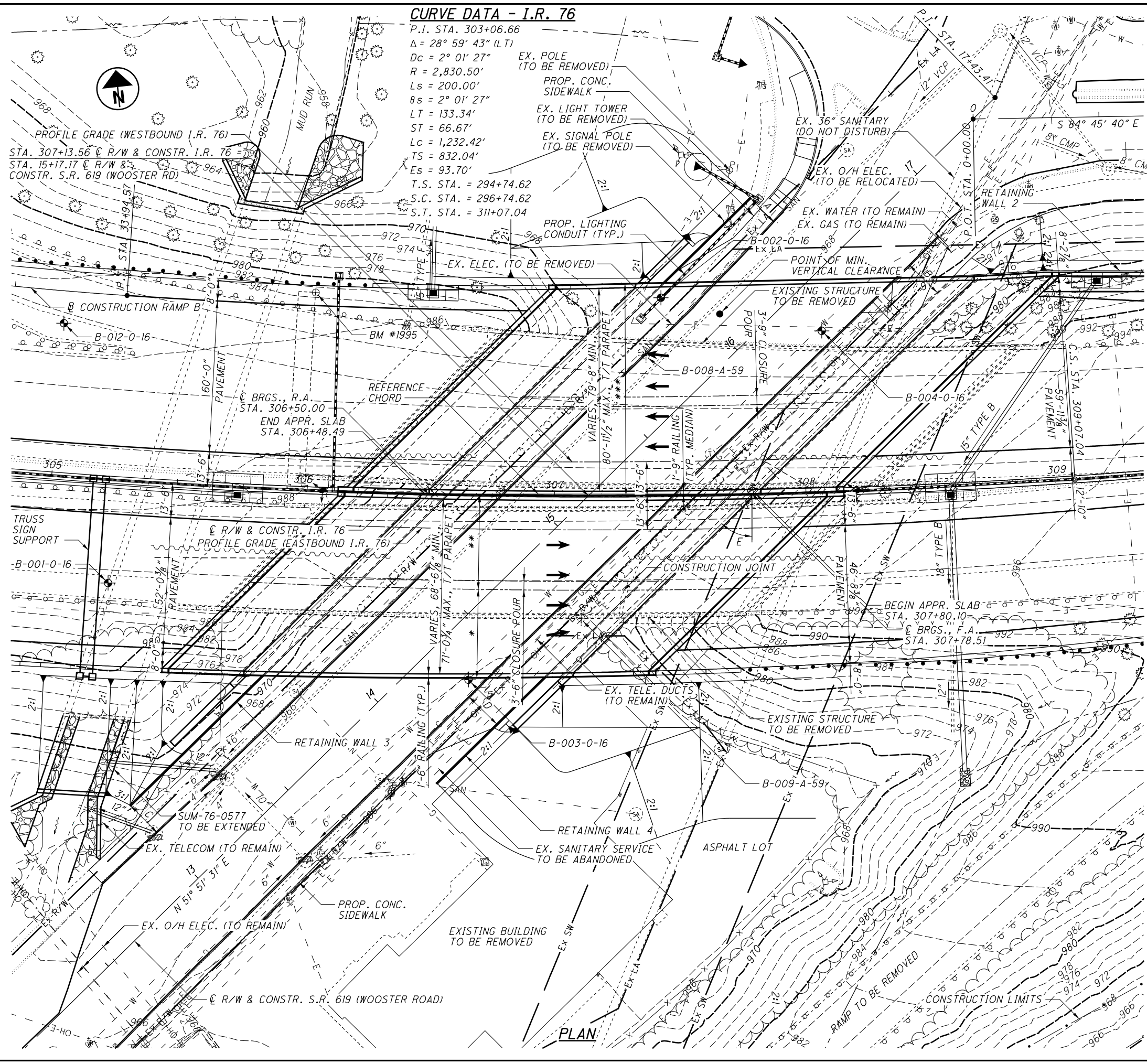


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CURVE DATA - I.R. 76

P.I. STA. 303+06.66
 $\Delta = 28^\circ 59' 43''$ (LT)
 $D_c = 2^\circ 01' 27''$
 $R = 2,830.50'$
 $L_s = 200.00'$
 $\theta_s = 2^\circ 01' 27''$
 $LT = 133.34'$
 $L_c = 1,232.42'$
 $TS = 832.04'$
 $ES = 93.70'$
 $T.S. STA. = 294+74.62$
 $S.C. STA. = 296+74.62$
 $S.T. STA. = 311+07.04$

BENCHMARK DATA		
BM #1995	STA. 306+02.10,	EL. 984.87, OFFSET 78.68' LT.

NOTES
 1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE, ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
 2. SEE SHEET 2/78 FOR PROFILES AND REFERENCE CHORD DIAGRAM.

DESIGN TRAFFIC:
 2020 ADT = 77,400 2020 ADTT = 11,610
 2040 ADT = 98,000 2040 ADTT = 14,700
 DIRECTIONAL DISTRIBUTION = 57%

- LEGEND**
- BORING LOCATION
 - ⊕ BENCHMARK
 - * - PHASE 1 CONSTRUCTION = VARIES (34'-6 7/8" MIN., 37'-0 3/4" MAX.)
 - ** - PHASE 2 CONSTRUCTION = 37'-5"
 - *** - PHASE 3 CONSTRUCTION = VARIES (83'-1" MIN., 84'-4 1/2" MAX.)
 - 16'-6" REQUIRED MINIMUM VERTICAL CLEARANCE
 16'-7 3/4" ACTUAL MINIMUM VERTICAL CLEARANCE
 - A: ACTUAL HORIZONTAL CLEARANCE = 13'-0 3/8"
 REQUIRED HORIZONTAL CLEARANCE = 6'-0"
 - B: ACTUAL HORIZONTAL CLEARANCE = 15'-6 1/4"
 REQUIRED HORIZONTAL CLEARANCE = 6'-0"
 - C: ACTUAL HORIZONTAL CLEARANCE = 14'-10 1/4"
 REQUIRED HORIZONTAL CLEARANCE = 6'-0"
 - D: ACTUAL HORIZONTAL CLEARANCE = 15'-5 5/8"
 REQUIRED HORIZONTAL CLEARANCE = 6'-0"
 - E: 45°34'57" SKEW L.F. W/RESPECT TO REF. CHORD (TYP.)

EXISTING STRUCTURE

TYPE: 3 SPAN CONTINUOUS ROLLED STEEL BEAM BRIDGES WITH COMPOSITE REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 54'-0"±, 90'-0"±, 63'-0"± (MEASURED ALONG EXISTING REFERENCE CHORD)

ROADWAY: VARIES WITH RAMP (WB) & 41'-0"± (EB) T/T PARAPET

LOADING: HS-20 WITH ALT. MIL. (SUPERSTRUCTURE), C.F. 2000 (SUBSTRUCTURE)

WEARING SURFACE: 1" MONOLITHIC CONCRETE

SKEW: 45°15'44"± L.F. WITH RESPECT TO REFERENCE CHORD

APPROACH SLABS: 25'-0"± LONG (AS-1-81)

STRUCTURAL FILE NUMBER: 7705492 (WB) / 7705522 (EB)

DATE BUILT: 1962; REHABILITATED 1997

DISPOSITION: TO BE REPLACED

PROPOSED STRUCTURE

TYPE: SINGLE SPAN COMPOSITE GALVANIZED STEEL (ASTM A709) PLATE GIRDER BRIDGE ON SEMI-INTEGRAL ABUTMENTS WITH MSE WALLS

SPAN: 128'-6" MEASURED ALONG REFERENCE CHORD

ROADWAY: VAR. (79'-8" MIN., 80'-11 1/2" MAX.) (WB) & VAR. (68'-6 7/8" MIN., 71'-0 3/4" MAX.) WITH RAMP (EB) T/T PARAPET

LOADING: HL-93

WEARING SURFACE: 1" MONOLITHIC CONCRETE

FUTURE WEARING SURFACE: 0.06 KSF

SKEW: 45°34'57" L.F. WITH RESPECT TO REFERENCE CHORD

APPROACH SLABS: 30'-0" LONG (AS-1-15 & AS-2-15) TYPE C

ALIGNMENT: 2°01'27" CURVE LEFT

SUPERELEVATION: VARIES

COORDINATES: LATITUDE 41°02'09.05" N
 LONGITUDE 81°34'42.30" W

DESIGN AGENCY
CARPENTER MARTY
 TRANSPORTATION

DATE: 5/4/2017
 STRUCTURE FILE NUMBER: 7705493

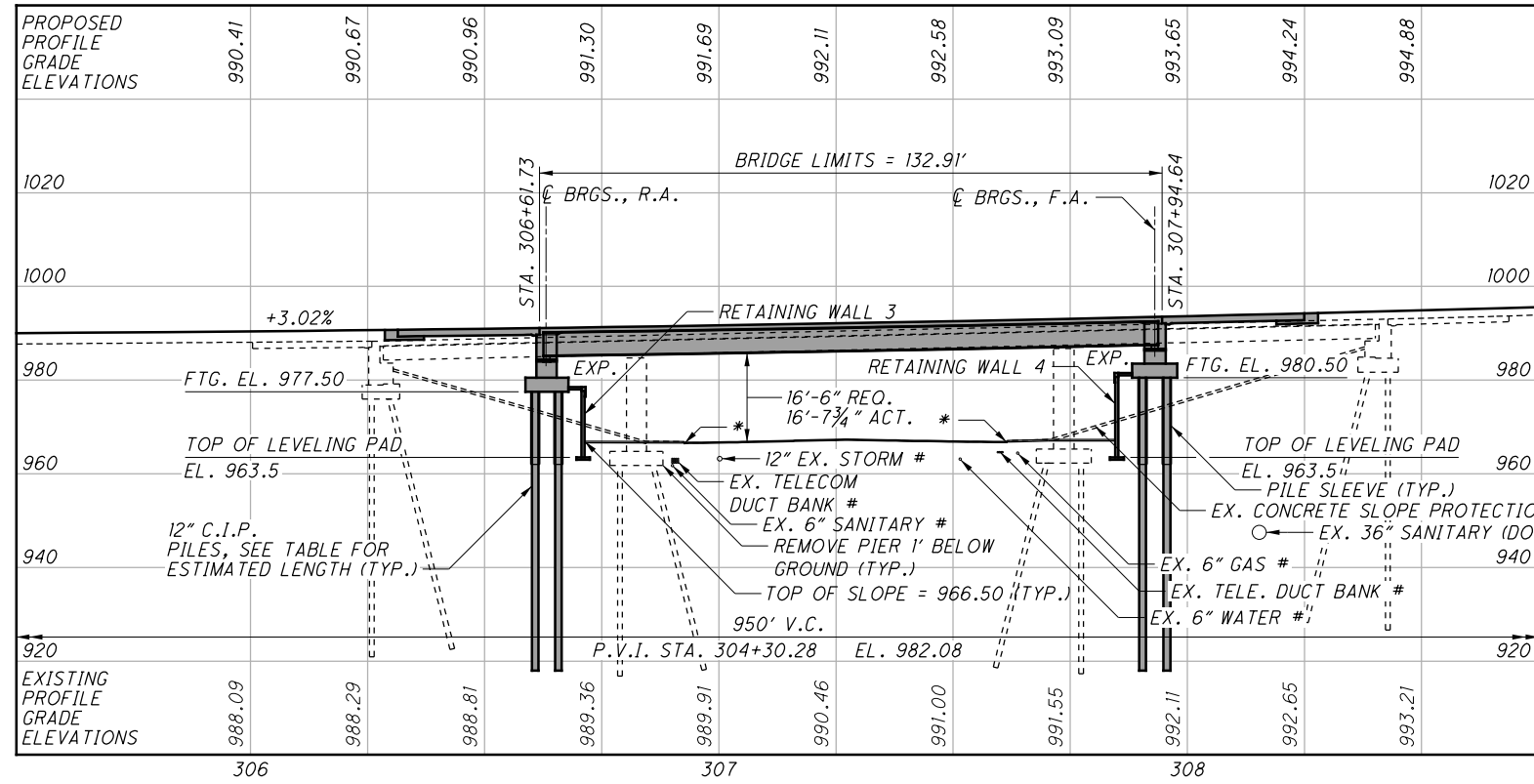
SUMMIT COUNTY
 STA. 306+48.49
 STA. 307+80.10

SITE PLAN
 BRIDGE NO. SUM-76-0580
 OVER S.R. 619 (WOOSTER ROAD)

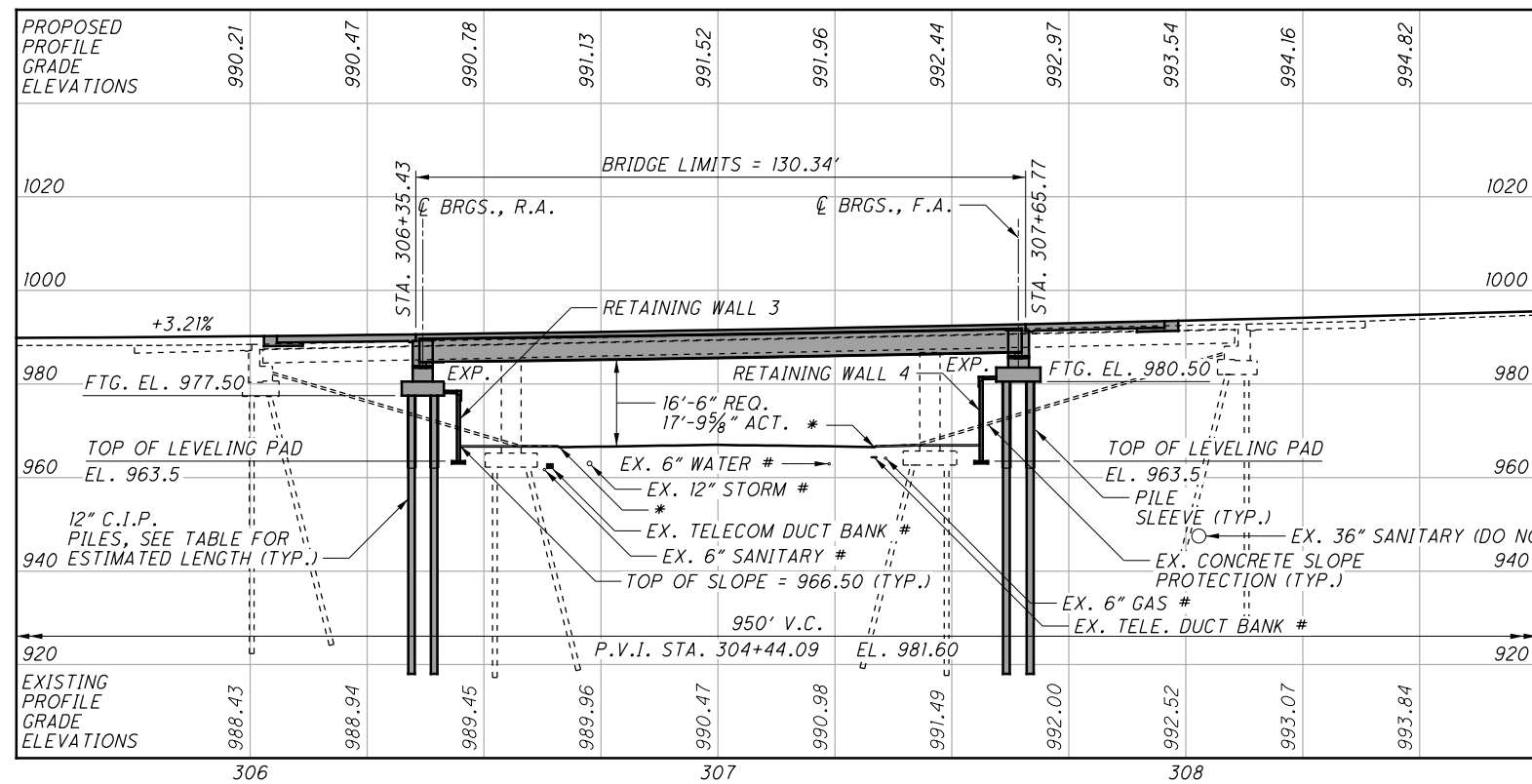
SUM-76-5.53
 PID No. 96670

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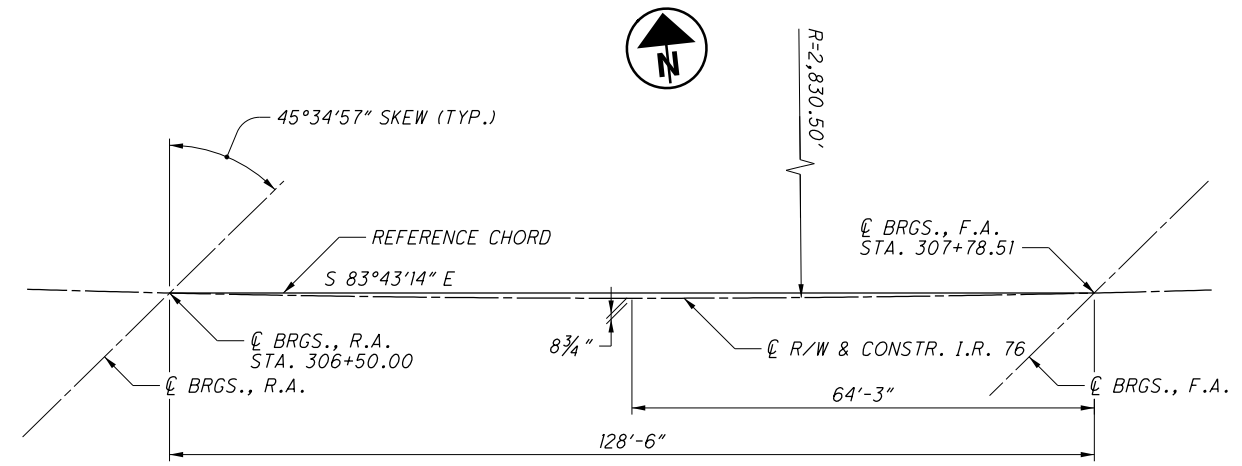


PROFILE ALONG PROFILE GRADE (WESTBOUND I.R. 76)



PROFILE ALONG PROFILE GRADE (EASTBOUND I.R. 76)

ESTIMATED PILE LENGTH		
PILE NUMBER ON SHEETS	ESTIMATED LENGTH	QUANTITY
25/78 & 26/78		
1-24, 49-62	60 FEET	38
77-112	65 FEET	36
113-118, 121-124, 125-129, 132-136	70 FEET	20
119-120, 130-131	80 FEET	4
25-48, 63-76	85 FEET	38



REFERENCE CHORD DIAGRAM

LEGEND

- * - EDGE OF PAVEMENT
- # - UTILITY TO REMAIN

DESIGN AGENCY: **CARPENTER MARTY** Transportation

DATE: 5/4/2017

REVIEWED: WHM

DRAWN: ERK

DESIGNED: ERK

CHECKED: GDU

REVISED: GDU

STRUCTURE FILE NUMBER: 7705493

SUMMIT COUNTY

STA. 306+48.49

STA. 307+80.10

PROFILES

BRIDGE NO. SUM-76-0580

OVER S.R. 619 (WOOSTER ROAD)

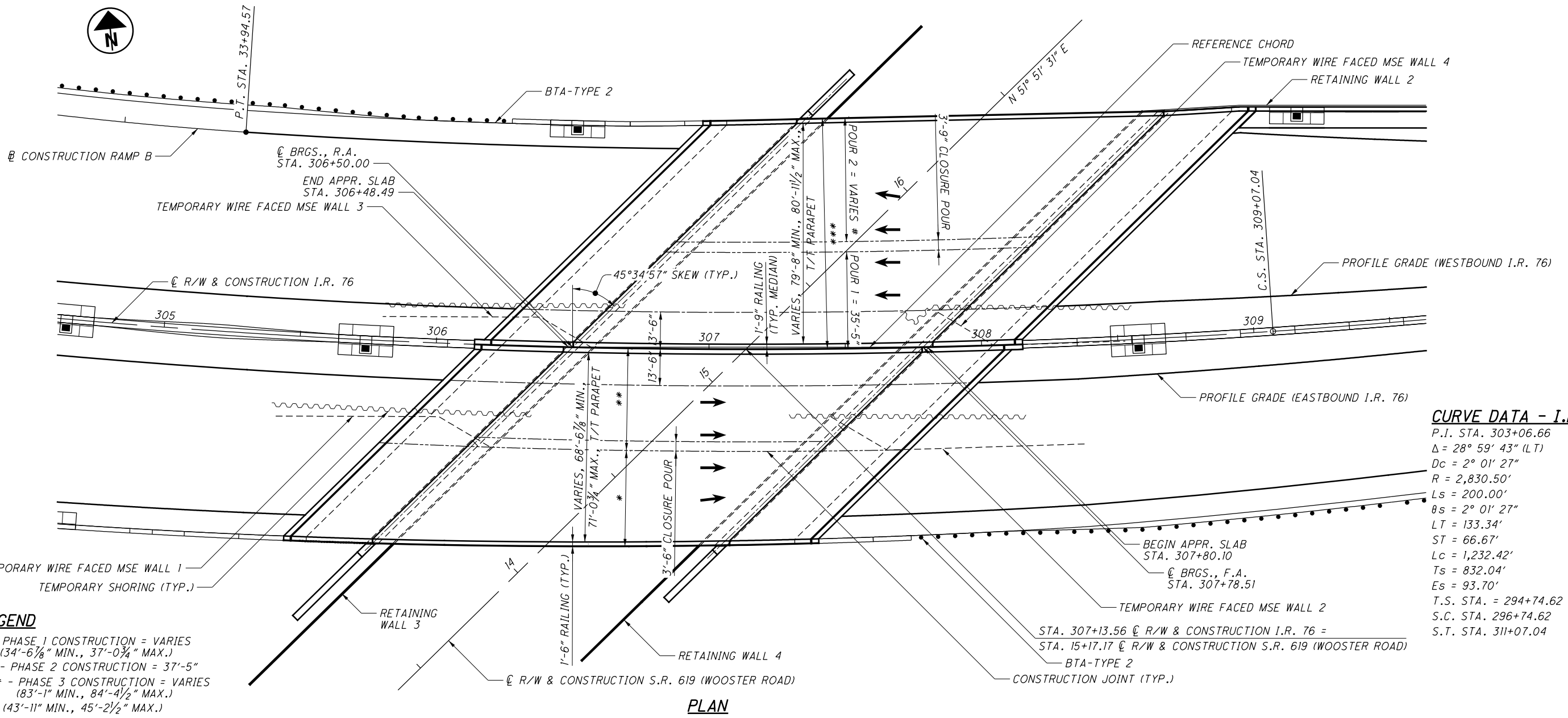
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PID No. 96670

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672



PLAN

LEGEND

- * - PHASE 1 CONSTRUCTION = VARIES (34'-6 1/8" MIN., 37'-0 3/4" MAX.)
- ** - PHASE 2 CONSTRUCTION = 37'-5"
- *** - PHASE 3 CONSTRUCTION = VARIES (83'-1" MIN., 84'-4 1/2" MAX.)
- # - (43'-11" MIN., 45'-2 1/2" MAX.)

ITEM 506 - STATIC LOAD TEST, AS PER PLAN:

PERFORM STATIC LOAD TESTING ACCORDING TO CMS SECTION 506, EXCEPT AS MODIFIED BY THIS NOTE.

THE PRODUCTION PILES AT BRIDGE SUM-76-0580 ARE LOCATED WITHIN PROPOSED MSE WALL FILL. THEREFORE, CHOOSE ONE OF THE FOLLOWING TWO OPTIONS FOR PERFORMING THE STATIC LOAD TEST.

1. PERFORM THE STATIC LOAD TEST ON A NON-PRODUCTION PILE LOCATED WITHIN THE INFIELD OF EXISTING RAMP D AND WITHIN 50 FEET OF EITHER BRIDGE SUM-76-0577, SUM-76-0578, OR SUM-76-0580. PERFORM THE STATIC LOAD TEST BEFORE DRIVING PILES AT BRIDGE SUM-76-0580.
2. PERFORM THE STATIC LOAD TEST ON A PRODUCTION PILE AT BRIDGE SUM-76-0577 OR SUM-76-0578 BUT BEFORE DRIVING THE PILES AT BRIDGE SUM-76-0580.

IF PERFORMING THE STATIC LOAD TEST ON A PRODUCTION PILE FOR SUM-76-0577, USE AN ULTIMATE BEARING VALUE OF 324 KIPS FOR THE STATIC LOAD TEST PILE, OTHERWISE USE AN ULTIMATE BEARING VALUE OF 254 KIPS FOR THE STATIC LOAD TEST PILE. IF PERFORMING THE STATIC LOAD TEST ON A NON-PRODUCTION PILE, USE A 12-INCH DIAMETER PILE. INCLUDE ALL COSTS ASSOCIATED WITH FURNISHING AND DRIVING NON-PRODUCTION PILES IN THE CONTRACT LUMP SUM PRICE FOR STATIC LOAD TEST.

NOTIFY THE ENGINEER AND THE OFFICE OF GEOTECHNICAL ENGINEERING AT LEAST TWO WEEKS BEFORE BEGINNING PILE DRIVING. DO NOT DRIVE THE TEST PILE BEYOND THE ESTIMATED PILE LENGTH UNLESS DIRECTED OTHERWISE BY THE ENGINEER. DRIVE THREE ADDITIONAL PILES TO THE SAME UBV AS THE TEST PILE AND PERFORM DYNAMIC TESTING ON ALL FOUR PILES. THESE ADDITIONAL PILES CAN BE ANCHOR PILES USED FOR THE STATIC LOAD TEST. DRIVE ONE ADDITIONAL PILE WITHOUT DYNAMIC LOAD TESTING FOR THE PURPOSE OF WARMING UP THE PILE HAMMER ON THE RESTRIKE TESTS. INSTALL SISTER BAR STRAIN GAUGES IN THE STATIC LOAD TEST PILE AS DESCRIBED BELOW AND THEN FILL THE TEST PILE WITH CONCRETE. ALLOW THE CONCRETE TO CURE FOR 3 DAYS BEFORE PERFORMING THE STATIC LOAD TEST. DO NOT PERFORM ANY PILE DRIVING OPERATIONS DURING THE CURING PERIOD AND WHILE PERFORMING THE STATIC LOAD TEST. AFTER COMPLETION OF THE STATIC LOAD TEST, PERFORM PILE RESTRIKES ON THE FOUR PILES (TWO RESTRIKE TEST ITEMS) ON WHICH DYNAMIC TESTING WAS PERFORMED BEFORE THE STATIC LOAD TEST. PERFORM THE RESTRIKE TESTS NOT MORE THAN 24 HOURS AFTER THE COMPLETION OF THE STATIC LOAD TEST. IMMEDIATELY AFTER THE RESTRIKE TESTS, PROVIDE THE ENGINEER DRIVING CRITERIA FOR THE PILES. PILE DRIVING OPERATIONS MAY RESUME AT THIS POINT. WITHIN FOUR DAYS OF COMPLETING THE STATIC LOAD TEST, SUBMIT A DRAFT REPORT TO THE ENGINEER WHICH CONTAINS

THE INFORMATION REQUIRED IN CMS ITEM 506. PERFORM ADDITIONAL RESTRIKES ON THE FOUR DYNAMIC TEST PILES 7 DAYS AND 14 DAYS AFTER THE PILES WERE DRIVEN. DO NOT CUT OFF PILES (EXCEPT AS REQUIRED TO PERFORM THE STATIC LOAD TEST) UNTIL DIRECTED BY THE ENGINEER. WITHIN FOUR DAYS OF COMPLETING THE 14 DAY RESTRIKES, UPDATE THE REPORT WITH THE RESTRIKE TEST RESULTS AND SUBMIT THE FINAL REPORT TO THE ENGINEER. SUBMIT ALL REPORTS, TEST RESULTS, AND RECORDED DATA TO THE ENGINEER AND THE OFFICE OF GEOTECHNICAL ENGINEERING.

FURNISH AND INSTALL EIGHT (8) SISTER BAR STRAIN GAUGES WITHIN THE STATIC LOAD TEST PILE. ATTACH THE SISTER BAR STRAIN GAUGES TO A LENGTH OF REINFORCING STEEL (SIZE NO. 4 OR 5) THAT EXTENDS FOR THE FULL LENGTH OF THE PILE. LOCATE ONE STRAIN GAUGE APPROXIMATELY 18 INCHES FROM THE PILE TIP, ONE STRAIN GAUGE WITHIN 24 INCHES OF THE PILE TOP, AND EVENLY DISTRIBUTE THE REMAINING SIX STRAIN GAUGES ALONG THE LENGTH OF THE TEST PILE. MEASURE AND REPORT THE LOCATION OF EACH STRAIN GAUGE RELATIVE TO THE TOP OF THE TEST PILE. LABEL THE END OF THE SIGNAL CABLES WITH THE STRAIN GAUGE NUMBER IN CONSECUTIVE ORDER STARTING FROM THE TOP. USE CENTRALIZERS ON THE LENGTH OF REINFORCING STEEL TO ENSURE THE STRAIN GAUGES ARE LOCATED IN THE CENTER OF THE TEST PILE. SPACE THE CENTRALIZERS NO MORE THAN 10 FEET APART. PLACE THE REINFORCING STEEL AND STRAIN GAUGES IN THE TEST PILE AND SUPPORT THEM IN PLACE. CUT A HOLE IN THE SIDE OF THE TEST PILE BELOW THE PILE CUTOFF ELEVATION AND RUN THE SIGNAL CABLES FROM THE STRAIN GAUGES THROUGH THE HOLE AND OUTSIDE OF THE PILE. FILL THE TEST PILE WITH CONCRETE WITHOUT DISTURBING THE STRAIN GAUGES. DURING THE STATIC LOAD TEST, RECORD THE STRAIN GAUGE READINGS BEFORE STARTING THE TEST AND DURING THE TEST WHENEVER RECORDING READINGS OF TIME, LOAD, AND MOVEMENT. REPORT THE MEASUREMENTS IN UNITS OF MICROSTRAIN.

FURNISH AND INSTALL STRAIN GAUGES FROM ONE OF THE MANUFACTURERS LISTED BELOW.

- GEOKON, INC.: VIBRATING WIRE REBAR STRAIN METER "SISTER BAR", MODEL 4911, WWW.GEOKON.COM
- GEO-INSTRUMENTS: SISTER BAR STRAIN GAUGE, PART NUMBER PGISBSG002, WWW.GEO-INSTRUMENTS.COM
- RST INSTRUMENTS LTD.: VIBRATING WIRE SISTER BAR, ITEM NO. VW5000-15, RSTINSTRUMENTS.COM
- ROCTEST: IRHP INSTRUMENTED SISTER BAR, MODEL IRCL-0500, WWW.ROCTEST.COM

IF DIRECTED BY THE ENGINEER, REMOVE NON-PRODUCTION TEST PILES AND ANCHOR PILES TO AT LEAST TWO FEET BELOW THE PROPOSED GROUND SURFACE.

SUPERELEVATION TRANSITION TABLE		
STATION	WB CROSS SLOPE	EB CROSS SLOPE
306+25.00	-0.0450	0.0450
306+50.00	-0.0450	0.0450
306+75.00	-0.0450	0.0450
307+00.00	-0.0450	0.0450
307+25.00	-0.0450	0.0450
307+49.24	-0.0450	0.0450
307+50.00	-0.0450	0.0449
307+75.00	-0.0450	0.0418
308+00.00	-0.0450	0.0386
308+20.96	-0.0450	0.0360
308+25.00	-0.0446	0.0355
308+35.00	-0.0437	0.0343
308+50.00	-0.0423	0.0324
308+66.00	-0.0408	0.0304
308+75.00	-0.0399	0.0293
309+00.00	-0.0376	0.0261
309+07.04	-0.0369	0.0253

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REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	REVISED	7-17-2015
AS-2-15	REVISED	1-19-2018
GSD-1-96	REVISED	7-19-2002
PCB-91	REVISED	1-18-2013
SBR-1-13	REVISED	7-20-2018
SBR-2-13	REVISED	7-20-2018
SICD-1-96	REVISED	7-18-2014
SICD-2-14	DATED	7-18-2014
VPF-1-90	REVISED	7-20-2018

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

SS800-2016	DATED	10-19-2018
SS832	DATED	1-17-2014
SS840	DATED	7-20-2018
SS845	DATED	4-20-2018
SS866	DATED	4-21-2017
SS867	DATED	4-15-2016
SS869	DATED	10-17-2014
SS878	DATED	4-21-2017

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2014 AND THE ODOT BRIDGE DESIGN MANUAL, 2007.

LRFD LOAD MODIFIERS:

OPERATIONAL IMPORTANCE: A LOAD MODIFIER OF 1.05 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL, 2007.

SPECIAL DESIGN SPECIFICATIONS:

THIS BRIDGE REQUIRED THE USE OF A TWO DIMENSIONAL MODEL USING THE GRILLAGE DESIGN METHOD TO ANALYZE THE STRUCTURE. THE COMPUTER PROGRAM USED FOR STRUCTURAL ANALYSIS WAS MDX. THE BRIDGE COMPONENTS DESIGNED BY THIS METHOD WERE THE STEEL GIRDERS AND CROSSFRAMES.

DEAD LOAD DISTRIBUTION: WEIGHT OF DECK AND STEEL GIRDERS WERE USED FOR THE NON-COMPOSITE DEAD LOAD BASED ON TRIBUTARY AREA. THE WEIGHT OF THE PARAPETS AND FUTURE WEARING SURFACE COURSE WERE DIVIDED EQUALLY AMONG THE GIRDERS FOR THE COMPOSITE DEAD LOAD.

LIVE LOAD DISTRIBUTION FACTORS:

EXTERIOR MEMBERS - DIRECT LANE LOADING FOR WHEEL (OR AXLE) LOAD & FOR LANE LOAD MOMENTS. DIRECT LANE LOADING FOR WHEEL (OR AXLE) LOAD & LANE LOAD SHEARS.

INTERIOR MEMBERS - DIRECT LANE LOADING FOR WHEEL (OR AXLE) LOAD & FOR LANE LOAD MOMENTS. DIRECT LANE LOADING FOR WHEEL (OR AXLE) LOAD & LANE LOAD SHEARS.

DESIGN LOADING:

HL-93
FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/FT²

DESIGN DATA:

CONCRETE CLASS QC2 WITH QC/OA - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC1 WITH QC/OA - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI

STRUCTURAL STEEL - ASTM A709 GRADE 50 - YIELD STRENGTH 50 KSI

DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL

2 1/2" CONCRETE COVER

MONOLITHIC WEARING SURFACE:

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN:

THE DESIGN SHOWN ON THE PLANS FOR TEMPORARY SUPPORT OF THE EXCAVATION IS ONE REPRESENTATIVE DESIGN THAT MAY BE USED TO CONSTRUCT THE PROJECT. THE CONTRACTOR MAY CONSTRUCT THE DESIGN SHOWN ON THE PLANS OR PREPARE AN ALTERNATE DESIGN TO SUPPORT THE SIDES OF EXCAVATIONS. IF CONSTRUCTING AN ALTERNATE DESIGN FOR

TEMPORARY SUPPORT OF EXCAVATION, PREPARE AND PROVIDE PLANS IN ACCORDANCE WITH C&MS 501.05. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SUPPORT OF EXCAVATION AT THE CONTRACT LUMP SUM PRICE FOR COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN. NO ADDITIONAL PAYMENT WILL BE MADE FOR PROVIDING AN ALTERNATE DESIGN.

SHEET PILES SHALL BE EXTRACTED AFTER PHASE 1 AND PHASE 2 CONSTRUCTION IS COMPLETE.

SPLICING OF SHEET PILES SHALL ONLY BE PERMITTED DIRECTLY UNDER THE DE-ENERGIZED OVERHEAD ELECTRIC LINES. ALL STRUCTURAL WELDING OF STEEL AND STEEL REINFORCEMENT SHALL BE PERFORMED BY CERTIFIED WELDERS QUALIFIED TO PERFORM WELDING SHOWN ON THE SHOP DRAWINGS. ALL SHEET PILES SHALL BE CUT OFF TO A TRUE PLANE AT THE ELEVATIONS SHOWN ON THE CONTRACT DRAWINGS. ALL CUT OFF LENGTHS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED.

PILE DRIVING CONSTRAINTS:

PRIOR TO DRIVING ABUTMENT PILES TO THE ULTIMATE BEARING VALUE (UBV), CONSTRUCT THE MSE WALL AND THE BRIDGE APPROACH EMBANKMENT BEHIND THE ABUTMENT UP TO THE BOTTOM OF THE FOOTING FOR A MINIMUM DISTANCE OF 200 FEET BEHIND EACH ABUTMENT. THE CONTRACTOR MAY PRE-DRIVE ABUTMENT PILES BEFORE CONSTRUCTING MSE WALLS. PRE-DRIVING CONSISTS OF INSTALLING THE ABUTMENT PILES INTO THE SOIL ONLY AS FAR AS NECESSARY SO THAT THE PILES WILL REMAIN VERTICAL DURING MSE WALL CONSTRUCTION. IF PRE-DRIVING PILES, INSTALL PILE SLEEVES AROUND PILES BEFORE CONSTRUCTING THE MSE WALL. AT LEAST THREE FEET OF PILE MUST EXTEND ABOVE THE TOP OF THE PILE SLEEVE TO MEET THE REQUIREMENTS OF C&MS 507.09 REGARDING SPLICES. DO NOT DRIVE ABUTMENT PILES TO THE UBV UNTIL AFTER THE ABOVE REQUIRED MSE WALL AND EMBANKMENT HAVE BEEN CONSTRUCTED. AFTER THE MSE WALL HAS BEEN CONSTRUCTED TO THE BOTTOM OF FOOTING, DRIVE ABUTMENT PILES TO THE UBV. IN ORDER TO REMOVE ANY NEGATIVE SKIN FRICTION THAT HAS DEVELOPED DURING THE WAITING PERIOD, DRIVE EACH ABUTMENT PILE A DISTANCE OF AT LEAST 0.5 INCH.

IF NOT PRE-DRIVING ABUTMENT PILES, INSTALL THE ABUTMENT PILES THROUGH PILE SLEEVES AFTER THE ABOVE REQUIRED MSE WALL AND EMBANKMENT HAVE BEEN CONSTRUCTED AND THE SPECIFIED WAITING PERIOD HAS ELAPSED.

PILE DESIGN LOADS (ULTIMATE BEARING VALUE):

THE ULTIMATE BEARING VALUE IS 254 KIPS PER PILE FOR THE REAR AND FORWARD ABUTMENT PILES.

ABUTMENT PILES: 12" CAST-IN-PLACE REINFORCED CONCRETE PILES

PILE NUMBER ON SHEETS	ORDER LENGTH	QUANTITY
1-24, 49-62	65 FEET	38
77-112	70 FEET	36
113-118, 121-124, 125-129, 132-136	75 FEET	20
119-120, 130-131	85 FEET	4
25-48, 63-76	90 FEET	38

ITEM 506 - STATIC LOAD TEST, AS PER PLAN:

SEE NOTE ON SHEET [3/78].

ITEM 523 - DYNAMIC LOAD TESTING, AS PER PLAN:

ITEM 523- RESTRIKE, AS PER PLAN:
PERFORM DYNAMIC LOAD TESTING AND RESTRIKES ACCORDING TO CMS SECTION 523 EXCEPT AS MODIFIED BY THIS NOTE.

PERFORM A SIGNAL MATCHING ANALYSIS (CAPWAP) ON EACH PILE TESTED FOR EACH DYNAMIC LOAD TEST AND RESTRIKE.

ITEM 203 - EMBANKMENT, AS PER PLAN:

PLACE AND COMPACT EMBANKMENT MATERIAL IN 6 INCH LIFTS FOR THE CONSTRUCTION OF THE APPROACH EMBANKMENT.

ITEM 507 - 12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED, AS PER PLAN:

FURNISH STEEL FOR CAST-IN-PLACE REINFORCED CONCRETE PILES CONFORMING TO ASTM A 252, GRADE 3.

ITEM 507 - PREBORED HOLES, AS PER PLAN:

PREBORE HOLES FOR PILES 119, 120, 130, AND 131 PER C&MS 507.11. CASE THE PREBORED HOLES AS THEY ARE BEING DRILLED TO MAINTAIN THE PREBORED HOLE WALLS. FOLLOWING PLACEMENT OF THE CASING, IT IS RECOMMENDED THAT THE PILE BE PLACED WITHIN THE PREBORED HOLES AFTER WHICH THE CASING CAN BE REMOVED AND THE PILE DRIVEN TO THE DESIRED UBV.

DECK PLACEMENT DESIGN ASSUMPTIONS:

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.53 KIPS (PHASE 1), 2.48 KIPS (PHASE 2), 2.49 KIPS (PHASE 3 POUR 1), AND 2.66 KIPS (PHASE 3 POUR 2).

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103".

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 IN.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65".

ITEM 511 - CLASS QC2 CONCRETE WITH QC/OA, SUPERSTRUCTURE, AS PER PLAN

AT THE OPTION OF THE CONTRACTOR, THE WESTBOUND SUM-76-0580 BRIDGE DECK MAY BE CONSTRUCTED BY MEANS OF A SINGLE POUR. THE DECK FINISHING MACHINE LENGTH WILL EXCEED 120'. THE DECK SHALL BE PLACED PER C&MS 511. THE CONTRACTOR SHALL CALCULATE THE DECK FINISHING MACHINE WHEEL LOADS AND DESIGN THE TEMPORARY BRACING AND BLOCKING ACCORDINGLY. THE CONTRACTOR SHALL ENSURE THAT THE TOTAL LOSS OF DECK THICKNESS DOES NOT EXCEED 1/2". THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION PLAN UPDATES RESULTING FROM THE SINGLE POUR, WHICH SHALL BE SIGNED AND SEALED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER AND PROVIDED TO THE ENGINEER FOR APPROVAL. NO ADDITIONAL COSTS SHALL BE INCURRED BY THE STATE.

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 4, AS PER PLAN 1.0 DESCRIPTION

IN ADDITION TO THE REQUIREMENTS OF CONSTRUCTION AND MATERIAL SPECIFICATION 513, THIS ITEM SHALL CONSIST OF FURNISHING ALL NECESSARY LABOR, MATERIALS AND EQUIPMENT TO CLEAN AND GALVANIZE ALL STRUCTURAL STEEL SURFACES, AS SPECIFIED HEREIN. THE GALVANIZED COATING SYSTEM MAY BE APPLIED BY A GALVANIZER NOT QUALIFIED AS A FABRICATION SHOP UNDER CONSTRUCTION AND MATERIAL SPECIFICATION 513, BUT THE APPROVED FABRICATOR OF THE STRUCTURAL STEEL SHALL BE RESPONSIBLE FOR THE QUALITY OF THE APPLIED GALVANIZED COATING SYSTEM AND ANY REPAIRS, RE-FABRICATING, ADDITIONAL LAYDOWNS REQUIRED TO ASSURE THE FABRICATED STEEL MEETS ALL REQUIREMENTS OF THIS SPECIFICATION. SECTIONS 513.27 AND 513.28 SHALL NOT APPLY.

THIS ITEM SHALL ALSO INCLUDE GALVANIZING, PER 711.02, OF ALL NUTS, WASHERS, BOLTS, ANCHOR BOLTS.

SHEAR STUDS SHALL BE INSTALLED AS PER SECTION 513.22.

2.0 PRE-FABRICATION MEETING

IN ADDITION TO THE PRE-FABRICATION MEETING REQUIREMENTS UNDER 513.07, BOTH THE FABRICATOR'S QUALITY CONTROL SPECIALIST, (QCS) AND GALVANIZER'S QCS COATING APPLICATOR SHALL BE PRESENT AND DISCUSS METHODS OF OPERATION, QUALITY CONTROL, INCLUDING REPAIRS, TRANSPORTATION, ERECTION METHODS TO ACCOMPLISH ALL PHASES OF THE PREPARATION AND COATING WORK REQUIRED BY THIS SPECIFICATION.

3.0 QUALITY CONTROL

3.1 QUALITY CONTROL SPECIALIST

THE GALVANIZER'S QCS (QUALITY CONTROL SPECIALIST) REQUIRED UNDER 514, IS RESPONSIBLE FOR ALL QUALITY CONTROL REQUIREMENTS OF THIS SPECIFICATION. THE QCS SHALL HAVE THE TESTING EQUIPMENT SPECIFIED IN 514.05

3.2 QUALITY CONTROL POINTS (QCP)

QUALITY CONTROL POINTS (QCP) ARE POINTS IN TIME WHEN ONE PHASE OF THE WORK IS COMPLETE AND READY FOR INSPECTION BY THE FABRICATOR'S QCS AND THE DEPARTMENT'S QA REPRESENTATIVE. THE NEXT OPERATIONAL STEP MUST NOT PROCEED UNLESS THE QCP HAS BEEN ACCEPTED OR QA INSPECTION WAIVED BY THE DEPARTMENT'S QA REPRESENTATIVE. AT THESE POINTS THE FABRICATOR MUST AFFORD ACCESS TO INSPECT ALL AFFECTED SURFACES. IF INSPECTION INDICATES A DEFICIENCY, THAT PHASE OF THE WORK MUST BE CORRECTED IN ACCORDANCE WITH THESE SPECIFICATIONS PRIOR TO BEGINNING THE NEXT PHASE OF WORK. DISCOVERY OF DEFECTIVE WORK OR MATERIAL AFTER A QUALITY CONTROL POINT IS PAST OR FAILURE OF THE FINAL PRODUCT BEFORE FINAL ACCEPTANCE, MUST NOT IN ANY WAY PREVENT REJECTION OR OBLIGATE THE DEPARTMENT TO FINAL ACCEPTANCE.

QUALITY CONTROL POINTS	
QUALITY CONTROL POINTS (QCP)	PURPOSE
A. SOLVENT CLEANING	REMOVE ASPHALTIC CEMENT, OIL, GREASE, SALT, DIRT, ETC.
B. GRINDING EDGES	REMOVE SHARP CORNERS PER AWS.
C. ABRASIVE BLASTING	BLAST SURFACES, INCLUDING REPAIR FINS, TEARS, SLIVERS OR SHARP EDGES.
D. GALVANIZING	CHECK COATING THICKNESS.
E. FAYING SURFACE CLEANING	CHECK FAYING SURFACE ROUGHNESS. CHECK BOLT HOLE CLEARANCE. CHECK FOR OTHER FIELD CONNECTIONS UNIFORM COATING THICKNESS.
F. SECOND LAY DOWN	CHECK SWEEP AND CAMBER TOLERANCES OF EACH STRUCTURAL MEMBER.
G. FIELD REPAIR OF DAMAGED AREAS	CHECK FOR DAMAGE AREAS AFTER ERECTION OF STRUCTURE. PERFORM DAMAGE REPAIRS.
H. FINAL REVIEW	CLEAN STRUCTURE AS PER QCP #1. VISUALLY INSPECT SYSTEM FOR ACCEPTANCE.

A. SOLVENT CLEANING (QCP #1)

THE STEEL MUST BE SOLVENT CLEANED WHERE NECESSARY TO REMOVE ALL TRACES OF ASPHALTIC CEMENT, OIL, GREASE, DIESEL FUEL DEPOSITS, AND OTHER SOLUBLE CONTAMINANTS PER SSPC-SP 1 SOLVENT CLEANING. UNDER NO CIRCUMSTANCES MUST ANY ABRASIVE BLASTING BE DONE TO AREAS WITH ASPHALTIC CEMENT, OIL, GREASE, OR DIESEL FUEL DEPOSITS. STEEL MUST BE ALLOWED TO DRY BEFORE BLAST CLEANING BEGINS. THE GALVANIZER'S QCS SHALL INSPECT AND DOCUMENT THAT THE CLEANING CONFORMS TO SSPC-SPI AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

B. GRINDING EDGES (QCP #2)

ALL CORNERS OF THERMALLY CUT OR SHEARED EDGES MUST HAVE A 1/16 INCH RADIUS OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE. THERMALLY CUT MATERIAL THICKER THAN 1 1/2 INCH MUST HAVE THE SIDES GROUND TO REMOVE THE HEAT EFFECTED ZONE, AS NECESSARY TO ACHIEVE THE SPECIFIED SURFACE CLEANING. THE GALVANIZER'S QCS MUST VISUALLY INSPECT AND DOCUMENT THAT THE GRINDING CONFORMS TO THIS SPECIFICATION AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

C. ABRASIVE BLASTING (QCP #3)

BEAMS AND GIRDERS MUST BE PREPARED BY THE FABRICATOR TO STEEL STRUCTURES PAINTING COUNCIL (SSPC) GRADE SIX (6) COMMERCIAL BLAST CLEANING PRIOR TO GALVANIZING. ALL MATERIAL MUST BE FREE OF PAINT MARKS. SECONDARY ANGLE, PLATES, BARS AND SHAPES NEED NOT BE BLAST CLEANED.

ABRASIVES MUST ALSO BE CHECKED FOR OIL CONTAMINATION BEFORE USE. A SMALL SAMPLE OF ABRASIVES MUST BE ADDED TO ORDINARY TAP WATER. ANY DETECTION OF AN OIL FILM ON THE SURFACE OF THE WATER MUST BE CAUSE FOR REJECTION. THE GALVANIZER'S QCS MUST PERFORM AND RECORD THIS TEST AT THE START OF EACH SHIFT.

REVISIONS	NUMBER	DATE	DESCRIPTION
	A	4/24/19	ADDED NOTE



DESIGNED	ERK	CHECKED	STK
DRAWN	ERK	REVISED	ERK
REVIEWED	WHM	DATE	5/5/2017
STRUCTURE FILE NUMBER			7705493

GENERAL NOTES
BRIDGE NO. SUM-76-0580
OVER S.R. 619 (WOOSTER ROAD)

SUM-76-5.53
PID No. 96670

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ALL FINIS, TEARS, SLIVERS AND BURRED OR SHARP EDGES THAT ARE PRESENT ON ANY STEEL MEMBER OR THAT APPEAR AFTER THE BLASTING OPERATION MUST BE CONDITIONED PER ASTM A6. WELDING REPAIRS MUST ONLY BE PERFORMED BY THE 513 FABRICATOR.

THE GALVANIZER'S QCS MUST VISUALLY INSPECT AND DOCUMENT THAT THE BLAST CONFORMS TO SSPC-SP6, THAT ALL CONDITIONING IS PERFORMED PER ASTM A6, AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

D. GALVANIZING (QCP #4)

GALVANIZED PER 711.02 AND THIS SPECIFICATION. COATING THICKNESS MUST BE A MINIMUM OF 4 MILS MEASURED AS SPECIFIED.

MATERIAL MUST BE FREE OF IMPERFECTIONS OR DEPRESSIONS CAUSED BY MATERIAL HANDLING. THE FABRICATOR, GALVANIZER AND ERECTOR MUST USE LIFTING CLAMPS OR SOFTENERS FOR HANDLING. PRIOR TO GALVANIZING, SURFACE IMPERFECTIONS MAY BE REPAIRED BY THE FABRICATOR IN CONFORMANCE WITH ASTM A6. IMPERFECTIONS GREATER THAN THE LIMITS ALLOWED BY ASTM A6 MUST BE DOCUMENTED. REPAIR OR REPLACEMENT OF THIS MEMBER WILL BE AT THE DISCRETION OF THE DEPARTMENT.

ALL DAMAGED GALVANIZING MUST BE REPAIRED IN ACCORDANCE WITH 711.02.

DOCUMENTATION OF COATING THICKNESS MUST BE PERFORMED BY THE GALVANIZER'S QCS. THE GALVANIZER'S QCS MUST RECORD THE GAGE READINGS AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

E. FAYING SURFACE CLEANING (QCP #5)

AREAS OF FIELD CONNECTIONS MUST HAVE A UNIFORM GALVANIZED COATING THICKNESS FREE OF LOCAL EXCESSIVE ROUGHNESS WHICH WOULD PREVENT SPLICE PLATES, BEARINGS OR OTHER FIELD CONNECTIONS FROM MAKING INTIMATE CONTACT.

FAYING SURFACES OF THE BOLTED SPLICES MUST BE ROUGHENED IN THE SHOP AFTER GALVANIZING BY HAND WIRE BRUSHING. POWER WIRE BRUSHING IS NOT PERMITTED. ALL FIELD SPLICE BOLT HOLES MUST BE FREE OF ZINC BUILD UP. AFTER GALVANIZING, CLEAN EACH HOLE AS NECESSARY SO THAT A DRIFT PIN 1/16" LESS THAN THE DIAMETER OF THAT HOLE CAN BE FULLY INSERTED. CONSIDERATION WILL BE GIVEN TO OTHER METHODS OF TREATING THE FAYING SURFACES AND BOLT HOLES IF A WRITTEN REQUEST IS SUBMITTED TO THE OFFICE OF MATERIAL MANAGEMENT (OMM) IN ACCORDANCE WITH CMS 108.05.

INSPECTION OF THE ROUGHENING OF THE FAYING SURFACES AND CHECKING OF HOLES WITH DRIFT PINS MUST BE PERFORMED BY THE GALVANIZER'S QCS. ACCEPTANCE OF THE FAYING SURFACES AND HOLES SHALL BE DOCUMENTED BY THE GALVANIZER'S QCS.

F. SECOND LAY DOWN (QCP #6)

AFTER GALVANIZING, MATERIALS MUST BE PLACED IN A SECOND SHOP ASSEMBLY PER CMS SECTION 513.24 TO CHECK ALIGNMENT OF HOLES, SWEEP AND CAMBER AGAINST THE FABRICATORS ORIGINAL RECORDED LAY DOWN DIMENSIONS. THIS SHOP ASSEMBLY MAY BE PERFORMED AT THE GALVANIZER'S FACILITY, BY THE FABRICATORS PERSONNEL, IF APPROVED BY THE OFFICE OF MATERIAL MANAGEMENT (OMM). THE SECOND LAY DOWN MAY BE WAIVED BY THE OMM IF THE FABRICATOR RECORDS INDIVIDUAL BEAM CAMBERS AND SWEEPS DURING THE FIRST LAY DOWN, AND THE NEW INDIVIDUAL BEAM CAMBERS AND SWEEPS, AFTER GALVANIZING, COMPARED TO THE FIRST LAY DOWN ARE WITHIN THE FOLLOWING TOLERANCES:

BEARING POINTS AFTER GALVANIZING MUST BE WITHIN ± 1/8 INCH OF THE APPROVED SHOP DRAWING LAY DOWN.

CAMBER POINTS AFTER GALVANIZING MUST BE + 1#4" OR - 0 INCH FROM THE FIRST LAY DOWN.

SWEEP POINTS AFTER GALVANIZING MUST BE ± 3#8" FROM THE FIRST LAY DOWN.

INDIVIDUAL BEAMS THAT EXCEED THE LISTED TOLERANCES MUST BE PLACED WITH AT LEAST TWO ADJACENT BEAMS IN LAY DOWN FOR CHECKING AGAINST THE RECORDED SHOP ASSEMBLY RECORDS PER 513.24. DOCUMENTATION OF THE SECOND LAY DOWN OR INDIVIDUAL MEMBER CAMBERS MUST BE RECORDED BY THE FABRICATOR'S QCS OR GALVANIZER'S QCS PER 513.24.

G. FIELD REPAIR OF DAMAGED AREAS (QCP #7)

MATERIAL MUST BE FREE OF IMPERFECTIONS OR DEPRESSIONS CAUSED BY MATERIAL HANDLING. THE CONTRACTOR MUST USE LIFTING CLAMPS OR SOFTENERS FOR HANDLING. IMPERFECTIONS MAY BE REPAIRED BY GRINDING AS ALLOWED BY ASTM A6 BY THE CONTRACTOR. IMPERFECTIONS THAT ARE GREATER THAN THE GRINDING LIMITS ALLOWED BY ASTM A6 MUST BE DOCUMENTED. REPAIR OR REPLACEMENT OF THIS MEMBER WILL BE AT THE DISCRETION OF THE OMM.

ALL DAMAGED GALVANIZING MUST BE REPAIRED IN ACCORDANCE WITH 711.02.

DAMAGED GALVANIZING WHICH WILL BE INACCESSIBLE FOR REPAIR AFTER ERECTION MUST BE REPAIRED PRIOR TO ERECTION.

IN ORDER TO MINIMIZE DAMAGE TO THE GALVANIZED STEEL, CONCRETE SPLATTER AND FORM LEAKAGE MUST BE WASHED FROM THE SURFACE OF THE STEEL SHORTLY AFTER THE CONCRETE IS PLACED AND BEFORE IT IS DRY. IF THE CONCRETE DRIES, IT MUST BE REMOVED.

TEMPORARY ATTACHMENTS, SUPPORTS FOR SCAFFOLDING AND FINISHING MACHINE OR FORMS MUST NOT DAMAGE THE COATING SYSTEM. IN PARTICULAR, SUFFICIENT SIZE SUPPORT PADS MUST BE USED ON THE FASCIAS WHERE BRACING IS USED.

DOCUMENTATION OF GALVANIZING REPAIRS MUST BE PERFORMED BY THE GALVANIZER'S QCS BY A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

H. FINAL REVIEW (QCP #8)

AFTER THE ERECTION WORK HAS BEEN COMPLETED, INCLUDING ALL CONNECTIONS AND THE APPROVED REPAIR OF ANY DAMAGED BEAMS, GIRDERS OR OTHER STEEL MEMBERS, AND THE DECK HAS BEEN PLACED, THE CONTRACTOR AND ENGINEER MUST INSPECT THE STRUCTURE FOR DAMAGED COATING. (QCP #8). DAMAGED AREAS MUST BE REPAIRED BY QCP #7. AT THE COMPLETION OF CONSTRUCTION, THE GALVANIZING MUST BE UNDAMAGED AND THE SURFACES FREE FROM GREASE, OIL, CHALK MARKS, PAINT, CONCRETE SPLATTER OR OTHER SILAGE. SUCH SILAGE WILL BE REMOVED BY SOLVENT CLEANING PER SSPC-SPI (QCP #1).

DOCUMENTATION OF FINAL REVIEW MUST BE PERFORMED BY THE GALVANIZER'S QCS BY A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

4.0 TESTING EQUIPMENT

THE FABRICATOR MUST PROVIDE THE GALVANIZER'S QCS INSPECTOR THE FOLLOWING TESTING EQUIPMENT IN GOOD WORKING ORDER FOR THE DURATION OF THE PROJECT. ONE (POSITECTOR 2000 OR 6000, QUANIX 2200, OR ELCOMETER A345FB11) AND THE CALIBRATION PLATES, 38-200 MM AND 250-625 MM [1.5-8 MILS AND 10-25 MILS] AS PER THE NBS CALIBRATION STANDARDS IN ACCORDANCE WITH ASTM D-1186.

5.0 COATING THICKNESS

GALVANIZED THICKNESS MUST BE DETERMINED BY USE OF TYPE 2 MAGNETIC GAGE IN ACCORDANCE WITH THE FOLLOWING:

FIVE SEPARATE SPOT MEASUREMENTS MUST BE MADE, SPACED EVENLY OVER ONE (1) RANDOMLY SELECTED, 100 SQUARE FEET OF SURFACE AREA ON EACH STRUCTURAL MEMBER. THREE GAGE READINGS MUST BE MADE FOR EACH SPOT MEASUREMENT. THE PROBE MUST BE MOVED A DISTANCE OF 1 TO 3 INCHES FOR EACH NEW GAGE READING. ANY UNUSUALLY HIGH OR LOW GAGE READING THAT CANNOT BE REPEATED CONSISTENTLY MUST BE DISCARDED. THE AVERAGE (MEAN) OF THE 3 GAGE READINGS MUST BE USED AS THE SPOT MEASUREMENT. THE AVERAGE OF FIVE SPOT MEASUREMENTS FOR EACH SUCH 100 SQUARE FOOT AREA MUST NOT BE LESS THAN THE SPECIFIED THICKNESS. NO SINGLE SPOT MEASUREMENT IN ANY 100 SQUARE FOOT AREA MUST BE LESS THAN 80% OF THE SPECIFIED MINIMUM THICKNESS. ANY ONE OF 3 READINGS WHICH ARE AVERAGED TO PRODUCE EACH SPOT MEASUREMENT, MAY UNDER-RUN OR OVER-RUN BY A GREATER AMOUNT. THE 5 SPOT MEASUREMENTS MUST BE MADE FOR ONE (1) RANDOMLY SELECTED, 100 SQUARE FEET OF AREA ON EACH STRUCTURAL MEMBER. ALL SPLICE MATERIAL AND SECONDARY MEMBERS MUST HAVE AT LEAST ONE SPOT MEASURED ON EACH PIECE. THE PROBE MUST BE MOVED SO THAT ONE READING IS TAKEN AT EACH END AND MIDDLE OF THE PIECE FOR A TOTAL OF THREE READINGS.

THE GALVANIZER'S QCS MUST INSPECT AND PROVIDE DOCUMENTATION OF ACTUAL DATA, THE GALVANIZED THICKNESS CHECKS WERE PERFORMED PER SPECIFICATION, AND THE COATING THICKNESS MEETS SPECIFICATION REQUIREMENTS.

6.0 HANDLING AND SHIPPING

REASONABLE CARE MUST BE EXERCISED IN HANDLING THE GALVANIZED STEEL DURING SHIPPING, ERECTION, AND SUBSEQUENT CONSTRUCTION OF THE BRIDGE. THE STEEL MUST BE INSULATED FROM THE BINDING CHAINS BY SOFTENERS. HOOKS AND SLINGS USED TO HOIST STEEL MUST BE PADDED. DIAPHRAGMS AND SIMILAR PIECES MUST BE SPACED IN SUCH A WAY THAT NO RUBBING WILL OCCUR DURING SHIPMENT THAT MAY DAMAGE THE GALVANIZING. THE STEEL MUST BE STORED ON PALLETS AT THE JOB SITE, OR BY OTHER MEANS, SO THAT IT DOES NOT REST ON THE GROUND OR SO THAT COMPONENTS DO NOT FALL OR REST ON EACH OTHER.

7.0 SAFETY REQUIREMENT AND PRECAUTIONS

THE CONTRACTOR MUST MEET THE SAFETY REQUIREMENTS OF THE OHIO INDUSTRIAL COMMISSION AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), IN ADDITION TO THE SCAFFOLDING REQUIREMENTS BELOW.

THE CONTRACTOR IS REQUIRED TO MEET THE APPLICABLE SAFETY REQUIREMENTS OF THE OHIO INDUSTRIAL COMMISSION IN ADDITION TO THE SCAFFOLDING REQUIREMENTS SPECIFIED BELOW.

8.0 SCAFFOLDING

RUBBER ROLLERS, OR OTHER PROTECTIVE DEVICES MEETING THE APPROVAL OF THE ENGINEER, MUST BE USED ON SCAFFOLD FASTENINGS. METAL ROLLERS OR CLAMPS AND OTHER TYPES OF FASTENINGS WHICH WILL MAR OR DAMAGE COATED SURFACES MUST NOT BE USED.

9.0 INSPECTION ACCESS FOR FIELD REPAIR

IN ADDITION TO THE REQUIREMENT OF 105.10, THE CONTRACTOR MUST FURNISH, ERECT, AND MOVE SCAFFOLDING AND OTHER APPROPRIATE EQUIPMENT, TO PERMIT THE INSPECTOR THE OPPORTUNITY TO INSPECT CLOSELY OBSERVE, ALL AFFECTED SURFACES. THIS OPPORTUNITY MUST BE PROVIDED TO THE INSPECTOR DURING ALL PHASES OF THE WORK AND CONTINUE FOR A PERIOD OF AT LEAST TEN (10) WORKING DAYS AFTER THE TOUCH-UP WORK HAS BEEN COMPLETED. WHEN SCAFFOLDING IS USED, IT MUST BE PROVIDED IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS. WHEN SCAFFOLDING, OR THE HANGERS ATTACHED TO THE SCAFFOLDING ARE SUPPORTED BY HORIZONTAL WIRE ROPES, OR WHEN SCAFFOLDING IS PLACED DIRECTLY UNDER THE SURFACE TO BE PAINTED, THE FOLLOWING REQUIREMENTS MUST BE COMPLIED WITH:

WHEN SCAFFOLDING IS SUSPENDED 43" OR MORE BELOW THE COATED SURFACE TO BE REPAIRED, TWO ROWS OF GUARDRAIL MUST BE PLACED ON ALL SIDES OF THE SCAFFOLDING. ONE ROW OF GUARDRAIL MUST BE PLACED AT 42" ABOVE THE SCAFFOLDING AND THE OTHER ROW AT 20" ABOVE THE SCAFFOLDING.

WHEN THE SCAFFOLDING IS SUSPENDED AT LEAST 21", BUT LESS THAN 43" BELOW THE COATED SURFACE TO BE REPAIRED, A ROW OF GUARDRAIL MUST BE PLACED ON ALL SIDES OF THE SCAFFOLDING AT 20" ABOVE THE SCAFFOLDING.

TWO ROWS OF GUARDRAIL MUST BE PLACED ON ALL SIDES OF SCAFFOLDING NOT PREVIOUSLY MENTIONED. THE ROWS OF GUARDRAIL MUST BE PLACED AT 42" AND 20" ABOVE SCAFFOLDING, AS PREVIOUSLY MENTIONED.

ALL SCAFFOLDING MUST BE AT LEAST 24" WIDE WHEN GUARDRAIL IS USED AND 28" WIDE WHEN THE SCAFFOLDING IS SUSPENDED LESS THAN 21" BELOW THE COATED SURFACE TO BE REPAIRED AND GUARDRAIL IS NOT USED. IF TWO OR MORE SCAFFOLDING ARE LAID PARALLEL TO ACHIEVE THE PROPER WIDTH, THEY MUST BE RIGIDLY ATTACHED TO EACH OTHER TO PRECLUDE ANY DIFFERENTIAL MOVEMENT.

ALL GUARDRAILS MUST BE CONSTRUCTED AS A SUBSTANTIAL BARRIER WHICH IS SECURELY FASTENED IN PLACE AND IS FREE FROM PROTRUDING OBJECTS SUCH AS NAILS, SCREWS AND BOLTS. THERE MUST BE AN OPENING IN THE GUARDRAIL, PROPERLY LOCATED, TO ALLOW THE INSPECTOR ACCESS ONTO THE SCAFFOLDING.

THE RAILS AND UPRIGHTS MUST BE EITHER METAL OR WOOD. IF PIPE RAILING IS USED, THE RAILING MUST HAVE A NOMINAL DIAMETER OF NO LESS THAN ONE AND ONE HALF INCHES. IF STRUCTURAL STEEL RAILING IS USE, THE RAILS MUST BE 2 X 2 X 3/8 INCH STEEL ANGLES OR OTHER METAL SHAPES OF EQUAL OR GREATER STRENGTH. IF WOOD RAILING IS USED, THE RAILING MUST BE 2 X 4 INCH (NOMINAL) STOCK. ALL UPRIGHTS MUST BE SPACED AT NO MORE THAN 8 FEET ON CENTER. IF WOOD UPRIGHTS ARE USED, THE UPRIGHTS MUST BE 2 X 4 INCHES (NOMINAL) STOCK.

WHEN THE SURFACE TO BE INSPECTED IS MORE THAN 15 FEET ABOVE THE GROUND OR WATER, AND THE SCAFFOLDING IS SUPPORTED FROM THE STRUCTURE BEING PAINTED, THE CONTRACTOR MUST PROVIDE THE INSPECTOR WITH A SAFETY BELT AND LIFELINE. THE LIFELINE MUST NOT ALLOW A FALL GREATER THAN 6 FEET. THE CONTRACTOR MUST PROVIDE A METHOD OF ATTACHING THE LIFELINE TO THE STRUCTURE INDEPENDENT OF THE SCAFFOLDING, CABLES, OR BRACKETS SUPPORTING THE SCAFFOLDING. WHEN SCAFFOLDING IS MORE THAN TWO AND ONE HALF FEET ABOVE THE GROUND, THE CONTRACTOR MUST PROVIDE A LADDER FOR ACCESS ONTO THE SCAFFOLDING. THE LADDER AND ANY EQUIPMENT USED TO ATTACH THE LADDER TO THE STRUCTURE MUST BE CAPABLE OF SUPPORTING 250 POUNDS WITH A SAFETY FACTOR OF AT LEAST FOUR (4). ALL RUNGS, STEPS, CLEATS, OR TREADS MUST HAVE UNIFORM SPACING AND MUST NOT EXCEED 12" ON CENTER. AT LEAST ONE SIDE RAIL MUST EXTEND AT LEAST 36" ABOVE THE LANDING NEAR THE TOP OF THE LADDER.

AN ADDITIONAL LANDING MUST BE REQUIRED WHEN THE DISTANCE FROM THE LADDER TO THE POINT WHERE THE SCAFFOLDING MAY BE ACCESSED, EXCEEDS 12". THE LANDING MUST BE A MINIMUM OF AT LEAST 24" WIDE AND 24" LONG. IT MUST ALSO BE OF ADEQUATE SIZE AND SHAPE SO THAT THE DISTANCE FROM THE LANDING TO THE POINT WHERE THE SCAFFOLDING IS ACCESSED DOES NOT EXCEED 12". THE LANDING MUST BE RIGID AND FIRMLY ATTACHED TO THE LADDER; HOWEVER, IT MUST NOT BE SUPPORTED BY THE LADDER. THE SCAFFOLDING MUST BE CAPABLE OF SUPPORTING A MINIMUM OF 1000 LBS.

IN ADDITION TO THE AFOREMENTIONED REQUIREMENTS, THE CONTRACTOR IS STILL RESPONSIBLE TO OBSERVE AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS, ORDINANCES, REGULATIONS, ORDERS AND DECREES.

THE CONTRACTOR MUST FURNISH ALL NECESSARY TRAFFIC CONTROL TO PERMIT INSPECTION DURING AND AFTER ALL PHASES OF THE PROJECT.

10.0 PROTECTION OF PERSONS AND PROPERTY

THE CONTRACTOR MUST INSTALL AND MAINTAIN SUITABLE SHIELDS OR ENCLOSURES TO PREVENT DAMAGE TO ADJACENT BUILDINGS, PARKED CARS, TRUCKS, BOATS, OR VEHICLES TRAVELING ON, OVER, OR UNDER STRUCTURES HAVING GALVANIZED REPAIRS. THEY MUST BE SUITABLY ANCHORED AND REINFORCED TO PREVENT INTERFERING WITH NORMAL TRAFFIC OPERATIONS IN THE OPEN LANES. PAYMENT FOR THE SHIELDS MUST BE INCLUDED AS INCIDENTAL TO THE APPLICABLE FIELD COATING OPERATION. WORK MUST BE SUSPENDED WHEN DAMAGE TO ADJACENT BUILDINGS, MOTOR VEHICLES, BOATS, OR OTHER PROPERTY IS OCCURRING.

WHEN OR WHERE ANY DIRECT OR INDIRECT DAMAGE OR INJURY IS DONE TO PUBLIC OR PRIVATE PROPERTY, THE CONTRACTOR MUST RESTORE, AT HIS OWN EXPENSE, SUCH PROPERTY, TO A CONDITION SIMILAR OR EQUAL TO THAT EXISTING BEFORE SUCH DAMAGE OR INJURY WAS DONE.

11.0 POLLUTION CONTROL

THE CONTRACTOR MUST TAKE ALL NECESSARY PRECAUTIONS TO COMPLY WITH POLLUTION CONTROL LAWS, RULES OR REGULATIONS OF FEDERAL, STATE OR LOCAL AGENCIES.

12.0 METHOD OF MEASUREMENT

THE COST OF ALL LABOR, MATERIALS, EQUIPMENT NECESSARY TO GALVANIZE AND TO FABRICATE THE STRUCTURAL STEEL IN ACCORDANCE WITH 513 AND PERFORM ANY NECESSARY FIELD REPAIR SHALL BE INCLUDED IN THIS 513, AS PER PLAN ITEM.

13.0 BASIS OF PAYMENT

PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR THE ITEM 513, STRUCTURAL STEEL MEMBERS, LEVEL 4, AS PER PLAN.

14.0 METALIZING STRUCTURAL STEEL

IN LIEU OF GALVANIZING THE STRUCTURAL STEEL, METALIZING PER SUPPLEMENTAL SPECIFICATION 845 WILL BE ALLOWED. ALL NECESSARY LABOR, MATERIALS, AND EQUIPMENT ASSOCIATED WITH SUPPLEMENTAL SPECIFICATION 845 ARE TO BE CONSIDERED INCIDENTAL TO ITEM 513-STRUCTURAL STEEL MEMBERS, LEVEL 4, AS PER PLAN.

