

GENERAL NOTES

- NO TREES OR SHRUBS SHALL BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.
- THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE, THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK, ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.
- ALL HOLES OR OPENINGS BELOW SUBGRADE RESULTING FROM ABANDONMENT OR REMOVAL OF EXISTING STRUCTURES SHALL BE FILLED WITH GRANULAR BACKFILL WHICH WILL BE INCLUDED IN THE PRICE OF THE ABANDONED OR REMOVED ITEM.
- WHEN THE QUANTITY OF HMA PAVEMENT OR BASE AGGREGATE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.
- PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, THE CONTRACTOR SHALL VERIFY RELATED DRAINAGE INFORMATION IN THE PLANS WITH THE ENGINEER.
- INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHOWN ON THE PLAN MAY BE ADJUSTED BY THE ENGINEER TO FIT FIELD CONDITIONS.
- CURB AND GUTTER GRADES ARE GIVEN TO THE FLANGE. CURB AND GUTTER RADII ARE MEASURED TO THE FLANGE.
- TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLANDS.
- BROKEN CONCRETE CONTAINING RE-BAR SHALL NOT BE USED AS RIPRAP.
- CROSS SECTIONS SHOWN INCLUDE THE THICKNESS OF SALVAGED TOPSOIL WHERE REQUIRED. SALVAGED TOPSOIL SHALL BE REPLACED WITH 4-INCH MINIMUM DEPTH.
- TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- REMOVAL OF EROSION CONTROL DEVICES IS INCLUDED IN THE COST OF THEIR RESPECTIVE BID ITEMS.
- THE EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
- ASPHALTIC AND CONCRETE SURFACES SHALL BE SAWCUT AT THE MATCH LINE AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER.
- DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE SALVAGED TOPSOILED, FERTILIZED, SEEDED AND MULCHED/EROSION MATTED.
- INLET PROTECTION REQUIRED AT ALL INLETS AS PER DETAIL OR AS DIRECTED BY THE ENGINEER.
- FERTILIZER SHALL NOT BE USED WITHIN 20' OF NAVIGABLE WATERWAYS OR WETLANDS.

ORDER OF SECTION 2 DETAIL SHEETS

- GENERAL NOTES
- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- REMOVAL PLANS
- PLAN DETAILS
- EROSION CONTROL
- STORM SEWER ITS
- PAVEMENT MARKING AND SIGNING
- TRAFFIC CONTROL
- ALIGNMENT PLANS

- STATIONING FOR SIGNS SHOWN ON THE PLANS ARE APPROXIMATE AND THE FINAL LOCATIONS OF SIGNS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
- A CONVERSION FACTOR OF 2.10 TONS/CY IS USED TO ESTIMATE QUANTITIES FOR BASE AGGREGATE DENSE ¾-INCH.
- A CONVERSION FACTOR OF 2.00 TONS/CY IS USED TO ESTIMATE QUANTITIES FOR BASE AGGREGATE DENSE 1¼-INCH.
- A CONVERSION FACTOR OF 2.20 TONS/CY IS USED TO ESTIMATE QUANTITIES FOR BASE AGGREGATE DENSE 3-INCH.
- A CONVERSION FACTOR OF 1.90 TONS/CY IS USED TO ESTIMATE QUANTITIES FOR SELECT CRUSHED MATERIAL.
- A CONVERSION FACTOR OF 112 LBS/IN/SY IS USED TO ESTIMATE QUANTITIES FOR HMA PAVEMENT.
- ALL TYPES OF ASPHALTIC PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYERS AND GRADATIONS:

PAVEMENT TYPE	TOTAL LAYER PAVEMENT THICKNESS	LAYERS	NOMINAL MAXIMUM SIZE GRADATION	ASPHALTIC MATERIAL
E-0.3	3.50"	1.75" UPPER 1.75" LOWER	12.5 MM 12.5 MM	PG58-28 PG58-28
E-1.0	2.00"	2.00"	12.5 MM	PG58-28
E-1.0	3.00"	3.00"	12.5 MM	PG58-28
E-1.0	3.50"	1.75" UPPER 1.75" LOWER	12.5 MM 12.5 MM	PG58-28 PG58-28
E-1.0	4.00"	4.00"	12.5 MM	PG58-28
E-30	2.00"	2.00"	12.5 MM	PG64-28
E-30	4.00"	4.00"	19.0 MM	PG64-28
E-30	6.50"	2.00" UPPER 4.50" LOWER	12.5 MM 25.0 MM	PG64-28 PG58-28
E-30	7.50"	2.00" UPPER 2.75" MIDDLE 2.75" LOWER	12.5 MM 25.0 MM 25.0 MM	PG64-28 PG58-28 PG58-28
E-30	9.50"	2.00" UPPER 3.50" MIDDLE 4.00" LOWER	12.5 MM 25.0 MM 25.0 MM	PG64-28 PG58-28 PG58-28
ASPHALTIC SURFACE	3.00"	3.00"	--	--

STANDARD ABBREVIATIONS

- AECPRC APRON ENDWALL CULVERT PIPE REINFORCED CONCRETE
- AECPRCHE APRON ENDWALL CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
- AECPSS APRON ENDWALL CULVERT PIPE SLOPED SECTION
- AEW APRON END WALL
- AGG AGGREGATE
- ASPH ASPHALT
- BAD BASE AGGREGATE DENSE
- B/C BACK OF CURB
- BH BOREHOLE
- BM BENCH MARK
- C&G CURB AND GUTTER
- C/L OR CENTER OR CONSTRUCTION LINE
- CONC CONCRETE
- CP CULVERT PIPE
- CPCS CULVERT PIPE CORRUGATED STEEL
- CPRC CULVERT PIPE REINFORCED CONCRETE
- CPRCHE CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
- CSD CONCRETE SURFACE DRAIN
- CY CUBIC-YARD
- D DEGREE OF CURVE
- △ DELTA
- DISCH DISCHARGE
- EL ELEVATION
- ESTR EXISTING SIGN TO REMAIN
- FE FIELD ENTRANCE
- FMS FIXED MESSAGE SIGN
- HMA HOT MIX ASPHALT
- HTCG HIGH TENSION CABLE GUARD
- INV INVERT
- L LENGTH OF CURVE
- LHF LEFT HAND FORWARD
- LT LEFT
- MID MIDDLE OF RADIUS
- MIN MINIMUM
- M/L MATCHLINE
- NB NORTHBOUND
- NC NORMAL CROWN
- PAVT PAVEMENT
- PC POINT-OF CURVE
- PCC POINT OF COMPOUND CURVE
- PE PRIVATE ENTRANCE
- PGL PROFILE GRADE LINE
- PI POINT OF INTERSECTION
- PLE PERMANENT LIMITED EASEMENT
- PT POINT OF TANGENT
- R RADIUS OF CURVE
- R/L REFERENCE LINE
- R/W RIGHT OF WAY
- RC REVERSE CROWN
- RCAEW APRON ENDWALL FOR CULVERT PIPE REINFORCE CONCRETE
- REQ'D REQUIRED
- RHF RIGHT HAND FORWARD
- RO RUN OFF LENGTH
- RT RIGHT
- SALV SALVAGED
- SB SOUTHBOUND
- SDD STANDARD DETAIL DRAWING
- SE SUPER ELEVATION
- SF SQUARE FOOT
- SSPRC STORM SEWER PIPE REINFORCED CONCRETE
- SSPRCHE STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
- STA STATION
- SY SQUARE YARD
- T TANGENT LENGTH
- TLE TEMPORARY LIMITED EASEMENT
- TP TEST PIT
- TYP TYPICAL
- VCL VERTICAL CURVE LENGTH
- VPC POINT OF VERTICAL CURVE
- VPI POINT OF VERTICAL INTERSECTION
- VPT POINT OF VERTICAL TANGENT

UTILITY CONTACTS

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TO OBTAIN LOCATION OF
PARTICIPANTS UNDERGROUND
FACILITIES BEFORE YOU DIG IN
WISCONSIN

WIS. STATUTE 182.0175 (1974)
REQUIRES MIN. OF 3 WORK DAYS
NOTICE BEFORE YOU EXCAVATE.

ELECTRIC
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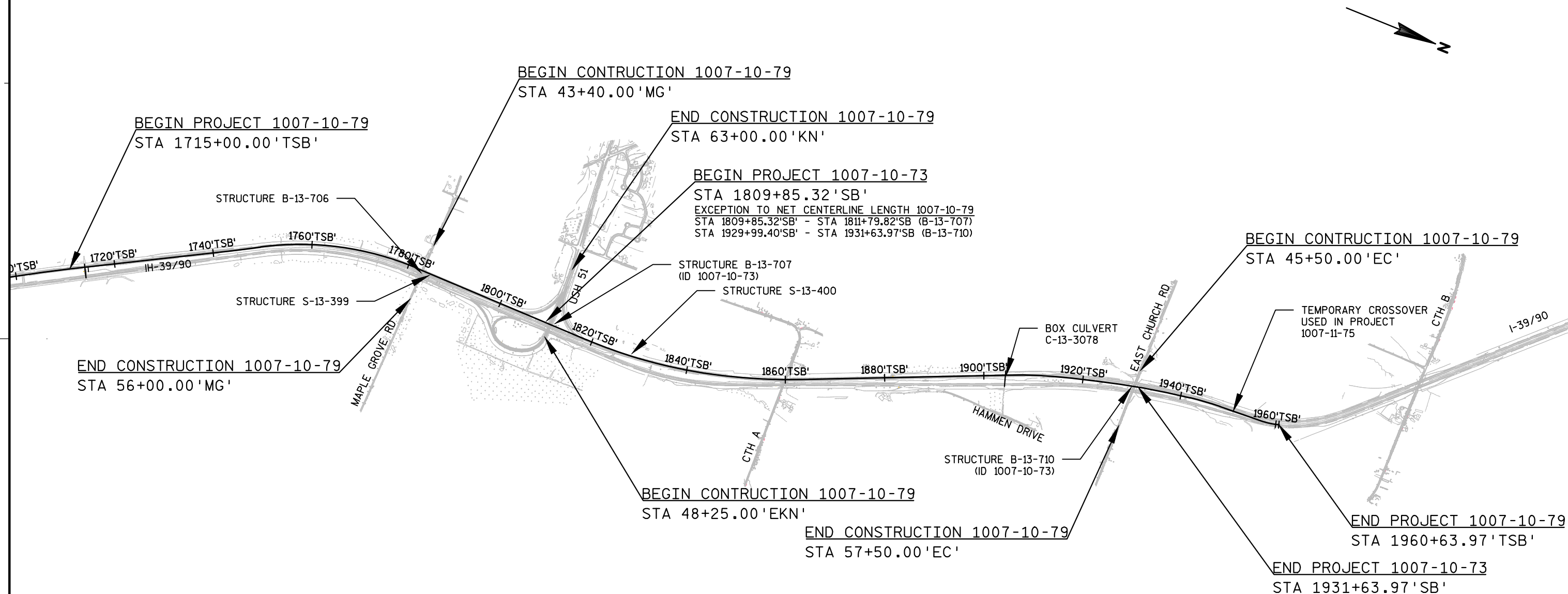
OTHER AGENCIES

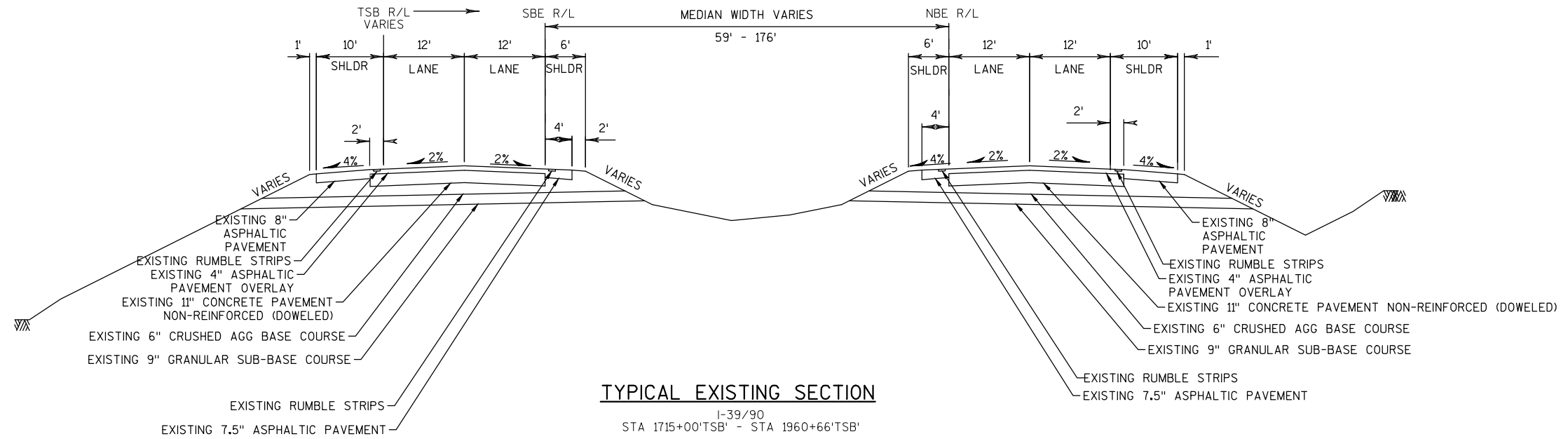
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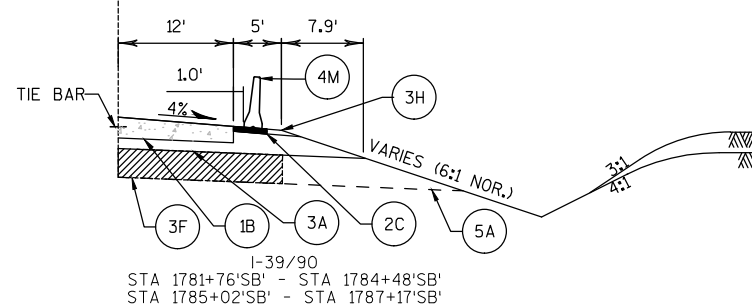
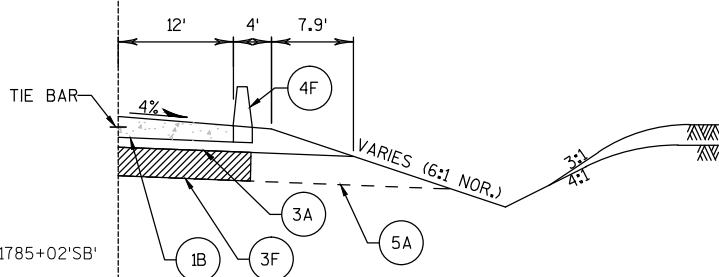
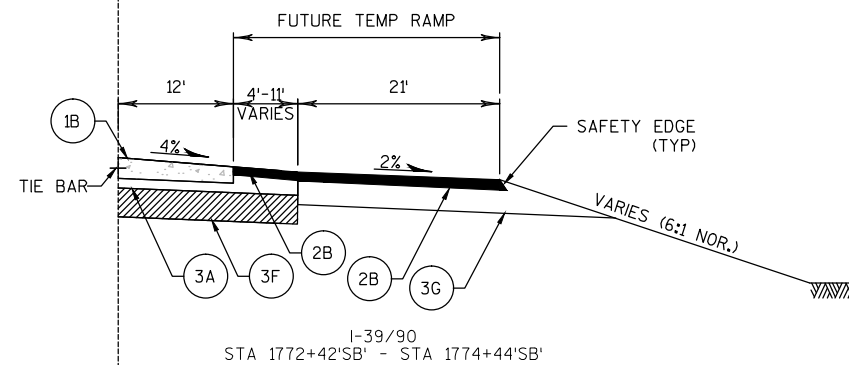
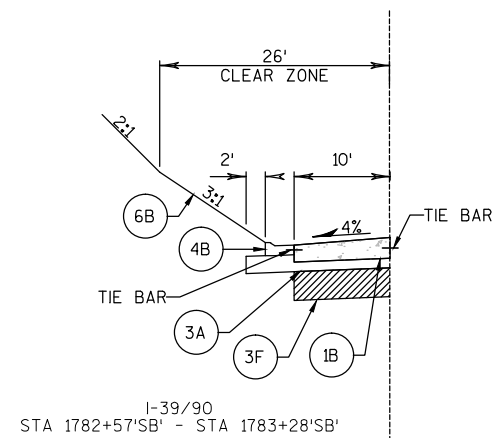
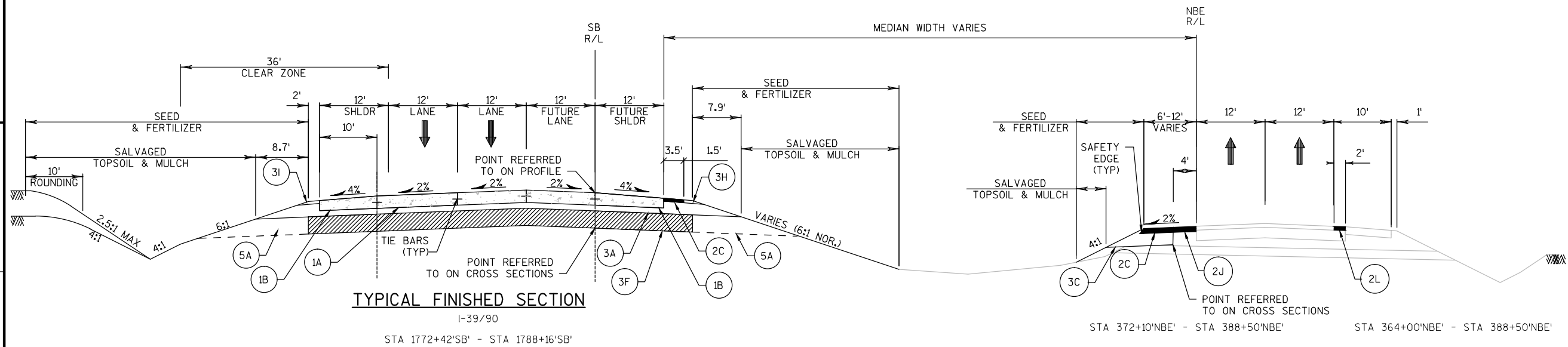
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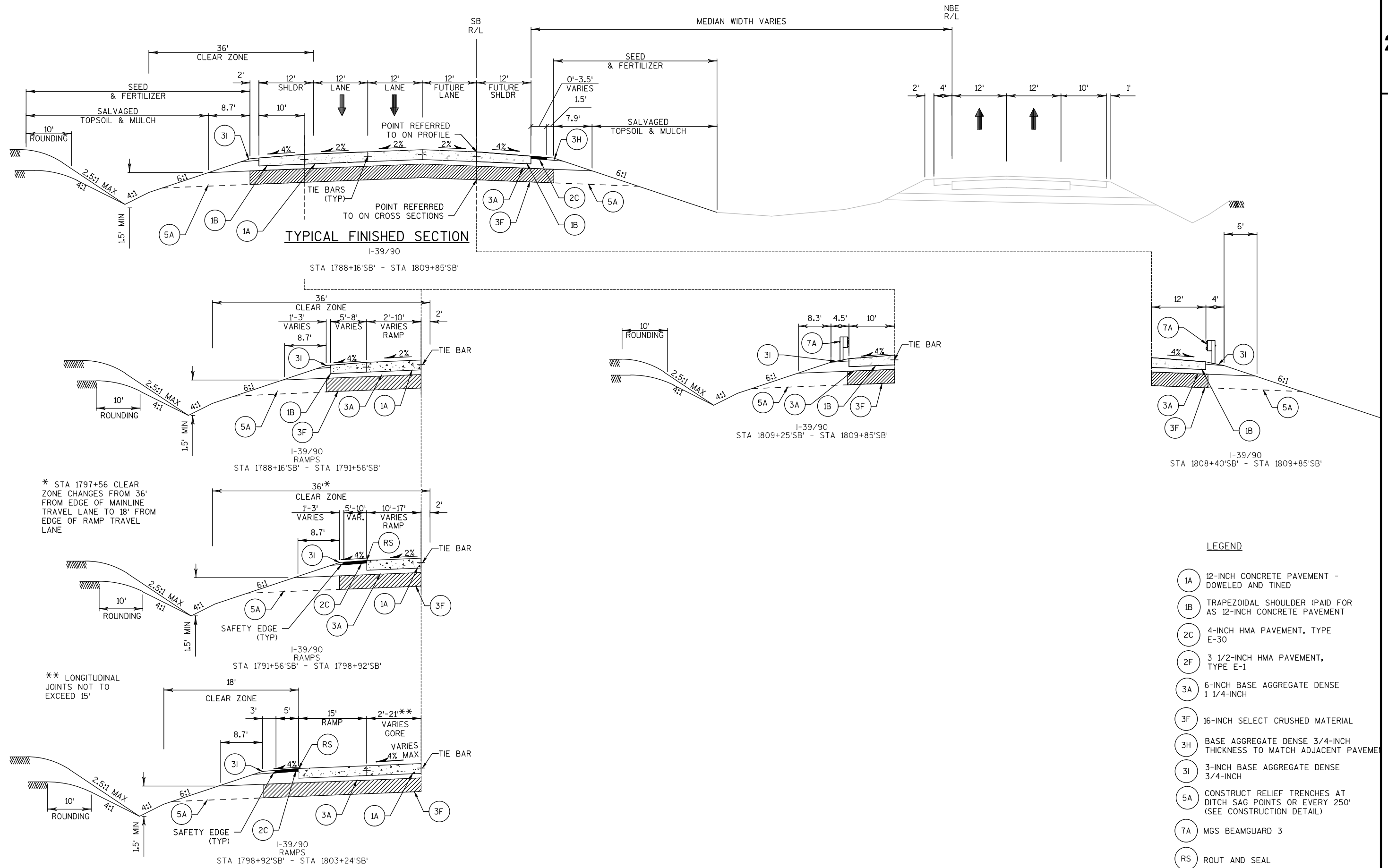


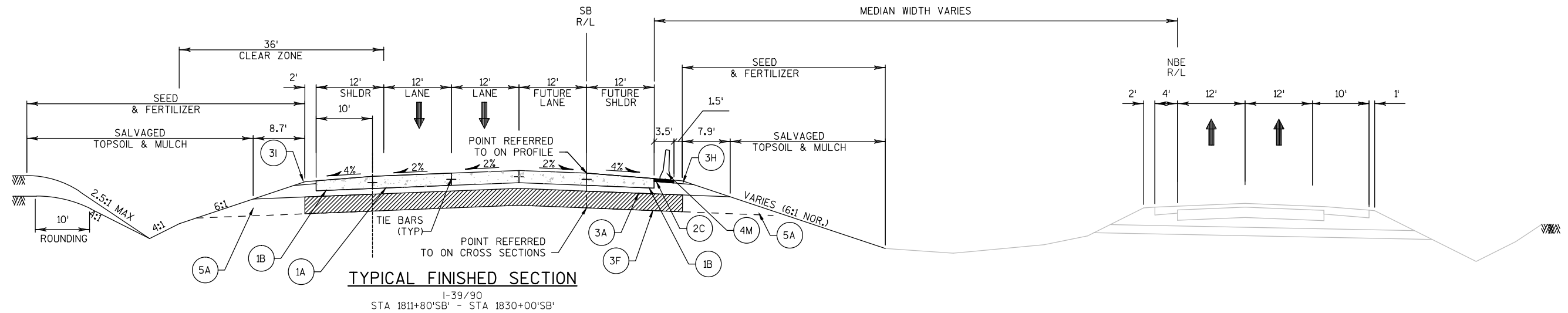




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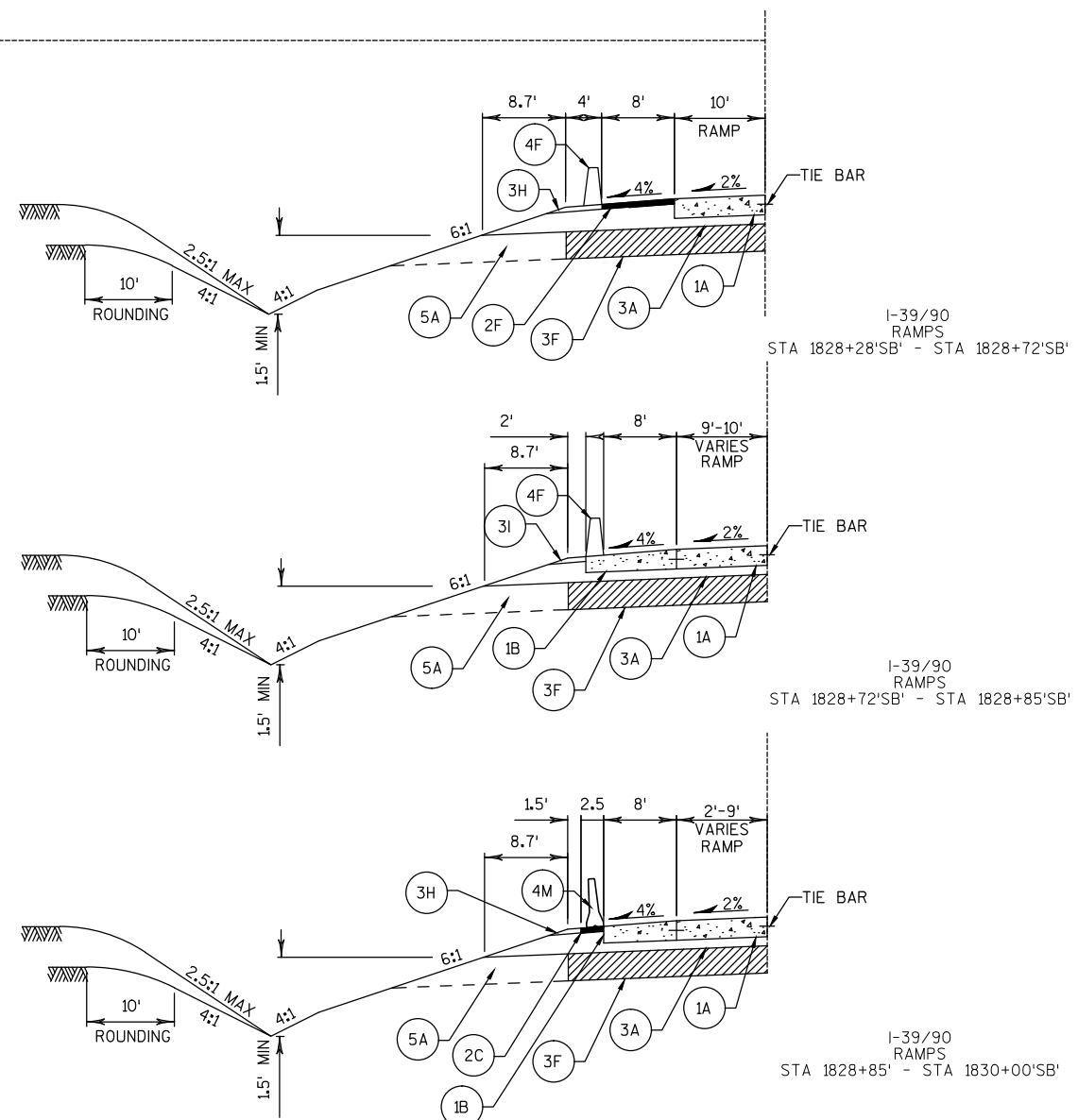
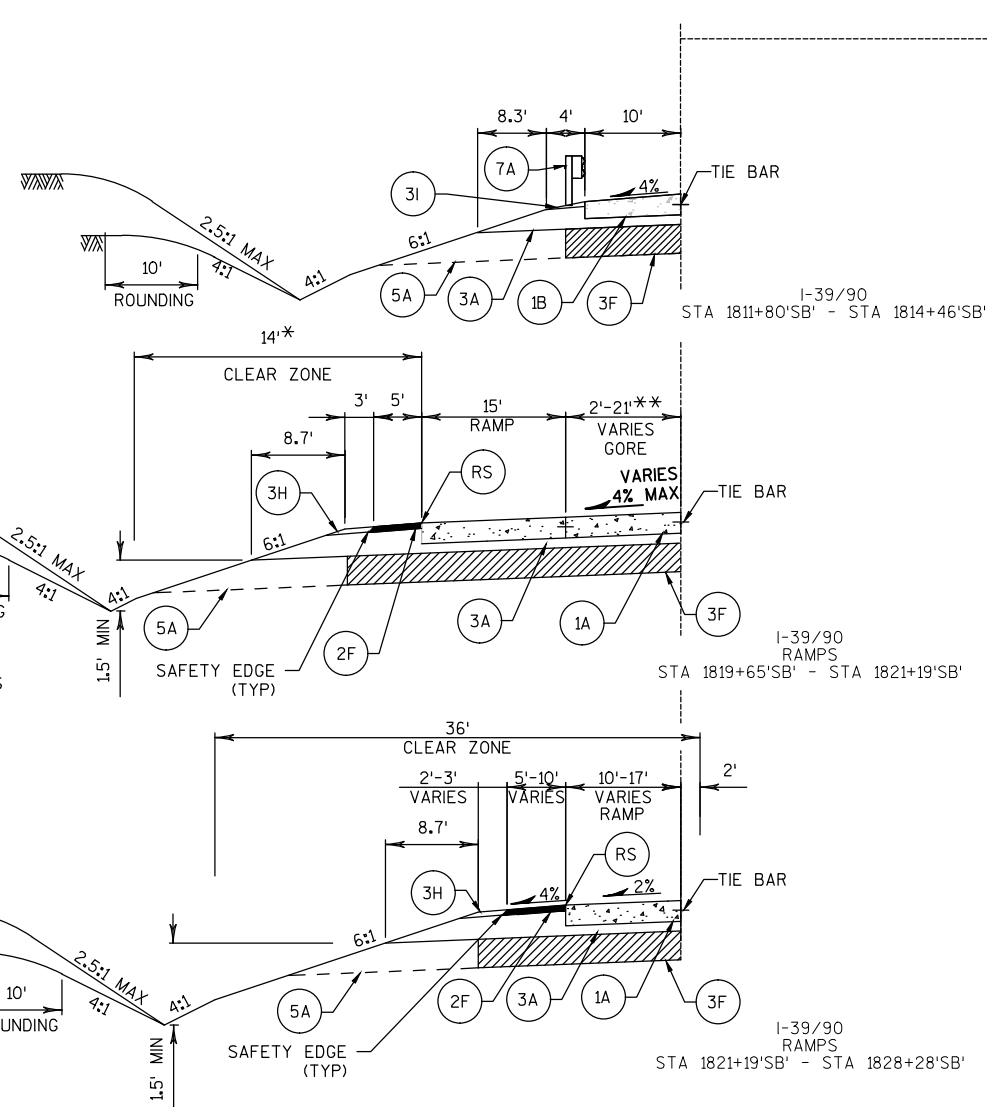
- 1A 12-INCH CONCRETE PAVEMENT - DOWELED AND TINED
- 1B TRAPEZOIDAL SHOULDER (PAID FOR AS 12-INCH CONCRETE PAVEMENT)
- 2B 6 1/2-INCH HMA PAVEMENT, TYPE E-30
- 2C 4-INCH HMA PAVEMENT, TYPE E-30
- 2J 4-INCH REMOVING ASPHALTIC SURFACE MILLING 4-INCH HMA PAVEMENT, TYPE E-30
- 2L 2-INCH REMOVING ASPHALTIC SURFACE MILLING 2-INCH HMA PAVEMENT, TYPE E-30
- 3A 6-INCH BASE AGGREGATE DENSE 1 1/4-INCH
- 3C 14-INCH BASE AGGREGATE DENSE 1 1/4-INCH
- 3F 16-INCH SELECT CRUSHED MATERIAL
- 3G 18-INCH BASE AGGREGATE DENSE 1 1/4-INCH
- 3H BASE AGGREGATE DENSE 3/4-INCH THICKNESS TO MATCH ADJACENT PAVEMENT
- 3I 3-INCH BASE AGGREGATE DENSE 3/4-INCH
- 4B CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
- 4F CONCRETE BARRIER TYPE S36
- 4M CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE
- 5A CONSTRUCT RELIEF TRENCHES AT DITCH SAG POINTS OR EVERY 250' (SEE CONSTRUCTION DETAIL)
- 6B SLOPE PAVING (SEE BRIDGE PLANS)
- 7A MGS BEAMGUARD 3





* STA 1820+88
CLEAR ZONE
CHANGES FROM 14'
FROM EDGE OF
RAMP TRAVEL LANE
TO 36' FROM EDGE
OF MAINLINE
TRAVEL LANE

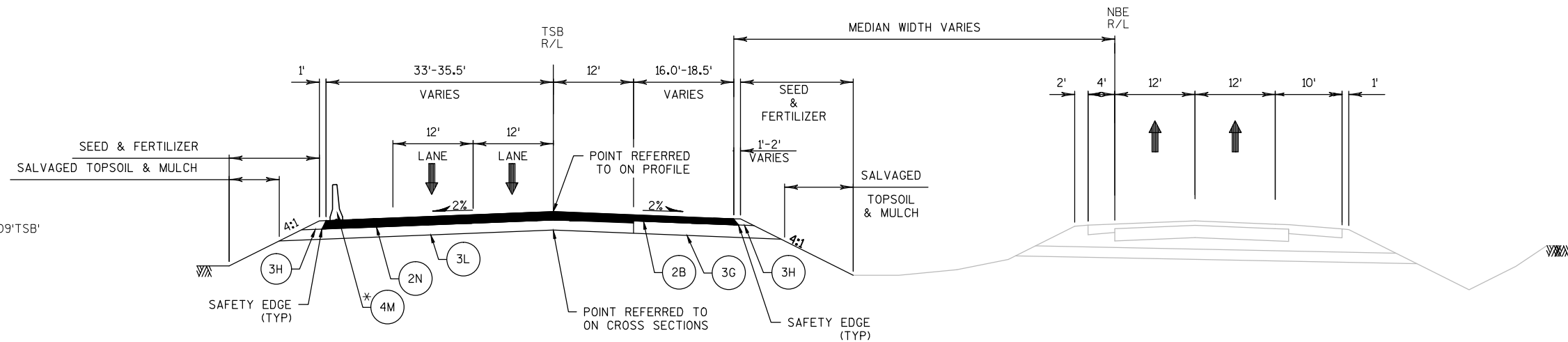
** LONGITUDINAL JOINTS
NOT TO EXCEED 15'



LEGEND

- 1A 12-INCH CONCRETE PAVEMENT -
DOWELED AND TINED
- 1B TRAPEZOIDAL SHOULDER (PAID FOR
AS 12-INCH CONCRETE PAVEMENT)
- 2C 4-INCH HMA PAVEMENT,
TYPE E-30
- 2F 3 1/2-INCH HMA PAVEMENT,
TYPE E-1
- 3A 6-INCH BASE AGGREGATE DENSE
1 1/4-INCH
- 3F 16-INCH SELECT CRUSHED MATERIAL
- 3H BASE AGGREGATE DENSE 3/4-INCH
THICKNESS TO MATCH ADJACENT PAVEMENT
- 3I 3-INCH BASE AGGREGATE DENSE
3/4-INCH
- 4F CONCRETE BARRIER TYPE S36
- 4M CONCRETE BARRIER TEMPORARY PRECAST
LEFT IN PLACE
- 5A CONSTRUCT RELIEF TRENCHES AT
DITCH SAG POINTS OR EVERY 250'
(SEE CONSTRUCTION DETAIL)
- 7A MGS BEAMGUARD 3
- RS ROUT AND SEAL

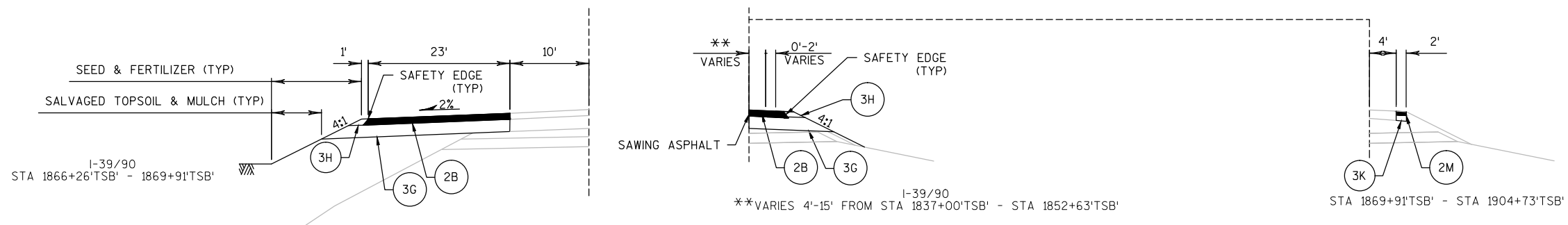
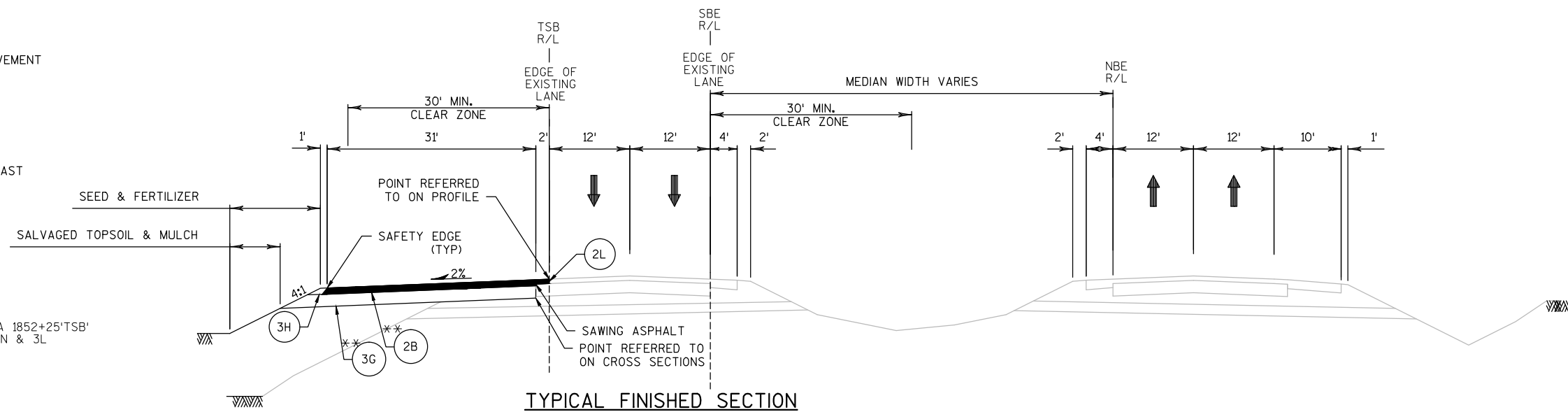
* STA 1830+11'TSB' - STA 1831+09'TSB'

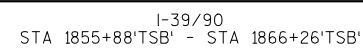
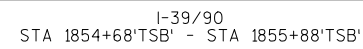


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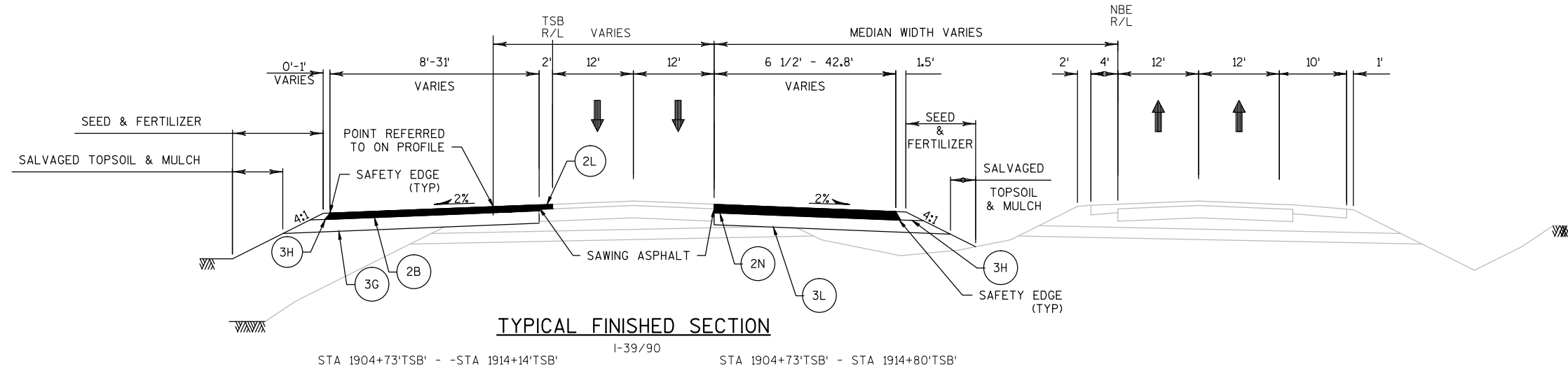
- 2B 6 1/2-INCH HMA PAVEMENT, TYPE E-30
- 2L 2-INCH REMOVING ASPHALTIC SURFACE MILLING
2-INCH HMA PAVEMENT, TYPE E-30
- 2M 2-INCH HMA PAVEMENT, TYPE E-1
- 2N 9 1/2-INCH HMA PAVEMENT, TYPE E-30
- 3G 18-INCH BASE AGGREGATE DENSE 1 1/4-INCH
- 3H BASE AGGREGATE DENSE 3/4-INCH THICKNESS TO MATCH ADJACENT PAVEMENT
- 3K 3-INCH BASE AGGREGATE DENSE 1 1/4-INCH
- 3L 15-INCH BASE AGGREGATE DENSE 1 1/4-INCH
- 4M CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE

**STA 1837+00'TSB' - STA 1852+25'TSB'
PAVEMENT STRUCTURE IS 2N & 3L



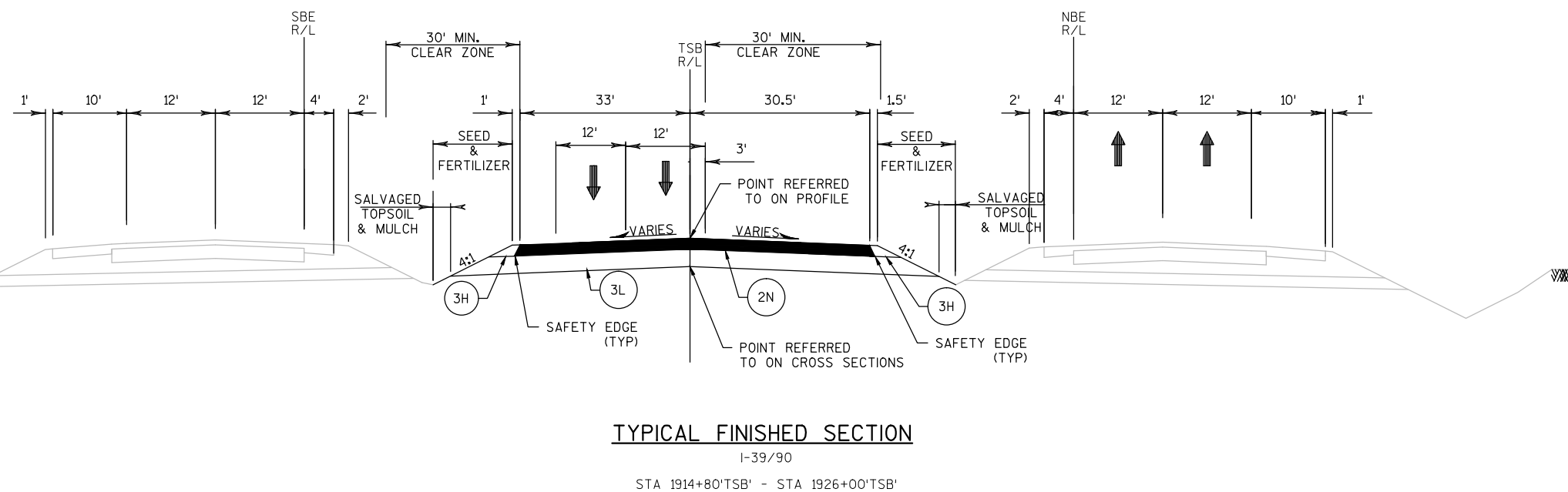


- 2B 6 1/2-INCH HMA PAVEMENT,
TYPE E-30
- 2L 2-INCH REMOVING ASPHALTIC
SURFACE MILLING
2-INCH HMA PAVEMENT,
TYPE E-30
- 3G 18-INCH BASE AGGREGATE DENSE
1 1/4-INCH
- 3H BASE AGGREGATE DENSE 3/4-INCH
THICKNESS TO MATCH ADJACENT PAVEMENT



LEGEND

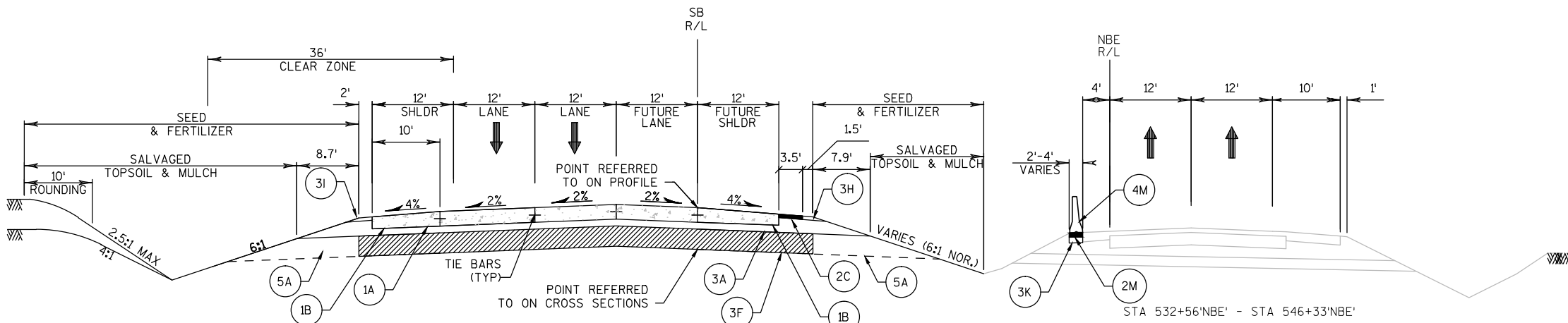
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- (2L) 2-INCH REMOVING ASPHALTIC SURFACE MILLING
2-INCH HMA PAVEMENT, TYPE E-30
- (2N) 9 1/2-INCH HMA PAVEMENT, TYPE E-30
- (3G) 18-INCH BASE AGGREGATE DENSE 1 1/4-INCH
- (3H) BASE AGGREGATE DENSE 3/4-INCH THICKNESS TO MATCH ADJACENT PAVEMENT
- (3L) 15-INCH BASE AGGREGATE DENSE 1 1/4-INCH



2

LEGEND

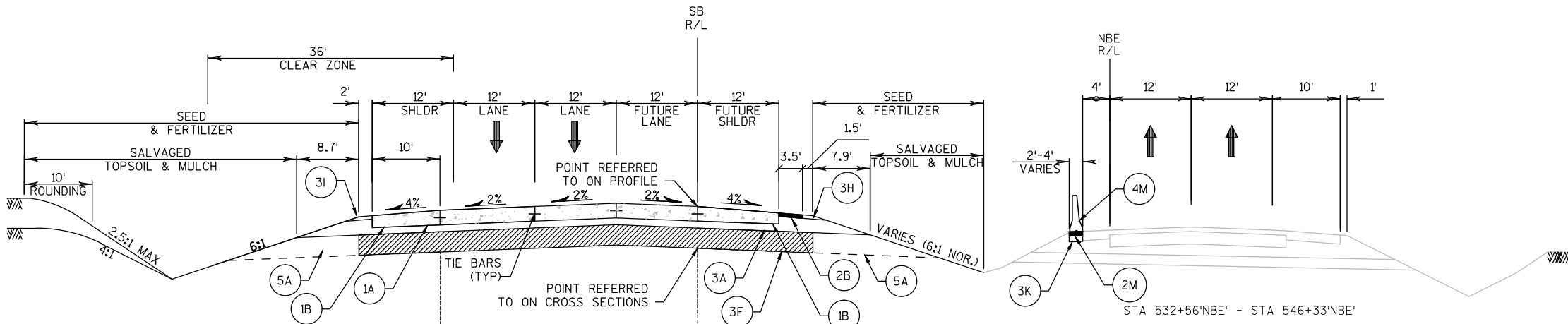
- | | |
|----|---|
| 1A | 12-INCH CONCRETE PAVEMENT -
DOWELED AND TINED |
| 1B | TRAPEZOIDAL SHOULDER (PAID FOR
AS 12-INCH CONCRETE PAVEMENT |
| 2B | 6 1/2-INCH HMA PAVEMENT,
TYPE E-30 |
| 2C | 4-INCH HMA PAVEMENT, TYPE
E-30 |
| 2M | 2-INCH HMA PAVEMENT,
TYPE E-1 |
| 3A | 6-INCH BASE AGGREGATE DENSE
1 1/4-INCH |
| 3F | 16-INCH SELECT CRUSHED MATERIAL |
| 3H | BASE AGGREGATE DENSE 3/4-INCH
THICKNESS TO MATCH ADJACENT PAVEMENT |
| 3I | 3-INCH BASE AGGREGATE DENSE
3/4-INCH |
| 3K | 3-INCH BASE AGGREGATE DENSE
1 1/4-INCH |
| 4M | CONCRETE BARRIER TEMPORARY PRECAST
LEFT IN PLACE |
| 5A | CONSTRUCT RELIEF TRENCHES AT
DITCH SAG POINTS OR EVERY 250'
(SEE CONSTRUCTION DETAIL) |
| 7A | MGS BEAMGUARD 3 |



TYPICAL FINISHED SECTION

1-39/90

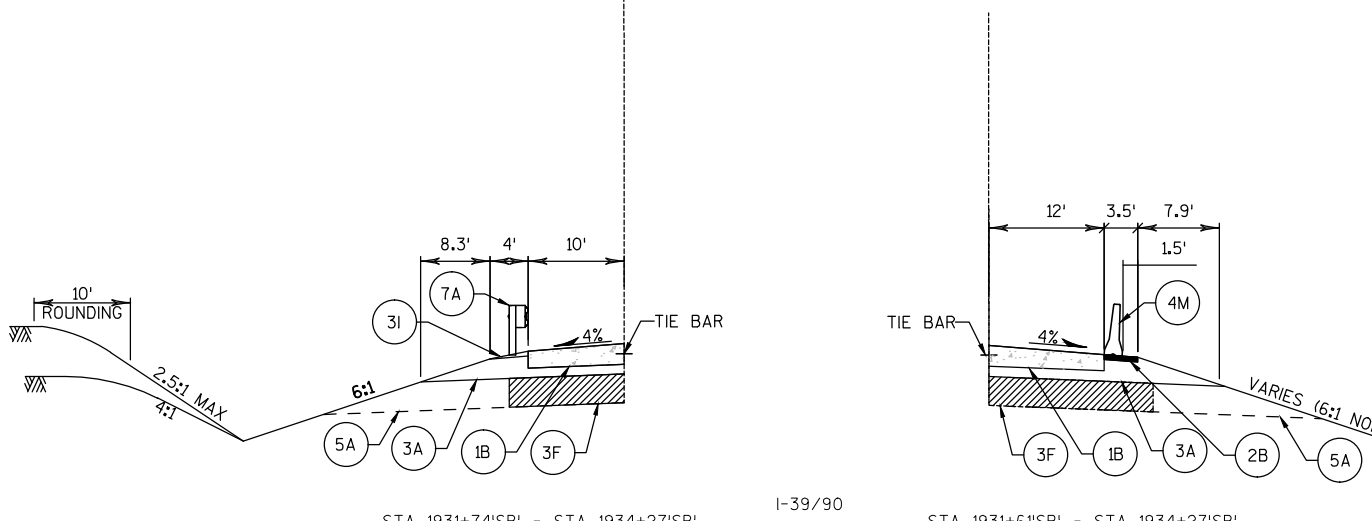
STA 1926+44'SB' - STA 1929+99'SB'

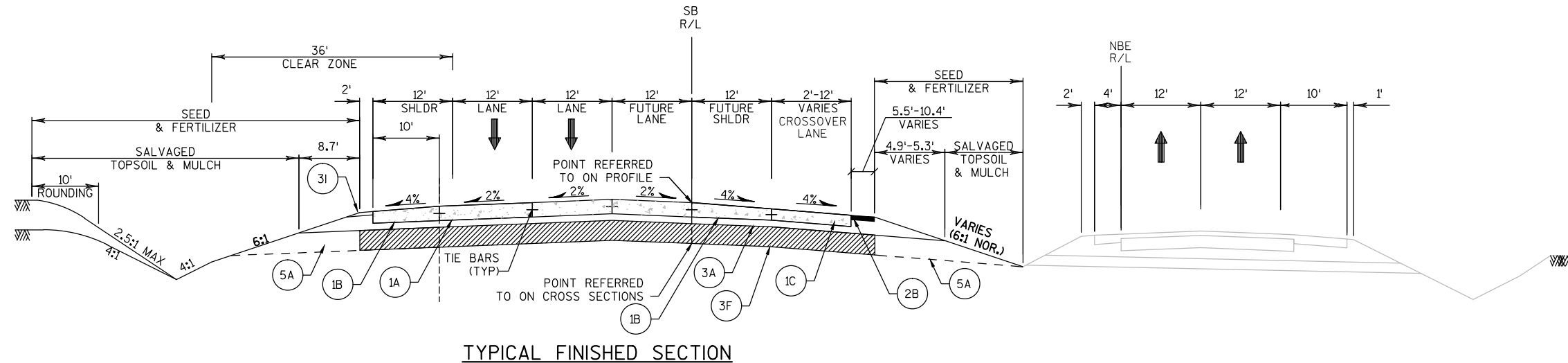


TYPICAL FINISHED SECTION

1-39/90

STA 1931+64'SB' - STA 1943+98'SE



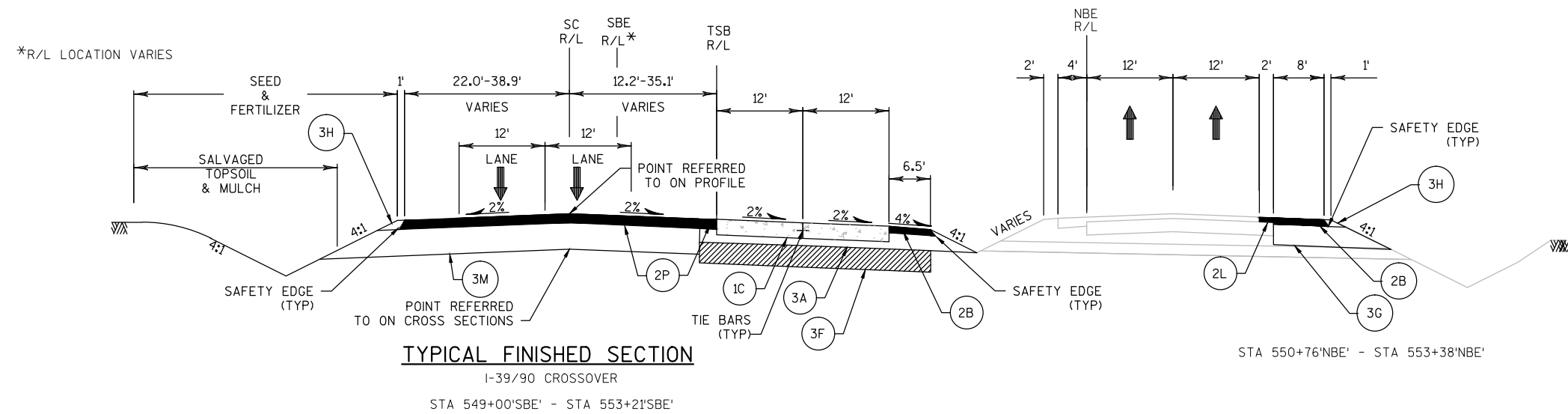


TYPICAL FINISHED SECTION

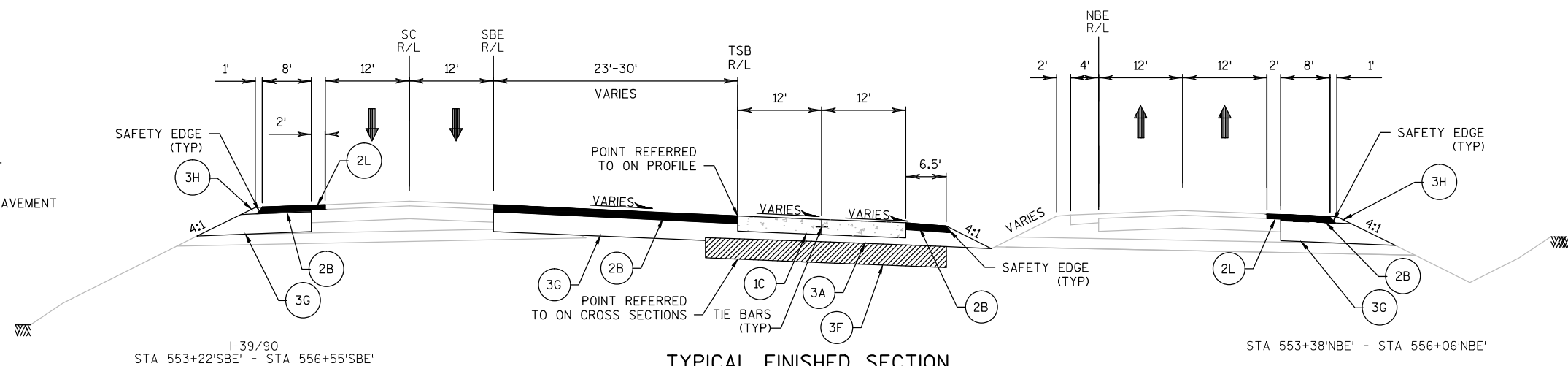
I-39/90
STA 1943+98'SB' - STA 1948+00'SB'

LEGEND

- 1A 12-INCH CONCRETE PAVEMENT - DOWELED AND TINED
- 1B TRAPEZOIDAL SHOULDER (PAID FOR AS 12-INCH CONCRETE PAVEMENT)
- 1C 10-INCH CONCRETE PAVEMENT - DOWELED AND TINED
- 2B 6 1/2-INCH HMA PAVEMENT, TYPE E-30
- 2L 2-INCH REMOVING ASPHALTIC SURFACE MILLING
2-INCH HMA PAVEMENT TYPE E-30
- 2P 7 1/2-INCH HMA PAVEMENT, TYPE E-30
- 3A 6-INCH BASE AGGREGATE DENSE 1 1/4-INCH
- 3G 18-INCH BASE AGGREGATE DENSE 1 1/4-INCH
- 3F 16-INCH SELECT CRUSHED MATERIAL
- 3H BASE AGGREGATE DENSE 3/4-INCH THICKNESS TO MATCH ADJACENT PAVEMENT
- 3I 3-INCH BASE AGGREGATE DENSE 3/4-INCH
- 3M 20-INCH BASE AGGREGATE DENSE 1 1/4-INCH
- 5A CONSTRUCT RELIEF TRENCHES AT DITCH SAG POINTS OR EVERY 250' (SEE CONSTRUCTION DETAIL)

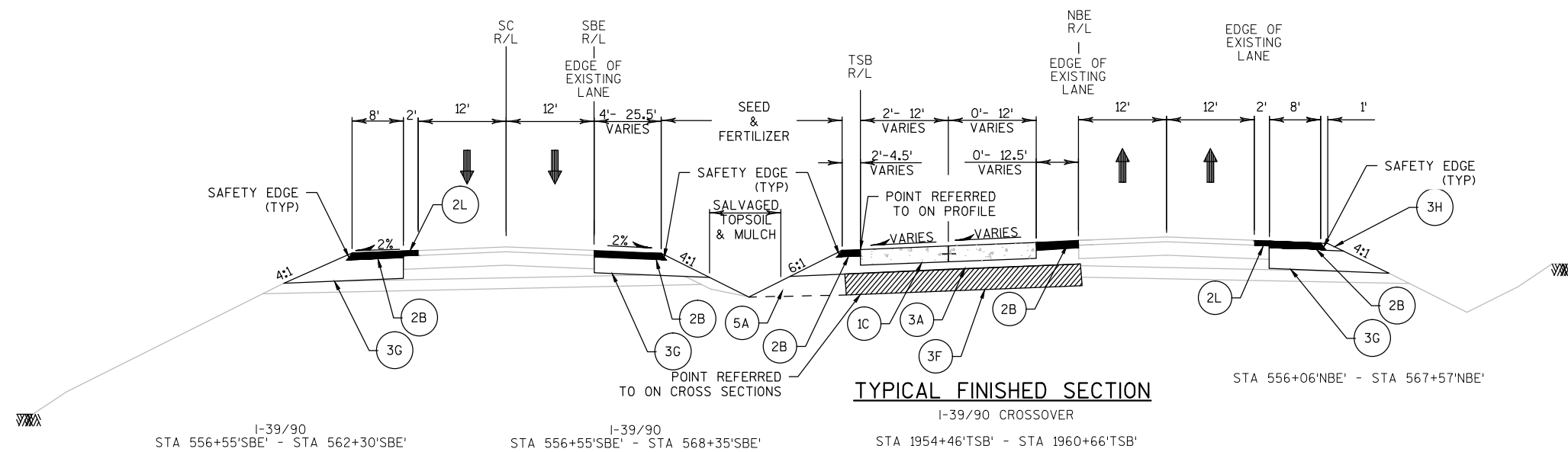


TYPICAL FINISHED SECTION

I-39/90 CROSSOVER
STA 549+00'SBE' - STA 553+21'SBE'

TYPICAL FINISHED SECTION

I-39/90 CROSSOVER
STA 1951+78'TSB' - STA 1954+46'TSB'

**LEGEND**

- 1C 10-INCH CONCRETE PAVEMENT - DOWELED AND TINED
- 2B 6 1/2-INCH HMA PAVEMENT, TYPE E-30
- 2L 2-INCH REMOVING ASPHALTIC SURFACE MILLING
2-INCH HMA PAVEMENT, TYPE E-30
- 3A 6-INCH BASE AGGREGATE DENSE 1 1/4-INCH
- 3G 18-INCH BASE AGGREGATE DENSE 1 1/4-INCH
- 3F 16-INCH SELECT CRUSHED MATERIAL
- 3H BASE AGGREGATE DENSE 3/4-INCH THICKNESS TO MATCH ADJACENT PAVEMENT
- 5A CONSTRUCT RELIEF TRENCHES AT DITCH SAG POINTS OR EVERY 250' (SEE CONSTRUCTION DETAIL)

STATION	DESCRIPTION	LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER
1715+00.00 'TSB'	NORMAL SHOULDER	-2.00%	-2.00%	-2.00%	-2.00%
1748+03.60 'TSB'	END NORMAL SHOULDER	-2.00%	-2.00%	-2.00%	-2.00%
1748+03.60 'TSB'	END NORMAL CROWN	-2.00%	-2.00%	-2.00%	-2.00%
1748+79.60 'TSB'	LEVEL CROWN	0.00%	0.00%	-2.00%	-2.00%
1749+55.97 'TSB'	REVERSE CROWN	2.00%	2.00%	-2.00%	-2.00%
1750+05.60 'TSB'	BEGIN FULL SUPER	3.30%	3.30%	-3.30%	-3.30%
1769+50.00 'TSB'	END FULL SUPER	3.30%	3.30%	-3.30%	-3.30%
1771+00.00 'TSB'	BEGIN FULL SUPER	3.20%	3.20%	-3.20%	-4.00%
1772+00.00 'TSB'	END FULL SUPER	3.20%	3.20%	-3.20%	-4.00%
1772+42.42 'SB'	BEGIN FULL SUPER	3.20%	3.20%	-3.20%	-4.00%
1781+34.91 'SB'	END FULL SUPER	3.20%	3.20%	-3.20%	-4.00%
1781+54.44 'SB'	REVERSE CROWN	2.00%	2.00%	-2.00%	-4.00%
1782+74.44 'SB'	LEVEL CROWN	0.00%	0.00%	-2.00%	-4.00%
1783+94.44 'SB'	BEGIN NORMAL CROWN	-4.00%	-2.00%	-2.00%	-4.00%
1783+94.44 'SB'	BEGIN NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
1808+63.82 'SB'	END SHOULDER NC	-4.00%	-2.00%	-2.00%	-4.00%
1809+83.82 'SB'	BEGIN SHOULDER 2%	-2.00%	-2.00%	-2.00%	-2.00%
1811+81.32 'SB'	END SHOULDER 2%	-2.00%	-2.00%	-2.00%	-2.00%
1813+01.32 'SB'	BEGIN SHOULDER NC	-4.00%	-2.00%	-2.00%	-4.00%
1816+69.17 'SB'	END NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
1816+69.17 'SB'	END NORMAL CROWN	-4.00%	-2.00%	-2.00%	-4.00%
1817+89.17 'SB'	LEVEL CROWN	-4.00%	-2.00%	0.00%	0.00%
1819+09.17 'SB'	BEGIN FULL SUPER	-4.00%	-2.00%	2.00%	2.00%
1819+64.53 'SB'	BACK GORE	-3.80%	-2.00%	2.00%	2.00%
1822+20.31 'SB'	END RAMP FULL SUPER	-	-2.00%	2.00%	2.00%
1822+68.62 'SB'	RAMP LOW SHLDR MATCH	-	-2.00%	2.00%	2.00%
1829+72.56 'SB'	END RAMP	-4.00%	-2.00%	2.00%	2.00%
1830+10.81 'TSB'	MATCHPROPOSED	-4.00%	-2.00%	2.00%	2.00%
1830+66.81 'TSB'	END SHLD ROTATION	-2.00%	-2.00%	2.00%	2.00%
1863+14.65 'TSB'	BEGIN NORMAL CROWN	-2.00%	-2.00%	2.00%	2.00%
1863+98.65 'TSB'	BEGIN NORMAL SHOULDER	-2.00%	-2.00%	-2.00%	-2.00%
1903+33.01 'TSB'	END NORMAL SHOULDER	-2.00%	-2.00%	-2.00%	-2.00%
1904+17.01 'TSB'	LEVEL CROWN	0.00%	0.00%	-2.00%	-2.00%
1905+01.01 'TSB'	BEGIN FULL SUPER	2.00%	2.00%	-2.00%	-2.00%
1905+01.01 'TSB'	REVERSE CROWN	2.00%	2.00%	-2.00%	-2.00%
1917+42.80 'TSB'	END FULL SUPER	2.00%	2.00%	-2.00%	-2.00%
1917+42.80 'TSB'	REVERSE CROWN	2.00%	2.00%	-2.00%	-2.00%
1918+26.80 'TSB'	LEVEL CROWN	0.00%	0.00%	-2.00%	-2.00%
1919+10.80 'TSB'	BEGIN NORMAL SHOULDER	-2.00%	-2.00%	-2.00%	-2.00%
1925+44.00 'TSB'	BEGIN SHOULDER TRANSITION	-2.00%	-2.00%	-2.00%	-2.00%
1926+00.00 'TSB'	MATCH PROPOSED	-4.00%	-2.00%	-2.00%	-4.00%
1928+76.56 'SB'	END SHOULDER NC	-4.00%	-2.00%	-2.00%	-4.00%
1929+96.56 'SB'	BEGIN SHOULDER 2%	-2.00%	-2.00%	-2.00%	-2.00%
1931+74.82 'SB'	END SHOULDER 2%	-2.00%	-2.00%	-2.00%	-2.00%
1932+94.82 'SB'	BEGIN SHOULDER NC	-4.00%	-2.00%	-2.00%	-4.00%
1948+00.00 'SB'	END SHOULDER NC	-4.00%	-2.00%	-2.00%	-4.00%
548+99.94 'SBE'	BEGIN NORMAL CROWN	-4.00%	-2.00%	-2.00%	-
551+74.20 'SBE'	END NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-
553+20.61 'SBE'	END NORMAL CROWN	-4.00%	-2.00%	-2.00%	-
553+63.53 'SBE'	LEVEL CROWN	-4.00%	-2.00%	0.00%	0.00%
554+58.20 'SBE'	REVERSE CROWN	-4.00%	-2.00%	2.00%	2.00%
555+52.86 'SBE'	LOW SHOULDER MATCH	-4.00%	-4.00%	-	-
556+47.53 'SBE'	BEGIN FULL SUPER	-6.00%	-6.00%	-	3.10%
574+47.30 'SBE'	END FULL SUPER	-6.00%	-6.00%	-	3.10%
1947+58.61 'TSB'	MATCH PROPOSED	-4.00%	-2.00%	-4.00%	-4.00%
1948+46.61 'TSB'	BEGIN 2% SUPER	2.00%	2.00%	-2.00%	-4.00%
1949+50.46 'TSB'	END MATCH SB TIE-IN	2.00%	2.00%	-2.00%	-4.00%
1951+06.46 'TSB'	NORMAL SHOULDER	-2.00%	-2.00%	-2.00%	-4.00%
1952+15.51 'TSB'	END NORMAL CROWN	-2.00%	-2.00%	-2.00%	-4.00%
1952+91.51 'TSB'	LEVEL CROWN	-2.00%	-2.00%	0.00%	0.00%
1954+45.51 'TSB'	BEGIN 3.7% SUPER	-4.00%	-4.00%	3.70%	3.70%
1955+37.51 'TSB'	END 3.7% SUPER	-4.00%	-4.00%	3.70%	3.70%
1956+03.08 'TSB'	BEGIN FULL SUPER	-5.40%	-5.40%	5.40%	5.40%
1960+63.97 'TSB'	END ALIGNMENT	-5.40%	-5.40%	5.40%	5.40%

STATION	DESCRIPTION	LEFT SHOULDER	LANE	RIGHT SHOULDER
797+56.37 'KC'	BEGIN ALIGNMENT	-4.00%	2.00%	-
802+08.29 'KC'	REVERSE CROWN	-4.00%	2.00%	-
802+56.29 'KC'	LOW SHOULDER MATCH	-4.00%	4.00%	-
803+04.29 'KC'	BEGIN FULL SUPER	-6.00%	6.00%	-
803+21.83 'KC'	SHOULDER RIGHT 2.70%	-6.00%	6.00%	2.70%
804+00.92 'KC'	SHOULDER RIGHT 6.00%	-6.00%	6.00%	6.00%
812+53.43 'KC'	SHOULDER RIGHT 6.00%	-6.00%	6.00%	6.00%
813+52.20 'KC'	SHOULDER RIGHT 1.88%	-6.00%	6.00%	1.88%
815+05.87 'KC'	END FULL SUPER	-6.00%	6.00%	-
815+53.87 'KC'	LOW SHOULDER MATCH	-4.00%	4.00%	-
816+01.87 'KC'	REVERSE CROWN	-4.00%	2.00%	-
816+49.87 'KC'	LEVEL CROWN	-4.00%	2.00%	-
816+97.87 'KC'	BEGIN NORMAL CROWN	-4.00%	2.00%	-
816+97.87 'KC'	BEGIN NORMAL SHOULDER	-4.00%	2.00%	-
815+53.87 'KC'	END ALIGNMENT	-4.00%	2.00%	-

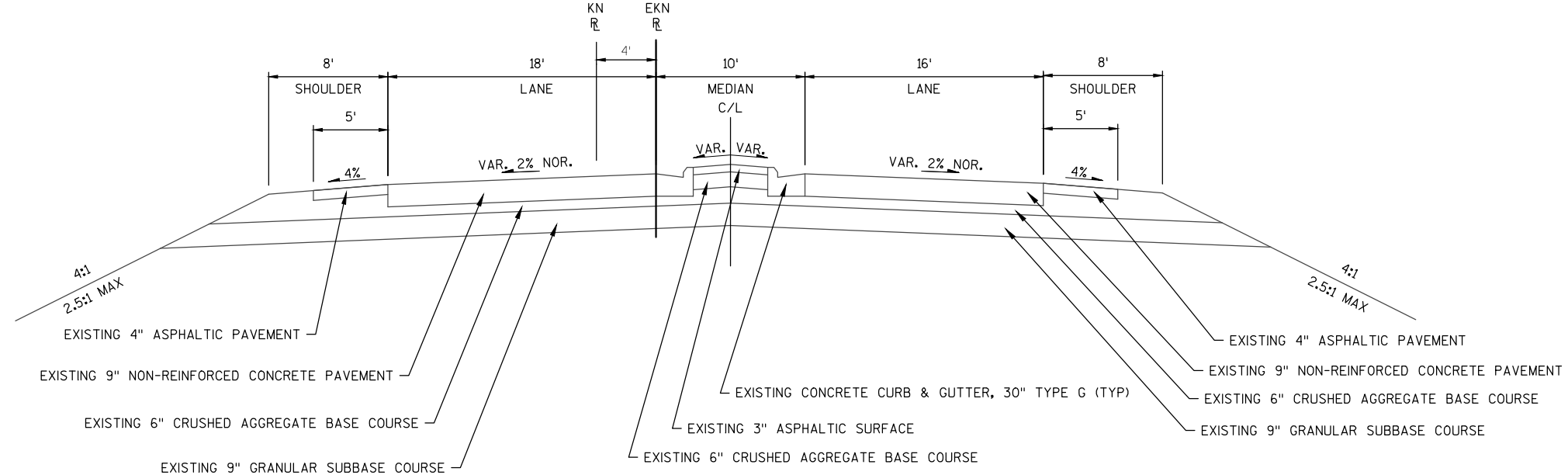
STATION	DESCRIPTION	LEFT SHOULDER	LANE	RIGHT SHOULDER
806+71.65 'KD'	BEGIN ALIGNMENT	-4.00%	4.00%	-
806+71.65 'KD'	LOW SHOULDER MATCH	-4.00%	4.00%	-
807+19.65 'KD'	BEGIN FULL SUPER	-6.00%	6.00%	-
808+17.91 'KD'	SHOULDER RIGHT -2.00%	-6.00%	6.00%	-2.00%
810+10.88 'KD'	SHOULDER RIGHT 6.00%	-6.00%	6.00%	6.00%
816+58.47 'KD'	END FULL SUPER	-6.00%	6.00%	6.00%
816+63.82 'KD'	BEGIN FULL SUPER	-5.80%	5.80%	5.80%
819+12.44 'KD'	SHOULDER RIGHT 5.80%	-5.80%	5.80%	5.80%
819+67.20 'KD'	SHOULDER RIGHT 3.75%	-5.80%	5.80%	3.75%
821+19.29 'KD'	END RAMP SUPER	-5.80%	5.80%	-
1821+19.27 'SB'	BEGIN MAINLINE RAMP SUPER	-5.80%	-5.80%	-
1822+20.31 'SB'	END RAMP FULL SUPER	-5.80%	-5.80%	-
1822+68.62 'SB'	RAMP LOW SHLDR MATCH	-4.00%	-4.00%	-
1823+22.28 'SB'	END RAMP SUPER	-4.00%	-2.00%	-
1829+72.56 'SB'	END RAMP	-4.00%	-2.00%	-

STATION	DESCRIPTION	OUTSIDE LEFT SHOULDER	LEFT LANE 2	LEFT LANE 1	RIGHT LANE 1	RIGHT LANE 2	OUTSIDE RIGHT SHOULDER
55+86.89 'KN'	END NORMAL SHOULDER	-4.00%	-	-2.00%	-2.00%	-	-4.00%
55+86.89 'KN'	END NORMAL CROWN	-4.00%	-	-2.00%	-2.00%	-	-4.00%
56+06.24 'KN'	LEVEL CROWN	-4.00%	-	-2.00%	0.00%	-	0.00%
56+25.59 'KN'	BEGIN FULL SUPER	-4.00%	-	-2.00%	2.00%	-	2.00%
56+25.59 'KN'	REVERSE CROWN	-4.00%	-	-2.00%	2.00%	-	2.00%
57+75.75 'KN'	SHOULDER LEFT -4.00%	-4.00%	-	-2.00%	2.00%	-	2.00%
58+15.20 'KN'	SHOULDER LEFT -2.51%	-2.51%	-	-2.00%	2.00%	-	2.00%
58+19.22 'KN'	SHOULDER RIGHT 2.00%	-	-	-2.00%	2.00%	-	2.00%
58+30.22 'KN'	SHOULDER RIGHT 1.58%	-	-	-2.00%	2.00%	-	1.58%
59+77.70 'KN'	LOW SHOULDER MATCH (RIGHT LANE 2)	-	-	-2.00%	2.00%	-4.08%	-4.08%
60+19.17 'KN'	LOW SHOULDER MATCH (LEFT LANE 2)	-4.00%	-4.00%	-2.00%	2.00%	-2.34%	-2.34%
60+25.48 'KN'	LOW LANE MATCH (RIGHT LANE 2)	-4.00%	-3.74%	-2.00%	2.00%	-2.08%	-2.08%
60+67.17 'KN'	REVERSE CROWN (LEFT LANE 2)	-4.00%	-2.00%	-2.00%	2.00%	-0.59%	-0.59%
60+73.26 'KN'	LEVEL CROWN (RIGHT LANE 2)	-4.00%	-2.00%	-2.00%	2.00%	-0.06%	-0.06%
61+21.06 'KN'	REVERSE CROWN (RIGHT LANE 2)	-4.00%	-2.00%	-2.00%	2.00%	1.96%	1.96%
65+96.55 'KN'	END FULL SUPER	-4.00%	-2.00%	-2.00%	2.00%	2.00%	2.00%
65+96.55 'KN'	REVERSE CROWN	-4.00%	-2.00%	-2.00%	2.00%	2.00%	2.00%
66+15.90 'KN'	LEVEL CROWN	-4.00%	-2.00%	-2.00%	0.00%	0.00%	0.00%
66+35.25 'KN'	BEGIN NORMAL CROWN	-4.00%	-2.00%	-2.00%	-2.00%	-2.00%	-4.00%
66+35.25 'KN'	BEGIN NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-2.00%	-2.00%	-4.00%
88+73.19 'KN'	END ALIGNMENT	-4.00%	-2.00%	-2.00%	-2.00%	-2.00%	-4.00%

STATION	DESCRIPTION	OUTSIDE LEFT SHOULDER	LEFT LANE	INSIDE LEFT SHOULDER ((LEFT/RIGHT) OF REFERENCE LINE)	INSIDE RIGHT SHOULDER	RIGHT LANE	OUTSIDE RIGHT SHOULDER
47+65.00'EKN'	BEGIN PROJECT	-8.00%	-8.00%	(-/+) 8.00%	8.00%	8.00%	8.00%
48+12.53'EKN'	END FULL SUPER	-8.00%	-8.00%	(-/+) 8.00%	8.00%	8.00%	8.00%
49+08.53'EKN'	LOW SHOULDER MATCH	-4.00%	-4.00%	(-/+) 4.00%	4.00%	4.00%	4.00%
49+56.53'EKN'	REVERSE CROWN	-2.00%	-2.00%	(-/+) 2.00%	4.00%	2.00%	2.00%
50+04.53'EKN'	LEVEL CROWN	-2.00%	-2.00%	0.00%	4.00%	0.00%	0.00%
50+52.53'EKN'	BEGIN NORMAL CROWN	-2.00%	-2.00%	(+/-) 4.00%	4.00%	-2.00%	-2.00%

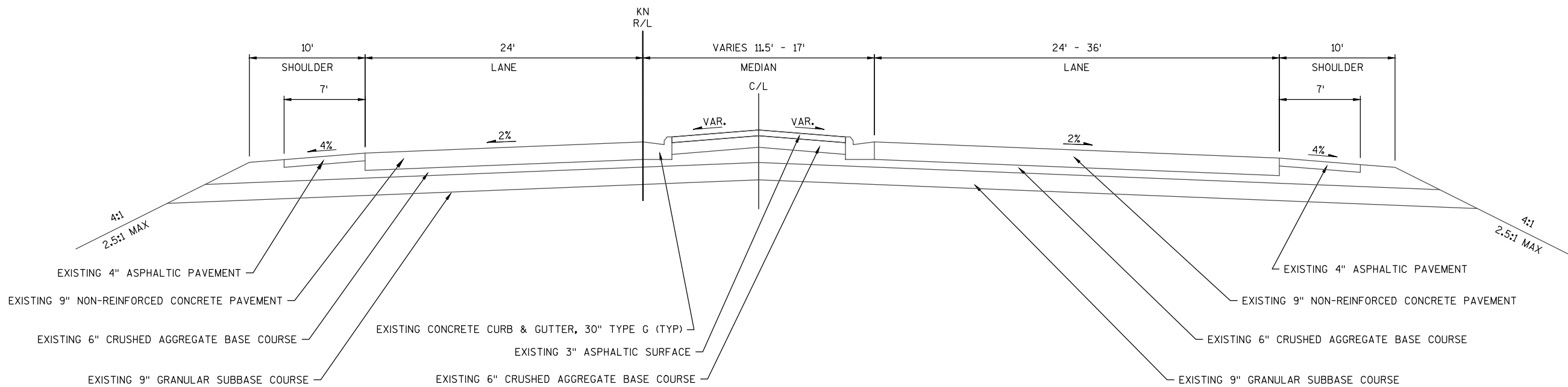
2

2



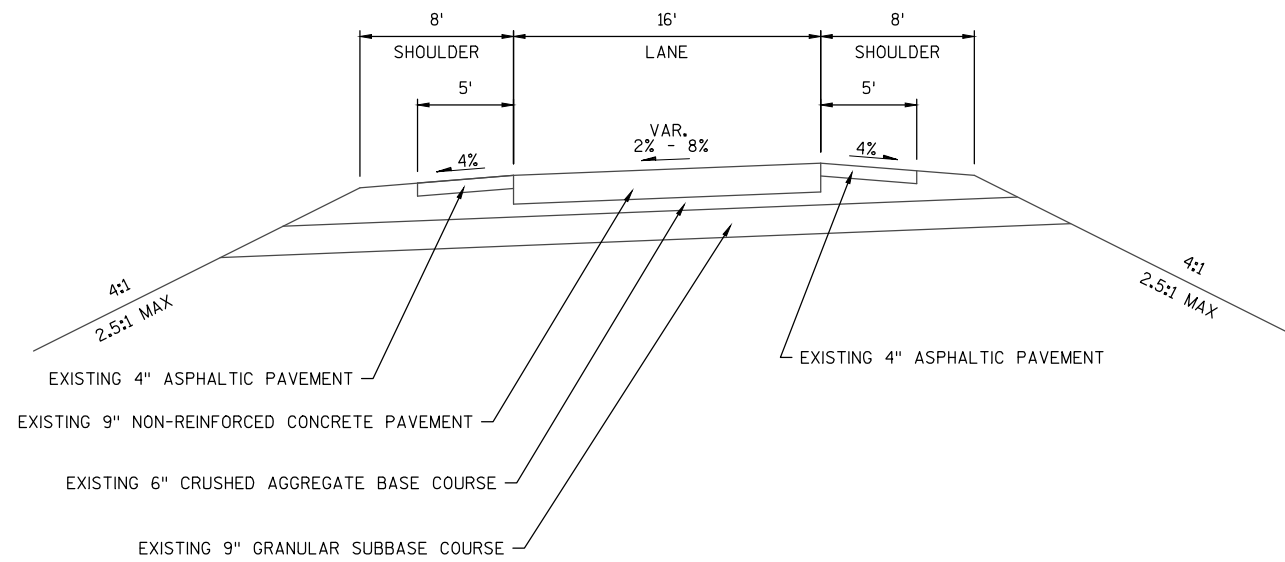
EXISTING TYPICAL SECTION

USH 51
STA 52+00'KN' TO STA 57+98'KN'

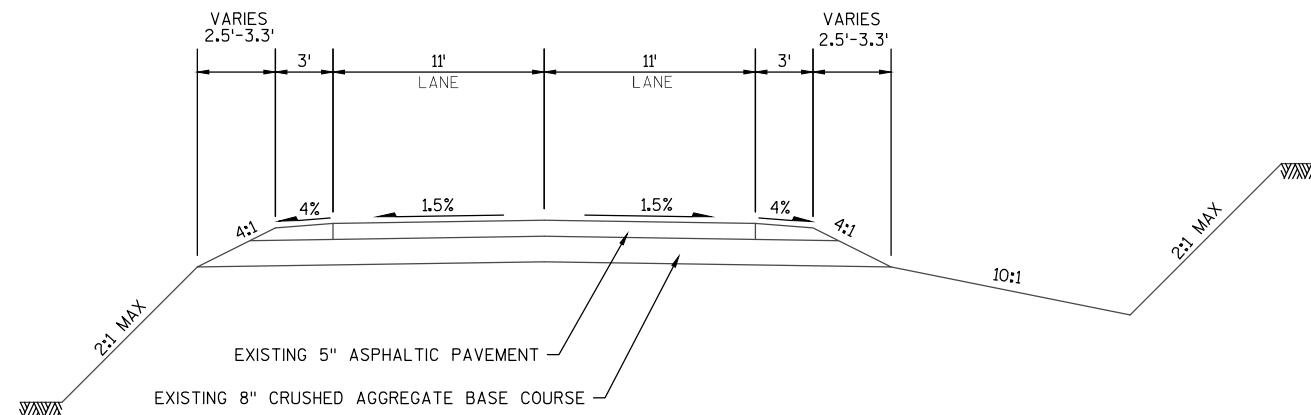


EXISTING TYPICAL SECTION

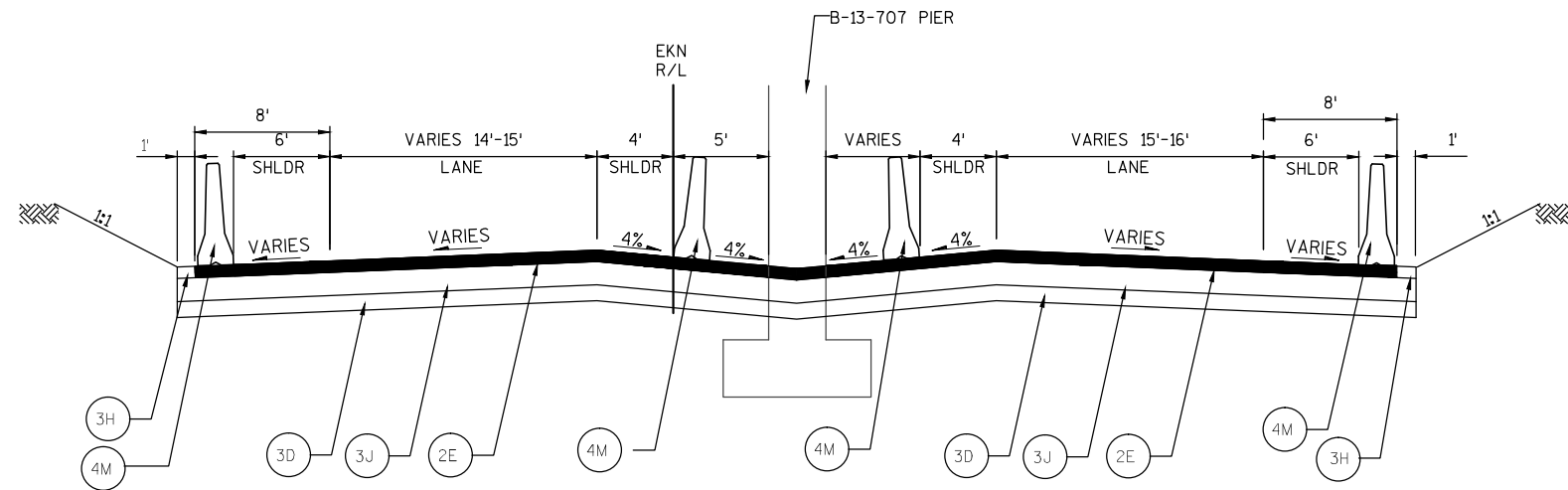
STA 57+98'KN' TO STA 63+00'KN'



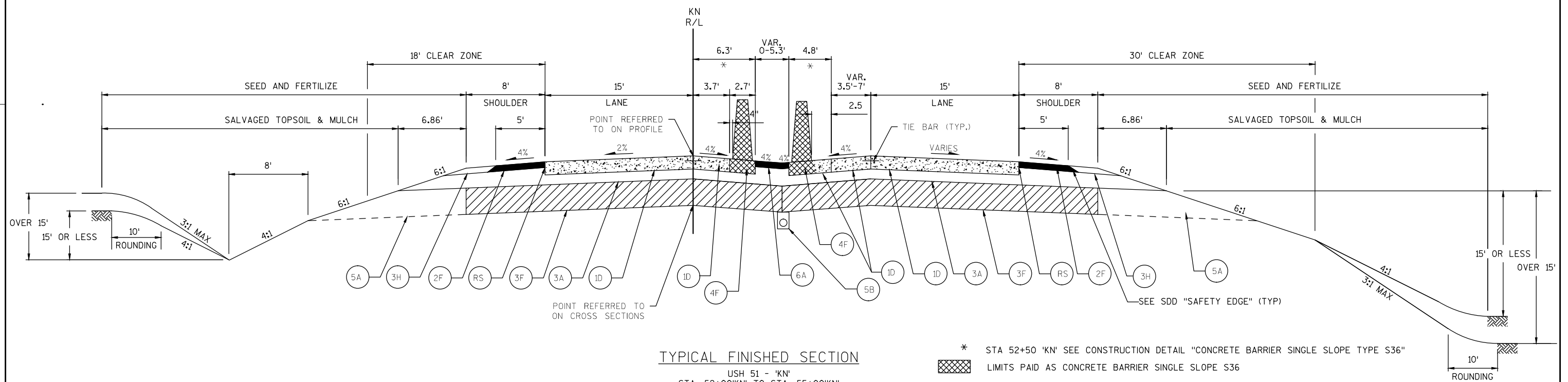
EXISTING TYPICAL SECTION
USH 51 - 'KC' & 'KD'



EXISTING TYPICAL SECTION
MAPLE GROVE ROAD



TYPICAL FINISHED SECTION

USH 51 TEMPORARY - 'EKN'
STA. 48+25'EKN' TO STA. 52+00'EKN'

TYPICAL FINISHED SECTION

USH 51 - 'KN'
STA. 52+00'KN' TO STA. 55+00'KN'

LEGEND

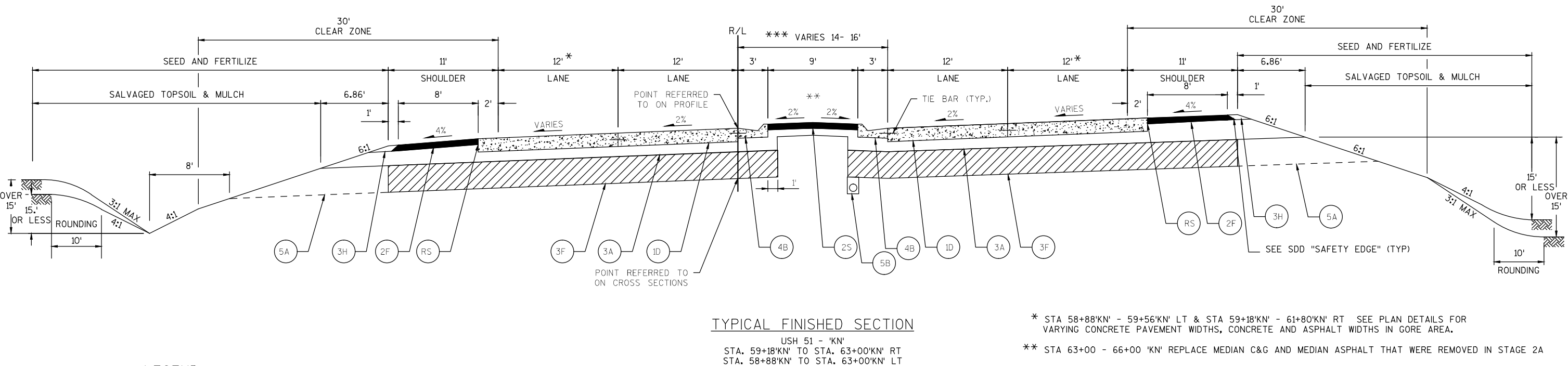
- 1D 8-INCH CONCRETE PAVEMENT
DOWELED AND TINED
- 2E 4-INCH HMA PAVEMENT,
TYPE E-1
- 2F 3 1/2-INCH HMA PAVEMENT,
TYPE E-1

- 3A 6-INCH BASE AGGREGATE DENSE
1 1/4-INCH
- 3D 6-INCH BASE AGGREGATE DENSE
3-INCH
- 3H BASE AGGREGATE DENSE 3/4-INCH
THICKNESS TO MATCH ADJACENT
PAVEMENT
- 3F 16-INCH SELECT CRUSHED MATERIAL

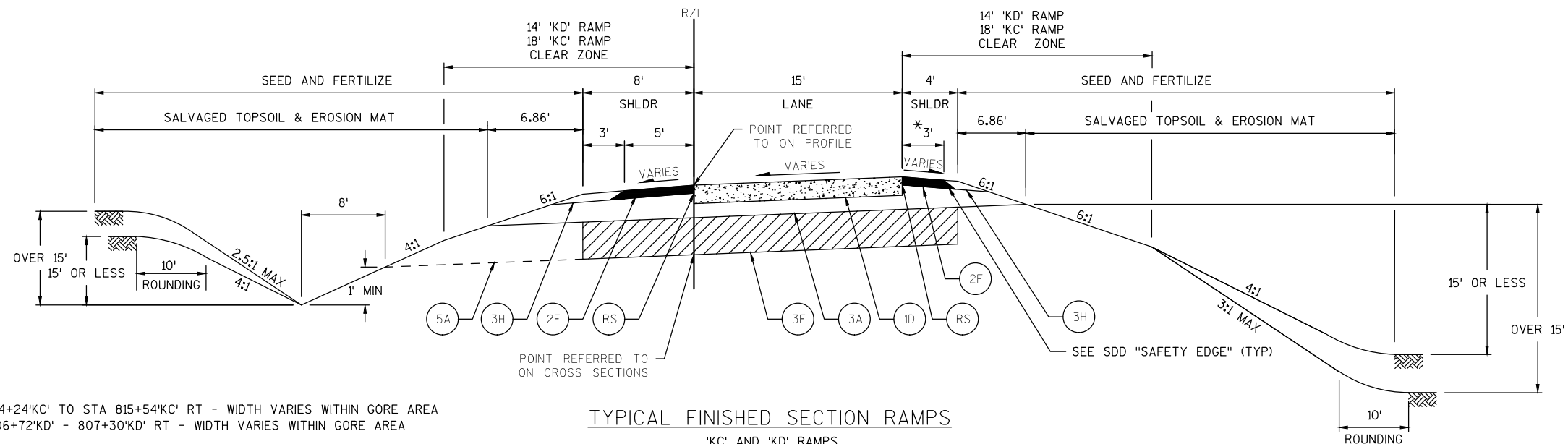
- 3J 10-INCH BASE AGGREGATE DENSE
1 1/4-INCH
- 4F CONCRETE BARRIER TYPE S36
- 4M CONCRETE BARRIER TEMPORARY
LEFT IN PLACE

- 5A CONSTRUCT RELIEF TRENCHES AT
DITCH SAG POINTS OR EVERY 250'
(SEE CONSTRUCTION DETAIL)
- 5B PIPE UNDERDRAIN 6-INCH
SEE PIPE UNDERDRAIN DETAIL
- 6A EMULSIFIED ASPHALT MEDIAN
TREATMENT
- RS ROUT AND SEAL

2



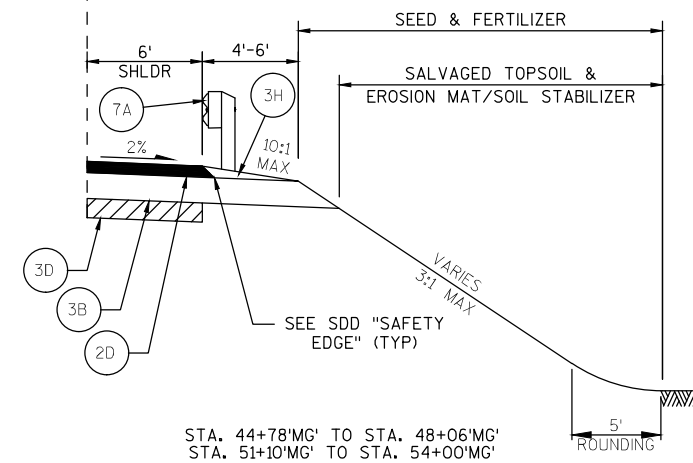
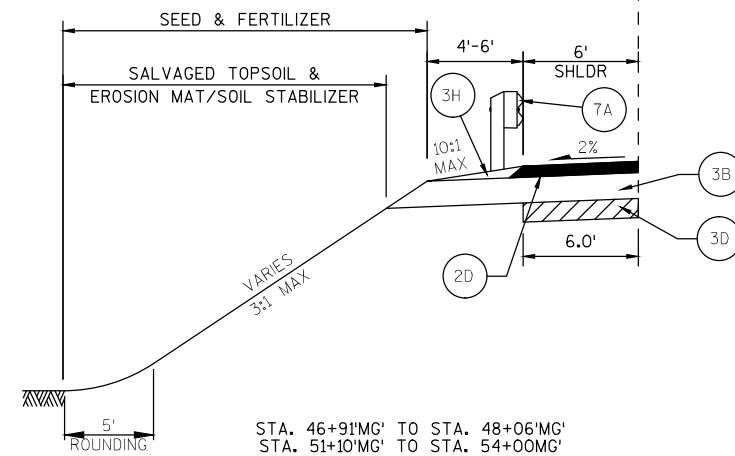
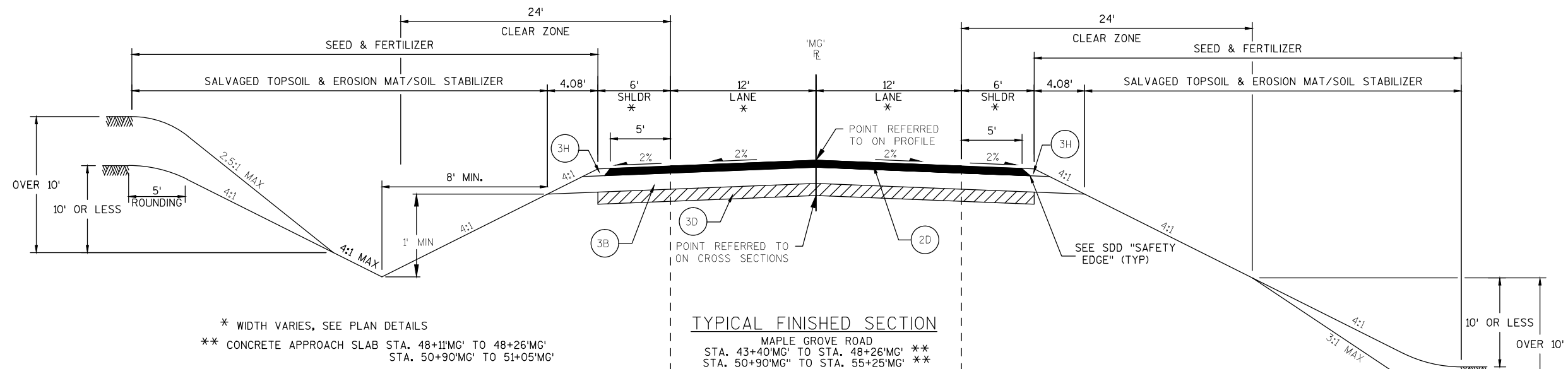
(3H) BASE AGGREGATE DENSE 3/4-INCH THICKNESS TO MATCH ADJACENT PAVEMENT	(4B) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A	(5B) PIPE UNDERDRAIN 6-INCH SEE PIPE UNDERDRAIN DETAIL
(3F) 16-INCH SELECT CRUSHED MATERIAL	(5A) CONSTRUCT RELIEF TRENCHES AT DITCH SAG POINTS OR EVERY 250' (SEE CONSTRUCTION DETAIL)	(RS) ROUT AND SEAL



* STA. 814+24'KC' TO STA 815+54'KC' RT - WIDTH VARIES WITHIN GORE AREA
* STA. 806+72'KD' - 807+30'KD' RT - WIDTH VARIES WITHIN GORE AREA

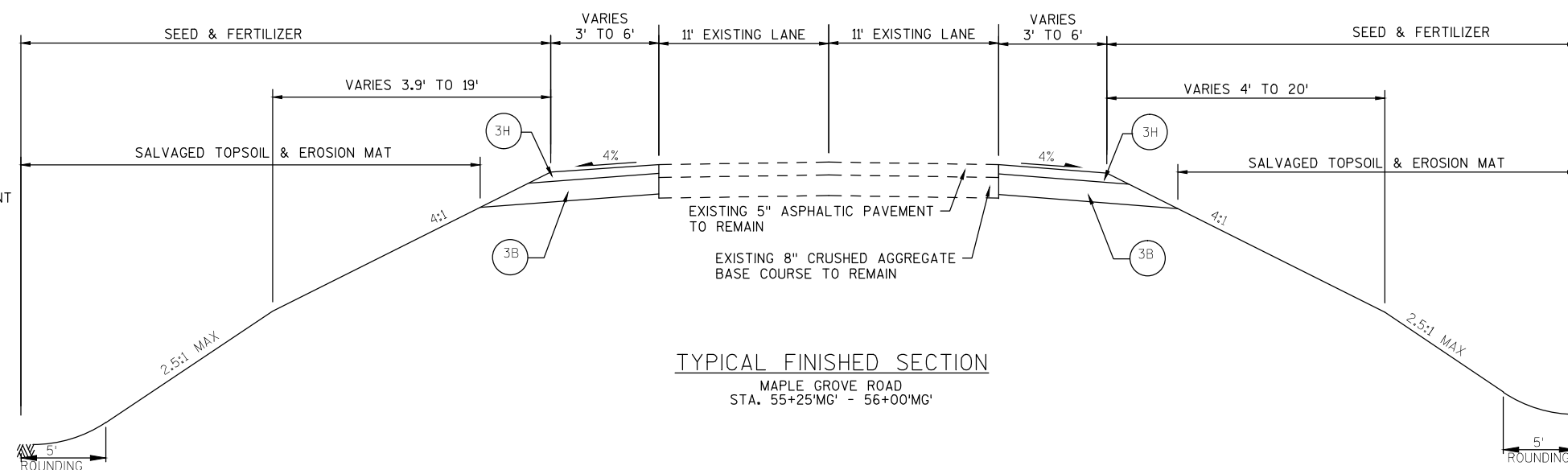
LEGEND

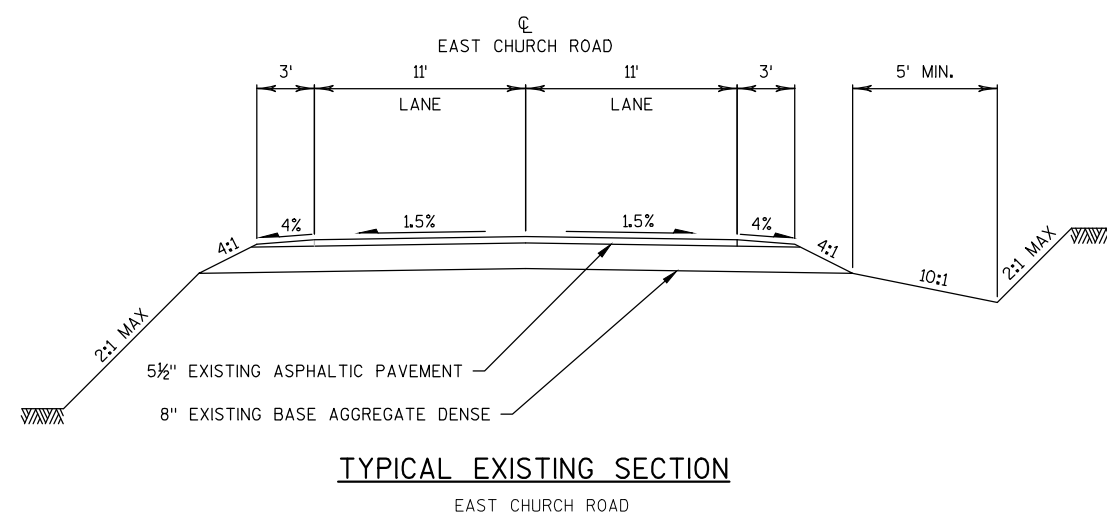
- (1D) 8-INCH CONCRETE PAVEMENT
DOWELED AND TINED
- (2F) 3 1/2-INCH HMA PAVEMENT,
TYPE E-1
- (3A) 6-INCH BASE AGGREGATE DENSE
1 1/4-INCH
- (3H) BASE AGGREGATE DENSE 3/4-INCH
THICKNESS TO MATCH EXISTING PAVEMENT
- (3F) 16-INCH SELECT CRUSHED MATERIAL
- (5A) CONSTRUCT RELIEF TRENCHES AT
DITCH SAG POINTS OR EVERY 250'
(SEE CONSTRUCTION DETAIL)

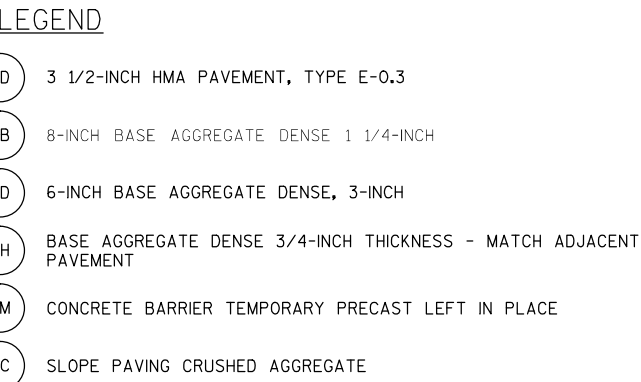


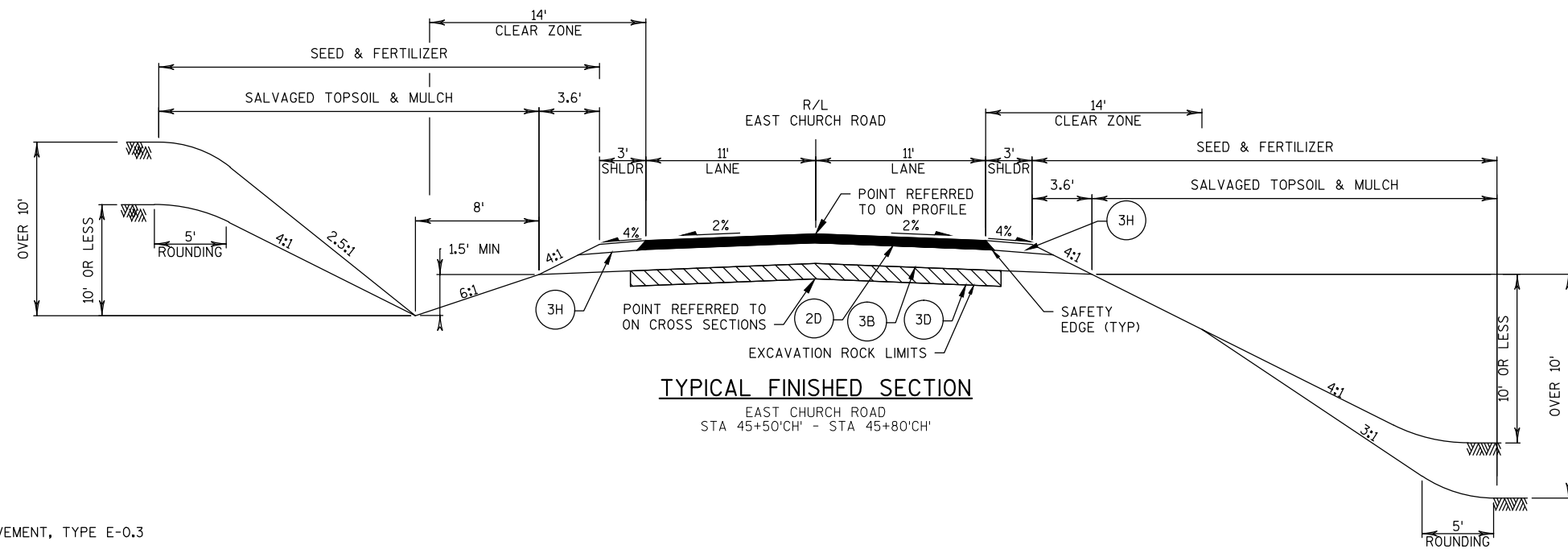
LEGEND

- (2D) 3 1/2-INCH HMA PAVEMENT, TYPE E-0.3
- (3B) 8-INCH BASE AGGREGATE DENSE 1 1/4-INCH
- (3D) 6-INCH BASE AGGREGATE DENSE 3-INCH
- (3H) BASE AGGREGATE DENSE 3/4-INCH THICKNESS TO MATCH EXISTING PAVEMENT

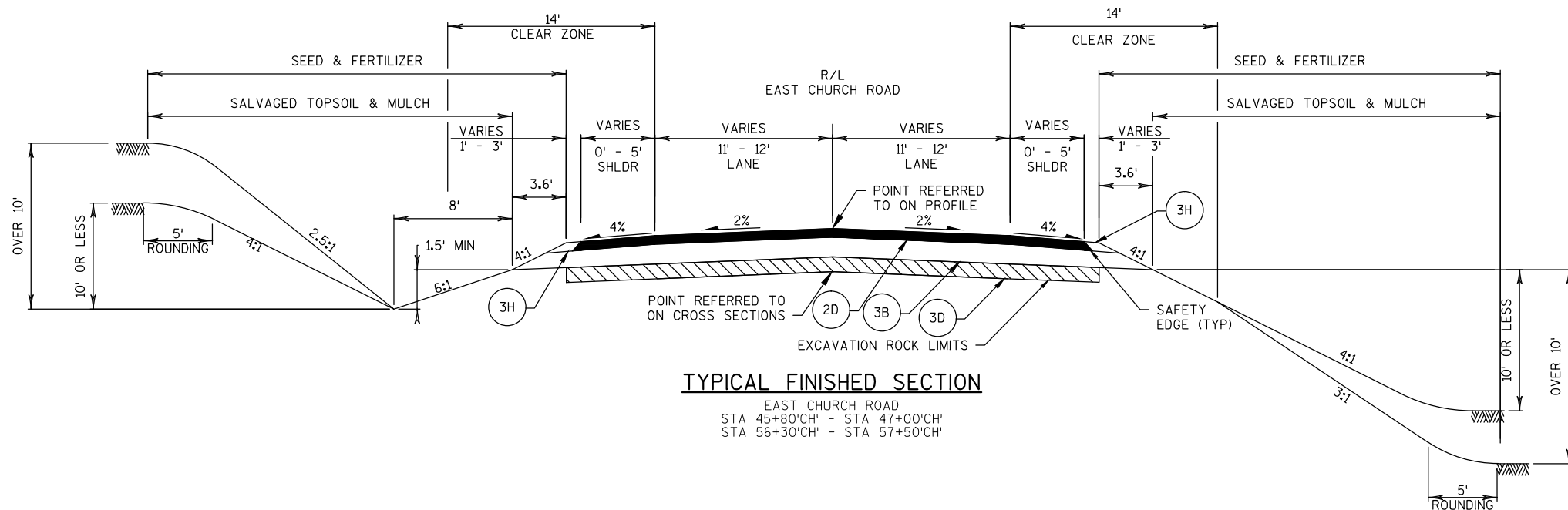


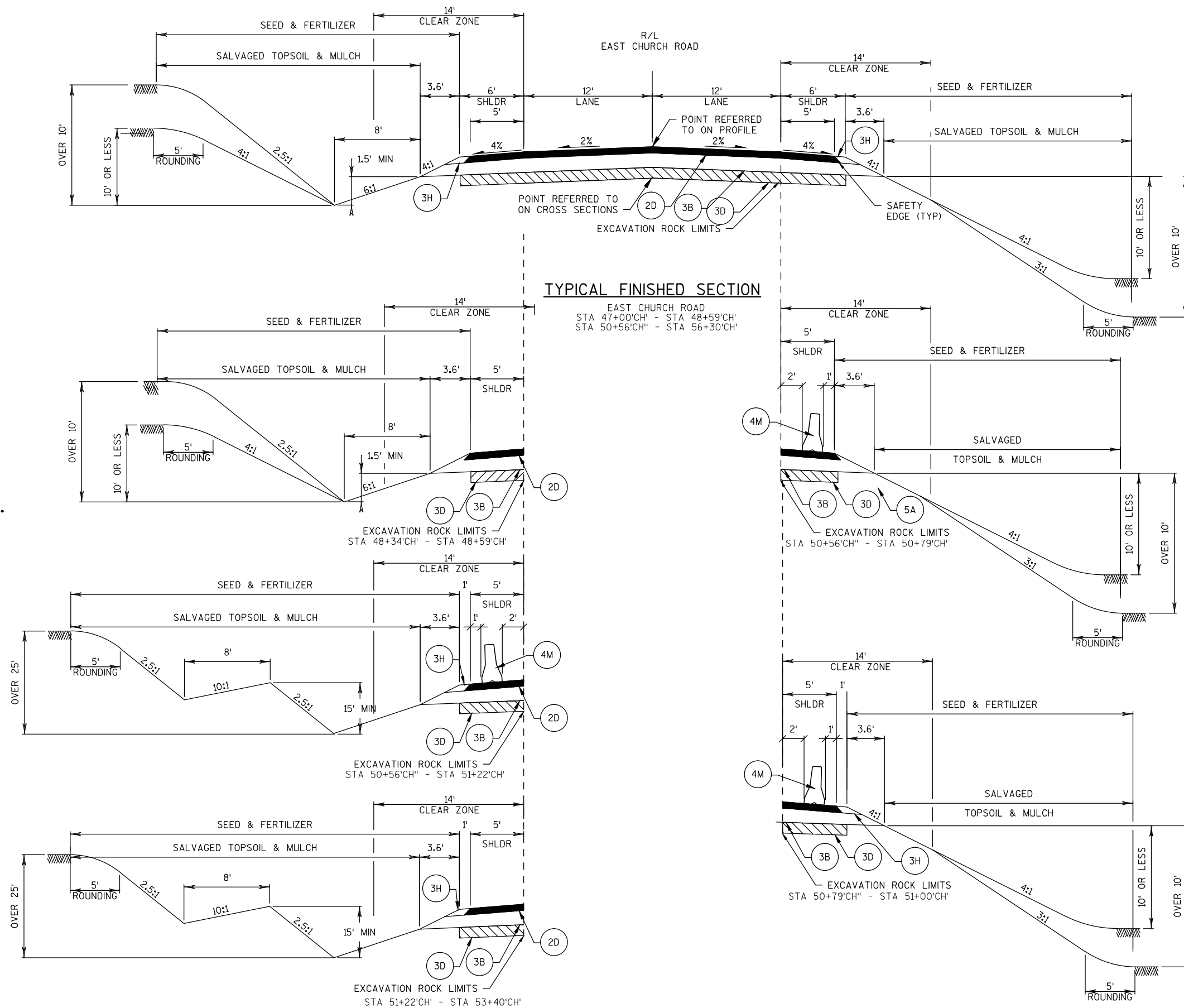




**LEGEND**

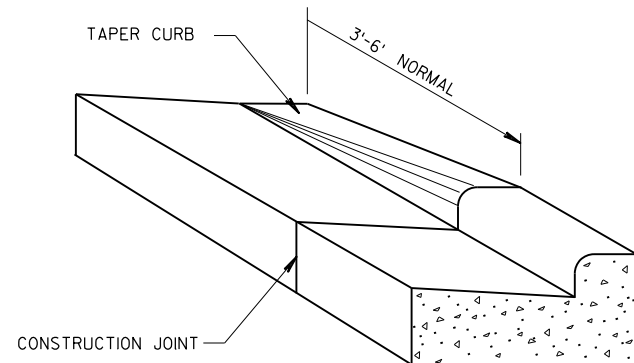
- 2D 3 1/2-INCH HMA PAVEMENT, TYPE E-0.3
- 3B 8-INCH BASE AGGREGATE DENSE 1 1/4-INCH
- 3D 6-INCH BASE AGGREGATE DENSE, 3-INCH
- 3H BASE AGGREGATE DENSE 3/4-INCH THICKNESS - MATCH ADJACENT PAVEMENT
- 4M CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE



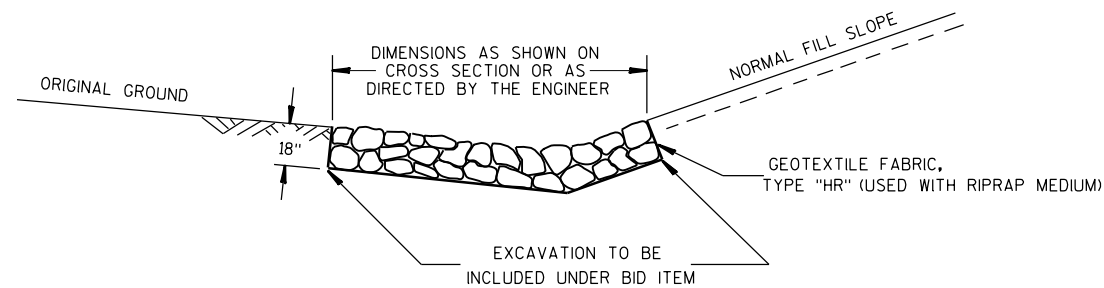


LEGEND

- 2D 3 1/2-INCH HMA PAVEMENT, TYPE E-0.3
- 3B 8-INCH BASE AGGREGATE DENSE 1 1/4-INCH
- 3D 6-INCH BASE AGGREGATE DENSE, 3-INCH
- 3H BASE AGGREGATE DENSE 3/4-INCH THICKNESS - MATCH ADJACENT PAVEMENT
- 4M CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE



DETAIL OF CURB & GUTTER TERMINI

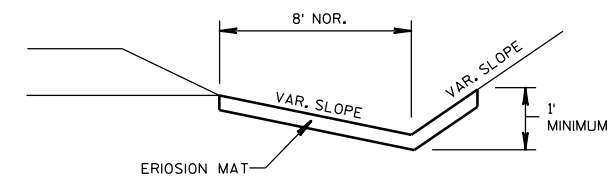


DETAIL FOR RIPRAP MEDIUM IN DITCHES

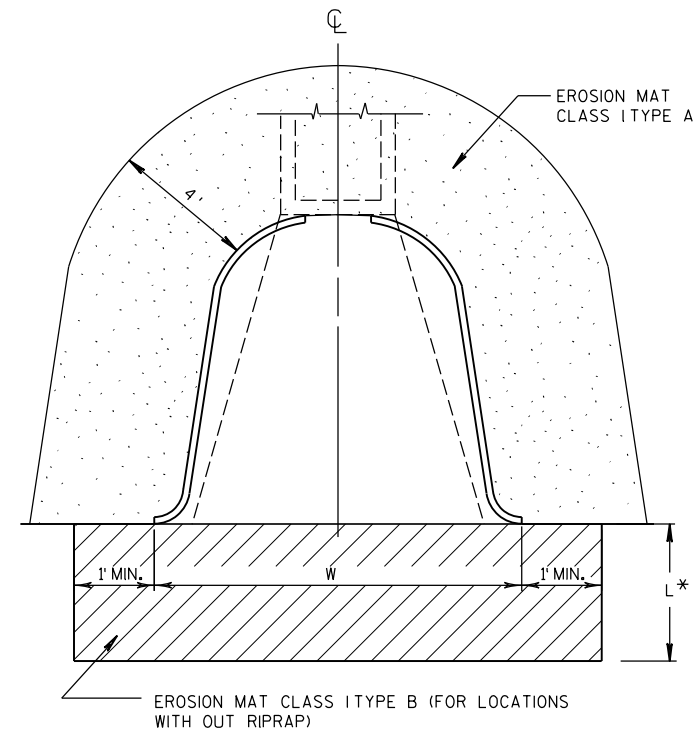
RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

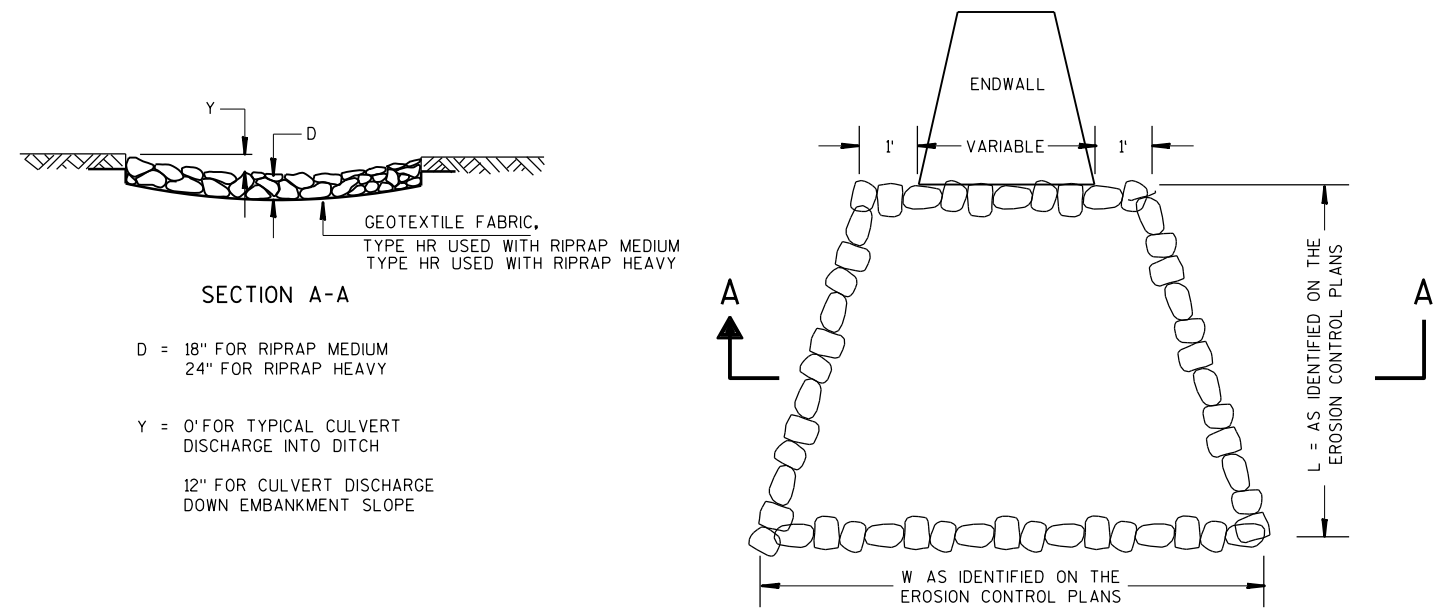
TOTAL PROJECT AREA = 258.4 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 100.0 ACRES



EROSION MAT DETAIL FOR DITCHES

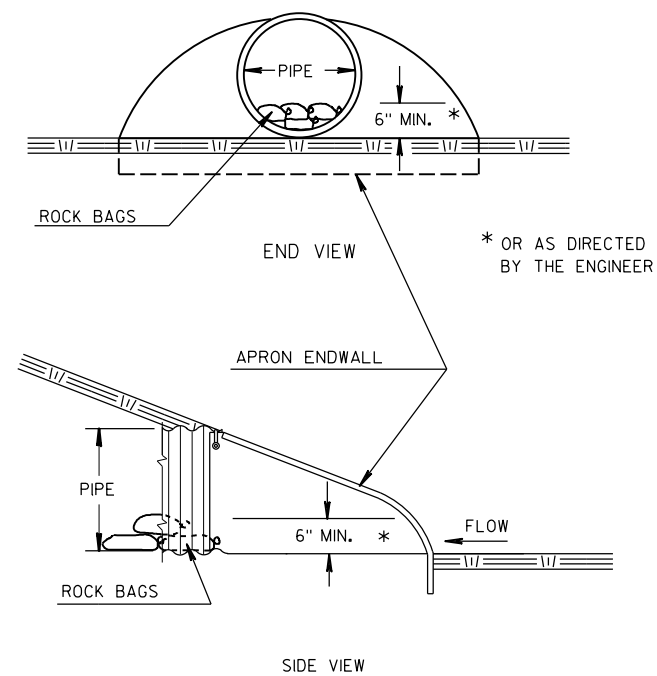


EROSION MAT DETAIL AT APRON ENDWALLS

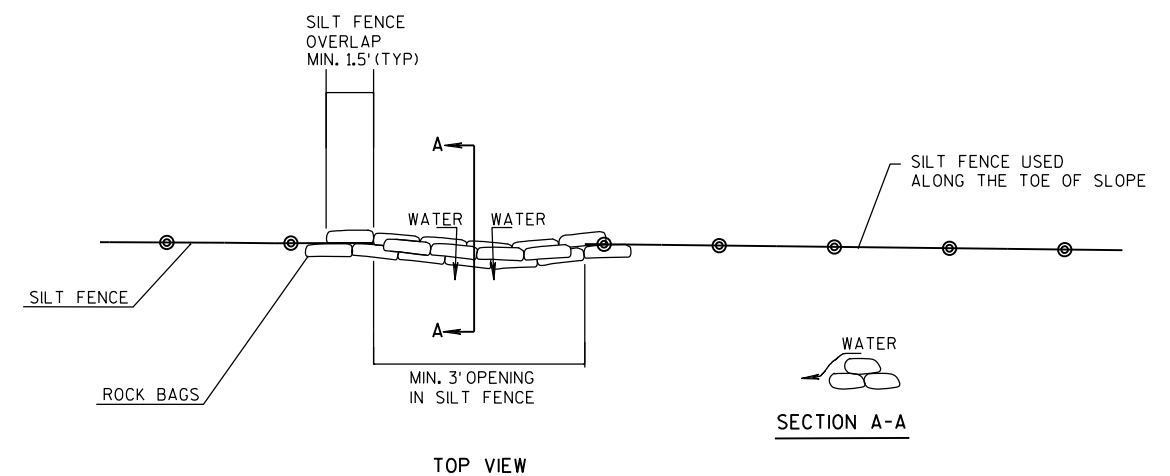


RIPRAP AND GEOTEXTILE FABRIC DETAIL AT APRON ENDWALLS

(SEE EROSION CONTROL PLANS FOR LOCATIONS)



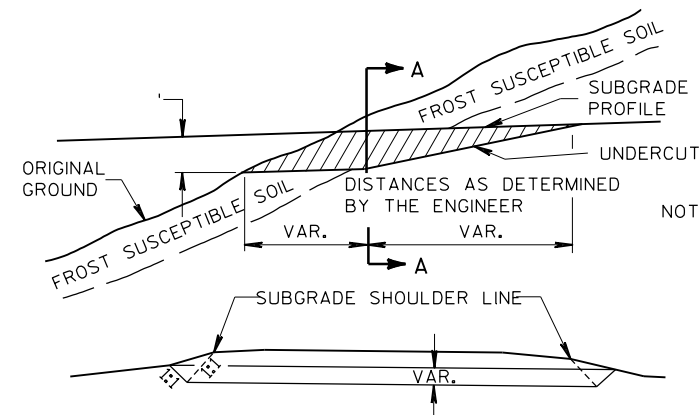
CULVERT PIPE CHECKS DETAIL



SILT FENCE RELIEF DETAIL

PAID AS ROCK BAGS

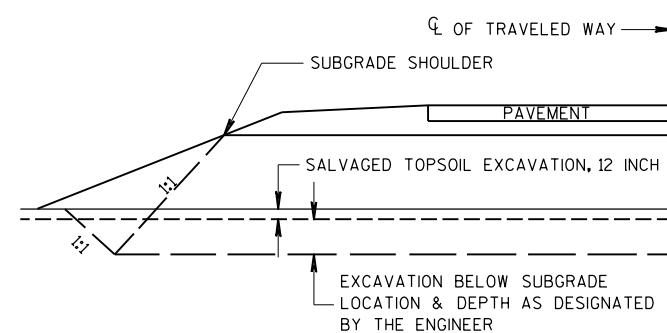
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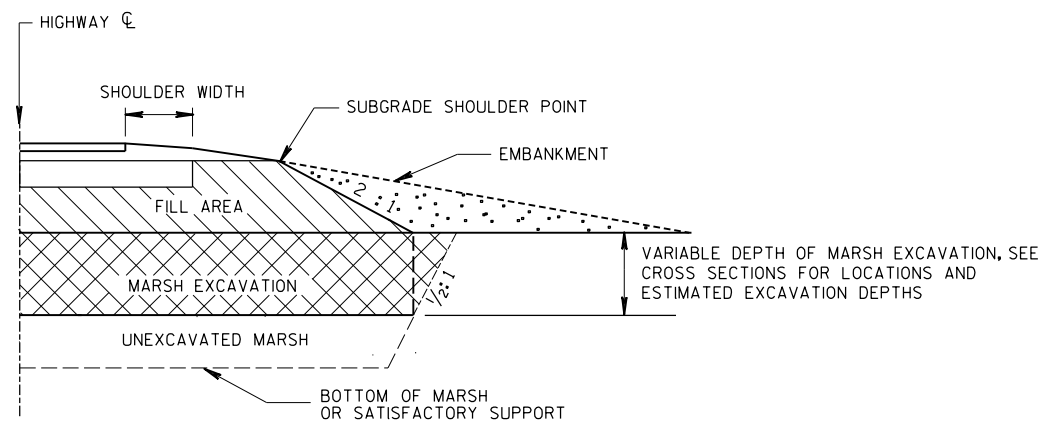
SECTION A-A
CROSS SECTION SHOWING UNDERCUT
**DETAIL FOR EXCAVATION BELOW
SUBGRADE AT CUTS**

NOTE: EXACT LOCATIONS AND EXTENT OF E.B.S. SECTIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

BACKFILL MUST BE HOMOGENEOUS WITH ADJOINING FILL MATERIAL.
THE FILL SECTION WITHIN 100' OF THE MOUTH OF THE CUT MUST BE KEPT 2' BELOW SUBGRADE UNTIL E.B.S. IS COMPLETED.



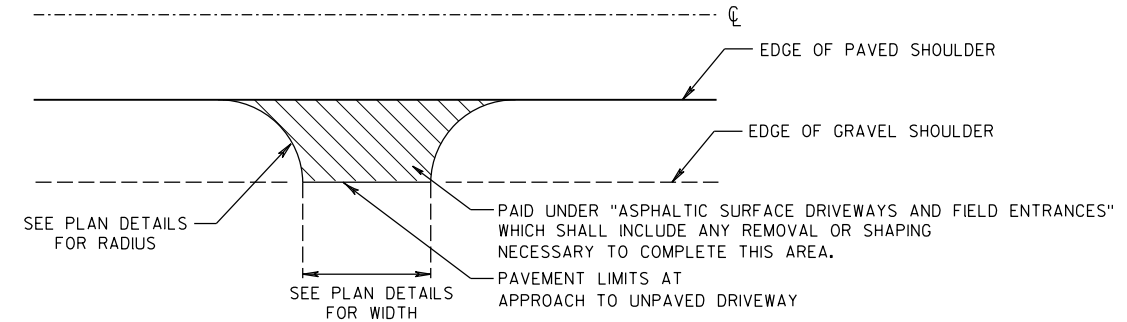
DETAIL FOR EXCAVATION BELOW SUBGRADE



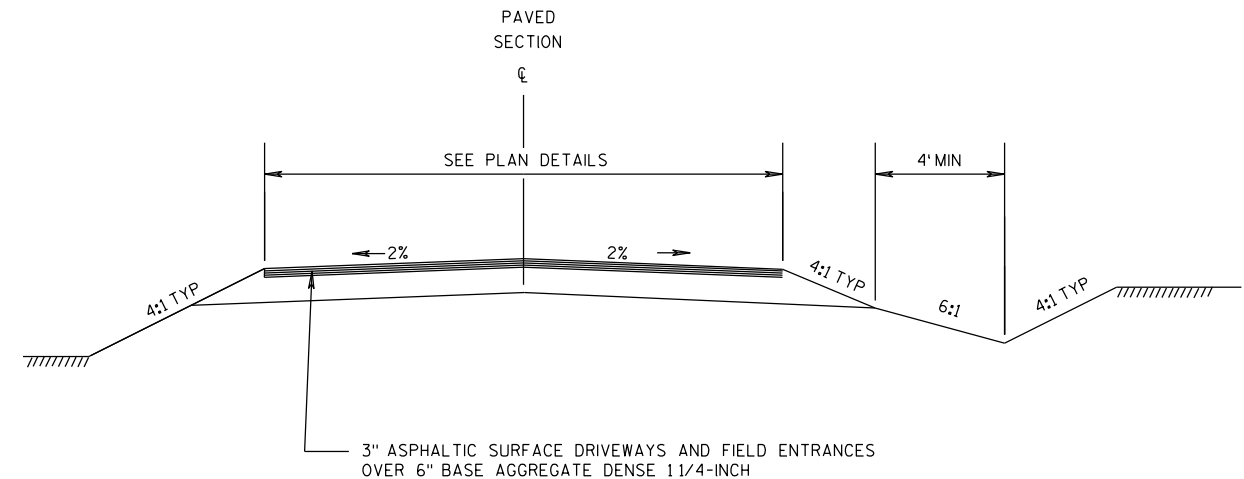
MARSH EXCAVATION DETAIL

NOTES:
MARSH EXCAVATION SHALL BE REPLACED WITH SELECT CRUSHED MATERIAL IN AREAS WHERE WATER IS ENCOUNTERED. WHERE WATER IS ENCOUNTERED, PLACE SELECT CRUSHED MATERIAL TO AN ELEVATION 1 FT ABOVE THE WATER LINE. ALL OTHER AREAS SHALL BE REPLACED WITH ROADWAY EMBANKMENT. ALL MARSH EXCAVATION IS TO BE WASTED OFF SITE.

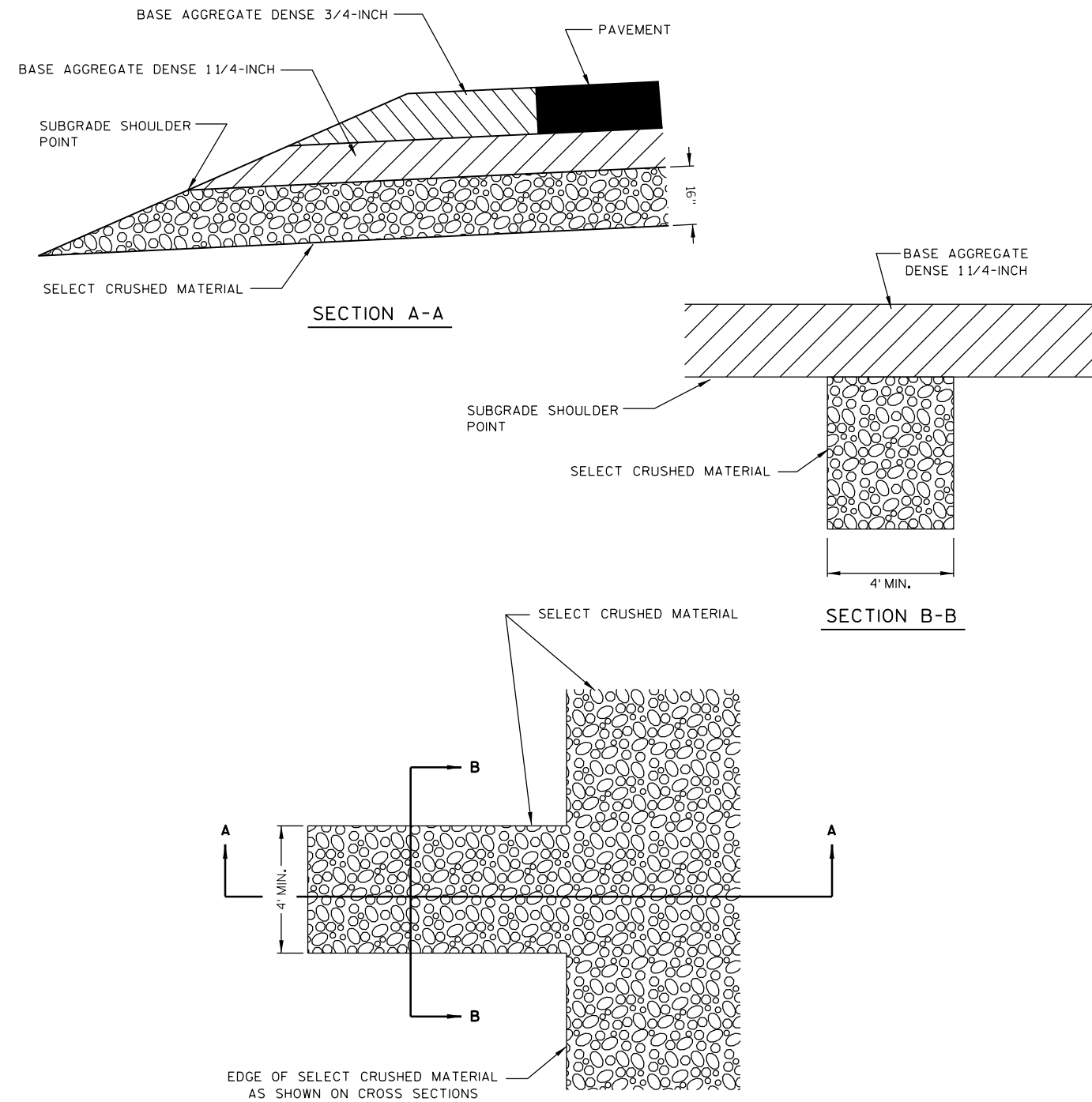
2



RURAL DRIVEWAY DETAIL



RURAL DRIVEWAY TYPICAL SECTION DETAIL

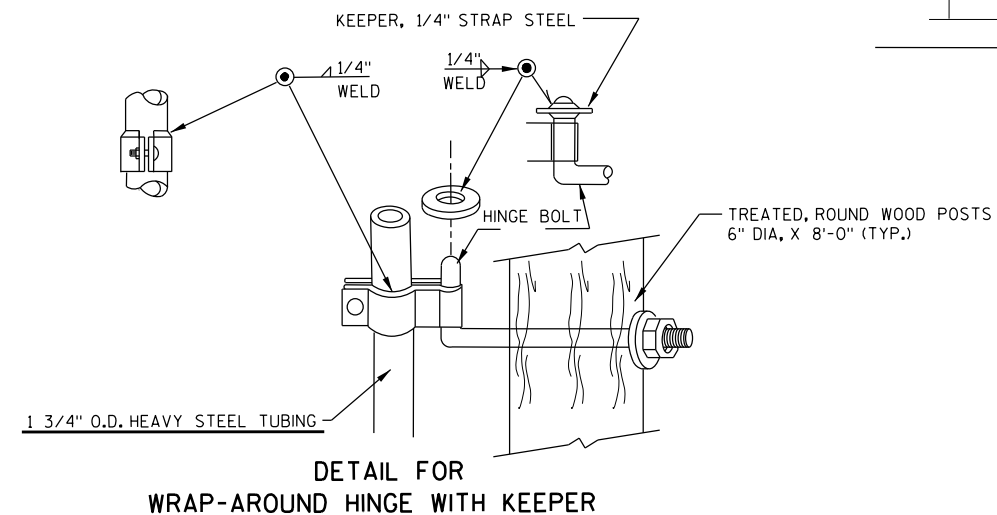


DETAIL FOR RELIEF TRENCH

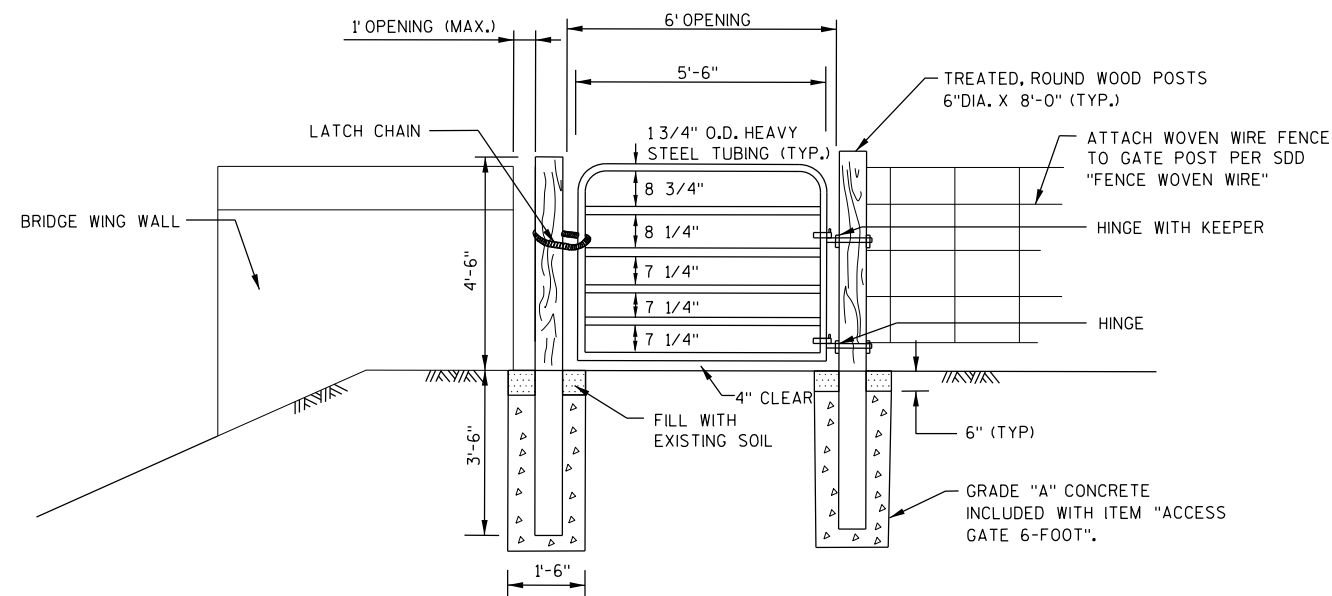
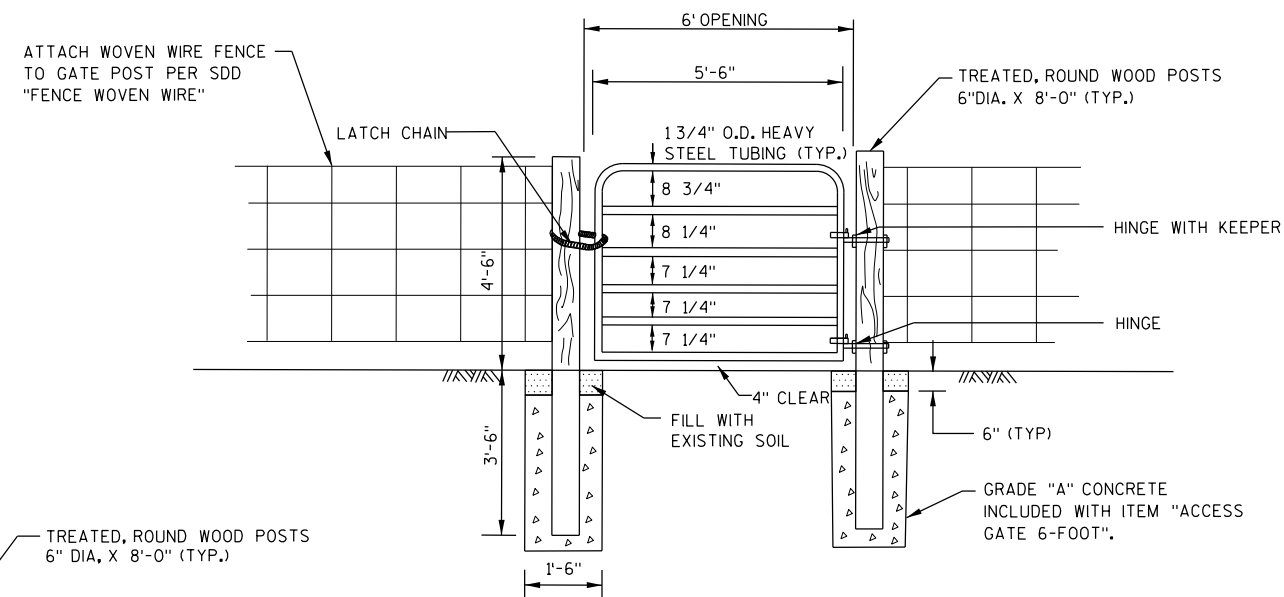
CONSTRUCT DRAINS AT LEAST EVERY 250' AND
AT EACH SAG VERTICAL CURVE IN THE PROFILE.

(LOCATIONS TO BE DETERMINED IN THE FIELD BY THE ENGINEER)

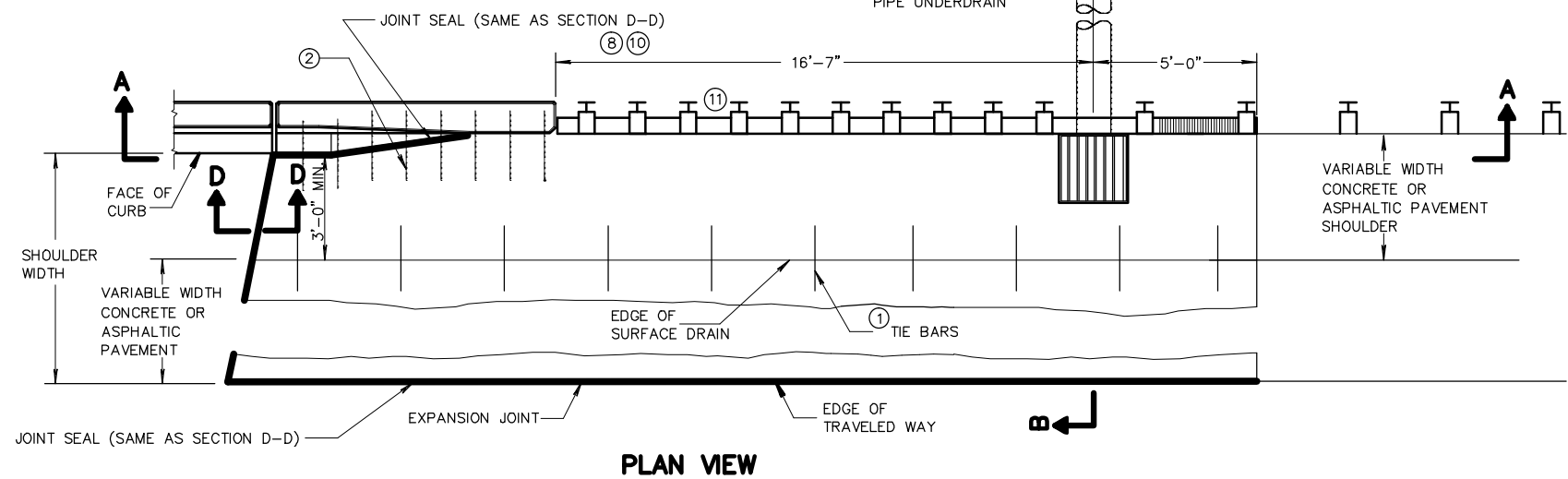
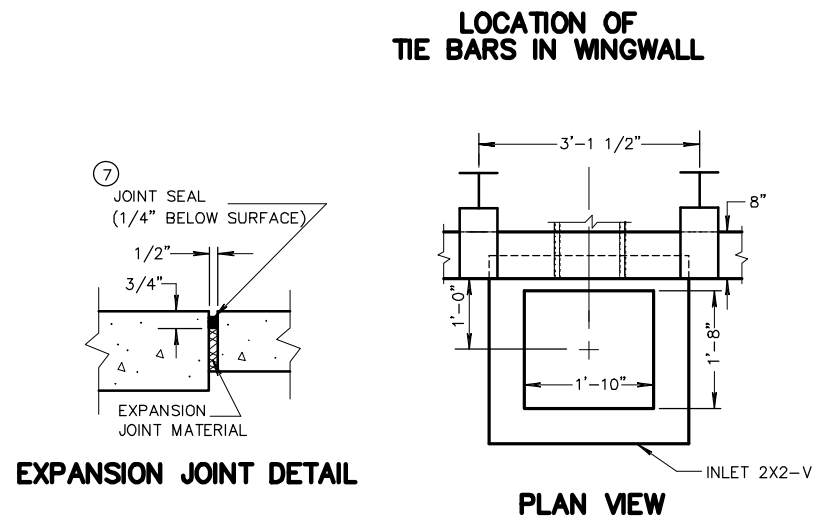
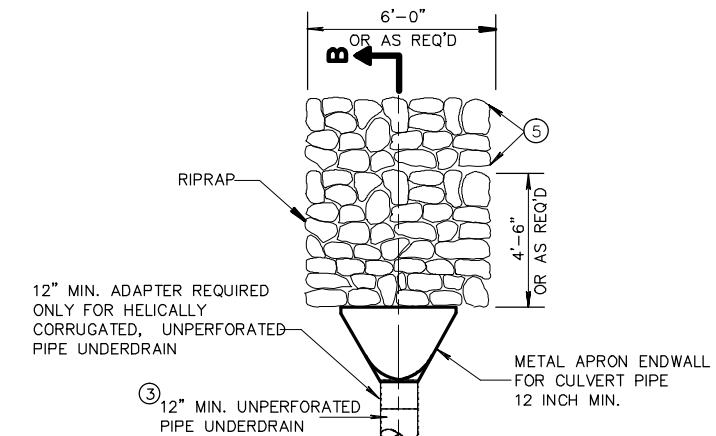
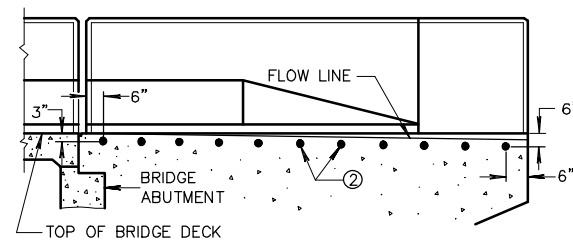
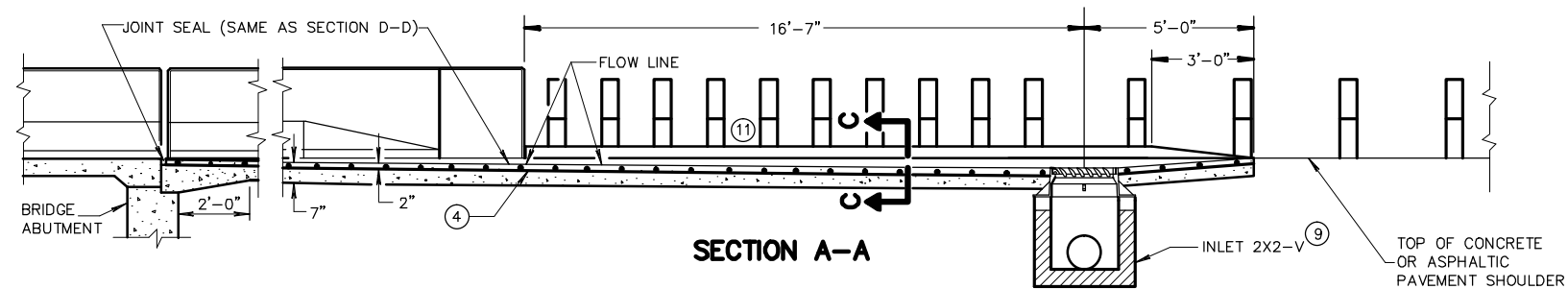
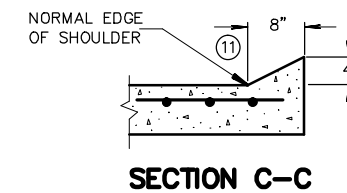
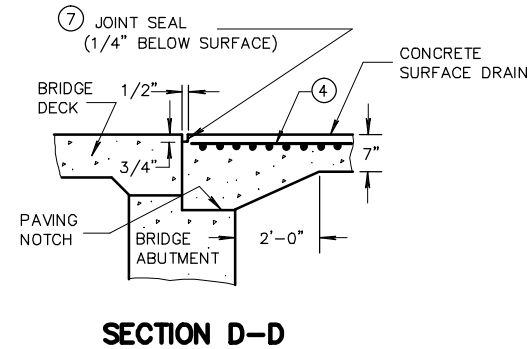
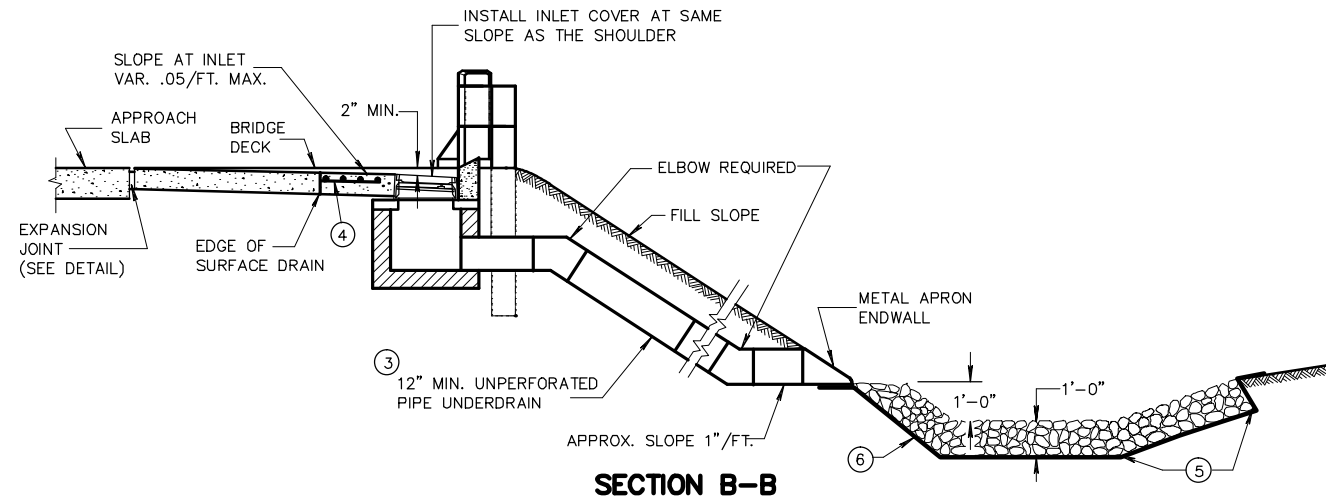
EXCAVATION REQUIRED TO CONSTRUCT RELIEF TRENCH
INCLUDED TO THE ITEM SELECT CRUSHED MATERIAL



SEE MISCELLANEOUS QUANTITIES FOR APPROXIMATE LOCATIONS. LOCATION SHALL BE ADJUSTED TO FIT FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER.



NOTES:
KEEPER TO BE ATTACHED TO TOP HINGE OF EACH GATE ONLY.
KEEPER SHALL BE FITTED AFTER THE GATE IS HUNG IN PLACE.
KEEPER TO BE OF SUCH DIMENSIONS TO PROVIDE CLEARANCE FOR LATERAL SWING.
DRILL HOLE IN KEEPER OF SUFFICIENT DIAMETER TO PROVIDE SNUG FIT OVER HINGE BOLT.
ALL FIELD WELDED SURFACES SHALL BE PRIMED WITH PREMIXED RUSTPROOF PAINT, THEN TWO FIELD COATS OF ENAMEL PAINT SHALL BE APPLIED.
KEYED LOCK TO BE SUPPLIED BY OTHERS (WISDOT)

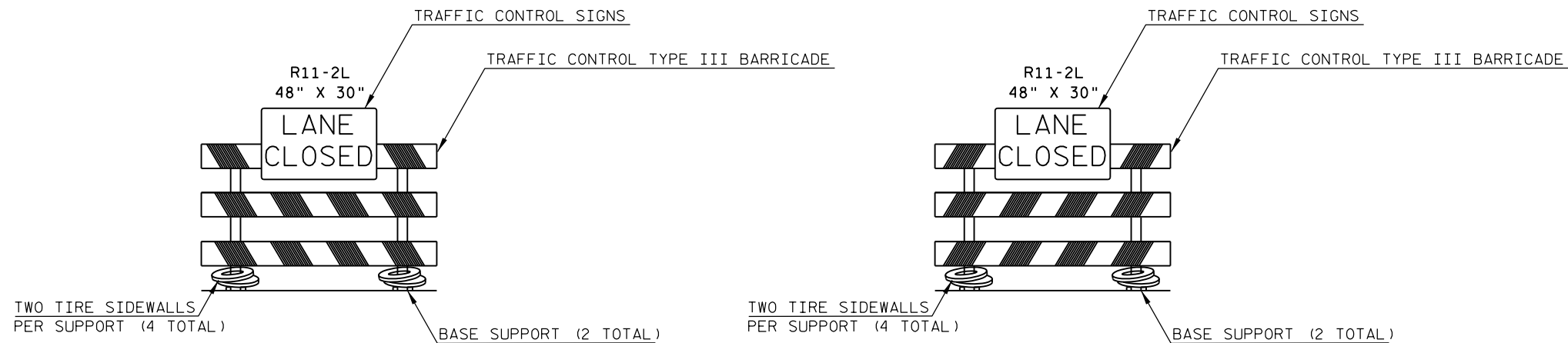


GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

- ① NO. 4 X 2'-0" TIE BARS SPACED AT 3'-0" CENTERS TO BE USED ONLY WHEN ADJACENT TO P.C. CONCRETE.
- ② NO. 4 X 2'-0" TIE BARS SPACED AT 12" CENTERS TO BE PLACED BY BRIDGE CONTRACTOR, OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.
- ③ THE PIPE UNDERDRAIN MAY BE ANY ONE OF THE SIX MATERIALS LISTED IN THE STANDARD SPECIFICATIONS SECTION 612.2 EXCEPT DRAIN TILE.
- ④ MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C-C.
- ⑤ LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.
- ⑥ GEOTEXTILE FABRIC, TYPE 'R' OR TYPE 'HR', DEPENDENT ON RIPRAP TYPE.
- ⑦ HOT POURED SEALANT UNLESS OTHERWISE SPECIFIED.
- ⑧ THIS DIMENSION MAY VARY DEPENDING ON THE SPACING OF POSTS FOR THE STEEL PLATE BEAM GUARD. THE TYPICAL LOCATION FOR THE SURFACE DRAIN IS WHERE THE POST SPACING IS 3'-1 1/2".
- ⑨ SEE CURRENT STANDARD DETAIL DRAWINGS 8A5 AND 8C7 FOR DETAILS.
- ⑩ SEE CURRENT STANDARD DETAIL DRAWING 14B45 FOR MGS POST SPACING DETAILS.
- ⑪ DO NOT INSTALL SURFACE DRAIN CURB AT STA 1931+68'SB'. TEMPORARY CONCRETE BARRIER WILL BE USED IN REPLACEMENT OF CURB.



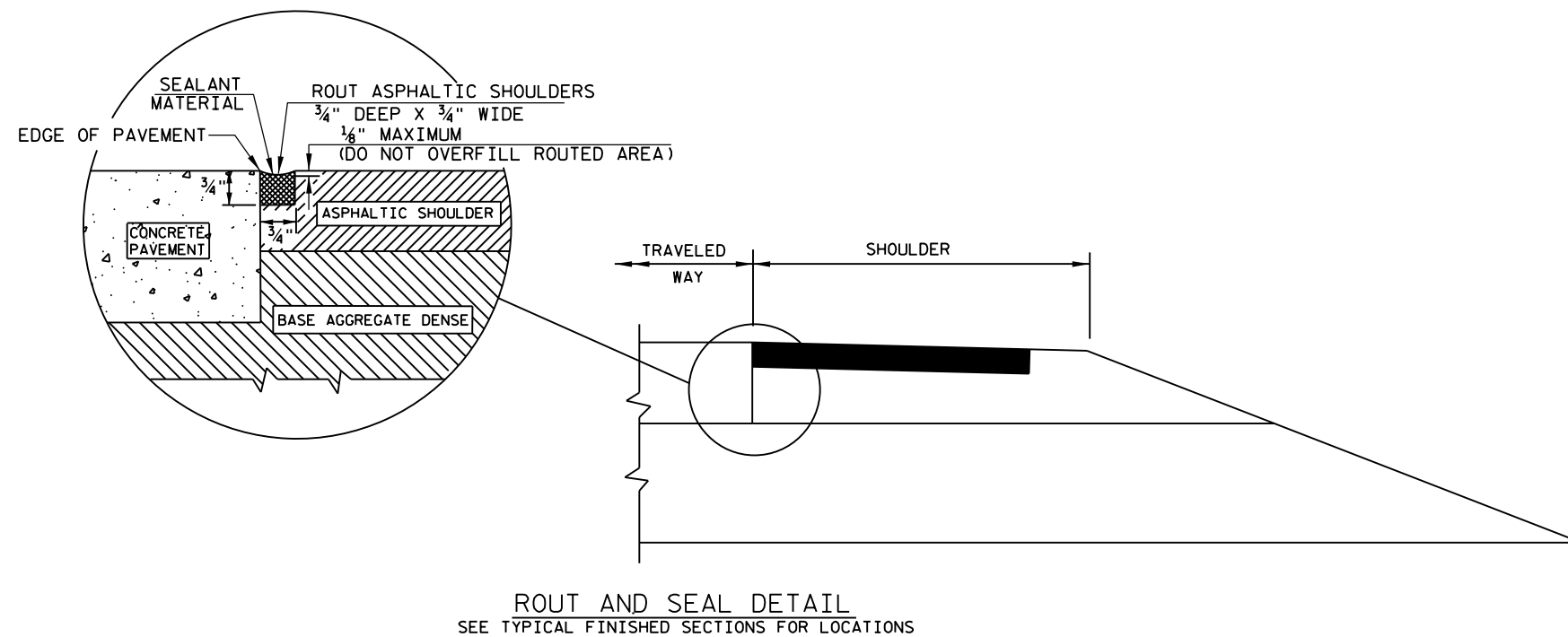
TRAFFIC CONTROL BARRICADES TYPE III WITH SIGN, PERMANENT

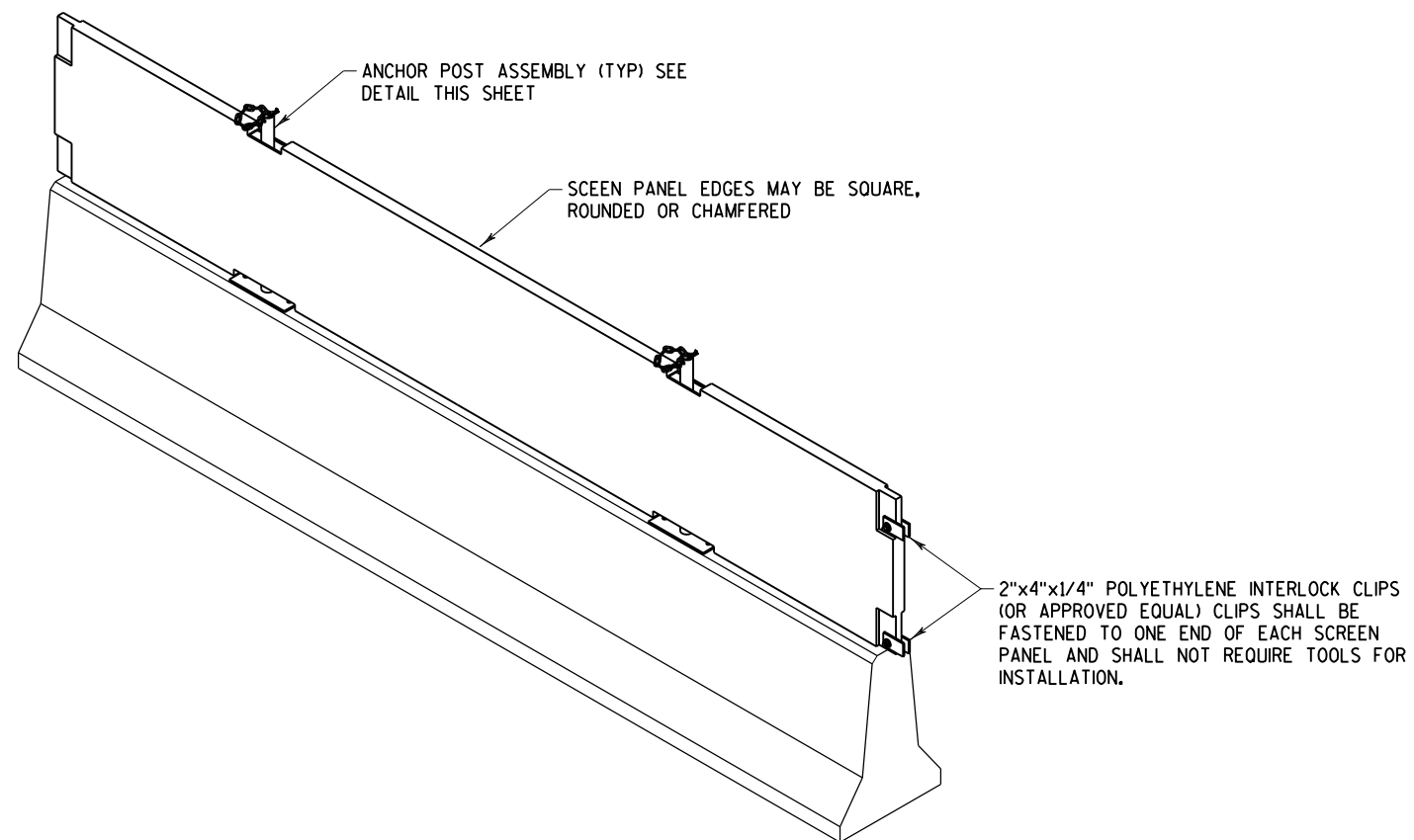
ALL THE FOLLOWING ITEMS PAID FOR AS TRAFFIC CONTROL BARRICADES TYPE III WITH SIGN, PERMANENT

- TRAFFIC CONTROL SIGNS R11-2L "LANE CLOSED" - ONE PER BARRICADE
- TRAFFIC CONTROL TYPE III BARRICADE - INCLUDES TWO BASE SUPPORTS PER BARRICADE
- TIRE SIDEWALLS - FOUR PER BARRICADE

NOTE: PROVIDE HALF OF THE BARRICADES WITH THE RAIL STRIPES AND SIGNS SET UP FOR BARRICADES PLACED ON THE LEFT SIDE OF THE ROADWAY.

NOTE: PROVIDE HALF OF THE BARRICADES WITH THE RAIL STRIPES AND SIGNS SET UP FOR BARRICADES PLACED ON THE RIGHT SIDE OF THE ROADWAY.





NOTE:

THE DESIGN OF THIS ITEM, WHICH INCLUDES ALL ASPECTS SHOWN, SHALL BE DESIGNED SO THAT THE SCREEN IS CAPABLE OF REMAINING IN PLACE FROM TRAFFIC GUSTS, WIND GUSTS, AND OTHER OUTDOOR ELEMENTS THAT MAY MOVE OR DISPLACE THE SCREEN.

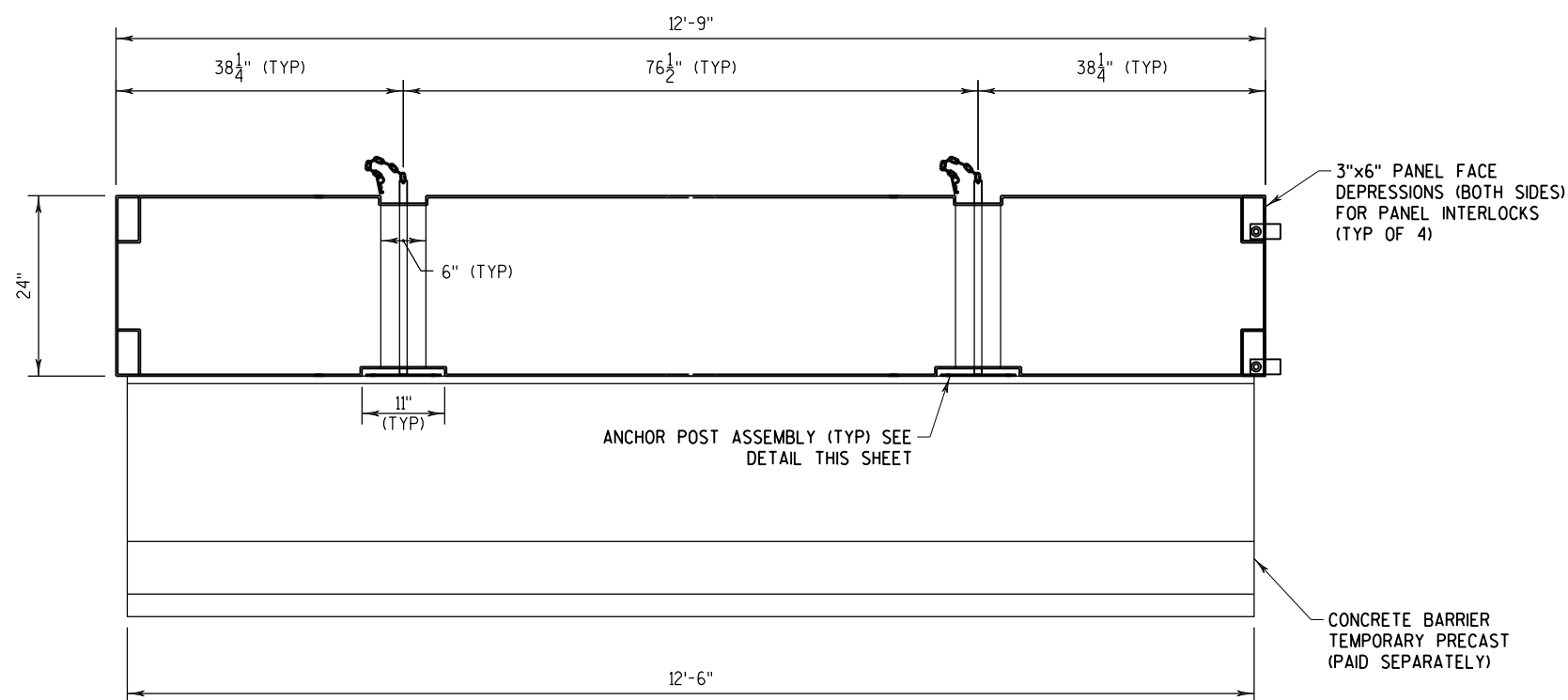
VENT HOLES THROUGH THE SCREEN PANEL ARE PERMITTED BUT NOT REQUIRED. IF VENT HOLES ARE USED, THE HOLES SHALL NOT EXCEED 3-INCHES IN DIAMETER AND SHALL BE LIMITED TO 24 OR LESS PER PANEL.

SCREEN PANELS SHALL HAVE A NON-REFLECTIVE MAT OR FLAT GRAY FINISH OR PAINTED SURFACE.

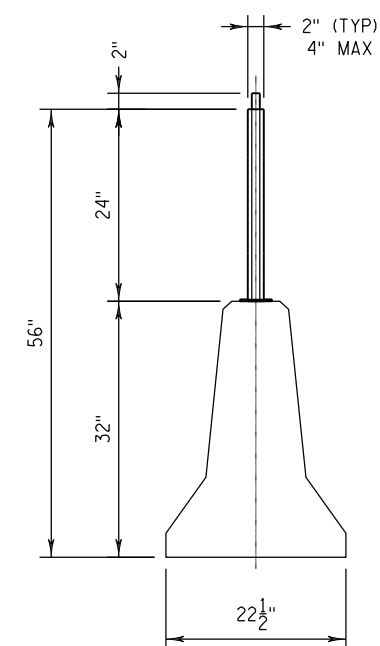
SHOP DRAWINGS WITH A FULL SIZE SAMPLE SHALL BE PROVIDED TO THE CMT (CORRIDOR MANAGEMENT TEAM) FOR APPROVAL PRIOR TO USE.

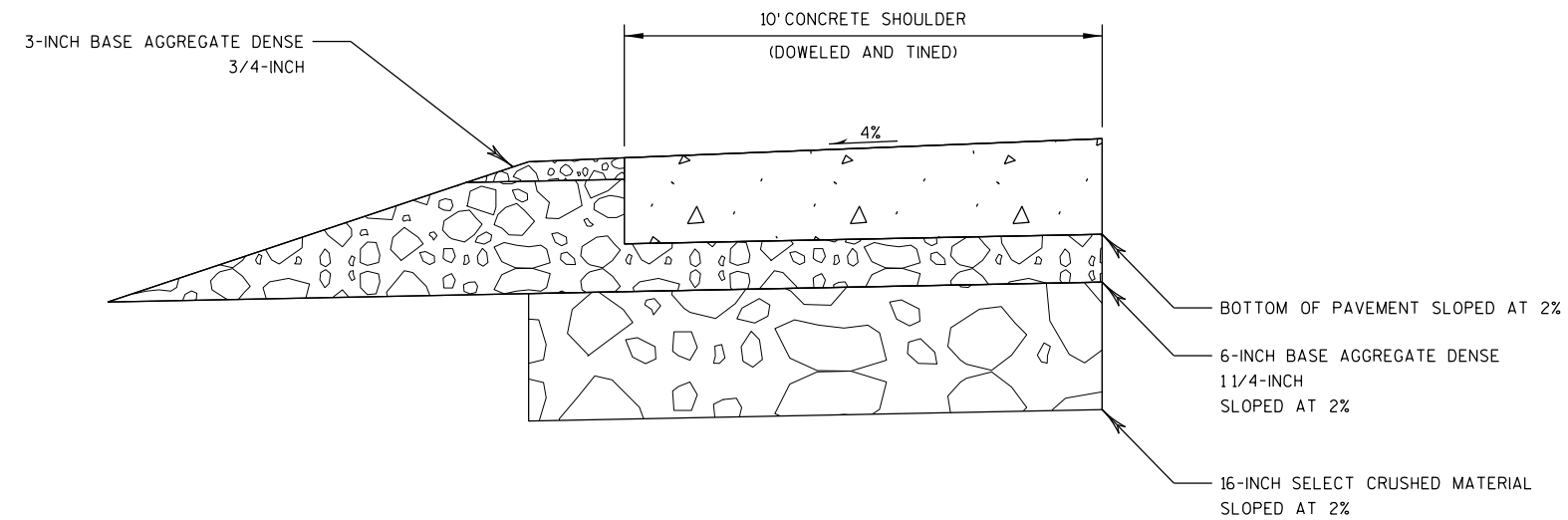


ANCHOR POST ASSEMBLY

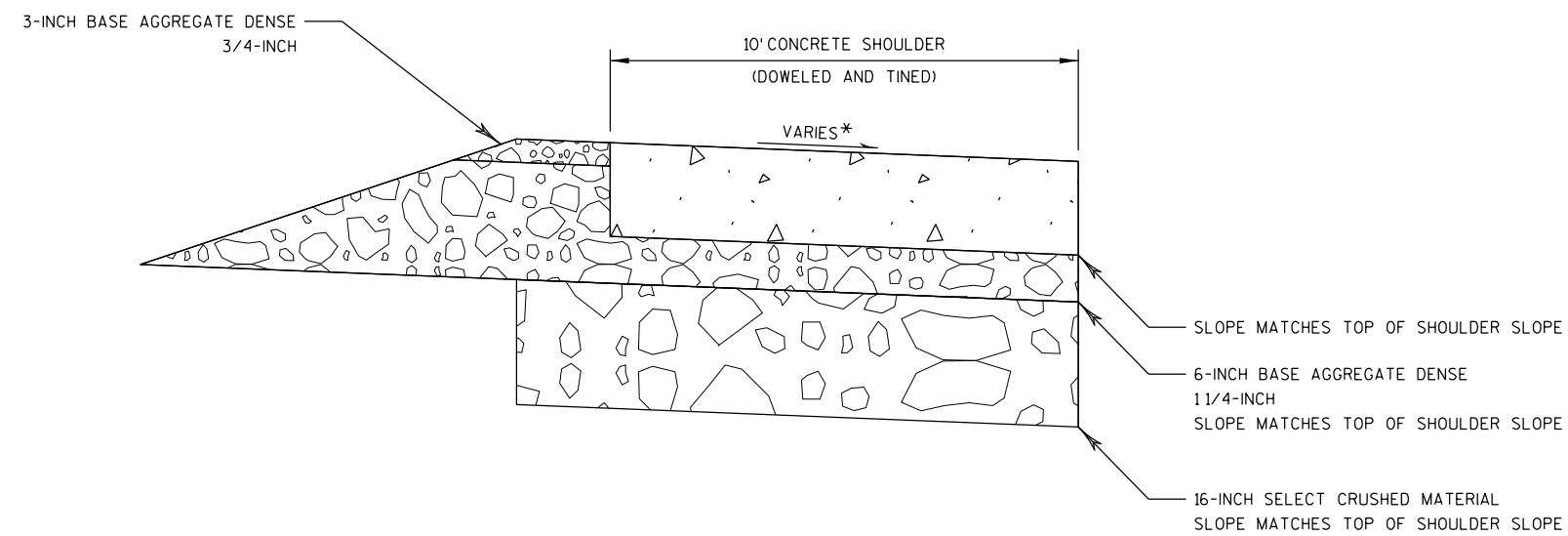


TRAFFIC CONTROL GAWK SCREEN





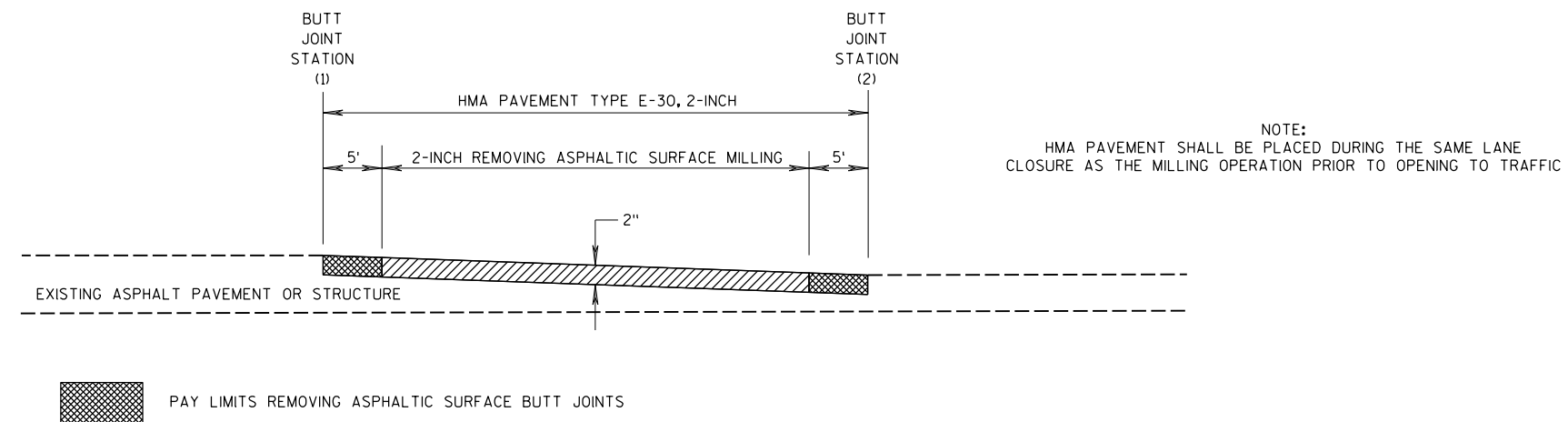
NORMAL SHOULDER



SUPERELEVATED SHOULDER

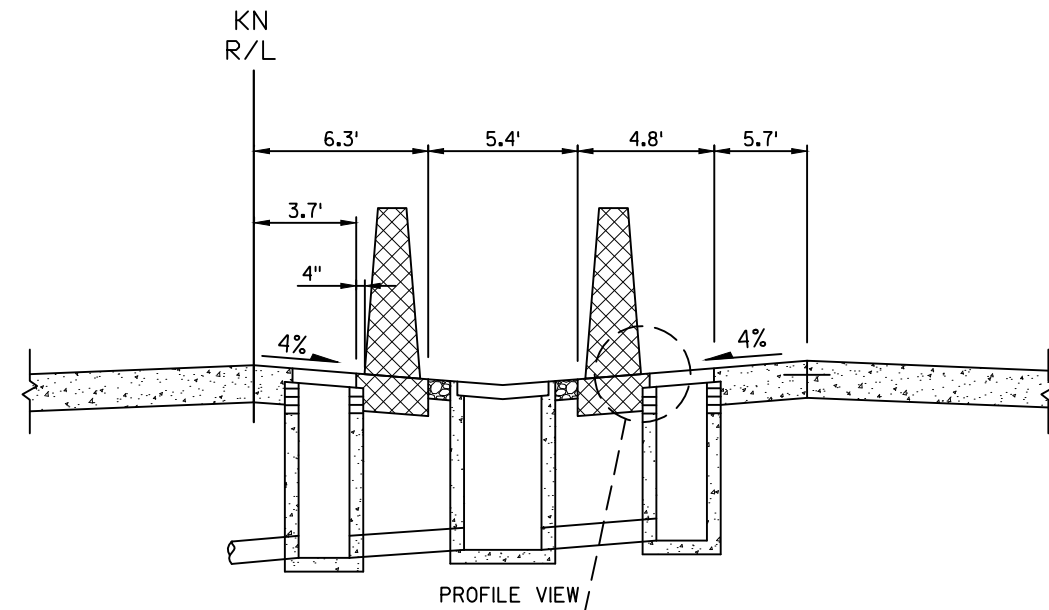
* SLOPE VARIES SEE SUPERELEVATION TABLE

NOTE:
TRAPEZOIDAL SHOULDER IS PAID AS 12-INCH CONCRETE PAVEMENT



REMOVING ASPHALTIC SURFACE BUTT JOINT DETAIL

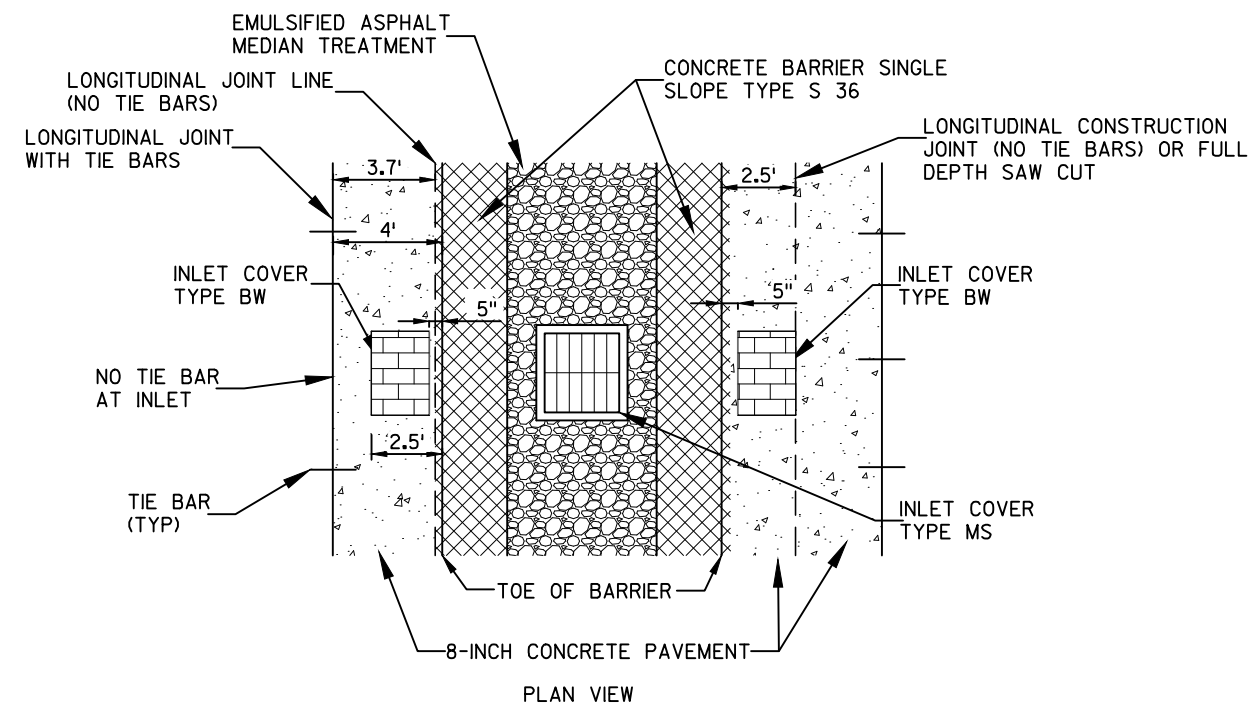
- (1) STA 1854+68'TSB'
(2) STA 1866+26'TSB'



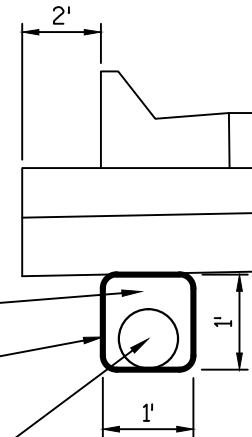
CONCRETE BARRIER SINGLE
SLOPE TYPE S 36

INLET COVER TYPE BW

DETAIL



CONCRETE BARRIER SINGLE SLOPE TYPE S 36
STA. 52+50'KN'

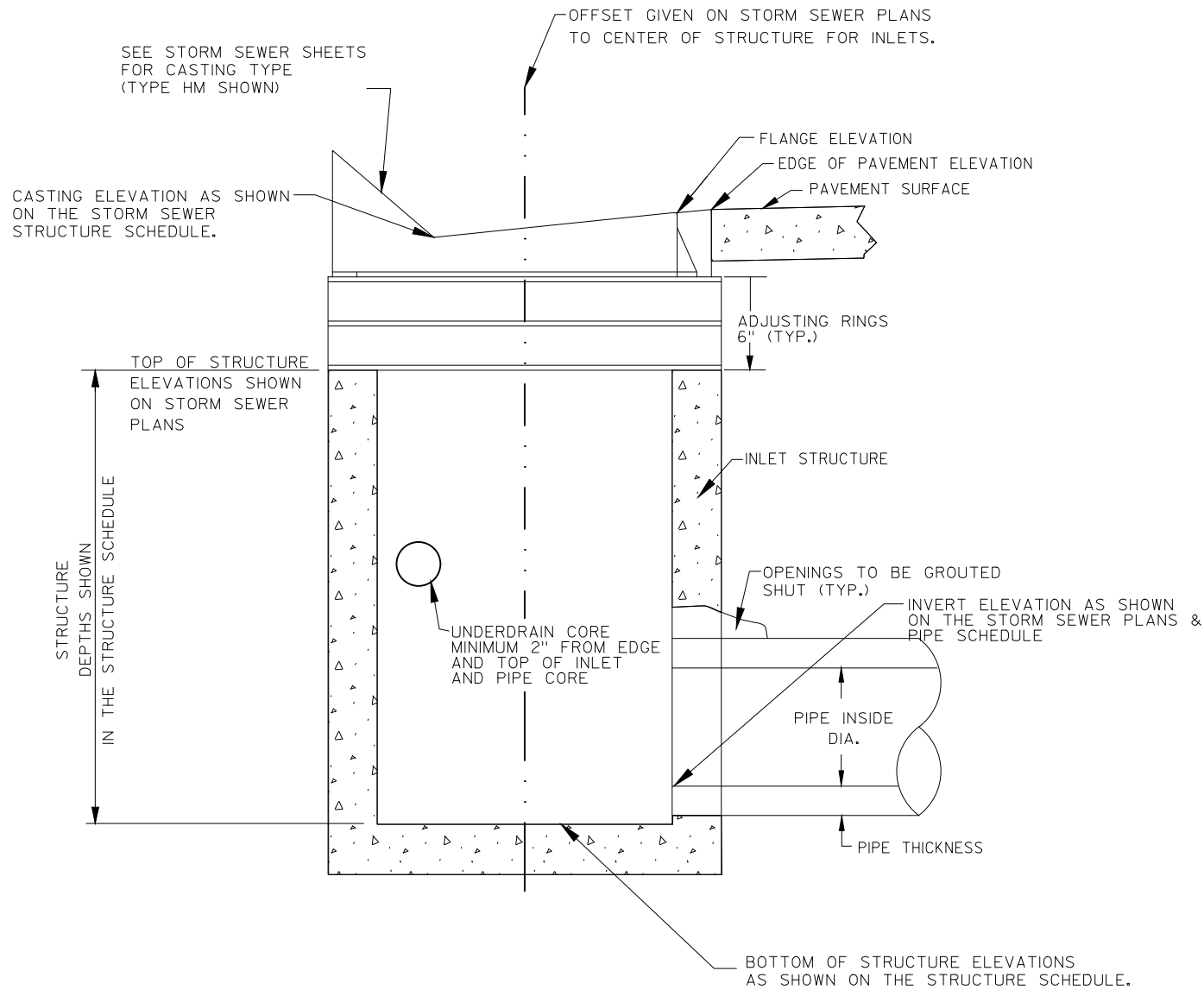


#1 CONCRETE AGGREGATE
(INCIDENTAL TO PIPE UNDERDRAIN)

GEOTEXTILE FABRIC
TYPE DF SCHEDULE B

6" PERFORATED PIPE UNDERDRAIN
DISCHARGE INTO NEW STORM SEWER
INLETS (INCIDENTAL TO 6-INCH PIPE
UNDERDRAIN)

PIPE UNDERDRAIN DETAIL



DETAIL OF INLET W/CASTING

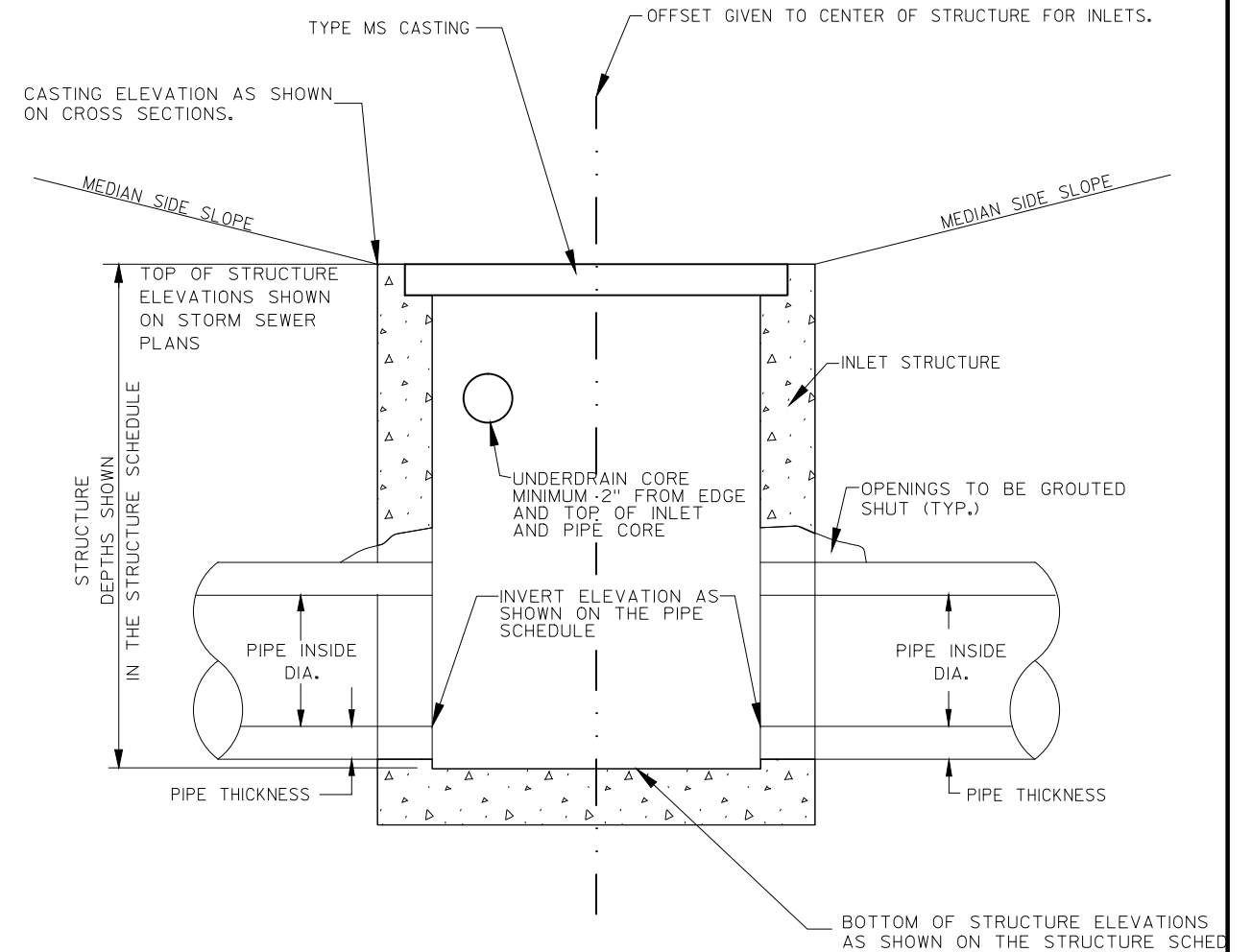
SEE STORM SEWER PLANS FOR LOCATIONS

GENERAL NOTES:

GRANULAR BACKFILL REQUIRED AROUND INLET
(INCIDENTAL TO CONSTRUCTION OF INLET)

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, APPLICABLE SPECIAL PROVISIONS, AND S.D.D. FOR INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT.

CONNECT PIPE UNDERDRAIN TO INLETS.
SEE S.D.D. "EDGEDRAIN OUTLET & OUTFALL MARKERS" FOR DETAILS.



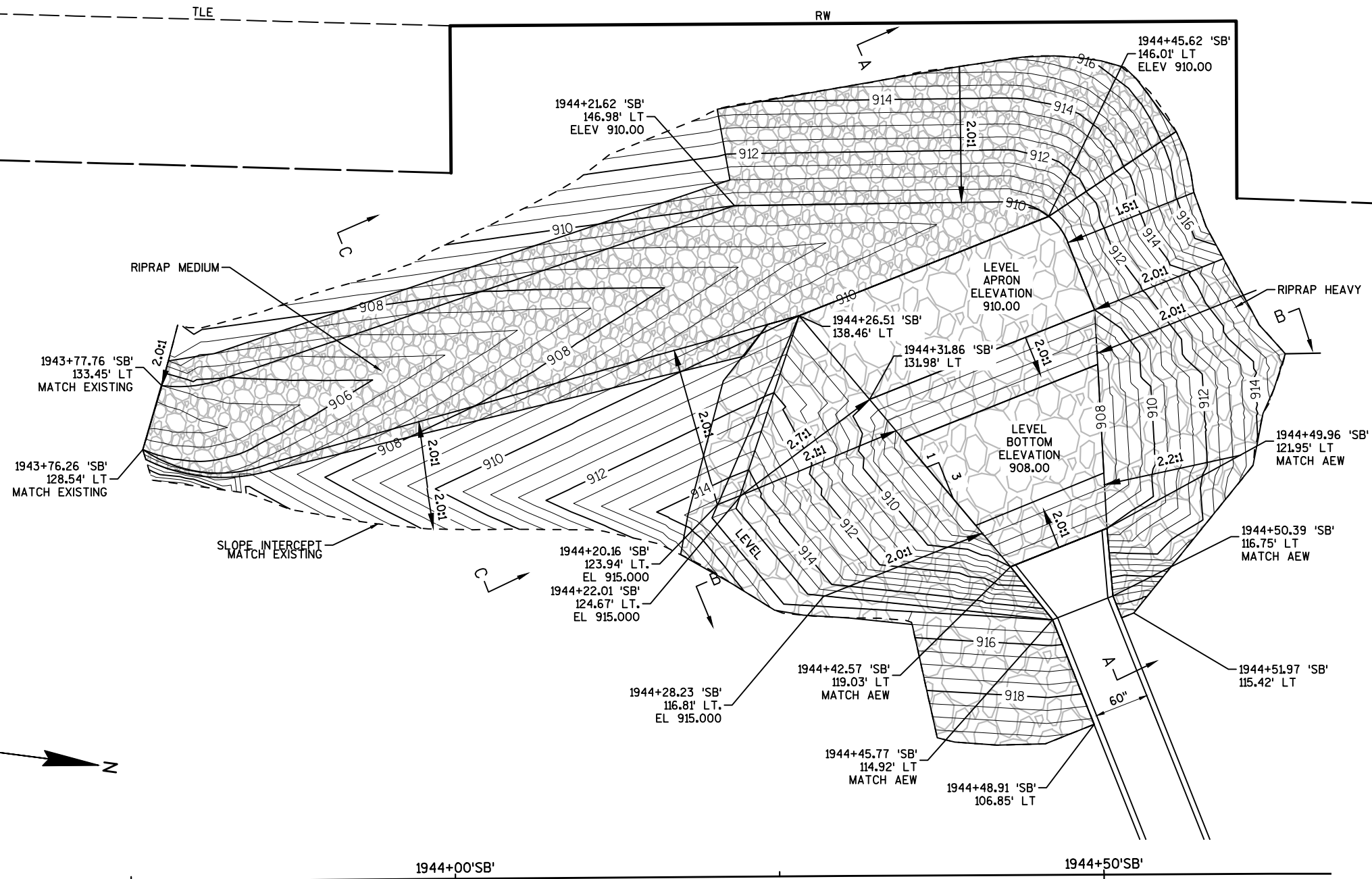
DETAIL OF MEDIAN INLET W/CASTING

SEE STORM SEWER PLANS/CROSS SECTIONS FOR LOCATIONS

GENERAL NOTES:

GRANULAR BACKFILL REQUIRED AROUND INLET
(INCIDENTAL TO CONSTRUCTION OF INLET)

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, APPLICABLE SPECIAL PROVISIONS, AND S.D.D. FOR INLETS AND MEDIAN 1 & 2 GRATE.



NOTES:

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE STANDARD SPECIFICATIONS.

RIPRAP BASIN WILL BE MEASURED AND PAID UNDER THE INDIVIDUAL ITEMS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

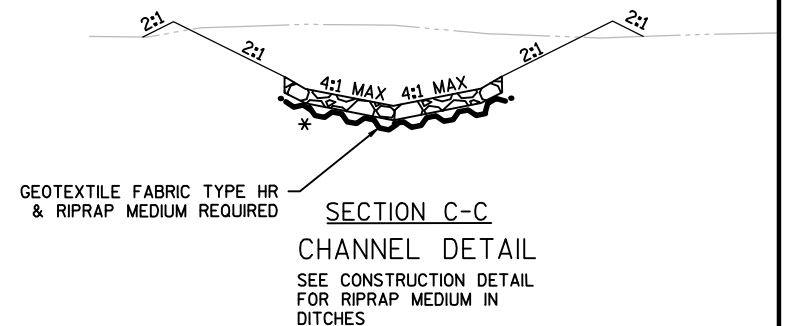
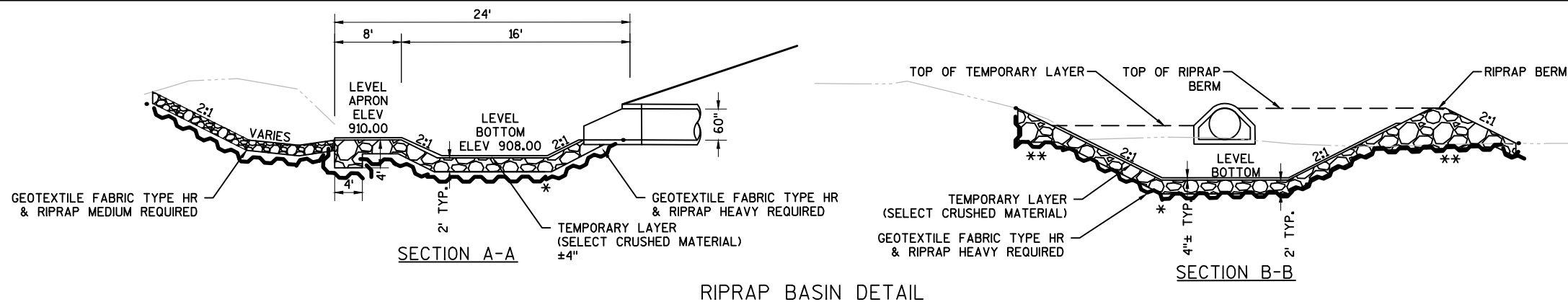
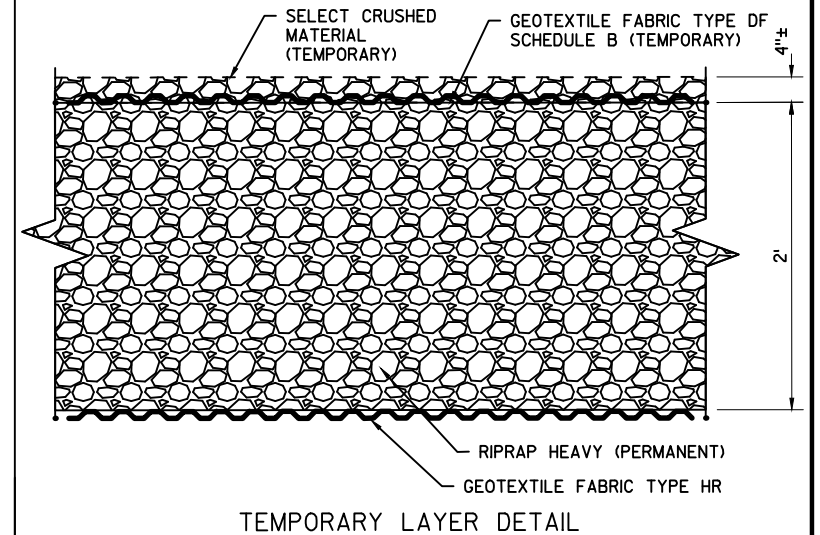
TOP OF RIPRAP BERM ELEVATION MATCHES THE TOP OF PIPE.

A TEMPORARY LAYER DURING CONSTRUCTION WILL CONSIST OF GEOTEXTILE FABRIC TYPE DF SCHEDULE B OVER THE RIPRAP HEAVY LAYER. THE GEOTEXTILE FABRIC TYPE DF SCHEDULE B WILL BE ANCHORED BY A LAYER OF SELECT CRUSHED MATERIAL. REMOVE THE SELECT CRUSHED MATERIAL AND GEOTEXTILE FABRIC TYPE DF SCHEDULE B IN A MANNER TO PREVENT CONTAMINATING THE RIPRAP WITH SELECT CRUSHED MATERIAL OR SEDIMENTS AND AS DIRECTED BY THE ENGINEER.

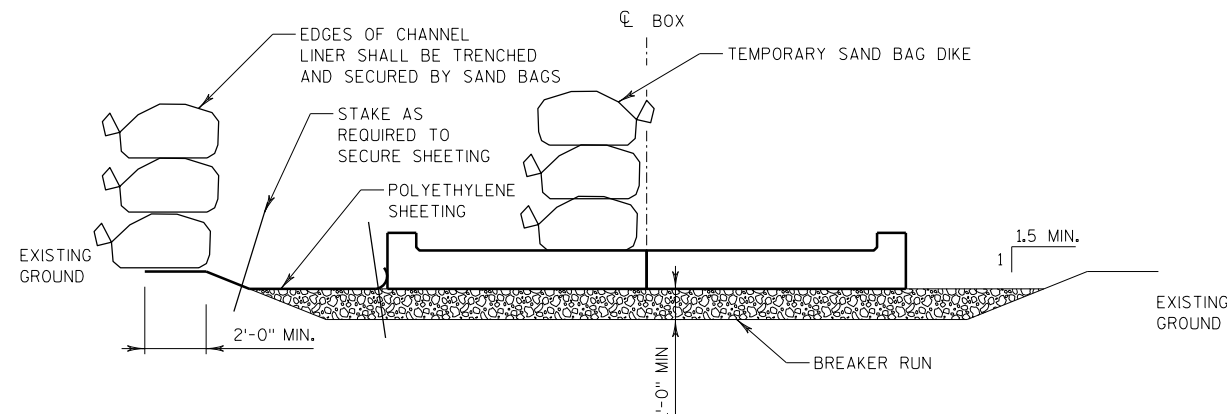
REMOVAL OF THE SELECT CRUSHED MATERIAL AND GEOTEXTILE FABRIC TYPE DF SCHEDULE B WILL BE CONSIDERED INCIDENTAL TO THOSE ITEMS.

* LAY GEOTEXTILE FABRIC ROLLS ALONG THE CHANNEL LENGTH FROM TOP OF RIPRAP DOWN TOWARD THE CHANNEL BOTTOM. OVERLAP FABRIC A MINIMUM OF 1'.

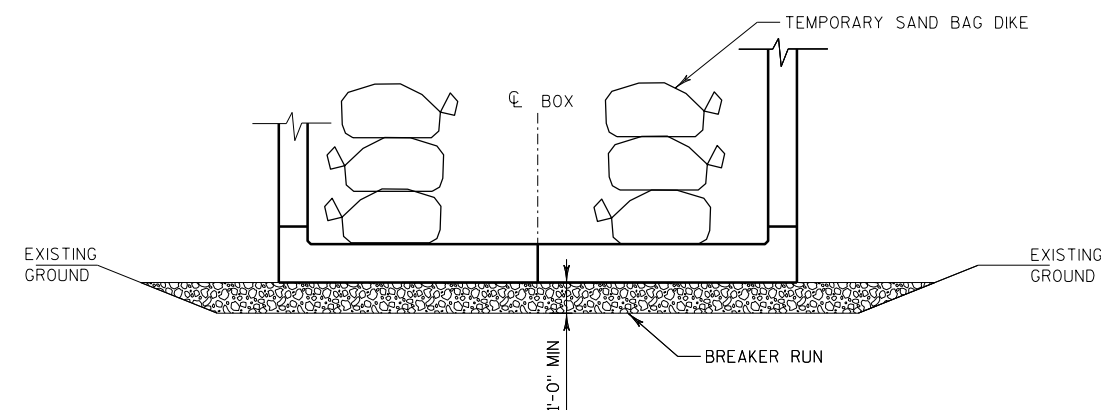
** SLOPE SUBGRADE TOWARD THE CULVERT PIPE.



TYPICAL SECTION OF TEMPORARY BYPASS CHANNEL (STAGE 1A)



TYPICAL SECTION OF TEMPORARY BYPASS CHANNEL (STAGE 1B)



TYPICAL SECTION OF TEMPORARY BYPASS CHANNEL (STAGE 1C)

NOTE:
TEMPORARY CHANNEL MUST BE CAPABLE OF CARRYING NORMAL STREAM FLOW AND MUST MAINTAIN A SUITABLE DEPTH AND VELOCITY TO ALLOW THE PASSAGE OF MIGRATING FISH AND AQUATIC SPECIES. FISH THAT BECOME STRANDED IN DEWATERED AREAS OR TEMPORARY CHANNELS SHOULD BE CAPTURED AND RETURNED TO THE ACTIVE CHANNEL IMMEDIATELY. SEE STRUCTURE PLANS FOR HYDRAULIC INFORMATION FOR AG DITCH #2.

BREAKER RUN AND TEMPORARY SANDBAG DIKE WILL BE PAID UNDER STRUCTURE BID ITEMS "BREAKER RUN" AND "COFFERDAMS C-13-3078". SEE STRUCTURE PLAN FOR DETAILS.

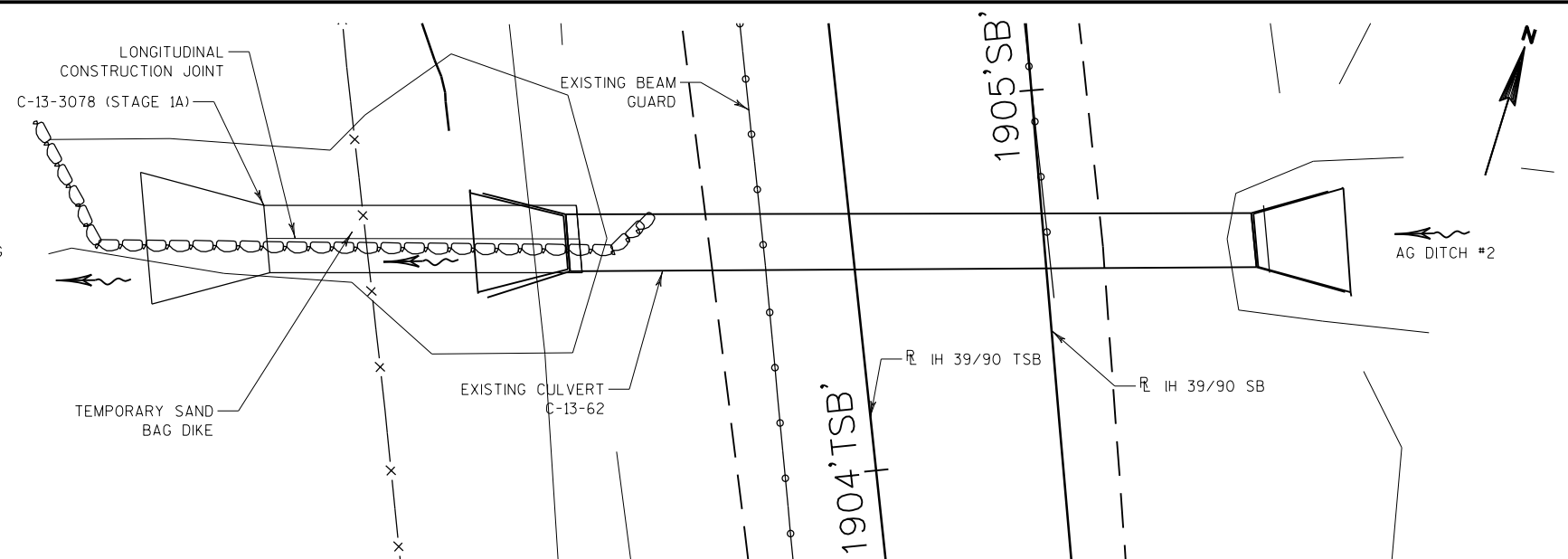
POLYETHYLENE SHEETING WILL BE INCLUDED IN STRUCTURE BID ITEM "COFFERDAMS C-13-3078".

EXCAVATION AND BACKFILL REQUIRED FOR BYPASS CHANNEL WILL BE INCLUDED IN STRUCTURE BID ITEM "COFFERDAMS C-13-3078".

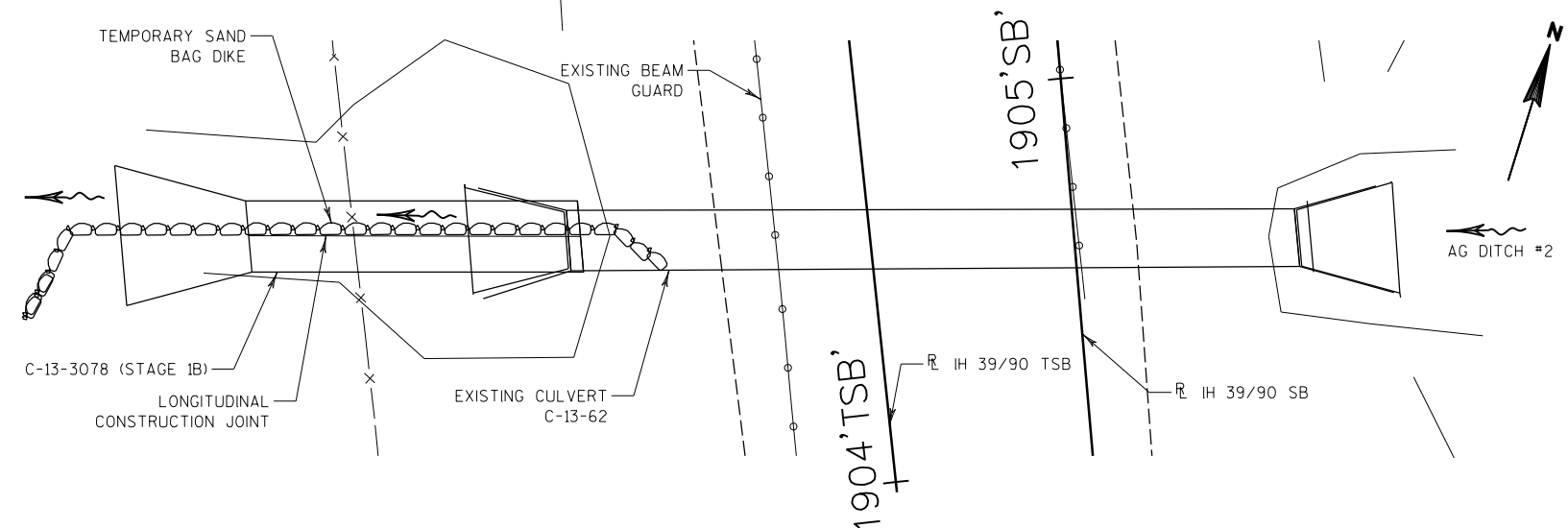
IT IS ASSUMED THE WORK ZONE WILL BE INUNDATED FOR HEAVY RAINFALL EVENTS.

SCHEMATIC VIEWS OF DEWATERED WORK ZONE ARE FOR CONTRACTOR'S INFORMATION. CONTRACTOR MAY CHOOSE DEWATERING METHODS WHICH SUIT THEIR BEST PRACTICES.

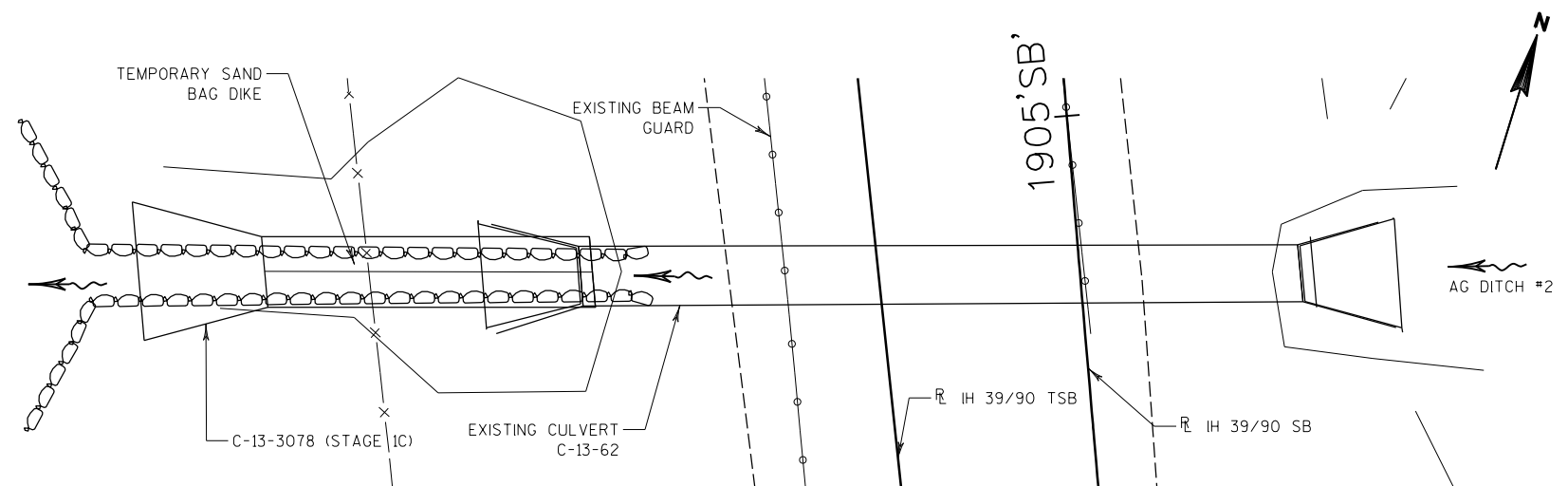
SUBMIT A WATER DIVERSION PLAN TO THE ENGINEER IF CONTRACTOR CHOOSES A DIFFERENT METHOD THAN WHAT IS SHOWN IN THE SCHEMATIC.



PLAN VIEW OF TEMPORARY BYPASS CHANNEL (STAGE 1A)



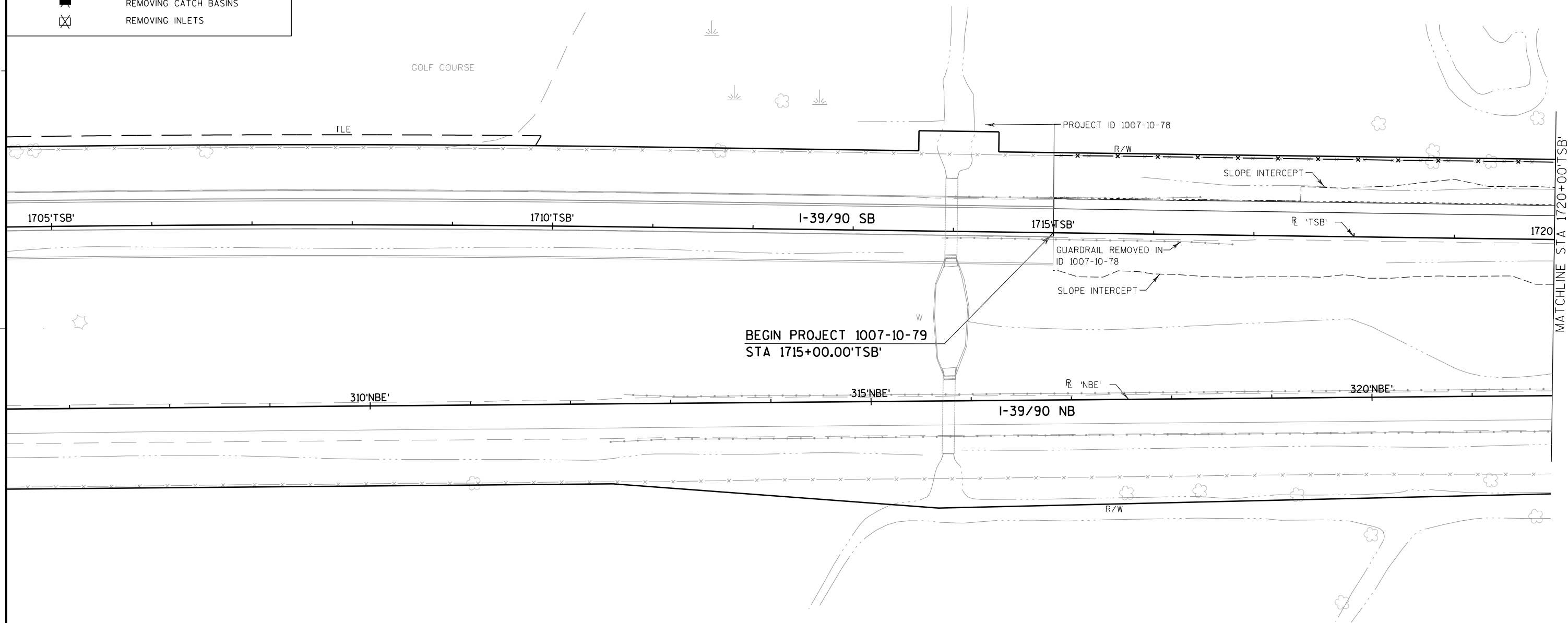
PLAN VIEW OF TEMPORARY BYPASS CHANNEL (STAGE 1B)



PLAN VIEW OF TEMPORARY BYPASS CHANNEL (STAGE 1C)

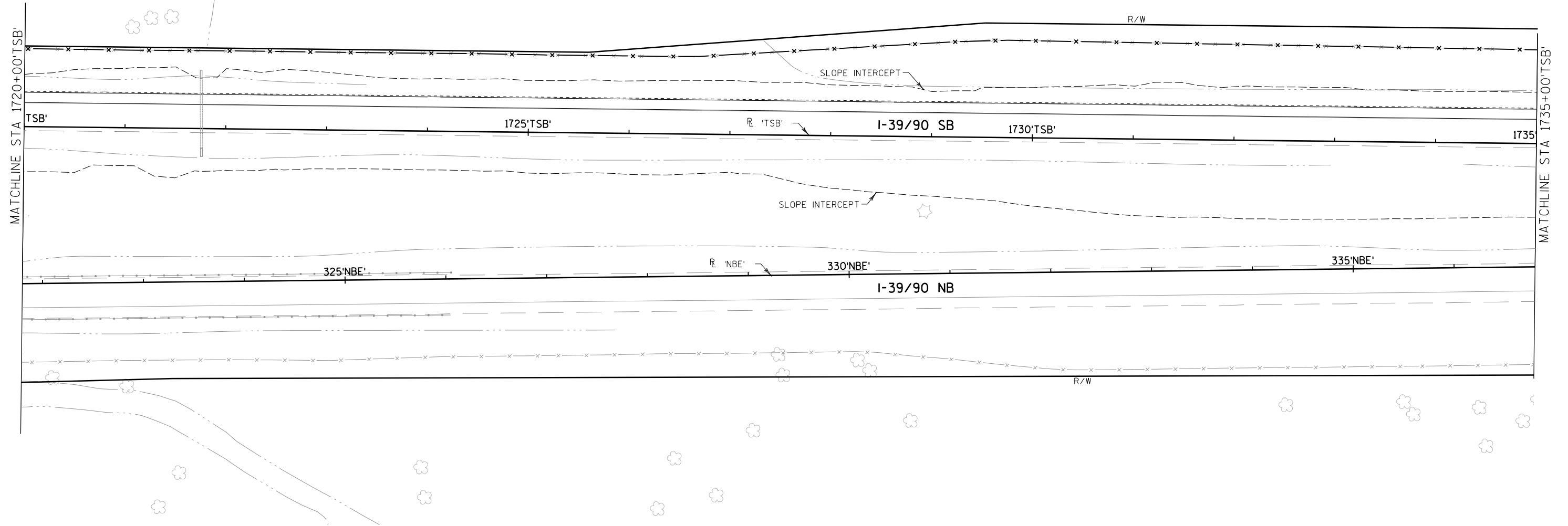
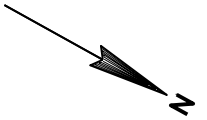
LEGEND

- REMOVING PAVEMENT
- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS



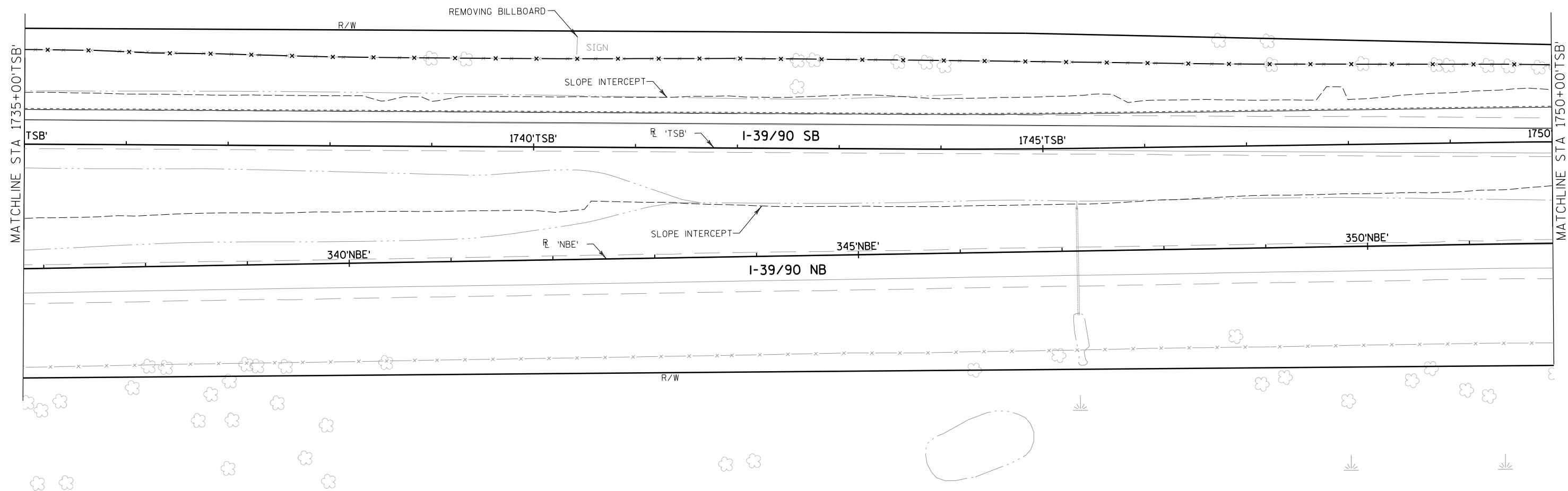
LEGEND

- REMOVING PAVEMENT
- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS



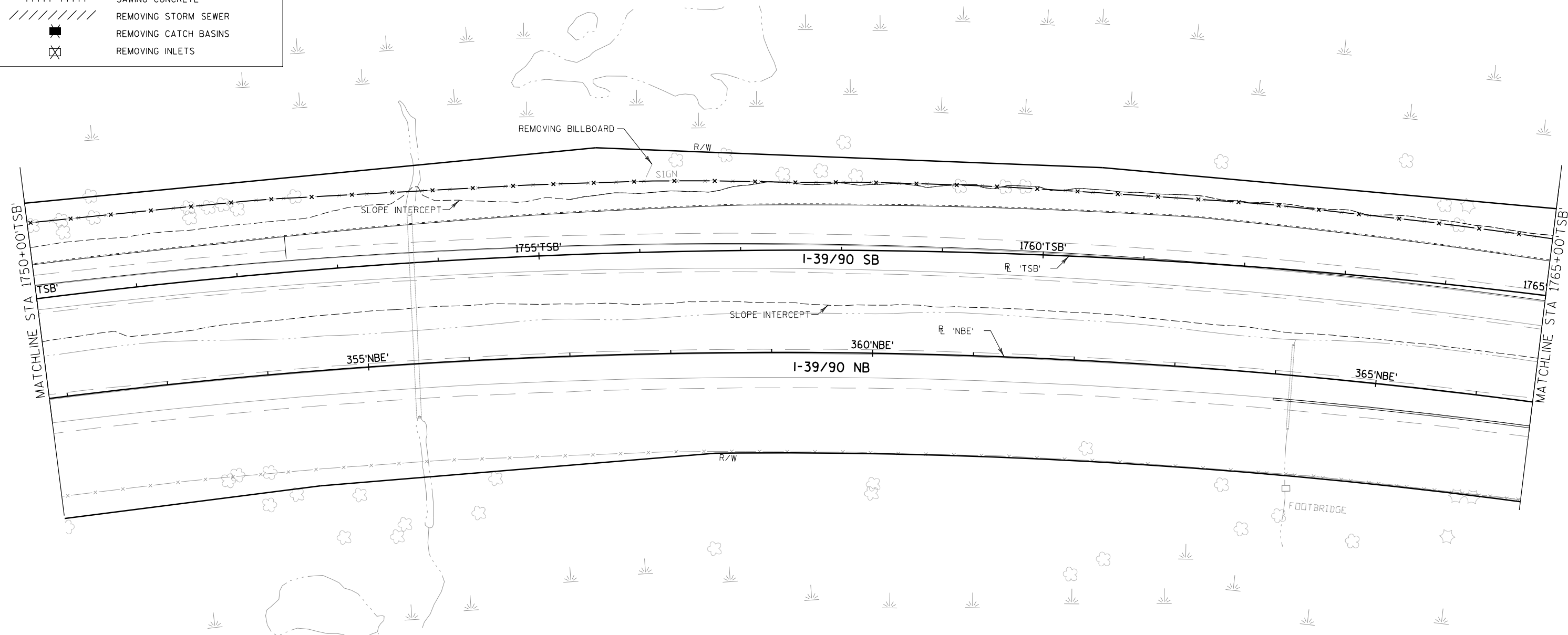
LEGEND

- REMOVING PAVEMENT
- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS

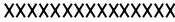
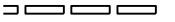
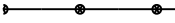
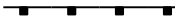
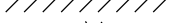


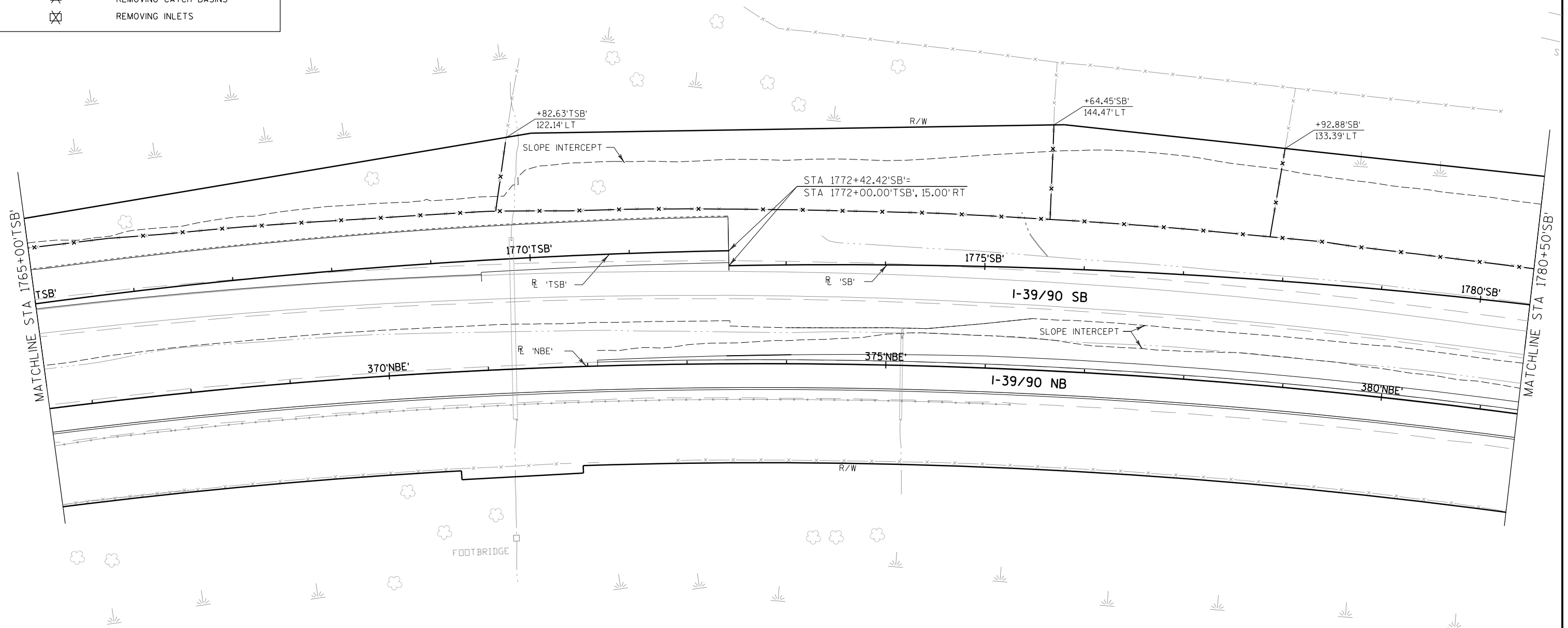
LEGEND

- REMOVING PAVEMENT
- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS



LEGEND

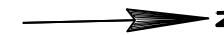
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	REMOVING SMALL PIPE CULVERTS
	REMOVING CONCRETE BARRIER
	REMOVING CURB & GUTTER
	REMOVING GUARDRAIL
	REMOVING FENCE
	SAWING CONCRETE
	REMOVING STORM SEWER
	REMOVING CATCH BASINS
	REMOVING INLETS



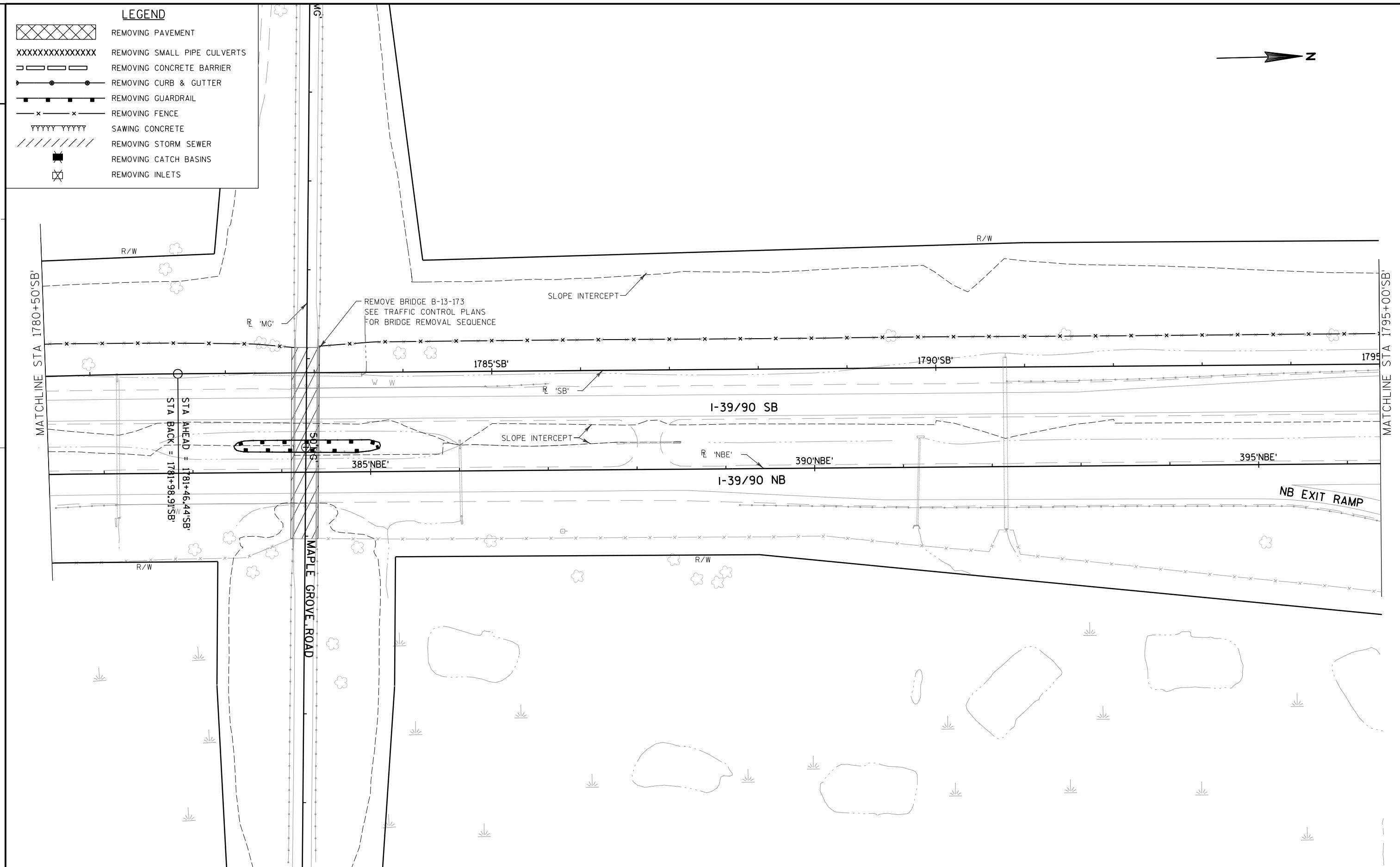
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LEGEND

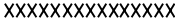
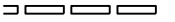
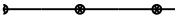
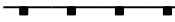
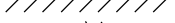
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- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS

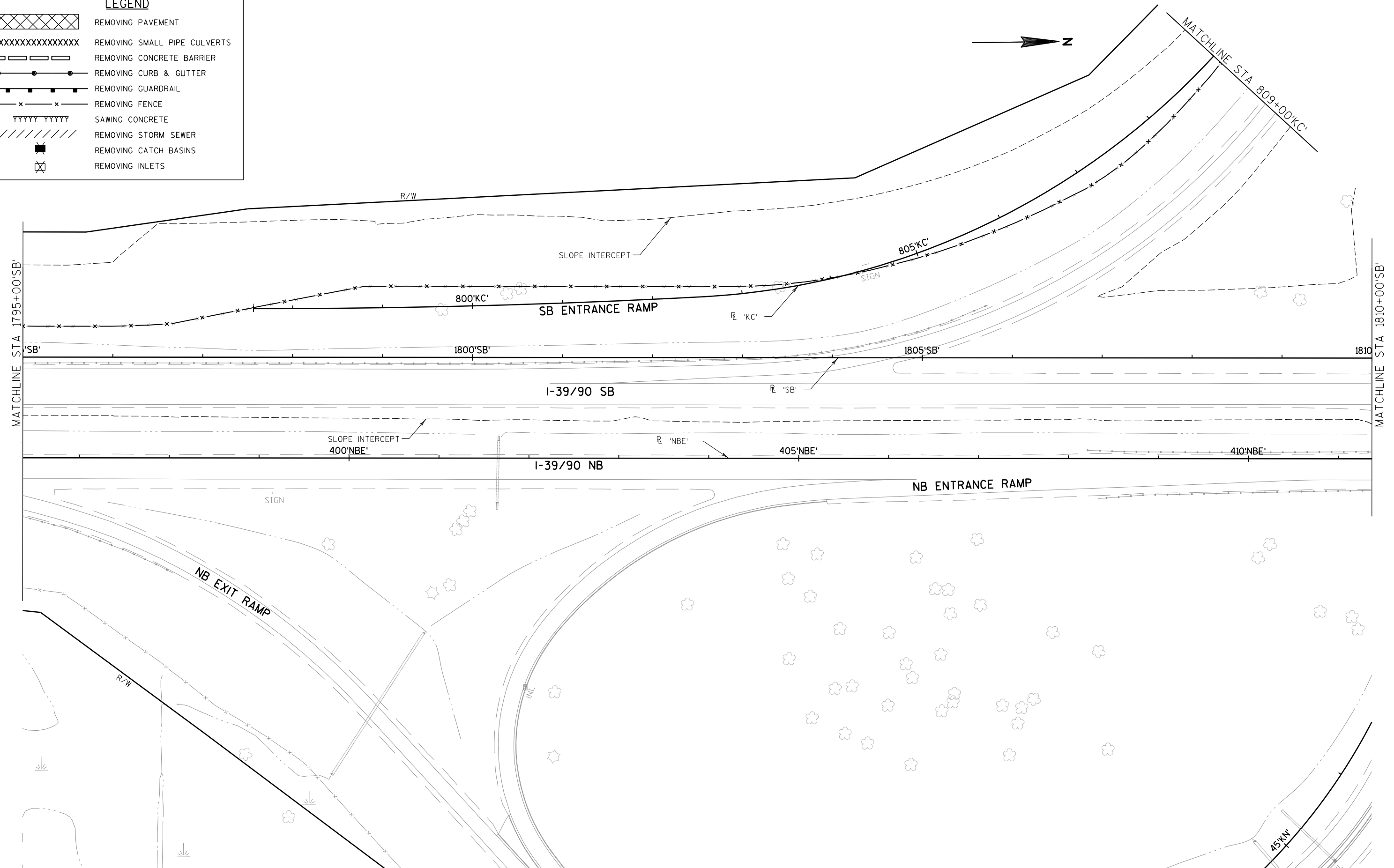


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LEGEND

	REMOVING PAVEMENT
	REMOVING SMALL PIPE CULVERTS
	REMOVING CONCRETE BARRIER
	REMOVING CURB & GUTTER
	REMOVING GUARDRAIL
	REMOVING FENCE
	SAWING CONCRETE
	REMOVING STORM SEWER
	REMOVING CATCH BASINS
	REMOVING INLETS



PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

REMOVAL PLAN - STAGE 1

SHEET

47

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\021107_rm1.dgn

PLOT DATE : 7/29/2015

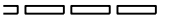
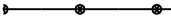
PLOT BY : cti

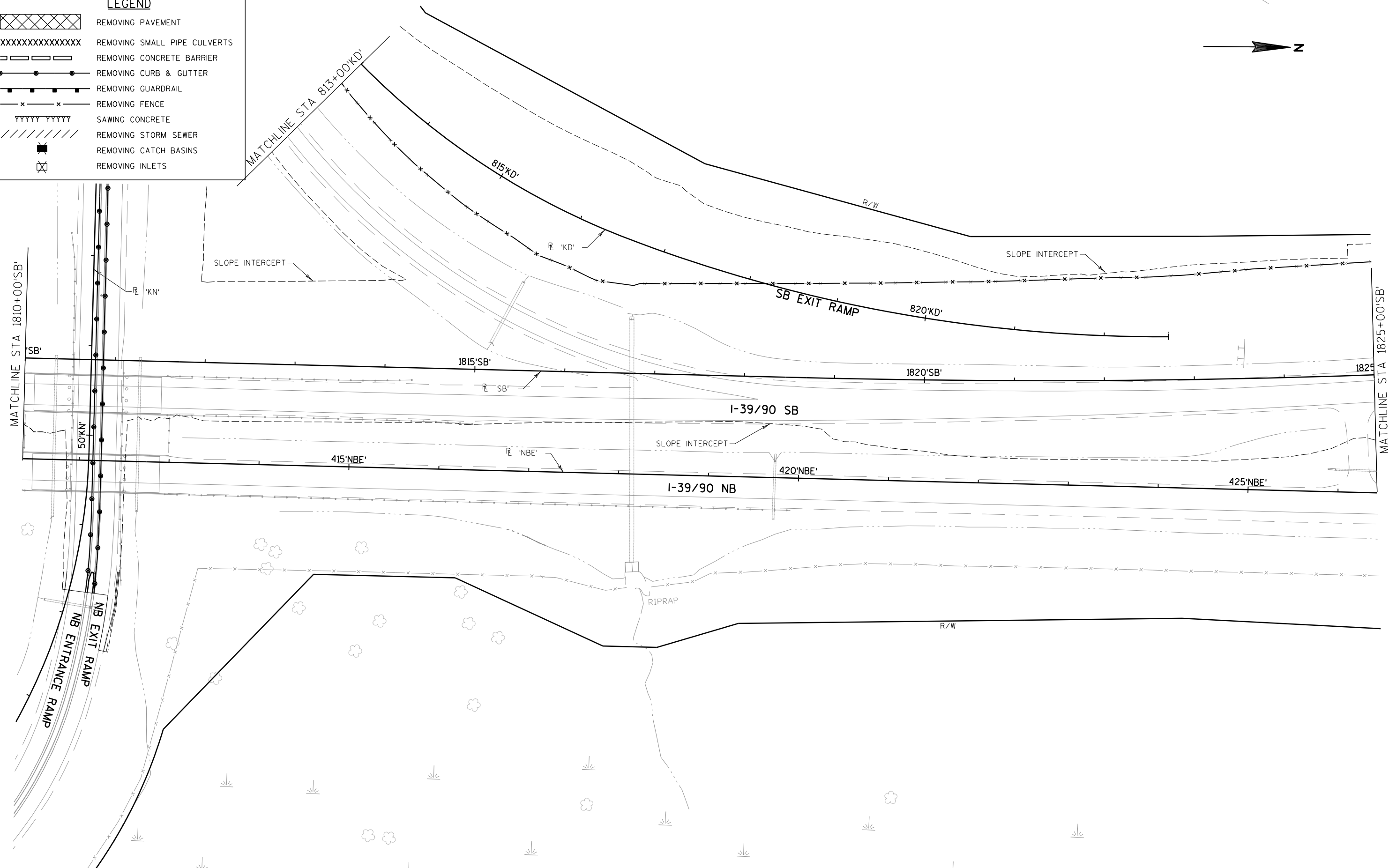
PLOT NAME : \$FILE\$

PLOT SCALE : 1:100

WISDOT/CADDs SHEET 42

LEGEND

	REMOVING PAVEMENT
	REMOVING SMALL PIPE CULVERTS
	REMOVING CONCRETE BARRIER
	REMOVING CURB & GUTTER
	REMOVING GUARDRAIL
	REMOVING FENCE
	SAWING CONCRETE
	REMOVING STORM SEWER
	REMOVING CATCH BASINS
	REMOVING INLETS



PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

REMOVAL PLAN - STAGE 1

SHEET

48

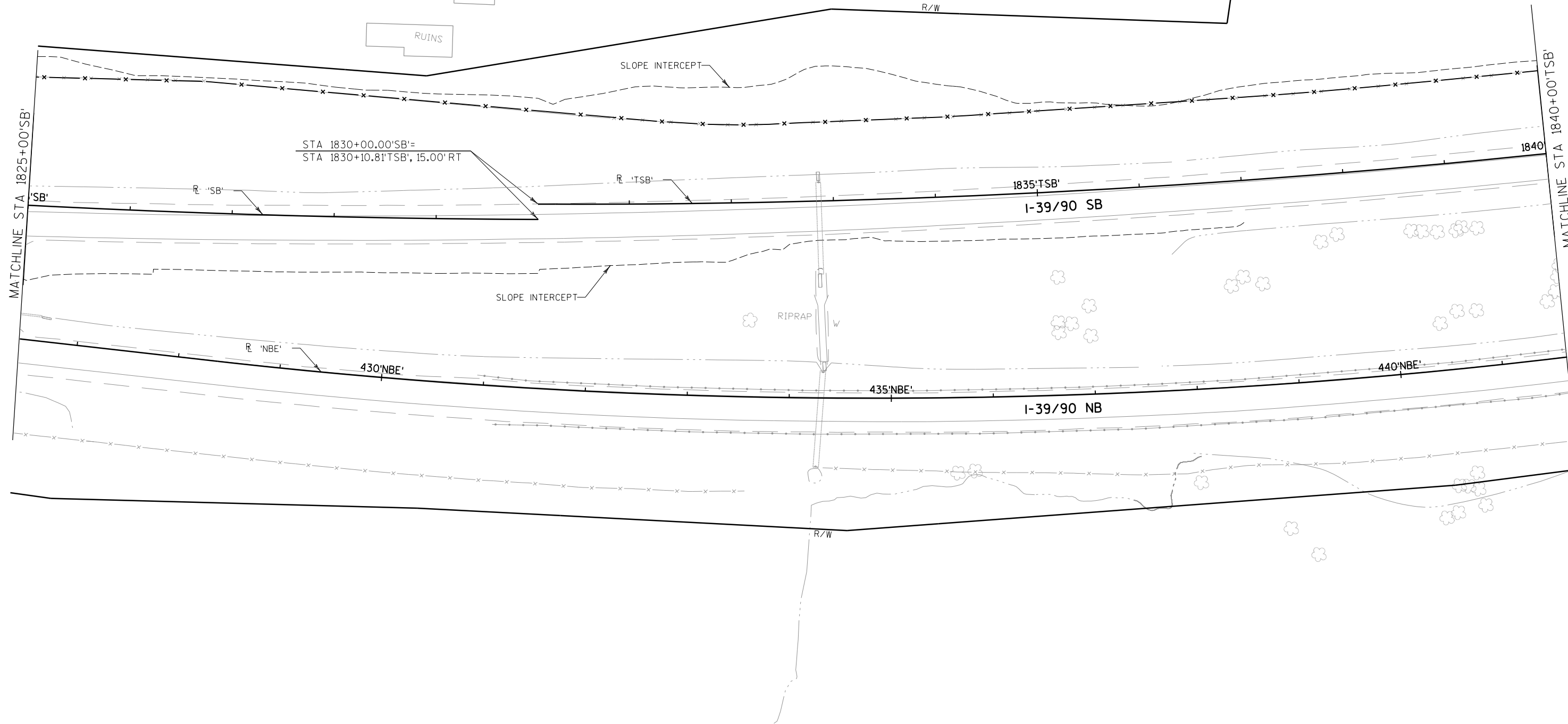
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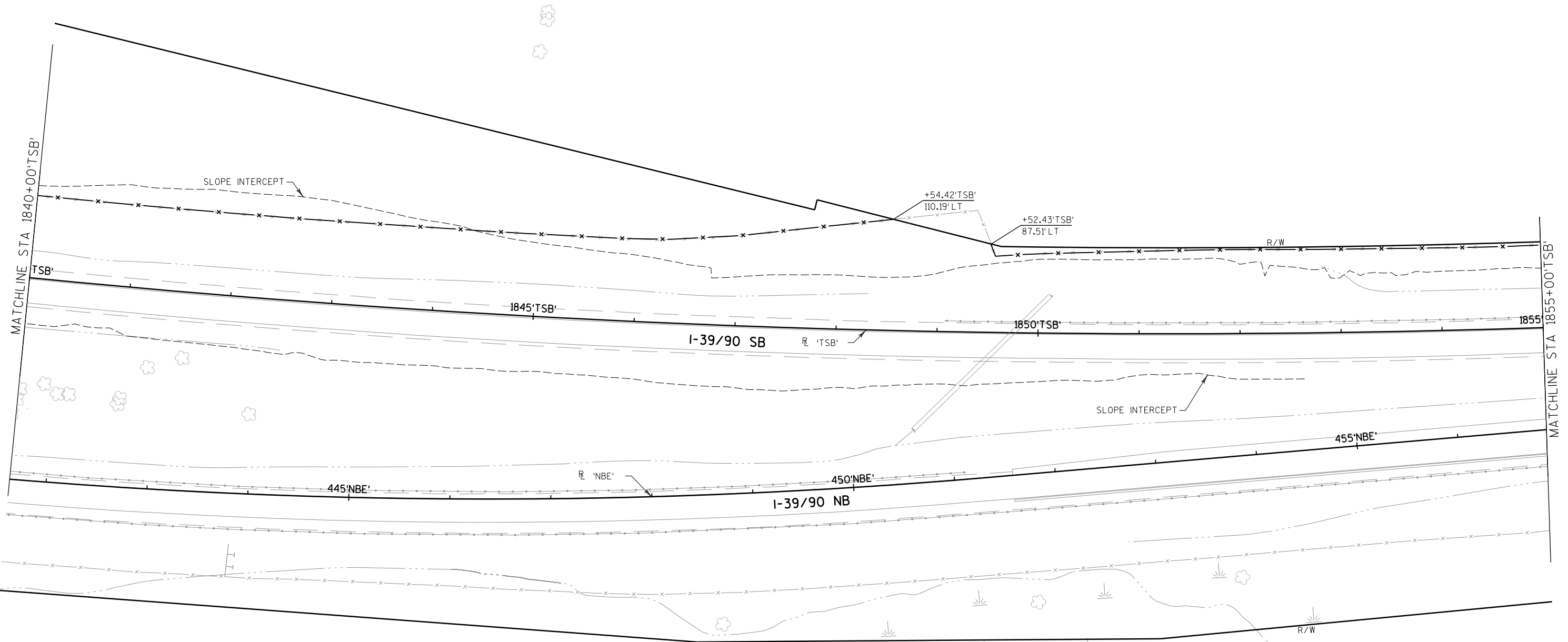
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LEGEND

- REMOVING PAVEMENT
- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS

2





LEGEND

- REMOVING PAVEMENT
- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS

PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

REMOVAL PLAN - STAGE 1

SHEET

50

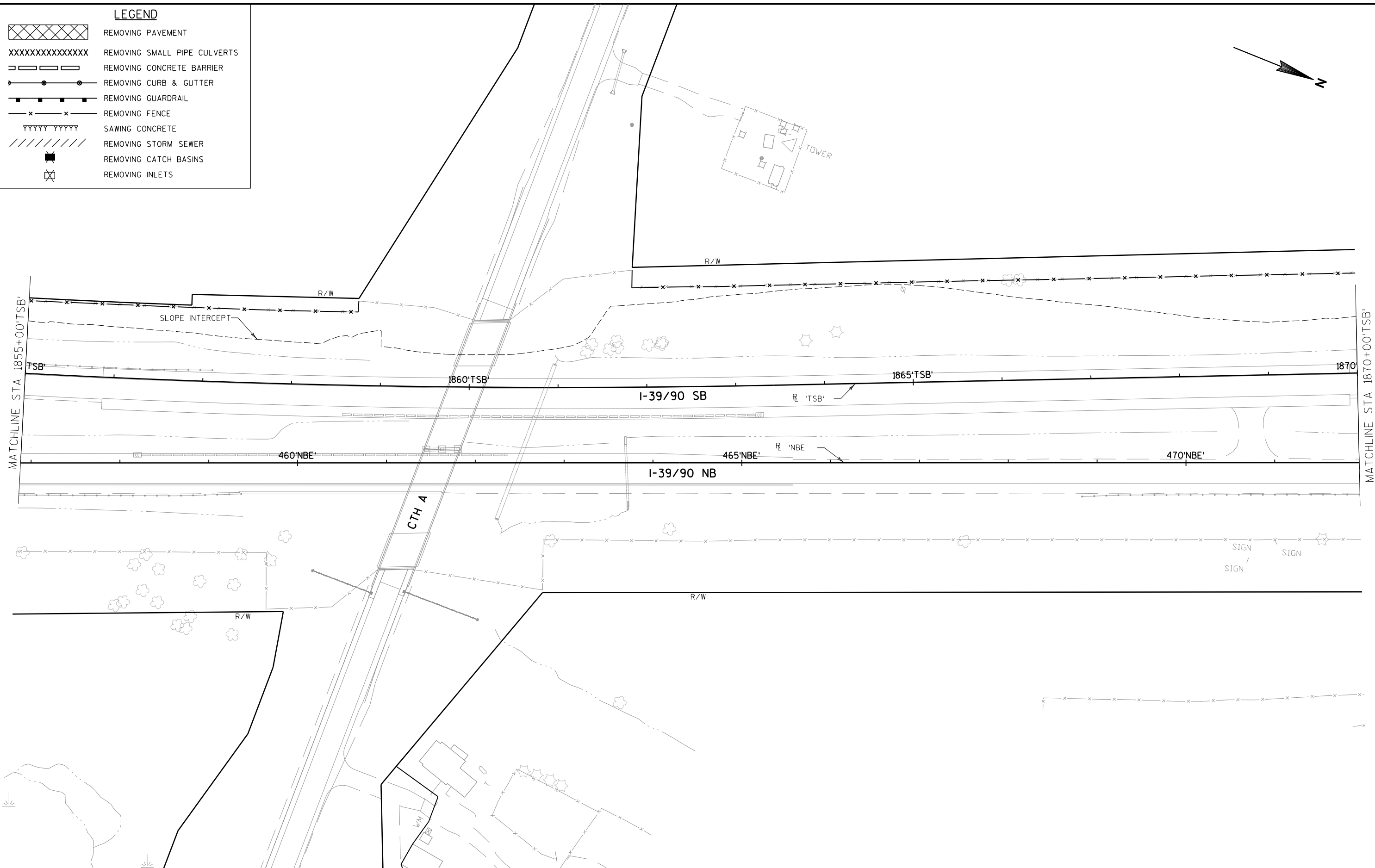
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LEGEND

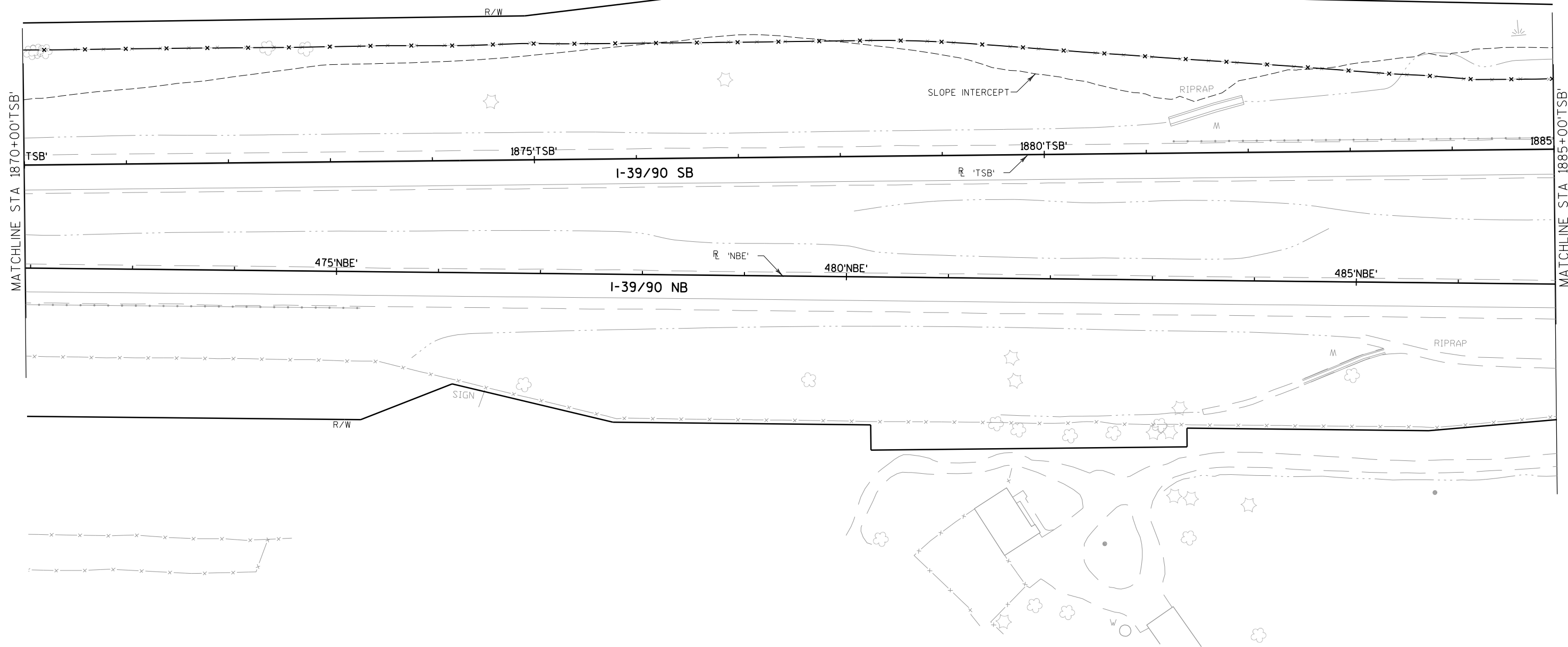
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- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS

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LEGEND

- REMOVING PAVEMENT
- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
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- REMOVING CATCH BASINS
- REMOVING INLETS

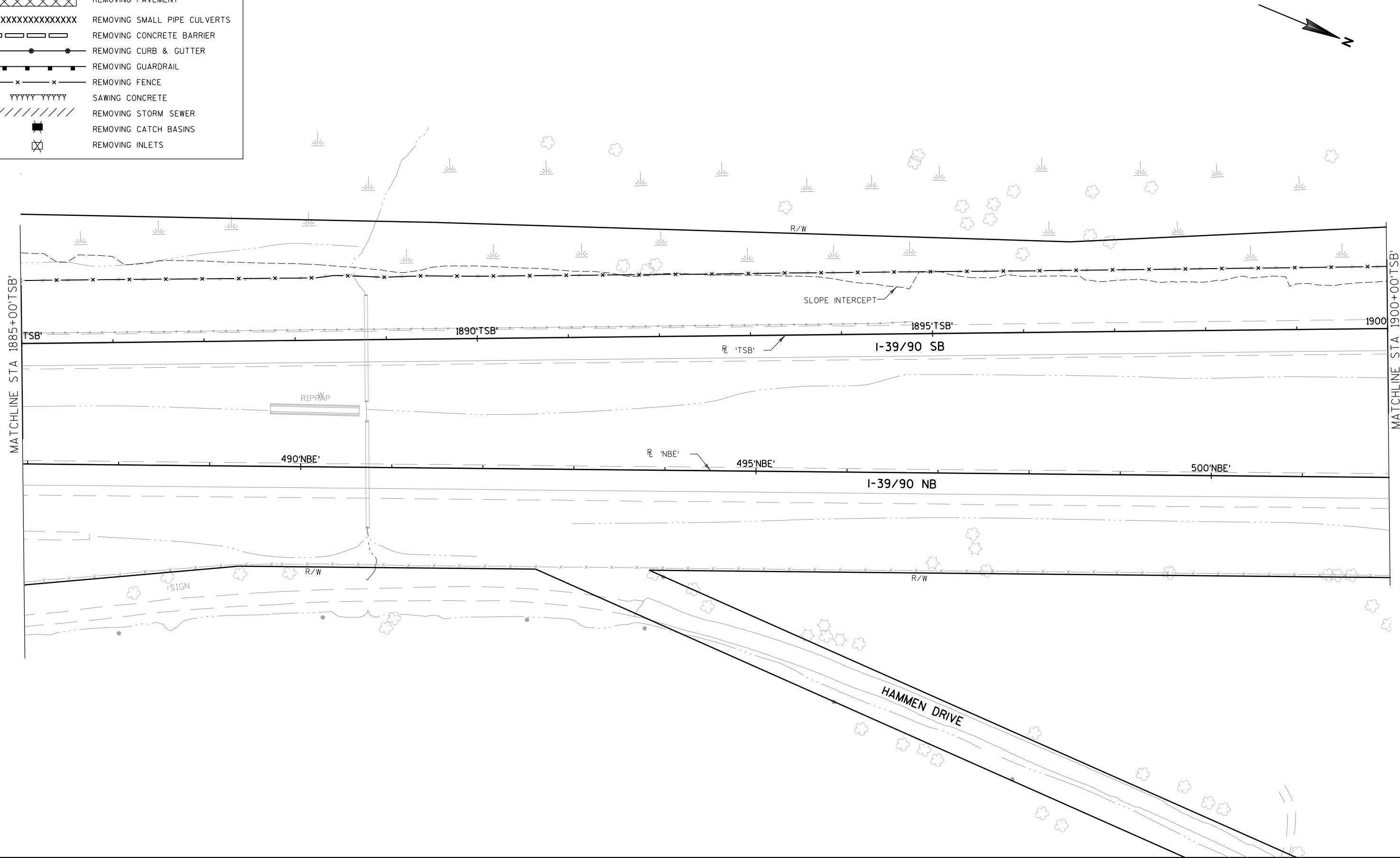


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LEGEND

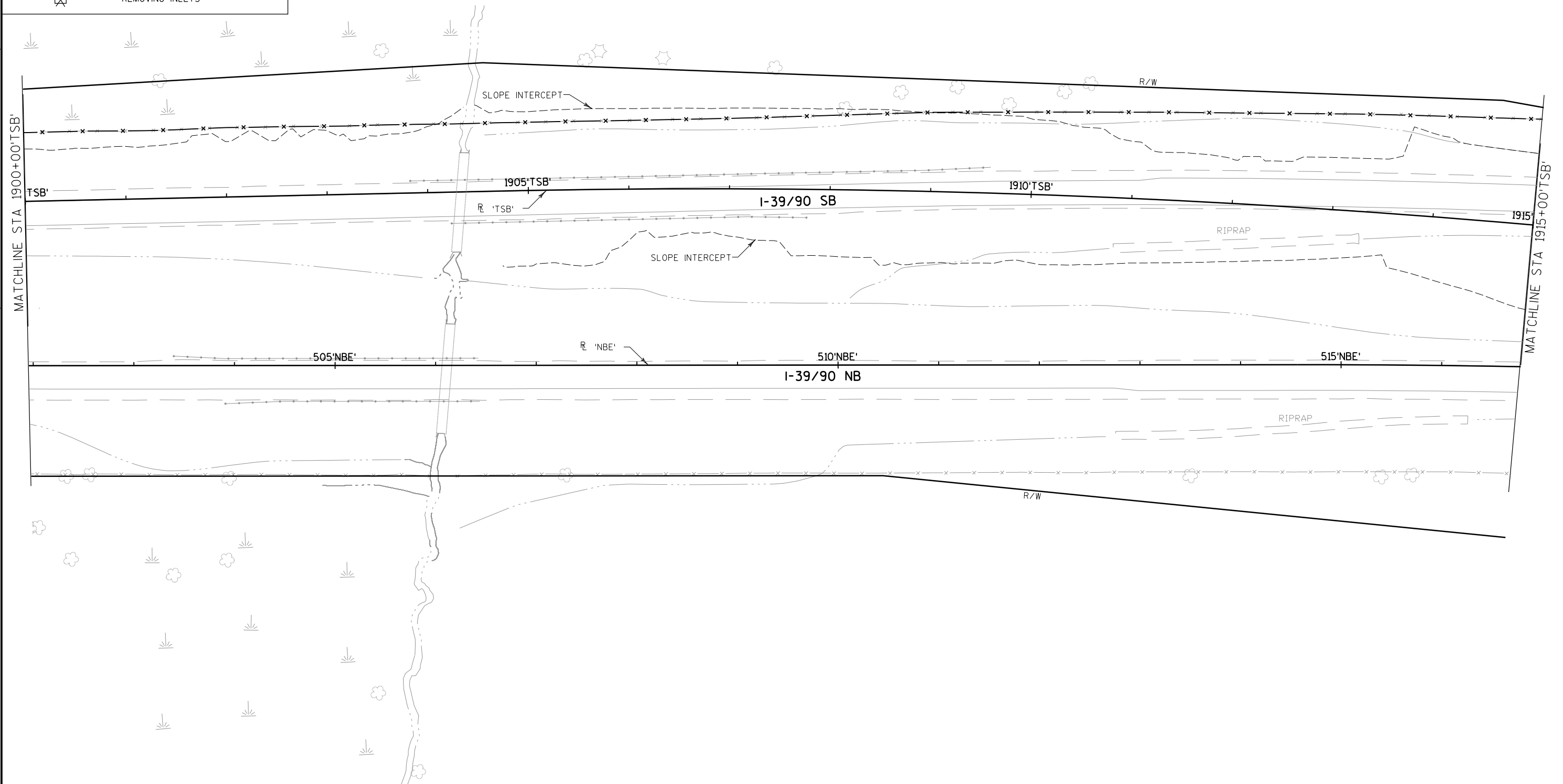
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- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS

2

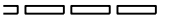
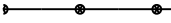
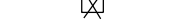


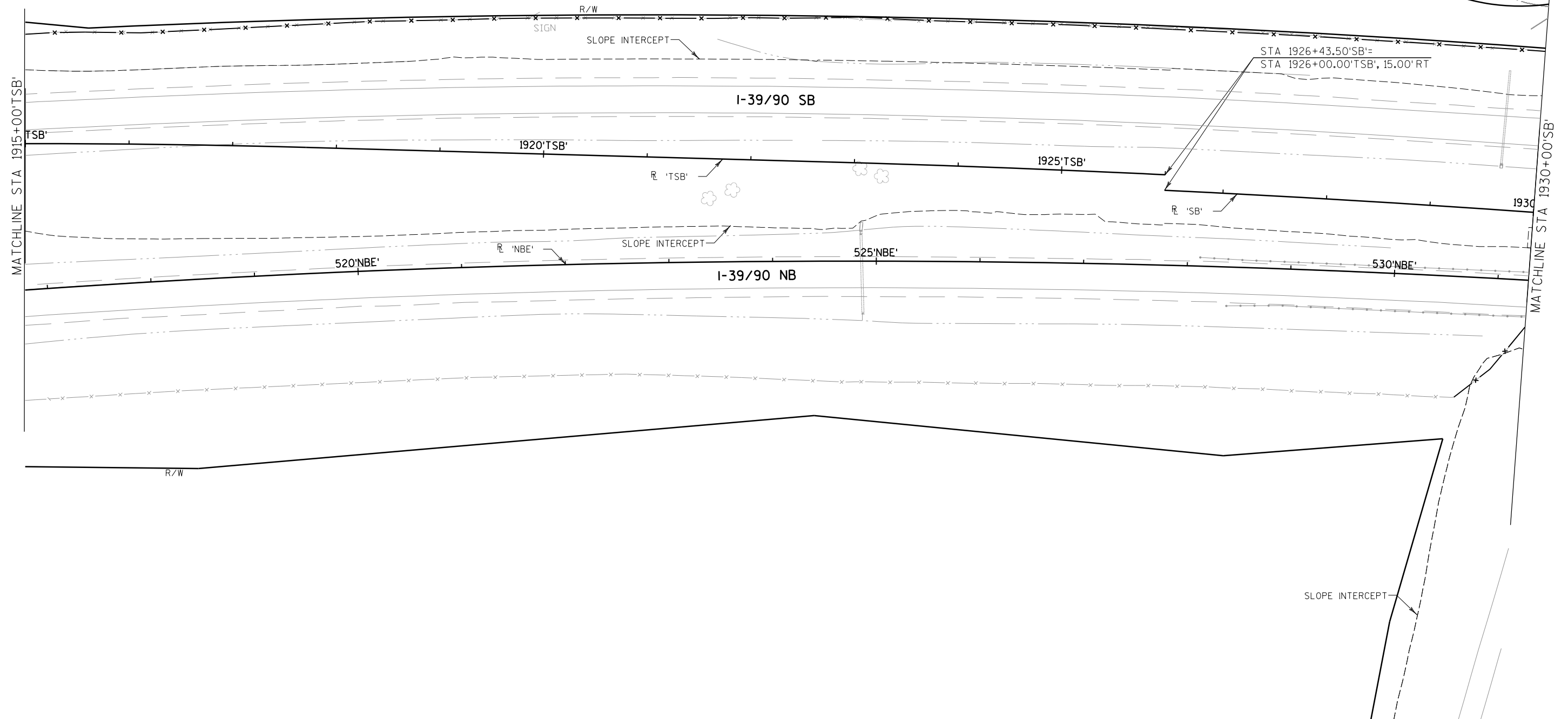
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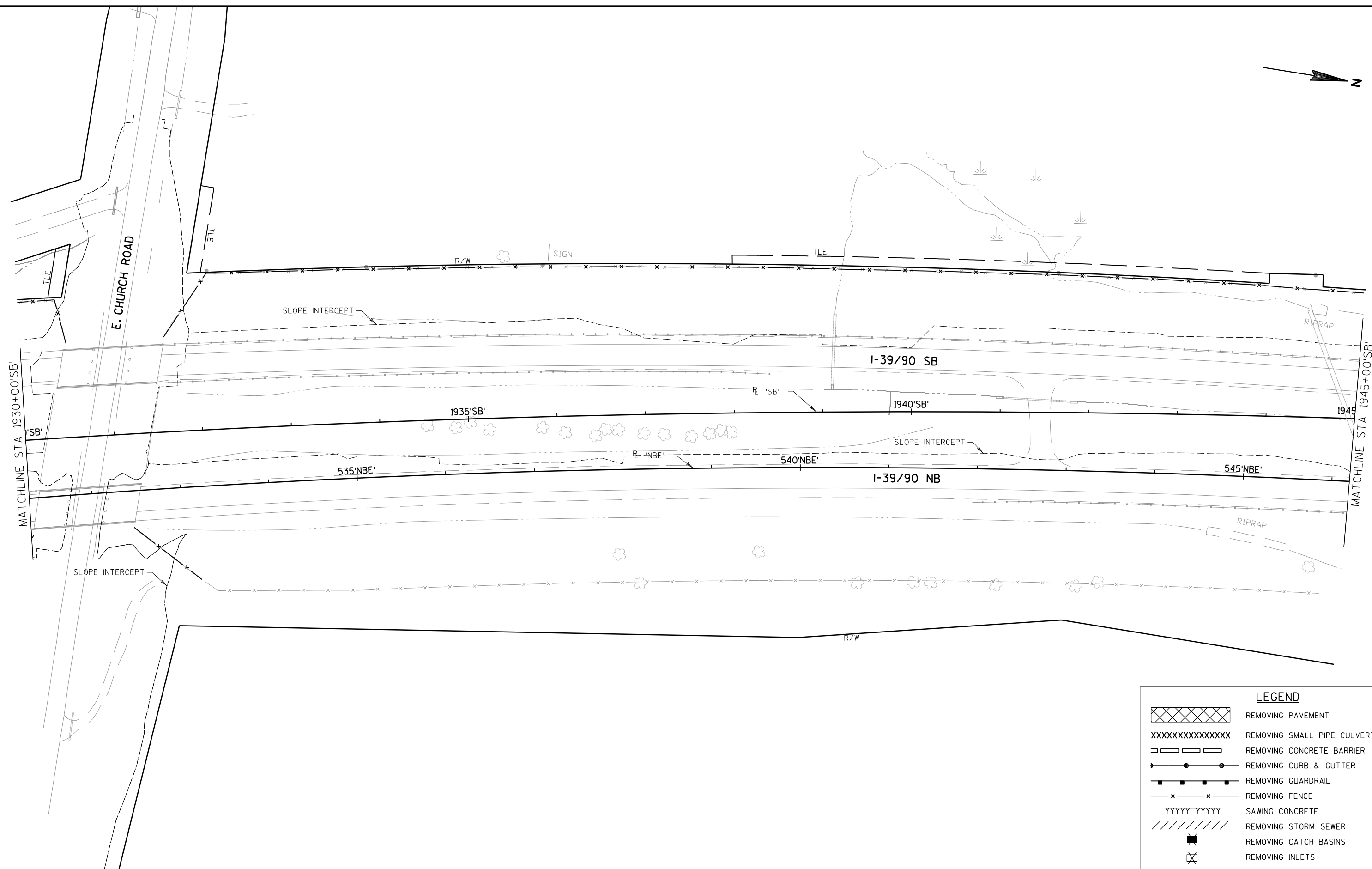
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- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS



LEGEND

	REMOVING PAVEMENT
	REMOVING SMALL PIPE CULVERTS
	REMOVING CONCRETE BARRIER
	REMOVING CURB & GUTTER
	REMOVING GUARDRAIL
	REMOVING FENCE
	SAWING CONCRETE
	REMOVING STORM SEWER
	REMOVING CATCH BASINS
	REMOVING INLETS



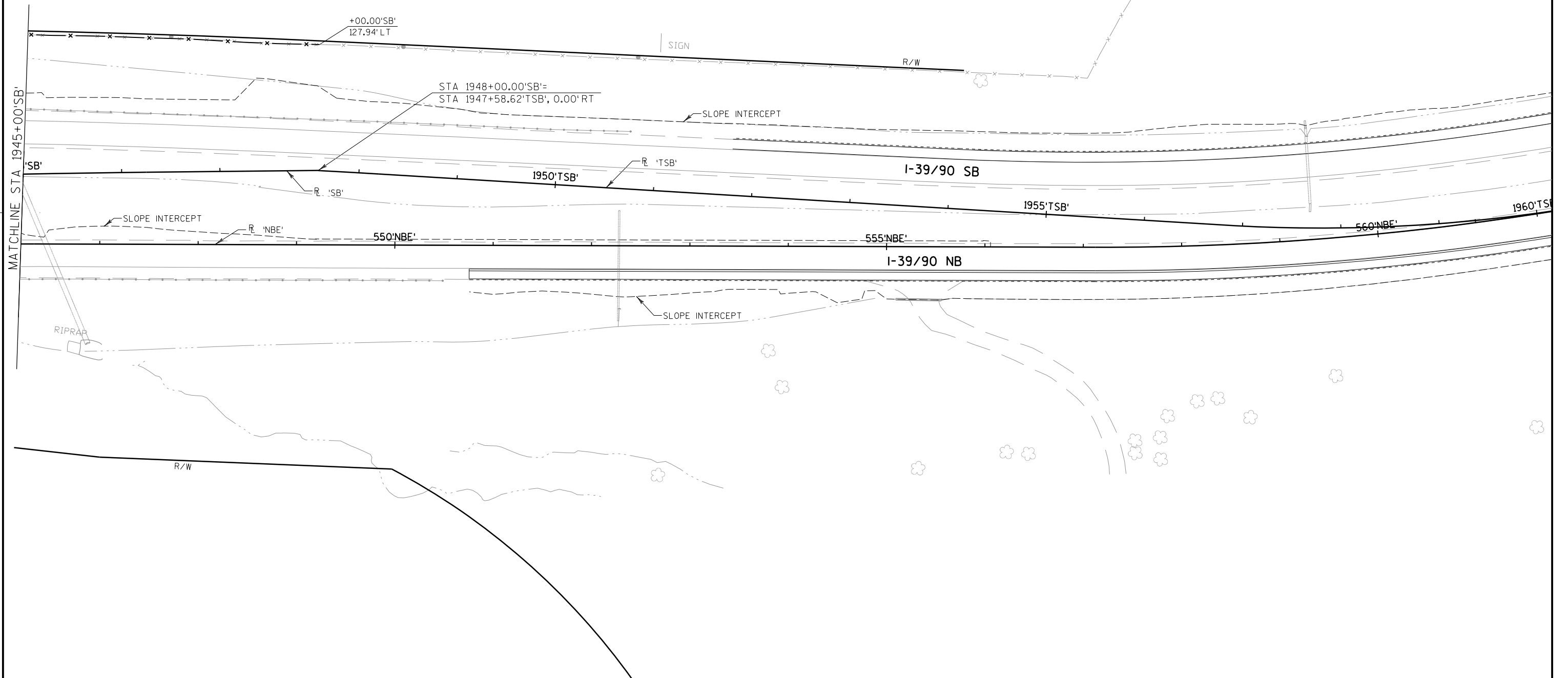


LEGEND

- XXXXXX REMOVING PAVEMENT
- XXXXXXXXXXXXXXXXX REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- x-x- REMOVING FENCE
- YYYYY REMOVING SAWING CONCRETE
- ////// REMOVING STORM SEWER
- REMOVING CATCH BASINS
- ⊗ REMOVING INLETS

LEGEND

- REMOVING PAVEMENT
- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS

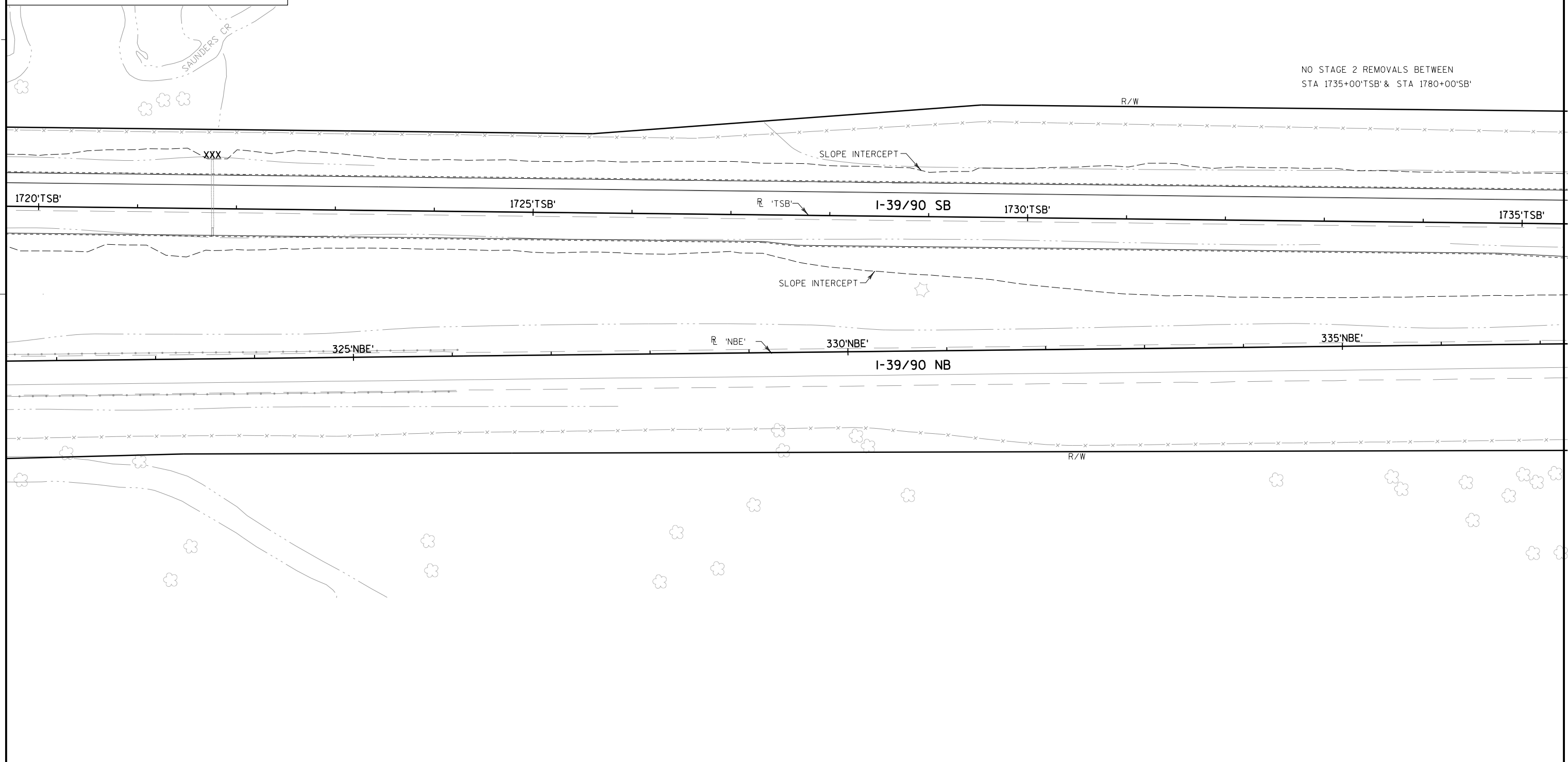
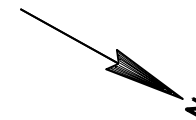


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LEGEND

- REMOVING PAVEMENT
- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS

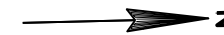
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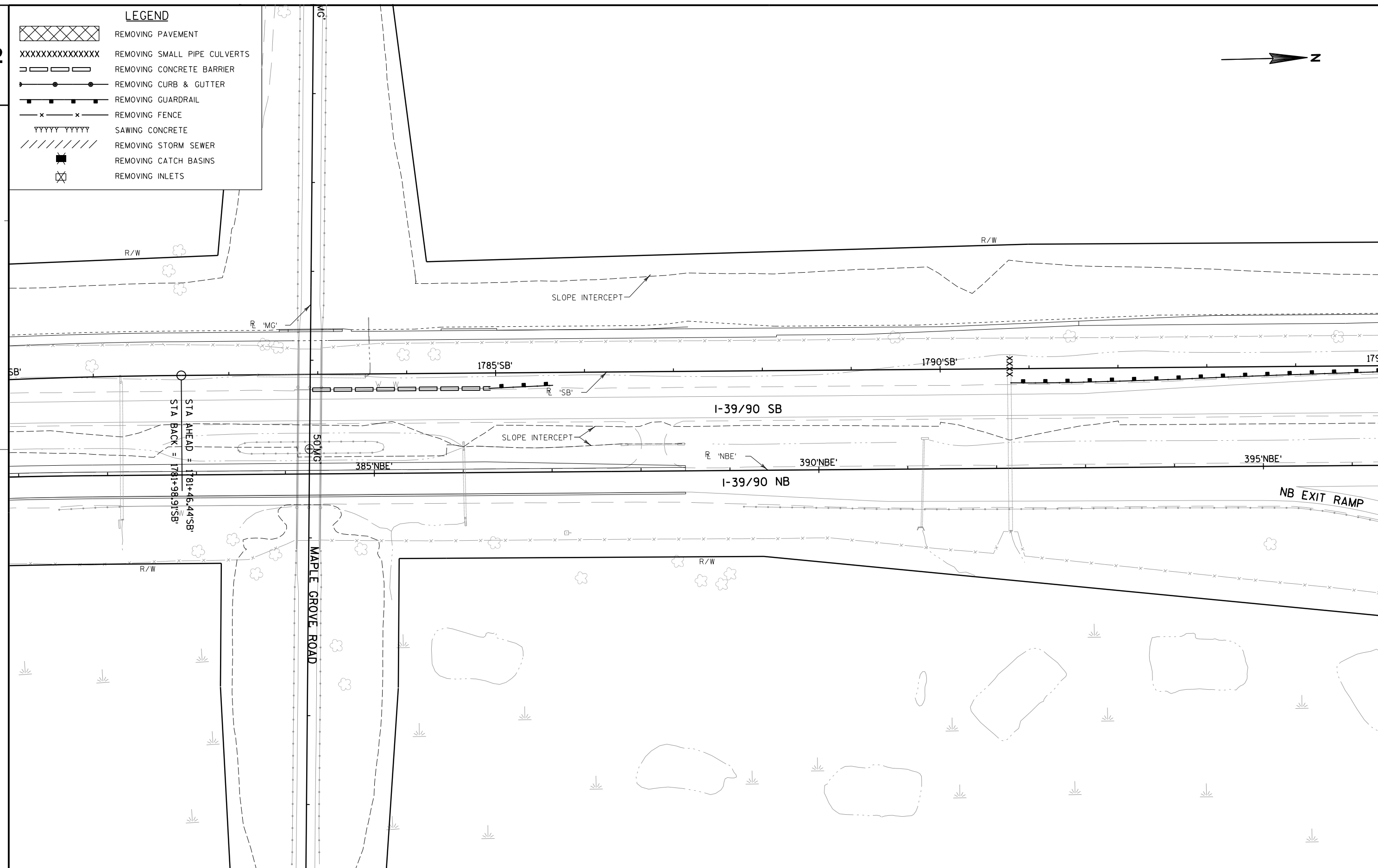
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LEGEND

- REMOVING PAVEMENT
- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS



2



PROJECT NO:1007-10-79

HWY:IH 39

COUNTY:DANE

REMOVAL PLAN - STAGE 2

SHEET

59

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\021119_rm2.dgn

PLOT DATE : 7/29/2015

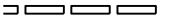
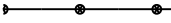
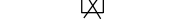
PLOT BY : cti

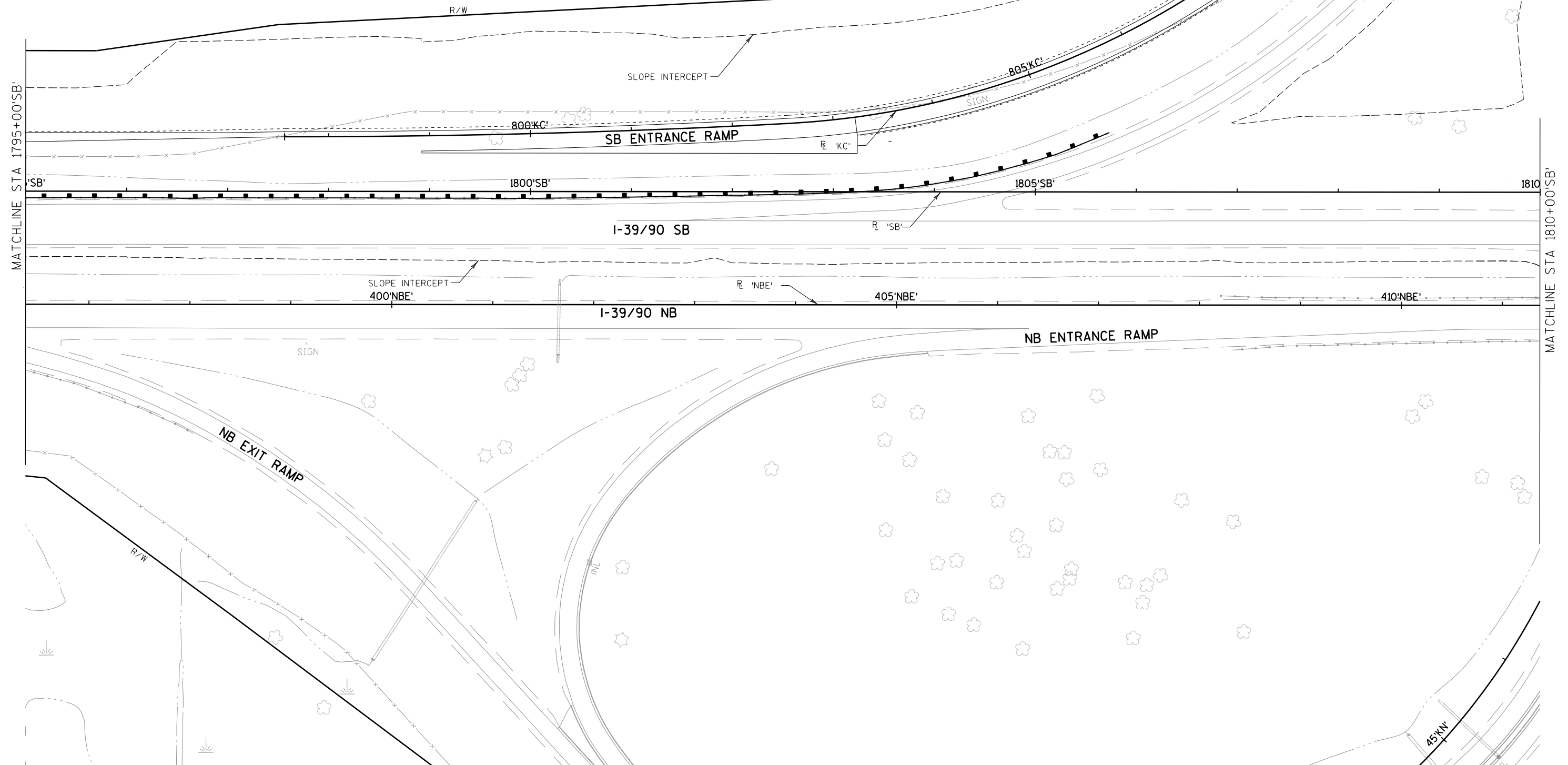
PLOT NAME : \$FILE\$

PLOT SCALE : 1:100

WISDOT/CADDs SHEET 42

LEGEND

	REMOVING PAVEMENT
	REMOVING SMALL PIPE CULVERTS
	REMOVING CONCRETE BARRIER
	REMOVING CURB & GUTTER
	REMOVING GUARDRAIL
	REMOVING FENCE
	SAWING CONCRETE
	REMOVING STORM SEWER
	REMOVING CATCH BASINS
	REMOVING INLETS



PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

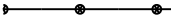
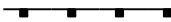
REMOVAL PLAN - STAGE 2

SHEET

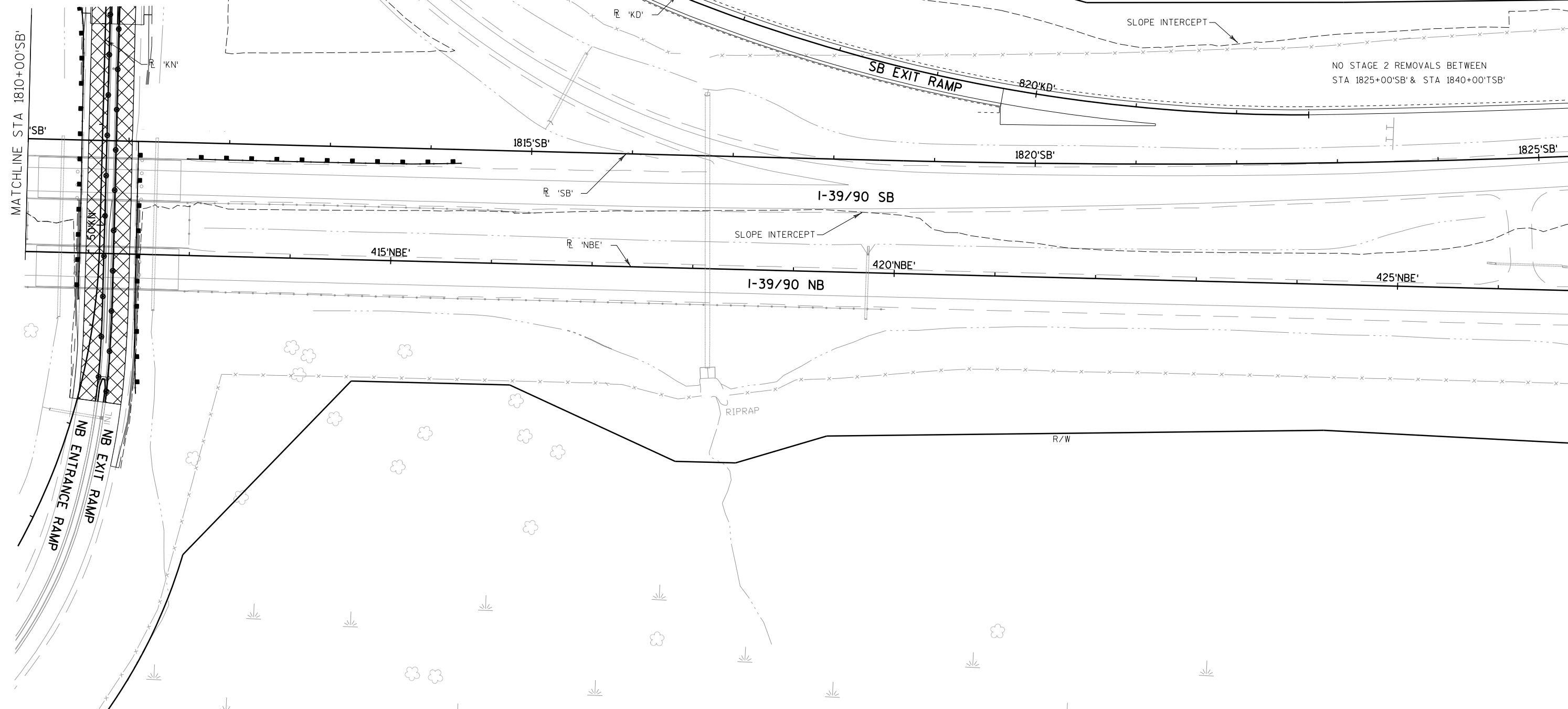
60

E

LEGEND

	REMOVING PAVEMENT
	REMOVING SMALL PIPE CULVERTS
	REMOVING CONCRETE BARRIER
	REMOVING CURB & GUTTER
	REMOVING GUARDRAIL
	REMOVING FENCE
	SAWING CONCRETE
	REMOVING STORM SEWER
	REMOVING CATCH BASINS
	REMOVING INLETS

MATCHLINE STA 1810+00'SB'



PROJECT NO:1007-10-79

HWY: IH 39

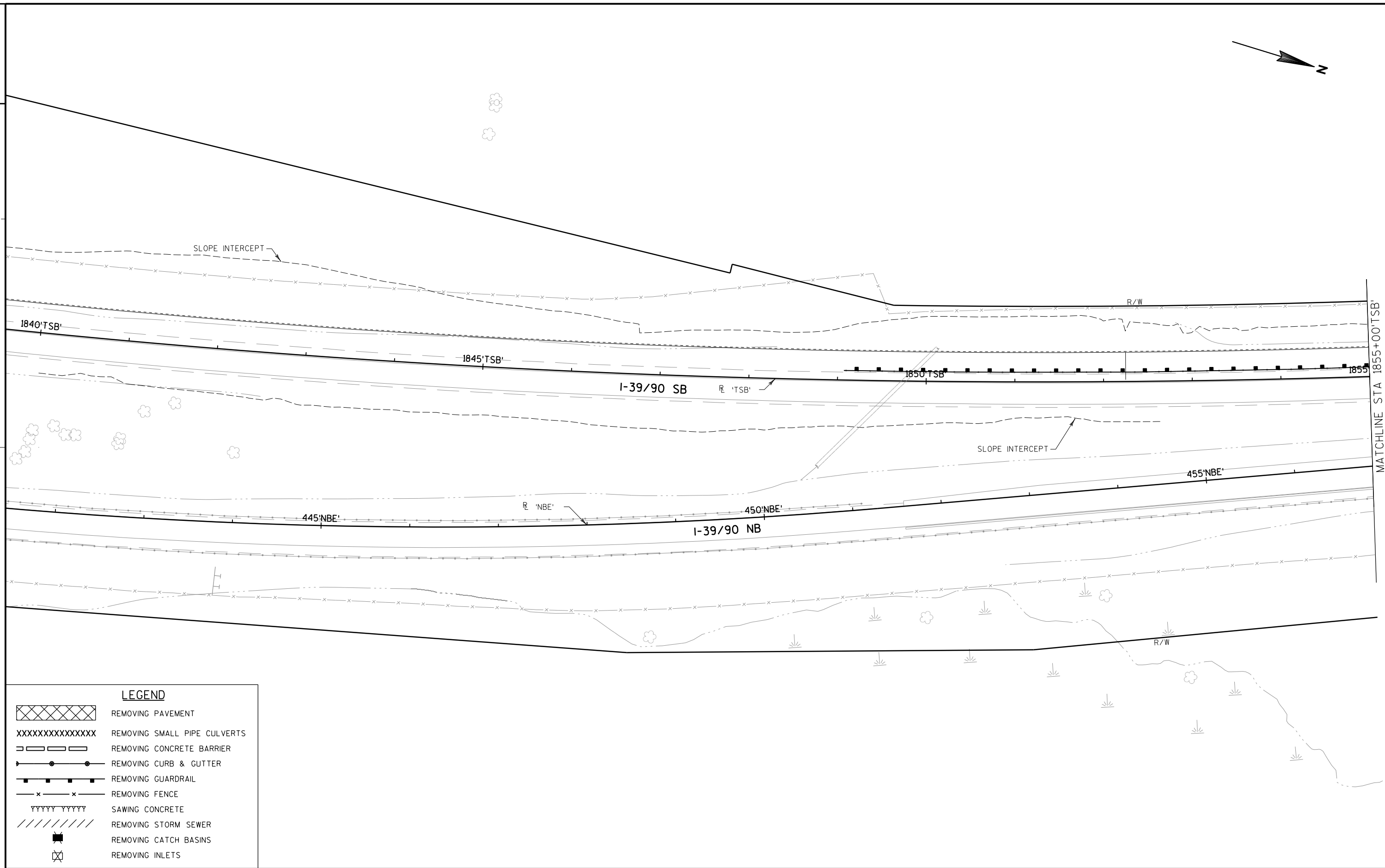
COUNTY: DANE

REMOVAL PLAN - STAGE 2

SHEET

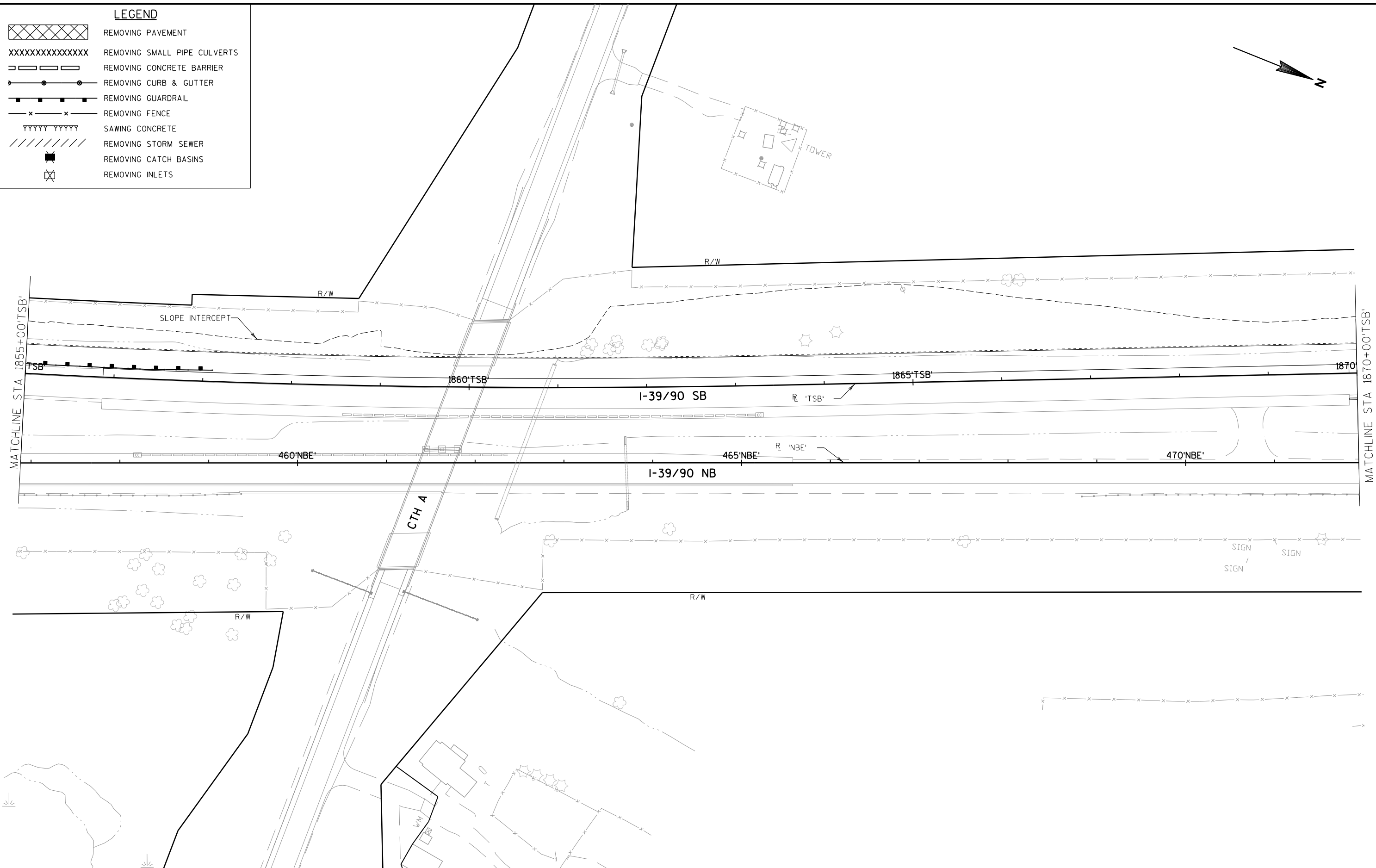
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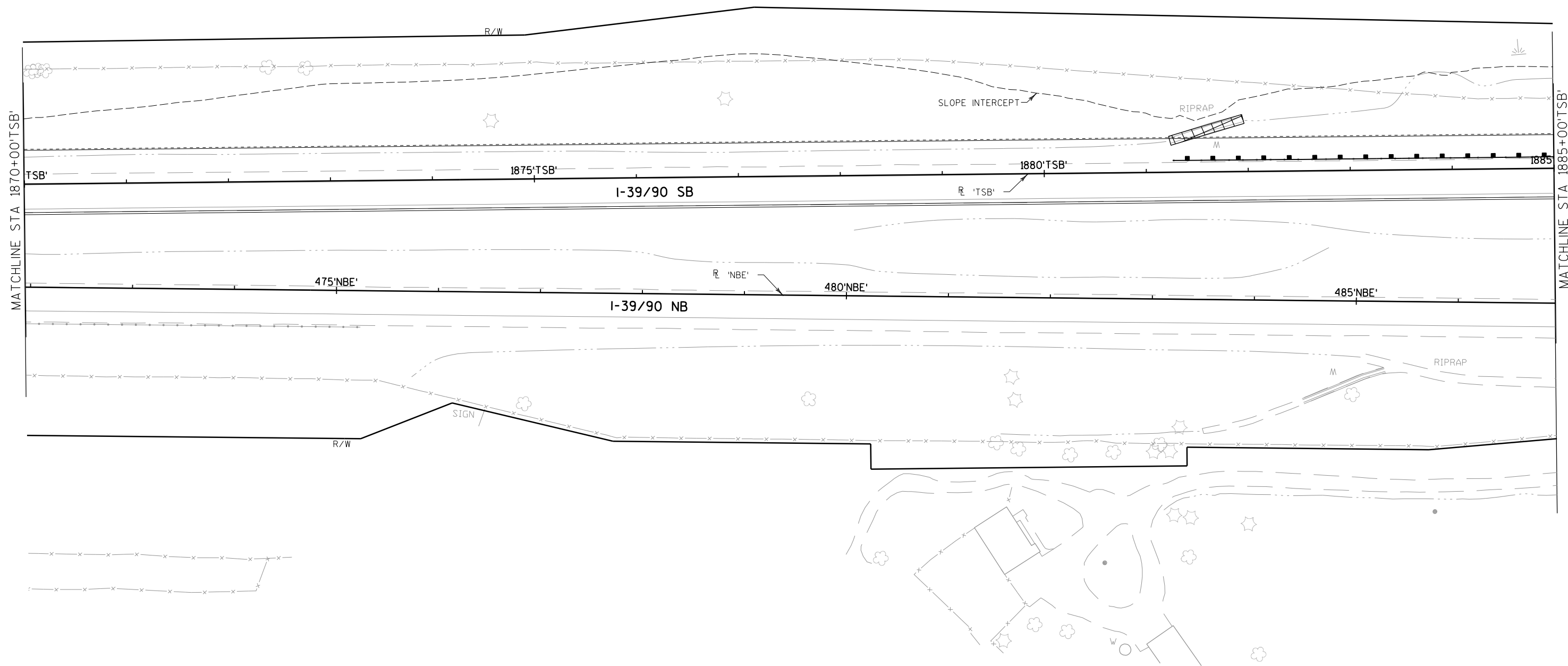
LEGEND

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- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS



LEGEND

- REMOVING PAVEMENT
- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS

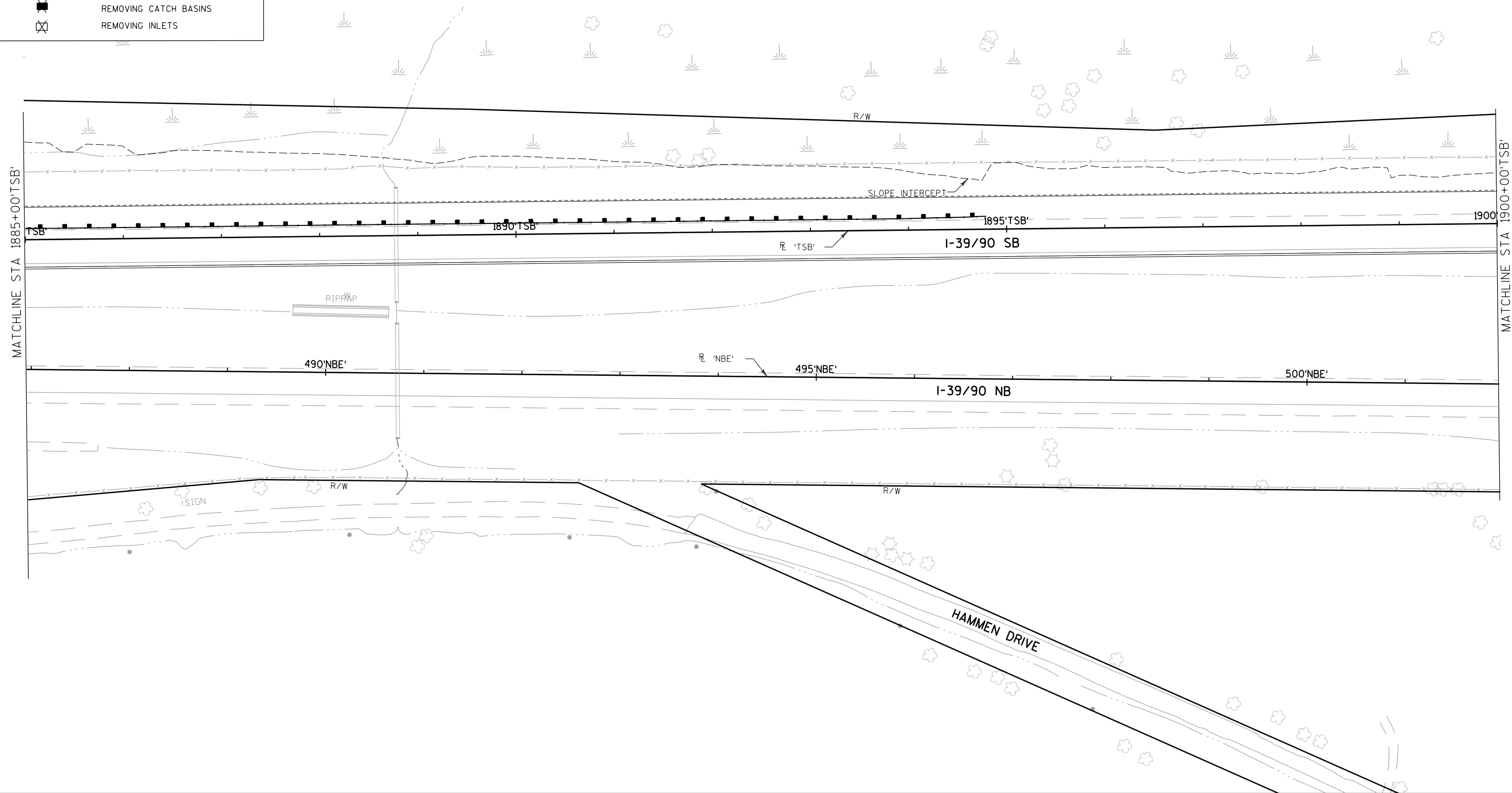


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LEGEND

- REMOVING PAVEMENT
- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS

2



PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

REMOVAL PLAN - STAGE 2

SHEET

65

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\021125_rm2.dgn

PLOT DATE : 7/29/2015

PLOT BY : cti

PLOT NAME : \$FILE\$

PLOT SCALE : 1:100

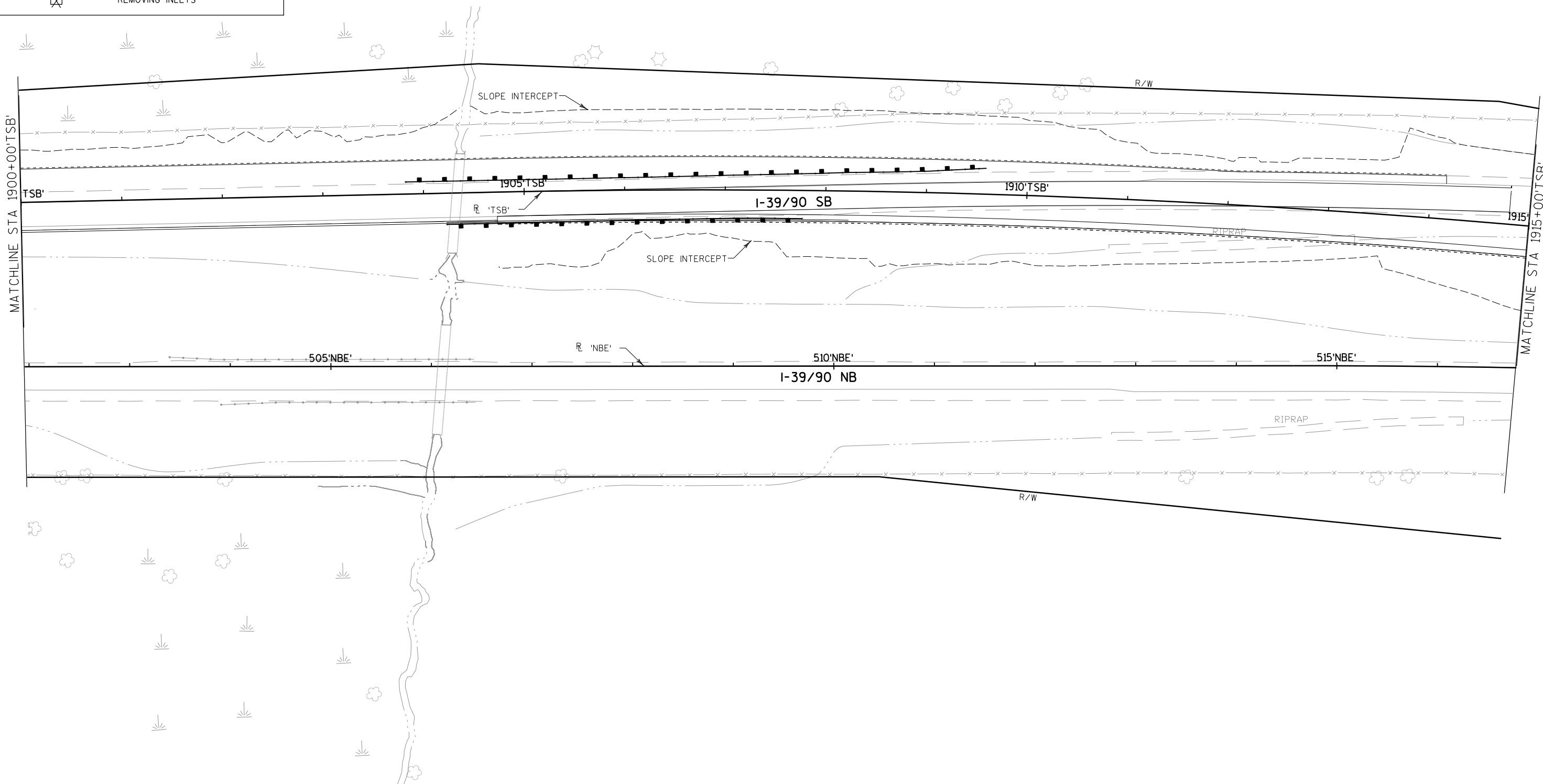
WISDOT/CADDs SHEET 42

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LEGEND

- REMOVING PAVEMENT
- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS

2



PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

REMOVAL PLAN - STAGE 2

SHEET

66

E

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PLOT DATE : 7/29/2015

PLOT BY : cti

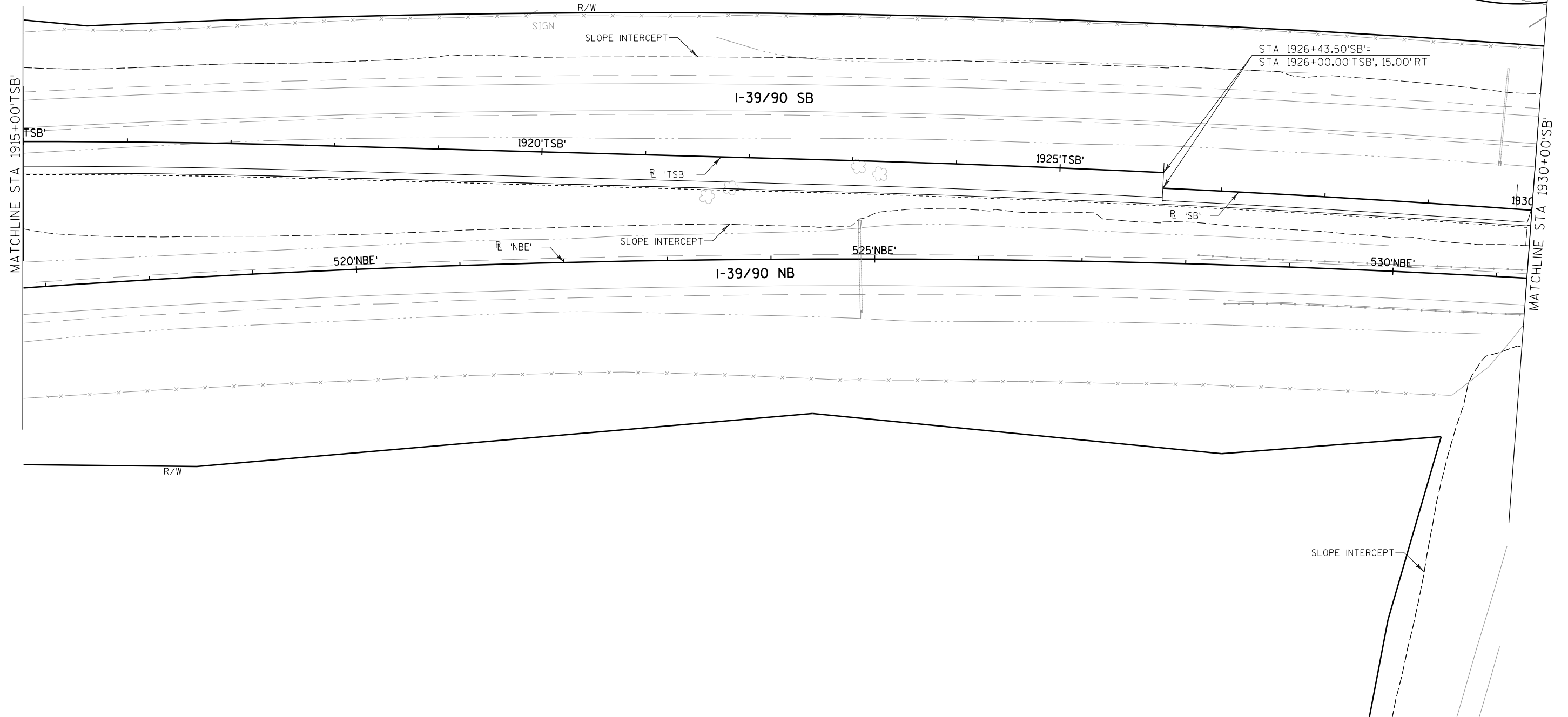
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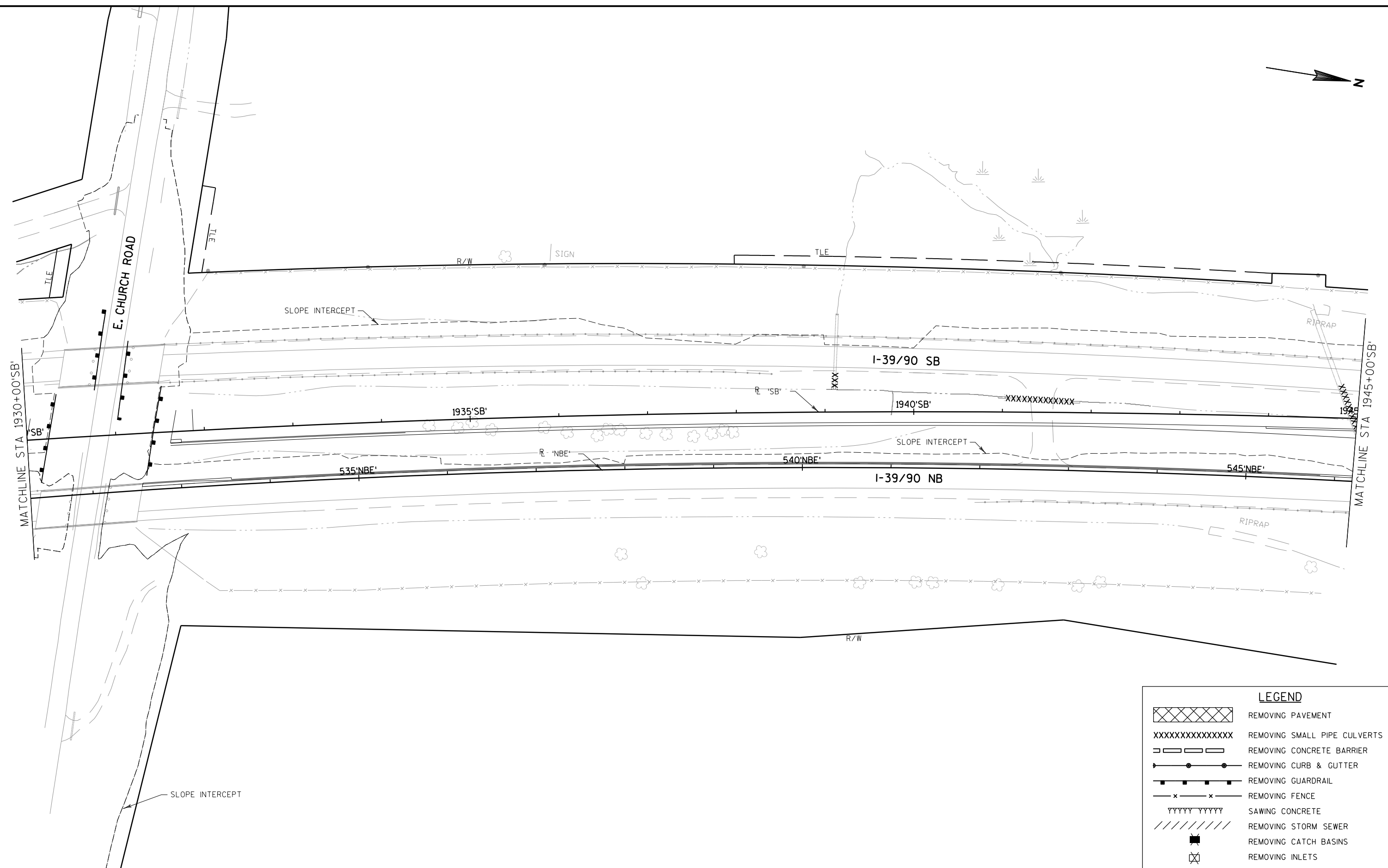
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WISDOT/CADDs SHEET 42

LEGEND

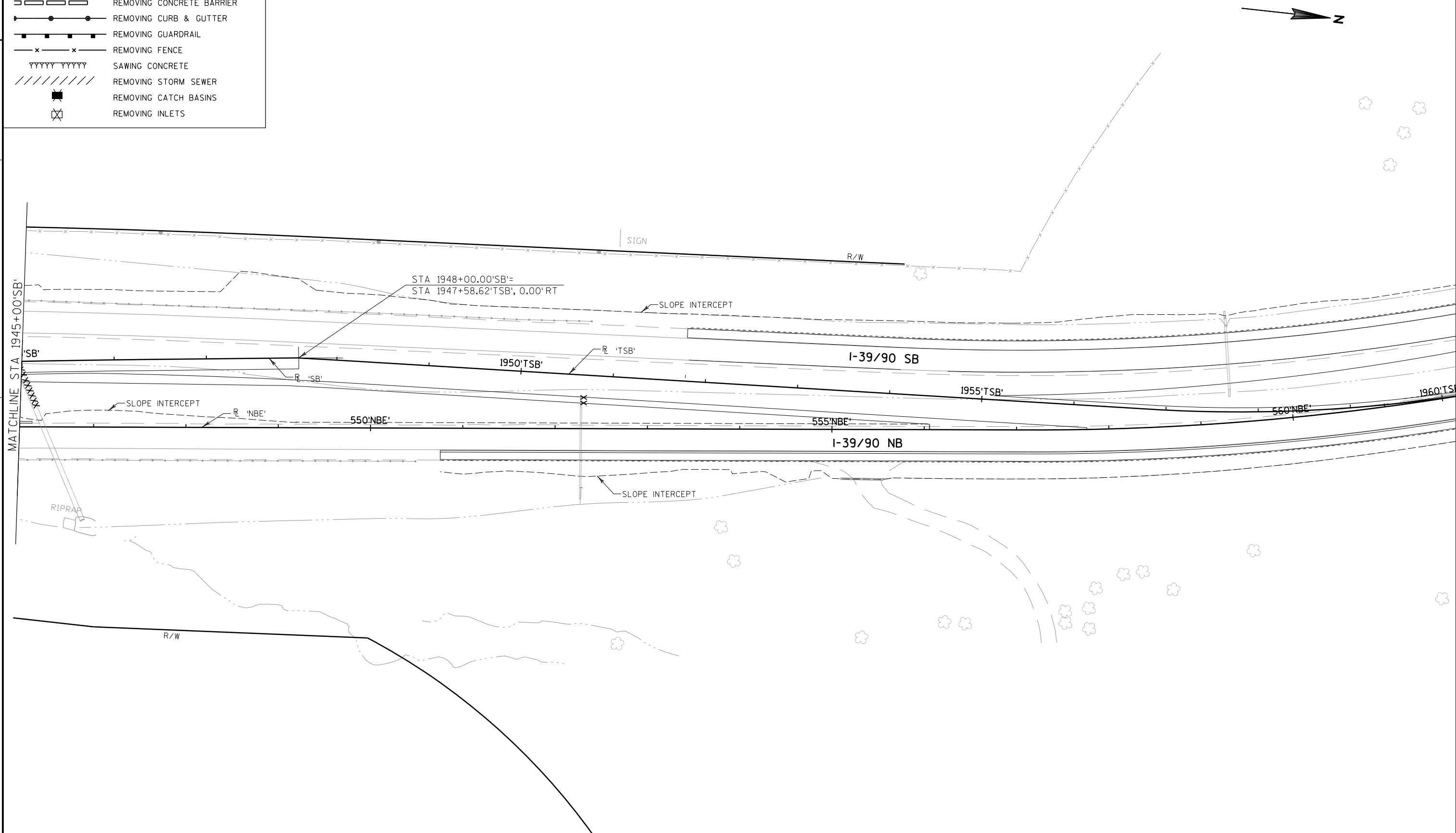
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- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
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- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS



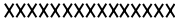
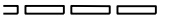
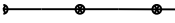
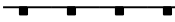
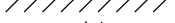


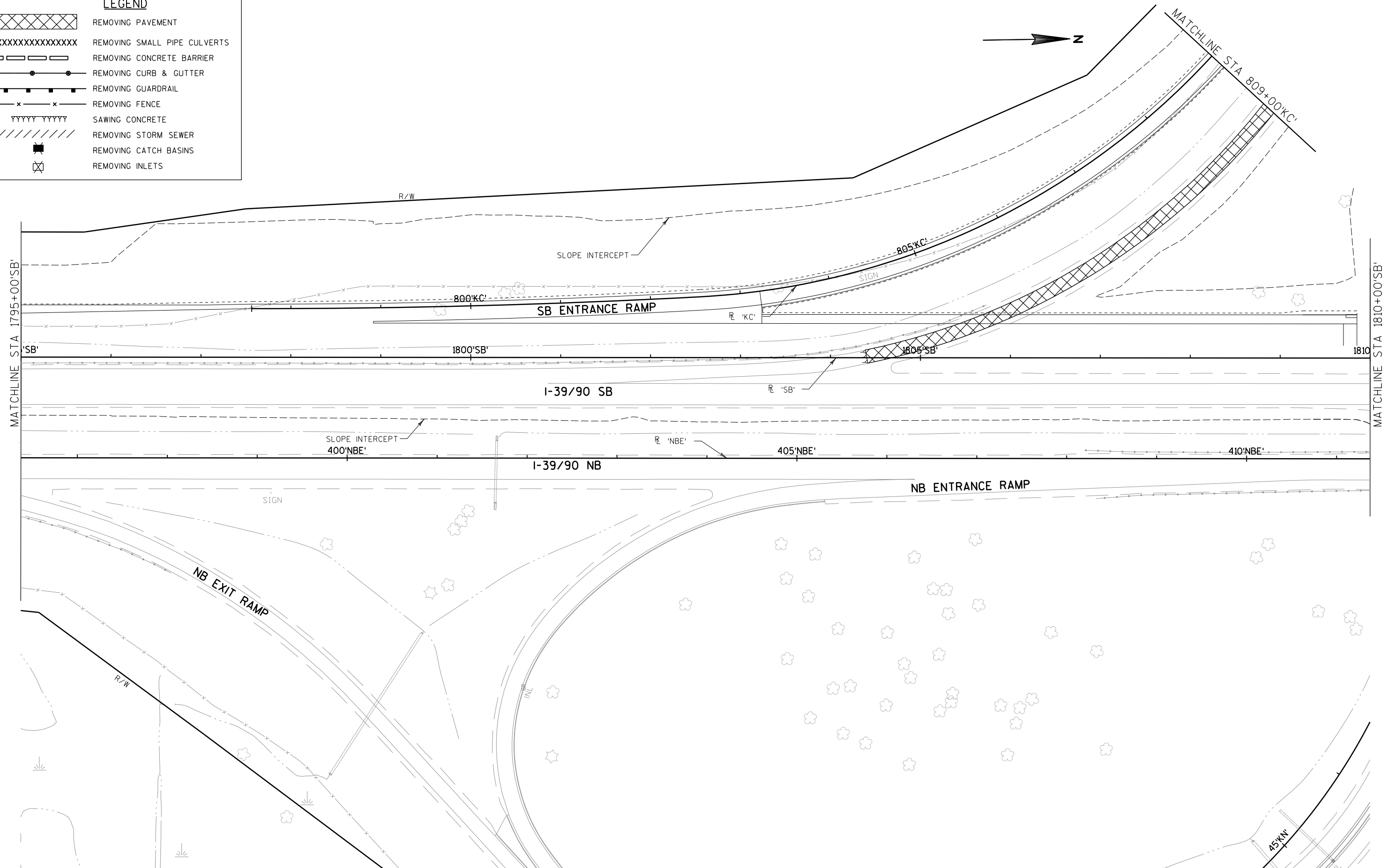
LEGEND

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- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS



LEGEND

	REMOVING PAVEMENT
	REMOVING SMALL PIPE CULVERTS
	REMOVING CONCRETE BARRIER
	REMOVING CURB & GUTTER
	REMOVING GUARDRAIL
	REMOVING FENCE
	SAWING CONCRETE
	REMOVING STORM SEWER
	REMOVING CATCH BASINS
	REMOVING INLETS



PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

REMOVAL PLAN - STAGE 3

SHEET

70

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\021130_rm3.dgn

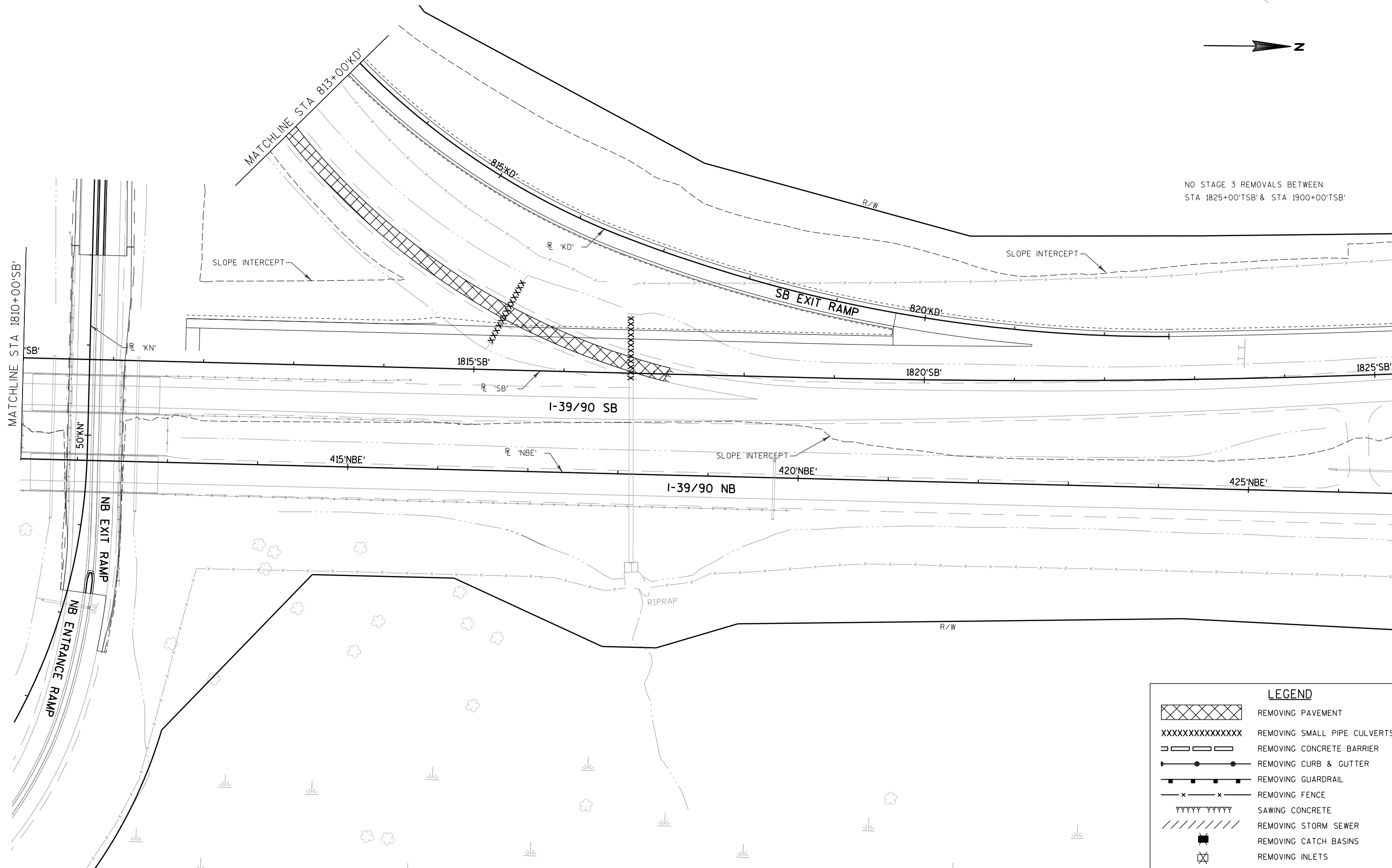
PLOT DATE : 7/29/2015

PLOT BY : cti

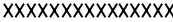
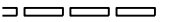
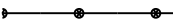
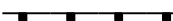
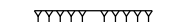
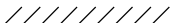
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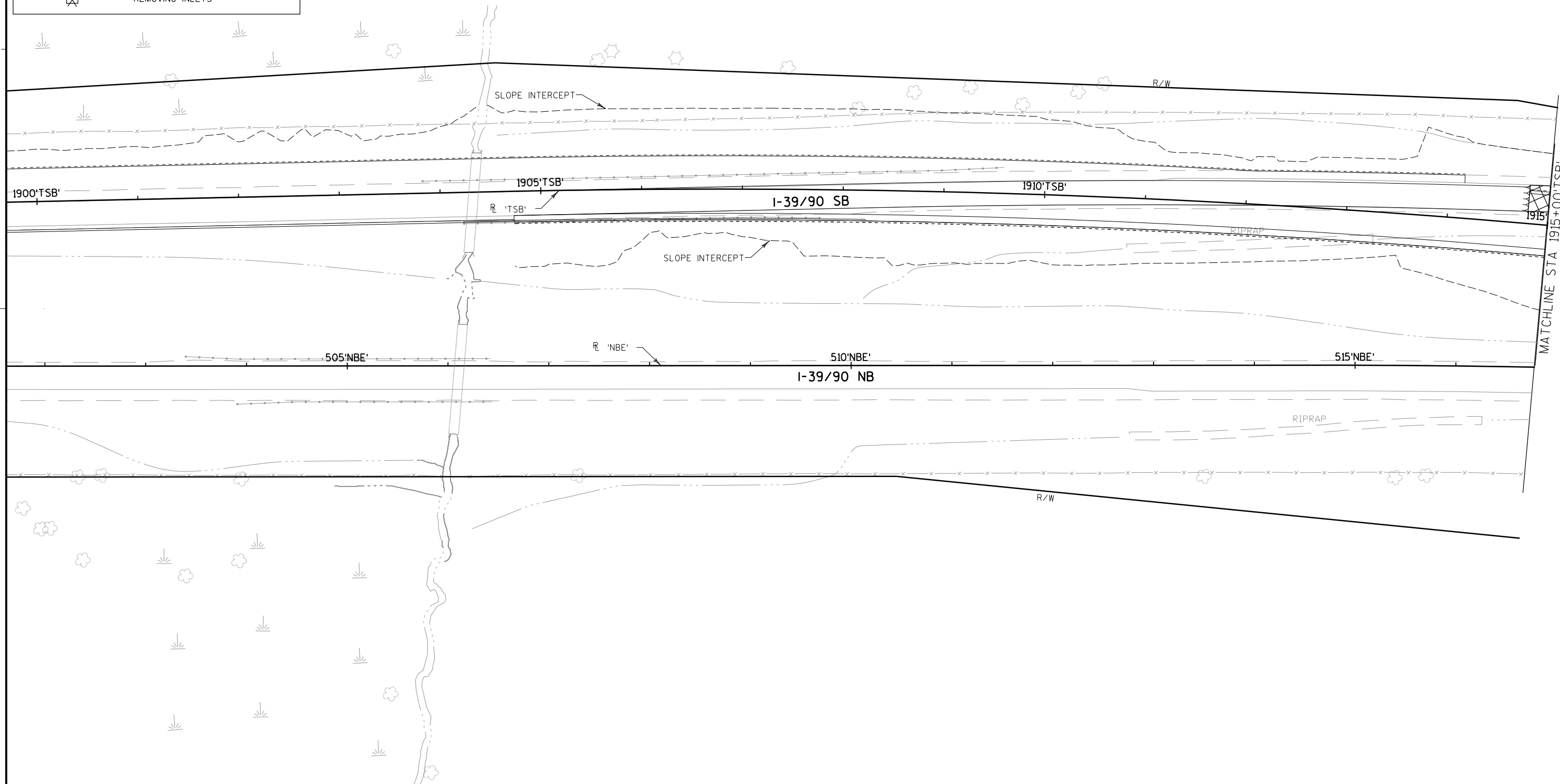
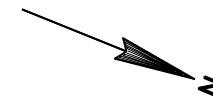
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WISDOT/CADDs SHEET 42



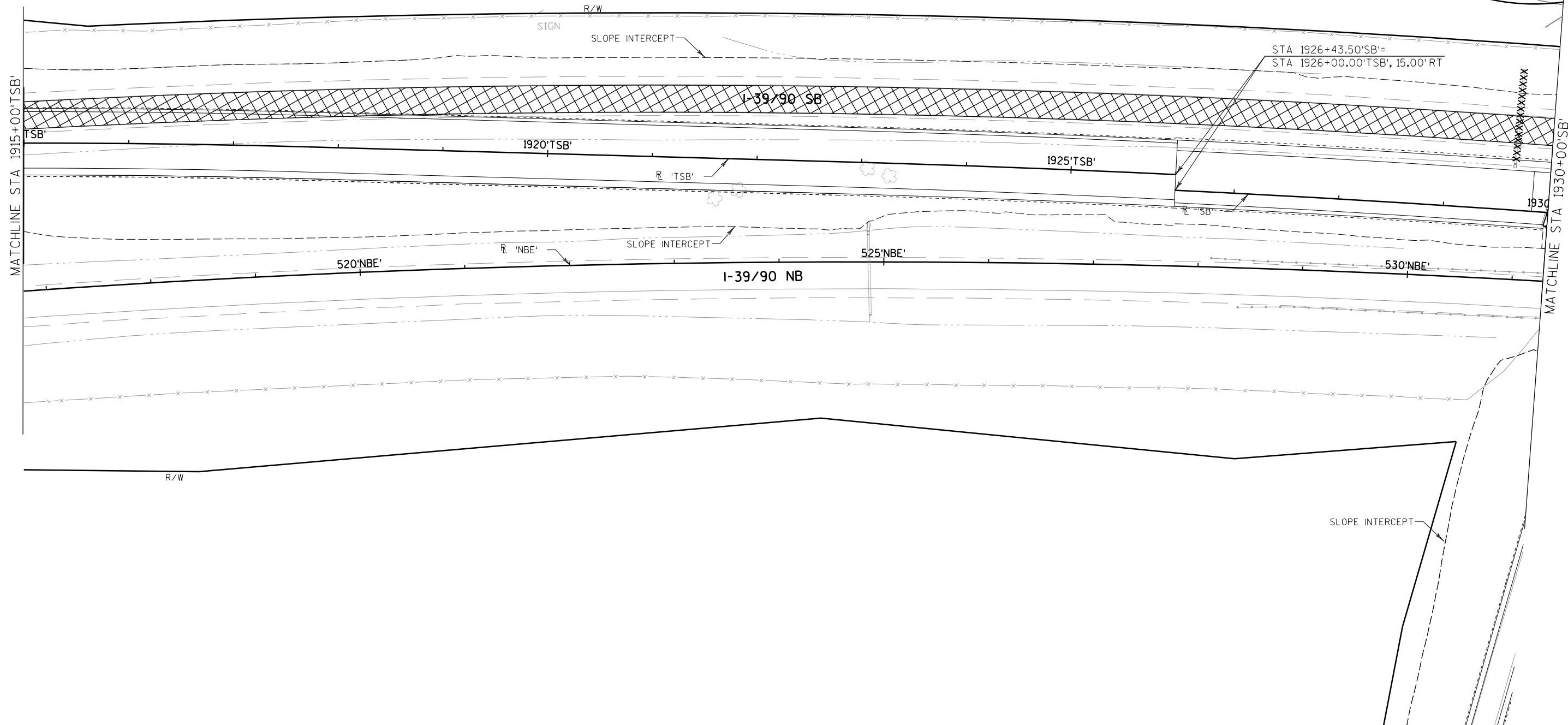
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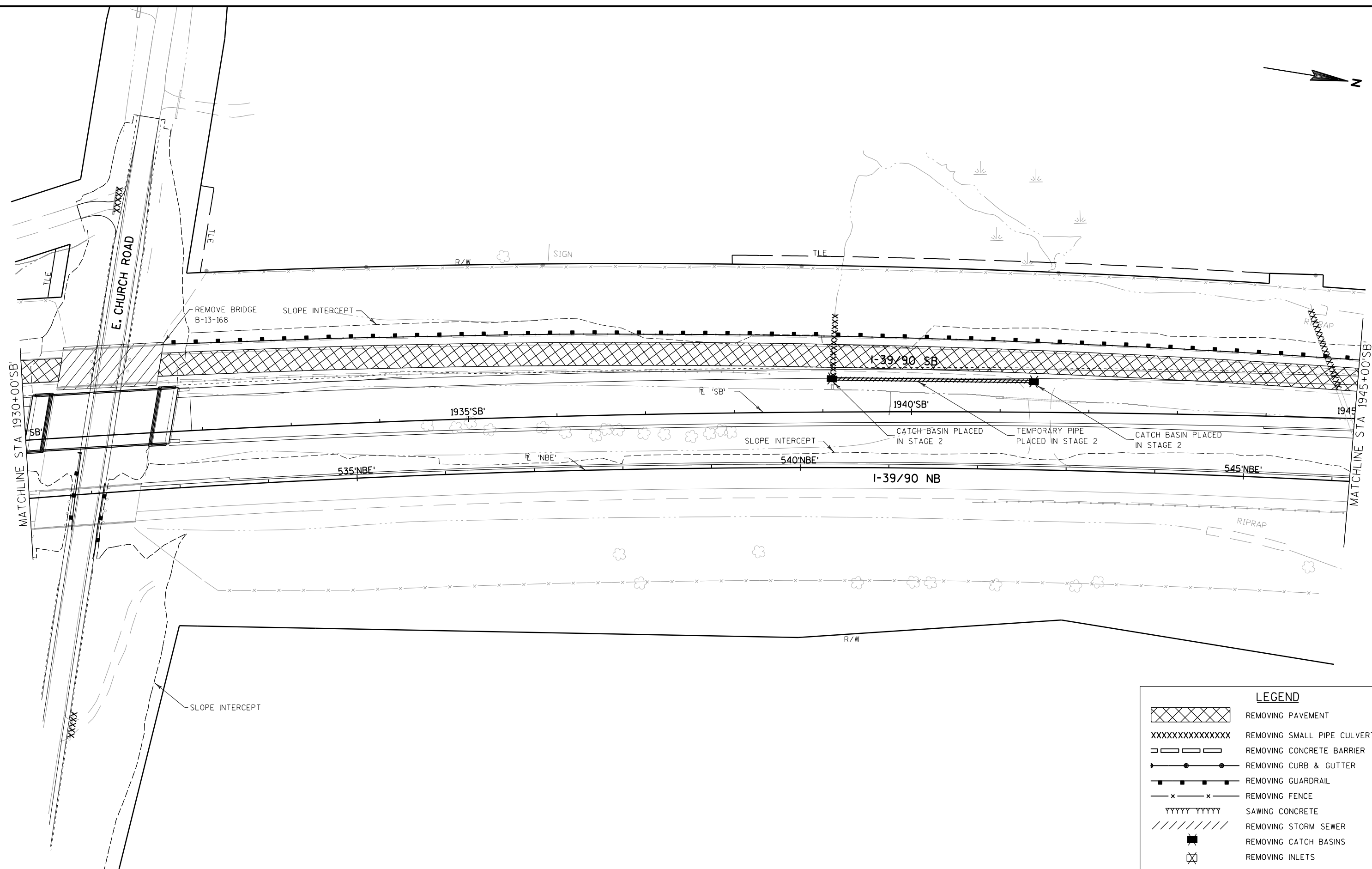
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	REMOVING SMALL PIPE CULVERTS
	REMOVING CONCRETE BARRIER
	REMOVING CURB & GUTTER
	REMOVING GUARDRAIL
	REMOVING FENCE
	SAWING CONCRETE
	REMOVING STORM SEWER
	REMOVING CATCH BASINS
	REMOVING INLETS



LEGEND

- REMOVING PAVEMENT
- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS

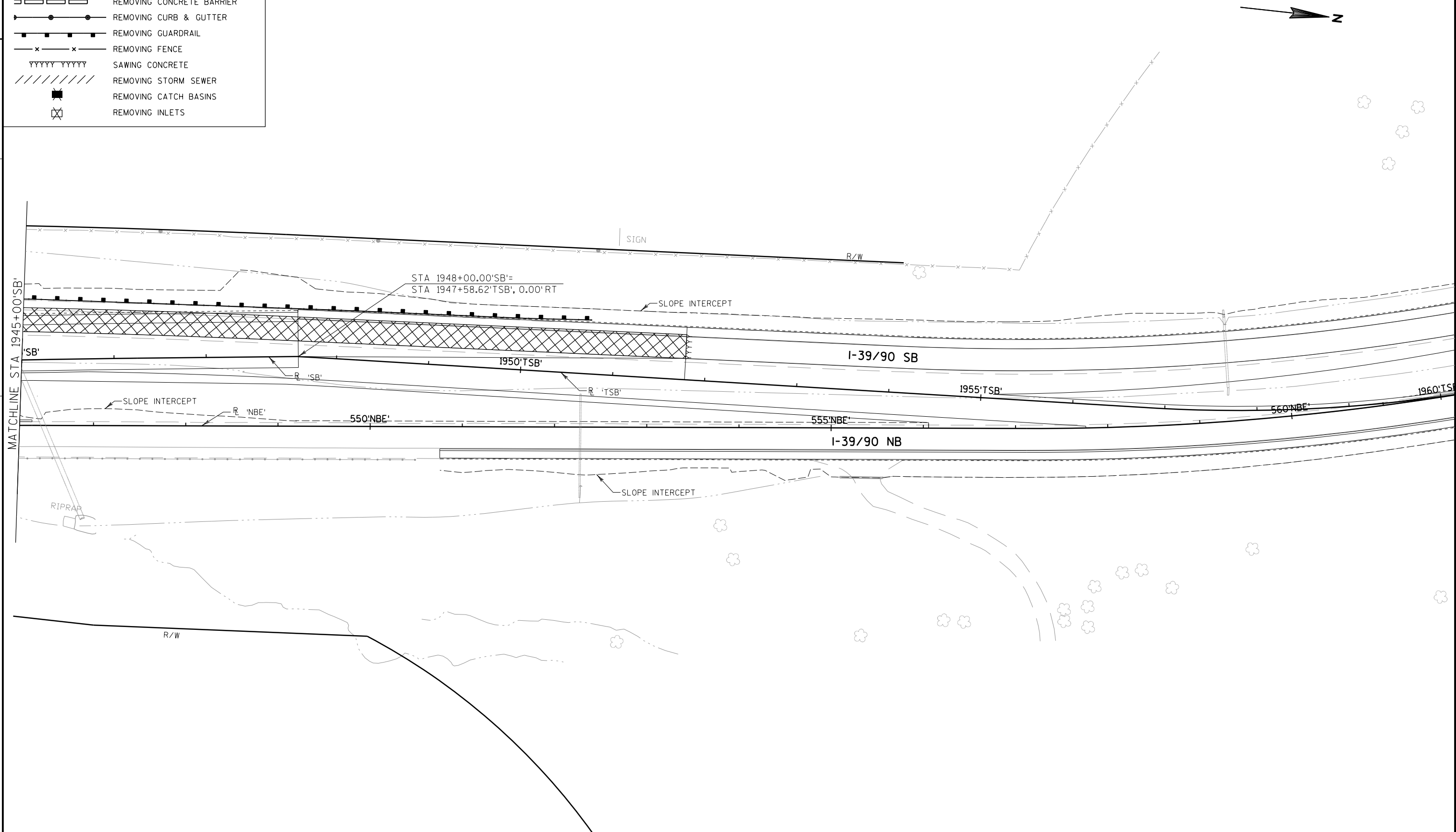




LEGEND	
	REMOVING PAVEMENT
	REMOVING SMALL PIPE CULVERTS
	REMOVING CONCRETE BARRIER
	REMOVING CURB & GUTTER
	REMOVING GUARDRAIL
	REMOVING FENCE
	SAWING CONCRETE
	REMOVING STORM SEWER
	REMOVING CATCH BASINS
	REMOVING INLETS

LEGEND

- REMOVING PAVEMENT
- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS

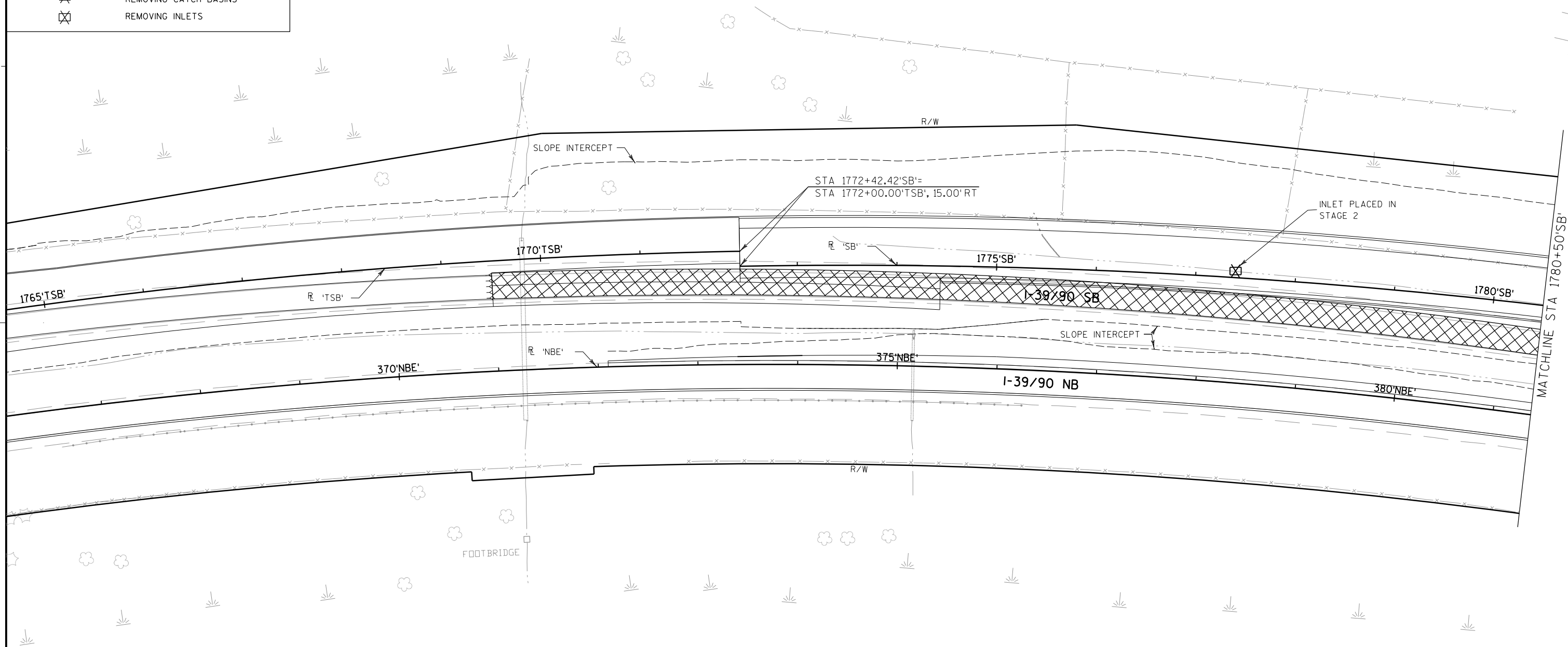


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LEGEND

- REMOVING PAVEMENT
- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS

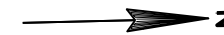
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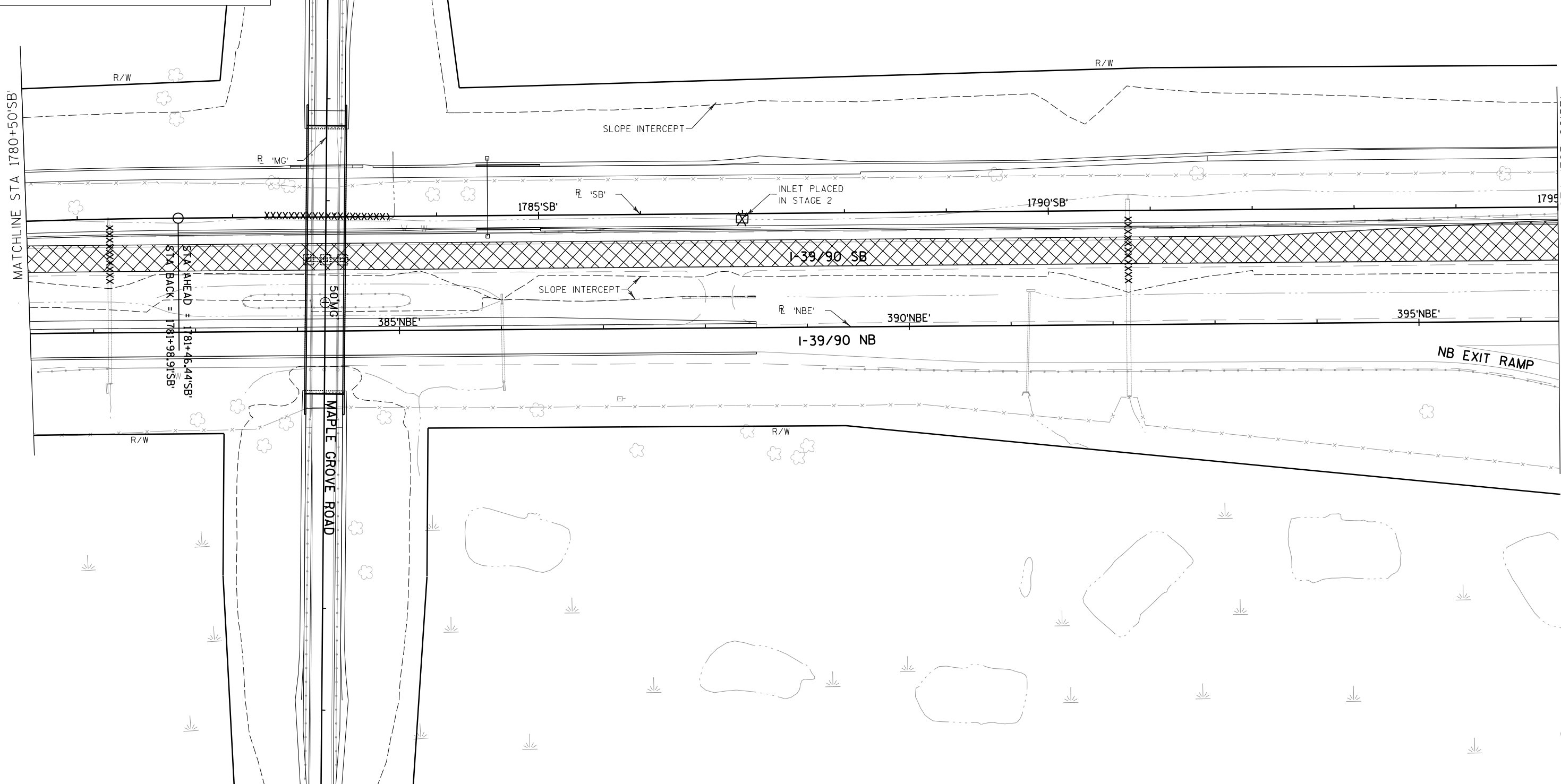
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LEGEND

- REMOVING PAVEMENT
- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS



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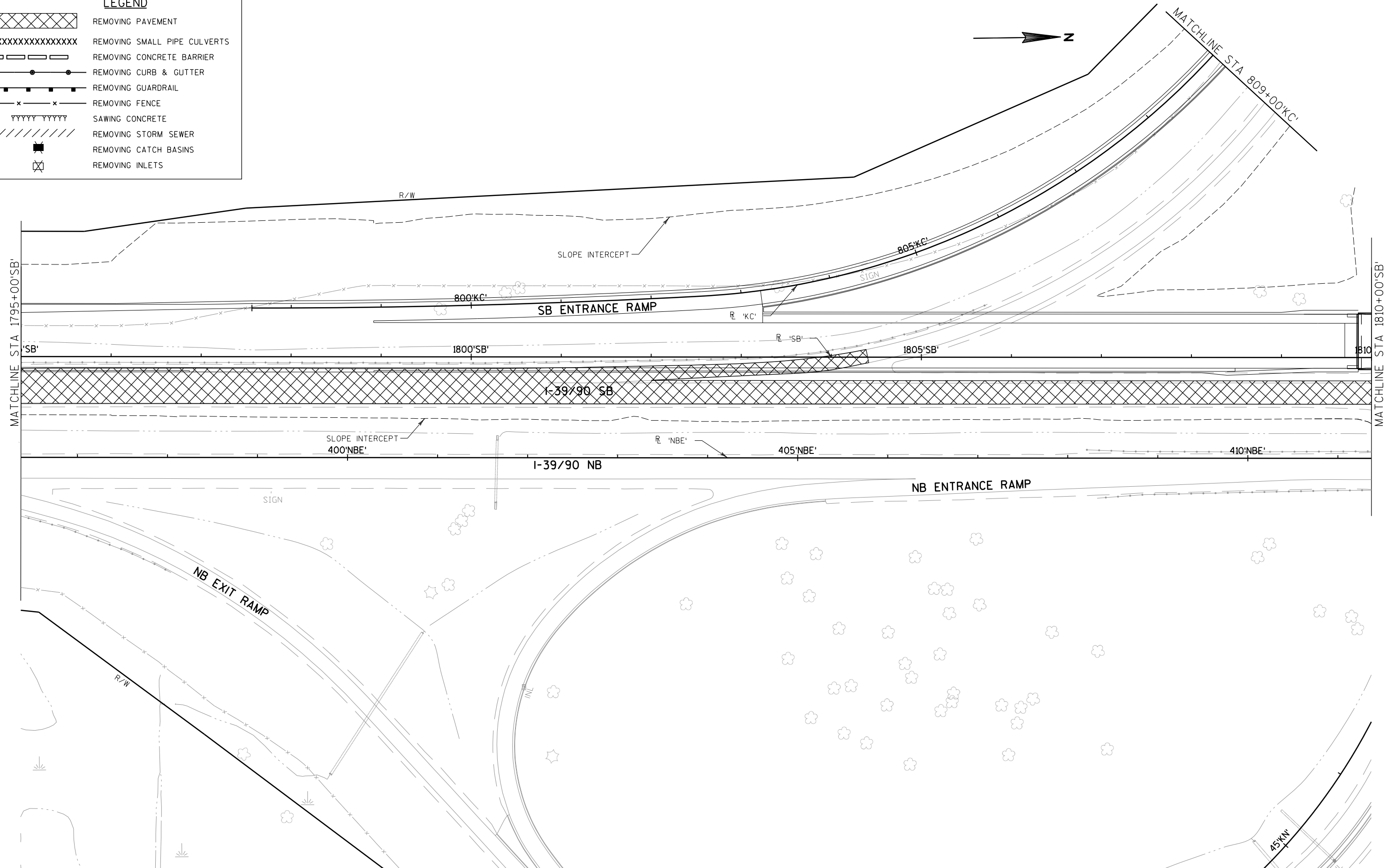


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LEGEND

- REMOVING PAVEMENT
- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS

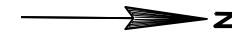
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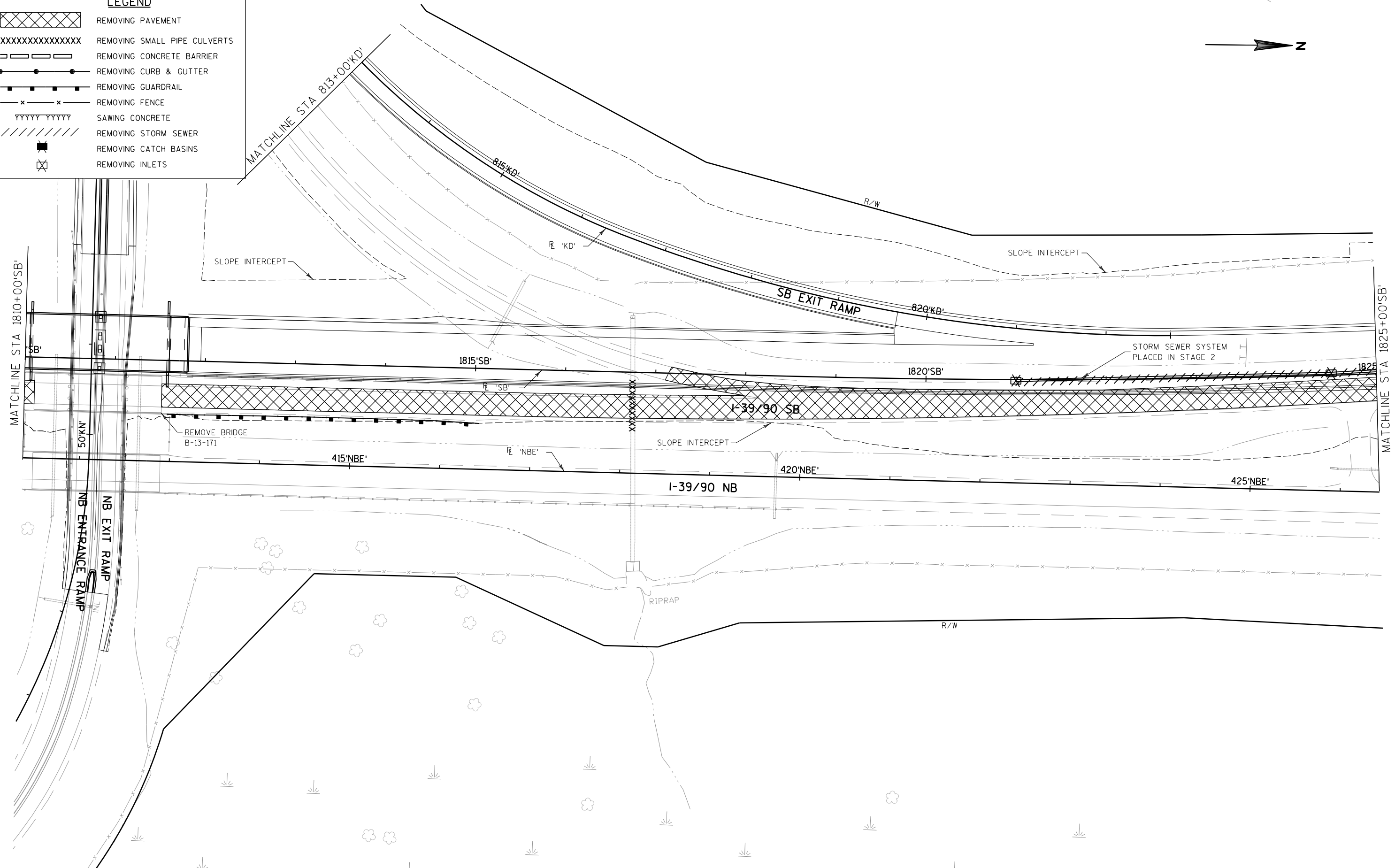
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LEGEND

- REMOVING PAVEMENT
- REMOVING SMALL PIPE CULVERTS
- REMOVING CONCRETE BARRIER
- REMOVING CURB & GUTTER
- REMOVING GUARDRAIL
- REMOVING FENCE
- SAWING CONCRETE
- REMOVING STORM SEWER
- REMOVING CATCH BASINS
- REMOVING INLETS

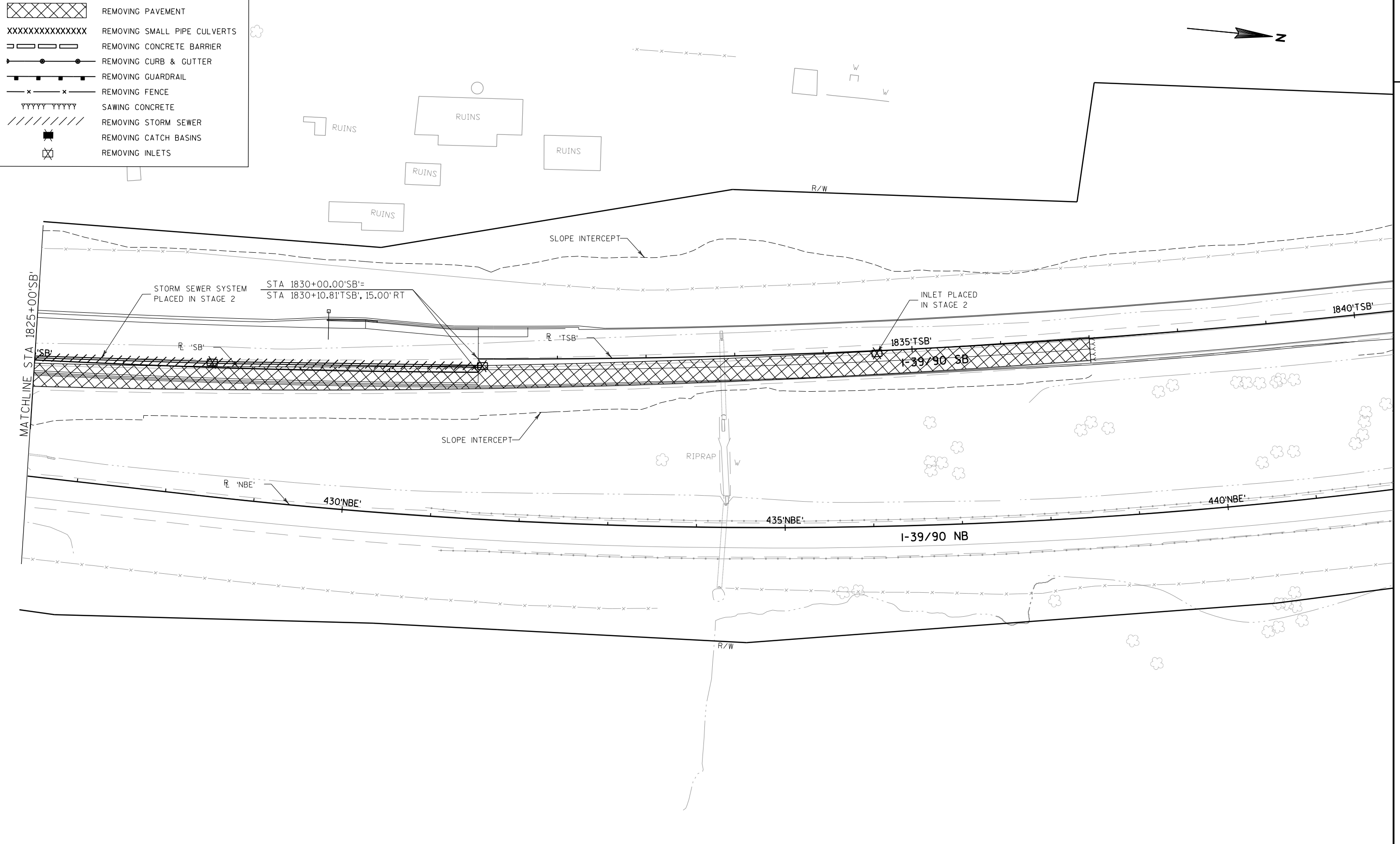


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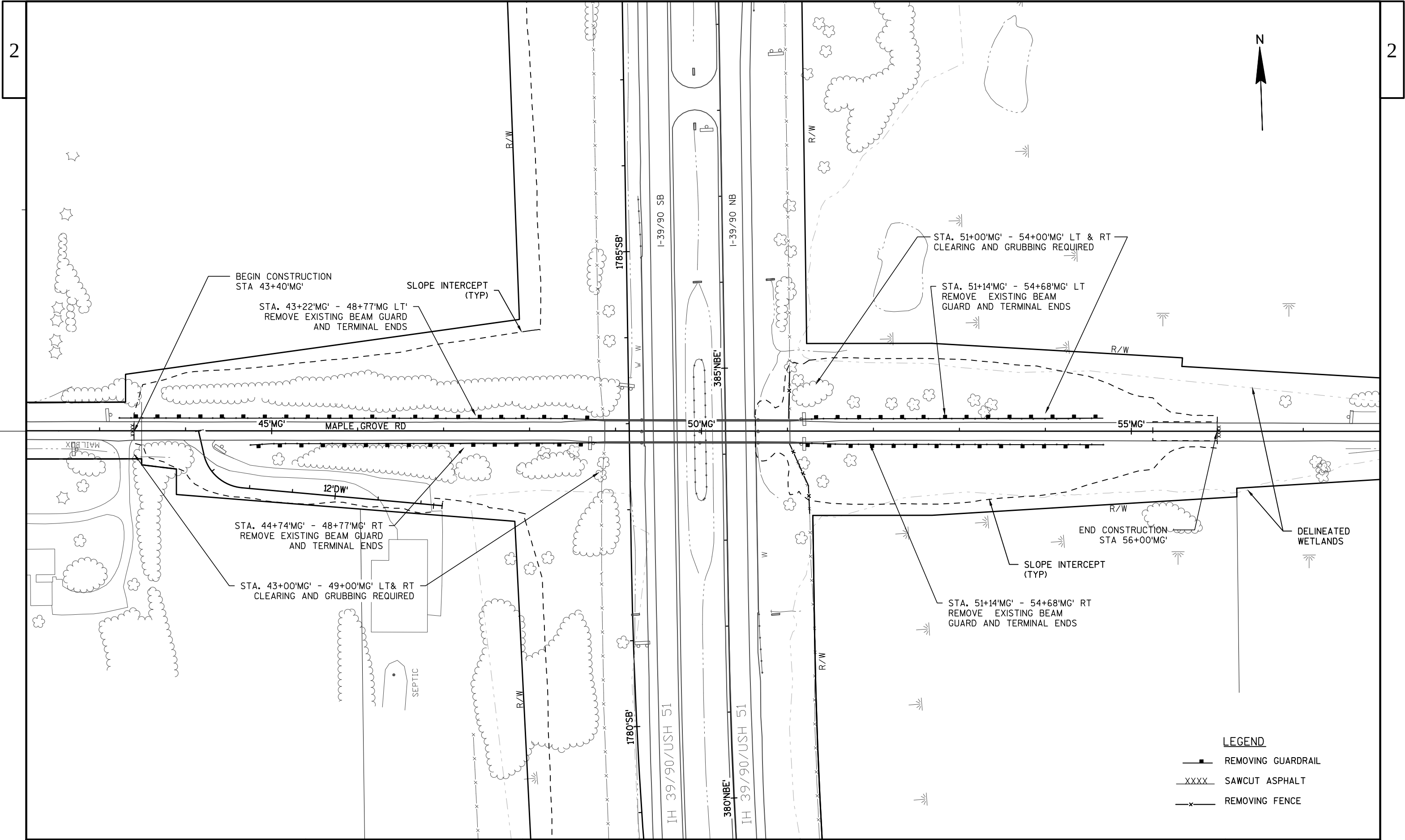
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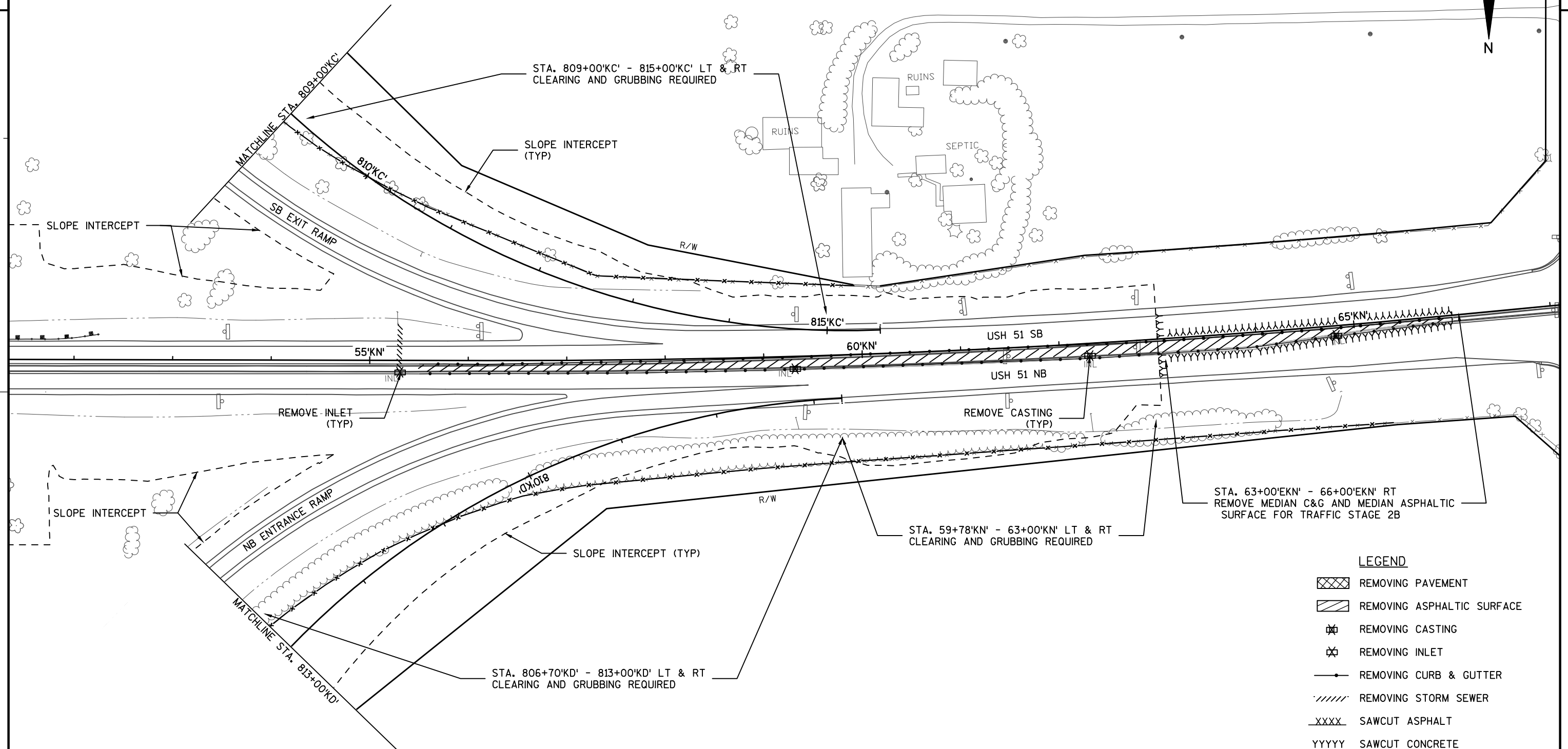
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XXXXXXXXXXXXXXXXXXXX	REMOVING SMALL PIPE CULVERTS
	REMOVING CONCRETE BARRIER
	REMOVING CURB & GUTTER
	REMOVING GUARDRAIL
	REMOVING FENCE
YYYYYY YYYYYY	SAWING CONCRETE
	REMOVING STORM SEWER
	REMOVING CATCH BASINS
	REMOVING INLETS

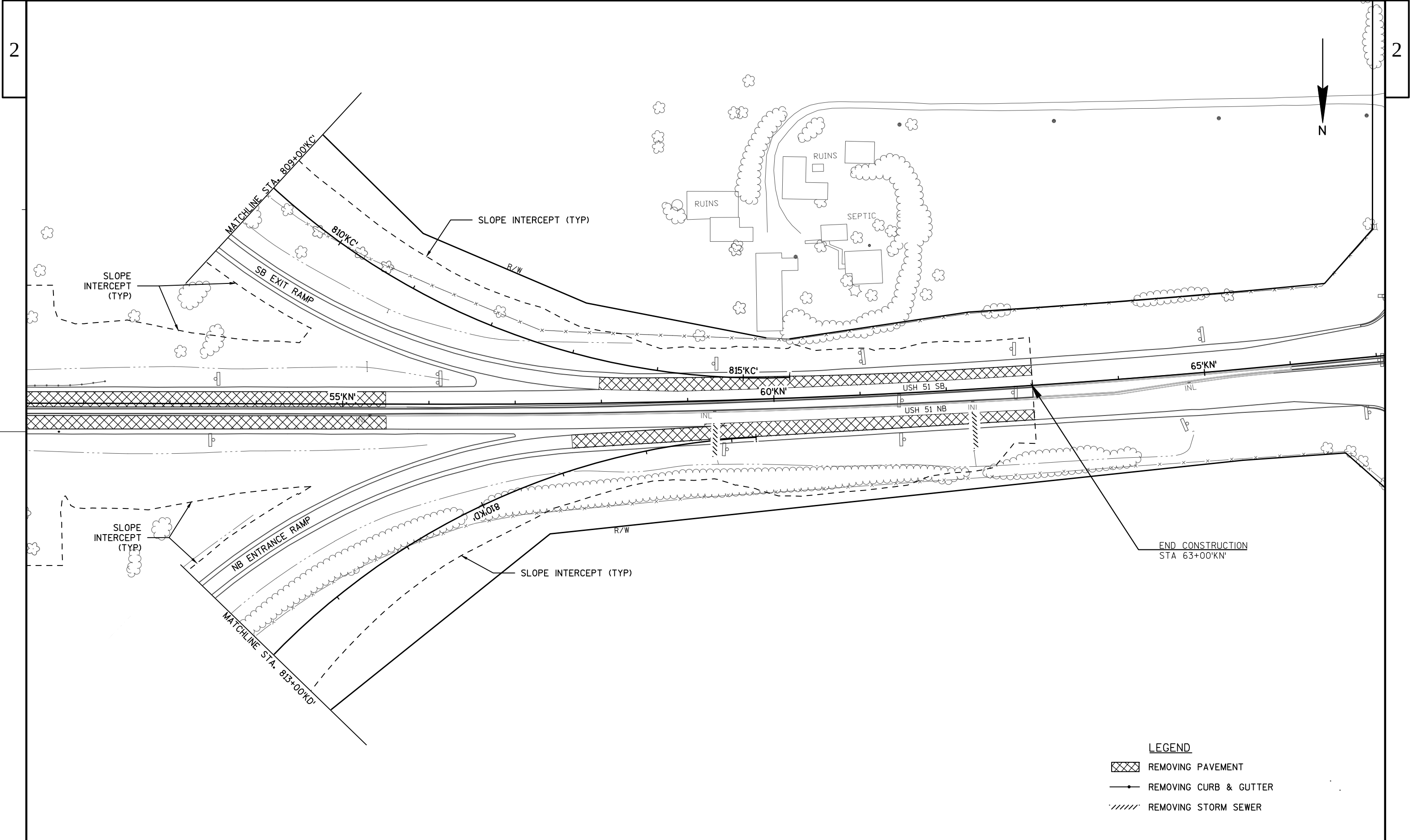


SHEET 80

WISDOT/CADDS SHEET 42

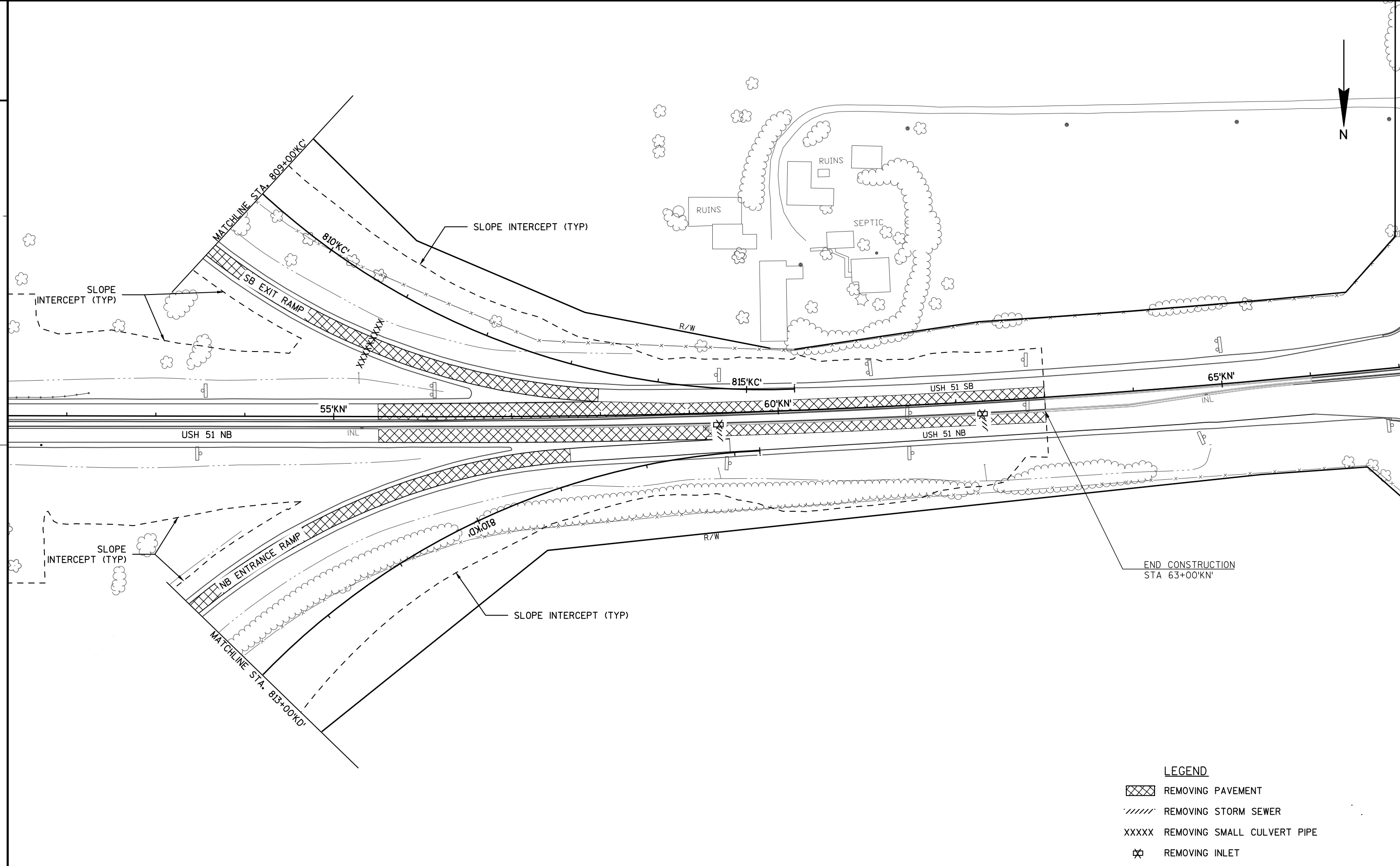






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2



	REMOVING PAVEMENT
	REMOVING STORM SEWER
XXXXX	REMOVING SMALL CULVERT PIPE
	REMOVING INLET

PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

REMOVAL PLAN STAGE 3 - USH 51

SHEET	84	E
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E

PLOT DATE : 7/25/2015 12:49 PM

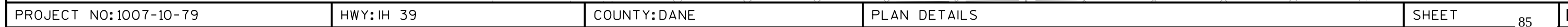
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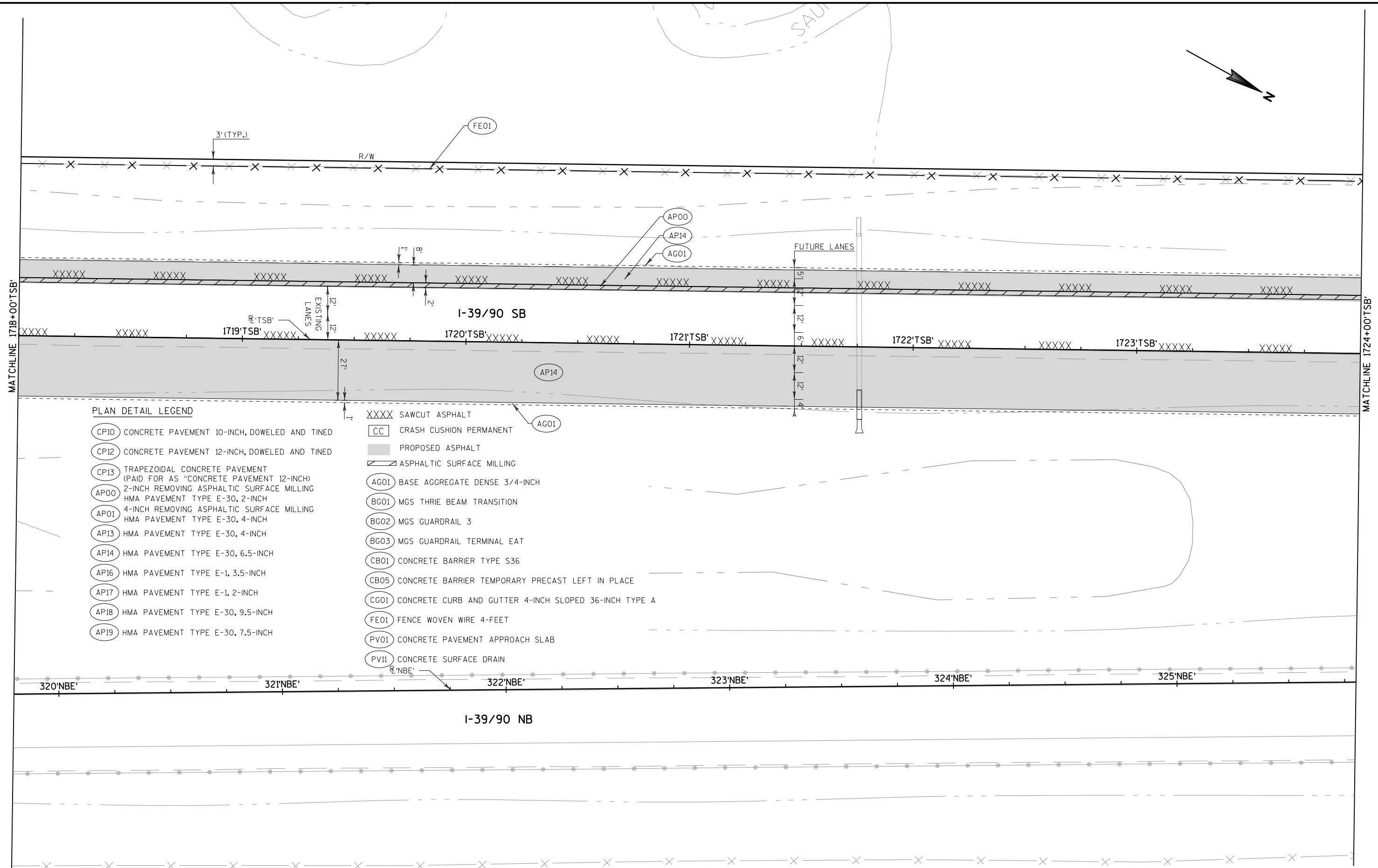
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WISDOT/CADDS SHEET 42

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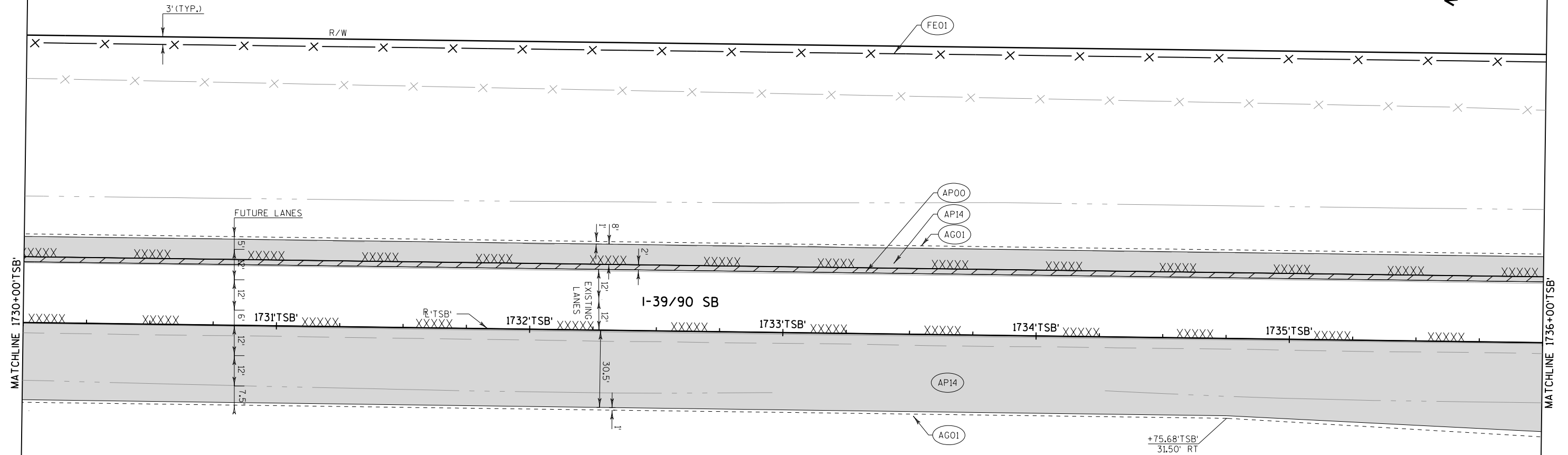


- XXXX SAWCUT ASPHALT

- | | |
|---|---|
|  | CRASH CUSHION PERMANENT |
|  | PROPOSED ASPHALT |
|  | ASPHALTIC SURFACE MILLING |
|  | BASE AGGREGATE DENSE 3/4-INCH |
|  | MGS THRIE BEAM TRANSITION |
|  | MGS GUARDRAIL 3 |
|  | MGS GUARDRAIL TERMINAL EAT |
|  | CONCRETE BARRIER TYPE S36 |
|  | CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE |
|  | CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A |
|  | FENCE WOVEN WIRE 4-FEET |
|  | CONCRETE PAVEMENT APPROACH SLAB |
|  | CONCRETE SURFACE DRAIN |

2

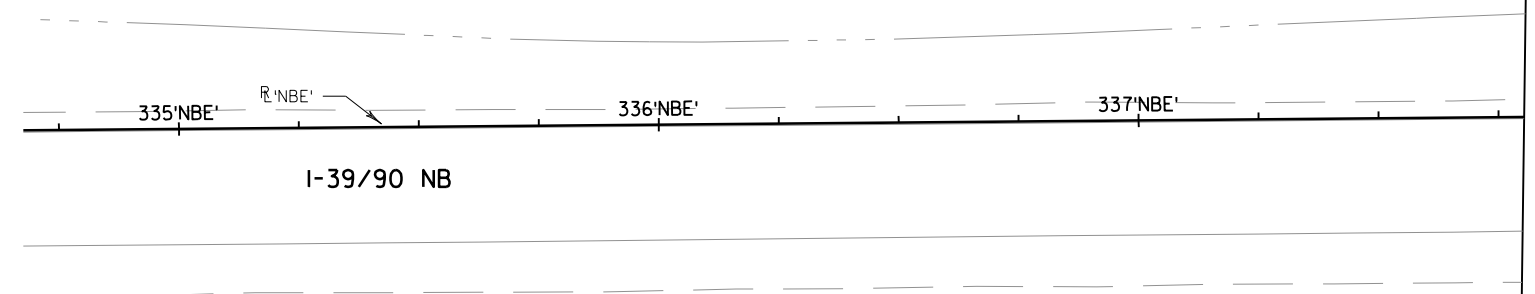
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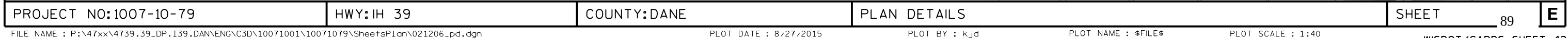
PLAN DETAIL LEGEND

- | | |
|------|---|
| CP10 | CONCRETE PAVEMENT 10-INCH, DOWELED AND TINED |
| CP12 | CONCRETE PAVEMENT 12-INCH, DOWELED AND TINED |
| CP13 | TRAPEZOIDAL CONCRETE PAVEMENT
(PAID FOR AS "CONCRETE PAVEMENT 12-INCH") |
| AP00 | 2-INCH REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE E-30, 2-INCH |
| AP01 | 4-INCH REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE E-30, 4-INCH |
| AP13 | HMA PAVEMENT TYPE E-30, 4-INCH |
| AP14 | HMA PAVEMENT TYPE E-30, 6.5-INCH |
| AP16 | HMA PAVEMENT TYPE E-1, 3.5-INCH |
| AP17 | HMA PAVEMENT TYPE E-1, 2-INCH |
| AP18 | HMA PAVEMENT TYPE E-30, 9.5-INCH |
| AP19 | HMA PAVEMENT TYPE E-30, 7.5-INCH |

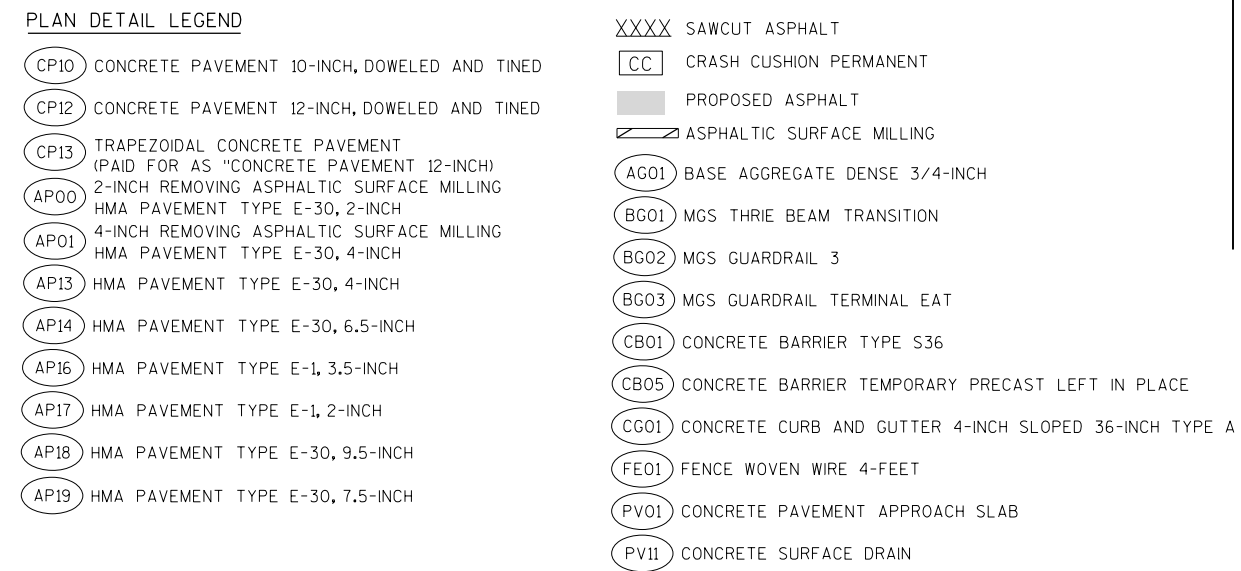
- XXXX SAWCUT ASPHALT
- CC CRASH CUSHION PERMANENT
- PROPOSED ASPHALT
- ASPHALTIC SURFACE MILLING
- AG01 BASE AGGREGATE DENSE 3/4-INCH
- BG01 MGS THRIE BEAM TRANSITION
- BG02 MGS GUARDRAIL 3
- BG03 MGS GUARDRAIL TERMINAL EAT
- CB01 CONCRETE BARRIER TYPE S36
- CB05 CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE
- CG01 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
- FE01 FENCE WOVEN WIRE 4-FEET
- PV01 CONCRETE PAVEMENT APPROACH SLAB
- PV11 CONCRETE SURFACE DRAIN



2



2

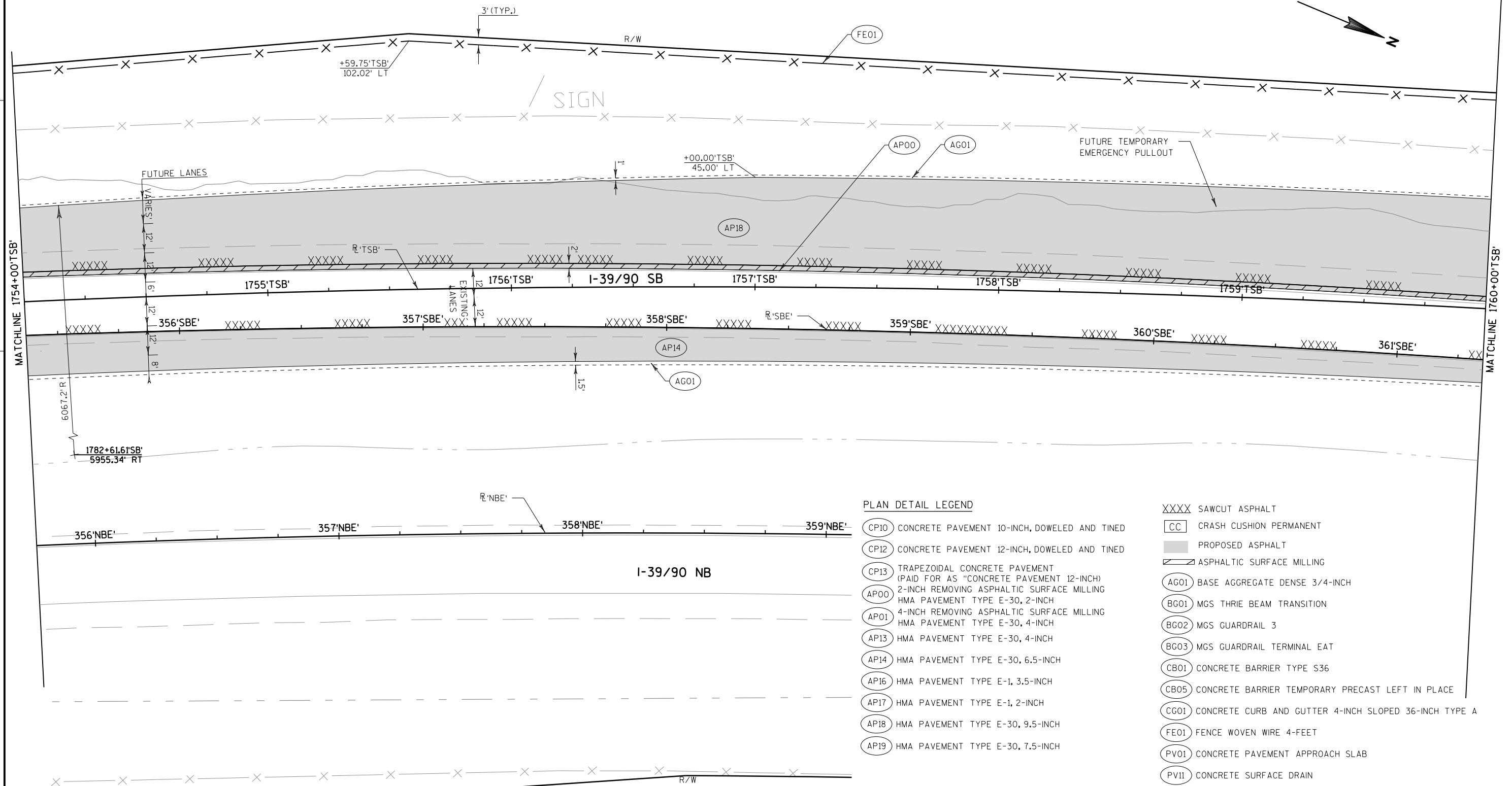


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PLAN DETAIL LEGEND

- | | |
|------|---|
| CP10 | CONCRETE PAVEMENT 10-INCH, DOWELED AND TINED |
| CP12 | CONCRETE PAVEMENT 12-INCH, DOWELED AND TINED |
| CP13 | TRAPEZOIDAL CONCRETE PAVEMENT
(PAID FOR AS "CONCRETE PAVEMENT 12-INCH) |
| AP00 | 2-INCH REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE E-30, 2-INCH |
| AP01 | 4-INCH REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE E-30, 4-INCH |
| AP13 | HMA PAVEMENT TYPE E-30, 4-INCH |
| AP14 | HMA PAVEMENT TYPE E-30, 6.5-INCH |
| AP16 | HMA PAVEMENT TYPE E-1, 3.5-INCH |
| AP17 | HMA PAVEMENT TYPE E-1, 2-INCH |
| AP18 | HMA PAVEMENT TYPE E-30, 9.5-INCH |
| AP19 | HMA PAVEMENT TYPE E-30, 7.5-INCH |

- | | |
|------|---|
| XXXX | SAWCUT ASPHALT |
| CC | CRASH CUSHION PERMANENT |
| | PROPOSED ASPHALT |
| | ASPHALTIC SURFACE MILLING |
| AG01 | BASE AGGREGATE DENSE 3/4-INCH |
| BG01 | MGS THRIE BEAM TRANSITION |
| BG02 | MGS GUARDRAIL 3 |
| BG03 | MGS GUARDRAIL TERMINAL EAT |
| CB01 | CONCRETE BARRIER TYPE S36 |
| CB05 | CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE |
| CG01 | CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A |
| FE01 | FENCE WOVEN WIRE 4-FEET |
| PV01 | CONCRETE PAVEMENT APPROACH SLAB |
| PV11 | CONCRETE SURFACE DRAIN |



PLAN DETAIL LEGEND

- CP10 CONCRETE PAVEMENT 10-INCH, DOWELED AND TINED
- CP12 CONCRETE PAVEMENT 12-INCH, DOWELED AND TINED
- CP13 TRAPEZOIDAL CONCRETE PAVEMENT (PAID FOR AS "CONCRETE PAVEMENT 12-INCH")
- AP00 2-INCH REMOVING ASPHALTIC SURFACE MILLING HMA PAVEMENT TYPE E-30, 2-INCH
- AP01 4-INCH REMOVING ASPHALTIC SURFACE MILLING HMA PAVEMENT TYPE E-30, 4-INCH
- AP13 HMA PAVEMENT TYPE E-30, 4-INCH
- AP14 HMA PAVEMENT TYPE E-30, 6.5-INCH
- AP16 HMA PAVEMENT TYPE E-1, 3.5-INCH
- AP17 HMA PAVEMENT TYPE E-1, 2-INCH
- AP18 HMA PAVEMENT TYPE E-30, 9.5-INCH
- AP19 HMA PAVEMENT TYPE E-30, 7.5-INCH

- XXXX SAWCUT ASPHALT
- CC CRASH CUSHION PERMANENT
- PROPOSED ASPHALT
- ASPHALTIC SURFACE MILLING
- AG01 BASE AGGREGATE DENSE 3/4-INCH
- BG01 MGS THRIE BEAM TRANSITION
- BG02 MGS GUARDRAIL 3
- BG03 MGS GUARDRAIL TERMINAL EAT
- CB01 CONCRETE BARRIER TYPE S36
- CB05 CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE
- CG01 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
- FE01 FENCE WOVEN WIRE 4-FEET
- PV01 CONCRETE PAVEMENT APPROACH SLAB
- PV11 CONCRETE SURFACE DRAIN

PLAN DETAIL LEGEND

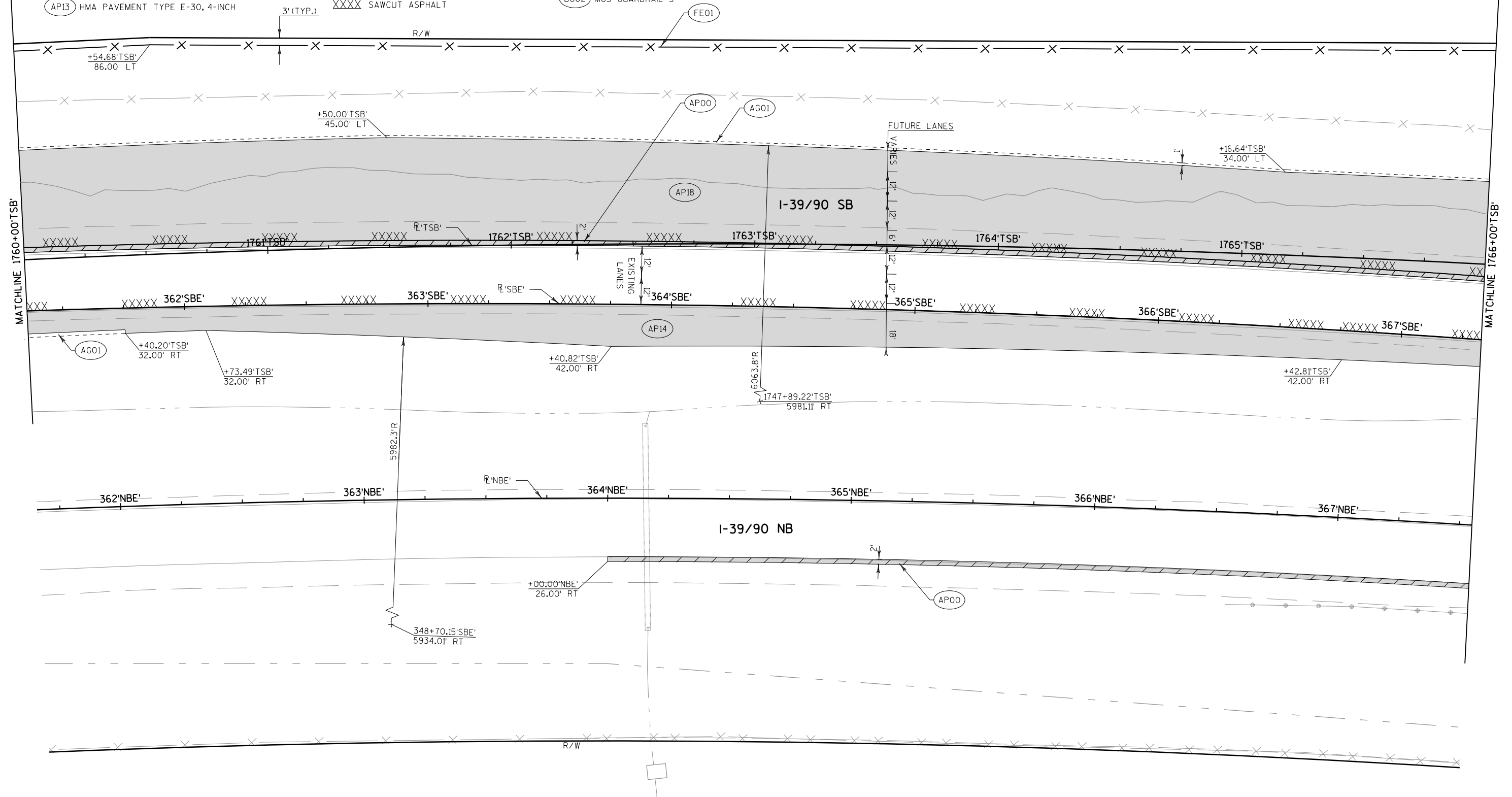
- CP10 CONCRETE PAVEMENT 10-INCH, DOWELED AND TINED
CP12 CONCRETE PAVEMENT 12-INCH, DOWELED AND TINED
CP13 TRAPEZOIDAL CONCRETE PAVEMENT
(PAID FOR AS "CONCRETE PAVEMENT 12-INCH")
AP00 2-INCH REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE E-30, 2-INCH
AP01 4-INCH REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE E-30, 4-INCH
AP13 HMA PAVEMENT TYPE E-30, 4-INCH

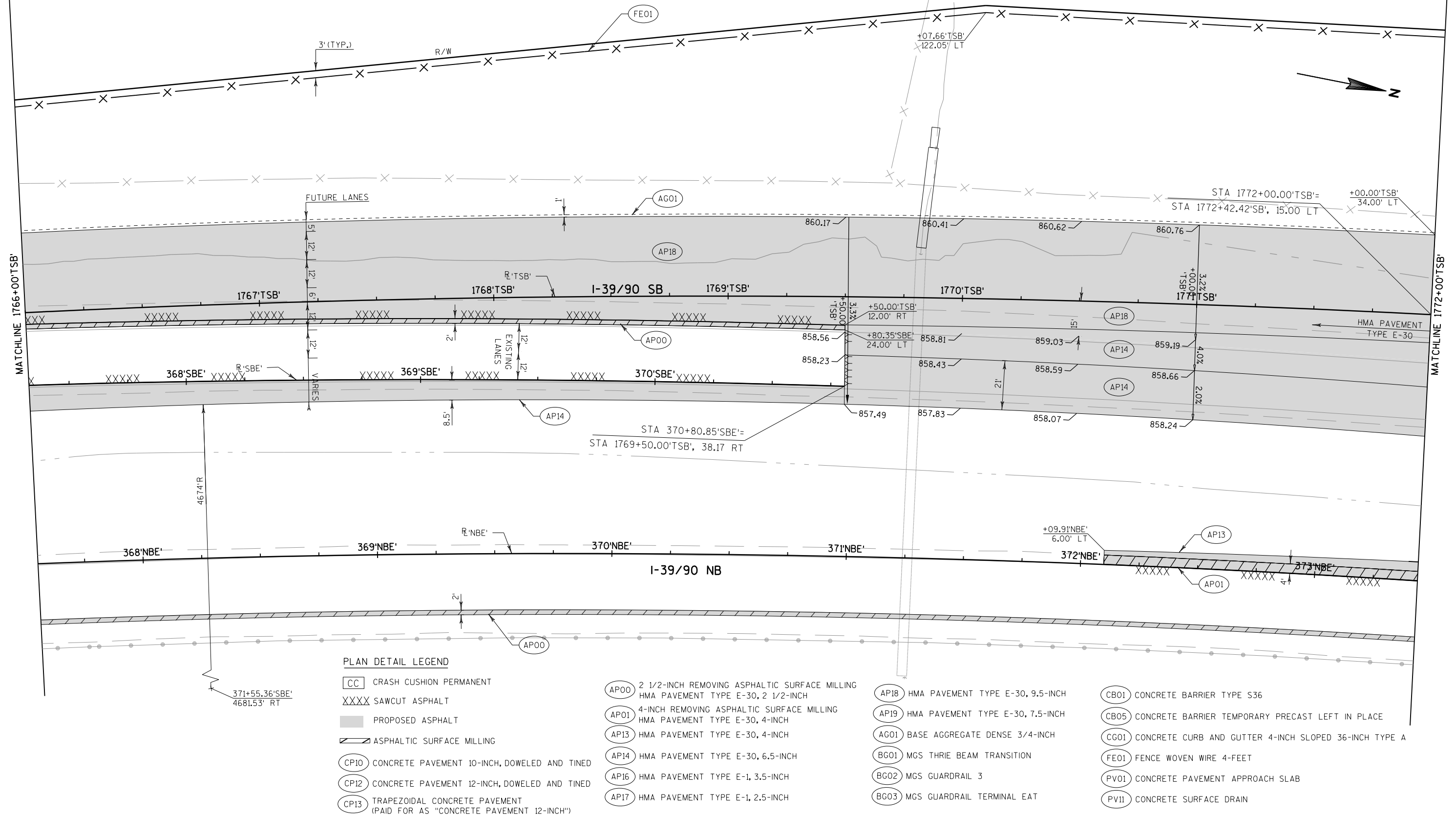
- AP14 HMA PAVEMENT TYPE E-30, 6.5-INCH
AP16 HMA PAVEMENT TYPE E-1, 3.5-INCH
AP17 HMA PAVEMENT TYPE E-1, 2-INCH
AP18 HMA PAVEMENT TYPE E-30, 9.5-INCH
AP19 HMA PAVEMENT TYPE E-30, 7.5-INCH
XXXX SAWCUT ASPHALT

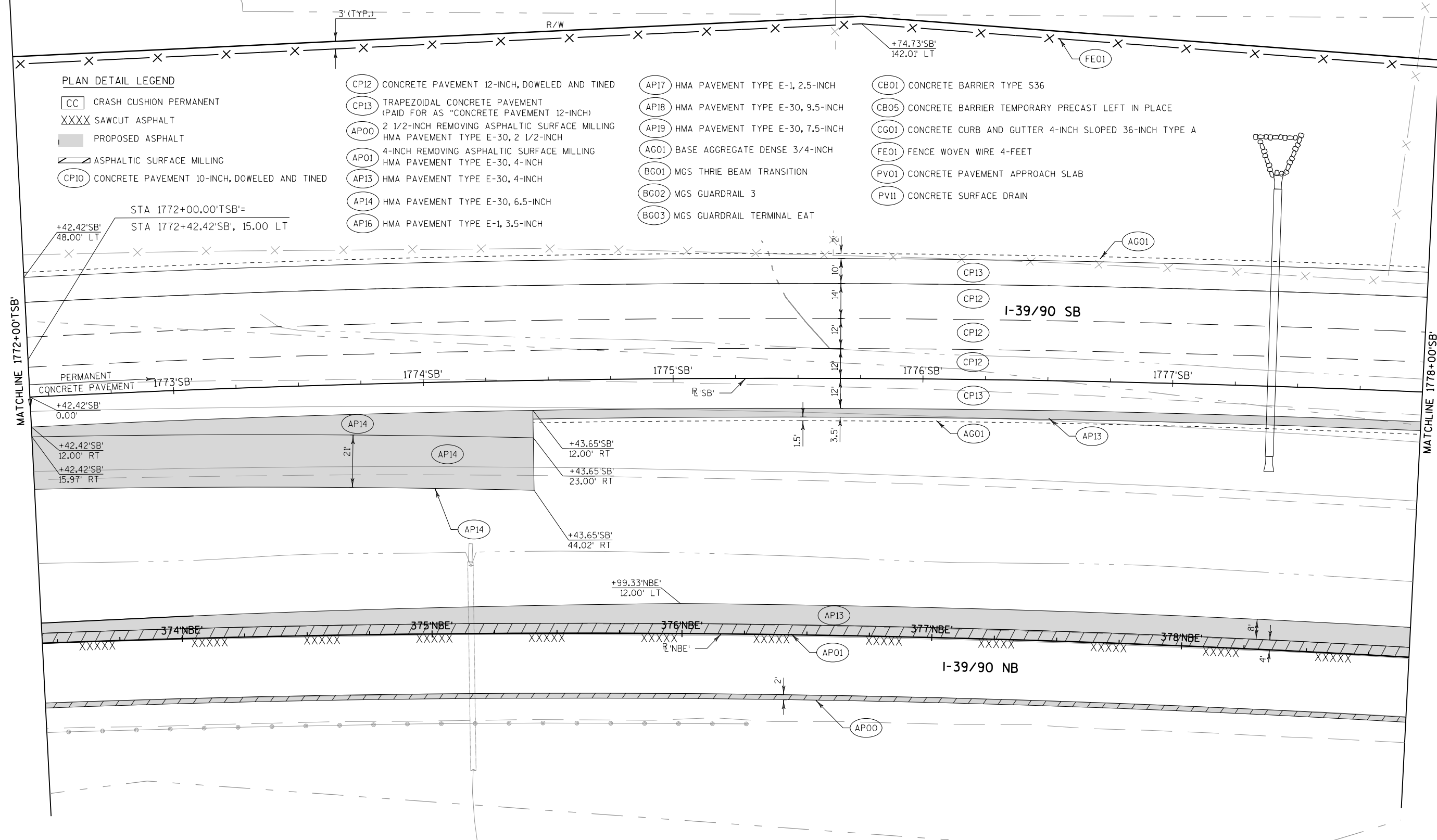
- CC CRASH CUSHION PERMANENT
PROPOSED ASPHALT
ASPHALTIC SURFACE MILLING
AG01 BASE AGGREGATE DENSE 3/4-INCH
BG01 MGS THRIE BEAM TRANSITION
BG02 MGS GUARDRAIL 3
FE01

- BG03 MGS GUARDRAIL TERMINAL EAT
CB01 CONCRETE BARRIER TYPE S36
CB05 CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE
CG01 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
FE01 FENCE WOVEN WIRE 4-FEET

- PV01 CONCRETE PAVEMENT APPROACH SLAB
PV11 CONCRETE SURFACE DRAIN







2



PLAN DETAIL LEGEND

[CC] CRASH CUSHION PERMANENT

XXXX SAWCUT ASPHALT

[] PROPOSED ASPHALT

[] ASPHALTIC SURFACE MILLING

[CP10] CONCRETE PAVEMENT 10-INCH, DOWELED AND TINED

[CP12] CONCRETE PAVEMENT 12-INCH, DOWELED AND TINED

[CP13] TRAPEZOIDAL CONCRETE PAVEMENT
(PAID FOR AS "CONCRETE PAVEMENT 12-INCH")[AP00] 2 1/2-INCH REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE E-30, 2 1/2-INCH[AP01] 4-INCH REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE E-30, 4-INCH

[AP13] HMA PAVEMENT TYPE E-30, 4-INCH

[AP14] HMA PAVEMENT TYPE E-30, 6.5-INCH

[AP16] HMA PAVEMENT TYPE E-1, 3.5-INCH

[AP17] HMA PAVEMENT TYPE E-1, 2.5-INCH

[AP18] HMA PAVEMENT TYPE E-30, 9.5-INCH

[AP19] HMA PAVEMENT TYPE E-30, 7.5-INCH

[AG01] BASE AGGREGATE DENSE 3/4-INCH

[BG01] MGS THRIE BEAM TRANSITION

[BG02] MGS GUARDRAIL 3

[BG03] MGS GUARDRAIL TERMINAL EAT

[CB01] CONCRETE BARRIER TYPE S36

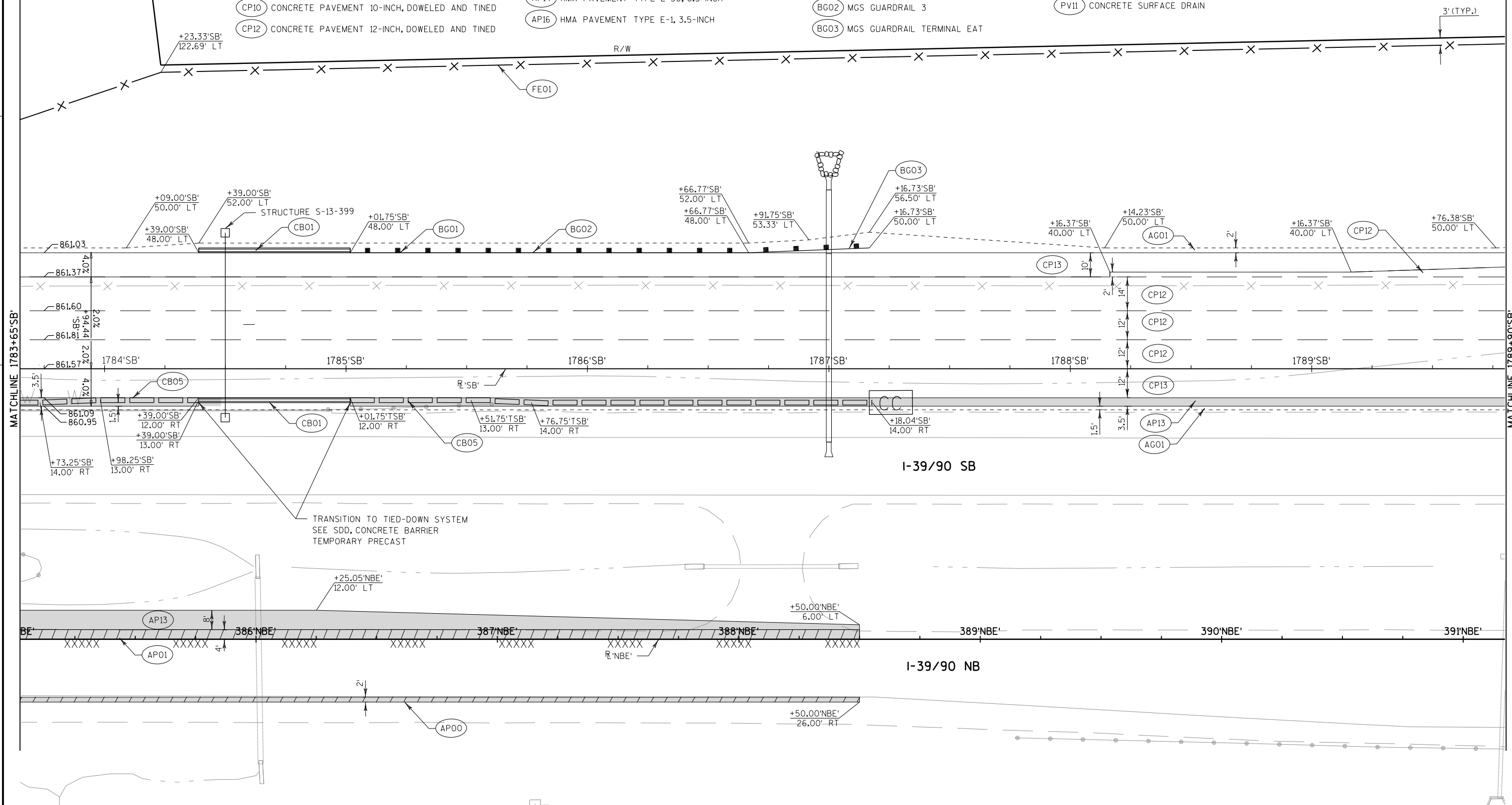
[CB05] CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE

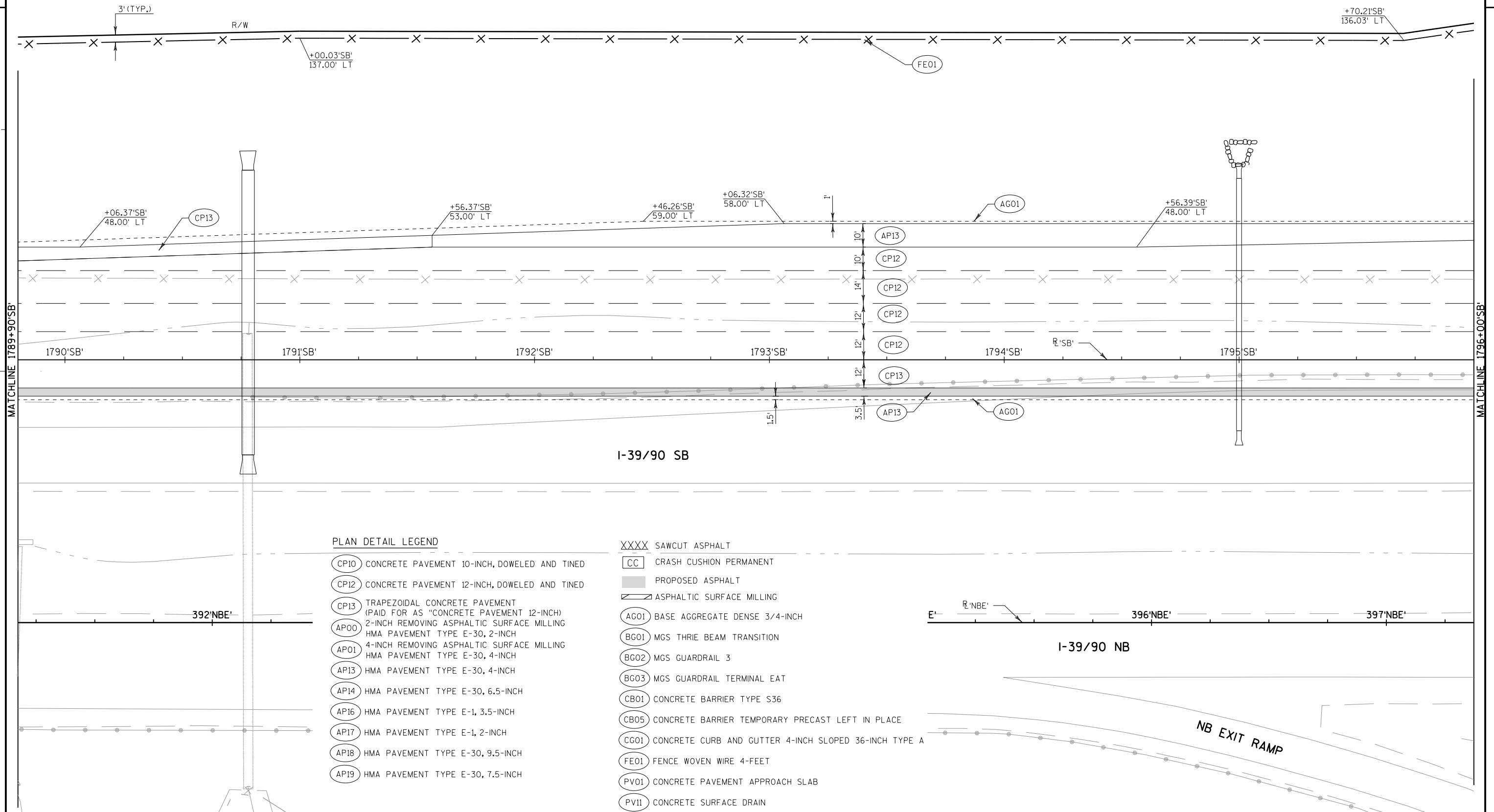
[CG01] CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A

[FE01] FENCE WOVEN WIRE 4-FEET

[PV01] CONCRETE PAVEMENT APPROACH SLAB

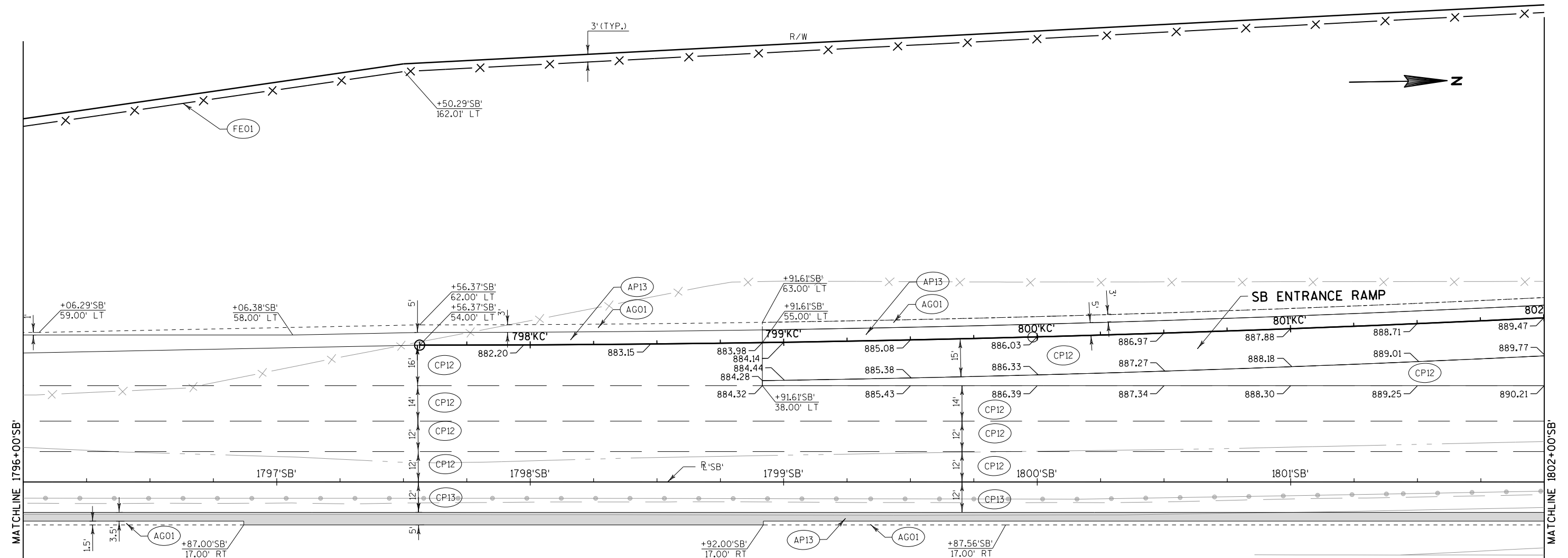
[PV11] CONCRETE SURFACE DRAIN





2

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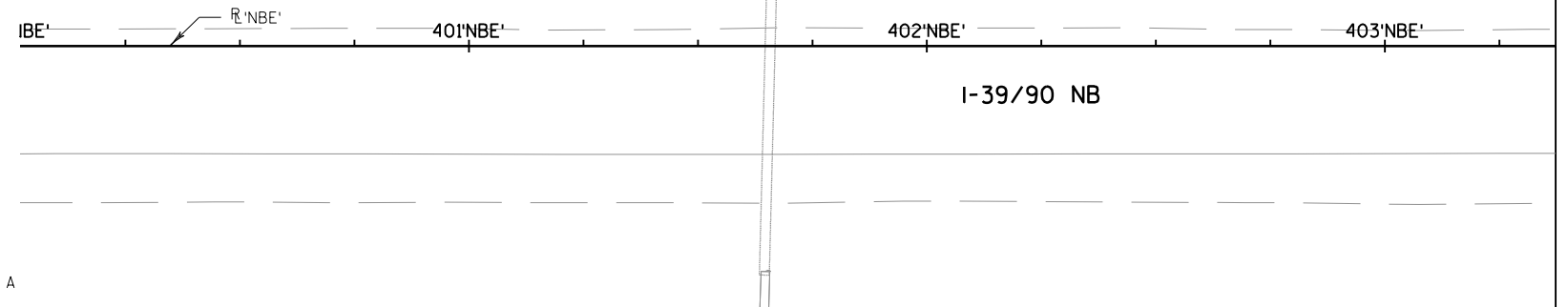


PLAN DETAIL LEGEND

- CP10 CONCRETE PAVEMENT 10-INCH, DOWELED AND TINED
- CP12 CONCRETE PAVEMENT 12-INCH, DOWELED AND TINED
- CP13 TRAPEZOIDAL CONCRETE PAVEMENT (PAID FOR AS "CONCRETE PAVEMENT 12-INCH")
- AP00 2-INCH REMOVING ASPHALTIC SURFACE MILLING
- AP01 4-INCH REMOVING ASPHALTIC SURFACE MILLING
- AP13 HMA PAVEMENT TYPE E-30, 4-INCH
- AP14 HMA PAVEMENT TYPE E-30, 6.5-INCH
- AP16 HMA PAVEMENT TYPE E-1, 3.5-INCH
- AP17 HMA PAVEMENT TYPE E-1, 2-INCH
- AP18 HMA PAVEMENT TYPE E-30, 9.5-INCH
- AP19 HMA PAVEMENT TYPE E-30, 7.5-INCH

XXXX SAWCUT ASPHALT

- CC CRASH CUSHION PERMANENT
- PROPOSED ASPHALT
- ASPHALTIC SURFACE MILLING
- AG01 BASE AGGREGATE DENSE 3/4-INCH
- BG01 MGS THRIE BEAM TRANSITION
- BG02 MGS GUARDRAIL 3
- BG03 MGS GUARDRAIL TERMINAL EAT
- CB01 CONCRETE BARRIER TYPE S36
- CB05 CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE
- CG01 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
- FE01 FENCE WOVEN WIRE 4-FEET
- PV01 CONCRETE PAVEMENT APPROACH SLAB
- PV11 CONCRETE SURFACE DRAIN



PROJECT NO: 1007-10-79

HWY: IH 39

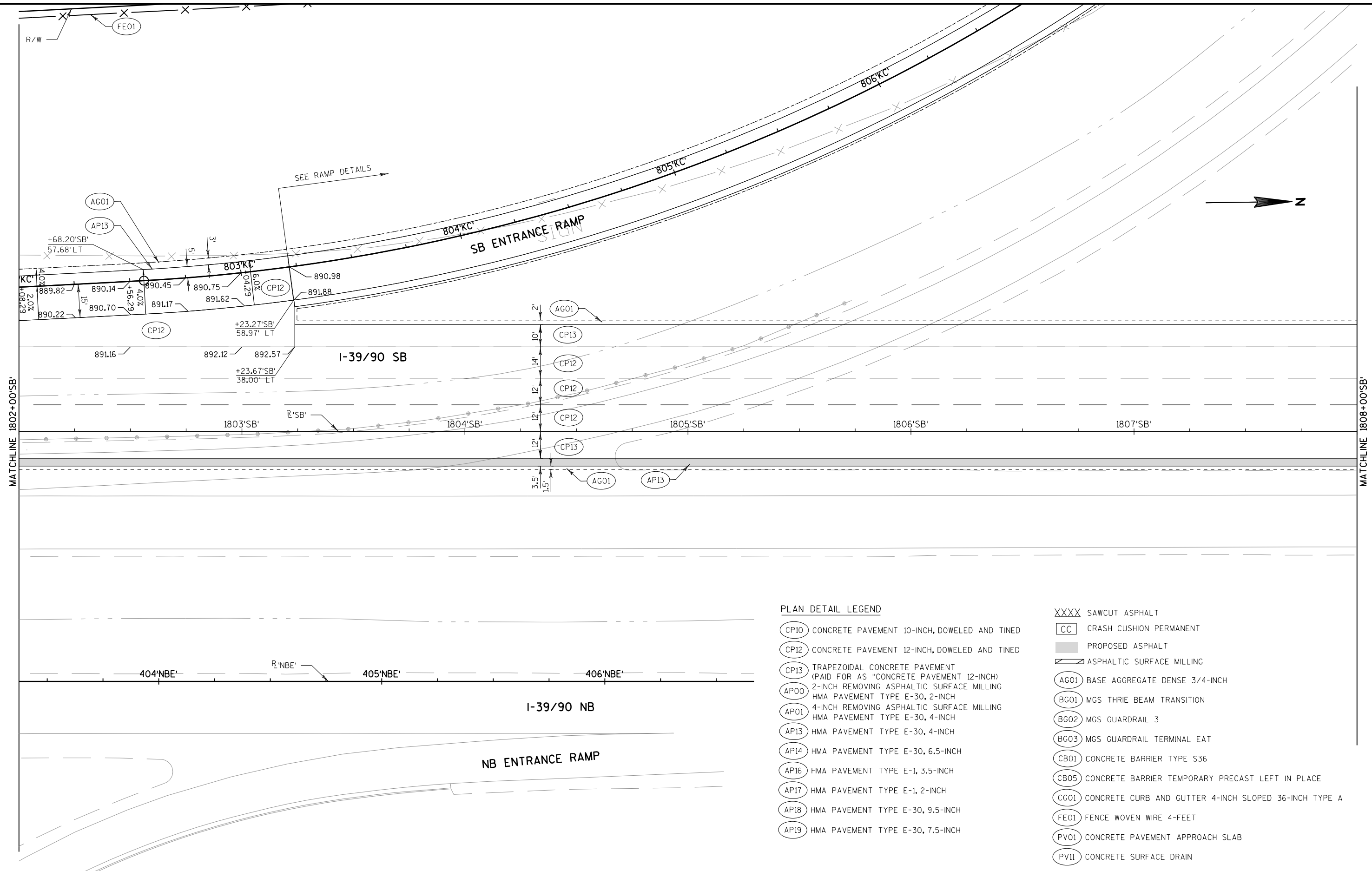
COUNTY: DANE

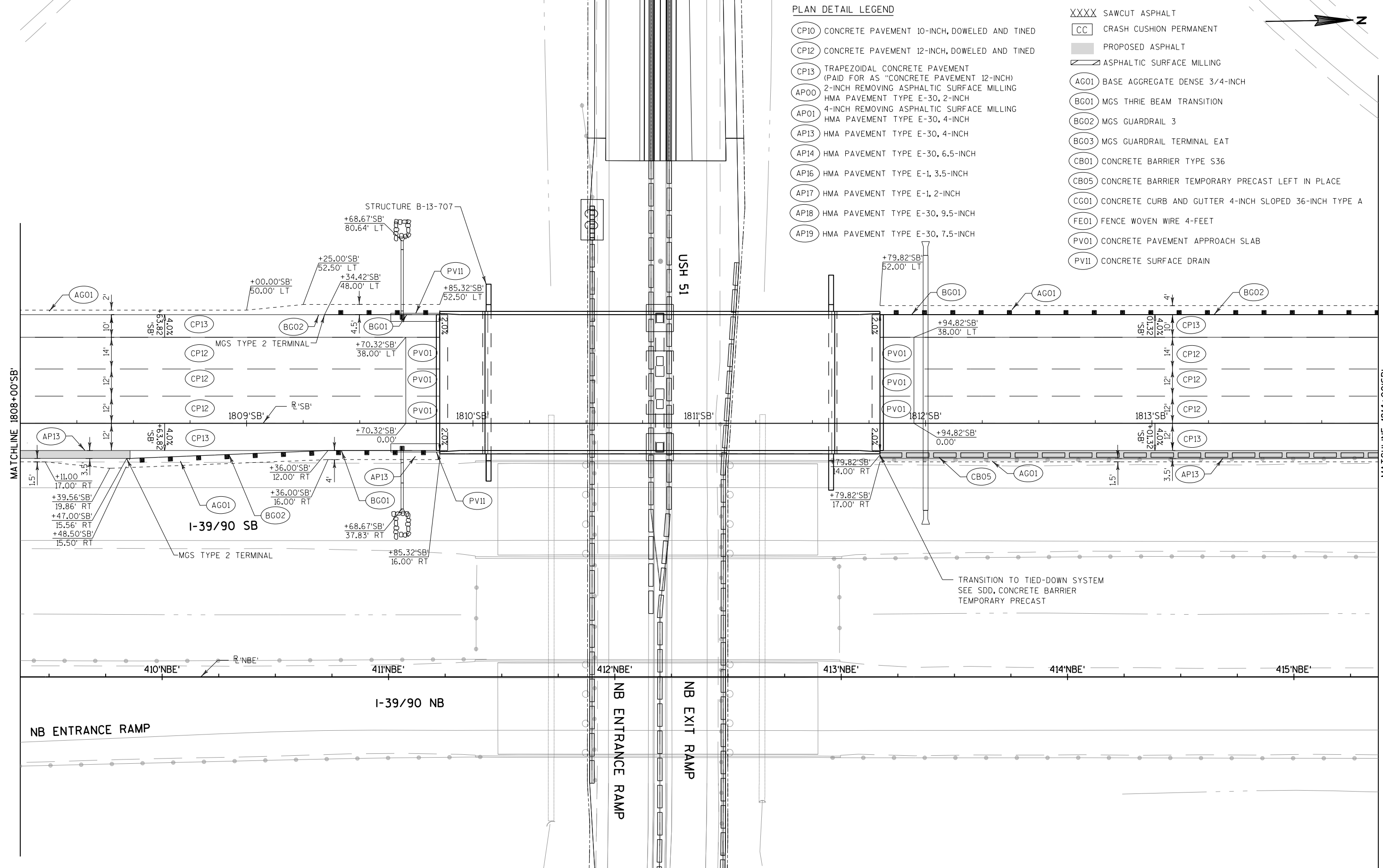
PLAN DETAILS

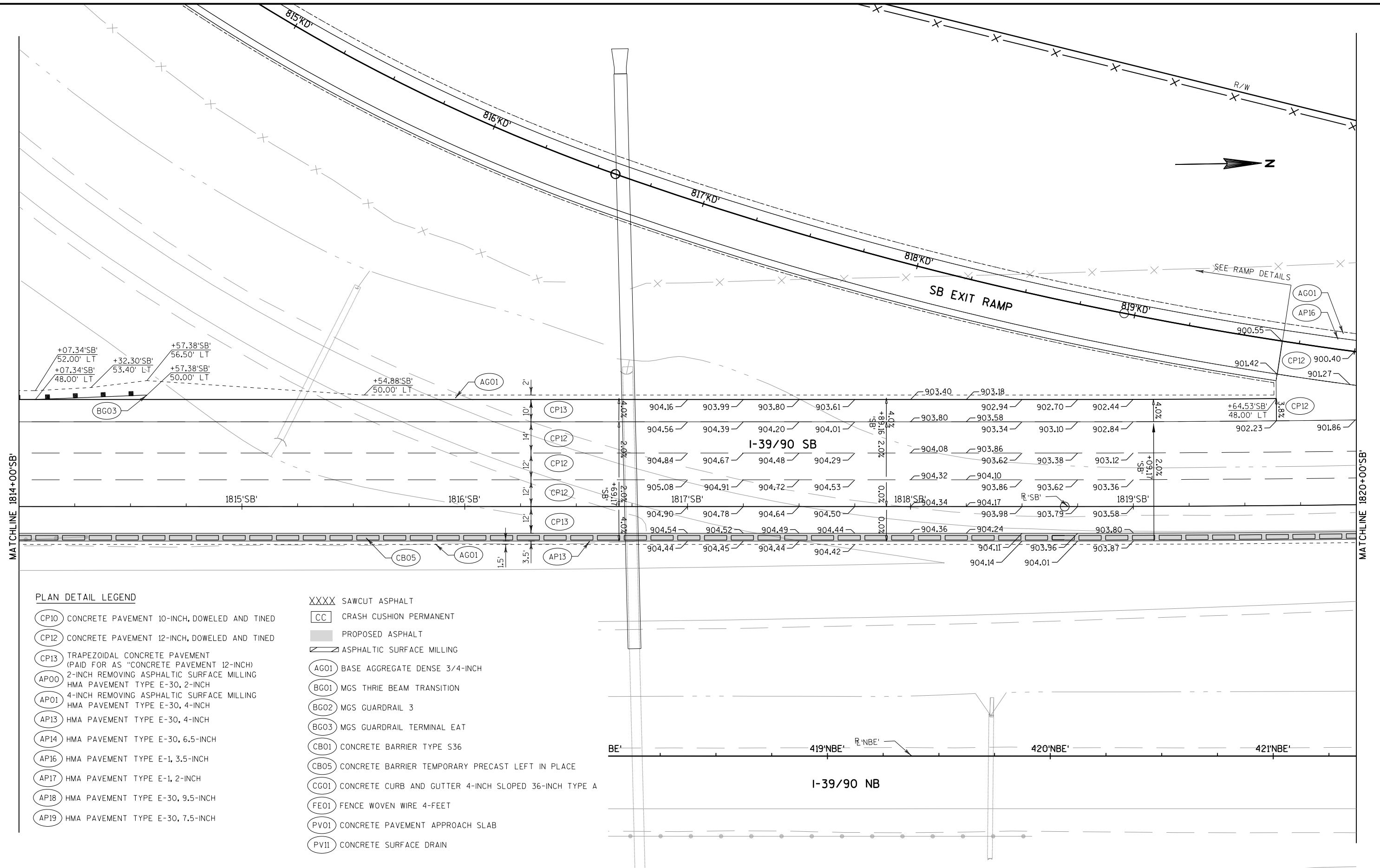
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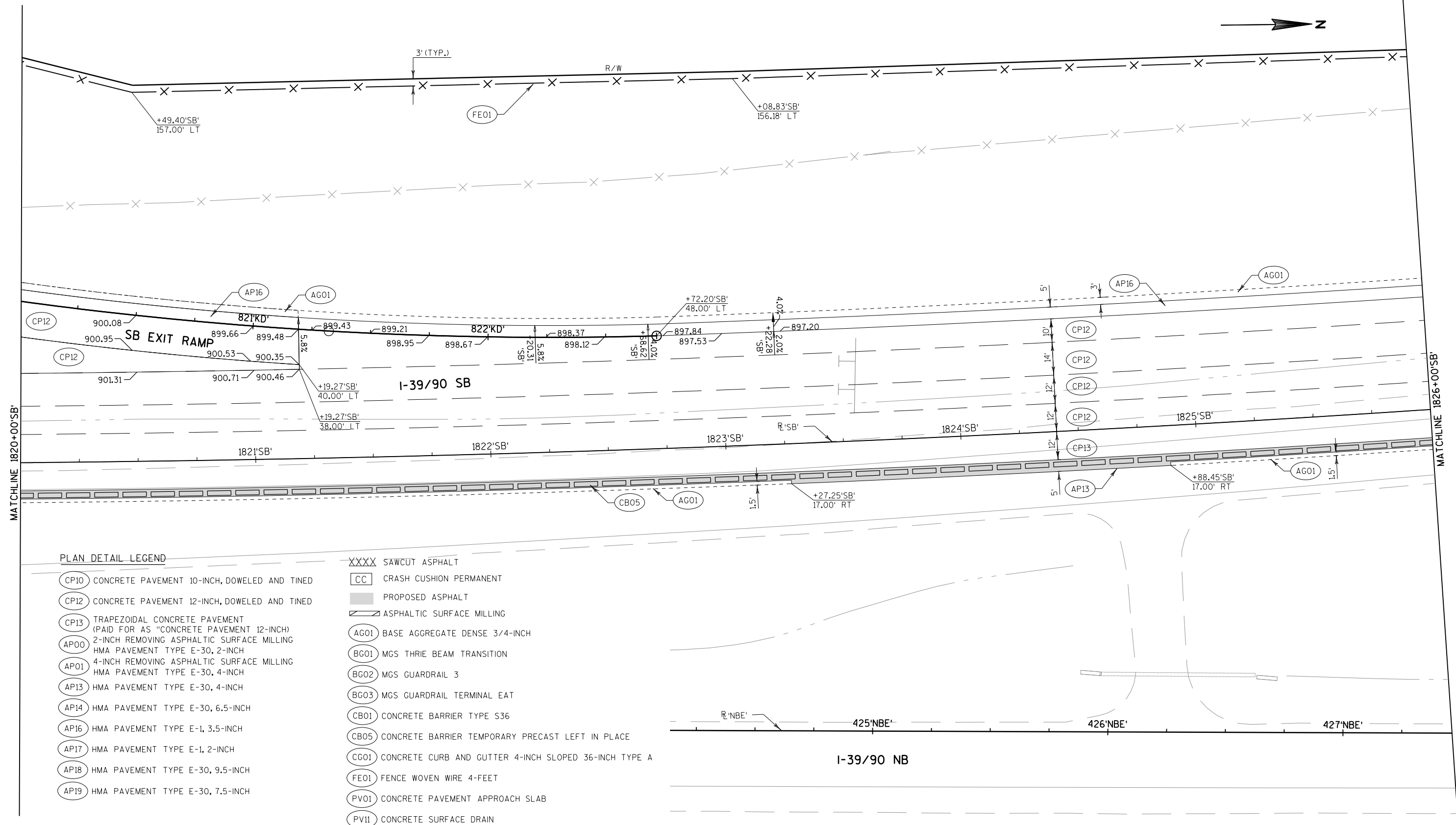
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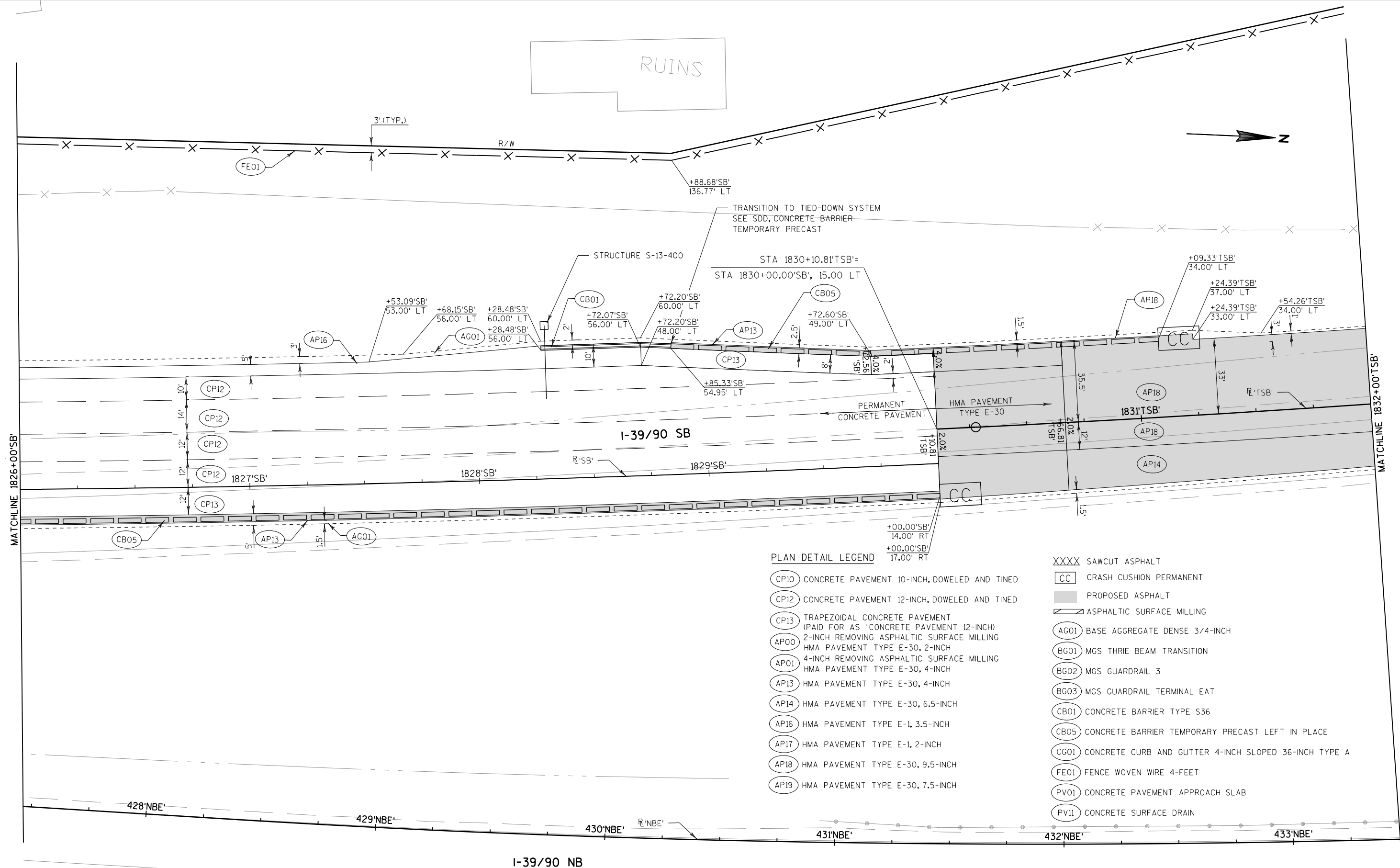
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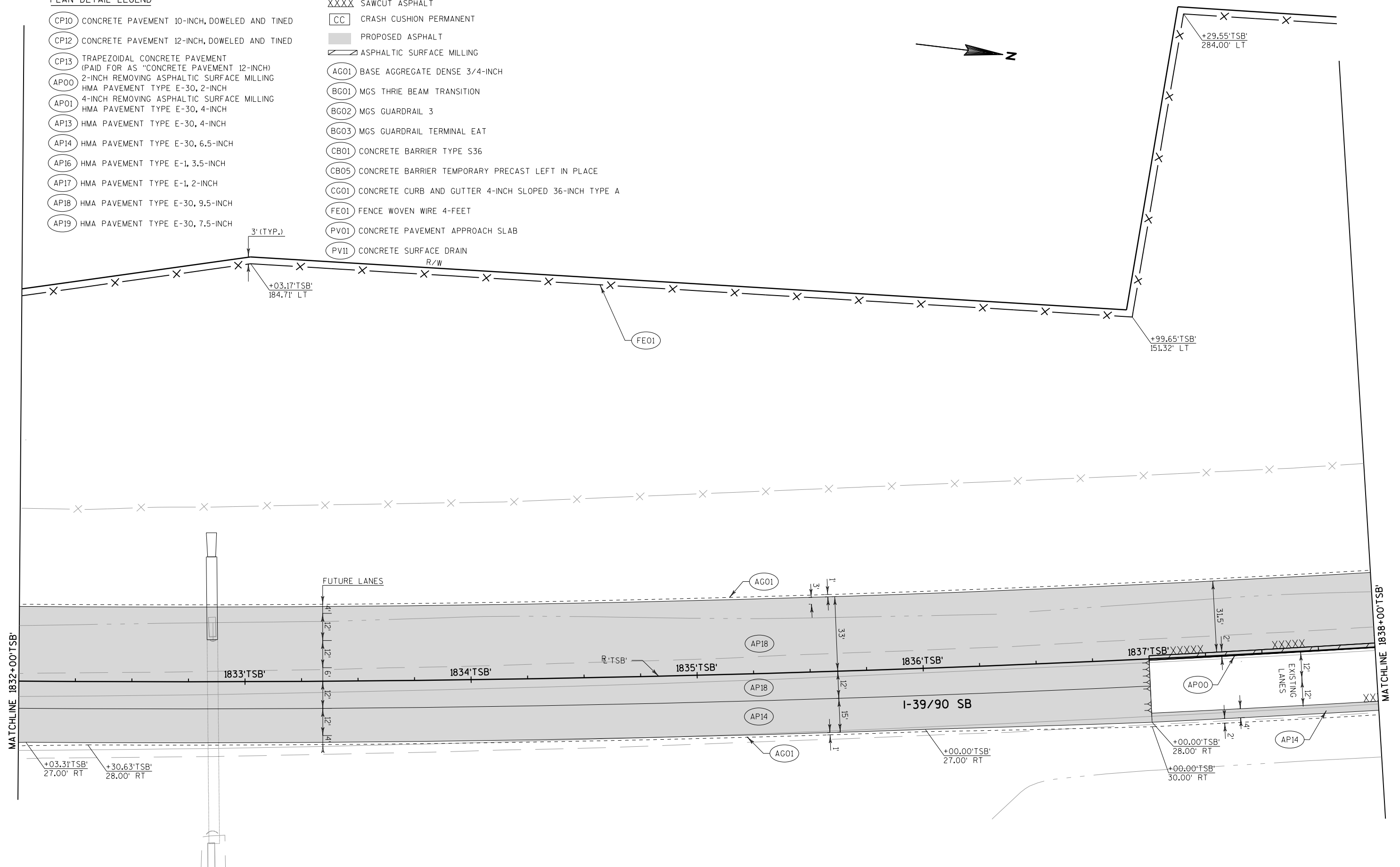




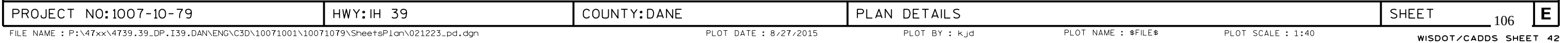


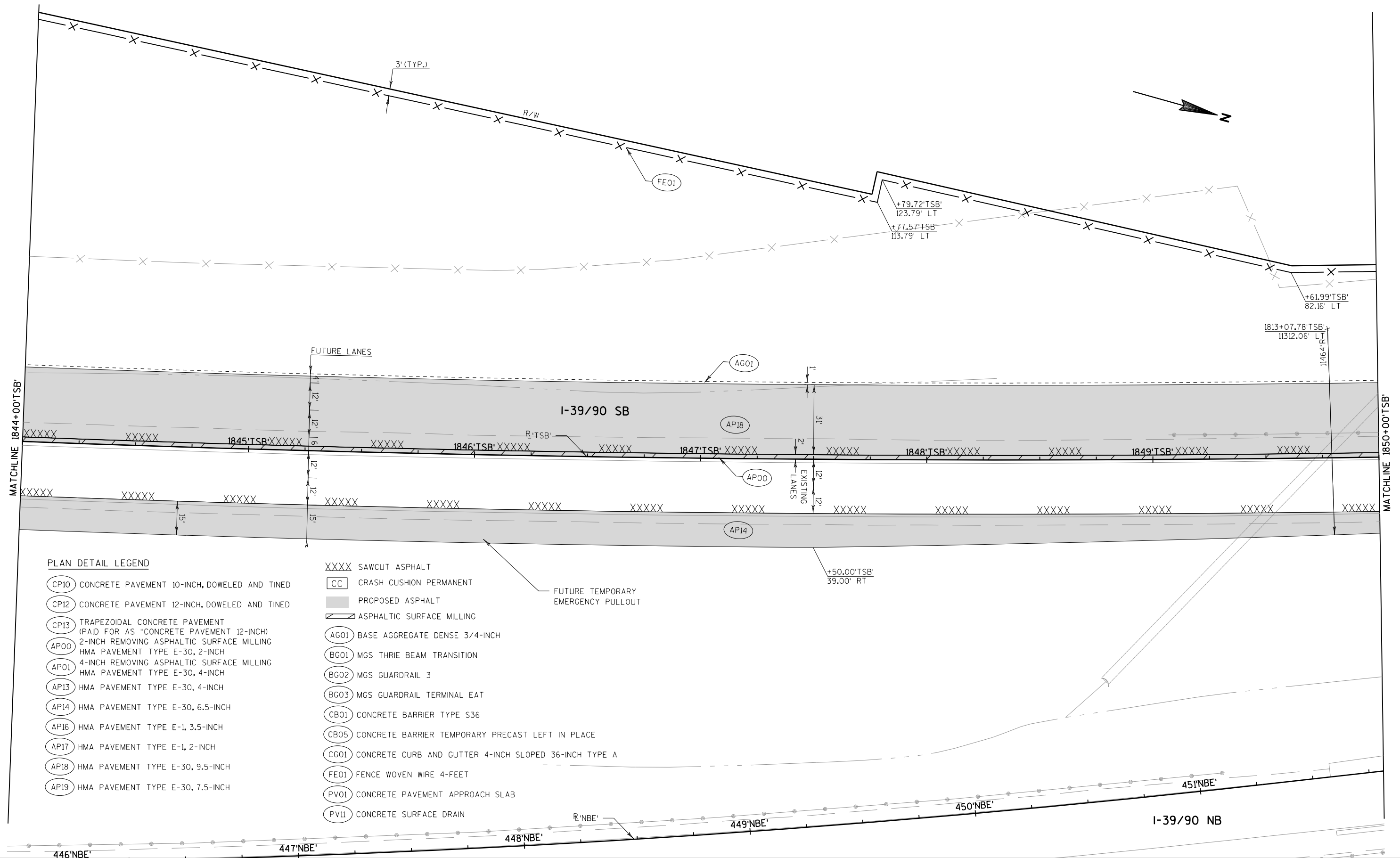
PLAN DETAIL LEGEND

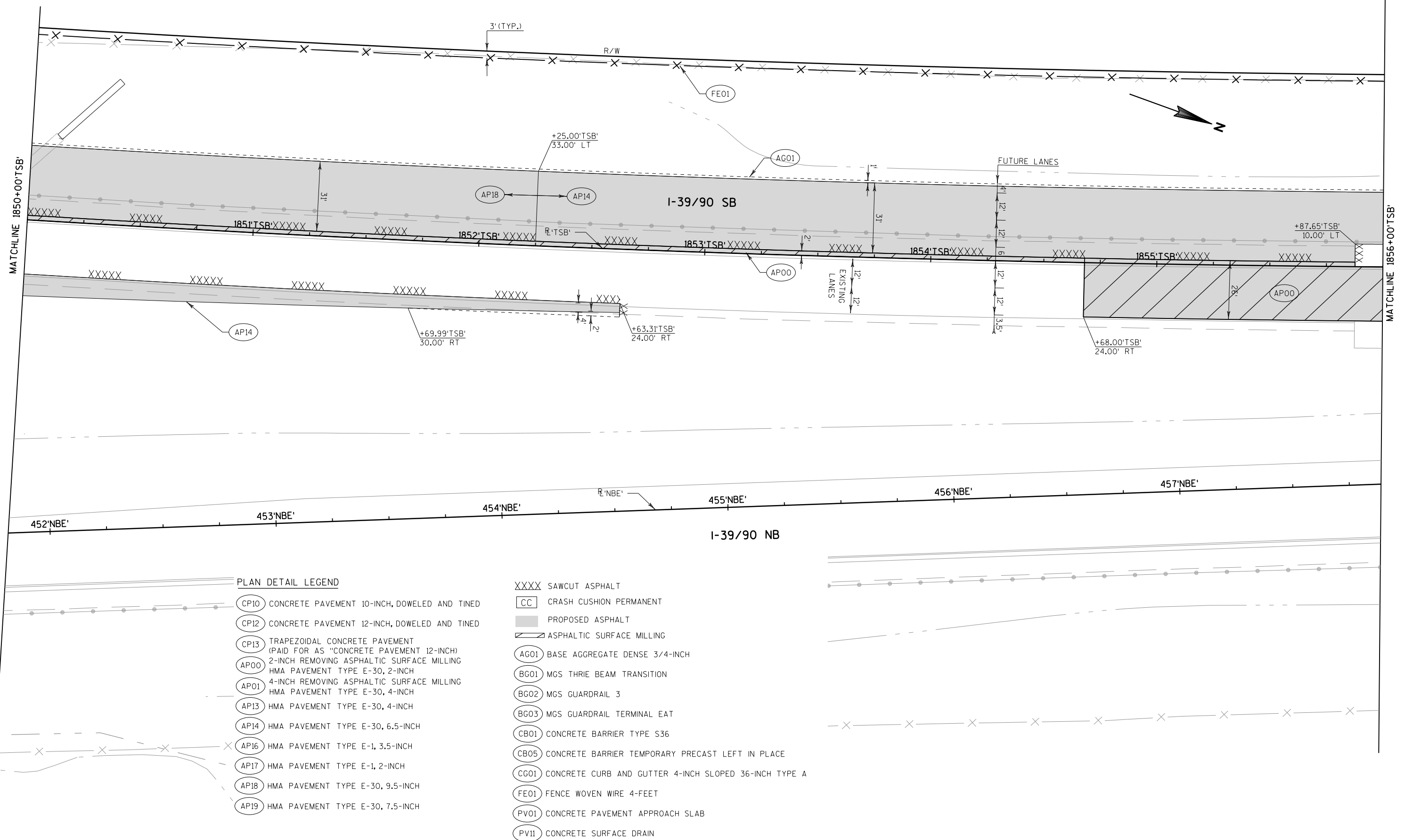
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|--|--|
| (CP10) CONCRETE PAVEMENT 10-INCH, DOWELED AND TINED | XXXX SAWCUT ASPHALT |
| (CP12) CONCRETE PAVEMENT 12-INCH, DOWELED AND TINED | CC CRASH CUSHION PERMANENT |
| (CP13) TRAPEZOIDAL CONCRETE PAVEMENT
(PAID FOR AS "CONCRETE PAVEMENT 12-INCH) | PROPOSED ASPHALT |
| (AP00) 2-INCH REMOVING ASPHALTIC SURFACE MILLING | ASPHALTIC SURFACE MILLING |
| (AP01) 4-INCH REMOVING ASPHALTIC SURFACE MILLING | (AG01) BASE AGGREGATE DENSE 3/4-INCH |
| (AP13) HMA PAVEMENT TYPE E-30, 4-INCH | (BG01) MGS THRIE BEAM TRANSITION |
| (AP14) HMA PAVEMENT TYPE E-30, 6.5-INCH | (BG02) MGS GUARDRAIL 3 |
| (AP16) HMA PAVEMENT TYPE E-1, 3.5-INCH | (BG03) MGS GUARDRAIL TERMINAL EAT |
| (AP17) HMA PAVEMENT TYPE E-1, 2-INCH | (CB01) CONCRETE BARRIER TYPE S36 |
| (AP18) HMA PAVEMENT TYPE E-30, 9.5-INCH | (CB05) CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE |
| (AP19) HMA PAVEMENT TYPE E-30, 7.5-INCH | (CG01) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A |
| | (FE01) FENCE WOVEN WIRE 4-FEET |
| | (PV01) CONCRETE PAVEMENT APPROACH SLAB |
| | (PV11) CONCRETE SURFACE DRAIN |

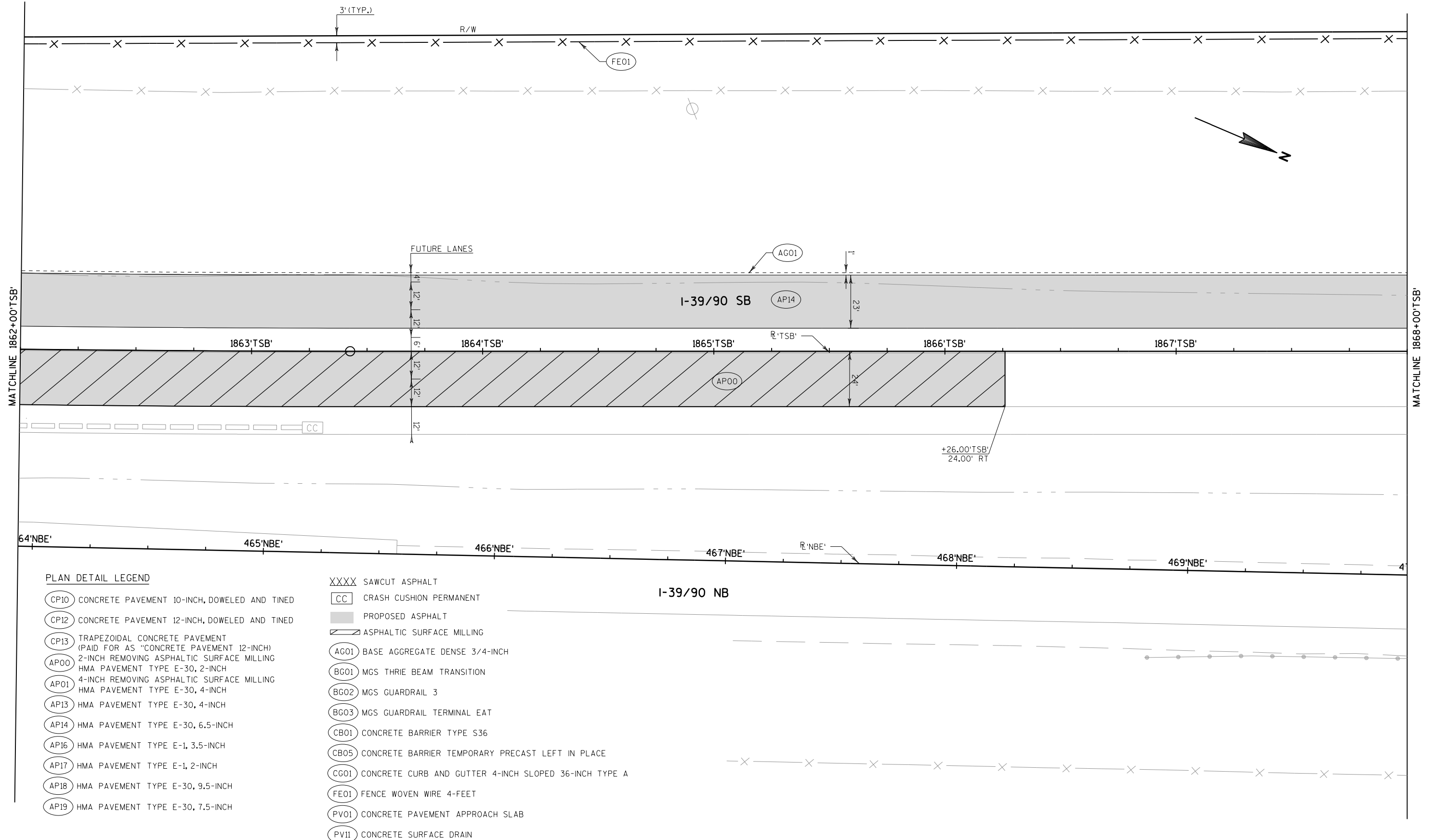


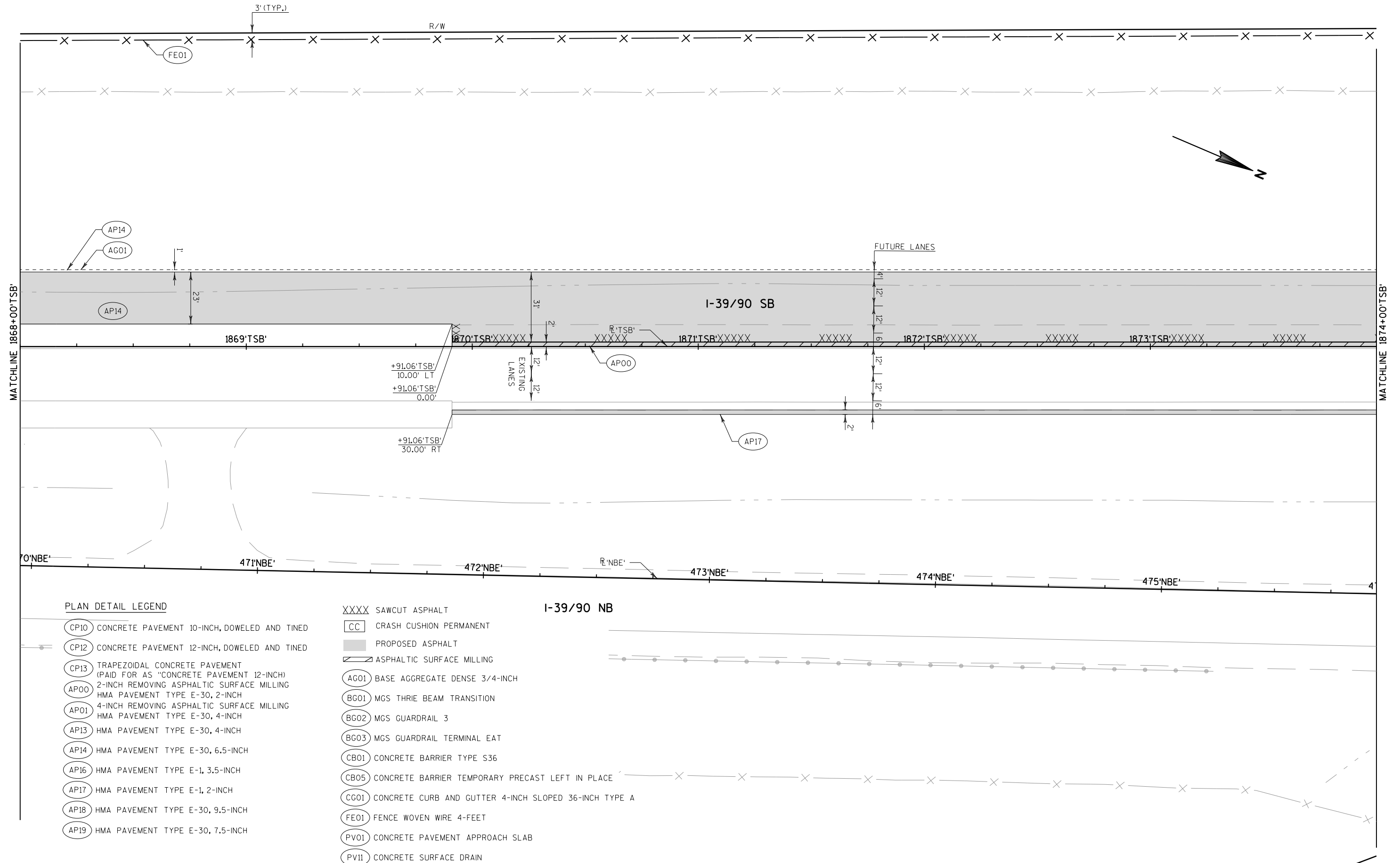
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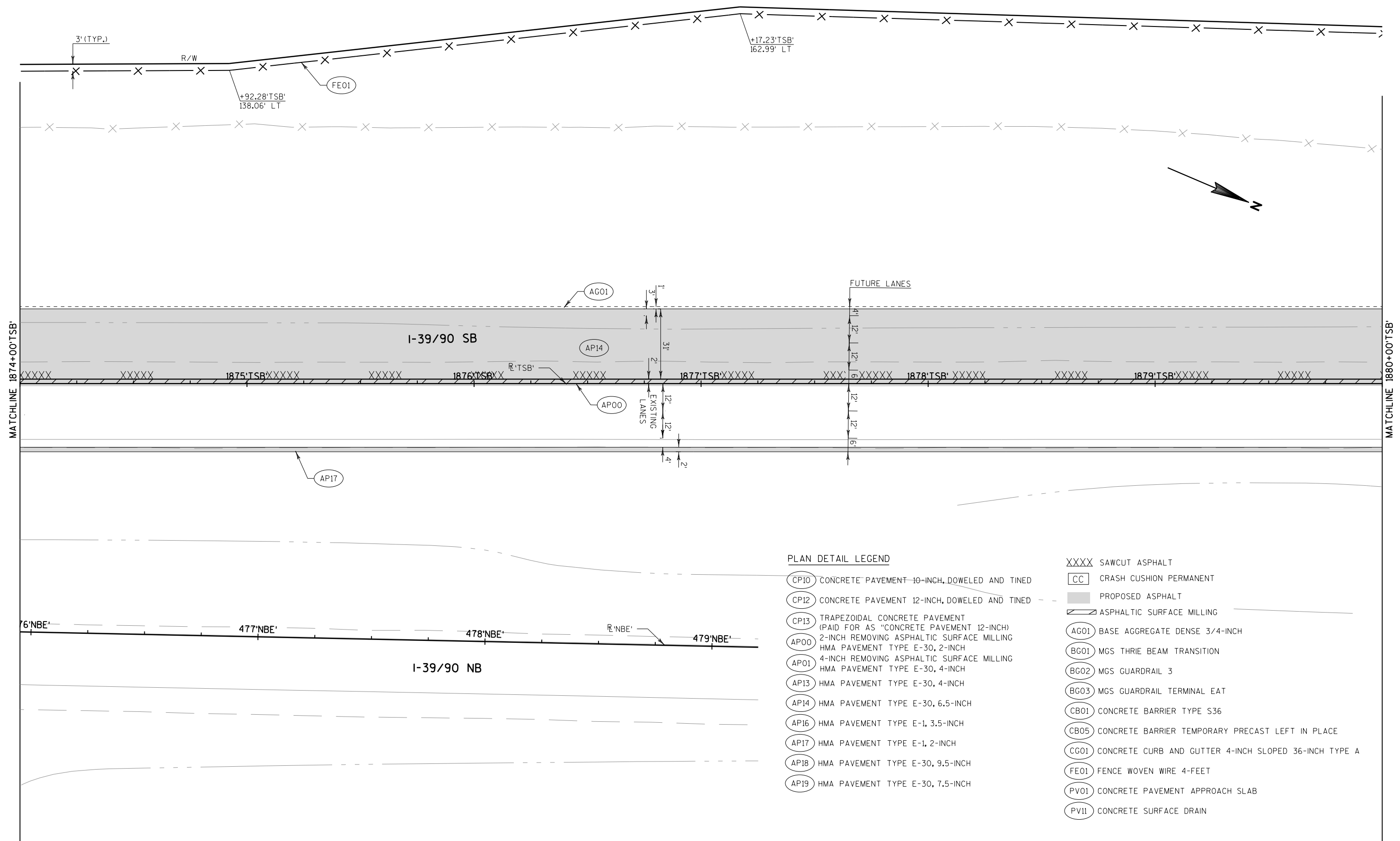


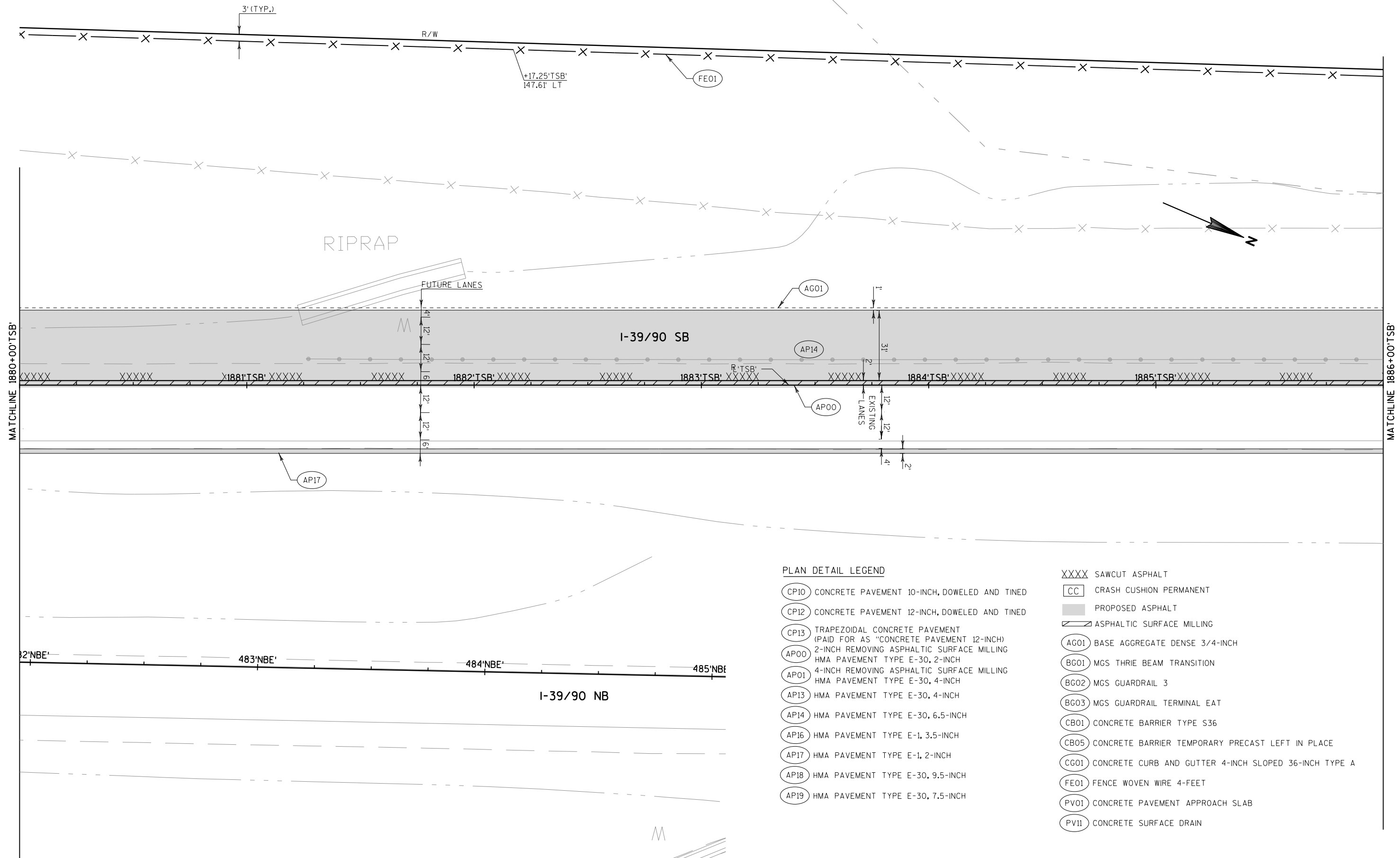








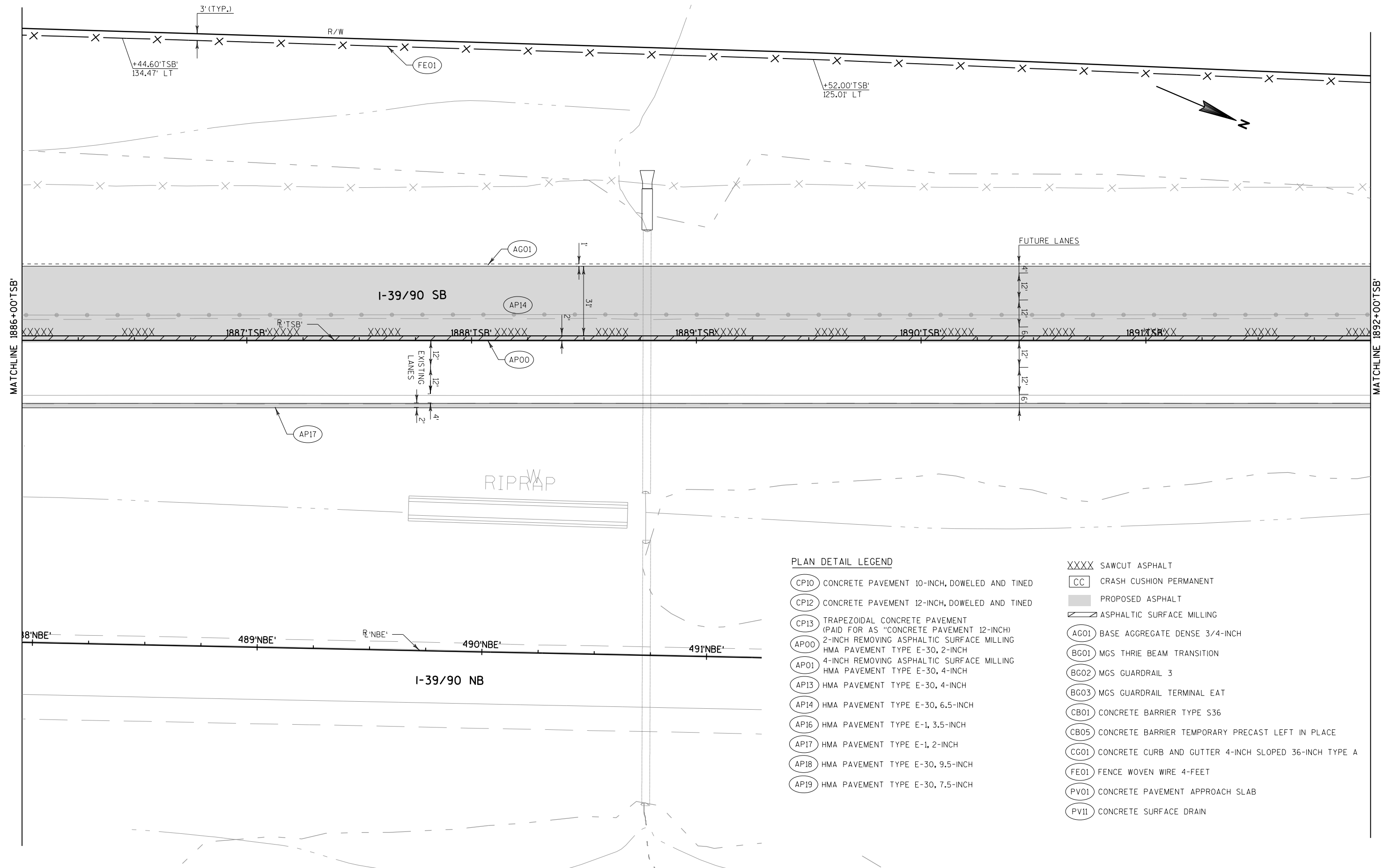


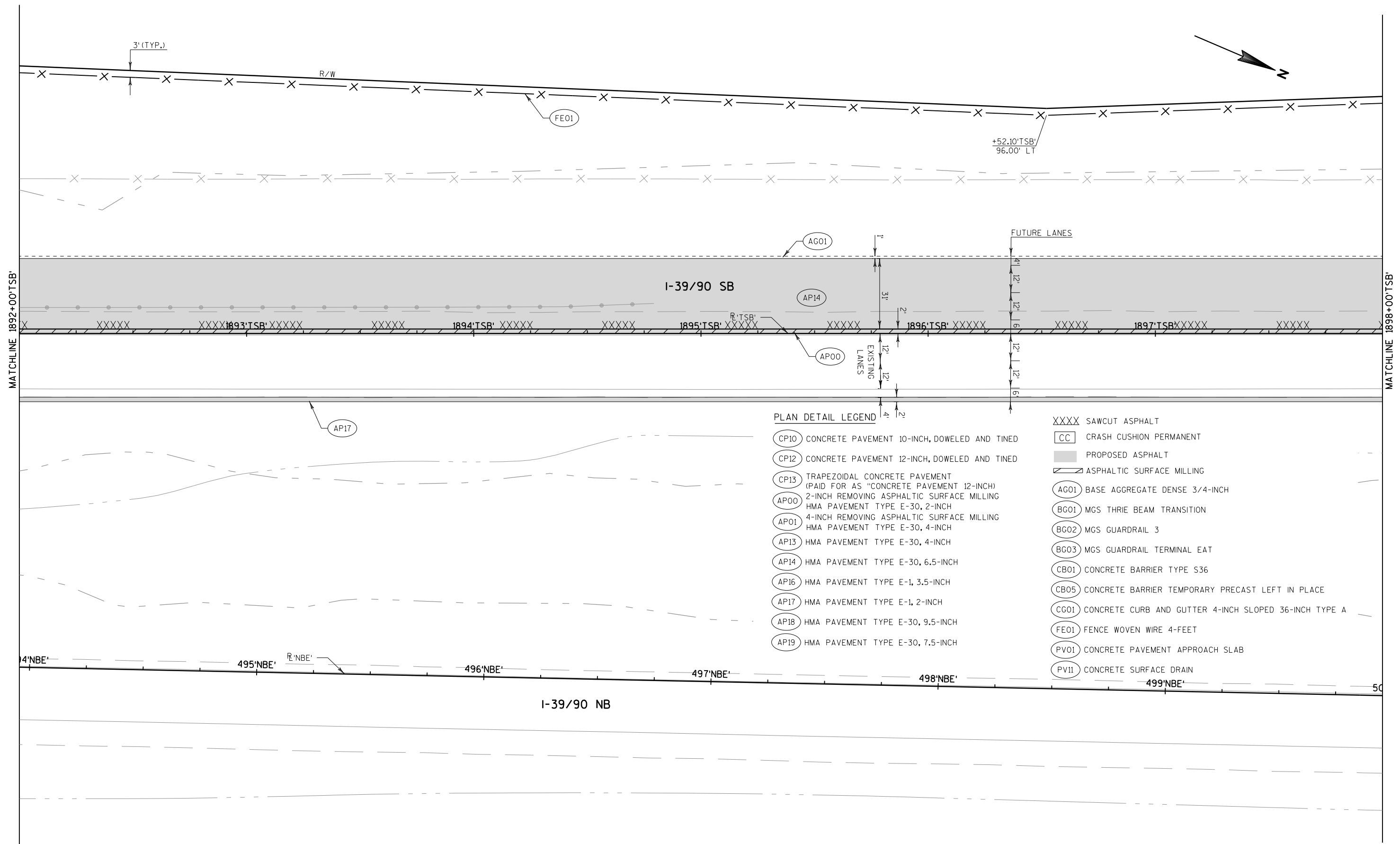


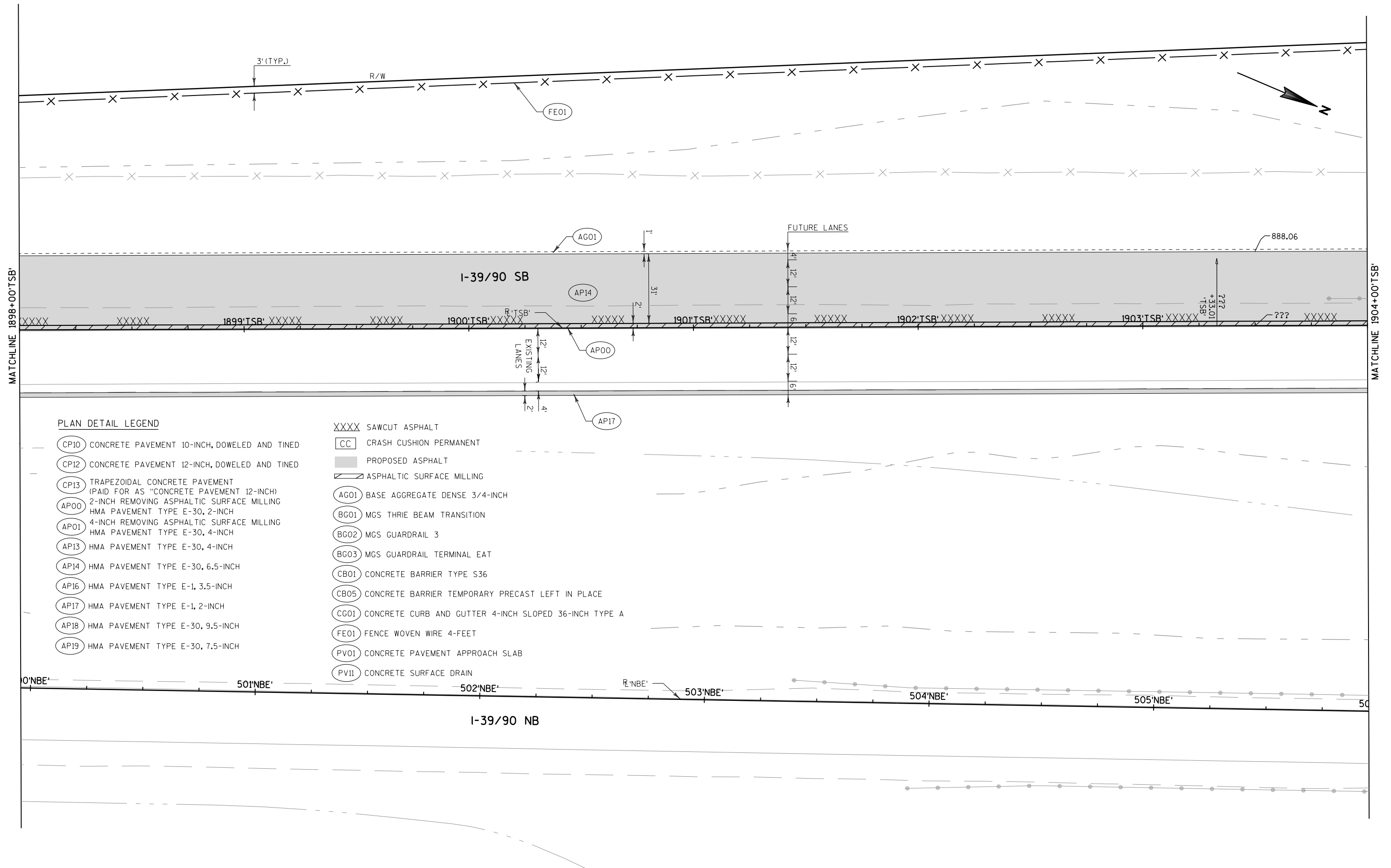
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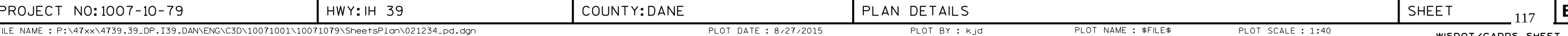
- (CP10) CONCRETE PAVEMENT 10-INCH, DOWELED AND TINED
(CP12) CONCRETE PAVEMENT 12-INCH, DOWELED AND TINED
(CP13) TRAPEZOIDAL CONCRETE PAVEMENT (PAID FOR AS "CONCRETE PAVEMENT 12-INCH")
(AP00) 2-INCH REMOVING ASPHALTIC SURFACE MILLING
(AP01) 4-INCH REMOVING ASPHALTIC SURFACE MILLING
(AP13) HMA PAVEMENT TYPE E-30, 4-INCH
(AP14) HMA PAVEMENT TYPE E-30, 6.5-INCH
(AP16) HMA PAVEMENT TYPE E-1, 3.5-INCH
(AP17) HMA PAVEMENT TYPE E-1, 2-INCH
(AP18) HMA PAVEMENT TYPE E-30, 9.5-INCH
(AP19) HMA PAVEMENT TYPE E-30, 7.5-INCH

- XXXX SAWCUT ASPHALT
[CC] CRASH CUSHION PERMANENT
[] PROPOSED ASPHALT
[] ASPHALTIC SURFACE MILLING
(AG01) BASE AGGREGATE DENSE 3/4-INCH
(BG01) MGS THRIE BEAM TRANSITION
(BG02) MGS GUARDRAIL 3
(BG03) MGS GUARDRAIL TERMINAL EAT
(CB01) CONCRETE BARRIER TYPE S36
(CB05) CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE
(CG01) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
(FE01) FENCE WOVEN WIRE 4-FEET
(PV01) CONCRETE PAVEMENT APPROACH SLAB
(PV11) CONCRETE SURFACE DRAIN

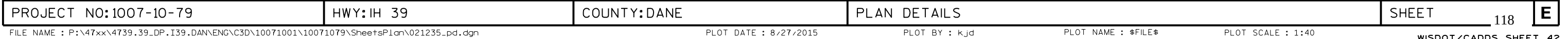




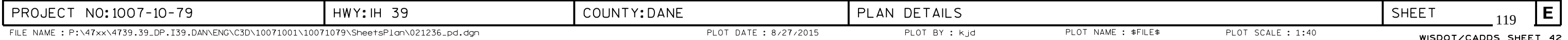


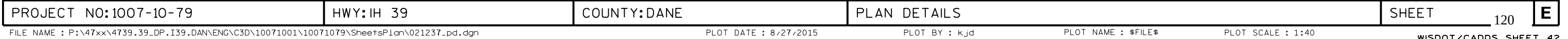


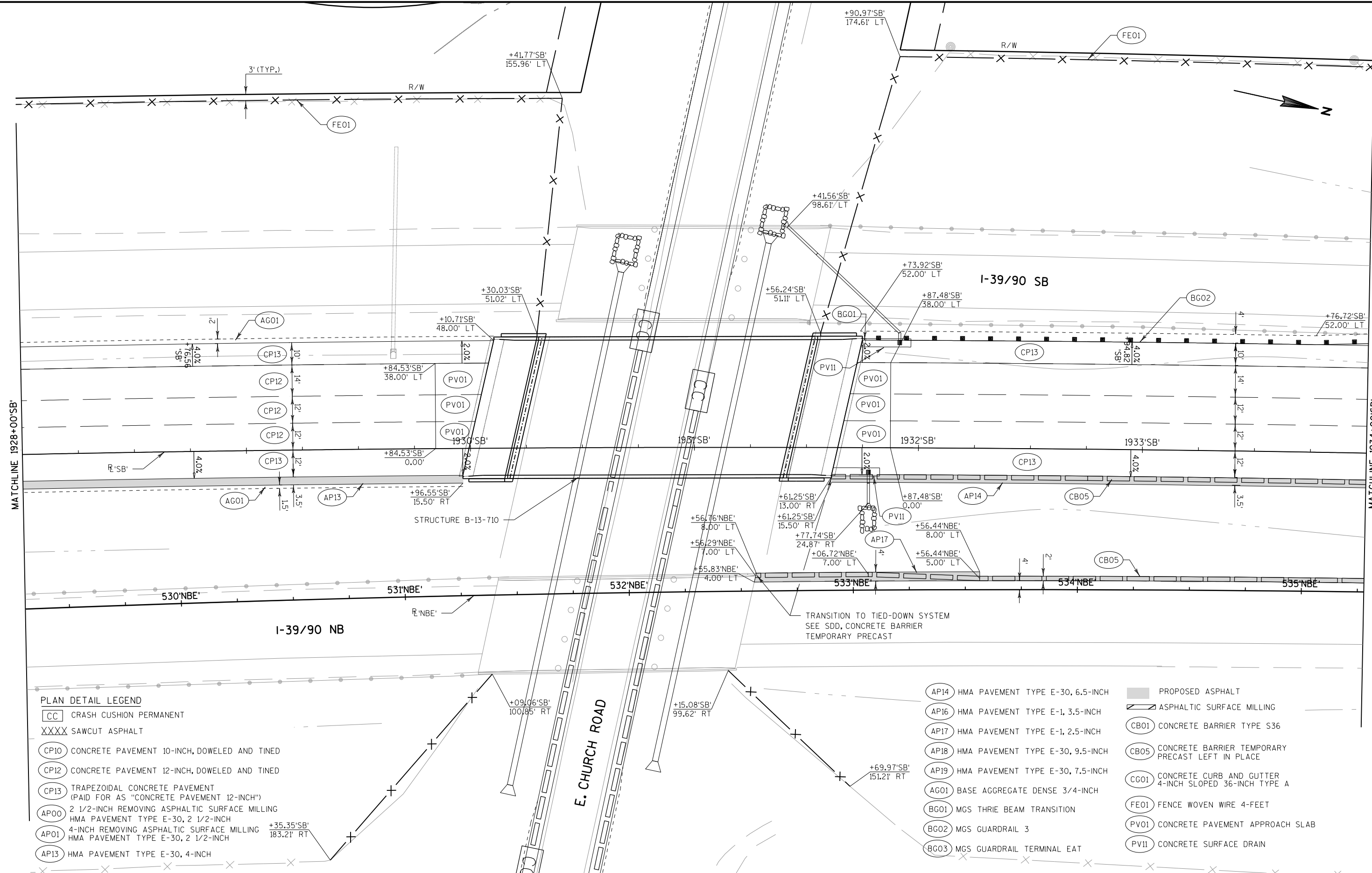
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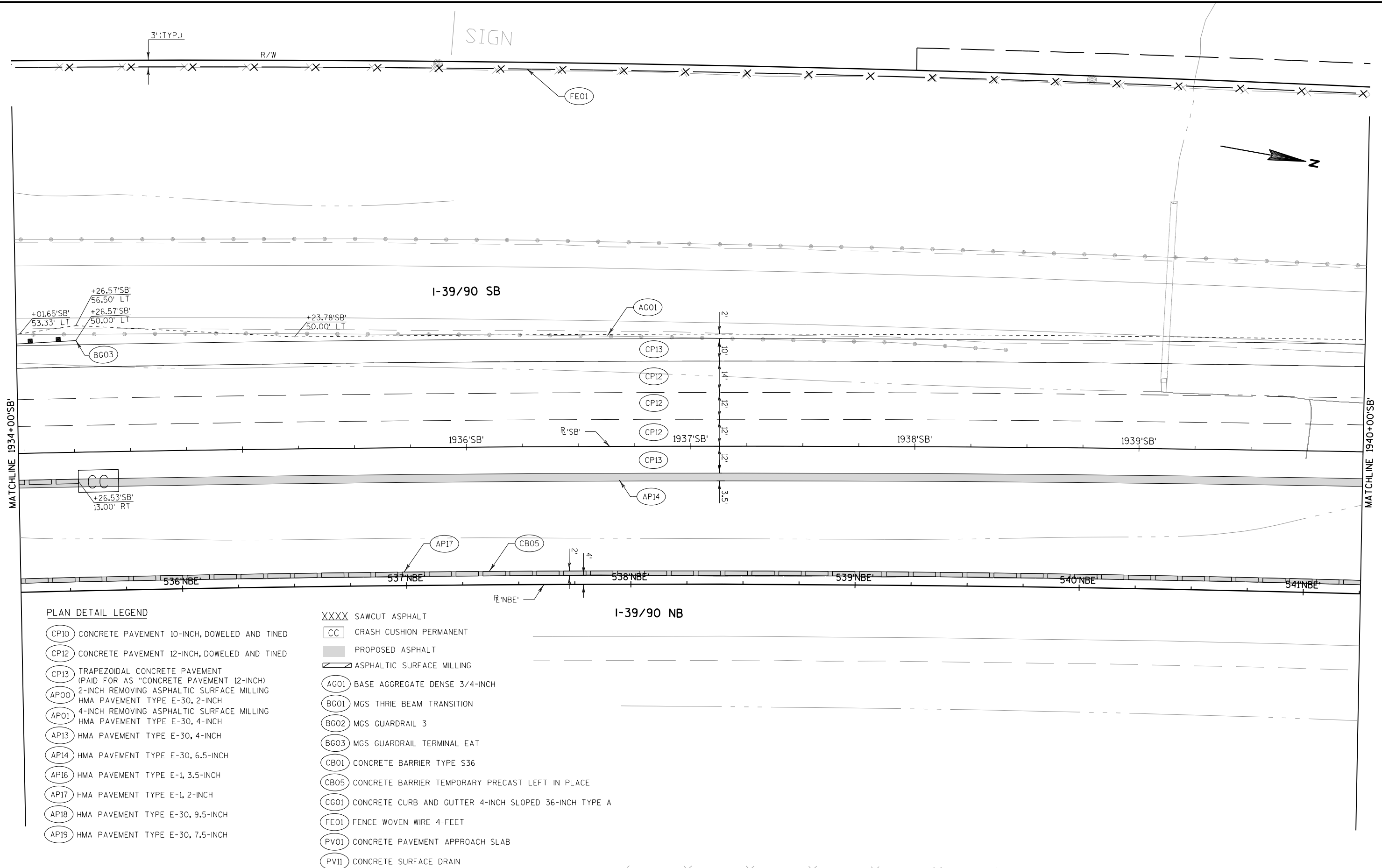






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PROJECT NO:1007-10-79

HWY: IH 39

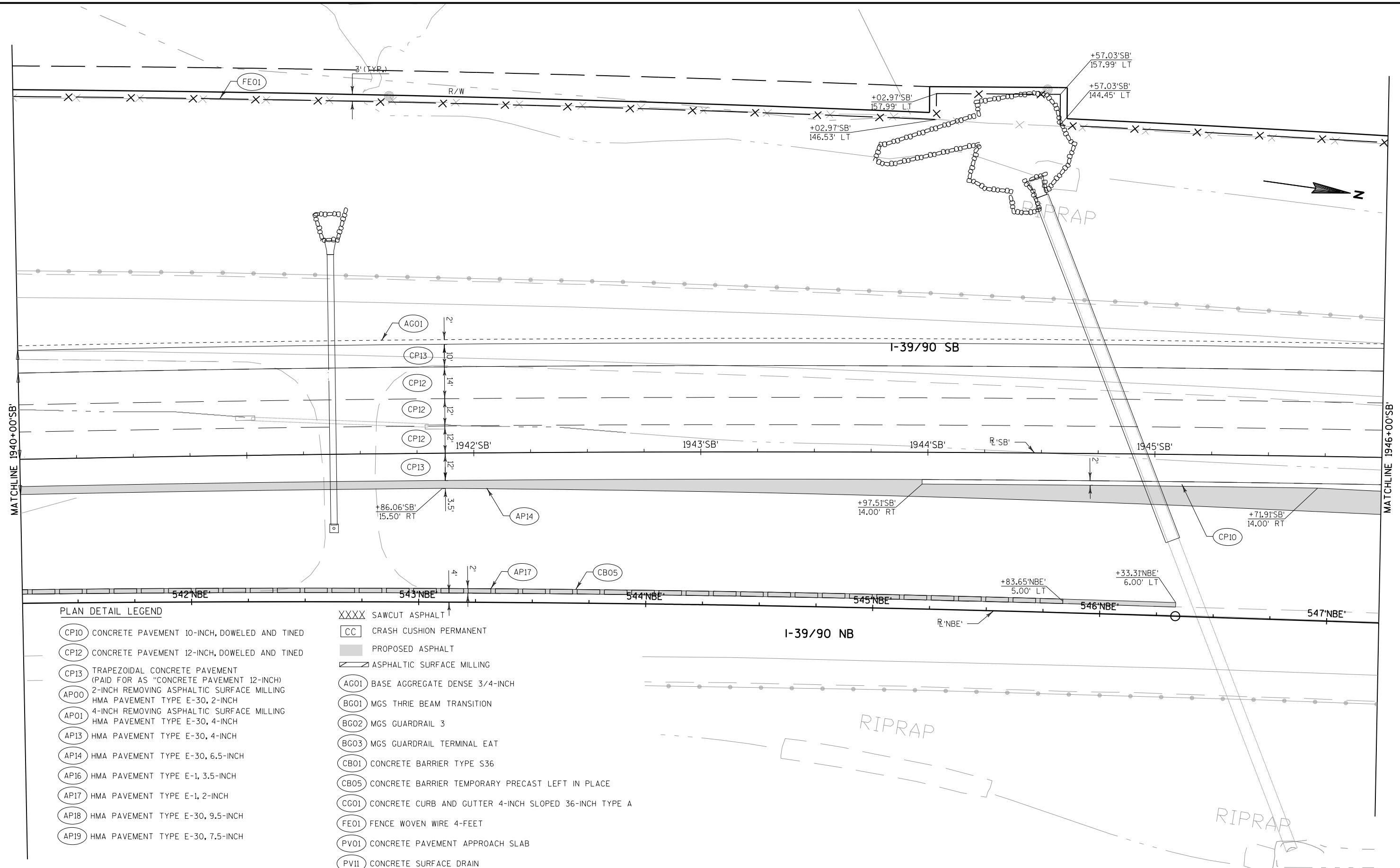
COUNTY: DANE

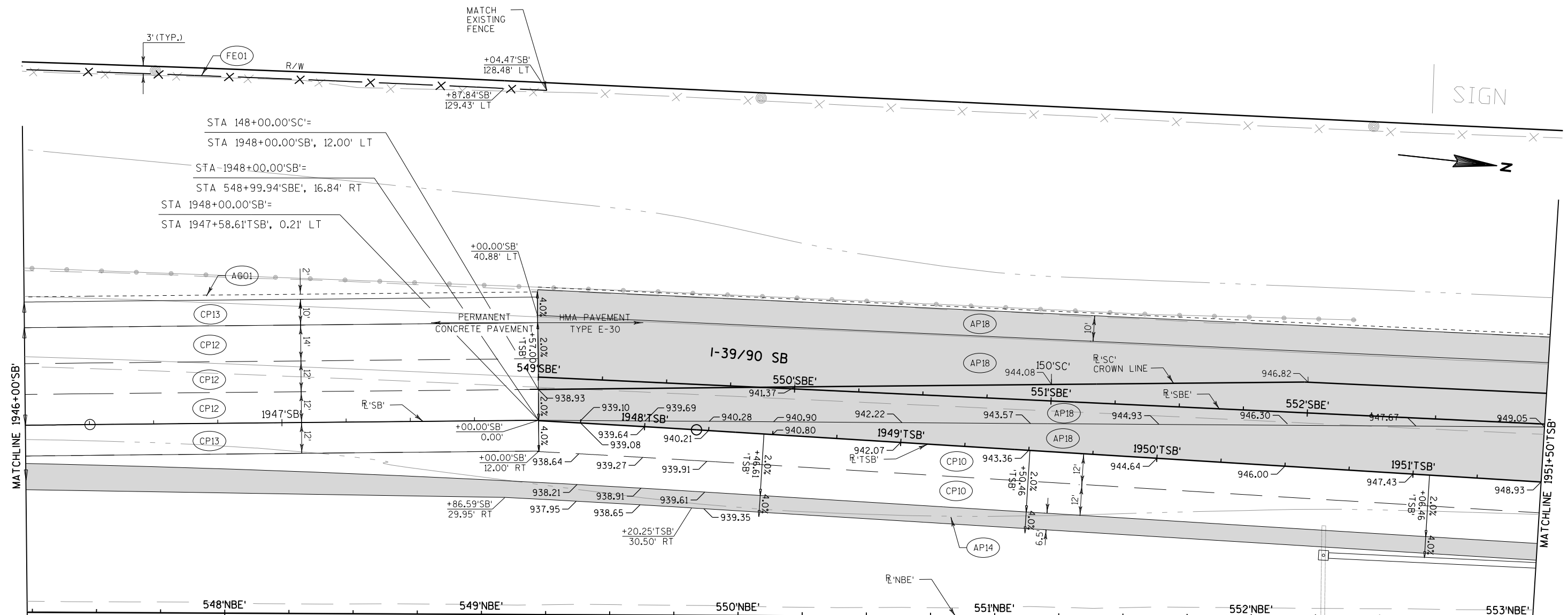
PLAN DETAILS

SHEET

122

E





PLAN DETAIL LEGEND

- CP10 CONCRETE PAVEMENT 10-INCH, DOWELED AND TINED
- CP12 CONCRETE PAVEMENT 12-INCH, DOWELED AND TINED
- CP13 TRAPEZOIDAL CONCRETE PAVEMENT (PAID FOR AS "CONCRETE PAVEMENT 12-INCH")
- AP00 2-INCH REMOVING ASPHALTIC SURFACE MILLING
- AP01 4-INCH REMOVING ASPHALTIC SURFACE MILLING
- AP13 HMA PAVEMENT TYPE E-30, 4-INCH
- AP14 HMA PAVEMENT TYPE E-30, 6.5-INCH
- AP16 HMA PAVEMENT TYPE E-1, 3.5-INCH
- AP17 HMA PAVEMENT TYPE E-1, 2-INCH
- AP18 HMA PAVEMENT TYPE E-30, 9.5-INCH
- AP19 HMA PAVEMENT TYPE E-30, 7.5-INCH

- XXXX SAWCUT ASPHALT
- CC CRASH CUSHION PERMANENT
- PROPOSED ASPHALT
- ASPHALTIC SURFACE MILLING
- AG01 BASE AGGREGATE DENSE 3/4-INCH
- BG01 MGS THRIE BEAM TRANSITION
- BG02 MGS GUARDRAIL 3
- BG03 MGS GUARDRAIL TERMINAL EAT
- CB01 CONCRETE BARRIER TYPE S36
- CB05 CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE
- CG01 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
- FE01 FENCE WOVEN WIRE 4-FEET
- PV01 CONCRETE PAVEMENT APPROACH SLAB
- PV11 CONCRETE SURFACE DRAIN

I-39/90 NB

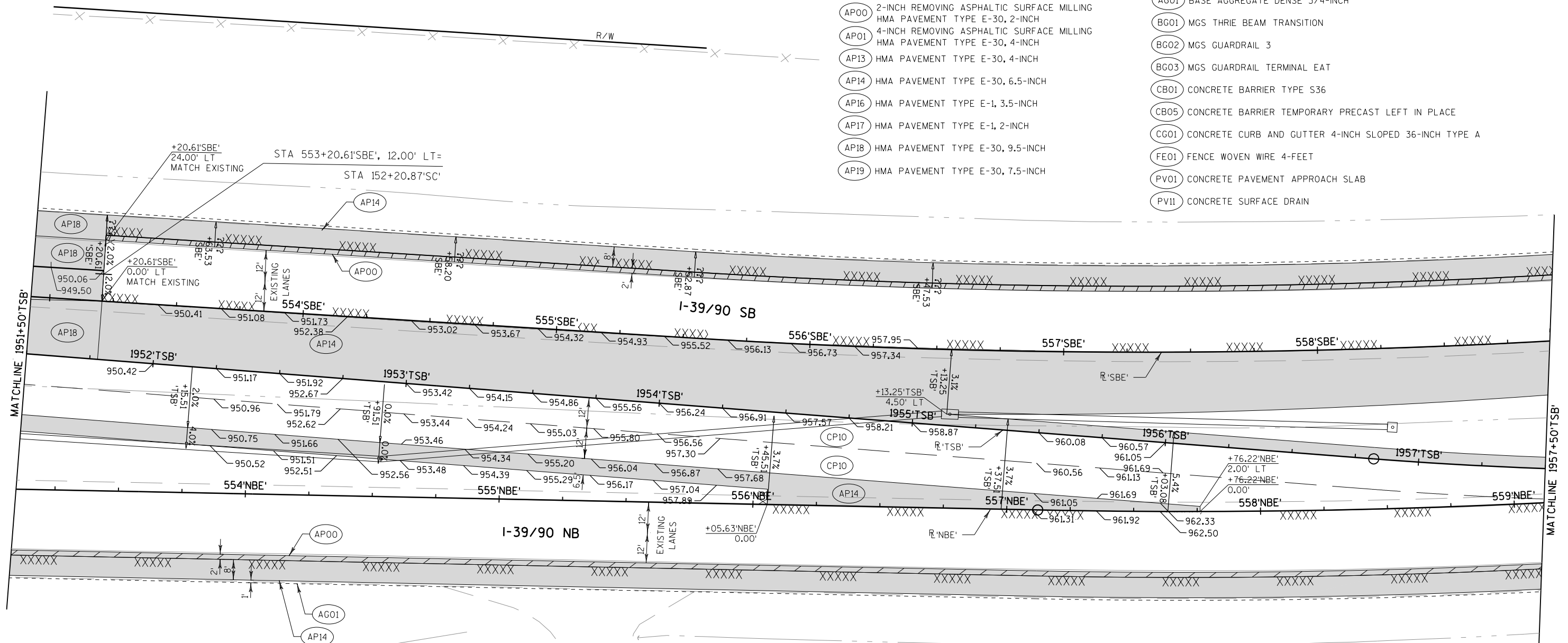
+75.63'NBE'
24.00' RT

+75.63'NBE'
35.00' RT

PLAN DETAIL LEGEND

- (CP10) CONCRETE PAVEMENT 10-INCH, DOWELED AND TINED
(CP12) CONCRETE PAVEMENT 12-INCH, DOWELED AND TINED
(CP13) TRAPEZOIDAL CONCRETE PAVEMENT
(PAID FOR AS "CONCRETE PAVEMENT 12-INCH")
(AP00) 2-INCH REMOVING ASPHALTIC SURFACE MILLING
(AP01) 4-INCH REMOVING ASPHALTIC SURFACE MILLING
(AP13) HMA PAVEMENT TYPE E-30, 4-INCH
(AP14) HMA PAVEMENT TYPE E-30, 6.5-INCH
(AP16) HMA PAVEMENT TYPE E-1, 3.5-INCH
(AP17) HMA PAVEMENT TYPE E-1, 2-INCH
(AP18) HMA PAVEMENT TYPE E-30, 9.5-INCH
(AP19) HMA PAVEMENT TYPE E-30, 7.5-INCH

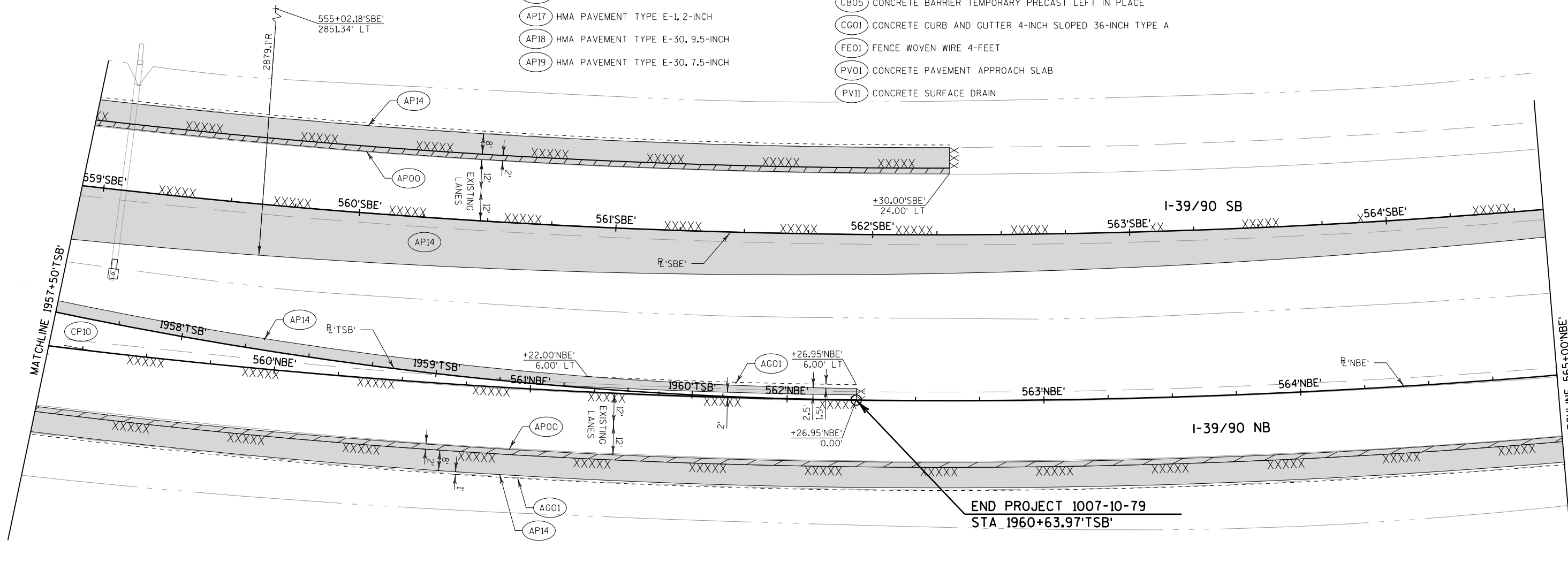
- XXXX SAWCUT ASPHALT
CC CRASH CUSHION PERMANENT
PROPOSED ASPHALT
ASPHALTIC SURFACE MILLING
(AG01) BASE AGGREGATE DENSE 3/4-INCH
(BG01) MGS THRIE BEAM TRANSITION
(BG02) MGS GUARDRAIL 3
(BG03) MGS GUARDRAIL TERMINAL EAT
(CB01) CONCRETE BARRIER TYPE S36
(CB05) CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE
(CG01) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
(FE01) FENCE WOVEN WIRE 4-FEET
(PV01) CONCRETE PAVEMENT APPROACH SLAB
(PV11) CONCRETE SURFACE DRAIN

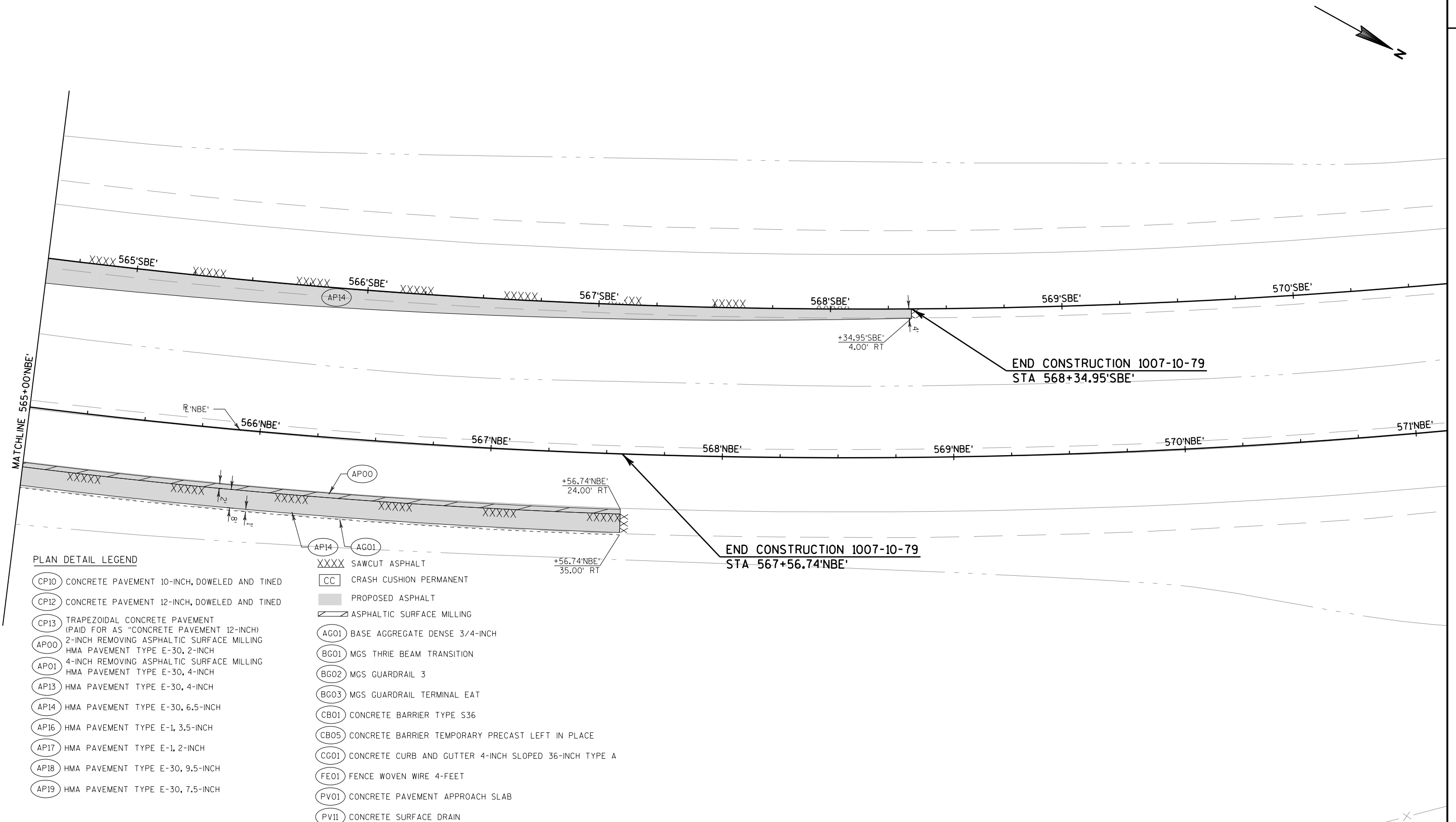


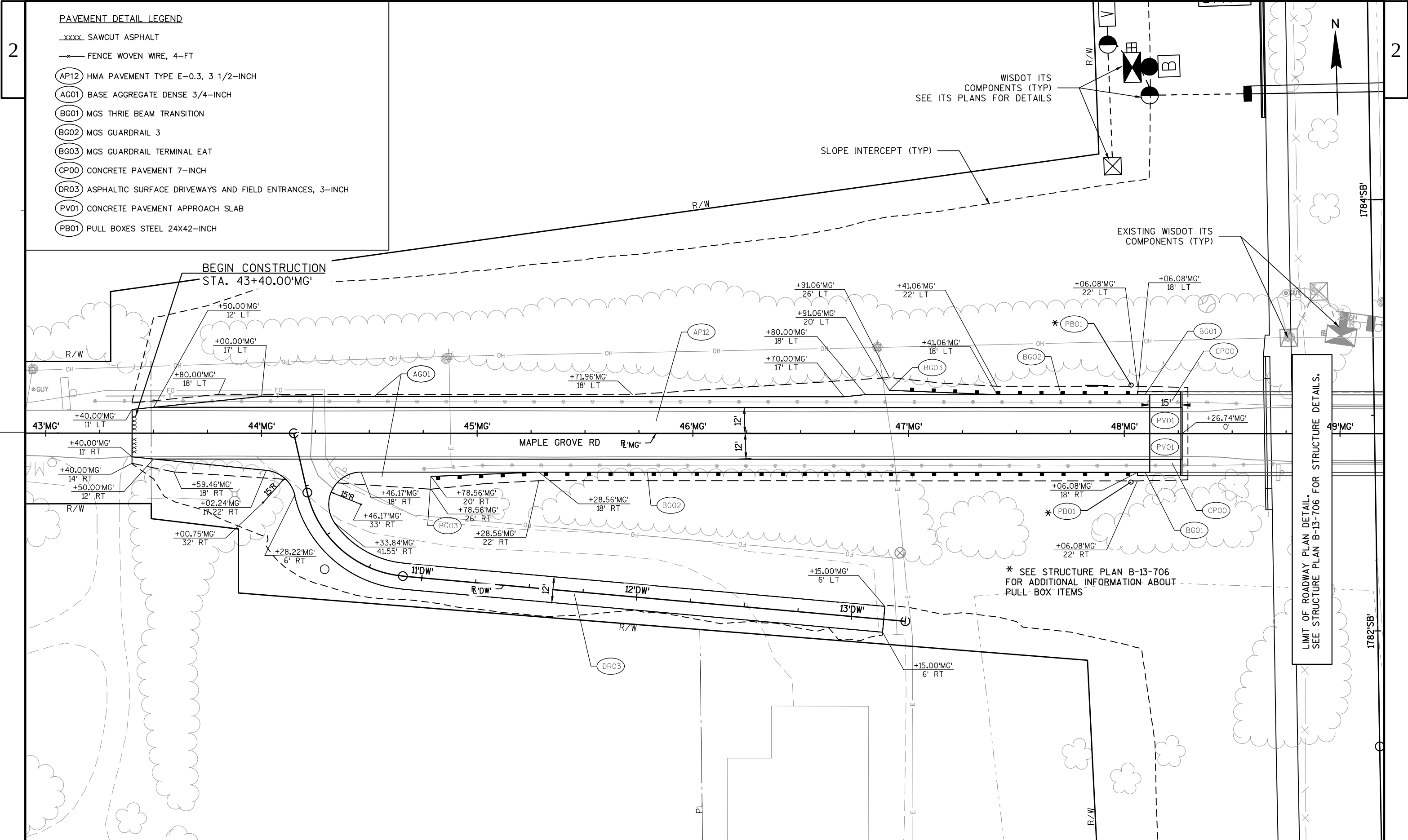
PLAN DETAIL LEGEND

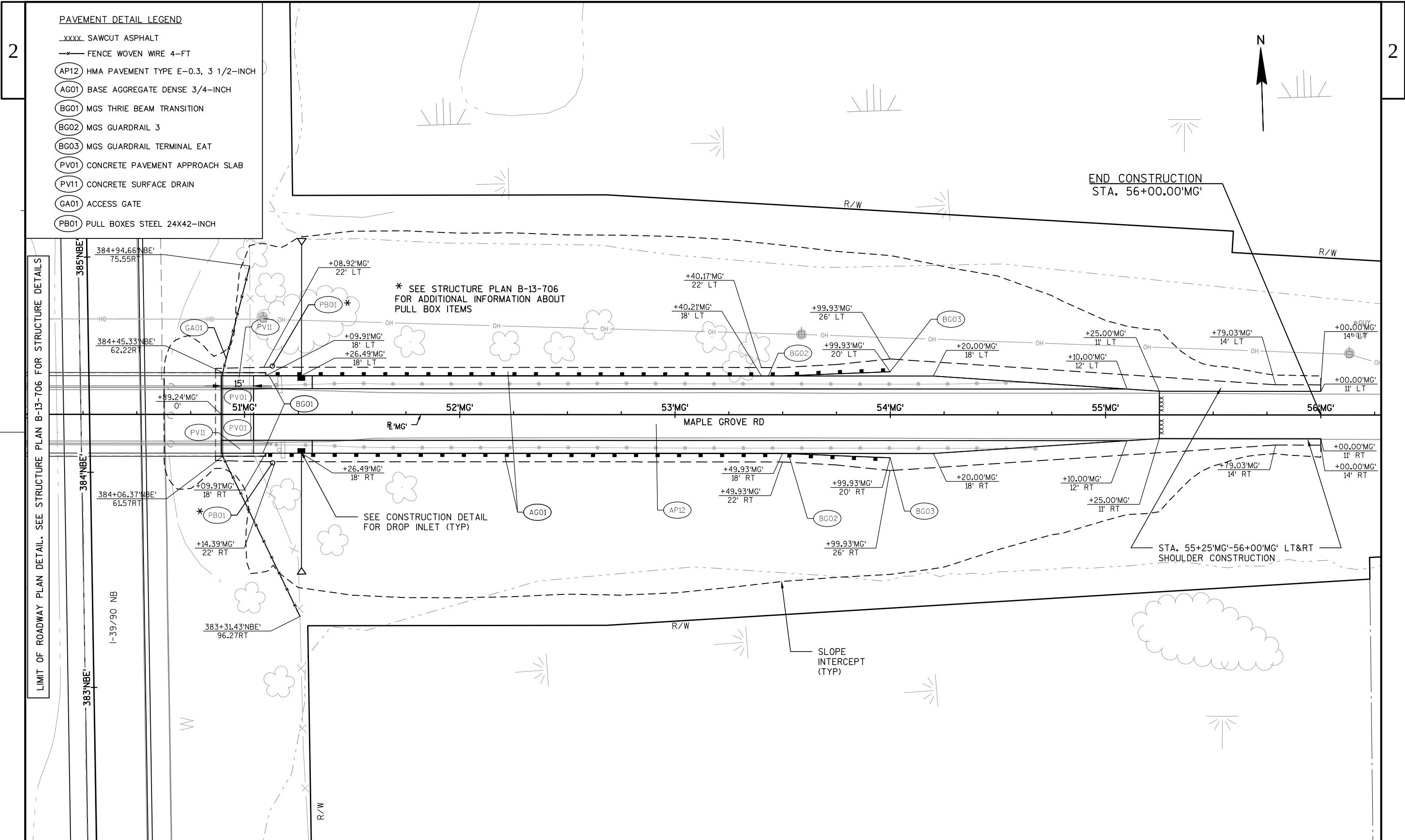
- (CP10) CONCRETE PAVEMENT 10-INCH, DOWELED AND TINED
(CP12) CONCRETE PAVEMENT 12-INCH, DOWELED AND TINED
(CP13) TRAPEZOIDAL CONCRETE PAVEMENT
(PAID FOR AS "CONCRETE PAVEMENT 12-INCH")
(AP00) 2-INCH REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE E-30, 2-INCH
(AP01) 4-INCH REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE E-30, 4-INCH
(AP13) HMA PAVEMENT TYPE E-30, 4-INCH
(AP14) HMA PAVEMENT TYPE E-30, 6.5-INCH
(AP16) HMA PAVEMENT TYPE E-1, 3.5-INCH
(AP17) HMA PAVEMENT TYPE E-1, 2-INCH
(AP18) HMA PAVEMENT TYPE E-30, 9.5-INCH
(AP19) HMA PAVEMENT TYPE E-30, 7.5-INCH

- XXXX SAWCUT ASPHALT
(CC) CRASH CUSHION PERMANENT
PROPOSED ASPHALT
ASPHALTIC SURFACE MILLING
(AG01) BASE AGGREGATE DENSE 3/4-INCH
(BG01) MGS THRIE BEAM TRANSITION
(BG02) MGS GUARDRAIL 3
(BG03) MGS GUARDRAIL TERMINAL EAT
(CB01) CONCRETE BARRIER TYPE S36
(CB05) CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE
(CG01) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
(FE01) FENCE WOVEN WIRE 4-FEET
(PV01) CONCRETE PAVEMENT APPROACH SLAB
(PV11) CONCRETE SURFACE DRAIN



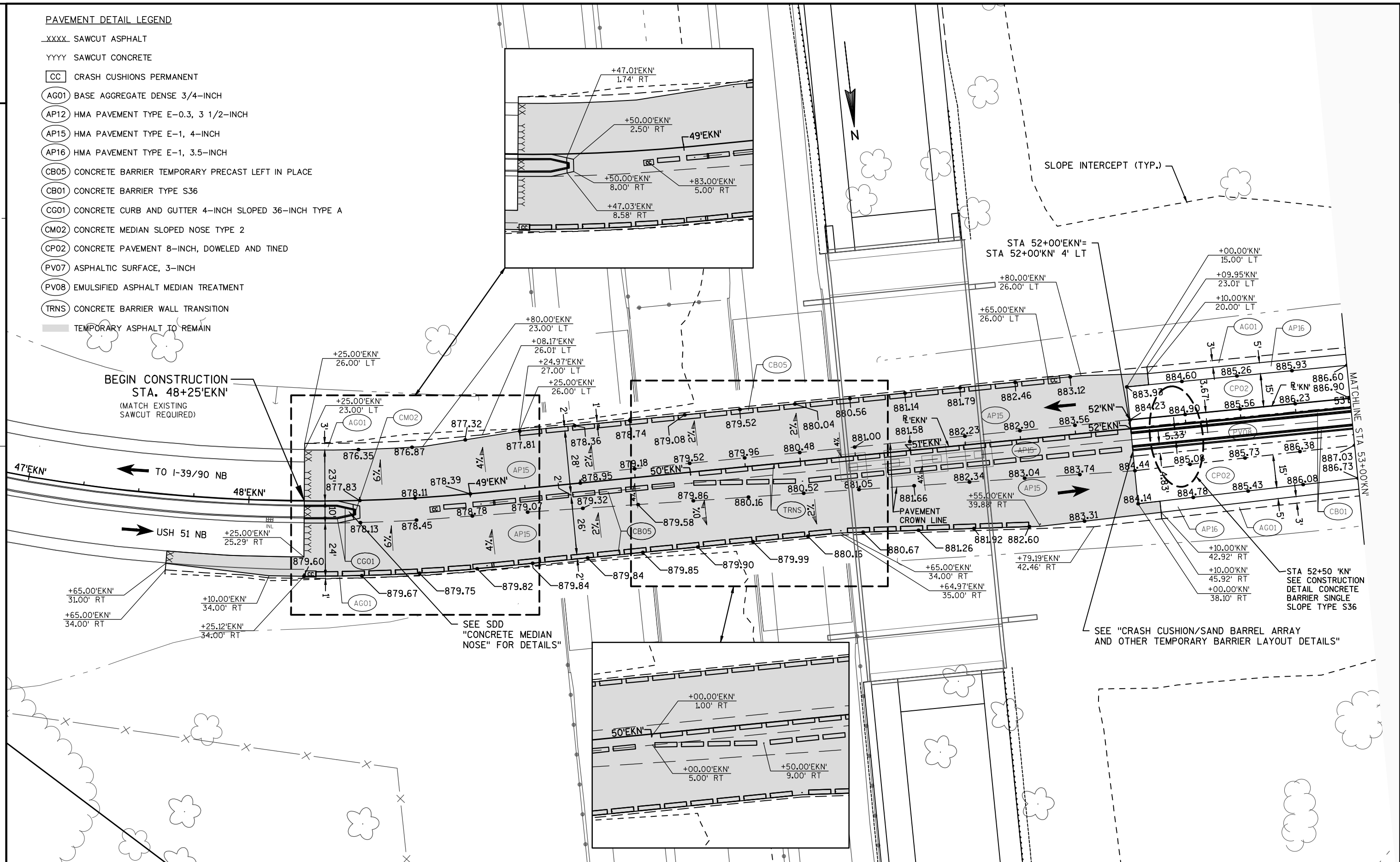






PAVEMENT DETAIL LEGEND

- XXXX SAWCUT ASPHALT
- YYYY SAWCUT CONCRETE
- CC CRASH CUSHIONS PERMANENT
- AG01 BASE AGGREGATE DENSE 3/4-INCH
- AP12 HMA PAVEMENT TYPE E-0.3, 3 1/2-INCH
- AP15 HMA PAVEMENT TYPE E-1, 4-INCH
- AP16 HMA PAVEMENT TYPE E-1, 3.5-INCH
- CB05 CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE
- CB01 CONCRETE BARRIER TYPE S36
- CG01 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
- CM02 CONCRETE MEDIAN SLOPED NOSE TYPE 2
- CP02 CONCRETE PAVEMENT 8-INCH, DOWELED AND TINED
- PV07 ASPHALTIC SURFACE, 3-INCH
- PV08 EMULSIFIED ASPHALT MEDIAN TREATMENT
- TRNS CONCRETE BARRIER WALL TRANSITION
- TEMPORARY ASPHALT TO REMAIN



PAVEMENT DETAIL LEGEND

- CC CRASH CUSHIONS PERMANENT
AG01 BASE AGGREGATE DENSE 3/4-INCH
AP16 HMA PAVEMENT TYPE E-1, 3 1/2-INCH
CB01 CONCRETE BARRIER TYPE S36
CB06 CONCRETE BARRIER TYPE S36, END ANCHOR
CG01 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
CM01 CONCRETE MEDIAN SLOPED NOSE TYPE 1
CP02 CONCRETE PAVEMENT 8-INCH, DOWELED AND TINED
PV07 ASPHALTIC SURFACE, 3-INCH
PV08 EMULSIFIED ASPHALT MEDIAN TREATMENT
TRNS CONCRETE BARRIER WALL TRANSITION

SLOPE INTERCEPT (TYP.)

SEE SDD "CONCRETE
MEDIAN NOSE" FOR DETAILS

MATCHLINE STA 53+00'KN'

MATCHLINE STA 59+00'KN'

PAVEMENT DETAIL LEGEND

XXXX SAWCUT ASPHALT

YYYY SAWCUT CONCRETE

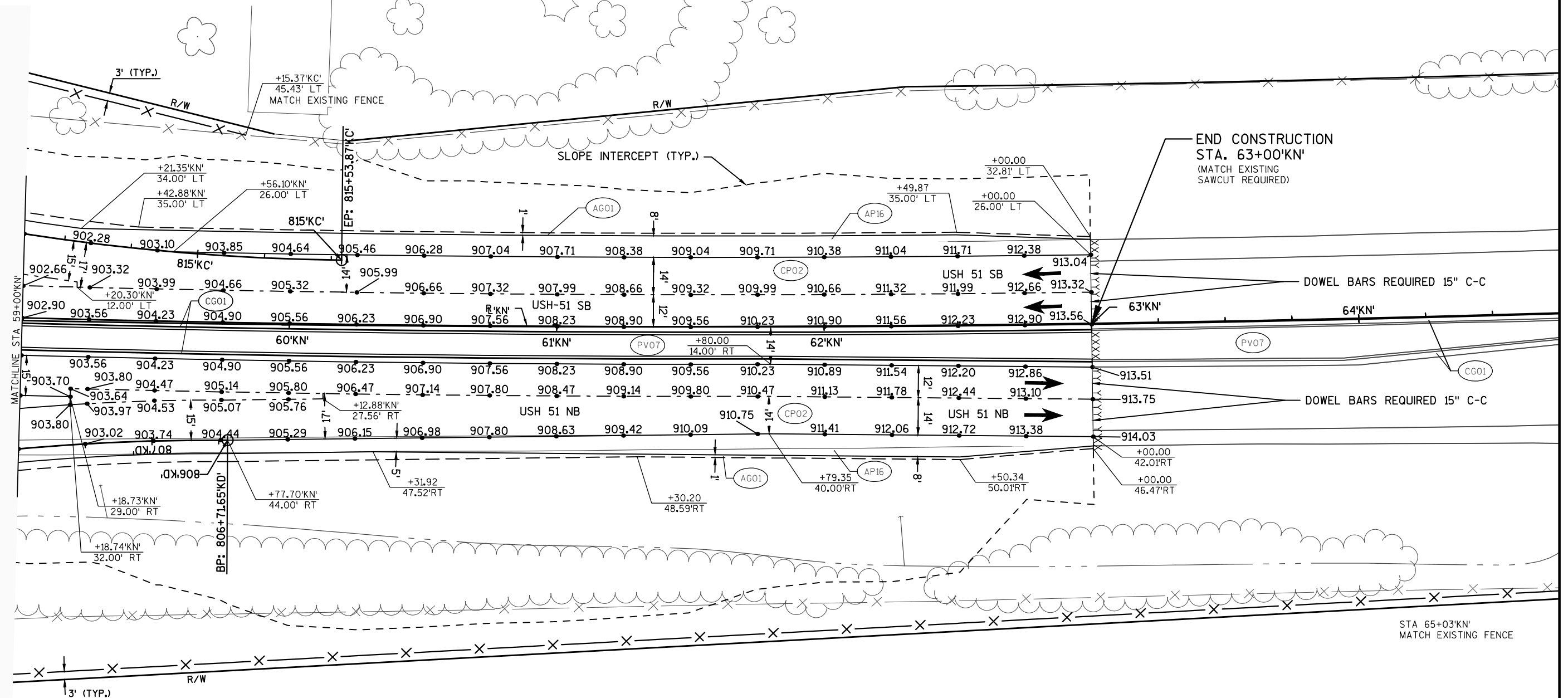
AG01 BASE AGGREGATE DENSE 3/4-INCH

AP16 HMA PAVEMENT TYPE E-1, 3 1/2-INCH

CG01 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A

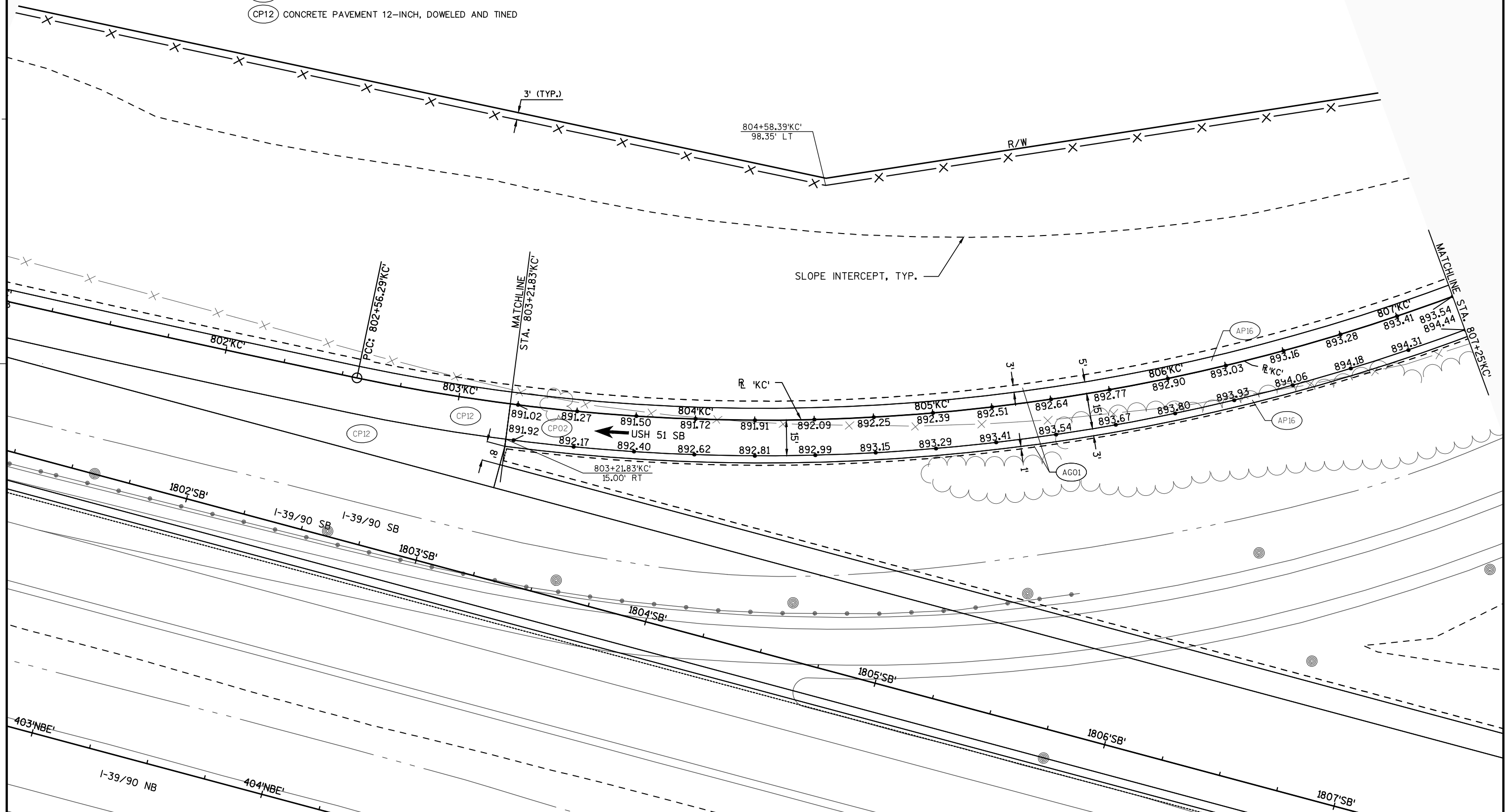
CP02 CONCRETE PAVEMENT 8-INCH, DOWELED AND TINED

PV07 ASPHALTIC SURFACE, 3-INCH



PAVEMENT DETAIL LEGEND

- (AG01) BASE AGGREGATE DENSE, 3/4-INCH
(AP16) HMA PAVEMENT TYPE E-1, 3 1/2-INCH
(CP02) CONCRETE PAVEMENT 8-INCH, DOWELED AND TINED
(CP12) CONCRETE PAVEMENT 12-INCH, DOWELED AND TINED



PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

PLAN DETAILS: USH 51 'KC'

SHEET

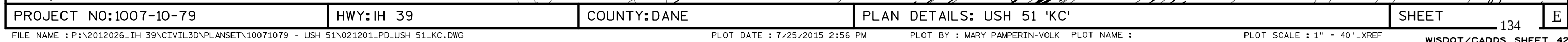
133

E

AG01 BASE AGGREGATE DENSE, 3/4-INCH

AP16 HMA PAVEMENT TYPE E-1, 3 1/2-INCH

CP02 CONCRETE PAVEMENT 8-INCH, DOWELED AND TINED

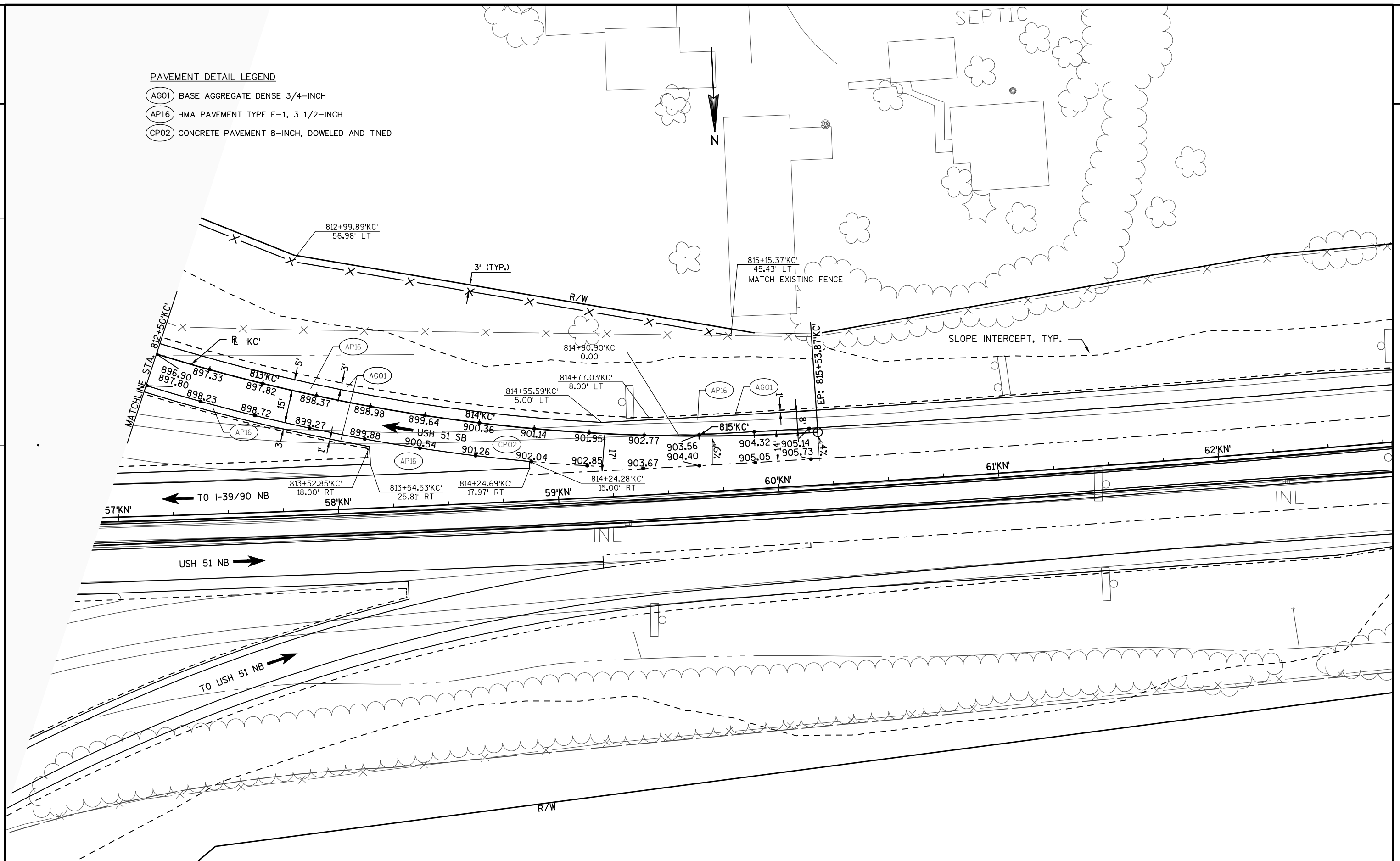


PAVEMENT DETAIL LEGEND

AG01 BASE AGGREGATE DENSE 3/4-INCH

AP16 HMA PAVEMENT TYPE E-1, 3 1/2-INCH

CP02 CONCRETE PAVEMENT 8-INCH, DOWELED AND TINED



AG01 BASE AGGREGATE DENSE 3/4-INCH

AP16 HMA PAVEMENT TYPE E-1, 3 1/2-INCH

CP02 CONCRETE PAVEMENT 8-INCH, DOWELED AND TINED



AG01 BASE AGGREGATE DENSE 3/4-INCH

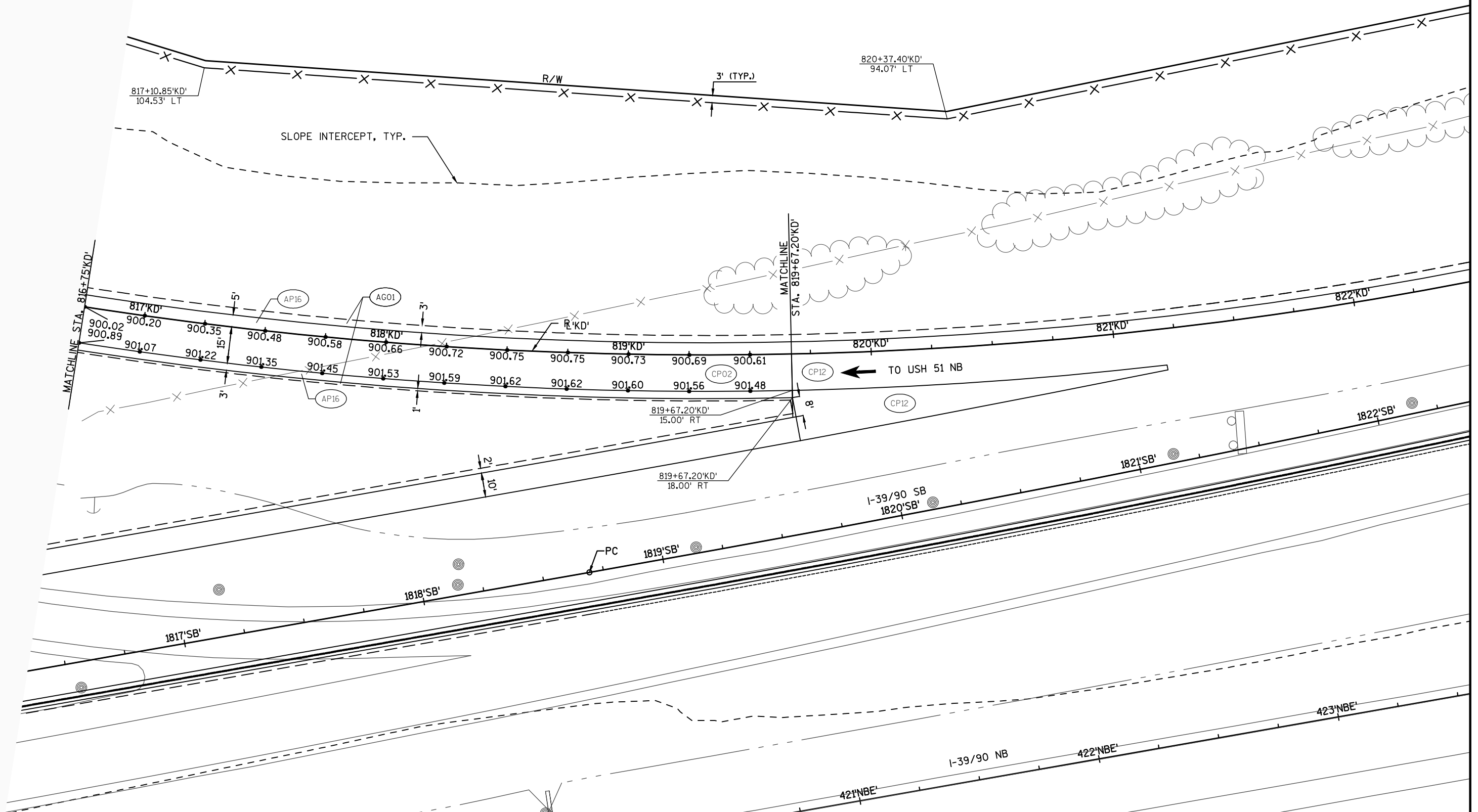
AP16 HMA PAVEMENT TYPE E-1, 3 1/2-INCH

CP02 CONCRETE PAVEMENT 8-INCH, DOWELED AND TINED



PAVEMENT DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE 3/4-INCH
AP16 HMA PAVEMENT TYPE E-1, 3 1/2-INCH
CP02 CONCRETE PAVEMENT 8-INCH, DOWELED AND TINED
CP12 CONCRETE PAVEMENT 12-INCH, DOWELED AND TINED



PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

PLAN DETAILS: USH 51 'KD'

SHEET

138

E

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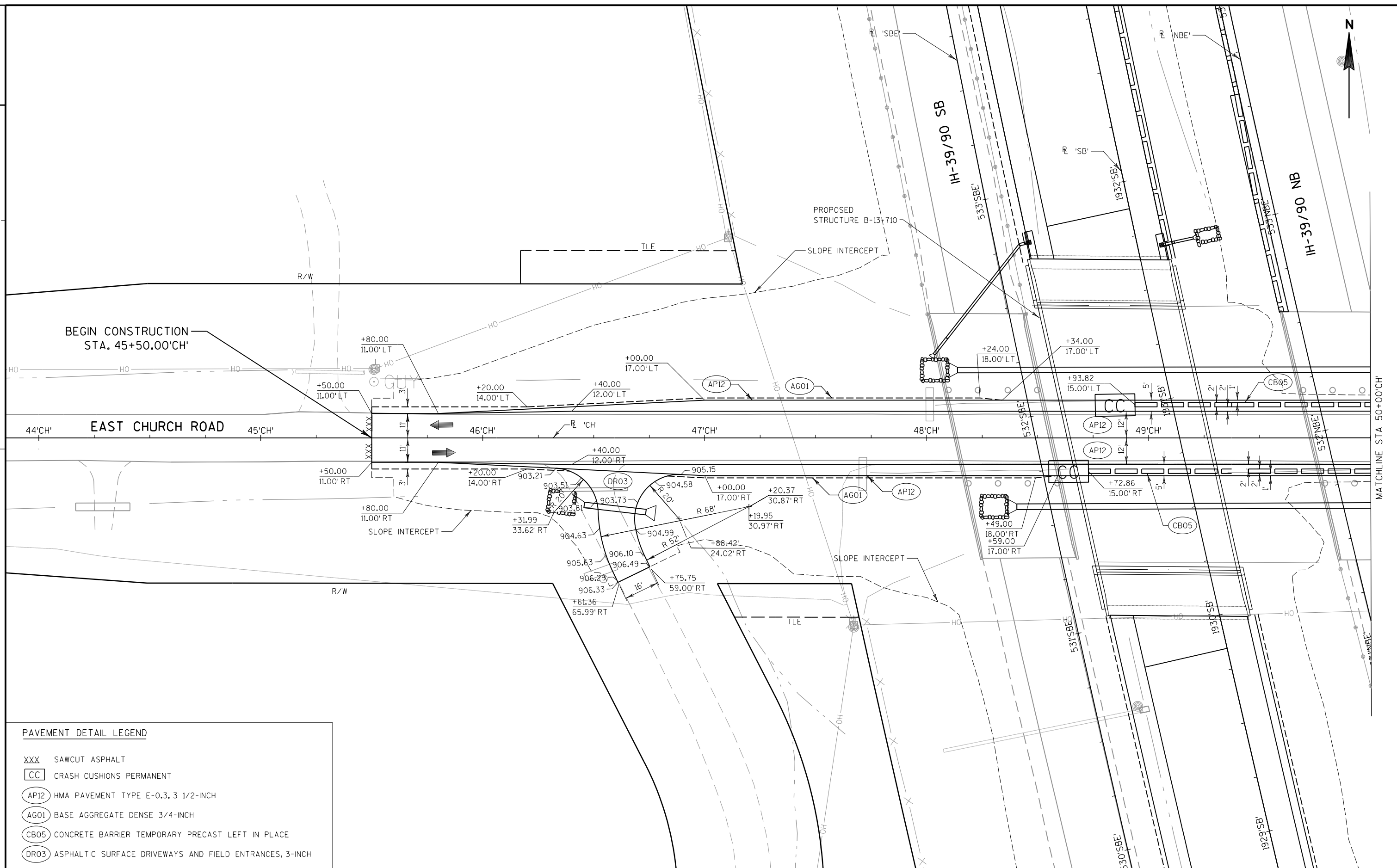
PLOT BY : MARY PAMPERIN-VOLK PLOT NAME :

PLOT SCALE : 1:40-XREF

WISDOT/CADDs SHEET 42

2

2 |



PAVEMENT DETAIL LEGEND

XXX SAWCUT ASPHALT

 CRASH CUSHIONS PERMANENT

(AP12) HMA PAVEMENT TYPE E-0.3, 3 1/2-INCH

(AG01) BASE AGGREGATE DENSE 3/4-INCH

(CB05) CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE

(DRO3) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH

PROJECT NO:1007-10-79

HWY: IH 39

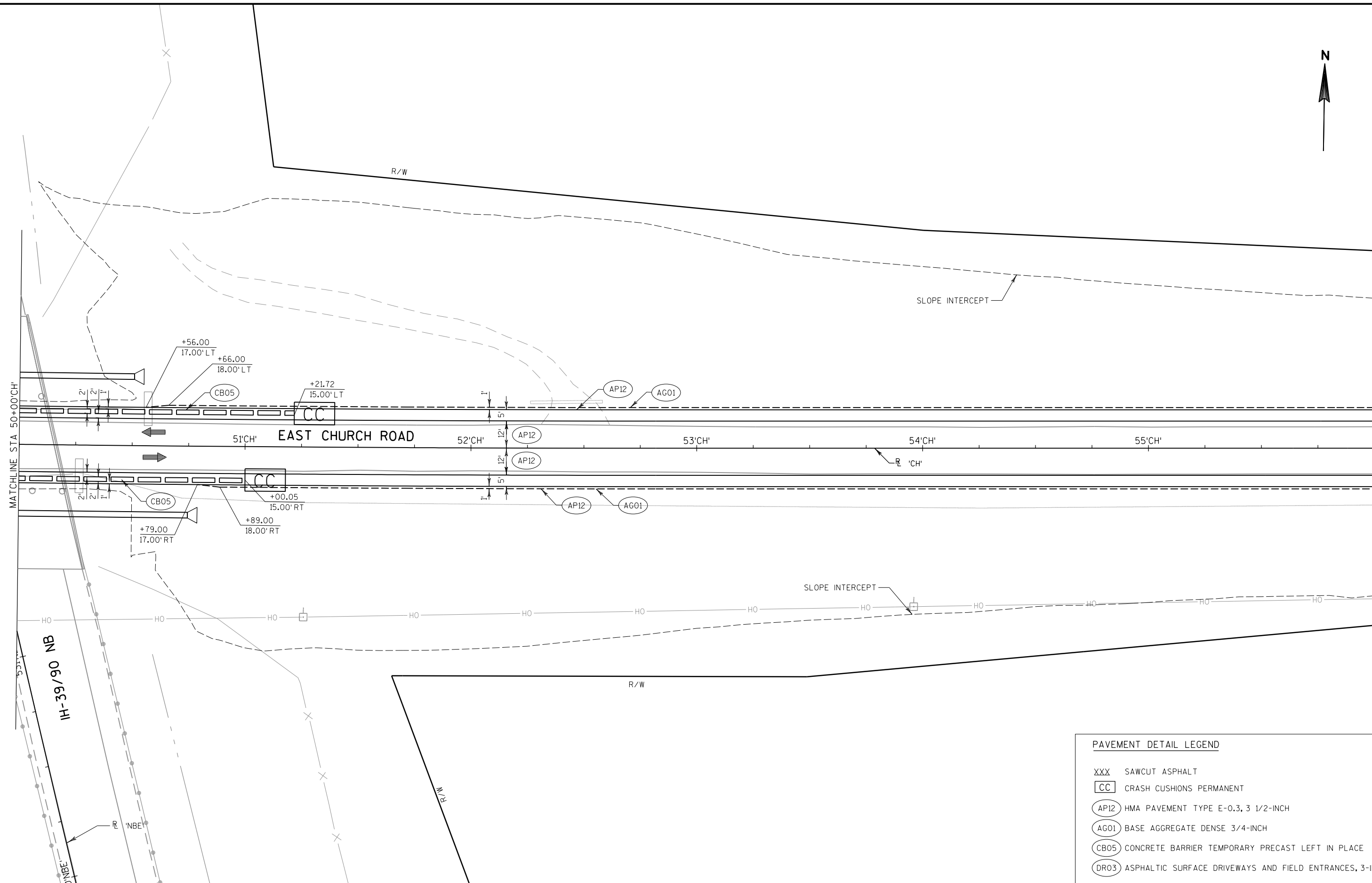
COUNTY: DANE

PLAN DETAILS : EAST CHURCH ROAD

SHEET

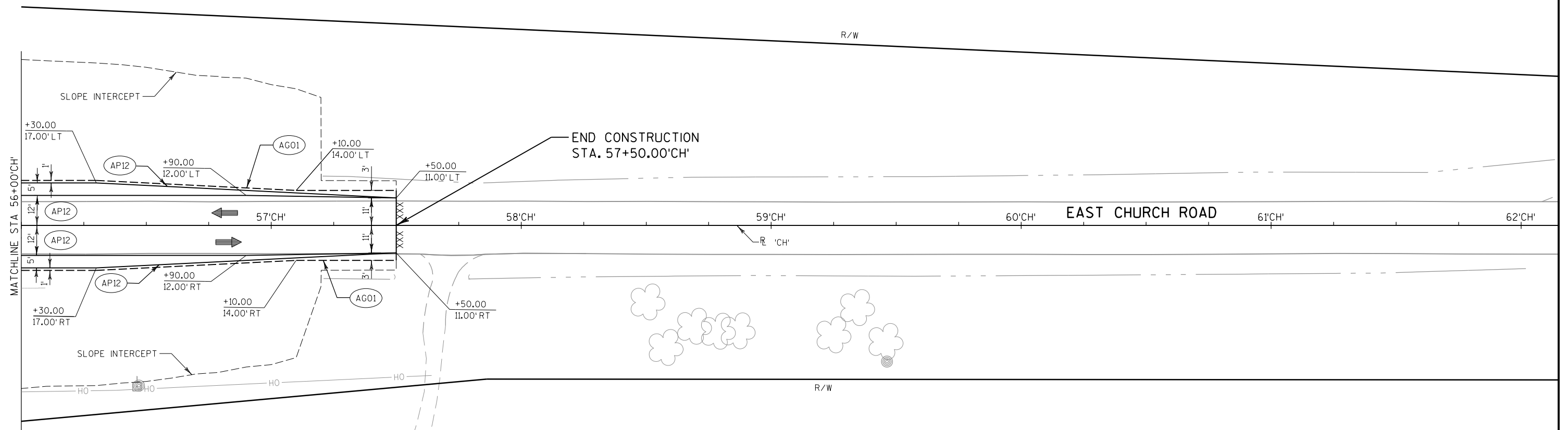
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PAVEMENT DETAIL LEGEND

- | | |
|------|---|
| XXX | SAWCUT ASPHALT |
| CC | CRASH CUSHIONS PERMANENT |
| API2 | HMA PAVEMENT TYPE E-0.3, 3 1/2-INCH |
| AG01 | BASE AGGREGATE DENSE 3/4-INCH |
| CB05 | CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE |
| DR03 | ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH |

PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

PLAN DETAILS: EAST CHURCH ROAD

SHEET

41

5

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071073\Sheet sPlan\021306_pd.dgn

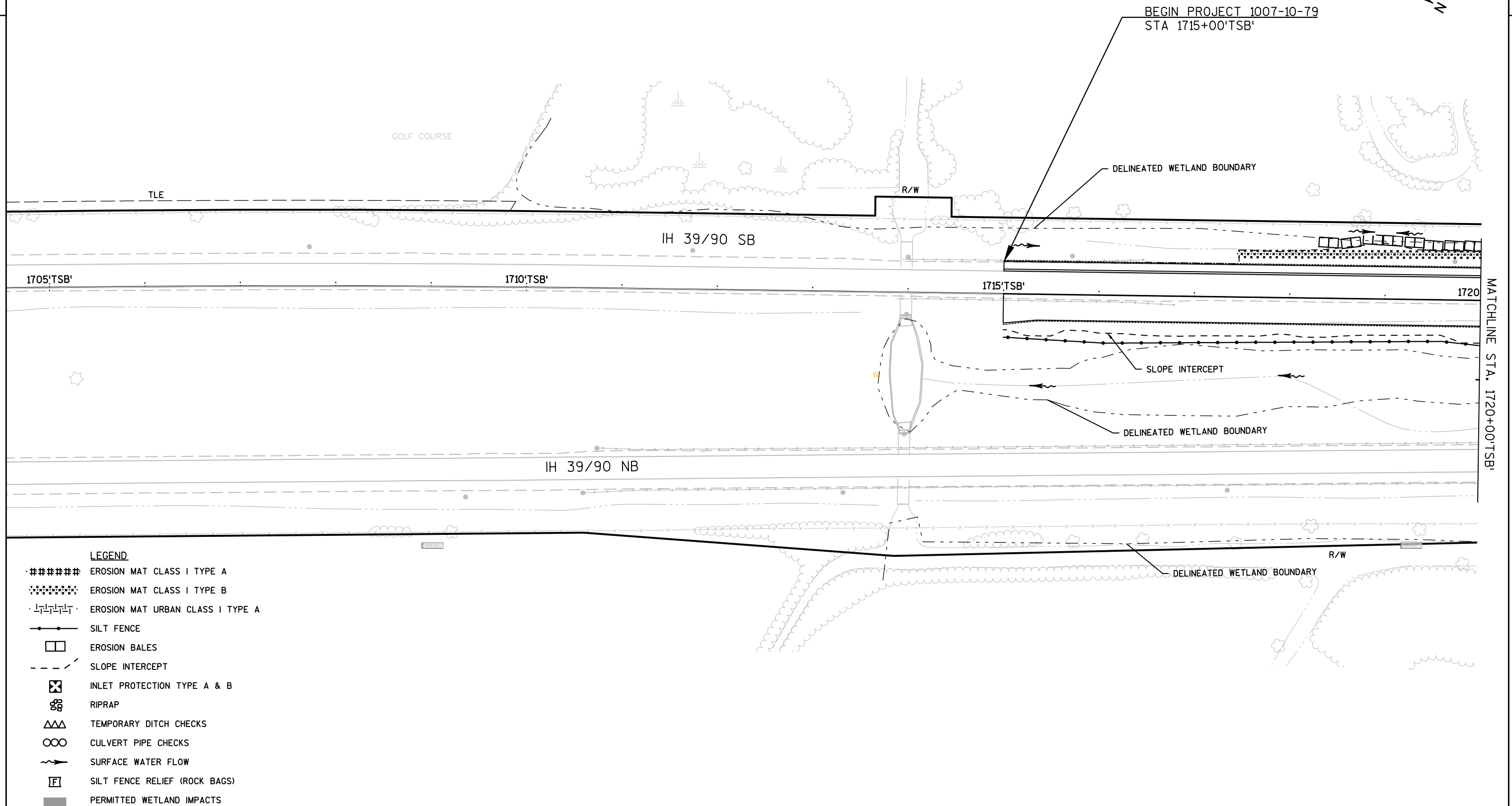
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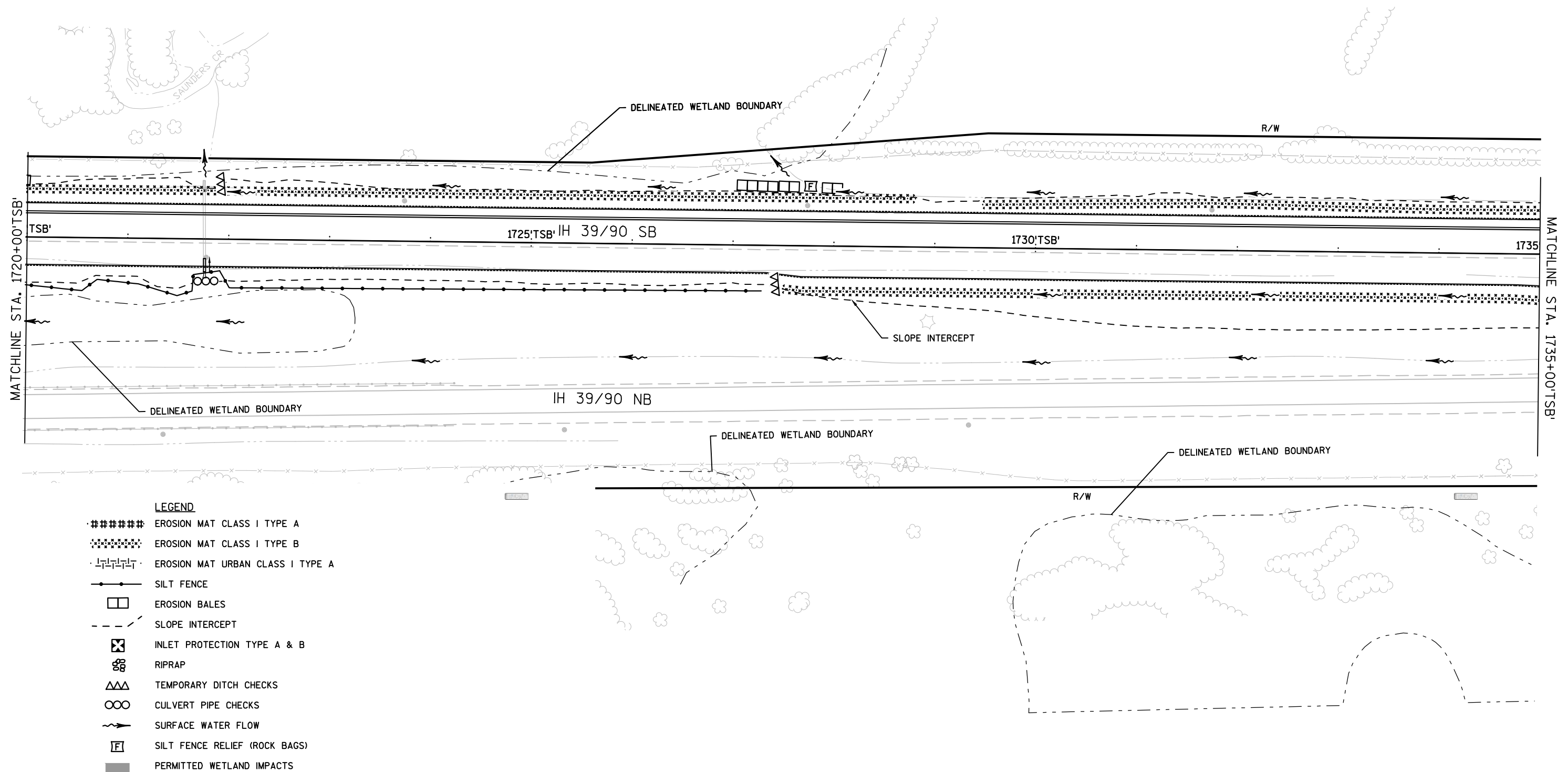
PLOT BY : kjd

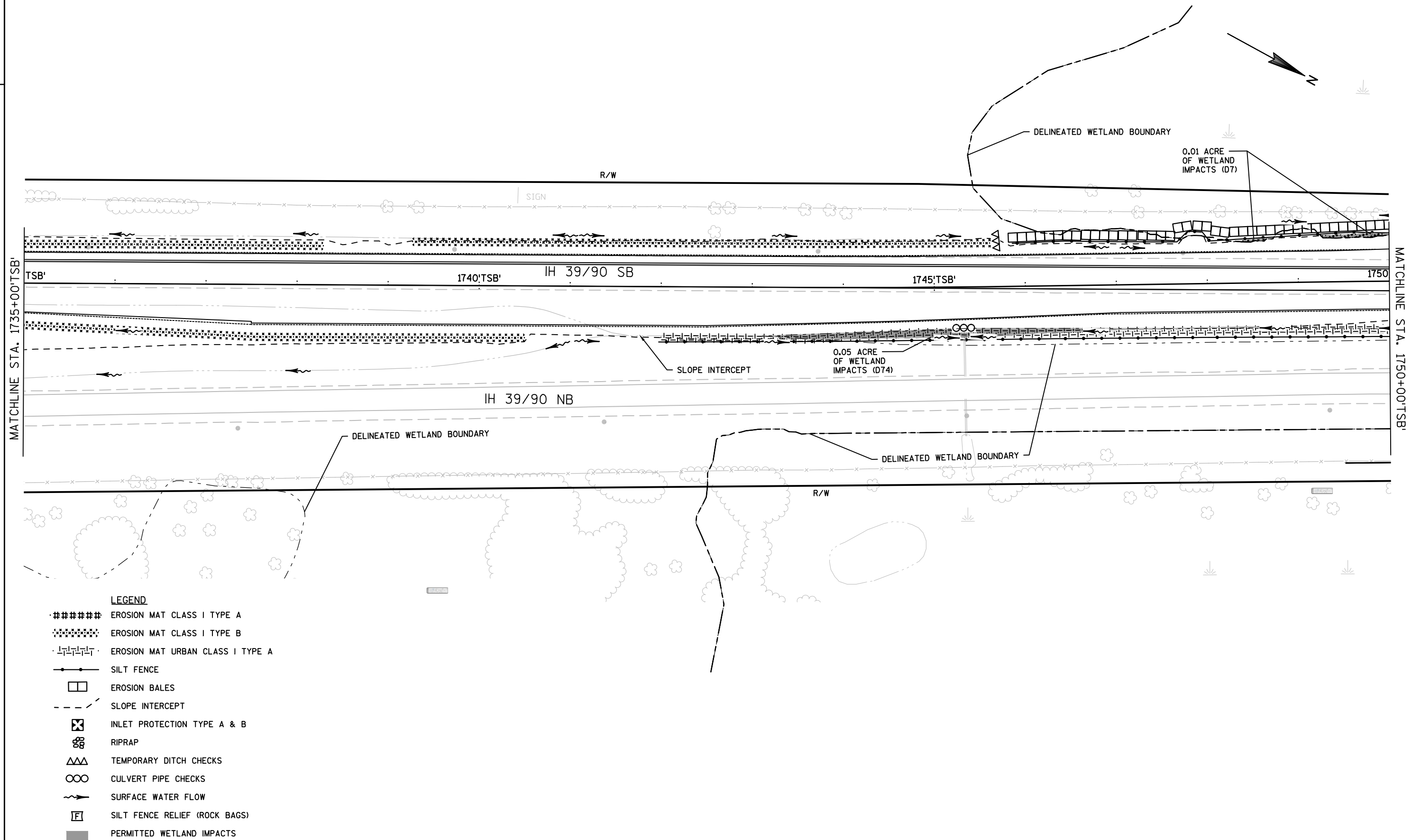
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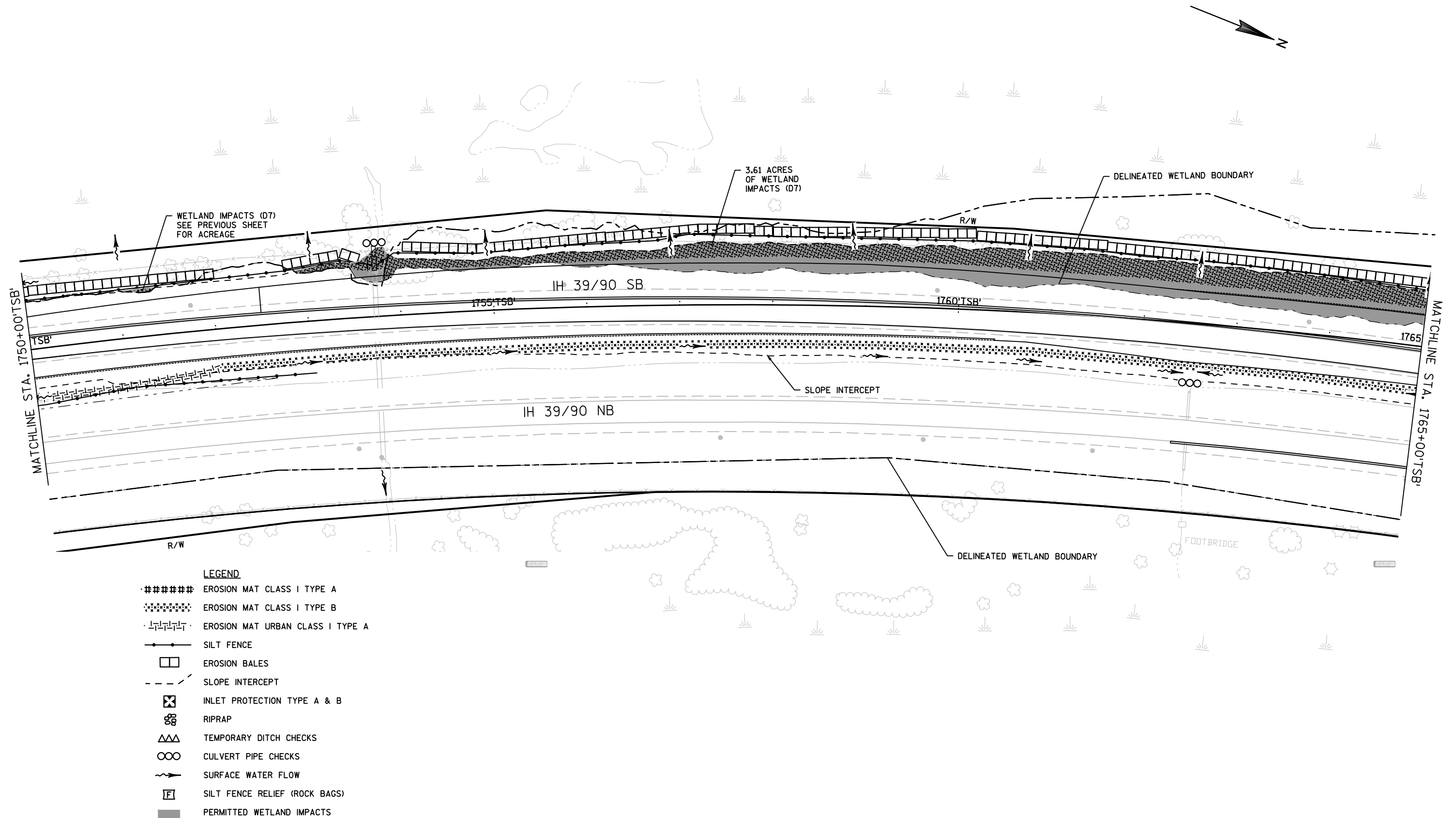
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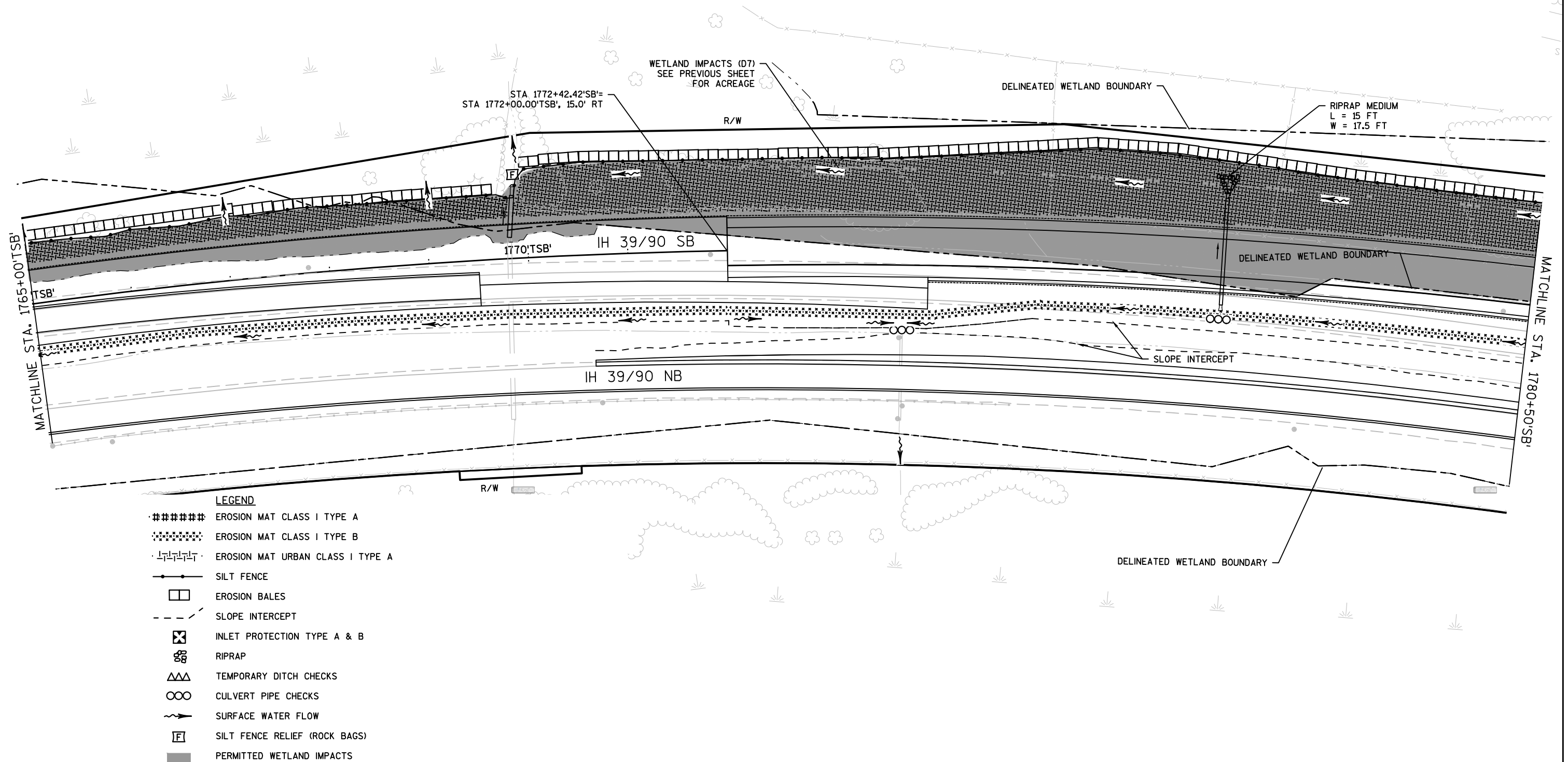
WISDOT/CADDS SHEET 42

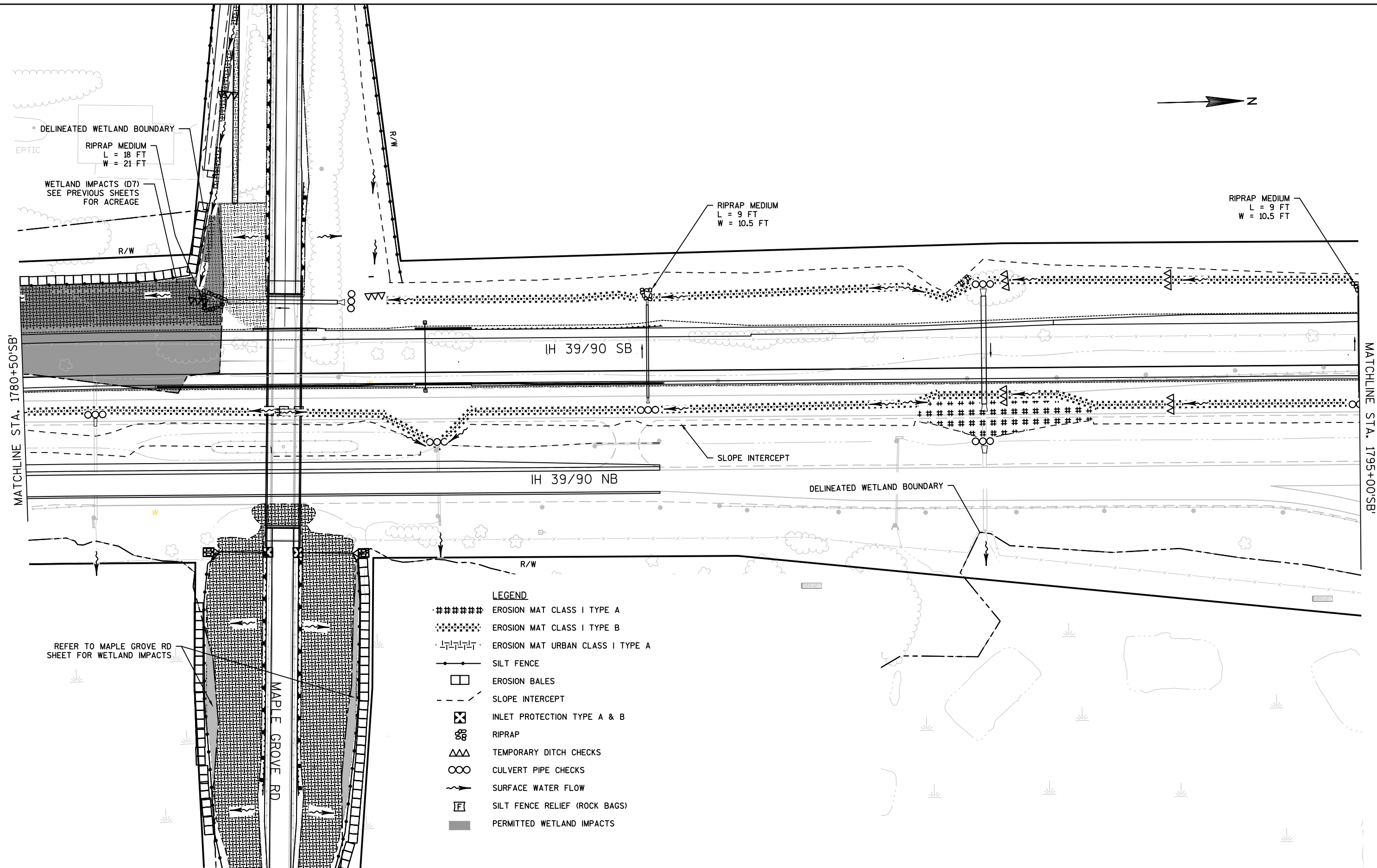


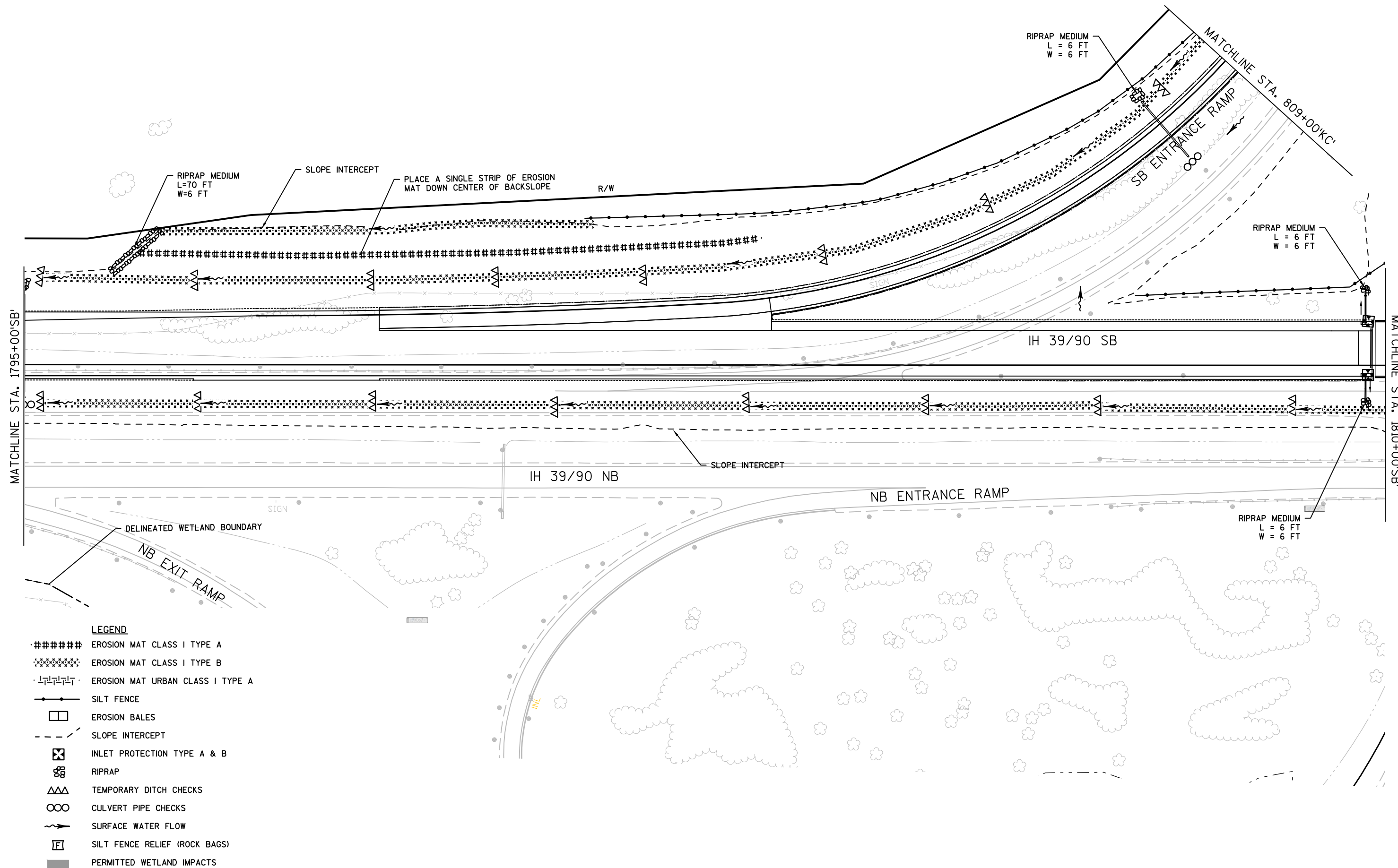


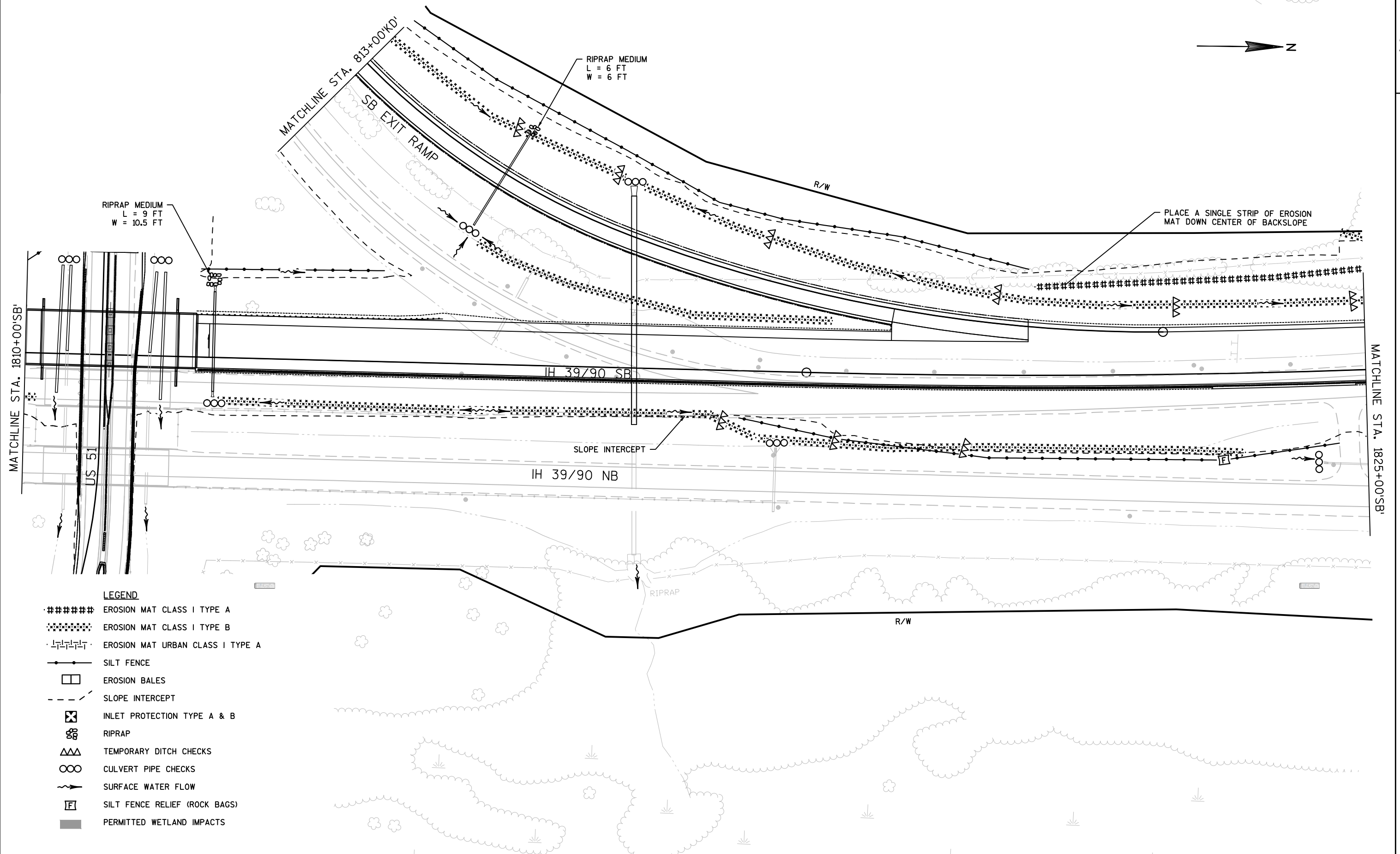


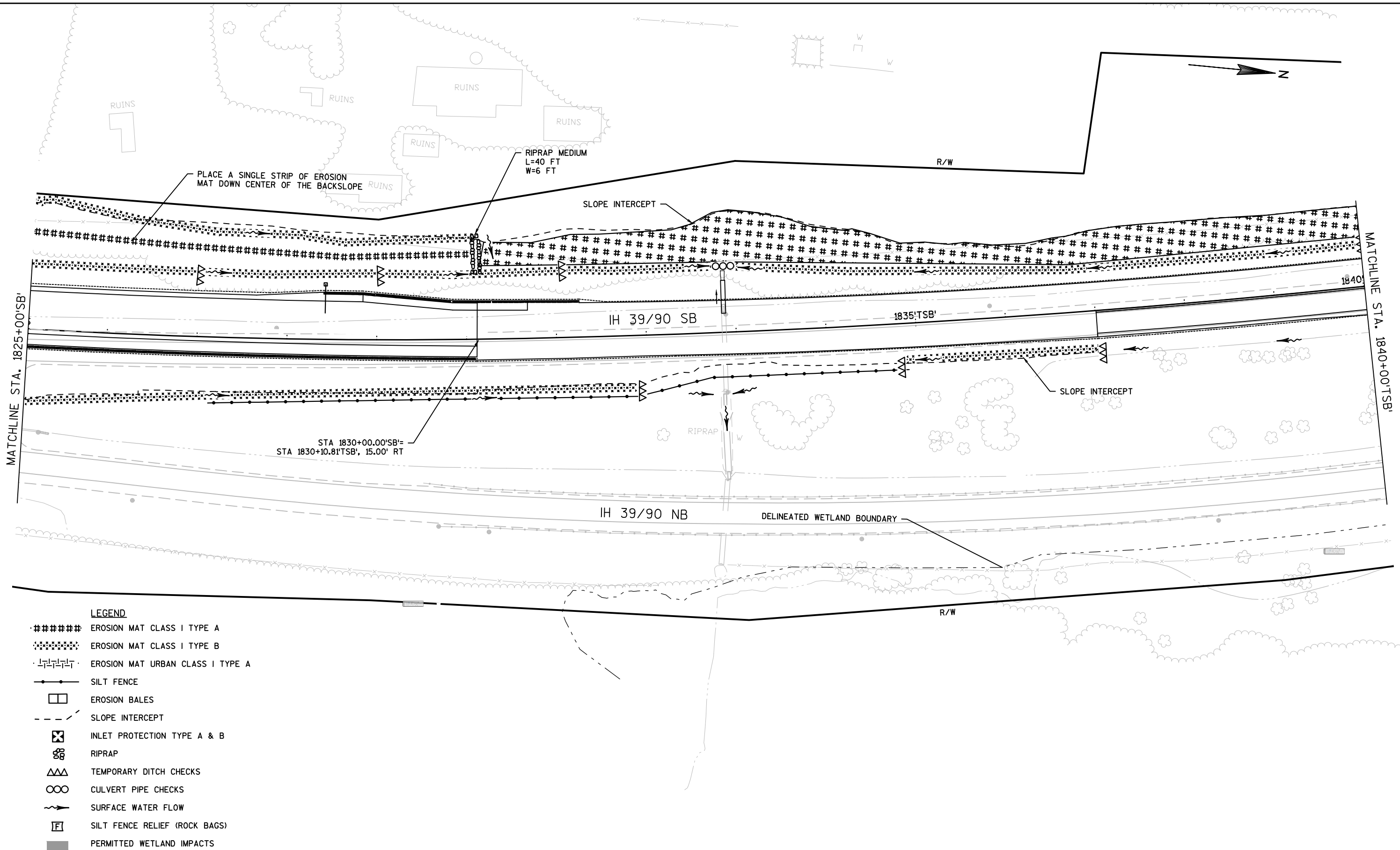










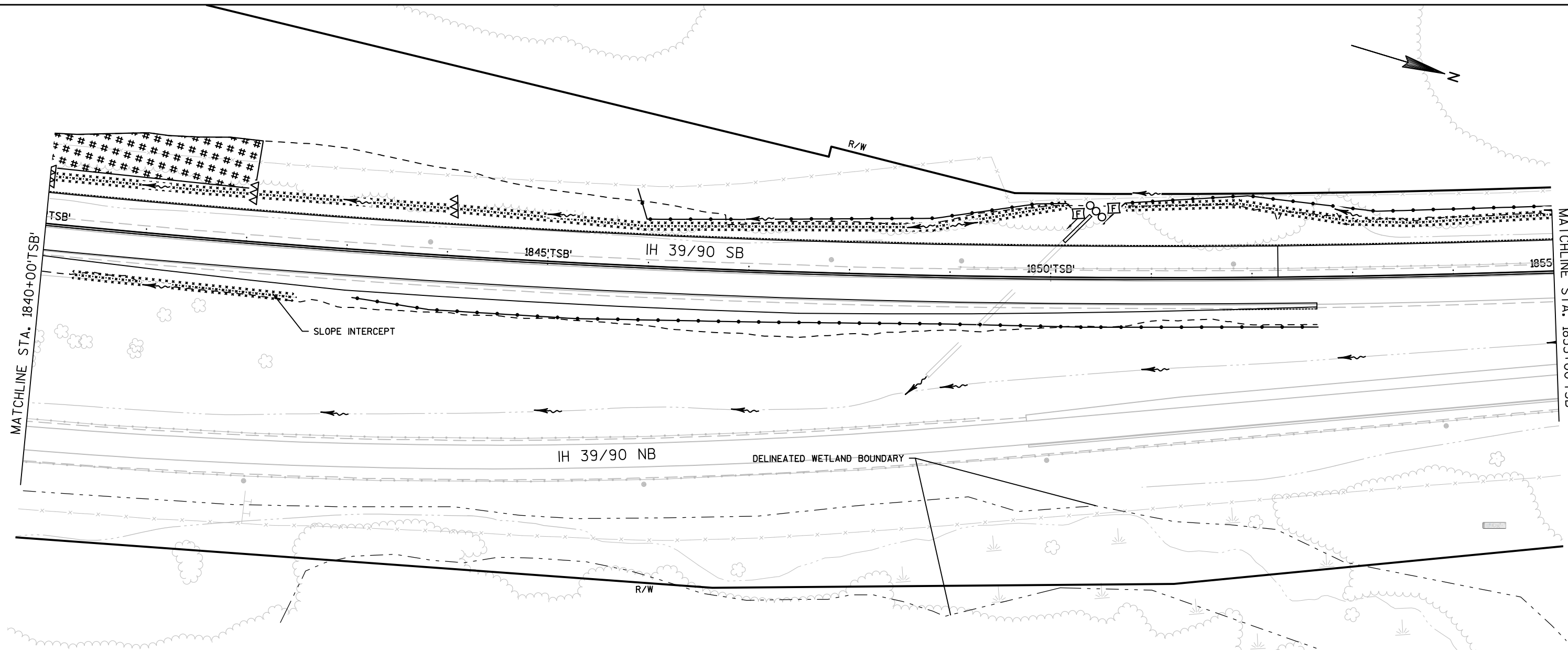


LEGEND

- ##### EROSION MAT CLASS I TYPE A
- ##### EROSION MAT CLASS I TYPE B
- |-|-|-| EROSION MAT URBAN CLASS I TYPE A
- |-|-|-| SILT FENCE
- EROSION BALES
- - - SLOPE INTERCEPT
- ⊗ INLET PROTECTION TYPE A & B
- ⊗ RIPRAP
- △△△ TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- ⌈⌋ SILT FENCE RELIEF (ROCK BAGS)
- PERMITTED WETLAND IMPACTS

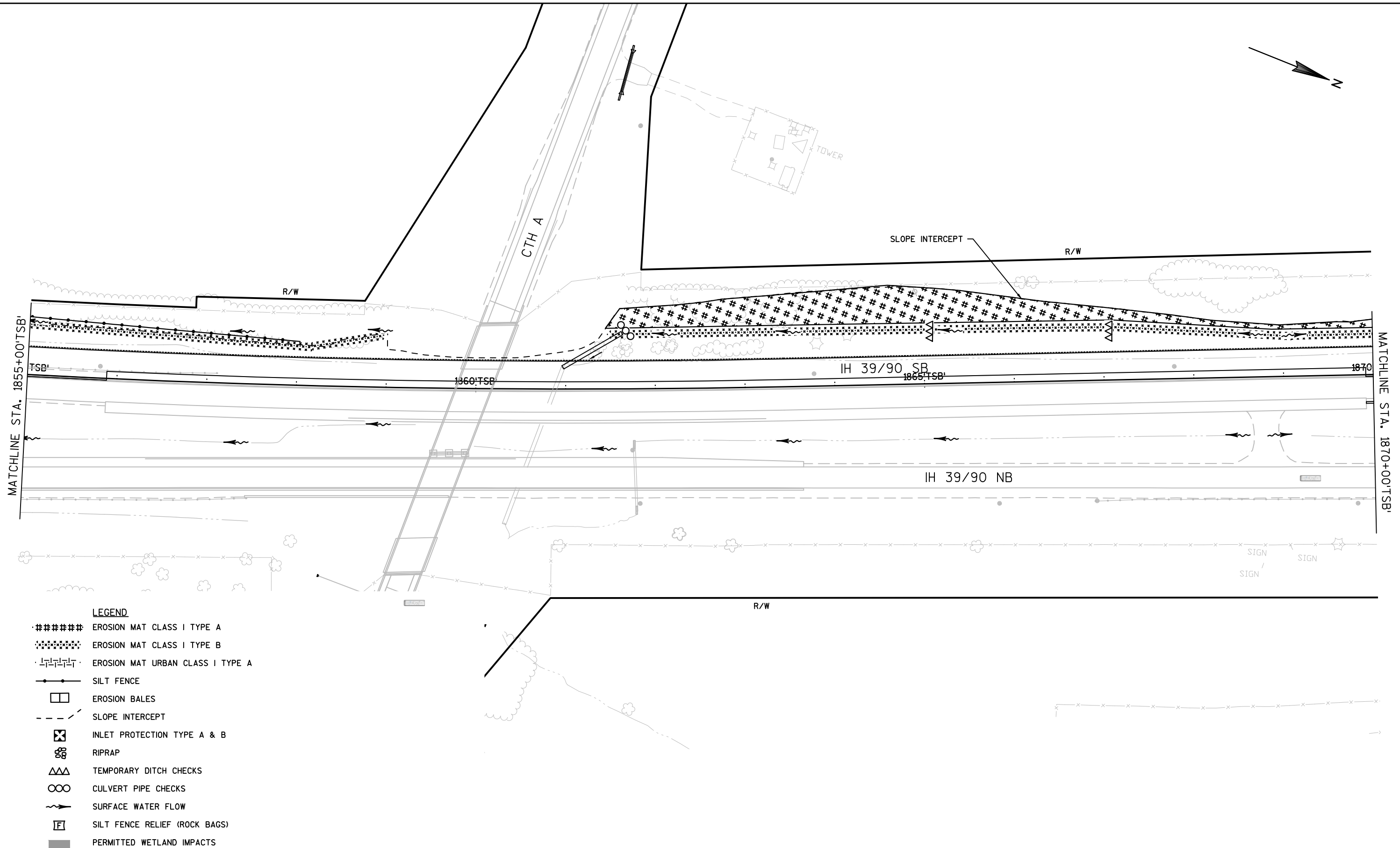
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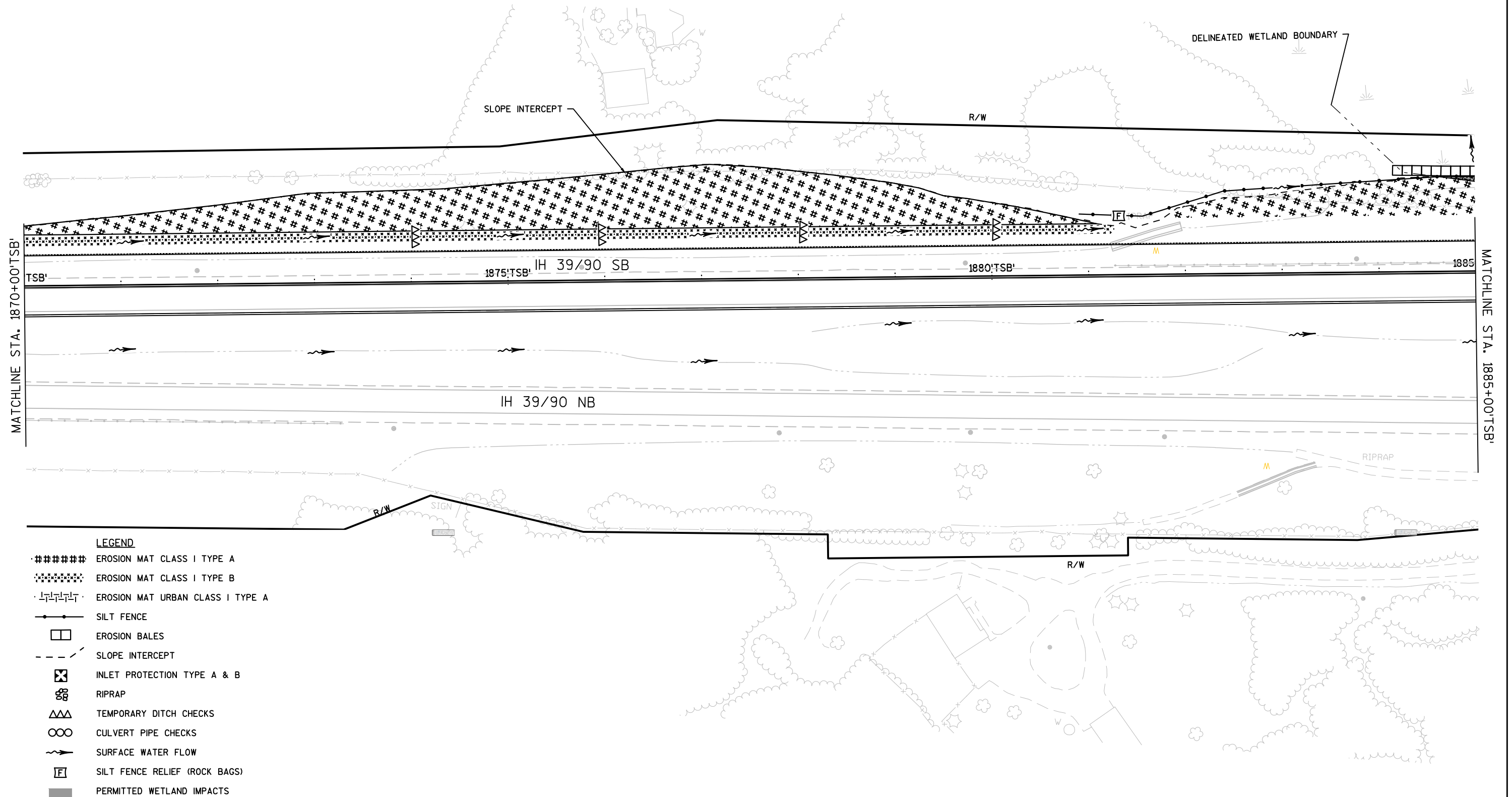
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LEGEND

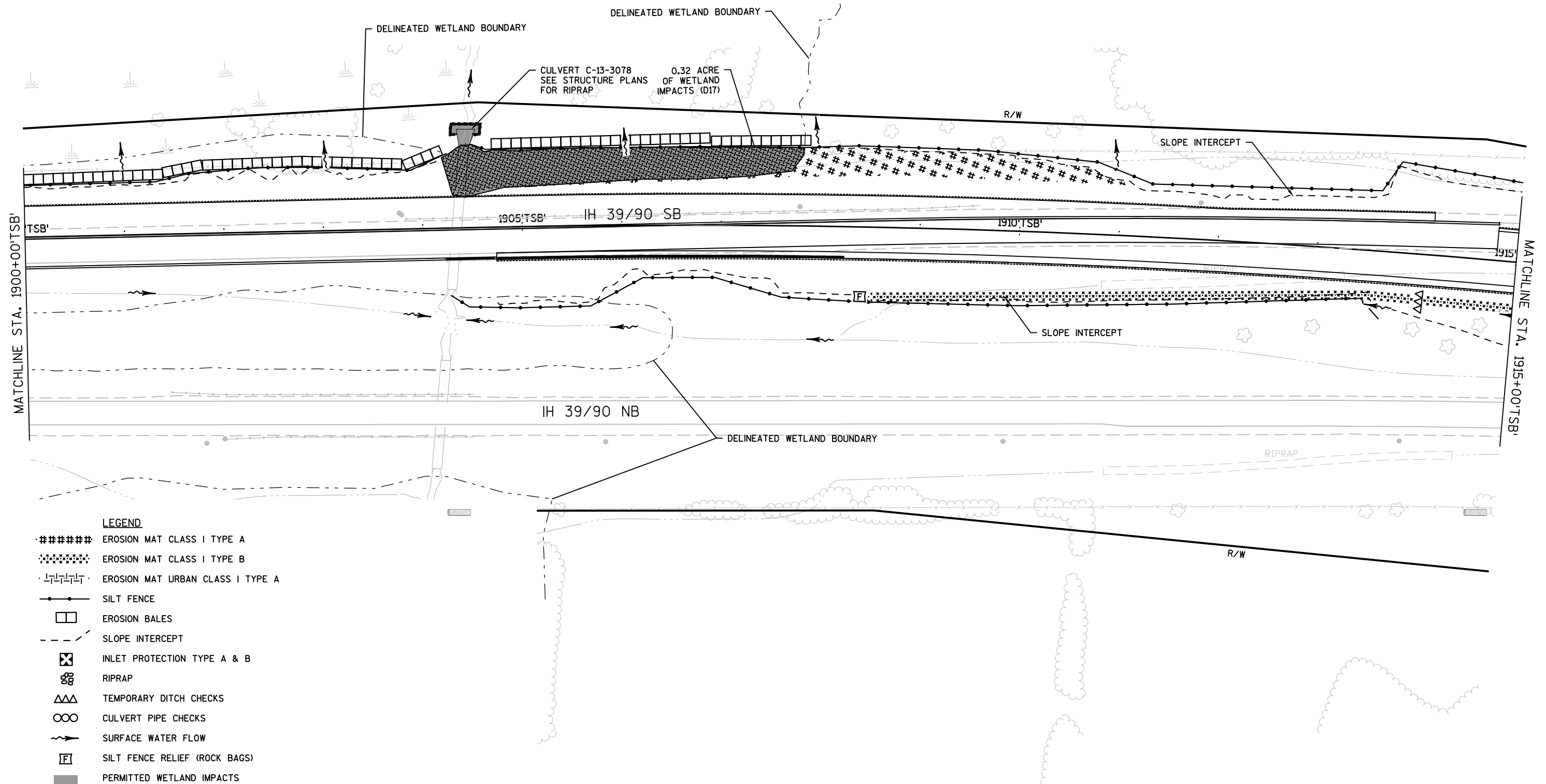
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|---|----------------------------------|
|  | EROSION MAT CLASS I TYPE A |
|  | EROSION MAT CLASS I TYPE B |
|  | EROSION MAT URBAN CLASS I TYPE A |
|  | SILT FENCE |
|  | EROSION BALES |
|  | SLOPE INTERCEPT |
|  | INLET PROTECTION TYPE A & B |
|  | RIPRAP |
|  | TEMPORARY DITCH CHECKS |
|  | CULVERT PIPE CHECKS |
|  | SURFACE WATER FLOW |
|  | SILT FENCE RELIEF (ROCK BAGS) |
|  | PERMITTED WETLAND IMPACTS |

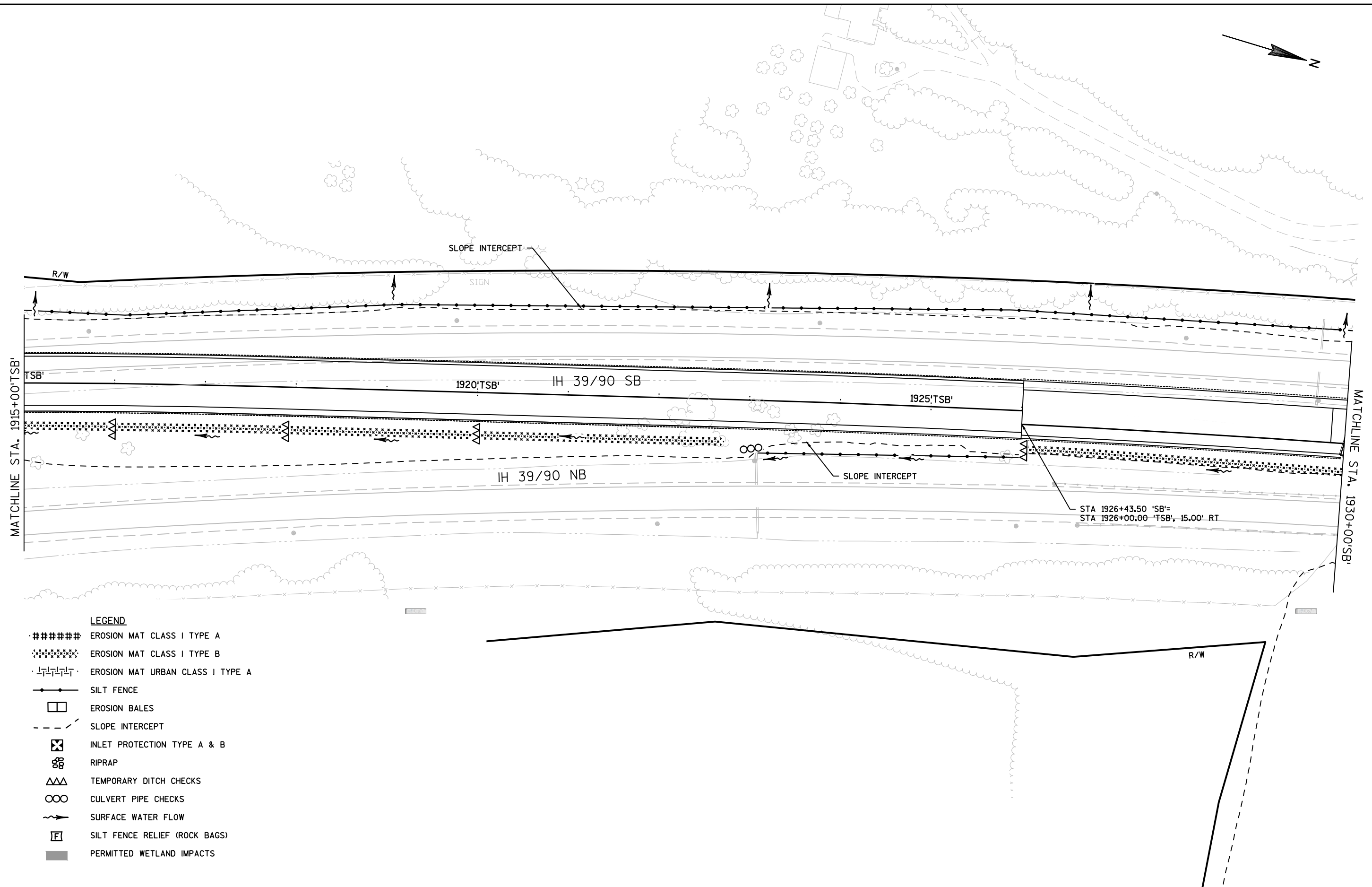




2





**LEGEND**

- ##### EROSION MAT CLASS I TYPE A
- ##### EROSION MAT CLASS I TYPE B
- - - - - EROSION MAT URBAN CLASS I TYPE A
- - - - - SILT FENCE
- EROSION BALES
- - - - - SLOPE INTERCEPT
- ⊗ INLET PROTECTION TYPE A & B
- ⊗ RIPRAP
- △△△ TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- ⌈⌋ SILT FENCE RELIEF (ROCK BAGS)
- PERMITTED WETLAND IMPACTS

PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

EROSION CONTROL - FINAL

SHEET 156

E

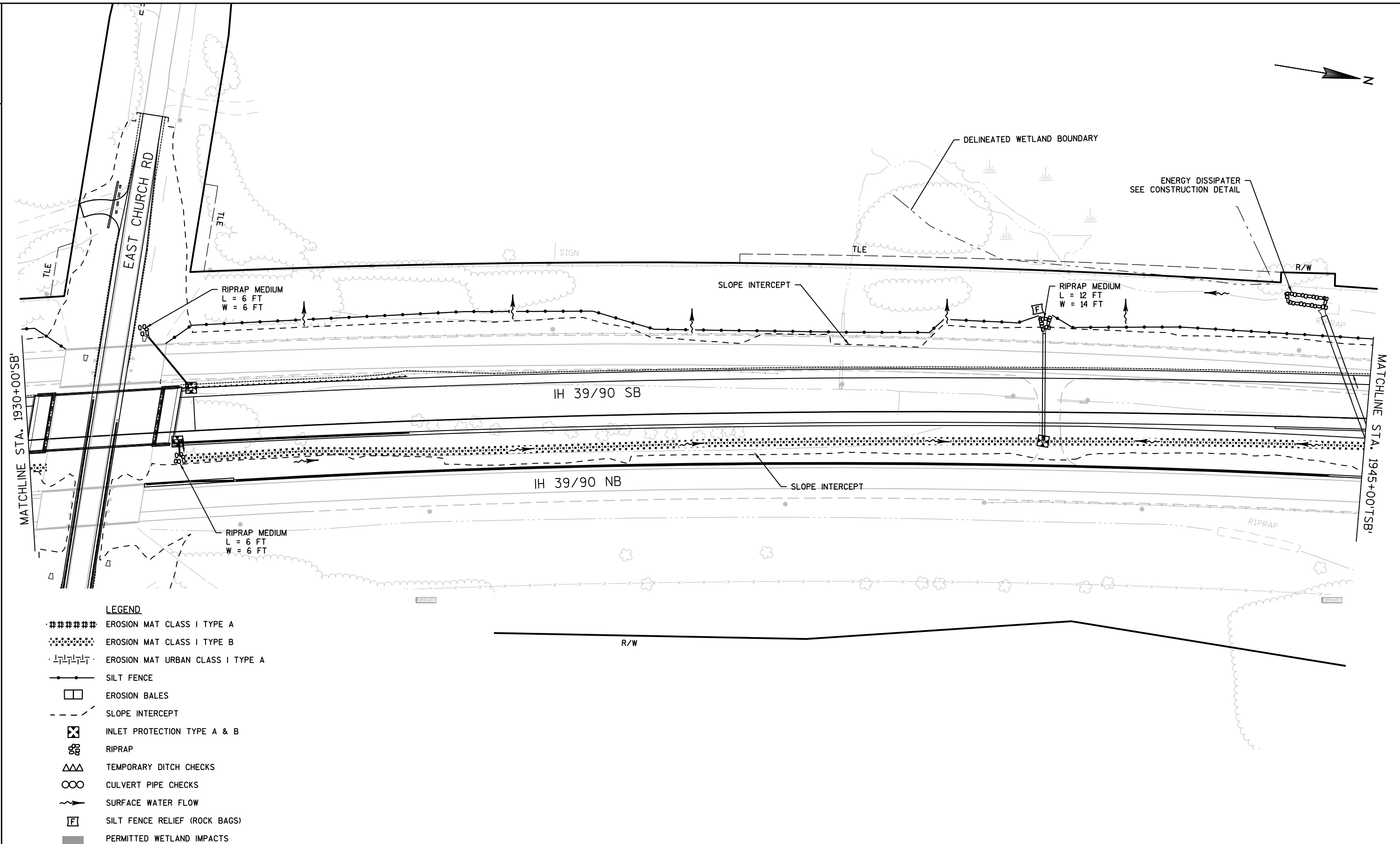
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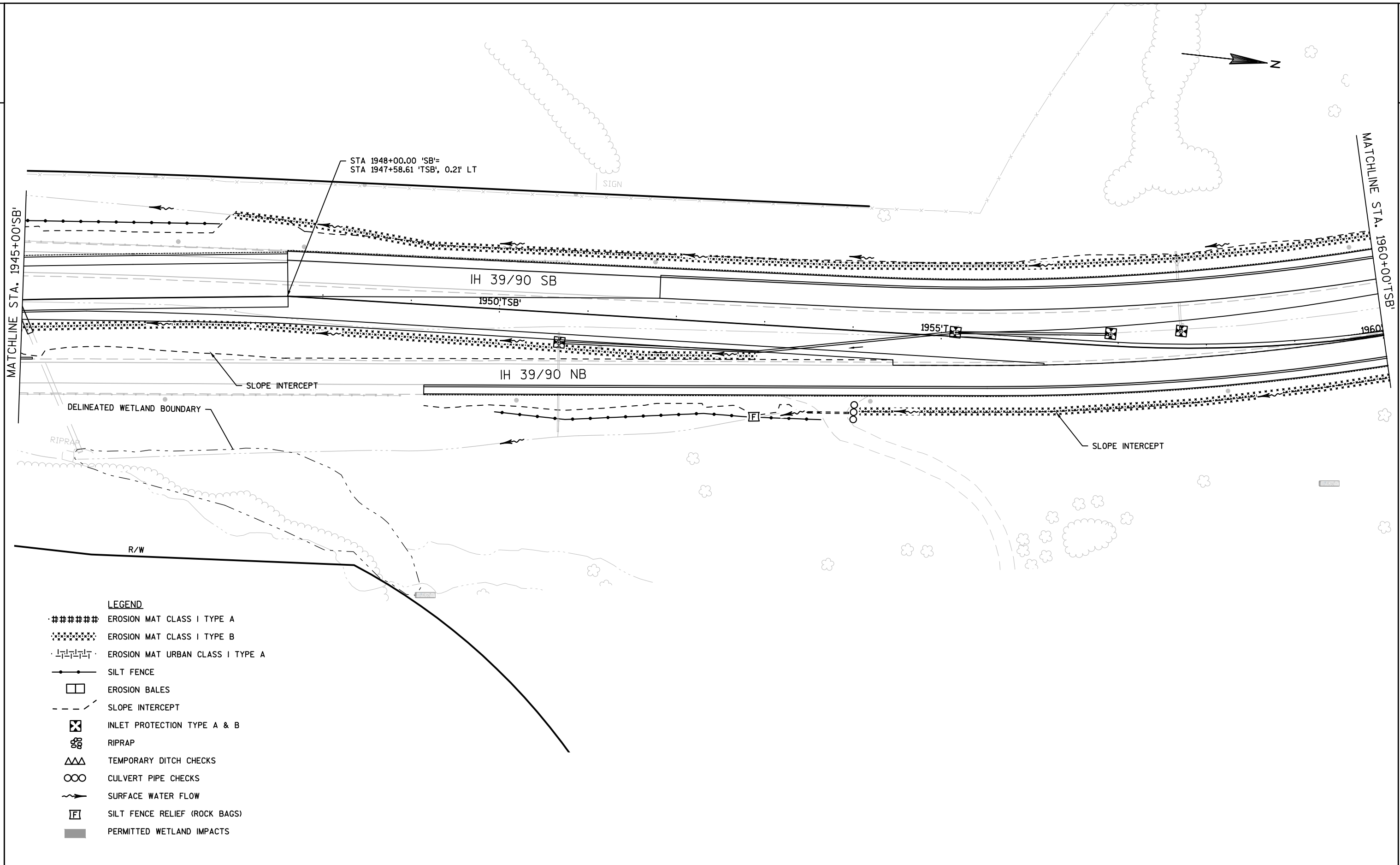
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PLOT BY : KAIT SANFORD

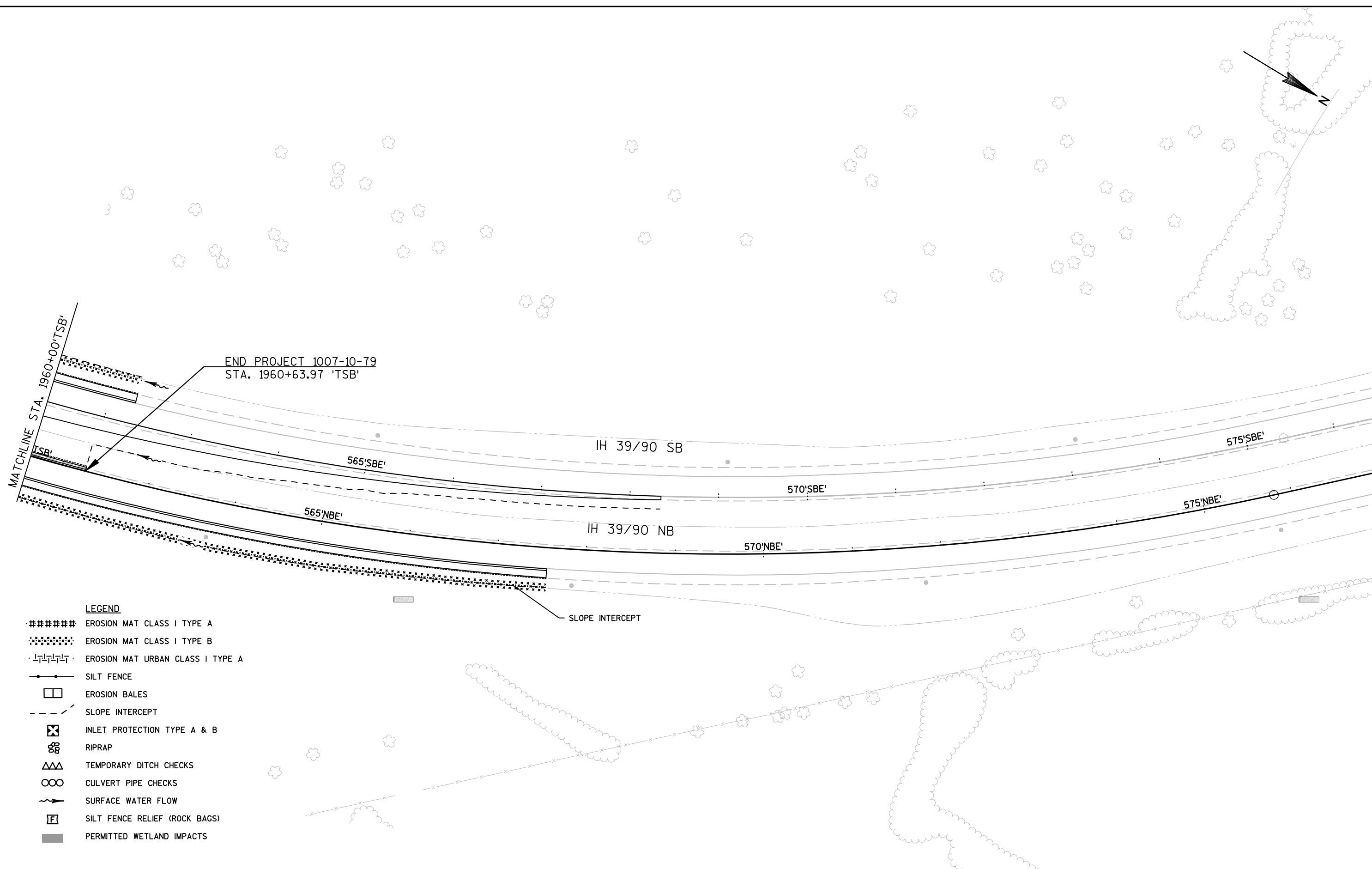
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WISDOT/CADDs SHEET 42





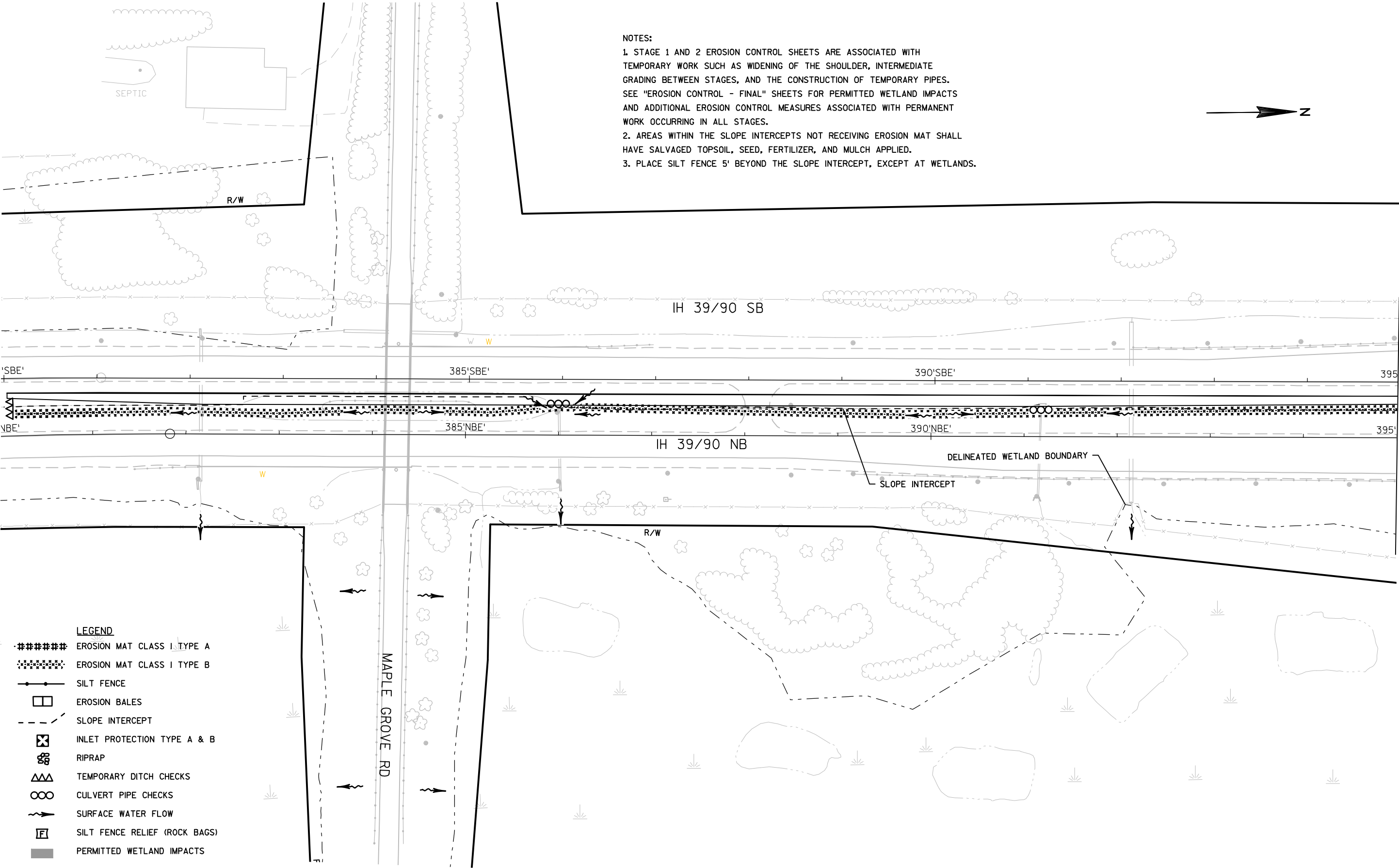
PROJECT NO:1007-10-79	HWY:IH 39	COUNTY:DANE	EROSION CONTROL - FINAL	SHEET 158	E
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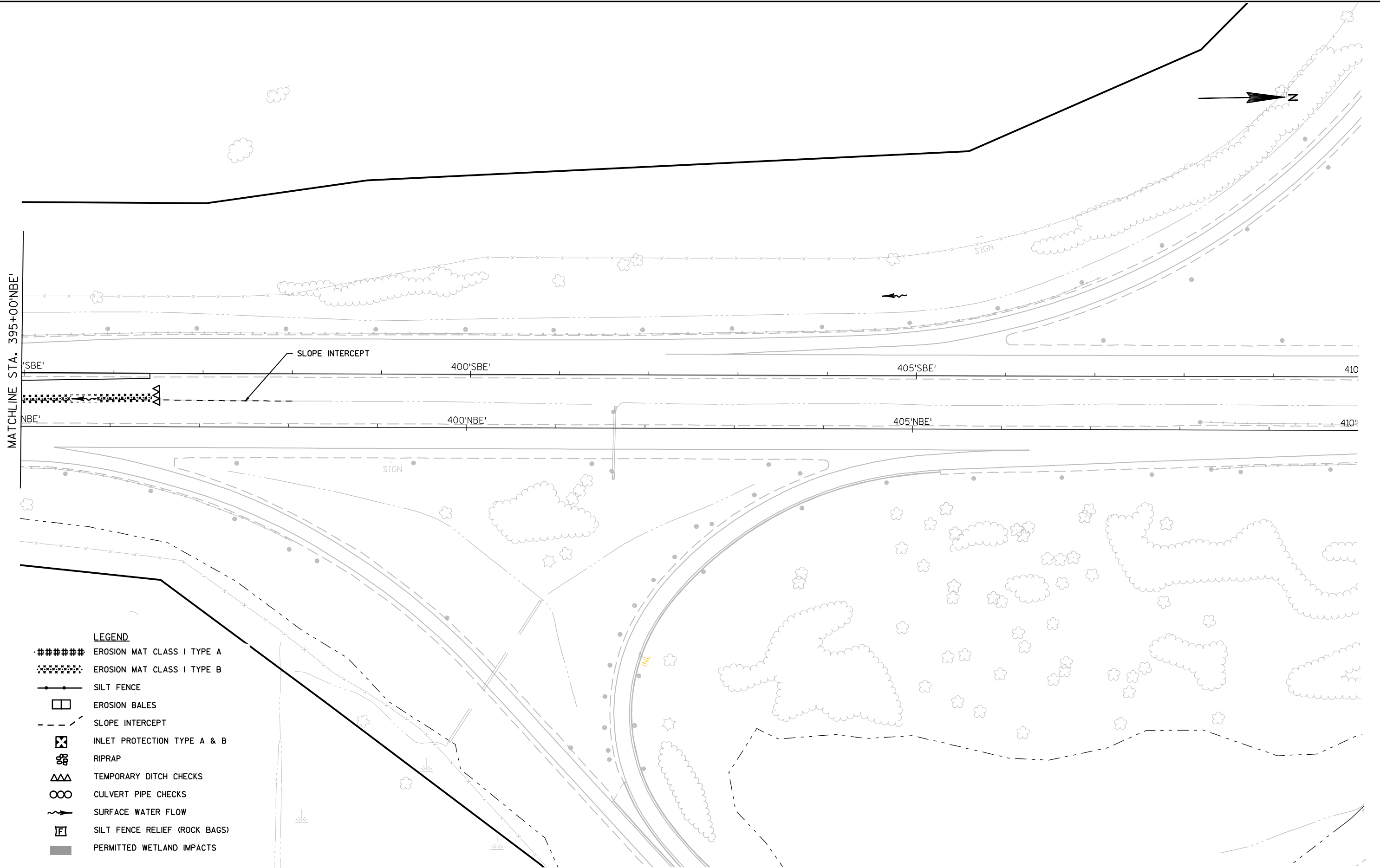
- ##### EROSION MAT CLASS I TYPE A
- ##### EROSION MAT CLASS I TYPE B
- ##### EROSION MAT URBAN CLASS I TYPE A
- SILT FENCE
- EROSION BALES
- - - SLOPE INTERCEPT
- ⊗ INLET PROTECTION TYPE A & B
- ⊞ RIPRAP
- △△△ TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- ⊞ SILT FENCE RELIEF (ROCK BAGS)
- PERMITTED WETLAND IMPACTS

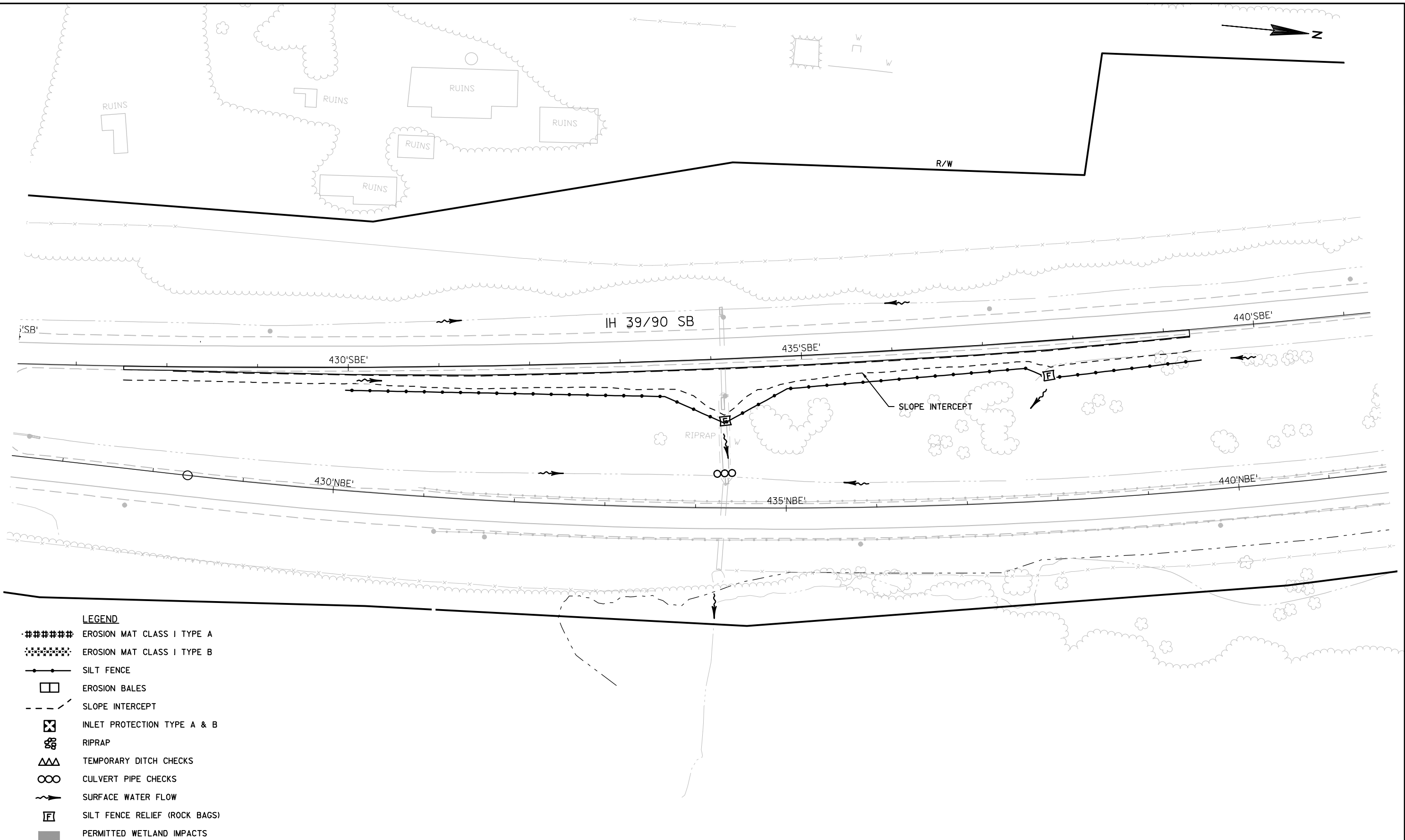
NOTES:
1. STAGE 1 AND 2 EROSION CONTROL SHEETS ARE ASSOCIATED WITH TEMPORARY WORK SUCH AS WIDENING OF THE SHOULDER, INTERMEDIATE GRADING BETWEEN STAGES, AND THE CONSTRUCTION OF TEMPORARY PIPES. SEE "EROSION CONTROL - FINAL" SHEETS FOR PERMITTED WETLAND IMPACTS AND ADDITIONAL EROSION CONTROL MEASURES ASSOCIATED WITH PERMANENT WORK OCCURRING IN ALL STAGES.
2. AREAS WITHIN THE SLOPE INTERCEPTS NOT RECEIVING EROSION MAT SHALL HAVE SALVAGED TOPSOIL, SEED, FERTILIZER, AND MULCH APPLIED.
3. PLACE SILT FENCE 5' BEYOND THE SLOPE INTERCEPT, EXCEPT AT WETLANDS.



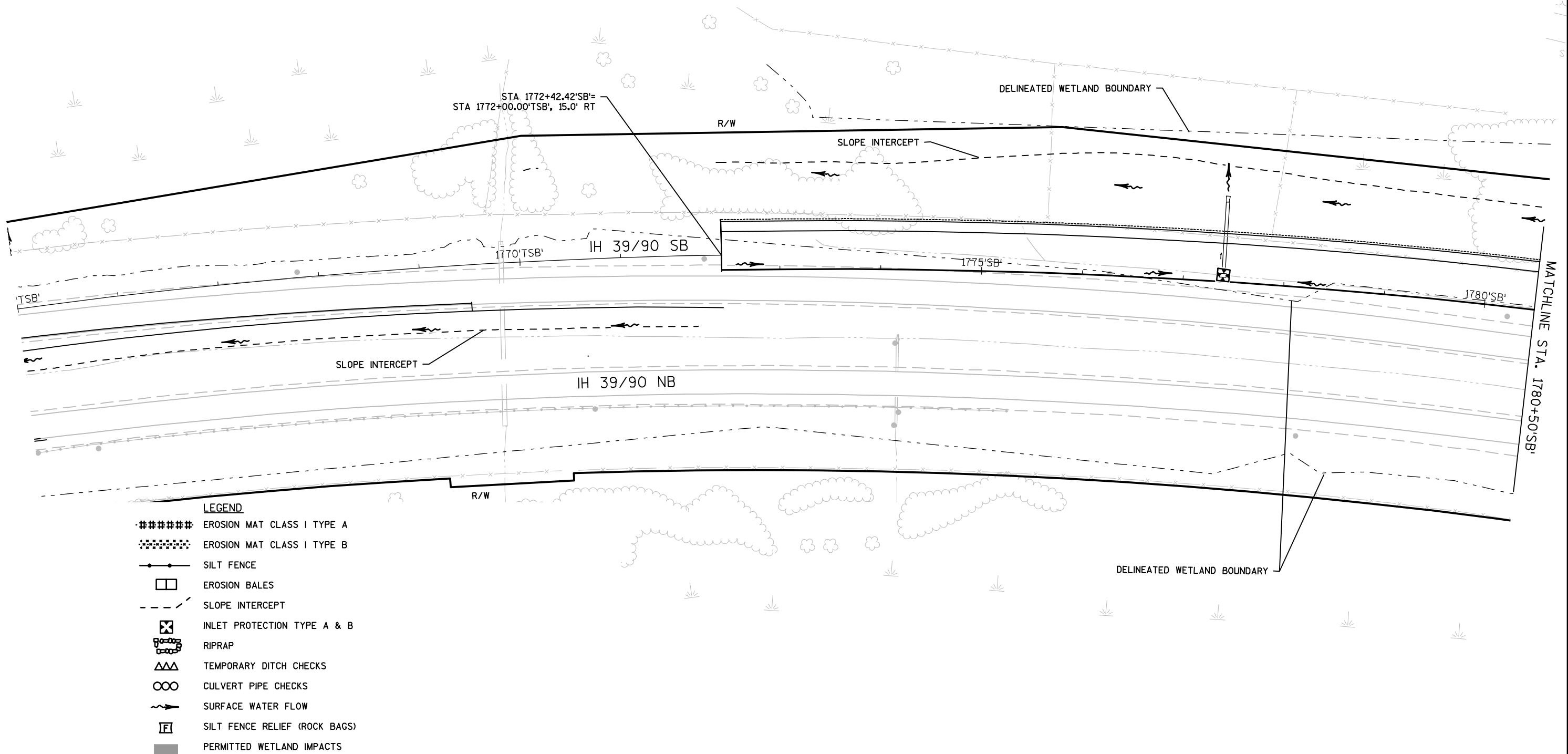
MATCHLINE STA. 395+00'NBE'

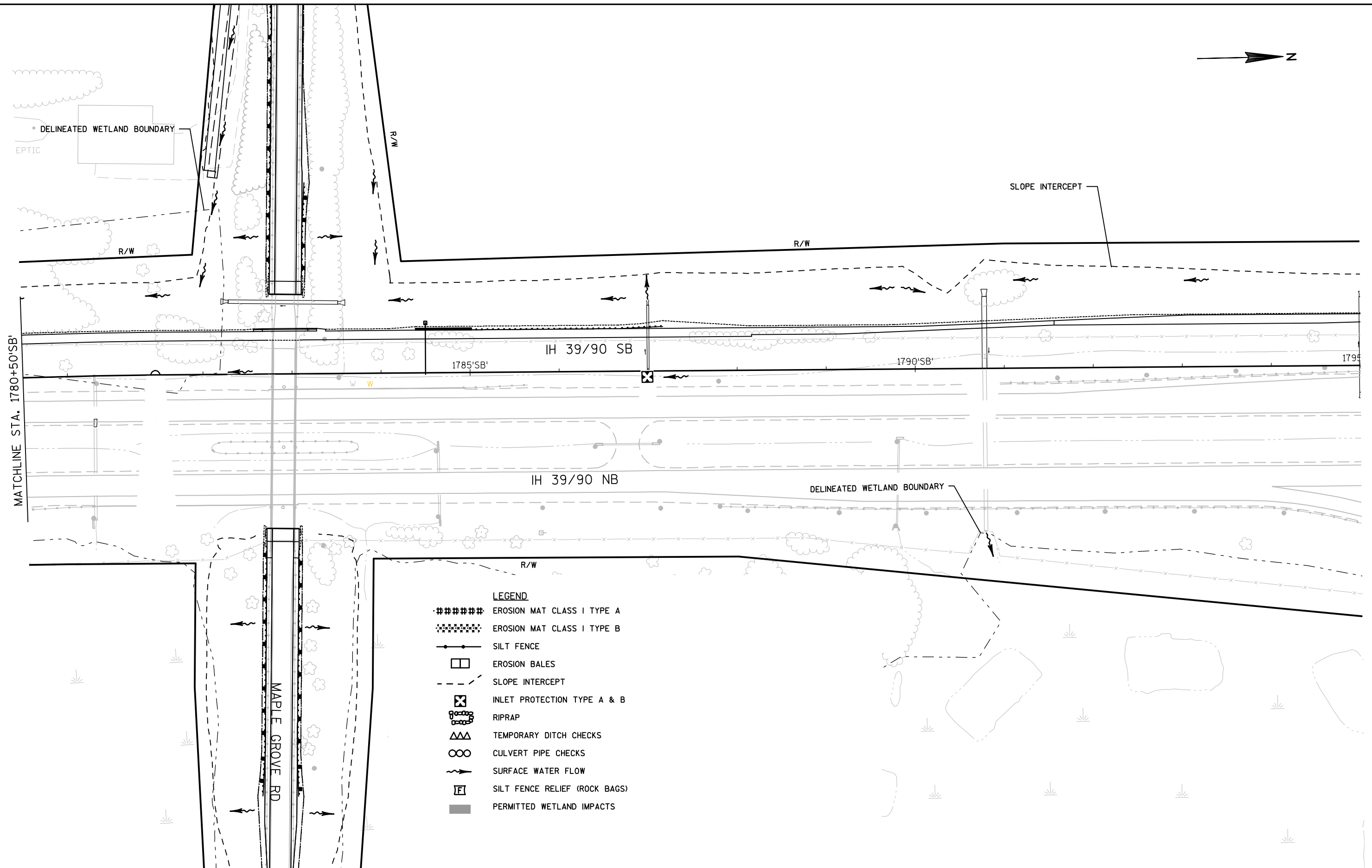
- LEGEND**
- ##### EROSION MAT CLASS I TYPE A
 - ##### EROSION MAT CLASS I TYPE B
 - SILT FENCE
 - ▢ EROSION BALES
 - - - SLOPE INTERCEPT
 - ⊗ INLET PROTECTION TYPE A & B
 - gg RIPRAP
 - ΔΔΔ TEMPORARY DITCH CHECKS
 - ∞ CULVERT PIPE CHECKS
 - SURFACE WATER FLOW
 - ⌈⌋ SILT FENCE RELIEF (ROCK BAGS)
 - PERMITTED WETLAND IMPACTS

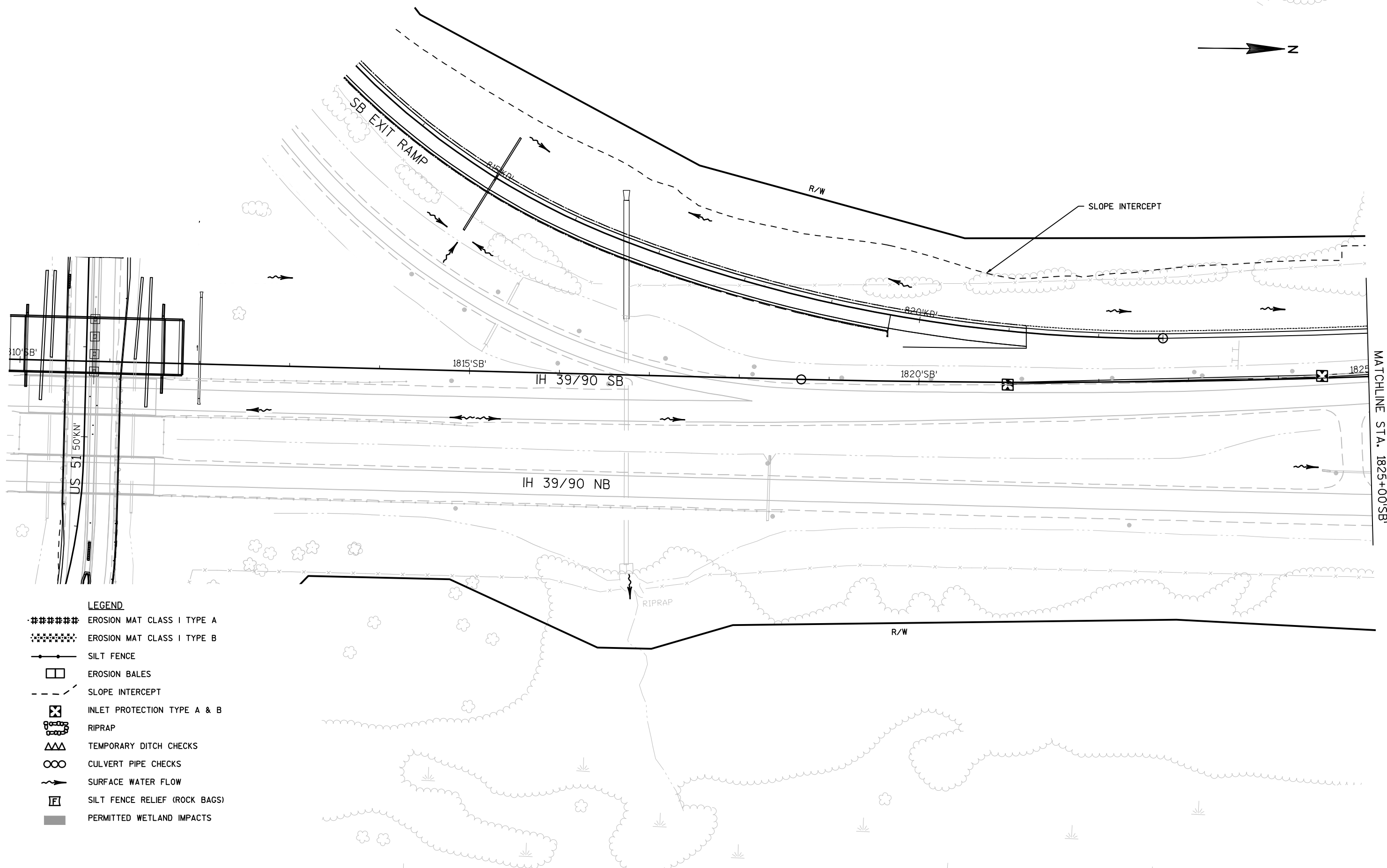




NOTE:
STAGE 2 EROSION CONTROL MEASURES SHOWN ARE FOR TEMPORARY DRAINAGE
STRUCTURES ONLY. TEMPORARY PIPES AND STRUCTURES INSTALLED IN STAGE 2
WILL BE REMOVED OR ABANDONED IN STAGE 4 (SEE TEMPORARY STORM SEWER
PLANS FOR MORE DETAILS).





**LEGEND**

- ##### EROSION MAT CLASS I TYPE A
- ##### EROSION MAT CLASS I TYPE B
- SILT FENCE
- EROSION BALES
- - - SLOPE INTERCEPT
- ⊗ INLET PROTECTION TYPE A & B
- ⊗ RIPRAP
- △△△ TEMPORARY DITCH CHECKS
- ∞ CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- ⌈ F ⌋ SILT FENCE RELIEF (ROCK BAGS)
- PERMITTED WETLAND IMPACTS

PROJECT NO:1007-10-79

HWY:IH 39

COUNTY:DANE

EROSION CONTROL - STAGE 2

SHEET

165

E

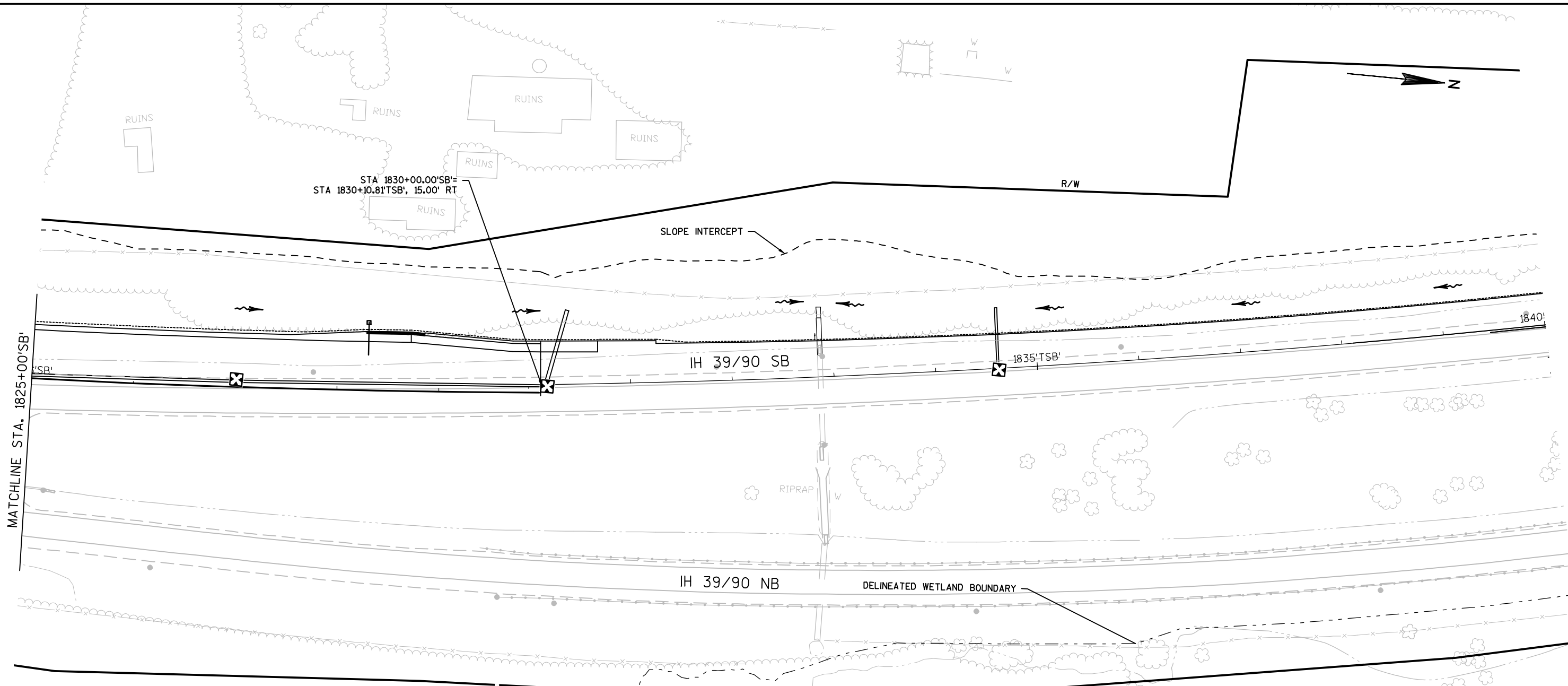
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PLOT DATE : 7/20/2015 11:52 AM

PLOT BY : KATIE NAKLES

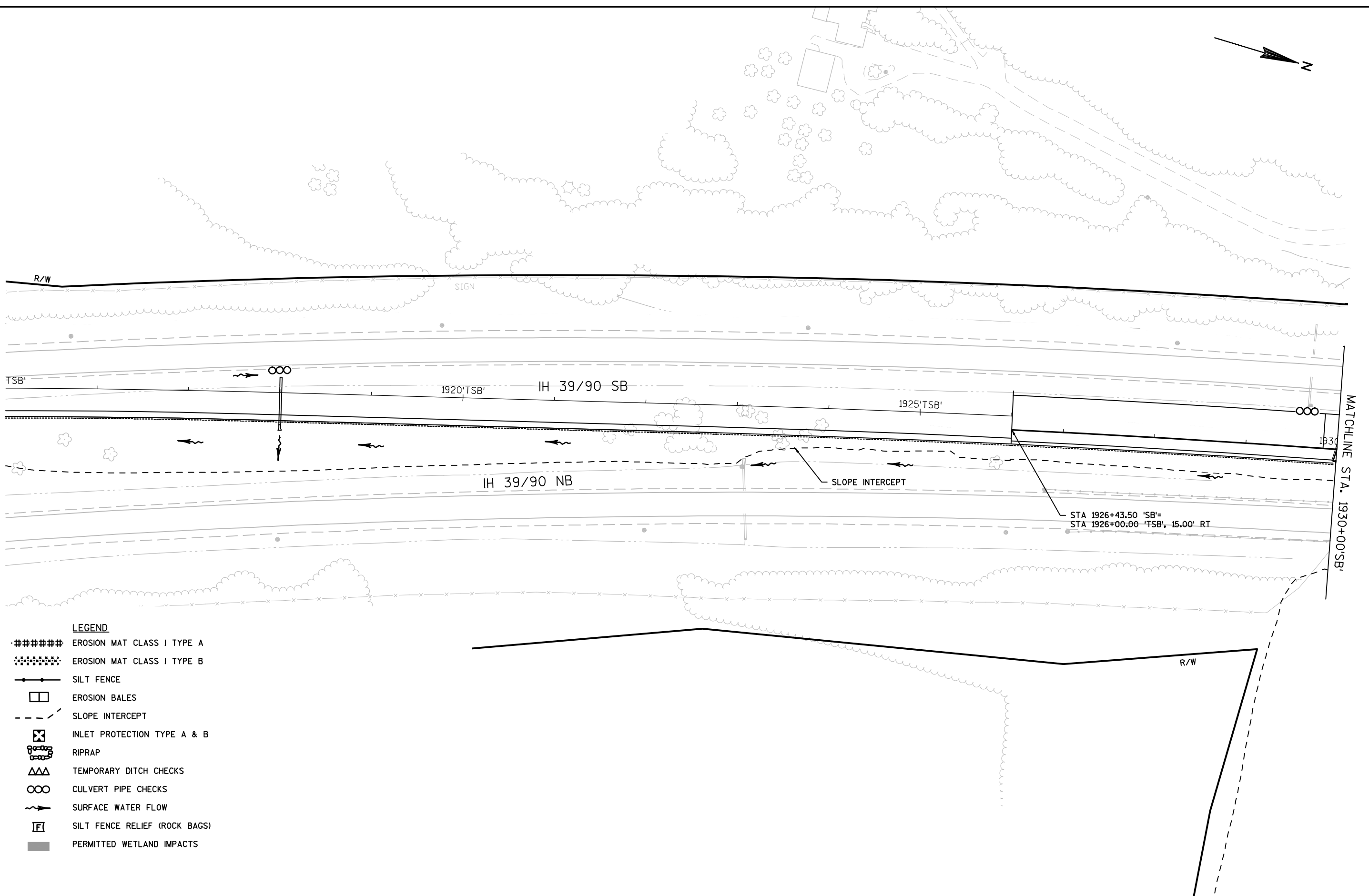
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WISDOT/CADDS SHEET 42



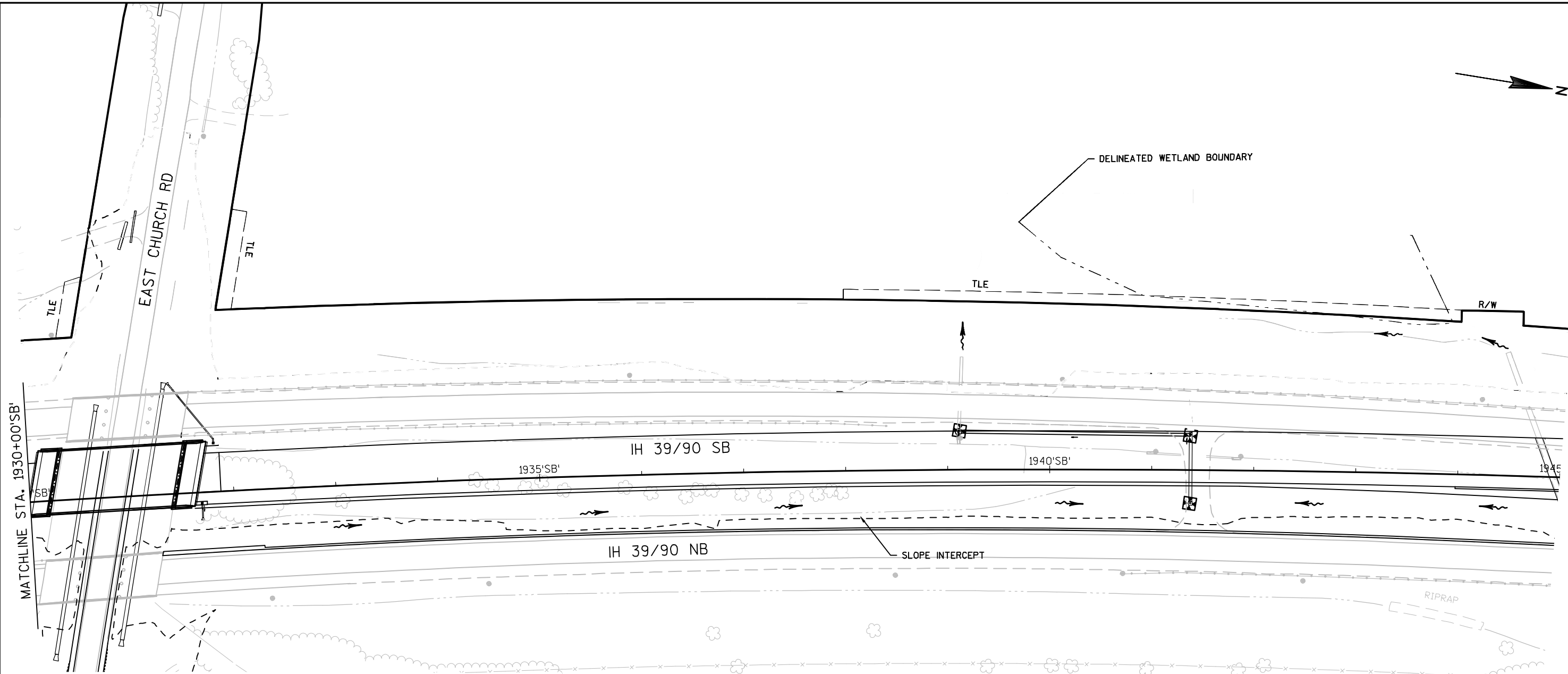
LEGEND

- ##### EROSION MAT CLASS I TYPE A
- ##### EROSION MAT CLASS I TYPE B
- SILT FENCE
- ▢ EROSION BALES
- - - SLOPE INTERCEPT
- ⊗ INLET PROTECTION TYPE A & B
- ⦿ RIPRAP
- △△△ TEMPORARY DITCH CHECKS
- ∞ CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- ⌈⌋ SILT FENCE RELIEF (ROCK BAGS)
- PERMITTED WETLAND IMPACTS



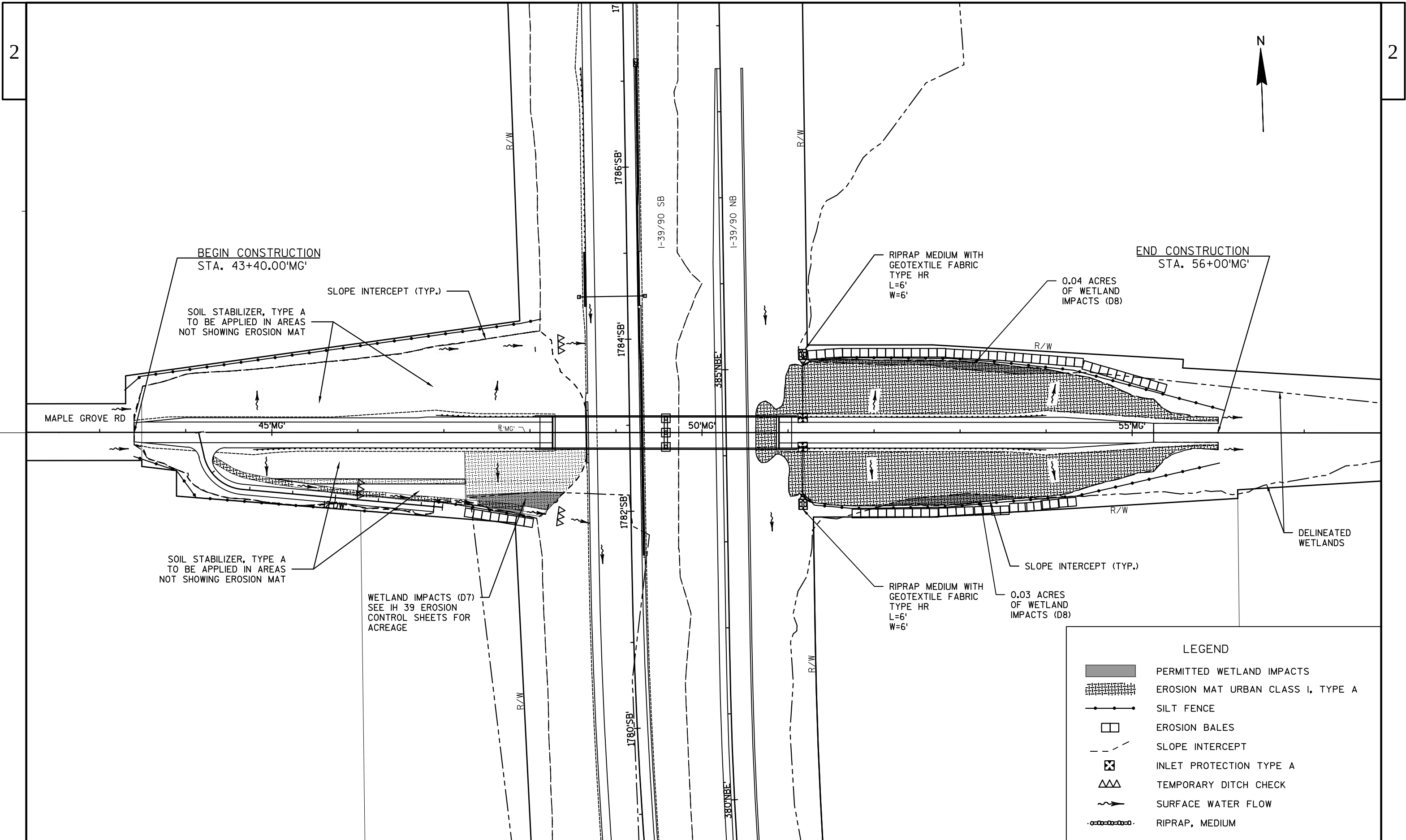
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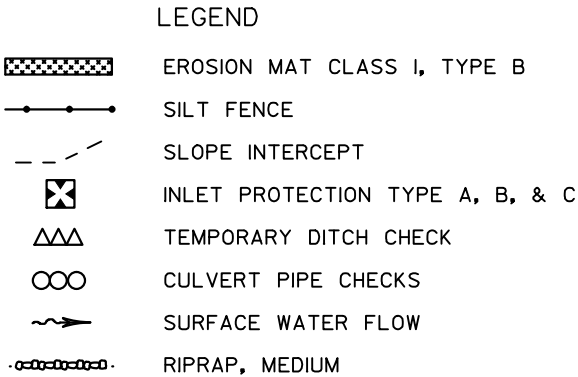
- ##### EROSION MAT CLASS I TYPE A
- ##### EROSION MAT CLASS I TYPE B
- SILT FENCE
- EROSION BALES
- - - SLOPE INTERCEPT
- ⊗ INLET PROTECTION TYPE A & B
- ⊗ RIPRAP
- △△△ TEMPORARY DITCH CHECKS
- ∞∞ CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- ⌈⌋ SILT FENCE RELIEF (ROCK BAGS)
- PERMITTED WETLAND IMPACTS

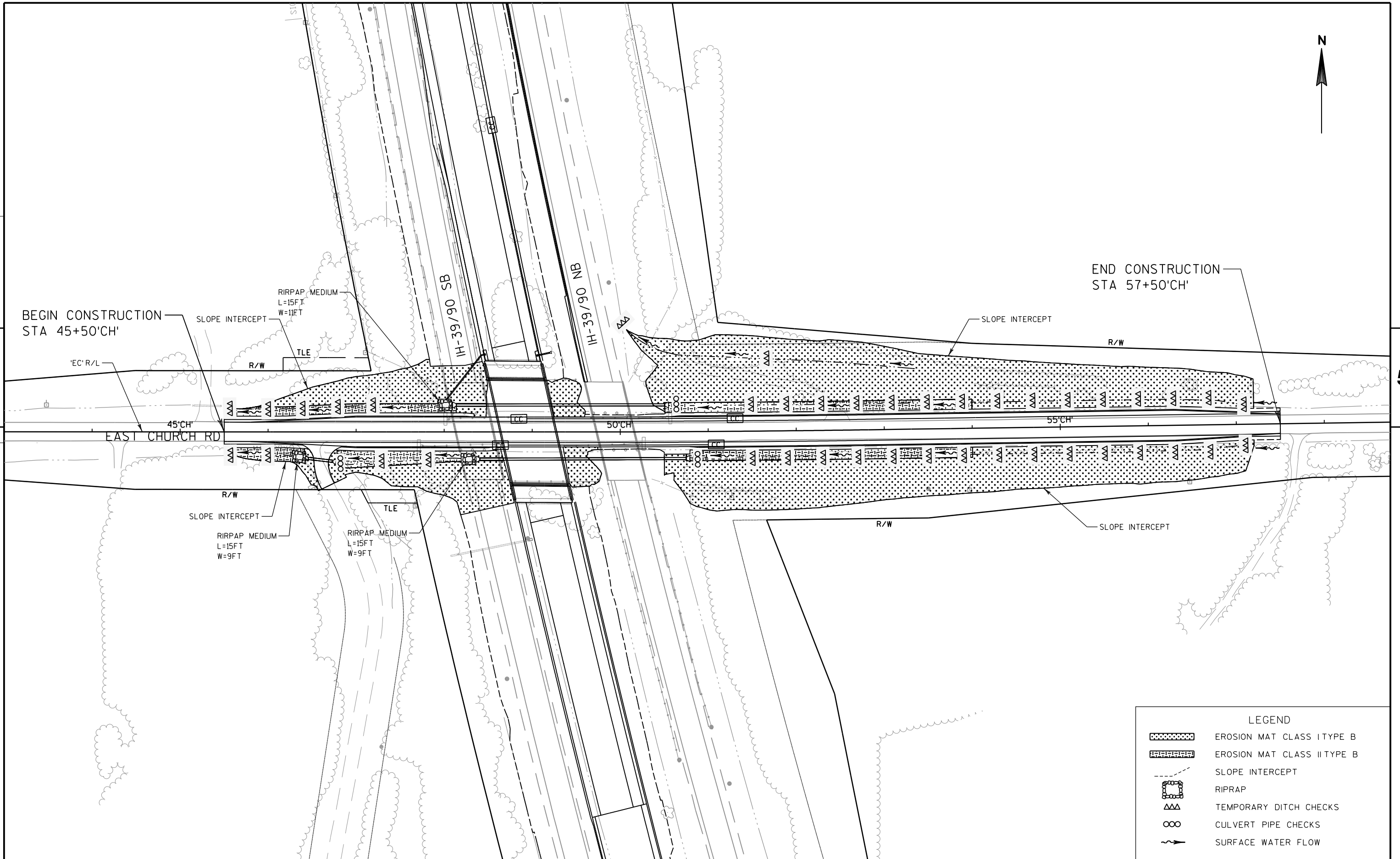


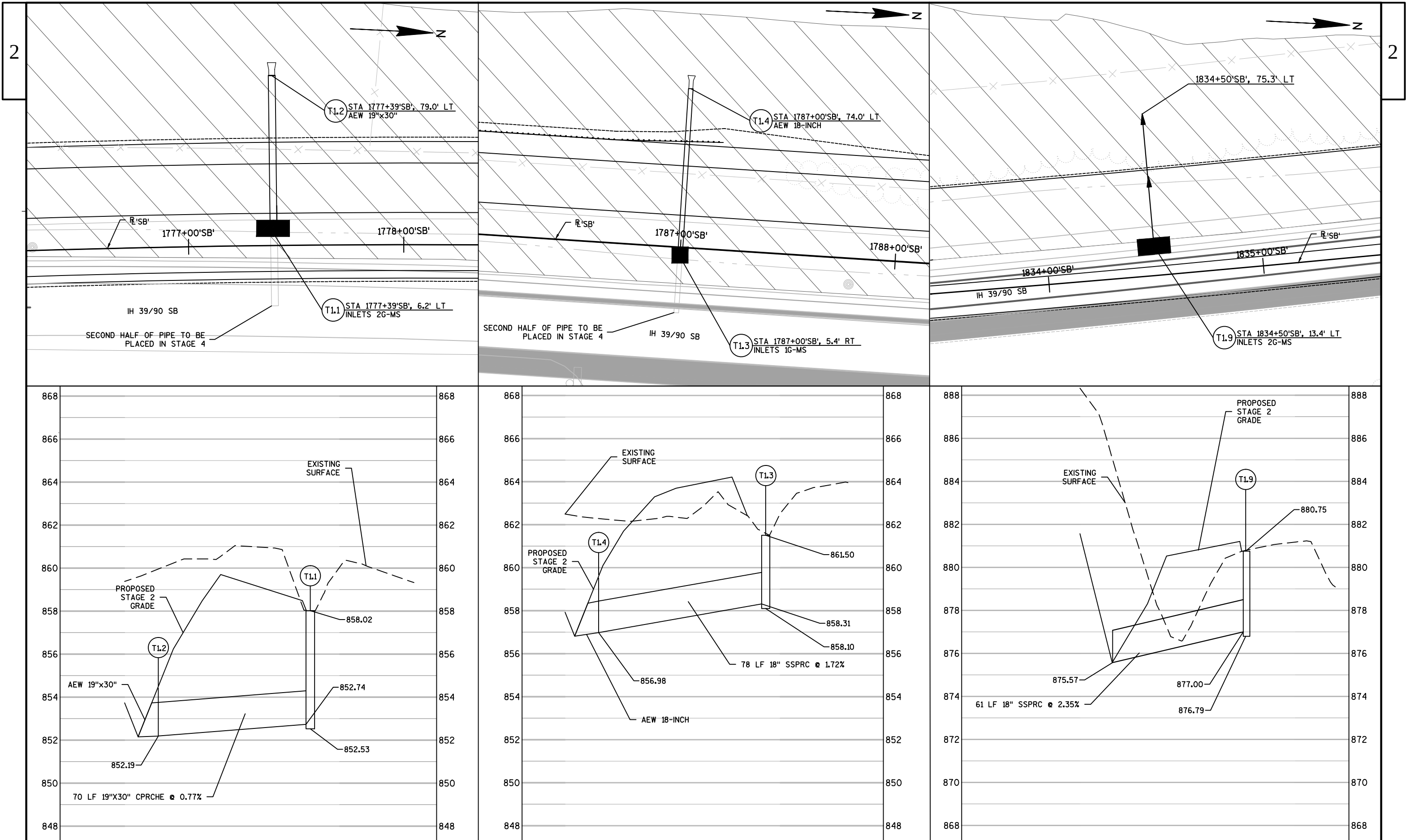
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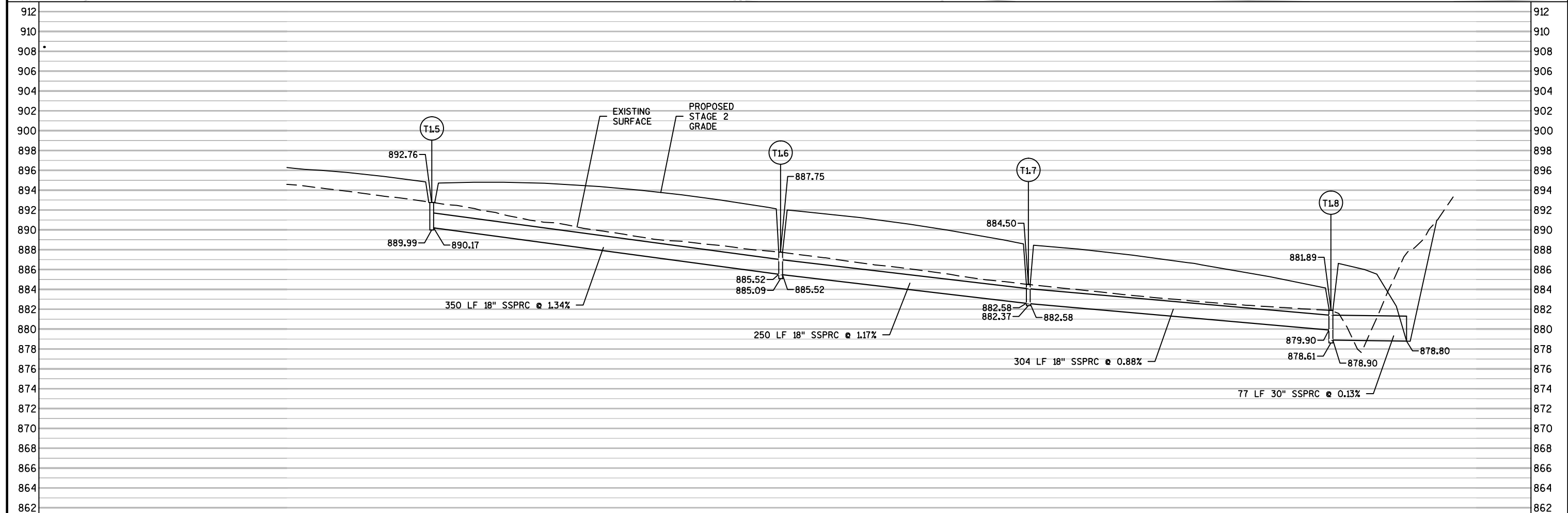
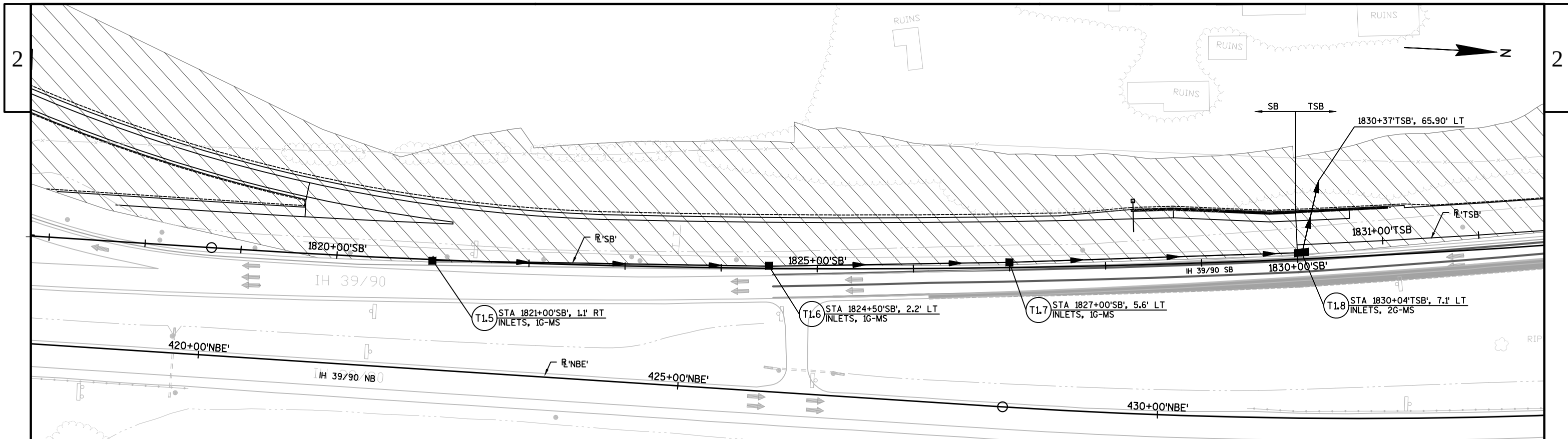
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- SILT FENCE
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- - - SLOPE INTERCEPT
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- SURFACE WATER FLOW
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- PERMITTED WETLAND IMPACTS

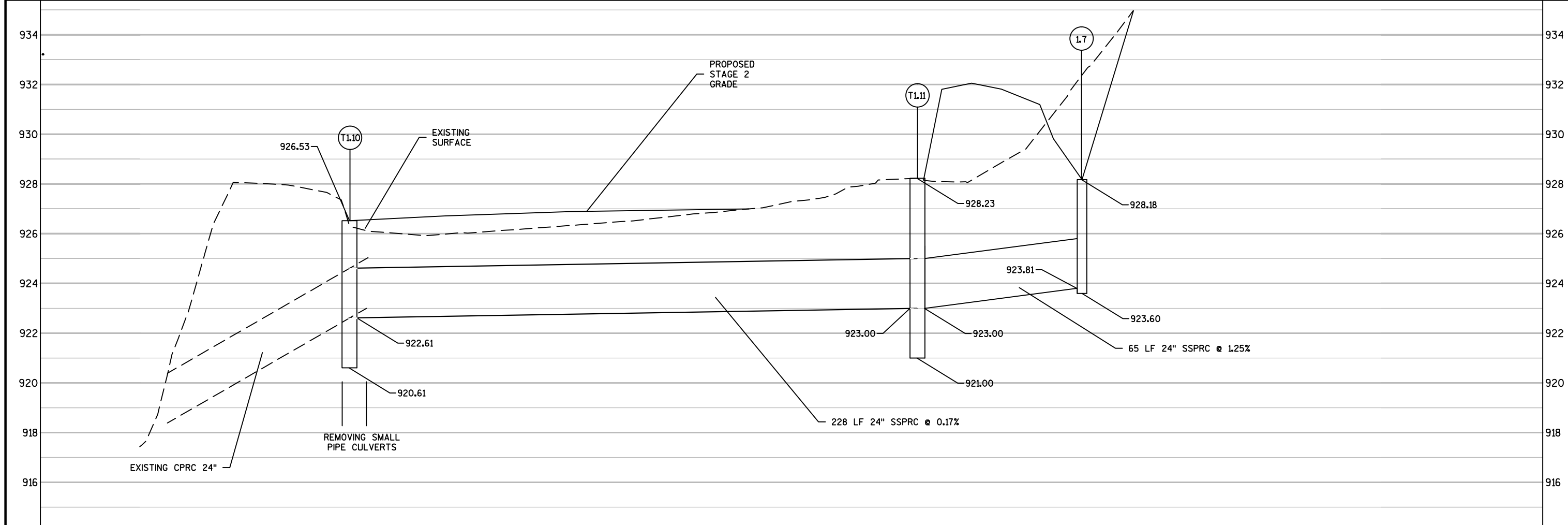
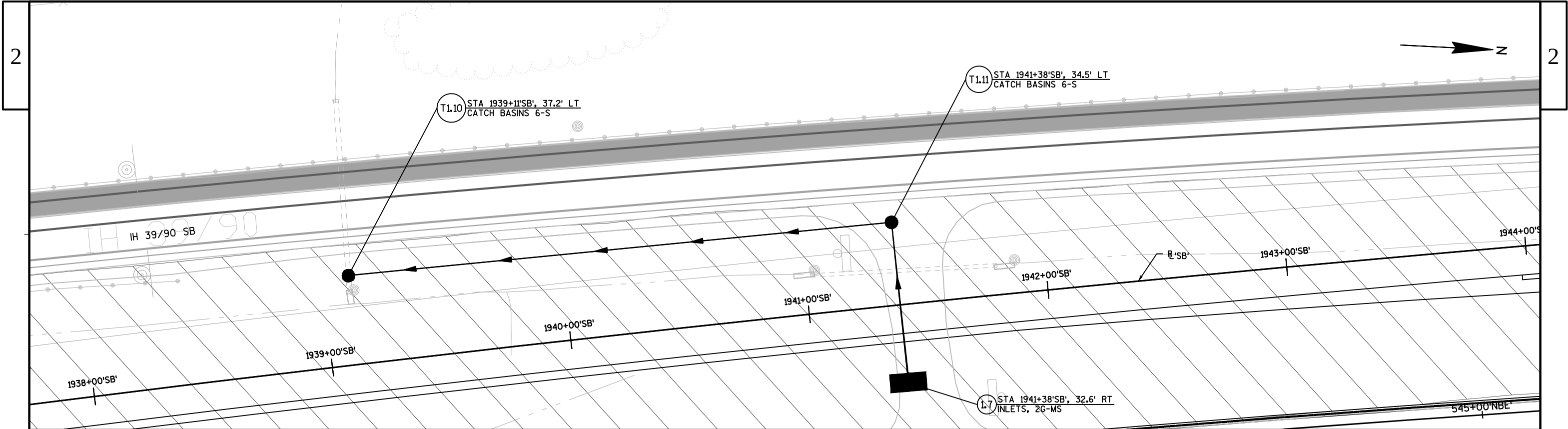


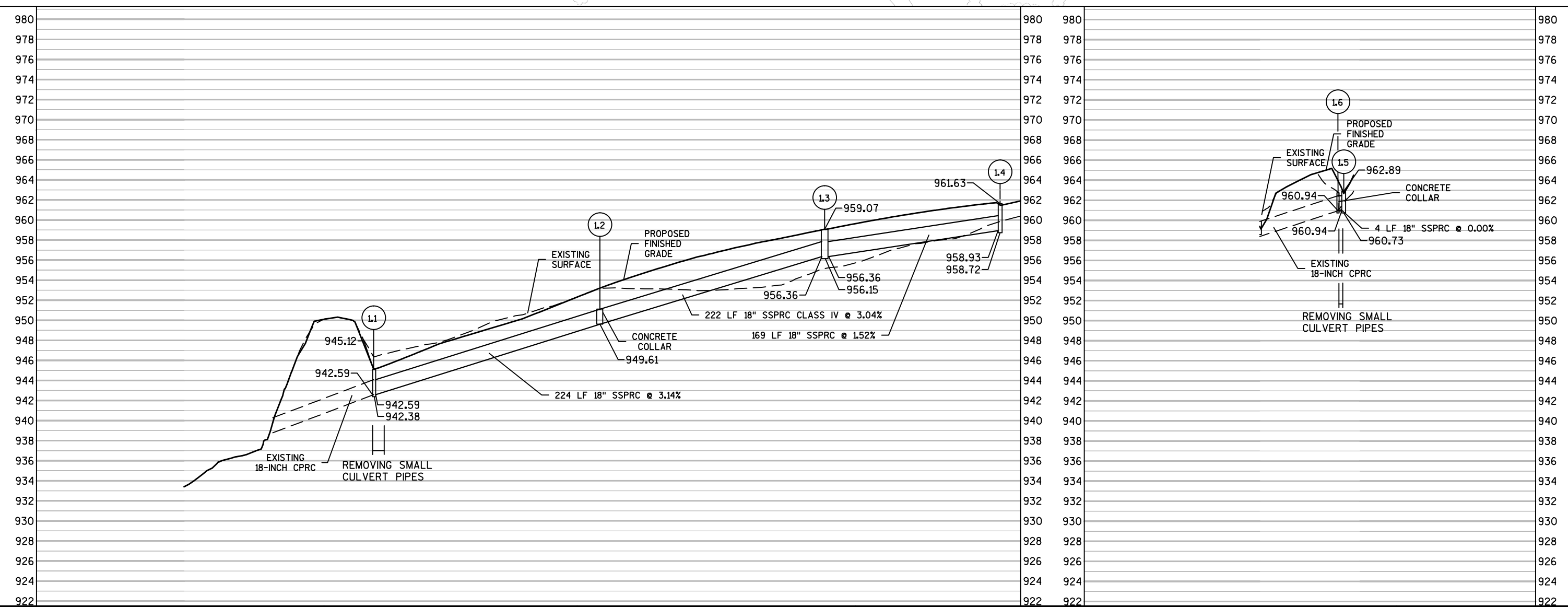
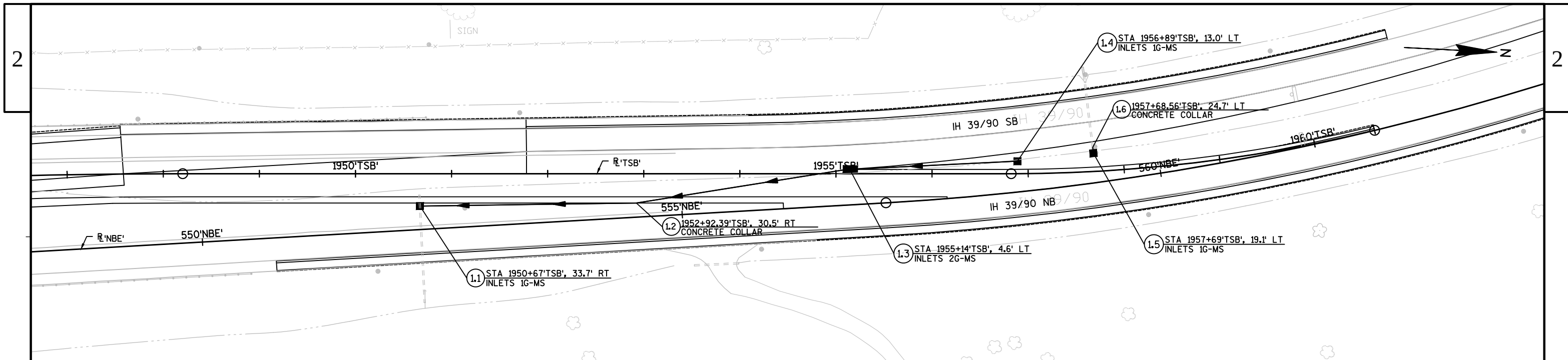


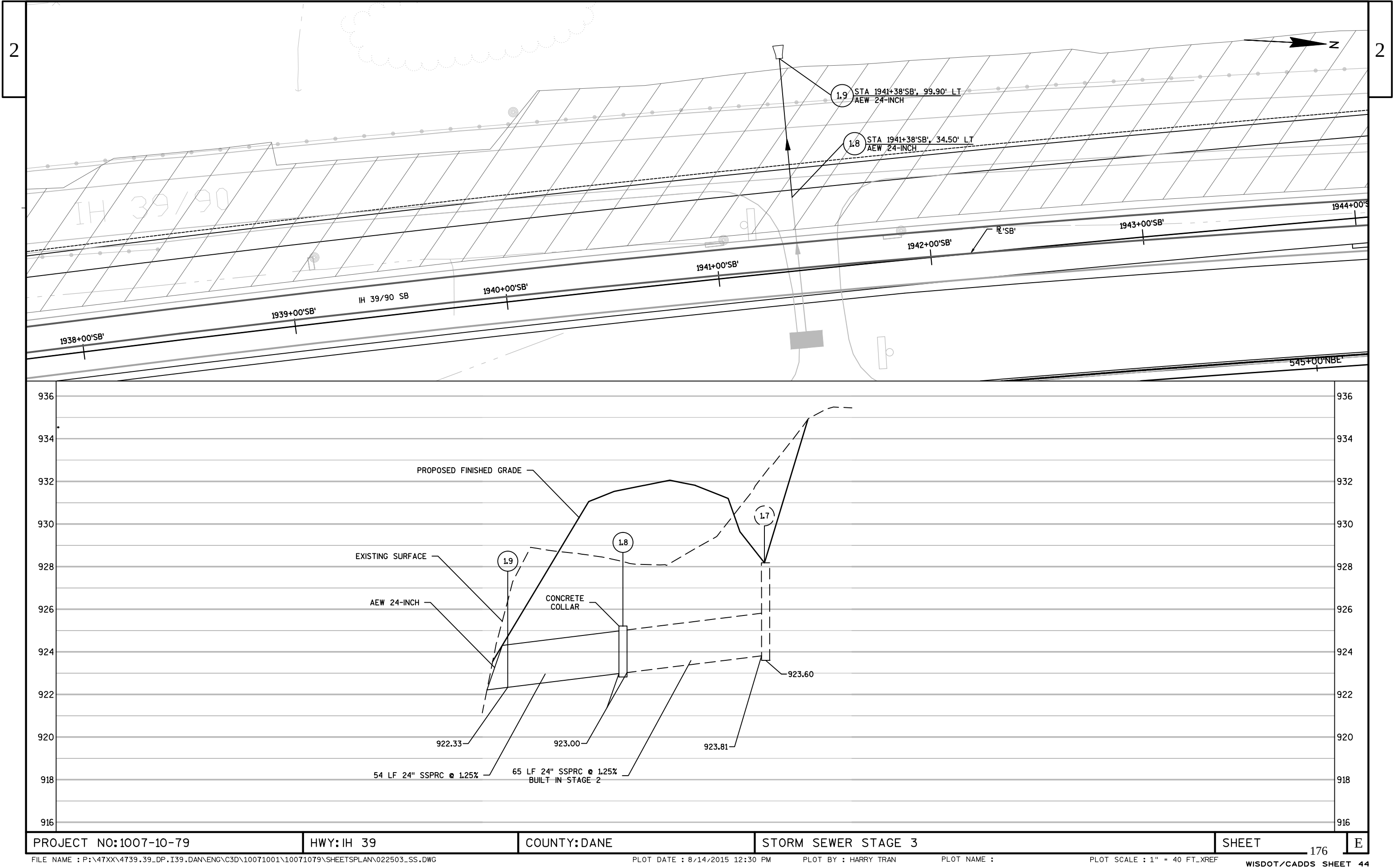


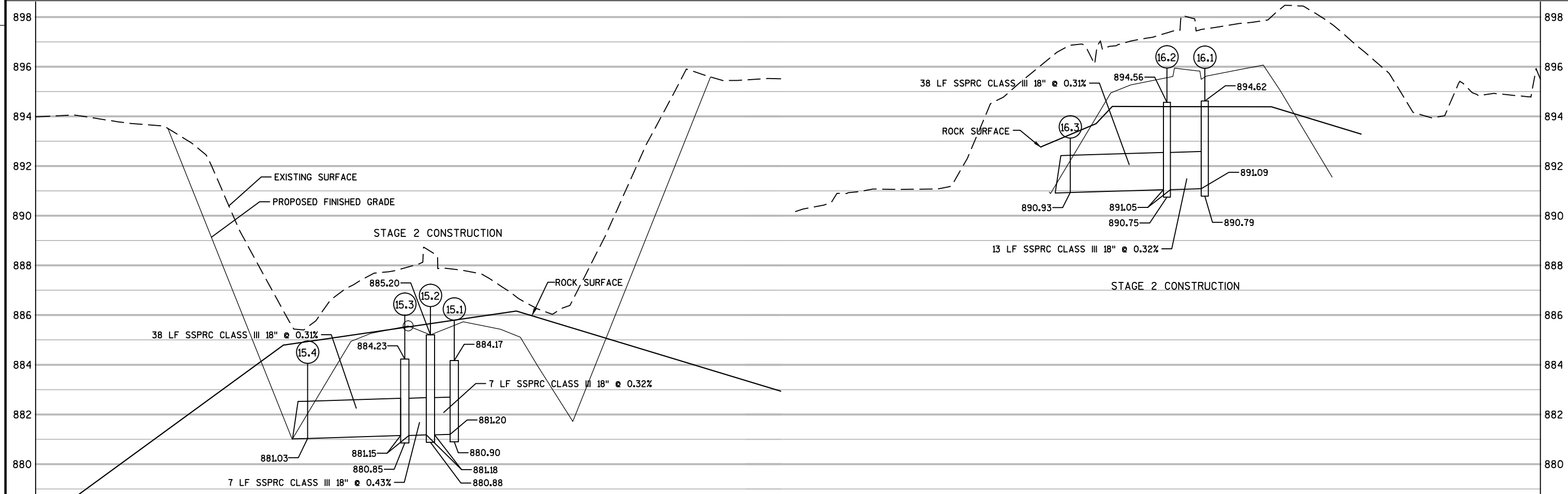
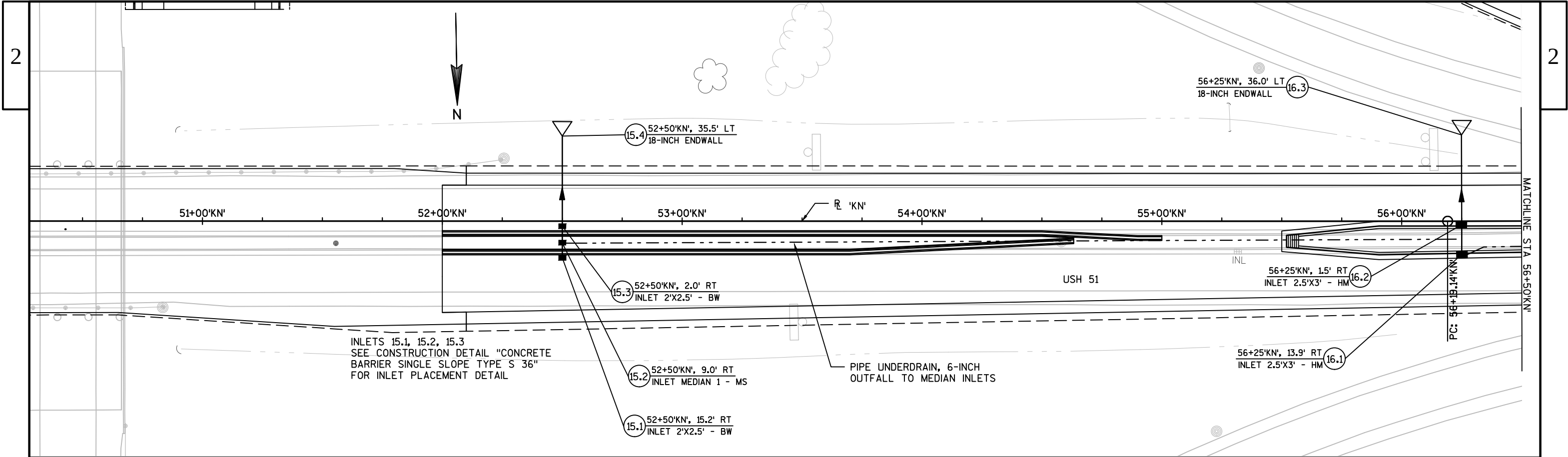


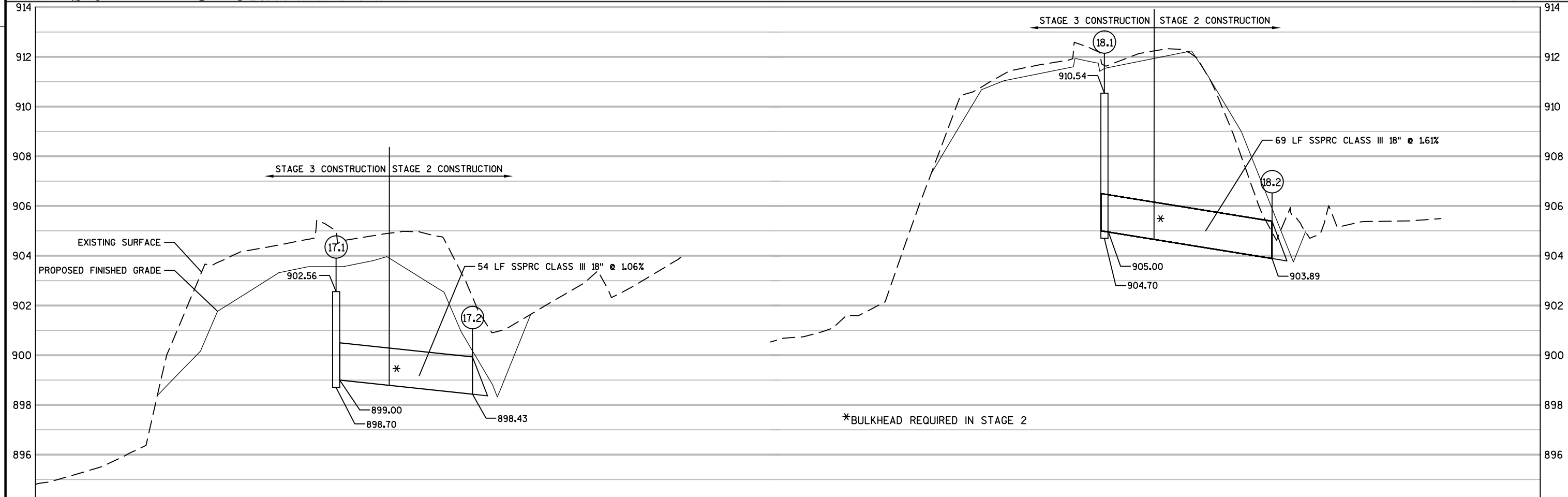
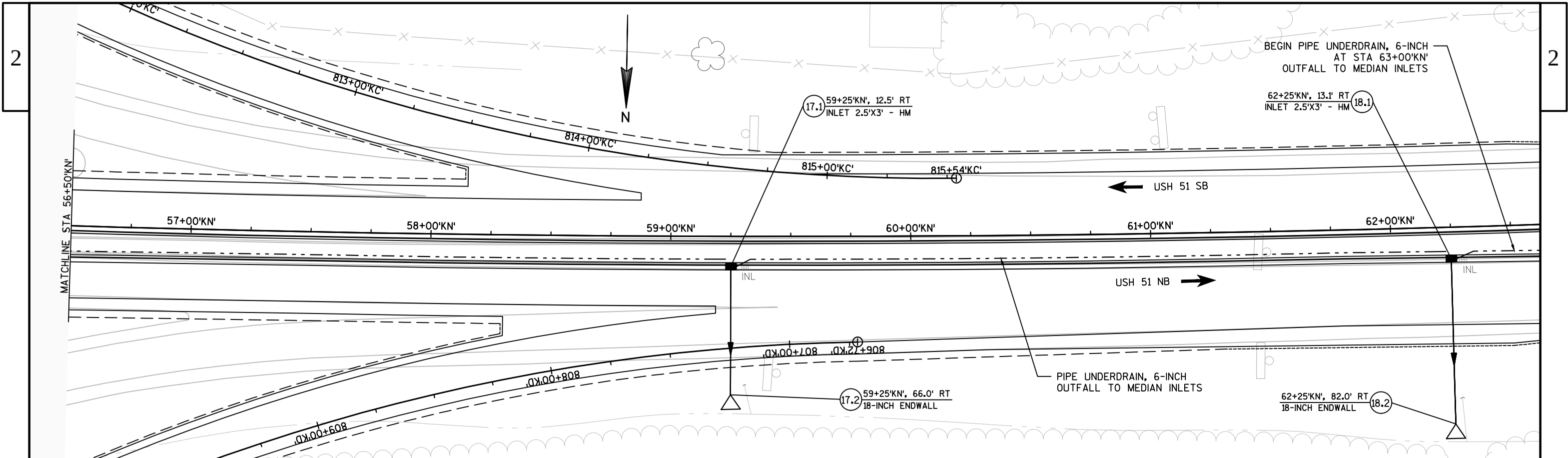












ITS GENERAL NOTES

THESE PLANS AND THE ASSOCIATED SPECIAL PROVISIONS REFLECT CONDITIONS KNOWN DURING THE DEVELOPMENT OF THE PLANS AND SPECIAL PROVISIONS. ALL SCALES, DIMENSIONS, AND LOCATIONS SHOWN IN THESE PLANS ARE APPROXIMATE. ACTUAL PHYSICAL FIELD CONDITIONS SHALL PROVIDE THE BASIS FOR THE APPLICATION OF WORK SHOWN IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR THE APPLICATION OF ALL WORK SHOWN IN THE PLANS TO THE ACTUAL PHYSICAL FIELD CONDITIONS TO PROVIDE A COMPLETE AND ACCEPTED PROJECT. IN THE EVENT THAT ACTUAL PHYSICAL FIELD CONDITIONS AFFECT OR PREVENT THE APPLICATION OR PROGRESSION OF ANY WORK SHOWN IN THE PLANS OR SPECIAL PROVISIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY, AND PRIOR TO ANY FURTHER WORK ACTIVITY. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY LOCATION CHANGES.

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS SHOWN ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

ALL EXISTING UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES WITHIN THE SCOPE OF THIS PROJECT MAY NOT BE LOCATED IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR LOCATING AND AVOIDING ALL UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES.

NO TEST BORINGS WERE MADE WHERE CONDUIT, PULL BOXES, POLES, FOUNDATIONS, OR OTHER EQUIPMENT IS TO BE INSTALLED.

THE CONTRACTOR IS FULLY RESPONSIBLE FOR EXAMINING THE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

AREAS WITHIN RIGHT-OF-WAY DISTURBED SPECIFICALLY FOR ITS CONSTRUCTION ARE TO BE RESTORED TO THE ORIGINAL CONDITION WITH TOPSOIL, FERTILIZER, SEED, AND MULCH. RESTORATION FOR AREAS DISTURBED FOR OTHER CONSTRUCTION OPERATIONS, BUT ALSO CONTAINING ITS CONSTRUCTION, WILL BE DONE ACCORDING TO REQUIREMENTS AND PAYMENT PROVISIONS FOR THE OTHER CONSTRUCTION OPERATIONS. NO PAYMENT WILL BE MADE FOR RESTORING AREAS DISTURBED FOR ITS CONSTRUCTION OPERATIONS.

DUE TO RAMP, LANE, AND SHOULDER CLOSURE RESTRICTIONS AND WORK UNDER OTHER CONTRACTS, SOME WORK MAY BE REQUIRED TO BE PERFORMED AT NIGHT. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RAMP, LANE, SHOULDER, AND ROADWAY CLOSURES WITH OTHER CONTRACTS IN THE AREA.

NOTIFY THE REGIONAL TRAFFIC UNIT (PRIMARY 608-246-5367, SECONDARY 608-246-5362), A MINIMUM OF TWO (2) WEEKS PRIOR TO STAKING THE ITS ITEMS.

NOTIFY THE REGIONAL TRAFFIC UNIT (PRIMARY 608-246-5360, SECONDARY 608-884-1166), A MINIMUM OF TWO (2) WEEKS PRIOR TO STAKING THE RAMP CLOSURE GATE ITEMS.

HAND DIG TRENCHES NEAR EXISTING CONDUIT CONTAINING FIBER OPTIC CABLE. VERIFY DEPTHS OF EXISTING CONDUITS CONTAINING FIBER OPTIC CABLE PRIOR TO CROSSING BY DIRECTIONAL BORE.

ITS LEGEND

DESCRIPTION	SYMBOL
JUNCTION BOX -----	■
CCTV CAMERA -----	◀■
GROUND MOUNTED CABINET -----	■
POLE MOUNTED CABINET -----	■
POLE -----	●
PULL BOX 24X36 -----	●
PULL BOX 24X42 -----	⊙
COMMUNICATION VAULT -----	⌈
COMMUNICATION MANHOLE -----	⊗
MICROWAVE DETECTOR -----	◆
ITS CONDUIT -----	---
DYNAMIC MESSAGE SIGN, OVERHEAD -----	┌
DYNAMIC MESSAGE SIGN, ROADSIDE -----	┌┌
DYNAMIC MESSAGE SIGN, BUTTERFLY -----	┌┌
DYNAMIC MESSAGE SIGN, CANTILEVER -----	┌
PORTABLE CHANGEABLE MESSAGE SIGN -----	PCMS
ROAD WEATHER INFORMATION SYSTEM -----	┌
METER BREAKER PEDESTAL -----	⊗
METER SOCKET -----	⊗
BREAKER DISCONNECT BOX -----	⊗
RAMP CLOSURE GATE -----	▼
BLUETOOTH SENSOR -----	B
WIRELESS MESH NODE -----	W
AUTOMATIC TRAFFIC RECORDER -----	ATR
WOODEN POWER POLE -----	□
WOOD POST -----	□
TRANSFORMER -----	⊗
DETECTION ZONE -----	○
QUANTITY POINT -----	▲

ITS STANDARD ABBREVIATIONS

ATR	-----	AUTOMATIC TRAFFIC RECORDER
CB	-----	CONTROLLER CABINET
CCTV	-----	CLOSED CIRCUIT TELEVISION
CP	-----	CAMERA POLE
CV	-----	COMMUNICATIONS VAULT
DMS	-----	DYNAMIC MESSAGE SIGN
DP	-----	DETECTOR POLE
DS	-----	DRAINAGE STRUCTURE (ON ITS PLANS ONLY)
EX	-----	EXISTING
FO	-----	FIBER OPTIC
G	-----	RAMP CLOSURE GATE
JB	-----	JUNCTION BOX
MB	-----	METER BREAKER
MD	-----	MICROWAVE DETECTOR
MH	-----	MANHOLE
MM	-----	MULTIMODE
PB	-----	PULL BOX
PCMS	-----	PORTABLE CHANGEABLE MESSAGE SIGN
PF	-----	POLE FOUNDATION
RWIS	-----	ROAD WEATHER INFORMATION SYSTEM
S	-----	OVERHEAD SIGNAL SUPPORT
SB	-----	SIGNAL BASE
SDS	-----	SYSTEM DETECTOR STATION
SM	-----	SINGLE MODE
SWEF	-----	SAFETY AND WEIGHT ENFORCEMENT FACILITY
WDS	-----	WIRELESS DETECTION SENSOR
WIM	-----	WEIGH IN MOTION
WMN	-----	WIRELESS MESH NODE

ITS CONTACTS

WISCONSIN DEPARTMENT OF TRANSPORTATION
SOUTHWEST REGION ITS
MR. KYLE HEMP
608-246-5367
MR. GRAHAM HEITZ
608-246-5362
2101 WRIGHT ST
MADISON, WI 53704

WISCONSIN DEPARTMENT OF TRANSPORTATION
SOUTHWEST REGION RAMP CLOSURE GATES
MS. DENA DRAMM
608-246-5360
MR. JEFF GUSTAFSON
608-884-1166
2101 WRIGHT ST
MADISON, WI 53704

WISCONSIN DEPARTMENT OF TRANSPORTATION
STATEWIDE TRAFFIC OPERATIONS CENTER
MR. DEAN BEEKMAN
414-227-2154
MR. DON SCHELL
414-227-2148
433 W. ST. PAUL AVENUE, SUITE 300
MILWAUKEE, WI 53203

SRF CONSULTING GROUP
INTELLIGENT TRANSPORTATION SYSTEMS
MR. JACOB FOLKERINGA
763-452-4730
MS. CORTNEY FALERO
763-452-4806
1 CARLSON PARKWAY NORTH, SUITE 150
MINNEAPOLIS, MN 55447

ORIGINAL PLANS PREPARED BY

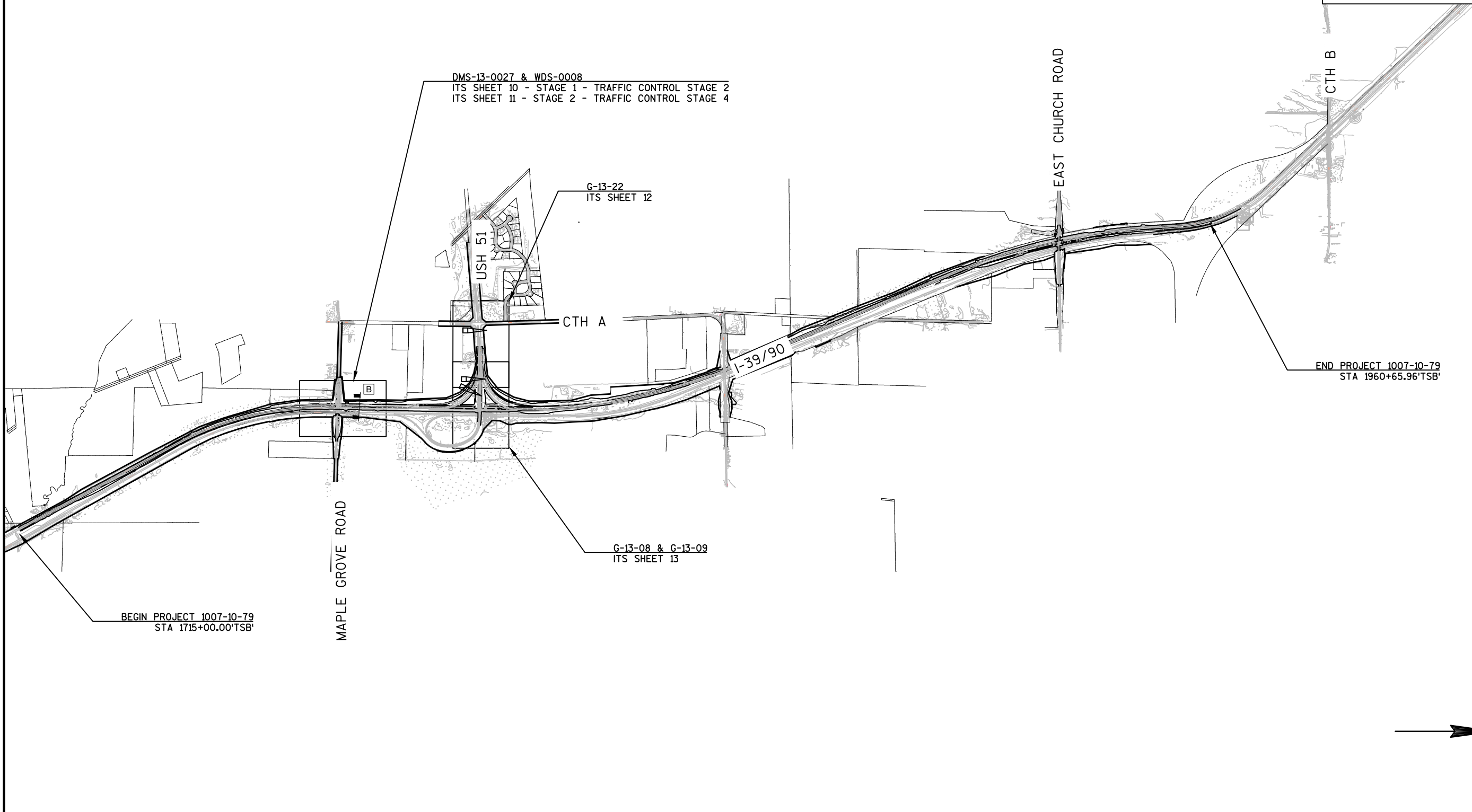


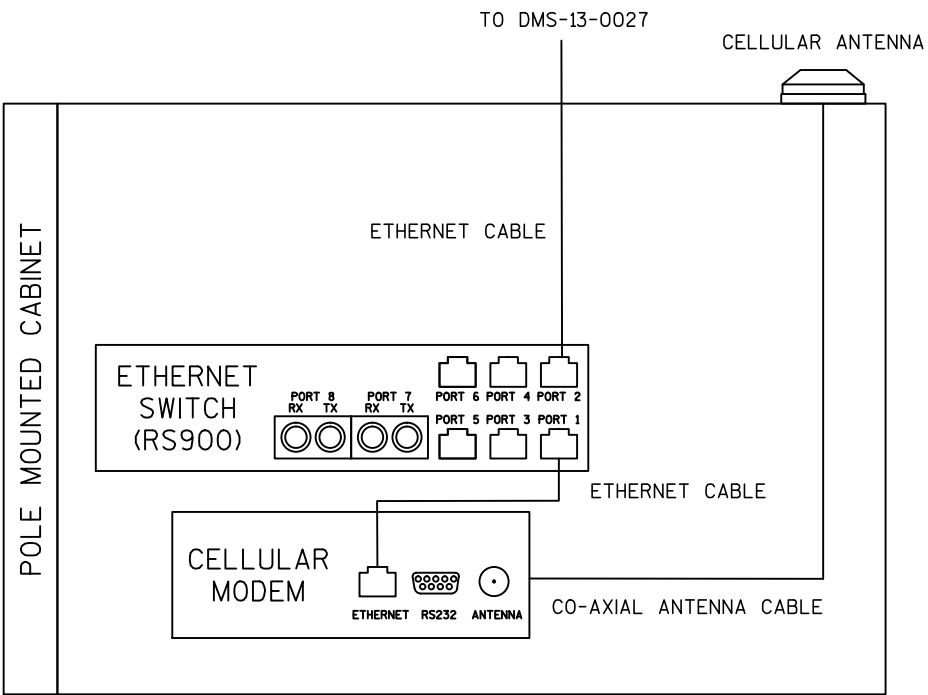
ITS SHEETS 1-13



7/14/2015 (Date) [Signature] (Signature)

ITS LEGEND	
DESCRIPTION	SYMBOL
DYNAMIC MESSAGE SIGN, OVERHEAD	-- 
BLUETOOTH SENSOR	-- 
RAMP CLOSURE GATES	-- 
ITS STANDARD ABBREVIATIONS	
DMS	----- DYNAMIC MESSAGE SIGN
G	----- RAMP CLOSURE GATE
WDS	----- WIRELESS DETECTION SENSOR



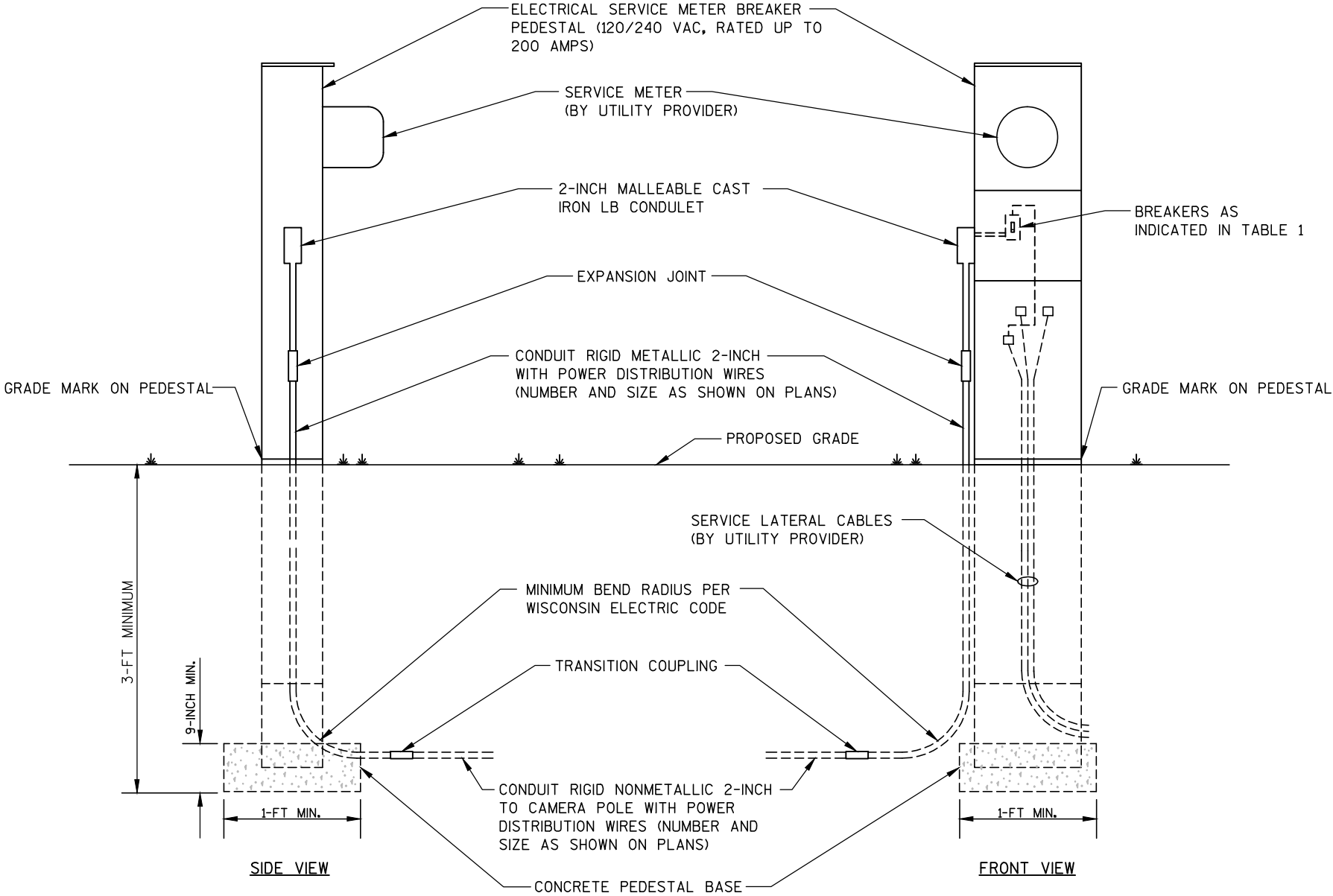


OVERHEAD DMS

DMS-13-0027 - I-39/90 @ MAPLE GROVE ROAD

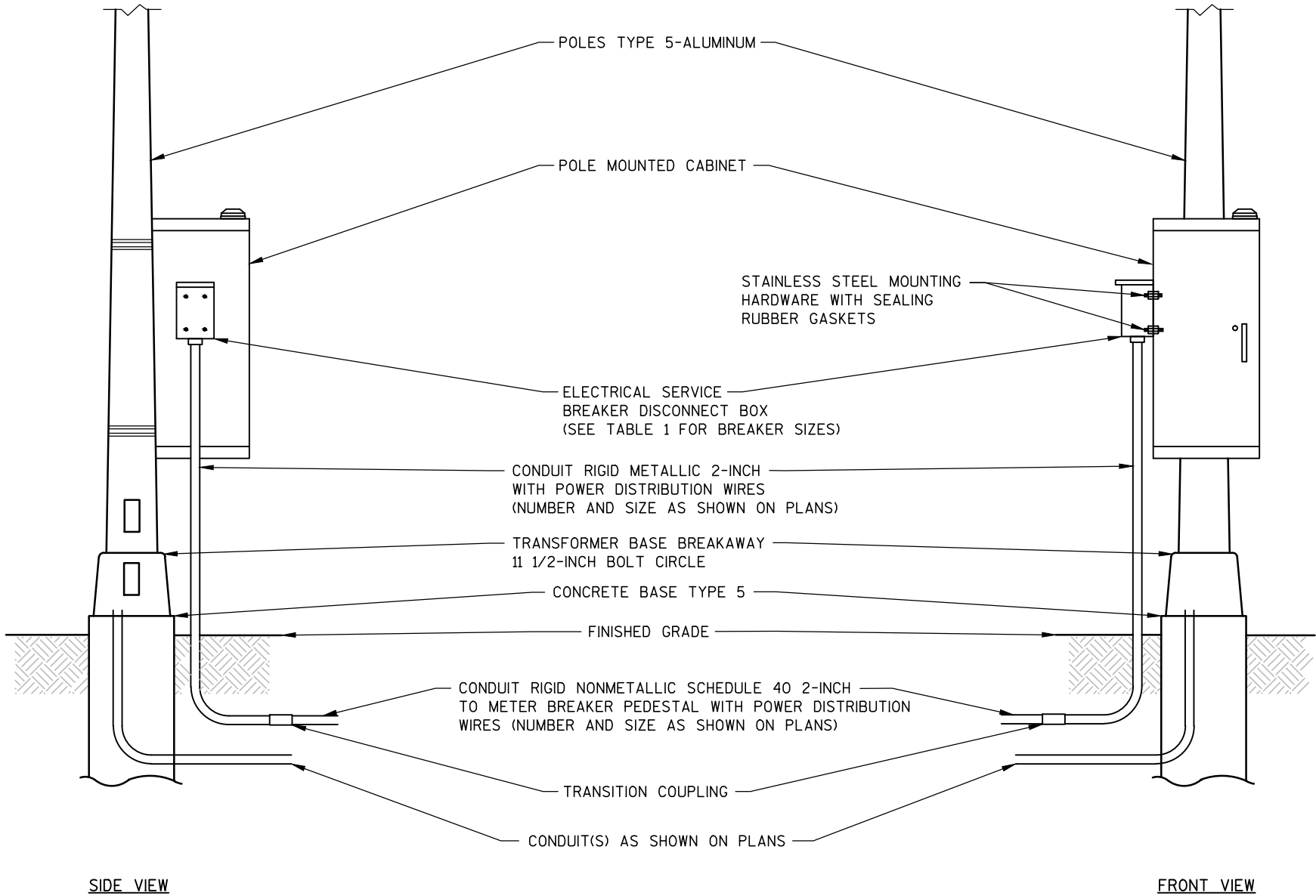
NOTES

ALL CABLES INCIDENTAL TO DEVICE INSTALLATION.



ELECTRICAL SERVICE METER BREAKER PEDESTAL
DMS-13-0027 & WDS-0008 - I-39/90 @ MAPLE GROVE ROAD

TABLE 1				
BREAKER SIZES BY LOCATION				
LOCATION	ID	MAIN BREAKER SIZE	SUB-BREAKER #1 SIZE	SUB-BREAKER #2 SIZE
I-39/90 @ MAPLE GROVE ROAD	DMS-13-0027 WDS-0008	100 AMPS (2P)	100 AMPS (2P) (DMS)	30 AMPS (SPARE)



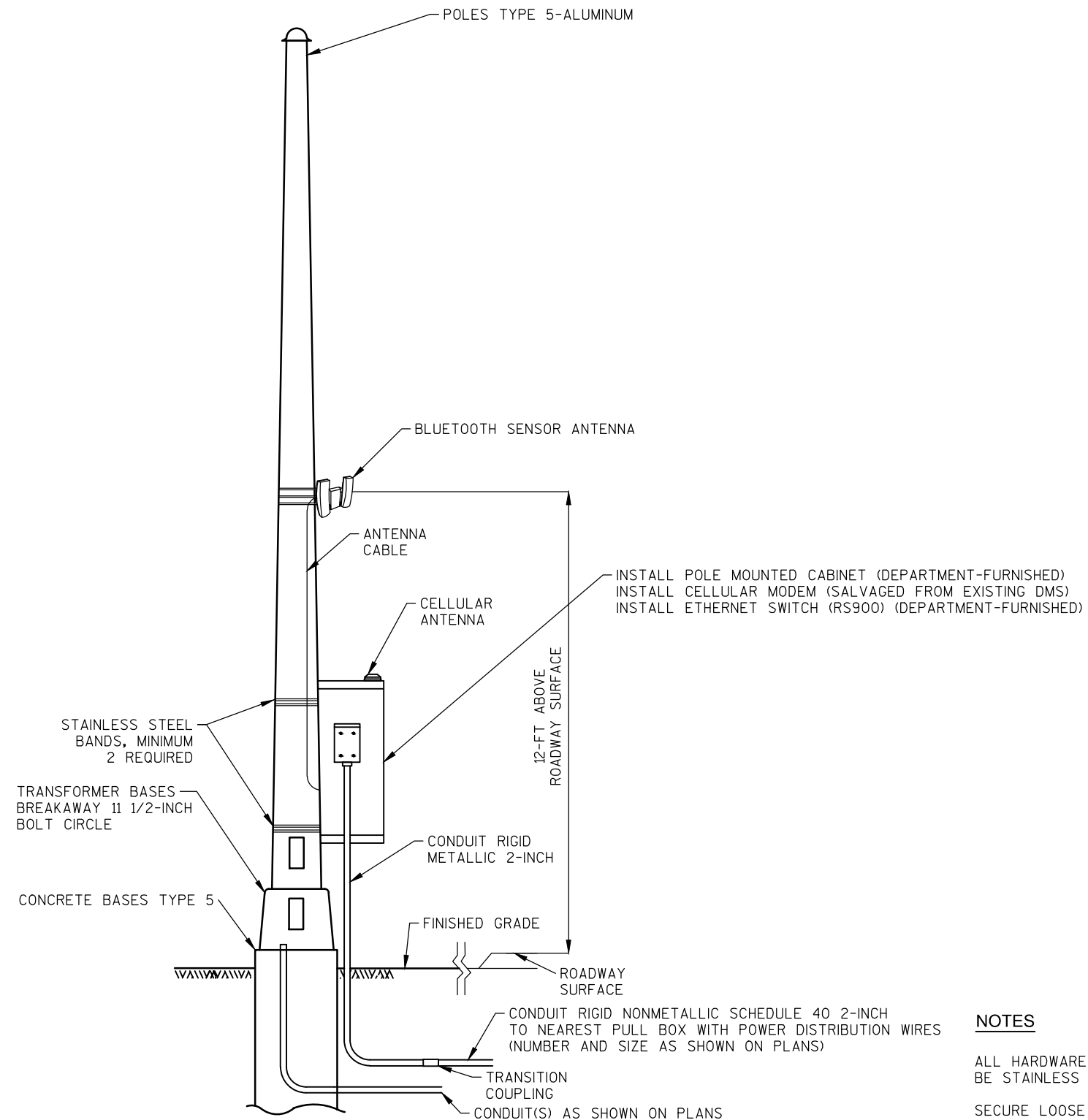
ELECTRICAL SERVICE BREAKER DISCONNECT BOX
(POLE MOUNTED CABINET)
DMS-13-0027 & WDS-0008 - I-39/90 @ MAPLE GROVE ROAD

NOTES

ALL FASTENERS AND HARDWARE SHALL BE STAINLESS STEEL.

MOUNT EQUIPMENT UTILIZING STAINLESS STEEL BANDS OR METHOD APPROVED BY THE ENGINEER.

TABLE 1					
BREAKER SIZES BY LOCATION					
LOCATION	ID	MAIN BREAKER SIZE	SUB-BREAKER #1 SIZE	SUB-BREAKER #2 SIZE	SUB-BREAKER #3 SIZE
I-39/90 @ MAPLE GROVE ROAD	DMS-13-0027 WDS-0008	100 AMPS (2P)	60 AMPS (2P) (DMS)	30 AMPS (CB)	



ELEVATION VIEW

BLUETOOTH SENSOR & POLE MOUNTED CABINET MOUNTING
DMS-13-0027 & WDS-0008 - I-39/90 @ MAPLE GROVE ROAD

NOTES

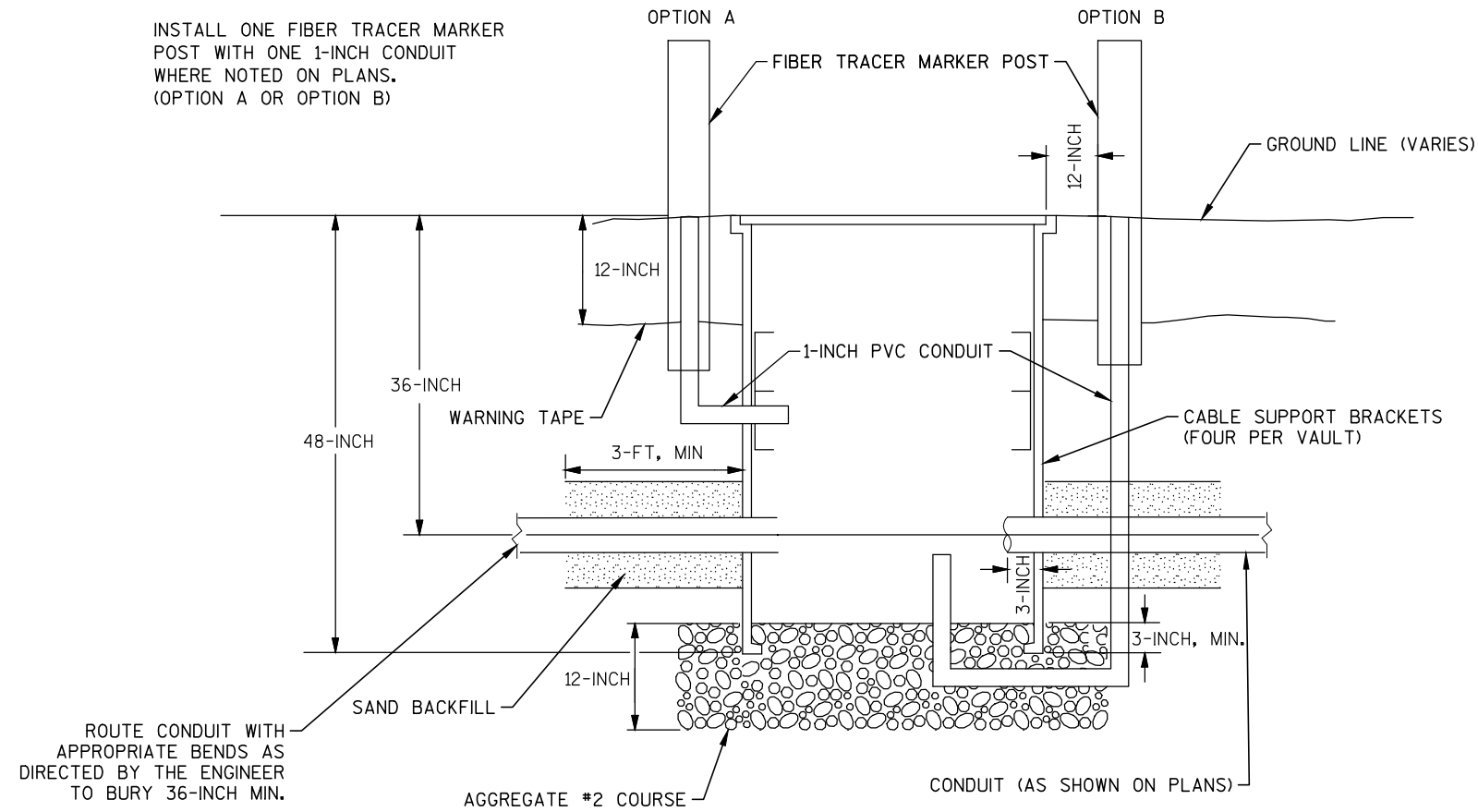
ALL HARDWARE AND FASTENERS SHALL BE STAINLESS STEEL.

SECURE LOOSE CABLES TO POLE AT 5-FT INTERVALS.

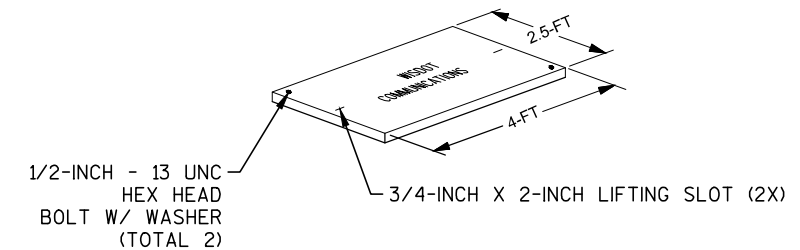
INSTALL DRIP LOOPS ON LOOSE CABLES TO PREVENT WATER FROM FLOWING ON CABLE AND ENTERING POLES/ENCLOSURES.

MOUNT EQUIPMENT UTILIZING STAINLESS STEEL BANDS OR METHOD APPROVED BY THE ENGINEER.

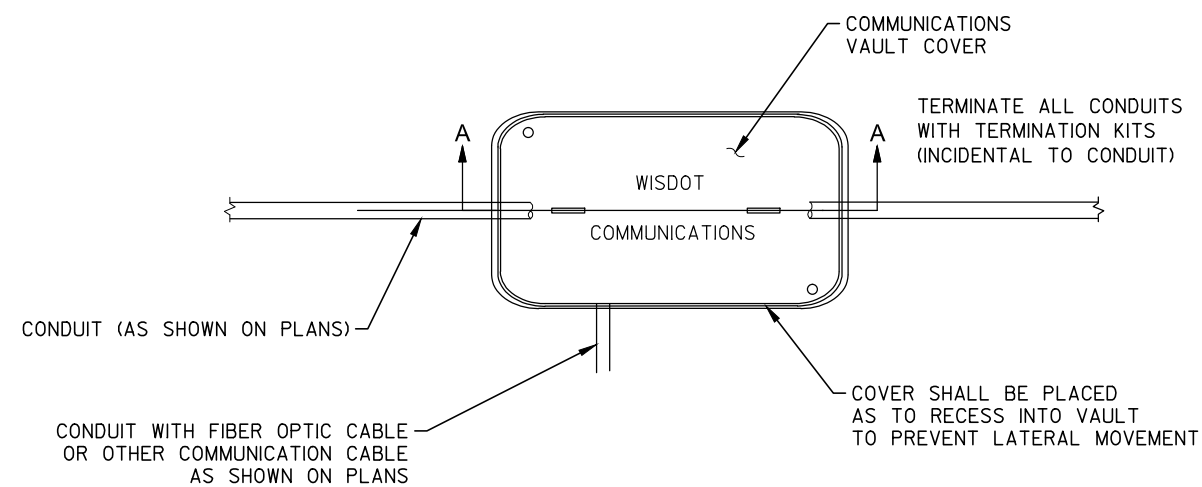
INSTALL ONE FIBER TRACER MARKER POST WITH ONE 1-INCH CONDUIT WHERE NOTED ON PLANS. (OPTION A OR OPTION B)



SECTION A-A



ISOMETRIC



PLAN

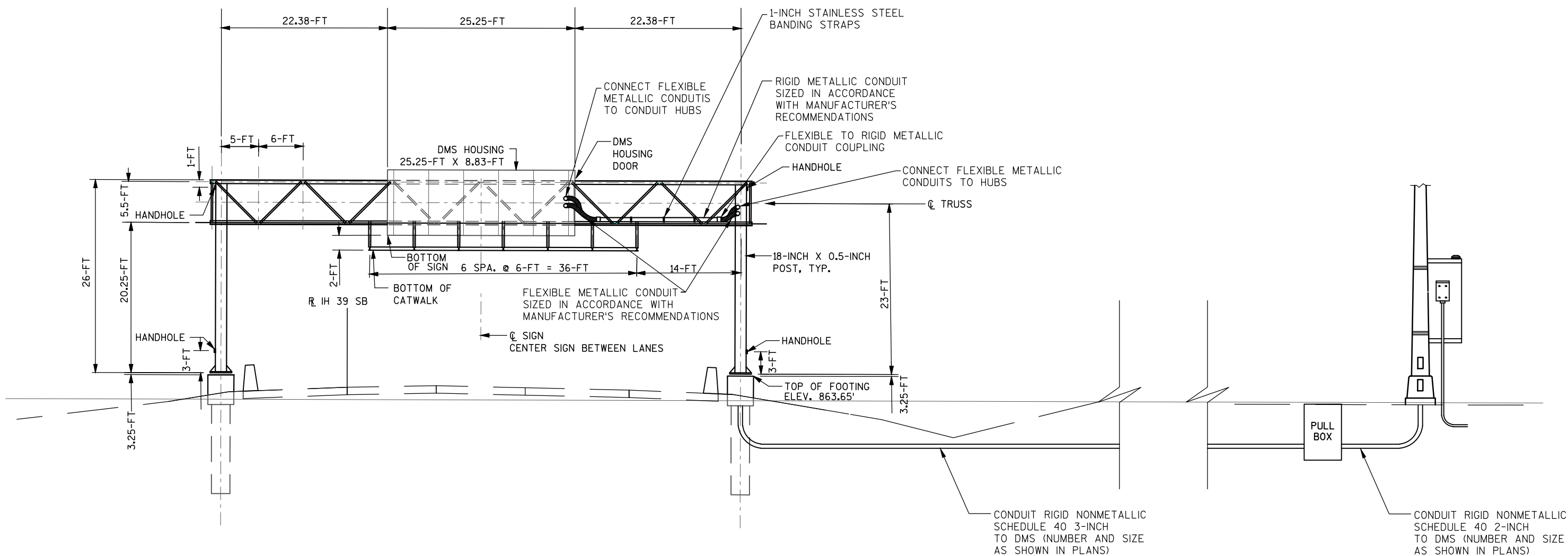
NOTES

BOX SHALL HAVE AN OPEN BASE.