REVISIONS	NUMBER	DATE	DESCRIPTION
	A	4/24/19	ADDED NOTE

DESIGN AGENCY: CARPENTER MARTY TRANSPORTATION (WWW.CARPENTERMARTY.COM)

GENERAL NOTES: BRIDGE NO. SUM-76-0580 OVER S.R. 619 (WOOSTER ROAD)

SUM-76-5.53 PID No. 96670

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569 672

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ESTIMATED QUANTITIES										DESIGN: GDJ	CHECK: ERK		
										DATE: 8/14/18	DATE: 8/14/18		
ITEM	EXTENSION	PHASE 1	PHASE 2	PHASE 3	TOTAL 02/IMS/BR	TOTAL 11/IMS/BR	TOTAL	UNIT	DESCRIPTION	ABUT.	SUPER.	GEN.	SHEET #
202	11003	LS	LS	LS		LS	LS	-	STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN			LS	18/78
202	22900	133	175	285	196	397	593	SY	APPROACH SLAB REMOVED			593	
202	32800	370	547	659	520	1056	1576	SY	CONCRETE SLOPE PROTECTION REMOVED			1576	
503	11101	LS	LS			LS	LS	-	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN			LS	4/78
505	11100	LS	LS	LS		LS	LS	-	PILE DRIVING EQUIPMENT MOBILIZATION	LS			
506	11101	LS				LS	LS	-	STATIC LOAD TEST, AS PER PLAN	LS			3/78 AND 4/78
507	00500	3480	2030	4060	3158	6412	9570	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	9570			
507	00551	3720	2170	4360	3382	6868	10250	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED, AS PER PLAN	10250			4/78
507	92201			84	28	56	84	FT	PREBORED HOLES, AS PER PLAN	84			4/78
509	10000	63523	55053	137475	84497	171554	256051	LB	EPOXY COATED REINFORCING STEEL	43031	213020		
511	21522	219	231		148	302	450	CY	CLASS OC2 CONCRETE WITH OC/OA, SUPERSTRUCTURE		450		
511	21523			526	174	352	526	CY	CLASS OC2 CONCRETE WITH OC/OA, SUPERSTRUCTURE, AS PER PLAN		526		4/78
511	33500	2		2	1	3	4	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE		4		
511	34450	21	31	50	34	68	102	CY	CLASS OC2 CONCRETE WITH OC/OA, BRIDGE DECK (PARAPET)		102		
511	43512	217	108	259	193	391	584	CY	CLASS OC1 CONCRETE WITH OC/OA, ABUTMENT INCLUDING FOOTING	584			
512	10100	460	258	680	461	937	1398	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	471	721	206	
512	33000		8	8	5	11	16	SY	TYPE 2 WATERPROOFING			16	
513	10281	255900	263300	585500	364551	740149	1104700	LB	STRUCTURAL STEEL MEMBERS, LEVEL 4, AS PER PLAN		1104700		4/78 5/78 36/78
513	20000	1344	1344	3024	1885	3827	5712	EACH	WELDED STUD SHEAR CONNECTORS		5712		
516	10010	96	105	240	146	295	441	FT	ARMORLESS PREFORMED JOINT SEAL			441	
516	13600	9	13	21	14	29	43	SF	1" PREFORMED EXPANSION JOINT FILLER		43		
516	13900	90	13	563	220	446	666	SF	2" PREFORMED EXPANSION JOINT FILLER			666	
516	14020	131	106	261	164	334	498	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL		498		
516	44200	8	8	18	11	23	34	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (18" X 22" X 3.374" WITH A 19" X 23" X 2" LOAD PLATE)		34		
518	21200	80	59	157	98	198	296	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC			296	
518	40000	169	120	256	180	365	545	FT	6" PERFORATED CORRUGATED PLASTIC PIPE			545	
518	40010	55		26	27	54	81	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS			81	
523	20001	2			1	1	2	EACH	DYNAMIC LOAD TESTING, AS PER PLAN	2			4/78
523	20501	6			2	4	6	EACH	RESTRIKE, AS PER PLAN	6			4/78
526	30011	235	248	566	346	703	1049	SY	REINFORCED CONCRETE APPROACH SLABS WITH OC/OA (T=17"), AS PER PLAN			1049	62/78 THRU 70/78
526	90030	96	105	240	146	295	441	FT	TYPE C INSTALLATION			441	
607	39900	126		130	84	172	256	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC			256	
867	00100	LS				LS	LS	-	TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL (TEMPORARY WIRE FACED MSE WALL 1)			LS	
867	00100	LS				LS	LS	-	TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL (TEMPORARY WIRE FACED MSE WALL 2)			LS	
867	00100		LS			LS	LS	-	TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL (TEMPORARY WIRE FACED MSE WALL 3)			LS	
867	00100		LS			LS	LS	-	TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL (TEMPORARY WIRE FACED MSE WALL 4)			LS	

* - PAID FOR UNDER THE ROADWAY QUANTITIES. SEE THE ROADWAY GENERAL SUMMARY.

REVISIONS	NUMBER	DATE	DESCRIPTION
	△	4/2/19	REVISED QUANTITIES
	△	4/25/19	REMOVED PAY ITEMS

DESIGN AGENCY
CARPENTER MARTY
TRANSPORTATION
CONSULTANTS, INC.

DATE
5/8/2017

REVIEWED
WHM

STRUCTURE FILE NUMBER
7705493

ESTIMATED QUANTITIES

BRIDGE NO. SUM-76-0580
OVER S.R. 619 (WOOSTER ROAD)

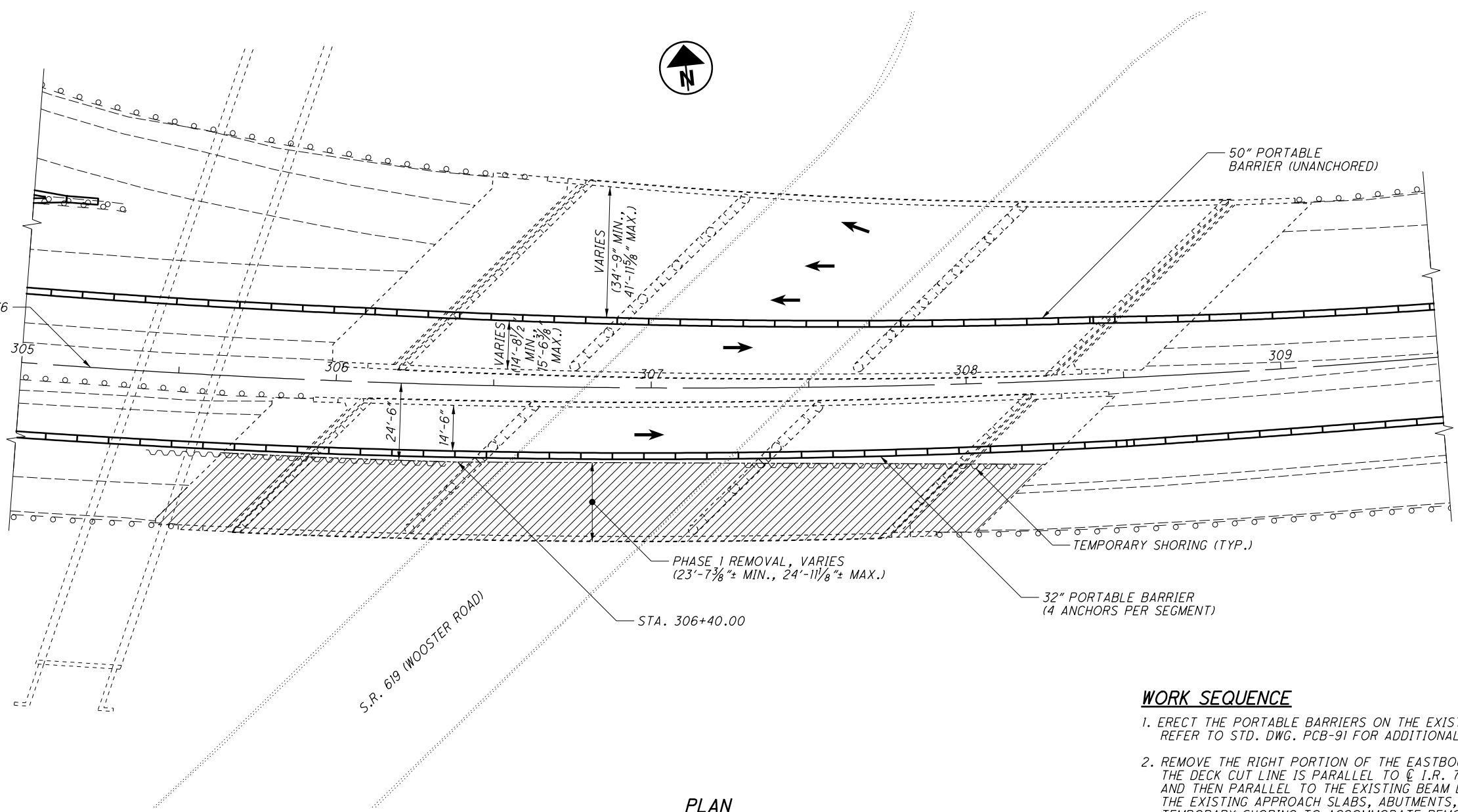
SUM-76-5.53
PID No. 96670

6/78

570
672

P:\ODT\MP\0093_SUM-76-5.62\SUM-76-5.62\SUM-76-5.62\Structures\SUM076_0580C_Sheets\076_0580C_Sheet.dgn Sheet 10/11/2018 2:08:52 PM cmt007

CL R/W & CONSTRUCTION I.R. 76



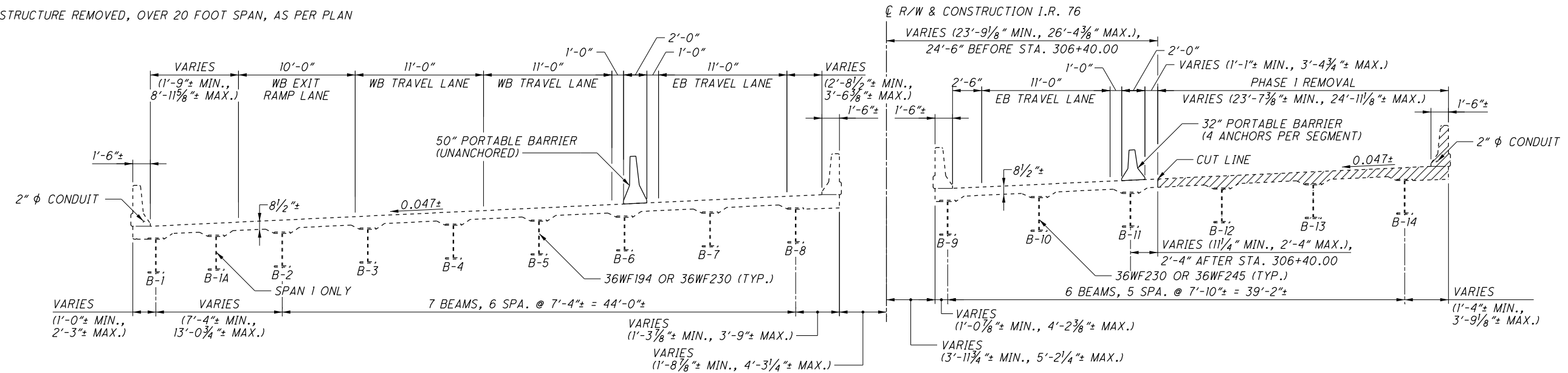
PLAN

WORK SEQUENCE

1. ERECT THE PORTABLE BARRIERS ON THE EXISTING STRUCTURES AS SHOWN. REFER TO STD. DWG. PCB-91 FOR ADDITIONAL DETAILS.
2. REMOVE THE RIGHT PORTION OF THE EASTBOUND SUPERSTRUCTURE. THE DECK CUT LINE IS PARALLEL TO CL I.R. 76 UNTIL STA. 306+40.00 AND THEN PARALLEL TO THE EXISTING BEAM LINE. REMOVE PORTIONS OF THE EXISTING APPROACH SLABS, ABUTMENTS, AND PIERS. PROVIDE TEMPORARY SHORING TO ACCOMMODATE REMOVAL OF THE EXISTING SUBSTRUCTURES & PHASE 1 CONSTRUCTION.

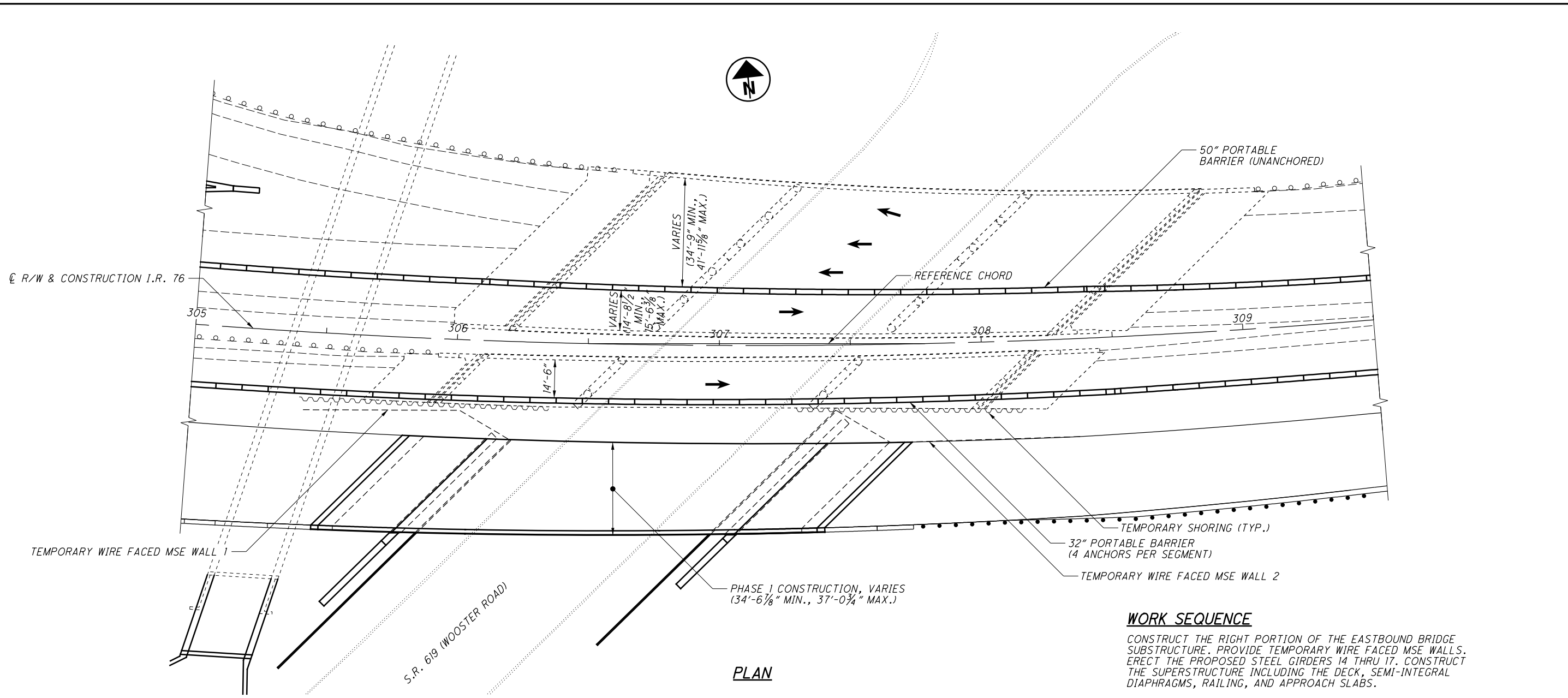
LEGEND

STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN



PHASE 1 MAINTENANCE OF TRAFFIC AND REMOVAL
CROSS FRAMES NOT SHOWN

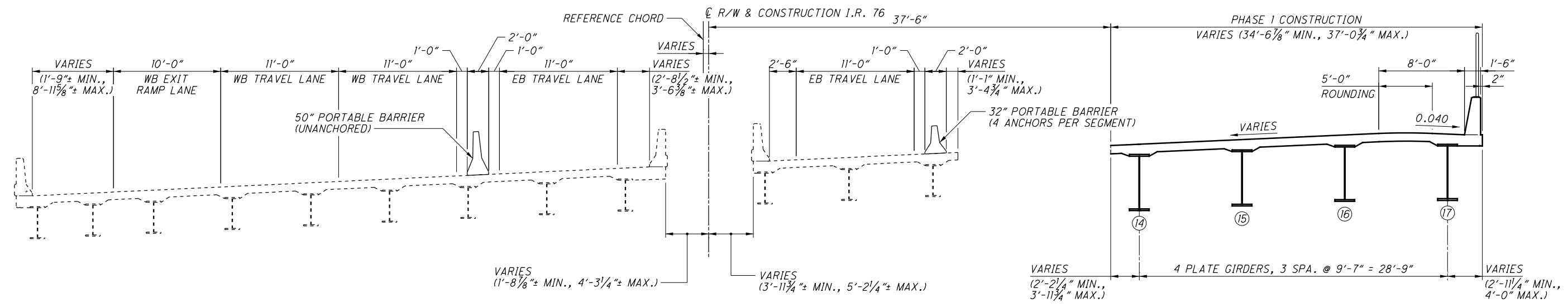
P:\ODT\MP\0093_SUM-76-5.62\SUM-76-5.62\SUM-76-5.62\Design\Structures\SUM076_0580C_Sheets\076_0580C_SC002.dgn Sheet 10/1/2018 2:08:53 PM cmt007



PLAN

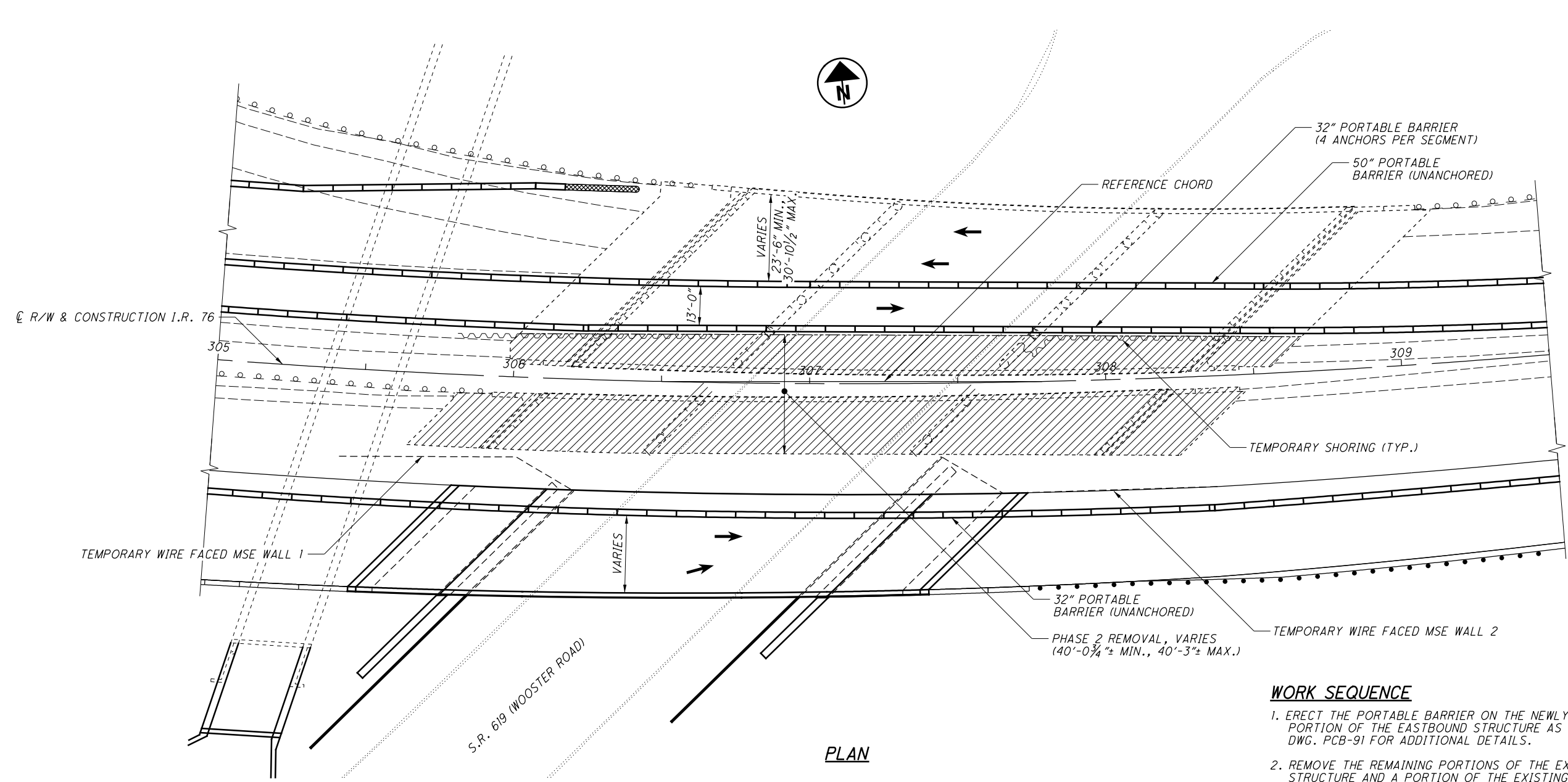
WORK SEQUENCE

CONSTRUCT THE RIGHT PORTION OF THE EASTBOUND BRIDGE SUBSTRUCTURE. PROVIDE TEMPORARY WIRE FACED MSE WALLS. ERECT THE PROPOSED STEEL GIRDERS 14 THRU 17. CONSTRUCT THE SUPERSTRUCTURE INCLUDING THE DECK, SEMI-INTEGRAL DIAPHRAGMS, RAILING, AND APPROACH SLABS.



PHASE 1 CONSTRUCTION
 CROSS FRAMES NOT SHOWN

P:\ODT\MP\0093_SUM-76-5.62\SUM-76-5.62\Structures\SUM076_0580C_Sheets\076_0580C_SC003.dgn Sheet 10/1/2018 2:08:54 PM cmt007

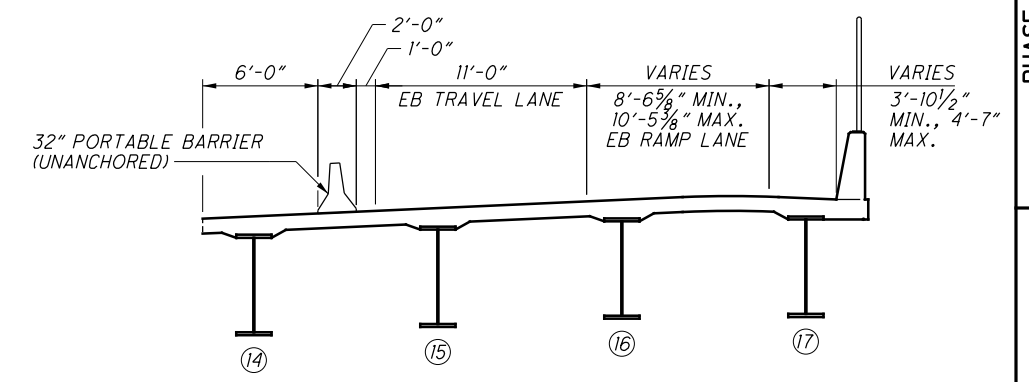
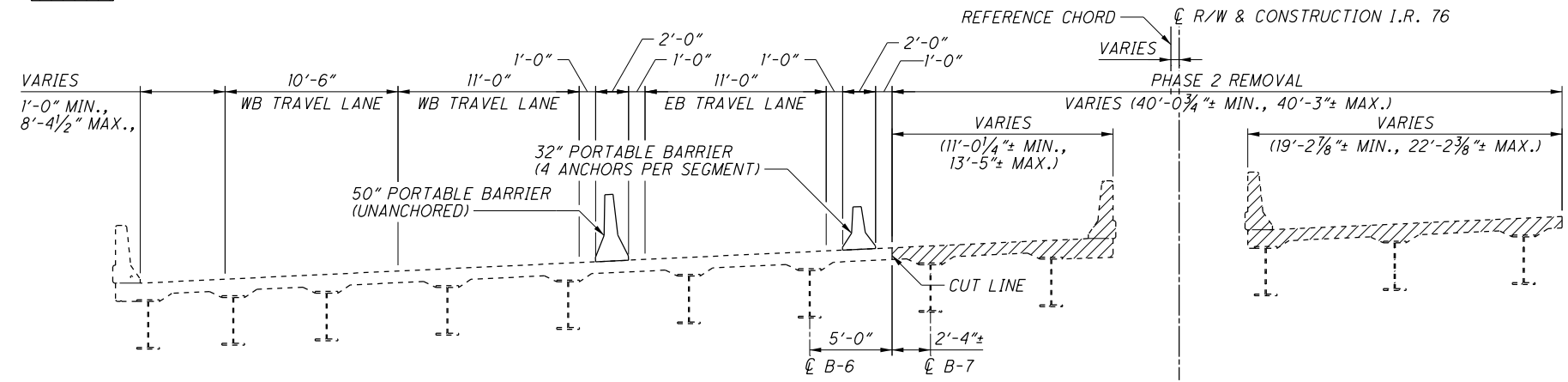


LEGEND

STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

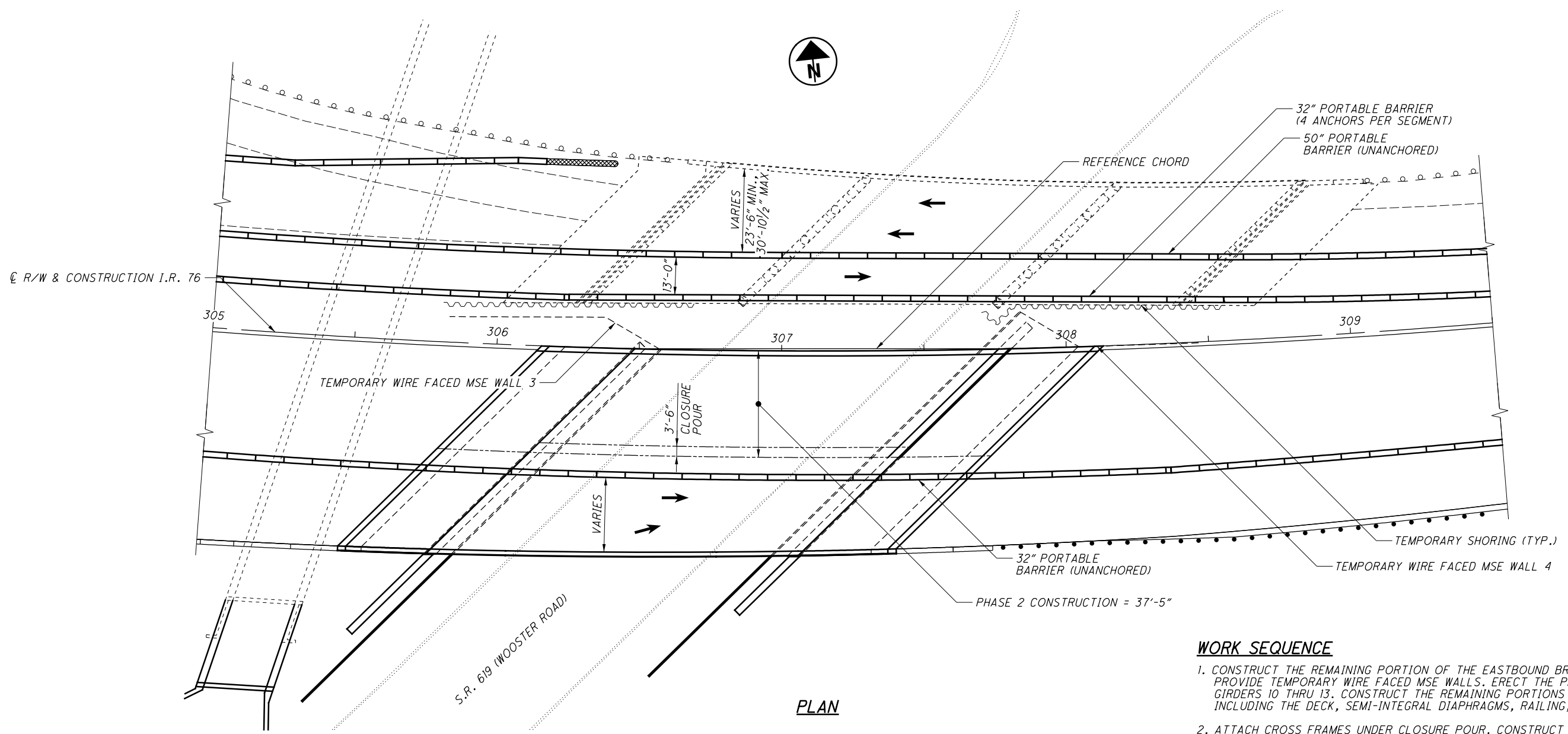
WORK SEQUENCE

1. ERECT THE PORTABLE BARRIER ON THE NEWLY CONSTRUCTED RIGHT PORTION OF THE EASTBOUND STRUCTURE AS SHOWN. REFER TO STD. DWG. PCB-91 FOR ADDITIONAL DETAILS.
2. REMOVE THE REMAINING PORTIONS OF THE EXISTING EASTBOUND STRUCTURE AND A PORTION OF THE EXISTING WESTBOUND STRUCTURE. THE CUT LINE IS PARALLEL TO THE BEAM. PROVIDE TEMPORARY SHORING TO ACCOMMODATE REMOVAL OF THE EXISTING SUBSTRUCTURES AND PHASE 2 CONSTRUCTION.



PHASE 2 MAINTENANCE OF TRAFFIC AND REMOVAL
CROSS FRAMES NOT SHOWN

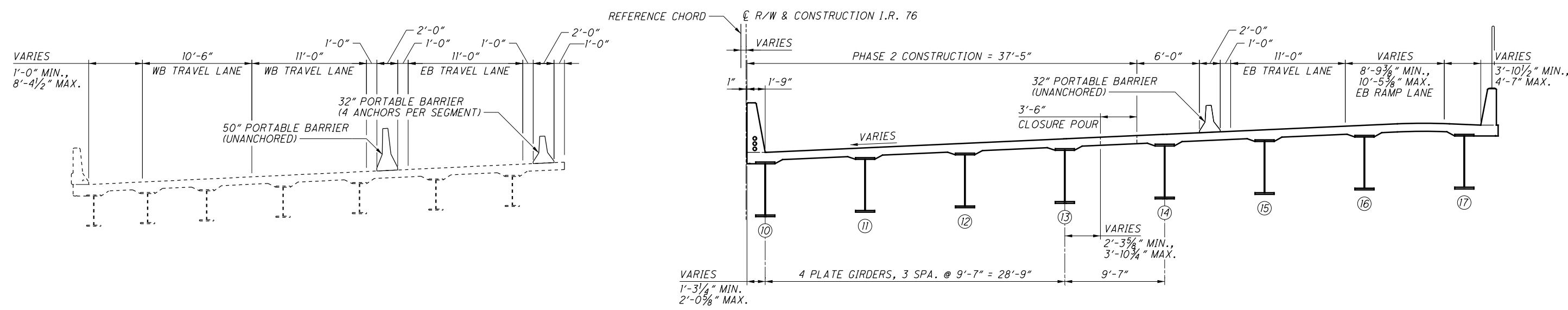
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PLAN

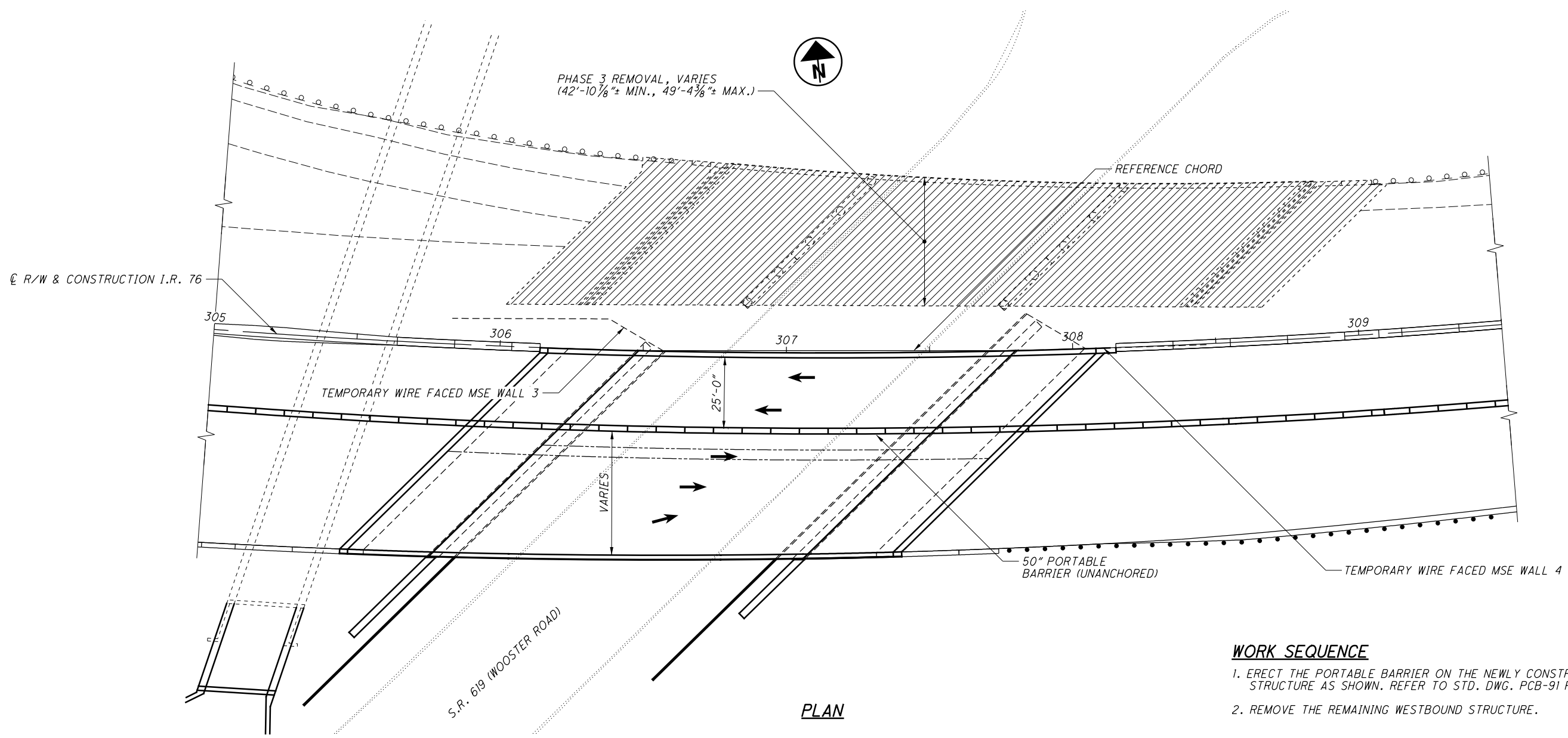
WORK SEQUENCE

1. CONSTRUCT THE REMAINING PORTION OF THE EASTBOUND BRIDGE SUBSTRUCTURE. PROVIDE TEMPORARY WIRE FACED MSE WALLS. ERECT THE PROPOSED STEEL GIRDERS 10 THRU 13. CONSTRUCT THE REMAINING PORTIONS OF THE SUPERSTRUCTURE INCLUDING THE DECK, SEMI-INTEGRAL DIAPHRAGMS, RAILING, AND APPROACH SLABS.
2. ATTACH CROSS FRAMES UNDER CLOSURE POUR. CONSTRUCT THE CLOSURE POUR FOR SEMI-INTEGRAL DIAPHRAGMS AND DECK.



PHASE 2 CONSTRUCTION
 CROSS FRAMES NOT SHOWN

P:\ODT\MP\0093_SUM-76-5.62\SUM-76-5.62\SUM-96670\Design\Structures\SUM076_0580C\Sheets\076_0580C_SC005.dgn Sheet 10/1/2018 2:08:57 PM cmt007

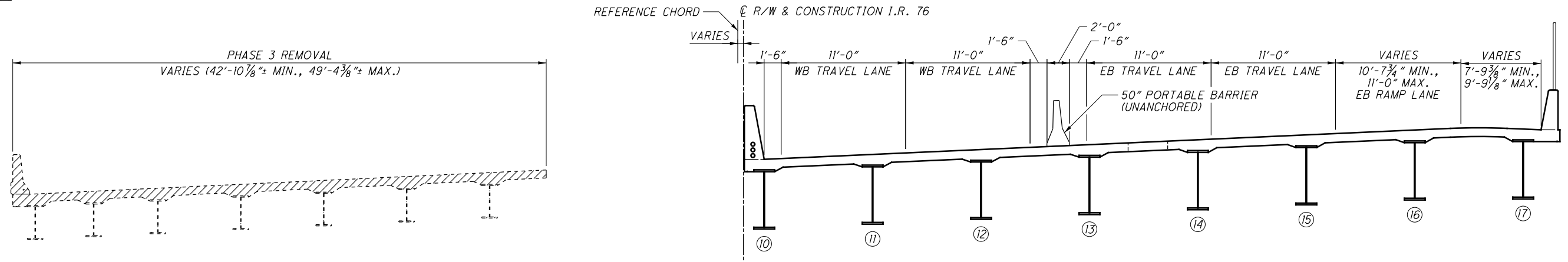


WORK SEQUENCE

1. ERECT THE PORTABLE BARRIER ON THE NEWLY CONSTRUCTED EASTBOUND STRUCTURE AS SHOWN. REFER TO STD. DWG. PCB-91 FOR ADDITIONAL DETAILS.
2. REMOVE THE REMAINING WESTBOUND STRUCTURE.

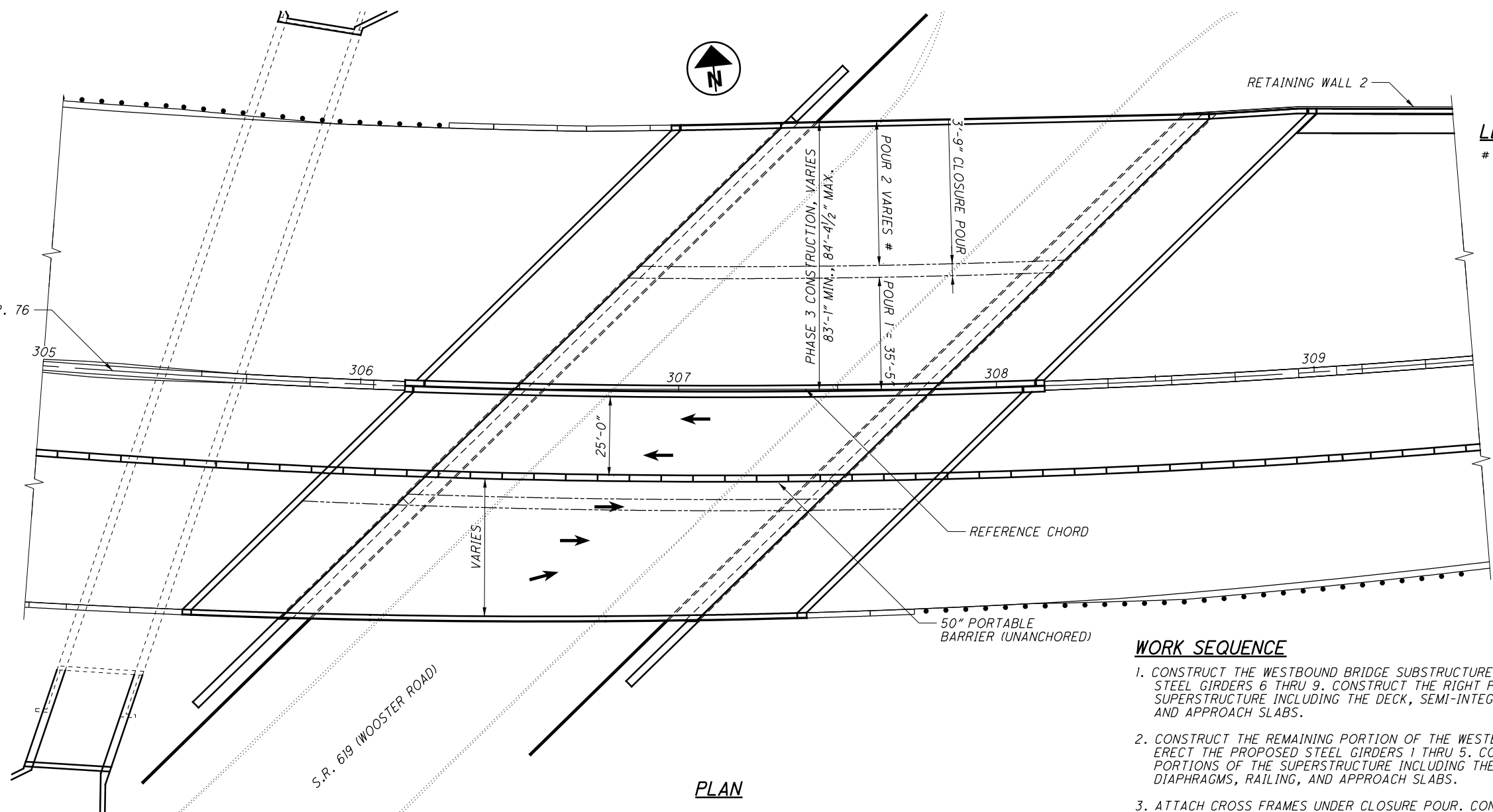
LEGEND

STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN



PHASE 3 MAINTENANCE OF TRAFFIC AND REMOVAL
 CROSS FRAMES NOT SHOWN

P:\ODT\MP\0093_SUM-76-5.62\SUM-76-5.62\SUM-76-5.62\Design\Structures\SUM076_0580C\Sheets\076_0580C_SC006.dgn Sheet 10/1/2018 2:08:58 PM cmt007

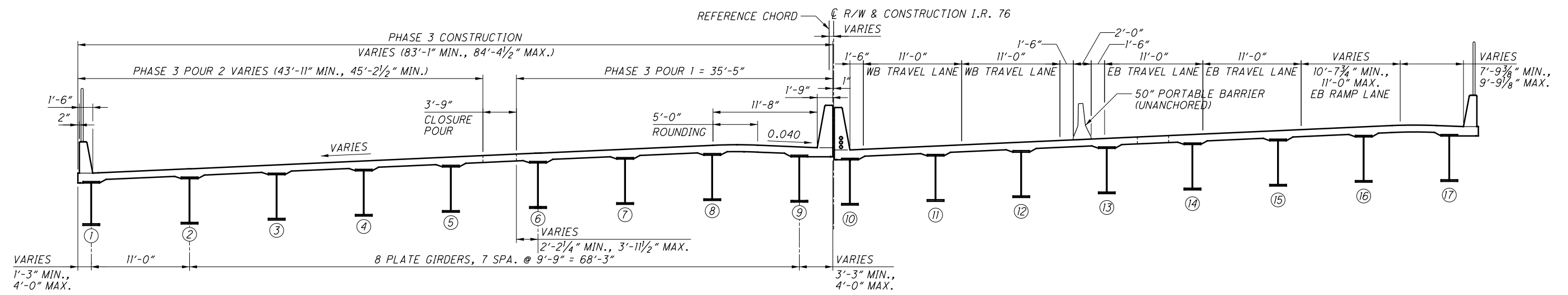


LEGEND
- (43'-11" MIN., 45'-2 1/2" MAX.)

WORK SEQUENCE

1. CONSTRUCT THE WESTBOUND BRIDGE SUBSTRUCTURE. ERECT THE PROPOSED STEEL GIRDERS 6 THRU 9. CONSTRUCT THE RIGHT PORTION OF THE WESTBOUND SUPERSTRUCTURE INCLUDING THE DECK, SEMI-INTEGRAL DIAPHRAGMS, RAILING, AND APPROACH SLABS.
2. CONSTRUCT THE REMAINING PORTION OF THE WESTBOUND BRIDGE SUPERSTRUCTURE. ERECT THE PROPOSED STEEL GIRDERS 1 THRU 5. CONSTRUCT THE REMAINING PORTIONS OF THE SUPERSTRUCTURE INCLUDING THE DECK, SEMI-INTEGRAL DIAPHRAGMS, RAILING, AND APPROACH SLABS.
3. ATTACH CROSS FRAMES UNDER CLOSURE POUR. CONSTRUCT THE CLOSURE POUR FOR SEMI-INTEGRAL DIAPHRAGMS AND DECK.
4. REMOVE THE PORTABLE BARRIER AND OPEN COMPLETED BRIDGE TO TRAFFIC. PERFORM MISCELLANEOUS TASKS SUCH AS SEALING CONCRETE SURFACES.

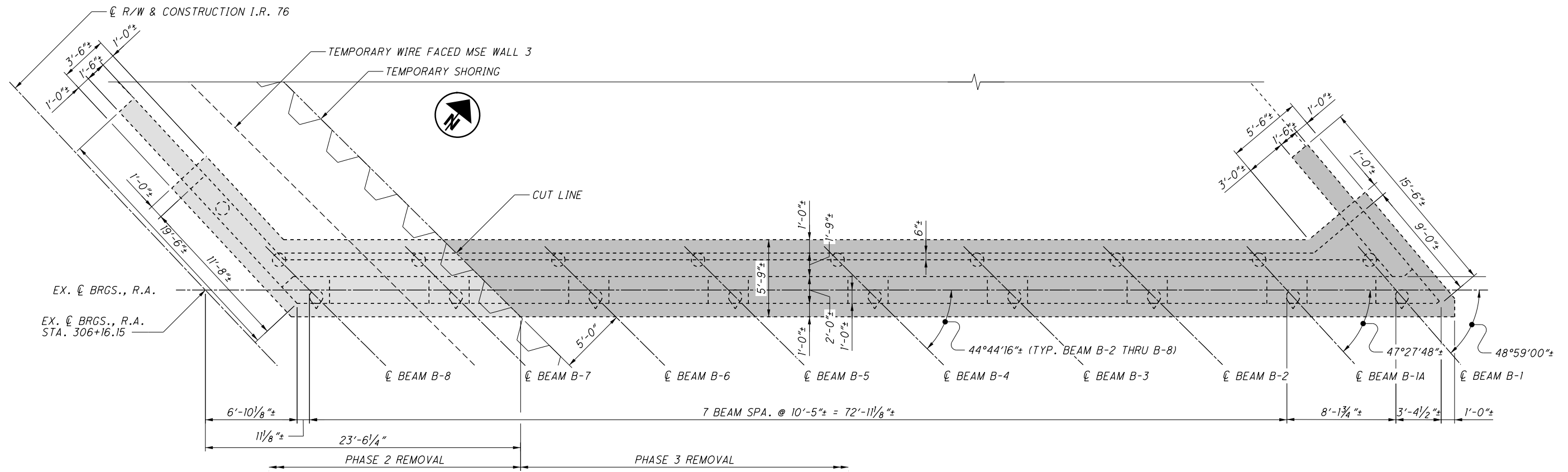
PLAN



PHASE 3 CONSTRUCTION
CROSS FRAMES NOT SHOWN

	DESIGNED	ERK	CHECKED	GDJ
	DRAWN	ERK	REVISED	
REVIEWED	WHM	STRUCTURE FILE NUMBER	7705493	
DATE	5/4/2017			
PHASE 3 CONSTRUCTION BRIDGE NO. SUM-76-0580 OVER S.R. 619 (WOOSTER ROAD)				
SUM-76-5.53 PID No. 96670				
12 / 78				
(576) (672)				

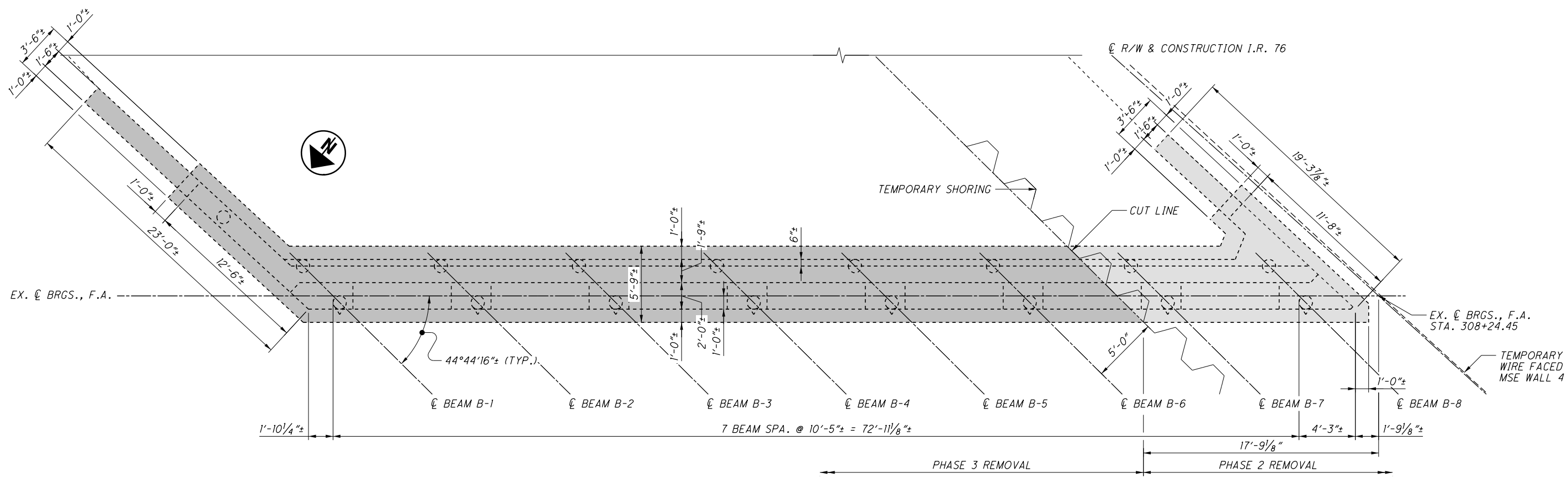
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- LEGEND**
- STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 2
 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 3

PLAN - REAR ABUTMENT

- NOTES**
1. SEE SHEETS 18/78 AND 20/78 FOR TEMPORARY SHORING DETAILS.
 2. SEE SHEETS 23/78 AND 24/78 FOR TEMPORARY WIRE FACED MSE WALL DETAILS.



PLAN - FORWARD ABUTMENT

DESIGN AGENCY
CARPENTER MARTY
TRANSPORTATION

DESIGNED	ERK	CHECKED	GDJ
DRAWN	ERK	REVISED	
REVIEWED	WHM	DATE	5/4/2017
STRUCTURE FILE NUMBER	7705493		

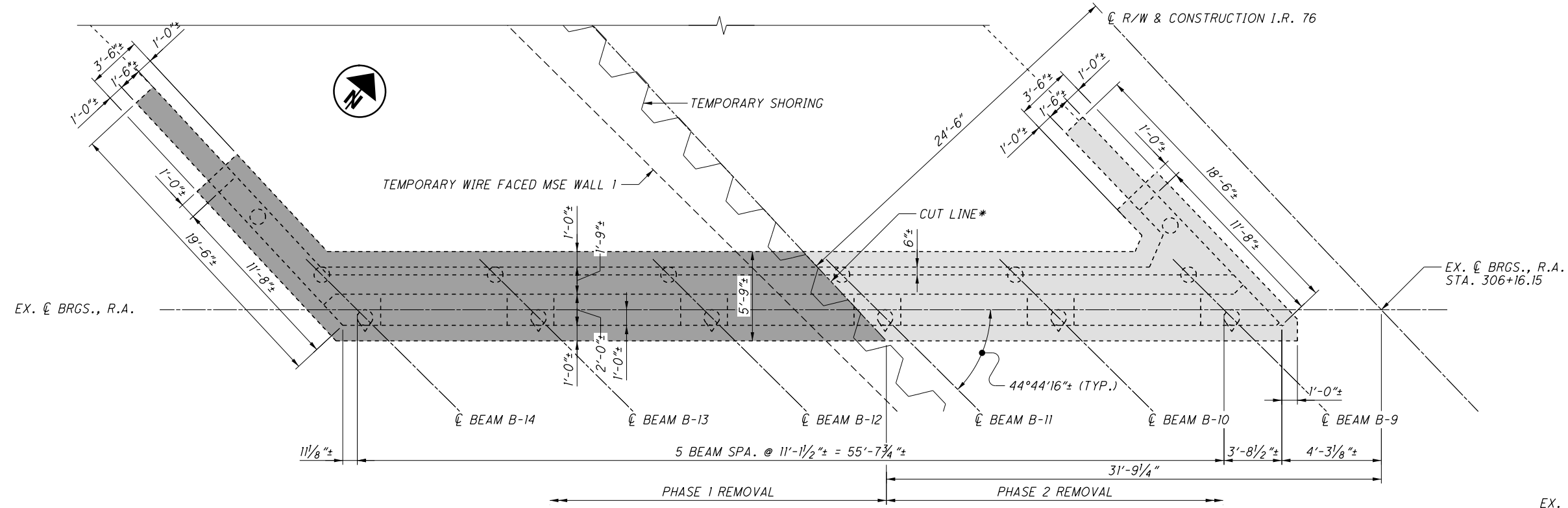
ABUTMENT REMOVAL DETAILS (WESTBOUND)
BRIDGE NO. SUM-76-0580
OVER S.R. 619 (WOOSTER ROAD)

SUM-76-5.53
PID No. 96670

13 / 78

577
672

P:\DDT\MP\0093_SUM-76-5.62\SUM-76-5.62\Structures\SUM076-0580C_Sheets\076_0580C_SV002.dgn Sheet 10/1/2018 2:08:59 PM cmt007



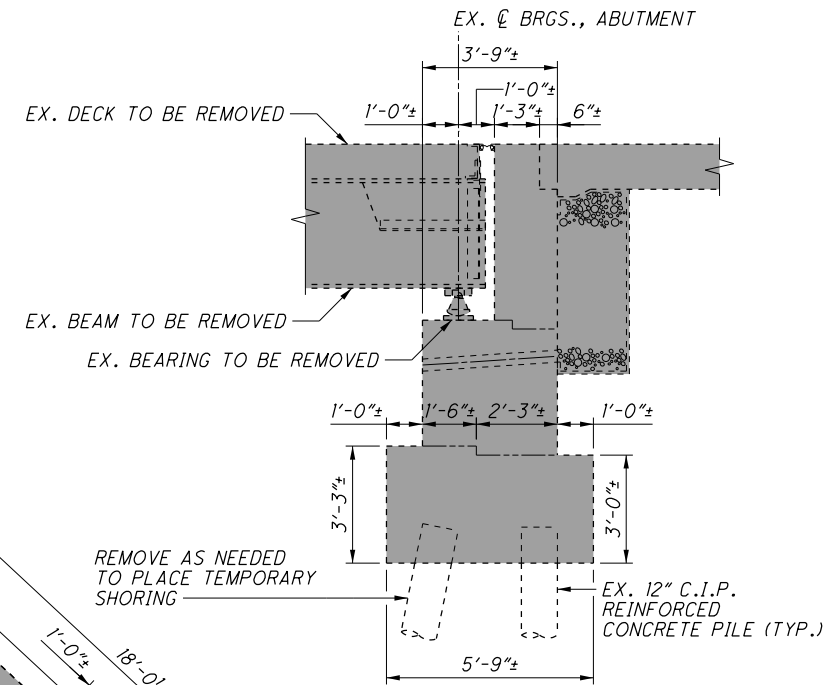
PLAN - REAR ABUTMENT

LEGEND

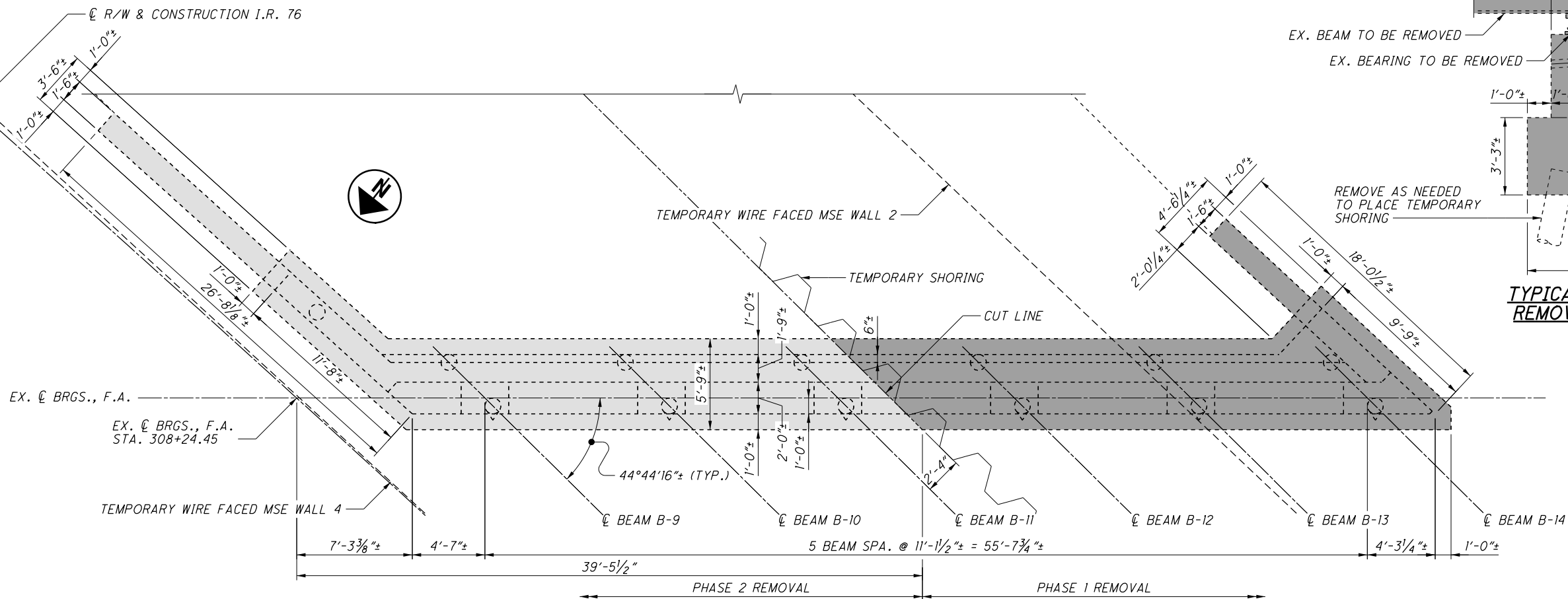
- STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 1
- STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 2
- * CUT LINE PARALLEL TO THE CENTERLINE

NOTES

1. SEE SHEETS 17/78 AND 19/78 FOR TEMPORARY SHORING DETAILS.
2. SEE SHEETS 21/78 AND 22/78 FOR TEMPORARY WIRE FACED MSE WALL DETAILS.

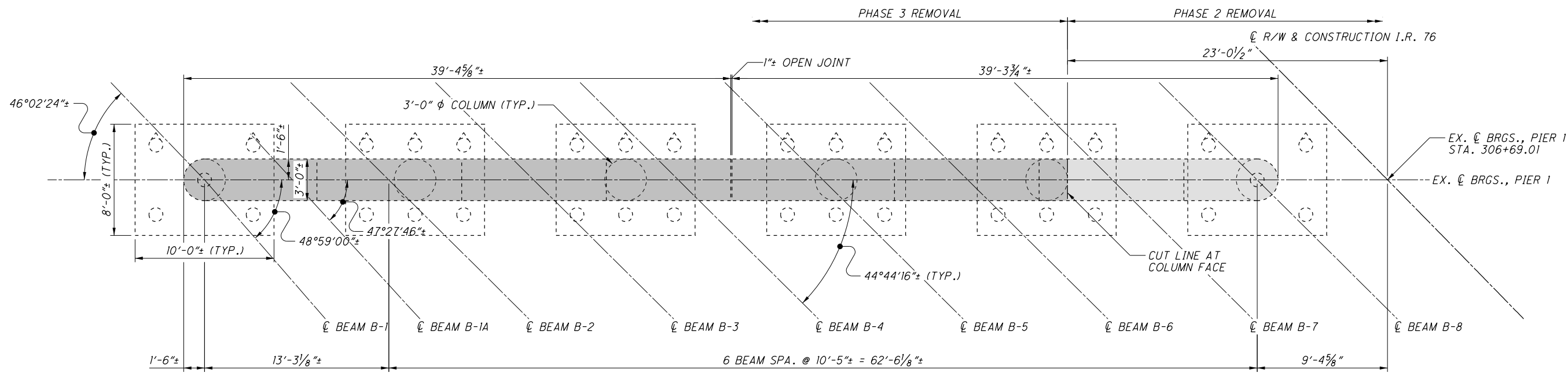


**TYPICAL ABUTMENT
REMOVAL SECTION**



PLAN - FORWARD ABUTMENT

P:\DDT\MP\0093_SUM-76-5.62\SUM-76-5.62\Design\Structures\SUM076-0580C_Sheets\076-0580C_SV003.dgn Sheet 10/1/2018 2:05:00 PM cmt007



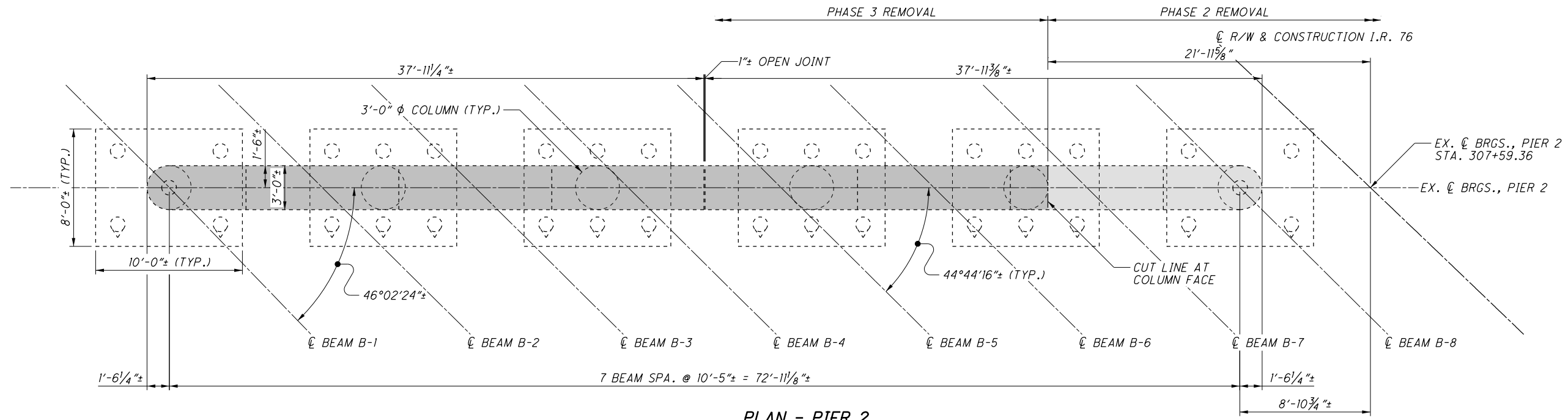
PLAN - PIER 1

LEGEND

- STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 2
- STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 3

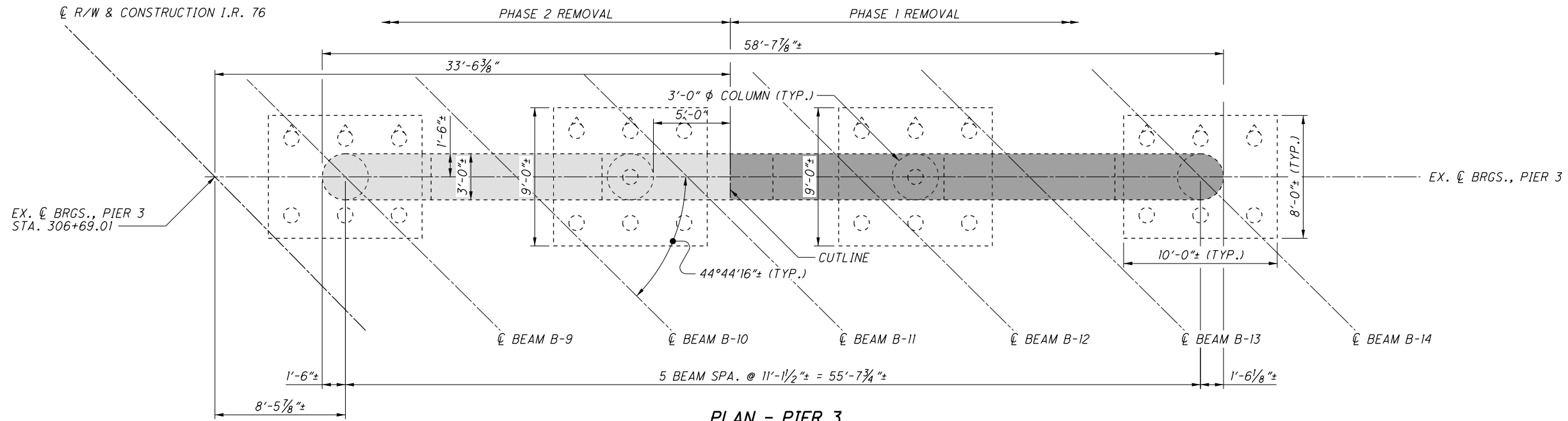
NOTE

REMOVE COLUMN FOOTINGS AS NEEDED TO FACILITATE CONSTRUCTION OF MSE WALLS.



PLAN - PIER 2

P:\DDT\MP\0093_SUM-76-5.62\SUM-76-5.62\SUM-96670\Design\Structures\SUM076_0580C_Sheets\076_0580C_SV004.dgn Sheet 10/1/2018 2:05:01 PM cmt007



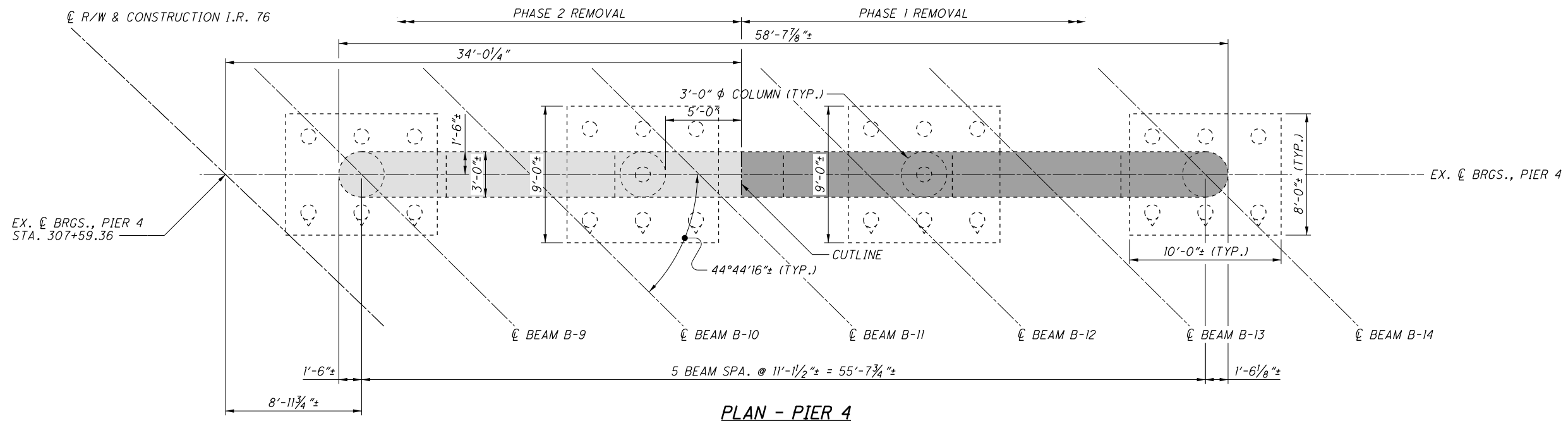
PLAN - PIER 3

LEGEND

- STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 1
- STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN - PHASE 2

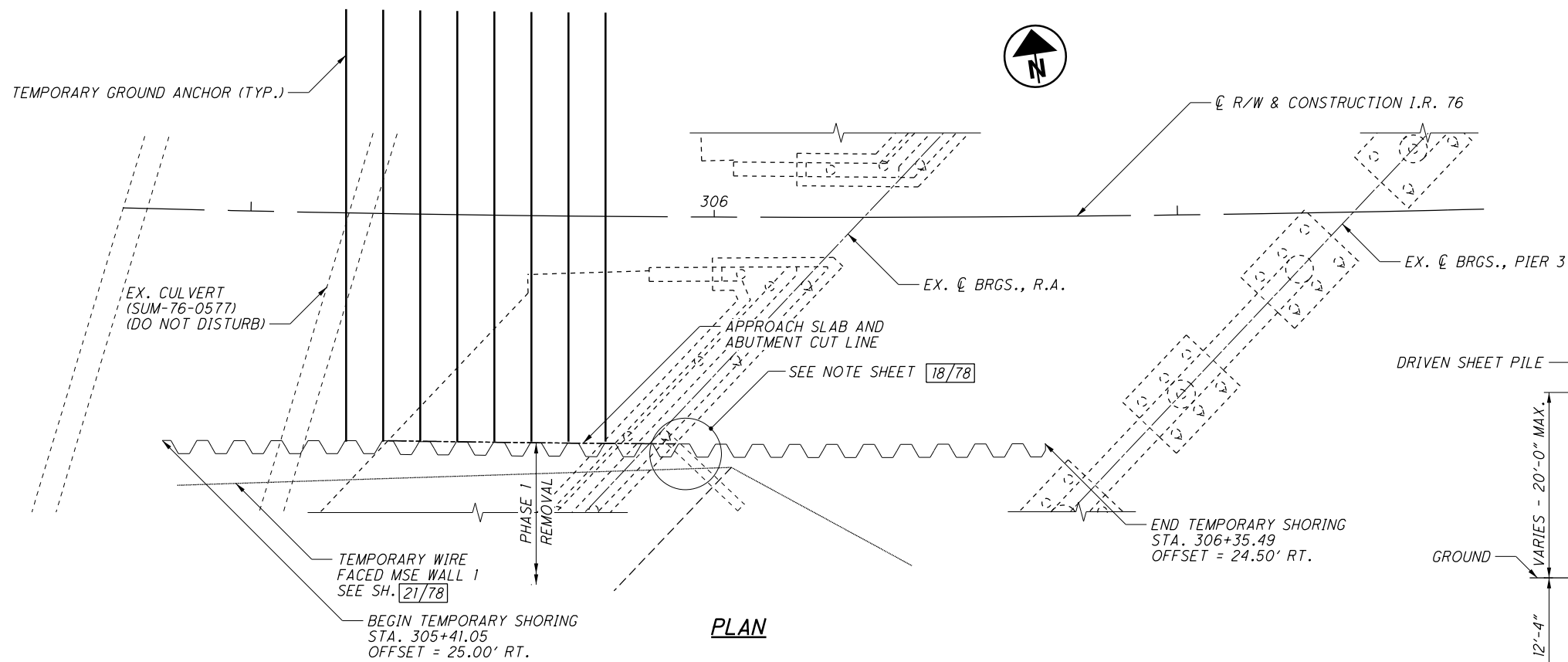
NOTE

REMOVE COLUMN FOOTINGS AS NEEDED TO FACILITATE CONSTRUCTION OF MSE WALLS.