COVER SHALL HAVE A MINIMUM DESIGN LOAD OF 15,000 LBS AND SHALL LOCK.

ALL OPENINGS IN STRUCTURE MUST BE MACHINED AT TIME OF FABRICATION, OR PUNCH DRIVEN AT TIME OF PLACEMENT.

VAULTS SHALL BE OF ONE-PIECE CONSTRUCTION. TWO-PIECE/STACKABLE VAULTS WILL NOT BE PERMITTED.

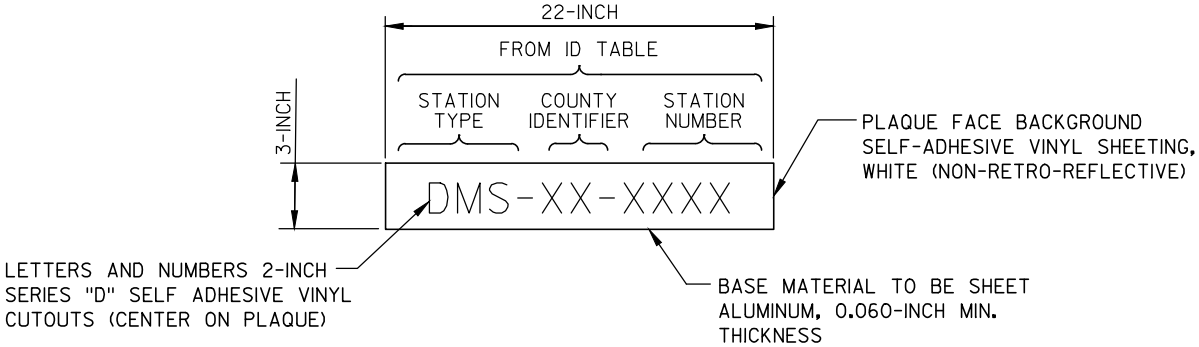


DMS-13-0027
I-39/90 @ MAPLE GROVE ROAD

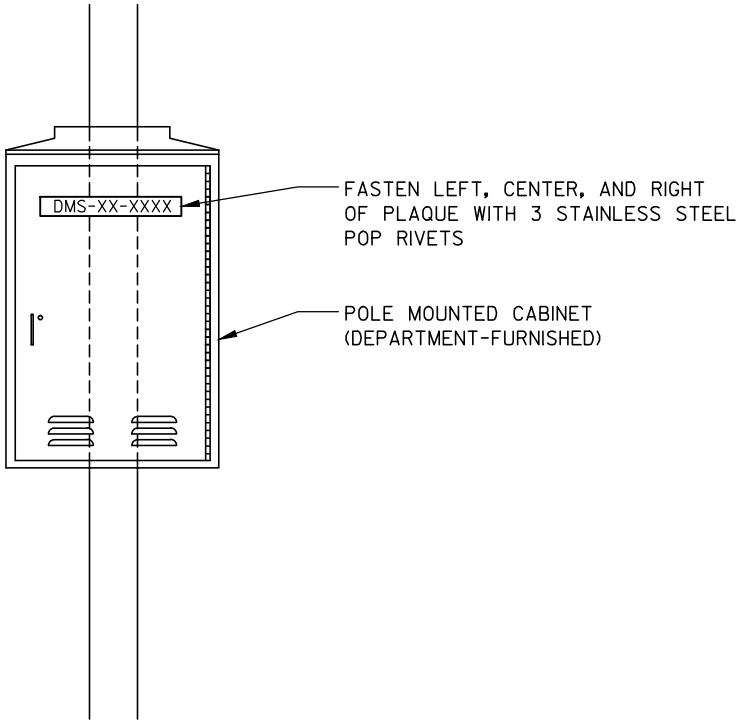
NOTES

MOUNT EQUIPMENT UTILIZING STAINLESS STEEL BANDS OR METHOD APPROVED BY THE ENGINEER.

SEE S-13-399 STRUCTURE PLANS FOR STRUCTURAL DETAILS.



CONTROL CABINET IDENTIFICATION PLAQUE



PLAQUES SEQUENCE IDENTIFICATION

PLAQUES SEQUENCE IDENTIFICATION TABLE		
SITE LOCATION	ID PLAQUE	NO. OF PLAQUES
I-39/90 @ MAPLE GROVE ROAD	DMS-13-0027	2
	WDS-0008	2

STATION TYPE LEGEND

- ATR - AUTOMATIC TRAFFIC RECORDER
- CCTV - CLOSED CIRCUIT TELEVISION
- DMS - DYNAMIC MESSAGE SIGN
- G - RAMP CLOSURE GATE
- SDS - SYSTEM DETECTOR STATION
- WDS - WIRELESS DETECTION SENSOR

NOTES

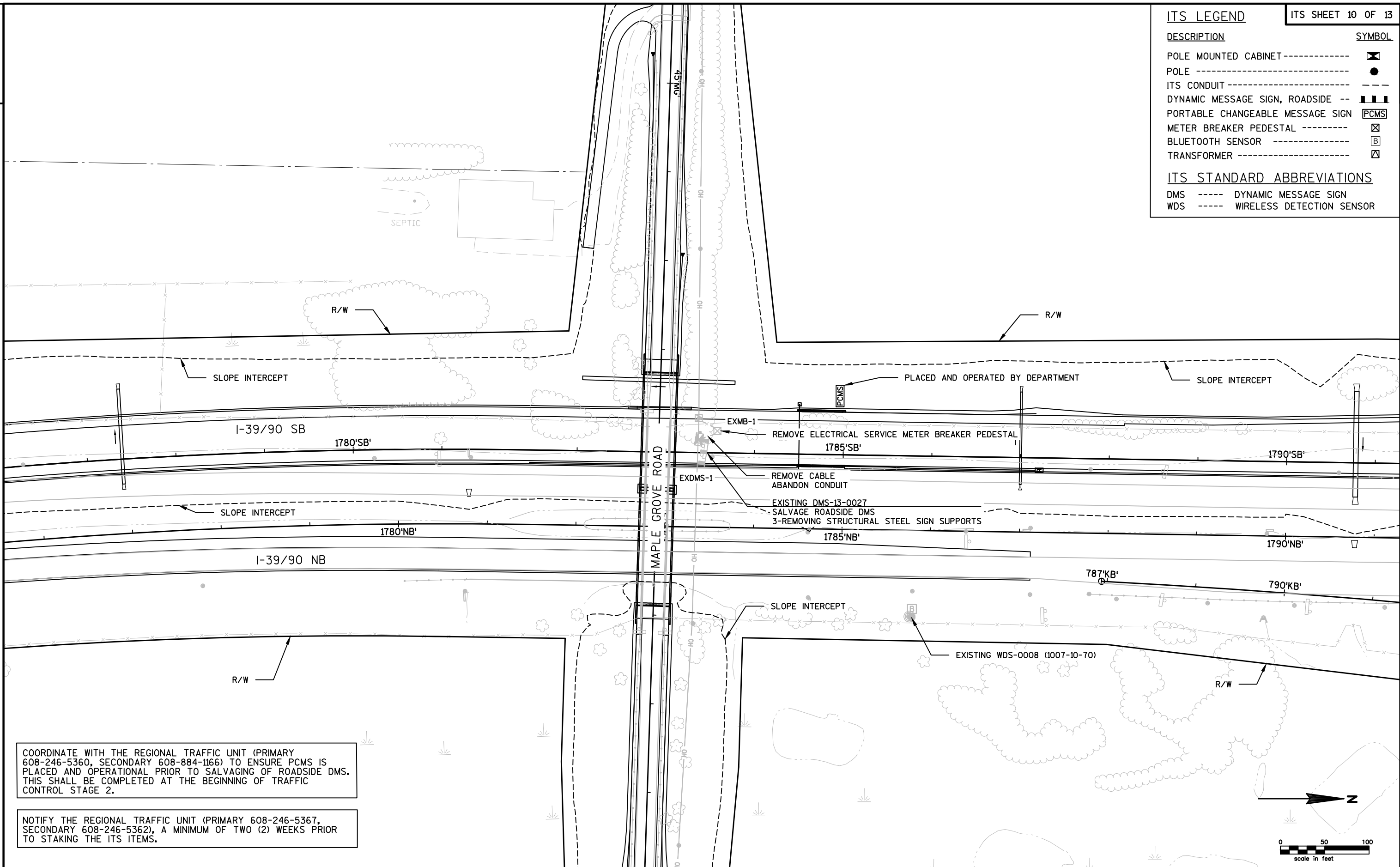
- TWO PLAQUES PER DEVICE REQUIRED ON CONTROL CABINET.
- FASTEN ONE PLAQUE ON FRONT DOOR, UPPER HALF.
- FASTEN ONE PLAQUE ON SIDE FACING LOCAL STREET. IF NO LOCAL STREET NEARBY, OR IF SUCH LOCATION COINCIDES WITH LOCATION OF PLAQUE IN PREVIOUS NOTE, FASTEN PLAQUE ON REAR OF CABINET, UPPER HALF.
- FOR BLUETOOTH SENSOR ENCLOSURES LOCATED IN A CONTROL CABINET, FASTEN PLAQUES TO CONTROL CABINET.

ITS LEGEND

DESCRIPTION	SYMBOL
POLE MOUNTED CABINET -----	
POLE -----	
ITS CONDUIT -----	
DYNAMIC MESSAGE SIGN, ROADSIDE --	
PORTABLE CHANGEABLE MESSAGE SIGN	
METER BREAKER PEDESTAL -----	
BLUETOOTH SENSOR -----	
TRANSFORMER -----	

ITS STANDARD ABBREVIATIONS

DMS	----	DYNAMIC MESSAGE SIGN
WDS	----	WIRELESS DETECTION SENSOR



COORDINATE WITH THE REGIONAL TRAFFIC UNIT (PRIMARY 608-246-5360, SECONDARY 608-884-1166) TO ENSURE PCMS IS PLACED AND OPERATIONAL PRIOR TO SALVAGING OF ROADSIDE DMS. THIS SHALL BE COMPLETED AT THE BEGINNING OF TRAFFIC CONTROL STAGE 2.

NOTIFY THE REGIONAL TRAFFIC UNIT (PRIMARY 608-246-5367, SECONDARY 608-246-5362), A MINIMUM OF TWO (2) WEEKS PRIOR TO STAKING THE ITS ITEMS.

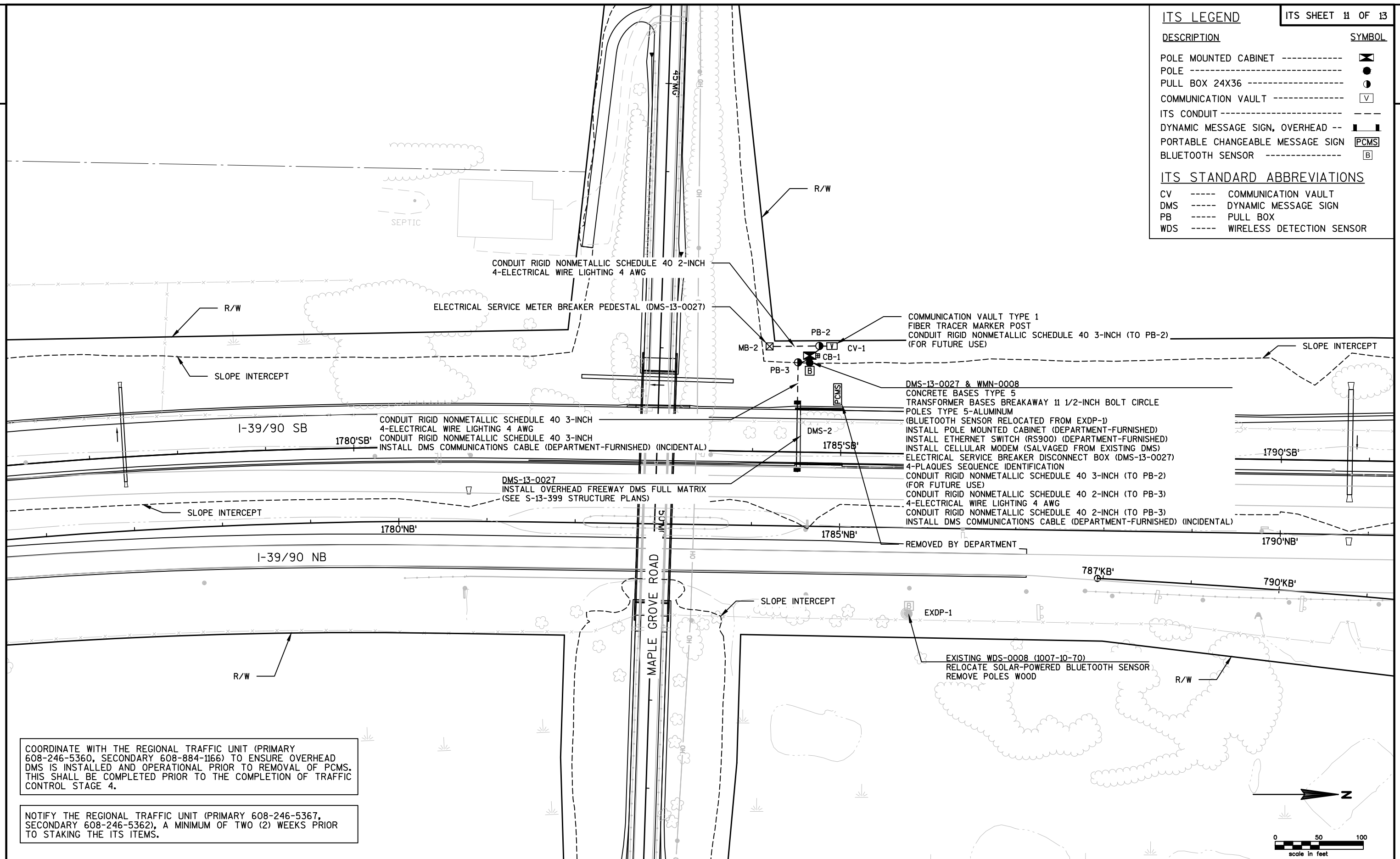
ITS LEGEND

ITS SHEET 11 OF 13

DESCRIPTION	SYMBOL
POLE MOUNTED CABINET -----	
POLE -----	
PULL BOX 24X36 -----	
COMMUNICATION VAULT -----	
ITS CONDUIT -----	
DYNAMIC MESSAGE SIGN, OVERHEAD --	
PORTABLE CHANGEABLE MESSAGE SIGN	
BLUETOOTH SENSOR -----	

ITS STANDARD ABBREVIATIONS

CV	----	COMMUNICATION VAULT
DMS	----	DYNAMIC MESSAGE SIGN
PB	----	PULL BOX
WDS	----	WIRELESS DETECTION SENSOR



PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

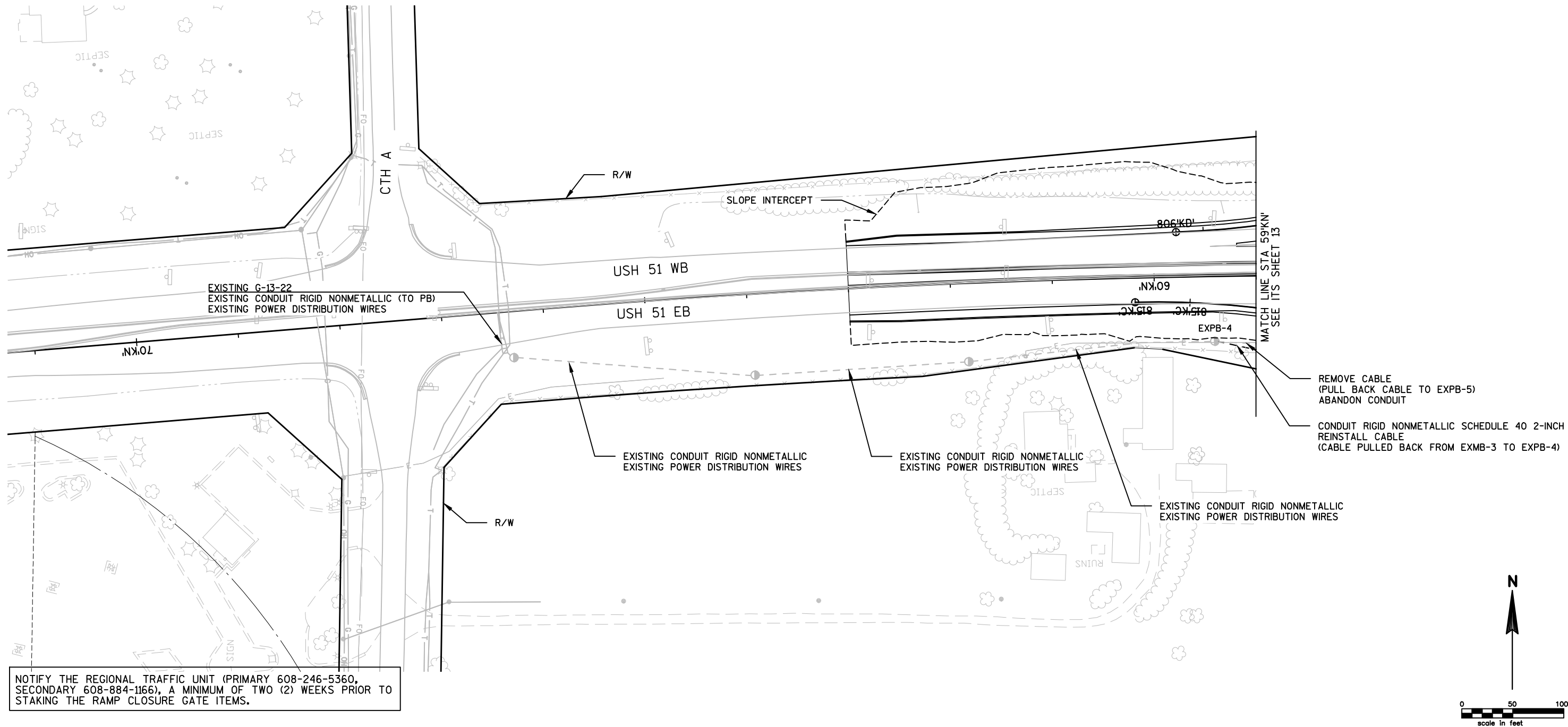
ITS PLANS STAGE 2 - TRAFFIC CONTROL STAGE 4

SHEET

189

E

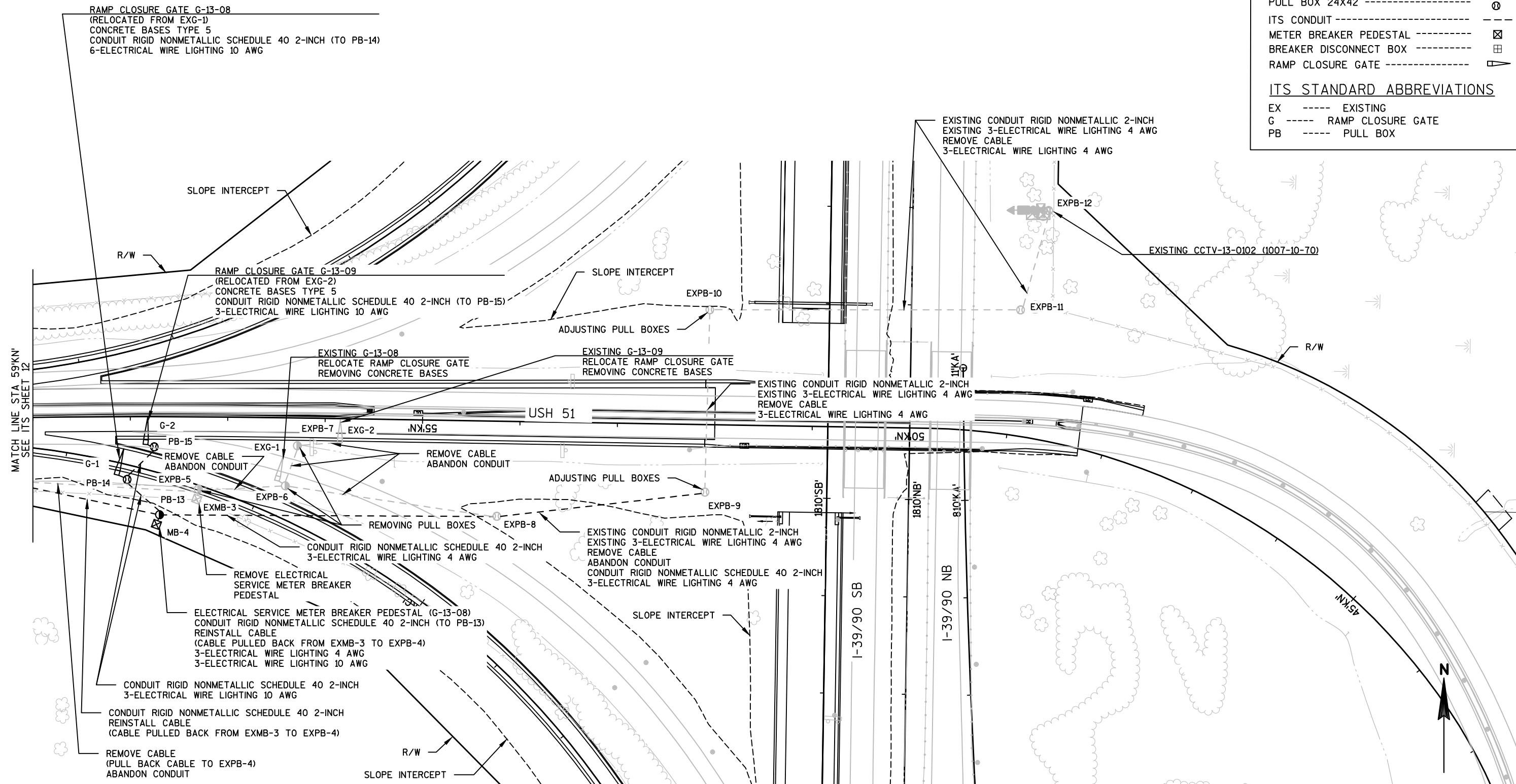
ITS LEGEND		ITS SHEET 12 OF 13
DESCRIPTION		SYMBOL
PULL BOX 24X36	-----	●
ITS CONDUIT	-----	---
RAMP CLOSURE GATE	-----	△
ITS STANDARD ABBREVIATIONS		
EX	----	EXISTING
G	----	RAMP CLOSURE GATE
PB	----	PULL BOX



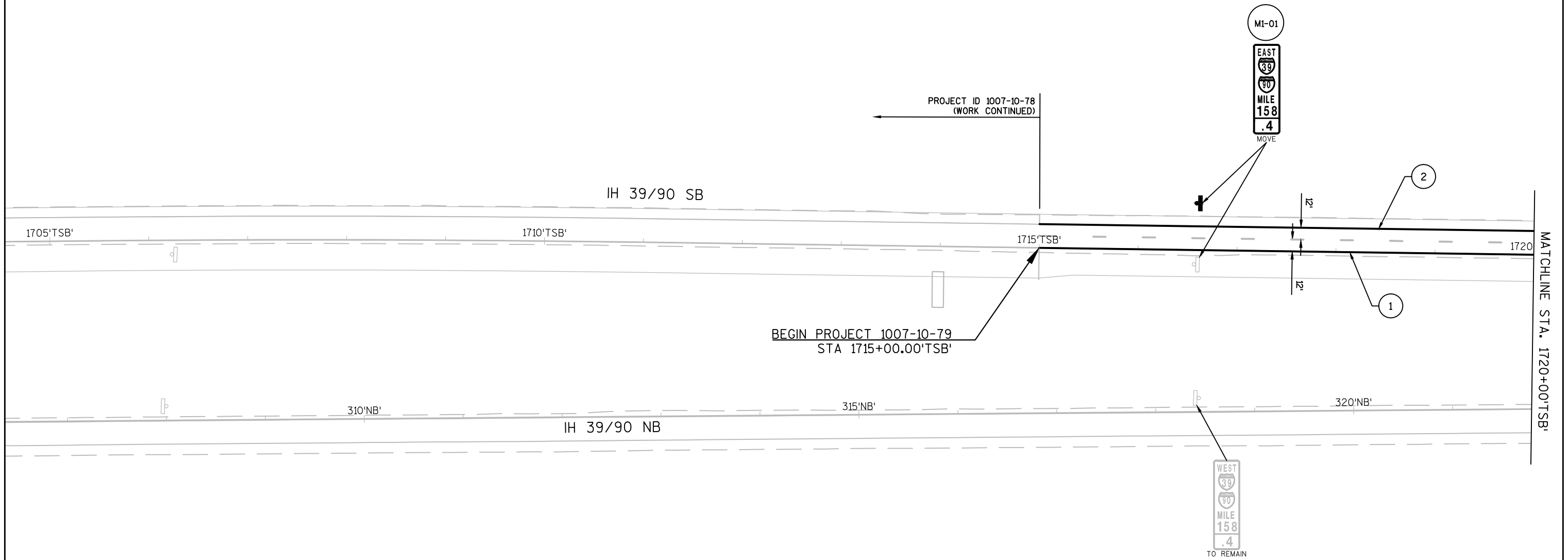
DESCRIPTION	SYMBOL
CCTV CAMERA	
POLE MOUNTED CABINET	
PULL BOX 24X36	
PULL BOX 24X42	
ITS CONDUIT	
METER BREAKER PEDESTAL	
BREAKER DISCONNECT BOX	
RAMP CLOSURE GATE	

ITS STANDARD ABBREVIATIONS

EX	-----	EXISTING
G	-----	RAMP CLOSURE GATE
PB	-----	PULL BOX



NOTIFY THE REGIONAL TRAFFIC UNIT (PRIMARY 608-246-5360, SECONDARY 608-884-1166), A MINIMUM OF TWO (2) WEEKS PRIOR TO STAKING THE RAMP CLOSURE GATE ITEMS.

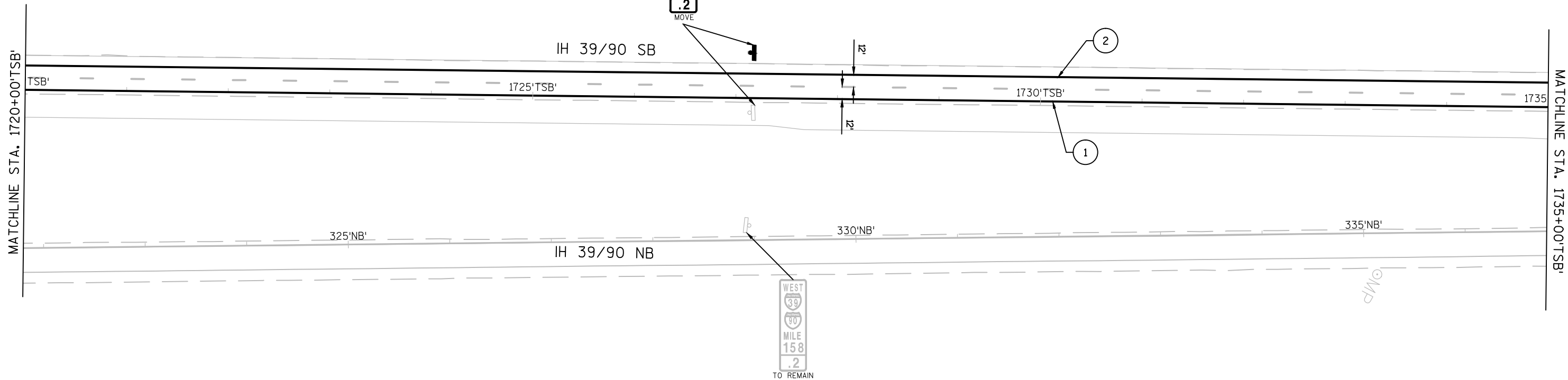


PAVEMENT MARKING LEGEND

- | | |
|---|---|
| ① PAVEMENT MARKING EPOXY 4-INCH (YELLOW) | ②① PAVEMENT MARKING CURB EPOXY (YELLOW) |
| ② PAVEMENT MARKING EPOXY 4-INCH (WHITE) | ②① PAVEMENT MARKING ISLAND NOSE EPOXY |
| ③ PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE)(12.5 FT LINE 37.5 FT SKIP) | ②⑦ PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE (4-INCH) (DASHED WHITE, 12.5 FT LINE 37.5 FT SKIP) |
| ④ PAVEMENT MARKING EPOXY 4-INCH (DOT PATTERN WHITE)(3 FT LINE 9 FT SKIP) | ②⑧ PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE (4-INCH) (DOT PATTERN WHITE, 3 FT LINE 9 FT SKIP) |
| ⑥ PAVEMENT MARKING EPOXY 8-INCH (WHITE) | ②⑨ PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE (8-INCH) |
| ⑬ PAVEMENT MARKING DIAGONAL EPOXY 24-INCH (WHITE) | |

PERMANENT SIGNING LEGEND

- | | | |
|-------------------|-----------------|----------------------------------|
| X-XX NEW SIGN | MX-XX MOVE SIGN | EXISTING SIGN MOUNTED ON POST(S) |
| RX-XX REMOVE SIGN | | PROPOSED SIGN MOUNTED ON POST(S) |
| | | SINGLE/DOUBLE DELINEATOR WHITE |
| | | FLEXIBLE TUBULAR MARKER POSTS |

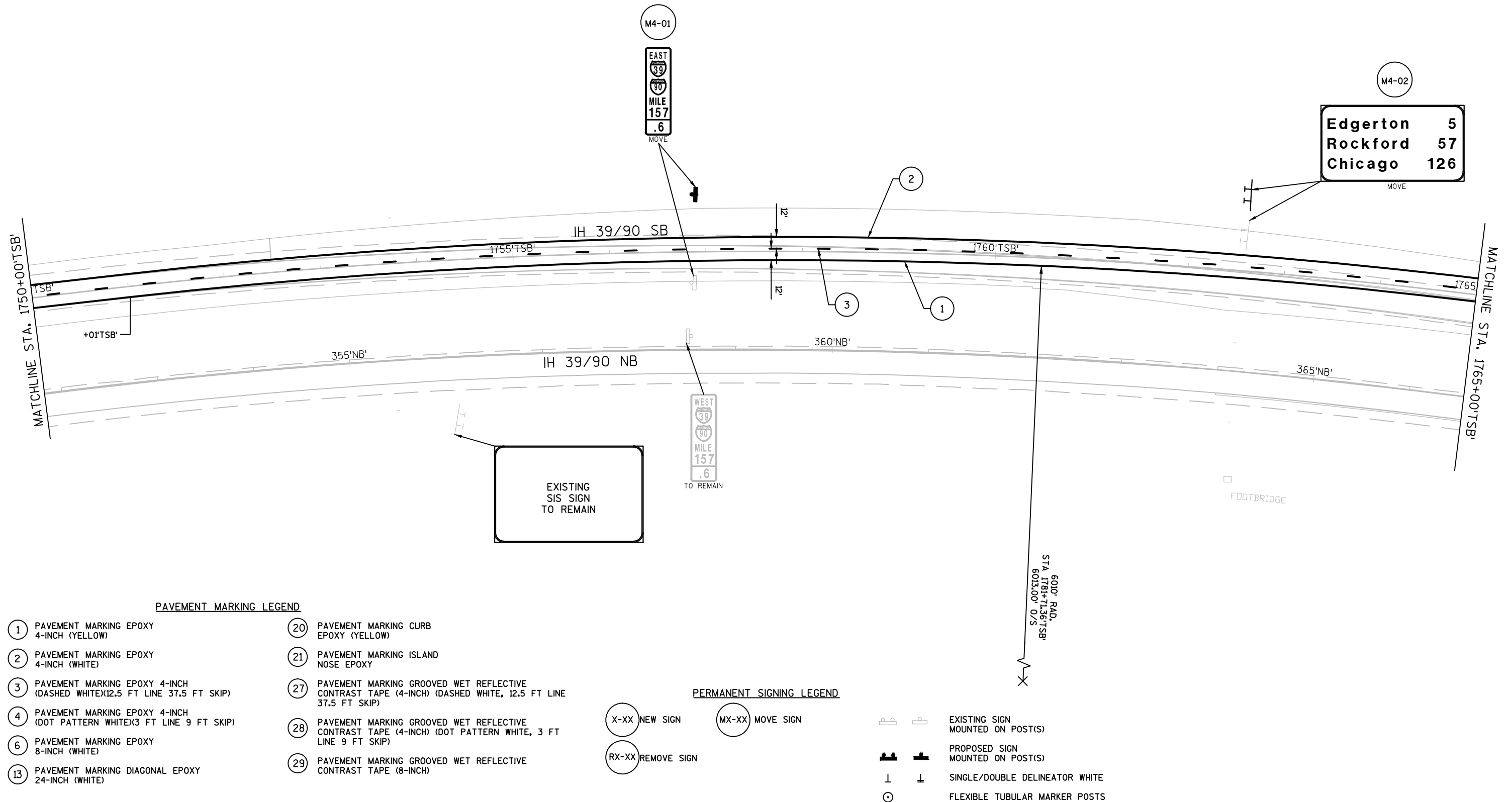


PAVEMENT MARKING LEGEND

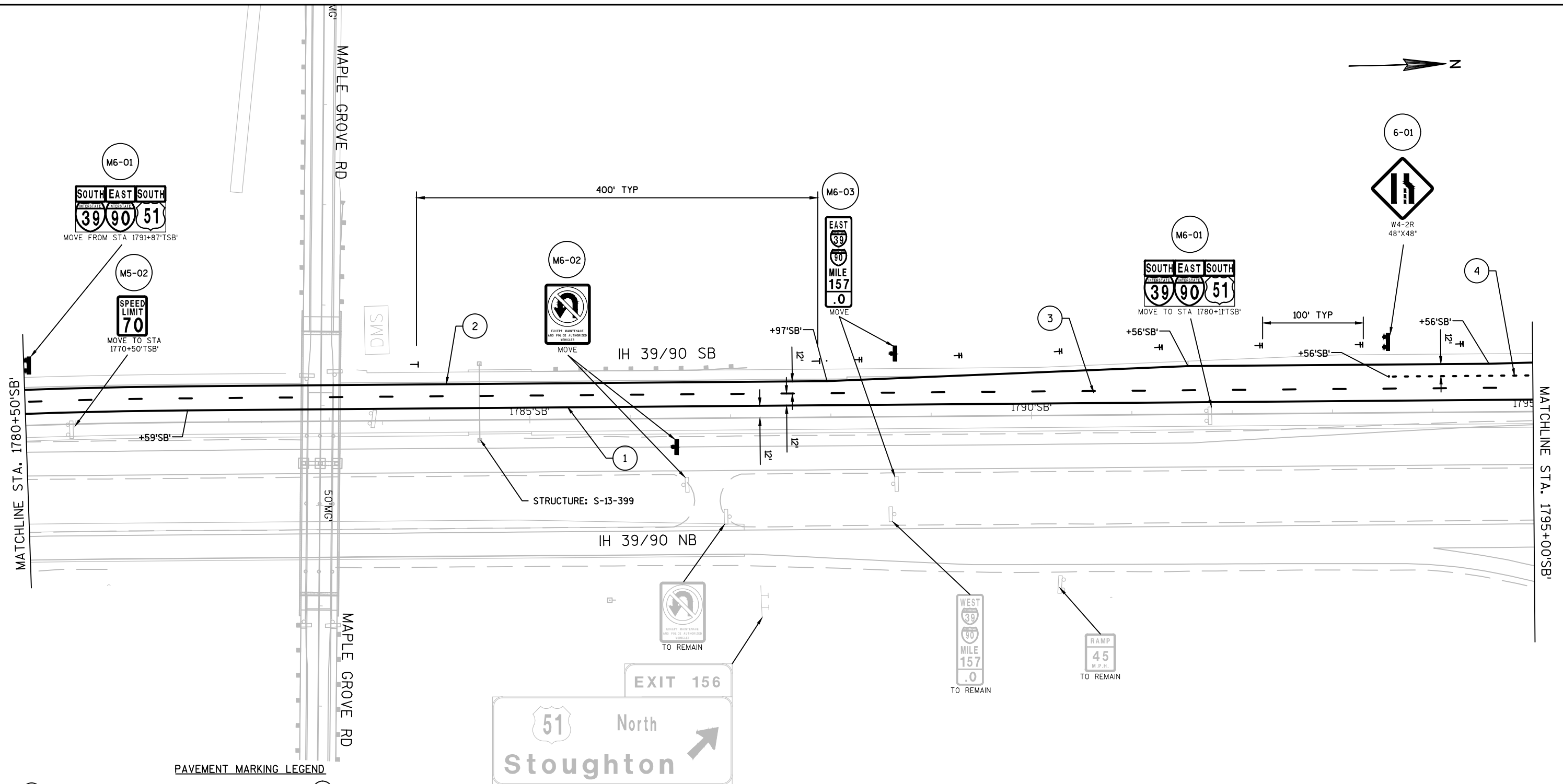
- | | |
|--|---|
| ① PAVEMENT MARKING EPOXY
4-INCH (YELLOW) | ②0 PAVEMENT MARKING CURB
EPOXY (YELLOW) |
| ② PAVEMENT MARKING EPOXY
4-INCH (WHITE) | ②1 PAVEMENT MARKING ISLAND
NOSE EPOXY |
| ③ PAVEMENT MARKING EPOXY 4-INCH
(DASHED WHITE)(12.5 FT LINE 37.5 FT SKIP) | ②7 PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (4-INCH) (DASHED WHITE, 12.5 FT LINE
37.5 FT SKIP) |
| ④ PAVEMENT MARKING EPOXY 4-INCH
(DOT PATTERN WHITE)(3 FT LINE 9 FT SKIP) | ②8 PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (4-INCH) (DOT PATTERN WHITE, 3 FT
LINE 9 FT SKIP) |
| ⑥ PAVEMENT MARKING EPOXY
8-INCH (WHITE) | ②9 PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (8-INCH) |
| ⑬ PAVEMENT MARKING DIAGONAL EPOXY
24-INCH (WHITE) | |

PERMANENT SIGNING LEGEND

- | | | |
|-------------------|-----------------|-------------------------------------|
| X-XX NEW SIGN | MX-XX MOVE SIGN | EXISTING SIGN
MOUNTED ON POST(S) |
| RX-XX REMOVE SIGN | | PROPOSED SIGN
MOUNTED ON POST(S) |
| | | SINGLE/DOUBLE DELINEATOR WHITE |
| | | FLEXIBLE TUBULAR MARKER POSTS |







PAVEMENT MARKING LEGEND

- ① PAVEMENT MARKING EPOXY
4-INCH (YELLOW)
- ② PAVEMENT MARKING EPOXY
4-INCH (WHITE)
- ③ PAVEMENT MARKING EPOXY 4-INCH
(DASHED WHITE)(12.5 FT LINE 37.5 FT SKIP)
- ④ PAVEMENT MARKING EPOXY 4-INCH
(DOT PATTERN WHITE)(3 FT LINE 9 FT SKIP)
- ⑥ PAVEMENT MARKING EPOXY
8-INCH (WHITE)
- ⑬ PAVEMENT MARKING DIAGONAL EPOXY
24-INCH (WHITE)

- ⑳ PAVEMENT MARKING CURB
EPOXY (YELLOW)
- ㉑ PAVEMENT MARKING ISLAND
NOSE EPOXY
- ㉒ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (4-INCH) (DASHED WHITE, 12.5 FT LINE
37.5 FT SKIP)
- ㉓ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (4-INCH) (DOT PATTERN WHITE, 3 FT
LINE 9 FT SKIP)
- ㉔ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (8-INCH)

TO REMAIN

PERMANENT SIGNING LEGEND

X-XX NEW SIGN

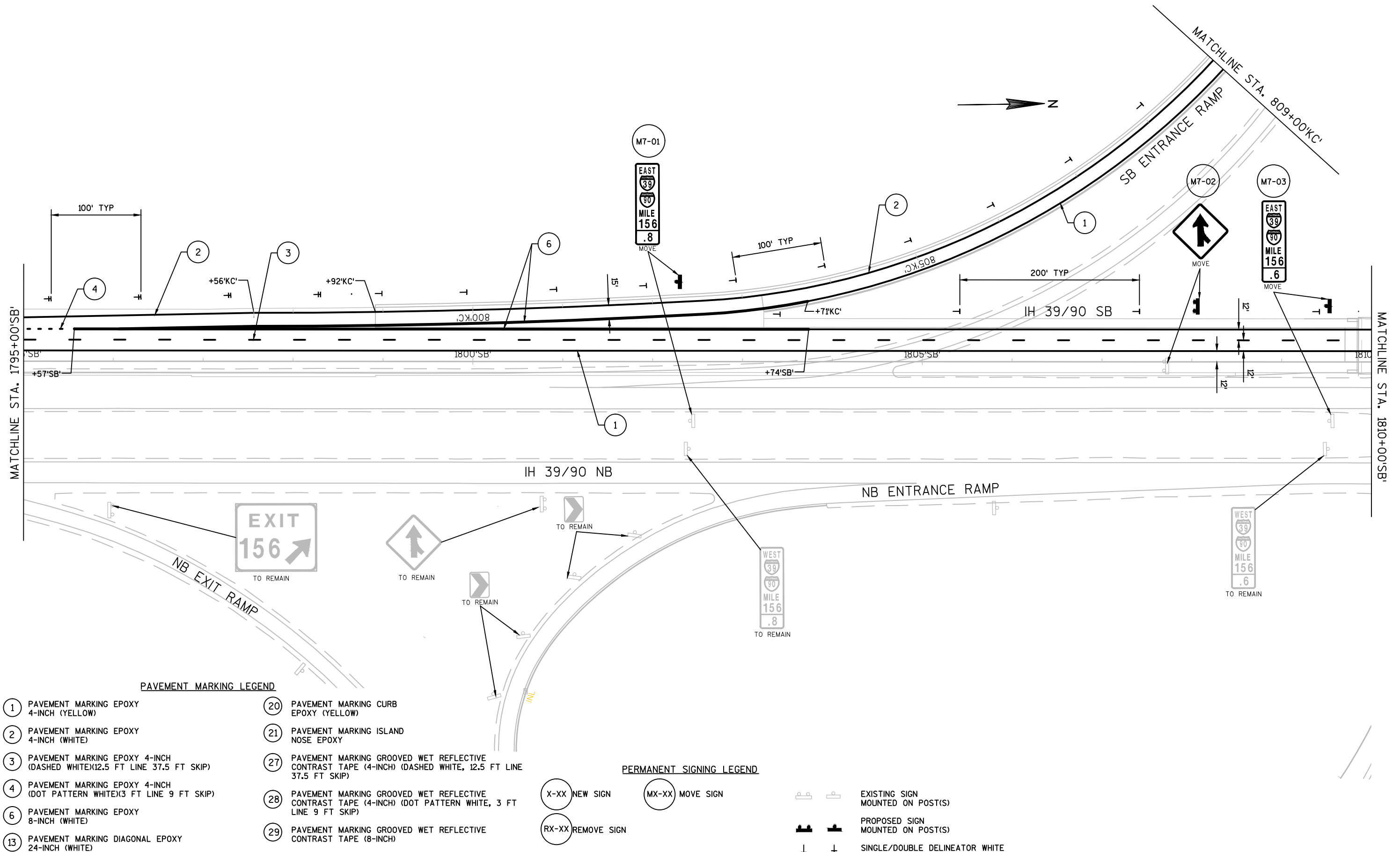
MX-XX MOVE SIGN

RX-XX REMOVE SIGN

EXISTING SIGN
MOUNTED ON POST(S)PROPOSED SIGN
MOUNTED ON POST(S)

SINGLE/DOUBLE DELINEATOR WHITE

FLEXIBLE TUBULAR MARKER POSTS

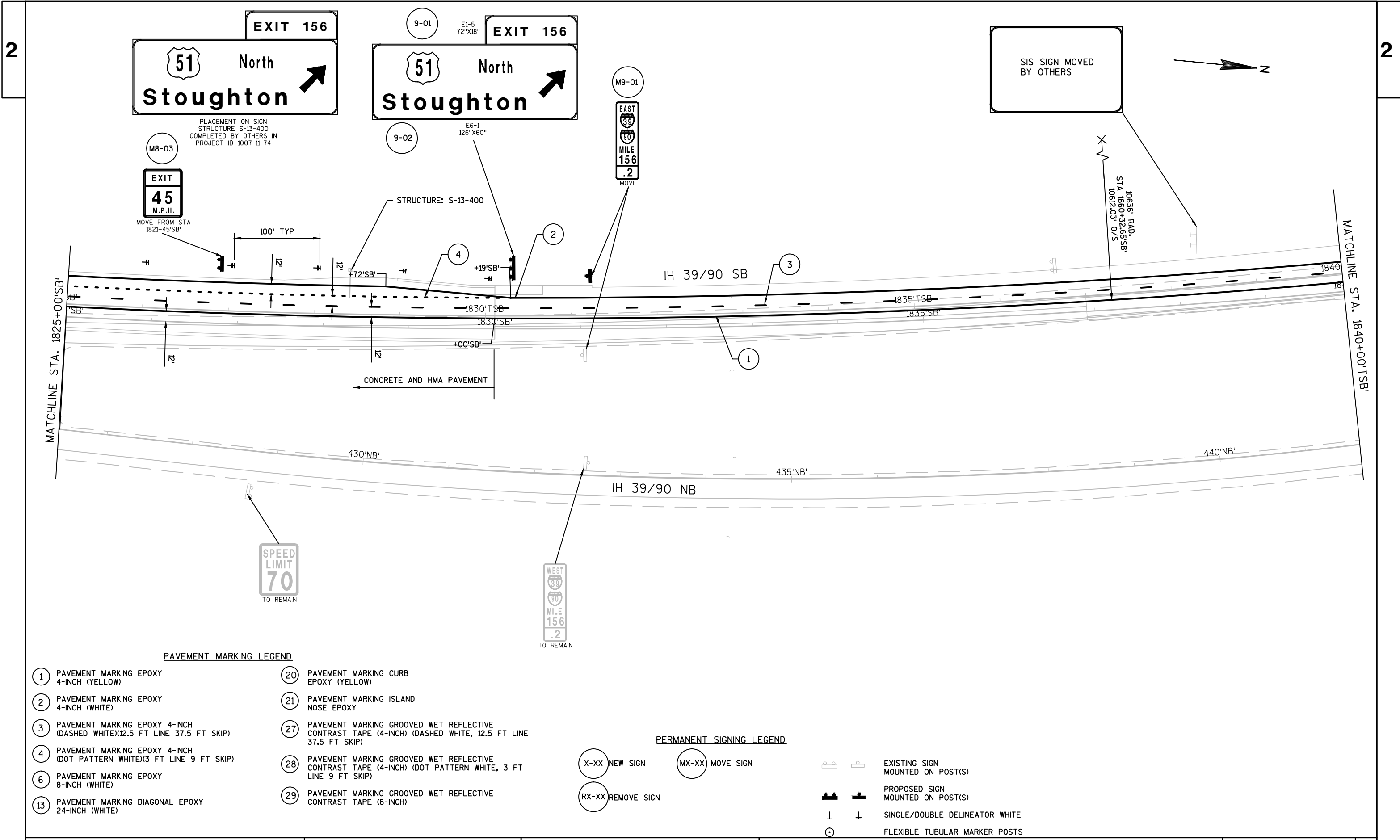




- | | |
|---|--|
| <p>① PAVEMENT MARKING EPOXY
4-INCH (YELLOW)</p> <p>② PAVEMENT MARKING EPOXY
4-INCH (WHITE)</p> <p>③ PAVEMENT MARKING EPOXY 4-INCH
(DASHED WHITE)(12.5 FT LINE 37.5 FT SKIP)</p> <p>④ PAVEMENT MARKING EPOXY 4-INCH
(DOT PATTERN WHITE)(3 FT LINE 9 FT SKIP)</p> <p>⑥ PAVEMENT MARKING EPOXY
8-INCH (WHITE)</p> <p>⑬ PAVEMENT MARKING DIAGONAL EPOXY
24-INCH (WHITE)</p> | <p>⑳ PAVEMENT MARKING CURB
EPOXY (YELLOW)</p> <p>㉑ PAVEMENT MARKING ISLAND
NOSE EPOXY</p> <p>㉔ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (4-INCH) (DASHED WHITE, 12.5 FT LINE
37.5 FT SKIP)</p> <p>㉘ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (4-INCH) (DOT PATTERN WHITE, 3 FT
LINE 9 FT SKIP)</p> <p>㉙ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (8-INCH)</p> |
|---|--|

PERMANENT SIGNING LEGEND

- | | | | | |
|---|---|---|---|-------------------------------------|
|  X-XX NEW SIGN |  MX-XX MOVE SIGN |  |  | EXISTING SIGN
MOUNTED ON POST(S) |
|  RX-XX REMOVE SIGN | |  |  | PROPOSED SIGN
MOUNTED ON POST(S) |
| | |  |  | SINGLE/DOUBLE DELINEATOR WHITE |
| | |  | | FLEXIBLE TUBULAR MARKER POSTS |

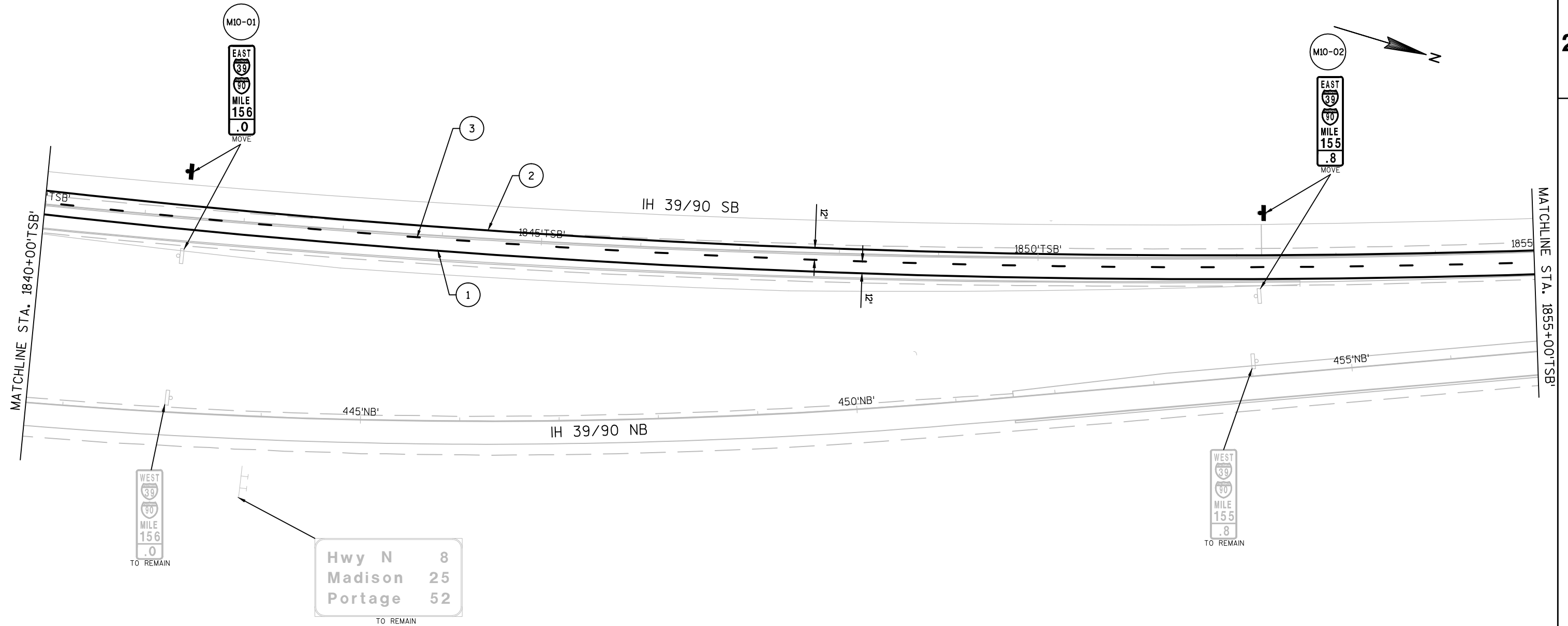


PAVEMENT MARKING LEGEND

- | | |
|--|---|
| ① PAVEMENT MARKING EPOXY
4-INCH (YELLOW) | ②① PAVEMENT MARKING CURB
EPOXY (YELLOW) |
| ② PAVEMENT MARKING EPOXY
4-INCH (WHITE) | ②① PAVEMENT MARKING ISLAND
NOSE EPOXY |
| ③ PAVEMENT MARKING EPOXY 4-INCH
(DASHED WHITE)(12.5 FT LINE 37.5 FT SKIP) | ②⑦ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (4-INCH) (DASHED WHITE, 12.5 FT LINE
37.5 FT SKIP) |
| ④ PAVEMENT MARKING EPOXY 4-INCH
(DOT PATTERN WHITE)(3 FT LINE 9 FT SKIP) | ②⑧ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (4-INCH) (DOT PATTERN WHITE, 3 FT
LINE 9 FT SKIP) |
| ⑥ PAVEMENT MARKING EPOXY
8-INCH (WHITE) | ②⑨ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (8-INCH) |
| ⑬ PAVEMENT MARKING DIAGONAL EPOXY
24-INCH (WHITE) | |

PERMANENT SIGNING LEGEND

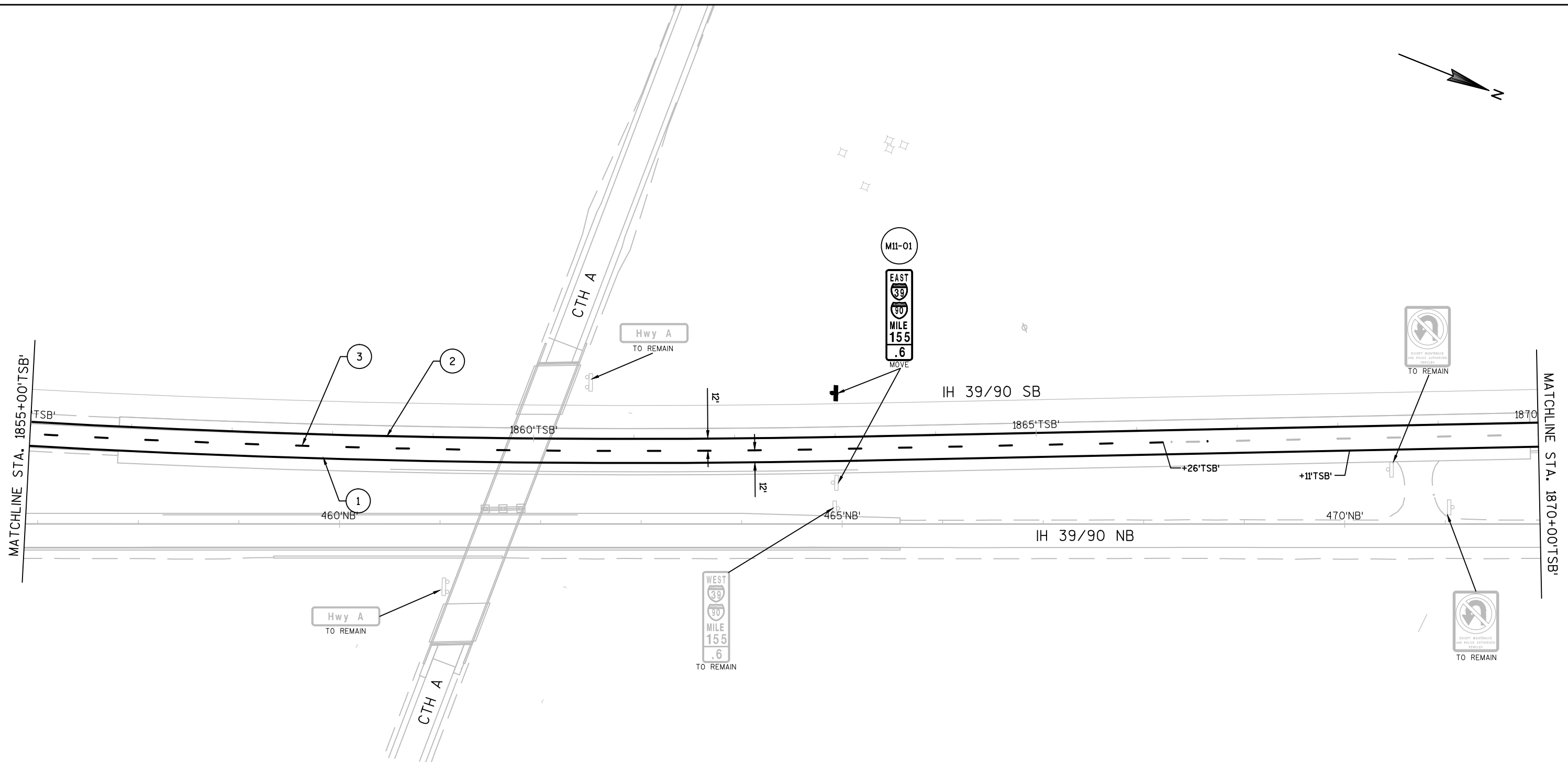
- | | | |
|-------------------|-----------------|-------------------------------------|
| X-XX NEW SIGN | MX-XX MOVE SIGN | EXISTING SIGN
MOUNTED ON POST(S) |
| RX-XX REMOVE SIGN | | PROPOSED SIGN
MOUNTED ON POST(S) |
| | | SINGLE/DOUBLE DELINEATOR WHITE |
| | | FLEXIBLE TUBULAR MARKER POSTS |

**PAVEMENT MARKING LEGEND**

- | | |
|--|---|
| ① PAVEMENT MARKING EPOXY
4-INCH (YELLOW) | ②① PAVEMENT MARKING CURB
EPOXY (YELLOW) |
| ② PAVEMENT MARKING EPOXY
4-INCH (WHITE) | ②① PAVEMENT MARKING ISLAND
NOSE EPOXY |
| ③ PAVEMENT MARKING EPOXY 4-INCH
(DASHED WHITE)(12.5 FT LINE 37.5 FT SKIP) | ②⑦ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (4-INCH) (DASHED WHITE, 12.5 FT LINE
37.5 FT SKIP) |
| ④ PAVEMENT MARKING EPOXY 4-INCH
(DOT PATTERN WHITE)(3 FT LINE 9 FT SKIP) | ②⑧ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (4-INCH) (DOT PATTERN WHITE, 3 FT
LINE 9 FT SKIP) |
| ⑥ PAVEMENT MARKING EPOXY
8-INCH (WHITE) | ②⑨ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (8-INCH) |
| ⑬ PAVEMENT MARKING DIAGONAL EPOXY
24-INCH (WHITE) | |

PERMANENT SIGNING LEGEND

- | | | |
|-------------------|-----------------|-------------------------------------|
| X-XX NEW SIGN | MX-XX MOVE SIGN | EXISTING SIGN
MOUNTED ON POST(S) |
| RX-XX REMOVE SIGN | | PROPOSED SIGN
MOUNTED ON POST(S) |
| | | SINGLE/DOUBLE DELINEATOR WHITE |
| | | FLEXIBLE TUBULAR MARKER POSTS |

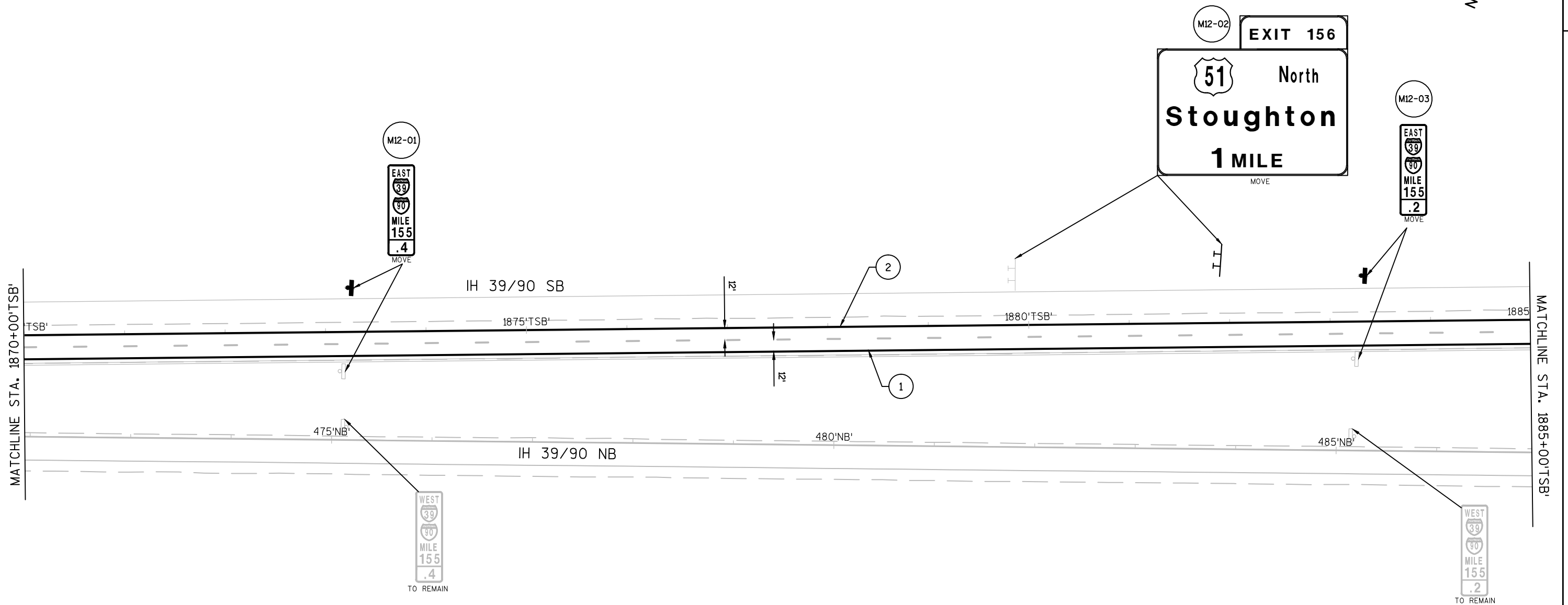


PAVEMENT MARKING LEGEND

- | | |
|---|---|
| ① PAVEMENT MARKING EPOXY 4-INCH (YELLOW) | ②⑦ PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE (4-INCH) (DASHED WHITE, 12.5 FT LINE 37.5 FT SKIP) |
| ② PAVEMENT MARKING EPOXY 4-INCH (WHITE) | ②⑧ PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE (4-INCH) (DOT PATTERN WHITE, 3 FT LINE 9 FT SKIP) |
| ③ PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE)(12.5 FT LINE 37.5 FT SKIP) | ②⑨ PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE (8-INCH) |
| ④ PAVEMENT MARKING EPOXY 4-INCH (DOT PATTERN WHITE)(3 FT LINE 9 FT SKIP) | |
| ⑥ PAVEMENT MARKING EPOXY 8-INCH (WHITE) | |
| ⑬ PAVEMENT MARKING DIAGONAL EPOXY 24-INCH (WHITE) | |
| ②⑦ PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE (4-INCH) (DASHED WHITE, 12.5 FT LINE 37.5 FT SKIP) | |
| ②⑧ PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE (4-INCH) (DOT PATTERN WHITE, 3 FT LINE 9 FT SKIP) | |
| ②⑨ PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE (8-INCH) | |

PERMANENT SIGNING LEGEND

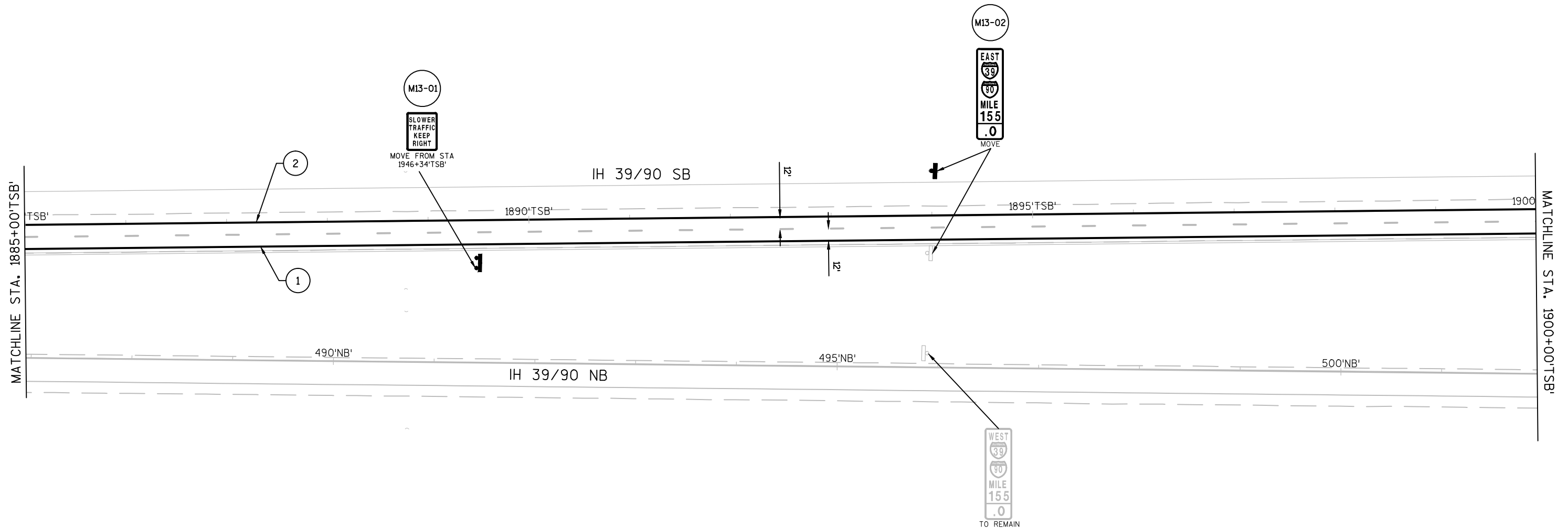
- | | | |
|-------------------|-----------------|----------------------------------|
| X-XX NEW SIGN | MX-XX MOVE SIGN | EXISTING SIGN MOUNTED ON POST(S) |
| RX-XX REMOVE SIGN | | PROPOSED SIGN MOUNTED ON POST(S) |
| | | SINGLE/DOUBLE DELINEATOR WHITE |
| | | FLEXIBLE TUBULAR MARKER POSTS |

**PAVEMENT MARKING LEGEND**

- | | |
|--|---|
| ① PAVEMENT MARKING EPOXY
4-INCH (YELLOW) | ②⑦ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (4-INCH) (DASHED WHITE, 12.5 FT LINE
37.5 FT SKIP) |
| ② PAVEMENT MARKING EPOXY
4-INCH (WHITE) | ②⑧ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (4-INCH) (DOT PATTERN WHITE, 3 FT
LINE 9 FT SKIP) |
| ③ PAVEMENT MARKING EPOXY 4-INCH
(DASHED WHITE)(12.5 FT LINE 37.5 FT SKIP) | ②⑨ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (8-INCH) |
| ④ PAVEMENT MARKING EPOXY 4-INCH
(DOT PATTERN WHITE)(3 FT LINE 9 FT SKIP) | |
| ⑥ PAVEMENT MARKING EPOXY
8-INCH (WHITE) | |
| ⑬ PAVEMENT MARKING DIAGONAL EPOXY
24-INCH (WHITE) | |
| ②⑩ PAVEMENT MARKING CURB
EPOXY (YELLOW) | |
| ②⑪ PAVEMENT MARKING ISLAND
NOSE EPOXY | |

PERMANENT SIGNING LEGEND

- | | | |
|-------------------|-----------------|-------------------------------------|
| X-XX NEW SIGN | MX-XX MOVE SIGN | EXISTING SIGN
MOUNTED ON POST(S) |
| RX-XX REMOVE SIGN | | PROPOSED SIGN
MOUNTED ON POST(S) |
| | | SINGLE/DOUBLE DELINEATOR WHITE |
| | | FLEXIBLE TUBULAR MARKER POSTS |

PAVEMENT MARKING LEGEND

- | | |
|--|---|
| ① PAVEMENT MARKING EPOXY
4-INCH (YELLOW) | ②① PAVEMENT MARKING CURB
EPOXY (YELLOW) |
| ② PAVEMENT MARKING EPOXY
4-INCH (WHITE) | ②① PAVEMENT MARKING ISLAND
NOSE EPOXY |
| ③ PAVEMENT MARKING EPOXY 4-INCH
(DASHED WHITE)(12.5 FT LINE 37.5 FT SKIP) | ②⑦ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (4-INCH) (DASHED WHITE, 12.5 FT LINE
37.5 FT SKIP) |
| ④ PAVEMENT MARKING EPOXY 4-INCH
(DOT PATTERN WHITE)(3 FT LINE 9 FT SKIP) | ②⑧ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (4-INCH) (DOT PATTERN WHITE, 3 FT
LINE 9 FT SKIP) |
| ⑥ PAVEMENT MARKING EPOXY
8-INCH (WHITE) | ②⑨ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (8-INCH) |
| ⑬ PAVEMENT MARKING DIAGONAL EPOXY
24-INCH (WHITE) | |

PERMANENT SIGNING LEGEND

X-XX NEW SIGN

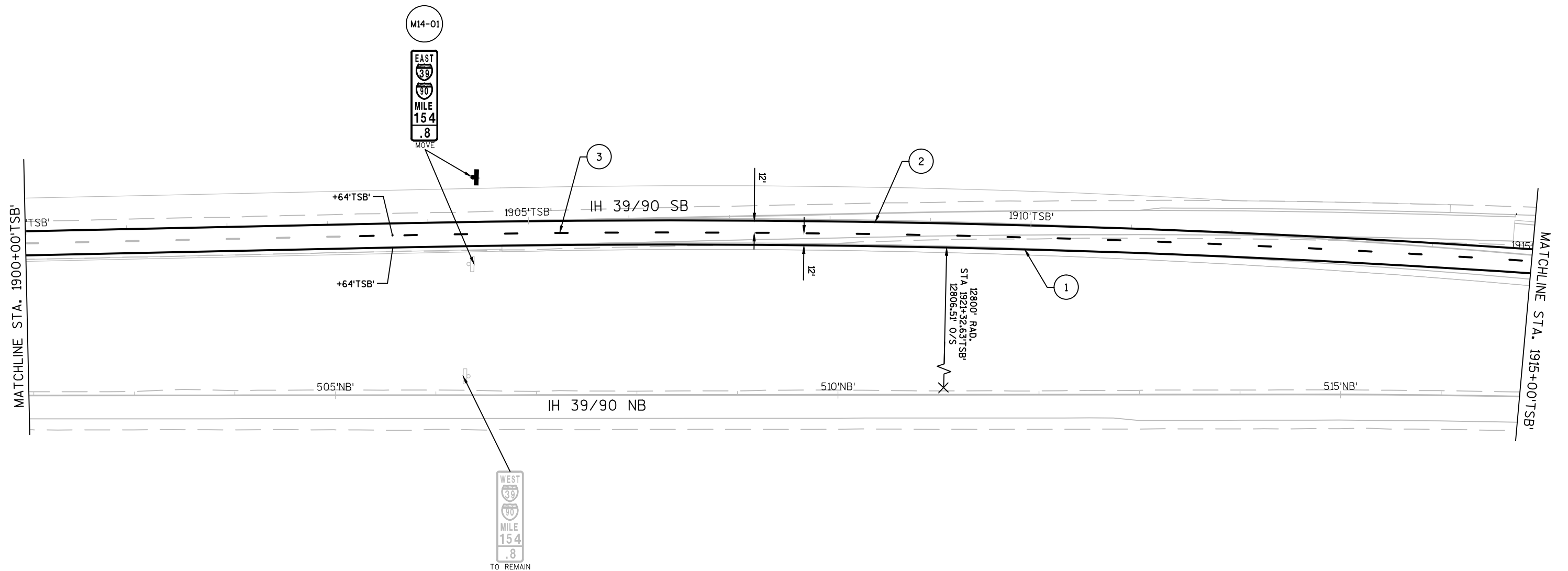
MX-XX MOVE SIGN

RX-XX REMOVE SIGN

EXISTING SIGN
MOUNTED ON POST(S)PROPOSED SIGN
MOUNTED ON POST(S)

SINGLE/DOUBLE DELINEATOR WHITE

FLEXIBLE TUBULAR MARKER POSTS

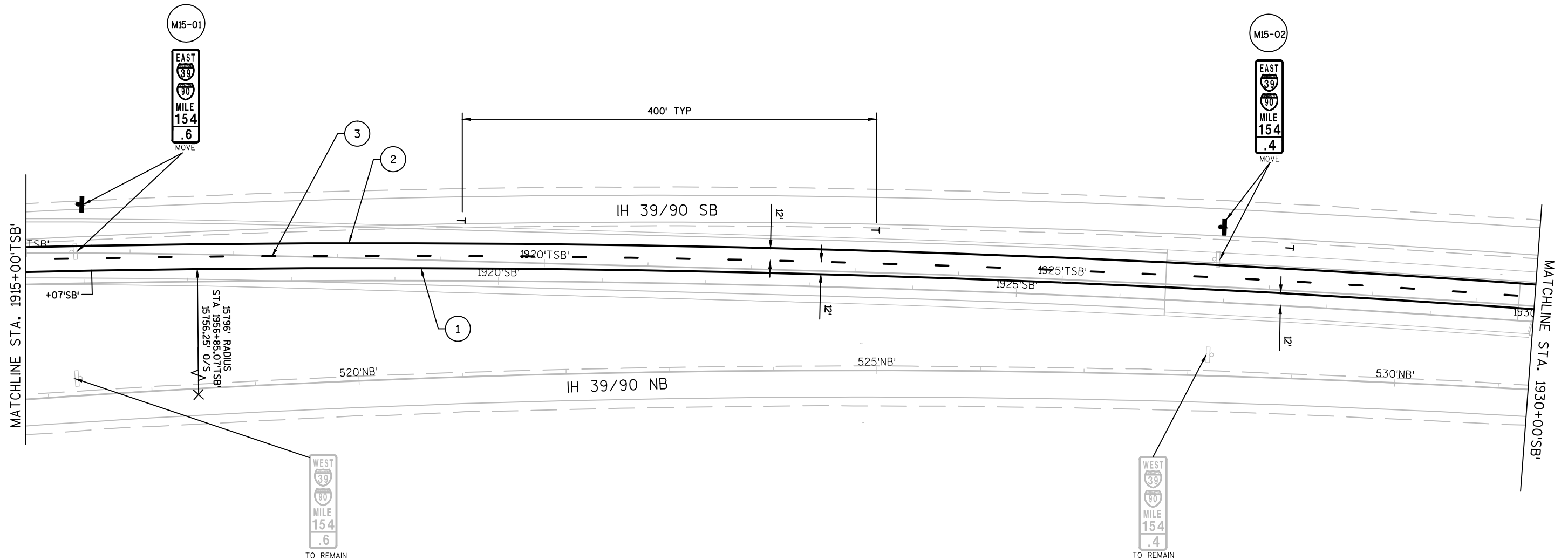


PAVEMENT MARKING LEGEND

- | | |
|---|---|
| ① PAVEMENT MARKING EPOXY 4-INCH (YELLOW) | ②① PAVEMENT MARKING CURB EPOXY (YELLOW) |
| ② PAVEMENT MARKING EPOXY 4-INCH (WHITE) | ②① PAVEMENT MARKING ISLAND NOSE EPOXY |
| ③ PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE)(12.5 FT LINE 37.5 FT SKIP) | ②⑦ PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE (4-INCH) (DASHED WHITE, 12.5 FT LINE 37.5 FT SKIP) |
| ④ PAVEMENT MARKING EPOXY 4-INCH (DOT PATTERN WHITE)(3 FT LINE 9 FT SKIP) | ②⑧ PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE (4-INCH) (DOT PATTERN WHITE, 3 FT LINE 9 FT SKIP) |
| ⑥ PAVEMENT MARKING EPOXY 8-INCH (WHITE) | ②⑨ PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE (8-INCH) |
| ⑬ PAVEMENT MARKING DIAGONAL EPOXY 24-INCH (WHITE) | |

PERMANENT SIGNING LEGEND

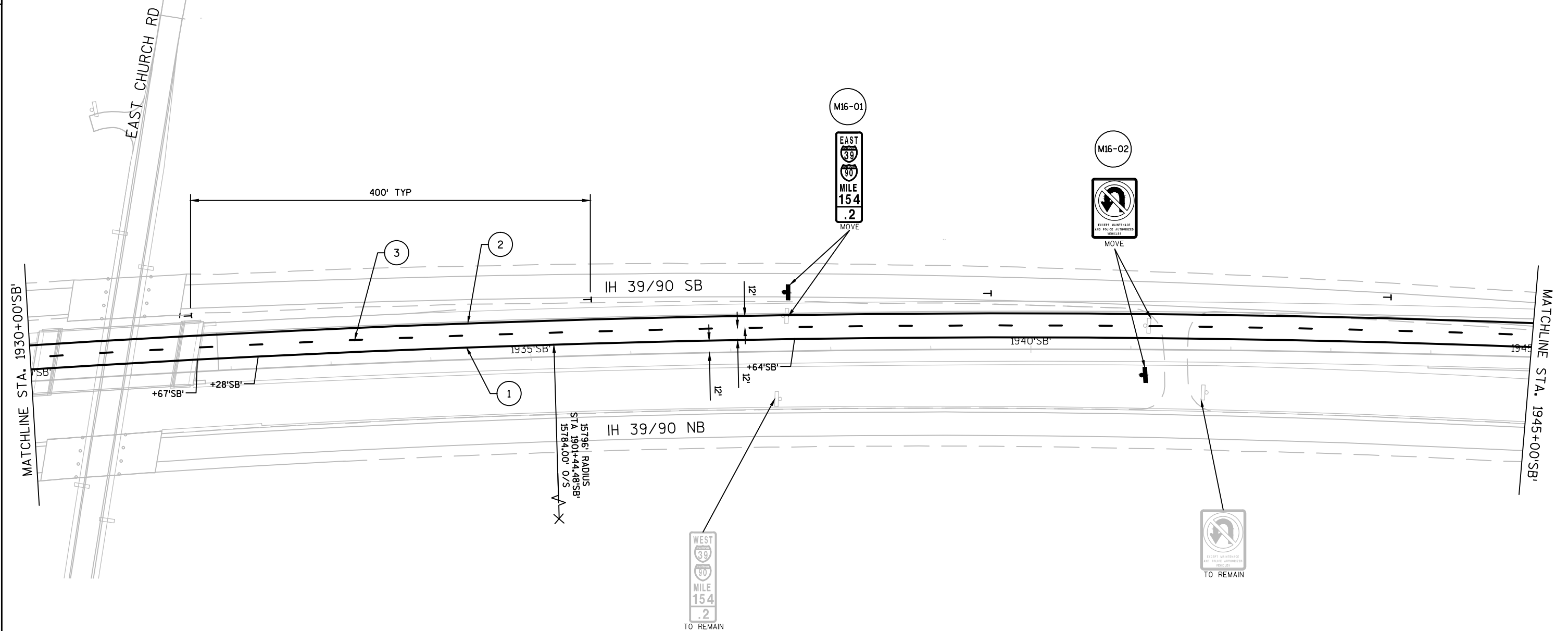
- | | | |
|-------------------|-----------------|----------------------------------|
| X-XX NEW SIGN | MX-XX MOVE SIGN | EXISTING SIGN MOUNTED ON POST(S) |
| RX-XX REMOVE SIGN | | PROPOSED SIGN MOUNTED ON POST(S) |
| | | SINGLE/DOUBLE DELINEATOR WHITE |
| | | FLEXIBLE TUBULAR MARKER POSTS |

**PAVEMENT MARKING LEGEND**

- | | |
|---|---|
| ① PAVEMENT MARKING EPOXY
4-INCH (YELLOW) | ②① PAVEMENT MARKING CURB
EPOXY (YELLOW) |
| ② PAVEMENT MARKING EPOXY
4-INCH (WHITE) | ②① PAVEMENT MARKING ISLAND
NOSE EPOXY |
| ③ PAVEMENT MARKING EPOXY 4-INCH
(DASHED WHITE) 12.5 FT LINE 37.5 FT SKIP | ②⑦ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (4-INCH) (DASHED WHITE, 12.5 FT LINE
37.5 FT SKIP) |
| ④ PAVEMENT MARKING EPOXY 4-INCH
(DOT PATTERN WHITE) 3 FT LINE 9 FT SKIP | ②⑧ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (4-INCH) (DOT PATTERN WHITE, 3 FT
LINE 9 FT SKIP) |
| ⑥ PAVEMENT MARKING EPOXY
8-INCH (WHITE) | ②⑨ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (8-INCH) |
| ⑬ PAVEMENT MARKING DIAGONAL EPOXY
24-INCH (WHITE) | |

PERMANENT SIGNING LEGEND

- | | | |
|-------------------|-----------------|-------------------------------------|
| ⊖-XX NEW SIGN | ⊖X-XX MOVE SIGN | EXISTING SIGN
MOUNTED ON POST(S) |
| RX-XX REMOVE SIGN | | PROPOSED SIGN
MOUNTED ON POST(S) |
| | | ⊥ ⊥ SINGLE/DOUBLE DELINEATOR WHITE |
| | | ⊙ FLEXIBLE TUBULAR MARKER POSTS |



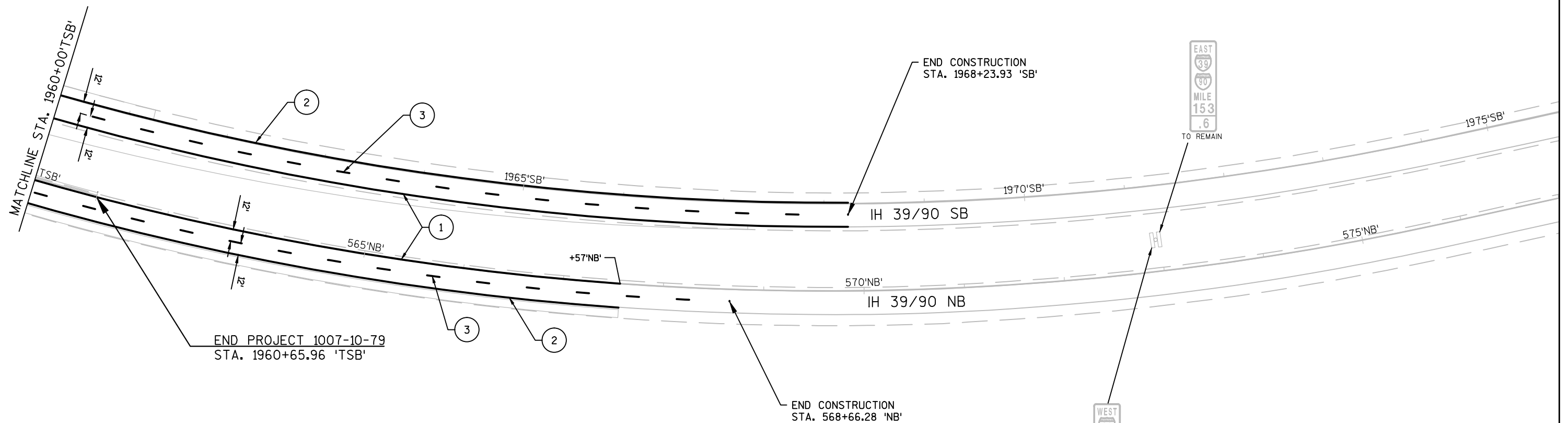
PAVEMENT MARKING LEGEND

- | | |
|--|---|
| ① PAVEMENT MARKING EPOXY
4-INCH (YELLOW) | ②① PAVEMENT MARKING CURB
EPOXY (YELLOW) |
| ② PAVEMENT MARKING EPOXY
4-INCH (WHITE) | ②① PAVEMENT MARKING ISLAND
NOSE EPOXY |
| ③ PAVEMENT MARKING EPOXY 4-INCH
(DASHED WHITE)(12.5 FT LINE 37.5 FT SKIP) | ②⑦ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (4-INCH) (DASHED WHITE, 12.5 FT LINE
37.5 FT SKIP) |
| ④ PAVEMENT MARKING EPOXY 4-INCH
(DOT PATTERN WHITE)(3 FT LINE 9 FT SKIP) | ②⑧ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (4-INCH) (DOT PATTERN WHITE, 3 FT
LINE 9 FT SKIP) |
| ⑥ PAVEMENT MARKING EPOXY
8-INCH (WHITE) | ②⑨ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (8-INCH) |
| ⑬ PAVEMENT MARKING DIAGONAL EPOXY
24-INCH (WHITE) | |

PERMANENT SIGNING LEGEND

- | | | |
|-------------------|-----------------|-------------------------------------|
| X-XX NEW SIGN | MX-XX MOVE SIGN | EXISTING SIGN
MOUNTED ON POST(S) |
| RX-XX REMOVE SIGN | | PROPOSED SIGN
MOUNTED ON POST(S) |
| | | SINGLE/DOUBLE DELINEATOR WHITE |
| | | FLEXIBLE TUBULAR MARKER POSTS |



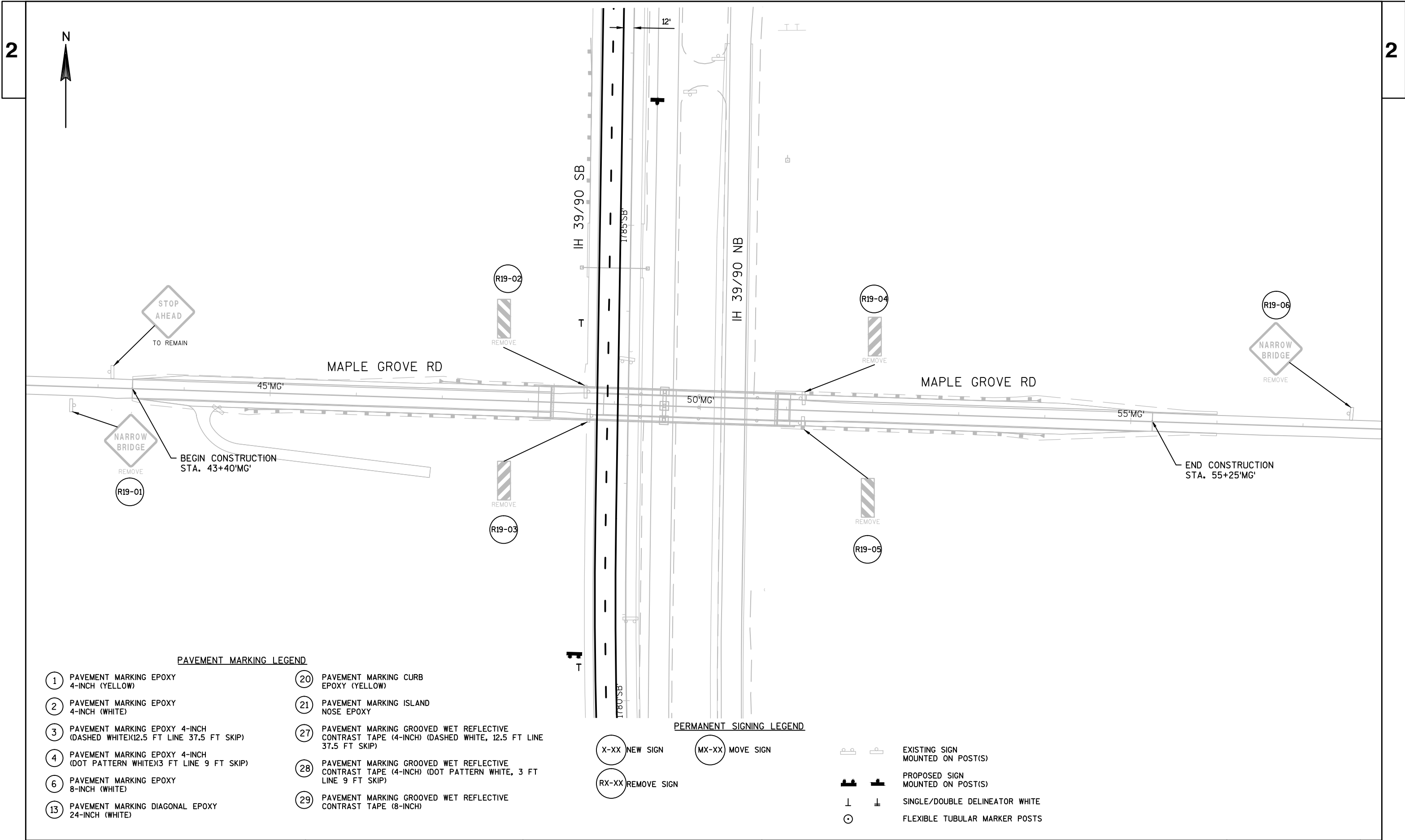


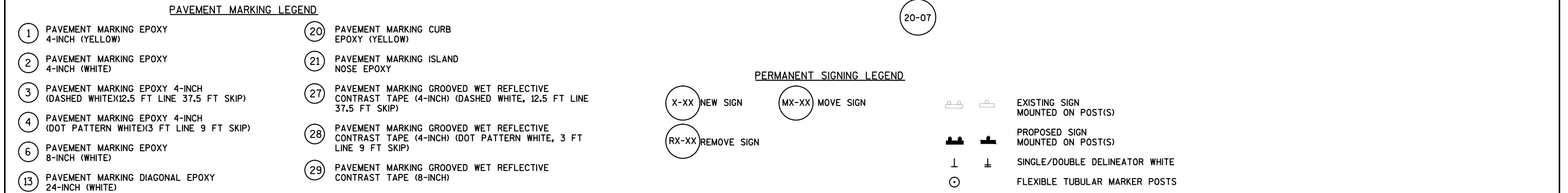
PAVEMENT MARKING LEGEND

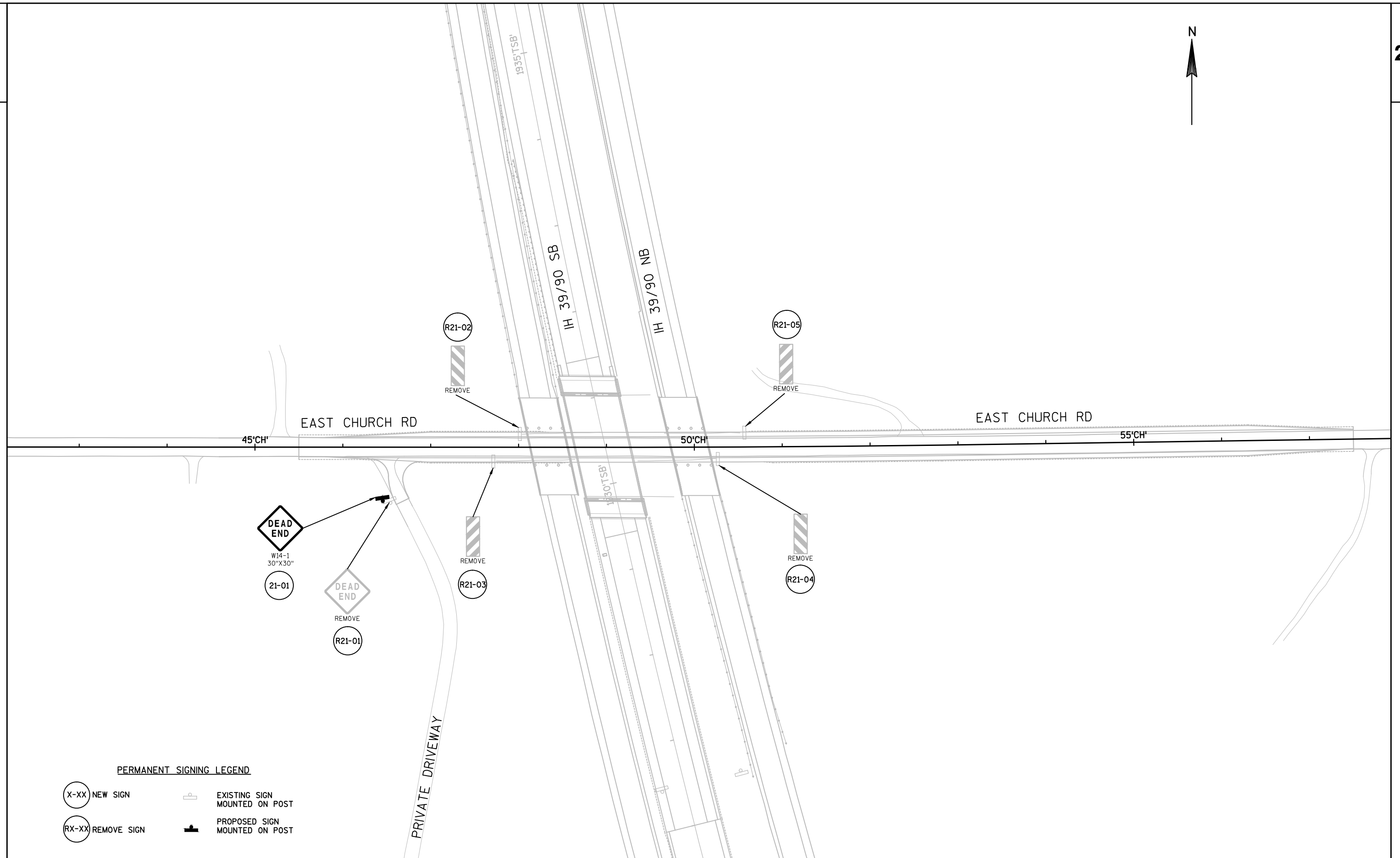
- | | |
|--|---|
| ① PAVEMENT MARKING EPOXY
4-INCH (YELLOW) | ②⑦ PAVEMENT MARKING CURB
EPOXY (YELLOW) |
| ② PAVEMENT MARKING EPOXY
4-INCH (WHITE) | ②① PAVEMENT MARKING ISLAND
NOSE EPOXY |
| ③ PAVEMENT MARKING EPOXY 4-INCH
(DASHED WHITE)(12.5 FT LINE 37.5 FT SKIP) | ②⑦ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (4-INCH) (DASHED WHITE, 12.5 FT LINE
37.5 FT SKIP) |
| ④ PAVEMENT MARKING EPOXY 4-INCH
(DOT PATTERN WHITE)(3 FT LINE 9 FT SKIP) | ②⑧ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (4-INCH) (DOT PATTERN WHITE, 3 FT
LINE 9 FT SKIP) |
| ⑥ PAVEMENT MARKING EPOXY
8-INCH (WHITE) | ②⑨ PAVEMENT MARKING GROOVED WET REFLECTIVE
CONTRAST TAPE (8-INCH) |
| ⑬ PAVEMENT MARKING DIAGONAL EPOXY
24-INCH (WHITE) | |

PERMANENT SIGNING LEGEND

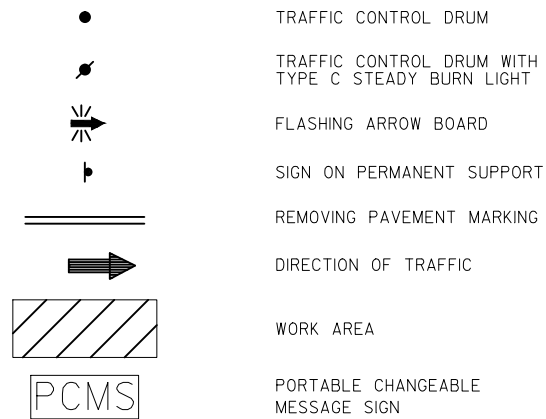
- | | | |
|-------------------|-----------------|-------------------------------------|
| X-XX NEW SIGN | MX-XX MOVE SIGN | EXISTING SIGN
MOUNTED ON POST(S) |
| RX-XX REMOVE SIGN | | PROPOSED SIGN
MOUNTED ON POST(S) |
| | | SINGLE/DOUBLE DELINEATOR WHITE |
| | | FLEXIBLE TUBULAR MARKER POSTS |







LEGEND



TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, 500 FEET DESIRABLE, DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

REDUCED SPEED AHEAD AND SPEED LIMIT 55 SIGNS MUST BE POST MOUNTED.

SPEED LIMIT SIGNS SHALL ALSO BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND AT 0.5 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

THE LOCATION OF THE FIRST SIGN INDICATING THE 55 MPH REGULATORY SPEED LIMIT IS REFERENCED FROM BEGINNING OF LANE CLOSURE TAPER. THE 55 MPH REGULATORY SPEED LIMIT SIGN LOCATION MUST BE ADJUSTED WHEN CONSTRUCTION ACTIVITIES REQUIRE THE LANE CLOSURE START LOCATION TO CHANGE.

TRAFFIC CONTROL DEVICES NOT IN USE SHALL BE LAYED DOWN OR REMOVED, TURNING OF DEVICES TO OBSCURE THE MESSAGE WILL NOT BE ALLOWED.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

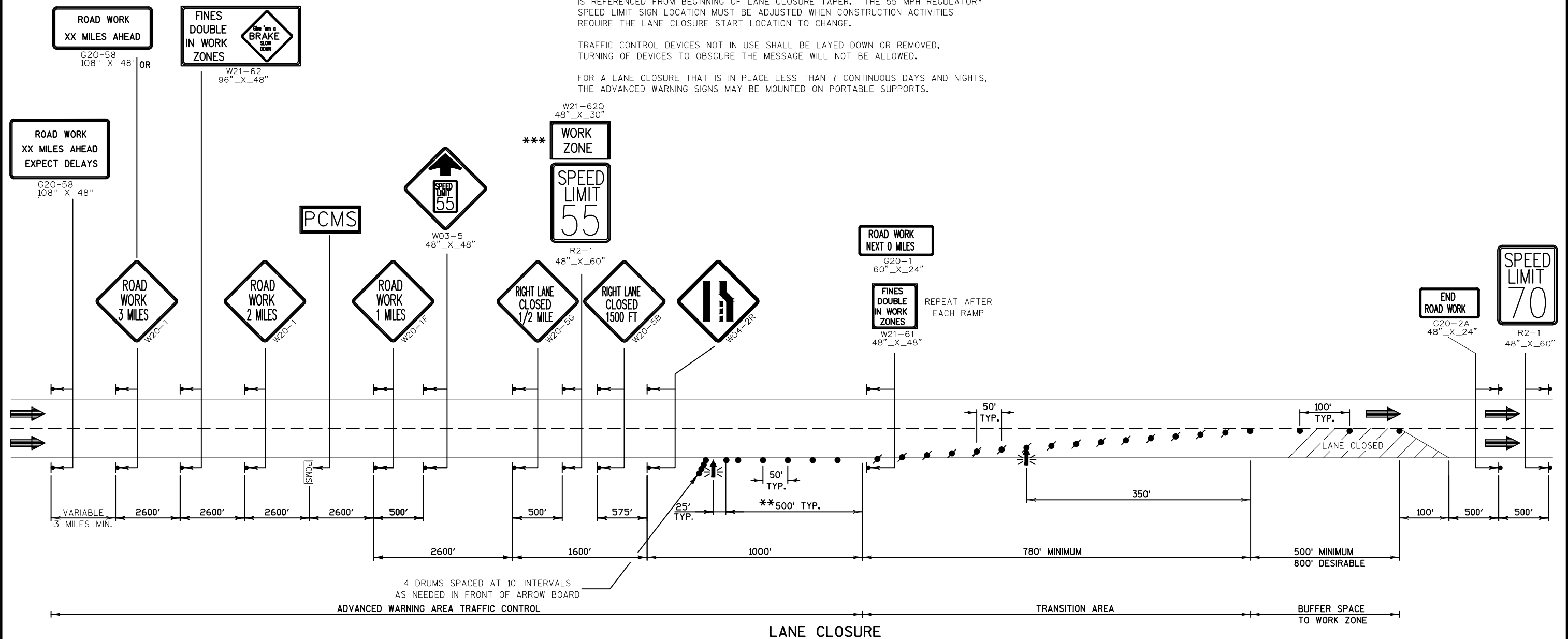
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

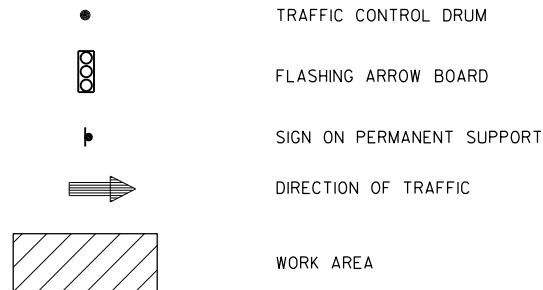
****** CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM OF 1500 FEET IN FRONT OF THE DRUMS.

******* SEE REQUIREMENT FOR TEMPORARY REGULATORY SPEED REDUCTION IN THE SPECIAL PROVISIONS.

COVERING AND REMOVAL OF MATERIAL COVERING TEMPORARY REGULATORY SPEED LIMIT SIGNS AND EXISTING SPEED LIMIT SIGNS RELATED TO TEMPORARY AND/OR PERIODIC LANE CLOSURES SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.



LEGEND



TRAFFIC CONTROL DRUM

FLASHING ARROW BOARD

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, 500 FEET DESIRABLE, DISTANCE TO EXISTING SIGNS.

THIS SHOULDER CLOSURE IS TYPICAL FOR CLOSING RIGHT SHOULDER - REVERSE FOR CLOSING LEFT SHOULDER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"W0" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

FOR A SHOULDER CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE CRASHWORTHY SUPPORTS.

REDUCED SPEED AHEAD AND SPEED LIMIT 55 SIGNS MUST BE POST MOUNTED.

SPEED LIMIT SIGNS SHALL ALSO BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND AT 0.5 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC CONTROL NOTES

THE LOCATION OF THE FIRST SIGN INDICATING THE 55 MPH REGULATORY SPEED LIMIT IS REFERENCED FROM BEGINNING OF SHOULDER CLOSURE TAPER. THE 55 MPH REGULATORY SPEED LIMIT SIGN LOCATION MUST BE ADJUSTED WHEN CONSTRUCTION ACTIVITIES REQUIRE THE SHOULDER CLOSURE START LOCATION TO CHANGE.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE SHOULDER CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE SHOULDER CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

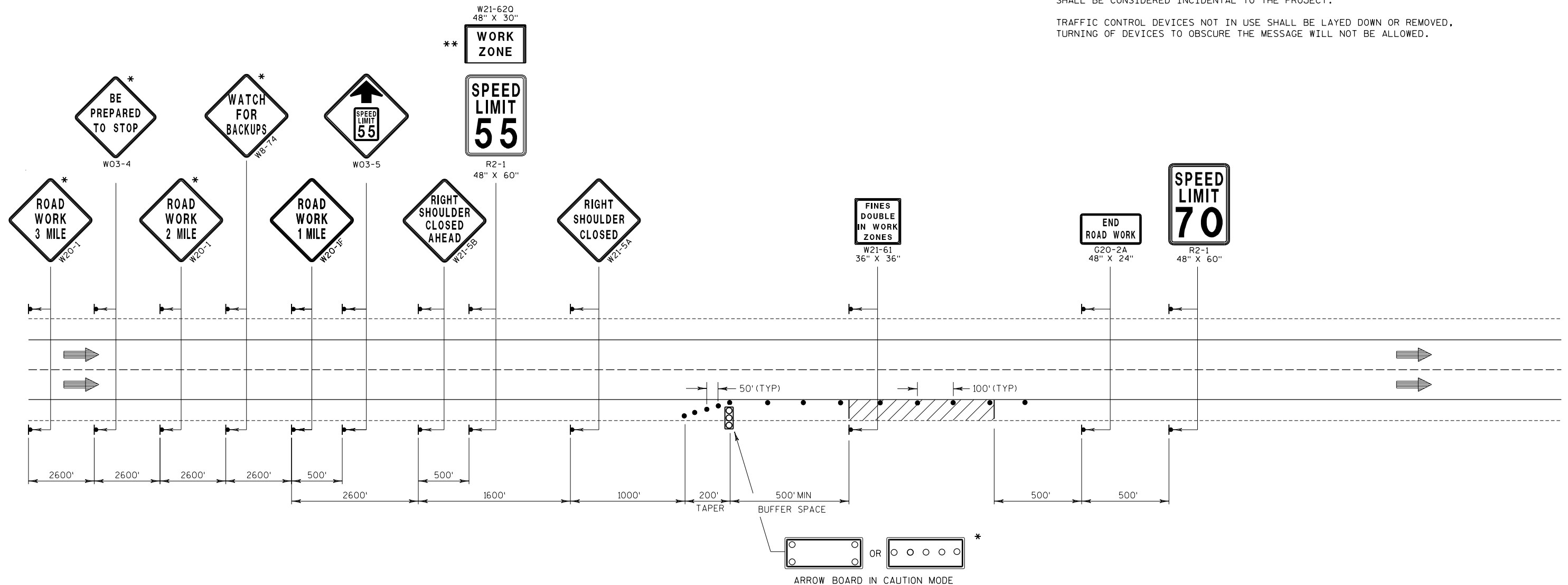
CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND SHOULDER CLOSURE DRUMS FOR A MINIMUM OF 1500 FEET IN FRONT OF THE DRUMS.

* PROVIDE ITEM WHEN SPECIFIED IN MISCELLANEOUS QUANTITIES OR SPECIAL PROVISIONS.

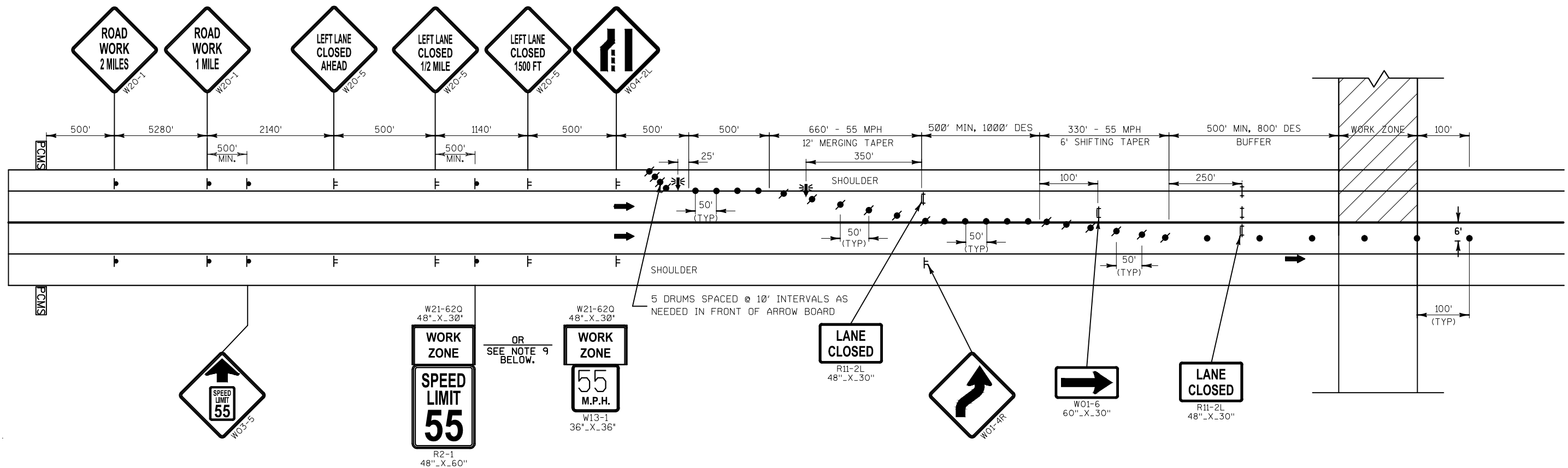
** SEE REQUIREMENT FOR TEMPORARY REGULATORY SPEED REDUCTION IN THE SPECIAL PROVISIONS.

COVERING AND REMOVAL OF MATERIAL COVERING TEMPORARY REGULATORY SPEED LIMIT SIGNS AND EXISTING SPEED LIMIT SIGNS RELATED TO TEMPORARY AND/OR PERIODIC SHOULDER CLOSURES SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

TRAFFIC CONTROL DEVICES NOT IN USE SHALL BE LAYED DOWN OR REMOVED, TURNING OF DEVICES TO OBSCURE THE MESSAGE WILL NOT BE ALLOWED.



SHOULDER CLOSURE - REGULATORY SPEED REDUCTION WITHOUT BARRIER



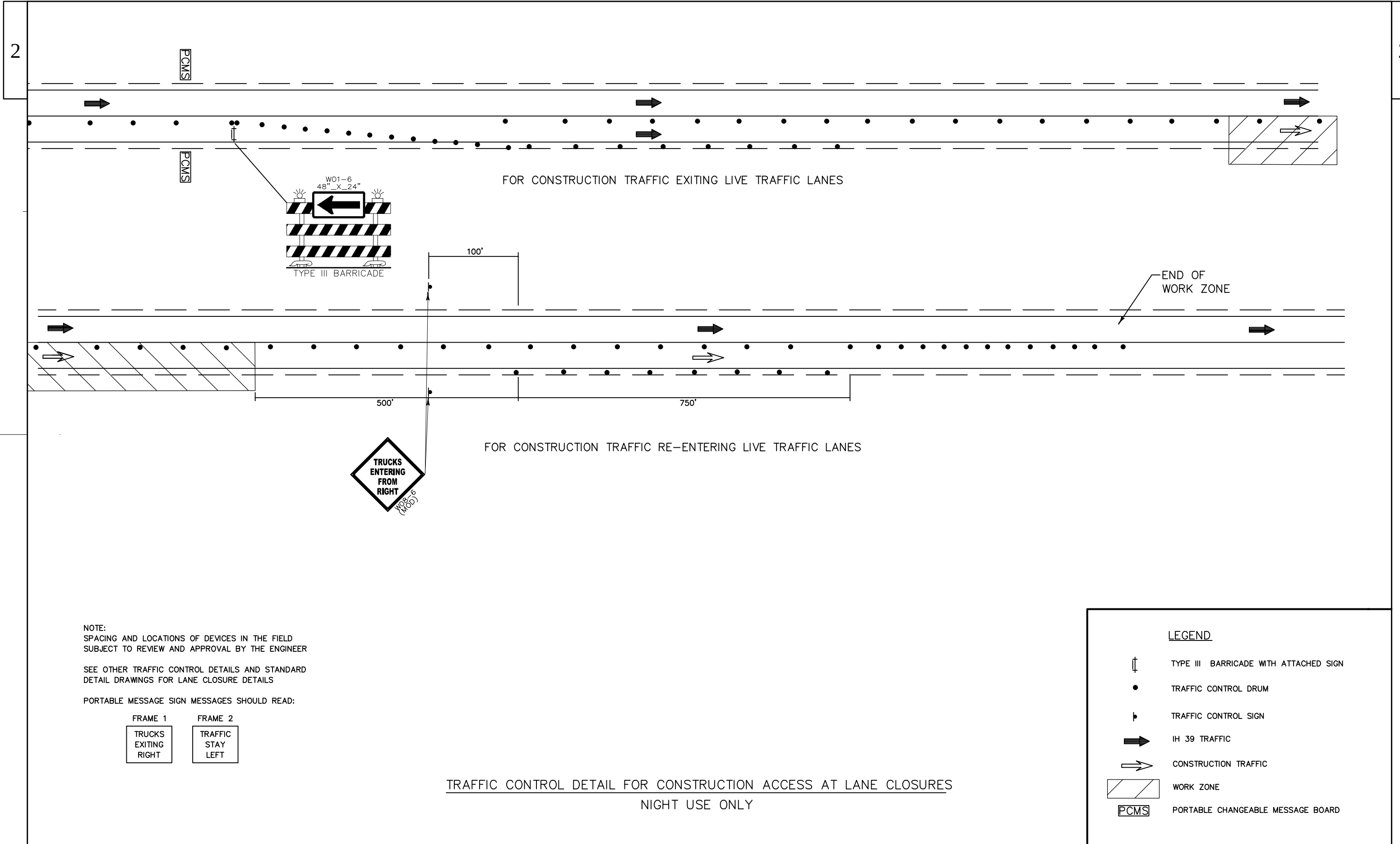
NOTES:

- 1) THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- 2) ALL DRUMS IN TAPERS SHALL HAVE A WARNING LIGHT, TYPE C (STEADY BURN).
- 3) ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- 4) "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- 5) MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.
- 6) ALL SHORT-TERM LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL ARROWBOARDS AND DEVICES REMOVED BEYOND THE SHOULDER WHEN THE WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION.
- 7) UTILIZE PERMITTED LANE CLOSURE TIMES FOR ALL BRIDGE CONSTRUCTION ACTIVITIES. HOURS FOR PERMITTED LANE CLOSURES SHALL ADHERE TO THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
- 8) DETAIL IS TYPICAL FOR NB AND SB DIRECTIONS. LEFT LANE CLOSURE IS SHOWN. REVERSE FOR CLOSING RIGHT LANE.
- 9) CONTACT RICH CANNON, I-39/90 TRAFFIC MANAGEMENT ENGINEER, AT (608) 884-1160 TO DETERMINE APPLICABLE SIGN ASSEMBLY.
- 10) 6-FT OFFSET FROM EDGE OF LANE TO WORK ZONE UNDERNEATH STRUCTURE SHALL APPLY FOR ALL OVERHEAD STRUCTURE WORK.

LEGEND

- | | | | |
|---|--|------|--|
| ● | TRAFFIC CONTROL DRUM | ⦿ | TRAFFIC CONTROL BARRICADE TYPE III WITH LIGHT TYPE A AND ATTACHED SIGN |
| ⦿ | TRAFFIC CONTROL DRUM WITH LIGHT TYPE C | ⦿ | TRAFFIC CONTROL BARRICADE TYPE III WITH LIGHT TYPE A |
| ▭ | WORK ZONE | ➤ | TRAFFIC CONTROL ARROW BOARD |
| T | SIGN ON TEMPORARY SUPPORT | ➡ | DIRECTION OF TRAFFIC |
| P | SIGN ON PERMANENT SUPPORT | PCMS | TRAFFIC CONTROL SIGN PORTABLE CHANGEABLE MESSAGE |

TRAFFIC CONTROL LANE CLOSURE WITH SHIFT ONTO SHOULDER



NOTE:
SPACING AND LOCATIONS OF DEVICES IN THE FIELD
SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER

SEE OTHER TRAFFIC CONTROL DETAILS AND STANDARD
DETAIL DRAWINGS FOR LANE CLOSURE DETAILS

PORTABLE MESSAGE SIGN MESSAGES SHOULD READ:

FRAME 1	FRAME 2
TRUCKS EXITING RIGHT	TRAFFIC STAY LEFT

TRAFFIC CONTROL DETAIL FOR CONSTRUCTION ACCESS AT LANE CLOSURES
NIGHT USE ONLY

LEGEND

TYPE III BARRICADE WITH ATTACHED SIGN

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL SIGN

IH 39 TRAFFIC

CONSTRUCTION TRAFFIC

WORK ZONE

PORTABLE CHANGEABLE MESSAGE BOARD

MAINTENANCE OF TRAFFIC

- IH 39/90 & RAMP
- TRAFFIC SHALL BE MAINTAINED ON ALL EXISTING MAINLINE LANES.
- SINGLE LANE AND SHOULDER CLOSURES SHALL BE USED FOR WIDENING TEMPORARY PAVEMENT AND MAPLE GROVE RD BRIDGE REMOVAL DURING PERMITTED LANE CLOSURE TIMES.
- USH 51 NORTHBOUND RAMP SHALL BE CLOSED AND DETOURED.
- FIFTEEN MINUTE ROLLING CLOSURES AT NIGHT SHALL BE USED FOR MAPLE GROVE RD BRIDGE GIRDER REMOVAL.

CONSTRUCTION TO BE COMPLETED

- PLACE PAVEMENT ON OUTSIDE SHOULDER OF I-39/90 NORTHBOUND AND SOUTHBOUND
- PLACE PAVEMENT IN MEDIAN OF I-39/90 SOUTHBOUND STA 427+00-440+00'SBE'
- PLACE PAVEMENT IN MEDIAN OF I-39/90 NORTHBOUND STA 532+56-546+33'NBE'
- REMOVE MAPLE GROVE ROAD BRIDGE.
- CONSTRUCT PARTIAL NORTHBOUND AND SOUTHBOUND USH 51 ENTRANCE RAMP
- CONSTRUCT IH 39 SB BRIDGE AT USH 51
- CONSTRUCT IH 39 SB BRIDGE AT EAST CHURCH RD

- TO BE CONSTRUCTED PRIOR TO STAGE 1 DURING NIGHT TIME CLOSURES:
- MILL AND OVERLAY OF RUMBLE STRIPS ALONG SB I-39/90 STA 427+00-440+00'SBE'

BEGIN PROJECT
1007-10-79
STA. 316+37.67'SBE'

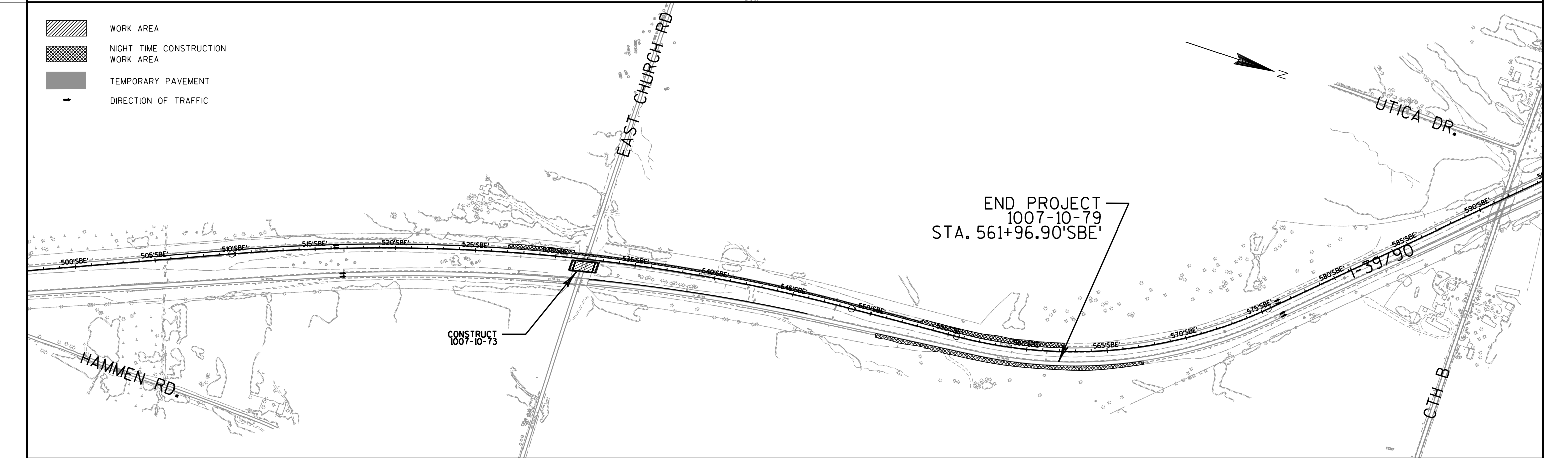
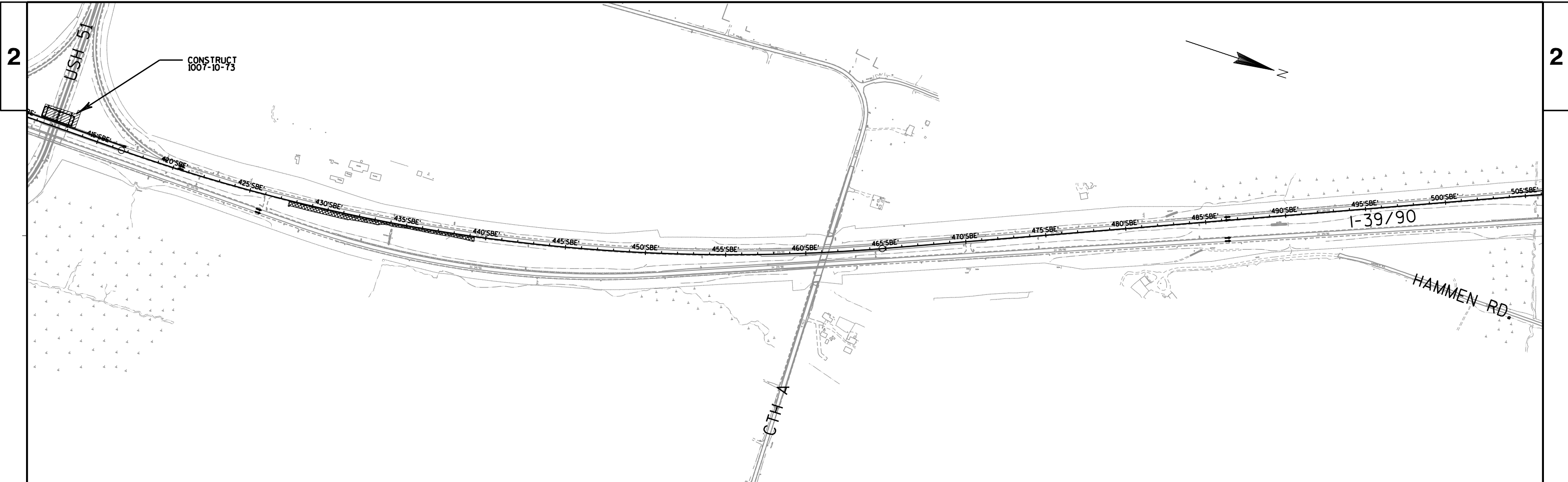
GENERAL NOTES FOR TRAFFIC CONTROL

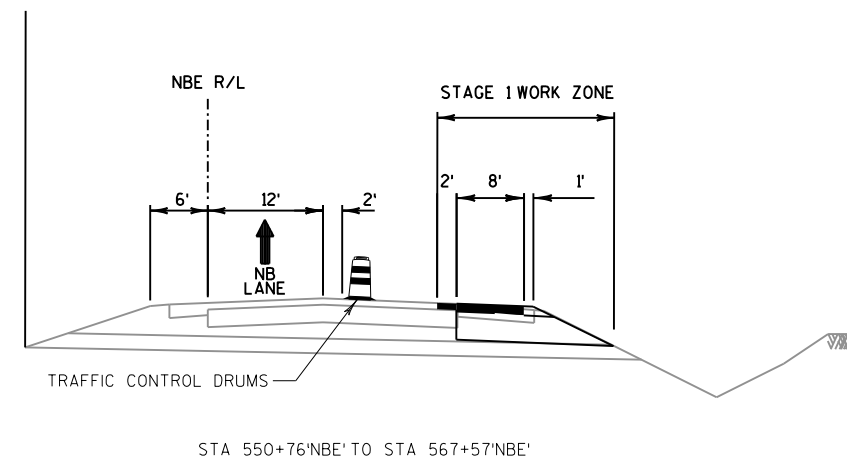
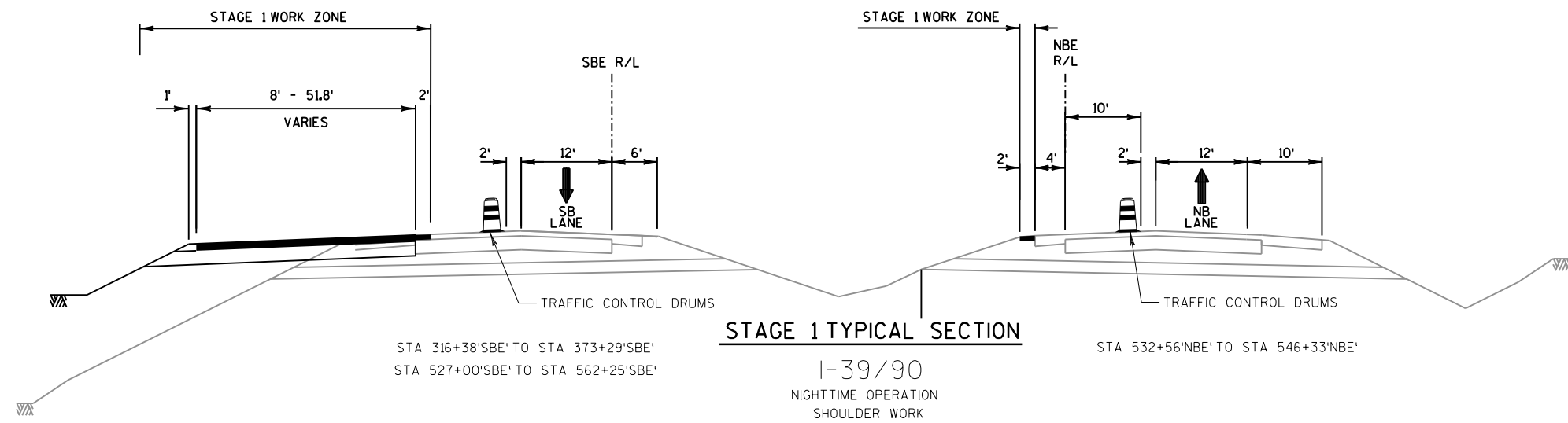
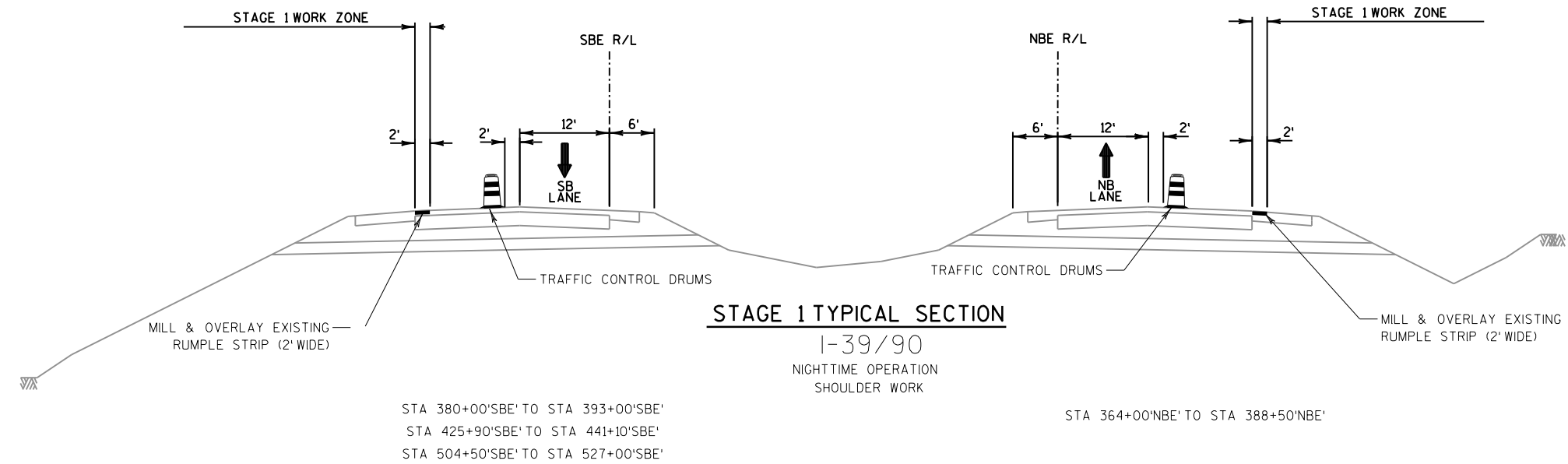
- THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES ARE TO BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- CONFLICTING TRAFFIC SIGNS ARE TO BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER. EXISTING SIGNS COVERED BY A PROPOSED TRAFFIC CONTROL SIGN OR TRAFFIC CONTROL DETOUR SIGN ARE PAID FOR AS TRAFFIC CONTROL SIGNS OR TRAFFIC CONTROL DETOUR SIGNS.
- A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE WORK AREAS IF WARRANTED BY CONDITIONS OR AS DIRECTED BY THE ENGINEER. IH 39/90 SHALL NOT BE FLAGGED.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A TYPE C WARNING LIGHT.
- ALL TYPE III BARRICADES ARE TO BE 8' WIDE, UNLESS OTHERWISE NOTED.
- CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM OF 1500 FEET IN FRONT OF THE DRUMS.
- TRAFFIC CONTROL DEVICES NOT IN USE ARE TO BE LAID DOWN OR REMOVED, TURNING OF DEVICES TO OBSTRUCT THE MESSAGE WILL NOT BE ALLOWED.
- DIMENSIONS TO CONCRETE BARRIER TEMPORARY PRECAST ARE TO THE FACE OF BARRIER ADJACENT TO TRAFFIC. STATION CALL-OUTS TO CONCRETE BARRIER TEMPORARY PRECAST ARE TO THE CENTER OF THE BARRIER.
- ALWAYS PROVIDE A MINIMUM OF 2' CLEAR FROM EDGE OF TRAVEL LANE TO THE TOE OF THE TEMPORARY PRECAST CONCRETE BARRIER.
- SEE THE FOLLOWING SDDS TO SUPPLEMENT THE TRAFFIC CONTROL PLANS
"BARRICADES AND SIGNS FOR MAINLINE CLOSURES"
"BARRICADES AND SIGNS FOR SIDEROAD CLOSURES"
"TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
"TRAFFIC CONTROL, EXIT RAMP CLOSURE"
- MAPLE GROVE ROAD AND EAST CHURCH RD BRIDGES SHALL BE CLOSED TO TRAFFIC DURING CONSTRUCTION.
- PORTABLE CHANGEABLE MESSAGE SIGNS(PCMS) SHALL BE PLACED 1 MILE PRIOR TO TRAFFIC CONTROL ADVANCED WARNING SIGNS OR AS DIRECTED BY ENGINEER. PCMS SHALL BE IN PLACE 1 WEEK PRIOR TO AND DURING CONSTRUCTION AND SHALL BE USED TO INFORM THE PUBLIC OF THE PROJECT. CONTACT SW REGION TRAFFIC TEAM FOR LEADER MESSAGES.

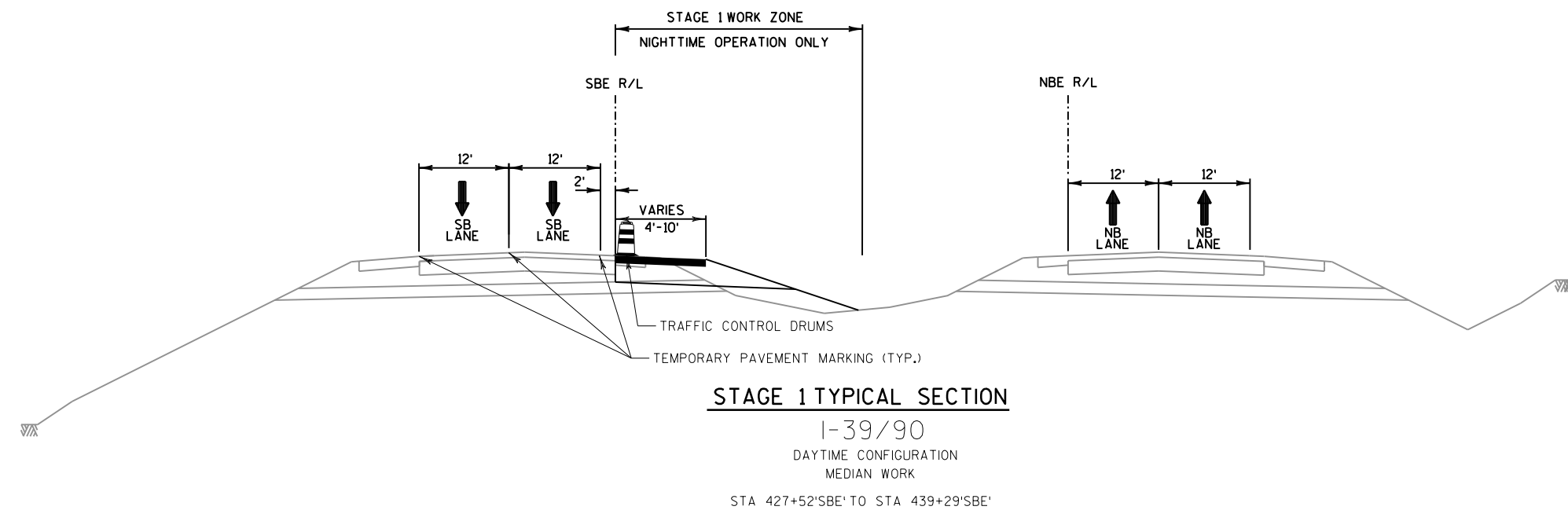
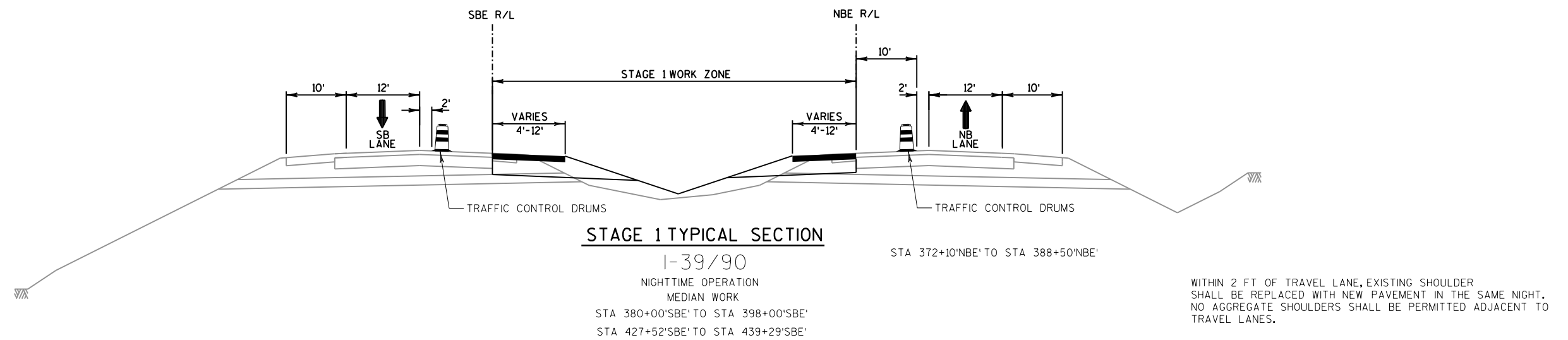
- WORK AREA
- NIGHT TIME CONSTRUCTION WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC

REMOVE EXISTING BRIDGE

CONSTRUCT
1007-10-73

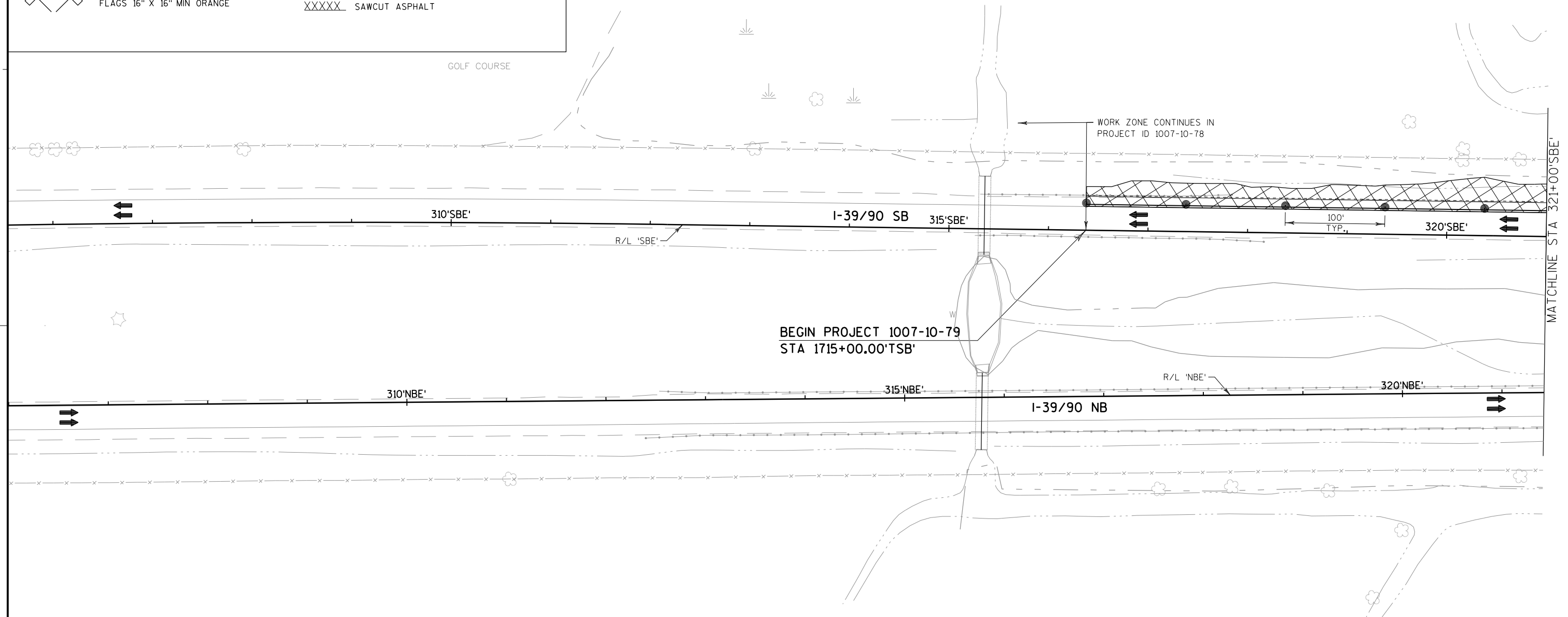






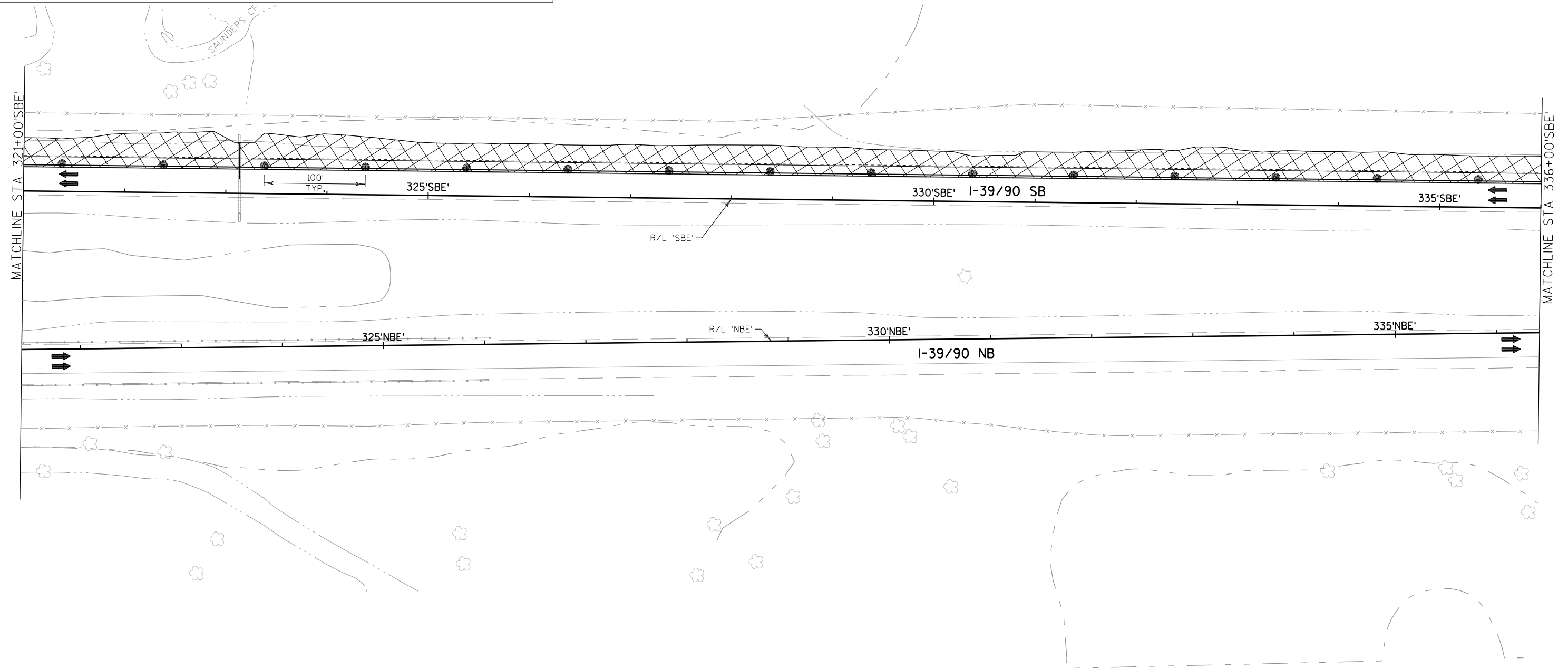
LEGEND

	WORK AREA		TYPE III BARRICADE/WITH ATTACHED SIGN
	NIGHTTIME CONSTRUCTION WORK AREA		TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	TEMPORARY PAVEMENT		FLASHING ARROW BOARD
	DIRECTION OF TRAFFIC		SIGN ON PERMANENT SUPPORT
	CONCRETE BARRIER TEMPORARY PRECAST		SIGN ON TEMPORARY SUPPORT
	CRASH CUSHION TEMPORARY		PORTABLE CHANGEABLE MESSAGE BOARD
	FLAGS 16" X 16" MIN ORANGE		FLEXIBLE TUBULAR MARKER
			SAWCUT ASPHALT



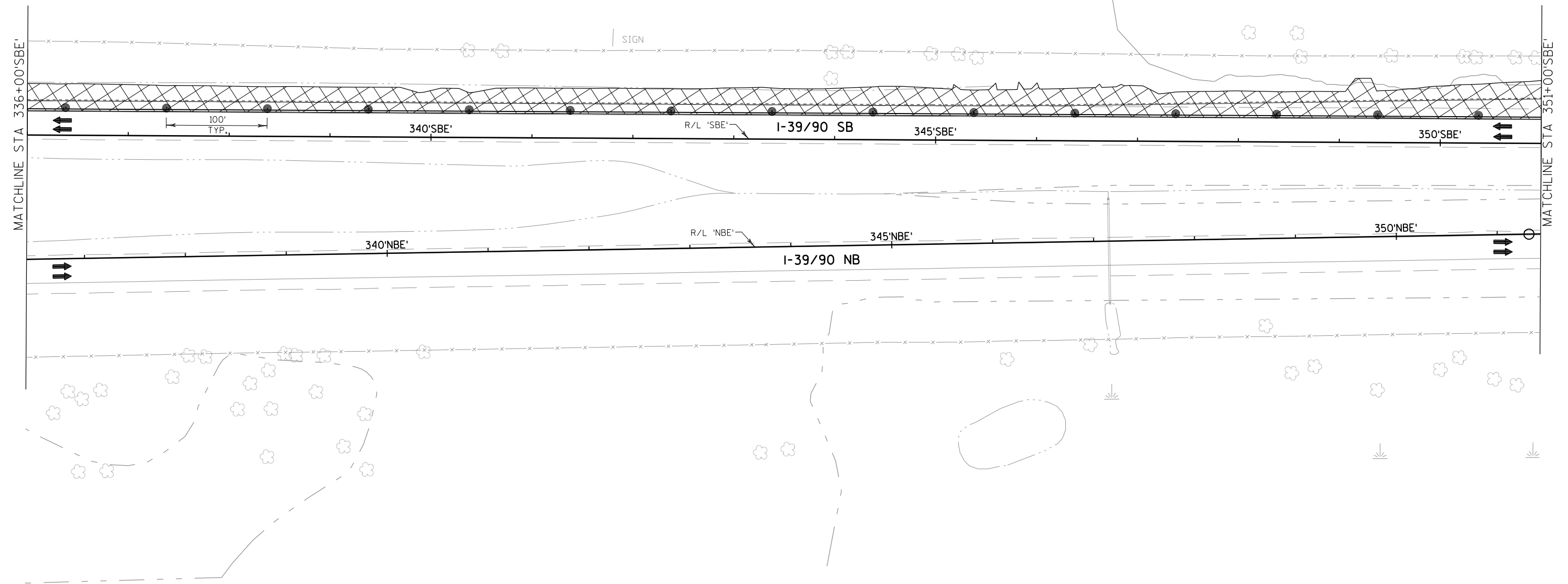
LEGEND

	WORK AREA		TYPE III BARRICADE/WITH ATTACHED SIGN
	NIGHTTIME CONSTRUCTION WORK AREA		TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	TEMPORARY PAVEMENT		FLASHING ARROW BOARD
	DIRECTION OF TRAFFIC		SIGN ON PERMANENT SUPPORT
	CONCRETE BARRIER TEMPORARY PRECAST		SIGN ON TEMPORARY SUPPORT
	CRASH CUSHION TEMPORARY		PORTABLE CHANGEABLE MESSAGE BOARD
	FLAGS 16" X 16" MIN ORANGE		FLEXIBLE TUBULAR MARKER
			SAWCUT ASPHALT



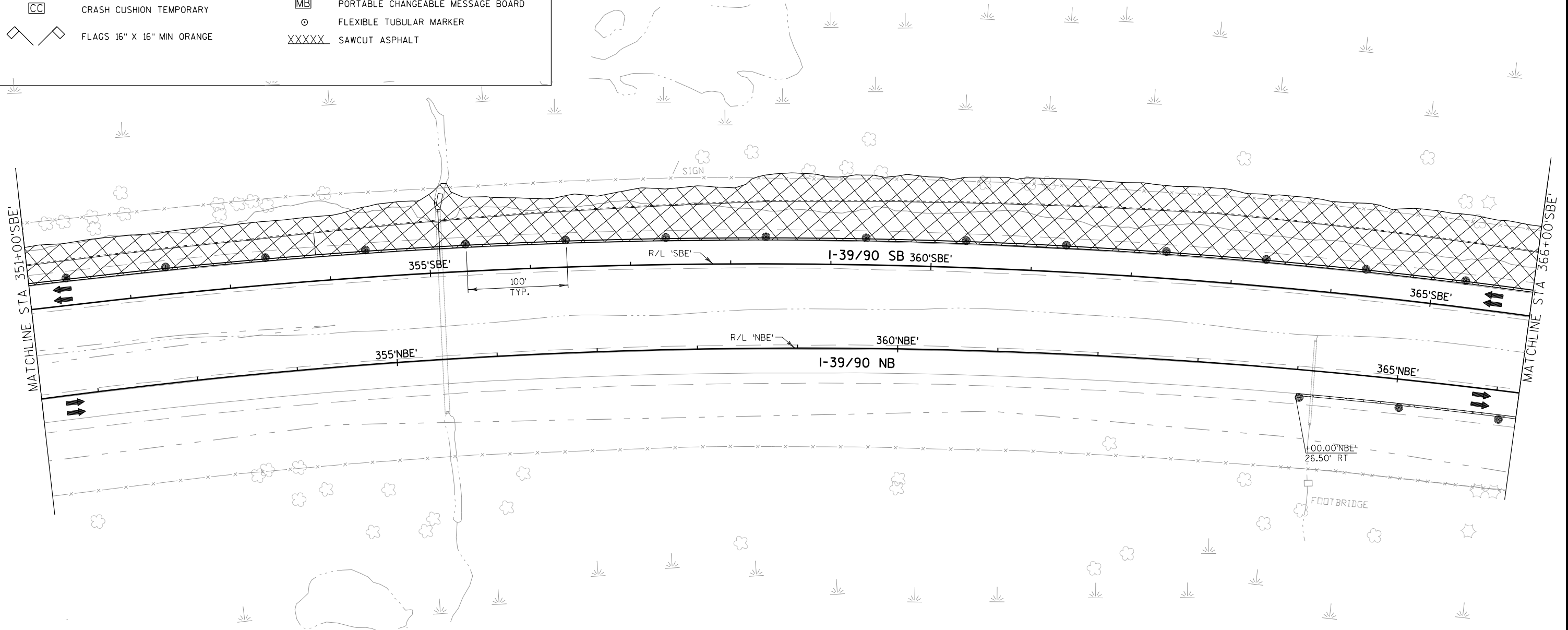
LEGEND

	WORK AREA		TYPE III BARRICADE/WITH ATTACHED SIGN
	NIGHTTIME CONSTRUCTION WORK AREA		TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	TEMPORARY PAVEMENT		FLASHING ARROW BOARD
	DIRECTION OF TRAFFIC		SIGN ON PERMANENT SUPPORT
	CONCRETE BARRIER TEMPORARY PRECAST		SIGN ON TEMPORARY SUPPORT
	CRASH CUSHION TEMPORARY		PORTABLE CHANGEABLE MESSAGE BOARD
	FLAGS 16" X 16" MIN ORANGE		FLEXIBLE TUBULAR MARKER
			SAWCUT ASPHALT



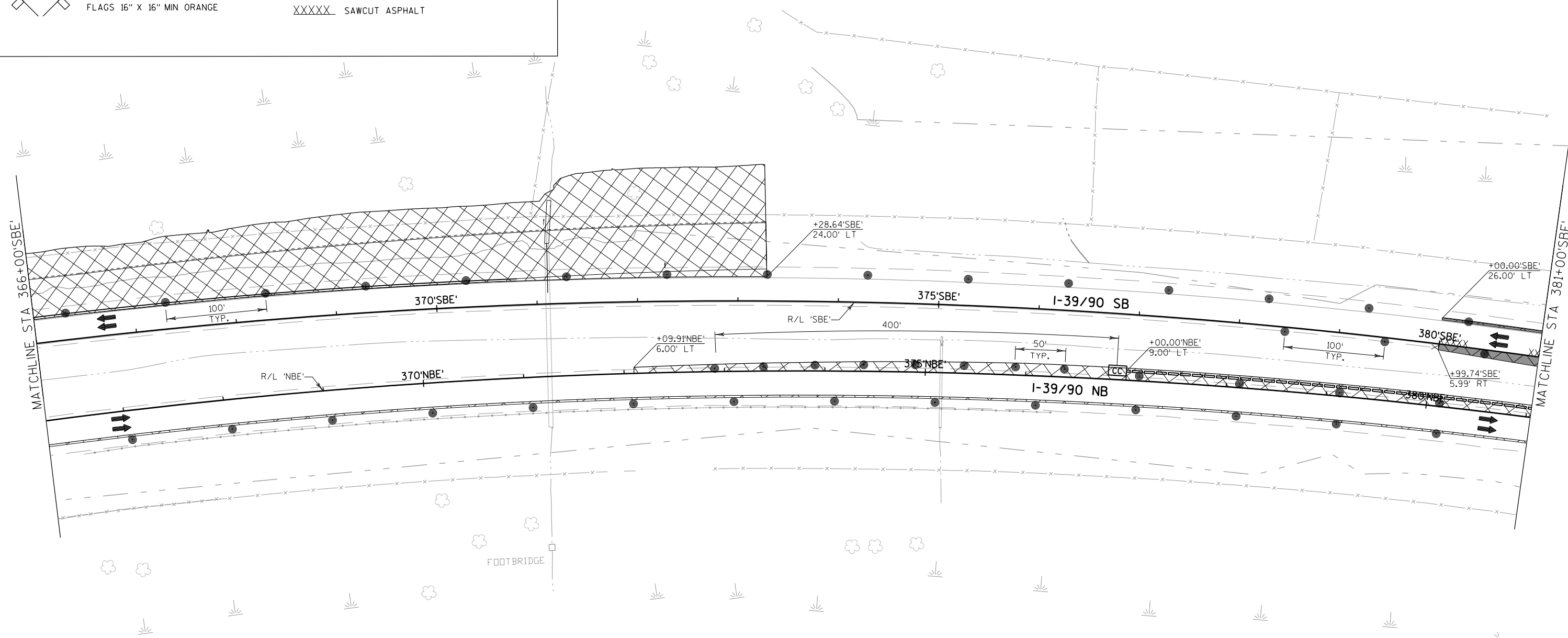
LEGEND

	WORK AREA		TYPE III BARRICADE/WITH ATTACHED SIGN
	NIGHTTIME CONSTRUCTION WORK AREA		TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	TEMPORARY PAVEMENT		FLASHING ARROW BOARD
	DIRECTION OF TRAFFIC		SIGN ON PERMANENT SUPPORT
	CONCRETE BARRIER TEMPORARY PRECAST		SIGN ON TEMPORARY SUPPORT
	CRASH CUSHION TEMPORARY		PORTABLE CHANGEABLE MESSAGE BOARD
	FLAGS 16" X 16" MIN ORANGE		FLEXIBLE TUBULAR MARKER
			SAWCUT ASPHALT

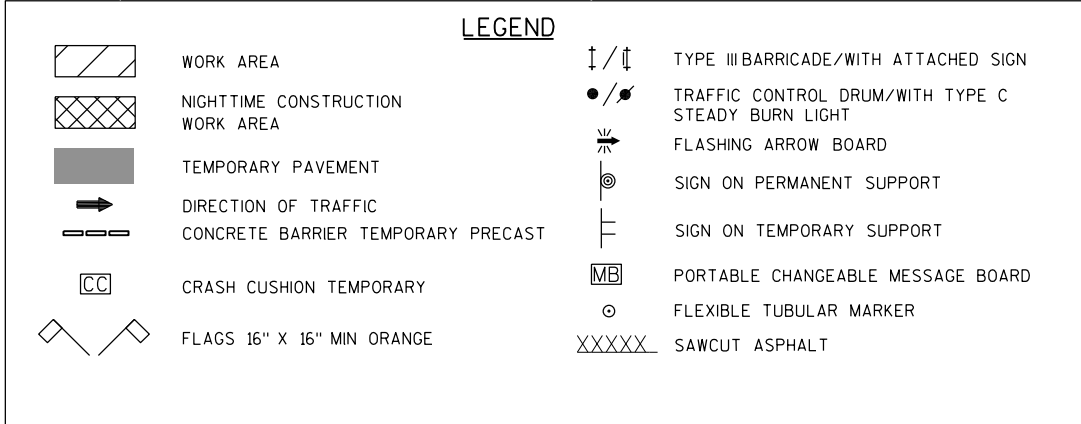


LEGEND

	WORK AREA		TYPE III BARRICADE/WITH ATTACHED SIGN
	NIGHTTIME CONSTRUCTION WORK AREA		TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	TEMPORARY PAVEMENT		FLASHING ARROW BOARD
	DIRECTION OF TRAFFIC		SIGN ON PERMANENT SUPPORT
	CONCRETE BARRIER TEMPORARY PRECAST		SIGN ON TEMPORARY SUPPORT
	CRASH CUSHION TEMPORARY		PORTABLE CHANGEABLE MESSAGE BOARD
	FLAGS 16" X 16" MIN ORANGE		FLEXIBLE TUBULAR MARKER
			SAWCUT ASPHALT



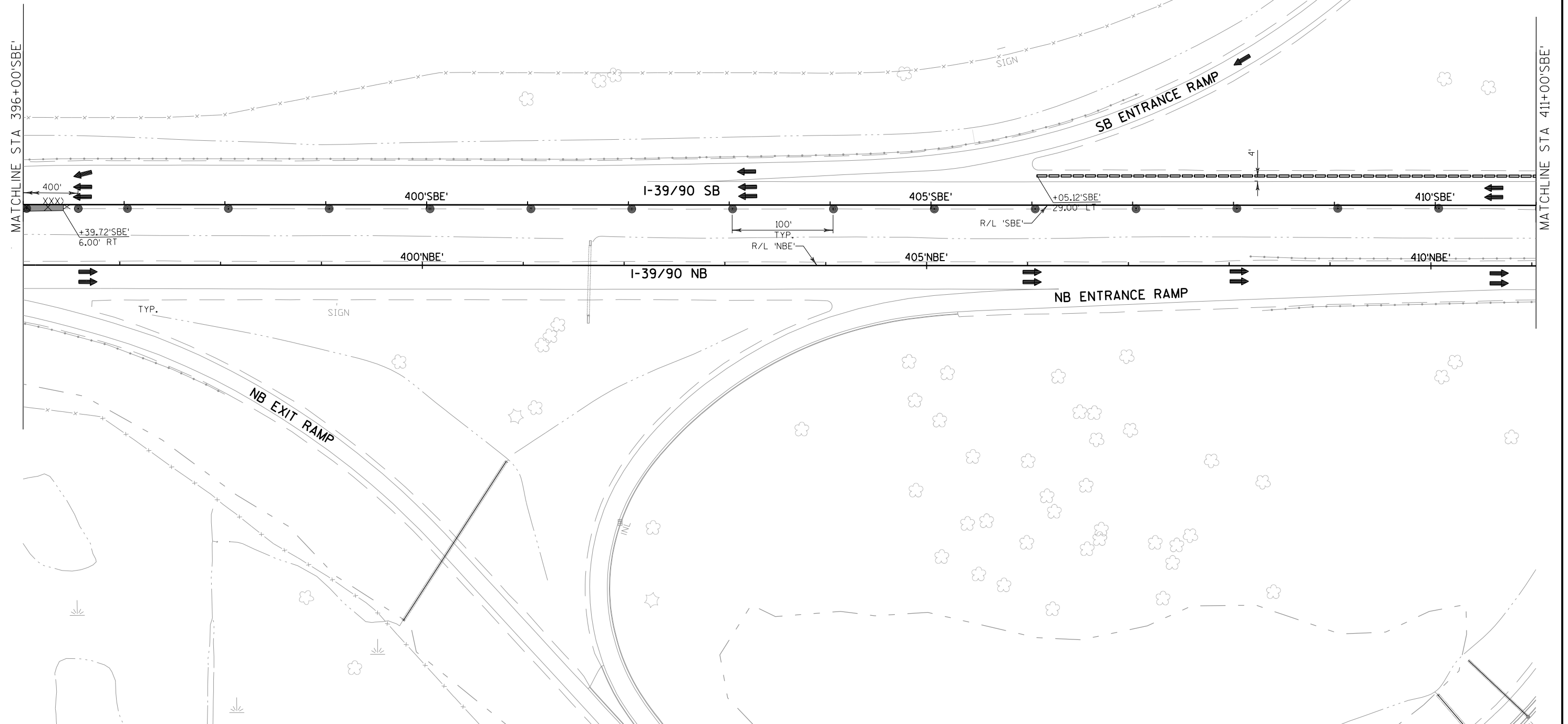
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2

LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHION TEMPORARY
	FLAGS 16" X 16" MIN ORANGE
	TYPE III BARRICADE/WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	PORTABLE CHANGEABLE MESSAGE BOARD
	FLEXIBLE TUBULAR MARKER
	SAWCUT ASPHALT

2



MATCHLINE STA 411+00'SBE'

MATCHLINE STA 426+00'SBE'

Z

CAWK SCREEN
STA 410+00'SBE' TO 415+00'SBE'

SB EXIT RAMP

415'SBE'

+59.06'SBE'
29.00' LT

R/L 'SBE'

50'
TYP.

I-39/90 SB 420'SBE'

100'
TYP.+90.00'SBE'
12.00' LT

425'SBE'

+90.00'SBE'
26.00' LT+90.00'SBE'
24.00' LT
100'+90.00'SBE'
0.00'

415'NBE'

R/L 'NBE'

420'NBE'

I-39/90 NB

425'NBE'

RIPRAP

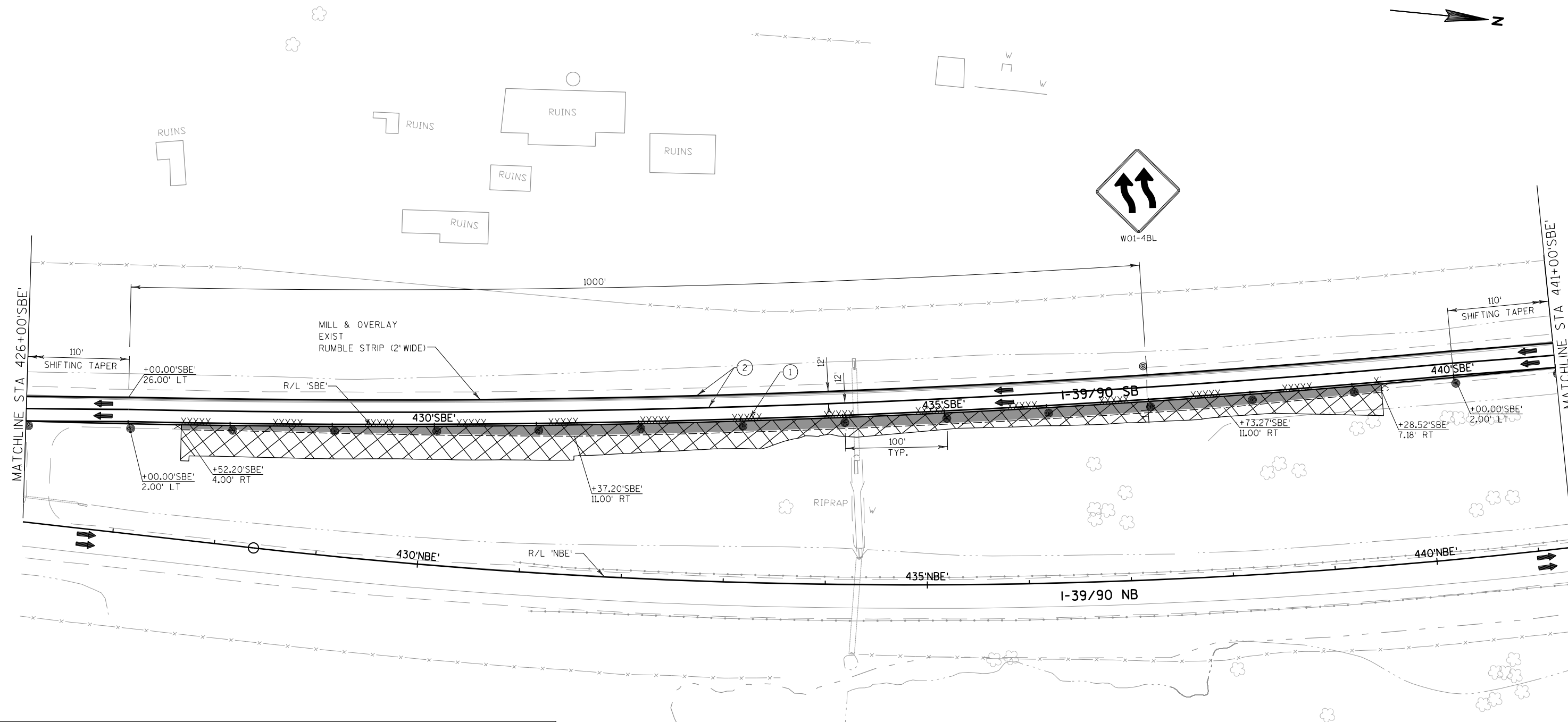
LEGEND

	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHION TEMPORARY
	FLAGS 16" X 16" MIN ORANGE

	TYPE III BARRICADE/WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	PORTABLE CHANGEABLE MESSAGE BOARD
	FLEXIBLE TUBULAR MARKER
	SAWCUT ASPHALT

PAVEMENT MARKING LEGEND

① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE)	④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP)
② TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE EDGE LINE)	⑤ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP)
③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE)	⑥ SEE PERMANENT MARKING PLAN

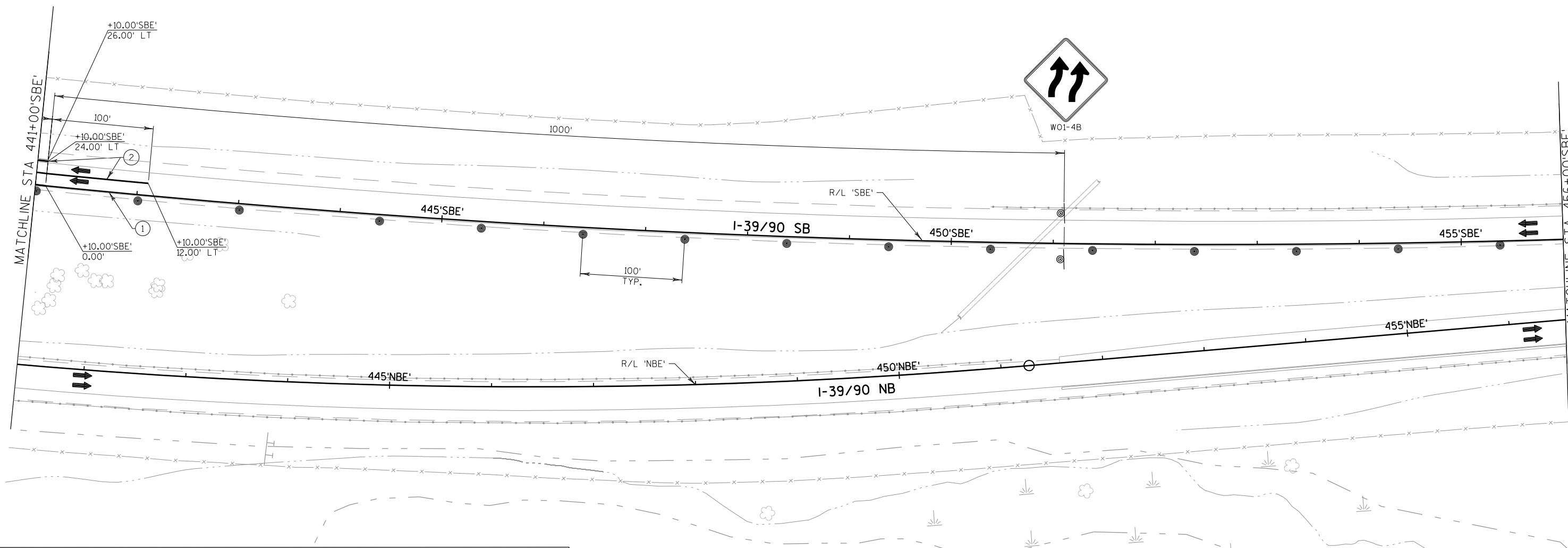


LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHION TEMPORARY
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PAVEMENT MARKING LEGEND

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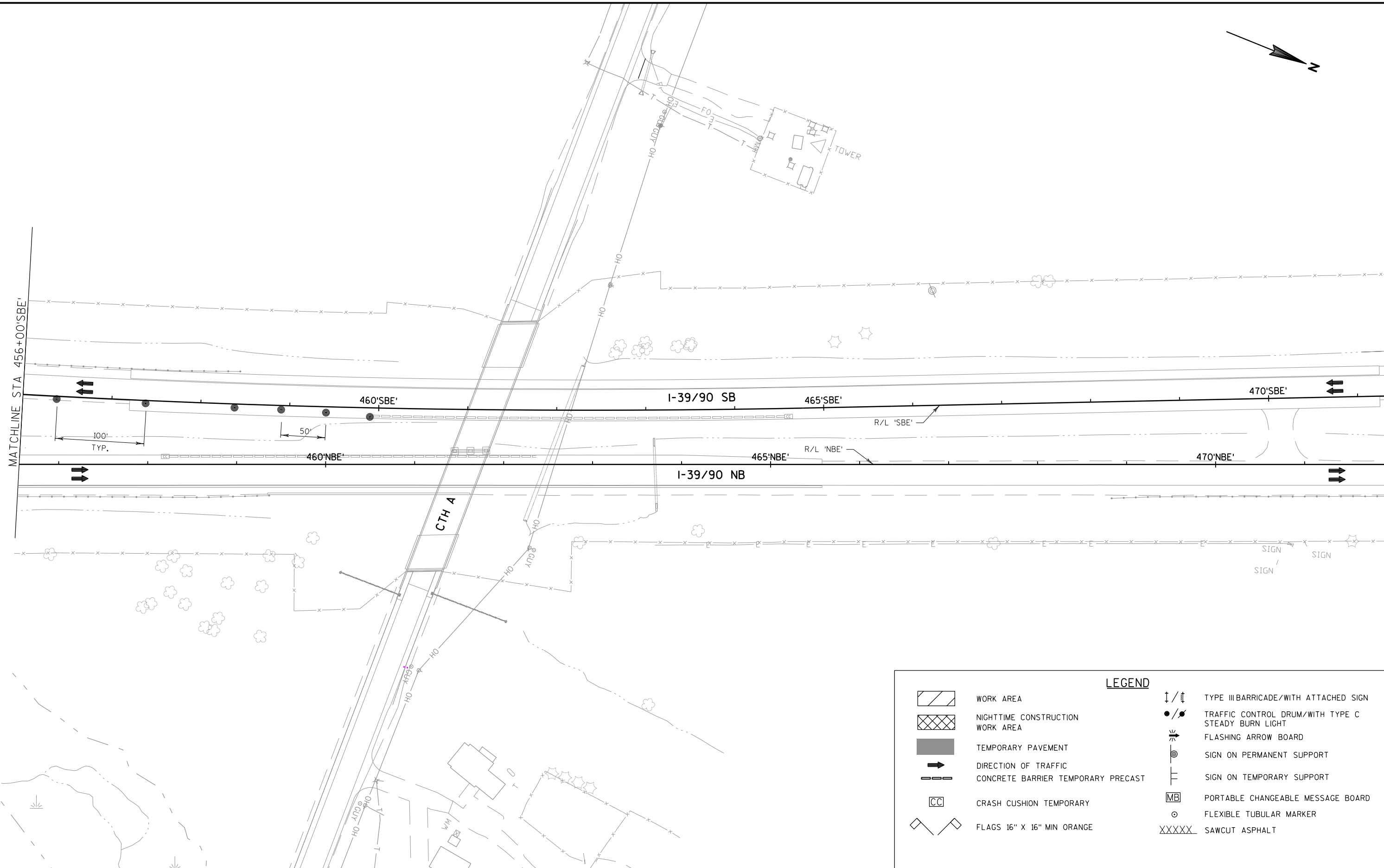


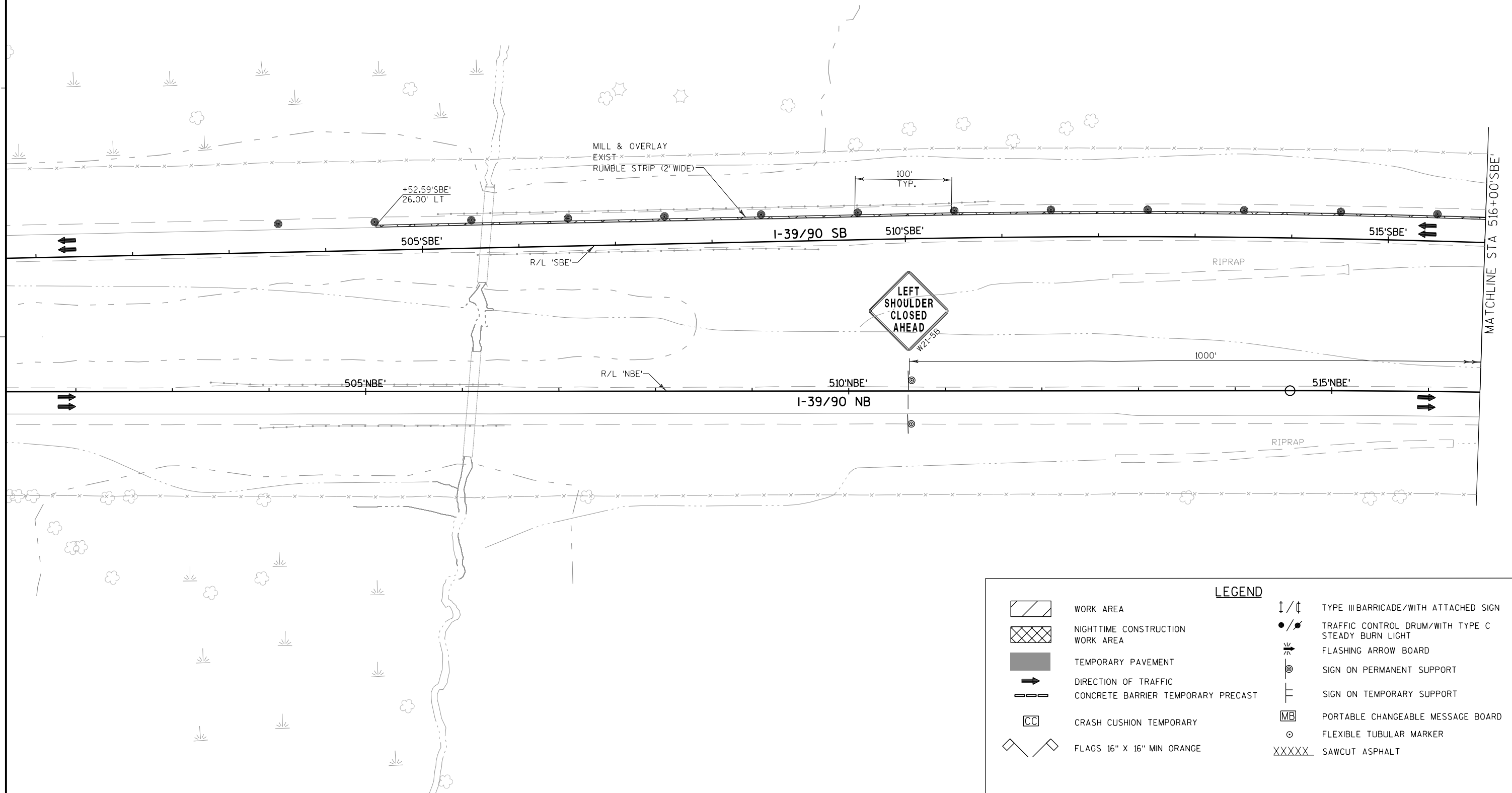
LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHION TEMPORARY
	FLAGS 16" X 16" MIN ORANGE

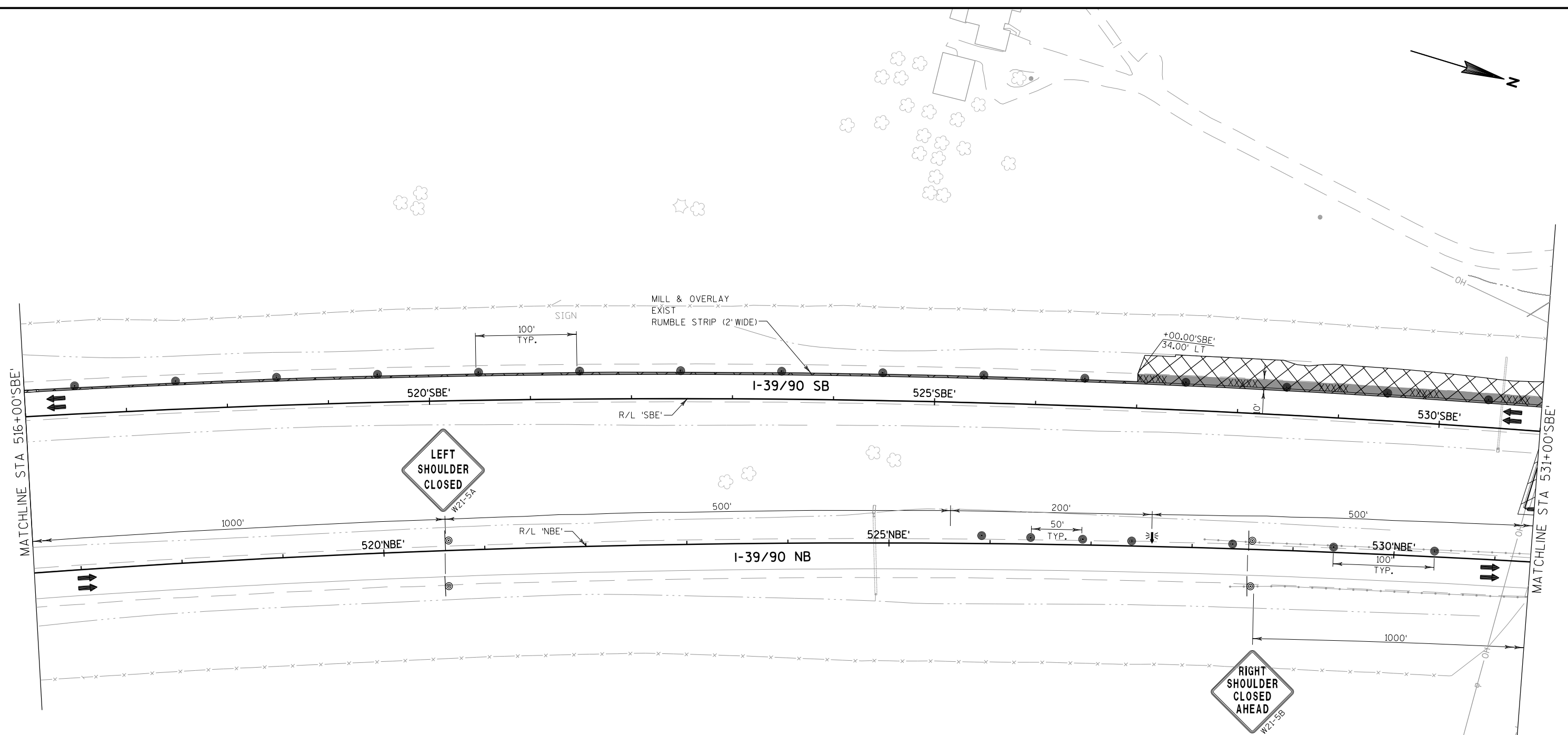
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PAVEMENT MARKING LEGEND

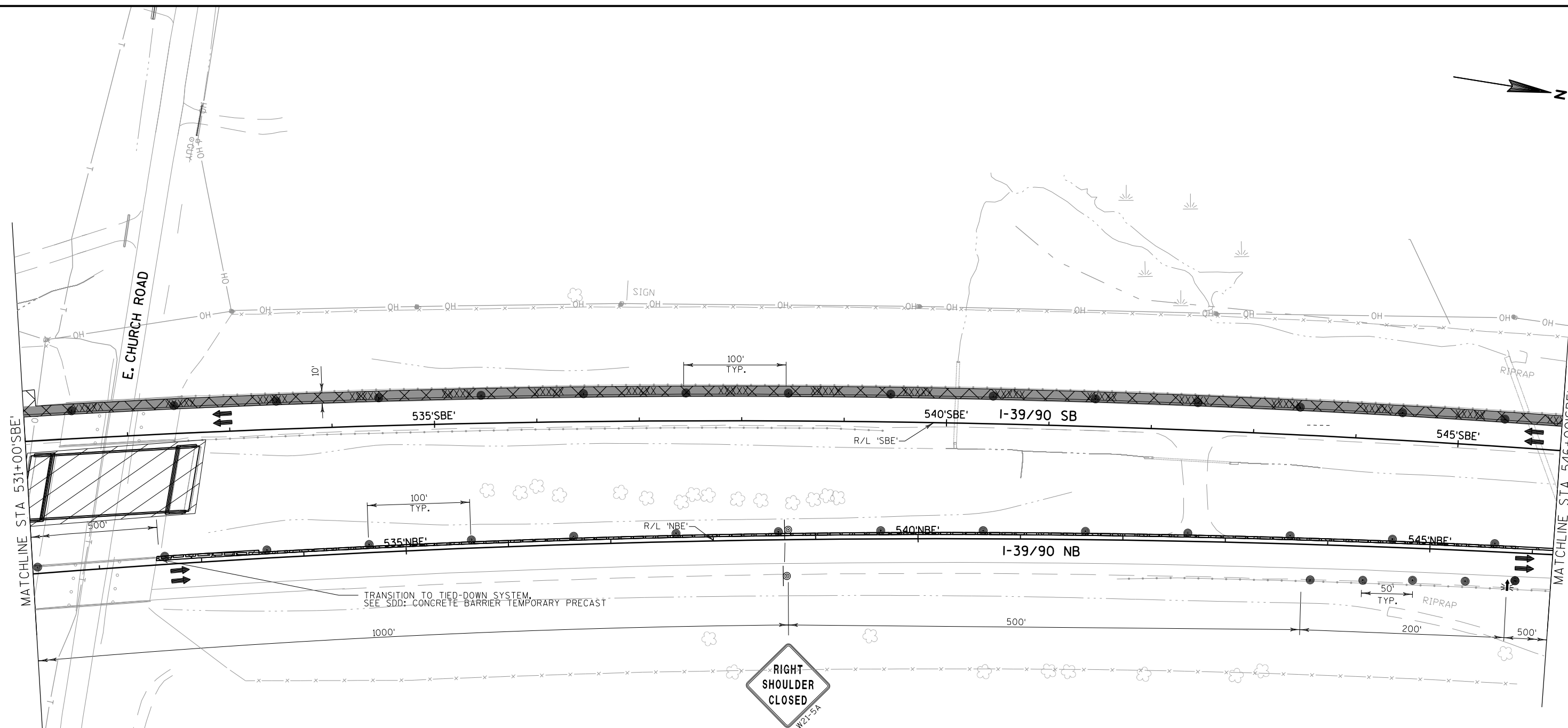
- | | |
|--|---|
| ① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE) | ④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP) |
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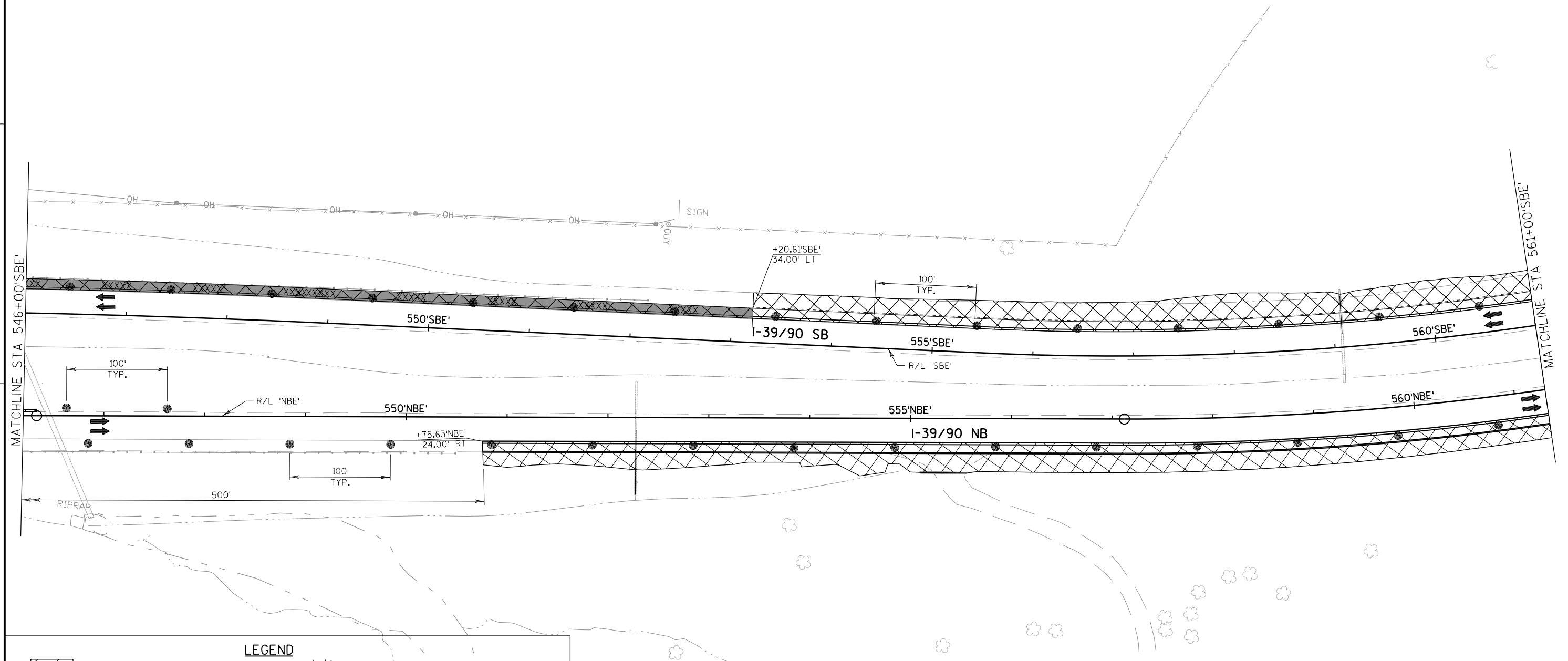




LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
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	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	PORTABLE CHANGEABLE MESSAGE BOARD
	FLEXIBLE TUBULAR MARKER
	SAWCUT ASPHALT

PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

TRAFFIC CONTROL STAGE 1

SHEET

235

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\026117_fc1.dgn

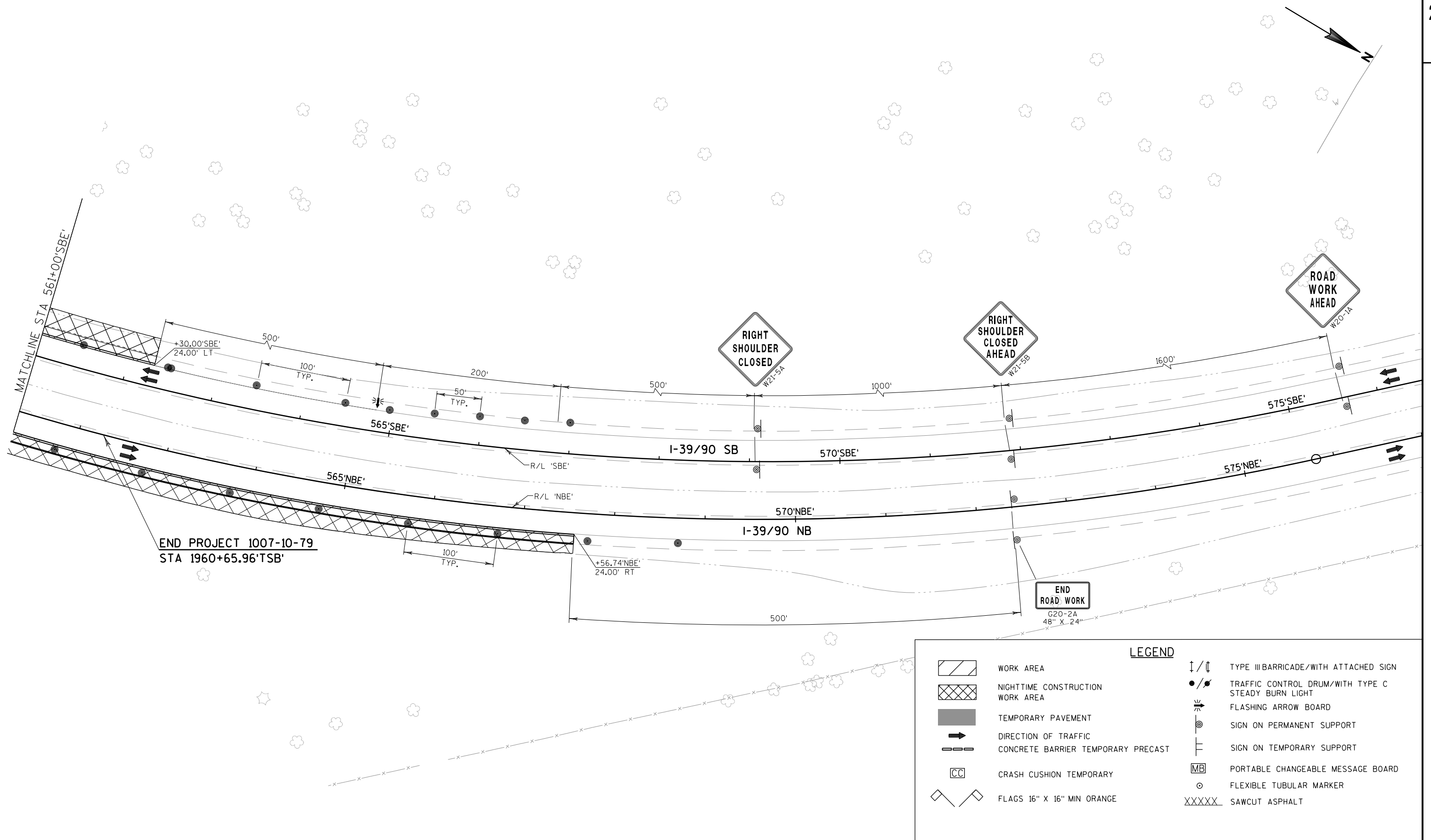
PLOT DATE : 7/28/2015

PLOT BY : jpo

PLOT NAME : \$FILE\$

PLOT SCALE : 1:100

WISDOT/CADDs SHEET 42



MAINTENANCE OF TRAFFIC

- IH 39/90 & RAMP
 -TRAFFIC SHALL BE MAINTAINED ON ALL EXISTING MAINLINE LANES.
 -SINGLE LANE AND SHOULDER CLOSURE SHALL BE USED FOR WIDENING AND TEMPORARY PAVEMENT DURING PERMITTED LANE CLOSURE TIMES.
 -USH 51 NORTHBOUND RAMP SHALL BE CLOSED AND DETOURED.

CONSTRUCTION TO BE COMPLETED**STAGE 2A**

- CONSTRUCT TEMPORARY ASPHALT MEDIAN ON USH 51

STAGE 2B

- PLACE PAVEMENT IN MEDIAN OF I-39/90 SOUTHBOUND SOUTH OF MAPLE GROVE RD
 -CONSTRUCT SOUTHBOUND USH 51 EXIT AND ENTRANCE RAMP
 -CONSTRUCT THE OUTSIDE SHOULDER AND TWO OUTSIDE LANES OF SOUTHBOUND I-39/90 CONCRETE PAVEMENT SOUTH AND NORTH OF USH 51 RAMP & SOUTH AND NORTH OF EAST CHURCH RD BRIDGE
 -CONSTRUCT CONCRETE CROSSOVER AT NORTHERN LIMITS
 -CONTINUE CONSTRUCTION IH 39 SB BRIDGE AT USH 51
 -CONTINUE CONSTRUCTION IH 39 SB BRIDGE AT EAST CHURCH RD
 -CONSTRUCT MAPLE GROVE RD BRIDGE

STAGE 2C

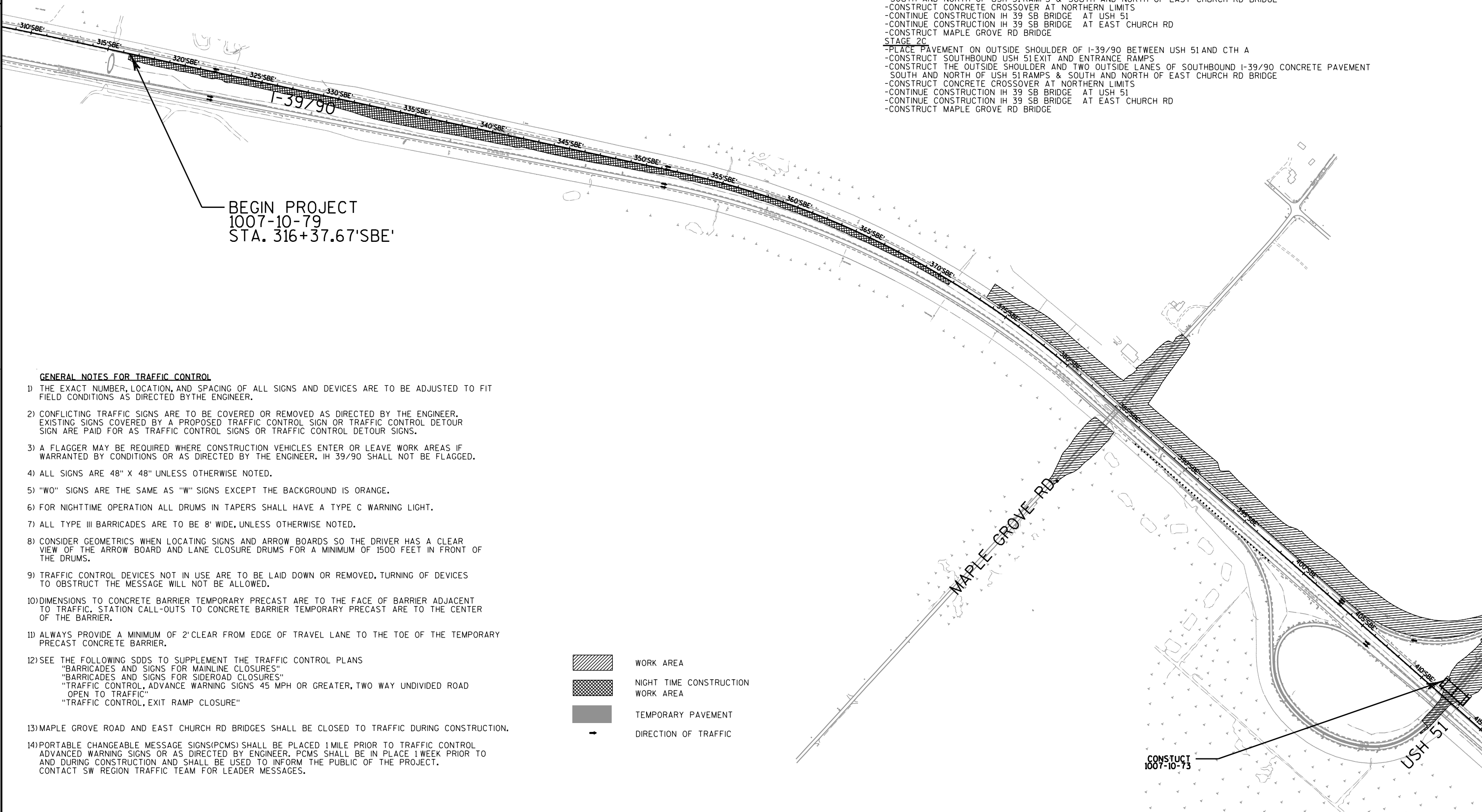
- PLACE PAVEMENT ON OUTSIDE SHOULDER OF I-39/90 BETWEEN USH 51 AND CTH A
 -CONSTRUCT SOUTHBOUND USH 51 EXIT AND ENTRANCE RAMP
 -CONSTRUCT THE OUTSIDE SHOULDER AND TWO OUTSIDE LANES OF SOUTHBOUND I-39/90 CONCRETE PAVEMENT SOUTH AND NORTH OF USH 51 RAMP & SOUTH AND NORTH OF EAST CHURCH RD BRIDGE
 -CONSTRUCT CONCRETE CROSSOVER AT NORTHERN LIMITS
 -CONTINUE CONSTRUCTION IH 39 SB BRIDGE AT USH 51
 -CONTINUE CONSTRUCTION IH 39 SB BRIDGE AT EAST CHURCH RD
 -CONSTRUCT MAPLE GROVE RD BRIDGE

BEGIN PROJECT
 1007-10-79
 STA. 316+37.67'SBE'

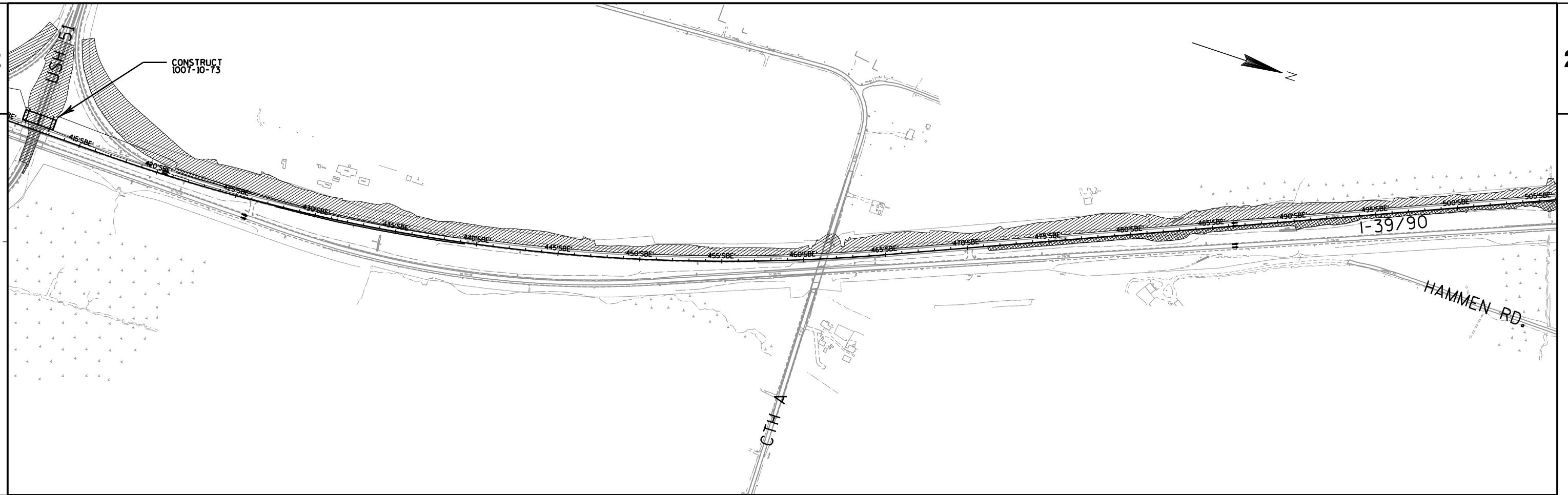
GENERAL NOTES FOR TRAFFIC CONTROL

- 1) THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES ARE TO BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- 2) CONFLICTING TRAFFIC SIGNS ARE TO BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER. EXISTING SIGNS COVERED BY A PROPOSED TRAFFIC CONTROL SIGN OR TRAFFIC CONTROL DETOUR SIGN ARE PAID FOR AS TRAFFIC CONTROL SIGNS OR TRAFFIC CONTROL DETOUR SIGNS.
- 3) A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE WORK AREAS IF WARRANTED BY CONDITIONS OR AS DIRECTED BY THE ENGINEER. IH 39/90 SHALL NOT BE FLAGGED.
- 4) ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- 5) "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- 6) FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A TYPE C WARNING LIGHT.
- 7) ALL TYPE III BARRICADES ARE TO BE 8' WIDE, UNLESS OTHERWISE NOTED.
- 8) CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM OF 1500 FEET IN FRONT OF THE DRUMS.
- 9) TRAFFIC CONTROL DEVICES NOT IN USE ARE TO BE LAID DOWN OR REMOVED, TURNING OF DEVICES TO OBSTRUCT THE MESSAGE WILL NOT BE ALLOWED.
- 10) DIMENSIONS TO CONCRETE BARRIER TEMPORARY PRECAST ARE TO THE FACE OF BARRIER ADJACENT TO TRAFFIC. STATION CALL-OUTS TO CONCRETE BARRIER TEMPORARY PRECAST ARE TO THE CENTER OF THE BARRIER.
- 11) ALWAYS PROVIDE A MINIMUM OF 2' CLEAR FROM EDGE OF TRAVEL LANE TO THE TOE OF THE TEMPORARY PRECAST CONCRETE BARRIER.
- 12) SEE THE FOLLOWING SDDS TO SUPPLEMENT THE TRAFFIC CONTROL PLANS
 "BARRICADES AND SIGNS FOR MAINLINE CLOSURES"
 "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES"
 "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
 "TRAFFIC CONTROL, EXIT RAMP CLOSURE"
- 13) MAPLE GROVE ROAD AND EAST CHURCH RD BRIDGES SHALL BE CLOSED TO TRAFFIC DURING CONSTRUCTION.
- 14) PORTABLE CHANGEABLE MESSAGE SIGNS(PCMS) SHALL BE PLACED 1 MILE PRIOR TO TRAFFIC CONTROL ADVANCED WARNING SIGNS OR AS DIRECTED BY ENGINEER. PCMS SHALL BE IN PLACE 1 WEEK PRIOR TO AND DURING CONSTRUCTION AND SHALL BE USED TO INFORM THE PUBLIC OF THE PROJECT. CONTACT SW REGION TRAFFIC TEAM FOR LEADER MESSAGES.

- WORK AREA
 NIGHT TIME CONSTRUCTION WORK AREA
 TEMPORARY PAVEMENT
 DIRECTION OF TRAFFIC

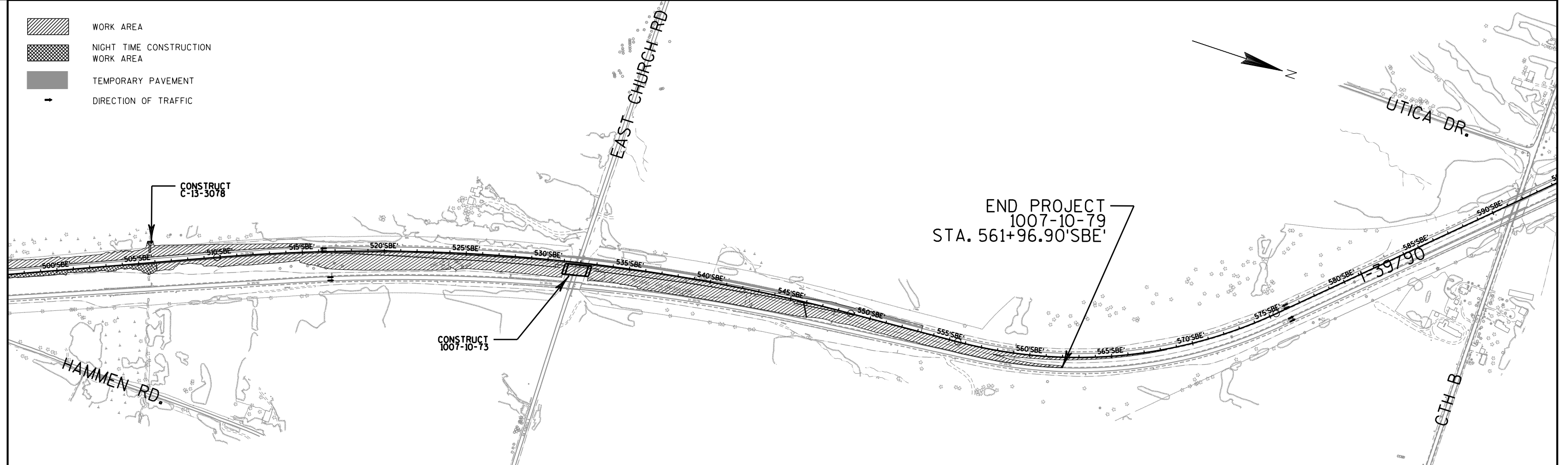


2



2

-  WORK AREA
-  NIGHT TIME CONSTRUCTION WORK AREA
-  TEMPORARY PAVEMENT
-  DIRECTION OF TRAFFIC



PROJECT NO: 1007-10-79

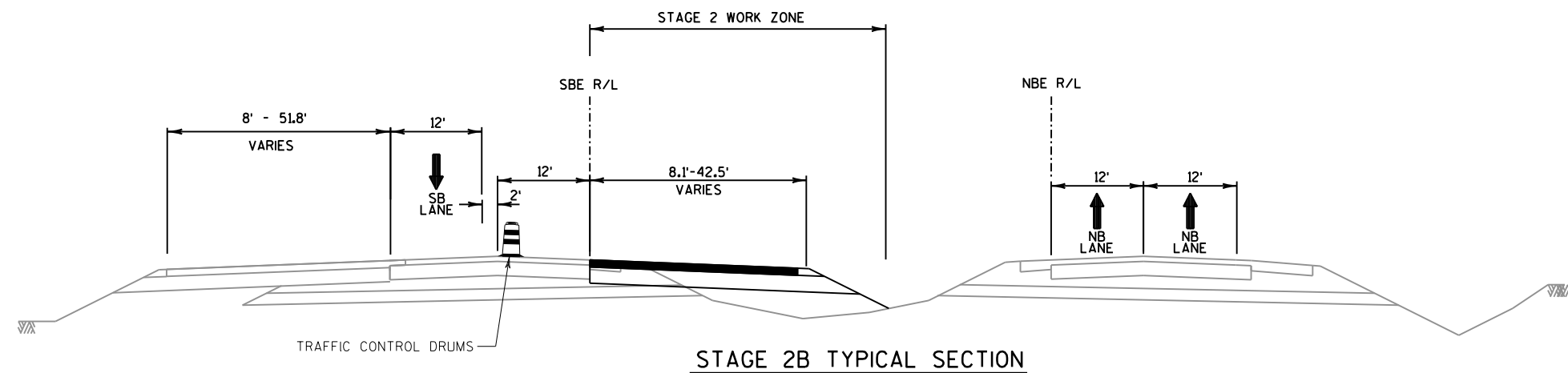
HWY: IH 39

COUNTY: DANE

TRAFFIC CONTROL OVERVIEW - IH 39 STAGE 2

SHEET 238

E



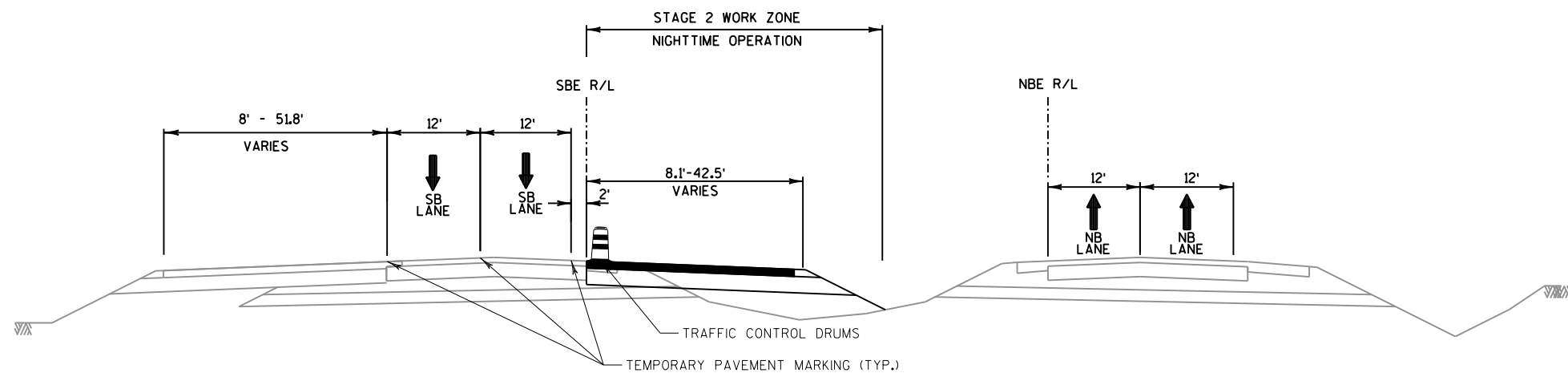
I-39/90

NIGHTTIME OPERATION

MEDIAN WORK

STA 316+38'SBE' TO STA 373+29'SBE'

NOTE:
NB MEDIAN LANE SHALL BE CLOSED IF MEDIAN WORK ZONE
IS LESS THAN 30' TO THE NB TRAVEL LANES.

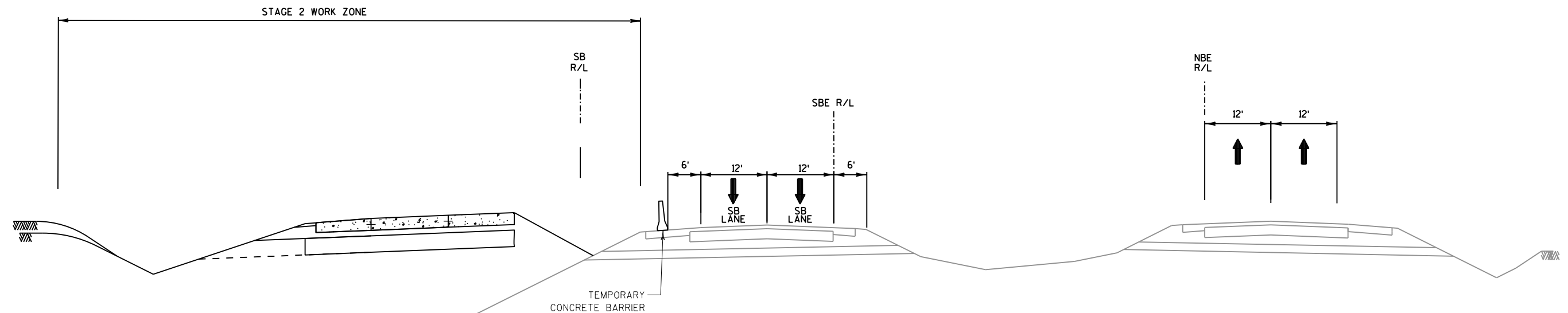


I-39/90

DAYTIME CONFIGURATION

MEDIAN WORK

STA 316+38'SBE' TO STA 370+81'SBE'

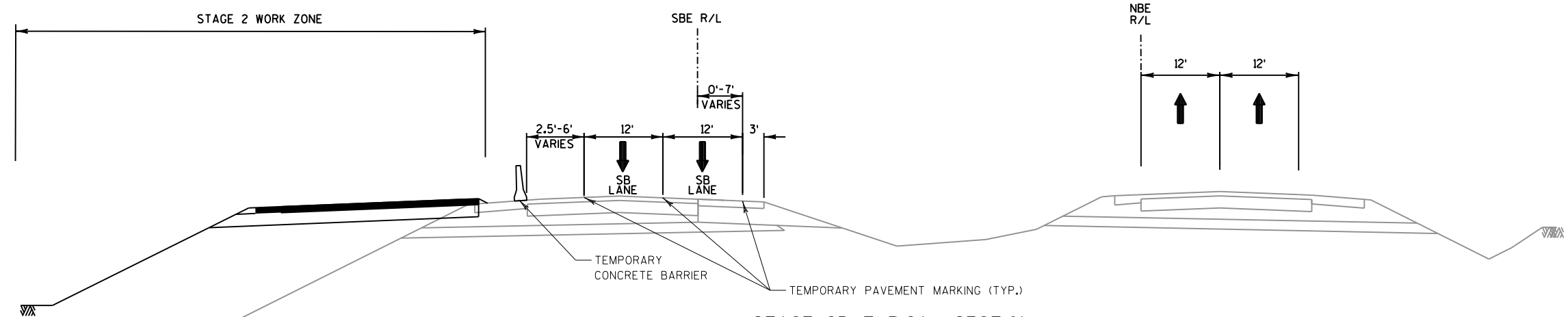
**STAGE 2B TYPICAL SECTION**

I-39/90

DAYTIME OPERATION

STA 373+29'SBE' TO STA 406+00'SBE'

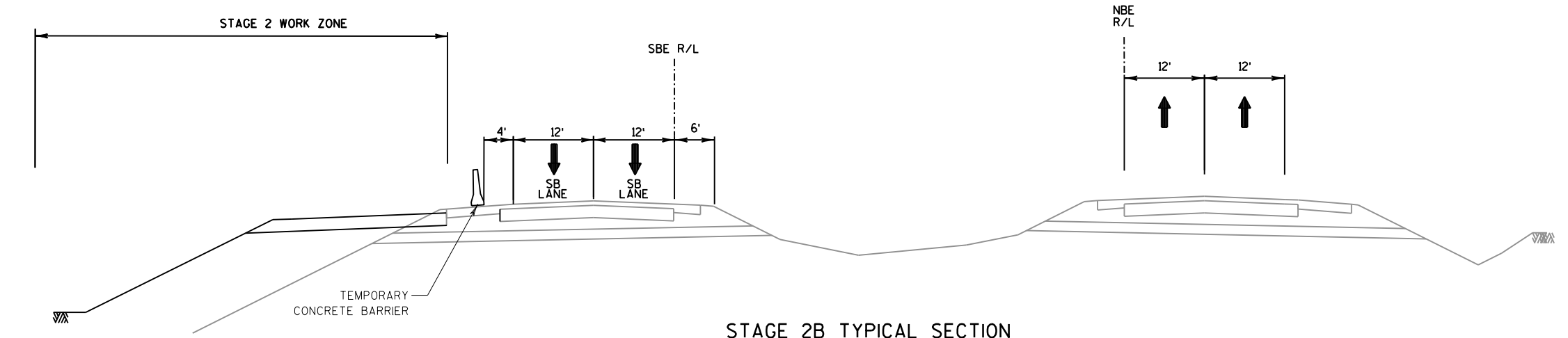
STA 418+00'SBE' TO STA 427+52'SBE'

**STAGE 2B TYPICAL SECTION**

I-39/90

DAYTIME OPERATION

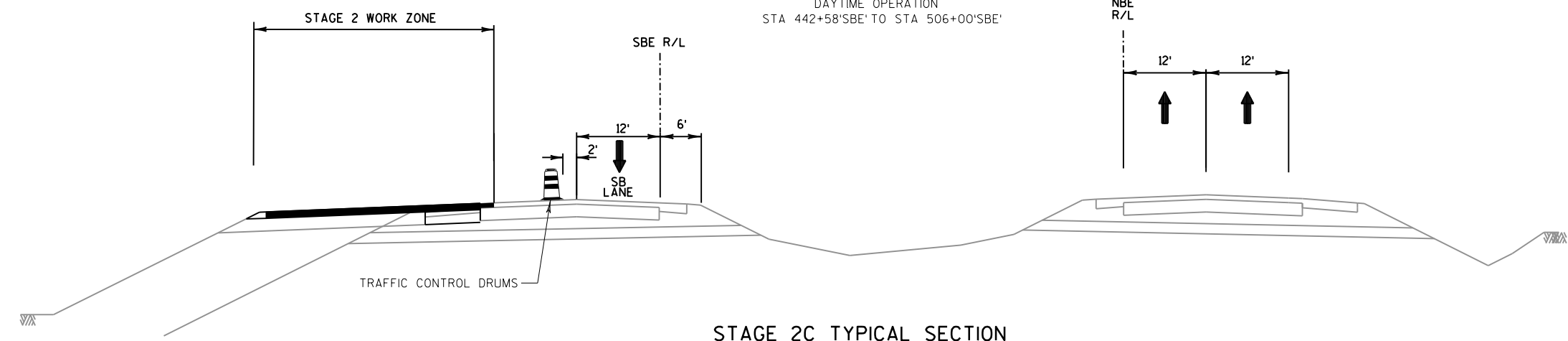
STA 427+52'SBE' TO STA 441+58'SBE'



STAGE 2B TYPICAL SECTION

I-39/90

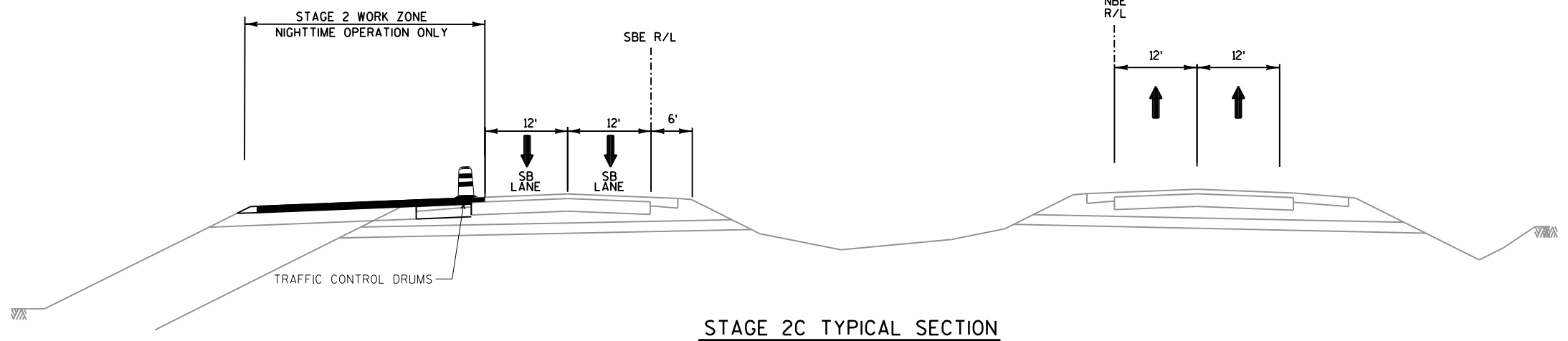
DAYTIME OPERATION
STA 442+58'SBE' TO STA 506+00'SBE'



STAGE 2C TYPICAL SECTION

I-39/90

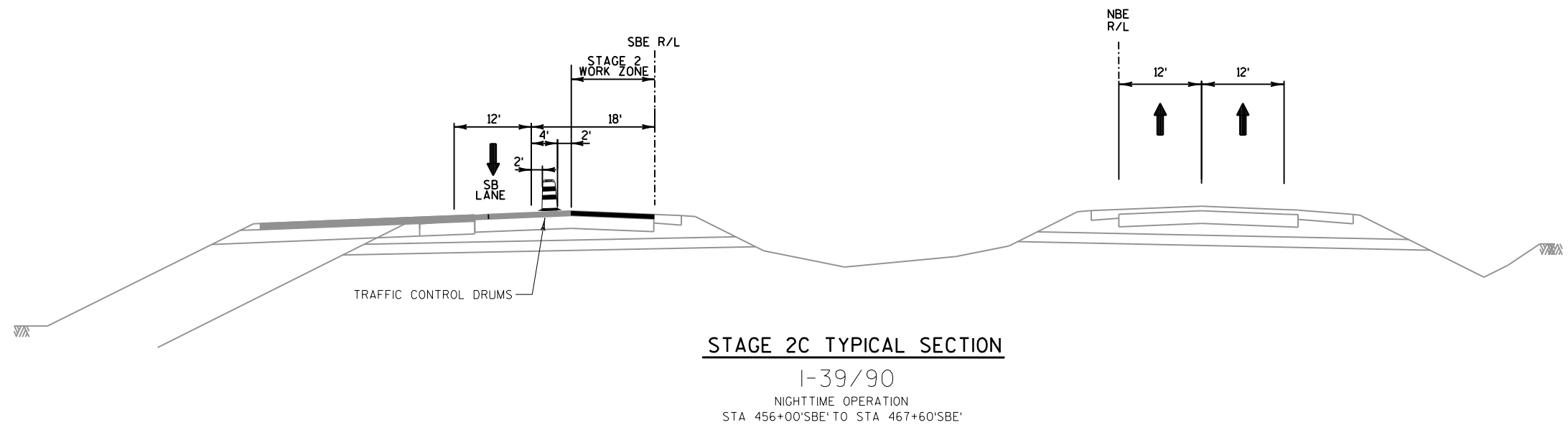
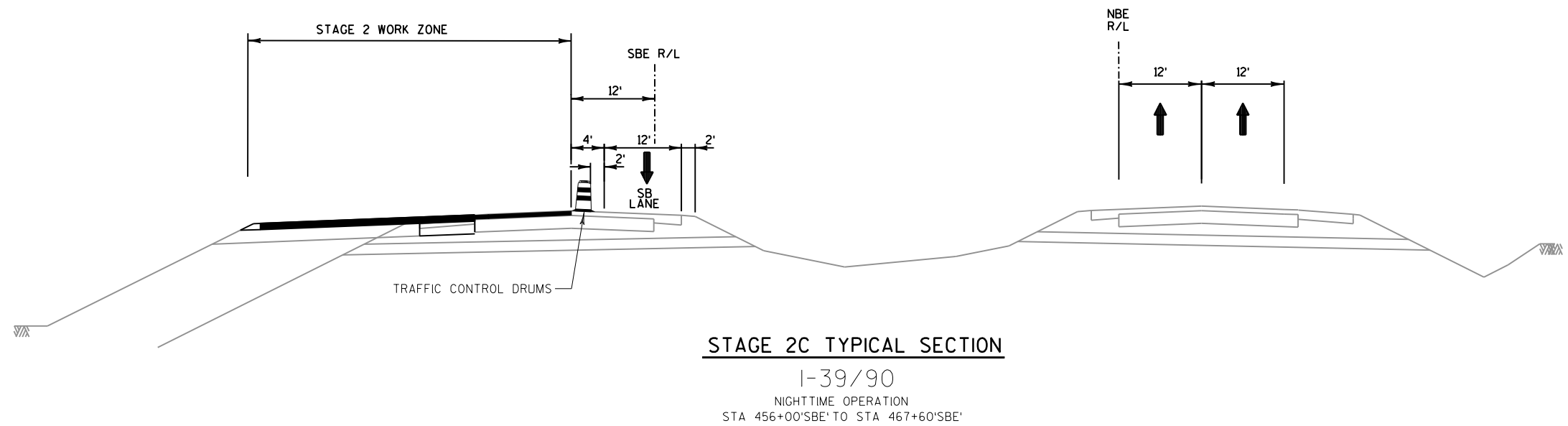
NIGHTTIME OPERATION
STA 442+58'SBE' TO STA 456+00'SBE'
STA 467+60'SBE' TO STA 506+00'SBE'

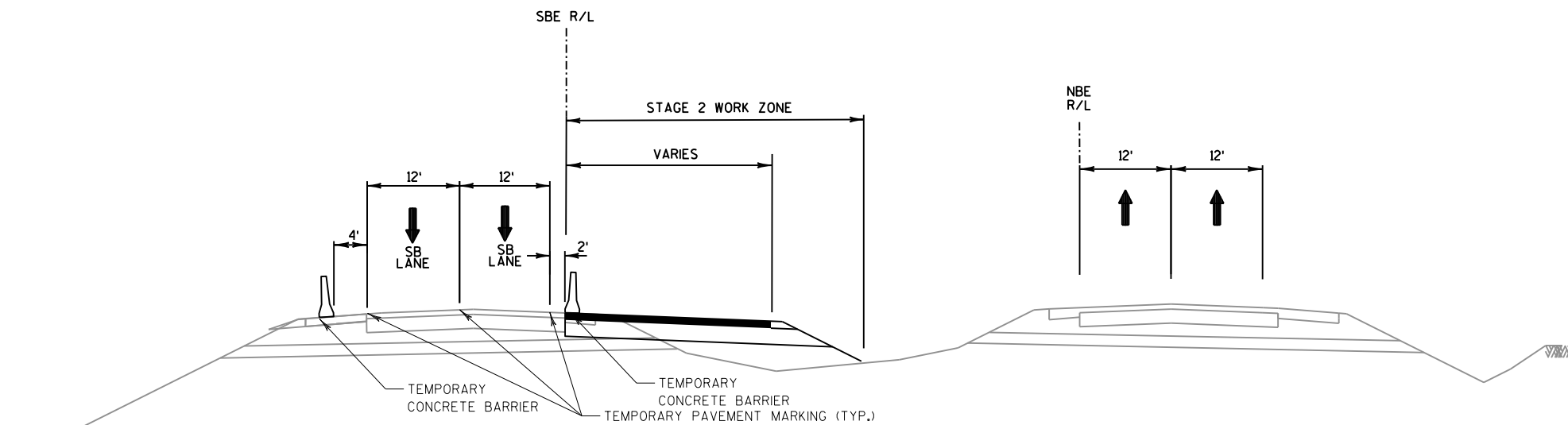


STAGE 2C TYPICAL SECTION

I-39/90

DAYTIME CONFIGURATION
STA 442+58'SBE' TO STA 506+00'SBE'



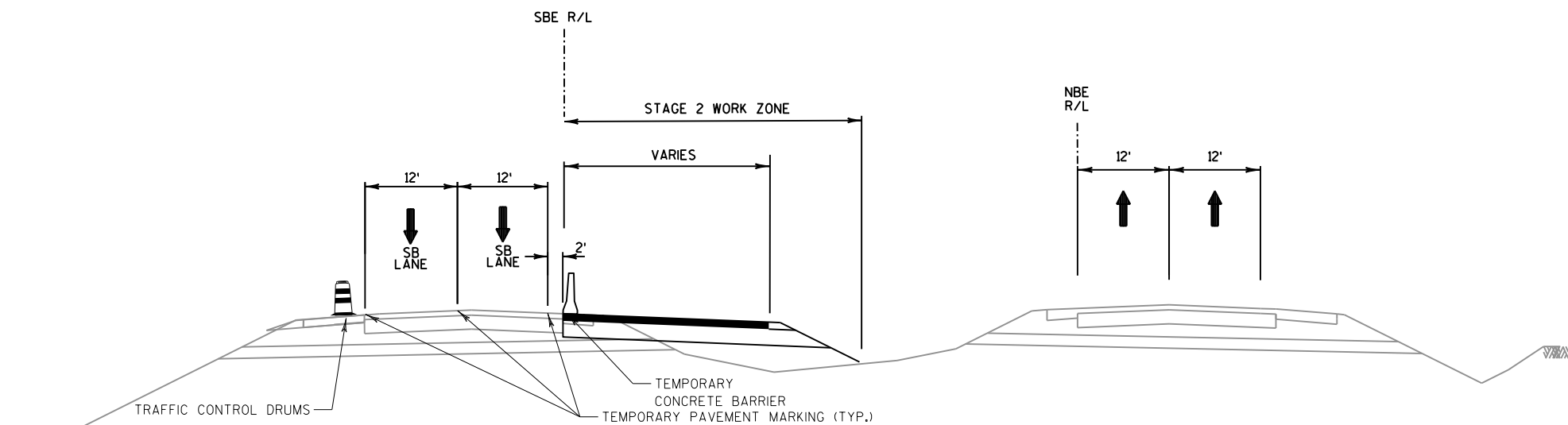


STAGE 2B TYPICAL SECTION

I-39/90

DAYTIME OPERATION

STA 506+00'SBE' TO STA 527+36'SBE

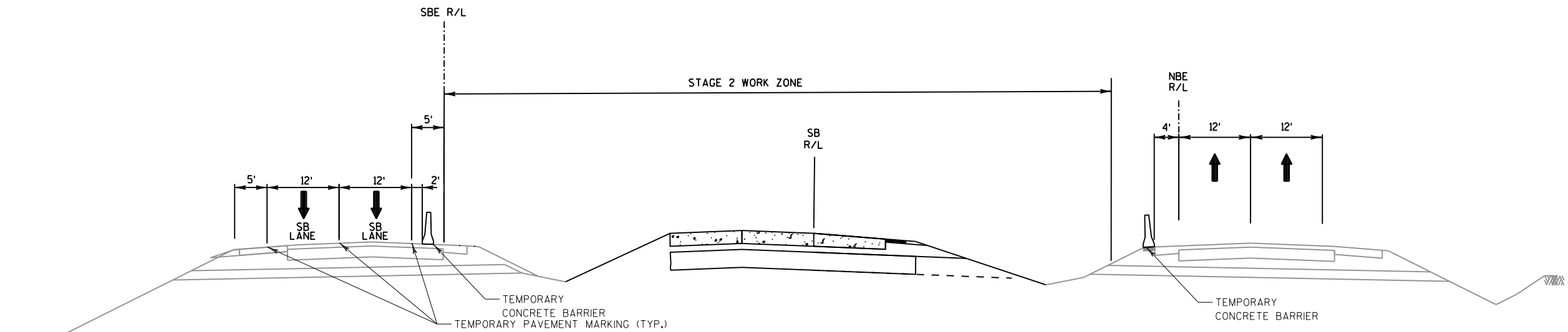


STAGE 2C TYPICAL SECTION

I-39/90

DAYTIME OPERATION

STA 506+00'SBE' TO STA 527+36'SBE

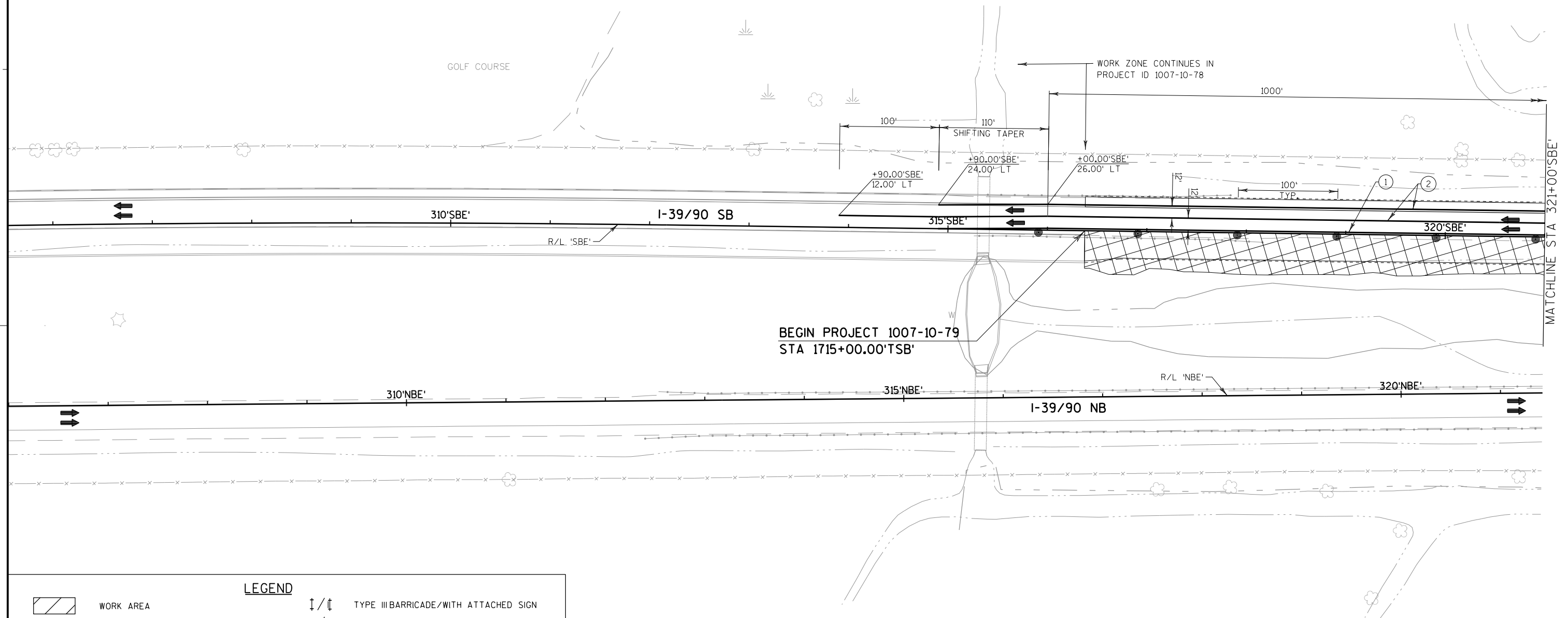


STAGE 2B TYPICAL SECTION

I-39/90

DAYTIME OPERATION

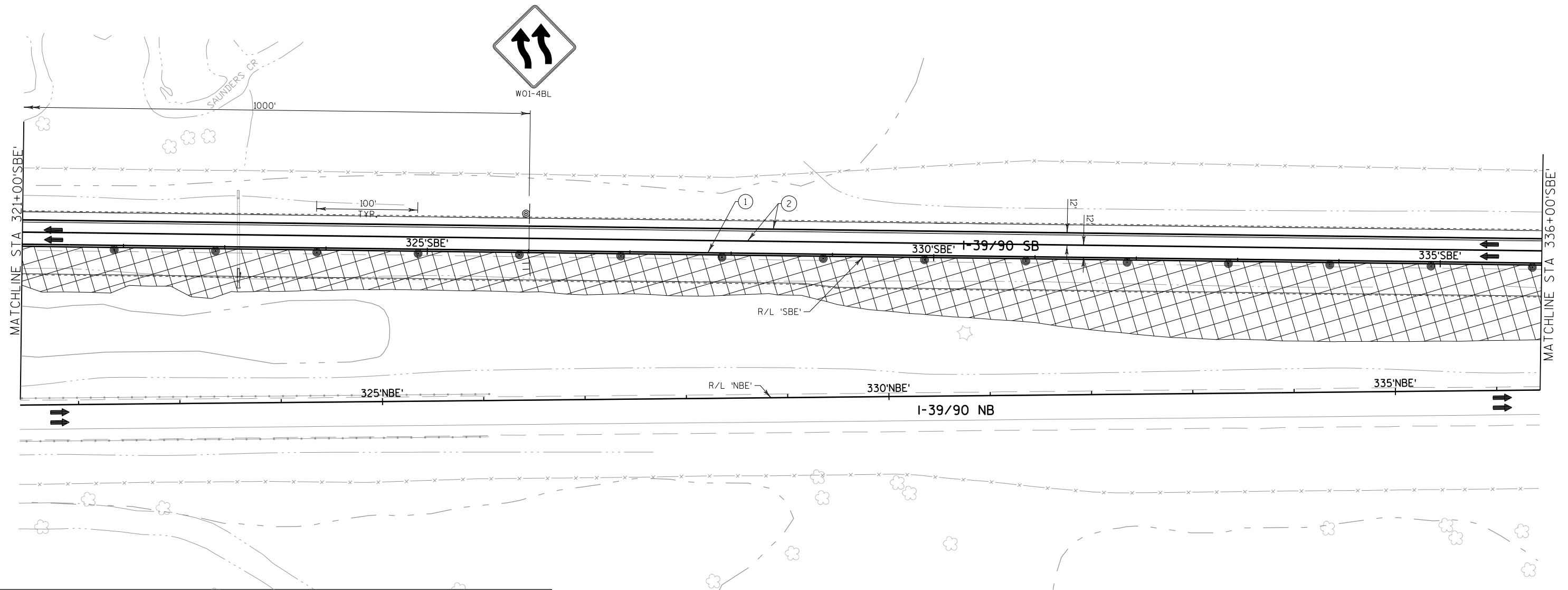
STA 527+36'SBE' TO STA 544+98'SBE



LEGEND	
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	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
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	SAWCUT ASPHALT

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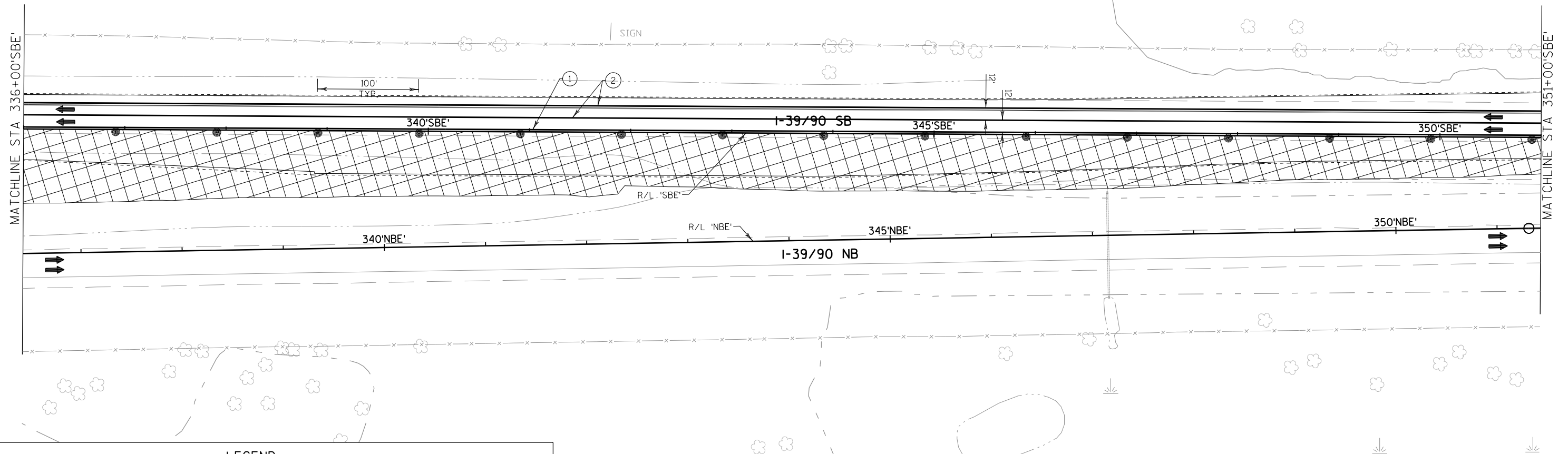


LEGEND	
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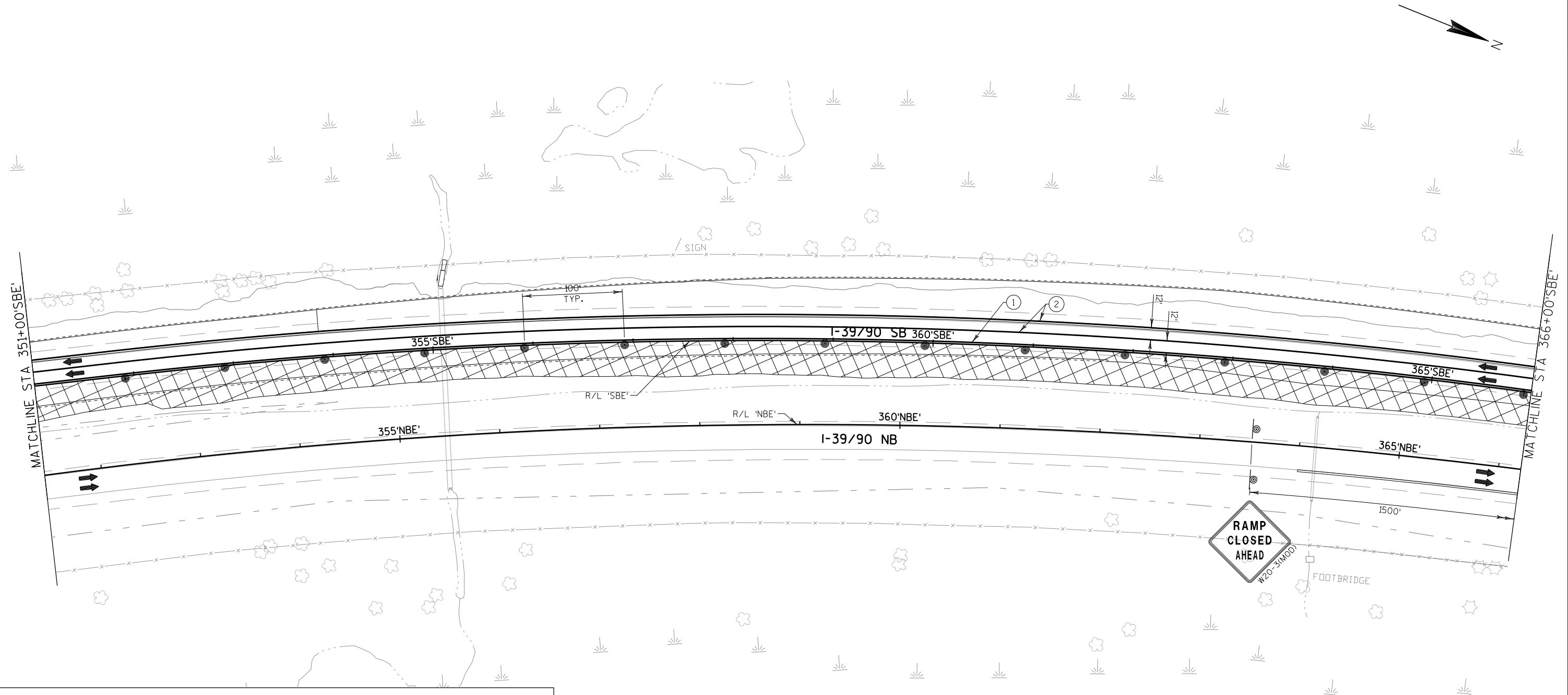


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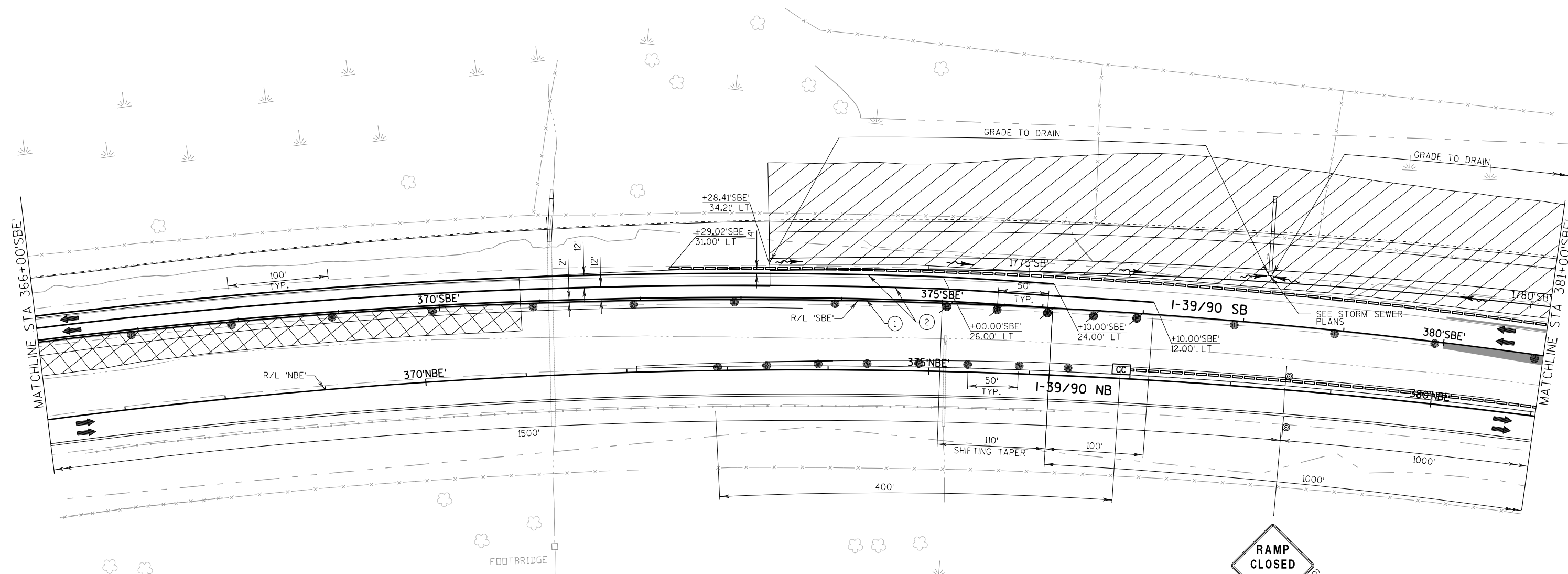


LEGEND

	WORK AREA		TYPE III BARRICADE/WITH ATTACHED SIGN
	NIGHTTIME CONSTRUCTION WORK AREA		TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	TEMPORARY PAVEMENT		FLASHING ARROW BOARD
	DIRECTION OF TRAFFIC		SIGN ON PERMANENT SUPPORT
	CONCRETE BARRIER TEMPORARY PRECAST		SIGN ON TEMPORARY SUPPORT
	CRASH CUSHION TEMPORARY		PORTABLE CHANGEABLE MESSAGE BOARD
	FLAGS 16" X 16" MIN ORANGE		FLEXIBLE TUBULAR MARKER
			SAWCUT ASPHALT

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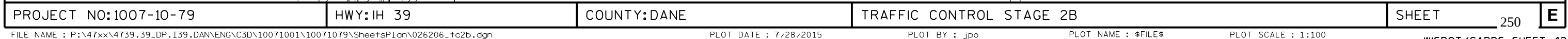
LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
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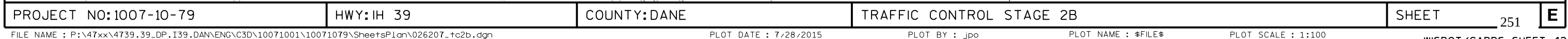
PAVEMENT MARKING LEGEND

- | | |
|--|---|
| ① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE) | ④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP) |
| ② TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE EDGE LINE) | ⑤ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP) |
| ③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE) | ⑥ SEE PERMANENT MARKING PLAN |

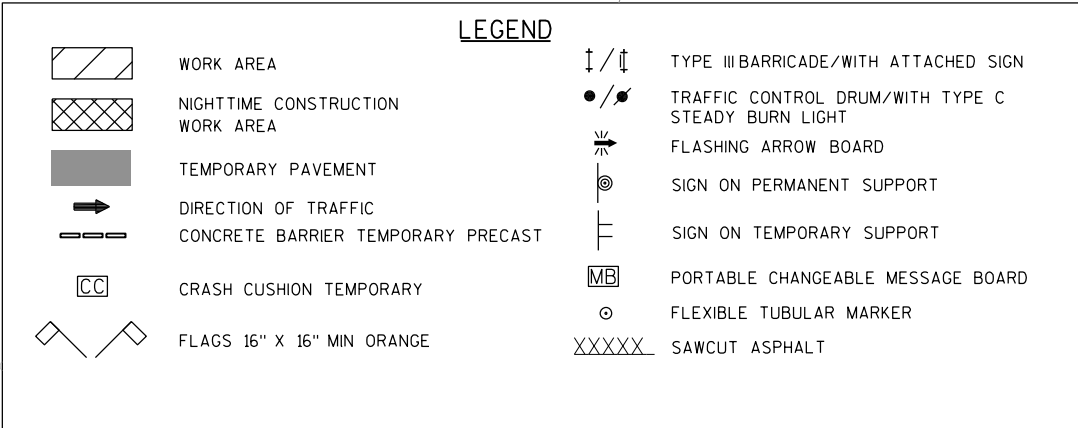
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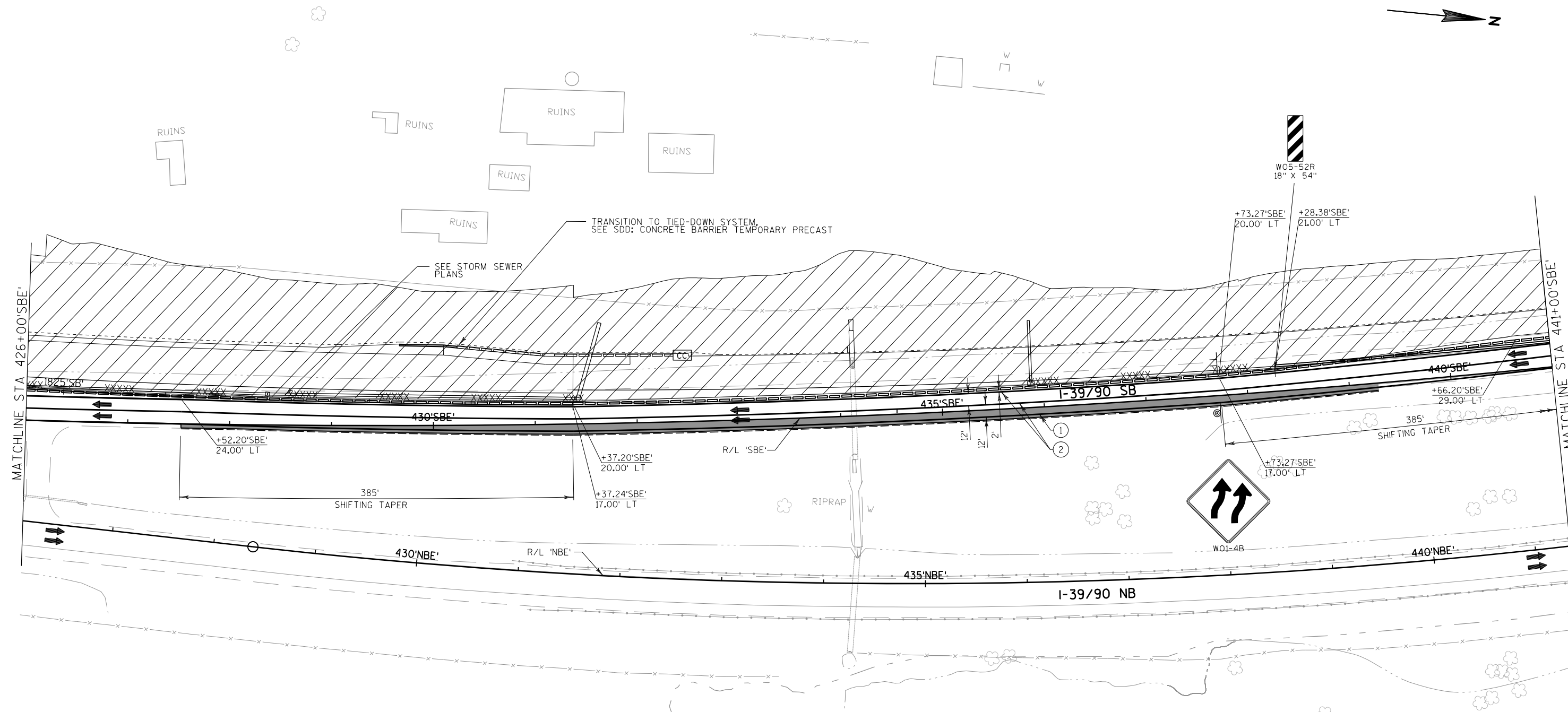
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2



PAVEMENT MARKING LEGEND	
① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE)	④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP)
② TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE EDGE LINE)	⑤ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP)
③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE)	⑥ SEE PERMANENT MARKING PLAN

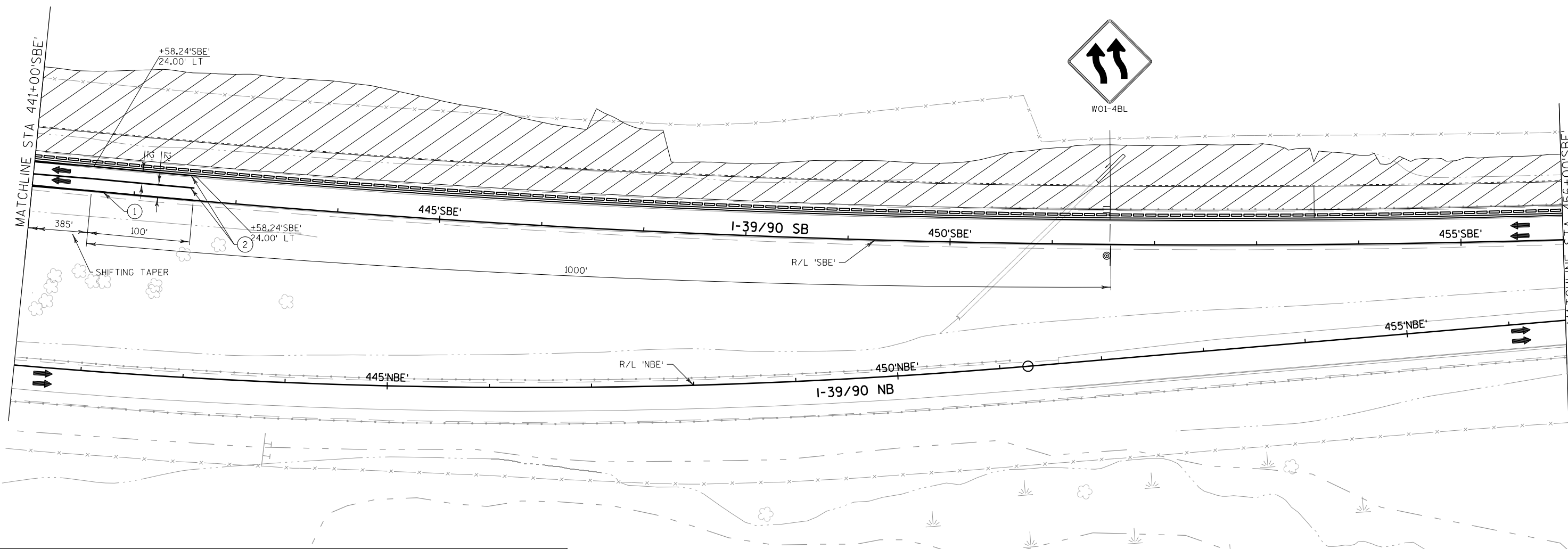


LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHION TEMPORARY
	FLAGS 16" X 16" MIN ORANGE

	TYPE III BARRICADE/WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	PORTABLE CHANGEABLE MESSAGE BOARD
	FLEXIBLE TUBULAR MARKER
	SAWCUT ASPHALT

PAVEMENT MARKING LEGEND

- | | |
|--|---|
| ① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE) | ④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP) |
| ② TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE EDGE LINE) | ⑤ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP) |
| ③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE) | ⑥ SEE PERMANENT MARKING PLAN |

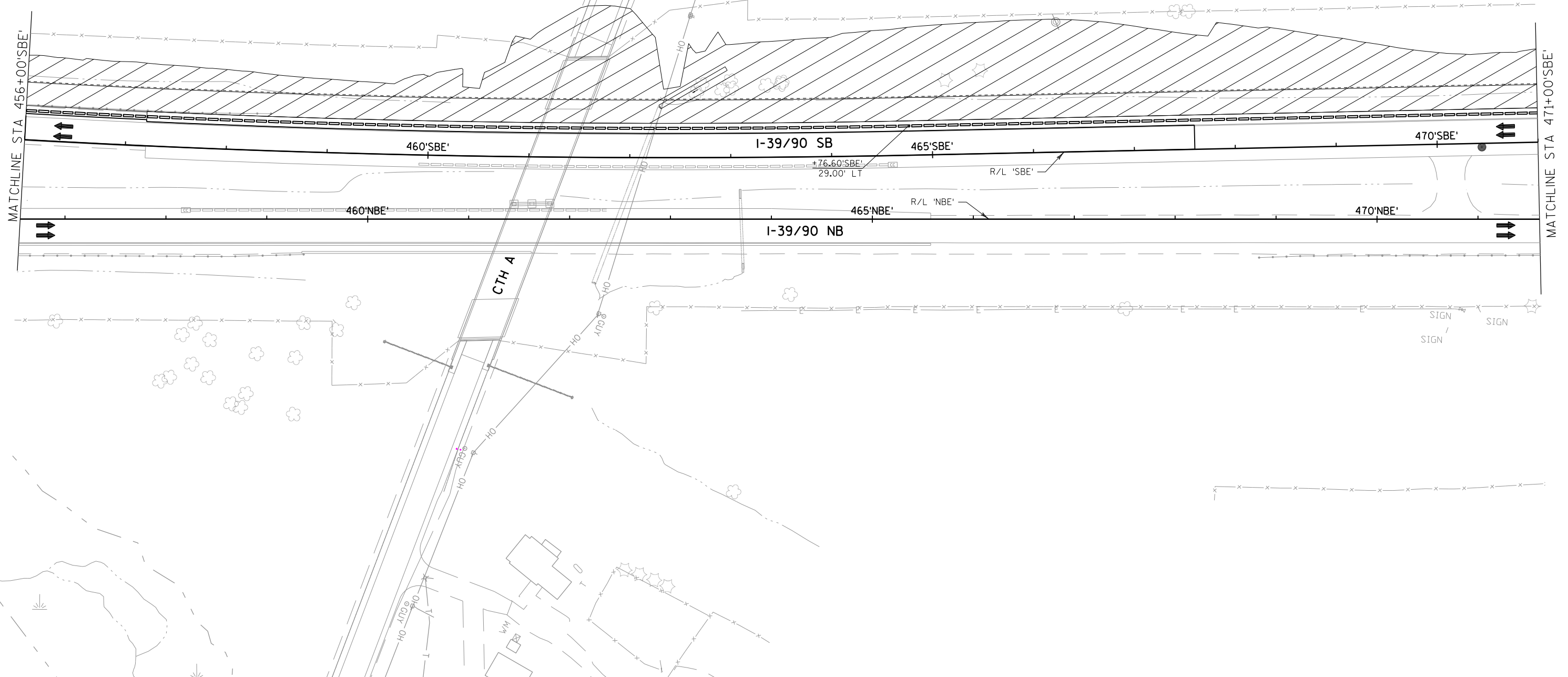


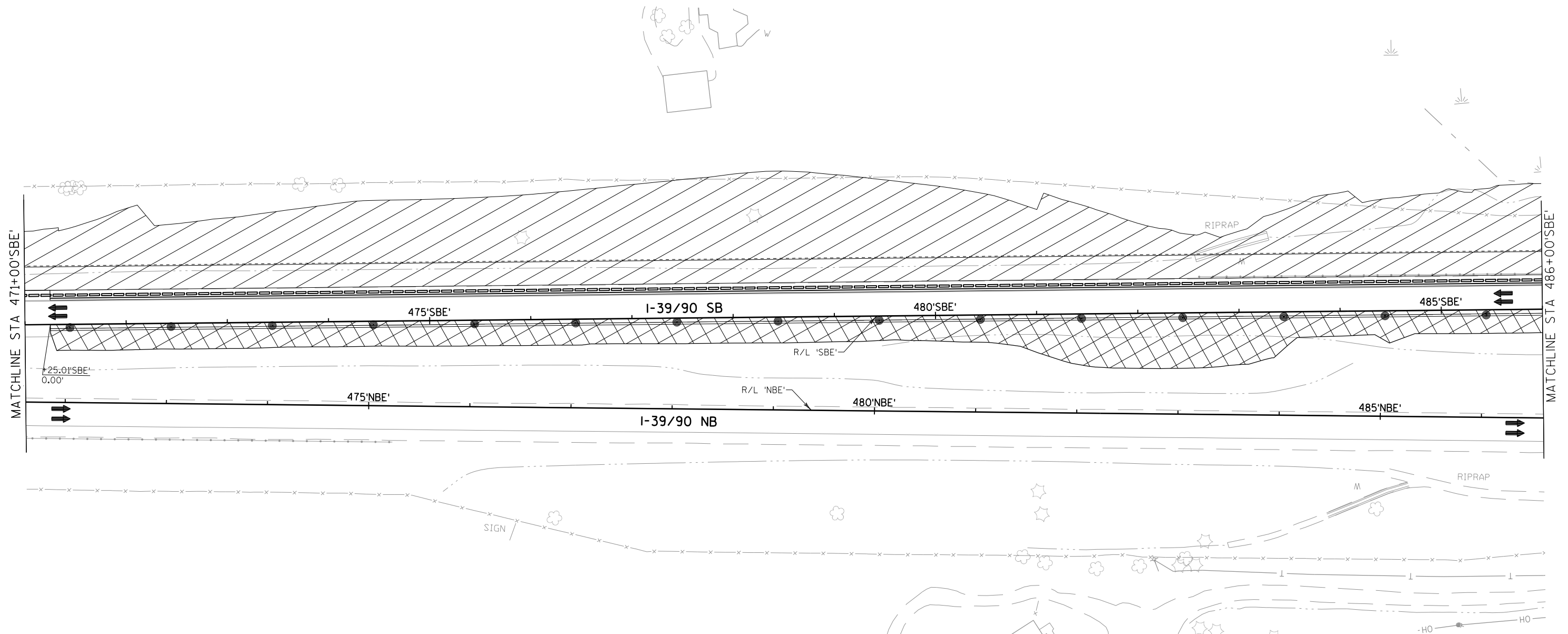
LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHION TEMPORARY
	FLAGS 16" X 16" MIN ORANGE
	TYPE III BARRICADE/WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	PORTABLE CHANGEABLE MESSAGE BOARD
	FLEXIBLE TUBULAR MARKER
	SAWCUT ASPHALT

PAVEMENT MARKING LEGEND	
① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE)	④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP)
② TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE EDGE LINE)	⑤ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP)
③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE)	⑥ SEE PERMANENT MARKING PLAN

LEGEND

	WORK AREA		TYPE III BARRICADE/WITH ATTACHED SIGN
	NIGHTTIME CONSTRUCTION WORK AREA		TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	TEMPORARY PAVEMENT		FLASHING ARROW BOARD
	DIRECTION OF TRAFFIC		SIGN ON PERMANENT SUPPORT
	CONCRETE BARRIER TEMPORARY PRECAST		SIGN ON TEMPORARY SUPPORT
	CRASH CUSHION TEMPORARY		PORTABLE CHANGEABLE MESSAGE BOARD
	FLAGS 16" X 16" MIN ORANGE		FLEXIBLE TUBULAR MARKER
			SAWCUT ASPHALT

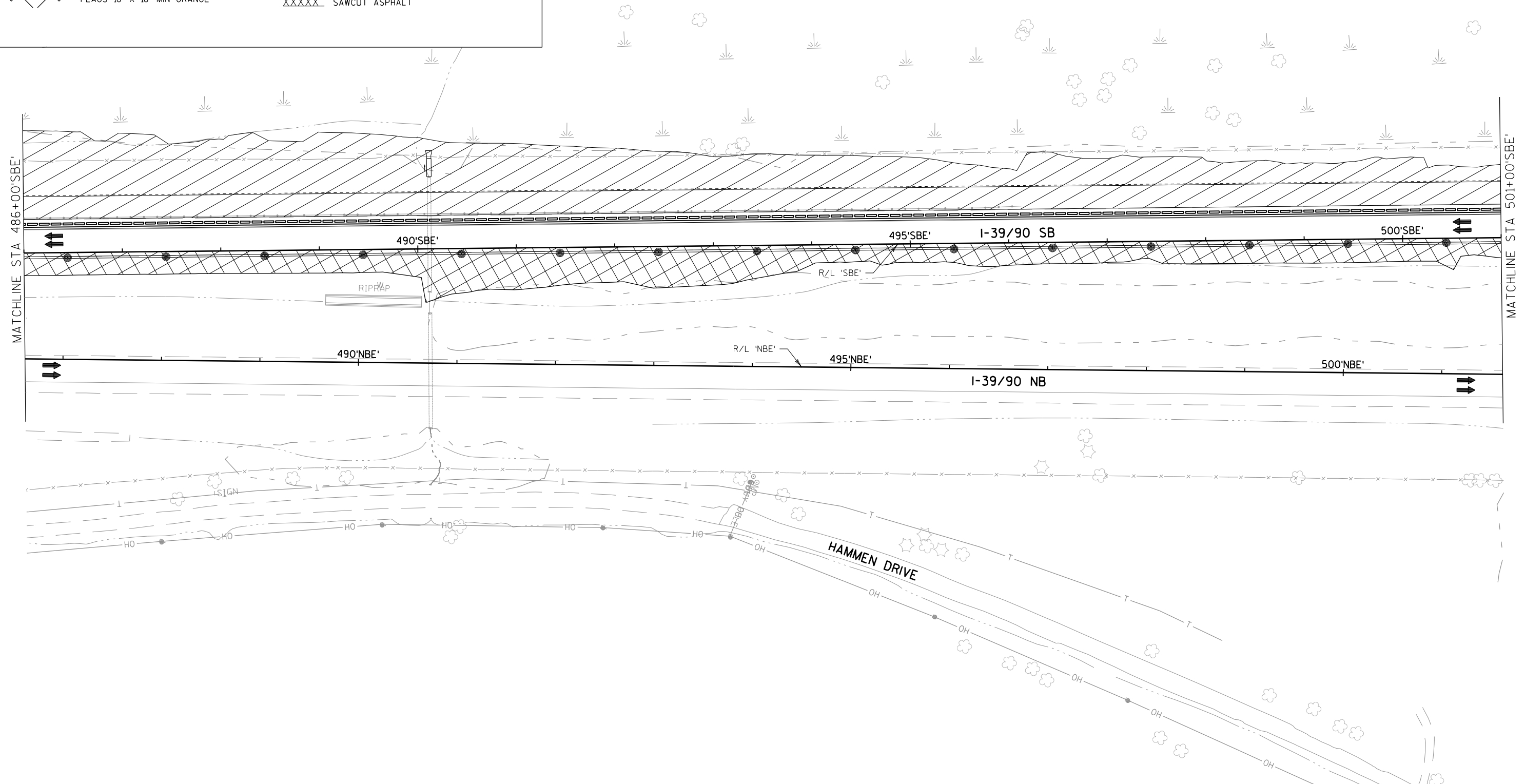


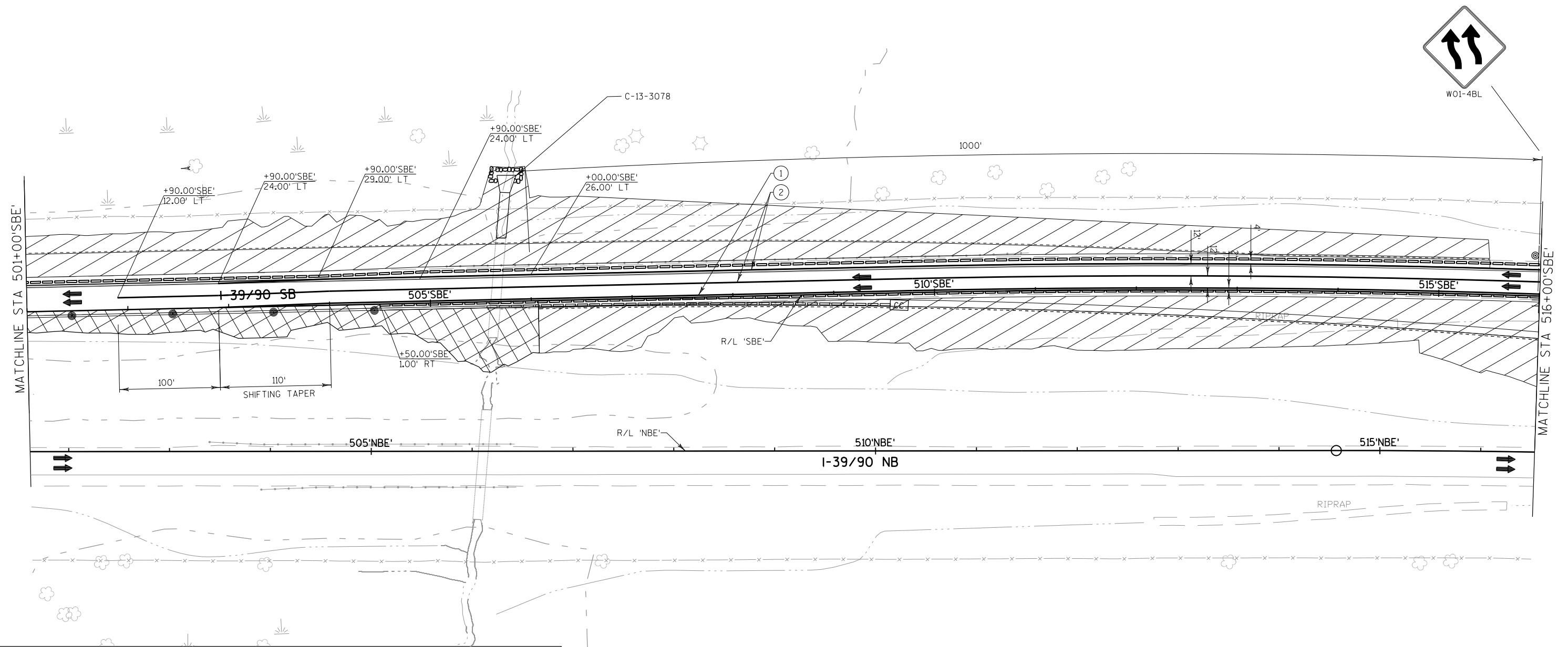


LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHION TEMPORARY
	FLAGS 16" X 16" MIN ORANGE
	TYPE III BARRICADE/WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	PORTABLE CHANGEABLE MESSAGE BOARD
	FLEXIBLE TUBULAR MARKER
	SAWCUT ASPHALT

LEGEND

	WORK AREA		TYPE III BARRICADE/WITH ATTACHED SIGN
	NIGHTTIME CONSTRUCTION WORK AREA		TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	TEMPORARY PAVEMENT		FLASHING ARROW BOARD
	DIRECTION OF TRAFFIC		SIGN ON PERMANENT SUPPORT
	CONCRETE BARRIER TEMPORARY PRECAST		SIGN ON TEMPORARY SUPPORT
	CRASH CUSHION TEMPORARY		PORTABLE CHANGEABLE MESSAGE BOARD
	FLAGS 16" X 16" MIN ORANGE		FLEXIBLE TUBULAR MARKER
			SAWCUT ASPHALT



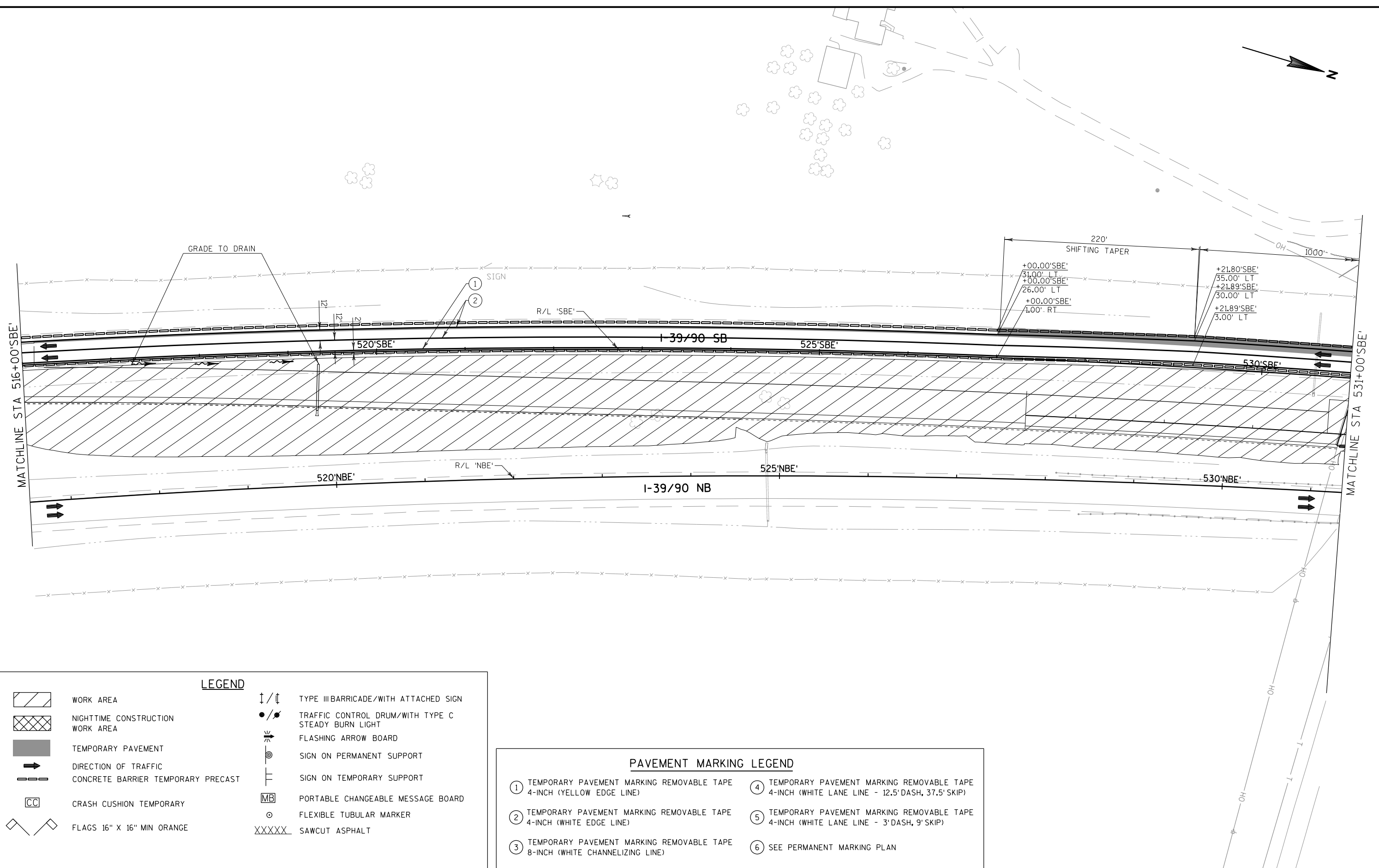


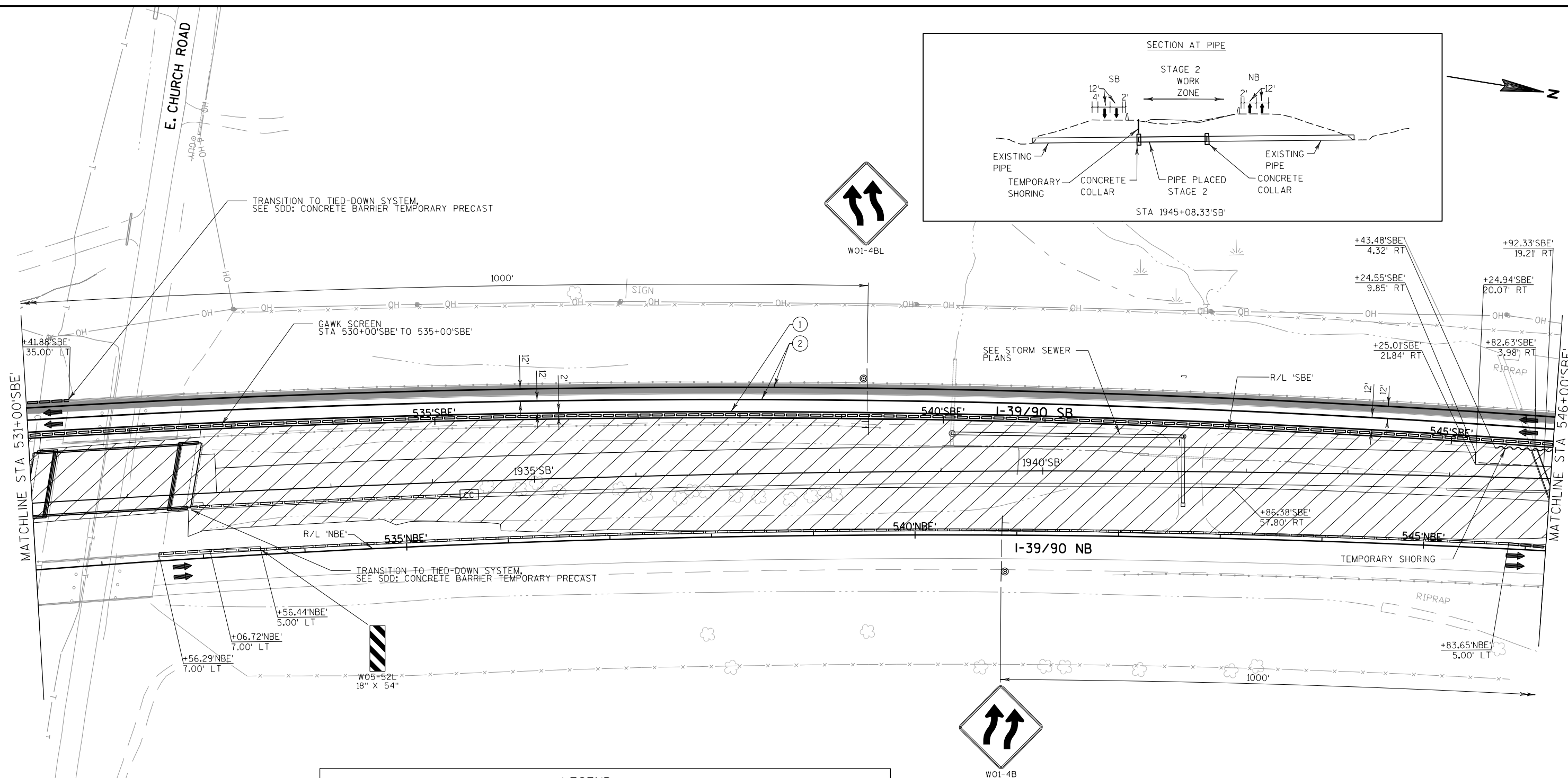
LEGEND

	WORK AREA		TYPE III BARRICADE/WITH ATTACHED SIGN
	NIGHTTIME CONSTRUCTION WORK AREA		TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	TEMPORARY PAVEMENT		FLASHING ARROW BOARD
	DIRECTION OF TRAFFIC		SIGN ON PERMANENT SUPPORT
	CONCRETE BARRIER TEMPORARY PRECAST		SIGN ON TEMPORARY SUPPORT
	CRASH CUSHION TEMPORARY		PORTABLE CHANGEABLE MESSAGE BOARD
	FLAGS 16" X 16" MIN ORANGE		FLEXIBLE TUBULAR MARKER
			SAWCUT ASPHALT

PAVEMENT MARKING LEGEND

- | | |
|--|---|
| ① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE) | ④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP) |
| ② TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE EDGE LINE) | ⑤ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP) |
| ③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE) | ⑥ SEE PERMANENT MARKING PLAN |





- LEGEND**
- WORK AREA
 - NIGHTTIME CONSTRUCTION WORK AREA
 - TEMPORARY PAVEMENT
 - DIRECTION OF TRAFFIC
 - CONCRETE BARRIER TEMPORARY PRECAST
 - CRASH CUSHION TEMPORARY
 - FLAGS 16" X 16" MIN ORANGE

- TYPE III BARRICADE/WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- PORTABLE CHANGEABLE MESSAGE BOARD
- FLEXIBLE TUBULAR MARKER
- SAWCUT ASPHALT

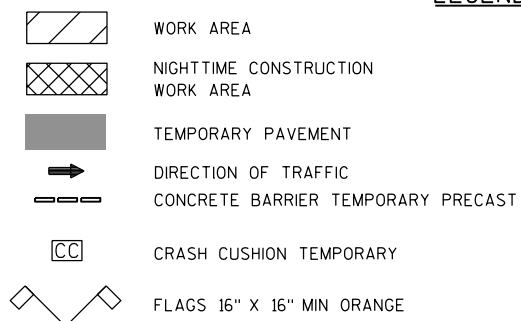
PAVEMENT MARKING LEGEND

- ① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE)
- ② TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE EDGE LINE)
- ③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE)
- ④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP)
- ⑤ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP)
- ⑥ SEE PERMANENT MARKING PLAN



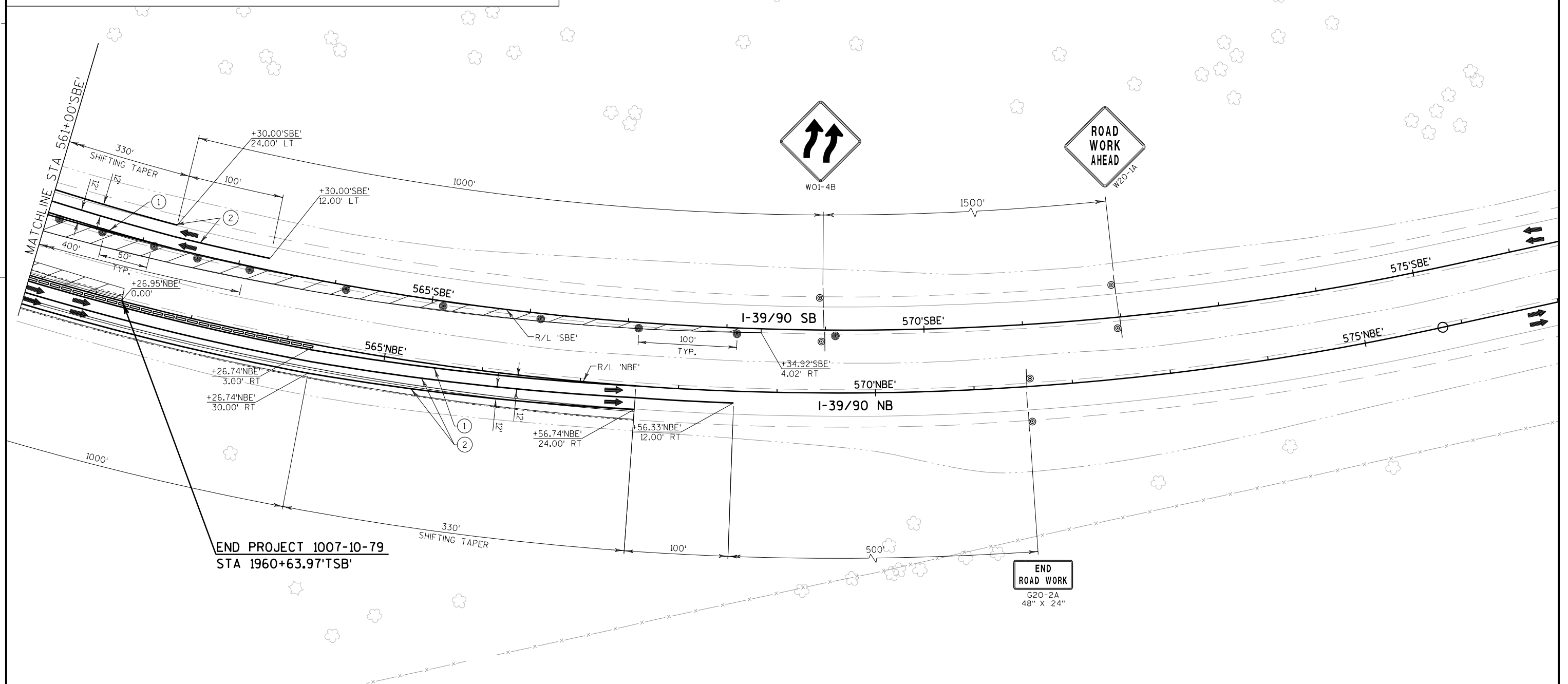
① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE)	④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP)
② TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE EDGE LINE)	⑤ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP)
③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE)	⑥ SEE PERMANENT MARKING PLAN

2

**PAVEMENT MARKING LEGEND**

- | | |
|--|---|
| ① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE) | ④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP) |
| ② TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE EDGE LINE) | ⑤ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP) |
| ③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE) | ⑥ SEE PERMANENT MARKING PLAN |

2



PROJECT NO: 1007-10-79

HWY: IH 39

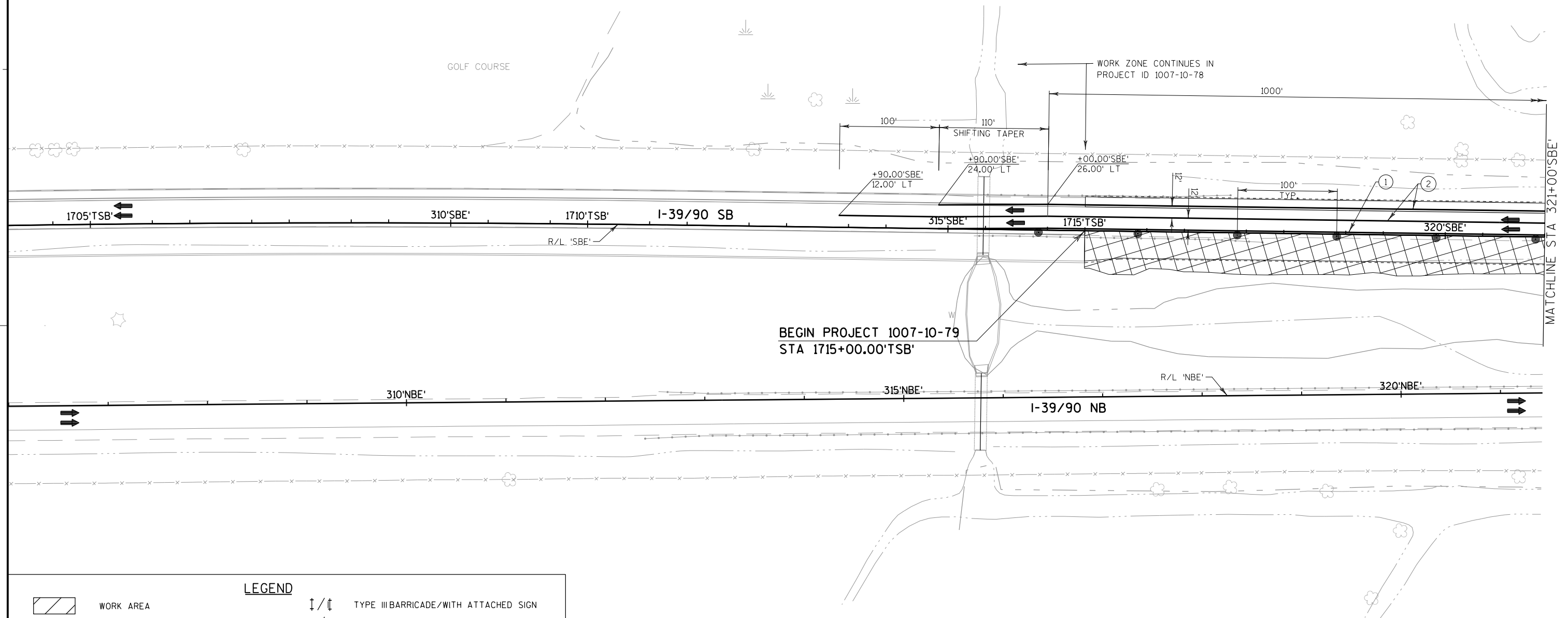
COUNTY: DANE

TRAFFIC CONTROL STAGE 2B

SHEET

262

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BEGIN PROJECT 1007-10-79
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PROJECT ID 1007-10-78

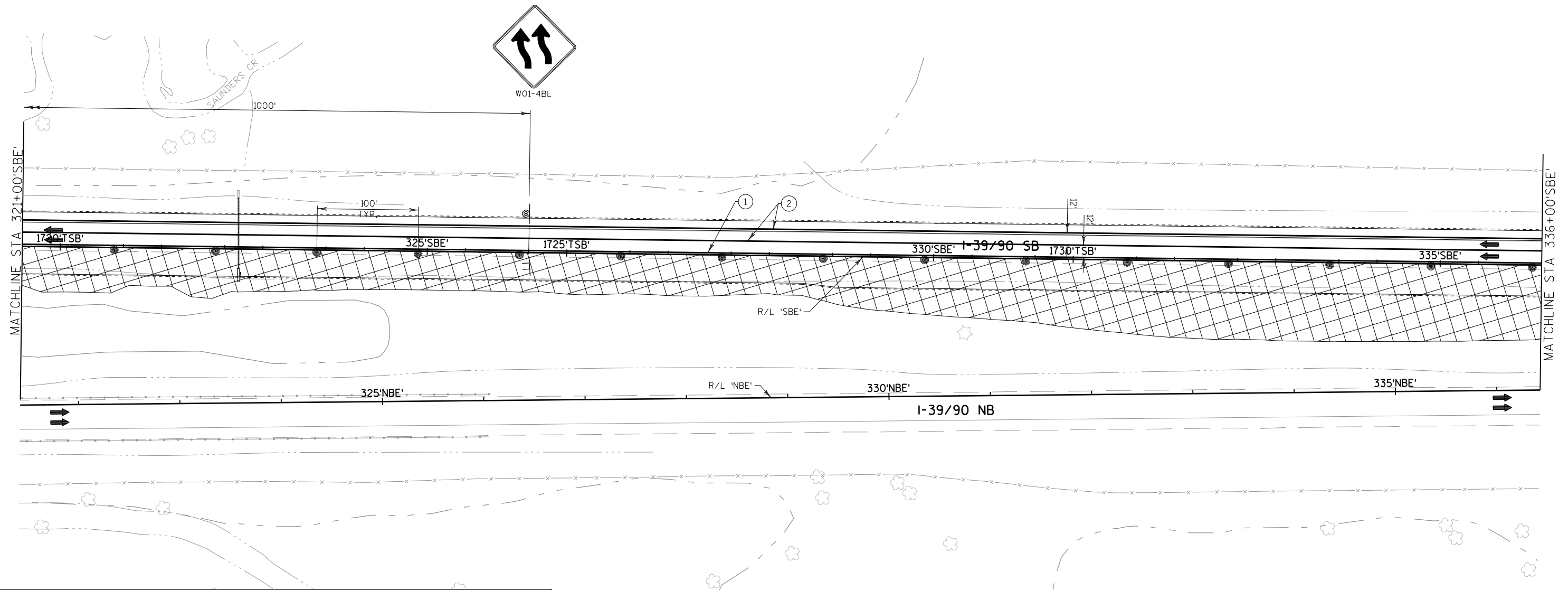
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LEGEND

	WORK AREA		TYPE III BARRICADE/WITH ATTACHED SIGN
	NIGHTTIME CONSTRUCTION WORK AREA		TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	TEMPORARY PAVEMENT		FLASHING ARROW BOARD
	DIRECTION OF TRAFFIC		SIGN ON PERMANENT SUPPORT
	CONCRETE BARRIER TEMPORARY PRECAST		SIGN ON TEMPORARY SUPPORT
	CRASH CUSHION TEMPORARY		PORTABLE CHANGEABLE MESSAGE BOARD
	FLAGS 16" X 16" MIN ORANGE		FLEXIBLE TUBULAR MARKER
			SAWCUT ASPHALT

PAVEMENT MARKING LEGEND

- | | |
|---|--|
| ① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
4-INCH (YELLOW EDGE LINE) | ④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP) |
| ② TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
4-INCH (WHITE EDGE LINE) | ⑤ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP) |
| ③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE
8-INCH (WHITE CHANNELIZING LINE) | ⑥ SEE PERMANENT MARKING PLAN |

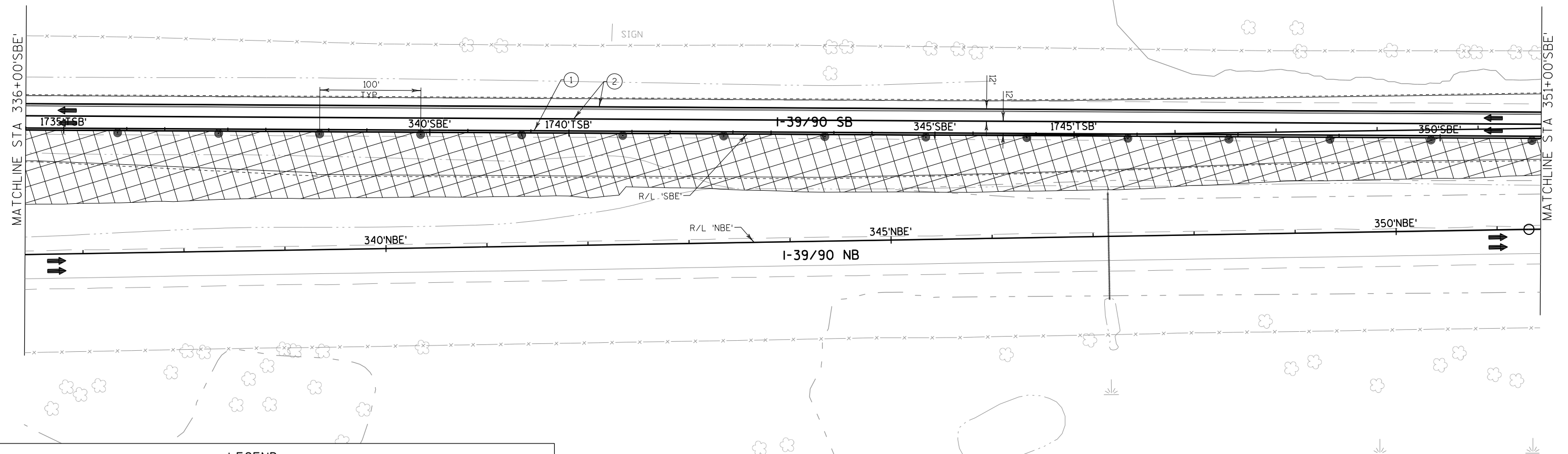


- LEGEND**
- WORK AREA
 - NIGHTTIME CONSTRUCTION WORK AREA
 - TEMPORARY PAVEMENT
 - DIRECTION OF TRAFFIC
 - CONCRETE BARRIER TEMPORARY PRECAST
 - CRASH CUSHION TEMPORARY
 - FLAGS 16" X 16" MIN ORANGE

- TYPE III BARRICADE/WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- PORTABLE CHANGEABLE MESSAGE BOARD
- FLEXIBLE TUBULAR MARKER
- SAWCUT ASPHALT

PAVEMENT MARKING LEGEND

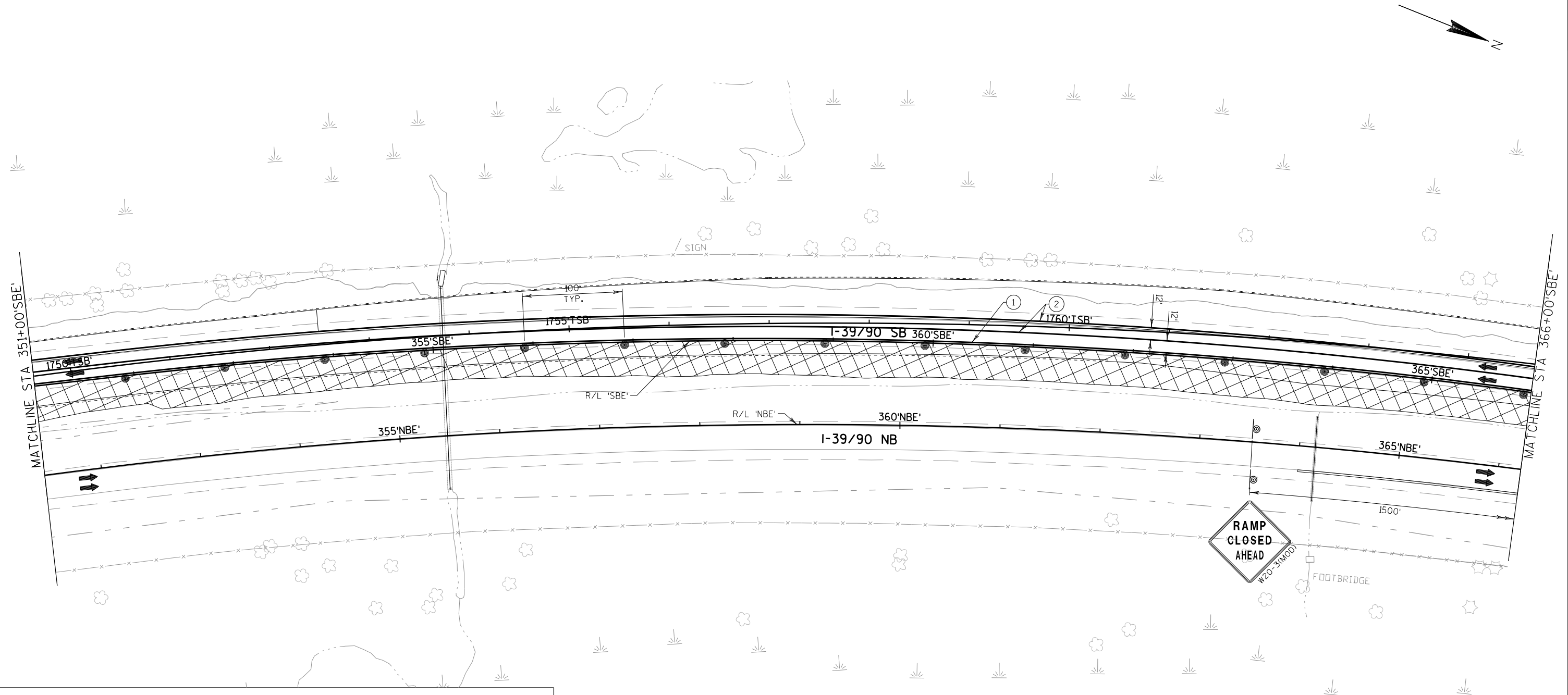
- ① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE)
- ② TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE EDGE LINE)
- ③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE)
- ④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP)
- ⑤ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP)
- ⑥ SEE PERMANENT MARKING PLAN



LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHION TEMPORARY
	FLAGS 16" X 16" MIN ORANGE
	TYPE III BARRICADE/WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	PORTABLE CHANGEABLE MESSAGE BOARD
	FLEXIBLE TUBULAR MARKER
	SAWCUT ASPHALT

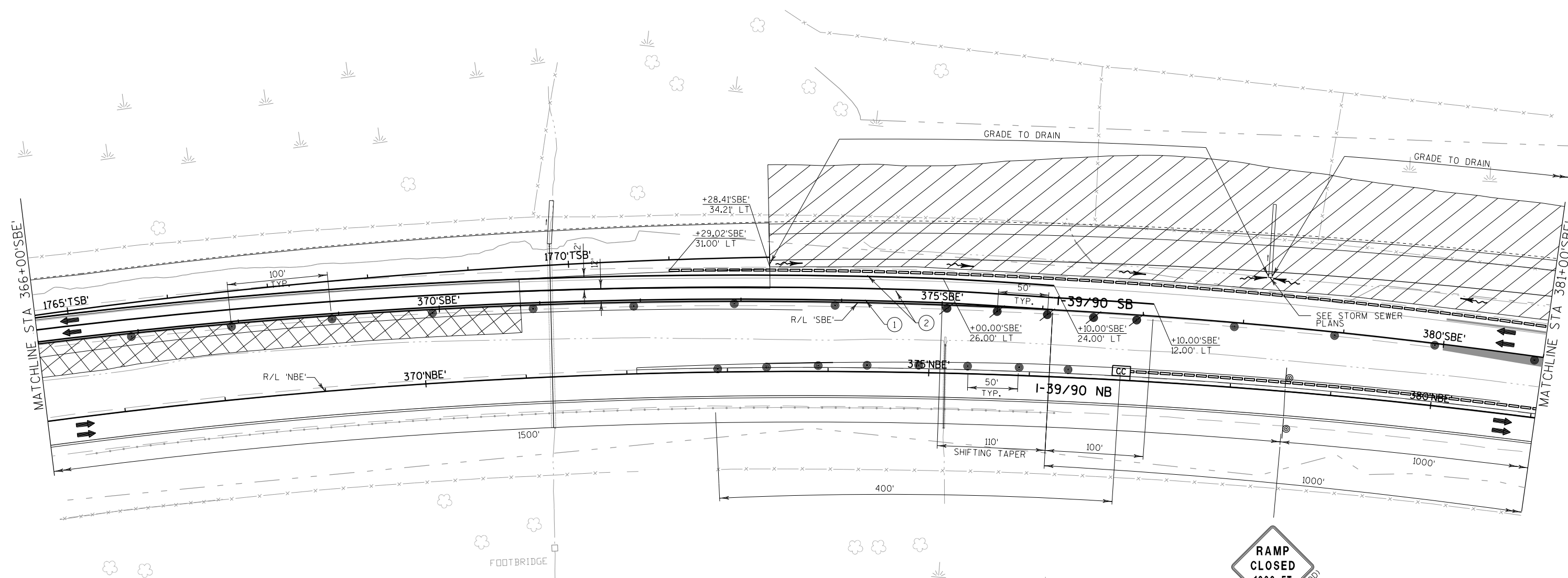
PAVEMENT MARKING LEGEND

- | | |
|--|---|
| ① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE) | ④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP) |
| ② TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE EDGE LINE) | ⑤ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP) |
| ③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE) | ⑥ SEE PERMANENT MARKING PLAN |



LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHION TEMPORARY
	FLAGS 16" X 16" MIN ORANGE
	TYPE III BARRICADE/WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	PORTABLE CHANGEABLE MESSAGE BOARD
	FLEXIBLE TUBULAR MARKER
	SAWCUT ASPHALT

PAVEMENT MARKING LEGEND	
① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE)	④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP)
② TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE EDGE LINE)	⑤ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP)
③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE)	⑥ SEE PERMANENT MARKING PLAN

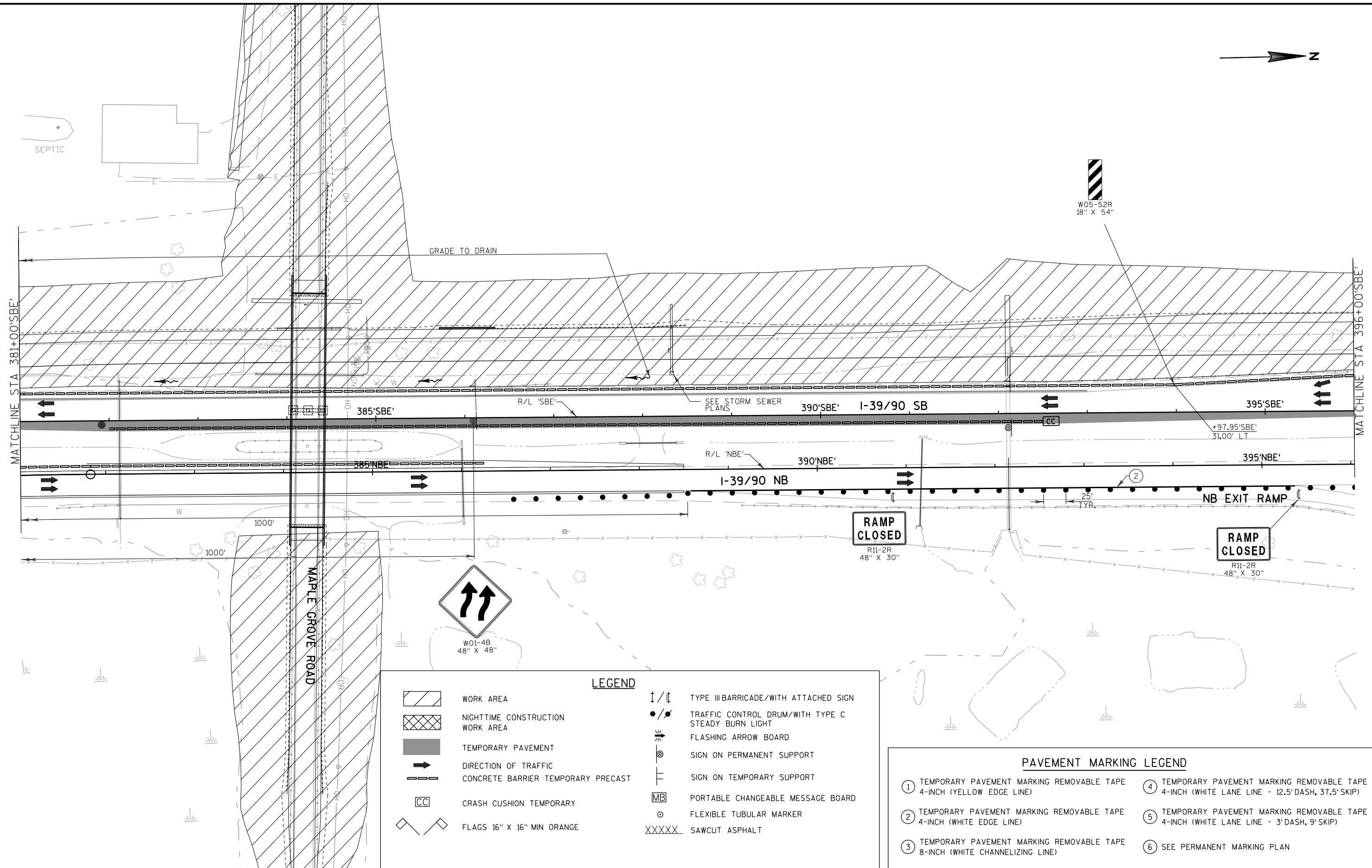


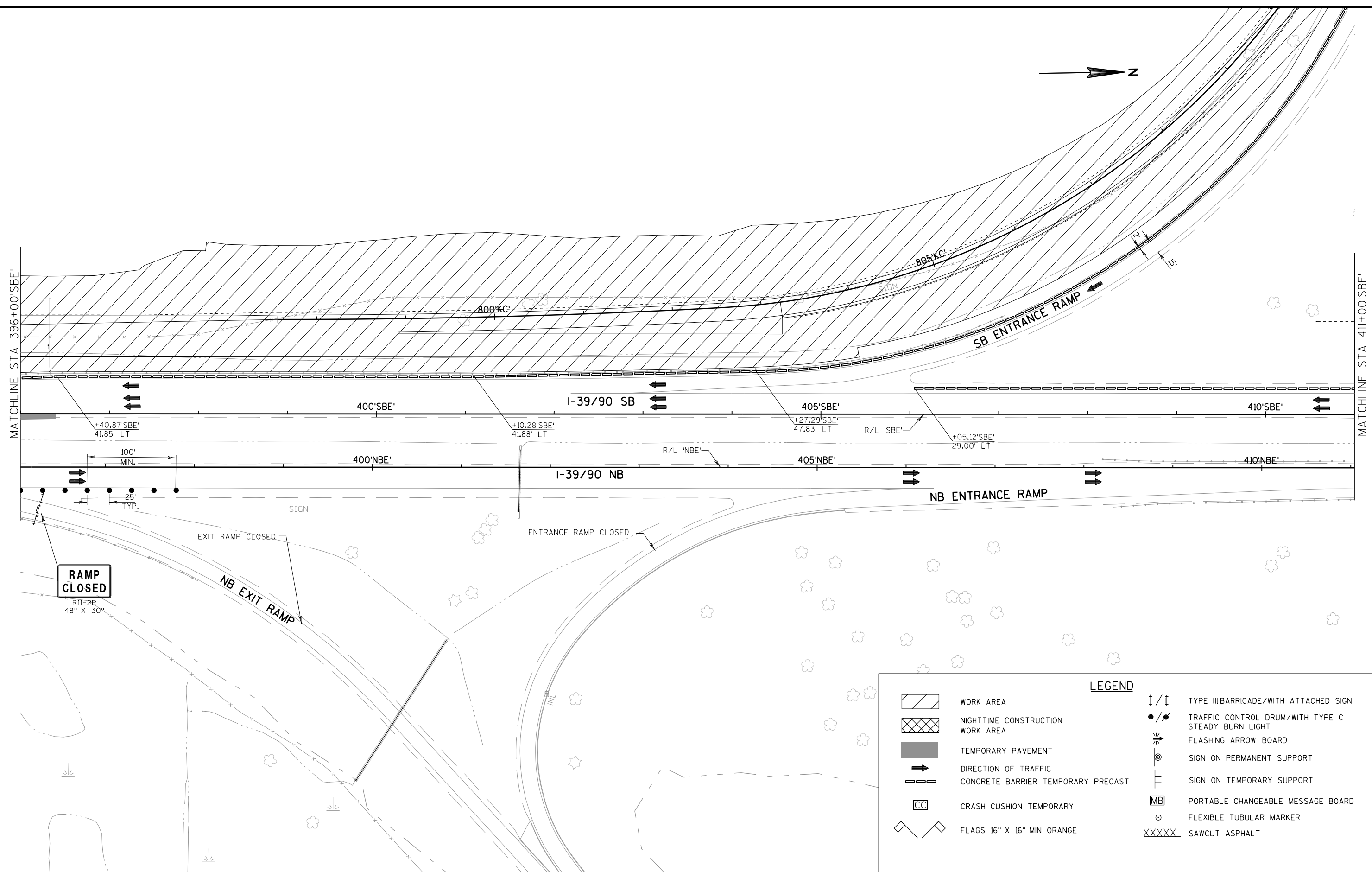
LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHION TEMPORARY
	FLAGS 16" X 16" MIN ORANGE

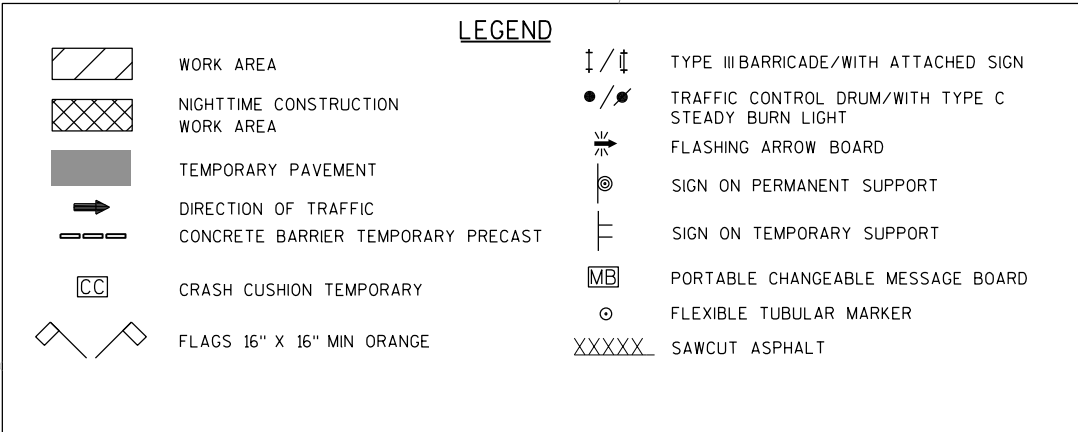
	TYPE III BARRICADE/WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	PORTABLE CHANGEABLE MESSAGE BOARD
	FLEXIBLE TUBULAR MARKER
	SAWCUT ASPHALT

PAVEMENT MARKING LEGEND

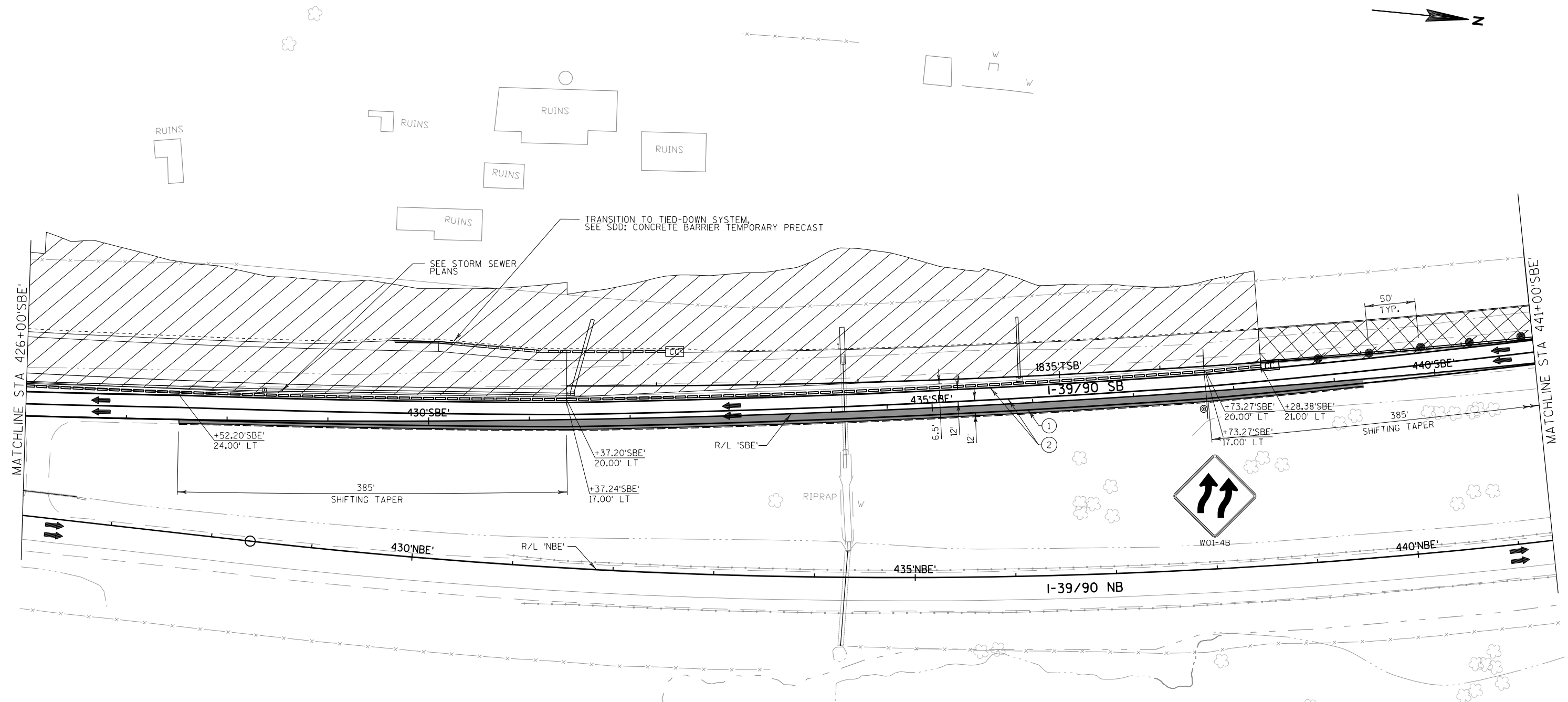
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| ① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE) | ④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP) |
| ② TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE EDGE LINE) | ⑤ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP) |
| ③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE) | ⑥ SEE PERMANENT MARKING PLAN |







PAVEMENT MARKING LEGEND	
① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE)	④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP)
② TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE EDGE LINE)	⑤ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP)
③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE)	⑥ SEE PERMANENT MARKING PLAN

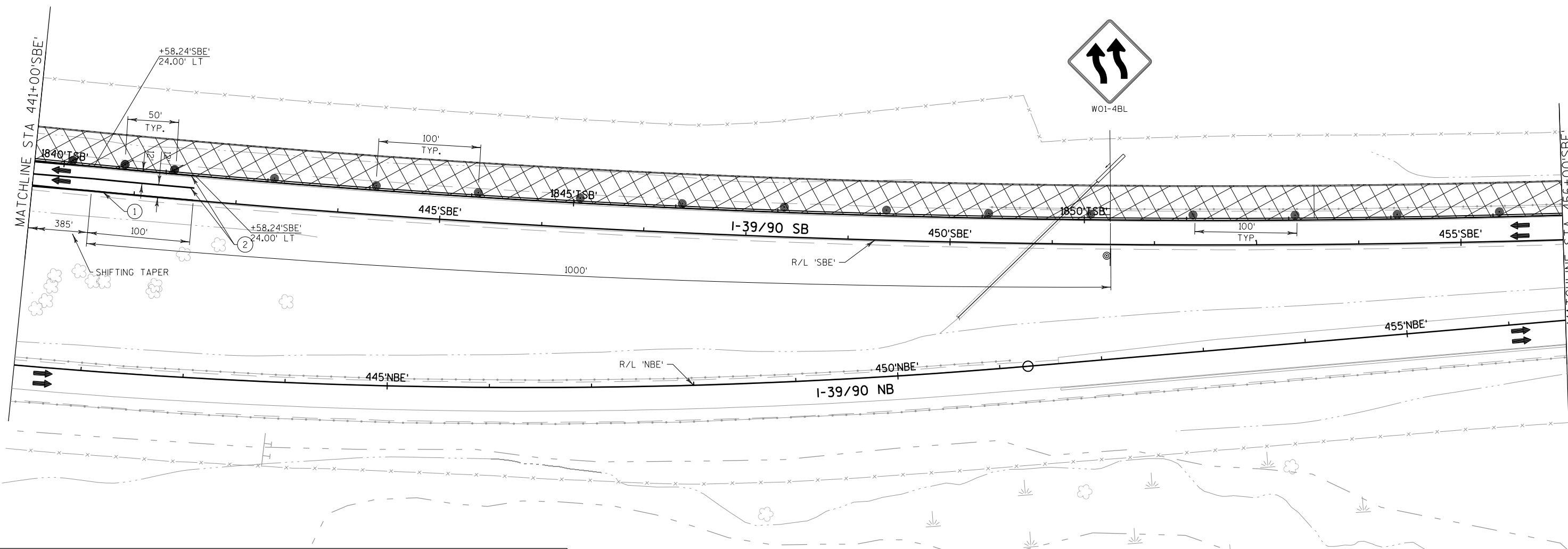


LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHION TEMPORARY
	FLAGS 16" X 16" MIN ORANGE

	TYPE III BARRICADE/WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	PORTABLE CHANGEABLE MESSAGE BOARD
	FLEXIBLE TUBULAR MARKER
	SAWCUT ASPHALT

PAVEMENT MARKING LEGEND

- | | |
|--|---|
| ① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE) | ④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP) |
| ② TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE EDGE LINE) | ⑤ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP) |
| ③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE) | ⑥ SEE PERMANENT MARKING PLAN |

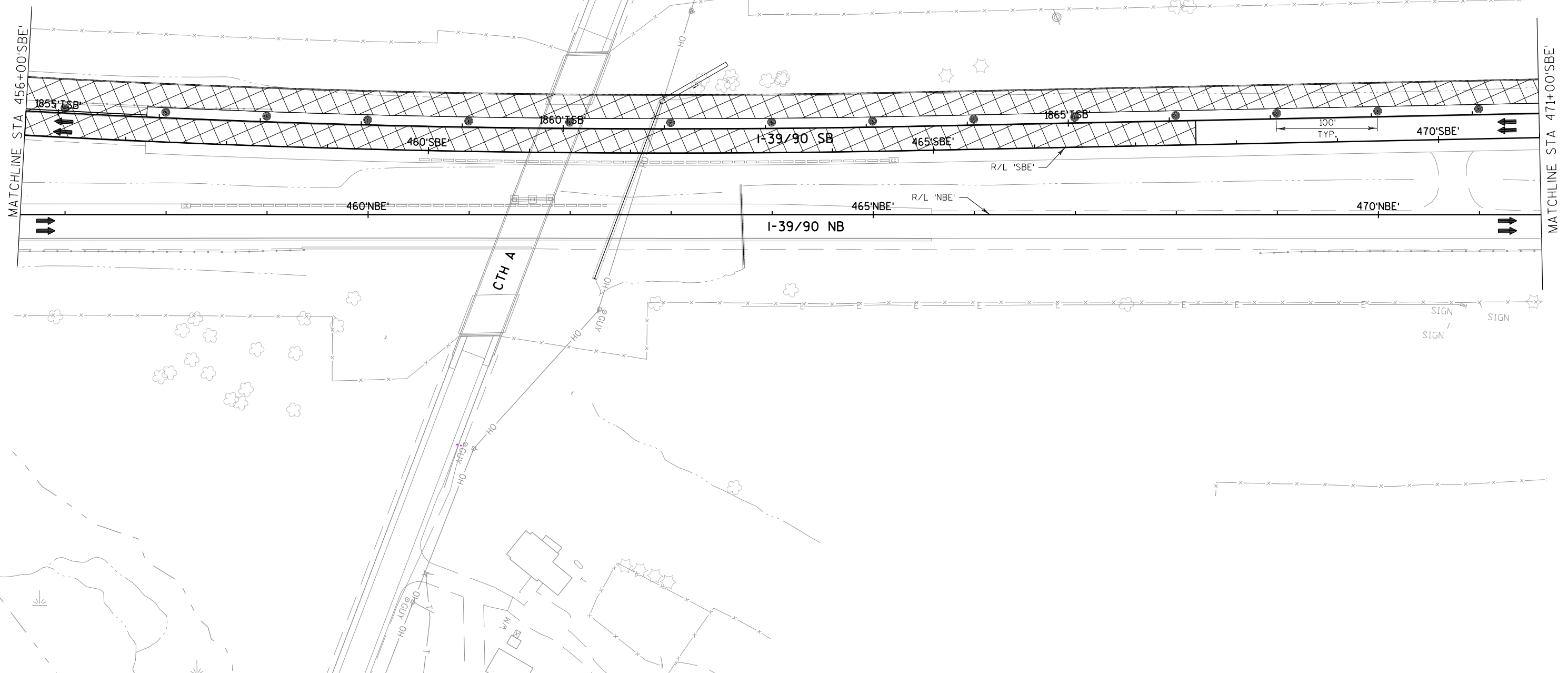


LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHION TEMPORARY
	FLAGS 16" X 16" MIN ORANGE
	TYPE III BARRICADE/WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	PORTABLE CHANGEABLE MESSAGE BOARD
	FLEXIBLE TUBULAR MARKER
	SAWCUT ASPHALT

PAVEMENT MARKING LEGEND	
①	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE)
②	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE EDGE LINE)
③	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE)
④	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP)
⑤	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP)
⑥	SEE PERMANENT MARKING PLAN

LEGEND

	WORK AREA		TYPE III BARRICADE/WITH ATTACHED SIGN
	NIGHTTIME CONSTRUCTION WORK AREA		TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	TEMPORARY PAVEMENT		FLASHING ARROW BOARD
	DIRECTION OF TRAFFIC		SIGN ON PERMANENT SUPPORT
	CONCRETE BARRIER TEMPORARY PRECAST		SIGN ON TEMPORARY SUPPORT
	CRASH CUSHION TEMPORARY		PORTABLE CHANGEABLE MESSAGE BOARD
	FLAGS 16" X 16" MIN ORANGE		FLEXIBLE TUBULAR MARKER
			SAWCUT ASPHALT



PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

TRAFFIC CONTROL STAGE 2C

SHEET

273

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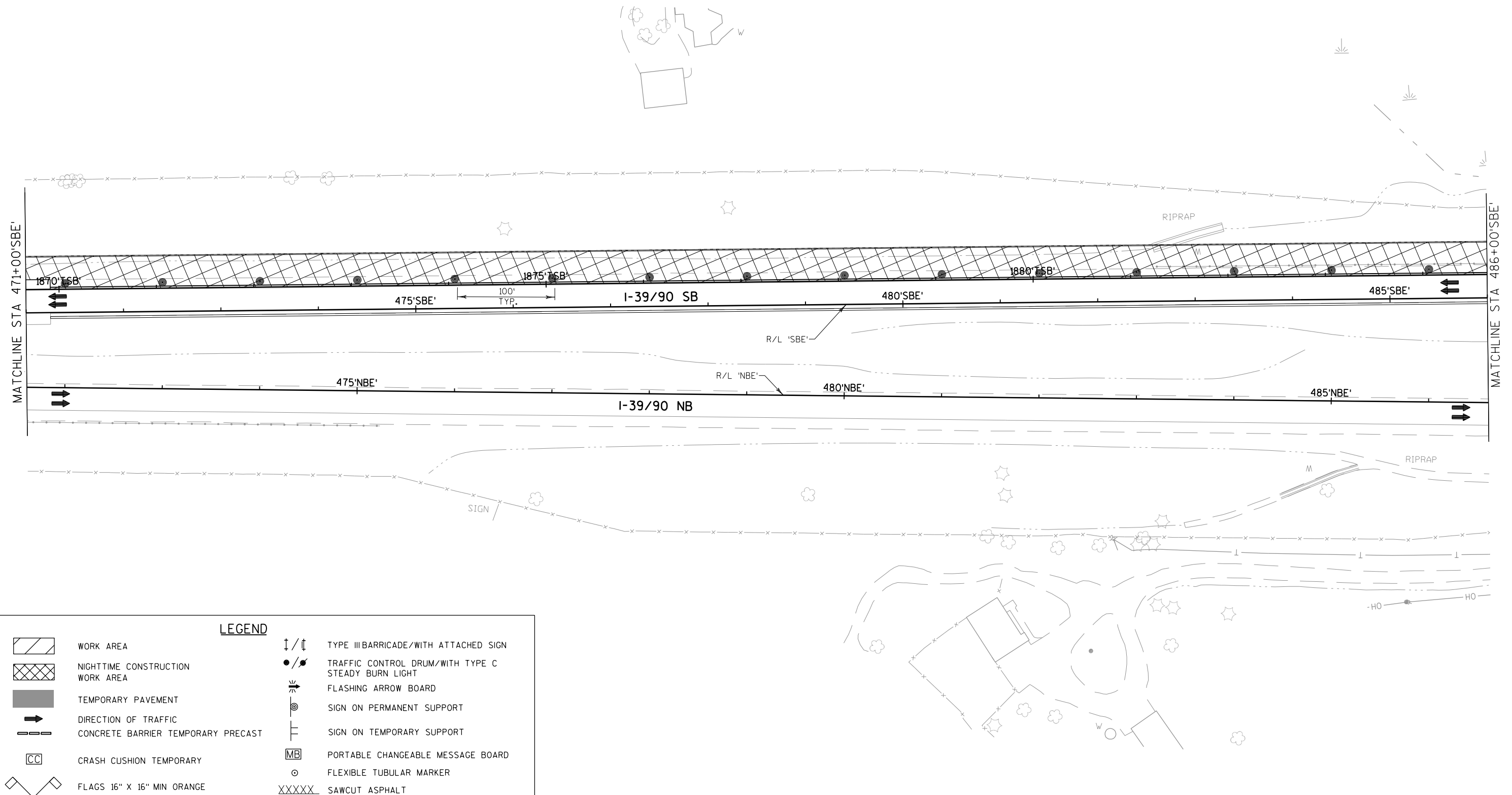
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PLOT BY : jpo

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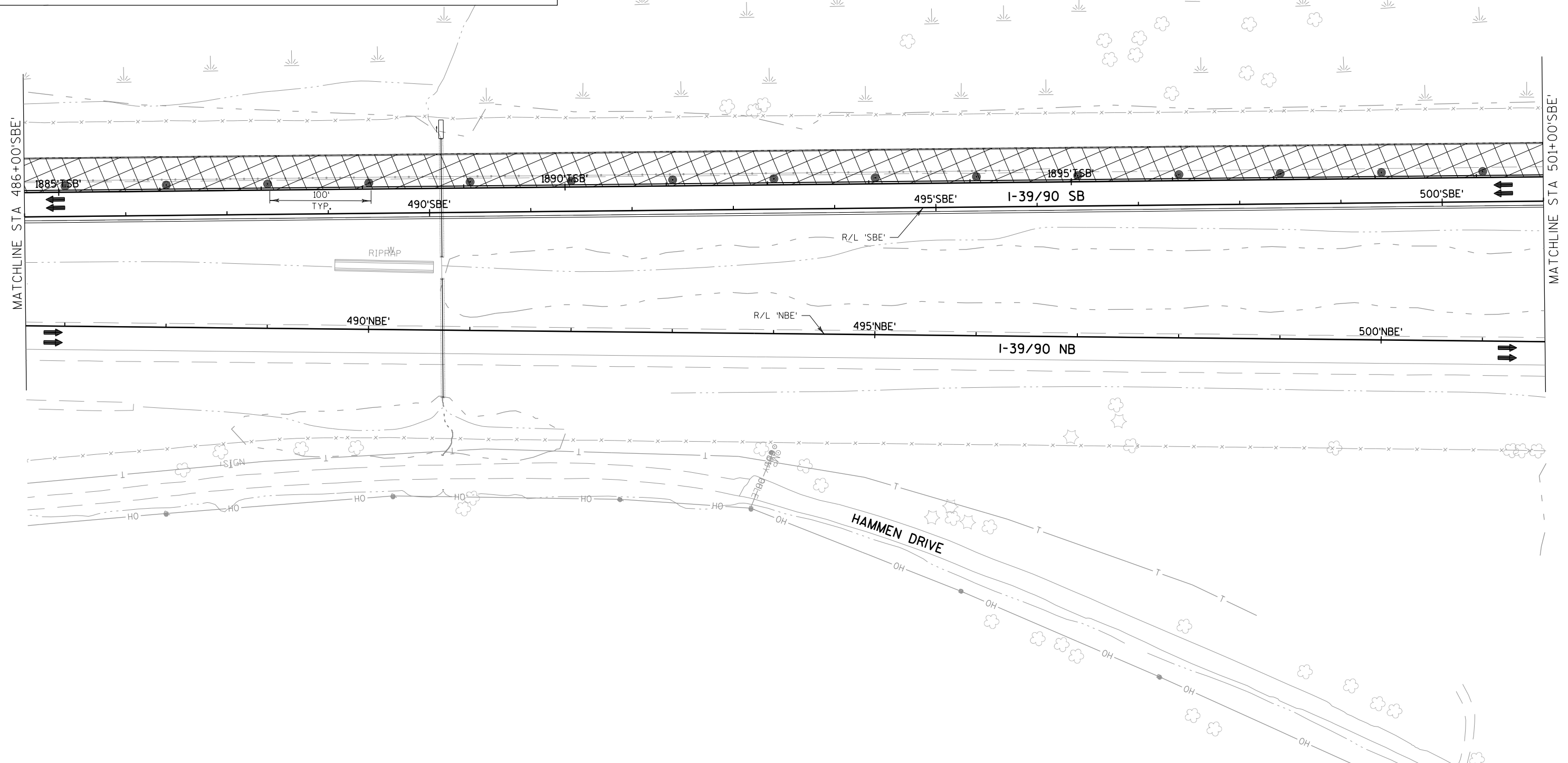
PLOT SCALE : 1:100

WISDOT/CADDs SHEET 42



LEGEND

	WORK AREA		TYPE III BARRICADE/WITH ATTACHED SIGN
	NIGHTTIME CONSTRUCTION WORK AREA		TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	TEMPORARY PAVEMENT		FLASHING ARROW BOARD
	DIRECTION OF TRAFFIC		SIGN ON PERMANENT SUPPORT
	CONCRETE BARRIER TEMPORARY PRECAST		SIGN ON TEMPORARY SUPPORT
	CRASH CUSHION TEMPORARY		PORTABLE CHANGEABLE MESSAGE BOARD
	FLAGS 16" X 16" MIN ORANGE		FLEXIBLE TUBULAR MARKER
			SAWCUT ASPHALT



PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

TRAFFIC CONTROL STAGE 2C

SHEET

275

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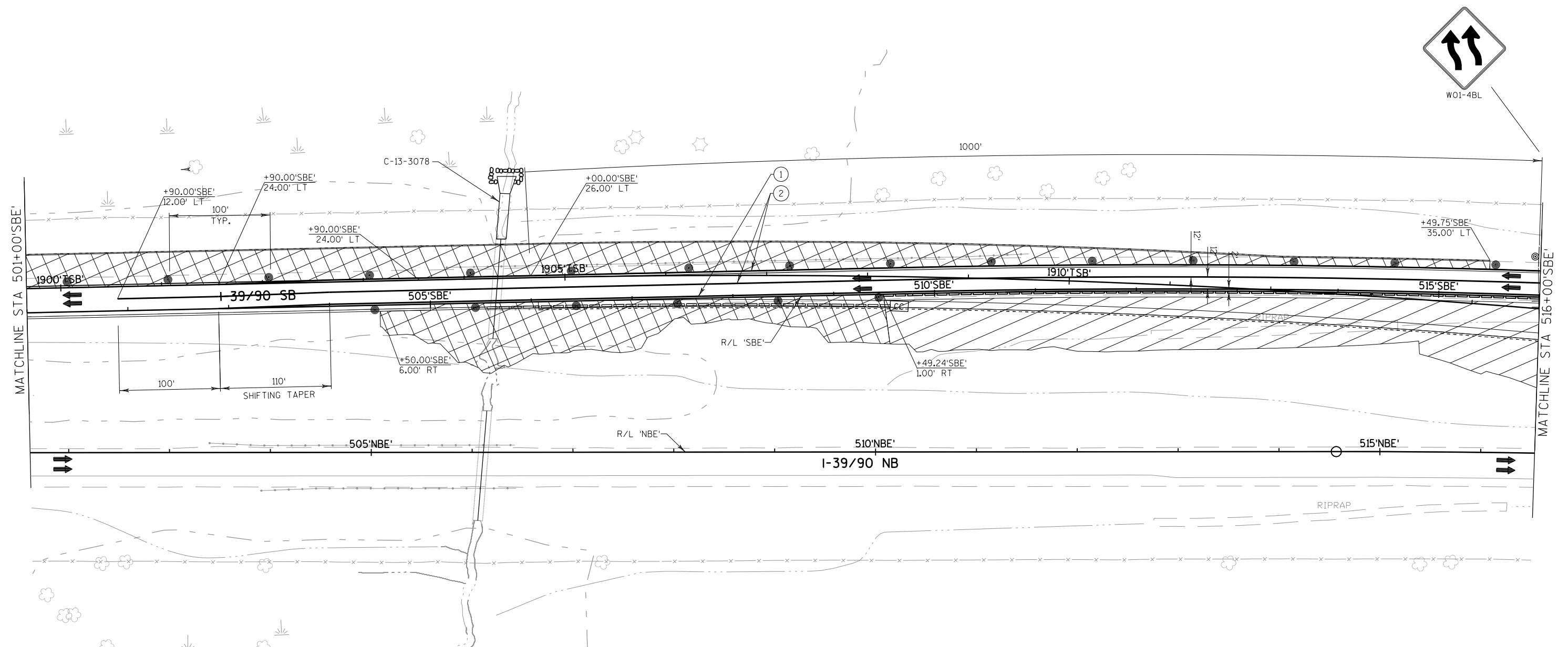
PLOT DATE : 7/28/2015

PLOT BY : jpo

PLOT NAME : \$FILE\$

PLOT SCALE : 1:100

WISDOT/CADDs SHEET 42



LEGEND

	WORK AREA		TYPE III BARRICADE/WITH ATTACHED SIGN
	NIGHTTIME CONSTRUCTION WORK AREA		TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	TEMPORARY PAVEMENT		FLASHING ARROW BOARD
	DIRECTION OF TRAFFIC		SIGN ON PERMANENT SUPPORT
	CONCRETE BARRIER TEMPORARY PRECAST		SIGN ON TEMPORARY SUPPORT
	CRASH CUSHION TEMPORARY		PORTABLE CHANGEABLE MESSAGE BOARD
	FLAGS 16" X 16" MIN ORANGE		FLEXIBLE TUBULAR MARKER
			SAWCUT ASPHALT

PAVEMENT MARKING LEGEND

- | | |
|--|---|
| ① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE) | ④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP) |
| ② TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE EDGE LINE) | ⑤ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP) |
| ③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE) | ⑥ SEE PERMANENT MARKING PLAN |

PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

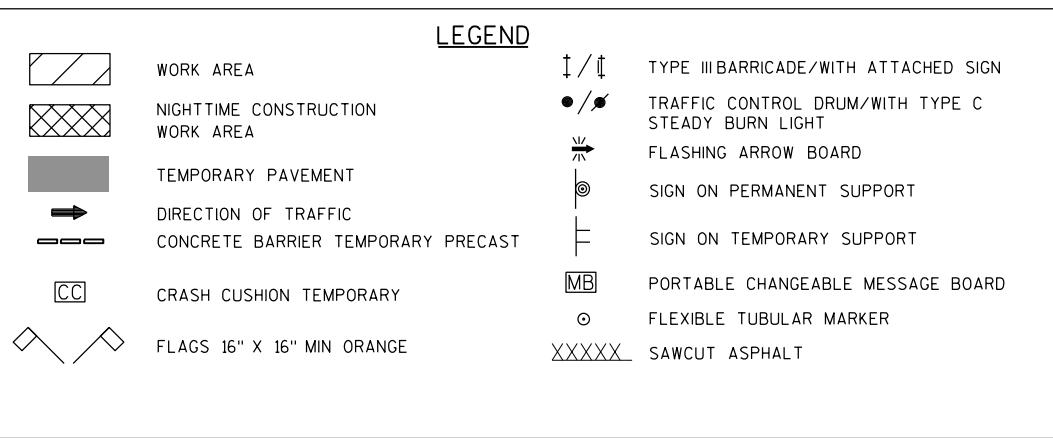
TRAFFIC CONTROL STAGE 2C

SHEET

276

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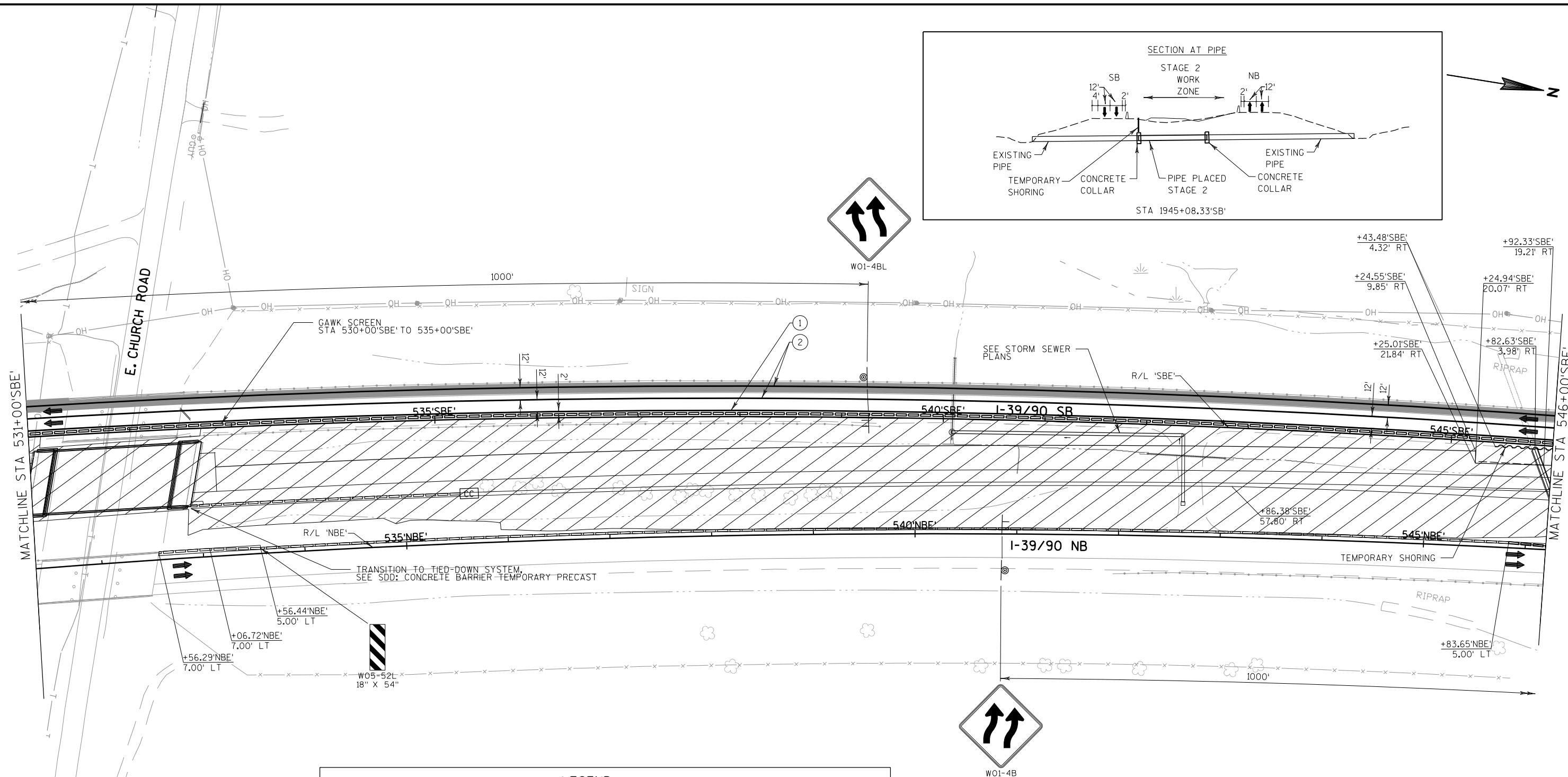
2 |



① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE) ② TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE EDGE LINE) ③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE)	④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP) ⑤ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP) ⑥ SEE PERMANENT MARKING PLAN
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SHEET 277

WISDOT/CADDS SHEET 42

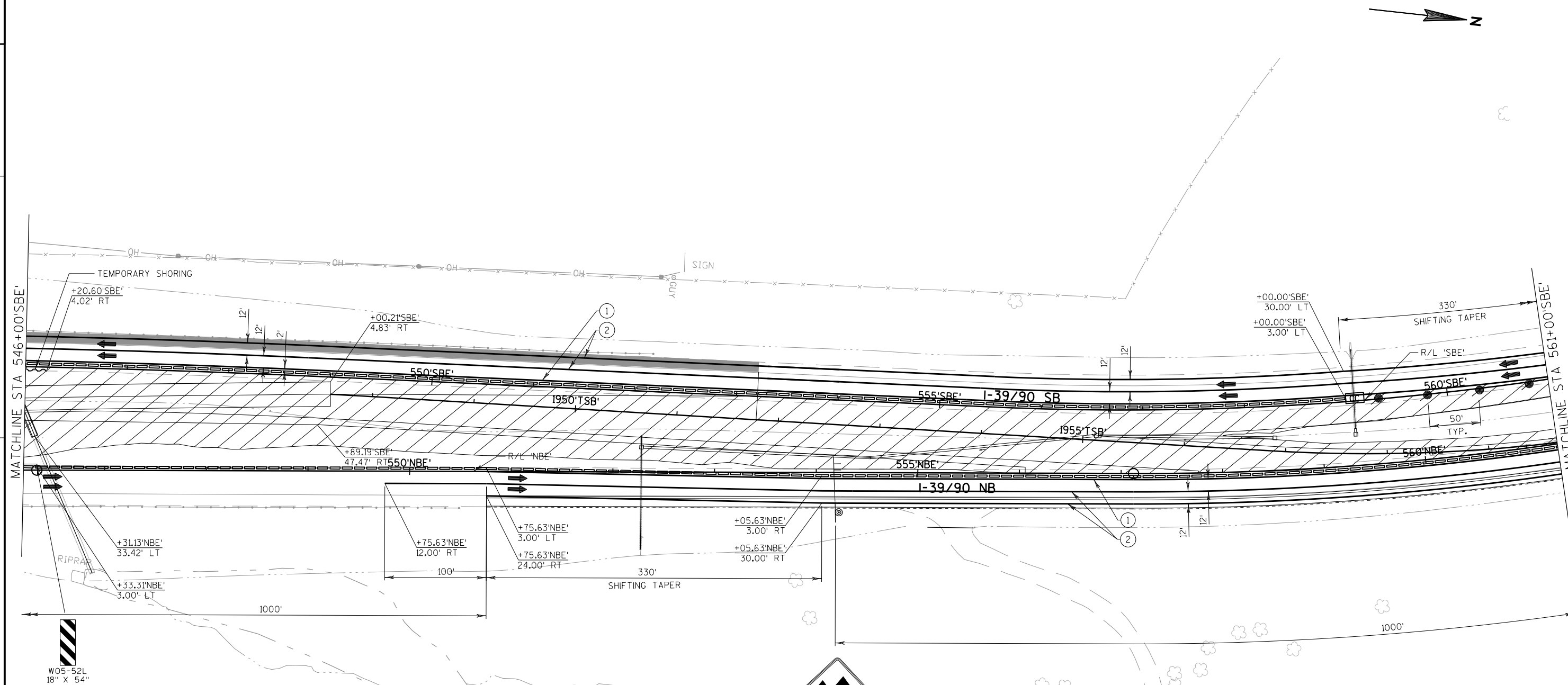


- LEGEND**
- | | |
|--|------------------------------------|
| | WORK AREA |
| | NIGHTTIME CONSTRUCTION WORK AREA |
| | TEMPORARY PAVEMENT |
| | DIRECTION OF TRAFFIC |
| | CONCRETE BARRIER TEMPORARY PRECAST |
| | CRASH CUSHION TEMPORARY |
| | FLAGS 16" X 16" MIN ORANGE |

- | | |
|--|--|
| | TYPE III BARRICADE/WITH ATTACHED SIGN |
| | TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT |
| | FLASHING ARROW BOARD |
| | SIGN ON PERMANENT SUPPORT |
| | SIGN ON TEMPORARY SUPPORT |
| | PORTABLE CHANGEABLE MESSAGE BOARD |
| | FLEXIBLE TUBULAR MARKER |
| | SAWCUT ASPHALT |

PAVEMENT MARKING LEGEND

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| ③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE) | ⑥ SEE PERMANENT MARKING PLAN |

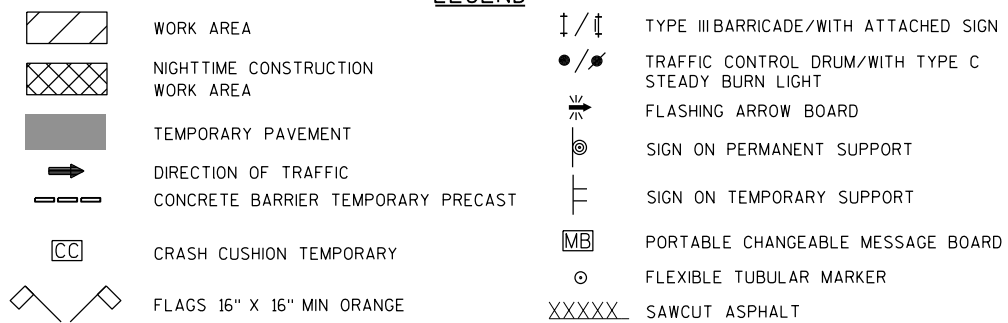


LEGEND

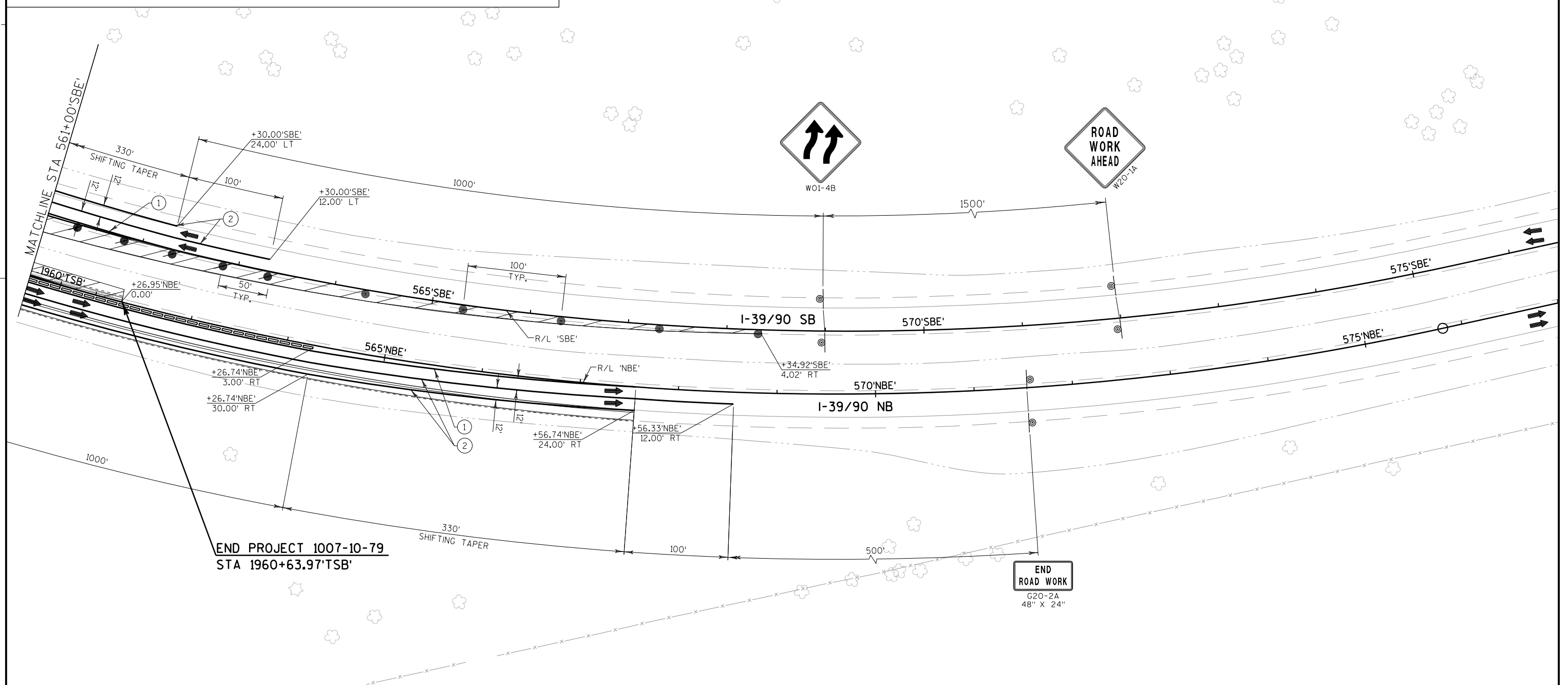
	WORK AREA		TYPE III BARRICADE/WITH ATTACHED SIGN
	NIGHTTIME CONSTRUCTION WORK AREA		TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	TEMPORARY PAVEMENT		FLASHING ARROW BOARD
	DIRECTION OF TRAFFIC		SIGN ON PERMANENT SUPPORT
	CONCRETE BARRIER TEMPORARY PRECAST		SIGN ON TEMPORARY SUPPORT
	CRASH CUSHION TEMPORARY		PORTABLE CHANGEABLE MESSAGE BOARD
	FLAGS 16" X 16" MIN ORANGE		FLEXIBLE TUBULAR MARKER
			SAWCUT ASPHALT

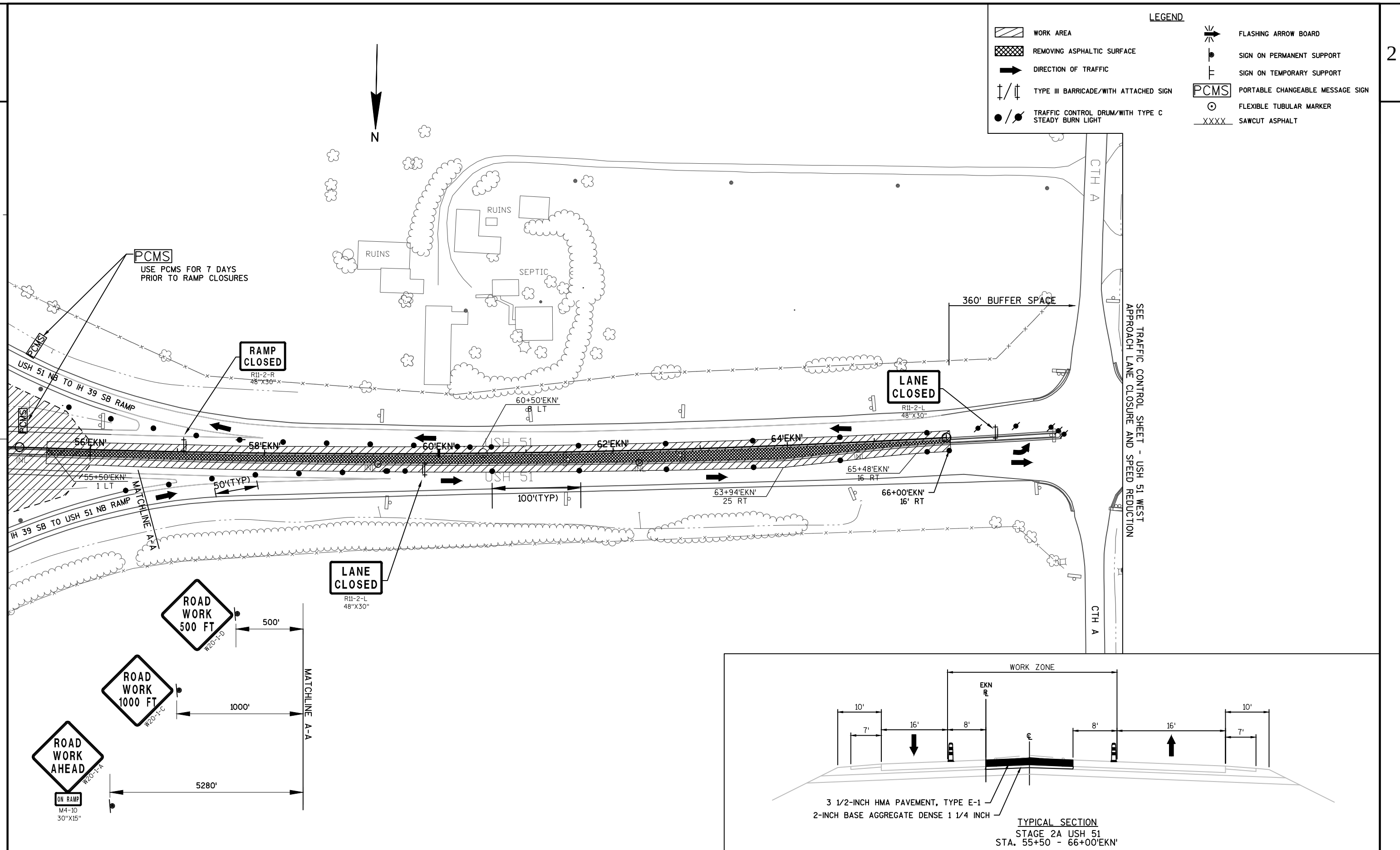
PAVEMENT MARKING LEGEND

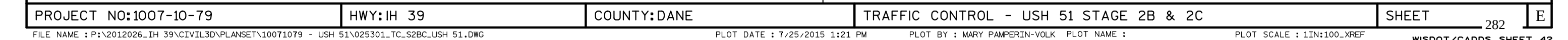
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| ③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE) | ⑥ SEE PERMANENT MARKING PLAN |

**PAVEMENT MARKING LEGEND**

- | | |
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| ① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE) | ④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP) |
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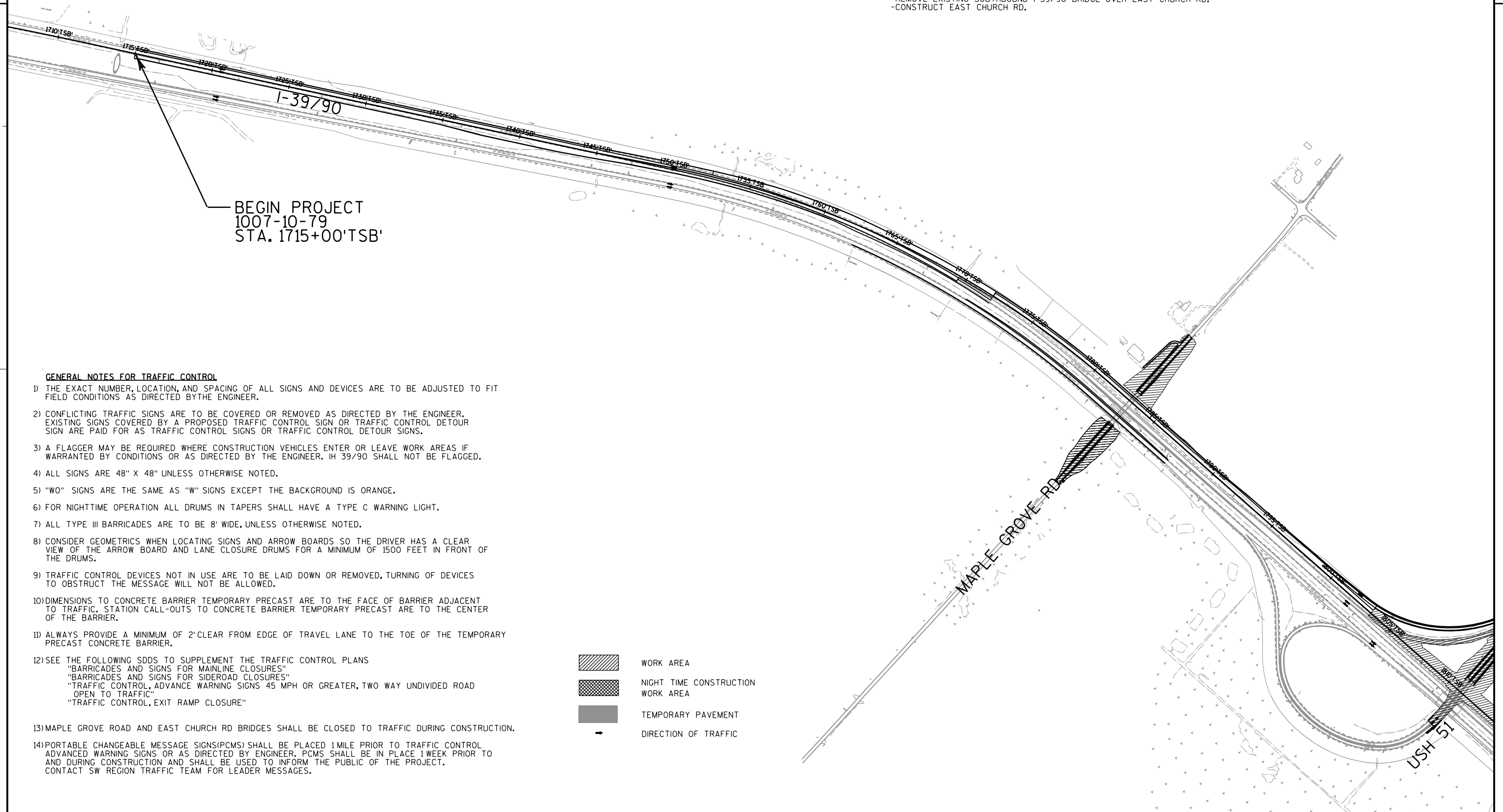


MAINTENANCE OF TRAFFIC

- IH 39/90 & RAMP
 -TRAFFIC SHALL BE MAINTAINED ON ALL EXISTING MAINLINE LANES.
 -USH 51 NORTHBOUND RAMP SHALL BE CLOSED AND DETOURED.
 -USH 51 SOUTHBOUND RAMP SHALL BE SWITCHED TO NEW PAVEMENT
 -I-39/90 SOUTHBOUND TRAFFIC AT EAST CHURCH RD SHALL BE SWITCHED OVER TO NEW PAVEMENT AND BRIDGE.

CONSTRUCTION TO BE COMPLETED

- CONSTRUCT THE OUTSIDE SHOULDER AND TWO OUTSIDE LANES OF SOUTHBOUND I-39/90 CONCRETE PAVEMENT BETWEEN USH 51 ENTRANCE AND EXIT RAMP
 -CONSTRUCT MEDIAN SHOULDER AND INSIDE LANE OF SOUTHBOUND I-39/90 CONCRETE PAVEMENT NORTH AND SOUTH OF EAST CHURCH RD
 -CONTINUE CONSTRUCTION IH 39 SB BRIDGE AT USH 51
 -CONTINUE CONSTRUCTION IH 39 SB BRIDGE AT MAPLE GROVE RD
 -REMOVE EXISTING SOUTHBOUND I-39/90 BRIDGE OVER EAST CHURCH RD.
 -CONSTRUCT EAST CHURCH RD.

**GENERAL NOTES FOR TRAFFIC CONTROL**

- 1) THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES ARE TO BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- 2) CONFLICTING TRAFFIC SIGNS ARE TO BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER. EXISTING SIGNS COVERED BY A PROPOSED TRAFFIC CONTROL SIGN OR TRAFFIC CONTROL DETOUR SIGN ARE PAID FOR AS TRAFFIC CONTROL SIGNS OR TRAFFIC CONTROL DETOUR SIGNS.
- 3) A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE WORK AREAS IF WARRANTED BY CONDITIONS OR AS DIRECTED BY THE ENGINEER. IH 39/90 SHALL NOT BE FLAGGED.
- 4) ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- 5) "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- 6) FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A TYPE C WARNING LIGHT.
- 7) ALL TYPE III BARRICADES ARE TO BE 8' WIDE, UNLESS OTHERWISE NOTED.
- 8) CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM OF 1500 FEET IN FRONT OF THE DRUMS.
- 9) TRAFFIC CONTROL DEVICES NOT IN USE ARE TO BE LAID DOWN OR REMOVED, TURNING OF DEVICES TO OBSTRUCT THE MESSAGE WILL NOT BE ALLOWED.
- 10) DIMENSIONS TO CONCRETE BARRIER TEMPORARY PRECAST ARE TO THE FACE OF BARRIER ADJACENT TO TRAFFIC. STATION CALL-OUTS TO CONCRETE BARRIER TEMPORARY PRECAST ARE TO THE CENTER OF THE BARRIER.
- 11) ALWAYS PROVIDE A MINIMUM OF 2' CLEAR FROM EDGE OF TRAVEL LANE TO THE TOE OF THE TEMPORARY PRECAST CONCRETE BARRIER.
- 12) SEE THE FOLLOWING SDDS TO SUPPLEMENT THE TRAFFIC CONTROL PLANS
 "BARRICADES AND SIGNS FOR MAINLINE CLOSURES"
 "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES"
 "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
 "TRAFFIC CONTROL, EXIT RAMP CLOSURE"
- 13) MAPLE GROVE ROAD AND EAST CHURCH RD BRIDGES SHALL BE CLOSED TO TRAFFIC DURING CONSTRUCTION.
- 14) PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE PLACED 1 MILE PRIOR TO TRAFFIC CONTROL ADVANCED WARNING SIGNS OR AS DIRECTED BY ENGINEER. PCMS SHALL BE IN PLACE 1 WEEK PRIOR TO AND DURING CONSTRUCTION AND SHALL BE USED TO INFORM THE PUBLIC OF THE PROJECT. CONTACT SW REGION TRAFFIC TEAM FOR LEADER MESSAGES.