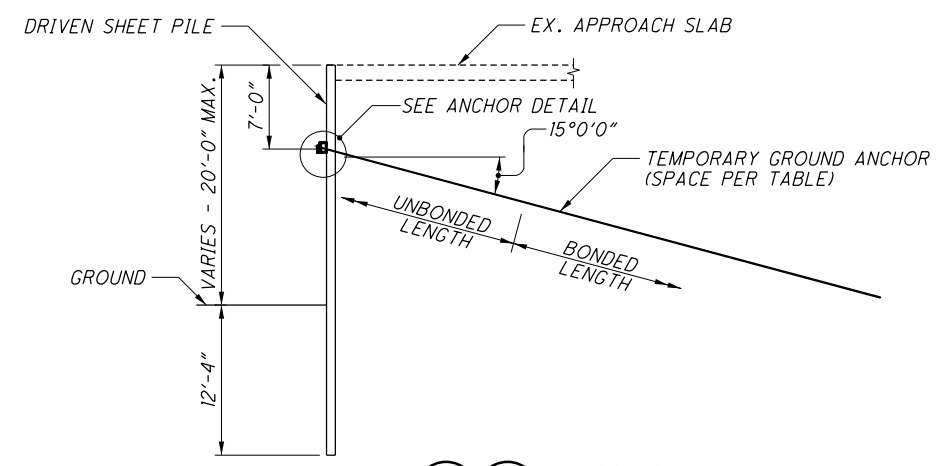


PLAN - PIER 4

P:\DDT\MP\0093_SUM-76-5.62\SUM-76-5.62\Design\Structures\SUM076_0580C_Sheets\076_0580C_SH005.dgn Sheet 10/1/2018 2:09:01 PM cmt007

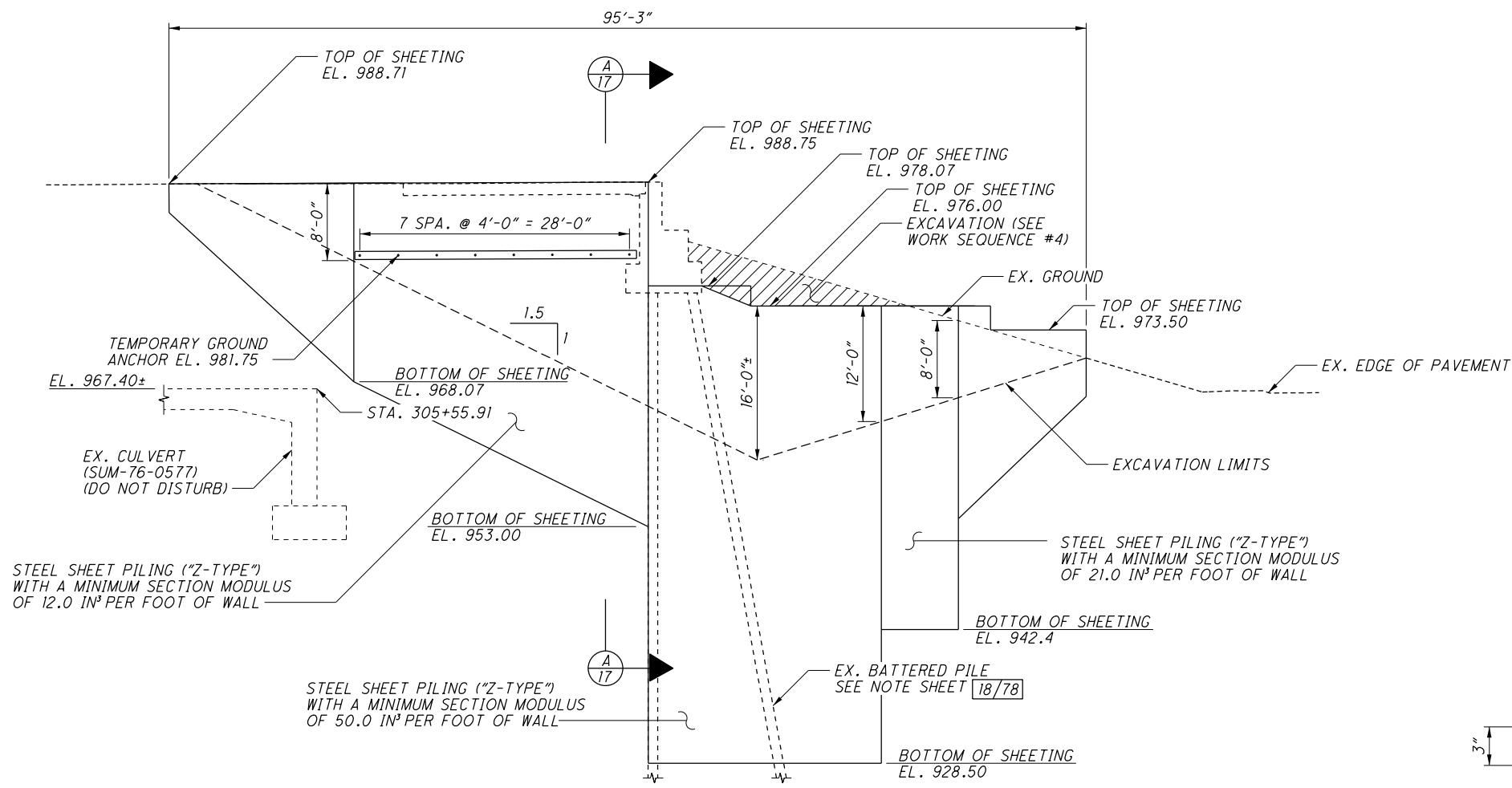


NOTE
SEE WORK SEQUENCE ON SHEET 18/78

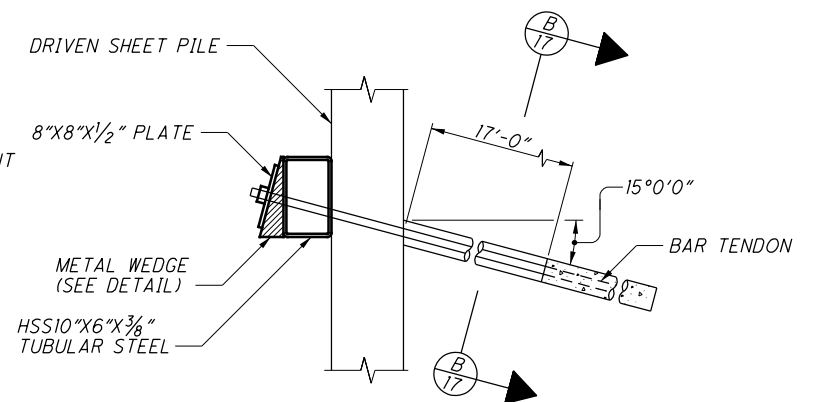


A A SECTION
17 18

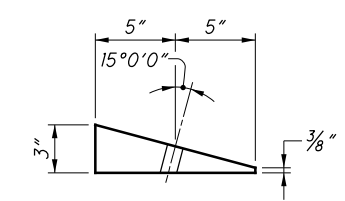
TABLE: GROUND ANCHOR				
SPACING (FT.)	DEPTH (FT.)	MAXIMUM TEST LOAD (KIPS)	UNBONDED LENGTH (FT.)	LOCK-OFF LOAD (KIPS)
4	12.3	69.1	17	47.0



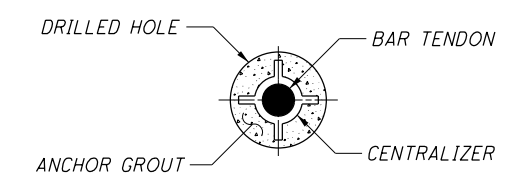
ELEVATION
ALONG FRONT FACE



TEMPORARY GROUND ANCHOR DETAIL

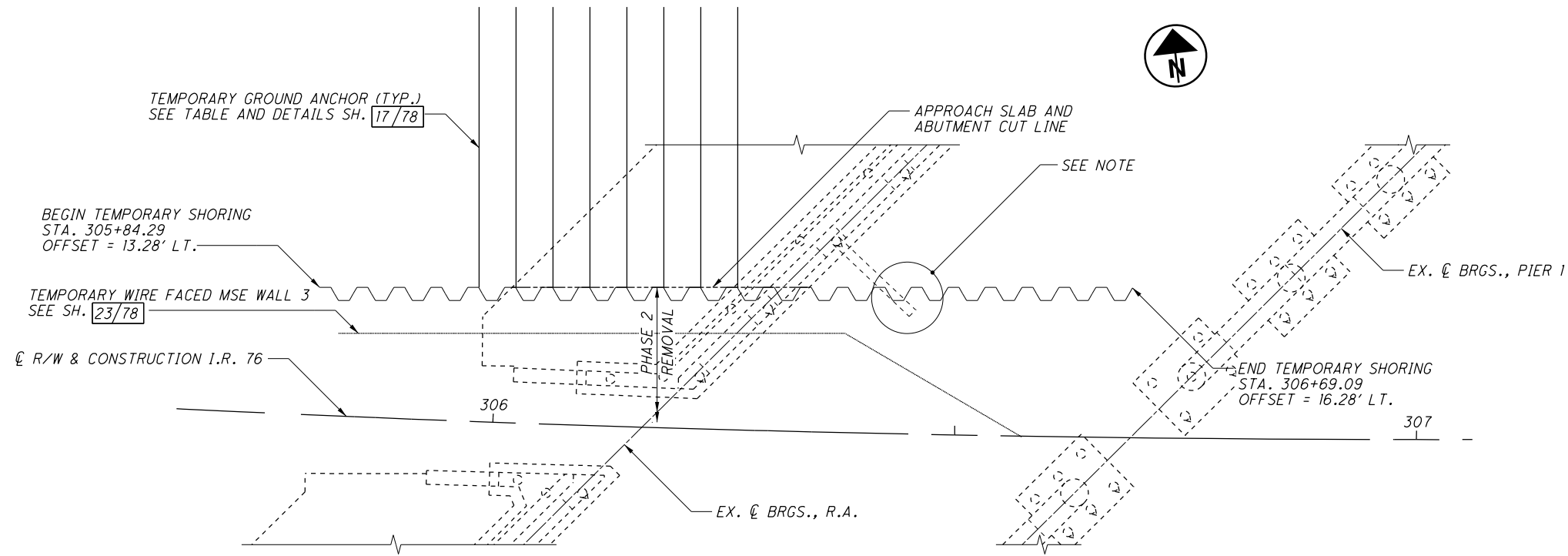


TAPERED METAL WEDGE

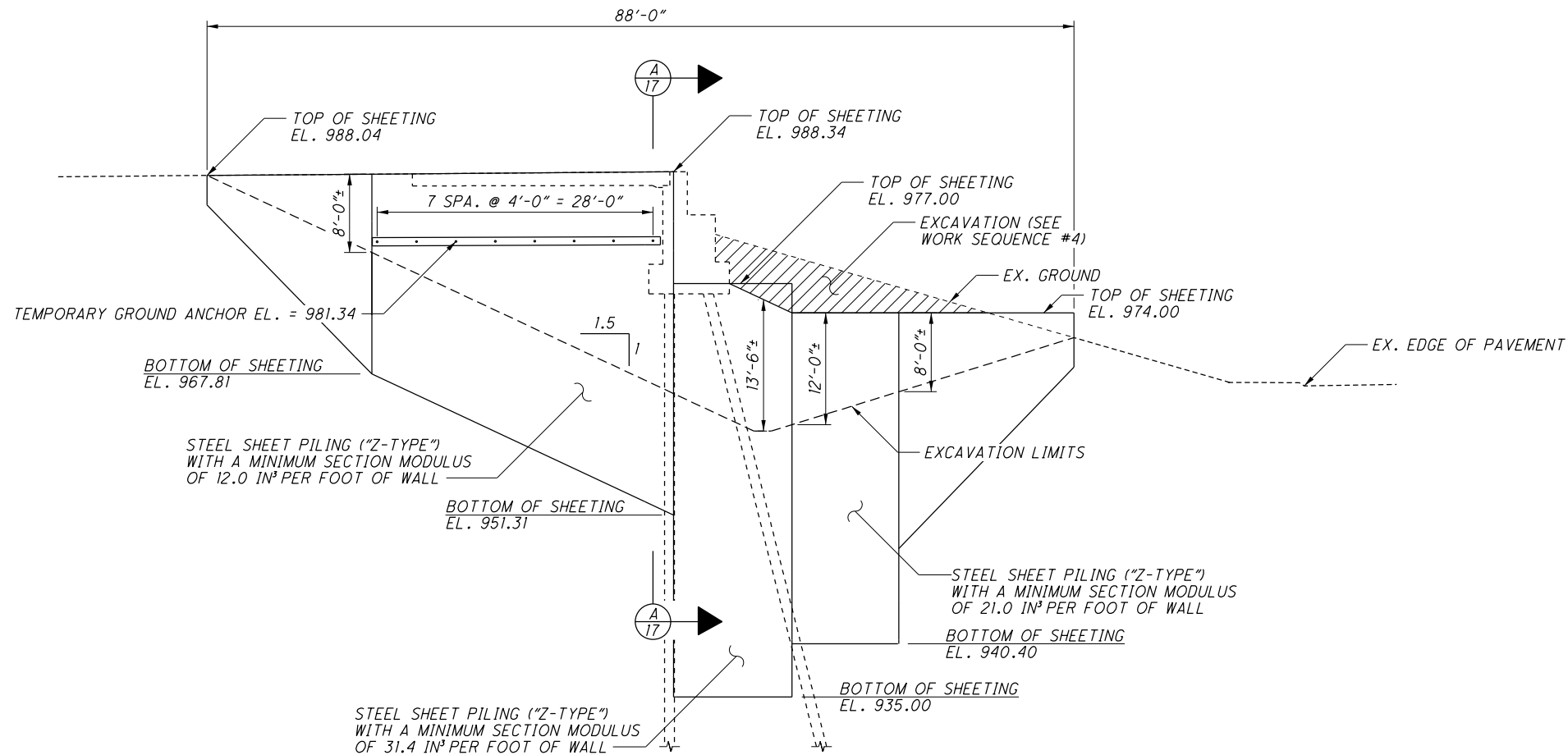


B B SECTION
17

P:\DDT\MP\0093_SUM-76-5.62\SUM-76-5.62\Structures\SUM076_0580C_Sheets\076_0580C_SH006.dgn Sheet 10/1/2018 2:05:02 PM cmt007



PLAN



ELEVATION
ALONG FRONT FACE

WORK SEQUENCE:

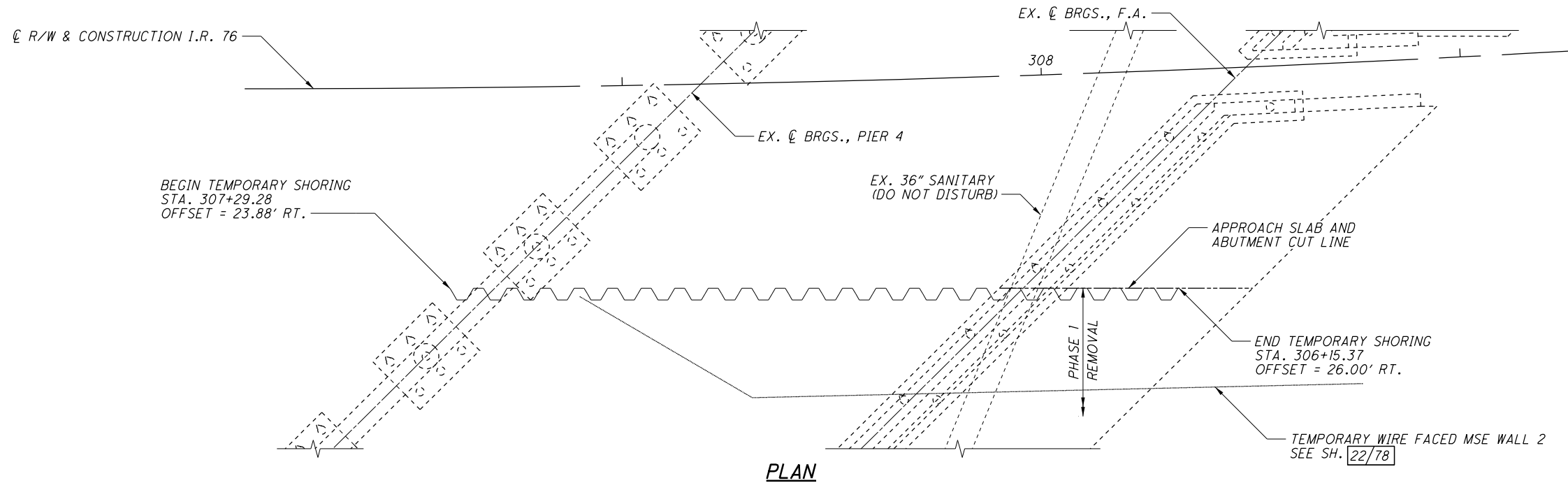
REAR ABUTMENT

1. REMOVE PORTIONS OF EXISTING APPROACH SLABS, PAVEMENT, DECK AND EMBANKMENT TO ALLOW INSTALLATION OF SHORING.
2. INSTALL SHORING BEHIND ABUTMENT.
3. INSTALL TEMPORARY GROUND ANCHORS.
4. EXCAVATE EXISTING GROUND.
5. INSTALL SHORING ADJACENT TO AND IN FRONT OF ABUTMENT.
6. COMPLETE EXCAVATION.
7. REMOVE SHEETING AND ANCHORS TO CONSTRUCT SUBSEQUENT PHASE.

NOTE

PRIOR TO DRIVING SHORING, EXPOSE AND REMOVE EX. BATTERED PILE TO LIMITS SUFFICIENT TO FACILITATE SHORING INSTALLATION. ALL LABOR, MATERIALS AND INCIDENTALS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 202, STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

P:\DDT\MP\0093_SUM-76-5.62\SUM-76-5.62\Design\Structures\SUM076_0580C\Sheets\076_0580C_SH007.dgn Sheet 10/1/2018 2:09:03 PM cmt007

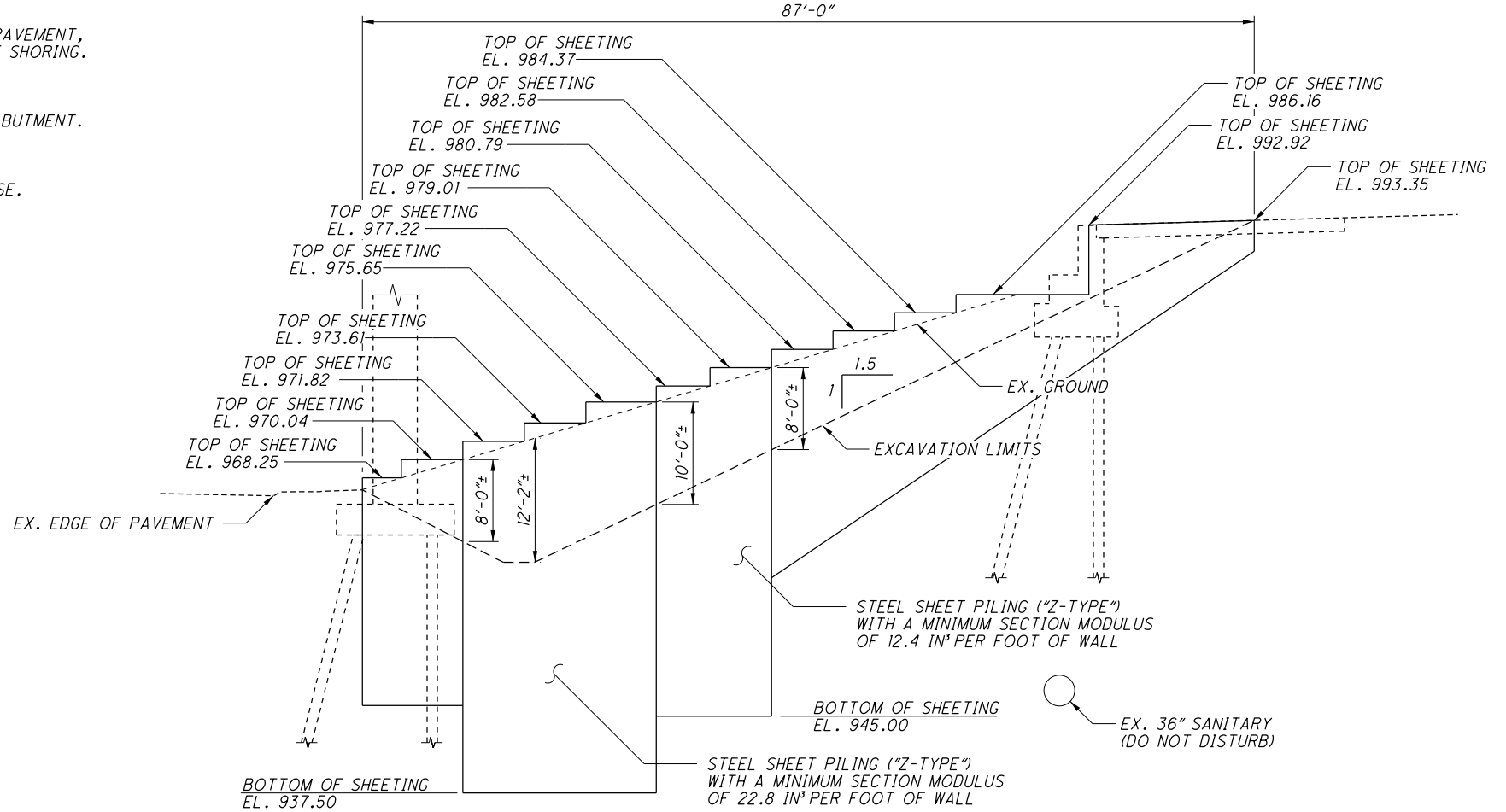


PLAN

WORK SEQUENCE:

FORWARD ABUTMENT

1. REMOVE PORTIONS OF EXISTING APPROACH SLABS, PAVEMENT, DECK AND EMBANKMENT TO ALLOW INSTALLATION OF SHORING.
2. INSTALL SHORING BEHIND ABUTMENT.
3. INSTALL SHORING ADJACENT TO AND IN FRONT OF ABUTMENT.
4. COMPLETE EXCAVATION.
5. REMOVE SHEETING TO CONSTRUCT SUBSEQUENT PHASE.

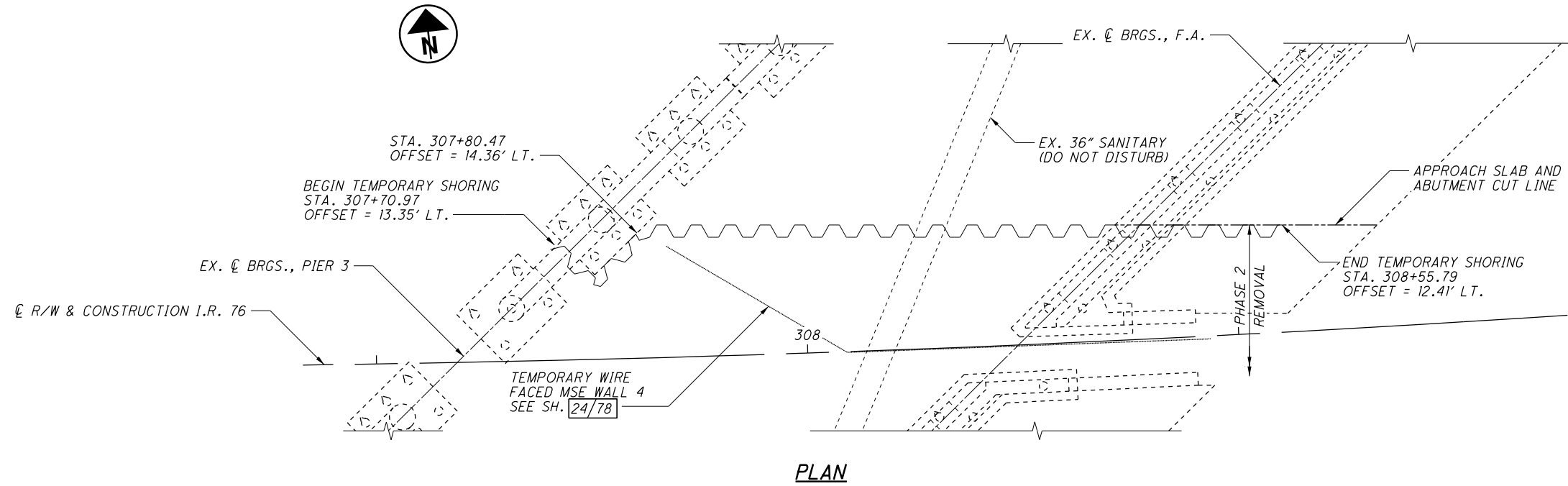


ELEVATION
ALONG FRONT FACE

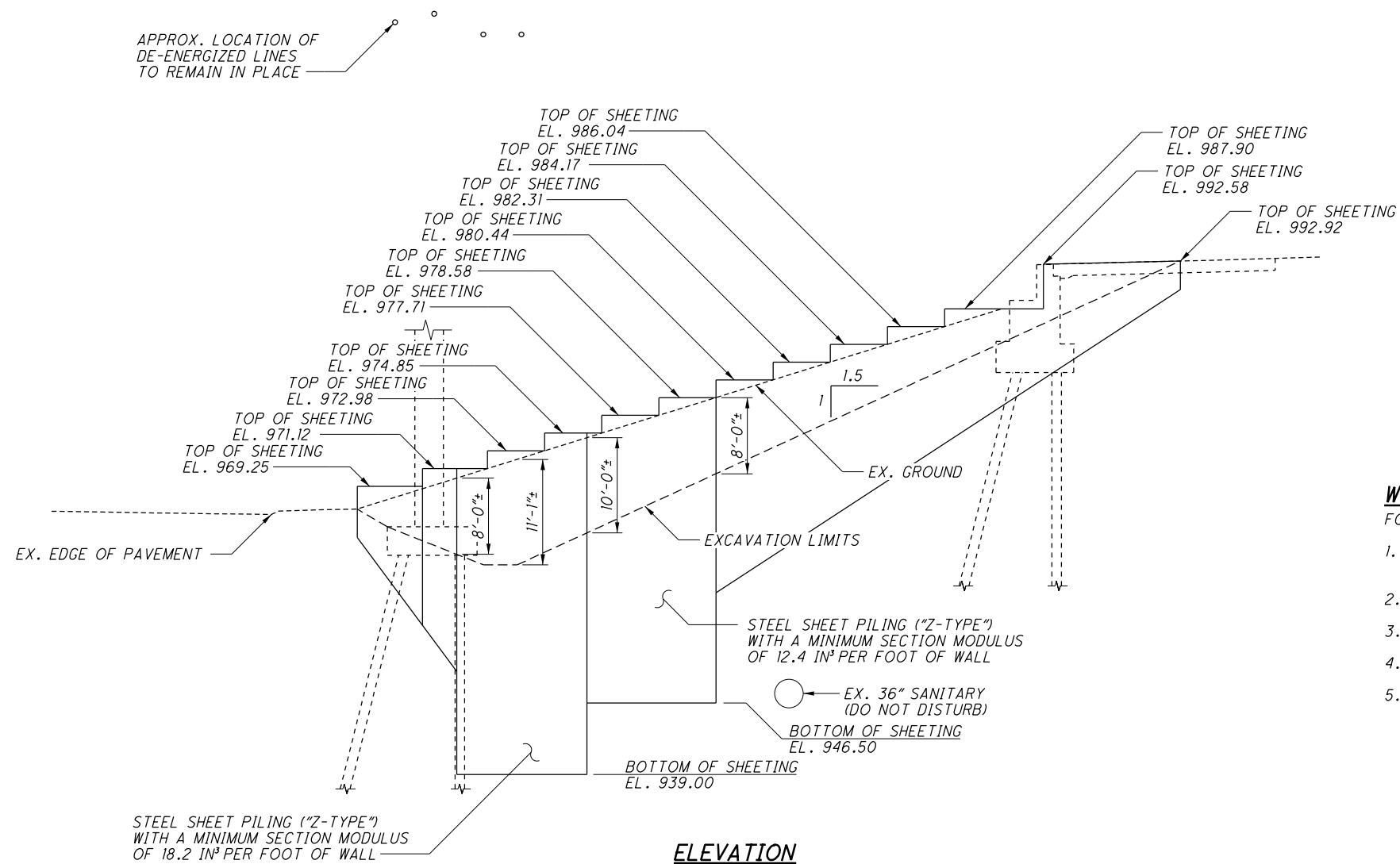
NOTE

TOP OF SHEETING TO BE A MINIMUM OF 6" ABOVE EXISTING GROUND LINE.

P:\DDT\MP\0093_SUM-76-5.62\SUM-76-5.62\Design\Structures\SUM076_0580C_Sheets\076_0580C_SH008.dgn Sheet 10/1/2018 2:09:04 PM cmt007



PLAN



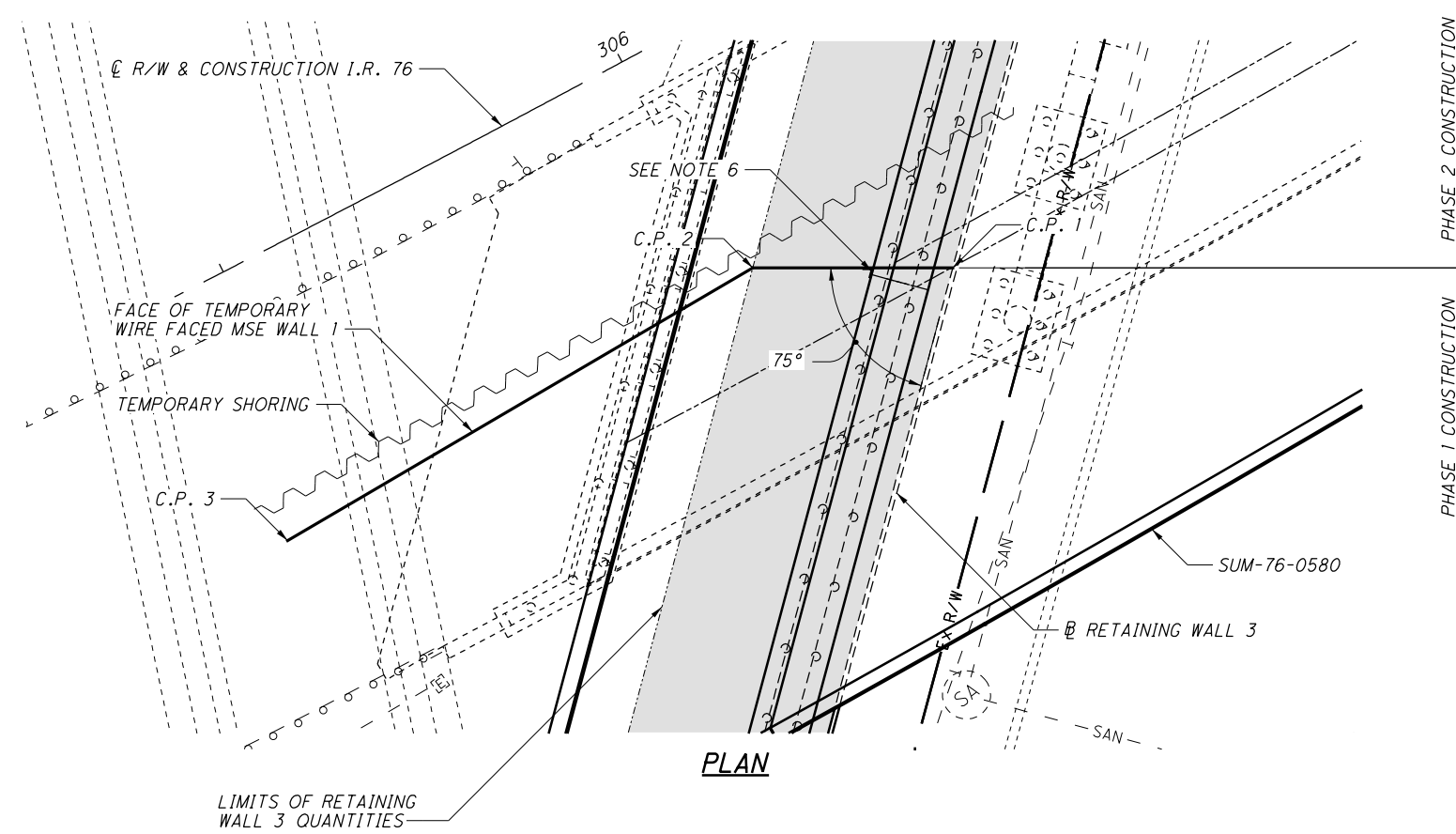
ELEVATION
ALONG FRONT FACE

WORK SEQUENCE:

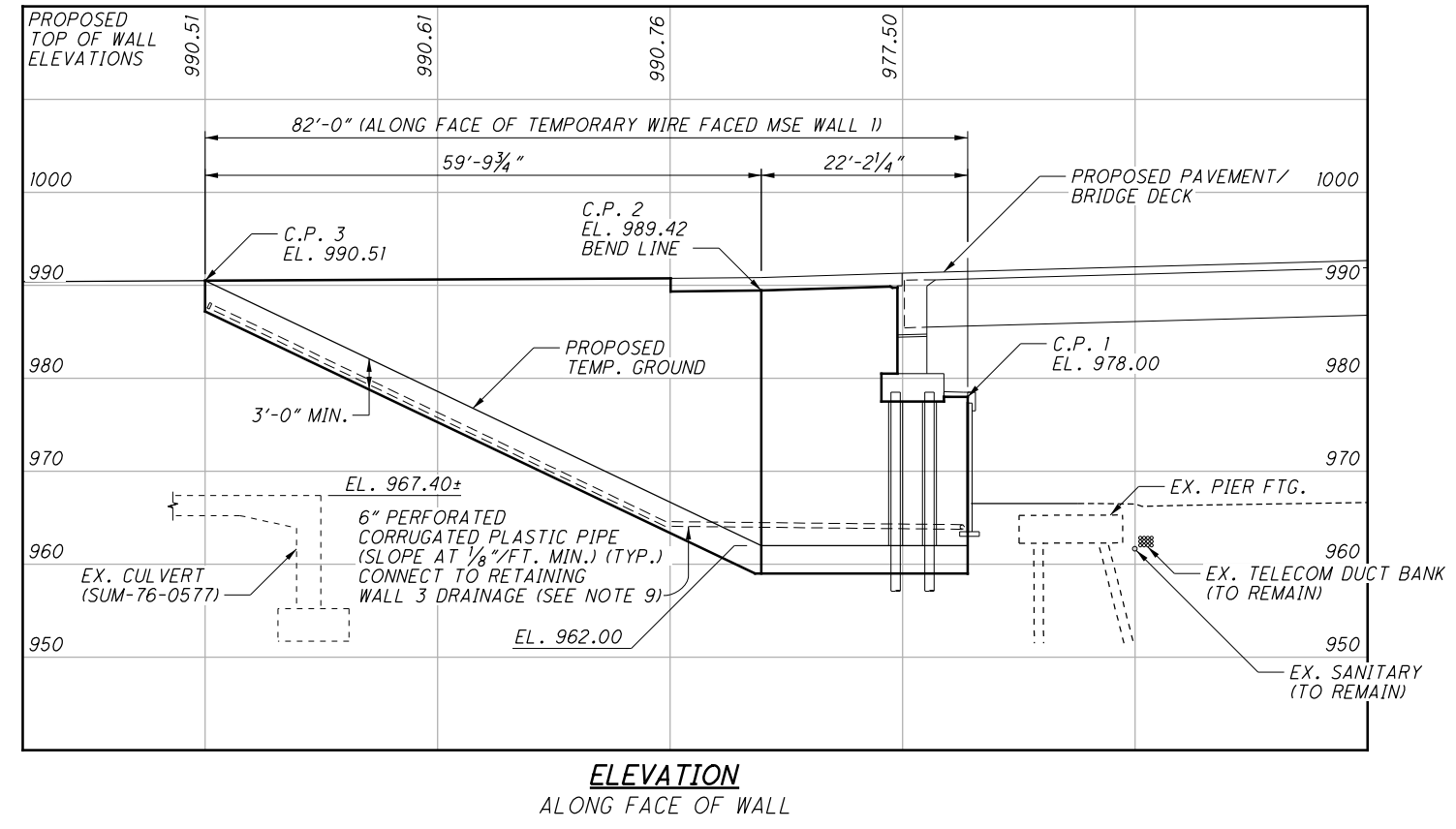
- FORWARD ABUTMENT
1. REMOVE PORTIONS OF EXISTING APPROACH SLABS, PAVEMENT, DECK AND EMBANKMENT TO ALLOW INSTALLATION OF SHORING.
 2. INSTALL SHORING BEHIND ABUTMENT.
 3. INSTALL SHORING ADJACENT TO AND IN FRONT OF ABUTMENT.
 4. COMPLETE EXCAVATION.
 5. REMOVE SHEETING TO CONSTRUCT SUBSEQUENT PHASE.

NOTE
TOP OF SHEETING TO BE A MINIMUM OF 6" ABOVE EXISTING GROUND LINE.

P:\DDT\MP\0093_SUM-76-5.53\SUM-76-5.53\SUM-76-5.53\SUM-76-0580C_Sheets\076-0580C_SHEET.dgn Sheet 10/1/2018 2:09:07 PM cmt007



C.P. NUMBER	STA. @ RET. WALL 3	OFFSET	STA. R/W & @ CONSTR. I.R. 76	OFFSET
1	31+24.10	0.46' LT.	306+21.21	37.58' RT.
2	31+18.36	21.88' LT.	306+01.94	27.00' RT.
3	30+75.79	63.91' LT.	305+42.77	29.77' RT.



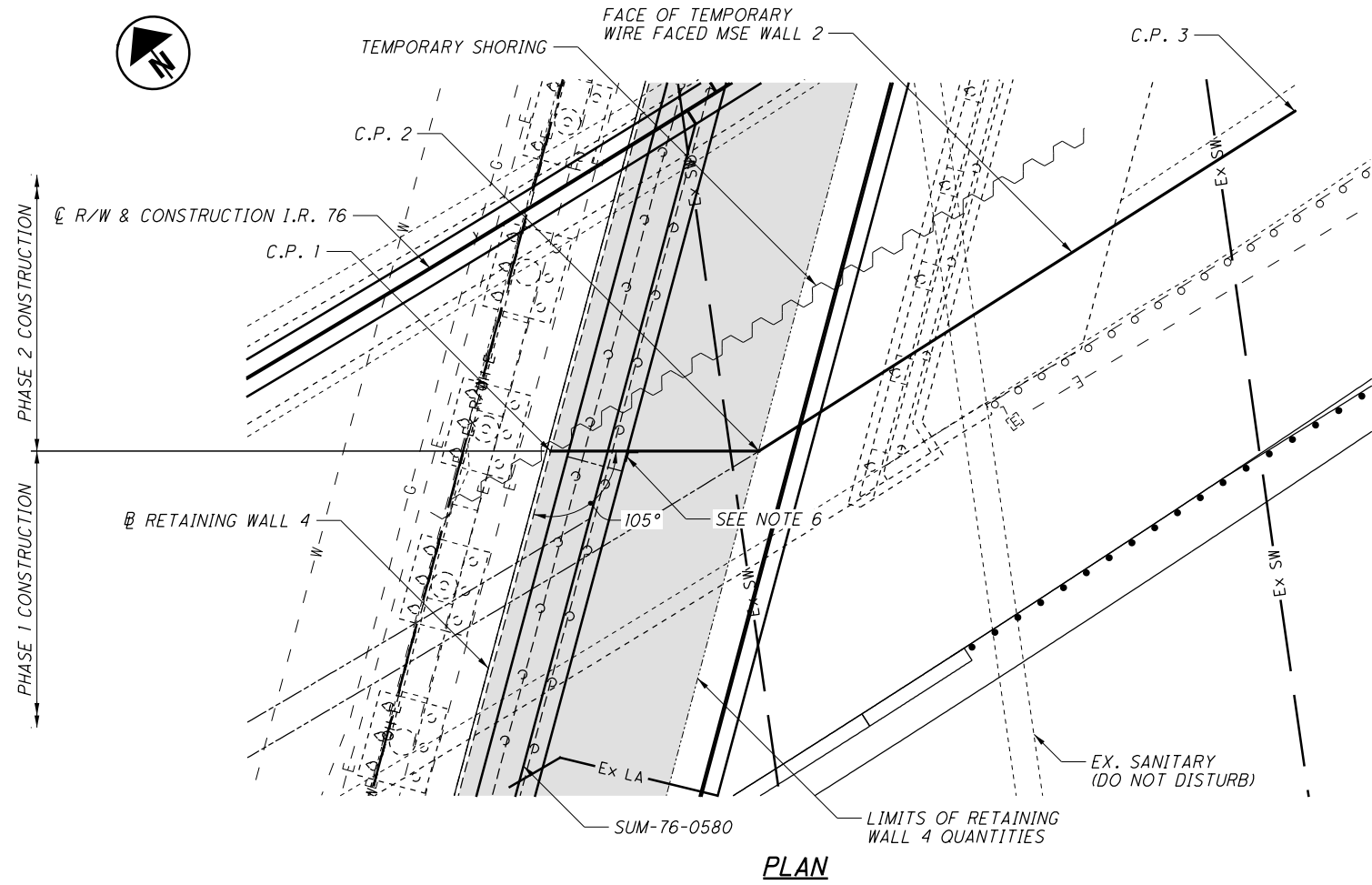
NOTES

1. THE MINIMUM DISTANCE FROM THE PROPOSED TEMPORARY GROUND SURFACE TO THE BOTTOM OF THE TEMPORARY WIRE FACED MSE WALL IS BASED ON A FROST DEPTH OF 3.0 FT.
2. THE RETAINING WALL 3 BASELINE IS LOCATED AT THE FRONT FACE OF THE WALL.
3. PERMANENT WALL MANUFACTURER SHALL ADJUST AND ARRANGE THE SOIL REINFORCEMENT IN THE PHASE CONSTRUCTION DIVISION AREA FOR PROPER ENGAGEMENT OF THE SOIL MASS.
4. SEE SHEET 17/78 FOR TEMPORARY SHORING DETAILS.
5. TOP OF WALL ELEVATIONS OUTSIDE OF THE PROPOSED BRIDGE LIMITS ARE SHOWN AT THE APPROXIMATE TOP OF PAVEMENT ELEVATION.
6. THE TEMPORARY WIRE FACED MSE WALL SHALL BE DESIGNED BY THE SUPPLIER TO CONTAIN PHASE 1 EMBANKMENT AND ALLOW ACCESS TO TIE PHASE 2 BRIDGE CONSTRUCTION WITH PHASE 1.
7. SEE RETAINING WALL PLAN SHEETS (524/672) & (525/672) FOR RETAINING WALL 3 DETAILS.
8. THE FACTORED BEARING RESISTANCE AT THE BASE OF THE REINFORCED SOIL MASS IS 9.3 KSF FOR TEMPORARY WIRE FACED MASE WALL 1.
9. 6" PERFORATED CORRUGATED PLASTIC PIPE TO BE PAID FOR WITH ITEM 867 - TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL.

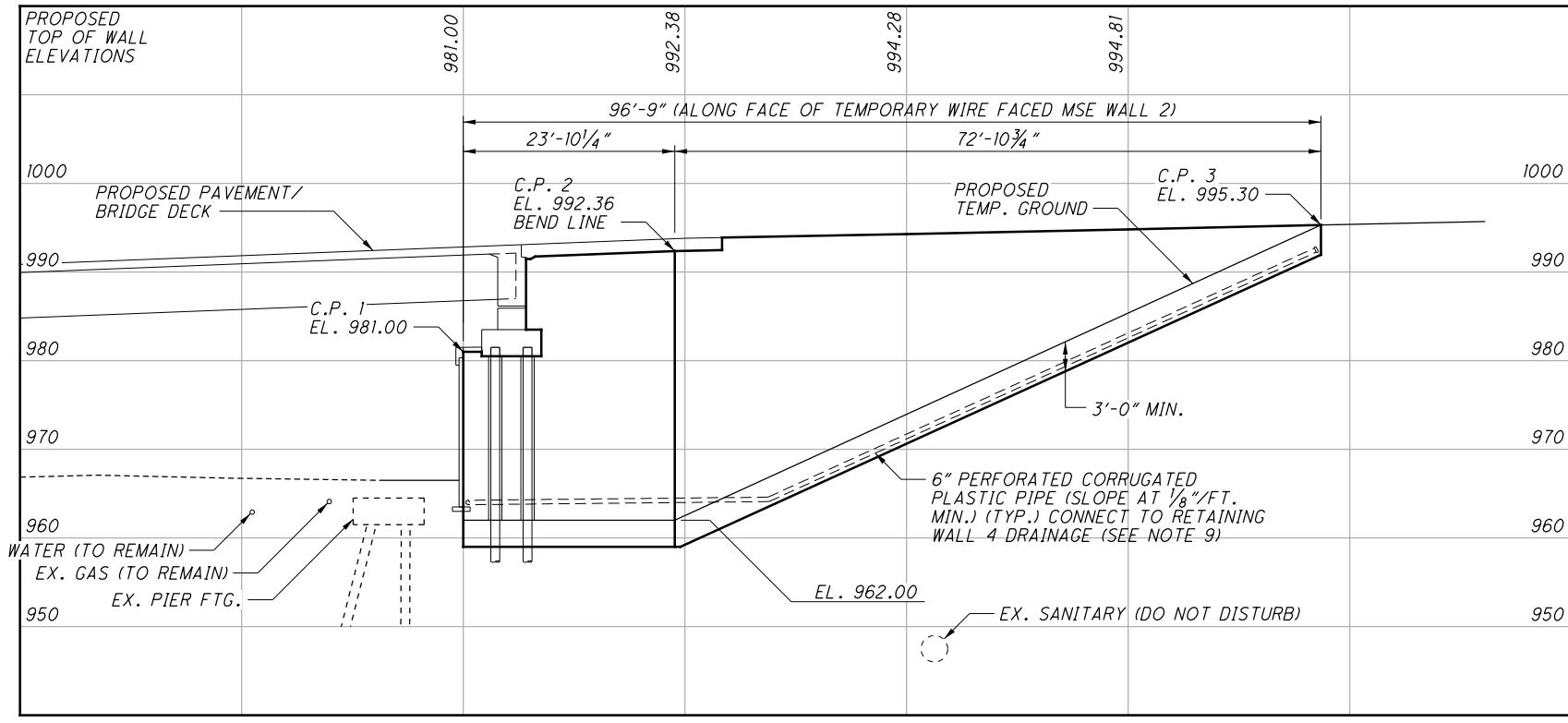
LEGEND

▭ LIMITS OF RETAINING WALL 3 EXCAVATION

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TEMPORARY WIRE FACED MSE WALL 2 CONTROL POINTS				
C.P. NUMBER	STA. @ RET. WALL 4	OFFSET	STA. R/W & C CONSTR. I.R. 76	OFFSET
1	41+60.05	0.46' RT.	307+44.57	25.07' RT.
2	41+53.87	23.50' RT.	307+64.71	37.50' RT.
3	41+00.25	72.85' LT.	308+36.64	37.44' RT.



ELEVATION
ALONG FACE OF WALL

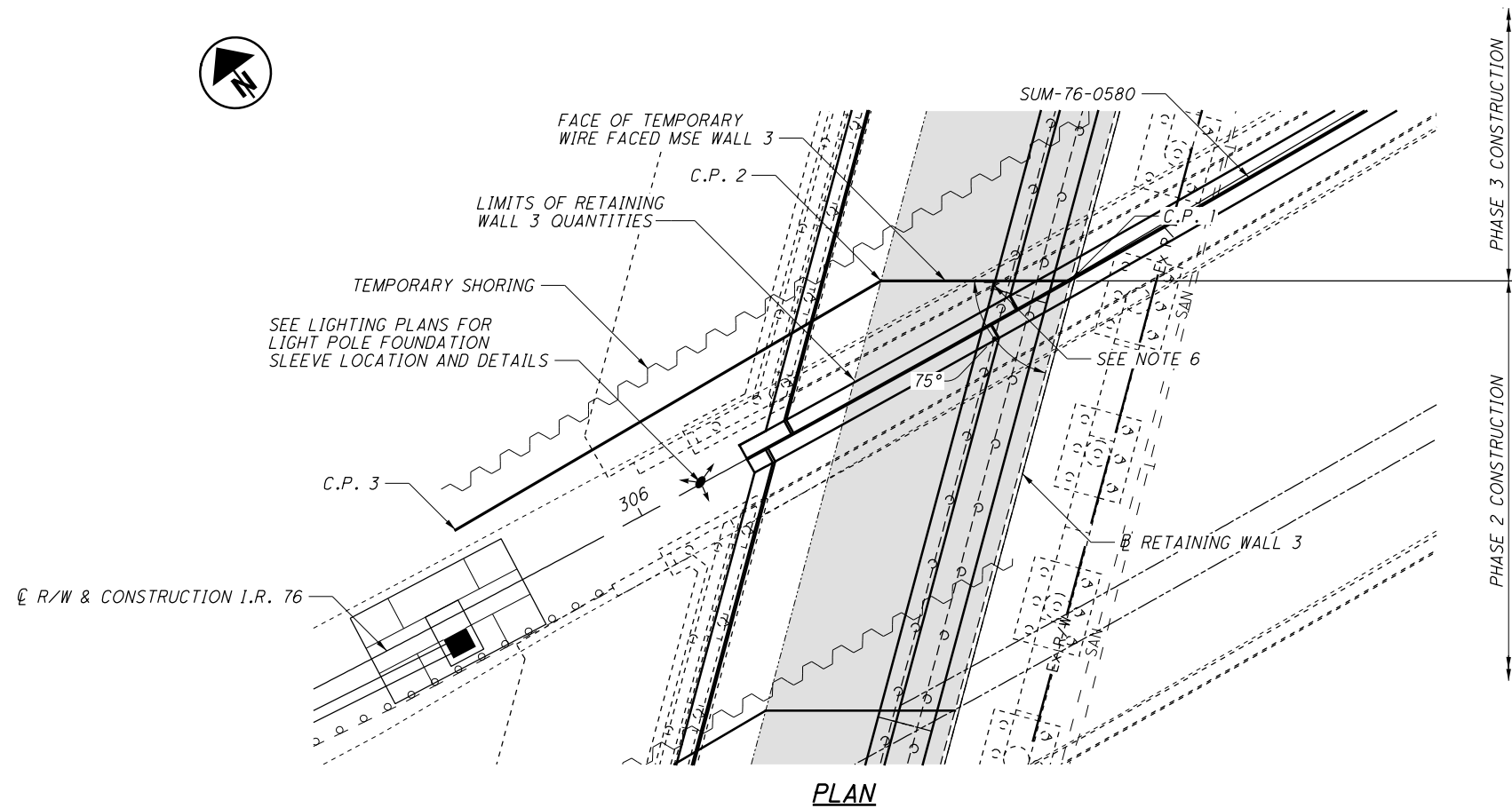
NOTES

1. THE MINIMUM DISTANCE FROM THE PROPOSED TEMPORARY GROUND SURFACE TO THE BOTTOM OF THE TEMPORARY WIRE FACED MSE WALL IS BASED ON A FROST DEPTH OF 3.0 FT.
2. THE RETAINING WALL 4 BASELINE IS LOCATED AT THE FRONT FACE OF THE WALL.
3. PERMANENT WALL MANUFACTURER SHALL ADJUST AND ARRANGE THE SOIL REINFORCEMENT IN THE PHASE CONSTRUCTION DIVISION AREA FOR PROPER ENGAGEMENT OF THE SOIL MASS.
4. SEE SHEET 19/78 FOR TEMPORARY SHORING DETAILS.
5. TOP OF WALL ELEVATIONS OUTSIDE OF THE PROPOSED BRIDGE LIMITS ARE SHOWN AT THE APPROXIMATE TOP OF PAVEMENT ELEVATION.
6. THE TEMPORARY WIRE FACED MSE WALL SHALL BE DESIGNED BY THE SUPPLIER TO CONTAIN PHASE 1 EMBANKMENT AND ALLOW ACCESS TO TIE PHASE 2 BRIDGE CONSTRUCTION WITH PHASE 1.
7. SEE RETAINING WALL PLAN SHEETS 526/617 & 527/612 FOR RETAINING WALL 4 DETAILS.
8. THE FACTORED BEARING RESISTANCE AT THE BASE OF THE REINFORCED SOIL MASS IS 10.5 KSF FOR TEMPORARY WIRE FACED MSE WALL 2.
9. 6" PERFORATED CORRUGATED PLASTIC PIPE TO BE PAID FOR WITH ITEM 867 - TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL.

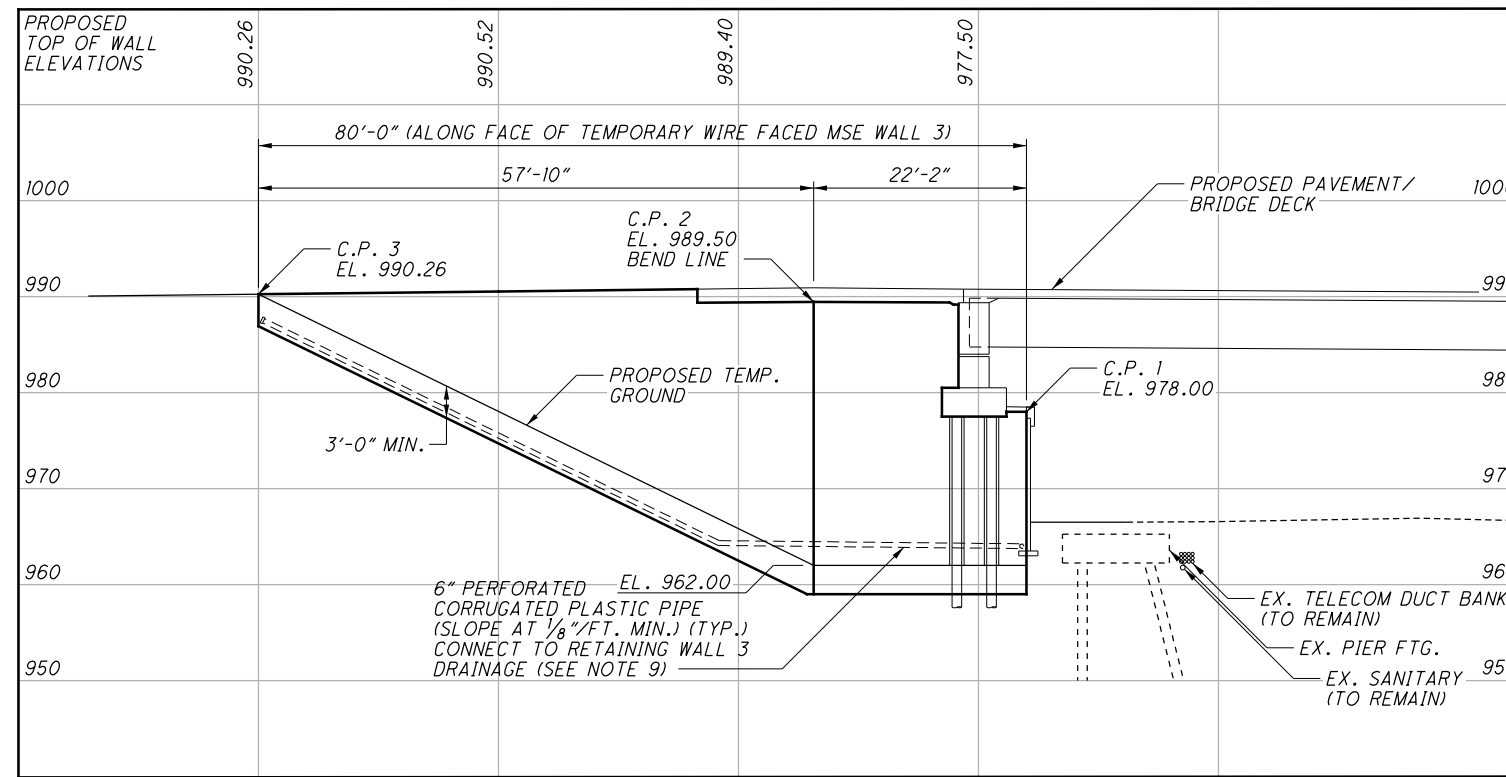
LEGEND

▭ LIMITS OF RETAINING WALL 4 EXCAVATION

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TEMPORARY WIRE FACED MSE WALL 3 CONTROL POINTS				
C.P. NUMBER	STA. @ RET. WALL 3	OFFSET	STA. R/W & @ CONSTR. I.R. 76	OFFSET
1	31+76.29	0.46' LT.	306+57.26	0.08' RT.
2	31+70.55	21.88' LT.	306+37.87	10.75' LT.
3	31+29.39	62.51' LT.	305+79.88	8.82' LT.



ELEVATION
ALONG FACE OF WALL

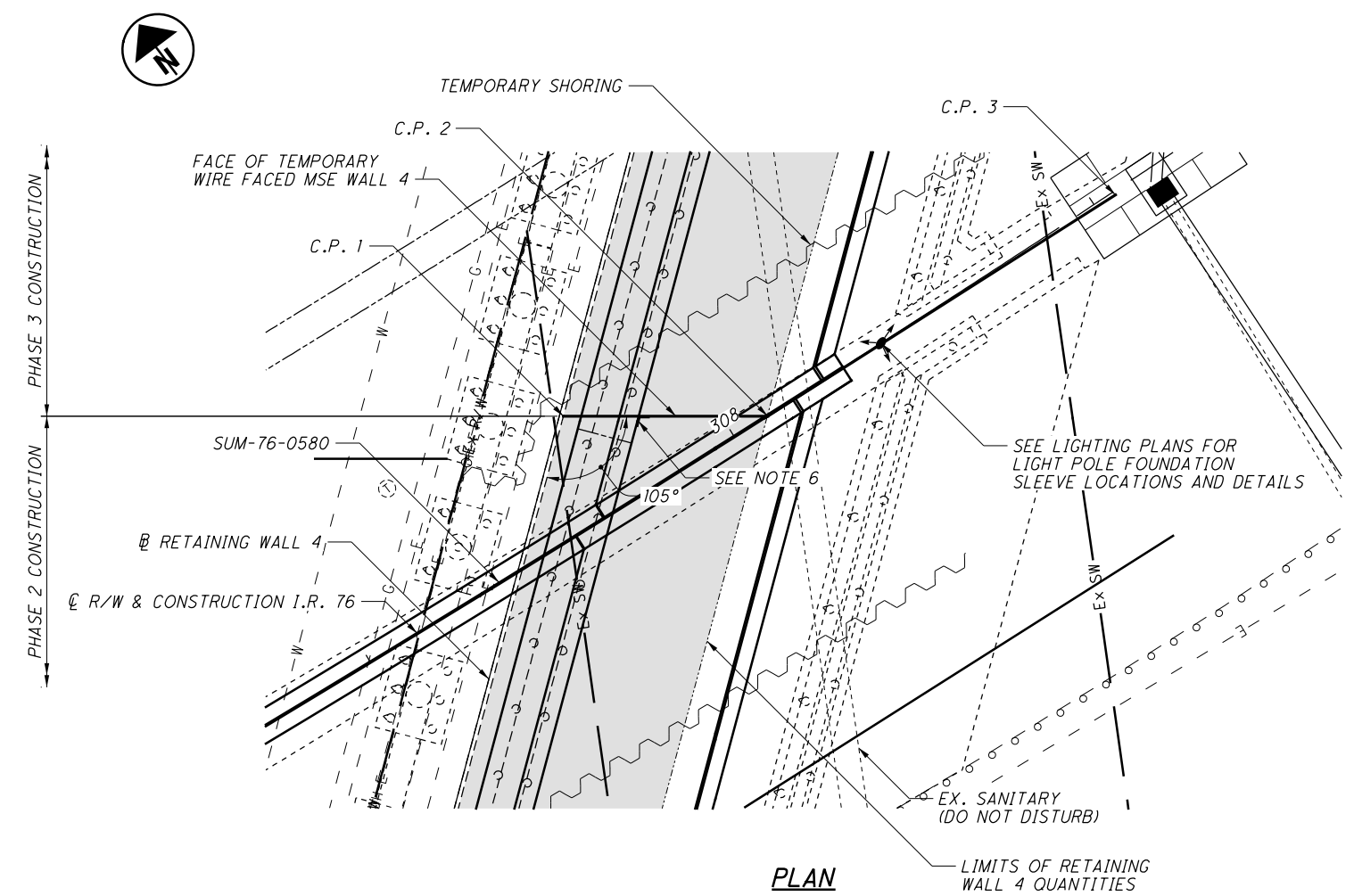
NOTES

1. THE MINIMUM DISTANCE FROM THE PROPOSED TEMPORARY GROUND SURFACE TO THE BOTTOM OF THE TEMPORARY WIRE FACED MSE WALL IS BASED ON A FROST DEPTH OF 3.0 FT.
2. THE RETAINING WALL 3 BASELINE IS LOCATED AT THE FRONT FACE OF THE WALL.
3. PERMANENT WALL MANUFACTURER SHALL ADJUST AND ARRANGE THE SOIL REINFORCEMENT IN THE PHASE CONSTRUCTION DIVISION AREA FOR PROPER ENGAGEMENT OF THE SOIL MASS.
4. SEE SHEET 18/78 FOR TEMPORARY SHORING DETAILS.
5. TOP OF WALL ELEVATIONS OUTSIDE OF THE PROPOSED BRIDGE LIMITS ARE SHOWN AT THE APPROXIMATE TOP OF PAVEMENT ELEVATION.
6. THE TEMPORARY WIRE FACED MSE WALL SHALL BE DESIGNED BY THE SUPPLIER TO CONTAIN PHASE 2 EMBANKMENT AND ALLOW ACCESS TO TIE PHASE 3 BRIDGE CONSTRUCTION WITH PHASE 2.
7. SEE RETAINING WALL PLAN SHEETS 524/672 & 525/672 FOR RETAINING WALL 3 DETAILS.
8. THE FACTORED BEARING RESISTANCE AT THE BASE OF THE REINFORCED SOIL MASS IS 9.3 KSF FOR TEMPORARY WIRE FACED MSE WALL 3.
9. 6" PERFORATED CORRUGATED PLASTIC PIPE TO BE PAID FOR WITH ITEM 867 - TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL.

LEGEND

▭ LIMITS OF RETAINING WALL 3 EXCAVATION

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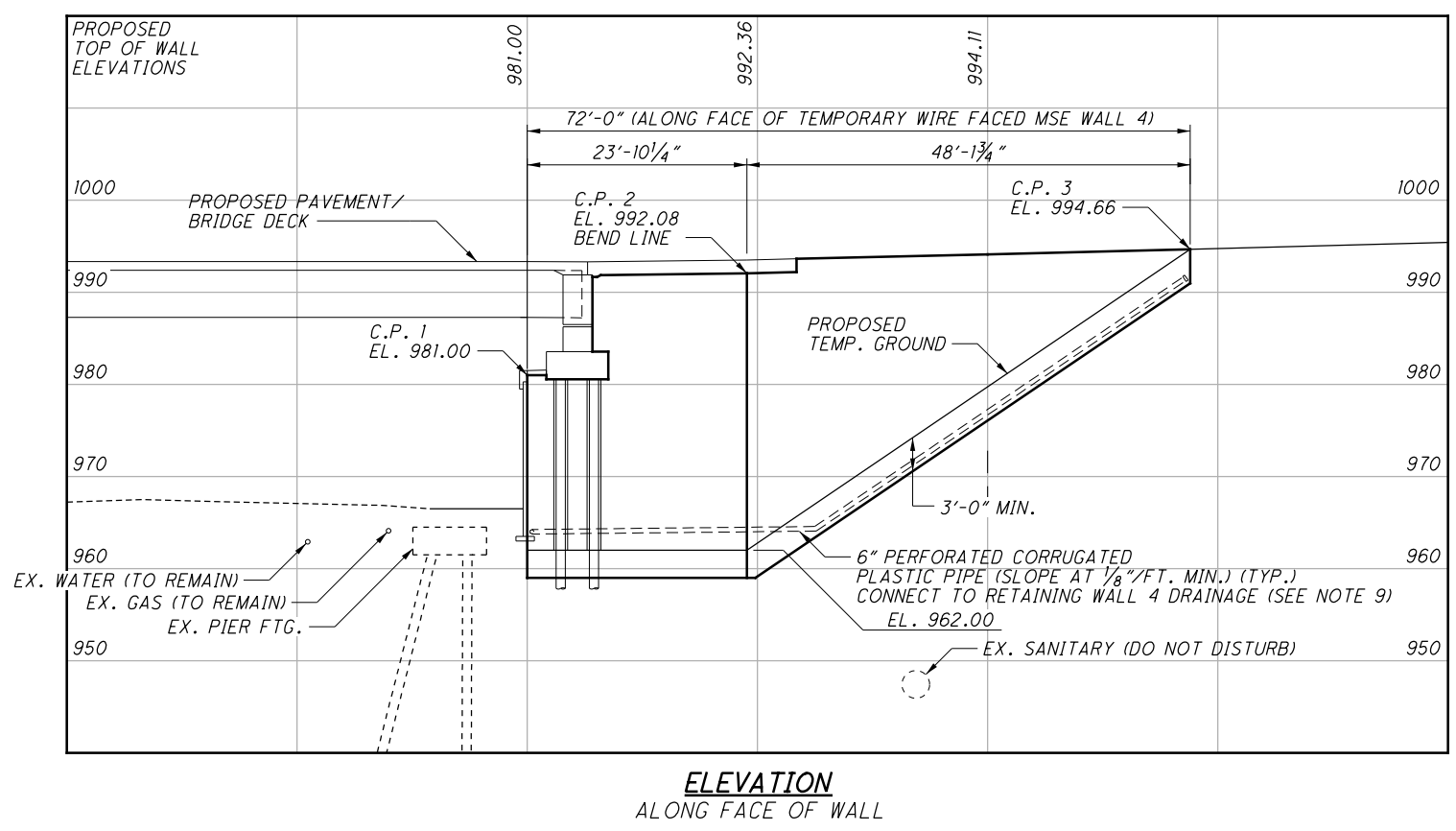
TEMPORARY WIRE FACED MSE WALL 4 CONTROL POINTS				
C.P. NUMBER	STA. @ RET. WALL 4	OFFSET	STA. @ R/W & CONSTR. I.R. 76	OFFSET
1	41+05.18	0.46' LT.	307+84.35	12.63' LT.
2	40+99.00	23.50' LT.	308+04.58	0.08' RT.
3	40+63.51	56.03' LT.	308+52.72	0.42' RT.

NOTES

1. THE MINIMUM DISTANCE FROM THE PROPOSED TEMPORARY GROUND SURFACE TO THE BOTTOM OF THE TEMPORARY WIRE FACED MSE WALL IS BASED ON A FROST DEPTH OF 3.0 FT.
2. THE RETAINING WALL 4 BASELINE IS LOCATED AT THE FRONT FACE OF THE WALL.
3. PERMANENT WALL MANUFACTURER SHALL ADJUST AND ARRANGE THE SOIL REINFORCEMENT IN THE PHASE CONSTRUCTION DIVISION AREA FOR PROPER ENGAGEMENT OF THE SOIL MASS.
4. SEE SHEET [20/78] FOR TEMPORARY SHORING DETAILS.
5. TOP OF WALL ELEVATIONS OUTSIDE OF THE PROPOSED BRIDGE LIMITS ARE SHOWN AT THE APPROXIMATE TOP OF PAVEMENT ELEVATION.
6. THE TEMPORARY WIRE FACED MSE WALL SHALL BE DESIGNED BY THE SUPPLIER TO CONTAIN PHASE 2 EMBANKMENT AND ALLOW ACCESS TO TIE PHASE 3 BRIDGE CONSTRUCTION WITH PHASE 2.
7. SEE RETAINING WALL PLAN SHEETS [525/672] & [526/672] FOR RETAINING WALL 4 DETAILS.
8. THE FACTORED BEARING RESISTANCE AT THE BASE OF THE REINFORCED SOIL MASS IS 10.5 KSF FOR TEMPORARY WIRE FACED MSE WALL 4.
9. 6" PERFORATED CORRUGATED PLASTIC PIPE TO BE PAID FOR WITH ITEM 867 - TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL.

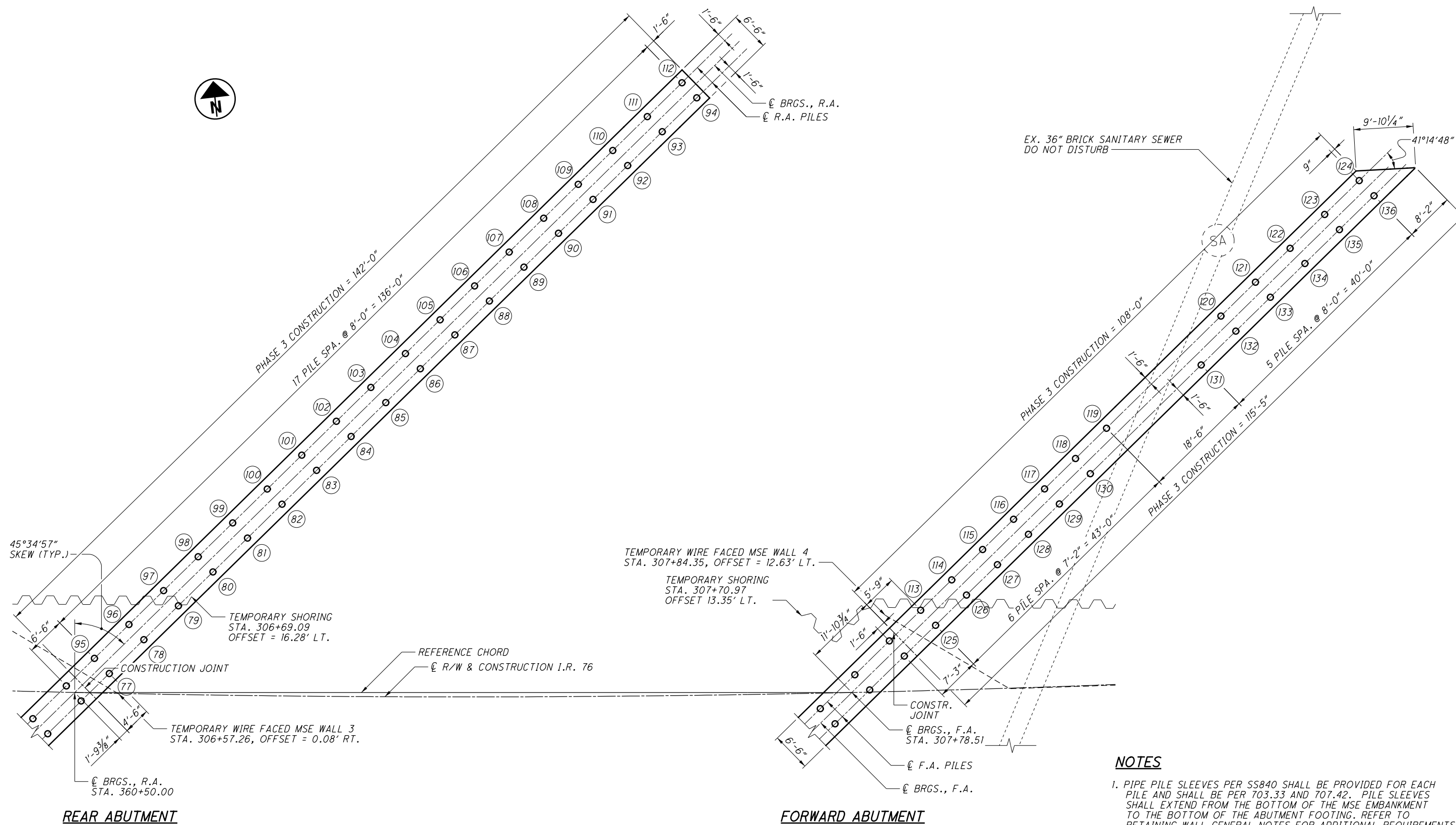
LEGEND

▭ LIMITS OF RETAINING WALL 4 EXCAVATION



ELEVATION
 ALONG FACE OF WALL

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PLAN

LEGEND

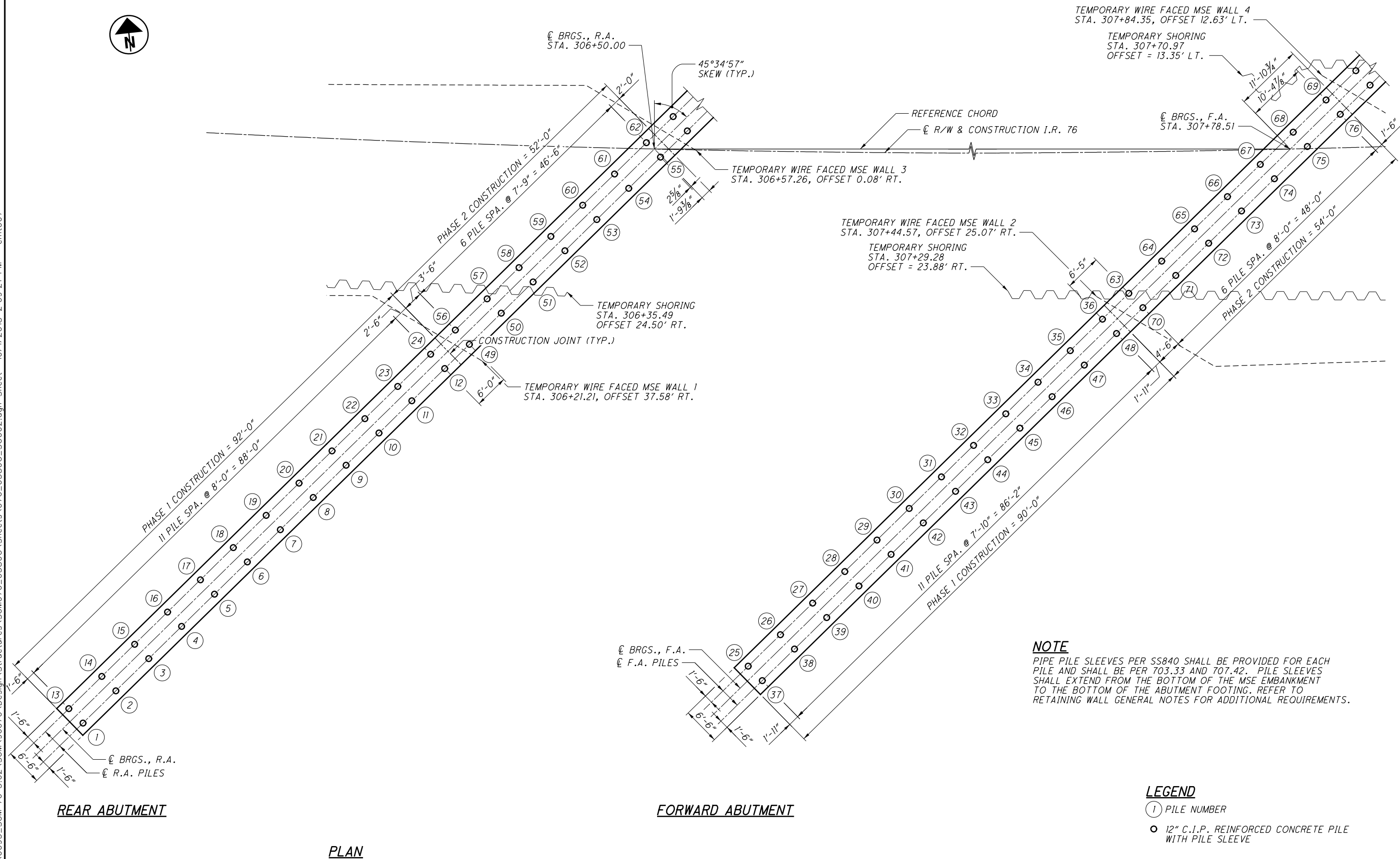
- ① PILE NUMBER
- 12" C.I.P. REINFORCED CONCRETE PILE WITH PILE SLEEVE

NOTES

1. PIPE PILE SLEEVES PER SS840 SHALL BE PROVIDED FOR EACH PILE AND SHALL BE PER 703.33 AND 707.42. PILE SLEEVES SHALL EXTEND FROM THE BOTTOM OF THE MSE EMBANKMENT TO THE BOTTOM OF THE ABUTMENT FOOTING. REFER TO RETAINING WALL GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.
2. PREBORE PILE NUMBERS 119, 120, 130, AND 131 TO A MINIMUM OF 5 FEET BELOW THE BOTTOM OF THE BRICK SANITARY SEWER. THE APPROXIMATE BOTTOM OF BRICK SANITARY SEWER IS EL. 946.0±. PREBORED HOLES SHALL BE PER C&MS 507.II.
3. PROVIDE 3" CHAMFER AT ACUTE CORNERS.

DESIGNED ERK	DATE 4/26/2017
DRAWN ERK	STRUCTURE FILE NUMBER 7705493
CHECKED GDJ	REVIEWED WHM
FOUNDATION PLAN (WESTBOUND) BRIDGE NO. SUM-76-0580 OVER S.R. 619 (WOOSTER ROAD)	
SUM-76-5.53 PID No. 96670	
25 / 78	
589 672	

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NOTE
 PIPE PILE SLEEVES PER SS840 SHALL BE PROVIDED FOR EACH PILE AND SHALL BE PER 703.33 AND 707.42. PILE SLEEVES SHALL EXTEND FROM THE BOTTOM OF THE MSE EMBANKMENT TO THE BOTTOM OF THE ABUTMENT FOOTING. REFER TO RETAINING WALL GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.

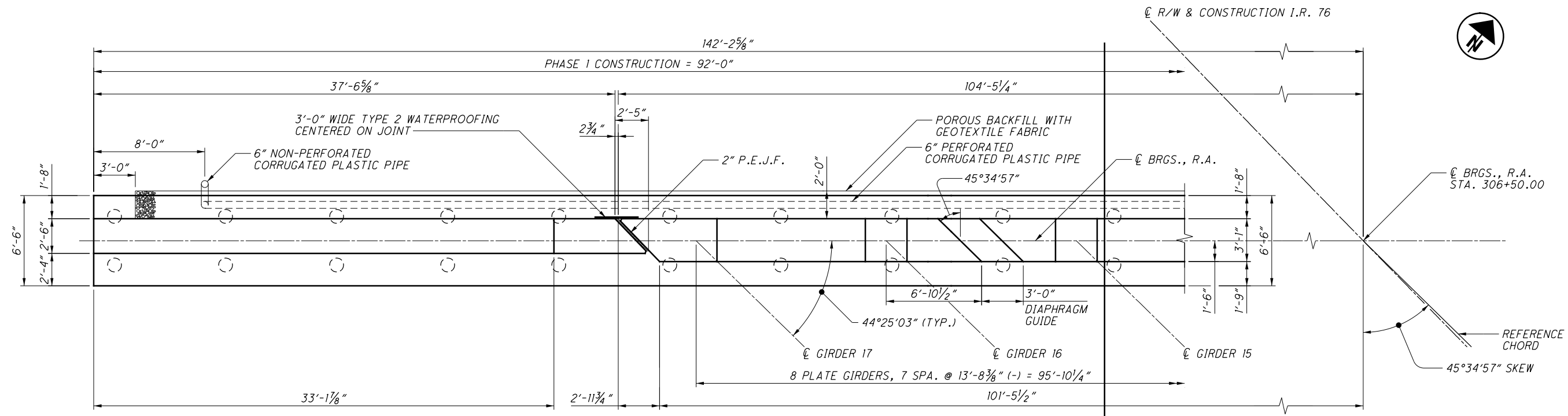
- LEGEND**
- ① PILE NUMBER
 - 12" C.I.P. REINFORCED CONCRETE PILE WITH PILE SLEEVE

DATE	4/26/2017
REVIEWED	WHM
DRAWN	ERK
CHECKED	GDJ
STRUCTURE FILE NUMBER	7705493

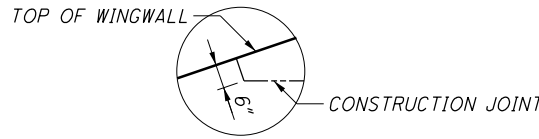
FOUNDATION PLAN (EASTBOUND)
 BRIDGE NO. SUM-76-0580
 OVER S.R. 619 (WOOSTER ROAD)

SUM-76-5.53
PID No. 96670

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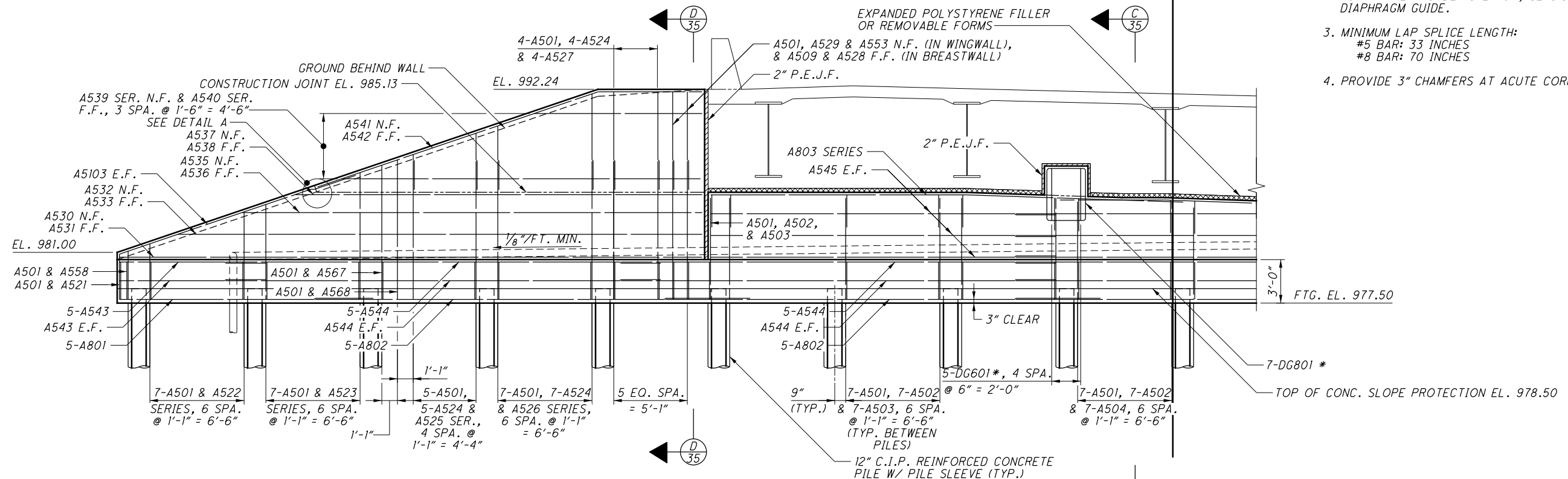
PLAN



DETAIL A

LEGEND
* - SEE NOTE 2

- NOTES**
- SEE STD. DWGS. SICD-1-96 AND SICD-2-14 FOR ADDITIONAL NOTES AND DETAILS.
 - SEMI-INTEGRAL DIAPHRAGM GUIDE AND ALL RELATED APPURTENANCES SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 511, SEMI-INTEGRAL DIAPHRAGM GUIDE.
 - MINIMUM LAP SPLICE LENGTH:
#5 BAR: 33 INCHES
#8 BAR: 70 INCHES
 - PROVIDE 3" CHAMFERS AT ACUTE CORNERS.

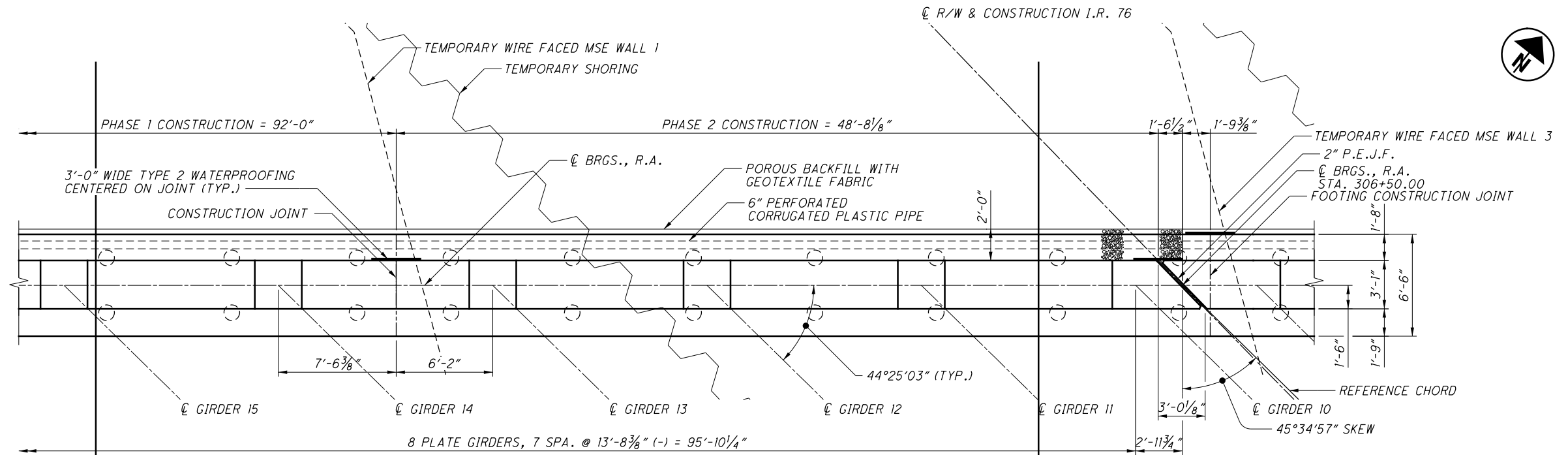


ELEVATION

MSE WALL NOT SHOWN

GIRDER SEAT ELEVATIONS (FT.)		
GIRDER 15	GIRDER 16	GIRDER 17
984.75	985.12	985.13

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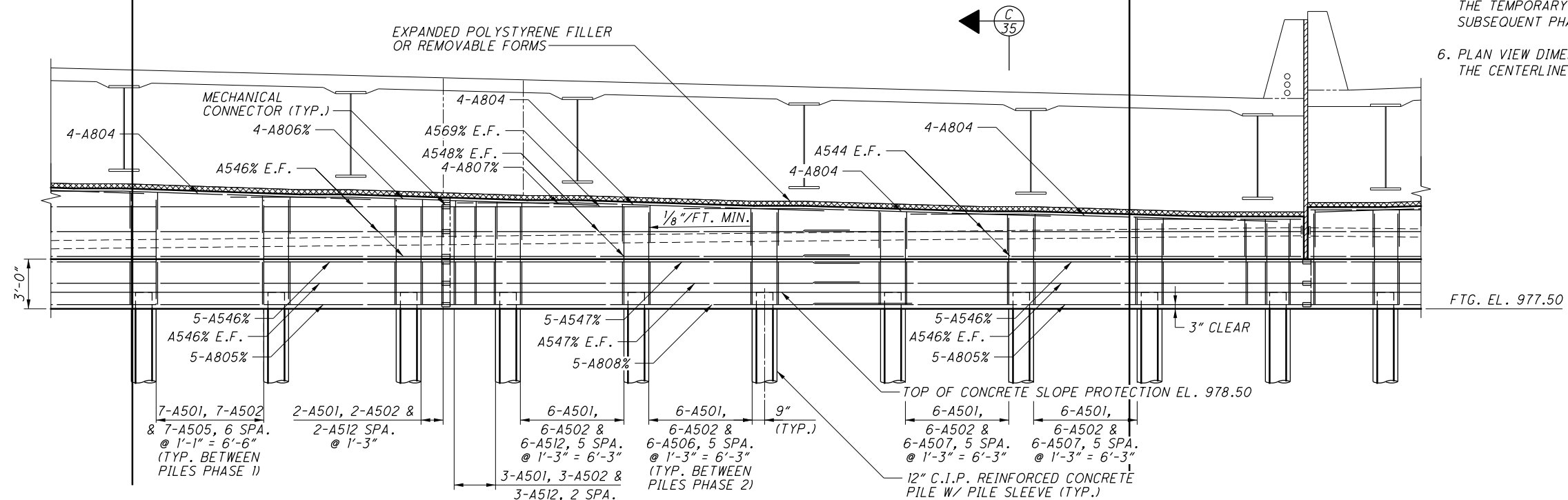
PLAN

NOTES

- SEE STD. DWG. SICD-I-96 FOR ADDITIONAL NOTES AND DETAILS.
- SEAL VERTICAL PHASE CONSTRUCTION JOINT ON THE BACKSIDE FROM TOP OF FOOTING TO THE BRIDGE SEAT.
- MINIMUM LAP SPLICE LENGTH:
#5 BAR: 33 INCHES
#8 BAR: 70 INCHES
- PROVIDE 3" CHAMFERS AT ACUTE CORNERS.
- DRAINAGE PIPES SHALL CONNECT THROUGH THE TEMPORARY MSE WALLS FOR EACH SUBSEQUENT PHASE.
- PLAN VIEW DIMENSIONS ARE MEASURED TO THE CENTERLINE OF THE JOINT.

LEGEND

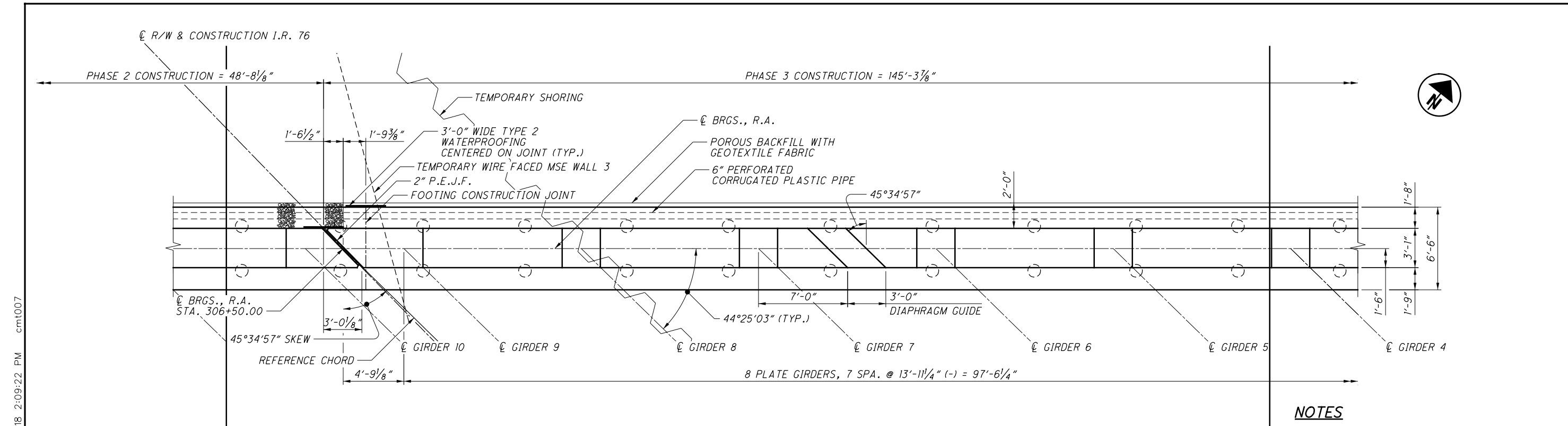
% - BAR TO UTILIZE A MECHANICAL CONNECTOR



ELEVATION

MSE WALL NOT SHOWN

GIRDER SEAT ELEVATIONS (FT.)			
GIRDER 11	GIRDER 12	GIRDER 13	GIRDER 14
983.38	983.71	984.05	984.40

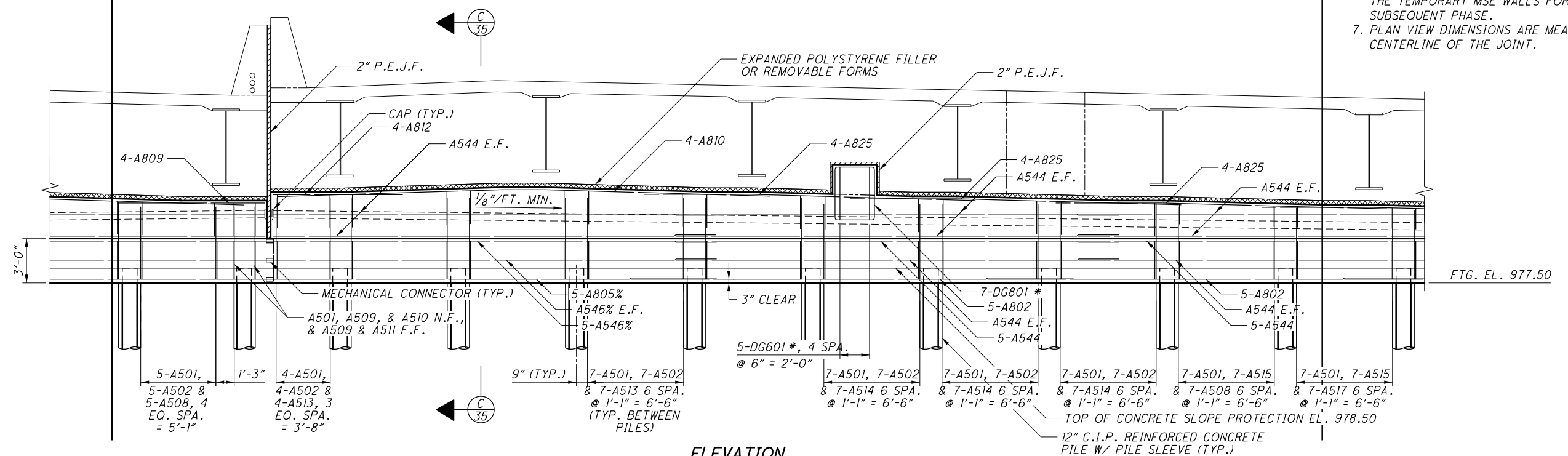


PLAN

NOTES

- SEE STD. DWGS. SICD-1-96 AND SICD-2-14 FOR ADDITIONAL NOTES AND DETAILS.
- SEAL VERTICAL PHASE CONSTRUCTION JOINT ON THE BACKSIDE FROM TOP OF FOOTING TO THE BRIDGE SEAT.
- SEMI-INTEGRAL DIAPHRAGM GUIDE AND ALL RELATED APPURTENANCES SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 511, SEMI-INTEGRAL DIAPHRAGM GUIDE.
- MINIMUM LAP SPLICE LENGTH:
 #5 BAR: 33 INCHES
 #8 BAR: 70 INCHES
- PROVIDE 3" CHAMFERS AT ACUTE CORNERS.
- DRAINAGE PIPES SHALL CONNECT THROUGH THE TEMPORARY MSE WALLS FOR EACH SUBSEQUENT PHASE.
- PLAN VIEW DIMENSIONS ARE MEASURED TO THE CENTERLINE OF THE JOINT.

LEGEND
 % - BAR TO UTILIZE A MECHANICAL CONNECTOR
 * - SEE NOTE 3

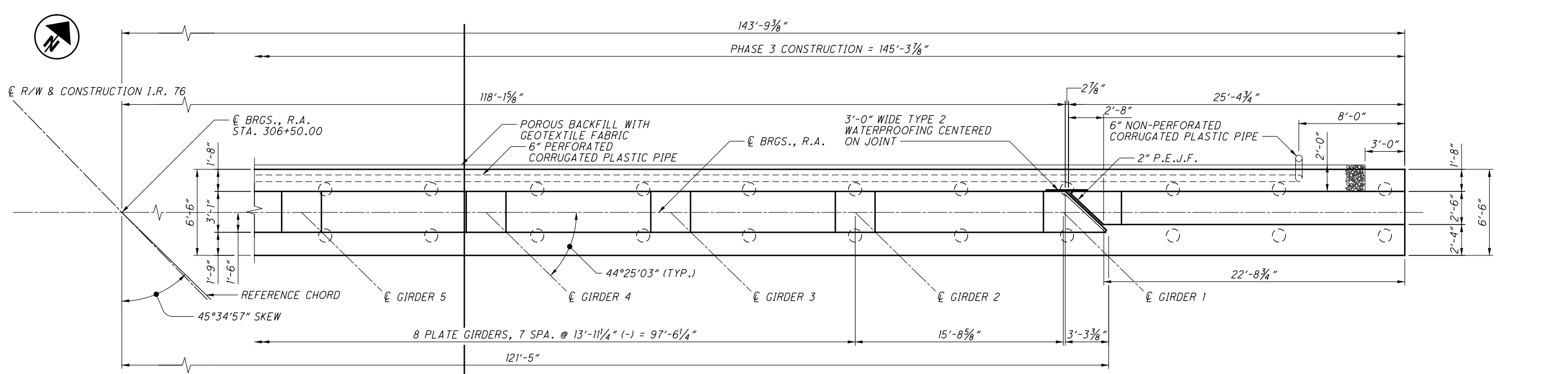


ELEVATION
 MSE WALL NOT SHOWN

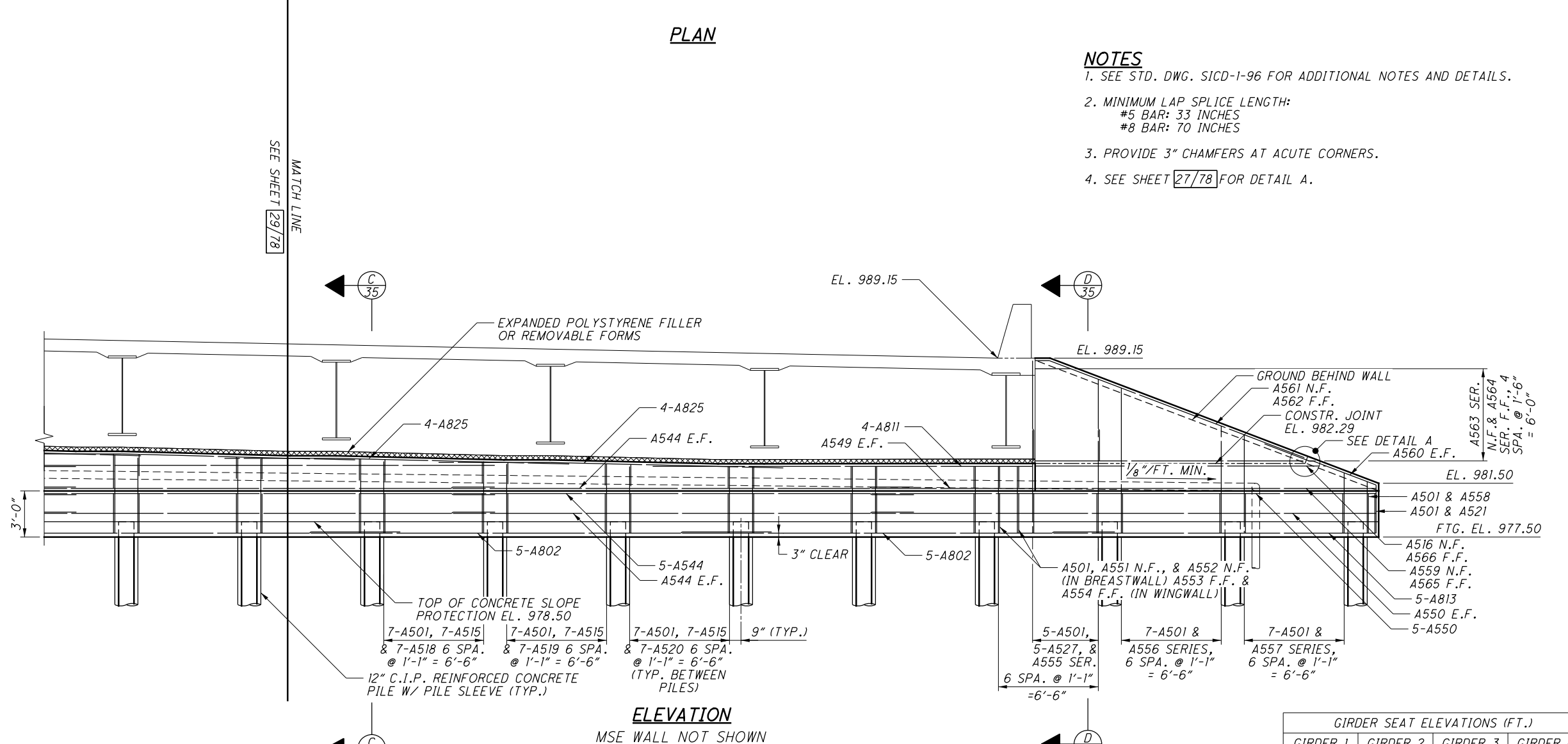
GIRDER SEAT ELEVATIONS (FT.)					
GIRDER 5	GIRDER 6	GIRDER 7	GIRDER 8	GIRDER 9	GIRDER 10
983.07	983.36	983.66	983.97	983.64	983.06

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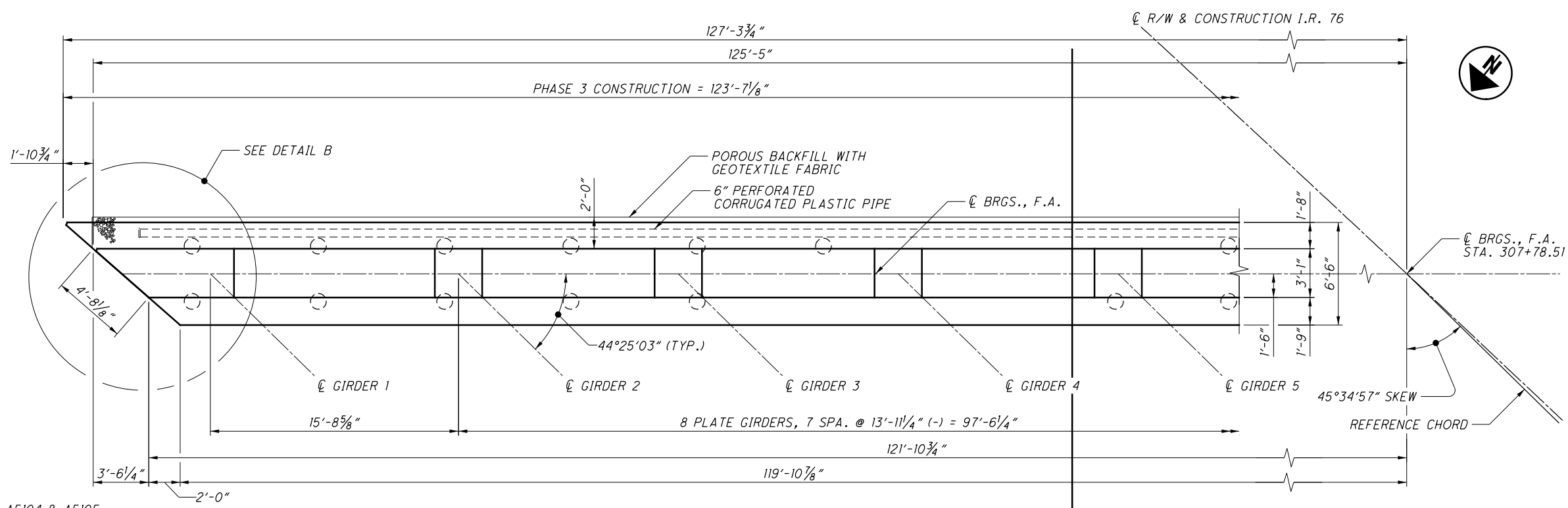
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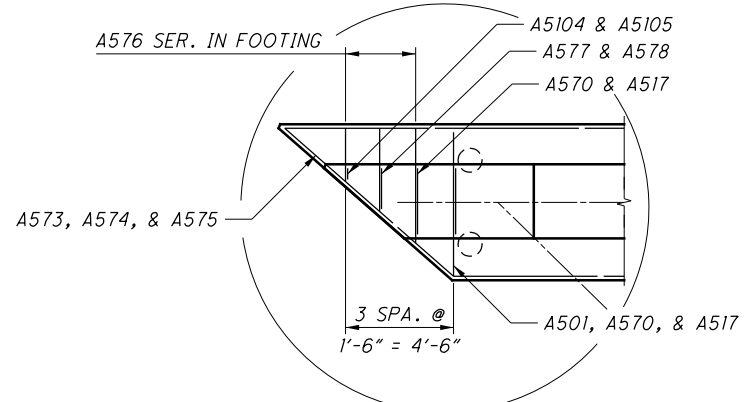
- NOTES**
1. SEE STD. DWG. SICD-1-96 FOR ADDITIONAL NOTES AND DETAILS.
 2. MINIMUM LAP SPLICE LENGTH:
#5 BAR: 33 INCHES
#8 BAR: 70 INCHES
 3. PROVIDE 3" CHAMFERS AT ACUTE CORNERS.
 4. SEE SHEET 27/78 FOR DETAIL A.



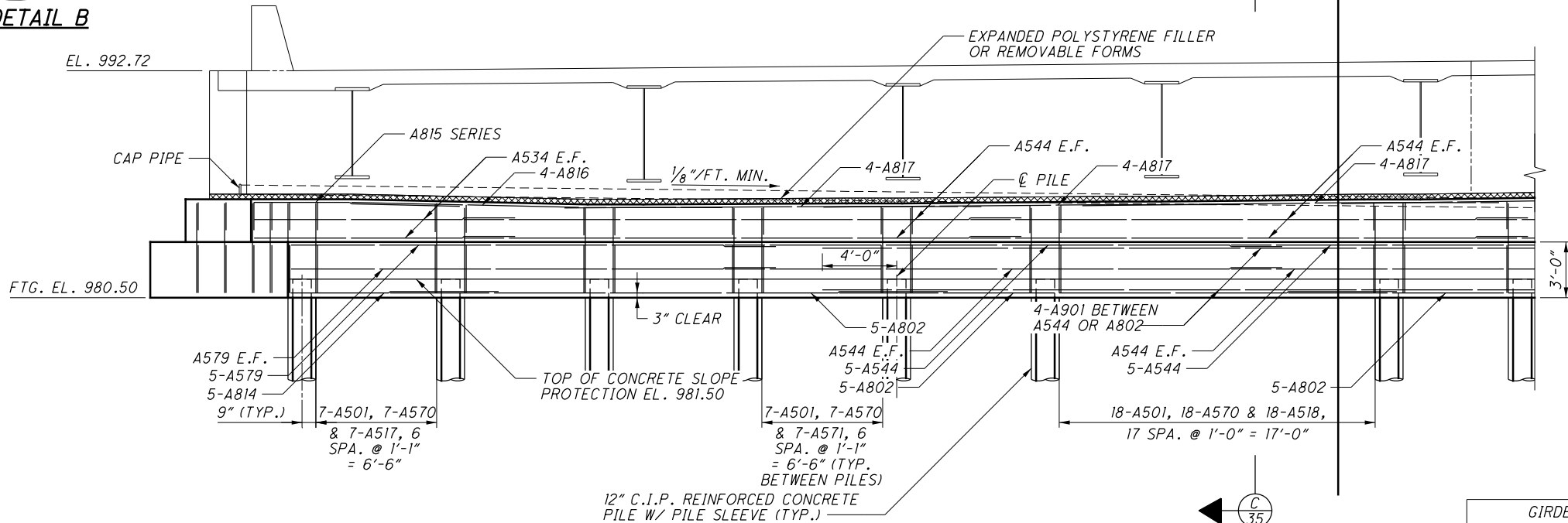
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PLAN



DETAIL B



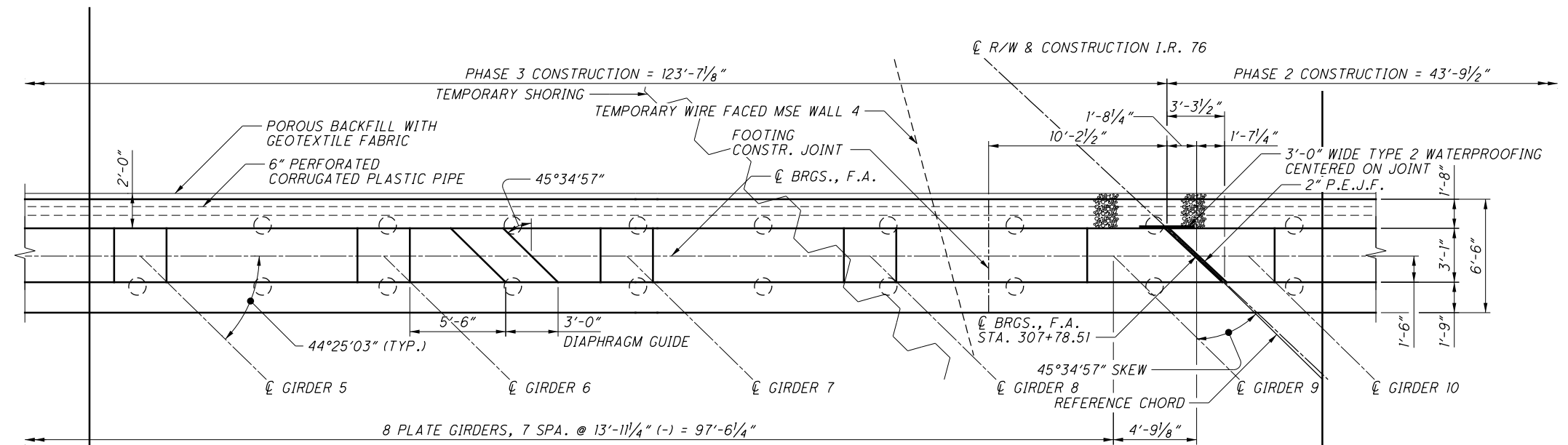
ELEVATION

MSE WALL NOT SHOWN

- NOTES**
- SEE STD. DWG. SICD-1-96 FOR ADDITIONAL NOTES AND DETAILS.
 - MINIMUM LAP SPLICE LENGTH:
#5 BAR: 33 INCHES
#8 BAR: 70 INCHES
 - PROVIDE 3" CHAMFERS AT ACUTE CORNERS.
- LEGEND**
- % - BAR TO UTILIZE A MECHANICAL CONNECTOR

GIRDER SEAT ELEVATIONS (FT.)			
GIRDER 1	GIRDER 2	GIRDER 3	GIRDER 4
985.80	985.52	985.58	985.66

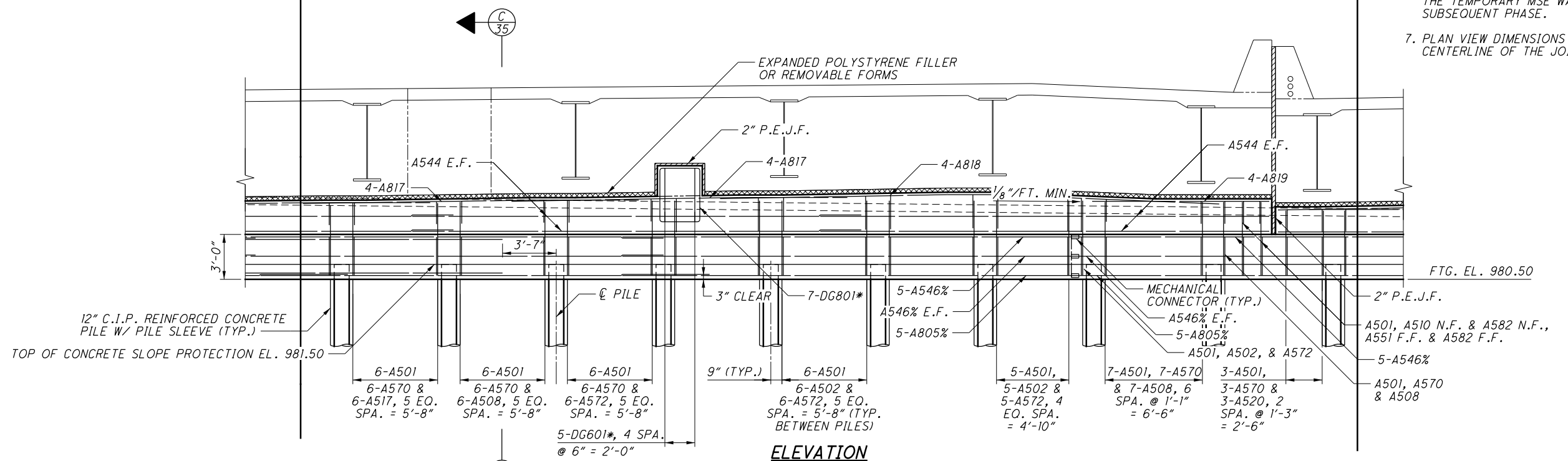
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PLAN

LEGEND
% - BAR TO UTILIZE A MECHANICAL CONNECTOR
* - SEE NOTE 3

- NOTES**
- SEE STD. DWG. SICD-1-96 AND SICD-2-14 FOR ADDITIONAL NOTES AND DETAILS.
 - SEAL VERTICAL PHASE CONSTRUCTION JOINT ON THE BACKSIDE FROM TOP OF FOOTING TO THE BRIDGE SEAT.
 - SEMI-INTEGRAL DIAPHRAGM GUIDE AND ALL RELATED APPURTENANCES SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 511, SEMI-INTEGRAL DIAPHRAGM GUIDE.
 - MINIMUM LAP SPLICE LENGTH:
#5 BAR: 33 INCHES
#8 BAR: 70 INCHES
 - PROVIDE 3" CHAMFERS AT ACUTE CORNERS.
 - DRAINAGE PIPES SHALL CONNECT THROUGH THE TEMPORARY MSE WALLS FOR EACH SUBSEQUENT PHASE.
 - PLAN VIEW DIMENSIONS ARE MEASURED TO THE CENTERLINE OF THE JOINT.

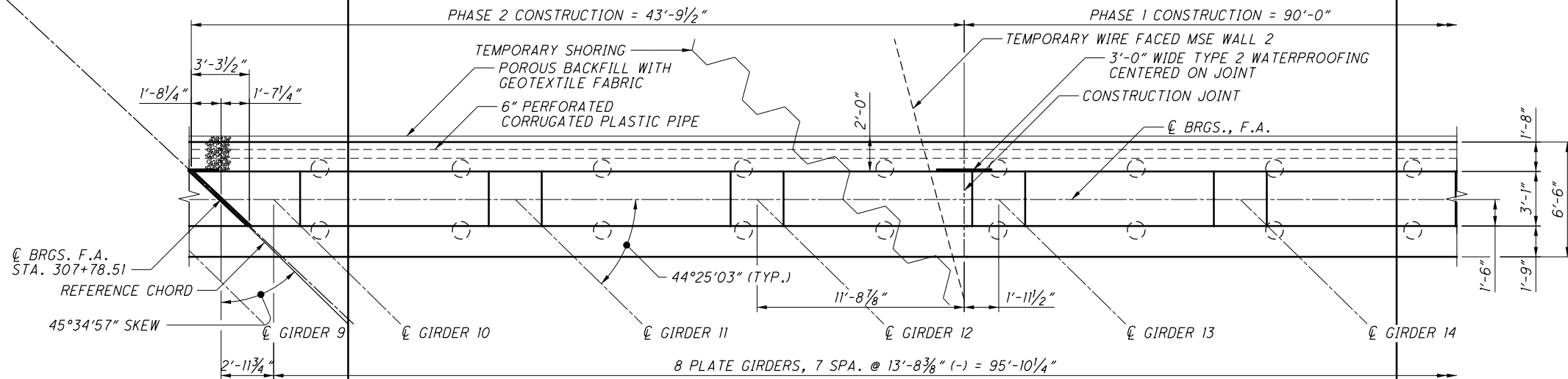


ELEVATION

MSE WALL NOT SHOWN

GIRDER SEAT ELEVATIONS (FT.)					
GIRDER 5	GIRDER 6	GIRDER 7	GIRDER 8	GIRDER 9	GIRDER 10
985.78	985.96	986.13	986.32	985.86	985.34

℄ R/W & CONSTRUCTION I.R. 76



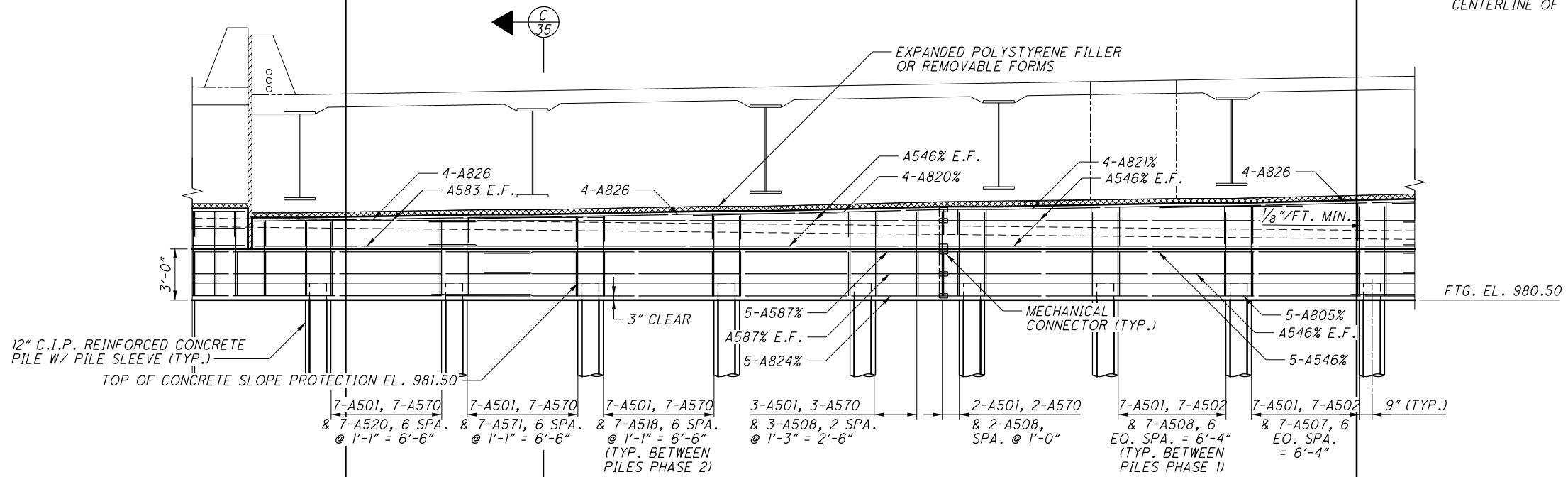
PLAN

LEGEND

% - BAR TO UTILIZE A MECHANICAL CONNECTOR

NOTES

1. SEE STD. DWG. SICD-1-96 FOR ADDITIONAL NOTES AND DETAILS.
2. SEAL VERTICAL PHASE CONSTRUCTION JOINT ON THE BACKSIDE FROM TOP OF FOOTING TO THE BRIDGE SEAT.
3. MINIMUM LAP SPLICE LENGTH:
#5 BAR: 33 INCHES
#8 BAR: 70 INCHES
4. PROVIDE 3" CHAMFERS AT ACUTE CORNERS.
5. DRAINAGE PIPES SHALL CONNECT THROUGH THE TEMPORARY MSE WALLS FOR EACH SUBSEQUENT PHASE.
6. PLAN VIEW DIMENSIONS ARE MEASURED TO THE CENTERLINE OF THE JOINT.



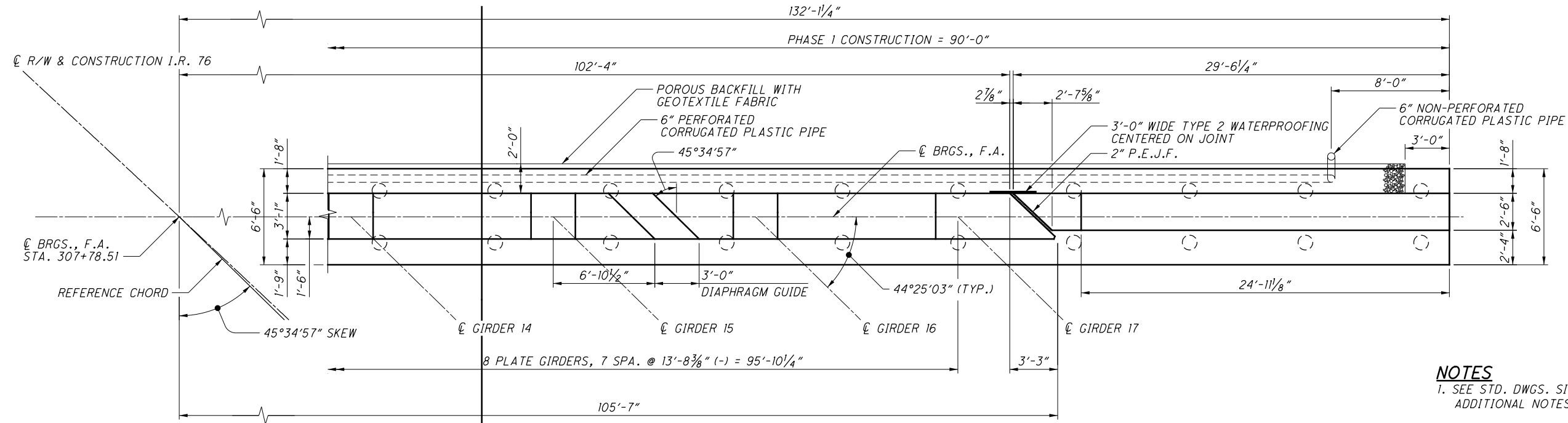
ELEVATION

MSE WALL NOT SHOWN

GIRDER SEAT ELEVATIONS (FT.)

GIRDER 11	GIRDER 12	GIRDER 13	GIRDER 14
985.51	985.71	985.95	986.18

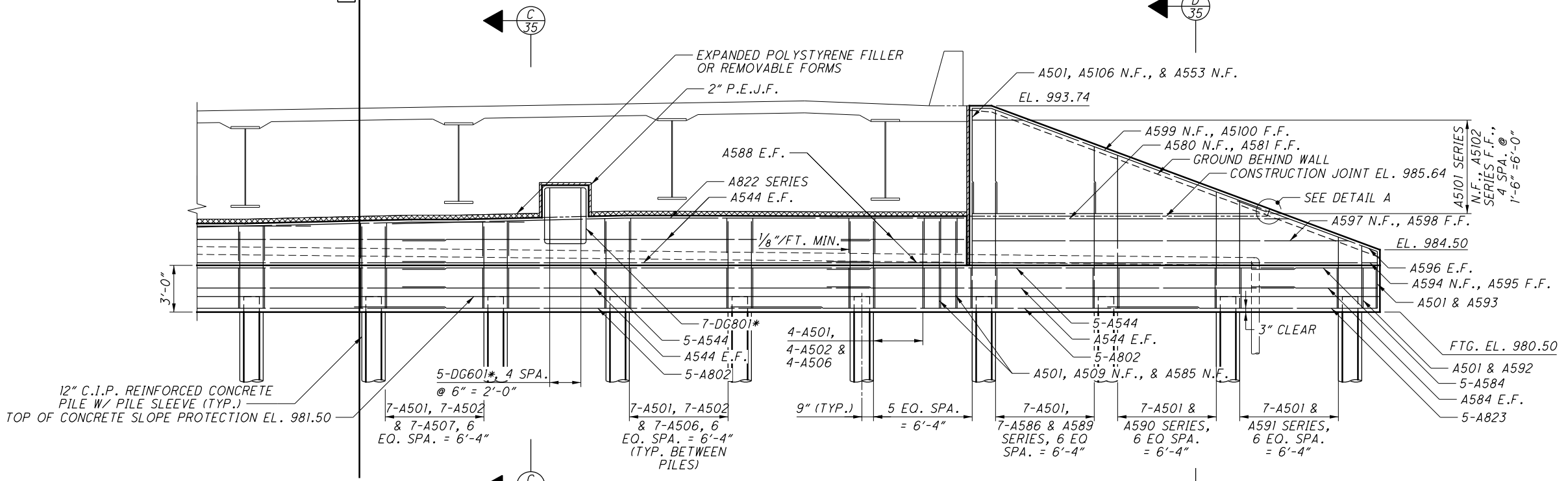




- NOTES**
- SEE STD. DWGS. SICD-1-96 AND SICD-2-14 FOR ADDITIONAL NOTES AND DETAILS.
 - SEMI-INTEGRAL DIAPHRAGM GUIDE AND ALL RELATED APPURTENANCES SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 511, SEMI-INTEGRAL DIAPHRAGM GUIDE.
 - MINIMUM LAP SPLICE LENGTH:
 #5 BAR: 33 INCHES
 #8 BAR: 70 INCHES
 - PROVIDE 3" CHAMFERS AT ACUTE CORNERS.
 - SEE SHEET 27/78 FOR DETAIL A.

LEGEND

% - BAR TO UTILIZE A MECHANICAL CONNECTOR
 * - SEE NOTE 2



GIRDER SEAT ELEVATIONS (FT.)		
GIRDER 15	GIRDER 16	GIRDER 17
986.43	986.68	986.64

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MATCH LINE
 SEE SHEET 33/78

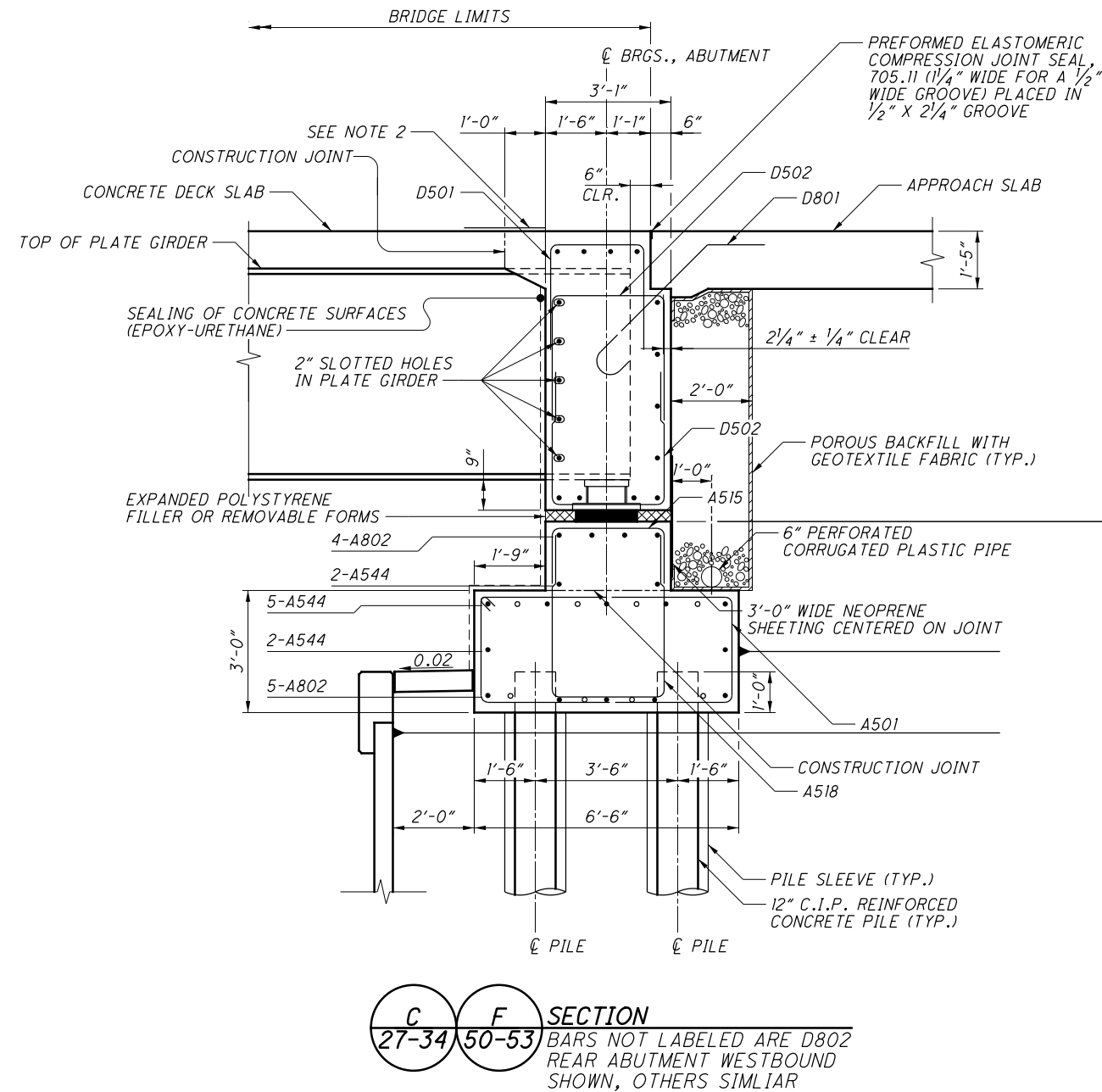
C 35

D 35

C 35

D 35

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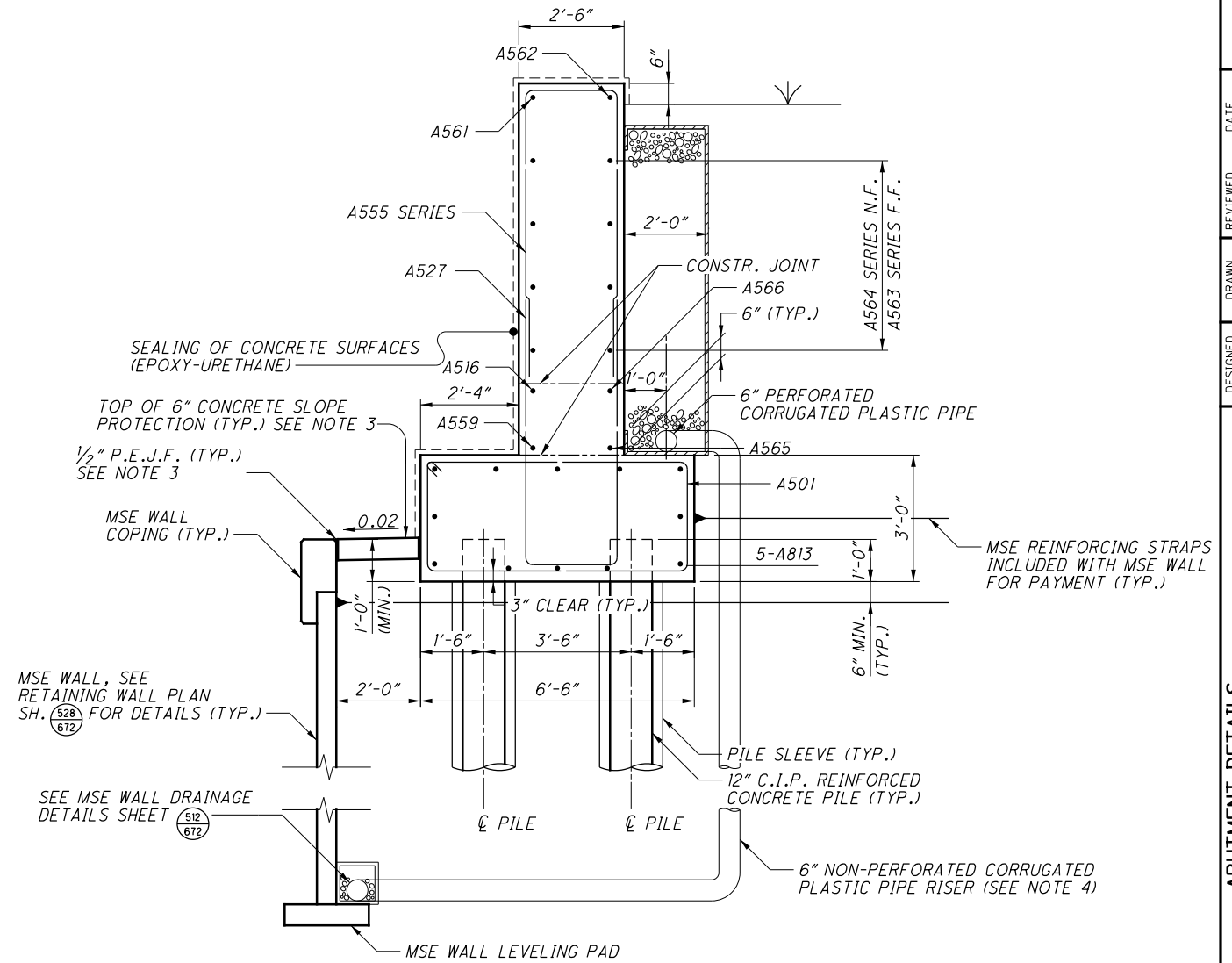
C F SECTION
 27-34 50-53 BARS NOT LABELED ARE D802 REAR ABUTMENT WESTBOUND SHOWN, OTHERS SIMILAR

LEGEND

○ - A901 - SEE SHEETS 31/78 & 32/78 FOR LOCATIONS OVER TOP OF BRICK SANITARY.

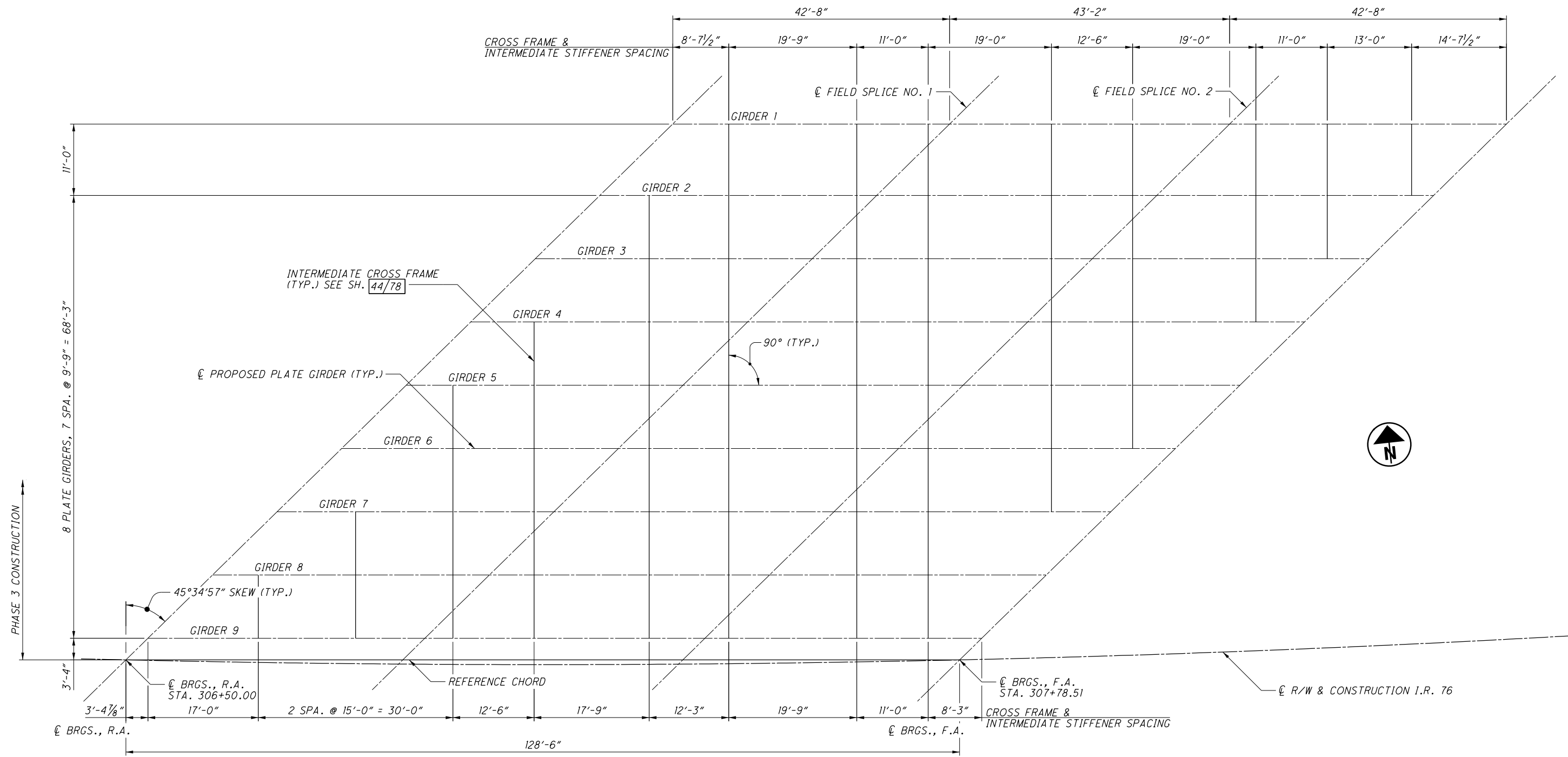
NOTES

- SEE STD. DWGS. SICD-1-96 AND SICD-2-14 FOR ADDITIONAL NOTES AND DETAILS.
- 2'-0" WIDE HMWM RESIN CENTERED ON CONSTRUCTION JOINT. PAYMENT SHALL BE INCLUDED WITH ITEM 511, CLASS QC2 CONCRETE WITH QC/OA, SUPERSTRUCTURE, AS PER PLAN.
- 1/2" P.E.J.F. AND 6" CONCRETE SLOPE PROTECTION SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 601, CONCRETE SLOPE PROTECTION, AS PER PLAN. SEE SHEET 528/672.
- 6" NON-PERFORATED CORRUGATED PLASTIC PIPE RISER AND 6" NON-PERFORATED CORRUGATED PLASTIC PIPE INCLUDED WITH BRIDGE FOR PAYMENT.

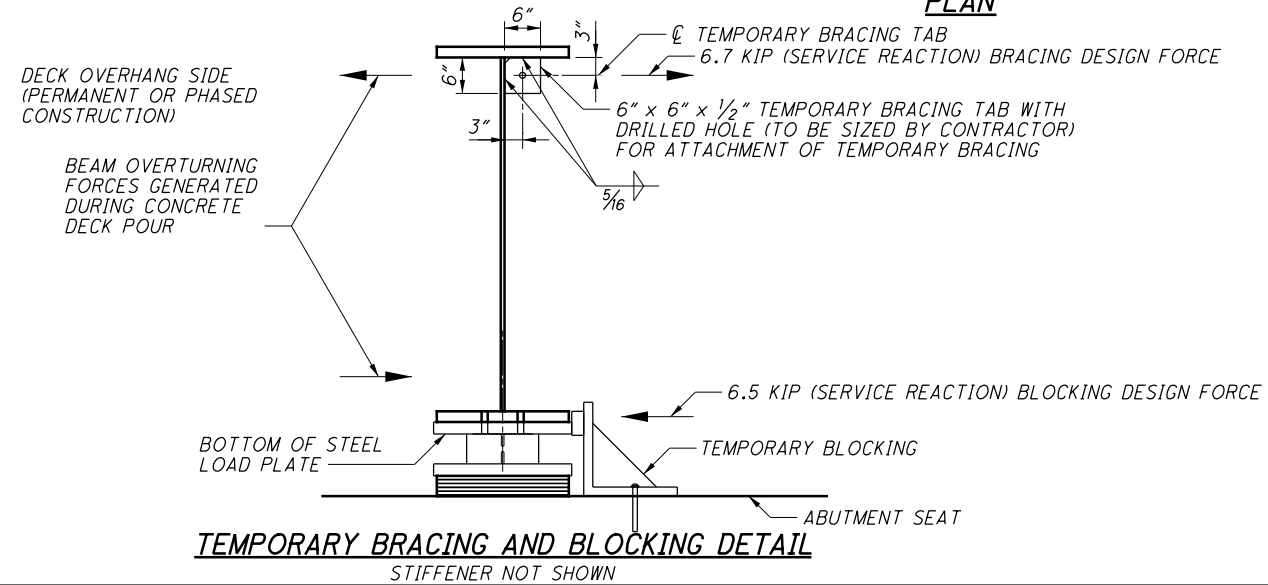


D D D SECTION
 27 30 34 BARS NOT LABELED ARE A550 REAR ABUTMENT WESTBOUND SHOWN, OTHERS SIMILAR

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PLAN



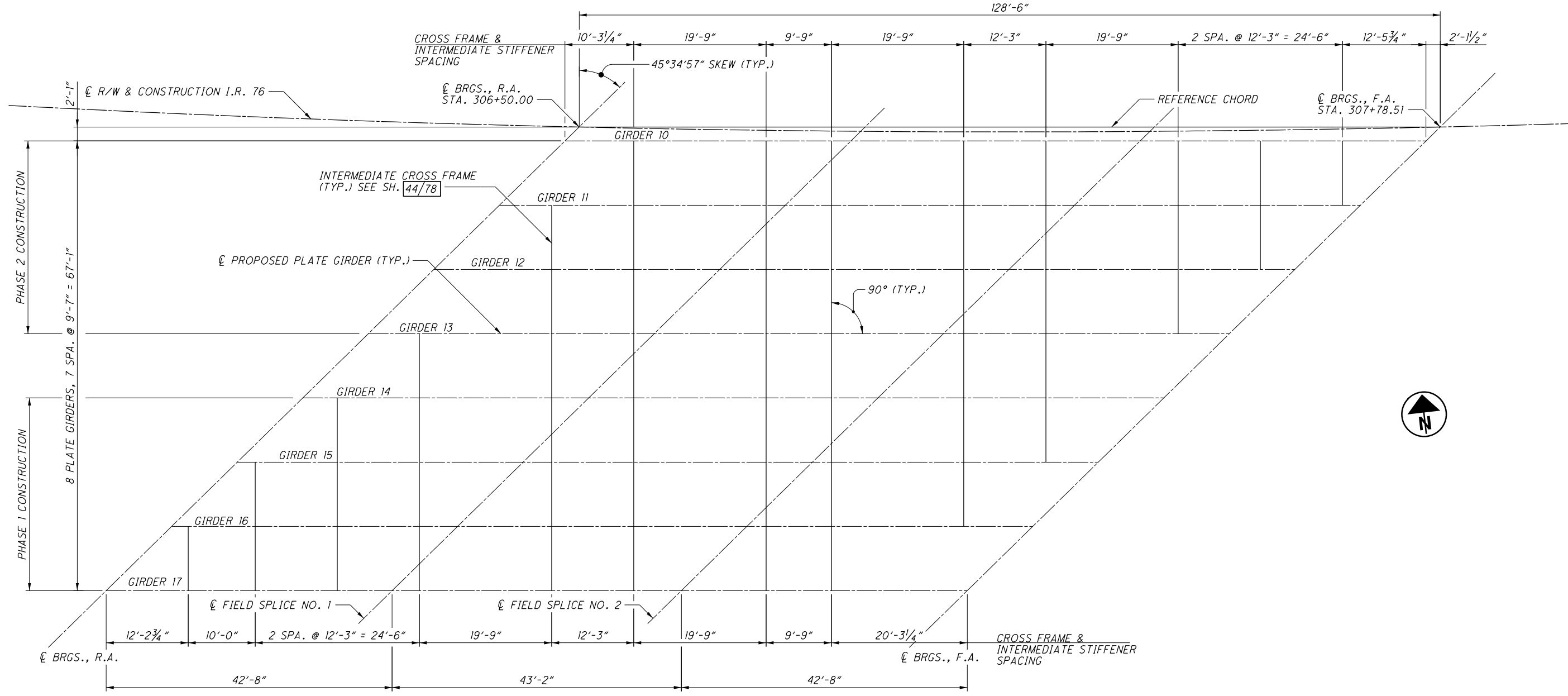
TEMPORARY BRACING AND BLOCKING DETAIL
STIFFENER NOT SHOWN

NOTES

1. ATTACH CROSS FRAMES BETWEEN GIRDERS 5 AND 6 AFTER THE SECOND DECK POUR BUT PRIOR TO CONSTRUCTING THE CLOSURE POUR FOR THE DECK.
2. DETAILS AT LOCATIONS OF TEMPORARY BRACING AND BLOCKING SHALL BE CONTRACTOR DESIGNED INCLUDING TOP FLANGE BRACING, BOTTOM LOAD PLATE BLOCKING, AND BE CAPABLE OF RESISTING A HORIZONTAL LOAD OF 6.7 KIPS (SERVICE REACTION) (PERPENDICULAR TO THE BEAM) AT GIRDERS 1, 5, 6, 9, 10, 13, 14, AND 17. THESE FORCES ARE A RESULT OF THE CONCRETE DECK OVERHANG POUR AS SHOWN IN TEMPORARY BRACING AND BLOCKING DETAIL. THIS BRACING AND BLOCKING SHALL BE DETAILED TO PREVENT BEAM ROTATION AND TRANVERSE DEFORMATION OF THE ELASTOMERIC BEARINGS. THE DESIGN CALCULATIONS FOR THIS BRACING AND BLOCKING SYSTEM SHALL BE PREPARED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER AND SHALL BE SUBMITTED TO THE DEPARTMENT AT LEAST 7 DAYS PRIOR TO INSTALLATION. DEPARTMENT ACCEPTANCE IS NOT REQUIRED.

THE BRACING AND BLOCKING SYSTEM SHALL BE INSTALLED PRIOR TO THE CONCRETE DECK POUR AND SHALL BE REMOVED PRIOR TO THE CONCRETE DIAPHRAGM POUR. THE TEMPORARY BRACING TAB SHALL BE FABRICATED WITH THE BEAMS AND SHALL NOT BE REMOVED. ALL LABOR, EQUIPMENT, AND MATERIAL NECESSARY FOR THE COMPLETE DESIGN, INSTALLATION, AND REMOVAL OF THE TEMPORARY BRACING AND BLOCKING SYSTEM SHALL BE CONSIDERED INCIDENTAL TO THE COST OF ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 4, AS PER PLAN.

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PLAN

NOTES

1. ATTACH CROSS FRAMES BETWEEN GIRDERS 13 AND 14 PRIOR TO CONSTRUCTING THE CLOSURE POUR FOR THE DECK.
2. SEE SH. 36/78 FOR TEMPORARY BRACING AND BLOCKING NOTES AND DETAILS.