- WORK AREA
 NIGHT TIME CONSTRUCTION WORK AREA
 TEMPORARY PAVEMENT
 DIRECTION OF TRAFFIC



PROJECT NO:1007-10-79

HWY:IH 39

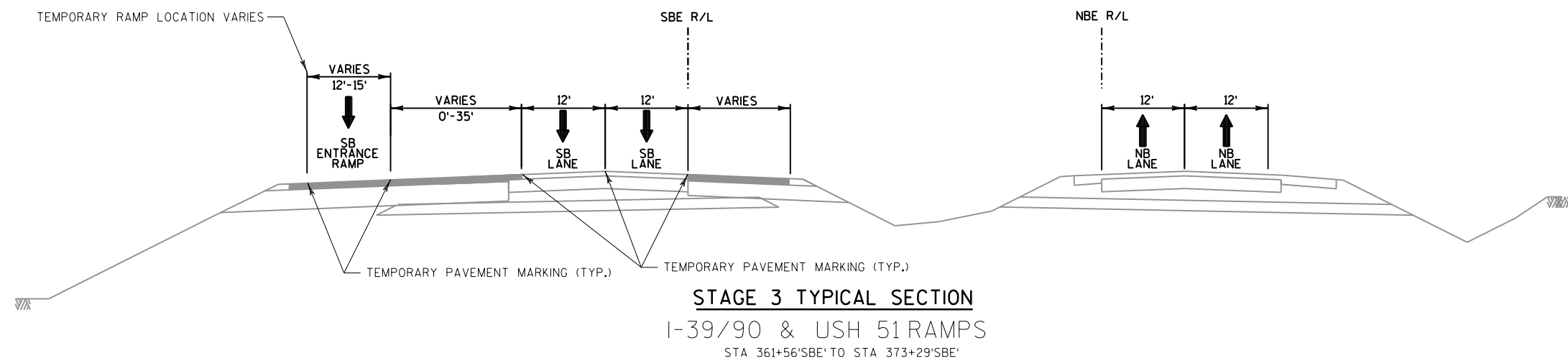
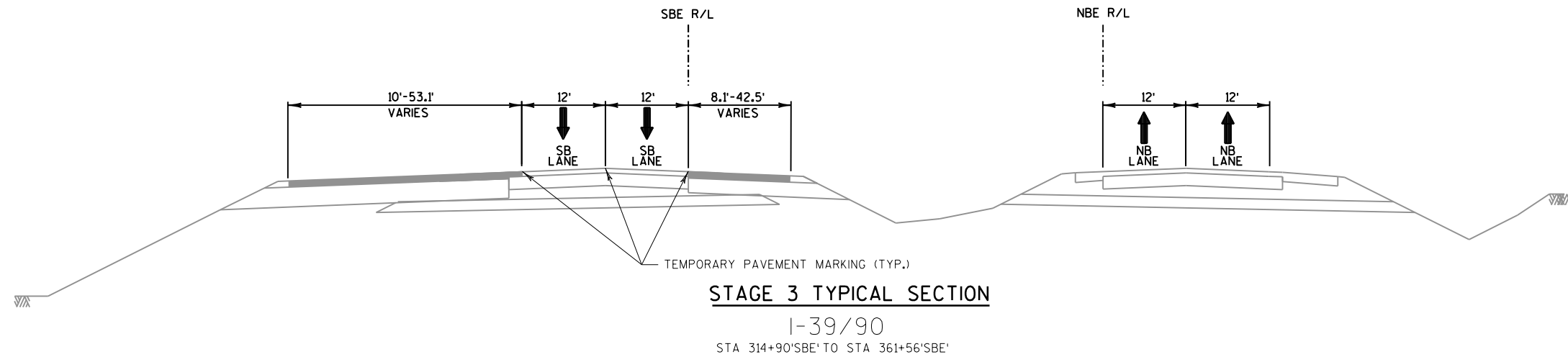
COUNTY:DANE

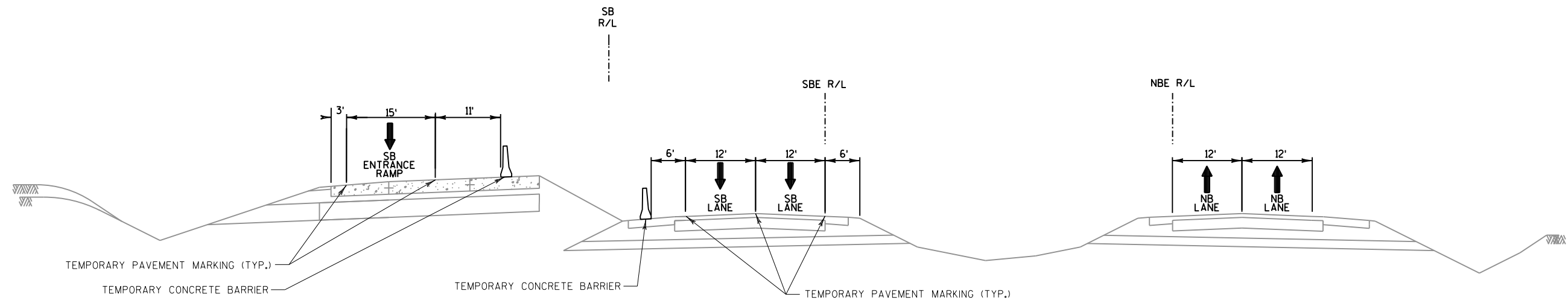
TRAFFIC CONTROL OVERVIEW - IH 39 STAGE 3

SHEET

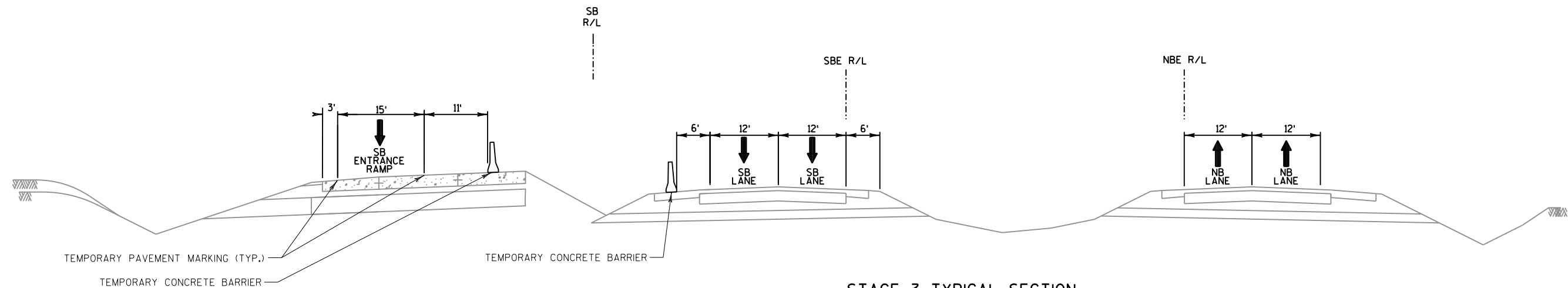
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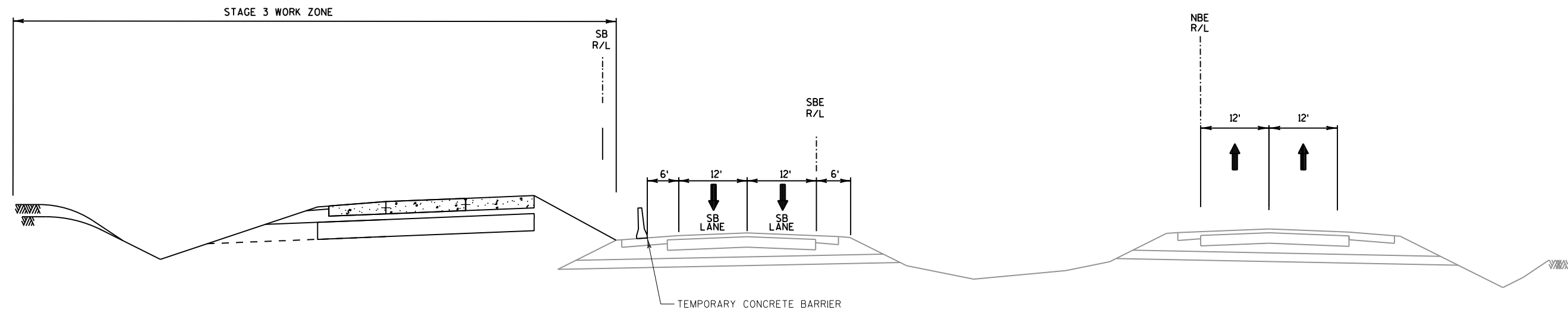




STAGE 3 TYPICAL SECTION
 I-39/90 & USH 51 RAMP
 STA 373+29'SBE' TO STA 382+14'SBE'



STAGE 3 TYPICAL SECTION
 I-39/90 & USH 51 RAMP
 STA 373+29'SBE' TO STA 404+57'SBE'

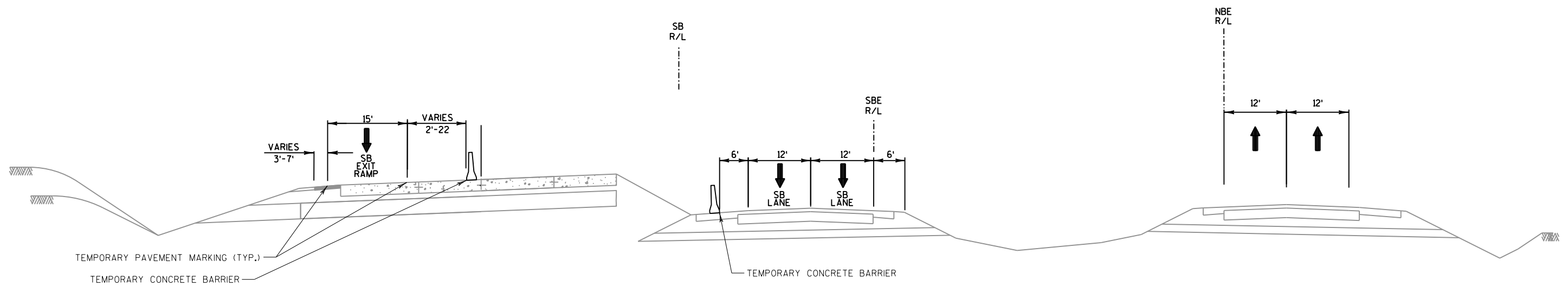


STAGE 3 TYPICAL SECTION

I-39/90

DAYTIME OPERATION

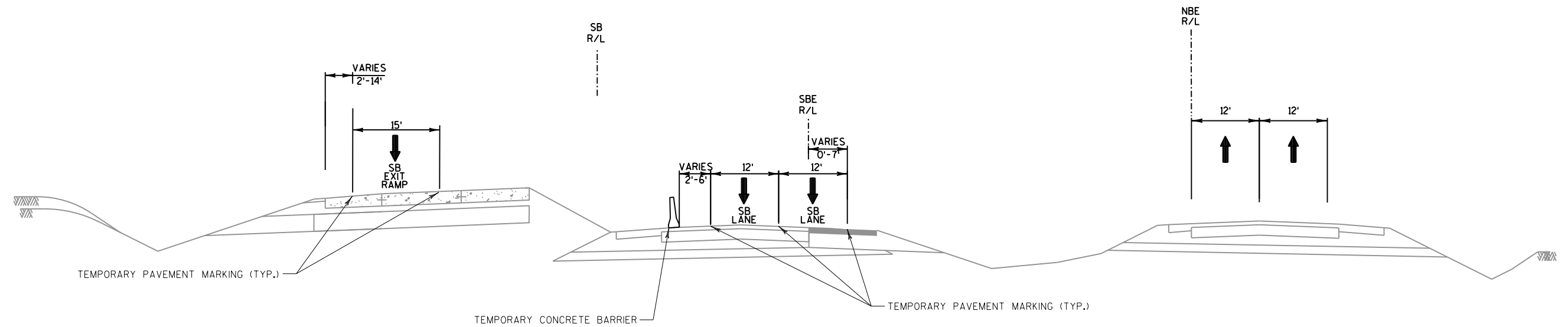
STA 404+57'SBE' TO STA 421+01'SBE'



STAGE 3 TYPICAL SECTION

I-39/90

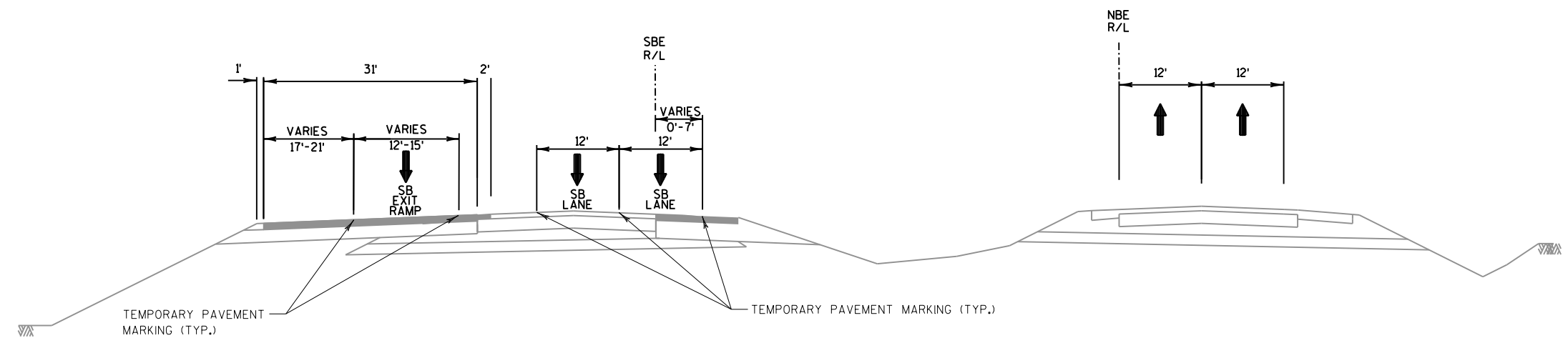
STA 421+01'SBE' TO STA 426+52'SBE'



STAGE 3 TYPICAL SECTION

I-39/90

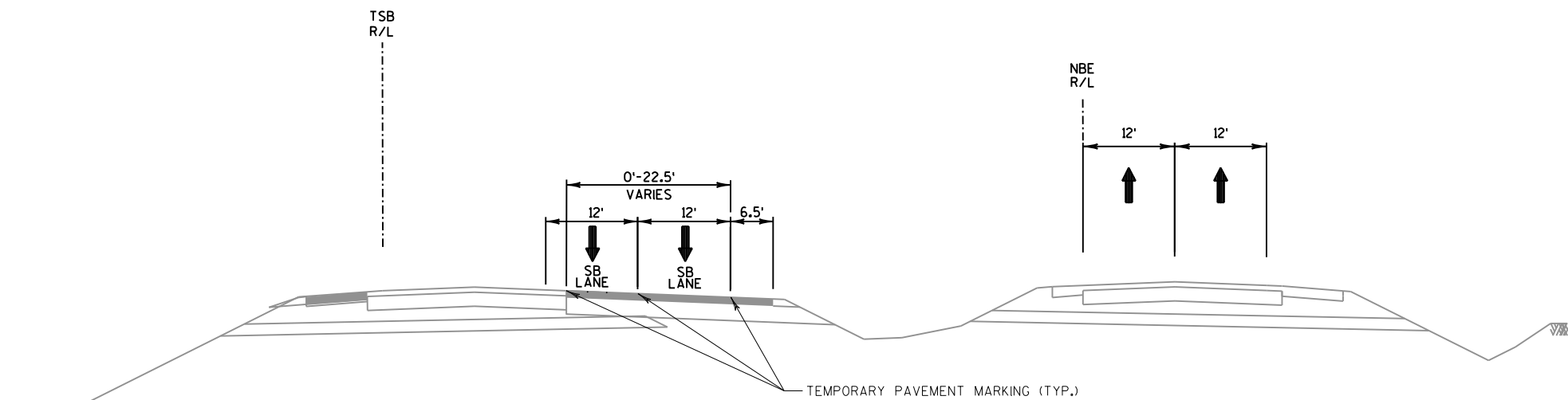
STA 426+52'SBE' TO STA 431+37'SBE'



STAGE 3 TYPICAL SECTION

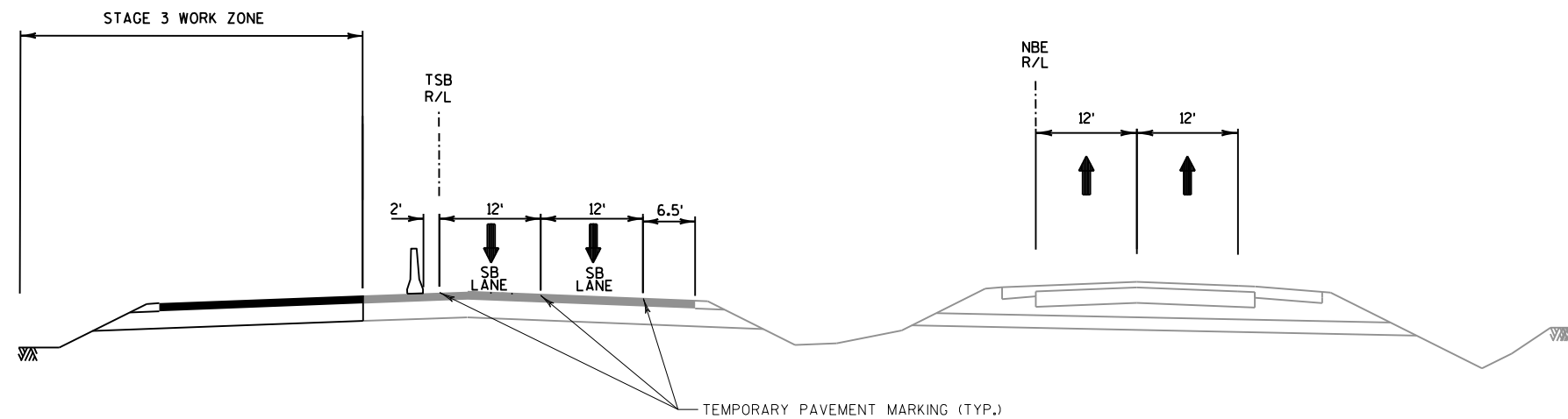
I-39/90

STA 431+37'SBE' TO STA 450+60'SBE'

**STAGE 3 TYPICAL SECTION**

I-39/90

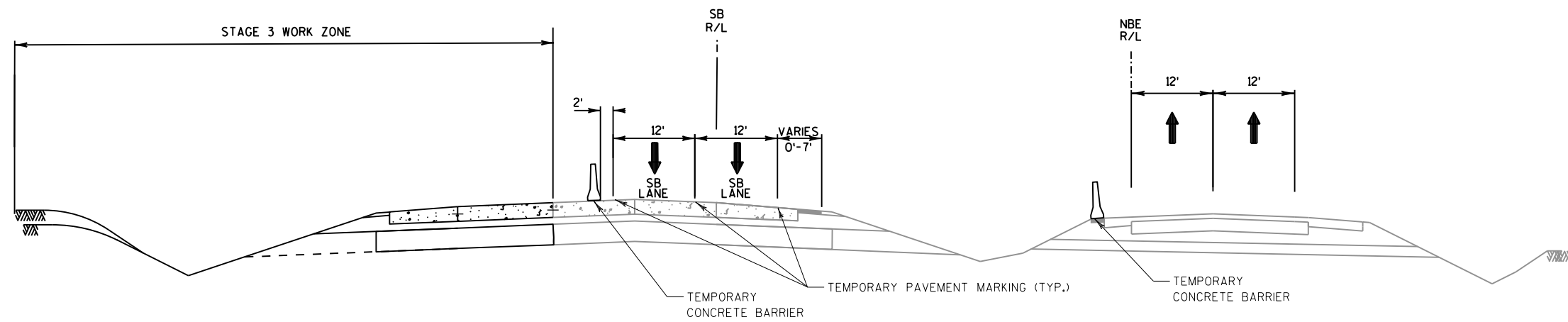
STA 1904+73'TSB' TO STA 1912+00'TSB'

**STAGE 3 TYPICAL SECTION**

I-39/90

DAYTIME OPERATION

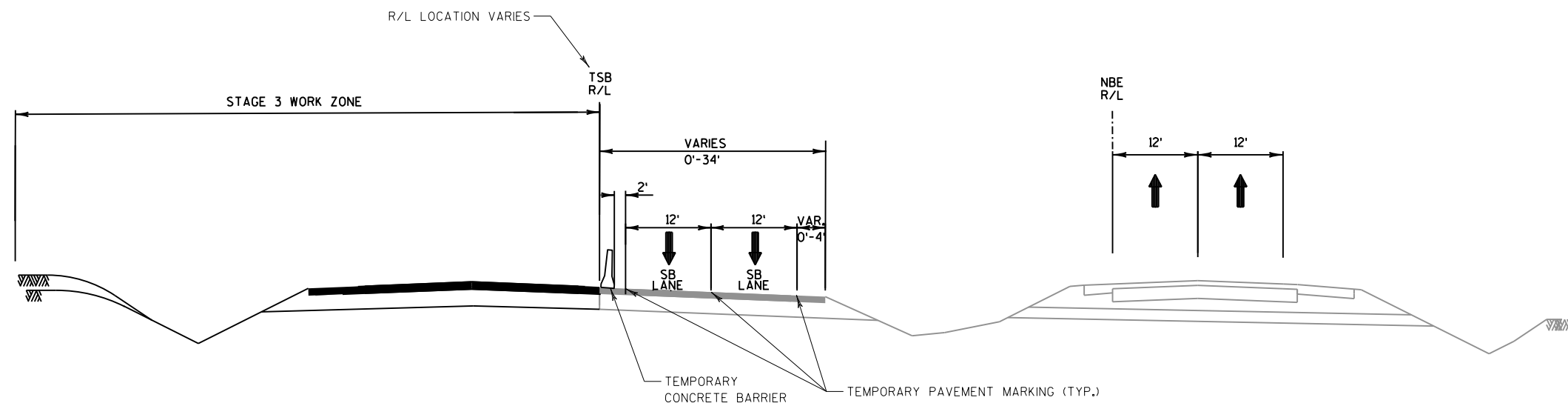
STA 1914+80'TSB' TO STA 1926+00'TSB'



STAGE 3 TYPICAL SECTION

I-39/90

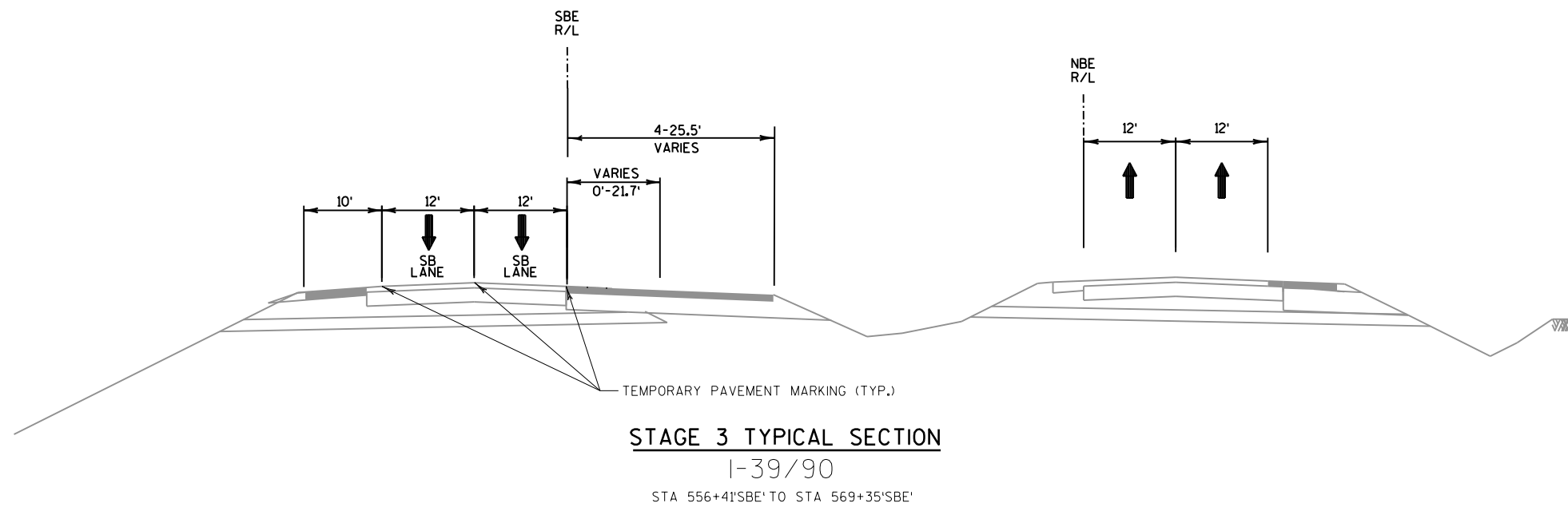
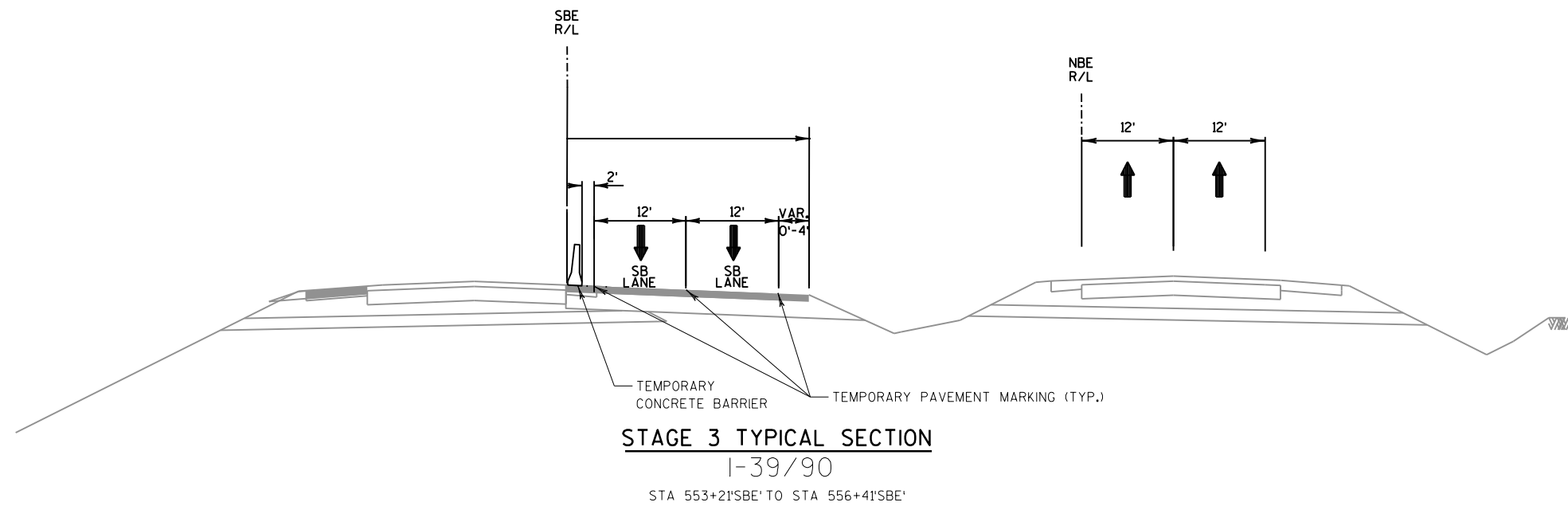
DAYTIME OPERATION
STA 1926+44'SB' TO STA 1948+00'SB'

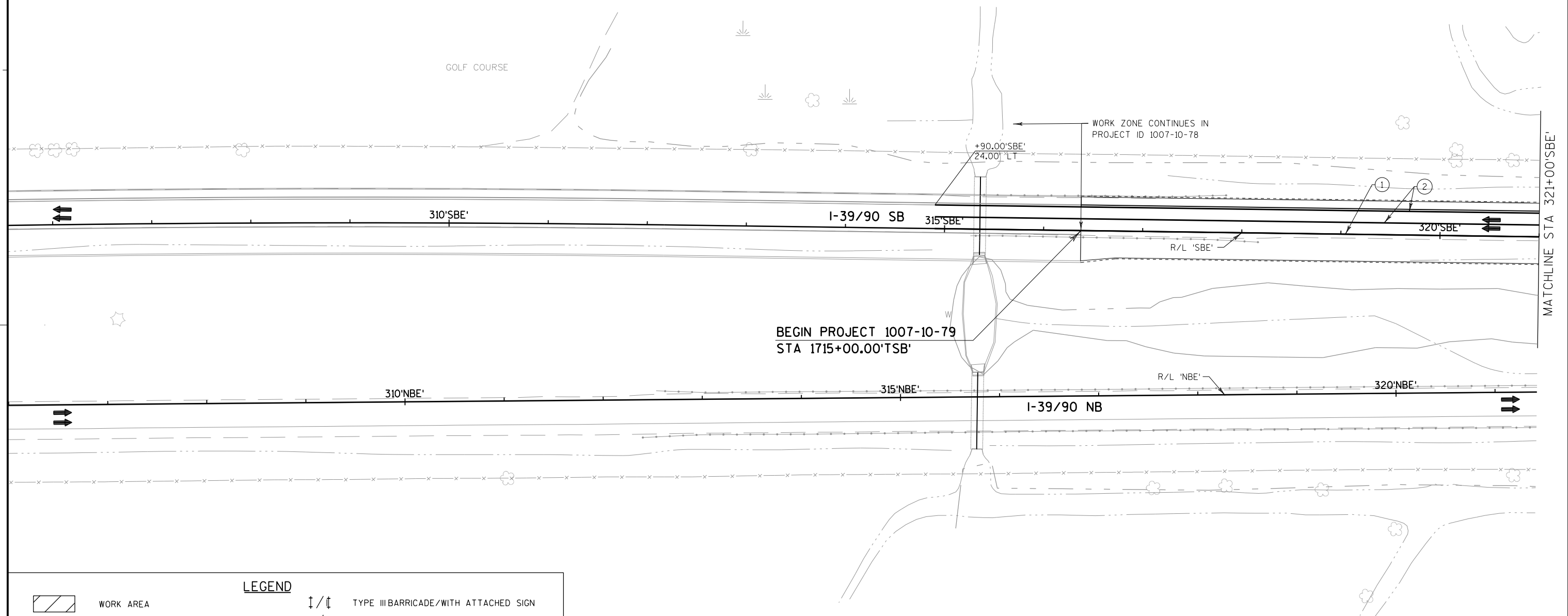


STAGE 3 TYPICAL SECTION

I-39/90

DAYTIME OPERATION
STA 1947+58'TSB' TO STA 1951+78'TSB'



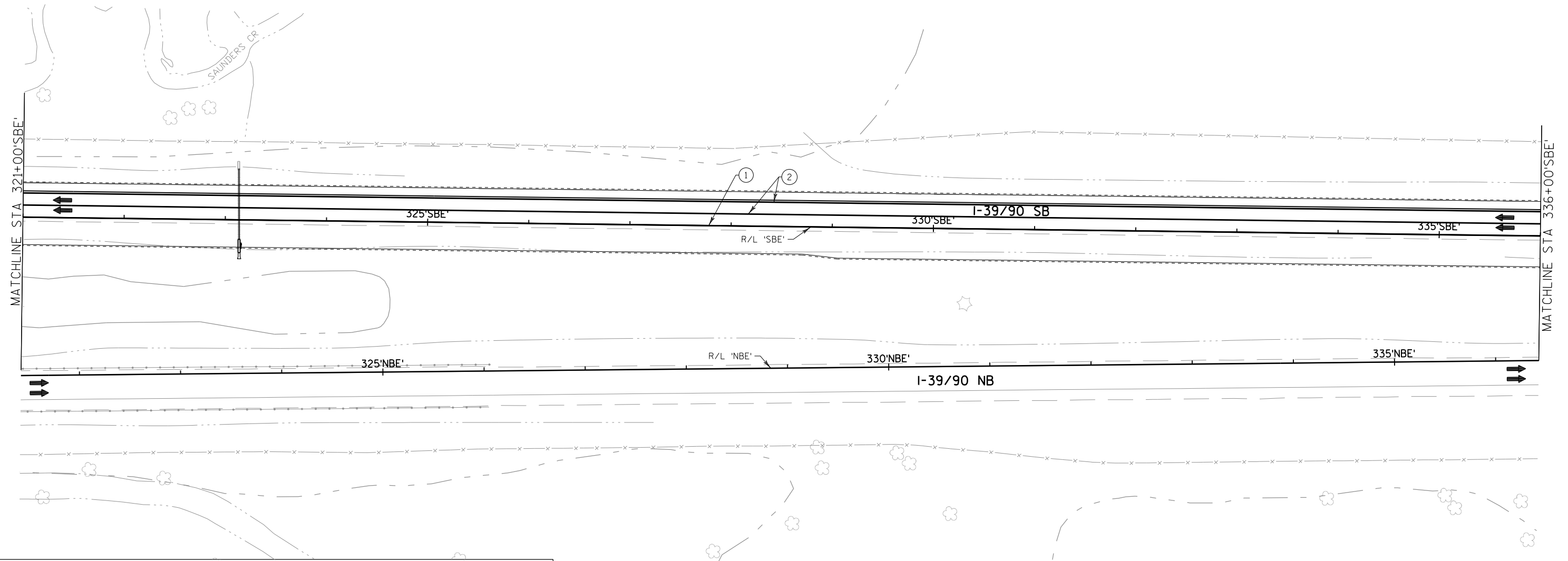


LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHION TEMPORARY
	FLAGS 16" X 16" MIN ORANGE

	TYPE III BARRICADE/WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	PORTABLE CHANGEABLE MESSAGE BOARD
	FLEXIBLE TUBULAR MARKER
	SAWCUT ASPHALT

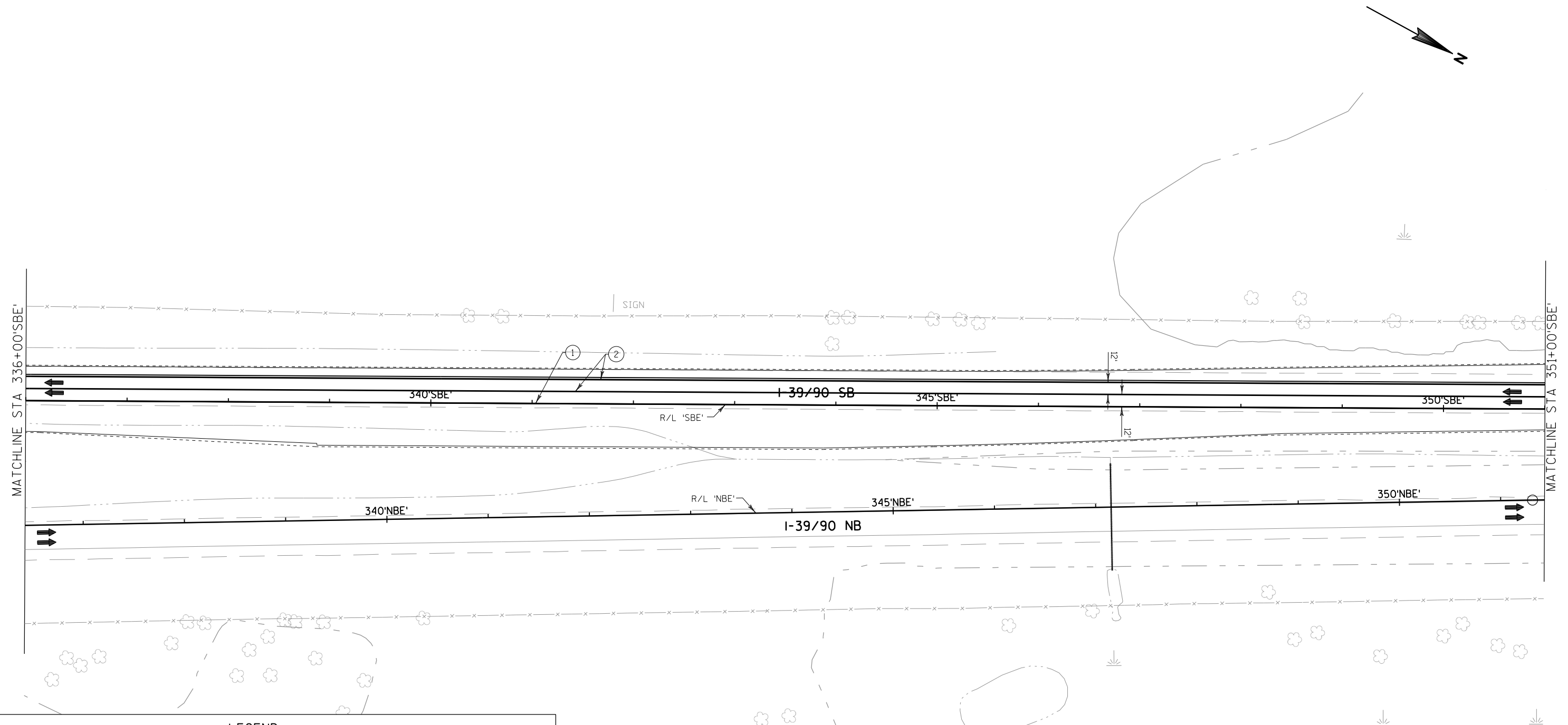
PAVEMENT MARKING LEGEND

- | | |
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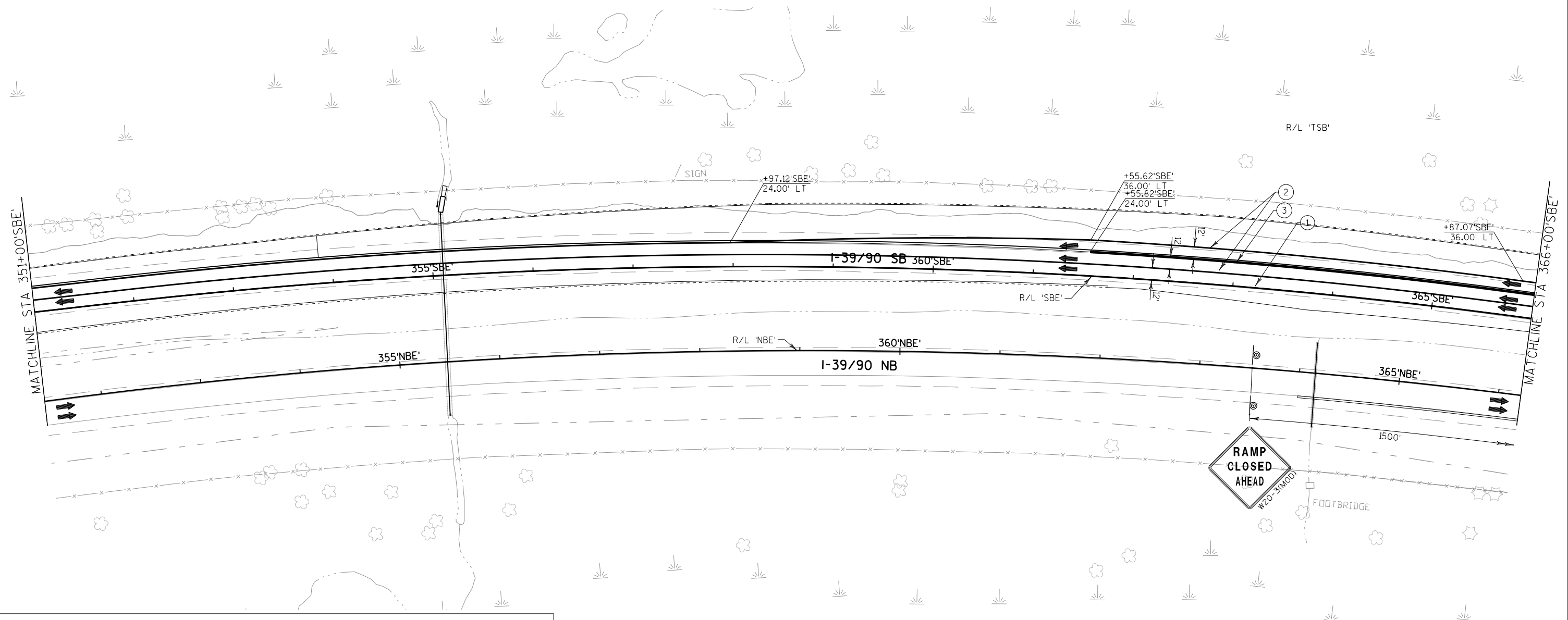
LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
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LEGEND	
	WORK AREA
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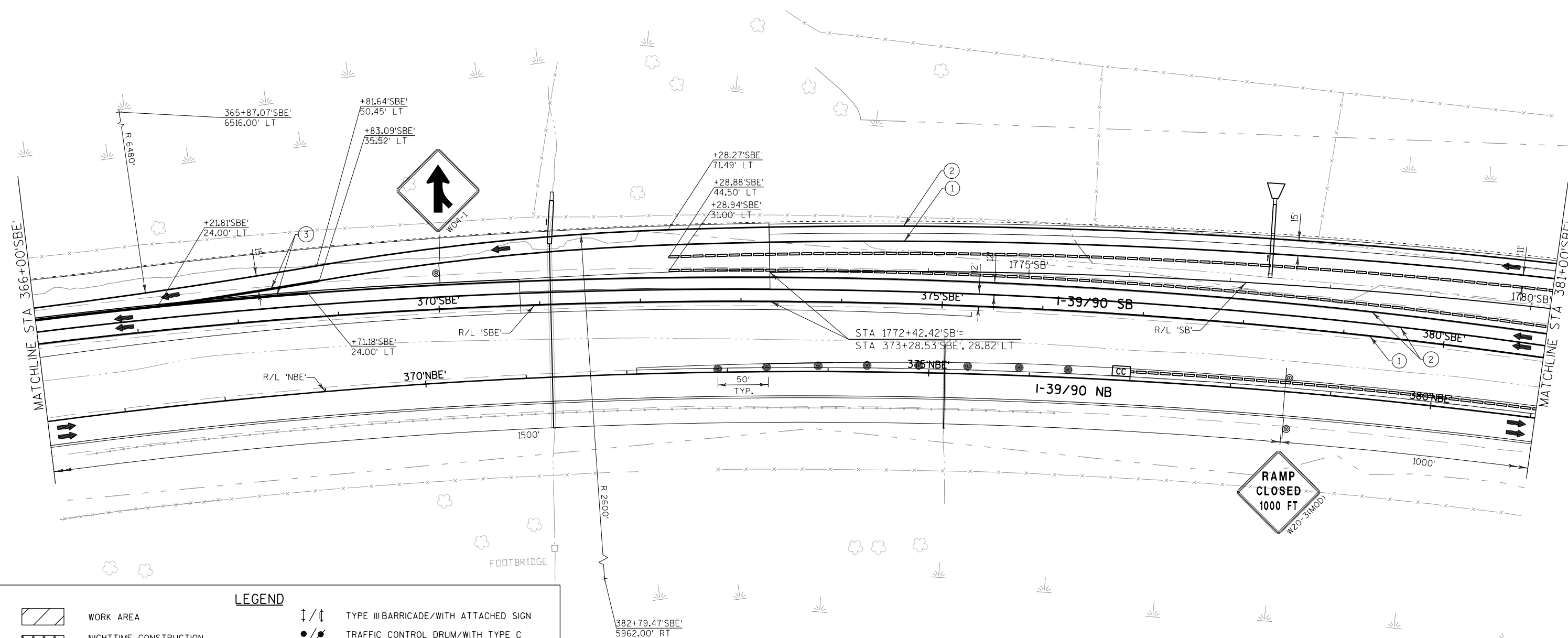


LEGEND

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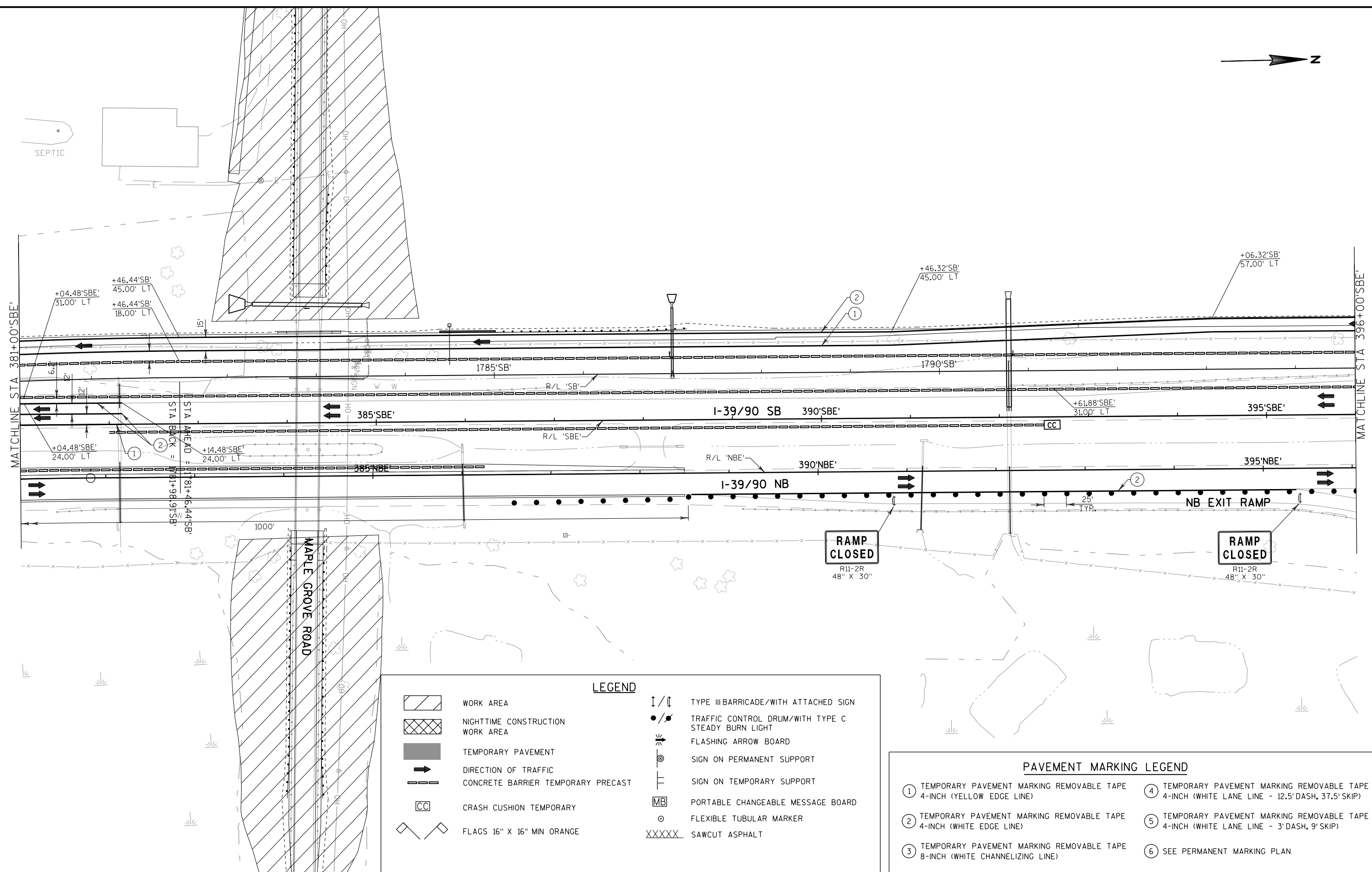
PAVEMENT MARKING LEGEND

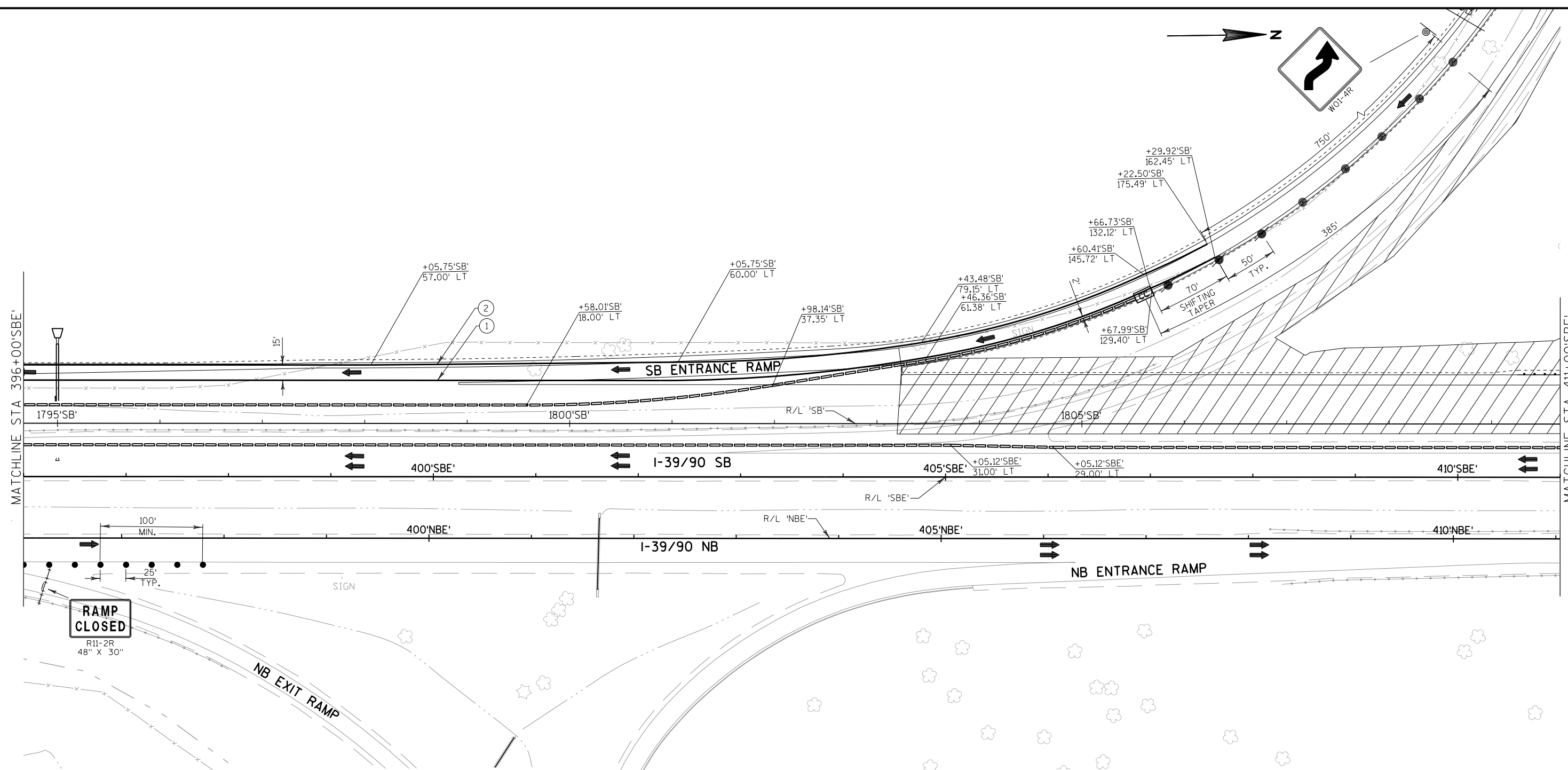
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PAVEMENT MARKING LEGEND

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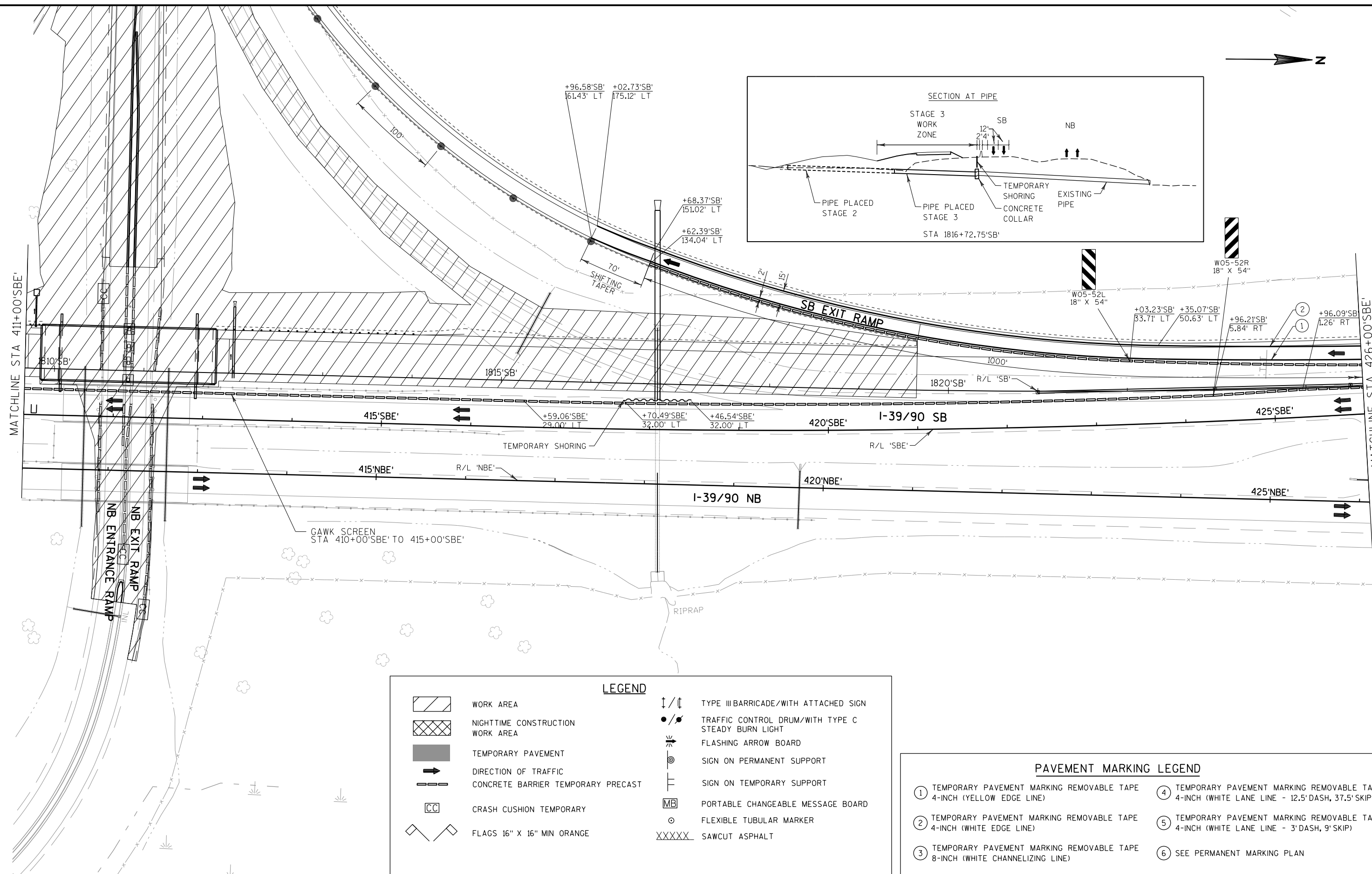


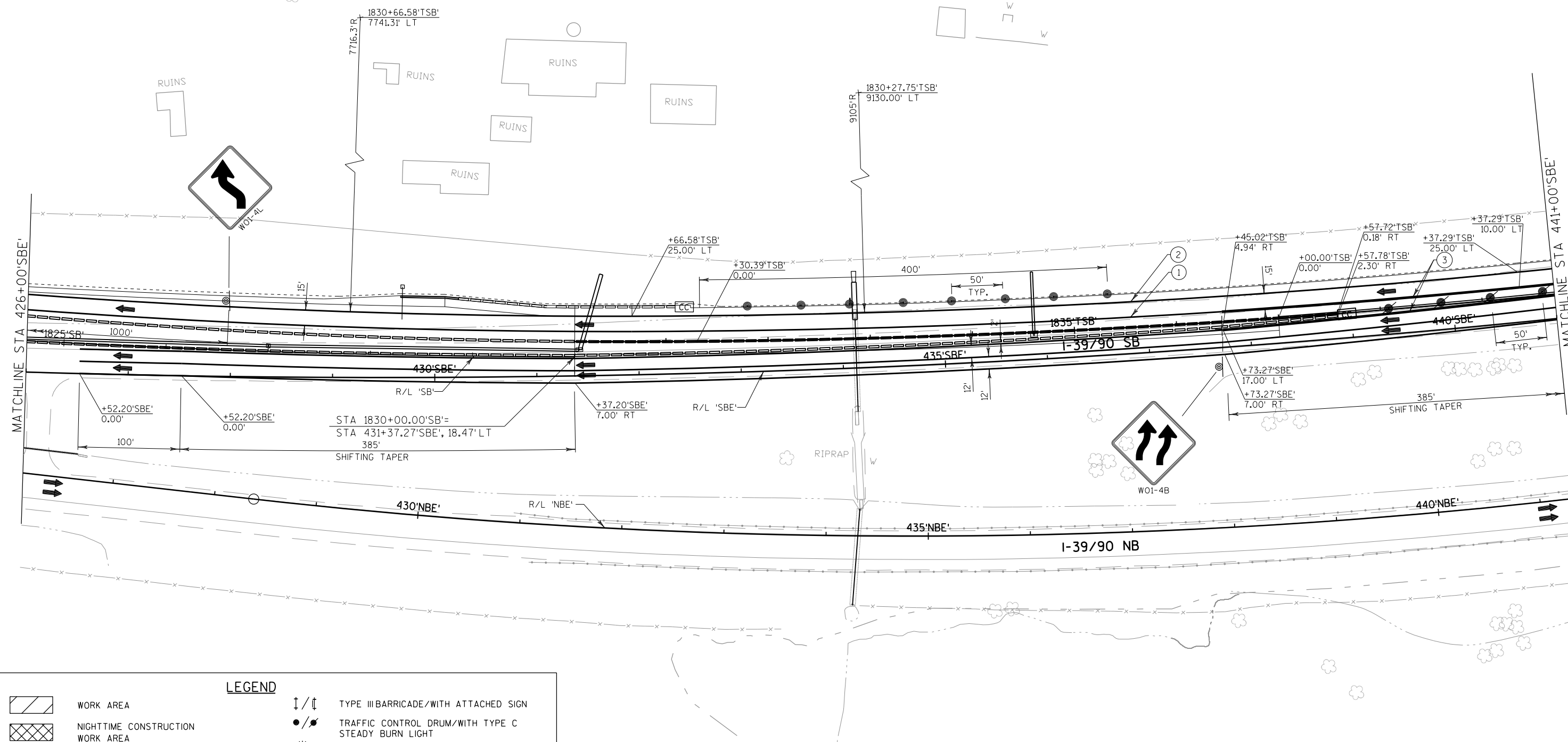
LEGEND

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	FLAGS 16" X 16" MIN ORANGE		FLEXIBLE TUBULAR MARKER
			SAWCUT ASPHALT

PAVEMENT MARKING LEGEND

- | | |
|--|---|
| ① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE) | ④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP) |
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| ③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE) | ⑥ SEE PERMANENT MARKING PLAN |



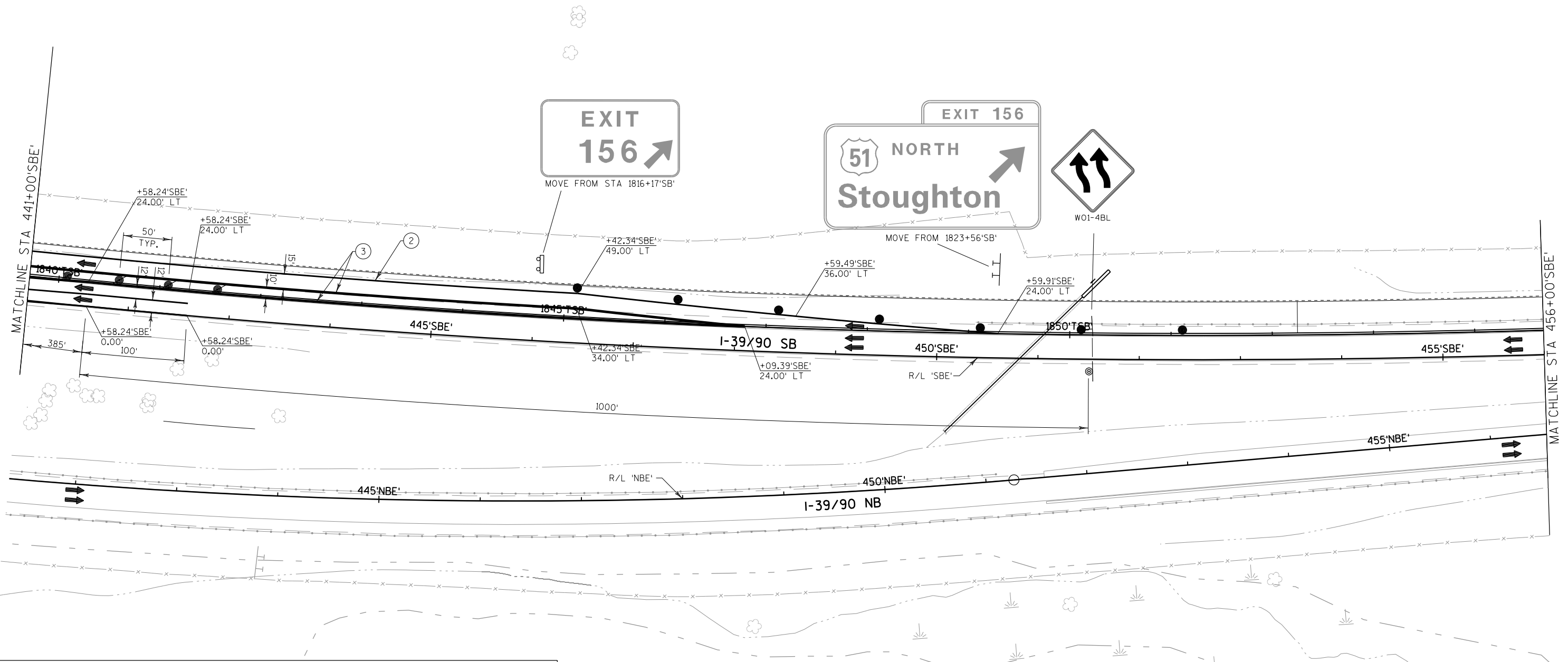


LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHION TEMPORARY
	FLAGS 16" X 16" MIN ORANGE

	TYPE III BARRICADE/WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	PORTABLE CHANGEABLE MESSAGE BOARD
	FLEXIBLE TUBULAR MARKER
	SAWCUT ASPHALT

PAVEMENT MARKING LEGEND

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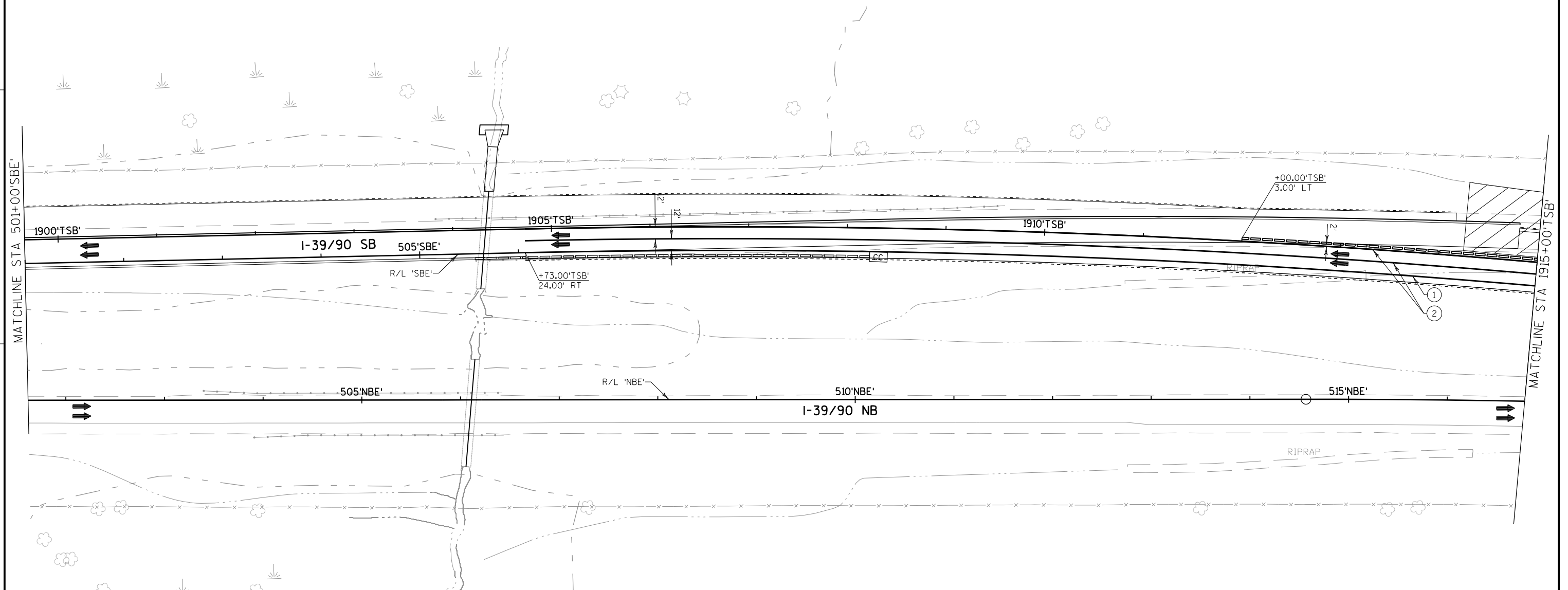


LEGEND

	WORK AREA		TYPE III BARRICADE/WITH ATTACHED SIGN
	NIGHTTIME CONSTRUCTION WORK AREA		TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	TEMPORARY PAVEMENT		FLASHING ARROW BOARD
	DIRECTION OF TRAFFIC		SIGN ON PERMANENT SUPPORT
	CONCRETE BARRIER TEMPORARY PRECAST		SIGN ON TEMPORARY SUPPORT
	CRASH CUSHION TEMPORARY		PORTABLE CHANGEABLE MESSAGE BOARD
	FLAGS 16" X 16" MIN ORANGE		FLEXIBLE TUBULAR MARKER
			SAWCUT ASPHALT

PAVEMENT MARKING LEGEND

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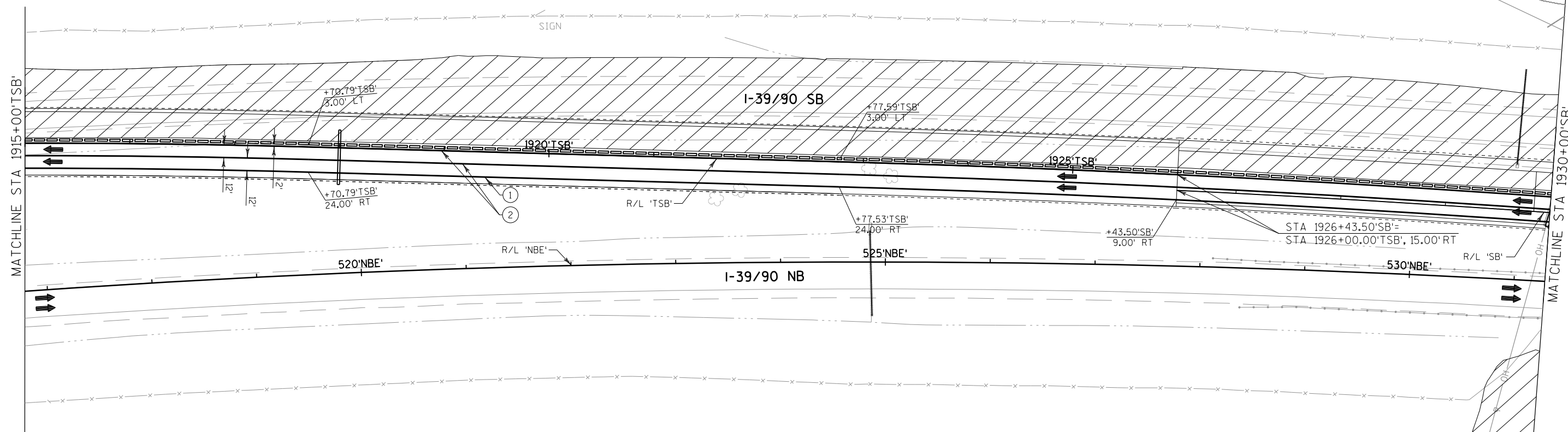


LEGEND

	WORK AREA		TYPE III BARRICADE/WITH ATTACHED SIGN
	NIGHTTIME CONSTRUCTION WORK AREA		TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	TEMPORARY PAVEMENT		FLASHING ARROW BOARD
	DIRECTION OF TRAFFIC		SIGN ON PERMANENT SUPPORT
	CONCRETE BARRIER TEMPORARY PRECAST		SIGN ON TEMPORARY SUPPORT
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	FLAGS 16" X 16" MIN ORANGE		FLEXIBLE TUBULAR MARKER
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PAVEMENT MARKING LEGEND

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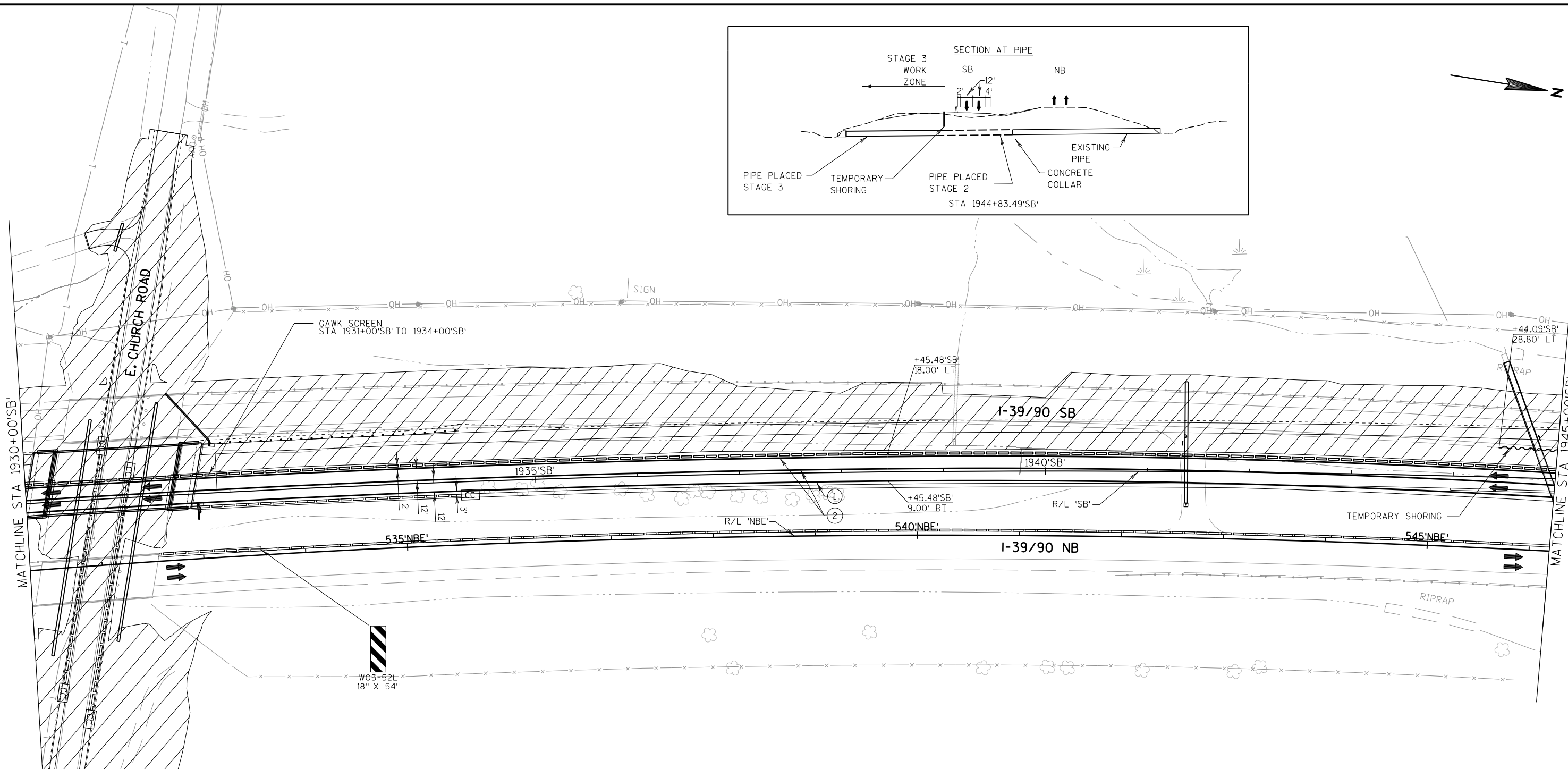
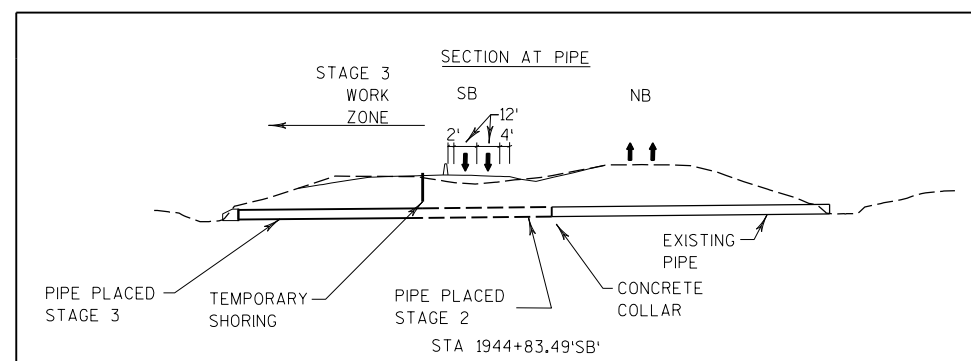


LEGEND

	WORK AREA		TYPE III BARRICADE/WITH ATTACHED SIGN
	NIGHTTIME CONSTRUCTION WORK AREA		TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	TEMPORARY PAVEMENT		FLASHING ARROW BOARD
	DIRECTION OF TRAFFIC		SIGN ON PERMANENT SUPPORT
	CONCRETE BARRIER TEMPORARY PRECAST		SIGN ON TEMPORARY SUPPORT
	CRASH CUSHION TEMPORARY		PORTABLE CHANGEABLE MESSAGE BOARD
	FLAGS 16" X 16" MIN ORANGE		FLEXIBLE TUBULAR MARKER
			SAWCUT ASPHALT

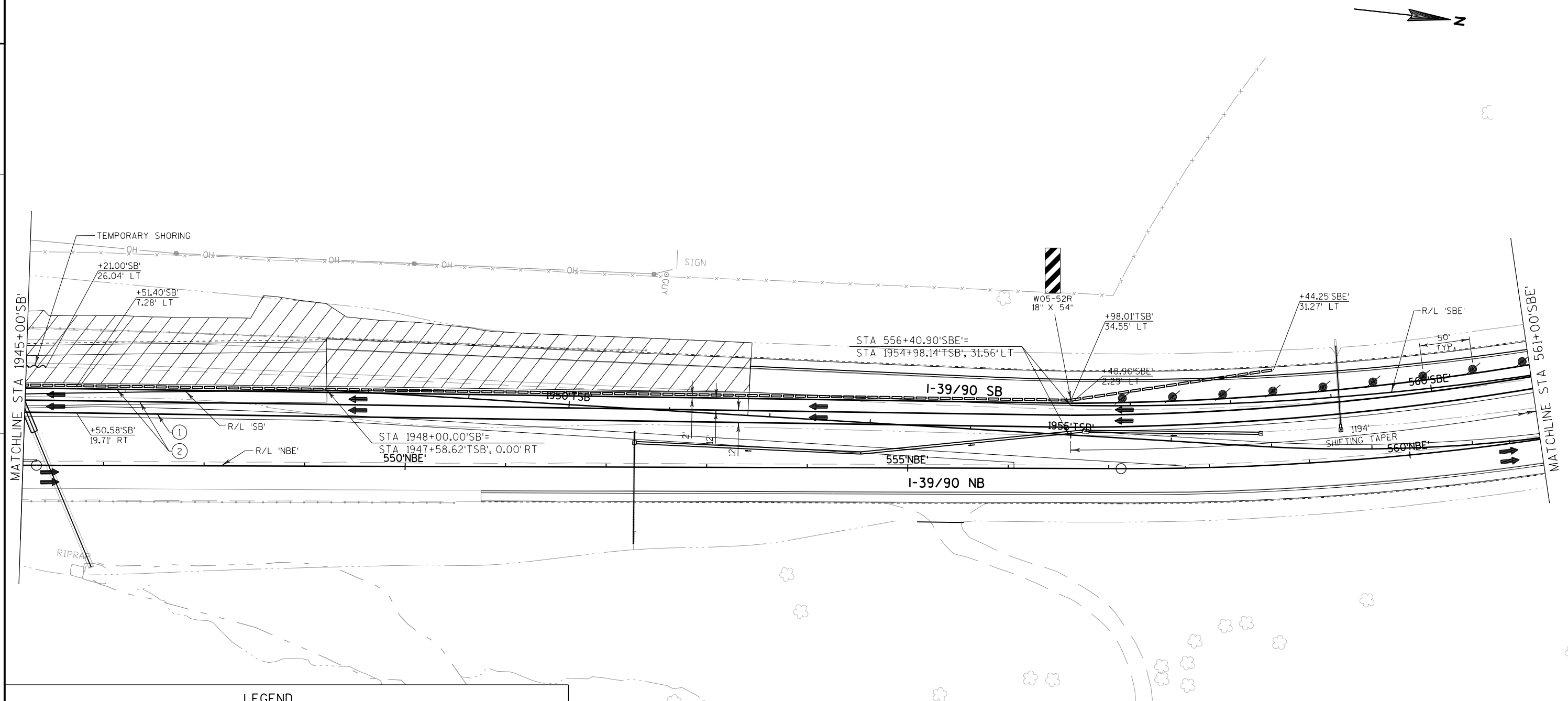
PAVEMENT MARKING LEGEND

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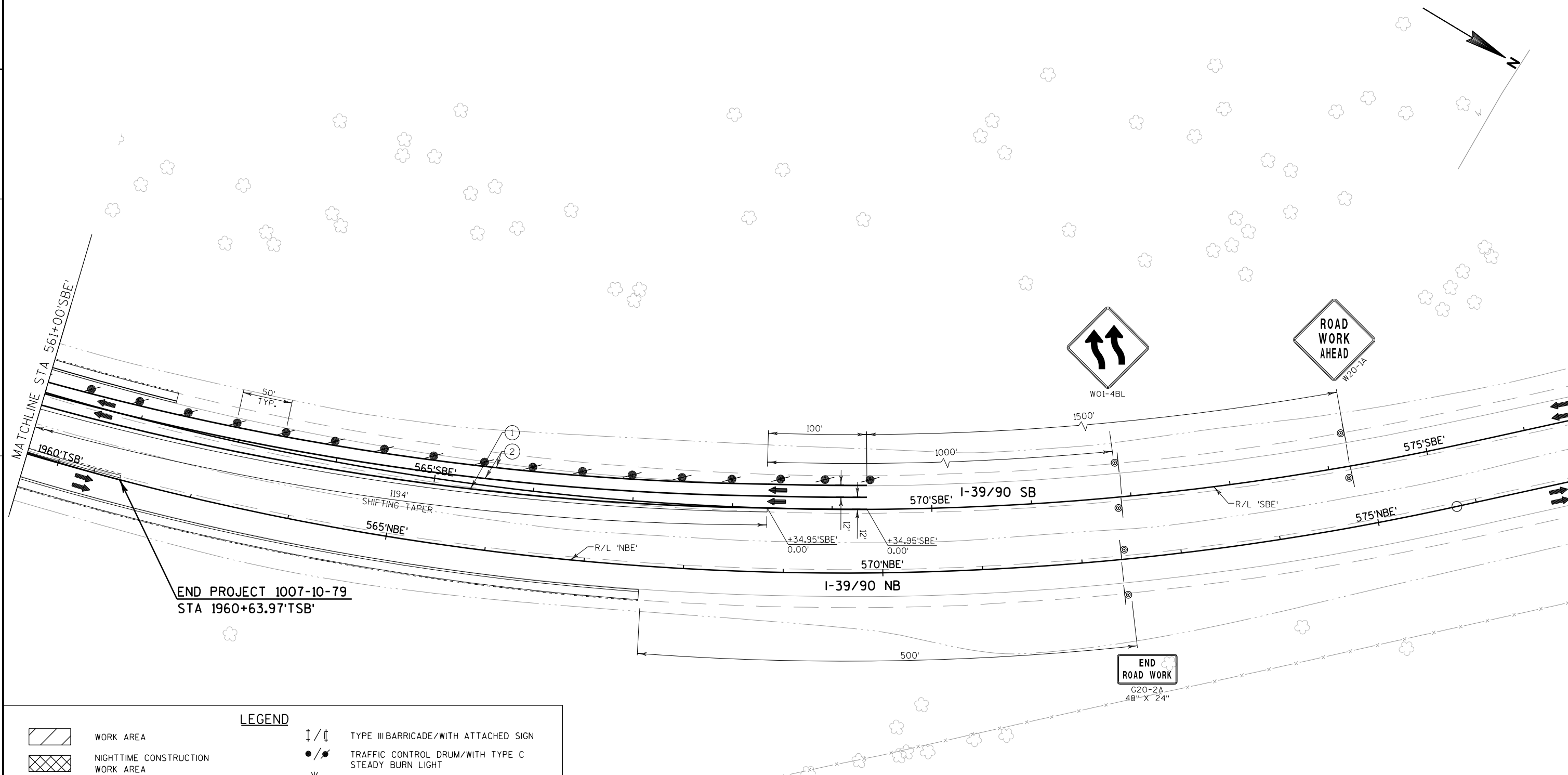
- LEGEND**
- WORK AREA
 - NIGHTTIME CONSTRUCTION WORK AREA
 - TEMPORARY PAVEMENT
 - DIRECTION OF TRAFFIC
 - CONCRETE BARRIER TEMPORARY PRECAST
 - CRASH CUSHION TEMPORARY
 - FLAGS 16" X 16" MIN ORANGE
 - TYPE III BARRICADE/WITH ATTACHED SIGN
 - TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
 - FLASHING ARROW BOARD
 - SIGN ON PERMANENT SUPPORT
 - SIGN ON TEMPORARY SUPPORT
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 - SAWCUT ASPHALT

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 - ⑥ SEE PERMANENT MARKING PLAN



LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHION TEMPORARY
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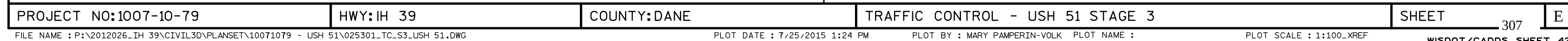


LEGEND

	WORK AREA		TYPE III BARRICADE/WITH ATTACHED SIGN
	NIGHTTIME CONSTRUCTION WORK AREA		TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	TEMPORARY PAVEMENT		FLASHING ARROW BOARD
	DIRECTION OF TRAFFIC		SIGN ON PERMANENT SUPPORT
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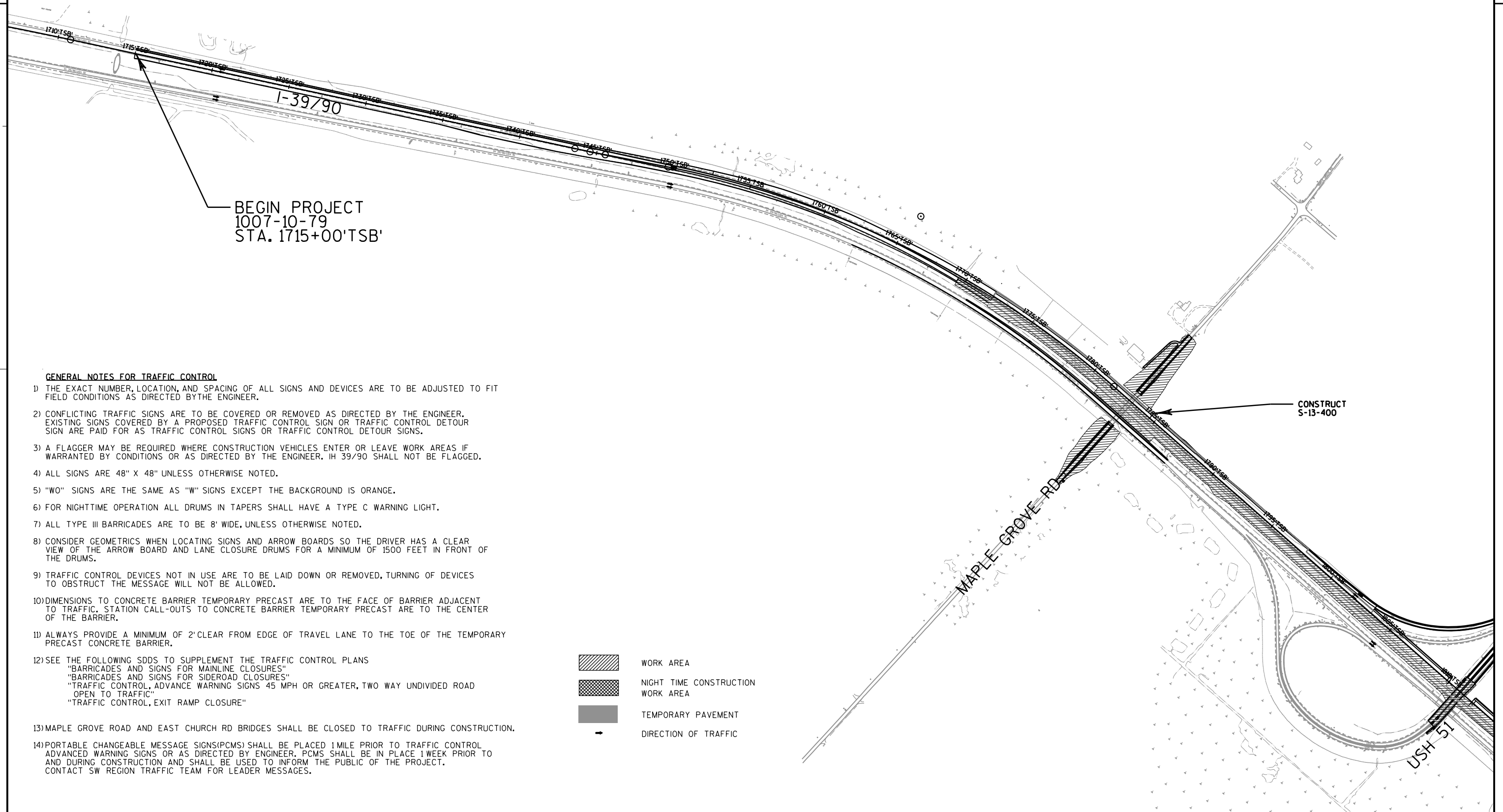


MAINTENANCE OF TRAFFIC

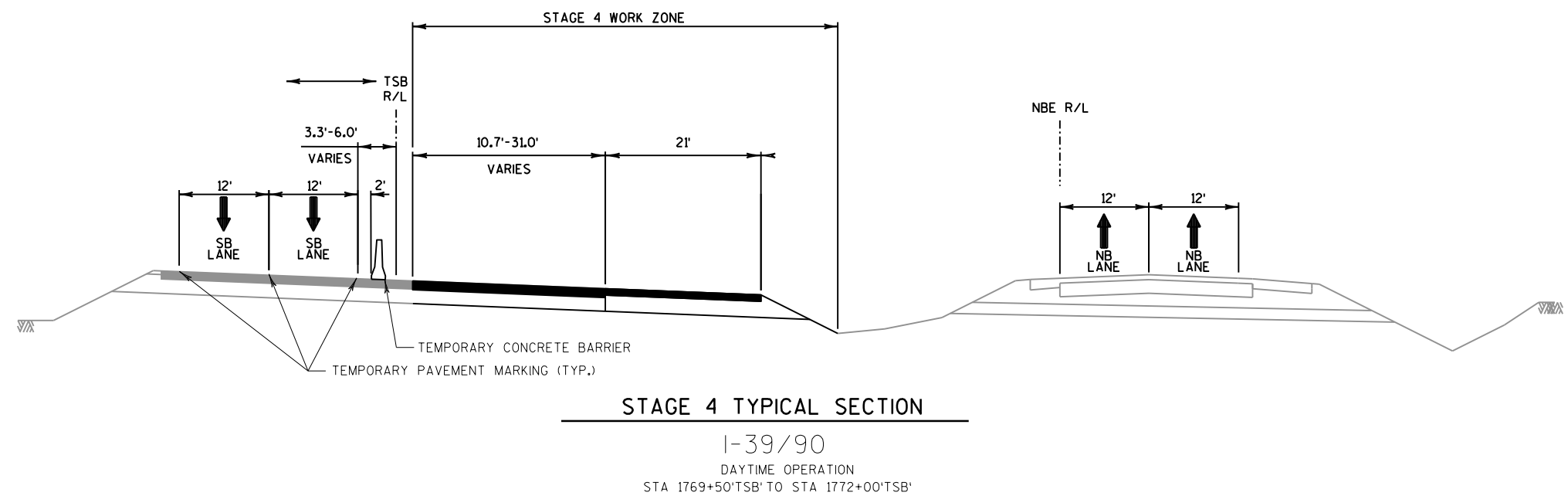
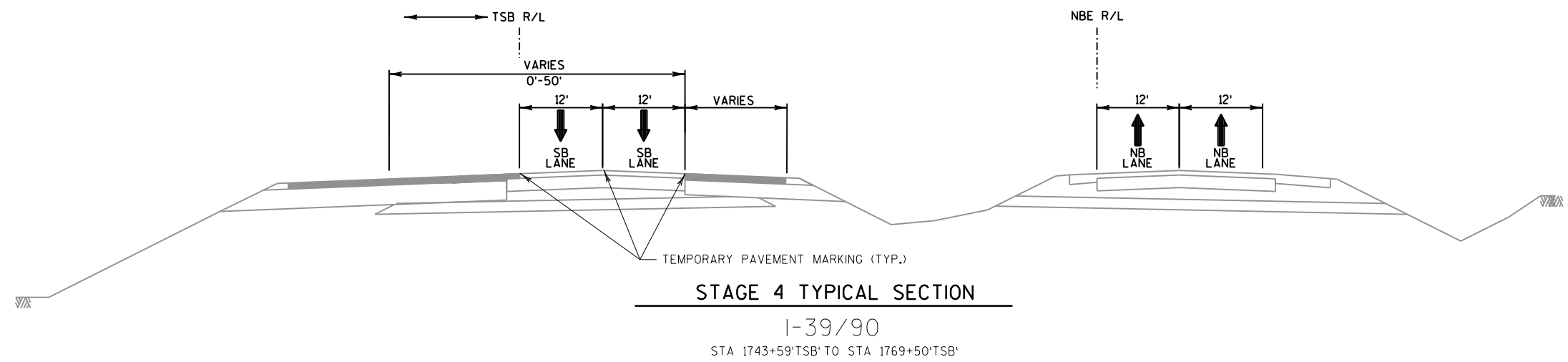
- IH 39/90 & RAMP
 -TRAFFIC SHALL BE MAINTAINED ON ALL EXISTING MAINLINE LANES.
 -USH 51 NORTHBOUND RAMP SHALL BE CLOSED AND DETOURED.
 -USH 51 SOUTHBOUND RAMP SHALL BE ON NEW PAVEMENT
 -I-39/90 SOUTHBOUND TRAFFIC AT USH 51 SHALL BE SWITCHED OVER TO NEW CONCRETE PAVEMENT AND BRIDGE.

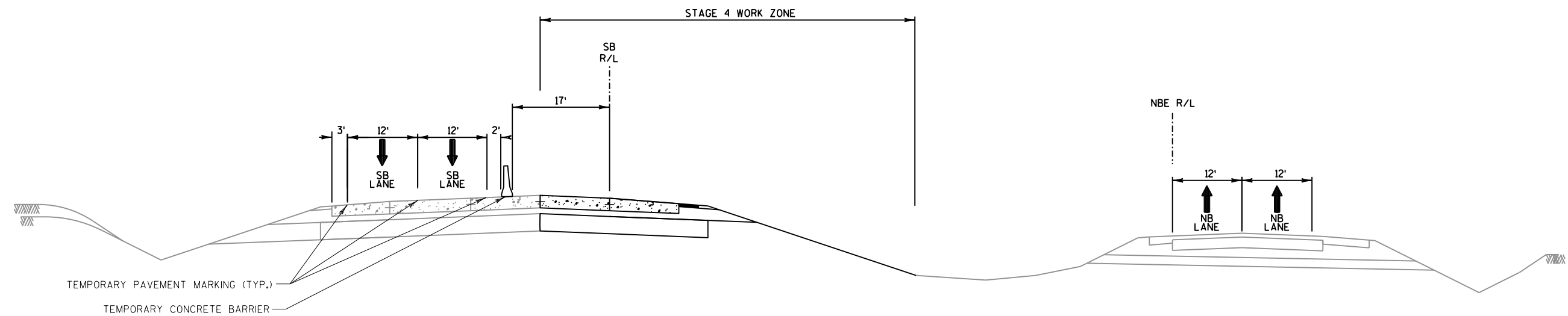
CONSTRUCTION TO BE COMPLETED

- CONSTRUCT MEDIAN SHOULDER AND INSIDE LANE OF SOUTHBOUND I-39/90 CONCRETE PAVEMENT FROM SOUTH OF MAPLE GROVE RD TO NORTH OF USH 51
 -CONTINUE CONSTRUCTION IH 39 SB BRIDGE AT MAPLE GROVE RD
 -CONSTRUCT SOUTHBOUND MEDIAN PAVEMENT.
 -REMOVAL OF EXISTING SOUTHBOUND I-39/90 BRIDGE OVER USH 51.







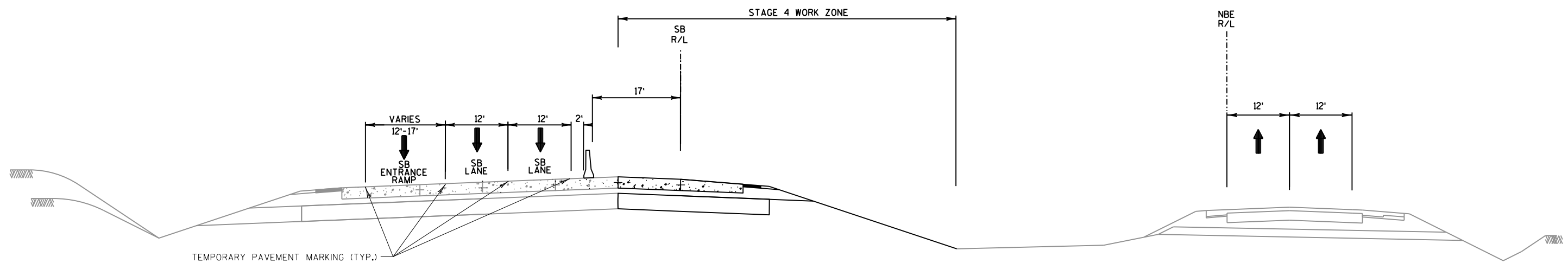


STAGE 4 TYPICAL SECTION

I-39/90

DAYTIME OPERATION

STA 1772+42'SB' TO STA 1793+06'SB'
 STA 1803+24'SB' TO STA 1819+65'SB'
 STA 1819+65'SB' TO STA 1830+00'SB'

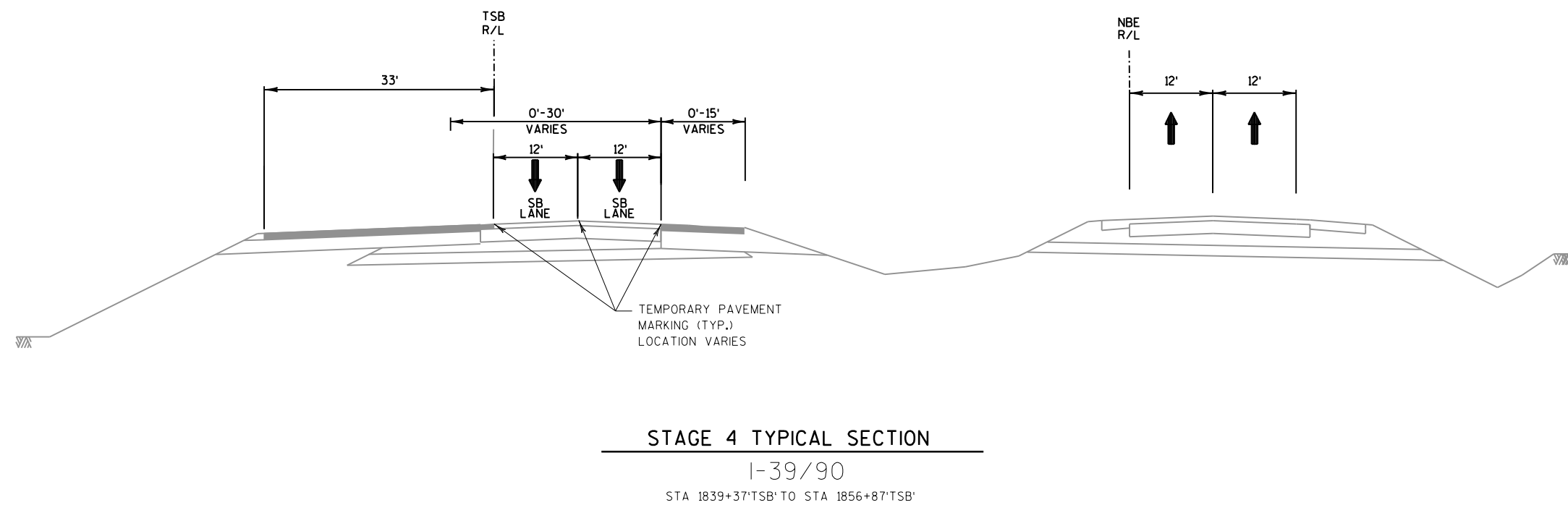
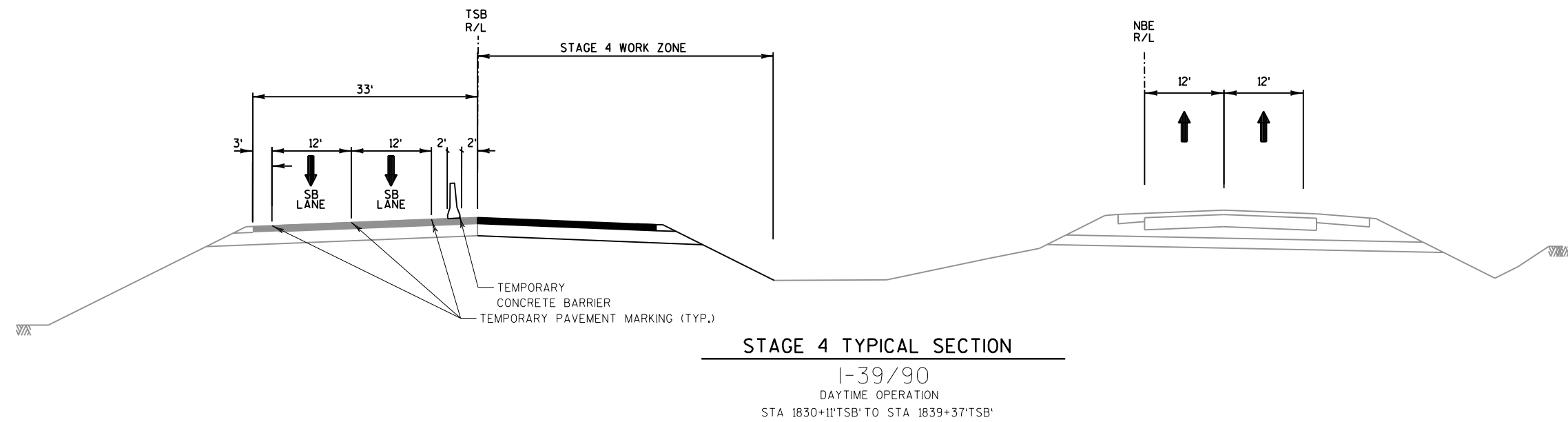


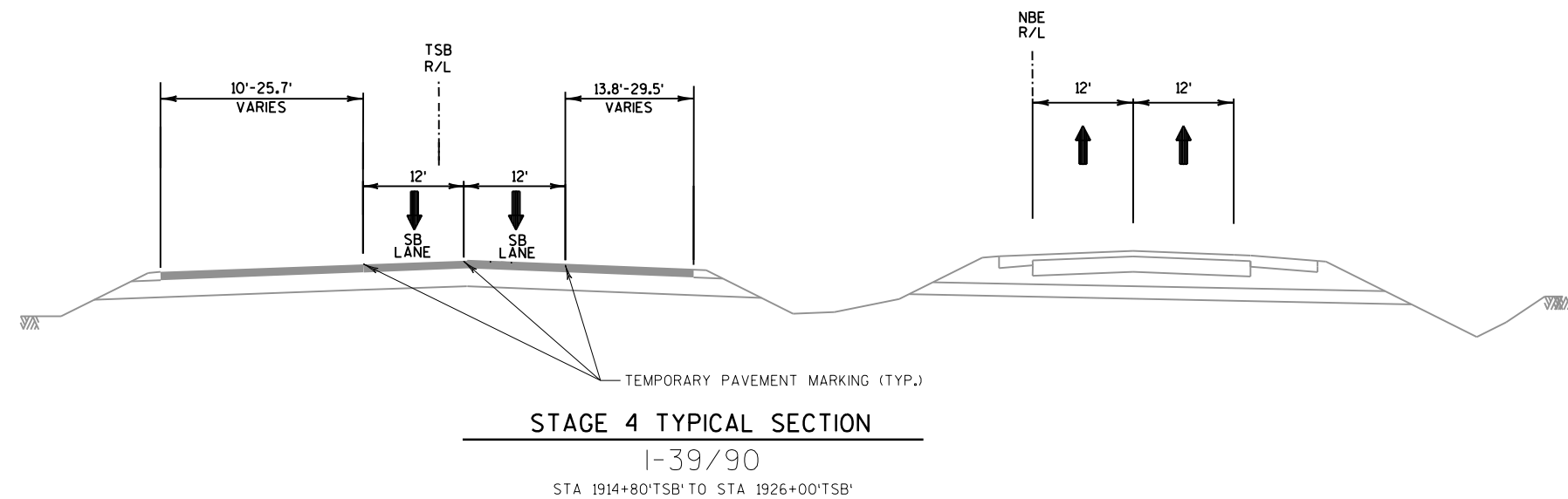
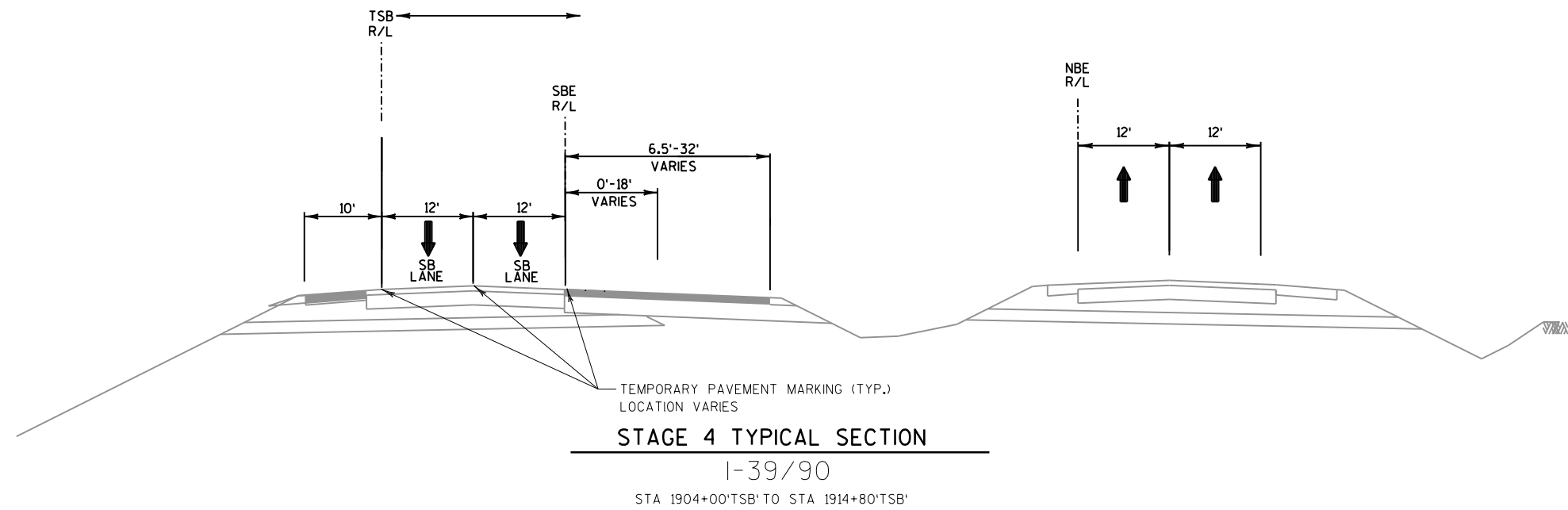
STAGE 4 TYPICAL SECTION

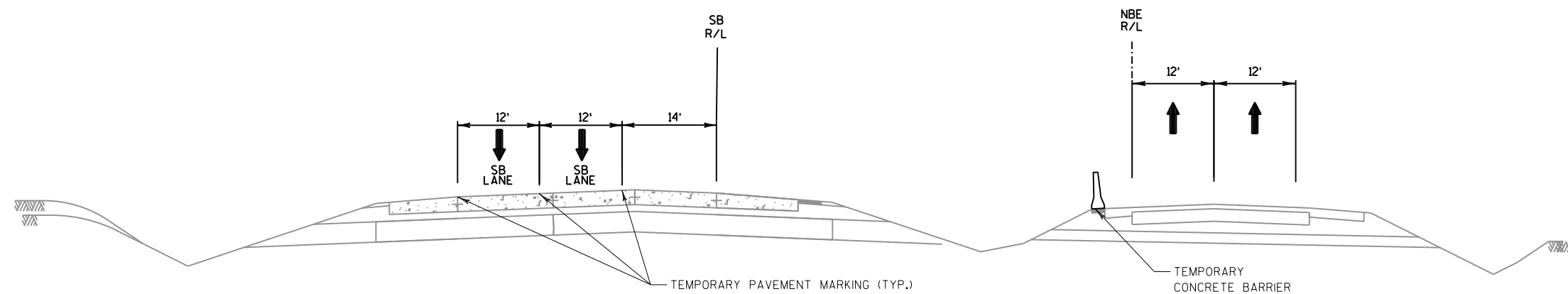
I-39/90 & USH 51 RAMP

DAYTIME OPERATION

STA 1793+06'SB' TO STA 1803+24'SB'



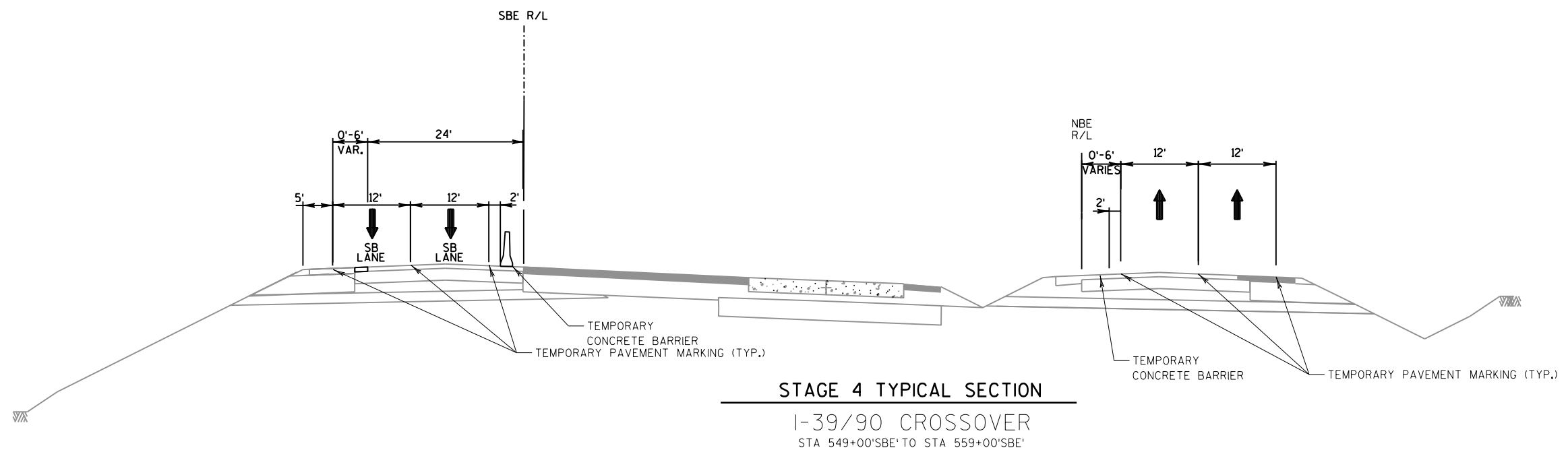




STAGE 4 TYPICAL SECTION

I-39/90

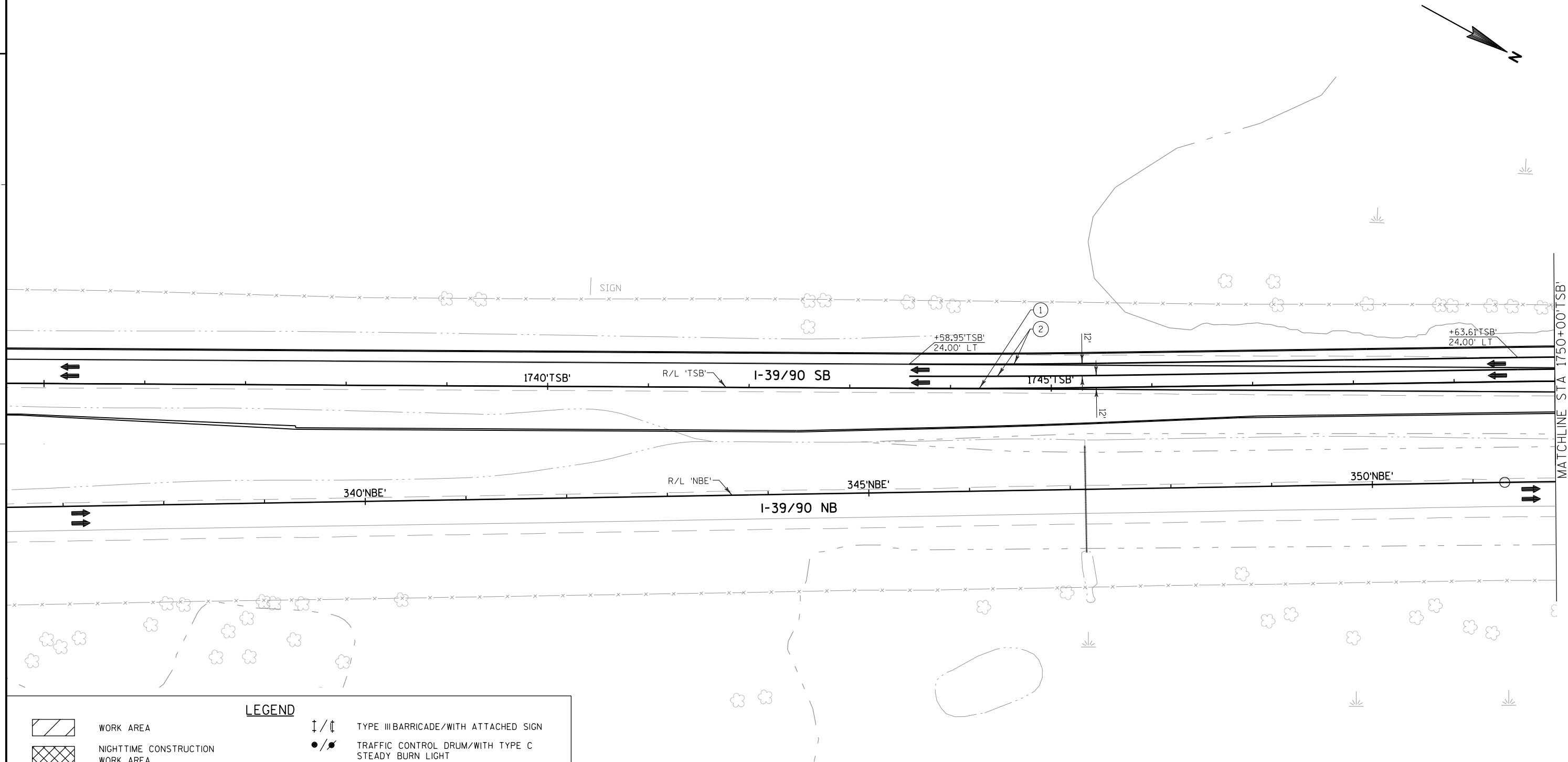
STA 1926+44'SB' TO STA 1948+00'SB'

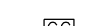


STAGE 4 TYPICAL SECTION

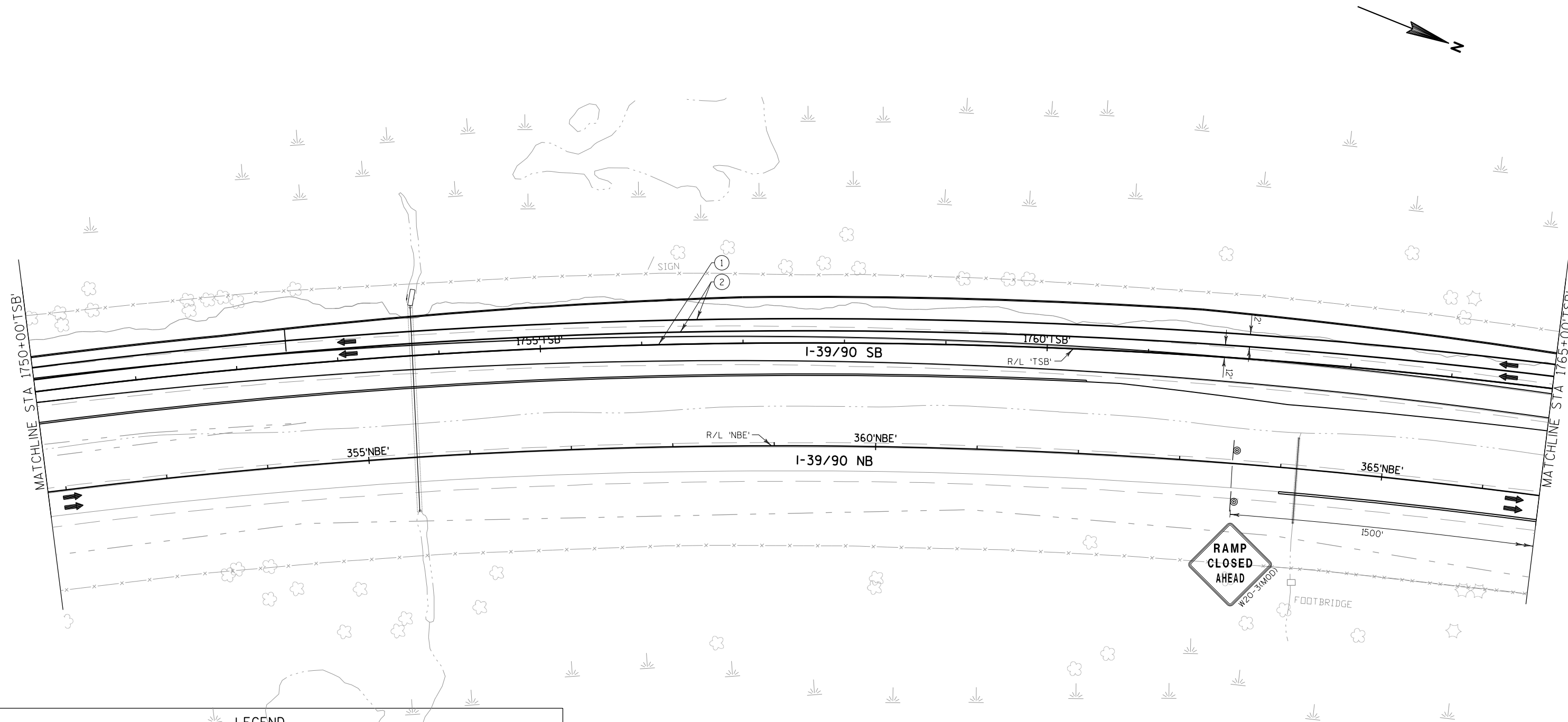
I-39/90 CROSSOVER

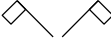
STA 549+00'SBE' TO STA 559+00'SBE'



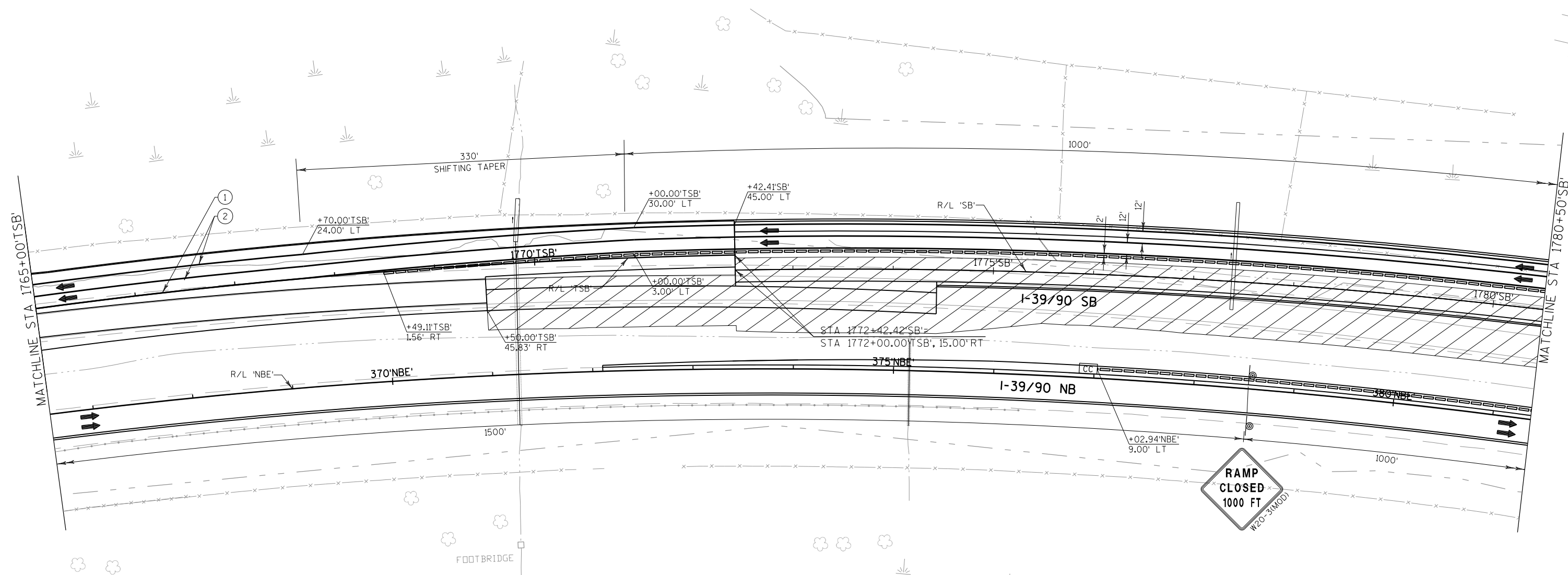
	WORK AREA		TYPE III BARRICADE/WITH ATTACHED SIGN
	NIGHTTIME CONSTRUCTION WORK AREA		TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	TEMPORARY PAVEMENT		FLASHING ARROW BOARD
	DIRECTION OF TRAFFIC		SIGN ON PERMANENT SUPPORT
	CONCRETE BARRIER TEMPORARY PRECAST		SIGN ON TEMPORARY SUPPORT
	CRASH CUSHION TEMPORARY		PORTABLE CHANGEABLE MESSAGE BOARD
	FLAGS 16" X 16" MIN ORANGE		FLEXIBLE TUBULAR MARKER
			SAWCUT ASPHALT

PAVEMENT MARKING LEGEND	
①	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE)
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⑤	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP)
⑥	SEE PERMANENT MARKING PLAN



LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
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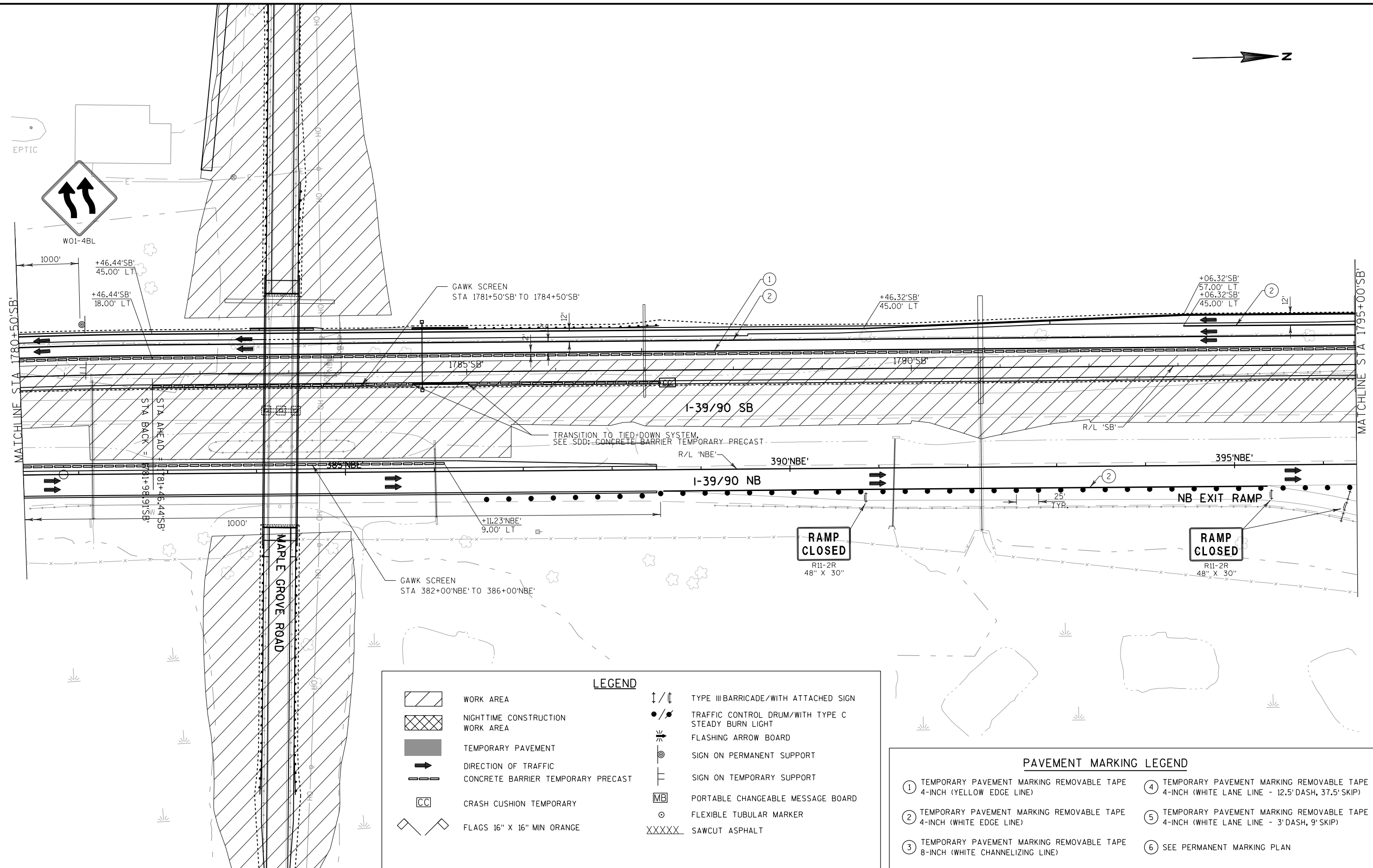


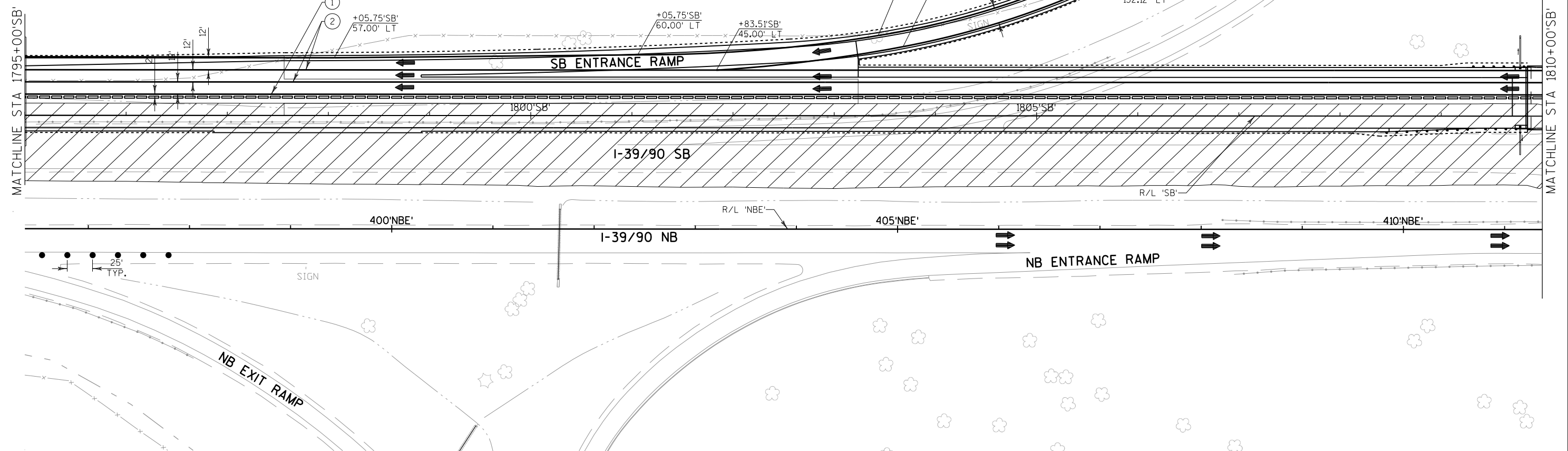
LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
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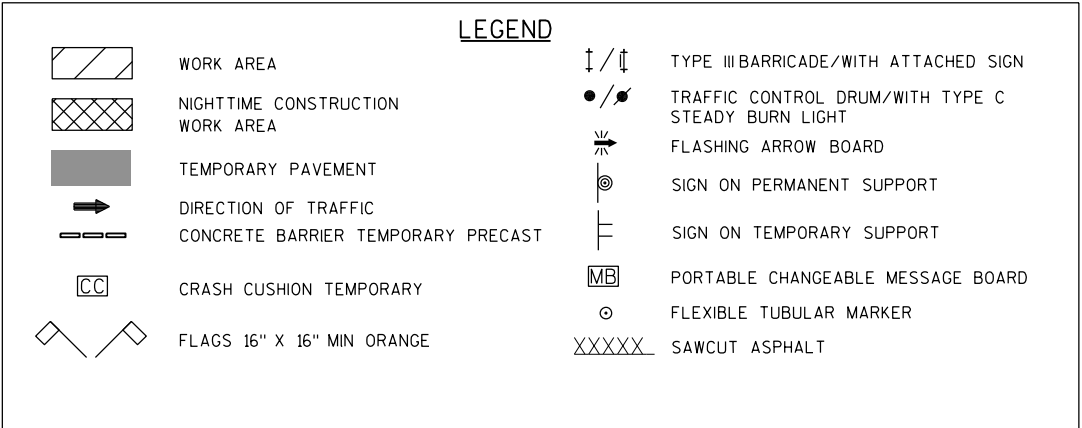


LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONCRETE BARRIER TEMPORARY PRECAST
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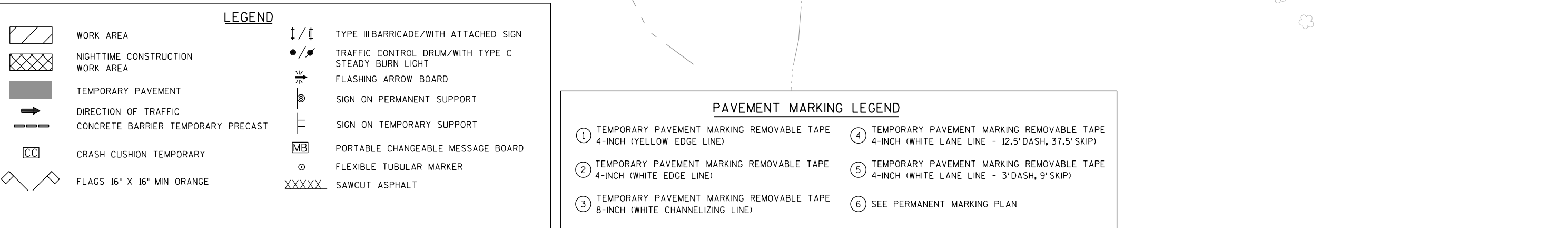
PAVEMENT MARKING LEGEND

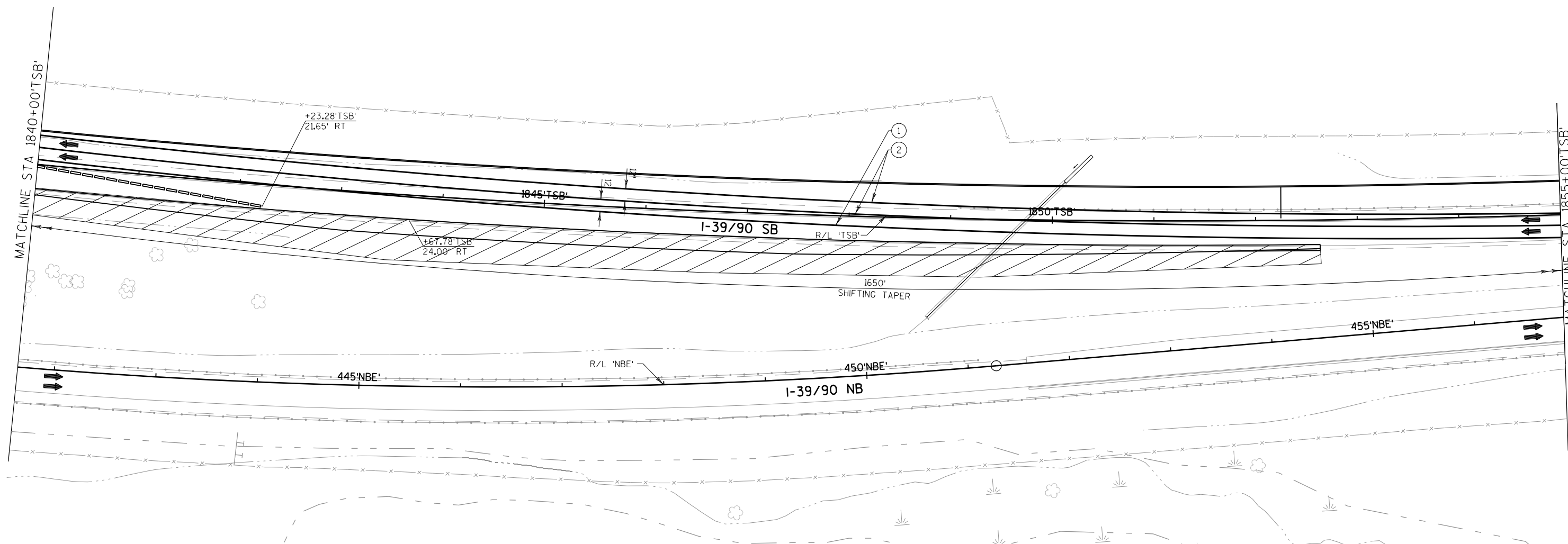
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PROJECT NO:1007-10-79	HWY:IH 39	COUNTY:DANE	TRAFFIC CONTROL STAGE 4	SHEET 320	E
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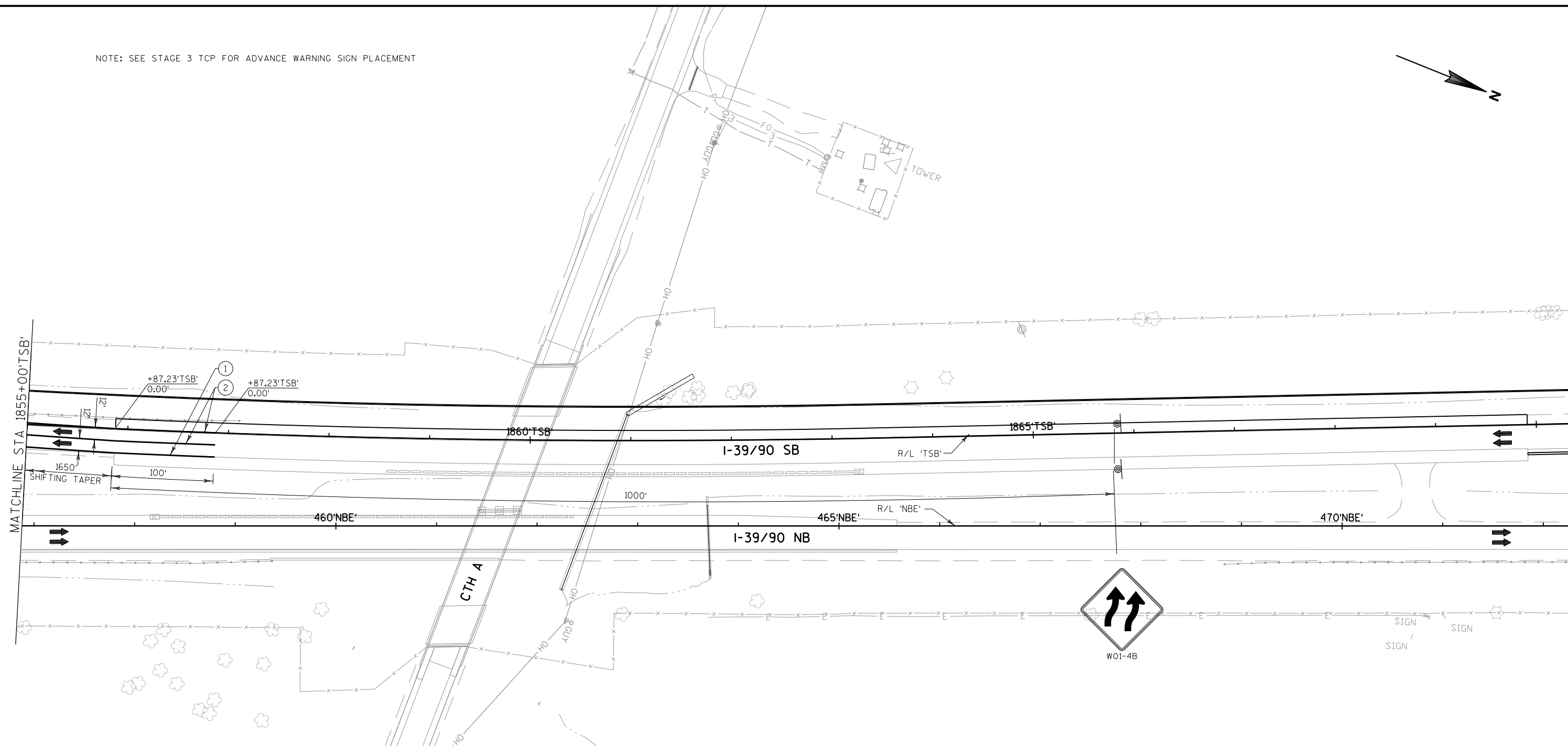


- LEGEND**
- WORK AREA
 - NIGHTTIME CONSTRUCTION WORK AREA
 - TEMPORARY PAVEMENT
 - DIRECTION OF TRAFFIC
 - CONCRETE BARRIER TEMPORARY PRECAST
 - CRASH CUSHION TEMPORARY
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- FLASHING ARROW BOARD
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- SIGN ON TEMPORARY SUPPORT
- PORTABLE CHANGEABLE MESSAGE BOARD
- FLEXIBLE TUBULAR MARKER
- SAWCUT ASPHALT

PAVEMENT MARKING LEGEND

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LEGEND	
	WORK AREA
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① TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGE LINE)	④ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 12.5' DASH, 37.5' SKIP)
② TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE EDGE LINE)	⑤ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE LANE LINE - 3' DASH, 9' SKIP)
③ TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE CHANNELIZING LINE)	⑥ SEE PERMANENT MARKING PLAN

2

MAINTENANCE OF TRAFFIC

IH 39/90 & RAMPS
 -TRAFFIC SHALL BE MAINTAINED ON ALL EXISTING MAINLINE LANES.
 -FIFTEEN MINUTE ROLLING CLOSURES SHALL BE USED FOR GIRDER PLACEMENT FOR MAPLE GROVE RD BRIDGE
 DURING PERMITTED LANE CLOSURE TIMES.

CONSTRUCTION TO BE COMPLETED

-CONSTRUCT BRIDGE AT MAPLE GROVE RD.

2 |

- BEGIN PROJECT
1007-10-79
STA. 1715+00'TSB'

GENERAL NOTES FOR TRAFFIC CONTROL

- 1) THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES ARE TO BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- 2) CONFLICTING TRAFFIC SIGNS ARE TO BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER. EXISTING SIGNS COVERED BY A PROPOSED TRAFFIC CONTROL SIGN OR TRAFFIC CONTROL DETOUR SIGN ARE PAID FOR AS TRAFFIC CONTROL SIGNS OR TRAFFIC CONTROL DETOUR SIGNS.
- 3) A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE WORK AREAS IF WARRANTED BY CONDITIONS OR AS DIRECTED BY THE ENGINEER. IH 39/90 SHALL NOT BE FLAGGED.
- 4) ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- 5) "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- 6) FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A TYPE C WARNING LIGHT.
- 7) ALL TYPE III BARRICADES ARE TO BE 8' WIDE, UNLESS OTHERWISE NOTED.
- 8) CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM OF 1500 FEET IN FRONT OF THE DRUMS.
- 9) TRAFFIC CONTROL DEVICES NOT IN USE ARE TO BE LAID DOWN OR REMOVED, TURNING OF DEVICES TO OBSTRUCT THE MESSAGE WILL NOT BE ALLOWED.
- 10) DIMENSIONS TO CONCRETE BARRIER TEMPORARY PRECAST ARE TO THE FACE OF BARRIER ADJACENT TO TRAFFIC. STATION CALL-OUTS TO CONCRETE BARRIER TEMPORARY PRECAST ARE TO THE CENTER OF THE BARRIER.
- 11) ALWAYS PROVIDE A MINIMUM OF 2' CLEAR FROM EDGE OF TRAVEL LANE TO THE TOE OF THE TEMPORARY PRECAST CONCRETE BARRIER.
- 12) SEE THE FOLLOWING SDDS TO SUPPLEMENT THE TRAFFIC CONTROL PLANS
 - "BARRICADES AND SIGNS FOR MAINLINE CLOSURES"
 - "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES"
 - "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
 - "TRAFFIC CONTROL, EXIT RAMP CLOSURE"
- 13) MAPLE GROVE ROAD AND EAST CHURCH RD BRIDGES SHALL BE CLOSED TO TRAFFIC DURING CONSTRUCTION.
- 14) PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE PLACED 1 MILE PRIOR TO TRAFFIC CONTROL ADVANCED WARNING SIGNS OR AS DIRECTED BY ENGINEER. PCMS SHALL BE IN PLACE 1 WEEK PRIOR TO AND DURING CONSTRUCTION AND SHALL BE USED TO INFORM THE PUBLIC OF THE PROJECT. CONTACT SW REGION TRAFFIC TEAM FOR LEADER MESSAGES.

 WORK AREA
 NIGHT TIME CONSTRUCTION WORK AREA
 TEMPORARY PAVEMENT
 DIRECTION OF TRAFFIC

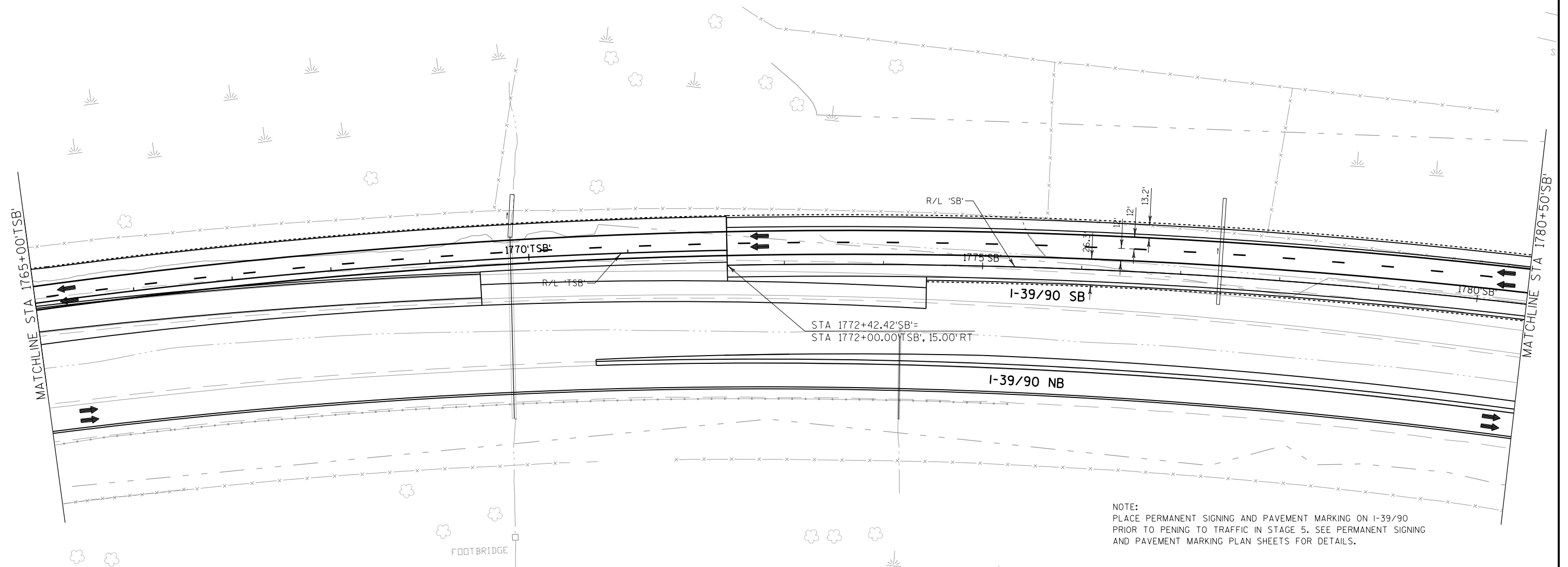




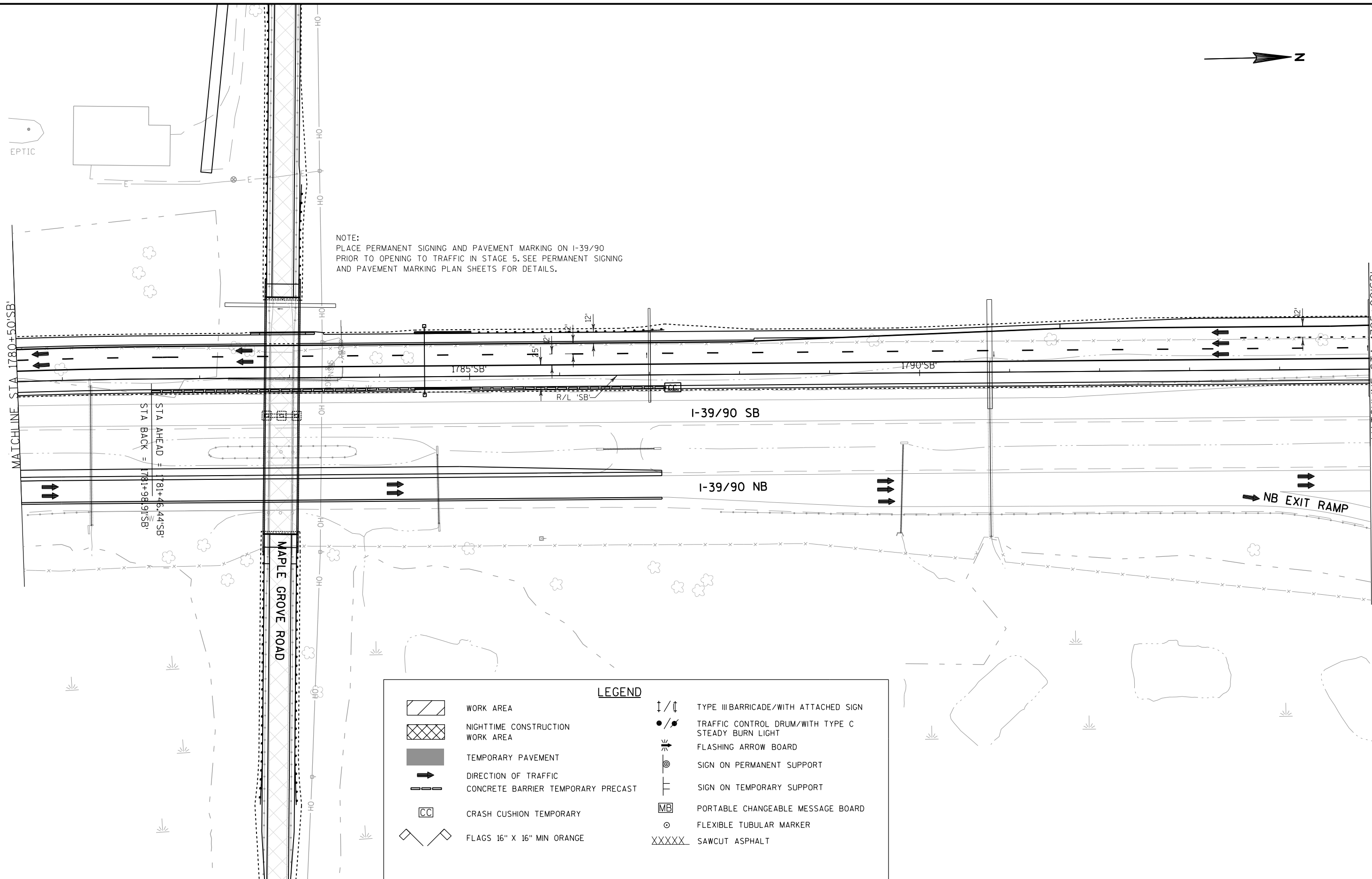
STAGE 5 TYPICAL SECTION

I-39/90

UNDER MAPLE GROVE ROAD BRIDGE



LEGEND	
	WORK AREA
	NIGHTTIME CONSTRUCTION WORK AREA
	TEMPORARY PAVEMENT
	DIRECTION OF TRAFFIC
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHION TEMPORARY
	FLAGS 16" X 16" MIN ORANGE
	TYPE III BARRICADE/WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	PORTABLE CHANGEABLE MESSAGE BOARD
	FLEXIBLE TUBULAR MARKER
	SAWCUT ASPHALT



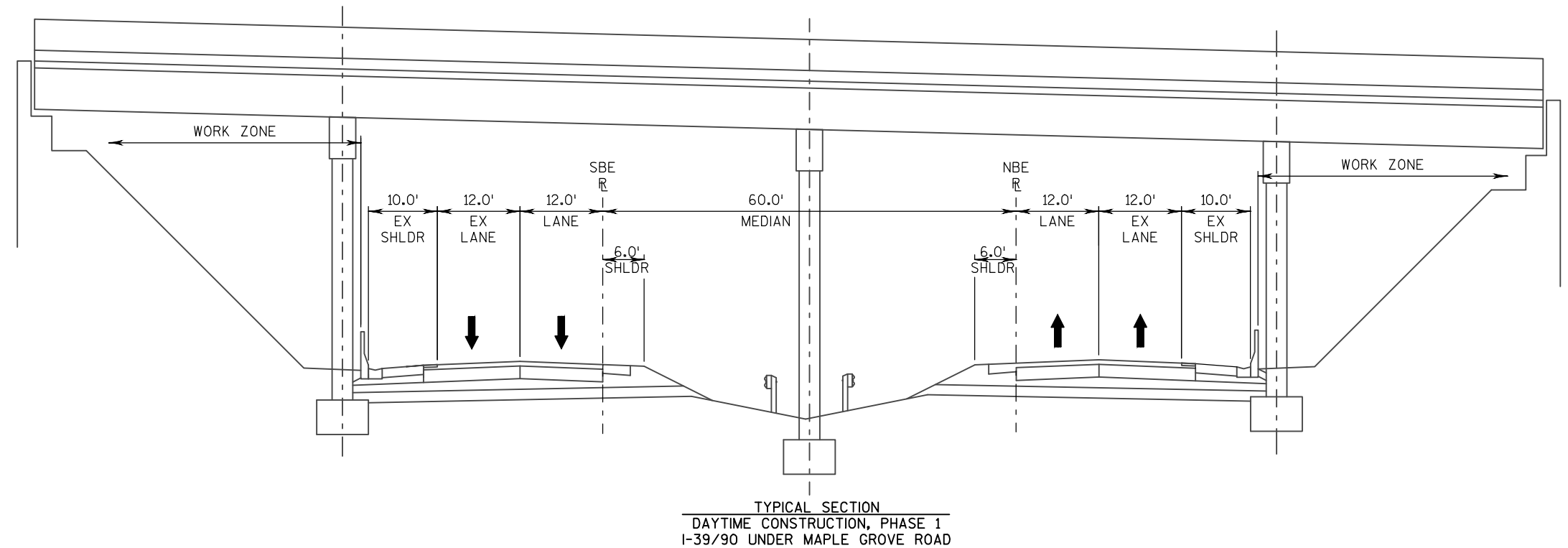
**PHASE 1 DAYTIME
MAINTENANCE OF TRAFFIC**

I-39/90 TRAFFIC TO REMAIN ON "DAYTIME
CONSTRUCTION, PHASE 1" CONFIGURATION DURING
DAYTIME HOURS.

MAPLE GROVE ROAD CLOSED WITHIN WORK ZONE.

**PHASE 1 DAYTIME
CONSTRUCTION TO BE COMPLETED**

NO CONSTRUCTION ACTIVITIES ARE ALLOWED THAT WILL IMPACT
I-39/90 TRAFFIC.



**PHASE 1 NIGHTTIME
MAINTENANCE OF TRAFFIC**

MERGE I-39/90 NB & SB TRAFFIC TO A SINGLE INSIDE LANE
DURING PERMITTED LANE CLOSURE TIMES.

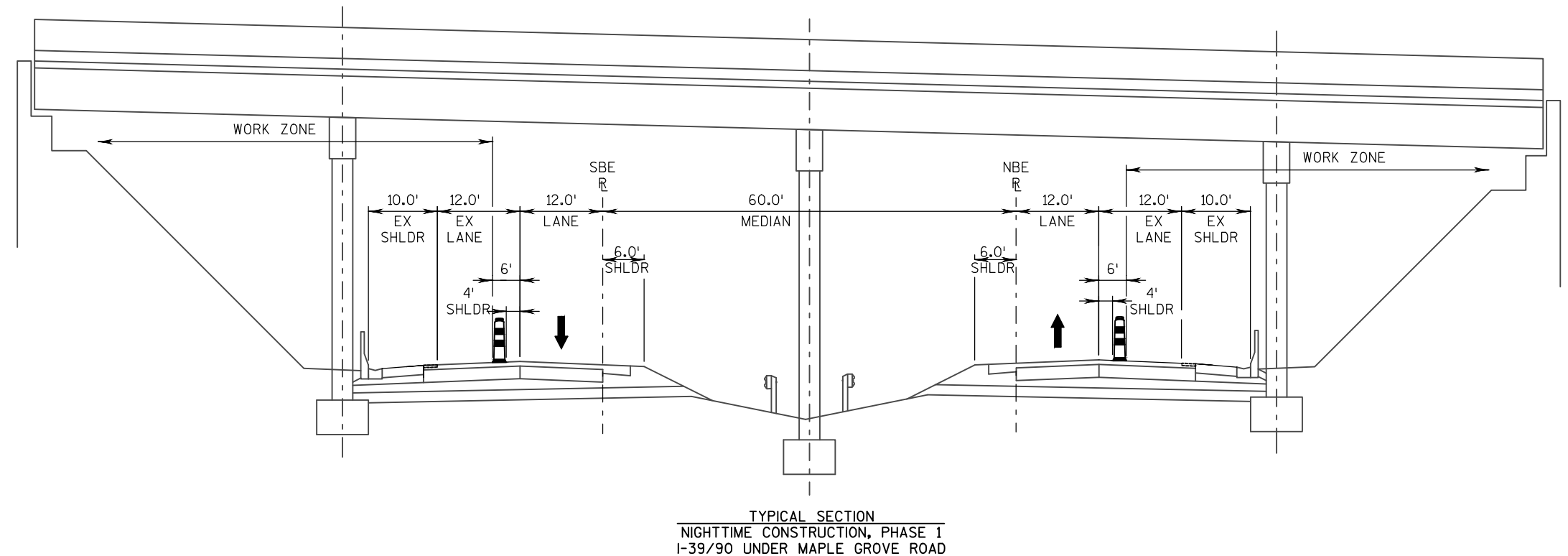
I-39/90 TRAFFIC TO BE ON "NIGHTTIME CONSTRUCTION, PHASE 1"
CONFIGURATION DURING PERMITTED LANE CLOSURE TIMES.

MAPLE GROVE ROAD CLOSED WITHIN WORK ZONE.

**PHASE 1 NIGHTTIME
CONSTRUCTION TO BE COMPLETED**

MILL & OVERLAY RUMBLE STRIPS ON I-39/90 NB & SB OUTSIDE
SHOULDERS DURING PERMITTED LANE CLOSURE TIMES.

WITHIN 2 FT OF TRAVEL LANE, EXISTING MILLED RUMBLE STRIP
SHALL BE REPLACED WITH NEW PAVEMENT OVERLAY IN THE
SAME NIGHT.



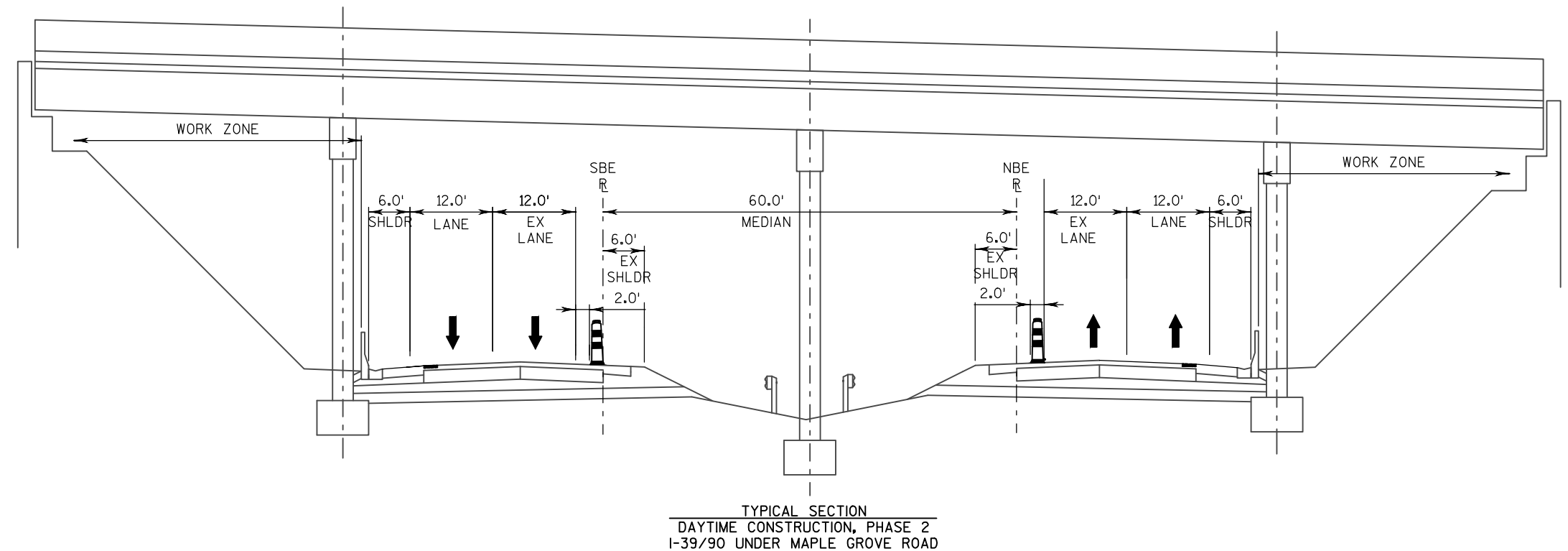
PHASE 2 DAYTIME MAINTENANCE OF TRAFFIC

I-39/90 TRAFFIC TO REMAIN ON "DAYTIME CONSTRUCTION, PHASE 2" CONFIGURATION DURING DAYTIME HOURS.

MAPLE GROVE ROAD CLOSED WITHIN WORK ZONE.

PHASE 2 DAYTIME CONSTRUCTION TO BE COMPLETED

NO CONSTRUCTION ACTIVITIES ARE ALLOWED THAT WILL IMPACT I-39/90 TRAFFIC.



PHASE 2 NIGHTTIME MAINTENANCE OF TRAFFIC

MERGE I-39/90 NB & SB TRAFFIC TO A SINGLE OUTSIDE LANE DURING PERMITTED LANE CLOSURE TIMES.

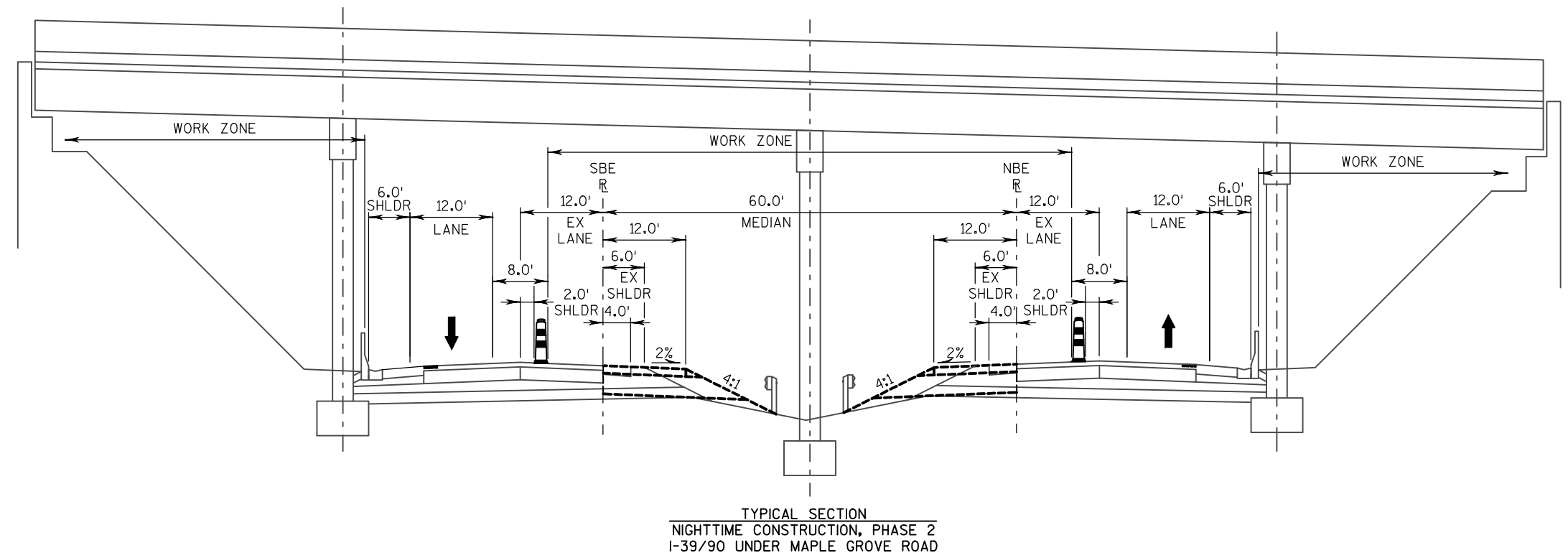
I-39/90 TRAFFIC TO BE ON "NIGHTTIME CONSTRUCTION, PHASE 2" CONFIGURATION DURING PERMITTED LANE CLOSURE TIMES.

MAPLE GROVE ROAD CLOSED WITHIN WORK ZONE.

PHASE 2 NIGHTTIME CONSTRUCTION TO BE COMPLETED

RECONSTRUCT I-39/90 NB & SB OUTSIDE SHOULDERS (12 FEET WIDE, 6.5 HMA TYPE 30 OVER 18" BAD 1 1/2" INCHES).

WITHIN 2 FT OF TRAVEL LANE, EXISTING SHOULDER SHALL BE REPLACED WITH NEW PAVEMENT IN THE SAME NIGHT. NO AGGREGATE SHOULDERS SHALL BE PERMITTED ADJACENT TO TRAVEL LANES.



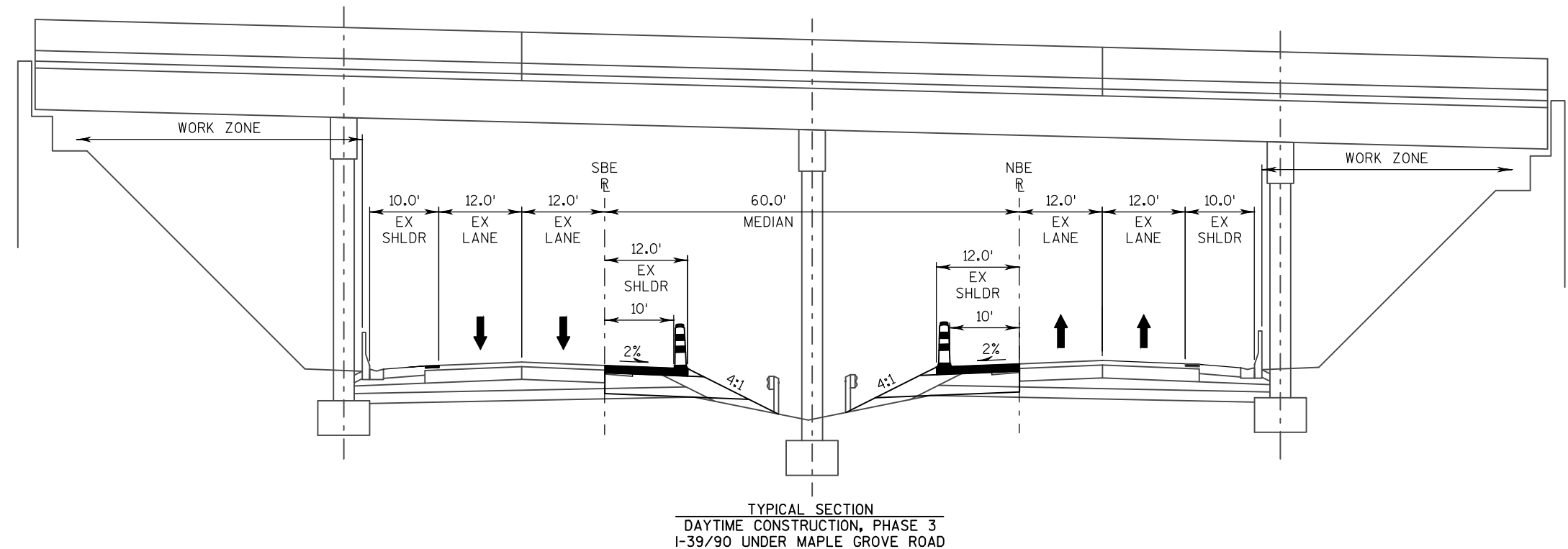
PHASE 3 DAYTIME MAINTENANCE OF TRAFFIC

I-39/90 TRAFFIC TO REMAIN ON "DAYTIME CONSTRUCTION, PHASE 3" CONFIGURATION DURING DAYTIME HOURS.

MAPLE GROVE ROAD CLOSED WITHIN WORK ZONE.

PHASE 3 DAYTIME CONSTRUCTION TO BE COMPLETED

NO CONSTRUCTION ACTIVITIES ARE ALLOWED THAT WILL IMPACT I-39/90 TRAFFIC.



PHASE 3 NIGHTTIME MAINTENANCE OF TRAFFIC

MERGE & SHIFT I-39/90 NB & SB TRAFFIC TO A SINGLE OUTSIDE LANE TO UTILIZE OUTSIDE SHOULDERS DURING PERMITTED LANE CLOSURE TIMES.

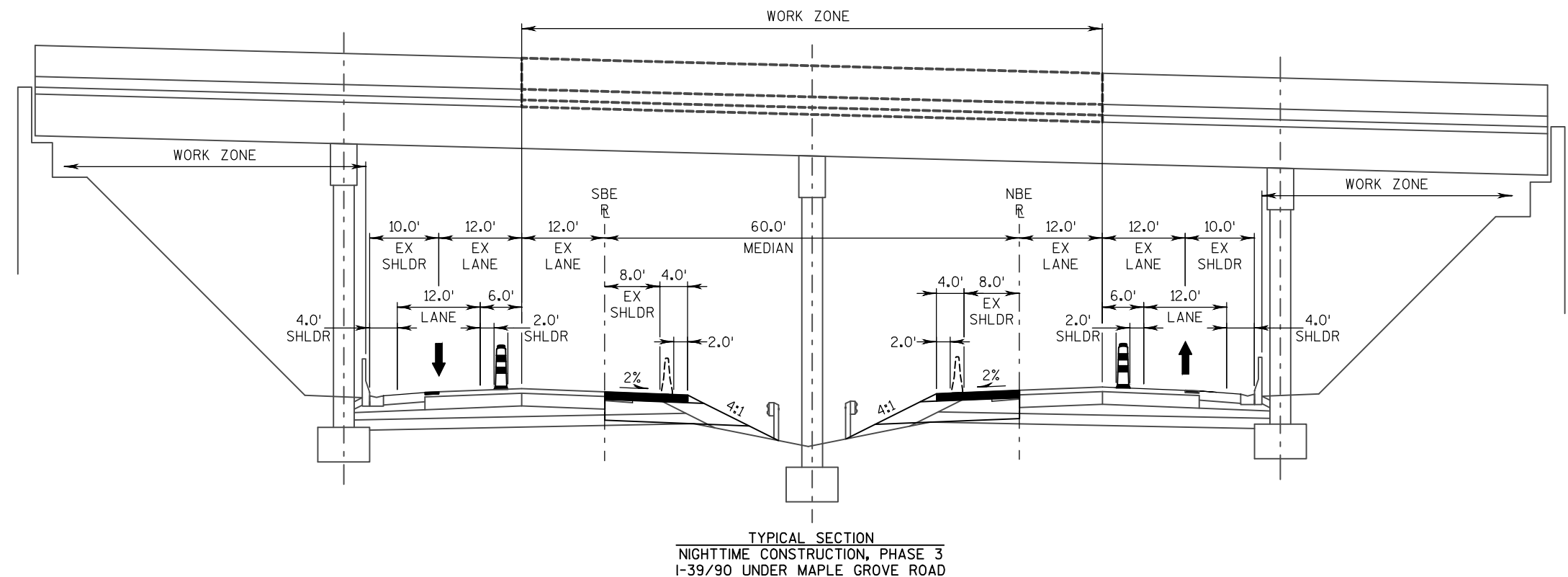
I-39/90 TRAFFIC TO BE ON "NIGHTTIME CONSTRUCTION, PHASE 3" CONFIGURATION DURING PERMITTED LANE CLOSURE TIMES.

MAPLE GROVE ROAD CLOSED WITHIN WORK ZONE.

PHASE 3 NIGHTTIME CONSTRUCTION TO BE COMPLETED

REMOVE EXISTING BRIDGE DECK & PARAPETS DURING PERMITTED LANE CLOSURE TIMES.

PLACE TEMPORARY BARRIER ON INSIDE SHOULDER AT END OF PHASE 3 PRIOR TO STARTING PHASE 4.



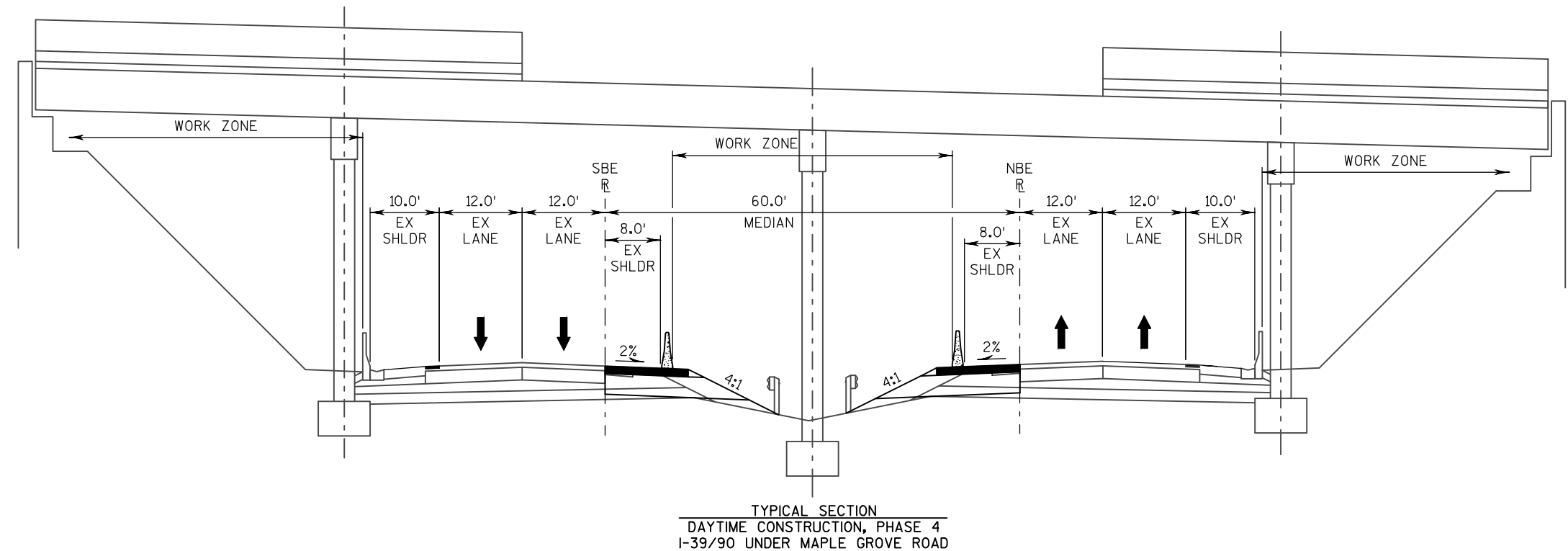
PHASE 4 DAYTIME MAINTENANCE OF TRAFFIC

I-39/90 TRAFFIC TO REMAIN ON "DAYTIME CONSTRUCTION, PHASE 4" CONFIGURATION DURING DAYTIME HOURS.

MAPLE GROVE ROAD CLOSED WITHIN WORK ZONE.

PHASE 4 DAYTIME CONSTRUCTION TO BE COMPLETED

NO CONSTRUCTION ACTIVITIES ARE ALLOWED THAT WILL IMPACT I-39/90 TRAFFIC



PHASE 4 NIGHTTIME MAINTENANCE OF TRAFFIC

MERGE & SHIFT I-39/90 NB & SB TRAFFIC TO A SINGLE INSIDE LANE TO UTILIZE INSIDE SHOULDERS DURING PERMITTED LANE CLOSURE TIMES.

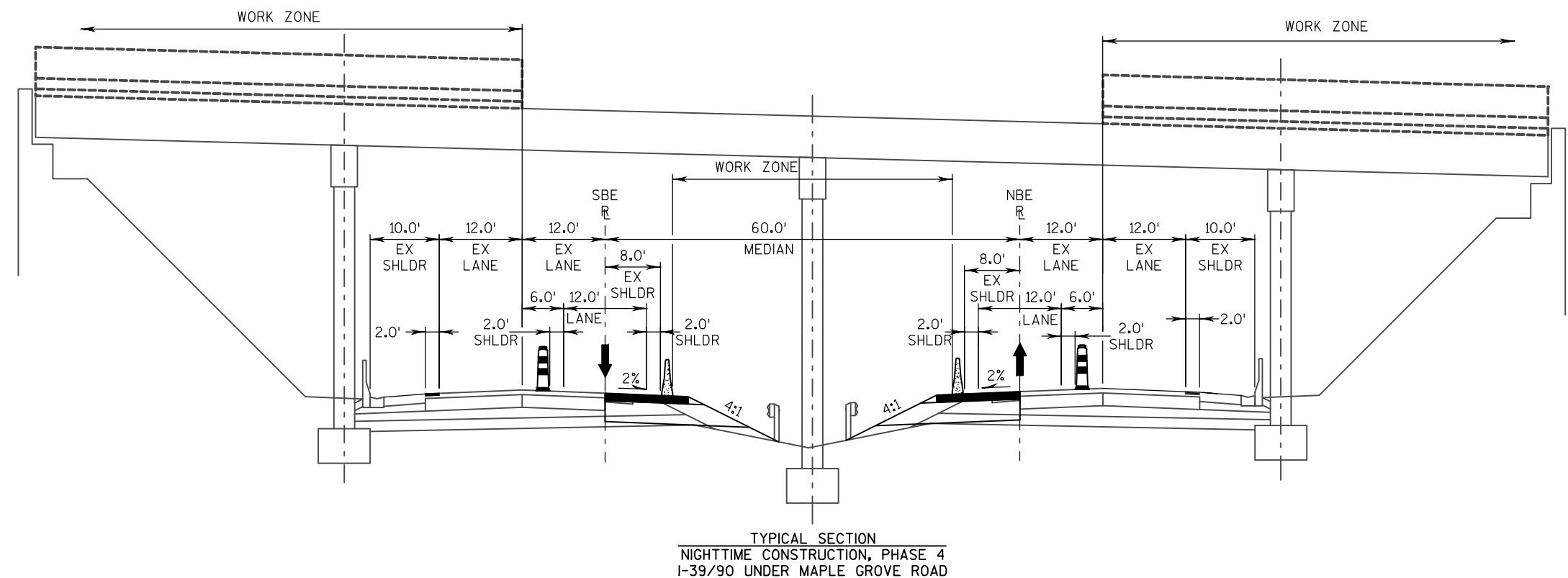
I-39/90 TRAFFIC TO BE ON "NIGHTTIME CONSTRUCTION, PHASE 4" CONFIGURATION DURING PERMITTED LANE CLOSURE TIMES.

MAPLE GROVE ROAD IS CLOSED WITHIN WORK ZONE.

PHASE 4 NIGHTTIME CONSTRUCTION TO BE COMPLETED

REMOVE EXISTING BRIDGE DECK & PARAPETS DURING PERMITTED LANE CLOSURE TIMES.

AT THE END OF STAGE 1, ADD TEMPORARY BARRIER TO THE SB OUTSIDE SHOULDER FOR THE START OF STAGE 2.



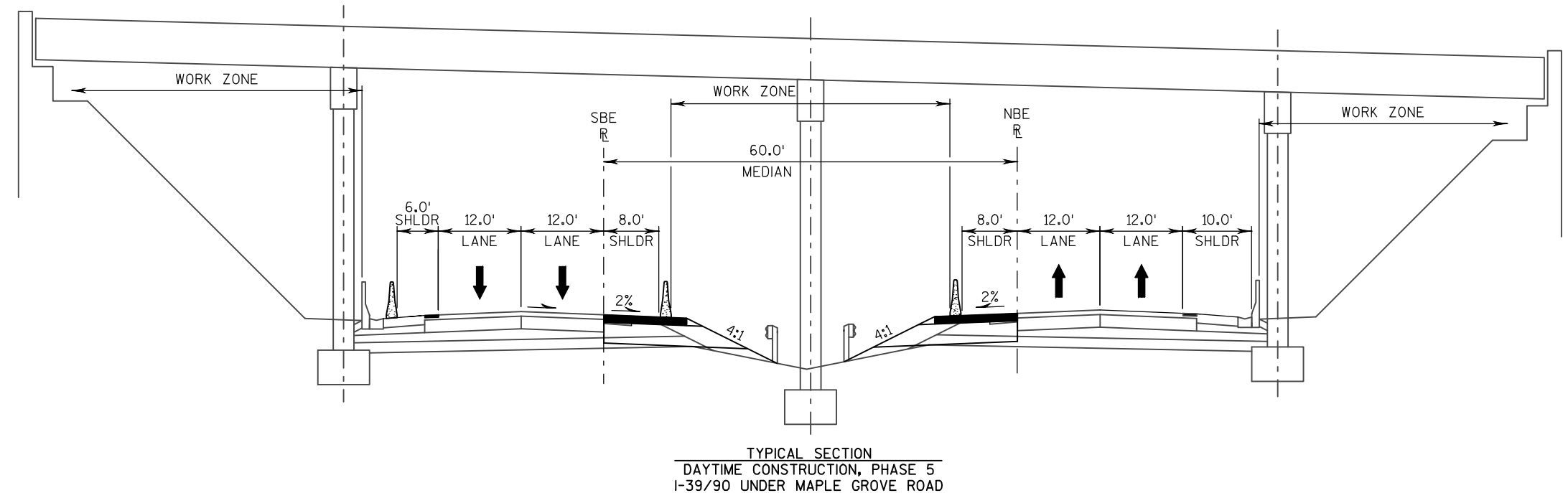
PHASE 5 DAYTIME MAINTENANCE OF TRAFFIC

I-39/90 TRAFFIC TO REMAIN ON "DAYTIME CONSTRUCTION, PHASE 5" CONFIGURATION DURING DAYTIME HOURS.

MAPLE GROVE ROAD CLOSED WITHIN WORK ZONE.

PHASE 5 DAYTIME CONSTRUCTION TO BE COMPLETED

NO CONSTRUCTION ACTIVITIES ARE ALLOWED THAT WILL IMPACT I-39/90 TRAFFIC.



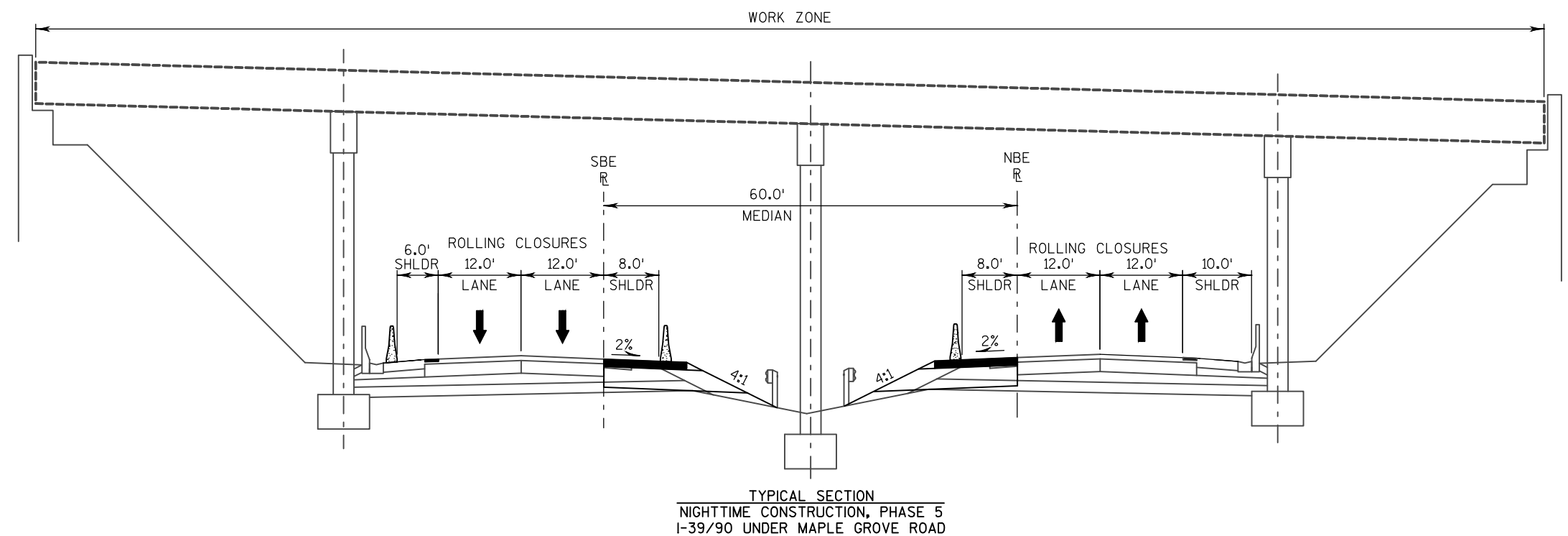
PHASE 5 NIGHTTIME MAINTENANCE OF TRAFFIC

I-39/90 TRAFFIC TO BE ON "NIGHTTIME CONSTRUCTION, PHASE 5" CONFIGURATION DURING NIGHTTIME HOURS.

MAPLE GROVE ROAD CLOSED WITHIN WORK ZONE.

PHASE 5 NIGHTTIME CONSTRUCTION TO BE COMPLETED

REMOVE EXISTING BRIDGE GIRDERS DURING NIGHTTIME HOURS USING ROLLING CLOSURES DURING NIGHTTIME HOURS, 11PM-5AM MONDAY THRU THURSDAY.



PHASE 6 MAINTENANCE OF TRAFFIC

I-39/90 TRAFFIC TO BE ON "CONSTRUCTION PHASE 6"
CONFIGURATION DURING ALL TIMES.

MAPLE GROVE ROAD CLOSED WITHIN WORK ZONE.

PHASE 6 CONSTRUCTION TO BE COMPLETED

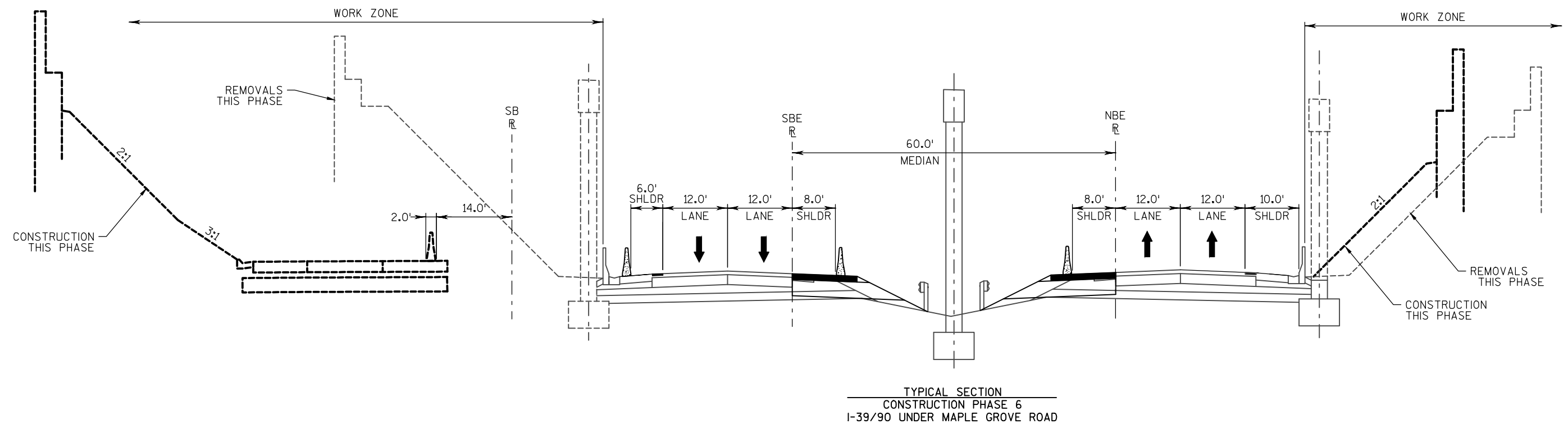
REMOVE EXISTING EAST AND WEST BRIDGE PIER COLUMNS/CAP.

REMOVE EXISTING FILL BETWEEN EXISTING & PROPOSED WEST BRIDGE
ABUTMENTS.

CONSTRUCT PROPOSED EAST & WEST BRIDGE ABUTMENTS.

CONSTRUCT I-39/90 SB PROPOSED ROADWAY (THREE OF FIVE PANELS).

PLACE TEMPORARY BARRIER ON NEW I-39/90 SB ROADWAY.



PHASE 7 MAINTENANCE OF TRAFFIC

I-39/90 TRAFFIC TO BE ON "CONSTRUCTION, PHASE 7" CONFIGURATION DURING ALL HOURS.

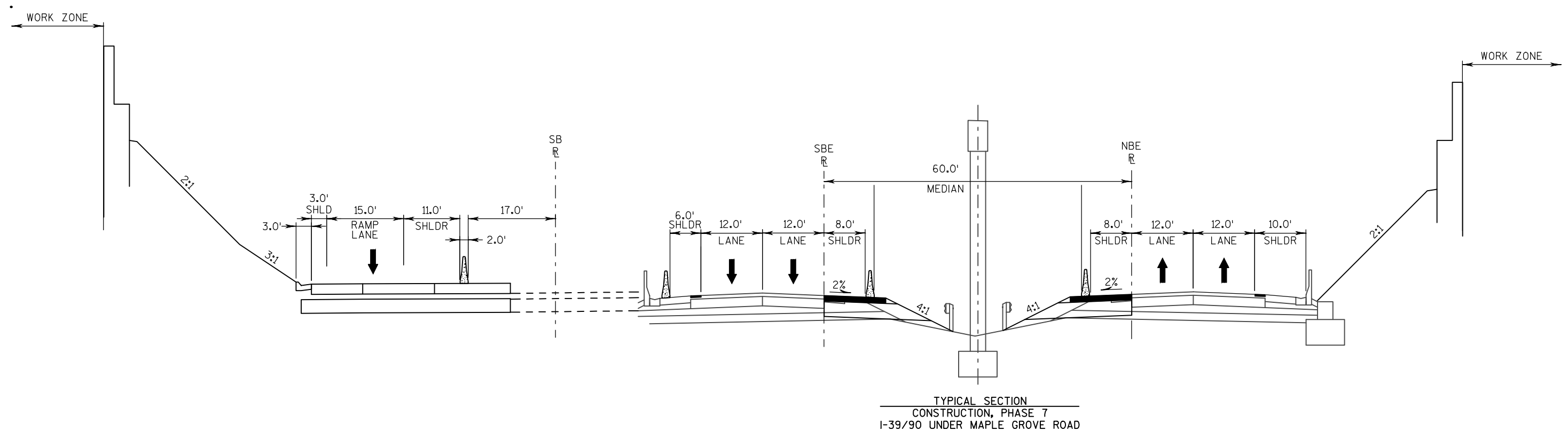
USH 51 SB ENTRANCE RAMP TRAFFIC IS ON A SINGLE LANE OF NEWLY BUILT I-39/90 SB PAVEMENT DURING PHASE 7.

MAPLE GROVE ROAD IS CLOSED WITHIN WORK ZONE.

PHASE 7 CONSTRUCTION TO BE COMPLETED

CONTINUE WORK ON AND MAPLE GROVE ROAD.

DO NOT CONSTRUCT B-13-706 DURING PHASE 7.



PHASE 8 MAINTENANCE OF TRAFFIC

I-39/90 TRAFFIC TO BE ON "CONSTRUCTION, PHASE 8" CONFIGURATION AT ALL TIMES.

US 51 SB ENTRANCE RAMP HAS MERGED INTO THE NEWLY BUILT I-39/90 LANES.

MAPLE GROVE ROAD IS CLOSED WITHIN WORK ZONE.

PHASE 8 CONSTRUCTION TO BE COMPLETED

REMOVE EXISTING BEAM GUARD & BULLNOSES IN MEDIAN.

REMOVE EXISTING MEDIAN BRIDGE PIER COLUMNS/CAP.

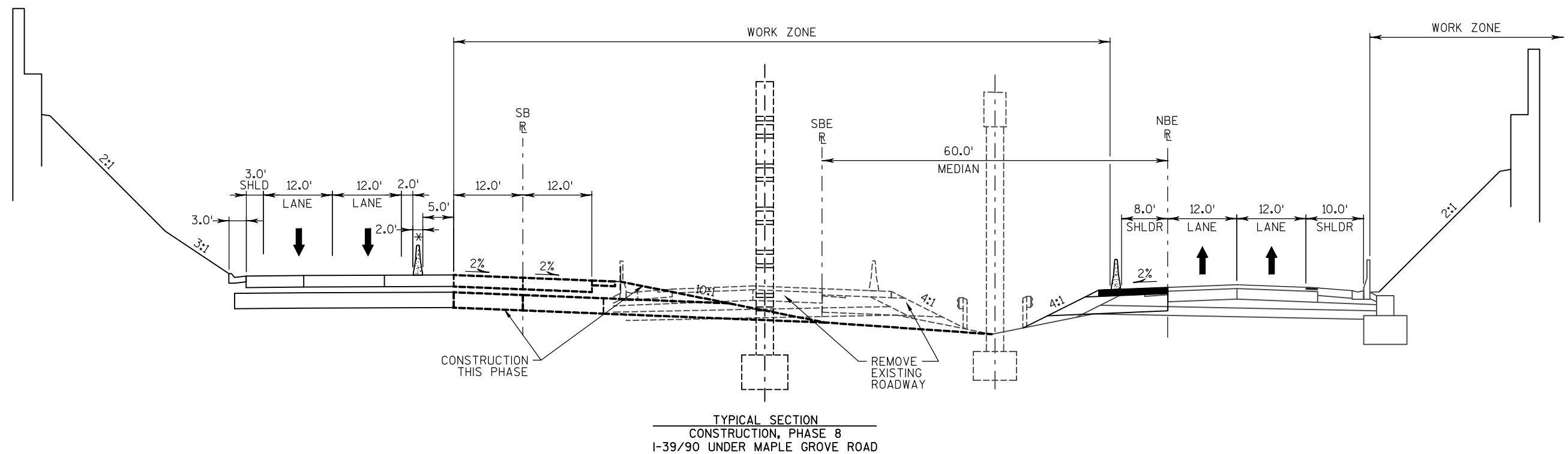
REMOVE EXISTING I-39/90 SB ROADWAY STRUCTURE.

CONSTRUCT PROPOSED BRIDGE PIER COLUMNS/CAP IN MEDIAN.

CONSTRUCT REMAINDER OF PROPOSED I-39/90 SB ROADWAY STRUCTURE & TEMPORARY INSIDE SHOULDER WIDENING.

GRADE MEDIAN TO MAINTAIN EXISTING DITCH FLOWLINE.

* AT THE END OF PHASE 8, MOVE TEMPORARY BARRIER TO OFFSET SHOWN IN PHASE 9.



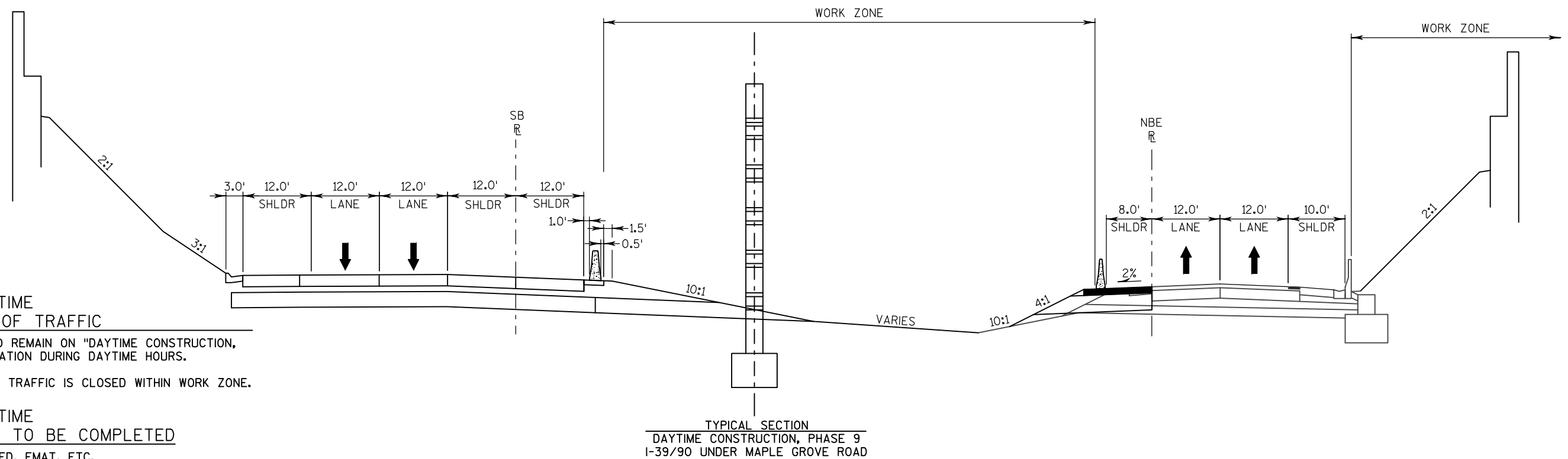
PHASE 9 DAYTIME MAINTENANCE OF TRAFFIC

I-39/90 TRAFFIC TO REMAIN ON "DAYTIME CONSTRUCTION, PHASE 9" CONFIGURATION DURING DAYTIME HOURS.

MAPLE GROVE ROAD TRAFFIC IS CLOSED WITHIN WORK ZONE.

PHASE 9 DAYTIME CONSTRUCTION TO BE COMPLETED

FINISHING ITEMS, SEED, EMAT, ETC.



PHASE 9 NIGHTTIME MAINTENANCE OF TRAFFIC

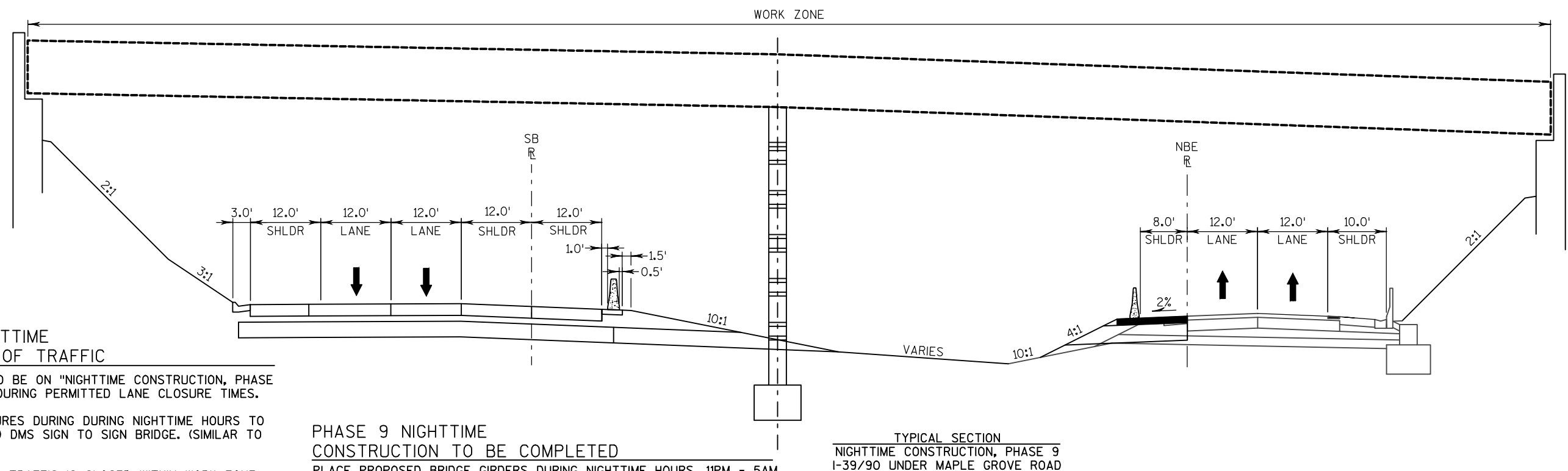
I-39/90 TRAFFIC TO BE ON "NIGHTTIME CONSTRUCTION, PHASE 9" CONFIGURATION DURING PERMITTED LANE CLOSURE TIMES.

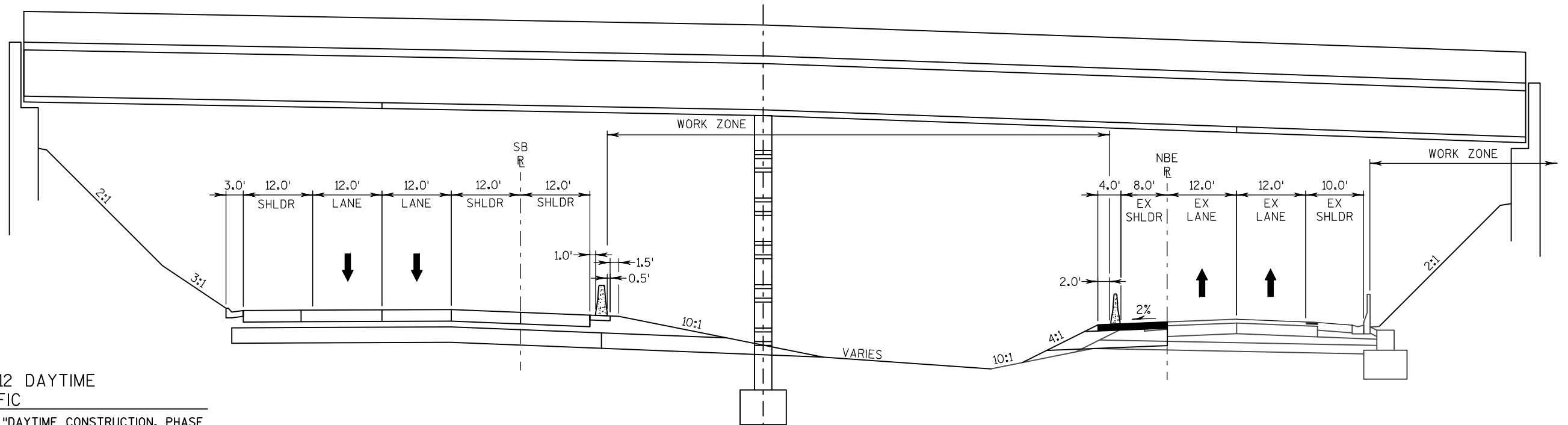
USE ROLLING CLOSURES DURING NIGHTTIME HOURS TO PLACE GIRDERS AND DMS SIGN TO SIGN BRIDGE. (SIMILAR TO PHASE 5)

MAPLE GROVE ROAD TRAFFIC IS CLOSED WITHIN WORK ZONE.

PHASE 9 NIGHTTIME CONSTRUCTION TO BE COMPLETED

PLACE PROPOSED BRIDGE GIRDERS DURING NIGHTTIME HOURS, 11PM - 5AM, MONDAY THROUGH THURSDAY.



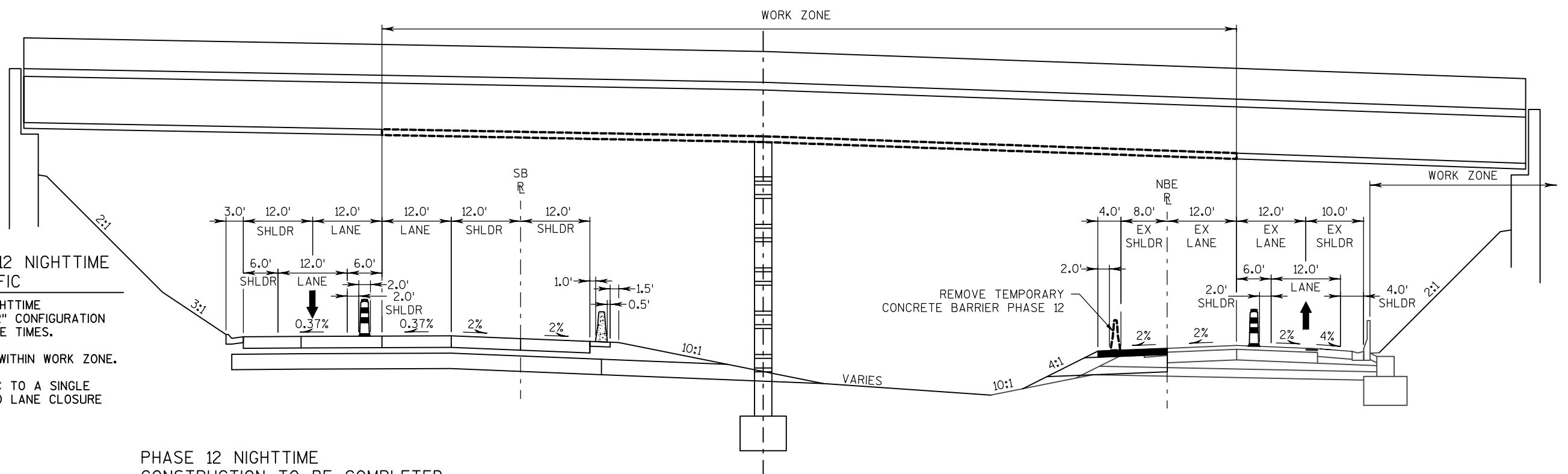


PHASE 10 AND PHASE 12 DAYTIME MAINTENANCE OF TRAFFIC

I-39/90 TRAFFIC TO REMAIN ON "DAYTIME CONSTRUCTION, PHASE 10" CONFIGURATION DURING DAYTIME HOURS.

MAPLE GROVE ROAD IS CLOSED TO TRAFFIC WITHIN WORK ZONE.

TYPICAL SECTION
DAYTIME CONSTRUCTION, PHASE 10 AND PHASE 12
I-39/90 UNDER MAPLE GROVE ROAD



PHASE 10 AND PHASE 12 NIGHTTIME MAINTENANCE OF TRAFFIC

I-39/90 TRAFFIC TO BE ON "NIGHTTIME CONSTRUCTION, PHASE 10 AND 12" CONFIGURATION DURING PERMITTED LANE CLOSURE TIMES.

MAPLE GROVE ROAD IS CLOSED WITHIN WORK ZONE.

MERGE & SHIFT I-39/90 TRAFFIC TO A SINGLE OUTSIDE LANE DURING PERMITTED LANE CLOSURE TIMES.

PHASE 10 NIGHTTIME CONSTRUCTION TO BE COMPLETED

PLACE FALSEWORK FOR NEW BRIDGE DURING PERMITTED LANE CLOSURE TIMES.

PHASE 12 NIGHTTIME CONSTRUCTION TO BE COMPLETED

REMOVE FALSEWORK FOR NEW BRIDGE DURING PERMITTED LANE CLOSURE TIMES.

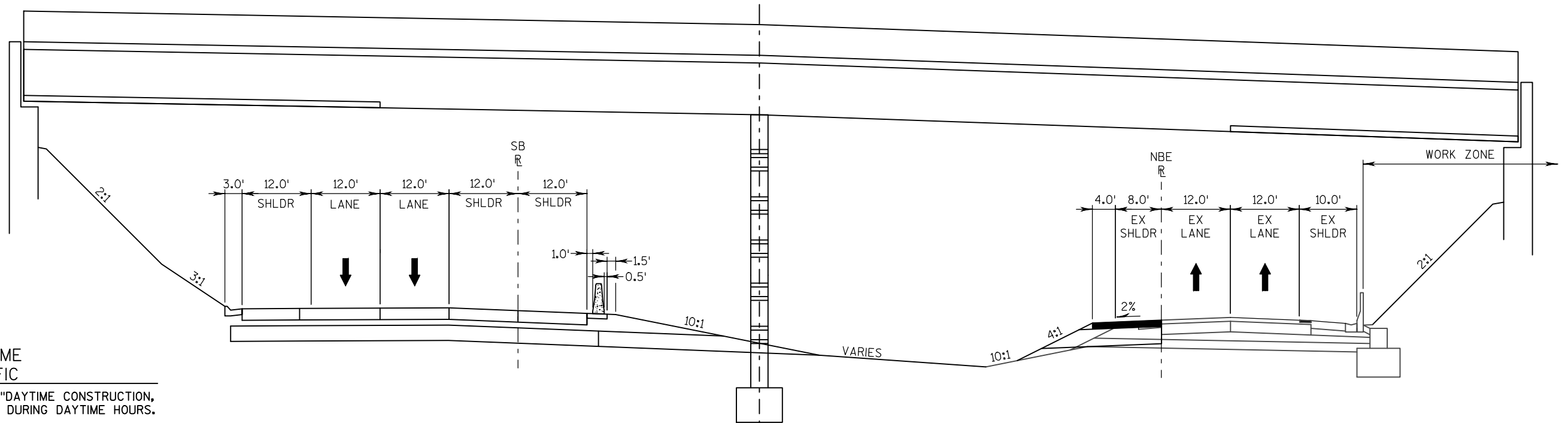
REMOVE TEMPORARY BARRIER ON EXISTING I-39/90 NB INSIDE SHOULDER.

TYPICAL SECTION
NIGHTTIME CONSTRUCTION, PHASE 10 AND PHASE 12
I-39/90 UNDER MAPLE GROVE ROAD

**PHASE 11 AND 13 DAYTIME
MAINTENANCE OF TRAFFIC**

I-39/90 TRAFFIC TO REMAIN ON "DAYTIME CONSTRUCTION,
PHASE 11 AND 13" CONFIGURATION DURING DAYTIME HOURS.

CLOSE ALL TRAFFIC ON MAPLE GROVE ROAD WITHIN WORK
ZONE.



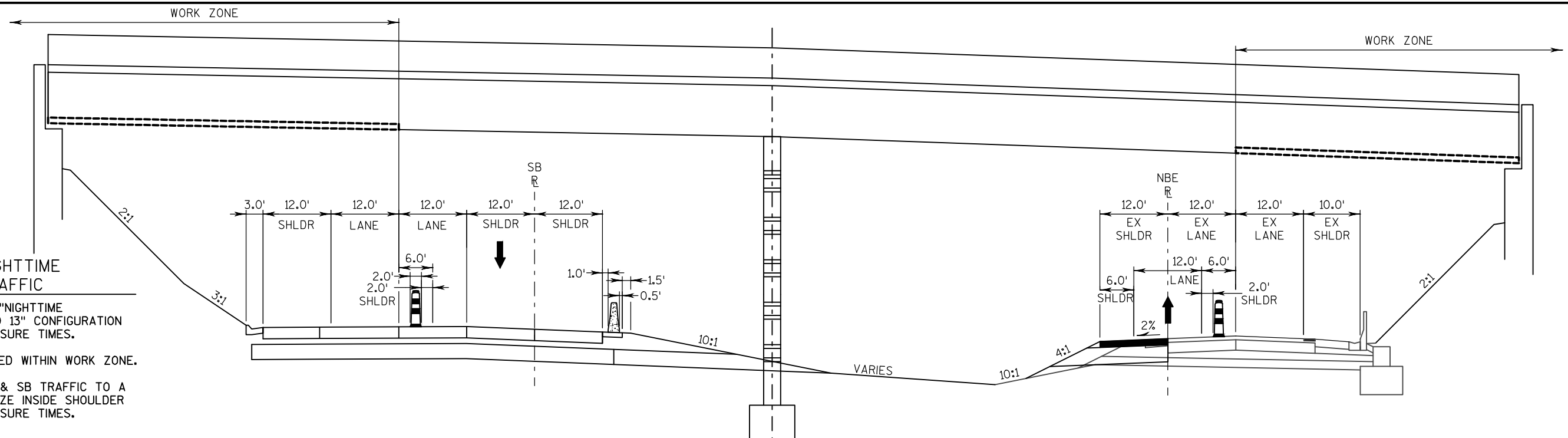
TYPICAL SECTION
DAYTIME CONSTRUCTION, PHASE 11 AND 13
I-39/90 UNDER MAPLE GROVE ROAD

**PHASE 11 AND 13 NIGHTTIME
MAINTENANCE OF TRAFFIC**

I-39/90 TRAFFIC TO BE ON "NIGHTTIME
CONSTRUCTION, PHASE 11 AND 13" CONFIGURATION
DURING PERMITTED LANE CLOSURE TIMES.

MAPLE GROVE ROAD IS CLOSED WITHIN WORK ZONE.

MERGE & SHIFT I-39/90 NB & SB TRAFFIC TO A
SINGLE INSIDE LANE TO UTILIZE INSIDE SHOULDER
DURING PERMITTED LANE CLOSURE TIMES.



TYPICAL SECTION
NIGHTTIME CONSTRUCTION, PHASE 11 AND 13
I-39/90 UNDER MAPLE GROVE ROAD

**PHASE 11 NIGHTTIME
CONSTRUCTION TO BE COMPLETED**

PLACE REMAINDER OF FALSEWORK FOR NEW BRIDGE DECK
DURING PERMITTED LANE CLOSURE TIMES.

**PHASE 13 NIGHTTIME
CONSTRUCTION TO BE COMPLETED**

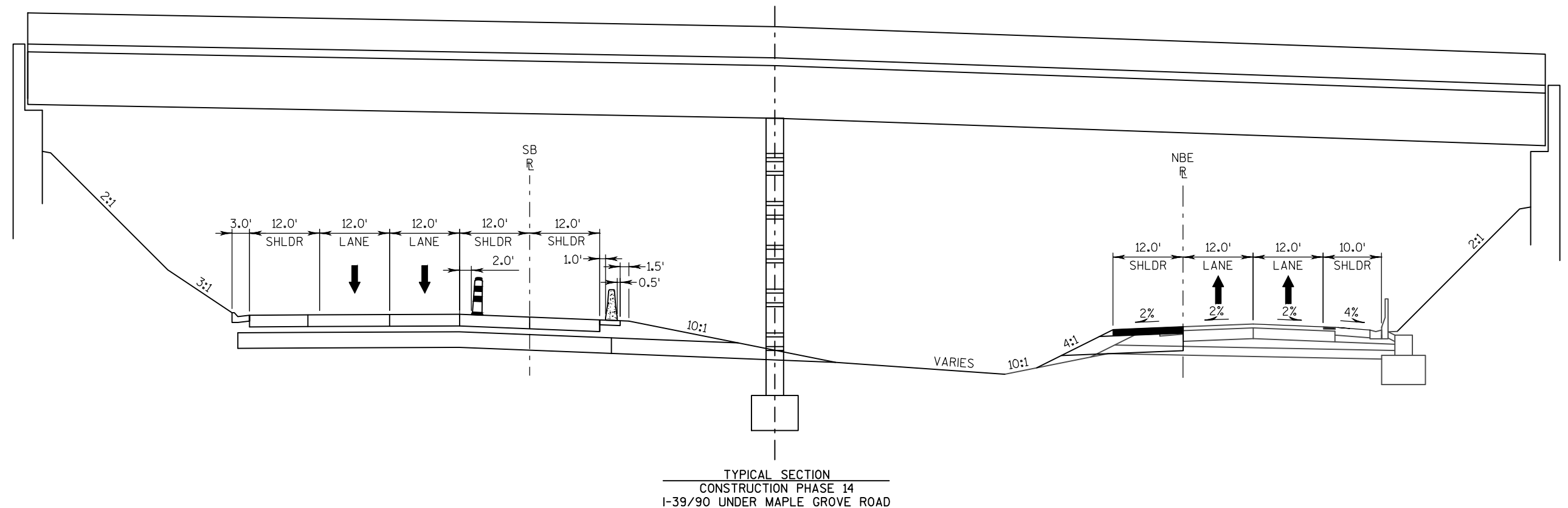
REMOVE REMAINDER OF FALSEWORK FOR NEW BRIDGE DECK
DURING PERMITTED LANE CLOSURE TIMES.

PHASE 14 MAINTENANCE OF TRAFFIC

I-39/90 TRAFFIC TO REMAIN ON "CONSTRUCTION PHASE 12" CONFIGURATION DURING ALL HOURS.

REOPEN TRAFFIC ON MAPLE GROVE ROAD.

TEMPORARY BARRIER ON I-39/90 SB ROADWAY (MEDIAN) TO REMAIN IN PLACE AT END OF CONSTRUCTION CONTRACT



GENERAL NOTES

THIS LANE CLOSURE IS TYPICAL FOR CLOSING THE INSIDE WESTBOUND LANE IN PHASE 2A AND STAGE 3. REVERSE FOR CLOSING THE OUTSIDE LANE IN PHASE 2B & 2C.
CLOSE THE WESTBOUND LANE BY PLACING DRUM SHIFTING TAPER AS NEEDED TO CLOSE SECOND LANE AT THE WESTBOUND GORE.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

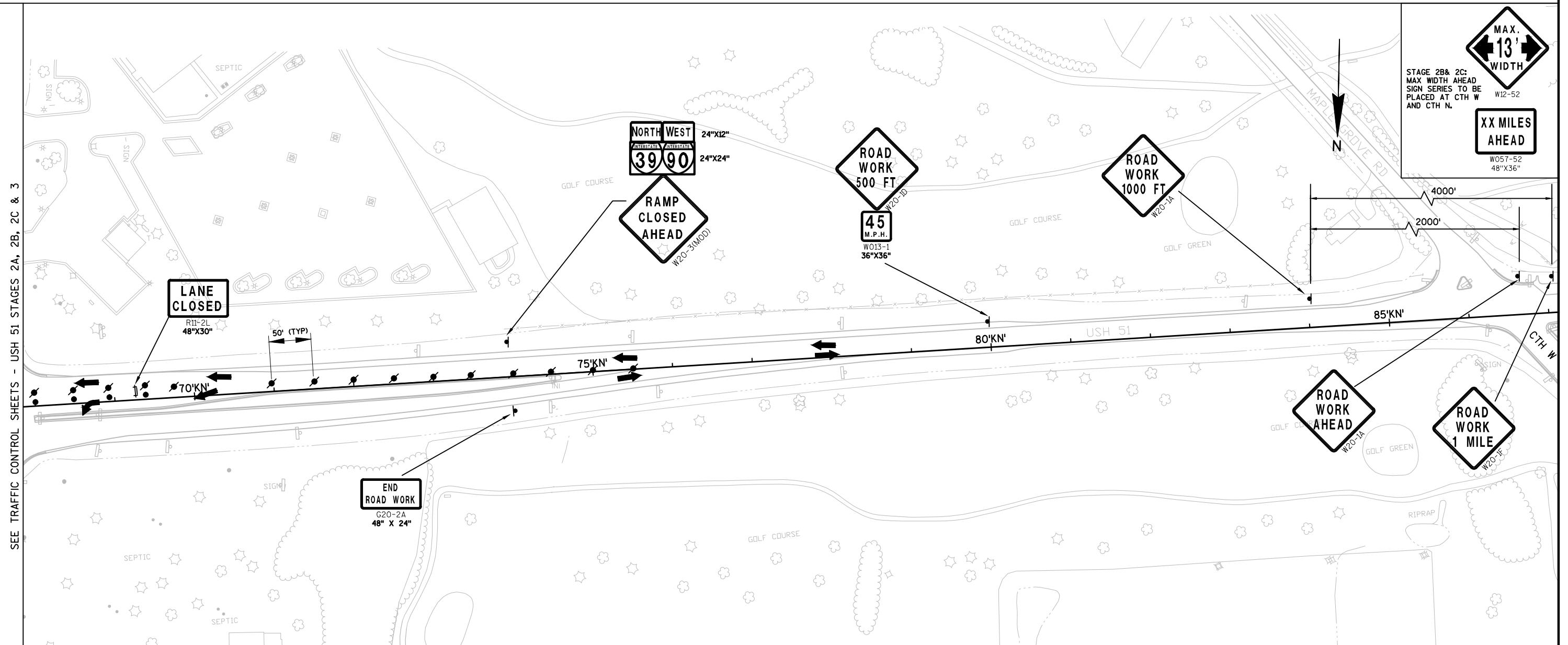
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

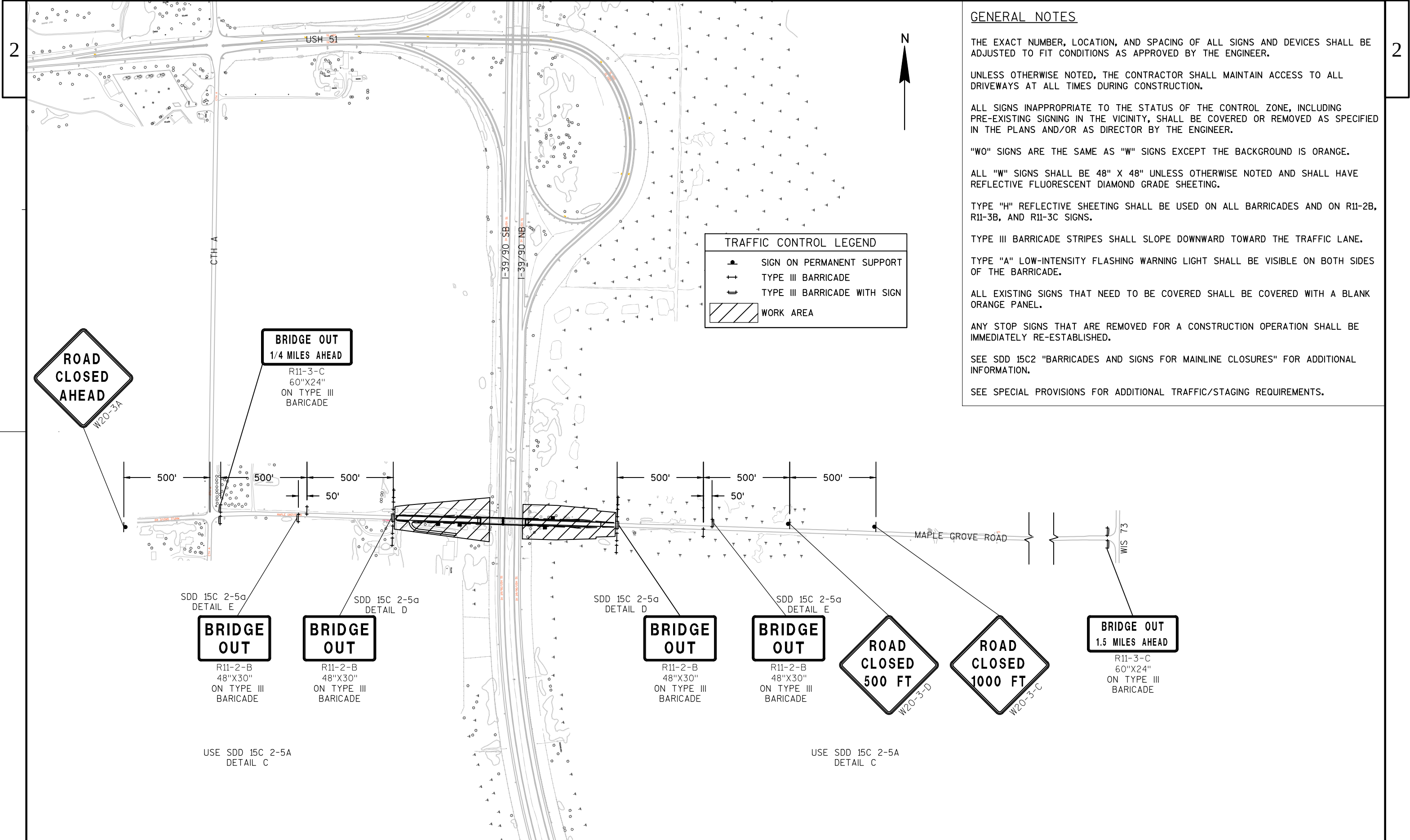
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

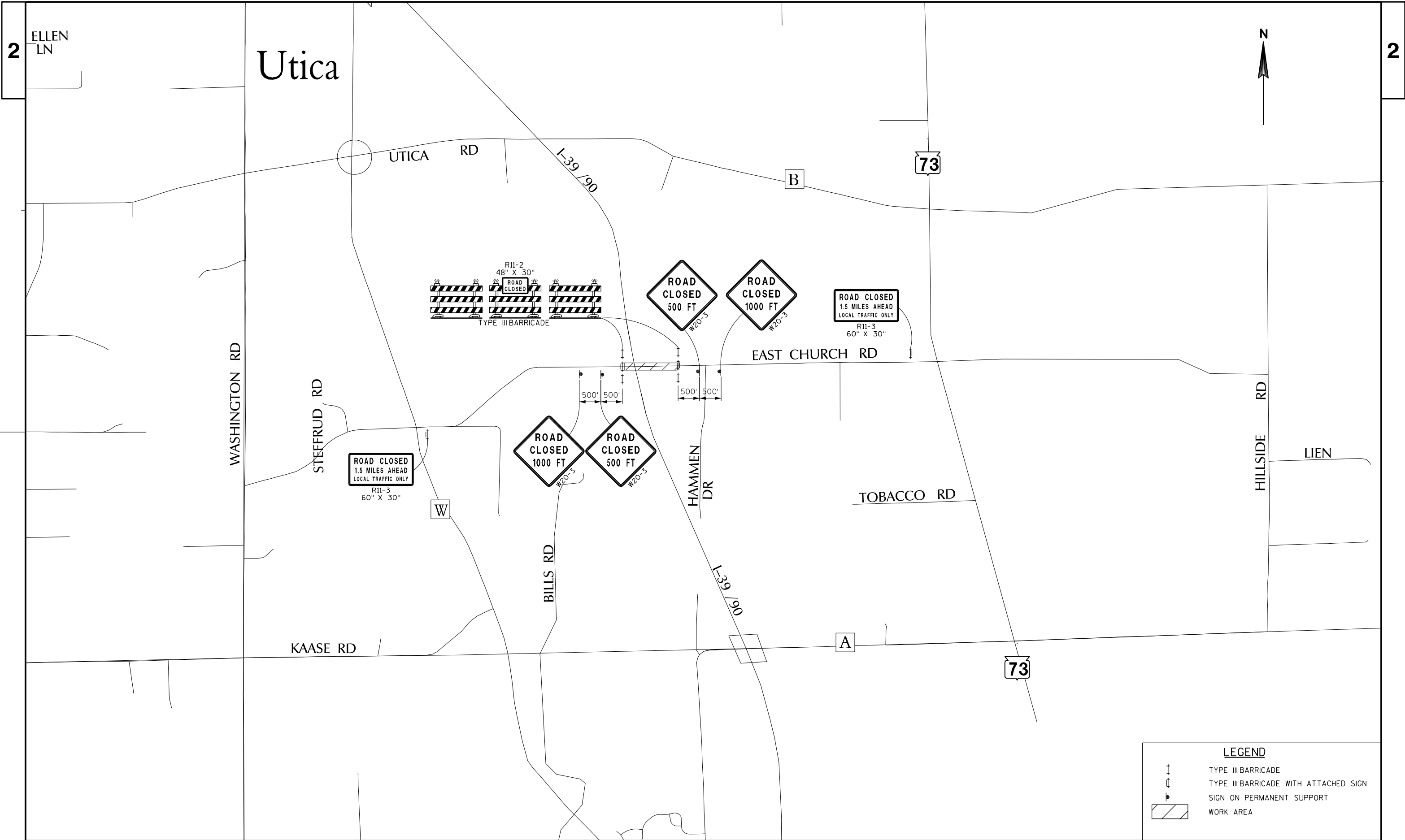
LEGEND

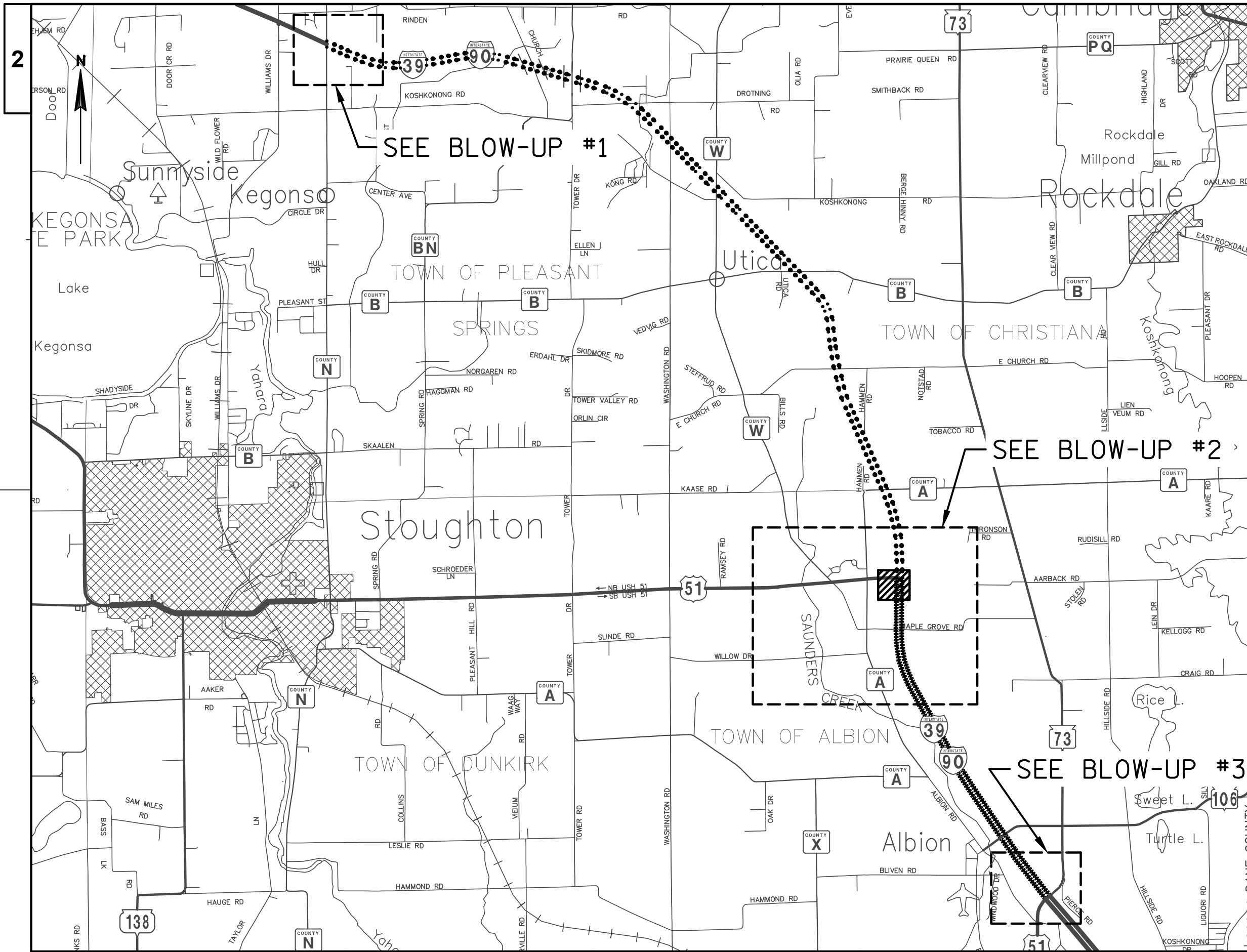
- SIGN ON PERMANENT SUPPORT
- ┼ SIGN ON TEMPORARY SUPPORT
- ➔ DIRECTION OF TRAFFIC
- ⊥/⊥ TYPE III BARRICADE/WITH ATTACHED SIGN
- /● TRAFFIC CONTROL DRUM/WITH TYPE C STEADY BURN LIGHT



TRAFFIC CONTROL - USH 51 WEST APPROACH LANE CLOSURE AND SPEED REDUCTION







DETOUR GENERAL NOTES

THE EXACT LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE TRAFFIC CONTROL PLAN, INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.

ALL "W" AND "WO" SIGNS SHALL BE 48"X48" UNLESS OTHERWISE NOTED AND SHALL HAVE REFLECTIVE FLORESCENT DIAMOND GRADE SHEETING.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE.

ALL M3 SERIES SIGNS (NORTH, EAST, SOUTH, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKER SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND.

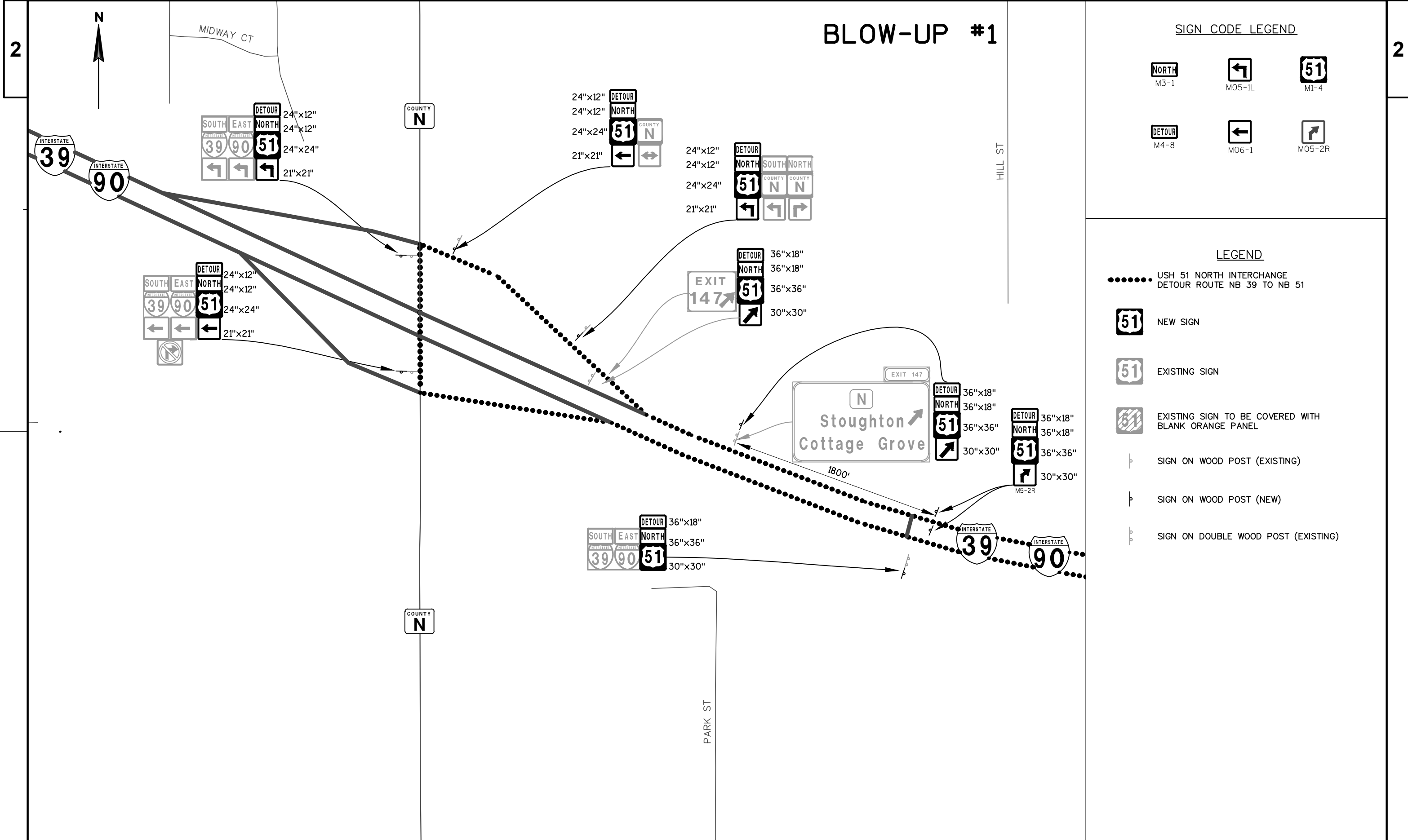
ALL M05 AND M06 ARROW SIGNS SHALL BE THE SAME AS "M" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE.

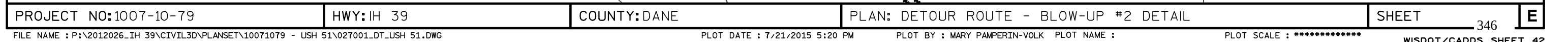
SIGNS SHALL BE PLACED A MINIMUM OF 10 CALENDAR DAYS PRIOR TO CONSTRUCTION AND COVERED UNTIL NEEDED. COVERED SIGNS IS INCIDENTAL TO ITEM DETOUR SIGNS PAID AS COVERING SIGNS TYPE 1/TYPE 2.

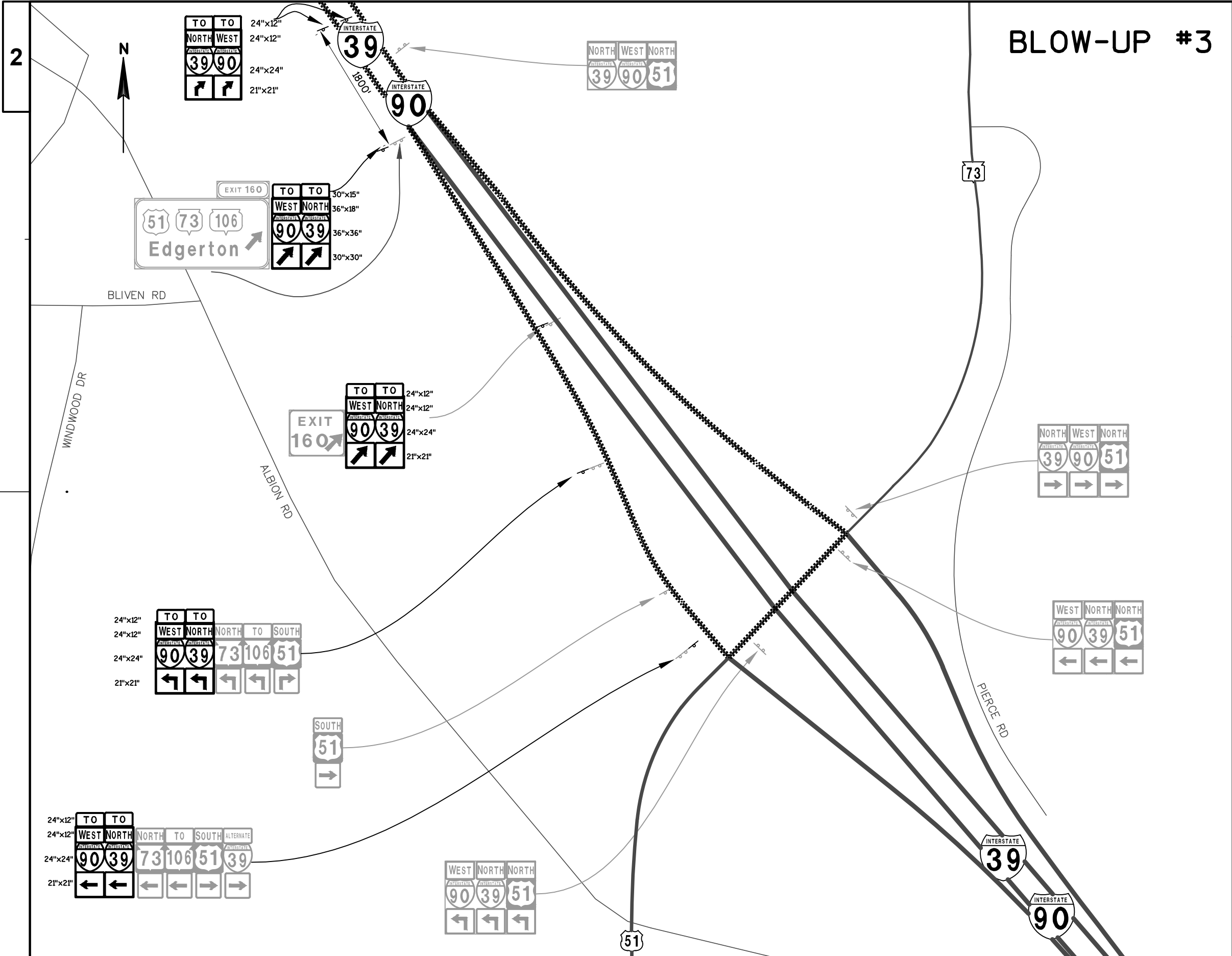
PCMS SHALL BE IN PLACE A MINIMUM OF 10 DAYS PRIOR TO CONSTRUCTION. CONTACT SW REGION TRAFFIC TEAM LEADER FOR MESSAGES.

LEGEND

- USH 51 NORTH INTERCHANGE DETOUR ROUTE NB 39 TO NB 51
- USH 51 NORTH INTERCHANGE DETOUR ROUTE SB 51 TO NB 39
- ▨▨▨▨▨▨▨▨ WORK AREA







BLOW-UP #3

SIGN CODE LEGEND

 M3-1	 M05-1L	 M1-51
 M3-4	 M06-1	 M1-51
 M4-8	 M06-2	
 M04-5		

LEGEND

-  USH 51 NORTH INTERCHANGE
DETOUR ROUTE SB 39 TO NB 39
-  NEW SIGN
-  EXISTING SIGN
-  EXISTING SIGN TO BE COVERED WITH
BLANK ORANGE PANEL
-  SIGN ON WOOD POST (EXISTING)
-  SIGN ON WOOD POST (NEW)
-  SIGN ON DOUBLE WOOD POST (EXISTING)

CURVE TSB6

PI STA = 1699+73.65'TSB'
Y = 416629.85
X = 904282.78
DELTA = 5°32'00"
D = 0°15'00"
T = 1107.53
L = 2213.33
R = 22918.32
PC STA = 1688+66.13'TSB'
PT STA = 1710+79.46'TSB'
SE = NC

CURVE TSB7

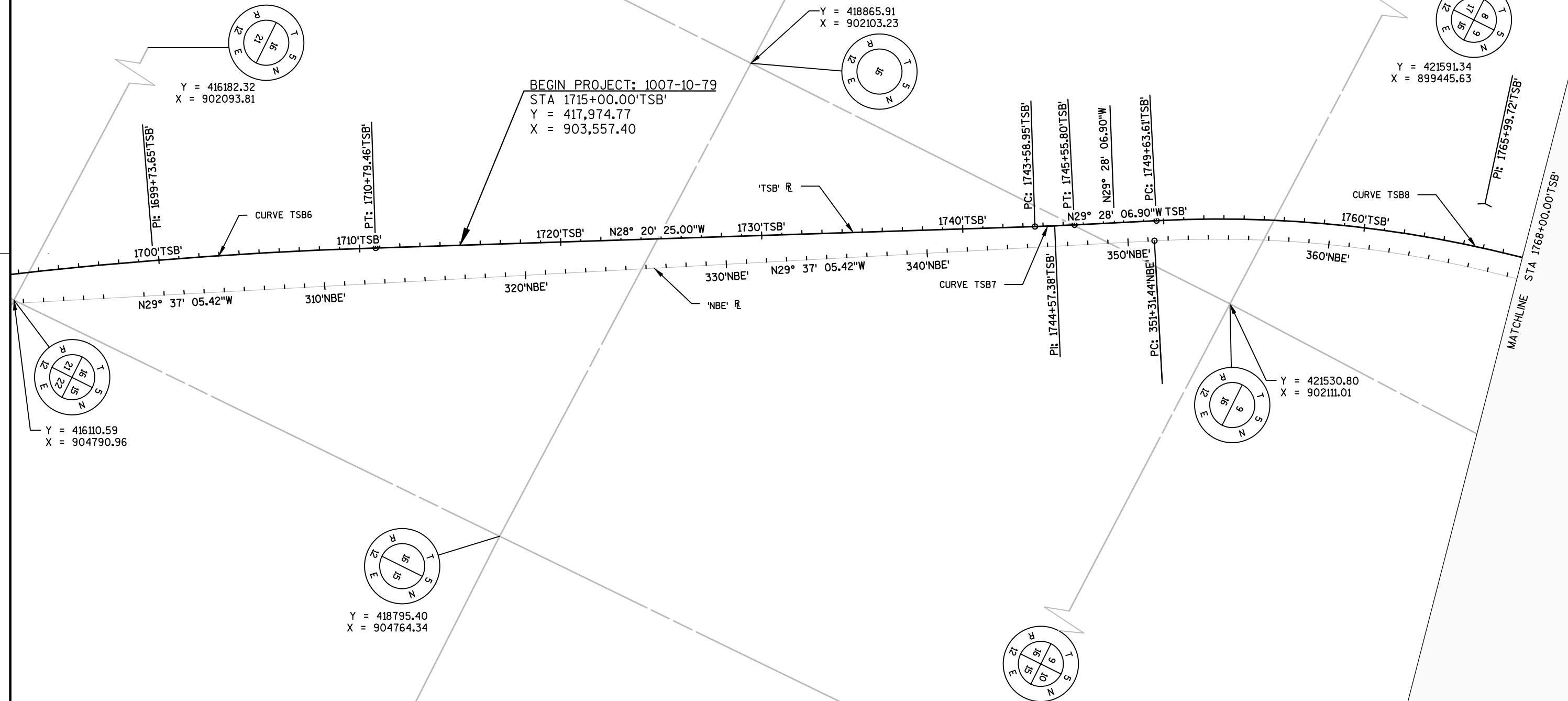
PI STA = 1744+57.38'TSB'
Y = 420577.68
X = 902153.51
DELTA = 1°07'42"
D = 0°34'23"
T = 98.43
L = 196.85
R = 9996.21
PC STA = 1743+58.95'TSB'
PT STA = 1745+55.80'TSB'
SE = NC

CURVE TSB8

PI STA = 1765+99.72'TSB'
Y = 422442.87
X = 901099.59
DELTA = 30°21'57"
D = 0°57'01"
T = 1636.11
L = 3195.27
R = 6029.00
PC STA = 1749+63.61'TSB'
PT STA = 1781+58.88'TSB'
SE = 3.30%

BEGIN PROJECT: 1007-10-79

STA 1715+00.00'TSB'
Y = 417,974.77
X = 903,557.40



CURVE SB5

PI STA = 1766+85.82'SB'
Y = 422495.38
X = 901115.41
DELTA = 29°30'00"
D = 0°57'10"
T = 1583.35
L = 3096.44
R = 6014.00
PC STA = 1751+02.47'SB'
PT STA = 1781+46.44'SB'
SE = 3.20%

CURVE SB6

PI STA = 1840+87.66'SB'
Y = 430019.04
X = 901233.24
DELTA = 24°05'00"
D = 0°33'03"
T = 2218.49
L = 4371.47
R = 10400.00
PC STA = 1818+69.17'SB'
PT STA = 1862+92.04'SB'
SE = RC

CURVE TSB8

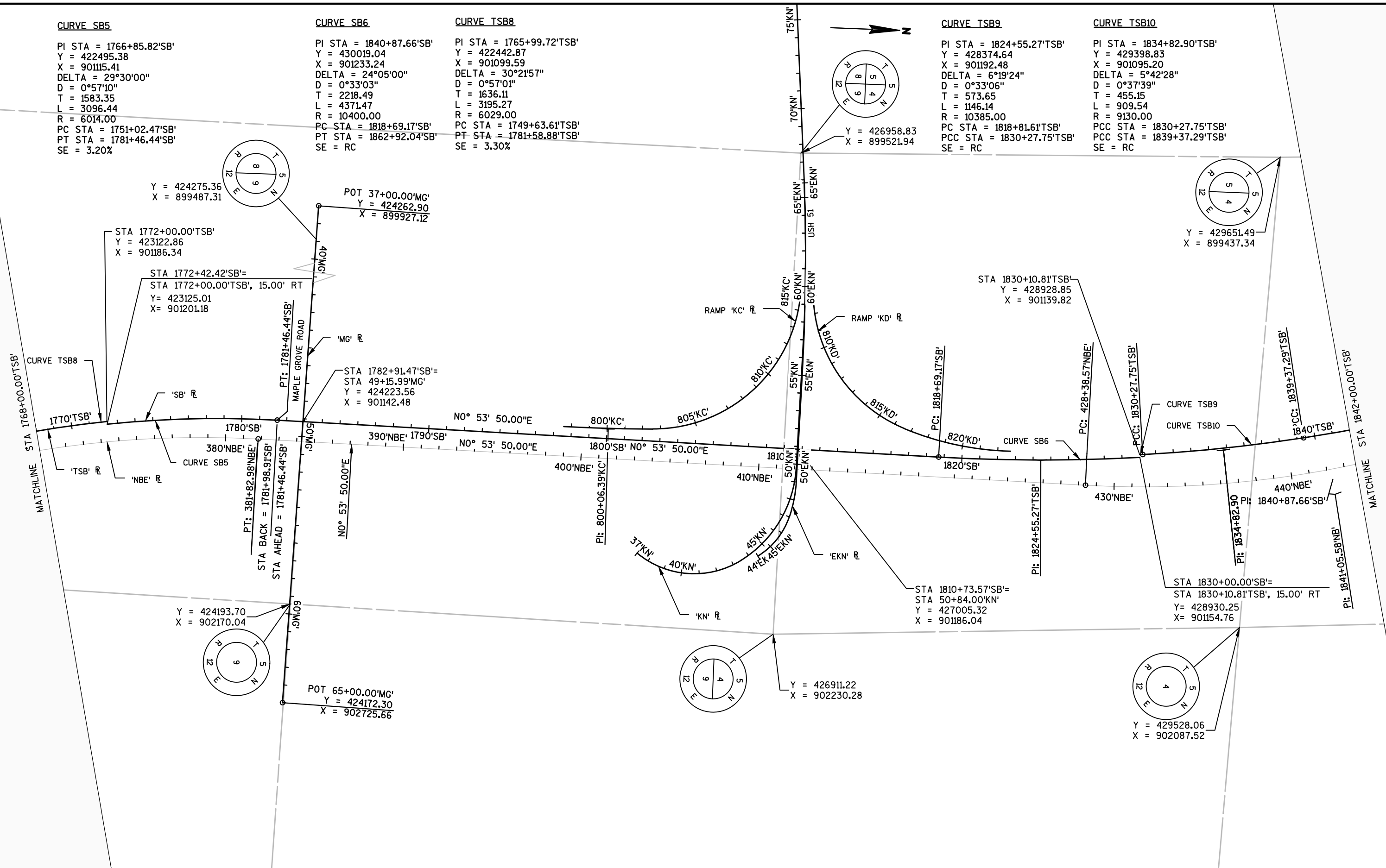
PI STA = 1765+99.72'TSB'
Y = 422442.87
X = 901099.59
DELTA = 30°21'57"
D = 0°57'01"
T = 1636.11
L = 3195.27
R = 6029.00
PC STA = 1749+63.61'TSB'
PT STA = 1781+58.88'TSB'
SE = 3.30%

CURVE TSB9

PI STA = 1824+55.27'TSB'
Y = 428374.64
X = 901192.48
DELTA = 6°19'24"
D = 0°33'06"
T = 573.65
L = 1146.14
R = 10385.00
PC STA = 1818+81.61'TSB'
PCC STA = 1830+27.75'TSB'
SE = RC

CURVE TSB10

PI STA = 1834+82.90'TSB'
Y = 429398.83
X = 901095.20
DELTA = 5°42'28"
D = 0°37'39"
T = 455.15
L = 909.54
R = 9130.00
PCC STA = 1830+27.75'TSB'
PCC STA = 1839+37.29'TSB'
SE = RC

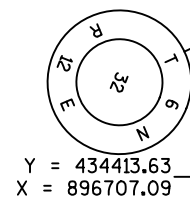


CURVE TSB11

PI STA = 1851+44.42'TSB'
Y = 431029.82
X = 900774.20
DELTA = 12°03'07"
D = 0°30'04"
T = 1207.13
L = 2405.35
R = 11435.16
PCC STA = 1839+37.29'TSB'
PT STA = 1863+42.65'TSB'
SE = RC

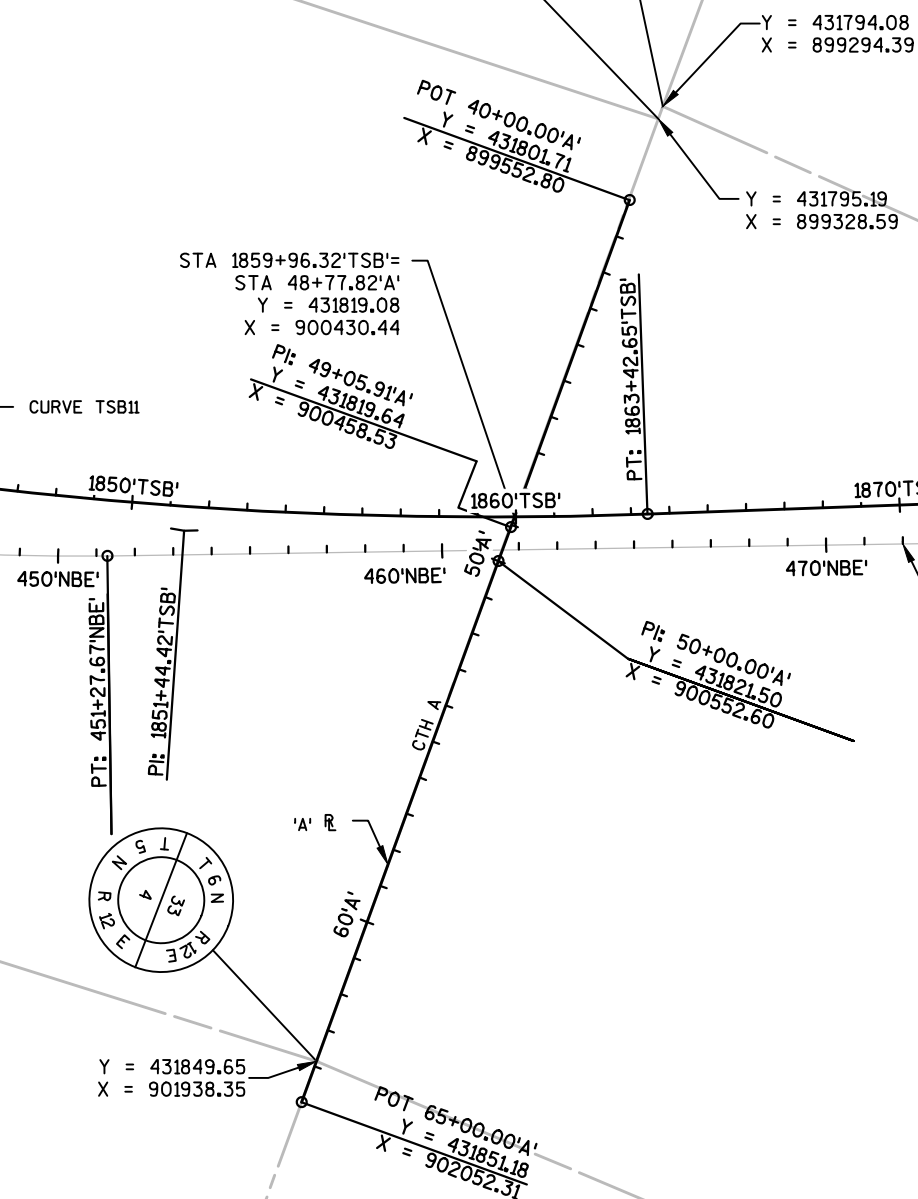
CURVE TSB12

PI STA = 1911+22.93'TSB'
Y = 436533.63
X = 898416.84
DELTA = 7°54'07"
D = 0°36'32"
T = 649.92
L = 1297.78
R = 9410.00
PC STA = 1904+73.01'TSB'
PT STA = 1917+70.79'TSB'
SE = NC



Y = 434413.63
X = 896707.09

MATCHLINE STA 1842+00.00'TSB'



MATCHLINE STA 1916+00.00'TSB'

CURVE TSB13

PI STA = 1932+39.53'TSB'
Y = 438577.36
X = 897858.35
DELTA = 6°58'08"
D = 0°21'46"
T = 962.00
L = 1921.64
R = 15799.00
PC STA = 1922+77.53'TSB'
PCC STA = 1941+99.16'TSB'
SE = NC

CURVE TSB14

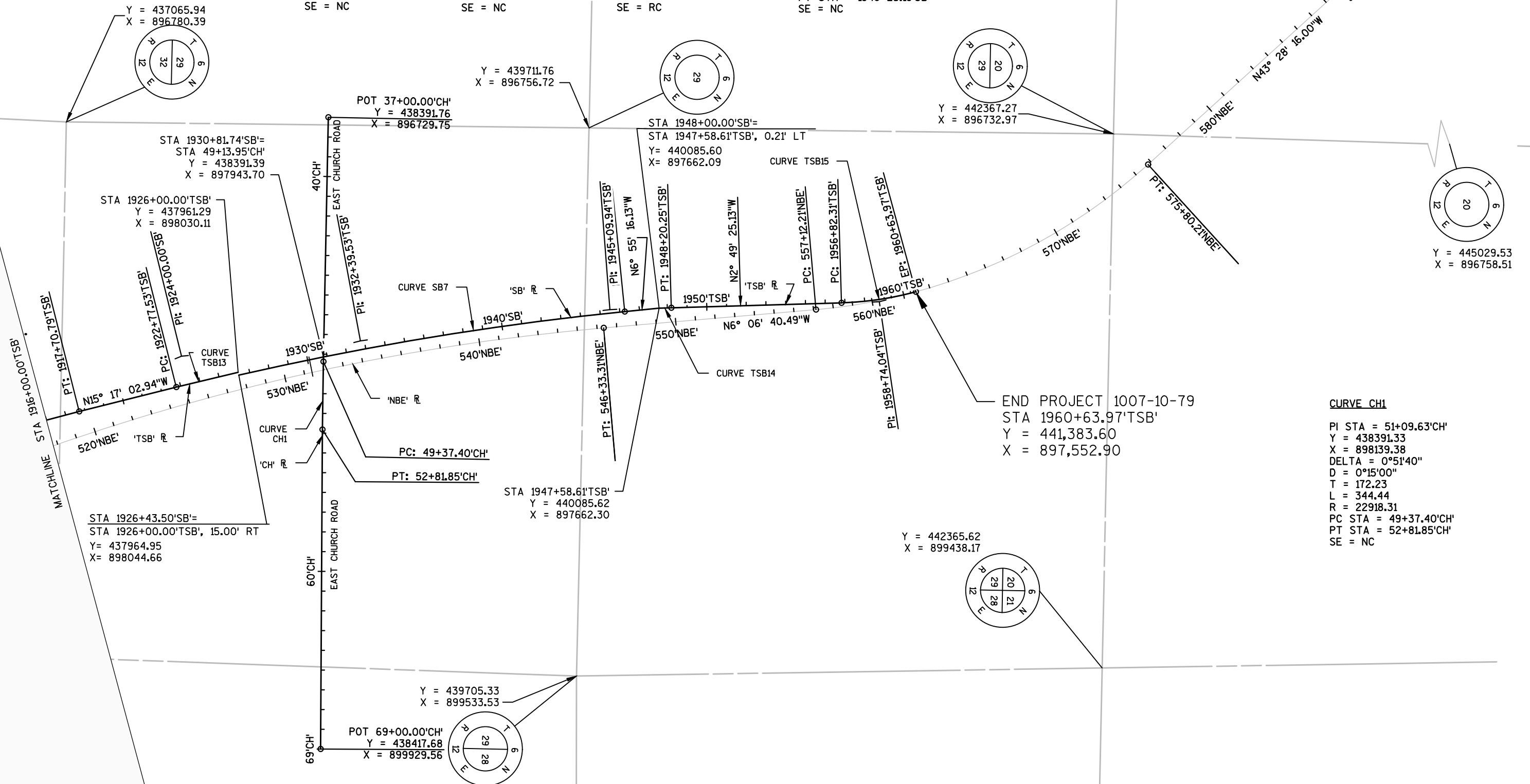
PI STA = 1945+09.94'TSB'
Y = 439836.76
X = 897674.28
DELTA = 5°29'30"
D = 0°53'03"
T = 310.78
L = 621.09
R = 6480.00
PCC STA = 1941+99.16'TSB'
PT STA = 1948+20.25'TSB'
SE = NC

CURVE TSB15

PI STA = 1958+74.04'TSB'
Y = 441199.67
X = 897607.06
DELTA = 13°34'57"
D = 3°33'31"
T = 191.73
L = 381.66
R = 1610.00
PC STA = 1956+82.31'TSB'
PT STA = 1960+63.97'TSB'
SE = RC

CURVE SB7

PI STA = 1924+00.00'SB'
Y = 437672.98
X = 897954.95
DELTA = 16°15'54"
D = 0°21'47"
T = 2255.53
L = 4480.72
R = 15784.00
PC STA = 1901+44.48'SB'
PT STA = 1946+25.19'SB'
SE = NC



CURVE KD1

PI STA = 812+32.21'KD'
Y = 427075.92
X = 900851.87
DELTA = 67°52'35"
D = 6°52'42"
T = 560.56
L = 986.83
R = 833.00
PC STA = 806+71.65'KD'
PCC STA = 816+58.47'KD'
SE = 6.00%

CURVE KD2

PI STA = 819+68.61'KD'
Y = 427892.61
X = 901153.77
DELTA = 21°09'55"
D = 3°27'06"
T = 310.14
L = 613.21
R = 1660.00
PC STA = 816+58.47'KD'
PT STA = 822+71.68'KD'
SE = 6.00%

CURVE KC1

PI STA = 800+06.39'KC'
Y = 425939.11
X = 901115.34
DELTA = 3°08'14"
D = 0°37'39"
T = 250.02
L = 499.92
R = 9130.00
PC STA = 797+56.37'KC'
PCC STA = 802+56.29'KC'
SE = NC

CURVE KC2

PI STA = 810+78.46'KC'
Y = 427010.49
X = 901073.43
DELTA = 89°15'03"
D = 6°52'42"
T = 822.18
L = 1297.58
R = 833.00
PCC STA = 802+56.29'KC'
PT STA = 815+53.87'KC'
SE = 6.00%

Y = 424275.36
X = 899487.31

POT 37+00.00'MG'
Y = 424262.90
X = 899927.12

STA 797+56.37'KC'=
STA 1797+56.37'SB', 54.00' LT
Y = 425689.12
X = 901111.42

STA 815+53.87'KC'=
STA 60+19.17'KN', 24.00' LT
Y = 426989.10
X = 900251.53

EP: 65+82.79'EKN'
Y = 426984.10
X = 899688.24

PT: 66+03.00'KN'
Y = 426982.53
X = 899668.03

STA 806+71.65'KD'=
STA 59+77.70'KN', 44.00' RT
Y = 427057.96
X = 900291.60

Y = 429651.49
X = 899437.34

STA 822+71.68'KD'=
STA 1822+72.20'SB', 48.00' LT
Y = 428202.71
X = 901149.01

Y = 424193.70
X = 902170.04

POT 65+00.00'MG'
Y = 424172.30
X = 902725.66

CURVE KN1

PI STA = 40+83.95'KN'
Y = 426414.51
X = 902025.31
DELTA = 71°31'11"
D = 11°27'33"
T = 360.08
L = 624.13
R = 500.00
PC STA = 37+23.87'KN'
PCC STA = 43+48.00'KN'
SE = 6.00%

CURVE KN2

PI STA = 46+91.10'KN'
Y = 426997.78
X = 901632.55
DELTA = 55°04'39"
D = 8°42'27"
T = 343.10
L = 632.53
R = 658.00
PCC STA = 43+48.00'KN'
PT STA = 49+80.52'KN'
SE = 6.00%

CURVE KN3

PI STA = 61+11.47'KN'
Y = 427022.66
X = 900158.72
DELTA = 5°38'34"
D = 0°34'25"
T = 492.33
L = 983.86
R = 9990.00
PC STA = 56+19.14'KN'
PT STA = 66+03.00'KN'
SE = RC

CURVE EKN1

PI STA = 45+62.63'EKN'
Y = 426933.84
X = 901710.73
DELTA = 39°46'22"
D = 13°42'26"
T = 151.20
L = 290.16
R = 418.00
PC STA = 44+11.43'EKN'
PCC STA = 47+01.59'EKN'
SE = 8.00%

CURVE EKN2

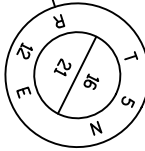
PI STA = 48+03.59'EKN'
Y = 427004.85
X = 901467.69
DELTA = 15°17'19"
D = 7°32'20"
T = 102.00
L = 202.80
R = 760.00
PCC STA = 47+01.59'EKN'
PT STA = 49+04.38'EKN'
SE = 8.00%

CURVE EKN3

PI STA = 60+51.10'EKN'
Y = 427024.95
X = 900219.13
DELTA = 5°19'15"
D = 0°30'00"
T = 532.46
L = 1064.16
R = 11459.19
PC STA = 55+18.64'EKN'
PT STA = 65+82.79'EKN'
SE = RC

CURVE SBE4

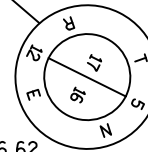
PI STA = 301+11.33'SBE'
Y = 416629.85
X = 904282.78
DELTA = 5°32'00"
D = 0°15'00"
T = 1107.53
L = 2213.33
R = 22918.31
PC STA = 290+03.80'SBE'
PT STA = 312+17.13'SBE'
SE = NC



Y = 416182.32
X = 902093.81

CURVE SBE5

PI STA = 366+75.17'SBE'
Y = 422408.49
X = 901166.06
DELTA = 29°14'15"
D = 1°00'00"
T = 1494.45
L = 2923.75
R = 5729.58
PC STA = 351+80.73'SBE'
PT STA = 381+04.48'SBE'
SE = 3.30%

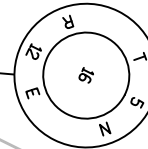


Y = 418936.62
X = 899425.58

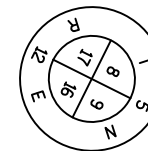
BEGIN PROJECT: 1007-10-79

STA 1715+00.00'TSB' = STA 316+37.67'SBE'
Y = 417,974.77
X = 903,557.40

Y = 418865.91
X = 902103.23



Y = 421591.34
X = 899445.63



PI: 301+11.33'SBE'

CURVE SBE4

PT: 312+17.13'SBE'

PC: 351+80.73'SBE'

CURVE SBE5

PI: 366+75.17'SBE'

PI: 366+94.33'NBE'

MATCHLINE STA 370+00.00'SBE'

CURVE NBE4

N29° 37' 05.42"W

310'NBE'

320'NBE'

'NBE' R

N29° 37' 05.42"W

340'NBE'

350'NBE'

360'NBE'

370'

N28° 20' 25.00"W

340'SBE'

350'SBE'

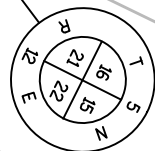
360'SBE'

370'

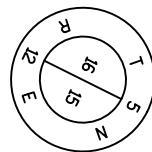
330'SBE'

330'NBE'

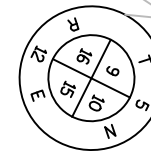
'SBE' R

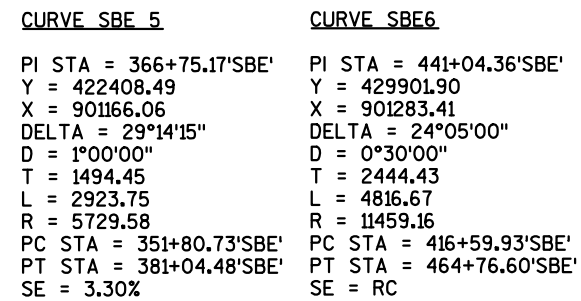


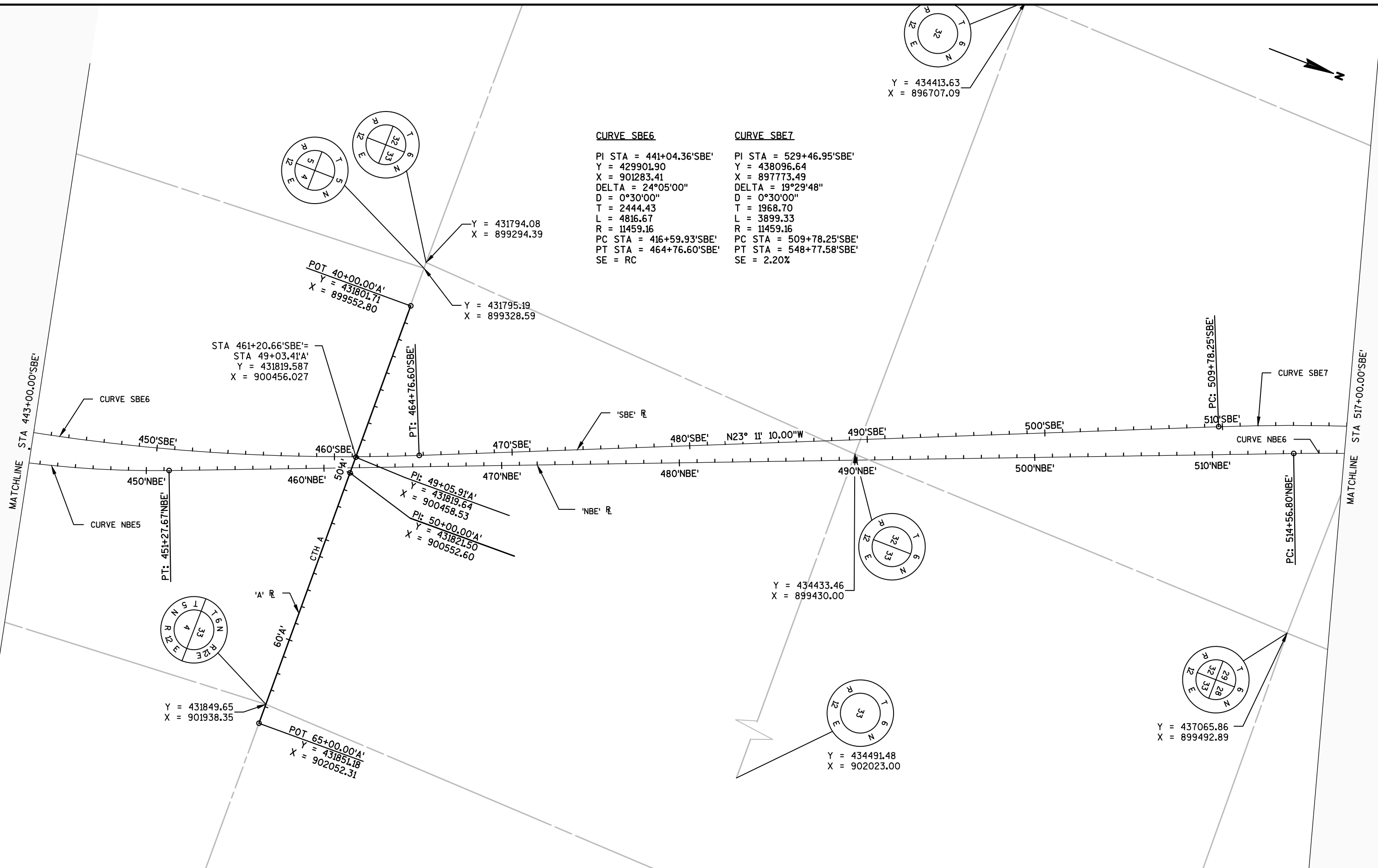
Y = 416110.59
X = 904790.96

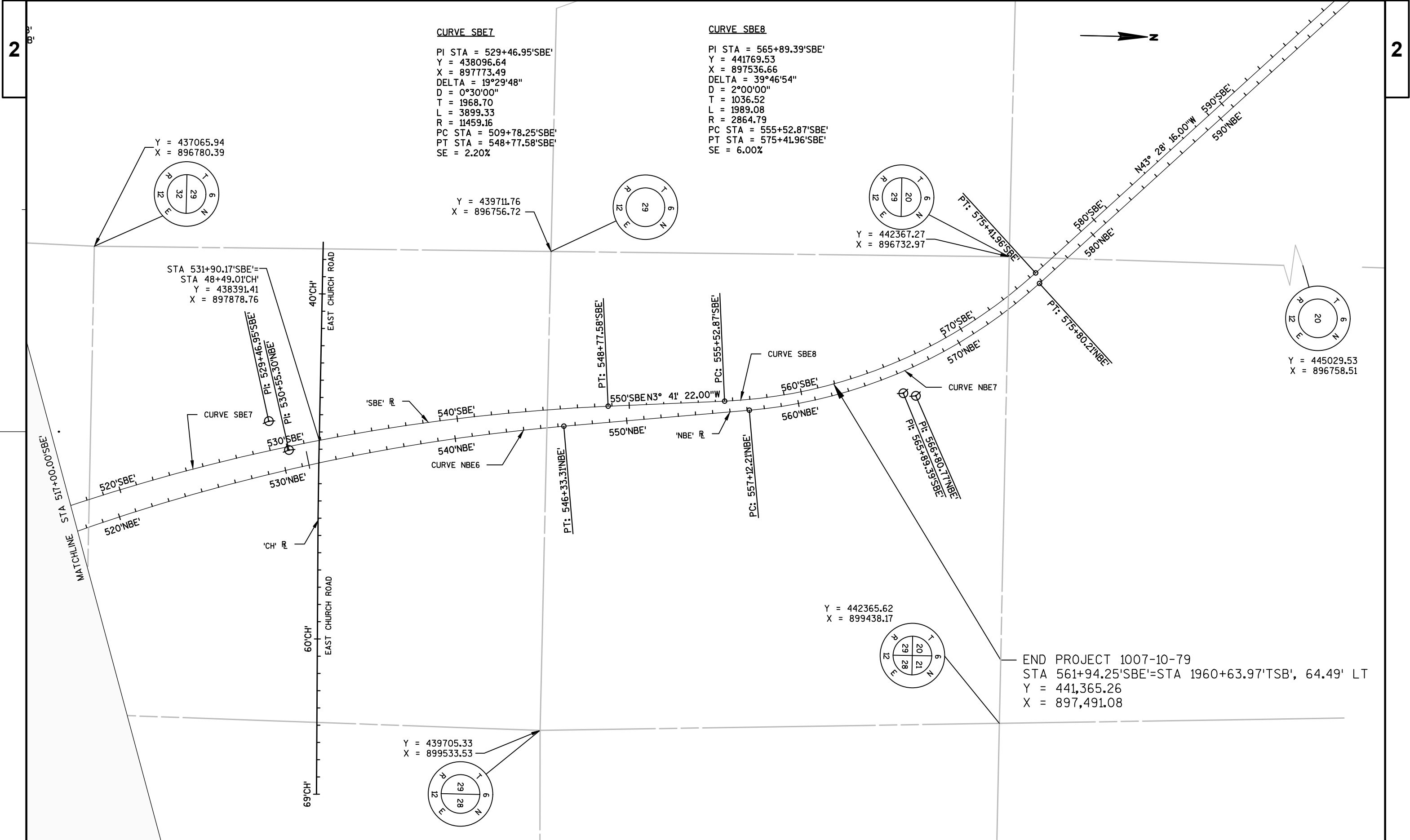


Y = 418795.40
X = 904764.34









CURVE SBE7

PI STA = 529+46.95'SBE'
Y = 438096.64
X = 897773.49
DELTA = 19°29'48"
D = 0°30'00"
T = 1968.70
L = 3899.33
R = 11459.16
PC STA = 509+78.25'SBE'
PT STA = 548+77.58'SBE'
SE = 2.20%

CURVE SBE8

PI STA = 565+89.39'SBE'
Y = 441769.53
X = 897536.66
DELTA = 39°46'54"
D = 2°00'00"
T = 1036.52
L = 1989.08
R = 2864.79
PC STA = 555+52.87'SBE'
PT STA = 575+41.96'SBE'
SE = 6.00%

END PROJECT 1007-10-79
STA 561+94.25'SBE'=STA 1960+63.97'TSB', 64.49' LT
Y = 441,365.26
X = 897,491.08

3

DATE 25NOV15		E S T I M A T E O F Q U A N T I T I E S				
LINE					1007-10-73	1007-10-79
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY	QUANTITY
0010	201.0105	Clearing	STA	100.000		100.000
0020	201.0205	Grubbing	STA	100.000		100.000
0030	203.0100	Removing Small Pipe Culverts	EACH	19.000		19.000
0040	203.0200	Removing Old Structure (station) 001. 1810'SB'+80	LS	1.000	1.000	
0050	203.0200	Removing Old Structure (station) 002. 1930'SB'+40	LS	1.000	1.000	
0060	203.0200	Removing Old Structure (station) 003. 50'MG'+00	LS	1.000		1.000
0070	203.0200	Removing Old Structure (station) 004. 1904+79 'TSB'	LS	1.000		1.000
0080	203.0210.S	Abatement of Asbestos Containing Material (structure) 001. B-13-173	LS	1.000		1.000
0090	203.0225.S	Debris Containment (structure) 001. B-13-173	LS	1.000		1.000
0100	204.0100	Removing Pavement	SY	42,745.000		42,745.000
0110	204.0110	Removing Asphaltic Surface	SY	897.000		897.000
0120	204.0115	Removing Asphaltic Surface Butt Joints	SY	33.000		33.000
0130	204.0120	Removing Asphaltic Surface Milling	SY	8,941.000		8,941.000
0140	204.0150	Removing Curb & Gutter	LF	2,101.000		2,101.000
0150	204.0157	Removing Concrete Barrier	LF	221.000		221.000
0160	204.0165	Removing Guardrail	LF	9,786.000		9,786.000
0170	204.0170	Removing Fence	LF	24,630.000		24,630.000
0180	204.0180	Removing Delineators and Markers	EACH	112.000		112.000
0190	204.0195	Removing Concrete Bases	EACH	2.000		2.000
0200	204.0215	Removing Catch Basins	EACH	2.000		2.000
0210	204.0220	Removing Inlets	EACH	10.000		10.000
0220	204.0245	Removing Storm Sewer (size) 001. 18-INCH	LF	1,289.000		1,289.000
0230	204.0270	Abandoning Culvert Pipes	EACH	3.000		3.000
0240	205.0100	Excavation Common	CY	265,133.000		265,133.000
0250	205.0200	Excavation Rock	CY	72,476.000		72,476.000
0260	205.0400	Excavation Marsh	CY	687.000		687.000
0270	206.1000	Excavation for Structures Bridges (structure) 001. B-13-707	LS	1.000	1.000	
0280	206.1000	Excavation for Structures Bridges (structure) 002. B-13-710	LS	1.000	1.000	
0290	206.1000	Excavation for Structures Bridges (structure) 003. B-13-706	LS	1.000		1.000
0300	206.2000	Excavation for Structures Culverts (structure) 001. C-13-3078	LS	1.000		1.000
0310	206.5000	Cofferdams (structure) 001. C-13-3078	LS	1.000		1.000
0320	210.0100	Backfill Structure	CY	2,108.000	1,103.000	1,005.000
0330	213.0100	Finishing Roadway (project) 001. 1007-10-79	EACH	1.000		1.000
0340	305.0110	Base Aggregate Dense 3/4-Inch	TON	4,487.000		4,487.000
0350	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	150,997.000	768.000	150,229.000
0360	305.0130	Base Aggregate Dense 3-Inch	TON	4,010.000		4,010.000
0370	311.0115	Breaker Run	CY	37.000		37.000
0380	312.0110	Select Crushed Material	TON	79,099.000		79,099.000
0390	371.1000.S	QMP Base Aggregate Dense 1 1/4-Inch Compaction	TON	150,229.000		150,229.000
0400	415.0070	Concrete Pavement 7-Inch **P**	SY	20.000		20.000
0410	415.0080	Concrete Pavement 8-Inch **P**	SY	9,157.000		9,157.000
0420	415.0100	Concrete Pavement 10-Inch **P**	SY	2,958.000		2,958.000
0430	415.0120	Concrete Pavement 12-Inch **P**	SY	51,681.000		51,681.000
0440	415.0410	Concrete Pavement Approach Slab **P**	SY	372.000		372.000

3

3

25NOV15		E S T I M A T E O F Q U A N T I T I E S			
LINE				1007-10-73	1007-10-79
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0450	415.6000.S	Rout and Seal	LF	8,506.000	8,506.000
0460	416.0610	Drilled Tie Bars	EACH	200.000	200.000
0470	416.0620	Drilled Dowel Bars	EACH	32.000	32.000
0480	416.1010	Concrete Surface Drains **P**	CY	19.300	19.300
0490	440.4410	Incentive IRI Ride	DOL	21,821.000	21,821.000
0500	455.0105	Asphaltic Material PG58-28	TON	1,654.000	1,654.000
0510	455.0120	Asphaltic Material PG64-28	TON	666.000	666.000
0520	455.0605	Tack Coat	GAL	9,731.000	9,731.000
0530	460.1100	HMA Pavement Type E-0.3	TON	1,518.000	1,518.000
0540	460.1101	HMA Pavement Type E-1	TON	1,761.000	1,761.000
0550	460.1130	HMA Pavement Type E-30	TON	38,143.000	38,143.000
0560	460.2000	Incentive Density HMA Pavement	DOL	26,510.000	26,510.000
0570	460.4000	HMA Cold Weather Paving	TON	1,772.000	1,772.000
0580	465.0105	Asphaltic Surface	TON	163.000	163.000
0590	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	91.000	91.000
0600	501.1000.S	Ice Hot Weather Concreting	LB	9,950.000	9,950.000
0610	502.0100	Concrete Masonry Bridges **P**	CY	1,292.000	639.000
0620	502.3200	Protective Surface Treatment **P**	SY	3,453.000	2,403.000
0630	502.3210	Pigmented Surface Sealer	SY	610.000	350.000
0640	502.6105	Masonry Anchors Type S 5/8-Inch	EACH	18.000	18.000
0650	503.0137	Prestressed Girder Type I 36W-Inch **P**	LF	917.000	917.000
0660	503.0155	Prestressed Girder Type I 54W-Inch **P**	LF	2,672.000	1,107.000
0670	504.0100	Concrete Masonry Culverts **P**	CY	73.000	73.000
0680	505.0400	Bar Steel Reinforcement HS Structures **P**	LB	48,680.000	31,030.000
0690	505.0600	Bar Steel Reinforcement HS Coated Structures **P**	LB	311,480.000	202,910.000
0700	505.0800.S	Bar Steel Reinforcement HS Stainless Structures **P**	LB	4,326.000	4,326.000
0710	505.0905	Bar Couplers No. 5 **P**	EACH	14.000	14.000
0720	505.0907	Bar Couplers No. 7 **P**	EACH	54.000	8.000
0730	505.0909	Bar Couplers No. 9 **P**	EACH	7.000	7.000
0740	506.2605	Bearing Pads Elastomeric Non-Laminated	EACH	66.000	42.000
0750	506.4000	Steel Diaphragms (structure) 001. B-13-707 **P**	EACH	10.000	10.000
0760	506.4000	Steel Diaphragms (structure) 002. B-13-710 **P**	EACH	16.000	16.000
0770	506.4000	Steel Diaphragms (structure) 003. B-13-706 **P**	EACH	20.000	20.000
0780	511.1100	Temporary Shoring	SF	3,000.000	3,000.000
0790	511.1200	Temporary Shoring (structure) 001. B-13-707	SF	250.000	250.000
0800	511.1200	Temporary Shoring (structure) 002. B-13-710	SF	640.000	640.000
0810	511.2200	Temporary Shoring Left in Place (structure) 001. C-13-3078	SF	300.000	300.000
0820	516.0500	Rubberized Membrane Waterproofing	SY	105.000	58.000
0830	517.1010.S	Concrete Staining (structure) 001. B-13-706 **P**	SF	9,810.000	9,810.000
0840	517.1010.S	Concrete Staining (structure) 002. B-13-707 **P**	SF	7,010.000	7,010.000
0850	520.8000	Concrete Collars for Pipe	EACH	22.000	22.000
0860	521.0130	Culvert Pipe Corrugated Steel 30-Inch	LF	687.000	687.000
0870	521.0142	Culvert Pipe Corrugated Steel 42-Inch	LF	19.000	19.000

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DATE 25NOV15		E S T I M A T E O F Q U A N T I T I E S				
LINE					1007-10-73	1007-10-79
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY	QUANTITY
0880	521.1012	Apron Endwalls for Culvert Pipe Steel 12-Inch	EACH	6.000		6.000
0890	521.1030	Apron Endwalls for Culvert Pipe Steel 30-Inch	EACH	8.000		8.000
0900	521.1042	Apron Endwalls for Culvert Pipe Steel 42-Inch	EACH	1.000		1.000
0910	522.0118	Culvert Pipe Reinforced Concrete Class III 18-Inch	LF	260.000		260.000
0920	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	68.000		68.000
0930	522.0130	Culvert Pipe Reinforced Concrete Class III 30-Inch	LF	392.000		392.000
0940	522.0136	Culvert Pipe Reinforced Concrete Class III 36-Inch	LF	156.000		156.000
0950	522.0142	Culvert Pipe Reinforced Concrete Class III 42-Inch	LF	53.000		53.000
0960	522.0148	Culvert Pipe Reinforced Concrete Class III 48-Inch	LF	121.000		121.000
0970	522.0318	Culvert Pipe Reinforced Concrete Class IV 18-Inch	LF	52.000		52.000
0980	522.0336	Culvert Pipe Reinforced Concrete Class IV 36-Inch	LF	123.000		123.000
0990	522.0354	Culvert Pipe Reinforced Concrete Class IV 54-Inch	LF	258.000		258.000
1000	522.0360	Culvert Pipe Reinforced Concrete Class IV 60-Inch	LF	162.000		162.000
1010	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	13.000		13.000
1020	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	3.000		3.000
1030	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	2.000		2.000
1040	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	2.000		2.000
1050	522.1048	Apron Endwalls for Culvert Pipe Reinforced Concrete 48-Inch	EACH	2.000		2.000
1060	522.1054	Apron Endwalls for Culvert Pipe Reinforced Concrete 54-Inch	EACH	1.000		1.000
1070	522.1060	Apron Endwalls for Culvert Pipe Reinforced Concrete 60-Inch	EACH	1.000		1.000
1080	523.0119	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 19x30-Inch	LF	107.000		107.000
1090	523.0519	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	2.000		2.000
1100	524.0636	Apron Endwalls for Culvert Pipe Salvaged 36-Inch	EACH	2.000		2.000
1110	524.0642	Apron Endwalls for Culvert Pipe Salvaged 42-Inch	EACH	2.000		2.000
1120	550.0020	Pre-Boring Rock or Consolidated Materials	LF	110.000	110.000	
1130	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	2,070.000	330.000	1,740.000
1140	550.1120	Piling Steel HP 12-Inch X 53 Lb	LF	1,170.000		1,170.000
1150	601.0551	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type A **P**	LF	2,202.000		2,202.000
1160	603.1136	Concrete Barrier Type S36 **P**	LF	746.000		746.000

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DATE 25NOV15		E S T I M A T E O F Q U A N T I T I E S				
LINE					1007-10-73	1007-10-79
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY	QUANTITY
1170	603.8000	Concrete Barrier Temporary Precast Delivered	LF	44,778.000		44,778.000
1180	603.8125	Concrete Barrier Temporary Precast Installed	LF	51,003.000		51,003.000
1190	604.0500	Slope Paving Crushed Aggregate	SY	800.000	615.000	185.000
1200	606.0200	Riprap Medium	CY	291.000		291.000
1210	606.0300	Riprap Heavy	CY	124.000		124.000
1220	607.5000	Storm Sewer Rock Excavation	CY	30.000		30.000
1230	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	1,615.000		1,615.000
1240	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	347.000		347.000
1250	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	77.000		77.000
1260	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	283.000		283.000
1270	611.0610	Inlet Covers Type BW	EACH	2.000		2.000
1280	611.0627	Inlet Covers Type HM	EACH	4.000		4.000
1290	611.0642	Inlet Covers Type MS	EACH	18.000		18.000
1300	611.0651	Inlet Covers Type S	EACH	2.000		2.000
1310	611.0654	Inlet Covers Type V	EACH	6.000		6.000
1320	611.1006	Catch Basins 6-FT Diameter	EACH	2.000		2.000
1330	611.3220	Inlets 2x2-FT	EACH	6.000		6.000
1340	611.3225	Inlets 2x2.5-FT	EACH	2.000		2.000
1350	611.3253	Inlets 2.5x3-FT	EACH	4.000		4.000
1360	611.3901	Inlets Median 1 Grate	EACH	8.000		8.000
1370	611.3902	Inlets Median 2 Grate	EACH	5.000		5.000
1380	611.8115	Adjusting Inlet Covers	EACH	1.000		1.000
1390	611.8120.S	Cover Plates Temporary	EACH	3.000		3.000
1400	611.9710	Salvaged Inlet Covers	EACH	1.000		1.000
1410	612.0106	Pipe Underdrain 6-Inch	LF	1,050.000		1,050.000
1420	612.0212	Pipe Underdrain Unperforated 12-Inch	LF	285.000		285.000
1430	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	580.000	400.000	180.000
1440	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	12.000	8.000	4.000
1450	614.0800	Crash Cushions Permanent	EACH	13.000		13.000
1460	614.0905	Crash Cushions Temporary	EACH	7.000		7.000
1470	614.2300	MGS Guardrail 3	LF	1,253.000		1,253.000
1480	614.2500	MGS Thrie Beam Transition	LF	354.600		354.600
1490	614.2610	MGS Guardrail Terminal EAT	EACH	7.000		7.000
1500	614.2620	MGS Guardrail Terminal Type 2	EACH	2.000		2.000
1510	616.0100	Fence Woven Wire (height) 001. 4-FT **P**	LF	24,255.000		24,255.000
1520	616.0700.S	Fence Safety	LF	1,500.000		1,500.000
1530	619.1000	Mobilization	EACH	1.000	0.100	0.900
1540	620.0300	Concrete Median Sloped Nose **P**	SF	84.000		84.000
1550	624.0100	Water	MGAL	2,200.000		2,200.000
1560	625.0500	Salvaged Topsoil **P**	SY	330,670.000		330,670.000
1570	627.0200	Mulching	SY	168,100.000		168,100.000
1580	628.1104	Erosion Bales	EACH	3,165.000		3,165.000
1590	628.1504	Silt Fence	LF	28,410.000		28,410.000
1600	628.1520	Silt Fence Maintenance	LF	170,405.000		170,405.000
1610	628.1905	Mobilizations Erosion Control	EACH	15.000		15.000
1620	628.1910	Mobilizations Emergency Erosion Control	EACH	8.000		8.000
1630	628.2002	Erosion Mat Class I Type A	SY	20,780.000		20,780.000

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DATE 25NOV15		E S T I M A T E O F Q U A N T I T I E S				
LINE					1007-10-73	1007-10-79
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY	QUANTITY
1640	628.2004	Erosion Mat Class I Type B	SY	63,980.000		63,980.000
1650	628.2006	Erosion Mat Urban Class I Type A	SY	25,390.000		25,390.000
1660	628.2023	Erosion Mat Class II Type B	SY	2,850.000		2,850.000
1670	628.6505	Soil Stabilizer Type A	ACRE	9.000		9.000
1680	628.6510	Soil Stabilizer Type B	ACRE	9.000		9.000
1690	628.7005	Inlet Protection Type A	EACH	55.000		55.000
1700	628.7010	Inlet Protection Type B	EACH	3.000		3.000
1710	628.7015	Inlet Protection Type C	EACH	15.000		15.000
1720	628.7504	Temporary Ditch Checks	LF	1,428.000		1,428.000
1730	628.7555	Culvert Pipe Checks	EACH	340.000		340.000
1740	628.7560	Tracking Pads	EACH	16.000		16.000
1750	628.7570	Rock Bags	EACH	1,152.000		1,152.000
1760	629.0205	Fertilizer Type A	CWT	191.000		191.000
1770	630.0110	Seeding Mixture No. 10	LB	1,335.000		1,335.000
1780	630.0120	Seeding Mixture No. 20	LB	3,083.000		3,083.000
1790	630.0130	Seeding Mixture No. 30	LB	850.000		850.000
1800	630.0200	Seeding Temporary	LB	8,247.000		8,247.000
1810	633.0100	Delineator Posts Steel	EACH	76.000		76.000
1820	633.0500	Delineator Reflectors	EACH	98.000		98.000
1830	633.5100	Markers Row	EACH	110.000		110.000
1840	633.5200	Markers Culvert End	EACH	40.000		40.000
1850	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	1.000		1.000
1860	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	6.000		6.000
1870	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	3.000		3.000
1880	634.0620	Posts Wood 4x6-Inch X 20-FT	EACH	2.000		2.000
1890	634.0622	Posts Wood 4x6-Inch X 22-FT	EACH	7.000		7.000
1900	634.0624	Posts Wood 4x6-Inch X 24-FT	EACH	1.000		1.000
1910	635.0200	Sign Supports Structural Steel HS	LB	445.000		445.000
1920	636.0100	Sign Supports Concrete Masonry **p**	CY	38.800		38.800
1930	636.0500	Sign Supports Steel Reinforcement	LB	166.000		166.000
1940	636.1500	Sign Supports Steel Coated Reinforcement HS	LB	5,655.000		5,655.000
1950	637.2210	Signs Type II Reflective H	SF	185.250		185.250
1960	637.2230	Signs Type II Reflective F	SF	91.250		91.250
1970	637.3210	Sign S Type III Reflective H	SF	61.500		61.500
1980	638.2101	Moving Signs Type I	EACH	2.000		2.000
1990	638.2102	Moving Signs Type II	EACH	34.000		34.000
2000	638.2601	Removing Signs Type I	EACH	1.000		1.000
2010	638.2602	Removing Signs Type II	EACH	22.000		22.000
2020	638.3000	Removing Small Sign Supports	EACH	25.000		25.000
2030	638.3100	Removing Structural Steel Sign Supports	EACH	5.000		5.000
2040	638.4100	Moving Structural Steel Sign Supports	EACH	4.000		4.000
2050	641.1200	Sign Bridge Cantilevered (structure) 001. S-13-400	LS	1.000		1.000
2060	641.6600	Sign Bridge (structure) 001. S-13-399	LS	1.000		1.000
2070	642.5401	Field Office Type D	EACH	1.000	0.100	0.900
2080	643.0100	Traffic Control (project) 001. 1007-10-79	EACH	1.000		1.000
2090	643.0300	Traffic Control Drums	DAY	23,415.000		23,415.000
2100	643.0420	Traffic Control Barricades Type III	DAY	6,348.000		6,348.000
2110	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	33.000		33.000
2120	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	33.000		33.000

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DATE 25NOV15		E S T I M A T E O F Q U A N T I T I E S				
LINE					1007-10-73	1007-10-79
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY	QUANTITY
2130	643.0705	Traffic Control Warning Lights Type A	DAY	3,260.000		3,260.000
2140	643.0715	Traffic Control Warning Lights Type C	DAY	4,820.000		4,820.000
2150	643.0800	Traffic Control Arrow Boards	DAY	150.000		150.000
2160	643.0900	Traffic Control Signs	DAY	11,304.000		11,304.000
2170	643.0910	Traffic Control Covering Signs Type I	EACH	12.000		12.000
2180	643.0920	Traffic Control Covering Signs Type II	EACH	27.000		27.000
2190	643.1050	Traffic Control Signs PCMS	DAY	776.000		776.000
2200	643.2000	Traffic Control Detour (project) 001. 1007-10-79	EACH	1.000		1.000
2210	643.3000	Traffic Control Detour Signs	DAY	18,000.000		18,000.000
2220	645.0105	Geotextile Fabric Type C	SY	124.000		124.000
2230	645.0112	Geotextile Fabric Type DF Schedule B	SY	168.000		168.000
2240	645.0120	Geotextile Fabric Type HR	SY	1,100.000		1,100.000
2250	646.0106	Pavement Marking Epoxy 4-Inch	LF	71,030.000		71,030.000
2260	646.0126	Pavement Marking Epoxy 8-Inch	LF	2,160.000		2,160.000
2270	646.0600	Removing Pavement Markings	LF	39,428.000		39,428.000
2280	646.0841.S	Pavement Marking Grooved Wet Reflective Contrast Tape 4-Inch	LF	145.000		145.000
2290	646.0843.S	Pavement Marking Grooved Wet Reflective Contrast Tape 8-Inch	LF	905.000		905.000
2300	647.0456	Pavement Marking Curb Epoxy	LF	105.000		105.000
2310	647.0606	Pavement Marking Island Nose Epoxy	EACH	2.000		2.000
2320	647.0746	Pavement Marking Diagonal Epoxy 24-Inch	LF	65.000		65.000
2330	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	142,162.000		142,162.000
2340	649.0801	Temporary Pavement Marking Removable Tape 8-Inch	LF	2,949.000		2,949.000
2350	652.0125	Conduit Rigid Metallic 2-Inch **P**	LF	202.000	84.000	118.000
2360	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch **P**	LF	2,974.000	761.000	2,213.000
2370	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch **P**	LF	135.000		135.000
2380	653.0135	Pull Boxes Steel 24x36-Inch	EACH	3.000		3.000
2390	653.0140	Pull Boxes Steel 24x42-Inch	EACH	6.000		6.000
2400	653.0222	Junction Boxes 18x12x6-Inch	EACH	8.000	4.000	4.000
2410	653.0900	Adjusting Pull Boxes	EACH	2.000		2.000
2420	653.0905	Removing Pull Boxes	EACH	3.000		3.000
2430	654.0105	Concrete Bases Type 5	EACH	3.000		3.000
2440	655.0615	Electrical Wire Lighting 10 AWG	LF	723.000		723.000
2450	655.0630	Electrical Wire Lighting 4 AWG	LF	5,072.000		5,072.000
2460	656.0200	Electrical Service Meter Breaker Pedestal (location) 001. DMS-13-0027	LS	1.000		1.000
2470	656.0200	Electrical Service Meter Breaker Pedestal (location) 002. G-13-08	LS	1.000		1.000
2480	656.0500	Electrical Service Breaker Disconnect Box (location) 001. DMS-13-0027	LS	1.000		1.000
2490	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	1.000		1.000
2500	657.0322	Poles Type 5-Aluminum	EACH	1.000		1.000
2510	670.0100	Field System Integrator	LS	1.000		1.000
2520	670.0200	ITS Documentation	LS	1.000		1.000
2530	673.0105	Communication Vault Type 1	EACH	1.000		1.000
2540	673.0225.S	Install Pole Mounted Cabinet	EACH	1.000		1.000
2550	674.0300	Remove Cable	LF	1,480.000		1,480.000
2560	674.0400	Reinstall Cable	LF	185.000		185.000

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DATE 25NOV15		E S T I M A T E O F Q U A N T I T I E S				
LINE					1007-10-73	1007-10-79
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY	QUANTITY
2570	675.0400.S	Install Ethernet Switch	EACH	1.000		1.000
2580	678.0100.S	Install Overhead Freeway DMS Full Matrix	EACH	1.000		1.000
2590	690.0150	Sawing Asphalt	LF	31,377.000		31,377.000
2600	690.0250	Sawing Concrete	LF	888.000		888.000
2610	715.0415	Incentive Strength Concrete Pavement	DOL	20,087.000		20,087.000
2620	715.0502	Incentive Strength Concrete Structures	DOL	14,424.000	10,068.000	4,356.000
2630	SPV.0035	Special 001. Roadway Embankment	CY	185,310.000		185,310.000
2640	SPV.0035	Special 701. HPC Masonry Structures ***p**	CY	1,039.000	1,039.000	
2650	SPV.0060	Special 001. Baseline CPM Progress Schedule	EACH	1.000	0.100	0.900
2660	SPV.0060	Special 002. CPM Progress Schedule Updates And Accepted Revisions	EACH	8.000	2.000	6.000
2670	SPV.0060	Special 003. Access Gate 6-FT	EACH	2.000		2.000
2680	SPV.0060	Special 004. Removing Billboards	EACH	2.000		2.000
2690	SPV.0060	Special 103. Traffic Control Barricades Type III With Sign, Permanent	EACH	19.000		19.000
2700	SPV.0060	Special 401. Fiber Tracer Marker Post	EACH	1.000		1.000
2710	SPV.0060	Special 402. Install Cellular Modem	EACH	1.000		1.000
2720	SPV.0060	Special 403. Remove Poles Wood	EACH	1.000		1.000
2730	SPV.0060	Special 404. Remove Electrical Service Meter Breaker Pedestal	EACH	2.000		2.000
2740	SPV.0060	Special 701. Grouted Bar Couplers	EACH	144.000	144.000	
2750	SPV.0090	Special 200. Concrete Barrier Temporary Precast Left In Place	LF	6,084.000		6,084.000
2760	SPV.0090	Special 202. Traffic Control GawK Screen Furnished	LF	2,000.000		2,000.000
2770	SPV.0090	Special 203. Traffic Control GawK Screen Installed	LF	2,000.000		2,000.000
2780	SPV.0090	Special 701. Precast Pier Columns ***p**	LF	68.000	68.000	
2790	SPV.0090	Special 702. Precast Pier Cap ***p**	LF	56.000	56.000	
2800	SPV.0090	Special 703. Fence Chain Link Polymer Coated 6-F	LF	606.000		606.000
2810	SPV.0105	Special 001. Concrete Pavement Joint Layout	LS	1.000		1.000
2820	SPV.0105	Special 002. Survey Project 1007-10-73	LS	1.000	1.000	
2830	SPV.0105	Special 004. Survey Project 1007-10-79	LS	1.000		1.000
2840	SPV.0105	Special 401. Relocate Solar-Powered Bluetooth Sensor	LS	1.000		1.000
2850	SPV.0105	Special 402. Relocate Ramp Closure Gate (G-13-08)	LS	1.000		1.000
2860	SPV.0105	Special 403. Relocate Ramp Closure Gate (G-13-09)	LS	1.000		1.000
2870	SPV.0105	Special 404. Salvage Roadside DMS	LS	1.000		1.000
2880	SPV.0165	Special 701. Longitudinal Grooving Bridge Deck ***p**	SF	21,590.000	21,590.000	
2890	SPV.0180	Special 001. Emulsified Asphalt Median Treatment	SY	140.000		140.000

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CLEARING AND GRUBBING

				201.0105	201.0205	
STAGE	LOCATION	STATION		CLEARING	GRUBBING	
				STA	STA	
1	IH 39 SB	1769+00 - 1772+00	'TSB'	3	3	
	MAPLE GROVE ROAD	43+00 - 49+00	'MG'	6	6	
		51+00 - 54+00	'MG'	3	3	
		STAGE 1 SUBTOTALS			12	12
2	IH 39 SB	1772+00 - 1775+00	'SB'	3	3	
		1780+00 - 1783+00	'SB'	3	3	
		1783+00 - 1786+00	'SB'	3	3	
		1787+00 - 1792+00	'SB'	5	5	
		1796+00 - 1801+00	'SB'	5	5	
		1809+00 - 1810+00	'SB'	1	1	
		1815+00 - 1816+00	'SB'	1	1	
		1819+00 - 1830+00	'SB'	11	11	
		1861+00 - 1864+00	'TSB'	3	3	
		1875+00 - 1879+00	'TSB'	4	4	
		1882+00 - 1885+00	'TSB'	3	3	
		1895+00 - 1896+00	'TSB'	1	1	
		1914+00 - 1917+00	'TSB'	3	3	
		1922+00 - 1926+00	'TSB'	4	4	
		1931+00 - 1938+00	'SB'	7	7	
		USH 51	59+00 - 63+00	'KN'	4	4
		RAMP KC	806+00 - 815+00	'KC'	9	9
		RAMP KD	807+00 - 815+00	'KD'	8	8
		STAGE 2 SUBTOTALS			78	78
	3	EAST CHURCH ROAD	46+00 - 48+00	'CH'	2	2
50+00 - 58+00			'CH'	8	8	
STAGE 3 SUBTOTALS			10	10		
CATEGORY 1000 SUBTOTALS				100	100	
PROJECT TOTALS				100	100	

REMOVING PAVEMENT

204.0100						
STAGE	LOCATION	STATION		SY	REMARKS	
2	IH 39 SB	1881+22	- 1881+96	'EKN'	76	CONCRETE CHANNEL
	USH 51	48+25	- 55+50	'EKN'	3,076	BOTH LANES
		57+64	- 63+00	'EKN'	1,641	OUTSIDE LANES
		STAGE 2 SUBTOTAL			4,793	
3	IH 39 SB	516+13	- 553+21	'SBE'	10,389	TRAVEL LANES
	USH 51	55+50	- 63+00	'EKN'	2,358	INSIDE LANES
	RAMP KC	801+40	- 811+16	'KC'	2,208	
	RAMP KD	808+77	- 817+46	'KD'	1,833	
	STAGE 3 SUBTOTAL			16,788		
4	IH 39 SB	370+81	- 438+28	'SBE'	21,164	TRAVEL LANES
		STAGE 4 SUBTOTAL			21,164	
		CATEGORY 1000 SUBTOTAL			42,745	
	PROJECT TOTAL			42,745		

REMOVING FENCE

					204.0170
STAGE	LOCATION	STATION		OFFSET	LF
1	IH 39 SB	1715+00	- 1772+00	'TSB' LT	5,723
		1772+42	- 1897+56	'SB' LT	2,687
		1821+21	- 1830+00	'SB' LT	876
		1830+11	- 1926+00	'TSB' LT	9,333
		1926+43	- 1948+00	'SB' LT	2,144
	IH 39 NB	530+63	- 533+18	'NBE' LT	198
	USH 51	821+20	'KD' - 62+75	'EKN' RT	1,765
		978+92	- 815+30	'KC' LT	1,769
	MAPLE GROVE ROAD	51+00	'MGR' LT & RT	135	
	CATEGORY 1000 SUBTOTAL				
PROJECT TOTAL					24,630

REMOVING SMALL PIPE CULVERTS

					203.0100	
STAGE	LOCATION	STATION	OFFSET	DESCRIPTION	EACH	REMARKS
2	IH 39 SB	1721+76'TSB'	RT	18" CPRC AEW	1	ONLY REMOVE AEW
		1790+76'SB'	LT & RT	194' x 48" CPCS	1	REMOVE 19.5'
		1941+00-1941+80'SB'	LT	78' x 18" CPCS	1	LONGITUDINAL
		545+83-546+13'SBE'	RT	308' x 60" CPCS	1	REMOVE 68'
		1939+09'SB'	LT	81' x 18" CPRC	1	REMOVE 12'
		1950+67'TSB'	RT	112' x 18"CPCS	1	REMOVE 12'
		1957+69'TSB'	LT	78' x 18" CPRC	1	ONLY REMOVE AEW
STAGE 2 SUBTOTAL					7	
3	IH 39 SB	1816+72'SB'	LT & RT	274' x 54" CPCS	1	REMOVE 80.5'
		1929+64'SB'	LT	91' x 18" CPCS	1	CROSS PIPE
		1939+09'SB'	LT	69' x 18" CPRC	1	CROSS PIPE, 12' REMOVED IN STAGE 2
		1944+49-1944+83'SB'	LT & RT	240' x 60" CPCS	1	REMOVE REMAINING PIPE TO THE WEST
	RAMP KC	810+90'KC'	RT	63' x 24" CPCS	1	CROSS PIPE
	RAMP KD	815+75'KD'	RT	77' x 24" CPCS	1	CROSS PIPE
	EAST CHURCH ROAD	46+34-46+65'EC'	RT	32' x 18" CPCS	1	DRIVEWAY CULVERT
		52+26-52+58'EC'	LT	32' x 15" CPCS	1	DRIVEWAY CULVERT
STAGE 3 SUBTOTAL					8	
4	IH 39 SB	1781+31'SB'	RT	150' x 36" CPCS	1	REMOVE 50', REATTACH SALVAGED AEW
		1782+31-1783+53'SB'	RT	122' x 36" CPCS	1	LONGITUDINAL
		1790+76'SB'	LT & RT	174' x 48" CPCS	1	REMOVE 51', 19.5' REMOVED IN STAGE 2
		1816+72'SB'	LT & RT	193' x 54" CPCS	1	REMOVE 46' , 80.5' REMOVED IN STAGE 3
	STAGE 4 SUBTOTAL					4
CATEGORY 1000 SUBTOTAL					19	
PROJECT TOTAL					19	

REMOVING CONCRETE BARRIER

				204.0157
STAGE	LOCATION	STATION	OFFSET	LF
2	IH 39 SB	1782+74 - 1784+94	'SB' RT	221
CATEGORY 1000 SUBTOTAL				221
PROJECT TOTAL				221

REMOVING ASPHALTIC SURFACE

					204.0110	
STAGE	LOCATION	STATION			SY	REMARKS
2	USH 51	55+50	-	66+00	'EKN' 897	TRAFFIC STAGING
CATEGORY 1000 SUBTOTAL					897	
PROJECT TOTAL					897	

REMOVING ASPHALTIC SURFACE BUTT JOINTS

			204.0115
STAGE	LOCATION	STATION	SY
2	IH 39 SB	1866+26	13
		1854+68	13
		UNDISTRIBUTED	
CATEGORY 1000 SUBTOTAL			33
PROJECT SUBTOTAL			33

REMOVING CURB & GUTTER

					204.0150	
STAGE	LOCATION	STATION			LF	REMARKS
2	USH 51	55+50	-	66+00	2,101	MEDIAN TRAFFIC STAGING
CATEGORY 1000 SUBTOTAL					2,101	
PROJECT TOTAL					2,101	

REMOVING DELINEATORS AND MARKERS

204.0180 REMOVING DELINEATORS AND MARKERS		
LOCATION	EACH	REMARKS
IH 39 SB	87	
IH 39 SB RAMPS USH 51	25	RAMP KC,KD AND KN
CATEGORY 1000 SUBTOTAL	112	
PROJECT TOTAL	112	

REMOVING STORM SEWER STRUCTURES

				204.0215	204.0220		
				REMOVING CATCH BASINS	REMOVING INLETS		
STAGE	LOCATION	STATION	OFFSET	EACH	EACH	REMARKS	
2	USH 51	55+32	'EKN' 9.0' RT	-	1	MEDIAN	
STAGE 2 SUBTOTALS				-	1		
3	USH 51	59+31	'EKN' 11.0' RT	-	1	MEDIAN	
		62+30	'EKN' 14.0' RT	-	1	MEDIAN	
	IH 39	1938+69	'SB' 22.0' LT	1	-	MEDIAN	
		1941+38	'SB' 34.5' LT	1	-	MEDIAN	
STAGE 3 SUBTOTALS				2	2		
4	IH 39	1777+39	'SB' 6.2' LT	-	1	MEDIAN	
		1787+00	'SB' 5.4' RT	-	1	MEDIAN	
		1821+00	'SB' 1.1' RT	-	1		
		1824+50	'SB' 2.2' LT	-	1		
		1827+00	'SB' 5.6' LT	-	1		
		1830+04	'SB' 7.1' LT	-	1		
		1834+50	'SB' 13.4' LT	-	1		
		STAGE 4 SUBTOTALS				-	7
CATEGORY 1000 SUBTOTALS				2	10		
PROJECT TOTALS				2	10		

REMOVING STORM SEWER

				204.0245.001	204.0270		
		18-INCH		ABANDONING CULVERT PIPES			
STAGE	LOCATION	STATION	OFFSET	LF	EACH	REMARKS	
2	USH 51	55+32	'EKN'	RT	50	-	CROSSING EXISTING SB
		59+31	'EKN'	RT	36	-	OUSTIDE NB LANE
		62+30	'EKN'	RT	44	-	OUSTIDE NB LANE
STAGE 2 SUBTOTALS				130			
3	USH 51	59+31	'EKN'	RT	14	-	INSIDE NB LANE
		62+30	'EKN'	RT	13	-	INSIDE NB LANE
	IH 39	1938+67-1940+96	'TSB'	LT	228	-	
		1918+00	'TSB'	LT/RT	-	1	
STAGE 3 SUBTOTALS				255	1		
4	IH 39	1821+12-1824+61	'TSB'	RT	350	-	
		1824+61-1827+11	'TSB'	RT	250	-	
		1827+11-1830+14	'TSB'	RT	304	-	
		1830+16-1830+37	'TSB'	LT	-	1	
		1834+60	'TSB'	LT	-	1	
		STAGE 4 SUBTOTALS				904	2
CATEGORY 1000 SUBTOTALS				1,289	3		
PROJECT TOTALS				1,289	3		

REMOVING BILLBOARDS

SPV.0060.004					
STAGE	LOCATION	STATION	OFFSET	EACH	REMARKS
1	IH 39 SB	1740+42	'TSB' LT	1	EDGERTON
		1756+08	'TSB' LT	1	TOWNE EDGE MOTEL
CATEGORY 1000 SUBTOTAL				2	
PROJECT TOTAL				2	

EARTHWORK SUMMARY

		205.0100		205.0400		205.0200		SPV.0035.001		312.0110	
		EXCAVATION COMMON (1)		MARSH		ROCK		ROADWAY		*SELECT	
		CY		EXCAVATION (4)		EXCAVATION		EMBANKMENT(5)		CRUSHED	
		EBS						MASS		MATERIAL	
STAGE/DIVISION	LOCATION	STATION	CUT (2)	EXCAVATION (3)	EXCAVATION (4)	EXCAVATION	FILL	CY	ORDINATE	TON	
1	IH 39 SB	1715+00 'TSB' - 553+21 'SBE'	9,359	21,722	0	0	6,167	27,889	24,914	0	
	IH 39 NB	372+10 'NBE' - 567+57 'NBE'	2,650	0	0	0	896	896	1,754	0	
	UNDISTRIBUTED		0	2,173	0	0	0	1,087	2,173	2,064	
STAGE 1 SUBTOTALS			12,009	23,895	0	0	7,063	29,872	28,841	2,064	
2	IH 39 SB	1715+00 'TSB' - 568+35 'SBE'	118,422	23,635	0	3,559	60,703	81,750	84,913	4,918	
	MAPLE GROVE RD	43+40 'MG' - 56+00 'MG'	688	0	0	0	15,511	15,511	-14,823	0	
	USH 51	58+88 'KN' - 63+00 'KN'	2,591	0	0	0	89	89	2,502	0	
	RAMP KC	798+92 'KC' - 815+54 'KC'	5,102	0	0	25,770	3,385	3,385	27,487	0	
	RAMP KD	806+72 'KD' - 821+19 'KD'	8,047	0	0	0	9,273	9,273	-1,226	0	
	UNDISTRIBUTED		0	1,349	0	0	0	1,349	2,563		
	STAGE 2 SUBTOTALS		134,850	24,984	0	29,329	88,961	110,008	100,202	7,481	
3	IH 39 SB	1803+23 'SB' - 554+58 'SBE'	12,298	0	0	2,191	28,007	28,007	-13,518	0	
	USH 51	47+65 'EKN' - 63+00 'KN'	14,080	0	0	4,536	1,079	1,079	17,537	0	
	RAMP KC	805+50 'KC' - 813+53 'KC'	3,952	0	0	114	4	4	4,062	0	
	RAMP KD	808+17 'KD' - 816+00 'KD'	4,572	0	0	32	23	23	4,581	0	
	EAST CHRUCH RD	45+50 'EC' - 58+00 'EC'	1,487	0	0	23,293	351	351	24,429	0	
	UNDISTRIBUTED		0	364	364	1,820	0	0	2,548	692	
STAGE 3 SUBTOTALS			36,389	364	364	31,986	29,464	29,464	39,639	692	
4	IH 39 SB	1769+50 'TSB' - 1837+00 'TSB'	32,319	0	0	9,545	15,643	15,643	26,221	0	
	UNDISTRIBUTED		0	323	323	1,616	0	323	2,262	622	
	STAGE 4 SUBTOTALS		32,319	323	323	11,161	15,643	15,966	28,483	622	
CATEGORY 1000 SUBTOTALS			215,567	49,566	687	72,476	141,131	185,310	197,165	10,859	
PROJECT TOTALS			215,567	49,566	687	72,476	141,131	185,310	197,165	10,859	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN

- 1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
- 2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
- 3) EBS EXCAVATION TO BE BACKFILLED WITH ROADWAY EMBANKMENT EXCEPT AS NOTED IN NOTE 8.
SEE CONSTRUCTION DETAILS FOR LIMITS OF EBS EXCAVATION AND PLACEMENT.
- 4) MARSH EXCAVATION TO BE BACKFILLED WITH ROADWAY EMBANKMENT EXCEPT AS NOTED IN NOTE 8.
SEE CONSTRUCTION DETAILS FOR LIMITS OF MARSH EXCAVATION AND PLACEMENT.
- 5) ROADWAY EMBANKMENT = (FILL + EBS EXCAVATION+ MARSH EXCAVATION - (SELECT CRUSHED MATERIAL + 1.9))
- 6) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
MASS ORDINATE = CUT +EBS EXC + MARSH EXC + ROCK EXC - FILL. THE MASS ORDINATE IS FOR INFORMATION PURPOSES ONLY AS COMMON EXCAVATION AND ROADWAY EMBANKMENT ARE NOT BALANCED FOR QUANTITY PURPOSES AND DOES NOT GUARANTEE THE QUALITY OF COMMON EXCAVATION, AND IF IT CAN BE REUSED ONSITE.
- 7) SELECT CRUSHED MATERIAL USED IN AREAS OF MARSH EXCAVATION AND IN EBS AREAS WHERE WATER IS ENCOUNTERED. WHERE WATER IS ENCOUNTERED, PLACE SELECT CRUSHED MATERIAL TO AN ELEVATION 1 FT ABOVE THE WATER LINE.

BASE AGG ITEMS									
STAGE	LOCATION	STATION		305.0110	305.0120	371.1000.S	305.0130	*312.0110	REMARKS
				BASE AGG DENSE 3/4-INCH TON	BASE AGG DENSE 1 1/4-INCH TON	QMP BASE AGG DENSE 1 1/4-INCH COMPACTION TON	BASE AGG DENSE 3-INCH TON	SELECT CRUSHED MATERIAL TON	
1	IH 39 SB	1715+00 - 1772+00	'TSB'	641	14,699	-	-	-	OUTSIDE SHOULDER
		380+00 - 398+00	'SBE'	-	3,010	-	-	-	TEMP MEDIAN SHOULDER WIDENING
		427+52 - 439+29	'SBE'	104	1,944	-	-	-	TEMP MEDIAN SHOULDER WIDENING
		527+00 - 553+21	'SBE'	-	2,377	-	-	-	TEMP MEDIAN SHOULDER WIDENING
		553+21 - 562+30	'SBE'	80	1,425	-	-	-	OUTSIDE SHOULDER
	IH 39 NB	372+00 - 388+50	'NBE'	-	2,089	-	-	-	MEDIAN SHOULDER WIDENING
		532+56 - 546+33	'NBE'	-	55	-	-	-	
		550+76 - 567+57	'NBE'	149	2,658	-	-	-	OUTSIDE SHOULDER
		STAGE 1 SUBTOTALS			974	28,257	-	-	
2	IH 39 SB	1715+00 - 1760+40	'TSB'	453	18,933	-	-	-	MEDIAN SHOULDER WIDENING
		1772+42 - 1803+24	'SB'	174	6,714	-	-	11,907	TRAVEL LANES/SHOULDER
		1819+64 - 1830+00	'SB'	71	2,405	-	-	4,223	TRAVEL LANES/SHOULDER
		1830+11 - 1837+00	'TSB'	116	2,700	-	-	-	INTERIM CONNECTION
		1837+00 - 1905+14	'TSB'	707	25,905	-	-	-	OUTSIDE SHOULDER WIDENING
		1869+91 - 1904+73	'TSB'	-	129	-	-	-	MEDIAN SHOULDER
		1905+14 - 1914+15	'TSB'	80	2,492	-	-	-	OUTSIDE SHOULDER
		1869+91 - 1926+00	'TSB'	404	7,437	-	-	-	MEDIAN WIDENING/INTERIM CONNECTION
		1926+44 - 1929+99	'SB'	20	786	-	-	1,449	TRAVEL LANES/SHOULDER
		1931+61 - 1948+00	'SB'	-	3,565	-	-	5,984	TRAVEL LANES/SHOULDER
		1947+59 - 1960+64	'TSB'	-	1,010	-	-	3,346	CROSSOVER
		549+00 - 553+21	'SBE'	-	596	-	-	-	INTERIM CONNECTION
		1955+13 - 1960+64	'TSB'	-	295	-	-	-	CROSSOVER LT SHOULDER
		1947+59 - 1956+15	'TSB'	-	427	-	-	-	CROSSOVER RT SHOULDER
		553+21 - 568+35	'SBE'	-	3,598	-	-	-	MEDIAN SHOULDER
	USH 51	55+50 - 66+00	'EKN'	-	130	-	-	-	TEMP MEDIAN WIDENING STAGE 2A
		58+88 - 63+00	'KN'	45	1,093	-	-	2,481	OUTSIDE LANES STAGE 2 B
		798+92 - 814+57	'KC'	191	2,967	-	-	4,051	TRAVEL LANES
		806+72 - 821+20	'KD'	165	2,654	-	-	3,611	TRAVEL LANES
	MAPLE GROVE RD	43+40 - 48+26	'MG'	38	1,143	-	727	-	TRAVEL LANES
		50+90 - 56+00	'MG'	38	1,191	-	614	-	TRAVEL LANES
		10+23 - 13+15	'DW'	-	139	-	-	-	DRIVEWAY OFF OF MAPLE GROVE ROAD
	STAGE 2 SUBTOTALS			2,502	86,309	-	1,341	37,052	
3	IH 39 SB	1803+24 - 1809+85	'SB'	39	1,336	-	-	2,441	TRAVEL LANES/SHOULDER
		1811+80 - 1819+64	'SB'	61	1,627	-	-	2,922	TRAVEL LANES/SHOULDER
		1914+80 - 1926+00	'TSB'	179	3,185	-	-	-	INTERIM CONNECTION
		1926+44 - 1930+11	'SB'	19	486	-	-	830	TRAVEL LANES/SHOULDER
		1931+74 - 1948+00	'SB'	104	2,611	-	-	4,456	TRAVEL LANES/SHOULDER
		1947+59 - 1951+78	'TSB'	47	2,562	-	-	-	INTERIM CONNECTION
		47+65 - 52+00	'EKN'	-	1,501	-	991	-	TRAVEL LANES
	USH 51	52+00 - 58+88	'KN'	79	2,514	-	-	3,947	TRAVEL LANES
		58+88 - 63+00	'KN'	-	692	-	-	1,192	INSIDE TRAVEL LANES
		45+50 - 57+50	'EC'	75	2,174	-	1,678	-	TRAVEL LANES
	STAGE 3 SUBTOTALS			603	18,688	-	2,669	15,788	
4	IH 39 SB	1769+50 - 1772+00	'TSB'	-	1,031	-	-	-	INTERIM CONNECTION
		1772+42 - 1809+85	'SB'	201	6,857	-	-	10,395	TRAVEL LANES/SHOULDER
		1811+80 - 1830+00	'SB'	94	2,967	-	-	4,970	TRAVEL LANES/SHOULDER
		1830+11 - 1837+00	'TSB'	68	2,314	-	-	-	INTERIM CONNECTION
		1837+00 - 1852+63	'TSB'	45	2,806	-	-	-	MEDIAN SHOULDER
	STAGE 4 SUBTOTALS			408	15,975	-	-	15,365	
	UNDISTRIBUTED			-	1,000	-	-	-	
	CATEGORY 1000 SUBTOTALS			4,487	150,229	150,229	4,010	68,205	
	PROJECT TOTALS			4,487	150,229	150,229	4,010	68,205	
	*ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN								

CONCRETE PAVEMENT												
					415.0070	415.0080	415.0100	415.0120	416.0620	416.0610	415.6000.S	
STAGE	LOCATION	STATION		OFFSET	7-INCH	8-INCH	10-INCH	12-INCH	DRILLED DOWEL BARS	DRILLED TIE BARS	ROUT AND SEAL	REMARKS
					SY	SY	SY	SY	EACH	EACH	LF	
2	IH 39 SB	1772+42	- 1803+24	'SB' LT	-	-	-	12,730	-	-	736	SB TRAVEL LANES/SHOULDER
		1819+65	- 1830+00	'SB' LT	-	-	-	4,226	-	-	789	SB TRAVEL LANES/SHOULDER
		1926+44	- 1929+99	'SB' LT & RT	-	-	-	1,430	-	-	-	SB TRAVEL LANES/SHOULDER
		1931+62	- 1948+00	'SB' LT & RT	-	-	204	6,027	-	-	-	SB TRAVEL LANES/SHOULDER
		1947+59	- 1960+64	'TSB' RT	-	-	2,754	-	-	-	-	CROSS OVER LANES
	USH 51	58+88	- 63+00	'KN' LT	-	663	-	-	8	-	410	USH 51 SB OUTSIDE TRAVEL LANE
		59+19	- 63+00	'KN' RT	-	666	-	-	8	-	385	USH 51 NB OUTSIDE TRAVEL LANE
	RAMP KC	798+92	- 803+22	'KC' RT	-	-	-	719	-	-	-	TRAVEL LANE
		803+22	- 814+25	'KC' RT	-	1,854	-	-	-	-	2,289	TRAVEL LANE
	RAMP KD	807+30	- 819+67	'KD' RT	-	2,079	-	-	-	-	2,491	TRAVEL LANE
		819+67	- 821+22	'KD' RT	-	-	-	256	-	-	-	TRAVEL LANE
	STAGE 2 SUBTOTALS					-	5,262	2,958	25,388	16	-	7,100
3	IH 39 SB	1803+24	- 1809+85	'SB' LT	-	-	-	2,640	-	-	-	SB TRAVEL LANES/SHOULDER
		1811+80	- 1819+65	'SB' LT	-	-	-	3,095	-	-	-	SB TRAVEL LANES/SHOULDER
		1926+44	- 1930+11	'SB' LT	-	-	-	893	-	-	-	SB TRAVEL LANES/SHOULDER
		1931+73	- 1948+00	'SB' LT	-	-	-	4,774	-	-	-	SB TRAVEL LANES/SHOULDER
	USH 51	58+88	- 63+00	'KN' LT & RT	-	1,015	-	-	16	-	-	USH 51 INSIDE TRAVEL LANES
		52+00	- 58+88	'KN' LT & RT	-	2,880	-	-	-	-	1,406	TRAVEL LANES
		63+00	- 66+00	'KN' MEDIAN	-	-	-	-	-	200	-	TIE NEW MEDIAN C&G TO EXISTING CONCRETE
	STAGE 3 SUBTOTALS					-	3,895	-	11,402	16	200	1,406
4	IH 39 SB	1772+43	- 1809+85	'SB' LT & RT	-	-	-	10,057	-	-	-	SB TRAVEL LANES/SHOULDER
		1811+80	- 1830+00	'SB' LT & RT	-	-	-	4,834	-	-	-	SB TRAVEL LANES/SHOULDER
STAGE 4 SUBTOTALS					-	-	-	14,891	-	-	-	
5	MAPLE GROVE RD	48+11	- 48+26	'MG' RT	10	-	-	-	-	-	-	SHOULDER AT CONCRETE APPROACH SLAB
		48+11	- 48+26	'MG' LT	10	-	-	-	-	-	-	SHOULDER AT CONCRETE APPROACH SLAB
STAGE 5 SUBTOTALS					20	-	-	-	-	-	-	
CATEGORY 1000 SUBTOTALS					20	9,157	2,958	51,681	32	200	8,506	
PROJECT TOTALS					20	9,157	2,958	51,681	32	200	8,506	

CONCRETE PAVEMENT APPROACH SLAB

415.0410						
STAGE	LOCATION	STATION			SY	REMARKS
2	IH 39 SB	1929+85	- 1930+08	'SB'	82	SB TRAVEL LANES
		1931+64	- 1931+87	'SB'	82	SB TRAVEL LANES
		STAGE 2 SUBTOTAL			164	
3	IH 39 SB	1809+70	- 1809+85	'SB'	64	SB TRAVEL LANES
		1811+80	- 1811+95	'SB'	64	SB TRAVEL LANES
		STAGE 3 SUBTOTAL			128	
5	MAPLE GROVE RD	48+12	- 48+27	'MG'	40	TRAVEL LANES
		50+89	- 51+04	'MG'	40	TRAVEL LANES
		STAGE 5 SUBTOTAL			80	
CATEGORY 1000 SUBTOTAL					372	
PROJECT TOTAL					372	

EMULSIFIED ASPHALT MEDIAN TREATMENT

STAGE	LOCATION	STATION		OFFSET	SPV.0180.001		REMARKS
					EMULSIFIED ASPHALT	MEDIAN TREATMENT	
					SY		
3	USH 51	52+00	- 55+00	'KN' RT	140		PLACE STONE 6" DEEP
CATEGORY 1000 SUBTOTAL					140		
PROJECT TOTAL					140		

ASPHALTIC PAVEMENT ITEMS															
STAGE	LOCATION	STATION	OFFSET	455.0105	455.0120	455.0605	460.1100	460.1101	460.1130	460.4000	465.0120	465.0105	204.0120	REMARKS	
				ASPHALTIC MATERIAL		TACK	HMA PAVEMENT			HMA COLD WEATHER PAVING	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	ASPHALTIC SURFACE	REMOVING ASPHALTIC SURFACE MILLING		
				PG58-28	PG64-28	COAT	TYPE E-0.3	TYPE E-1	TYPE E-30	TON	TON	TON	TON		SY
1	IH 39 SB	1715+00 - 1752+50	'TSB' LT	59	26	287	-	-	1,532	-	-	-	-	OUTSIDE WIDENING	
		1715+00 - 1769+50	'TSB' LT & RT	-	8	85	-	-	136	-	-	-	1,212	OUTSIDE WIDENING	
		1752+50 - 1772+00	'TSB' LT & RT	192	52	1,150	-	-	4,413	-	-	-	-	OUTSIDE WIDENING/INTERIM CONNECTION	
		1769+50 - 1772+00	'TSB' RT	2	1	10	-	-	50	-	-	-	-	INTERIM CONNECTION	
		380+00 - 393+00	'SBE' LT	-	2	21	-	-	33	-	-	-	289	TEMP OUTSIDE SHOULDER	
		380+00 - 396+40	'SBE' RT	28	13	140	-	-	727	-	-	-	-	TEMP MEDIAN WIDENING	
		425+90 - 441+10	'SBE' LT	-	3	24	-	-	38	-	-	-	337	TEMP OUTSIDE SHOULDER	
		427+52 - 439+29	'SBE' RT	16	8	80	-	-	414	-	-	-	-	TEMP MEDIAN WIDENING	
		1903+19 - 1914+15	'TSB' LT	-	2	18	-	-	28	-	-	-	246	OUTSIDE SHOULDER	
		515+50 - 527+00	'SBE' LT	-	2	19	-	-	30	-	-	-	261	OUTSIDE SHOULDER	
		527+00 - 553+21	'SBE' LT	-	4	41	-	-	66	-	-	-	584	TEMP OUTSIDE SHOULDER	
		527+00 - 553+21	'SBE' LT	33	15	164	-	-	849	-	-	-	-	TEMP OUTSIDE SHOULDER	
		553+21 - 562+30	'SBE' LT	12	6	57	-	-	302	-	-	-	-	OUTSIDE SHOULDER	
		553+21 - 562+30	'SBE' LT	-	2	15	-	-	23	-	-	-	201	OUTSIDE SHOULDER	
	IH 39 NB	364+00 - 388+50	'NBE' RT	-	4	38	-	-	61	-	-	-	543	OUTSIDE SHOULDER	
		372+10 - 388+50	'NBE' LT	-	25	139	-	-	445	-	-	-	730	MEDIAN SHOULDER	
		532+56 - 546+33	'NBE' LT	3	-	23	-	37	-	-	-	-	-	MEDIAN SHOULDER	
		550+76 - 567+57	'NBE' RT	22	10	106	-	-	566	-	-	-	-	OUTSIDE SHOULDER	
		550+76 - 567+57	'NBE' RT	-	3	27	-	-	43	-	-	-	376	OUTSIDE SHOULDER	
STAGE 1 SUBTOTALS				367	186	2,444	-	37	9,756	-	-	-	4,779		
2	IH 39 SB	1715+00 - 1772+00	'TSB' RT	215	96	1,074	-	-	5,640	-	-	-	-	MEDIAN WIDENING	
		1791+56 - 1803+23	'SB' LT	-	11	59	-	-	194	-	-	-	-	OUTSIDE SHOULDER	
		1821+19 - 1828+72	'SB' LT	6	-	32	-	91	-	-	-	-	-	OUTSIDE SHOULDER	
		1828+85 - 1830+00	'SB' LT	-	1	3	-	-	8	-	-	-	-	OUTSIDE SHOULDER	
		1830+11 - 1837+00	'TSB' LT & RT	64	17	381	-	-	1,462	-	-	-	-	INTERIM CONNECTION	
		1837+00 - 1852+25	'TSB' LT	123	33	735	-	-	2,828	-	-	-	-	OUTSIDE WIDENING	
		1852+25 - 1905+14	'TSB' LT	238	106	1,188	-	-	6,231	-	-	-	-	OUTSIDE WIDENING	
		1839+81 - 1903+19	'TSB' LT	-	7	77	-	-	123	-	-	-	1,098	OUTSIDE WIDENING	
		1869+91 - 1904+73	'TSB' RT	5	-	55	-	87	-	-	-	-	-	MEDIAN SHOULDER	
		1854+68 - 1866+26	'TSB' RT	-	20	217	-	-	347	-	-	-	3,064	TRAVEL LANES	
		1904+73 - 1926+00	'TSB' LT & RT	168	45	1,013	-	-	3,869	-	-	-	-	INTERIM CONNECTION	
		1905+14 - 1914+15	'TSB' LT	27	12	132	-	-	692	-	-	-	-	OUTSIDE WIDENING	
		1926+44 - 1929+99	'SB' RT	-	2	-	-	-	31	-	-	-	-	MEDIAN SHOULDER	
		1931+64 - 1948+00	'SB' RT	14	6	64	-	-	345	-	-	-	-	RT SHOULDER	
		549+00 - 553+21	'SBE' LT	10	4	76	-	-	226	-	-	-	-	INTERIM CONNECTION	
		1955+13 - 1960+64	'TSB' LT	4	2	18	-	-	100	-	-	-	-	LT CROSSOVER SHOULDER	
		1947+59 - 1956+16	'TSB' RT	10	5	45	-	-	240	-	-	-	-	RT CROSSOVER SHOULDER	
		553+21 - 568+35	'SBE' LT	41	19	203	-	-	1,067	-	-	-	-	INTERIM CONNECTION/MEDIAN SHOUDER	
	USH 51	52+10 - 58+88	'KN' LT	5	-	29	-	81	-	-	-	-	-	SHOULDER	
		52+10 - 59+19	'KN' RT	5	-	31	-	85	-	-	-	-	-	SHOULDER	
		55+50 - 66+00	'EKN' RT	15	-	-	-	260	-	-	-	-	-	TEMPORARY PAVEMENT STAGE 2A	
		58+34 - 63+00	'KN' RT	4	-	22	-	62	-	-	-	-	-	SHOULDER	
		59+21 - 63+00	'KN' LT	4	-	23	-	64	-	-	-	-	-	SHOULDER	
		803+22 - 814+56	'KC' LT	7	-	44	-	124	-	-	-	-	-	SHOULDER	
		803+22 - 813+53	'KC' RT	4	-	25	-	69	-	-	-	-	-	SHOULDER	
		808+17 - 819+67	'KD' RT	5	-	28	-	77	-	-	-	-	-	SHOULDER	
		808+17 - 821+19	'KD' LT	8	-	51	-	142	-	-	-	-	-	SHOULDER	
STAGE 2 SUBTOTALS				982	386	5,625	-	1,142	23,403	-	-	-	4,162		
3	IH 39 SB	1914+80 - 1926+00	'TSB' LT	70	19	419	-	-	1,603	-	-	-	-	INTERIM CONNECTION	
		549+00 - 553+21	'SBE' LT	34	13	279	-	-	839	-	-	-	-	INTERIM CONNECTION	
	USH 51	55+50 - 66+00	'KN' RT	-	-	-	-	-	-	-	-	163	-	MEDIAN	
	EAST CHURCH RD	45+50 - 57+50	'CH' LT & RT	48	-	304	856	-	-	-	-	-	-	TRAVEL LANES AND SHOULDERS	
		46+33 - 46+89	'CH' RT	-	-	-	-	-	-	-	20	-	-	DRIVEWAY	
STAGE 3 SUBTOTALS				152	32	1,002	856	-	2,442	825	20	163	-		
4	IH 39 SB	1769+50 - 1772+00	'TSB' RT	13	6	62	-	-	322	-	-	-	-	INTERIM CONNECTION/RAMP CROSSOVER	
		1772+42 - 1774+44	'SB' RT	9	4	45	-	-	232	-	-	-	-	RAMP CROSSOVER	
		1774+44 - 1808+49	'SB' RT	-	17	-	-	-	304	-	-	-	-	RT SHOULDER	
		1811+80 - 1830+00	'SB' RT	-	10	-	-	-	165	-	-	-	-	RT SHOULDER	
		1830+11 - 1837+00	'TSB' RT	18	5	106	-	-	410	-	-	-	-	INTERIM CONNECTION	
		1830+11 - 1837+00	'TSB' RT	17	8	84	-	-	442	-	-	-	-	INTERIM CONNECTION	
		1837+00 - 1852+63	'TSB' RT	26	12	126	-	-	667	-	-	-	-	MEDIAN SHOULDER	
	USH 51	48+25 - 52+00	'EKN' LT & RT	33	-	-	-	582	-	-	-	-	-	TRAVEL LANES AND SHOULDERS	
STAGE 4 SUBTOTALS				116	62	423	-	582	2,542	781	-	-	-		
5	MAPLE GROVE RD	43+40 - 48+11	'MG' LT & RT	20	-	126	353	-	-	-	-	-	-	TRAVEL LANES & SHOULDERS	
		10+19 - 13+15	'DW' RT	-	-	-	-	-	-	-	71	-	-	DRIVEWAY	
		51+05 - 55+25	'MG' LT & RT	17	-	111	309	-	-	-	-	-	-	TRAVEL LANES & SHOULDERS	
STAGE 5 SUBTOTALS				37	-	237	662	-	-	166	71	-	-		
CATEGORY 1000 SUBTOTALS				1,654	666	9,731	1,518	1,761	38,143	1,772	91	163	8,941		
PROJECT SUBTOTALS				1,654	666	9,731	1,518	1,761	38,143	1,772	91	163	8,941		

CULVERT PIPE																											
									*520.8000	521.0130	521.0142		522.0118	522.0124	522.0130	522.0136	522.0142	522.0148	522.0318	522.0336	522.0354	522.0360	523.0119				
									CONCRETE	CORRUGATED		MIN. PIPE	REINFORCED						REINFORCED				CULVERT PIPE REINFORCED CONC.				
									COLLARS	STEEL		THICKNESS	CONC. CLASS III						CONC. CLASS IV				HORIZONTAL ELLIPTICAL CLASS HE-III				
		INLET			OUTLET			SLOPE	FOR PIPE	30-INCH	42-INCH	STEEL	18-INCH	24-INCH	30-INCH	36-INCH	42-INCH	48-INCH	18-INCH	36-INCH	54-INCH	60-INCH	19X30-INCH				
STAGE	LOCATION	STATION	OFFSET	ELEVATION	STATION	OFFSET	ELEVATION	%	EACH	LF	LF	IN	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	REMARKS		
1	IH 39	1753+78.08 'TSB'	64.1' LT	849.79	1753+74.41 'TSB'	49.6' LT	849.66	0.81	1	-	-	-	-	-	-	16	-	-	-	-	-	-	-	-	OUTSIDE EXTENSION		
		1769+82.09 'TSB'	21.3' LT	850.57	1769+86.65 'TSB'	64.0' LT	850.57	0.00	1	-	-	-	-	-	-	43	-	-	-	-	-	-	-	-	OUTSIDE EXTENSION		
		1812+00.00 'SB'	5.8' RT	897.78	1812+00.00 'SB'	74.2' LT	897.11	0.84	-	-	-	-	-	80	-	-	-	-	-	-	-	-	-	-	PARTIAL		
2	IH 39	1721+76.34 'TSB'	32.4' RT	846.21	1721+76.16 'TSB'	19.3' RT	845.79	3.21	1	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	MEDIAN EXTENSION		
		1777+39.54 'SB'	6.2' LT	852.73	1777+39.54 'SB'	79.0' LT	852.20	0.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	70	HE PIPE PARTIAL		
		1790+78.00 'SB'	80.8' LT	858.01	1790+78.00 'SB'	08.2 RT	857.68	0.37	1	-	-	-	-	-	-	-	-	89	-	-	-	-	-	-	PARTIAL, CONNECT TO EXISTING		
		1795+00.00 'SB'	00.0'	871.23	1795+00.00 'SB'	77.3' LT	870.10	1.46	-	-	-	-	77	-	-	-	-	-	-	-	-	-	-	-	MEDIAN		
		1816+69.80 'SB'	194.1' LT	885.25	1816+72.75 'SB'	74.8' LT	881.18	3.39	-	-	-	-	-	-	-	-	-	-	-	-	120	-	-	-	CONNECT TO EXISTING		
		1832+85.62 'TSB'	18.6' LT	873.90	1832+85.36 'TSB'	55.2' LT	873.90	0.00	1	-	-	-	-	-	-	-	37	-	-	-	-	-	-	-	-	OUTSIDE EXTENSION	
		1850+38.57 'TSB'	63.5' LT	889.35	1850+12.32 'TSB'	37.5' LT	887.50	5.00	1	-	-	-	-	-	-	37	-	-	-	-	-	-	-	-	OUTSIDE EXTENSION		
		1861+62.40 'TSB'	64.2' LT	910.80	1860+96.28 'TSB'	26.2' LT	910.72	0.11	1	-	-	-	-	-	-	76	-	-	-	-	-	-	-	-	-	OUTSIDE EXTENSION	
		1888+78.13 'TSB'	49.1' LT	878.30	1888+78.13 'TSB'	67.5' LT	878.03	1.42	-	-	-	19	0.109	-	-	-	-	-	-	-	-	-	-	-	-	OUTSIDE EXTENSION	
		1918+00.00 'TSB'	17.0' LT	915.89	1918+00.00 'TSB'	35.0' RT	915.89	0.00	-	-	-	-	-	-	-	-	-	-	52	-	-	-	-	-	-	TO BE ABANDONED AT THE END OF STAGE 3	
		1945+08.33 'SB'	37.8' RT	911.96	1944+83.49 'SB'	25.7' LT	911.14	1.21	1	-	-	-	-	-	-	-	-	-	-	-	-	-	68	-	-	PARTIAL	
		MG	48+35.23 'MG'	59.0' LT	854.85	48+35.23 'MG'	64.1' RT	854.14	0.58	-	-	-	-	-	-	-	-	-	-	-	123	-	-	-	-	TRANSVERSE	
		RAMP KC	808+00 'KC'	43.0' RT	888.00	808+00 'KC'	25.0' LT	887.60	0.59	-	-	-	-	-	68	-	-	-	-	-	-	-	-	-	-	TRANSVERSE	
		RAMP KD	815+00 'KD'	58.0' RT	888.25	815+00 'KD'	42.0' LT	886.94	1.26	-	-	-	-	-	-	104	-	-	-	-	-	-	-	-	-	TRANSVERSE	
		EKN	51+84.00 'KN'	37.0' LT	880.80	50+87.6 'KN'	39.0' LT	880.80	0.00	-	-	96	0.079	-	-	-	-	-	-	-	-	-	-	-	-	-	CONNECT TO EXISTING CSCP
			51+84.00 'KN'	46.0' LT	879.36	50+40 'KN'	49.8' LT	875.26	2.85	-	-	-	-	-	-	-	144	-	-	-	-	-	-	-	-	-	LONGITUDINAL , CAP CPRC PIPE. ENDWALLS ADDED BY OTHER CONTRACT
			51+79.00 'KN'	60.0' RT	881.51	50+88 'KN'	54.4' RT	881.51	0.00	-	-	91	0.079	-	-	-	-	-	-	-	-	-	-	-	-	-	CONNECT TO EXISTING CSCP
			51+79.00 'KN'	70.0' RT	879.40	50+35 'KN'	67.6' RT	887.63	5.72	-	-	-	-	-	-	-	144	-	-	-	-	-	-	-	-	-	LONGITUDINAL , CAP CPRC PIPE. ENDWALLS ADDED BY OTHER CONTRACT
		3	IH 39	1816+72.75 'SB'	74.8' LT	881.18	1816+75.03 'SB'	17.5' RT	878.05	3.39	2	-	-	-	-	-	-	-	-	-	-	-	92	-	-	-	CONNECT TO EXISTING
1944+83.49 'SB'	25.7' LT			911.14	1944+49.01 'SB'	112.9' LT	910.00	1.21	1	-	-	-	-	-	-	-	-	-	-	-	-	-	94	-	PARTIAL		
4	IH 39	1777+39.54 'SB'	28.1' RT	853.01	1777+39.54 'SB'	6.2' LT	852.73	0.76	1	-	-	-	-	-	-	-	-	-	-	-	-	-	37	-	HE PIPE PARTIAL		
		1787+00.00 'SB'	30.4' RT	858.77	1787+00.00 'SB'	3.4' RT	858.31	1.71	1	-	-	-	27	-	-	-	-	-	-	-	-	-	-	-	PARTIAL		
		1790+78.00 'SB'	08.2 RT	857.68	1790+78.00 'SB'	40.5' RT	857.57	0.34	1	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	PARTIAL		
		1795+00.00 'SB'	30.3' RT	871.67	1795+00.00 'SB'	00.00'	871.23	1.46	1	-	-	-	-	30	-	-	-	-	-	-	-	-	-	-	-	PARTIAL	
		1812+00.00 'SB'	38.5' RT	898.05	1812+00.00 'SB'	05.8' RT	897.78	0.84	1	-	-	-	-	32	-	-	-	-	-	-	-	-	-	-	-	PARTIAL	
		1816+75.03 'SB'	17.5' RT	878.05	1816+76.17 'SB'	63.8' RT	876.51	3.39	1	-	-	-	-	-	-	-	-	-	-	-	46	-	-	-	-		
		EAST CHURCH RD	46+73.51 'EC'	33.4' RT	900.76	46+45.63 'EC'	30.2' RT	900.52	0.86	-	-	28	0.079	-	-	-	-	-	-	-	-	-	-	-	-	DRIVEWAY	
			50+50.76 'EC'	30.6' LT	917.48	48+13.87 'EC'	30.6' LT	906.98	4.44	-	-	237	0.079	-	-	-	-	-	-	-	-	-	-	-	-	TRANSVERSE	
	50+74.71 'EC'	30.6' RT	918.65	48+40.62 'EC'	31.0' RT	907.93	4.56	-	-	235	0.079	-	-	-	-	-	-	-	-	-	-	-	-	TRANSVERSE			
UNDISTRIBUTED									2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
CATEGORY 1000 SUBTOTALS									19	687	19		260	68	392	156	53	121	52	123	258	162		107			
PROJECT TOTALS									19	687	19		260	68	392	156	53	121	52	123	258	162		107			
NOTE: STATION, OFFSET AND ELEVATION INFORMATION PROVIDED IS TO THE END OF PIPE																											
*ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN																											

TEMPORARY SHORING				
STAGE	LOCATION	STATION	511.1100 SF	
2	IH 39 SB	1944+80 'SB'	1,500	
3	IH 39 SB	1816+75 'SB'	1,500	
CATEGORY 1000 SUBTOTAL			3,000	
PROJECT TOTAL			3,000	

CULVERT PIPE ENDWALLS															
			521.1030	521.1042	*522.1018	*522.1024	522.1030	522.1036	522.1048	522.1054	522.1060	523.0519	524.0636	524.0642	*633.5200
			APRON ENDWALLS FOR CULVERT PIPE				APRON ENDWALLS FOR CULVERT PIPE						APRON ENDWALLS FOR CULVERT PIPE		MARKERS
			STEEL				REINFORCED CONCRETE						SALVAGED		CULVERT END
LOCATION	STATION	OFFSET	30-INCH EACH	42-INCH EACH	18-INCH EACH	24-INCH EACH	30-INCH EACH	36-INCH EACH	48-INCH EACH	54-INCH EACH	60-INCH EACH	19X30-INCH EACH	36-INCH EACH	42-INCH EACH	EACH
IH 39	1721+76.34	'TSB'	RT	-	-	1	-	-	-	-	-	-	-	-	1
	1753+74.41	'TSB'	LT	-	-	-	-	-	-	-	-	-	-	1	1
	1769+86.57	'TSB'	LT	-	-	-	-	-	-	-	-	-	1	-	1
	1777+39.54	'SB'	LT	-	-	-	-	-	-	-	-	1	-	-	1
	1777+39.54	'SB'	RT	-	-	-	-	-	-	-	-	1	-	-	1
	1781+31.18	'SB'	RT	-	-	-	-	-	-	-	-	-	1	-	-
	48+35.23	'MG'	RT	-	-	-	-	1	-	-	-	-	-	-	-
	48+35.23	'MG'	LT	-	-	-	-	1	-	-	-	-	-	-	-
	1787+00.00	'SB'	LT	-	-	1	-	-	-	-	-	-	-	-	1
	1787+00.00	'SB'	RT	-	-	1	-	-	-	-	-	-	-	-	1
	1790+78.00	'SB'	LT	-	-	-	-	-	1	-	-	-	-	-	1
	1790+78.00	'SB'	RT	-	-	-	-	-	1	-	-	-	-	-	1
	1795+00.00	'SB'	LT	-	-	1	-	-	-	-	-	-	-	-	1
	1795+00.00	'SB'	RT	-	-	1	-	-	-	-	-	-	-	-	1
	1812+00.00	'SB'	LT	-	-	1	-	-	-	-	-	-	-	-	-
	1812+00.00	'SB'	RT	-	-	1	-	-	-	-	-	-	-	-	-
	1816+77.00	'SB'	LT	-	-	-	-	-	-	1	-	-	-	-	1
	1832+85.62	'TSB'	LT	-	-	-	-	-	-	-	-	-	-	1	1
	1888+78.17	'TSB'	LT	-	1	-	-	-	-	-	-	-	-	-	1
	1918+00.00	'TSB'	RT	-	-	1	-	-	-	-	-	-	-	-	-
	1944+49.01	'SB'	LT	-	-	-	-	-	-	-	1	-	-	-	1
RAMP KC	808+00	'KC'	LT & RT	-	-	-	2	-	-	-	-	-	-	-	2
RAMP KD	815+00	'KD'	LT & RT	-	-	-	-	2	-	-	-	-	-	-	2
EKN	51+84	'KN'	LT	1	-	-	-	-	-	-	-	-	-	-	2
	50+40 & 51+84	'KN'	LT	-	-	-	-	**	-	-	-	-	-	-	-
	51+79	'KN'	RT	1	-	-	-	-	-	-	-	-	-	-	2
	50+35 & 51+79	'KN'	RT	-	-	-	-	**	-	-	-	-	-	-	-
EAST CHURCH RD	46+46 & 46+74	'EC'	RT	2	-	-	-	-	-	-	-	-	-	-	-
	48+14 & 50+51	'EC'	LT	2	-	-	-	-	-	-	-	-	-	-	2
	48+41 & 50+75	'EC'	RT	2	-	-	-	-	-	-	-	-	-	-	2
CATEGORY 1000 SUBTOTALS				8	1	8	2	2	2	1	1	2	2	2	27
PROJECT TOTALS				8	1	8	2	2	2	1	1	2	2	2	27

*ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN
** CAP 30" CPRC TO PREVENT WATER OR DEBRIS. ENDWALLS ADDED BY OTHER CONTRACT.

3

STORM SEWER SUMMARY

STAGE					SLOPE %	*520.8000 CONCRETE COLLARS FOR PIPE	*522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE	*522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE	608.0005 STORM SEWER ROCK EXCAVATION	608.0318 STORM SEWER PIPE REINFORCED CONCRETE	608.0324 STORM SEWER PIPE REINFORCED CONCRETE	608.0330 STORM SEWER PIPE REINFORCED CONCRETE	608.0418 STORM SEWER PIPE REINFORCED CONCRETE	*633.5200 MARKERS CULVERT END	REMARKS
	INLET		OUTLET			EACH	18-INCH	24-INCH	CY	CLASS III 18-INCH	CLASS III 24-INCH	CLASS III 30-INCH	CLASS IV 18-INCH	EACH	
	STRUCTURE	ELEVATION	STRUCTURE	ELEVATION											
2	T1.3	858.31	T1.4	856.98	1.72	-	1	-	-	78	-	-	-	1	INLET TO BE REMOVED IN STAGE 4
	T1.5	890.17	T1.6	885.52	1.34	-	-	-	-	350	-	-	-	-	TO BE REMOVED IN STAGE 4
	T1.6	885.52	T1.7	882.58	1.17	-	-	-	-	250	-	-	-	-	TO BE REMOVED IN STAGE 4
	T1.7	882.58	T1.8	879.90	0.88	-	-	-	-	304	-	-	-	-	TO BE REMOVED IN STAGE 4
	T1.8	878.90	-	878.80	0.13	-	-	-	-	-	-	77	-	1	TO BE ABANDONED IN STAGE 4
	T1.9	877.00	-	875.57	2.35	-	-	-	-	-	-	-	61	1	TO BE ABANDONED IN STAGE 4
	T1.11	923.00	T1.10	922.61	0.17	-	-	-	-	-	228	-	-	-	TO BE REMOVED IN STAGE 3
	1.7	923.81	T1.11	923.00	1.25	-	-	-	-	-	65	-	-	-	-
	1.5	960.94	1.6	960.94	0.00	1	-	-	-	4	-	-	-	-	-
	1.4	958.93	1.3	956.36	1.52	-	-	-	-	169	-	-	-	-	-
	1.3	956.36	1.2	949.61	3.04	1	-	-	-	-	-	-	222	-	-
	1.2	949.61	1.1	942.59	3.14	-	-	-	-	224	-	-	-	-	-
	15.1	881.20	15.2	881.18	0.32	-	-	-	2	7	-	-	-	-	-
	15.2	881.18	15.3	881.15	0.43	-	-	-	2	7	-	-	-	-	-
	15.3	881.15	15.4	881.03	0.31	-	1	-	11	38	-	-	-	1	-
	16.1	891.09	16.2	891.05	0.32	-	-	-	4	13	-	-	-	-	-
	16.2	891.05	16.3	890.93	0.31	-	1	-	11	38	-	-	-	1	-
	17.1**	899.00	17.2	898.43	1.06	-	1	-	-	64	-	-	-	1	CONSTRUCT 40 LF OF STORM SEWER PIPE IN STAGE 2 CONSTRUCT 55 LF OF STORM SEWER PIPE IN STAGE 2
	18.1**	905.00	18.2	903.89	1.61	-	1	-	-	69	-	-	-	1	
STAGE 2 SUBTOTALS						2	5	-	30	1615	293	77	283	7	
3	1.8	923.00	1.9	922.33	1.25	1	-	1	-	-	54	-	-	-	CONSTRUCT 65 LF OF STORM SEWER PIPE IN STAGE 2
STAGE 3 SUBTOTALS						1	-	-	-	-	54	-	-	-	
CATEGORY 1000 SUBTOTALS						3	5	-	30	1,615	347	77	283	7	
PROJECT TOTALS						3	5	1	30	1,615	347	77	283	7	

*ADDITIONAL QUANTITES LISTED ELSEWHERE IN PLAN
**CONSTRUCT IN STAGE 2 AND 3. SEAL BULKHEAD BEFORE COVERING IN STAGE 2

3

STORM SEWER STRUCTURE SCHEDULE

								611.0610	611.0627	611.0642	611.0651	611.1006	611.3225	611.3253	611.3901	611.3902
								INLET COVERS				CATCH BASINS	INLETS	INLETS	INLETS	
								TYPE BW	TYPE HM	TYPE MS	TYPE S	6-FT DIAMETER	2x2.5-FT	2.5x3-FT	MEDIAN 1	MEDIAN 2
STAGE	STRUCTURE	STATION	OFFSET	FLANGE ELEVATION	TOP OF STRUCTURE ELEVATION	BOTTOM OF STRUCTURE ELEVATION	DEPTH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	GRATE	GRATE
2	T1.1	1777+39'SB'	6.2' LT	858.02	858.02	852.53	5.49	-	-	2	-	-	-	-	-	1
	T1.3	1787+00'SB'	5.4' RT	861.50	861.50	858.10	3.40	-	-	1	-	-	-	-	1	-
	T1.5	1821+00'SB'	1.1' RT	892.76	892.76	889.99	2.77	-	-	1	-	-	-	-	1	-
	T1.6	1824+50'SB'	2.2' LT	887.75	887.75	885.09	2.66	-	-	1	-	-	-	-	1	-
	T1.7	1827+00'SB'	5.6' LT	884.50	884.50	882.37	2.13	-	-	1	-	-	-	-	1	-
	T1.8	1830+04'TSB'	7.1' LT	881.89	881.89	878.61	3.28	-	-	2	-	-	-	-	-	1
	T1.9	1834+50'SB'	13.4' LT	880.75	880.75	876.79	3.96	-	-	2	-	-	-	-	-	1
	T1.10	1939+11'SB'	37.2' LT	926.53	925.53	920.61	4.92	-	-	-	1	1	-	-	-	-
	T1.11	1941+38'SB	35.4' LT	928.23	927.23	921.00	6.23	-	-	-	1	1	-	-	-	-
	1.1	1950+67 'TSB'	33.7' RT	945.12	945.12	942.38	2.74	-	-	1	-	-	-	-	1	-
	1.3	1955+14'TSB'	4.6' LT	959.07	959.07	956.15	2.92	-	-	2	-	-	-	-	-	1
	1.4	1956+89 'TSB'	13.0' LT	961.63	961.63	958.72	2.91	-	-	1	-	-	-	-	1	-
	1.5	1957+69'TSB'	19.1' LT	962.89	962.89	960.73	2.16	-	-	1	-	-	-	-	1	-
	1.7	1941+38'SB'	32.6' RT	928.18	928.18	923.60	4.58	-	-	2	-	-	-	-	-	1
	15.1	52+50 'KN'	15.2' RT	885.50	884.17	880.90	3.27	1	-	-	-	-	1	-	-	-
	15.2	52+50 'KN'	9.0' RT	885.20	885.20	880.88	4.32	-	-	1	-	-	-	-	1	-
	15.3	52+50 'KN'	2.0' RT	885.56	884.23	880.85	3.38	1	-	-	-	-	1	-	-	-
	16.1	56+25 'KN'	13.9' RT	895.62	894.62	890.79	3.83	-	1	-	-	-	-	1	-	-
	16.2	56+25 'KN'	1.5' RT	895.56	894.56	890.75	3.81	-	1	-	-	-	-	1	-	-
	17.1	59+25 'KN'	12.5' RT	903.56	902.56	898.70	3.86	-	1	-	-	-	-	1	-	-
	18.1	62+25 'KN'	13.1' RT	911.54	910.54	904.70	5.84	-	1	-	-	-	-	1	-	-
CATEGORY 1000 SUBTOTALS								2	4	18	2	2	2	4	8	5
PROJECT TOTALS								2	4	18	2	2	2	4	8	5

EROSION CONTROL

		645.0112																			*645.0120	
		*312.0110	*606.0200	*606.0300	628.1104	628.1504	628.1520	628.2002	628.2004	628.2023	628.2006	628.7005	628.7010	728.7015	628.7504	628.7555	628.7560	628.7570**	GEOTEXTILE			
		SELECT CRUSHED	RIPRAP	RIPRAP	EROSION	SILT	SILT FENCE	EROSION MAT	EROSION MAT	EROSION MAT	EROSION MAT	INLET PROTECTION	INLET PROTECTION	INLET PROTECTION	TEMPORARY	CULVERT PIPE	TRACKING	ROCK	FABRIC			
		MATERIAL	MEDIUM	HEAVY	BALES	FENCE	MAINTAINANCE	CLASS I TYPE A	CLASS I TYPE B	CLASS II TYPE B	URBAN CLASS I	TYPE A	TYPE A	TYPE B	TYPE C	DITCH CHECKS	CHECKS	PADS	BAGS	SCHEDULE B		
STAGE	LOCATION	STATION	TON	CY	CY	EACH	LF	LF	SY	SY	SY	EACH	EACH	EACH	LF	EACH	EACH	EACH	SY	TYPE HR		
1	SB IH 39 OUTSIDE SHOULDER TEMPORARY	1715+00 - 1772+00 'TSB'	-	-	-	1,110	2,670	16,020	-	2,580	-	4,650	-	-	30	16	-	79	-	-		
		1903+56 - 1914+80 'TSB'	-	-	-	140	1,110	6,660	810	-	-	1,370	-	-	-	-	-	-	-	-		
		553+21 - 562+30 'SBE'	-	-	-	-	-	-	-	1,230	-	-	-	-	-	-	-	-	-	-	-	
	SB IH 39 INSIDE SHOULDER TEMPORARY	1826+28 - 1838+00 'TSB'	-	-	-	-	970	5,820	-	60	-	-	-	-	-	8	-	190	-	-		
		380+00 - 396+40 'SBE'	-	-	-	-	-	-	-	2,370	-	-	-	-	30	16	-	-	-	-	-	
	NB IH 39 OUTSIDE SHOULDER TEMPORARY	550+76 - 567+57 'NBE'	-	-	-	-	370	2,220	-	1,200	-	-	-	-	-	8	-	-	-	-	-	
	UNDISTRIBUTED		-	-	-	310	1,280	7,680	200	1,860	-	1,510	-	-	15	12	5	67	-	-	-	
	STAGE 1 SUBTOTALS		-	-	-	1,560	6,400	38,400	1,010	9,300	-	7,530	-	-	75	60	5	336	-	-	-	
2	SB IH 39 OUTSIDE SHOULDER TEMPORARY	1830+11 - 1903+56 'TSB'	-	13	-	580	3,050	18,300	13,360	6,280	-	490	-	-	140	24	-	442	-	42		
	SB IH 39 INSIDE SHOULDER TEMPORARY	1715+00 - 1772+00 'TSB'	-	-	-	-	2,370	14,220	-	3,750	-	920	-	-	10	24	-	-	-	-		
		1868+00 - 1926+00 'TSB'	-	-	-	-	1,250	7,500	-	1,590	-	-	-	-	60	16	-	64	-	-		
	SB IH 39 OUTSIDE SHOULDER RECONSTRUCTION	1772+00 - 1803+27 'SB'	-	69	-	400	1,160	6,960	730	2,870	-	6,280	2	-	100	16	-	-	-	201		
		1819+65 - 1830+00 'SB'	-	-	-	-	240	1,440	1,050	3,180	-	-	5	-	60	-	-	-	-	-		
	IH 39 CROSSOVER	1926+44 - 1960+64 'TSB'	-	2	-	-	-	-	-	3,460	-	-	9	-	-	8	-	-	-	8		
	USH 51	59+00 - 63+00 'KN'	-	16	-	275	400	2,400	-	-	710	-	16	3	13	10	8	-	-	56		
	RAMP KC	798+92 - 814+56 'KC'	-	4	-	-	-	-	-	2,350	-	-	8	-	8	8	-	-	-	14		
	RAMP KD	808+17 - 821+19 'KD'	-	4	-	-	-	-	-	-	-	-	12	-	12	8	-	-	-	14		
	UNDISTRIBUTED		-	27	-	310	2,120	12,710	3,790	5,870	180	1,920	-	-	100	28	5	127	-	84		
	STAGE 2 SUBTOTALS		-	135	-	1,565	10,590	63,530	18,930	29,350	890	9,610	52	3	13	500	140	5	633	-	419	
3	SB IH 39 OUTSIDE SHOULDER RECONSTRUCTION	1803+27 - 1819+65 'SB'	-	24	-	-	1,610	9,660	-	1,680	-	-	1	-	80	24	-	-	-	-		
		1926+44 - 1948+00 'SB'	28	66	90	-	1,990	11,940	-	-	-	-	1	-	-	-	-	52	134	378		
	SB IH 39 OUTSIDE SHOULDER TEMPORARY	1914+80 - 1926+00 'TSB'	-	-	-	-	1,180	7,080	-	-	-	-	-	-	-	-	-	-	-	-		
		1947+58 - 1951+78 'TSB'	-	-	-	-	-	-	-	440	-	-	-	-	-	-	-	-	-	-		
	MAPLE GROVE RD	43+40 - 56+25 'MG'	-	4	-	32	1,930	11,580	-	-	-	6,600	-	2	2	-	-	-	-	16		
	EAST CHURCH ROAD	45+50 57+50 'EC'	-	16	-	-	-	-	-	10,430	1,570	-	-	-	400	32	-	-	-	75		
	UNDISTRIBUTED		7	27	22	8	1,680	10,065	-	3,140	390	1,650	-	-	121	14	4	13	34	117		
STAGE 3 SUBTOTALS		35	137	112	40	8,390	50,325	-	15,690	1,960	8,250	2	-	2	603	70	4	65	168	586		
4	SB IH 39 INSIDE SHOULDER RECONSTRUCTION	1772+00 - 1830+00 'SB'	-	2	-	-	980	5,880	670	7,170	-	-	1	-	160	56	-	94	-	-		
	SB IH 39 INSIDE SHOULDER TEMPORARY	1830+11 - 1853+00 'TSB'	-	-	-	-	1,440	8,640	-	540	-	-	-	-	40	-	-	-	-	-		
	UNDISTRIBUTED		-	1	-	-	610	3,630	170	1,930	-	-	-	-	50	14	2	24	-	-		
STAGE 4 SUBTOTALS		-	3	-	-	3,030	18,150	840	9,640	-	-	1	-	250	70	2	118	-	-	-		
CATEGORY 1000 SUBTOTALS		35	275	112	3,165	28,410	170,405	20,780	63,980	2,850	25,390	55	3	15	1,428	340	16	1,152	168	1,005		
PROJECT TOTALS		35	275	112	3,165	28,410	170,405	20,780	63,980	2,850	25,390	55	3	15	1,428	340	16	1,152	168	1,005		
*ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN																						
**ROCK BAGS ARE FOR SILT FENCE RELIEF																						

EROSION CONTROL MOBILIZATION

		628.1905	628.1910
		MOBILIZATIONS	EMERGENCY
		EROSION CONTROL	MOBILIZATIONS
			EROSION CONTROL
STAGE	LOCATION	EACH	EACH
1	IH 39 SB	3	2
2		7	4
3		2	1
4		3	1
CATEGORY 1000 SUBTOTALS		15	8
PROJECT TOTALS		15	8

RESTORATION

STAGE	LOCATION	STATION			625.0500	627.0200	628.6505	628.6510	629.0205	630.0110	630.0120	630.0130	630.0200	REMARKS	
					SALVAGED		SOIL STABILIZER	SOIL STABILIZER	FERTILIZER	SEEDING MIXTURE			SEEDING		
					TOPSOIL	MULCHING	TYPE A	TYPE B	TYPE A	NO. 10	NO. 20	NO. 30	TEMPORARY		
					SY	SY	ACRE	ACRE	CWT	LB	LB	LB	LB		
1	SB IH 39 OUTSIDE SHOULDER TEMPORARY	1715+00 - 1772+00	'TSB'		13,500	710	-	-	9	183	-	-	365		
		1903+56 - 1914+80	'TSB'		4,400	1,230	-	-	3	60	-	-	120		
		553+21 - 562+30	'SBE'		2,300	10	-	-	1	-	61	-	61		
	SB IH 39 INSIDE SHOULDER TEMPORARY	1826+28 - 1838+00	'TSB'		1,100	1,140	-	-	1	15	-	-	31		
		380+00 - 396+40	'SBE'		-	1,140	-	-	-	-	-	-	-		
	NB IH 39 OUTSIDE SHOULDER TEMPORARY	550+76 - 567+57	'NBE'		2,900	420	-	-	2	-	77	-	77		
		UNDISTRIBUTED			6,050	1,160	-	1	4	64	35	-	163		
	STAGE 1 SUBTOTALS				30,250	5,810	-	1	20	322	173	-	817		
	2	SB IH 39 OUTSIDE SHOULDER TEMPORARY	1830+11 - 1903+56	'TSB'		37,300	10,060	-	-	23	120	770	-	1,010	
			SB IH 39 INSIDE SHOULDER TEMPORARY	1715+00 - 1772+00	'TSB'		14,500	3,740	-	-	9	200	-	-	390
SB IH 39 OUTSIDE SHOULDER RECONSTRUCTION		1868+00 - 1926+00	'TSB'		16,400	7,870	-	-	10	180	90	-	440		
		1772+00 - 1803+27	'SBE'		20,200	7,200	1	-	9	140	-	90	550	TEMP SEEDING ONLY ON SLOPES GREATER THAN 15' FROM SHOULDER, STA 1796+00 TO 1803+00	
		1819+65 - 1830+00	'SBE'		8,900	3,060	1	-	1	-	-	30	240	TEMP SEEDING ONLY ON SLOPES GREATER THAN 15' FROM SHOULDER	
IH 39 CROSSOVER		1926+44 - 1960+64	'TSB'		8,700	3,520	-	-	5	-	230	-	230		
		UNDISTRIBUTED			26,500	8,860	1	5	15	160	270	30	720		
STAGE 2 SUBTOTALS				132,500	44,310	3	5	72	800	1,360	150	3,580			
3		SB IH 39 OUTSIDE SHOULDER RECONSTRUCTION	1803+27 - 1819+65	'SBE'		21,700	23,580	2	-	6	-	100	110	590	SEED MIX NO. 20 ON OUTSIDE SLOPES OF US 51 SB ENTRANCE/EXIT RAMPS FROM STA 1806+00 TO 1818+00
			1926+44 - 1948+00	'SBE'		9,900	8,480	-	-	6	-	270	-	270	
	SB IH 39 OUTSIDE SHOULDER TEMPORARY	1914+80 - 1926+00	'TSB'		5,500	5,940	-	-	3	70	-	-	150		
		1947+58 - 1951+78	'TSB'		900	450	-	-	1	-	20	-	20		
	USH 51	52+00 - 63+00	'KN'		6,050	6,050	-	-	4	-	40	60	150		
		RAMP KC	798+92 - 814+25	'KC'		15,760	13,520	-	-	11	-	180	80	290	
	RAMP KD	807+30 - 821+20	'KD'		16,480	16,480	-	-	11	-	160	70	330		
		EAST CHURCH ROAD	45+50 - 57+50	'EC'		11,780	1,240	-	-	8	-	-	-	-	
	UNDISTRIBUTED				22,020	18,930	1	1	13	18	193	80	450		
	STAGE 3 SUBTOTALS				110,090	94,670	3	1	63	88	963	400	2,250		
4	SB IH 39 INSIDE SHOULDER RECONSTRUCTION	1772+00 - 1830+00	'SBE'		30,300	17,840	-	-	19	100	360	170	820		
	SB IH 39 INSIDE SHOULDER TEMPORARY	1830+11 - 1853+00	'TSB'		4,000	790	-	-	2	-	110	-	110		
	MAPLE GROVE RD	43+40 - 56+25	'MG'		11,960	-	2	-	8	-	-	70	350		
	UNDISTRIBUTED			11,570	4,680	1	2	7	25	118	60	320			
STAGE 4 SUBTOTALS				57,830	23,310	3	2	36	125	588	300	1,600			
CATEGORY 1000 SUBTOTALS				330,670	168,100	9	9	191	1,335	3,083	850	8,247			
PROJECT TOTALS				330,670	168,100	9	9	191	1,335	3,083	850	8,247			

**APPLY SEED MIXTURE NO. 30 ON SLOPES WITHIN 15 FT OF THE SHOULDER AT STATION RANGES INDICATED IN THE QUANTITIES.
APPLY SEED MIXTURE NO. 10 OR 20 ON ALL OTHER SLOPES AT STATION RANGES INDICATED IN THE QUANTITIES

3

GUARDRAIL ITEMS

						614.2300	614.2500	614.2610	614.2620
						MGS	THRIE BEAM	MGS	MGS
						GUARDRAIL 3	TRANSITION	GUARDRAIL	GUARDRAIL
						LF	LF	TERMINAL EAT	TERMINAL TYPE 2
STAGE	LOCATION	STATION		OFFSET				EACH	EACH
2	IH 39 SB	1785+02	- 1787+17	'SB'	LT	125.0	39.4	1	-
STAGE 2 SUBTOTALS						125.0	39.4	1	-
3	IH 39 SB	1809+34.4	- 1809+89.8	'SB'	LT	14.0	39.4	-	1
						1811+77.3	- 1814+57.3	'SB'	LT
						187.5	39.4	1	-
						1931+72.5	- 1934+27.0	'SB'	LT
						162.5	39.4	1	-
STAGE 3 SUBTOTALS						364	118.2	2	1
4	IH 39 SB	1808+46.9	- 1809+87.8	'SB'	RT	101.5	39.4	-	1
						44+78	- 48+08	'MG'	RT
						237.5	39.4	1	-
						46+90	- 48+08	'MG'	LT
						25	39.4	1	-
						51+08	- 54+00	'MG'	RT
						200	39.4	1	-
						51+08	- 54+00	'MG'	LT
						200	39.4	1	-
STAGE 4 SUBTOTALS						764	197.0	4	1
CATEGORY 1000 SUBTOTALS						1,253	354.6	7	2
PROJECT TOTALS						1,253	354.6	7	2

CONCRETE CURB & GUTTER

						601.0551	620.0300
						4-INCH	CONCRETE MEDIAN
						SLOPED 36-INCH	SLOPED NOSE
						TYPE A	
STAGE	LOCATION	STATION		OFFSET		LF	SF
2	IH 39 SB	1782+57	1783+28	'SB'	LT	71	-
STAGE 2 SUBTOTALS						71	-
3	USH 51	52+50	- 63+00	'KN'	RT	1,486	65
						63+00	- 66+00
						'KN'	RT
						600	-
STAGE 3 SUBTOTALS						2,086	65
4	USH 51	48+25	- 48+50	'EKN'	RT	45	19
STAGE 4 SUBTOTALS						45	19
CATEGORY 1000 SUBTOTALS						2,202	84
PROJECT TOTALS						2,202	84

3

EXISTING COVER ADJUSTMENTS

				611.8115	611.9710
				ADJUSTING	SALVAGED
				INLET COVERS	INLET COVERS
STAGE	STATION	OFFSET		EACH	EACH
2	64+80 'EKN	9.8'	RT	1	1
CATEGORY 1000 SUBTOTALS				1	1
PROJECT TOTALS				1	1

WATER

LOCATION	624.0100	REMARKS
UNDISTRIBUTED	800	BASE COMPACTION
	1,400	EARTHWORK DUST CONTROL
CATEGORY 1000 SUBTOTAL	2,200	BASE COMPACTION
PROJECT TOTAL	2,200	BASE COMPACTION

COVER PLATES TEMPORARY

				611.8120.S
STAGE	STATION	OFFSET		EACH
2	59+32 'EKN'	11.4'	RT	1
	62+30 'EKN'	13.9'	RT	1
	64+80 'EKN	9.8'	RT	1
CATEGORY 1000 SUBTOTAL				3
PROJECT TOTAL				3

PIPE UNDERDRAIN

				612.0106
				6-INCH
STAGE	LOCATION	STATION	STATION	LF
2	USH 51	52+50 'KN'	- 56+25 'KN'	375
				56+25 'KN'
				300
STAGE 2 SUBTOTAL				675
3	USH 51	59+25 'KN'	- 62+25'KN'	300
				62+25 'KN'
				75
STAGE 3 SUBTOTAL				375
CATEGORY 1000 SUBTOTAL				1,050
PROJECT TOTAL				1,050

DROP INLET ITEMS

										416.1010	521.1012	*606.0200	611.3220	611.0654	612.0212	*645.0120	*633.5200
										CONCRETE	APRON ENDWALLS	RIPRAP	INLETS	INLET	PIPE UNDERDRAIN	GEOTEXTILE	MARKERS
										SURFACE	FOR CULVERT	MEDIUM	2X2-FT	COVERS	UNPERFORATED	FABRIC	CULVERT END
										DRAINS	PIPE STEEL			TYPE V	12-INCH	TYPE HR	
STAGE	LOCATION	STATION	OFFSET	FLANGE	TOP OF	BOTTOM OF	PIPE UNDERDRAIN	DEPTH	CY		12-INCH						
2	IH 39 SB	1931+77.71	'SB'	RT	937.06	936.23	934.80	897.55	1.43	1.8	1	4	1	1	13	17	1
STAGE 2 SUBTOTALS										1.8	1	4	1	1	13	17	1
3	IH 39 SB	1809+68.74	'SB'	LT	902.53	901.70	899.70	895.72	2.00	1.8	1	2	1	1	33	8	1
										1809+68.74	'SB'	LT	936.72	935.89	933.89	907.10	2.00
										1.8	1	-	1	1	73	-	1
STAGE 3 SUBTOTALS										3.6	2	2	2	2	106	8	2
4	IH 39 SB	1809+68.74	'SB'	RT	902.76	901.93	899.93	895.72	2.00	1.8	1	3	1	1	26	12	1
STAGE 4 SUBTOTALS										1.8	1	3	1	1	26	12	1
5	MAPLE GROVE RD	51+26	'MG'	LT	880.20	879.37	877.37	855.42	2.00	6.1	1	2	1	1	70	8	1
										51+26	'MG'	RT	880.20	879.37	877.37	854.87	2.00
										6.1	1	2	1	1	70	8	1
STAGE 5 SUBTOTALS										12.1	2	4	2	2	140	16	2
UNDISTRIBUTED										-	-	3	-	-	-	13	-
CATEOGRY 1000 SUBTOTALS										19.3	6	16	6	6	285	66	6
PROJECT TOTALS										19.3	6	16	6	6	285	66	6

*ADDITIONAL QUANTITES LISTED ELSEWHERE IN PLAN

PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

MISCELLANEOUS QUANTITIES

SHEET

374

E

3

CRASH CUSHIONS

		614.0800		614.0905					
		CRASH CUSHIONS				BACK		CRASH	
STAGE	LOCATION	STATION		PERMANENT	TEMPORARY	WIDTH	SIGN	TEST	TRAFFIC
				EACH	EACH	FT	PLATE	LEVEL	LOCATION
1	IH 39 SB	392+50	'SBE'	-	1	2	WO5-58L	TL-3	RT
		416+59	'SBE'	-	1	2	WO5-58R	TL-3	LT
	IH 39 NB	377+00	'NBE'	-	1	2	WO5-58L	TL-3	RT
STAGE 1 SUBTOTALS				-	3				
2	IH 39 SB	438+28	'SBE'	-	1	2	WO5-58R	TL-3	LT
		559+00	'SBE'	-	1	2	WO5-58L	TL-3	RT
		1831+24	'TSB'	1	-	2	W5-58R	TL-3	LT
		1908+23	'TSB'	1	-	2	W5-58L	TL-3	RT
		1934+27	'SB'	1	-	2	W5-58L	TL-3	RT
STAGE 2 SUBTOTALS				3	2				
3	IH 39 SB	1805+68	'SB'	-	1	2	WO5-58L	TL-3	RT
		1837+58	'TSB'	-	1	2	WO5-58D	TL-3	LT & RT
	USH 51	55+00	'KN'	1	-	2	W5-58L	TL-3	RT
	EAST CHURCH RD	48+73	'EC'	1	-	2	W5-58R	TL-3	LT
		48+94	'EC'	1	-	2	W5-58L	TL-3	RT
		51+00	'EC'	1	-	2	W5-58L	TL-3	RT
		51+22	'EC'	1	-	2	W5-58R	TL-3	LT
	STAGE 3 SUBTOTALS				5	2			
4	IH 39 SB	1787+18	'SB'	1	-	2	W5-58L	TL-3	RT
		1830+00	'SB'	1	-	2	W5-58L	TL-3	RT
	USH 51	48+10	'EKN'	1	-	2	W5-58R	TL-3	LT
48+63		'EKN'	1	-	2	W5-58L	TL-3	LT & RT	
51+65		'EKN'	1	-	2	W5-58R	TL-3	LT	
STAGE 4 SUBTOTALS				5	-				
CATEGORY 1000 SUBTOTALS				13	7				
PROJECT TOTALS				13	7				

CONCRETE BARRIER

				603.1136		603.8000		603.8125		SPV.0090.200	
				CONCRETE BARRIER		CONCRETE BARRIER		CONCRETE BARRIER		CONCRETE BARRIER	
				TYPE S36		TEMPORARY PRECAST		TEMPORARY PRECAST		TEMPORARY PRECAST	
				DELIVERED		INSTALLED		LEFT IN PLACE			
STAGE	LOCATION	STATION		OFFSET	LF	LF	LF	LF	LF	REMARKS	
1	IH 39 SB	382+00	- 392+50	'SBE' RT	-	1,050	1,050	-	-	MEDIAN SHOULDER	
		406+05	- 416+59	'SBE' LT	-	1,054	1,054	-	-	OUTSIDE SHOULDER	
	IH 39 NB	377+00	- 386+25	'NBE' LT	-	925	925	-	-	MEDIAN SHOULDER	
STAGE 1 SUBTOTALS					-	3,029	3,029	-	-		
2	IH 39 SB	372+29'SBE'	- 812+05'KC'	LT & RT	-	4,214	4,214	-	-	OUTSIDE SHOULDER	
		810+00'KD'	- 531+42'SBE'	LT	-	12,122	12,122	-	-	OUTSIDE SHOULDER	
		1828+85'SB'	- 1831+09'TSB'	LT	-	213	213	213	-	OUTSIDE SHOULDER	
		504+50	- 559+00	'SBE' LT	-	5,450	5,450	-	-	MEDIAN	
		1784+39	- 1785+02	'SB' LT	63	-	-	-	-	-	
		1828+28	- 1828+85	'SB' LT	57	-	-	-	-	-	
		1904+22	- 1908+23	'SB' RT	-	400	400	400	-	-	
		1931+61	- 1934+27	'SB' RT	-	265	265	265	-	-	
		807+00'KC'	- 65+00'KN'	RT	-	1,450	1,446	-	-	-	
	810+00'KD'	- 64+00'KN'	RT	-	775	763	-	-	-		
	IH 39 NB	532+56	- 564+27	'NBE' LT	-	3,172	3,172	1,328	-	MEDIAN	
STAGE 2 SUBTOTALS					120	28,061	28,045	2,206	-		
3	IH 39 SB	394+00	- 406+05	'SBE' LT	-	-	605	-	-	OUTSIDE SHOULDER	
		372+29'SBE'	- 1805+68'SB'	LT	-	3,478	3,478	-	-	OUTSIDE SHOULDER	
		416+59	- 425+00	'SBE' LT	-	-	871	-	-	OUTSIDE SHOULDER	
		1816+62'SB'	- 438+58'SBE'	LT	-	2,093	2,093	-	-	EXIT RAMP	
		1912+00'TSB'	- 558+45'SBE'	LT	-	4,503	4,503	-	-	OUTSIDE SHOULDER	
	EAST CHURCH RD	48+93	- 51+21	'EC' LT	-	227	227	227	-	-	
		48+73	- 51+00	'EC' RT	-	228	228	228	-	-	
	USH 51	52+00	- 55+00	'KN' RT	563	-	-	-	-	MEDIAN	
STAGE 3 SUBTOTALS					563	10,529	12,005	455	-		
4	IH 39 SB	1768+50	- 1771+00	'SB' RT	-	-	251	-	-	-	
		1781+99	- 1787+18	'SB' RT	-	-	509	509	-	MEDIAN	
		1800+00'SB'	- 1842+23'TSB'	'SB' LT & RT	-	2,067	4,250	-	-	MEDIAN	
		1811+80	- 1830+00	'SB' RT	-	-	1,822	1,822	-	MEDIAN	
		1784+39	- 1785+02	'SB' RT	63	-	-	-	-	-	
	USH 51	48+25	- 51+65	'EKN' RT & LT	-	575	575	575	-	OUTSIDE LANES	
		48+83	- 52+00	'EKN' RT & LT	-	517	517	517	-	MEDIAN EDGE	
STAGE 4 SUBTOTALS					63	3,159	7,924	3,423	-		
CATEGORY 1000 SUBTOTALS					746	44,778	51,003	6,084	-		
PROJECT TOTALS					746	44,778	51,003	6,084	-		

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FENCE WOVEN WIRE 4-FT

					616.0100
STAGE	LOCATION	STATION		OFFSET	LF
2	IH 39 SB	1715+00	- 1782+86	'TSB' LT	6,854
		1783+25	- 1804+38	'TSB' LT	2,122
		1820+49	- 1858+74	'TSB' LT	3,911
	RAMP KC	804+58	- 815+15	'KC' LT	968
	RAMP KD	809+39	- 820+37	'KD' LT	998
	USH 51	57+38	- 65+03	'KN' RT	775
STAGE 2 SUBTOTAL					15,628
3	IH 39 SB	1861+85	- 1929+99	'TSB' LT	6,839
		1931+48	- 1947+55	'TSB' LT	1,654
	STAGE 3 SUBTOTAL				
4	MAPLE GROVE RD	50+90	- 51+02	'MG' LT	51
		50+90	- 51+26	'MG' RT	83
	STAGE 4 SUBTOTAL				
CATEGORY 1000 SUBTOTAL					24,255
PROJECT TOTAL					24,255

FENCE SAFETY

		616.0700.S
LOCATION		LF
UNDISTRIBUTED		1,500
CATEGORY 1000 SUBTOTAL		1,500
PROJECT TOTAL		1,500

ACCESS GATE

SPV.0060.003					
6-FOOT					
STAGE	LOCATION	STATION	OFFSET	EACH	REMARKS
4	IH 39 SB	1782+73	'SB' 86' LT	1	MAPLE GROVE RD, SW QUAD BRIDGE ABUTMENT LOCATION
	IH 39 NB	50+90	'MG' 30' LT	1	MAPLE GROVE RD, NE QUAD BRIDGE ABUTMENT LOCATION
CATEGORY 1000 SUBTOTAL				2	
PROJECT TOTAL				2	

TRAFFIC CONTROL ITEMS																											
			643.0300		643.0420		SPV.0060.103 BARRICADES TYPE III WITH SIGN, PERMANENT		*643.0500 *643.0600 FLEXIBLE TUBULAR MARKER		643.0705		643.0715		643.0800		643.0900		643.0910		643.0920		643.3000		643.1050		
			DRUMS		BARRICADES TYPE III				WARNING LIGHTS TYPE A		WARNING LIGHTS TYPE C		ARROW BOARDS		SIGNS		COVERING SIGNS TYPE I		COVERING SIGNS TYPE II		DETOUR SIGNS		PCMS				
STAGE	LOCATION	# OF DAYS	NO.	(DAYS)	NO.	(DAYS)	EACH	POST (EACH)	BASES (EACH)	NO.	(DAYS)	NO.	(DAYS)	NO.	(DAYS)	NO.	(DAYS)	NO.	(EACH)	NO.	(EACH)	NO.	(DAYS)	NO.	(DAYS)	REMARKS	
1	IH 39 SB	19	230	4370	-	-	-	-	-	-	-	-	-	1	19	10	190	-	2	-	-	2	58	DAYTIME OPERATIONS			
		14	24	336	-	-	-	-	-	-	-	15	210	2	28	32	448	-	-	-	-	1	14	NIGHTTIME OPERATIONS			
	IH 39 NB	19	73	1387	-	-	-	-	-	-	-	-	-	1	19	6	114	-	-	-	-	2	58	DAYTIME OPERATIONS			
		12	28	336	-	-	-	-	-	-	-	15	180	2	24	28	336	-	-	-	-	1	12	NIGHTTIME OPERATIONS			
	MAPLE GROVE RD	32	-	-	18	576	-	-	-	-	-	-	-	-	9	288	-	-	-	-	-	-	-	-	-		
EAST CHURCH RD		32	-	-	14	448	-	-	-	20	640	-	-	-	-	10	320	-	-	-	-	-	-	-	-		
STAGE 1 SUBTOTALS			6,429		1,024		0	0	0	640		390		90		1,696		0	2	0		6		142			
2A/B	IH 39 SB	24	131	3,144	-	-	-	-	-	-	-	23	552	-	-	18	432	-	2	-	-	-	2	48	DAYTIME OPERATIONS		
		18	24	432	-	-	-	-	-	2	36	15	270	2	36	32	576	-	-	-	-	1	18	NIGHTTIME OPERATIONS			
2A/B	IH 39 NB	24	54	1296	5	120	-	-	-	6	144	-	-	-	-	13	312	2	2	-	-	-	2	48	-		
2A	USH 51	3	45	135	3	9	-	-	-	-	-	9	27	-	-	23	69	2	3	125	375	2	14	PCMS INSTALLED FOR 7 DAYS PRIOR TO DETOUR			
2B	USH 51	39	34	1,326	3	117	-	14	14	-	-	22	858	-	-	36	1,404	2	3	125	4,875	-	-	-			
2A/B	MAPLE GROVE RD	42	-	-	18	756	-	-	-	-	-	-	-	-	-	9	378	-	-	-	-	-	-	-			
2A/B	EAST CHURCH RD	42	-	-	14	588	-	-	-	20	840	-	-	-	-	10	420	-	-	-	-	-	-	-			
2C	IH 39 SB	12	168	2,016	-	-	-	-	-	-	-	23	276	-	-	17	204	-	2	-	-	2	24	DAYTIME OPERATIONS			
		12	24	288	1	12	-	-	-	2	24	15	180	2	24	32	384	-	-	-	-	-	-	NIGHTTIME OPERATIONS			
	IH 39 NB	12	54	648	5	60	-	-	-	6	72	-	-	-	-	13	156	-	-	-	-	2	24	-			
		20	34	680	3	60	-	14	14	-	-	9	180	-	-	36	720	2	3	125	2,500	-	-	-			
	MAPLE GROVE RD	20	-	-	18	360	-	-	-	-	-	-	-	-	-	9	180	-	-	-	-	-	-	-			
EAST CHURCH RD		20	-	-	14	280	-	-	-	20	400	-	-	-	-	10	200	-	-	-	-	-	-	-			
STAGE 2 SUBTOTALS			9,965		2,362		0	28	28	1,516		2,343		60		5,435		8	15	7,750		11		176			
3	IH 39 SB	23	57	1,311	-	-	-	-	-	-	-	37	851	-	-	15	345	-	2	-	-	2	46	DAYTIME OPERATIONS			
		23	54	1,242	5	115	-	-	-	6	138	-	-	-	-	12	276	-	-	-	-	2	46	DAYTIME OPERATIONS			
	USH 51	42	43	1,806	3	126	-	-	-	-	-	18	756	-	-	22	924	2	3	125	5,250	-	-	-			
	MAPLE GROVE RD	42	-	-	18	756	-	-	-	-	-	-	-	-	-	9	378	-	-	-	-	-	-	-			
	EAST CHURCH RD	42	-	-	14	588	-	-	-	20	840	-	-	-	-	10	420	-	-	-	-	-	-	-			
STAGE 3 SUBTOTALS			4,359		1,585		0	0	0	978		1,607		0		2,343		2	5	5,250		4		92			
4	IH 39 SB	21	8	168	-	-	-	-	-	-	-	-	-	-	-	4	84	-	2	-	-	3	53	DAYTIME OPERATIONS			
		21	54	1,134	5	105	-	-	-	6	126	-	-	-	-	10	210	-	-	-	-	3	53	DAYTIME OPERATIONS			
	USH 51	40	34	1,360	3	120	-	-	-	-	-	12	480	-	-	24	960	2	3	125	5,000	-	-	-			
	MAPLE GROVE RD	40	-	-	18	720	-	-	-	-	-	-	-	-	-	9	360	-	-	-	-	-	-	-			
STAGE 4 SUBTOTALS			2,662		945		0	0	0	126		480		0		1,614		2	5	5,000		6		105			
5	IH 39	12	-	-	-	-	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	36	-			
	MAPLE GROVE RD	24	-	-	18	432	-	-	-	-	-	-	-	-	-	9	216	-	-	-	-	-	-	-			
STAGE 5 SUBTOTALS			0		432		19	-	0	0		0		0		216		0	0	-		0		36			
UNDISTRIBUTED			-		-		-	-	-	-		-		-		-		-	-	-		-		225			
CATEGORY 1000 SUBTOTALS			23,415		6,348		19	28	28	3,260		4,820		150		11,304		12	27	18,000		776					
PROJECT TOTALS			23,415		6,348		19	28	28	3,260		4,820		150		11,304		12	27	18,000		776					

*ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN

TRAFFIC CONTROL GAWK SCREEN

						SPV.0090.202	SPV.0090.203
STAGE	LOCATION	STATION		OFFSET		FURNISHED	INSTALLED
1	IH 39 SB	410+00	-	415+00	'SBE' LT	500	500
						STAGE 1 SUBTOTALS	
2	IH 39 SB	530+00	-	535+00	'SBE' LT	500	500
						STAGE 2 SUBTOTALS	
3	IH 39 SB	1931+00	-	1934+00	'SB' LT	300	300
						STAGE 3 SUBTOTALS	
4	IH 39 SB	1781+50	-	1784+50	'SB' RT	300	300
	IH 39 NB	382+00	-	386+00	'NBE' LT	400	400
	STAGE 4 SUBTOTALS					700	700
	CATEGORY 1000 SUBTOTALS					2,000	2,000
PROJECT TOTALS						2,000	2,000

3

DELINEATOR ITEMS												
STAGE	LOCATION	STATION			633.0100	633.0500	*643.0500	*643.0600				
					DELINEATOR		TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER					
					POSTS STEEL	REFLECTORS (WHITE)	POSTS	BASES				
					EACH	EACH	EACH	EACH				
2	IH 39 SB	1772+50 - 1788+00	'SB'		4	4	-	-				
		1788+00 - 1799+00	'SB'		11	22	-	-				
		1803+00 - 1819+00	'SB'		8	8	-	-				
		1820+00 - 1830+00	'SB'		11	22	-	-				
		1915+00 - 1948+00	'SB'		8	8	-	-				
		RAMP KC	799+00 - 815+00	'KC'		17	17	-	-			
	RAMP KD	807+00 - 820+00	'KD'		13	13	-	-				
STAGE 2 SUBTOTALS					72	94	-					
3	USH 51	54+50 - 55+00	KN'		-	-	5		5			
	EACH CHURCH RD	45+50 - 57+50	'EC'		4	4	-	-				
	STAGE 3 SUBTOTALS					4	4	5		5		
CATEGORY 1000 SUBTOTALS					76	98	5		5			
PROJECT TOTALS					76	98	5		5			
*ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN												

MARKERS ROW

LOCATION	633.5100 EACH	REMARKS
SB IH 39	110	INCLUDE MARKERS ON RIGHT-OF-WAY LINES WEST OF IH 39, SEE PLAT FOR LOCATIONS
CATEGORY 1000 SUBTOTAL	110	
PROJECT TOTAL	110	

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PERMANENT SIGNING

SIGN NO.	CODE NO.	SIGN MESSAGE	SIZE			637.2210	637.2230	637.3210	634.0614	634.0616	634.0618	634.0620	634.0622	634.0624	REMARKS
			INCH	x	INCH	SIGNS TYPE II REFLECTIVE H	SIGNS TYPE II REFLECTIVE F	SIGNS TYPE III REFLECTIVE H	POSTS WOOD 4X6-INCH X 14-FT	POSTS WOOD 4X6-INCH X 16-FT	POSTS WOOD 4X6-INCH X 18-FT	POSTS WOOD 4X6-INCH X 20-FT	POSTS WOOD 4X6-INCH X 22-FT	POSTS WOOD 4X6-INCH X 24-FT	
						SF	SF	SF	EACH	EACH	EACH	EACH	EACH	EACH	
6-01	W4-2R	RIGHT LANE ENDS	48	x	48	-	16.00	-	-	-	2	-	-	-	-
9-01	E1-5	EXIT 156	72	x	18	-	-	9.00	-	-	-	1	2	-	MOUNT ON SAME POSTS AS 9-02
9-02	E6-1	NORTH 51, STOUGHTON	126	x	60	-	-	52.50	-	-	-	-	-	-	MOUNT ON SAME POSTS AS 9-01
20-01	D1-72	LANE DESIGNATION	144	x	66	66.00	-	-	-	-	-	1	2	-	-
20-02	R5-57	PEDESTRIAN PROHIBITED	36	x	36	9.00	-	-	-	1	-	-	-	-	-
20-03	W6-2	DIVIDED HIGHWAY ENDS	36	x	36	-	9.00	-	-	-	1	-	-	-	-
20-04	W6-2	DIVIDED HIGHWAY ENDS	36	x	36	-	9.00	-	1	-	-	-	-	-	SIGN POST BOX OUT REQ'D
20-05	W13-3	RAMP SPEED 45 MPH	36	x	48	-	12.00	-	-	1	-	-	-	-	-
20-06	J1-1	JUNCTION ASSEMBLY	36	x	57	14.25	-	-	-	1	-	-	-	-	-
20-07	D1-71	GORE DESTINATION	108	x	96	72.00	-	-	-	-	-	-	1	1	-
20-08	W13-2B	RAMP SPEED 25 MPH	48	x	90	-	30.00	-	-	-	-	-	2	-	-
20-09	R3-4B	NO U TURN	36	x	48	12.00	-	-	-	1	-	-	-	-	MOUNT ON SAME POST AS 20-13
20-10	R3-4B	NO U TURN	36	x	48	12.00	-	-	-	-	-	-	-	-	MOUNT ON SAME POST AS 20-12
20-11	W4-1R	MERGING TRAFFIC SYMBOL	36	x	36	-	9.00	-	-	1	-	-	-	-	-
21-01	W14-1	DEAD END	30	X	30	-	6.25	-	-	1	-	-	-	-	-
CATEGORY 1000 SUBTOTALS						185.25	91.25	61.50	1	6	3	2	7	1	
PROJECT TOTALS						185.25	91.25	61.50	1	6	3	2	7	1	

PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

MISCELLANEOUS QUANTITIES

SHEET

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E

MOVING & REMOVING SIGNS												
SIGN NO.	SIGN MESSAGE	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS LB	*636.0100 SIGN SUPPORTS CONCRETE MASONRY CY	636.0500 SIGN SUPPORTS STEEL REINFORCEMENT LB	638.2101 MOVING SIGNS TYPE I EACH	638.2102 MOVING SIGNS TYPE II EACH	638.2601 REMOVING SIGNS TYPE I EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	*638.3100 REMOVING STRUCTURAL STEEL SIGN SUPPORTS EACH	638.4100 MOVING STRUCTURAL STEEL SIGN SUPPORTS EACH	REMARKS
M1-01	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M2-01	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M3-01	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M3-02	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M4-01	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M4-02	EDGERTON, ROCKFORD, CHICAGO	152	1.2	68	1	-	-	-	-	-	2	TYPE A BASES REQUIRED
M5-01	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M5-02	SPEED LIMIT	-	-	-	-	1	-	-	-	-	-	-
M5-03	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M6-01	REASSURANCE ASSEMBLY	-	-	-	-	1	-	-	-	-	-	-
M6-02	NO U TURN	-	-	-	-	1	-	-	-	-	-	-
M6-03	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M7-01	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M7-02	MERGING TRAFFIC SYMBOL	-	-	-	-	1	-	-	-	-	-	-
M7-03	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
R8-01	EXIT 156 STOUGHTON (ARROW)	-	-	-	-	-	1	-	-	2	-	-
M8-01	EXIT 156 (ARROW)	-	-	-	-	1	-	-	-	-	-	-
M8-02	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M8-03	EXIT SPEED 45 MPH	-	-	-	-	1	-	-	-	-	-	-
M8-04	NO U TURN	-	-	-	-	1	-	-	-	-	-	-
M9-01	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M10-01	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M10-02	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M11-01	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M12-01	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M12-02	EXIT 156 STOUGHTON (1 MILE)	293	1.6	98	1	-	-	-	-	-	2	TYPE B BASES REQUIRED
M12-03	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M13-01	SLOWER TRAFFIC KEEP RIGHT	-	-	-	-	1	-	-	-	-	-	-
M13-02	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M14-01	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M15-01	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M15-02	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M16-01	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M16-02	NO U TURN	-	-	-	-	1	-	-	-	-	-	-
M17-01	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M17-02	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
M17-03	MILE MARKER	-	-	-	-	1	-	-	-	-	-	-
R19-01	NARROW BRIDGE	-	-	-	-	-	-	1	1	-	-	-
R19-02	BRIDGE HASH MARK	-	-	-	-	-	-	1	1	-	-	-
R19-03	BRIDGE HASH MARK	-	-	-	-	-	-	1	1	-	-	-
R19-04	BRIDGE HASH MARK	-	-	-	-	-	-	1	1	-	-	-
R19-05	BRIDGE HASH MARK	-	-	-	-	-	-	1	1	-	-	-
R19-06	NARROW BRIDGE	-	-	-	-	-	-	1	1	-	-	-
R20-01	ROUTE TURN ASSEMBLY	-	-	-	-	-	-	1	2	-	-	-
R20-02	PEDESTRIANS PROHIBITED	-	-	-	-	-	-	1	1	-	-	-
R20-03	ROUTE TURN ASSEMBLY	-	-	-	-	-	-	1	1	-	-	-
R20-04	DIVIDED HIGHWAY ENDS	-	-	-	-	-	-	1	1	-	-	-
R20-05	DIVIDED HIGHWAY ENDS	-	-	-	-	-	-	1	1	-	-	-
R20-06	MADISON JANESVILLE	-	-	-	-	-	-	1	2	-	-	-
R20-07	RAMP SPEED 45 MPH	-	-	-	-	-	-	1	1	-	-	-
R20-08	JUNCTION ASSEMBLY	-	-	-	-	-	-	1	1	-	-	-
R20-09	ROUTE TURN ASSEMBLY	-	-	-	-	-	-	1	2	-	-	-
R20-10	MERGING TRAFFIC SYMBOL	-	-	-	-	-	-	1	1	-	-	-
R20-11	RAMP SPEED 25 MPH	-	-	-	-	-	-	1	1	-	-	-
R21-01	DEAD END	-	-	-	-	-	-	1	1	-	-	-
R21-02	BRIDGE HASH MARK	-	-	-	-	-	-	1	1	-	-	-
R21-03	BRIDGE HASH MARK	-	-	-	-	-	-	1	1	-	-	-
R21-04	BRIDGE HASH MARK	-	-	-	-	-	-	1	1	-	-	-
R21-05	BRIDGE HASH MARK	-	-	-	-	-	-	1	1	-	-	-
CATEGORY 1000 SUBTOTALS		445	2.8	166	2	34	1	22	25	2	4	
PROJECT TOTALS		445	2.8	166	2	34	1	22	25	2	4	
*ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN												

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					EPOXY 4-INCH			EPOXY	GROOVED WET REFLECTIVE	GROOVED WET REFLECTIVE	CURB	ISLAND NOSE	DIAGONAL
					WHITE	YELLOW	SKIPS WHITE	8-INCH WHITE	CONTRAST TAPE 4-INCH	CONTRAST TAPE 8-INCH	EPOXY YELLOW	EPOXY YELLOW	EPOXY 24-INCH WHITE
STAGE	LOCATION	STATION			LF			LF	SKIPS WHITE	LF	LF	EA	LF
4	IH 39 SB	1715+00	-	1788+00 'TSB'	7,320	7,310	1,111	-	-	-	-	-	-
		1788+00	-	1830+30 'TBS'	3,243	4,230	1,317	2,160	-	-	-	-	-
		1830+30	-	1968+35 'TSB'	13,755	13,785	2425	-	-	-	-	-	-
	IH 39 NB	550+75	-	567+50 'NB'	1,690	1,680	475	-	-	-	-	-	-
	RAMP KC	803+70	-	813+00 'KC'	2,075	950	-	-	-	-	-	-	-
	RAMP KD	808+15	-	819+15 'KD'	1,923	1,120	-	-	-	-	-	-	-
	USH 51	48+00	-	63+00 'KN'	1,945	2,950	-	-	145	905	105	2	65
	UNDISTRIBUTED	-	-	-	-	-	1,726	-	-	-	-	-	-
	CATEGORY 1000 SUBTOTALS					31,951	32,025	7,054	2,160	145	905	105	2

STAGE	LOCATION	STATION	LF	REMARKS
1	IH 39 SB	424+90 - 442+10 'SBE'	3570	LANE LINES & CENTER LINE
		STAGE 1 SUBTOTAL	3570	
2	IH 39 SB	314+90 - 376+10 'SBE'	13,770	LANE LINES & CENTER LINE
		442+10 - 442+58 'SBE'	108	LANE LINES & CENTER LINE
		501+90 - 563+30 'SBE'	13,415	LANE LINES & CENTER LINE
	IH 39 NB	550+75 - 567+50 'SBE'	3,794	LANE LINES & CENTER LINE
		STAGE 2 SUBTOTAL	31,087	
3	IH 39 SB	37710 - 382+14 'SBE'	1,334	LANE LINES & CENTER LINE
		441+10 - 450+60 'SBE'	950	OUTSIDE LANE LINE
		STAGE 3 SUBTOTAL	2,284	
4	IH 39 SB	442+58 - 457+20 'SBE'	2,488	LANE LINES & CENTER LINE
		STAGE 4 SUBTOTAL	2,488	
		CATEGORY 1000 SUBTOTAL	39,428	

		649.0400 REMOVABLE TAPE 4-INCH		649.0801 REMOVABLE TAPE 8-INCH WHITE
STAGE	LOCATION	WHITE	YELLOW	WHITE
1	IH 39 SB	3,234	1,620	-
STAGE 1 SUBTOTALS		3,234	1,620	-
2	IH 39 SB	28,060	14,000	-
	IH 39 NB	3,580	1,683	-
	USH 51	1653	1862	-
STAGE 2 SUBTOTALS		33,293	17,545	-
3	IH 39 SB	33,976	19,004	2,949
	USH 51	-	1900	-
STAGE 3 SUBTOTALS		33,976	20,904	2,949
4	IH 39 SB	20,260	11,330	-
STAGE 4 SUBTOTALS		20,260	11,330	-
CATEGORY 1000 SUBTOTALS		90,763	51,399	2,949
PROJECT TOTALS		90,763	51,399	2,949

		690.0150		690.0250		
		SAWING		SAWING		
		ASPHALT		CONCRETE		
STAGE	LOCATION	STATION	LF	LF	REMARKS	
1	IH 39 SB	316+38 - 373+29	'SBE'	5,695	-	OUTSIDE SHOULDER
		380+00 - 396+40	'SBE'	1,648	-	MEDIAN SHOULDER (TEMPORARY)
		427+52 - 439+29	'SBE'	1,177	-	MEDIAN SHOULDER
		527+00 - 562+30	'SBE'	3,546	-	OUTSIDE SHOULDER
	IH 39 NB	372+10 - 388+50	'NBE'	1,648	-	MEDIAN SHOULDER
		550+76 - 567+57	'NBE'	1,697	-	-
	MAPLE GROVE RD	43+40	'MG'	22	-	MAPLE GROVE ROAD
		55+25	'MG'	22	-	MAPLE GROVE ROAD
STAGE 1 SUBTOTALS			15,455	-		
2	IH 39 SB	316+38 - 370+80	'SBE'	5,446	-	OUTSIDE SHOULDER
		425+00 - 431+45	'SBE'	645	-	OUTSIDE SHOLDER
		435+87-457+36	SBE'	2,157	-	OUTSIDE SHOULDER
		471+25 - 516+00	'SBE'	4,483	-	MEDIAN SHOULDER
		553+20-568+35	'SBE'	1519	-	OUTSIDE SHOULDER
	USH 51	47+65	'EKN'	5	-	SHOULDER RT
		48+25	'EKN'	20	34	USH 51
		63+00	'EKN'	16	52	USH 51
		63+00 - 69+00	'EKN'	-	600	SAW ADJACENT TO MEDIAN CURB AND GUTTER
		66+00	'EKN'	3	5	USH 51
STAGE 2 SUBTOTALS			14,294	691		
3	IH 39 SB	1804+40	'SB'	-	15	-
		1817+15	'SB'	-	15	-
		1914+10-1914+80	'TSB'	50	51	-
		1951+78	'TSB'	-	26	-
	STAGE 3 SUBTOTALS			50	107	
4	IH 39 SB	1772+00	'TSB'	-	26	-
		1837+00	'TSB'	-	26	-
		1837+00 - 1852+63	'TSB'	1,567	-	-
	USH 51	48+25	'EKN'	11	38	USH 51
	STAGE 4 SUBTOTALS			1,578	90	
CATEGORY 1000 SUBTOTALS			31,377	888		
PROJECT TOTALS			31,377	888		

PULL BOXES STEEL				
24 X 42-INCH				
STAGE	LOCATION	STATION	OFFSET	EACH
4	MAPLE GROVE ROAD	48+03	'MG' 22.5' LT	1
		48+03	'MG' 22.5' RT	1
		51+13	'MG' 22.5' LT	1
		51+13	'MG' 22.5' RT	1
CATEGORY 1000 SUBTOTALS				4
PROJECT TOTALS				4

*ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN

ITS PULL BOX & COMMUNICATION VAULT ITEMS

EQUIPMENT CODE	STATION	OFFSET	653.0135	653.0140*	653.0900	653.0905	673.0105
			PULL BOXES STEEL 24x36-INCH	PULL BOXES STEEL 24x42-INCH	ADJUSTING PULL BOXES EACH	REMOVING PULL BOXES EACH	COMMUNICATION VAULT TYPE 1 EACH
CATEGORY 1200							
CV-1	1784+90 'SB'	LT	---	---	---	---	1
PB-2	1784+80 'SB'	LT	1	---	---	---	---
PB-3	1784+50 'SB'	LT	1	---	---	---	---
EXPB-5	812+60 'KC'	LT	---	---	---	1	---
EXPB-6	811+80 'KC'	RT	---	---	---	1	---
EXPB-7	56+30 'KN'	LT	---	---	---	1	---
EXPB-9	52+10 'KN'	LT	---	---	1	---	---
EXPB-10	52+00 'KN'	RT	---	---	1	---	---
PB-13	812+90 'KC'	LT	1	---	---	---	---
PB-14	57+80 'KN'	LT	---	1	---	---	---
PB-15	813+30 'KC'	LT	---	1	---	---	---
TOTALS			3	2	2	3	1

* Additional quantities shown elsewhere.