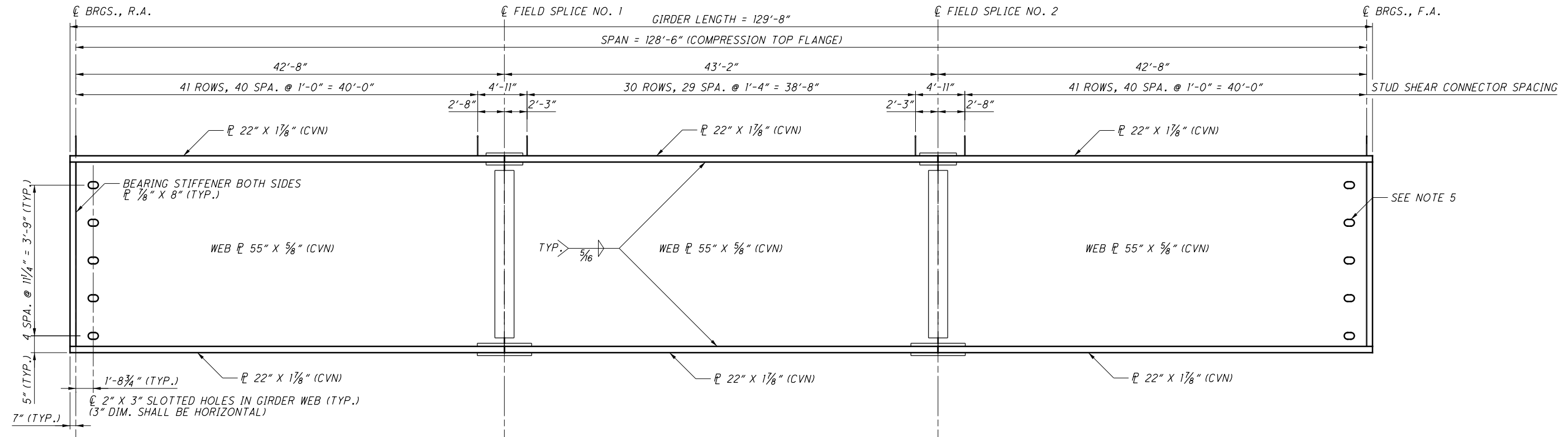


DESIGNED	ERK	CHECKED	GDJ
DRAWN	ERK	REVISED	
REVIEWED	WHM	DATE	4/28/2017
STRUCTURE FILE NUMBER	7705493		

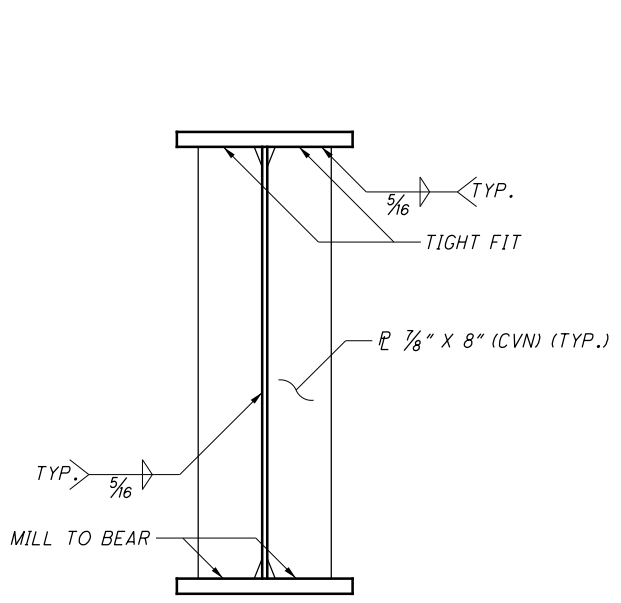
FRAMING PLAN (EASTBOUND)
BRIDGE NO. SUM-76-0580
OVER S.R. 619 (WOOSTER ROAD)

SUM-76-5.53
PID No. 96670

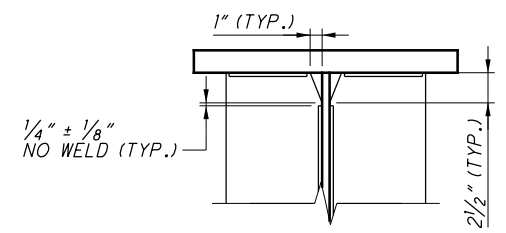
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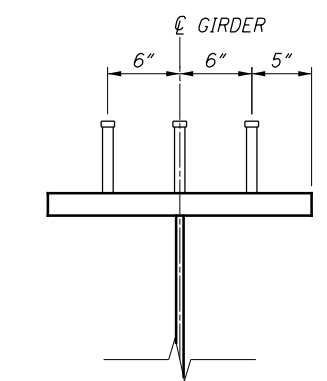
ELEVATION
 VERTICAL SCALE EXAGGERATED
 INTERMEDIATE STIFFENERS NOT SHOWN



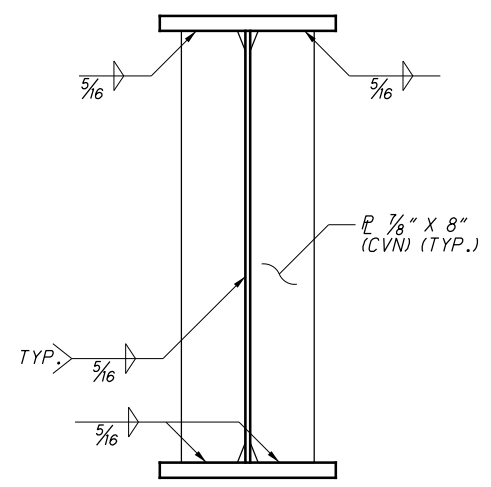
**BEARING STIFFENER
 PLATE DETAIL**



**STIFFENER CLIP AND
 WELD TERMINATION**



STUD SHEAR CONNECTOR
 7/8" φ X 6"



**INTERMEDIATE STIFFENER
 PLATE DETAIL**

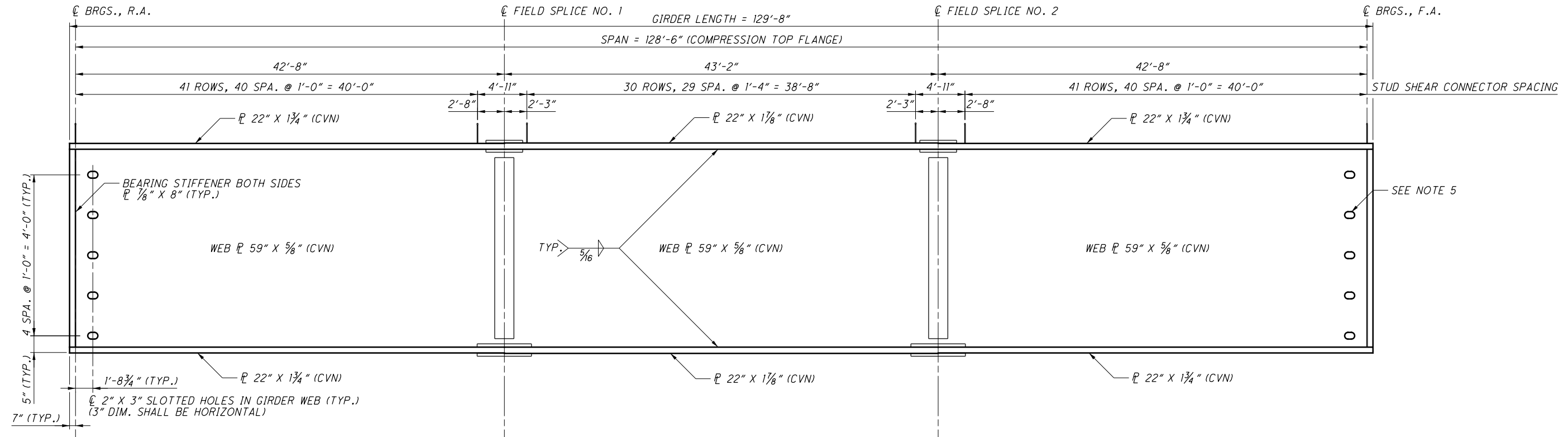
HOLES FOR CROSS FRAME
 GUSSET PLATES NOT SHOWN

NOTES

1. WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA STRINGER FLANGES DESIGNATED "COMPRESSION". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM EDGE OF FLANGE, BE NO MORE THAN 2" LONG, AND BE AT LEAST 1/4" FOR THICKNESSES UP TO 3/4" OR 5/16" FOR GREATER THAN 3/4" THICK.
2. WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
3. SEE SHEET 45/78 FOR VENT HOLE LOCATIONS IN BOTTOM FLANGE.
4. SEE SHEET 44/78 FOR TOP FLANGE CLIP DETAIL AND INTERMEDIATE CROSS FRAME DETAIL.
5. DRILL HOLES IN GIRDERS PRIOR TO GALVANIZING. DRILLING OF HOLES SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 513, STRUCTURAL STEEL MEMBERS, LEVEL 4, AS PER PLAN.
6. WELD STIFFENERS TO GIRDERS PRIOR TO GALVANIZING.

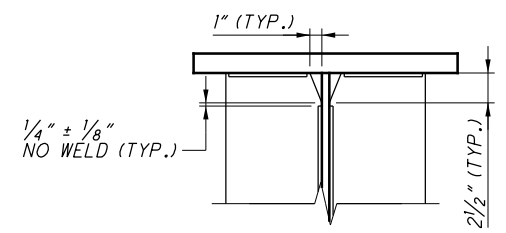
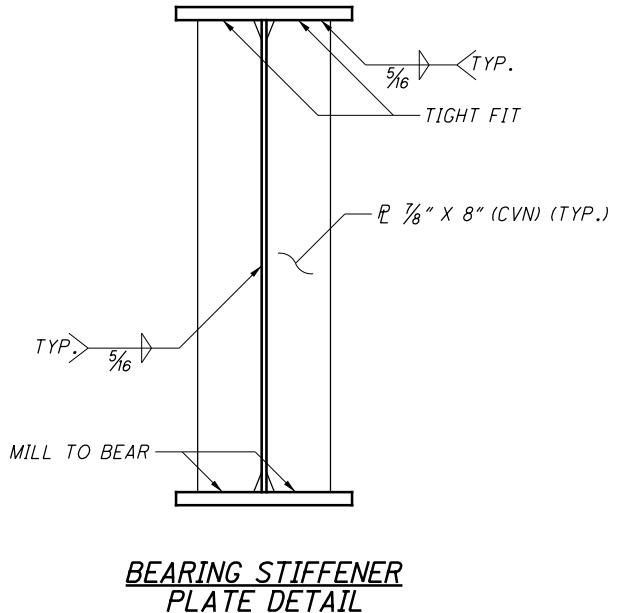
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DRAWN	ERK	REVISED	
REVIEWED	WHM	STRUCTURE FILE NUMBER	7705493
DATE	4/28/2017		

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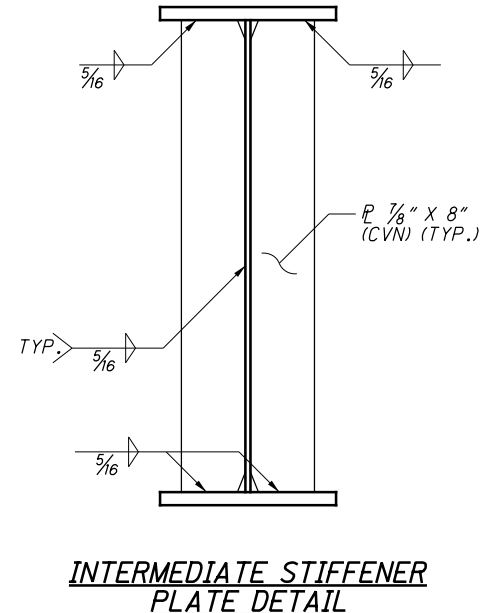
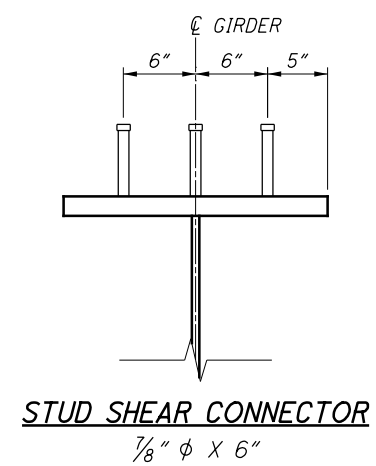


ELEVATION

VERTICAL SCALE EXAGGERATED
INTERMEDIATE STIFFENERS NOT SHOWN

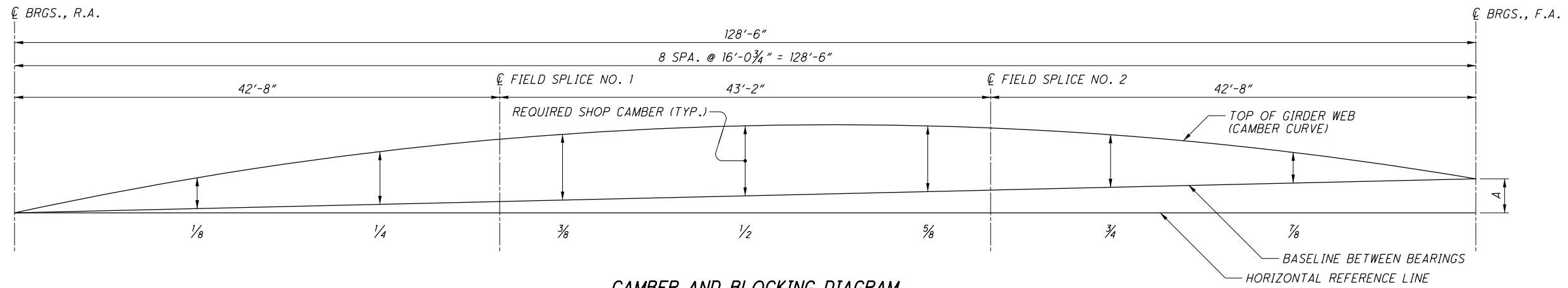


**STIFFENER CLIP AND
WELD TERMINATION**



NOTES

- WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA STRINGER FLANGES DESIGNATED "COMPRESSION". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM EDGE OF FLANGE, BE NO MORE THAN 2" LONG, AND BE AT LEAST 1/4" FOR THICKNESSES UP TO 3/4" OR 5/16" FOR GREATER THAN 3/4" THICK.
- WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
- SEE SHEET 45/78 FOR VENT HOLE LOCATIONS IN BOTTOM FLANGE.
- SEE SHEET 44/78 FOR TOP FLANGE CLIP DETAIL AND INTERMEDIATE CROSS FRAME DETAIL.
- DRILL HOLES IN GIRDERS PRIOR TO GALVANIZING. DRILLING OF HOLES SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 513, STRUCTURAL STEEL MEMBERS, LEVEL 4, AS PER PLAN.
- WELD STIFFENERS TO GIRDERS PRIOR TO GALVANIZING.



CAMBER AND BLOCKING DIAGRAM

GIRDER 1 - DEFLECTION AND CAMBER TABLE (INCHES)											
LOCATION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	3/16	1/16	15/16	13/8	1/2	13/8	1/4	1/16	3/16	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	13/8	2 1/2	3 1/16	3 1/4	3 9/16	3 1/4	3	2 1/16	1 3/8	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	-1 3/8	-2 1/2	-3 1/16	-3 3/16	-3 3/8	-4 1/8	-4	-3 3/16	-1 3/8	0
REQUIRED SHOP CAMBER	0	3/16	1 1/16	15/16	15/16	1 3/16	1/2	1/4	5/16	5/16	0

GIRDER 2 - DEFLECTION AND CAMBER TABLE (INCHES)											
LOCATION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	1/2	15/16	1 1/8	1 3/16	1 5/16	1 1/4	1 1/8	15/16	1/2	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	1 1/4	2 1/4	2 3/4	2 15/16	3 3/16	2 5/16	2 3/4	2 5/16	1 1/4	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	-1 1/4	-2 3/16	-2 5/8	-2 13/16	-3 1/4	-3 3/8	-3 3/8	-3 3/16	-1 3/4	0
REQUIRED SHOP CAMBER	0	1/2	1	1 1/4	1 5/16	1 1/4	1 3/16	1/2	1/16	0	0

GIRDER 3 - DEFLECTION AND CAMBER TABLE (INCHES)											
LOCATION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	1/2	1 1/8	1 1/16	1 1/8	1 1/4	1 1/8	1 1/16	1 1/8	1/2	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	1 3/16	2 1/8	2 5/8	2 13/16	3 1/16	2 13/16	2 5/8	2 3/16	1 3/16	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	-1 1/8	-1 15/16	-2 5/16	-2 1/2	-2 3/4	-2 13/16	-2 3/4	-2 9/16	-1 5/8	0
REQUIRED SHOP CAMBER	0	3/16	1 1/16	1 3/8	1 1/16	1 1/16	1 1/8	15/16	1/2	1/16	0

GIRDER 4 - DEFLECTION AND CAMBER TABLE (INCHES)											
LOCATION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	1/16	1/8	1 1/16	1 1/8	1 3/16	1 1/8	1 1/16	1/8	1/2	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	1 3/16	2 1/8	2 9/16	2 3/4	3	2 3/4	2 9/16	2 1/8	1 3/16	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	-1	-1 3/4	-2 1/16	-2 1/4	-2 1/16	-2 3/8	-2 1/4	-2	-1 3/8	0
REQUIRED SHOP CAMBER	0	5/8	1 1/4	1 9/16	1 5/8	1 3/4	1 1/2	1 3/8	1	5/16	0

GIRDER 5 - DEFLECTION AND CAMBER TABLE (INCHES)											
LOCATION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	1/16	13/16	1	1 1/8	1 3/16	1 1/8	1	13/16	1/16	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	1 1/8	2 1/8	2 9/16	2 3/4	3	2 3/4	2 9/16	2 1/8	1 1/8	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	-15/16	-1 5/8	-1 15/16	-2 1/16	-2 3/16	-2 1/16	-1 15/16	-1 5/8	-1	0
REQUIRED SHOP CAMBER	0	5/8	1 5/16	1 5/8	1 13/16	2	1 13/16	1 5/8	1 5/16	5/8	0

GIRDER 6 - DEFLECTION AND CAMBER TABLE (INCHES)											
LOCATION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	1/16	13/16	1	1 1/8	1 3/16	1 1/8	1	13/16	1/16	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	1 1/8	2 1/8	2 9/16	2 3/4	3	2 3/4	2 9/16	2 1/8	1 3/16	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	-15/16	-1 5/8	-1 15/16	-2	-2 1/8	-2	-1 15/16	-1 5/8	-15/16	0
REQUIRED SHOP CAMBER	0	5/8	1 5/16	1 11/16	1 3/8	2 1/16	1 3/8	1 11/16	1 5/16	1 1/16	0

GIRDER 7 - DEFLECTION AND CAMBER TABLE (INCHES)											
LOCATION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	1/2	1 1/8	1 1/16	1 1/8	1 3/16	1 1/8	1 1/16	1/8	1/2	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	1 3/16	2 3/16	2 5/8	2 13/16	3 1/16	2 13/16	2 5/8	2 3/16	1 3/16	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	-15/16	-1 9/16	-1 7/8	-2	-2 1/8	-2	-1 7/8	-1 9/16	-15/16	0
REQUIRED SHOP CAMBER	0	3/4	1 1/2	1 7/16	1 15/16	2 1/8	1 15/16	1 7/16	1 1/2	3/4	0

BLOCKING TABLE	
LOCATION	DIMENSION "A"
GIRDER 1	3'-6 1/8"
GIRDER 2	3'-3 1/4"
GIRDER 3	3'-0 3/4"
GIRDER 4	2'-10 5/8"
GIRDER 5	2'-8 5/8"
GIRDER 6	2'-7 1/8"
GIRDER 7	2'-5 3/4"
GIRDER 8	2'-4 3/8"
GIRDER 9	2'-2 3/4"
GIRDER 10	2'-3 1/2"
GIRDER 11	2'-1 5/8"
GIRDER 12	2'-0 1/8"
GIRDER 13	1'-10 7/8"
GIRDER 14	1'-9 1/2"
GIRDER 15	1'-8 1/8"
GIRDER 16	1'-6 1/8"
GIRDER 17	1'-6 1/4"

CAMBER SIGN CONVENTION

+ POSITIVE UPWARD
- NEGATIVE DOWNWARD

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GIRDER 8 - DEFLECTION AND CAMBER TABLE (INCHES)											
LOCATION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	1/2	1/8	1/8	13/16	1/4	13/16	1/16	1/8	1/2	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/4	23/16	213/16	3	3/4	3	23/4	2/4	1/4	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	-15/16	-19/16	-17/8	-2	-21/8	-2	-17/8	-19/16	-15/16	0
REQUIRED SHOP CAMBER	0	13/16	15/8	21/16	23/16	23/8	23/16	15/16	19/16	13/16	0

GIRDER 9 - DEFLECTION AND CAMBER TABLE (INCHES)											
LOCATION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	1/2	1	13/16	1/4	13/8	15/8	13/16	1	9/8	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	13/8	21/2	31/16	3/4	39/16	35/16	31/8	29/16	13/8	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	-9/16	-1	-13/16	-1/4	-13/8	-1/4	-13/16	-1	-9/16	0
REQUIRED SHOP CAMBER	0	15/16	21/2	31/16	3/4	39/16	33/8	31/8	29/16	13/8	0

GIRDER 10 - DEFLECTION AND CAMBER TABLE (INCHES)											
LOCATION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	3/16	1	13/16	1/4	13/8	1/4	13/16	15/16	1/2	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	13/16	23/16	211/16	213/16	31/16	213/16	25/8	21/8	13/16	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	-1	-13/4	-21/16	-23/16	-23/8	-23/16	-23/16	-113/16	-1/8	0
REQUIRED SHOP CAMBER	0	3/4	17/16	113/16	17/8	21/16	13/4	15/8	11/8	9/16	0

GIRDER 11 - DEFLECTION AND CAMBER TABLE (INCHES)											
LOCATION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	1/2	1/8	1/16	13/16	1/4	13/16	1/8	1/8	1/2	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	21/16	21/2	211/16	215/16	211/16	21/2	21/16	1/8	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	-15/16	-15/8	-17/8	-2	-21/8	-2	-113/16	-15/8	-1	0
REQUIRED SHOP CAMBER	0	1/16	15/16	11/16	17/8	21/16	17/8	11/16	15/16	5/8	0

GIRDER 12 - DEFLECTION AND CAMBER TABLE (INCHES)											
LOCATION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	1/16	1/8	1/16	13/16	1/8	13/16	1/16	1/8	1/2	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	21/16	21/2	25/8	21/8	25/8	21/2	21/16	1/8	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	-15/16	-19/16	-17/8	-115/16	-21/16	-115/16	-13/16	-11/2	-7/8	0
REQUIRED SHOP CAMBER	0	5/8	13/8	11/16	113/16	2	113/16	13/4	11/16	3/4	0

GIRDER 13 - DEFLECTION AND CAMBER TABLE (INCHES)											
LOCATION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	1/16	13/16	1	11/16	13/16	11/16	1	13/16	1/16	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	21/16	21/2	25/8	21/8	25/8	21/2	21/16	1/8	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	-15/16	-19/16	-17/8	-2	-21/8	-2	-17/8	-19/16	-15/16	0
REQUIRED SHOP CAMBER	0	5/8	15/16	15/8	111/16	115/16	111/16	15/8	15/16	5/8	0

GIRDER 14 - DEFLECTION AND CAMBER TABLE (INCHES)											
LOCATION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	1/16	13/16	1	11/16	13/16	11/16	1	13/16	1/16	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/8	21/16	21/2	211/16	215/16	211/16	21/2	21/16	1/8	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	-15/16	-19/16	-17/8	-115/16	-21/16	-115/16	-17/8	-19/16	-15/16	0
REQUIRED SHOP CAMBER	0	5/8	15/16	15/8	113/16	21/16	113/16	15/8	15/16	5/8	0

GIRDER 15 - DEFLECTION AND CAMBER TABLE (INCHES)											
LOCATION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	1/2	1/8	1/16	1/8	13/16	1/8	1/16	1/8	1/16	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	13/16	21/8	25/8	23/4	3	23/4	29/16	21/8	13/16	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	-15/16	-19/16	-17/8	-115/16	-21/16	-115/16	-17/8	-19/16	-15/16	0
REQUIRED SHOP CAMBER	0	3/4	17/16	113/16	115/16	21/8	115/16	13/4	11/16	11/16	0

GIRDER 16 - DEFLECTION AND CAMBER TABLE (INCHES)											
LOCATION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	1/2	1/8	1/8	13/16	1/4	13/16	1/16	1/8	1/2	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	1/4	21/4	23/4	215/16	33/16	215/16	23/4	21/4	1/4	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	-7/8	-19/16	-113/16	-115/16	-21/16	-115/16	-113/16	-19/16	-7/8	0
REQUIRED SHOP CAMBER	0	7/8	19/16	21/16	23/16	23/8	23/16	2	19/16	7/8	0

GIRDER 17 - DEFLECTION AND CAMBER TABLE (INCHES)											
LOCATION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	1/2	15/16	13/16	1/4	13/8	15/16	13/16	1	9/8	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	15/16	27/16	3	33/16	31/2	31/4	31/16	21/2	13/8	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	-9/16	-1	-13/16	-1/4	-15/16	-1/4	-13/16	-1	-9/16	0
REQUIRED SHOP CAMBER	0	1/4	23/8	3	33/16	39/16	35/16	31/16	21/2	13/8	0

CAMBER SIGN CONVENTION

+ POSITIVE UPWARD
- NEGATIVE DOWNWARD

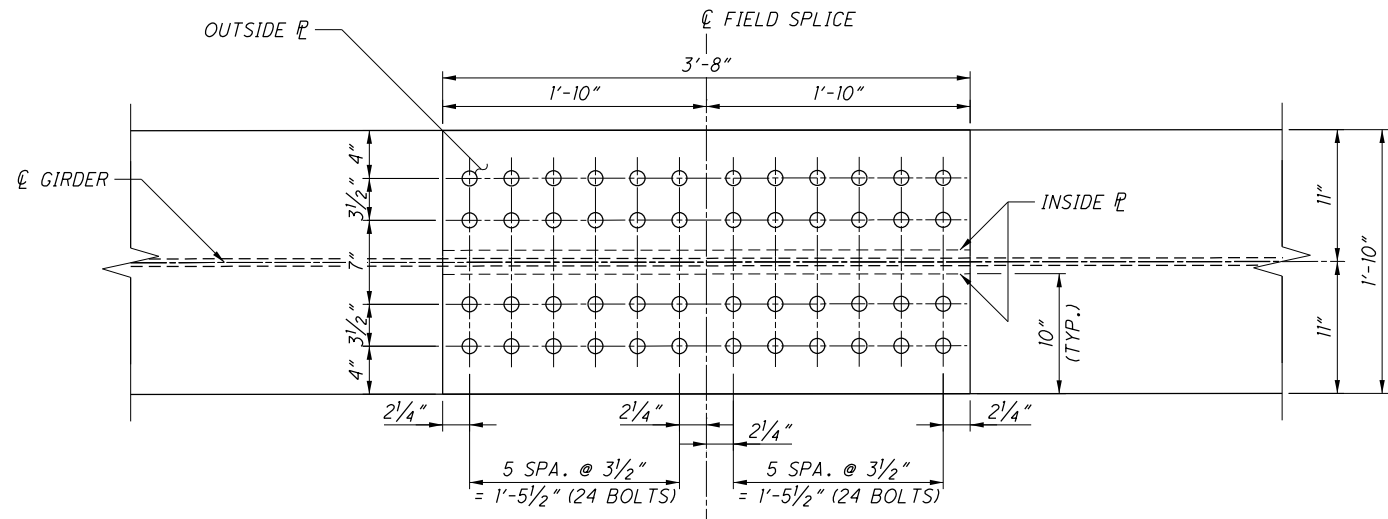


DESIGNED	ERK	CHECKED	GDJ
DRAWN	ERK	REVISED	
REVIEWED	WHM	DATE	4/28/2017
STRUCTURE FILE NUMBER	7705493		

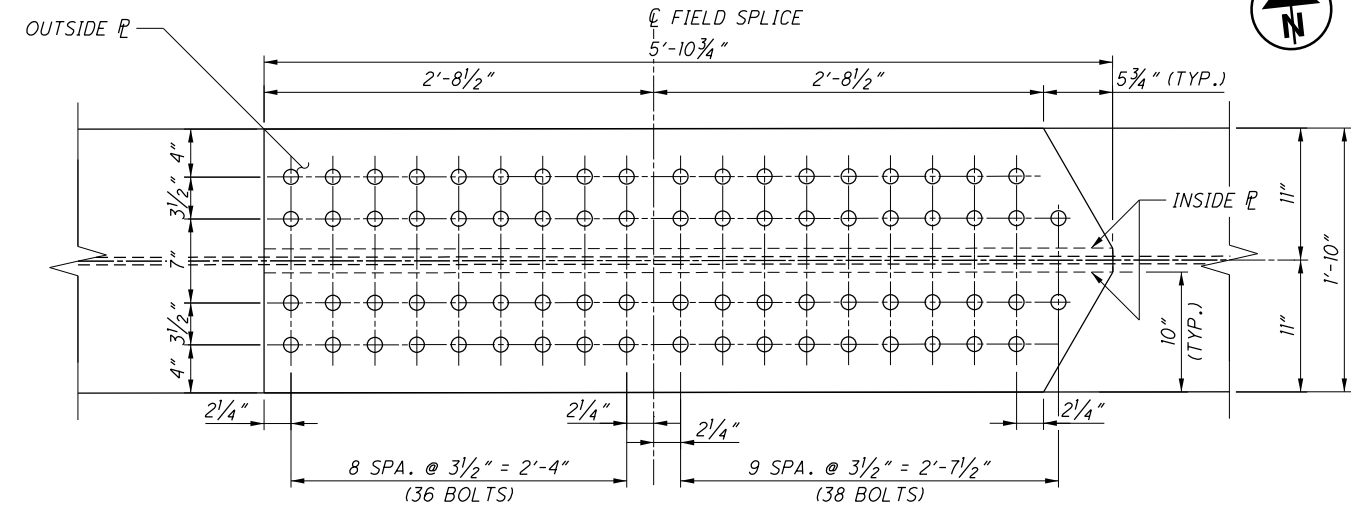
CAMBER DETAILS
BRIDGE NO. SUM-76-0580
OVER S.R. 619 (WOOSTER ROAD)

SUM-76-5.53
PID No. 96670

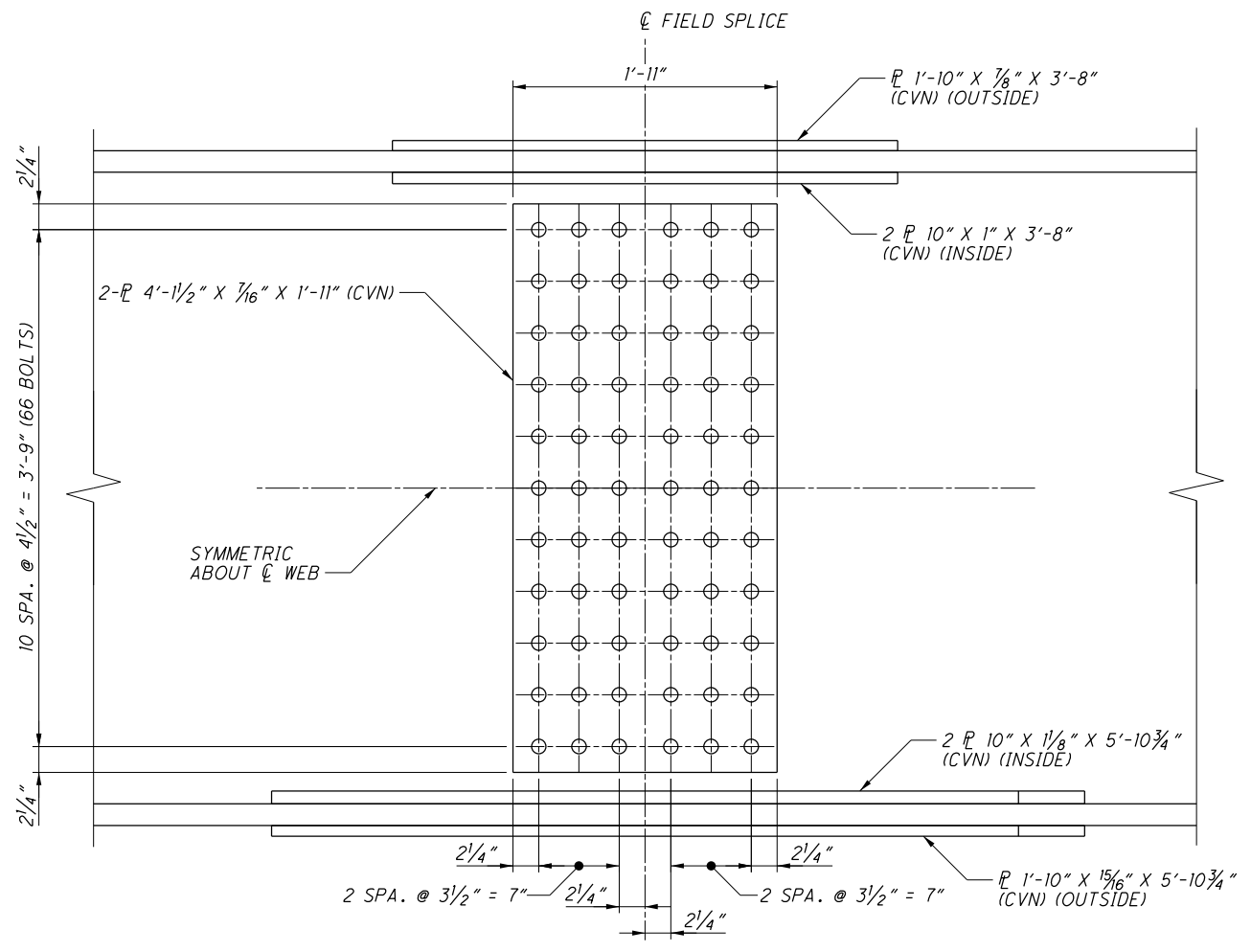
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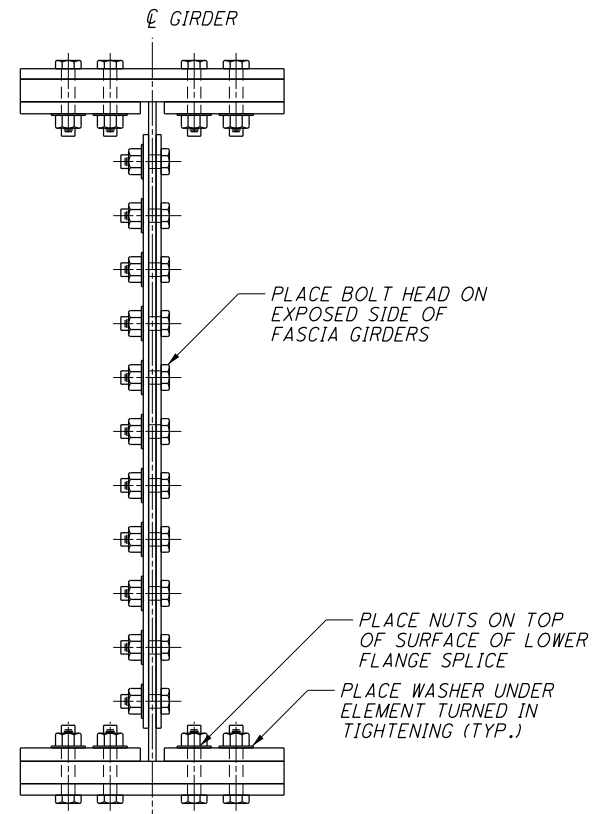
PLAN - TOP FLANGE SPLICE



PLAN - BOTTOM FLANGE SPLICE



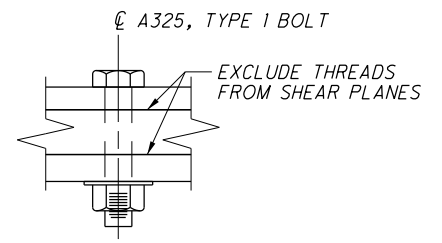
ELEVATION



SECTION

NOTES

1. CVN: WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
2. HIGH STRENGTH BOLTS SHALL BE 1/8" DIAMETER A325, TYPE I GALVANIZED 1/4" DIAMETER HOLES.
3. ALL BOLTS SHALL BE SIZED TO EXCLUDE THREADS FROM SHEAR PLANES. SEE BOLT DETAIL.



BOLT DETAIL

GIRDER 1 SPLICE DETAILS
BRIDGE NO. SUM-76-0580
OVER S.R. 619 (WOOSTER ROAD)

SUM-76-5.53
PID No. 96670

42 / 78

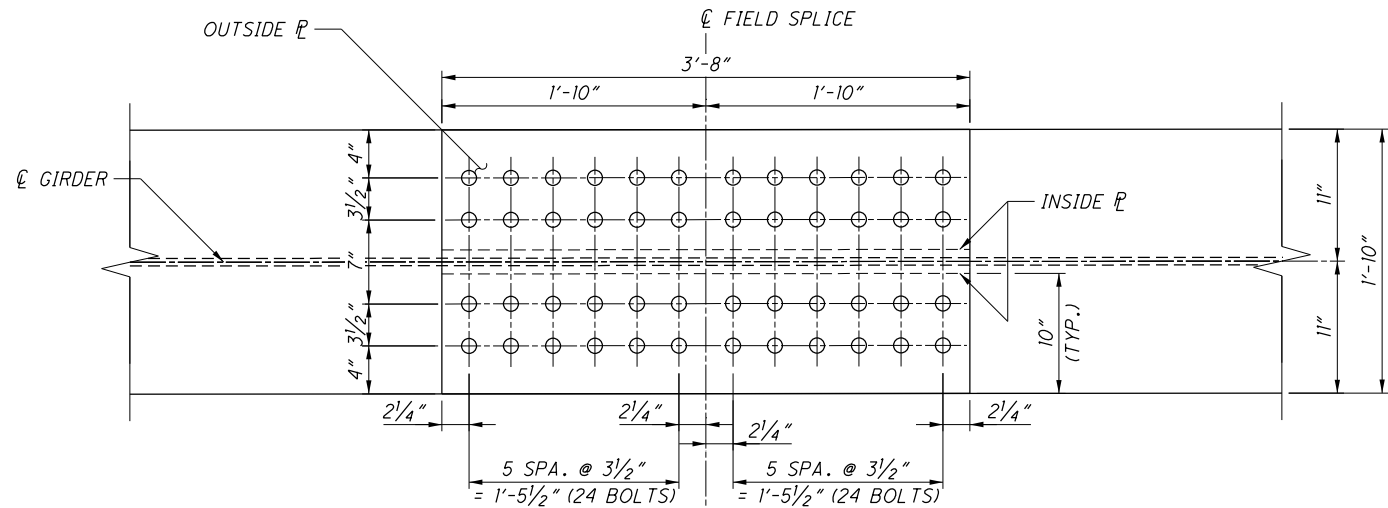
606
672

DESIGN AGENCY
CARPENTER MARTY
TRANSPORTATION
CONSULTANTS
INCORPORATED
WWW.CARPENTERMARTY.COM

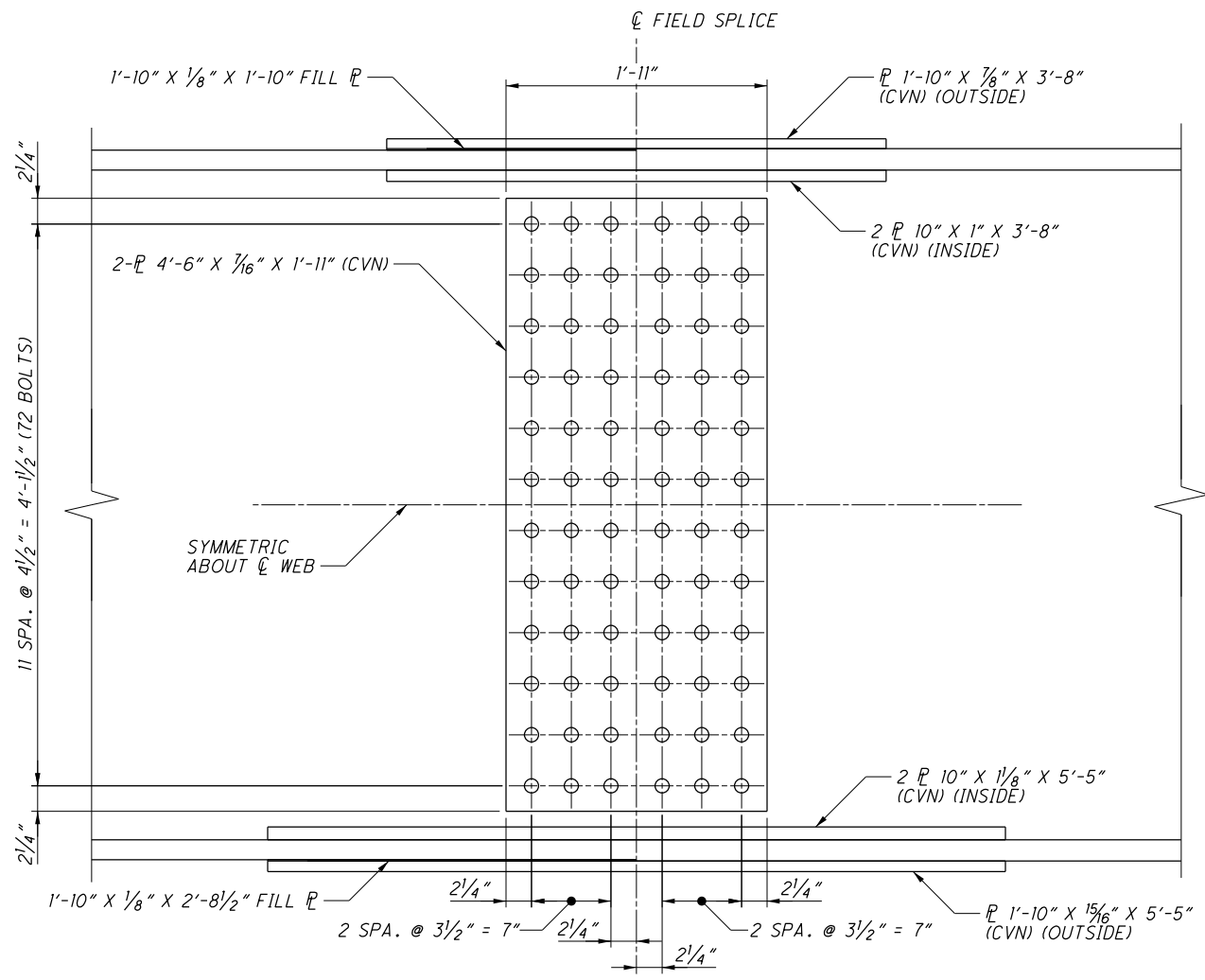
REVIEWED DATE 4/28/2017
WHM
STRUCTURE FILE NUMBER 7705493
DRAWN ERK
ERK REVISED
DESIGNED ERK
ERK CHECKED
GDU



P:\DDT\MP\0093_SUM-76-5.62\SUM-96670\Design\Structures\SUM076_0580C\Sheets\076_0580C.dgn Sheet 10/1/2018 2:09:31 PM cmt007

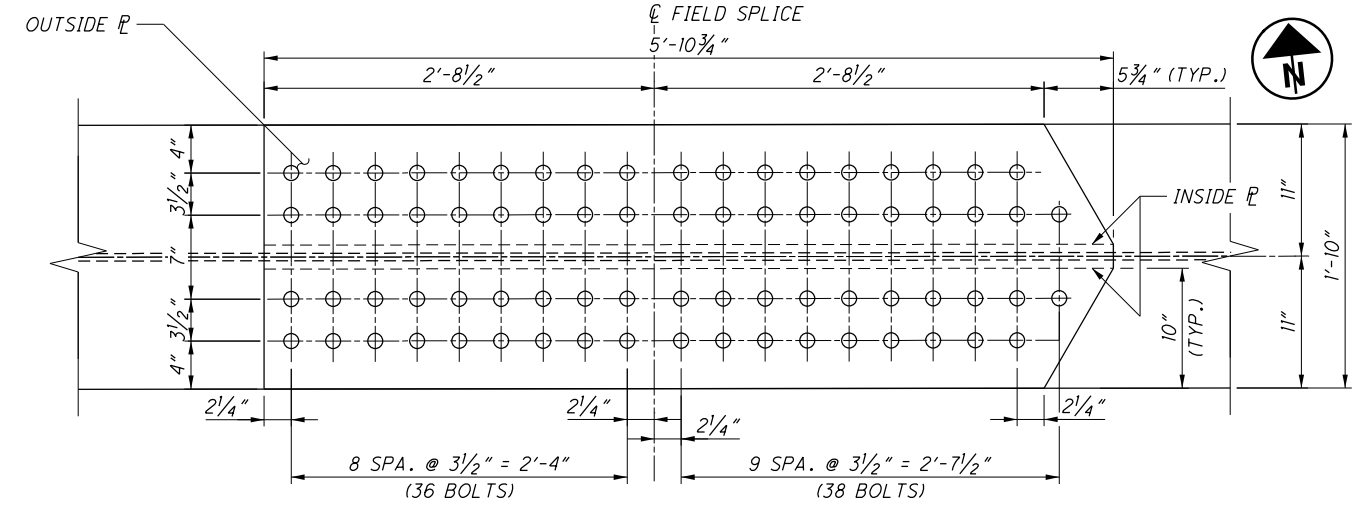


PLAN - TOP FLANGE SPLICE

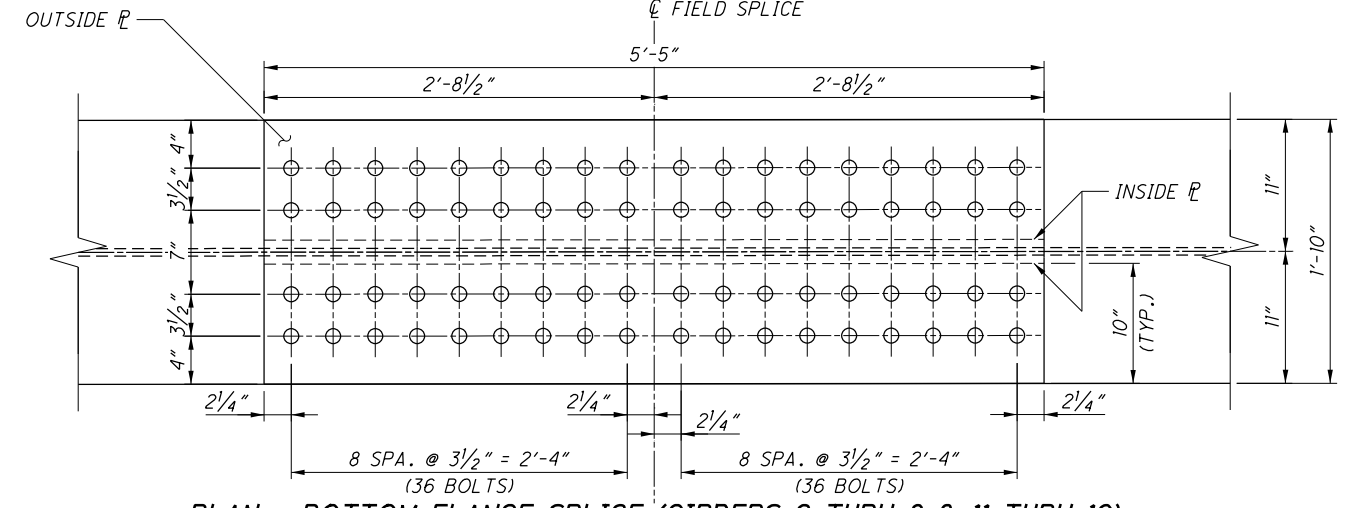


ELEVATION

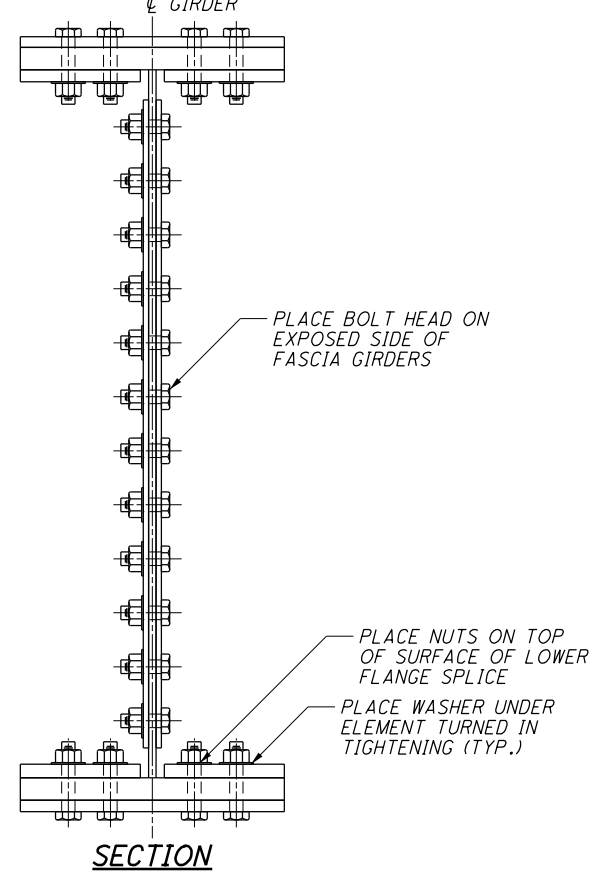
GIRDERS 2 THRU 8 & 11 THRU 16 SHOWN, 9, 10, & 17 SIMILAR SPLICE 1 SHOWN, SPLICE 2 OPPOSITE HAND



PLAN - BOTTOM FLANGE SPLICE (GIRDERS 9, 10, & 17)

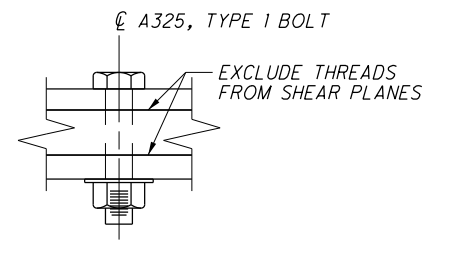


PLAN - BOTTOM FLANGE SPLICE (GIRDERS 2 THRU 8 & 11 THRU 16)



NOTES

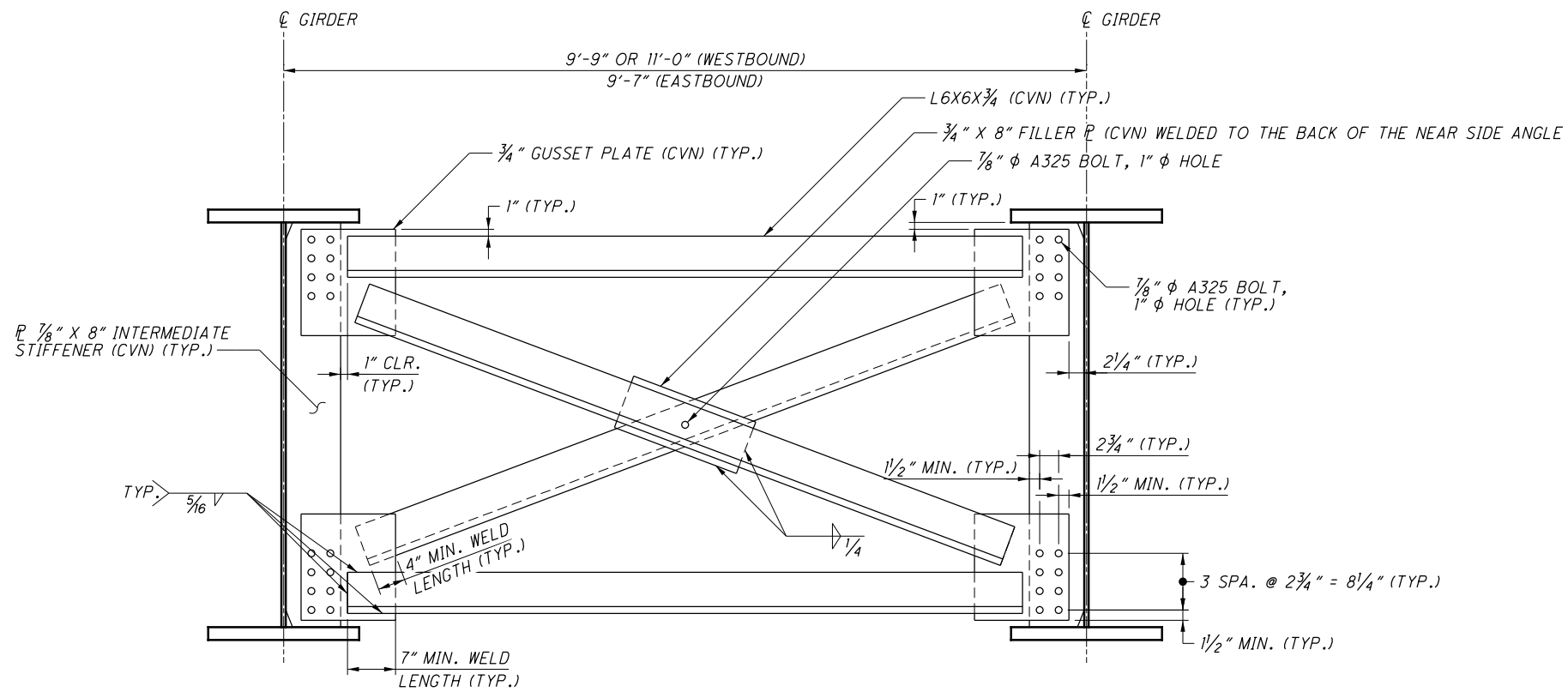
1. CVN: WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
2. HIGH STRENGTH BOLTS SHALL BE 1/8" DIAMETER A325, TYPE I GALVANIZED 1/4" DIAMETER HOLES.
3. ALL BOLTS SHALL BE SIZED TO EXCLUDE THREADS FROM SHEAR PLANES. SEE BOLT DETAIL.



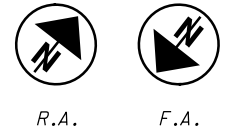
BOLT DETAIL

DESIGN AGENCY CARPENTER MARTY <small>TRANSPORTATION</small> <small>14450 24th St. - Canton, MA 01921</small>	DATE 4/28/2017
	REVIEWED WHM
	STRUCTURE FILE NUMBER 7705493
	DESIGNED ERK
CHECKED GDU	REVISION REVISED
DESIGNED ERK	REVISION REVISED
CHECKED GDU	REVISION REVISED
GIRDERS 2-17 SPLICE DETAILS BRIDGE NO. SUM-76-0580 OVER S.R. 619 (WOOSTER ROAD)	
SUM-76-5.53	PID No. 96670
43/78	607 672

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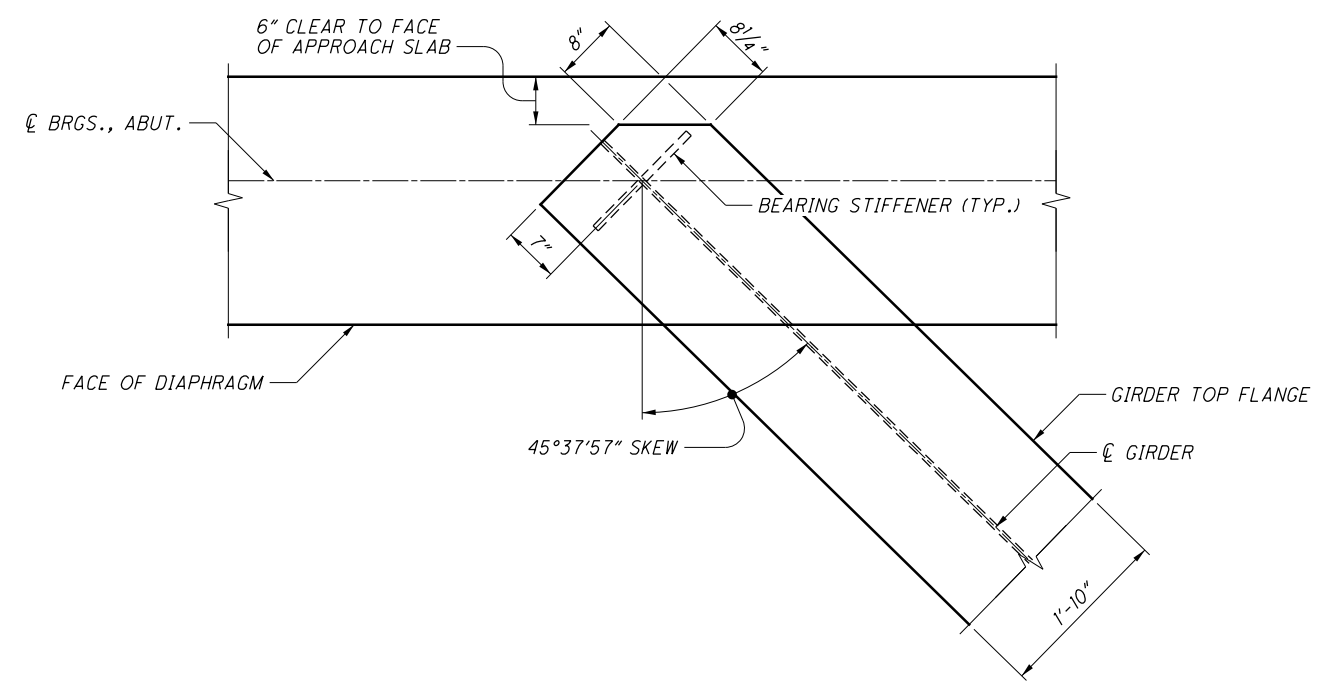


INTERMEDIATE CROSS FRAME



NOTES

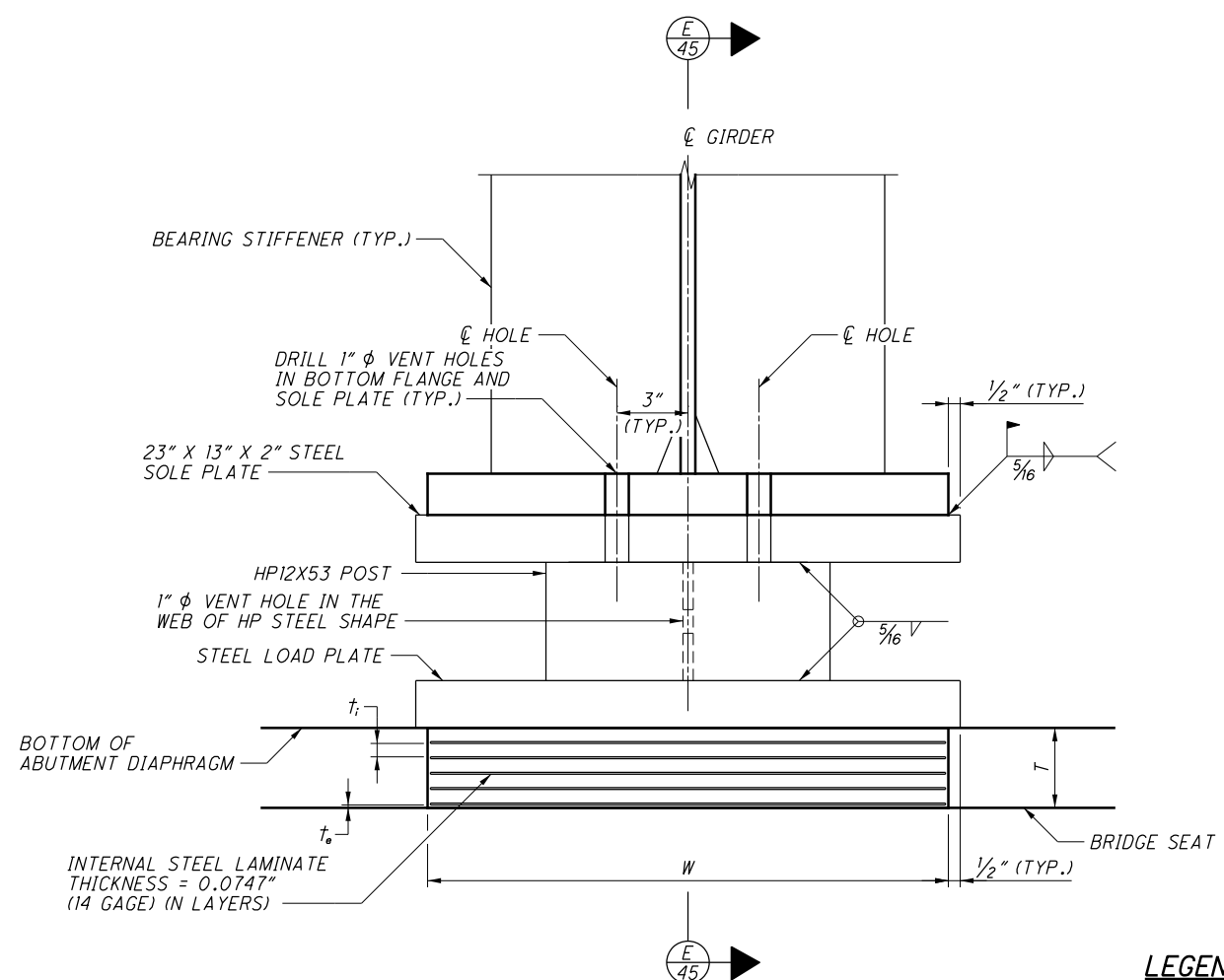
1. HIGH STRENGTH BOLTS SHALL BE A325, TYPE 1 GALVANIZED.
2. ALL BOLTS SHALL BE SIZED TO EXCLUDE THREADS FROM SHEAR PLANES. SEE BOLT DETAIL ON SHEET 42/78.
3. CVN: WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
4. ALL MEMBERS SHALL BE WELDED PRIOR TO GALVANIZING.



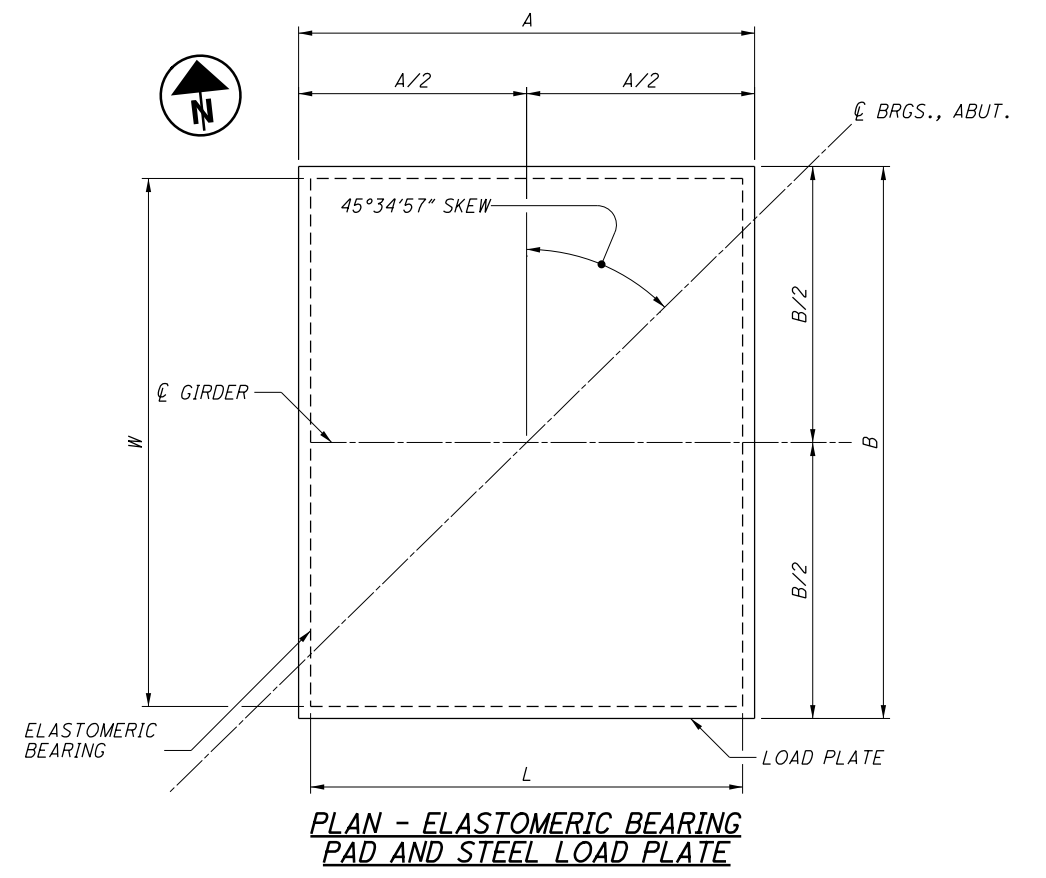
TOP FLANGE CLIP DETAIL

DESIGNED	ERK	CHECKED	GDJ
DRAWN	ERK	REVISED	
REVIEWED	WHM	DATE	4/28/2017
STRUCTURE FILE NUMBER	7705493		

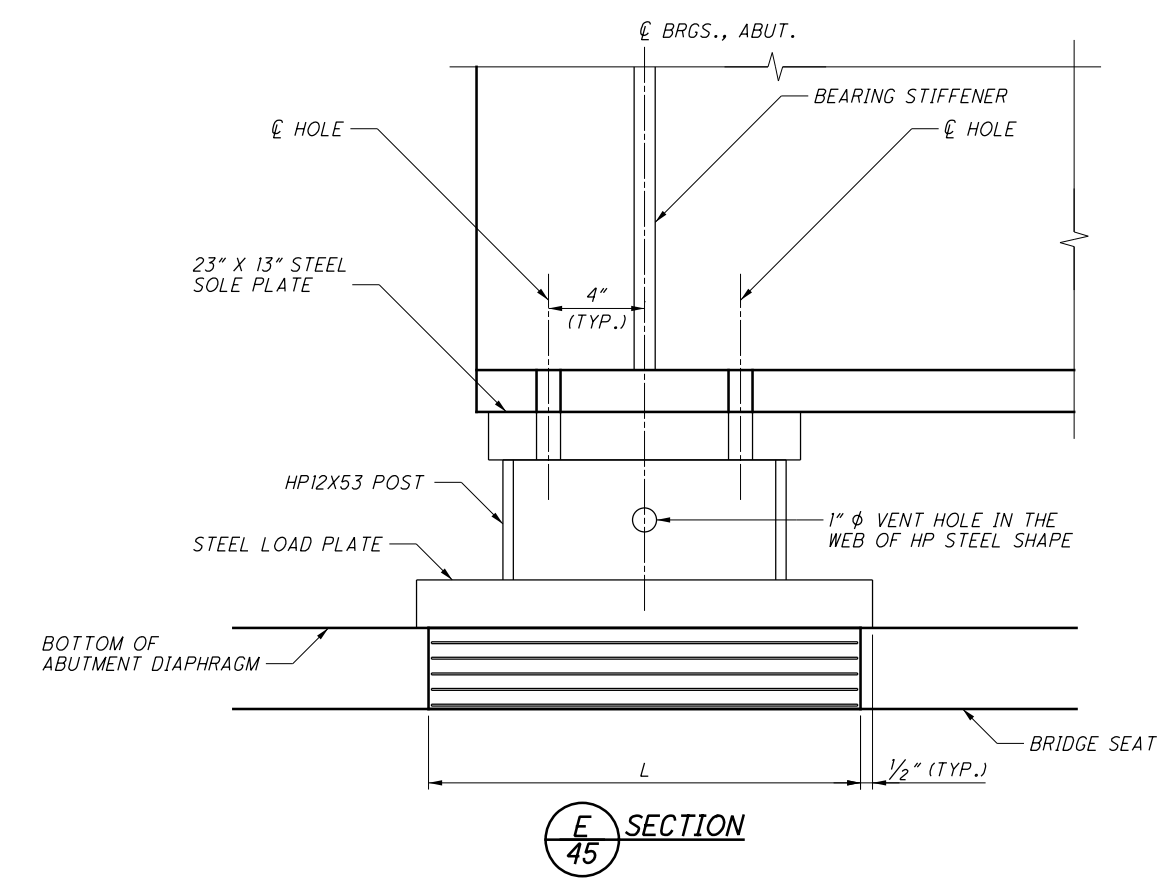
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LAMINATED ELASTOMERIC EXPANSION BEARING



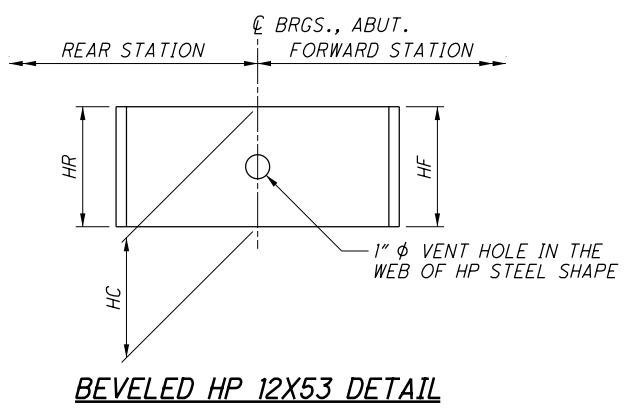
PLAN - ELASTOMERIC BEARING PAD AND STEEL LOAD PLATE



E 45 SECTION

LEGEND

- t_i - THICKNESS OF INTERNAL LAYERS
- t_e - THICKNESS OF EXTERNAL LAYERS
- T - TOTAL THICKNESS OF ELASTOMERIC BEARING
- N - NUMBER OF INTERNAL LAYERS
- N - NUMBER OF STEEL LAMINATES
- INTERNAL STEEL LAMINATE THICKNESS - 0.0747" (14 GAGE)
- * - REACTIONS SHOWN ARE WITH NO LOAD FACTOR OR DYNAMIC LOAD ALLOWANCE INCLUDED



BEVELED HP 12X53 DETAIL

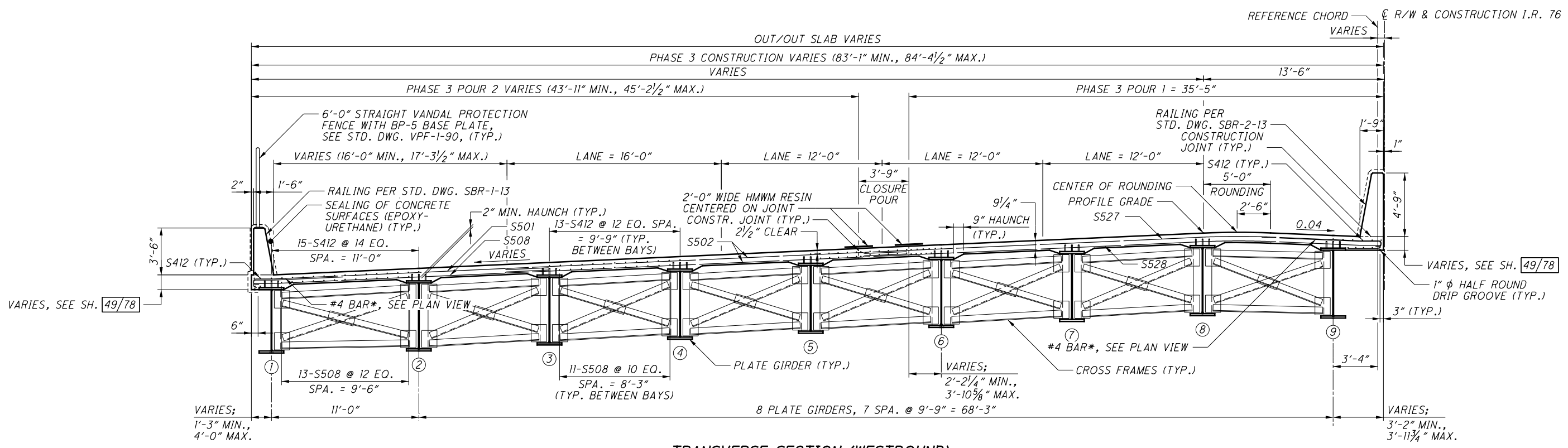
NOTES

1. ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGN IN ACCORDANCE WITH SECTION 14.7.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE LONG-TERM COMPRESSION PROOF LOAD TEST (AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6) IS NOT REQUIRED.
2. STEEL LOAD PLATES SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS. THE STEEL PLATES AND HP12X53 SHALL BE ASTM A709 GRADE 50 AND BE SIMILARLY COATED AS THE STRUCTURAL STEEL. GALVANIZING SHALL BE DONE IN THE SHOP AND BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 516, ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE).
3. ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE BEARING LOCATION ON THE BRIDGE AND A DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND BE VISIBLE AFTER BEARING IS INSTALLED.

	GIRDER	HP 12X53 POST HEIGHT (H)				GIRDER	HP 12X53 POST HEIGHT (H)		
		LOCATION					LOCATION		
		HR (IN.)	HC (IN.)	HF (IN.)			HR (IN.)	HC (IN.)	HF (IN.)
REAR ABUTMENT	1	4 7/8	5	5 1/8	FORWARD ABUTMENT	1	4 13/16	5	5 3/16
	2	4 7/8	5	5 1/8		2	4 13/16	5	5 3/16
	3	4 7/8	5	5 1/8		3	4 13/16	5	5 3/16
	4	4 7/8	5	5 1/8		4	4 13/16	5	5 3/16
	5	4 7/8	5	5 1/8		5	4 13/16	5	5 3/16
	6	4 7/8	5	5 1/8		6	4 13/16	5	5 3/16
	7	4 7/8	5	5 1/8		7	4 13/16	5	5 3/16
	8	4 7/8	5	5 1/8		8	4 13/16	5	5 3/16
	9	4 7/8	5	5 1/8		9	4 13/16	5	5 3/16
	10	4 7/8	5	5 1/8		10	4 13/16	5	5 3/16
	11	4 7/8	5	5 1/8		11	4 13/16	5	5 3/16
	12	4 7/8	5	5 1/8		12	4 7/8	5	5 1/8
	13	4 7/8	5	5 1/8		13	4 7/8	5	5 1/8
	14	4 15/16	5	5 1/16		14	4 7/8	5	5 1/8
	15	4 15/16	5	5 1/16		15	4 7/8	5	5 1/8
	16	4 15/16	5	5 1/16		16	4 7/8	5	5 1/8
	17	4 15/16	5	5 1/16		17	4 7/8	5	5 1/8

ELASTOMERIC BEARINGS												
BEARING DIMENSIONS						STEEL LOAD PLATE			REACTIONS*		MAXIMUM TOTAL LOAD	
L	W	t_i	t_e	T	N	A	B	THICKNESS	DL	LL		
18"	22"	0.575"	0.125"	3.374"	5	19"	23"	2"	264 K	102 K	366 K	

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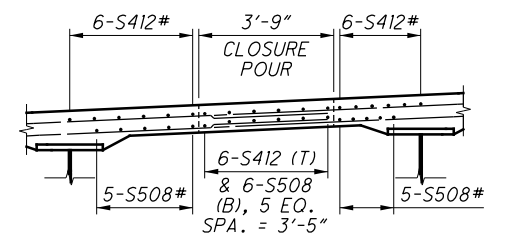
TRANSVERSE SECTION (WESTBOUND)

NOTES

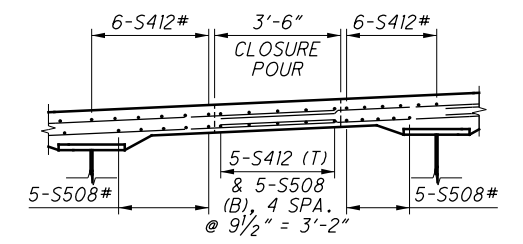
- 2'-0" WIDE HMWM RESIN CENTERED ON CONSTRUCTION JOINT. INCLUDE FOR PAYMENT UNDER ITEM 511, CLASS OC2 CONCRETE WITH OC/OA, SUPERSTRUCTURE.
- ATTACH CROSS FRAMES UNDER CLOSURE POUR PRIOR TO CONSTRUCTING THE CLOSURE POUR FOR THE DECK.
- SEE SH. 49/78 FOR OVERHANG DETAILS.

LEGEND

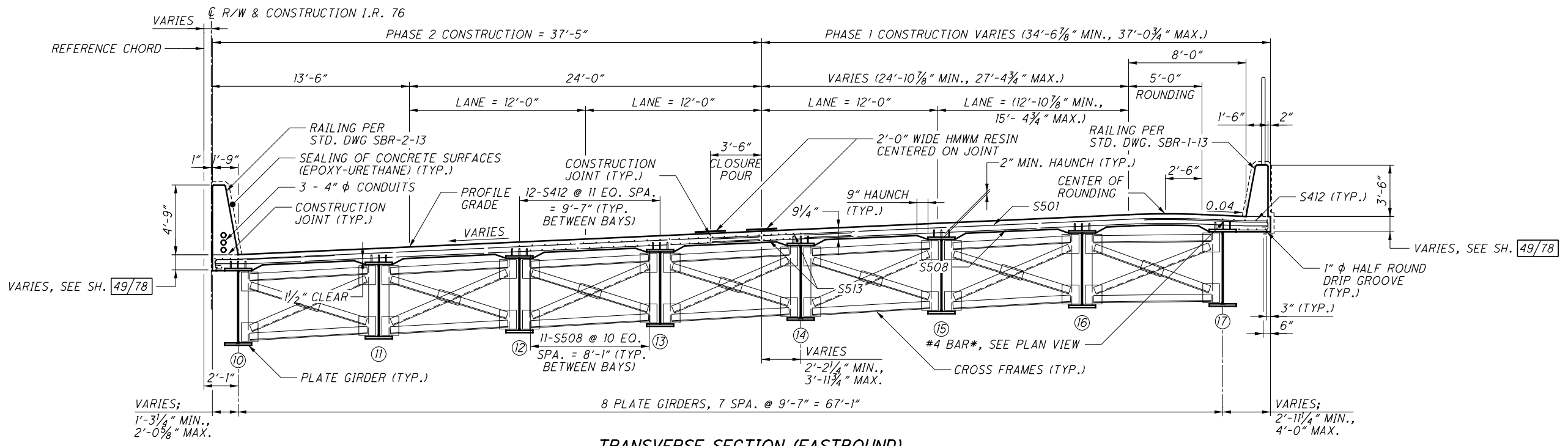
- * - BUNDLED WITH TOP NO. 5 BAR
- T - TOP
- B - BOTTOM
- # - SPACING VARIES



WESTBOUND CLOSURE POUR DETAIL



EASTBOUND CLOSURE POUR DETAIL

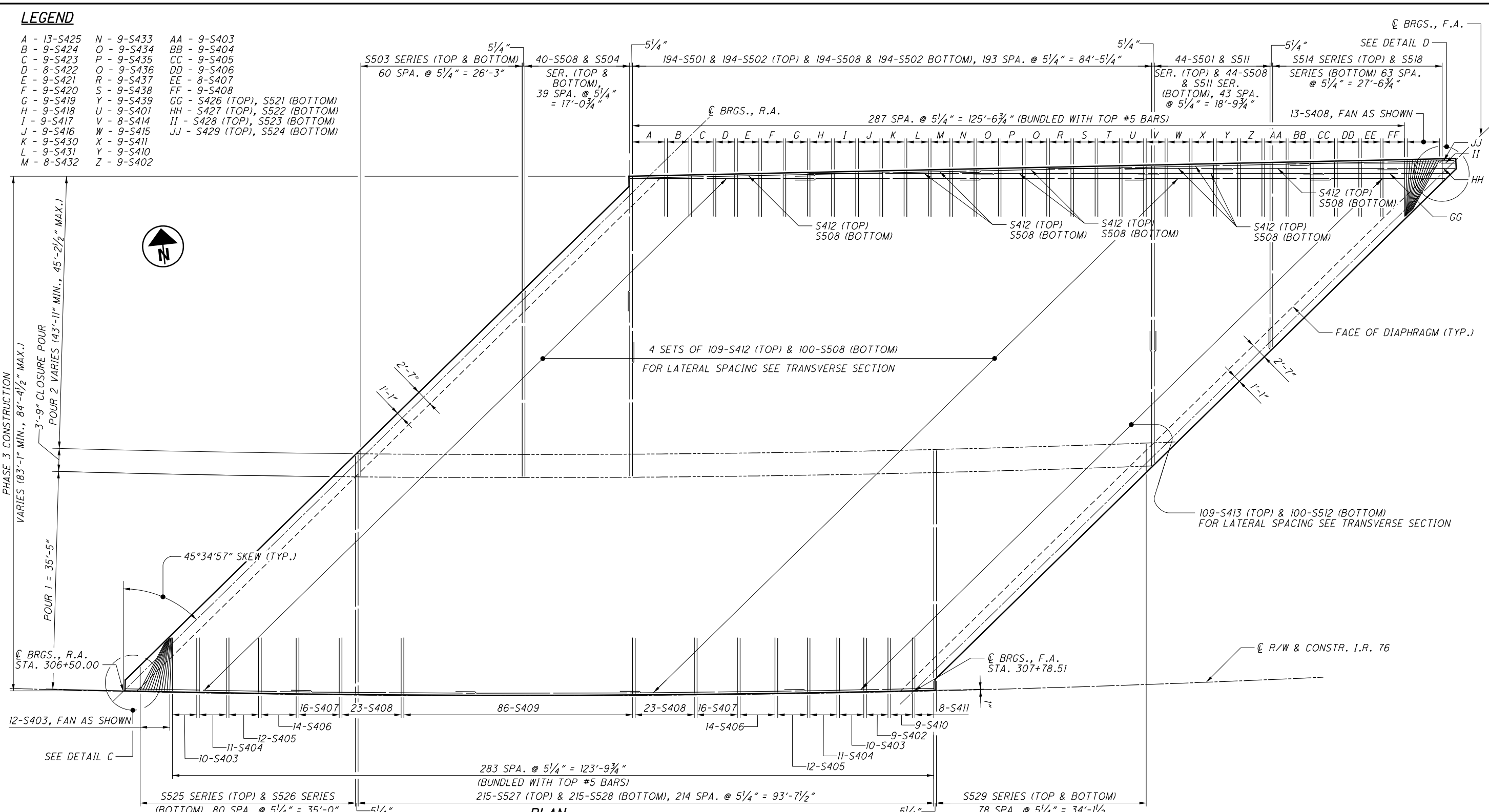


TRANSVERSE SECTION (EASTBOUND)

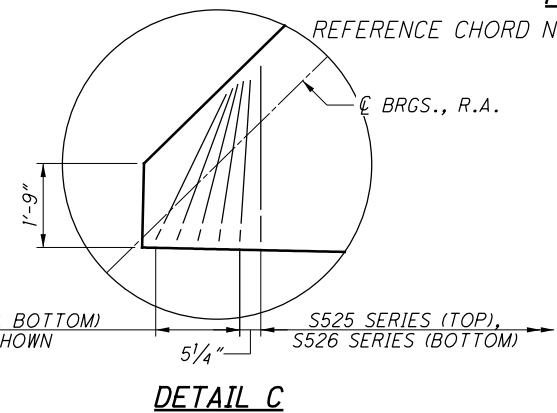
LEGEND

A - 13-S425	N - 9-S433	AA - 9-S403
B - 9-S424	O - 9-S434	BB - 9-S404
C - 9-S423	P - 9-S435	CC - 9-S405
D - 8-S422	Q - 9-S436	DD - 9-S406
E - 9-S421	R - 9-S437	EE - 8-S407
F - 9-S420	S - 9-S438	FF - 9-S408
G - 9-S419	Y - 9-S439	GG - S426 (TOP), S521 (BOTTOM)
H - 9-S418	U - 9-S401	HH - S427 (TOP), S522 (BOTTOM)
I - 9-S417	V - 8-S414	II - S428 (TOP), S523 (BOTTOM)
J - 9-S416	W - 9-S415	JJ - S429 (TOP), S524 (BOTTOM)
K - 9-S430	X - 9-S411	
L - 9-S431	Y - 9-S410	
M - 8-S432	Z - 9-S402	

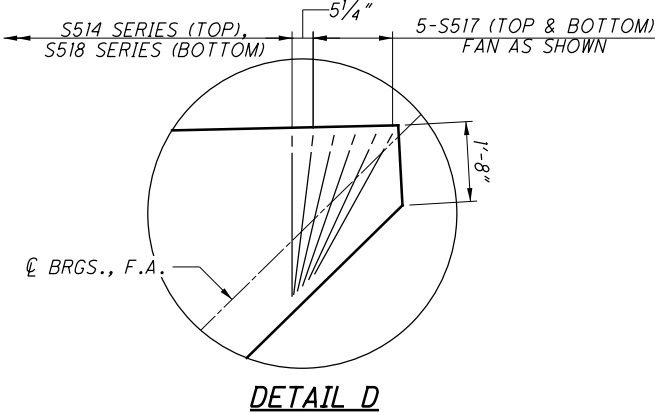
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PLAN



DETAIL C



DETAIL D

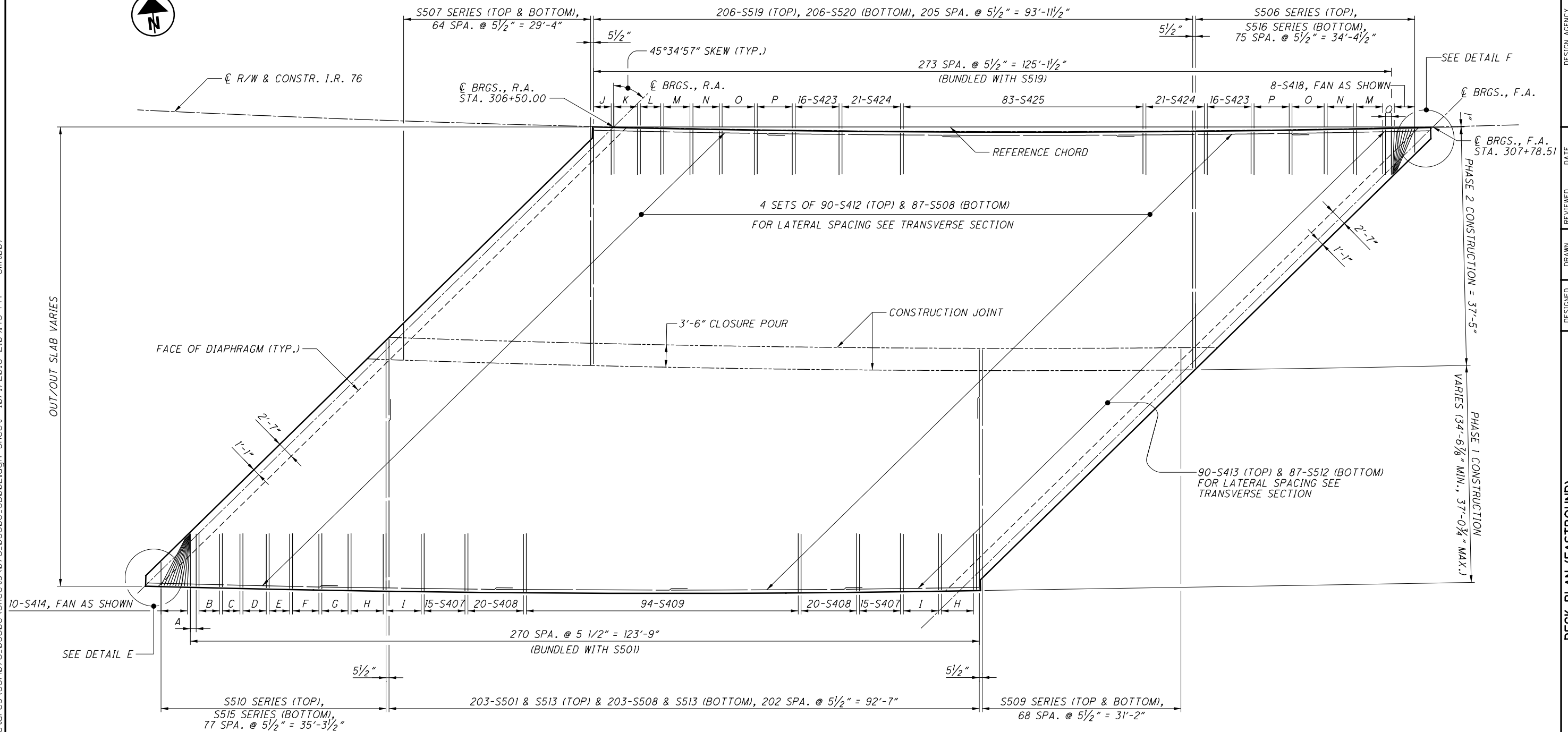
NOTES

1. DECK SLAB CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH GIRDER HAUNCH. THE ESTIMATE ASSUMES AN AVERAGE HAUNCH THICKNESS OF 3/8 INCHES AND A CONSTANT HAUNCH WIDTH OUTSIDE THE EDGE OF EACH GIRDER FLANGE OF 9 INCHES. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. THE ALLOWABLE TOLERANCE FOR THE HAUNCH WIDTH OUTSIDE THE EDGE OF EACH GIRDER FLANGE IS ±3 INCHES.
2. THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE GIRDER, FROM THE SURFACE OF THE DECK TO THE BOTTOM OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH 511.24.
3. MINIMUM LAP SPLICE LENGTHS:
 #4 BAR: 31 INCHES
 #5 BAR: 38 INCHES
4. TRANSVERSE BARS PLACED PERPENDICULAR TO REFERENCE CHORD.
5. SEE SHEET [49/78] FOR SLAB OVERHANG DIAGRAM.

DESIGN AGENCY: CARPENTER MARTY Transportation 14484524 - CUMMINS.COM
DATE: 4/30/2017 REVIEWED: WHM DRAWN: ERK CHECKED: GDU STRUCTURE FILE NUMBER: 7705493
DECK PLAN (WESTBOUND) BRIDGE NO. SUM-76-0580 OVER S.R. 619 (WOOSTER ROAD)
SUM-76-5.53 PID No. 96670
47 / 78
611 672



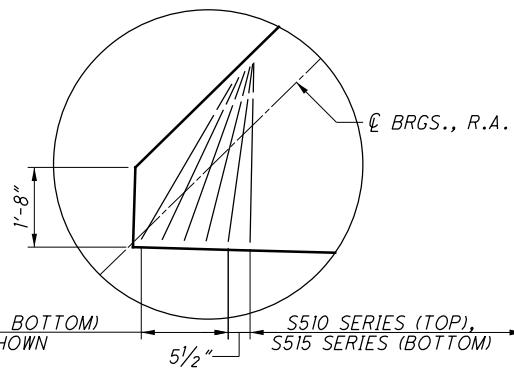
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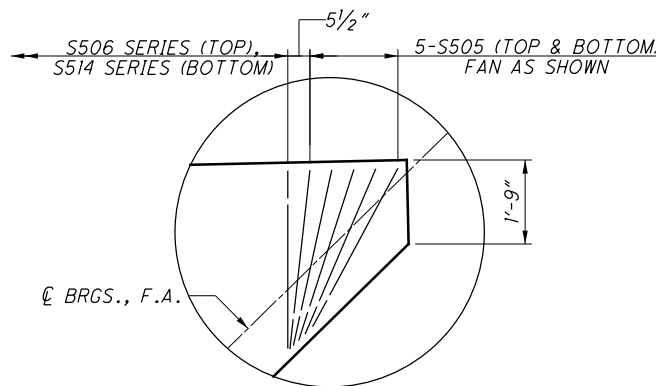
PLAN

LEGEND

- A - 3-S414
- B - 8-S415
- C - 7-S411
- D - 9-S410
- E - 8-S402
- F - 10-S403
- G - 10-S404
- H - 12-S405
- I - 13-S406
- J - 7-S416
- K - 9-S417
- L - 8-S418
- M - 10-S419
- N - 10-S420
- O - 12-S421
- P - 13-S422
- Q - 3-S418



DETAIL E



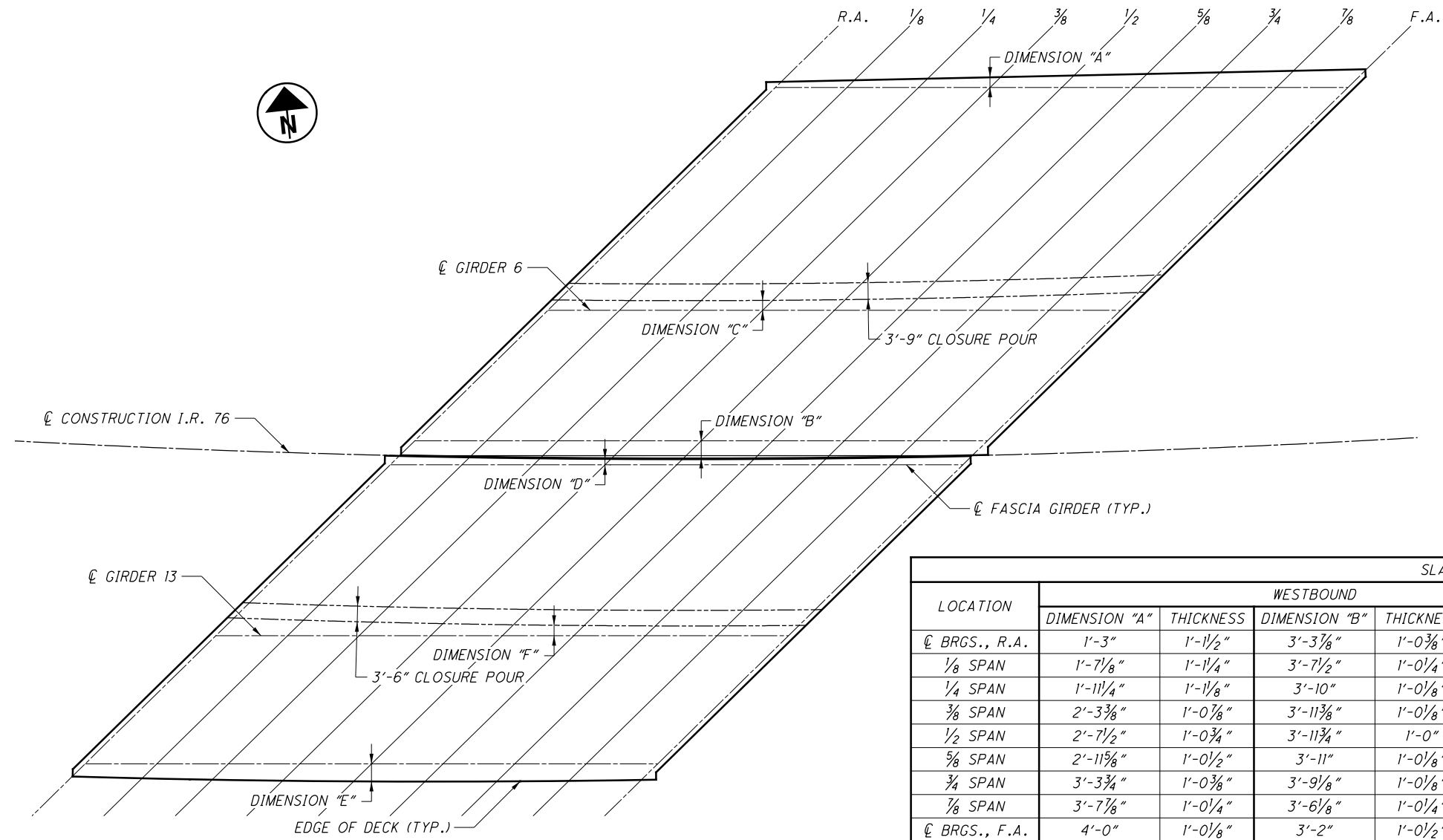
DETAIL F

NOTES

1. DECK SLAB CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH GIRDER HAUNCH, THE ESTIMATE ASSUMES AN AVERAGE HAUNCH THICKNESS OF 3/8 INCHES AND A CONSTANT HAUNCH WIDTH OUTSIDE THE EDGE OF EACH GIRDER FLANGE OF 9 INCHES. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. THE ALLOWABLE TOLERANCE FOR THE HAUNCH WIDTH OUTSIDE THE EDGE OF EACH GIRDER FLANGE IS ±3 INCHES.

THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE GIRDER, FROM THE SURFACE OF THE DECK TO THE BOTTOM OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH 511.24.
2. MINIMUM LAP SPLICE LENGTHS:
#4 BAR: 31 INCHES
#5 BAR: 38 INCHES
3. TRANSVERSE BARS PLACED PERPENDICULAR TO REFERENCE CHORD.
4. SEE SHEET 49/78 FOR SLAB OVERHANG DIAGRAM.

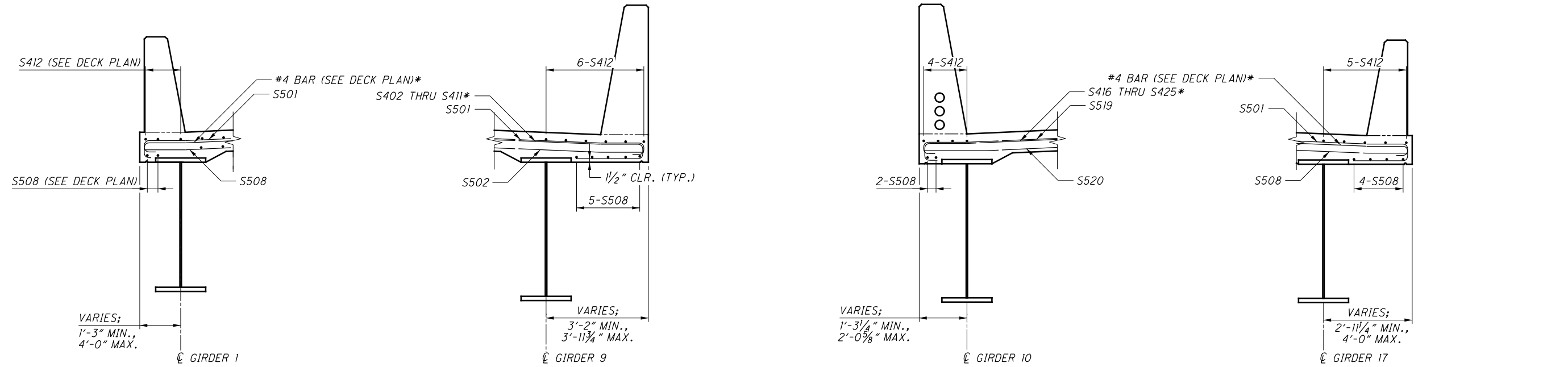
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LEGEND
* - BUNDLED WITH TOP NO. 5 BAR

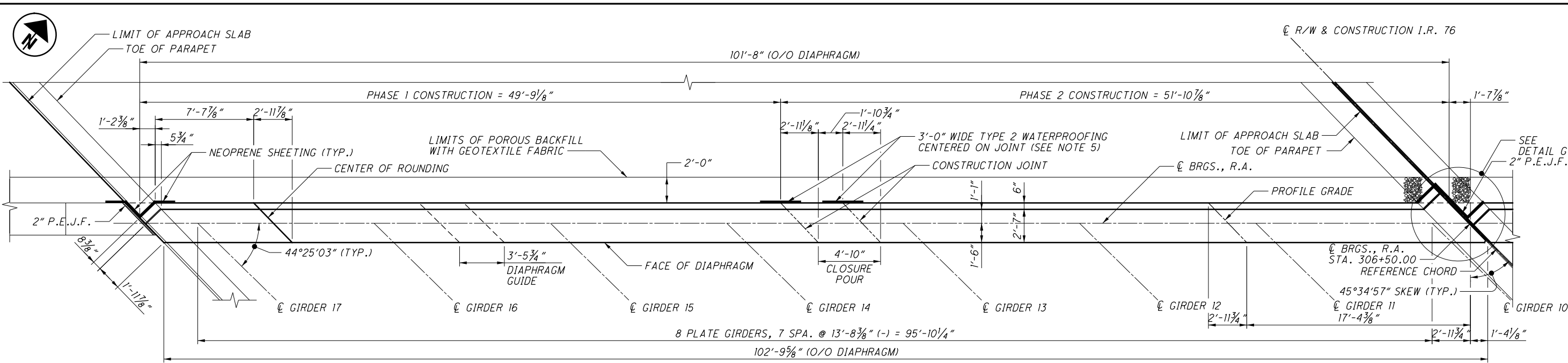
LOCATION	SLAB OVERHANG DIMENSIONS									
	WESTBOUND					EASTBOUND				
	DIMENSION "A"	THICKNESS	DIMENSION "B"	THICKNESS	DIMENSION "C"	DIMENSION "D"	THICKNESS	DIMENSION "E"	THICKNESS	DIMENSION "F"
CL BRGS., R.A.	1'-3"	1'-1/2"	3'-3 7/8"	1'-0 3/8"	2'-4 1/4"	2'-0 5/8"	1'-1"	2'-11 1/4"	1'-0 1/2"	3'-11 3/4"
1/8 SPAN	1'-7 1/8"	1'-1 1/4"	3'-7 1/2"	1'-0 1/4"	2'-2 3/4"	1'-8 5/8"	1'-1 1/8"	3'-4"	1'-0 3/8"	3'-5 5/8"
1/4 SPAN	1'-11 1/4"	1'-1 1/8"	3'-10"	1'-0 1/8"	2'-2 1/4"	1'-5 3/4"	1'-1 1/4"	3'-7 5/8"	1'-1 1/8"	3'-0 1/2"
3/8 SPAN	2'-3 3/8"	1'-0 3/8"	3'-11 3/8"	1'-0 1/8"	2'-2 7/8"	1'-4"	1'-1 3/8"	3'-10 1/8"	1'-1 1/8"	2'-8 1/2"
1/2 SPAN	2'-7 1/2"	1'-0 3/4"	3'-11 3/4"	1'-0"	2'-4 5/8"	1'-3 1/4"	1'-1 3/8"	3'-11 1/2"	1'-0"	2'-5 3/8"
5/8 SPAN	2'-11 5/8"	1'-0 1/2"	3'-11"	1'-0 1/8"	2'-7 1/2"	1'-3 5/8"	1'-1 3/8"	4'-0"	1'-0"	2'-3 3/8"
3/4 SPAN	3'-3 3/4"	1'-0 3/8"	3'-9 1/8"	1'-0 1/8"	2'-11 3/8"	1'-5 1/8"	1'-1 1/4"	3'-11 1/4"	1'-0"	2'-2 3/8"
7/8 SPAN	3'-7 7/8"	1'-0 1/4"	3'-6 1/8"	1'-0 1/4"	3'-4 1/2"	1'-7 3/4"	1'-1 1/8"	3'-9 1/2"	1'-0 1/8"	2'-2 3/8"
CL BRGS., F.A.	4'-0"	1'-0 1/8"	3'-2"	1'-0 1/2"	3'-10 5/8"	1'-11 1/2"	1'-1"	3'-6 3/4"	1'-0 1/4"	2'-3 3/8"

SLAB OVERHANG DIAGRAM

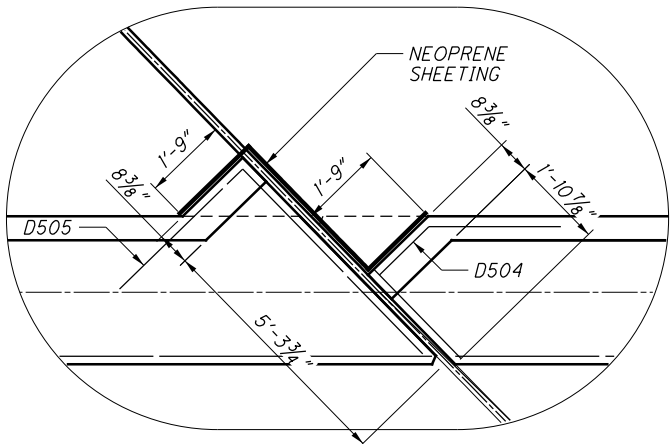


WESTBOUND BRIDGE LEFT SLAB OVERHANG WESTBOUND BRIDGE RIGHT SLAB OVERHANG EASTBOUND BRIDGE LEFT SLAB OVERHANG EASTBOUND BRIDGE RIGHT SLAB OVERHANG

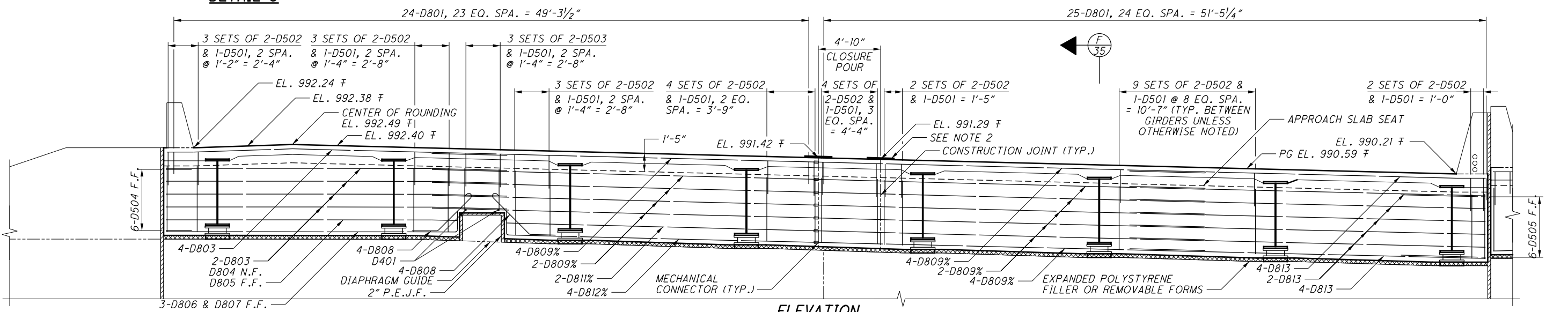
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PLAN
ABUTMENT BREASTWALL & FOOTING NOT SHOWN



DETAIL G



ELEVATION

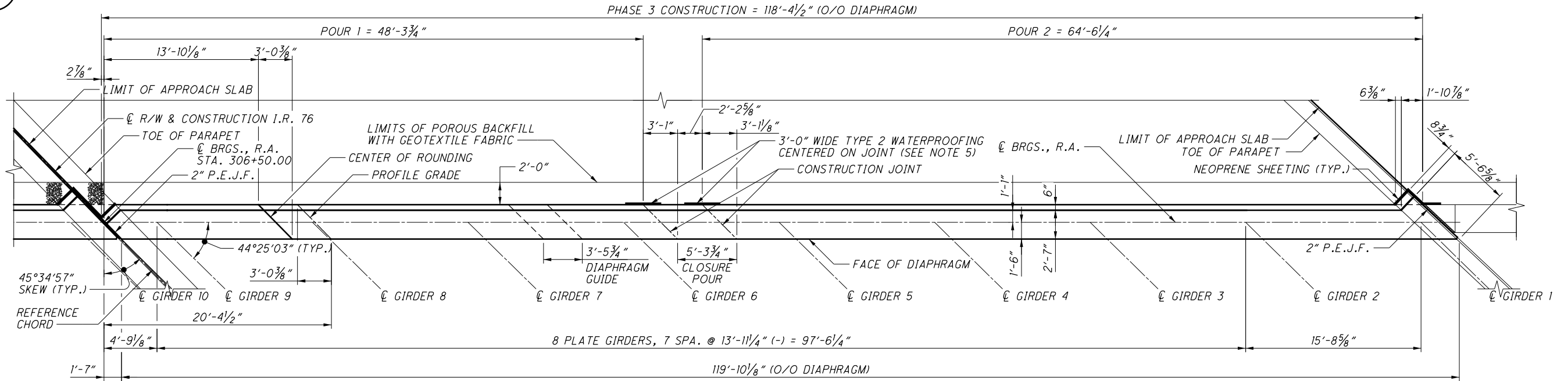
NOTES

- SEE STD DWGS. SICD-1-96 AND SICD-2-14 FOR ADDITIONAL NOTES AND DETAILS.
- 2'-0" WIDE HMWM RESIN CENTERED ON CONSTRUCTION JOINT. INCLUDE FOR PAYMENT UNDER ITEM 511, CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE.
- SEMI-INTEGRAL DIAPHRAGM GUIDE AND ALL RELATED APPURTENANCES SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 511, SEMI-INTEGRAL DIAPHRAGM GUIDE.
- S527, S528, S529, & D801 BARS TO BE PLACED PARALLEL TO \O GIRDERS.
- SEAL VERTICAL PHASE CONSTRUCTION JOINT FOR THE ENTIRE LENGTH OF THE JOINT.
- ABUTMENT DIAPHRAGM CONCRETE, PHASED CONSTRUCTION: PLACE THE DIAPHRAGM CONCRETE ENCASEING THE STRUCTURAL MEMBER ENDS OF AN INDIVIDUAL PHASE AFTER THE DECK PLACEMENT IN THE ADJACENT SPAN IS COMPLETE. PLACE CLOSURE POUR CONCRETE IN THE DIAPHRAGM AND DECK CONCURRENTLY.
- MINIMUM LAP SPLICE LENGTH:
#8 BAR: 70 INCHES
- PROVIDE 3" CHAMFERS AT ACUTE CORNERS.

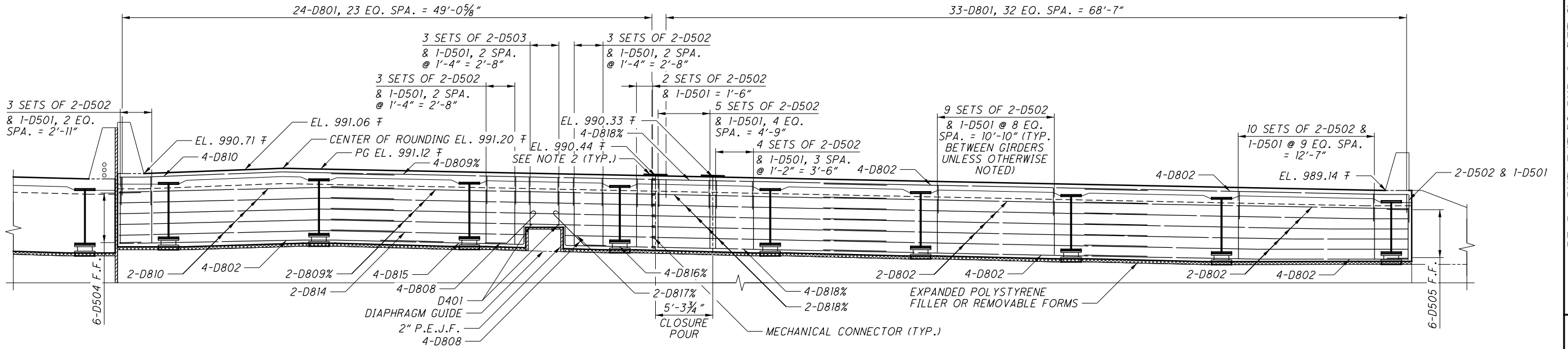
LEGEND

F - ELEVATION TAKEN AT BRIDGE LIMITS
% - BAR TO UTILIZE A MECHANICAL CONNECTOR

	DESIGN AGENCY	DATE	REVIEWED	DRAWN	DESIGNED
	CARPENTER MARTY	4/27/2017	WHM	ERK	ERK
	TRANSPORTATION	STRUCTURE FILE NUMBER	7705493	REVISED	CHECKED
	744846242 - CANTON, OH			GDJ	GDJ
REAR ABUTMENT DIAPHRAGM DETAILS (EASTBOUND)					
BRIDGE NO. SUM-76-0580 OVER S.R. 619 (WOOSTER ROAD)					
SUM-76-5.53 PID No. 96670					
50/78					
614 672					



PLAN
ABUTMENT BREASTWALL & FOOTING NOT SHOWN



ELEVATION

NOTES

1. SEE STD DWGS. SICD-1-96 AND SICD-2-14 FOR ADDITIONAL NOTES AND DETAILS.
2. 2'-0" WIDE HMW RESIN CENTERED ON CONSTRUCTION JOINT. INCLUDE FOR PAYMENT UNDER ITEM 511, CLASS OC2 CONCRETE WITH OC/OA, SUPERSTRUCTURE, AS PER PLAN.
3. SEMI-INTEGRAL DIAPHRAGM GUIDE AND ALL RELATED APPURTENANCES SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 511, SEMI-INTEGRAL DIAPHRAGM GUIDE.
4. D501, D502, D503, & D801 BARS TO BE PLACED PARALLEL TO GIRDERS.
5. SEAL VERTICAL CONSTRUCTION JOINT FOR THE ENTIRE LENGTH OF THE JOINT.

6. ABUTMENT DIAPHRAGM CONCRETE, PHASED CONSTRUCTION: PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER ENDS OF AN INDIVIDUAL PHASE AFTER THE DECK PLACEMENT IN THE ADJACENT SPAN IS COMPLETE. PLACE CLOSURE POUR CONCRETE IN THE DIAPHRAGM AND DECK CONCURRENTLY.
7. MINIMUM LAP SPLICE LENGTH: #8 BAR: 70 INCHES
8. PROVIDE 3" CHAMFERS AT ACUTE CORNERS.

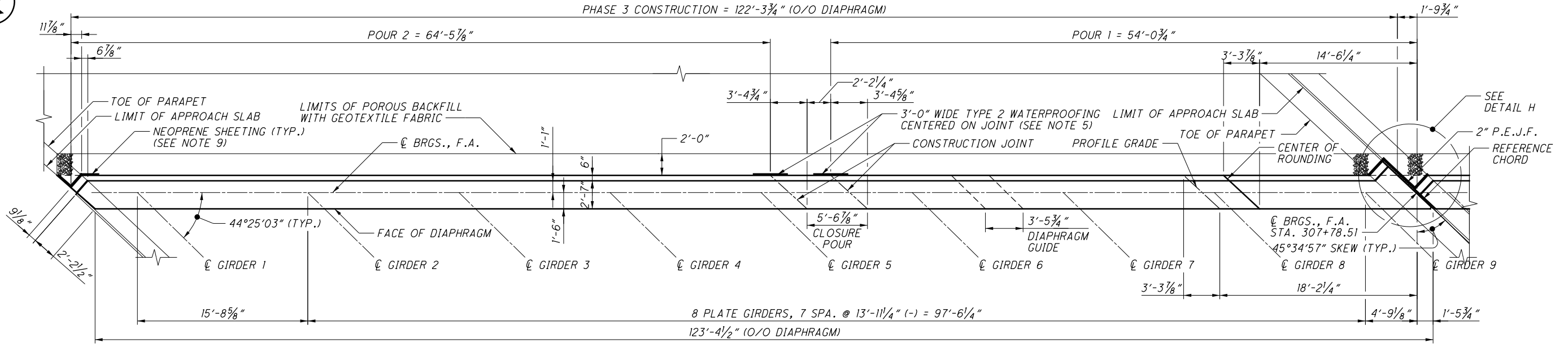
LEGEND

F - ELEVATION TAKEN AT BRIDGE LIMITS
% - BAR TO UTILIZE A MECHANICAL CONNECTOR

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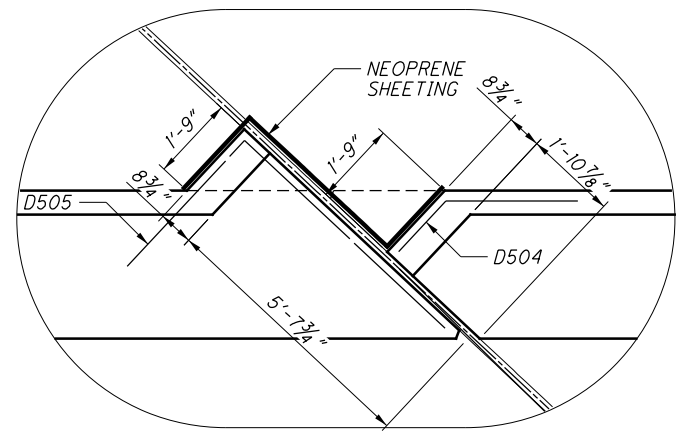


PHASE 3 CONSTRUCTION = 122'-3 3/4" (O/O DIAPHRAGM)

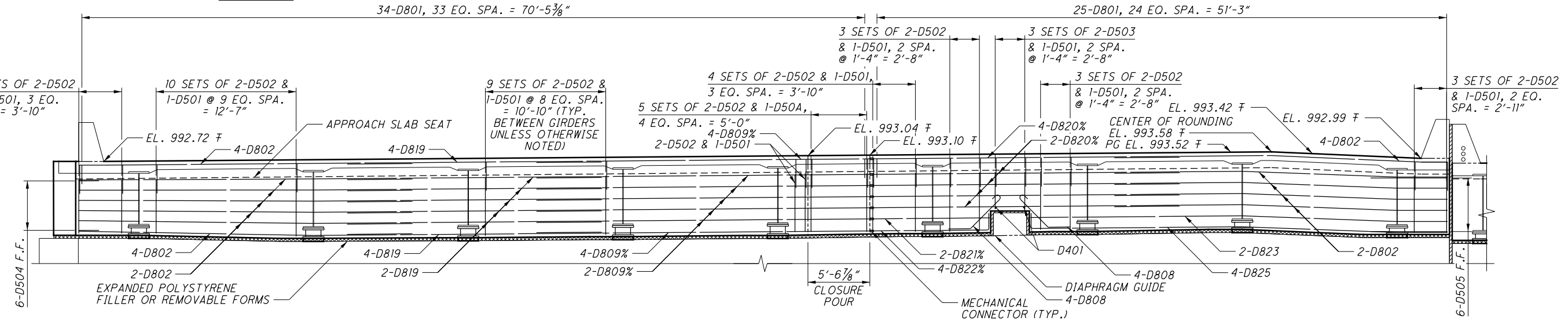


PLAN

ABUTMENT BREASTWALL & FOOTING NOT SHOWN



DETAIL H



NOTES

1. SEE STD DWGS. SICD-1-96 AND SICD-2-14 FOR ADDITIONAL NOTES AND DETAILS.
2. 2'-0" WIDE HMWM RESIN CENTERED ON CONSTRUCTION JOINT. INCLUDE FOR PAYMENT UNDER ITEM 511, CLASS OC2 CONCRETE WITH OC/OA, SUPERSTRUCTURE, AS PER PLAN.
3. SEMI-INTEGRAL DIAPHRAGM GUIDE AND ALL RELATED APPURTENANCES SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 511, SEMI-INTEGRAL DIAPHRAGM GUIDE.
4. D501, D502, D503, & D801 BARS TO BE PLACED PARALLEL TO GIRDERS.
5. SEAL VERTICAL CONSTRUCTION JOINT FOR THE ENTIRE LENGTH OF THE JOINT.

6. ABUTMENT DIAPHRAGM CONCRETE, PHASED CONSTRUCTION: PLACE THE DIAPHRAGM CONCRETE ENCASEING THE STRUCTURAL MEMBER ENDS OF AN INDIVIDUAL PHASE AFTER THE DECK PLACEMENT IN THE ADJACENT SPAN IS COMPLETE. PLACE CLOSURE POUR CONCRETE IN THE DIAPHRAGM AND DECK CONCURRENTLY.
7. MINIMUM LAP SPLICE LENGTH:
#8 BAR: 70 INCHES
8. PROVIDE 3" CHAMFERS AT ACUTE CORNERS.
9. SEE RETAINING WALL 2 SHEET (519/672) FOR PAYMENT.

LEGEND

ƒ - ELEVATION TAKEN AT BRIDGE LIMITS
% - BAR TO UTILIZE A MECHANICAL CONNECTOR

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DESIGN AGENCY
CARPENTER MARTY
TRANSPORTATION
14455 S.W. 10TH AVE., SUITE 200
MIAMI, FL 33186

DESIGNED	ERK	CHECKED	GDJ
DRAWN	ERK	REVISED	
REVIEWED	WHM	STRUCTURE FILE NUMBER	7705493
DATE	4/27/2017		

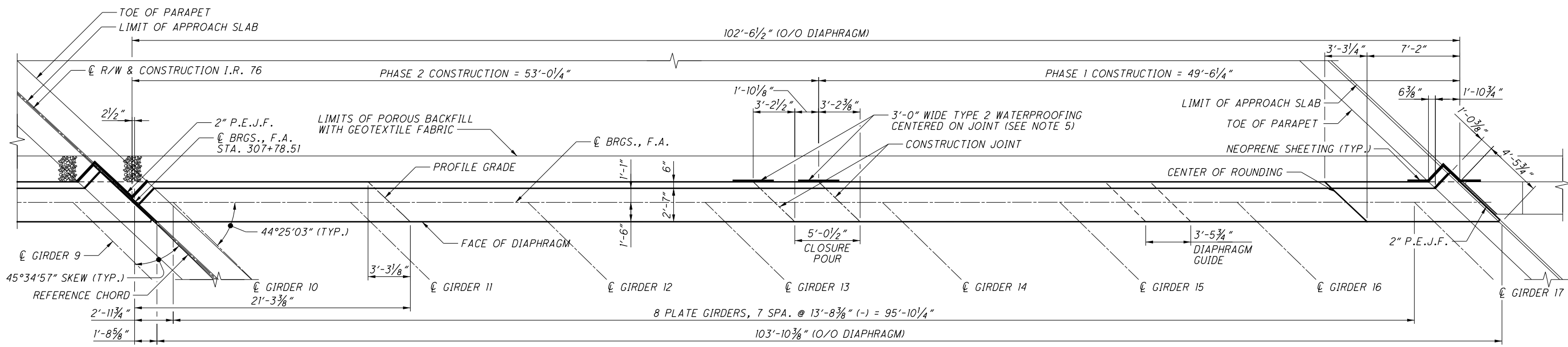
FORWARD ABUTMENT DIAPHRAGM DETAILS (WESTBOUND)

BRIDGE NO. SUM-76-0580
OVER S.R. 619 (WOOSTER ROAD)

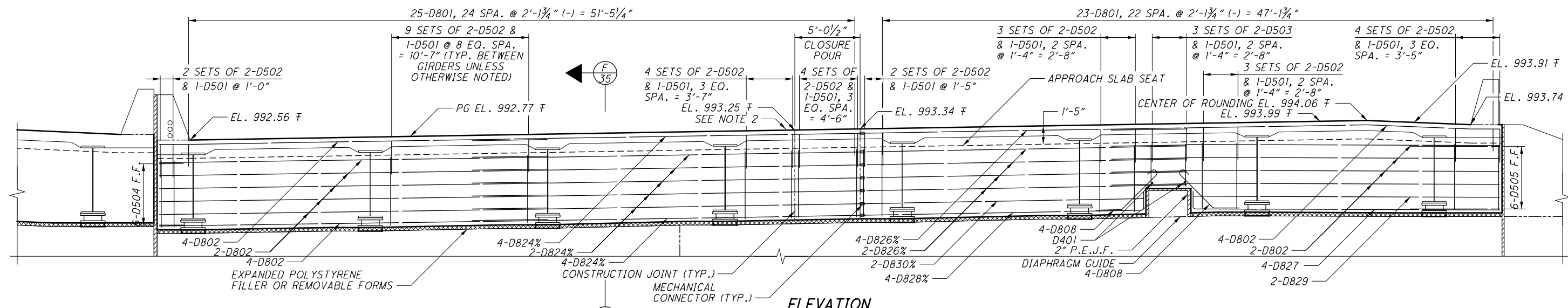
SUM-76-5.53
PID No. 96670

52 / 78

616
672



PLAN
ABUTMENT BREASTWALL & FOOTING NOT SHOWN



ELEVATION

- NOTES**
- SEE STD DWGS. SICD-1-96 AND SICD-2-14 FOR ADDITIONAL NOTES AND DETAILS.
 - 2'-0" WIDE HMMW RESIN CENTERED ON CONSTRUCTION JOINT. INCLUDE FOR PAYMENT UNDER ITEM 511, CLASS OC2 CONCRETE WITH OC/OA, SUPERSTRUCTURE.
 - SEMI-INTEGRAL DIAPHRAGM GUIDE AND ALL RELATED APPURTENANCES SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 511, SEMI-INTEGRAL DIAPHRAGM GUIDE.
 - S527, S528, S529, & D801 BARS TO BE PLACED PARALLEL TO ϕ GIRDERS.
 - SEAL VERTICAL PHASE CONSTRUCTION JOINT FOR THE ENTIRE LENGTH OF THE JOINT.

- ABUTMENT DIAPHRAGM CONCRETE, PHASED CONSTRUCTION: PLACE THE DIAPHRAGM CONCRETE ENCASEING THE STRUCTURAL MEMBER ENDS OF AN INDIVIDUAL PHASE AFTER THE DECK PLACEMENT IN THE ADJACENT SPAN IS COMPLETE. PLACE CLOSURE POUR CONCRETE IN THE DIAPHRAGM AND DECK CONCURRENTLY.
- MINIMUM LAP SPLICE LENGTH:
#8 BAR: 70 INCHES
- PROVIDE 3" CHAMFERS AT ACUTE CORNERS.

- LEGEND**
- F - ELEVATION TAKEN AT BRIDGE LIMITS
 - % - BAR TO UTILIZE A MECHANICAL CONNECTOR

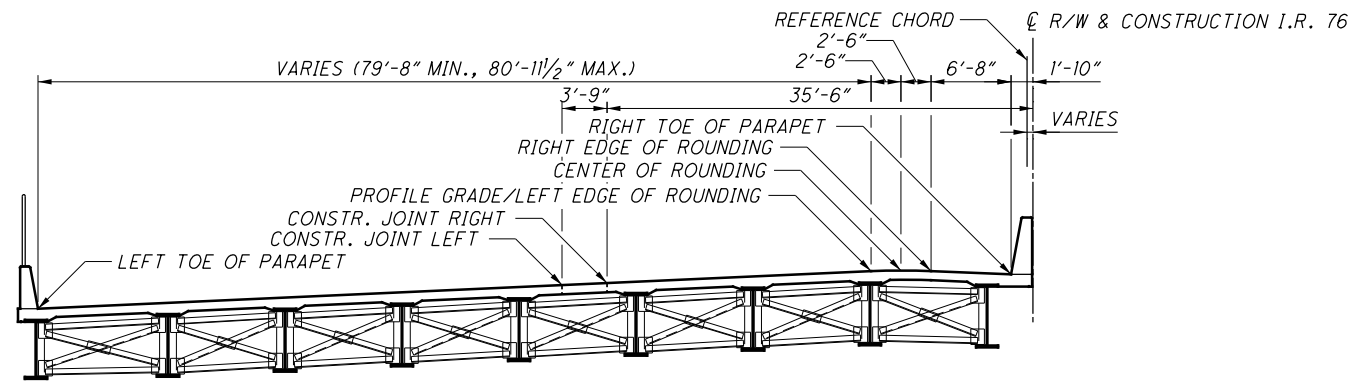
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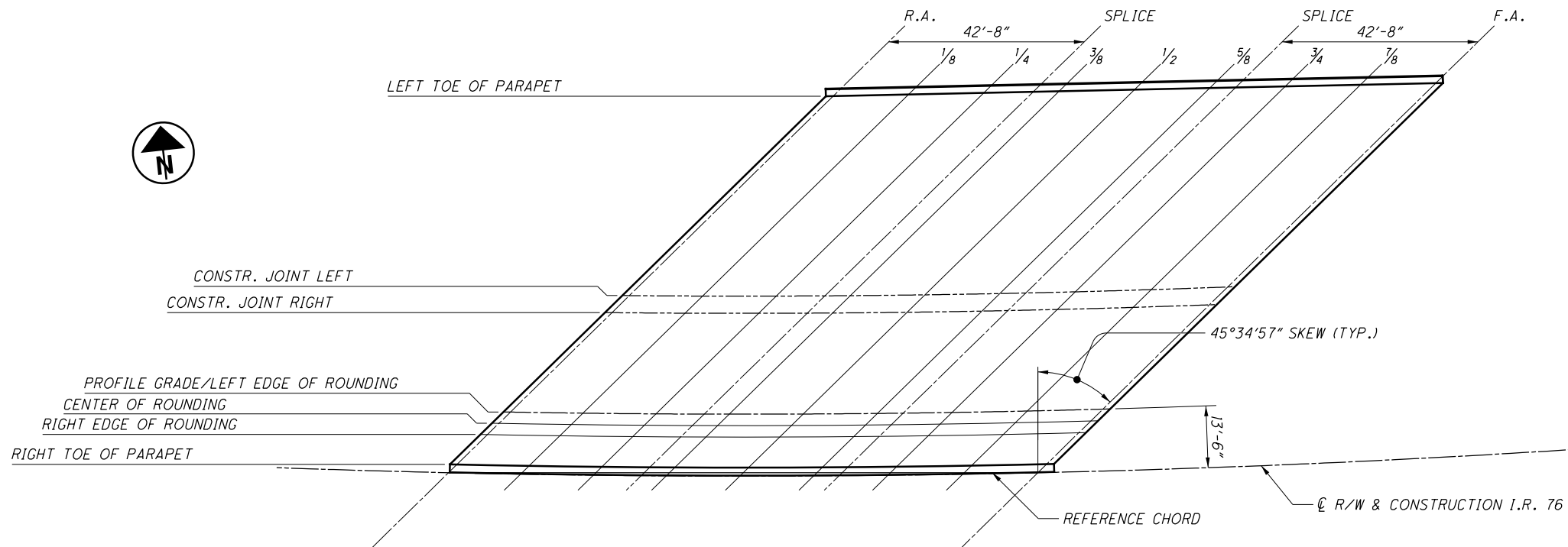
SCREED ELEVATIONS TABLE (FT.)												
LOCATION	DESCRIPTION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
LEFT TOE OF PARAPET	STATION	307+34.44	307+51.36	307+68.28	307+79.39	307+85.20	308+02.13	308+19.05	308+24.86	308+35.96	308+52.87	308+69.78
	ELEVATION	989.17	989.59	990.03	990.31	990.45	990.86	991.25	991.41	991.72	992.19	992.66
CONSTR. JOINT LEFT	STATION	306+89.08	307+05.27	307+21.55	307+32.29	307+37.93	307+54.41	307+70.99	307+76.72	307+87.68	308+04.47	308+21.37
	ELEVATION	990.36	990.71	991.07	991.30	991.42	991.76	992.08	992.18	992.38	992.69	993.00
CONSTR. JOINT RIGHT	STATION	306+85.28	307+01.42	307+17.66	307+28.37	307+34.00	307+50.43	307+66.96	307+72.67	307+83.60	308+00.34	308+17.19
	ELEVATION	990.47	990.82	991.17	991.40	991.51	991.85	992.16	992.27	992.46	992.76	993.06
PROFILE GRADE/ LEFT EDGE OF ROUNDING	STATION	306+63.26	306+79.15	306+95.14	307+05.68	307+11.21	307+27.38	307+43.65	307+49.26	307+60.01	307+76.47	307+93.04
	ELEVATION	991.14	991.47	991.80	992.01	992.12	992.43	992.71	992.80	992.97	993.23	993.49
CENTER OF ROUNDING	STATION	306+60.79	306+76.66	306+92.61	307+03.13	307+08.66	307+24.80	307+41.03	307+46.64	307+57.37	307+73.80	307+90.33
	ELEVATION	991.22	991.55	991.87	992.08	992.19	992.49	992.77	992.86	993.03	993.28	993.54
RIGHT EDGE OF ROUNDING	STATION	306+58.33	306+74.17	306+90.09	307+00.59	307+06.11	307+22.22	307+38.43	307+44.02	307+54.73	307+71.13	307+87.63
	ELEVATION	991.08	991.41	991.73	991.94	992.05	992.35	992.62	992.71	992.88	993.13	993.38
RIGHT TOE OF PARAPET	STATION	306+51.79	306+67.56	306+83.41	306+93.86	306+99.35	307+15.38	307+31.51	307+37.07	307+47.73	307+64.05	307+80.47
	ELEVATION	990.73	991.06	991.38	991.59	991.69	991.99	992.25	992.34	992.50	992.73	992.96

NOTES

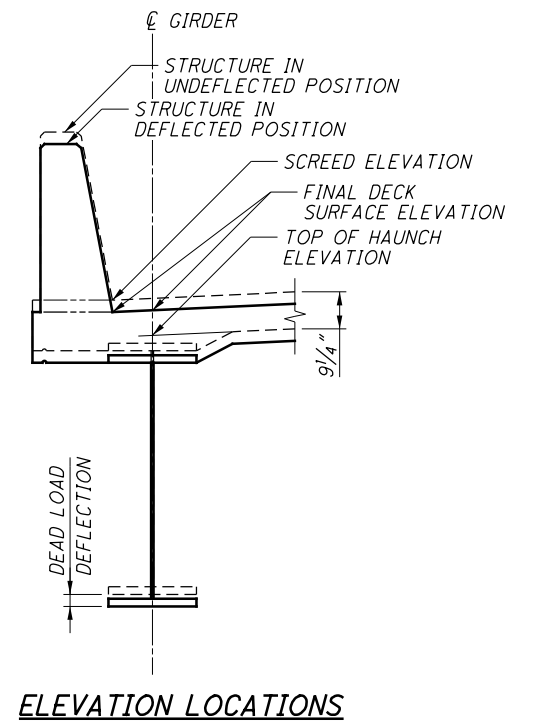
1. SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
2. CENTER OF ROUNDING ELEVATION IS THE THEORETICAL INTERSECTION OF THE TRANSVERSE SLOPES.



TRANSVERSE SECTION



PLAN



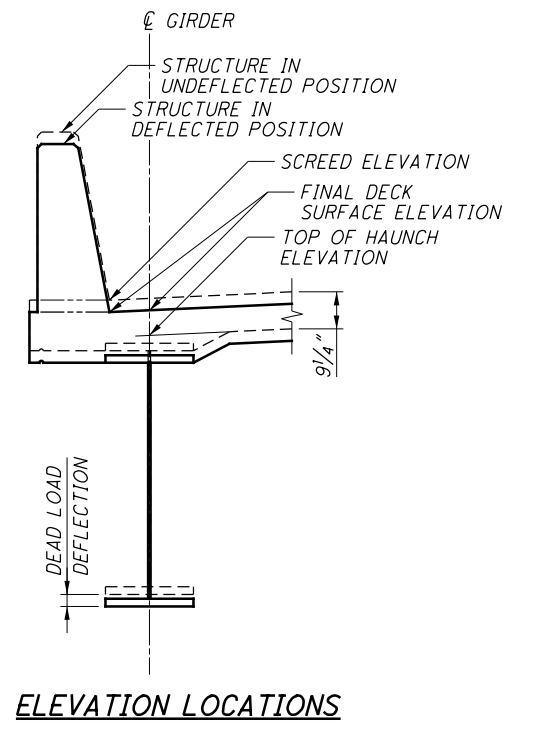
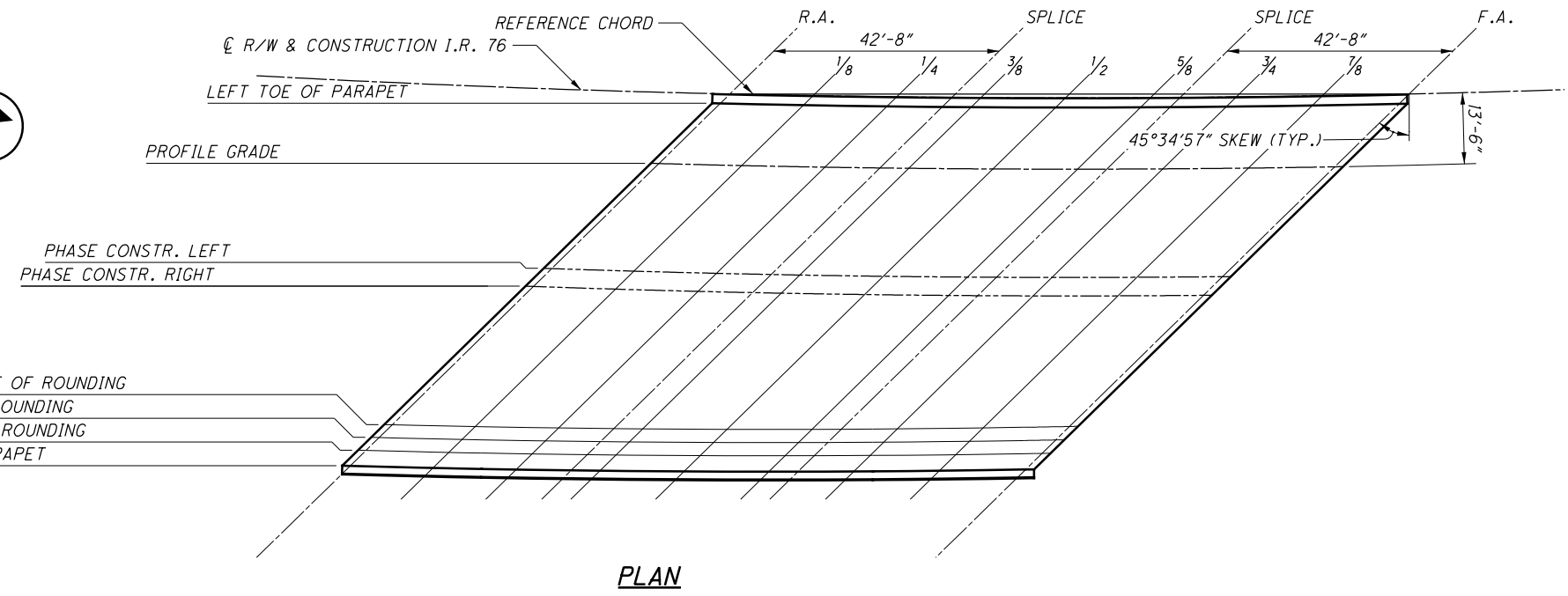
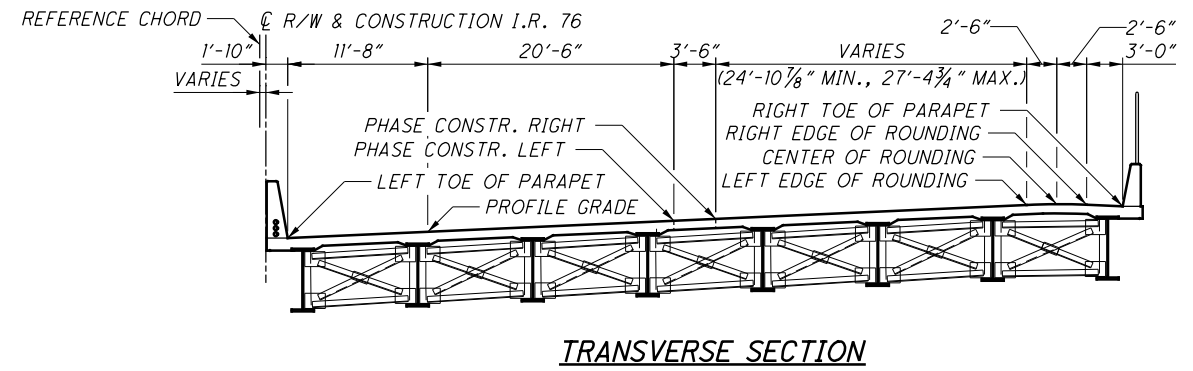
ELEVATION LOCATIONS

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SCREED ELEVATIONS TABLE (FT.)												
LOCATION	DESCRIPTION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
LEFT TOE OF PARAPET	STATION	306+48.21	306+63.94	306+79.75	306+90.18	306+95.65	307+11.64	307+27.73	307+33.28	307+43.91	307+60.18	307+76.56
	ELEVATION	990.23	990.54	990.86	991.06	991.16	991.45	991.72	991.81	991.98	992.24	992.52
PROFILE GRADE	STATION	306+36.93	306+52.53	306+68.21	306+78.55	306+83.98	306+99.84	307+15.79	307+21.29	307+31.83	307+47.97	307+64.20
	ELEVATION	990.61	990.90	991.20	991.39	991.49	991.76	992.02	992.10	992.26	992.50	992.74
PHASE CONSTRUCTION LEFT	STATION	306+17.42	306+32.80	306+48.27	306+58.46	306+63.82	306+79.45	306+95.17	307+00.59	307+10.98	307+26.88	307+42.87
	ELEVATION	991.31	991.58	991.85	992.02	992.11	992.36	992.59	992.66	992.80	993.01	993.22
PHASE CONSTRUCTION RIGHT	STATION	306+14.13	306+29.48	306+44.91	306+55.08	306+60.42	306+76.01	306+91.69	306+97.10	307+07.46	307+23.32	307+39.27
	ELEVATION	991.43	991.70	991.96	992.13	992.22	992.47	992.69	992.76	992.90	993.10	993.31
LEFT EDGE OF ROUNDING	STATION	305+88.93	306+04.29	306+19.73	306+29.92	306+35.26	306+50.88	306+66.59	306+72.01	306+82.39	306+98.28	307+14.27
	ELEVATION	992.41	992.65	992.88	993.03	993.10	993.30	993.48	993.54	993.65	993.80	993.96
CENTER OF ROUNDING	STATION	305+86.61	306+01.94	306+17.36	306+27.53	306+32.86	306+48.45	306+64.13	306+69.54	306+79.90	306+95.77	307+11.72
	ELEVATION	992.51	992.74	992.98	993.13	993.21	993.41	993.59	993.65	993.75	993.89	994.03
RIGHT EDGE OF ROUNDING	STATION	305+84.29	305+99.60	306+14.99	306+25.14	306+30.47	306+46.03	306+61.68	306+67.08	306+77.42	306+93.26	307+09.19
	ELEVATION	992.39	992.62	992.86	993.01	993.08	993.28	993.46	993.51	993.61	993.75	993.89
RIGHT TOE OF PARAPET	STATION	305+81.52	305+96.80	306+12.16	306+22.28	306+27.60	306+43.13	306+58.75	306+64.14	306+74.46	306+90.26	307+06.15
	ELEVATION	992.25	992.48	992.71	992.86	992.92	993.13	993.30	993.35	993.45	993.58	993.72

NOTES

- SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
- CENTER OF ROUNDING ELEVATION IS THE THEORETICAL INTERSECTION OF THE TRANSVERSE SLOPES.



DESIGN AGENCY
CARPENTER MARTY
 TRANSPORTATION
INCORPORATED - MEMPHIS, TN

DATE: 5/3/2017
 REVIEWED BY: WHM
 STRUCTURE FILE NUMBER: 7705493

DRAWN BY: ERK
 CHECKED BY: GDJ

SCREED ELEVATIONS (EASTBOUND)
 BRIDGE NO. SUM-76-0580
 OVER S.R. 619 (WOOSTER ROAD)

SUM-76-5.53
PID No. 96670

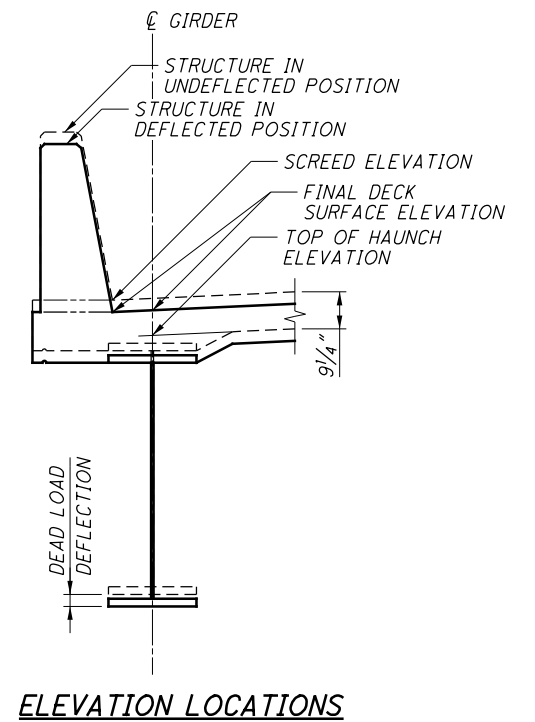
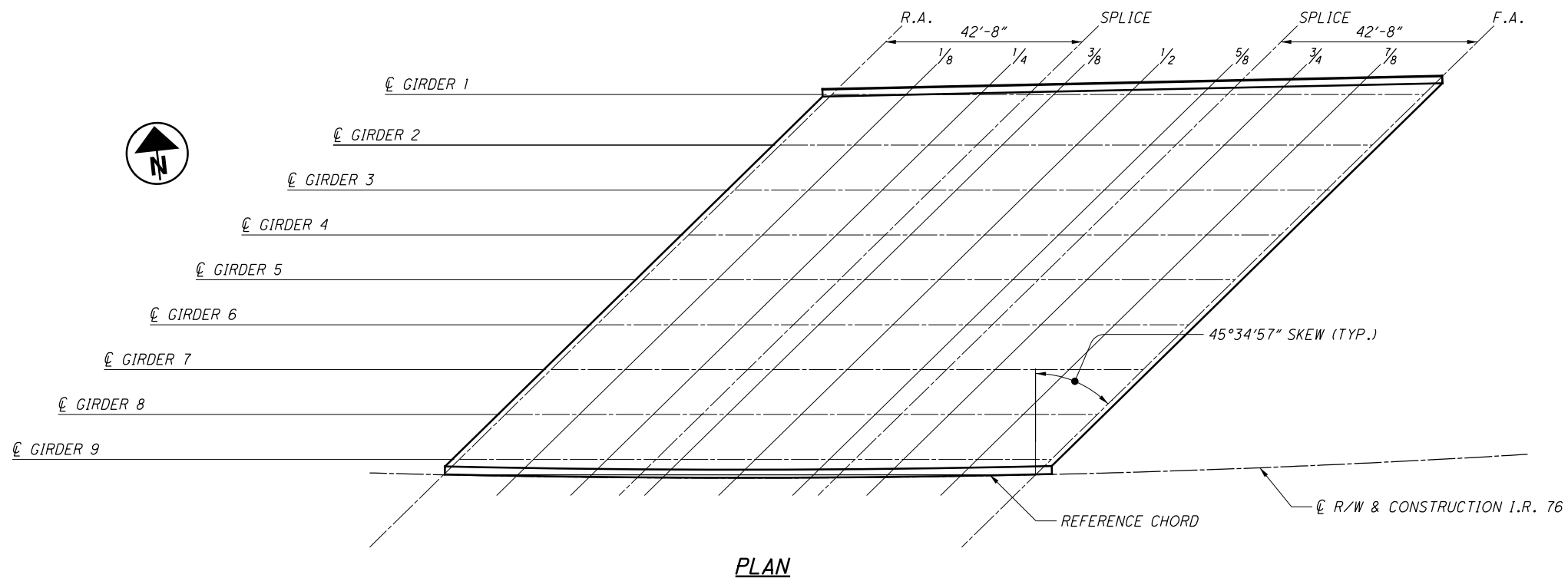
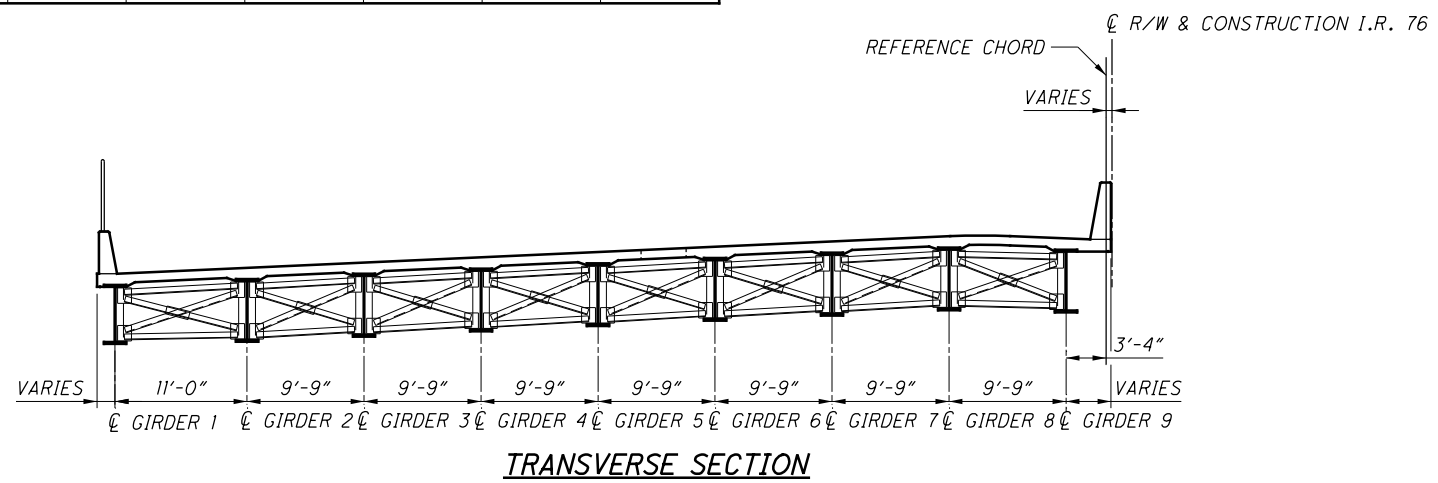
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		TOP OF HAUNCH ELEVATIONS (FT.)										
LOCATION	DESCRIPTION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
GIRDER 1	STATION	307+34.89	307+51.44	307+67.99	307+78.84	307+84.53	308+01.06	308+17.60	308+23.28	308+34.12	308+50.63	308+67.14
	ELEVATION	988.38	988.82	989.26	989.55	989.70	990.11	990.50	990.65	990.96	991.43	991.89
GIRDER 2	STATION	307+23.29	307+39.77	307+56.25	307+67.07	307+72.73	307+89.21	308+05.68	308+11.34	308+22.14	308+38.60	308+55.04
	ELEVATION	988.67	989.07	989.49	989.76	989.90	990.30	990.67	990.80	991.04	991.48	991.93
GIRDER 3	STATION	307+13.08	307+29.51	307+45.93	307+56.71	307+62.36	307+78.77	307+95.19	308+00.83	308+11.60	308+28.00	308+44.40
	ELEVATION	988.93	989.32	989.71	989.97	990.10	990.48	990.84	990.97	991.19	991.57	991.99
GIRDER 4	STATION	307+02.95	307+19.32	307+35.68	307+46.42	307+52.05	307+68.41	307+84.77	307+90.39	308+01.13	308+17.48	308+33.82
	ELEVATION	989.20	989.57	989.95	990.19	990.32	990.69	991.03	991.15	991.37	991.70	992.08
GIRDER 5	STATION	306+92.88	307+09.19	307+25.50	307+36.21	307+41.81	307+58.12	307+74.43	307+80.03	307+90.73	308+07.02	308+23.31
	ELEVATION	989.48	989.83	990.20	990.43	990.56	990.90	991.24	991.35	991.56	991.87	992.20
GIRDER 6	STATION	306+82.89	306+99.14	307+15.40	307+26.06	307+31.65	307+47.90	307+64.15	307+69.74	307+80.40	307+96.64	308+12.88
	ELEVATION	989.77	990.11	990.46	990.68	990.80	991.14	991.45	991.56	991.76	992.06	992.36
GIRDER 7	STATION	306+72.97	306+89.16	307+05.36	307+15.99	307+21.56	307+37.75	307+53.95	307+59.51	307+70.14	307+86.33	308+02.51
	ELEVATION	990.06	990.40	990.73	990.95	991.06	991.38	991.68	991.78	991.97	992.26	992.54
GIRDER 8	STATION	306+63.11	306+79.25	306+95.39	307+05.98	307+11.53	307+27.67	307+43.81	307+49.36	307+59.95	307+76.09	307+92.22
	ELEVATION	990.37	990.70	991.02	991.23	991.34	991.65	991.93	992.02	992.20	992.46	992.73
GIRDER 9	STATION	306+53.33	306+69.41	306+85.49	306+96.05	307+01.58	307+17.66	307+33.75	307+39.28	307+49.83	307+65.91	307+81.99
	ELEVATION	990.04	990.39	990.73	990.94	991.05	991.34	991.61	991.69	991.85	992.06	992.28

NOTE

TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.