ITS CONDUIT ITEMS

FROM	TO	LINEAR DISTANCE LF	652.0225*	652.0235
			CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF
CATEGORY 1200				
MB-2	PB-2	60	60	---
CV-1	PB-2	15	---	15
PB-2	CB-1	20	---	20
CB-1	PB-3	15	30	---
PB-3	DMS-2	50	---	100
EXPB-4	PB-13	175	175	---
PB-13	PB-14	50	50	---
G-1	PB-14	15	15	---
PB-14	PB-15	45	45	---
G-2	PB-15	10	10	---
MB-4	PB-13	10	10	---
PB-13	EXPB-8	350	350	---
EXPB-8	EXPB-9	220	220	---
TOTALS			965	135

* Additional quantities shown elsewhere.

ITS CABLE ITEMS

		ELECTRICAL CABLE SLACK		NUMBER OF ELECTRICAL WIRES LIGHTING 4 AWG	NUMBER OF ELECTRICAL WIRES LIGHTING 10 AWG	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG	655.0630 ELECTRICAL WIRE LIGHTING 4 AWG	674.0400 REINSTALL CABLE
FROM	TO	LINEAR DISTANCE LF	LF			LF	LF	LF
CATEGORY 1200								
MB-2	PB-2	60	16	4	---	---	304	---
CV-1	PB-2	15			FOR FUTURE USE			
PB-2	CB-1	20	30	4	---	---	200	---
CB-1	PB-3	15	30	4	---	---	180	---
PB-3	DMS-2	50	75	4	---	---	500	---
EXPB-4	PB-13	175	---	---	---	---	---	175
PB-13	PB-14	50	16	---	3	198	---	---
G-1	PB-14	15	16	---	6	186	---	---
PB-14	PB-15	45	16	---	3	183	---	---
G-2	PB-15	10	16	---	3	78	---	---
MB-4	PB-13	10	16	3	3	78	78	10
PB-13	EXPB-8	350	16	3	---	---	1098	---
EXPB-8	EXPB-9	220	16	3	---	---	708	---
EXPB-9	EXPB-10	190	16	3	---	---	618	---
EXPB-10	EXPB-11	320	16	3	---	---	1008	---
EXPB-11	EXPB-12	110	16	3	---	---	378	---
TOTALS						723	5072	185

ITS MISCELLANEOUS ITEMS

ITEM ID	EQUIPMENT CODE	STATION	OFFSET	670.0100	670.0200	675.0400.S	SPV.0060.401	SPV.0060.402	SPV.0060.403	SPV.0105.401
				FIELD	ITS	INSTALL	FIBER TRACER	INSTALL	REMOVE	RELOCATE
				SYSTEM	DOCUMENTATION	ETHERNET	MARKER POST	CELLULAR	POLES WOOD	SOLAR-POWERED
				INTEGRATOR	SWITCH		MODEM		BLUETOOTH SENSOR	
				LS	LS	EACH	EACH	EACH	EACH	LS
CATEGORY 1200										
DMS-13-0027 & WMN-0008	CB-1	1784+60 'SB'	LT	---	---	1	1	1	---	---
EXISTING WDS-0008	EXDP-1	1785+70 'NB'	RT	---	---	---	---	---	1	1
UNDISTRIBUTED	---	---	---	1	1	---	---	---	---	---
TOTALS				1	1	1	1	1	1	1

ITS POWER CONNECTION ITEMS

				656.0200.001	656.0200.002	656.0500	SPV.0060.404
				ELECTRICAL SERVICE METER BREAKER PEDASTAL LS	ELECTRICAL SERVICE METER BREAKER PEDASTAL LS	ELECTRICAL SERVICE BREAKER DISCONNECT BOX LS	REMOVE ELECTRICAL SERVICE METER BREAKER PEDESTAL EACH
ITEM ID	EQUIPMENT CODE	STATION	OFFSET				
CATEGORY 1200							
DMS-13-0027 & WMN-0008	CB-1	1784+60 'SB'	LT	1	---	1	---
EXISTING DMS-13-0027	EXMB-1	1783+60 'SB'	LT	---	---	---	1
EXISTING G-13-08	EXMB-3	812+60 'KC'	LT	---	---	---	1
G-13-08	MB-4	812+90 'KC'	LT	---	1	---	---
TOTALS				1	1	1	2

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ITS DMS ITEMS

				638.3100 REMOVING STRUCTURAL STEEL SIGN SUPPORTS EACH	654.0105* CONCRETE BASES TYPE 5 EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0322 POLES TYPE 5-ALUMINUM EACH	673.0225.S INSTALL POLE MOUNTED CABINET EACH	678.0100.S INSTALL OVERHEAD FREEWAY DMS FULL MATRIX EACH	SPV.0105.404 SALVAGE ROADSIDE DMS LS
ITEM ID	EQUIPMENT CODE	STATION	OFFSET							
CATEGORY 1200										
EXISTING DMS-13-0027	EXDMS-1	1783+50 'SB'	LT	3	---	---	---	---	---	1
DMS-13-0027	DMS-2	1784+50 'SB'	OH	---	1	1	1	1	1	---
TOTALS				3	1	1	1	1	1	1

* ADDITIONAL QUANTITY OF SAME ITEM SHOWN ELSEWHERE

RAMP CLOSURE GATE ITEMS

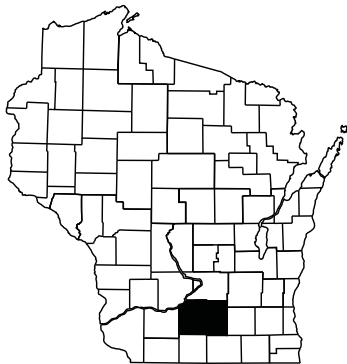
ITEM ID	EQUIPMENT CODE	STATION	OFFSET	204.0195	654.0105*	SPV.0105.402	SPV.0105.403
				REMOVING	CONCRETE BASES	RELOCATE	RELOCATE
				CONCRETE	TYPE 5	RAMP CLOSURE	RAMP CLOSURE
				BASES		GATE	GATE
				EACH	EA	LS	LS
CATEGORY 1200							
EXISTING G-13-08	EXG-1	811+85 'KC'	RT	1	---	1	---
EXISTING G-13-09	EXG-2	55+80 'KN'	LT	1	---	---	1
G-13-08	G-1	813+40 'KC'	LT	---	1	---	---
G-13-09	G-2	57+80 'KN'	LT	---	1	---	---
TOTALS				2	2	1	1

* ADDITIONAL QUANTITY OF SAME ITEM SHOWN ELSEWHERE

ITS REMOVE - LINEAR FEET ITEMS

		LINEAR DISTANCE	674.0300 REMOVE CABLE
FROM	TO	LF	LF
CATEGORY 1200			
EXDMS-1	EXMB-1	25	25
EXPB-4	EXPB-5	215	215
EXPB-5	EXPB-6	90	90
EXPB-6	EXPB-7	45	45
EXG-2	EXPB-7	45	45
EXPB-6	EXPB-8	220	220
EXPB-8	EXPB-9	220	220
EXPB-9	EXPB-10	190	190
EXPB-10	EXPB-11	320	320
EXPB-11	EXPB-12	110	110
TOTALS			1480

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
PROJECT 1007-10-21
ILLINOIS STATE LINE - MADISON
SOUTH DANE COUNTY LINE TO EAST CHURCH ROAD
I-39/90
DANE COUNTY



THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR 1007-10-21.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, DANE COUNTY, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES

ALL RIGHT-OF-WAY LINES DEPICTED IN NON ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR I-39/90 ESTABLISHED FROM PREVIOUS PROJECT: PROJECT I-90-3(29) 140, ASSESSOR'S PLAT OF VILLAGE OF ALBION, CSM 489, CSM 9619, CSM 5733, CSM 6883, CSM 7490, CSM 8753, CSM 7703, CSM 7950, CSM 5363, CSM 5053 AND CSM 9667.

EXISTING HIGHWAY RIGHT-OF-WAY FOR LAKE DRIVE ROAD ESTABLISHED FROM PREVIOUS PROJECT I-90-3(29) 140, CSM 7418, AND CSM 9619.

EXISTING HIGHWAY RIGHT-OF-WAY FOR PIERCE ROAD ESTABLISHED FROM PREVIOUS PROJECT I-90-3(29) 140, CSM 7703, AND CSM 2552.

EXISTING HIGHWAY RIGHT-OF-WAY FOR GOEDE ROAD ESTABLISHED FROM PREVIOUS PROJECT I-90-3(29) 140, CSM 5719, CSM 489, AND CSM 8753.

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 73 ESTABLISHED FROM PREVIOUS PROJECT I-90-3(29) 140, CSM 13090, AND CSM 6546.

EXISTING HIGHWAY RIGHT-OF-WAY FOR USH 51 ESTABLISHED FROM PREVIOUS PROJECT I-90-3(29) 140 AND CSM 9667

EXISTING HIGHWAY RIGHT OF WAY FOR ALBION ROAD ESTABLISHED FROM PREVIOUS PROJECT I-90-3(29) 140.

EXISTING HIGHWAY RIGHT OF WAY FOR HAUGAN ROAD ESTABLISHED FROM PREVIOUS PROJECT I-90-3(29) 140.

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 106 ESTABLISHED FROM PREVIOUS PROJECT I-90-3(29) 140 AND ASSESSOR'S PLAT OF VILLAGE OF ALBION.

EXISTING HIGHWAY RIGHT-OF-WAY FOR MAPLE GROVE ROAD ESTABLISHED FROM PREVIOUS PROJECT I-90-3(29) 140.

EXISTING HIGHWAY RIGHT-OF-WAY FOR CTH A ESTABLISHED FROM PREVIOUS PROJECT I-90-3(29) 140, CSM 866, CSM 7989, CSM 5053, AND CSM 7950.

EXISTING HIGHWAY RIGHT-OF-WAY FOR EAST CHURCH ROAD ESTABLISHED FROM PREVIOUS PROJECT I-90-3(29) 140.

EXISTING HIGHWAY RIGHT-OF-WAY FOR UNNAMED ROAD ESTABLISHED FROM SURVEYS OF RECORD.

EXISTING HIGHWAY RIGHT-OF-WAY FOR HAMMEN ROAD ESTABLISHED FROM PREVIOUS PROJECT I-90-3(29) 140.

EXISTING ACCESS CONTROL FOR I-39/90 ESTABLISHED FROM PREVIOUS PROJECT I-90-3(29) 140.

FOR THE LATEST ACCESS CONTROL INFORMATION, CONTACT THE PLANNING

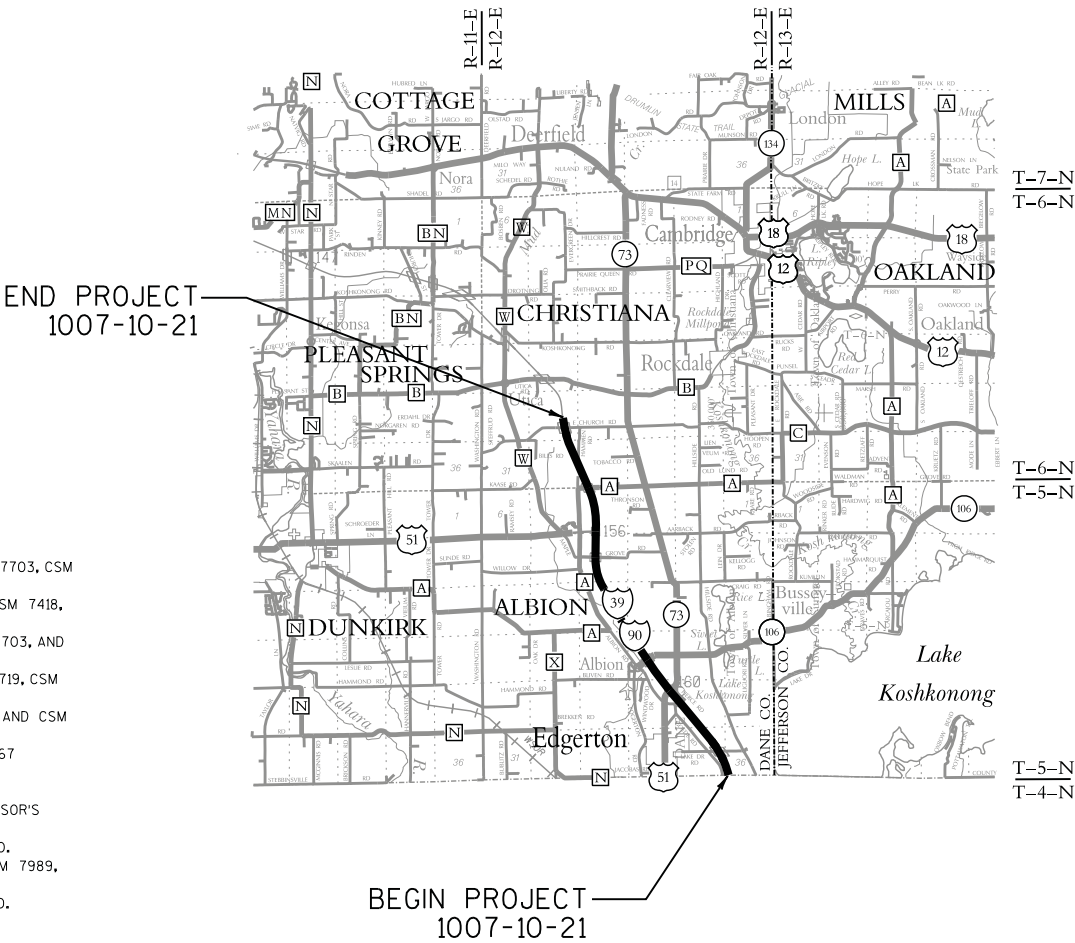
UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS.

A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A **HIGHWAY EASEMENT** (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.



CONVENTIONAL ABBREVIATIONS			
ACCESS POINT/ DRIVEWAY CONNECTION	AP	BUILDING	B
ACCESS RIGHTS	AR	REFERENCE LINE	R/L
ACRES	AC.	RELEASE OF RIGHTS	ROR
AND OTHERS	ET.AL.	REMAINING	REM.
CENTERLINE	C/L	RIGHT-OF-WAY	R/W
CERTIFIED SURVEY MAP	CSM	SECTION	SEC.
CORNER	COR.	STATION	STA.
DOCUMENT	DOC.	TEMPORARY LIMITED EASEMENT	TLE
EASEMENT	EASE.	VOLUME	VOL.
HIGHWAY EASEMENT	H.E.	CURVE DATA	
LAND CONTRACT	LC	LONG CHORD	LCH
MONUMENT	MON.	LONG CHORD BEARING	LCB
PAGE	P.	RADIUS	R
PERMANENT LIMITED EASEMENT	PLE	DEGREE OF CURVE	D
PROPERTY LINE	PL	CENTRAL ANGLE OR DELTA	Δ
RECORDED AS	(100')	LENGTH OF CURVE	L
DIRECTION AHEAD	DA	TANGENT	T
DIRECTION BACK	DB		
POINT OF TANGENCY	POT		

CONVENTIONAL SYMBOLS	
FOUND IRON PIPE/PIN	PROPOSED R/W LINE
R/W MONUMENT	EXISTING H.E. LINE
R/W STANDARD	PROPERTY LINE
SIGN	LOT & TIE LINES
SECTION CORNER MONUMENT	SLOPE INTERCEPTS
SECTION CORNER SYMBOL	CORPORATE LIMITS
FEE (HATCH VARIES)	ACCESS CONTROLLED (BY PREVIOUS ACQUISITION/CONTROL)
TEMPORARY LIMITED EASEMENT	ACCESS CONTROLLED (BY ACQUISITION)
PERMANENT LIMITED EASEMENT	ACCESS CONTROLLED (BY STATUTORY AUTHORITY)
R/W BOUNDARY POINT	SECTION LINE
PARCEL NUMBER	QUARTER LINE
UTILITY PARCEL NUMBER	SIXTEENTH LINE
SIGN NUMBER (OFF PREMISE)	EXISTING CENTERLINE
BUILDING	PROPOSED REFERENCE LINE
BRIDGE	PARALLEL OFFSET
GEODETIC MONUMENT	

CONVENTIONAL UTILITY SYMBOLS			
WATER	—W—	POWER POLE	NON COMPENSABLE
GAS	—G—	TELEPHONE POLE	COMPENSABLE
TELEPHONE	—T—	TELEPHONE PEDESTAL	
OVERHEAD TRANSMISSION LINES	—OH—	ELECTRIC TOWER	
ELECTRIC	—E—		
CABLE TELEVISION	—TV—		
FIBER OPTIC	—FO—		
SANITARY SEWER	—SAN—		
STORM SEWER	—SS—		

PROJECT NUMBER 1007-10-21 - 4.01
SHEET 2 OF 2

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR I-39/90 ESTABLISHED FROM PREVIOUS PROJECT I-90-3(29) AQ.
EXISTING ACCESS CONTROL FOR I-39/90 ESTABLISHED FROM PREVIOUS RIGHT OF WAY PROJECT I-90-3(29) AQ.
FOR THE LATEST ACCESS CONTROL INFORMATION, CONTACT THE PLANNING POSITION SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, DANE COUNTY MADISON 537027 IN THE SURVEY FEET VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

KRISTI CHLEROWSKI
DANE COUNTY
REGISTER OF DEEDS
DOCUMENT #
5074811
66/59/2014 10:00 AM
Trans. Fee:
Rec. Fee: 25.00
Pages: 1

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1007-10-21-4.13
AMENDMENT NO:

TRANSPORTATION PROJECT PLAT NO: 1007-10-21 - 4.13
THAT PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4, THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4, AND THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 16, ALL BEING LOCATED IN T 5 N, R 12 E, TOWN OF ALBION, DANE COUNTY, WISCONSIN.

RELOCATION ORDER I-39/90, ILLINOIS STATE LINE - MADISON (SOUTH DANE COUNTY LINE TO EAST CHURCH ROAD)

TO PROPERLY ESTABLISH LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THE CHANGE PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.03, AND 84.30 WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAND OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.03 (1) OR (2), WISCONSIN STATUTES.

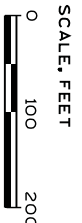
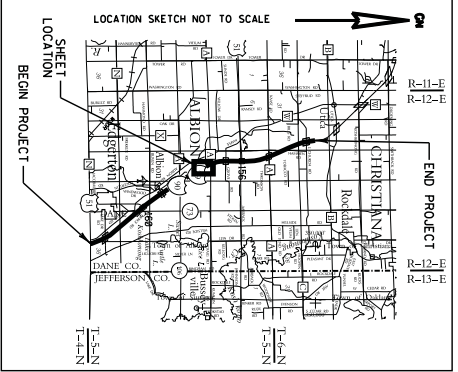
R/W STATION & OFFSET TABLE	
1302	1694+56.99
1303	1699+09.85
1304	1702+11.51
1305	1711+25.56
1306	1725+69.35
1309	1723+76.00
1310	1721+86.00
1311	1714+25.00
1312	1711+00.00
1313	1694+81.66
1314	1692+52.64
1316	1714+05.05
1317	1714+05.31
1318	1714+85.31
1319	1714+85.04

R/W COURSE TABLE	
1302-1303	SEE CURVE DATA ON SHEET
1303-1304	N 27°11'08" W
1304-1305	SEE CURVE DATA ON SHEET
1305-1306	N 28°20'26" W
1306-1309	S 61°39'34" W
1309-1310	N 28°20'26" W
1310-1311	N 61°39'34" E
1311-1312	N 28°20'26" W
1312-1313	S 29°07'51" E
1313-1314	S 30°27'15" E
	S 24°51'51" E
	S 29°37'26" E
	S 29°37'26" E

TLE STATION & OFFSET TABLE	
11350	1694+63.31
11351	1699+03.66
11352	1702+05.40
11353	1710+28.38
11354	1710+22.49

FOUND 1.25" IRON PIPE
Y = 418,795.404
X = 904,764.338

FOUND 6" X 6" STONE MONUMENT
Y = 416,112.185
X = 907,436.081



SCHEDULE OF LANDS & INTERESTS REQUIRED			
OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.			
PARCEL NUMBER	OWNERS(S)	INTEREST REQUIRED	R/W ACRES REQUIRED
60	CRAZY ACRES, INC.	FEE	0.497
68	CPTA, LLC, A WISCONSIN LIMITED LIABILITY COMPANY	TLE	---
71	WILLIAM L. MYHRE, JR., JUL E. MYHRE, JOHN C. NELSON, AND KATHARINE M. NELSON	FEE	0.056
72	MELVIN E. BECKER AND BONITA G. BECKER HIS WIFE	FEE	0.037
	ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED		---

ALBION

FOUND RAILROAD SPIKE
Y = 416,182.325
X = 902,093.807

FOUND 1.25" OD IP
Y = 416,110.586
X = 904,790.963

emcsc

(SIGNATURE) *Kevin C. Boyer* DATE 5/29/2014
(PRINTED NAME) KEVIN C. BOYER
(REGISTRATION NUMBER) 52873
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SW REGION OFFICE.
(SIGNATURE) *David B. Miller* DATE 5/29/2014
(PRINTED NAME) DAVID B. MILLER

4

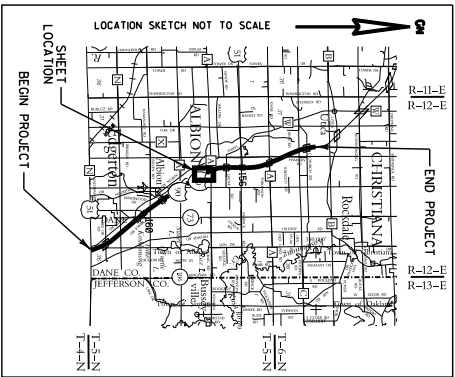
EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR I-39/90 ESTABLISHED FROM PREVIOUS PROJECT I-90-3(29) 140.
EXISTING ACCESS CONTROL FOR I-39/90 ESTABLISHED FROM PREVIOUS RIGHT OF WAY PROJECT I-90-3(29) 140.
FOR THE LATEST ACCESS CONTROL INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES. DANE COUNTY COORDINATES IN THE SOUTHWEST CORNER OF THE PLAT ARE WISCONSIN COUNTY COORDINATES. GRID BEARINGS AND GRID DISTANCES, GRID DISTANCES MAY BE USED AS GROUND DISTANCES

KRISTI CHLEBOWSKI
DANE COUNTY
REGISTER OF DEEDS
DOCUMENT #
5074812
06/09/2014 10:07 AM
Trans. Fee:
Exempt #: 25.00
Pages: 1
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1007-10-21-414
AMENDMENT NO:

TRANSPORTATION PROJECT PLAT NO: 1007-10-21 - 4.14
THAT PART OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4, THE NORTHEAST 1/4 OF THE NORTHEAST 1/4, AND THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 16, ALL BEING LOCATED IN T 5 N, R 12 E, TOWN OF ALBION, DANE COUNTY, WISCONSIN.

RELOCATION ORDER I-39/90, ILLINOIS STATE LINE -
MADISON (SOUTH DANE COUNTY LINE TO EAST CHURCH ROAD)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30 WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS Laid OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (D OR (2), WISCONSIN STATUTES.



SIGN NUMBER	SIGN OWNER	OASIS NUMBER
71-1	TOWN OF EDGERTON WILLIAM L. MYHRE, JR., JILL E. MYHRE, NATHAN L. NELSON, AND KATHARINE M. NELSON	14602

OASIS+ (OUTDOOR ADVERTISING SIGN INVENTORY SYSTEM)



R/W STATION & OFFSET TABLE	
1402	1725+69.35 201.33'
1403	1726+00.00 200.92'
1404	1729+93.00 229.11'
1405	1743+82.74 209.69'
1406	1745+23.00 204.03'
1407	1755+90.00 201.41'
1408	1756+26.17 112.38'
1411	1754+77.81 115.00'
1412	1753+00.00 120.68'
1413	1749+75.35 121.95'
1414	1723+78.00 121.95'

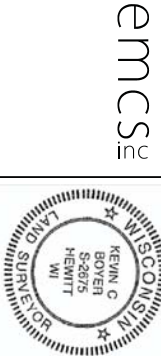
R/W COURSE TABLE	
1402-1403	N 28°20'26" W 30.66'
1403-1404	N 33°12'17" W 39.40'
1404-1405	N 28°22'32" W 1389.85'
1405-1406	N 28°22'32" W 140.27'
1406-1407	N 27°25'11" W 1085.53'
1407-1408	N 19°37'33" W 37.50'
1411-1412	S 26°36'22" E 174.41'
1412-1413	S 29°07'51" E 319.56'
1413-1414	S 29°07'51" E 2597.35'

241 VOL. 20726, PG. 17-20, DOC. 2408351 - PARCEL 71, 77
ROCK ENERGY COOPERATIVE

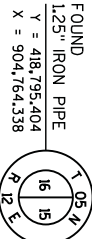
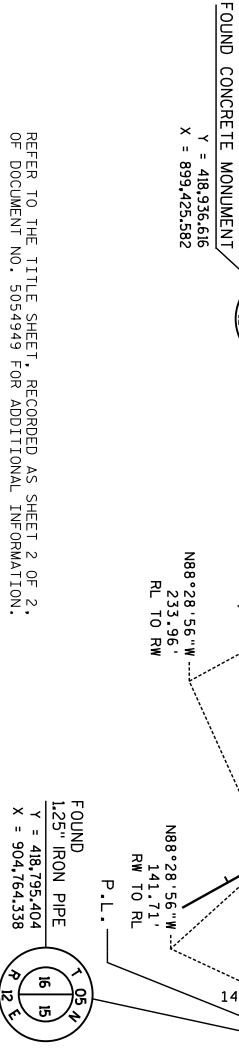
UTILITY SCHEDULE & INTERESTS REQUIRED	
UTILITY NUMBER	UTILITY OWNERS
241	ROCK ENERGY COOPERATIVE

SCHEDULE OF LANDS & INTERESTS REQUIRED			
PARCEL NUMBER	OWNERS(S)	INTEREST REQUIRED	R/W ACRES REQUIRED
71	WILLIAM L. MYHRE, JR., JILL E. MYHRE, JOHN C. NELSON, AND KATHARINE M. NELSON	FEE	1.268
77	SHIRLEY J. BAIS	FEE	0.968
		ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED	0.968

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1007-10-21-414 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.



(SIGNATURE) Kevin C. Boyer DATE 8/22/2014
(PRINTED NAME) KEVIN C. BOYER
(REGISTRATION NUMBER) S-2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SW REGION OFFICE.
(SIGNATURE) David R. Miller DATE 4/22/2014
(PRINTED NAME) DAVID R. MILLER





PURPOSES ONLY AND ARE SUBJECT TO CHANGE TO THE TRANSFER OF LAND INTERESTS TO THE

PURPOSES ONLY AND ARE SUBJECT TO CHANGE TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

	R/W ACRES REQUIRED	
INTEREST REQUIRED	NEW	EXISTING
FEE	1.064	---
FEE	0.168	---
FEE	2.509	---
OTHERWISE NOTED		

ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

1505

RELOCATION ORDER 1-39/90, ILLINOIS STATE LINE -
MADISON (SOUTH DANE COUNTY LINE TO EAST CHURCH ROAD)

TO PROPERTY ESTATE, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PLUANT TO AUTHORITY GRANTED UNDER SECTION 84.02, (3), 84.09, AND 84.30 WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS Laid OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THAT PORTION OF INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 84.09 TO OR (2), WISCONSIN STATUTES.

THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 TO OR (2), WISCONSIN STATUTES.

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING
POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR I-39/90 ESTABLISHED FROM PREVIOUS
PROJECT I-90-3(29) 140.

EXISTING ACCESS CONTROL F
WAY PROJECT 1-90-3(29) 140.

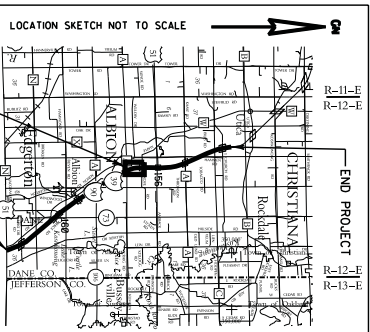
FOR THE LATEST ACCESS CO
OF THE WISCONSIN DEPARTEME

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, DANBURY COUNTY, NA808312007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES

UTILITY SCHEDULE & INTERESTS REQUIRED

SCHEDULE OF SIGN STRUCTURE		
SIGN NUMBER	SIGN OWNER	OASIS NUMBER

OASIS = (OUTDOOR ADVERTISING SIGN INVENTORY SYSTEM)



R/W STATION & OFFSET	TABLE
1502	1756+26.17
1503	1760+77.00
1504	1770+14.00
1505	1775+31.00
1506	1781+88.61
1507	43+89.35"WC"
1508	43+89.35"WC"
1509	43+81.91"WC"
1510	43+48.89"WC"
1511	43+30.19"WC"
1517	59+44.43"WC"
1518	59+44.43"WC"
1519	56+22.73"WC"
1520	56+22.88"WC"
1521	52+68.35"WC"
1522	1781+69.15
1523	1780+44.53
1524	1770+50.00
1525	1770+50.00
1526	1769+25.00
1527	1769+25.00

EXISTING IRON PIPES

R/W COURSE TABLE		
1502-1503	N 19°37'33" W	465.71
1503-1504	N 15°41'41" W	969.21
1504-1505	N 08°04'35" W	536.60
1505-1506	N 01°01'45" W	6860.62
1506-1507	N 83°38'19" W	394.83
1507-1508	N 01°44'36" E	29.65
1508-1509	N 81°27'04" W	40.67
1509-1510	N 01°44'36" E	7.00
1510-1511	N 88°15'24" W	18.70
1511-1512	S 01°16'12" W	17.00
1518-1519	S 88°21'35" W	322.56
1519-1520	S 01°09'28" W	10.01
1520-1521	S 88°21'35" W	355.17
1521-1522	N 88°15'24" W	138.85
1522-1523	S 00°54'34" W	143.04
1523-1524	SEE CURVE DATA ON SHEET	
1524-1525	N 80°18'12" E	7.46
1525-1526	S 10°18'02" E	122.47
1526-1527	S 79°05'44" W	8.89
1527-1528	SEE CURVE DATA ON SHEET	

71-2

ALBION

FOUND
ALUMINUM MONUMENT

$$Y = 421.471.188$$
$$X = 904.737.554$$

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT I AM IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1007-10-21-415 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN
KEVIN C BOYER
S-2875
HEWITT
WI

(SIGNATURE) *Kevin C. Boyer* DATE 6/22/01

(PRINTED NAME) KEVIN C. BOYER
(REGISTRATION NUMBER) S-2875

THIS PLAT AND RELOCATION ORDER ARE
APPROVED FOR THE WISCONSIN DEPARTMENT OF
TRANSPORTATION SM REGIONAL OFFICE.

(SIGNATURE) *David R. Miller* DATE 4/3/2015
(PRINTED NAME) DAVID R. MILLER

SCALE, FEET



REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2,
OF DOCUMENT NO. 5054949 FOR ADDITIONAL INFORMATION.

SET PK NAIL
Y = 426,956,830
X = 899,521,940

NO1 *00.23"E
325.15'
RW TO TRAV. PNT.

MW - NW
POINT 1802
SHEET 4.18

R/W STATION & OFFSET TABLE

1603	43+30.06"WC"	33.29'
1604	43+30.00"WC"	65.67'
1605	1784+23.27	209.69'
1606	1791+00.00	224.00'
1607	1795+70.00	223.03'
1608	1797+50.00	249.00'
1609	1804+25.00	284.00'
1610	1806+73.29	393.41'
1617	44+69.66"KN"	157.47'
1618	44+25.26"KN"	151.95'
1619	38+72.54"KN"	141.47'
1620	1800+16.04	592.77'
1621	1797+48.00	518.48'
1622	1795+20.00	335.62'
1623	1795+20.00	200.00'
1624	1788+00.00	125.00'
1625	1783+89.83	102.10'
1626	52+67.96"WC"	102.10'
1627	55+59.35"WC"	85.42'
1628	55+58.78"WC"	75.44'
1629	59+43.47"WC"	53.41'
1630	59+43.64"WC"	36.41'

LOT 1
CSM 12797
VOL. 81
PG. 78-80
DOC. 4609875

EASEMENT AGREEMENT
ME X 3, LLC,
DOC. 4613834

TILE STATION & OFFSET TABLE		
11650	44+56.54"KN"	173.91'
11651	44+50.00"KN"	173.37'
11652	44+50.00"KN"	155.27'
11653	42+50.00"KN"	129.37'
11654	42+50.00"KN"	145.41'
11655	38+50.00"KN"	161.15'
11656	38+50.00"KN"	144.73'

R/W COURSE TABLE

1603-1604	N 0°44'36" E	32.38'
1604-1605	N 83°53'59" E	462.57'
1605-1606	N 00°18'51" W	676.89'
1606-1607	N 07°00'54" E	470.00'
1607-1608	N 07°18'40" W	181.86'
1608-1609	N 02°04'16" W	675.91'
1609-1610	N 22°53'02" W	271.33'
1617-1618	SEE CURVE DATA ON SHEET	
1618-1619	SEE CURVE DATA ON SHEET	
1619-1620	SEE CURVE DATA ON SHEET	
1620-1621	S 48°24'34" W	100.74'
1621-1622	S 37°44'47" W	304.92'
1622-1623	S 37°17'22" W	228.58'
1623-1624	S 06°50'39" W	723.90'
1624-1625	S 01°02'15" W	410.17'
1625-1626	S 88°15'24" E	145.65'
1626-1627	S 84°52'08" E	291.87'
1627-1628	S 05°07'52" W	10.00'
1628-1629	S 84°52'08" E	385.32'
1629-1630	S 07°16'12" W	17.00'

FOUND
ALUMINUM MONUMENT
Y = 424,275,358
X = 899,487,308

STA 46+02.01"MC"

STA 1782+91.65
P.L.
N88°15'24"E 33.00'
TRAV. PNT. TO RW
N88°15'24"E 669.85'
RL TO TRAV. PNT.

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT CORRELATION DATA FOR THE 1782+91.65 TO 1782+91.65 PROJECT, AND I HAVE CORRECTLY REPRESENTED ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.



(SIGNATURE) *Kevin C. Boyer* DATE 7/22/2014
(PRINTED NAME) KEVIN C. BOYER
(REGISTRATION NUMBER) 52875
THIS PLAT AND RELOCATION ORDER ARE
APPROVED FOR THE WISCONSIN DEPARTMENT OF
TRANSPORTATION SW REGION OFFICE.
(SIGNATURE) *David R. Miller* DATE 7/22/2014
(PRINTED NAME) DAVID R. MILLER

PI STA 46+91.00"KN"
TAN, RL = "KN" N33°57'19"W
92.78' TRAV. PNT. TO PI
STA 1809+97.68/46+61.12"KN"

S88°59'35"E
415.60'
RL TO TAN

B-13-708
RL TO TAN

TAN, RL = "KN" N33°57'19"W
250.32' PCC TO TRAV. PNT.

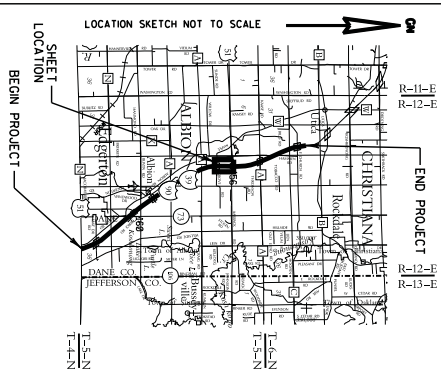
PCC STA 43+48.00"KN"

PI = 46+91.00"KN"
Y = 426,997,781
X = 901,632,553
Δ = 55°04'39" LT
D = 08°42'27"
T = 343.10'
L = 343.10'
R = 632.53'
DB = 533°31'19"E
DA = 49°40'32"KN
PI = 40+83.95"KN"
Y = 426,944,512
X = 902,023,511
Δ = 55°04'39" LT
D = 11°27'12"
T = 150.08'
L = 150.08'
R = 600.00'
DB = 537°33'53"W
DA = N33°57'19"W

NE - NW

EXISTING RL "B"
I-90-3129140

SCALE, FEET
0 100 200



TRANSPORTATION PROJECT PLAT NO: 1007-10-21 - 4.16

AMENDMENT ADDS AN EASEMENT AGREEMENT RECORDED AS DOCUMENT NO. 4613834 TO PARCEL 87 OF TWP 1007-10-21-4.16 RECORDED AS DOCUMENT NUMBER 5074888. THAT PART OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4, AND THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 9, ALL BEING LOCATED IN T 5 N, R 12 E, TOWN OF ALBION, DANE COUNTY, WISCONSIN. RELOCATION ORDER I-39/90, ILLINOIS STATE LINE - MADISON (SOUTH DANE COUNTY LINE TO EAST CHURCH ROAD) TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30 WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT: 1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAY OUT AND ESTABLISHED BY THE LINES AND MONS AS SO SHOWN FOR THE ABOVE PROJECT. 2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED				
PARCEL NUMBER	OWNERS(S)	INTEREST REQUIRED	NEW	EXISTING
86	ROLLAND D. NELSON AND JUDITH E. NELSON AND RANDALL D. NELSON	FEE	3.929	---
87	M. EUGENE WEDING, RICHARD W. WEDING AND THE MICHAEL D. BRALEY LIVING TRUST DATED AUGUST 17, 2012, MICHAEL D. BRALEY TRUSTEE (OR SUCCESSORS)	FEE/TILE	3.005	---
				0.195
R/W ACRES REQUIRED			TILE ACRES	
			TOTAL	

ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

STA 59+44.02"WC"
S01°16'12"E
2668.19'
MON. TO RW
P.L.
S01°16'12"E 33.00'
RW TO TRAV. PNT.
N88°15'24"E 944.01'
TRAV. PNT. TO RL

MAPLE GROVE RD 55"WC"

P.O.I. 1782+90.06/50+00.00"WC"
Y = 424,220,835
X = 902,026,444

ALBION

CALCULATED
Y = 424,193,702
X = 902,170,041

FOUND
CONCRETE MONUMENT
Y = 421,530,795
X = 902,111,010

R/W COURSE TABLE		
1802-1803	N 22°53'02" W	12.80'
1803-1804	N 44°35'47" W	272.96'
1804-1805	N 66°01'38" W	205.41'
1805-1806	N 78°11'33" W	211.97'
1806-1807	N 86°52'04" W	21.91'
1807-1808	S 82°19'40" W	209.49'
1808-1809	SEE CURVE DATA ON SHEET	
1809-1810	S 42°12'38" W	83.77'
1810-1811	S 00°52'34" W	617.78'
1811-1812	N 69°15'38" W	19.00'
1812-1813	S 47°48'08" E	79.99'
1813-1814	N 88°46'25" E	119.61'
1814-1815	N 84°46'40" E	807.26'
1815-1816	N 82°03'35" E	335.87'
1816-1817	N 27°49'30" E	120.11'

R/W STATION & OFFSET TABLE		
1802	53+92.92"KN"	400.66'
1803	53+98.10"KN"	388.96'
1804	55+93.00"KN"	197.85'
1805	57+94.00"KN"	116.23'
1806	59+93.00"KN"	70.76'
1807	60+21.02"KN"	88.62'
1808	62+31.13"KN"	89.55'
1809	66+48.50"KN"	89.81'
1810	67+09.65"KN"	147.06'
1811	67+69.47"KN"	761.94'
1812	67+88.33"KN"	760.15'
1813	67+08.54"KN"	166.53'
1814	66+53.86"KN"	108.15'
1815	65+35.00"KN"	105.36'
1816	57+39.00"KN"	150.73'
1817	54+79.44"KN"	360.95'
1818	54+25.18"KN"	468.10'

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT OF WAY FOR USH 51 ESTABLISHED FROM PREVIOUS PROJECT I-90-3029.140.
EXISTING HIGHWAY RIGHT OF WAY FOR CTH A ESTABLISHED FROM PREVIOUS PROJECT I-90-3029.140.
EXISTING ACCESS CONTROL FOR USH 51 ESTABLISHED FROM PREVIOUS RIGHT OF WAY PROJECT I-90-3029.140.
FOR THE LATEST ACCESS CONTROL INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.

KRISTI CHLEBOWSKI
DANE COUNTY
REGISTER OF DEEDS
DOCUMENT #
5074892
08/09/2014 12:47 PM
Trans. Fee:
Exempt #:
Rec. Fee: 25.00
Pages: 1

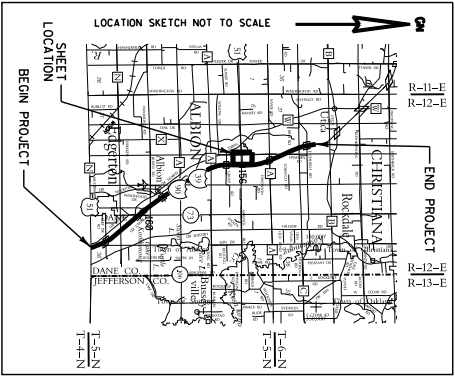
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1007-10-21-418
AMENDMENT NO:

TRANSPORTATION PROJECT PLAT NO: 1007-10-21 - 4.18
THAT PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 9, ALSO THAT PART OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 4, ALL BEING LOCATED IN T 5 N, R 12 E, TOWN OF ALBION, DANE COUNTY, WISCONSIN.

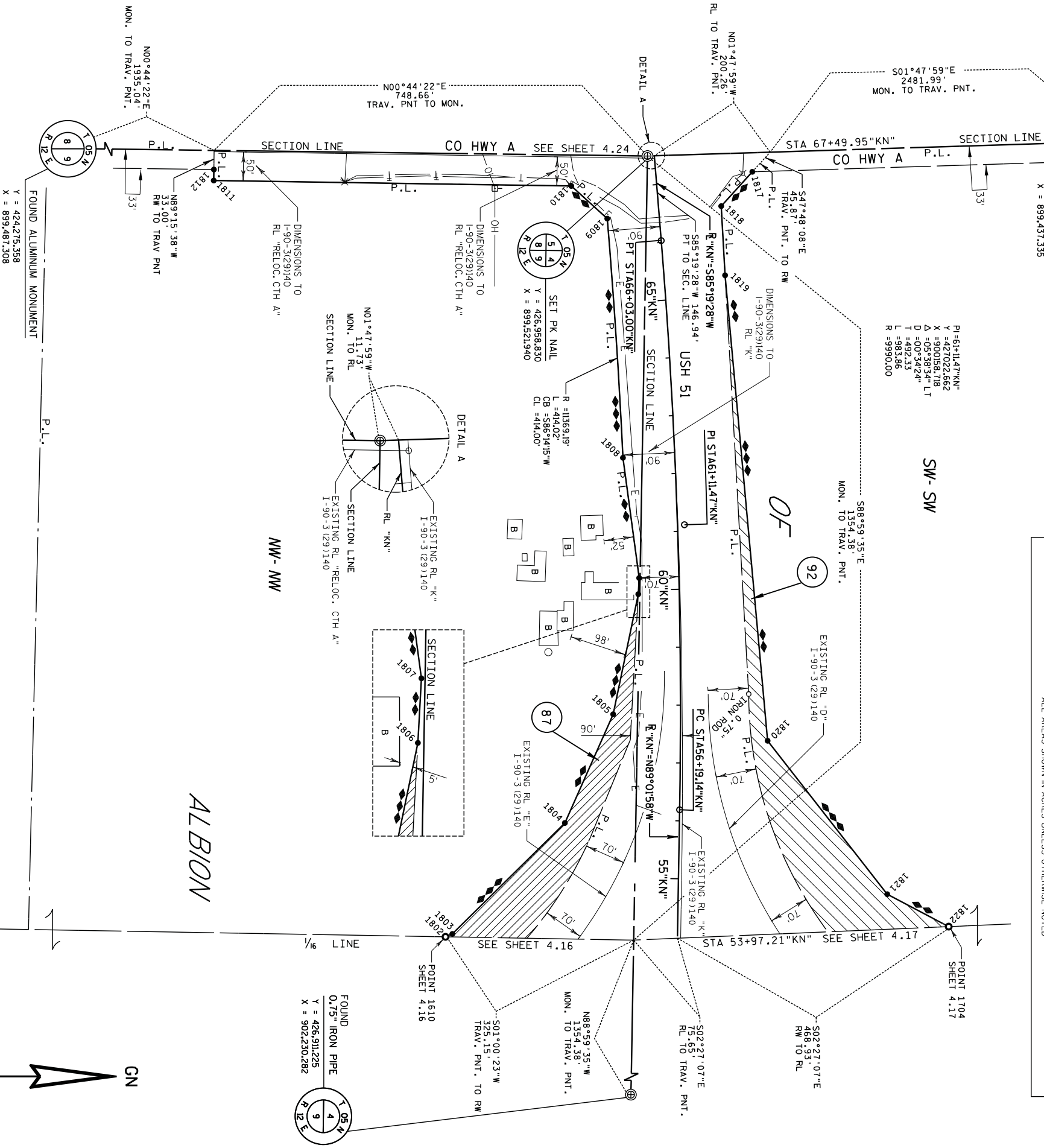
RELOCATION ORDER I-39/90, ILLINOIS STATE LINE -
MADISON (SOUTH DANE COUNTY LINE TO EAST CHURCH ROAD)
TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30 WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAY OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED	
			NEW	EXISTING TOTAL
87	M. EUGENE VEDVIG, RICHARD W. VEDVIG, AND THE MICHAEL D. BRALEY, LIVING TRUST, TRUSTEES FOR SUCCESSOR: MICHAEL D. BRALEY, TRUSTEES FOR	FEE	0.756	---
92	NICK H. HULL AND ROXANNE HULL	FEE	1.104	---
ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED			1.104	---



PI=61+11.47"KN"
Y=427022.662
X=900158.718
Δ=05°38'34"LT
D=00°54'24"
T=092.33
L=883.86
R=9900.00



emcs

WISCONSIN LAND SURVEYS

KEVIN C. BOYER
S-2675
HEMITT
WI

DATE: 06/20/14
(PRINTED NAME) KEVIN C. BOYER
(REGISTRATION NUMBER) S-2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SW REGION OFFICE.
(SIGNATURE) David R. Miller DATE 06/20/14
(PRINTED NAME) DAVID R. MILLER

LOT 1
CSM 12797
VOL. 81
PG. 78-80
DOC. 4609875

SCALE, FEET
0 100 200

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, OF DOCUMENT NO. 5064949 FOR ADDITIONAL INFORMATION.

FILE NAME : \$FILE\$ PLOT DATE : \$DATE\$ PLOT BY : bjl PLOT NAME : PLOT SCALE : 1:100 1007-10-21-4.18

TRANSPORTATION PROJECT PLAT NO: 1007-10-21 - 4.19

THAT PART OF LOT 10F C.S.M. NO. 5053, PART OF LOT 10F C.S.M. NO. 5363, AND PART OF LOT 2 OF C.S.M. 7950 LOCATED IN THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 4, ALSO PART OF LOT 2 OF C.S.M. 7950 LOCATED IN THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 4, ALSO PART OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 AND PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 4, ALL IN T 5 N, R 12 E, TOWN OF ALBION, DANE COUNTY, WISCONSIN.

RELOCATION ORDER I-39/90, ILLINOIS STATE LINE - MADISON (SOUTH DANE COUNTY LINE TO EAST CHURCH ROAD)

TO PROPERLY ESTABLISH, LAY OUT, WHERE ENLARGED, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30 WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAY OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT, IN HEREBY ORDERS THAT:
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING:

- 1. THE INTEREST OF WAY FOR I-39/90 ESTABLISHED FROM PREVIOUS PROJECT I-90-3129/140, CSM 7950, CSM 5363, AND CSM 5053.
- 2. EXISTING HIGHWAY RIGHT OF WAY FOR CO HWY A ESTABLISHED FROM PREVIOUS PROJECT I-90-3129/140, CSM 5053, AND CSM 7950.

EXISTING ACCESS CONTROL ESTABLISHED FROM PREVIOUS RIGHT OF WAY PROJECT I-90-3129/140.

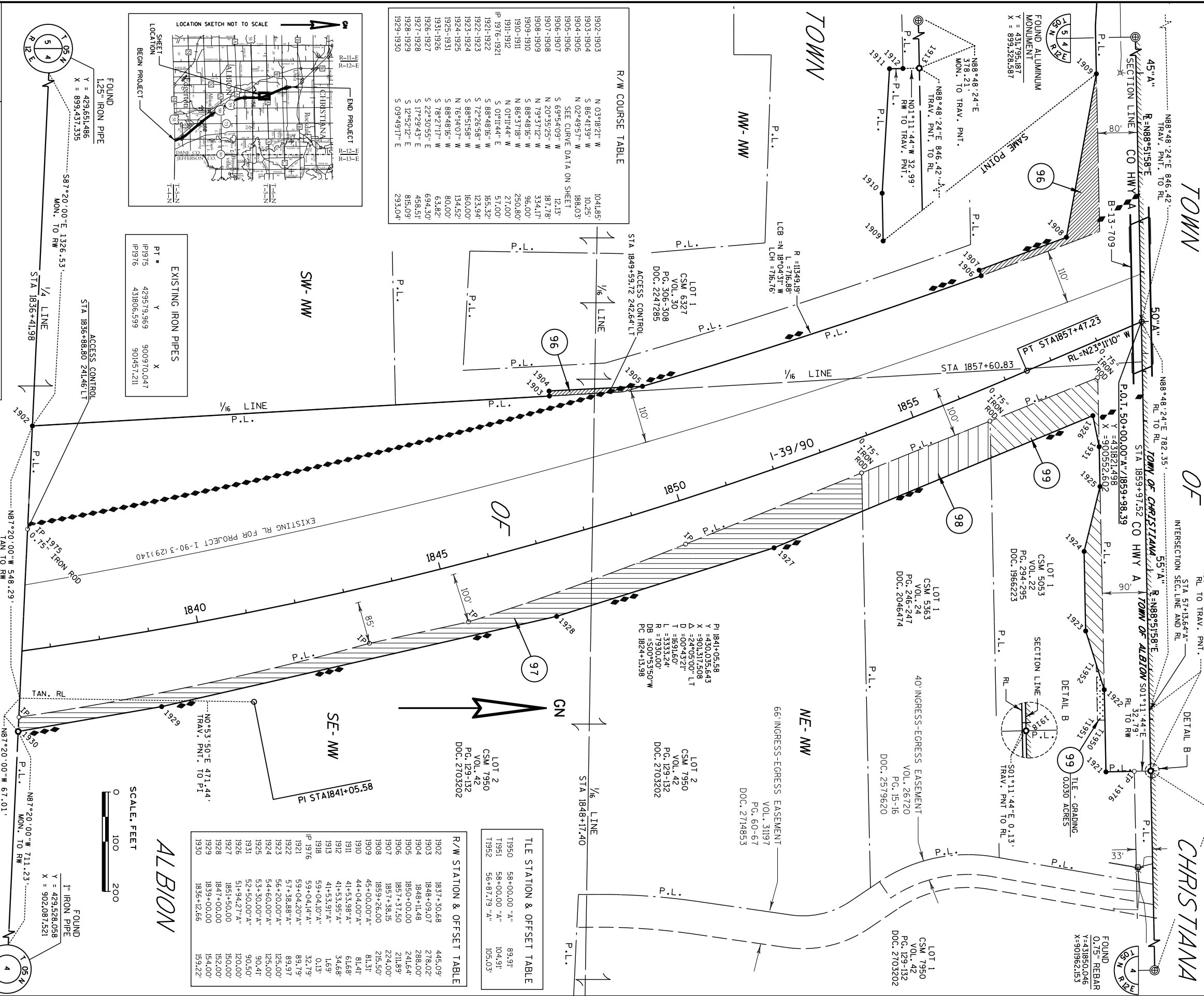
FOR THE LATEST ACCESS CONTROL INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, DANE COUNTY COORDINATES, AND GRID BEARINGS AND GRID DISTANCES, GRID DISTANCES MAY BE USED AS GROUND DISTANCES

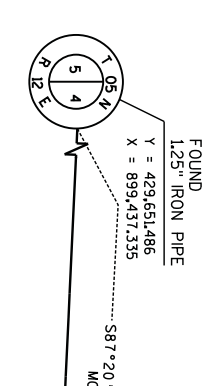
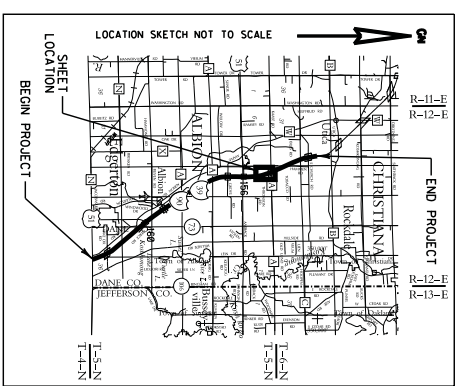
REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, OF DOCUMENT NO. 5054949 FOR ADDITIONAL INFORMATION.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1007-10-21-4.19
AMENDMENT NO:

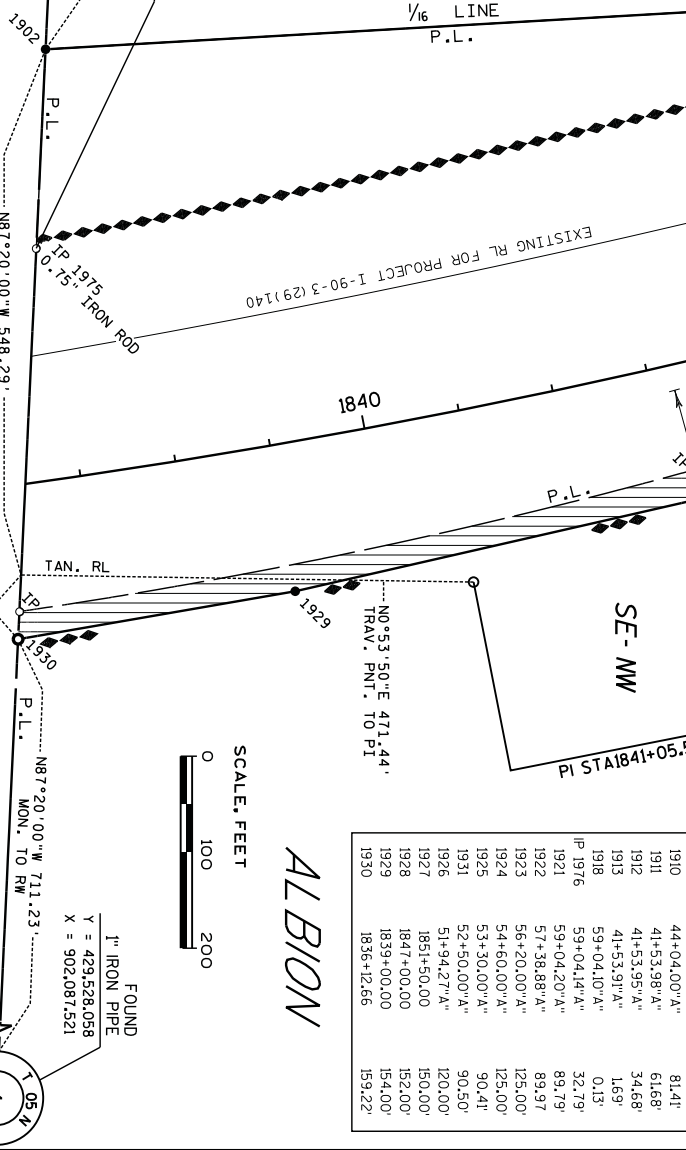
KRISTI CHLEBOWSKI
DANE COUNTY
REGISTER OF DEEDS
DOCUMENT #
5065382
05/07/2014 10:06 AM
Trans Fee:
Rec. Fee: \$5.00
Page: 1



R/W COURSE TABLE	
1902-1903	N 03°18'21" W
1903-1904	S 86°41'33" W
1904-1905	N 02°49'57" W
1905-1906	SEE CURVE DATA ON SHEET
1906-1907	S 69°54'09" W
1907-1908	N 20°35'25" W
1908-1909	N 79°37'12" W
1909-1910	S 88°48'16" W
1910-1911	N 86°37'18" W
1911-1912	N 07°11'44" W
1912-1913	S 07°11'44" E
1913-1914	S 88°48'16" W
1914-1915	S 72°26'58" W
1915-1916	S 88°51'58" W
1916-1917	N 76°14'07" W
1917-1918	S 88°48'16" W
1918-1919	S 78°27'17" W
1919-1920	S 22°30'55" E
1920-1921	S 17°29'43" E
1921-1922	S 12°52'12" E
1922-1923	S 09°49'37" E
1923-1924	
1924-1925	
1925-1926	
1926-1927	
1927-1928	
1928-1929	
1929-1930	



EXISTING IRON PIPES			
PT #	Y	X	
IP19175	429579.969	900970.047	
IP19176	431806.599	900457.211	



TILE STATION & OFFSET TABLE	
T1950	58+00.00 "A"
T1951	58+00.00 "A"
T1952	56+87.79 "A"
	105.03

R/W STATION & OFFSET TABLE	
1902	1837+30.68
1903	1848+09.07
1904	1848+11.48
1905	1850+00.00
1906	1857+37.50
1907	1857+38.15
1908	1859+26.00
1909	45+00.00 "A"
1910	44+04.00 "A"
1911	41+53.98 "A"
1912	41+53.95 "A"
1913	41+53.97 "A"
1914	59+04.10 "A"
1915	59+04.14 "A"
1916	59+04.20 "A"
1917	57+38.88 "A"
1918	57+38.88 "A"
1919	54+60.00 "A"
1920	53+30.00 "A"
1921	52+50.00 "A"
1922	51+94.27 "A"
1923	1847+00.00
1924	1847+00.00
1925	1847+00.00
1926	1847+00.00
1927	1847+00.00
1928	1839+00.00
1929	1836+12.66
1930	159.22

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNERS(S)	R/W ACRES REQUIRED		
		INTEREST	NEW	EXISTING
96	RANDY RAY KINCMEIER	FEE	0.346	---
97	GARY L. PETTIT AND JANE C. PETTIT	FEE	1.672	---
98	CHRIS A. BUCHANAN	FEE	0.452	---
99	GAIL RICHARDSON	FEE/TLE	0.602	---
				0.030

emcsc

WISCONSIN LAND SURVEYOR

KEVIN C. BOYER
BOYER & SONS
SURVEYING
INC.
HAWAII, HI

(SIGNATURE) *Kevin C. Boyer* DATE 4/17/2014
(PRINTED NAME) KEVIN C. BOYER
(REGISTRATION NUMBER) S-2613
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SW REGION OFFICE.
(SIGNATURE) *Jennifer Quernan* DATE 4/22/14
(PRINTED NAME) JENNIFER QUERNAN

TRANSPORTATION PROJECT PLAT NO: 1007-10-21 - 4.20

THAT PART OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 AND PART OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 33, ALL BEING LOCATED IN T 6 N, R 12 E, TOWN OF CHRISTIANA, DANE COUNTY, WISCONSIN.

RELOCATION ORDER I-39/90, ILLINOIS STATE LINE - MADISON (SOUTH DANE COUNTY LINE TO EAST CHURCH ROAD) TO PROPERLY ESTABLISH, LAY OUT, WHEN ENLARGE, EXTEND, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE TO THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.03, AND 84.30 WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAY OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.

2. THAT THE LINES AND WIDTHS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W ACRES REQUIRED	TITLE ACRES
101	WILBERT S. KNICKMEIER, JR.	FEE	0.851	---
103	ROY J. KAUFER	FEE/TITLE	2.325	---
	ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED		2.325	0.066

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNERS	INTEREST REQUIRED
202	WISCONSIN POWER AND LIGHT COMPANY, LLC (ELECTRIC)	RELEASE OF RIGHTS
221	FRONTIER COMMUNICATIONS OF WI LLC	RELEASE OF RIGHTS

- (202) WISCONSIN POWER AND LIGHT COMPANY (ELECTRIC)
NO EASEMENT OF RECORD - PARCEL 101,103
- (221) FRONTIER COMMUNICATIONS OF WI LLC
VOL. 1293, PG. 50, DOC. 218288 - PARCEL 103
NO EASEMENT OF RECORD - PARCEL 101

R/W COURSE TABLE

DATE	COURSE	LENGTH	BEARING
2004-2005	N 01°14'44" W	37.00'	
2005-2006	N 88°48'16" E	347.43'	
2006-2007	N 71°17'10" E	193.04'	
2007-2008	N 23°24'29" W	1284.34'	
2011-2012	S 22°02'14" E	1233.61'	
2012-2013	S 71°54'01" E	282.32'	
2013-2014	N 66°45'24" E	172.70'	
2014-2015	N 88°51'58" E	145.00'	
2015-2016	S 75°54'31" E	171.00'	
2016-2017	N 88°48'16" E	104.00'	
2017-2018	S 01°11'44" E	57.00'	

EXISTING IRON PIPES

PT #	Y	X
IP 2075	431927.102	901354.652

TILE STATION & OFFSET TABLE

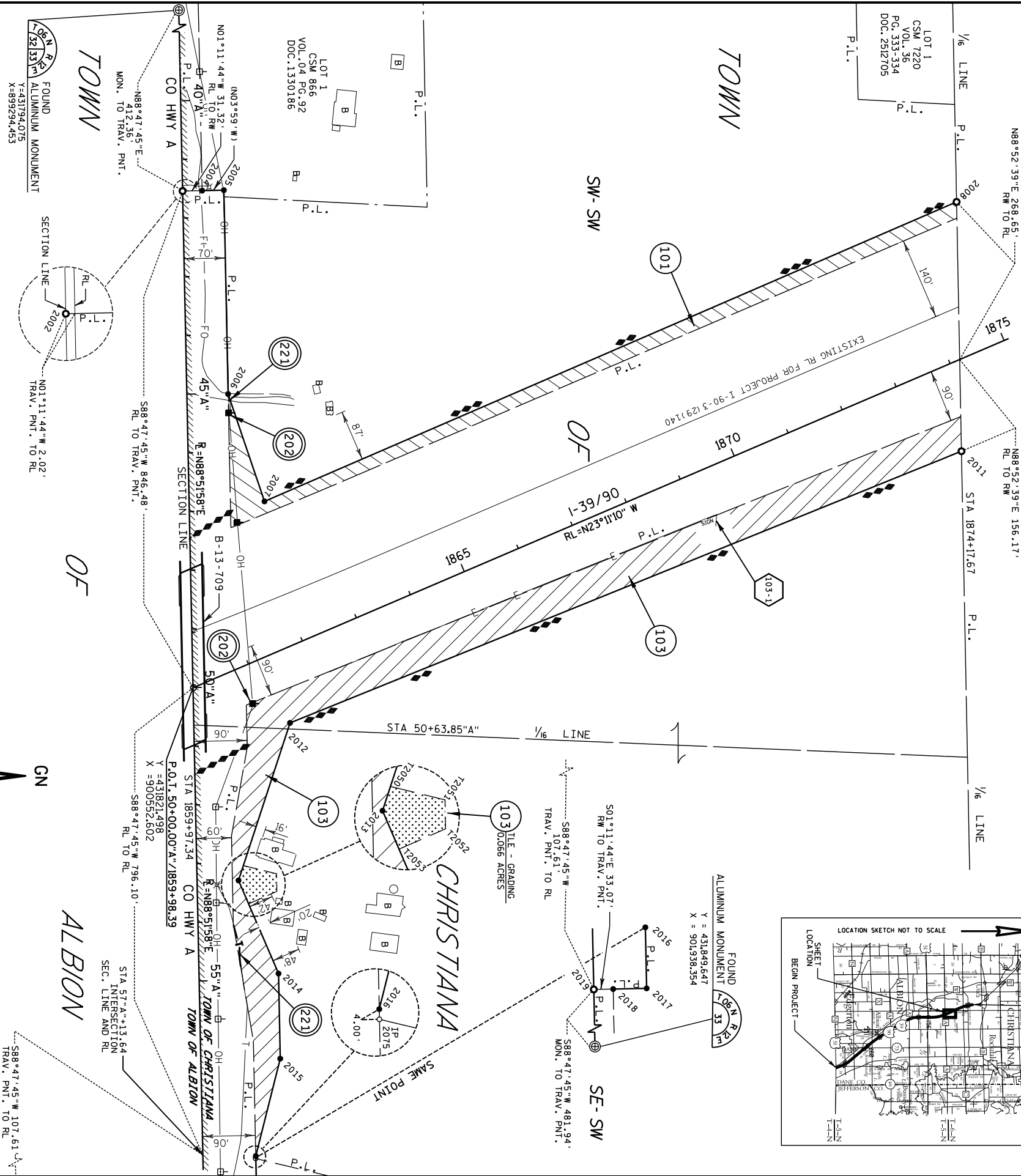
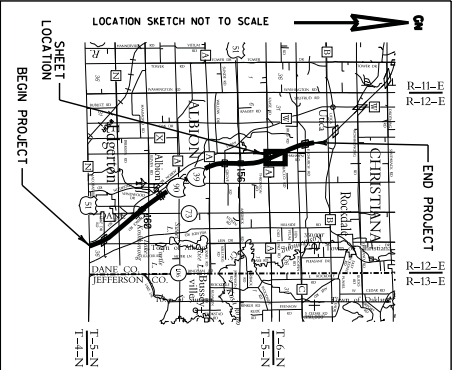
TILE	STATION	OFFSET
T2050	53+04.91 "A"	78.75'
T2051	53+20.00 "A"	135.00'
T2052	53+50.00 "A"	135.00'
T2053	53+70.19 "A"	86.33'

SIGN NUMBER	SIGN OWNER
103-1	LAMAR ADVERTISING

R/W STATION & OFFSET TABLE		
2002	41+53.91 "A"	2.02'
2003	41+53.88 "A"	31.32'
2004	41+53.84 "A"	68.32'
2005	45+01.27 "A"	68.69'
2006	1862+34.26	244.00'
2007	1875+18.59	248.98'
2008	1873+59.01	144.74'
2011	1861+25.65	120.00'
2012	53+30.00 "A"	70.00'
2013	54+90.00 "A"	135.00'
2014	56+35.00 "A"	135.00'
2015	58+00.00 "A"	90.09'
2016	59+04.00 "A"	90.21'
2017	59+04.07 "A"	33.21'
2018	59+04.10 "A"	0.15'

KRISTIE CHLEBOWSKI
DANE COUNTY
REGISTER OF DEEDS
DOCUMENT #
5059314
03/20/2014 09:55 AM
Trans. Fee:
Rec. Fee 25.00
Pages: 1

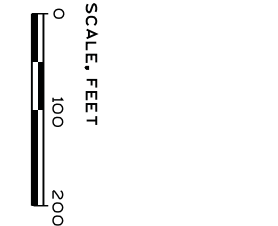
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1007-10-21-4.20
AMENDMENT NO:



emcs

1. KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT I HAVE FULLY COMPLIED WITH THE PROVISIONS OF SECTION 84.09 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1007-10-21-4.20 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

(SIGNATURE) *Kevin C. Boyer* DATE 3/17/2014
(PRINTED NAME) KEVIN C. BOYER
(REGISTRATION NUMBER) S-2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SW REGION OFFICE.
(SIGNATURE) *Jeffrey Quernem* DATE 3/17/2014
(PRINTED NAME) JEFFREY QUERNEM



TRANSPORTATION PROJECT PLAT NO: 1007-10-21 - 4.21

THAT PART OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 33, ALSO THAT PART OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 AND THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 32, ALL BEING LOCATED IN T 6 N, R 12 E, TOWN OF CHRISTIANA, DANE COUNTY, WISCONSIN.

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR I-39/90 ESTABLISHED FROM PREVIOUS PROJECT I-90-3(29) 140.
EXISTING HIGHWAY RIGHT OF WAY FOR HAMMEN ROAD ESTABLISHED FROM PREVIOUS PROJECT I-90-3(29) 140.
EXISTING ACCESS CONTROL FOR I-39/90 ESTABLISHED FROM PREVIOUS RIGHT OF WAY PROJECT I-90-3(29) 140.
FOR THE LATEST ACCESS CONTROL, INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, DANE COUNTY, NAD83(2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

KRISTI CHLEBOWSKI
DANE COUNTY
REGISTER OF DEEDS
DOCUMENT #
5074893
06/09/2014 12:47 PM
Trans. Fee:
Exempt #: 1
Rec. Fee: 25.00
Pages: 1
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1007-10-21-4.21
AMENDMENT NO:

FOUND
6" X 6" STONE MONUMENT
T 32 28
R 12 E
Y = 437,065.863
X = 899,492.891

TAN. RL
N23°11'10"W 2210.28'
TRAV. PNT. TO PT. STA 1924+79.40
N89°46'09"E 182.94'
TAN TO RW

TAN. RL
N23°11'10"W 2210.28'
TRAV. PNT. TO PT. STA 1924+79.40
N89°46'09"E 182.94'
TAN TO RW

TOWN

PI 1924+79.40
Y = 437,779.039
X = 898,000.906
Δ = 6°55'06" RT
D = 00°21'54"
T = 233°49'2"
L = 46°35'8"
DA = 05°56'00"W
PT 1947+80.35

PC STA 1901+44.48
TAN. RL
N89°46'09"E 182.94'
TAN TO RW

SCHEDULE OF LANDS & INTERESTS REQUIRED				OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY. ALL LANDS ARE SUBJECT TO CHANGE FOR THE DEPARTMENT. TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.		
PARCEL NUMBER	OWNERS(S)	INTEREST REQUIRED	NEW	EXISTING	R/W ACRES REQUIRED	
102	NANCY A. ANDERSON AND ROBERT NEIL ANDERSON	FEE	0.921	0.099	1.020	
104	ROBERT F. HILL AND MARLETTA R. HILL LAMAR ADVERTISING	FEE	0.320	---	0.320	
III	LAND CONTRACT, THE ESTATE OF WESLEY DEBBIE, DECEASED AND DORRIS W. MORRIS, AS PURCHASERS AND JO ANN H. MORRIS	FEE	0.709	0.100	0.809	
112	WAYNE A. LINERUD AND FAITH A LINERUD	FEE	0.044	---	0.044	
113	STATE OF WISCONSIN (STATE CONSERVATION COMMISSION)	FEE	1.340	---	1.340	

ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

R/W STATION & OFFSET TABLE	
2102	1875+18.59
2103	1875+40.00
2104	1877+65.00
2105	1882+65.24
2107	1883+85.18
2108	1889+39.52
2109	1890+00.00
2110	1897+00.00
2111	1903+63.70
2114	1901+98.35
2115	1892+33.76
2117	1891+08.98
2118	1887+83.32
2119	1884+22.16
2120	1881+85.00
2121	1881+85.00
2122	1878+75.00
2123	1878+75.00
2124	1876+22.33
2125	1873+53.01

R/W COURSE TABLE	
2102-2103	N 23°24'29" W
2103-2104	N 29°30'42" W
2104-2105	N 21°25'27" W
2107-2108	N 21°25'27" W
2108-2109	N 21°25'27" W
2109-2110	N 20°48'47" W
2110-2111	N 25°44'32" W
2114-2115	S 21°59'50" E
2117-2118	S 21°59'50" E
2118-2119	S 27°32'32" E
2119-2120	N 66°48'50" E
2120-2121	S 23°11'10" E
2121-2122	S 66°48'50" W
2122-2123	S 21°59'50" E
2123-2124	S 22°02'14" E

SW- NW

FOUND
6" X 6" STONE MONUMENT
Y = 434,528.665
X = 904,679.144

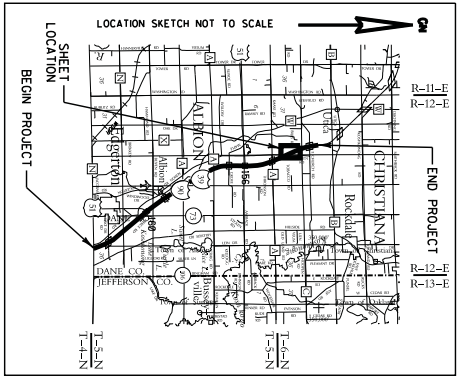
SET
L25" X 30" REBAR
Y = 434,390.173
X = 894,065.152

DETAIL A
N01°22'12"E
8.68'
MON TO RL
3.89'
MON. TO RL

NE- SE

GN

FOUND
ALUMINUM MONUMENT
Y = 431,794.074
X = 899,294.453



SCHEDULE OF SIGN STRUCTURE	
SIGN NUMBER	SIGN OWNER
104-1	LAMAR ADVERTISING
	ROBERT F. HILL AND MARLETTA R. HILL
	14430

OASIS - OUTDOOR ADVERTISING SIGN INVENTORY SYSTEM

UTILITY SCHEDULE & INTERESTS REQUIRED	
UTILITY NUMBER	UTILITY OWNERS
221	FRONTIER COMMUNICATIONS OF WI LLC

FRONTIER COMMUNICATIONS OF WI LLC
NO EASEMENT OF RECORD - PARCEL 104

CHRISTIANA

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT NO. 1007-10-21-4.21 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

(SIGNATURE) *Kevin C. Boyer* DATE 06/20/14
(PRINTED NAME) KEVIN C. BOYER
(REGISTRATION NUMBER) S-2615
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SW REGION OFFICE, MADISON
(SIGNATURE) *David R. Miller* DATE 02/20/14
(PRINTED NAME) DAVID R. MILLER

emcs

TRANSPORTATION PROJECT PLAT NO: 1007-10-21 - 4.23
THAT PART OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4, PART OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4, AND PART OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 29. ALL BEING LOCATED IN T 6 N, R 12 E, TOWN OF CHRISTIANA, DANE COUNTY, WISCONSIN.

RELOCATION ORDER I-39/90, ILLINOIS STATE LINE -
MADISON (SOUTH DANE COUNTY LINE TO EAST CHURCH ROAD)
TO PROPERLY ESTABLISH LAY OUT, WIDEN, ENLARGE, EXTEND, RECONSTRUCT, IMPROVE OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE,
THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND
INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30 WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION
HEREBY ORDERS THAT:
1. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT
2. THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, DANE
COUNTY NAD83(2007) IN U.S. SURVEY FEET, VALUES SHOWN ARE GRID
COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE
USED AS GROUND DISTANCES

KRISTIE CHLEBOWSKI
DANE COUNTY
REGISTER OF DEEDS
DOCUMENT #
5059372
03/20/2014 12:46 PM
Trans. Fee:
Rec. Fee: 25.00
Pages: 1

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1007-10-21-4.23
AMENDMENT NO:

R/W COURSE TABLE

2316-2317	S 00°04'43" W	211.61'
2317-2318	S 12°58'08" E	297.61'
2318-2319	S 08°04'33" E	698.24'
2319-2320	S 85°15'27" E	288.73'
2320-2325	S 88°15'14" E	500.51'
2325-2326	S 88°15'14" E	349.24'
2326-2327	N 89°12'05" E	426.87'
2327-2328	N 89°22'03" E	451.52'
2328-2329	S 89°55'55" E	168.04'
2329-2330	S 89°55'55" E	100.02'
2330-2331	S 82°45'41" W	11.35'
2331-2332	N 07°37'47" W	43.28'
2332-2333	N 07°37'47" W	17.34'
2333-2334	N 82°28'45" E	13.66'
2334-2335	SEE CURVE DATA ON SHEET	
2335-2336	N 03°39'51" W	48.14'
	S 03°53'46" E	298.01'
	S 00°04'43" W	187.66'

R/W STATION & OFFSET TABLE

2302	39+98.84 "CH"	3.13'
2304	46+16.94 "CH"	69.45'
2305	193+74.78	261.61'
2306	1943+77.35	233.65'
2307	1943+77.35	245.00'
2308	1944+19.96	244.98'
2309	1944+37.03	245.00'
2310	1944+37.03	231.34'
2311	1948+09.78	215.06'
2314	1948+50.77	219.00'
2315	1945+50.00	205.00'
2316	1943+61.65	180.40'
2317	1941+50.00	150.00'
2318	1938+50.00	170.00'
2319	1931+45.73	135.00'
2320	54+00.00 "CH"	96.52'
2321	1947+61.95	217.26'
2322	39+98.84 "CH"	32.99'
2324	44+48.90 "CH"	69.60'
2325	59+00.00 "CH"	73.91'
2326	62+48.88 "CH"	58.13'
2327	64+85.75 "CH"	57.95'
2329	64+83.22 "CH"	25.95'

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.		R/W ACRES REQUIRED	
PARCEL NUMBER	INTEREST REQUIRED	NEW	EXISTING TOTAL
126	MYRON C. FOSDAL	2.060	2.060
ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED			0.183

TLE STATION & OFFSET TABLE

T2350	1932+09.78	356.25'
T2351	1931+89.85	261.48'
T2352	1937+80.55	291.95'
T2353	1937+80.55	262.00'

UTILITY SCHEDULE & INTERESTS REQUIRED

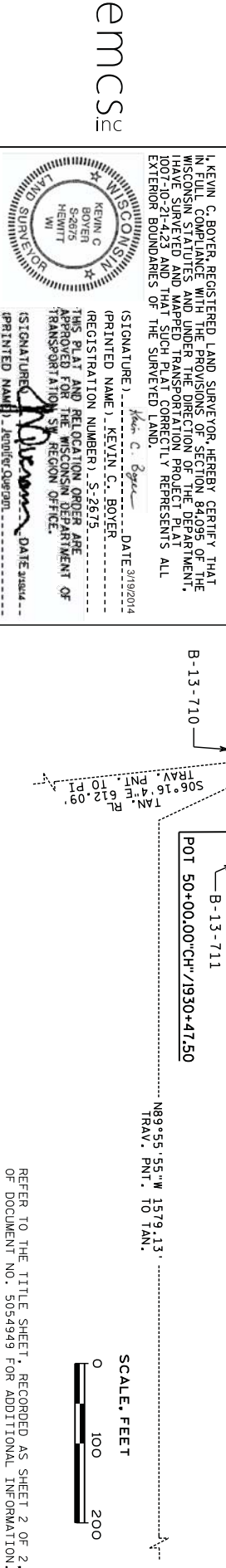
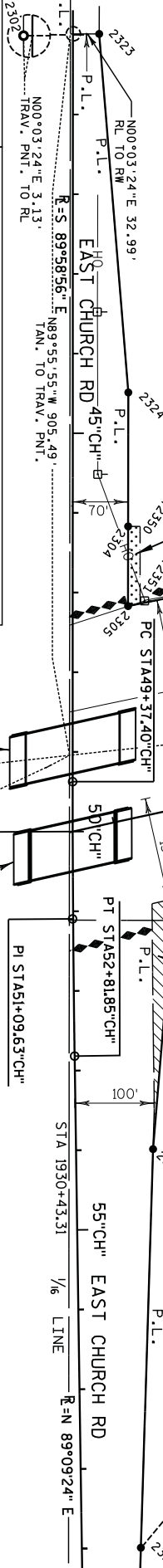
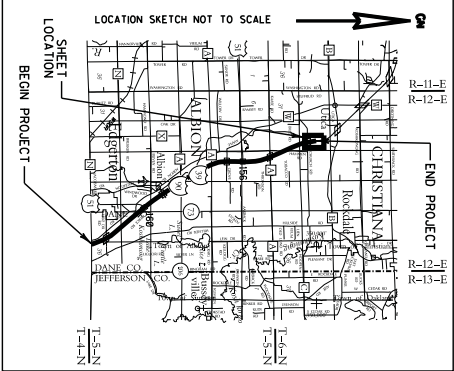
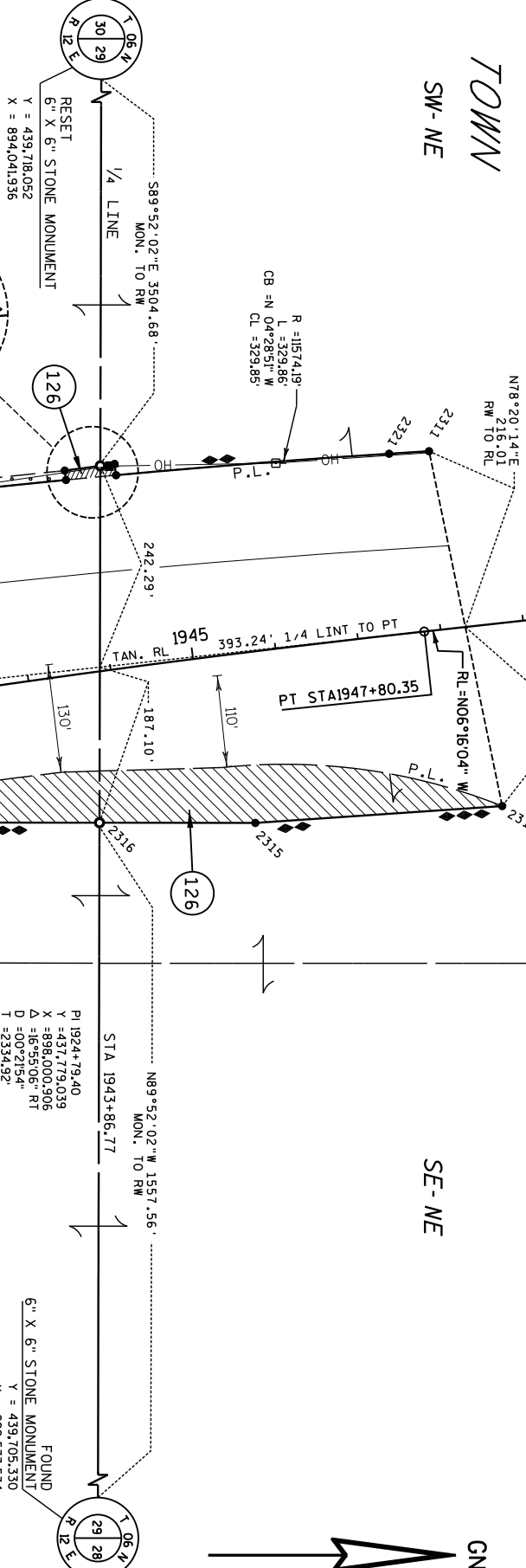
UTILITY NUMBER	UTILITY OWNERS	INTEREST REQUIRED
202	WISCONSIN POWER AND LIGHT COMPANY, LLC (ELECTRIC)	RELEASE OF RIGHTS

WISCONSIN POWER AND LIGHT COMPANY (ELECTRIC)
VOL. 243, PG. 491, DOC. 826823 - PARCEL 126
VOL. 395, PG. 145, DOC. 1020755 - PARCEL 126
VOL. 395, PG. 155, DOC. 1020758 - PARCEL 126

TOWN
SW-NE

SE-NE

CN



emcsc
KEVIN C. BOYER
REGISTERED LAND SURVEYOR
DATE: 3/19/2014
THIS PLAT AND RELOCATION ORDER ARE
APPROVED FOR THE WISCONSIN DEPARTMENT OF
TRANSPORTATION REGION OFFICE.
(SIGNATURE) *Kevin C. Boyer*
(PRINTED NAME) Kevin C. Boyer
(REGISTRATION NUMBER) S-2675
(LOCATION) T-6 N, R-12 E, T-29 S
(SECTION) 29
(TOWNSHIP) T-6 N
(RANGE) R-12 E
(COUNTY) DANE COUNTY, WISCONSIN
(PROJECT) TRANSPORTATION PROJECT PLAT NO: 1007-10-21 - 4.23
(SHEET) 4 OF 2

KRISTI CHLEBOWSKI
DANE COUNTY
REGISTER OF DEEDS

DOCUMENT #
5074896

06/09/2014 12:58 PM
Trans. Fee:
Exempt #:
Rec. Fee: 25.00
Pages: 1

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1007-10-21-4.24
AMENDMENT NO:

SET PK NAIL
Y = 426,958.830
X = 899,521.940

R/W STATION & OFFSET TABLE		
2403	68+54.04"KN"	753.92'
2404	68+68.97"KN"	752.50'
2405	68+10.45"KN"	150.48'
2406	68+77.15"KN"	79.70'
2407	83+60.46"KN"	79.23'
2408	83+60.44"KN"	43.53'
2409	85+86.30"KN"	43.36'
2412	87+05.49"KN"	100.88'
2413	68+46.10"KN"	100.29'
2414	67+74.58"KN"	167.45'

R/W COURSE TABLE		
2403-2404	N 89°15'38" W	15.00'
2404-2405	N 00°52'34" E	604.86'
2405-2406	N 47°58'34" E	97.26'
2406-2407	S 85°20'34" W	1483.31'
2407-2408	N 04°38'00" W	35.70'
2408-2409	S 85°22'00" W	225.86'
2412-2413	N 85°20'34" E	1859.39'
2413-2414	N 42°07'40" E	98.11'

LOT 2
CSM 9667
VOL. 55
PG. 283-289
DOC. 3207298
TRANS 233
RESTRICTIONS APPLY
DOT 13-051-230-00-C
MARCH 17, 2000

LOT 1
CSM 9667
VOL. 55
PG. 283-289
DOC. 3207298
TRANS 233
RESTRICTIONS APPLY
DOT 13-051-230-00-C
MARCH 17, 2000

N42°07'40"E
47.57'
RW TO TRAV. PNT.

IP 2460 IS
S64°33'3"E 0.68'
FROM POINT 2414

IP 2460
0.5" REBAR

IP 2455 IS
N88°48'25"E 2.89'
FROM POINT 2406

IP 2455
1.5" IP

IP 2458
1.5" IP

IP 2457
1.5" IP

IP 2456
1.5" IP

IP 2454 IS
N18°22'59"E 2.41'
FROM POINT 2405

IP 2454
0.75" REBAR

IP 2453
0.75" REBAR

IP 2452
1.5" IP

IP 2451 IS
N36°37'27"E 0.59'
FROM POINT 2404

IP 2451
1.5" IP

IP 2450 IS
S87°40'38"E 1.96'
FROM POINT 2403

IP 2450
1.5" IP

IP 2449 IS
N89°15'38" W
33.00'
TRAV. PNT. TO RW

IP 2448 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2447 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2446 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2445 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2444 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2443 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2442 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2441 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2440 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2439 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2438 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2437 IS
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1935.04'
MON. TO TRAV. PNT.

IP 2436 IS
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1935.04'
MON. TO TRAV. PNT.

IP 2435 IS
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1935.04'
MON. TO TRAV. PNT.

IP 2434 IS
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1935.04'
MON. TO TRAV. PNT.

IP 2433 IS
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1935.04'
MON. TO TRAV. PNT.

IP 2432 IS
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1935.04'
MON. TO TRAV. PNT.

IP 2431 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2430 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2429 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2428 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2427 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2426 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2425 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2424 IS
N00°44'22"E
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MON. TO TRAV. PNT.

IP 2423 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2422 IS
N00°44'22"E
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MON. TO TRAV. PNT.

IP 2421 IS
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1935.04'
MON. TO TRAV. PNT.

IP 2420 IS
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MON. TO TRAV. PNT.

IP 2419 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2418 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2417 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2416 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2415 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2414 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2413 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2412 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2411 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2410 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2409 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2408 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2407 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2406 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

IP 2405 IS
N00°44'22"E
1935.04'
MON. TO TRAV. PNT.

TRANSPORTATION PROJECT PLAT NO: 1007-10-21 - 4.24

THAT PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 AND THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 8. ALSO THAT PART OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 AND THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 5, ALL BEING LOCATED IN T 5 N, R 12 E, TOWN OF ALBION, DANE COUNTY, WISCONSIN.

THE STATE OF WISCONSIN HAS DEEMED IT NECESSARY TO MONUMENT RIGHT-OF-WAY INTERESTS PREVIOUSLY ACQUIRED UNDER SECTIONS 82.01, 82.31(1), 82.31(2), AND 84.09 OF THE WISCONSIN STATE STATUTES AND DOES HEREBY CERTIFY THE DEPARTMENT OF TRANSPORTATION HAS SURVEYED THE HIGHWAY RIGHT-OF-WAY; THAT THIS PLAT IS A TRUE AND CORRECT REPRESENTATION OF THE EXTERIOR BOUNDARIES OF THE LAND SURVEYED AND SHOWS ACCURATE MEASUREMENTS THEREOF.

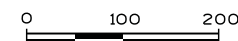
EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT OF WAY FOR USH 51 ESTABLISHED FROM PREVIOUS PROJECT I-90-3(29)140 AND CSM 9667.
EXISTING HIGHWAY RIGHT OF WAY FOR CO HWY A ESTABLISHED FROM PREVIOUS PROJECT I-90-3(29)140 AND CSM 9667.
EXISTING HIGHWAY RIGHT OF WAY FOR MAPLE GROVE ROAD ESTABLISHED FROM PREVIOUS PROJECT I-90-3(29)140 AND CSM 9667.

EXISTING ACCESS CONTROL FOR USH 51 ESTABLISHED FROM PREVIOUS RIGHT OF WAY PROJECT I-90-3(29)140 AND ACCESS CONTROL PROJECT 5845-02-29.
EXISTING ACCESS CONTROL FOR CO HWY A ESTABLISHED FROM CSM 9667.

FOR THE LATEST ACCESS CONTROL INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.

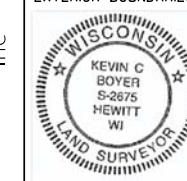
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, DANE COUNTY, NAD83(2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

SCALE, FEET



REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, OF DOCUMENT NO. 5054949 FOR ADDITIONAL INFORMATION.

emcs inc

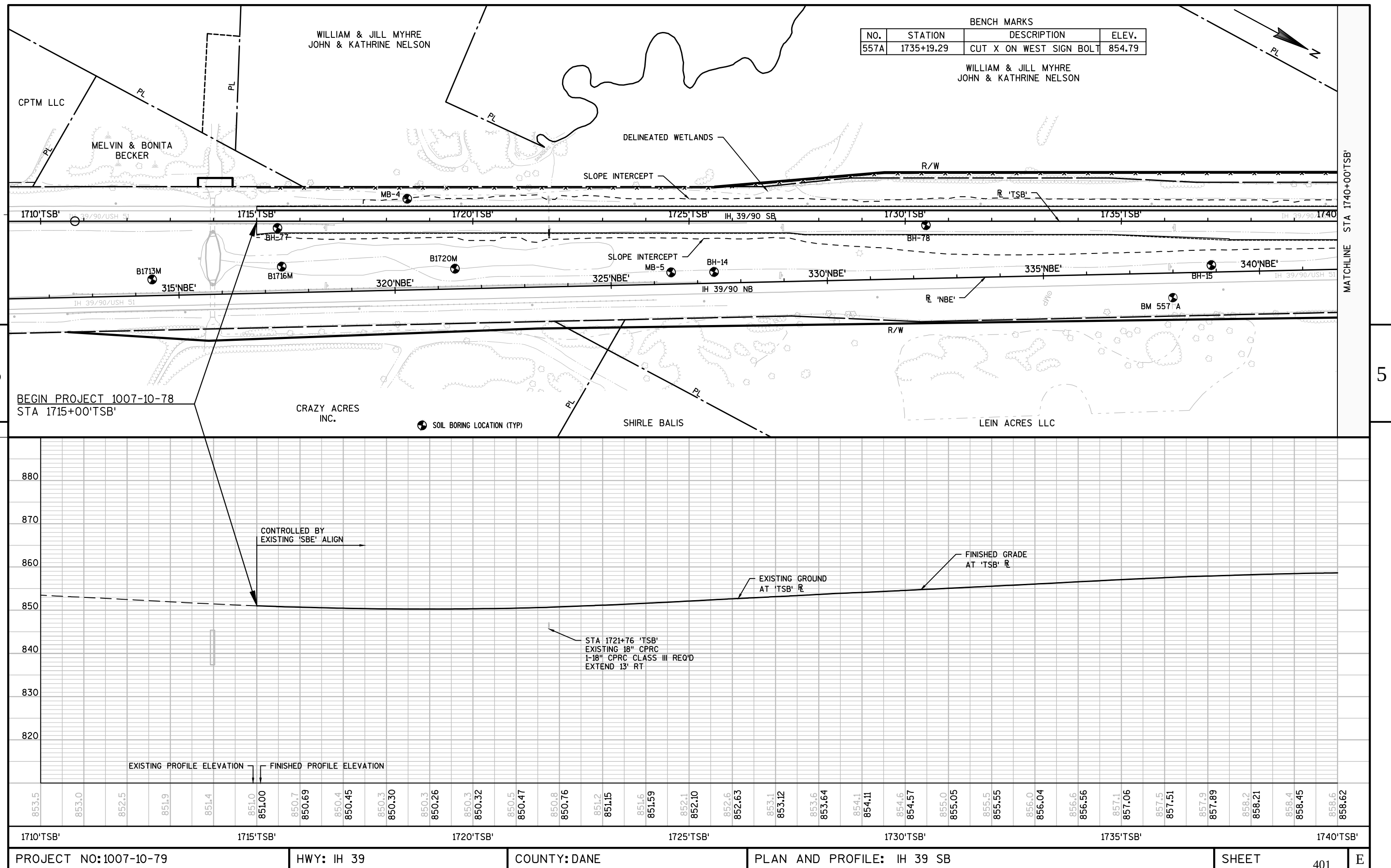


(SIGNATURE) *Kevin C. Boyer* DATE: 6/3/2014
(PRINTED NAME) KEVIN C. BOYER
(REGISTRATION NUMBER) S-2675

THIS PLAT IS APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SW REGION OFFICE.

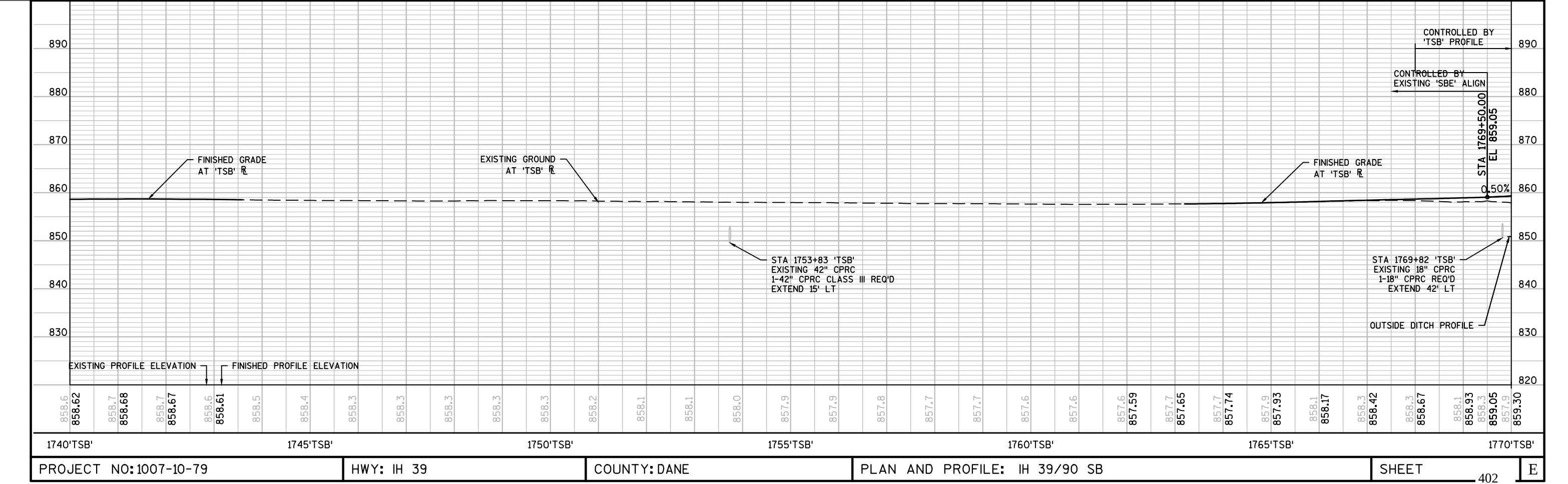
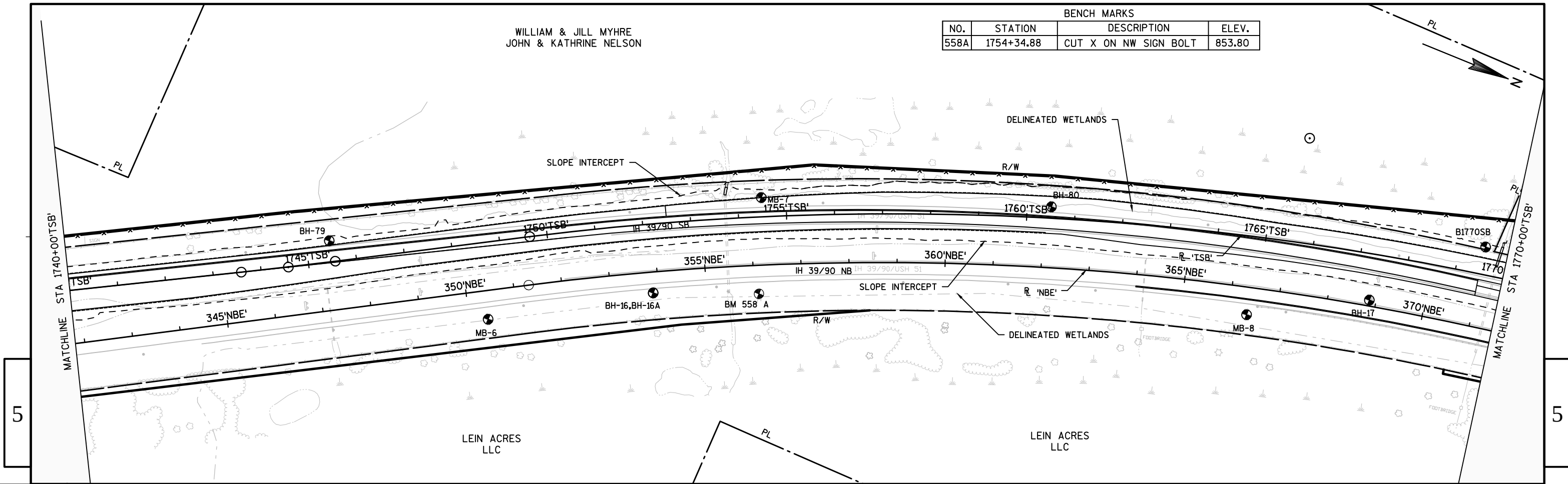
(SIGNATURE) *David R. Hill* DATE: 6/3/2014
(PRINTED NAME) DAVID R. HILL

400



WILLIAM & JILL MYHRE
JOHN & KATHRINE NELSON

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
558A	1754+34.88	CUT X ON NW SIGN BOLT	853.80



PROJECT NO:1007-10-79

HWY: IH 39

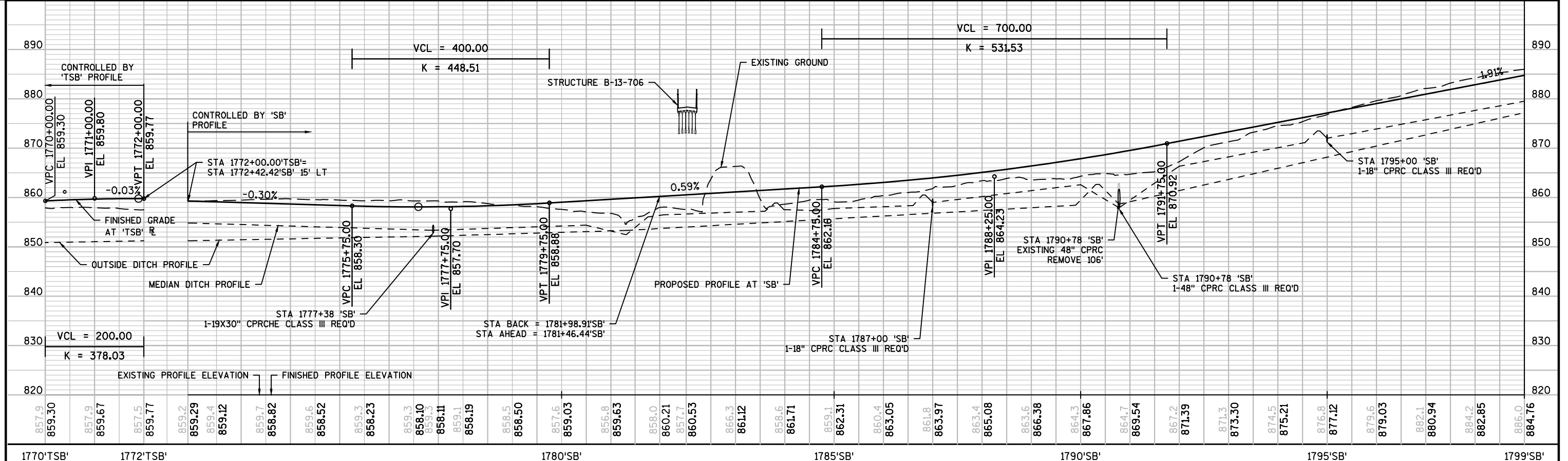
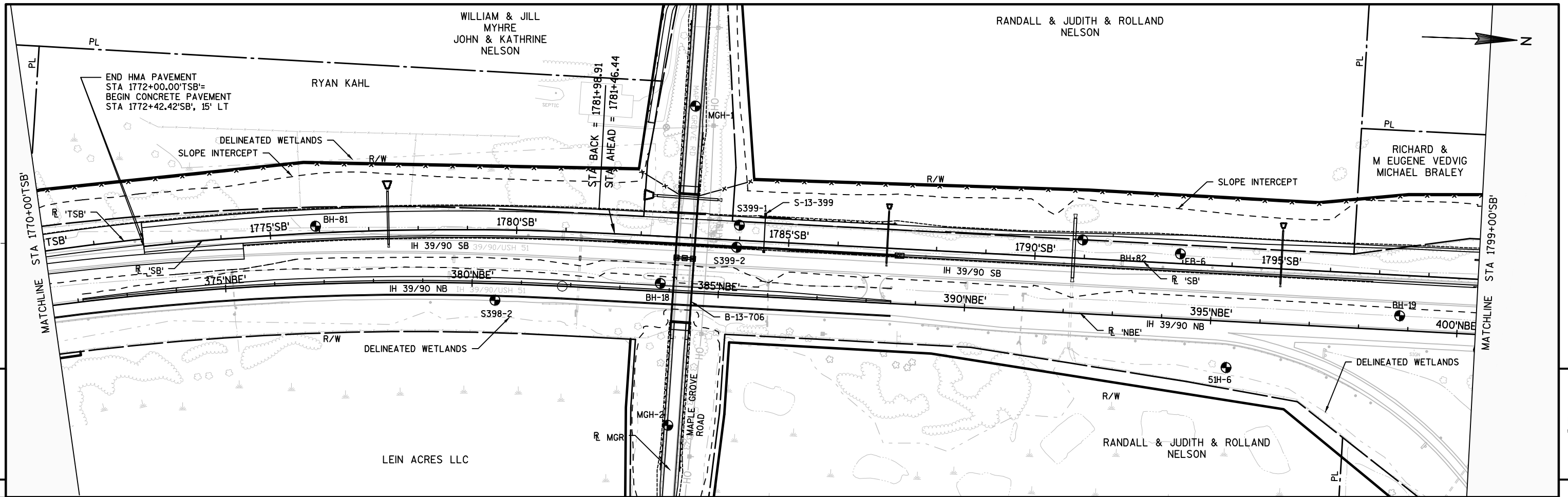
COUNTY: DANE

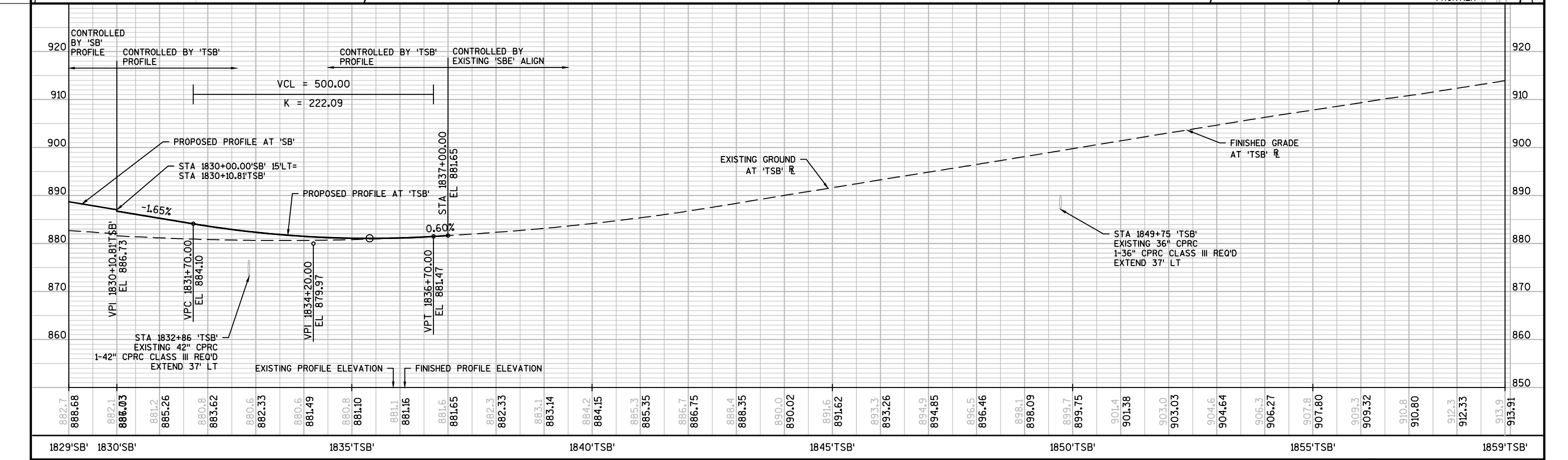
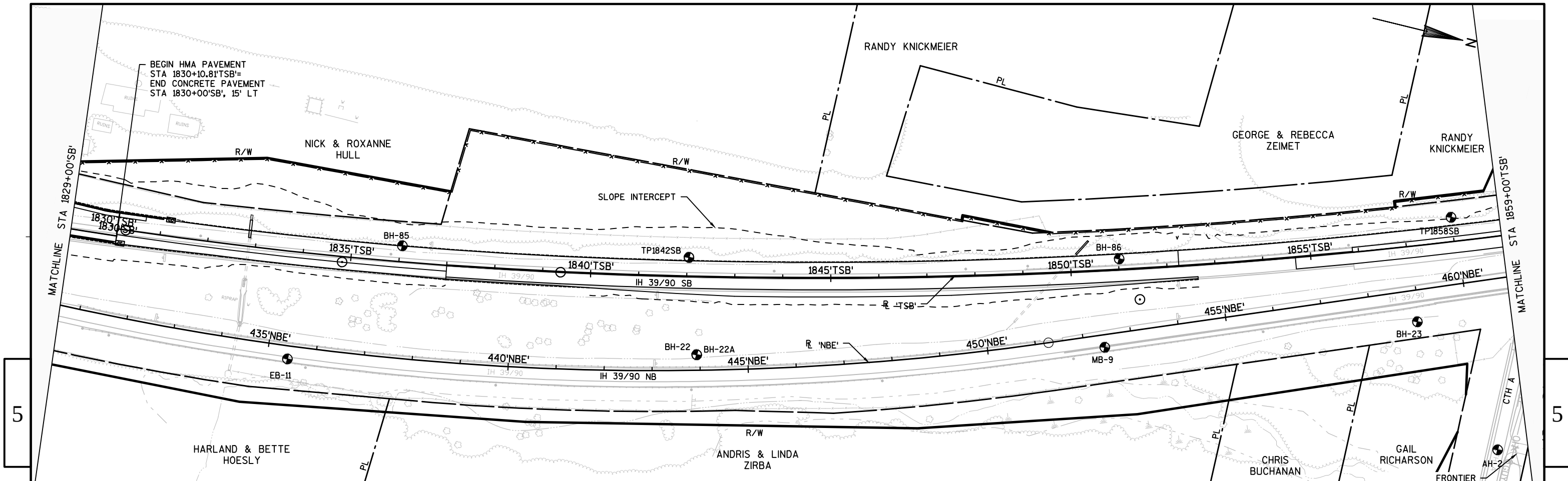
PLAN AND PROFILE: IH 39/90 SB

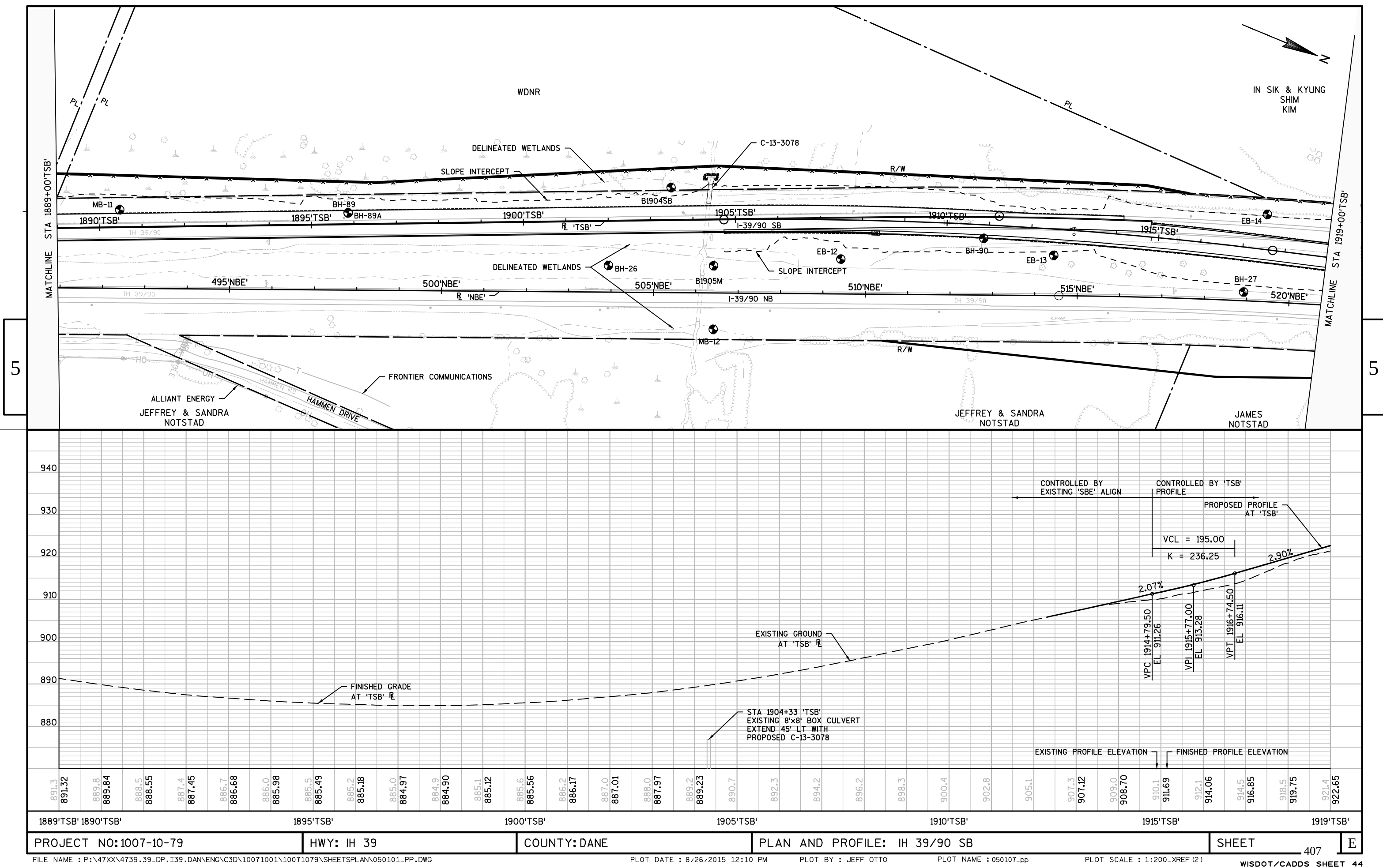
SHEET

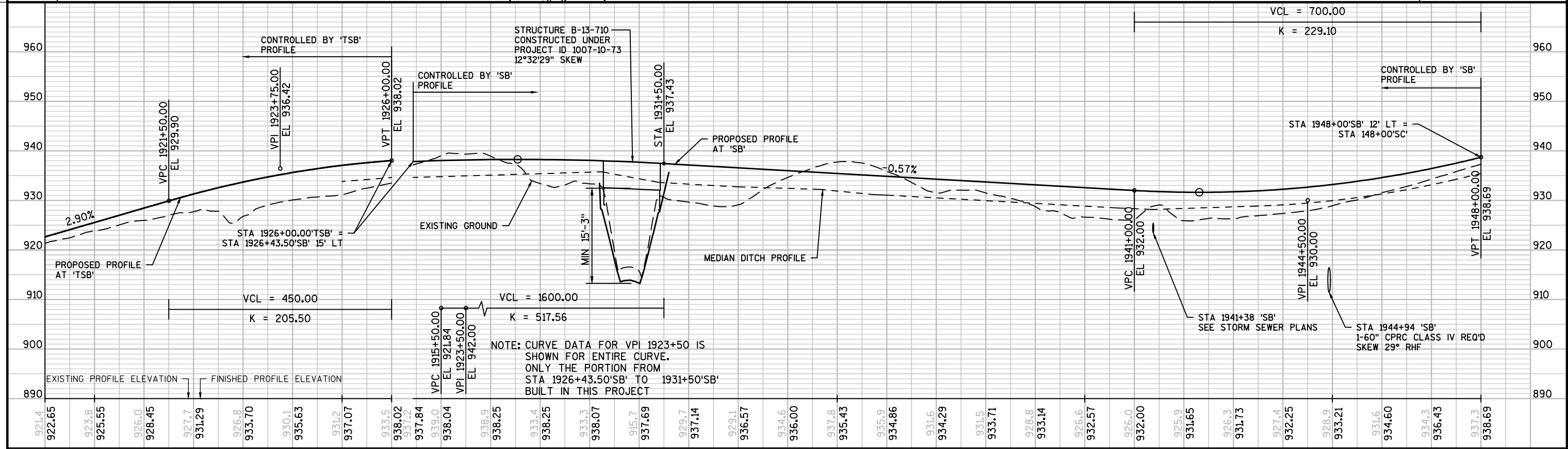
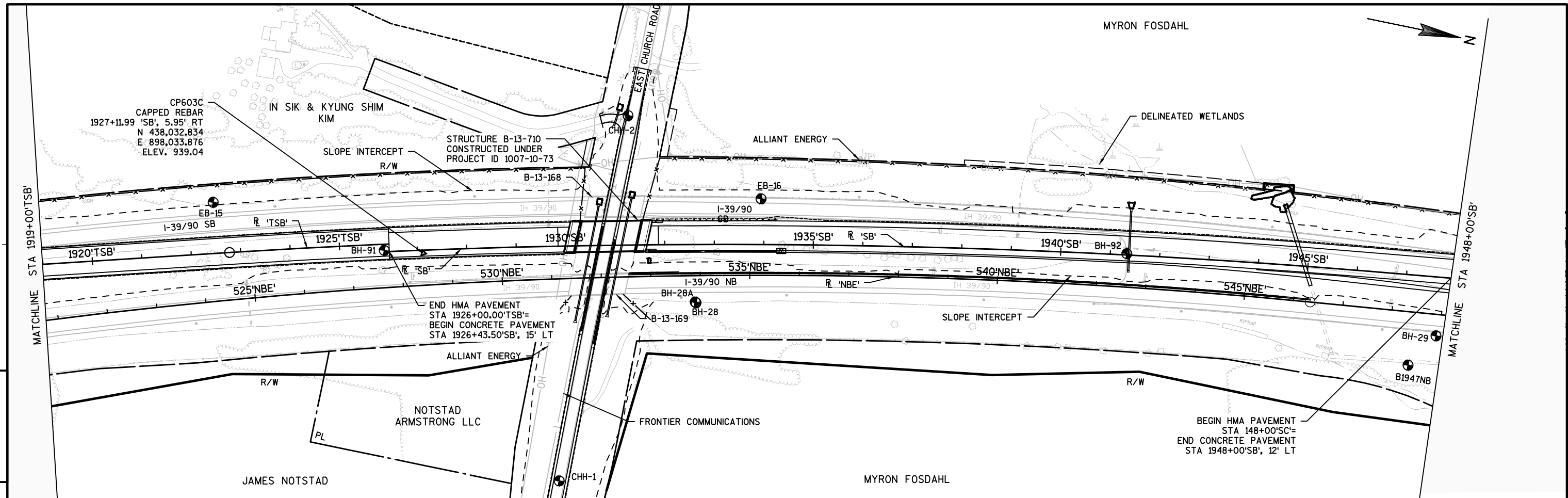
402

E

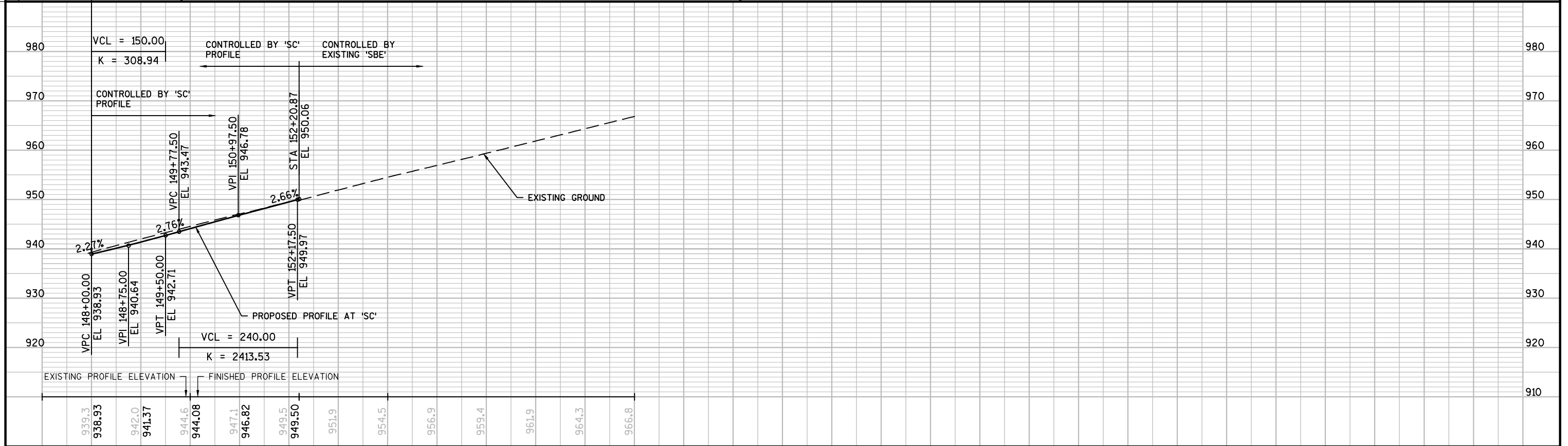
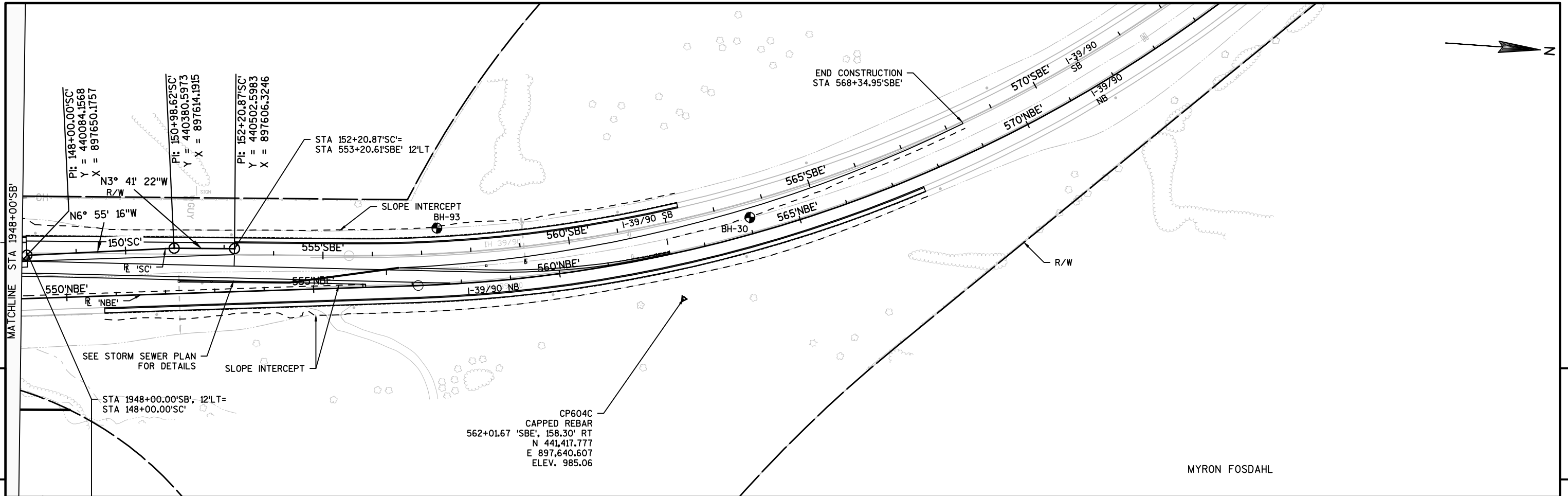




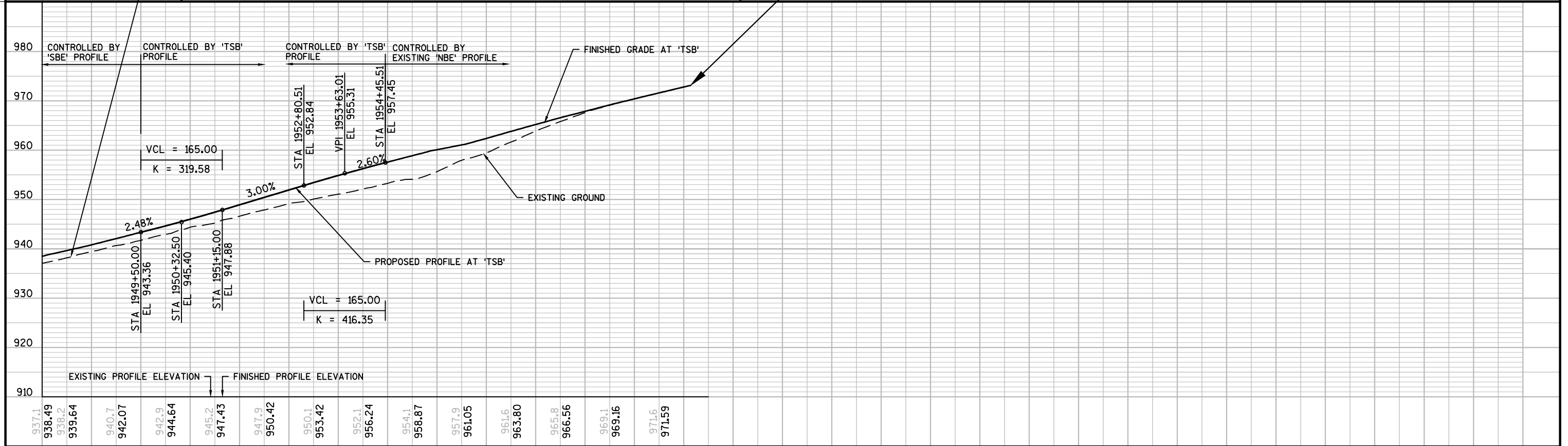
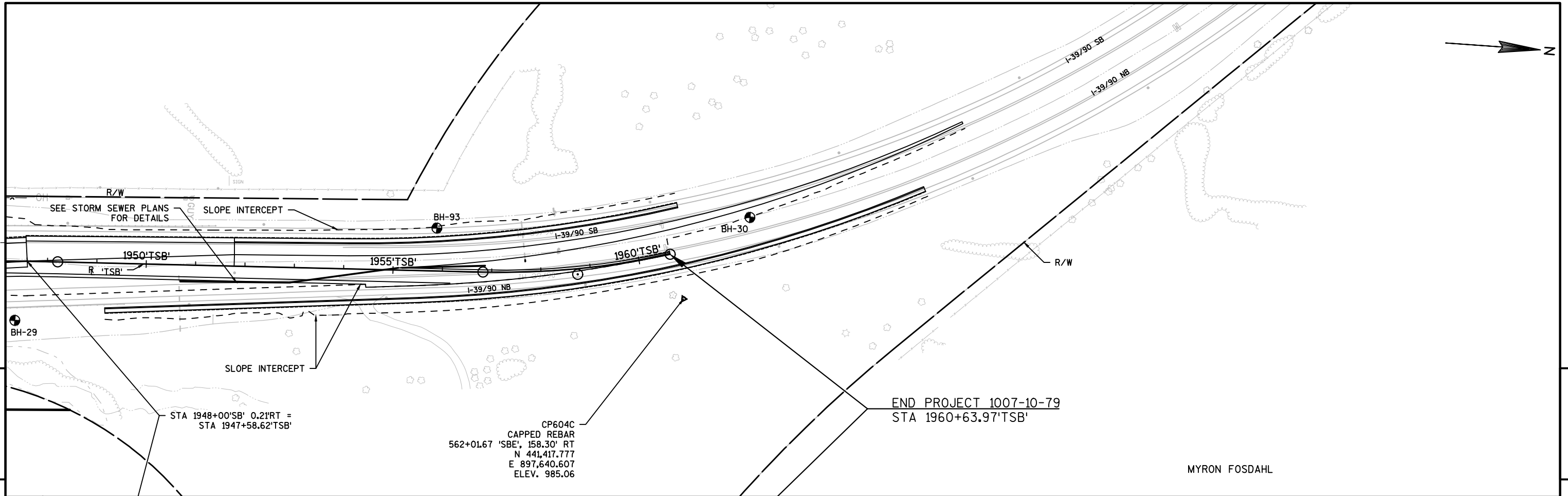




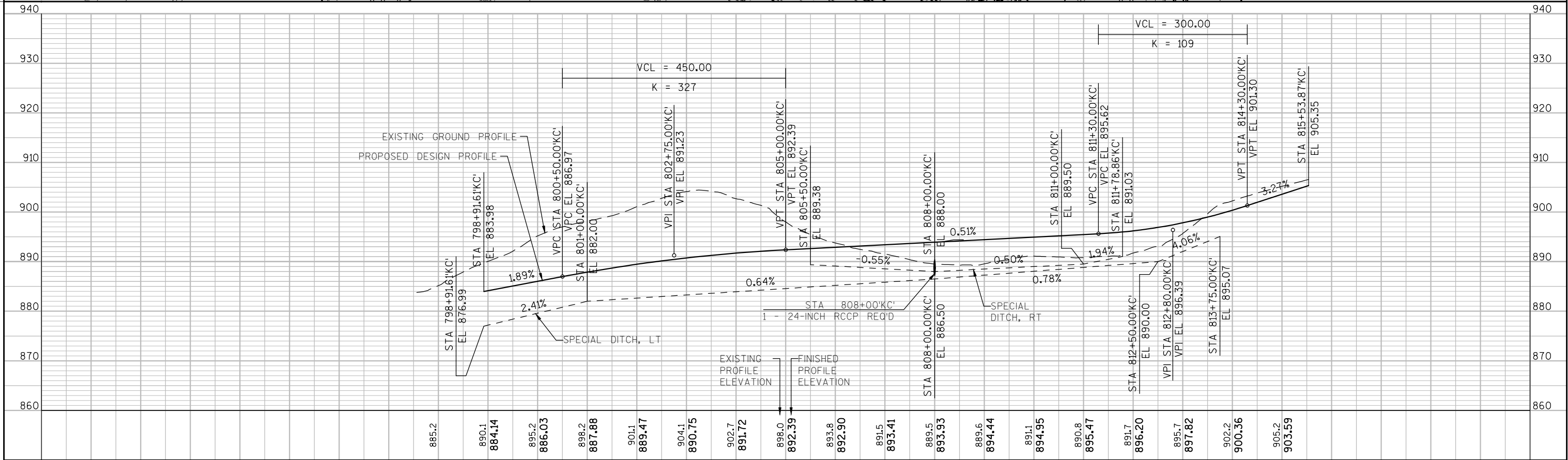
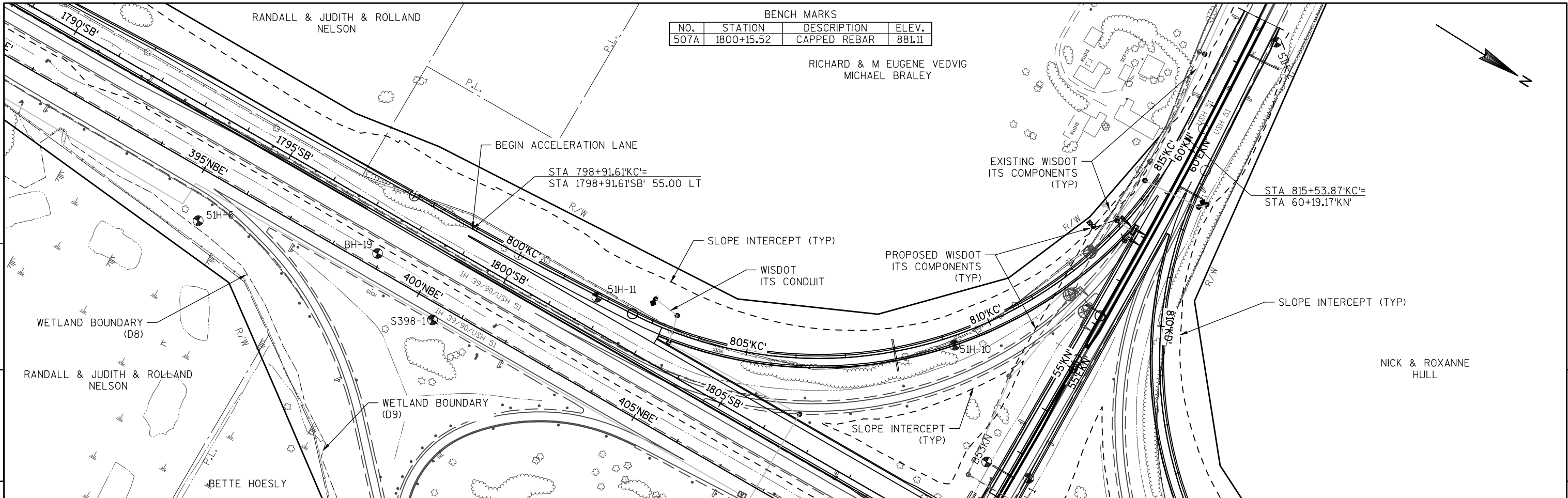
1919'TSB'	1920'TSB'	1925'TSB'	1926'TSB'	1935'SB'	1940'SB'	1945'SB'	1948'SB'
PROJECT NO:1007-10-79				HWY: IH 39		COUNTY: DANE	
PLAN AND PROFILE: IH 39/90 SB				SHEET		408	



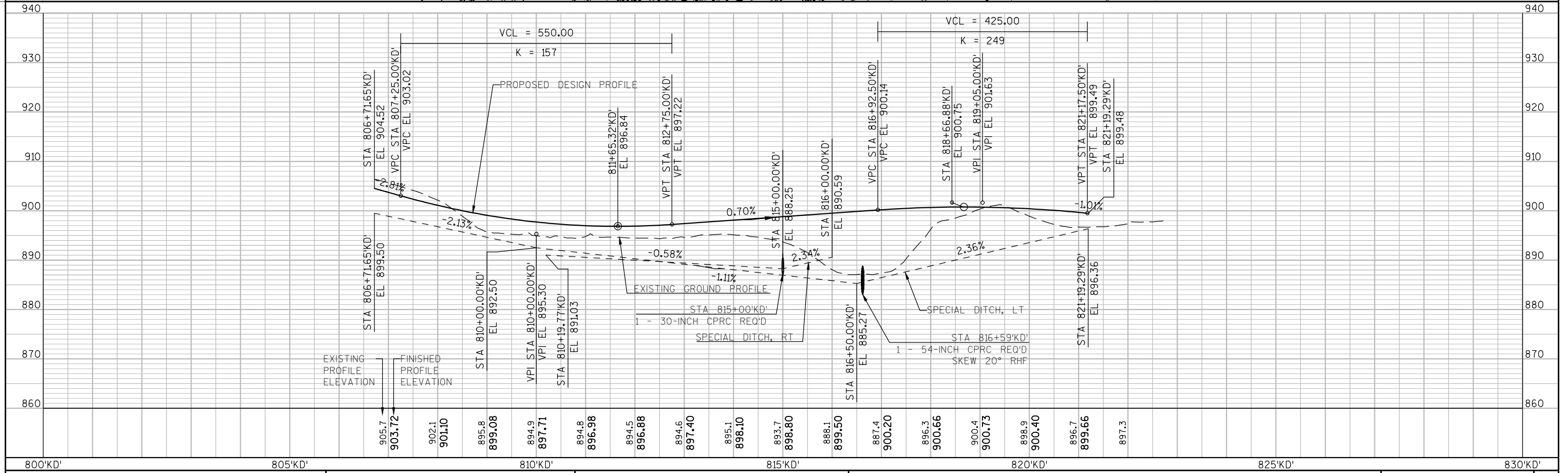
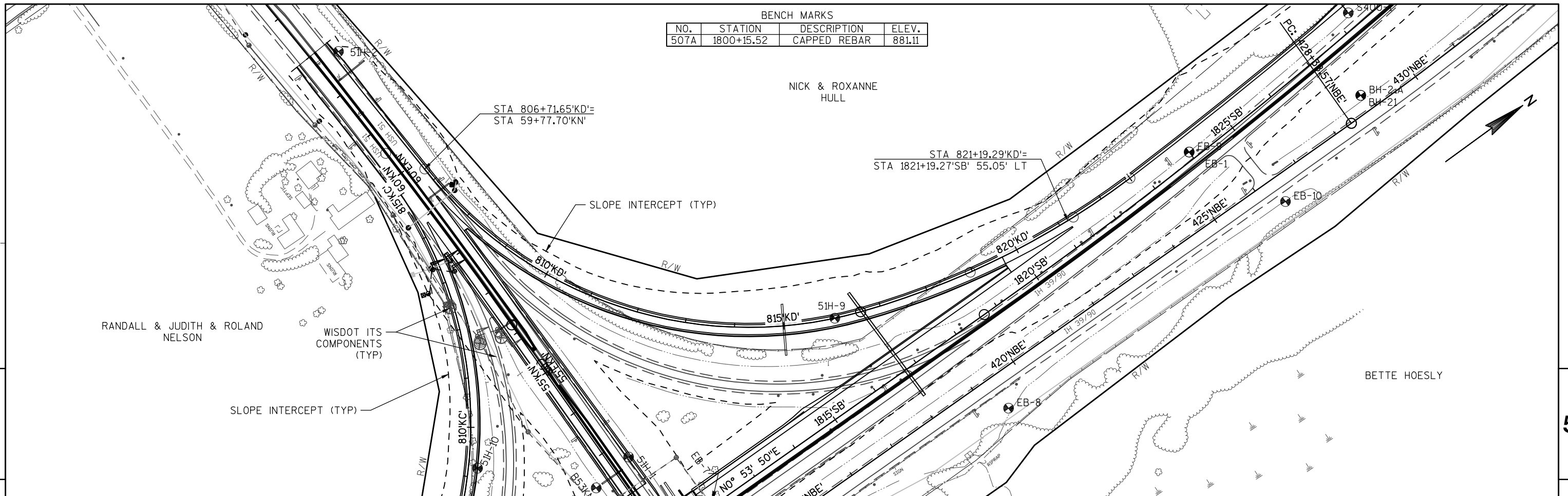
147'SC'	150'SC'	152'SC'	555'SBE'	560'SBE'
PROJECT NO:1007-10-79	HWY: IH 39	COUNTY: DANE	PLAN AND PROFILE: IH 39/90 SB	SHEET 409 E



1947'TSB'		1950'TSB'		1955'TSB'		1960'TSB' 1961'TSB'					
PROJECT NO:1007-10-79		HWY: IH 39		COUNTY: DANE		PLAN AND PROFILE: IH 39/90 CROSSOVER			SHEET 410		E



NO.	STATION	DESCRIPTION	ELEV.
507A	1800+15.52	CAPPED REBAR	881.11



PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

PLAN AND PROFILE: OFF RAMP - IH 39/90 SB TO USH 51 NB

SHEET

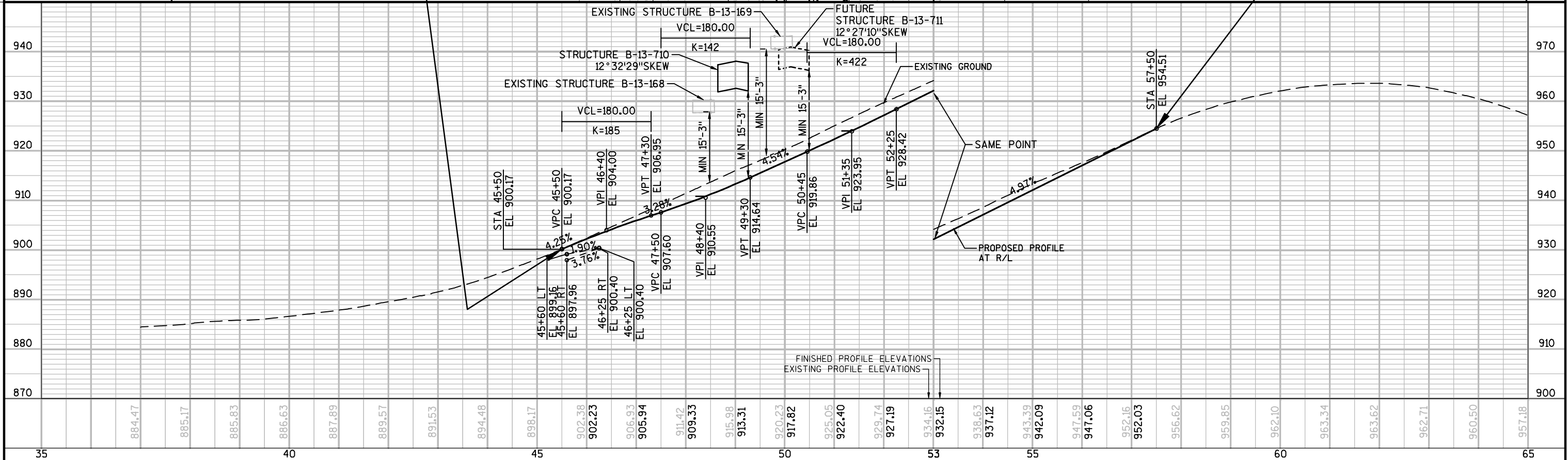
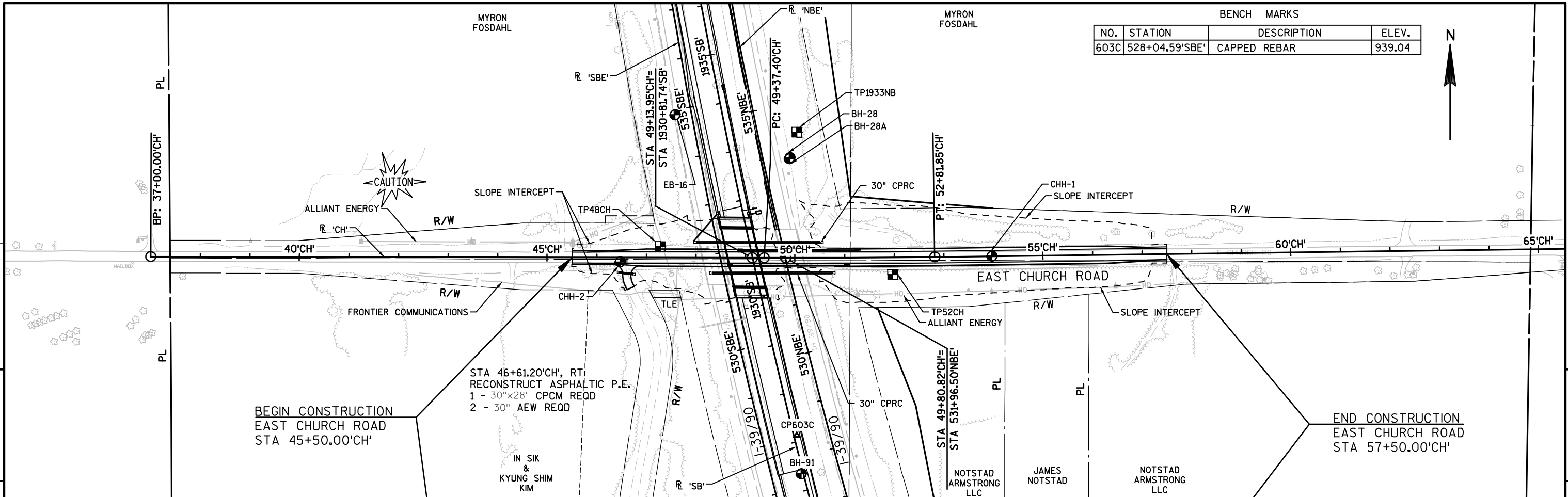
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FILE NAME : P:\2012026_IH 39\CIVIL3D\PLANSET\10071079 - USH 51\050101_PP_USH 51.DWG

PLOT DATE : 7/22/2015 3:49 PM

PLOT BY : MARY PAMPERIN-VOLK PLOT NAME : _____ PLOT SCALE : 1:200_XREF (2)

WISDOT/CADDS SHEET 44

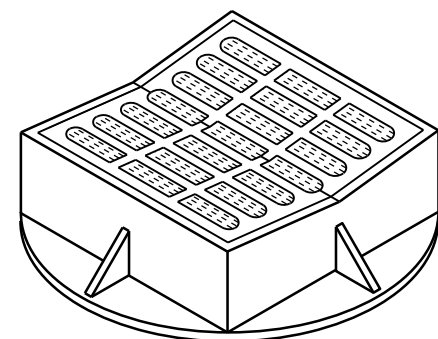
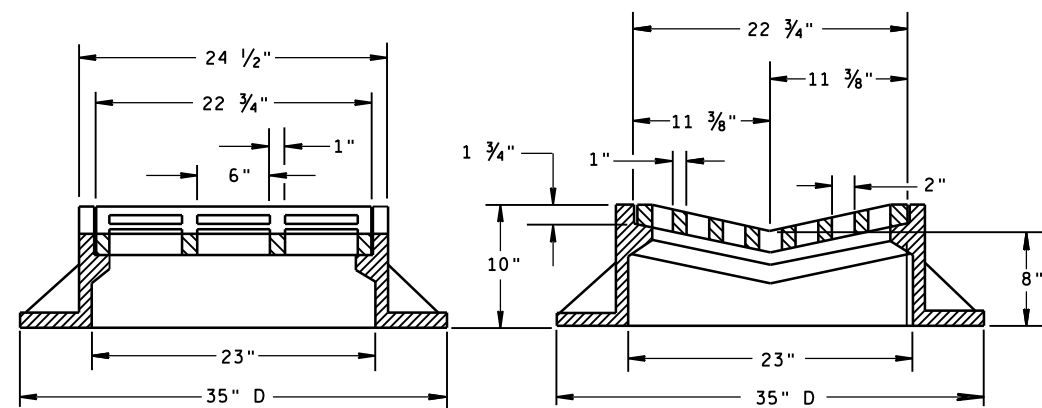


Standard Detail Drawing List

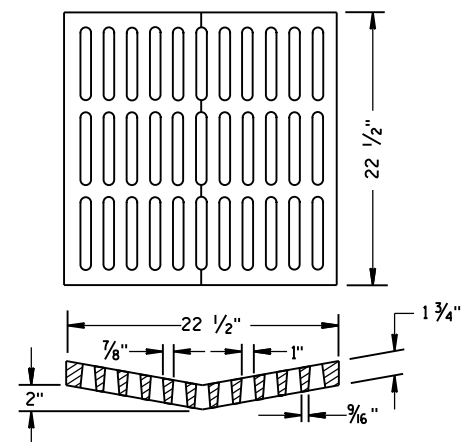
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A08-01	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08C07-01	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-01	INLETS MEDIAN 1 AND 2 GRATE
08D01-18	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-09	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
11A01-05	MAINTENANCE CROSSOVER FOR FREEWAYS
11B02-02	CONCRETE MEDIAN NOSE
12A03-10	NAME PLATE (STRUCTURES)
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13A03-06	CONCRETE PAVEMENT SHOULDERS
13B02-08A	CONCRETE PAVEMENT APPROACH SLAB
13B02-08B	STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-11A	RURAL DOWELED CONCRETE PAVEMENT
13C11-11B	RURAL DOWELED CONCRETE PAVEMENT
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C17-01A	CONCRETE JOINT DETAIL FOR EXIT RAMP TERMINI
13C17-01B	CONCRETE JOINT DETAIL FOR ENTRANCE RAMP TERMINI
13C18-03A	CONCRETE PAVEMENT JOINTING
13C18-03B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-03C	CONCRETE PAVEMENT JOINT TIES
13C18-03D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
14B07-14A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-02A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B29-01	SAFETY EDGE
14B32-03A	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-03B	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-03C	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-03D	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-03E	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B33-01D	CONCRETE BARRIER SINGLE SLOPE 36" THRIE BEAM ANCHOR
14B33-01E	CONCRETE BARRIER SINGLE SLOPE 36" THRIE BEAM ANCHOR
14B42-03A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-02A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-04A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)

Standard Detail Drawing List

14B45-04F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B47-02A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15A01-12A	MARKER POST FOR RIGHT-OF-WAY
15A01-12B	FLEXIBLE MARKER POST FOR RIGHT-OF-WAY
15A02-08	DELINEATOR POST, DELINEATOR, AND DELINEATOR BRACKET WITH REFLECTIVE SHEETING
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15A04-02	FLEXIBLE DELINEATOR POST
15A06-02	DELINEATOR LAYOUT
15B01-08A	FENCE WOVEN WIRE
15B01-08B	FENCE WOVEN WIRE
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-02	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C11-06	FLEXIBLE TUBULAR MARKER POST
15C19-02C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C31-01A	PAVEMENT MARKING (RAMPS AND GORES)
15C31-01D	PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP
15D03-02	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER
15D15-01	TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE
15D16-02	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D27-02	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D35-01A	RAMP GATE HARD WIRED
15D35-01B	RAMP GATE HARD WIRED
15D35-01C	RAMP GATE HARD WIRED
15D35-01D	RAMP GATE HARD WIRED

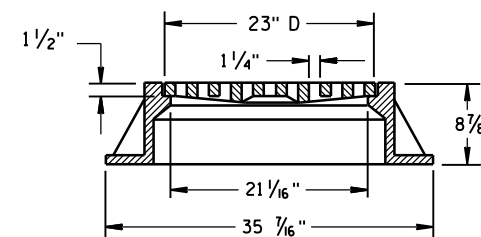
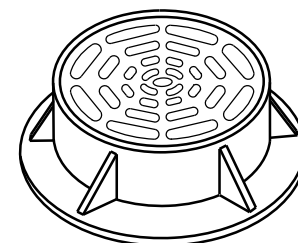
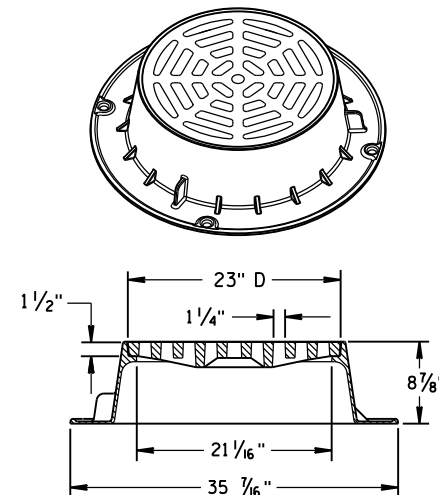


TYPE "B"



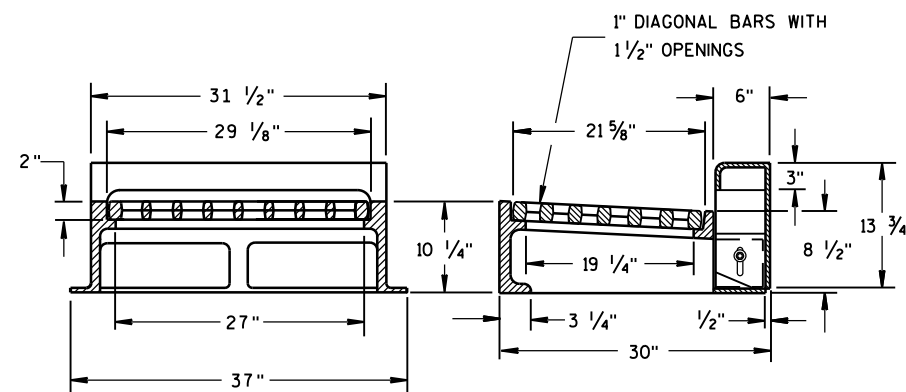
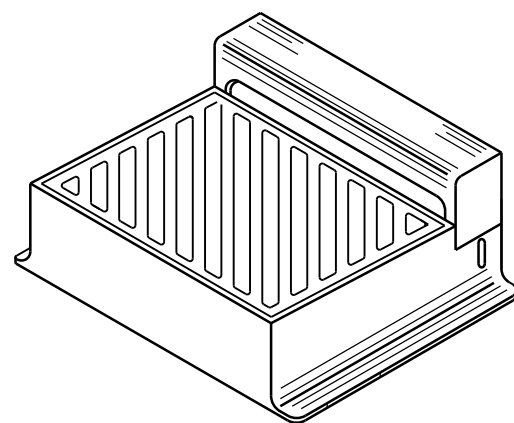
ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

NOTE: EITHER CASTING IS ACCEPTABLE



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

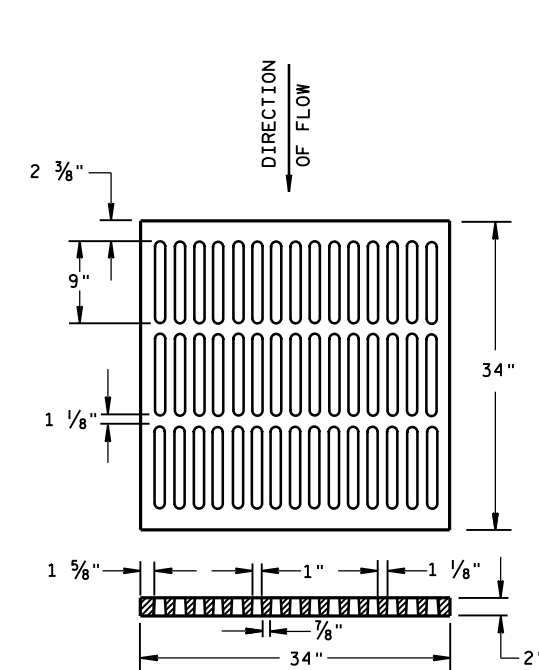
TYPE "WM"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

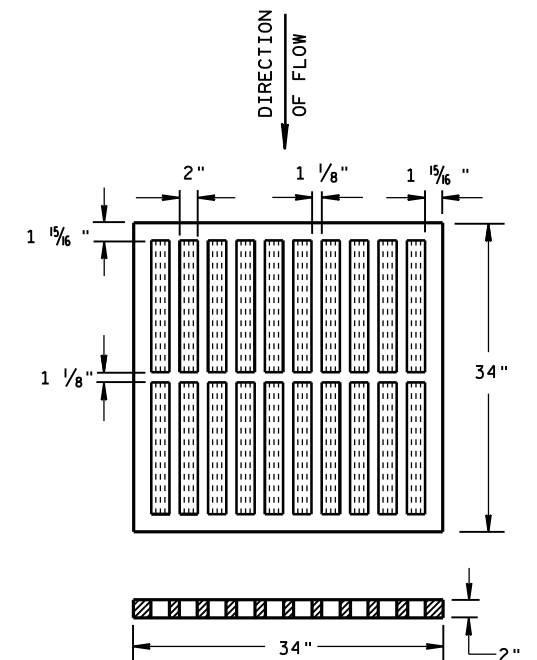
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE

**INLET COVERS
TYPE B, B-A, C,
MS, MS-A, & WM**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/27/2013

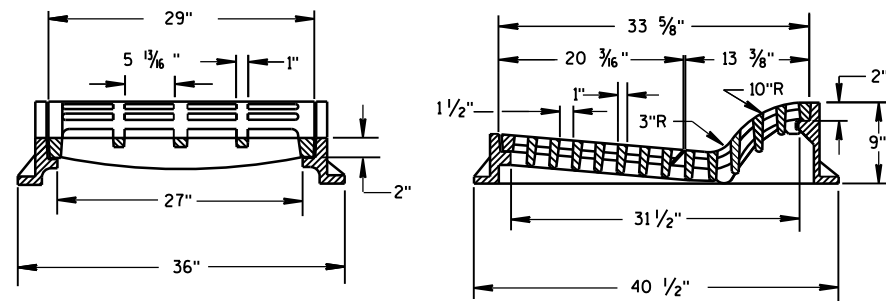
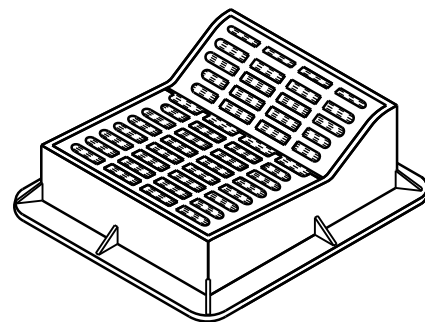
DATE _____

/S/ Jerry H. Zogg

ROADWAY STANDARDS 5410

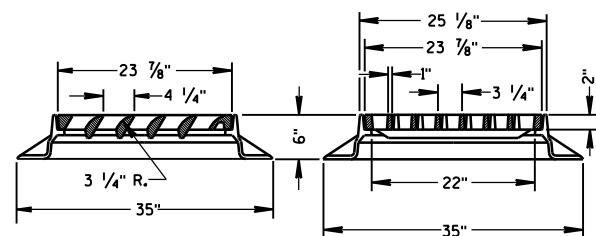
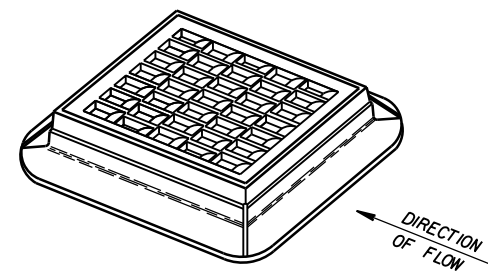
NT

STANDARDS 12 ENGINEER

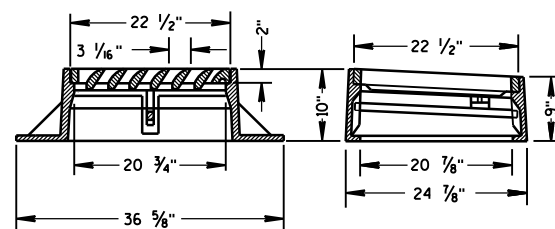
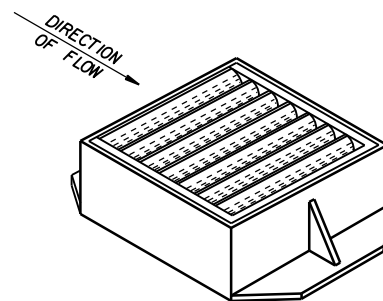


TYPE "F"

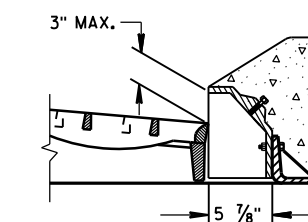
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



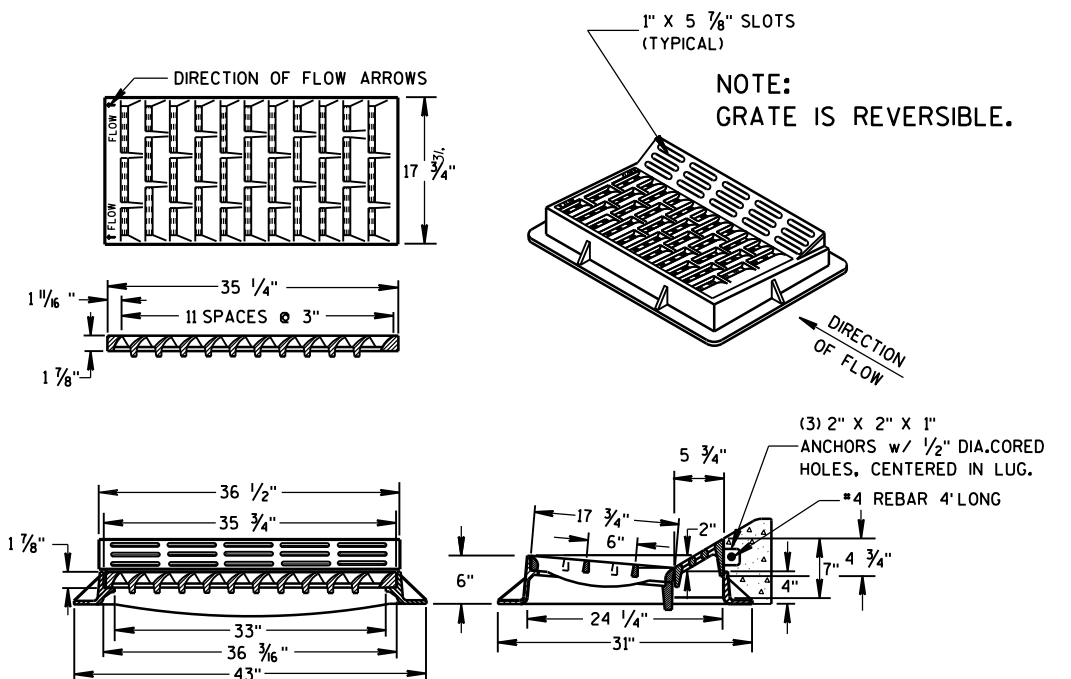
TYPE "S"



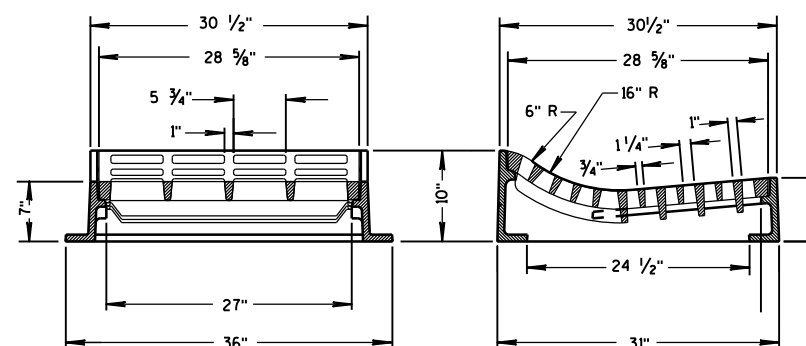
TYPE "V"

ALTERNATIVE CURB BOX
FOR TYPE "HM" COVERUSE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLENOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

GENERAL NOTES

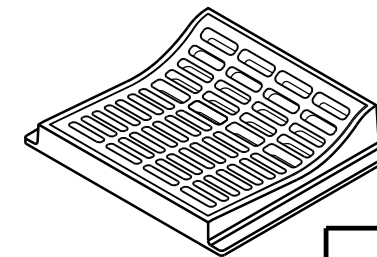
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING
SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND
THE APPLICABLE SPECIAL PROVISIONS.DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED
TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION
FOR EQUIVALENT CAPACITY AND STRENGTH.

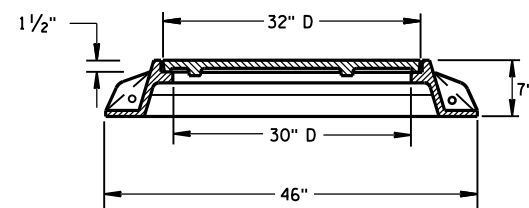
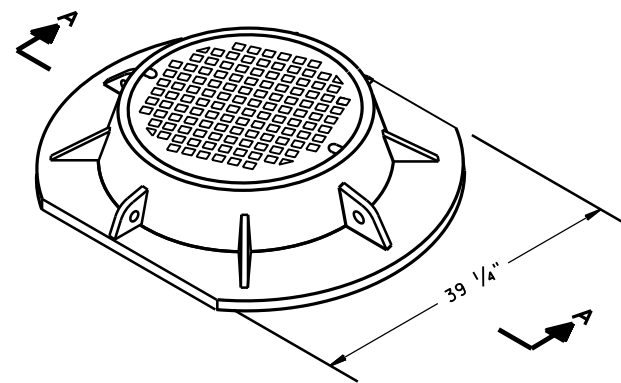
TYPE "HM"

USE WITH TYPES A & D CONCRETE
CURB & GUTTER, 36 INCH.NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE

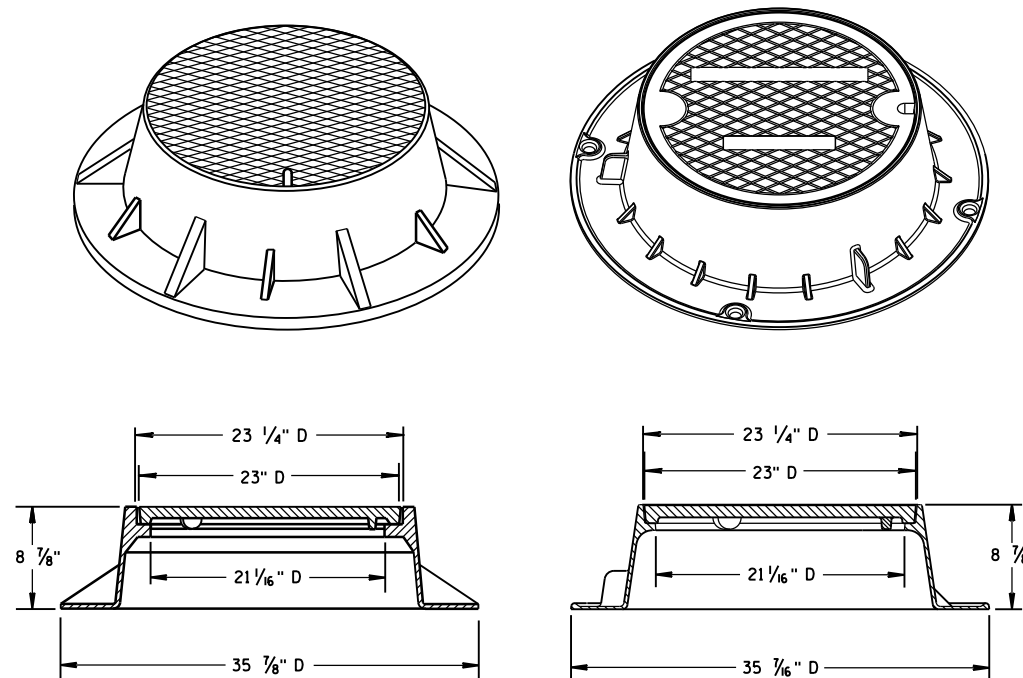
TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.

INLET COVERS
TYPE F, HM, HM-S, S, T, V,
HM-GJ, & HM-GJ-SSTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATIONAPPROVED
11/27/2013
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
419
FHWA

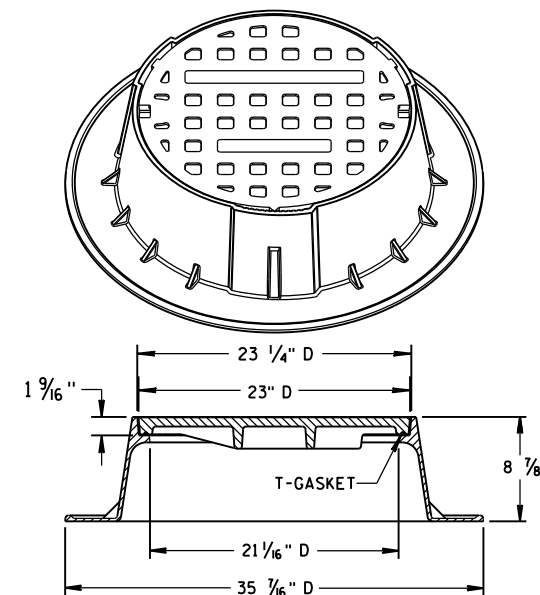


SECTION A-A
TYPE "K"



TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

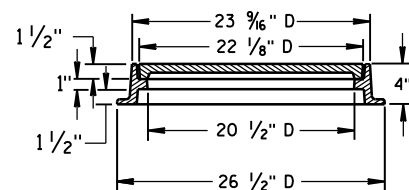
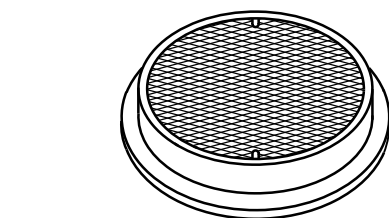
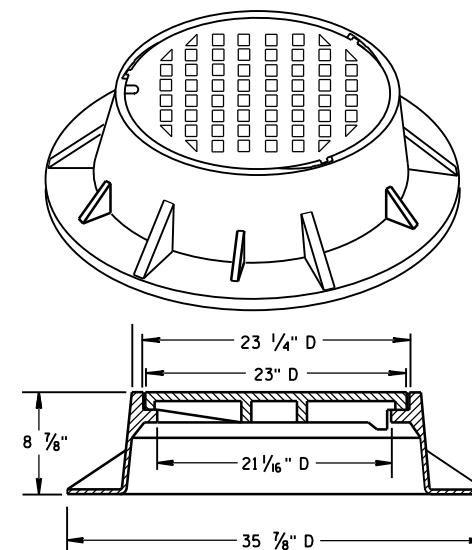


TYPE "J" SPECIAL

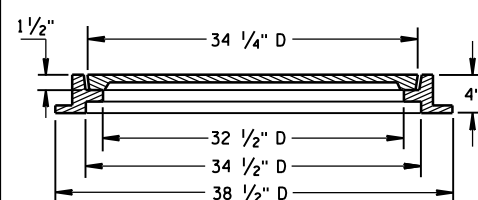
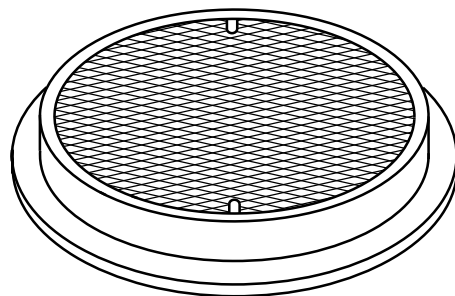
TYPE "B" NON-ROCKING SELF-SEAL LID

(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

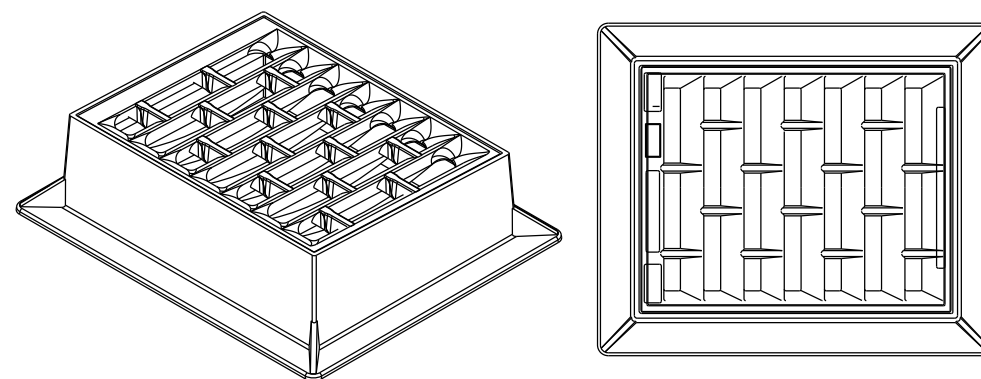
NOTE: EITHER CASTING IS ACCEPTABLE



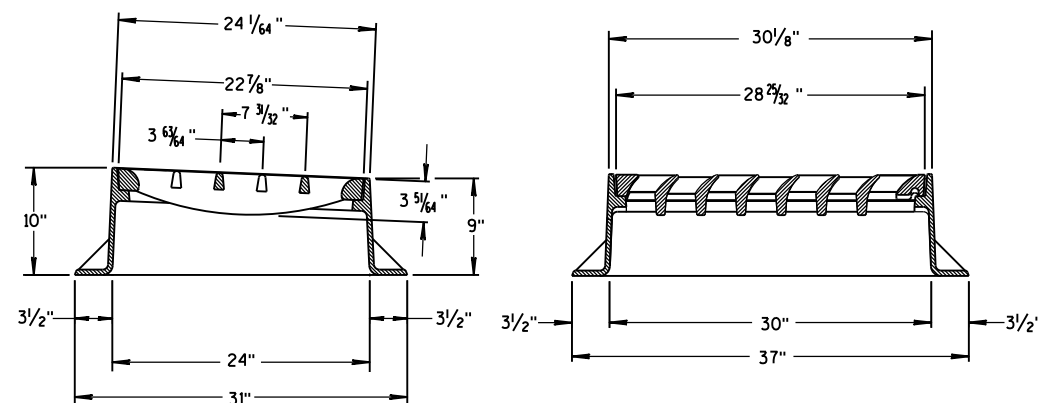
TYPE "L"



TYPE "M"



INLET COVER TYPE "BW"



GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K,
J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/27/2013

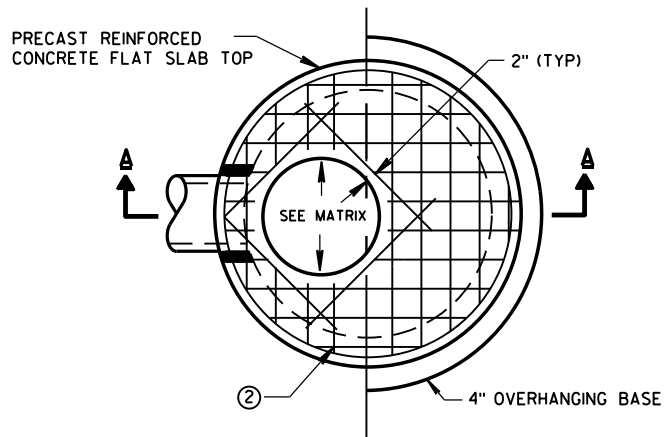
DATE

FHWA

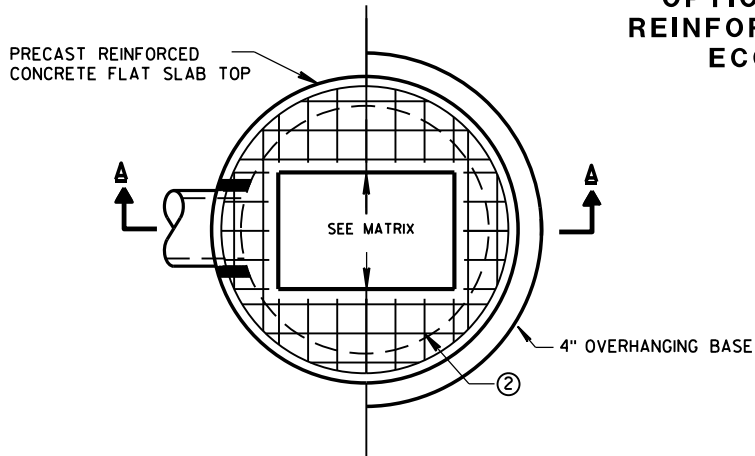
/S/ Jerry H. Zogg

ROADWAY STANDARDS 420

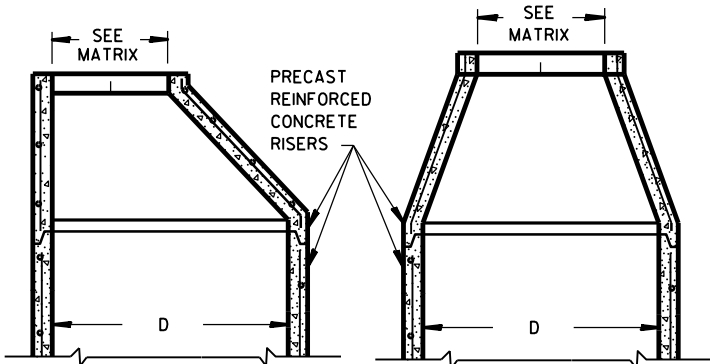
ENGINEER



PLAN VIEW CIRCULAR OPENING

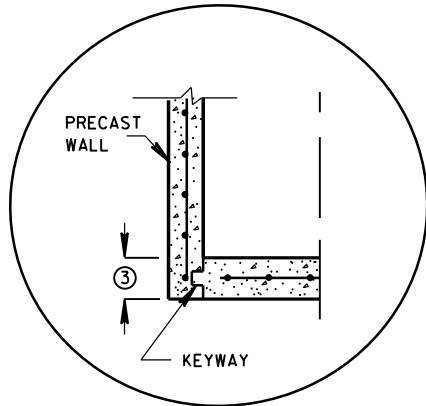


PLAN VIEW RECTANGULAR OPENING

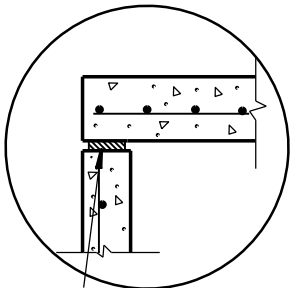


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

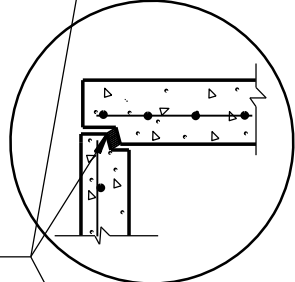
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



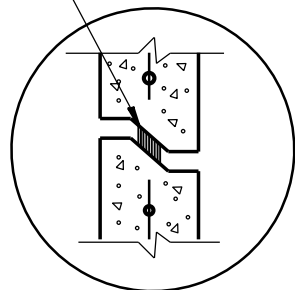
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



TOP WITH PLAIN END JOINT

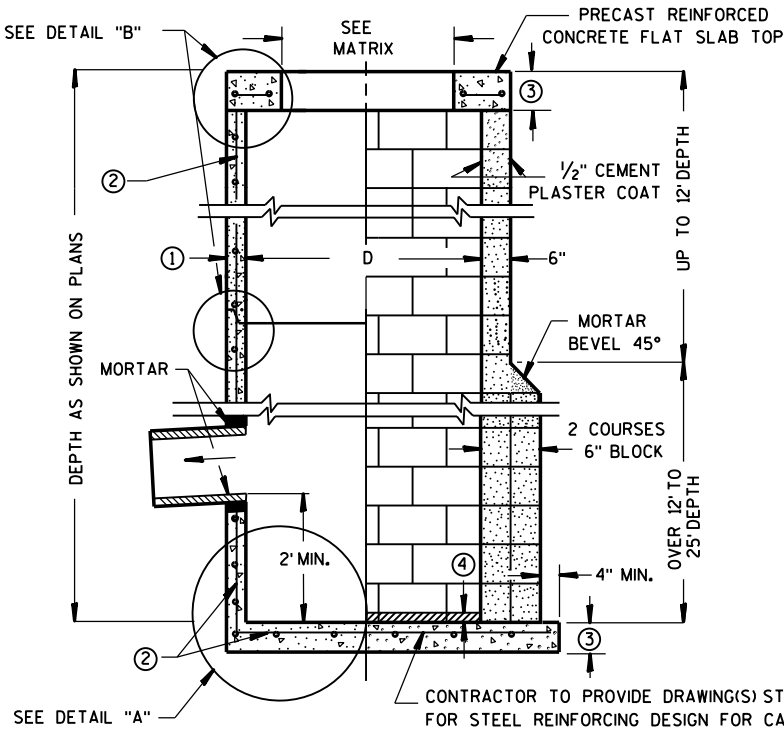


TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

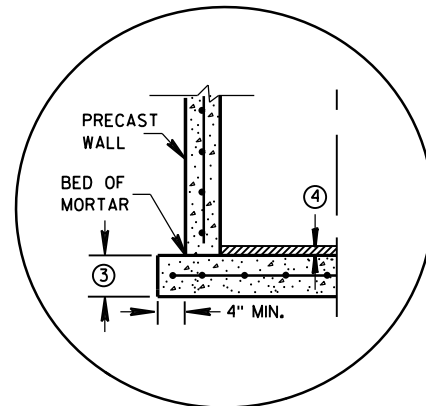


SECTION A-A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

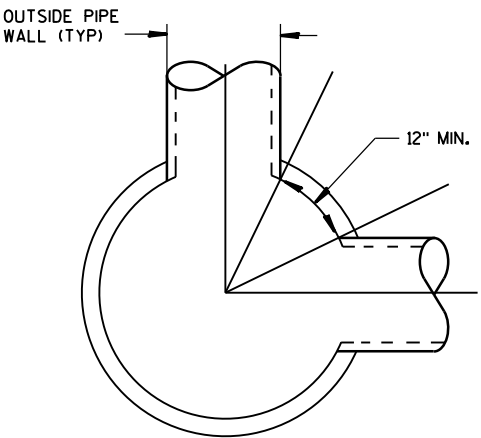
CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS. UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF 1/2 INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

- ① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.
- ② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.
- ③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".
- ④ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2" SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER OPENING MATRIX

CATCH BASIN SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
3-FT	2X2	X	X					X		X		
	2 DIA.				X							X
4-FT-6-FT	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3					X						

PIPE MATRIX

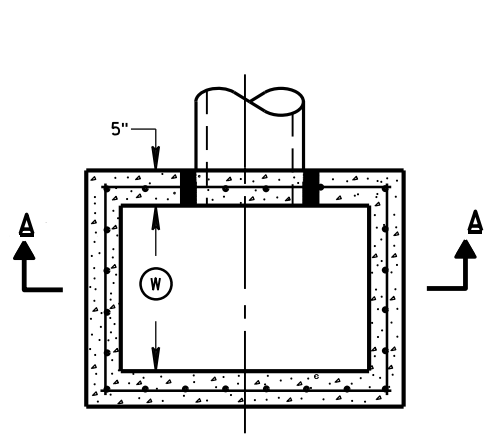
CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

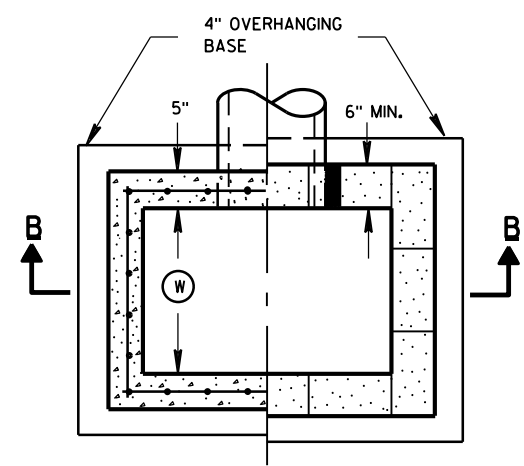
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED 6/5/2012 DATE /S/ Jerry H. Zogg ROADWAY STANDARDS 421 ENGINEER FHWA

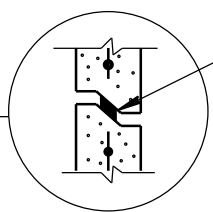
CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER



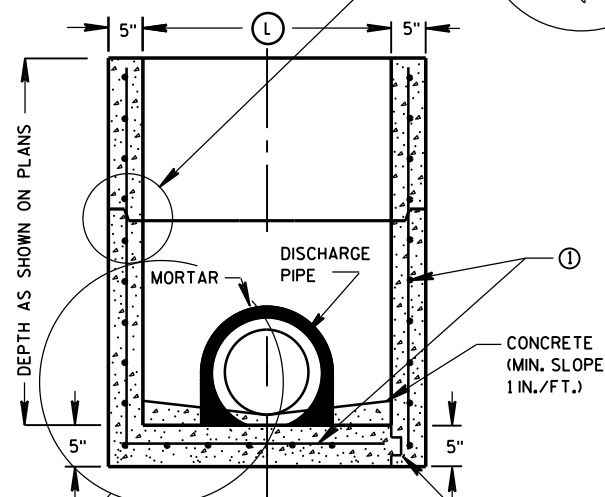
PLAN VIEW



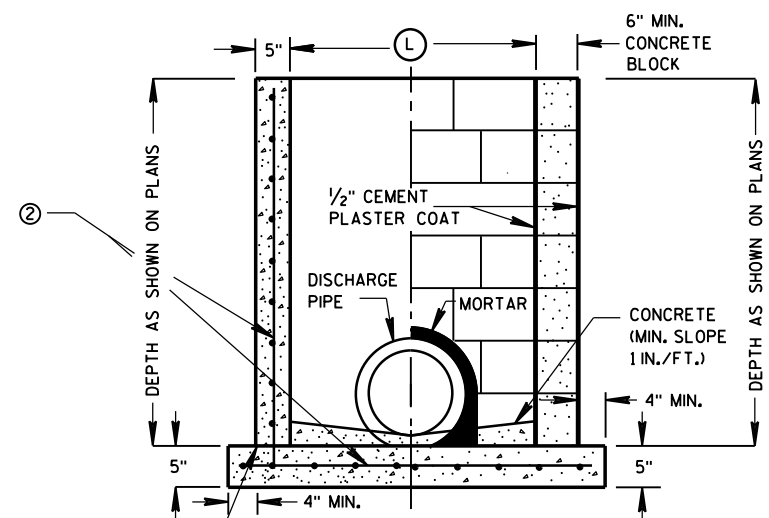
PLAN VIEW



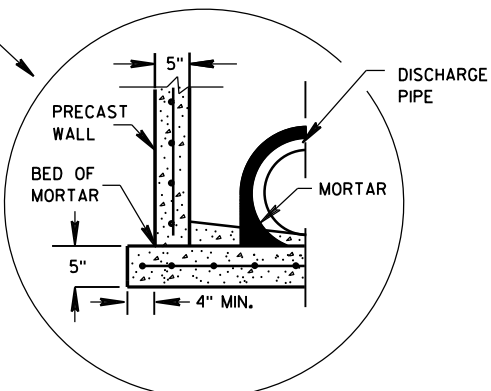
RISER JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

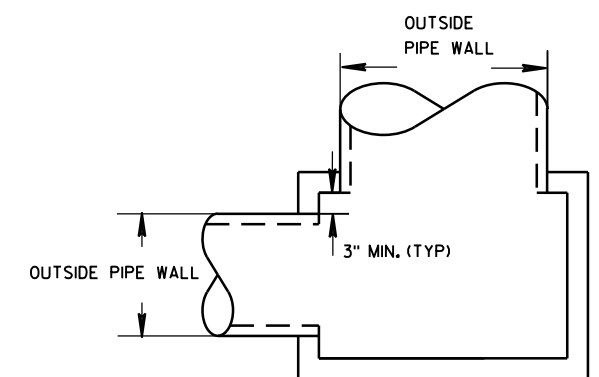
- ① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.
- ② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH ① (FT)	LENGTH ② (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24

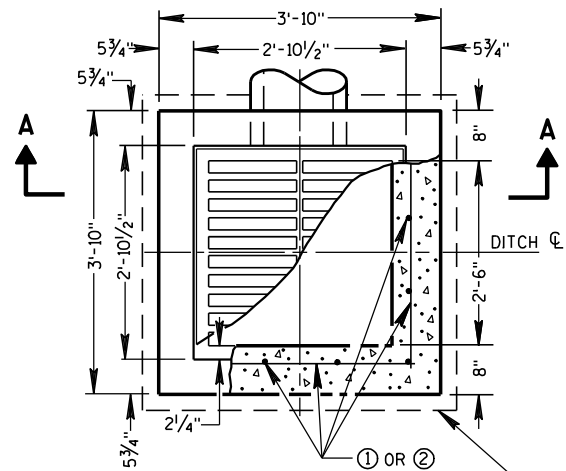


DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

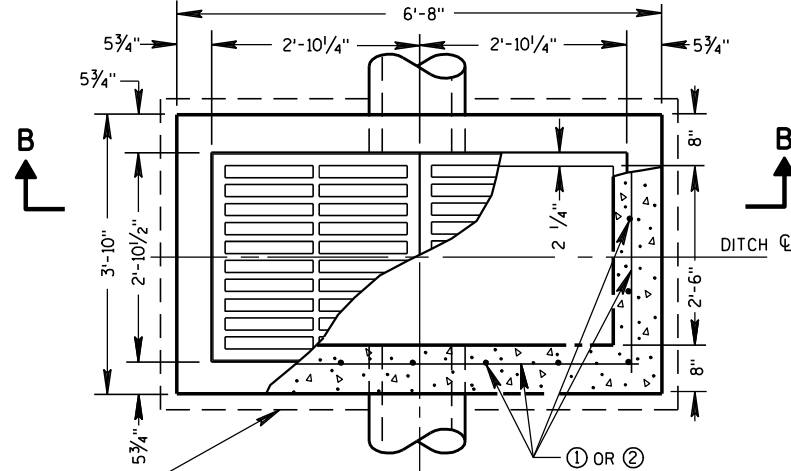
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DE
FHWA ENGINEER 422

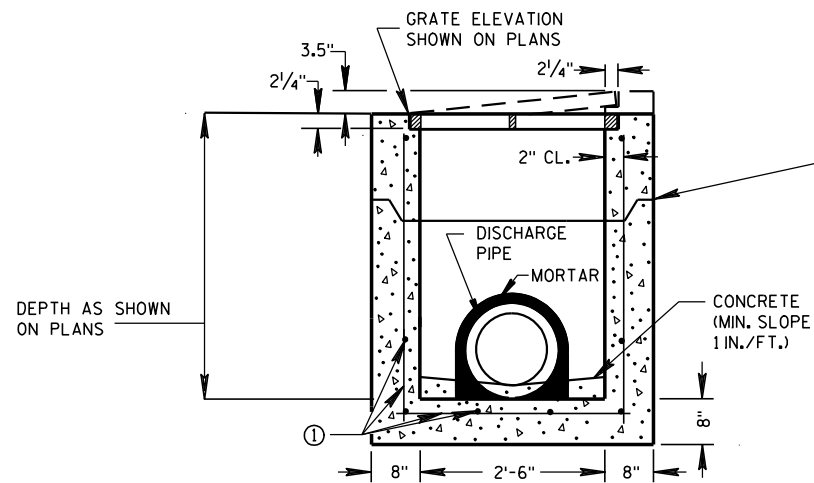


PLAN VIEW

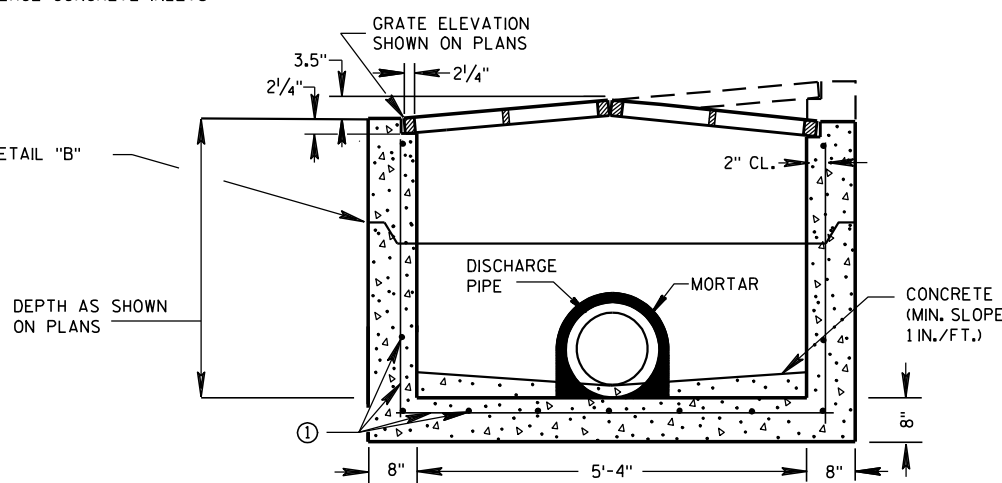
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



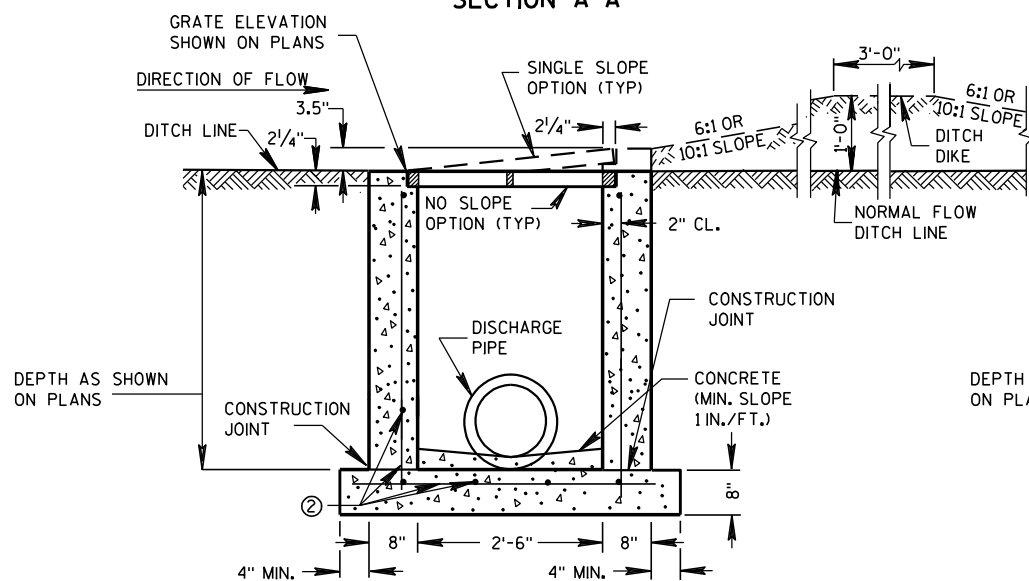
PLAN VIEW



PRECAST REINFORCED CONCRETE SECTION A-A

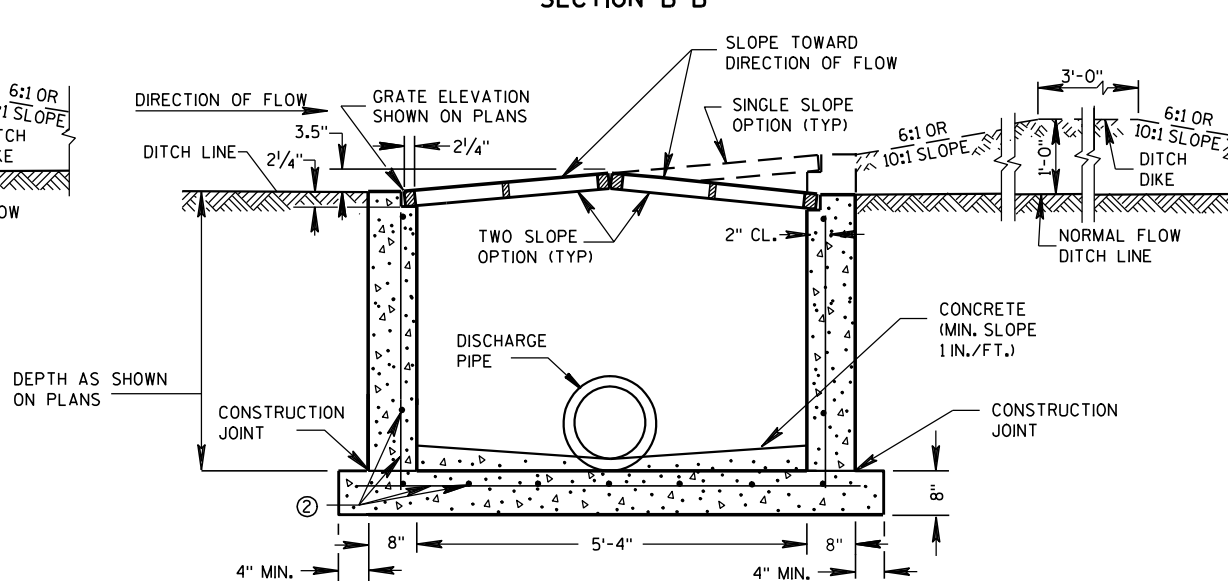


PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A

INLETS MEDIAN 1 GRATE



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 2 GRATE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, IG-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

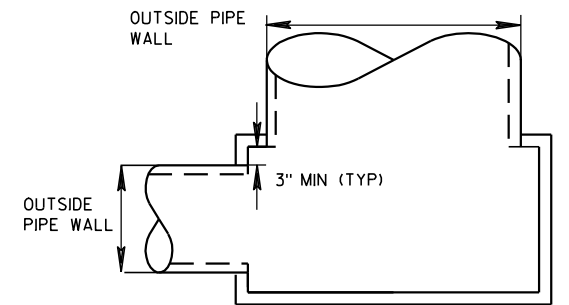
ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

- ① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.
- ② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

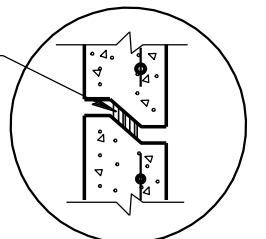
PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012

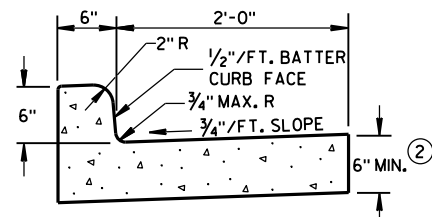
DATE

FHWA

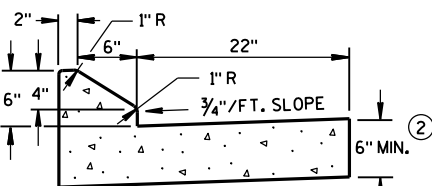
/s/ Jerry H. Zoon

ROADWAY STANDARDS 423

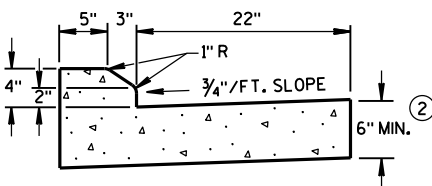
ENGINEER



TYPES A & D ①

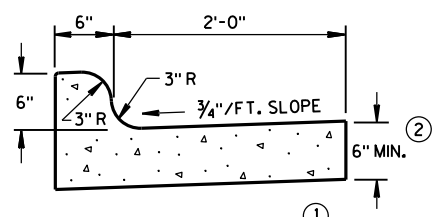


6" SLOPED CURB TYPES G & J ①



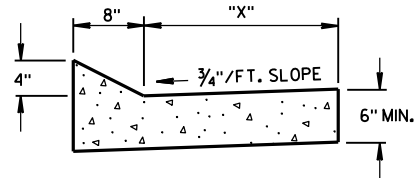
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"



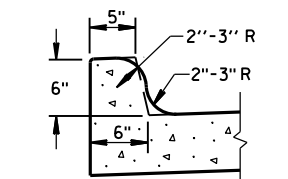
TYPES K & L ①

CONCRETE CURB & GUTTER 30"

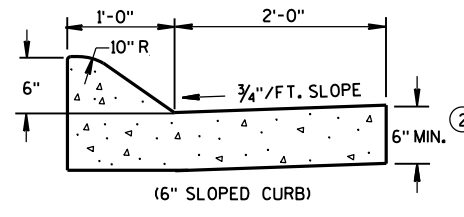


TYPES TBT & TBT ①
CONCRETE CURB & GUTTER

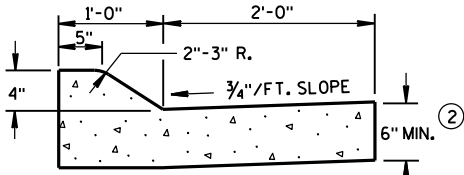
TBT & TBT	"X"
30"	22"
36"	28"



OPTIONAL CURB SHAPE
FOR TYPES K & L ①

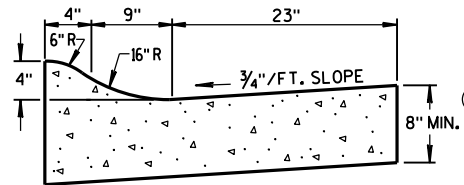


(6" SLOPED CURB)



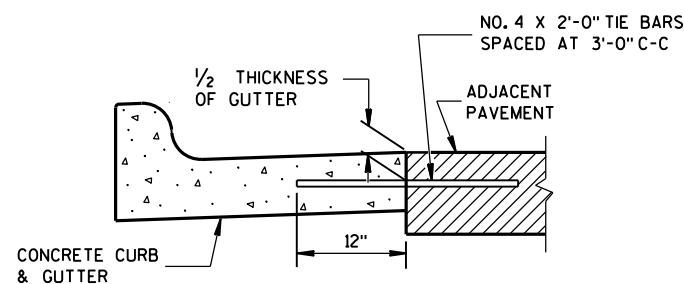
(4" SLOPED CURB)

TYPES A & D ①

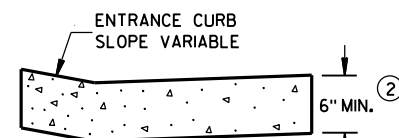


4" SLOPED CURB TYPES R & T ① ④

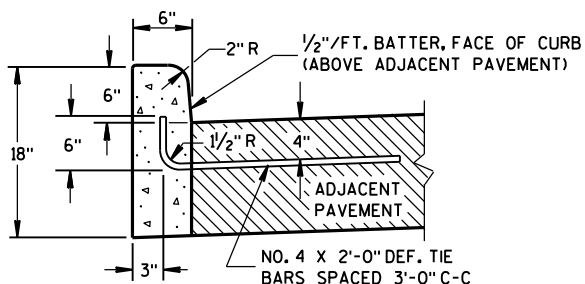
CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION ①

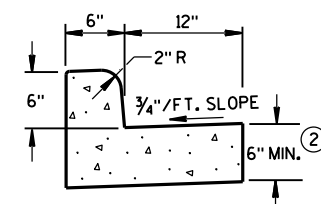


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

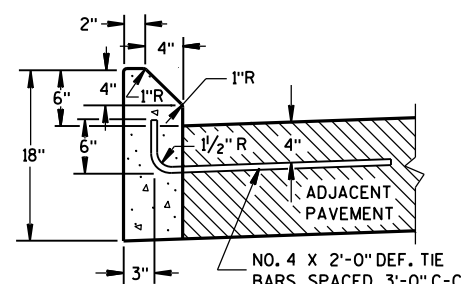


TYPES A & D ①

CONCRETE CURB



TYPES A & D
CONCRETE CURB & GUTTER 18"



TYPES G & J ①

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

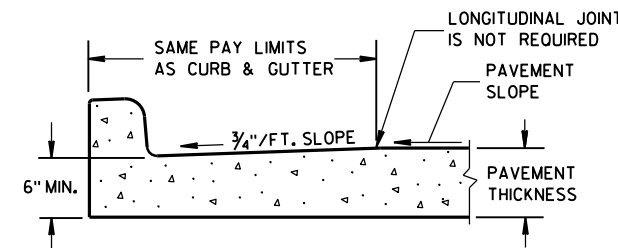
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

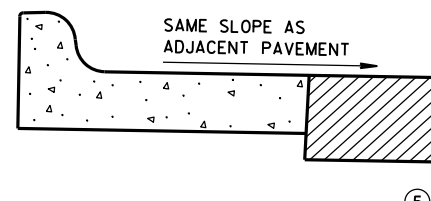
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

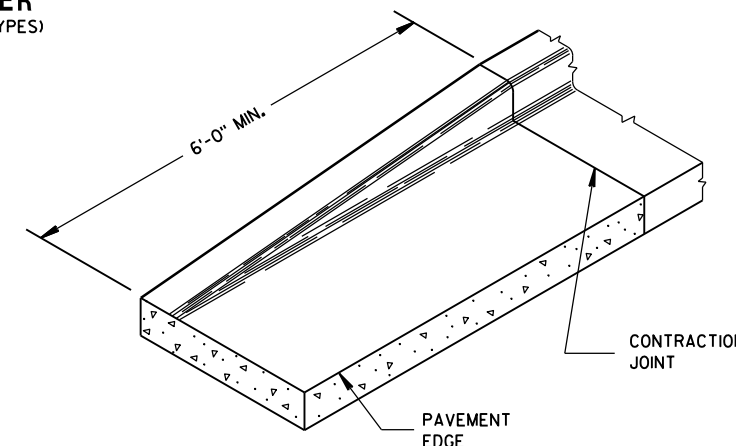
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



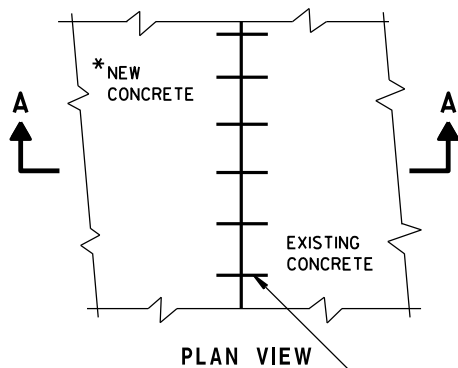
PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



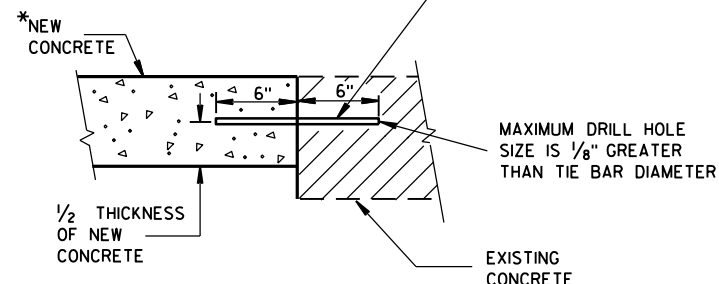
REVERSE SLOPE GUTTER
(TYPICAL FOR ALL CURB & GUTTER TYPES)



END SECTION CURB & GUTTER



PLAN VIEW

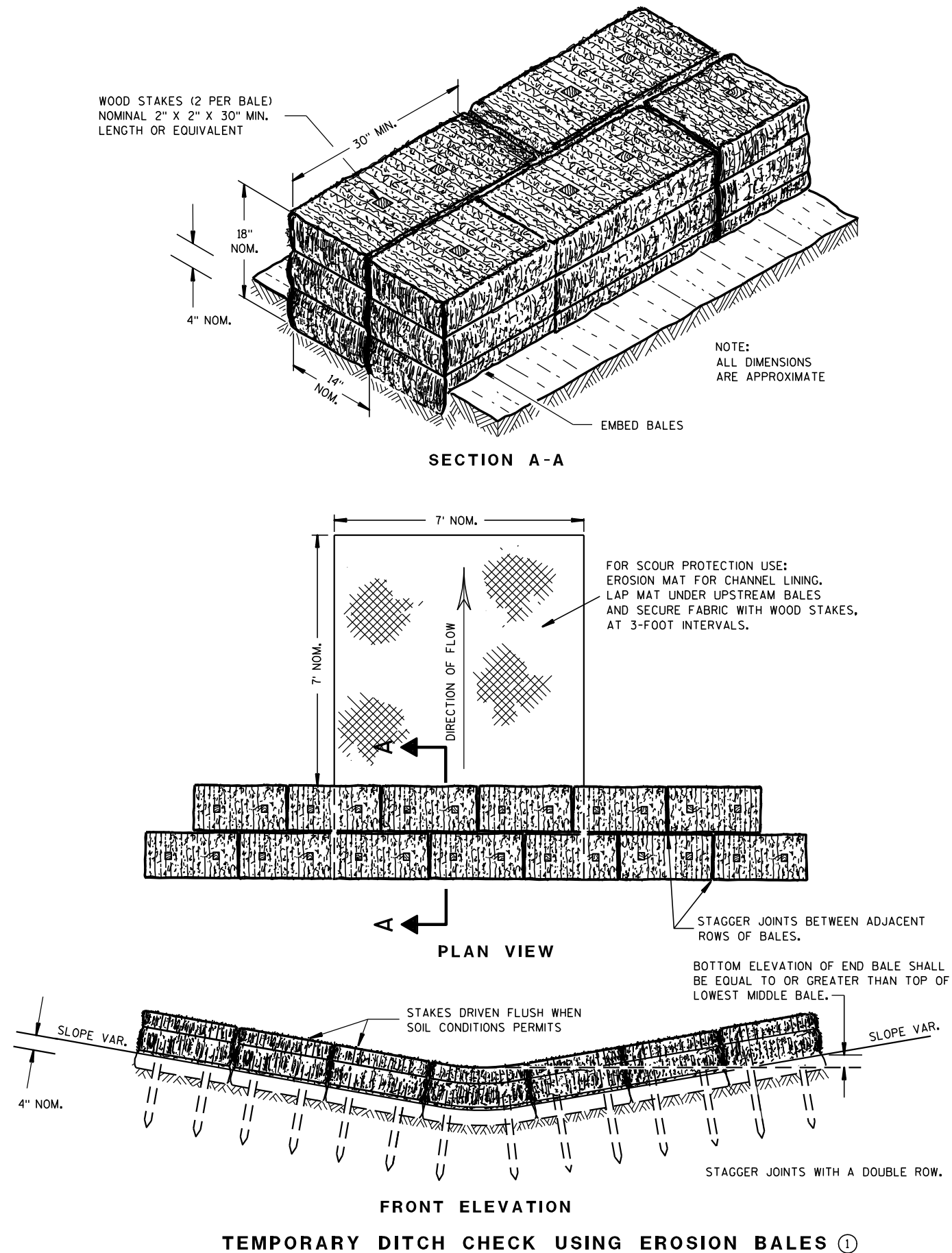


SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

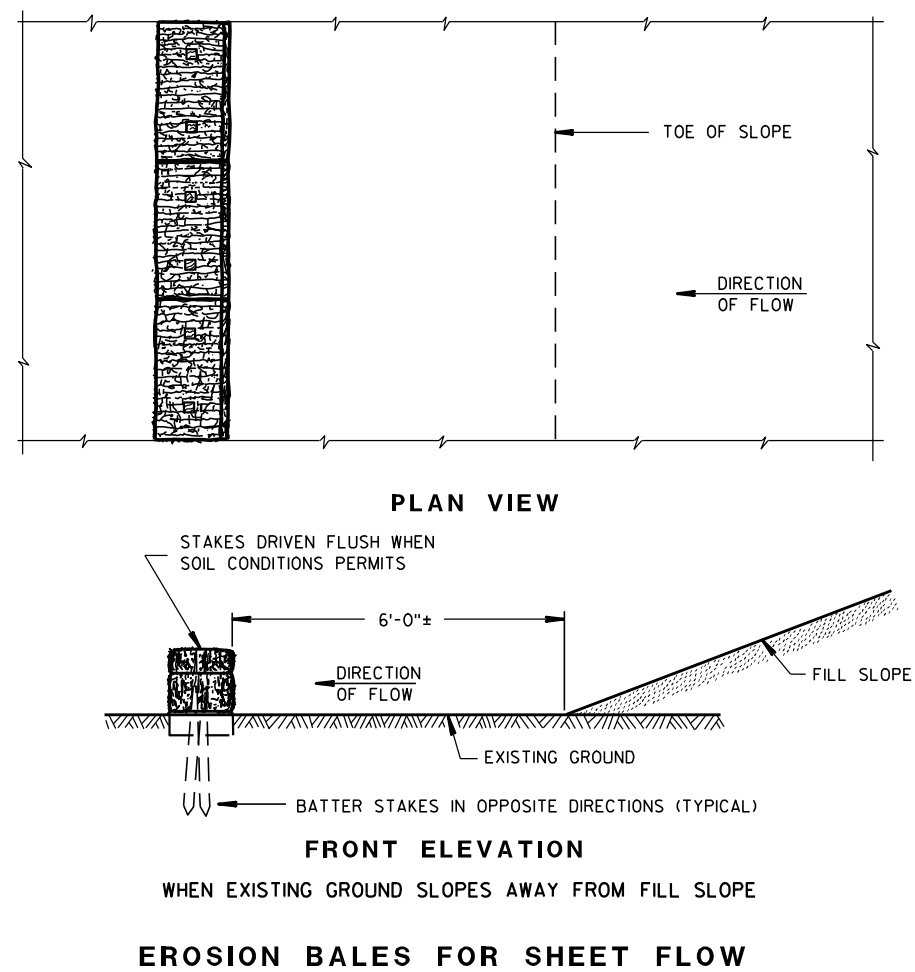
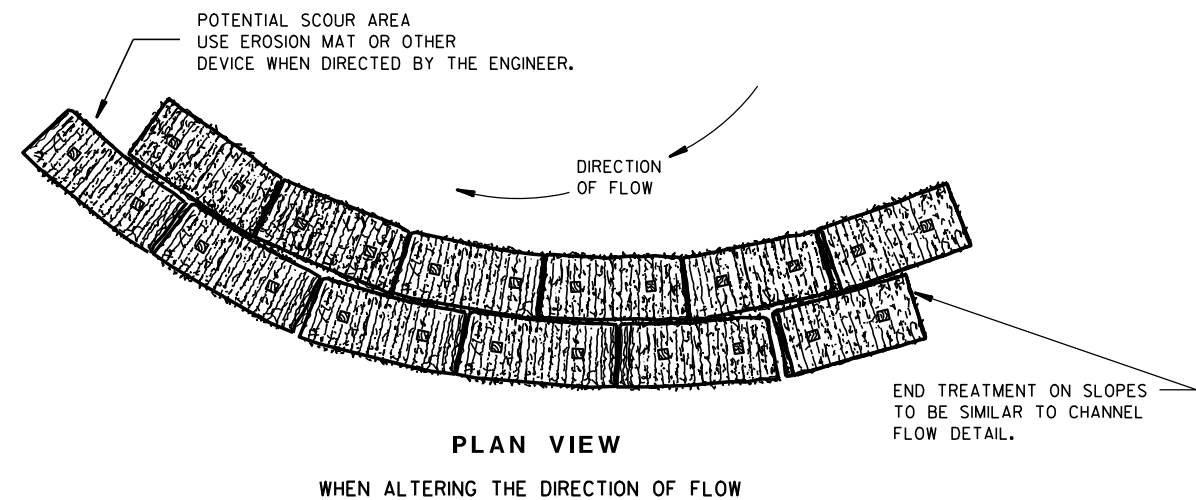
APPROVED
June, 2015 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS 424 INT
FHWA ENGINEER



GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

- ① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.



TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

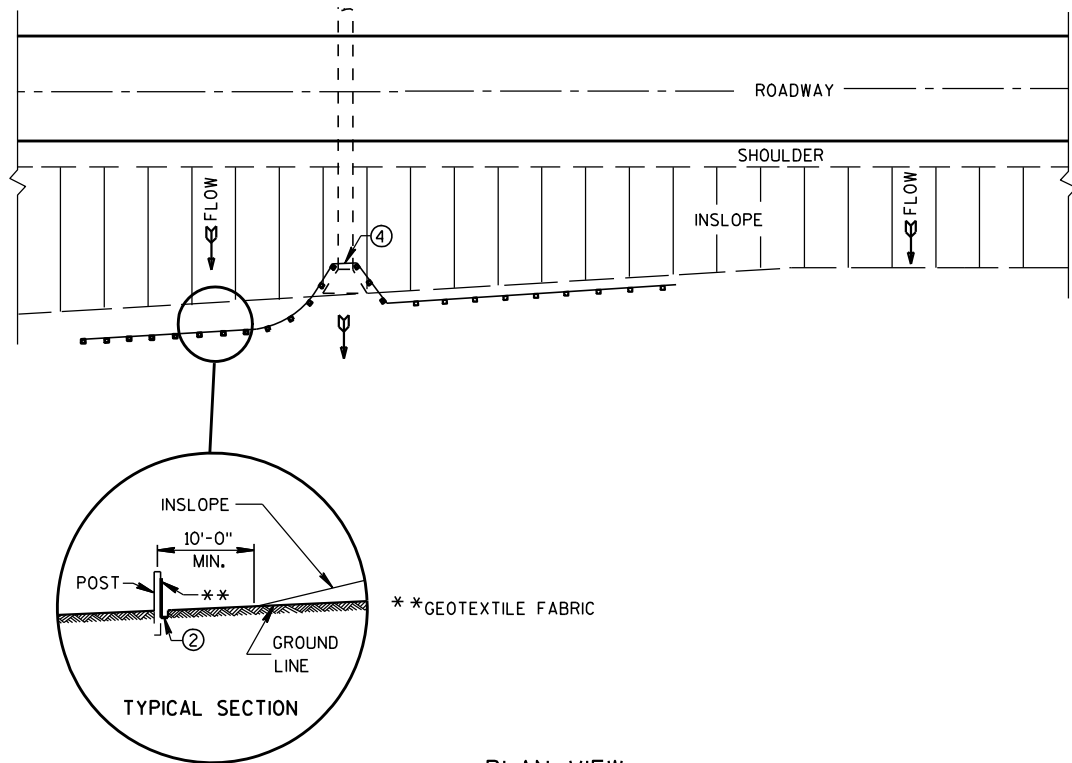
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

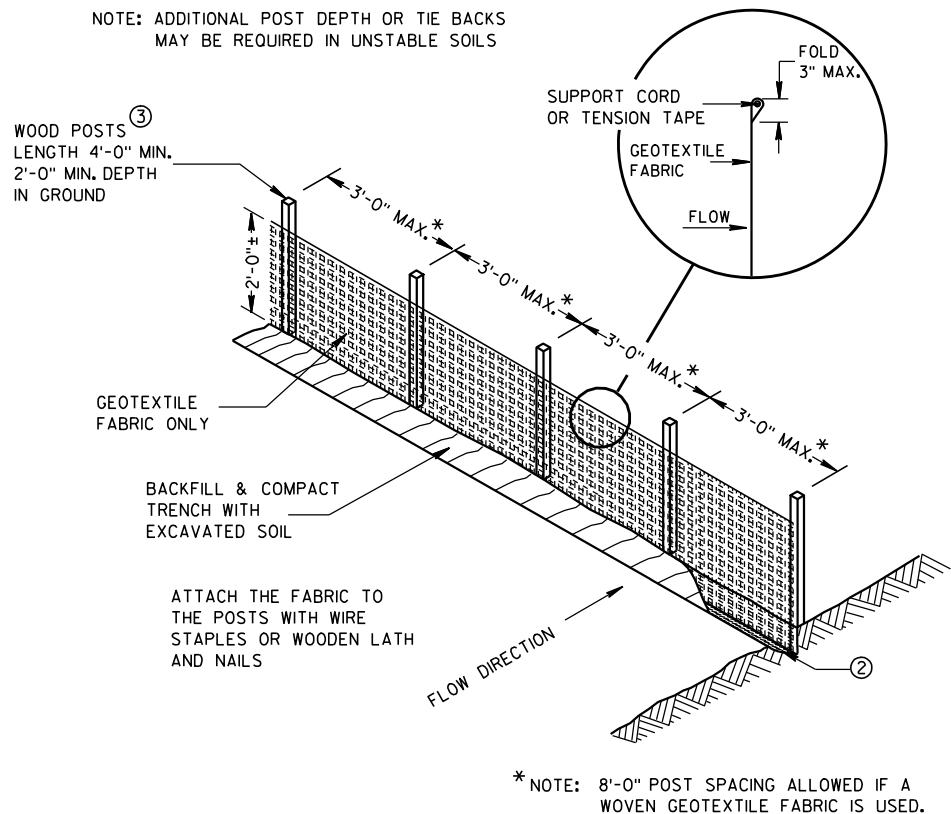
6/04/02
DATE

/S/ Beth Connors
CHIEF ROADWAY DEVELOPER 425 ENGINEER

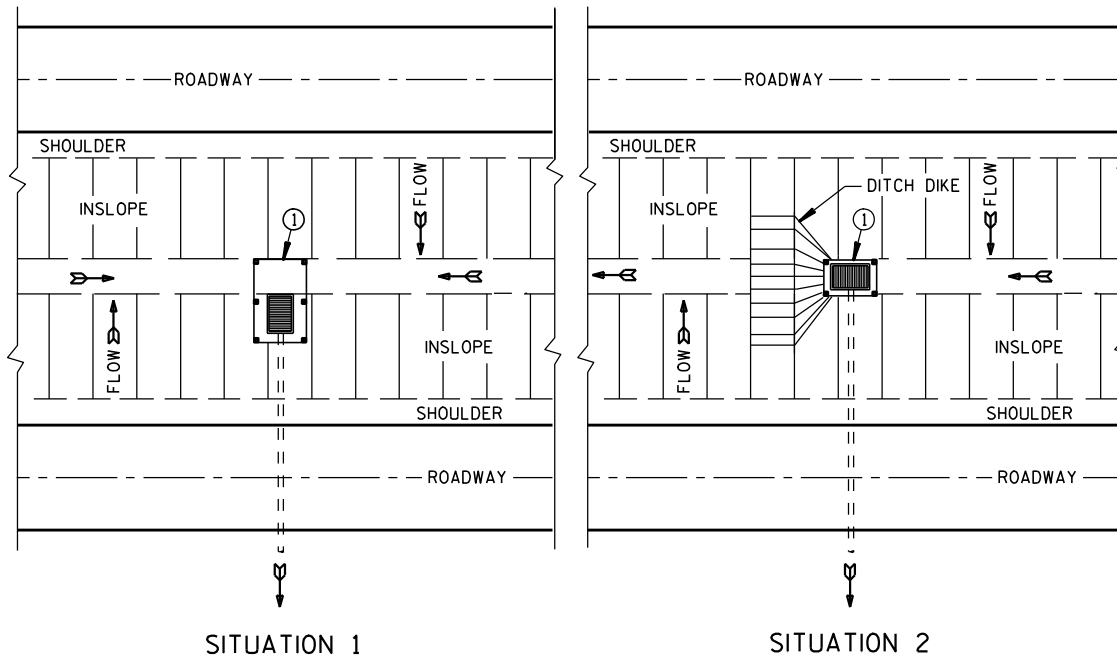
FHWA



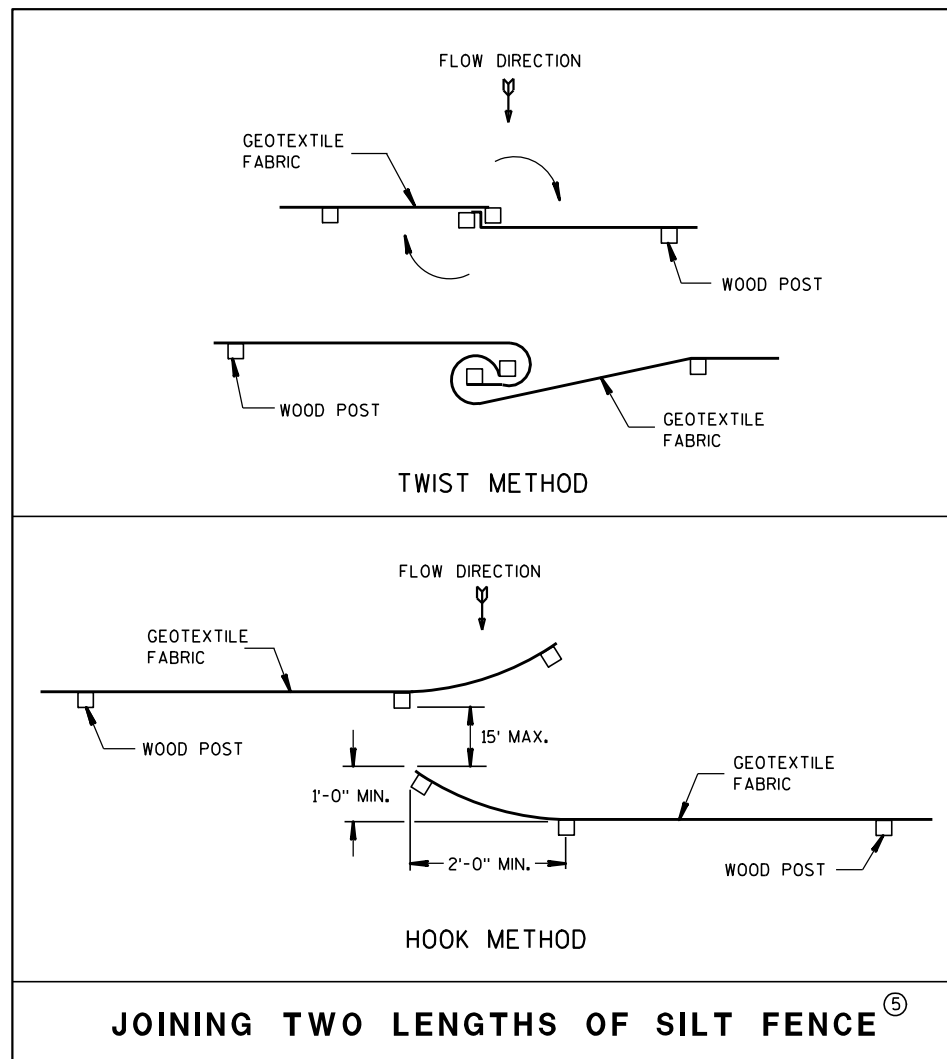
PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE



SILT FENCE



SITUATION 1
SITUATION 2
PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

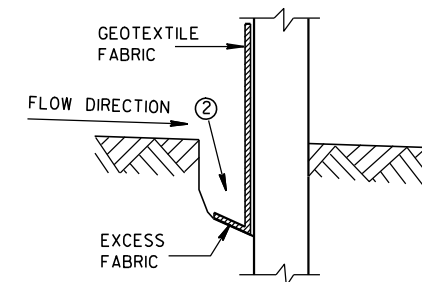


JOINING TWO LENGTHS OF SILT FENCE (5)

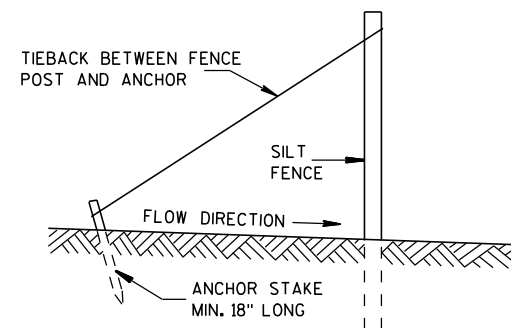
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

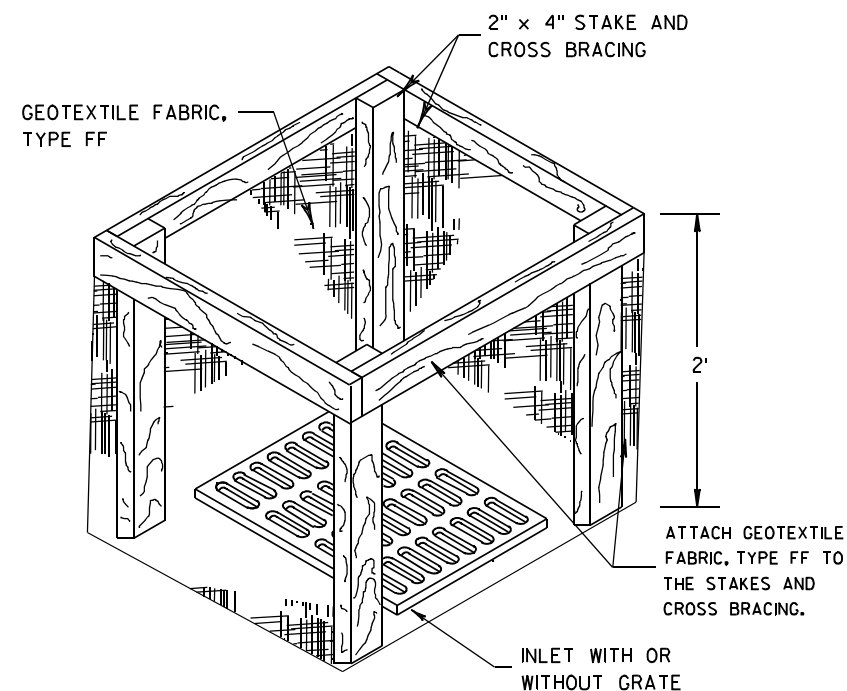
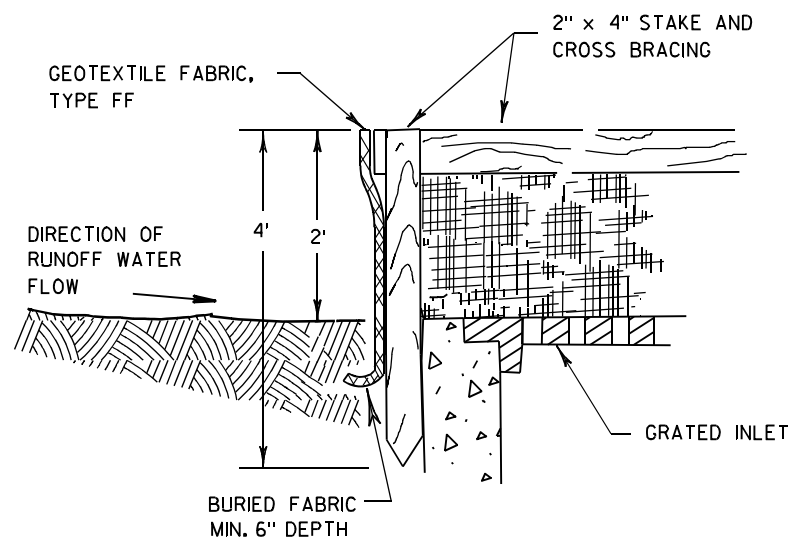


TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-29-05 DATE	/S/ Beth Conn CHIEF ROADWAY DEVELOP 426 ENGINEER
FHWA	



INLET PROTECTION, TYPE A

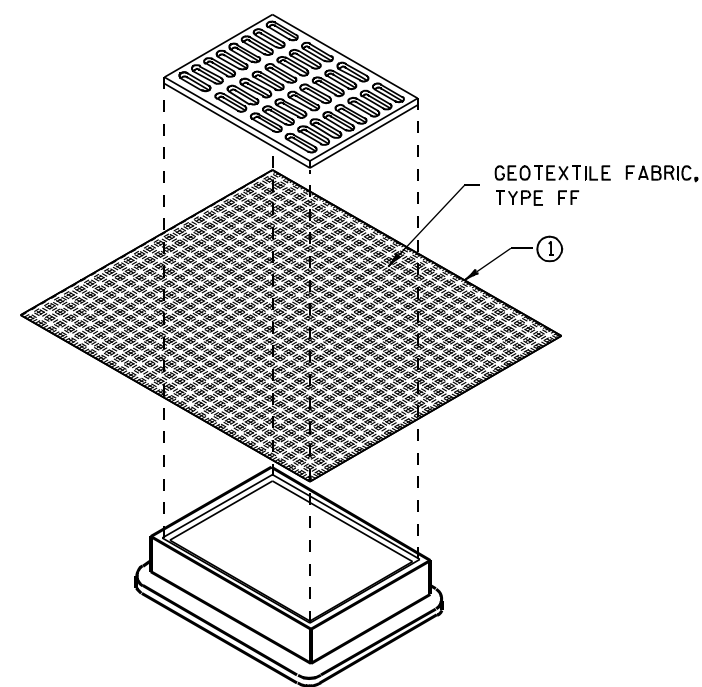
GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

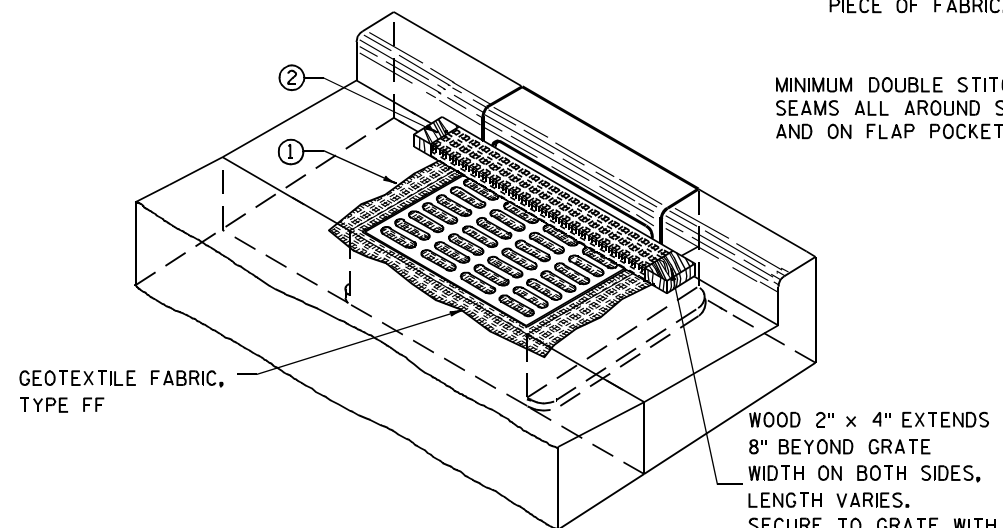
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- ① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- ③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

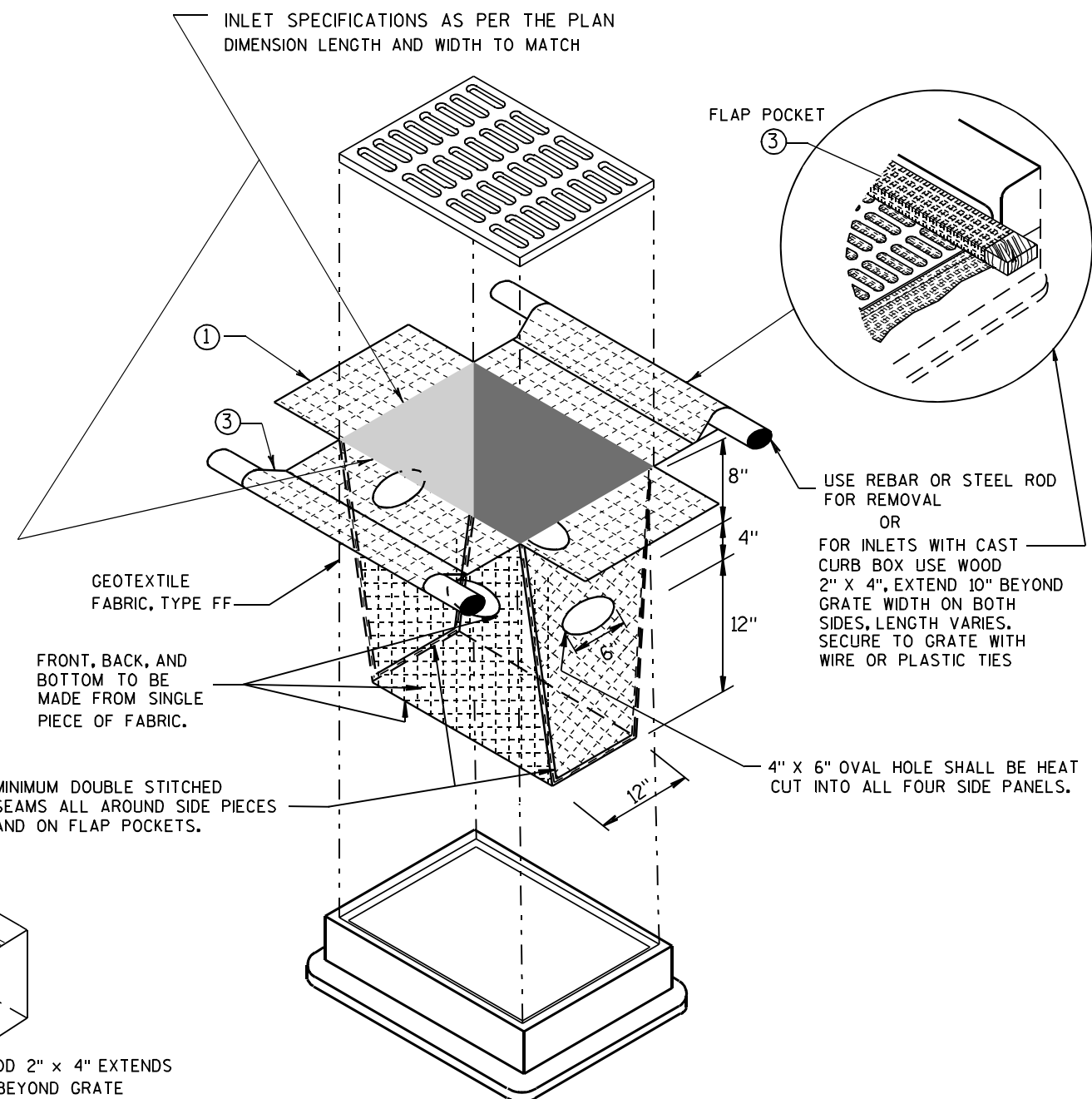
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLower THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Connolly
DATE 427
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER



VARIES

18"

EXISTING GROUND

CLEAN SELECT CRUSHED MATERIAL

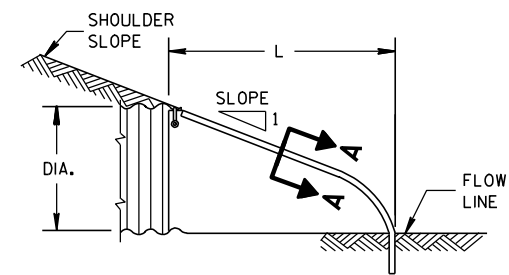
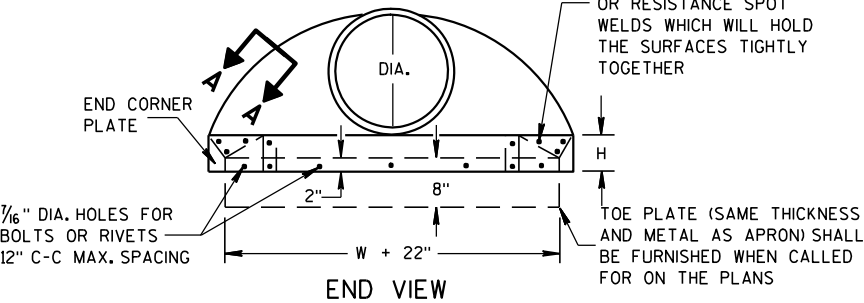
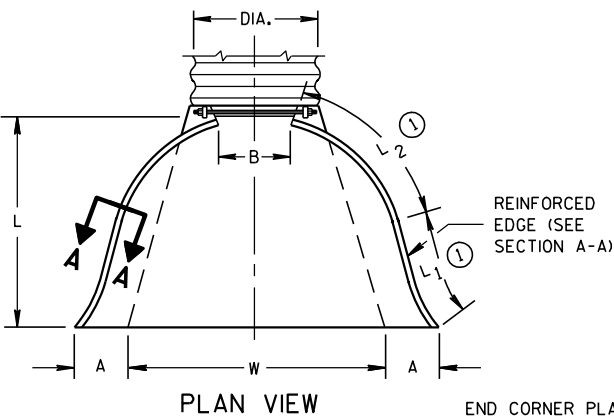
GEOTEXTILE FABRIC

SECTION A-A

APPROVED		
3/24/2011	/S/ Jerry H. Zonn	
DATE	ROADWAY STANDARDS ENGINEER	428 ENT
FHWA		

METAL APRON ENDWALLS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109x	.105x	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

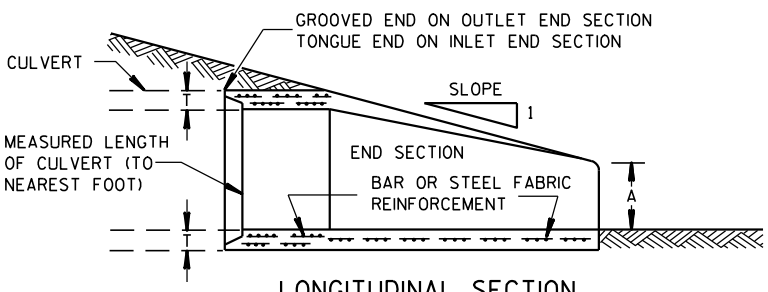
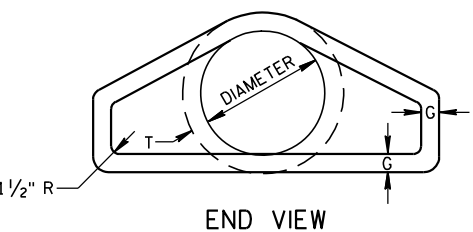
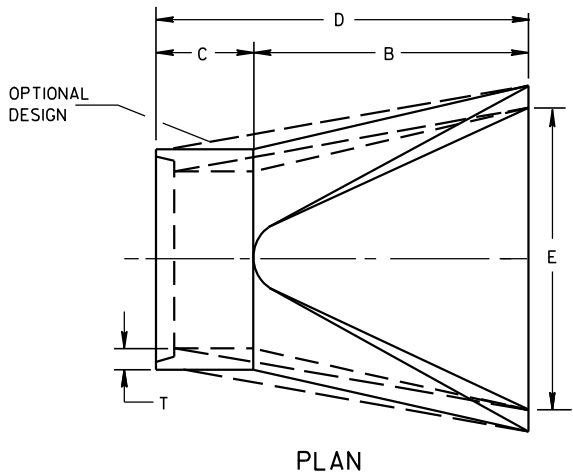
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



SIDE ELEVATION
METAL ENDWALLS

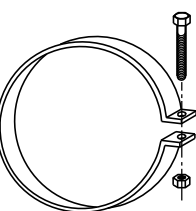
REINFORCED CONCRETE APRON ENDWALLS											
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE			
	T	A	B	C	D	E	G				
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1			
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1			
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1			
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1			
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1			
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1			
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1			
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1			
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1			
48	5	24	72	26	98	84	5	3 to 1			
54	5 1/2	27	65	33 1/4-35	98 1/4-100	90	5 1/2	2 2/5 to 1			
60	6	30-35	60	39	99	96	5	2 to 1			
66	6 1/2	24-30	72-78	21-27	99	102	5 1/2	2 to 1			
72	7	24-36	78	21	99	108	6	2 to 1			
78	7 1/2	24-36	78	21	99	114	6 1/2	2 to 1			
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1			
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1			

* MINIMUM
** MAXIMUM

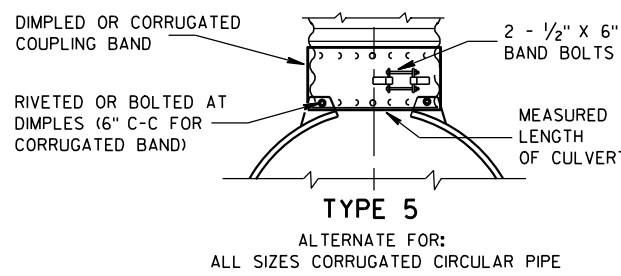
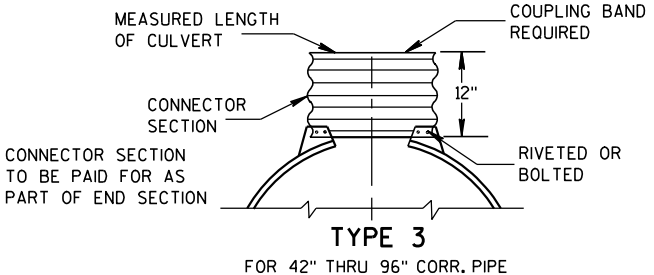
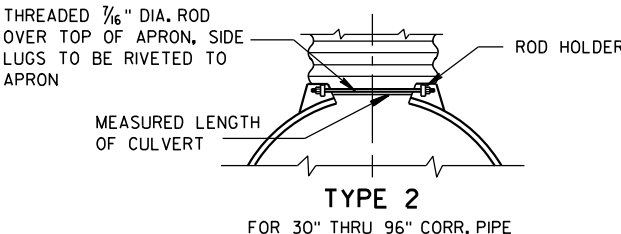
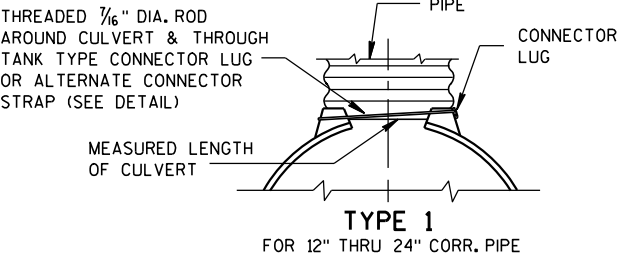


LONGITUDINAL SECTION
CONCRETE ENDWALLS

1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



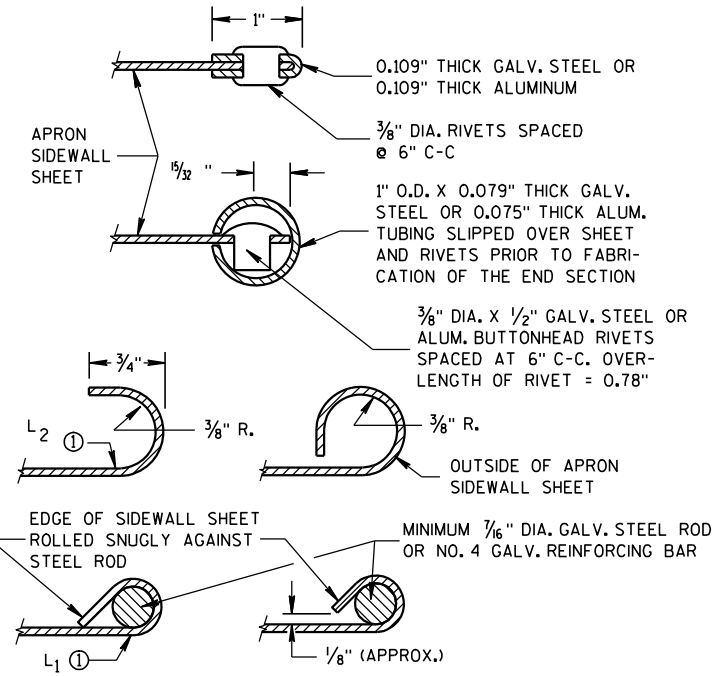
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

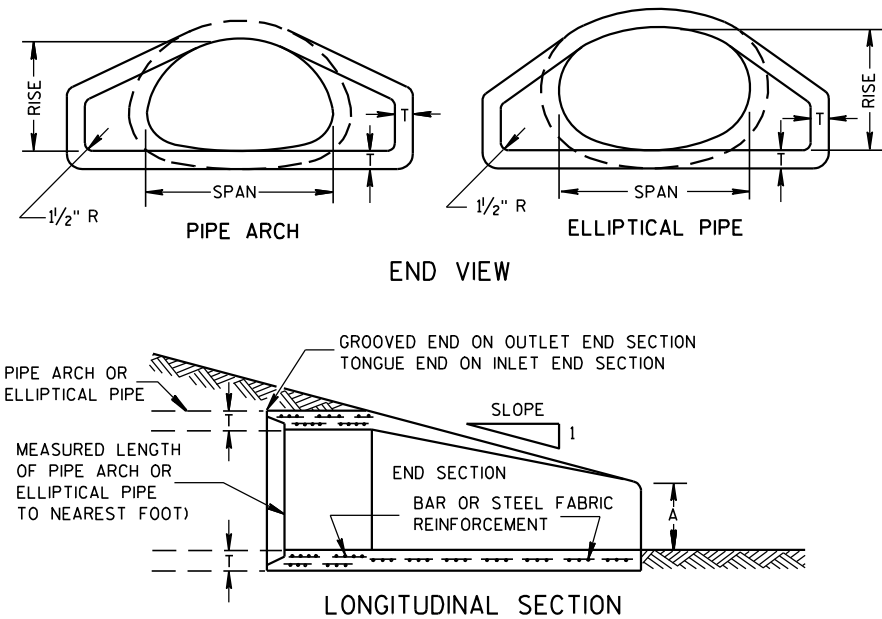
ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

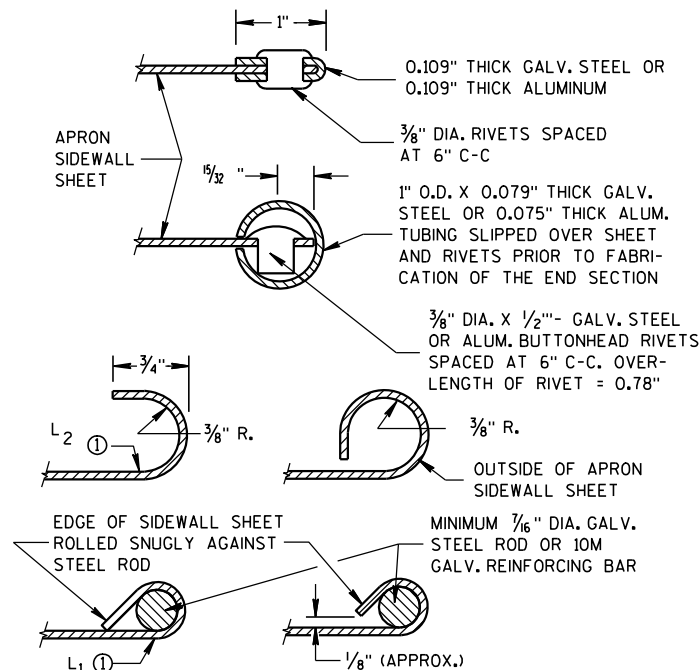
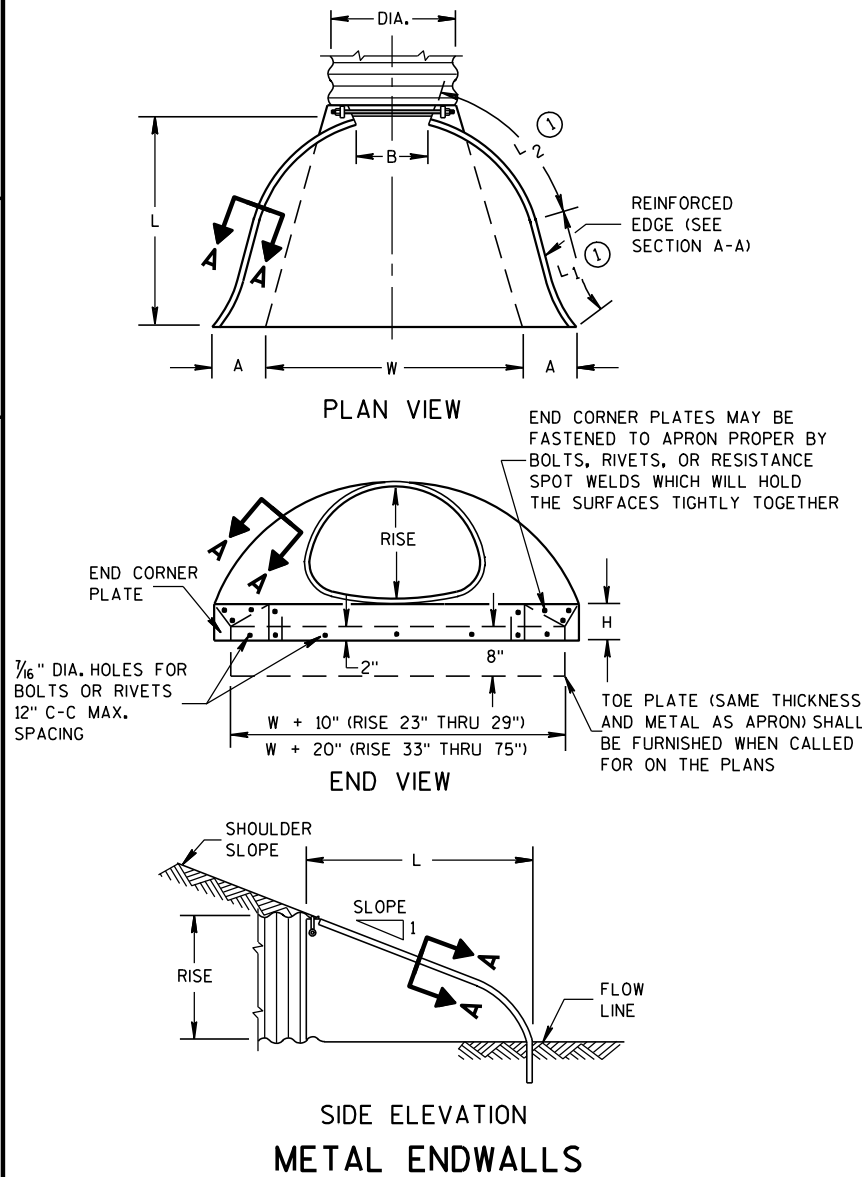
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED	11/30/94	/S/ Rory L. Rhinehart	NEER
DATE		CHIEF ROADWAY DEVELOP 429	
FHWA			



CONCRETE ENDWALLS



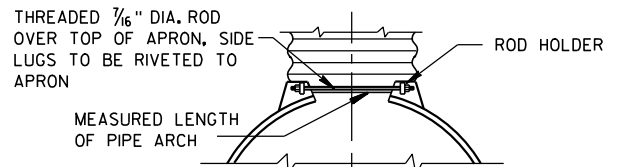
SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
					(±1")	(MAX.)	(±1")	(±1 1/2")	①	①	(±2")		
15	17	13	.064	.060	7	9	6	19	14	16	30	2 1/2 to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19 3/8	36	2 1/2 to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21 3/4	42	2 1/2 to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27 1/2	48	2 1/2 to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37 5/8	60	2 1/2 to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45 3/8	75	2 1/2 to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54 3/4	85	2 1/2 to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2 1/2 to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72 3/4	102	2 1/4 to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82 1/4	114	2 1/4 to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
					(±1")	(MAX.)	(±1")	(±1 1/2")	①	①	(±2")		
48	53	41	.109	.105	18	26	12	63	24	72 3/4	90	2 1/2 to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82 1/4	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1 1/2 to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1 1/2 to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1 1/2 to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1 1/2 to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1 1/2 to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1 1/2 to 1	3 Pc.

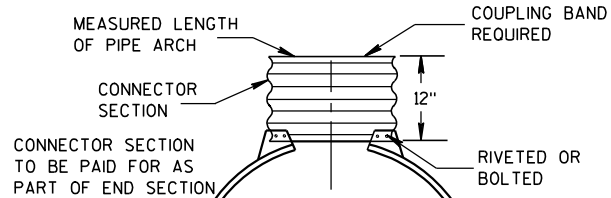
NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES



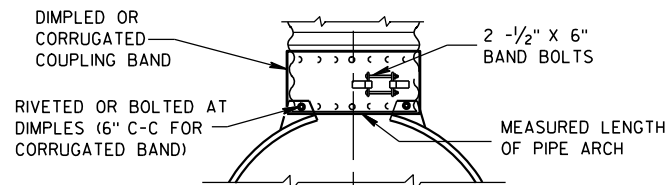
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:
ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

REINFORCED CONCRETE PIPE ARCH											
EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE		
	** SPAN	** RISE	T	A	B	C	D	E			
24	29	18	3	8 1/2	39	33	72	48	3 to 1		
30	36	22	3 1/2	9 1/2	50	46	96	60	3 to 1		
36	44	27	4	11 1/8	60	36	96	72	3 to 1		
42	51	31	4 1/2	15 1/16	60	36	96	78	3 to 1		
48	58	36	5	21	60	36	96	84	3 to 1		
54	65	40	5 1/2	25 1/2	60	36	96	90	3 to 1		
60	73	45	6	31	60	36	96	96	3 to 1		
72	88	54	7	31	60	39	99	120	2 to 1		
84	102	62	8	28 1/2	83	19	102	144	2 to 1		

REINFORCED CONCRETE ELLIPTICAL PIPE											
EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE		
	** SPAN	** RISE	T	A	B	C	D	E			
24	30	19	3 1/4	8 1/2	39	33	72	48	3 to 1		
30	38	24	3 3/4	9 1/2	54	18	72	60	3 to 1		
36	45	29	4 1/2	11 1/8	60	24	84	72	2 1/2 to 1		
42	53	34	5	15 1/4	60	36	96	78	2 1/2 to 1		
48	60	38	5 1/2	21	60	36	96	84	2 1/2 to 1		
54	68	43	6	25 1/2	60	36	96	90	2 1/2 to 1		
60	76	48	6 1/2	30	60	36	96	96	2 1/2 to 1		

**NOMINAL SIZE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR
PIPE ARCH AND
ELLIPTICAL PIPE

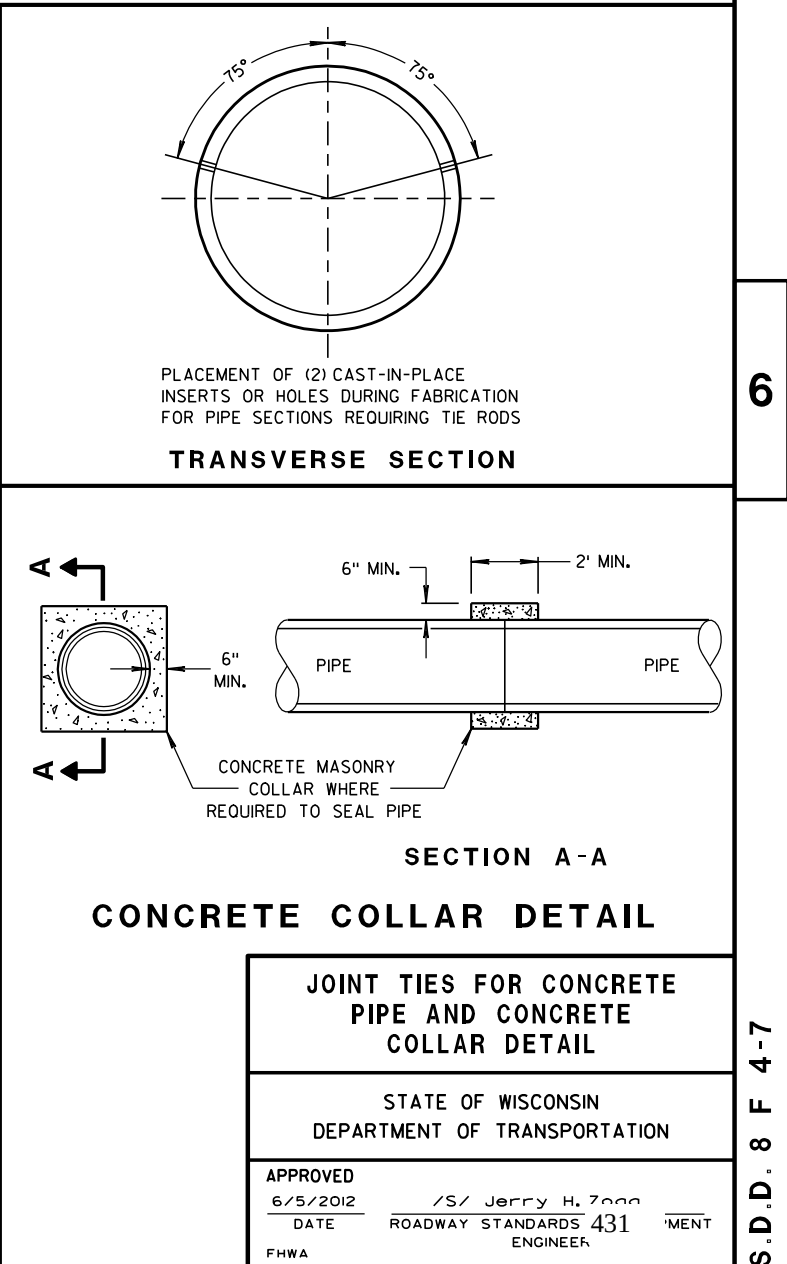
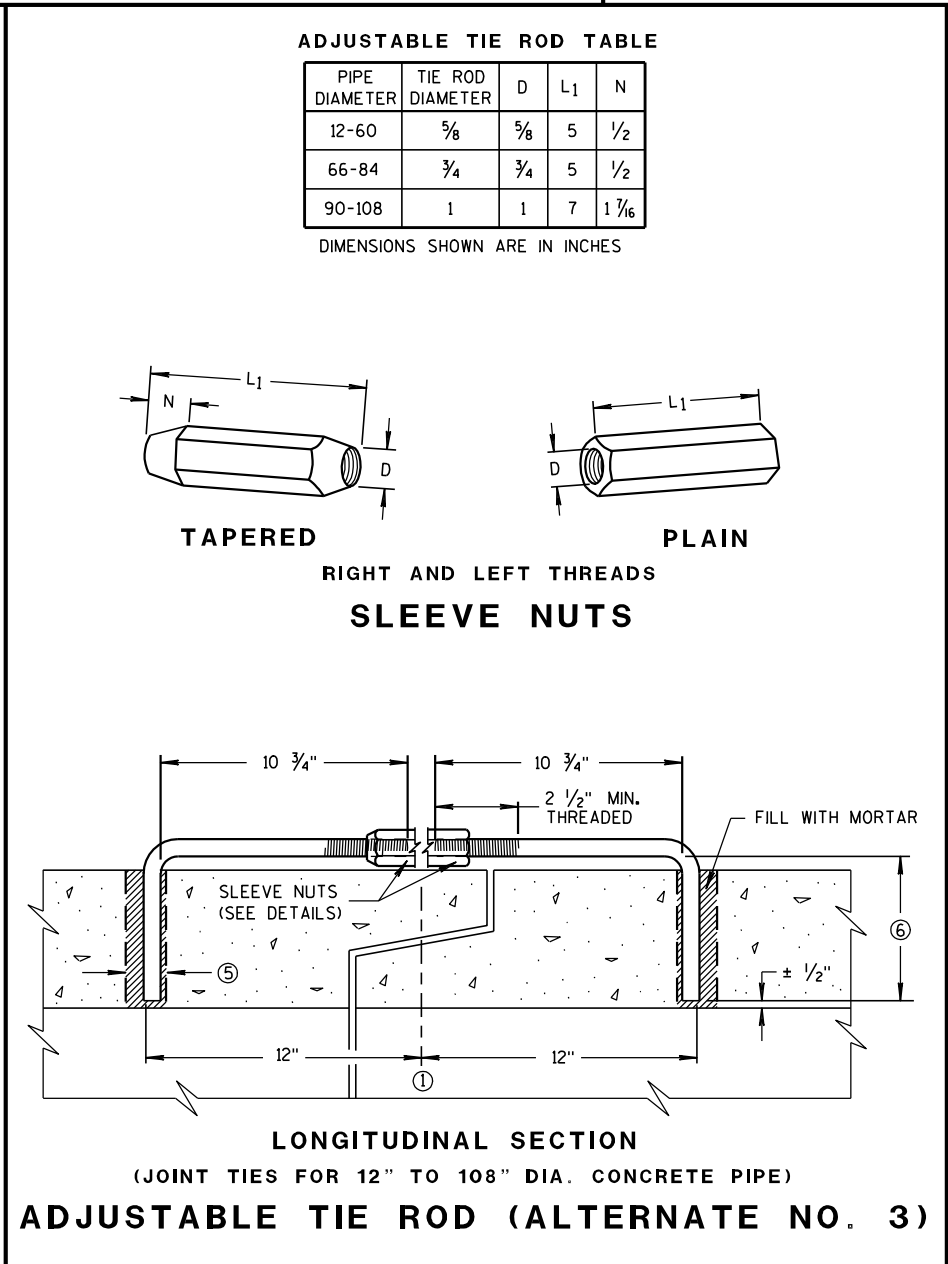
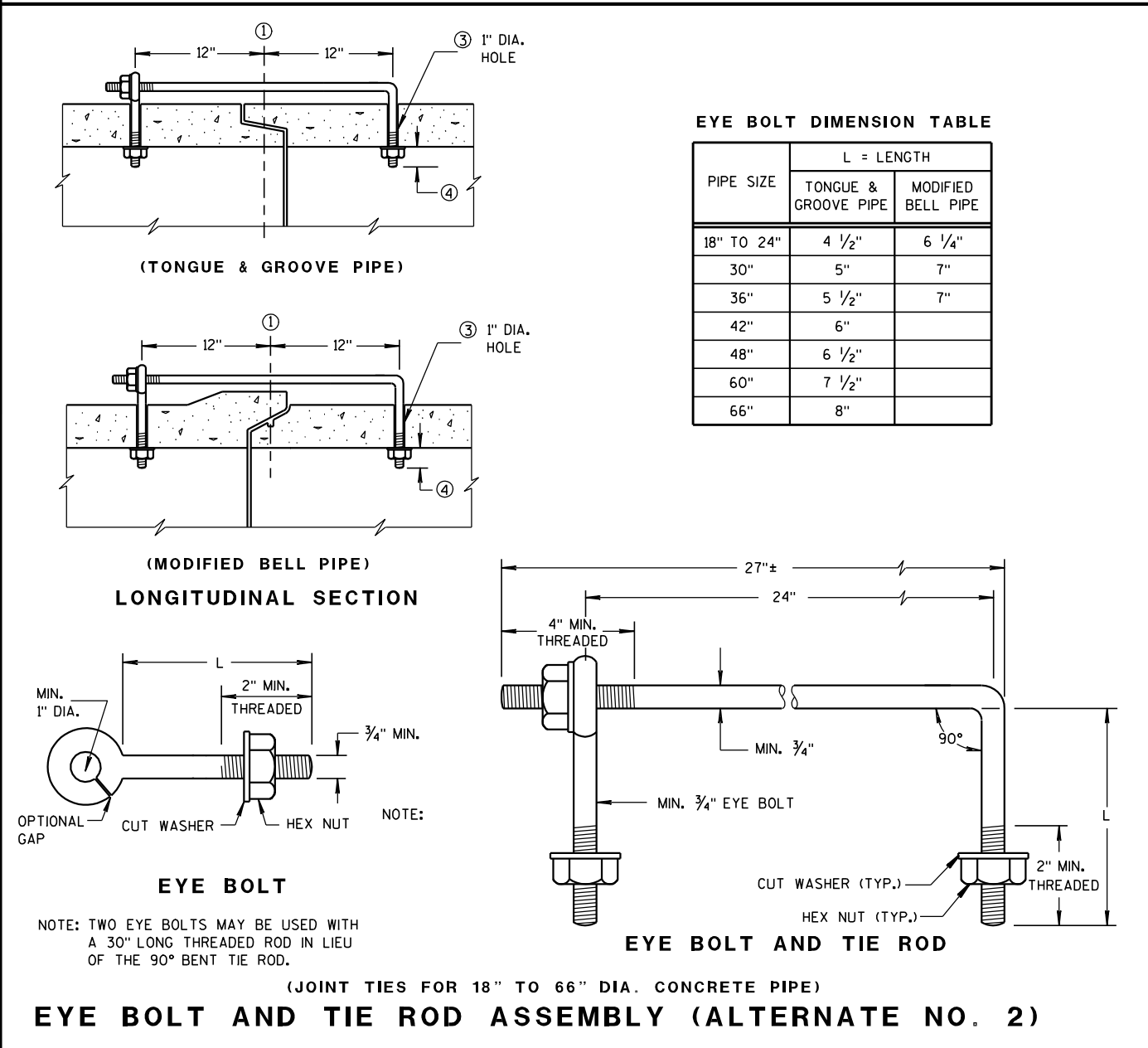
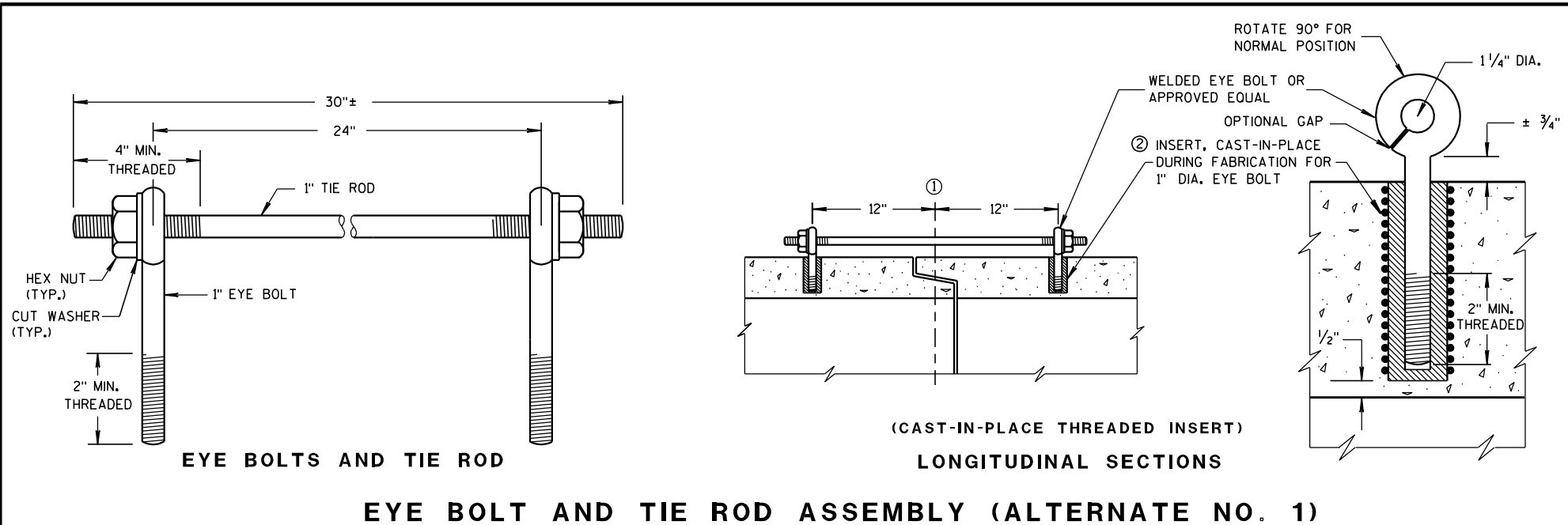
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

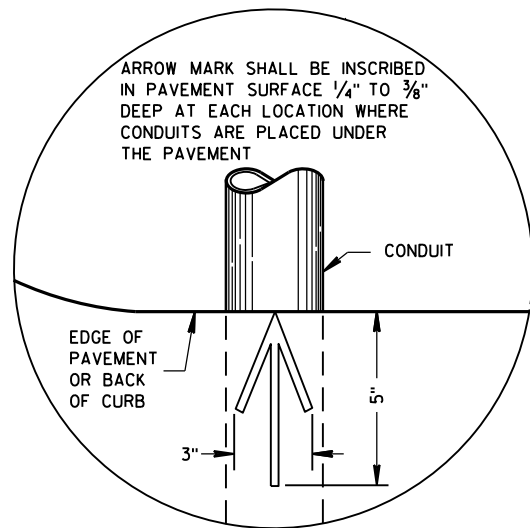
APPROVED

11/30/94
DATE

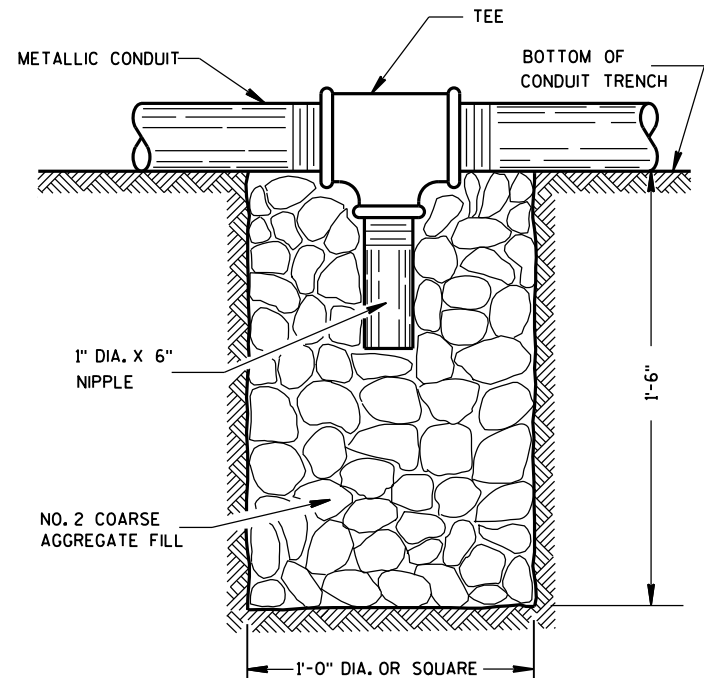
/S/ Rory L. Rhin...
CHIEF ROADWAY DEVELOP... ENGINEER

FHWA



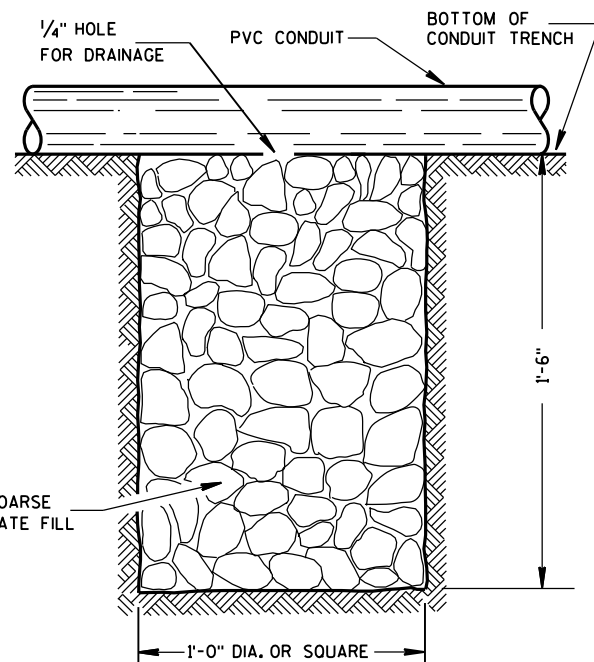


PLAN VIEW
ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

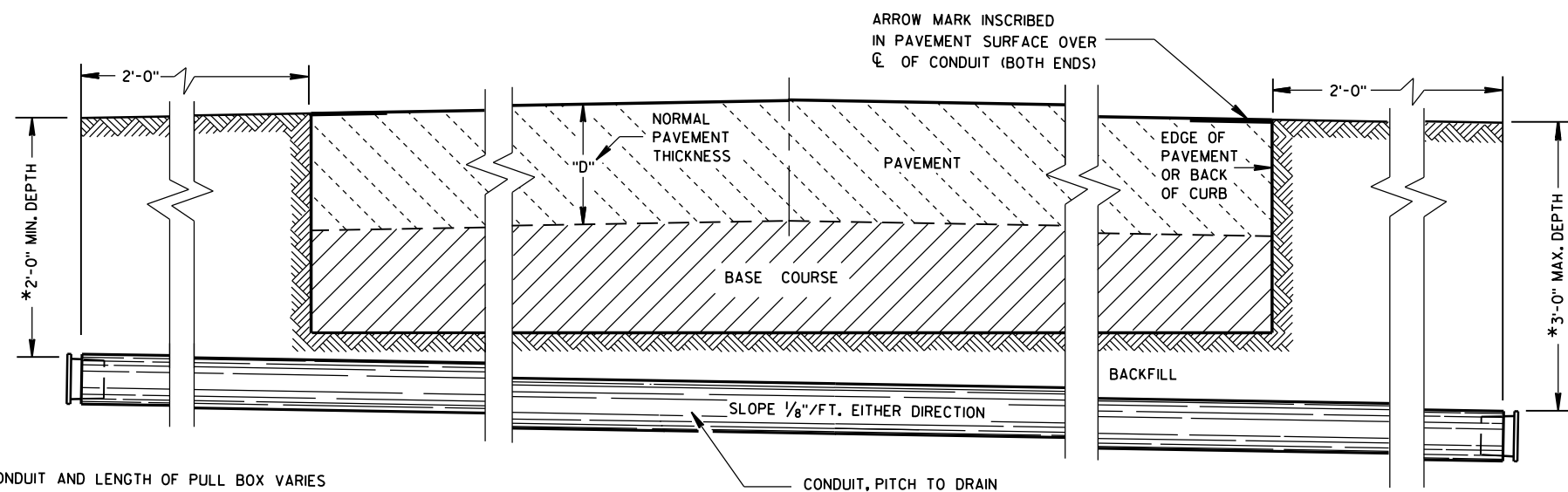
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION
DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL 432
FHWA

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

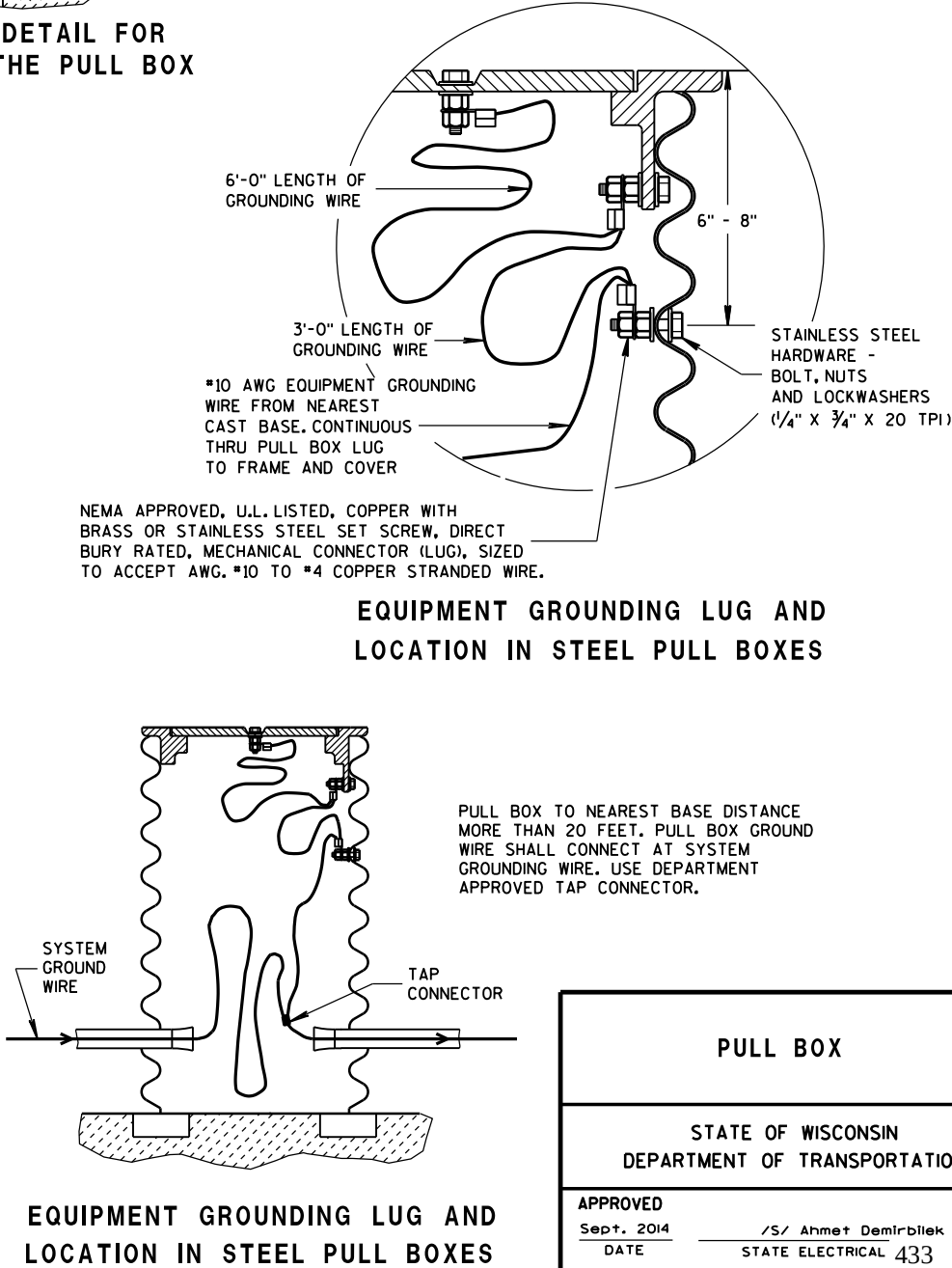
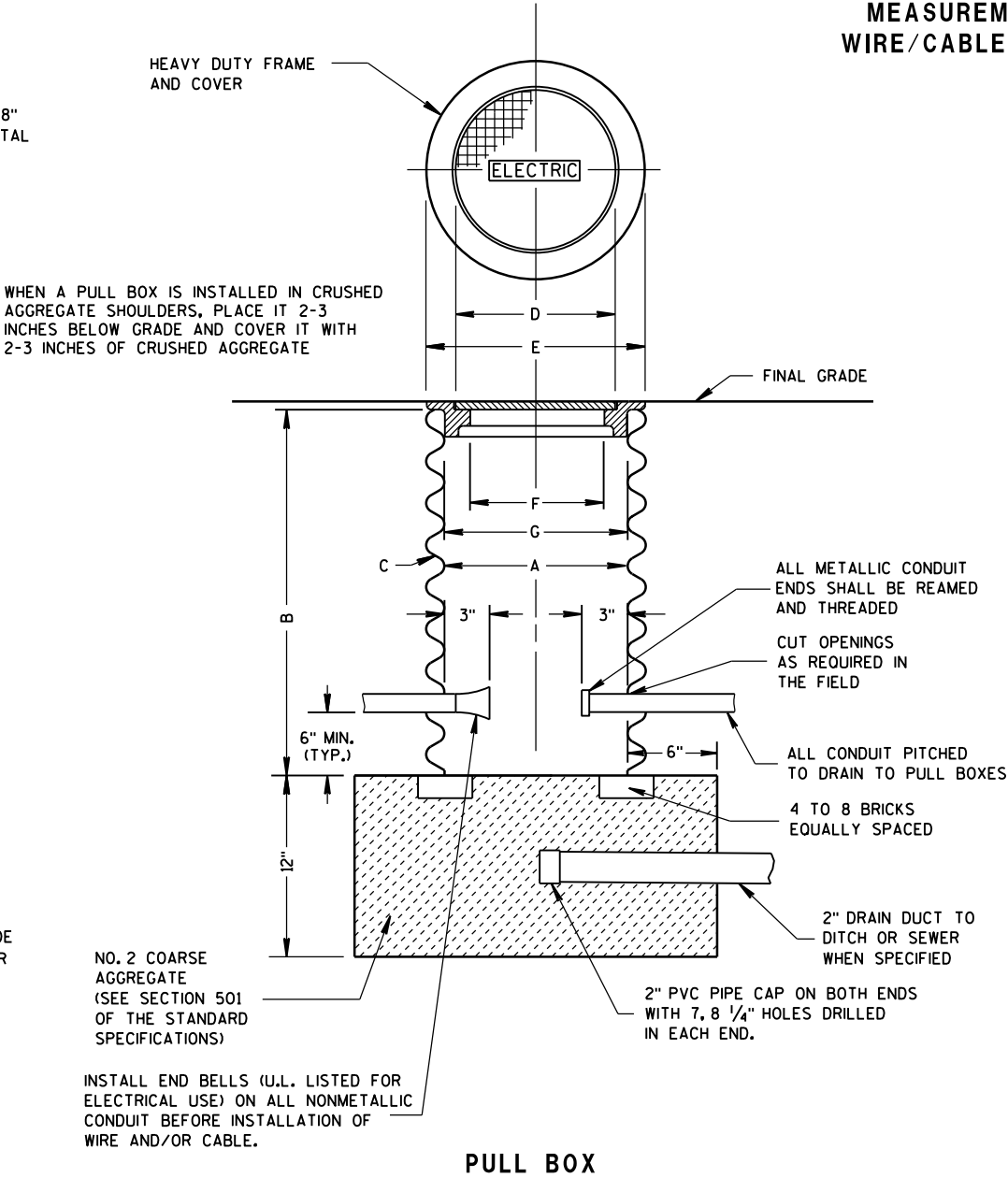
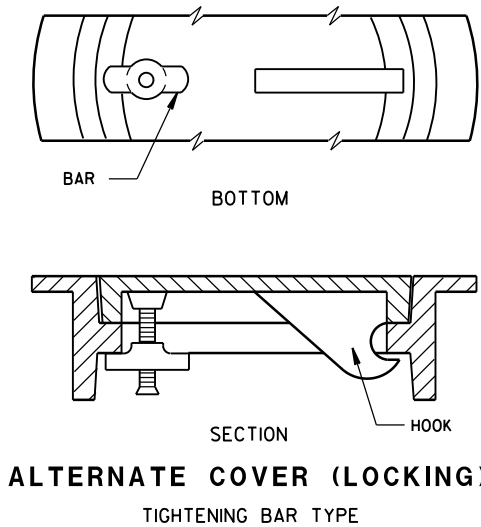
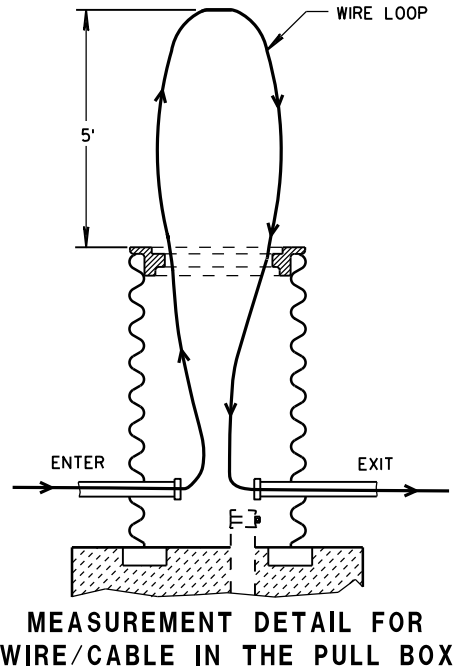
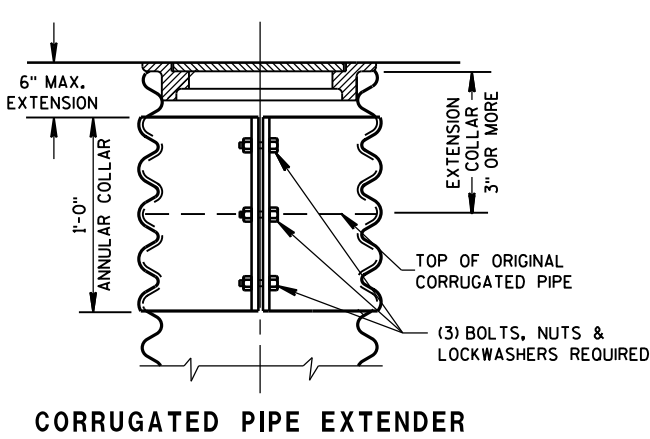
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

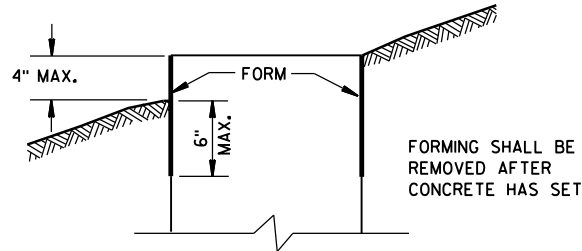
ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



PULL BOX	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Sept. 2014 DATE	/S/ Ahmet Demirelek STATE ELECTRICAL 433
FHWA	

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

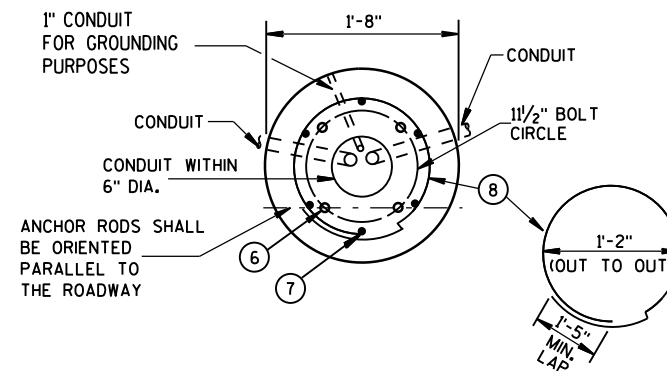
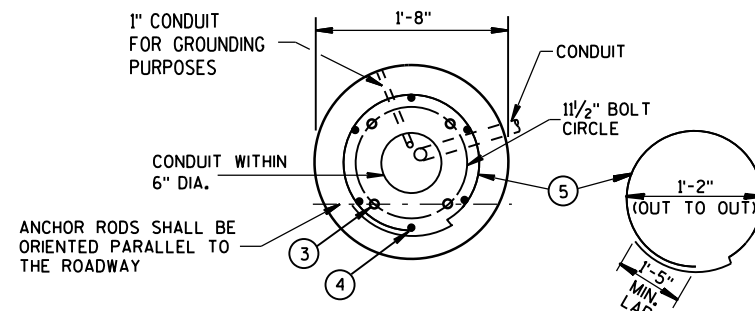
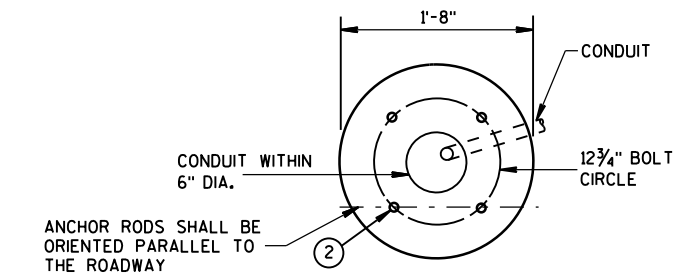
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

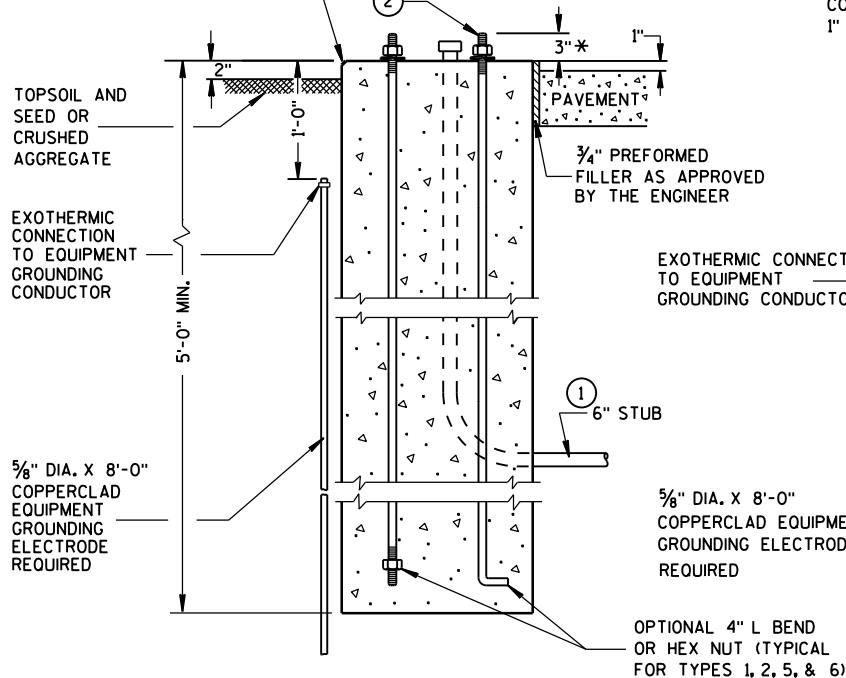
- 1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

- 2 (4) 1" DIA. X 3'-6" ANCHOR RODS.
3 (4) 1" DIA. X 5'-0" ANCHOR RODS.
4 (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.
5 (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.
6 (4) 1" DIA. X 3'-6" ANCHOR RODS.
7 (6) NO. 4 X 4'-8" BAR STEEL REINFORCEMENT.
8 (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

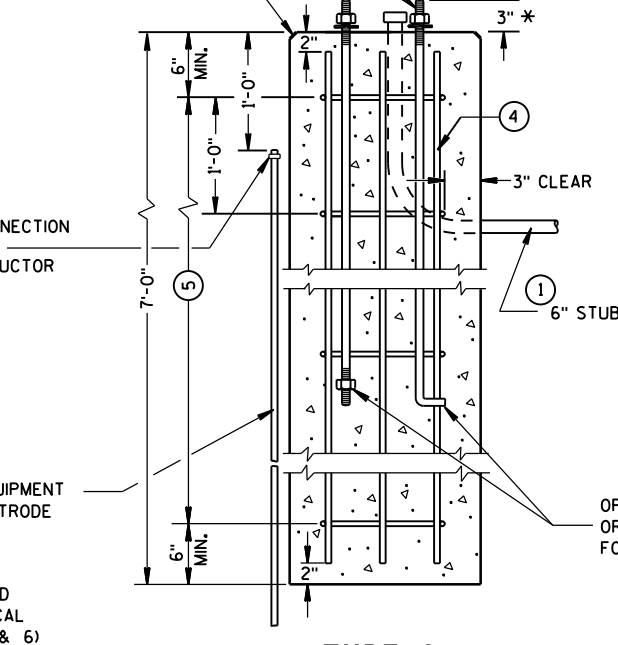


FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND

HALF SECTION IN UNPAVED AREA (TYPICAL FOR TYPES 1, 2, 5, & 6)



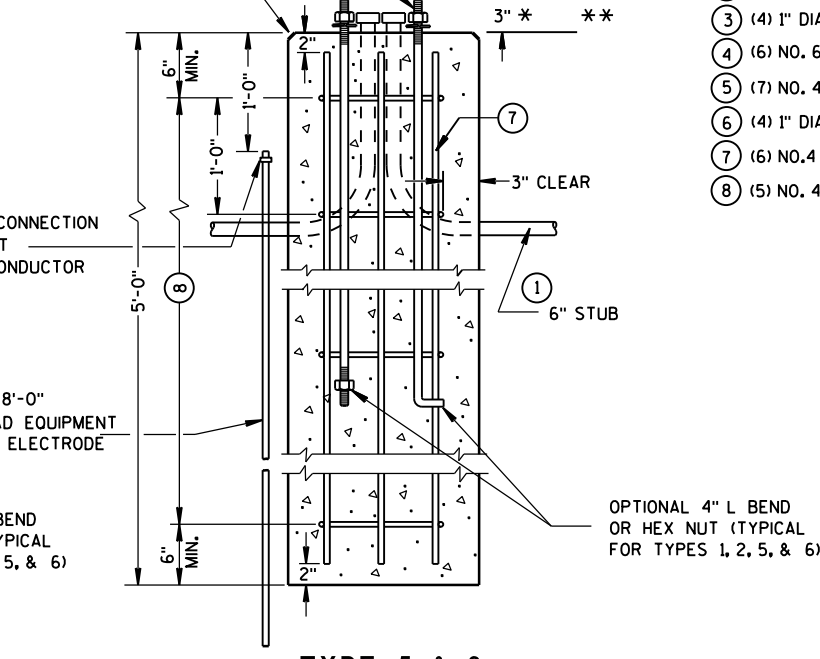
FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND



TYPE 2

CONCRETE BASES

FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND



TYPE 5 & 6

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2 3/4" OR LONGER THAN 3 3/4" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4 1/2" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2014

DATE

/S/ Ahmet Demirbilek

STATE ELECTRICAL 434

FHWA

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

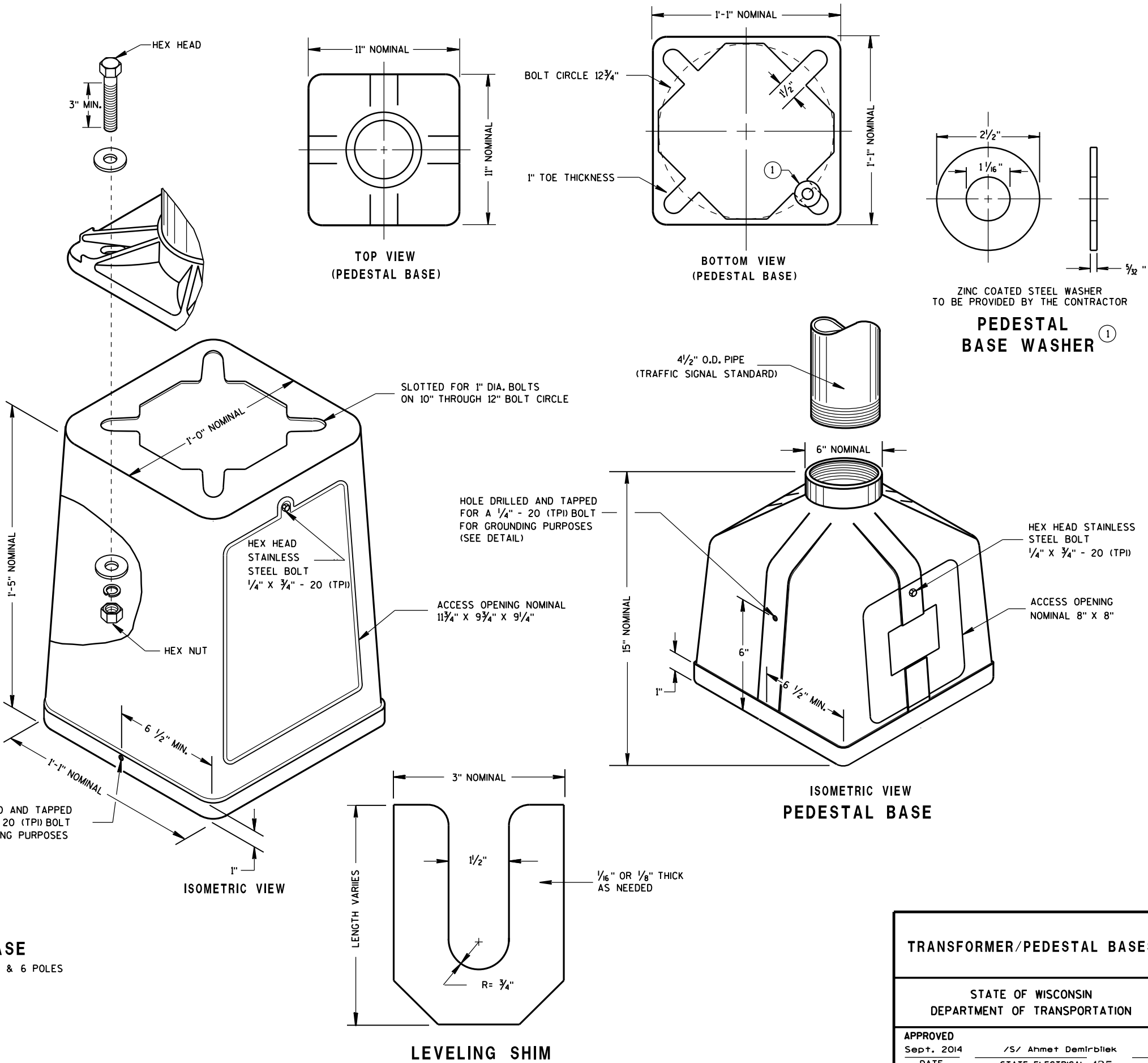
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.



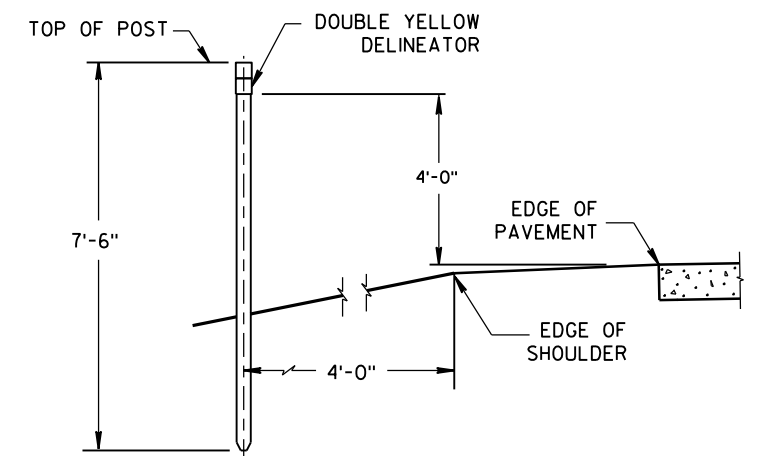
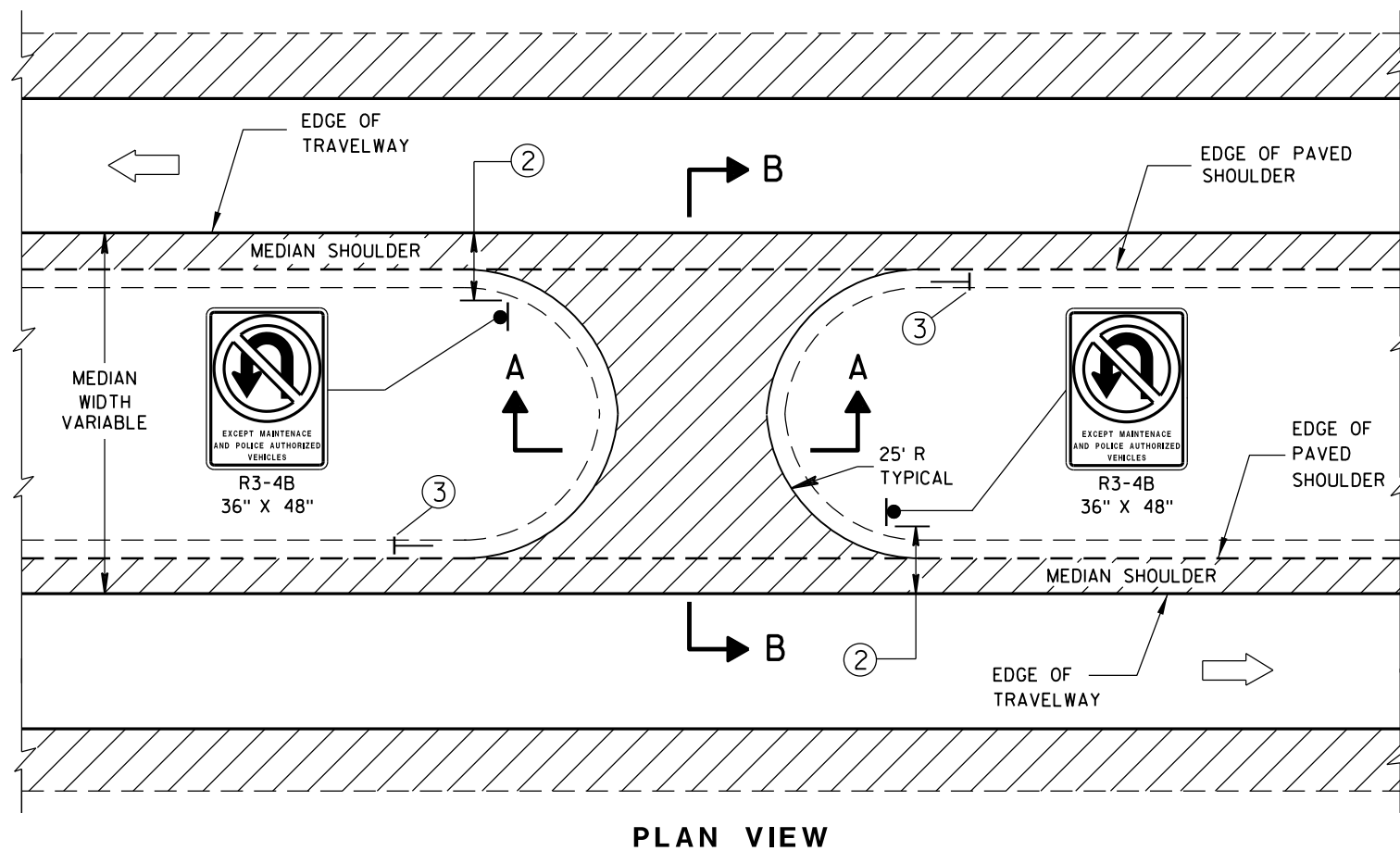
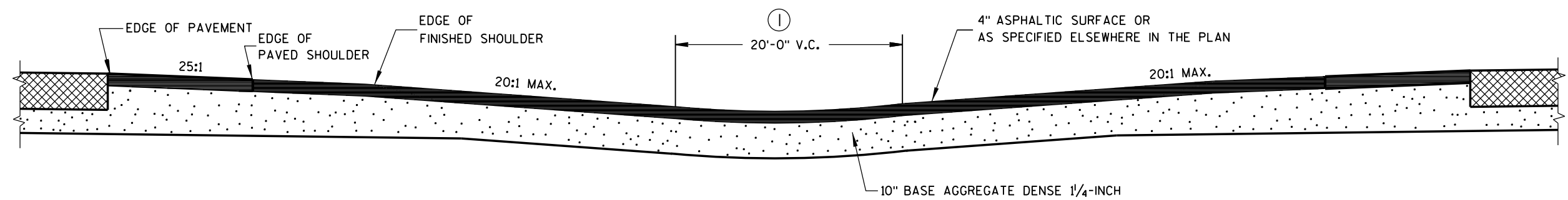
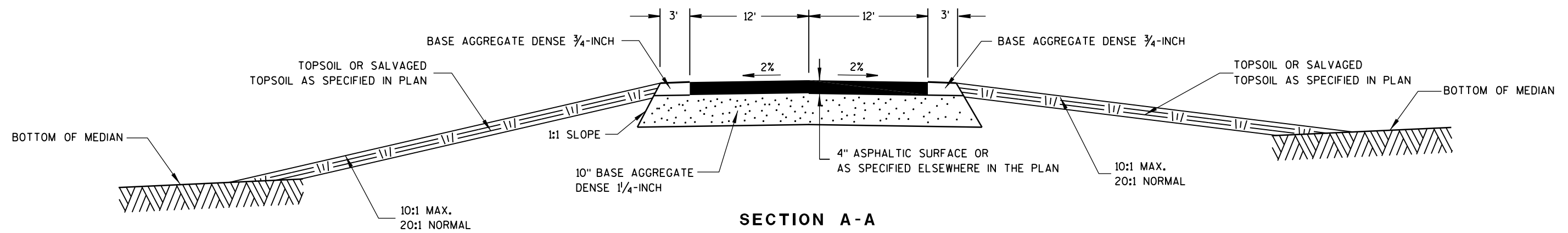
TYPICAL MECHANICAL
CONNECTOR LUG
TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE
INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL 435
FHWA

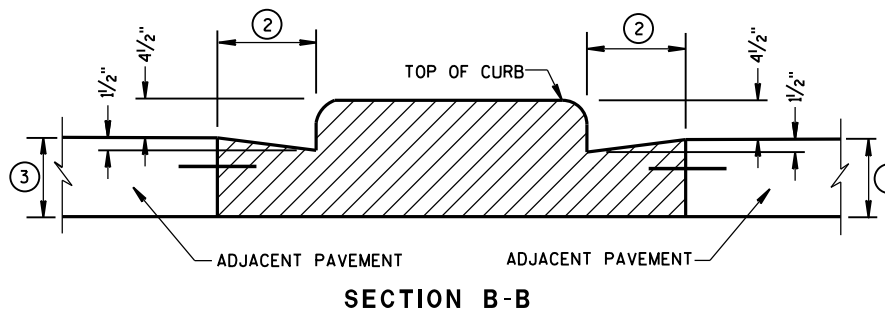
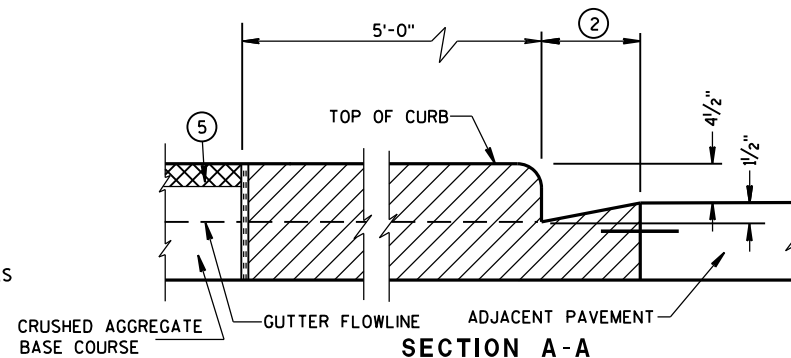
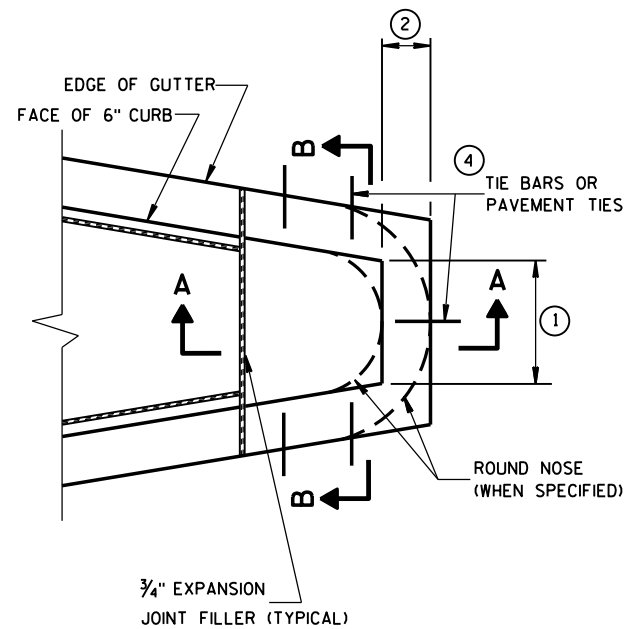
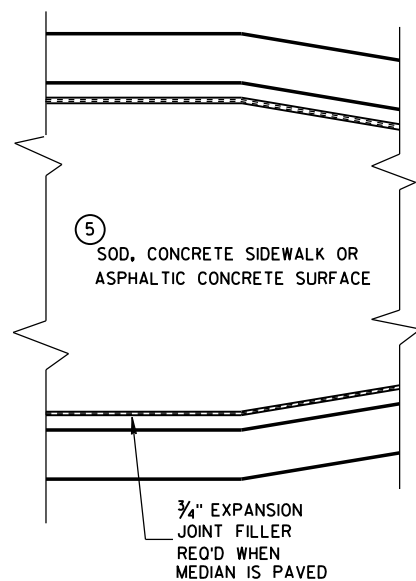


GENERAL NOTES

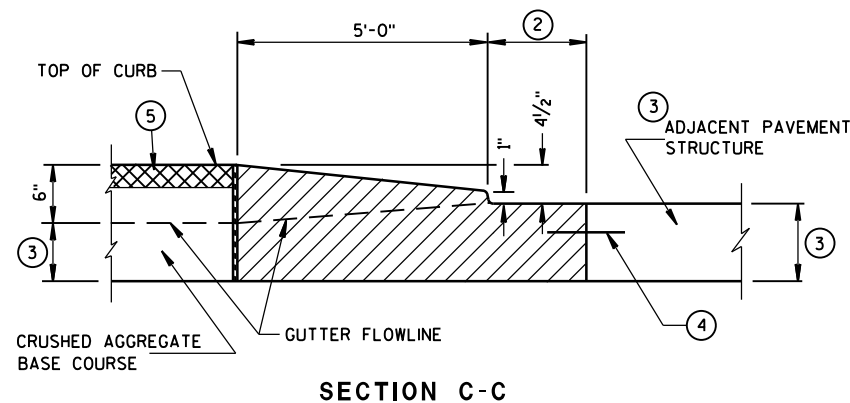
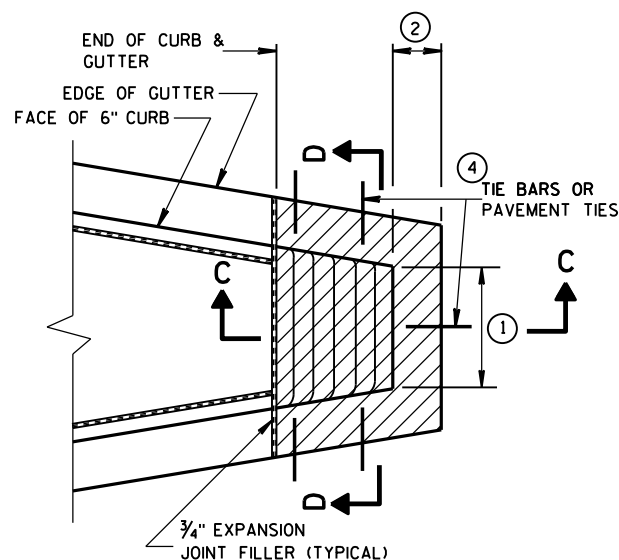
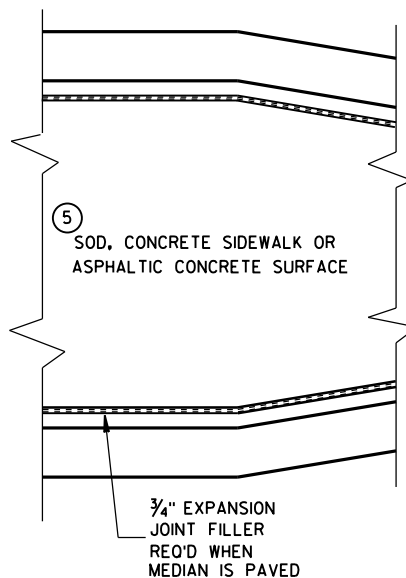
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN
ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS
OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL
PROVISIONS.

- ① ADJUST VERTICAL CURVE LOCATION Laterally to maintain 20:1 max.
- ② Signing details and specifications are provided elsewhere in the contract.
- ③ Install double yellow delineator. See standard detail drawing 15A2.

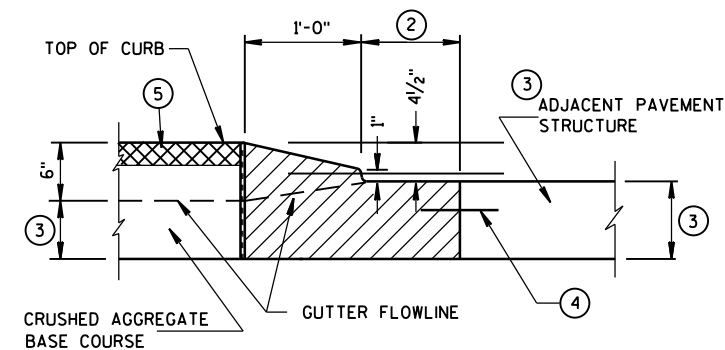
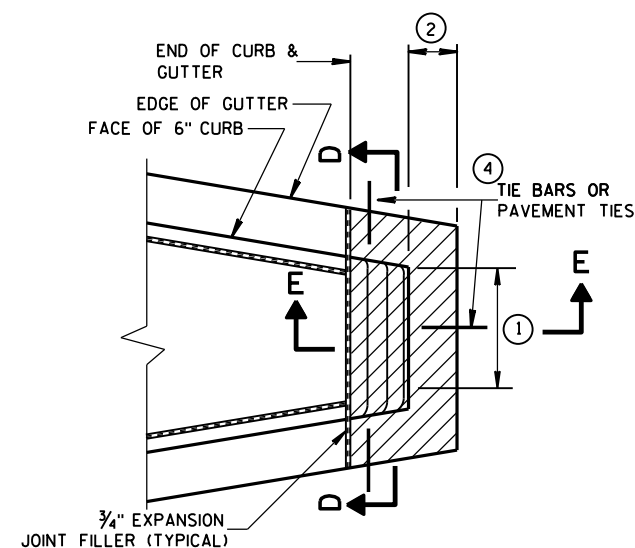
MAINTENANCE CROSSOVER FOR FREEWAYS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED <u>8/2013</u> DATE	<u>/s/ Jerry H. Zoga</u> ROADWAY STANDARDS ENGINEER 436



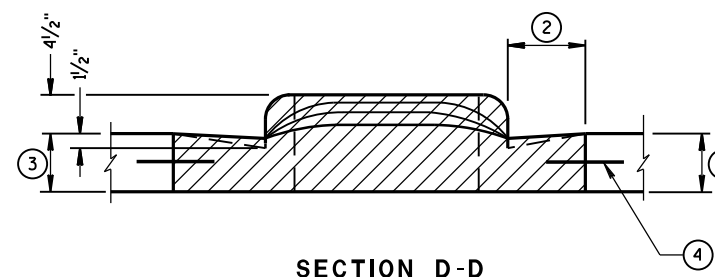
CONCRETE MEDIAN BLUNT NOSE DETAIL



CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN SLOPED NOSE TYPE 2



GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

- ① SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).
- ② WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.
- ③ DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:
 - (1) NEW OR EXISTING CONCRETE PAVEMENT.
 - (2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.
 - (3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

- ④ TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

- ⑤ SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

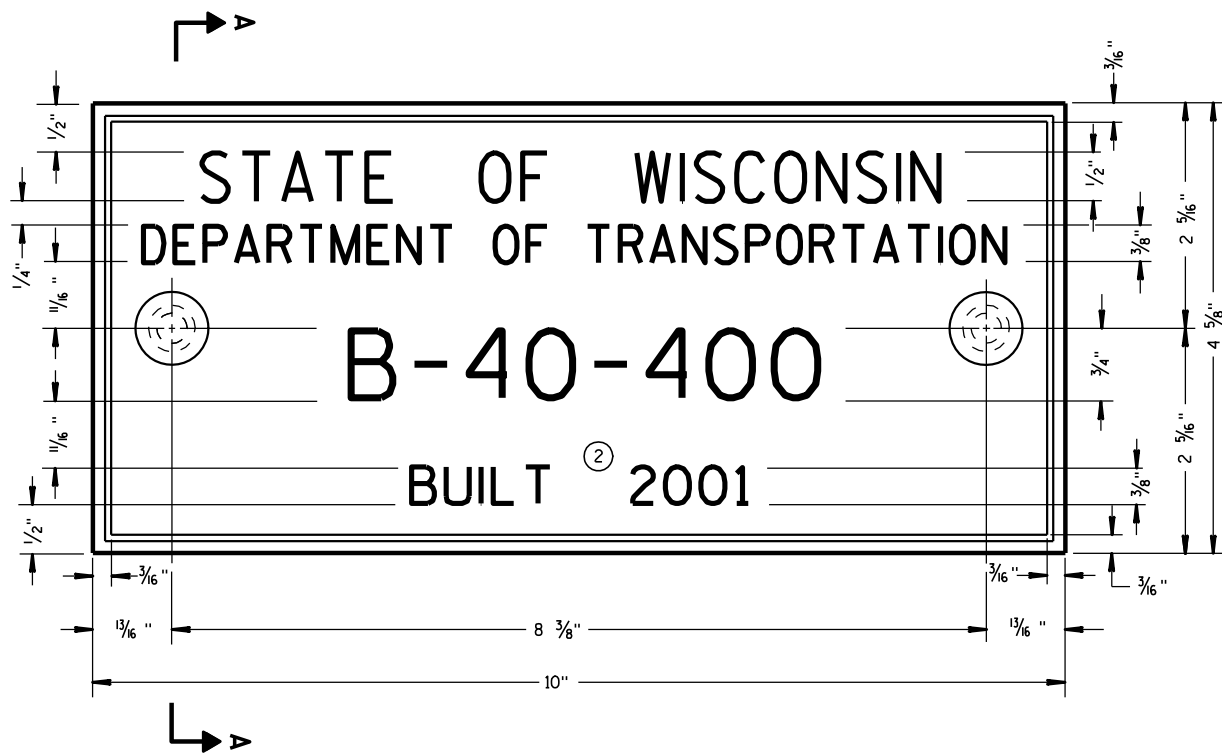
6/8/2006

DATE

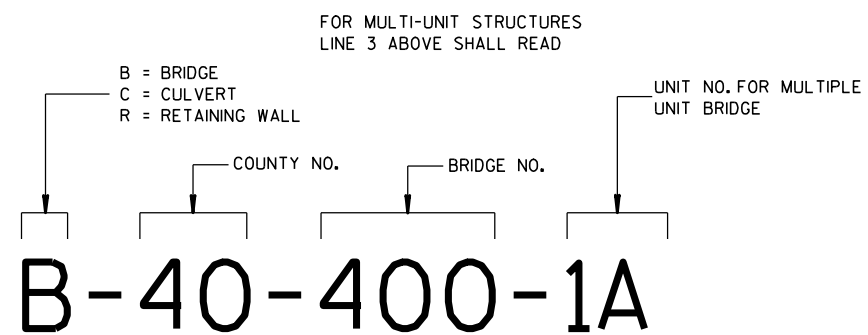
FWHA

/S/ Jerry H. Zogg
ROADWAY STANDARDS D 437
ENGINEER

4T



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)



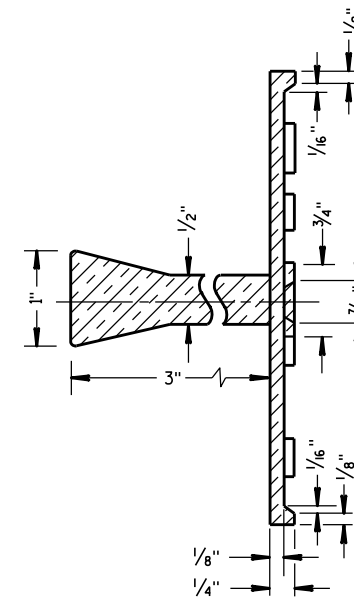
**NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES**

GENERAL NOTES

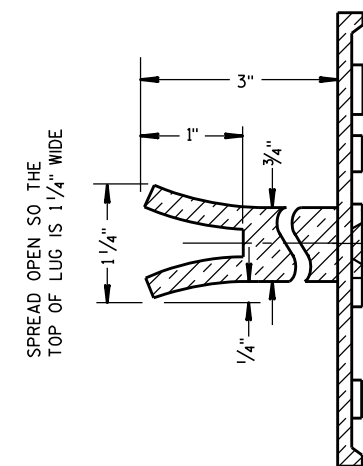
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

- ① EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ② REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



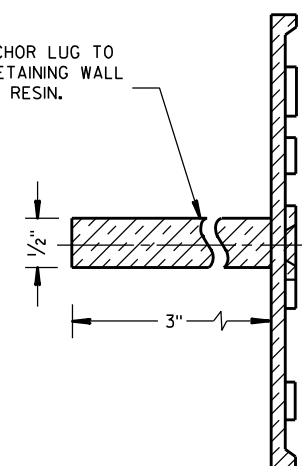
SECTION A-A



SPREAD OPEN SO THE
TOP OF LUG IS 1 1/4" WIDE

ALTERNATE LUG

- ① ADHERE ANCHOR LUG TO PRECAST RETAINING WALL WITH EPOXY RESIN.



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

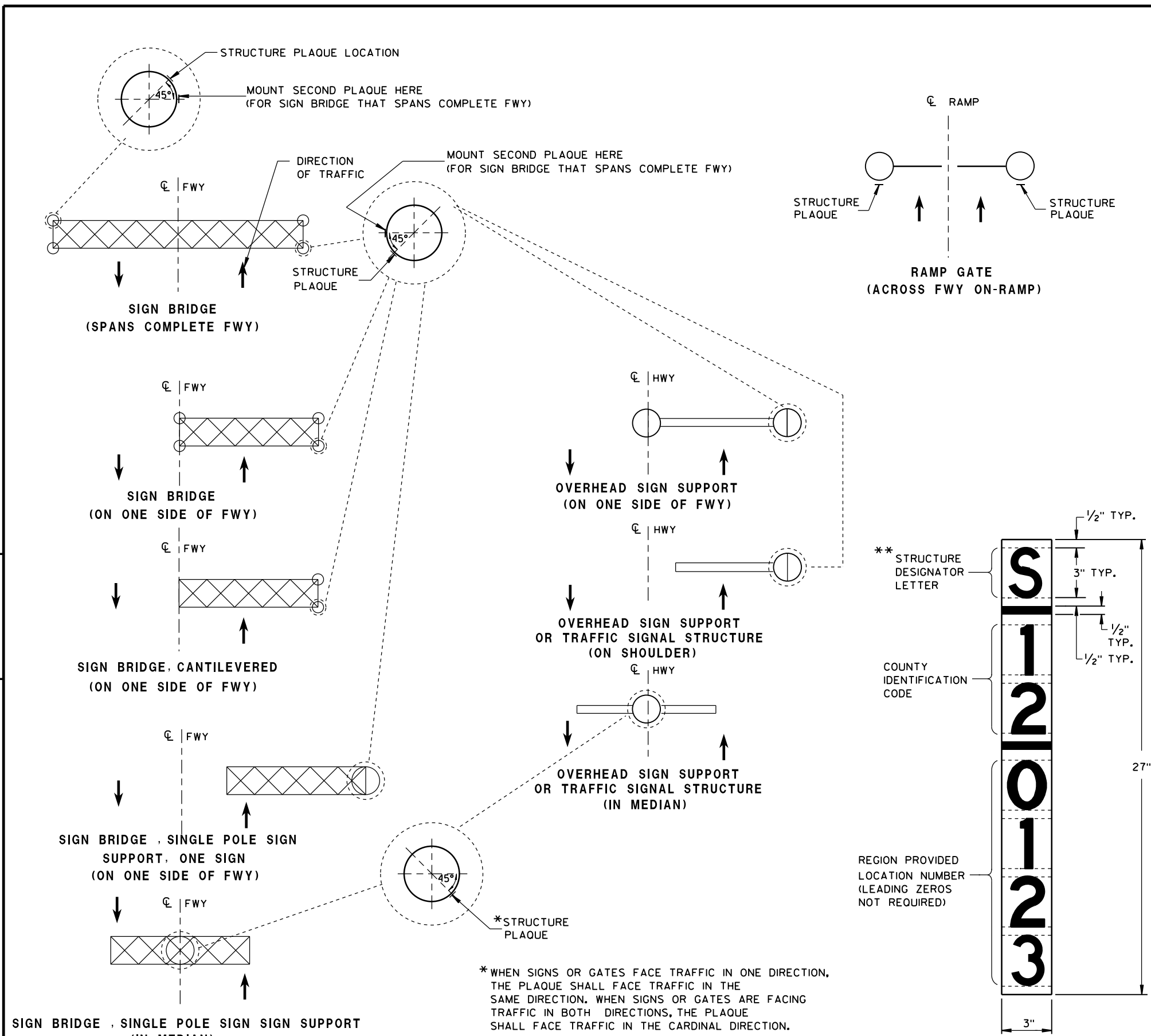
**NAME PLATE
(STRUCTURES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

DATE 3/26/10
CHIEF STRUCTURAL DEVELOPER 438
FHWA

/S/ Scot Beck
CHIEF STRUCTURAL DEVELOPER 438
JEER



LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES

RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

- GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS
- A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS
- ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

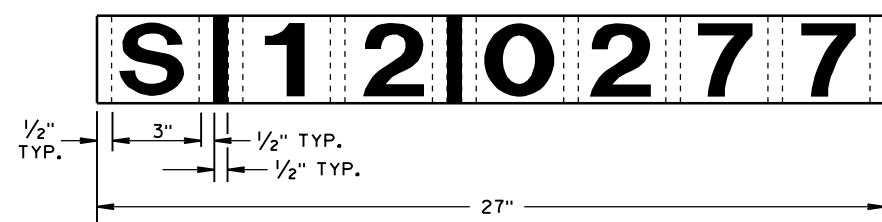
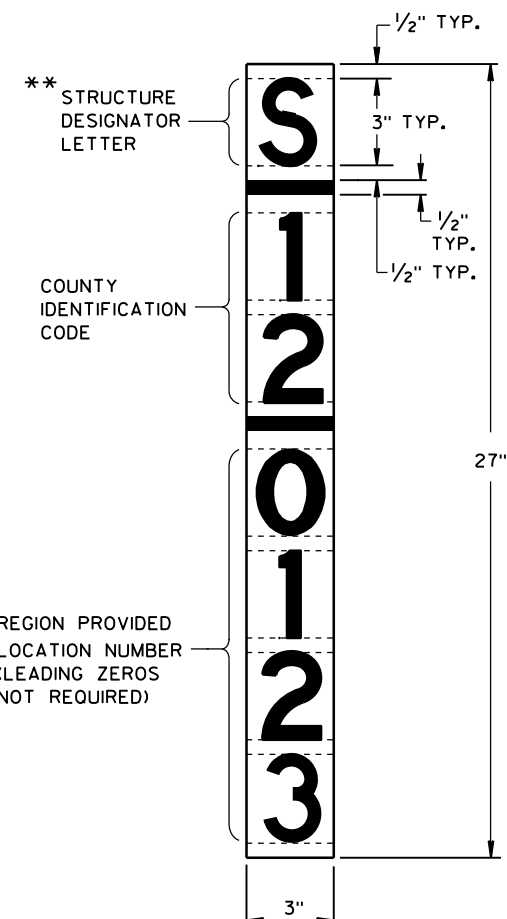
MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

- BASE - SHEET ALUMINUM, 0.060" THICK.
- FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE
- LINES - BLACK, 1/2" WIDE, SELF-ADHESIVE
- CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

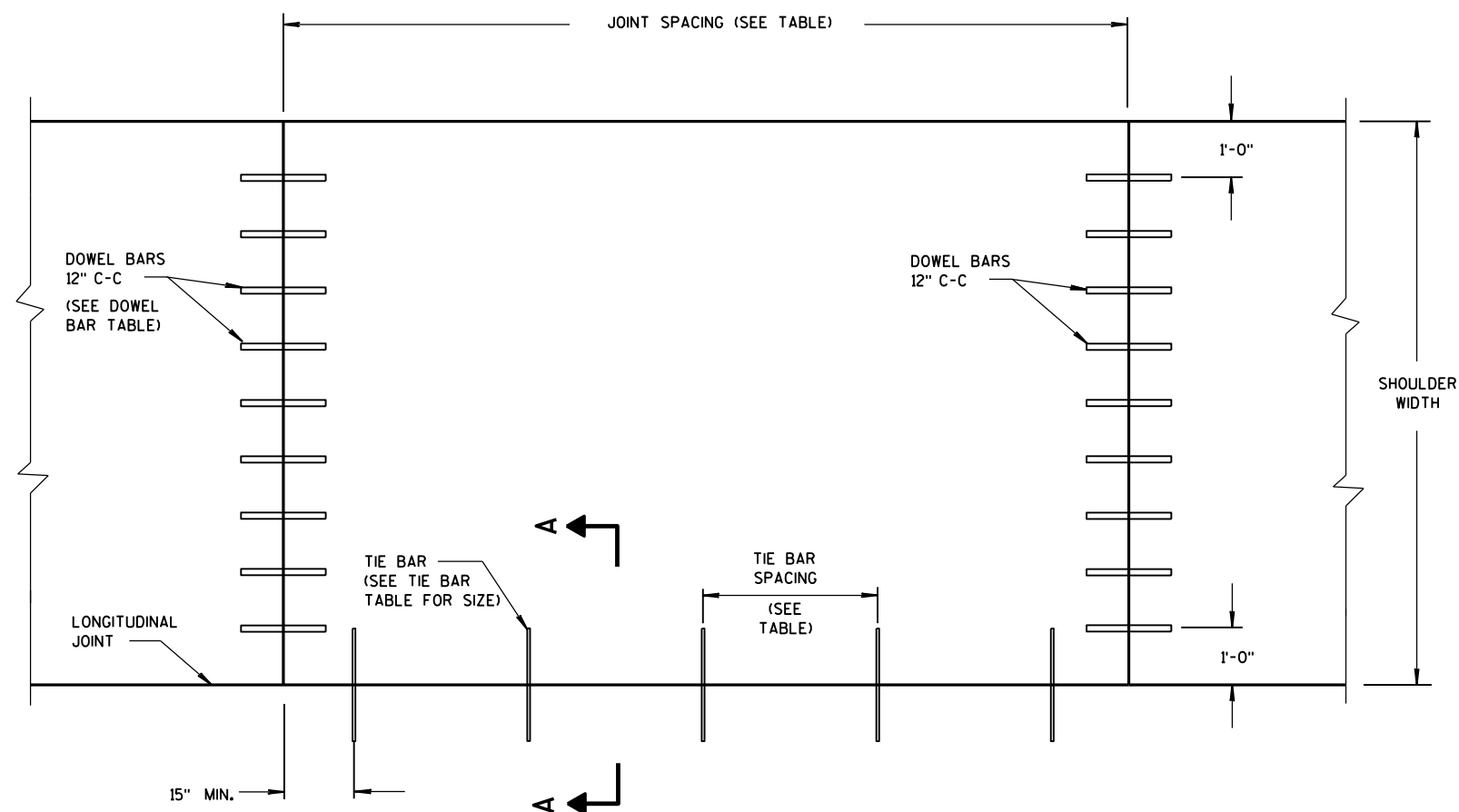
WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED 12/4/2012 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINE 439	SIGN
FHWA		



PLAN VIEW
CONCRETE PAVEMENT SHOULDER

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g., AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

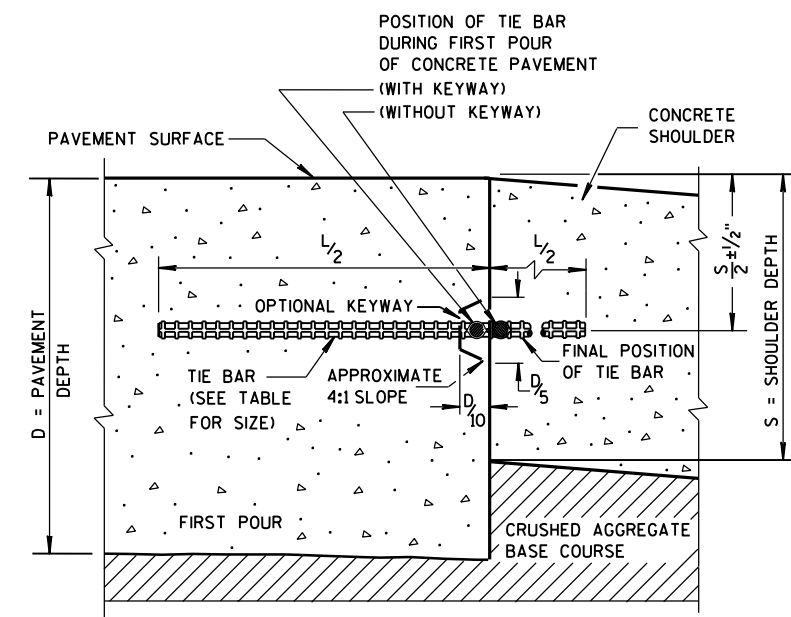
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TRANSVERSE JOINT DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

FINISH THE SHOULDER PAVEMENT CONFORMING TO SUBSECTION 415.3.8 OF THE STANDARD SPECIFICATIONS.

TIE BARS SHALL CONFORM TO SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.



SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE
AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER***	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	12'
7", 7 1/2"	1"	14'
8", 8 1/2"	1 1/4"	15'
9", 9 1/2"	1 1/4"	15'
10" & ABOVE	1 1/2"	15'

*** FOR DOWELED CONCRETE SHOULDERS WITH TRAPEZOIDAL CROSS SECTIONS, CHOSE THE APPROPRIATE DOWEL BAR DIAMETER BASED ON THE SMALLER PAVEMENT DEPTH (LIKELY THE OUTSIDE EDGE OF THE SHOULDER). IF USING BASKETS, USE BASKETS FOR THE AVERAGE THICKNESS OF THE CROSS SECTION.

CONCRETE PAVEMENT SHOULDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

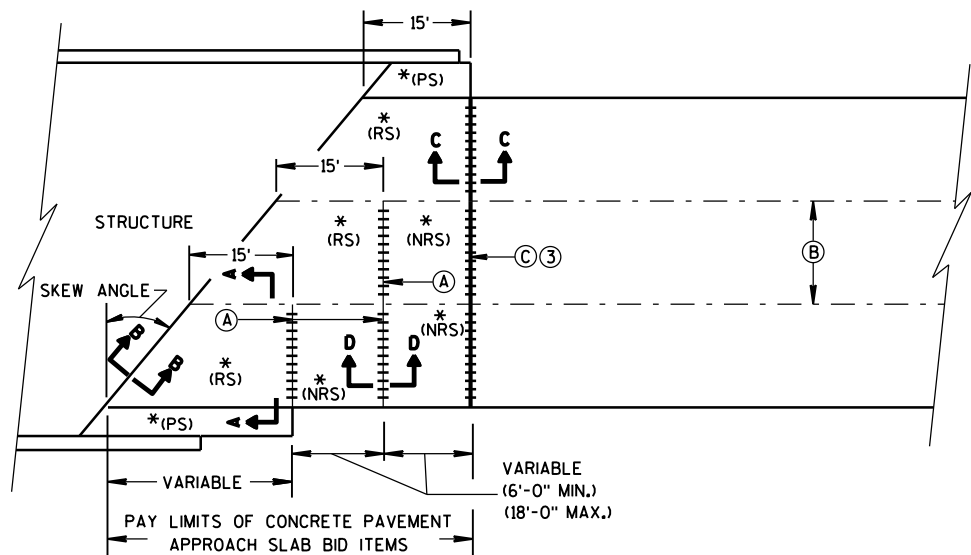
June, 2015

DATE

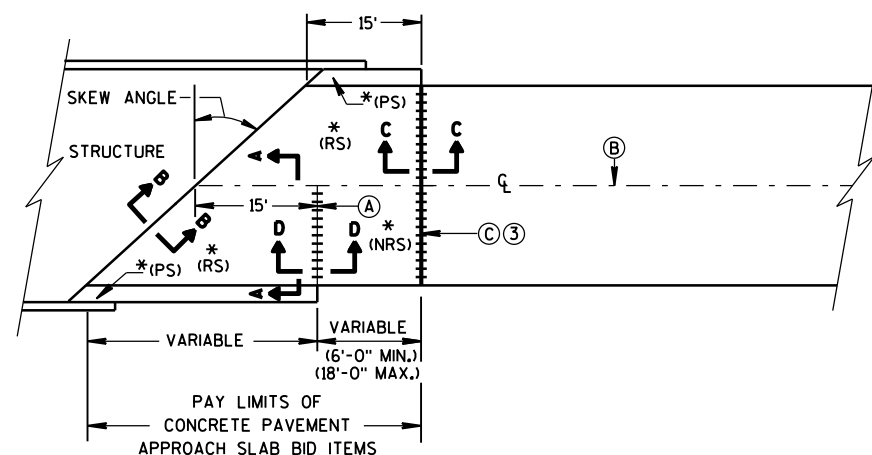
FHWA

/S/ Peter Kemp, P.E.

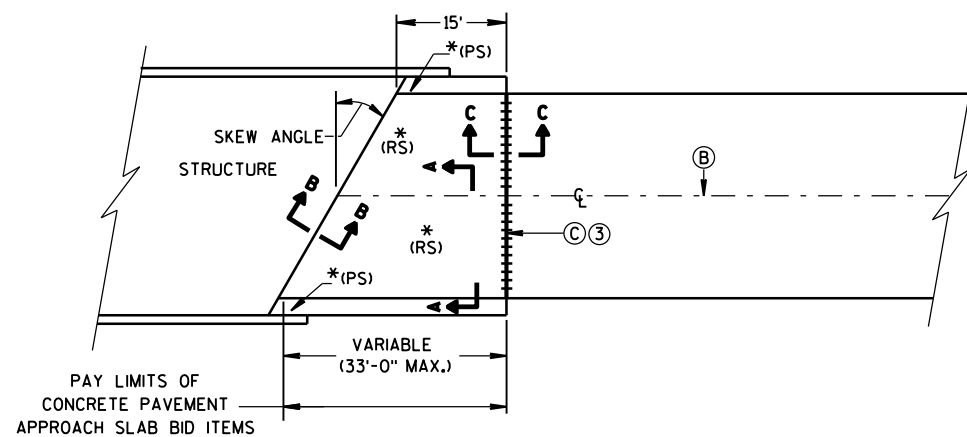
PAVEMENT SUPEF 440



**SKewed APPROACH
(PAVEMENT MORE THAN 2 LANES)**



**SKews > 20°
(PAVEMENT WIDTH ≤ 30')**

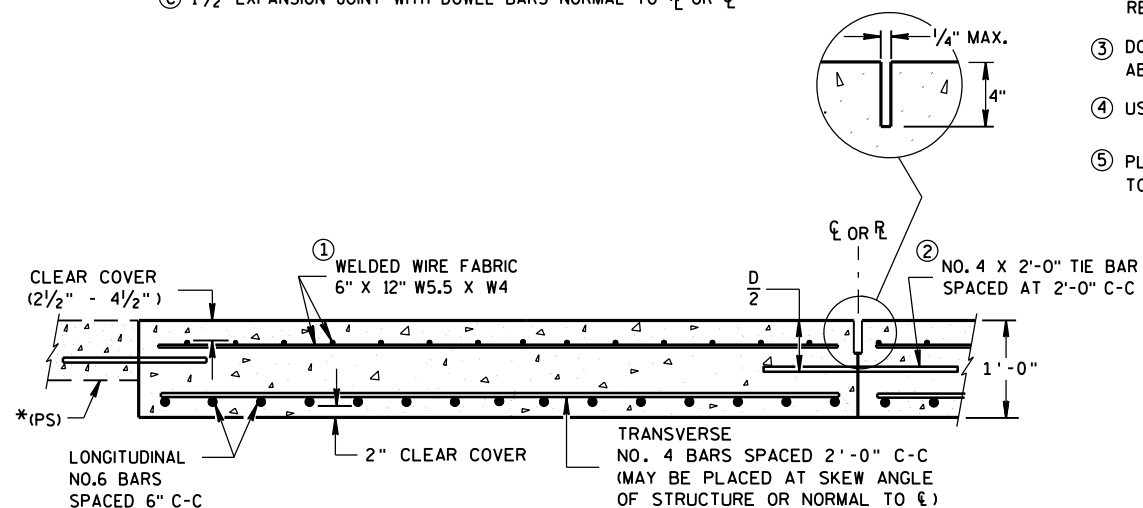


**SKews ≤ 20°
(PAVEMENT WIDTH ≤ 30')
APPROACH SLAB AND ADJACENT PAVEMENT**

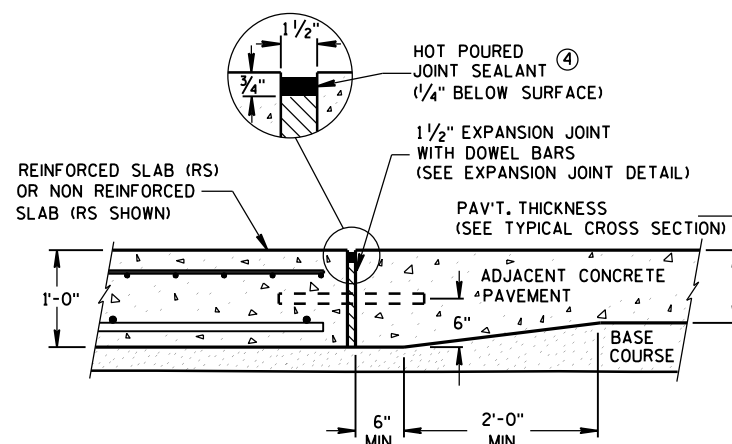
* (RS) = REINFORCED CONCRETE SLAB
* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB
(SEE DETAILS ELSEWHERE IN THE PLAN)
* (NRS) = NON-REINFORCED CONCRETE SLAB

*** STANDARD DOWEL BAR DIAMETER
(SEE SDD 13C11, & SDD 13C13)

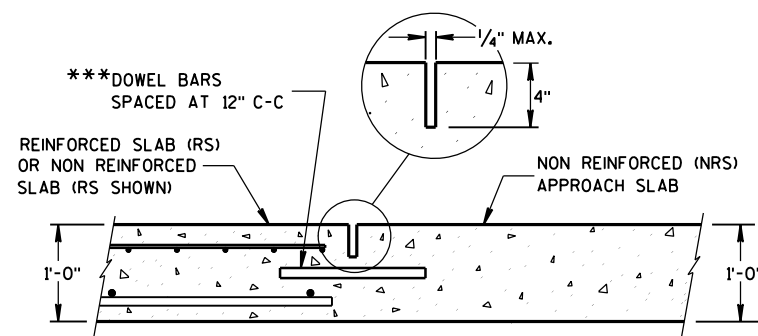
- (A) STANDARD CONTRACTION JOINT NORMAL TO ℓ OR ℓ_c
(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.
(C) 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℓ OR ℓ_c



**SECTION A-A
REINFORCEMENT POSITIONING DETAIL**



**SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT**



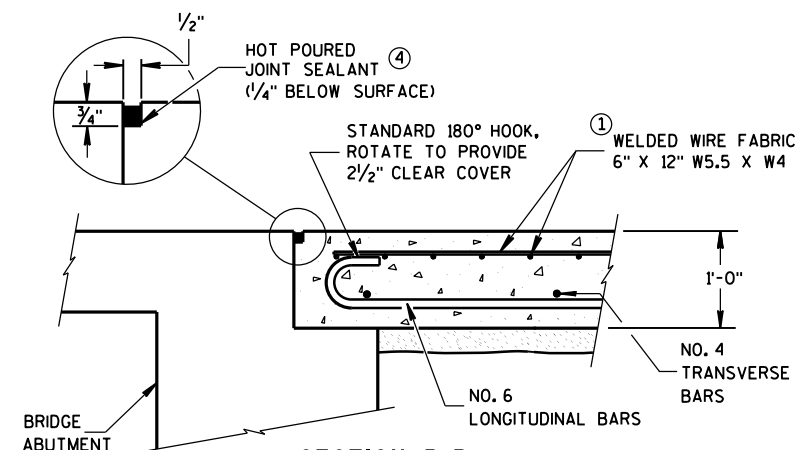
**SECTION D-D
CONTRACTION JOINT**

GENERAL NOTES

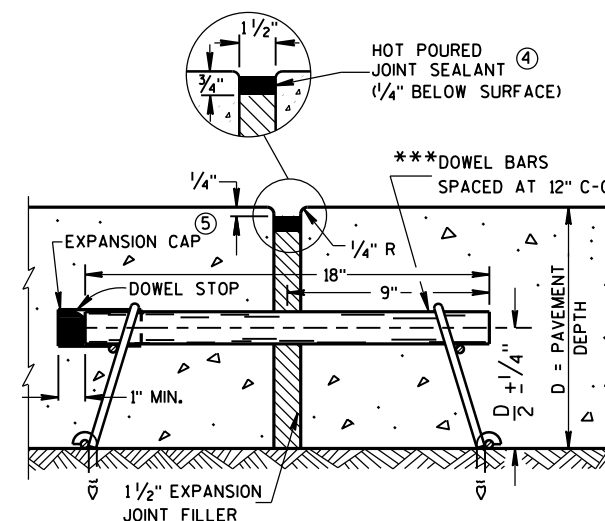
THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

- THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.
- THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.
- DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.
- USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.
- PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.



**SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT**

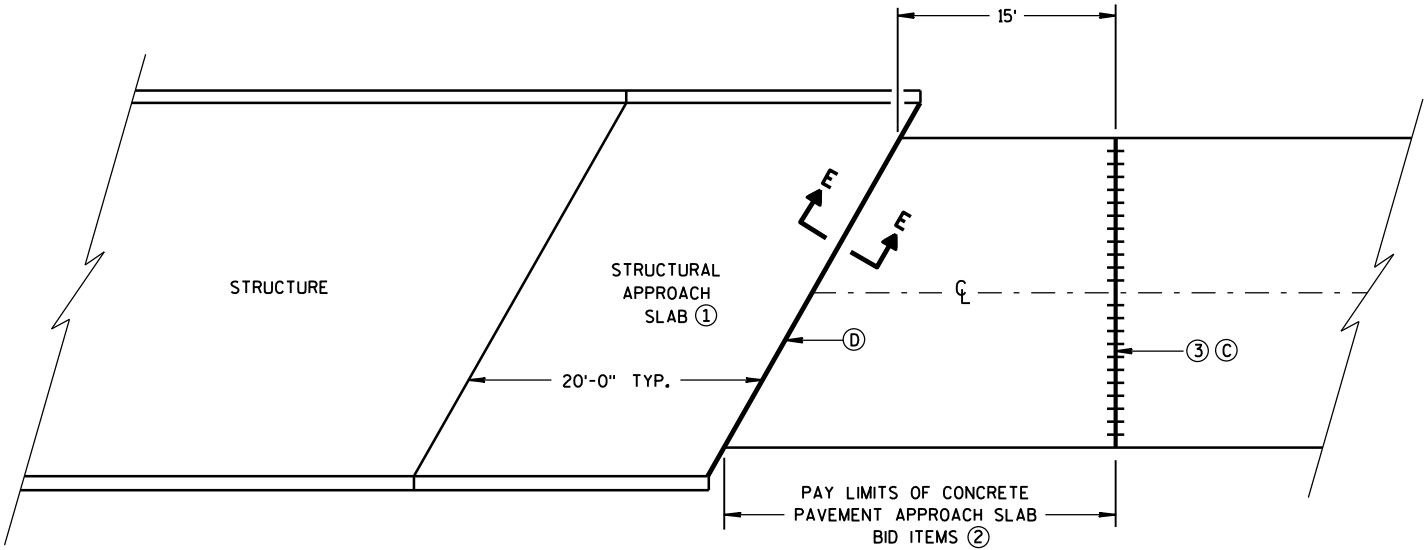


EXPANSION JOINT DETAIL

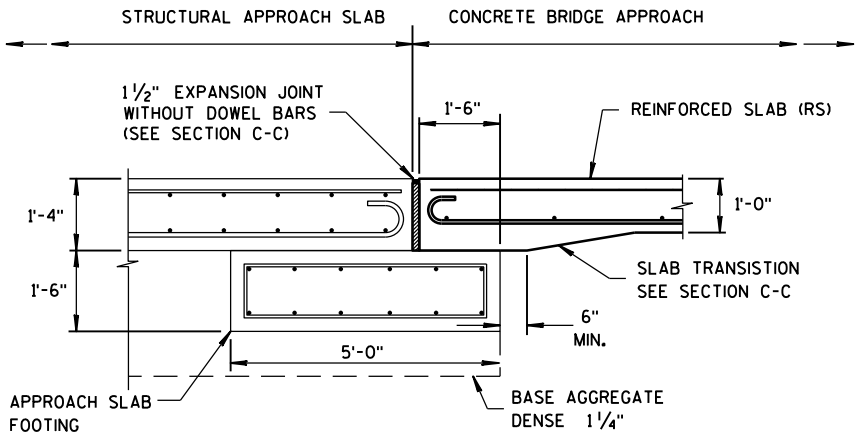
CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 /S/ Peter Kemp, P.E.
DATE PAVEMENT SUPEP 441
FHWA



BRIDGE APPROACHES



SECTION E-E
FOOTING DETAIL
STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

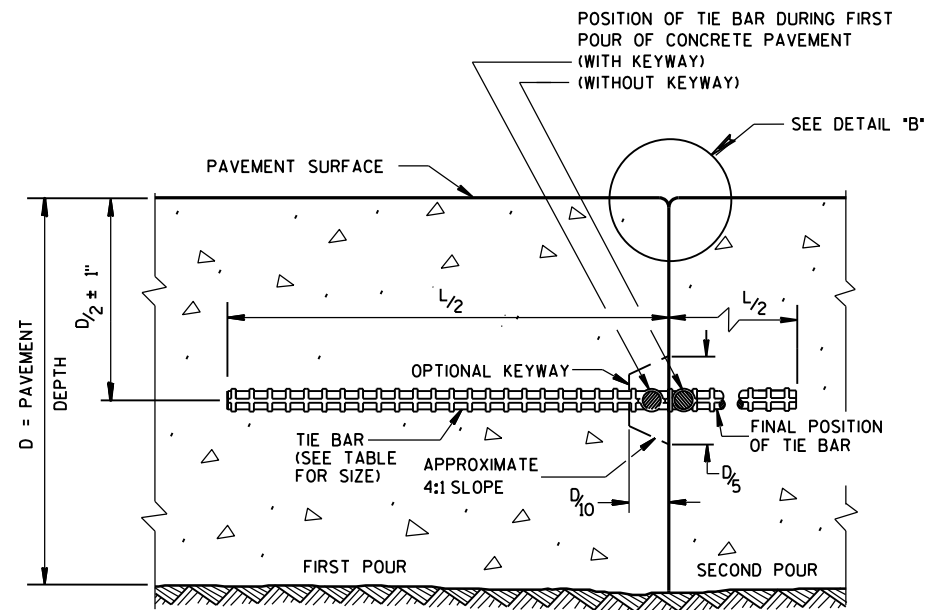
GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE PAVEMENT APPROACH SLAB.

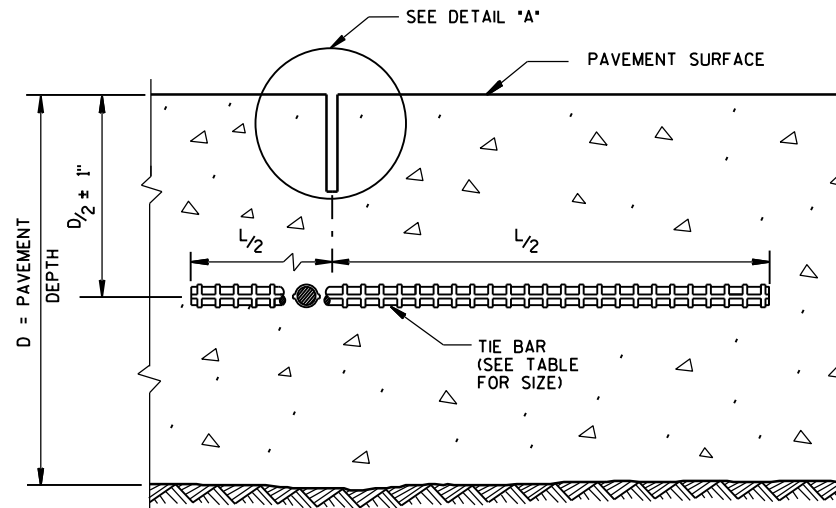
- ① SEE BRIDGE PLAN.
- ② CONFORM TO SHEET 13 B 2(A) FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS.
- ③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

- ③ 1 1/2" EXPANSION JOINT WITH DOWEL BARS NORMAL TO R_L OR C_L
- ④ 1 1/2" EXPANSION JOINT (NO DOWELS)

STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June, 2015 DATE	/S/ Peter Kemp, P.E. PAVEMENT SUPER 442
FHWA	



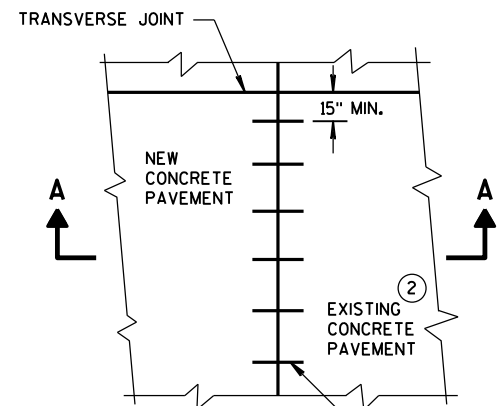
CONSTRUCTION JOINT



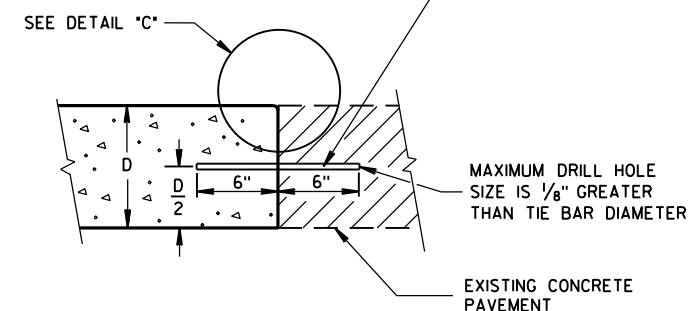
SAWED JOINT

GENERAL NOTES

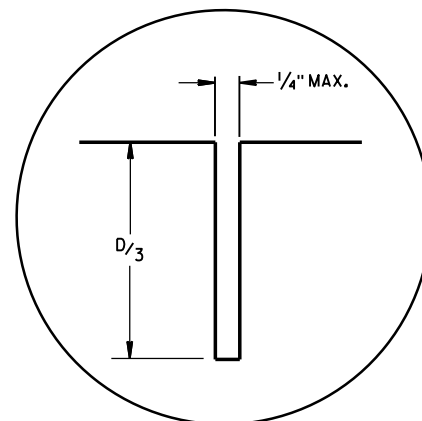
- DO NOT SEAL OR FILL LONGITUDINAL JOINTS.
- CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.
- CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.
- ① ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.
- ② PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



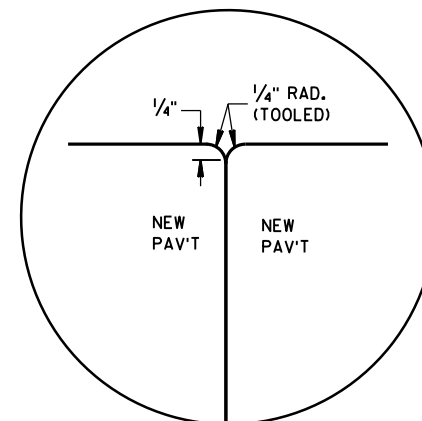
PLAN VIEW



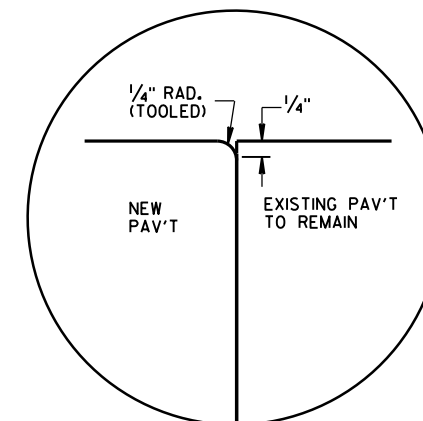
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT
TIE BARS ANCHORED
INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"

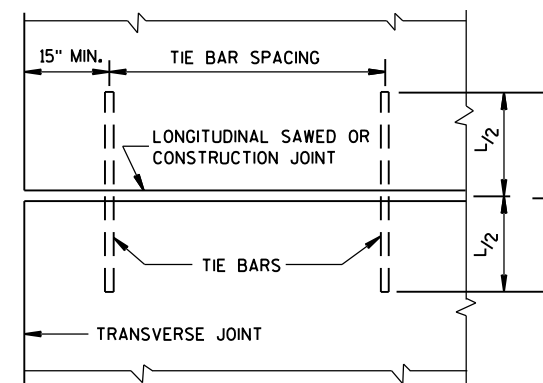


DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

- * SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)
- ** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

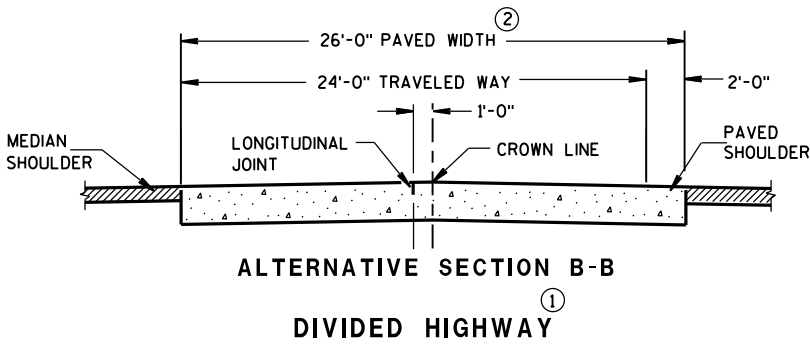
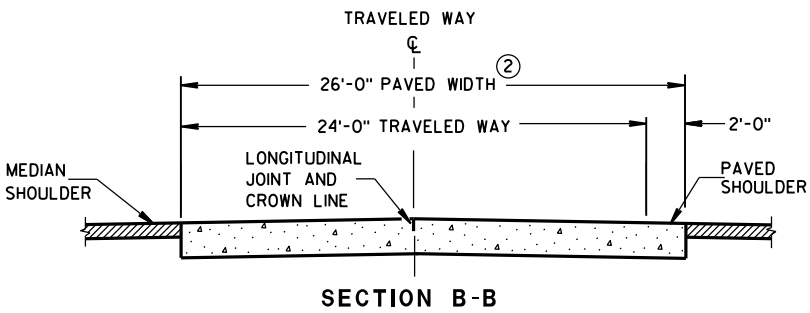
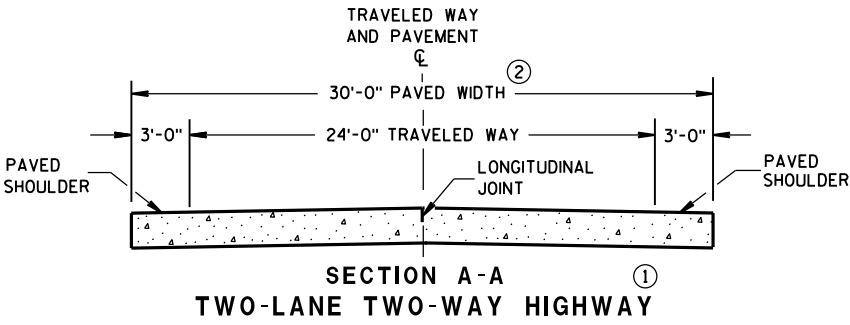


PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 /S/ Peter Kemp, P.E.
DATE PAVEMENT SUPER 443
FHWA



GENERAL NOTES

CONTRACTION JOINTS
CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

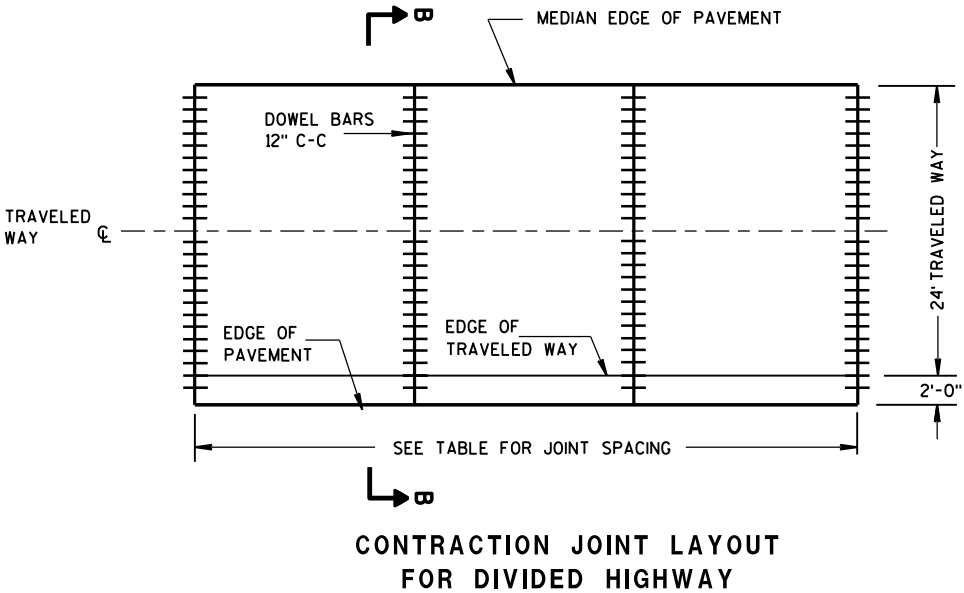
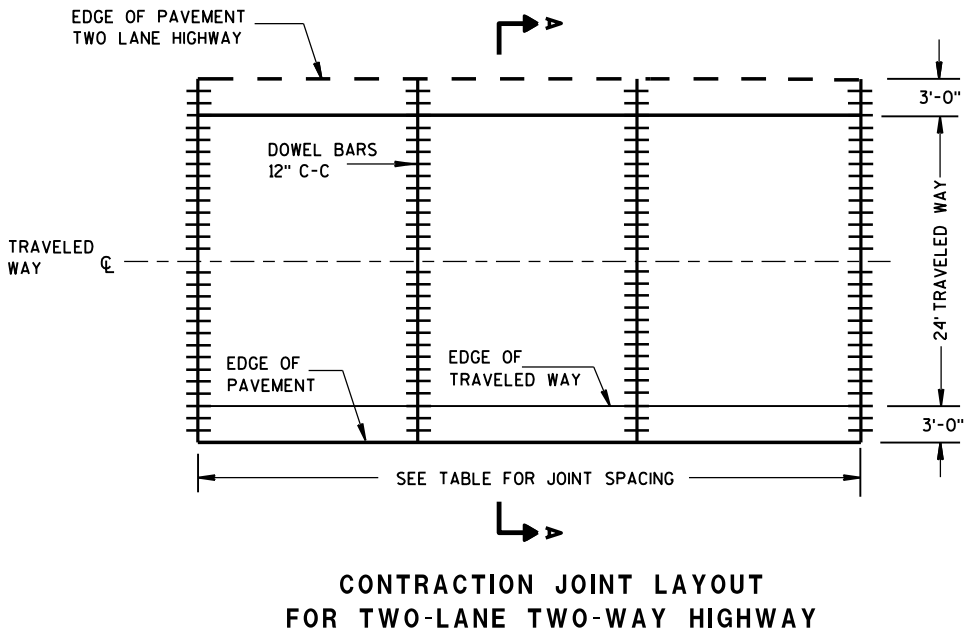
CONSTRUCTION JOINTS

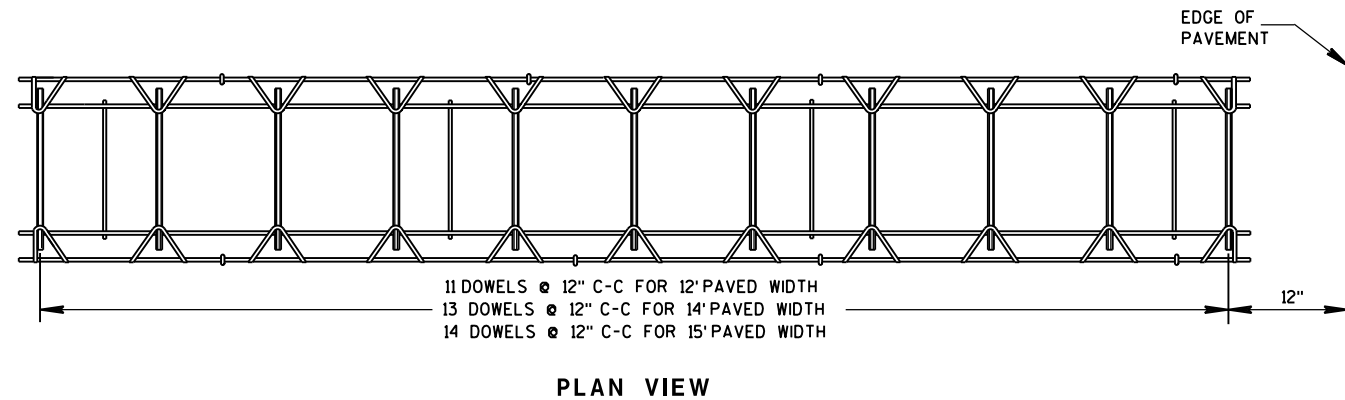
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

- ① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.
- ② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

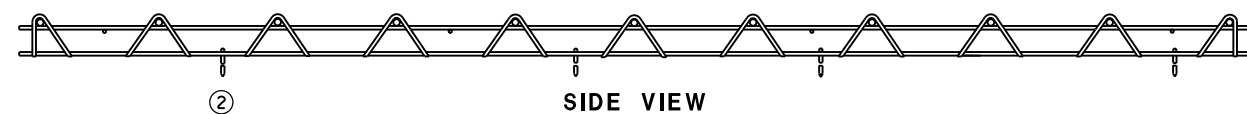
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	12'
7", 7 1/2"	1"	14'
8", 8 1/2"	1 1/4"	15'
9", 9 1/2"	1 1/4"	15'
10" & ABOVE	1 1/2"	15'



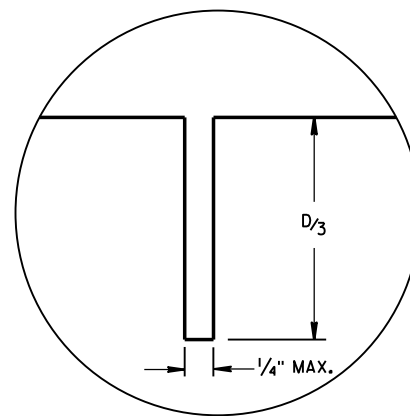


PLAN VIEW

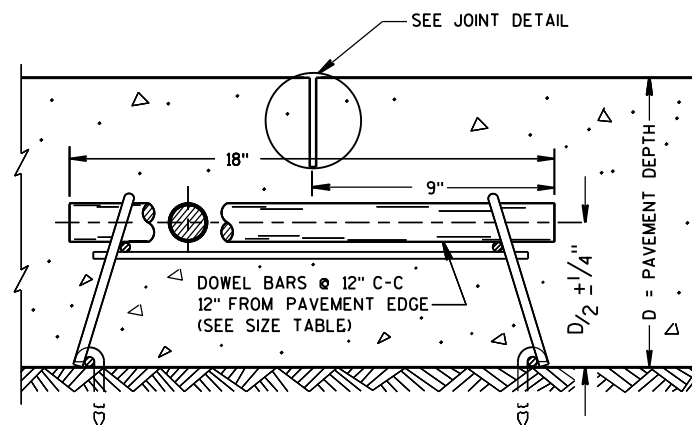


SIDE VIEW

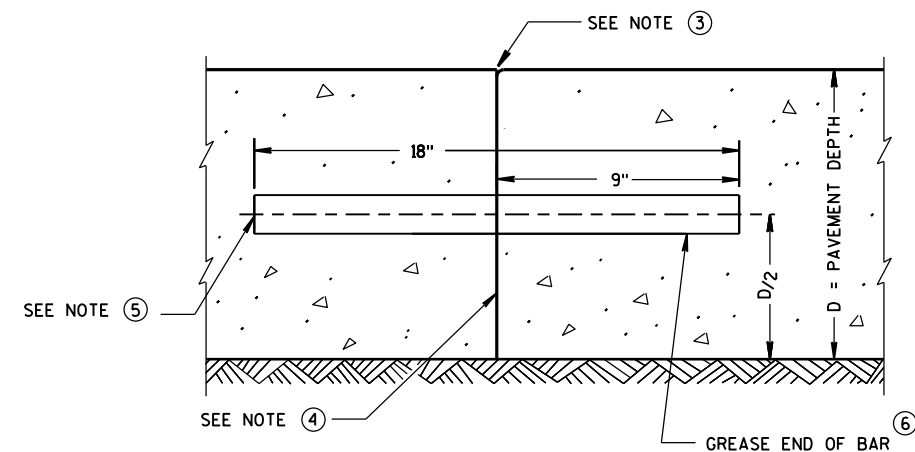
(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY^①

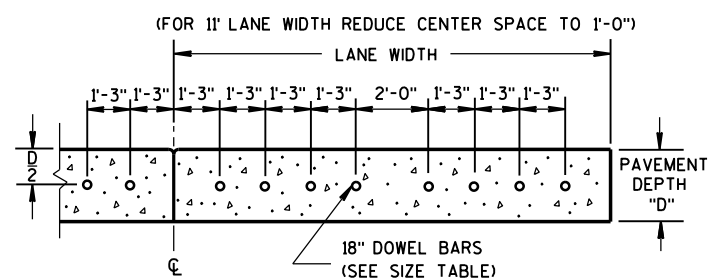
JOINT DETAIL



DOWELED CONTRACTION JOINT



TRANSVERSE CONSTRUCTION JOINT

DRILLED DOWEL BAR CONSTRUCTION JOINT^⑦

GENERAL NOTES

- ① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.
- ② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.
- ③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.
- ④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.
- ⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.
- ⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.
- ⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.

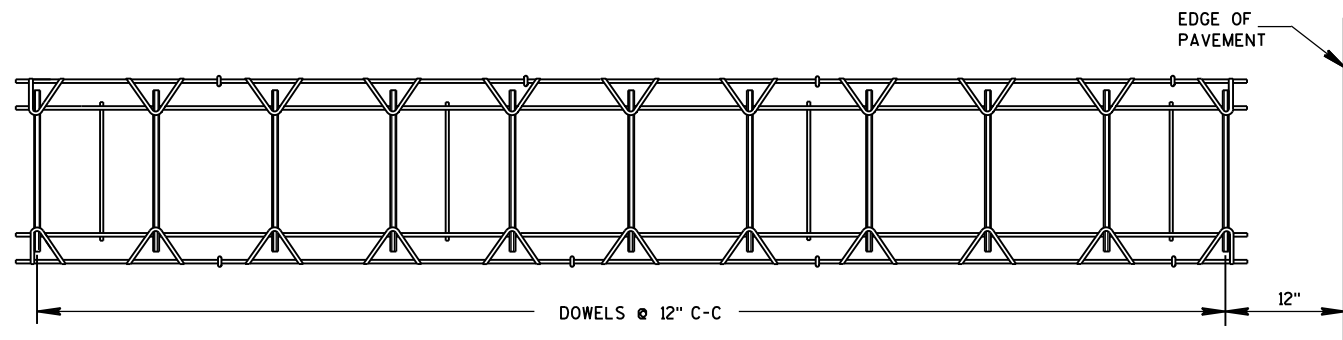
RURAL DOWELED
CONCRETE PAVEMENTSTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

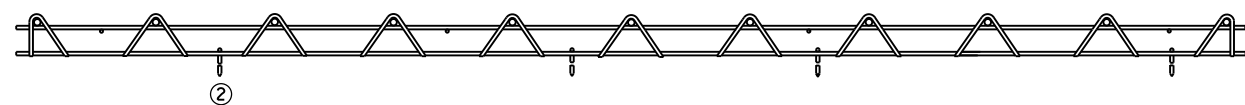
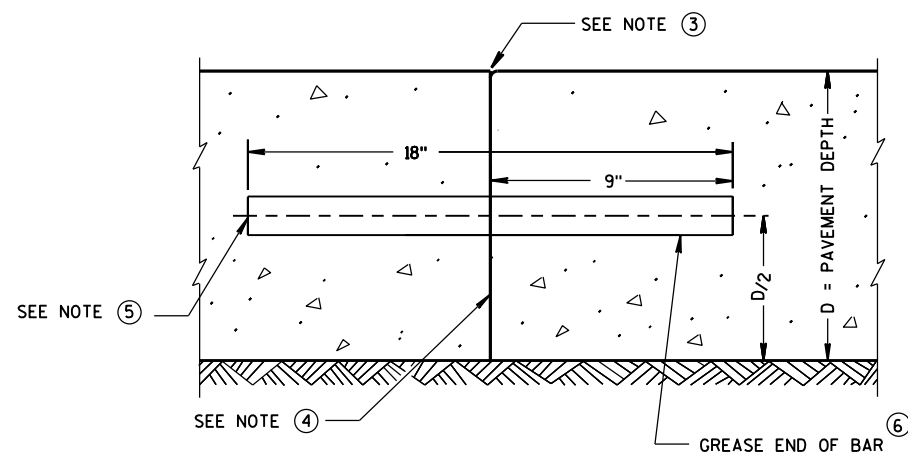
5/3/2013
DATE/S/ Deb Bischoff
PAVEMENT POLICY & DE 445

VEER

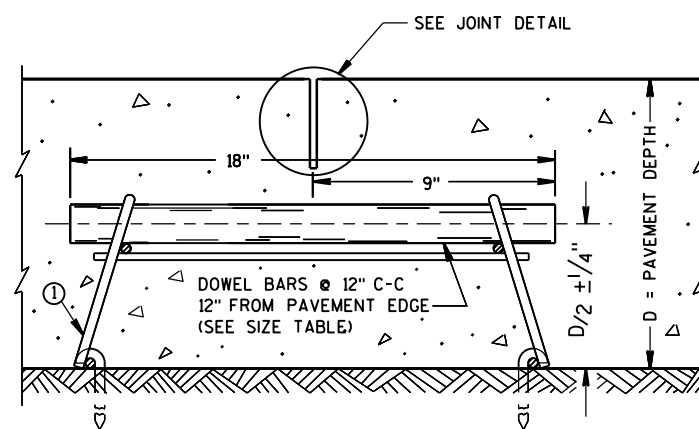
FHWA



PLAN VIEW

SIDE VIEW
CONTRACTION JOINT DOWEL ASSEMBLY (1)

TRANSVERSE CONSTRUCTION JOINT



DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE
AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	12'
7", 7 1/2"	1"	14'
8", 8 1/2"	1 1/4"	15'
9", 9 1/2"	1 1/4"	15'
10" & ABOVE	1 1/2"	15'

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

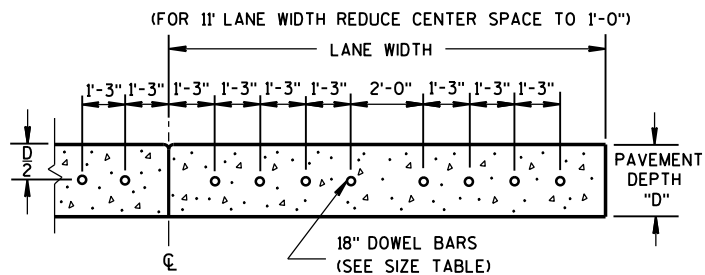
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

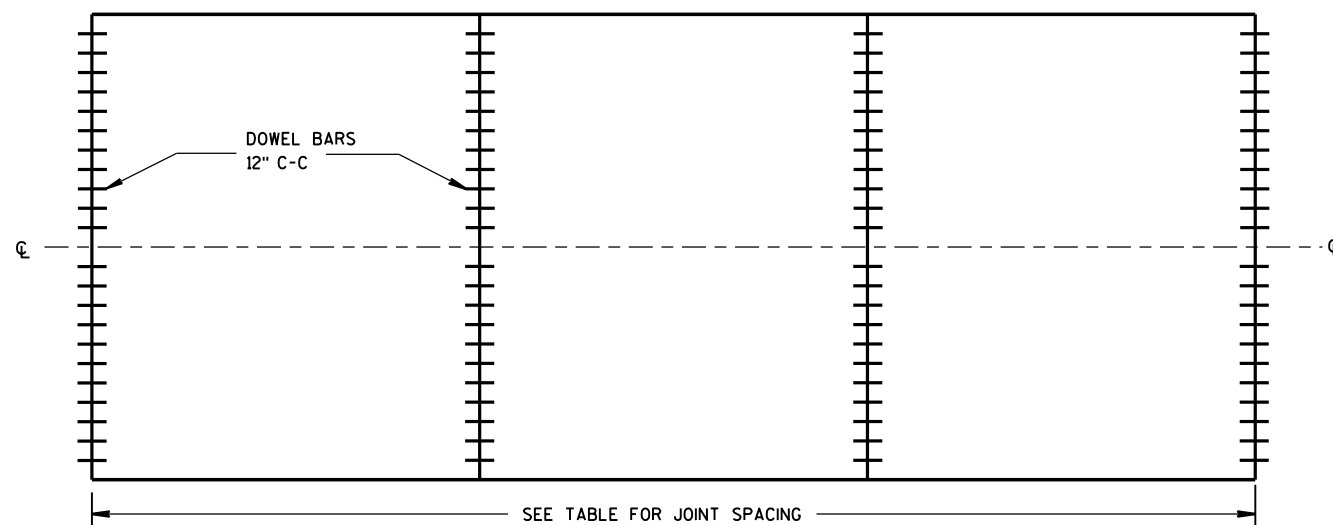
CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

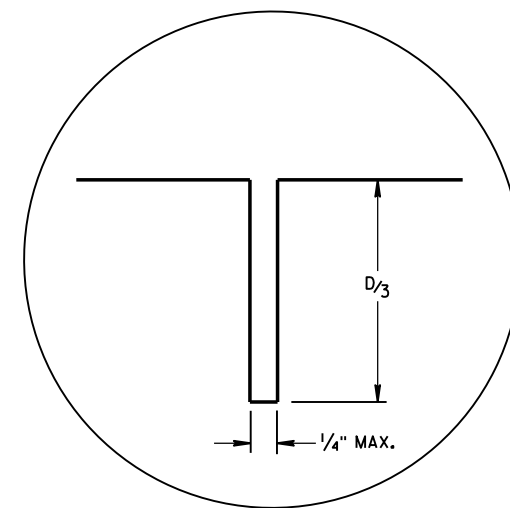
- (1) OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.
- (2) SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.
- (3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.
- (4) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.
- (5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.
- (6) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.
- (7) ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



CONTRACTION JOINT LOCATIONS



JOINT DETAIL

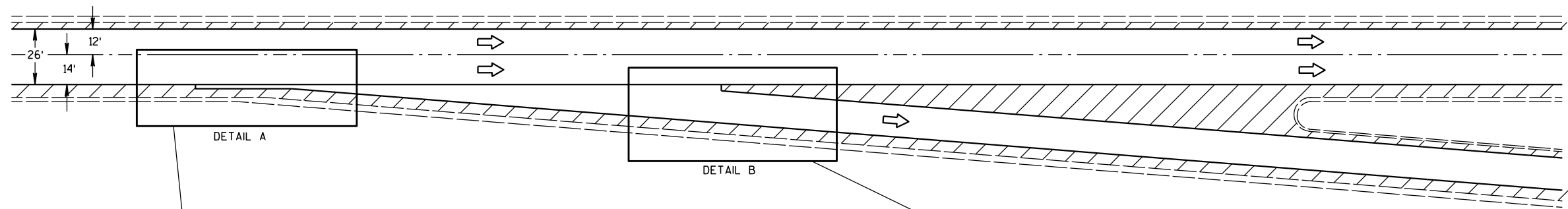
URBAN DOWELED
CONCRETE PAVEMENTSTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

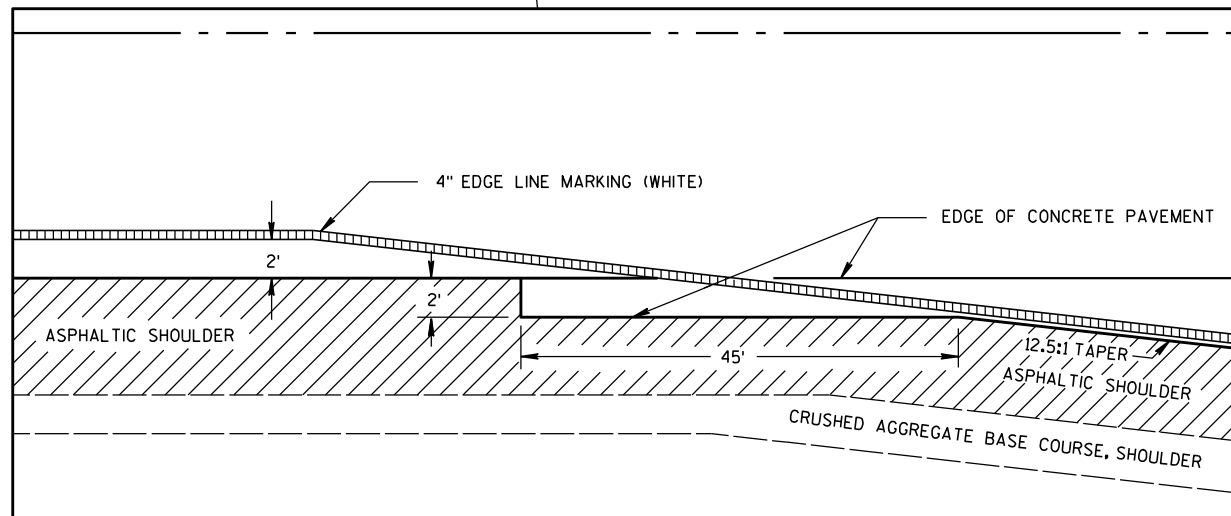
5/3/2013
DATE/S/ Deb Bischoff
PAVEMENT POLICY & DE 446

JEER

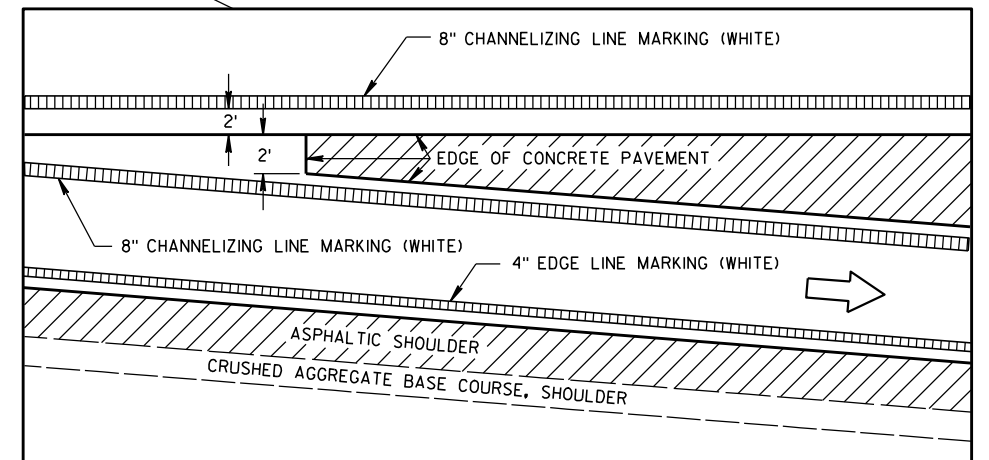
FHWA



EXIT RAMP DETAIL



DETAIL A



DETAIL B

CONCRETE JOINT PAVING DETAILS

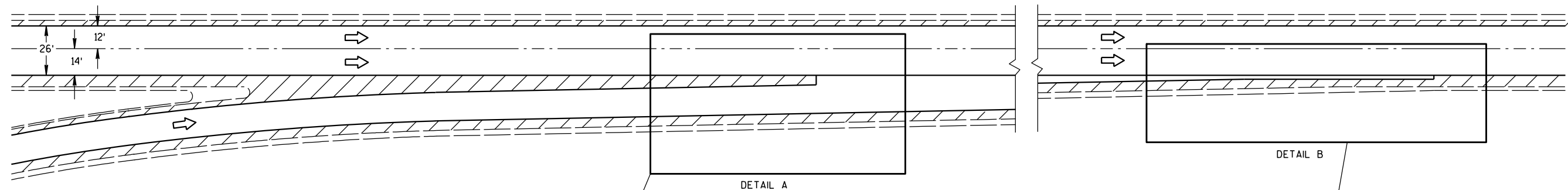
GENERAL NOTES

PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

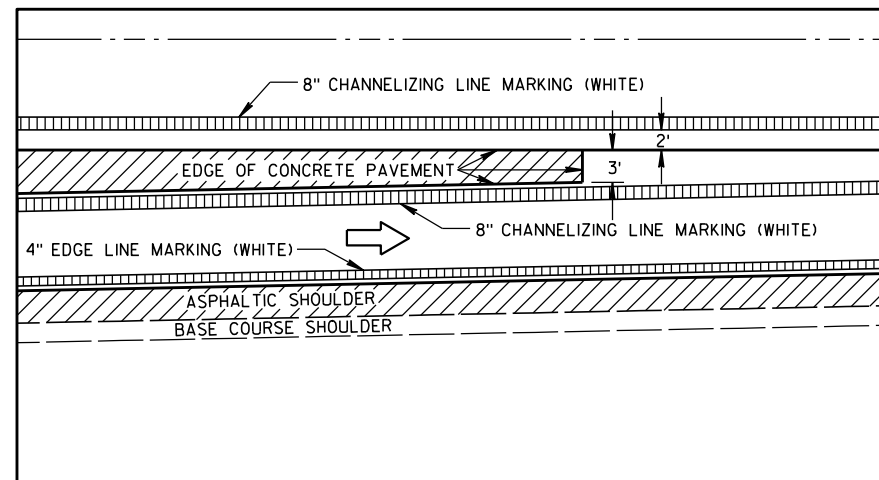
SEE SDD 13 A 4-4c OR SDD 13 A 5-1b FOR RAMP AND GORE RUMBLE STRIP LOCATION.

CONCRETE JOINT DETAIL FOR
EXIT RAMP TERMINI

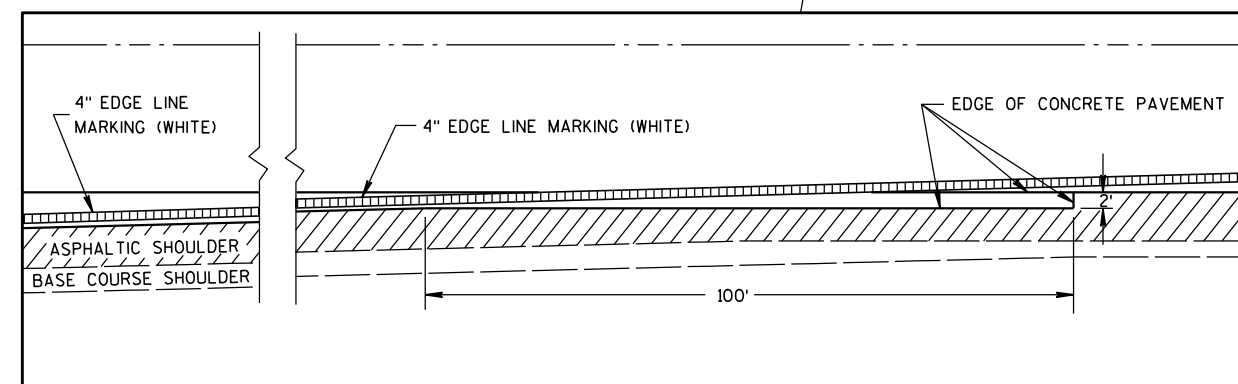
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



ENTRANCE RAMP DETAIL



DETAIL A



DETAIL B

CONCRETE JOINT PAVING DETAILS

GENERAL NOTES

PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

SEE SDD 13 A 4-4c OR SDD 13 A 5-1b FOR RAMP AND GORE RUMBLE STRIP LOCATION.

**CONCRETE JOINT DETAIL FOR
ENTRANCE RAMP TERMINI**

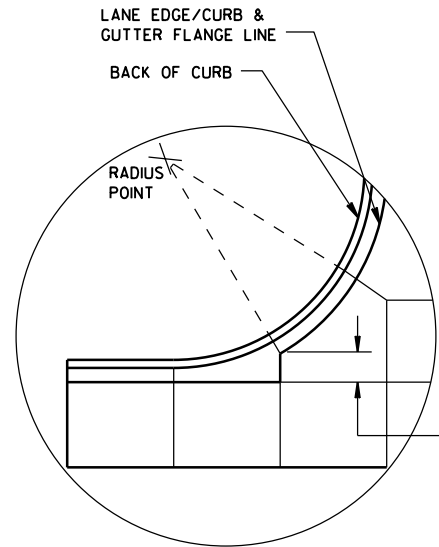
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

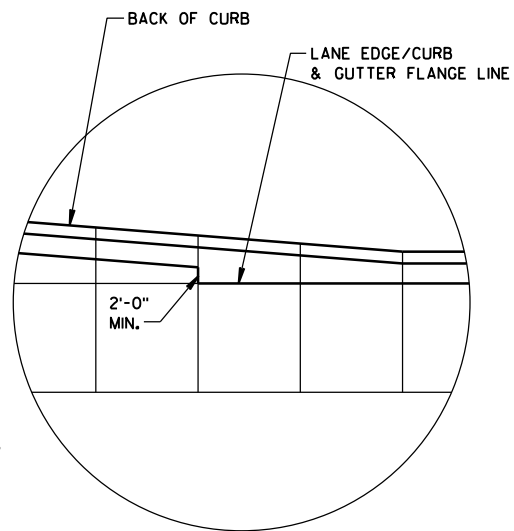
5/27/98
DATE

/S/ Rory L. Rhin...
CHIEF ROADWAY DEVELOP 448 ENGINEER

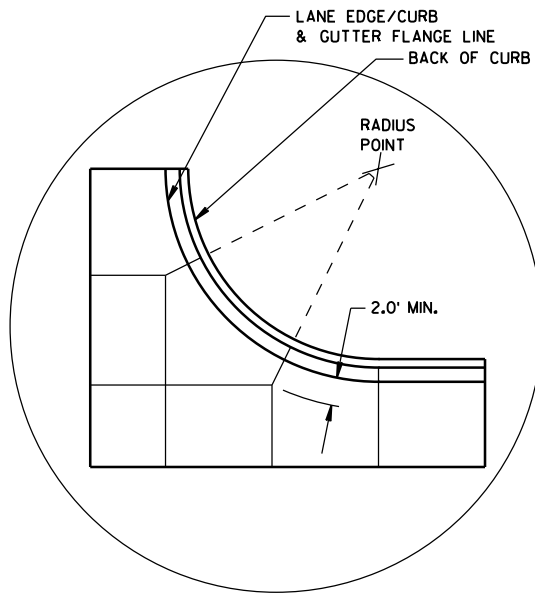
FHWA



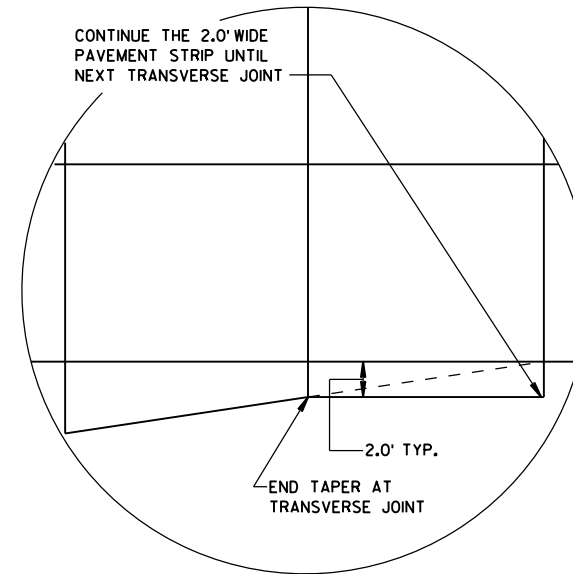
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

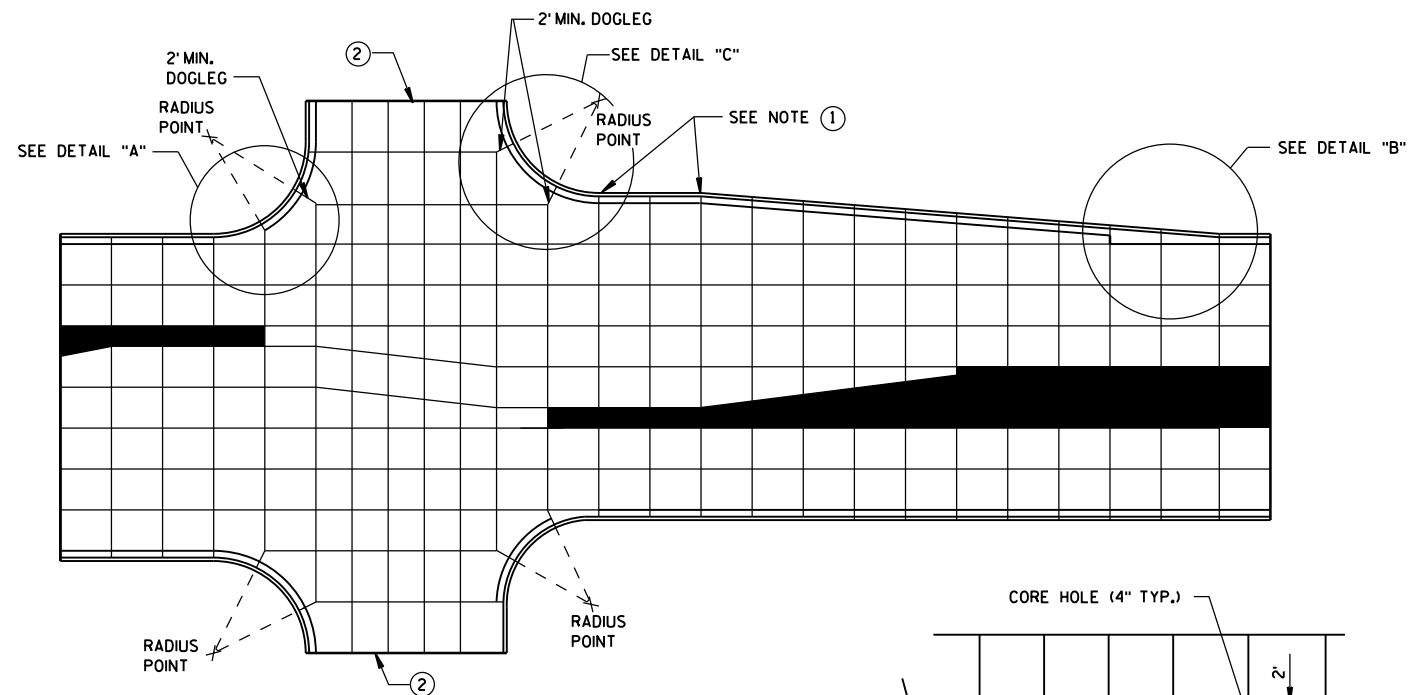
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

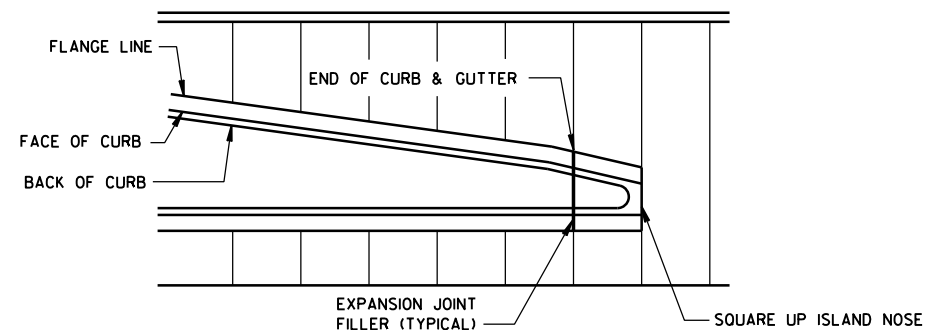
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

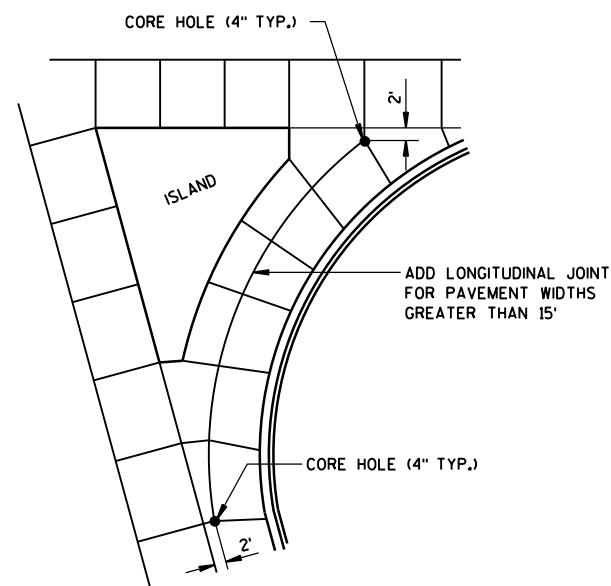
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



STANDARD INTERSECTION



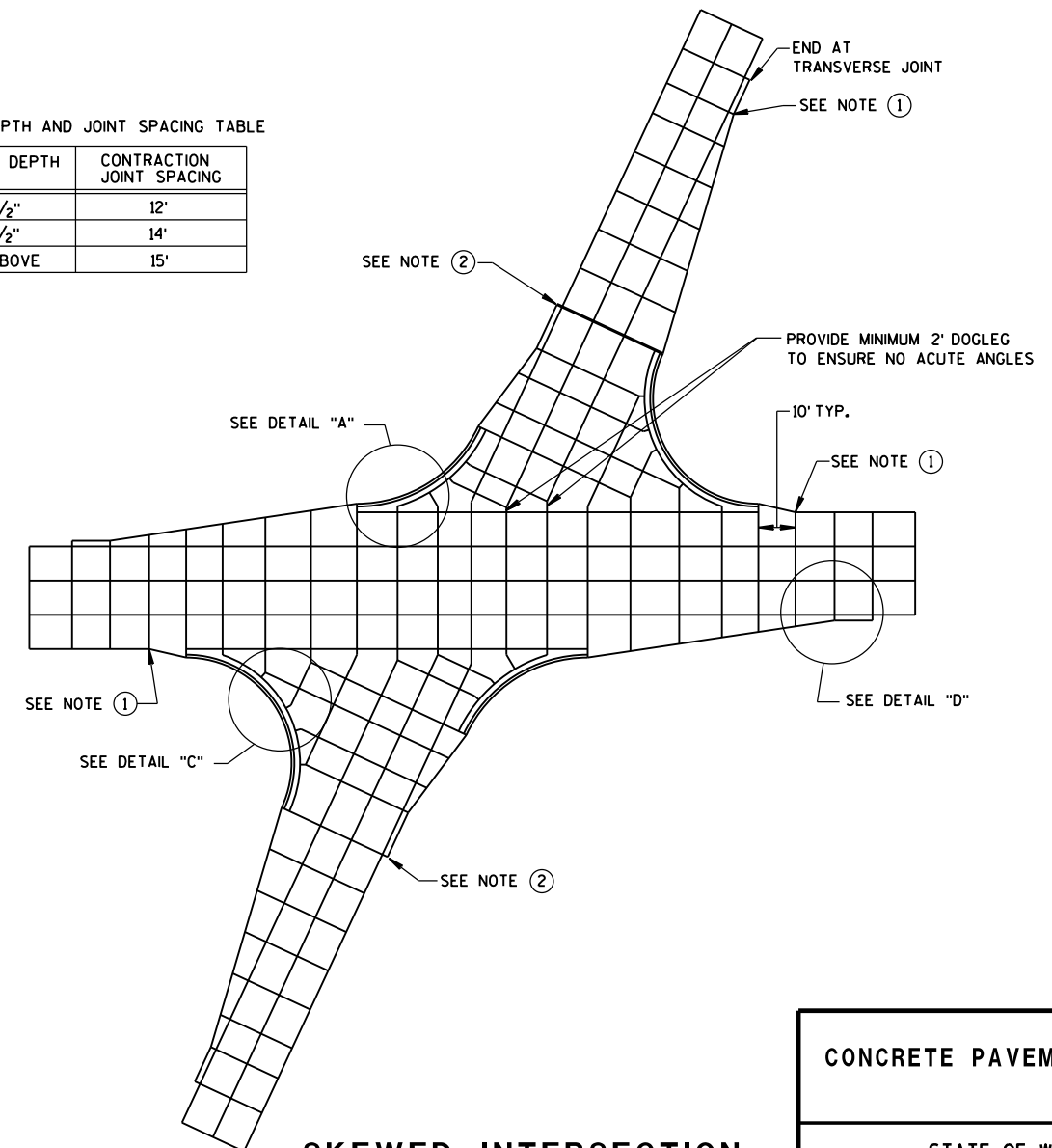
APPROACH TO MEDIAN



LARGE RIGHT TURN

PAVEMENT DEPTH AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 1/2"	12'
7", 7 1/2"	14'
8" & ABOVE	15'



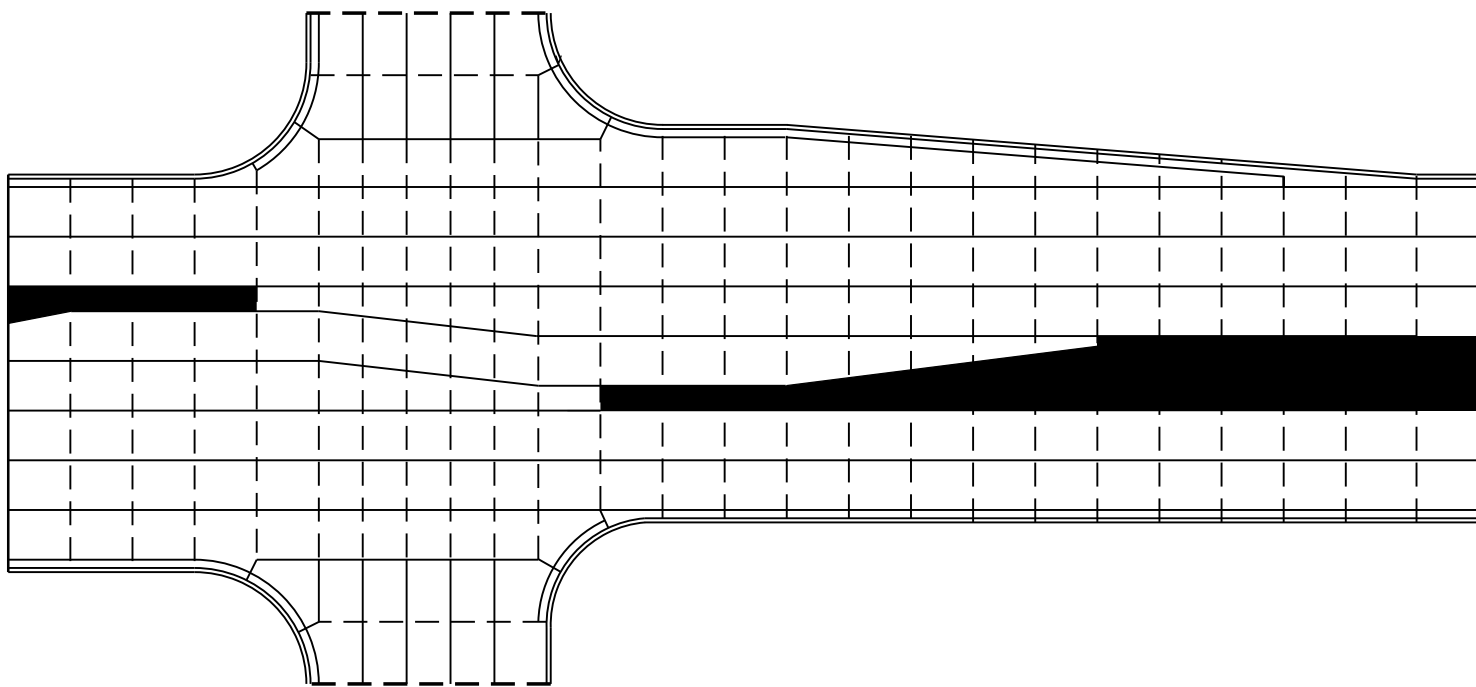
SKewed INTERSECTION

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

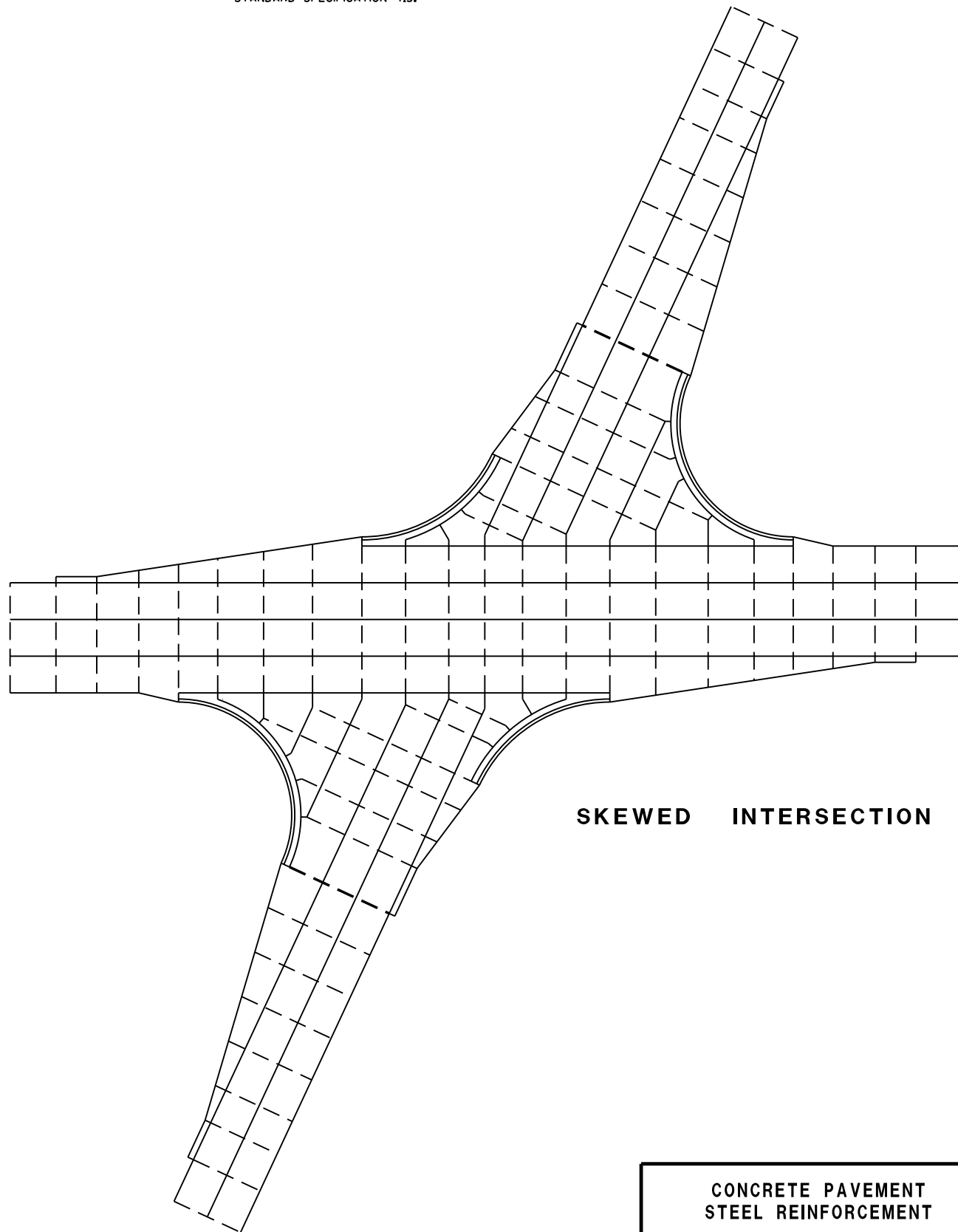
- POTENTIAL DOWELED EXPANSION JOINT
- - - DOWELED JOINT
- TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.

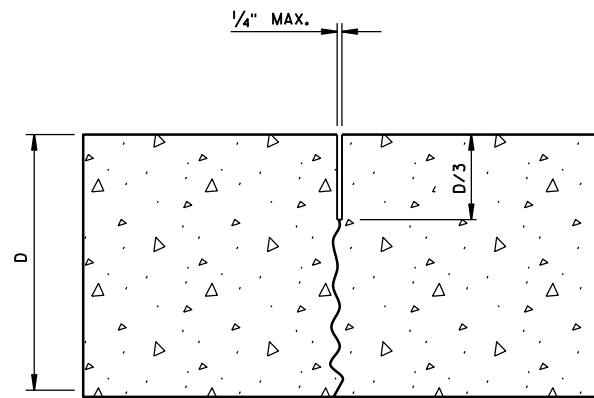


SKewed INTERSECTION

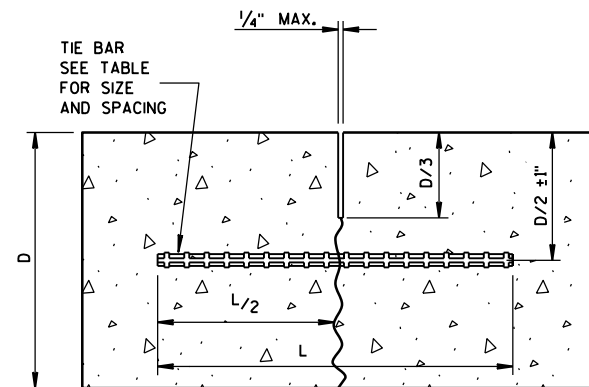
**CONCRETE PAVEMENT
STEEL REINFORCEMENT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

450

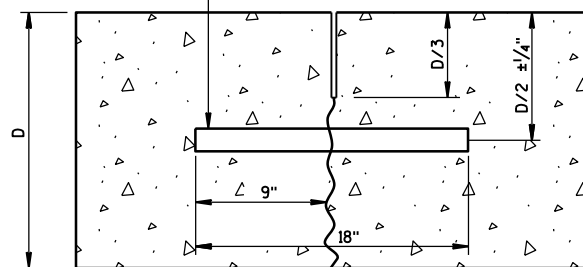


UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

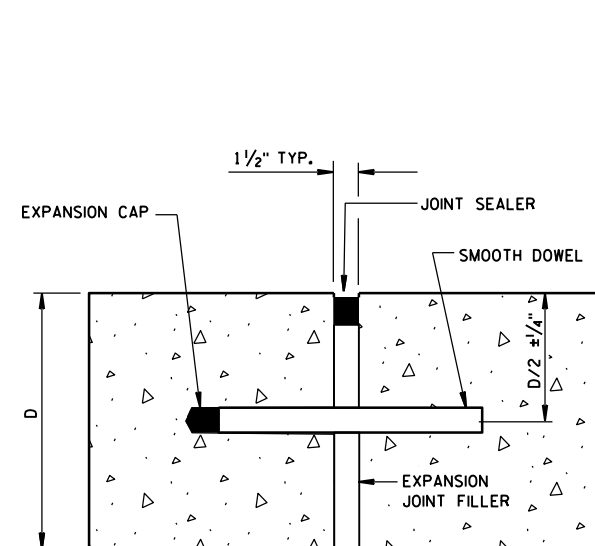
DOWEL BARS AT 12" C-C
12" FROM PAVEMENT EDGE



DOWELED-TRANSVERSE

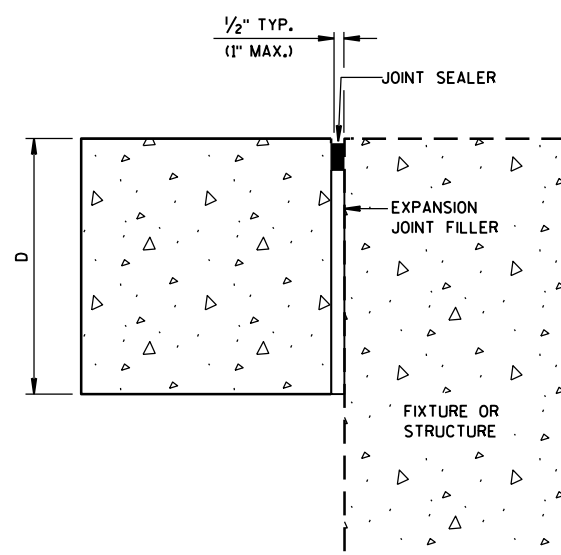
CONTRACTION JOINTS

SEE NOTE ②



DOWELED-TRANSVERSE

SEE NOTE ①



UNTIED-LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

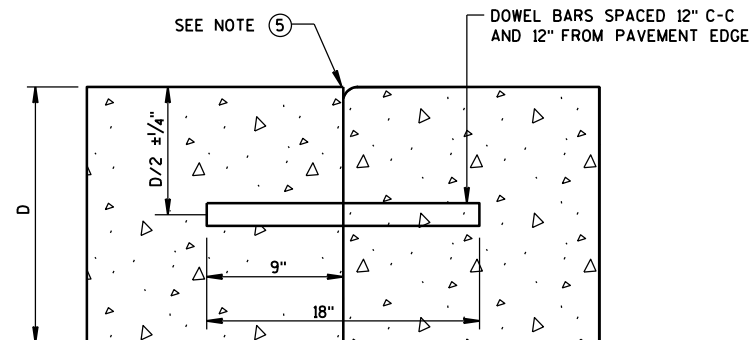
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

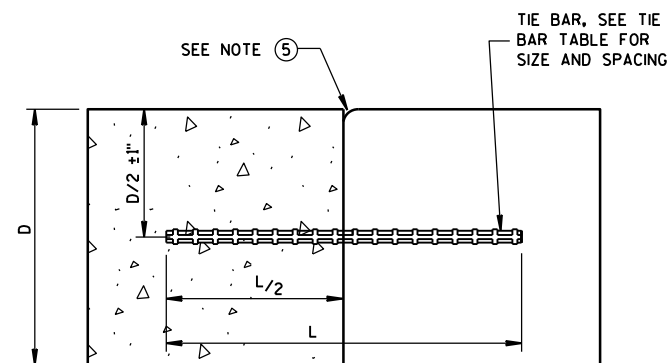
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

- ① USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
- ② SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
- ③ LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
- ④ CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
- ⑤ IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.
- ⑥ ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

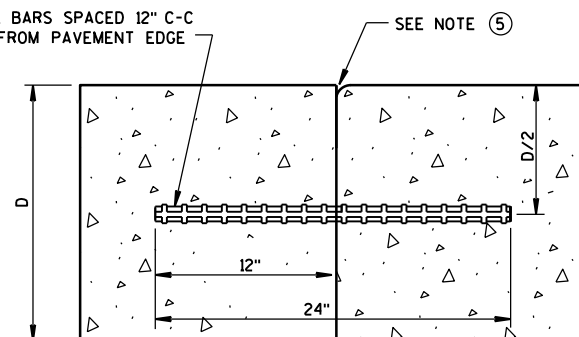
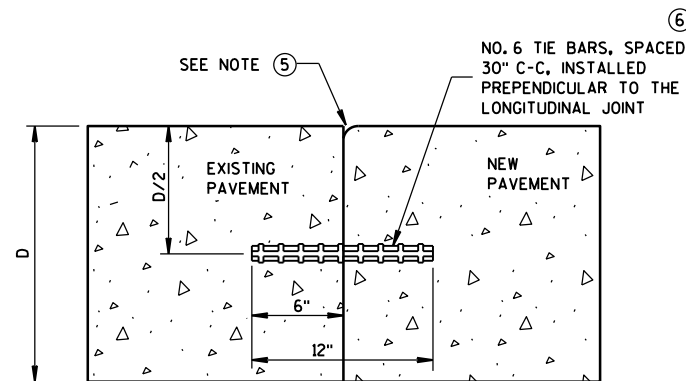


DOWELED TRANSVERSE ③



TIED LONGITUDINAL

NO. 6 TIE BARS SPACED 12" C-C
AND 12" FROM PAVEMENT EDGE

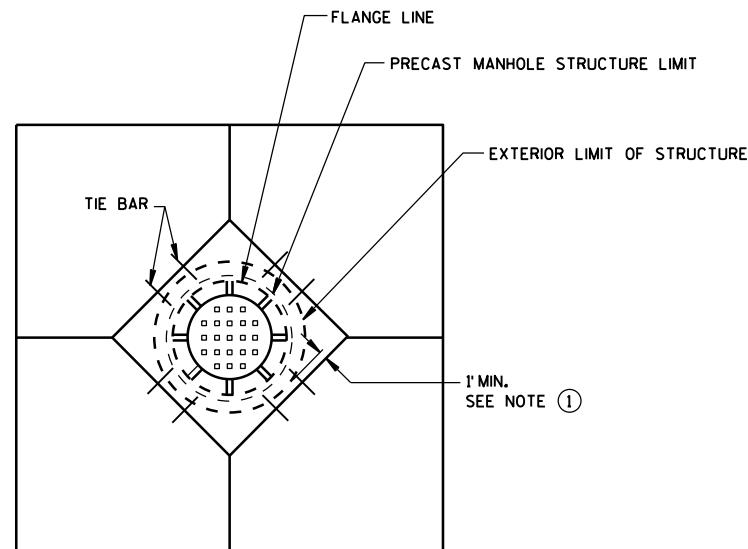
TIED TRANSVERSE ③
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)

TIED LONGITUDINAL TO EXISTING

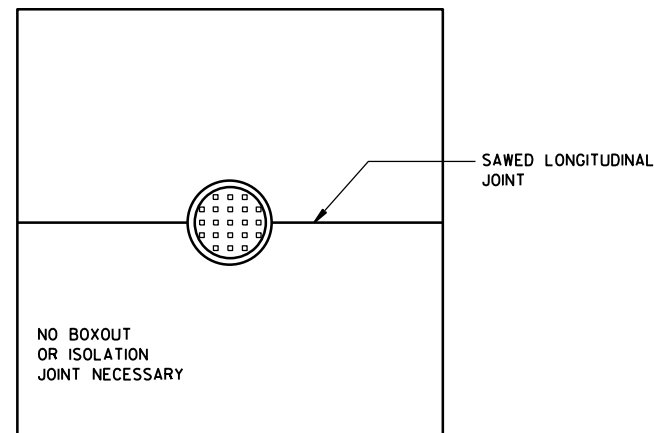
CONSTRUCTION JOINTS

SEE NOTE ④

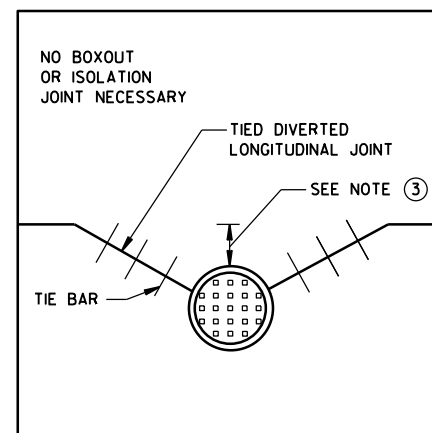
CONCRETE PAVEMENT
JOINT TYPESSTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 451



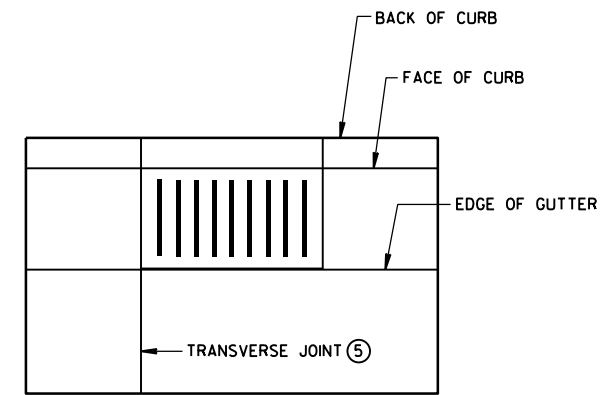
**DIAGONAL MANHOLE BOXOUT
FOR CONSTRUCTION JOINTS**



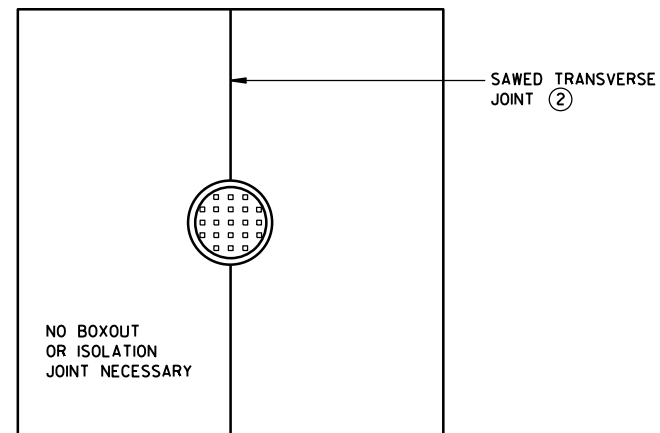
**MANHOLE WITH
LONGITUDINAL JOINT**



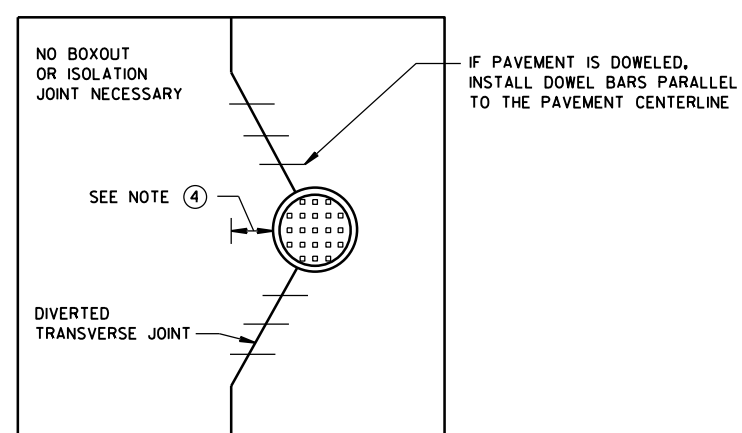
**MANHOLE WITH DIVERTED
LONGITUDINAL CONTRACTION JOINT**



**INLET WITH
TRANSVERSE JOINT**



**MANHOLE WITH
TRANSVERSE JOINT**



**MANHOLE WITH DIVERTED
TRANSVERSE CONTRACTION JOINT**

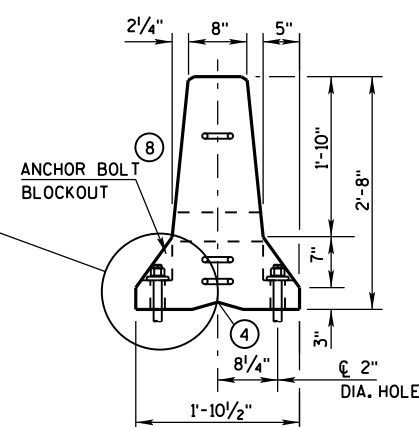
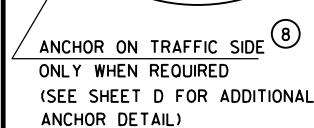
GENERAL NOTES

- ① USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
- ② ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
- ③ IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.
- ④ IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.
- ⑤ ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

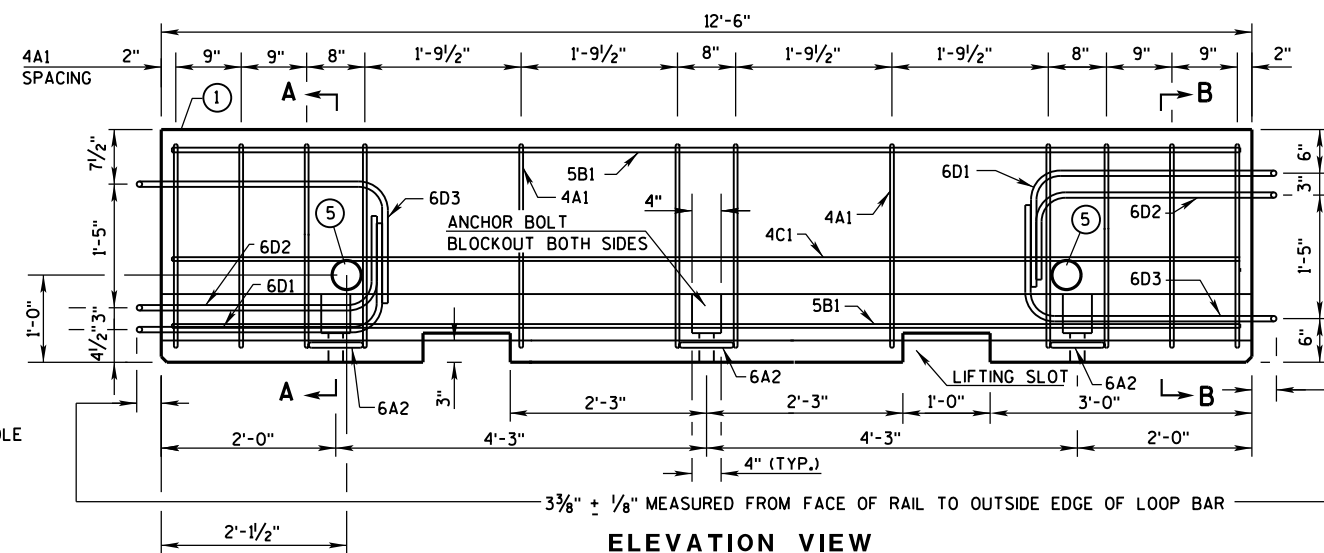
**CONCRETE PAVEMENT
JOINTING AT UTILITY FIXTURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

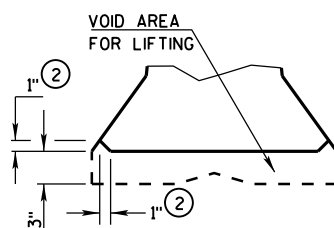
APPROVED
June, 2015 /S/ Peter Kemp, P.E.
DATE PAVEMENT SUPER 452
FHWA



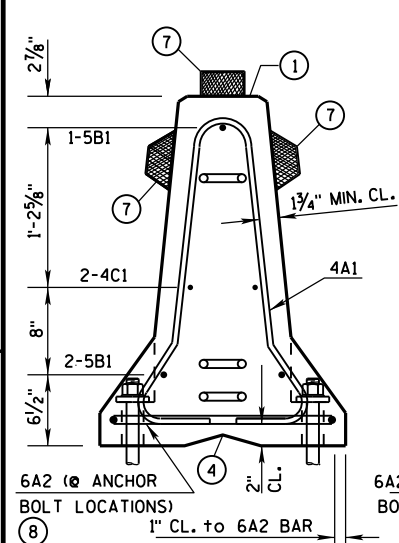
END VIEW



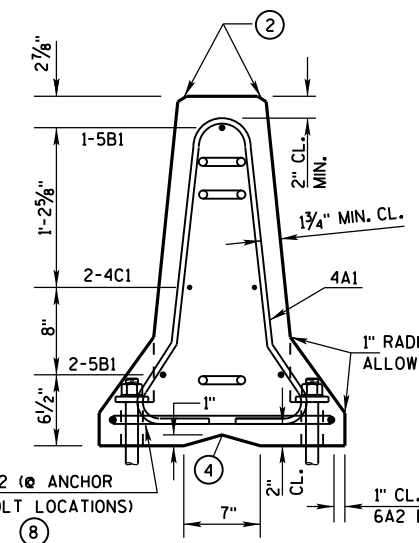
ELEVATION VIEW



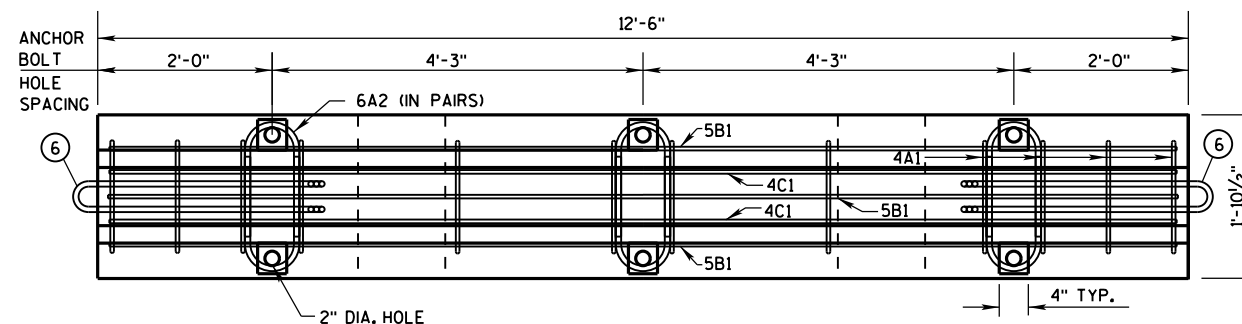
DETAIL "B"
LIFTING SLOT DETAIL



SECTION A-A
(STIRRUP PLACEMENT)

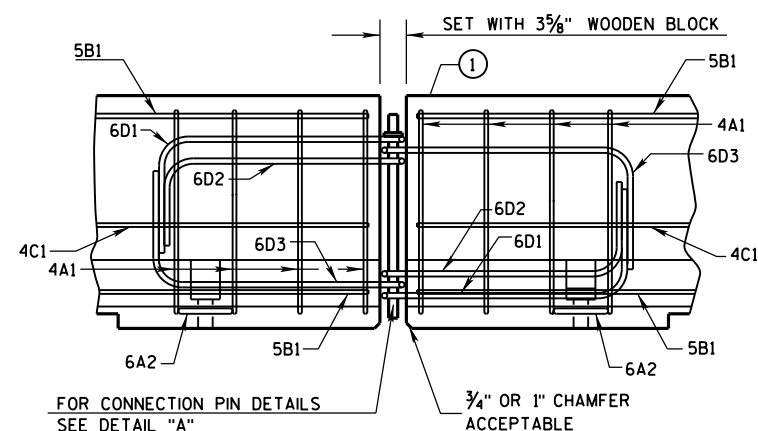


SECTION B-B
(STIRRUP PLACEMENT)

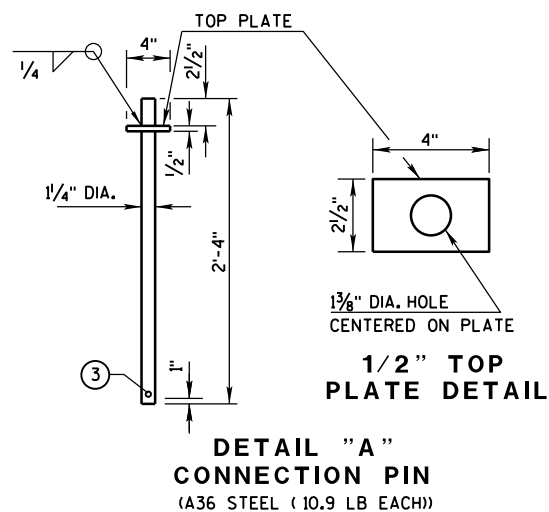


PLAN VIEW

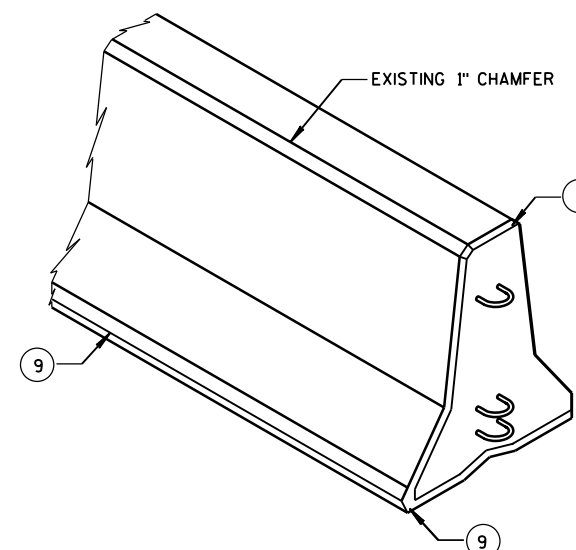
DETAILS OF BARRIER SECTION



DETAILS OF BARRIER CONNECTION



DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-14(d) THRU 14B7-14(h).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE $\frac{3}{4}$ " SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3- $\frac{1}{2}$ " PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN $\frac{1}{8}$ " OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

INSTALL MECHANICAL OR ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS.
PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

- ① MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
 - a. TYPE: WICBTP
 - b. MANUFACTURER
 - c. DATE MANUFACTURED (MONTH AND YEAR)
- ② 1" CHAMFER TO PREVENT SPALLING.
- ③ A $\frac{3}{8}$ " HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..
- ④ "V" NOTCH IS OPTIONAL.
- ⑤ THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).
- ⑥ NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.
- ⑦ USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.
- ⑧ SEE SHEET D FOR ANCHORING CRITERIA.
- ⑨ 1" CHAMFER OPTIONAL.

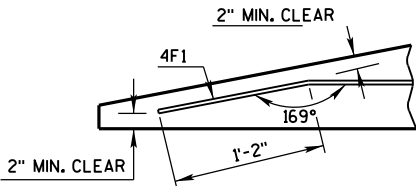
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION⁴⁵³

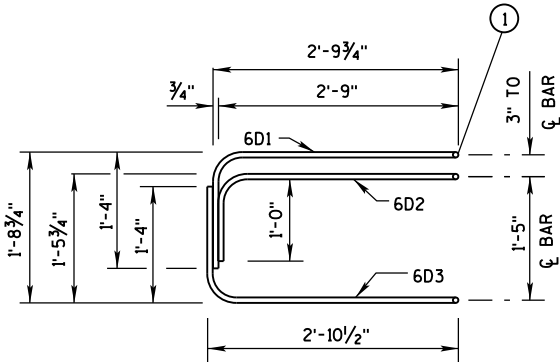
BARRIER TAPER SECTION
BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

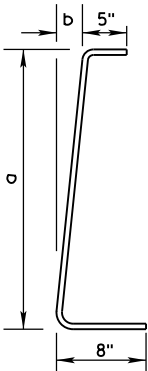
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



DETAIL "C"
BENT BAR DETAIL



ELEVATION
LOOP BAR ASSEMBLY



4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

BAR	a	b
V1	10"	1"
V2	1'-1"	1 1/4"
V3	1'-5"	1 5/8"
V4	1'-8"	1 7/8"
V5	2'-0 1/2"	2 3/8"
V6	2'-3"	2 3/4"

TAPER BARRIER SECTION

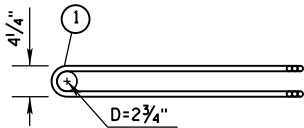
GENERAL NOTES

① NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

BARRIER SECTION
BILL OF MATERIALS

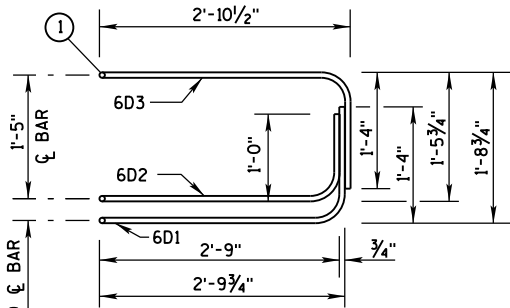
(PER 12'-6" BARRIER SECTION)

BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"

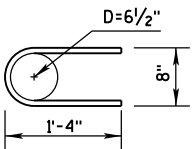


PLAN VIEW
LOOP BAR ASSEMBLY

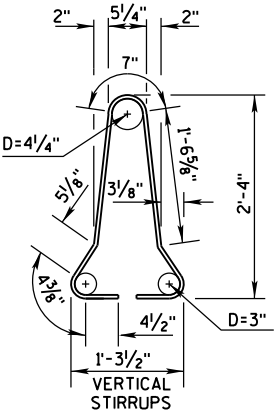
(MARKED END SHOWN, INVERT FOR OTHER END)



ELEVATION VIEW



6A2

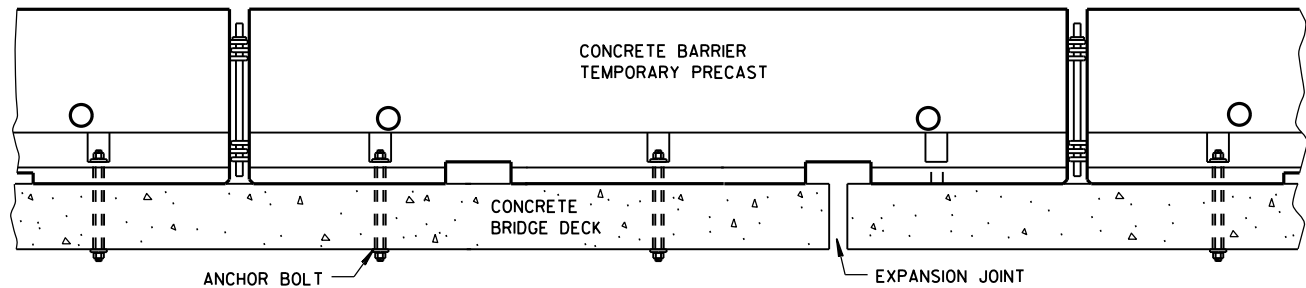
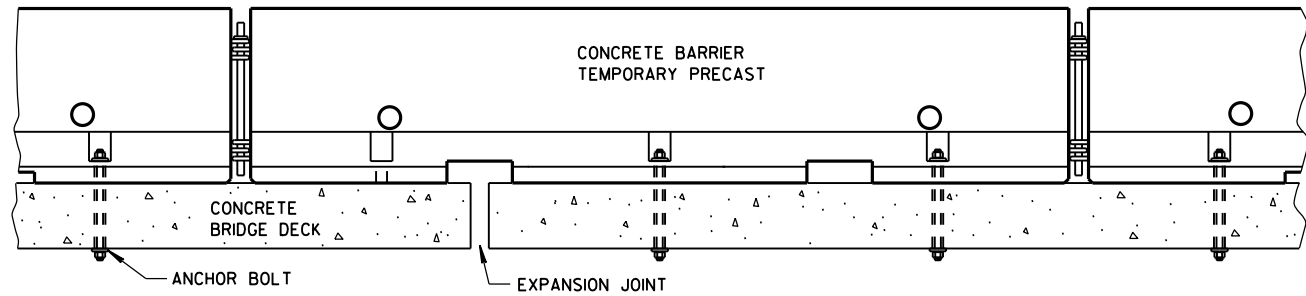


4A1

BARRIER SECTION

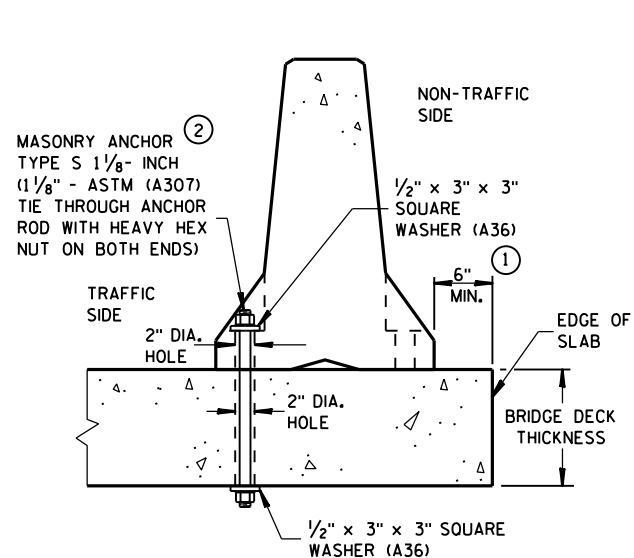
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



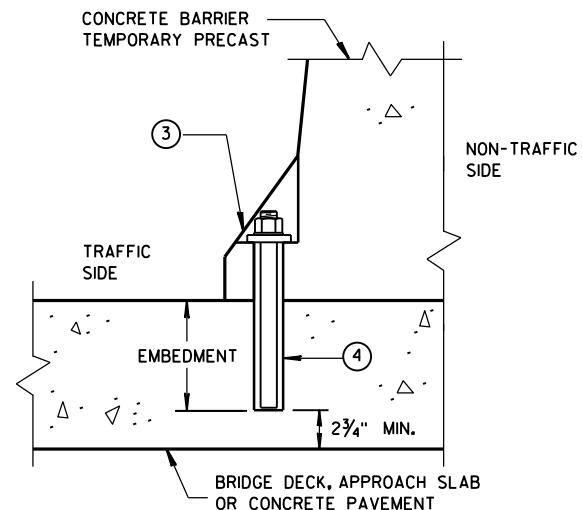
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)



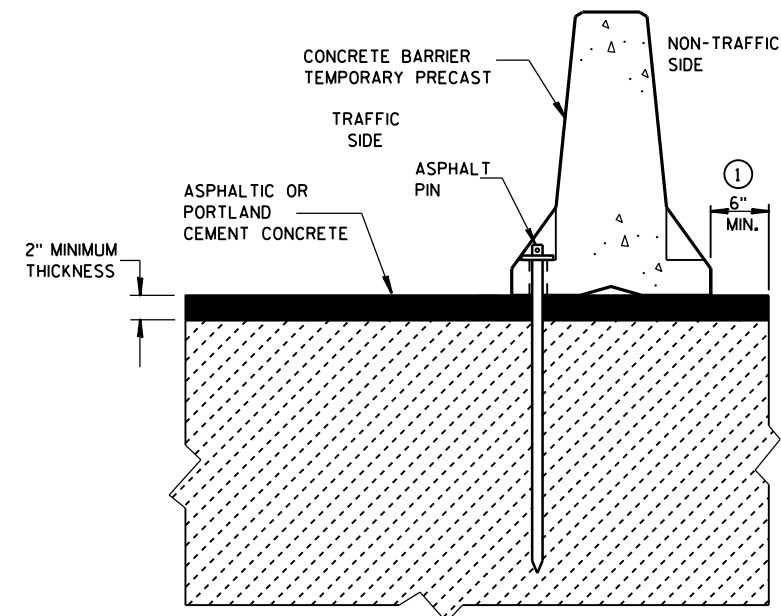
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



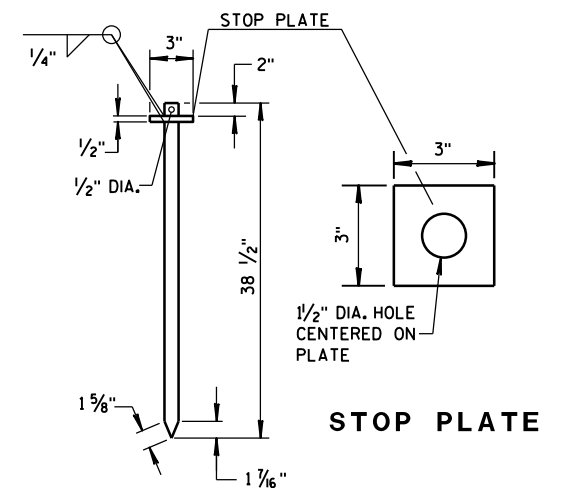
REMOVABLE ADHESIVE BONDED ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

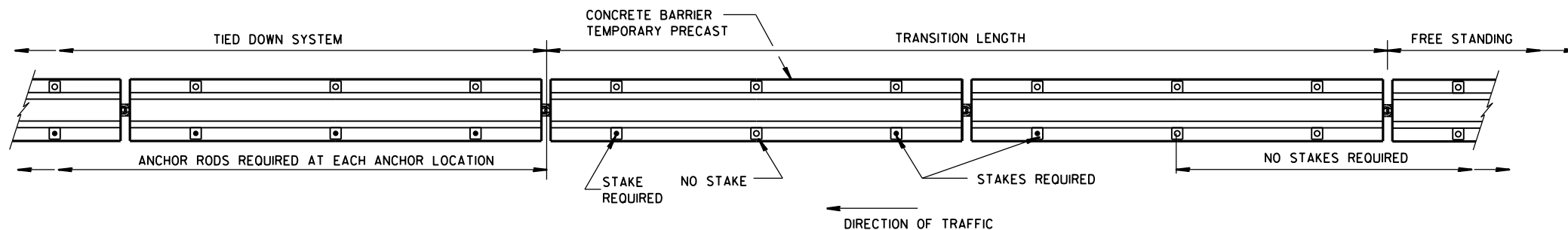


STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



ASPHALT PIN (ASTM A36 STEEL)



PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

GENERAL NOTES

- CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 45 MPH OR GREATER, OR

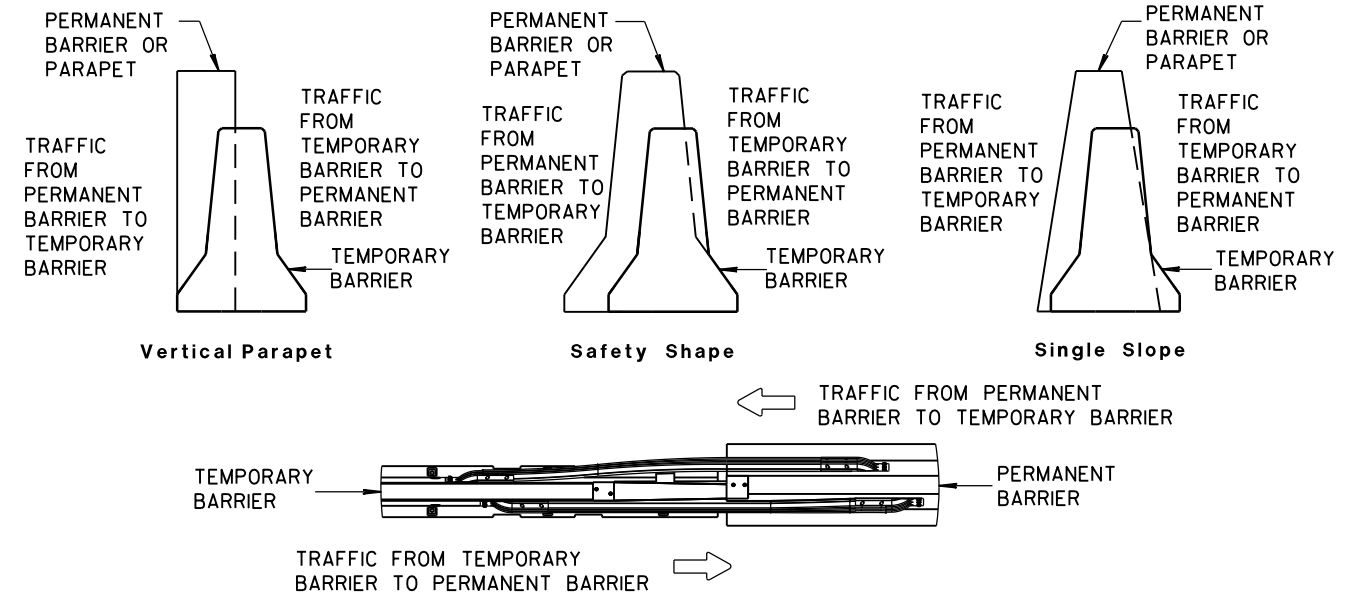
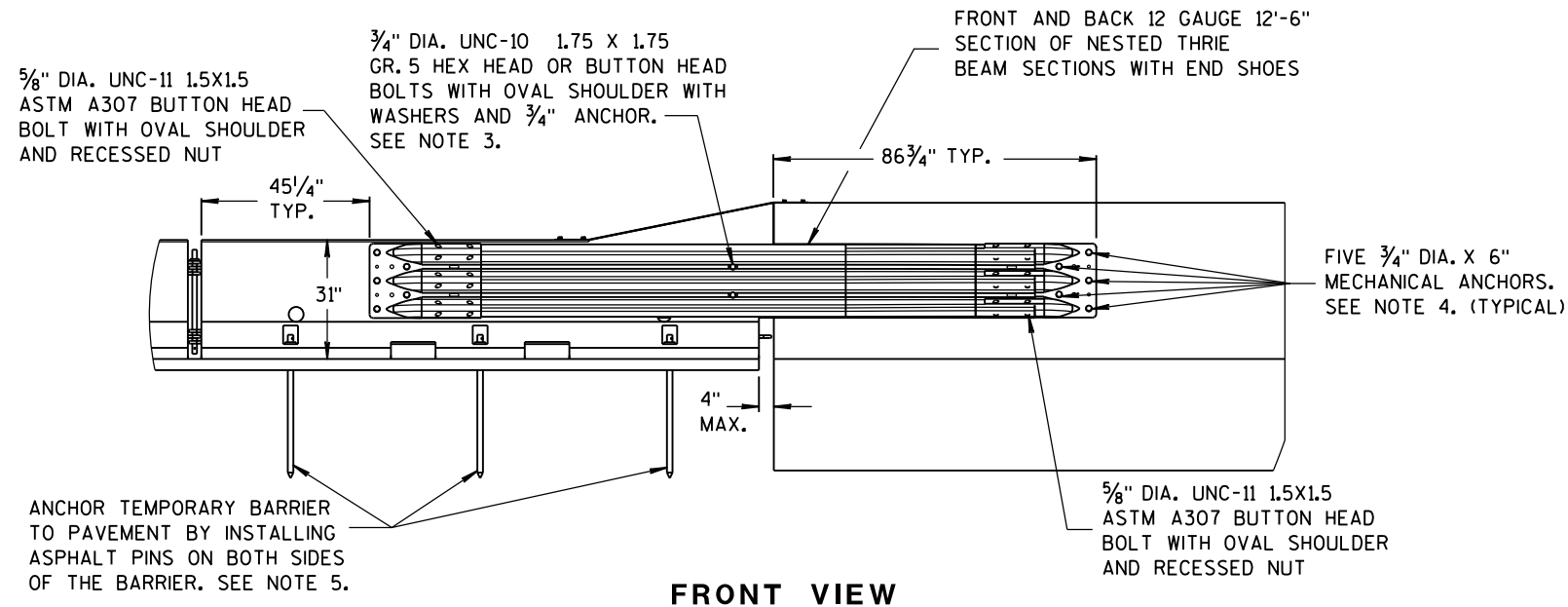
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 40 MPH OR LESS.
- ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED ANCHOR BOLT INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE S 1 1/8-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.

UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALL ANCHOR BOLTS AND COMPLETELY FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CONCRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERCIAL GROUT OR MATERIAL IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.
- 1/8" DIAMETER A307 THREADED ROD, 1/2" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL, ASTM A563A HEAVY HEX NUT.
- ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5/4" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

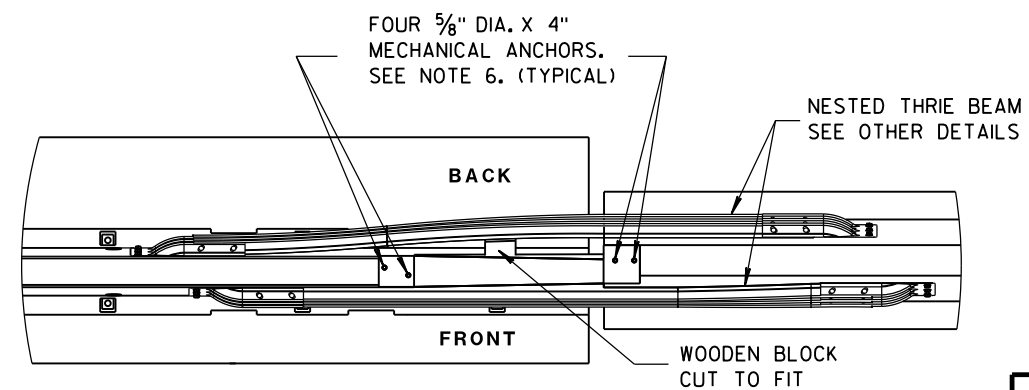
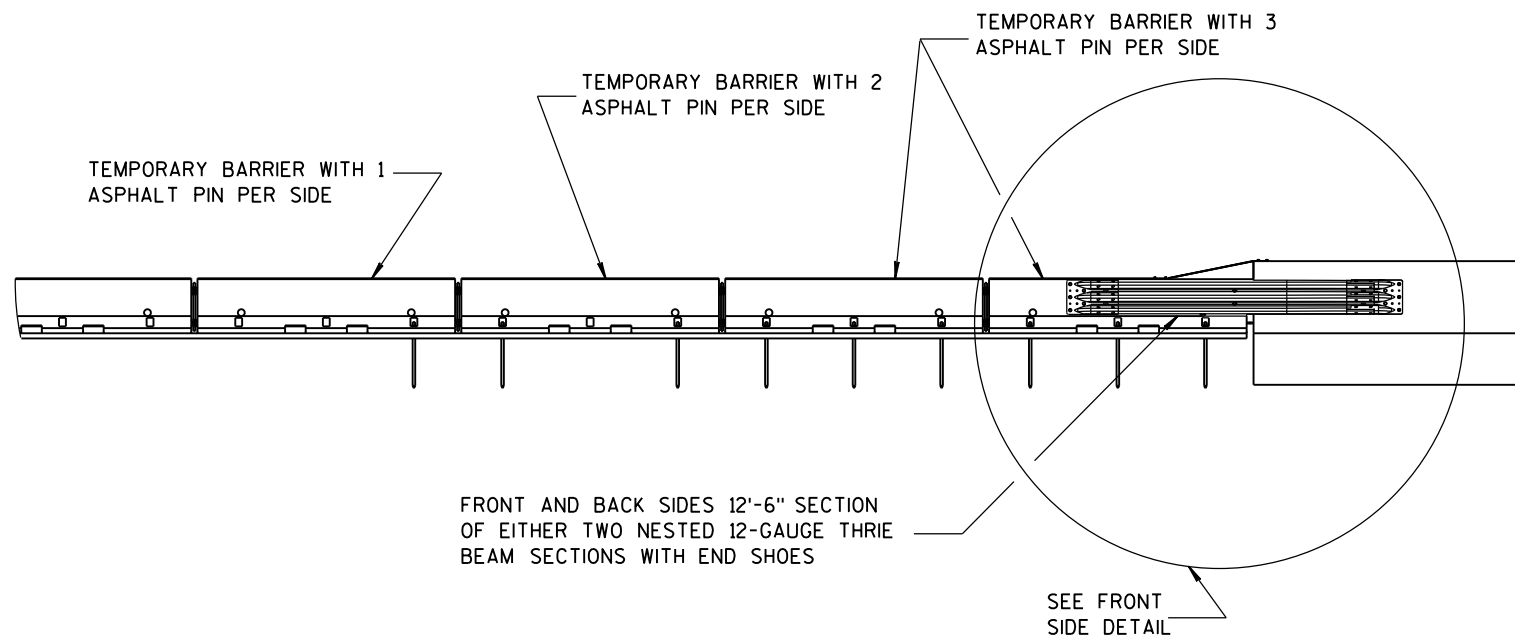
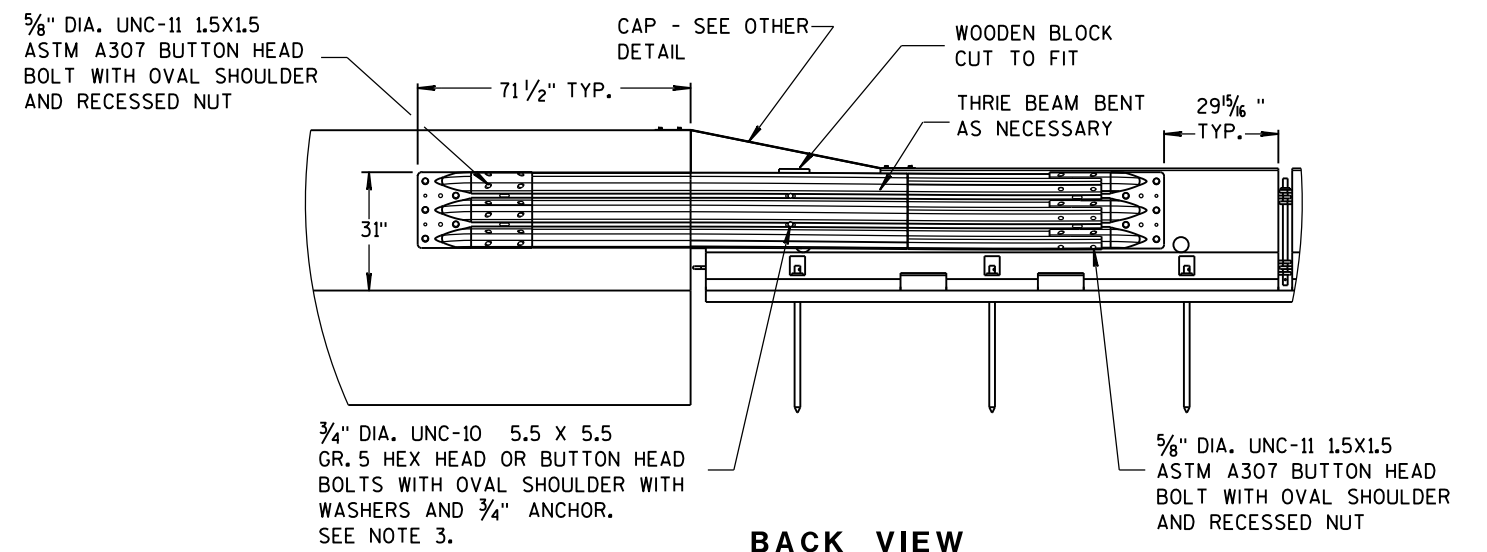
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 456



TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

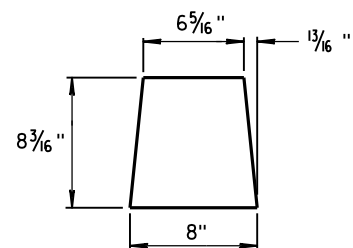
NOTES

1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.

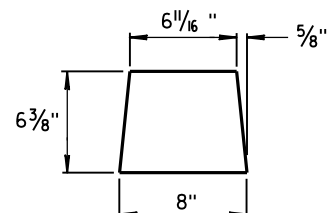


CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

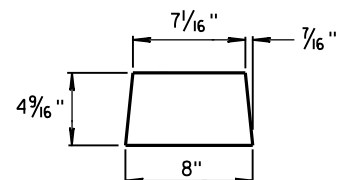
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



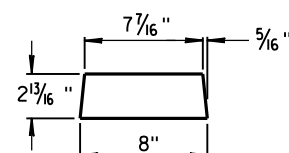
GUSSET 1



GUSSET 2

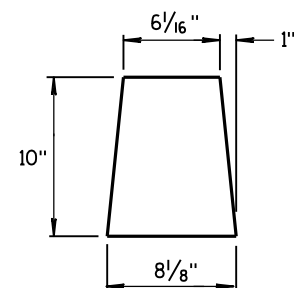


GUSSET 3

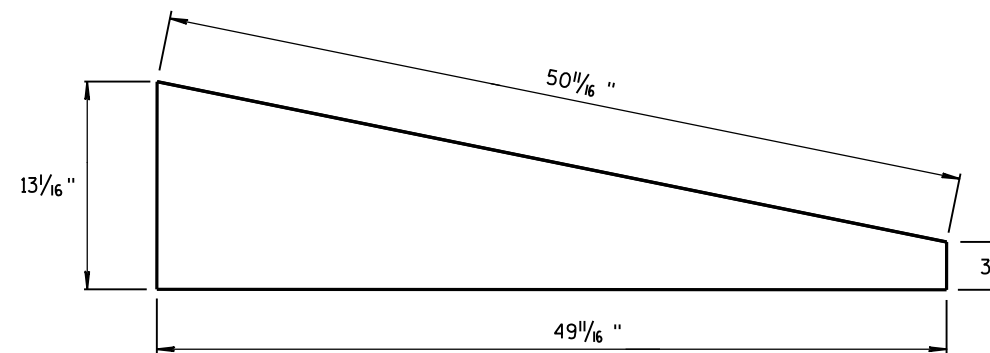


GUSSET 4

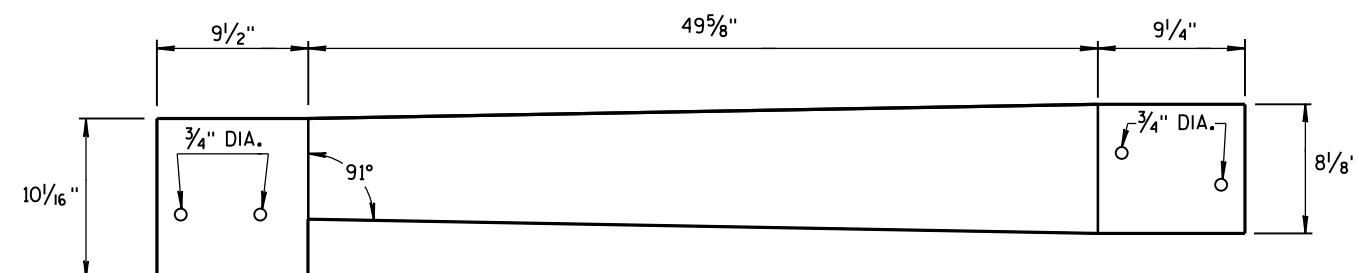
GUSSETS



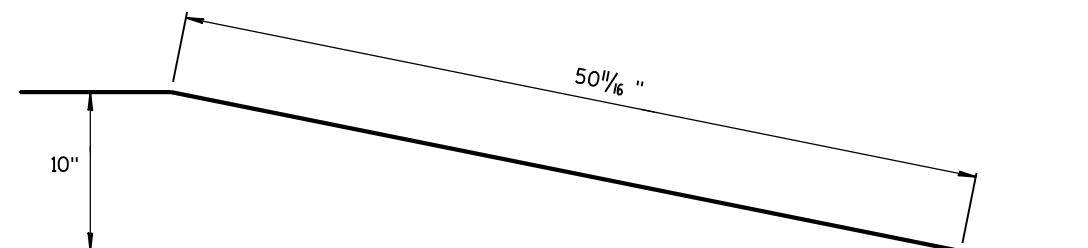
END PLATE



SIDE PLATE

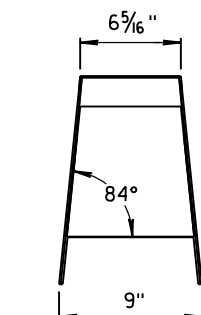
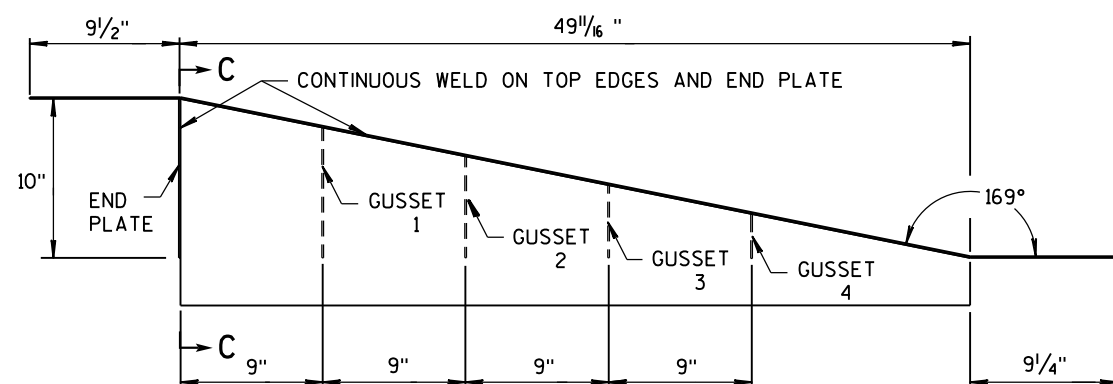
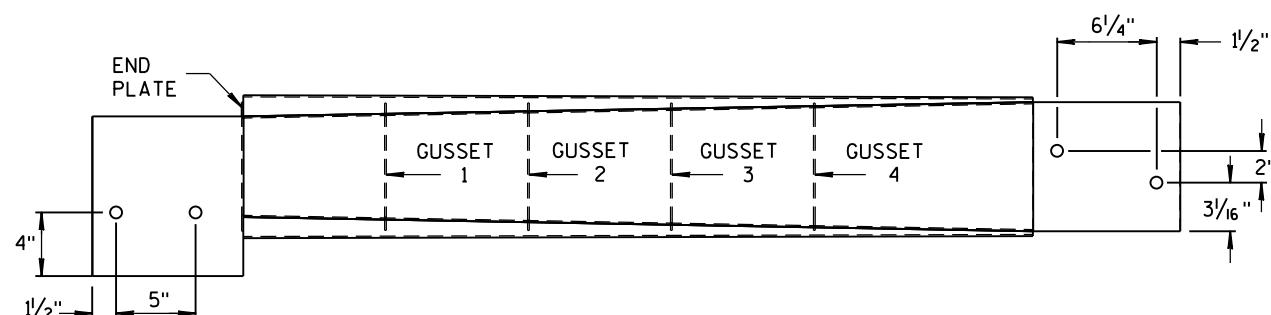


TOP PLATE



**SIDE, TOP AND END PLATES FOR CAP
FROM TEMPORARY CONCRETE BARRIER
TO 42" PERMANENT CONCRETE BARRIER**

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.



SECTION C-C

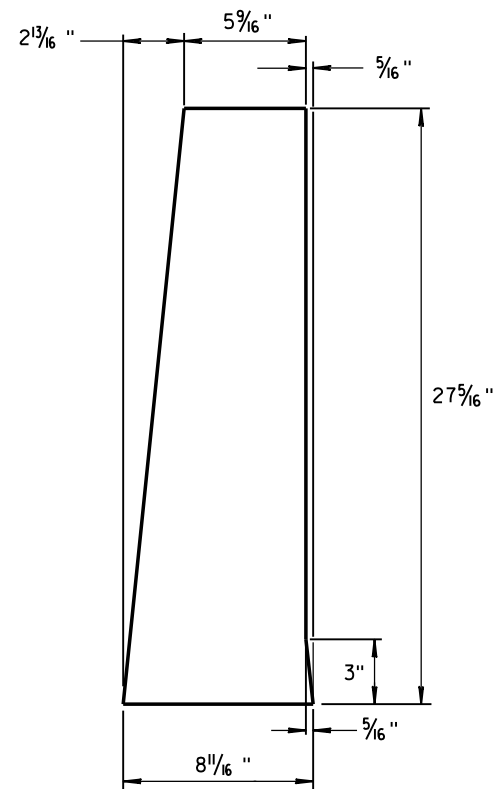
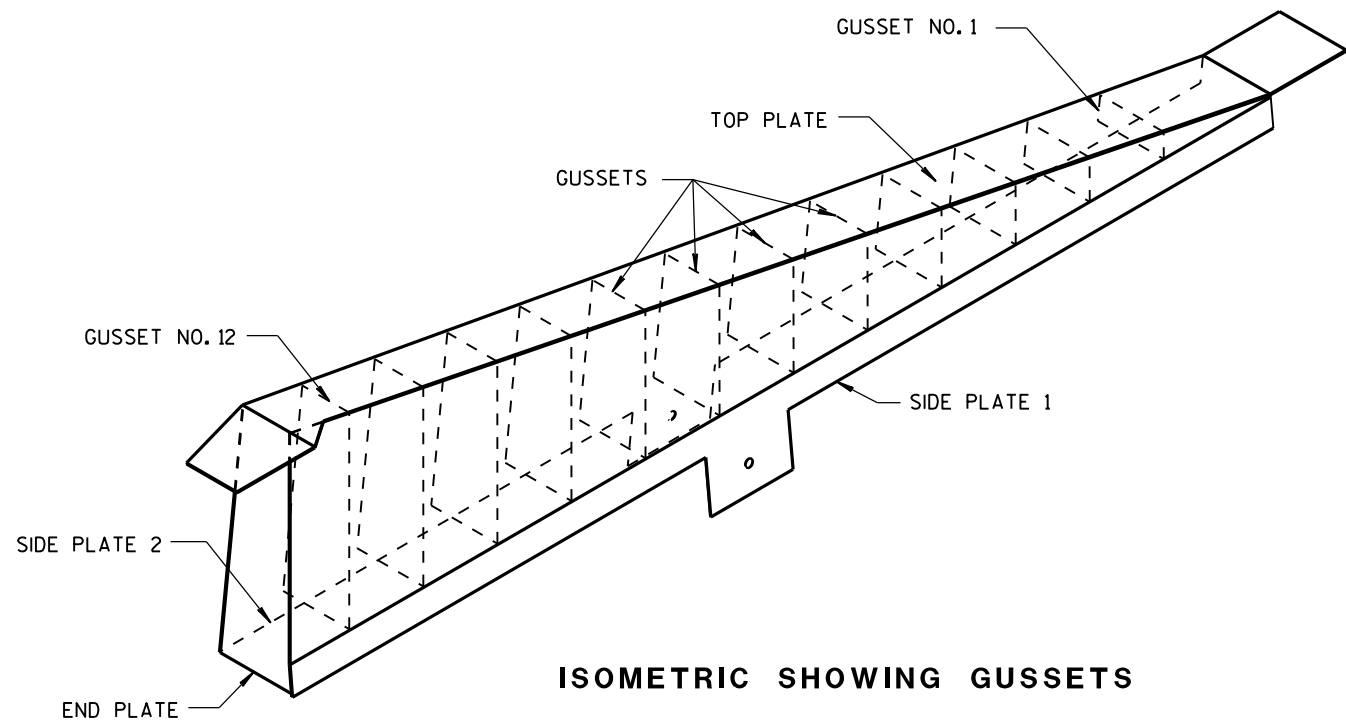
NOTES

1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

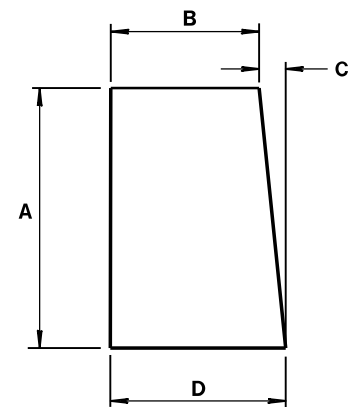
**CAP DETAILS FOR TEMPORARY CONCRETE
BARRIER TO 42" PERMANENT CONCRETE BARRIER**

**CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



1/8" STEEL PLATE

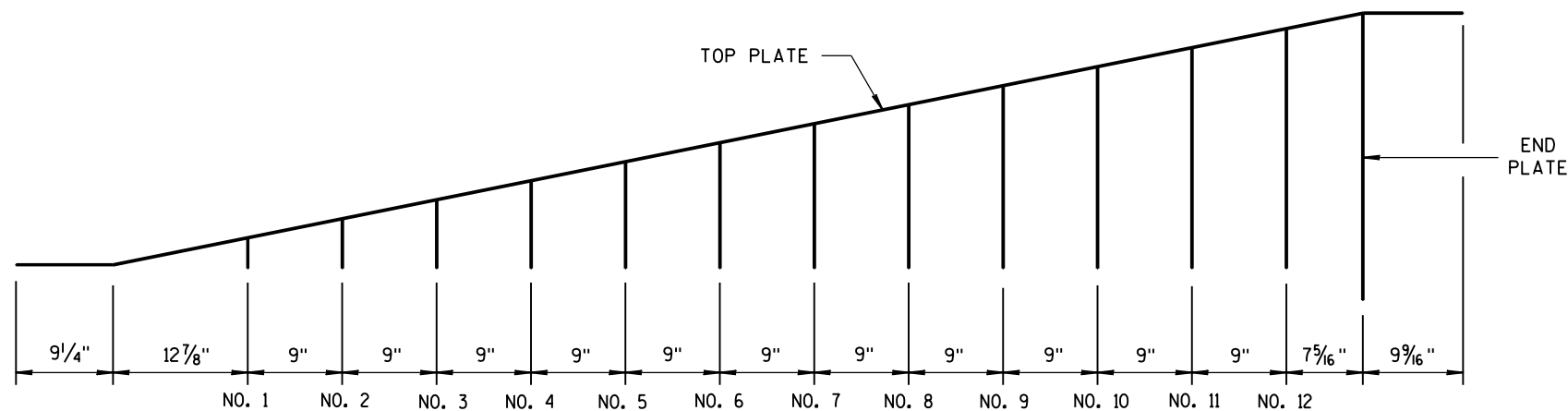


ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 1/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	1 1/16 "	8 1/16 "
4	8 5/16"	7 3/16"	7/8"	8 1/16 "
5	10 1/8"	7"	1 1/16 "	8 1/16 "
6	11 5/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16"	6 1/16"	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

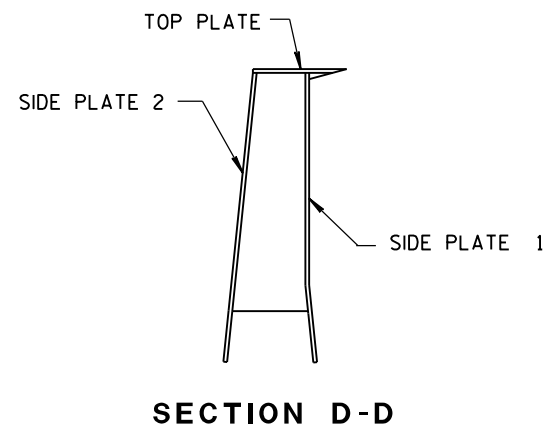
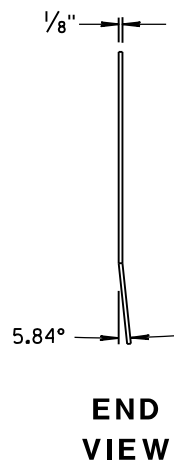
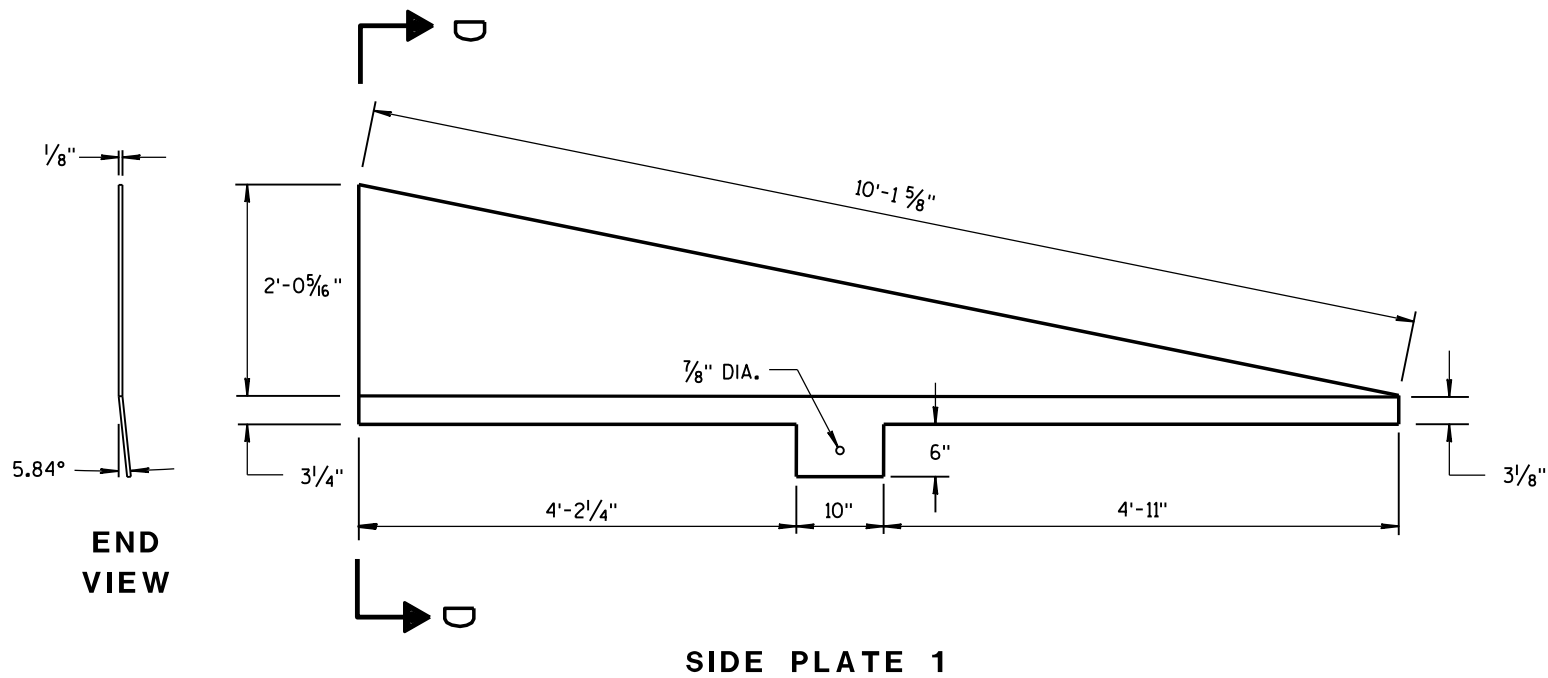
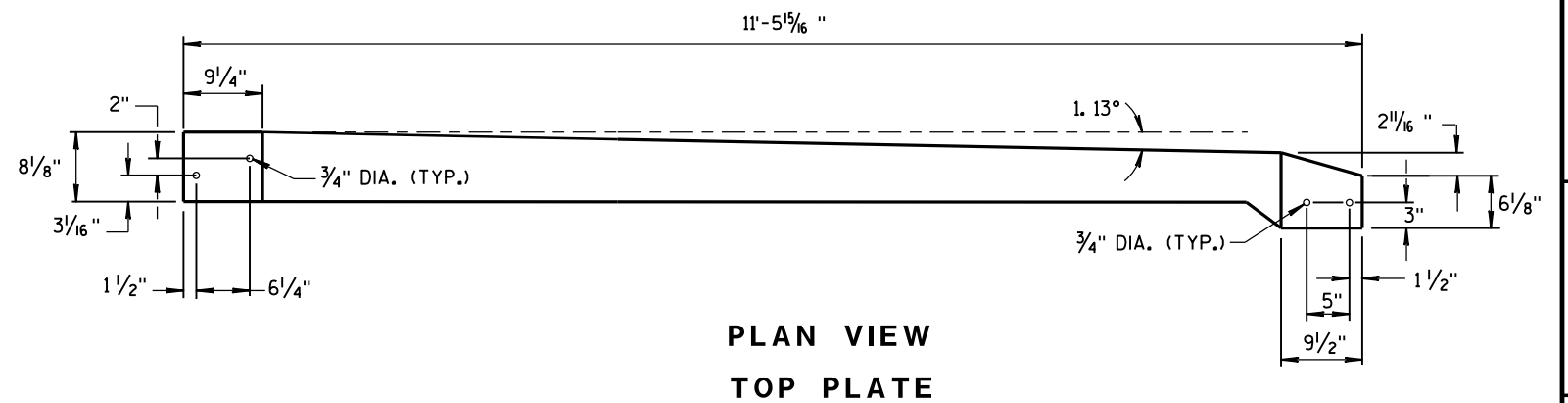
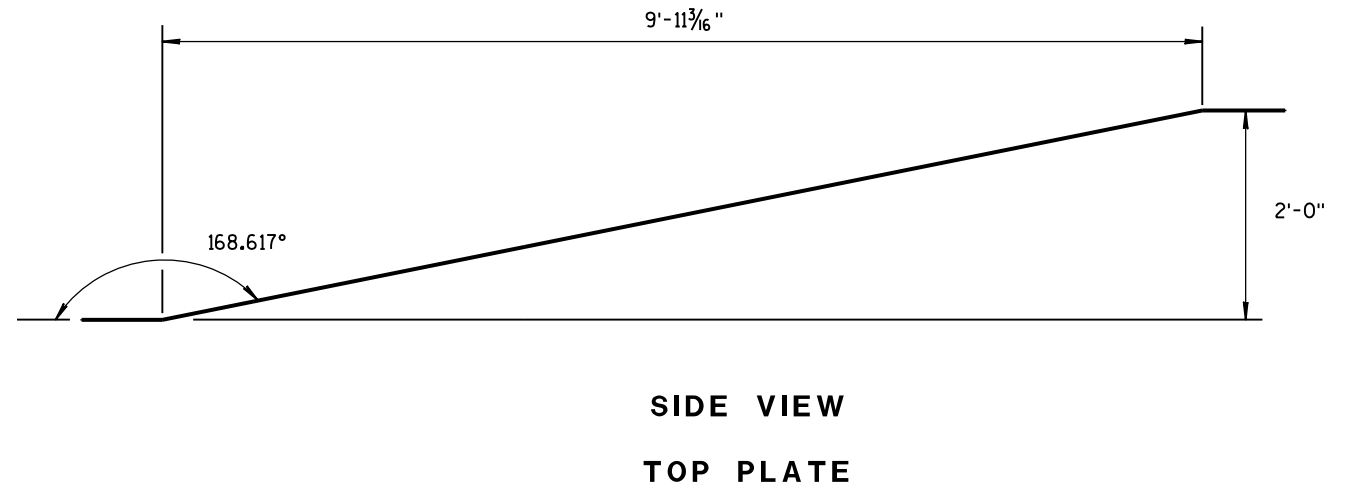
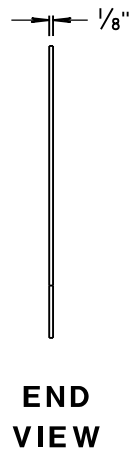
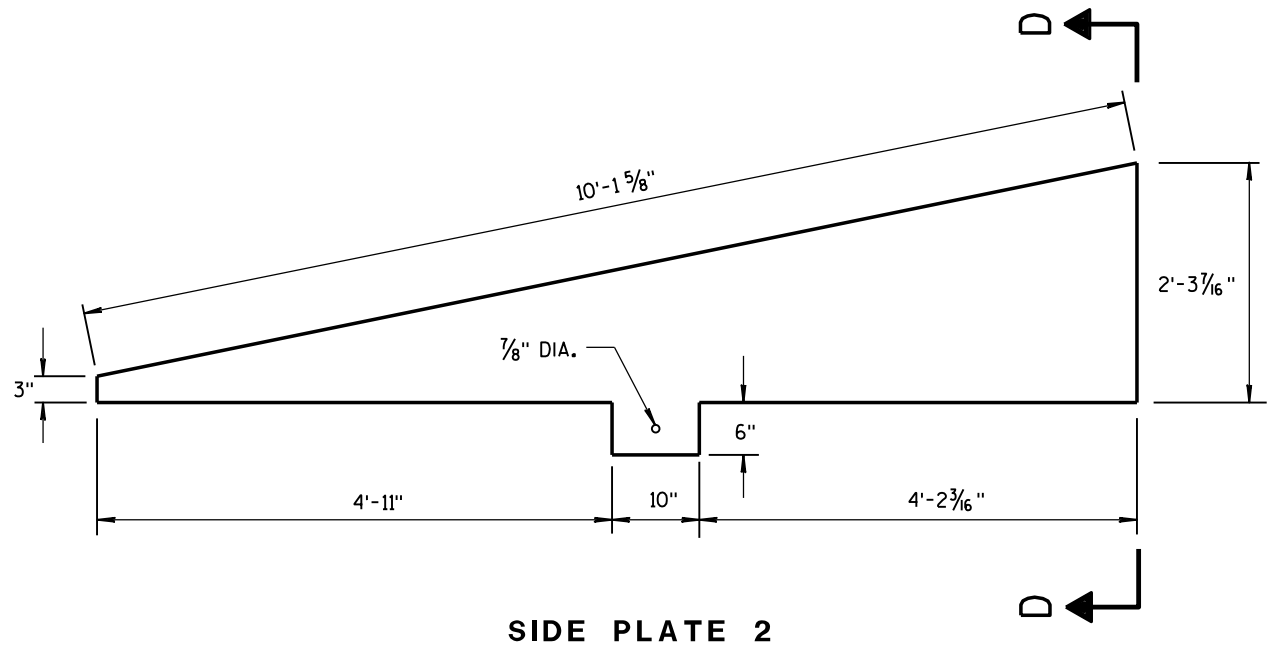
GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

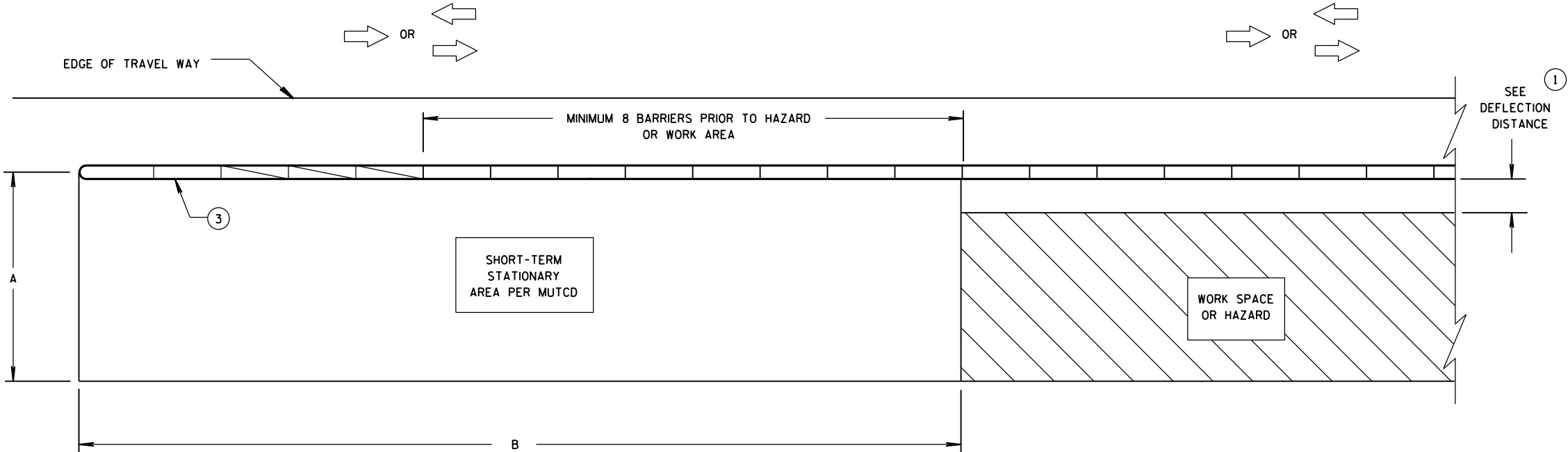
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

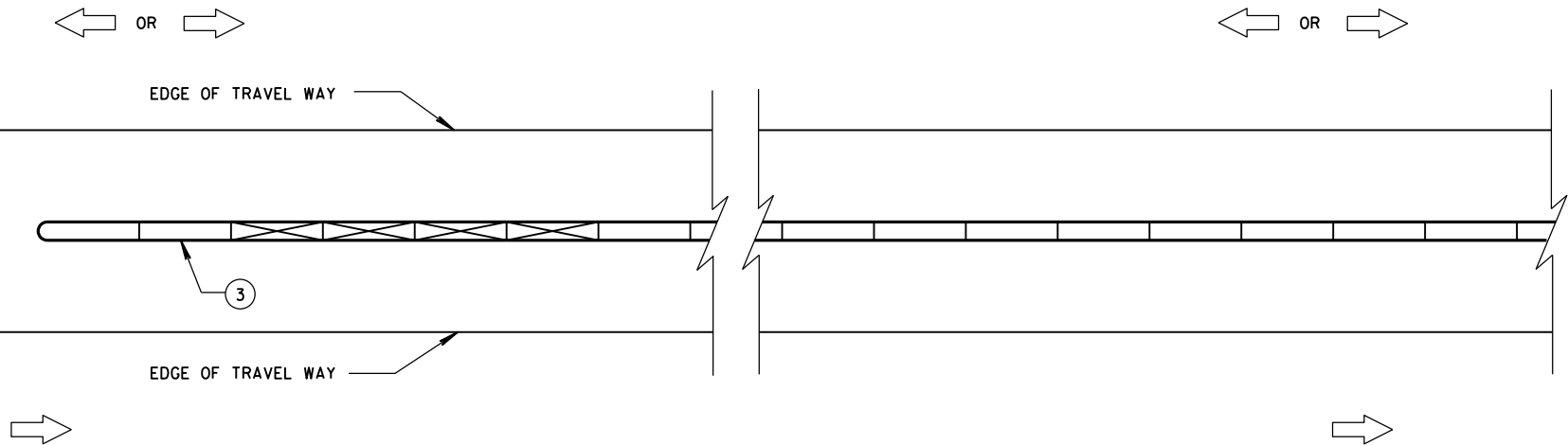


**CAP DETAILS FOR TEMPORARY CONCRETE
BARRIER TO 56" PERMANENT CONCRETE BARRIER**

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED			
June 2014	/S/ Jerry H. Zoog		
DATE	ROADWAY STANDARD	460	INT
FHWA	ENGINEER		



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER
INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER
INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

- ① FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.
- ② VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.
- ③ ANCHOR TEMPORARY BARRIER ACCORDING TO CRASH CUSHION OR SAND BARREL MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS ARE NOT PROVIDED, ANCHOR 3 PINS ON TRAFFIC SIDE.

DIMENSION A TABLE ②

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE ②

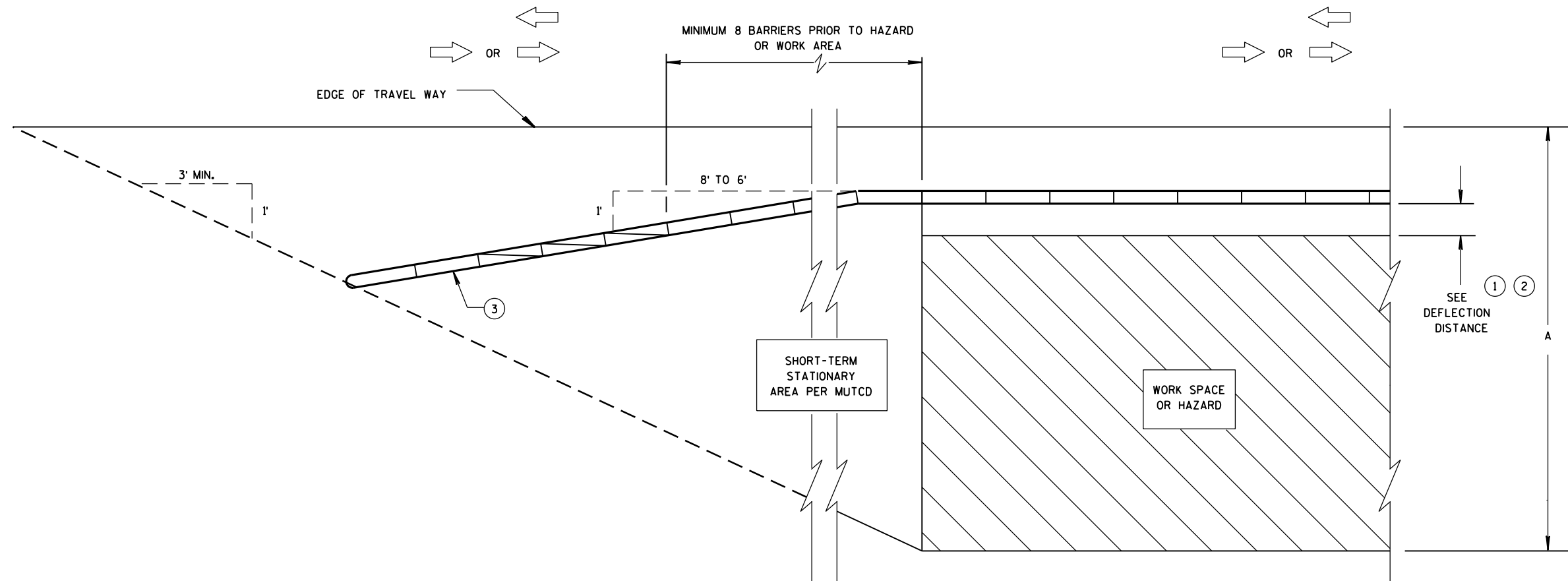
POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645

LEGEND

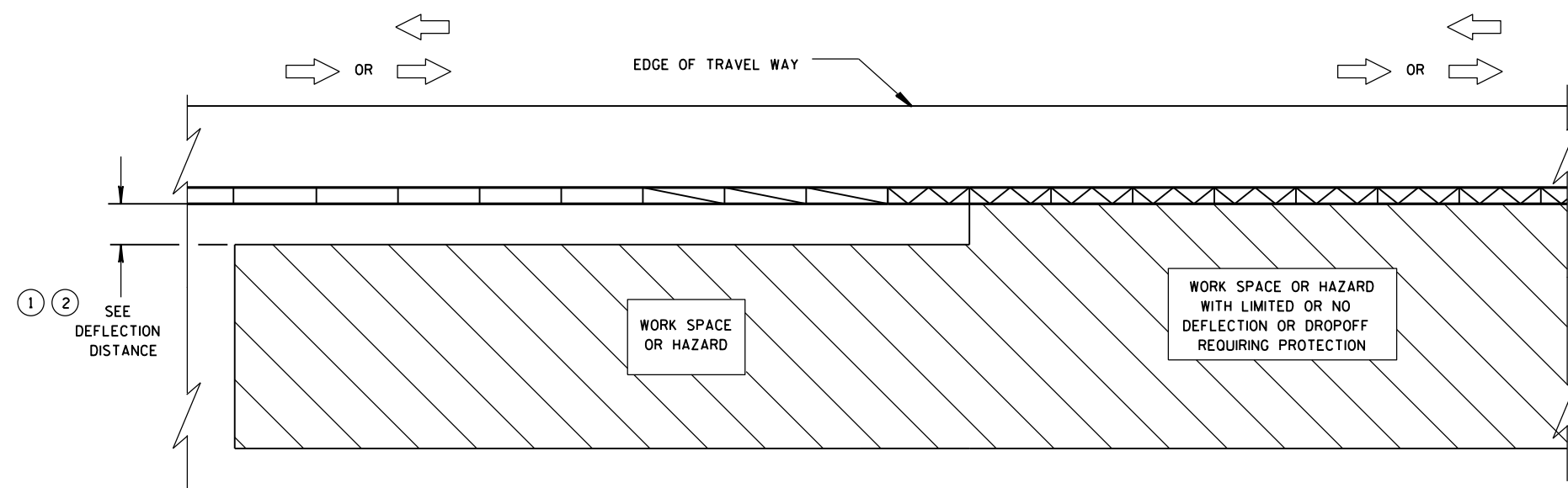
- DIRECTION OF TRAVEL →
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER
INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION**



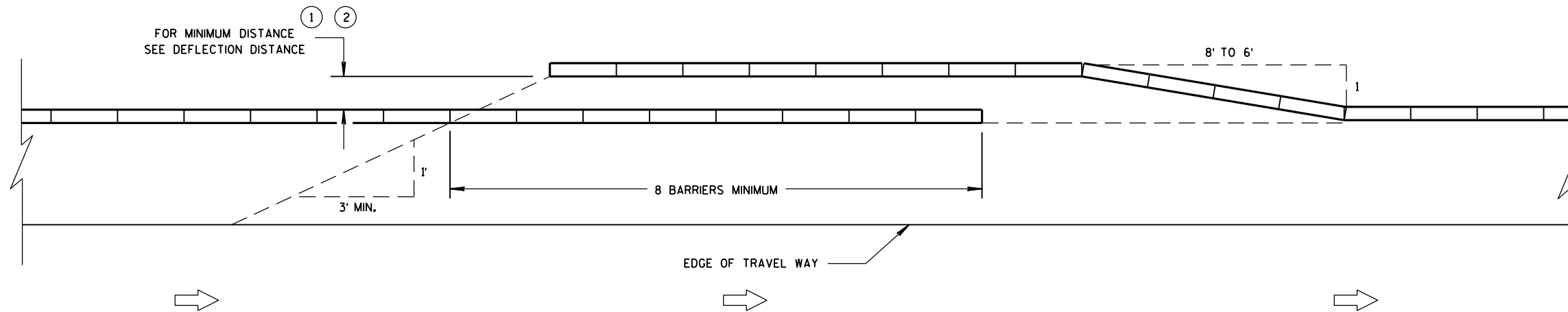
**TRANSITION FROM FREE STANDING TEMPORARY BARRIER
TO ANCHORED BARRIER**

LEGEND

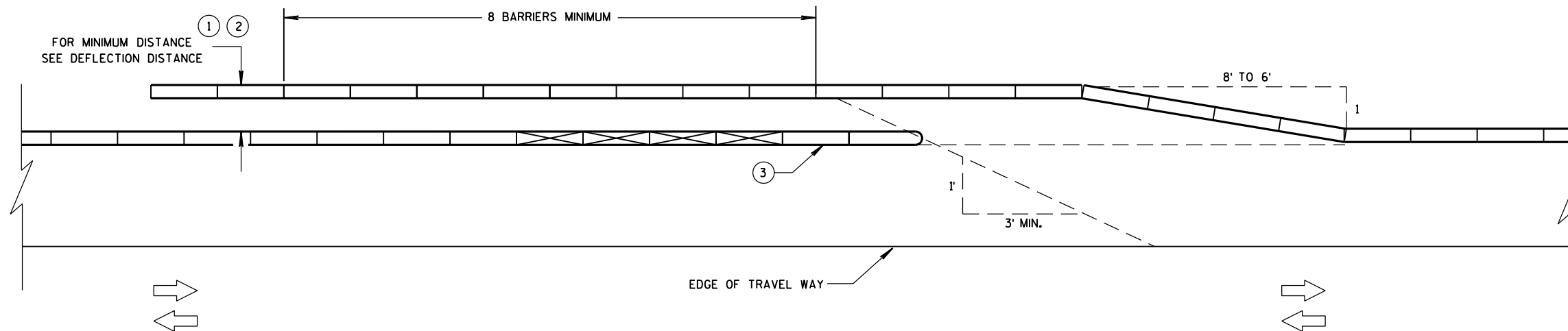
DIRECTION OF TRAVEL	
CRASH CUSHION OR SAND BARREL ARRAY	
SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS	
SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS	
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER	
PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET	
FREE STANDING TEMPORARY BARRIER	

**CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS**

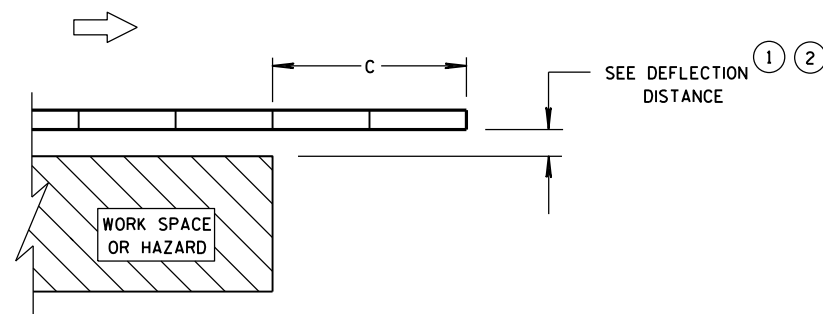
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 462



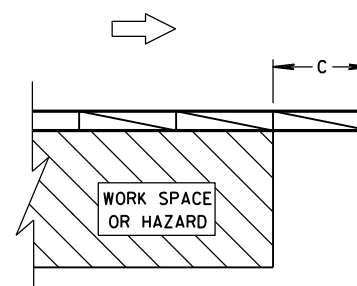
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



**ENDING TEMPORARY BARRIER
DOWNSTREAM - UNANCHORED**



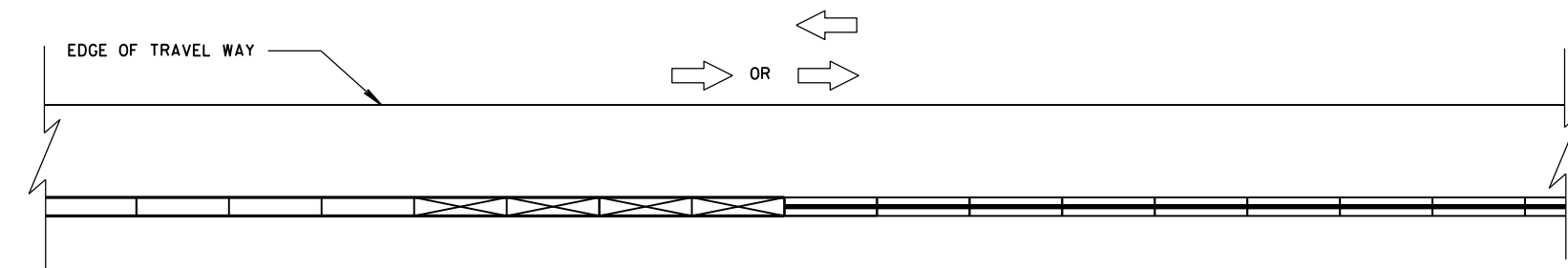
**ENDING TEMPORARY BARRIER
DOWNSTREAM - ANCHORED**

LEGEND

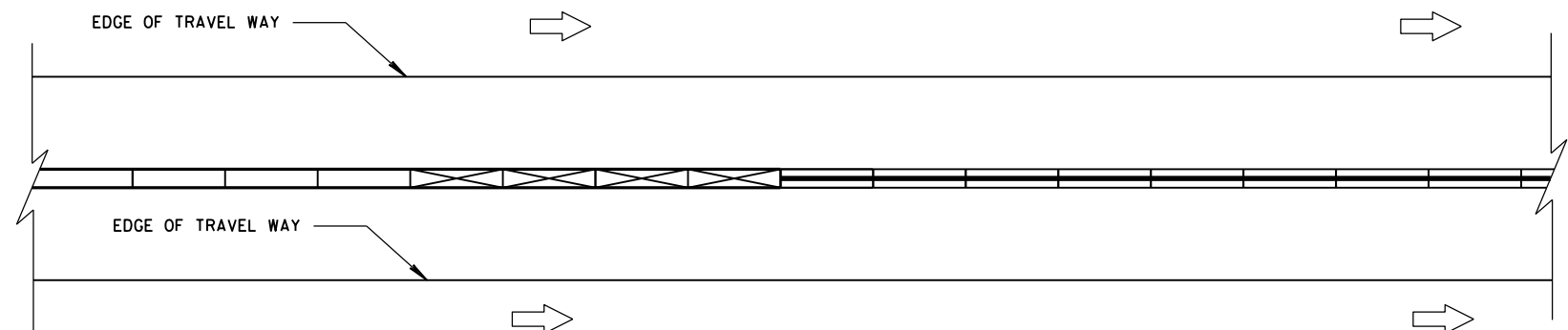
DIRECTION OF TRAVEL	
CRASH CUSHION OR SAND BARREL ARRAY	
SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS	
SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS	
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER	
PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET	
FREE STANDING TEMPORARY BARRIER	

**CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



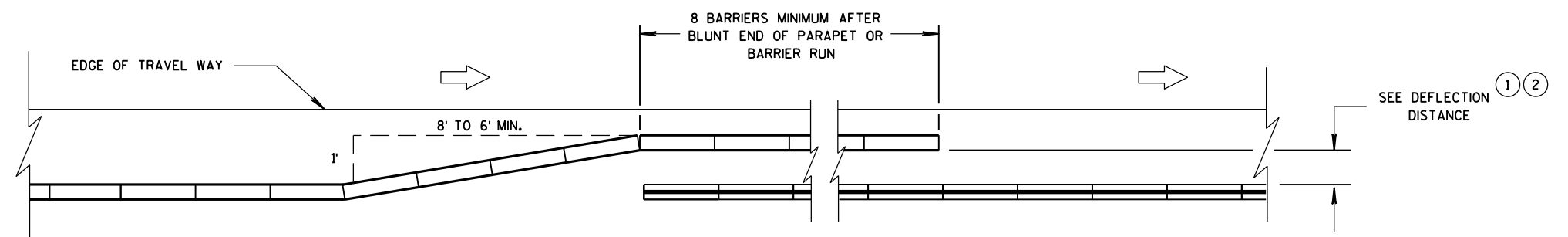
**CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE**



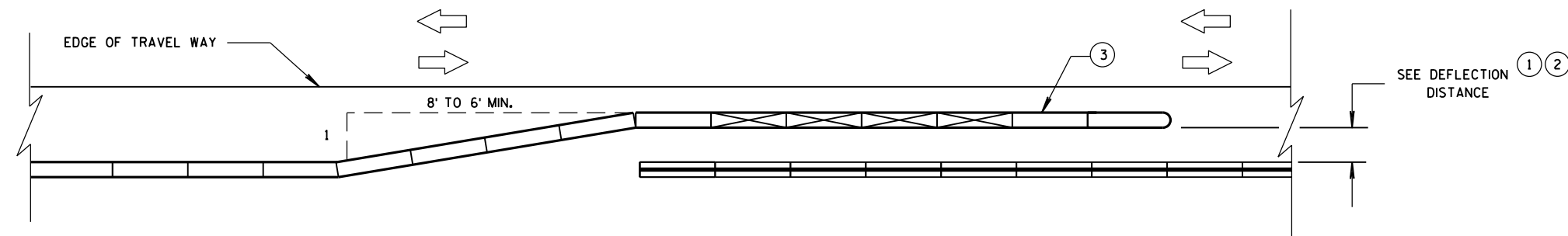
**CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES**

LEGEND

DIRECTION OF TRAVEL	
CRASH CUSHION OR SAND BARREL ARRAY	
SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS	
SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS	
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER	
PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET	
FREE STANDING TEMPORARY BARRIER	



**OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC**



**OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC**

**CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 464

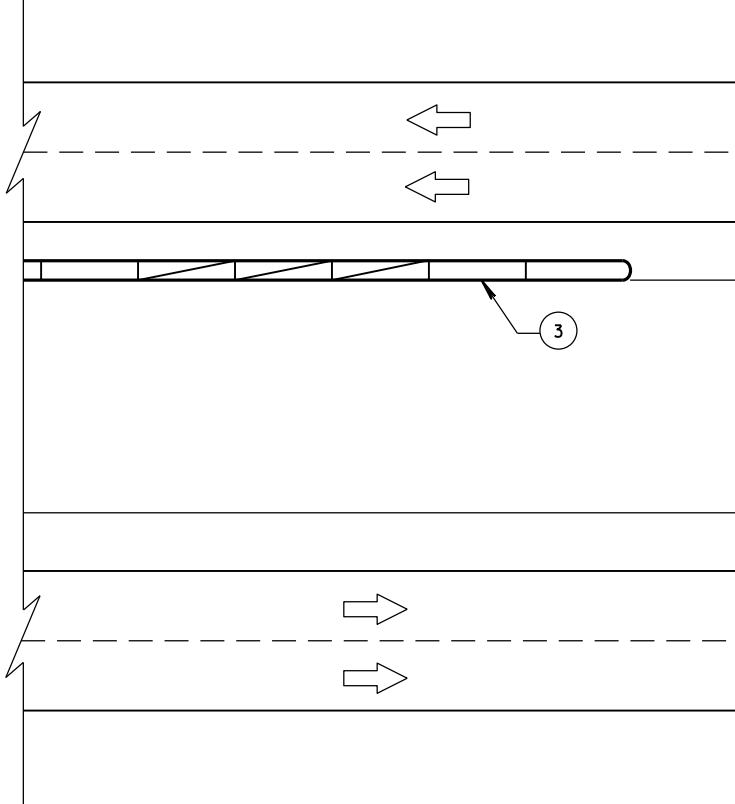
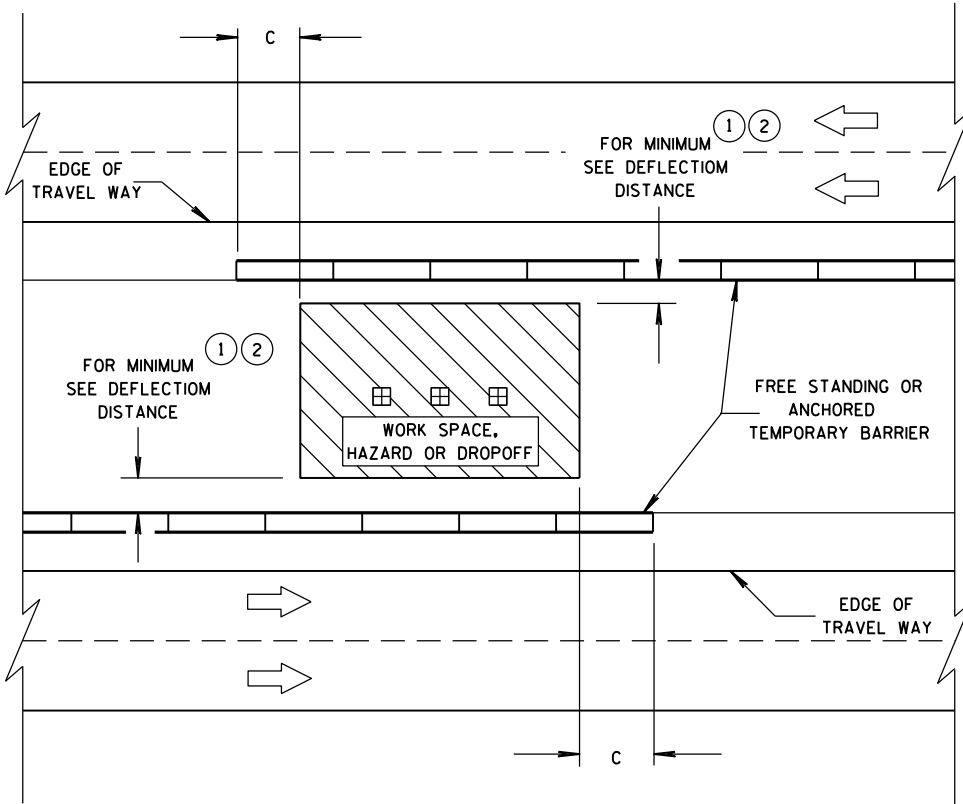
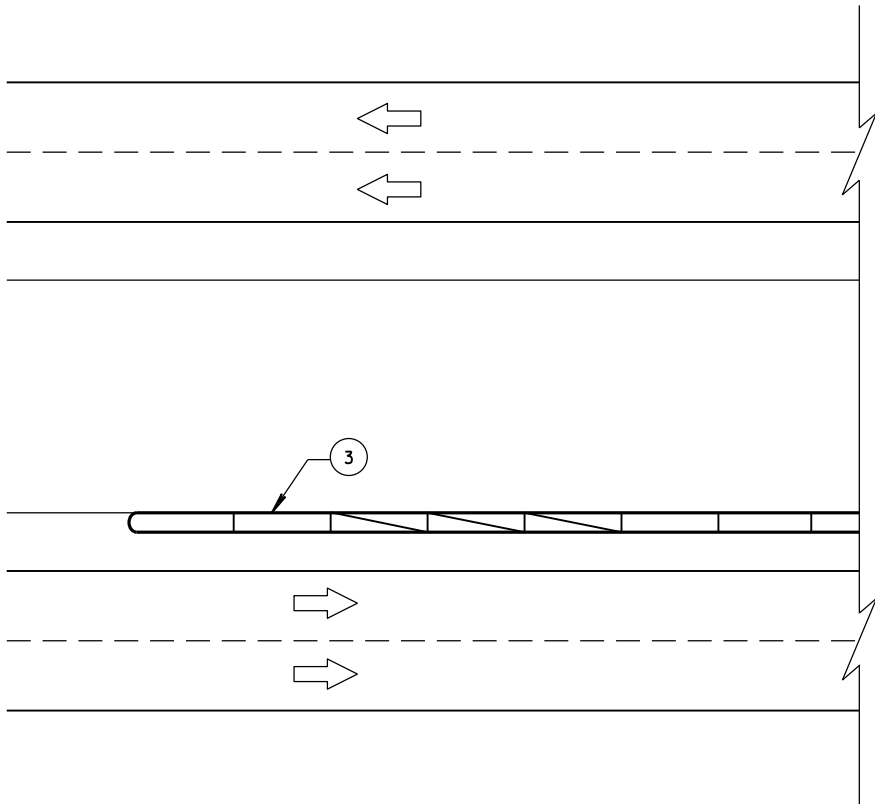
LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100

6

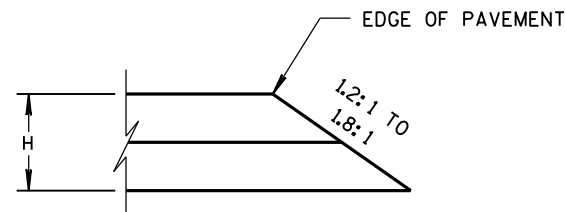


6

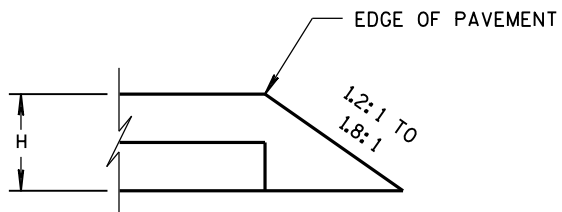
CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

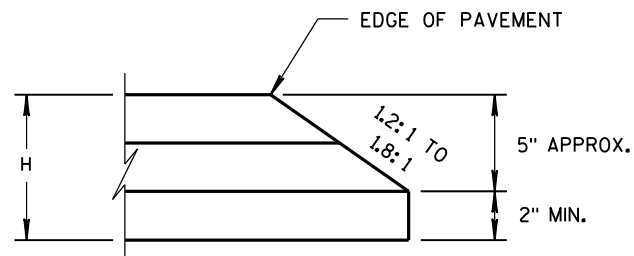
APPROVED
June, 2015 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS 465 ENT
FHWA ENGINEER



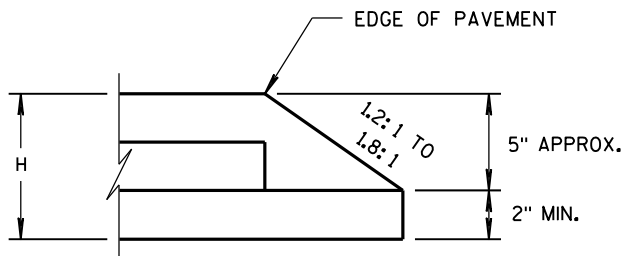
CONSTRUCTED WITH FINAL TWO LAYERS
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER
FOR H 5" OR LESS

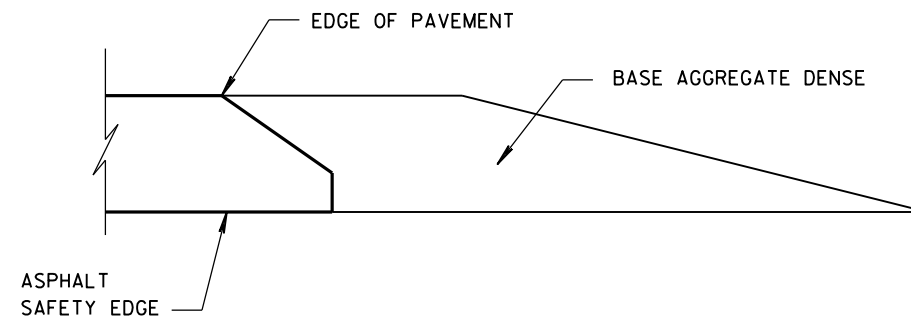


CONSTRUCTED WITH FINAL TWO LAYERS
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER
FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

SAFETY EDGE_{SM}

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

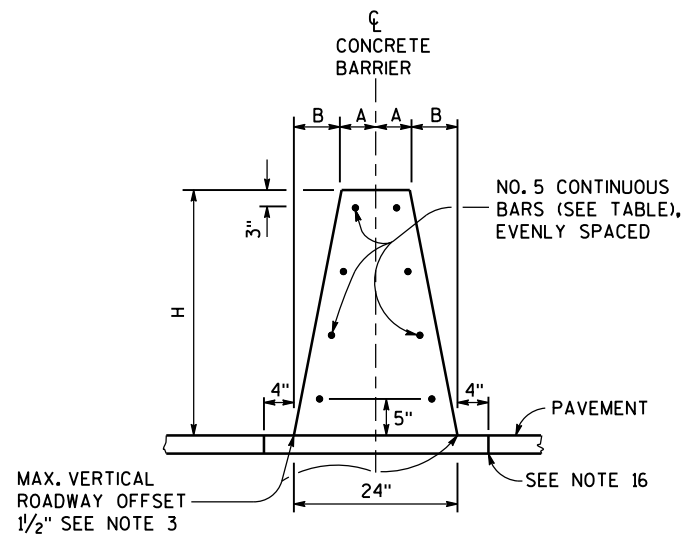
APPROVED

11/30/2012
DATE

FHWA

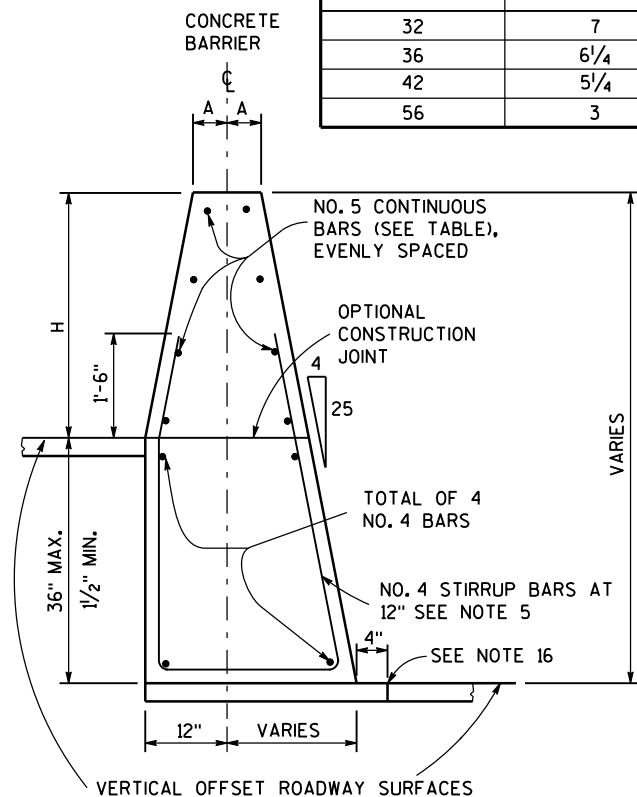
/s/ Jerry H. Zoaga
ROADWAY STANDARDS ENGINEER 466

ENT

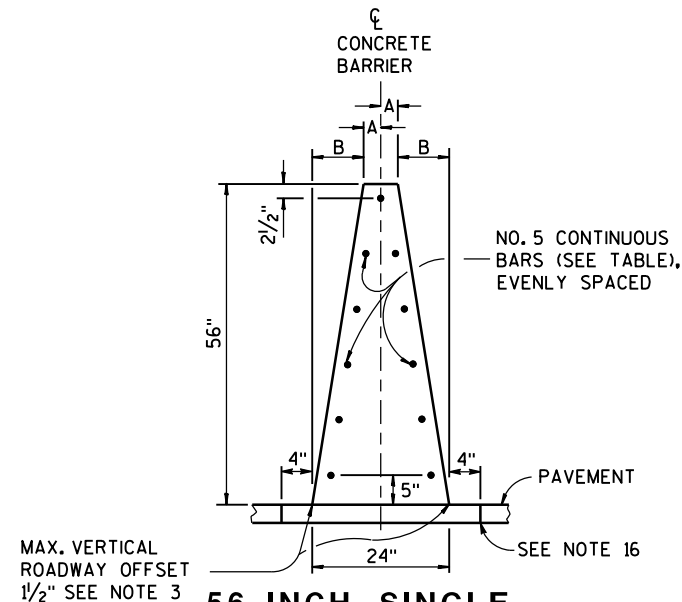


**32-INCH, 36-INCH OR 42-INCH
SINGLE SLOPE CONCRETE BARRIER
(TYPE S32, TYPE S36, AND
TYPE S42)**

BARRIER HEIGHT H INCHES	A INCHES	B INCHES	NUMBER OF NO. 5 BARS EACH
32	7	5	8
36	6 1/4	5 3/4	8
42	5 1/4	6 3/4	10
56	3	9	11

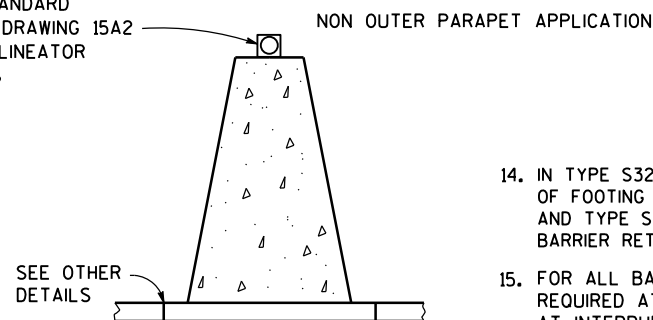


**SINGLE SLOPE CONCRETE
BARRIER AND RETAINING WALL
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)
(BETWEEN ADJACENT ROADWAYS)**



**56-INCH SINGLE
SLOPE CONCRETE BARRIER
(TYPE S56)**

SEE STANDARD
DETAIL DRAWING 15A2
FOR DELINEATOR
DETAILS



**SINGLE SLOPE
CONCRETE BARRIER
ON BRIDGE**

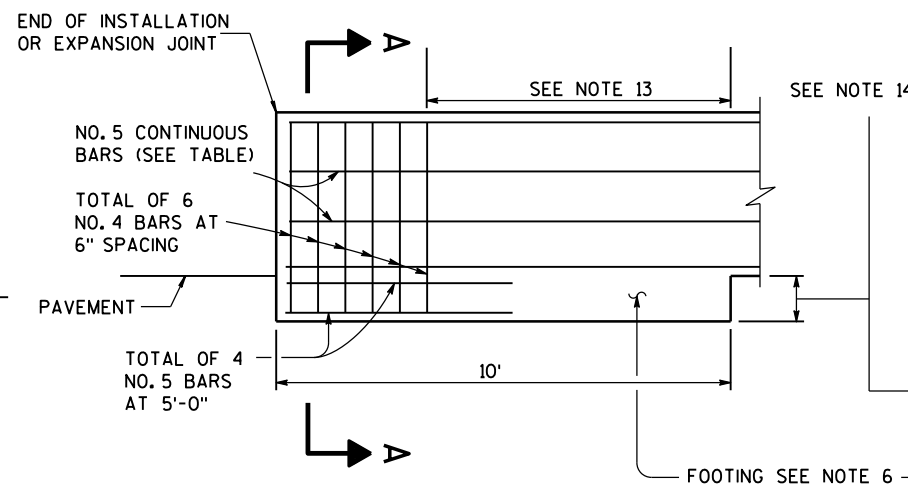
SEE OTHER
DETAILS

DELINEATION

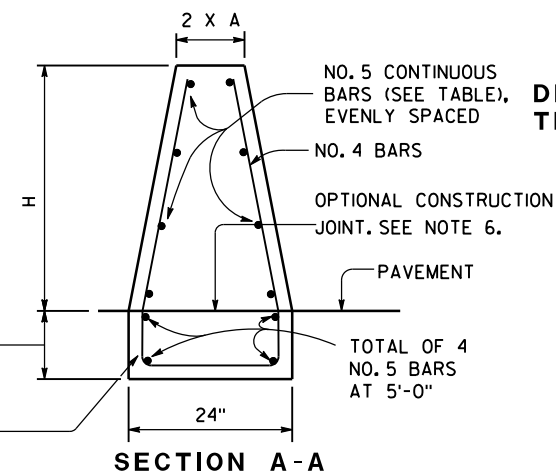
14. IN TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 DEPTH OF FOOTING 10". IN TYPE S32A, TYPE S36A, TYPE S42A AND TYPE S56A MATCH TOTAL HEIGHT OF SINGLE SLOPE BARRIER RETAINING WALL.

15. FOR ALL BARRIER TYPES SHOWN, ANCHOR IS REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER. ANCHOR MAY BE AS SHOWN ON DRAWING OR DETAILS SHOWN ON S.D.D. 14B33. ANCHORS INCIDENTAL TO CBSS.

16. CONCRETE PAD UNDER CBSS MAY BE PLACED INTEGRAL WITH BARRIER, PLACED SEPARATELY OR PLACED WITH CONCRETE SHOULDER AND SAWED FULL DEPTH. CONCRETE PAD MINIMUM DEPTH IS 6 INCHES, OR EQUAL TO THE DEPTH OF THE CONCRETE SHOULDER.



**END ANCHOR SINGLE
SLOPE CONCRETE BARRIER
AT CONSTRUCTION JOINT**



GENERAL NOTES

- WHERE THE CONCRETE BARRIER IS ADDED TO THE FACE OF EXISTING CONCRETE STRUCTURE, MATCH EXISTING WEEP HOLES.
- EXPANSION JOINTS IN CONCRETE BARRIER SHALL BE LOCATED AT ALL DECK, AND PRINCIPAL WALL JOINTS. EXPANSION JOINT FILLER MATERIAL SHALL BE THE SAME SIZE AS JOINT OR 1/2" MINIMUM.
- WHERE VERTICAL ROADWAY OFFSET IS GREATER THAN 1 1/2", USE TYPE A
- PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.
- EXCEPT IN ANCHORS, VERTICAL REINFORCING STIRRUP NOT REQUIRED FOR ROADWAY OFFSETS LESS THAN 1'-0".
- FOR TYPE S32, TYPE S36, TYPE S42, AND S56 MONOLITHIC FOOTING OR DOWELED FOOTING WITH 2-#8 x 8" @ 2'-0".
- STAGGER LAPPING OF LONGITUDINAL STEEL. MINIMUM OVERLAP OF STEEL 2 FEET. BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.
- 4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.
- WHEN SWITCHING BETWEEN SLIP FORM AND CAST-IN-PLACE OPERATIONS, EXTEND LONGITUDINAL STEEL 3 FEET BEYOND SLIP-FORMING CUT OFF POINT. EXPOSED STEEL INTO NEXT POURS REINFORCEMENT. LAPS TO BE FIRMLY TIED.
- USE 3/4" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.
- 2" CLEAR COVER TYPICAL.
- COLD-JOINTS MAY BE USED BETWEEN ANCHOR INSTALLATIONS. WHEN A COLD JOINT IS NEEDED, 3 FEET OF LAP OF LONGITUDINAL STEEL IS REQUIRED. LAPS TO BE FIRMLY TIED.
- IN TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 NO ADDITIONAL VERTICAL STEEL NEEDED. IN TYPE S32A, TYPE S36A, TYPE S42A AND TYPE S56A REQUIRES VERTICAL STEEL. SEE OTHER DETAIL.

DELINEATOR SPACING ON HORIZONTAL CURVES

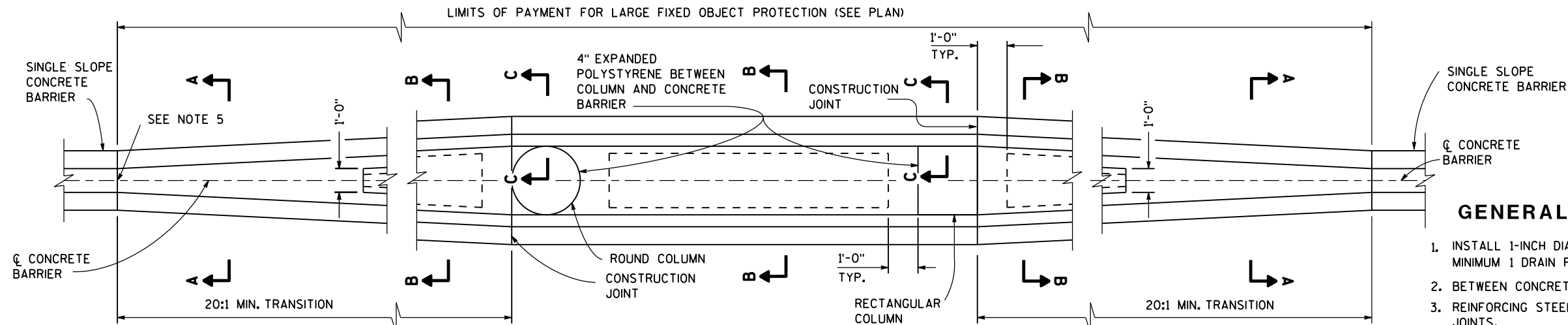
RADIUS OF CURVE	APPROXIMATE SPACING ON CURVE
50 FEET	20 FEET
115 FEET	25 FEET
180 FEET	35 FEET
250 FEET	40 FEET
300 FEET	50 FEET
400 FEET	55 FEET
500 FEET	65 FEET
600 FEET	70 FEET
700 FEET	75 FEET
800 FEET	80 FEET
900 FEET	85 FEET
1000 FEET	90 FEET

DELINEATOR SPACING ON RADIUS GREATER THAN 1000 FEET OR TANGENT SECTIONS

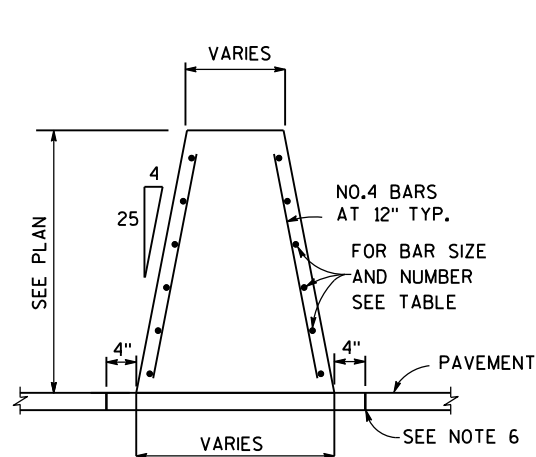
	LENGTH OF BARRIER	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 1	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 2	3

CONCRETE BARRIER SINGLE SLOPE (CBSS)

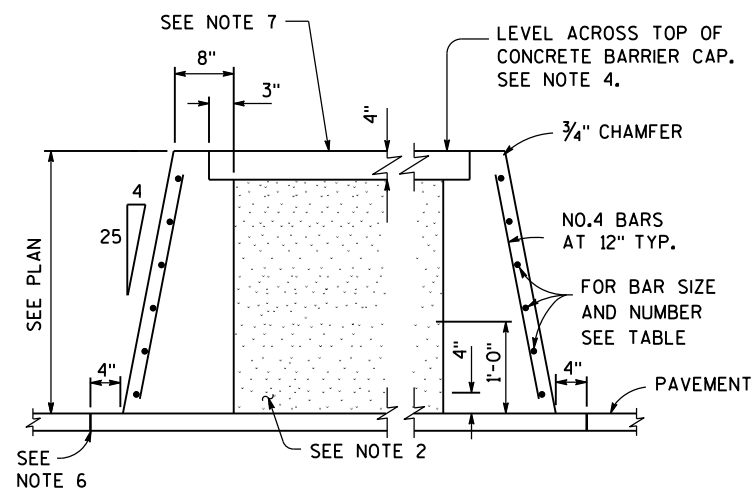
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



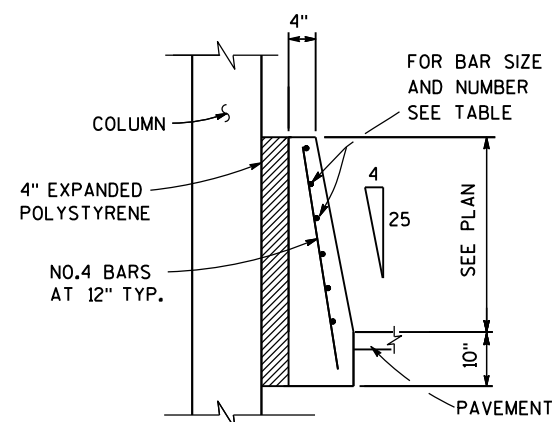
LARGE FIXED OBJECTS PROTECTION
TYPE S32, TYPE S36, TYPE S42, TYPE S56



SECTION A-A



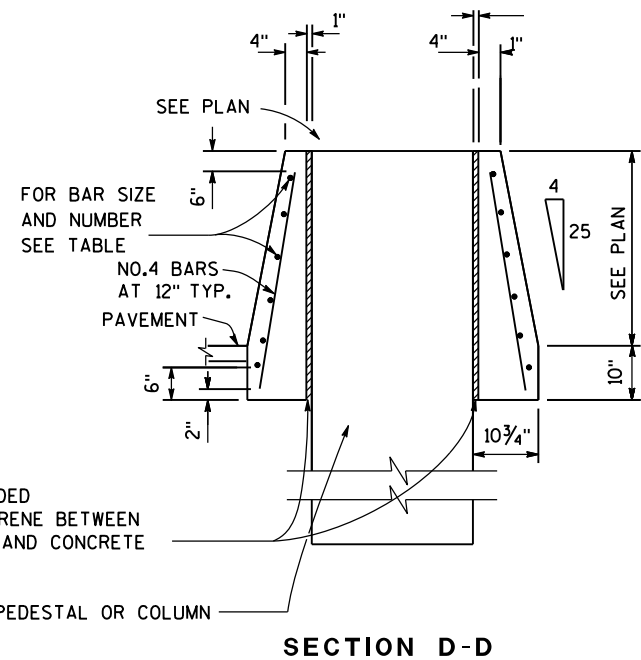
SECTION B-B



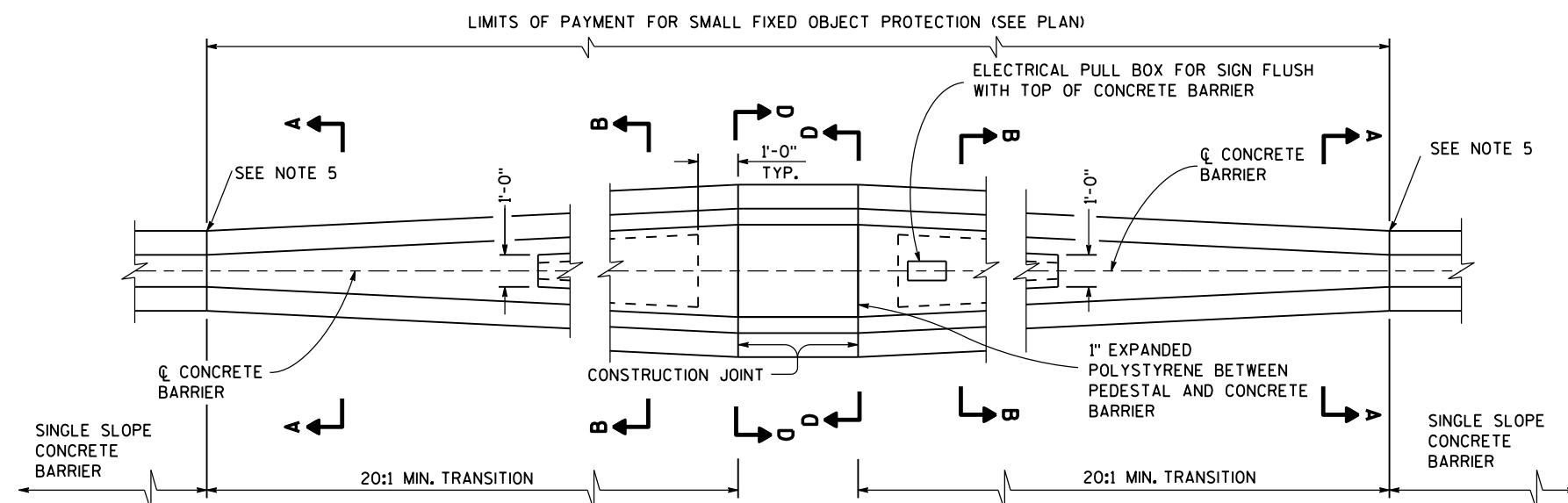
SECTION C-C

GENERAL NOTES

1. INSTALL 1-INCH DIAMETER DRAIN PIPE EVERY 20 FEET OF CROSS SECTION B-B. MINIMUM 1 DRAIN PER CAVITY.
2. BETWEEN CONCRETE BARRIER WALLS FILL WITH GRANULAR BACKFILL GRADE 2
3. REINFORCING STEEL SHALL EXTEND CONTINUOUS THROUGH CONSTRUCTION JOINTS.
4. ADJUST HEIGHT OF CONCRETE BARRIER WALL ON LOW SIDE OF OFFSET OR SUPERELEVATED ROADWAYS TO PROVIDE LEVEL GRADE ACROSS TOP OF CONCRETE CAP.
5. IF FIXED OBJECT PROTECTION IS INSTALLED FIRST, USE COLD JOINTS. IF CBSS PLACED FIRST, USE EXPANSION JOINT.
6. CONCRETE PAD UNDER CBSS MAY BE PLACED INTEGRAL WITH BARRIER, PLACED SEPARATELY OR PLACED WITH CONCRETE SHOULDER AND SAWED FULL DEPTH. SAWING OF CONCRETE SHOULDER IS INCIDENTAL TO CONCRETE BARRIER BID ITEM. CONCRETE PAD MINIMUM DEPTH IS 6 INCHES, OR EQUAL TO THE DEPTH OF THE CONCRETE SHOULDER.
7. USE NO. 3 BAR SPACED 12 INCHES CENTER TO CENTER (PLACED IN EACH DIRECTION) OR EQUIVALENT WIRE MESH.



SECTION D-D

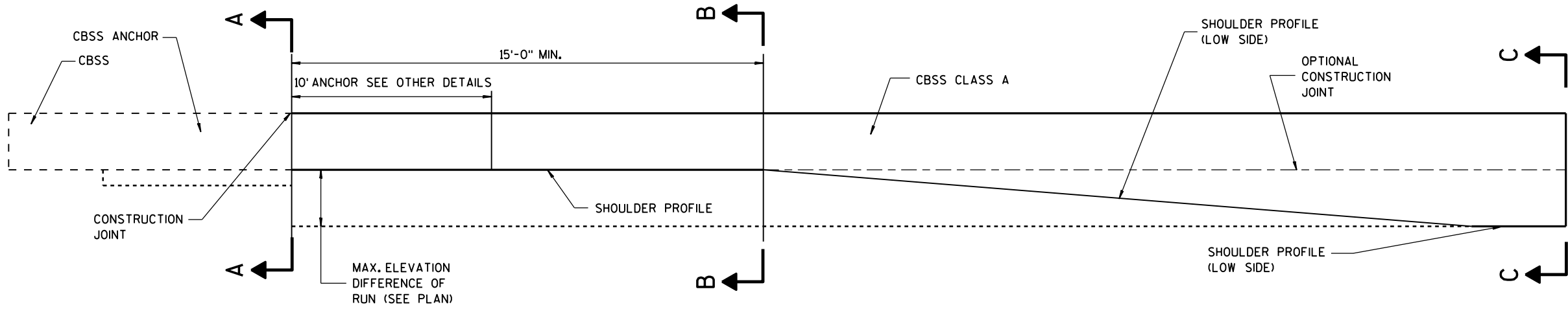


SMALL FIXED OBJECTS PROTECTION
TYPE S32, TYPE S36, TYPE S42, TYPE S56

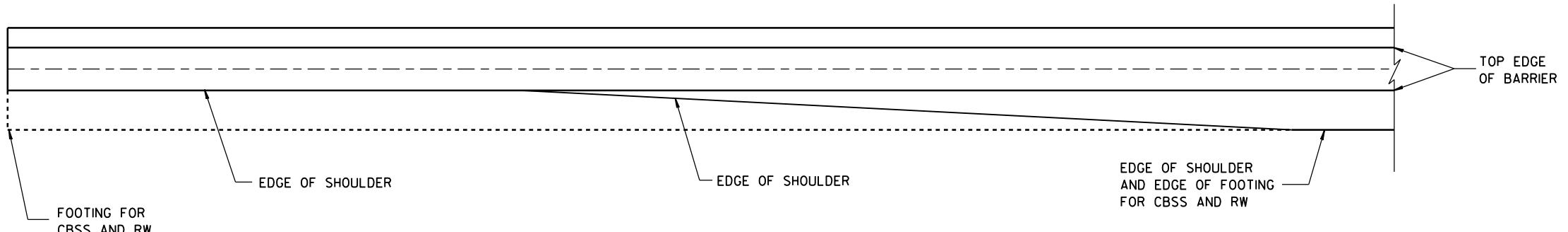
BARRIER HEIGHT H INCHES	BAR SIZE	NUMBER OF BARS EACH
32	4	6
36	4	6
42	5	6
56	5	9

**CONCRETE BARRIER SINGLE SLOPE
 (CBSS)**

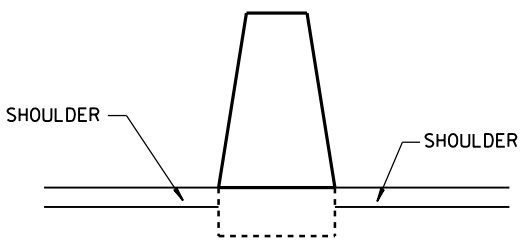
STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION 468



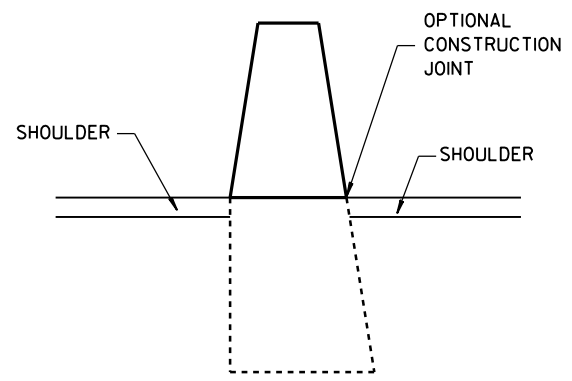
ELEVATION VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



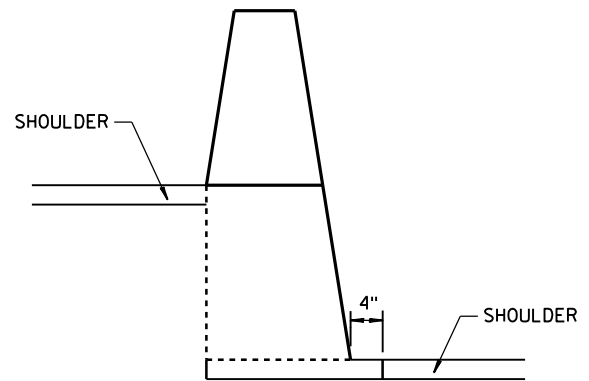
PLAN VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



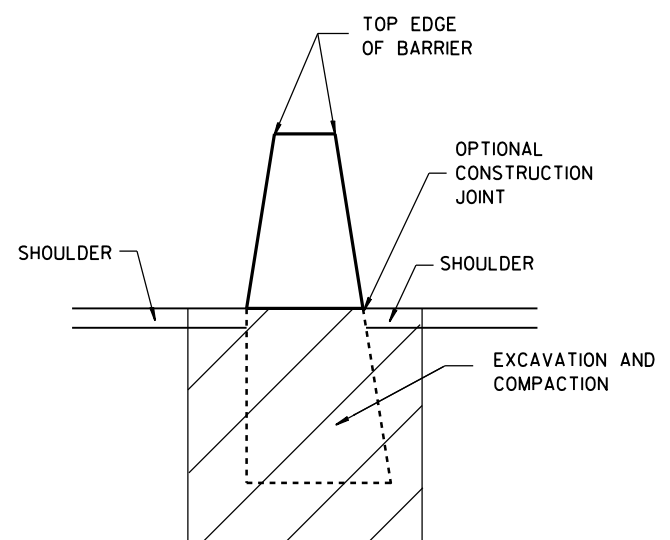
SECTION A-A



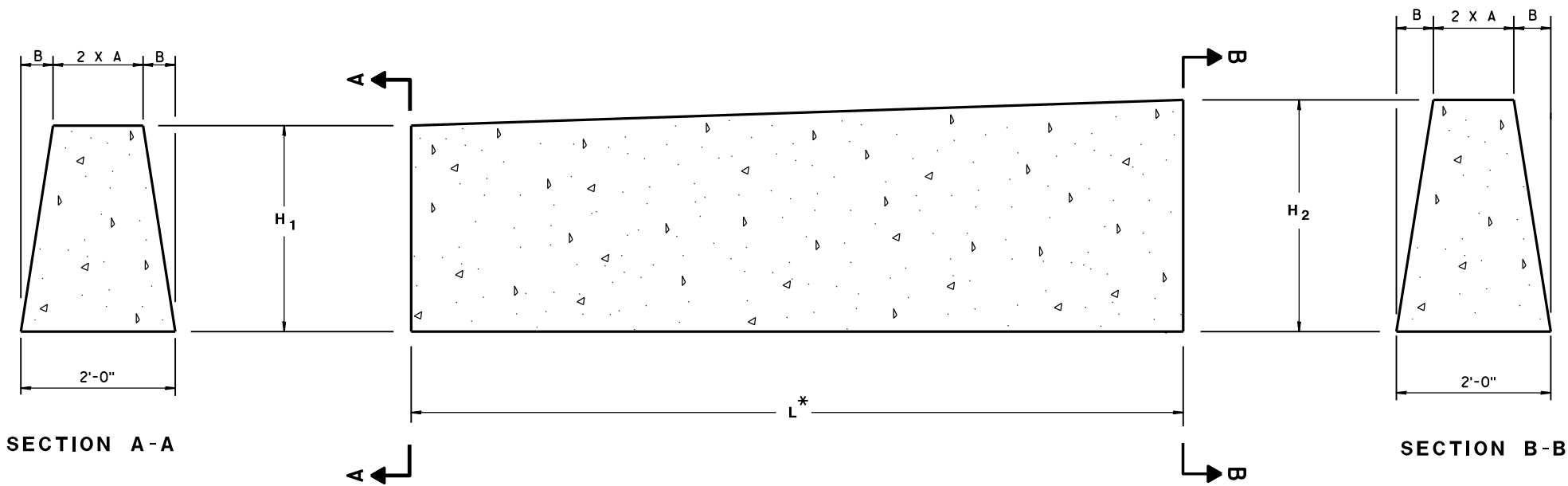
SECTION B-B



SECTION C-C



CONCRETE BARRIER SINGLE SLOPE (CBSS)
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION 469



SECTION A-A

SECTION B-B

DOUBLE COLD JOINT HEIGHT TRANSITION

BARRIER DIMENSIONS

BARRIER HEIGHT INCHES	A INCHES	B INCHES
32	7	5
36	6 $\frac{1}{4}$	5 $\frac{3}{4}$
42	5 $\frac{1}{4}$	6 $\frac{3}{4}$
56	3	9

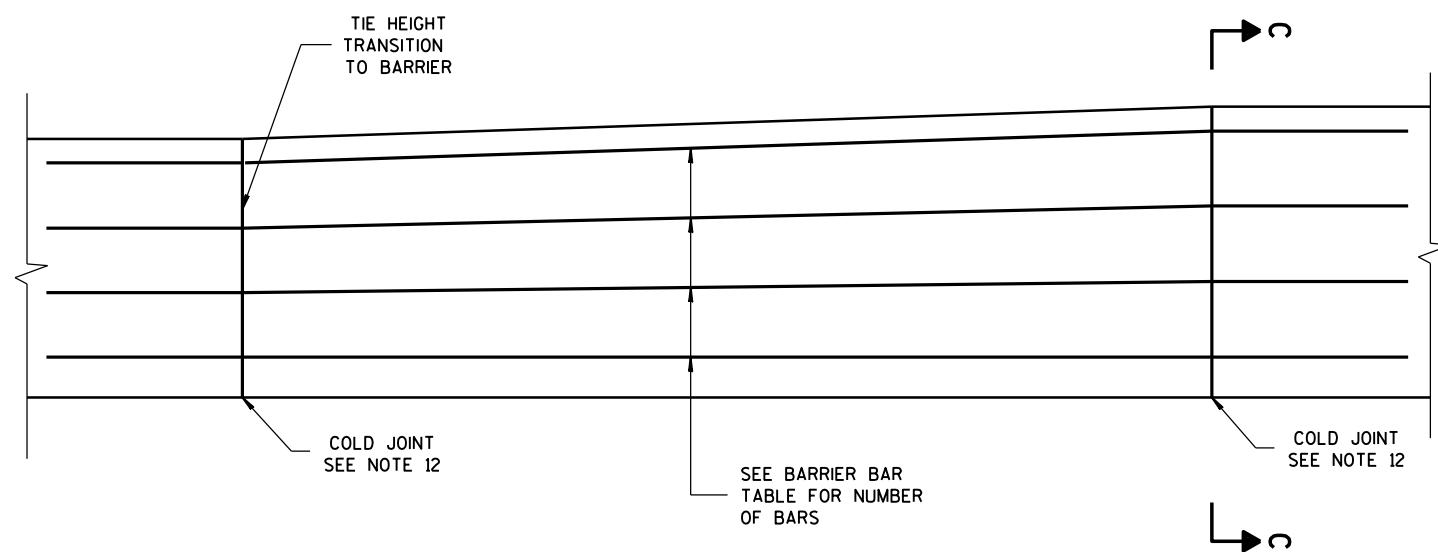
MULTIPLE HEIGHT TRANSITIONS MAY BE USED IN SEQUENCE TO GET TO APPROPRIATE HEIGHT.

USE COLD JOINT TO CONNECT MULTIPLE HEIGHT TRANSITIONS.

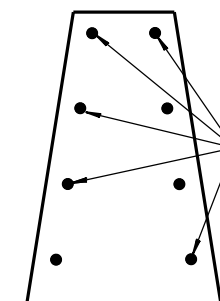
BARRIER BARS

H ₁	H ₂	L *	NUMBER OF NO. 5 BARS
32"	36"	10'-0"	8
36"	42"	10'-6"	10
42"	56"	24'-6"	11

*
LENGTH OF DOUBLE COLD JOINT INCLUDED IN THE TOTAL LENGTH OF CBSS.



STEEL REINFORCEMENT DETAIL



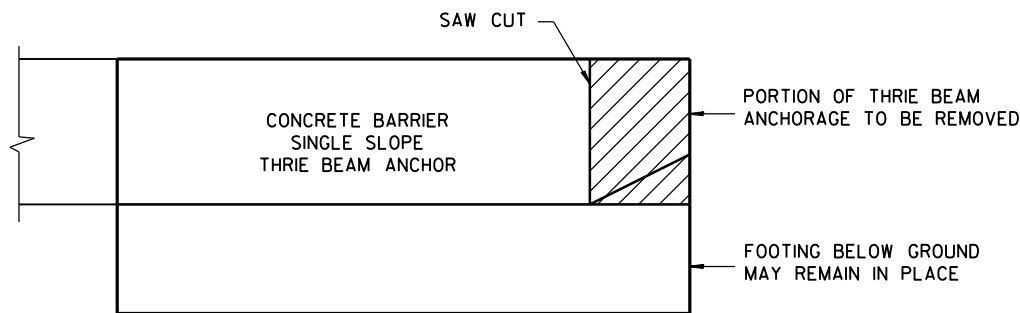
SECTION C-C

SEE BARRIER BAR
TABLE FOR NUMBER
OF BARS

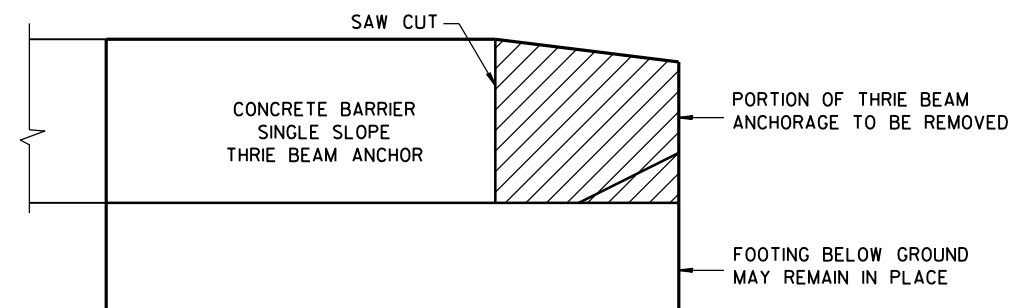
CONCRETE BARRIER
SINGLE SLOPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

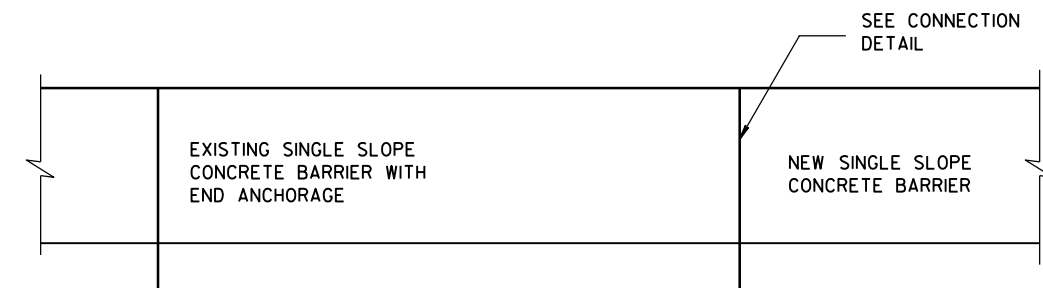
APPROVED
June 2014 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS ENGINEER
FHWA 470 INT



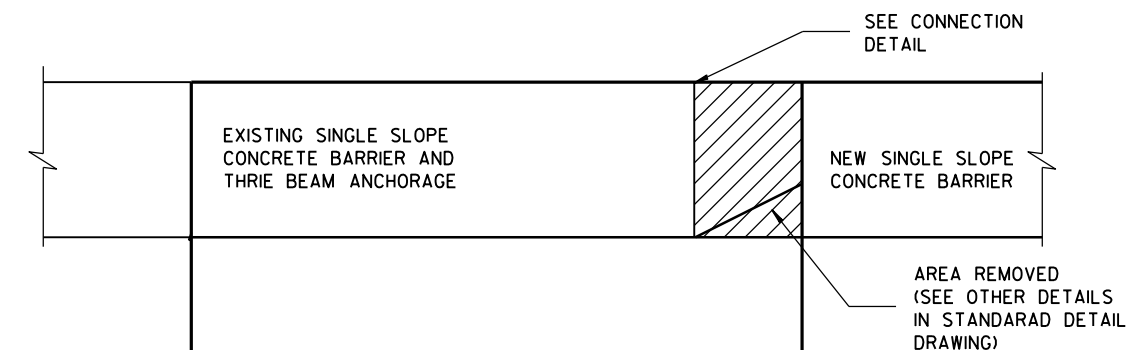
REMOVAL AREA OF
32" CONCRETE THRIE BEAM ANCHORAGE



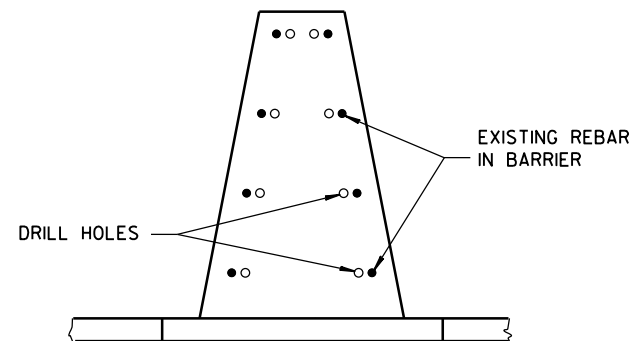
REMOVAL AREA OF CONCRETE THRIE BEAM
ANCHORAGE WITH HEIGHT GREATER THAN 32"



ELEVATION VIEW OF CONCRETE
BARRIER EXTENSION NEAR END ANCHORAGE



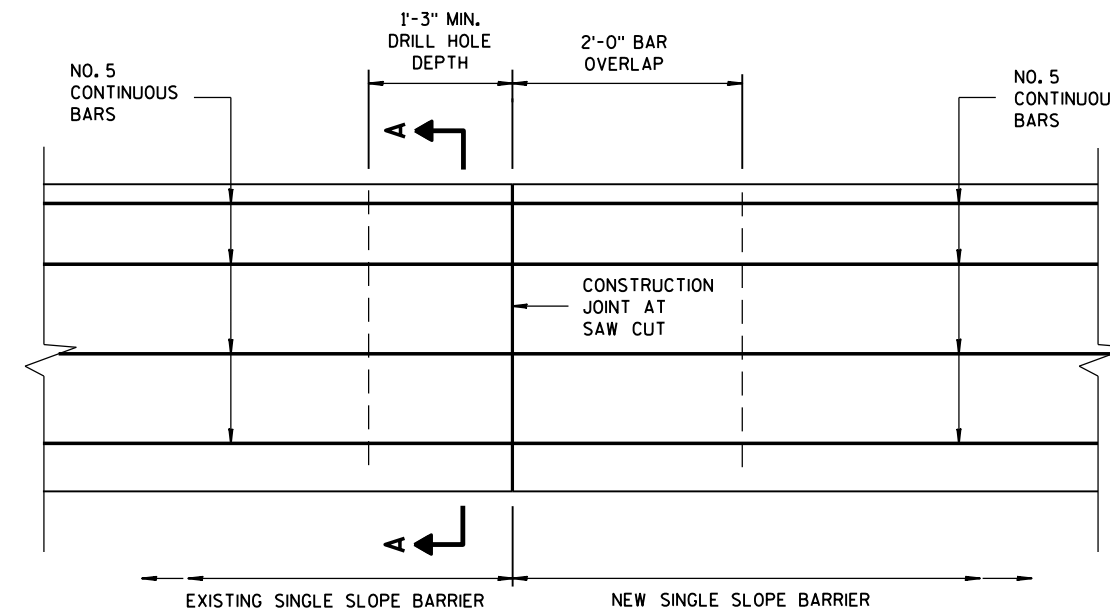
ELEVATION VIEW OF CONCRETE
BARRIER EXTENSION NEAR THRIE BEAM TERMINAL



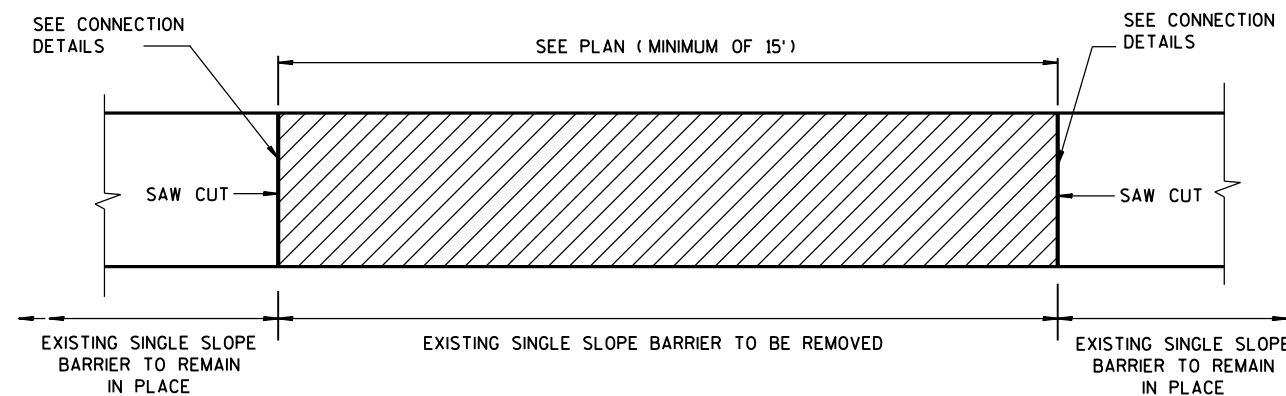
SECTION A-A

GENERAL NOTES

1. THE NUMBER OF DRILL HOLES IS EQUAL TO THE NUMBER OF REBAR IN BARRIER (SEE OTHER DETAILS).
2. MINIMUM DEPTH OF DRILL HOLES IS 1'-3".
3. DRILL HOLES TO BE A MINIMUM OF 4 INCHES FROM THE EDGE OF CONCRETE.
4. INSTALL EPOXY COATED NO. 5 BARS IN DRILL HOLES.
5. END ANCHORAGE MAY OR MAY NOT BE PRESENT ON EXISTING BARRIER.
6. REMOVE THRIE BEAM ANCHORAGE AS SHOWN.



CONNECTION OF EXISTING SINGLE SLOPE CONCRETE BARRIER TO
NEW SINGLE SLOPE CONCRETE BARRIER



ELEVATION FILE
BARRIER REMOVAL AND REPLACEMENT

CONCRETE BARRIER
SINGLE SLOPE

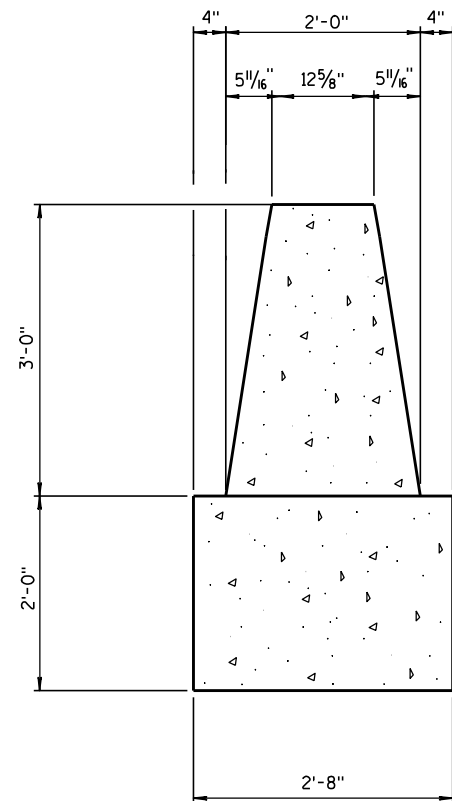
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
FHWA

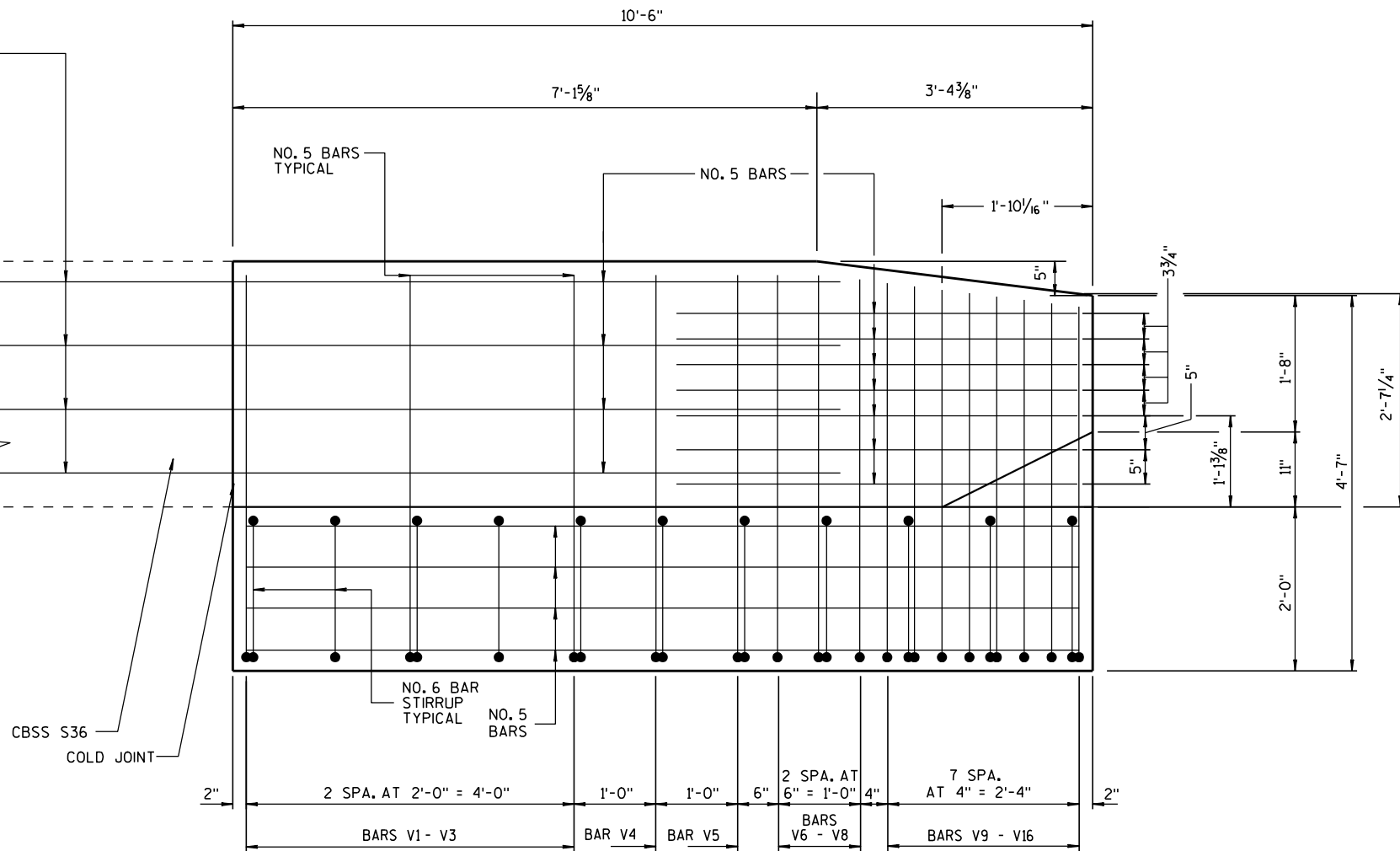
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
471

INT

SECTION A-A



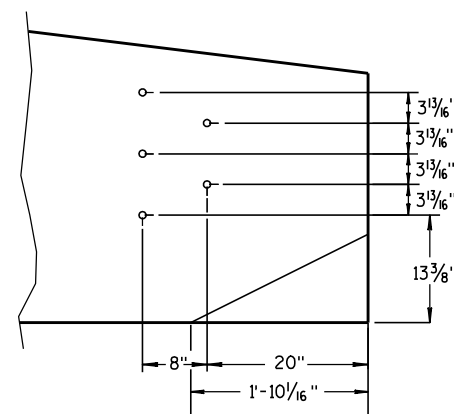
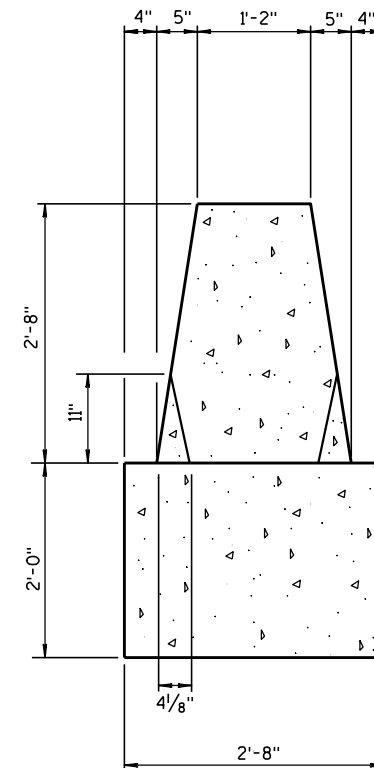
EVENLY SPACED H1 BARS,
NO. 5 BARS TO EXTEND
3' BEYOND END OF
TRANSITION
TIE NO. 5 BARS TO
HORIZONTAL BARS IN
SINGLE SLOPE BARRIER TO
TO FORM COLD JOINT



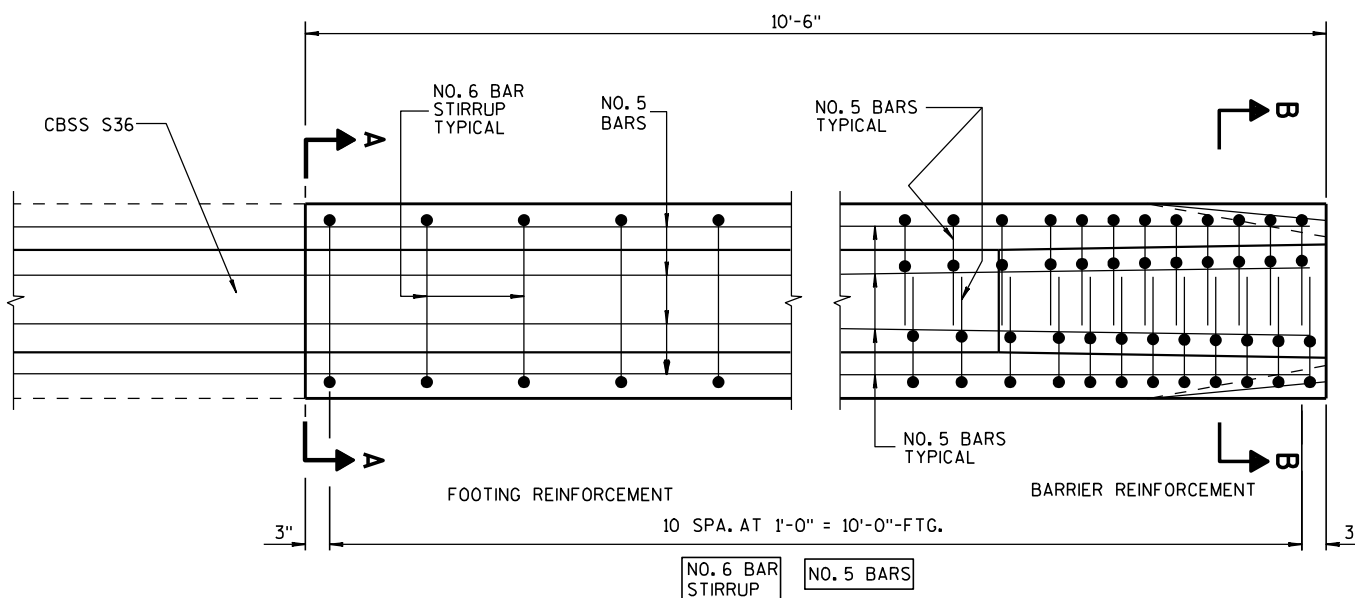
SEE SECTIONS ① THRU ⑩

ELEVATION VIEW

SECTION B-B



PVC PIPE LOCATIONS



PLAN VIEW

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

4000 PSICONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE 3/4" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

THRIE BEAM ANCHOR INCIDENTAL TO CONCRETE BARRIER ITEM.

INSTALL SCHEDULE 40 PVC PIPE 1" DIAMETER AT LOCATIONS INDICATED.

EXTEND PVC PIPE COMPLETELY THROUGH BARRIER.

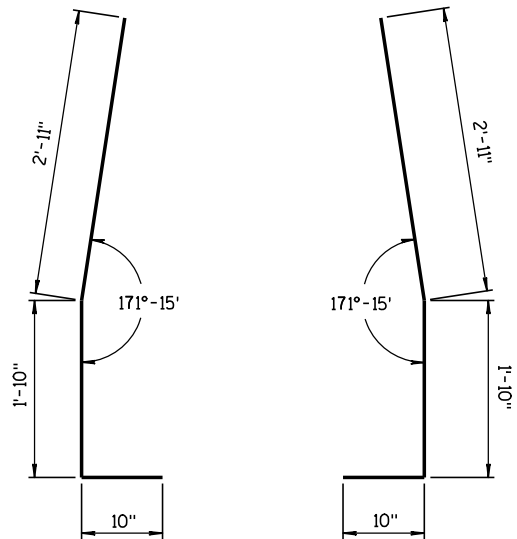
CUT ENDS OF PVC PIPE FLUSH WITH FINISHED FACE OF BARRIER.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

**CONCRETE BARRIER
SINGLE SLOPE 36"
THRIE BEAM ANCHOR**

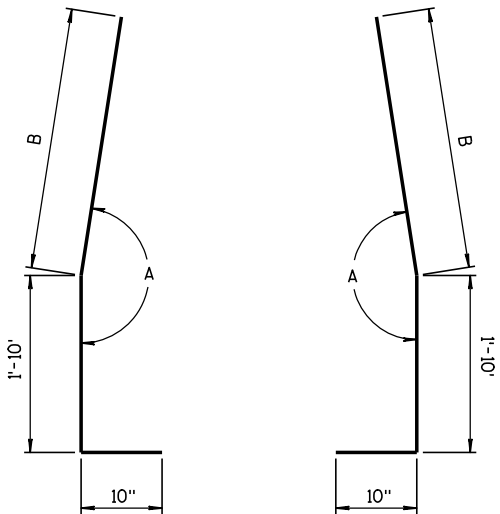
STATE OF WISCONSIN
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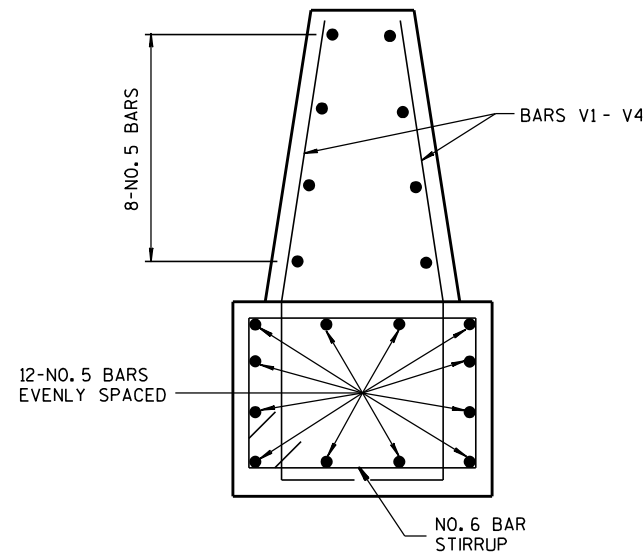
BAR BENDING DETAIL
FOR BARS V1 - V6

BAR CHART
SECTIONS V7 - V11

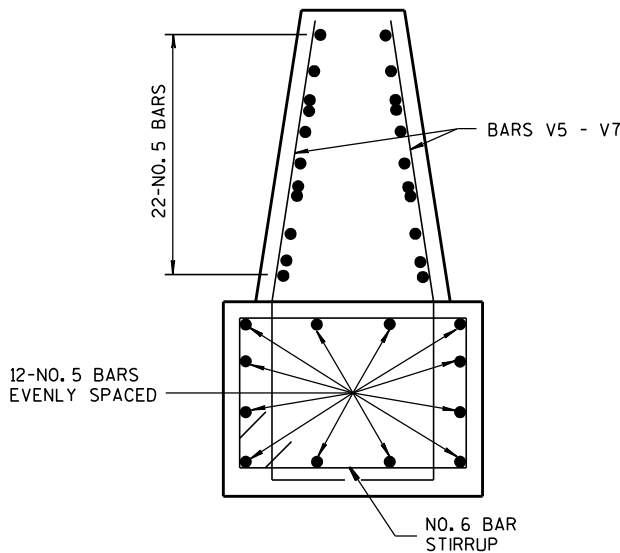
BAR	A	B
V7	171°-20'	2'-10½"
V8	171°-10'	2'-9½"
V9	171°-10'	2'-9"
V10	171°-05'	2'-8½"
V11	171°-10'	2'-8"



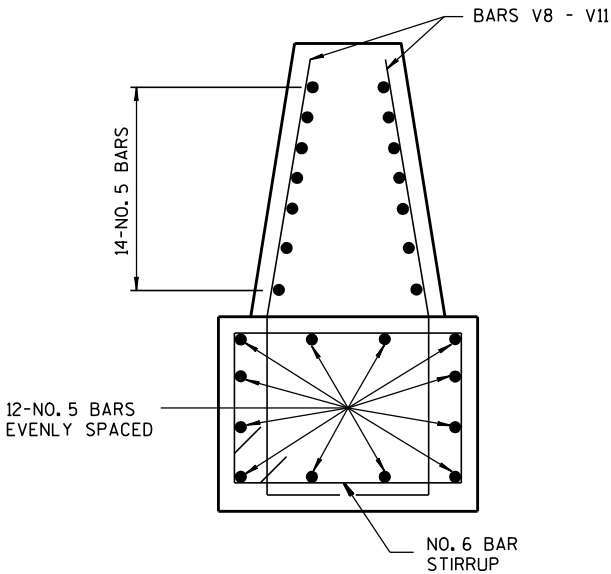
BAR BENDING DETAIL
FOR BARS V7 - V11



BAR DETAIL
SECTIONS 1 - 4



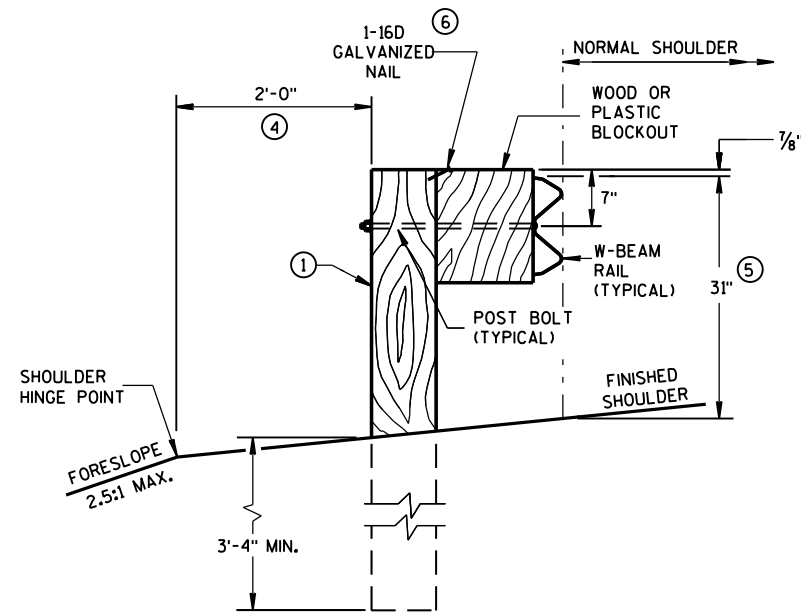
BAR DETAIL
SECTIONS 5 - 7



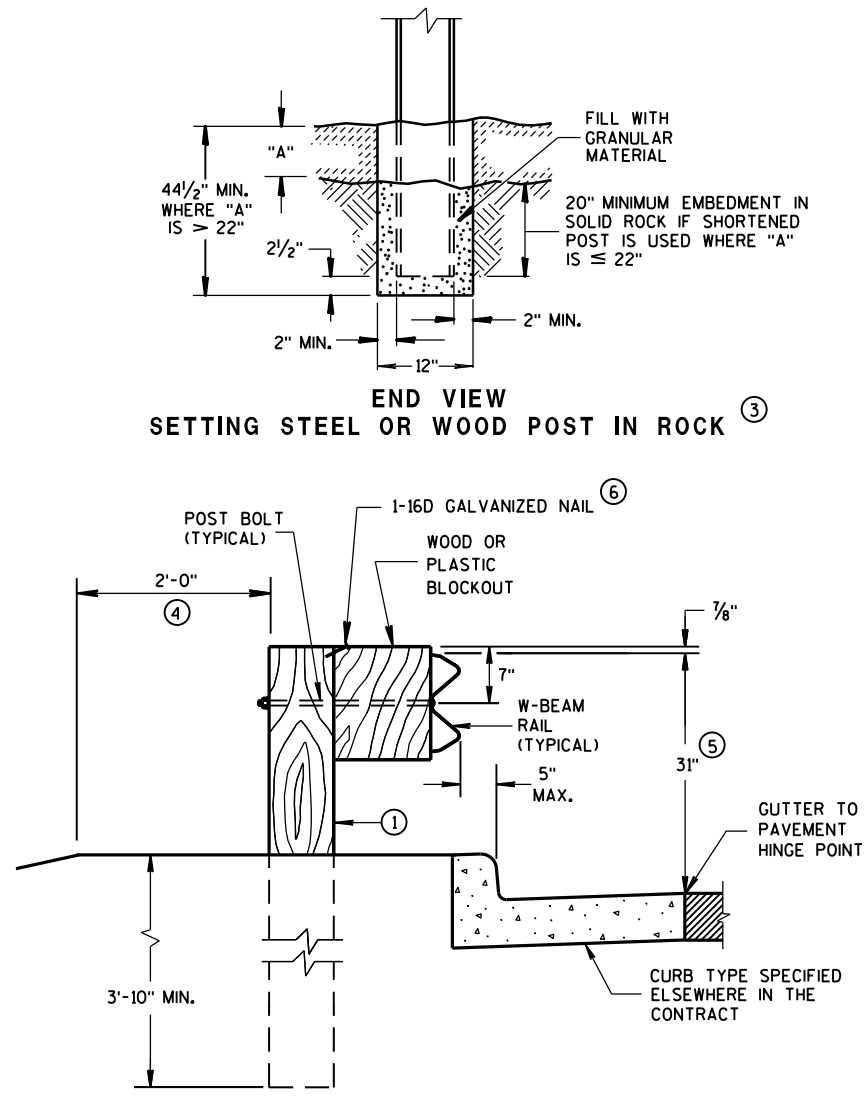
BAR DETAIL
SECTIONS 8 - 11

GENERAL NOTES

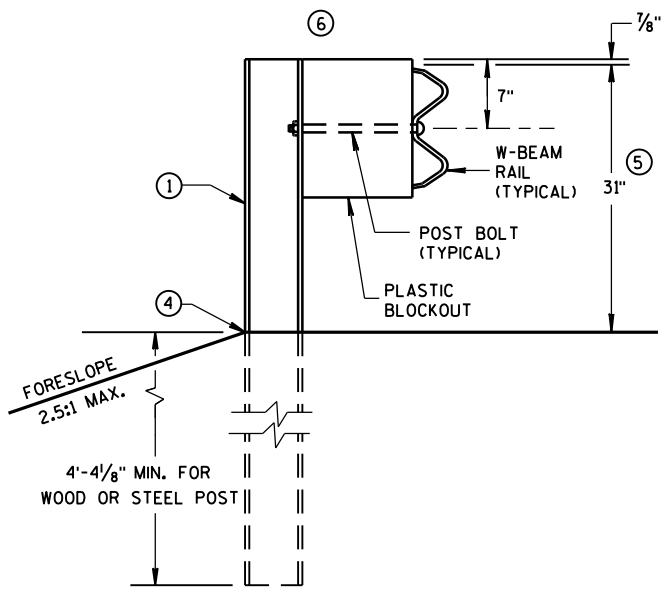
- ① WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ② USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.
- ③ IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2 INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AND INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.
- ④ WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).
- ⑤ FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 3/4" TO 32".
- ⑥ WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



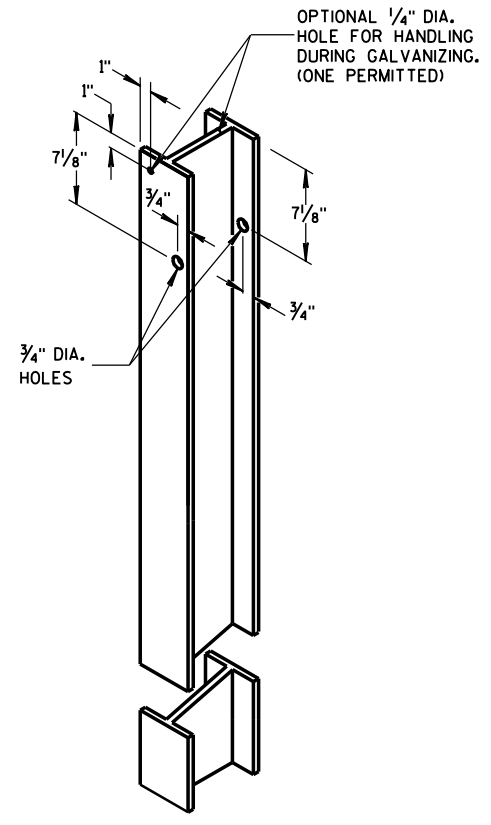
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



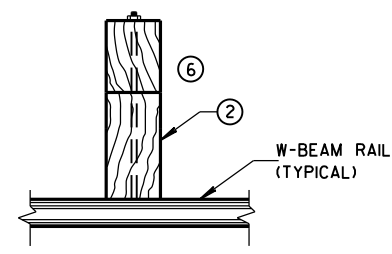
END VIEW
LOCATED ALONG A CURBED ROADWAY



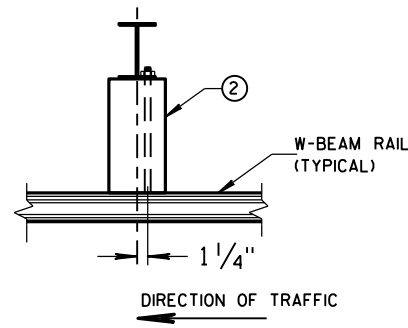
END VIEW
MGS LONGER POST AT HALFPST SPACING W BEAM (K)



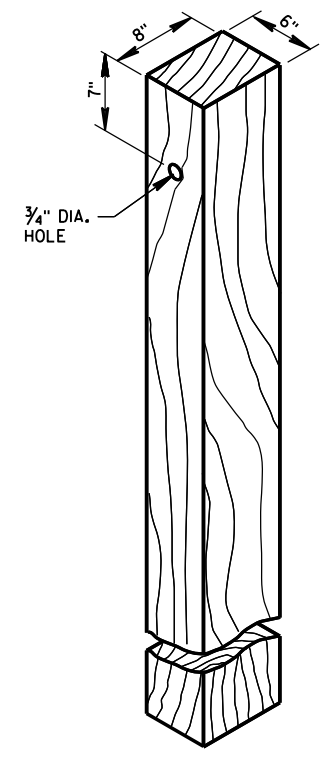
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9)



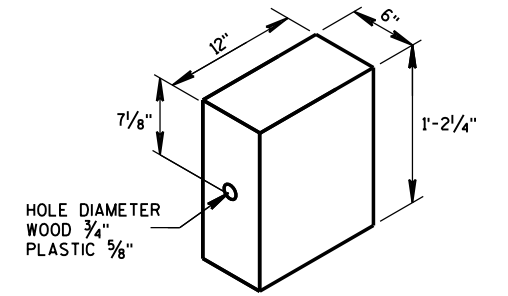
PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



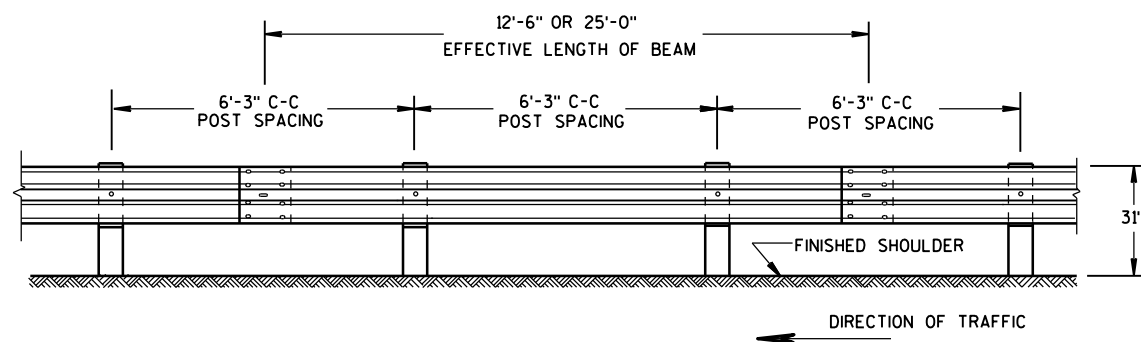
PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM



WOOD POST
(6" X 8") NOMINAL

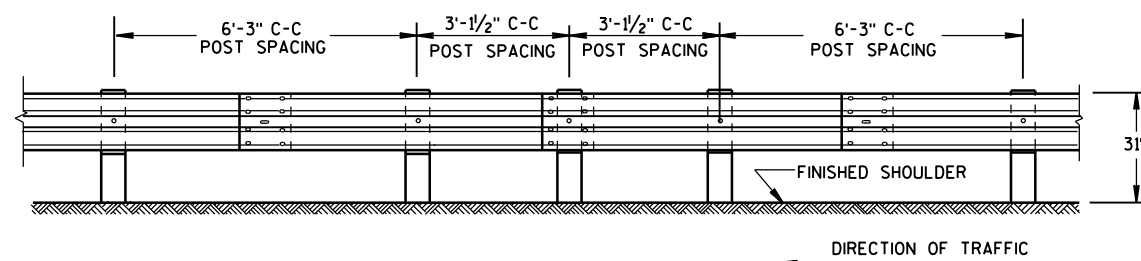


WOOD OR
PLASTIC BLOCKOUT



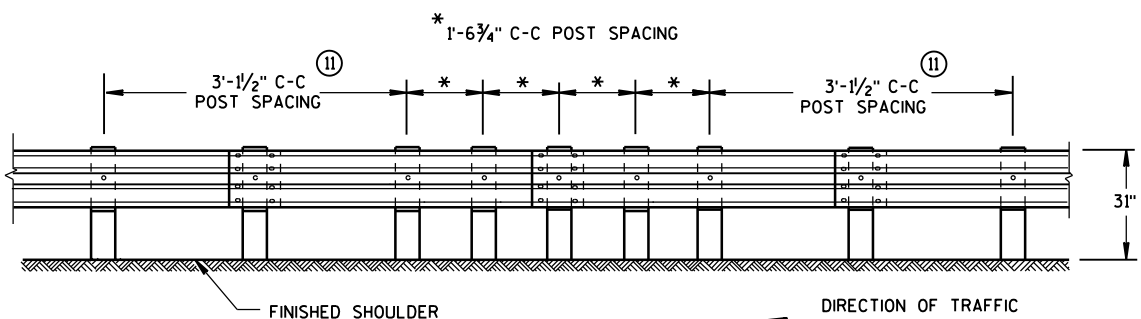
FRONT VIEW

POST SPACING STANDARD INSTALLATION



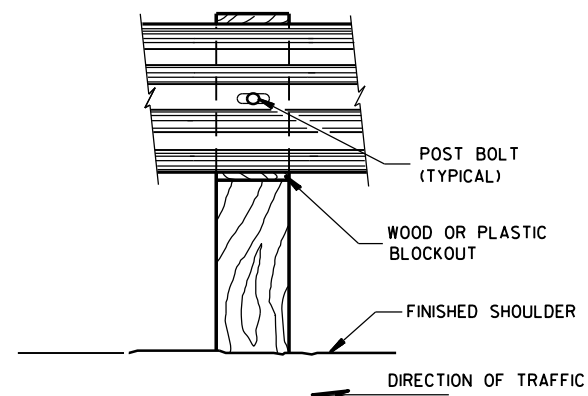
FRONT VIEW

HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)

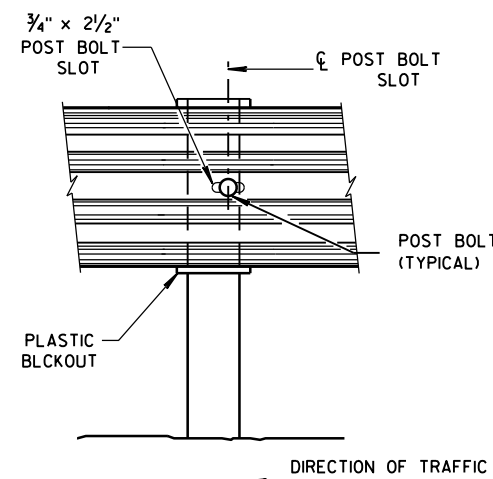


FRONT VIEW

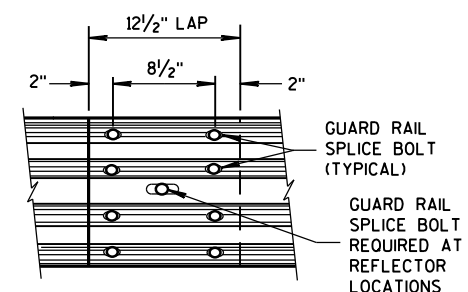
QUARTER POST SPACING (QS)



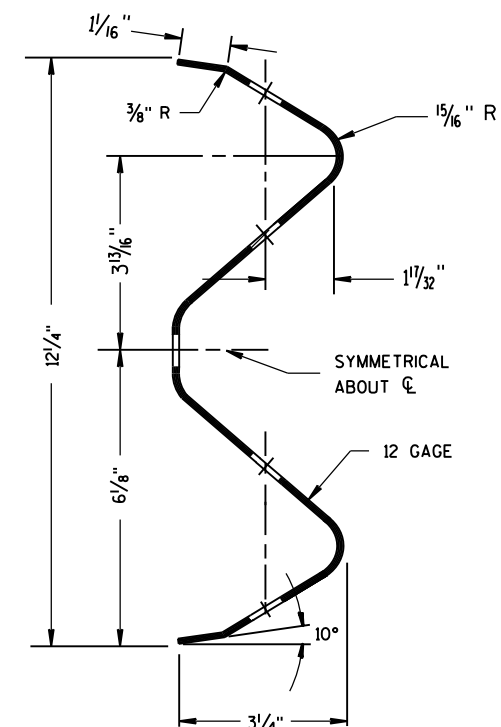
FRONT VIEW AT WOOD POST



FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE

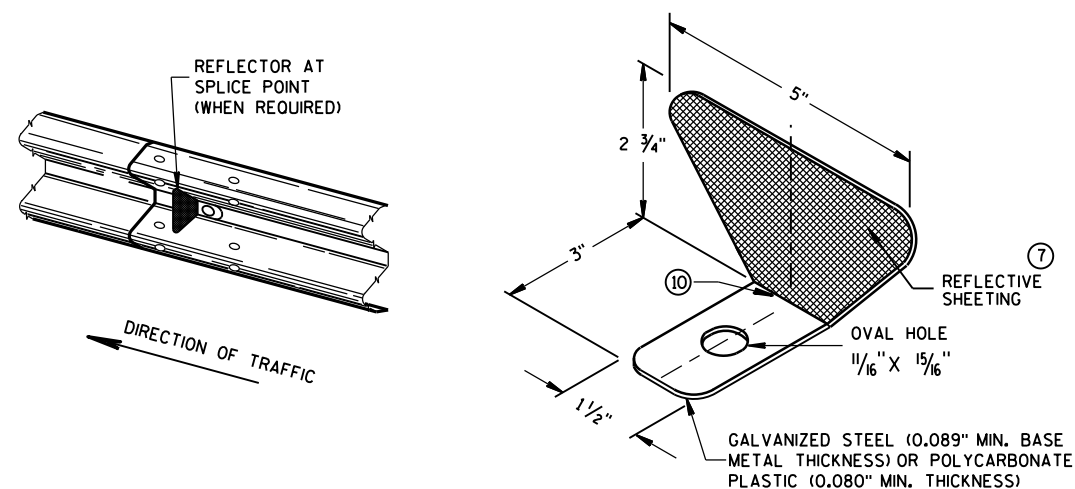


SECTION THRU W-BEAM RAIL

REFLECTOR SPACING ^⑧				
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 1 ^⑨	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 2 ^⑩	3

**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 475



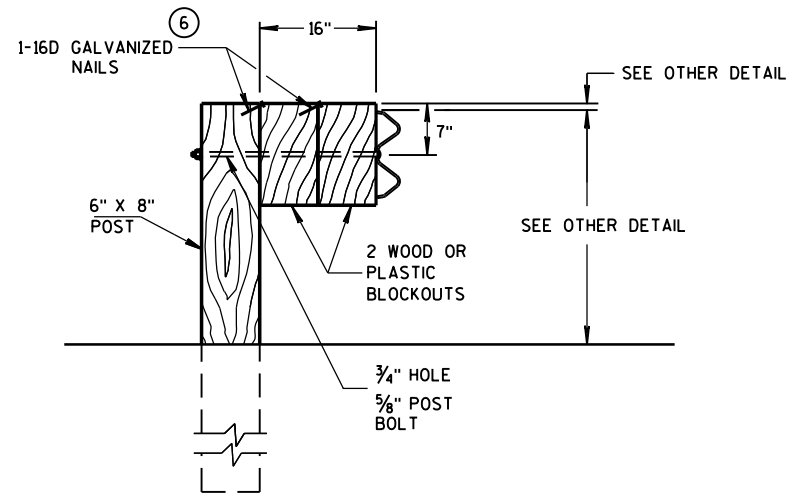
ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

GENERAL NOTES

- ⑦ PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.
- ⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.
- ⑨ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
- ⑩ PROVIDE AN ANGLE OF BEND OF $90^\circ \pm 1^\circ$ FOR TWO-SIDED REFLECTORS.
- ⑪ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

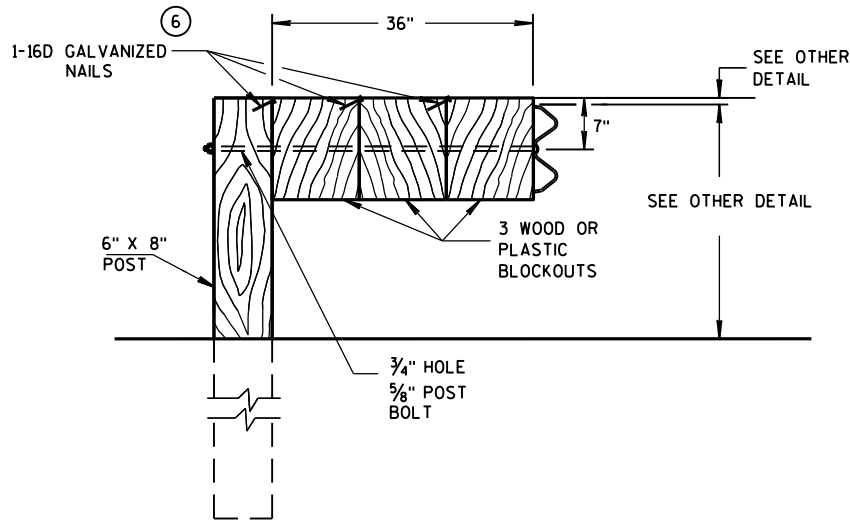
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL
HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE
RECESSED (DR) HEAVY HEX NUT.



DETAIL FOR 16" BLOCKOUT DEPTH

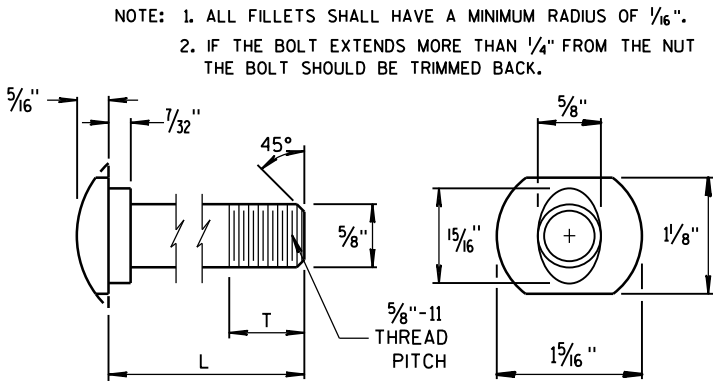
IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.



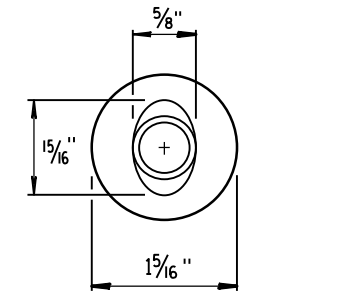
DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

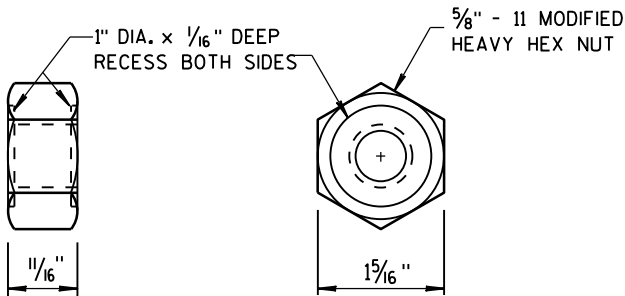
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.



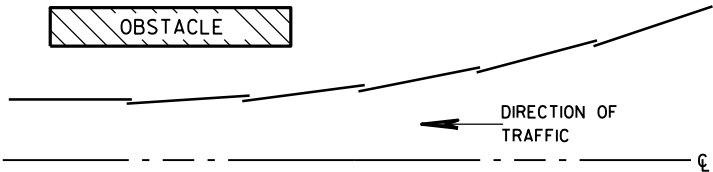
POST BOLT TABLE



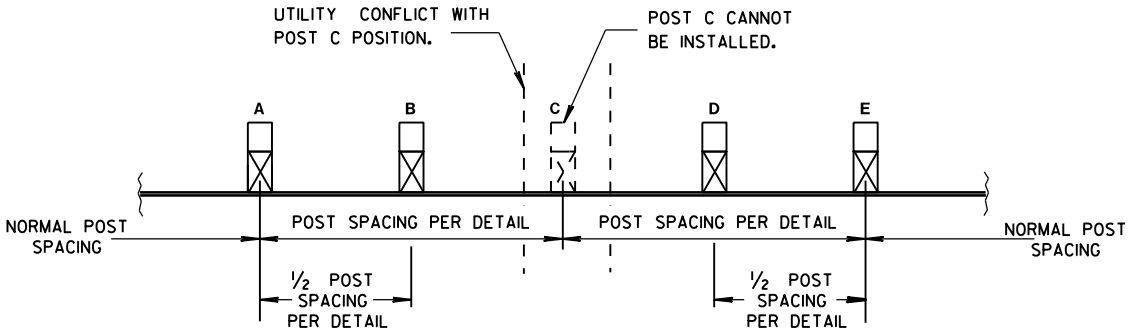
ALTERNATE BOLT HEAD



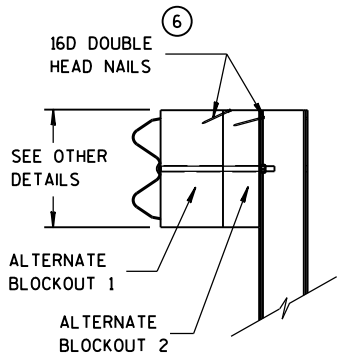
POST BOLT AND RECESS NUT



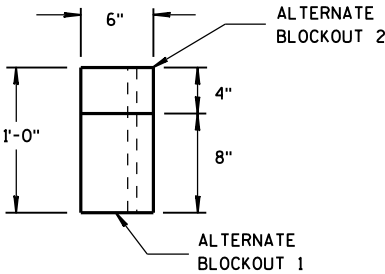
PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS
UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS (476) ENT
FHWA ENGINEER

GENERAL NOTES

- (A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.
- (B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.
- (C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.
- (D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.
- (E) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS, ONE SCREW PER CORNER.
- (G) 1/2" DIAMETER X 3" LONG LAG BOLT AND WASHER.
- (H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.
- (I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

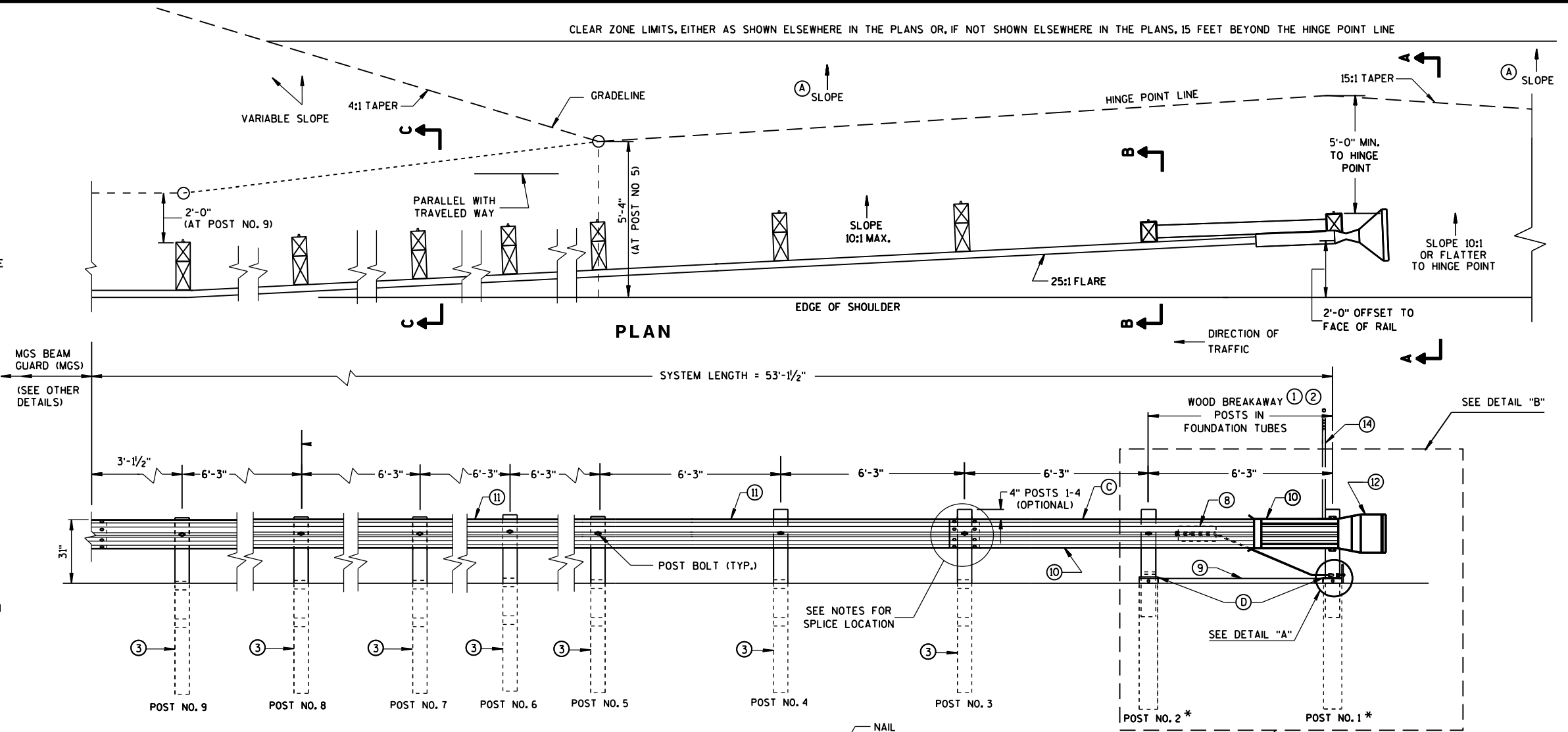
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

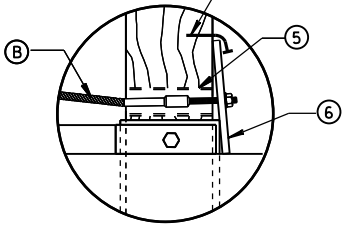
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

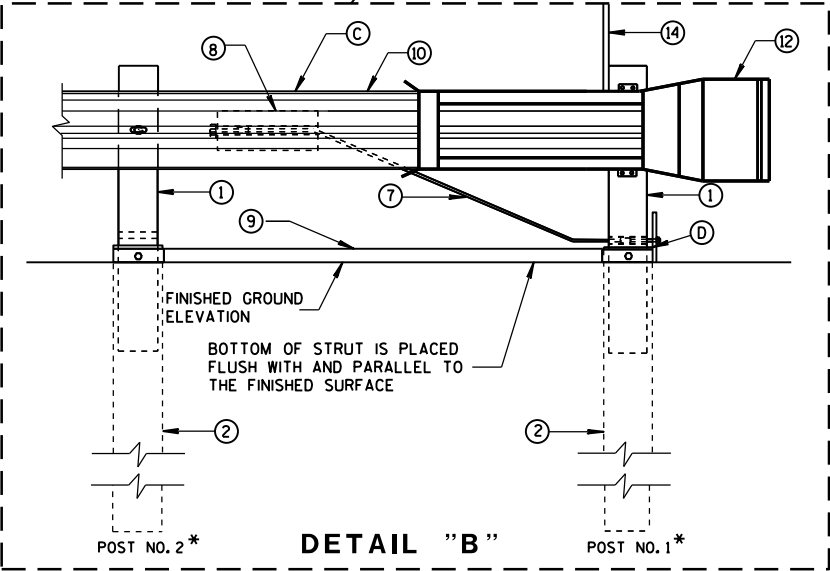
THE CENTER OF THE UPPER 3/2" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.



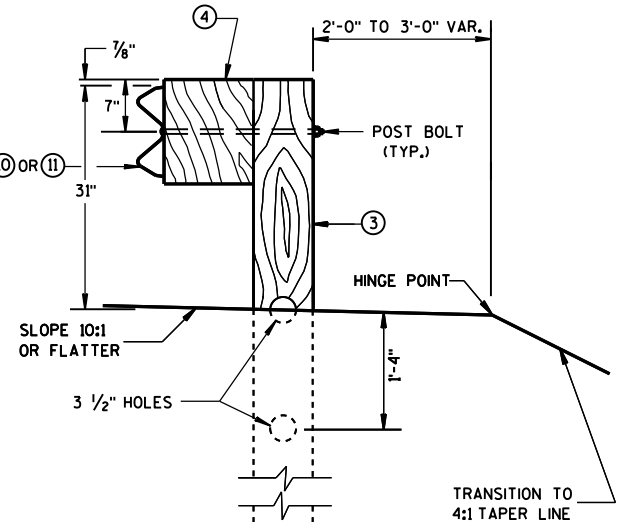
ELEVATION



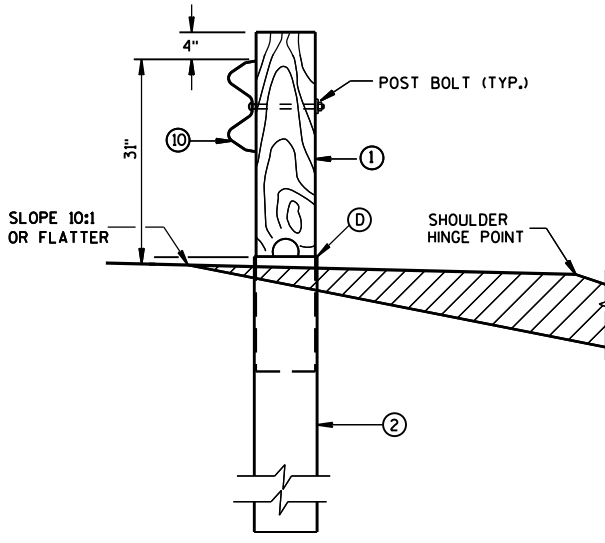
DETAIL "A"



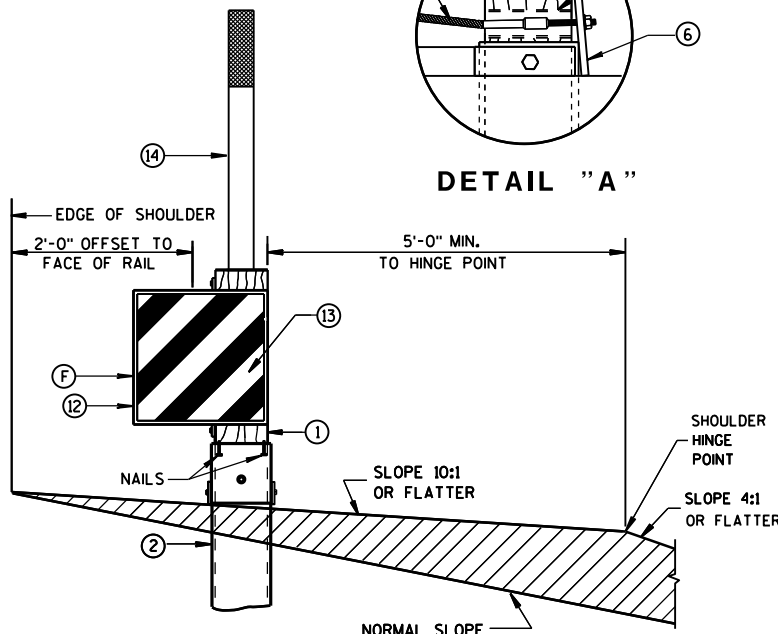
DETAIL "B"



SECTION C-C
TYPICAL AT POST NOS. 3-9



SECTION B-B
TYPICAL AT POST NO. 2*

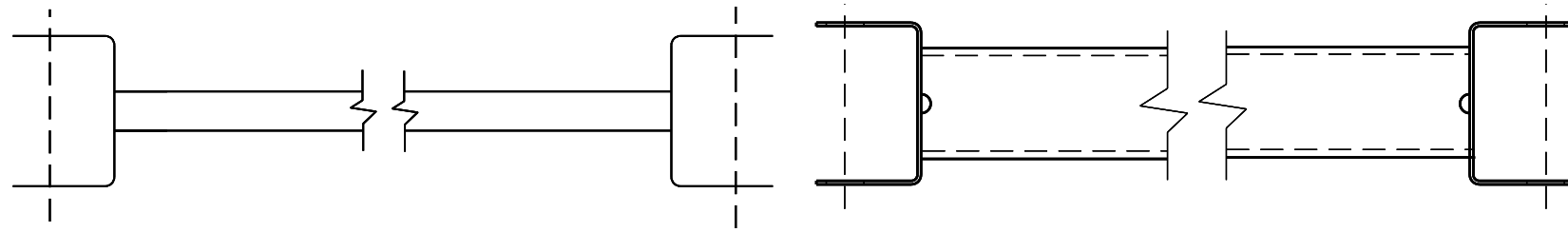


SECTION A-A
TYPICAL AT POST NO. 1*

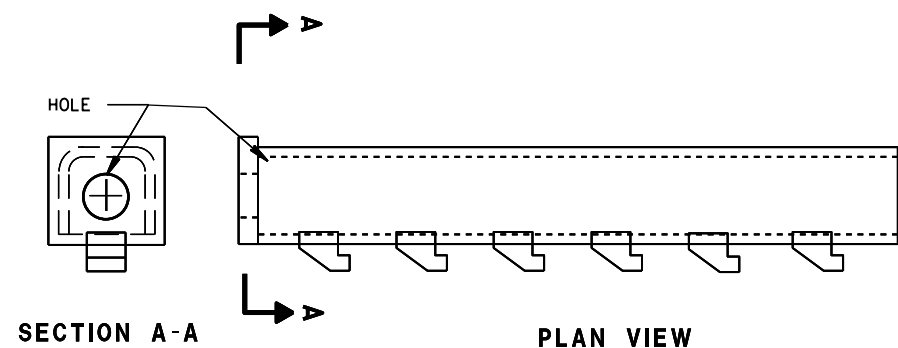
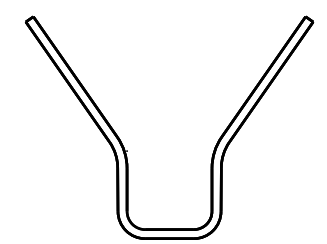
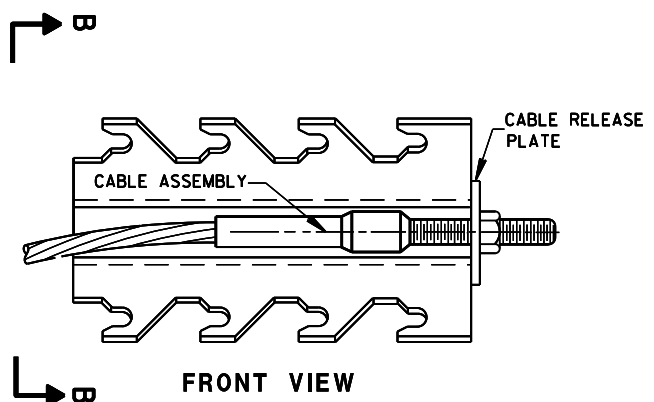
MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

477



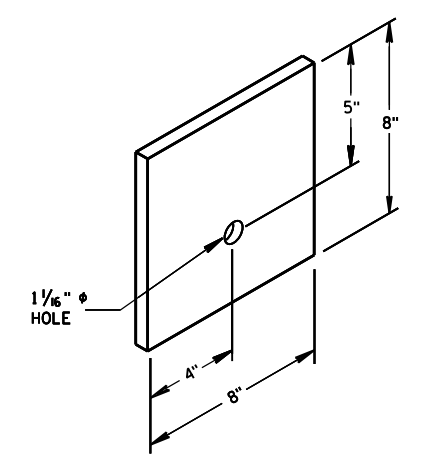
9 H
GENERIC GROUND STRUT



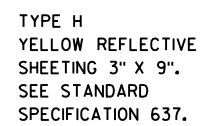
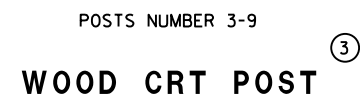
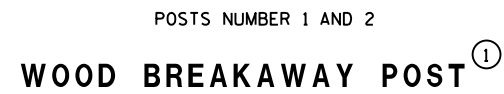
8 H
GENERIC ANCHOR CABLE BOX

BILL OF MATERIALS

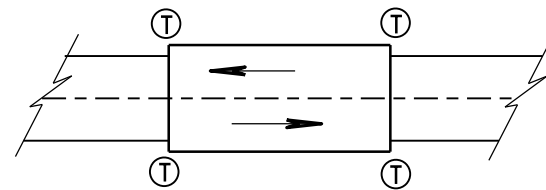
PART NO.	DESCRIPTION
MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.	
①	WOOD BREAKAWAY POST
②	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	END SECTION EAT
⑬	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
⑭	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



⑥
BEARING PLATE

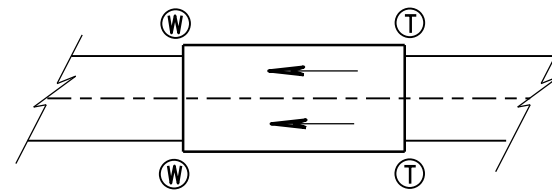


MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED <u>June 2014</u> <u>DATE</u>	<u>/S/ Jerry H. Zogg</u> ROADWAY STANDARDS ENGINEER		
FHWA	479	INT	



TWO WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION



ONE WAY TRAFFIC

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

GENERAL NOTES

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

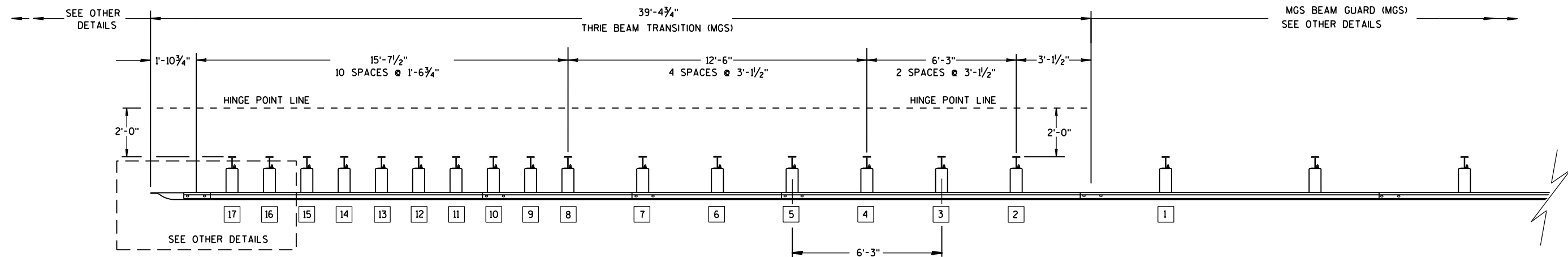
TRANSITION USES STEEL POSTS ONLY.

SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

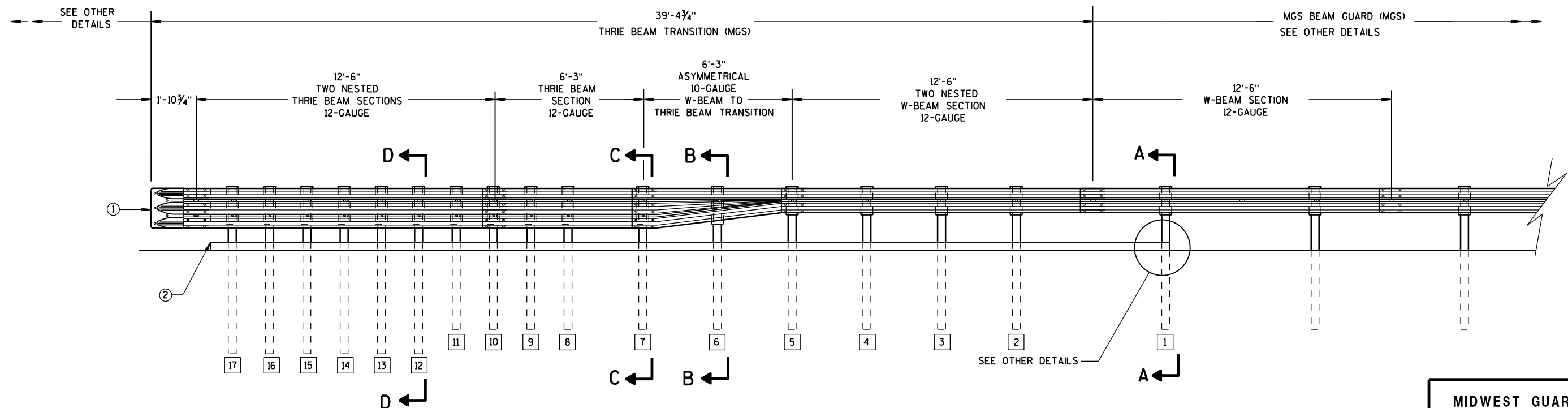
① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE



PLAN VIEW



ELEVATION VIEW

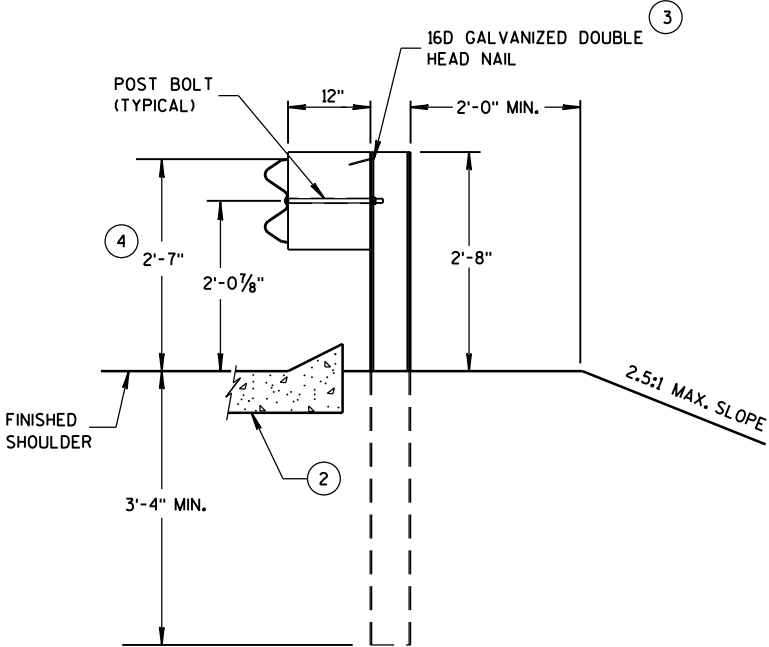
MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

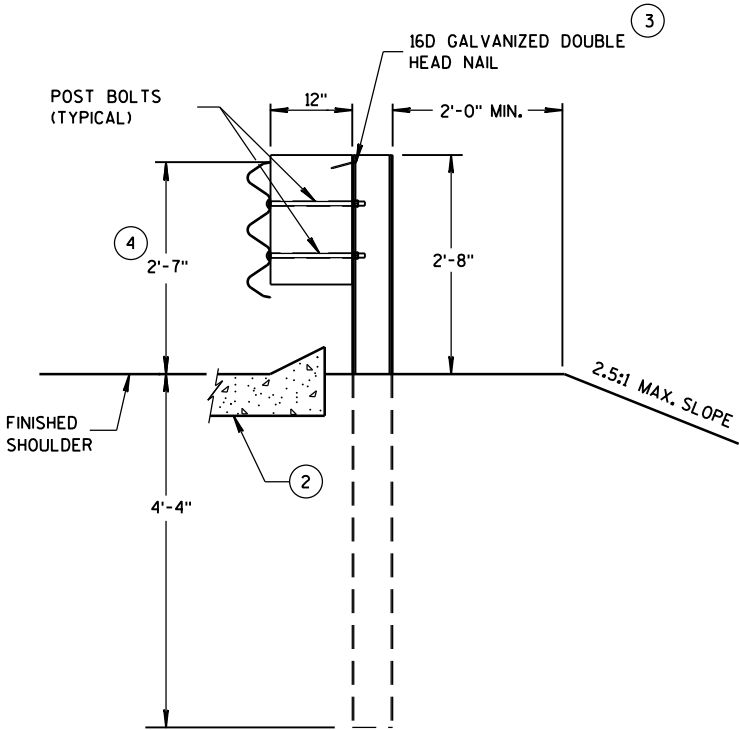
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 480

GENERAL NOTES

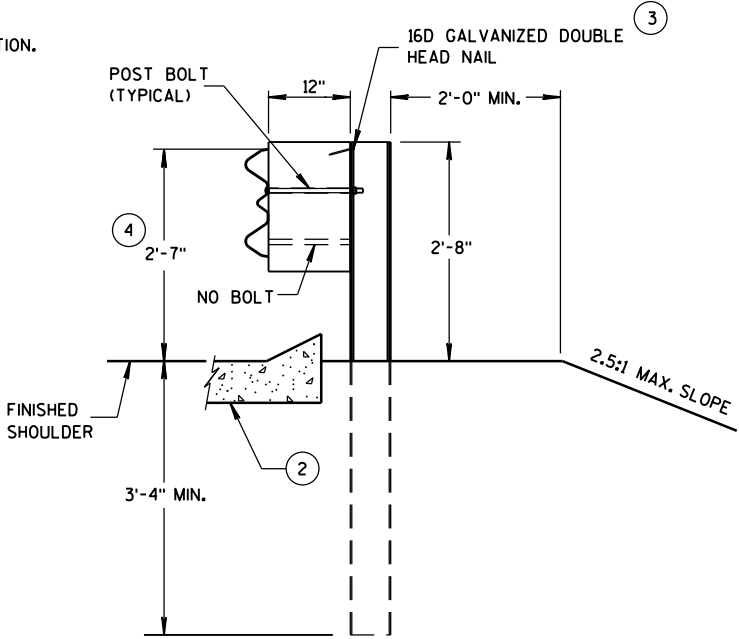
- 2 OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.
- 3 WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.
- 4 TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



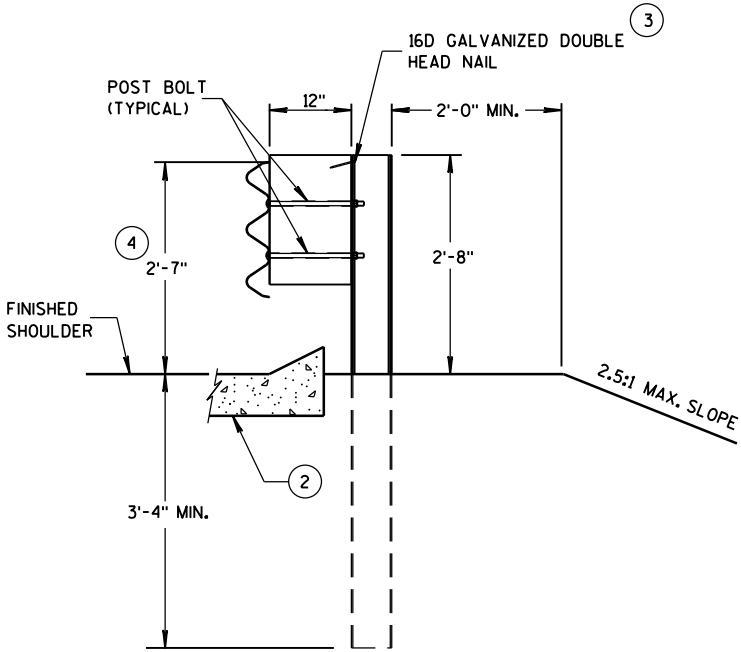
SECTION A-A
POSTS 1-5



SECTION D-D
POSTS 12-17



SECTION B-B
POST 6



SECTION C-C
POSTS 7-11

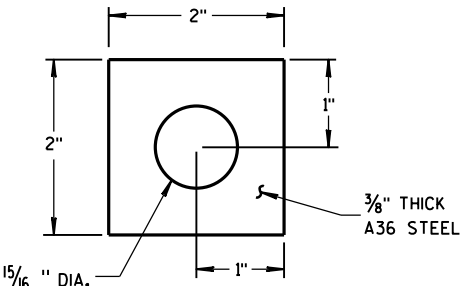
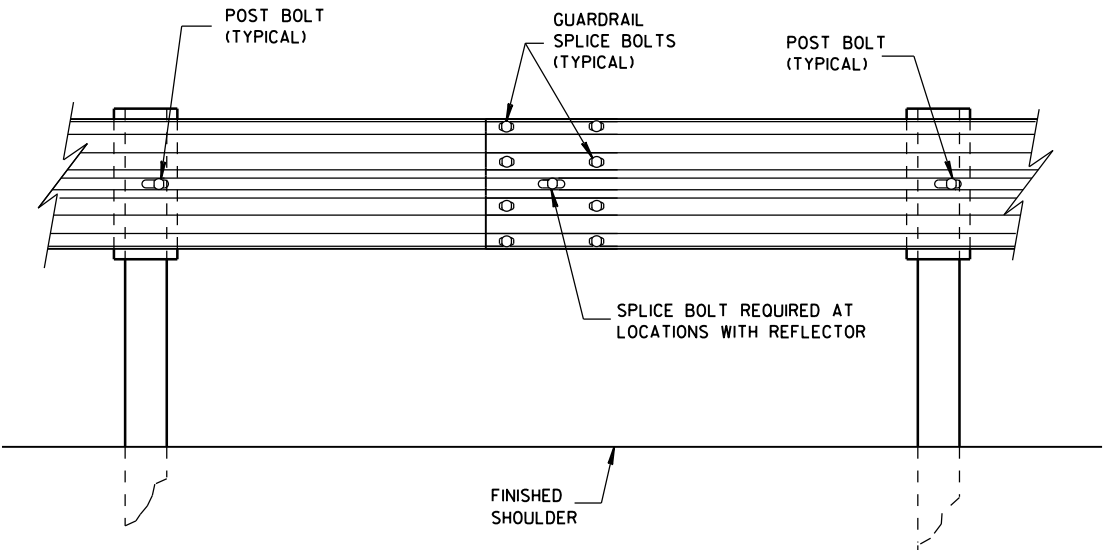
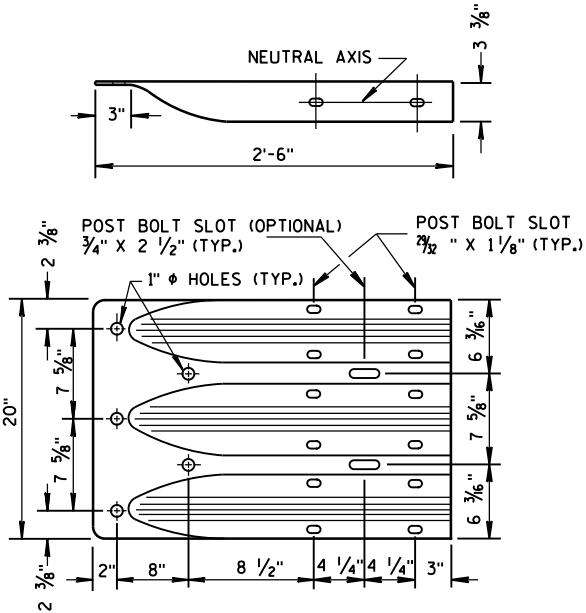


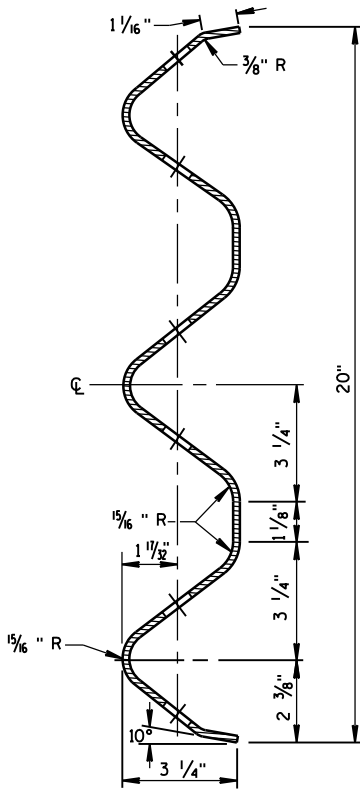
PLATE WASHER DETAIL



SPlice DETAIL



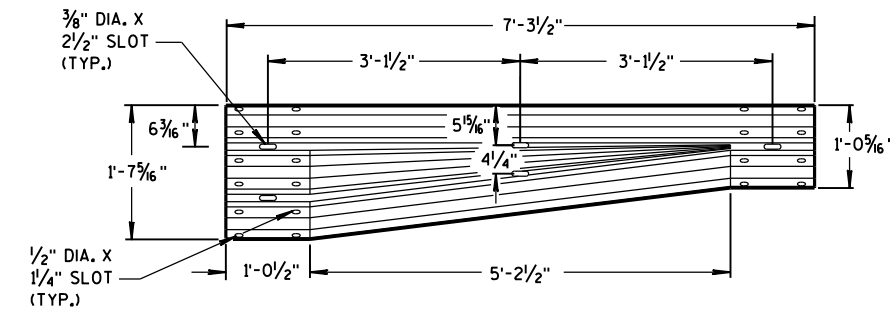
THRIE BEAM
TERMINAL CONNECTOR



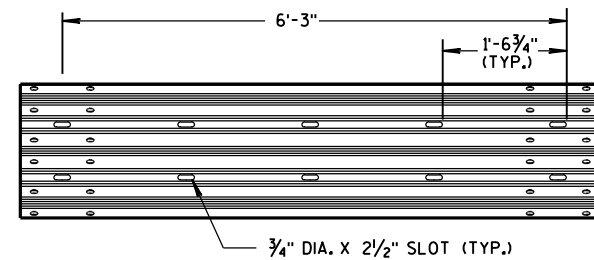
SECTION THRU THRIE
BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

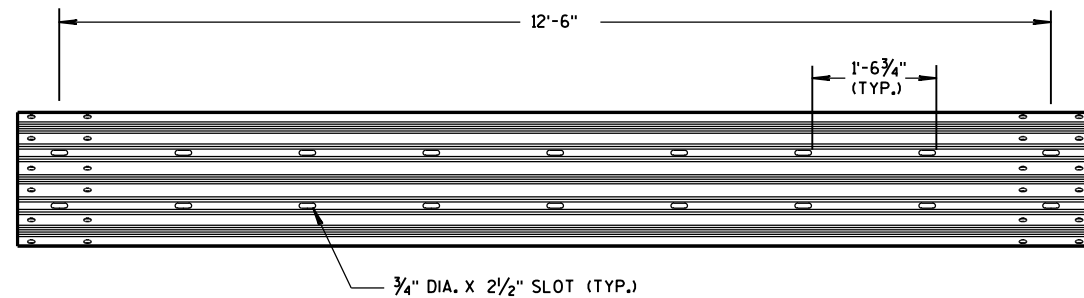
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 481



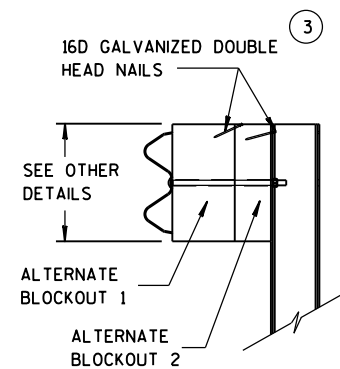
W-BEAM TO THRIE BEAM TRANSITION SECTION



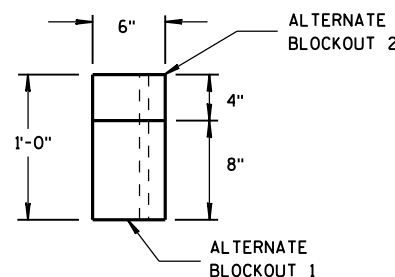
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

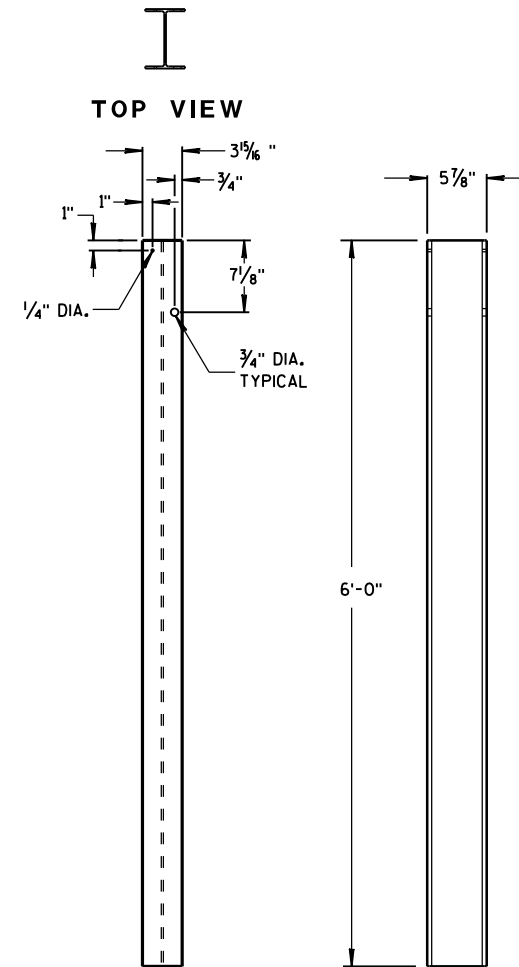


SIDE VIEW



TOP VIEW

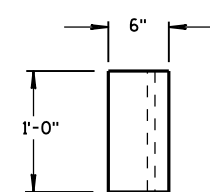
ALTERNATE WOOD BLOCKOUT DETAIL



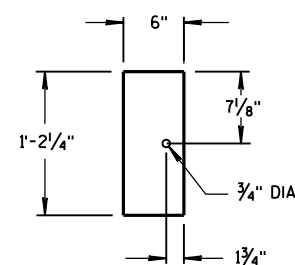
FRONT VIEW

SIDE VIEW

STEEL POSTS 1-5

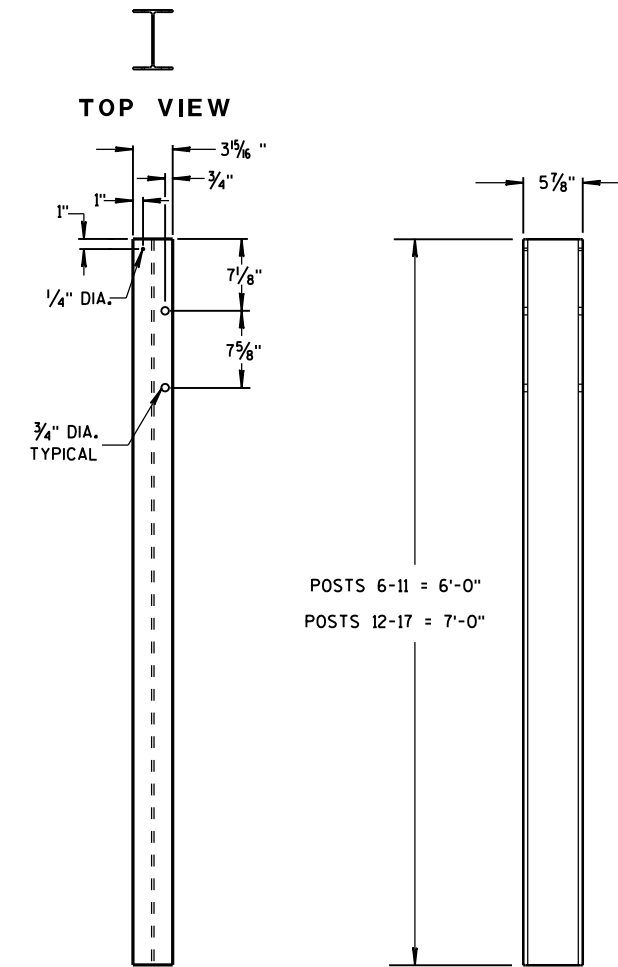


TOP VIEW



FRONT VIEW

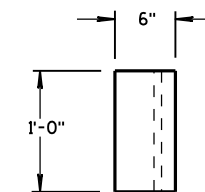
BLOCKOUT
POSTS 1-5



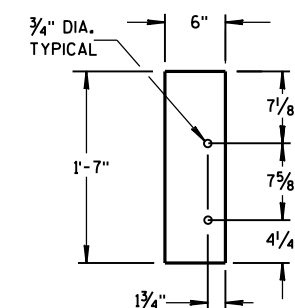
FRONT VIEW

SIDE VIEW

STEEL POSTS 6-17



TOP VIEW



FRONT VIEW

BLOCKOUT
POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

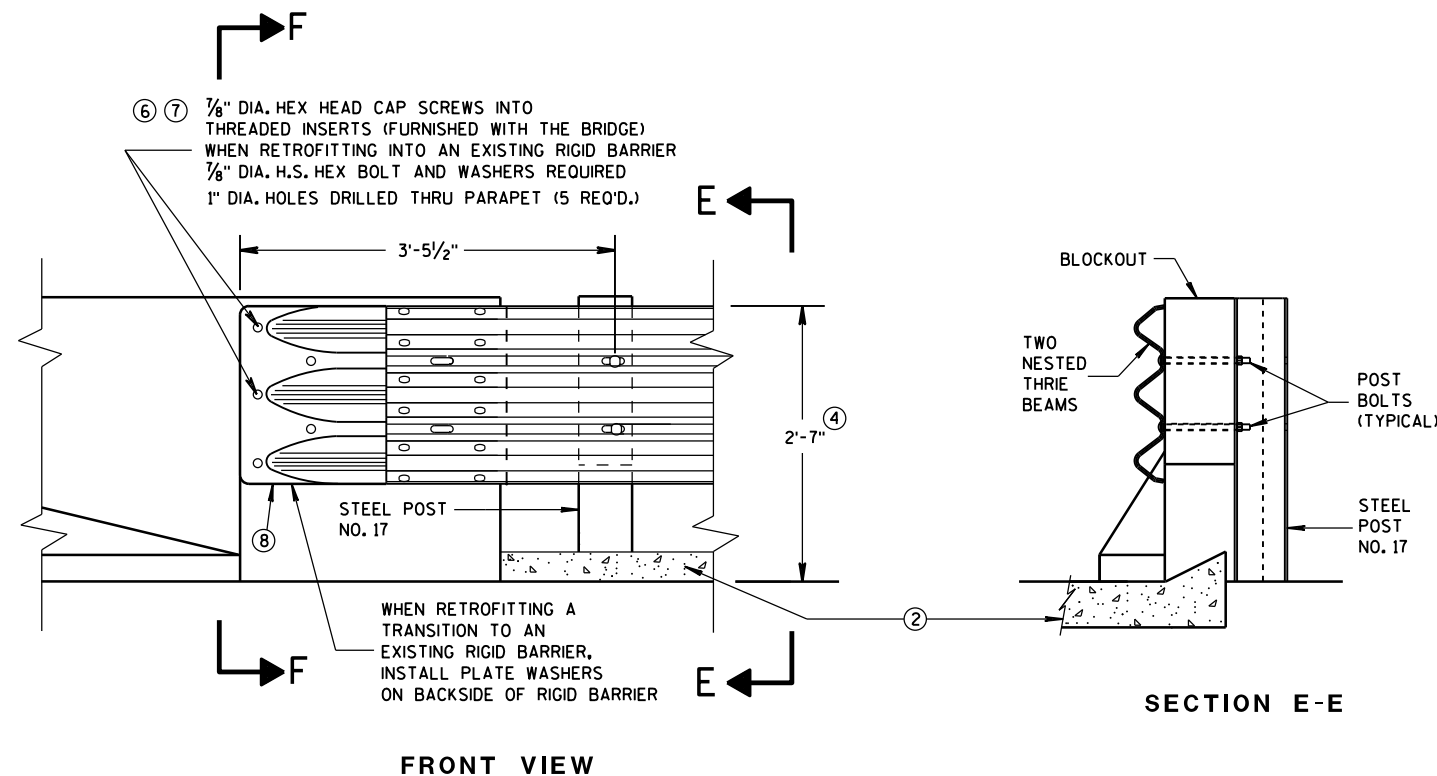
BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

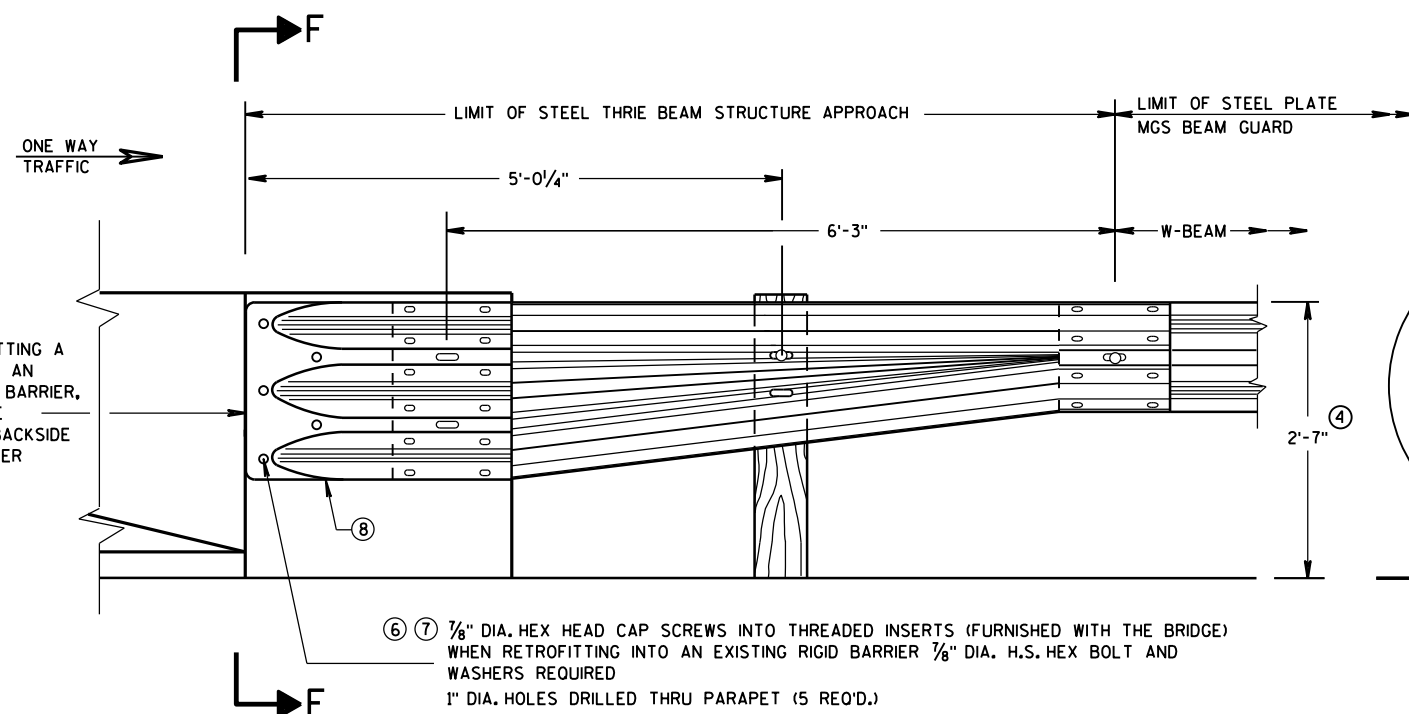
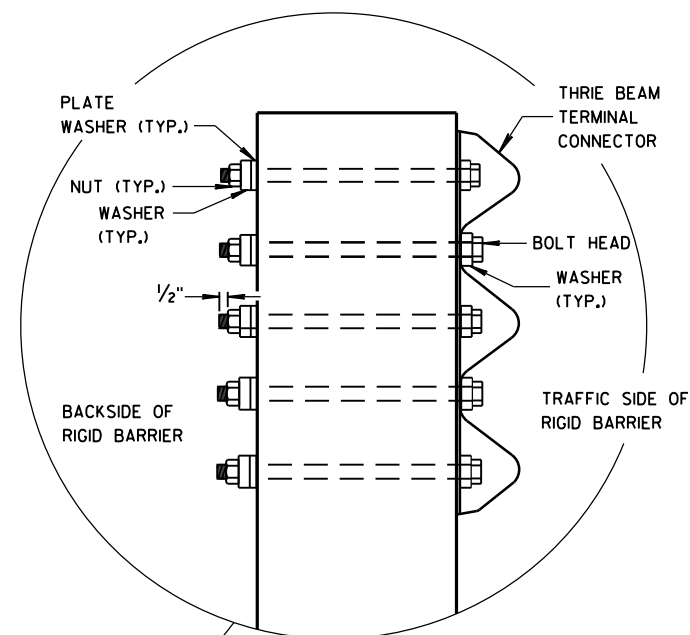
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 482



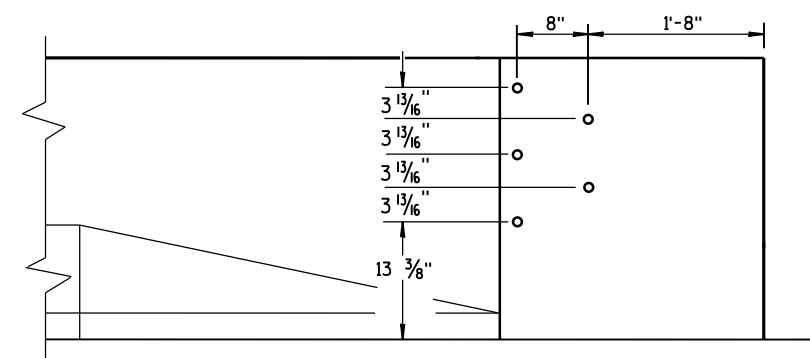
GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSITION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

- ② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.
- ④ TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.
- ⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- ⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.
- ⑧ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".



SECTION F-F



DRILL HOLE LOCATION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June, 2015

DATE

FHWA

/S/ Jerry H. Zogg

ROADWAY STANDARDS D 483

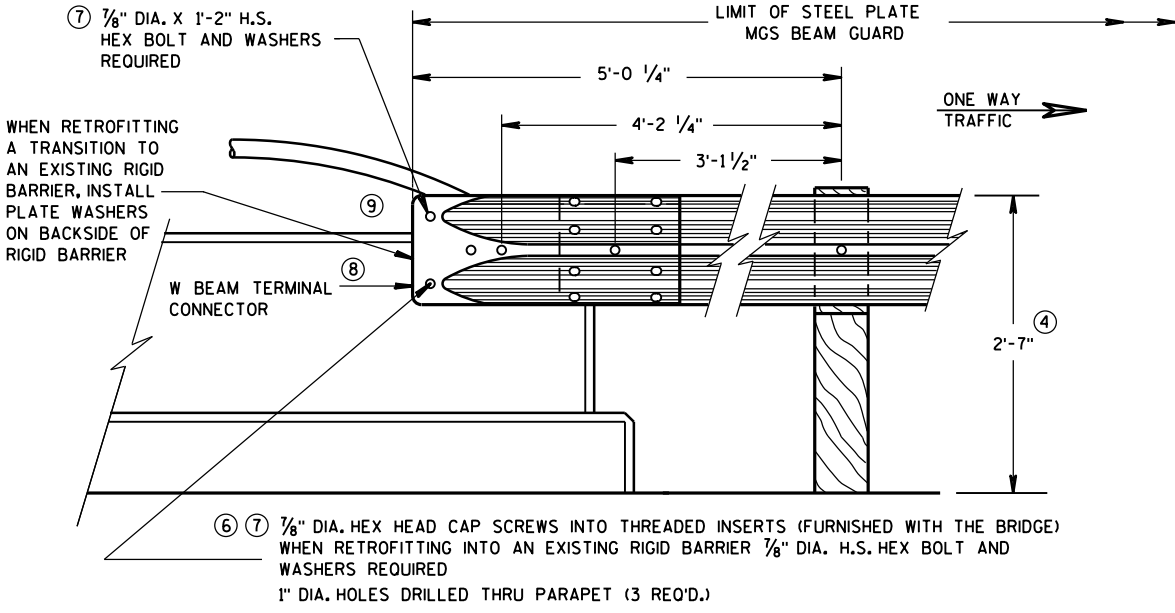
ENGINEER

NT

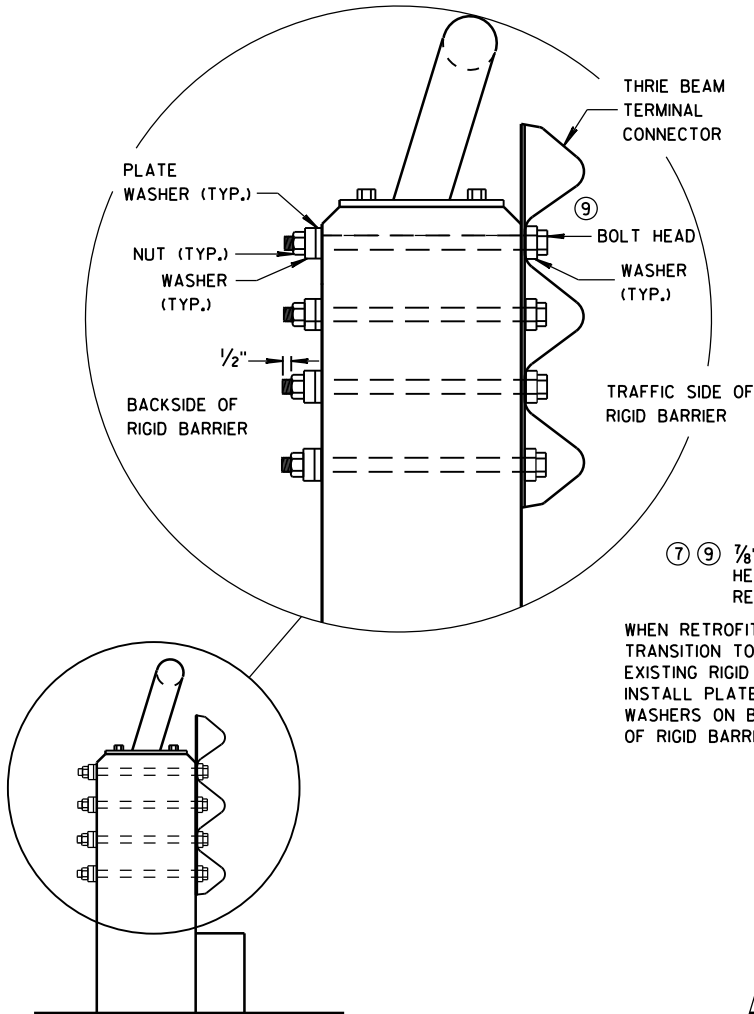
GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

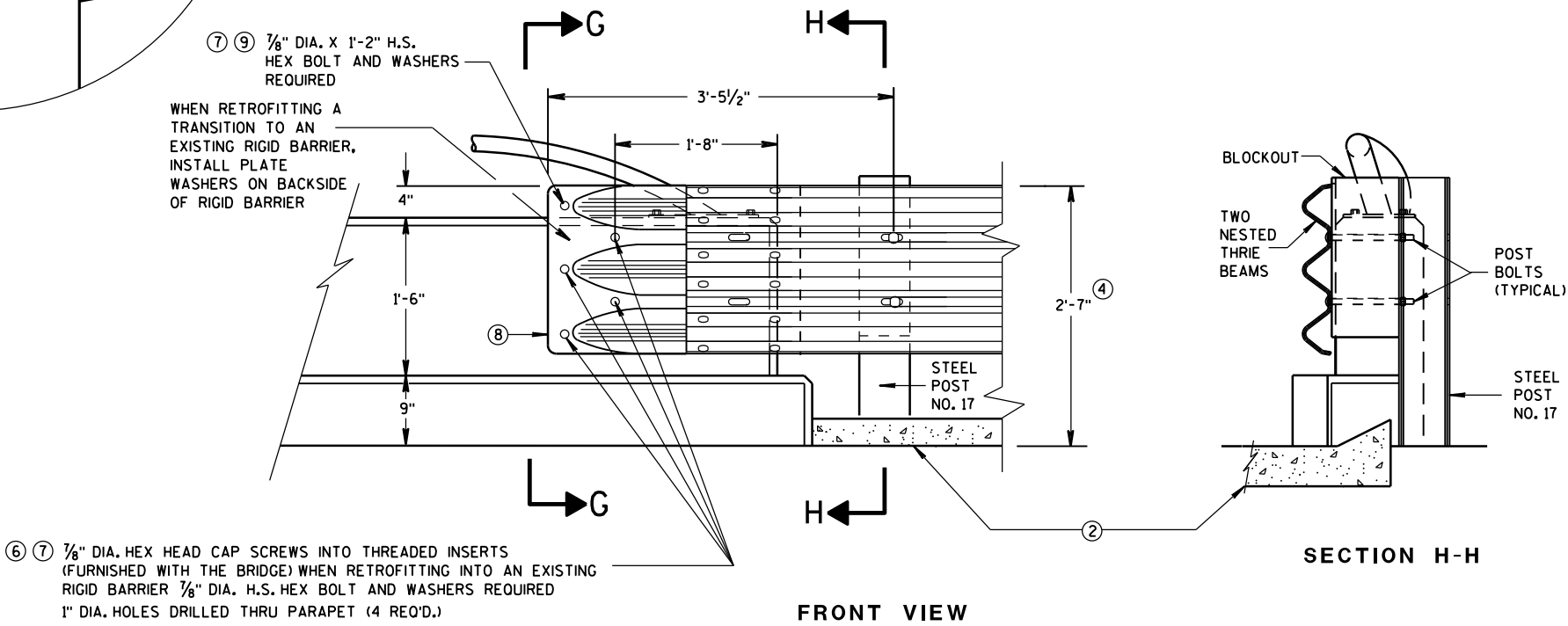
- ② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.
- ④ TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.
- ⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- ⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X $\frac{5}{8}"$ THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.
- ⑧ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 $\frac{1}{2}"$.
- ⑨ BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.



FRONT VIEW
W BEAM CONNECTION TO VERTICAL FACE PARAPET
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



SECTION G-G



FRONT VIEW

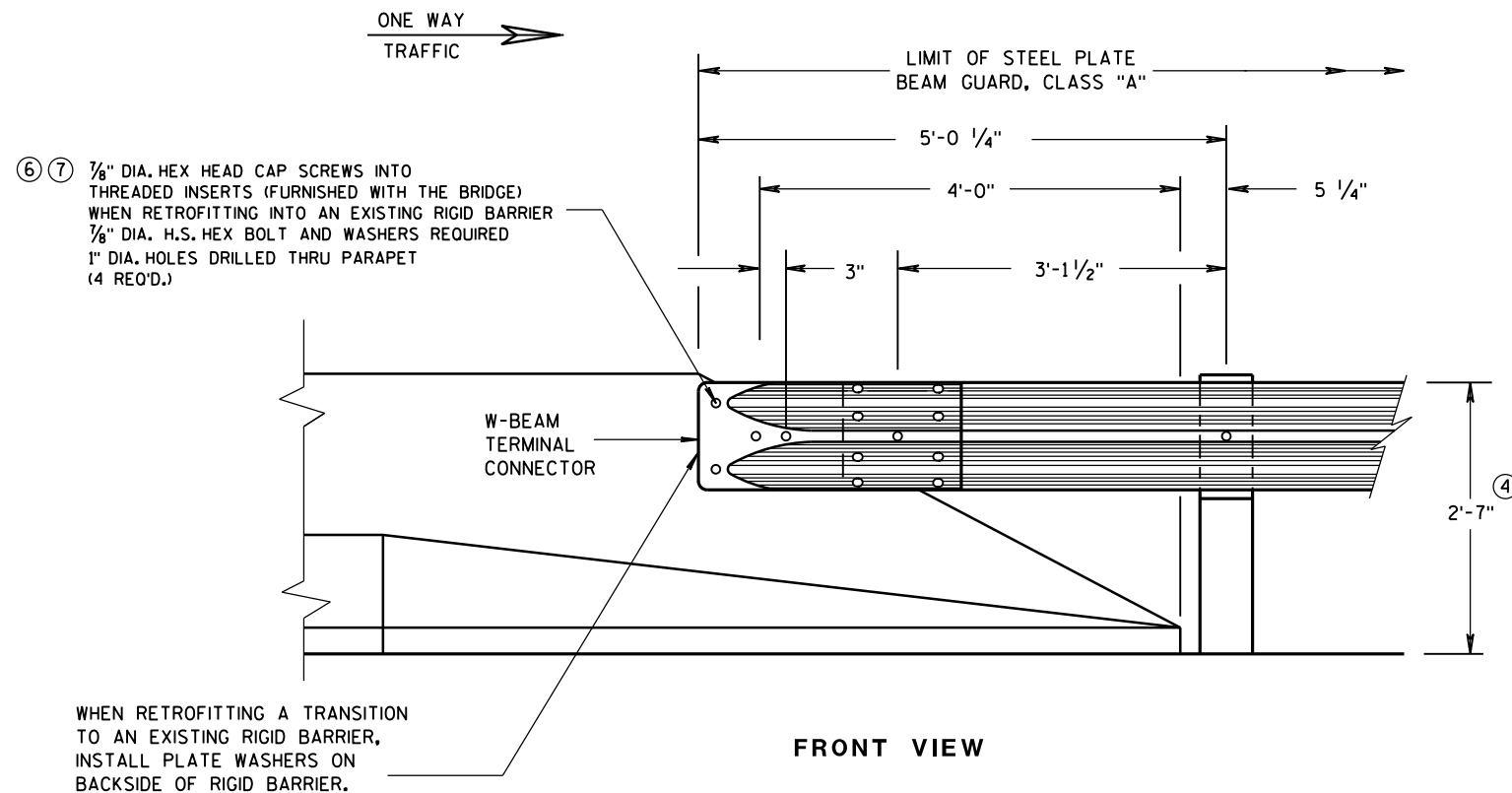
THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

SECTION H-H

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

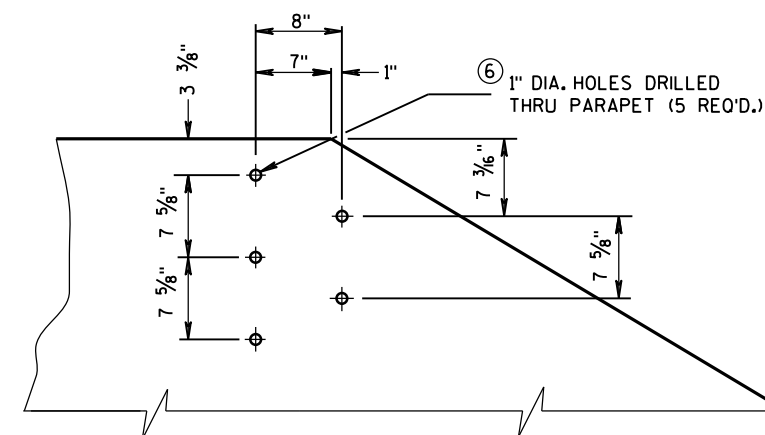
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS D 484 NT
FHWA ENGINEER

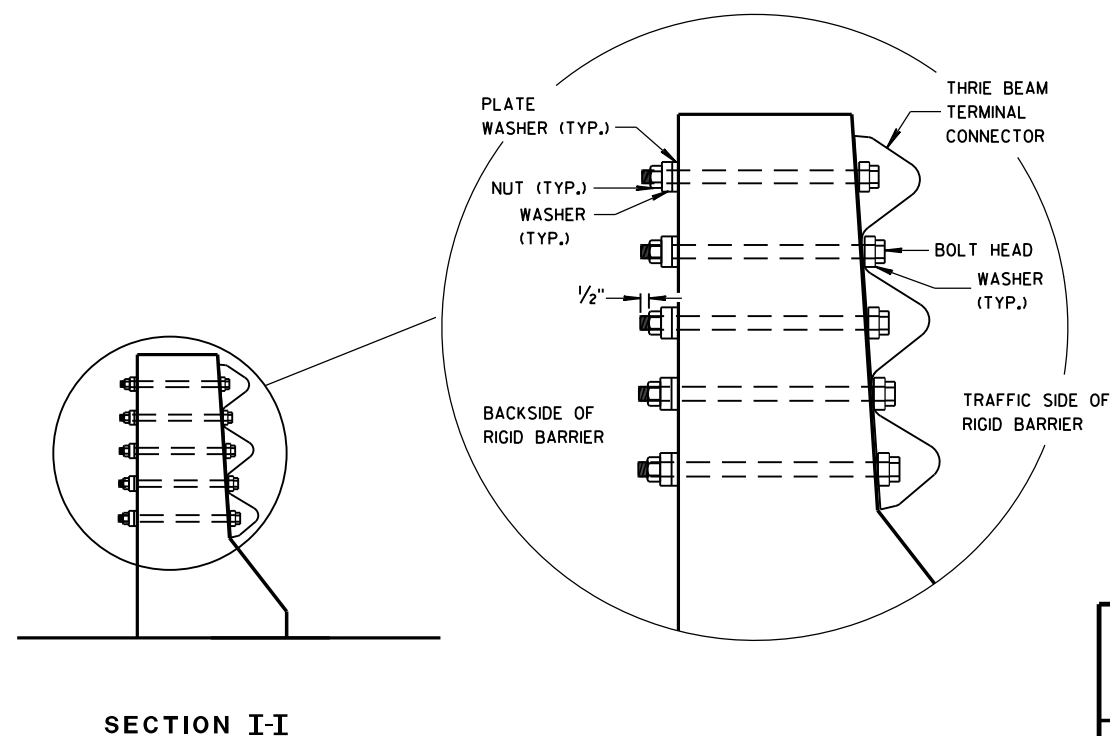
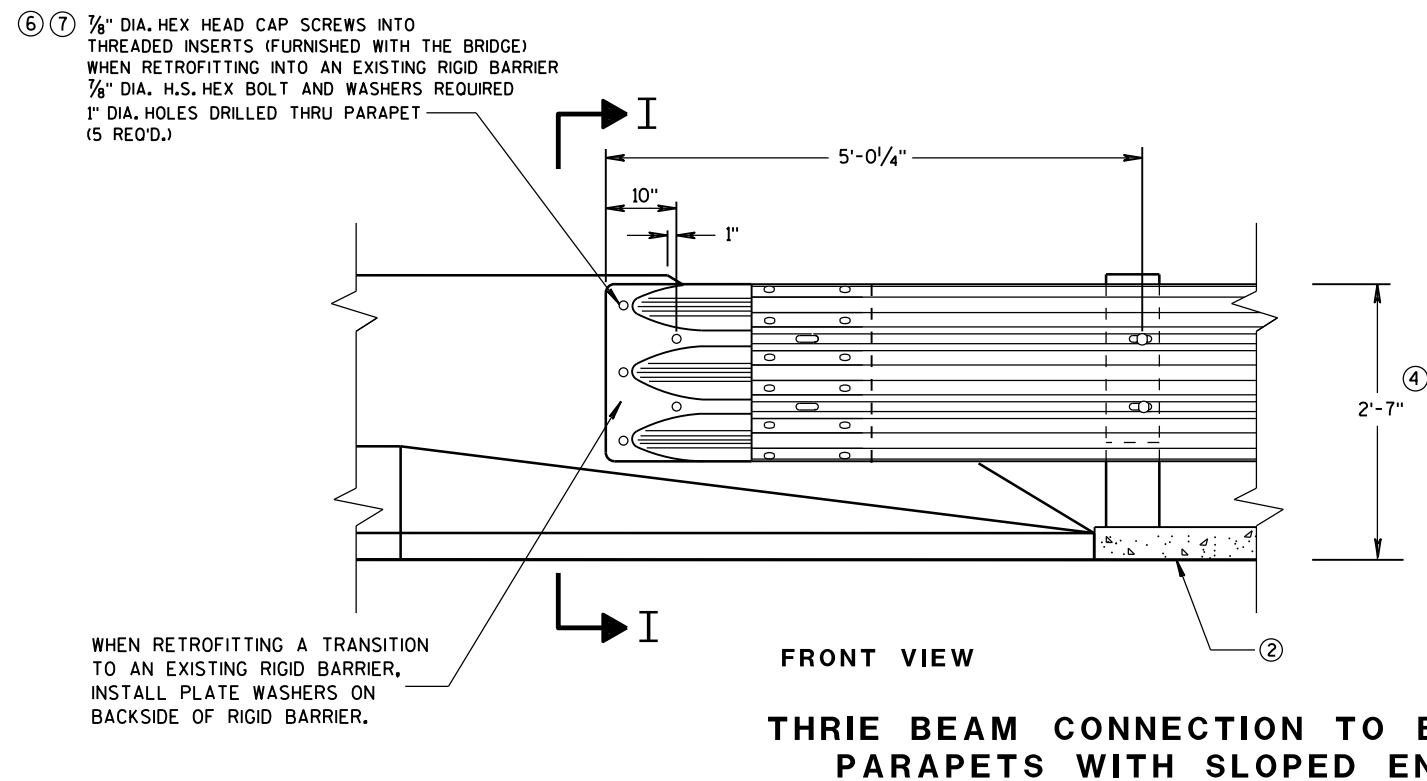


GENERAL NOTES

- ② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.
- ④ TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.
- ⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- ⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



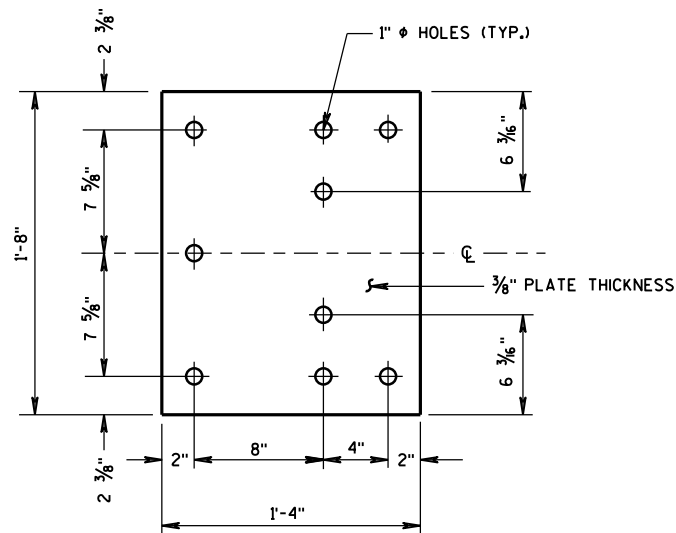
DRILL HOLE LOCATION AND PATTERN
FOR THRIE BEAM CONNECTION



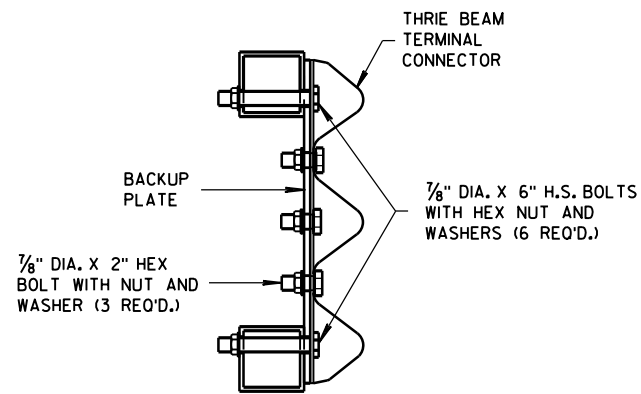
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

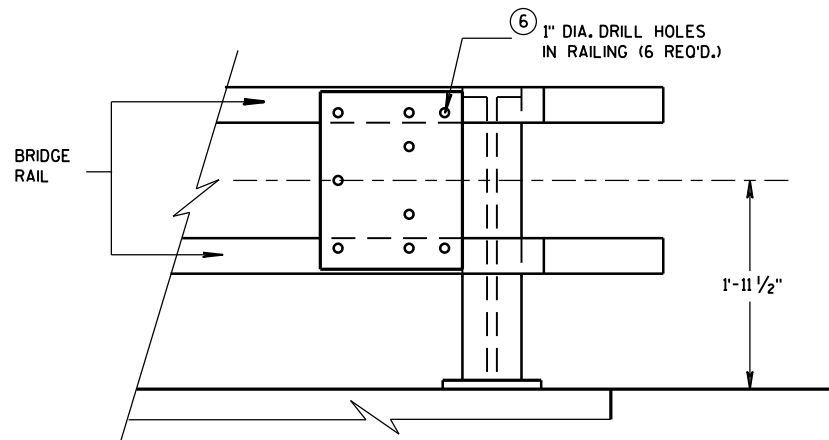
APPROVED
June, 2015 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS ENGINEER 485 INT
FHWA



BACK-UP PLATE DETAIL



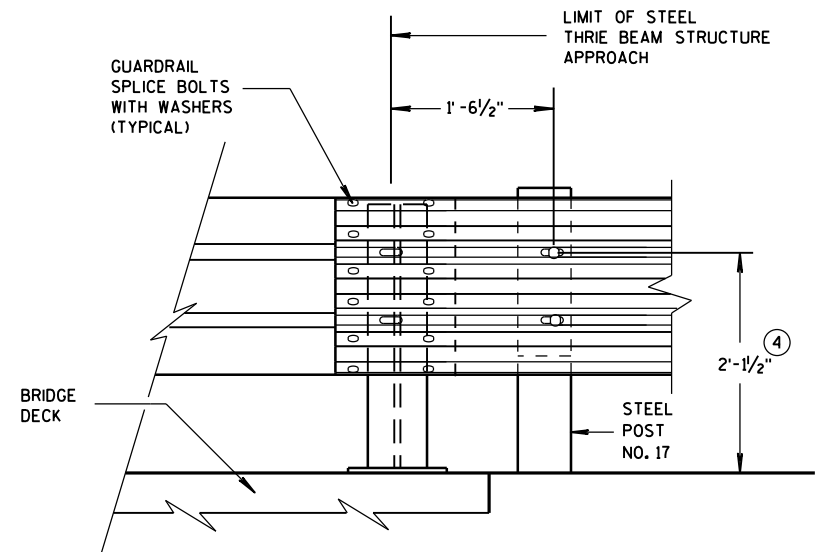
SECTION J-J



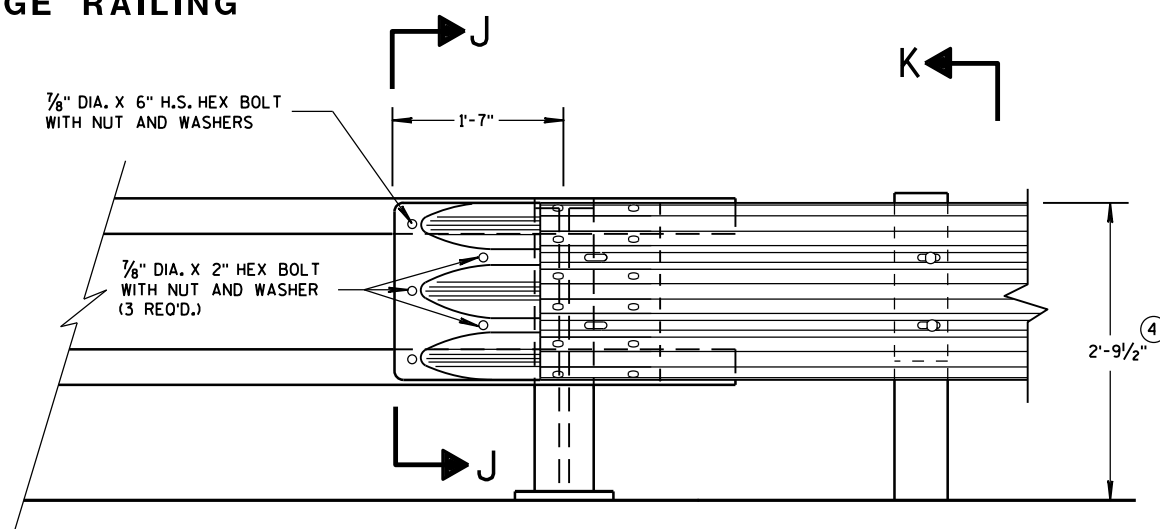
BACK-UP PLATE MOUNTING
ONTO BRIDGE RAILING

GENERAL NOTES

- ④ TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.
- ⑥ DRILLING HOLES THROUGH THE PAPER, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

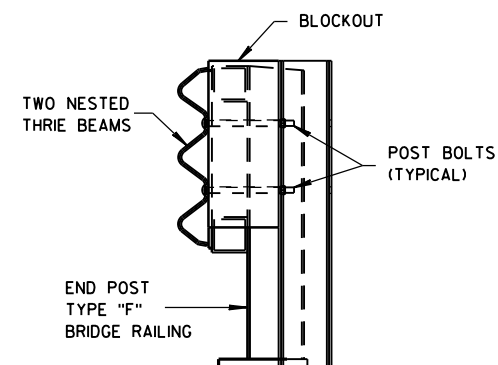


FRONT VIEW
THRIE BEAM CONNECTION TO
STEEL RAILING TYPE "W"



FRONT VIEW

THRIE BEAM CONNECTION TO
TUBULAR RAILING TYPE "F"



SECTION K-K

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS D 486 NT
FHWA ENGINEER

6

- S.D.D. 14 B 45-4h**



S.D.D. 14 B 45-4h



S.D.D. 14 B 45-4h



S.D.D. 14 B 45-4h

S.D.D. 14 B 45-4h



S.D.D. 14 B 45-4h



S.D.D. 14 B 45-4h



S.D.D. 14 B 45-4h

S.D.D. 14 B 45-4h



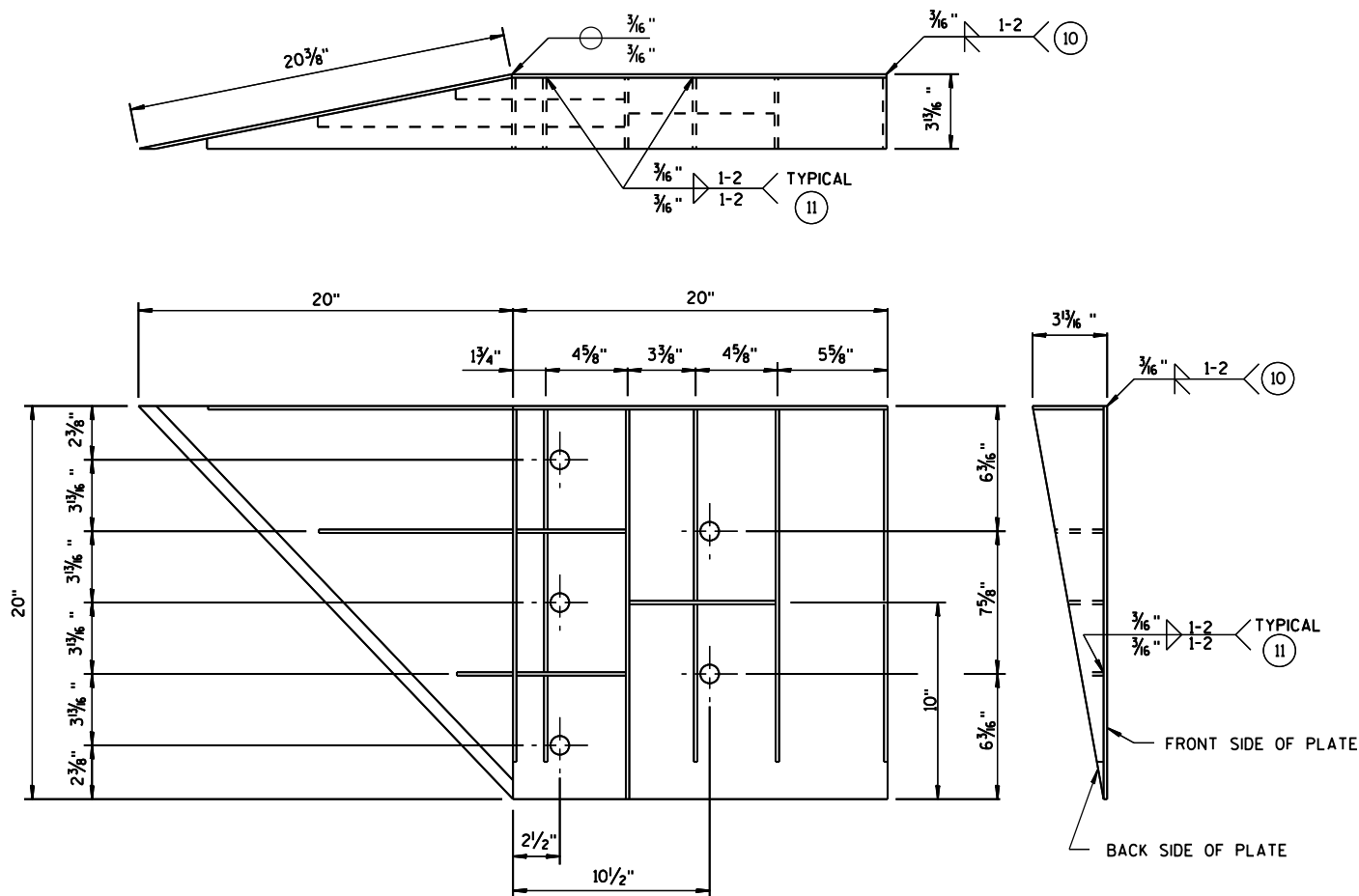
S.D.D. 14 B 45-4h



S.D.D. 14 B 45-4h

S.D.D. 14 B 45-4h

S.D.D. 14 B 45-4h

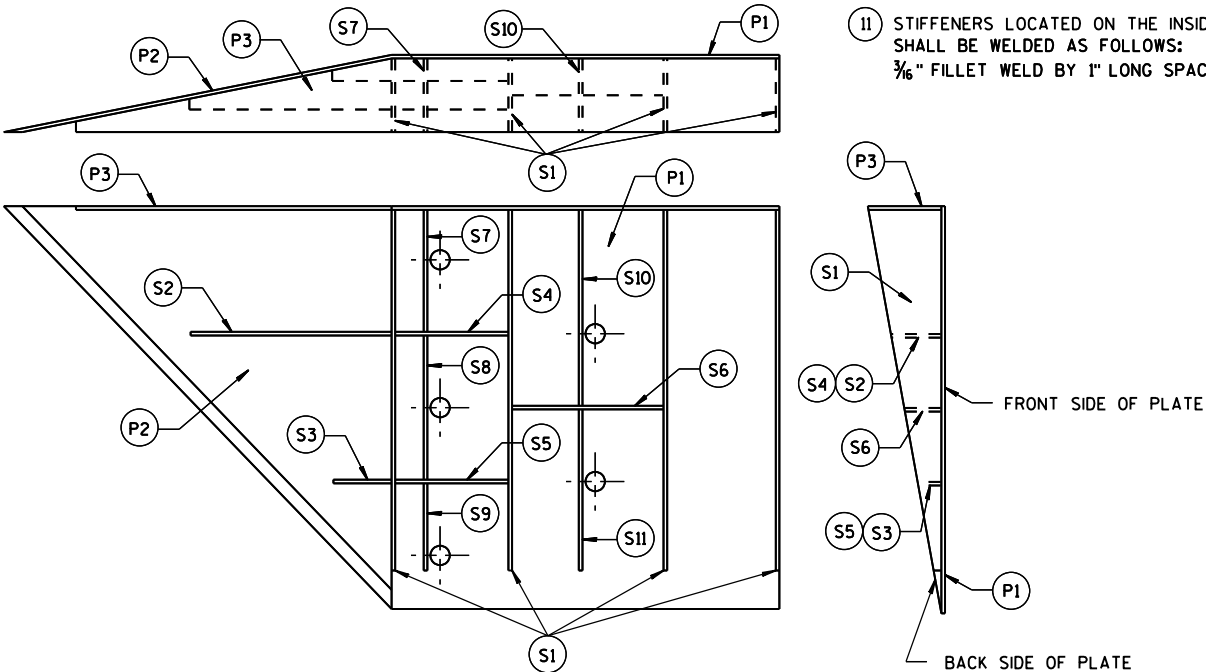


WELDING INSTRUCTION
(VIEWED FROM BACK SIDE OF PLATE)

SINGLE SLOPE CONNECTION PLATE

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)				
PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 7/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 1/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 1/16"	1/4"

PLATE AND STIFFENER IDENTIFICATION
(VIEWED FROM BACK SIDE OF PLATE)



GENERAL NOTES

- COVER PLATE PANELS ARE 3/16" THICK.
- ALL STIFFENERS ARE 1/4" THICK.
- CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.
- FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.
- ALL HOLE DIAMETERS SHALL BE 1".
- FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

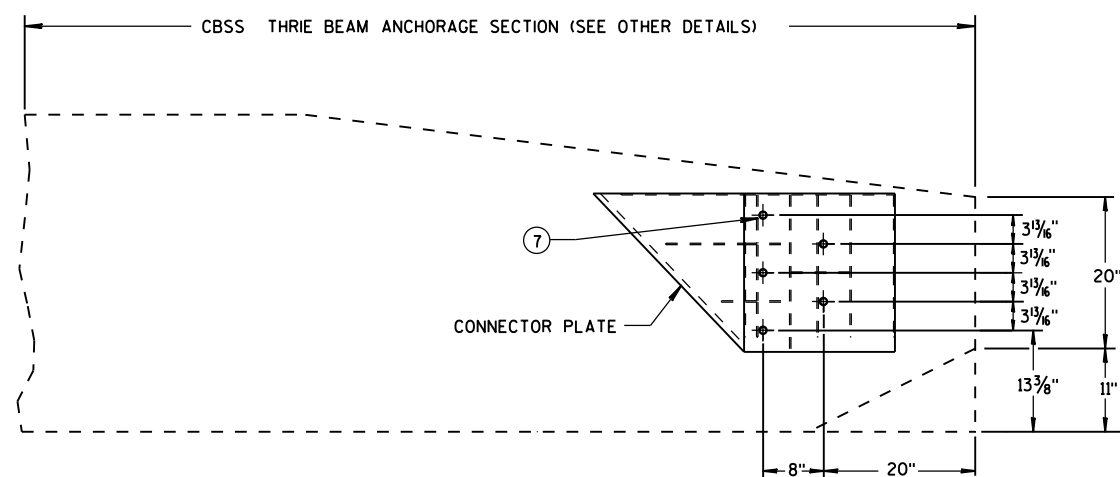
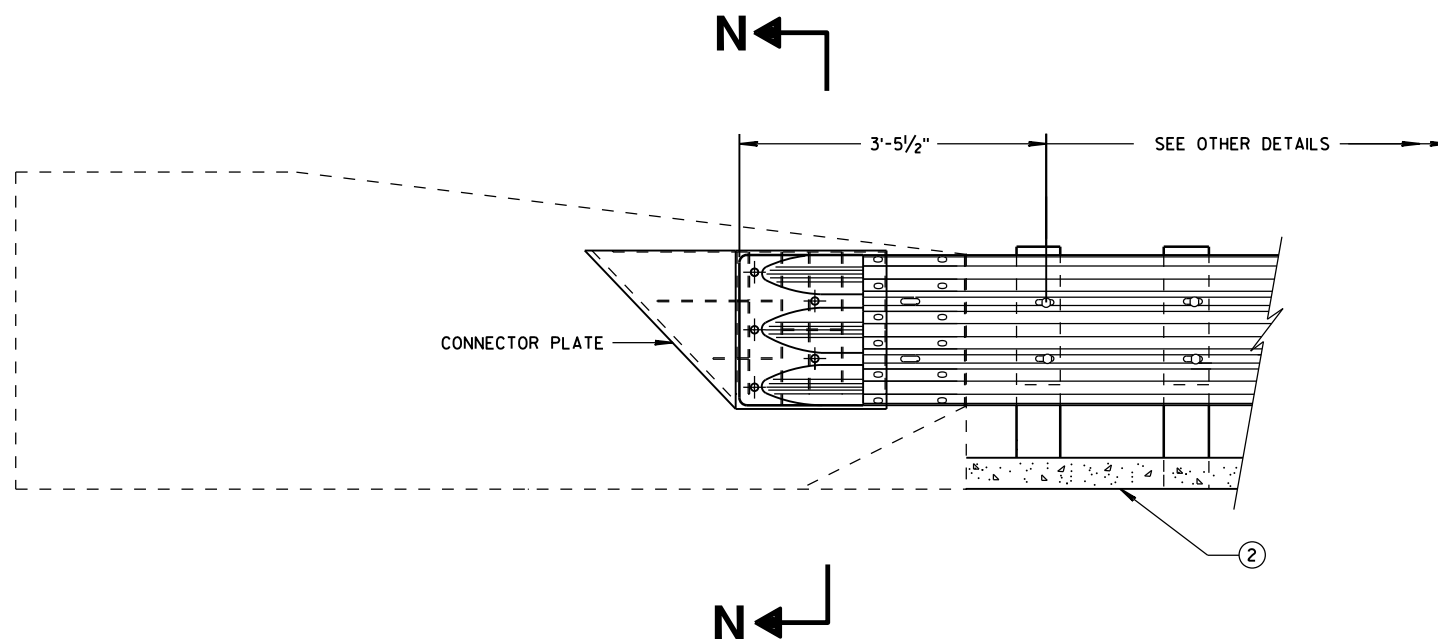
- 10 STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.
- 11 STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS 488
FHWA ENGINEER

THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



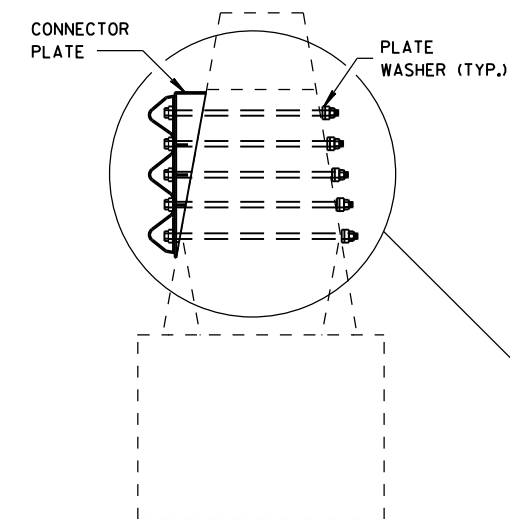
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

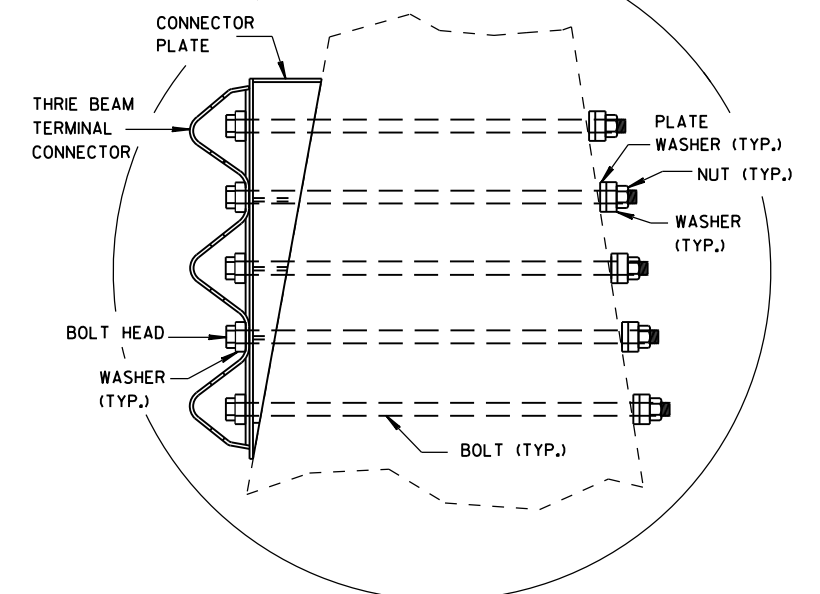
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June, 2015

DATE

FHWA

/s/ Jerry H. Zoog

ROADWAY STANDARDS D 489

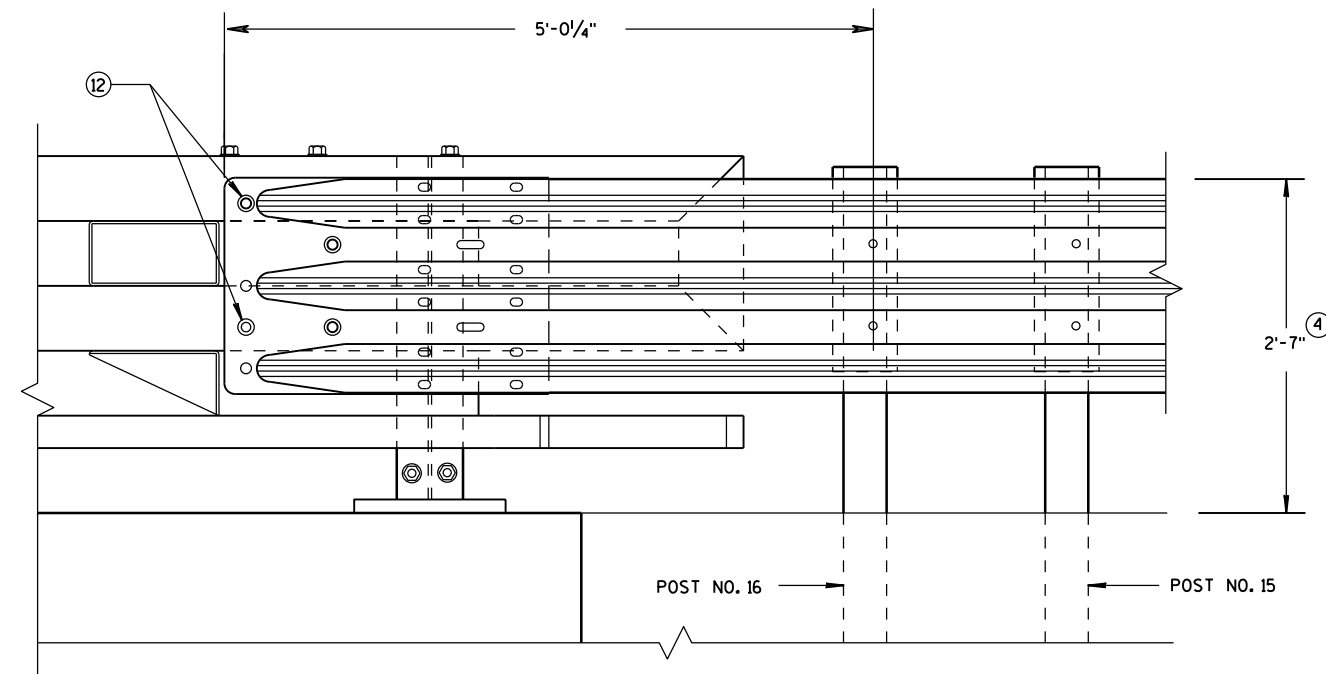
ENGINEER

NT

GENERAL NOTES

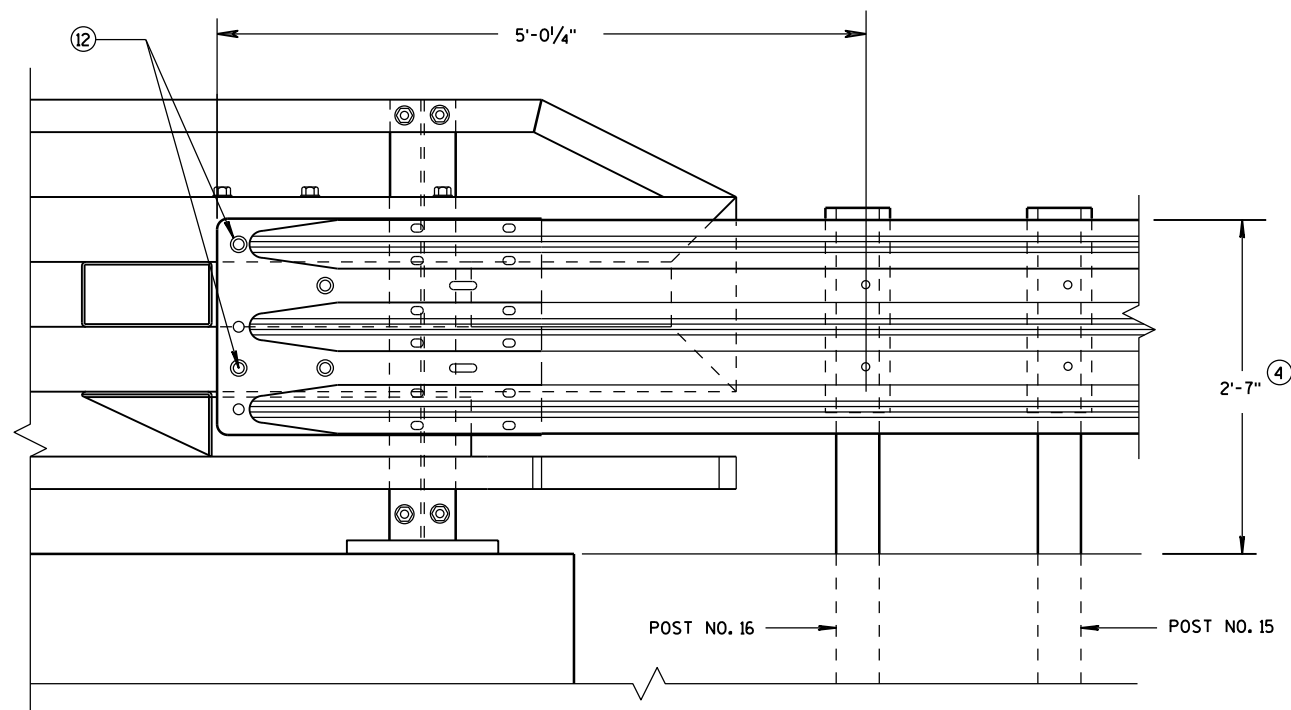
④ TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.

⑫ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND $\frac{1}{2}$ -INCH BEYOND NUT.



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June, 2015

DATE

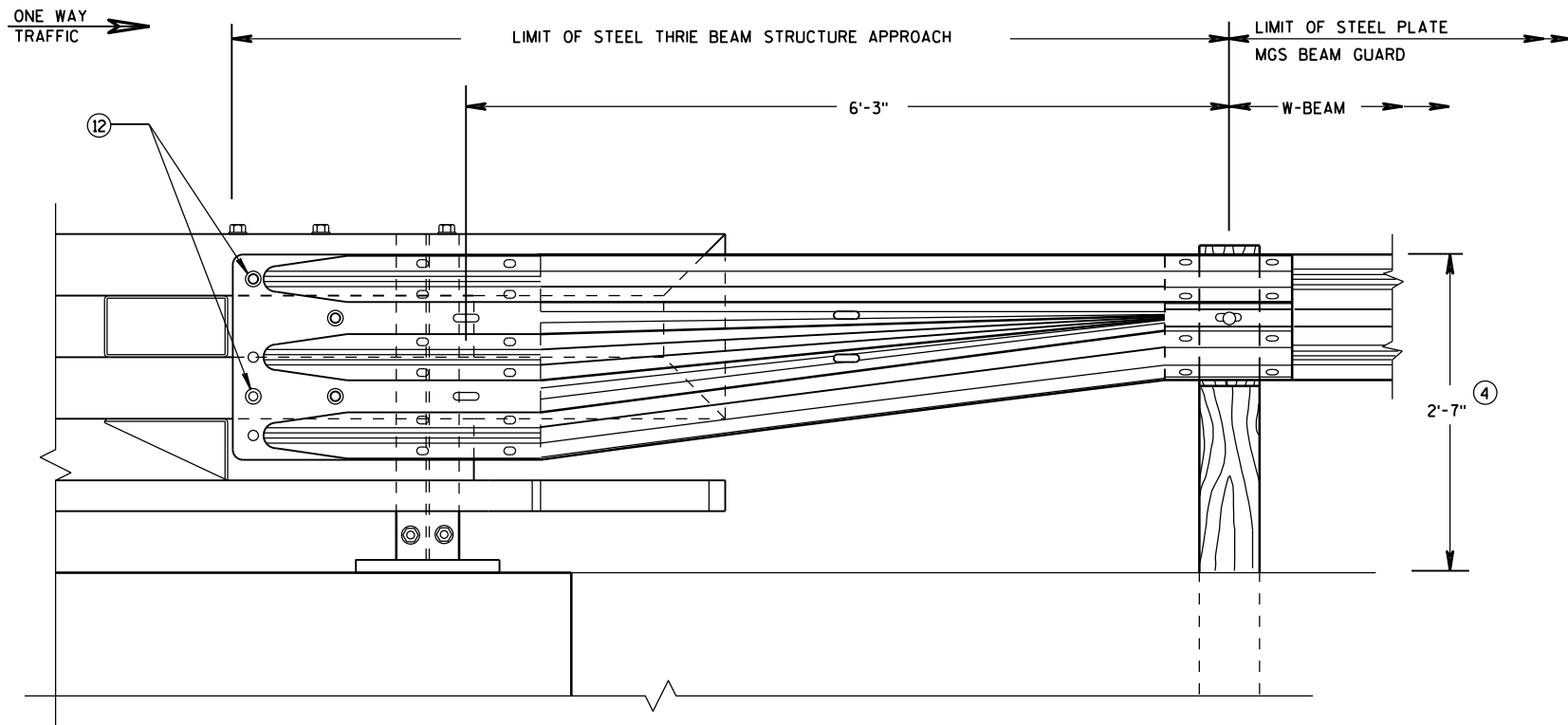
FHWA

/S/ Jerry H. Zogg

ROADWAY STANDARDS D 490

ENGINEER

NT

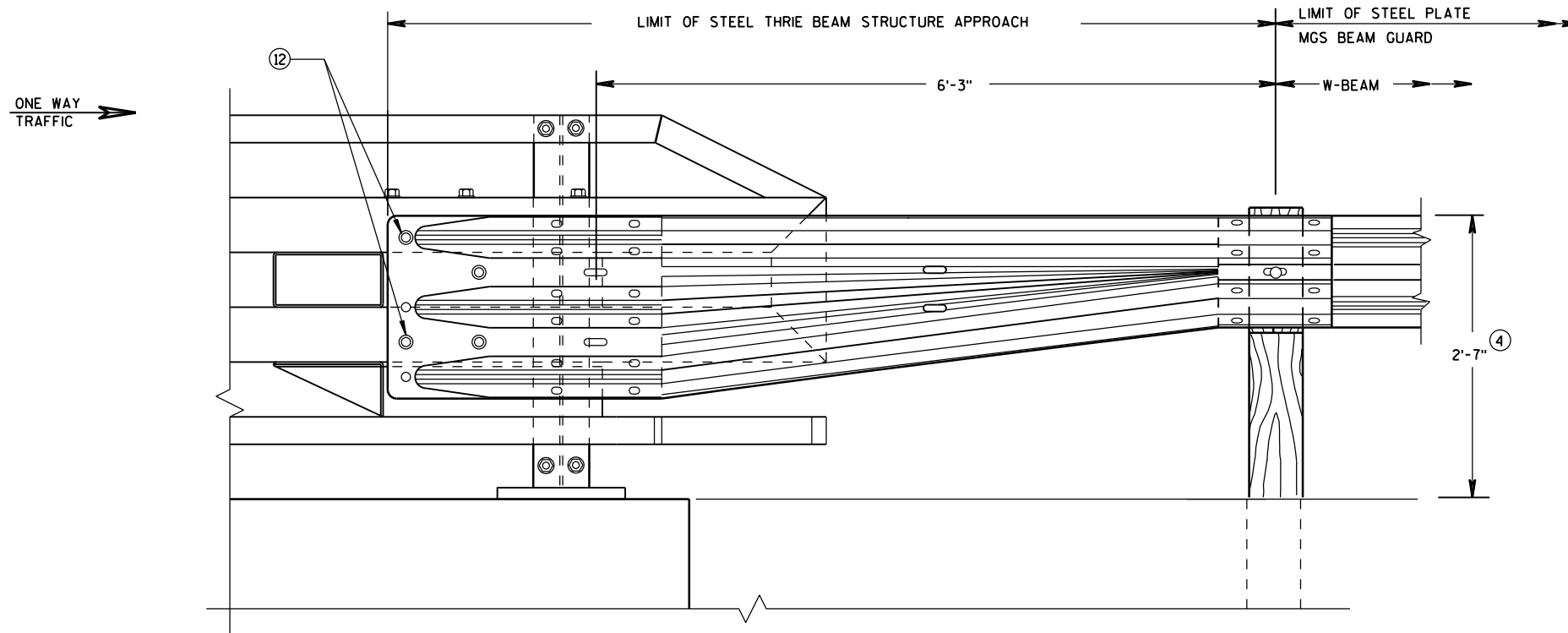


FRONT VIEW

**W BEAM TRANSITION AND
CONNECTION TO BRIDGE RAILING TYPE "NY3"**
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

- ④ TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.
- ⑫ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND $\frac{1}{2}$ -INCH BEYOND NUT.



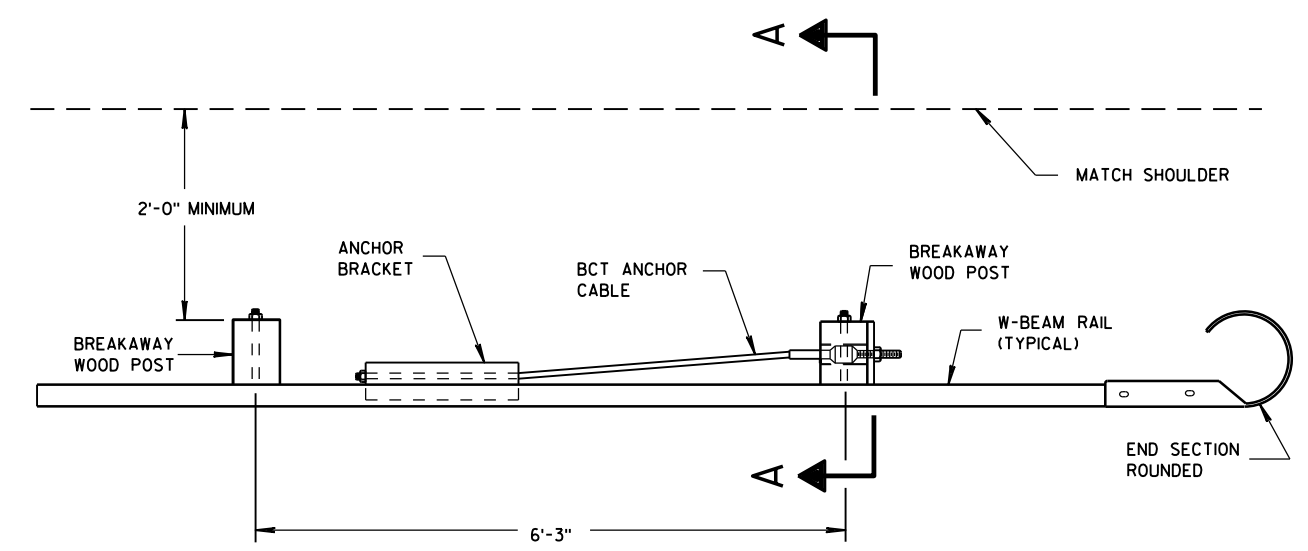
FRONT VIEW

**W BEAM TRANSITION AND
CONNECTION TO BRIDGE RAILING TYPE "NY4"**
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

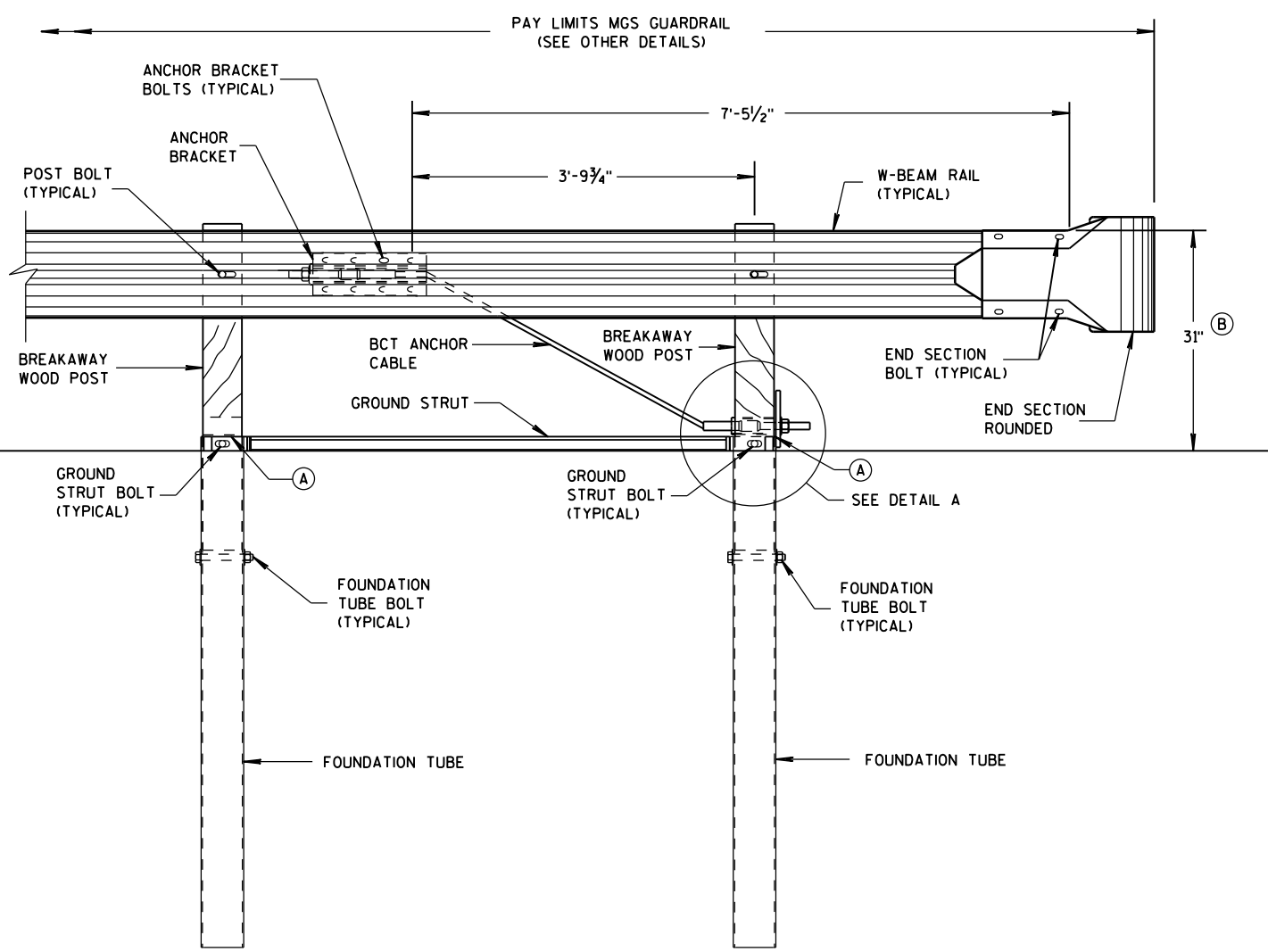
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED	/S/ Jerry H. Zogg	NT
June, 2015	DATE	ROADWAY STANDARDS D 491
FHWA	ENGINEER	

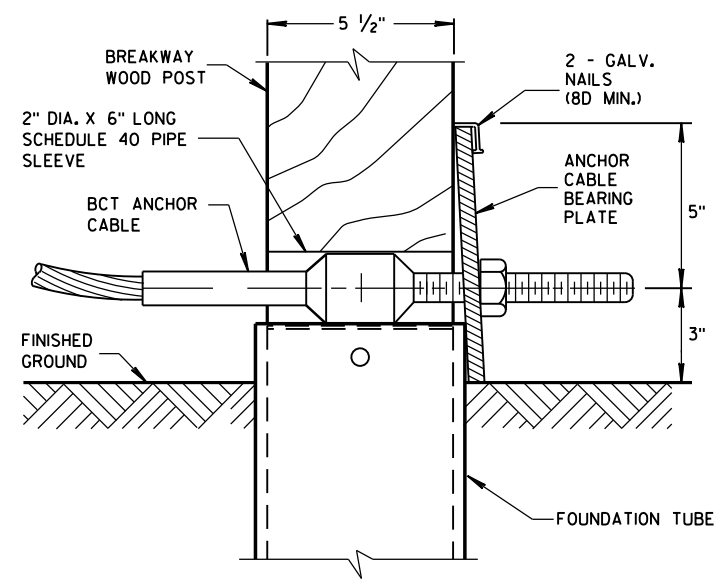


PLAN VIEW



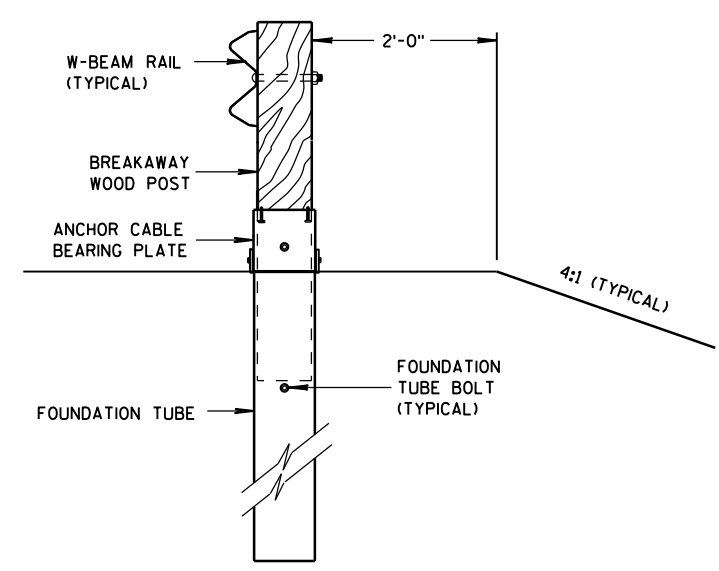
FRONT VIEW

END RAIL DETAIL



DETAIL A

POST NO. 1
GROUND STRUT NOT SHOWN FOR CLARITY.



SECTION A-A

GENERAL NOTES

SEE SDD 14 B 42 FOR MORE INFORMATION.

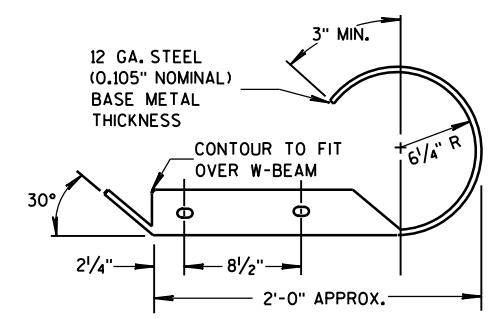
END SECTION BOLTS AND NUTS HAVE THE SAME MATERIAL REQUIREMENTS AS SPLICE BOLTS.

FOUNDATION TUBE BOLTS ARE 7/8" DIAMETER ASTM A307 HEX HEAD BOLT. FOUNDATION TUBE BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 7/8" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

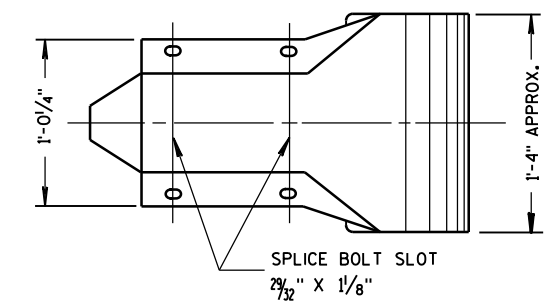
ANCHOR BRACKET AND GROUND STRUT BOLTS ARE A 5/8" DIAMETER ASTM A307 HEX HEAD BOLT. ANCHOR BRACKET BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 5/8" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

W-BEAM END SECTION ROUNDED HAS THE SAME MATERIAL PROPERTIES AS STANDARD STEEL RAIL.

- (A) TOP OF FOUNDATION TUBE SHALL BE NO MORE THAN 3" ABOVE FINISHED GROUND.
- (B) FOR NEW CONSTRUCTION TOP OF RAIL IS 31" ± 1".
FOR EXISTING INSTALLATIONS TOP OF RAIL IS BETWEEN 27 3/4" TO 32" ± 1".



PLAN VIEW

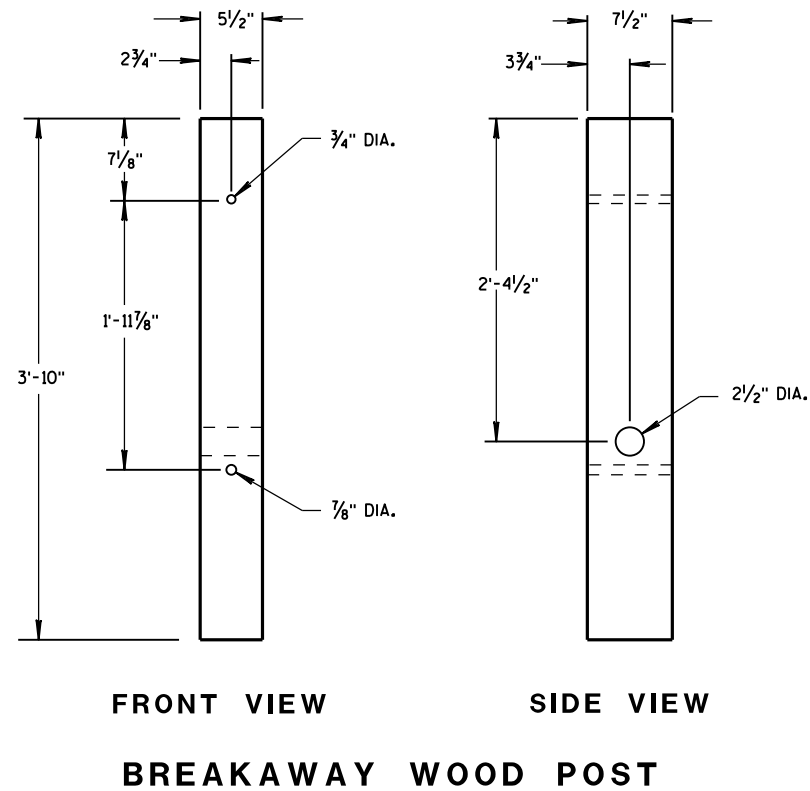
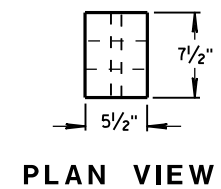
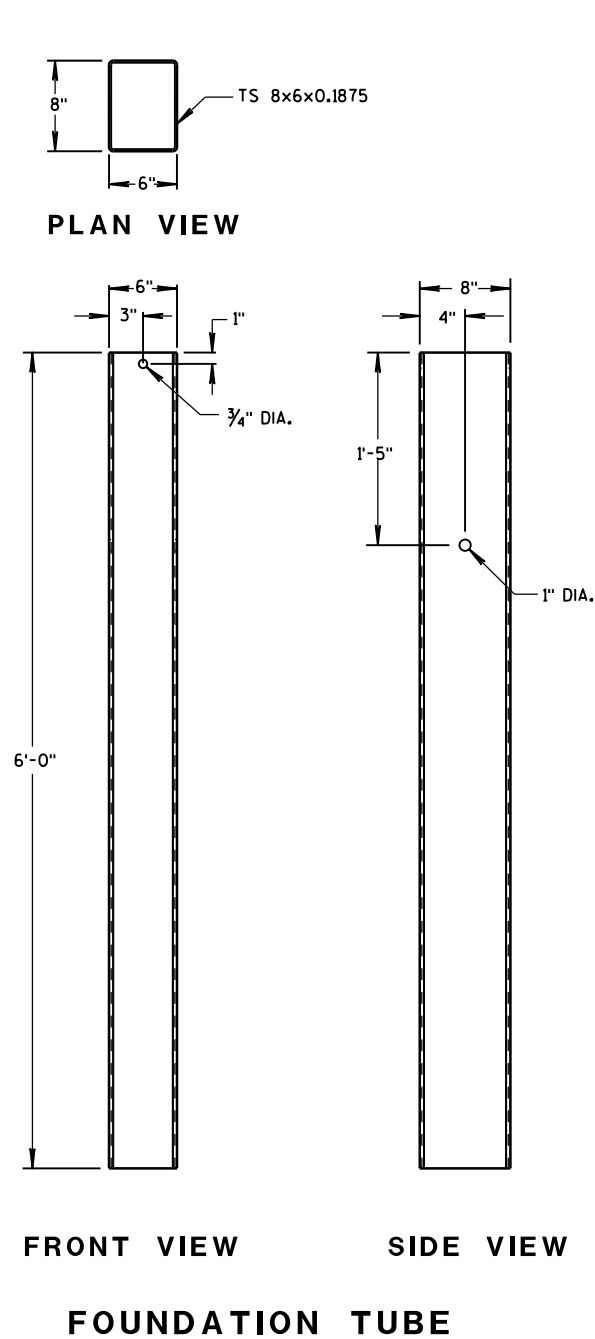


FRONT VIEW

W BEAM END
SECTION ROUNDED

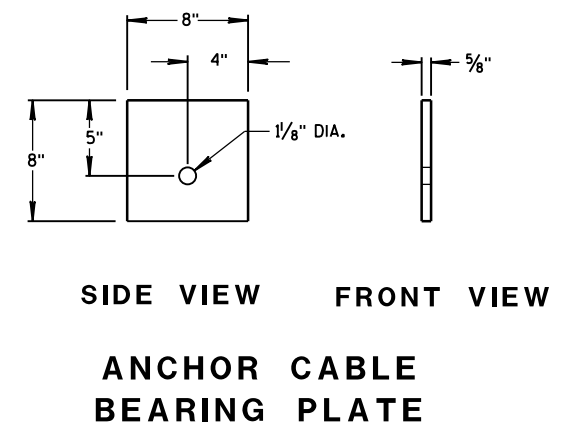
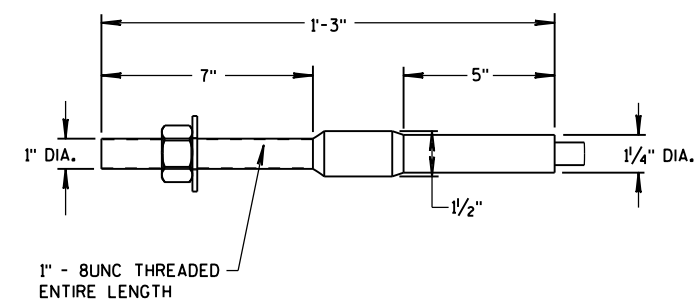
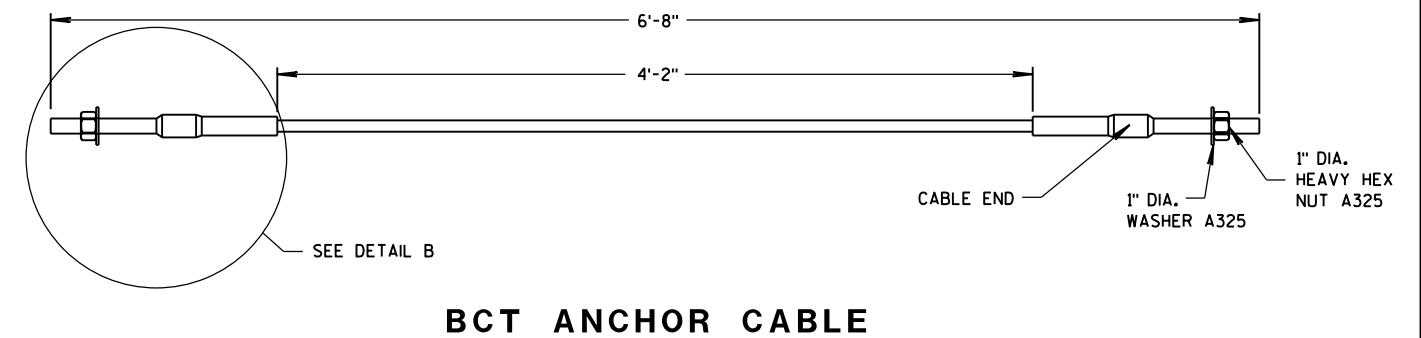
MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



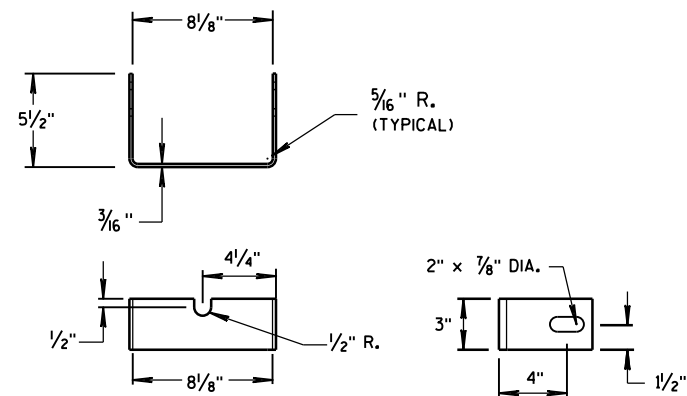
GENERAL NOTES

BCT ANCHOR CABLE IS A 3/4" DIAMETER 6X19 IWRC IPS GALVANIZED WIRE ROPE. THE SWAGED FITTINGS AND STUD ARE REQUIRED. END FITTING SHALL BE MACHINED FROM HOT-ROLLED CARBON STEEL CONFORMING TO ASTM A576 GRADE 1035 AND GALVANIZED ACCORDING TO ASTM A123. TREADED STUD SHALL CONFORM TO ASTM A325 OR SAE GRADE 5. MINIMUM BREAKING STRENGTH OF WIRE ROPE IS 43,000 LB. WIRE ROPE IS TO BE TAUT.

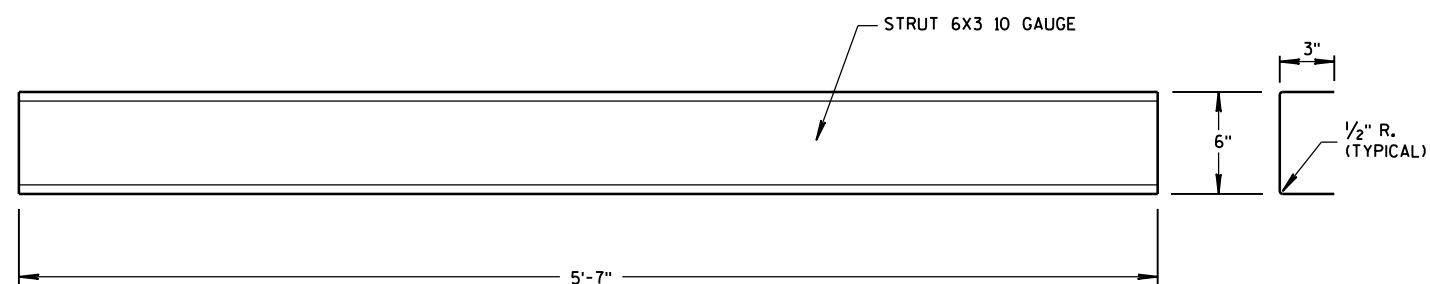


MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

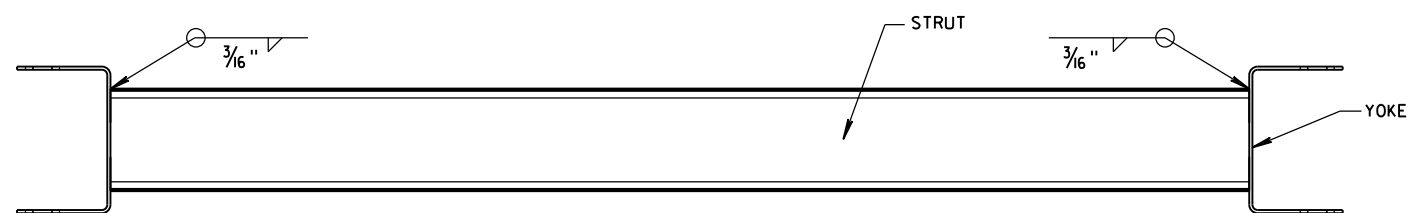
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 493



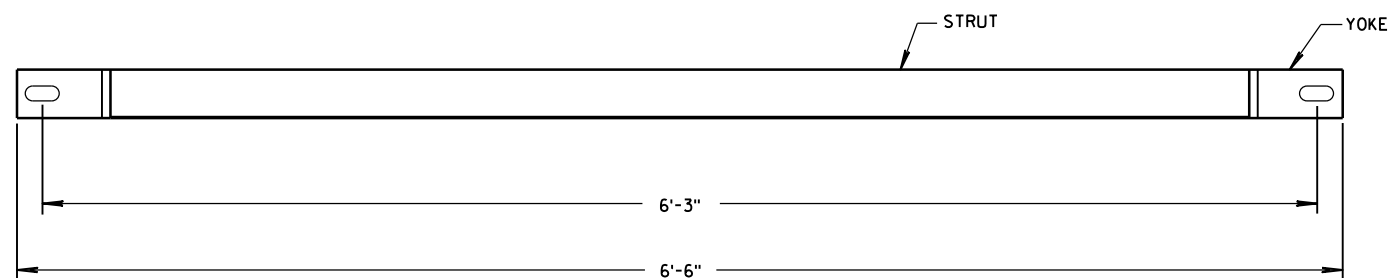
YOKE DETAIL



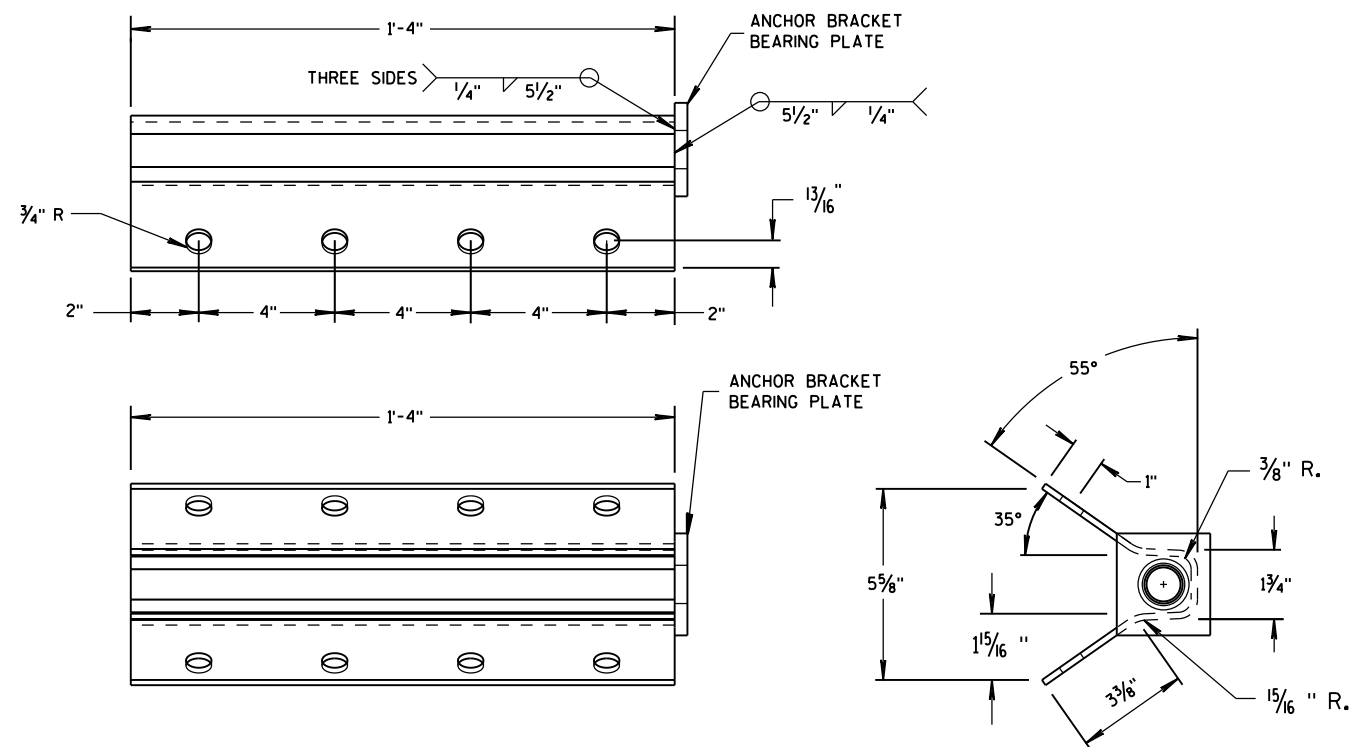
STRUT DETAIL



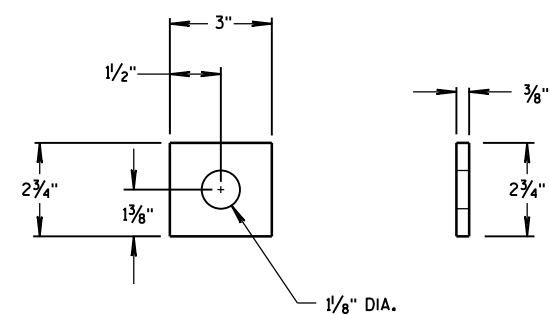
PLAN VIEW



FRONT VIEW
GROUND STRUT DETAIL



ANCHOR BRACKET

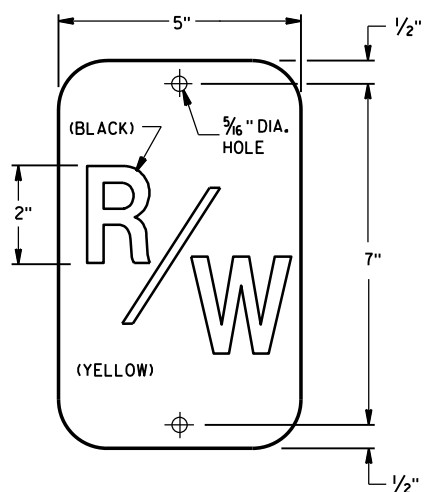
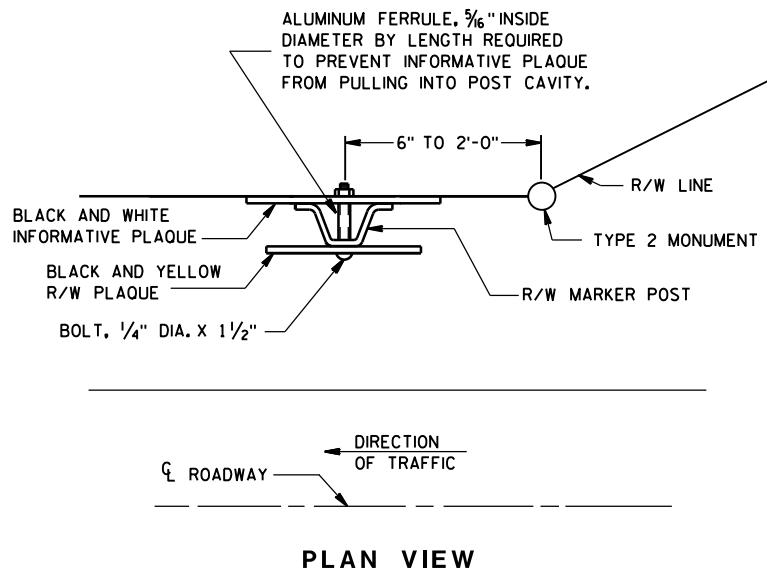


ANCHOR BRACKET
BEARING PLATE

MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

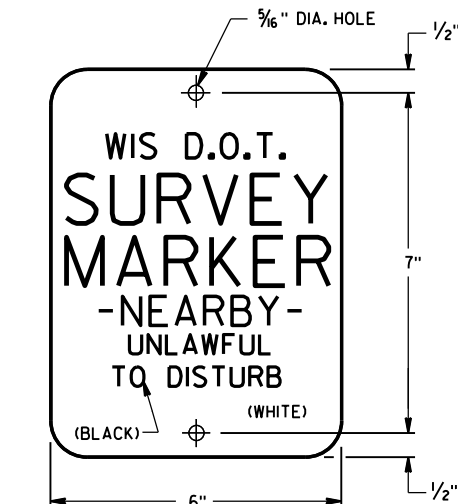
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS ENGINEER 494 ENT
FHWA



R/W PLAQUE

THE RIGHT-OF-WAY PLAQUE AND INFORMATIVE PLAQUE WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.



INFORMATIVE PLAQUE

GENERAL NOTES

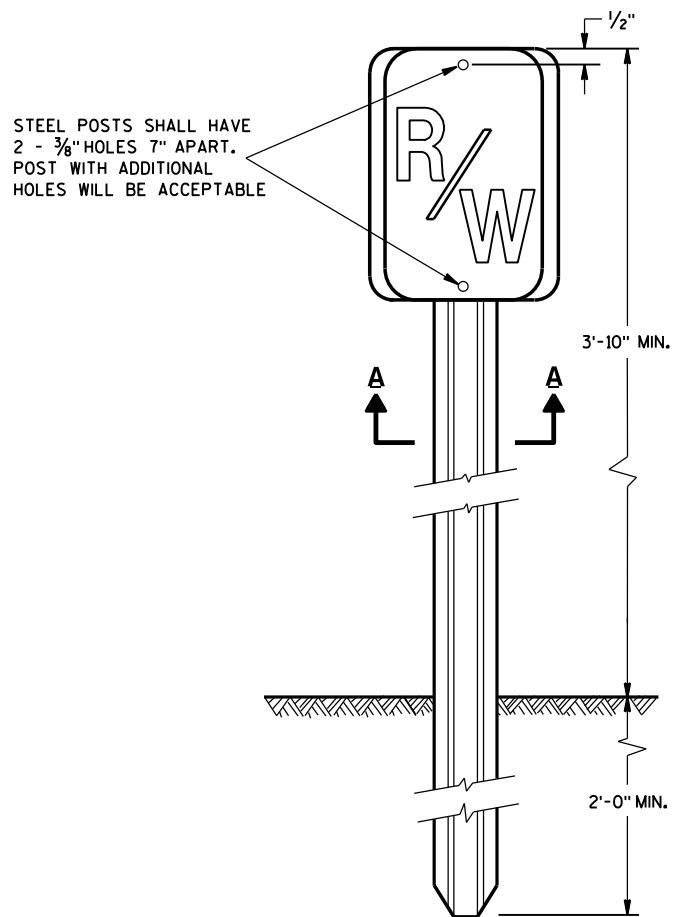
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

A STEEL MARKER POST FOR RIGHT-OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY, WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

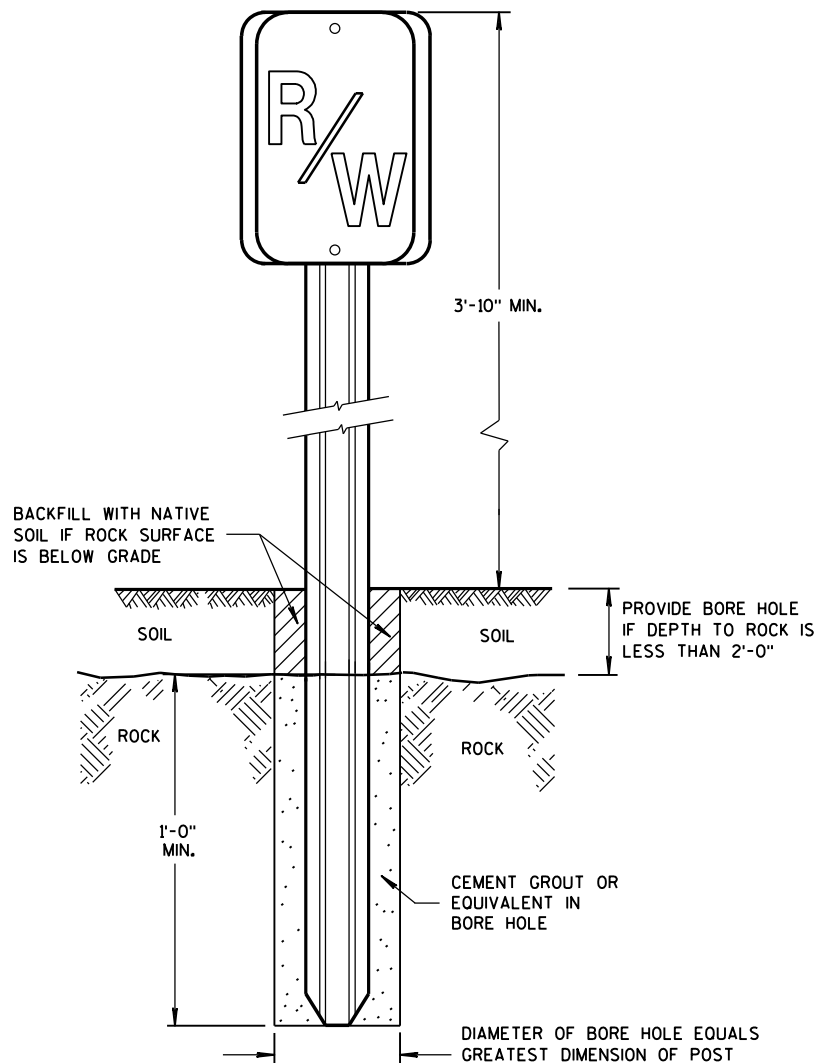
THE 'R/W' PLAQUE SHALL FACE THE ROADWAY AND THE INFORMATIVE PLAQUE SHALL FACE AWAY FROM THE ROADWAY. R/W AND INFORMATIVE PLAQUES WILL BE FURNISHED BY THE DEPARTMENT OF TRANSPORTATION.

STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

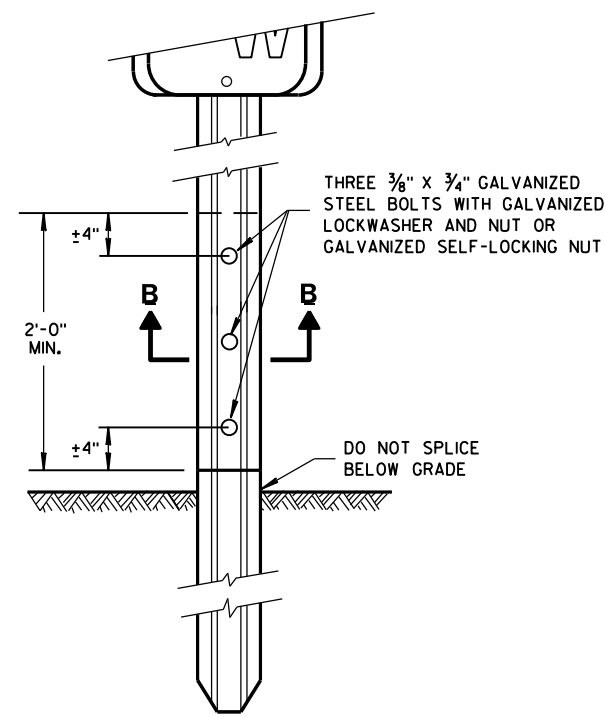
- ① IN AREAS OF SOLID ROCK, DRILL A BORE HOLE 2" GREATER THAN THE WIDEST DIMENSION OF THE POST CROSS SECTION INTO THE ROCK TO A MINIMUM DEPTH OF 12 INCHES. CUT OR SPLICE THE POST SO THAT A MINIMUM LENGTH OF 3' 10" PROTRUDES ABOVE THE GROUND. BLOW OUT THE BORE HOLE IN THE ROCK USING COMPRESSED AIR. FILL THE BORE HOLE WITH CEMENT GROUT, OR EQUIVALENT, DEPENDING ON THE STABILITY OF THE ROCK.



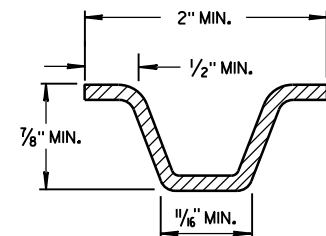
**FRONT VIEW
STEEL MARKER POST**



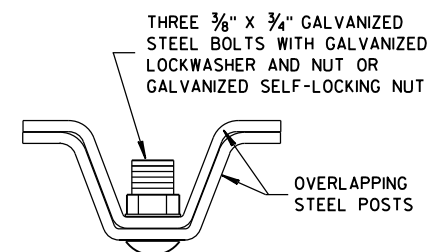
**FRONT VIEW
ROCK INSTALLATION** ①



**FRONT VIEW
SPLICE DETAIL**



SECTION A-A

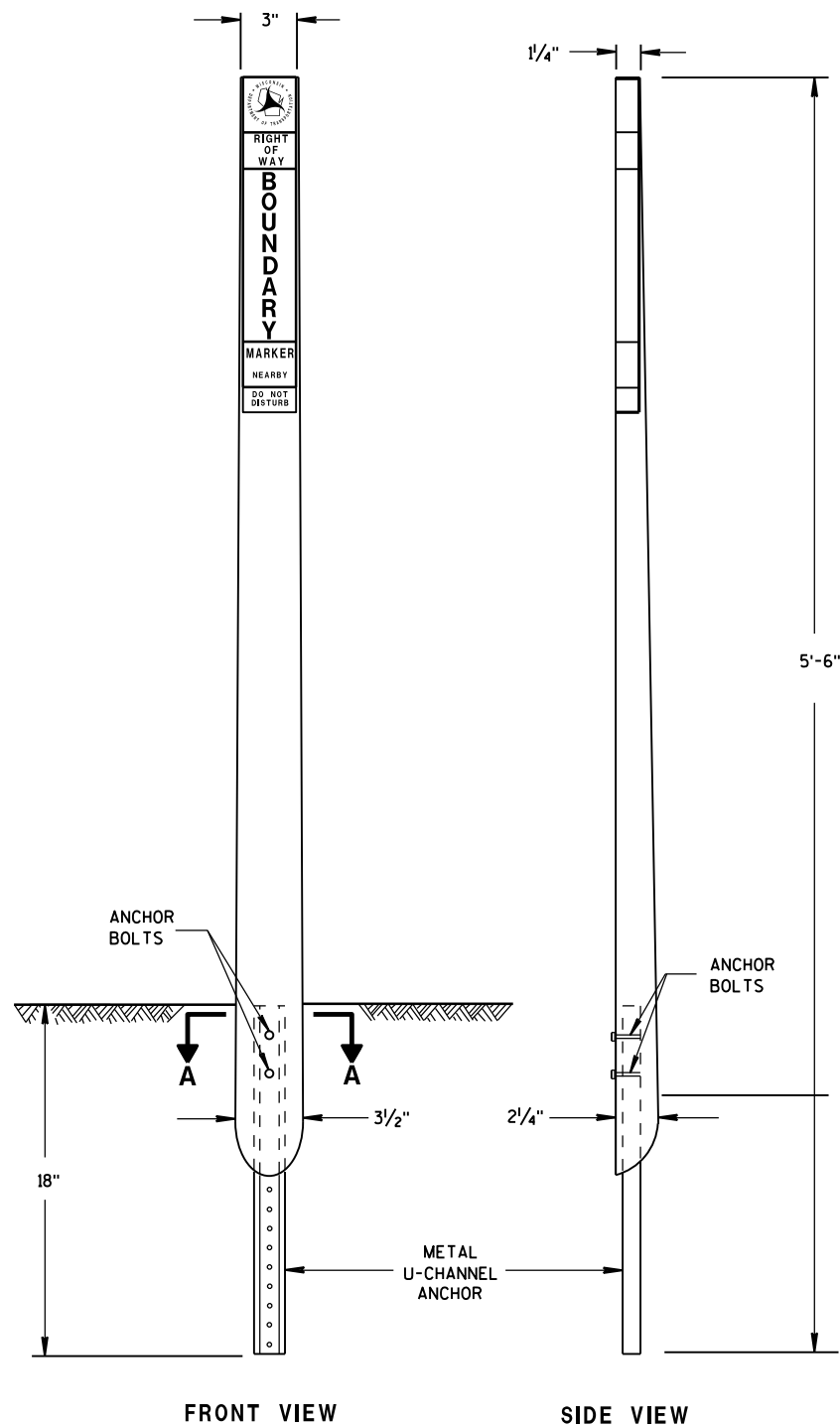


SECTION B-B

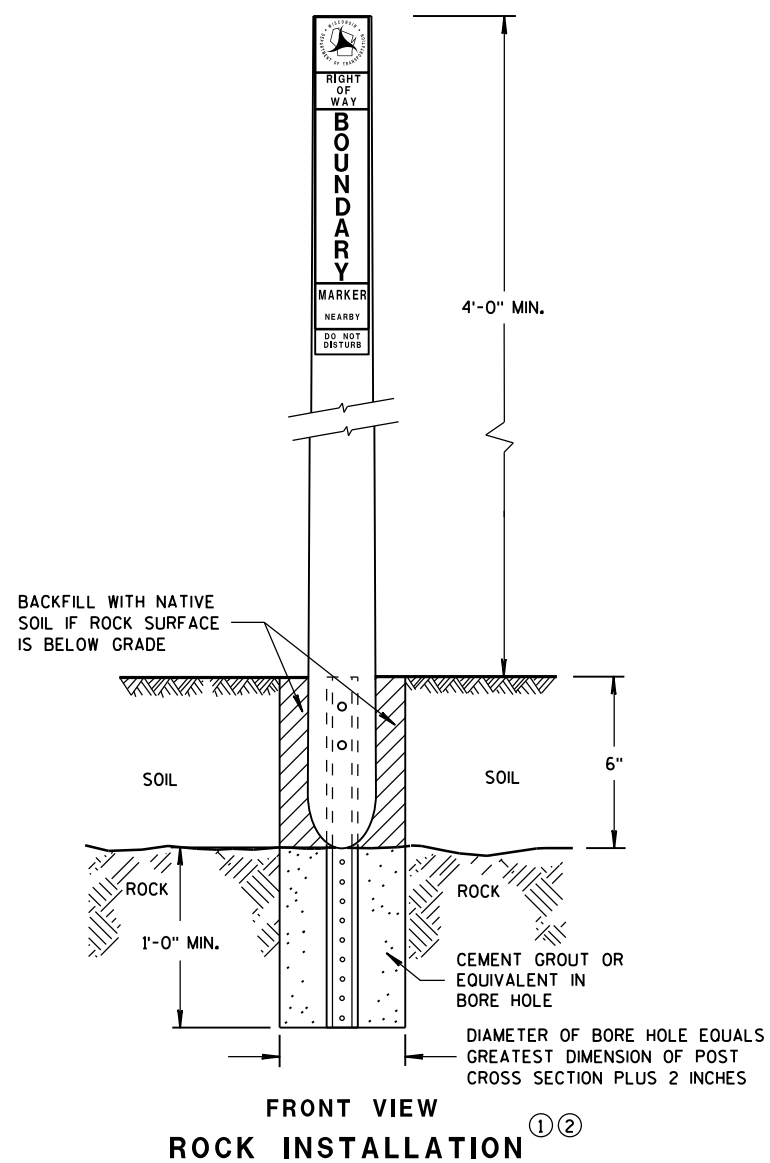
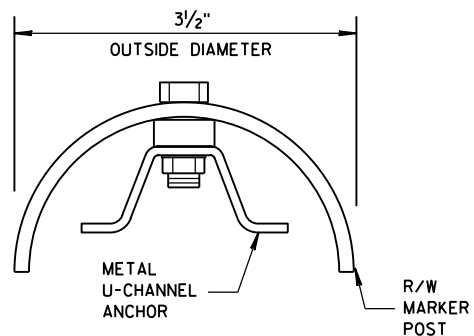
**MARKER POST
FOR RIGHT-OF-WAY**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 /S/ Ray Kumapayi
DATE CHIEF SURVEYING AND MA 495 INEER
FHWA



**FLEXIBLE MARKER POST^①
FOR RIGHT-OF-WAY**



GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

A FLEXIBLE MARKER POST FOR RIGHT-OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY, WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

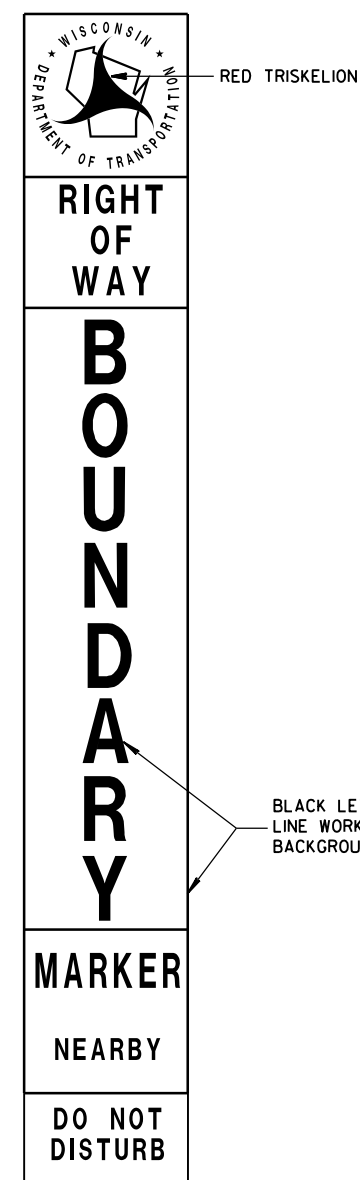
THE RIGHT-OF-WAY STICKER SHALL FACE THE ROADWAY.

INSTALL PER DEPTH OF MANUFACTURER'S RECOMMENDATIONS BUT NOT LESS THAN 18 INCHES BELOW GRADE FROM THE BOTTOM OF THE METAL U-CHANNEL ANCHOR.

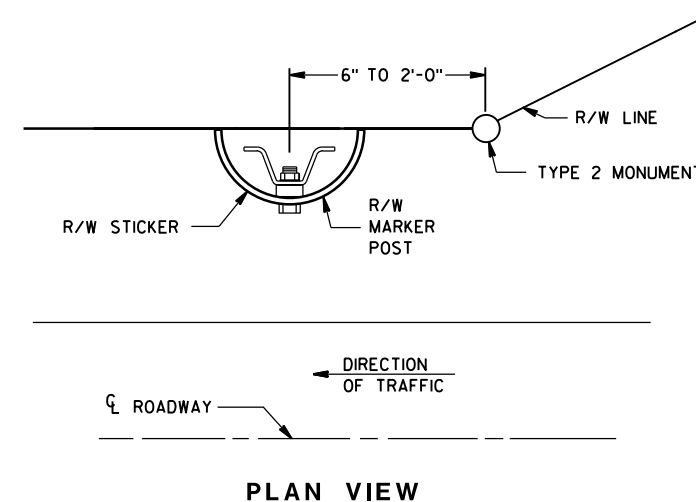
① FLEXIBLE MARKER POSTS SHALL BE INCLUDED IN THE APPROVED PRODUCTS LIST FOR MARKER POSTS AND SHALL BE FEDERAL YELLOW IN COLOR.

② IN AREAS OF SOLID ROCK, DRILL A BORE HOLE 2" GREATER THAN THE WIDEST DIMENSION OF THE POST CROSS SECTION INTO THE ROCK TO A MINIMUM DEPTH OF 12 INCHES. CUT OR SPLICE THE POST SO THAT A MINIMUM LENGTH OF 4'-0" PROTRUDES ABOVE THE GROUND. BLOW OUT THE BORE HOLE IN THE ROCK USING COMPRESSED AIR.

FILL THE BORE HOLE WITH CEMENT GROUT, OR EQUIVALENT, DEPENDING ON THE STABILITY OF THE ROCK.



THE RIGHT-OF-WAY STICKER WILL BE ATTACHED TO THE RIGHT-OF-WAY POST PRIOR TO DELIVERY.

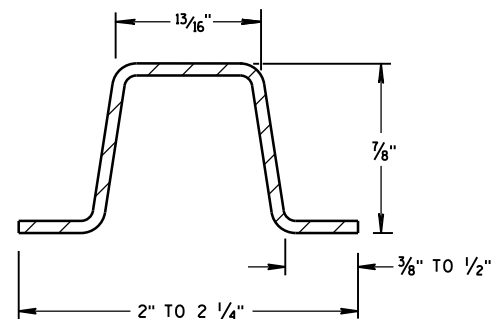


**FLEXIBLE MARKER POST
FOR RIGHT-OF-WAY**

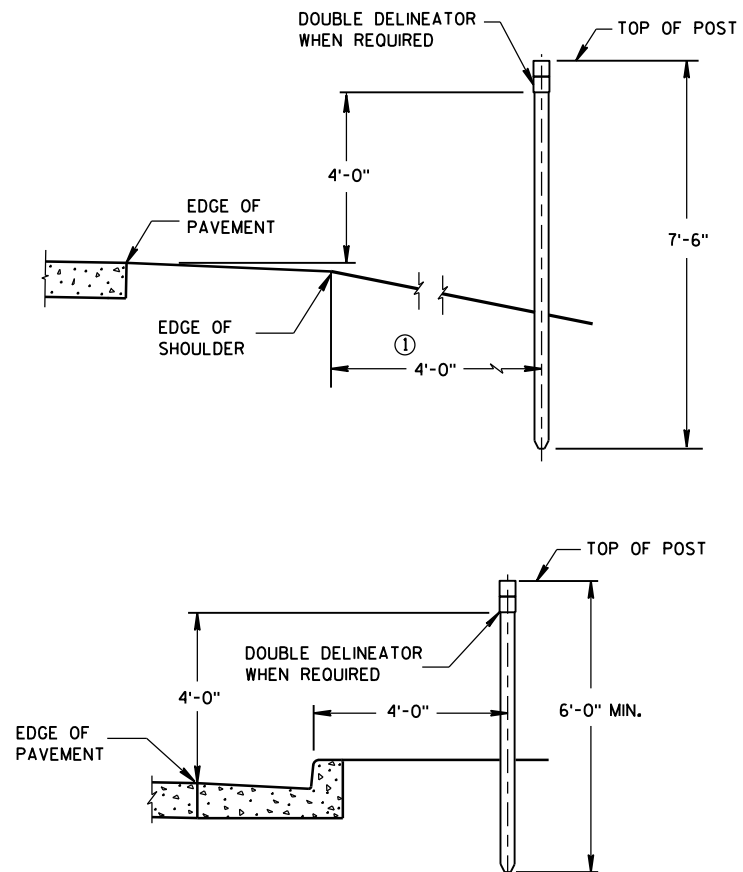
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 /S/ Ray Kumapayi
DATE CHIEF SURVEYING AND MA 496 INEER
FHWA

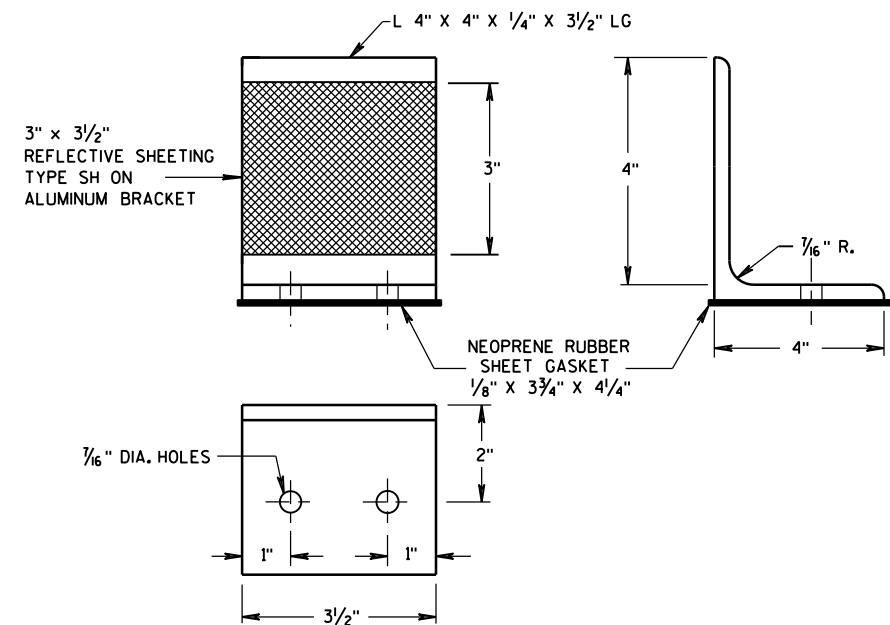
DELINEATOR POST



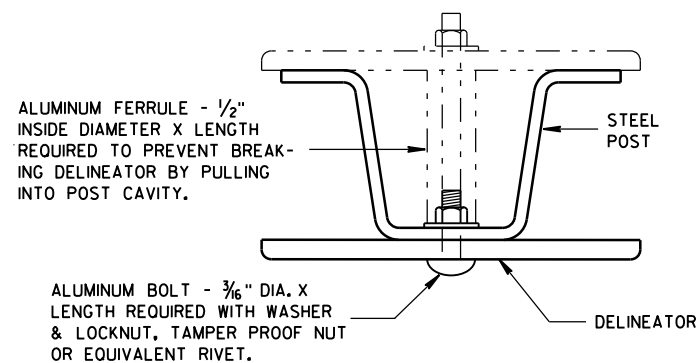
SECTION A-A
WEIGHT 1.12 LBS PER FT. $\pm$ 0.1 LB.



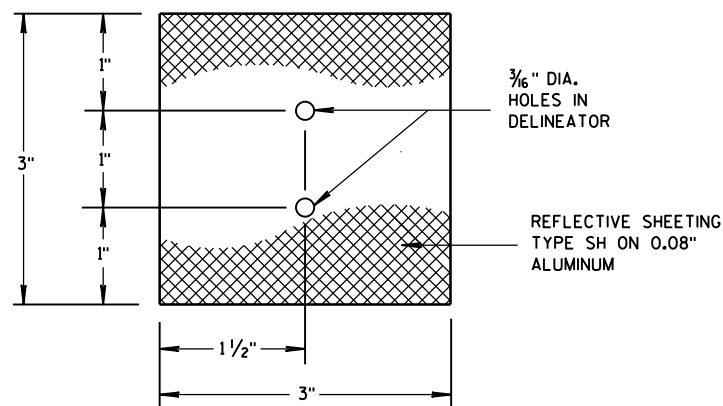
TYPICAL INSTALLATIONS OF DELINEATOR POSTS



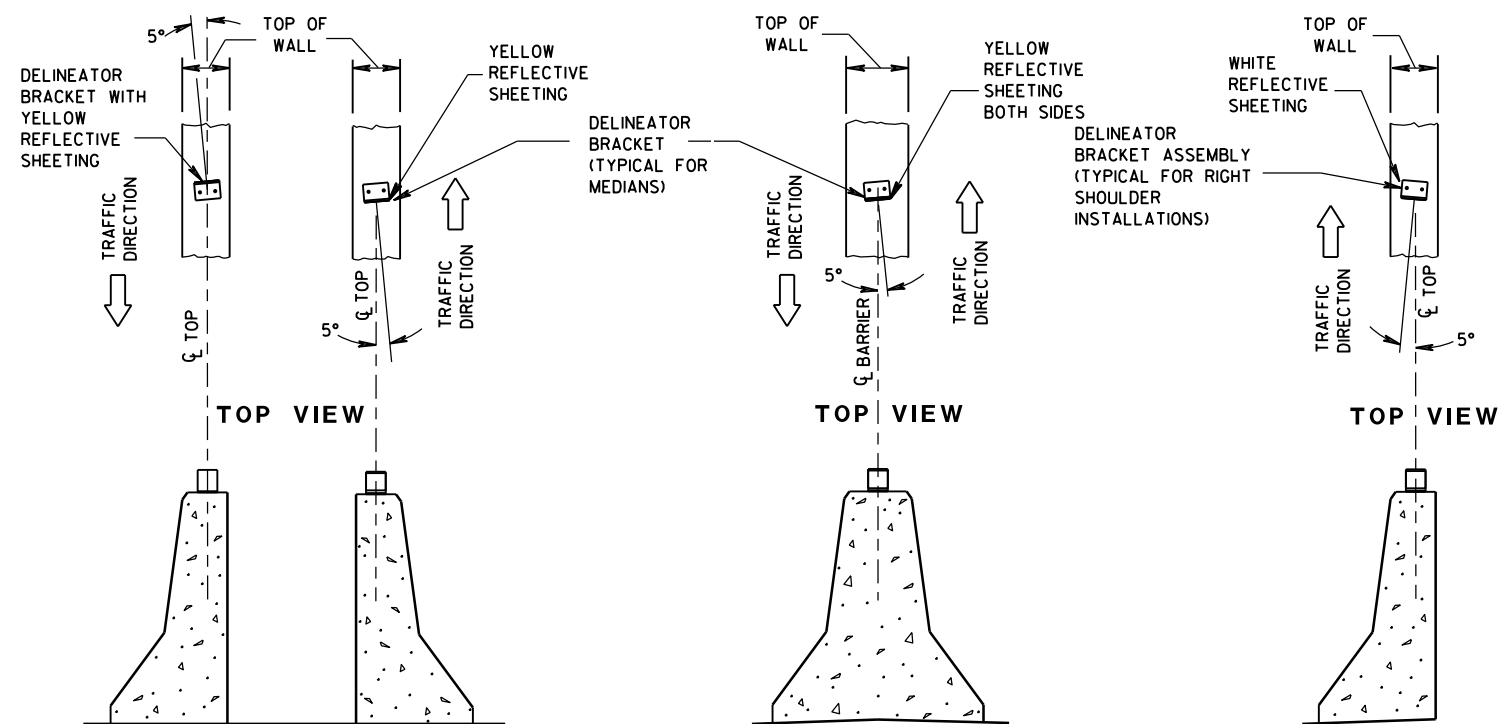
DELINEATOR BRACKET



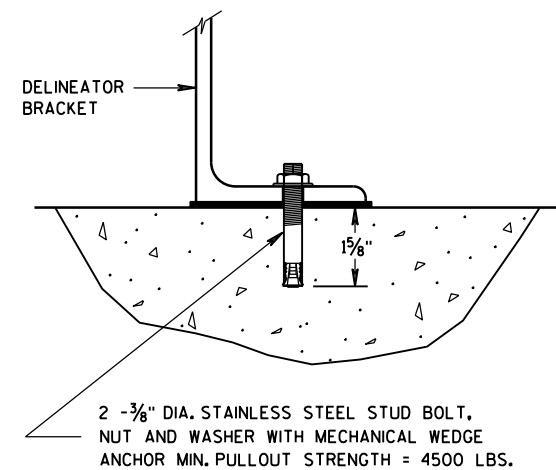
MOUNTING DETAIL FOR DELINEATOR



3" x 3" DELINEATOR



DOUBLE BARRIERS IN MEDIAN	MEDIAN BARRIER	BARRIER LOCATED TO RT. OF TRAFFIC FLOW
LOCATION AND AIMING DETAILS FOR DELINEATOR BRACKETS MOUNTED ON CONCRETE BARRIERS		



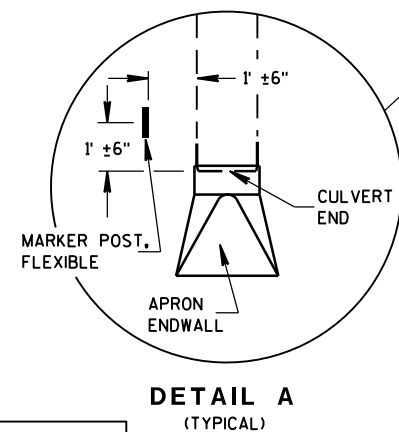
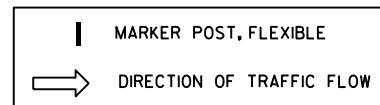
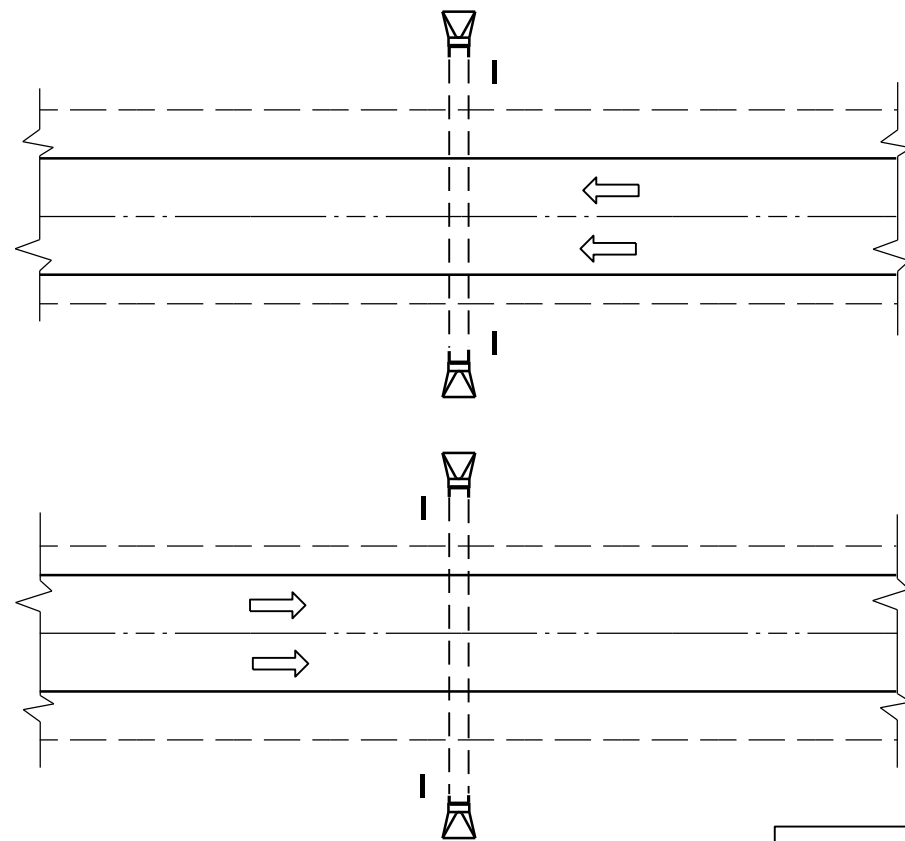
DELINEATOR BRACKET MOUNTING DETAIL

**DELINEATOR POST, DELINEATOR,
AND DELINEATOR BRACKET
WITH REFLECTIVE SHEETING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

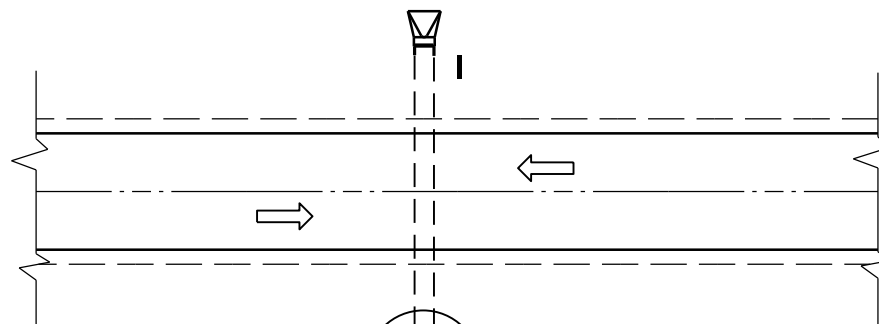
APPROVED
7/2013 /S/ Travis Feltes
DATE STATE TRAFFIC E 497
FHWA

PLAN VIEW
DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

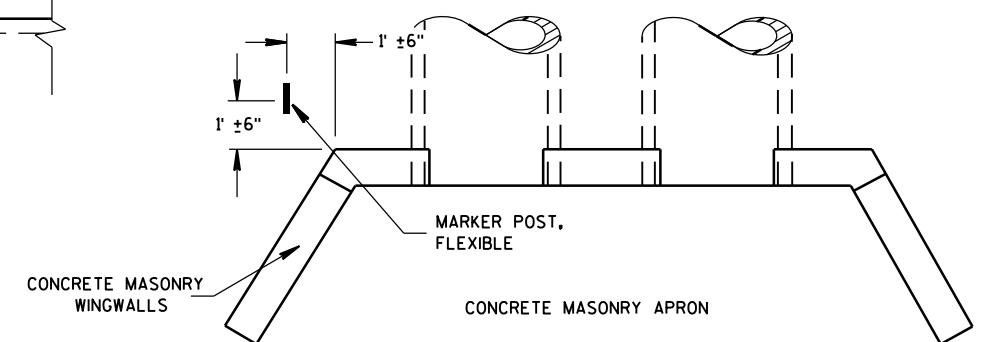
PLAN VIEW
UNDIVIDED HIGHWAY



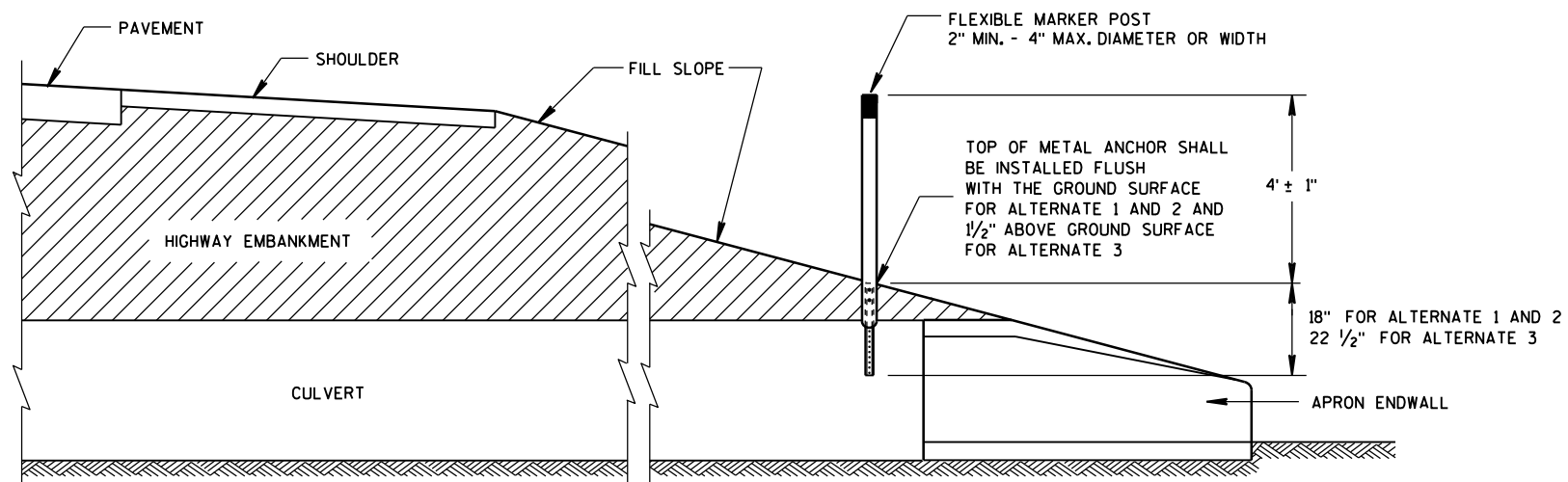
FLEXIBLE MARKER POST LOCATION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



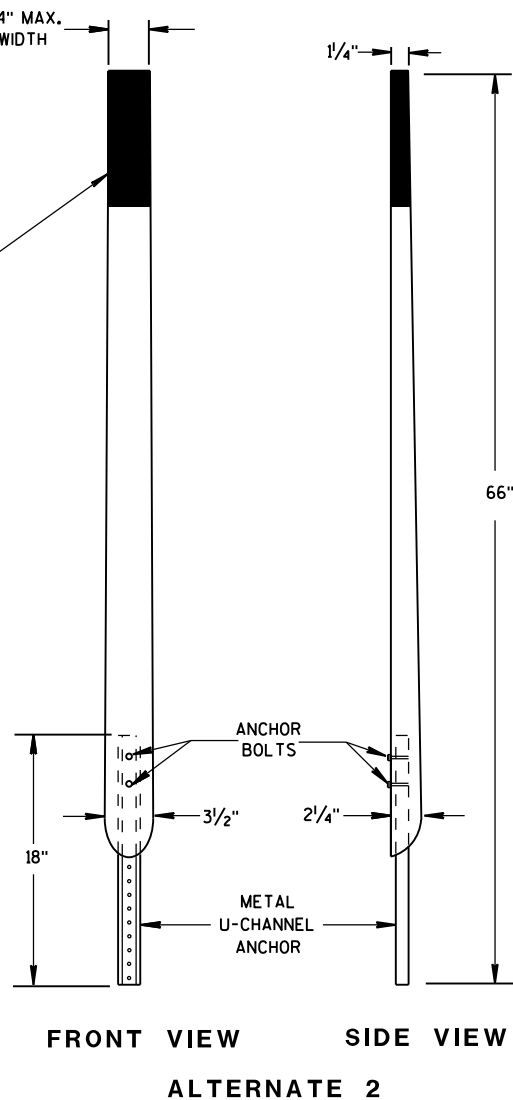
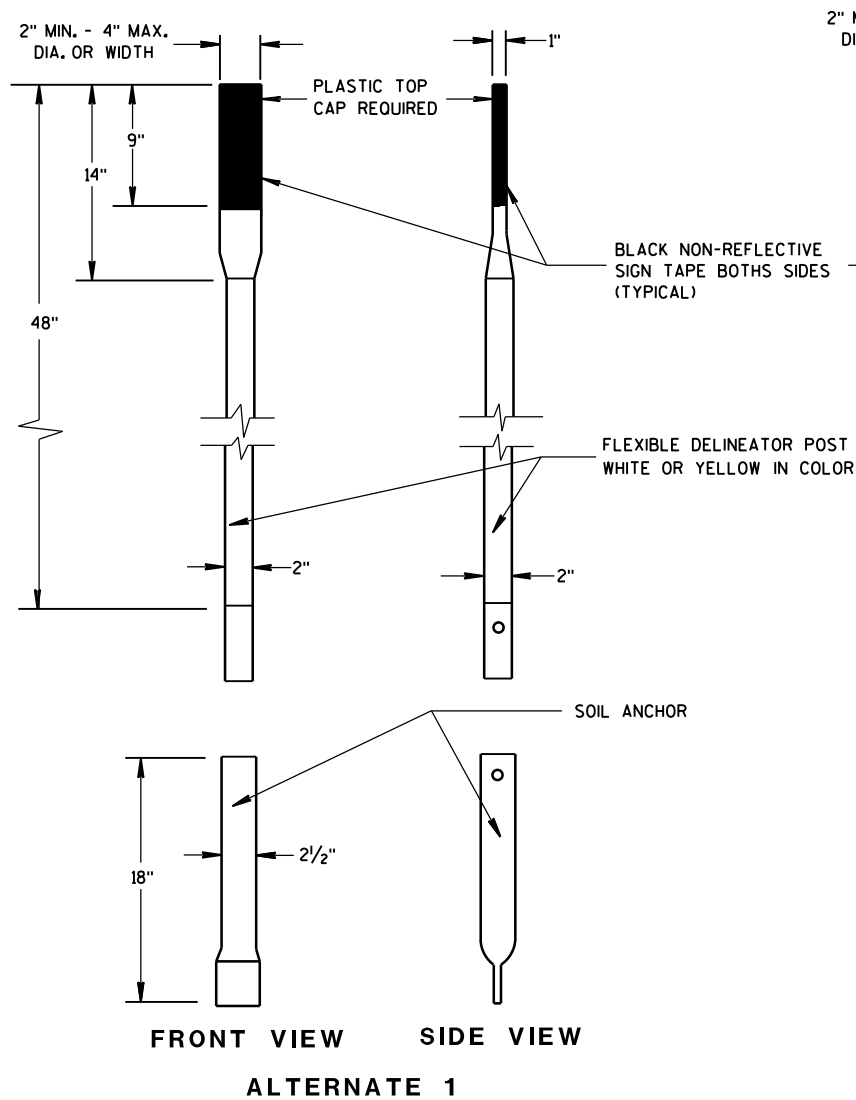
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



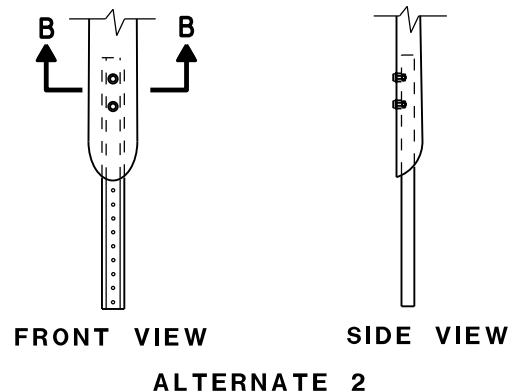
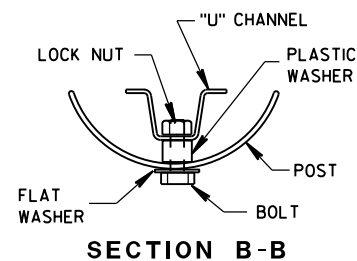
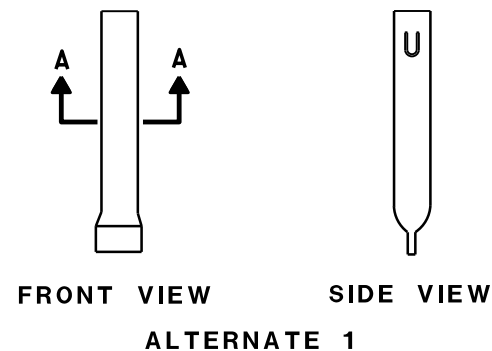
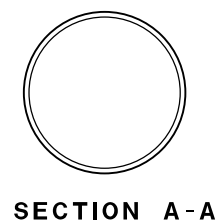
CROSS SECTION
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

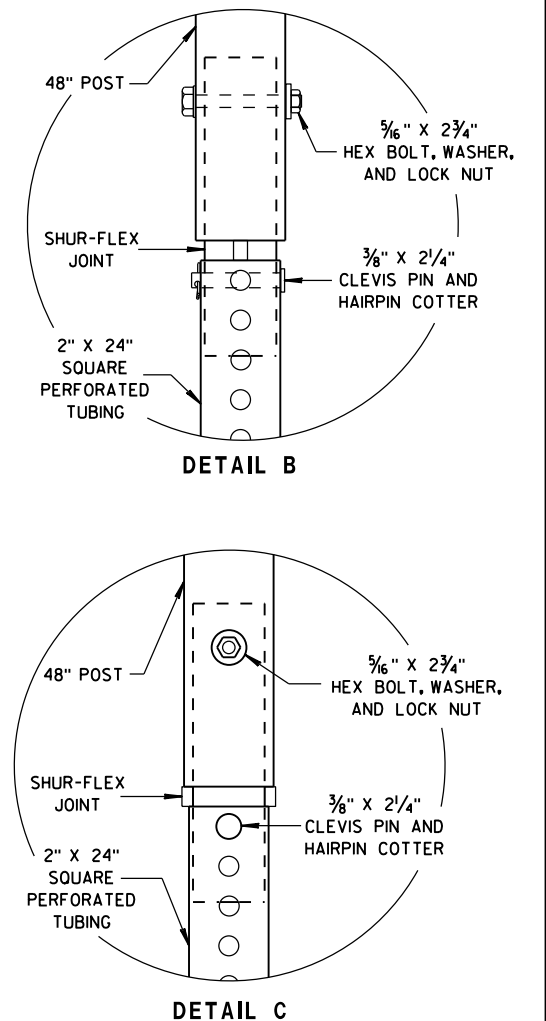
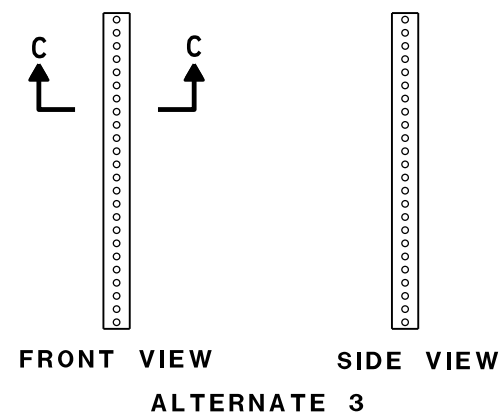
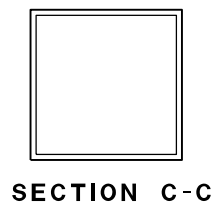
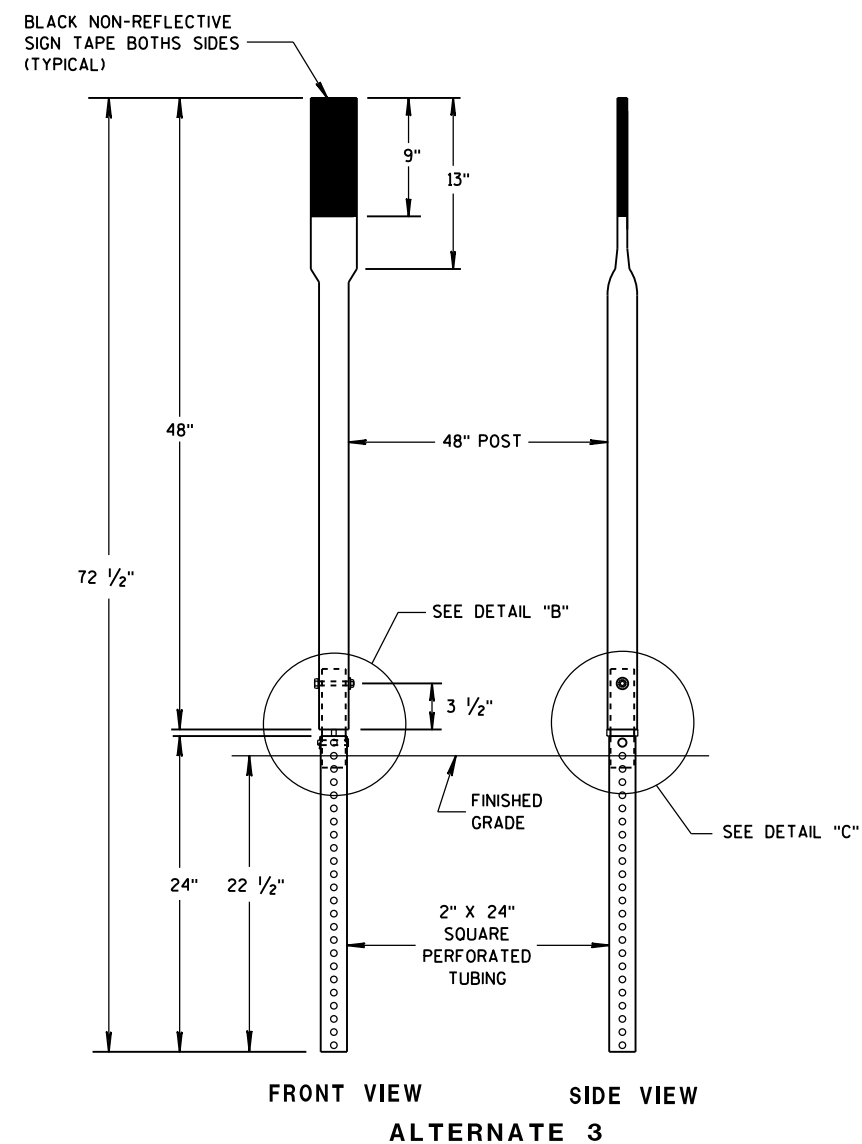
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 498



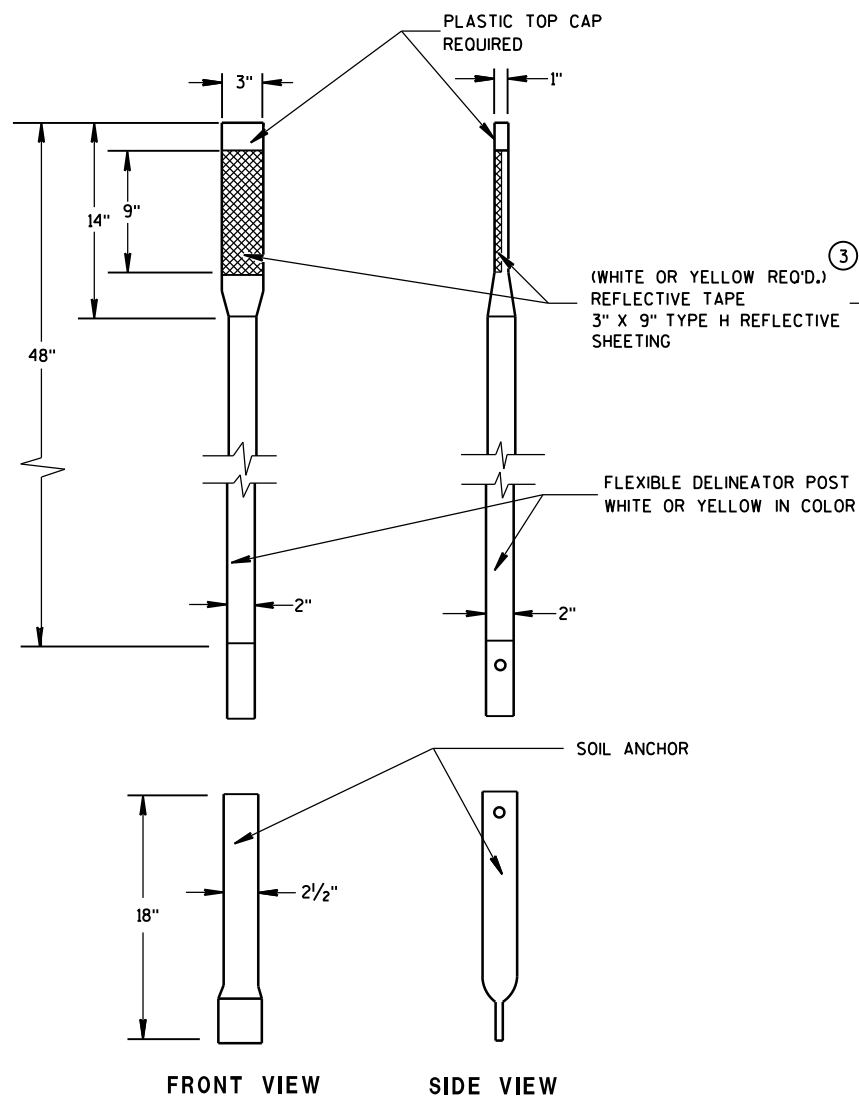
FLEXIBLE MARKER POSTS



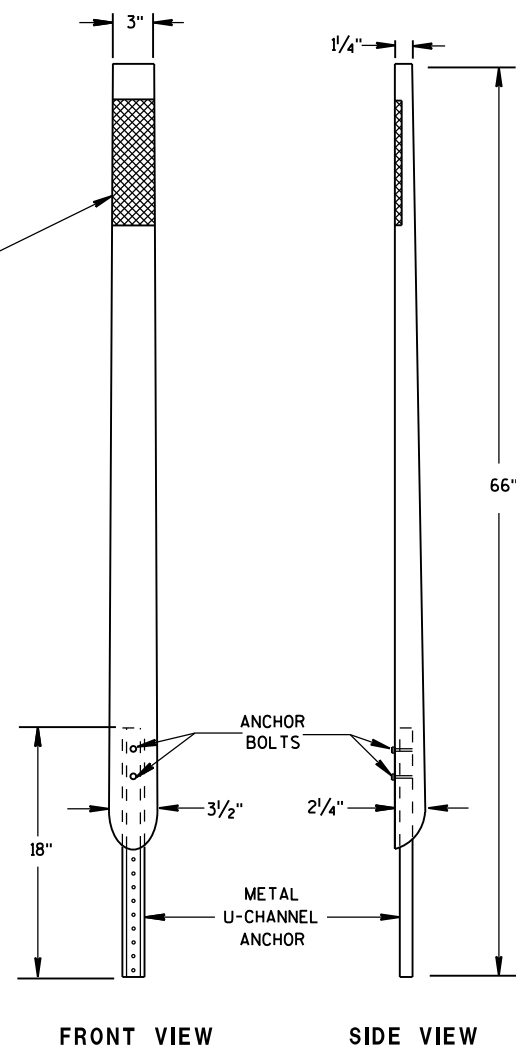
FLEXIBLE MARKER POST ANCHORS



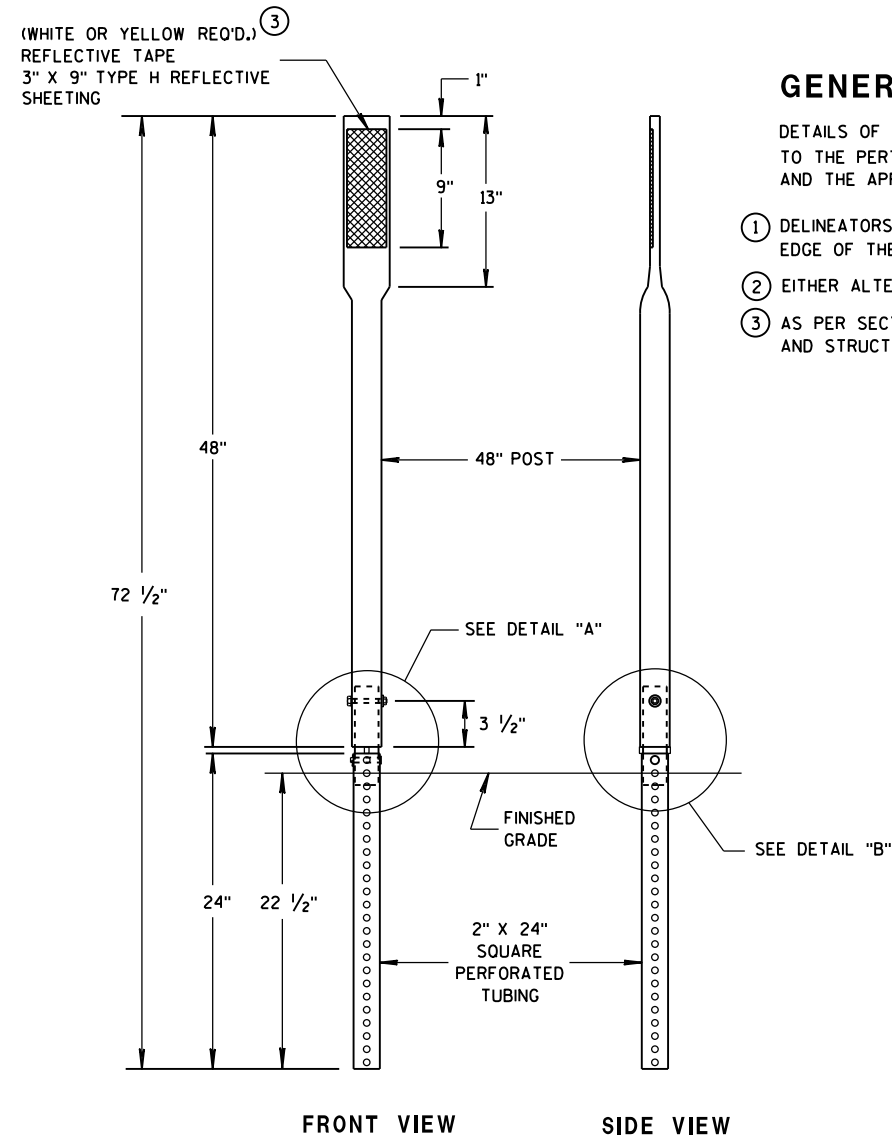
FLEXIBLE MARKER POST FOR CULVERT END		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED 10/1/2012 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER 499	IGN
FHWA		



ALTERNATE 1



ALTERNATE 2

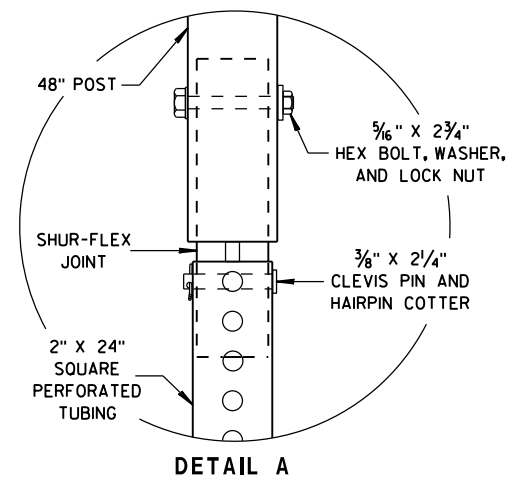


ALTERNATE 3

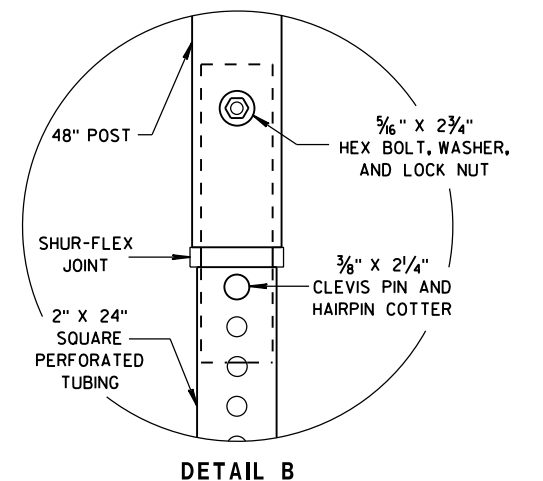
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARTD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

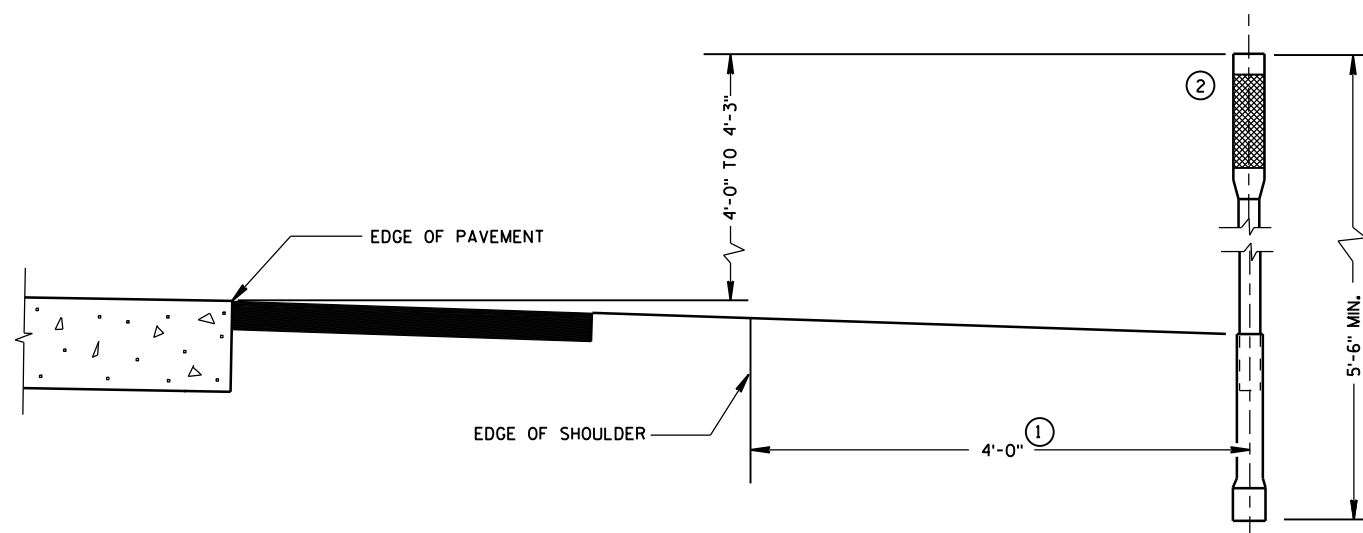
- ① DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.
- ② EITHER ALTERNATE NO.1, NO.2 OR NO.3 MAY BE FURNISHED.
- ③ AS PER SECTION 637.2.2.2. OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.



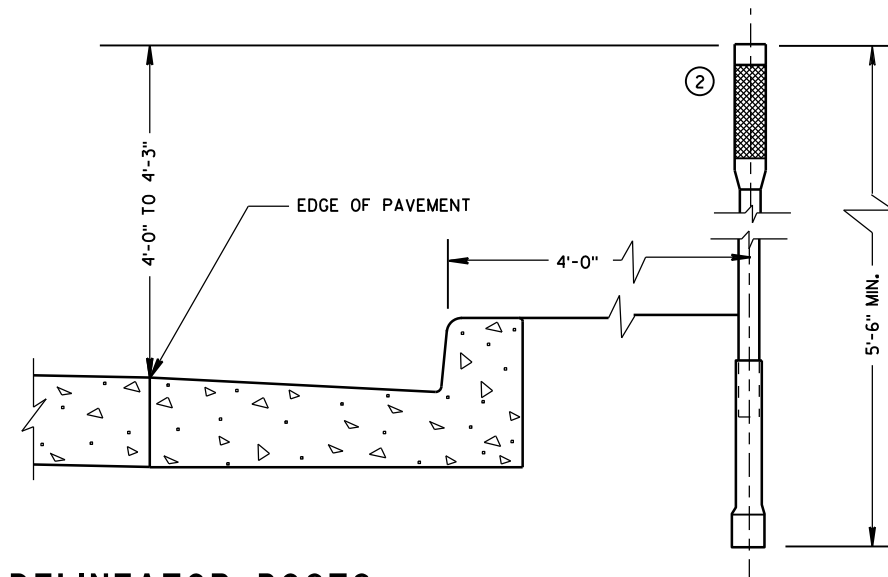
DETAIL A



DETAIL B



TYPICAL INSTALLATIONS OF FLEXIBLE DELINEATOR POSTS



FLEXIBLE DELINEATOR POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9-26-2012

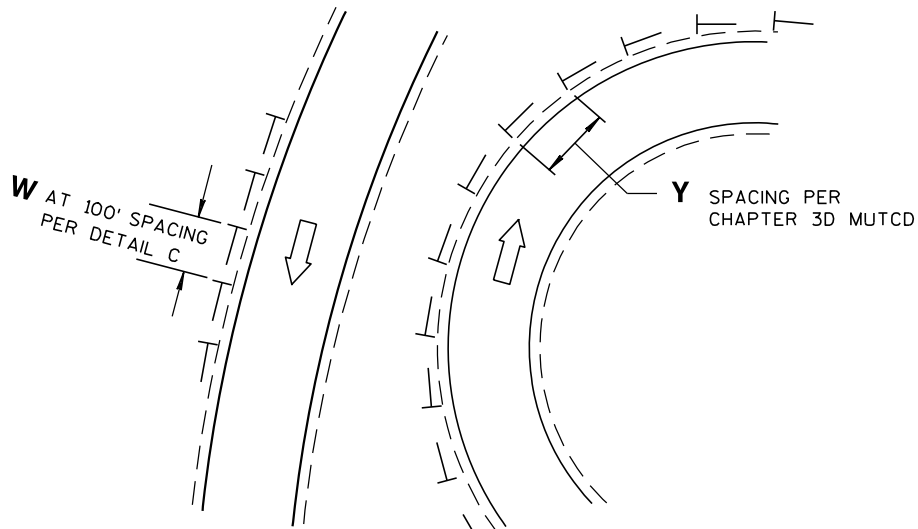
DATE

FHWA

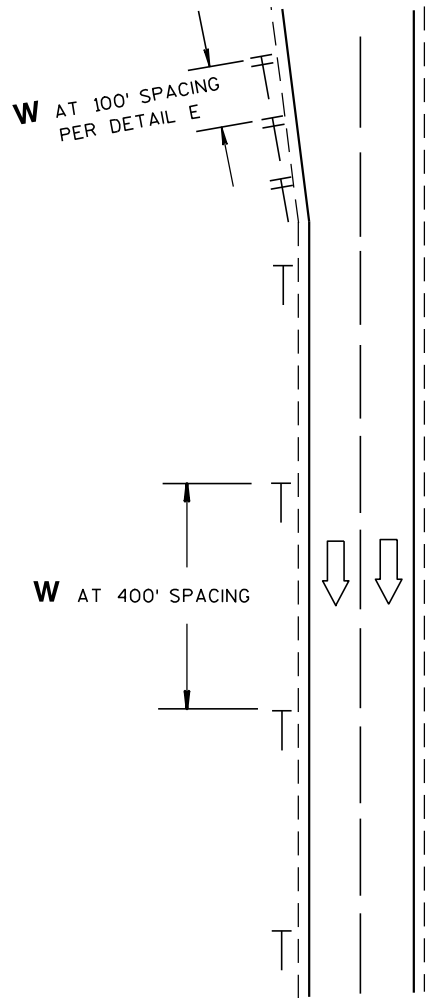
/S/ Travis Feltes

STATE TRAFFIC ENGINEER

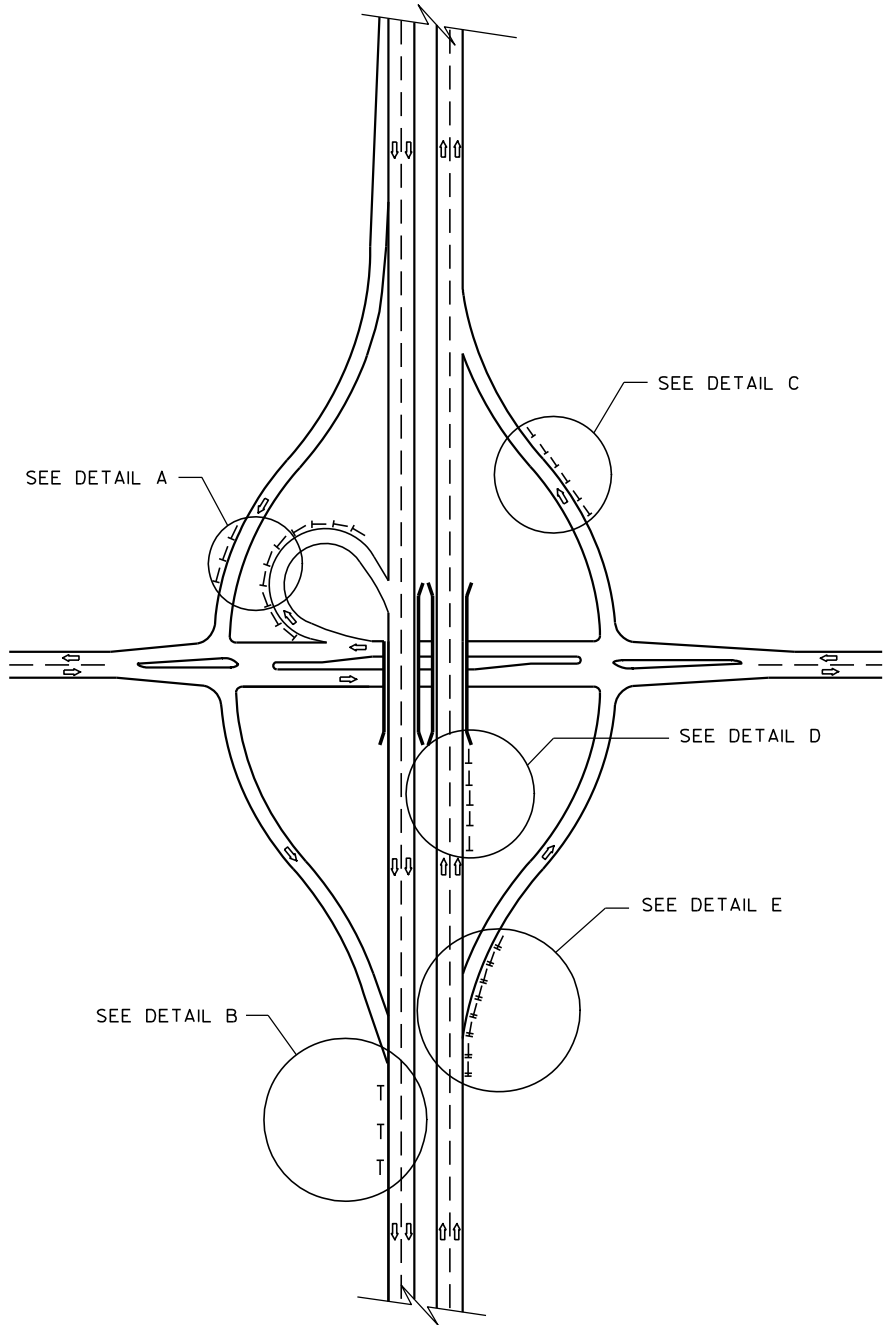
500 IGN



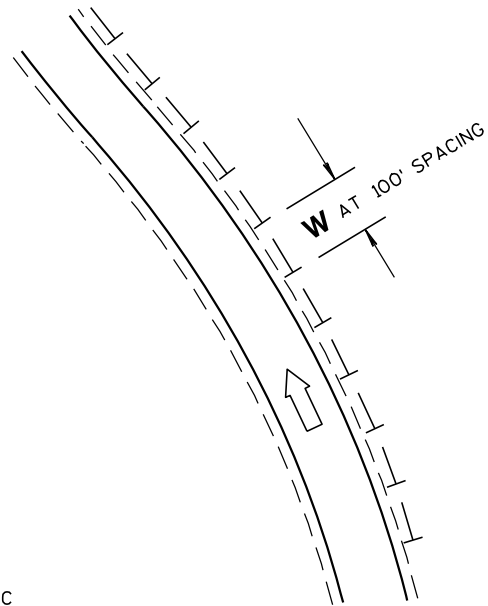
DETAIL A
DELINEATOR LAYOUT AT CURVED RAMP



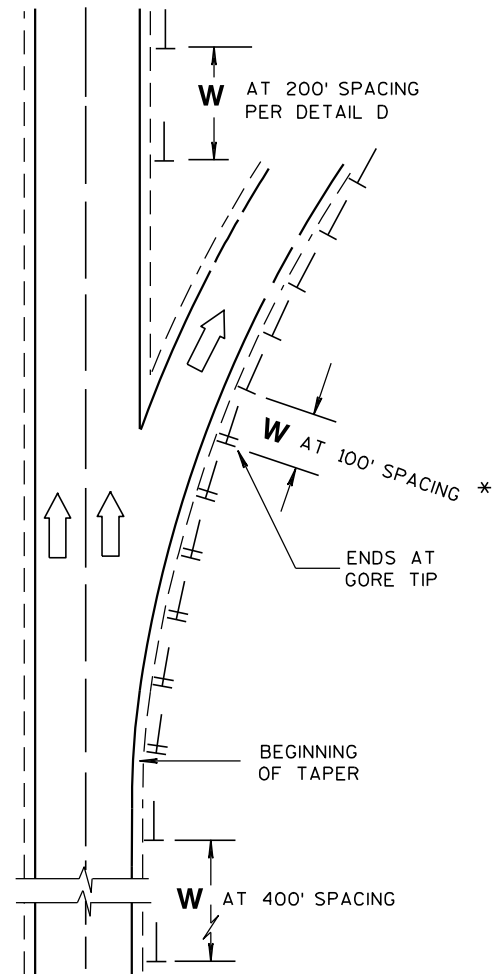
DETAIL B
DELINEATOR LAYOUT
ALONG MAINLINE



DELINEATOR LAYOUT



DETAIL C
DELINEATOR LAYOUT ALONG RAMP



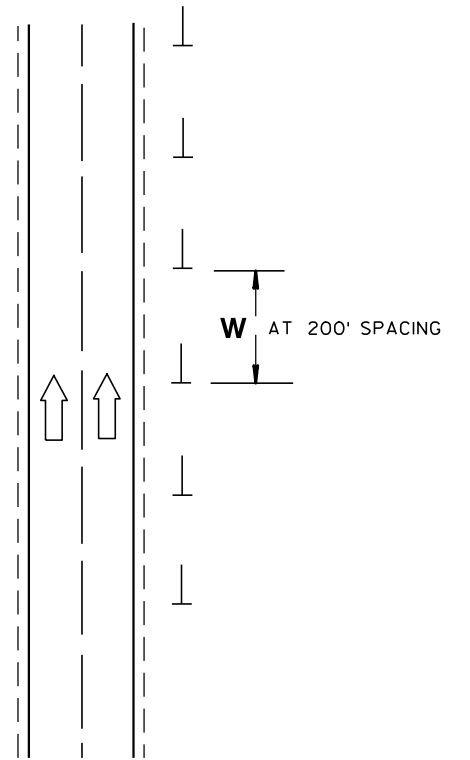
DETAIL E
DELINEATOR LAYOUT FOR ACCELERATION
- DECELERATION LANES AND TAPERS AT RAMPS

GENERAL NOTES

* USE DOUBLE DELINEATOR ALONG ACCELERATION-DECELERATION LANES AND TAPERS.
USE SINGLE DELINEATOR WHEN RAMP PAVEMENT IS FULL WIDTH.

LEGEND

- DIRECTION OF TRAFFIC FLOW
- SINGLE DELINEATOR
- DOUBLE DELINEATOR
- W** WHITE
- Y** YELLOW



DETAIL D
DELINEATOR LAYOUT
BETWEEN INTERCHANGE RAMPS

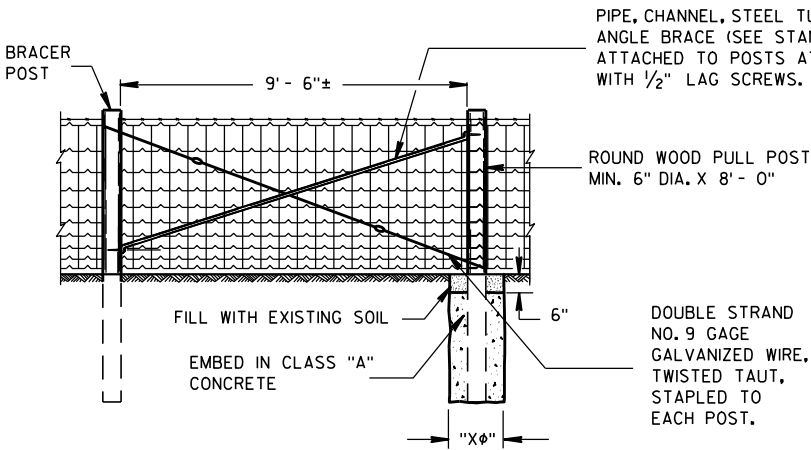
DELINEATOR LAYOUT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

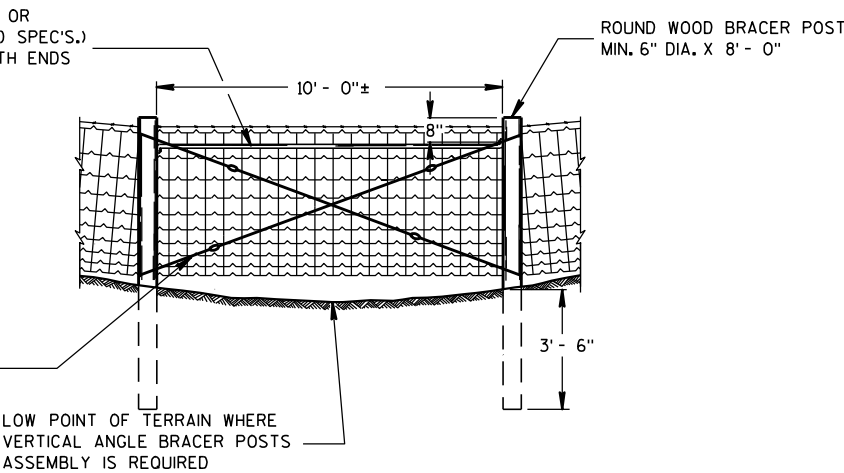
APPROVED
2/5/09 /S/ Thomas N. Nothmann
DATE STATE TRAFFIC ENGINEER 501 SIGN
FHWA

NOTE: PULL OR STRETCHER POST ASSEMBLIES SHALL BE PLACED MIDWAY BETWEEN END POSTS AND CORNER POSTS WHERE A RUN OF FENCE EXCEEDS 660' BUT IS LESS THAN 1,320'. FOR RUNS OF FENCE IN EXCESS OF 1,320' MAXIMUM SPACING OF PULL OR STRETCHER POST ASSEMBLIES SHALL BE 660'± C-C.

ILLUSTRATION SHOWS POSITION OF STANDARD STEEL BRACE, DOUBLE STRAND GALVANIZED WIRE, AND THE POST TO BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM LEFT TO RIGHT. THE BRACES SHALL BE POSITIONED ON THE OPPOSITE DIAGONALS AND THE OPPOSITE POST SHALL BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM RIGHT TO LEFT.



PULL OR STRETCHER POSTS ASSEMBLY



VERTICAL ANGLE BRACER POSTS ASSEMBLY

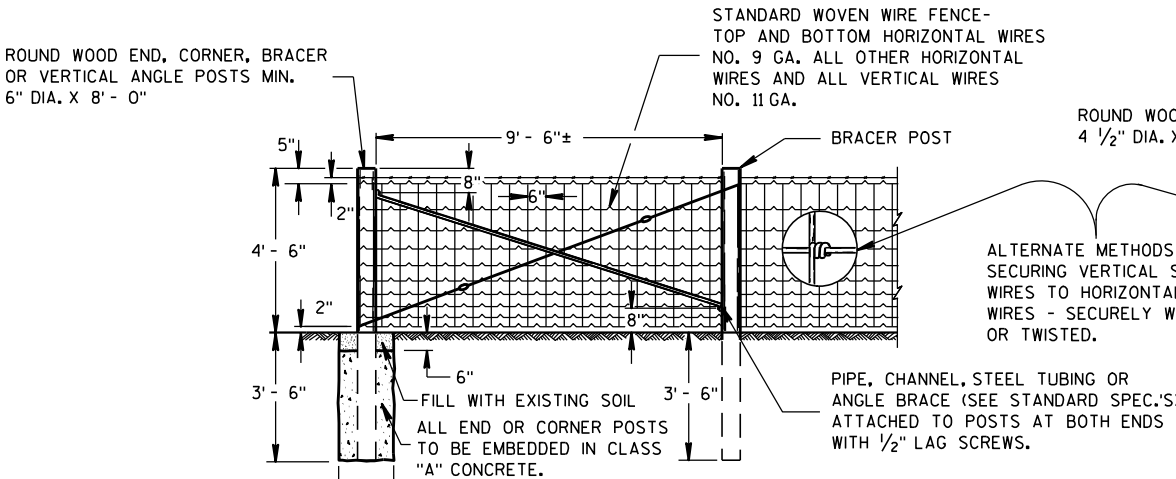
GENERAL NOTES

"Xφ" = DIAMETER OF THE POST PLUS 12".

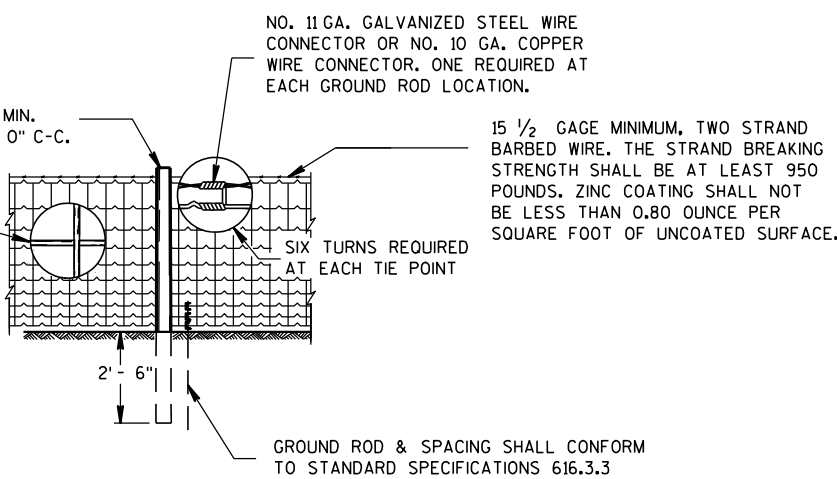
FENCE STAPLES SHOULD NEVER BE DRIVEN VERTICALLY INTO WOOD POSTS (WITH BOTH LEGS PARALLEL WITH THE WOOD GRAIN). DOING SO CAN SEPARATE THE GRAIN AND SIGNIFICANTLY REDUCE THE HOLDING POWER. ROTATING THE STAPLES SLIGHTLY OFF VERTICAL STRADDLES THE GRAIN AND PROVIDES MORE RESISTANCE TO PULL-OUT.

DO NOT STAPLE WIRE TIGHT TO THE LINE POSTS. ALLOW MOVEMENT OF WIRE FOR EXPANSION AND CONTRACTION. STAPLE ARRANGEMENT SHALL BE THE SAME FOR ALL OTHER POSTS EXCEPT THAT THEY SHALL BE DRIVEN TIGHT TO POSTS. ALL STAPLES SHALL BE 2" X 9 GAGE AND SHALL BE MANUFACTURED FROM GALVANIZED WIRE OR HOT DIP GALVANIZED AFTER FORMING. STAPLES SHALL HAVE SLASH-CUT POINTS.

FENCE SHALL BE LOCATED 3'-0" INSIDE THE RIGHT OF WAY LINE UNLESS OTHERWISE INDICATED ON THE PLANS.

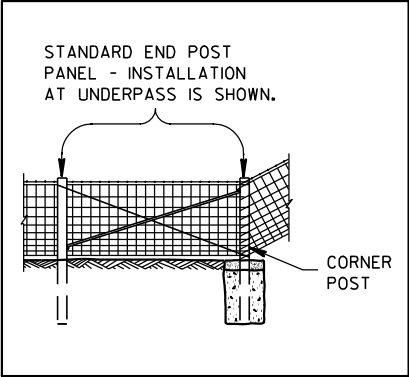


END OR CORNER POSTS ASSEMBLY

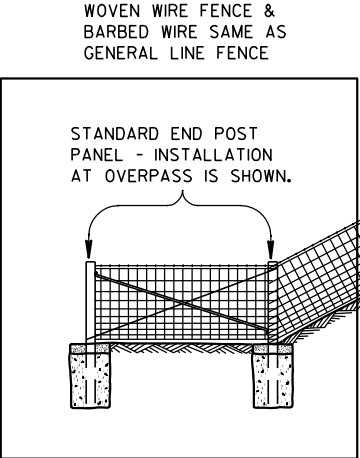


LINE FENCE CONSTRUCTION

GENERAL ROADSIDE VIEW OF WOVEN WIRE FENCE



ALTERNATE FENCE DESIGN AT STRUCTURE



FENCE DESIGN AT STRUCTURE APPROACH

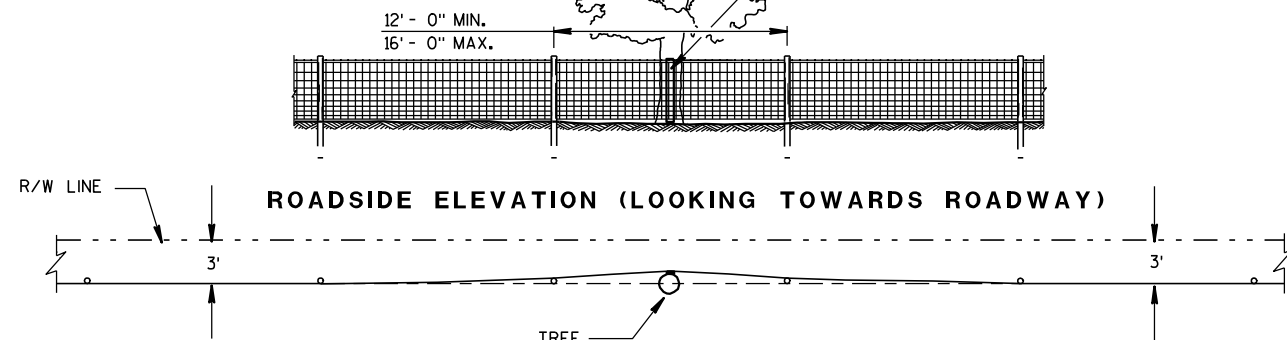
FENCE WOVEN WIRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

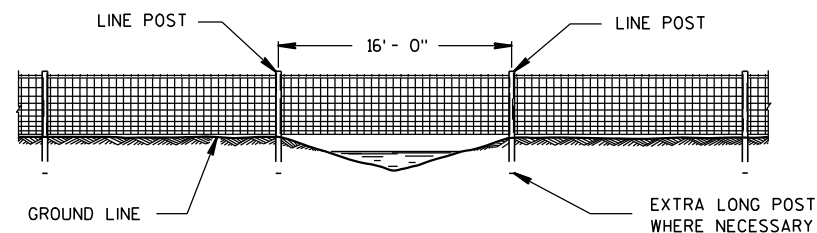
502

NOTE: TREE IN NORMAL FENCE LINE SPECIFICALLY ORDERED BY ENGINEER TO REMAIN IN PLACE.

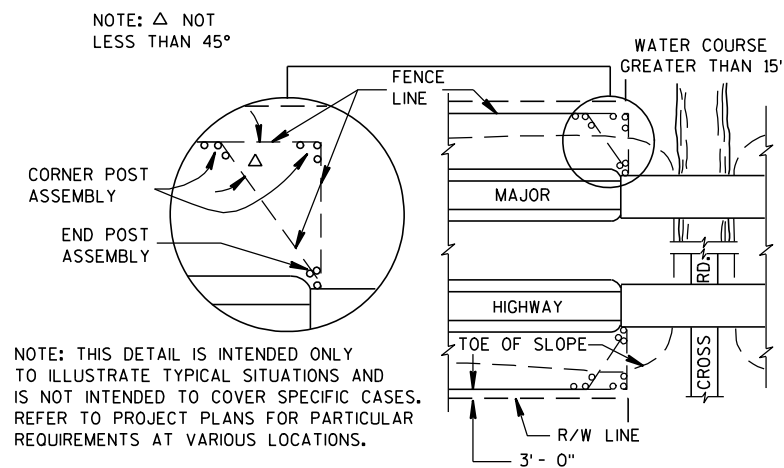
2" X 6" DOUGLAS FIR OR SO. YELLOW PINE PLACED BETWEEN TREE AND WOVEN WIRE FENCE. WOVEN WIRE FENCE AND BARBED WIRE TO BE STAPLED TO 2" X 6" LIKE AS TO LINE POST. 2" X 6" NOT FASTENED TO TREE.



PLAN VIEW
FENCE DESIGN AT TREES REMAINING
IN NORMAL FENCE LINE

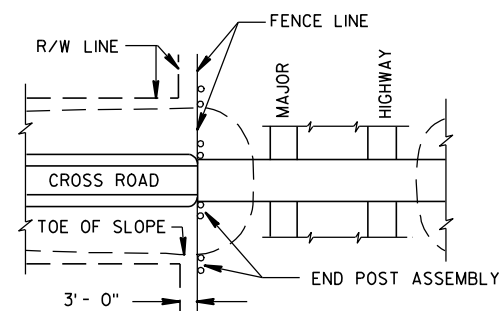


FENCE CONSTRUCTION OVER STREAM
COURSES OF 15 FT. OR LESS IN WIDTH

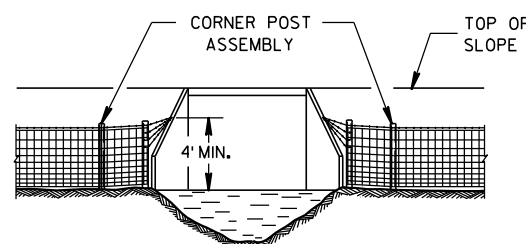


PLAN VIEW
MAJOR HIGHWAY OVERPASS OR STREAM COURSE
CROSSING OF GREATER THAN 15 FT. IN WIDTH

FENCE LOCATION AT STRUCTURES

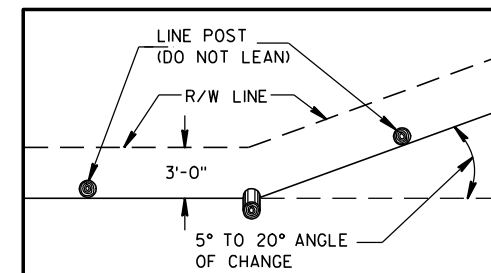
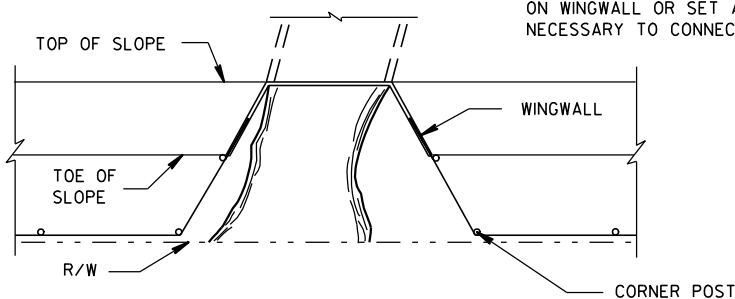


PLAN VIEW
MAJOR HIGHWAY UNDERPASS

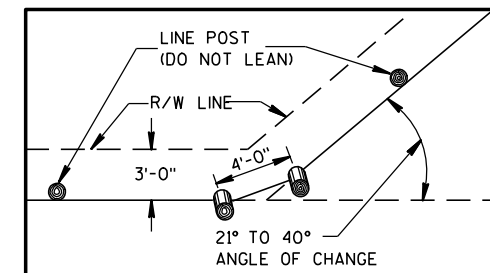


FENCE INSTALLATION TO WINGWALLS

NOTE: PLACE A MINIMUM OF 4 STRANDS OF BARBED WIRE, 6" MAXIMUM CENTERS IN FAN SHAPE CONNECTED TO AN EYE BOLT ON WINGWALL OR SET A LONE POST WHEN NECESSARY TO CONNECT BARBED WIRE.



PLAN VIEW
SINGLE POST CORNER

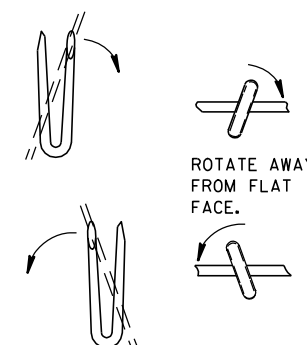


PLAN VIEW
DOUBLE POST CORNER

RIGHT OF WAY LINE CHANGE 40° AND LESS

NOTE: SINGLE AND DOUBLE POSTS SHALL BE A MIN. 6" DIA. X 8'-0" WITH A LEAN OF 4" TOWARD THE OUTSIDE OF THE CURVE.

WHEN THE RIGHT OF WAY LINE CHANGE IS MORE THAN 40° USE THE CORNER OR STRETCHER POSTS ASSEMBLY.



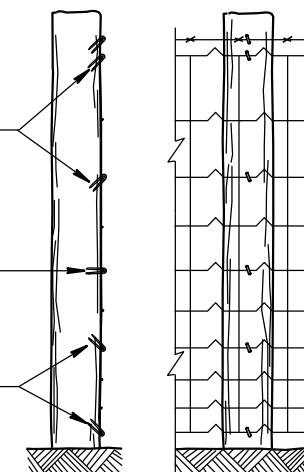
LINE POST

NOTE: WHEN POSTS ARE DRIVEN THE SMALL END SHALL BE DOWN.

STAPLES SLOPED DOWNWARD FOR SUSTAINED GRADES AND OVER KNOLLS.

STAPLES LEVEL FOR LEVEL GROUND.

SLOPE UPWARDS WHEN FENCE TENDS TO LIFT.



END ELEVATION
FARM SIDE ELEVATION
FENCE MOUNTING DETAIL

FENCE WOVEN WIRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/4/2008

DATE

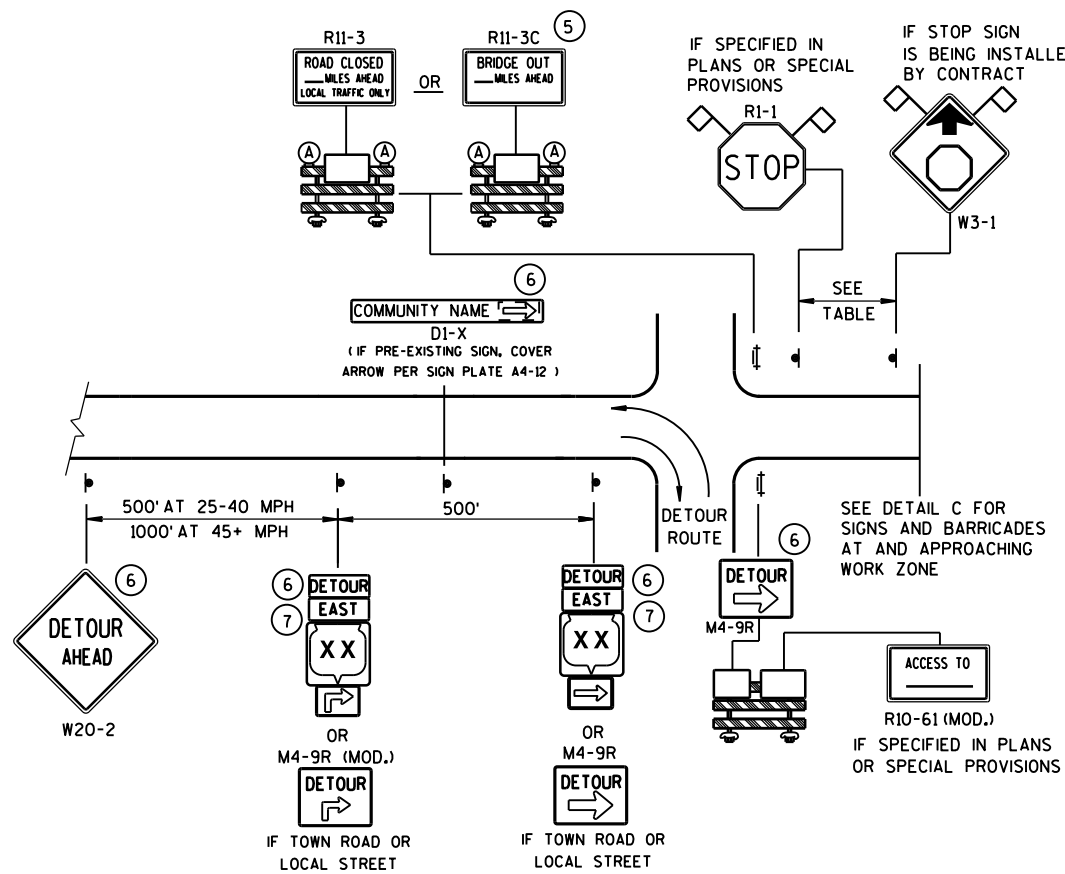
FHWA

/S/ Jerry H. 7----

ROADWAY STANDARDS 503

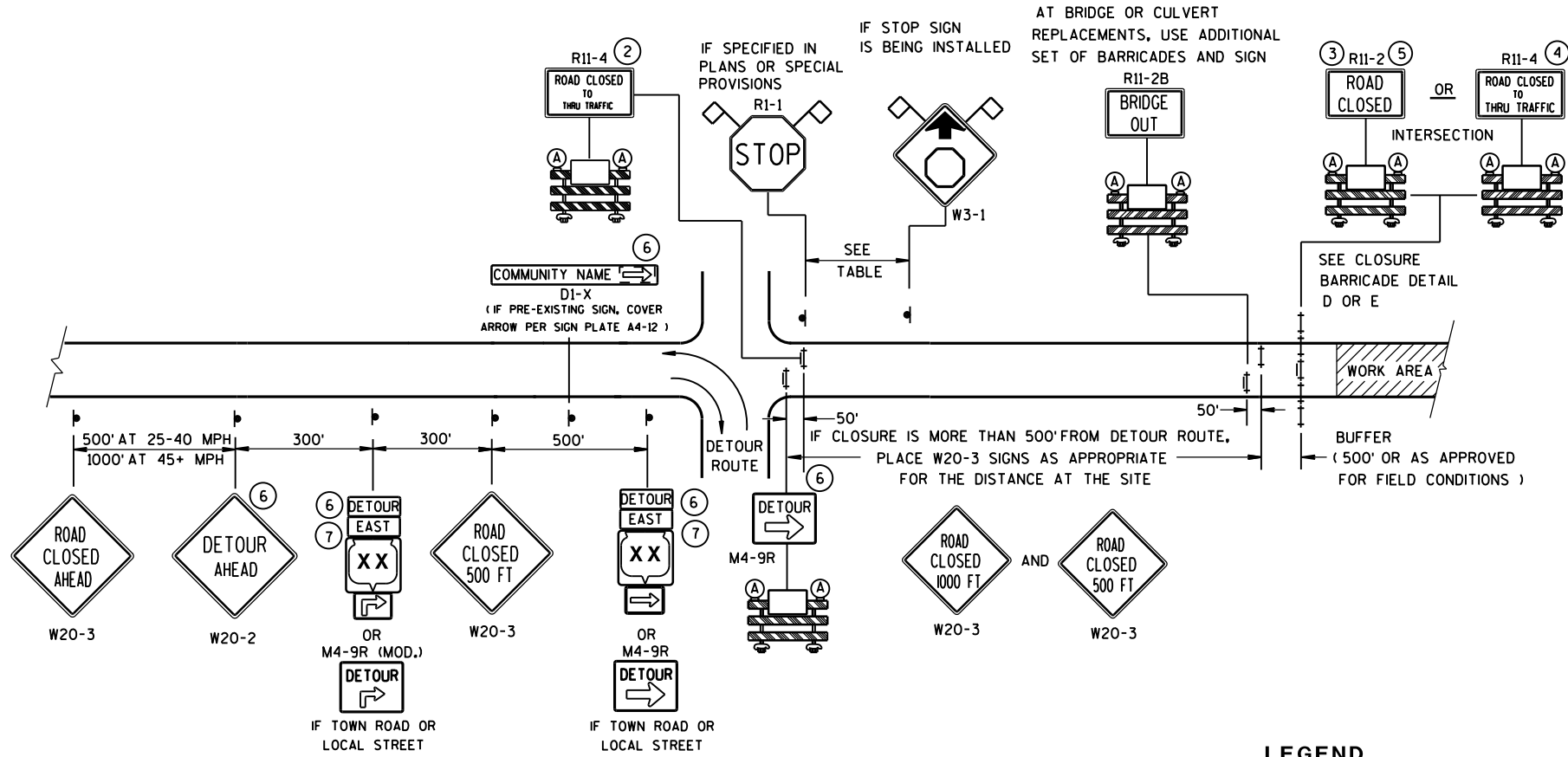
ENGINEER

ENT



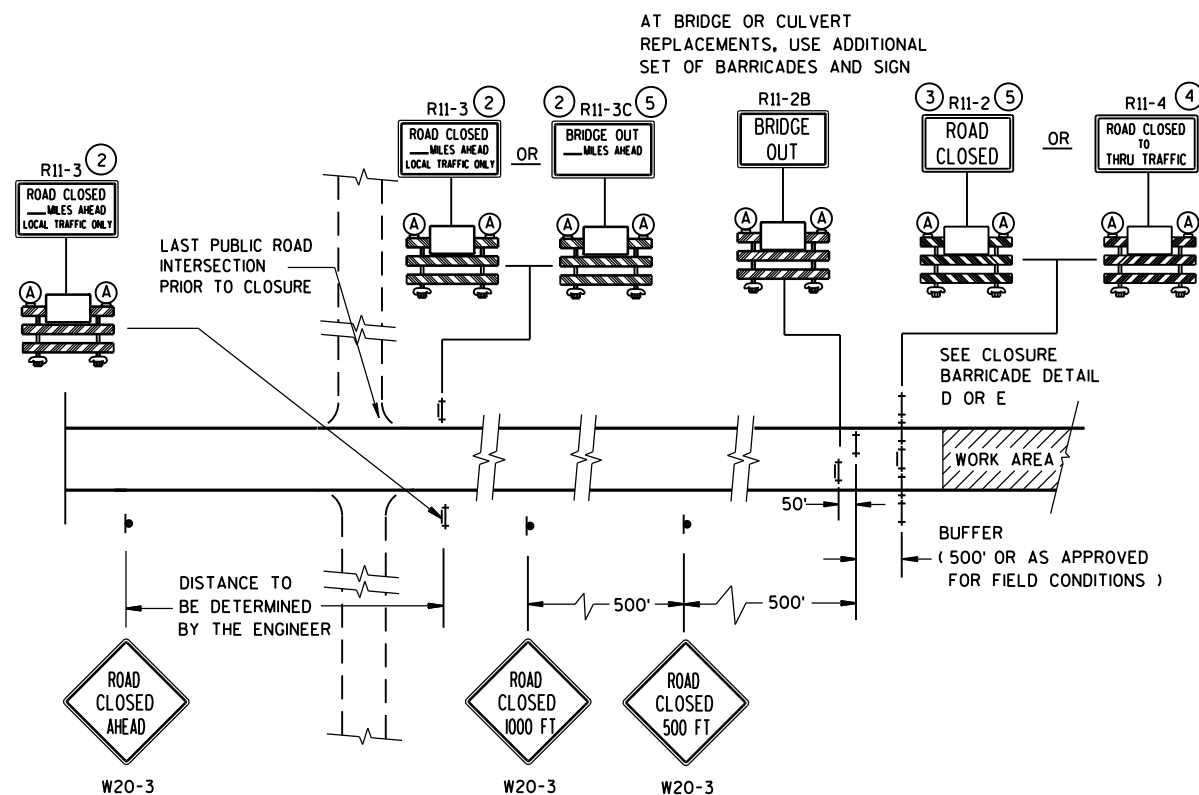
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

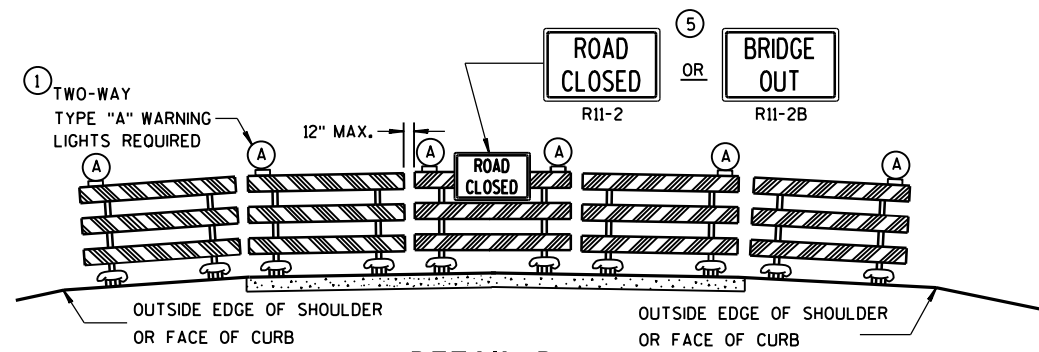
LEGEND

- SIGN ON PERMANENT SUPPORT
- ⊥ TYPE III BARRICADE
- ⊥ TYPE III BARRICADE WITH ATTACHED SIGN
- Ⓐ TYPE "A" WARNING LIGHT (FLASHING)
- ▨ WORK AREA
- DETOUR EAST M4-8 M3-X
- XX OR COUNTY XX OR XX M1-4 M1-5A M1-6
- OR M05-1 M06-1
- ◇ ◇ FLAGS, 16" X 16" MIN., (ORANGE)

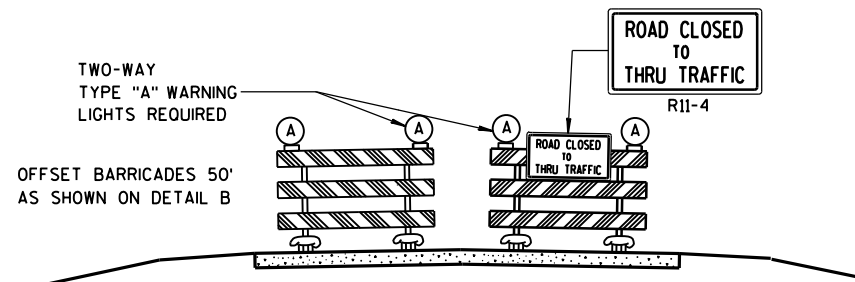
SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

BARRICADES AND SIGNS FOR MAINLINE CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
8/2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINE 504 ESIGN
FHWA	



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2-SHEET "a" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30".

R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".

M4-9 SHALL BE 30" X 24".

M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)

M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)

M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)

M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)

D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

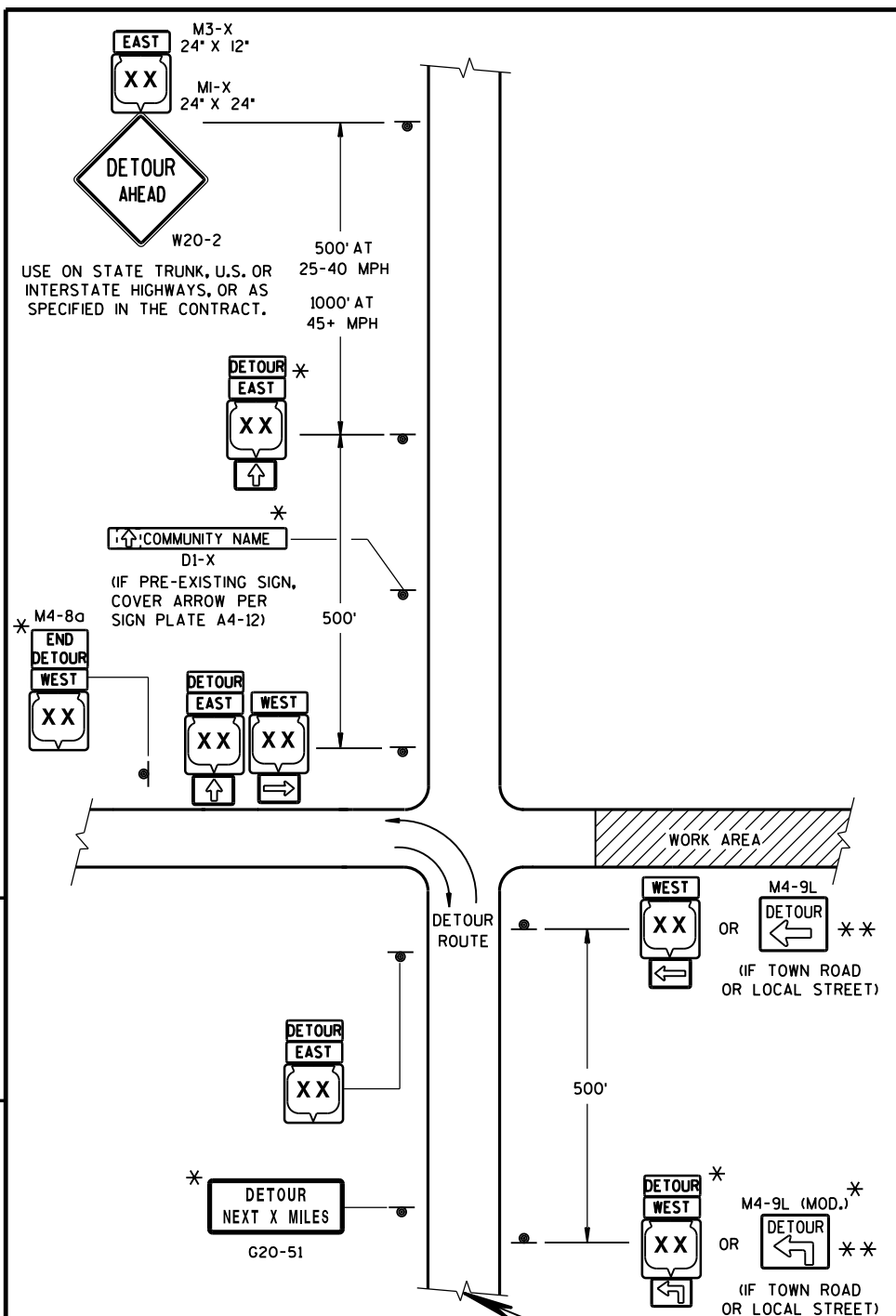
R1-1 SHALL BE 36" X 36".

- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- ③ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- ④ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- ⑤ FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- ⑥ INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- ⑦ "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINE 505 ESIGN
FHWA



THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

MATCH POINT

DETAIL F
DETOUR SIGNING

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS, MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

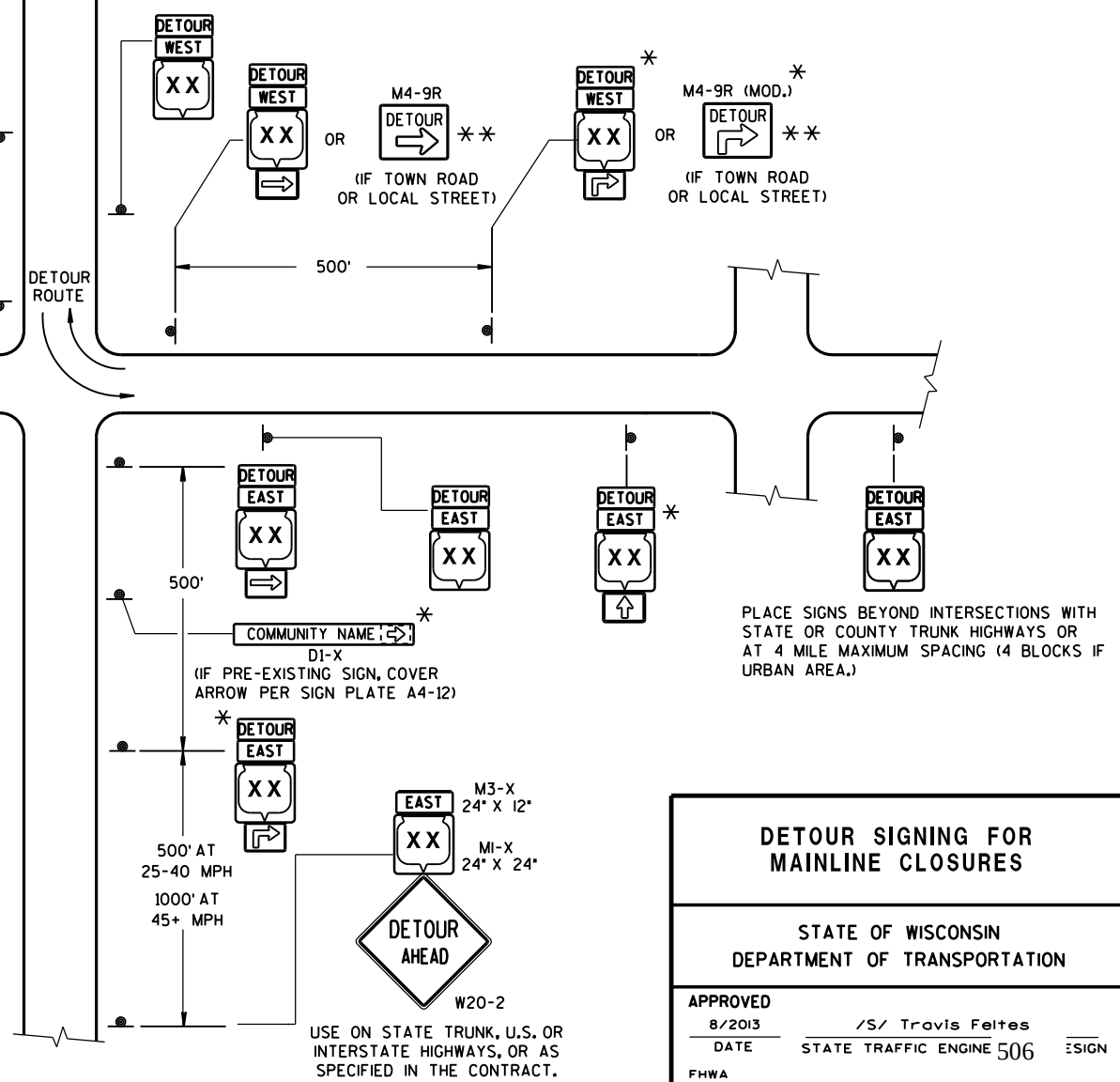
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

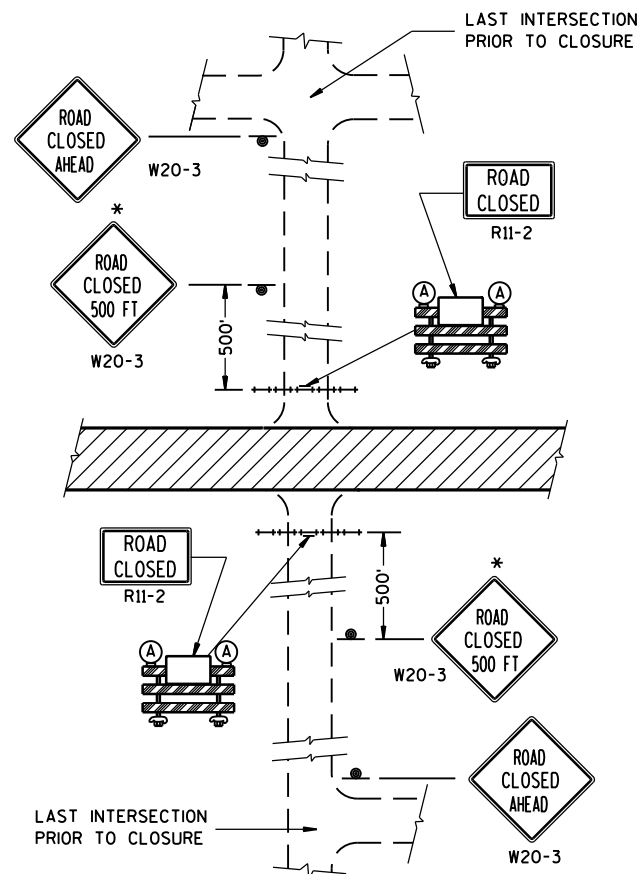
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

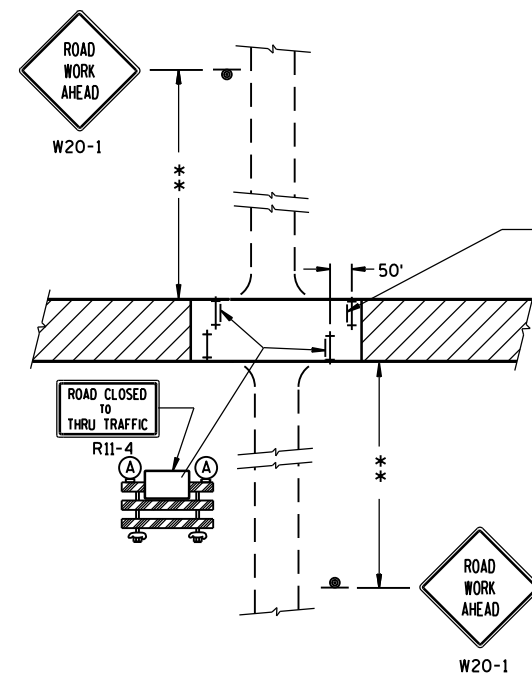
** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



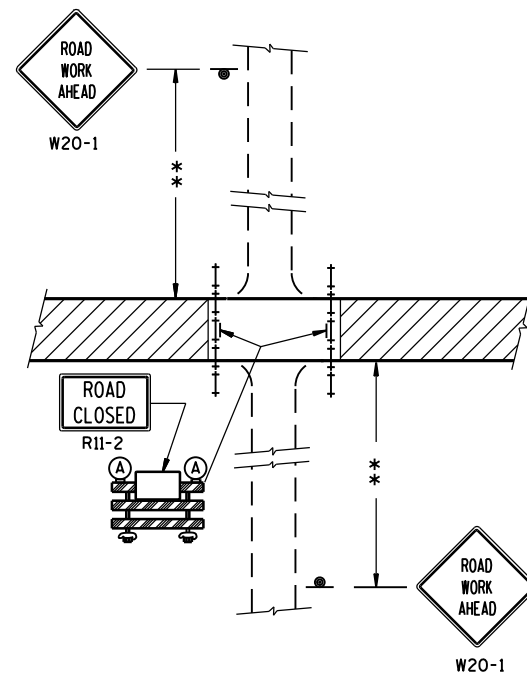
DETOUR SIGNING FOR MAINLINE CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINE 506 SIGN
FHWA	



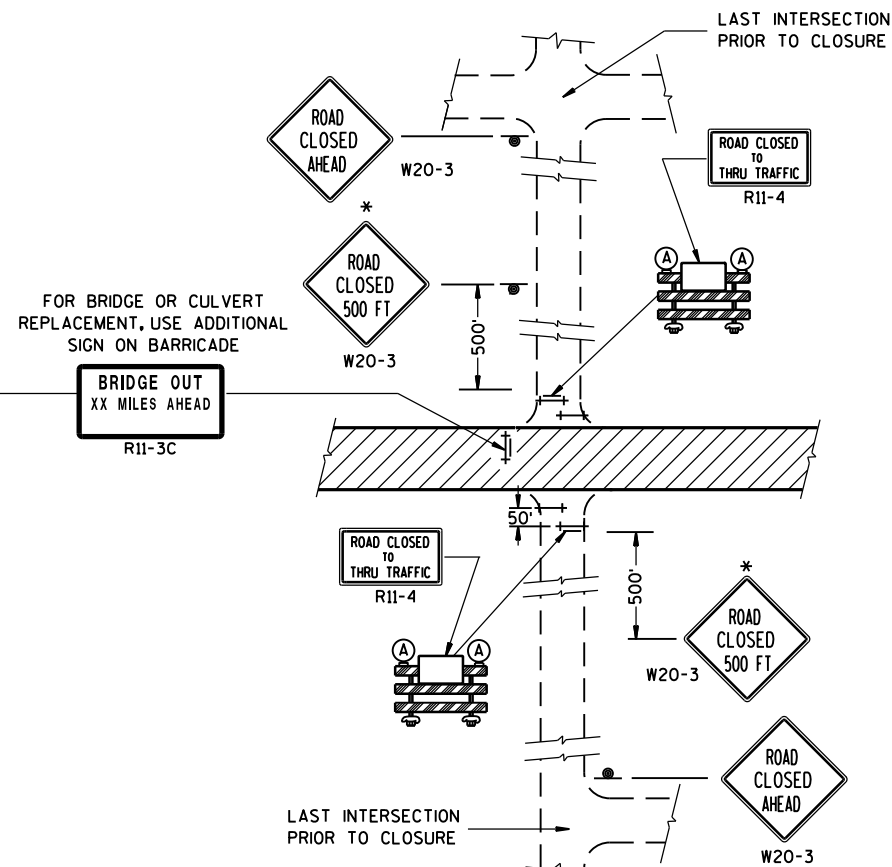
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT).



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30".

R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- ⊙ SIGN ON PERMANENT SUPPORT
- ⊥ TYPE III BARRICADE
- ⊥ TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- ▨ WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

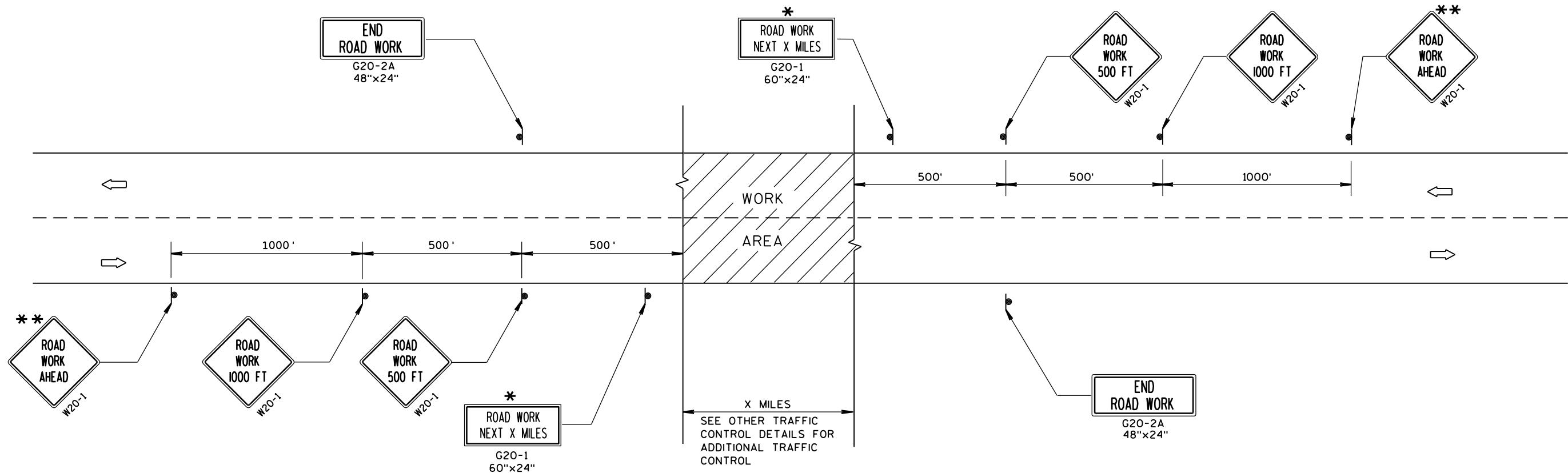
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 /S/ Travis Feltes

DATE STATE TRAFFIC ENGINE 507

FWHA SIGN



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

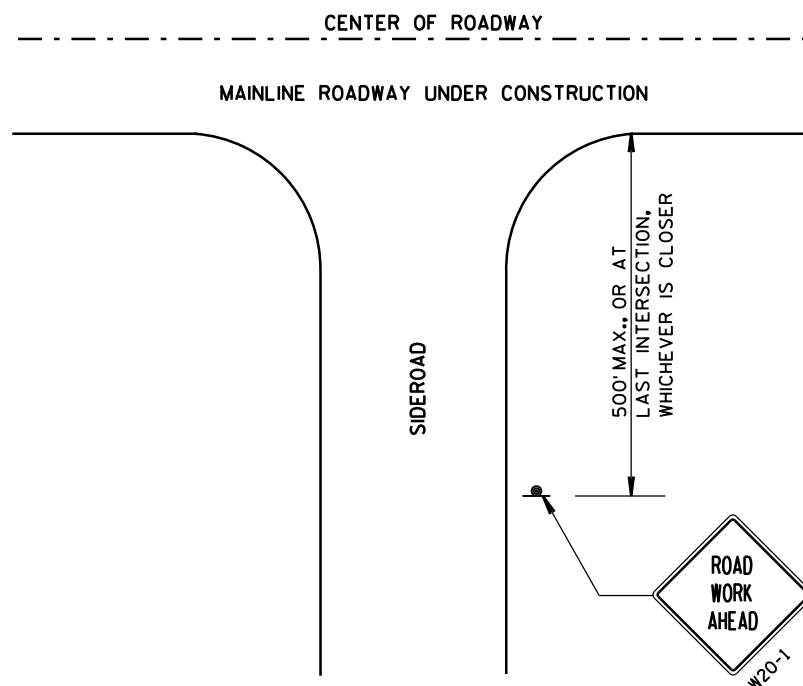
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE
WARNING SIGNS 45 M.P.H.
OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013

DATE

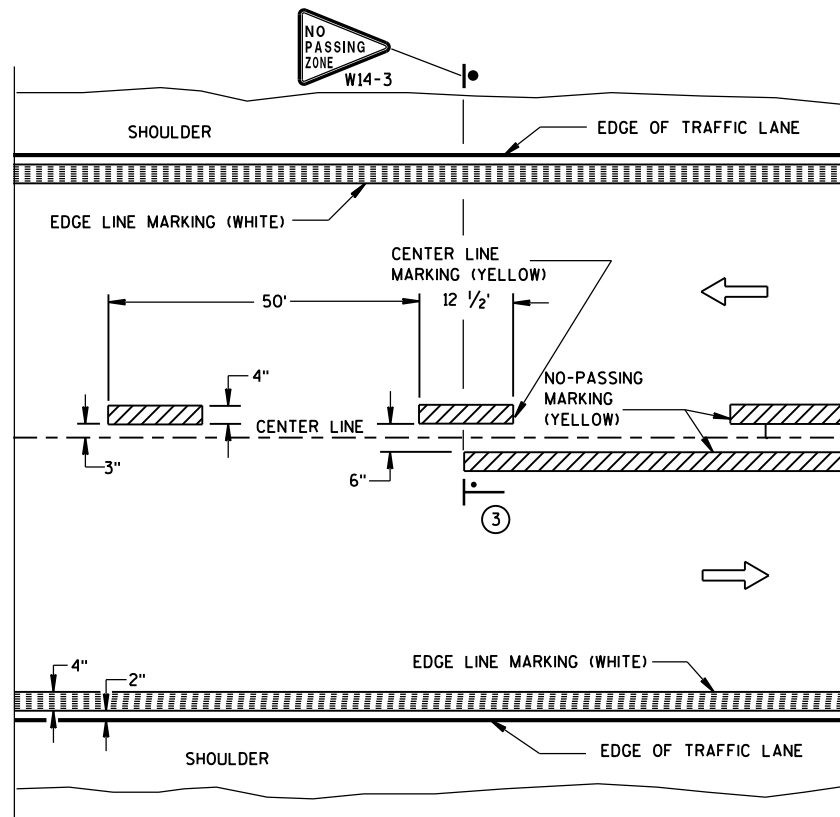
FHWA

/S/ Travis Feltes

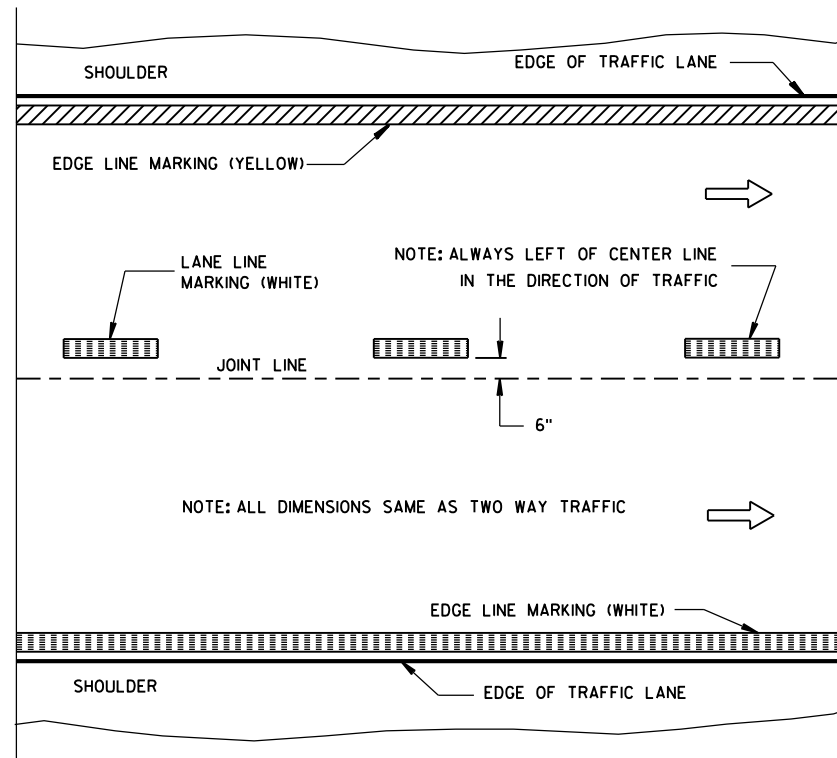
STATE TRAFFIC ENGINEER

508

SIGN

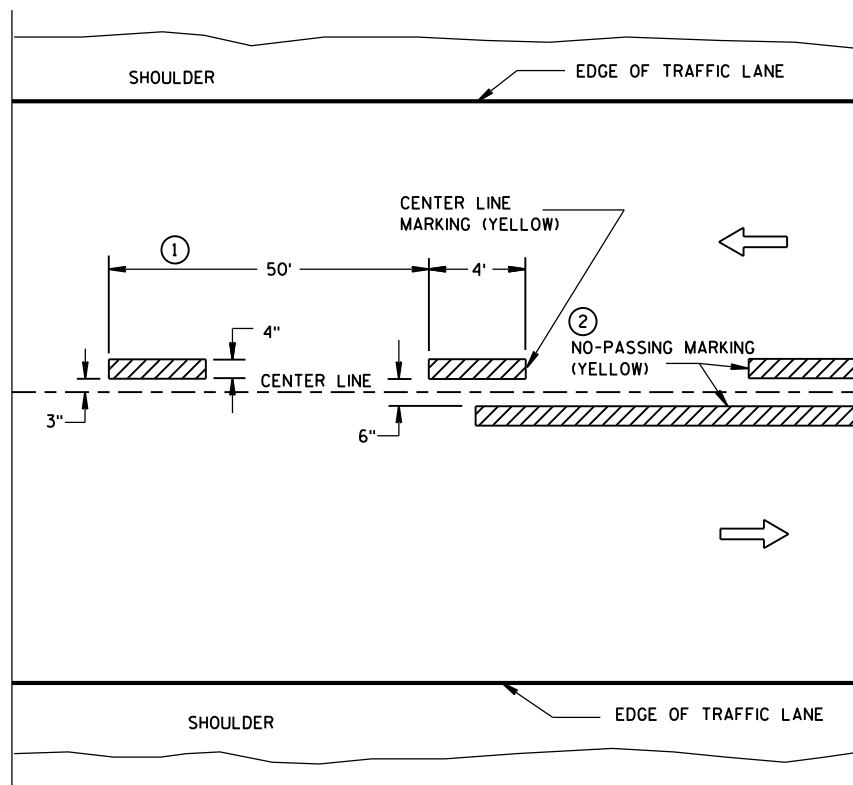


TWO WAY TRAFFIC

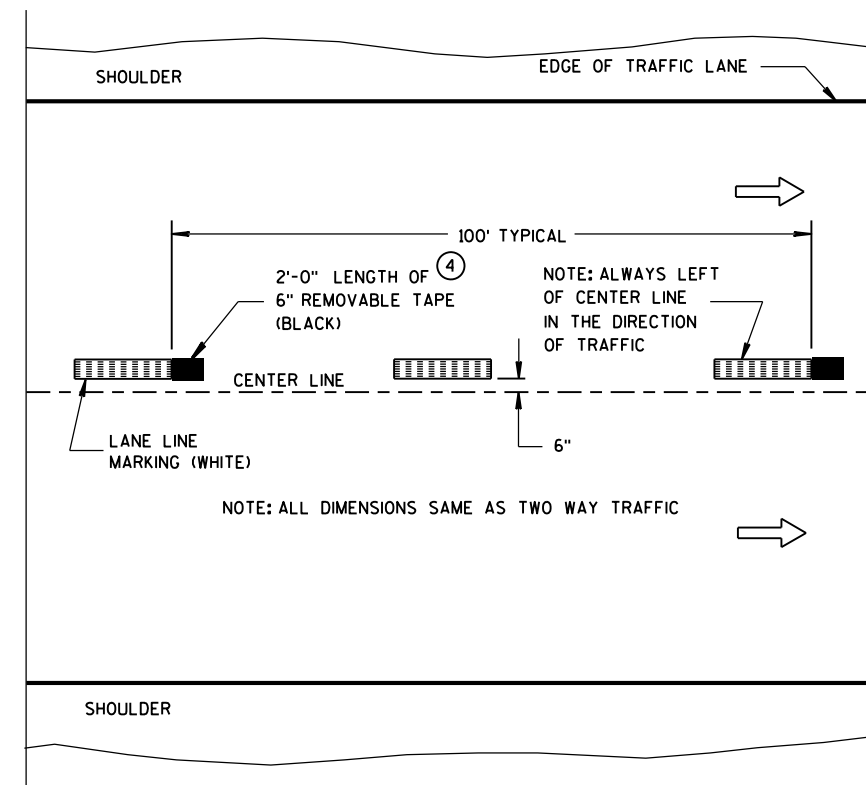


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

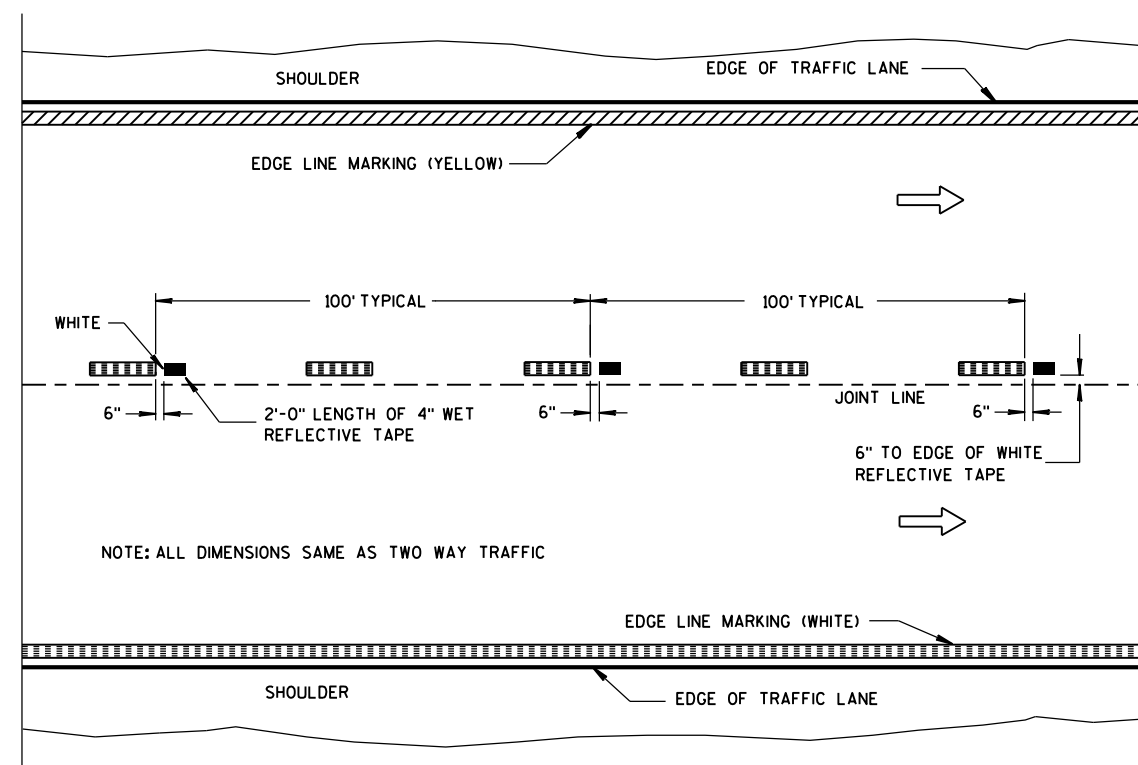
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- ① HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- ③ NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
- ④ CONCRETE ONLY.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

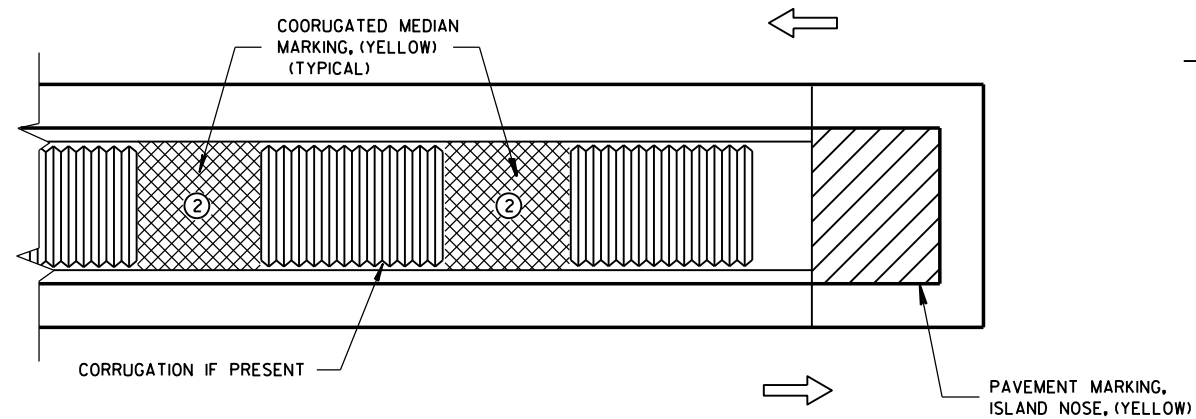
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

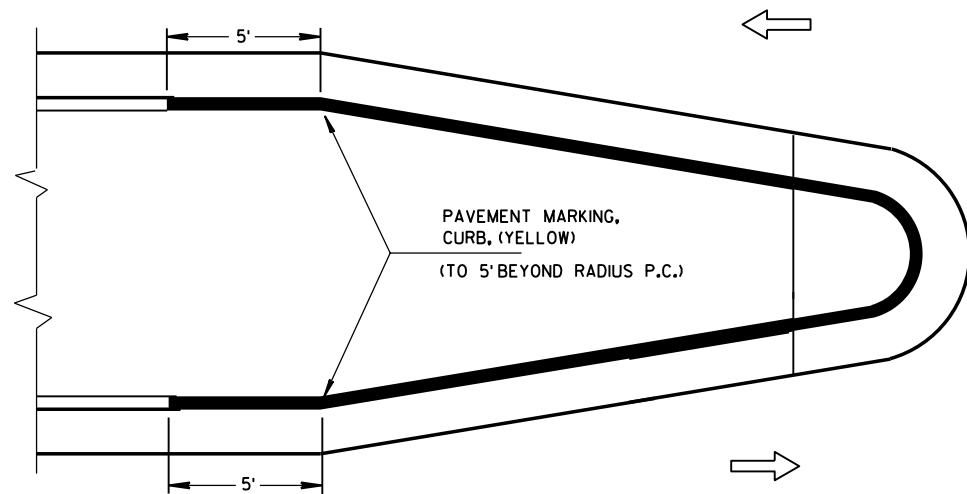
5-13-2013
DATE

FHWA

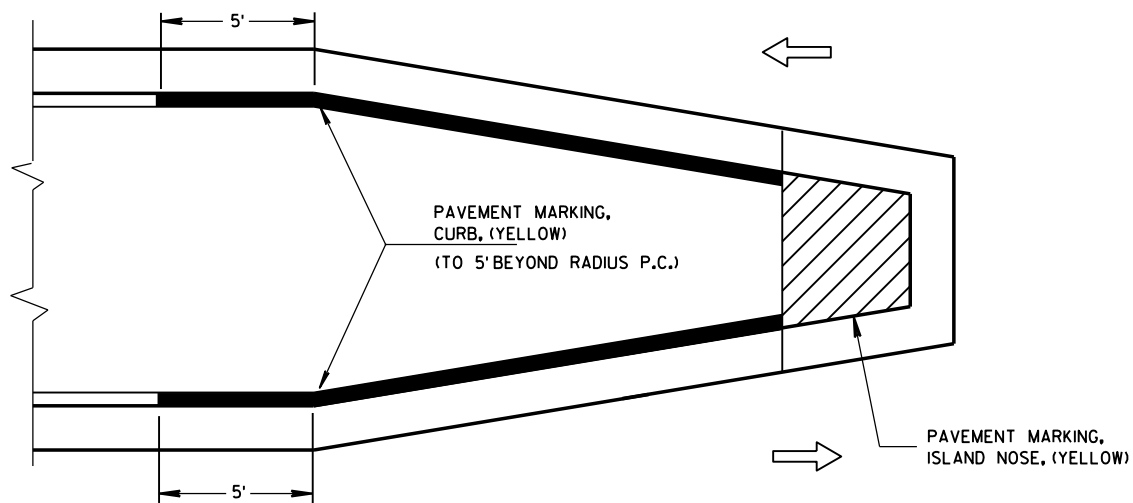
/S/ Travis Feltes
STATE TRAFFIC E 509



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

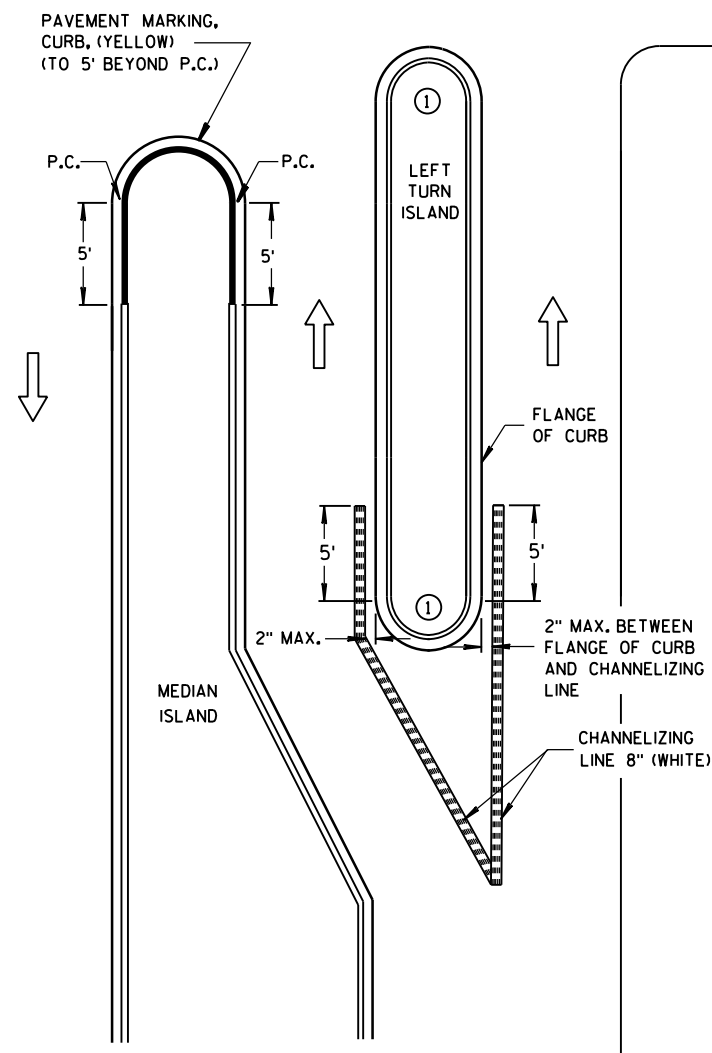


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

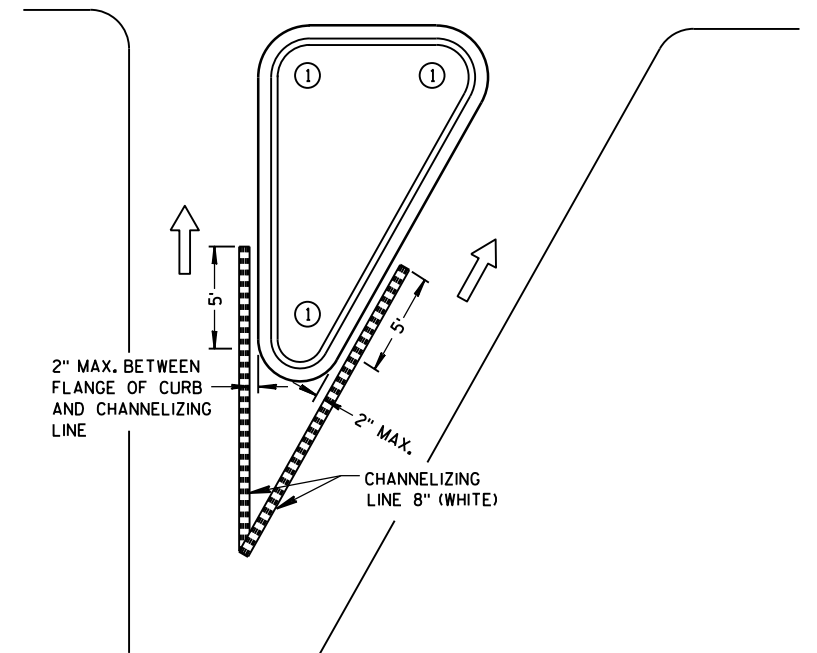
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

- 1 DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
- 2 WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN, THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



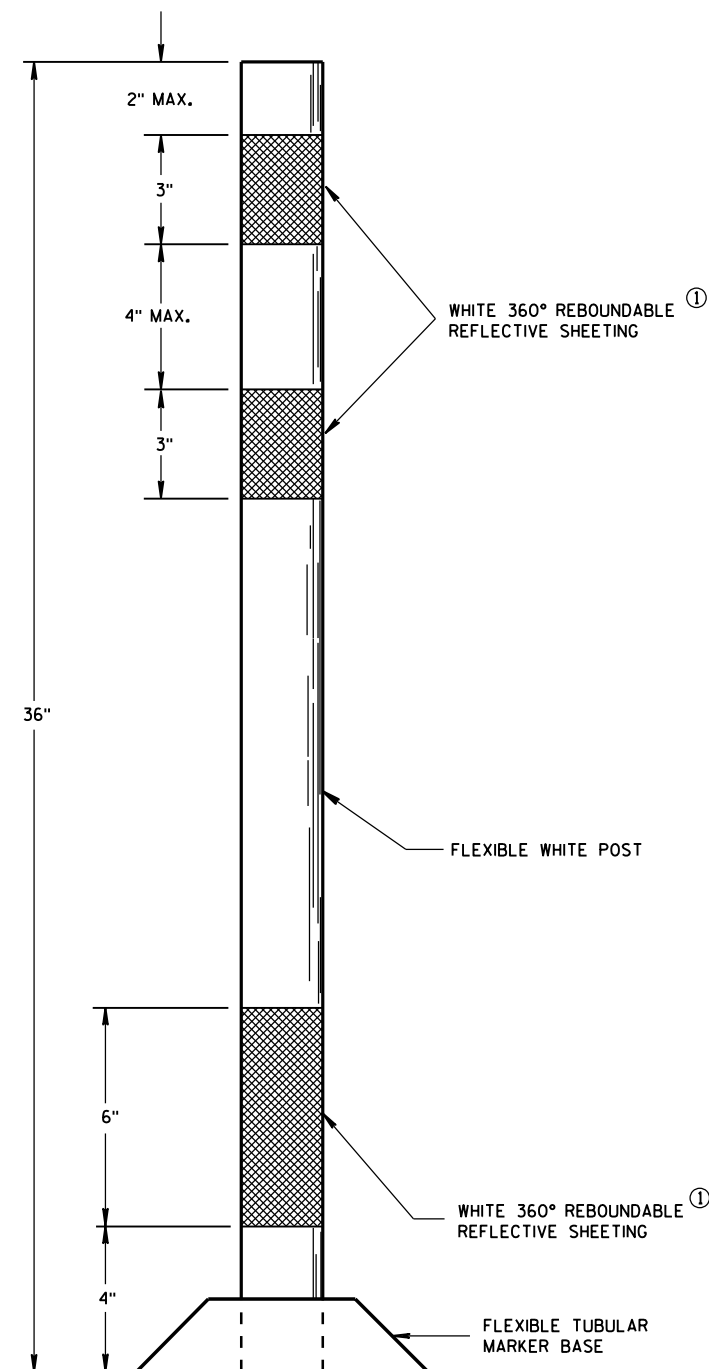
RIGHT TURN ISLAND

LEGEND

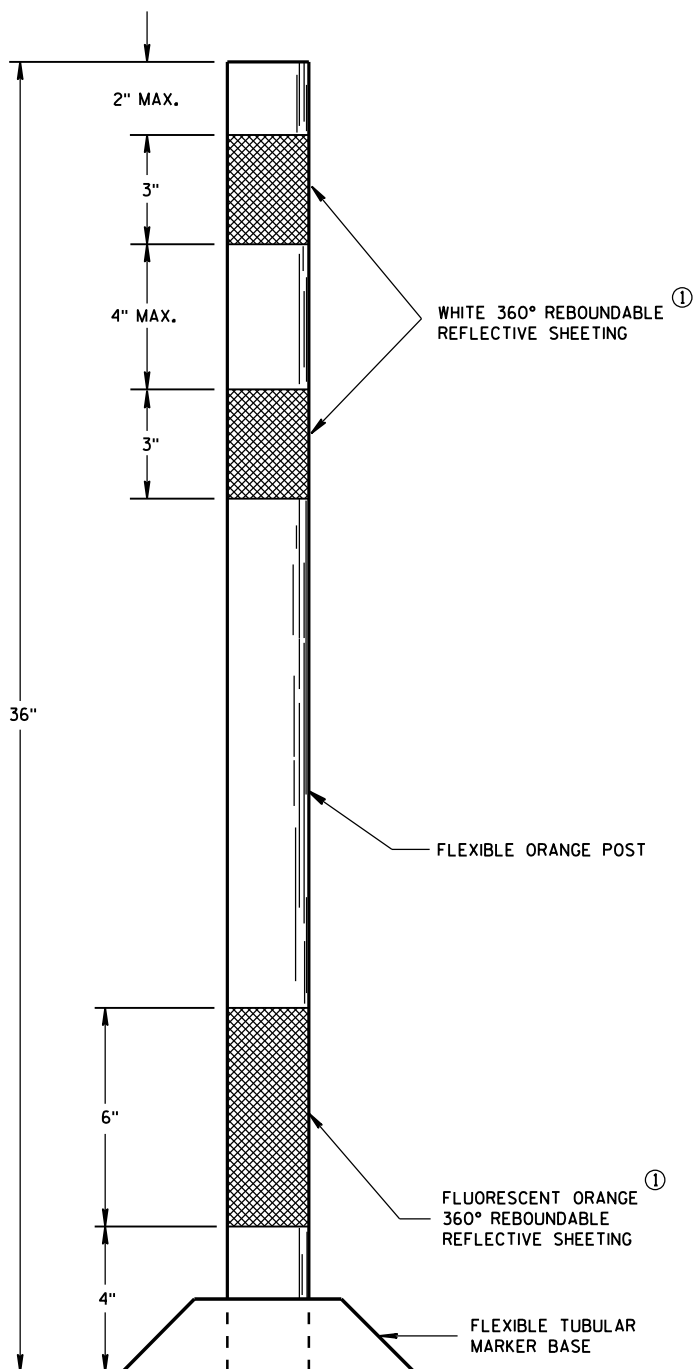
- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING (ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**FLEXIBLE
TUBULAR MARKER POST
PERMANENT CROSSOVER**



**FLEXIBLE
TUBULAR MARKER POST
WORK ZONE**

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

**FLEXIBLE TUBULAR MARKER
POST**

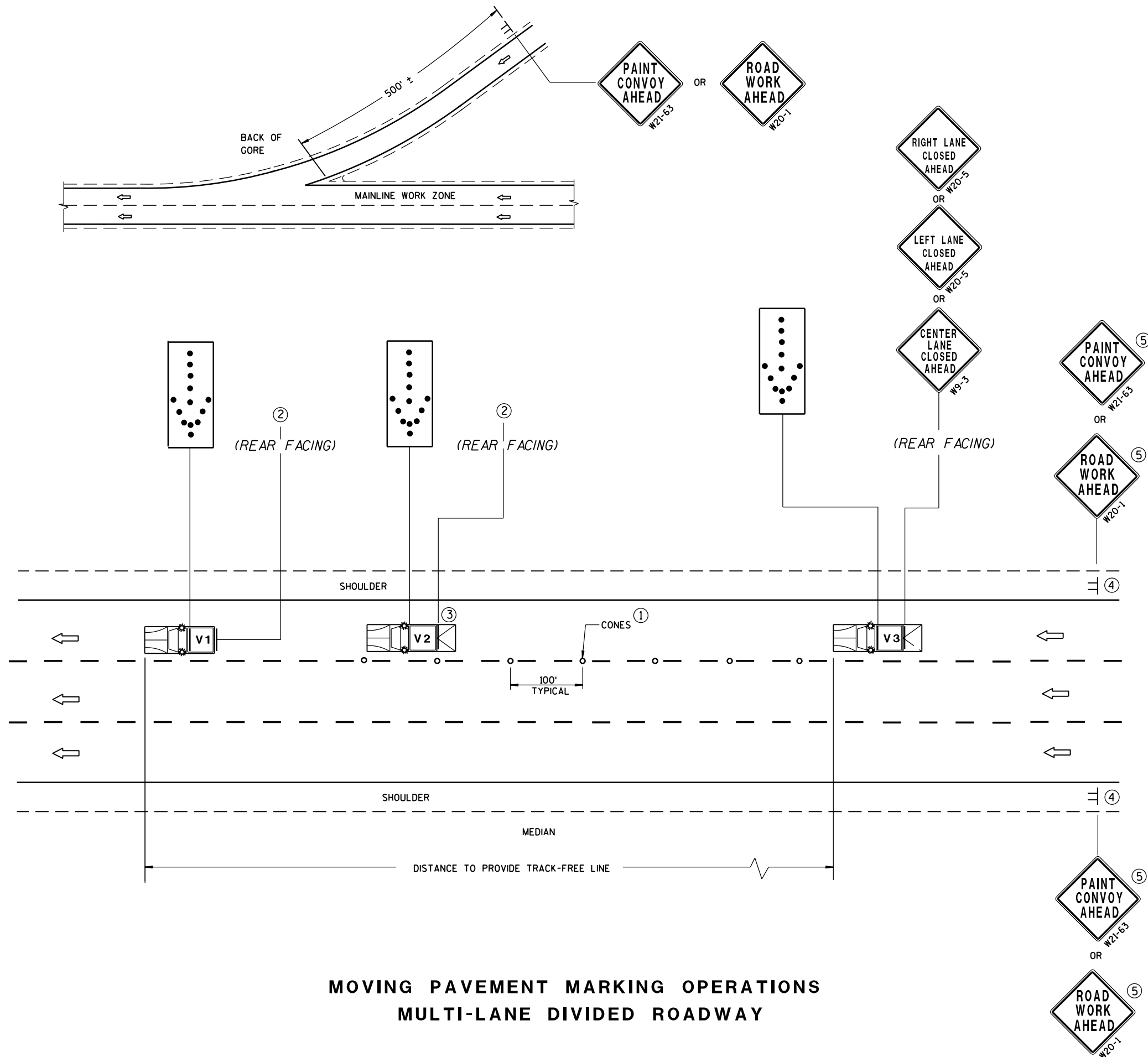
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

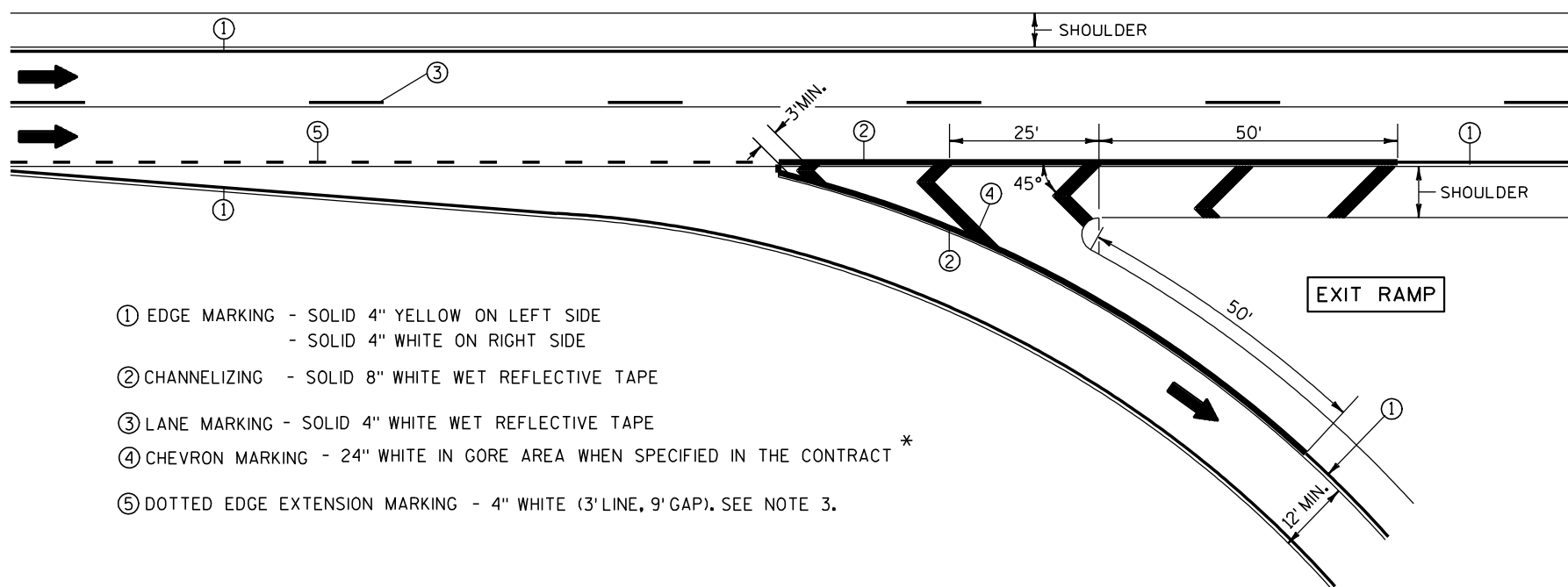
APPROVED

10-16-2015
DATE

FHWA

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE
SAFETY ENGINEER



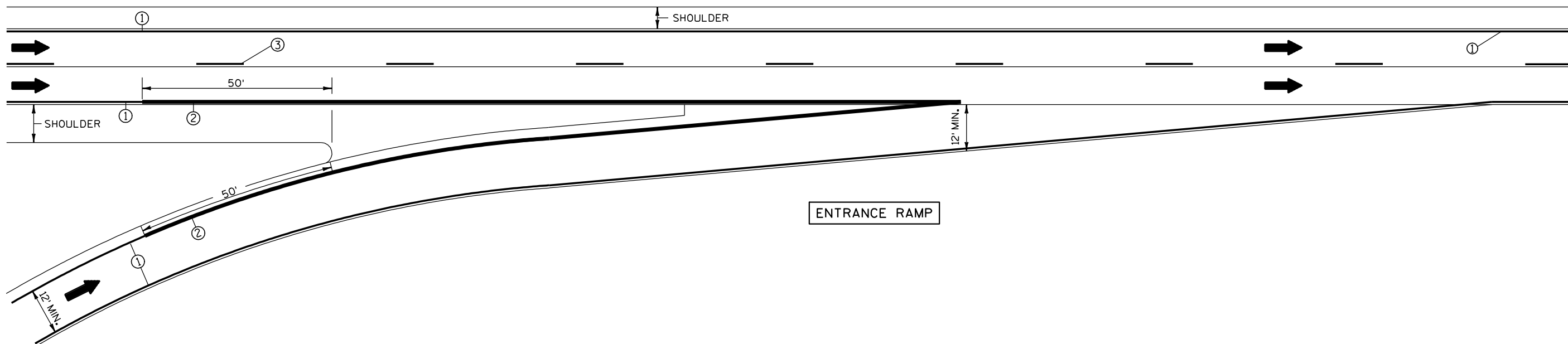


- ① EDGE MARKING - SOLID 4" YELLOW ON LEFT SIDE
- SOLID 4" WHITE ON RIGHT SIDE
- ② CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE
- ③ LANE MARKING - SOLID 4" WHITE WET REFLECTIVE TAPE
- ④ CHEVRON MARKING - 24" WHITE IN GORE AREA WHEN SPECIFIED IN THE CONTRACT *
- ⑤ DOTTED EDGE EXTENSION MARKING - 4" WHITE (3' LINE, 9' GAP). SEE NOTE 3.

NOTES:

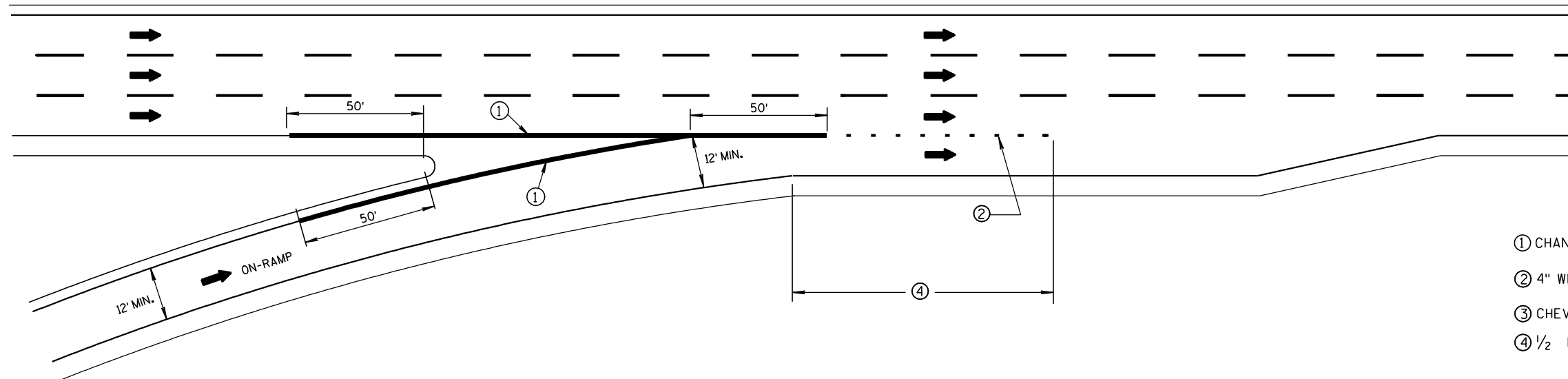
- 1. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.
- 2. PLACE WHITE EDGE OF TAPE 6" LEFT FROM JOINT.
- 3. 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- 4. RETRACE EXISTING DIAGONAL MARKINGS.

* REFER TO DESIGN NOTES.



PAVEMENT MARKING
(RAMPS AND GORES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

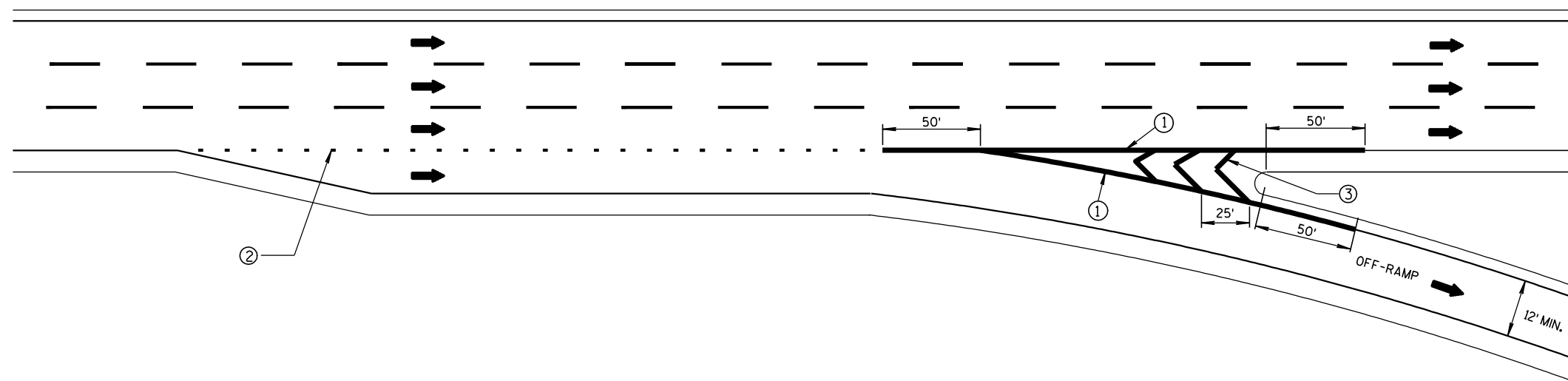
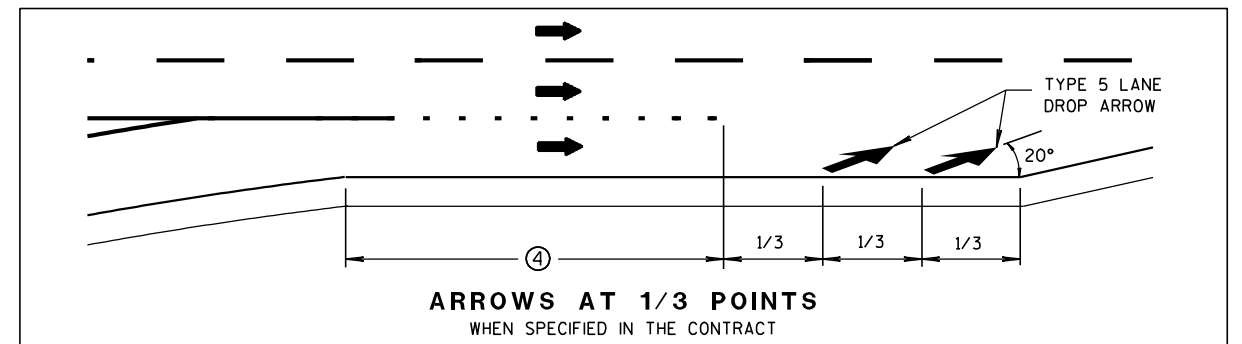


SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE-RAMP

NOTES:

1. AHEAD ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.
2. PLACE WHITE EDGE OF TAPE 6" LEFT FROM JOINT.
3. RETRACE EXISTING DIAGONAL MARKINGS.

- ① CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE IN GORE AREA.
- ② 4" WHITE (3' LINE, 9' GAP).
- ③ CHEVRON MARKING - 24" WHITE WHEN SPECIFIED IN THE CONTRACT.
- ④ 1/2 LENGTH OF FULL WIDTH ACCELERATION LANE.



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT-RAMP

PAVEMENT MARKING FOR
PARALLEL ON-RAMP AND
PARALLEL OFF-RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/23/2011

DATE

FHWA

/S/ Thomas N. Nottingham
STATE TRAFFIC ENGINE 514

SIGN

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- REMOVING PAVEMENT MARKING
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA



INSTALL ON EACH APPROACH AT THE CLOSEST INTERSECTION WITH A STATE OR COUNTY TRUNK HIGHWAY, OR AS DIRECTED BY THE ENGINEER. WIDTH ON SIGN TO BE APPROX. 1 FOOT LESS THAN AVAILABLE WIDTH (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET).



LOCATED 500 FEET IN ADVANCE OF R2-1 SIGN AND 500 FEET BEYOND THE "ROAD WORK 1 MILE" SIGN.



R2-1
48"x60"
(BLACK AND WHITE)

IF THE REGULATORY SPEED HAS BEEN REDUCED, A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES.

* INCLUDE RESUME SPEED LIMIT SIGN A MINIMUM OF 200 FEET (500 FEET DESIRABLE) AFTER END ROAD WORK SIGNS.

GENERAL NOTES

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR AS APPROVED BY THE ENGINEER.

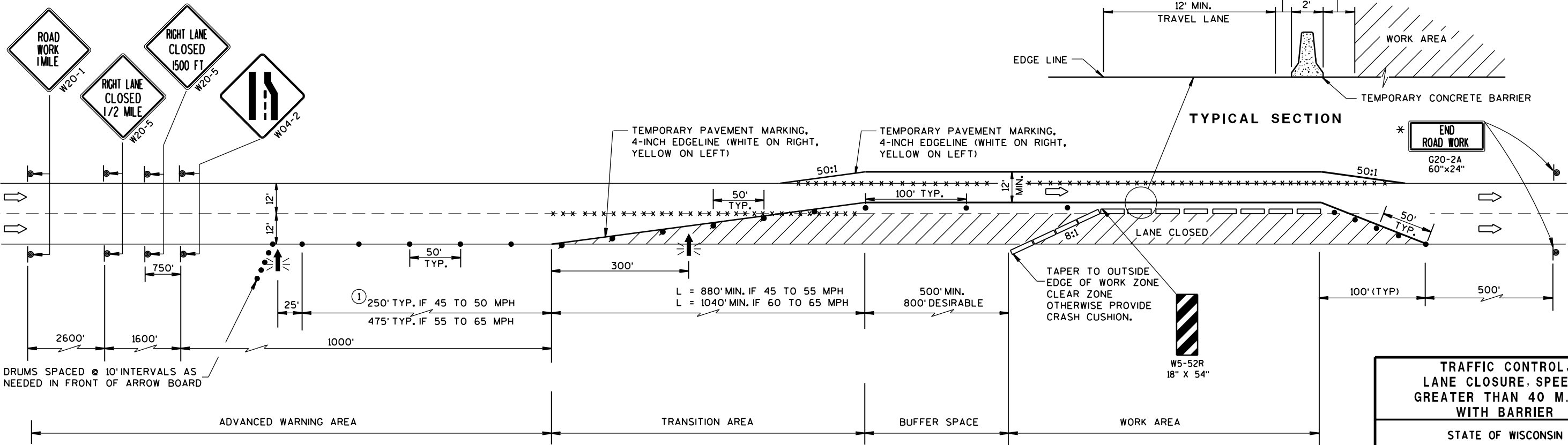
- ① CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUM TAPER.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

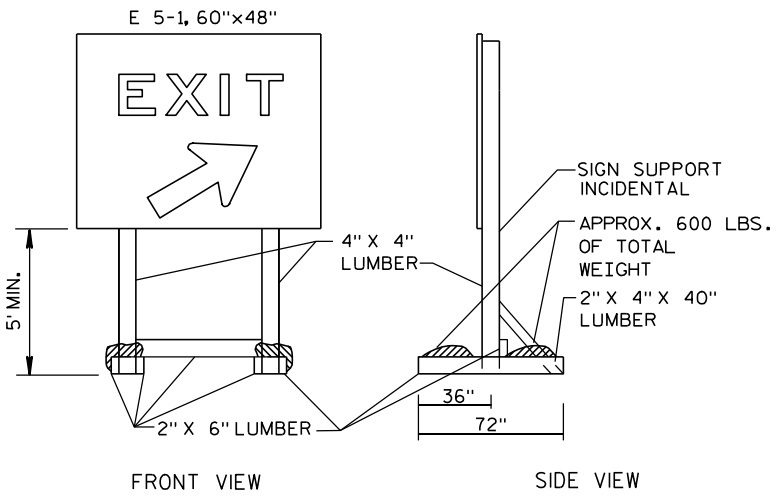
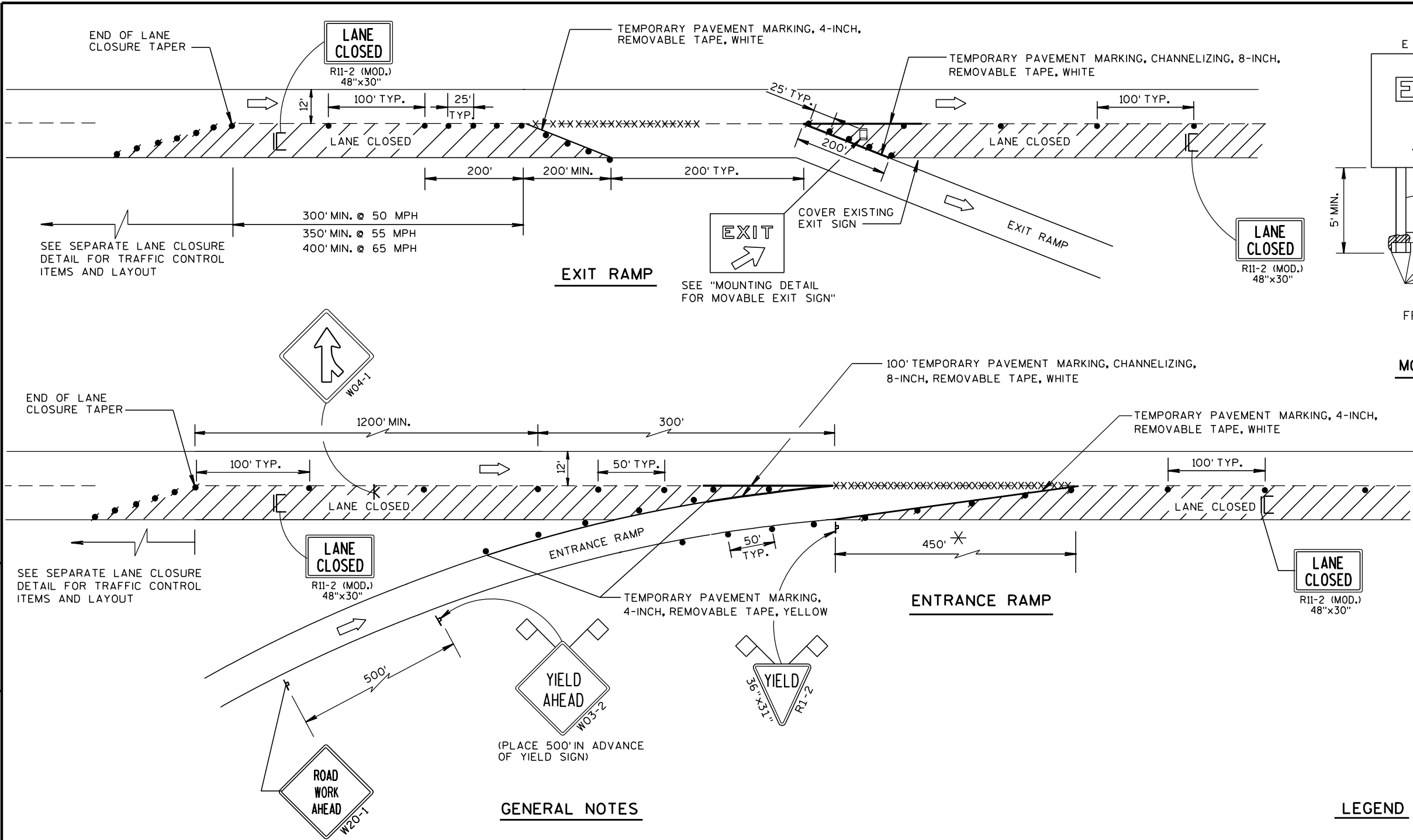
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.



TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED 8/2013	/S/ Travis Feltes	
DATE	STATE TRAFFIC ENGINE	SIGN
FHWA		



NOTE: ALL LUMBER DIMENSIONS ARE NOMINAL
MOUNTING DETAIL FOR MOVABLE EXIT SIGN

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2 (MOD.) "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* LENGTH OF OPENING MAY BE REDUCED TO 150 FEET DURING STAGING OF WORK IN IMMEDIATE AREA OF RAMP TAPER.

LEGEND

- POST MOUNTED SIGN
- SIGN ON PORTABLE SUPPORT
- TRAFFIC CONTROL, DRUM
- TRAFFIC CONTROL, DRUM WITH WARNING LIGHT, TYPE C (STEADY-BURN)
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE (8' EQUIVALENT) WITH SIGN
- FLAGS, 16"x16" MIN., ORANGE
- DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED	5/24/2000	/S/ Chester J. ...	CHIEF SIGNS AND MAR 516
DATE			INER
FHWA			

LEGEND

- † TYPE III BARRICADE
- †† TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- ⊙ SIGN ON PERMANENT SUPPORT
- Ⓐ TYPE "A" WARNING LIGHT (FLASHING)
- ➡ DIRECTION OF TRAFFIC

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

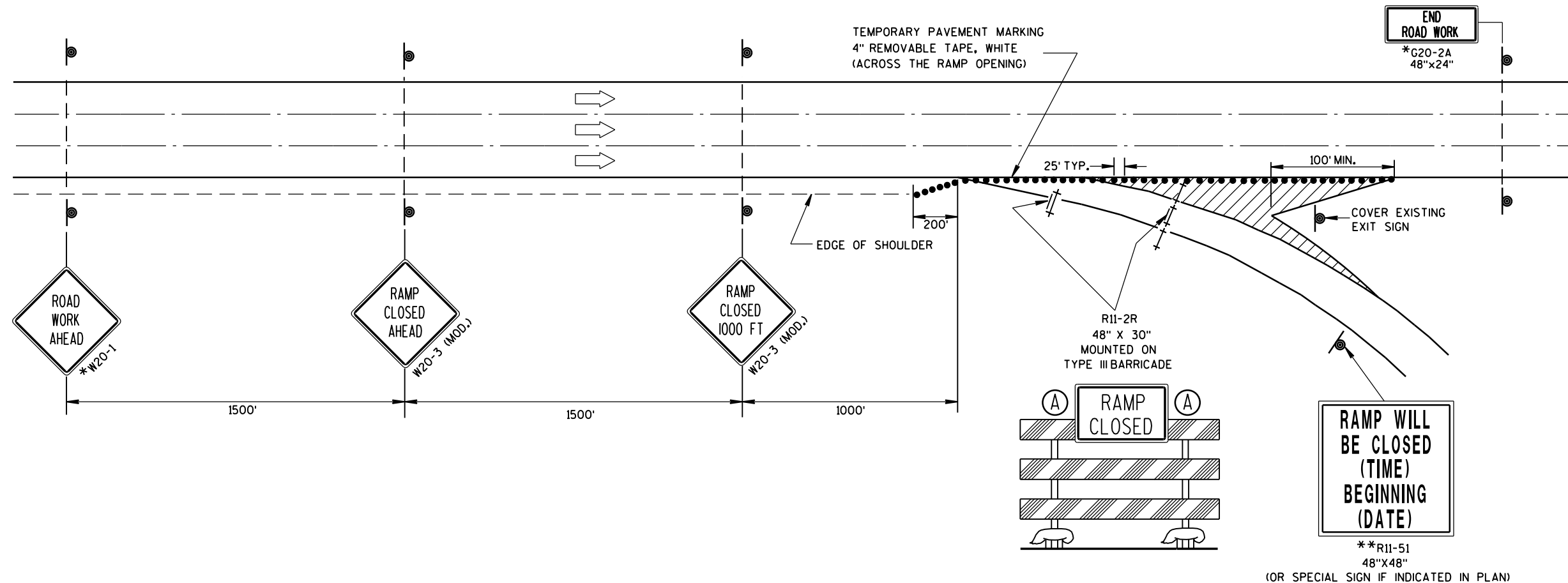
PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROPOFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN THE WORK IS NOT IN PROGRESS.

WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12-HOUR DURATION.

*W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

** PLACE "RAMP WILL BE CLOSED" SIGN 10 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



TRAFFIC CONTROL,
EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013

DATE

FHWA

/S/ Travis Feltes

STATE TRAFFIC ENGINE 517

ESIGN

LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ⚡➡ FLASHING ARROW BOARD
- ▨ WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

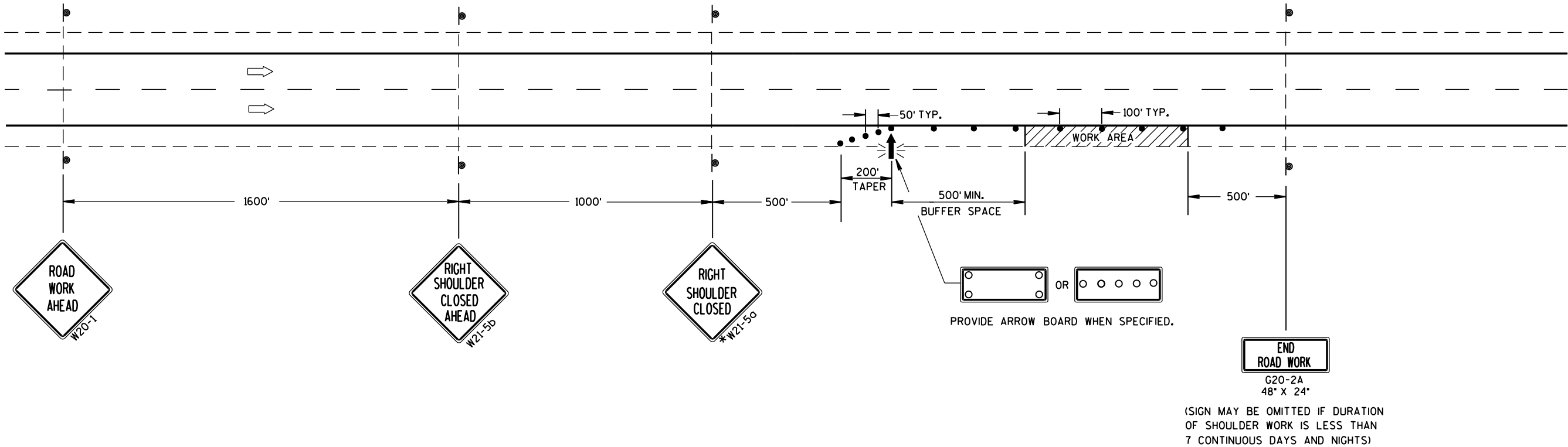
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



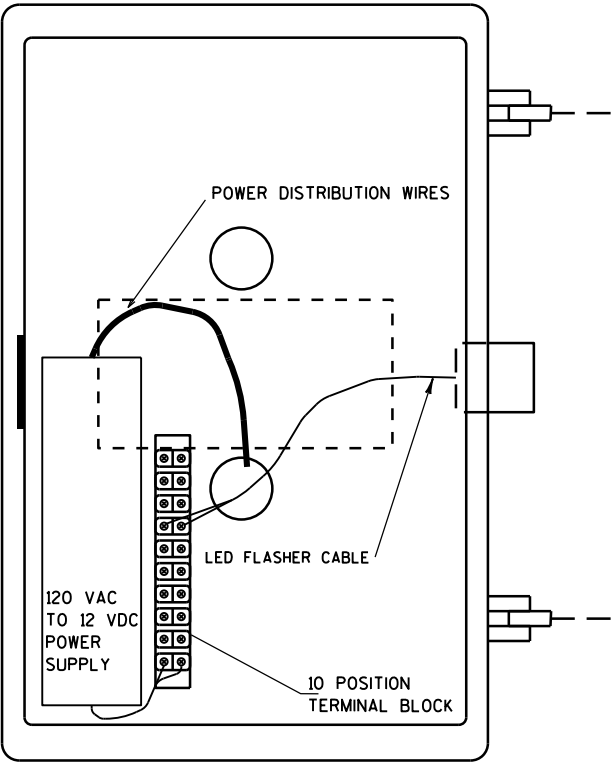
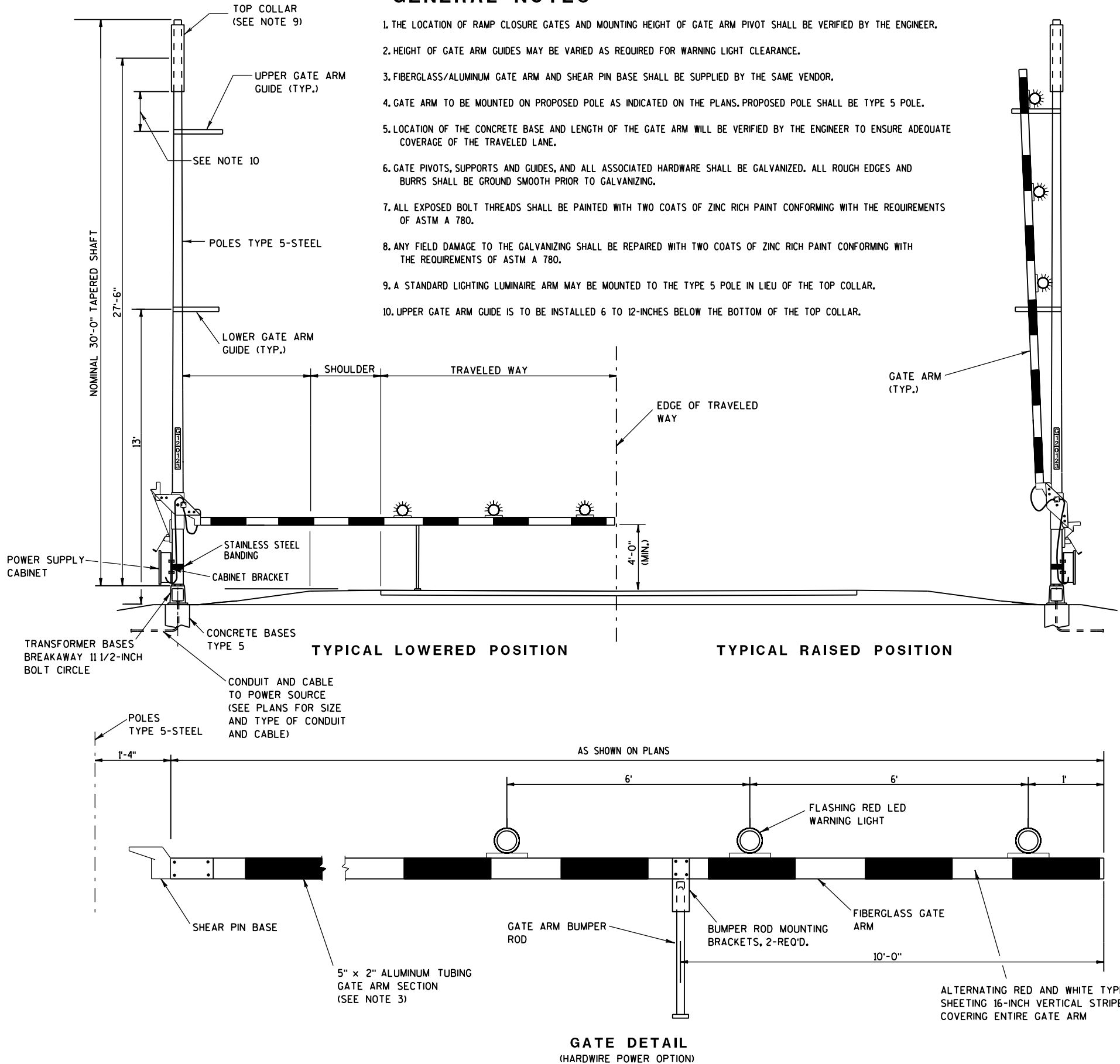
TRAFFIC CONTROL
SHOULDER CLOSURE ON DIVIDED
ROADWAY, SPEEDS GREATER
THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

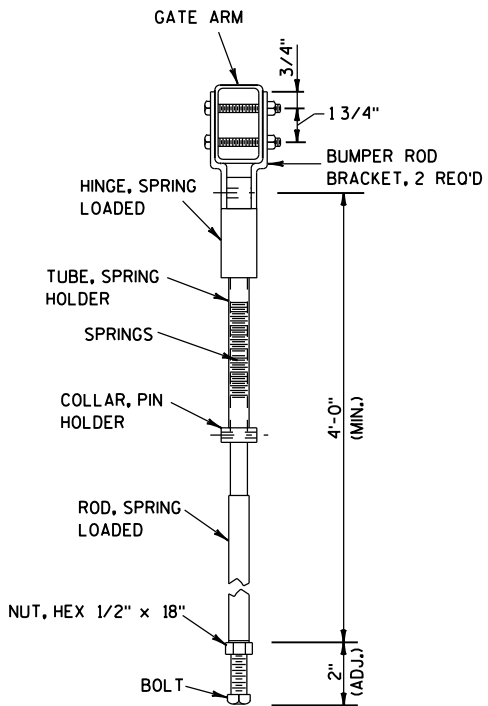
APPROVED
8/2013 /S/ Travis Feltz
DATE STATE TRAFFIC ENGINE 518 SIGN
FHWA

GENERAL NOTES

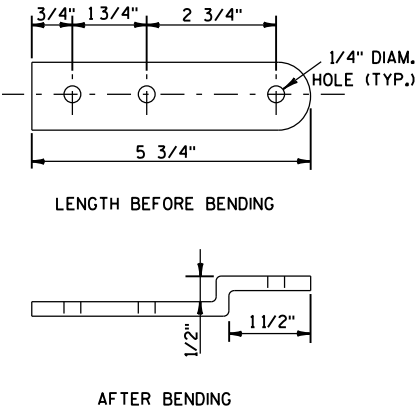
- 1. THE LOCATION OF RAMP CLOSURE GATES AND MOUNTING HEIGHT OF GATE ARM PIVOT SHALL BE VERIFIED BY THE ENGINEER.
- 2. HEIGHT OF GATE ARM GUIDES MAY BE VARIED AS REQUIRED FOR WARNING LIGHT CLEARANCE.
- 3. FIBERGLASS/ALUMINUM GATE ARM AND SHEAR PIN BASE SHALL BE SUPPLIED BY THE SAME VENDOR.
- 4. GATE ARM TO BE MOUNTED ON PROPOSED POLE AS INDICATED ON THE PLANS. PROPOSED POLE SHALL BE TYPE 5 POLE.
- 5. LOCATION OF THE CONCRETE BASE AND LENGTH OF THE GATE ARM WILL BE VERIFIED BY THE ENGINEER TO ENSURE ADEQUATE COVERAGE OF THE TRAVELED LANE.
- 6. GATE PIVOTS, SUPPORTS AND GUIDES, AND ALL ASSOCIATED HARDWARE SHALL BE GALVANIZED. ALL ROUGH EDGES AND BURRS SHALL BE GROUND SMOOTH PRIOR TO GALVANIZING.
- 7. ALL EXPOSED BOLT THREADS SHALL BE PAINTED WITH TWO COATS OF ZINC RICH PAINT CONFORMING WITH THE REQUIREMENTS OF ASTM A 780.
- 8. ANY FIELD DAMAGE TO THE GALVANIZING SHALL BE REPAIRED WITH TWO COATS OF ZINC RICH PAINT CONFORMING WITH THE REQUIREMENTS OF ASTM A 780.
- 9. A STANDARD LIGHTING LUMINAIRE ARM MAY BE MOUNTED TO THE TYPE 5 POLE IN LIEU OF THE TOP COLLAR.
- 10. UPPER GATE ARM GUIDE IS TO BE INSTALLED 6 TO 12-INCHES BELOW THE BOTTOM OF THE TOP COLLAR.



POWER SUPPLY CABINET



GATE ARM BUMPER ROD DETAIL

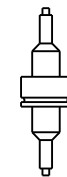
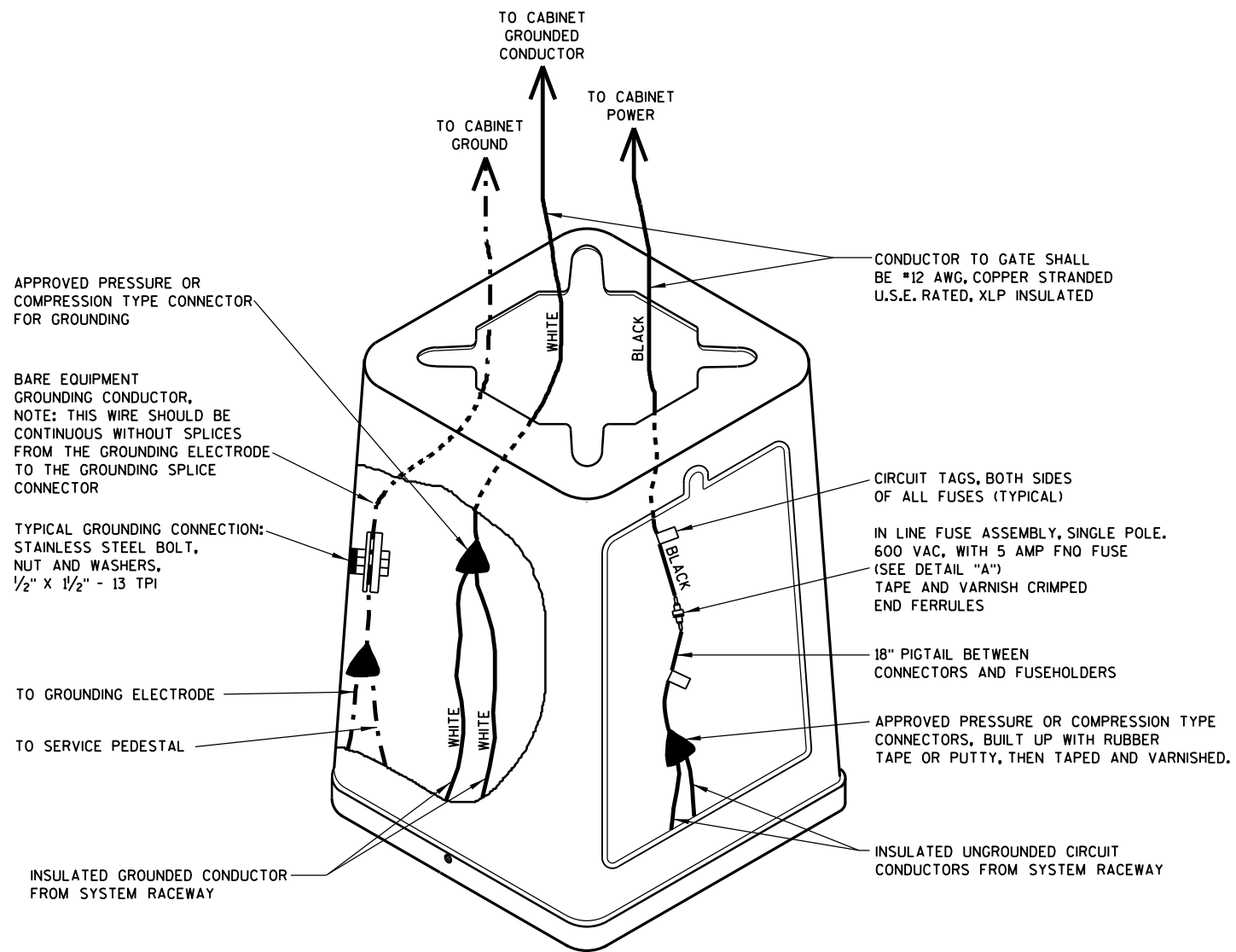


BUMPER ROD MOUNTING BRACKET DETAIL

RAMP GATE
HARD WIRED

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

519

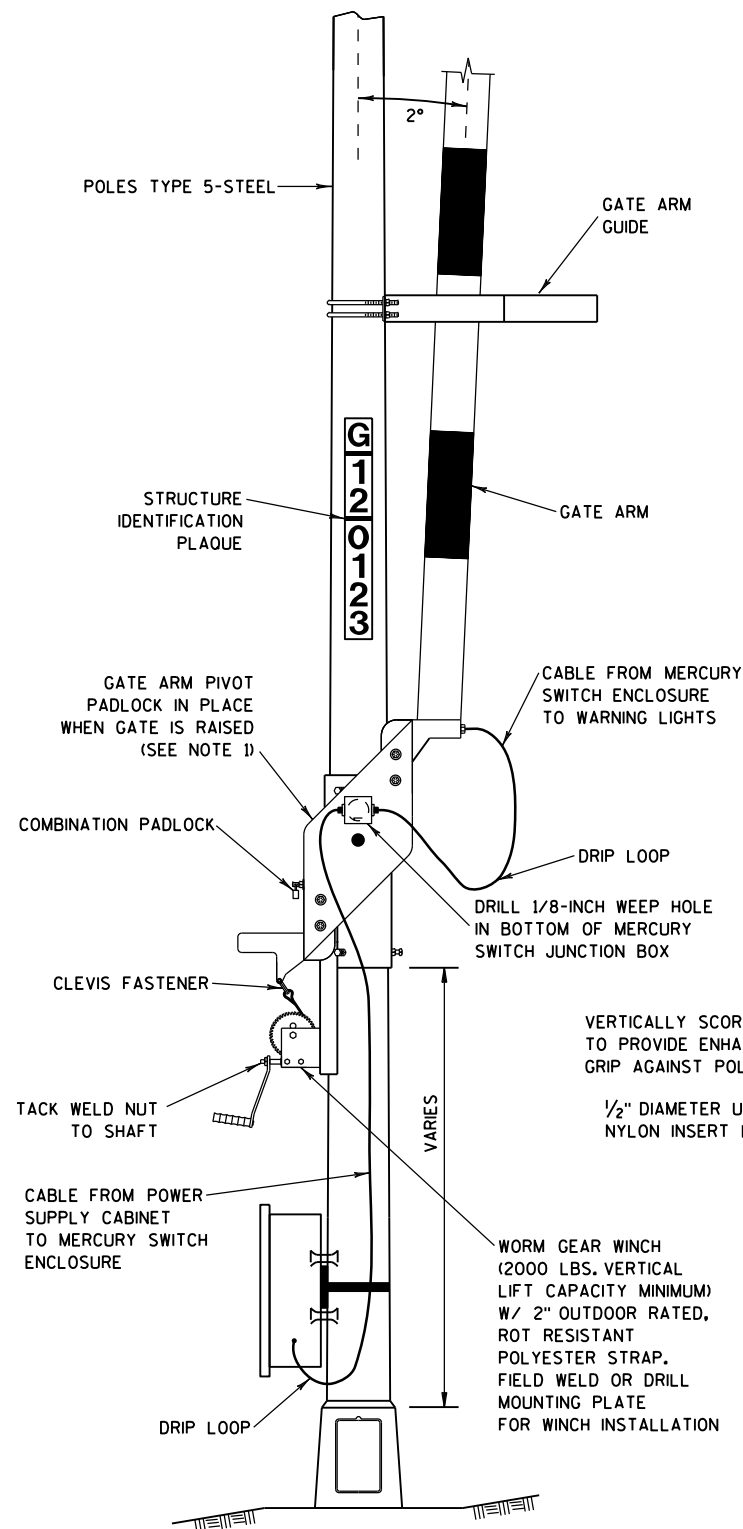


DETAIL "A"
SINGLE POLE

RAMP GATE
HARD WIRED

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

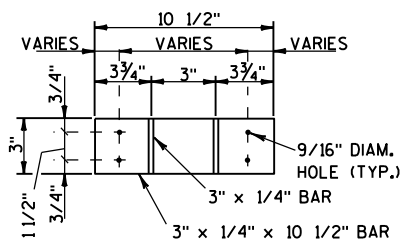
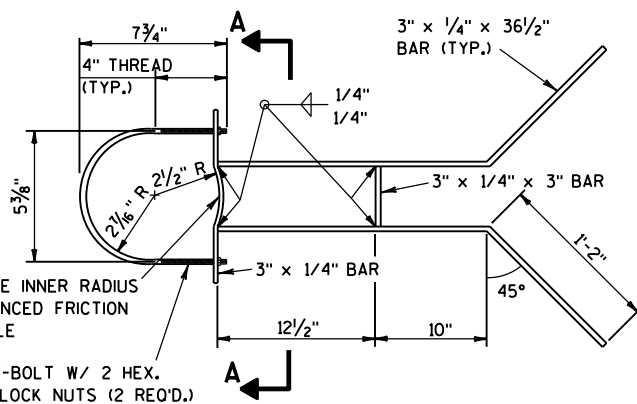




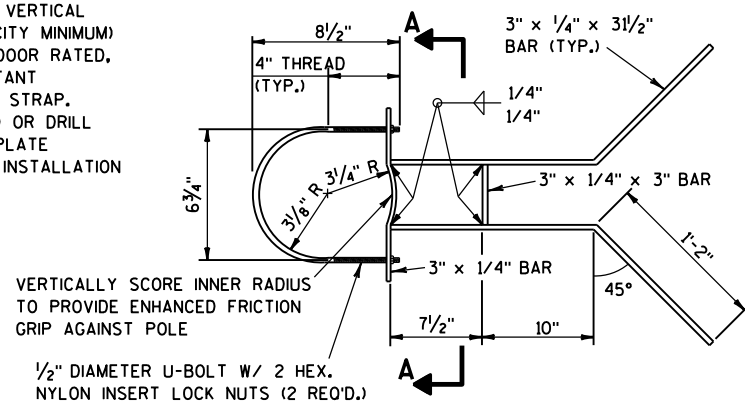
GATE PIVOT ASSEMBLY

GENERAL NOTES

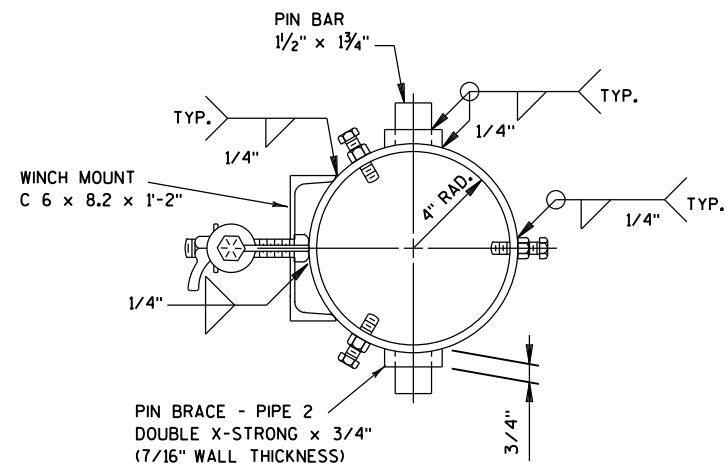
1. WHEN THE GATE IS FULLY RAISED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE OUTSIDE OF THE REAR CHANNEL AND PADLOCKED IN PLACE.
2. WHEN THE GATE IS FULLY LOWERED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE INSIDE OF THE REAR CHANNEL AND PADLOCKED INTO PLACE.
3. ANTI-SEIZE LUBRICATING MATERIAL SHALL BE USED ON ALL BOLT THREADS BEFORE INSTALLATION.
4. ALL BOLTS SHALL BE GALVANIZED AND CONFORM TO ASTM A307, GRADE A, UNLESS DESIGNATED AS HS (HIGH STRENGTH), WHICH SHALL CONFORM TO ASTM A325. BOLTS OF 1/2" NOMINAL DIAMETER OR LESS MAY BE STAINLESS STEEL.

SECTION A-A
U-BOLTS NOT SHOWN

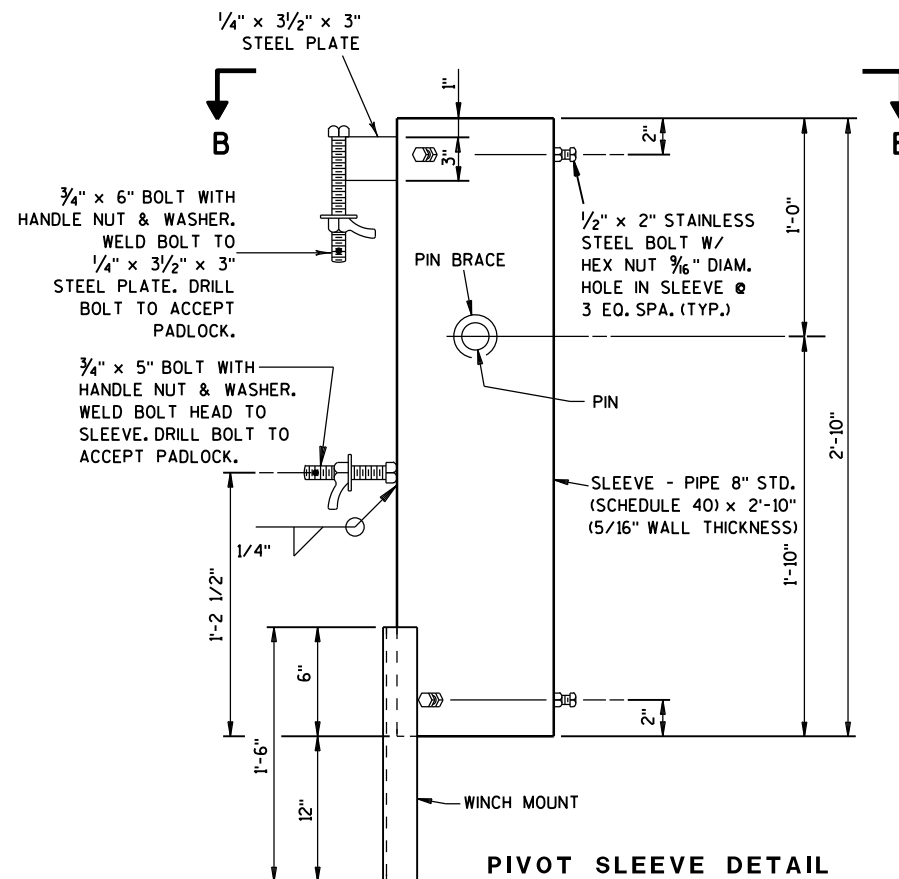
UPPER GATE ARM GUIDE DETAIL



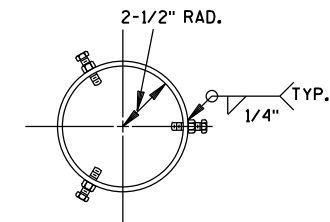
LOWER GATE ARM GUIDE DETAIL



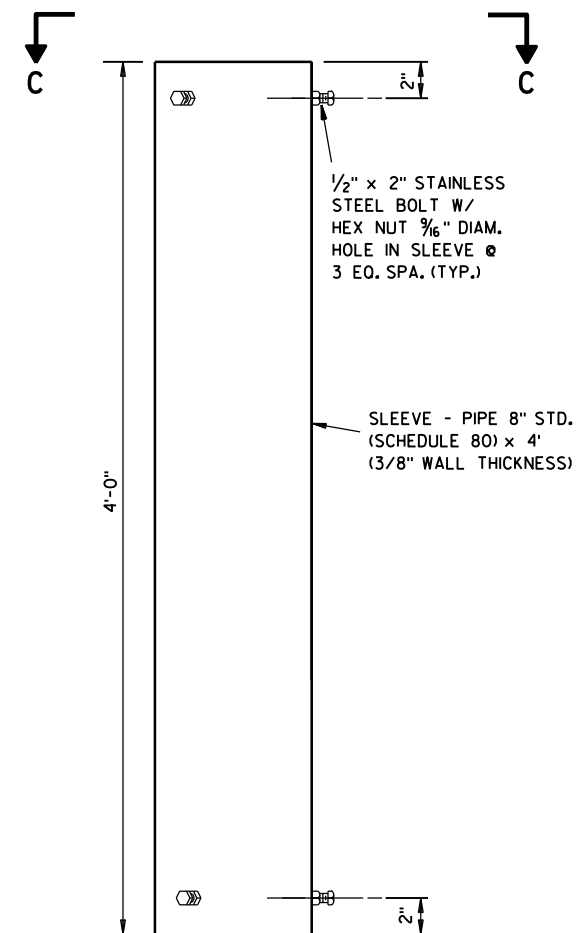
SECTION B-B



PIVOT SLEEVE DETAIL



SECTION C-C

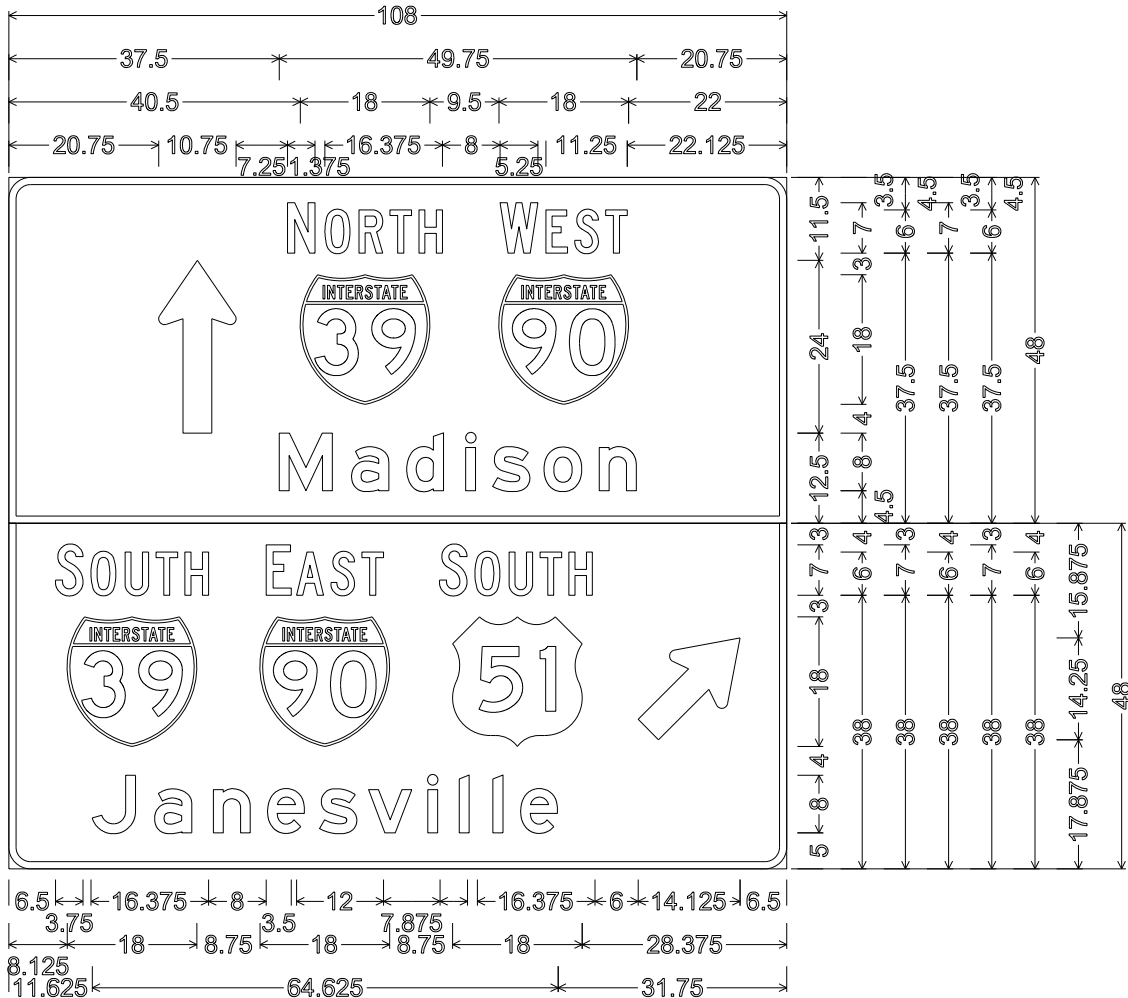


TOP COLLAR

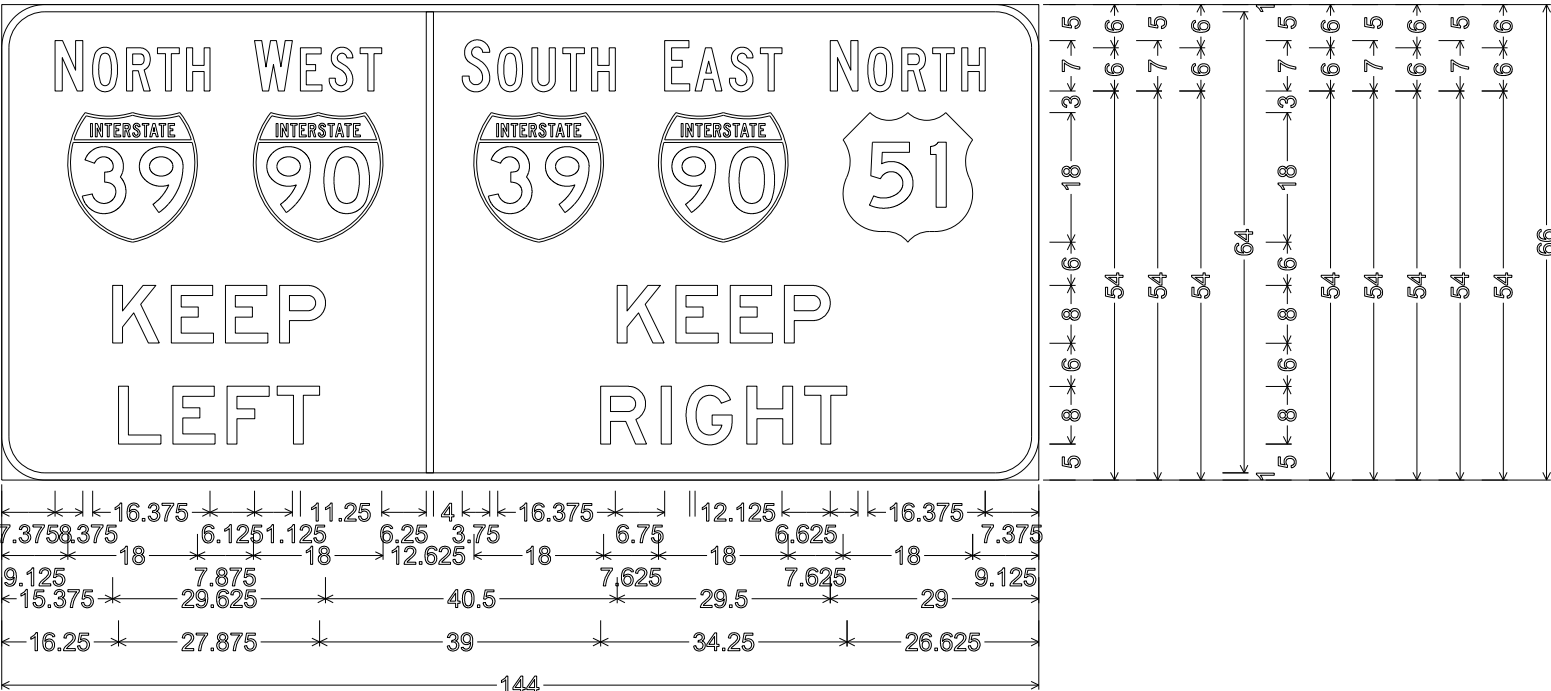
RAMP GATE
HARD WIREDSTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATIONAPPROVED
4-30-2013
DATE
FHWA/S/ Bill Wondrachek
STATE TRAFFIC
MANAGEMENT EN 1522

NOTES

- 1. All Signs Type II - Type H Reflective
- 2. Color:
Background - GREEN
Message - WHITE
- 3. Message Series - E except as noted



D1-71 3.000" Radius, 1.000" Border, White on Green;
Standard Arrow Custom 24.000" X 10.750" 90°; "NORTH" C;
"WEST" C; "Madison" E;
3.000" Radius, 1.000" Border, White on Green;
"SOUTH" C; "EAST" C; "NORTH" C; "Janesville" E;
Standard Arrow Custom 18.000" X 10.750" 45°;

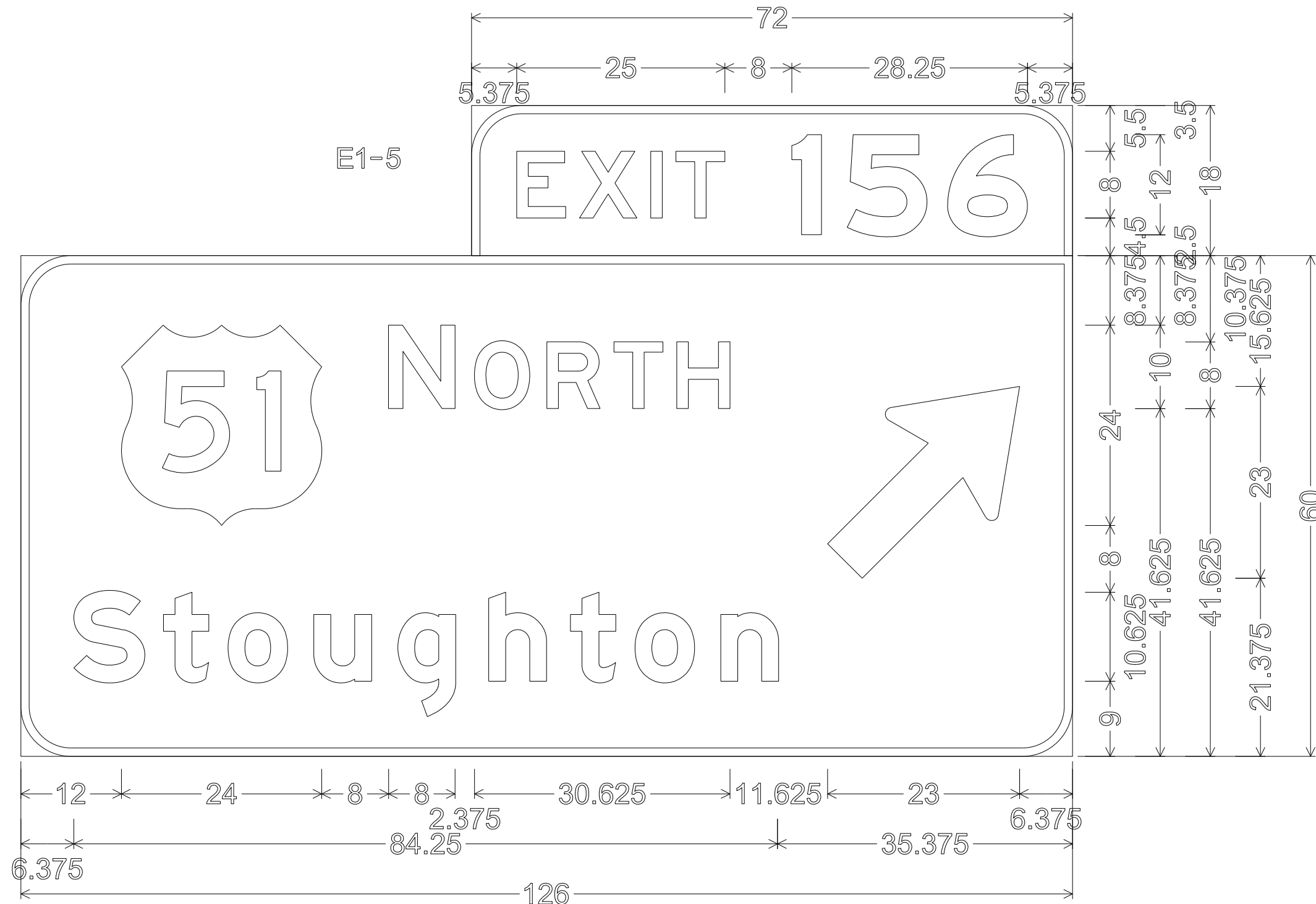


D1-72 6.000" Radius, 1.000" Border, White on Green;
"NORTH" C; "WEST" C; "KEEP" E; "LEFT" E; "SOUTH" C; "EAST" C; "NORTH" C;
"KEEP" E; "RIGHT" E;

NOTES

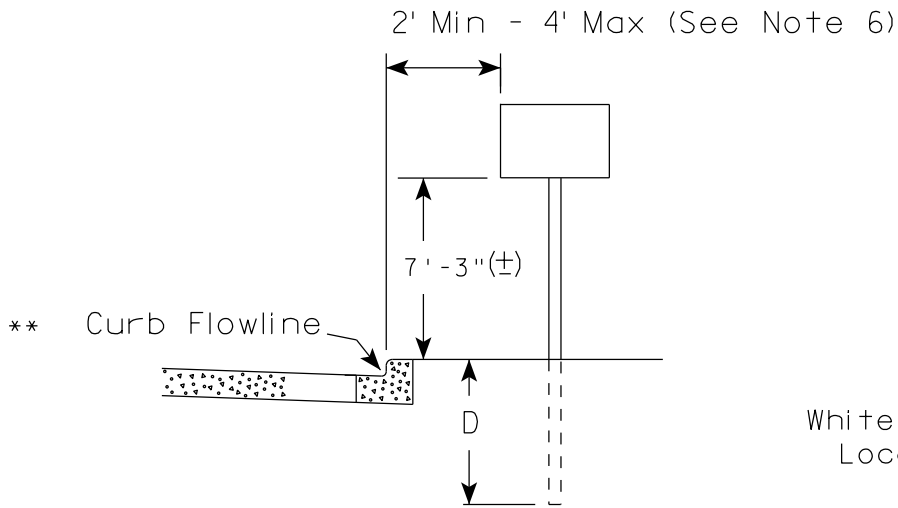
1. All Signs Type III- Type H Reflective
2. Color:
Background - GREEN
Message - WHITE
3. Message Series - E except as noted

E1-5

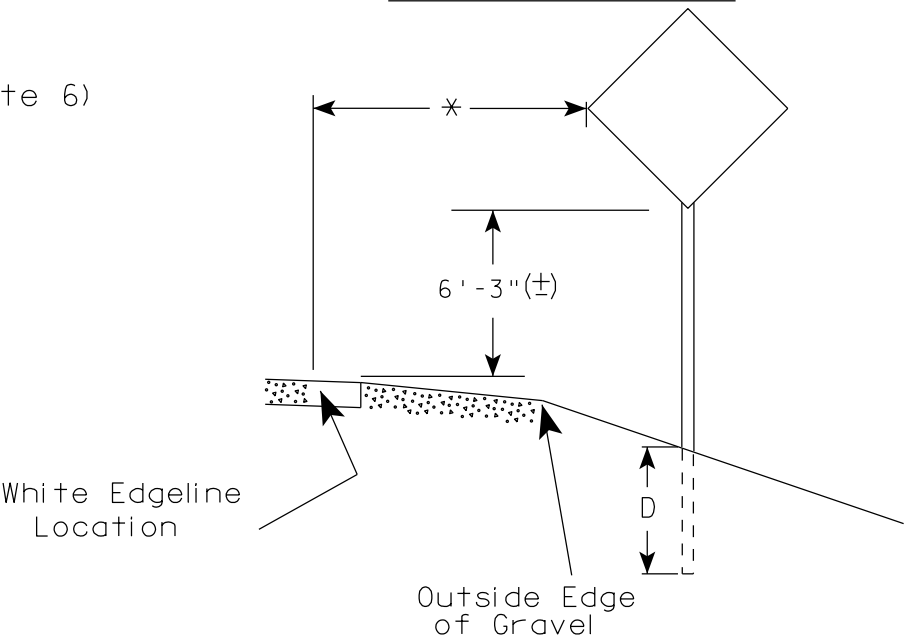


E6-1 6.000" Radius, 1.000" Border, White on Green;
 "EXIT" E; "156" E
 6.000" Radius, 1.000" Border, White on Green;
 "NORTH" E; "Stoughton" E Mod;

URBAN AREA

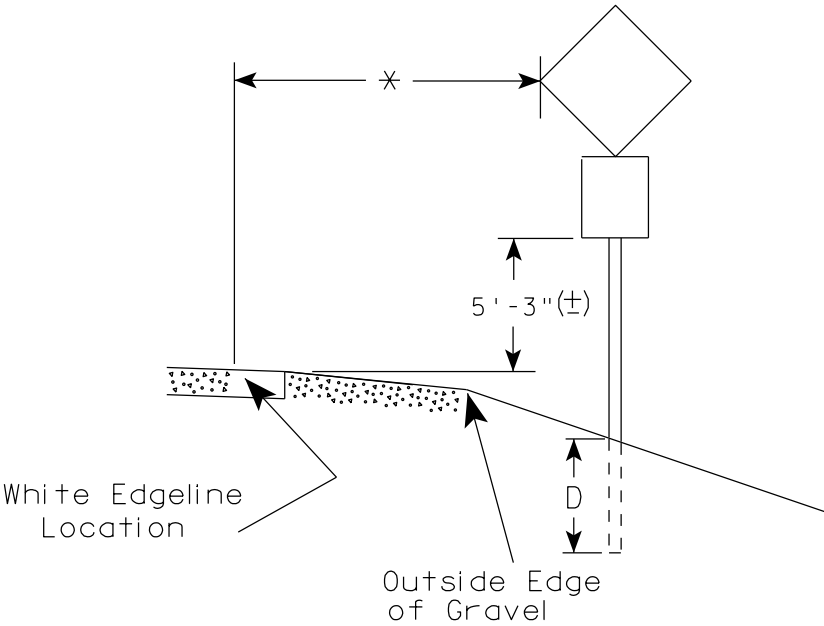
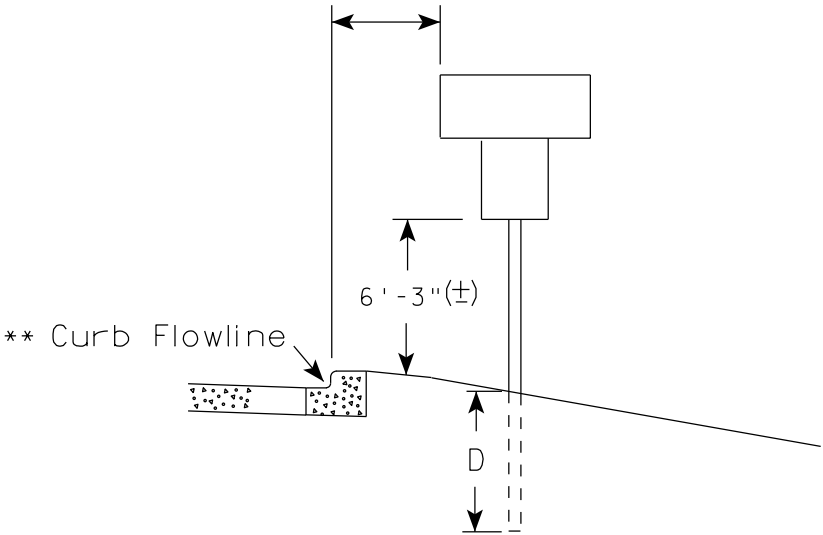


RURAL AREA (See Note 2)



- GENERAL NOTES
1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
 2. If signs are mounted on barrier wall, see A4-10 sign plate.
 3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
 4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
 5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
 6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
 7. The (±) tolerance for mounting height is 3 inches.
 8. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
 9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

2' Min - 4' Max (See Note 6)



POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

×× The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

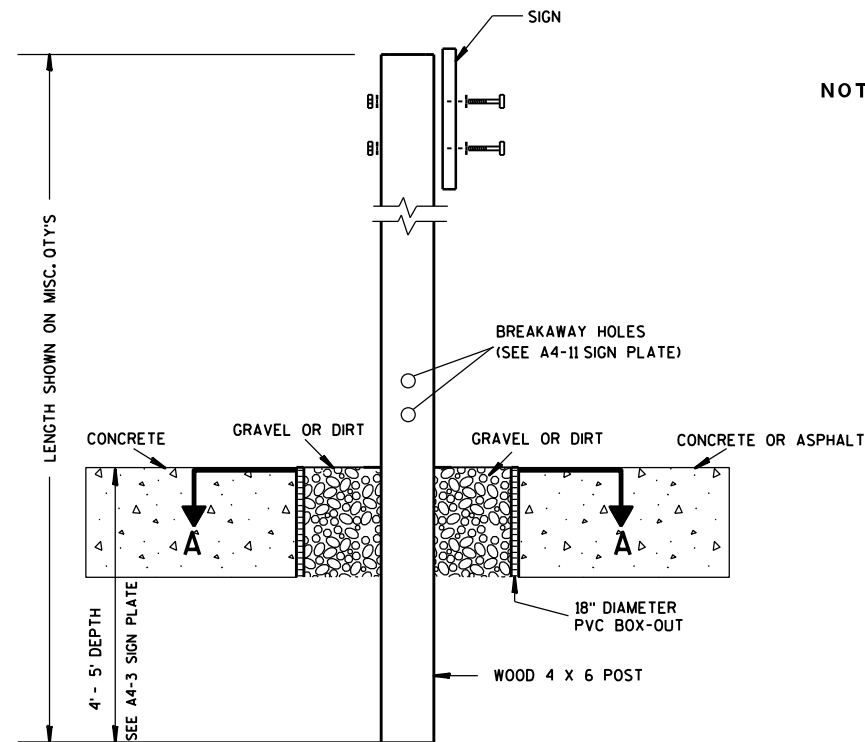
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

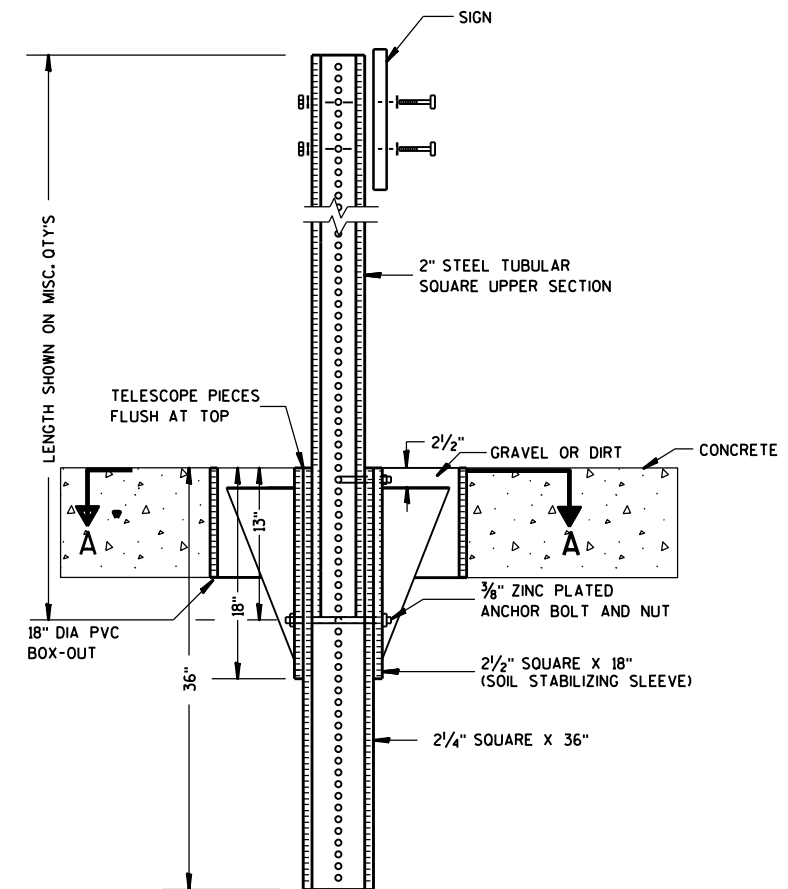
DATE 7/23/15 PLATE NO. A4-3.20
525



ELEVATION VIEW

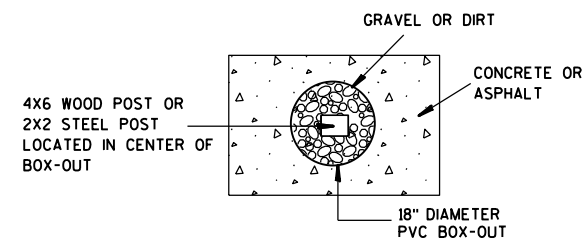
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- NOTES: 1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/27/14 PLAT 526 A4-3B.1

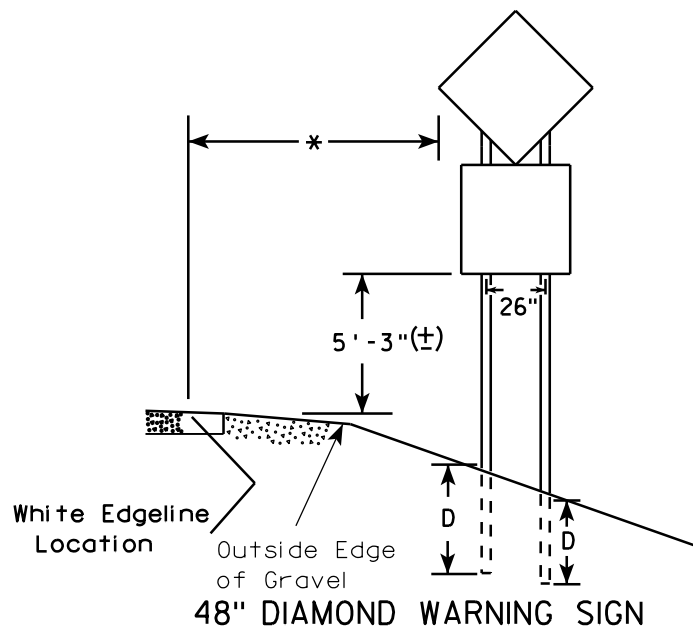
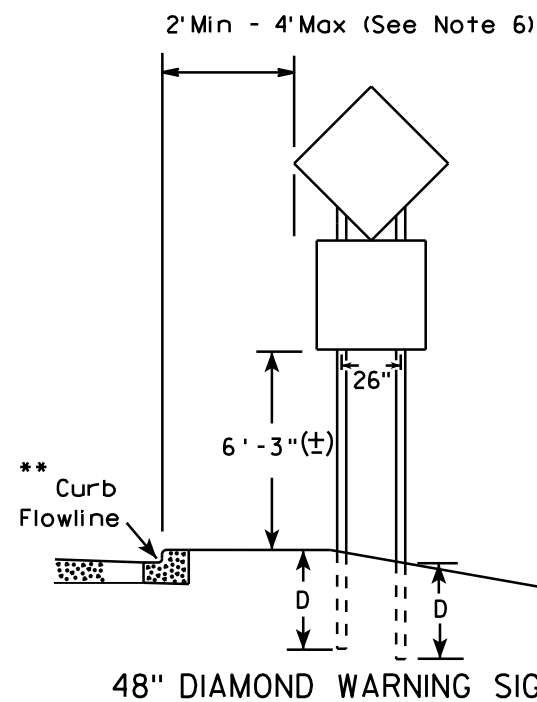
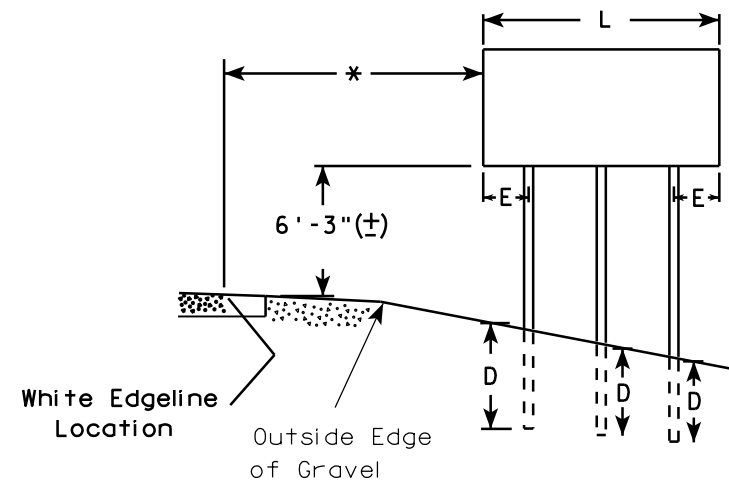
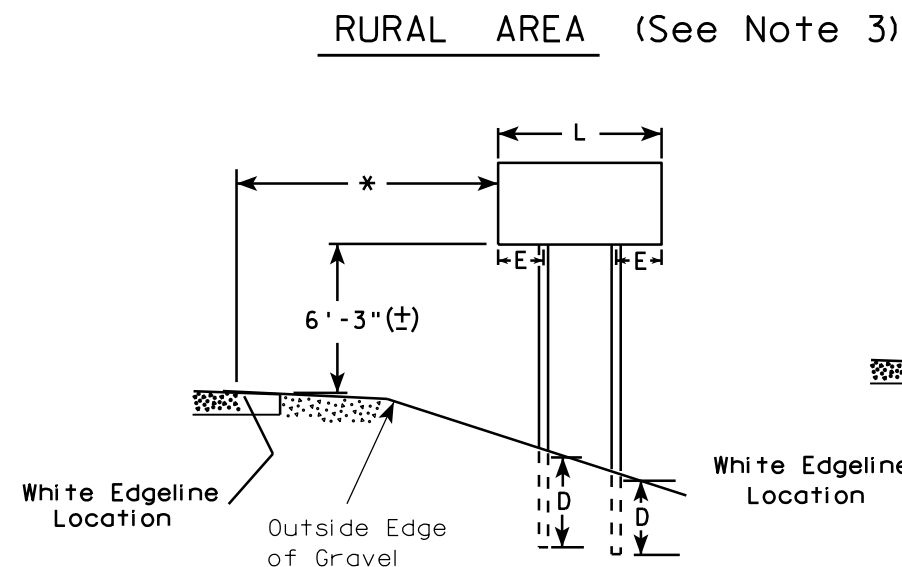
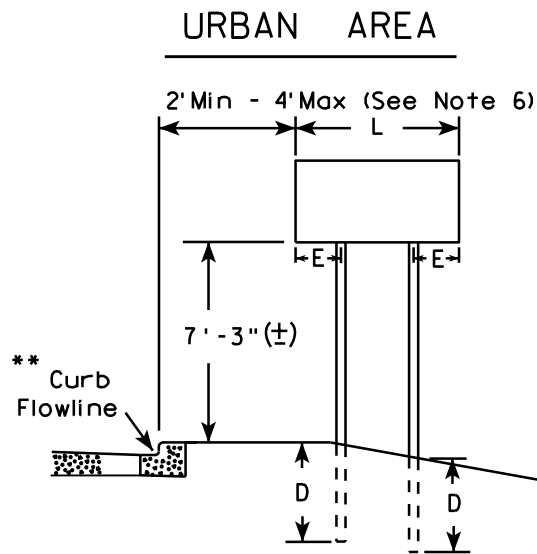
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



- GENERAL NOTES**
1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
 2. See tables below for required number of posts.
 3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
 4. The (±) tolerance for mounting height is 3 inches.
 5. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
 6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
 7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
 8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

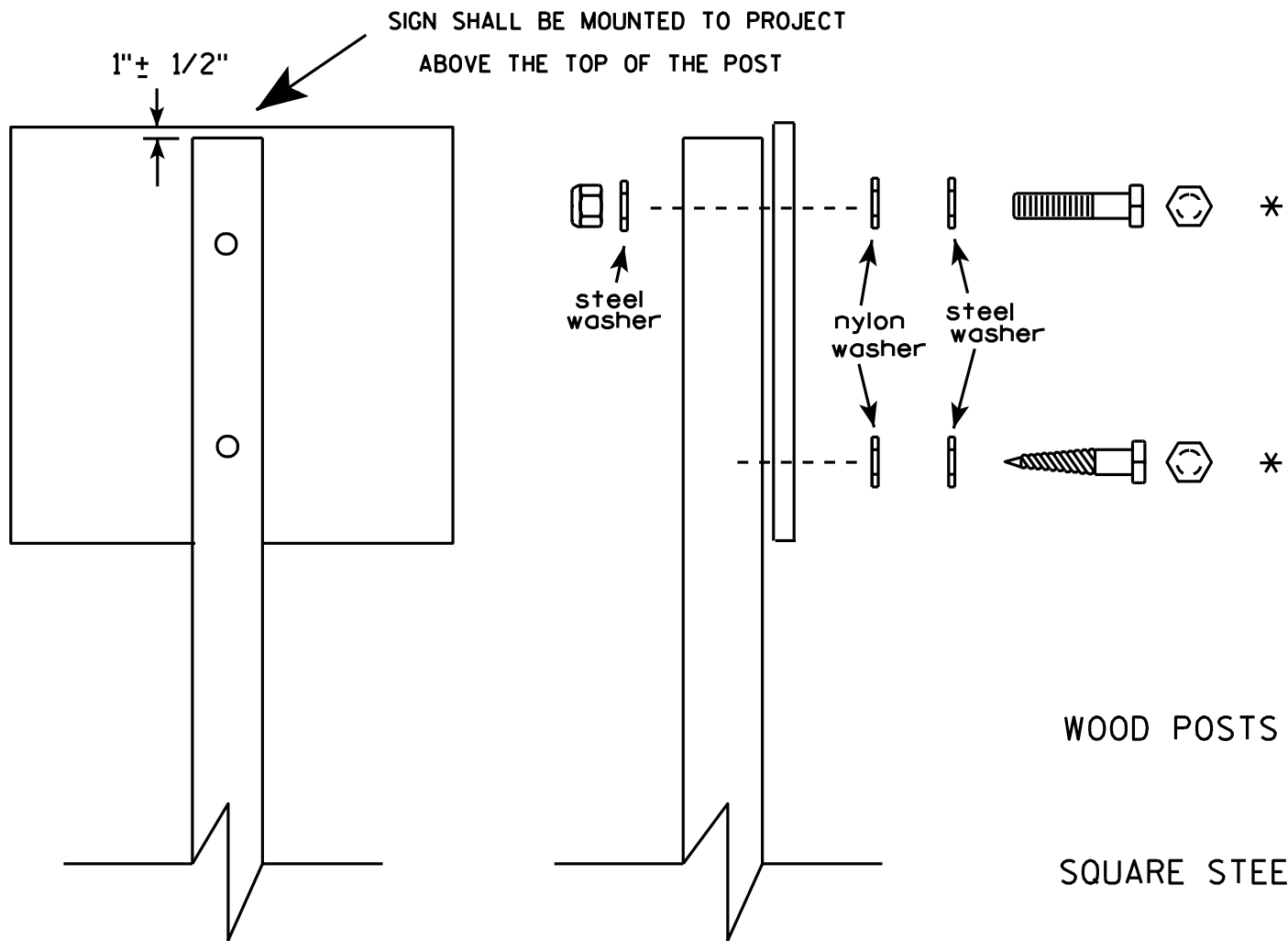
SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH	
Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 7/23/15	PLATE NO. ^{A4-A} 527 14

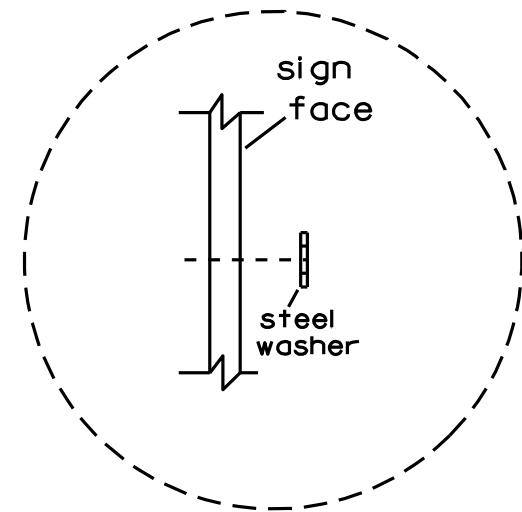


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.

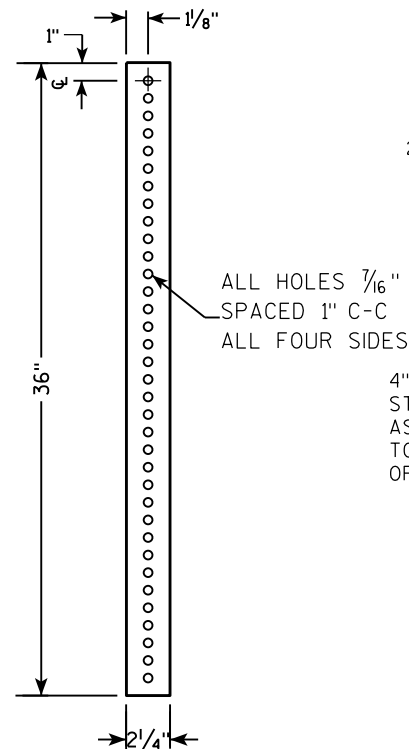


Washer Placement when Sign Has Other Than Type H or Type F Face

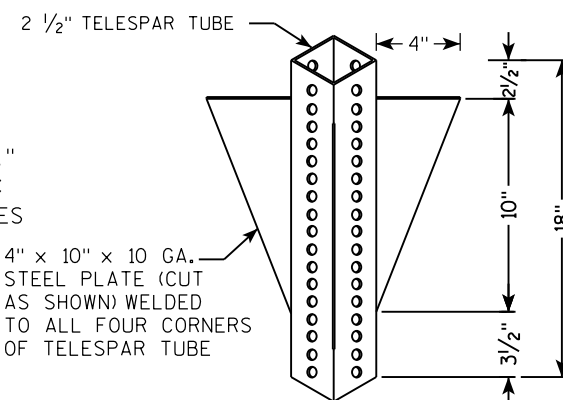
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/23/10	PLATE NO. A4-8.7

2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



**2 1/2" SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH**

[illegible]

TECHNICAL DRAWING OF A SIGNPOST ASSEMBLY.

Side View Dimensions:

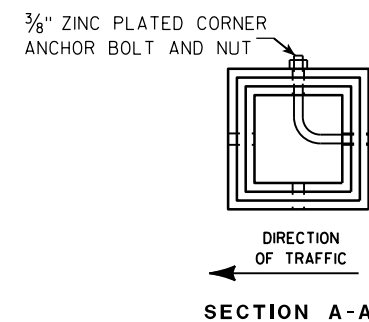
- Overall height: LENGTH SHOWN ON MISC. Q'TYS
- Section 1: 2" STEEL TUBULAR SQUARE UPPER SECTION
- Section 2: 2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)
- Section 3: 2 1/4" SQUARE X 36"
- Section 4: 36" (Total length of the lower square section)
- Section 5: 18"
- Section 6: 12"

Top View Dimensions:

- Overall width: 36"
- Section 1: 18"
- Section 2: 12"

Material and Assembly Specifications:

- ALL HOLES 7/16" SPACED 1" C-C ALL FOUR SIDES
- 3/8" ZINC PLATED CORNER ANCHOR BOLT AND NUT
- 3/8" ZINC PLATED ANCHOR BOLT AND NUT
- 2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)
- 2 1/4" SQUARE X 36"
- TELESCOPE PIECES FLUSH AT TOP
- SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL
- SIGN



Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch

for State Traffic Engineer

DATE 2/05/15 PLATI 529 14-9.9

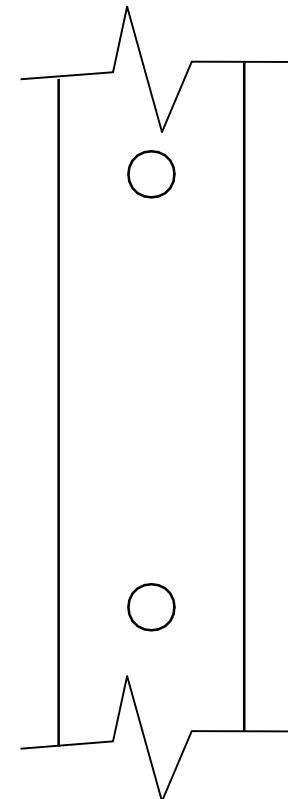
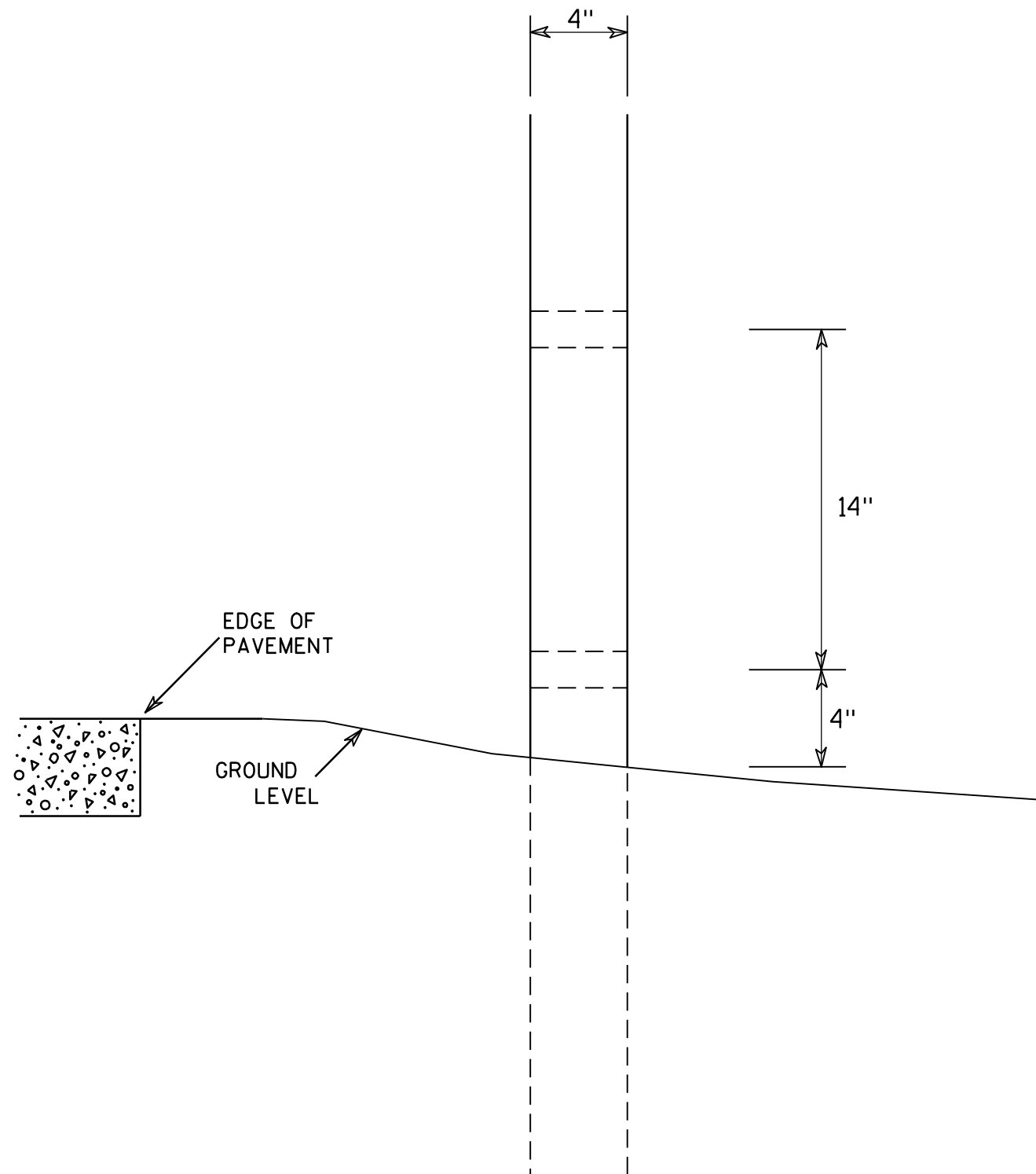
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

HWY:

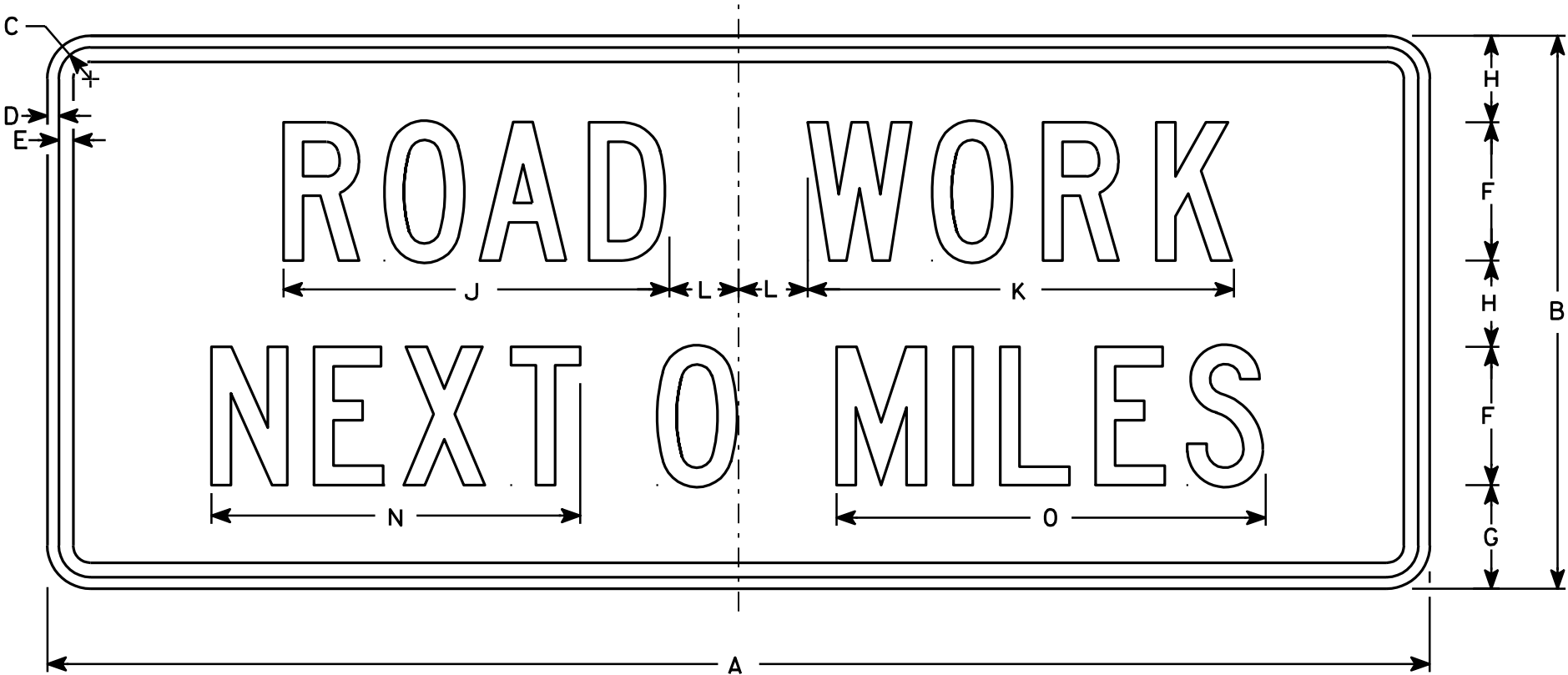
COUNTY:

SHEET NO: 530

E

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance



G20-1

Metric equivalent
for this sign is:

SIZE	
1	
2	1500 mm X 600 mm
3	
4	1500 mm X 600 mm
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	60	24	1 3⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10	.90
3																												
4	60	24	1 3⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10	.90
5																												

STANDARD SIGN
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chris J. Spay
State Traffic Engineer

DATE 4/8/97

PLATE NO. G20-1.7

PROJECT NO:

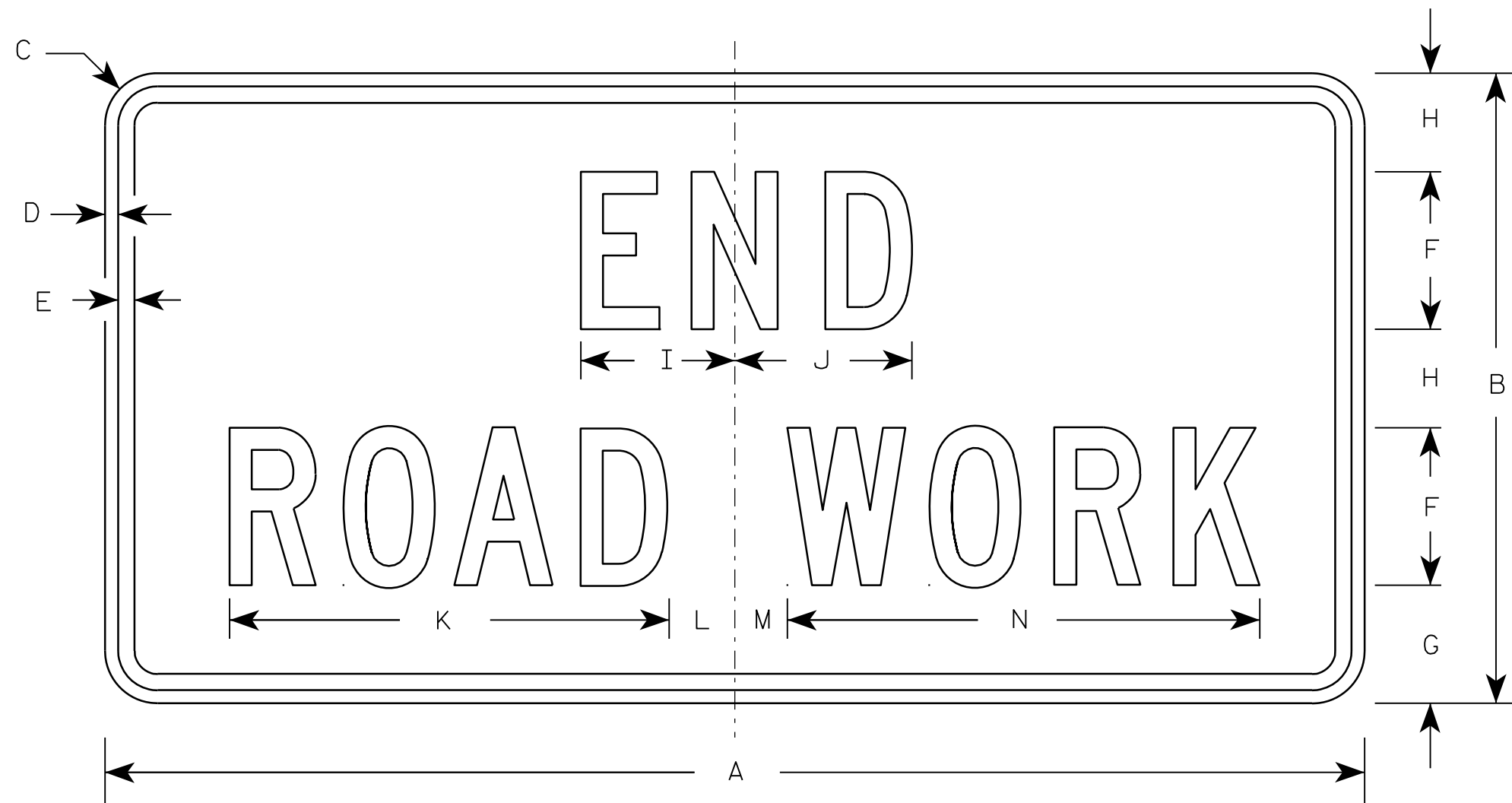
HWY:

COUNTY:

SHEET NO: 531

E

7



G20-2A

Metric equivalent
for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Orange
Message - Black
- Message Series - C
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

PROJECT NO:

HWY:

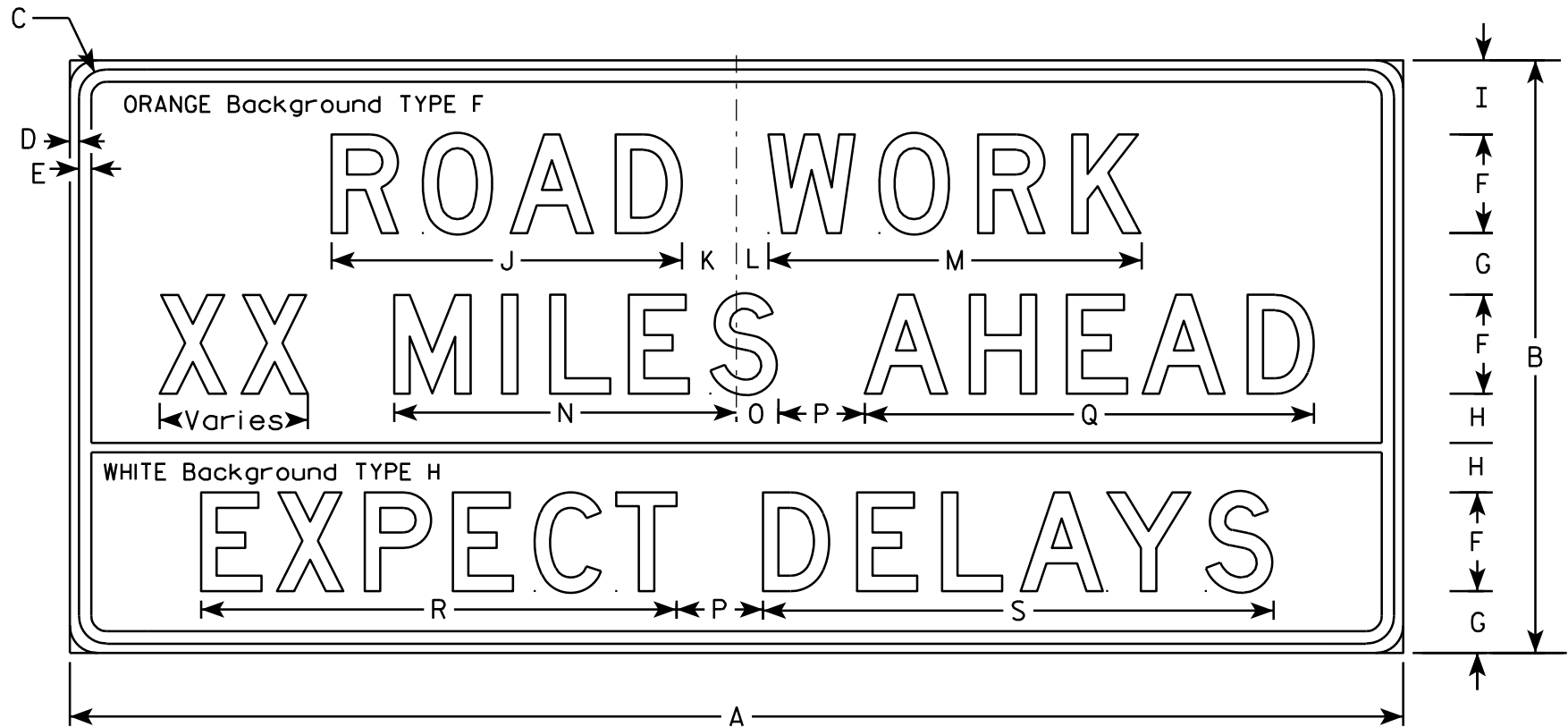
COUNTY:

SHEET NO: 532

E

NOTES

- 1. Sign is Type II - Type F & Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - AS NOTED
Message - BLACK
- 3. Message Series - D
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



G20-58

Metric equivalent
for this sign is:

SIZE	
1	
2	2700 mm X 1200 mm
3	
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2																												
3																												
4	108	48	2 1/4	3/4	1	8	5	4	6	28 3/8	4 1/2	2 1/2	30 1/4	27 3/4	3 3/8	7	36 3/8	38 1/2	41 3/8								36.0	3.24
5																												

STANDARD SIGN
G20-58

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 7/13/2009 PLATE NO. G20-58.1

PROJECT NO: HWY: COUNTY: SHEET NO: 533 E

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - E



G20-61

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3																											
4	120	30	6		2	12	9	21	78 1/4	20 3/4																	25.0
5																											

STANDARD SIGN

G20-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch

for State Traffic Engineer

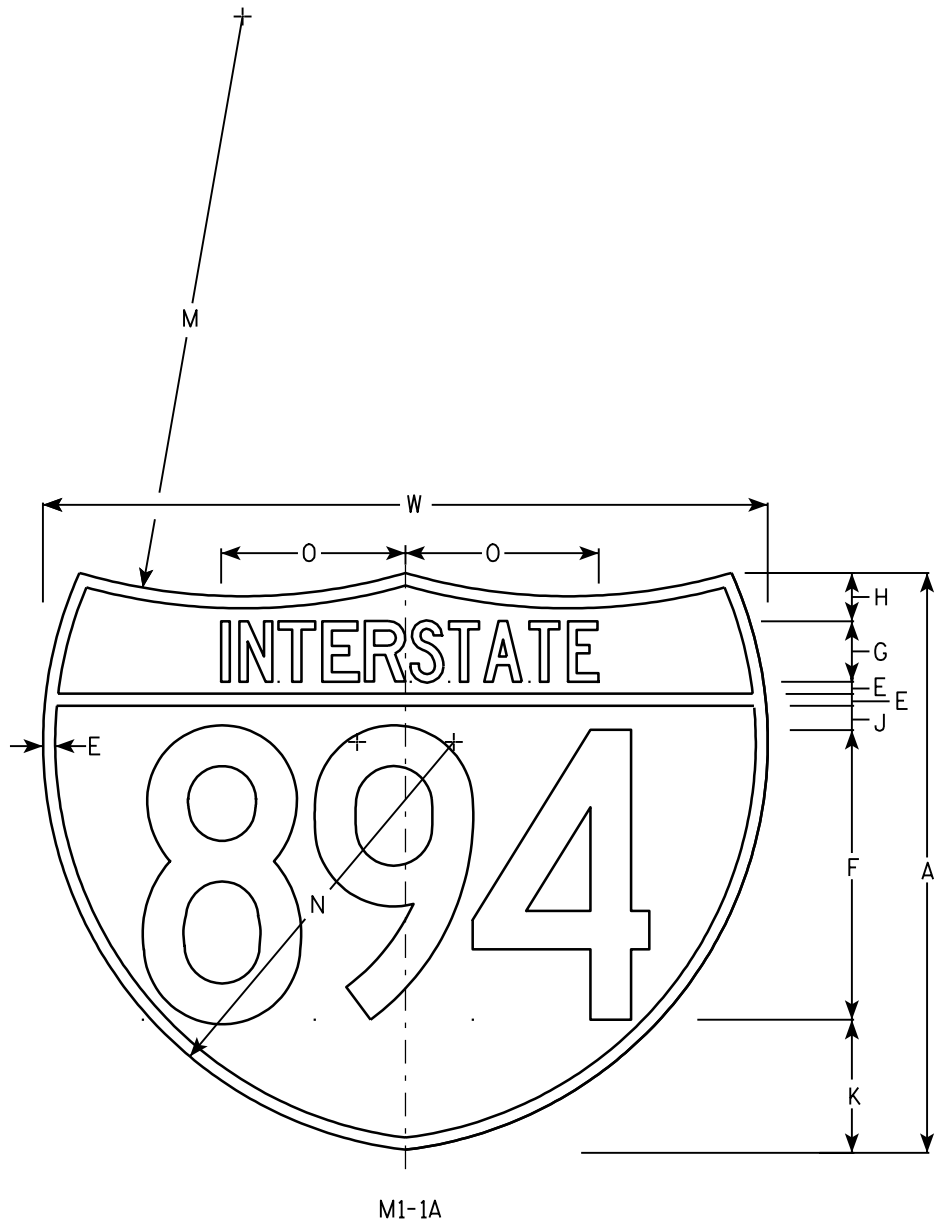
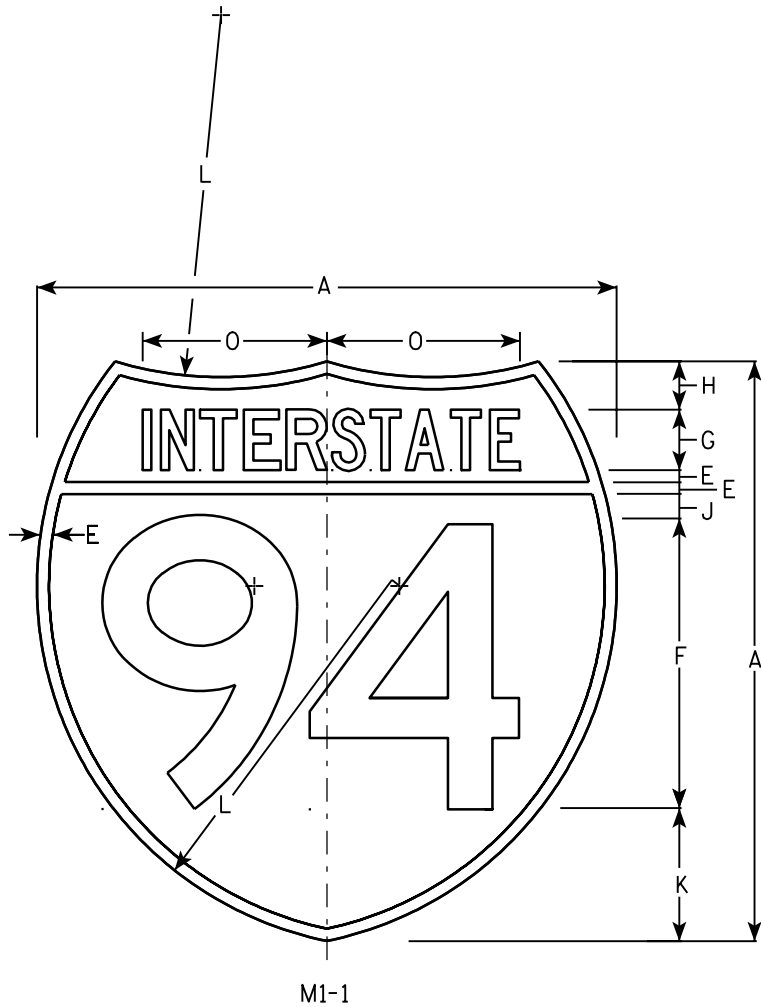
DATE 5/07/15

PLATE NO. 534

G20-61.1

SHEET NO:

E



NOTES

- 1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Top Red - Bottom Blue (See Note 6)
Message - White - See Note 6
- 3. Message Series - See note 5
- 4. Substitute appropriate numerals & adjust spacing as per plate A10-1.
- 5. M1-1 - Numerals - D
Interstate - C
M1-1A - All copy - C
- 6. Permanent Signs
Message - Type H Reflective
Detour or other temporary signs
Background - Reflective
Message - Reflective

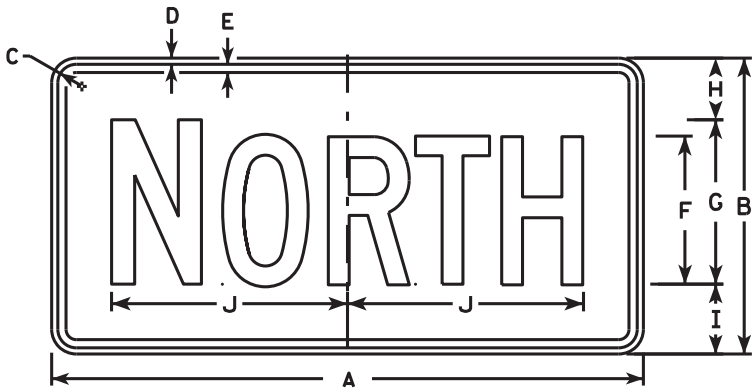
Metric equivalent for these signs are:

SIZE	M1 - 1	SIZE	M1 - 1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 mm

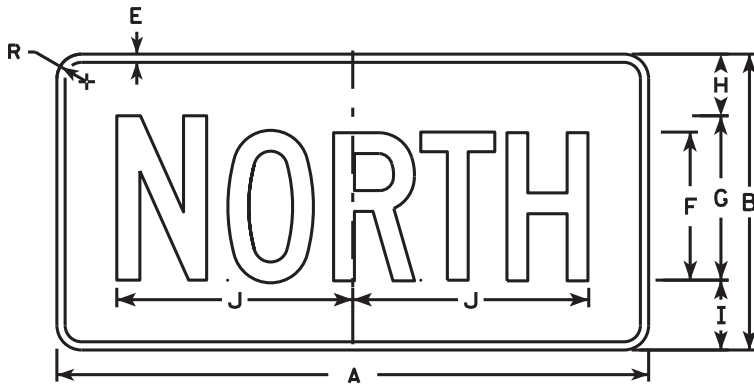
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Area sq. ft.	Area sq. ft.	Area m ²	Area m ²
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 08/23/05 PLATE NO. M1-1.8



M3-1
MM3-1
MP3-1



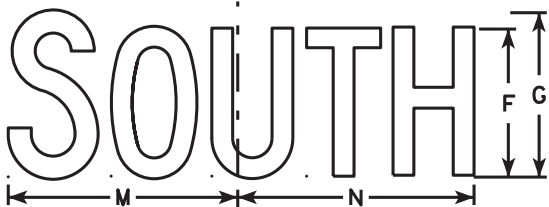
MB3-1
MK3-1
MN3-1



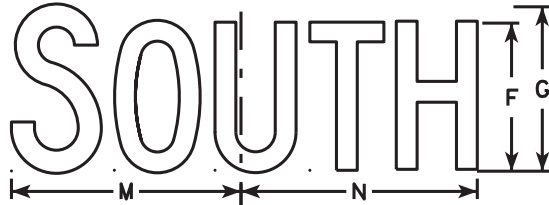
M3-2
MM3-2
MP3-2



MB3-2
MK3-2
MN3-2



M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
Background - See note 5
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White
MK3-1 thru MK3-4 Background - Green
Message - White
MM3-1 thru MM3-4 Background - White
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White
MP3-1 thru MP3-4 Background - White
Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

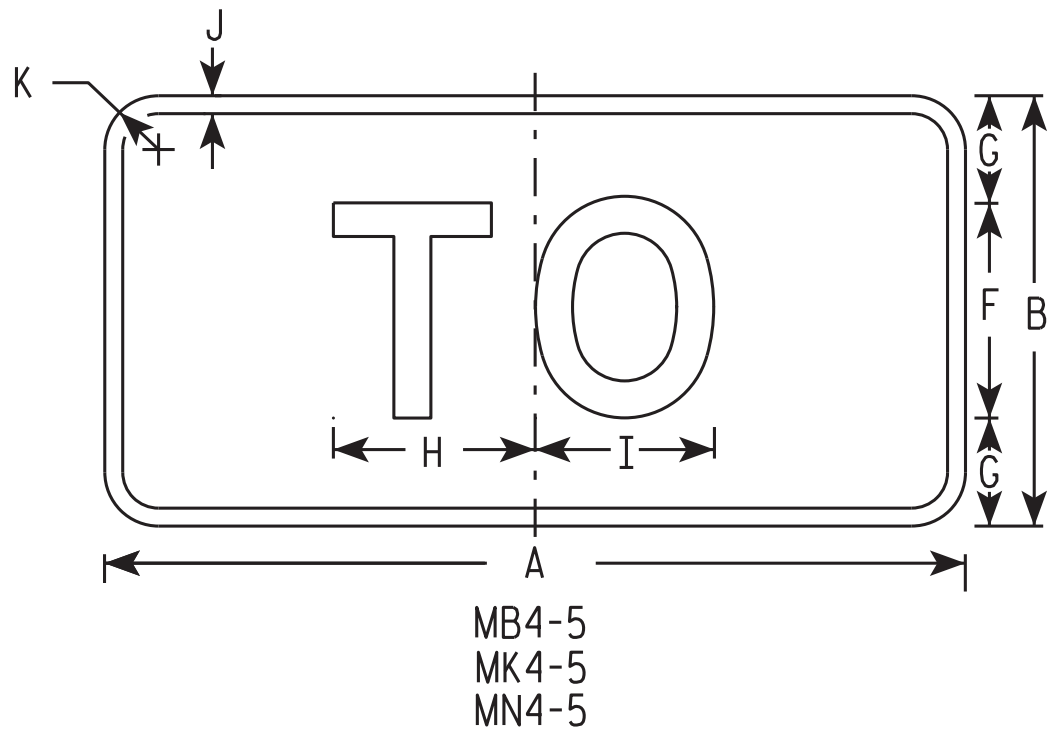
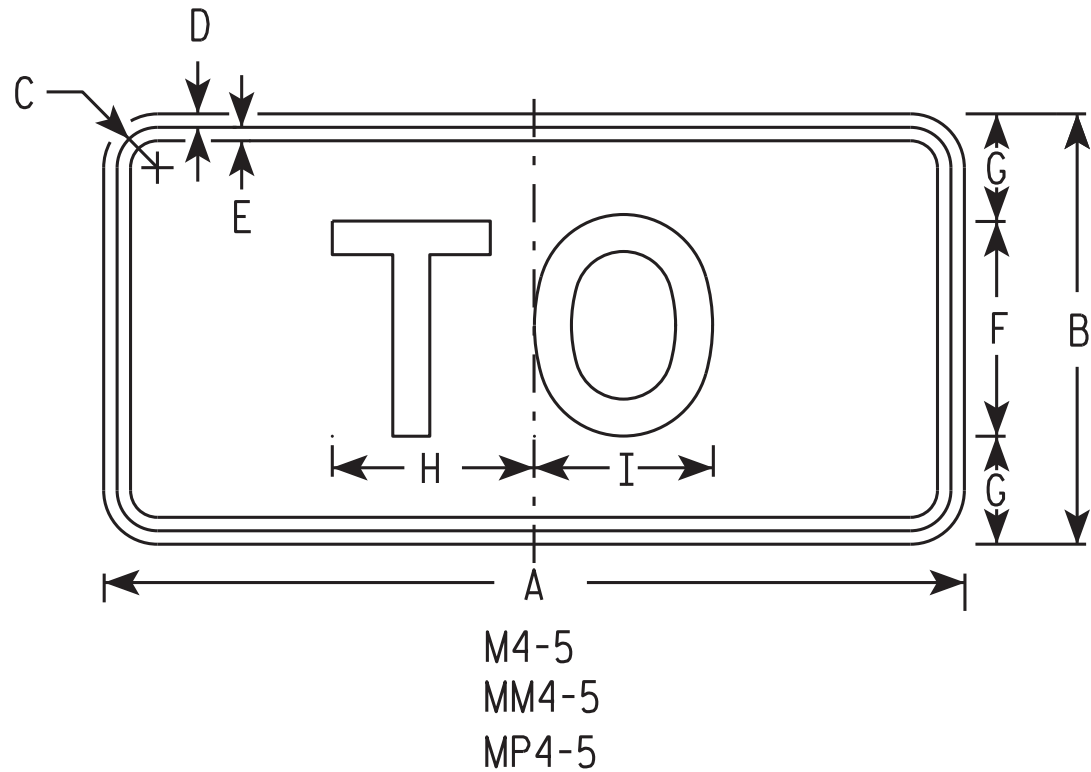
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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STANDARD SIGNS
M3-1 thru M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M3-1.14



NOTES

- 1. Sign is Type II - Type H
- 2. Color:
 - Background - See note 5
 - Message - See note 5
- 3. Message Series - E
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. M4-5 Background - White
Message - Black
- MB4-5 Background - Blue
Message - White
- MK4-5 Background - Green
Message - White
- MM4-5 Background - White
Message - Green
- MN4-5 Background - Brown
Message - White
- MP4-5 Background - White
Message - Blue

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	5 3/8	5 1/4	1/2	1 1/2															2.00	
3	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2															4.5	
4	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2															4.5	
5	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2															4.5	

PROJECT NO:

HWY:

COUNTY:

SHEET NO: E

STANDARD SIGN

M4 - 5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

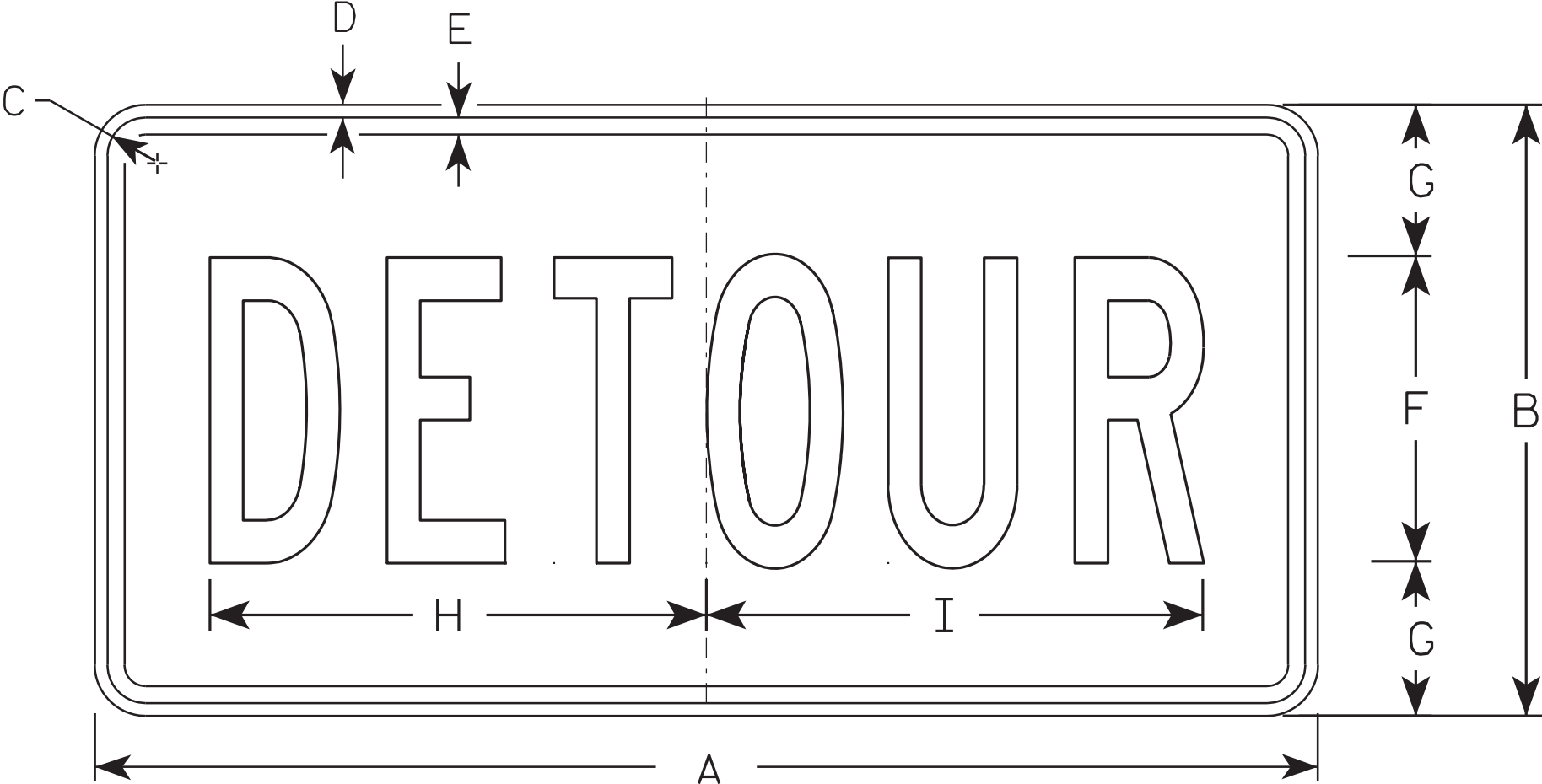
Matthew R. Rauch
for State Traffic Engineer

DATE 10/15/15

PLATE NO. M4-5.8

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
 - Background - Orange
 - Message - Black
- 3. Message Series - B
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



M4 - 8

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

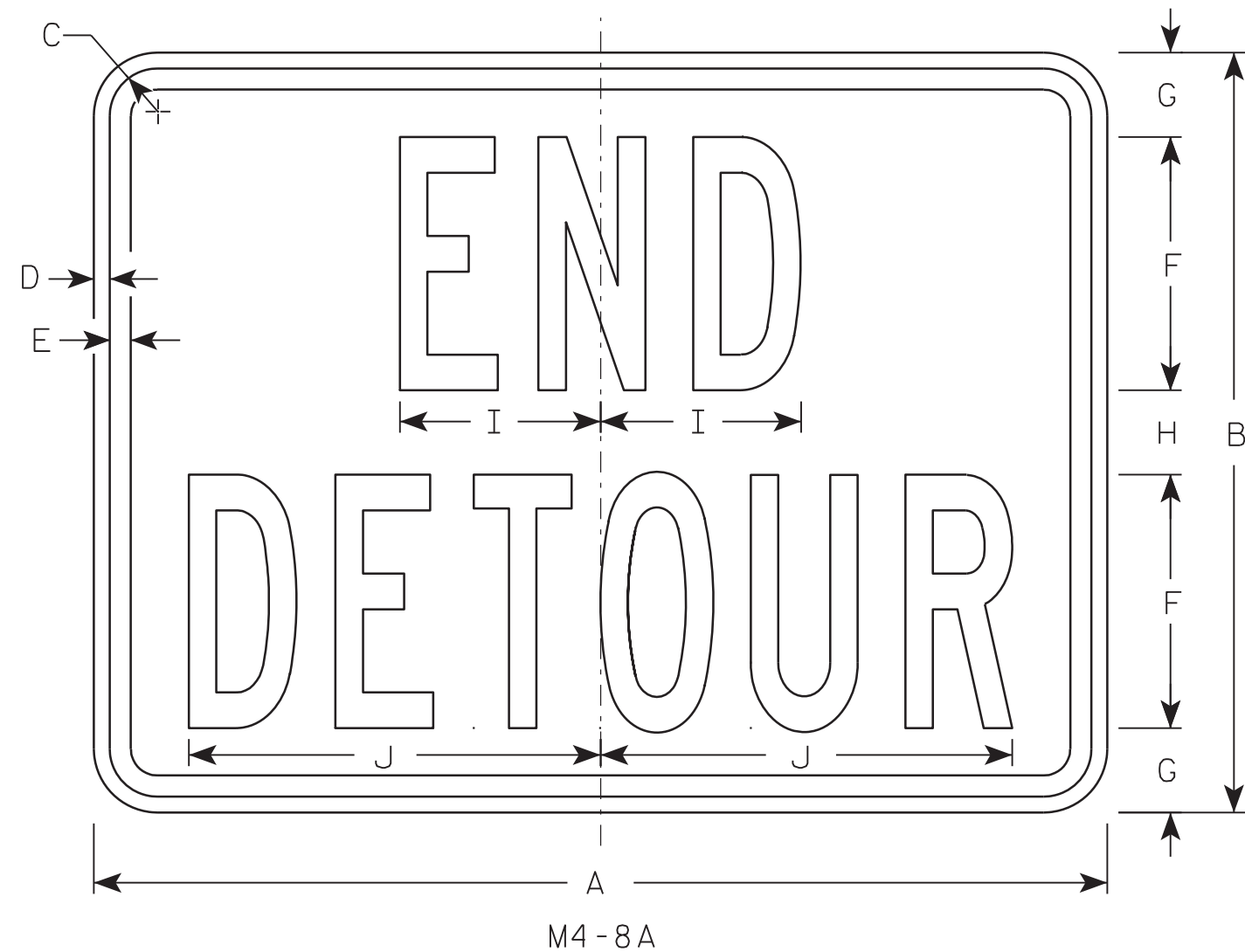
STANDARD SIGN
M4 - 8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

7



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 539	E
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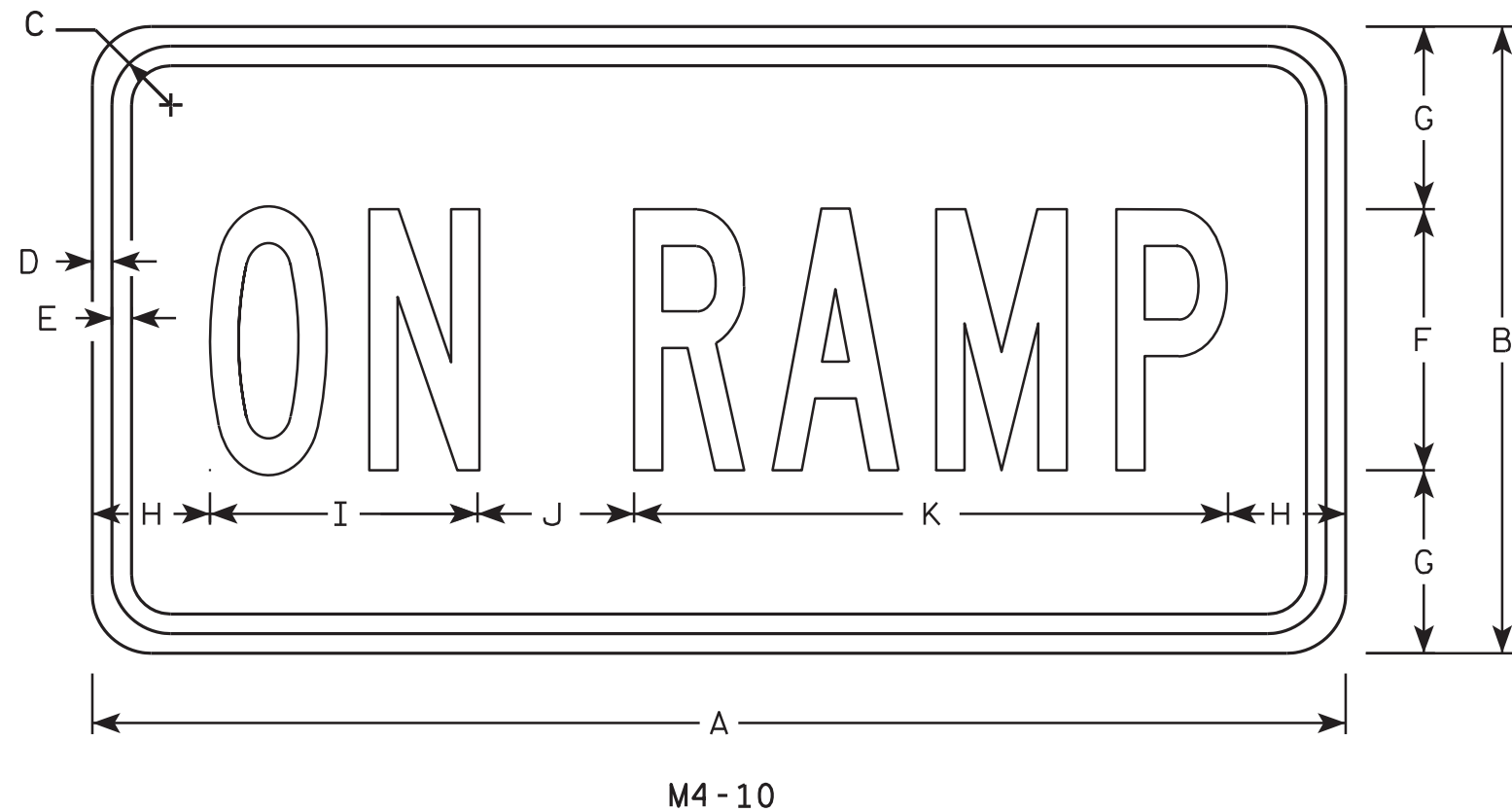
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

7



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	5	3 1/2	2 1/4	5 1/8	3	11 3/8																2.0
3	36	18	1 1/8	3/8	1/2	8	5	2 1/4	8 1/4	5	18 1/4																4.5
4																											
5																											

STANDARD SIGN
M4 - 10

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-10.2

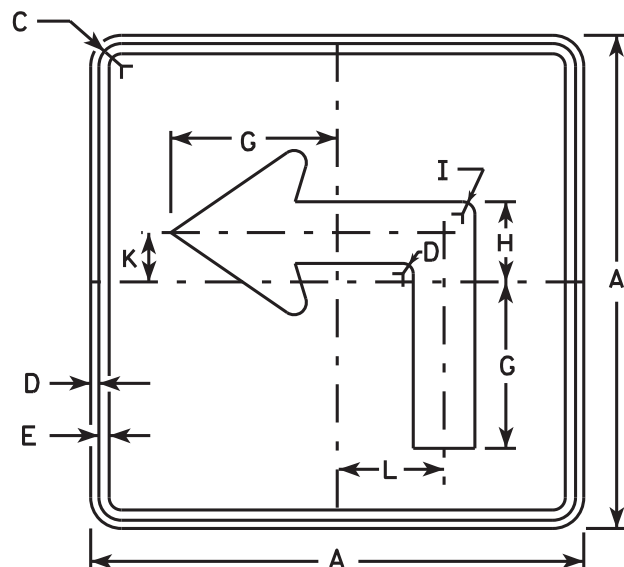
PROJECT NO:

HWY:

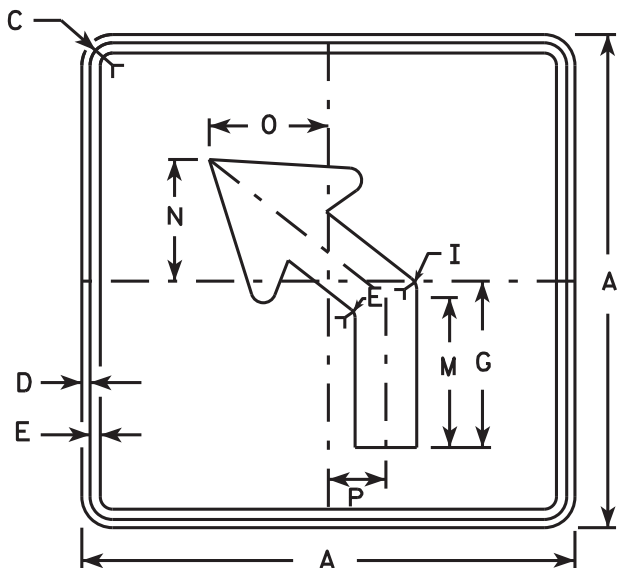
COUNTY:

SHEET NO: 540

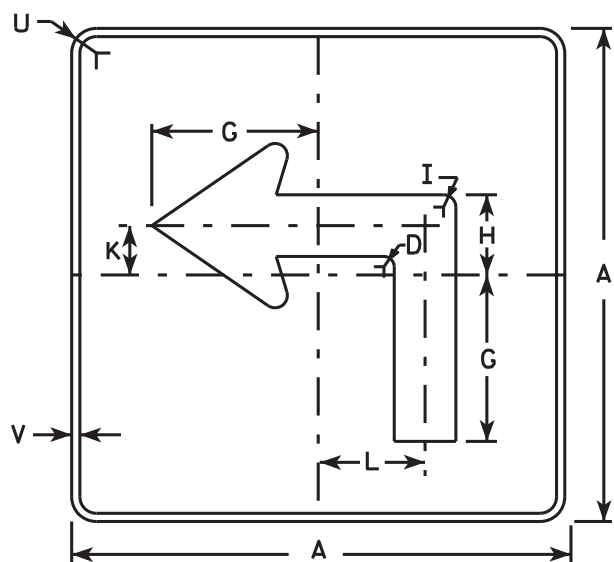
E



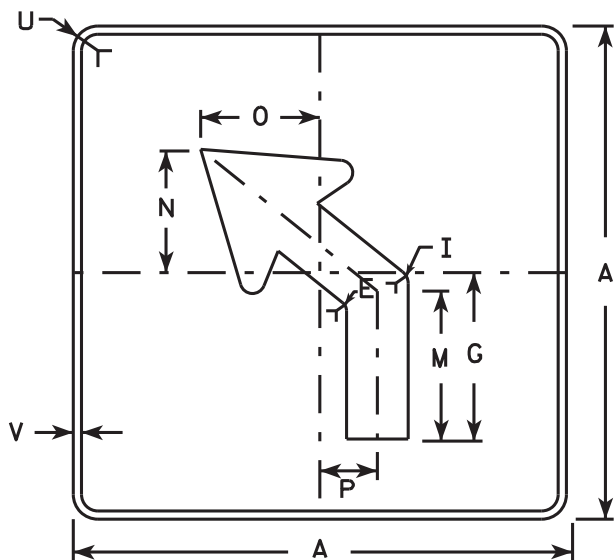
M5-1L
MM5-1L
M05-1L
MP5-1L



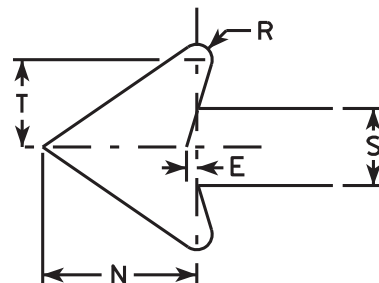
M5-2L
MM5-2L
M05-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

- Signs are Type II - Type H reflective except as shown
- Color:
Background - See note 4
Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- | | |
|-----------------|---|
| M5-1 and M5-2 | Background - White |
| | Message - Black |
| MB5-1 and MB5-2 | Background - Blue |
| | Message - White |
| MK5-1 and MK5-2 | Background - Green |
| | Message - White |
| MM5-1 and MM5-2 | Background - White |
| | Message - Green |
| MN5-1 and MN5-2 | Background - Brown |
| | Message - White |
| M05-1 and M05-2 | Background - Orange - Type F Reflective |
| | Message - Black |
| MP5-1 and MP5-2 | Background - White - Type H Reflective |
| | Message - Blue |
| MR5-1 and MR5-2 | Background - Brown |
| | Message - Yellow |
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN

M5-1 & M5-2

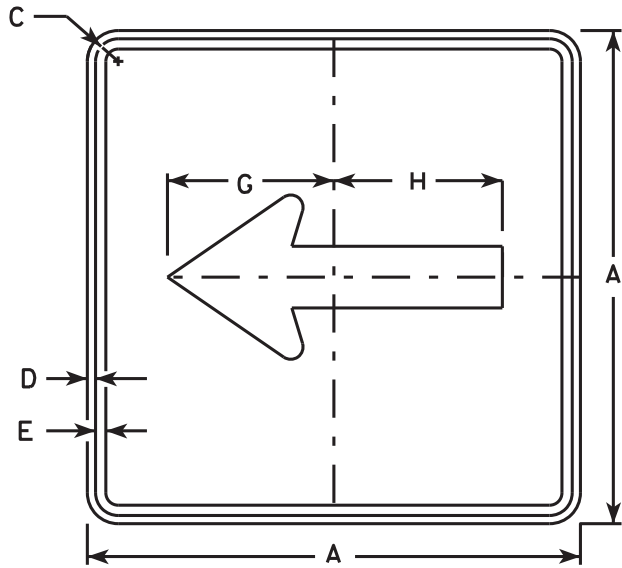
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*

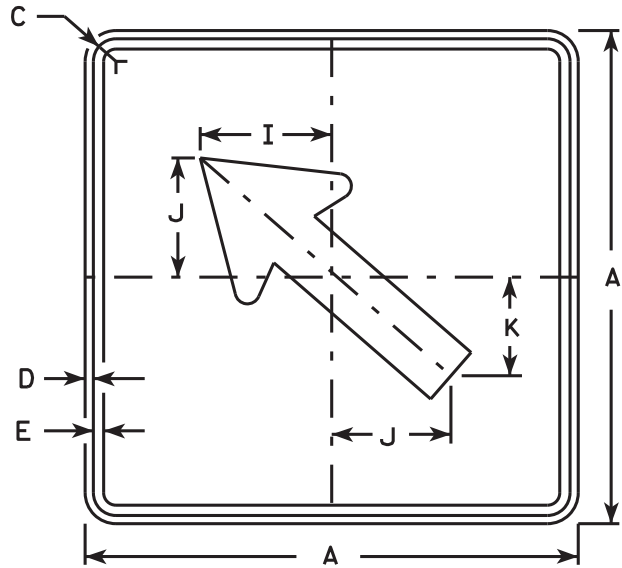
for State Traffic Engineer

DATE 10/15/15

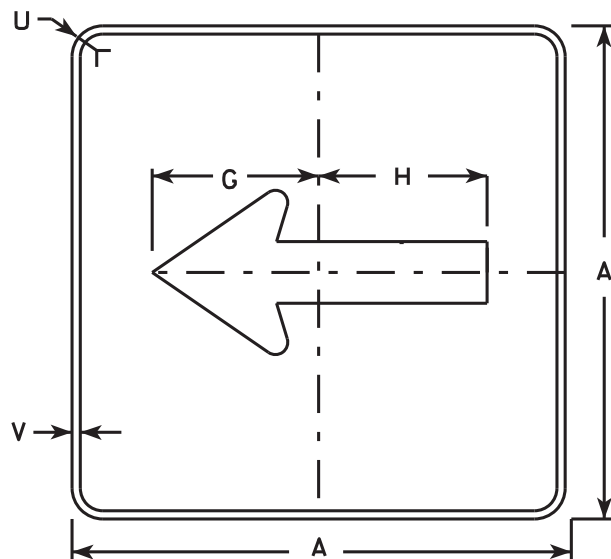
PLATE NO. M5-1.13



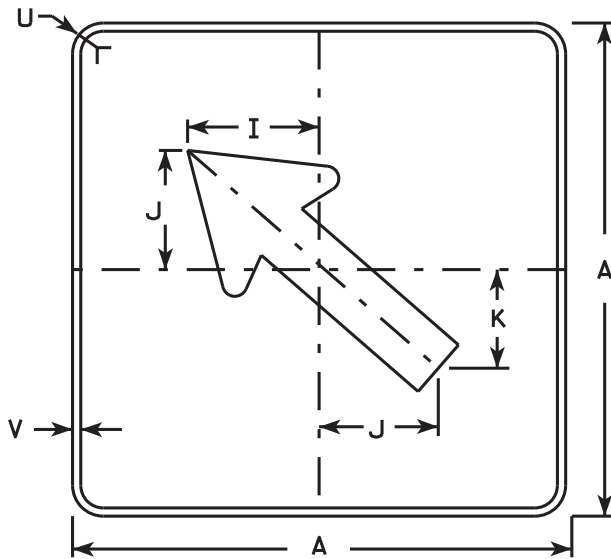
M6 - 1
MM6 - 1
MO6 - 1
MP6 - 1



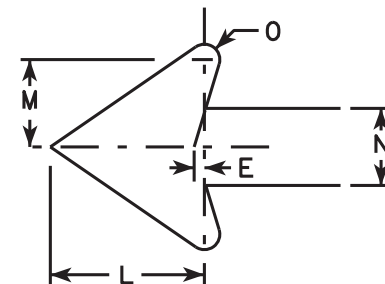
M6 - 2
MM6 - 2
MO6 - 2
MP6 - 2



MB6 - 1
MK6 - 1
MN6 - 1
MR6 - 1



MB6 - 2
MK6 - 2
MN6 - 2
MR6 - 2



NOTES

- Signs are Type II - Type H except as Shown
- Color:
Background - See note 4
Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M6-1 and M6-2 Background - White
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White
MK6-1 and MK6-2 Background - Green
Message - White
MM6-1 and MM6-2 Background - White
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White
MO6-1 and MO6-2 Background - Orange - Type F Reflective
Message - Black
MP6-1 and MP6-2 Background - White
Message - Blue
MR6-1 and MR6-2 Background - Brown
Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

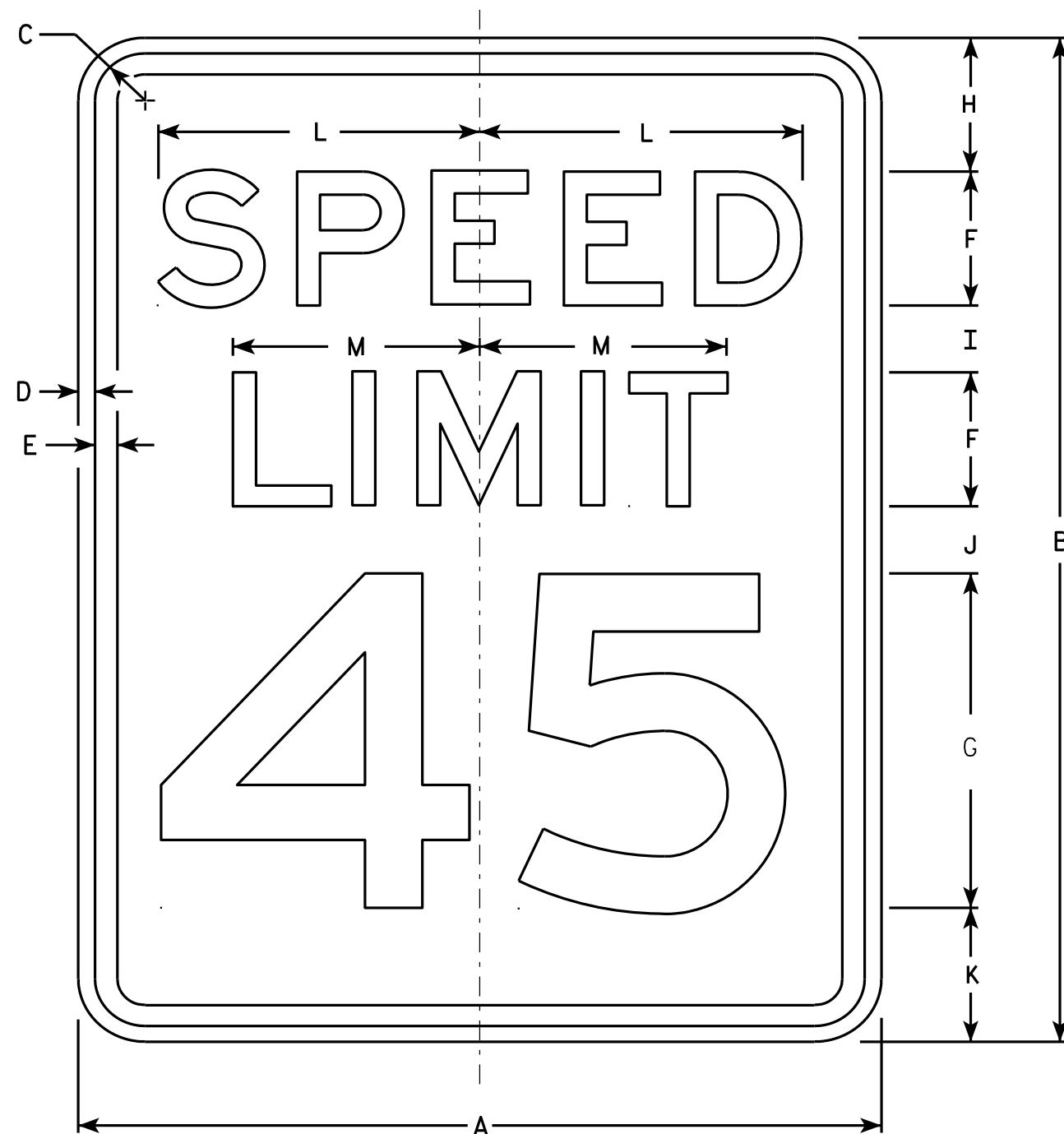
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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STANDARD SIGN
M6 - 1 & M6 - 2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-1.15



R2-1

NOTES

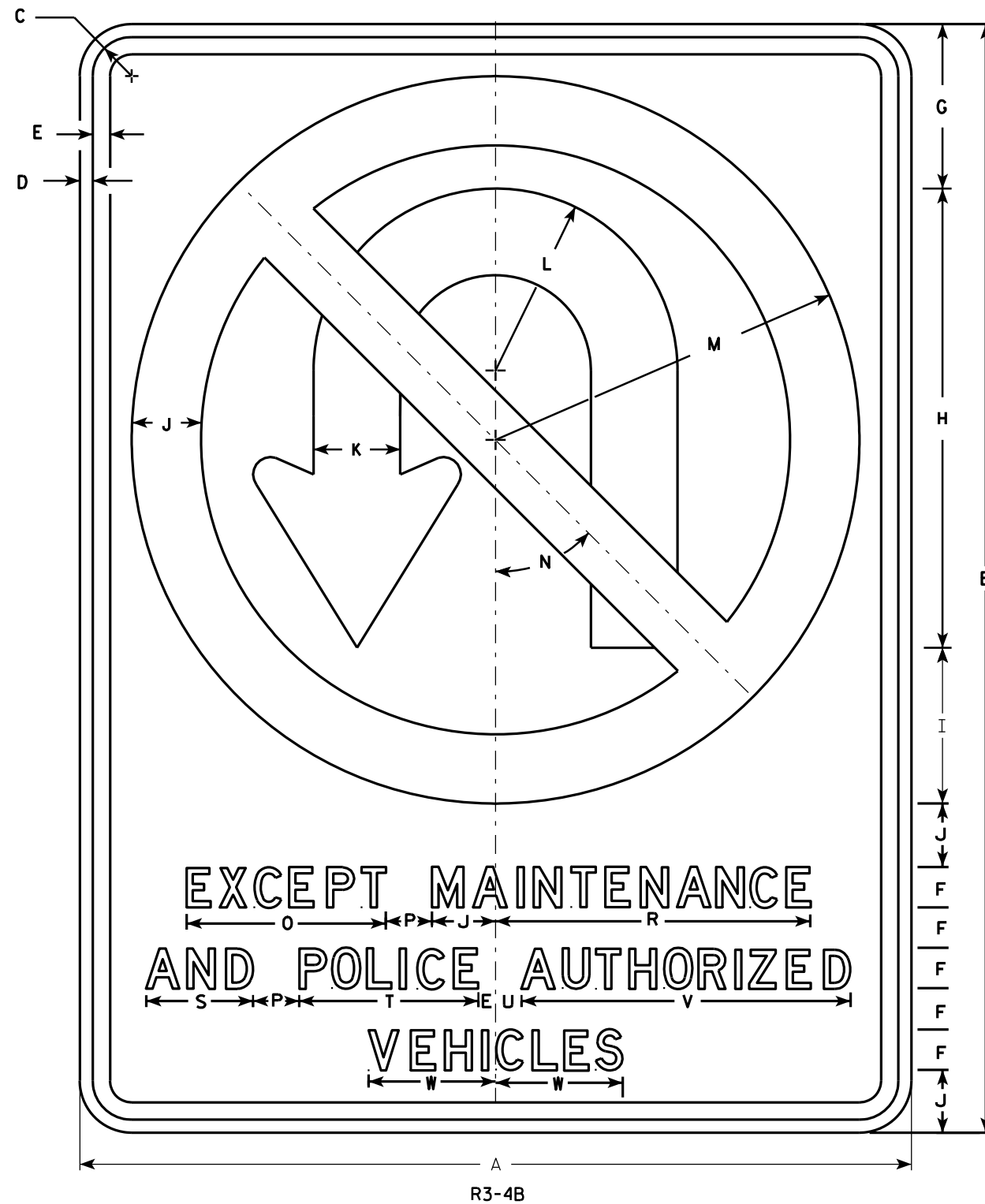
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN
R2-1

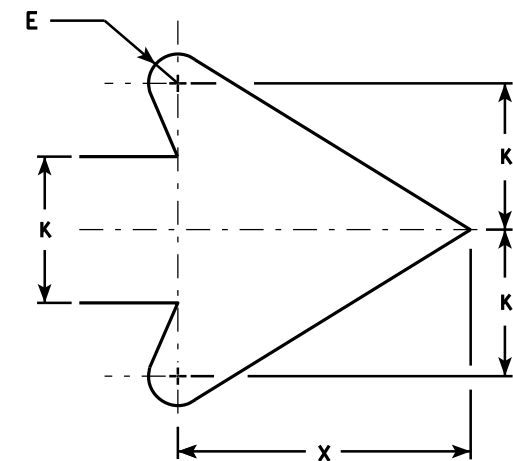
WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: HWY: COUNTY: SHEET NO: 543 E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S																											
2M																											
3																											
4	36	48	1 5⁄8	5⁄8	3⁄4	1 3⁄4	7 1⁄8	19 7⁄8	6 3⁄4	2 3⁄4	3 3⁄4	7 7⁄8	15 3⁄4	45°	8 5⁄8	2		13 5⁄8	4 5⁄8	7 3⁄4	1 1⁄8	14 1⁄4	5 1⁄2	7 5⁄8			12.0
5	36	48	1 5⁄8	5⁄8	3⁄4	1 3⁄4	7 1⁄8	19 7⁄8	6 3⁄4	2 3⁄4	3 3⁄4	7 7⁄8	15 3⁄4	45°	8 5⁄8	2		13 5⁄8	4 5⁄8	7 3⁄4	1 1⁄8	14 1⁄4	5 1⁄2	7 5⁄8			12.0

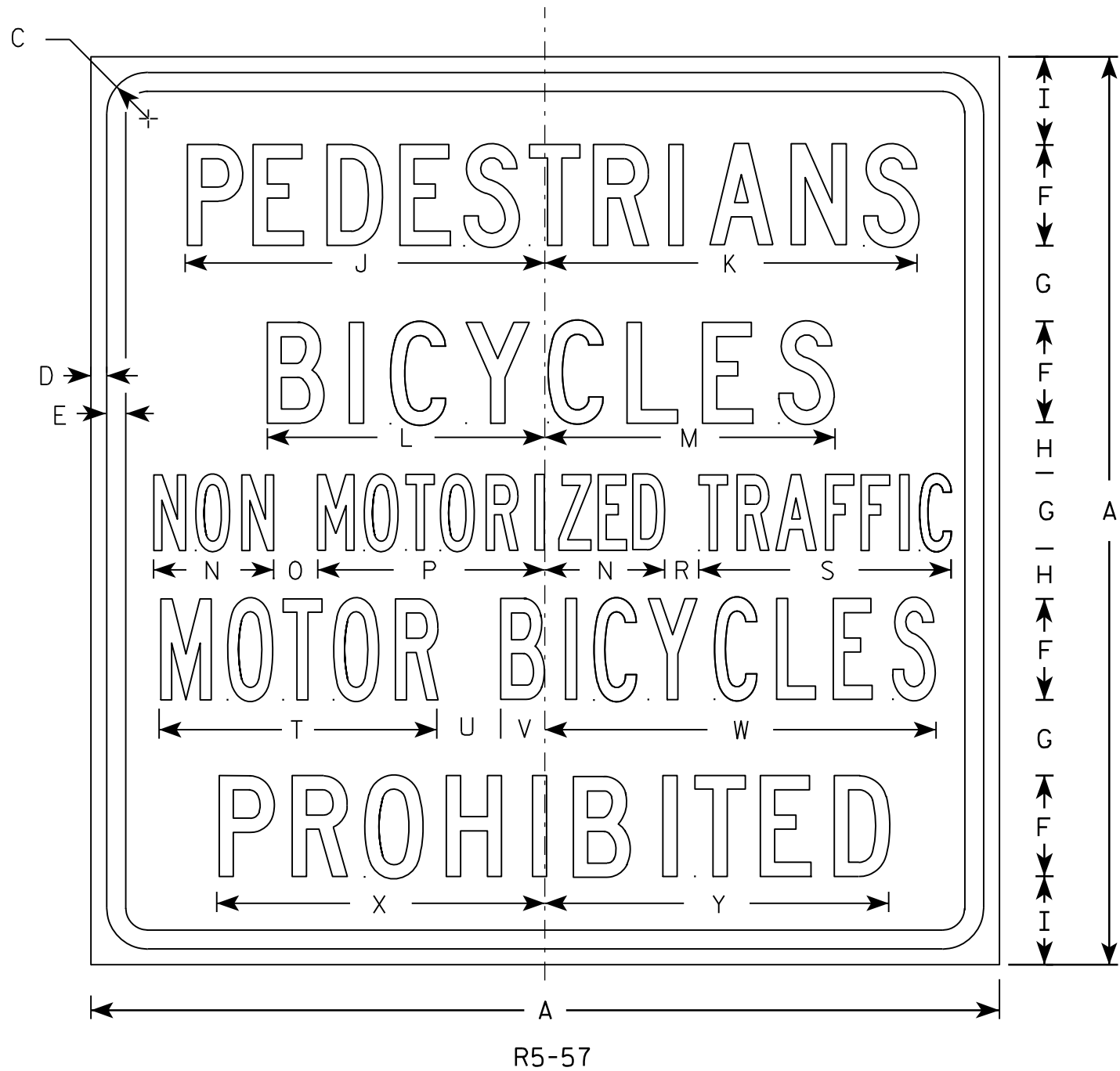
STANDARD SIGN R3-4B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/17/2011 PLATE NO. R3-4B.2

PROJECT NO: HWY: COUNTY: SHEET NO: 544 E



NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
 - Background - White
 - Message - Black
- 3. Message Series - Lines 1, 2, and 5 are Series C. Lines 3 and 4 are Series B.
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

7

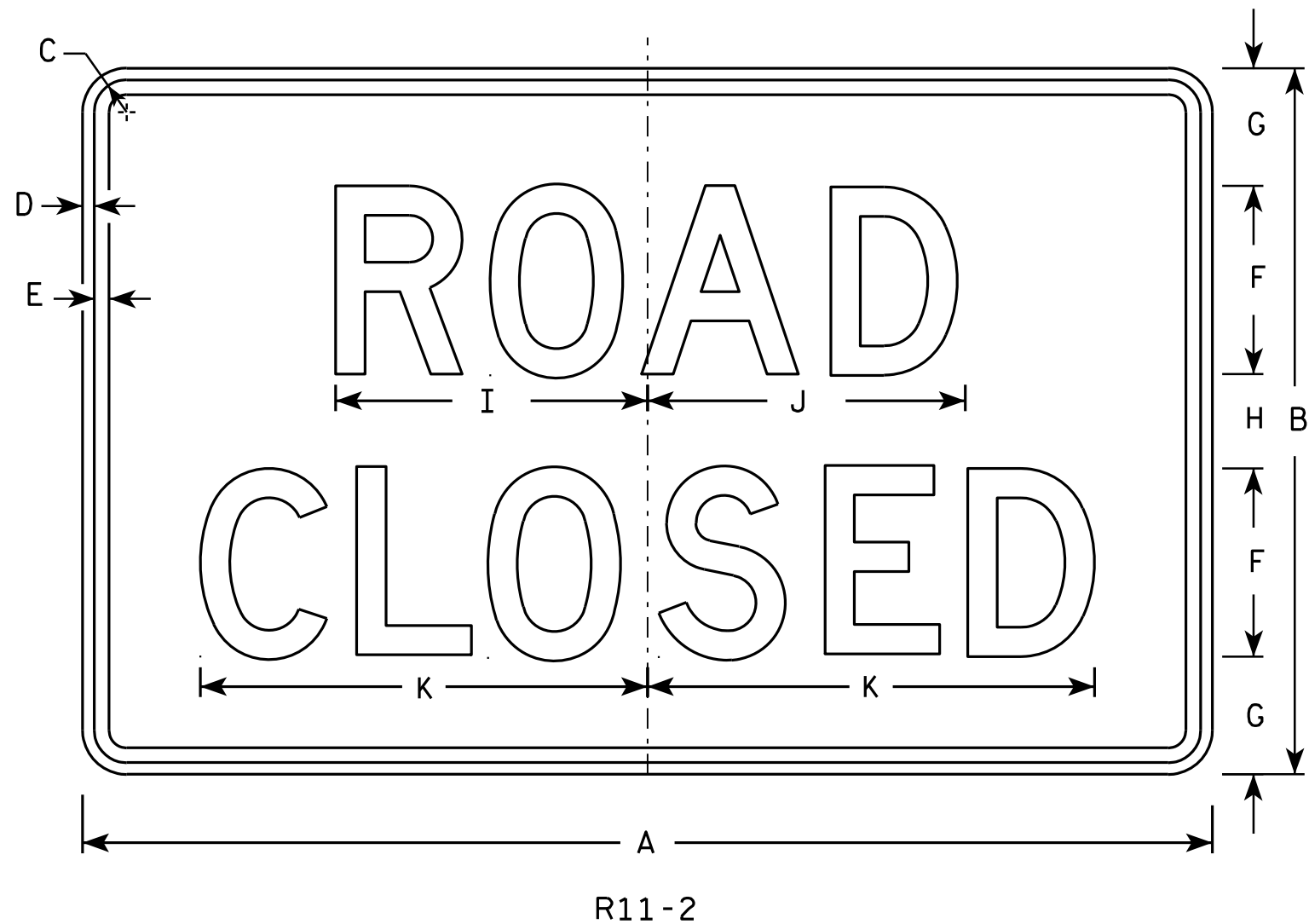
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S																											
2M																											
3																											
4	36		1 5⁄8	5⁄8	3⁄4	4	3	2	3 1⁄2	14 1⁄4	14 7⁄8	11	11 1⁄2	4 3⁄4	1 3⁄4	9		1 3⁄8	10	11	2 1⁄2	1 3⁄4	15 1⁄2	13	13 5⁄8		9.0
5	36		1 5⁄8	5⁄8	3⁄4	4	3	2	3 1⁄2	14 1⁄4	14 7⁄8	11	11 1⁄2	4 3⁄4	1 3⁄4	9		1 3⁄8	10	11	2 1⁄2	1 3⁄4	15 1⁄2	13	13 5⁄8		9.0

STANDARD SIGN
R5-57

WISCONSIN DEPT OF TRANSPORTATION

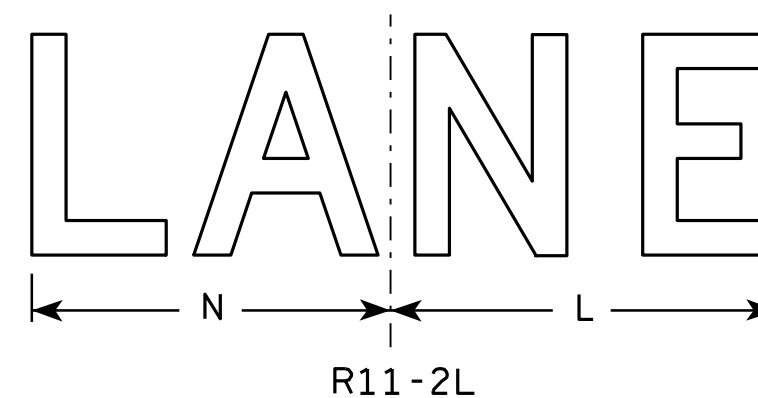
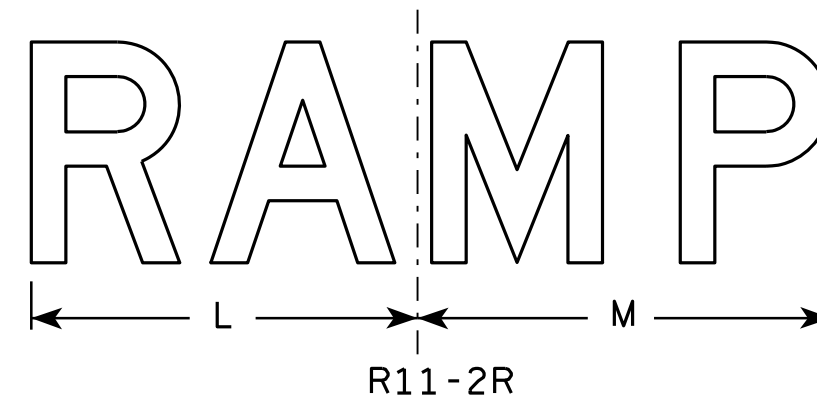
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-57.10



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
2M	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
3	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
4	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
5	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0

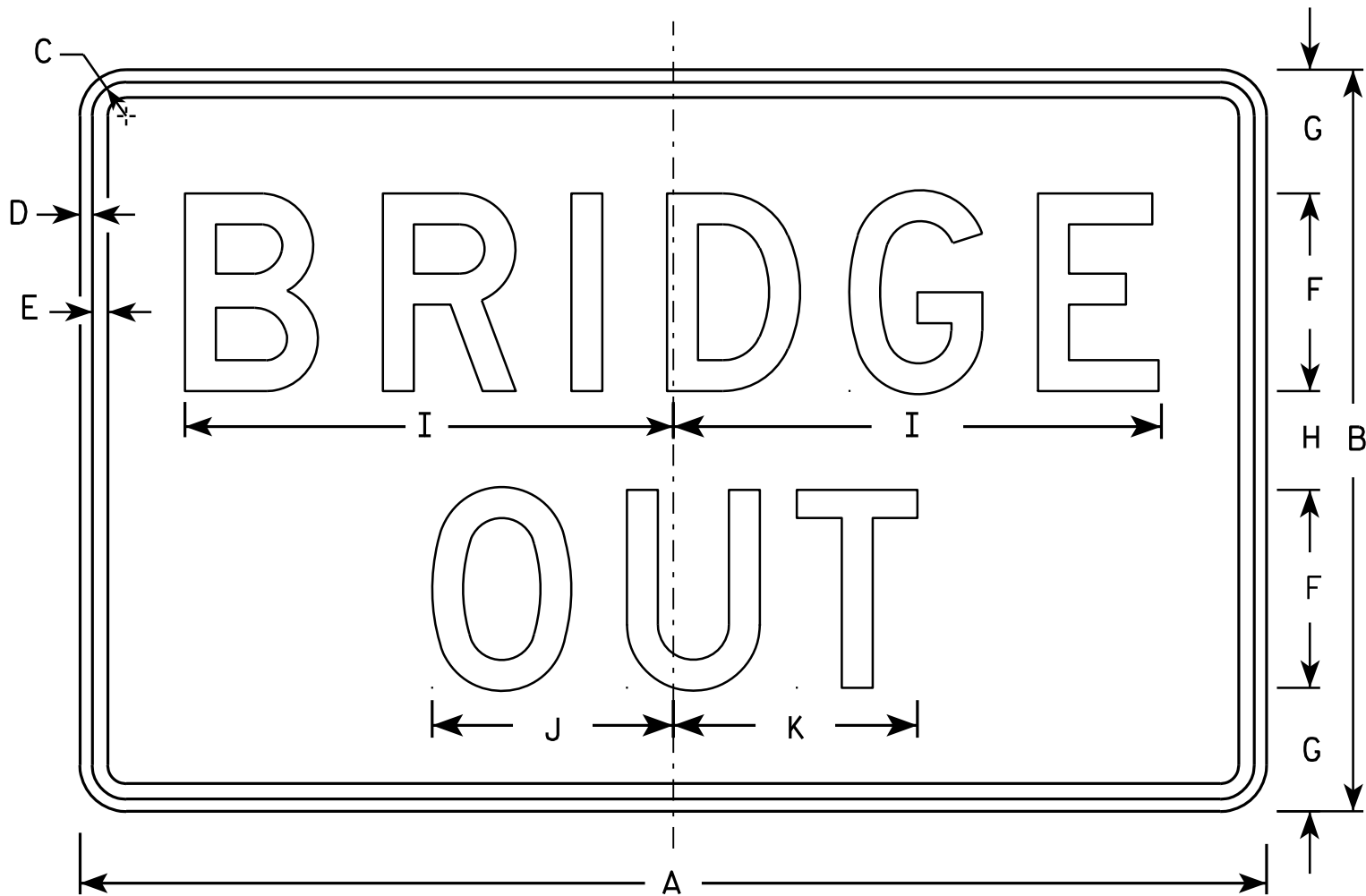
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO: HWY: COUNTY: SHEET NO: 546 E

NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
 - Background - White
 - Message - Black
- 3. Message Series - D
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R11-2B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0

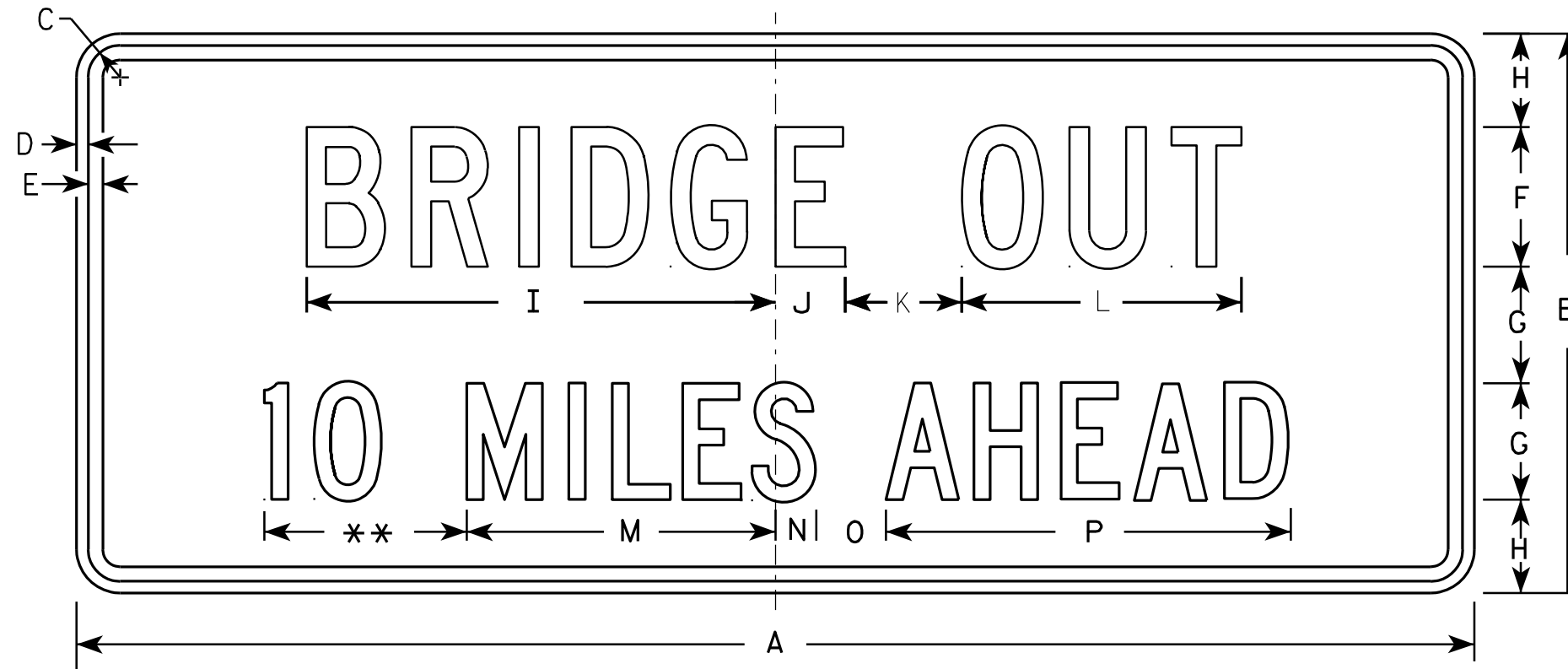
STANDARD SIGN

R11-2B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2B.2



R11-3C

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

** See Note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	15	1 3/8	1/2	5/8	4	3	2 1/2	13 1/4	2 1/4	3	8	8	1 1/2	2	10 3/4											3.75
2S	60	24	1 3/8	1/2	5/8	6	5	4	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8											10.0
2M	60	24	1 3/8	1/2	5/8	6	5	4	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8											10.0
3																											
4																											
5																											

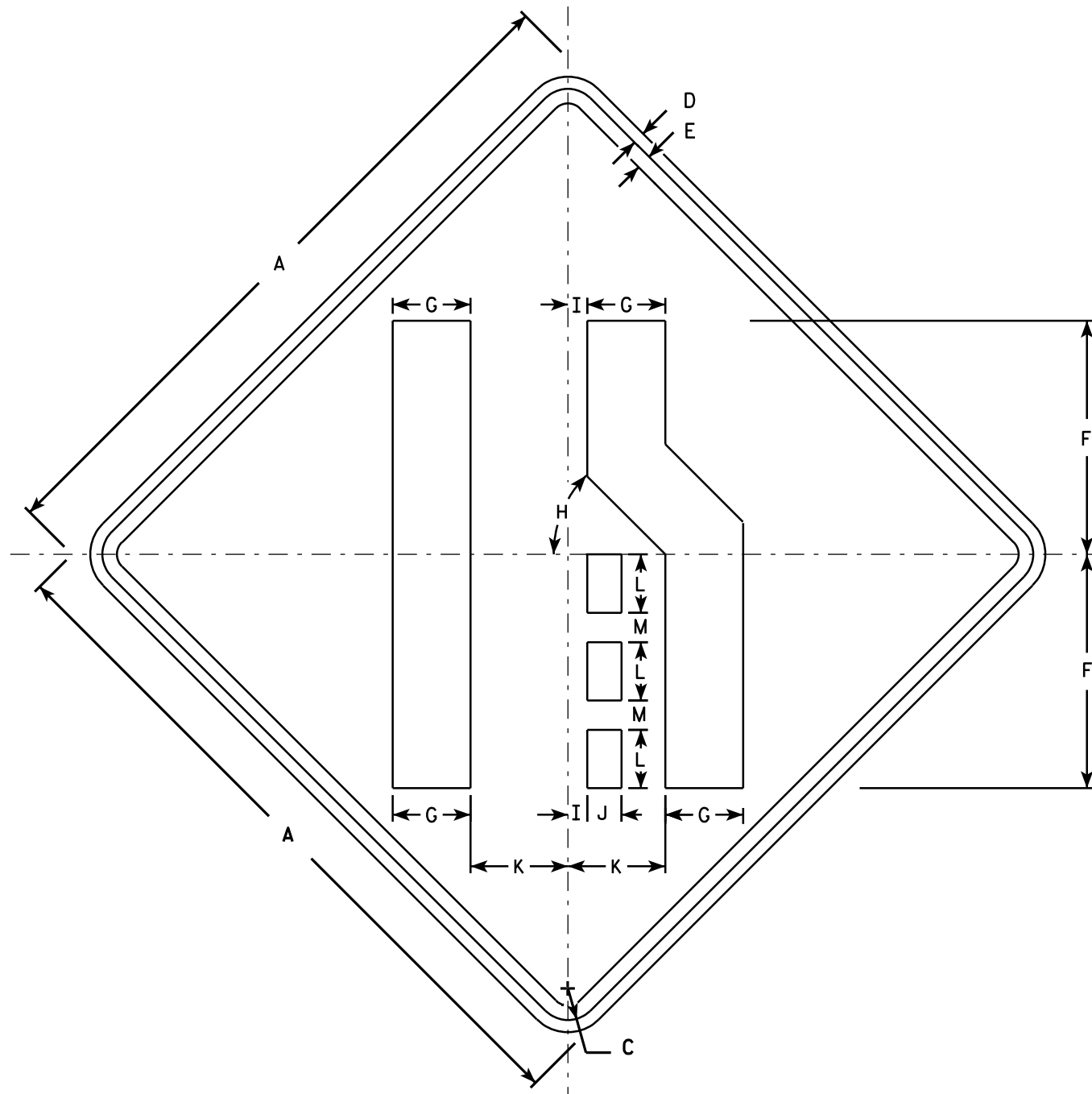
STANDARD SIGN
R11-3C

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-3C.2

PROJECT NO: SHEET NO: 548 E



W4-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-2L is the same as W4-2R except the symbols is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3⁄8	1⁄2	5⁄8	10	3 3⁄8	45°	7⁄8	1 1⁄2	4 1⁄4	2 1⁄2	1 1⁄4														6.25
2S	36		1 5⁄8	5⁄8	3⁄4	12	4	45°	1	1 3⁄4	5	3	1 1⁄2														9.0
2M	36		1 5⁄8	5⁄8	3⁄4	12	4	45°	1	1 3⁄4	5	3	1 1⁄2														9.0
3	36		1 5⁄8	5⁄8	3⁄4	12	4	45°	1	1 3⁄4	5	3	1 1⁄2														9.0
4	48		2 1⁄4	3⁄4	1	16	5 3⁄8	45°	1 1⁄4	2 3⁄8	6 3⁄4	4	2														16.0
5	48		2 1⁄4	3⁄4	1	16	5 3⁄8	45°	1 1⁄4	2 3⁄8	6 3⁄4	4	2														16.0

STANDARD SIGN W4-2

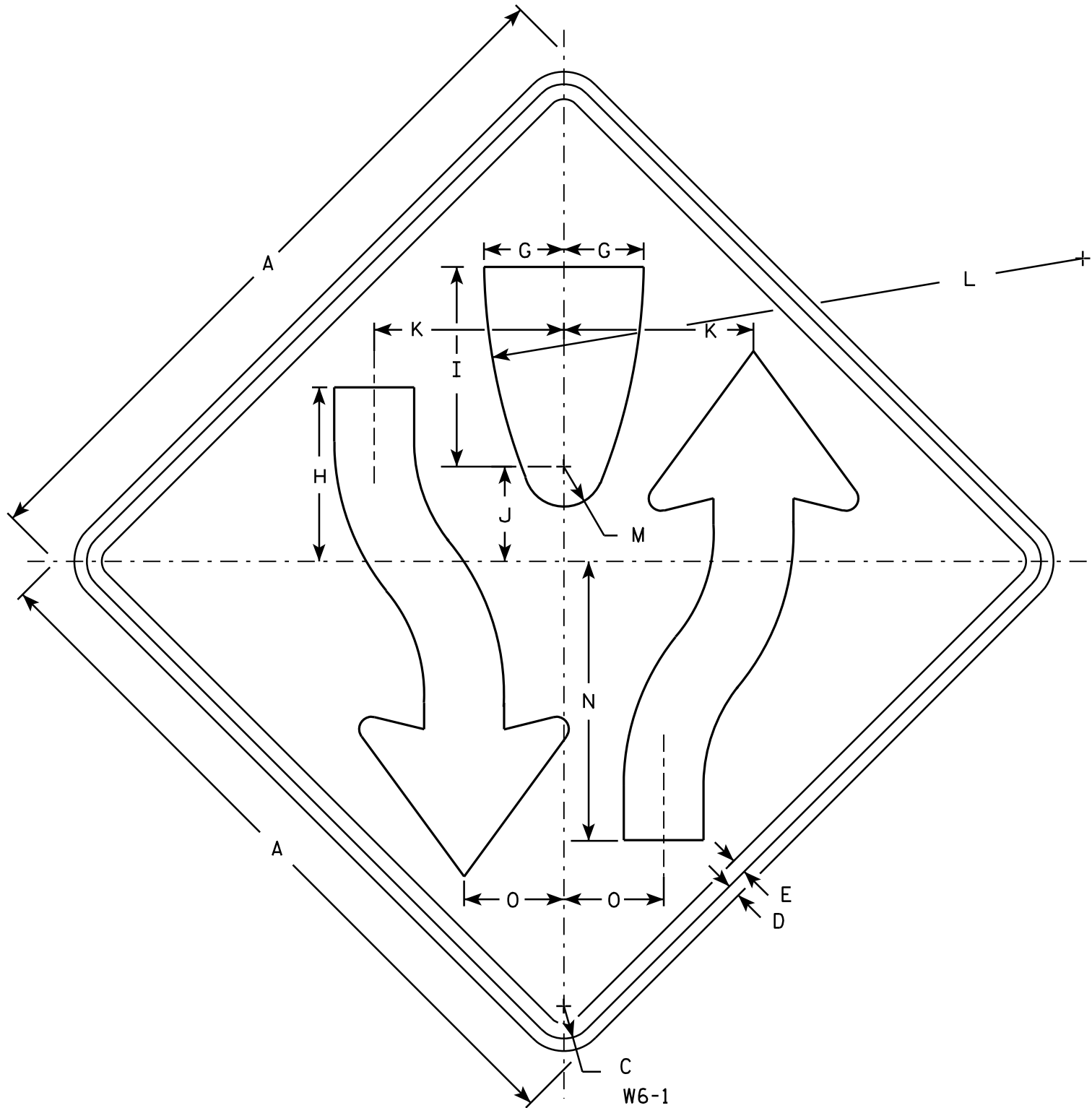
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/12/13 PLATE NO. W4-2.14

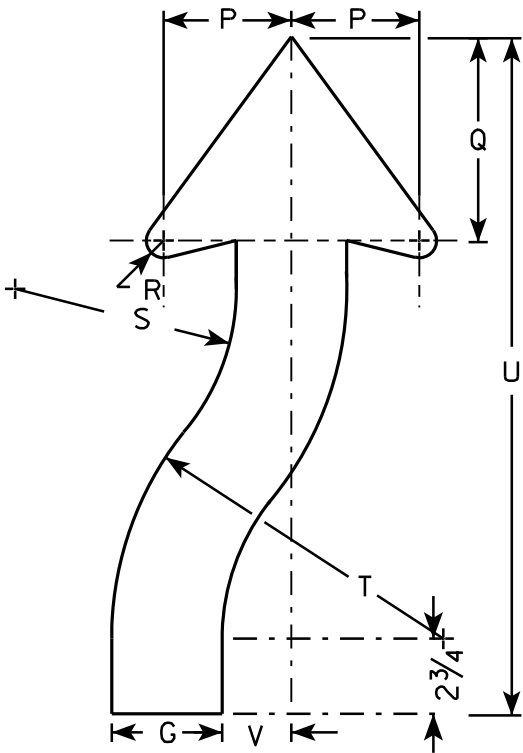
PROJECT NO:

SHEET NO: 549



NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Yellow
Message - Black
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. W6-2 same as W6-1 but is rotated 180° when mounted.