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DATE
5/3/2017

REVIEWED
WHM

DRAWN
ERK

DESIGNED
ERK

CHECKED
GDJ

STRUCTURE FILE NUMBER
7705493

TOP OF HAUNCH ELEVATIONS (WESTBOUND)

BRIDGE NO. SUM-76-0580

OVER S.R. 619 (WOOSTER ROAD)

SUM-76-5.53

PID No. 96670

56/78

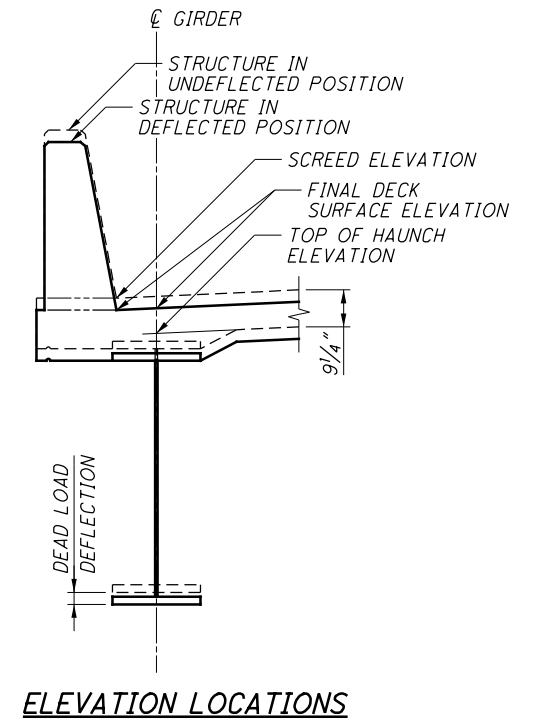
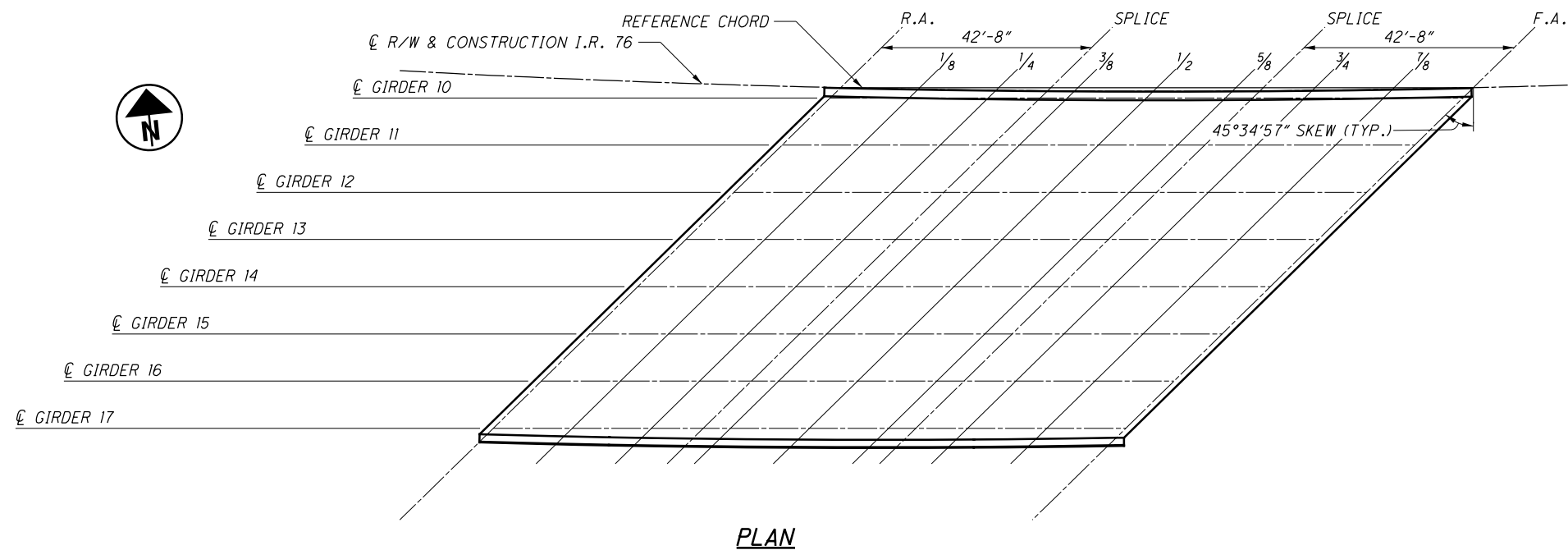
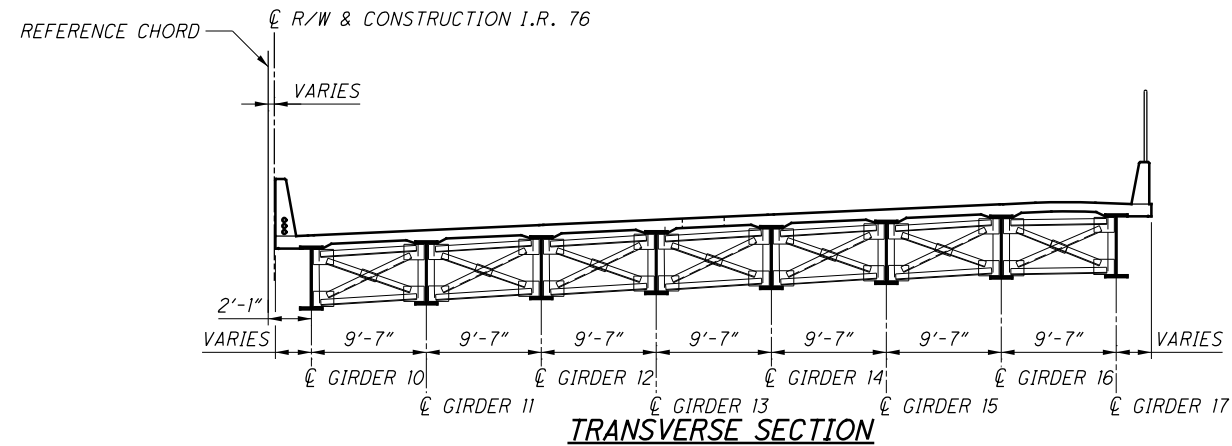
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		TOP OF HAUNCH ELEVATIONS (FT.)										
LOCATION	DESCRIPTION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
GIRDER 10	STATION	306+47.92	306+63.97	306+80.02	306+90.56	306+96.08	307+12.13	307+28.19	307+33.70	307+44.24	307+60.29	307+76.34
	ELEVATION	989.47	989.77	990.08	990.28	990.38	990.67	990.94	991.03	991.20	991.47	991.75
GIRDER 11	STATION	306+38.41	306+54.40	306+70.40	306+80.90	306+86.40	307+02.40	307+18.40	307+23.90	307+34.40	307+50.40	307+66.39
	ELEVATION	989.79	990.07	990.36	990.55	990.65	990.92	991.18	991.27	991.43	991.67	991.92
GIRDER 12	STATION	306+28.96	306+44.90	306+60.84	306+71.30	306+76.78	306+92.73	307+08.67	307+14.15	307+24.62	307+40.57	307+56.51
	ELEVATION	990.12	990.39	990.66	990.84	990.93	991.19	991.43	991.52	991.67	991.90	992.13
GIRDER 13	STATION	306+19.58	306+35.46	306+51.34	306+61.77	306+67.23	306+83.12	306+99.01	307+04.48	307+14.91	307+30.80	307+46.69
	ELEVATION	990.46	990.71	990.97	991.14	991.23	991.48	991.70	991.78	991.92	992.14	992.36
GIRDER 14	STATION	306+10.26	306+26.09	306+41.91	306+52.30	306+57.75	306+73.58	306+89.42	306+94.86	307+05.26	307+21.10	307+36.94
	ELEVATION	990.81	991.05	991.30	991.46	991.54	991.77	991.99	992.06	992.19	992.39	992.60
GIRDER 15	STATION	306+01.01	306+16.78	306+32.55	306+42.90	306+48.33	306+64.11	306+79.89	306+85.32	306+95.68	307+11.46	307+27.25
	ELEVATION	991.16	991.39	991.63	991.78	991.86	992.08	992.28	992.35	992.47	992.65	992.84
GIRDER 16	STATION	305+91.82	306+07.53	306+23.25	306+33.57	306+38.97	306+54.70	306+70.43	306+75.83	306+86.16	307+01.89	307+17.63
	ELEVATION	991.52	991.75	991.98	992.12	992.20	992.41	992.59	992.65	992.76	992.93	993.10
GIRDER 17	STATION	305+82.70	305+98.35	306+14.01	306+24.29	306+29.68	306+45.35	306+61.02	306+66.41	306+76.70	306+92.38	307+08.07
	ELEVATION	991.54	991.79	992.04	992.19	992.27	992.48	992.65	992.71	992.80	992.93	993.05

NOTE

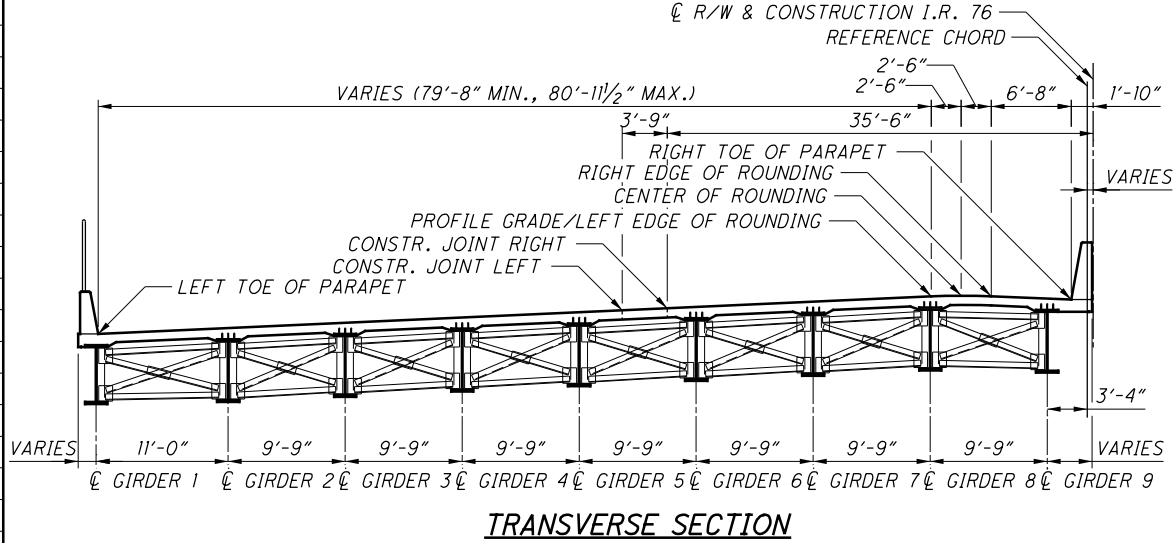
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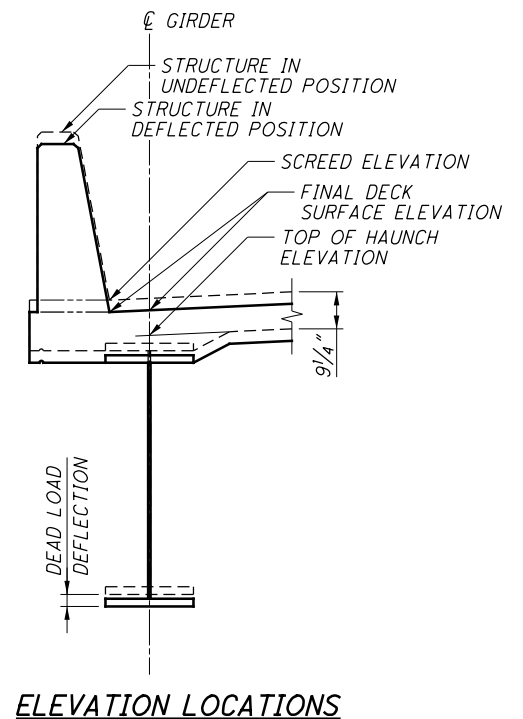
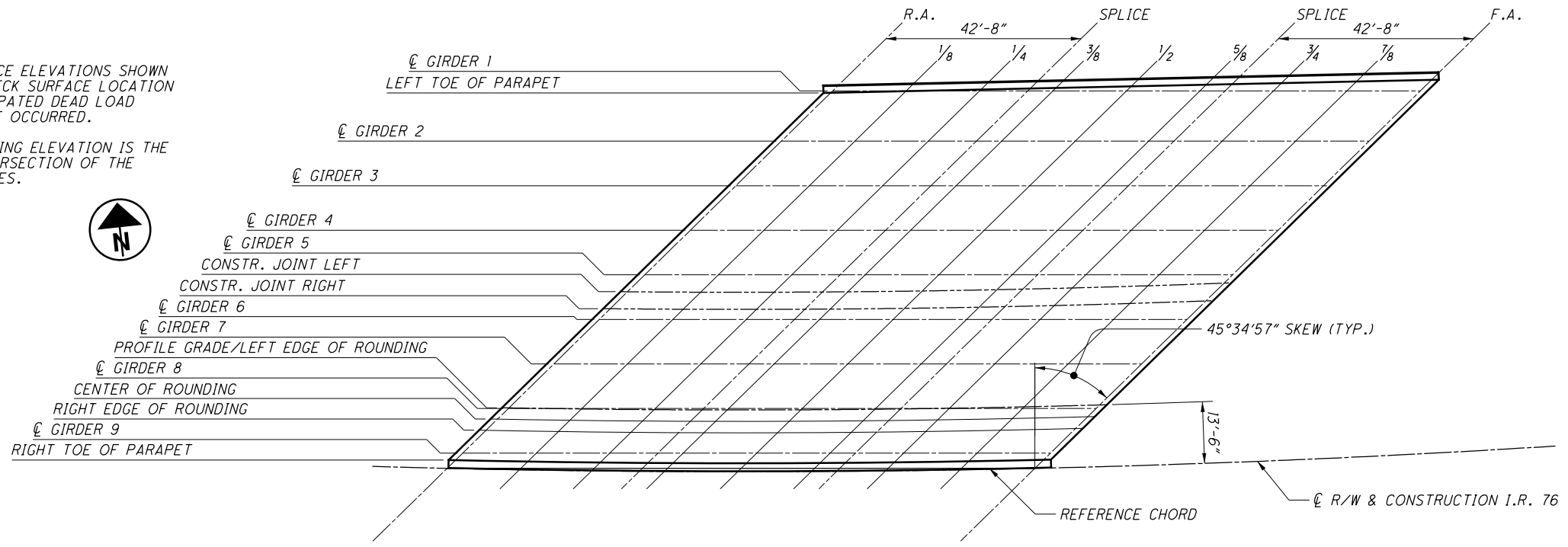
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FINAL DECK SURFACE ELEVATIONS TABLE (FT.)

LOCATION	DESCRIPTION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
LEFT TOE OF PARAPET	STATION	307+34.44	307+51.36	307+68.28	307+79.39	307+85.20	308+02.13	308+19.05	308+24.86	308+35.96	308+52.87	308+69.78
	ELEVATION	989.17	989.48	989.82	990.06	990.18	990.57	990.98	991.16	991.51	992.08	992.66
GIRDER 1	STATION	307+34.89	307+51.44	307+67.99	307+78.84	307+84.53	308+01.06	308+17.60	308+23.28	308+34.12	308+50.63	308+67.14
	ELEVATION	989.15	989.48	989.83	990.07	990.20	990.59	991.00	991.17	991.52	992.09	992.66
GIRDER 2	STATION	307+23.29	307+39.77	307+56.25	307+67.07	307+72.73	307+89.21	308+05.68	308+11.34	308+22.14	308+38.60	308+55.04
	ELEVATION	989.44	989.74	990.07	990.30	990.42	990.80	991.20	991.34	991.62	992.15	992.70
GIRDER 3	STATION	307+13.08	307+29.51	307+45.93	307+56.71	307+62.36	307+78.77	307+95.19	308+00.83	308+11.60	308+28.00	308+44.40
	ELEVATION	989.70	989.99	990.30	990.52	990.64	991.00	991.38	991.52	991.78	992.24	992.76
GIRDER 4	STATION	307+02.95	307+19.32	307+35.68	307+46.42	307+52.05	307+68.41	307+84.77	307+90.39	308+01.13	308+17.48	308+33.82
	ELEVATION	989.97	990.24	990.54	990.75	990.86	991.21	991.57	991.70	991.96	992.37	992.85
GIRDER 5	STATION	306+92.88	307+09.19	307+25.50	307+36.21	307+41.81	307+58.12	307+74.43	307+80.03	307+90.73	308+07.02	308+23.31
	ELEVATION	990.25	990.51	990.79	990.99	991.10	991.43	991.78	991.90	992.15	992.55	992.97
CONSTR. JOINT LEFT	STATION	306+89.08	307+05.27	307+21.55	307+32.29	307+37.93	307+54.41	307+70.99	307+76.72	307+87.68	308+04.47	308+21.37
	ELEVATION	990.36	990.61	990.89	991.09	991.19	991.51	991.85	991.97	992.21	992.59	993.00
CONSTR. JOINT RIGHT	STATION	306+85.28	307+01.42	307+17.66	307+28.37	307+34.00	307+50.43	307+66.96	307+72.67	307+83.60	308+00.34	308+17.19
	ELEVATION	990.47	990.72	990.99	991.18	991.29	991.60	991.93	992.05	992.29	992.66	993.06
GIRDER 6	STATION	306+82.89	306+99.14	307+15.40	307+26.06	307+31.65	307+47.90	307+64.15	307+69.74	307+80.40	307+96.64	308+12.88
	ELEVATION	990.54	990.78	991.05	991.24	991.34	991.66	991.99	992.11	992.35	992.73	993.13
GIRDER 7	STATION	306+72.97	306+89.16	307+05.36	307+15.99	307+21.56	307+37.75	307+53.95	307+59.51	307+70.14	307+86.33	308+02.51
	ELEVATION	990.84	991.07	991.32	991.50	991.60	991.90	992.22	992.33	992.56	992.93	993.31
GIRDER 8	STATION	306+63.11	306+79.25	306+95.39	307+05.98	307+11.53	307+27.67	307+43.81	307+49.36	307+59.95	307+76.09	307+92.22
	ELEVATION	991.14	991.36	991.60	991.77	991.86	992.15	992.45	992.56	992.78	993.13	993.50
PROFILE GRADE/ LEFT EDGE OF ROUNDING	STATION	306+63.26	306+79.15	306+95.14	307+05.68	307+11.21	307+27.38	307+43.65	307+49.26	307+60.01	307+76.47	307+93.04
	ELEVATION	991.14	991.36	991.61	991.78	991.87	992.16	992.46	992.57	992.78	993.12	993.49
CENTER OF ROUNDING	STATION	306+60.79	306+76.66	306+92.61	307+03.13	307+08.66	307+24.80	307+41.03	307+46.64	307+57.37	307+73.80	307+90.33
	ELEVATION	991.22	991.44	991.68	991.85	991.94	992.22	992.52	992.63	992.84	993.18	993.54
RIGHT EDGE OF ROUNDING	STATION	306+58.33	306+74.17	306+90.09	307+00.59	307+06.11	307+22.22	307+38.43	307+44.02	307+54.73	307+71.13	307+87.63
	ELEVATION	991.08	991.30	991.54	991.71	991.80	992.08	992.37	992.48	992.69	993.02	993.38
GIRDER 9	STATION	306+53.33	306+69.41	306+85.49	306+96.05	307+01.58	307+17.66	307+33.75	307+39.28	307+49.83	307+65.91	307+81.99
	ELEVATION	990.82	991.04	991.29	991.46	991.55	991.82	992.10	992.21	992.40	992.72	993.05
RIGHT TOE OF PARAPET	STATION	306+51.79	306+67.56	306+83.41	306+93.86	306+99.35	307+15.38	307+31.51	307+37.07	307+47.73	307+64.05	307+80.47
	ELEVATION	990.73	990.94	991.17	991.33	991.42	991.69	991.98	992.08	992.28	992.61	992.96

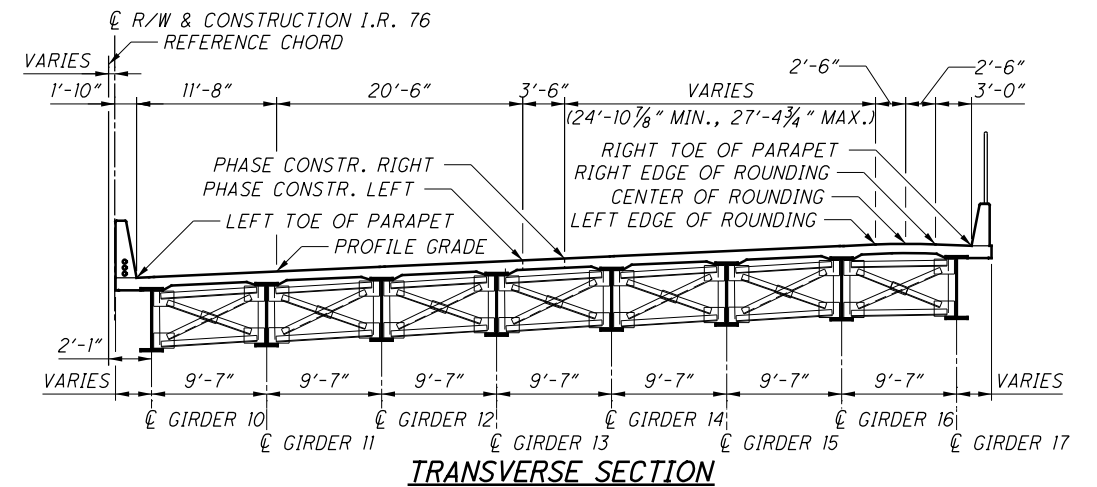


- NOTES**
- FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.
 - CENTER OF ROUNDING ELEVATION IS THE THEORETICAL INTERSECTION OF THE TRANSVERSE SLOPES.



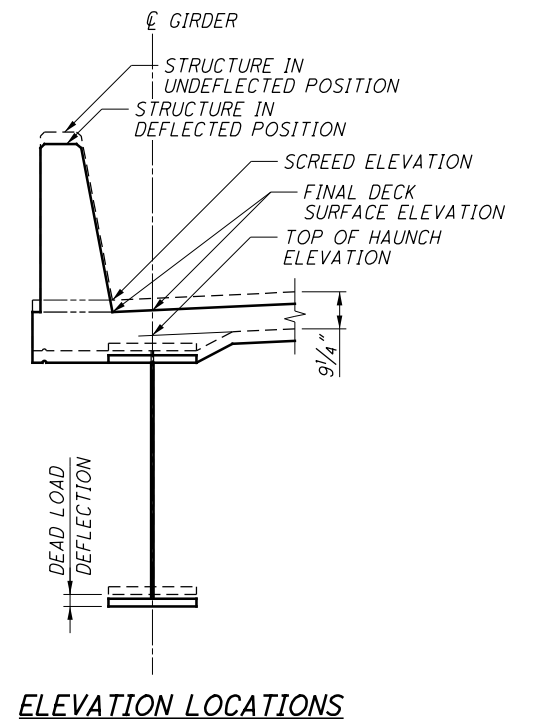
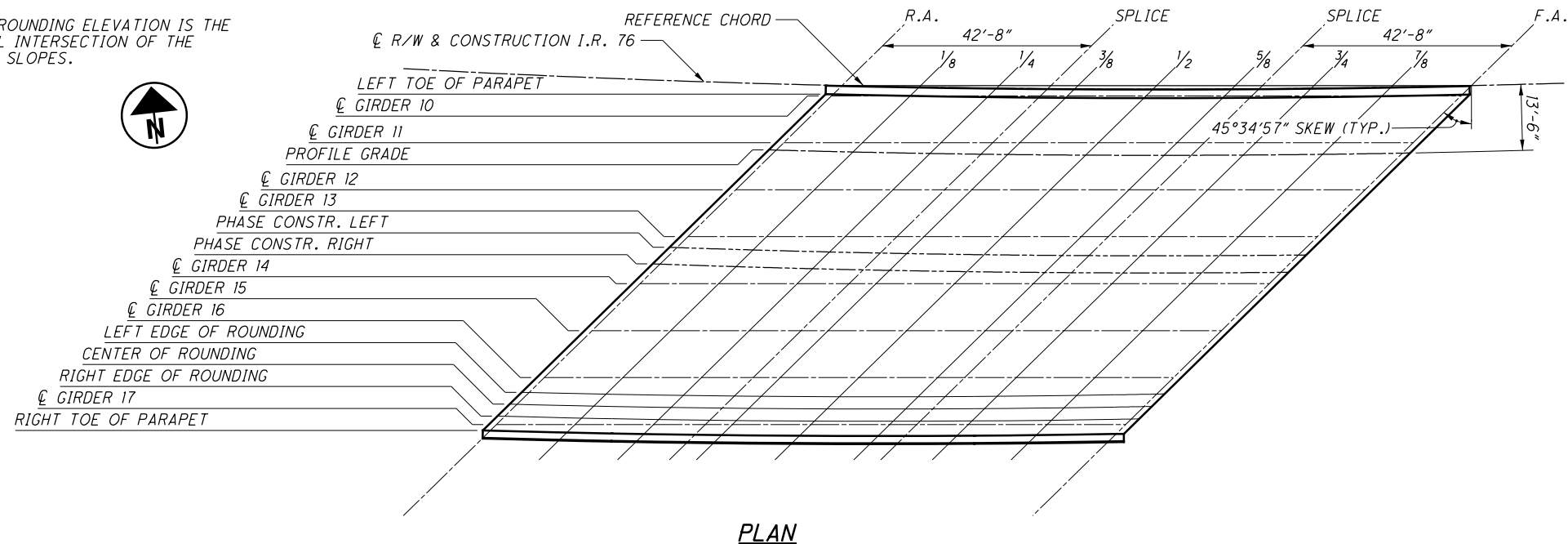
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FINAL DECK SURFACE ELEVATIONS TABLE (FT.)												
LOCATION	DESCRIPTION	R.A.	1/8	1/4	SPLICE	3/8	1/2	5/8	SPLICE	3/4	7/8	F.A.
LEFT TOE OF PARAPET	STATION	306+48.21	306+63.94	306+79.75	306+90.18	306+95.65	307+11.64	307+27.73	307+33.28	307+43.91	307+60.18	307+76.56
	ELEVATION	990.23	990.44	990.67	990.84	990.93	991.20	991.49	991.59	991.80	992.14	992.52
GIRDER 10	STATION	306+47.92	306+63.97	306+80.02	306+90.56	306+96.08	307+12.13	307+28.19	307+33.70	307+44.24	307+60.29	307+76.34
	ELEVATION	990.24	990.44	990.67	990.83	990.91	991.18	991.48	991.58	991.79	992.14	992.52
GIRDER 11	STATION	306+38.41	306+54.40	306+70.40	306+80.90	306+86.40	307+02.40	307+18.40	307+23.90	307+34.40	307+50.40	307+66.39
	ELEVATION	990.56	990.75	990.96	991.11	991.19	991.45	991.73	991.83	992.03	992.35	992.70
PROFILE GRADE	STATION	306+36.93	306+52.53	306+68.21	306+78.55	306+83.98	306+99.84	307+15.79	307+21.29	307+31.83	307+47.97	307+64.20
	ELEVATION	990.61	990.81	991.03	991.18	991.26	991.52	991.79	991.89	992.09	992.40	992.74
GIRDER 12	STATION	306+28.96	306+44.90	306+60.84	306+71.30	306+76.78	306+92.73	307+08.67	307+14.15	307+24.62	307+40.57	307+56.51
	ELEVATION	990.89	991.07	991.26	991.40	991.48	991.72	991.99	992.08	992.27	992.58	992.90
GIRDER 13	STATION	306+19.58	306+35.46	306+51.34	306+61.77	306+67.23	306+83.12	306+99.01	307+04.48	307+14.91	307+30.80	307+46.69
	ELEVATION	991.23	991.39	991.57	991.71	991.78	992.01	992.25	992.35	992.53	992.82	993.13
PHASE CONSTR. LEFT	STATION	306+17.42	306+32.80	306+48.27	306+58.46	306+63.82	306+79.45	306+95.17	307+00.59	307+10.98	307+26.88	307+42.87
	ELEVATION	991.31	991.48	991.68	991.81	991.89	992.12	992.37	992.45	992.63	992.92	993.22
PHASE CONSTR. RIGHT	STATION	306+14.13	306+29.48	306+44.91	306+55.08	306+60.42	306+76.01	306+91.69	306+97.10	307+07.46	307+23.32	307+39.27
	ELEVATION	991.43	991.60	991.79	991.92	992.00	992.22	992.47	992.55	992.73	993.01	993.31
GIRDER 14	STATION	306+10.26	306+26.09	306+41.91	306+52.30	306+57.75	306+73.58	306+89.42	306+94.86	307+05.26	307+21.10	307+36.94
	ELEVATION	991.58	991.72	991.89	992.02	992.09	992.30	992.53	992.62	992.79	993.07	993.37
GIRDER 15	STATION	306+01.01	306+16.78	306+32.55	306+42.90	306+48.33	306+64.11	306+79.89	306+85.32	306+95.68	307+11.46	307+27.25
	ELEVATION	991.93	992.07	992.22	992.34	992.40	992.60	992.82	992.90	993.06	993.33	993.61
GIRDER 16	STATION	305+91.82	306+07.53	306+23.25	306+33.57	306+38.97	306+54.70	306+70.43	306+75.83	306+86.16	307+01.89	307+17.63
	ELEVATION	992.30	992.42	992.56	992.66	992.72	992.91	993.12	993.19	993.35	993.60	993.87
LEFT EDGE OF ROUNDING	STATION	305+88.93	306+04.29	306+19.73	306+29.92	306+35.26	306+50.88	306+66.59	306+72.01	306+82.39	306+98.28	307+14.27
	ELEVATION	992.41	992.54	992.69	992.80	992.85	993.04	993.24	993.31	993.46	993.70	993.96
CENTER OF ROUNDING	STATION	305+86.61	306+01.94	306+17.36	306+27.53	306+32.86	306+48.45	306+64.13	306+69.54	306+79.90	306+95.77	307+11.72
	ELEVATION	992.51	992.63	992.78	992.88	992.94	993.12	993.32	993.39	993.54	993.77	994.03
RIGHT EDGE OF ROUNDING	STATION	305+84.29	305+99.60	306+14.99	306+25.14	306+30.47	306+46.03	306+61.68	306+67.08	306+77.42	306+93.26	307+09.19
	ELEVATION	992.39	992.51	992.65	992.76	992.81	992.99	993.19	993.26	993.40	993.64	993.89
GIRDER 17	STATION	305+82.70	305+98.35	306+14.01	306+24.29	306+29.68	306+45.35	306+61.02	306+66.41	306+76.70	306+92.38	307+08.07
	ELEVATION	992.31	992.45	992.60	992.71	992.77	992.96	993.15	993.22	993.36	993.59	993.83
RIGHT TOE OF PARAPET	STATION	305+81.52	305+96.80	306+12.16	306+22.28	306+27.60	306+43.13	306+58.75	306+64.14	306+74.46	306+90.26	307+06.15
	ELEVATION	992.25	992.37	992.51	992.61	992.65	992.84	993.03	993.10	993.24	993.47	993.72

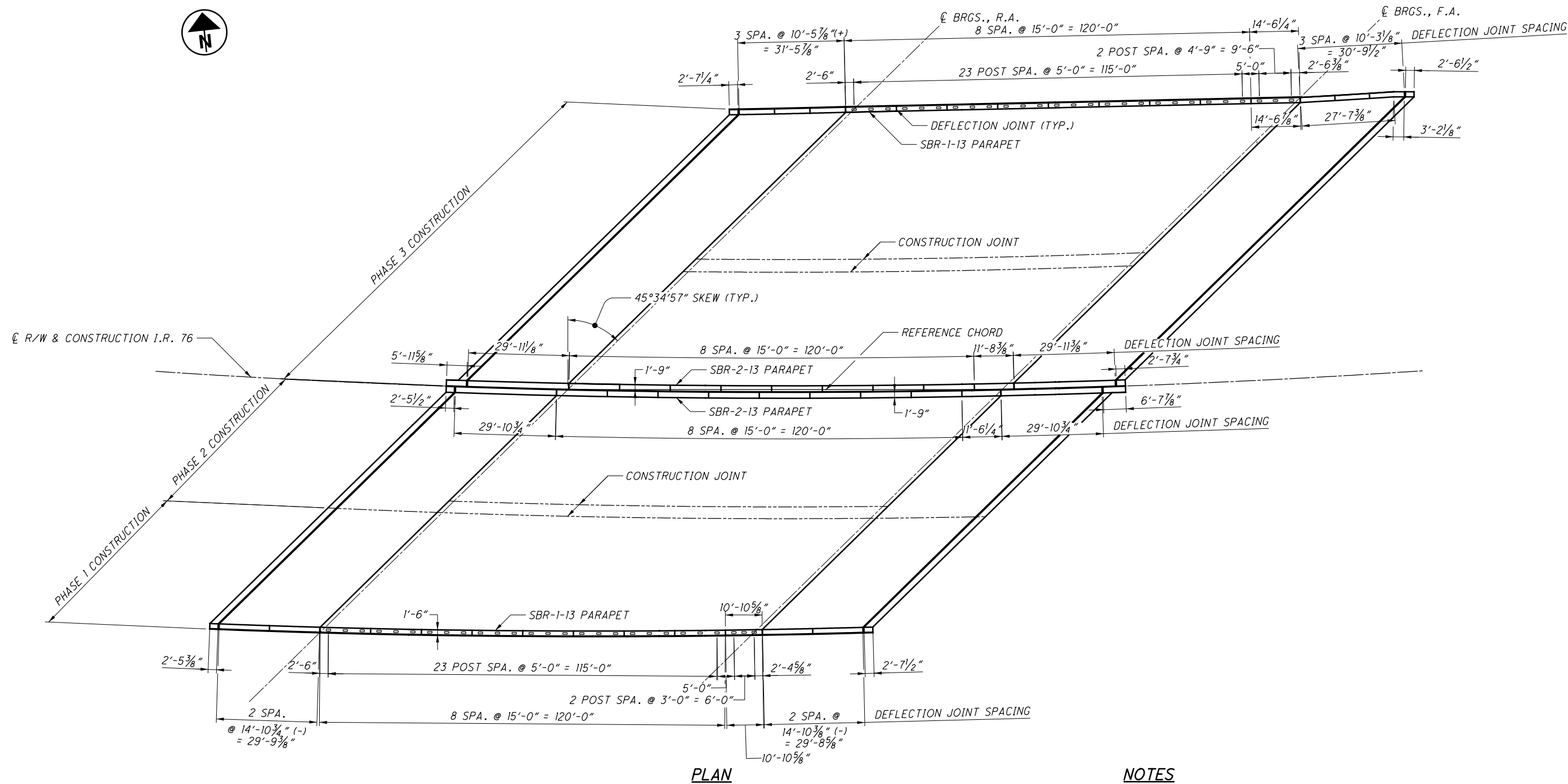


NOTES

- FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.
- CENTER OF ROUNDING ELEVATION IS THE THEORETICAL INTERSECTION OF THE TRANSVERSE SLOPES.



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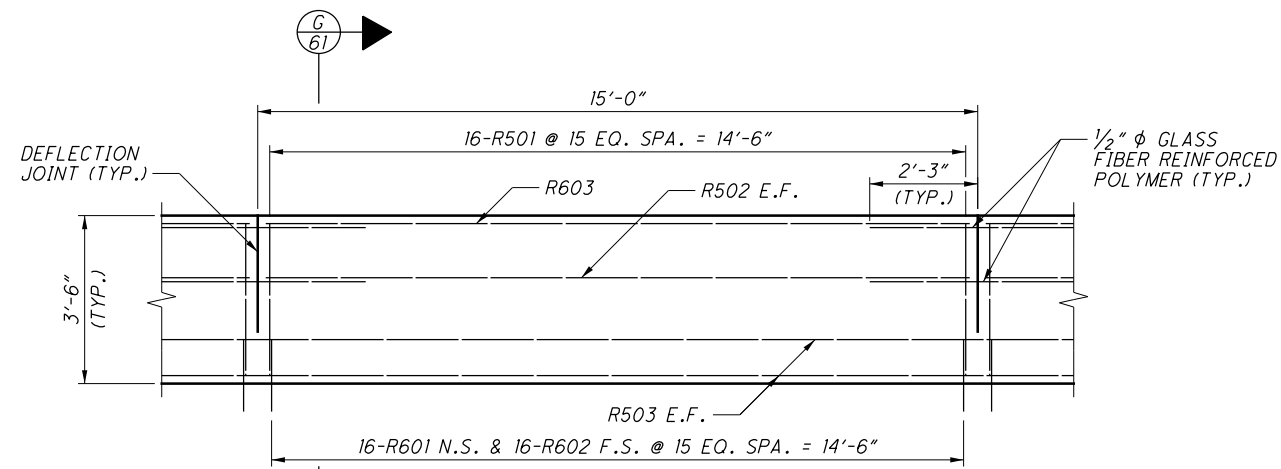


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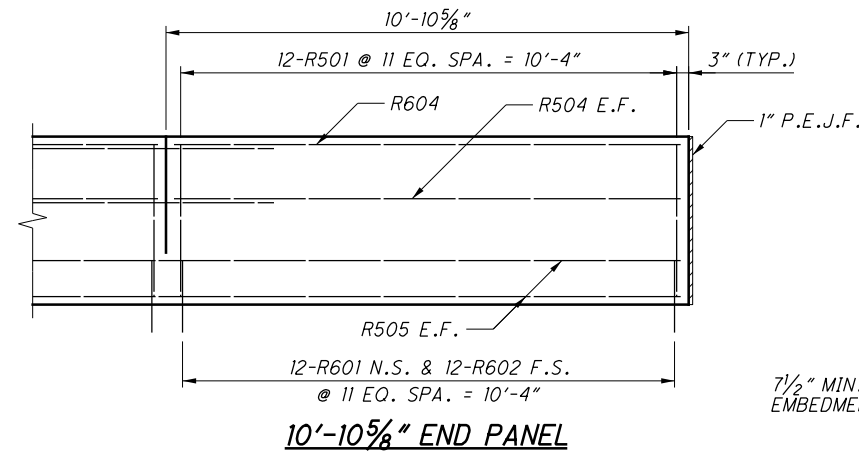
NOTES

1. DEFLECTION JOINTS ARE MEASURED ALONG THE INSIDE FACE OF THE PARAPET.
2. RAILING POSTS ARE MEASURED ALONG THE CENTERLINE OF THE BASE PLATE.
3. REFER TO STD. DWGS. SBR-1-13, SBR-2-13 & VPF-1-90 FOR ADDITIONAL NOTES AND DETAILS.
4. REFER TO SH. 61/78 FOR PARAPET AND MEDIAN DETAILS ON THE BRIDGE.
5. REFER TO SH. 69/78 & 70/78 FOR PARAPET AND MEDIAN DETAILS ON APPROACH SLABS.

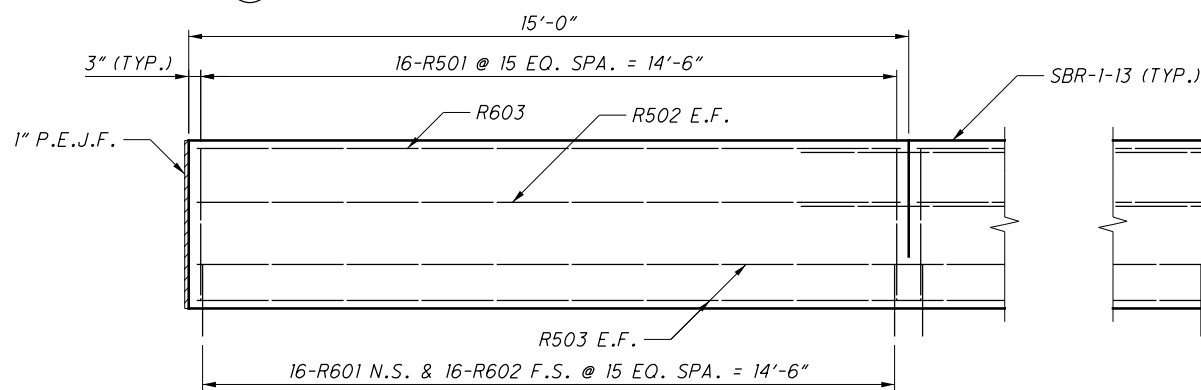
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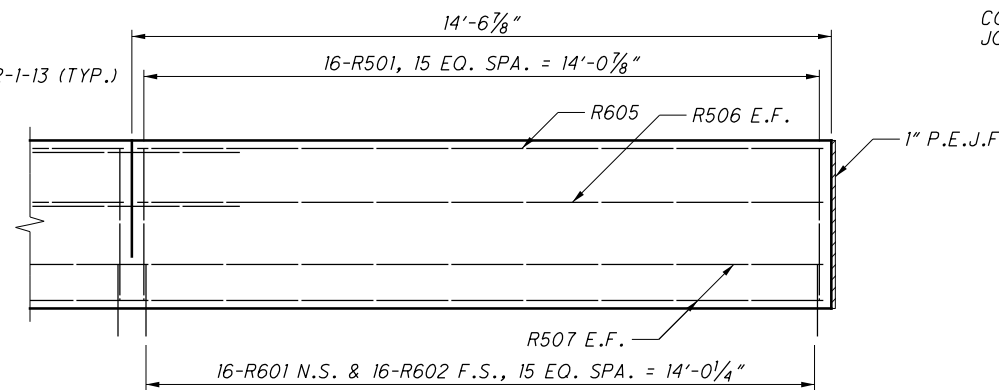
TYPICAL 15'-0" PANEL



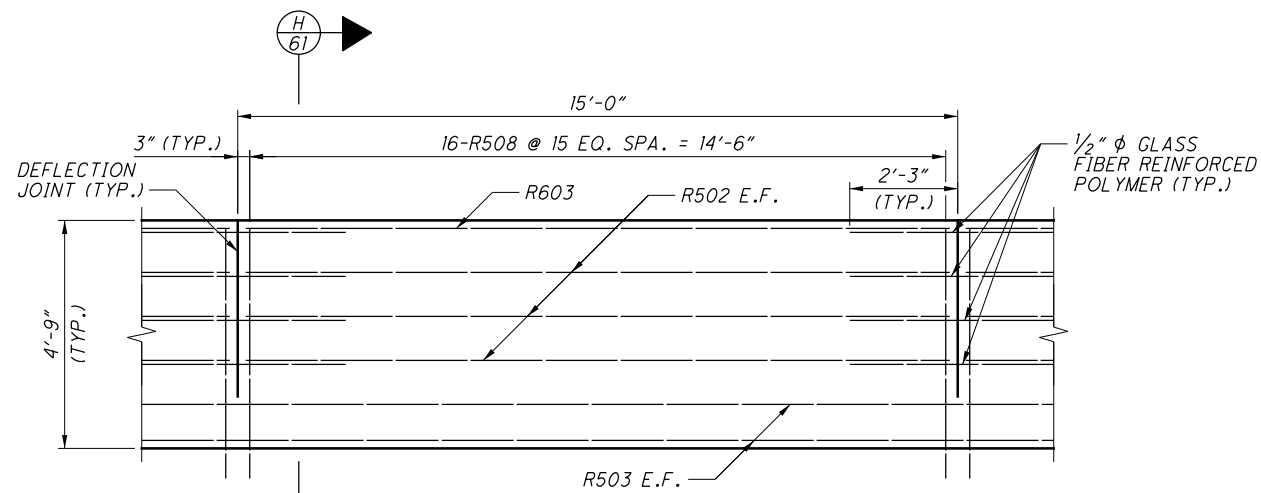
10'-10 5/8" END PANEL



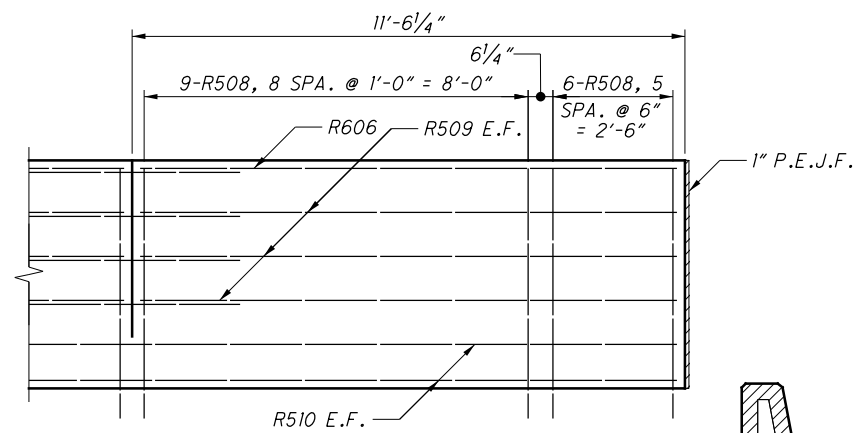
TYPICAL 15'-0" END PANEL



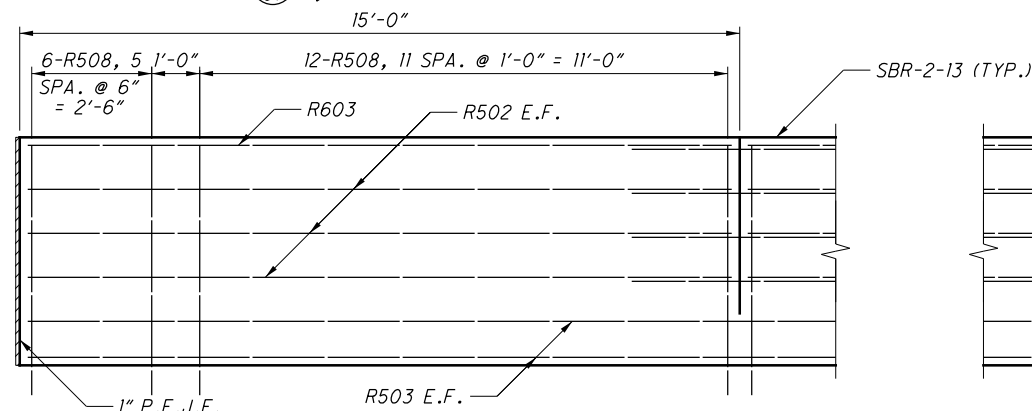
14'-6 7/8" END PANEL



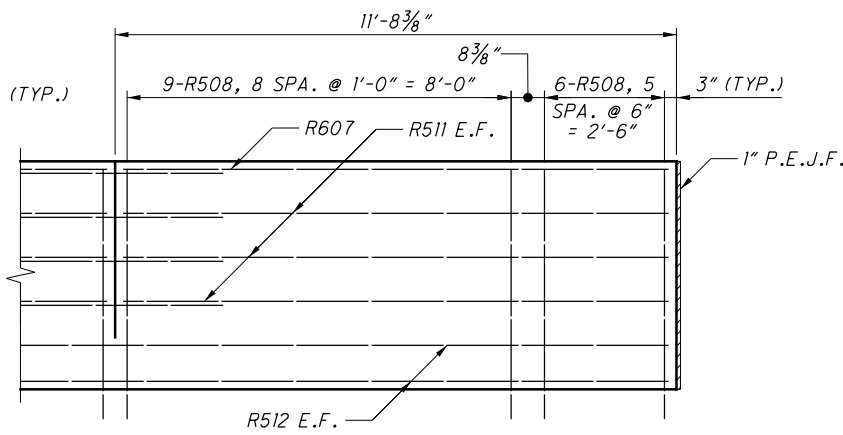
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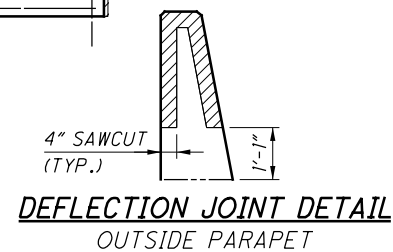
11'-6 1/4" END PANEL



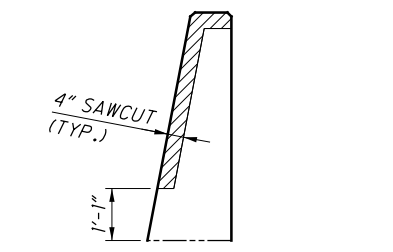
TYPICAL 15'-0" END PANEL



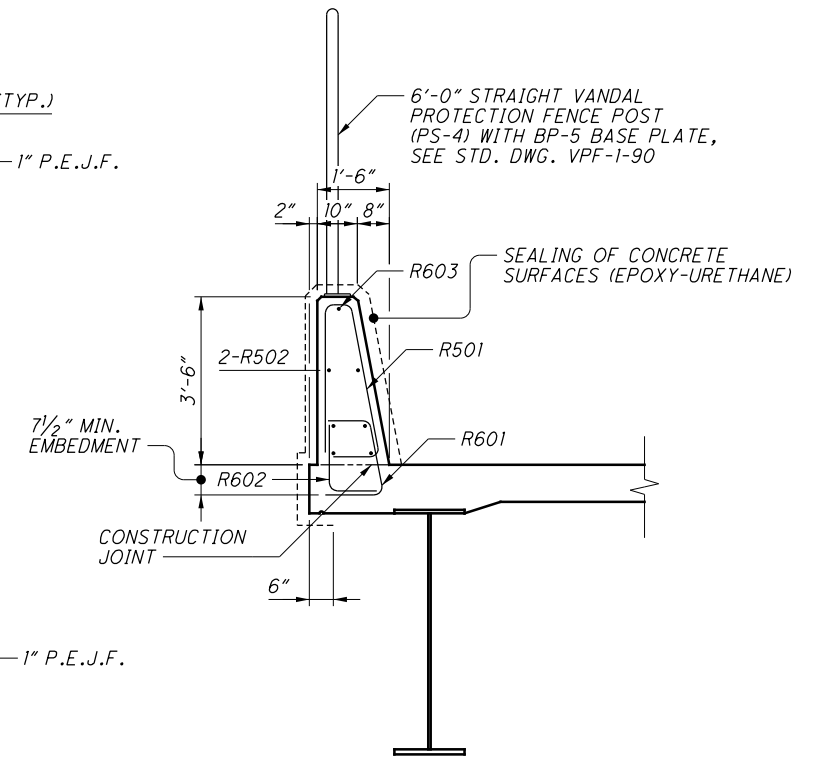
11'-8 3/8" END PANEL



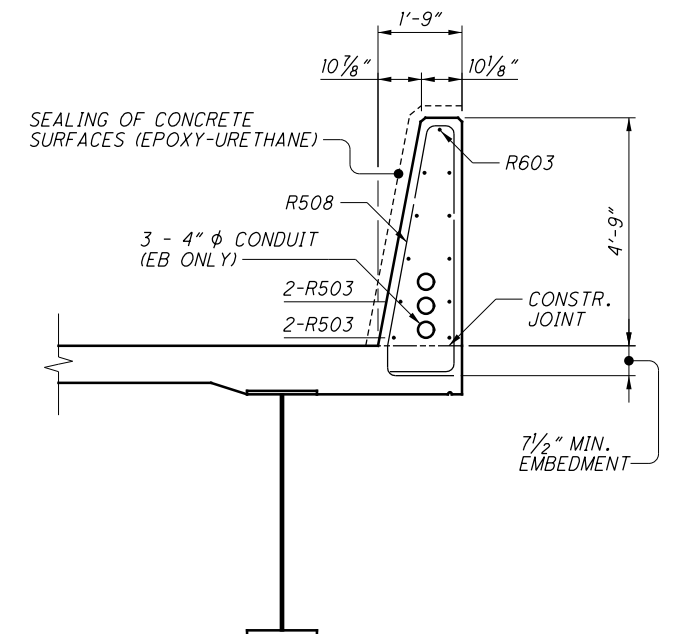
**DEFLECTION JOINT DETAIL
OUTSIDE PARAPET**



**DEFLECTION JOINT DETAIL
MEDIAN PARAPET**



**G SECTION
61 BARS NOT LABELED
ARE R503**



**H SECTION
61 BARS NOT LABELED
ARE R502**

NOTES

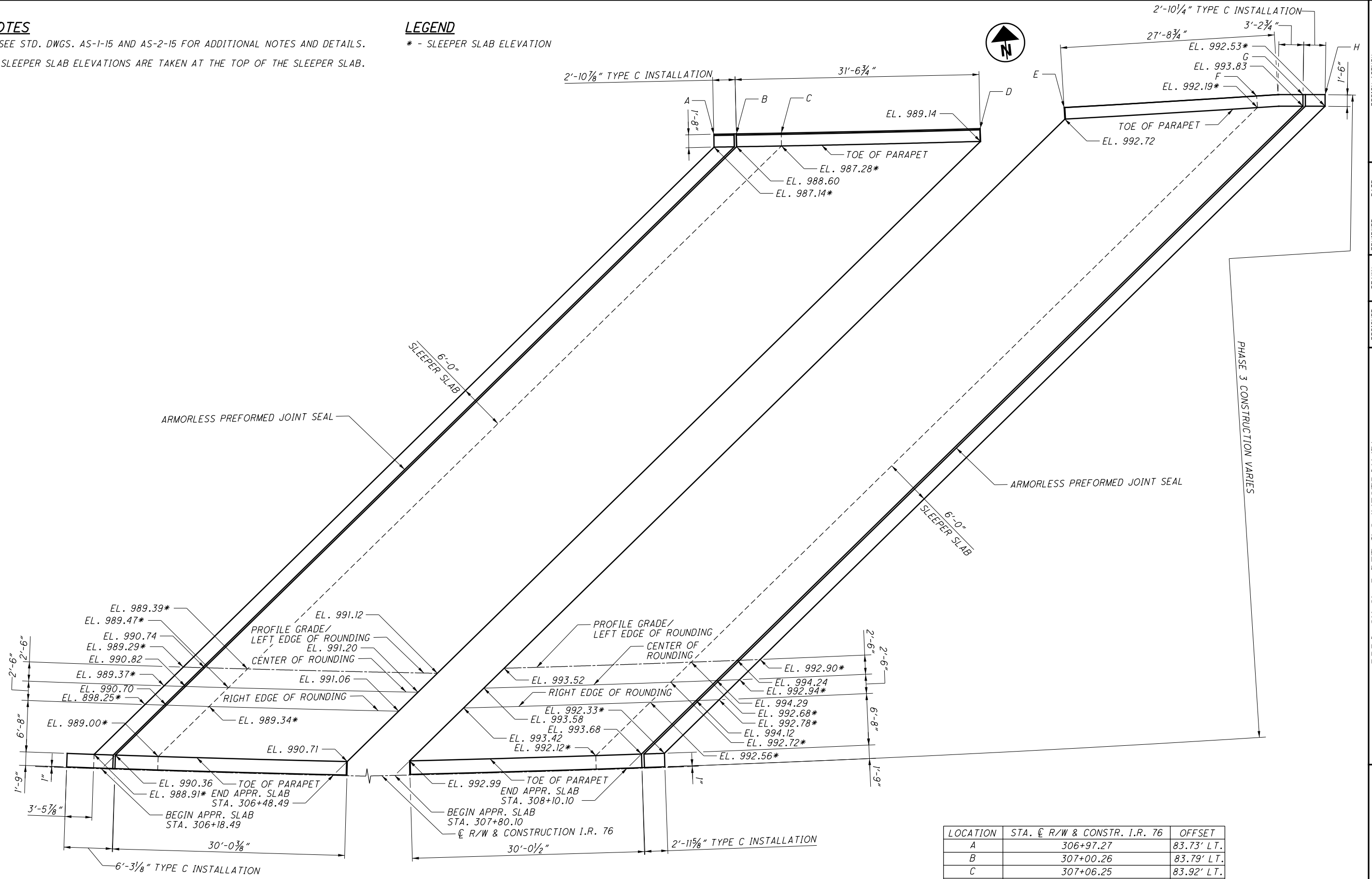
1. PARAPET ELEVATIONS ARE DIMENSIONED ALONG INSIDE FACE.
2. SEE STD. DWGS. SBR-1-13, SBR-2-13, AND VPF-1-90 FOR ADDITIONAL NOTES AND DETAILS.
3. MINIMUM LAP SPLICE LENGTH:
#5 BAR: 25 INCHES
4. 1/2" φ GLASS FIBER REINFORCED POLYMER TO BE INCLUDED FOR PAYMENT UNDER ITEM 509, EPOXY COATED REINFORCING STEEL.

NOTES

1. SEE STD. DWGS. AS-1-15 AND AS-2-15 FOR ADDITIONAL NOTES AND DETAILS.
2. SLEEPER SLAB ELEVATIONS ARE TAKEN AT THE TOP OF THE SLEEPER SLAB.

LEGEND

* - SLEEPER SLAB ELEVATION



PLAN

LOCATION	STA. @ R/W & CONSTR. I.R. 76	OFFSET
A	306+97.27	83.73' LT.
B	307+00.26	83.79' LT.
C	307+06.25	83.92' LT.
D	307+32.79	84.46' LT.
E	308+71.41	83.00' LT.
F	308+97.13	83.00' LT.
G	309+03.30	82.78' LT.
H	309+06.33	82.59' LT.

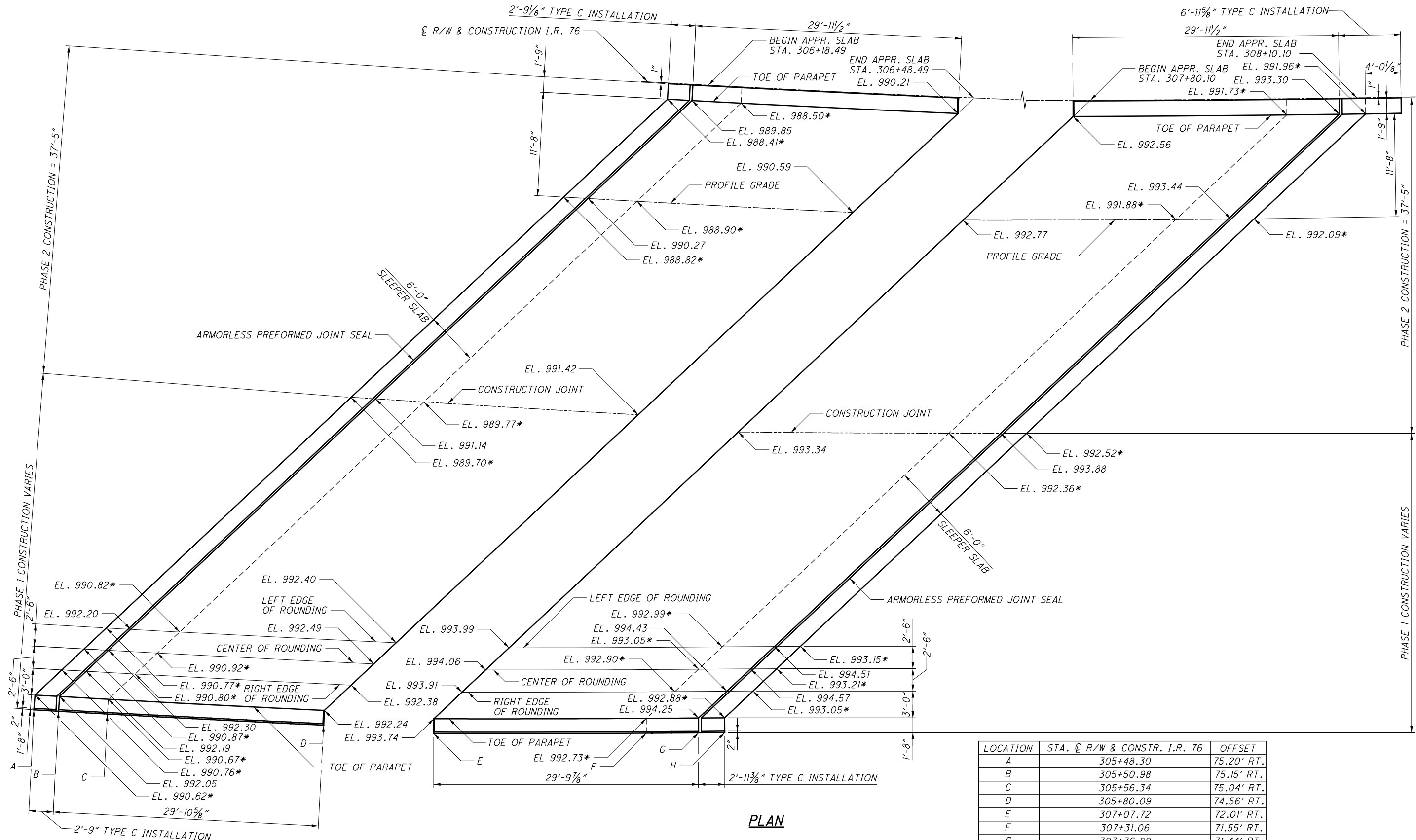
P:\ODT\MP\0093_SUM-76-5.62\SUM-76-5.62\Design Structures\SUM076_0580C_Sheets\076_0580C_SM001.dgn Sheet 10/11/2018 2:09:53 PM cmt007

NOTES

1. SEE STD. DWGS. AS-1-15 AND AS-2-15 FOR ADDITIONAL NOTES AND DETAILS.
2. SLEEPER SLAB ELEVATIONS ARE TAKEN AT THE TOP OF THE SLEEPER SLAB.

LEGEND

* - SLEEPER SLAB ELEVATION

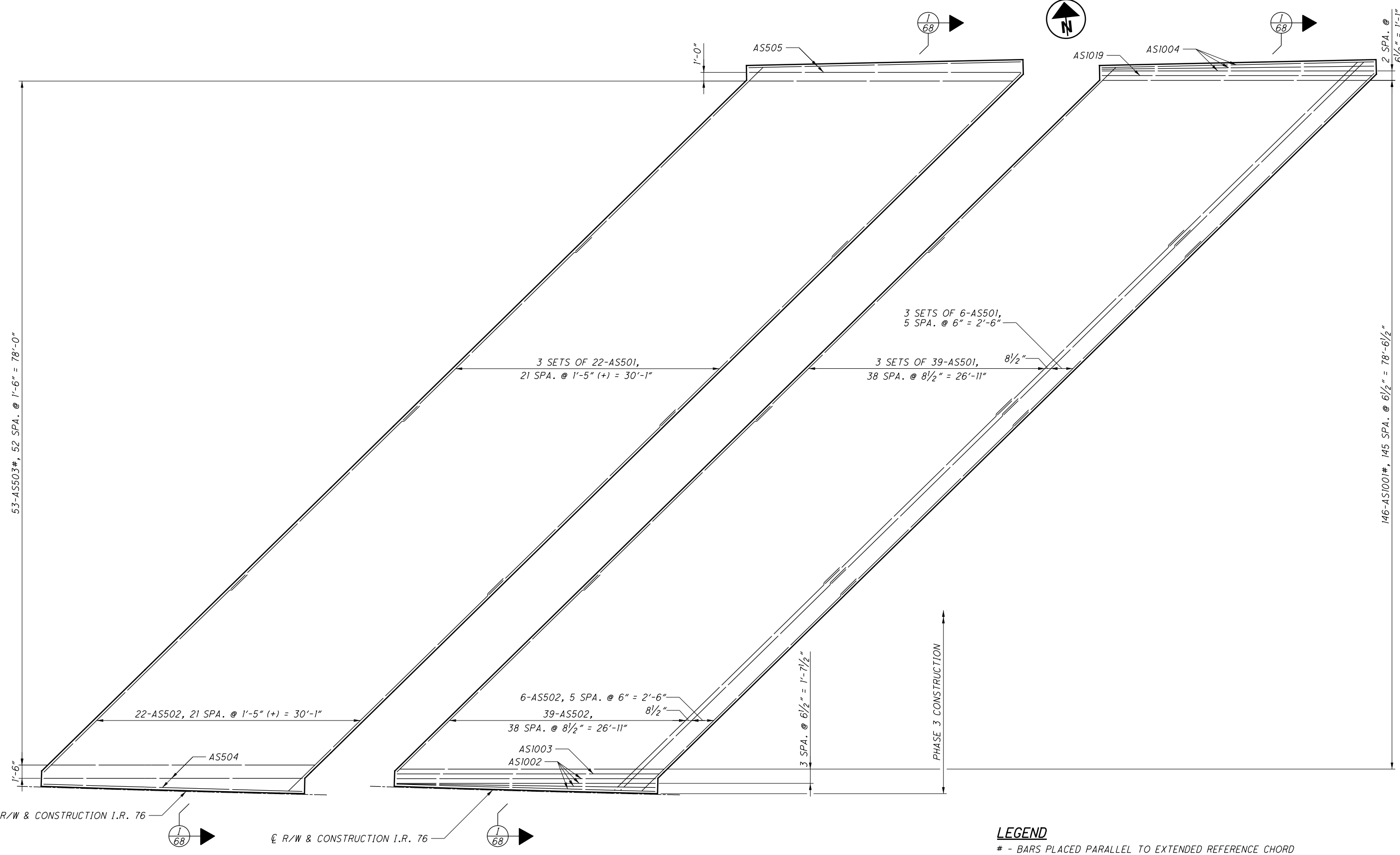


LOCATION	STA. @ R/W & CONSTR. I.R. 76	OFFSET
A	305+48.30	75.20' RT.
B	305+50.98	75.15' RT.
C	305+56.34	75.04' RT.
D	305+80.09	74.56' RT.
E	307+07.72	72.01' RT.
F	307+31.06	71.55' RT.
G	307+36.80	71.44' RT.
H	307+39.67	71.38' RT.

PLAN

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PLAN - TOP REINFORCING

PLAN - BOTTOM REINFORCING

LEGEND

- BARS PLACED PARALLEL TO EXTENDED REFERENCE CHORD

NOTES

- SEE STD. DWGS. AS-1-15 AND AS-2-15 FOR ADDITIONAL NOTES AND DETAILS.
- MINIMUM LAP SPLICE LENGTH:
#5 BAR: 30 INCHES

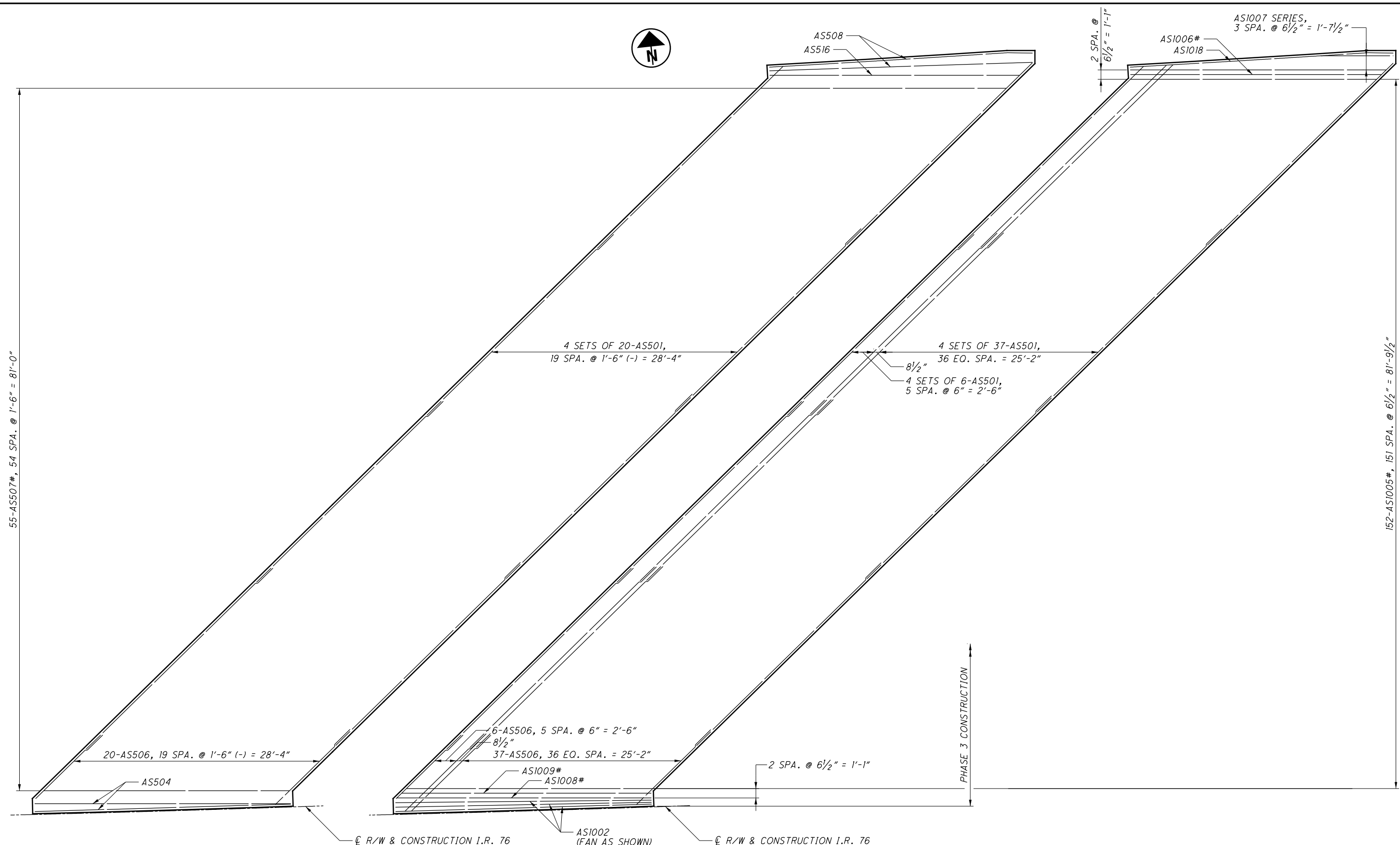
DESIGNED	ERK	CHECKED	GDJ
DRAWN	ERK	REVISED	
REVIEWED	WHM	STRUCTURE FILE NUMBER	7705493
DATE	5/3/2017		

REAR APPROACH SLAB DETAILS (WESTBOUND)

BRIDGE NO. SUM-76-0580
OVER S.R. 619 (WOOSTER ROAD)

SUM-76-5.53
PID No. 96670

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PLAN - TOP REINFORCING

PLAN - BOTTOM REINFORCING

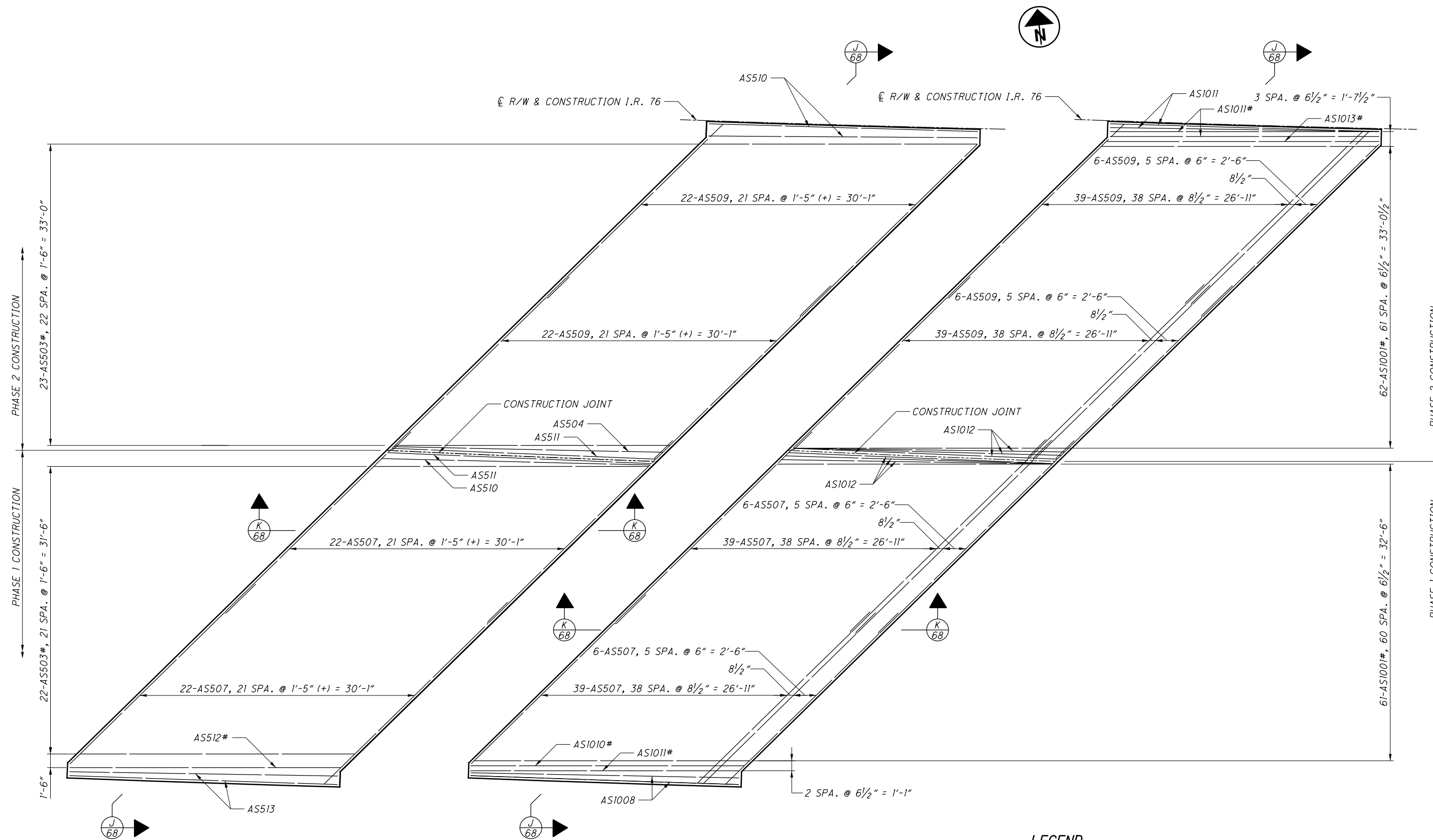
LEGEND

- BARS PLACED PARALLEL TO EXTENDED REFERENCE CHORD

NOTES

1. SEE STD. DWGS. AS-1-15 AND AS-2-15 FOR ADDITIONAL NOTES AND DETAILS.
2. MINIMUM LAP SPLICE LENGTH:
#5 BAR: 30 INCHES

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PLAN - TOP REINFORCING

PLAN - BOTTOM REINFORCING

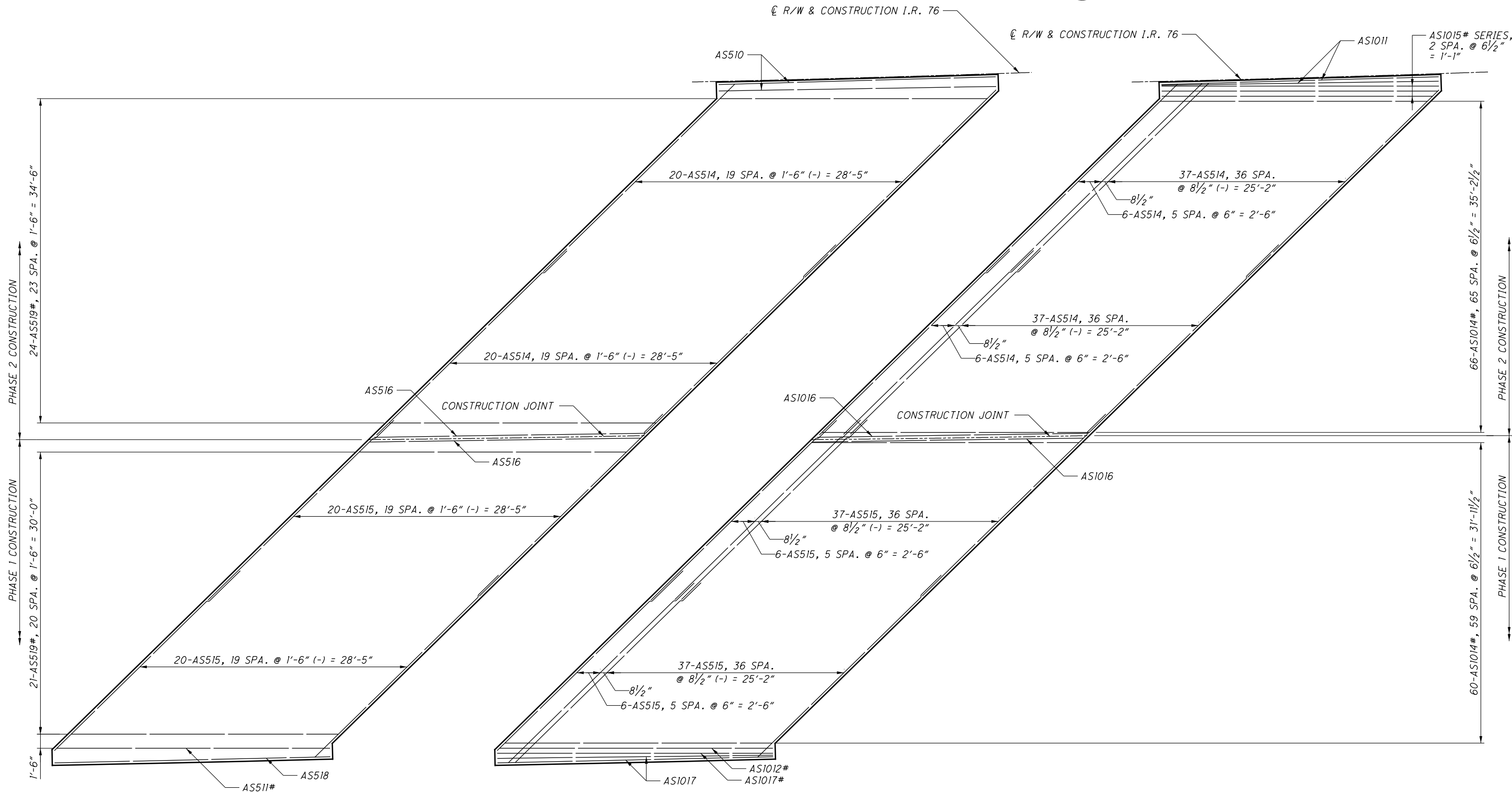
LEGEND

- BARS PLACED PARALLEL TO EXTENDED REFERENCE CHORD

NOTES

- SEE STD. DWGS. AS-1-15 AND AS-2-15 FOR ADDITIONAL NOTES AND DETAILS.
- MINIMUM LAP SPLICE LENGTH:
#5 BAR: 30 INCHES

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PLAN - TOP REINFORCING

PLAN - BOTTOM REINFORCING

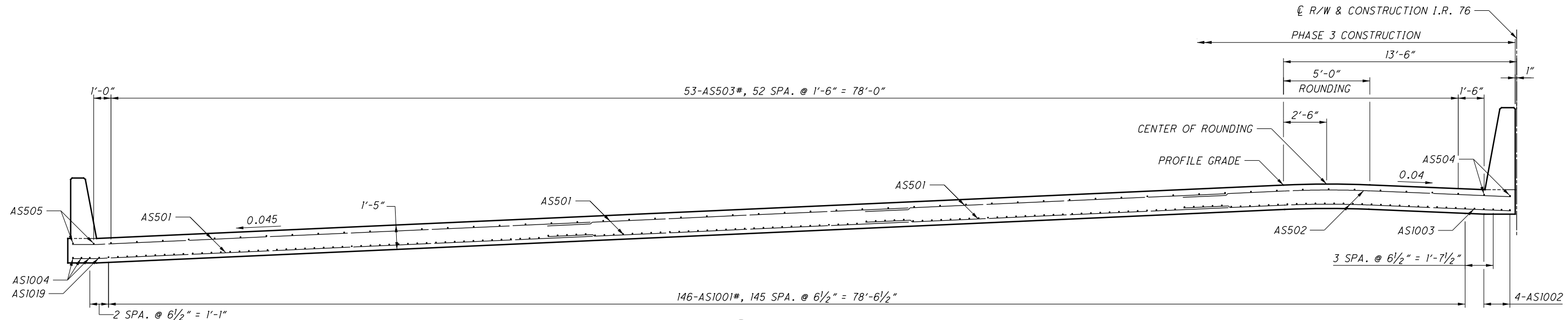
LEGEND

- BARS PLACED PARALLEL TO EXTENDED REFERENCE CHORD

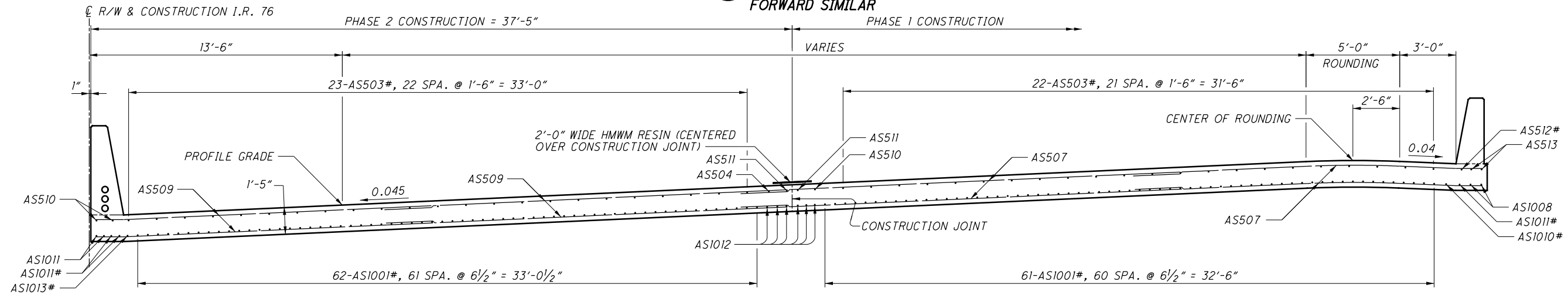
NOTES

1. SEE STD. DWGS. AS-1-15 AND AS-2-15 FOR ADDITIONAL NOTES AND DETAILS.
2. MINIMUM LAP SPLICE LENGTH:
#5 BAR: 30 INCHES

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I WESTBOUND SECTION
64 REAR APPROACH SLAB SHOWN,
FORWARD SIMILAR



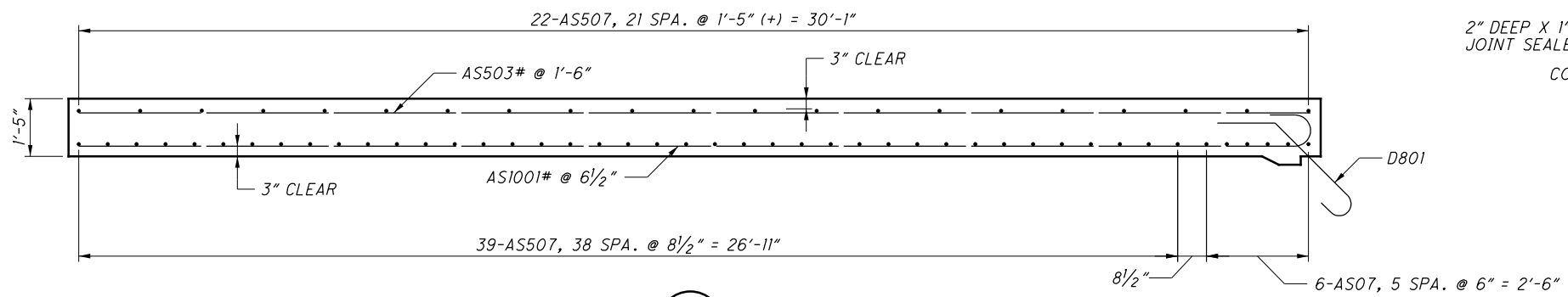
J EASTBOUND SECTION
66 REAR APPROACH SLAB SHOWN,
FORWARD SIMILAR

NOTES

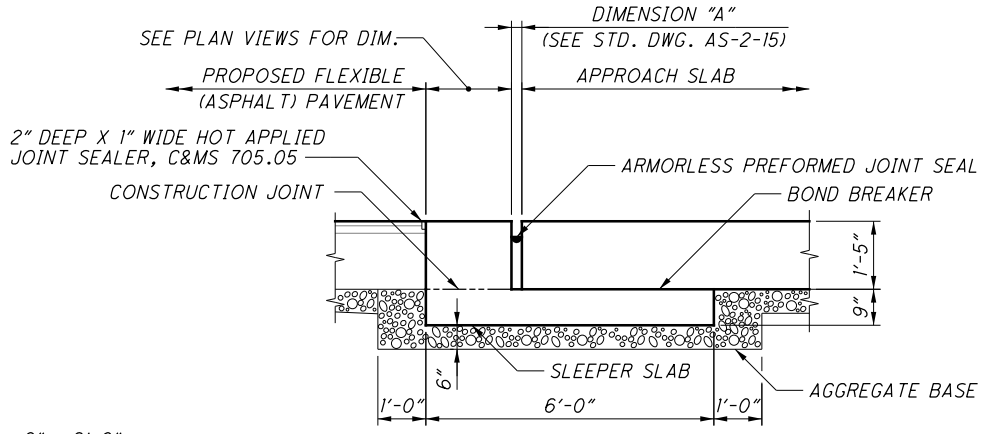
- 2'-0" WIDE HMWM RESIN CENTERED ON JOINTS TO BE INCLUDED FOR PAYMENT UNDER ITEM 526, REINFORCED CONCRETE APPROACH SLABS WITH OC/OA (T=17"), AS PER PLAN.
- SEE STD. DWGS. AS-1-15 AND AS-2-15 FOR ADDITIONAL NOTES, DETAILS AND REINFORCING OF SLEEPER SLABS AND TYPE C INSTALLATION.
- MINIMUM LAP SPLICE LENGTH:
#5 BAR: 30 INCHES

LEGEND

- BARS PLACED PARALLEL TO EXTENDED REFERENCE CHORD

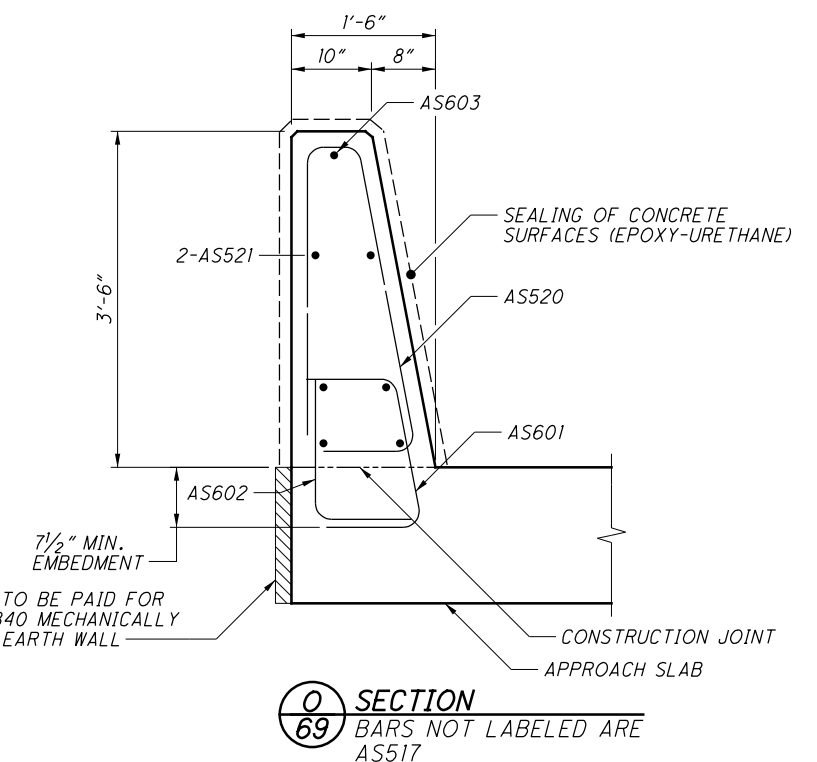
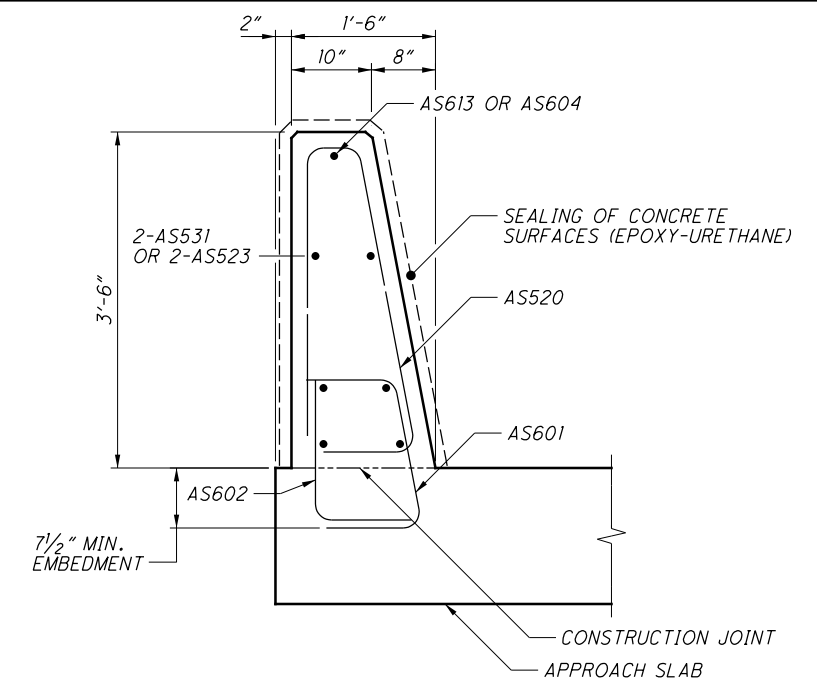
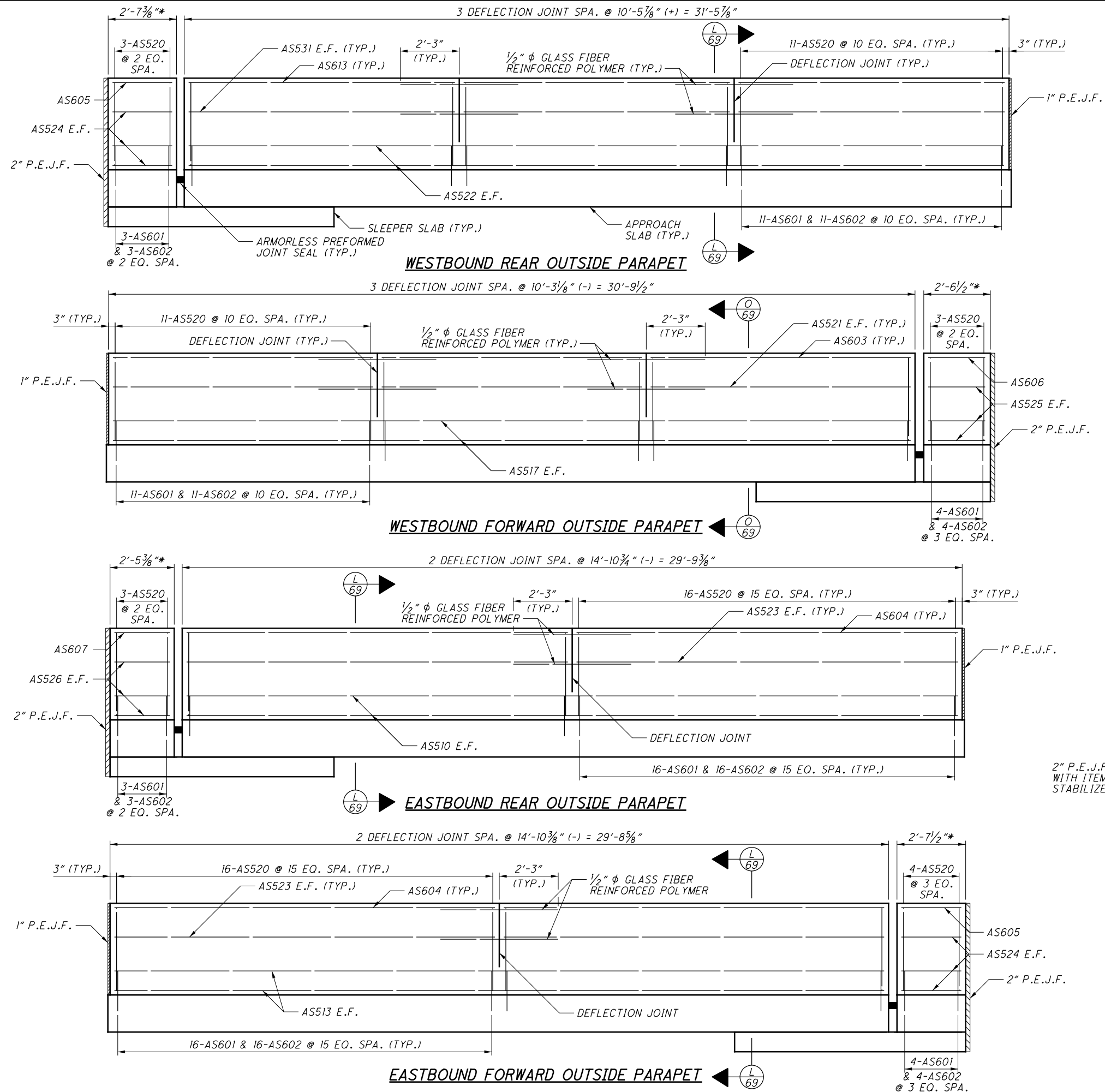


K SECTION
66



TYPE C INSTALLATION DETAIL

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LEGEND

* - WIDTH IS BASED ON THE JOINT OPENING AT A TEMPERATURE OF 60° F. ADJUST OPENING BASED ON ACTUAL TEMPERATURE AT TIME OF CONSTRUCTION. SEE TABLE 1 ON STD. DWG. AS-2-15

NOTES

1. PARAPET ELEVATIONS DIMENSIONED ALONG INSIDE FACE.
2. SEE STD. DWGS. AS-2-15 & SBR-1-13 FOR ADDITIONAL NOTES AND DETAILS.
3. 1/2" φ GLASS FIBER REINFORCED POLYMER TO BE INCLUDED FOR PAYMENT UNDER ITEM 509, EPOXY COATED REINFORCING STEEL.
4. CONCRETE PARAPET AND REINFORCING STEEL ON THE APPROACH SLABS SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 526, REINFORCED CONCRETE APPROACH SLABS WITH OC/OA (T=17"), AS PER PLAN.
5. SEE SHEET 61/78 FOR DEFLECTION JOINT DETAIL.

DESIGN AGENCY
CARPENTER MARTY
 TRANSPORTATION
 10000 W. 10TH AVE. SUITE 100
 DENVER, CO 80231

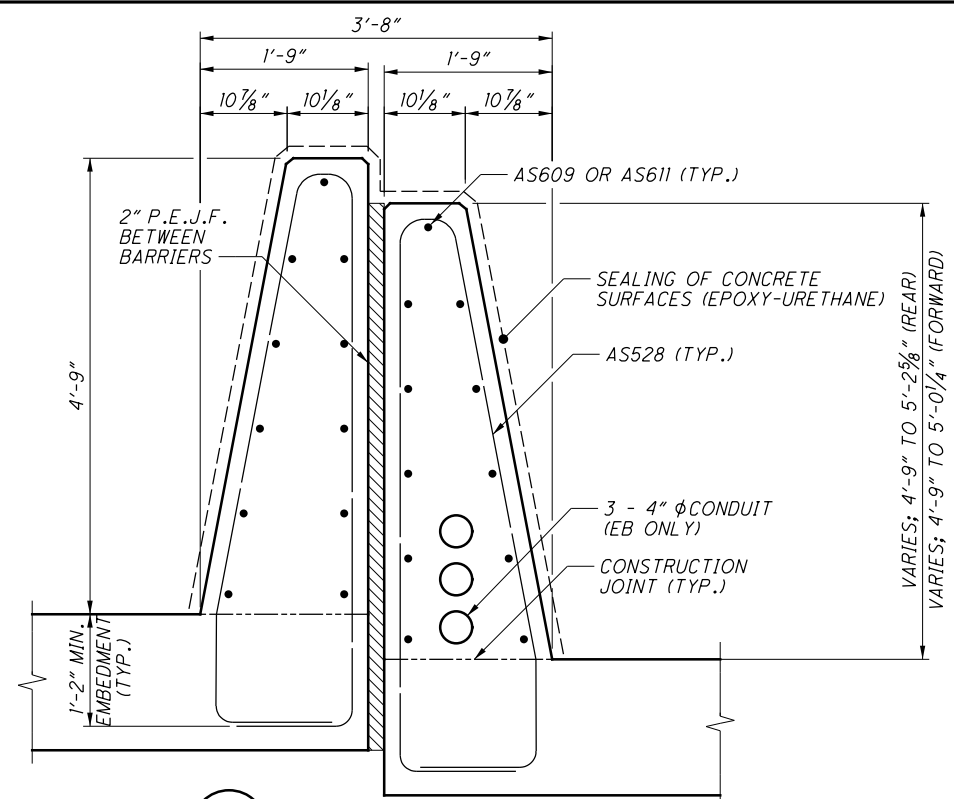
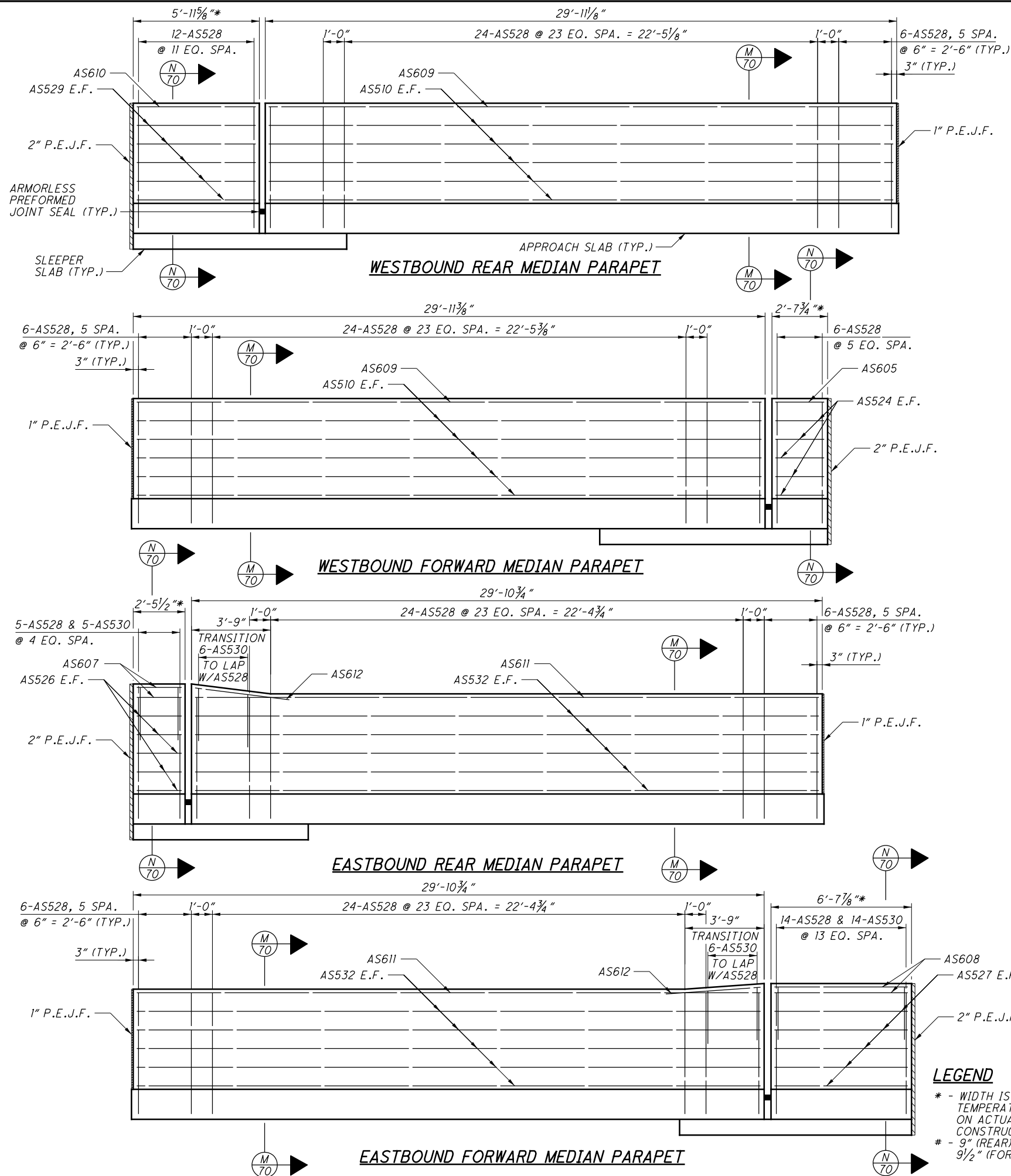
DESIGNED	ERK	CHECKED	STK
DRAWN	ERK	REVIEWED	WHM
DATE	5/3/2017	STRUCTURE FILE NUMBER	7705493

APPROACH SLAB PARAPET DETAILS
 BRIDGE NO. SUM-76-0580
 OVER S.R. 619 (WOOSTER ROAD)

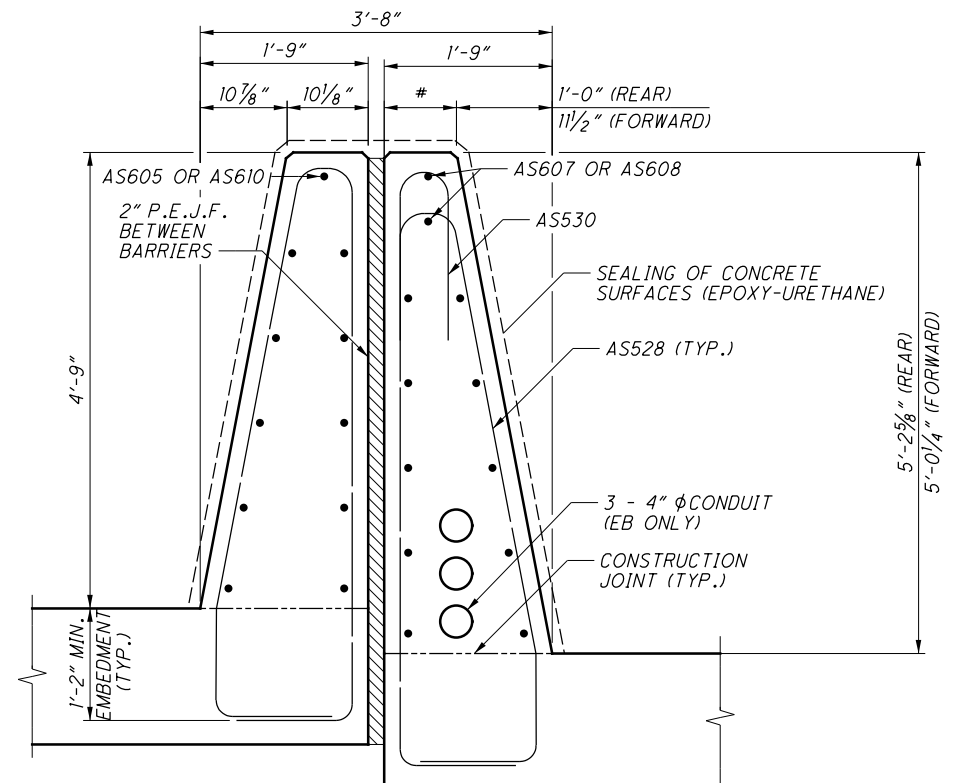
SUM-76-5.53
PID No. 96670

69/78
 633
 672

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M SECTION
BARS NOT LABELED ARE AS510 OR AS532



N SECTION
BARS NOT LABELED ARE AS510 OR AS532

LEGEND

- * - WIDTH IS BASED ON THE JOINT OPENING AT A TEMPERATURE OF 60° F. ADJUST OPENING BASED ON ACTUAL TEMPERATURE AT TIME OF CONSTRUCTION. SEE TABLE 1 ON STD. DWG. AS-2-15.
- # - 9" (REAR)
9 1/2" (FORWARD)

NOTES

1. PARAPET ELEVATIONS DIMENSIONED ALONG INSIDE FACE.
2. SEE STD. DWGS. AS-2-15 & SBR-2-15 FOR ADDITIONAL NOTES AND DETAILS.
3. 1/2" φ GLASS FIBER REINFORCED POLYMER TO BE INCLUDED FOR PAYMENT UNDER ITEM 509, EPOXY COATED REINFORCING STEEL.
4. CONCRETE PARAPET AND REINFORCING STEEL ON THE APPROACH SLABS SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 526, REINFORCED CONCRETE APPROACH SLABS WITH OC/OA (I=17"), AS PER PLAN.

DESIGNED ERK	DATE 5/3/2017
DRAWN ERK	STRUCTURE FILE NUMBER 7705493
CHECKED STK	REVISIONS 7705493
APPROACH SLAB MEDIAN PARAPET DETAILS BRIDGE NO. SUM-76-0580 OVER S.R. 619 (WOOSTER ROAD)	
SUM-76-5.53 PID No. 96670	
70/78 634 672	

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MARK	NUMBER						TOTAL	LENGTH	WEIGHT				TYPE	DIMENSIONS					
	R.A.			F.A.					PHASE 1	PHASE 2	PHASE 3	TOTAL		A	B	C	D	E	INC.
	PHASE 1	PHASE 2	PHASE 3	PHASE 1	PHASE 2	PHASE 3													
ABUTMENTS																			
A501	81	40	125	81	45	95	467	18'-2"	3070	1611	4169	8850	3	6'-2"	2'-7"				
A502	45	38	53	46		24	206	7'-0"	665	278	563	1506	2	2'-3"	2'-9"	2'-3"			
A503	22						22	16'-6"	379			379	2	7'-0"	2'-9"	7'-0"			
A504	7						7	16'-0"	117			117	2	6'-9"	2'-9"	6'-9"			
A505	14						14	15'-2"	222			222	2	6'-4"	2'-9"	6'-4"			
A506		12		25			37	13'-8"	357	172		529	2	5'-7"	2'-9"	5'-7"			
A507		12		14			26	13'-0"	190	163		353	2	5'-3"	2'-9"	5'-3"			
A508		5	7	16	11	6	45	12'-4"	206	206	168	580	2	4'-11"	2'-9"	4'-11"			
A509	2	2	2	2			8	5'-10"	25	13	13	51	1	3'-9"	2'-3"				
A510		2				2	4	5'-9"			12	24	1	4'-11"	1'-0"				
A511		2					2	6'-4"			14	14	1	5'-6"	1'-0"				
A512	2	9					11	14'-4"	30	135		165	2	5'-11"	2'-9"	5'-11"			
A513			32				32	13'-6"			451	451	2	5'-6"	2'-9"	5'-6"			
A514			21				21	12'-8"			278	278	2	5'-1"	2'-9"	5'-1"			
A515			49				49	5'-4"			273	273	2	1'-5"	2'-9"	1'-5"			
A516			1				1	19'-3"			21	21	STR						
A517			7			15	22	12'-2"			280	280	2	4'-10"	2'-9"	4'-10"			
A518			7		14	18	39	11'-10"		173	309	482	2	4'-8"	2'-9"	4'-8"			
A519			7				7	11'-6"			84	84	2	4'-6"	2'-9"	4'-6"			
A520			21		10		31	11'-2"		117	245	362	2	4'-4"	2'-9"	4'-4"			
A521	1		1				2	11'-2"	12		12	24	3	3'-1"	2'-2"				
A522	1 SERIES OF 7						1 SERIES OF 7	12'-8" TO 17'-0"	109			109	3	3'-10" TO 6'-0"	2'-2"			9" (-)	
A523	1 SERIES OF 7						1 SERIES OF 7	18'-2" TO 22'-6"	149			149	3	6'-7" TO 8'-9"	2'-2"			9" (-)	
A524	16						16	21'-1"	352			352	2	9'-7"	2'-2"	9'-7"			
A525	1 SERIES OF 5						1 SERIES OF 5	6'-9" TO 9'-9"	44			44	2	2'-5" TO 3'-11"	2'-2"	2'-5" TO 3'-11"		9"	
A526	1 SERIES OF 7						1 SERIES OF 7	10'-9" TO 15'-1"	95			95	2	4'-5" TO 6'-7"	2'-2"	4'-5" TO 6'-7"		9" (-)	
A527	4		5				9	15'-5"	65		81	146	2	6'-9"	2'-2"	6'-9"			
A528	2						2	7'-10"	17			17	1	7'-0"	1'-0"				
A529	2						2	12'-6"	27			27	1	9'-7"	3'-1"				
A530	1						1	39'-4"	42			42	STR						
A531	1						1	37'-4"	39			39	STR						
A532	1						1	35'-4"	37			37	STR						
A533	1						1	33'-4"	35			35	STR						
A534						4	4	14'-2"			60	60	STR						
A535	1						1	30'-11"	33			33	STR						
A536	1						1	28'-11"	31			31	STR						
A537	1						1	27'-3"	29			29	STR						
A538	1						1	25'-3"	27			27	STR						
A539	1 SERIES OF 4						1 SERIES OF 4	10'-9" TO 24'-0"	73			73	STR					4'-4"	
A540	1 SERIES OF 4						1 SERIES OF 4	8'-9" TO 22'-0"	65			65	STR					4'-4"	
A541	1						1	26'-9"	28			28	19	6'-4"	19'-4"	6'-7"			
A542	1						1	24'-9"	26			26	19	4'-4"	19'-4"	6'-7"			
A543	7						7	10'-1"	74			74	STR						
A544	14	4	35	18		30	101	30'-0"	1002	126	2034	3162	STR						
A545	6						6	26'-7"	167			167	STR						
A546%	13	7	7	11	11	7	56	30'-0"	751	564	439	1754	STR						
A547%		7					7	24'-9"		181		181	STR						
A548%		4					4	23'-11"		100		100	STR						
A549			2				2	10'-4"			22	22	STR						
A550			7				7	32'-10"			240	240	STR						
A551			2		2		4	5'-2"		11	11	22	1	4'-4"	1'-0"				
A552			2				2	5'-0"			11	11	1	3'-9"	1'-5"				
A553	2		2	1			5	9'-8"	31		21	52	1	6'-9"	3'-1"				
A554			2				2	9'-5"			20	20	1	6'-6"	3'-1"				

LEGEND

% - BARS TO UTILIZE A MECHANICAL CONNECTOR BAR LENGTH IS MEASURED TO THE CONSTRUCTION JOINT. EXTRA BAR LENGTH AND/OR BAR END PREPARATION MAY BE NECESSARY DEPENDING UPON THE TYPE OF MECHANICAL CONNECTOR FURNISHED.

NOTES

- SEE SHEET 78/78 FOR BENDING DIAGRAM AND NOTES.
- SEE SHEET 73/78 FOR MECHANICAL CONNECTOR TABLE.

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MARK	NUMBER						TOTAL	LENGTH	WEIGHT				TYPE	DIMENSIONS					
	R.A.			F.A.					PHASE 1	PHASE 2	PHASE 3	TOTAL		A	B	C	D	E	INC.
	PHASE 1	PHASE 2	PHASE 3	PHASE 1	PHASE 2	PHASE 3													
ABUTMENTS (CONTINUED)																			
A555			1 SERIES OF 5				1 SERIES OF 5	12'-7" TO 14'-11"			72	72	2	5'-4" TO 6'-6"	2'-2"	5'-4" TO 6'-6"		7"	
A556			1 SERIES OF 7				1 SERIES OF 7	19'-0" TO 23'-10"			157	157	3	7'-0" TO 9'-5"	2'-2"			9" (+)	
A557			1 SERIES OF 7				1 SERIES OF 7	12'-10" TO 17'-10"			112	112	3	3'-11" TO 6'-5"	2'-2"			10"	
A558	1		1				2	11'-8"	13		13	26	3	3'-4"	2'-2"				
A559			1				1	22'-6"			24	24	STR						
A560			2				2	7'-9"			17	17	STR						
A561			1				1	19'-1"			20	20	19	1'-4"	16'-7"	6'-4"			
A562			1				1	21'-2"			23	23	19	3'-5"	16'-7"	6'-4"			
A563			1 SERIES OF 5				1 SERIES OF 5	2'-8" TO 17'-10"			54	54	STR					3'-9 1/2"	
A564			1 SERIES OF 5				1 SERIES OF 5	4'-10" TO 20'-0"			65	65	STR					3'-9 1/2"	
A565			1				1	24'-9"			26	26	STR						
A566			1				1	21'-6"			23	23	STR						
A567	1						1	23'-6"	25		25	25	3	9'-3"	2'-2"				
A568	1						1	24'-2"	26		26	26	3	9'-7"	2'-2"				
A569%		2					2	12'-0"		26	26	26	STR						
A570				2	34	81	117	5'-6"	12	196	465	673	2	1'-6"	2'-9"	1'-6"			
A571					7	28	35	11'-8"		86	341	427	2	4'-7"	2'-9"	4'-7"			
A572					1	29	30	12'-6"		14	379	393	2	5'-0"	2'-9"	5'-0"			
A573						1	1	24'-6"			26	26	3	9'-4"	2'-7"				
A574						1	1	13'-7"			15	15	2	4'-10"	4'-2"	4'-10"			
A575						1	1	7'-9"			9	9	2	1'-11"	4'-2"	1'-11"			
A576						1 SERIES OF 3	1 SERIES OF 3	10'-4" TO 15'-6"			41	41	3	2'-3" TO 4'-10"	2'-7"			2'-7"	
A577						1	1	11'-3"			12	12	2	4'-10"	1'-10"	4'-10"			
A578						1	1	5'-5"			6	6	2	1'-11"	1'-10"	1'-11"			
A579						7	7	33'-3"			243	243	STR						
A580			1				1	21'-0"	22		22	22	STR						
A581			1				1	23'-2"	25		25	25	STR						
A582				2	2		4	5'-1"		11	11	22	1	3'-9"	1'-6"				
A583				4			4	16'-0"		67	67	67	STR						
A584			7				7	8'-1"	60		60	60	STR						
A585			2				2	6'-5"	14		14	14	1	5'-7"	1'-0"				
A586			7				7	18'-1"	133		133	133	2	8'-1"	2'-2"	8'-1"			
A587%				7			7	26'-9"		196	196	196	STR						
A588			4				4	8'-7"	36		36	36	STR						
A589			1 SERIES OF 7				1 SERIES OF 7	10'-7" TO 15'-1"	94		94	94	2	4'-4" TO 6'-7"	2'-2"	4'-4" TO 6'-7"		9"	
A590			1 SERIES OF 7				1 SERIES OF 7	19'-10" TO 24'-6"	162		162	162	3	7'-5" TO 9'-9"	2'-2"			9" (+)	
A591			1 SERIES OF 7				1 SERIES OF 7	14'-0" TO 18'-8"	120		120	120	3	4'-6" TO 6'-10"	2'-2"			9" (+)	
A592			1				1	13'-0"	14		14	14	3	4'-0"	2'-2"				
A593			1				1	12'-2"	13		13	13	3	3'-7"	2'-2"				
A594			1				1	26'-8"	28		28	28	STR						
A595			1				1	28'-10"	31		31	31	STR						
A596			2				2	9'-8"	21		21	21	STR						
A597			1				1	24'-10"	26		26	26	STR						
A598			1				1	27'-0"	29		29	29	STR						
A599			1				1	20'-10"	22		22	22	19	2'-0"	17'-8"	6'-6"			
A5100			1				1	22'-11"	24		24	24	19	4'-1"	17'-8"	6'-6"			
A5101			1 SERIES OF 5				1 SERIES OF 5	3'-11" TO 19'-6"	62		62	62	STR					3'-10" (-)	
A5102			1 SERIES OF 5				1 SERIES OF 5	6'-1" TO 21'-8"	73		73	73	STR					3'-10" (-)	
A5103	2						2	17'-2"	36		36	36	STR						

LEGEND

% - BARS TO UTILIZE A MECHANICAL CONNECTOR BAR LENGTH IS MEASURED TO THE CONSTRUCTION JOINT. EXTRA BAR LENGTH AND/OR BAR END PREPARATION MAY BE NECESSARY DEPENDING UPON THE TYPE OF MECHANICAL CONNECTOR FURNISHED.

NOTES

- SEE SHEET 78/78 FOR BENDING DIAGRAM AND NOTES.
- SEE SHEET 73/78 FOR MECHANICAL CONNECTOR TABLE.



DESIGNED BY: ERK
 CHECKED BY: STK
 DRAWN BY: ERK
 REVISIONS: REVISED
 REVIEWED BY: WHM
 DATE: 5/3/2017
 STRUCTURE FILE NUMBER: 7705493

REINFORCING STEEL LIST
 BRIDGE NO. SUM-76-0580
 OVER S.R. 619 (WOOSTER ROAD)

SUM-76-5.53
 PID No. 96670

P:\DDT\MP\0093_SUM-76-5.62\SUM-76-5.62\SUM-76-5.62\Design\Structures\SUM076_0580C_S1003.dgn Sheet 10/1/2018 2:05:59 PM cmt007

MARK	NUMBER						TOTAL	LENGTH	WEIGHT				TYPE	DIMENSIONS														
	R.A.			F.A.					PHASE 1	PHASE 2	PHASE 3	TOTAL		A	B	C	D	E	INC.									
	PHASE 1	PHASE 2	PHASE 3	PHASE 1	PHASE 2	PHASE 3																						
ABUTMENTS (CONTINUED)																												
A5104						1	1	9'-11"			11	11	2	4'-10"	6"	4'-10"												
A5105						1	1	4'-1"			5	5	2	1'-11"	6"	1'-11"												
A5106				1			1	11'-0"	12			12	1	8'-1"	3'-1"													
A801	5						5	19'-4"	259			259	STR															
A802	10		20	10		15	55	30'-0"	1602		2804	4406	STR															
A803	1 SERIES OF 4						1 SERIES OF 4	32'-9" TO 35'-3"	364			364	19	17'-10" TO 20'-4"	14'-11"	6"		10"										
A804	4	12					16	22'-2"	237	711		948	19	7'-3"	14'-11"	6"												
A805%	5	5	5	5	5	5	30	30'-0"	801	801	801	2403	STR															
A806%	4						4	13'-3"	142			142	19	7'-3"	6'-0"	3"												
A807%		4					4	8'-11"		96		96	STR															
A808%		5					5	27'-10"		372		372	STR															
A809		4					4	9'-11"		106		106	STR															
A810			4				4	33'-4"			356	356	20	5"	15'-2"	3'-0"	15'-2"	5"										
A811			4				4	24'-9"			265	265	STR															
A812			4				4	11'-6"			123	123	STR															
A813			5				5	21'-0"			281	281	STR															
A814					5		5	18'-4"			245	245	STR															
A815					1 SERIES OF 4		1 SERIES OF 4	11'-3" TO 14'-3"			137	137	19	5'-5" TO 8'-5"	5'-10"	1"		1'-0"										
A816					4		4	19'-11"			213	213	19	7'-3"	12'-8"	2"												
A817					20		20	22'-5"			1198	1198	19	7'-3"	15'-2"	1"												
A818					4		4	33'-4"			356	356	20	3"	15'-2"	3'-0"	15'-2"	7"										
A819					4		4	11'-10"			127	127	STR															
A820%				4			4	14'-6"		155		155	STR															
A821%				4			4	21'-5"	229			229	19	7'-3"	14'-2"	2"												
A822				1 SERIES OF 4			1 SERIES OF 4	33'-8" TO 36'-5"	375			375	19	18'-9" TO 21'-6"	14'-11"	4"		11"										
A823				5			5	17'-4"	232			232	STR															
A824%					5		5	29'-10"		399		399	STR															
A825			20				20	22'-5"			1198	1198	19	7'-3"	15'-2"	5"												
A826				4	8		12	22'-2"	237	474		711	19	7'-3"	14'-11"	4"												
A901						8	8	41'-3"			1122	1122	STR															
SUB-TOTAL																												

MARK	NUMBER				LENGTH	WEIGHT				TYPE	DIMENSIONS					
	PHASE 1	PHASE 2	PHASE 3	TOTAL		PHASE 1	PHASE 2	PHASE 3	TOTAL		A	B	C	D	R	INC.
APPROACH SLABS																
AS501			453	453	30'-0"			14175	14175	STR						
AS502			67	67	36'-4"			2540	2540	STR						
AS503	22	23	53	98	30'-1"	691	722	1663	3076	STR						
AS504		1	4	5	29'-6"		31	124	155	STR						
AS505			2	2	31'-0"			65	65	STR						
AS506			63	63	13'-11"			915	915	STR						
AS507	134		55	189	28'-4"	3960		1626	5586	STR						
AS508			2	2	30'-4"			64	64	STR						
AS509		134		134	27'-0"		3774		3774	STR						
AS510	5	4	20	29	29'-5"	154	123	614	891	STR						
AS511	2	1		3	28'-11"	61	31	92	92	STR						
AS512	1			1	29'-8"	31		31	31	STR						
AS513	6			6	29'-3"	184		184	184	STR						
AS514		126		126	28'-5"		3735		3735	STR						
AS515	126			126	27'-3"	3582			3582	STR						
AS516	1	1	1	3	28'-10"	31	31	31	93	STR						
AS517			4	4	30'-3"			127	127	STR						
AS518	1			1	29'-4"	31		31	31	STR						
AS519	21	24		45	28'-5"	623	712		1335	STR						
AS520	71		72	143	7'-4"	544		551	1095	23	11"	3'-3"	3'-0"		2 3/4"	

MECHANICAL CONNECTORS		
LOCATION	BAR SIZE	TOTAL
ABUTMENTS	5	38
	8	28

LEGEND

% - BARS TO UTILIZE A MECHANICAL CONNECTOR BAR LENGTH IS MEASURED TO THE CONSTRUCTION JOINT. EXTRA BAR LENGTH AND/OR BAR END PREPARATION MAY BE NECESSARY DEPENDING UPON THE TYPE OF MECHANICAL CONNECTOR FURNISHED.

NOTE

SEE SHEET 78/78 FOR BENDING DIAGRAM AND NOTES.



DESIGNED BY: ERK
 CHECKED BY: STK
 DRAWN BY: ERK
 REVISIONS:
 WHM 5/3/2017
 STRUCTURE FILE NUMBER: 7705493

REINFORCING STEEL LIST
 BRIDGE NO. SUM-76-0580
 OVER S.R. 619 (WOOSTER ROAD)

SUM-76-5.53
 PID No. 96670

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MARK	NUMBER				LENGTH	WEIGHT				TYPE	DIMENSIONS					
	PHASE 1	PHASE 2	PHASE 3	TOTAL		PHASE 1	PHASE 2	PHASE 3	TOTAL		A	B	C	D	R	INC.
APPROACH SLABS (CONTINUED)																
AS521			6	6	9'-9"			62	62	STR						
AS522			4	4	31'-0"			130	130	STR						
AS523	8			8	14'-4"	120			120	STR						
AS524	6		16	22	2'-1"	14		35	49	STR						
AS525			6	6	2'-0"			13	13	STR						
AS526	6	10		16	1'-11"	12	20		32	STR						
AS527		10		10	6'-2"		65		65	STR						
AS528		91	90	181	14'-1"		1337	1323	2660	35	1'-2"	1'-5"	1'-0"	4'-7"	3"	
AS529			10	10	5'-6"			58	58	STR						
AS530		31		31	5'-9"		186		186	24	6"	2'-6"			3"	
AS531			6	6	9'-11"			63	63	STR						
AS532		20			29'-5"		614		614	STR						
AS601	71		73	144	3'-3"	347		357	704	28	1'-7"	1'-0"				
AS602	71		73	144	2'-5"	258		265	523	1	1'-0"	1'-7"				
AS603			3	3	9'-9"			44	44	STR						
AS604	4			4	14'-4"	87			87	STR						
AS605	1		2	3	2'-1"	4		7	11	STR						
AS606			1	1	2'-0"			4	4	STR						
AS607	1	2		3	1'-11"	3	6		9	STR						
AS608		2		2	6'-2"		19		19	STR						
AS609			2	2	29'-5"			89	89	STR						
AS610			1	1	5'-6"			9	9	STR						
AS611		2		2	29'-5"		89		89	STR						
AS612		2		2	4'-6"		14		14	STR						
AS613			3	3	9'-11"			45	45	STR						
ASI001	61	62	146	269	31'-6"	8269	8404	19790	36463	16	30'-1"					
ASI002			7	7	30'-11"			932	932	16	29'-6"					
ASI003			1	1	31'-4"			135	135	16	29'-11"					
ASI004			3	3	32'-5"			419	419	16	31'-0"					
ASI005			152	152	29'-9"			19459	19459	16	28'-4"					
ASI006			1	1	30'-4"			131	131	16	28'-11"					
ASI007			1 SERIES OF 4	1 SERIES OF 4	9'-10" TO 30'-11"			351	351	16	8'-4" TO 29'-6"				7'-0" (+)	
ASI008	2		1	3	30'-9"	265		133	398	16	29'-4"					
ASI009			1	1	30'-2"			130	130	16	28'-9"					
ASI010	1			1	31'-5"	136			136	16	30'-0"					
ASI011	1	6		7	30'-10"	133	797		930	16	29'-5"					
ASI012	4	3		7	30'-5"	524	393		917	16	29'-0"					
ASI013		1		1	31'-3"		135		135	16	29'-10"					
ASI014	60	66		126	29'-10"	7703	8473		16176	16	28'-5"					
ASI015		1 SERIES OF 3		1 SERIES OF 3	30'-2" TO 30'-11"		395		395	16	28'-9" TO 29'-6"				4 1/2"	
ASI016	1	1		2	30'-3"	131	131		262	16	28'-10"					
ASI017	3			3	30'-9"	397			397	16	29'-4"					
ASI018			1	1	31'-10"			137	137	16	30'-5"					
ASI019			1	1	32'-2"			139	139	16	30'-9"					
SUB-TOTAL									125287							

MARK	NUMBER				LENGTH	WEIGHT				TYPE	DIMENSIONS			
	PHASE 1	PHASE 2	PHASE 3	TOTAL		PHASE 1	PHASE 2	PHASE 3	TOTAL		A	B	C	INC.
SLAB														
S401			9	9	10'-3"			62	62	2	8'-2"	7"	1'-8"	
S402	8		18	26	11'-0"	59		133	192	2	8'-7"	7"	2'-1"	
S403	10		41	51	11'-3"	76		309	385	2	8'-8"	7"	2'-2"	
S404	10		31	41	11'-4"	76		235	311	2	8'-9"	7"	2'-3"	
S405	24		33	57	11'-6"	185		254	439	2	8'-10"	7"	2'-4"	
S406	26		37	63	11'-8"	203		289	492	2	8'-11"	7"	2'-5"	
S407	30		40	70	11'-10"	238		317	555	2	9'-0"	7"	2'-6"	
S408	40		68	108	12'-0"	321		546	867	2	9'-1"	7"	2'-7"	

NOTE
SEE SHEET [78/78] FOR BENDING DIAGRAM AND NOTES.



DESIGNED BY: GDU
 CHECKED BY: GDU
 DRAWN BY: ERK
 ERK REVISIONS
 REVIEWED BY: STK
 STK STRUCTURE FILE NUMBER: 7705493
 DATE: 6/14/2018

REINFORCING STEEL LIST
 BRIDGE NO. SUM-76-0580
 OVER S.R. 619 (WOOSTER ROAD)

SUM-76-5.53
 PID No. 96670

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MARK	NUMBER				LENGTH	WEIGHT				TYPE	DIMENSIONS			
	PHASE 1	PHASE 2	PHASE 3	TOTAL		PHASE 1	PHASE 2	PHASE 3	TOTAL		A	B	C	INC.
SLAB (CONTINUED)														
S409	94		86	180	12'-3"	770		704	1474	2	9'-2"	7"	2'-8"	
S410	9		18	27	10'-10"	66		131	197	2	8'-6"	7"	2'-0"	
S411	7		17	24	10'-8"	50		122	172	2	8'-5"	7"	1'-11"	
S412	172	188	445	805	30'-0"	3447	3768	8918	16133	STR				
S413	43	47	109	199	22'-8"	652	712	1651	3015	STR				
S414	13		8	21	10'-4"	90		56	146	2	8'-3"	7"	1'-9"	
S415	8		9	17	10'-6"	57		64	121	2	8'-4"	7"	1'-10"	
S416		7	9	16	8'-4"		39	51	90	2	7'-3"	7"	9"	
S417		9	9	18	8'-3"		50	50	100	2	7'-2"	7"	8"	
S418		11	9	20	8'-0"		59	49	108	2	7'-1"	7"	7"	
S419		20	9	29	7'-10"		105	48	153	2	7'-0"	7"	6"	
S420		20	9	29	7'-8"		103	47	150	2	6'-11"	7"	5"	
S421		24	9	33	7'-6"		121	46	167	2	6'-10"	7"	4"	
S422		26	8	34	7'-4"		128	40	168	2	6'-9"	7"	3"	
S423		32	9	41	7'-3"		155	44	199	2	6'-8"	7"	2"	
S424		42	9	51	7'-0"		197	43	240	2	6'-7"	7"	1"	
S425		83	13	96	7'-0"		389	61	450	1	6'-6"	7"		
S426			1	1	22'-2"			15	15	STR				
S427			1	1	11'-6"			8	8	STR				
S428			1	1	27'-3"			19	19	STR				
S429			1	1	24'-7"			17	17	STR				
S430			9	9	8'-6"			52	52	2	7'-4"	7"	10"	
S431			9	9	8'-9"			53	53	2	7'-5"	7"	11"	
S432			8	8	8'-10"			48	48	2	7'-6"	7"	1'-0"	
S433			9	9	9'-0"			55	55	2	7'-7"	7"	1'-1"	
S434			9	9	9'-3"			56	56	2	7'-8"	7"	1'-2"	
S435			9	9	9'-4"			57	57	2	7'-9"	7"	1'-3"	
S436			9	9	9'-6"			58	58	2	7'-10"	7"	1'-4"	
S437			9	9	9'-9"			59	59	2	7'-11"	7"	1'-5"	
S438			9	9	9'-10"			60	60	2	8'-0"	7"	1'-6"	
S439			9	9	10'-0"			61	61	2	8'-1"	7"	1'-7"	
S501	203		238	441	30'-7"	6476		7592	14068	16	30'-0"			
S502			388	388	21'-10"			8836	8836	STR				
S503			2 SERIES OF 61	2 SERIES OF 61	4'-1" TO 29'-11"			2164	2164	STR				5" (+)
S504			2 SERIES OF 40	2 SERIES OF 40	3'-6" TO 20'-2"			988	988	STR				5" (+)
S505	10	10		20	3'-9"	40	40		80	STR				
S506		1 SERIES OF 76		1 SERIES OF 76	4'-3" TO 37'-6"		1659		1659	16	3'-8" TO 36'-11"			5 1/2" (-)
S507		2 SERIES OF 65		2 SERIES OF 65	5'-7" TO 35'-2"		2763		2763	STR				5 1/2" (+)
S508	371	180	727	1278	30'-0"	11609	5633	22748	39990	STR				
S509	2 SERIES OF 69			2 SERIES OF 69	5'-3" TO 35'-8"	2945			2945	STR				5 1/2" (-)
S510	1 SERIES OF 78			1 SERIES OF 78	4'-3" TO 39'-7"	1784			1784	16	3'-8" TO 39'-0"			5 1/2" (+)
S511			2 SERIES OF 44	2 SERIES OF 44	3'-6" TO 21'-6"		1148		1148	STR				5" (+)
S512	42	45	100	187	25'-3"	1107	1186	2634	4927	STR				
S513	406			406	12'-8"	5364			5364	STR				
S514			1 SERIES OF 64	1 SERIES OF 64	4'-1" TO 30'-6"			1158	1158	16	3'-6" TO 29'-11"			5" (+)
S515	1 SERIES OF 78			1 SERIES OF 78	3'-8" TO 39'-0"	1736			1736	STR				5 1/2" (+)
S516		1 SERIES OF 76		1 SERIES OF 76	3'-8" TO 36'-11"		1609		1609	STR				5 1/2" (-)
S517			20	20	3'-4"			70	70	STR				
S518			1 SERIES OF 64	1 SERIES OF 64	3'-6" TO 29'-11"			1116	1116	STR				5" (+)
S519		206		206	37'-8"		8093		8093	16	37'-1"			
S520		206		206	37'-1"		7968		7968	STR				

NOTE
SEE SHEET 78/78 FOR BENDING DIAGRAM AND NOTES.



DESIGNED BY: ERK
CHECKED BY: GDU
DRAWN BY: ERK
ERK REVISOR
REVIEWED BY: STK
STK
DATE: 6/14/2018
STRUCTURE FILE NUMBER: 7705493

REINFORCING STEEL LIST
BRIDGE NO. SUM-76-0580
OVER S.R. 619 (WOOSTER ROAD)

SUM-76-5.53
PID No. 96670

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MARK	NUMBER				LENGTH	WEIGHT				TYPE	DIMENSIONS			
	PHASE 1	PHASE 2	PHASE 3	TOTAL		PHASE 1	PHASE 2	PHASE 3	TOTAL		A	B	C	INC.
SLAB (CONTINUED)														
S521			1	1	23'-11"			25	25	STR				
S522			1	1	12'-8"			14	14	STR				
S523			1	1	27'-4"			29	29	STR				
S524			1	1	26'-11"			29	29	STR				
S525			1 SERIES OF 81	1 SERIES OF 81	4'-4" TO 39'-3"			1845	1845	16	3'-9" TO 38'-8"			5" (+)
S526			1 SERIES OF 81	1 SERIES OF 81	3'-9" TO 38'-8"			1792	1792	STR				5" (+)
S527			215	215	39'-5"			8839	8839	16	38'-10"			
S528			215	215	38'-10"			8709	8709	STR				
S529			2 SERIES OF 79	2 SERIES OF 79	4'-5" TO 36'-9"			3393	3393	STR				5" (-)
SUB-TOTAL									160145					

MARK	NUMBER				LENGTH	WEIGHT				TYPE	DIMENSIONS				
	PHASE 1	PHASE 2	PHASE 3	TOTAL		PHASE 1	PHASE 2	PHASE 3	TOTAL		A	B	C	D	R
RAILING															
R501	140		144	284	7'-4"	1071		1102	2173	23	11"	3'-3"	3'-0"		2 3/4"
R502	16	48	64	128	14'-6"	242	726	968	1936	STR					
R503	16	16	32	64	30'-0"	501	501	1002	2004	STR					
R504	2			2	10'-4"	22			22	STR					
R505	4			4	18'-9"	79			79	STR					
R506			2	2	14'-1"			30	30	STR					
R507			4	4	22'-7"			95	95	STR					
R508		145	145	290	13'-1"		1979	1979	3958	35	8"	1'-5"	1'-0"	4'-7"	3"
R509		6		6	11'-0"		69		69	STR					
R510		4		4	19'-5"		82		82	STR					
R511			6	6	11'-2"			70	70	STR					
R512			4	4	19'-8"			83	83	STR					
R601	140		144	284	3'-3"	684		703	1387	28	1'-7"	1'-0"			
R602	140		144	284	2'-5"	509		523	1032	1	1'-0"	1'-7"			
R603	8	8	16	32	14'-6"	175	175	349	699	STR					
R604	1			1	10'-4"	16			16	STR					
R605			1	1	14'-0"			22	22	STR					
R606		1		1	11'-0"		17		17	STR					
R607			1	1	11'-2"			17	17	STR					
SUB-TOTAL									13791						

NOTE
SEE SHEET 78/78 FOR BENDING DIAGRAM AND NOTES.

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MARK	NUMBER						LENGTH	WEIGHT				TYPE	DIMENSIONS					
	R.A.			F.A.				TOTAL	PHASE 1	PHASE 2	PHASE 3		TOTAL	A	B	C		
	PHASE 1	PHASE 2	PHASE 3	PHASE 1	PHASE 2	PHASE 3												
DIAPHRAGM GUIDES																		
DG601	5		5	5		5	20	15'-11"	240		240	480	3	3'-10"	3'-8 1/2"			
DG801	7		7	7		7	28	13'-8"	511		511	1022	5	2'-8"	3'-7"	2'-4"		
SUB-TOTAL															1502			

MARK	NUMBER						LENGTH	WEIGHT				TYPE	DIMENSIONS					
	R.A.			F.A.				TOTAL	PHASE 1	PHASE 2	PHASE 3		TOTAL	A	B	C		
	PHASE 1	PHASE 2	PHASE 3	PHASE 1	PHASE 2	PHASE 3												
DIAPHRAGM																		
D401	2		2	2		2	8	3'-11"	11		11	22	STR					
D501	34	35	79	33	37	82	300	8'-1"	565	608	1358	2531	2	2'-7"	3'-2"	2'-7"		
D502	62	70	152	60	74	158	576	13'-2"	1676	1978	4258	7912	2	4'-9"	3'-11"	4'-9"		
D503	6		6	6		6	24	10'-0"	126		126	252	2	3'-2"	3'-11"	3'-2"		
D504	6		6	6		6	24	4'-2"	27	27	53	107	19	2'-9"	1'-0"	1'-0"		
D505		6	6	6		6	24	8'-10"	56	56	111	223	1	3'-8"	5'-4"			
D801	24	25	57	23	25	59	213	6'-2"	774	824	1910	3508	18	4'-0"	1'-0"	1'-0"		
D802			40	12	18	30	100	30'-0"	962	1442	5607	8011	STR					
D803	12						12	26'-6"	850			850	STR					
D804	1						1	22'-6"	61			61	STR					
D805	1						1	20'-4"	55			55	STR					
D806	3						3	24'-0"	193			193	1	22'-6"	1'-8"			
D807	1						1	21'-10"	59			59	1	1'-8"	20'-4'			
D808	8		8	8		8	32	6'-10"	292		292	584	18	4'-1"	1'-5"	1'-5"		
D809%	12	18	12			18	60	30'-0"	962	1442	2403	4807	STR					
D810			14				14	25'-5"			951	951	STR					
D811%	2						2	24'-2"	130			130	STR					
D812%	4						4	25'-8"	275			275	1	24'-2"	1'-8"			
D813		18					18	27'-7"		1326		1326	STR					
D814			2				2	17'-9"			95	95	STR					
D815			4				4	14'-9"			158	158	1	13'-3"	1'-8"			
D816%			4				4	9'-9"			105	105	1	8'-3"	1'-8"			
D817%			2				2	8'-3"			45	45	STR					
D818%			18				18	21'-7"			1038	1038	STR					
D819						18	18	22'-8"			1090	1090	STR					
D820%						12	12	27'-10"			892	892	STR					
D821%						2	2	10'-7"			57	57	STR					
D822%						4	4	12'-0"			129	129	1	10'-7"	1'-8"			
D823						2	2	37'-3"			199	199	STR					
D824%						18	18	29'-11"		1438		1438	STR					
D825						4	4	38'-9"			414	414	1	37'-3"	1'-8"			
D826%				12			12	25'-2"	807			807	STR					
D827				4			4	25'-0"	267			267	1	23'-6"	1'-8"			
D828%				4			4	23'-4"	250			250	1	21'-10"	1'-8"			
D829				2			2	23'-6"	126			126	STR					
D830%				2			2	21'-10"	117			117	STR					
SUB-TOTAL															39084			

MECHANICAL CONNECTORS		
LOCATION	BAR SIZE	TOTAL
DIAPHRAGM	8	72

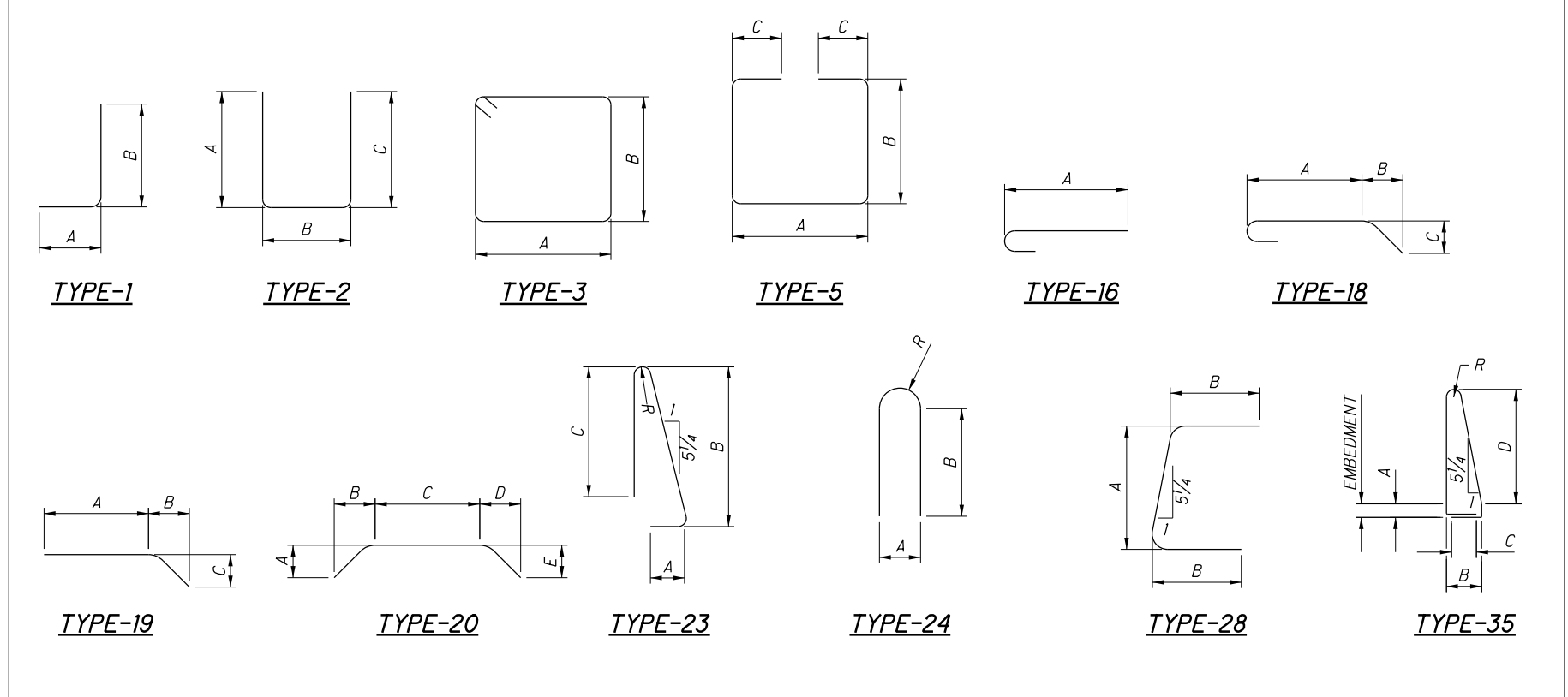
LEGEND

% - BARS TO UTILIZE A MECHANICAL CONNECTOR BAR LENGTH IS MEASURED TO THE CONSTRUCTION JOINT. EXTRA BAR LENGTH AND/OR BAR END PREPARATION MAY BE NECESSARY DEPENDING UPON THE TYPE OF MECHANICAL CONNECTOR FURNISHED.

NOTE

SEE SHEET 78/78 FOR BENDING DIAGRAM AND NOTES.

BENDING DIAGRAM



NOTES

1. THE BAR NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, S501 IS A NO. 5 BAR. BAR DIMENSIONS ARE OUT TO OUT UNLESS OTHERWISE INDICATED.
2. ALL REINFORCING STEEL IS TO BE EPOXY COATED.
3. MECHANICAL CONNECTORS TO BE INCLUDED FOR PAYMENT UNDER ITEM 509 - EPOXY COATED REINFORCING STEEL.
4. APPROACH SLAB REINFORCING STEEL SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 526, REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17"), AS PER PLAN.
5. DIAPHRAGM GUIDE REINFORCING STEEL SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 511, SEMI-INTEGRAL DIAPHRAGM GUIDE.

DESIGNED	ERK	CHECKED	GDJ
DRAWN	ERK	REVISED	
REVIEWED	STK	STRUCTURE FILE NUMBER	7705493
DATE	6/14/2018		

REINFORCING STEEL LIST
BRIDGE NO. SUM-76-0580
OVER S.R. 619 (WOOSTER ROAD)

SUM-76-5.53
PID No. 96670