ARROW DETAIL

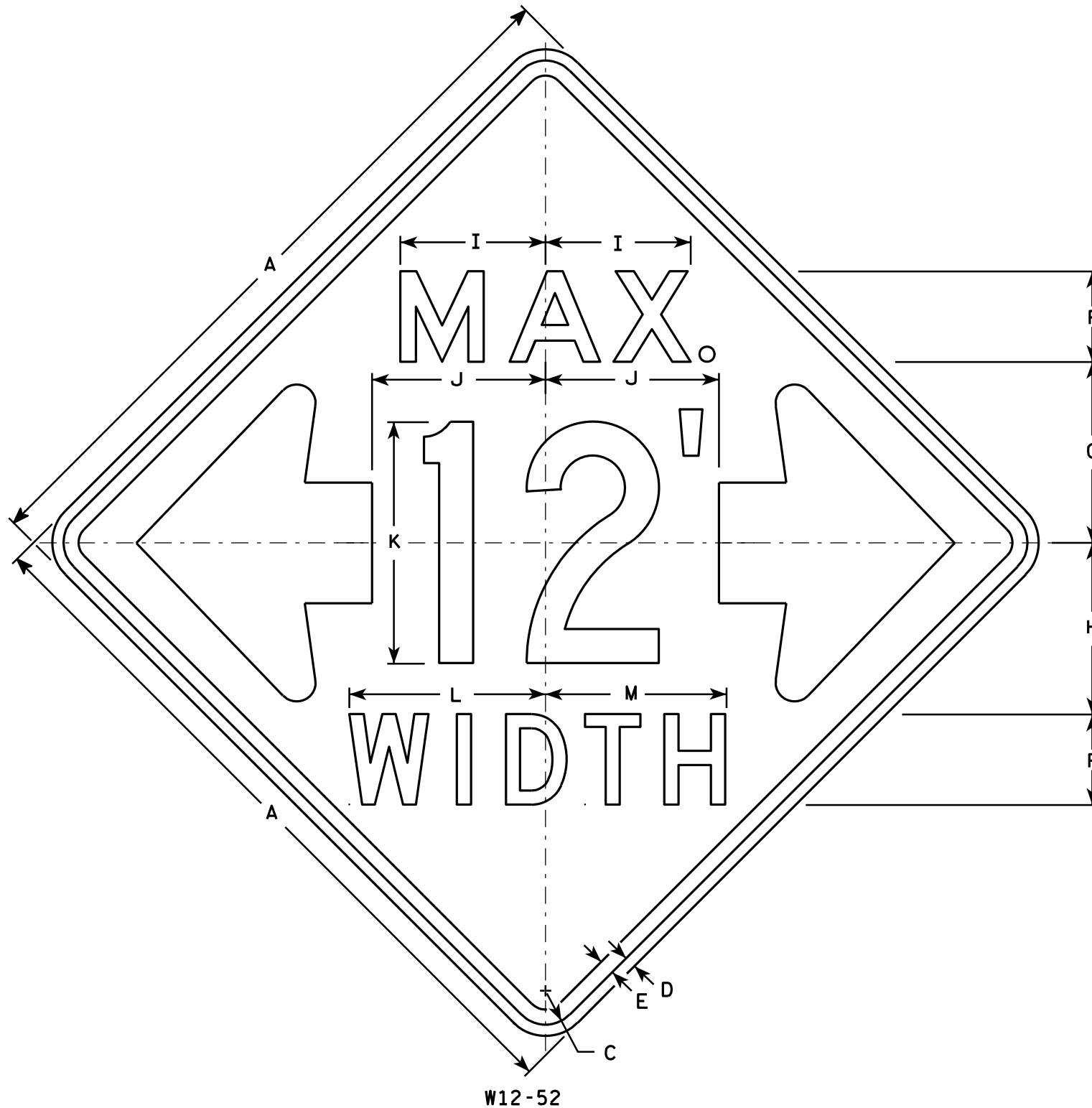
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3 1/4	8	8 1/4	4 1/8	7 7/8	25	1 3/4	11 5/8	4 1/8	3 7/8	6 3/4	5/8	6 5/8	9 7/8	21 5/8	2					6.25
2S	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2M	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
3																											
4	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

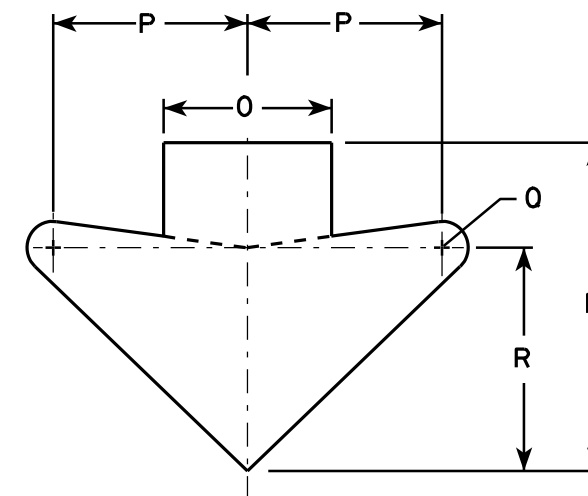
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-1.14



NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Orange
Message - Black
- Message Series - See note 5
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- The top line is series E, the numerals are series C, and the bottom line is series D.
- Substitute appropriate numerals and adjust spacing as required.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
2M	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
3																											
4																											
5																											

STANDARD SIGN W12-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-52.7

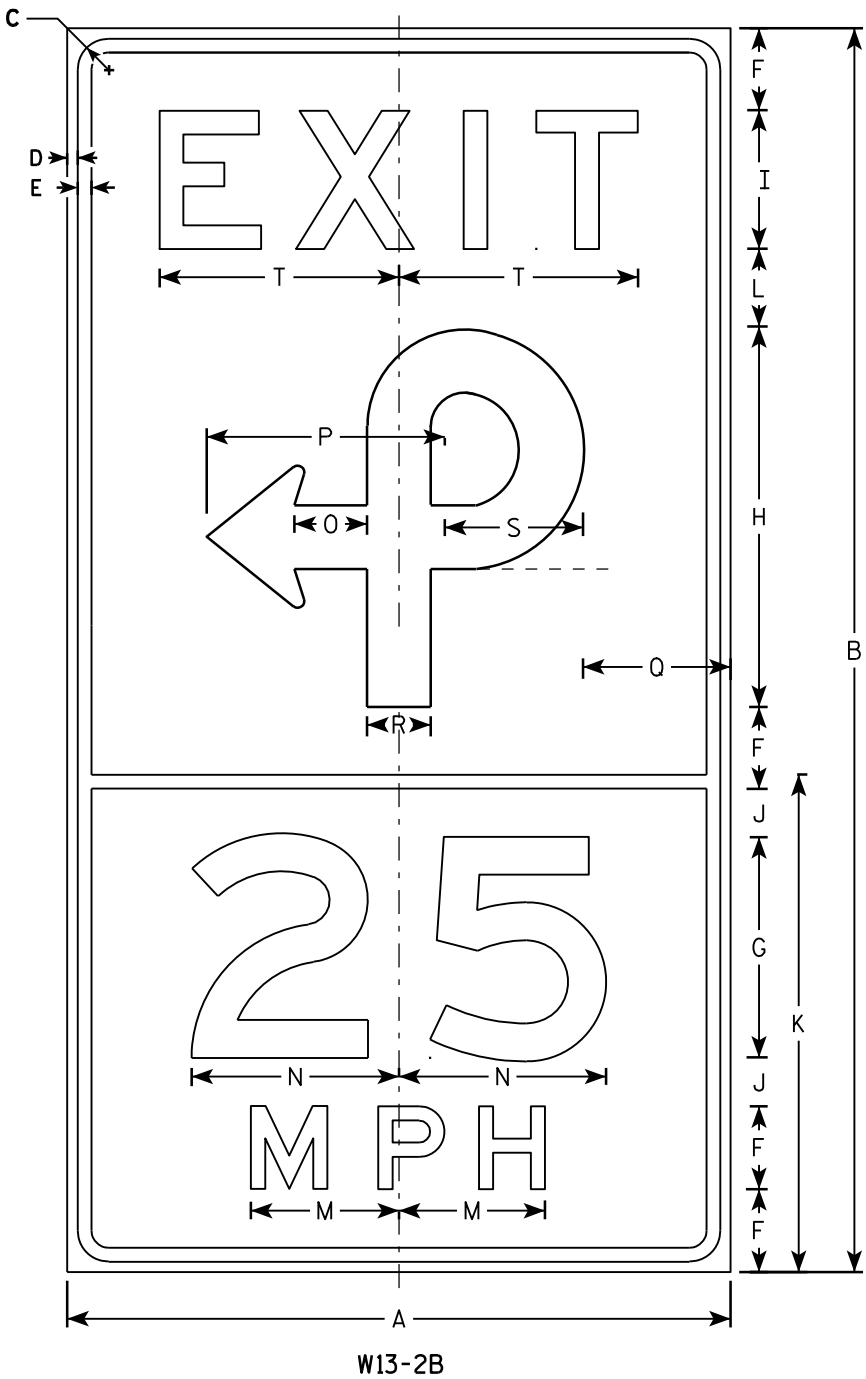
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 551

E



NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
 - Background - Yellow
 - Message - Black
- 3. Message Series - E
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	90	2 1/4	3/4	1	6	16	27 1/2	10	3 1/2	36	5 1/2	10 3/4	15	5 1/4	17 1/4	10 3/4	4 5/8	10	17 3/8							30
2M	48	90	2 1/4	3/4	1	6	16	27 1/2	10	3 1/2	36	5 1/2	10 3/4	15	5 1/4	17 1/4	10 3/4	4 5/8	10	17 3/8							30
3																											
4																											
5																											

STANDARD SIGN
W13-2B

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 5/31/12 PLATE NO. W13-2B.3

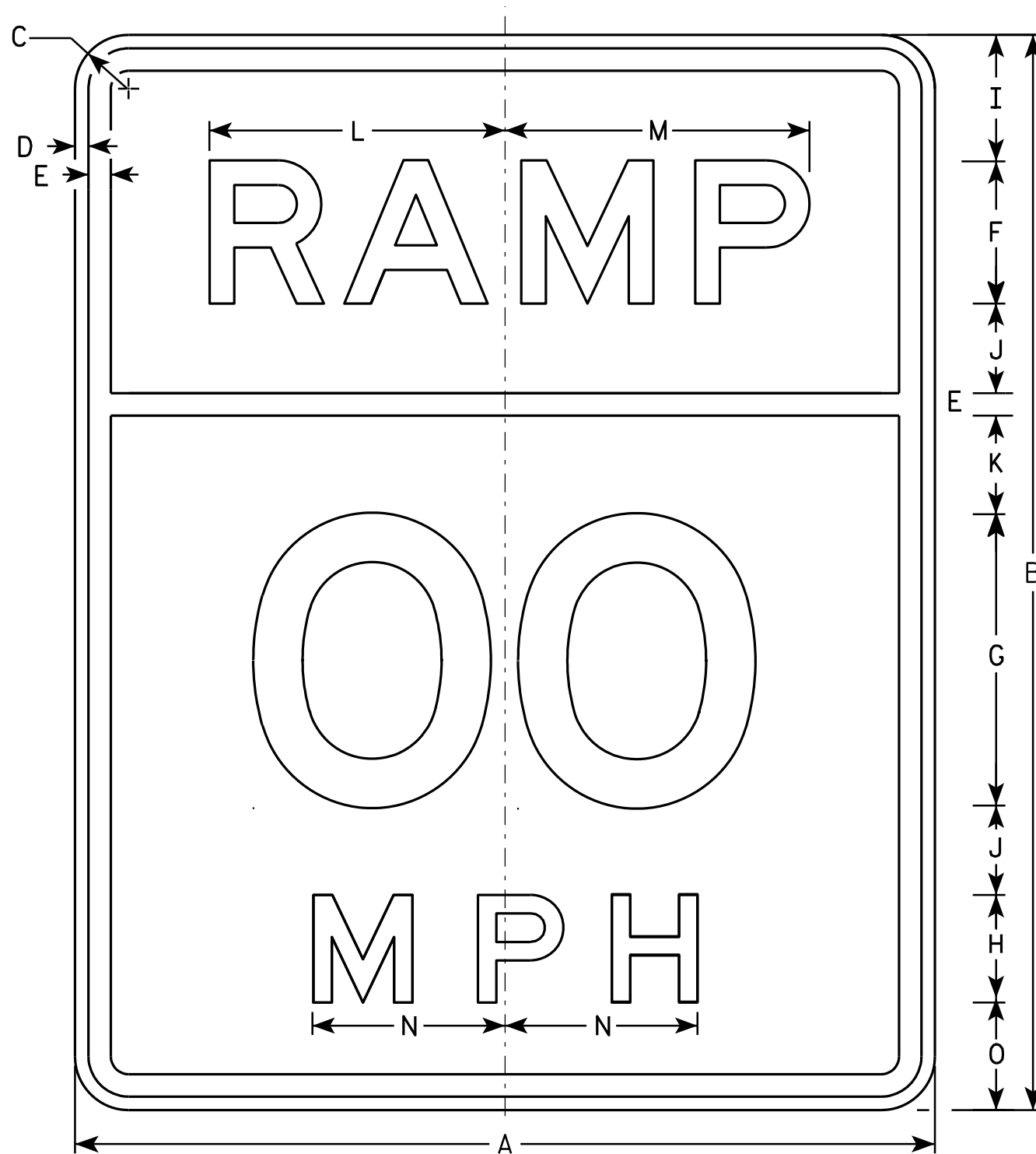
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 552

E



W13-3

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	30	1 1/8	3/8	5/8	4	8	3	3 1/2	2 1/2	2 7/8	8 1/4	8 1/2	5 3/8	3												5.0
2S	24	30	1 1/8	3/8	5/8	4	8	3	3 1/2	2 1/2	2 7/8	8 1/4	8 1/2	5 3/8	3												5.0
2M	24	30	1 1/8	3/8	5/8	4	8	3	3 1/2	2 1/2	2 7/8	8 1/4	8 1/2	5 3/8	3												5.0
3																											
4	36	48	1 5/8	5/8	7/8	6	12	4	6	4 1/8	5 1/8	13 1/2	13 5/8	7 1/8	6												12.0
5	48	60	2 1/4	3/4	1 1/4	8	16	6	7	5	5 3/4	16 1/2	17	10 5/8	6												20.0

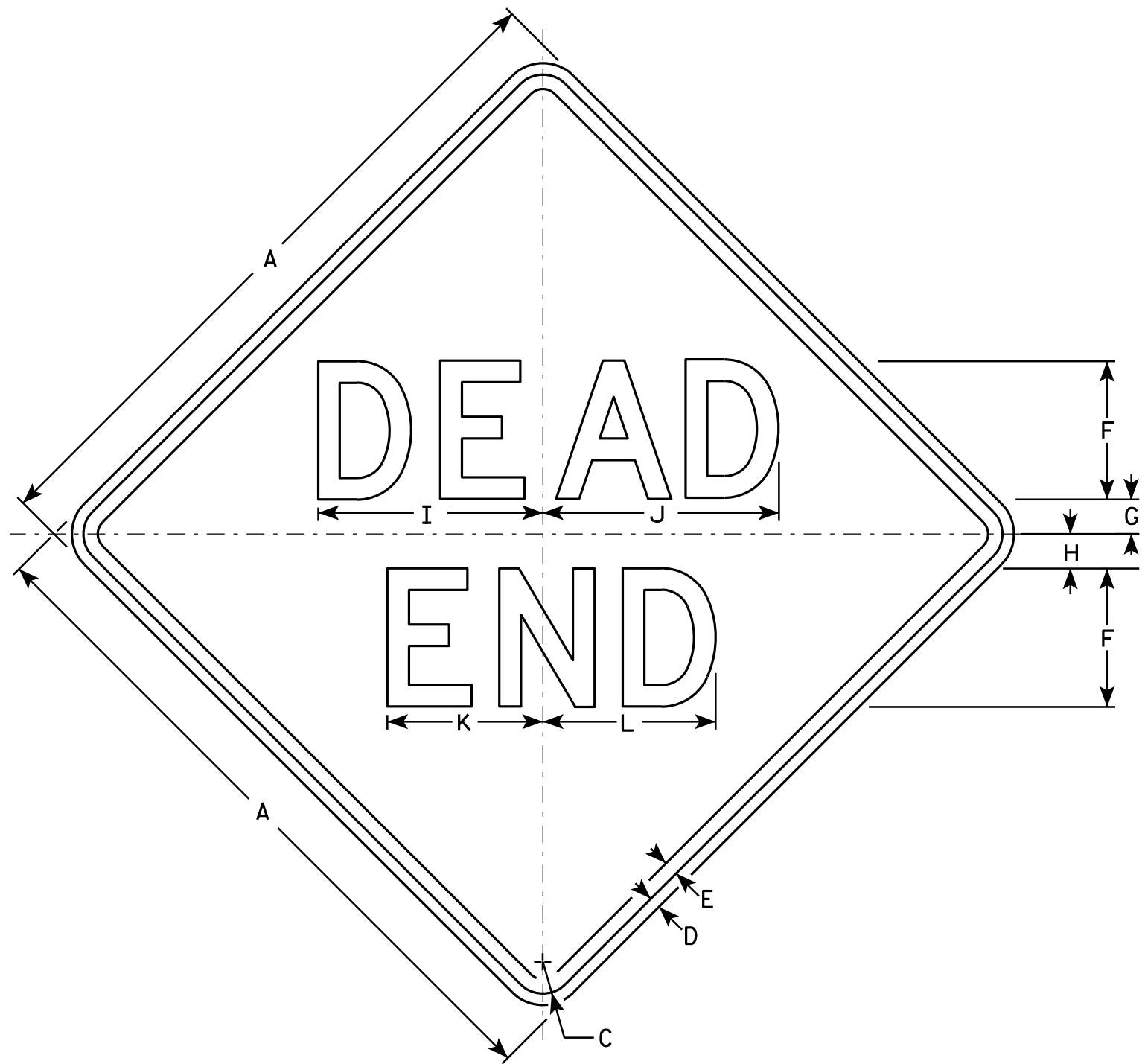
STANDARD SIGN
W13-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/13/13 PLATE NO. W13-3.9

PROJECT NO: HWY: COUNTY: SHEET NO: 553 E



W14-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

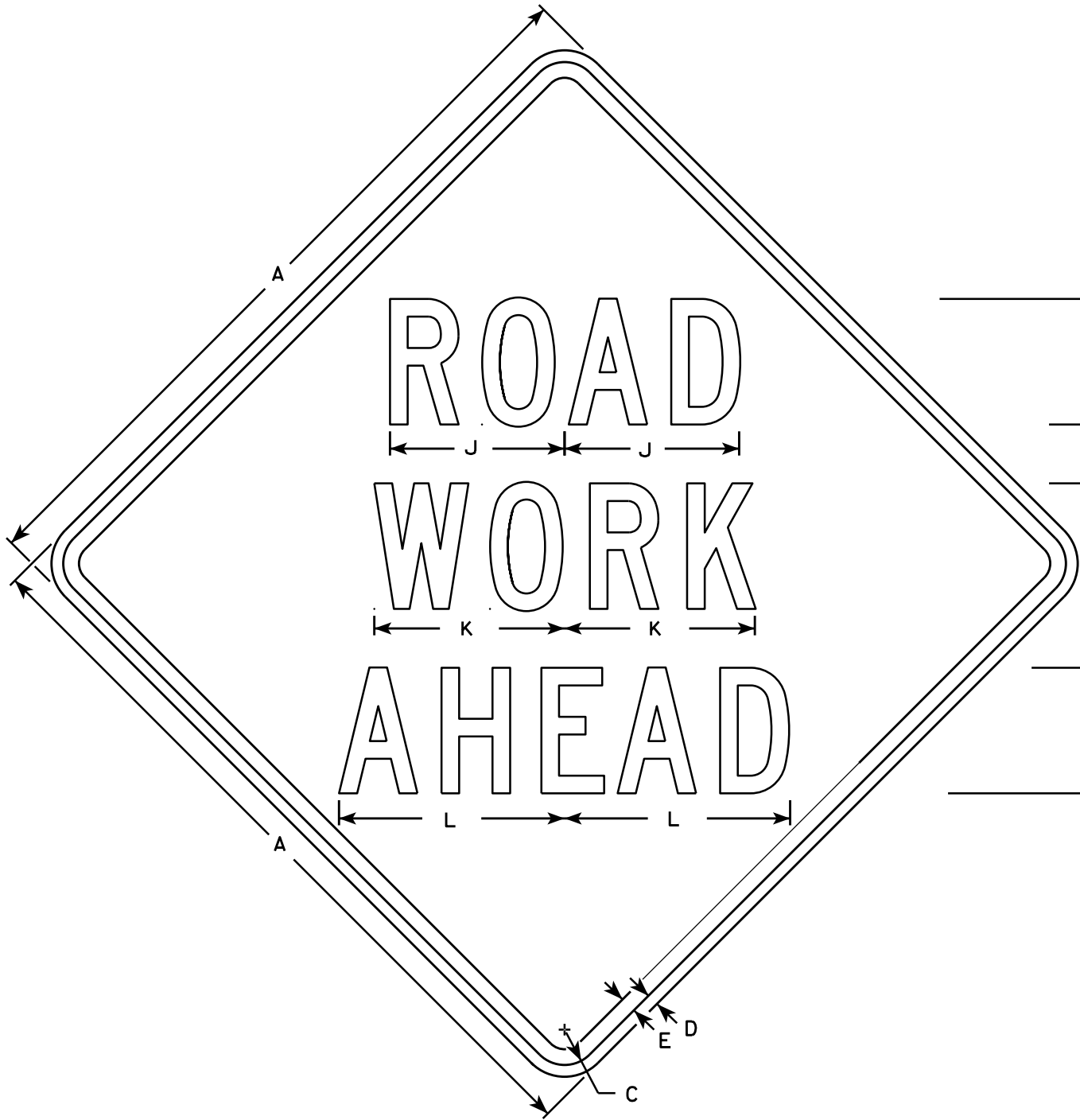
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area, sq. ft.
1	24		1 1/8	3/8	1/2	5	1	2	8 1/4	8 5/8	5 5/8	6 1/4															4.0
2S	30		1 3/8	1/2	5/8	6	1 1/2	2 1/2	9 3/4	10 1/4	6 3/4	7 1/2															6.25
2M	30		1 3/8	1/2	5/8	6	1 1/2	2 1/2	9 3/4	10 1/4	6 3/4	7 1/2															6.25
3	36		1 5/8	5/8	3/4	7	2	3	11 3/8	12	7 7/8	8 3/4															9.0
4																											
5																											

STANDARD SIGN W14-1

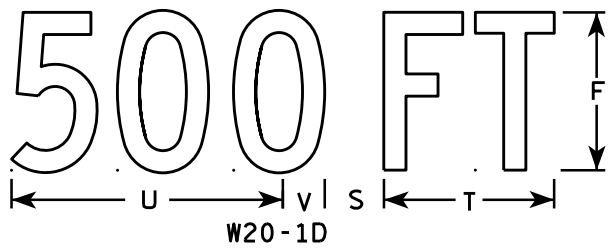
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch
for State Traffic Engineer
DATE 3/13/13 PLATE NO. W14-1.7

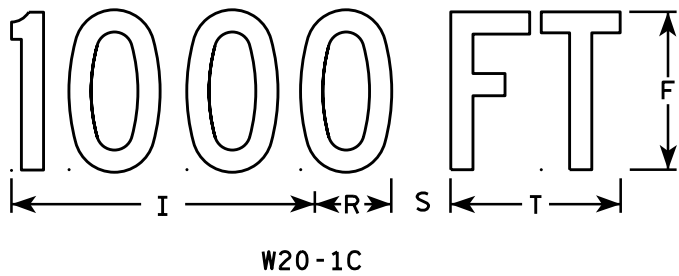
PROJECT NO: HWY: COUNTY: SHEET NO: 554 E



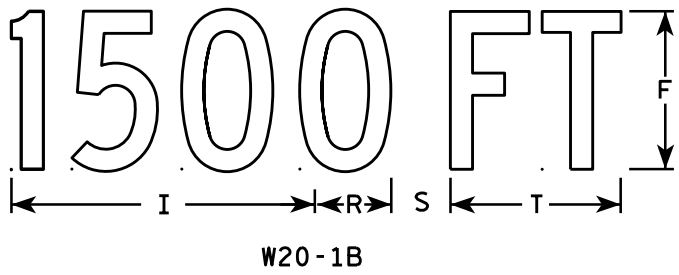
W20-1A



W20-1D



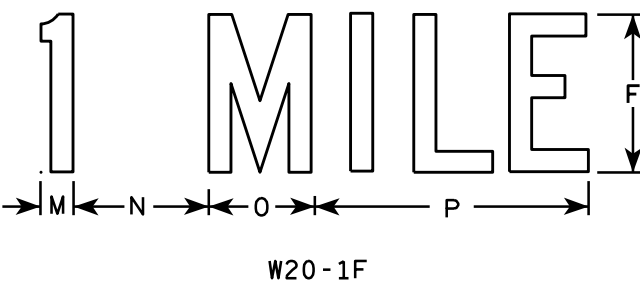
W20-1C



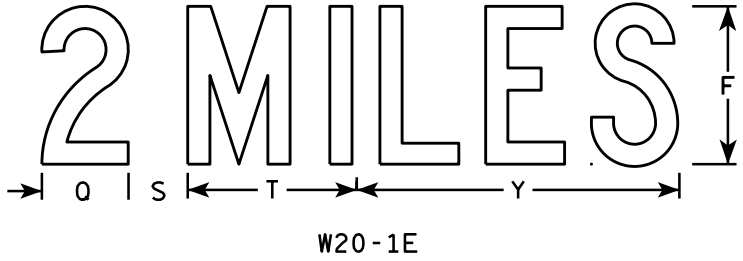
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

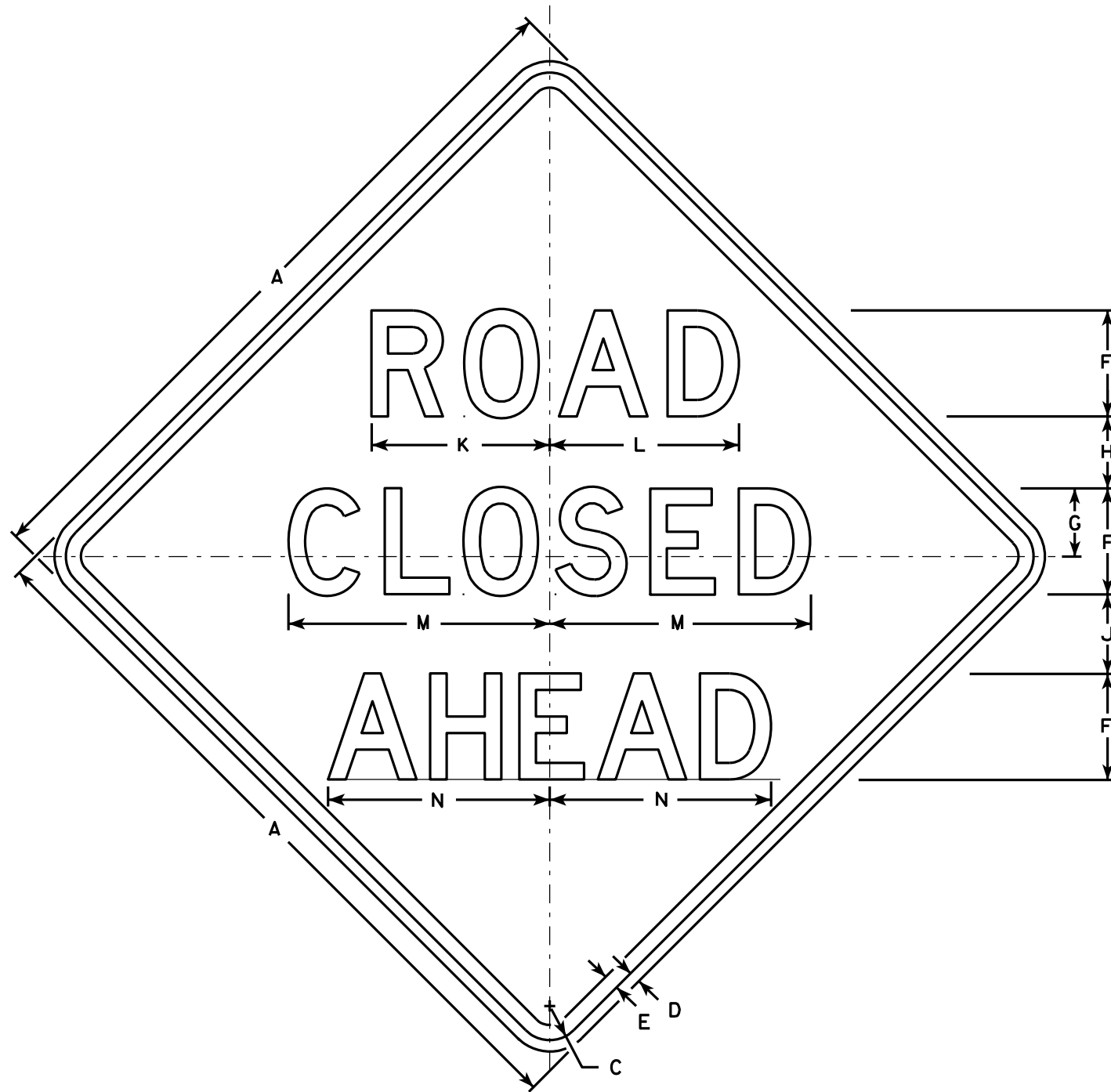
APPROVED

State Traffic Engineer

DATE 5/07/15

PLATE NO. W20-1.10

555



W20-3A

500 FT

W20-3D

1000 FT

W20-3C

1500 FT

W20-3B

1/2 MILE

W20-3G

1 MILE

W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 556

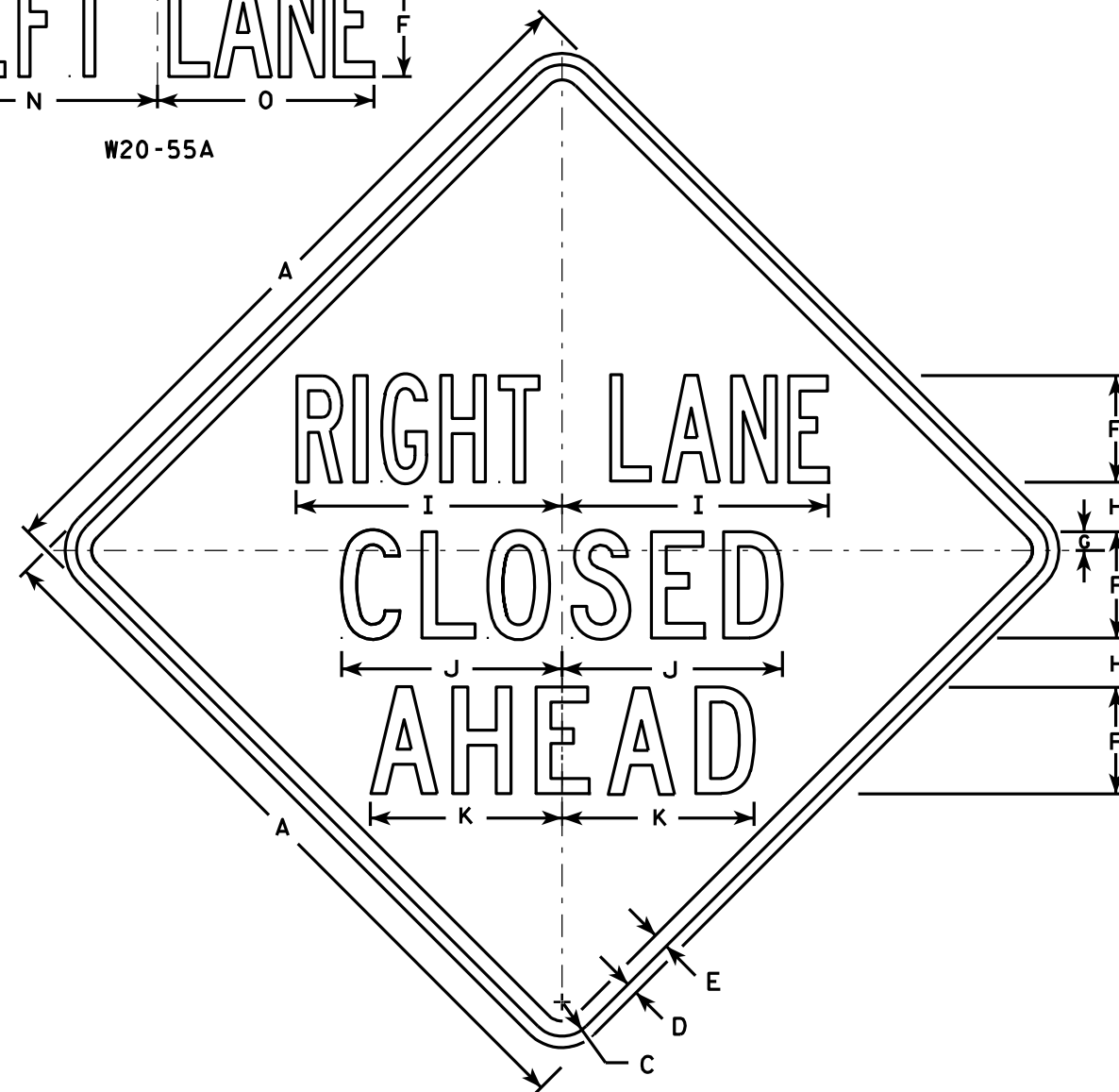
E

CENTER LANE

W20-56A

LEFT LANE

W20-55A



W20-5A

500 FT

W20-5D

1000 FT

W20-5C

1500 FT

W20-5B

1/2 MILE

W20-5G

1 MILE

W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. "----- LANE" is Series B.
All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	7/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

PROJECT NO:

HWY:

COUNTY:

STANDARD SIGN
W20-5A, B, C, D, F & G

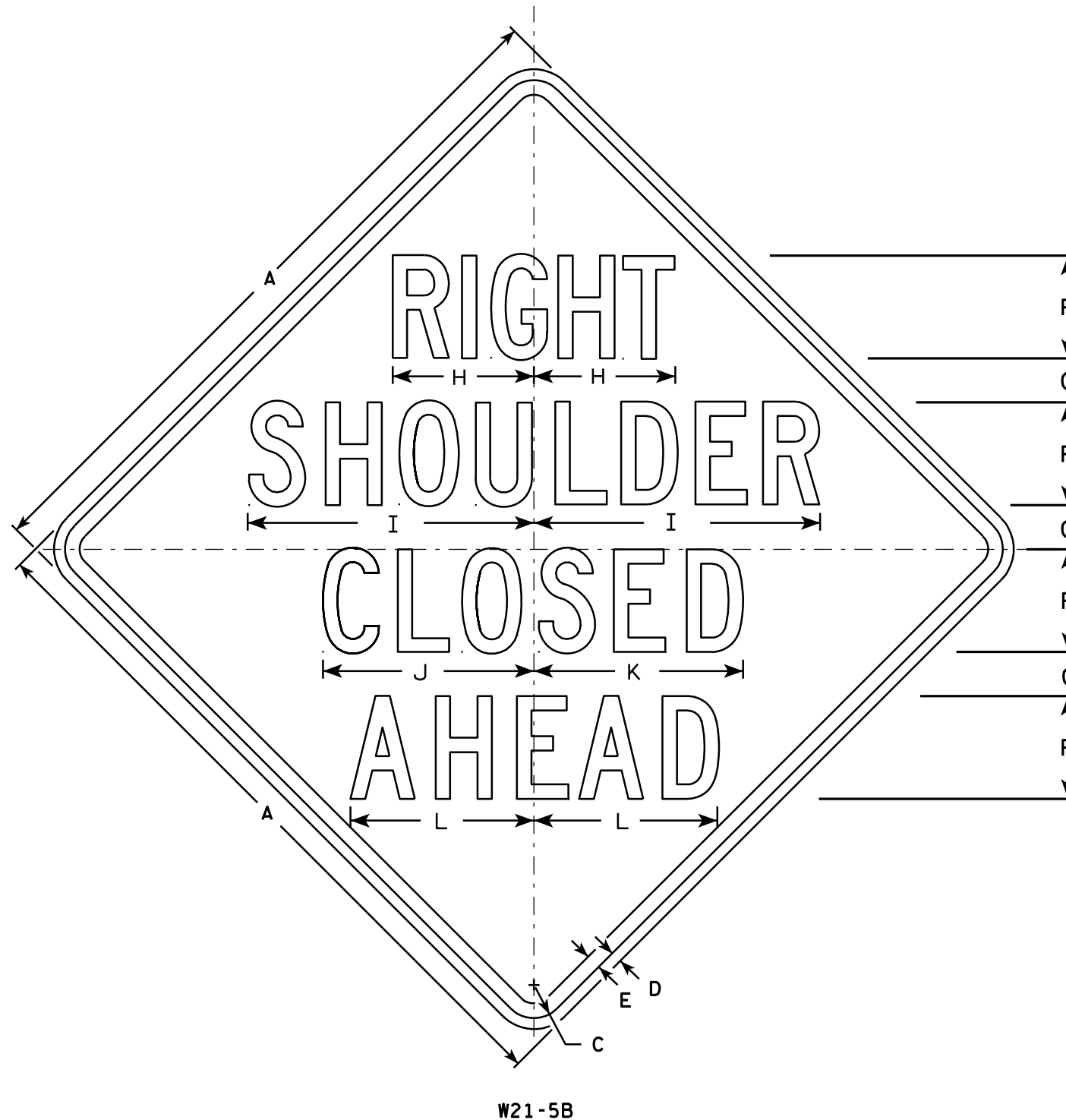
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

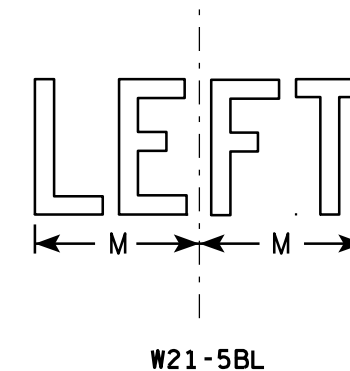
SHEET NO: 557

E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

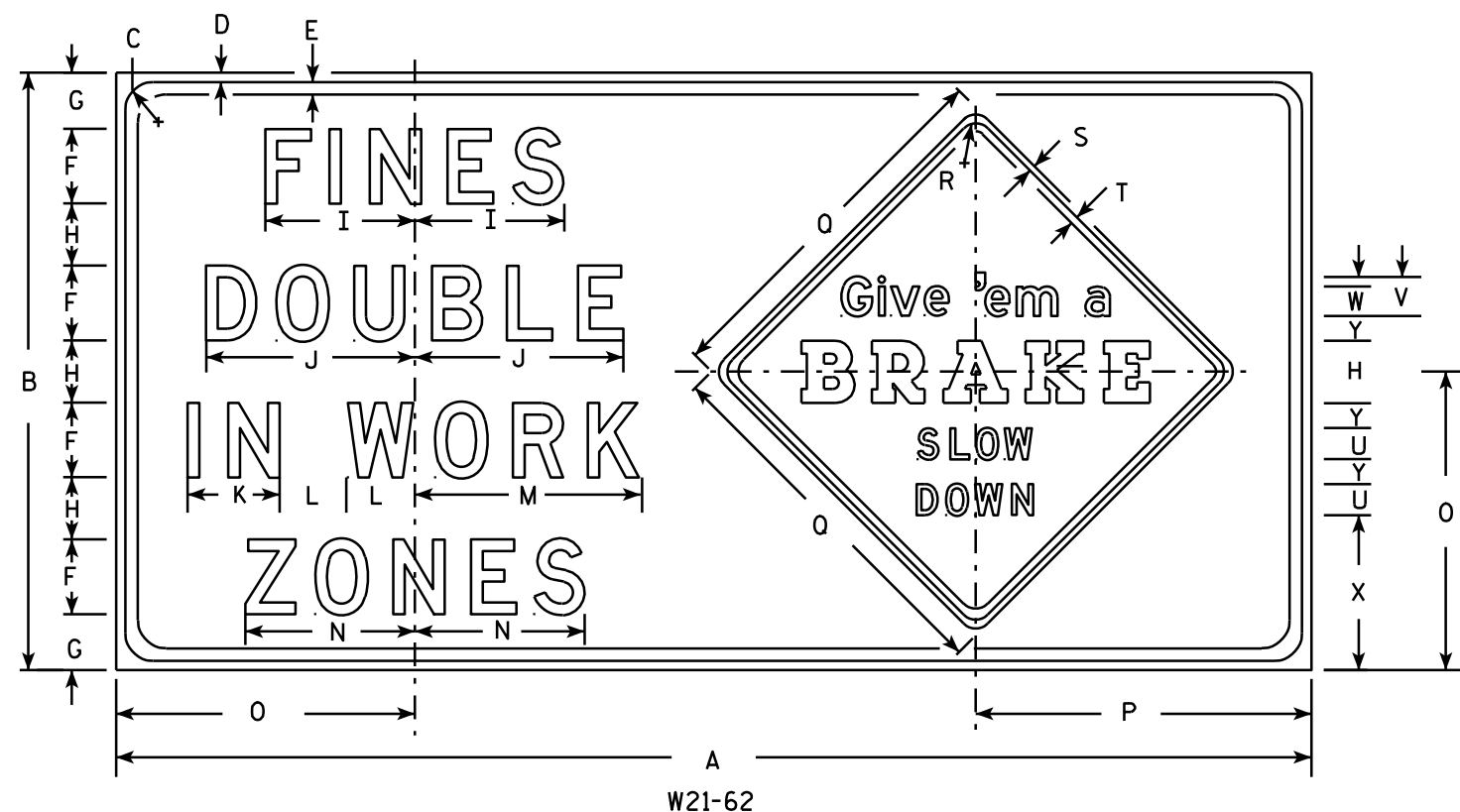


SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	2 1/4	7 3/8	14 1/4	10 1/4	10 1/8	8 7/8	6 1/4														9.0
2S	48		2 1/4	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
2M	48		2 1/4	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
3	48		2 1/4	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
4	48		2 1/4	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
5	48		2 1/4	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0

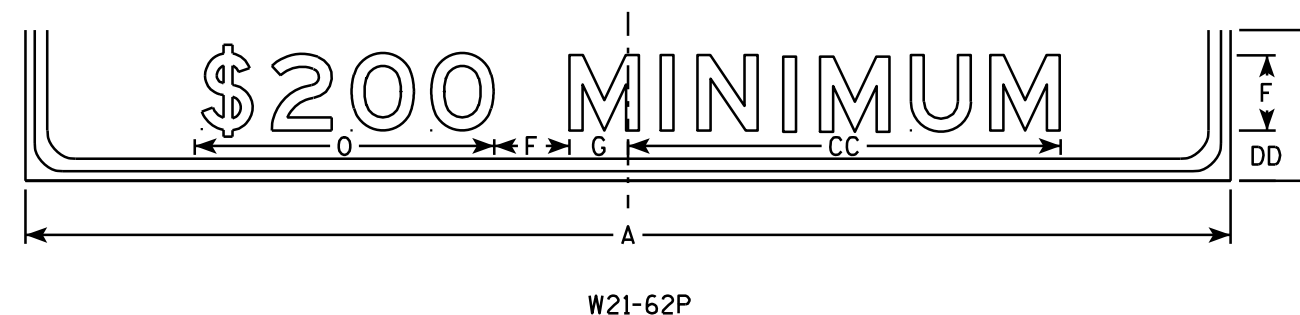
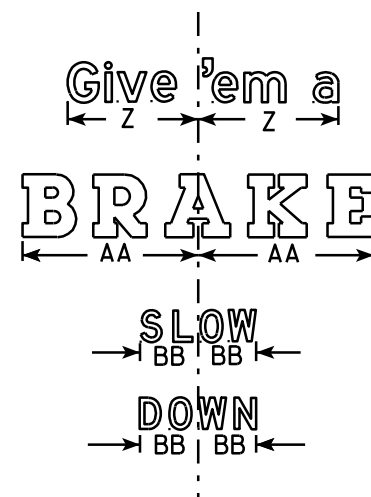
STANDARD SIGN
W21-5B

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 3/21/11 PLATE NO. W21-5B.3

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 558	E
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- NOTES
- Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
 - Color:
Background - White - (See Note 5)
Message - Black
 - Message Series -
Fines Double Message - All lines are Series D
Give 'em a Brake -
Line one is Series E, line two is a Special Graphic Series and lines three and four are Series D.
 - The base material shall be plywood. Corners may be square or rounded, but borders shall be rounded as shown. The base material for Give 'em a Brake sign can be a separate sheet of aluminum with the corners and borders rounded as shown. This separate panel shall then be attached to the plywood with aluminum or stainless steel sheet metal screws.
 - Background for the Give 'em a Brake sign shall be Type F reflective orange.

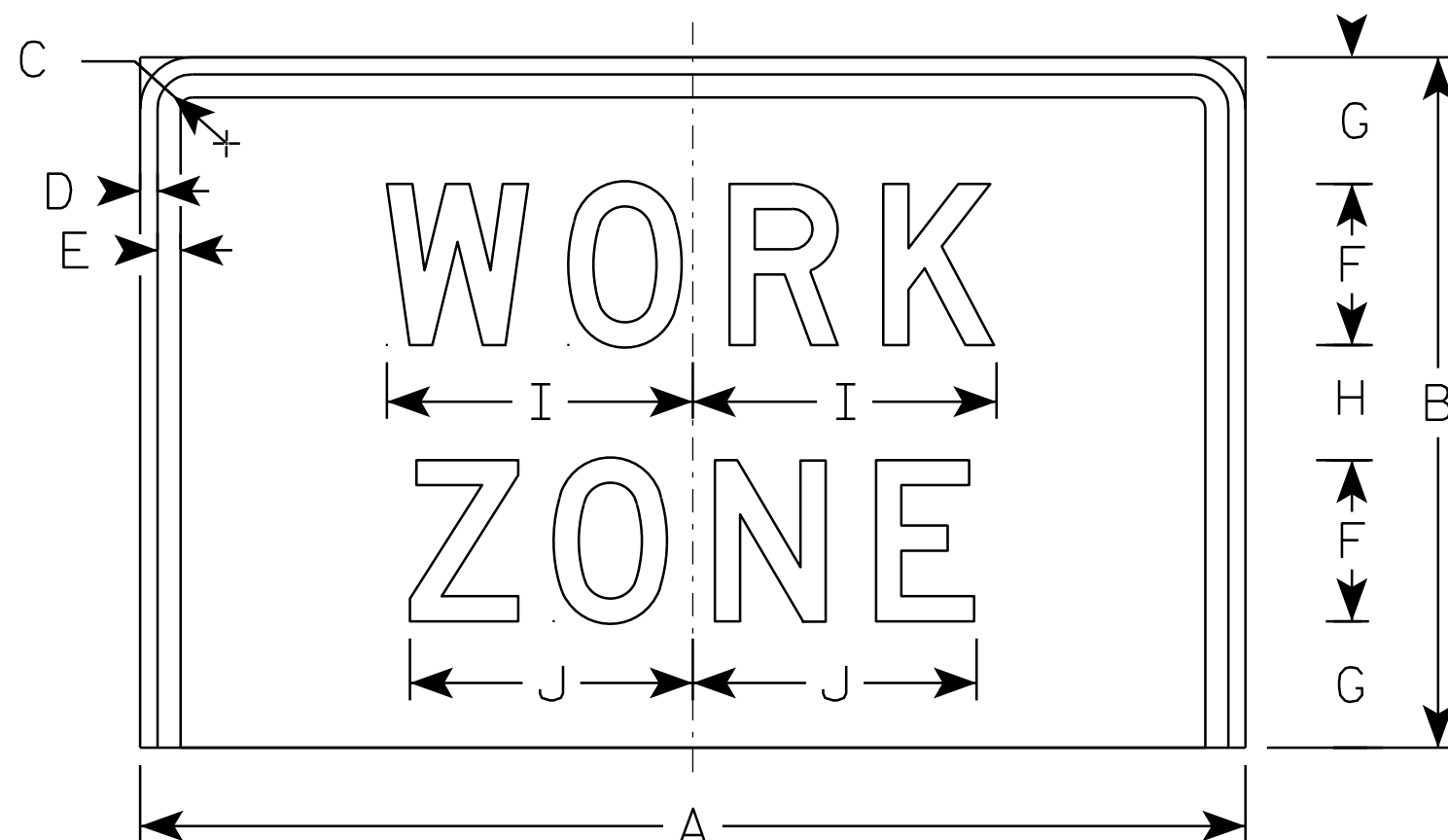


SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	Area sq. ft.
1																															
2S																															
2M																															
3	96	48	2 1/4	3/4	1	6	4 1/2	5	12	16 3/4	7 3/8	5 1/2	18 1/4	13 5/8	24	27	30	1 3/8	1/2	5/8	2 1/2	3 1/8	2 3/8	12 1/2	2	10 3/4	14	4 5/8	34 1/2	4	32.0
4																															
5																															

STANDARD SIGN W21-62	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED <i>Matthew R. Rauch</i> For State Traffic Engineer	DATE <u>3/21/11</u> PLATE NO. <u>W21-62.5</u>

NOTES

1. Sign is Type II - Type F - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - D



W21-620

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	2 1/4	3/4	1	7	5 1/2	5	13 1/4	12 1/4																	10.0
2M	48	30	2 1/4	3/4	1	7	5 1/2	5	13 1/4	12 1/4																	10.0
3																											
4																											
5																											

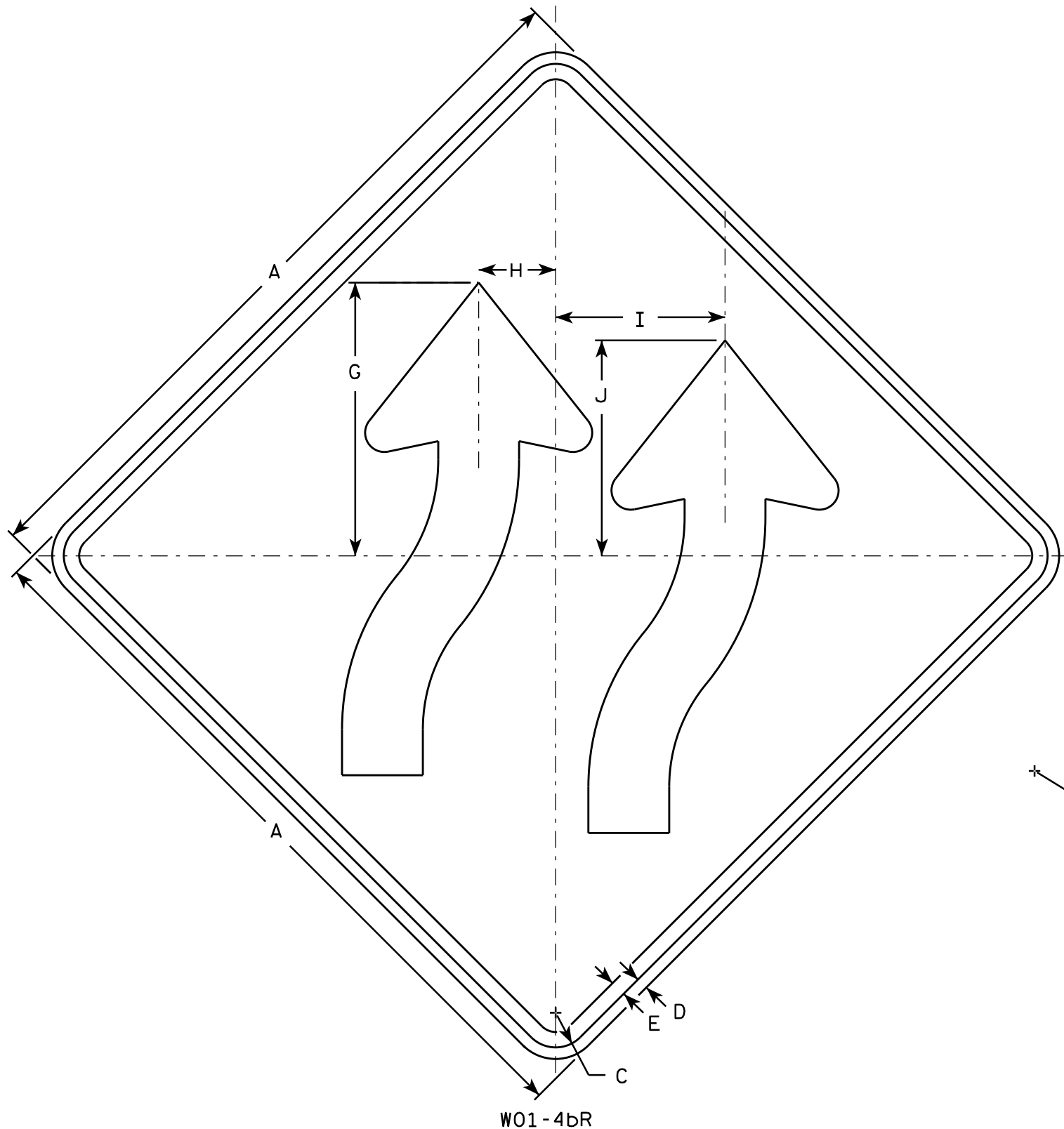
STANDARD SIGN
W21-620

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

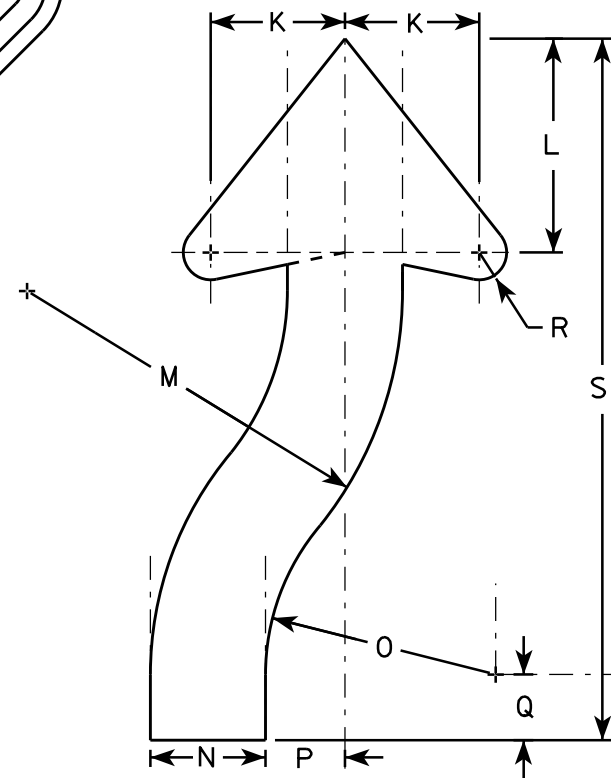
DATE 3/21/11 PLATE NO. W21-620.2

PROJECT NO: HWY: COUNTY: SHEET NO: 560 E



W01-4bR

- NOTES**
1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
 2. Color:
Background - Orange
Message - Black
 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
 4. W01-4bL is the same as W014-bR exept arrows are reversed along the vertical centerline



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4		13 3/8	3 3/4	8 1/4	10 1/2	4 5/8	7 3/8	12 7/8	3 7/8	7 7/8	2 3/4	2 1/4	7/8	24								9.0
2S	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
2M	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
3	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
4	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
5	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0

STANDARD SIGN

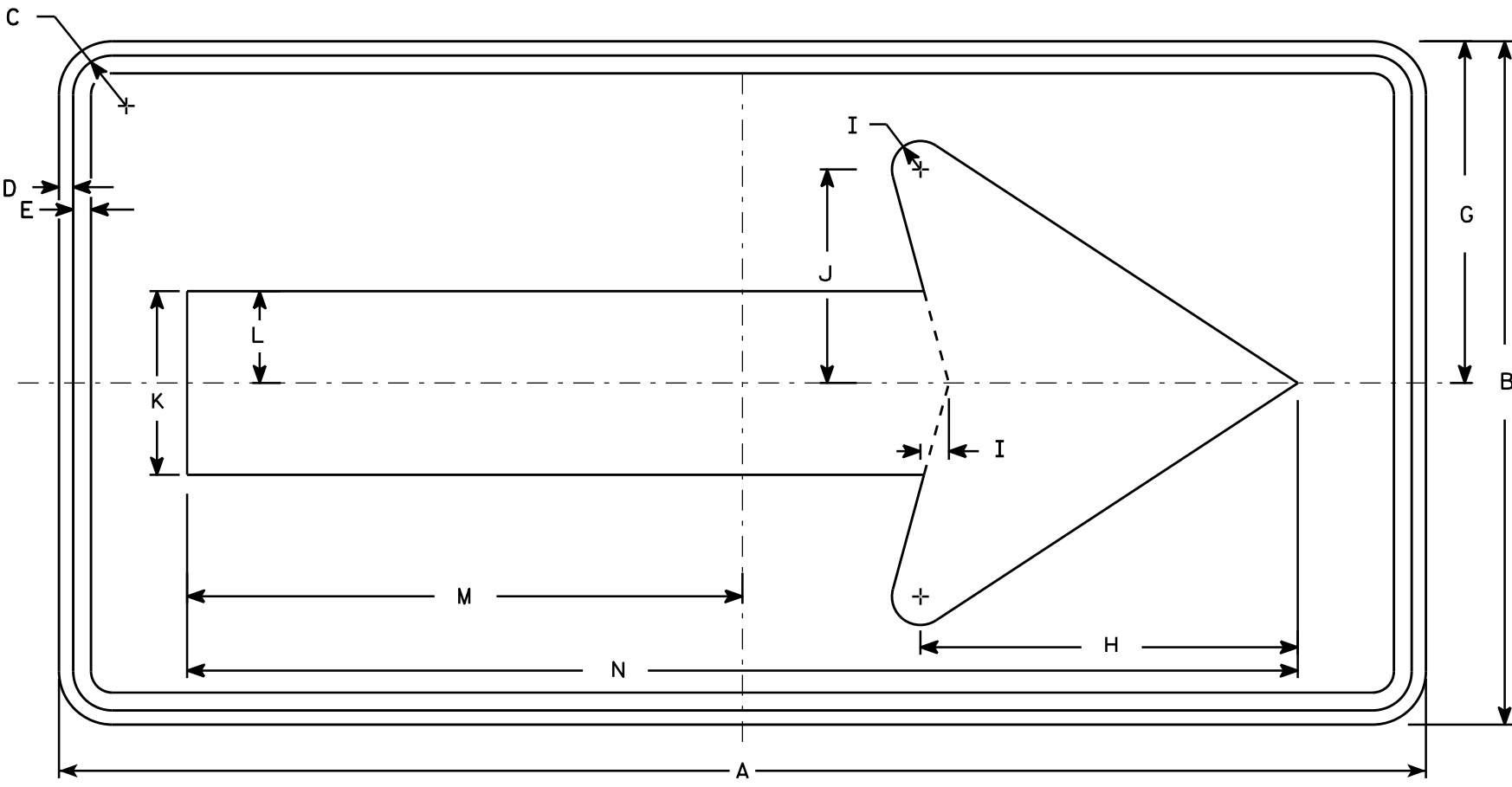
W01-4b

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/18/13 PLATE 561 W01-4b.1

SHEET NO: E



W01-6

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Orange
Message - Black
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

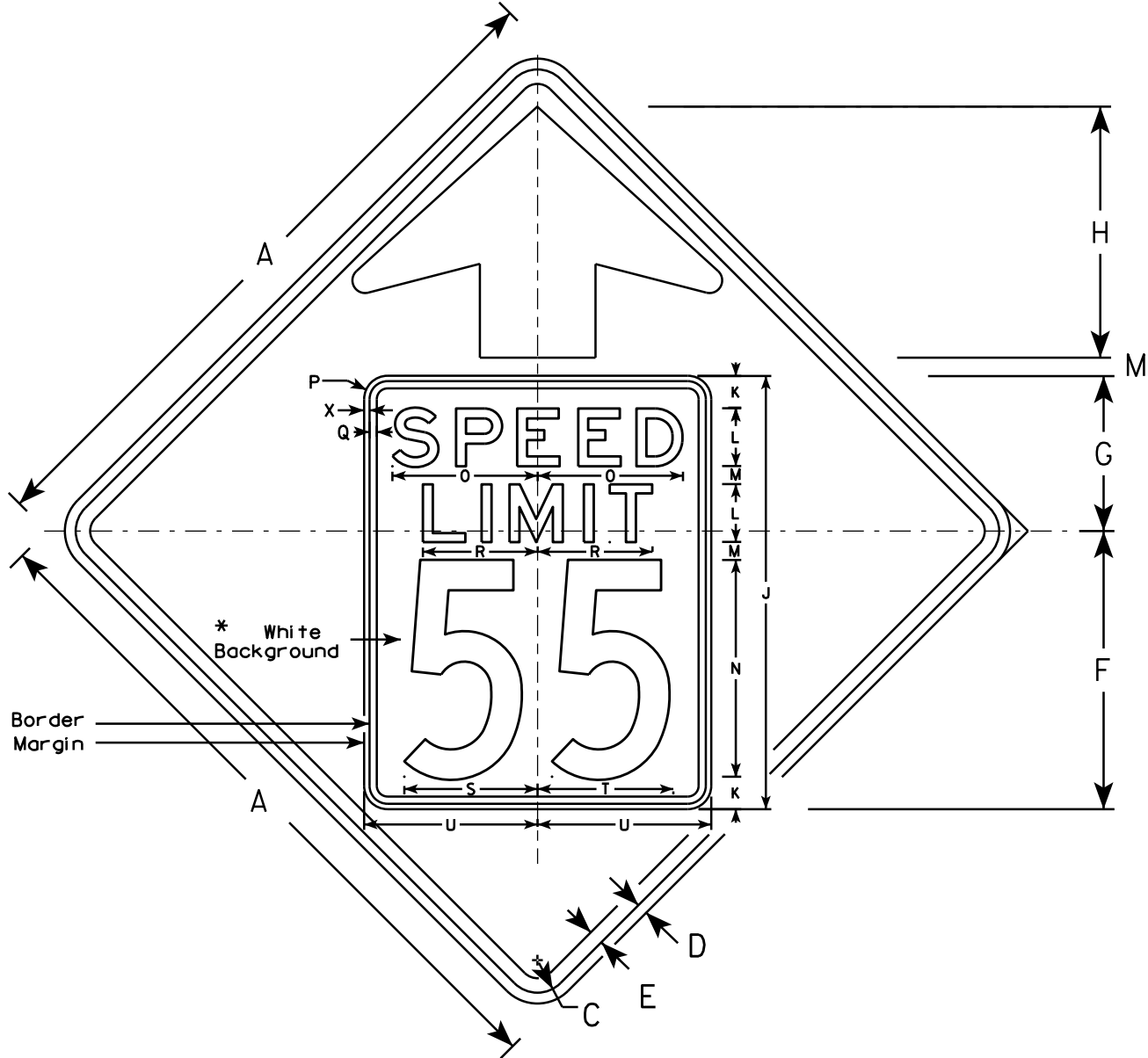
DATE 11/18/13 PLATE NO. 562 W01-6.1

PROJECT NO:

HWY:

COUNTY:

SHEET NO: E

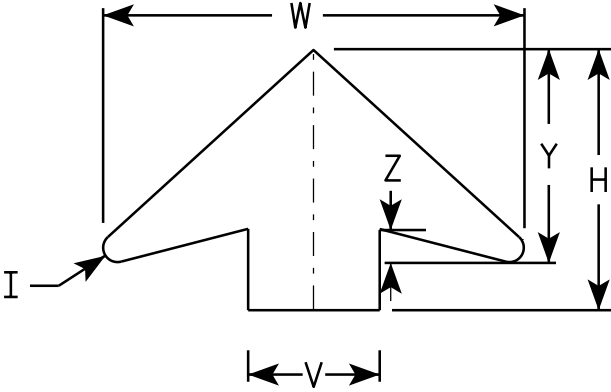


W03-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
Background - ORANGE*
Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

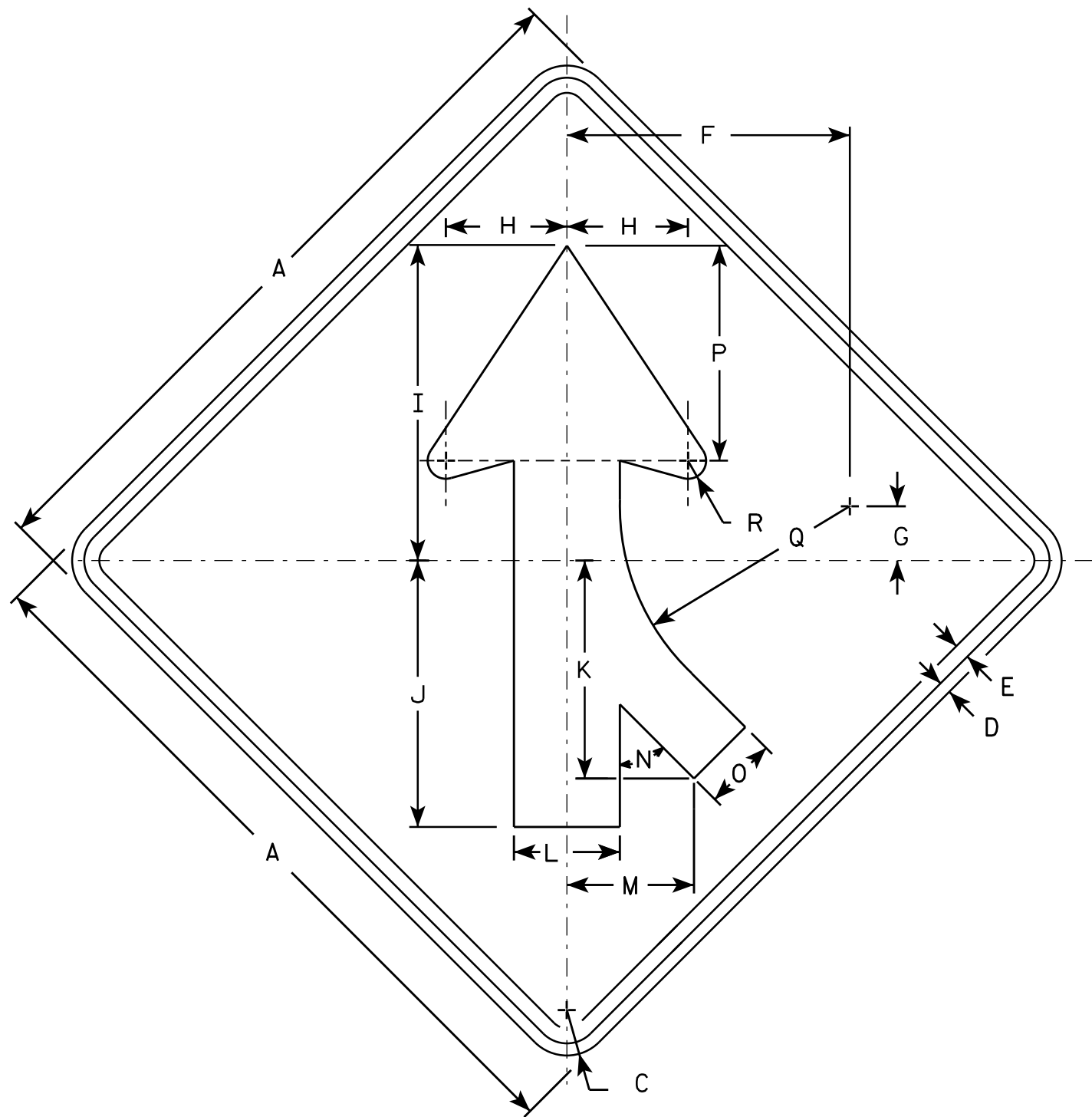
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2S	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
2M	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
3	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W03-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/20/13 PLATE 563 W03-5.1



W04-1R

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Orange
Message - Black
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. W4-1L is the same as W4-1R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
2S	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
2M	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
3	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
4	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
5	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

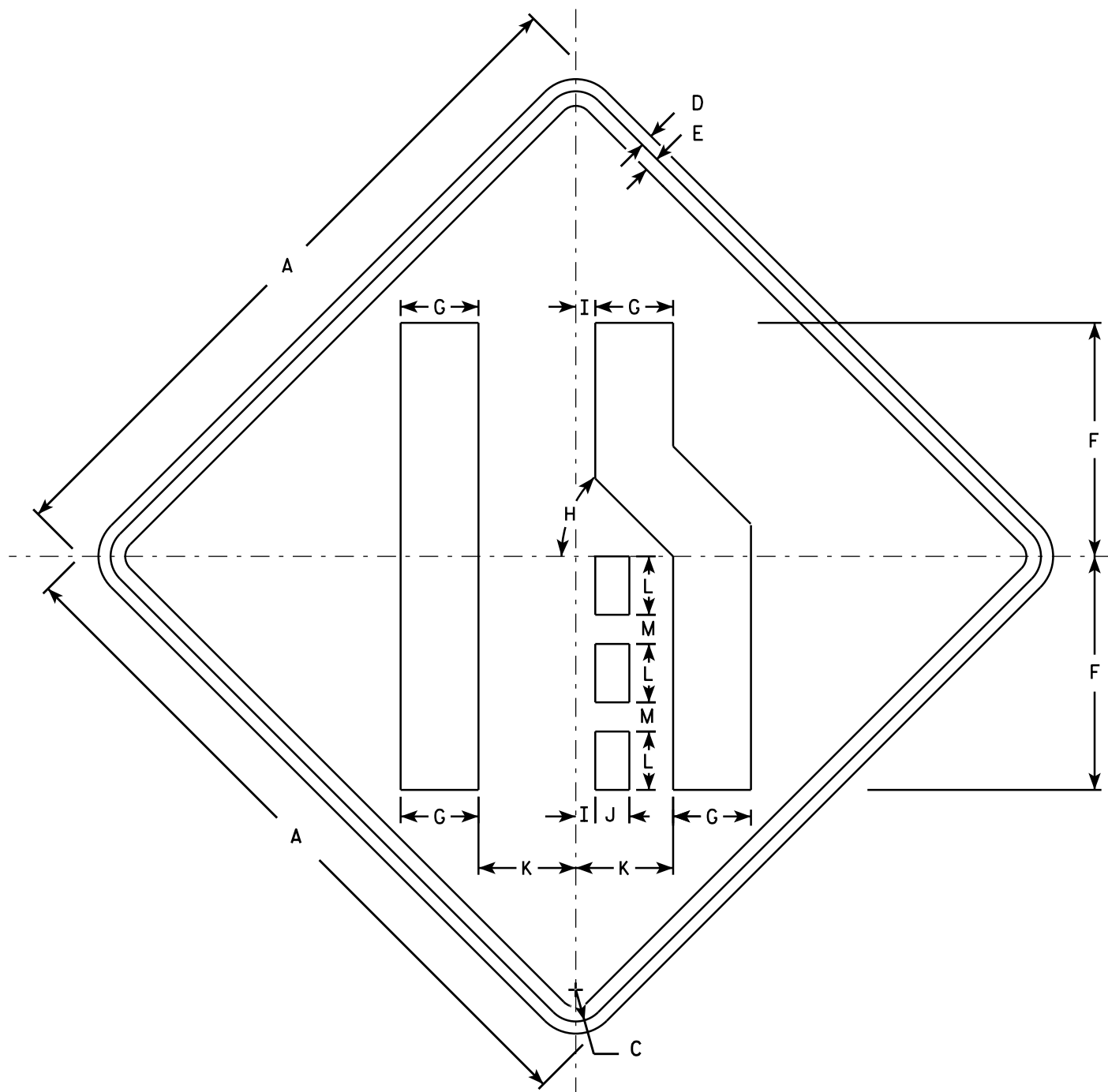
STANDARD SIGN

W04-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/20/13 PLATE NO. 564 W04-1.1



W04-2R

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Orange
Message - Black
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN

W04-2

WISCONSIN DEPT OF TRANSPORTATION

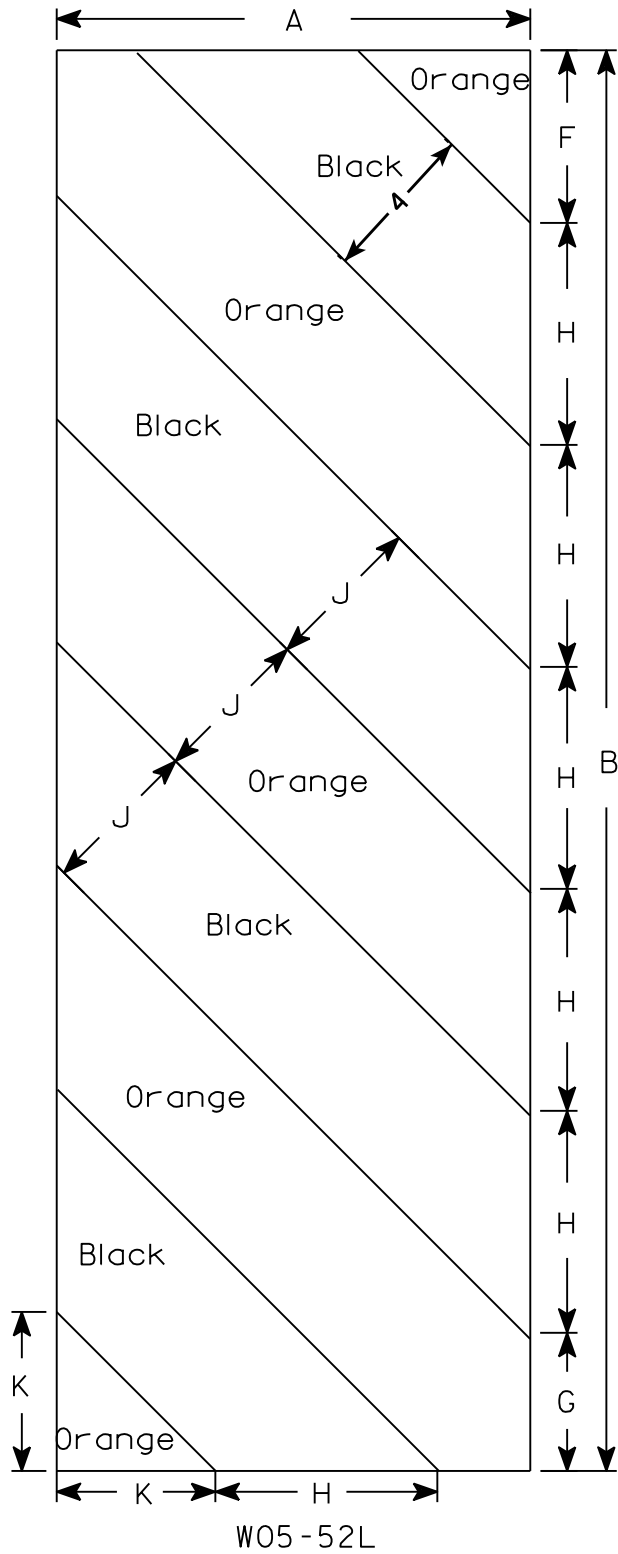
APPROVED

Matthew R. Rauch
For State Traffic Engineer

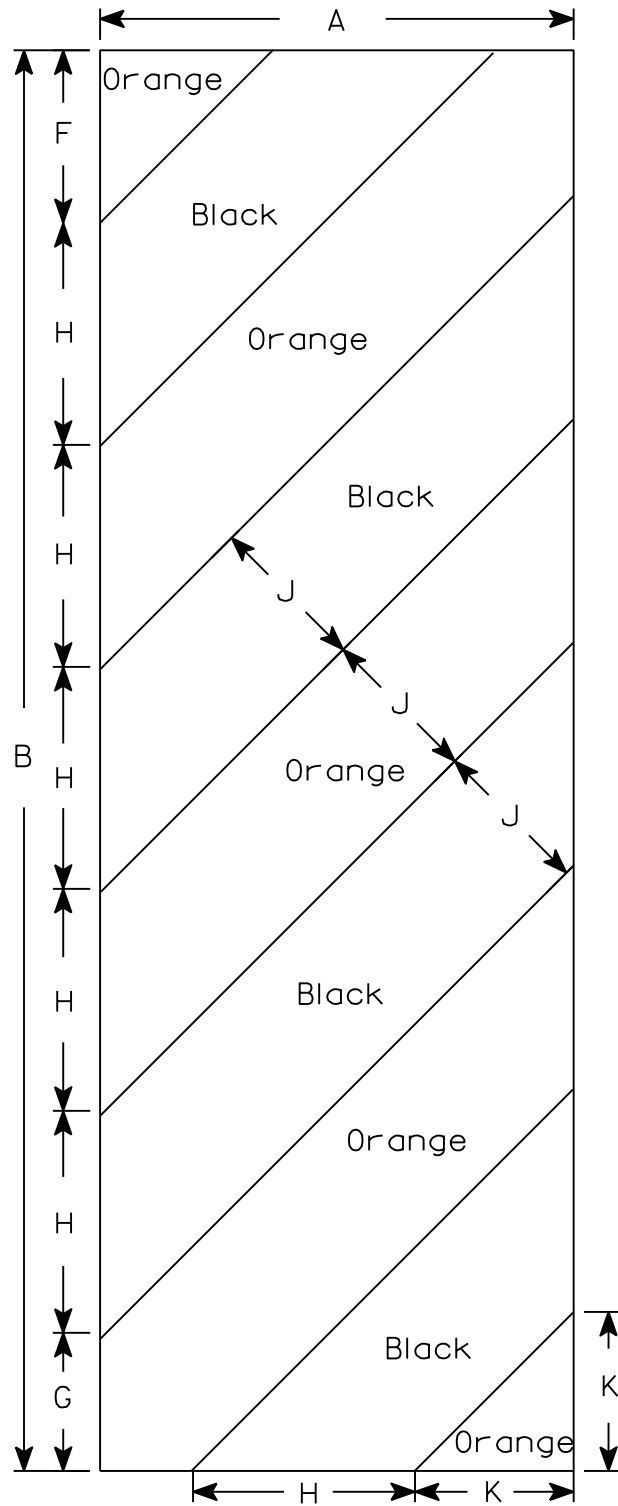
DATE 11/20/13

PLATE 565

W04-2.1



W05-52L



W05-52R

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Orange
Message - Black
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. Alternate colors of stripes as shown.

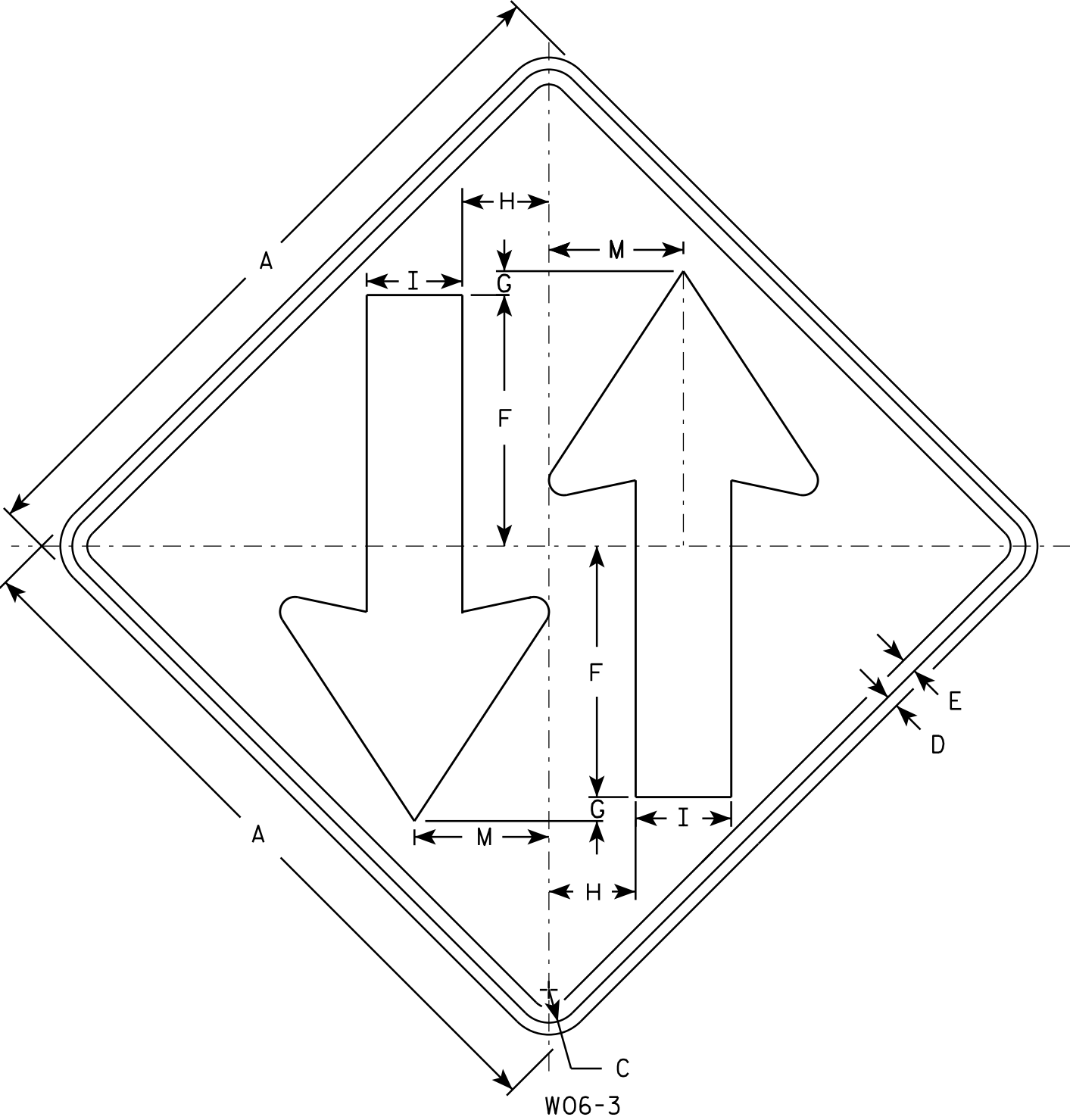
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN
W05-52L & W05-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

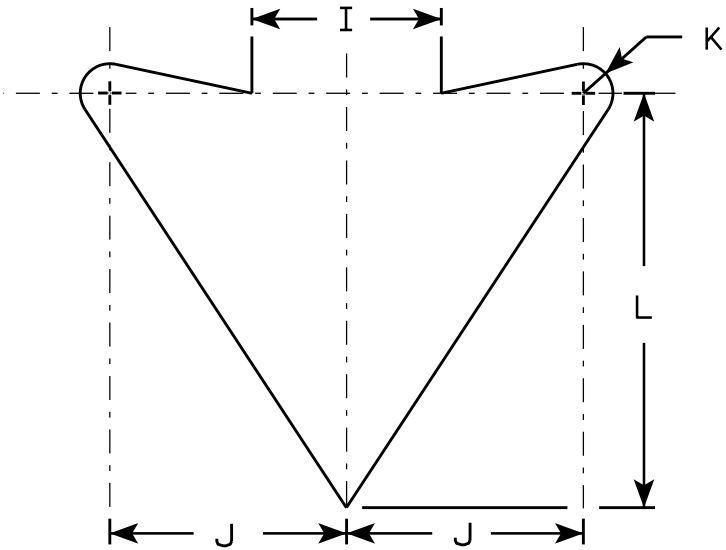
DATE 11/20/13 PLATE 566 W05-52.1



W06-3

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Orange
Message - Black
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
2S	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
2M	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
3	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
4	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
5	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0

PROJECT NO:

HWY:

COUNTY:

SHEET NO: E

STANDARD SIGN
W06 - 3

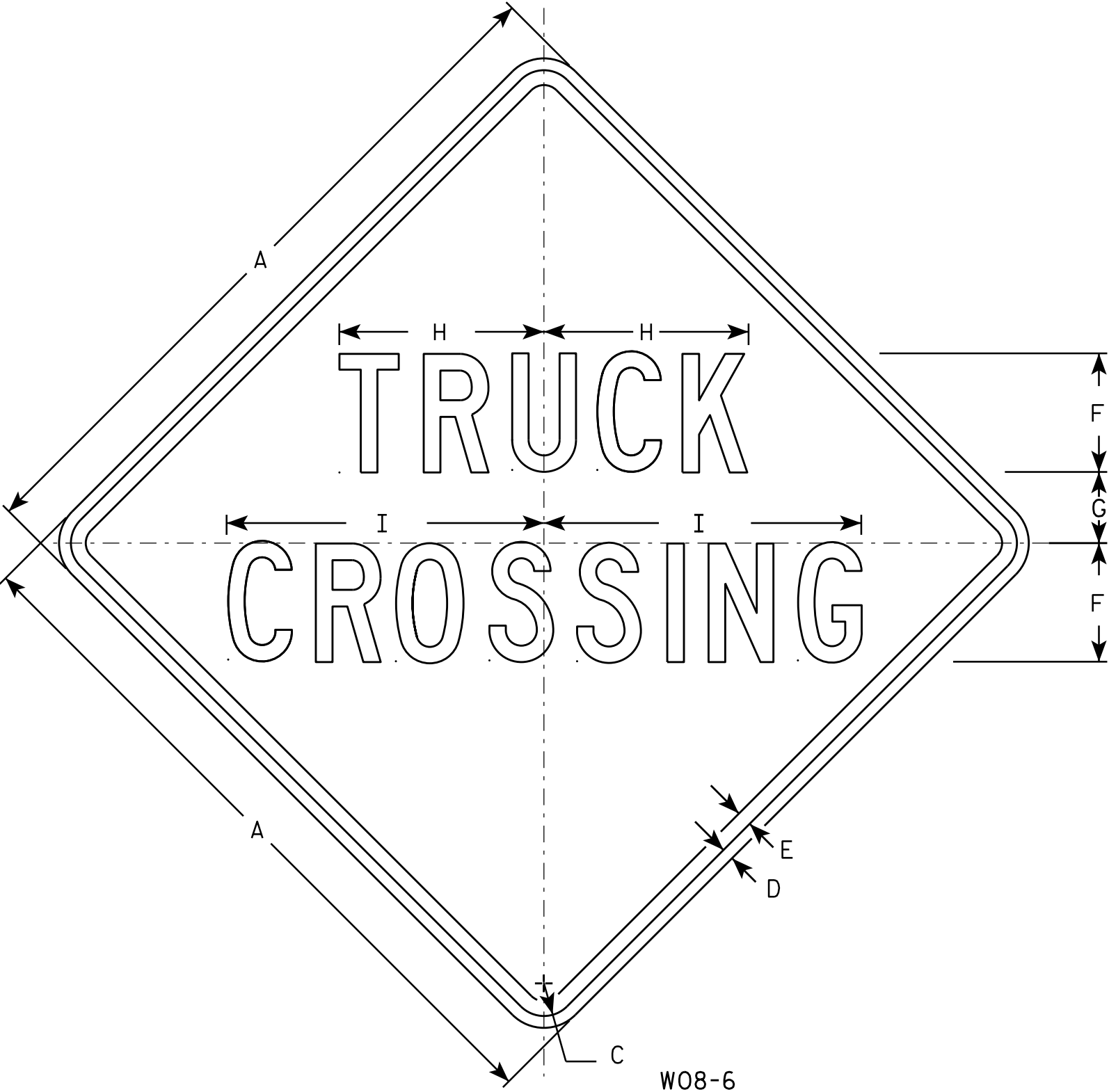
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/20/13 PLATE 567 "06-3.1

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
 - Background - Orange
 - Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



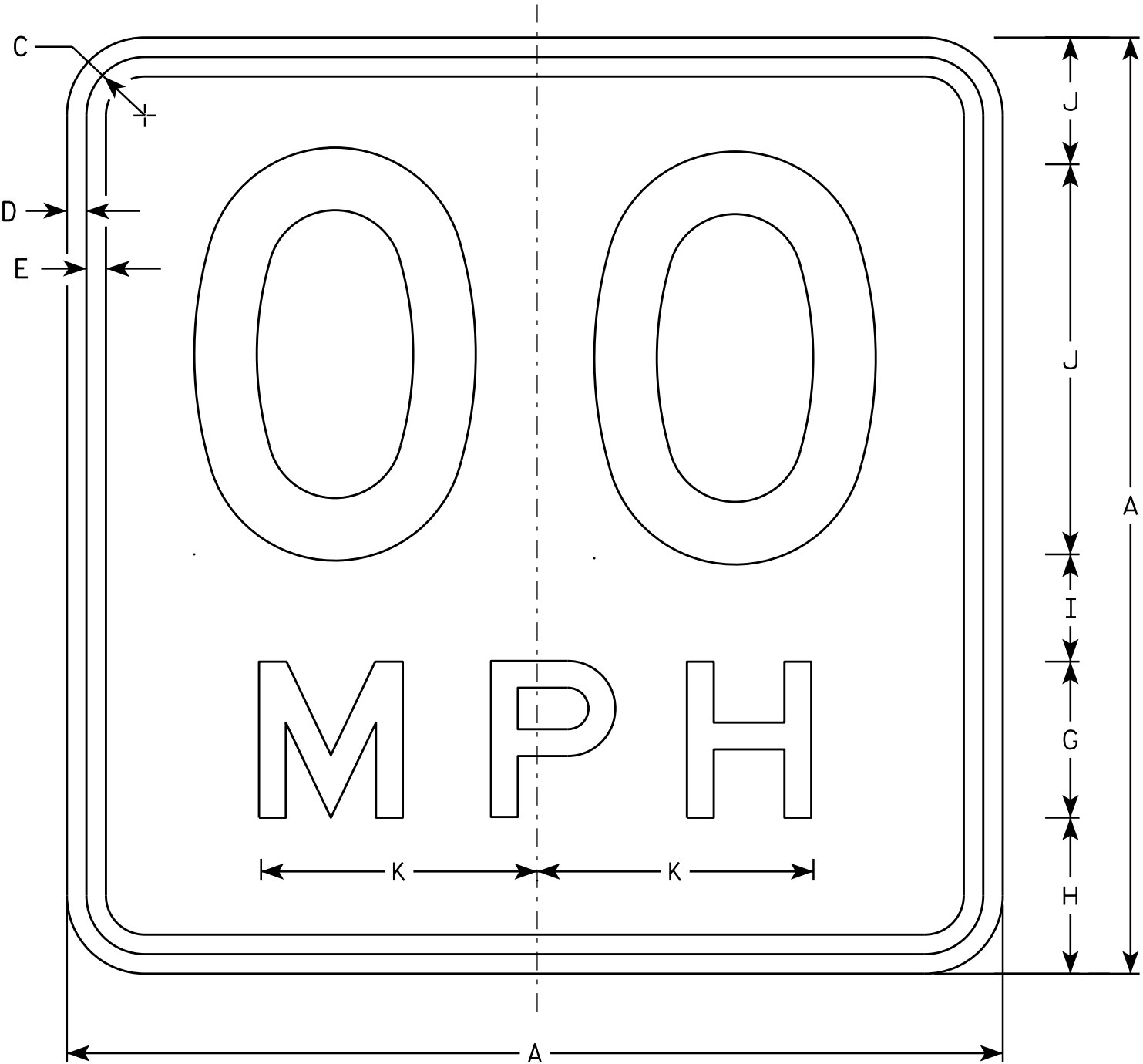
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	3 1/2	10 3/8	16																		9.0
2S	48		2 1/4	3/4	1	8	5	13 3/4	21 1/4																		16.0
2M	48		2 1/4	3/4	1	8	5	13 3/4	21 1/4																		16.0
3	48		2 1/4	3/4	1	8	5	13 3/4	21 1/4																		16.0
4	48		2 1/4	3/4	1	8	5	13 3/4	21 1/4																		16.0
5	48		2 1/4	3/4	1	8	5	13 3/4	21 1/4																		16.0

STANDARD SIGN
W08-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 568 W08-6.1



W013-1

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - See Note 6
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
- 6. Line 1 is Series D
Line 2 is Series E

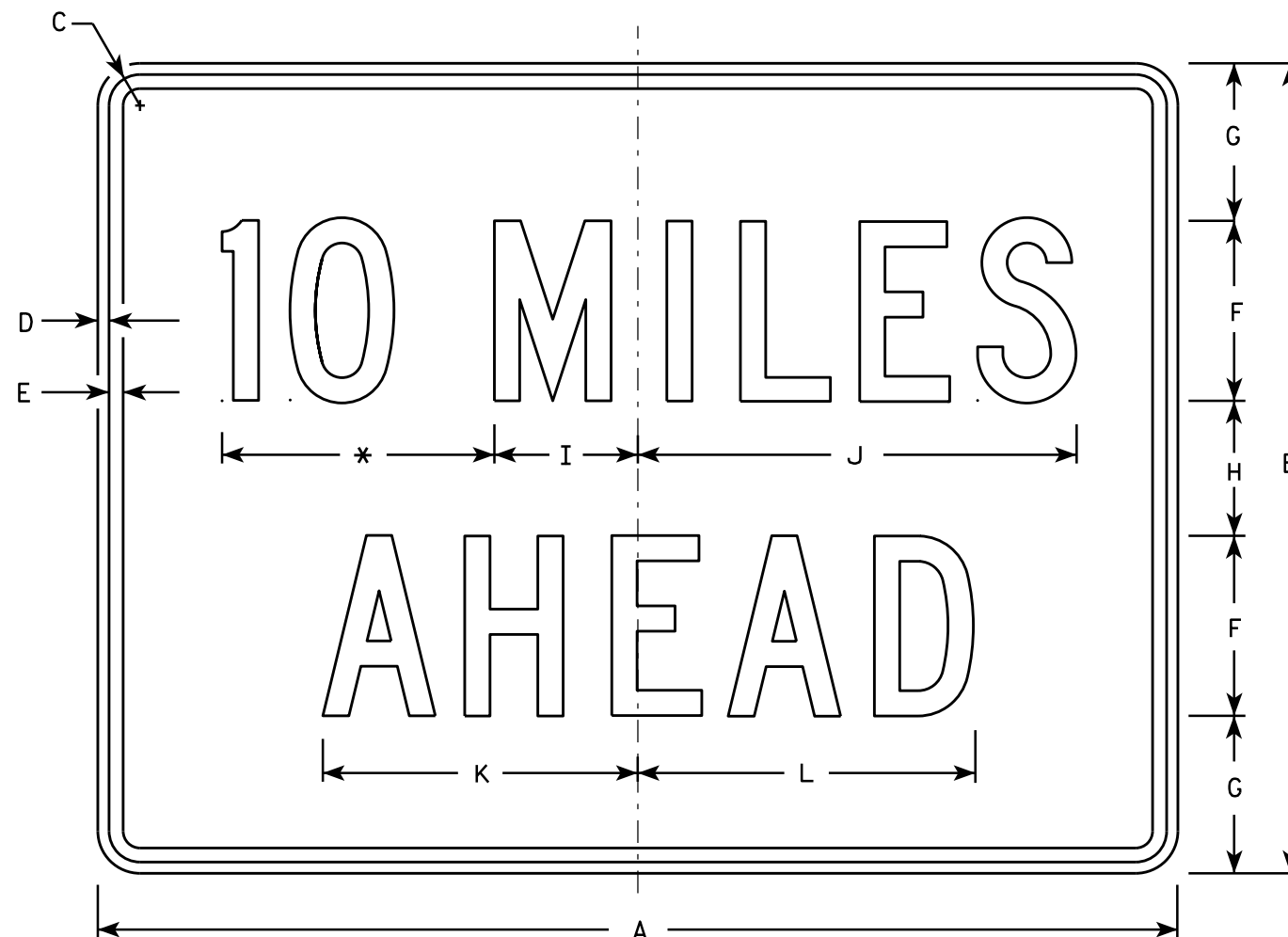
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	7 1/8																4.00
2S	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
2M	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
3	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN
W013-1

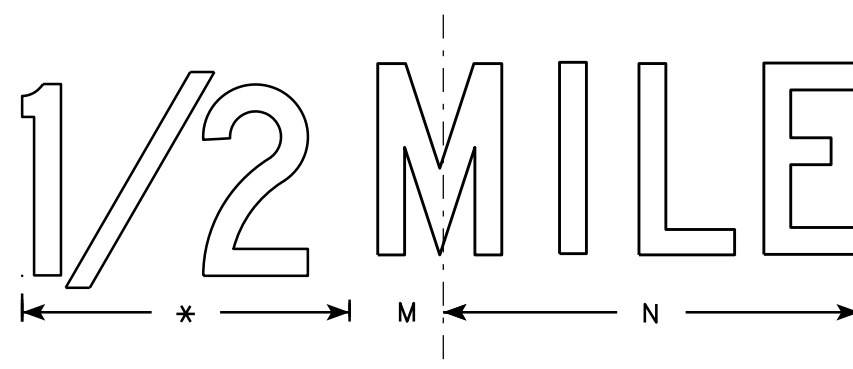
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
For State Traffic Engineer

DATE 11/21/13 PLATE 569 W013-1.1



W057-52



* See note 5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	13													6.0
2S	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	17 3/8													12.0
2M	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	17 3/8													12.0
3	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	17 3/8													12.0
4	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	17 3/8													12.0
5	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	17 3/8													12.0

STANDARD SIGN
W057-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 11/20/13

PLATE 570 W057-52.1

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

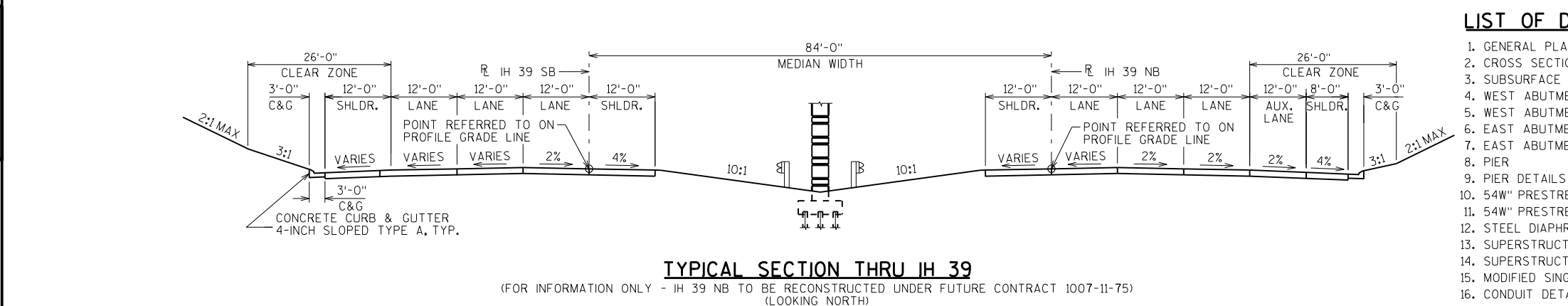
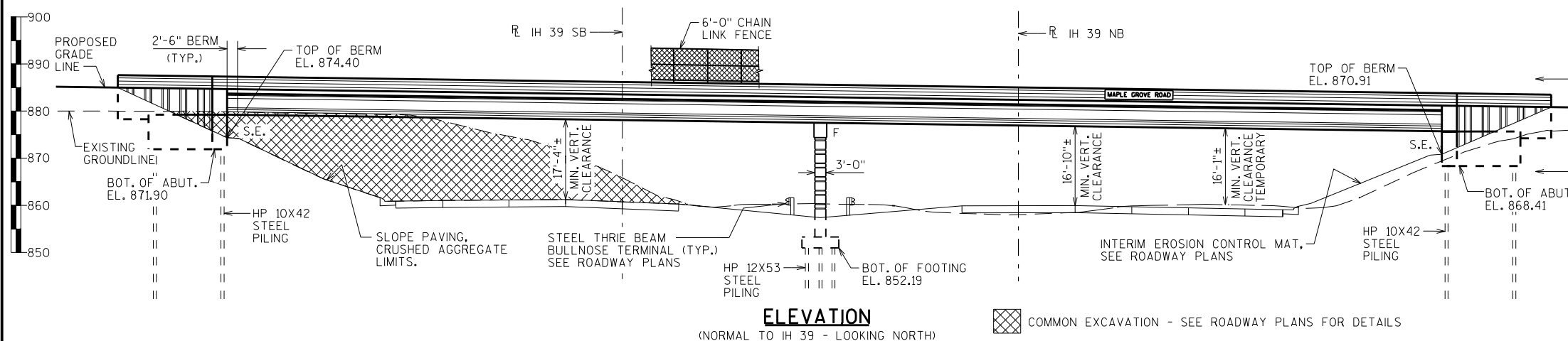
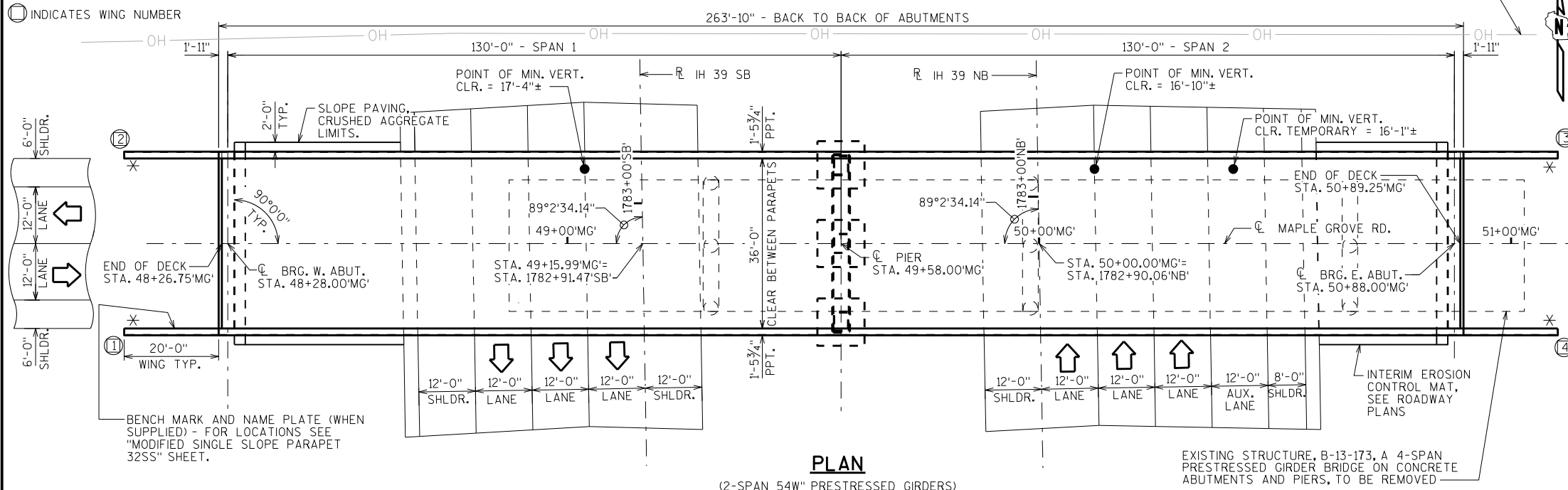
E

* PROVIDE FOR THREE BEAM GUARD RAIL ATTACHMENT AT UNUSED ANCHOR ASSEMBLIES CAULK HOLES SHUT WITH "100% SILICONE CAULK".

① INDICATES WING NUMBER

EXISTING DYNAMIC MESSAGE BOARD SIGN TO BE REMOVED, SEE ROADWAY PLANS FOR DETAILS.

EXISTING OVERHEAD LINES TO BE RE-ESTABLISHED, SEE ROADWAY SPECIAL PROVISIONS FOR DETAILS.



DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF=1.10
OPERATING RATING FACTOR: RF=1.56
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY SLAB $f'_c = 4,000$ P.S.I.
ALL OTHER $f'_c = 3,500$ P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 $f_y = 60,000$ P.S.I.
54W" PRESTRESSED GIRDERS, CONCRETE MASONRY $f'_c = 8,000$ P.S.I.
STRANDS- 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

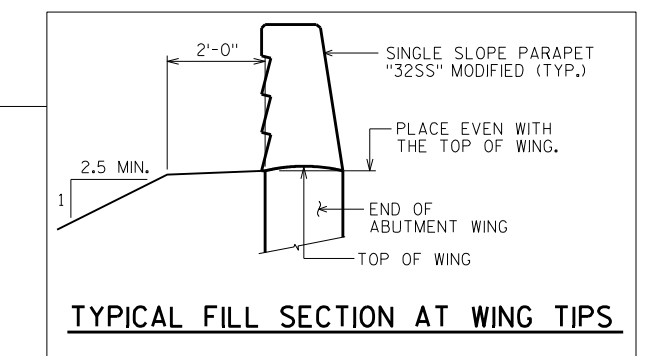
ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 90'-0" LONG (WEST ABUTMENT) ESTIMATED 55'-0" LONG (EAST ABUTMENT).

PIER TO BE SUPPORTED ON HP 12 X 53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 45'-0" LONG.

** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

TRAFFIC VOLUME

IH 39 SB	IH 39 NB	MAPLE GROVE RD.
A.D.T.= 70,300 (2040)	A.D.T.= 70,300 (2040)	A.D.T.= 250 (2040)
R.D.S.= 70 M.P.H.	R.D.S.= 70 M.P.H.	R.D.S.= 60 M.P.H.



STRUCTURE DESIGN CONTACTS:

EMILY KUEHNE	(608) 266-5089
AARON BONK	(608) 261-0261

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT
5. WEST ABUTMENT DETAILS
6. EAST ABUTMENT
7. EAST ABUTMENT DETAILS
8. PIER
9. PIER DETAILS
10. 54W" PRESTRESSED GIRDER DETAILS
11. 54W" PRESTRESSED GIRDER DETAILS 2
12. STEEL DIAPHRAGM
13. SUPERSTRUCTURE
14. SUPERSTRUCTURE DETAILS
15. MODIFIED SINGLE SLOPE PARAPET 32SS
16. CONDUIT DETAILS
17. CHAIN LINK FENCE DETAILS
18. AESTHETIC DETAILS
19. SLOPE PAVING (CRUSHED AGGREGATE)

NO.	DATE	REVISION	BY
ACCEPTED			
Plans Prepared By WISDOT			
BUREAU OF STRUCTURES			
ACCEPTED <i>William C. Dierker</i> 7/28/15			
CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-13-706			
MAPLE GROVE RD. OVER IH 39 NB & SB			
COUNTY	DANE	TOWN/CITY/VILLAGE	ALBION
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS			
DESIGNED BY	EMK	DESIGN CKD.	ABS
DRAWN BY	EMK	DDSD	PLANS CKD.
GENERAL PLAN			
SHEET 1 OF 19			
571			

I.D. 1007-10-01R

DATE: JULY 2015

SCALE = 14

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF DECK SURFACE.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND TOP OF PARAPETS, INCLUDING PARAPETS ON THE WINGS.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIER.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING MATERIAL TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS.

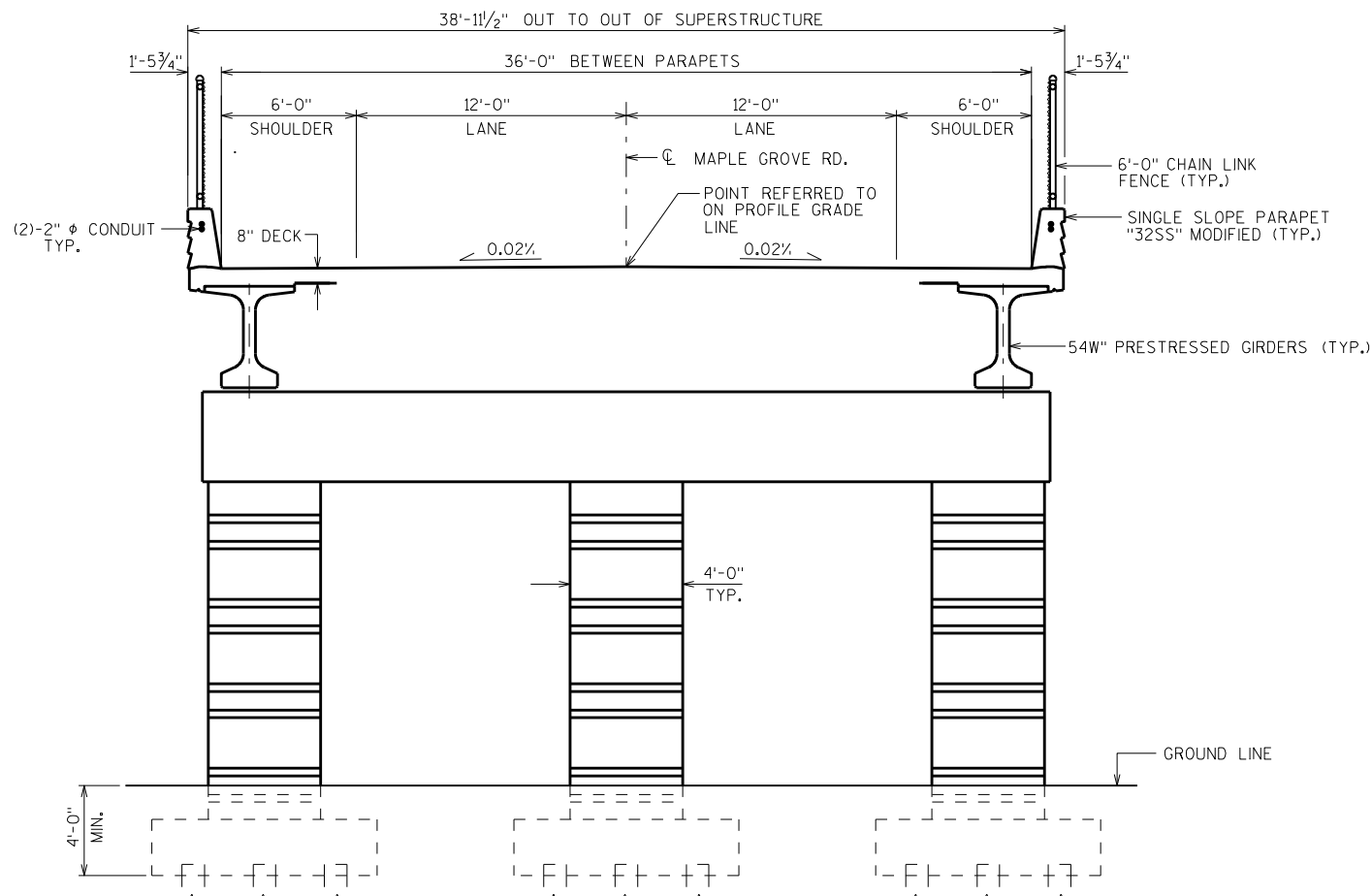
AT ABUTMENTS, HP 12X53 STEEL PILING MAY BE USED IN LIEU OF HP 10X42 STEEL PILING. PAYMENT SHALL BE BASED ON BID PRICE FOR HP 10X42 STEEL PILING.

EXISTING STRUCTURE B-13-173 A FOUR SPAN PRESTRESSED CONCRETE GIRDER BRIDGE WITH AN OVERALL LENGTH OF 218'-10" AND OVERALL WIDTH 27'-0" SUPPORTED ON TREATED TIMBER PILES TO BE REMOVED.

BEVEL ALL EXPOSED EDGES OF CONCRETE 3/4" UNLESS SHOWN OTHERWISE.

THE RUSTICATIONS IN THE ABUTMENTS AND PIER ARE INCLUDED IN THE BID ITEM "CONCRETE MASONRY BRIDGES".

THE RUSTICATIONS IN THE BACK FACES OF THE PARAPET ARE INCLUDED IN THE BID ITEM "CONCRETE MASONRY BRIDGES".



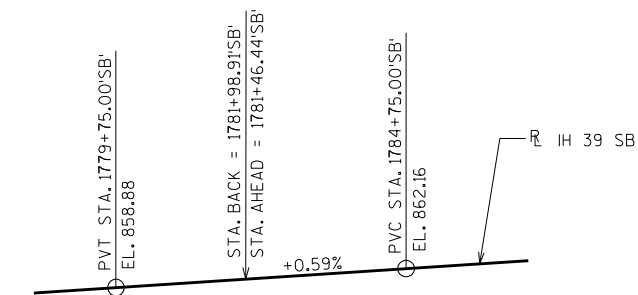
CROSS-SECTION THRU ROADWAY

(LOOKING EAST)

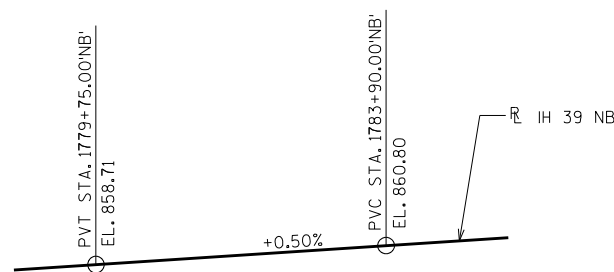
TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	WEST ABUT.	PIER	EAST ABUT.	TOTALS
203.0200	REMOVING OLD STRUCTURE STA. 50+MC+00	LS	—	—	—	—	1
203.0210.S	ABATEMENT OF ASBESTOS CONTAINING MATERIAL B-13-173	LS	—	—	—	—	1
203.0225.S	DEBRIS CONTAINMENT B-13-173	LS	—	—	—	—	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-13-706	LS	—	—	—	—	1
210.0100	BACKFILL STRUCTURE	CY	—	250	—	250	500
502.0100	CONCRETE MASONRY BRIDGES	CY	425	78	72	78	653
502.3200	PROTECTIVE SURFACE TREATMENT	SY	1,050	—	—	—	1,050
502.3210	PIGMENTED SURFACE SEALER	SY	220	20	—	20	260
503.0155	PRESTRESSED GIRDER TYPE I 54W-INCH	LF	1,565	—	—	—	1,565
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	—	3,750	2,455	3,750	9,955
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	87,835	4,305	11,565	4,310	108,015
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	24	—	—	—	24
506.4000	STEEL DIAPHRAGMS B-13-706	EACH	20	—	—	—	20
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	—	13	—	13	26
517.1010.S	CONCRETE STAINING B-13-706	SF	7,300	625	1,260	625	9,810
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	—	1,080	—	660	1,740
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	—	—	1,170	—	1,170
* 604.0500	SLOPE PAVING CRUSHED AGGREGATE	SY	—	185	—	—	185
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	—	90	—	90	180
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	—	2	—	2	4
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	24	12	—	12	48
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	1,032	108	—	108	1,248
653.0222	JUNCTION BOXES 18X12X6-INCH	EACH	4	—	—	—	4
SPV.0090	FENCE CHAIN LINK POLYMER COATED 6-FT	LF	528	39	—	39	606
	NON-BID ITEMS						
	FILLER	SIZE	—	—	—	—	1/2" & 3/4"

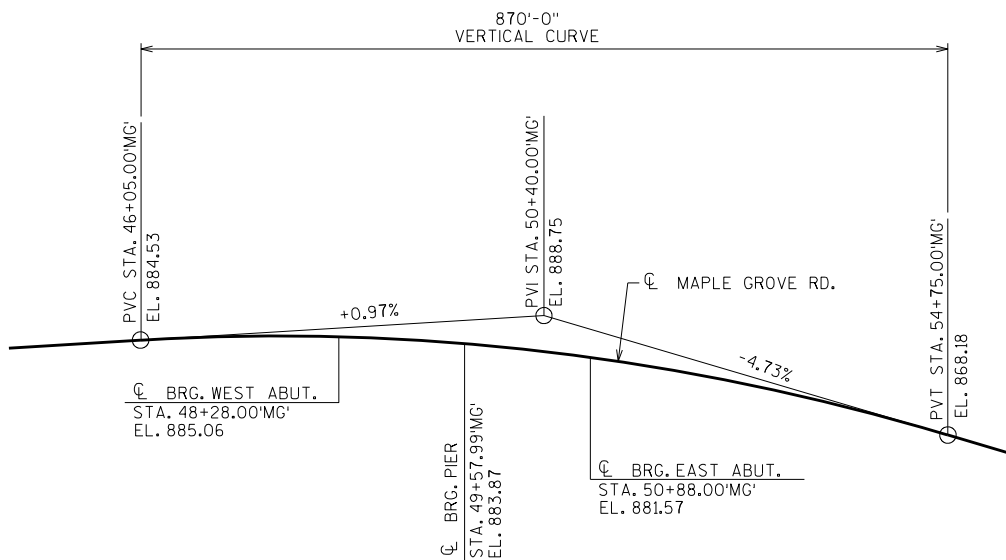
* SLOPE PAVING CRUSHED AGGREGATE AT EAST ABUTMENT WILL BE PLACED UNDER FUTURE CONTRACT 1007-11-75. SEE ROADWAY PLANS FOR INTERIM EROSION CONTROL MAT.



PROFILE GRADE LINE ON IH 39 SB



PROFILE GRADE LINE ON IH 39 NB

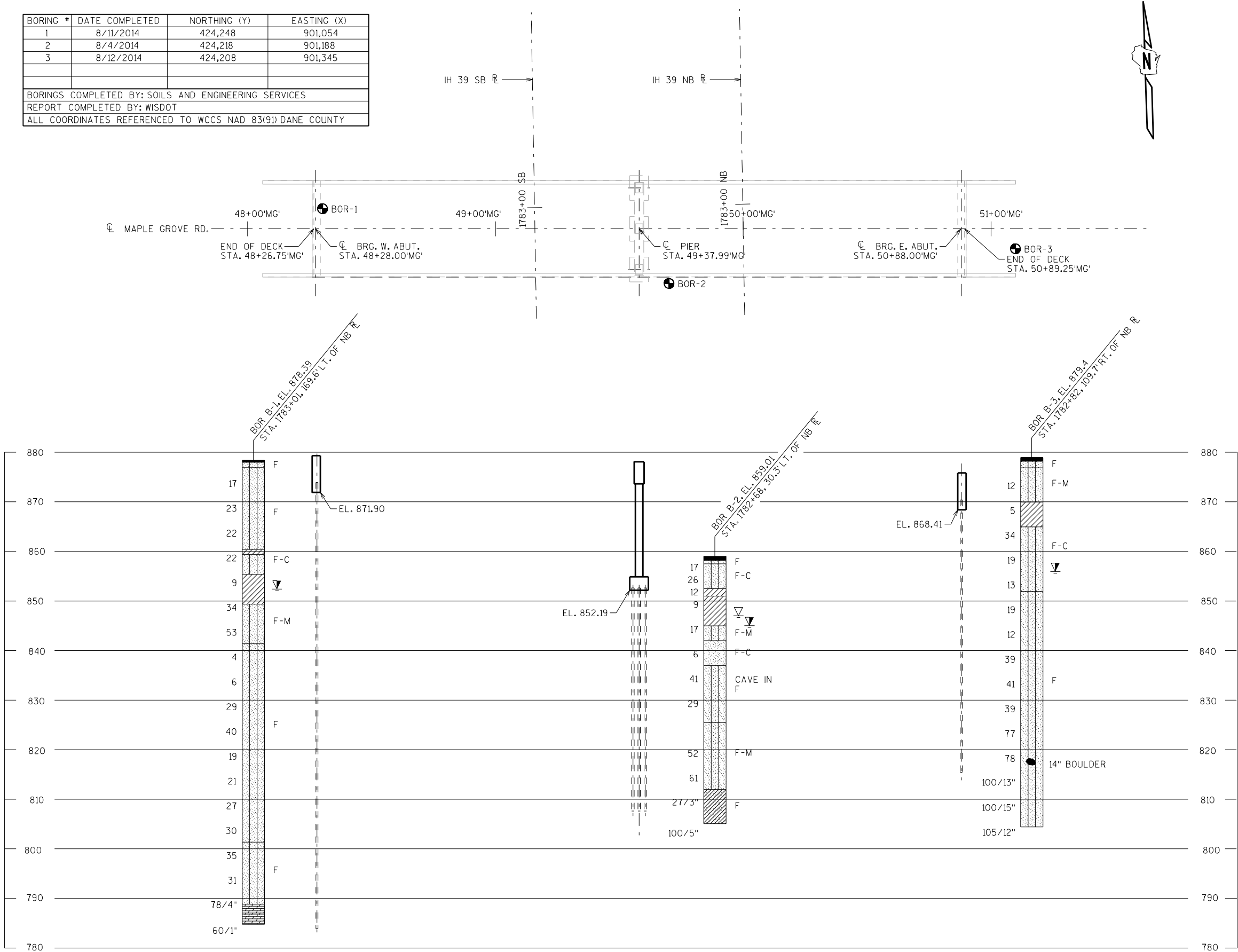


PROFILE GRADE LINE ON MAPLE GROVE RD.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-706			
DRAWN BY EMK/DDS		PLANS CK'D. EMK	
CROSS SECTION & QUANTITIES			SHEET 2
			572

ILLINOIS STATE LINE - MADISON
MAPLE GROVE ROAD OVER I39 NB/SB

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	8/11/2014	424,248	901,054
2	8/4/2014	424,218	901,188
3	8/12/2014	424,208	901,345
BORINGS COMPLETED BY: SOILS AND ENGINEERING SERVICES			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) DANE COUNTY			



STATE PROJECT NUMBER

1007-10-79

MATERIAL SYMBOLS

ASPHALT

CONCRETE

SAND

BOULDERS OR COBBLES

SHALE

TOPSOIL

FILL

CLAY

LIMESTONE

SANDSTONE

PEAT

GRAVEL

SILT

BEDROCK (UNKNOWN)

IGNEOUS/META

LEGEND OF BORING

BORING #/EL.

STA., OFF-SET

ST

0.25

17

F-C

COBBLE OR BOULDER

WEATHERED LIMESTONE

CORE RUN #1 - 24'-29'

REC=80%, ROD=72%

(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

▽ AT TIME OF DRILLING

▼ END OF DRILLING

▽ AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

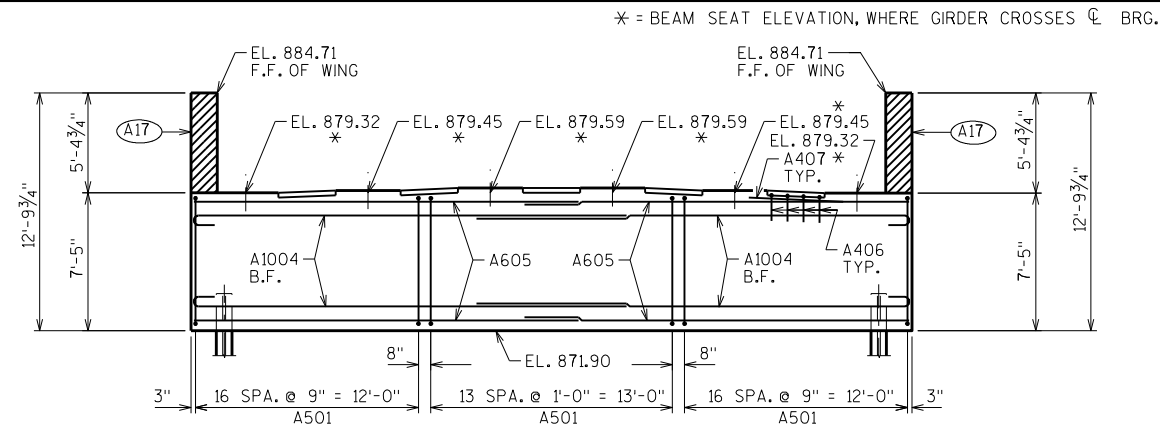
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION
STRUCTURE B-13-706
DRAWN BY PR/DDS PLANS CKD. EMK
SHEET 3
573

SUBSURFACE EXPLORATION

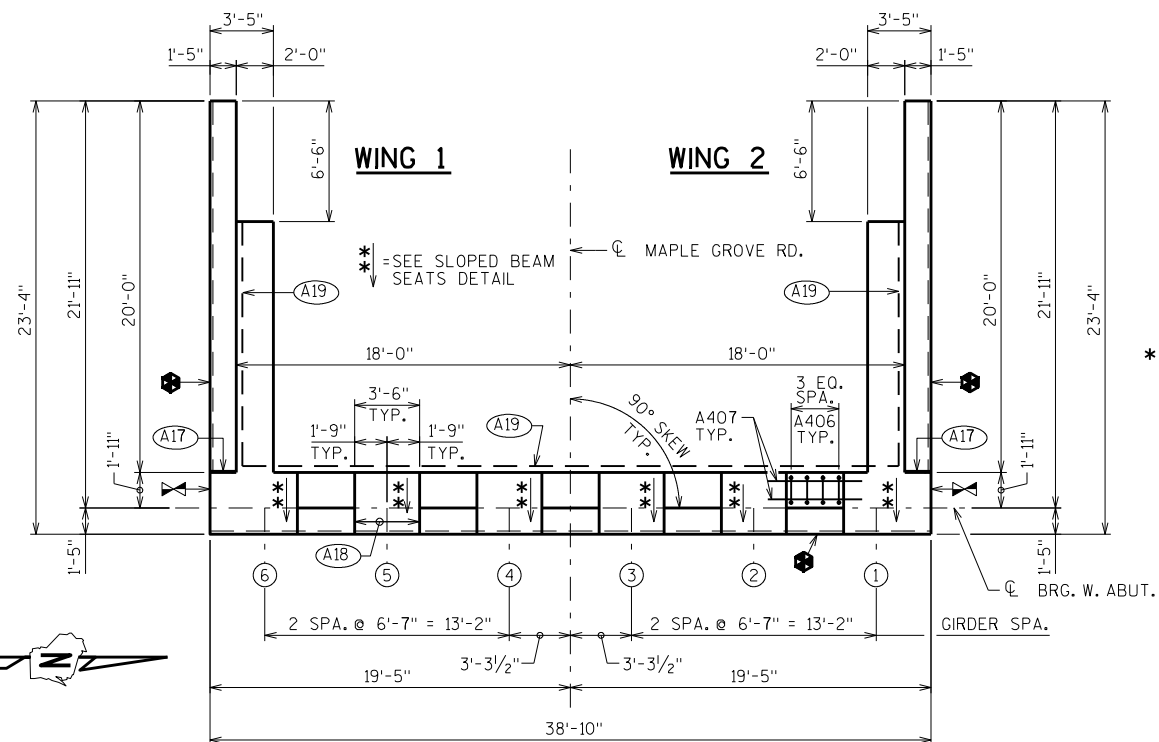
8

8

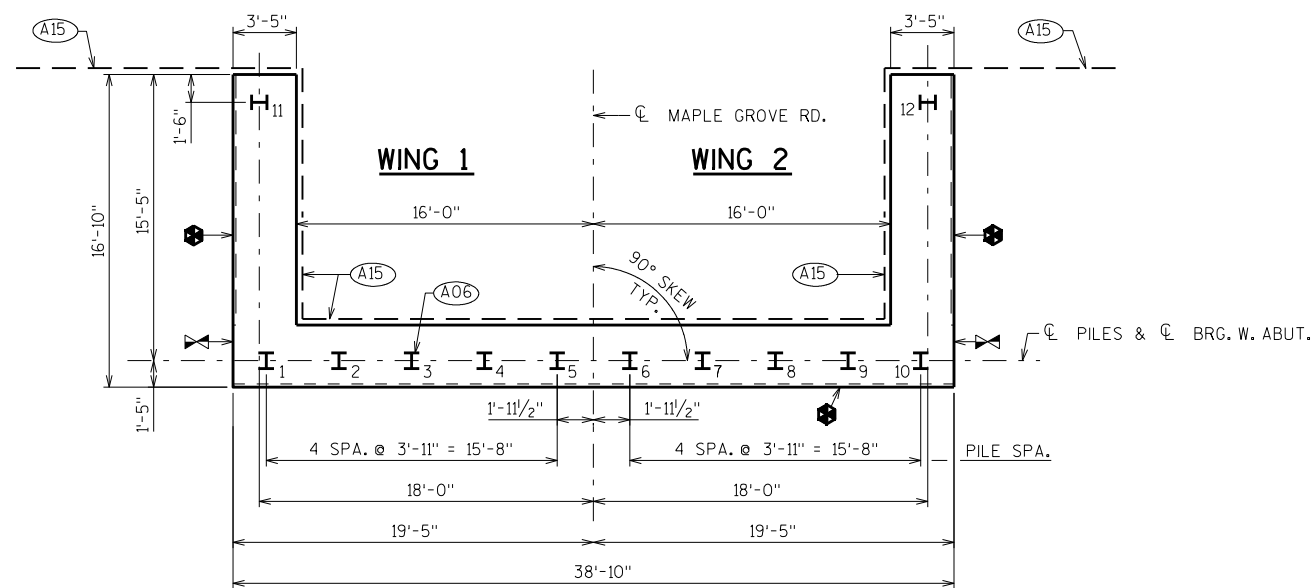
SCALE = 20



ELEVATION - LOOKING WEST



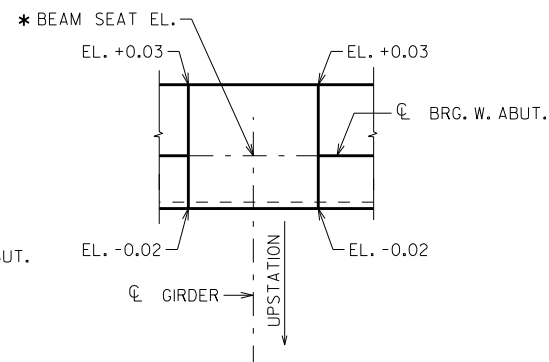
PLAN



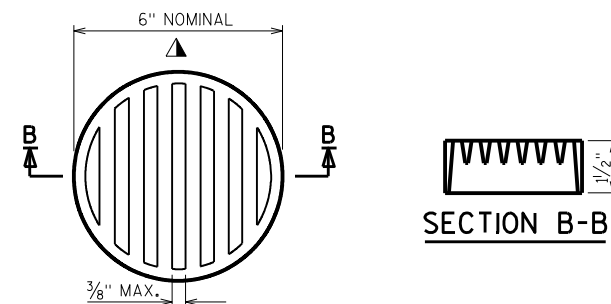
PILE PLAN

⬢ = RUSTICATION REQUIRED. FOR DETAILS SEE "AESTHETIC DETAILS" SHEET.

⌘ = NO RUSTICATION REQUIRED AT ENDS OF ABUTMENT BODY. FOR DETAILS SEE "AESTHETIC DETAILS" SHEET.



SLOPED BEAM SEATS

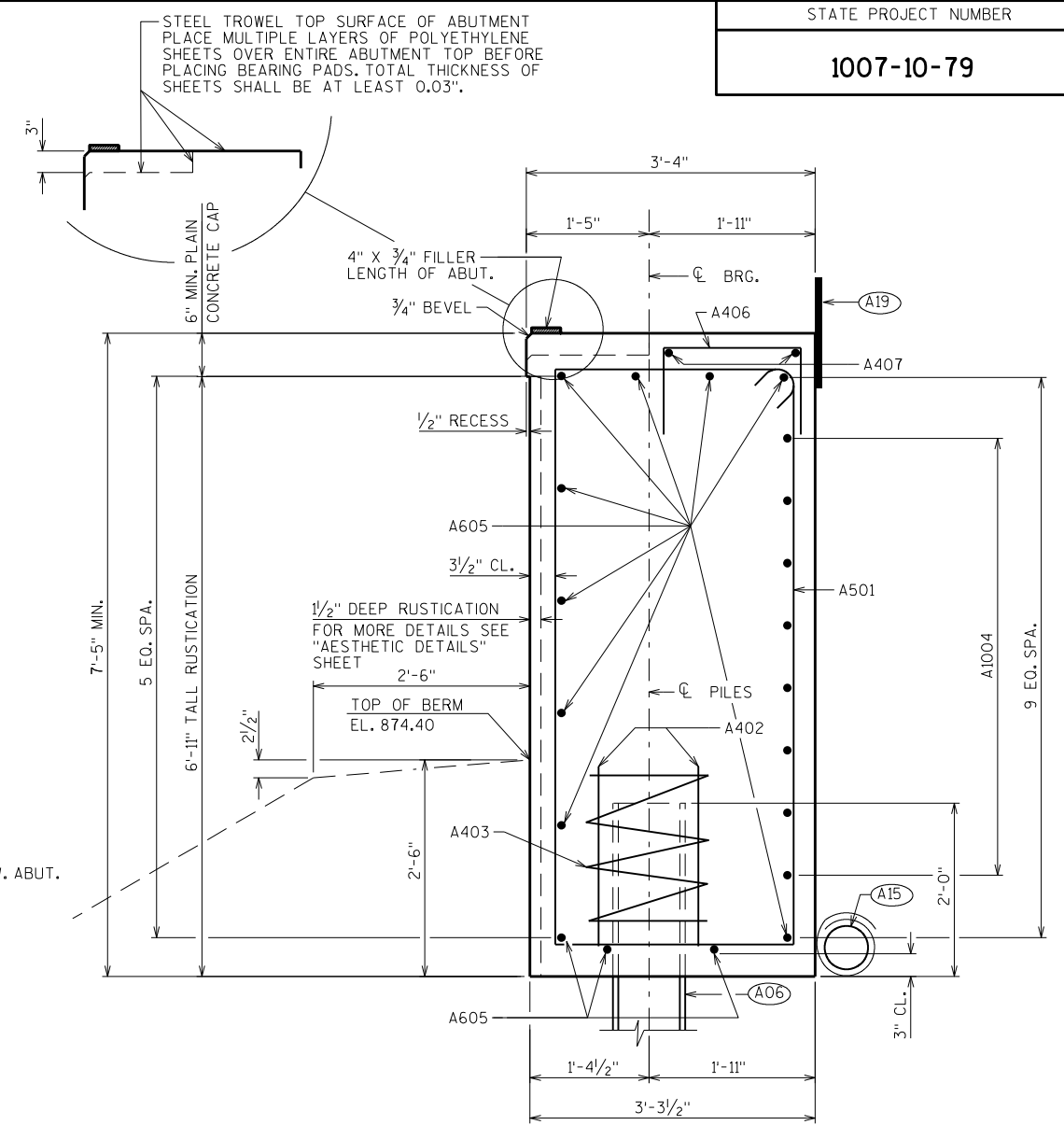


RODENT SHIELD DETAIL

▲ DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

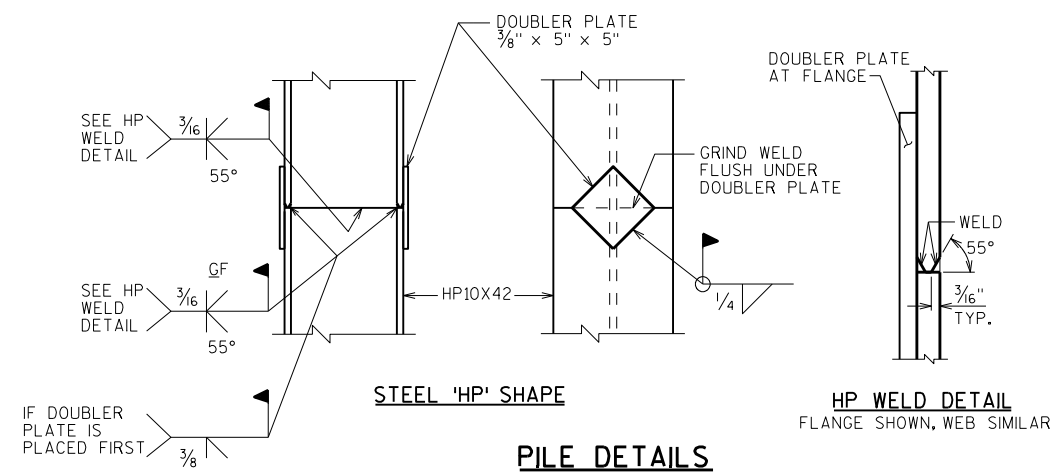
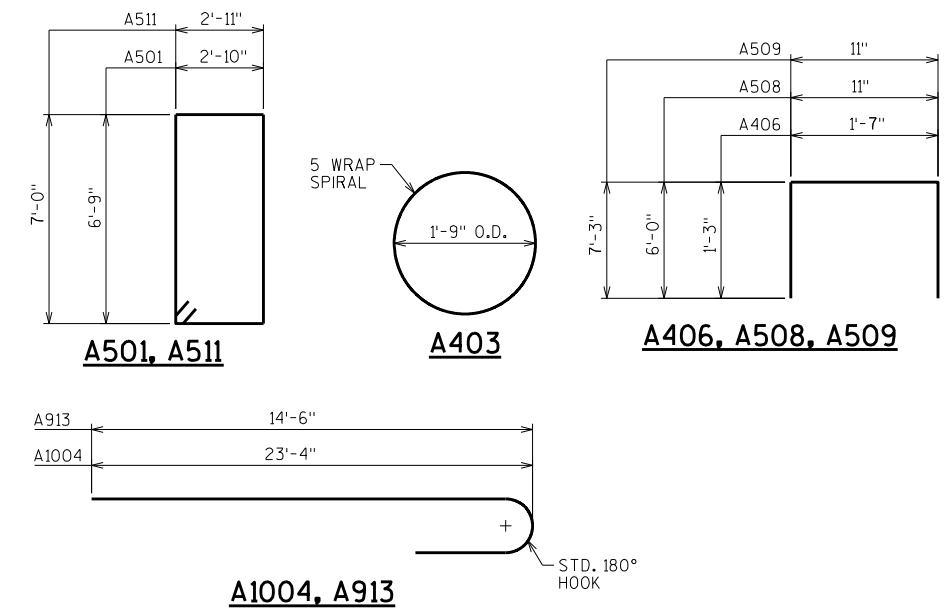
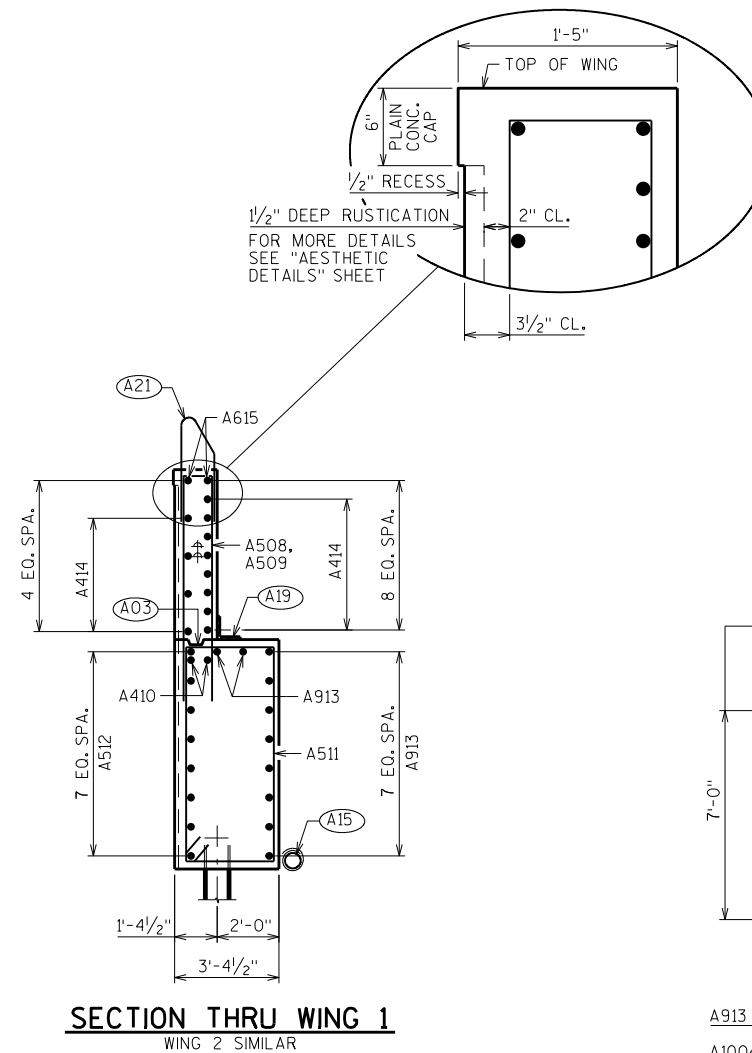
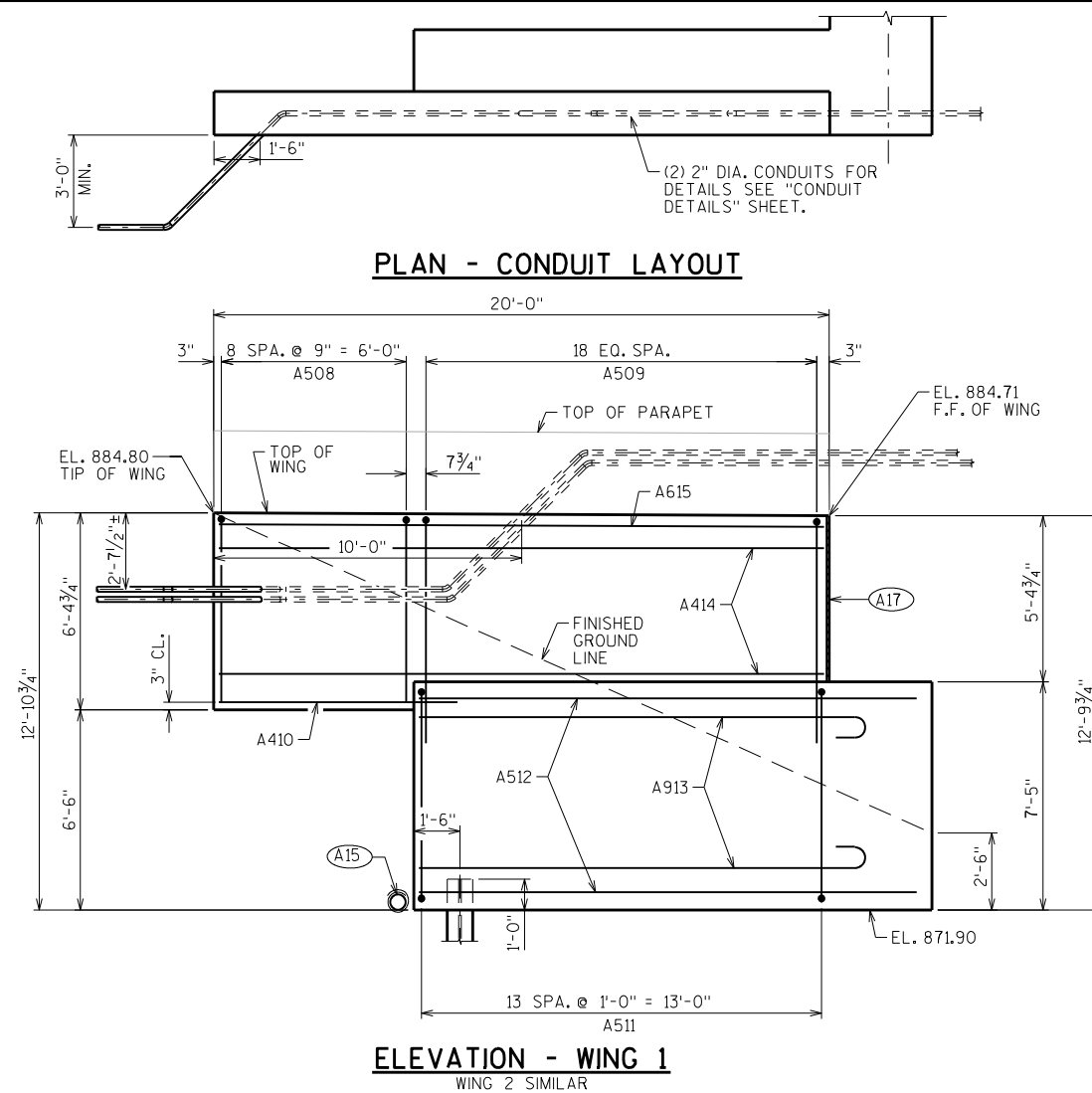
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



SECTION THRU BODY

- (A06) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING, ESTIMATED 90'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.
- (A15) PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- (A17) 1/2" FILLER (INCLUDED IN WING LENGTH); SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- (A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.
- (A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-706			
DRAWN BY DDS		PLANS CKD. EMK	
WEST ABUTMENT		SHEET 4	
		574	



WING 2 SIMILAR	1007-10-79 BILL OF BARS NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
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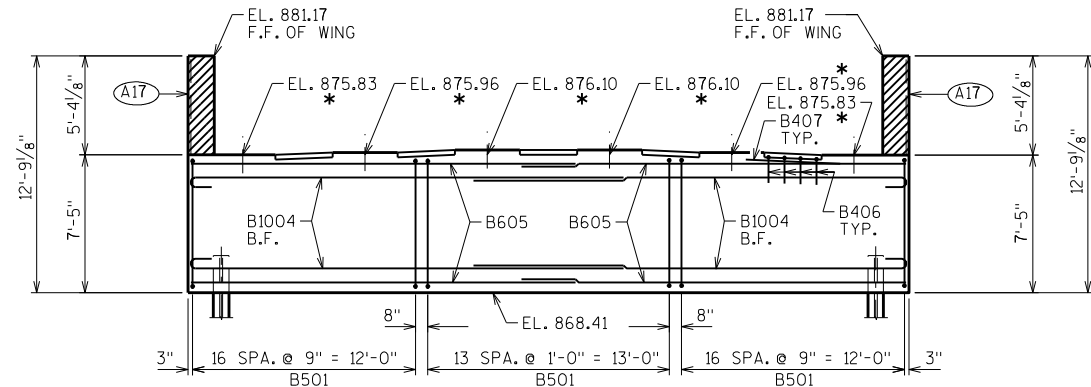
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		48	19'-10"	X		BODY - STIRRUP
A402		20	2'-3"			PILE - VERT. (2 PER BODY PILE)
A403		10	28'-0"	X		PILE - VERT. (1 PER BODY PILE)
A1004		16	24'-9"	X		BODY - HORIZ. - B.F.
A605		24	20'-9"			BODY - HORIZ.
A406		20	3'-11"	X		BODY - VERT.
A407		10	5'-1"			BODY - HORIZ.
A508	X	18	12'-8"	X		WINGS 1&2 - VERT.
A509	X	38	15'-2"	X		WINGS 1&2 - VERT.
A410	X	4	7'-9"			WINGS 1&2 - HORIZ.
A511	X	28	20'-6"	X		WINGS 1&2 - STIRRUP
A512	X	16	16'-2"			WINGS 1&2 - HORIZ. - F.F.
A913	X	20	15'-9"	X		WINGS 1&2 - HORIZ.
A414	X	24	19'-8"			WINGS 1&2 - HORIZ.
A615	X	4	19'-8"			WINGS 1&2 - HORIZ. - TOP

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE		B-13-706	
		DRAWN BY	DDS PLANS CK'D. EMK
WEST ABUTMENT DETAILS		SHEET 5	
		575	

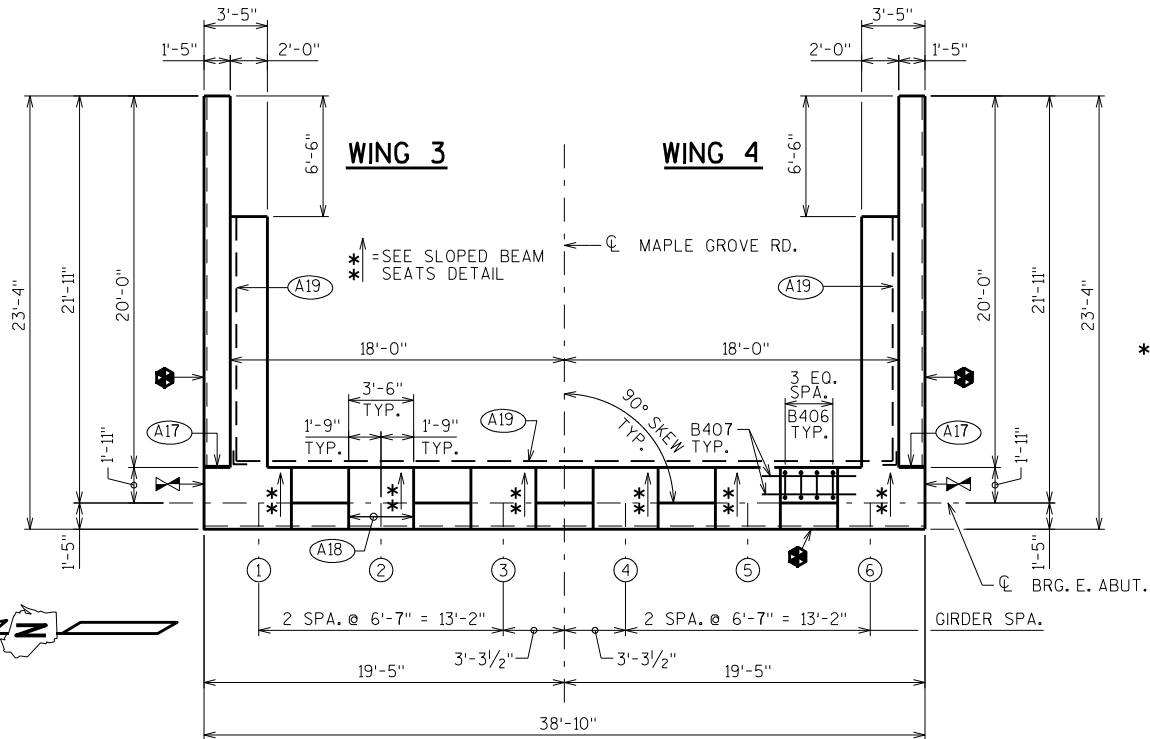
* = BEAM SEAT ELEVATION, WHERE GIRDER CROSSES CL BRG.

STATE PROJECT NUMBER

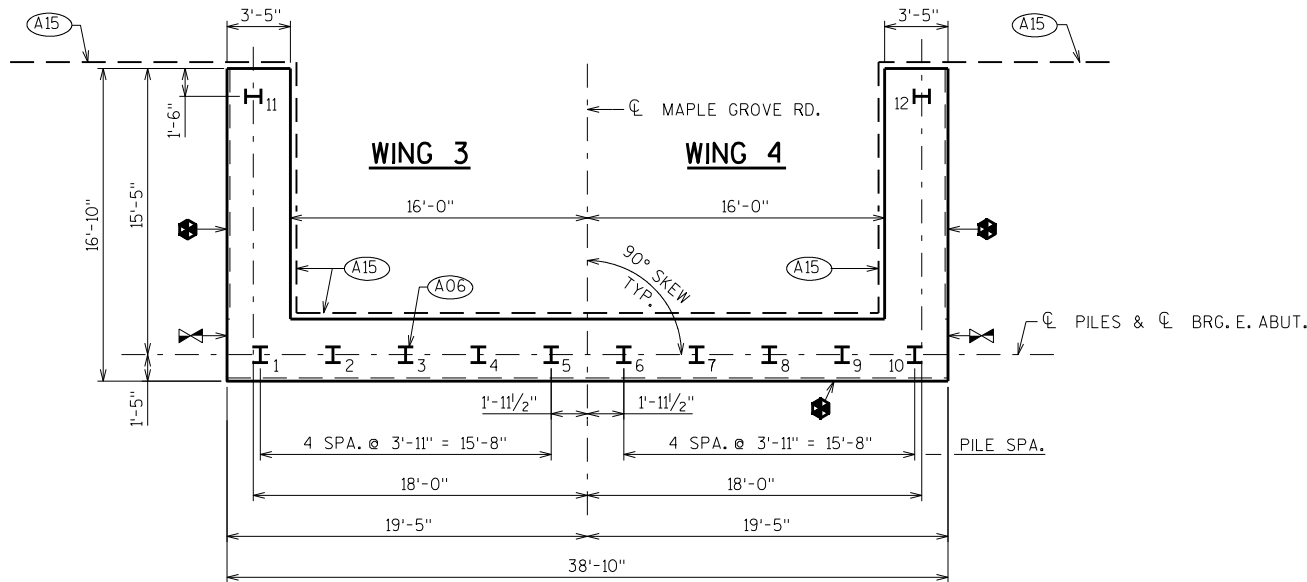
1007-10-79



ELEVATION - LOOKING WEST

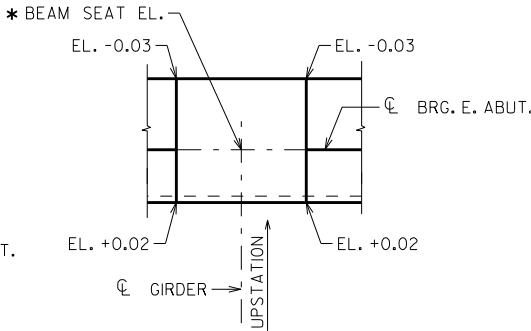


PLAN

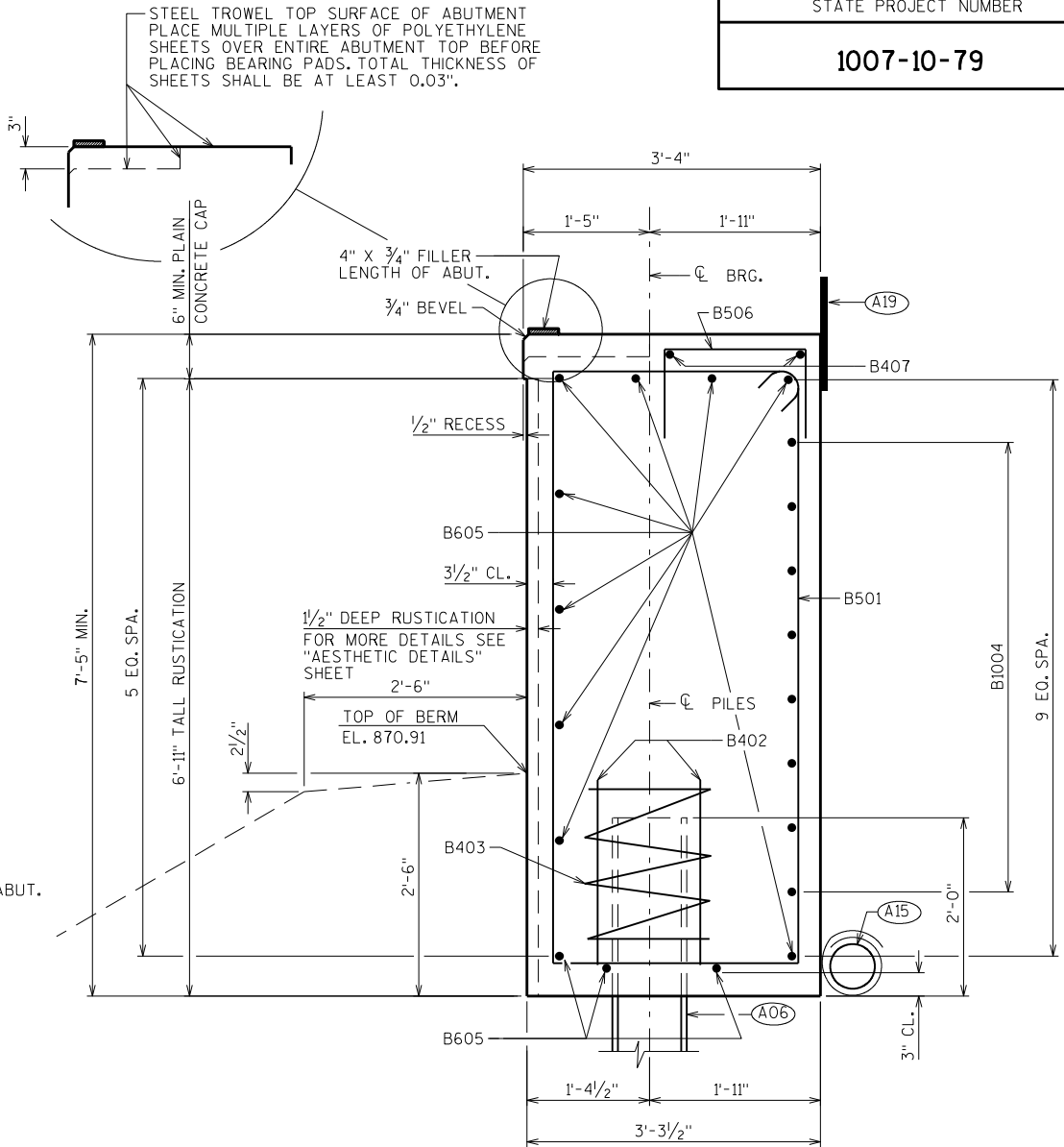


PILE PLAN

⬢ = RUSTICATION REQUIRED. FOR DETAILS SEE "AESTHETIC DETAILS" SHEET.
⌂ = NO RUSTICATION REQUIRED AT ENDS OF ABUTMENT BODY. FOR DETAILS SEE "AESTHETIC DETAILS" SHEET.

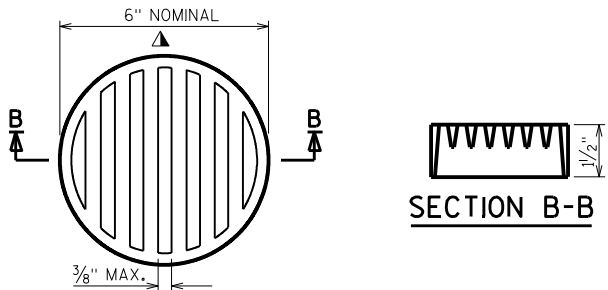


SLOPED BEAM SEATS



SECTION THRU BODY

- A06 SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING, ESTIMATED 55'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.
- A15 PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- A17 1/2" FILLER (INCLUDED IN WING LENGTH); SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE), EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- A18 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.
- A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.



RODENT SHIELD DETAIL

▲ DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

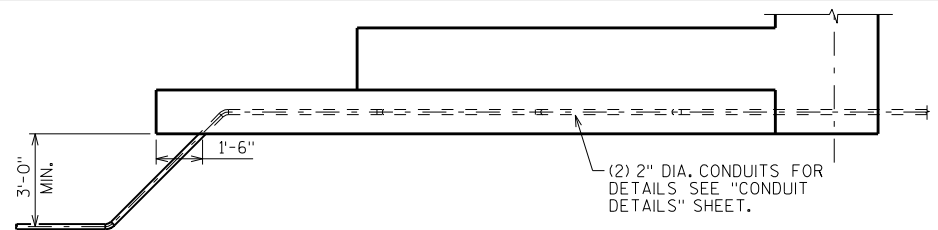
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-706			
DRAWN BY DDS		PLANS CKD. EMK	
EAST ABUTMENT			SHEET 6
			576

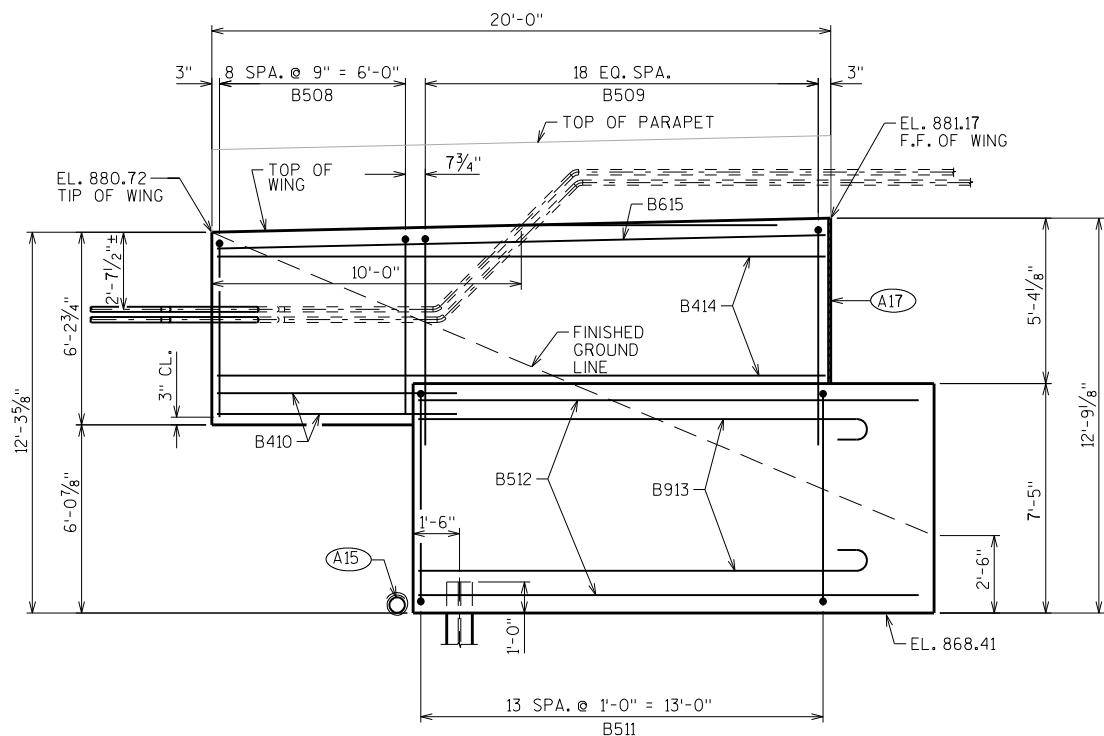
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B501		48	19'-10"	X		BODY - STIRRUP
B402		20	2'-3"			PILE - VERT. (2 PER BODY PILE)
B403		10	28'-0"	X		PILE - VERT. (1 PER BODY PILE)
B1004		16	24'-9"	X		BODY - HORIZ. - B.F.
B605		24	20'-9"			BODY - HORIZ.
B406		20	3'-11"	X		BODY - VERT.
B407		10	5'-1"			BODY - HORIZ.
B508	X	18	12'-2"	X		WINGS 3&4 - VERT.
B509	X	38	15'-0"	X		WINGS 3&4 - VERT.
B410	X	8	7'-9"			WINGS 3&4 - HORIZ.
B511	X	28	20'-6"	X		WINGS 3&4 - STIRRUP
B512	X	16	16'-2"			WINGS 3&4 - HORIZ. - F.F.
B913	X	20	15'-9"	X		WINGS 3&4 - HORIZ.
B414	X	24	19'-8"			WINGS 3&4 - HORIZ.
B615	X	4	19'-8"			WINGS 3&4 - HORIZ. - TOP

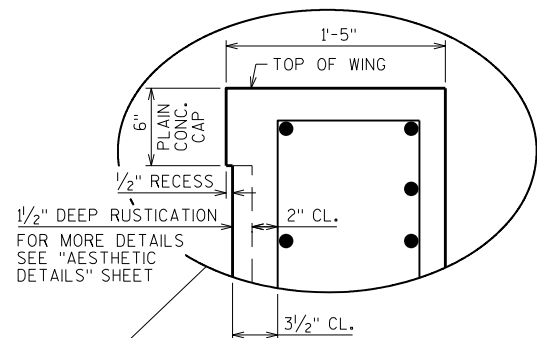
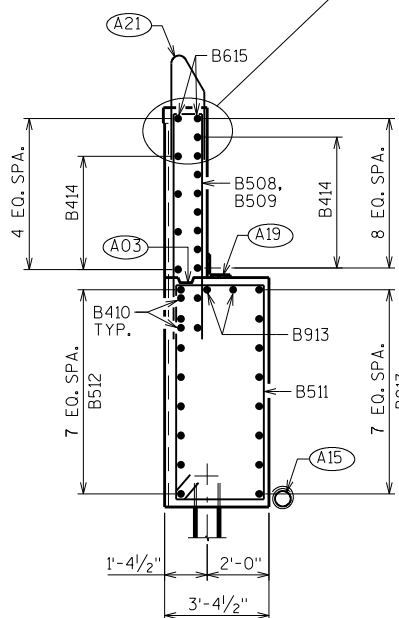


PLAN - CONDUIT LAYOUT



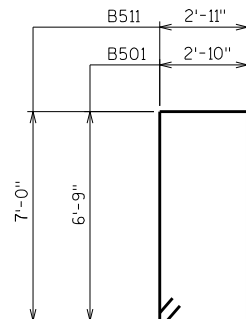
ELEVATION - WING 3

WING 4 SIMILAR

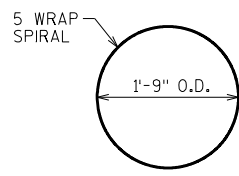
1/2" DEEP RUSTICATION
FOR MORE DETAILS
SEE "AESTHETIC
DETAILS" SHEET

SECTION THRU WING 3

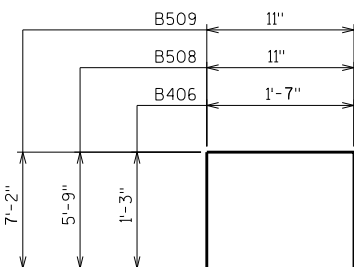
WING 4 SIMILAR



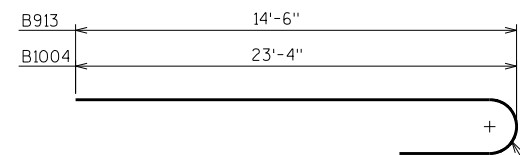
B501, B511



B403

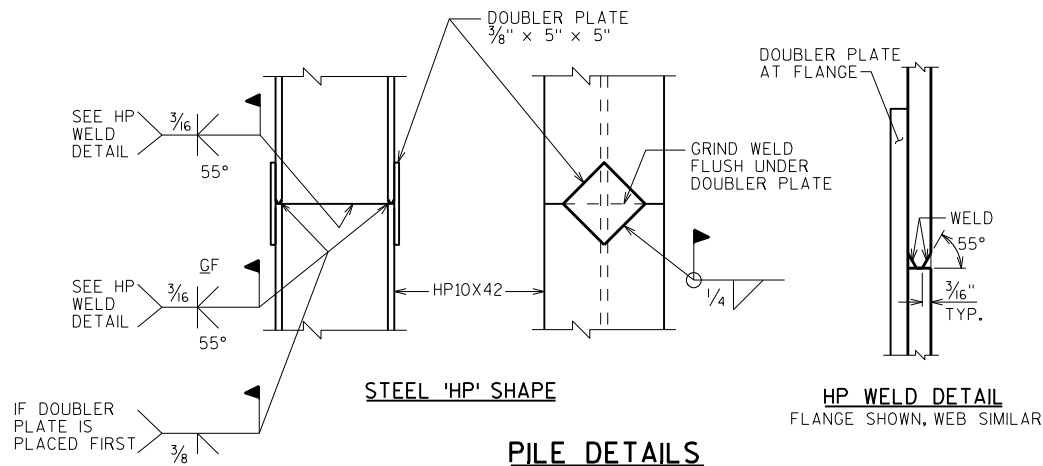


B406, B508, B509



B1004, B913

- (A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 X 6. (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).
- (A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- (A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- (A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- (A21) FOR PPT. BARS & DIMENSION SEE PARAPET SHT.

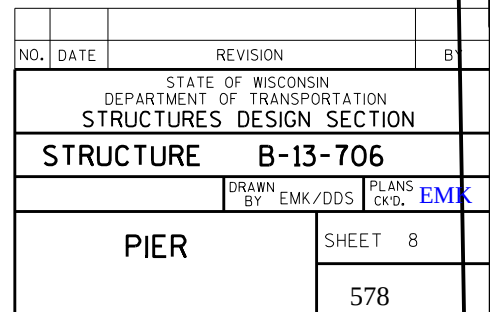
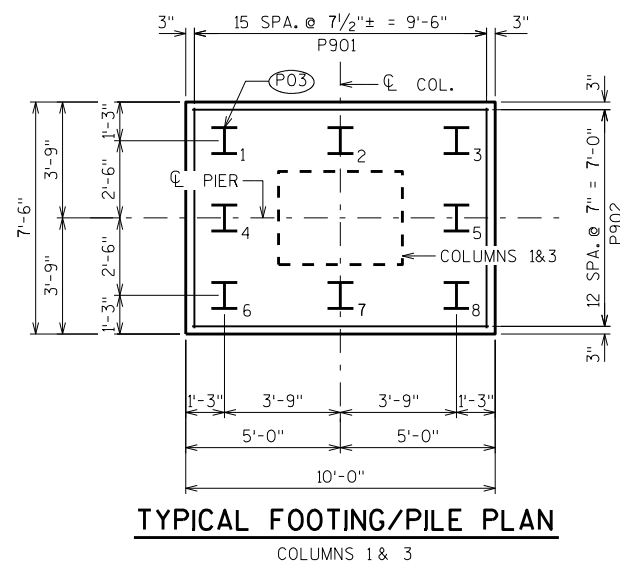
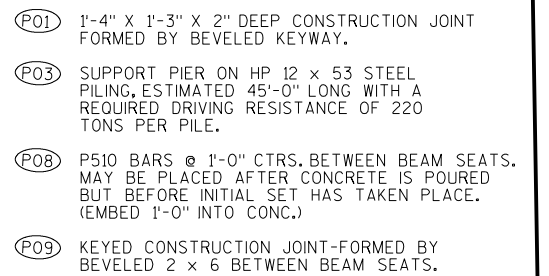


STEEL 'HP' SHAPE

PILE DETAILS

HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-706			
DRAWN BY DDS		PLANS CK'D. EMK	
EAST ABUTMENT DETAILS		SHEET 7	
		577	



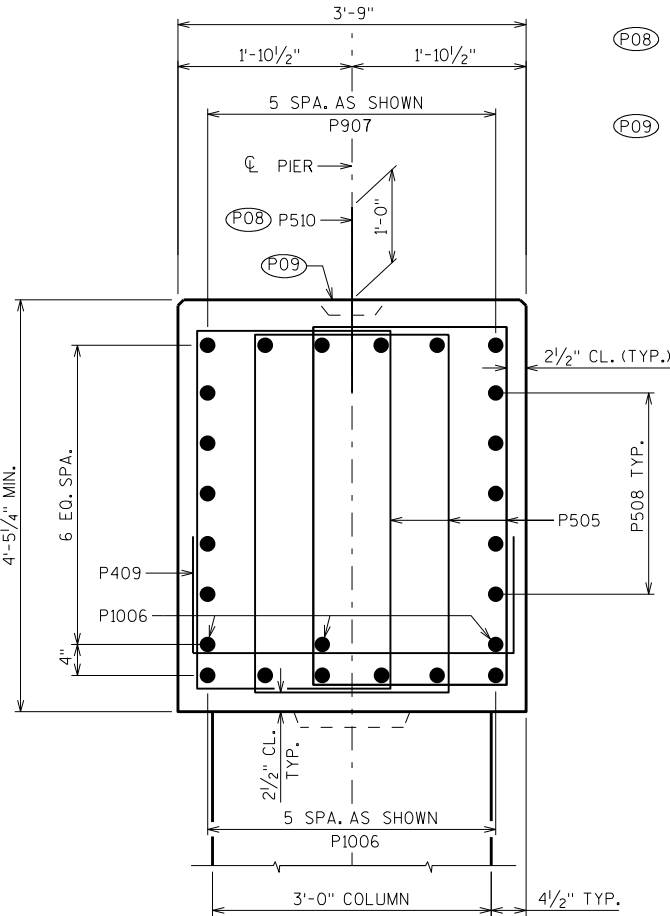
★ THE CONTRACTOR MAY FURNISH PRECAST PIER CAPS, BEARING BLOCKS AND COLUMNS IN LIEU OF THE CAST-IN-PLACE PIER WITH THE ACCEPTANCE OF SHOP DRAWINGS BY THE STRUCTURES DESIGN SECTION. CONTACT DAVE KIEKBUSCH (608) 266-5084 FOR PRECAST PIER MEMBER STANDARDS. PAYMENT FOR ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES"

IF THE CONTRACTOR CHOOSES TO FURNISH PRECAST PIER MEMBERS, THE CAP HEIGHT SHALL BE 4'-0". THE REMAINING DIFFERENCE BETWEEN THE BEAM SEAT ELEVATIONS AND THE TOP OF THE 4'-0" CAP WILL BE THE "H" DIMENSION OF THE PRECAST BEARING BLOCKS.

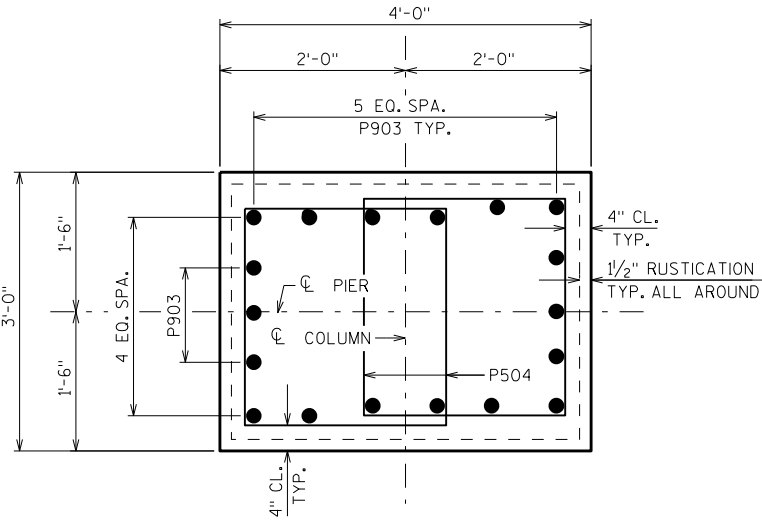
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

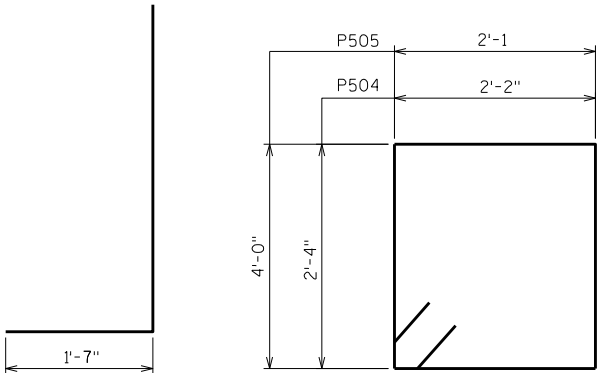
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
P901		48	7'-2"			FOOTING - HORIZ.
P902		39	9'-8"			FOOTING - HORIZ.
P903	X	54	26'-2"	X		FOOTING/SHAFT - VERT.
P504	X	234	9'-8"	X		COLUMN - STIRRUP - HORIZ.
P505	X	114	12'-10"	X		CAP - STIRRUP
P1006	X	9	36'-10"			CAP - HORIZ. - BOTTOM
P907	X	6	44'-6"	X		CAP - HORIZ. - TOP
P508	X	10	36'-10"			CAP - HORIZ. - SIDES
P409	X	9	6'-2"	X		CAP - VERT. - HANGER BAR
P510	X	20	2'-0"			DOWEL BAR
P511	X	12	6'-0"	X		CAP - HORIZ. - ENDS



SECTION THRU CAP

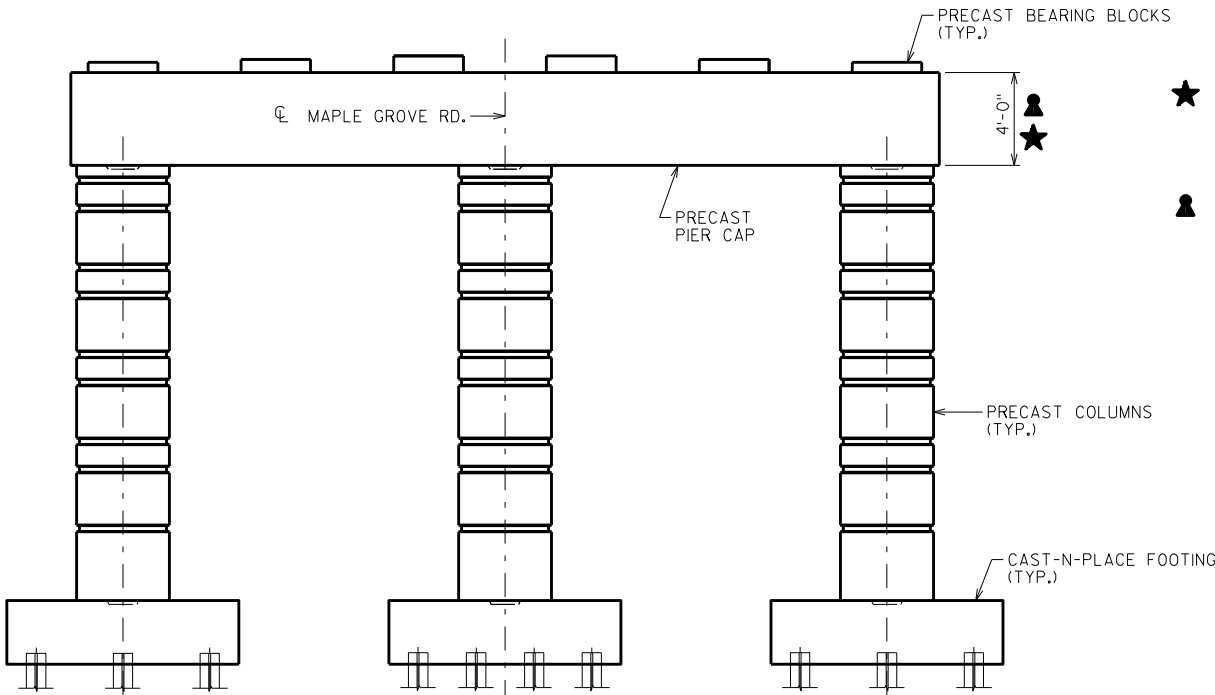


SECTION C-C THRU COLUMNS



P903

P504, P505

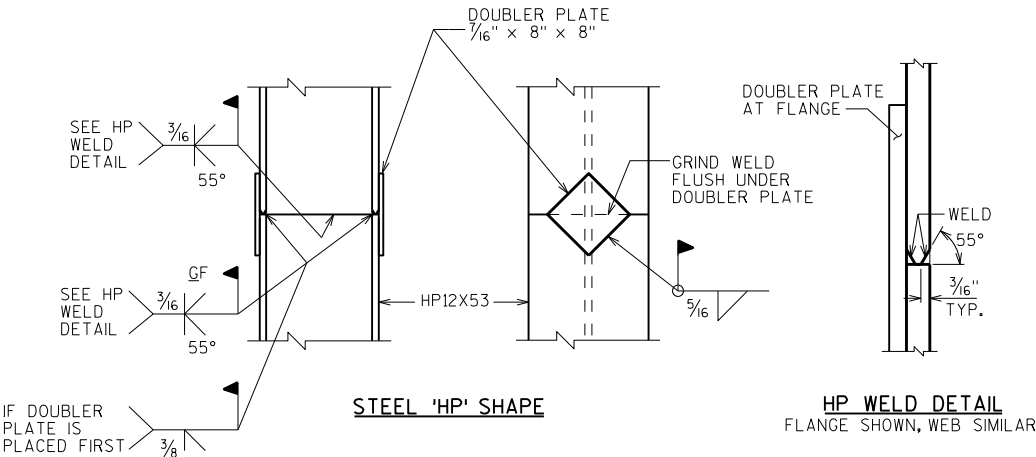


PRECAST PIER ALTERNATIVE - LOOKING EAST

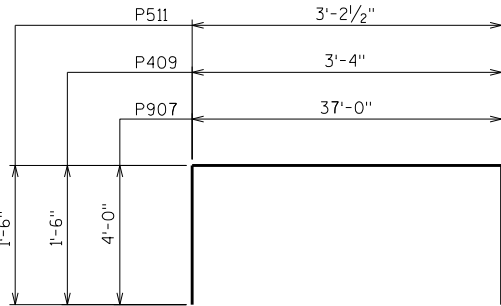
FOR INFORMATION ONLY
CONTACT DAVE KIEKBUSCH (608) 266-5084 OR JAMES LUEBKE (608) 266-5098
FOR PRECAST DETAILS/STANDARDS.

★ THE CONTRACTOR MAY FURNISH PRECAST PIER CAPS, BEARING BLOCKS AND COLUMNS IN LIEU OF THE CAST-N-PLACE PIER WITH THE ACCEPTANCE OF SHOP DRAWINGS BY THE STRUCTURES DESIGN SECTION. CONTACT DAVE KIEKBUSCH (608) 266-5084 FOR PRECAST PIER MEMBER STANDARDS. PAYMENT FOR THE PRECAST PIER MEMBERS SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES"

⦿ IF THE CONTRACTOR CHOOSES TO FURNISH PRECAST PIER MEMBERS, THE CAP HEIGHT SHALL BE 4'-0". THE REMAINING DIFFERENCE BETWEEN THE BEAM SEAT ELEVATIONS AND THE TOP OF THE 4'-0" CAP WILL BE THE "H" DIMENSION OF THE PRECAST BEARING BLOCKS.



PILE DETAILS



P907, P409, P511

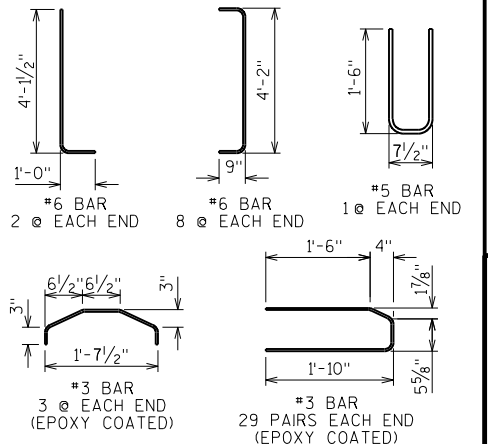
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-706			
DRAWN BY DDS		PLANS CK'D. EMK	
PIER DETAILS		SHEET 9	
		579	

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 15" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 15" OF THE TOP FLANGE.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, GRADE 2, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE
"STEEL DIAPHRAGM" SHEET.



(A) DETAIL TYP. AT EACH END

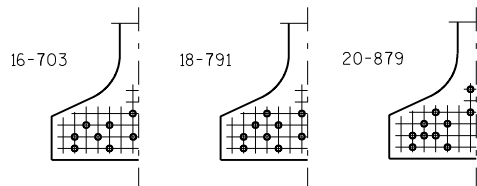
(B) 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"

* MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

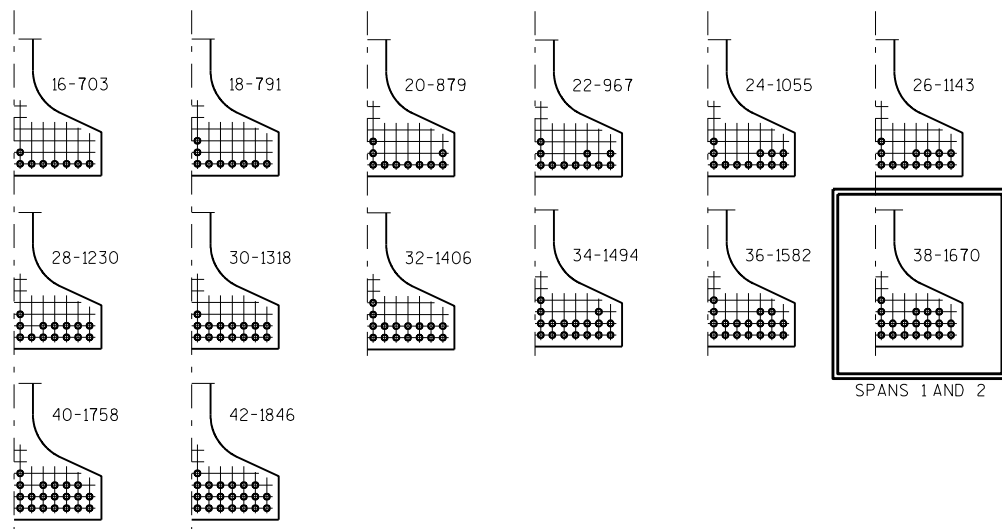
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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-706			
		DRAWN BY EMK	PLANS C'K'D. EMK
54W" PRESTRESSED GIRDER DETAILS		SHEET 10	
		580	

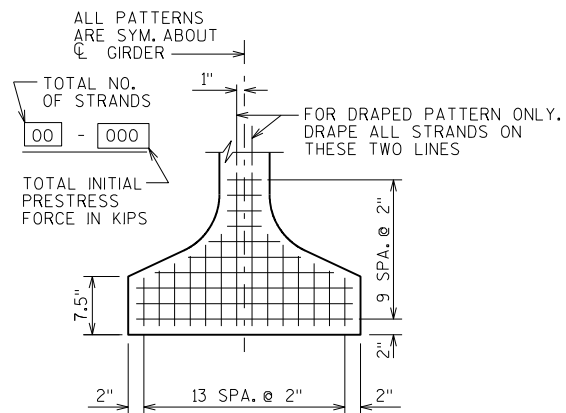
SCALE = 1.0



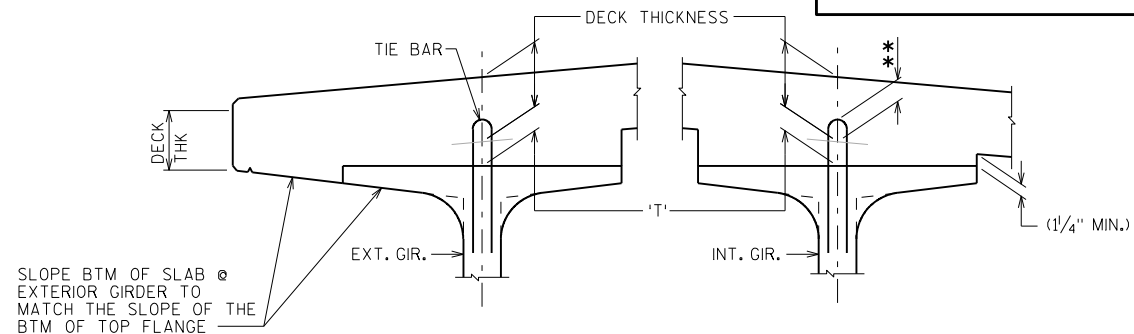
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6" ϕ STRANDS

ARRANGEMENT AT ϕ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6" ϕ STRANDS

TYP. STRAND PATTERN



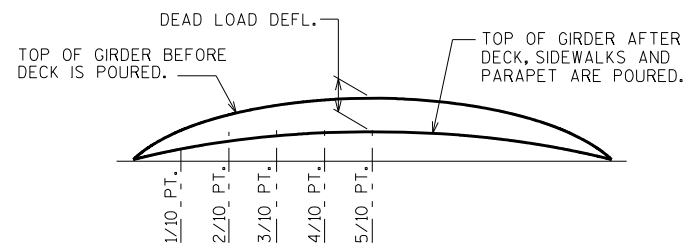
DECK HAUNCH DETAIL

IF $1/4$ " MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN $1/2$ " OR, ** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

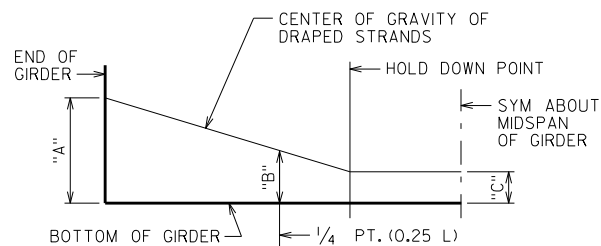
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ϕ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- DECK THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 2.6" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".



DEAD LOAD DEFLECTION DIAGRAM



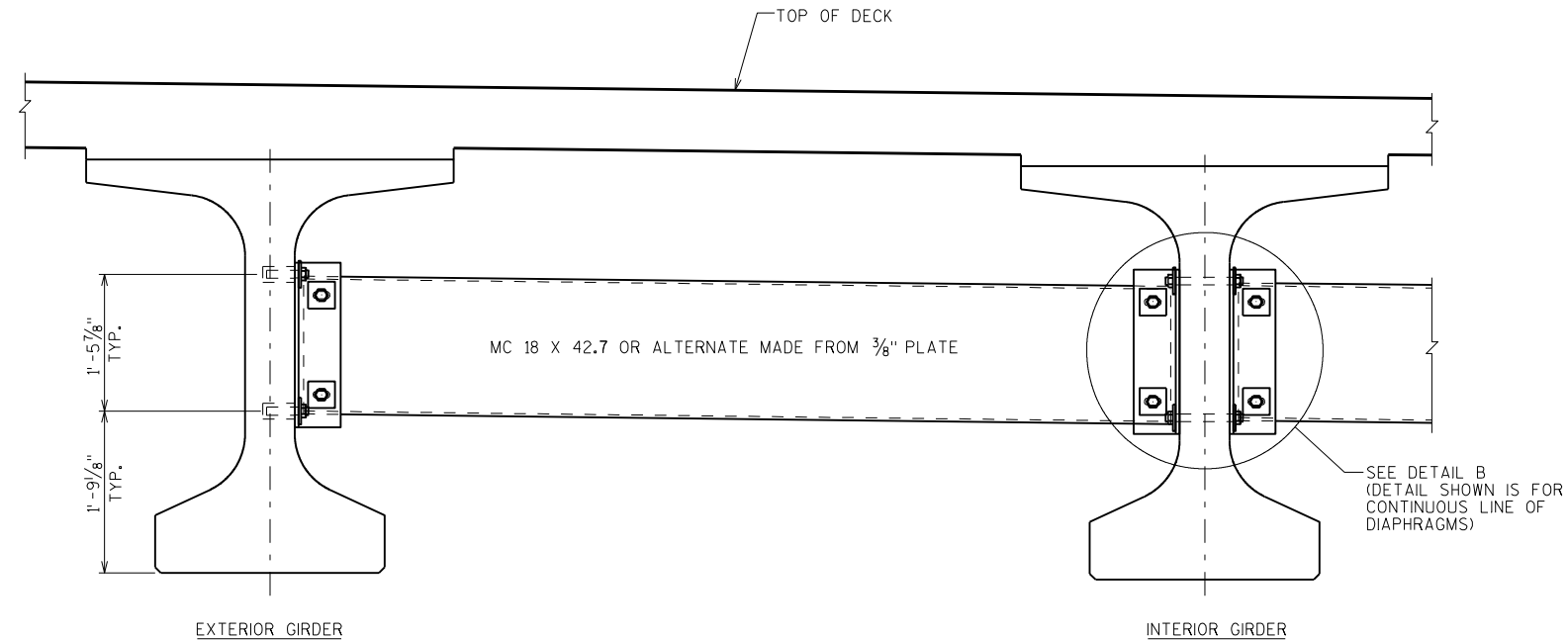
DRAPED STRAND PROFILE

*THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

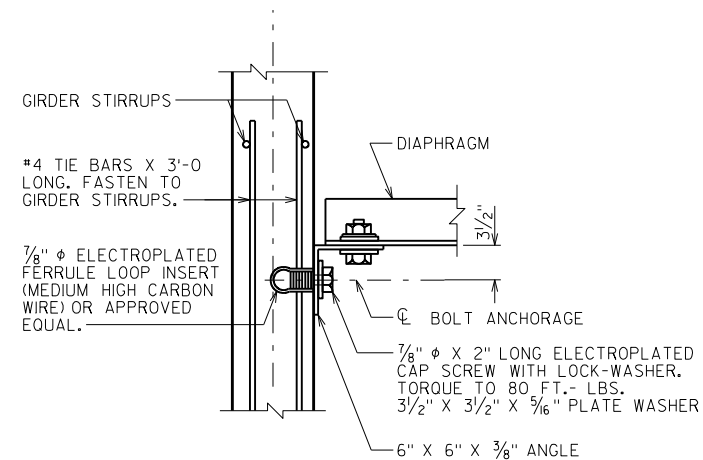
SPAN	CAMBER (IN.) *
1	3.95
2	3.95

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T'. USE ACTUAL GIRDER SHOTS.
THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-706			
DRAWN BY EMK		PLANS CK'D. EMK	
54W" PRESTRESSED GIRDER DETAILS 2		SHEET 11	
		581	

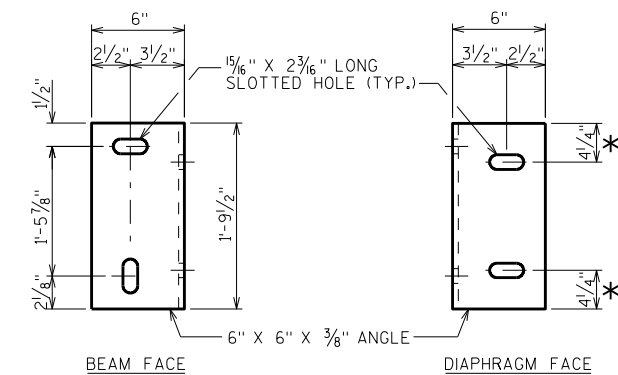


PART TRANSVERSE SECTION AT DIAPHRAGM

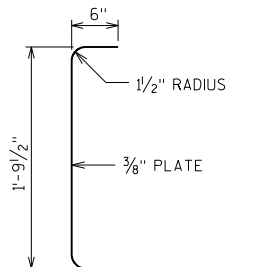


SECTION A-A

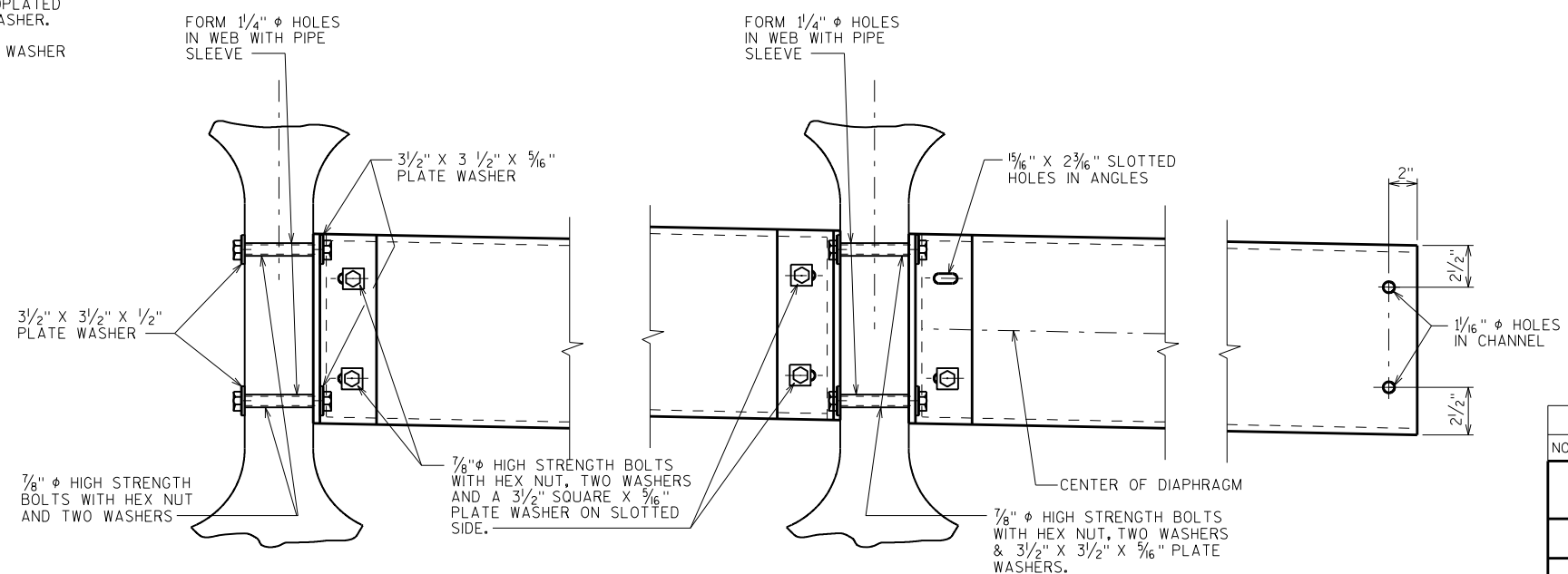
(FOR EXTERIOR ATTACHMENT)



DIAPHRAGM SUPPORT

* 2 $\frac{1}{2}$ " FOR ALTERNATE PLATE DIAPHRAGM

SECTION THRU ALTERNATE DIAPHRAGM



DETAIL B

(FOR CONTINUOUS LINE OF DIAPHRAGMS)

(FOR STAGGERED DIAPHRAGM)

NOTES

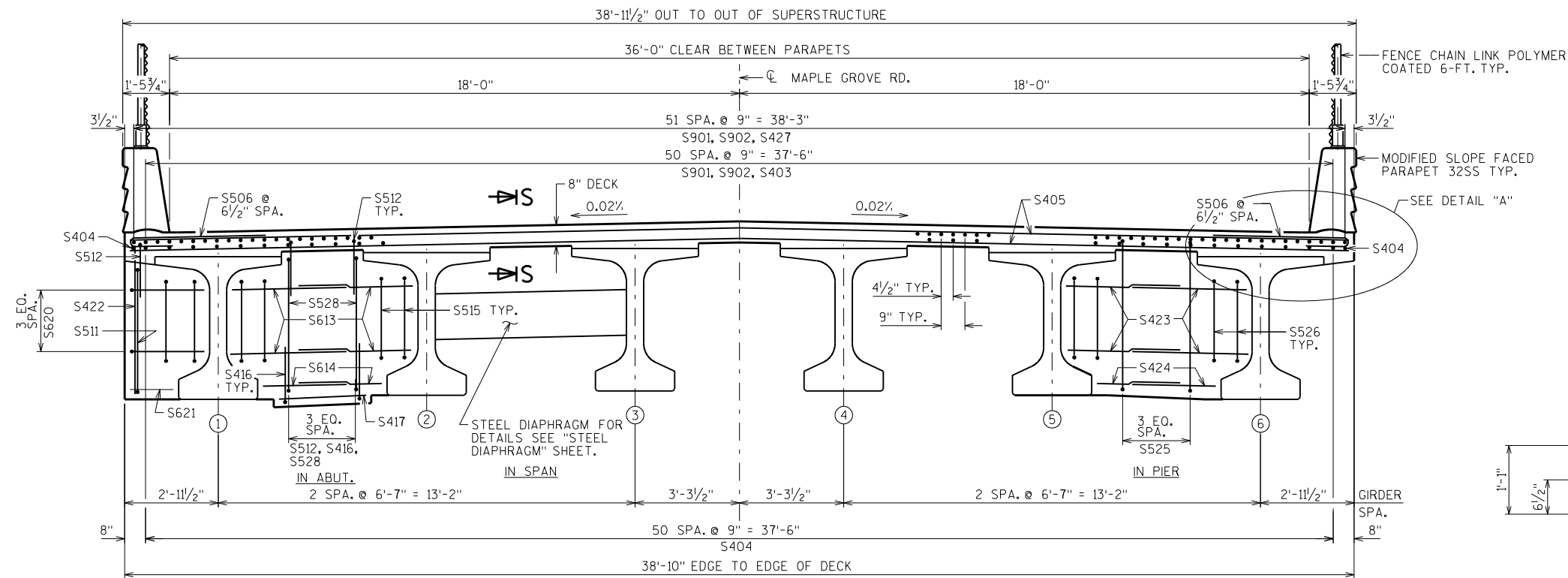
ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-13-706", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

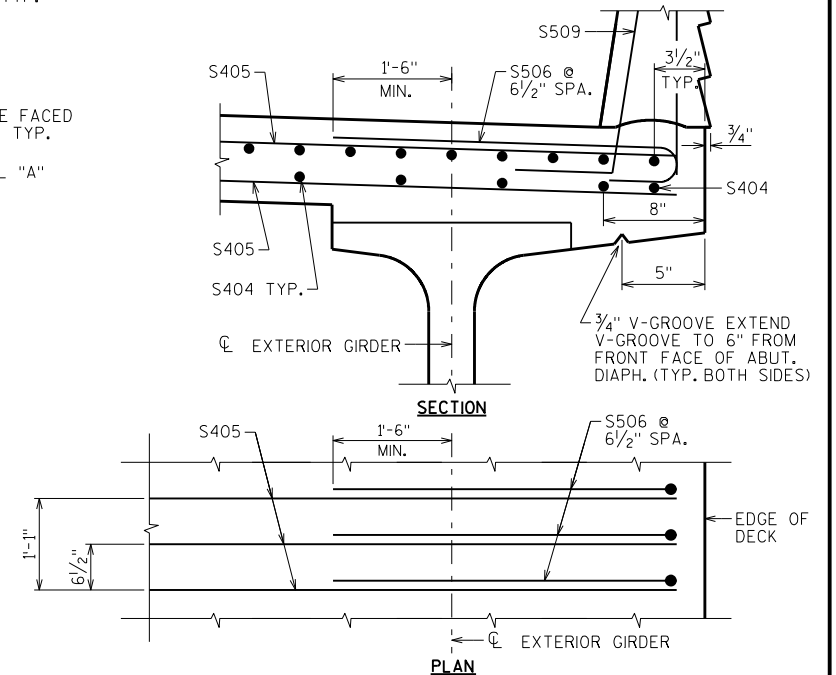
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S10F OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

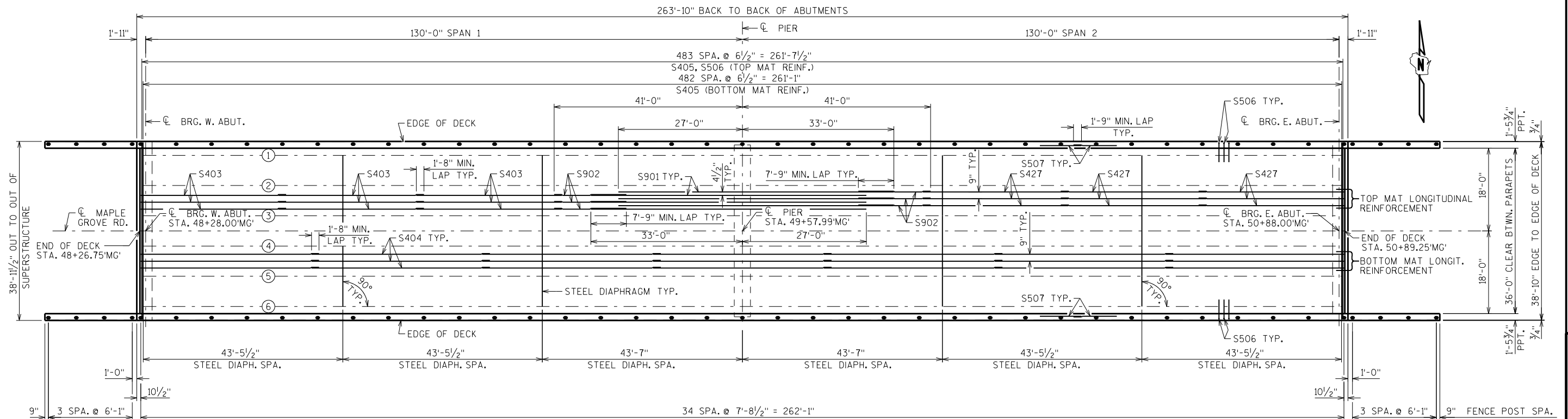
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-706			
DRAWN BY DDS		PLANS CK'D. EMK	
STEEL DIAPHRAGM			SHEET 12
			582



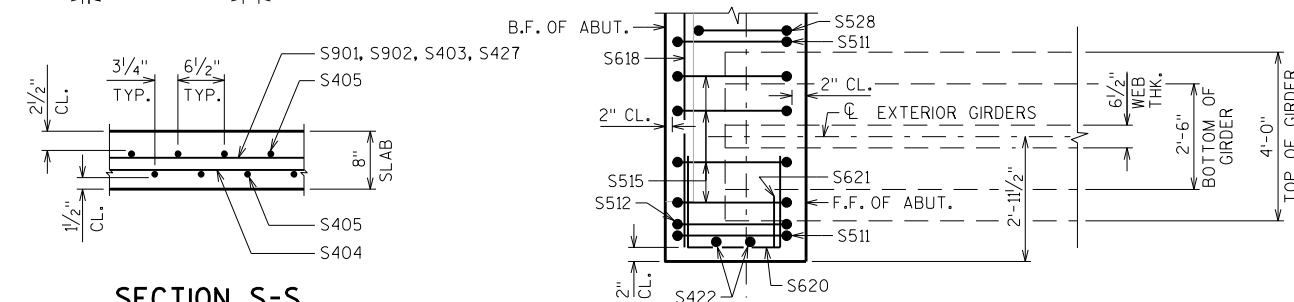
CROSS SECTION THRU ROADWAY - LOOKING EAST



DETAIL A



PLAN



SECTION S-S

PLAN - ABUT. DIAPH. ENDS

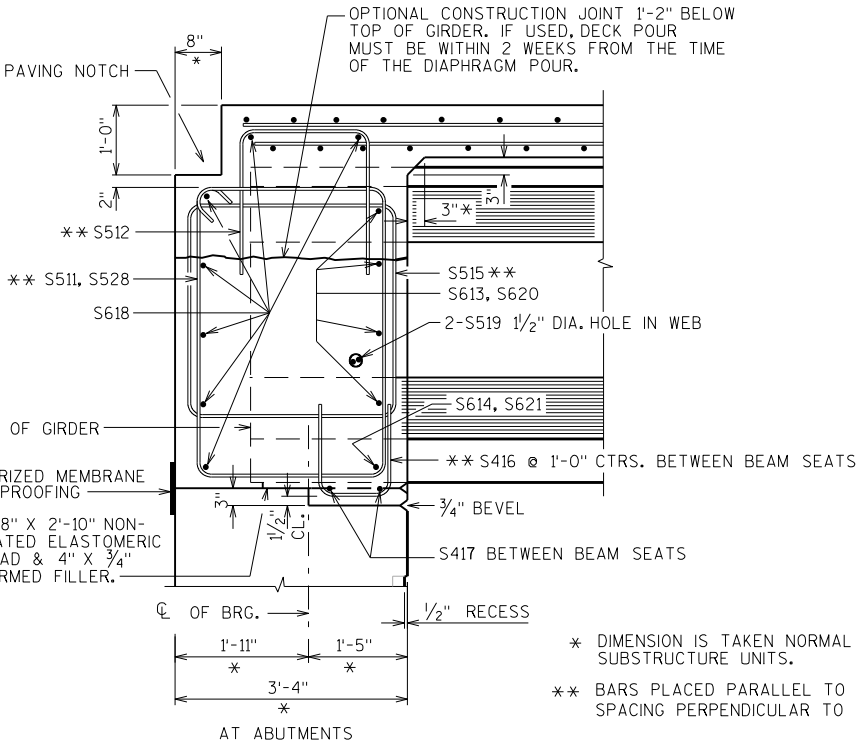
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-706			
DRAWN BY DDS		PLANS CK'D. EMK	
SUPERSTRUCTURE		SHEET 13	
		583	

BILL OF BARS

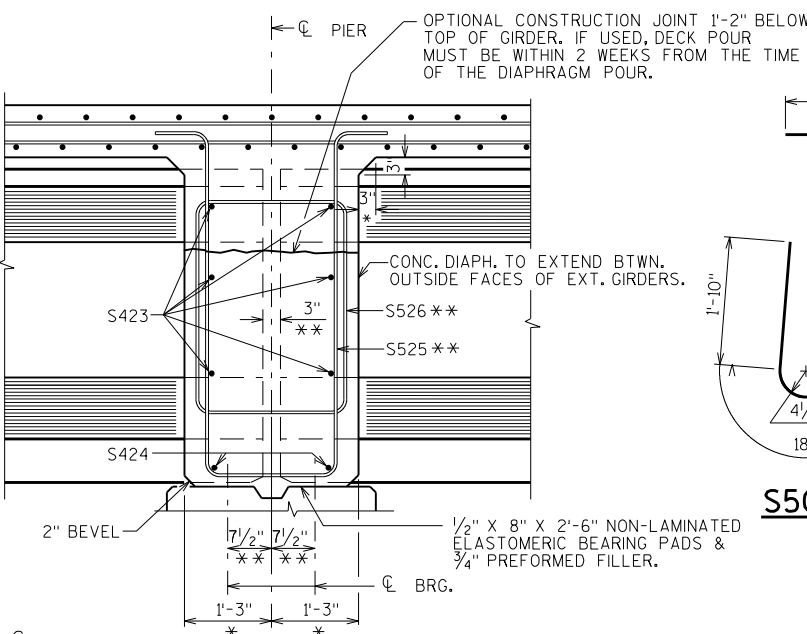
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S901	X	103	60'-0"			CONTINUITY OVER PIER
S902	X	103	15'-9"			CONTINUITY STEEL
S403	X	153	31'-9"			LONGITUDINAL - TOP
S404	X	371	38'-11"			LONGITUDINAL - BOTTOM
S405	X	967	38'-6"			TRANSVERSE - TOP & BOTTOM
S506	X	968	4'-11"	X		TRANSVERSE - EDGE OF DECK
S507	X	84	39'-2"			PARAPET - HORIZ.
S508	X	792	5'-0"	X		PARAPET - VERT.
S509	X	788	4'-5"	X		PARAPET - VERT.
S510	X	4	5'-10"	X		PARAPET - VERT. - AT PAVING NOTCHES
S511	X	4	14'-8"	X		ABUT. DIAPH. - STIRRUP - ENDS
S512	X	44	7'-7"	X		ABUT. DIAPH. - VERT.
S613	X	80	3'-9"			ABUT. DIAPH. - HORIZ. - F.F.
S614	X	20	2'-10"			ABUT. DIAPH. - HORIZ. - F.F.
S515	X	48	11'-0"	X		ABUT. DIAPH. - STIRRUPS AT GIRDERS
S416	X	40	3'-5"	X		ABUT. DIAPH. - VERT. - F.F.
S417	X	20	2'-9"			ABUT. DIAPH. - HORIZ. - F.F.
S618	X	14	38'-6"			ABUT. DIAPH. - HORIZ. - B.F.
S519	X	24	6'-0"			ABUT. DIAPH. - HORIZ. - THRU GIRDERS
S620	X	16	7'-2"	X		ABUT. DIAPH. - HORIZ. - ENDS
S621	X	4	1'-4"			ABUT. DIAPH. - HORIZ. - ENDS
S422	X	8	4'-8"			ABUT. DIAPH. - VERT. - ENDS
S423	X	60	3'-9"			PIER DIAPH. - HORIZ.
S424	X	20	2'-10"			PIER DIAPH. - HORIZ.
S525	X	20	12'-10"	X		PIER DIAPH. - VERT.
S526	X	20	9'-4"	X		PIER DIAPH. - STIRRUP AT GIRDERS
S427	X	156	31'-9"			LONGITUDINAL - TOP
S528	X	40	14'-10"	X		ABUT. DIAPH. - STIRRUP

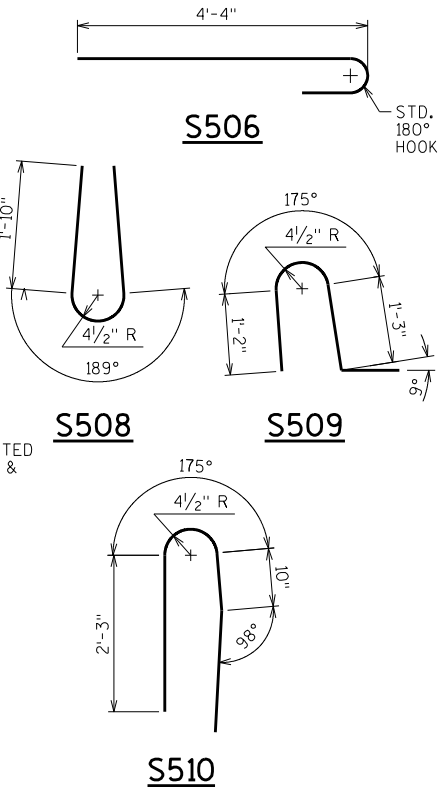
▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



PART LONGIT. SECTION

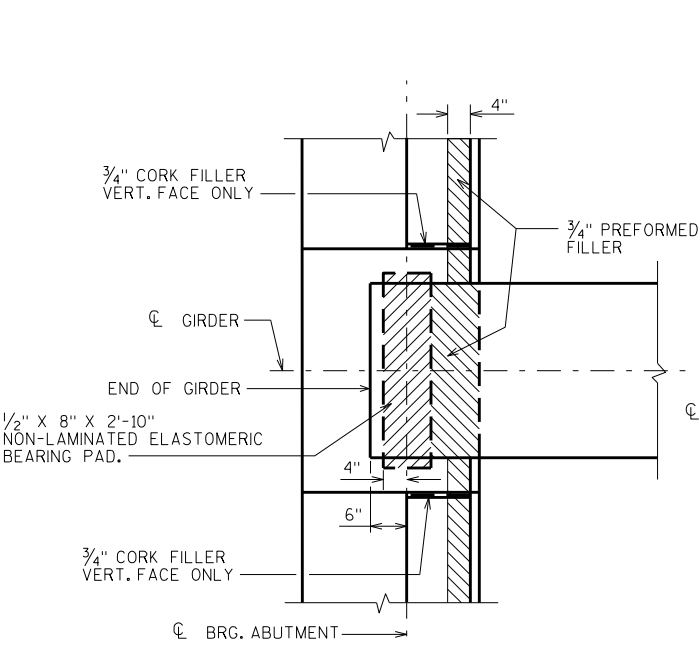


AT PIER DIAPHRAGM

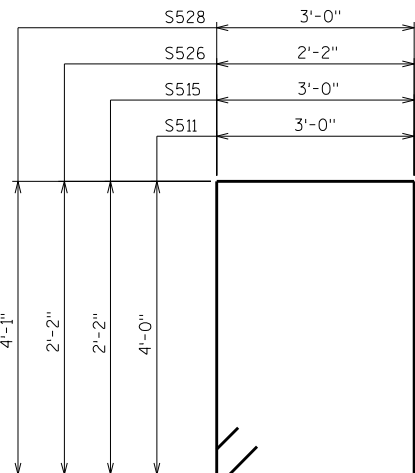
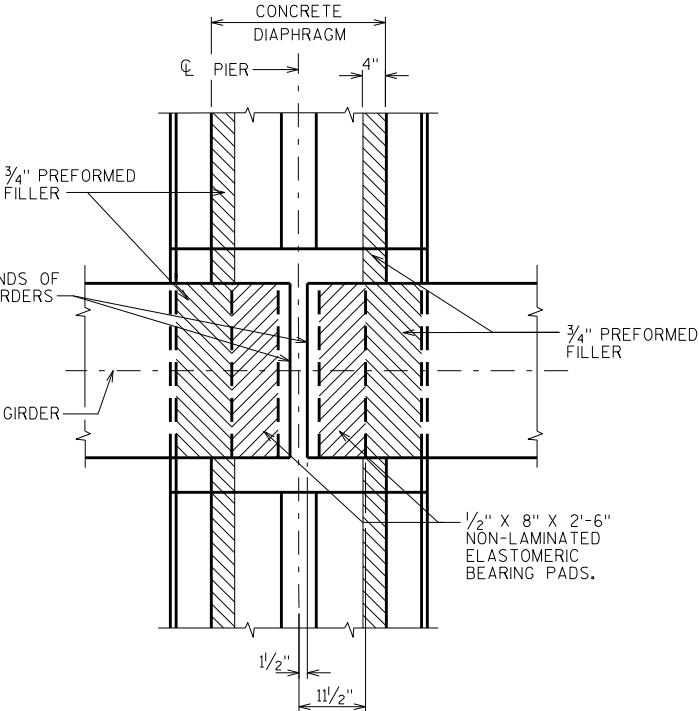


TOP OF DECK ELEVATIONS

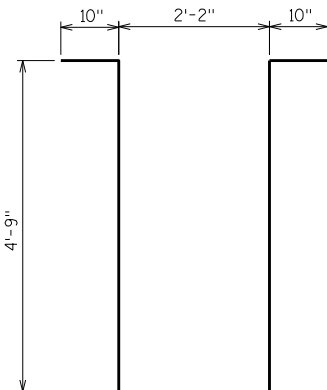
	CL BRG. WEST ABUT.	1/10 PT.	2/10 PT.	3/10 PT.	4/10 PT.	1/2 PT.	5/10 PT.	7/10 PT.	8/10 PT.	9/10 PT.	CL PIER	1/10 PT.	2/10 PT.	3/10 PT.	4/10 PT.	1/2 PT.	5/10 PT.	7/10 PT.	8/10 PT.	9/10 PT.	CL BRG. EAST ABUT.
NORTH E.O.D.	884.70	884.64	884.55	884.46	884.36	884.25	884.12	883.99	883.84	883.68	883.51	883.33	883.14	882.94	882.73	882.5	882.27	882.02	881.76	881.49	881.21
GIRDER 1	884.73	884.66	884.58	884.49	884.39	884.27	884.15	884.01	883.87	883.71	883.54	883.36	883.17	882.97	882.75	882.53	882.29	882.05	881.79	881.52	881.24
GIRDER 2	884.86	884.80	884.71	884.62	884.52	884.41	884.28	884.15	884.00	883.84	883.67	883.49	883.30	883.10	882.89	882.66	882.43	882.18	881.92	881.65	881.37
GIRDER 3	885.00	884.93	884.85	884.76	884.65	884.54	884.42	884.28	884.13	883.97	883.81	883.63	883.43	883.23	883.02	882.79	882.56	882.31	882.06	881.79	881.51
CL	885.06	885.00	884.91	884.82	884.72	884.61	884.48	884.35	884.20	884.04	883.87	883.69	883.50	883.30	883.09	882.86	882.63	882.38	882.12	881.85	881.57
GIRDER 4	885.00	884.93	884.85	884.76	884.65	884.54	884.42	884.28	884.13	883.97	883.81	883.63	883.43	883.23	883.02	882.79	882.56	882.31	882.06	881.79	881.51
GIRDER 5	884.86	884.80	884.71	884.62	884.52	884.41	884.28	884.15	884.00	883.84	883.67	883.49	883.30	883.10	882.89	882.66	882.43	882.18	881.92	881.65	881.37
GIRDER 6	884.73	884.66	884.58	884.49	884.39	884.27	884.15	884.01	883.87	883.71	883.54	883.36	883.17	882.97	882.75	882.53	882.29	882.05	881.79	881.52	881.24
SOUTH E.O.D.	884.70	884.64	884.55	884.46	884.36	884.25	884.12	883.99	883.84	883.68	883.51	883.33	883.14	882.94	882.73	882.5	882.27	882.02	881.76	881.49	881.21



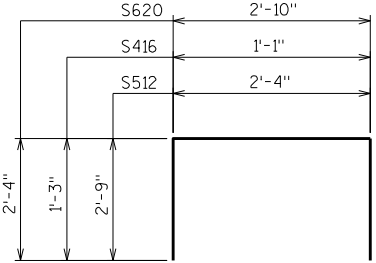
BEARING PAD DETAIL



S511, S515, S526, S528

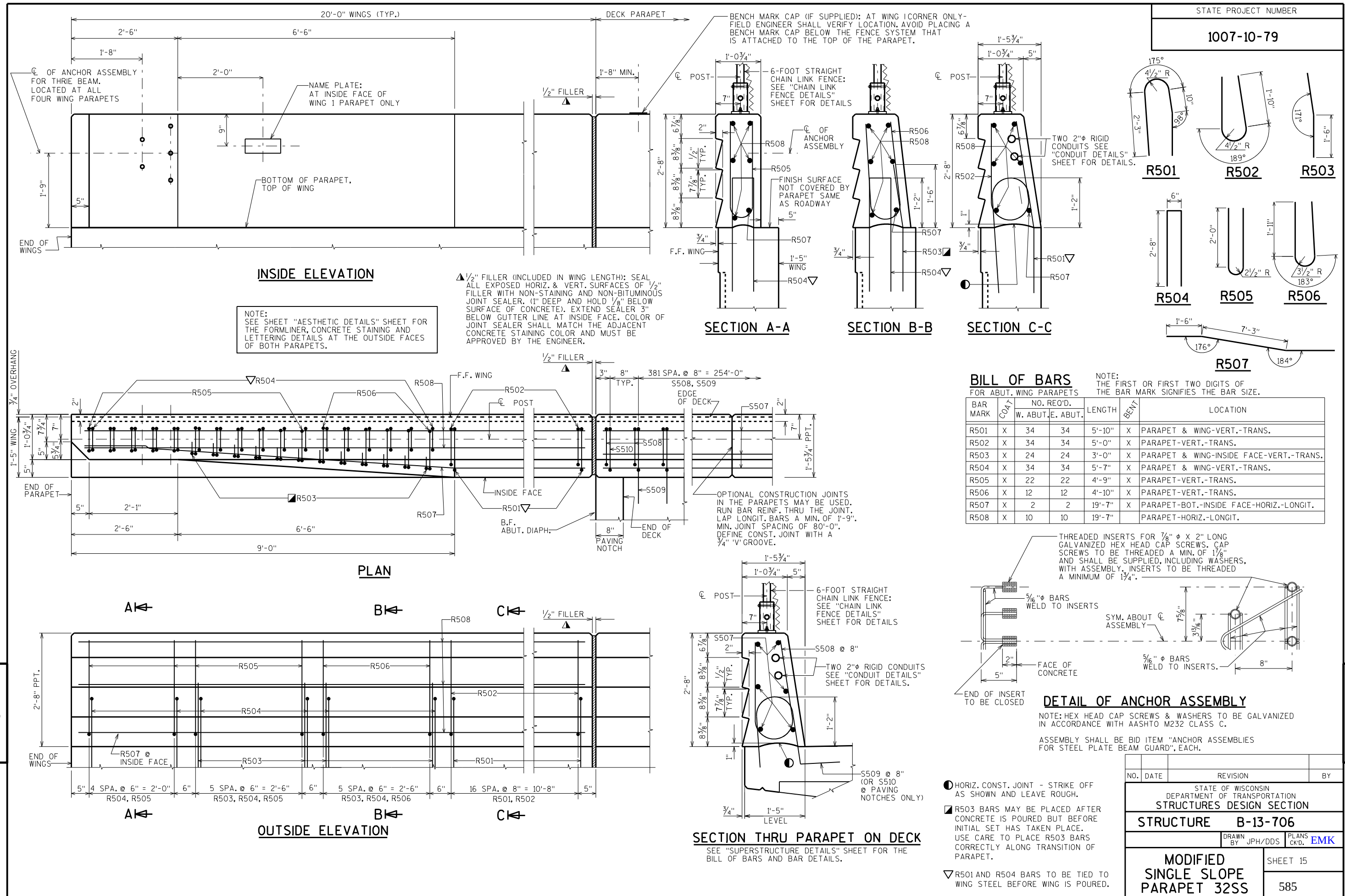


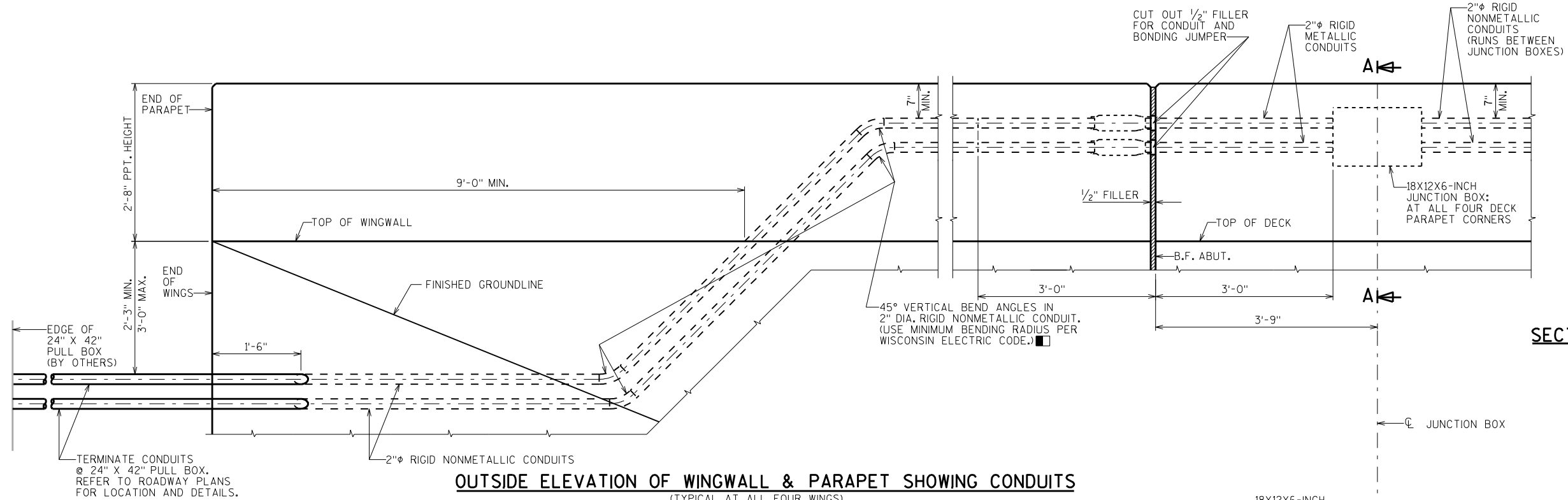
S525



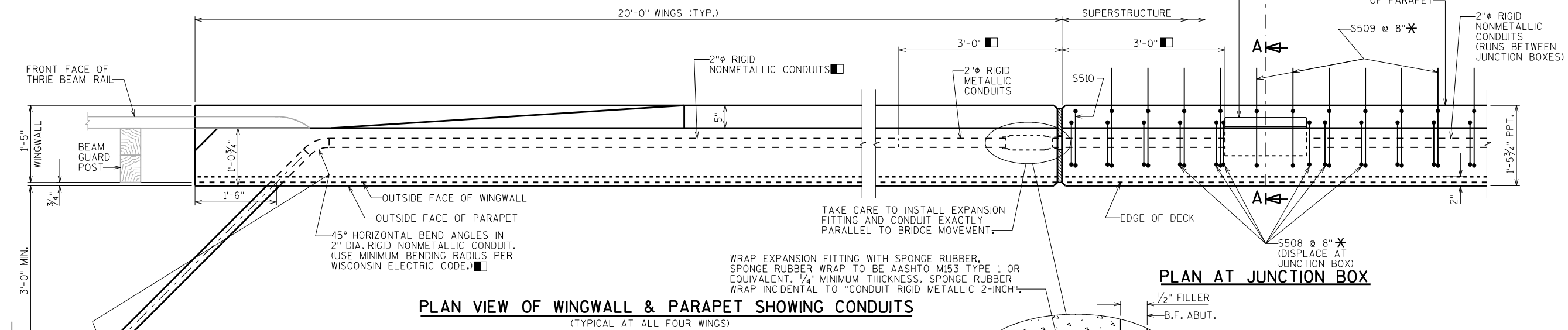
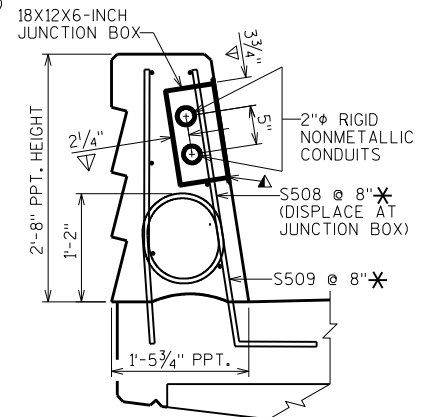
S512, S416, S620

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-706			
DRAWN BY DDS		PLANS CKD. EMK	
SUPERSTRUCTURE DETAILS		SHEET 14	
		584	

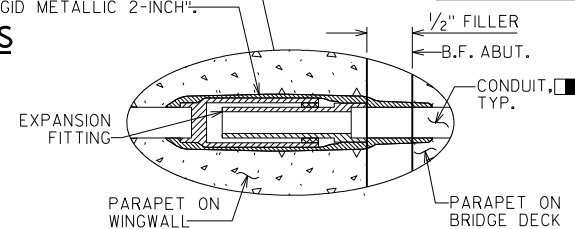




SECTION A-A (AT JUNCTION BOX)



PLAN AT JUNCTION BOX



NOTES

BID ITEMS SHALL BE:

"JUNCTION BOXES 18X12X6-INCH", EACH.
 "CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
 "CONDUIT RIGID METALLIC 2-INCH"

APPROVED MANUFACTURERS - JUNCTION BOXES:
 SEE APPROVED MATERIAL LIST.

APPROVED MANUFACTURER OR EQUIVALENT - EXPANSION FITTING:
 O-Z/GEDNEY TYPE AX-200 AND BONDING JUMPER (4" TOTAL CONDUIT MOVEMENT).

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL
 TO "CONDUIT RIGID METALLIC 2-INCH".

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY
 ADAPTER FITTINGS U.L. OR NRTL LISTED FOR ELECTRICAL USE SHALL BE USED.

- USE 2" RIGID NONMETALLIC CONDUIT EXCEPT AT EXPANSION FITTING. AT EXPANSION FITTING USE 2" RIGID METALLIC CONDUIT 3'-0" INTO PARAPET ON DECK AND WING SIDES OF THE B.F. ABUT.

- ▲ CUT OUT 1"± OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE.

- ▽ LOCATION OF CONDUIT IS MEASURED FROM OUTSIDE EDGE OF JUNCTION BOX.

- * SEE "SINGLE SLOPE PARAPET 32SS" SHEET. FOR ADDITIONAL BAR STEEL DETAILS.

WRAP EXPANSION FITTING WITH SPONGE RUBBER. SPONGE RUBBER WRAP TO BE AASHTO M153 TYPE 1 OR EQUIVALENT. 1/4" MINIMUM THICKNESS. SPONGE RUBBER WRAP INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

TAKE CARE TO INSTALL EXPANSION FITTING AND CONDUIT EXACTLY PARALLEL TO BRIDGE MOVEMENT.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-706			
DRAWN BY JPH/DDS		PLANS CK'D. EMK	
CONDUIT DETAILS		SHEET 16	
		586	

GENERAL NOTES

POSTS ARE TO BE SET VERTICAL.

ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL WITH A COLORED POLYMER-COATING ON THE OUTSIDE.

FABRIC SHALL CONFORM TO ASTM F668, CLASS 2B. STEEL RAILS, POSTS AND POST SLEEVES SHALL CONFORM TO ASTM F1083, STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM F626. SEE THE "BRIDGE SPECIAL PROVISIONS" FOR ADDITIONAL DETAILS.

THE COLOR OF POLYMER-COATING FOR THIS FENCING SHALL BE FEDERAL COLOR NO. 30140 IN ACCORDANCE WITH ASTM F934.

THE BID ITEM SHALL BE "FENCE CHAIN LINK POLYMER COATED 6'-FT", LF.

COMPLETE ANY REQUIRED WELDING OF COMPONENTS BEFORE GALVANIZING.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

BASE PLATES, ANCHOR PLATES AND SHIMS SHALL BE ASTM A709, GRADE 36.

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG THE ϕ OF THE POST.

■ CAULK AROUND PERIMETER OF BASE PLATE AND FILL PORTION OF SLOTTED HOLE AROUND ANCHOR BOLT IN SHIM WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

✱ ALTERNATE TO DOUBLE CLAMP: USE LINE RAIL CLAMP (BOULEVARD) OR 180° BRACE BAND, WHICH MAY BE USED WHEN THE POSTS ARE EITHER BOLTED TO THE POST SLEEVES OR DIRECTLY WELDED TO THE BASE PLATE.

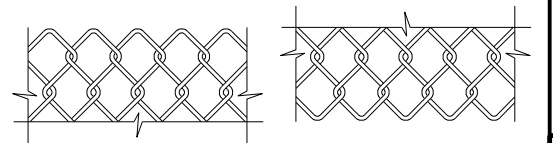
▲ $\frac{1}{2}$ " DIA. X $6\frac{7}{8}$ " LONG GALVANIZED HEX BOLT WITH NUT & WASHER, TYPE "S", $\frac{1}{2}$ " DIA. CONCRETE MASONRY ANCHORS MAY BE SUBSTITUTED FOR $\frac{1}{2}$ " DIA. BOLTS. ANCHOR PLATE NOT REQUIRED WHEN TYPE "S" ANCHORS ARE USED. SEE ☆

☆ MASONRY ANCHOR TYPE S $\frac{1}{2}$ -INCH. EMBED 6" IN CONCRETE. ANCHOR, WASHER, AND NUT SHALL BE GALVANIZED.

■ ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".

■ BOLT RAIL TO RAIL END TO SECURE OVERHANG SECTION. ALTERNATE IS TO WELD RAIL DIRECTLY TO END POST.

MINIMUM LENGTH OF TOP RAIL BETWEEN SPLICES SHALL BE 20'-0". LOCATE SPLICES NEAR $\frac{1}{4}$ POINT OF POST SPACING.



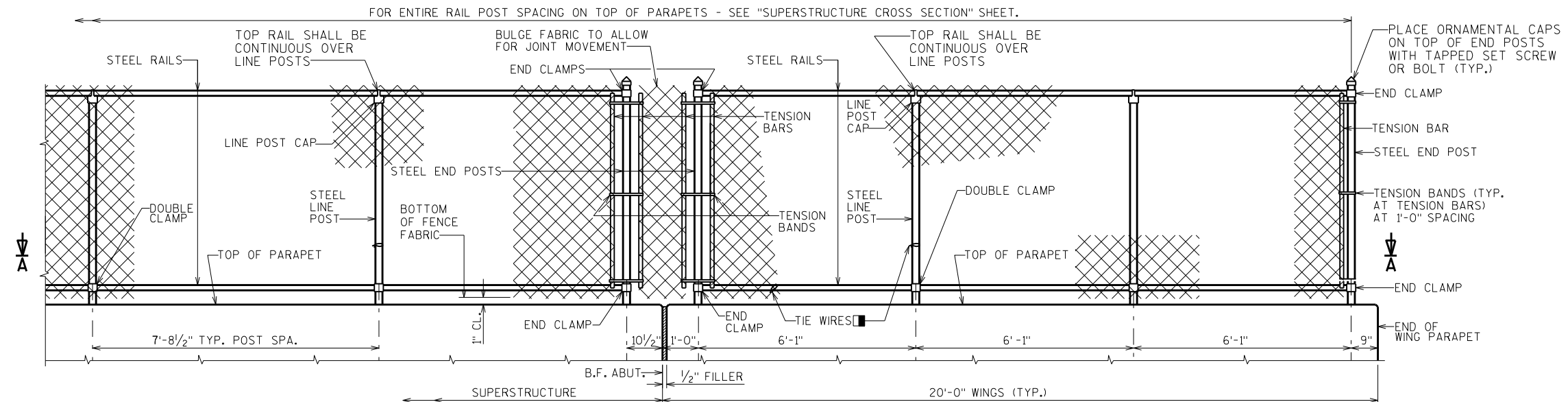
TOP DETAIL

BOTTOM DETAIL

FENCE FABRIC

FENCE FABRIC WOVEN OF 9-GAGE WIRE IN 2" DIAMOND PATTERN MESH WITH BOTH THE TOP AND BOTTOM SELVAGES KNUCKLED.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-706			
DRAWN BY DDS		PLANS CK'D. EMK	
CHAIN LINK FENCE DETAILS			SHEET 17
			587

**FENCE PART ELEVATION**

VIEWING FABRIC SIDE - INSIDE FACE OF PARAPET

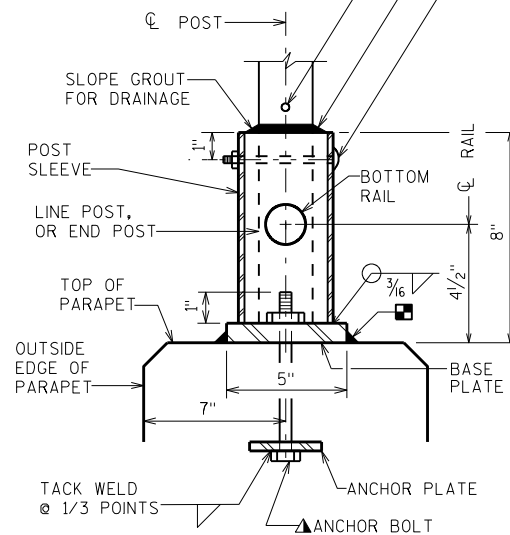
FENCE MEMBER SIZE & WEIGHT

STEEL FENCE MEMBER	OUTSIDE DIAMETER (INCHES)	WEIGHT (LB/FT)
RAILS	1.660	2.27
END POST	2.875	5.80
LINE POST	2.375	3.65
POST SLEEVE	4.000	9.12

$\frac{3}{8}$ " DIA. GALV. CARRIAGE BOLT WITH LOCKING NUT. (TO BE SUPPLIED WITH ASSEMBLY)

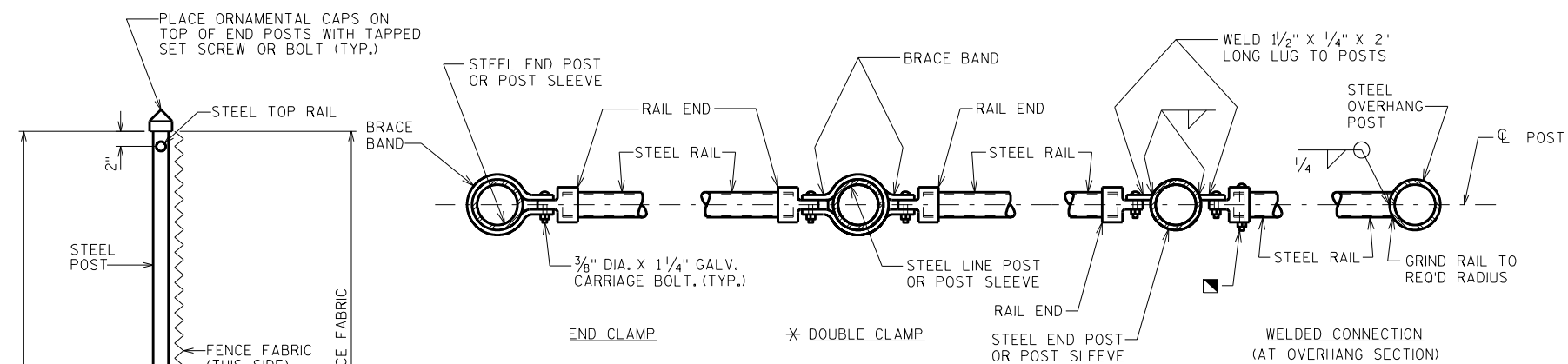
FILL SLEEVE AND BEVEL AWAY FROM POST WITH NON-SHRINK GROUT AFTER SETTING POST. (LEAVE NO VOIDS)

DRILL $\frac{3}{16}$ " DIA. DRAIN HOLE PARALLEL TO ROADWAY IMMEDIATELY ABOVE GROUT IN POST. SLEEVE LOCATIONS ONLY.

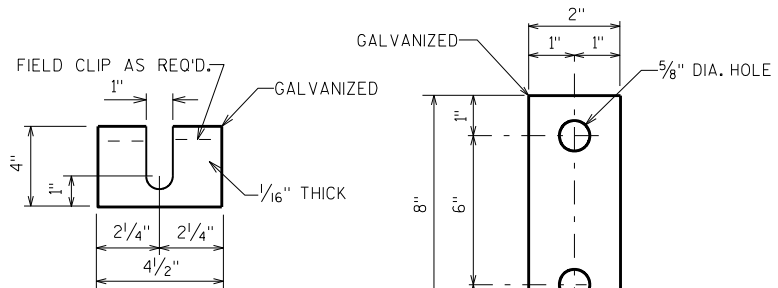
**DETAIL 'A'**

UNIT SHALL BE GALVANIZED AFTER FABRICATION

NOTE: IN LIEU OF USING THE POST SLEEVE, THE FENCE POST MAY BE WELDED TO THE BASE PLATE.

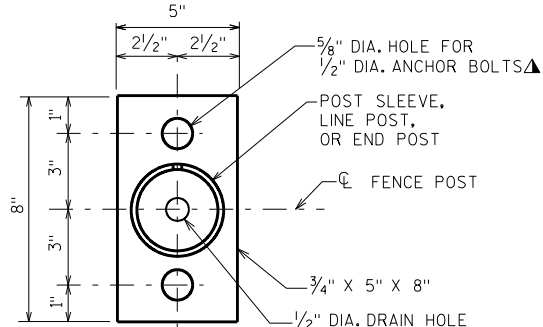
**SECTION A-A**

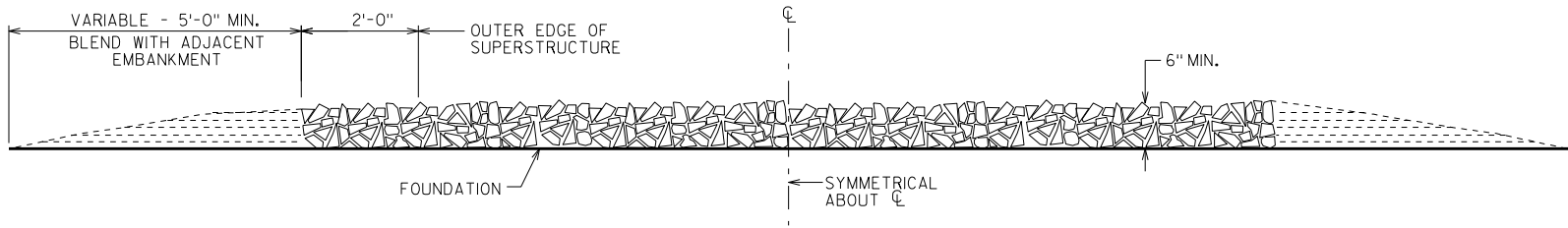
NOTE: PLACE ALL BOLT HEADS ON SIDE OF FENCE ADJACENT TO PEDESTRIANS

**POST SHIM DETAILS**

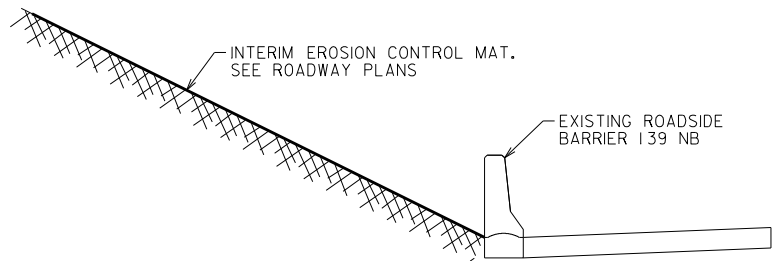
SHIMS REQUIRED ONLY WHEN END POSTS AND LINE POSTS ARE WELDED TO BASE PLATES. PROVIDE 4 SHIMS PER POST. USE WHERE REQUIRED FOR ALIGNMENT.

$\frac{1}{4}$ " X 2" X 8"

ANCHOR PLATE**BASE PLATE****SECTION THRU FENCE**

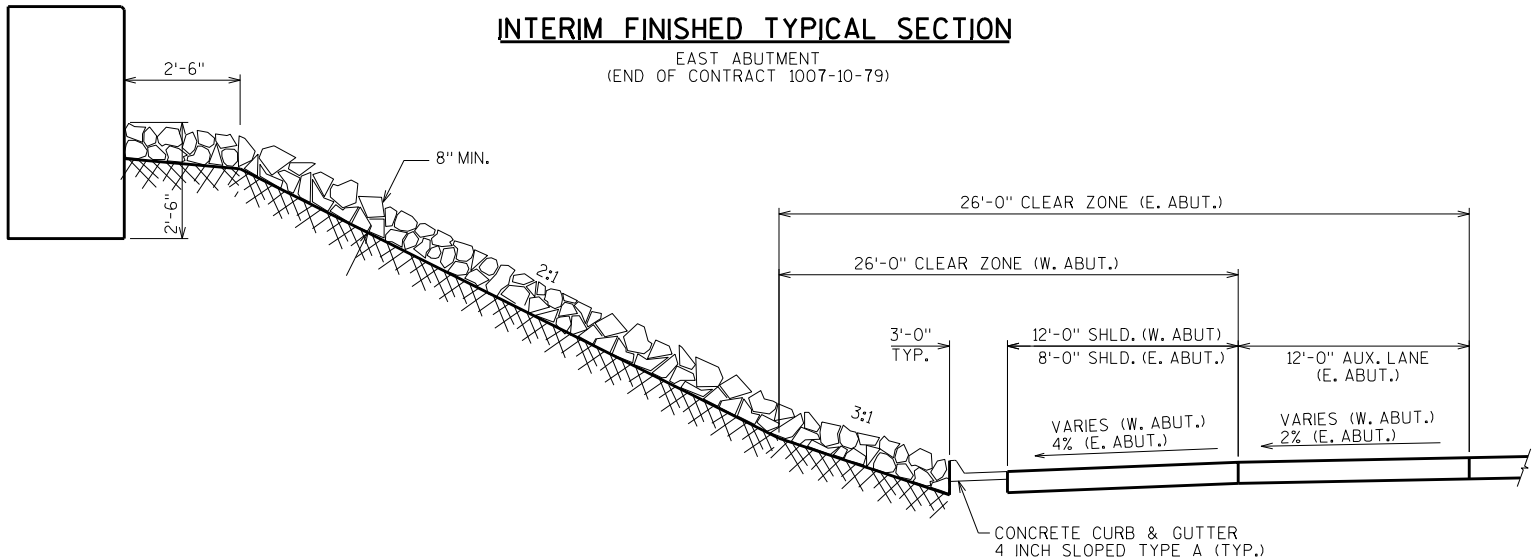


SECTION A-A



INTERIM FINISHED TYPICAL SECTION

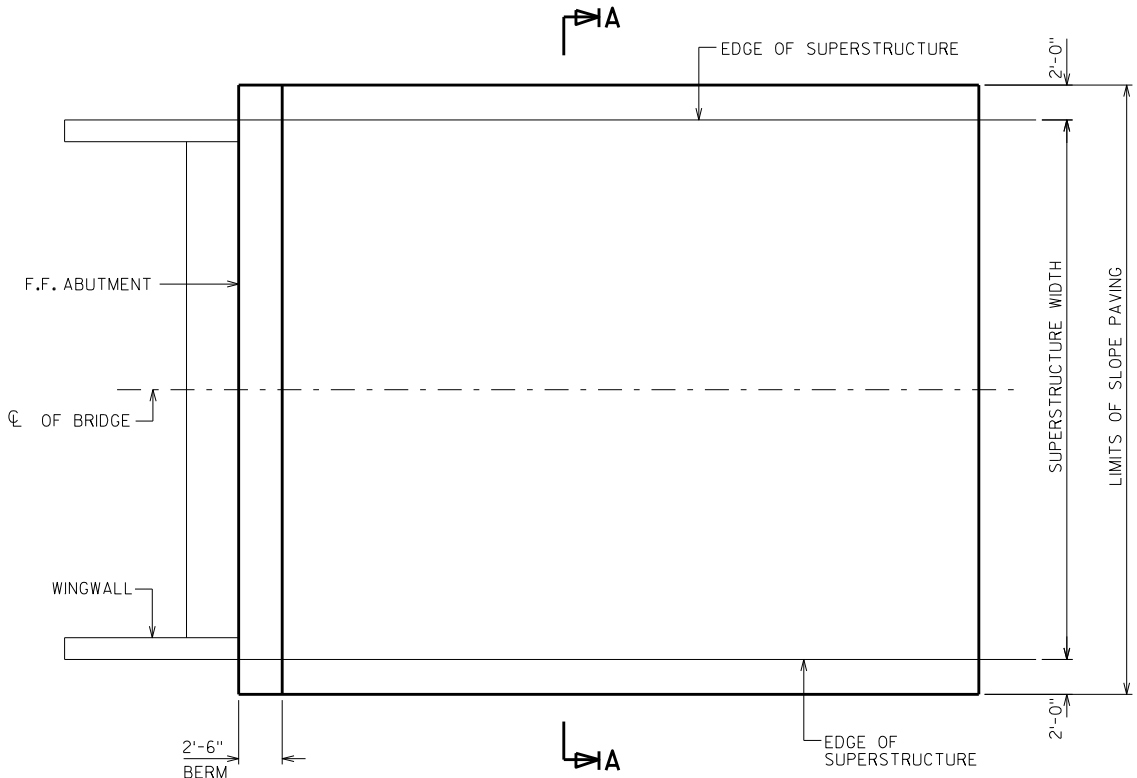
EAST ABUTMENT
(END OF CONTRACT 1007-10-79)



FINAL FINISHED TYPICAL SECTION

(FOR INFORMATIONAL USE ONLY AT EAST ABUTMENT - TO
BE CONSTRUCTED UNDER FUTURE CONTRACT 1007-11-75)

CROSS SECTION THRU SLOPE PAVING AT ABUTMENTS



PLAN

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP
NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE
PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY
ACCEPTABLE TO THE ENGINEER.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-706			
DRAWN BY DDS		PLANS CK'D. EMK	
SLOPE PAVING (CRUSHED AGGREGATE)		SHEET 19	
		589	

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
 INVENTORY RATING FACTOR: RF=1.08
 OPERATING RATING FACTOR: RF=1.39
 WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY

(HPC) DECK, PARAPET, DIAPHRAGMS, APPROACH SLAB $f'_c = 4,000$ P.S.I.
 ALL OTHER (INCL. APPROACH SLAB FTG.) $f'_c = 3,500$ P.S.I.

BAR STEEL REINFORCEMENT, GRADE 60 $f_y = 60,000$ P.S.I.
 BAR STEEL REINFORCEMENT STAINLESS, GRADE 60 $f_y = 60,000$ P.S.I.

36W" PRESTRESSED GIRDERS, CONCRETE MASONRY $f'_c = 8,000$ P.S.I.
 STRANDS- 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON 10X42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 175 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 15'-0" LONG.

PIERS WITH SPREAD FOOTINGS TO BE SUPPORTED BY UNDERLYING NATIVE SOILS WITH A REQUIRED FACTORED BEARING RESISTANCE OF 8,000 PSF ***. A GEOTECHNICAL ENGINEER WILL DETERMINE THE FACTORED BEARING RESISTANCE BY VISUAL INSPECTION PRIOR TO CONSTRUCTION OF THE PIER FOOTING.

PRE-BORING REQUIRED AT SOUTH ABUTMENT PILES. OBTAIN 10'-0" MIN. PILE LENGTH BELOW SUBSTRUCTURE.

** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

*** THE FACTORED BEARING RESISTANCE IS THE VALUE USED FOR DESIGN.

TRAFFIC VOLUME

IH-39

A.D.T.=70,300 (2040)
 R.D.S.=70 M.P.H.

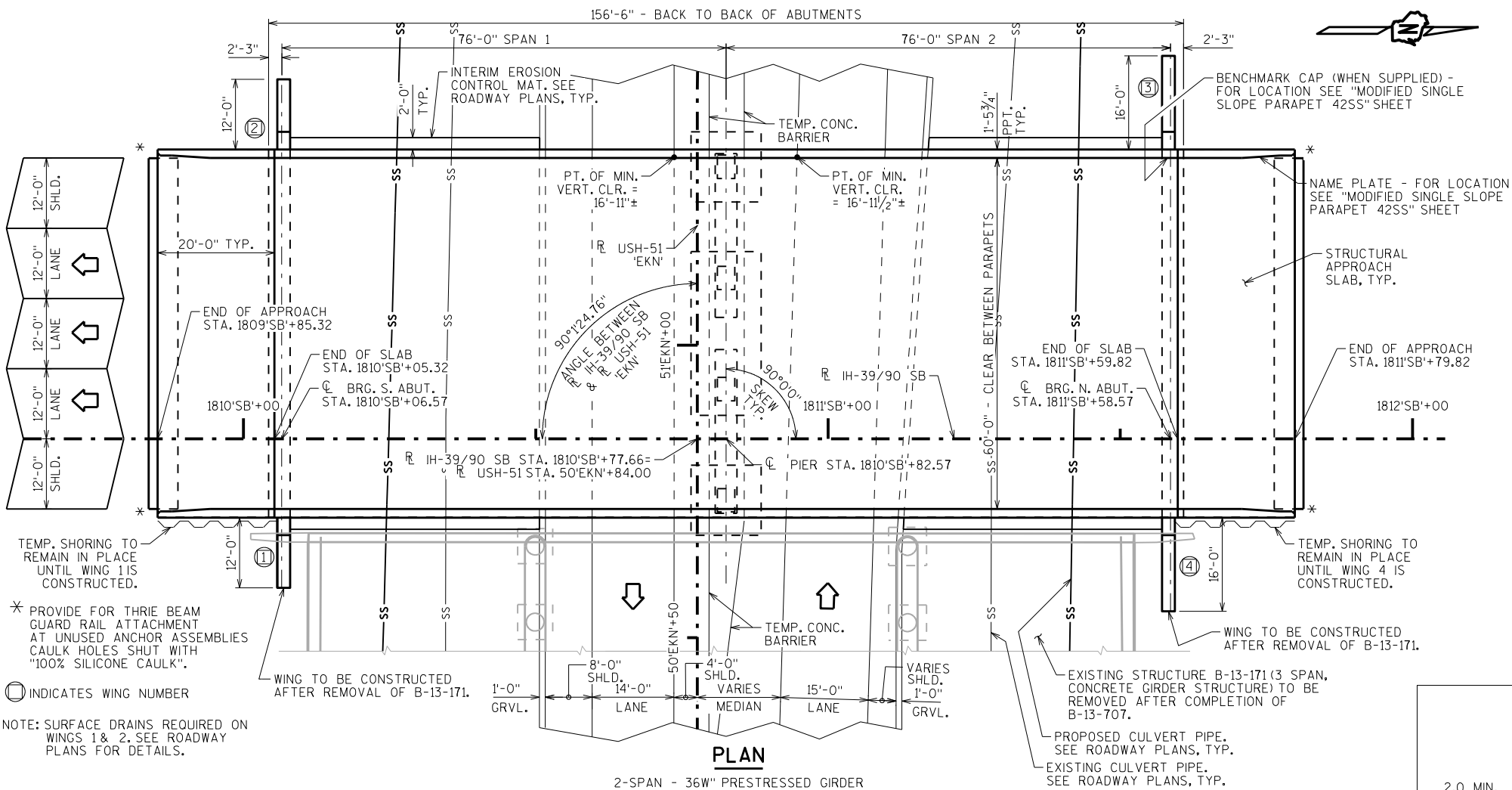
USH 51

A.D.T.=2,950 (2040)
 R.D.S.=60 M.P.H.

STRUCTURE DESIGN CONTACTS:

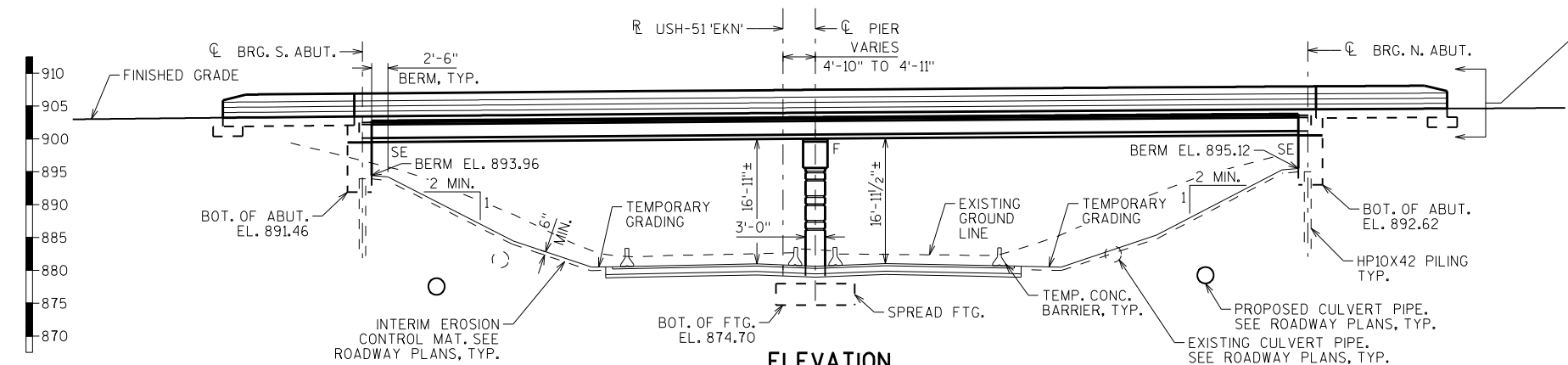
ADAM SWIERCZEK (608) 267-4593
 AARON BONK (608) 261-0261

NO.	DATE	REVISION	BY
Plans Prepared By WISDOT BUREAU OF STRUCTURES ACCEPTED <i>William C. Dierker</i> 10/5/15 CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-13-707			
SB IH-39/90 OVER USH-51			
COUNTY	DANE	TOWN/CITY/VILLAGE	ALBION
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS			
DESIGNED BY	ABS	DESIGN CKD. SAD	DRAWN BY ABS
GENERAL PLAN TEMP. CONDITION			SHEET 1 OF 24
			590



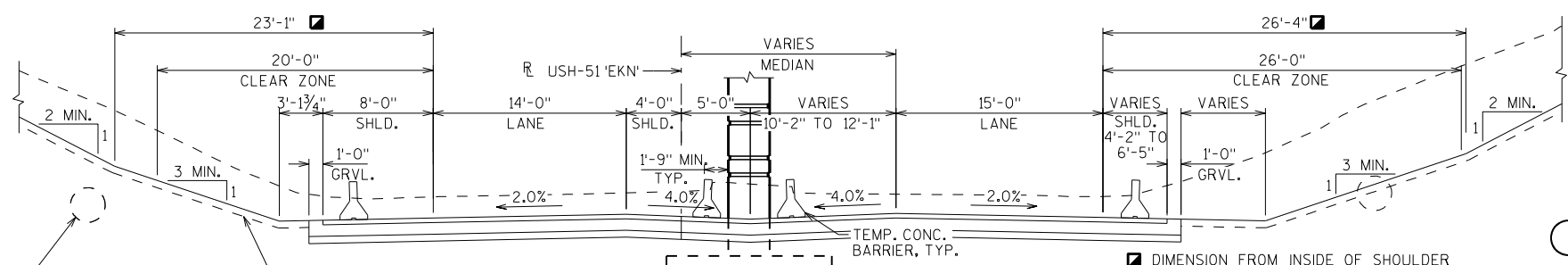
PLAN

2-SPAN - 36W" PRESTRESSED GIRDER



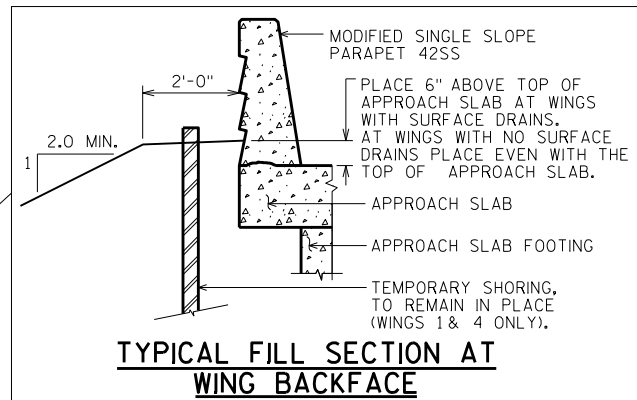
ELEVATION

NORMAL TO USH-51



TYPICAL TEMPORARY SECTION THRU USH-51

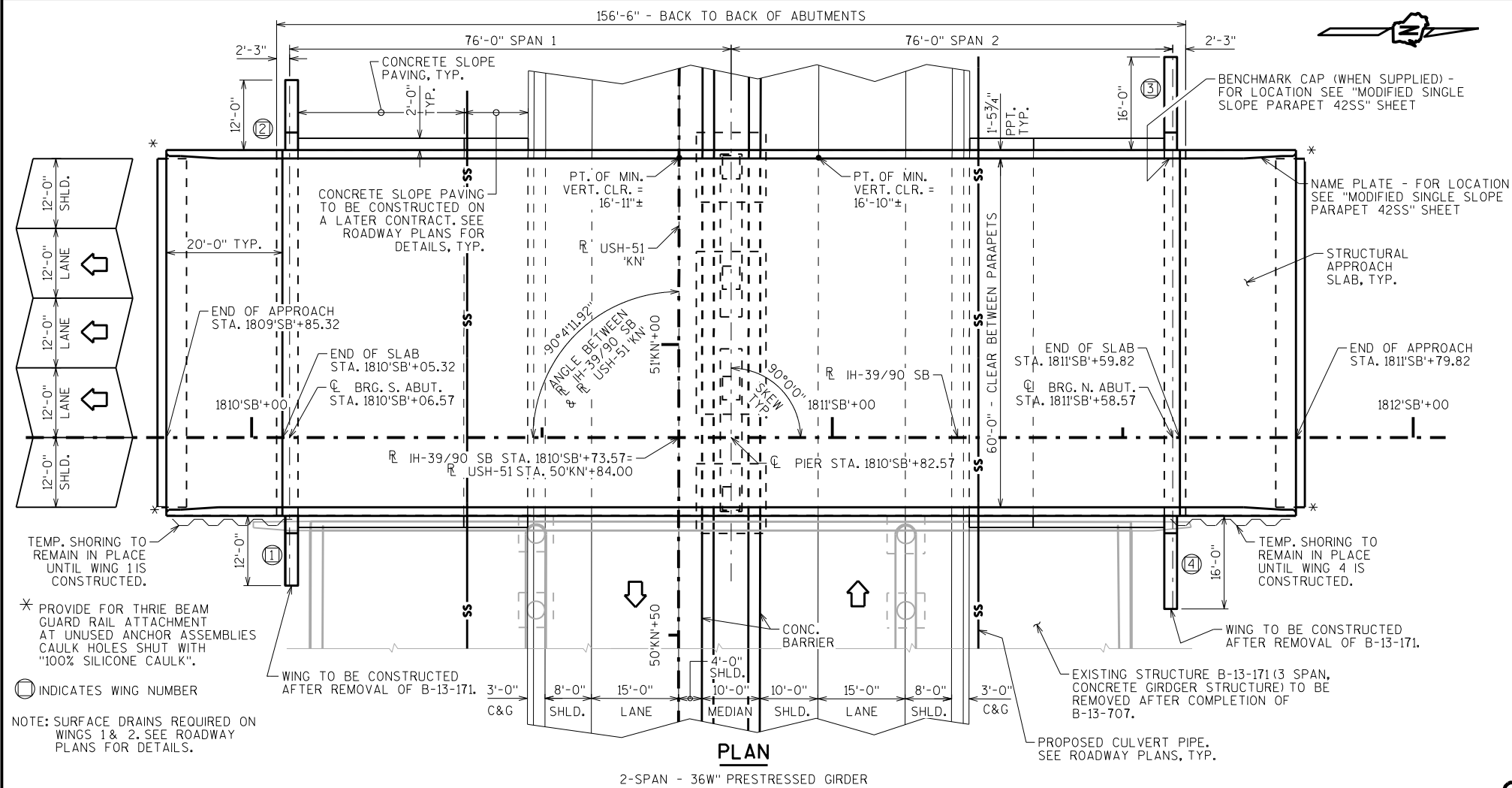
LOOKING WEST



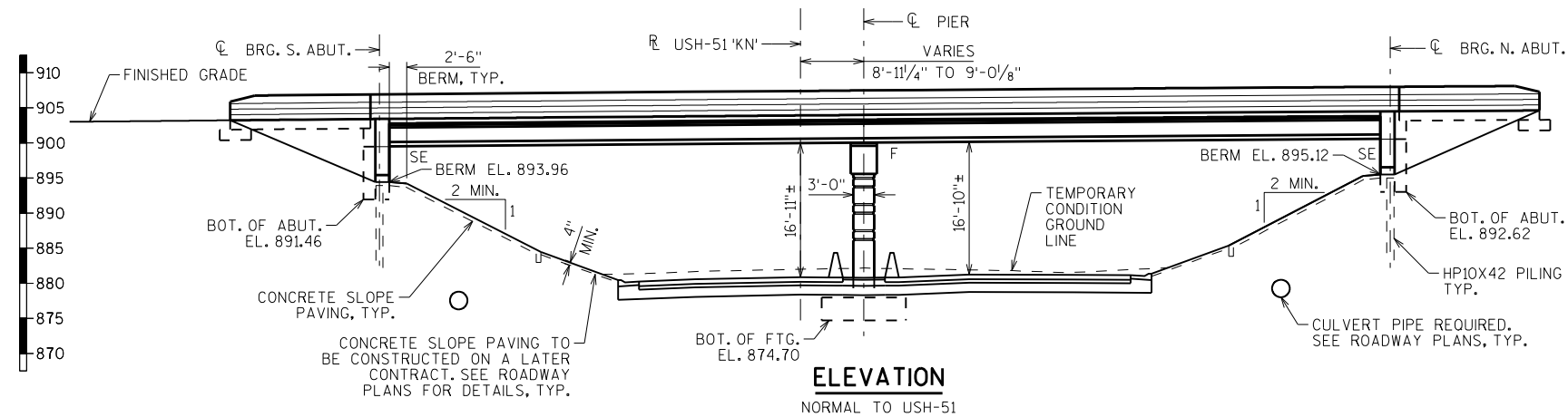
TYPICAL FILL SECTION AT WING BACKFACE

LIST OF DRAWINGS

1. GENERAL PLAN TEMP. CONDITION
2. GENERAL PLAN FINAL CONDITION
3. CROSS SECTION & PROFILES
4. QUANTITIES
5. SUBSURFACE EXPLORATION
6. SOUTH ABUTMENT
7. SOUTH ABUTMENT DETAILS
8. NORTH ABUTMENT
9. NORTH ABUTMENT DETAILS
10. PIER
11. PIER COLUMNS
12. PIER CAP
13. PRECAST PIER DETAILS
14. 36W" PRESTRESSED GIRDER DETAILS 1
15. 36W" PRESTRESSED GIRDER DETAILS 2
16. STEEL DIAPHRAGM
17. SUPERSTRUCTURE
18. SUPERSTRUCTURE DETAILS
19. STRUCTURAL APPROACH SLAB
20. MODIFIED SINGLE SLOPE PARAPET 42SS
21. CONDUIT DETAILS
22. AESTHETIC DETAILS
23. SLOPE PAVING (CONCRETE CAST-IN-PLACE)
24. ALTERNATE CONSTRUCTION JOINT



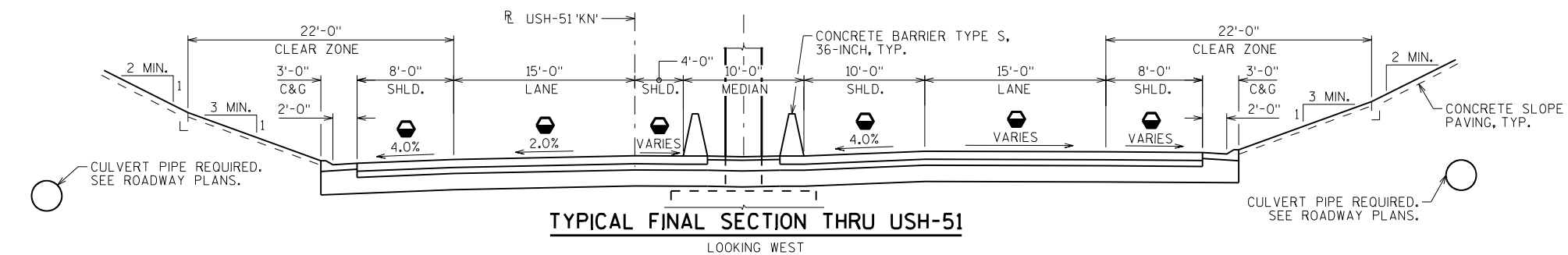
THIS SHEET FOR
INFORMATIONAL USE ONLY.
NOT FOR CONSTRUCTION



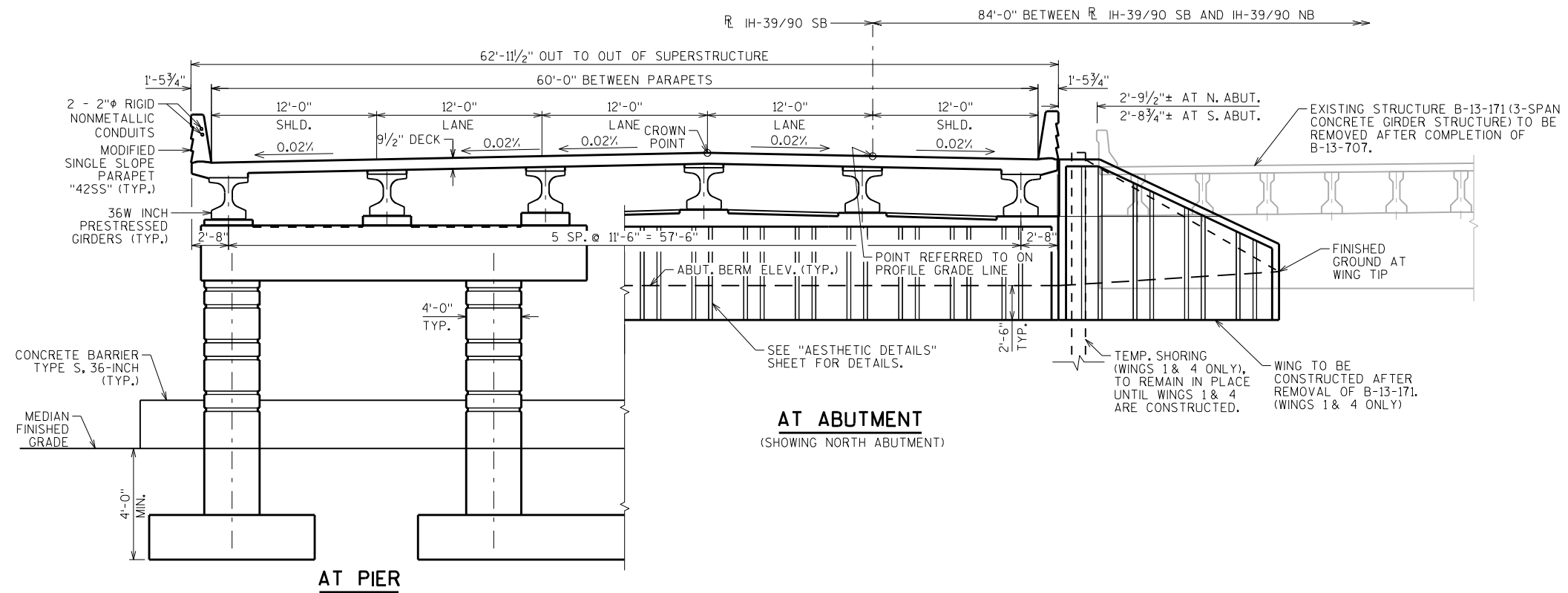
	EB OUTSIDE SHLD.	EB LANE	EB INSIDE SHLD.	EB MEDIAN	WB MEDIAN	WB INSIDE SHLD.	WB LANE	WB OUTSIDE SHLD.
W. EDGE OF DECK	4.0%	2.0%	4.0%	4.0%	4.0%	4.0%	2.0%	4.0%
E. EDGE OF DECK	4.0%	2.0%	0.1%	4.0%	4.0%	4.0%	0.1%	0.1%

UNDERPASS SUPERELEVATION TRANSITION

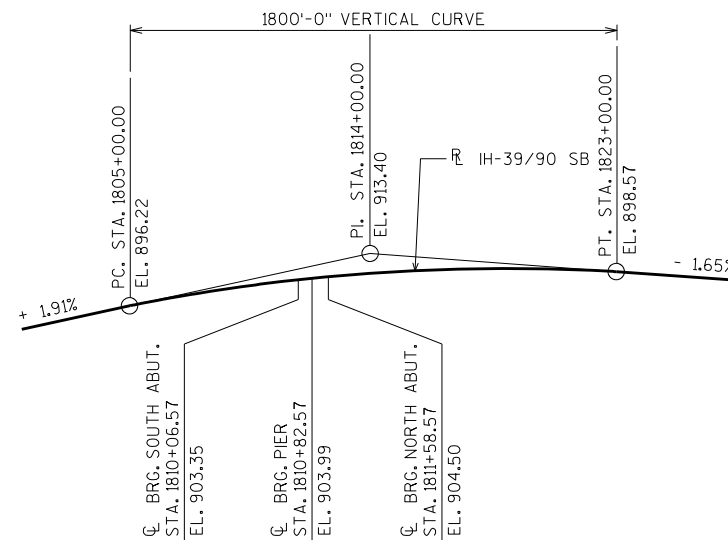
FOR INFORMATION ONLY, SEE ROADWAY PLANS FOR DETAILS



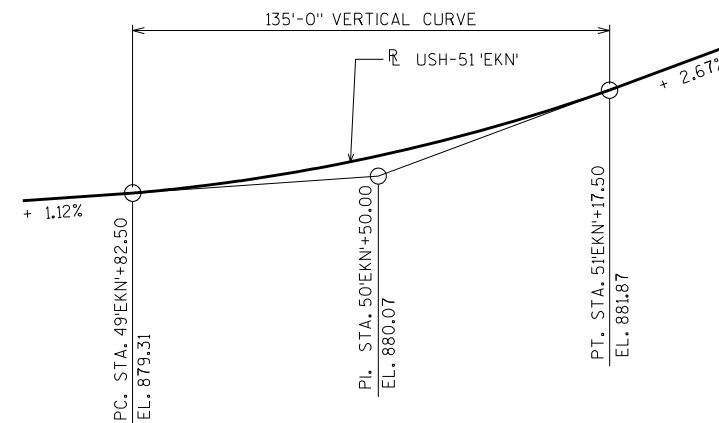
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-707			
DRAWN BY		ABS	PLANS CK'D. SAD
GENERAL PLAN FINAL CONDITION		SHEET 2	591



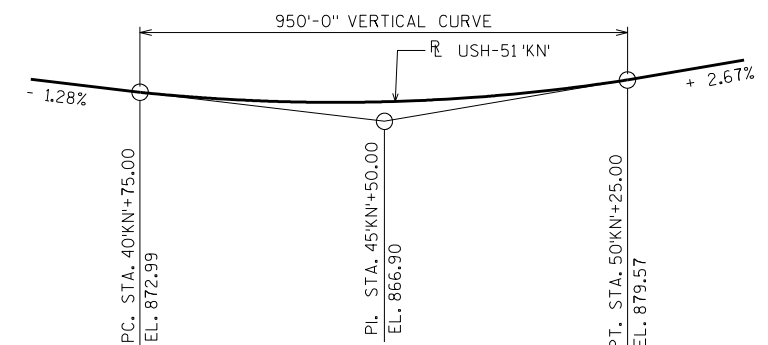
CROSS SECTION THRU ROADWAY LOOKING NORTH



PROFILE GRADE LINE IH-39/90 SB



PROFILE GRADE LINE USH-51 'EKN'



PROFILE GRADE LINE USH-51 'KN'

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-707			
DRAWN BY ABS		PLANS CK'D. SAD	
CROSS SECTION & PROFILES			SHEET 3
			592

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	SOUTH APP. SLAB	SOUTH ABUT.	PIER	NORTH ABUT.	NORTH APP. SLAB	TOTALS
203.0200	REMOVING OLD STRUCTURE STA. 1810+SB'+80	LS	—	—	—	—	—	—	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-13-707	LS	—	—	—	—	—	—	1
210.0100	BACKFILL STRUCTURE	CY	—	—	311	—	342	—	653
305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	—	189	—	—	—	189	378
501.1000.S	ICE HOT WEATHER CONCRETING	LB	6,230	—	—	—	—	—	6,230
502.0100	CONCRETE MASONRY BRIDGES	CY	—	17	84	81	89	17	288
502.3200	PROTECTIVE SURFACE TREATMENT	SY	1,030	135	—	—	—	135	1,300
502.3210	PIGMENTED SURFACE SEALER	SY	145	20	—	—	—	20	185
503.0137	PRESTRESSED GIRDER TYPE I 36W-INCH	LF	917	—	—	—	—	—	917
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	—	—	4,370	5,510	4,770	—	14,650
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	82,600	14,280	1,290	1,470	2,000	14,280	115,920
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	2,150	—	—	—	—	—	2,150
505.0905	BAR COUPLERS NO. 5	EACH	—	—	7	—	7	—	14
505.0907	BAR COUPLERS NO. 7	EACH	—	—	8	—	—	—	8
505.0909	BAR COUPLERS NO. 9	EACH	—	—	—	—	7	—	7
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	24	—	—	—	—	—	24
506.4000	STEEL DIAPHRAGMS B-13-707	EACH	10	—	—	—	—	—	10
511.1200	TEMPORARY SHORING B-13-707	SF	—	—	125	—	125	—	250
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	—	—	14	—	14	—	28
517.1010.S	CONCRETE STAINING B-13-707	SF	3,920	160	600	1,470	700	160	7,010
550.0020	PRE-BORING ROCK OR CONSOLIDATED MATERIALS	LF	—	—	110	—	—	—	110
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	—	—	165	—	165	—	330
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	—	—	100	—	100	—	200
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	—	2	—	—	—	2	4
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	40	6	—	—	—	6	52
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	281	56	—	—	—	56	393
653.0222	JUNCTION BOXES 18X12X6-INCH	EACH	2	—	—	—	—	—	2
SPV.0035	HIGH PERFORMANCE CONCRETE (HPC) MASONRY STRUCTURES	CY	407	68	—	—	—	68	543
SPV.0060	GROUTED BAR COUPLERS	EACH	—	—	—	144	—	—	144
SPV.0090	PRECAST PIER COLUMNS	LF	—	—	—	68	—	—	68
SPV.0090	PRECAST PIER CAP	LF	—	—	—	56	—	—	56
SPV.0165	LONGITUDINAL GROOVING BRIDGE DECK	SF	9,270	1,200	—	—	—	1,200	11,670
	NON-BID ITEMS								
	FILLER	SIZE	—	—	—	—	—	—	1/2", 3/4", 1 1/2"

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF DECK SURFACE AND APPROACH SLABS.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF THE PARAPETS, INCLUDING PARAPETS ON APPROACH SLABS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING MATERIAL TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS.

THE EXISTING STRUCTURE EAST OF B-13-707, B-13-171, IS A 3 SPAN CONCRETE GIRDER STRUCTURE WITH AN OVERALL WIDTH OF 40'-0" AND AN OVERALL LENGTH OF 145'-0 1/2", AND IS TO BE REMOVED.

TEMPORARY SHORING TO REMAIN IN PLACE UNTIL WINGS 1 & 4 ARE CONSTRUCTED AND BACKFILLED.

WINGS 1 & 4 ARE TO BE CONSTRUCTED AFTER REMOVAL OF B-13-171. SEE ABUTMENT SHEETS FOR DETAILS.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIER.

BEVEL ALL EXPOSED EDGES OF CONCRETE 3/4" UNLESS SHOWN OTHERWISE.

THE CONCRETE QUANTITIES FOR PARAPETS, SUPERSTRUCTURE DECK, APPROACH SLABS, CONCRETE DIAPHRAGMS, AND HAUNCH OVER GIRDERS SHALL BE PAID FOR UNDER THE BID ITEM "HPC MASONRY STRUCTURES".

THE RUSTICATIONS IN THE ABUTMENTS ARE INCLUDED IN THE BID ITEM "CONCRETE MASONRY BRIDGES".

THE RUSTICATIONS IN THE BACK FACES OF THE PARAPET ARE INCLUDED IN THE BID ITEM "HIGH PERFORMANCE CONCRETE (HPC) MASONRY STRUCTURES".

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II, OR III OR A.A.S.H.T.O. DESIGNATION M 213.

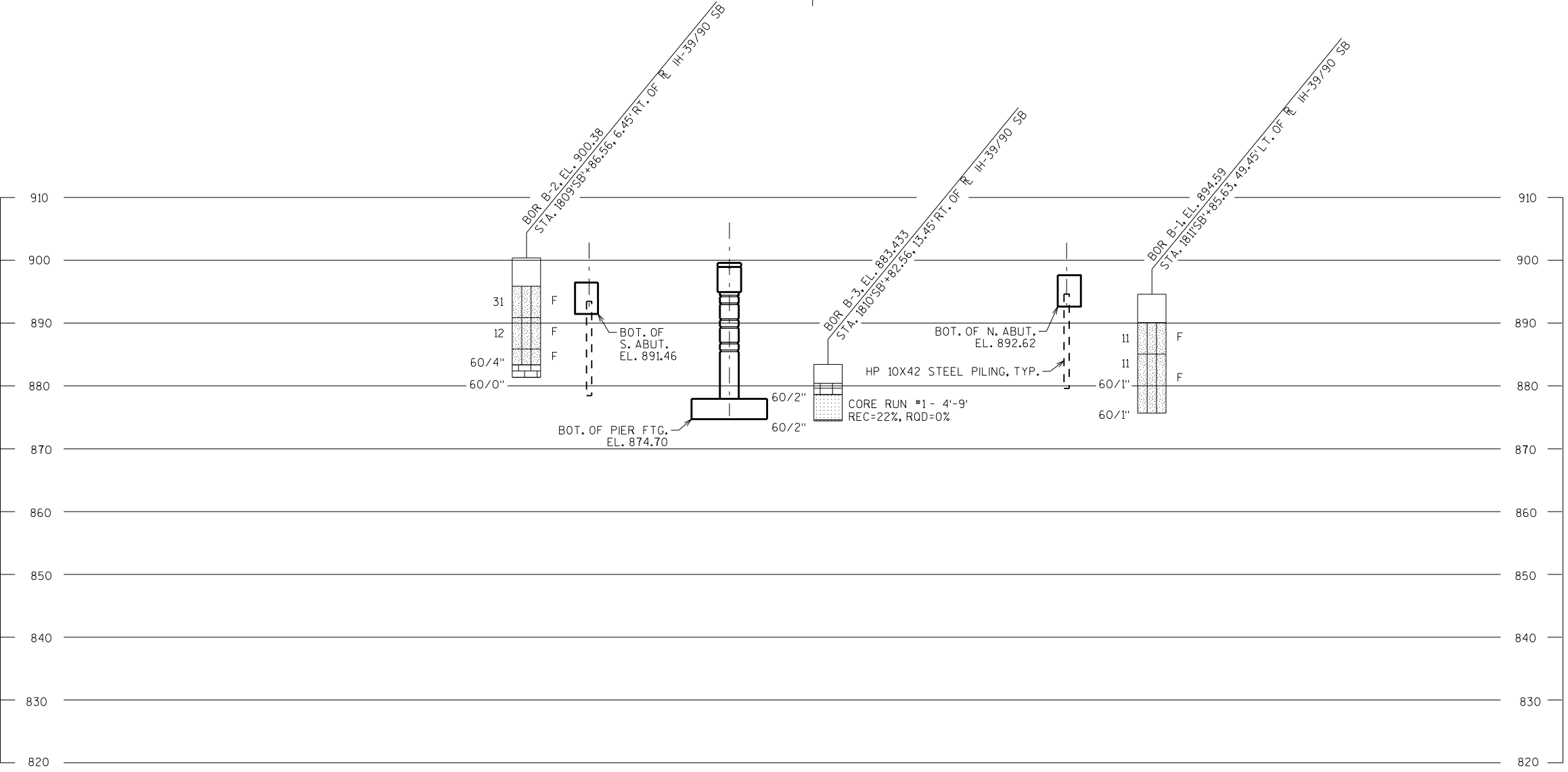
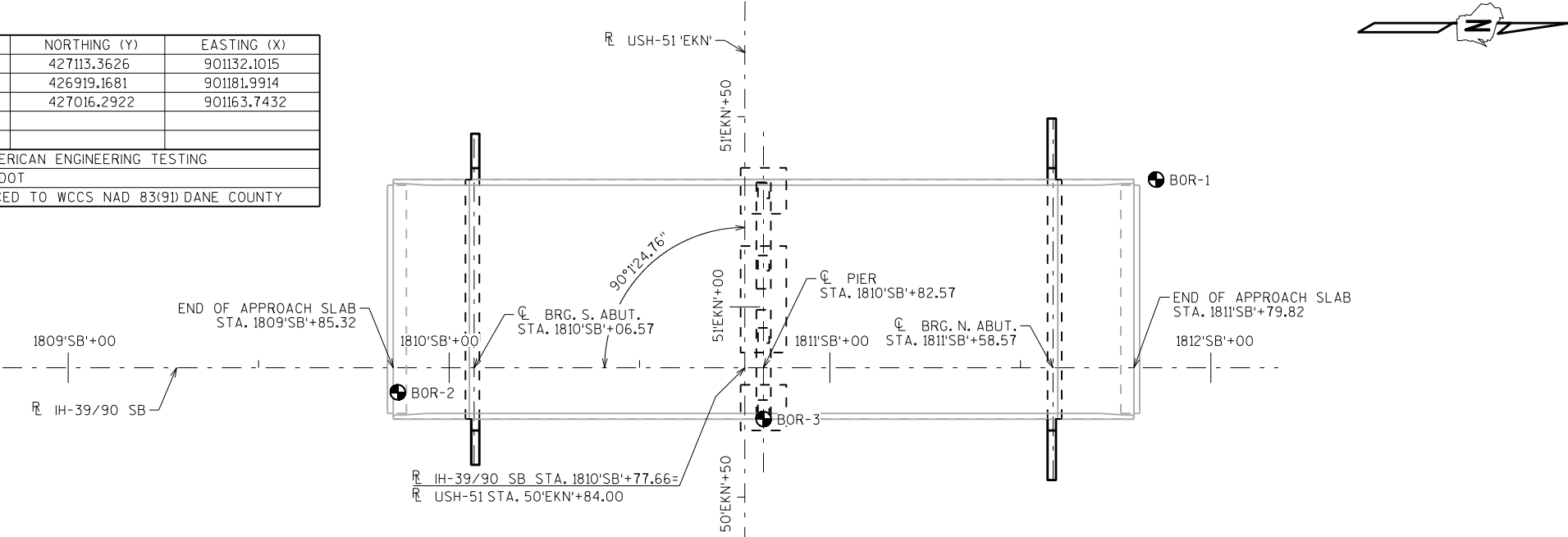
AT ABUTMENTS, HP 12X53 STEEL PILING MAY BE USED IN LIEU OF HP 10X42 STEEL PILING. PAYMENT SHALL BE BASED ON BID PRICE FOR HP 10X42 STEEL PILING.

PRE-BORING REQUIRED AT SOUTH ABUTMENT PILES. OBTAIN 10'-0" MINIMUM PILE LENGTH BELOW BOTTOM OF ABUTMENT.

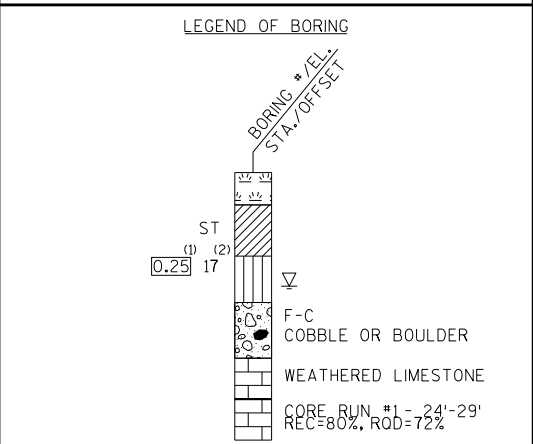
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-707			
		DRAWN BY ABS	PLANS CK'D. SAD
QUANTITIES		SHEET 4	
		593	

ILLINOIS STATE LINE - MADISON
SOUTH DANE COUNTY LINE TO UP RR

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	7/26/2013	427113.3626	901132.1015
2	7/29/2013	426919.1681	901181.9914
3	7/29/2013	427016.2922	901163.7432
BORINGS COMPLETED BY: AMERICAN ENGINEERING TESTING			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) DANE COUNTY			



STATE PROJECT NUMBER		
1007-10-73		
MATERIAL SYMBOLS		
ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/META



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION	
▽	AT TIME OF DRILLING
▼	END OF DRILLING
▽	AFTER DRILLING
ABBREVIATIONS	
F-FINE	M-MEDIUM
C-COARSE	ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

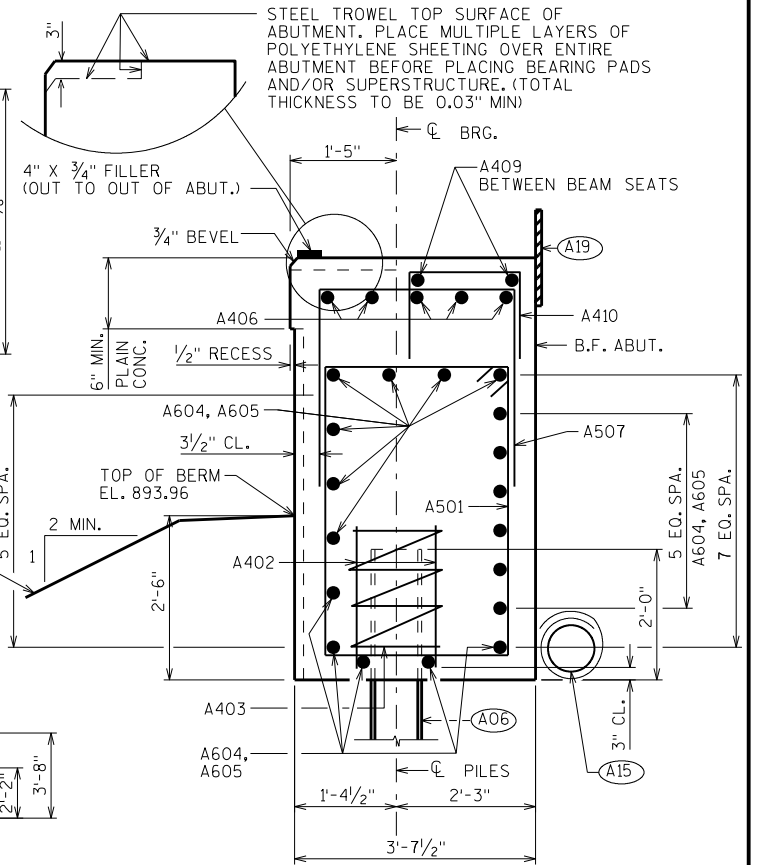
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-707			
DRAWN BY PR/ABS		PLANS CKD. SAD	
SUBSURFACE EXPLORATION			SHEET 5
			594

8

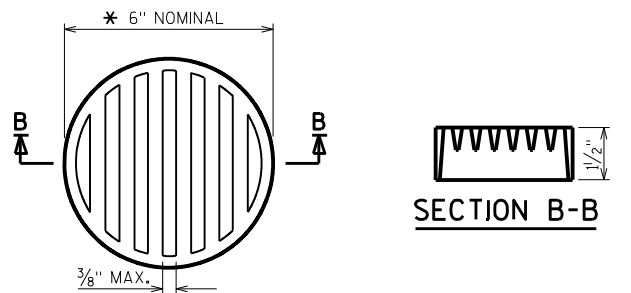
8

SCALE = 20.0

- [illegible]



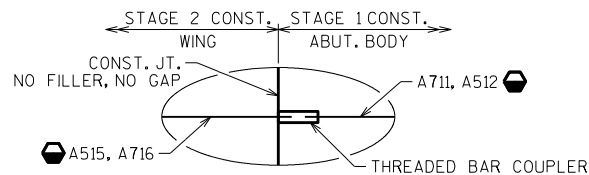
SECTION THRU BODY



RODENT SHIELD DETAIL

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

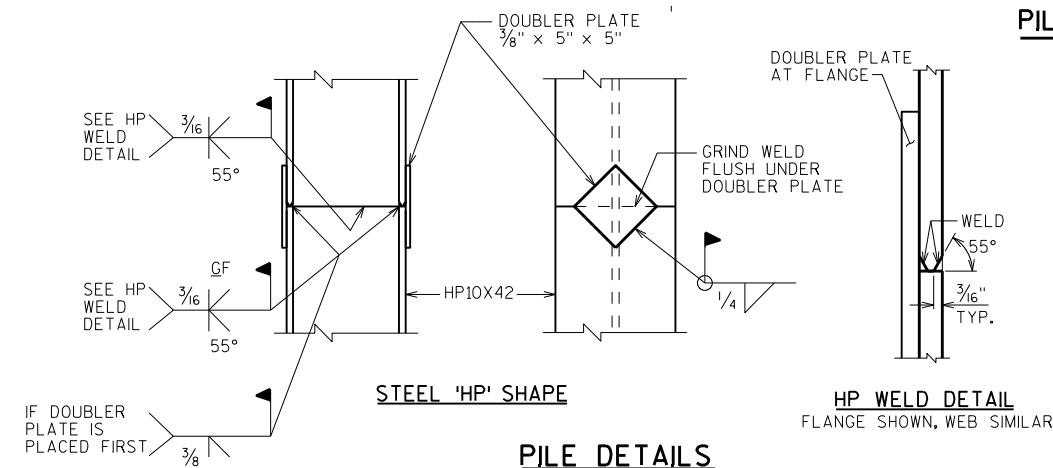
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



BAR COUPLER DETAIL

- BAR LENGTH HAS BEEN COMPUTED TO $\frac{1}{4}$ OF CONSTRUCTION JOINT AND SHALL BE MODIFIED TO BAR COUPLER MANUFACTURER RECOMMENDATIONS.

- A18 3/4" CORK FILLER UP VERT. BEAM SEAT FACES
THAT RUN PARALLEL WITH GIRDER.
- A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING
SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.



PILE DETAILS

PILE PLAN

- (A04) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.
- (A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 15'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 175 TONS PER PILE. PRE-BORING REQUIRED TO OBTAIN MIN. 10'-0" PILE DEPTH BELOW SUBSTRUCTURE
- (A15) PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- (A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-707			
		DRAWN BY	ABS
		PLANS CK'D.	SAD
SOUTH ABUTMENT		SHEET 6	
		595	

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
A501		78	20'-2"	X		BODY - STIRRUPS
A402		22	2'-3"			PILES - 2 PER BODY PILE
A403		11	28'-0"	X		PILES - 1 PER BODY PILE
A604		18	31'-0"			BODY - HORIZ. - F.F. & B.F.
A605		18	34'-7"			BODY - HORIZ. - F.F. & B.F.
A406		10	20'-5"			BODY - HORIZ. - UNDER GIRS. 2-6
A507		38	6'-5"	X		BODY - VERT. - UNDER GIRS. 2-6
A608		21	4'-9"	X		BODY - HORIZ. - ENDS
A409		10	10'-0"			BODY - HORIZ. - BETWEEN BEAM SEATS
A410		30	5'-6"	X		BODY - VERT. - BETWEEN BEAM SEATS
■ A711	X	8	4'-8"			BODY - HORIZ. - WING 1 END
■ A512	X	7	2'-11"			BODY - HORIZ. - WING 1 END
A413	X	20	12'-5"	X	▲	WING 1 - VERT - F.F.-B.F.
A414	X	6	14'-4"	X		WING 1 - VERT - F.F.-B.F.
■ A515	X	7	11'-11"			WING 1 - HORIZ. - F.F.
■ A716	X	8	11'-11"			WING 1 - HORIZ. - B.F. & TOP
A417	X	8	8'-3"		▲	WING 1 - HORIZ. - F.F.-B.F.
A418	X	2	12'-5"	X		WING 1 - HORIZ. - TOP
A419	X	20	12'-3"	X	▲	WING 2 - VERT - F.F.-B.F.
A420	X	6	14'-2"	X		WING 2 - VERT - F.F.-B.F.
A521	X	7	13'-7"			WING 2 - HORIZ. - F.F.
A722	X	8	14'-7"			WING 2 - HORIZ. - B.F. & TOP
A423	X	8	8'-2"		▲	WING 2 - HORIZ. - F.F.-B.F.
A424	X	2	12'-5"	X		WING 2 - HORIZ. - TOP

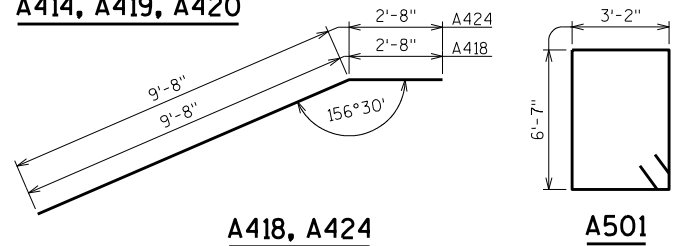
▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

MARK	NO. REQ'D.	LENGTH
A413	2 SERIES OF 10	10'-6" TO 14'-4"
A417	2 SERIES OF 4	5'-0" TO 11'-6"
A419	2 SERIES OF 10	10'-4" TO 14'-2"
A423	2 SERIES OF 4	4'-11" TO 11'-5"

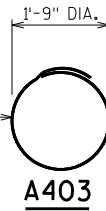
BUNDLE AND TAG EACH SERIES SEPARATELY.

A507, A608, A410, A413, A414, A419, A420



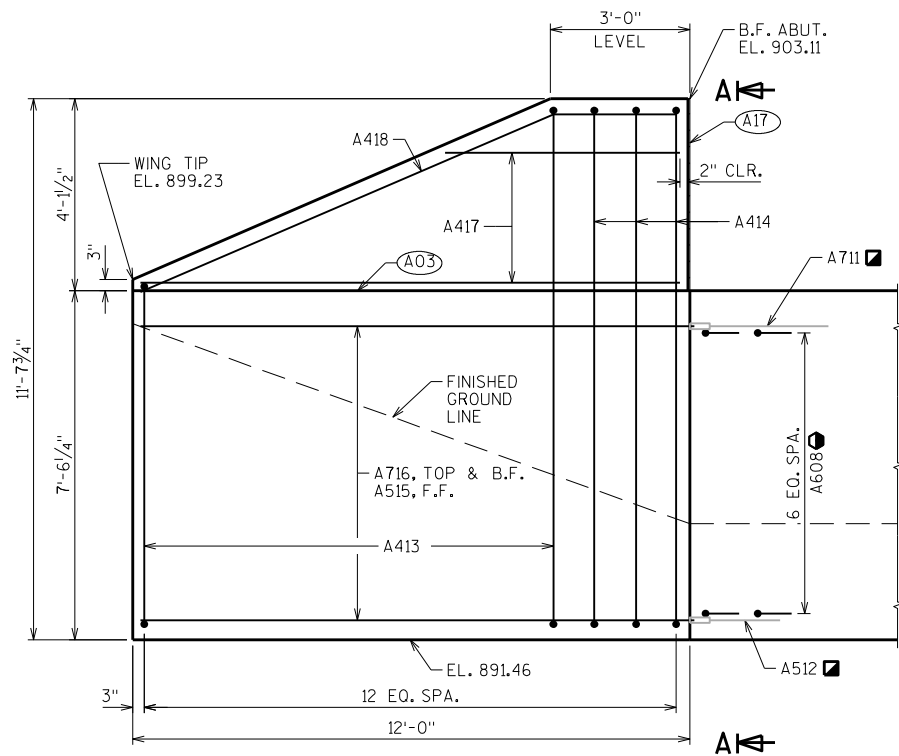
A418, A424

A501

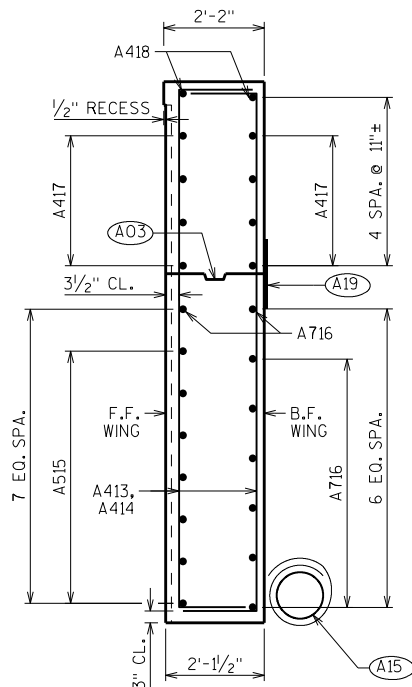


A403

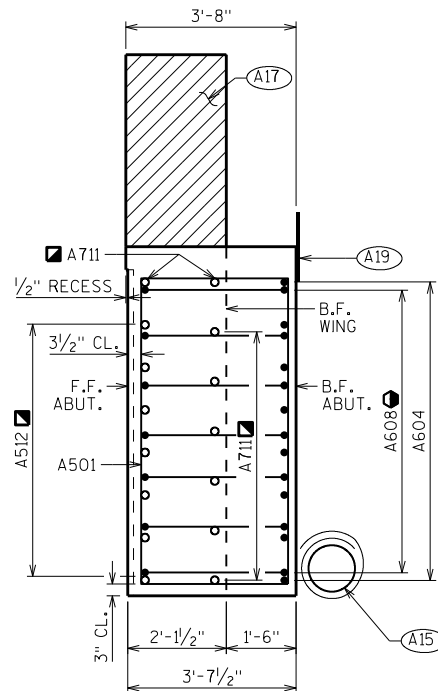
WING 1 ELEVATION



WING 1 SECTION

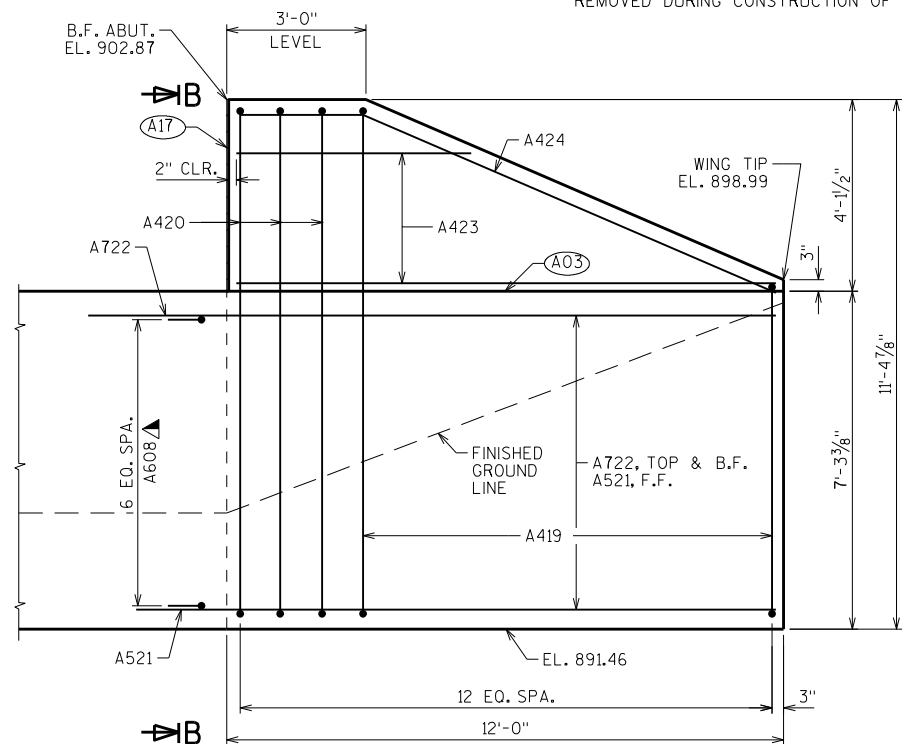


SECTION A-A

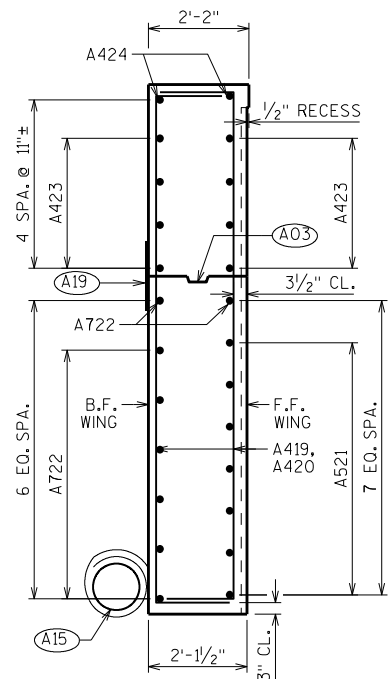


- TIED TO ABUT. A711 B.F. BARS AND A501 STIRRUPS
- THREADED BAR COUPLER, TYP. SUPPLY TEMPORARY CAP FOR EACH COUPLER. TEMPORARY CAPS TO BE REMOVED DURING CONSTRUCTION OF WING 1.

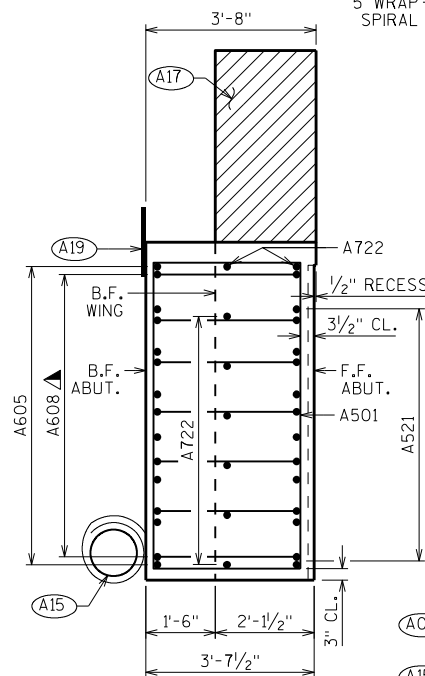
WING 2 ELEVATION



WING 2 SECTION



SECTION B-B



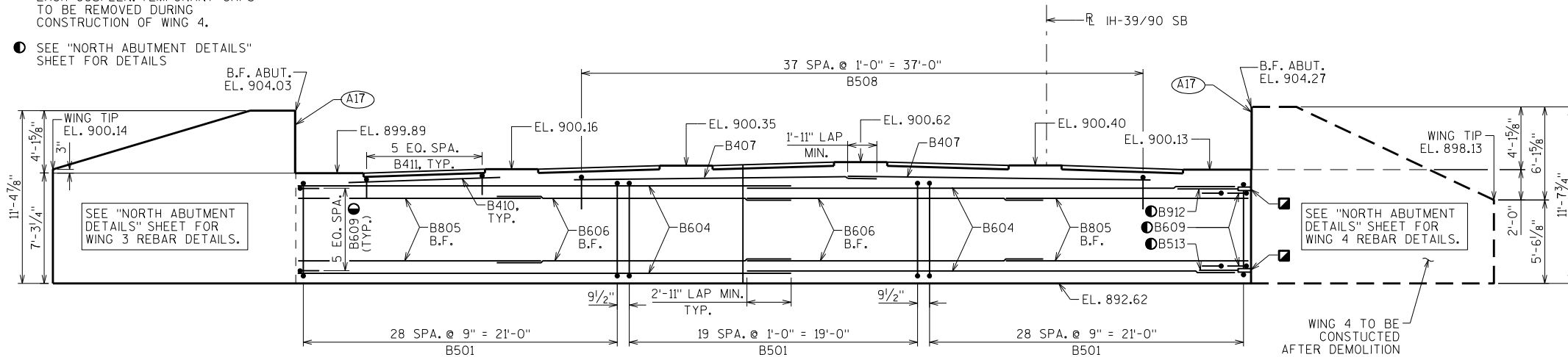
- (A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" R.M.W. @ B.F. IF JOINT IS USED).
- (A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- (A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- (A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

- ▲ TIED TO WING A722 B.F. BARS AND A501 STIRRUPS

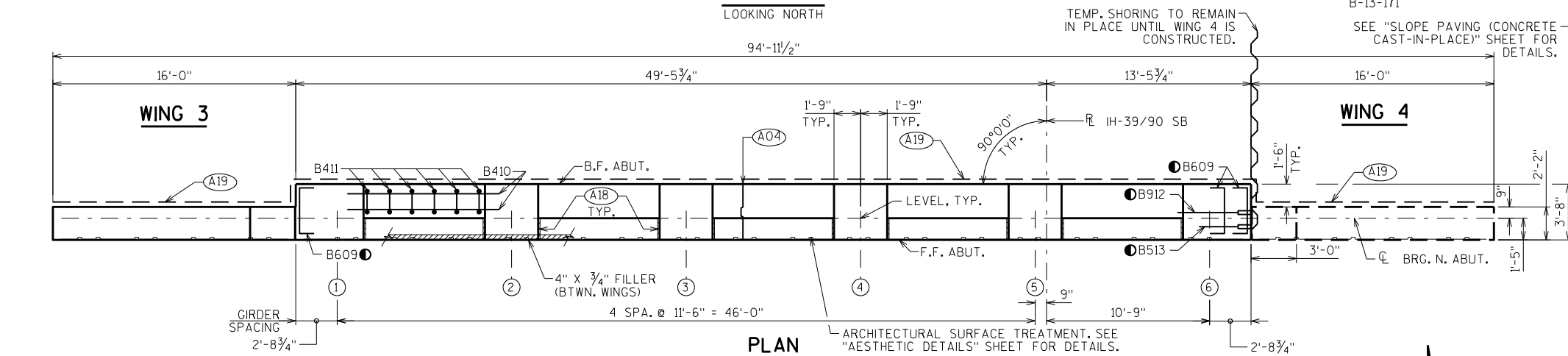
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-707			
DRAWN BY		ABS	PLANS CK'D. SAD
SOUTH ABUTMENT DETAILS		SHEET 7	
		596	

- THREADED BAR COUPLER, TYP. SUPPLY TEMPORARY CAP FOR EACH COUPLER. TEMPORARY CAPS TO BE REMOVED DURING CONSTRUCTION OF WING 4.

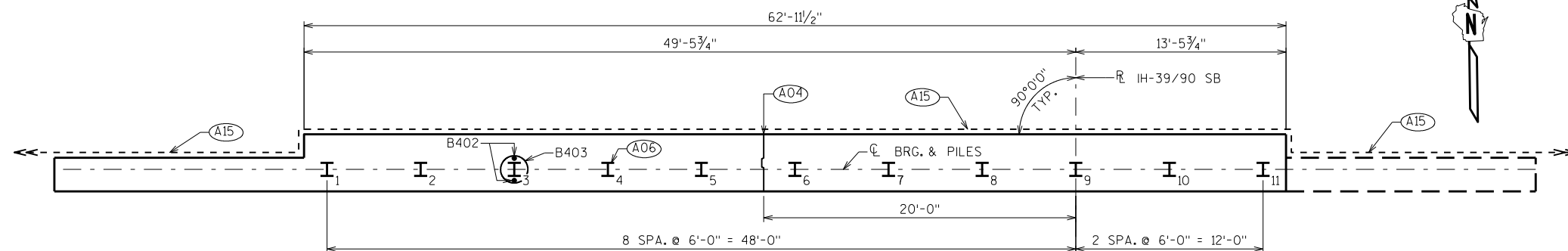
- SEE "NORTH ABUTMENT DETAILS" SHEET FOR DETAILS



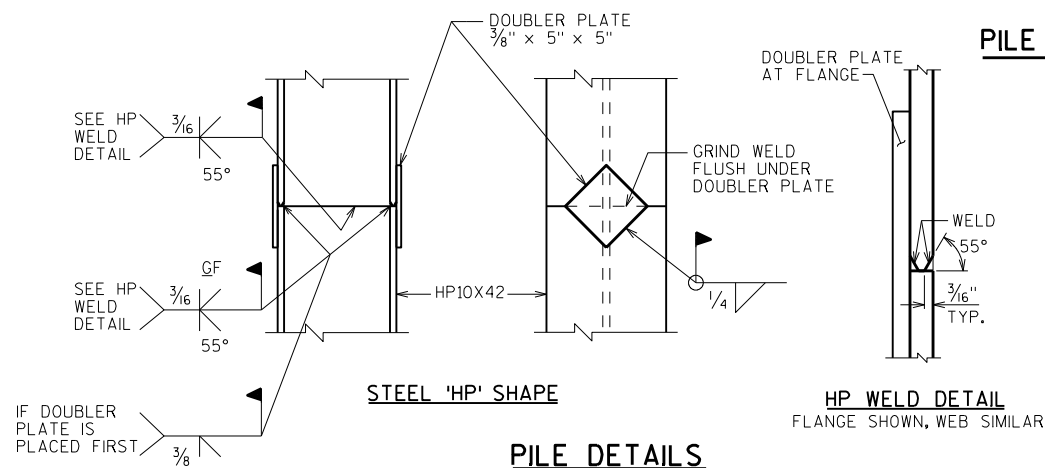
ELEVATION
LOOKING NORTH



PLAN

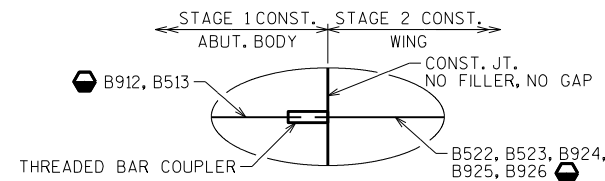


PILE PLAN



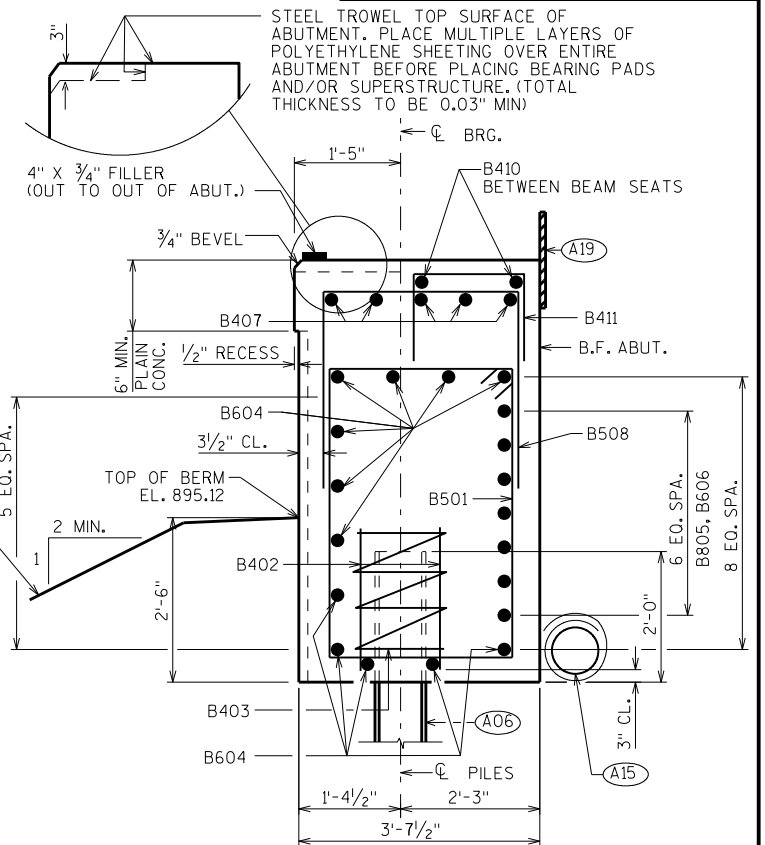
PILE DETAILS

- (A04) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 8, 3/4" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.
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- (A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

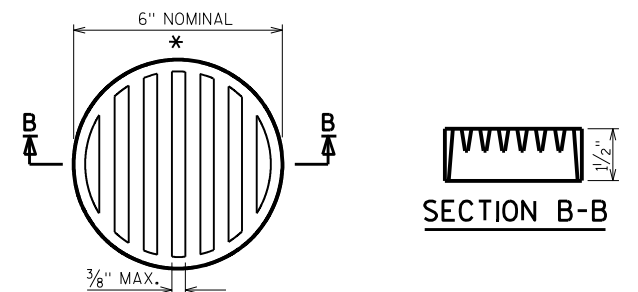


BAR COUPLER DETAIL

- (A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.
- (A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.



SECTION THRU BODY



RODENT SHIELD DETAIL

- * DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

NO.	DATE	REVISION	BY
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STRUCTURE B-13-707			
DRAWN BY		ABS	PLANS CK'D. SAD
NORTH ABUTMENT		SHEET 8	
		597	

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE
BAR MARK SIGNIFIES THE BAR SIZE.

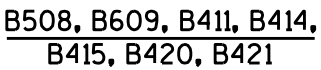
22

BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.



WING 3 SECTION

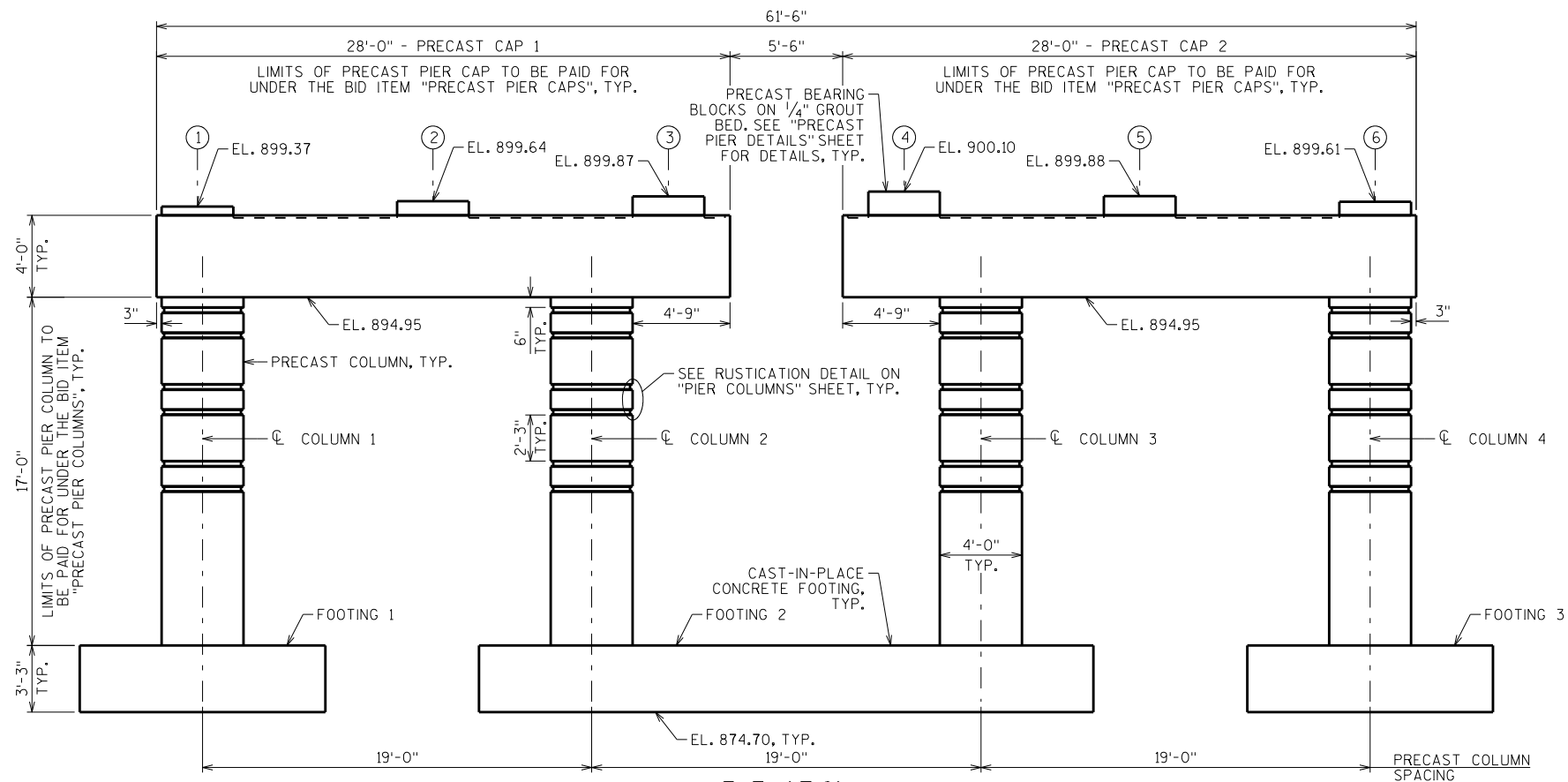


WING 4 SECTION

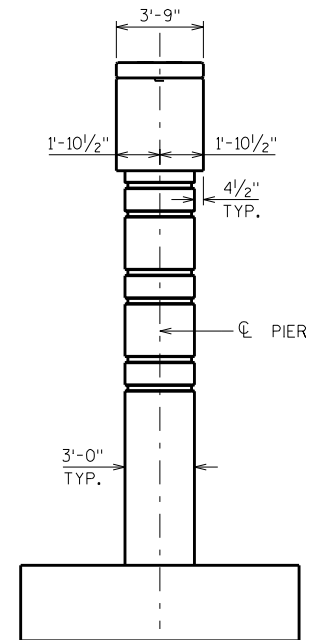
SECTION B-B

A17 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

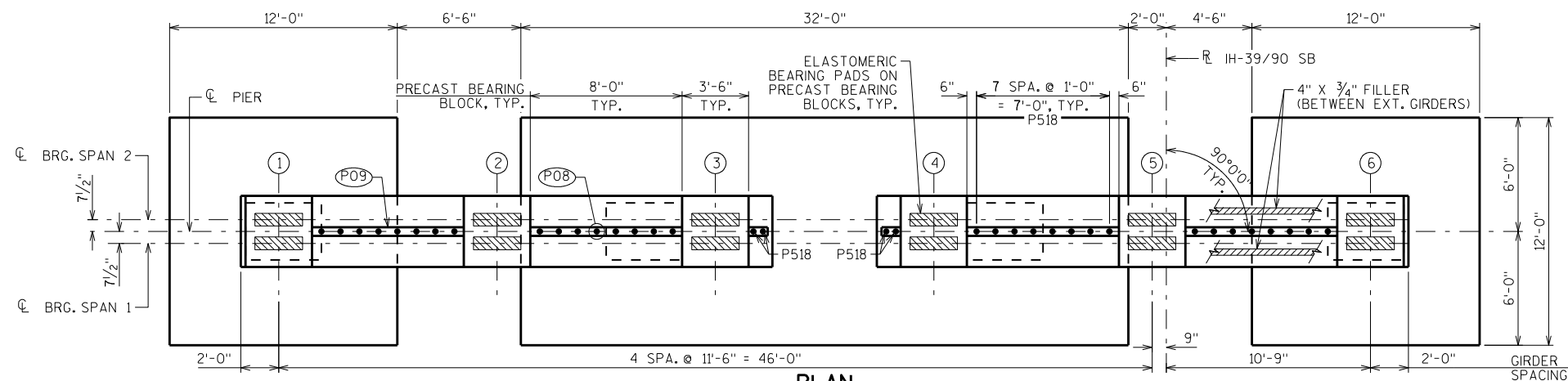
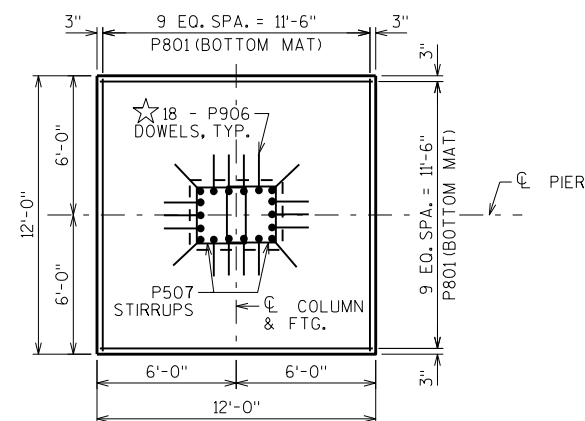
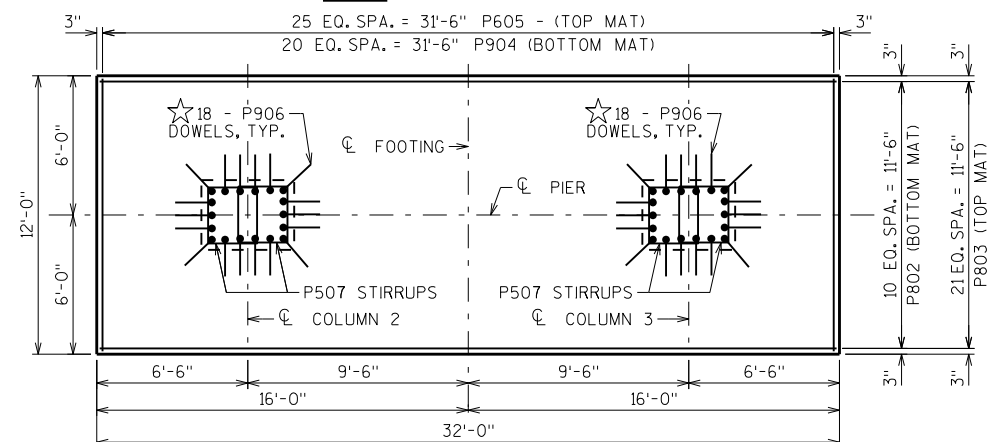
A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

**ELEVATION**

LOOKING NORTH

**END VIEW**

LOOKING WEST

**PLAN****FOOTING 1 & 3 REINFORCEMENT PLAN****FOOTING 2 REINFORCEMENT PLAN**

- ① INDICATES GIRDER NUMBER
- P08 P518 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- P09 KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 x 6 BETWEEN PRECAST BEARING BLOCKS.

GENERAL NOTES

USE TEMPLATE TO ALIGN P906 DOWELS INTO PRECAST COLUMNS. TEMPLATE TO BE PROVIDED BY PRECASTER.

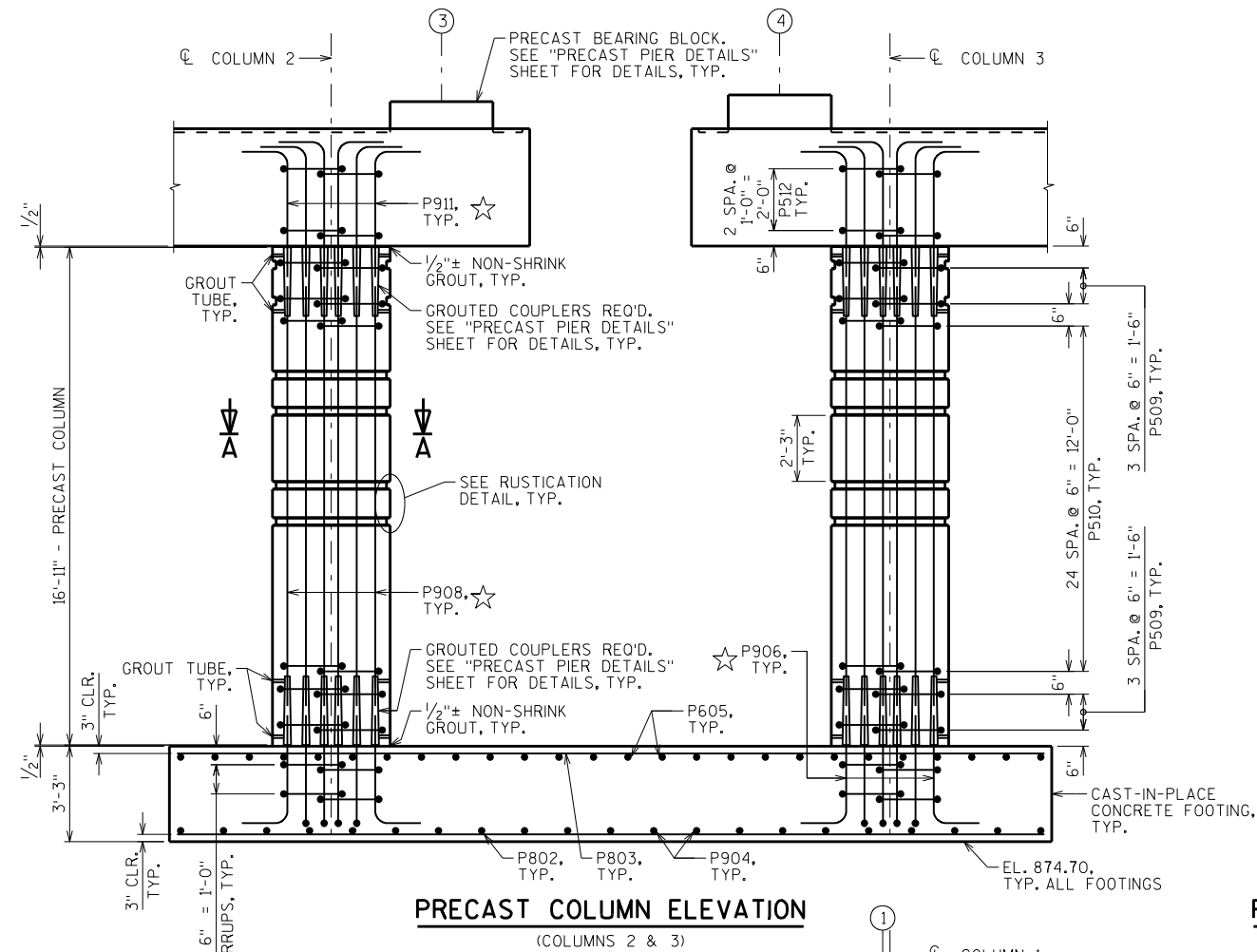
★ SUPPLY REINFORCEMENT BARS ACCORDING TO GROUDED COUPLER REQUIREMENTS FOR EMBEDMENT. BARS MAY BE FIELD CUT IF NEEDED. PAYMENT BASED ON PLAN LENGTHS AS SHOWN IN THE BILL OF BARS.

PROVIDE A SUITABLE LIFTING DEVICE FOR THE PRECAST CAP AND COLUMN UNIT(S).

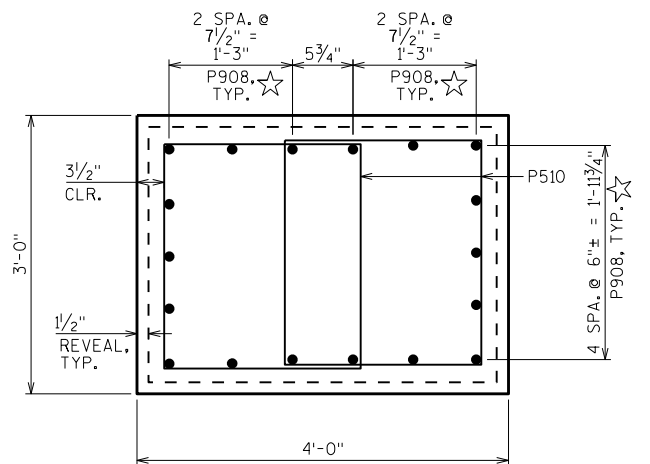
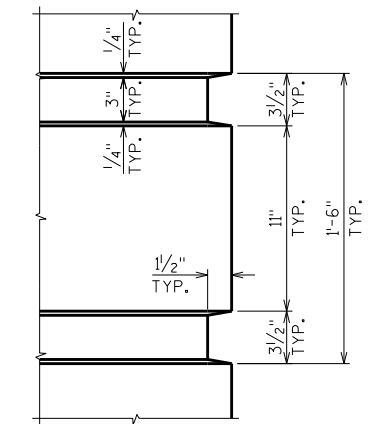
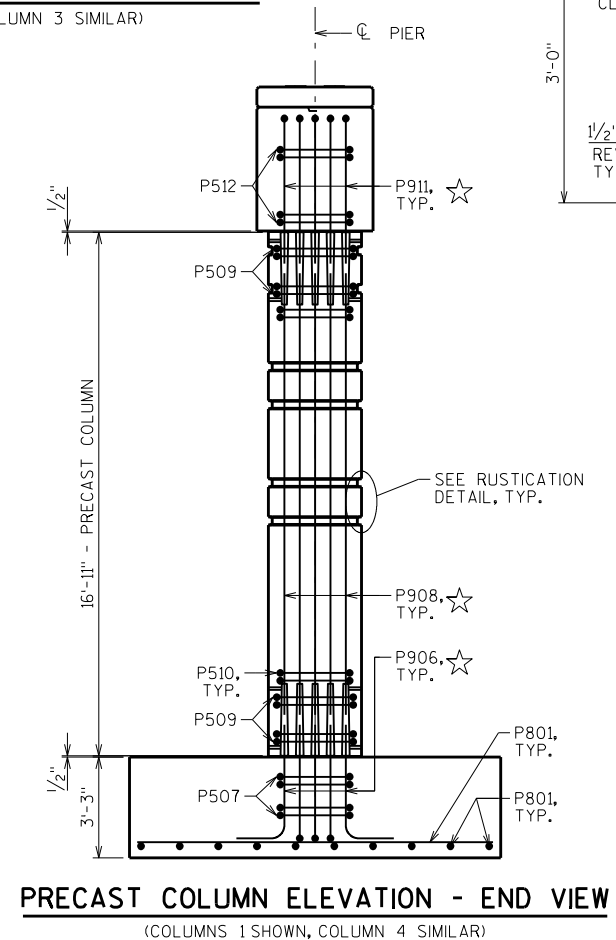
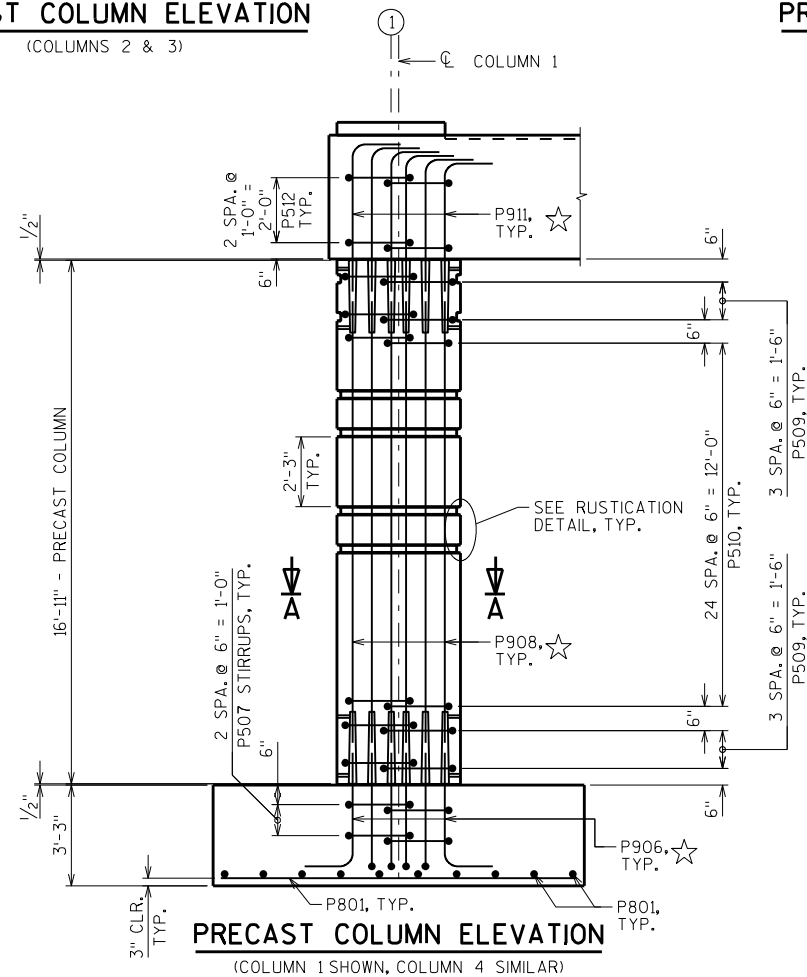
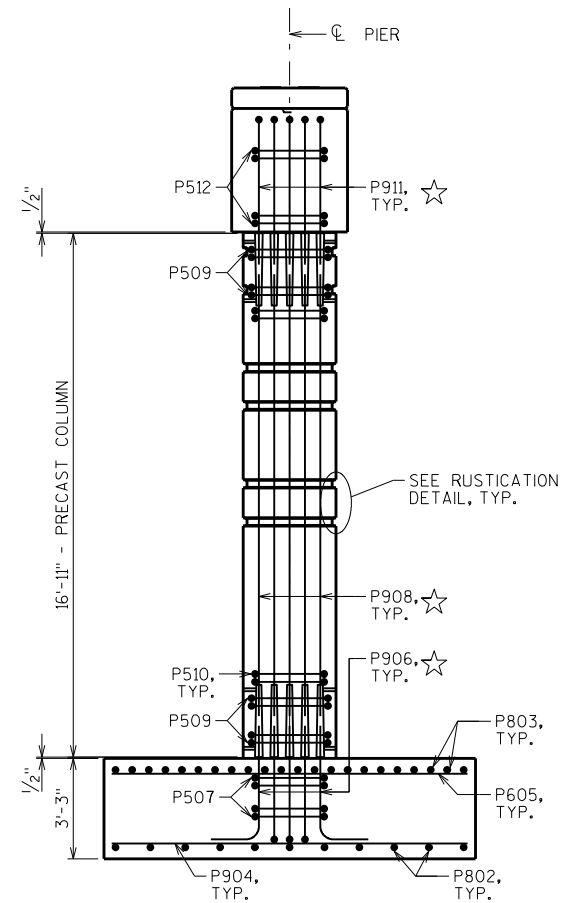
CAST-IN-PLACE ALTERNATIVE IS NOT ALLOWED.

STIRRUPS AT GROUDED COUPLERS ARE SIZED BASED ON A 3" OUTER DIAMETER COUPLER SLEEVE. ADJUST STIRRUP DIMENSIONS AS REQUIRED IF THE ACTUAL COUPLER SLEEVE DIMENSION DIFFERS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-707			
DRAWN BY		ABS	PLANS CK'D. SAD
PIER		SHEET 10	
		599	



PRECAST COLUMN ELEVATION - END VIEW
(COLUMNS 2 SHOWN, COLUMN 3 SIMILAR)



☆ SUPPLY REINFORCEMENT BARS ACCORDING TO GROUTED COUPLER REQUIREMENTS FOR EMBEDMENT. BARS MAY BE FIELD CUT IF NEEDED. PAYMENT BASED ON PLAN LENGTHS AS SHOWN IN THE BILL OF BARS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-707			
DRAWN BY		ABS	PLANS CKD. SAD
PIER COLUMNS		SHEET 11	
		600	



- ☆ SUPPLY REINFORCEMENT BARS ACCORDING TO GROUTED COUPLER REQUIREMENTS FOR EMBEDMENT. BARS MAY BE FIELD CUT IF NEEDED. PAYMENT IS BASED ON PLAN LENGTHS AS SHOWN IN THE BILL OF BARS.
- (P08) P518 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- (P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 x 6 BETWEEN PRECAST BEARING BLOCKS.

NO.	DATE	REVISION			BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION					
STRUCTURE B-13-707					
		DRAWN BY	ABS	PLANS CK'D.	SAD
PIER CAP				SHEET 12	
				601	

GROUTED SPLICE COUPLER CONNECTION SEQUENCE

FOLLOW THE WRITTEN INSTALLATION PROCEDURES OF THE COUPLER MANUFACTURER. THE FOLLOWING ARE GENERAL PROCEDURES THAT APPLY TO MOST COUPLER MANUFACTURERS:

1. IT IS RECOMMENDED THAT THE ELEMENT WITH THE REINFORCEMENT BARS EXTENDING OUT BE FABRICATED WITH EXTRA BAR LENGTHS.
2. SURVEY LOCATION AND ELEVATION OF LOWER ELEMENT.
3. DETERMINE THE REQUIRED REINFORCING BAR EXTENSION LENGTHS AND THE REQUIRED SHIM HEIGHTS BASED ON THE SURVEY.
4. CUT THE BAR EXTENSIONS TO THE REQUIRED LENGTH BASED ON THE SURVEY AND THE COUPLER MANUFACTURER'S RECOMMENDATIONS. FOR COATED BARS, THE ENDS OF THE BARS SHALL BE RE-COATED.
5. PLACE BEDDING GROUT ON TOP OF LOWER ELEMENT. THE USE OF EXTRA GROUT THAT IS ALLOWED TO FLOW OUT DURING ELEMENT PLACEMENT IS RECOMMENDED. IN LIEU OF PRE-PLACEMENT OF BEDDING GROUT, THE BEDDING GROUT CAN BE FLOWED INTO PLACE AFTER ELEMENT ERECTION BUT PRIOR TO GROUTING OF COUPLERS.
6. ERECT UPPER ELEMENT TO WITHIN THE SPECIFIED ERECTION TOLERANCES INDICATED IN THE SPECIAL PROVISIONS. PREVENT BEDDING GROUT FROM FLOWING INTO COUPLER.
7. MAINTAIN INTEGRITY OF GROUT BED DURING SETTING OPERATION. REPAIR GROUT THAT IS DISPLACED OR GAPS THAT DEVELOP IN THE GROUT JOINT USING HAND TOOLS.
8. BRACE THE UPPER ELEMENT.
9. INSTALL GROUT IN COUPLERS FOLLOWING THE MANUFACTURER'S WRITTEN PROCEDURES. IF THE COUPLER IS BELOW THE JOINT, COUPLER GROUT CAN BE INSTALLED PRIOR TO APPLICATION OF BEDDING GROUT.
10. ERECTION OF SUBSEQUENT ELEMENTS ABOVE A CONNECTION SHALL NOT COMMENCE UNTIL THE CONNECTION HAS ACHIEVED ADEQUATE STRENGTH AS DETERMINED THROUGH STRENGTH TESTING OF THE GROUT. THE TIMING OF SUBSEQUENT CONSTRUCTION STEPS SHOULD BE SPECIFIED IN BRIDGE ASSEMBLY PLAN.

GROUTED COUPLER NOTES

USE MATCHING TEMPLATES FOR THE LOCATION OF REINFORCEMENT AND GROUTED COUPLER PLACEMENT WITHIN THE ELEMENTS TO CONTROL CRITICAL DIMENSIONS AND ORIENTATION IN ALL DIRECTIONS.

- CONSULT MANUFACTURER OF THE GROUTED COUPLER FOR PROPER DIMENSIONS "B" AND "D" AND FOR TOLERANCE OF THESE DIMENSIONS. FIELD CUT FOOTING AND CAP DOWELS AS REQUIRED.

BEFORE EXECUTING GROUTED COUPLER ASSEMBLIES, ALWAYS SEEK INSTALLATION RECOMMENDATIONS FROM THE MANUFACTURER OF THE GROUTED COUPLER USED.

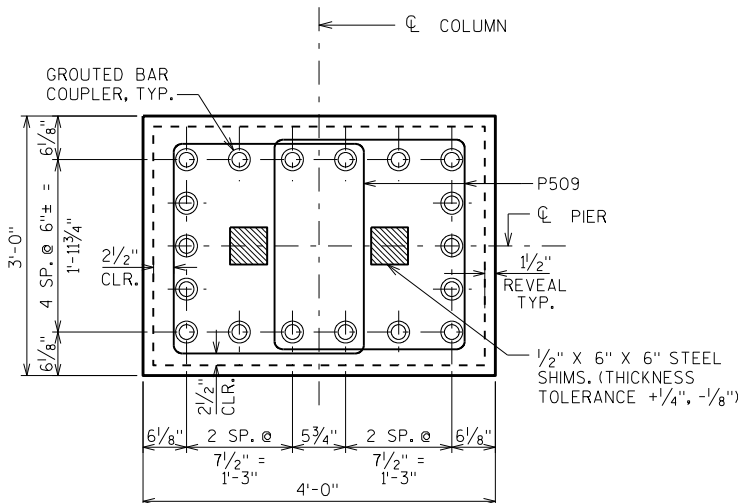
CONTRACTOR TO PROVIDE ADEQUATE BRACING OF COLUMNS UNTIL GROUTED COUPLER CONNECTIONS HAVE ACHIEVED ADEQUATE STRENGTH.

ALL GROUTED COUPLERS SHALL BE EPOXY COATED.

ADJUST SHIM STACK HEIGHT TO CONTROL ERECTION ELEVATIONS.

- ☆ SUPPLY REINFORCEMENT BARS ACCORDING TO GROUTED COUPLER REQUIREMENTS FOR EMBEDMENT. BARS MAY BE FIELD CUT IF NEEDED. PAYMENT IS BASED ON PLAN LENGTHS AS SHOWN IN THE BILL OF BARS.

PRECASTER SHALL PROVIDE PORTS IN THE PRECAST ELEMENTS TO ALLOW THE COUPLERS TO BE GROUTED AFTER THE PRECAST ELEMENTS HAVE BEEN ERECTED.



GROUTED COUPLER PLAN AT TOP AND BOTTOM OF COLUMN

BILL OF BARS - PIER FOOTINGS

BAR MARK	NO. REQ'D.	LENGTH	COAT	BENT	UNCOATED = 5,505 LBS. COATED = 1,470 LBS.
LOCATION					
P801	40	11'-6"			FOOTINGS 1 & 3 - BOTTOM MAT
P802	11	31'-6"			FOOTING 2 - LONG. - BOTTOM MAT
P803	22	31'-6"			FOOTING 2 - LONG. - TOP MAT
P904	21	11'-6"			FOOTING 2 - TRANS. - BOTTOM MAT
P605	26	11'-6"			FOOTING 2 - TRANS. - TOP MAT
P906	72	6'-0"	X	X	FOOTING DOWELS - VERT.
P507	24	9'-2"		X	FOOTING DOWEL STIRRUPS - HORIZ.

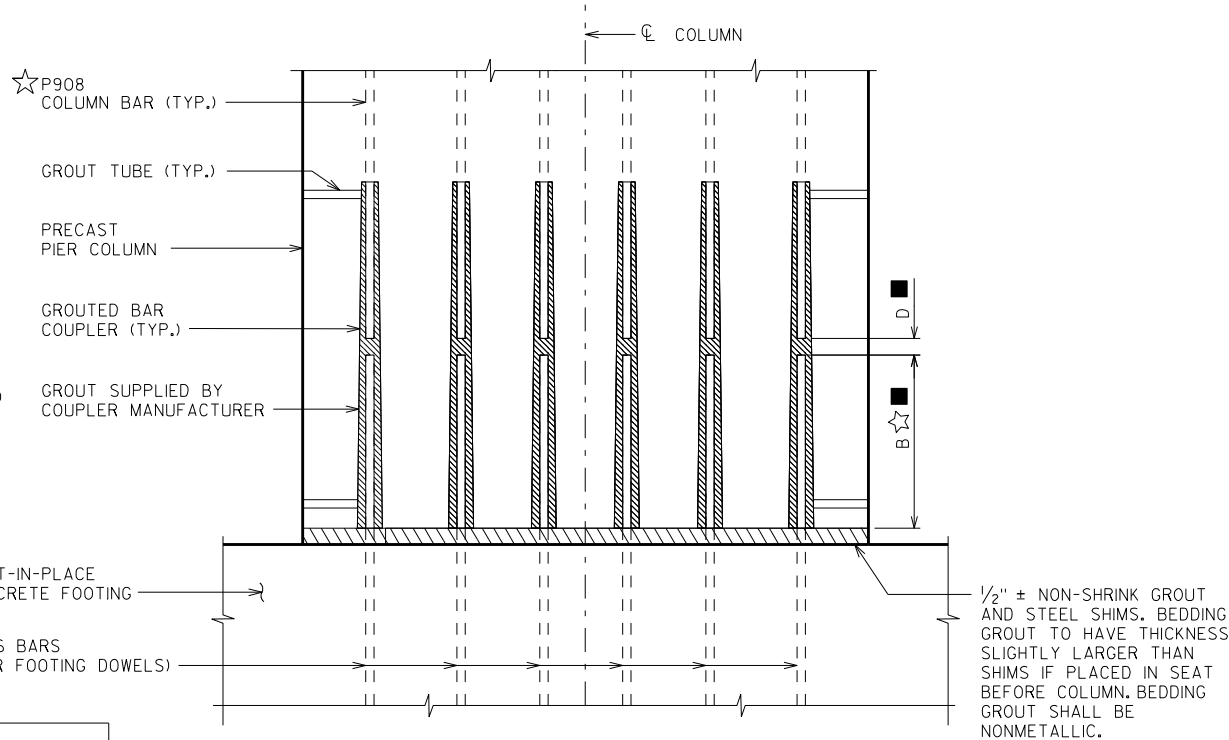
BILL OF BARS - PIER PRECAST COLUMNS

BAR MARK	NO. REQ'D.	LENGTH	COAT	BENT	UNCOATED = 0 LBS. COATED = 6,710 LBS.
LOCATION					
P908	72	17'-0"	X		COLUMNS - VERT.
P509	64	9'-6"	X	X	COLUMN - STIRRUPS - AT BAR COUPLERS
P510	200	9'-2"	X	X	COLUMN - STIRRUPS - BETWEEN BAR COUPLERS

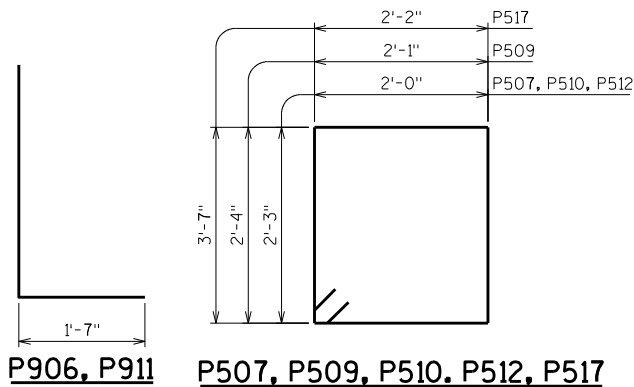
BILL OF BARS - PIER PRECAST CAPS

BAR MARK	NO. REQ'D.	LENGTH	COAT	BENT	UNCOATED = 0 LBS. COATED = 6,940 LBS.
LOCATION					
P911	72	6'-1"	X	X	CAP - DOWELS - BOT. - VERT.
P512	24	9'-2"	X	X	CAP - DOWEL STIRRUPS - HORIZ.
P1013	14	27'-6"	X		CAP 1 & 2 - BOTTOM - HORIZ. - LONG.
P514	20	27'-6"	X		CAP 1 & 2 - AT BOTH FACES - HORIZ. - LONG.
P915	14	30'-6"	X	X	CAP 1 & 2 - TOP - HORIZ. - LONG.
P516	28	6'-7"	X	X	CAP 1 & 2 - BOTH ENDS - HORIZ.
P517	100	12'-2"	X	X	CAP 1 & 2 - STIRRUPS - VERT.
P518	36	2'-0"	X		CAP 1 & 2 - DOWELS - TOP - VERT.

NOTE: THIS BILL OF BARS IS SHOWN FOR INFORMATION ONLY. PAYMENT FOR REINFORCEMENT IN PRECAST COLUMNS AND PRECAST CAP IS INCLUDED IN THE BID ITEMS 'PRECAST PIER COLUMNS' AND 'PRECAST PIER CAPS'.

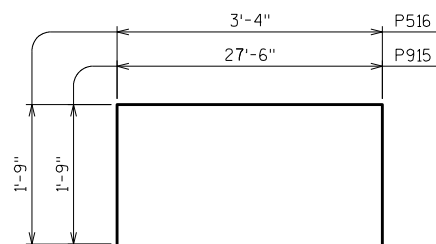
**GROUTED BAR COUPLER DETAILS**

(PIER COLUMN/FOOTING CONNECTION SHOWN. PIER CAP/COLUMN CONNECTION SIMILAR)

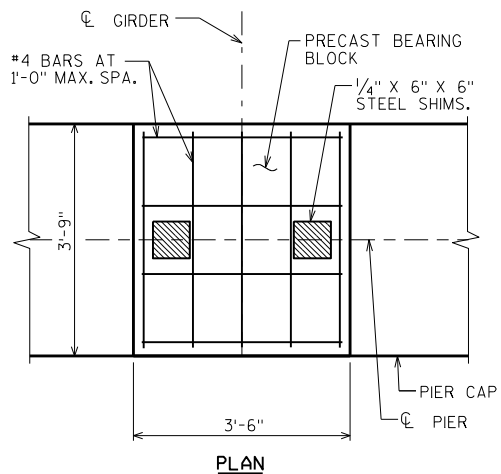


P906, P911

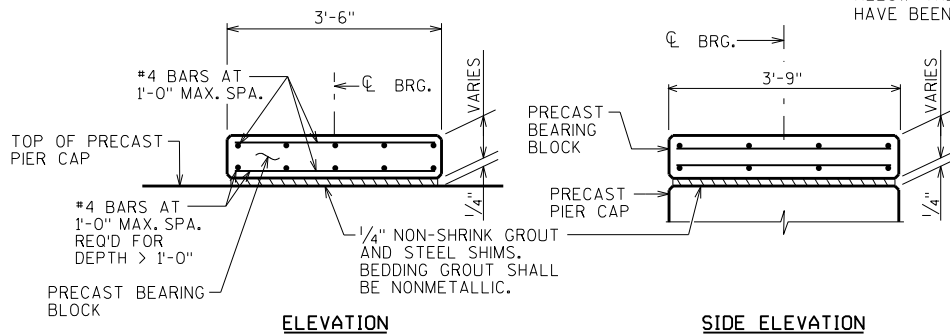
P507, P509, P510, P512, P517



P915, P516



PLAN



ELEVATION

SIDE ELEVATION

PRECAST BEARING BLOCK DETAILS

PRECAST BEARING BLOCKS ARE INCIDENTAL TO THE BID ITEM "PRECAST PIER CAPS" REINFORCING STEEL TO BE EPOXY COATED

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-707			
DRAWN BY		ABS	PLANS CK'D. SAD
PRECAST PIER DETAILS			SHEET 13
			602

NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, GRADE 2, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

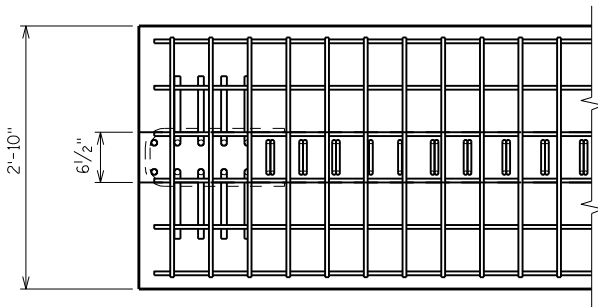
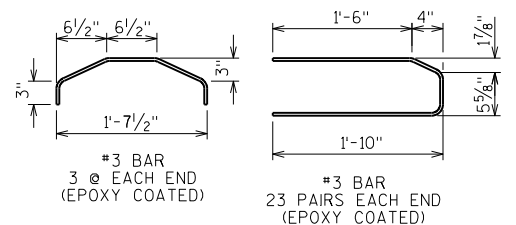
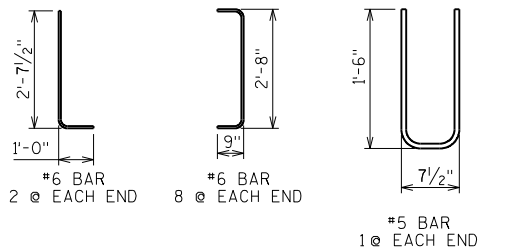
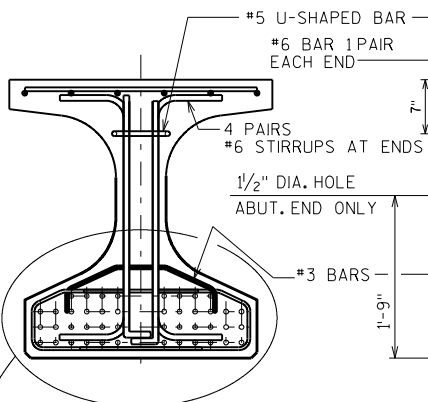
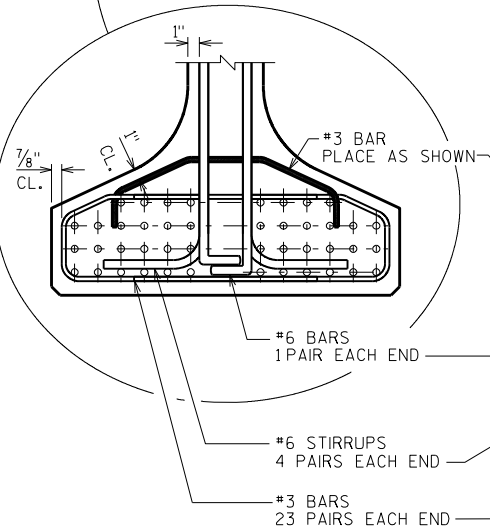
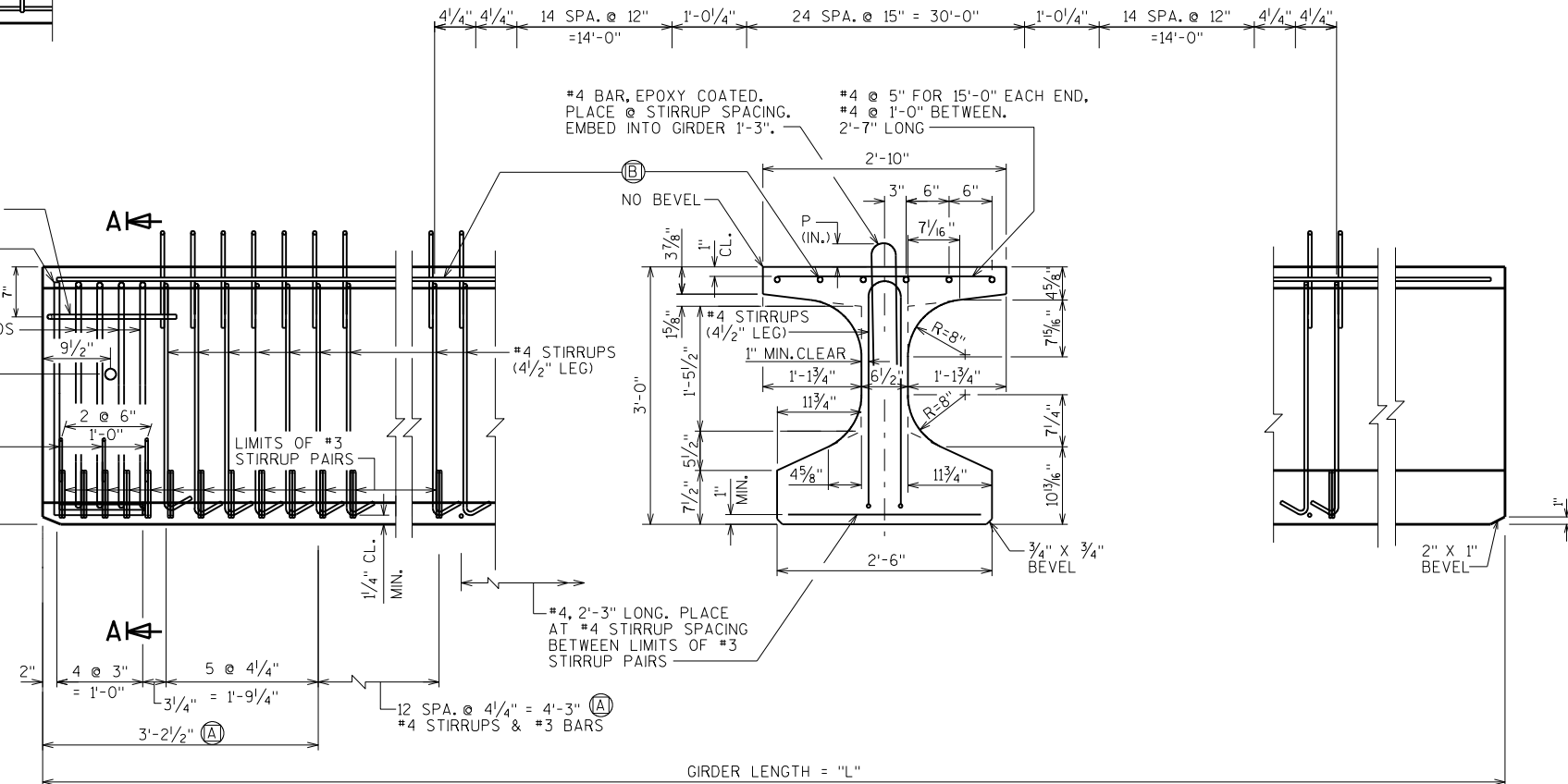
ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.

PRESTRESSING STRANDS SHALL BE (0.6" DIA.)-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.

**TOP FLANGE****SECTION A-A****BOTTOM FLANGE****SIDE VIEW & TYPICAL SECTION IN SPAN**

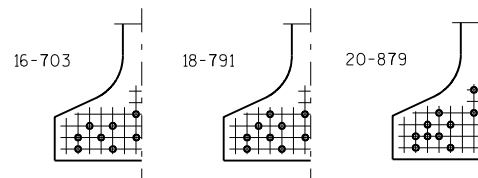
- (A) DETAIL TYP. AT EACH END
(B) 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"

* MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

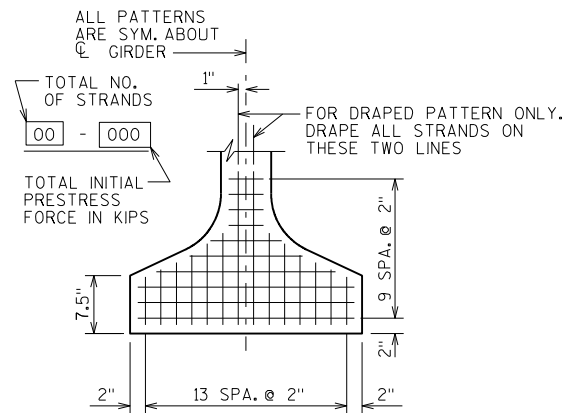
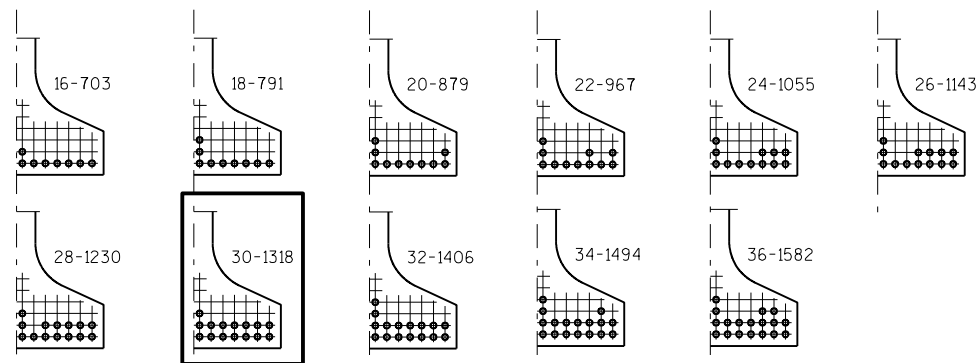
GIRDER DATA

GIRDER DATA																								
SPAN	GIRDER	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.)									CONC. STRGTH. f' _c (p.s.i.)	"P" 1ST 1/3 OF GIRDER	"P" MID 1/3 OF GIRDER	"P" END 1/3 OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN					UNDRAPED PATTERN		
			1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10						TOTAL NO. OF STRANDS	f' _{ci} (P.S.I.) *	(IN.)				TOTAL NO. OF STRANDS	f' _{ci} (P.S.I.) *
																		"A"	"B" MIN.	"B" MAX.	"C"			
1	1,6	76.375	0.43	0.82	1.12	1.31	1.37	1.30	1.11	0.81	0.42	8,000	8.0	7.0	8.0	0.6	30	6,400	32.0	11.0	14.0	4.0		
1	2-5	76.375	0.56	1.05	1.44	1.68	1.76	1.68	1.43	1.04	0.55	8,000	7.5	7.0	7.5	0.6	30	6,400	32.0	11.0	14.0	4.0		
2	1,6	76.375	0.42	0.81	1.11	1.30	1.37	1.31	1.12	0.82	0.43	8,000	8.0	7.0	8.0	0.6	30	6,400	32.0	11.0	14.0	4.0		
2	2-5	76.375	0.55	1.04	1.43	1.68	1.76	1.68	1.44	1.05	0.56	8,000	7.5	7.0	7.5	0.6	30	6,400	32.0	11.0	14.0	4.0		

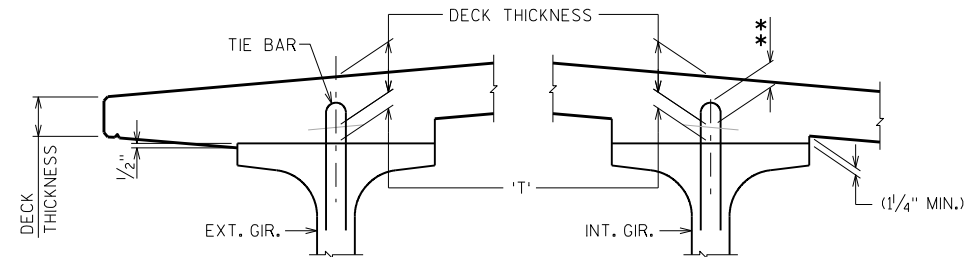
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-707			
DRAWN BY		ABS	PLANS CKD. SAD
36W" PRESTRESSED GIRDER DETAILS 1		SHEET 14	
		603	



STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6" ϕ STRANDS

TYP. STRAND PATTERN



DECK HAUNCH DETAIL

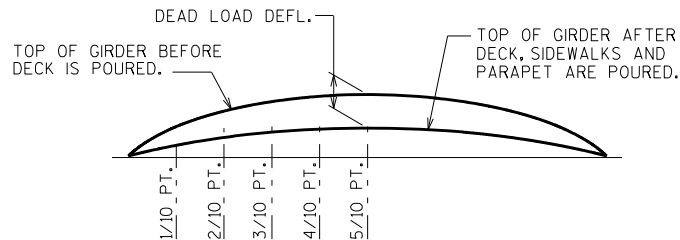
IF 1/4" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN 1/2" OR, ** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT C/G OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

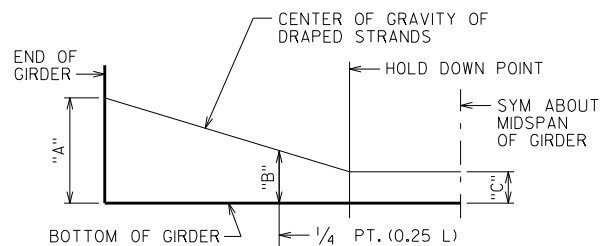
$$\begin{aligned} & \text{TOP OF DECK ELEV. AT FINAL GRADE} \\ & - \text{TOP OF GIRDER ELEVATION} \\ & + \text{DEAD LOAD DEFLECTION} \\ & - \text{DECK THICKNESS} \\ & = \text{HAUNCH HEIGHT 'T'} \end{aligned}$$

NOTE: AN AVERAGE HAUNCH ('T') OF 2.8" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".

ARRANGEMENT AT C/SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6" ϕ STRANDS

DEAD LOAD DEFLECTION DIAGRAM



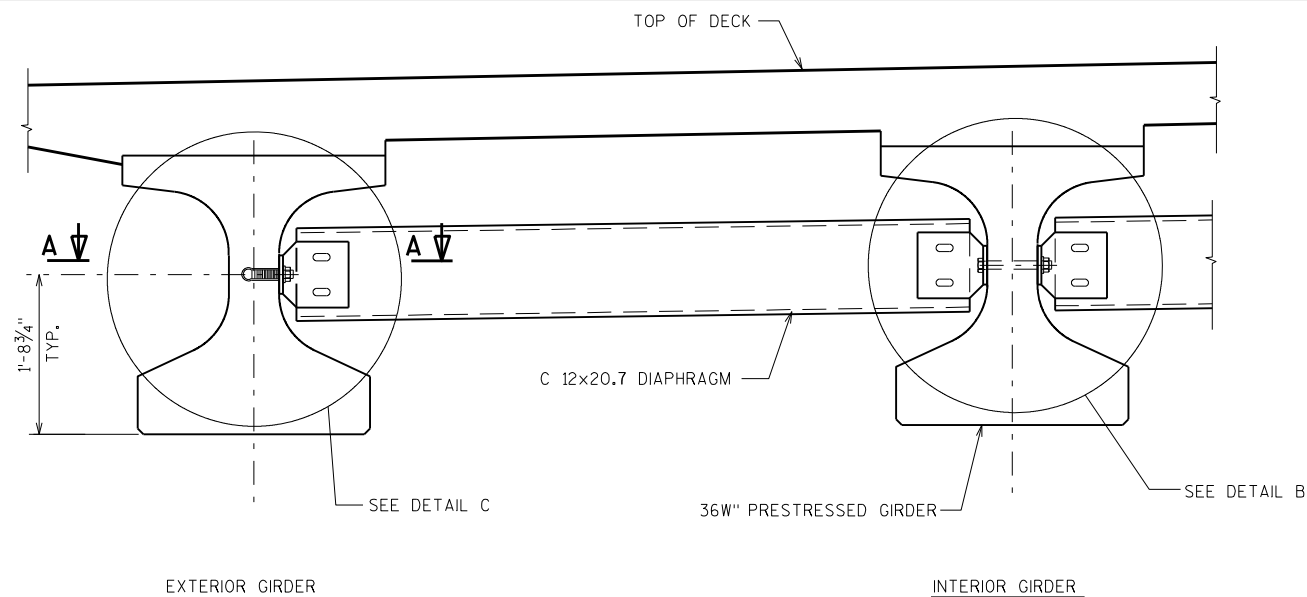
DRAPED STRAND PROFILE

*THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

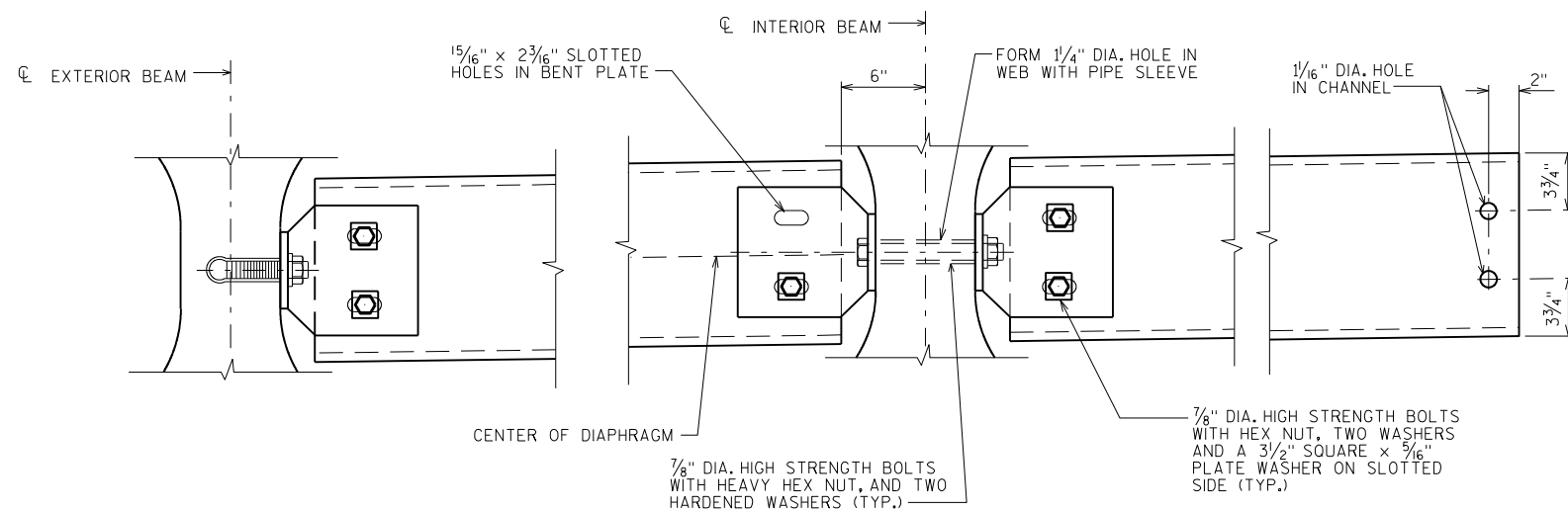
SPAN	CAMBER (IN.) *
1	3.09
2	3.09

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T'.
USE ACTUAL GIRDER SHOTS.
THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-707			
DRAWN BY		ABS	PLANS CK'D. SAD
36W" PRESTRESSED GIRDER DETAILS 2		SHEET 15	
		604	



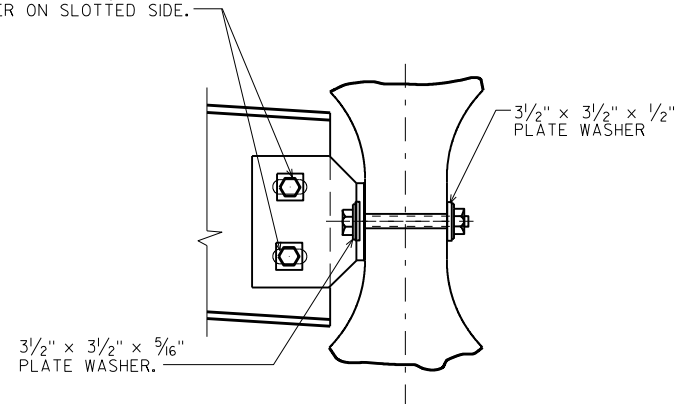
PART TRANSVERSE SECTION AT DIAPHRAGM



DETAIL C

DETAIL B

7/8" DIA HIGH STRENGTH BOLTS WITH HEX NUT, TWO WASHERS AND A 3 1/2" SQUARE x 5/16" PLATE WASHER ON SLOTTED SIDE.



SECTION AT INTERIOR GIRDERS THRU DIAPHRAGM FOR SKEW ANGLES > 10°

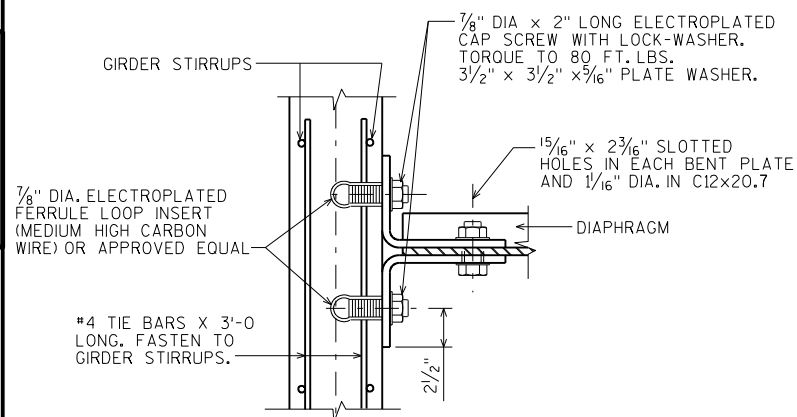
NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-13-707", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

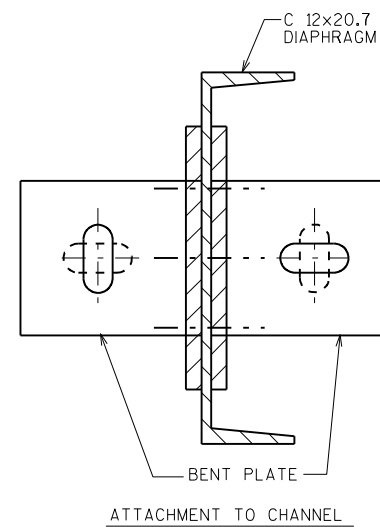
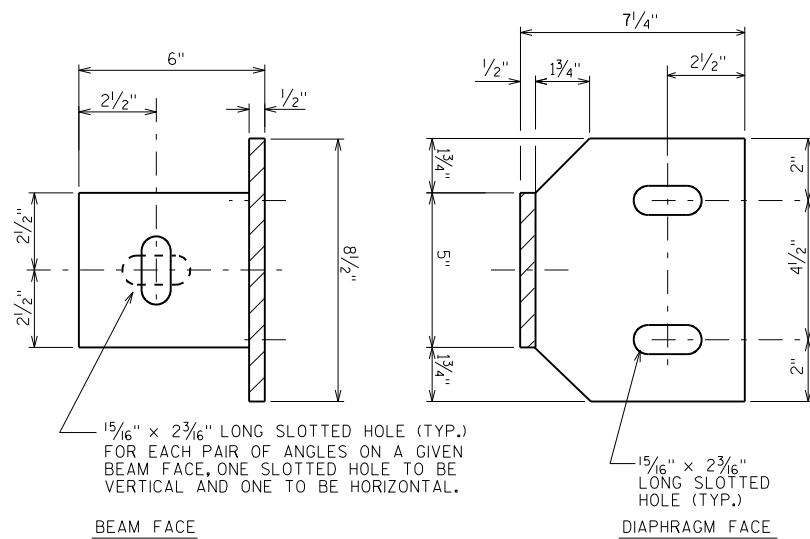
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

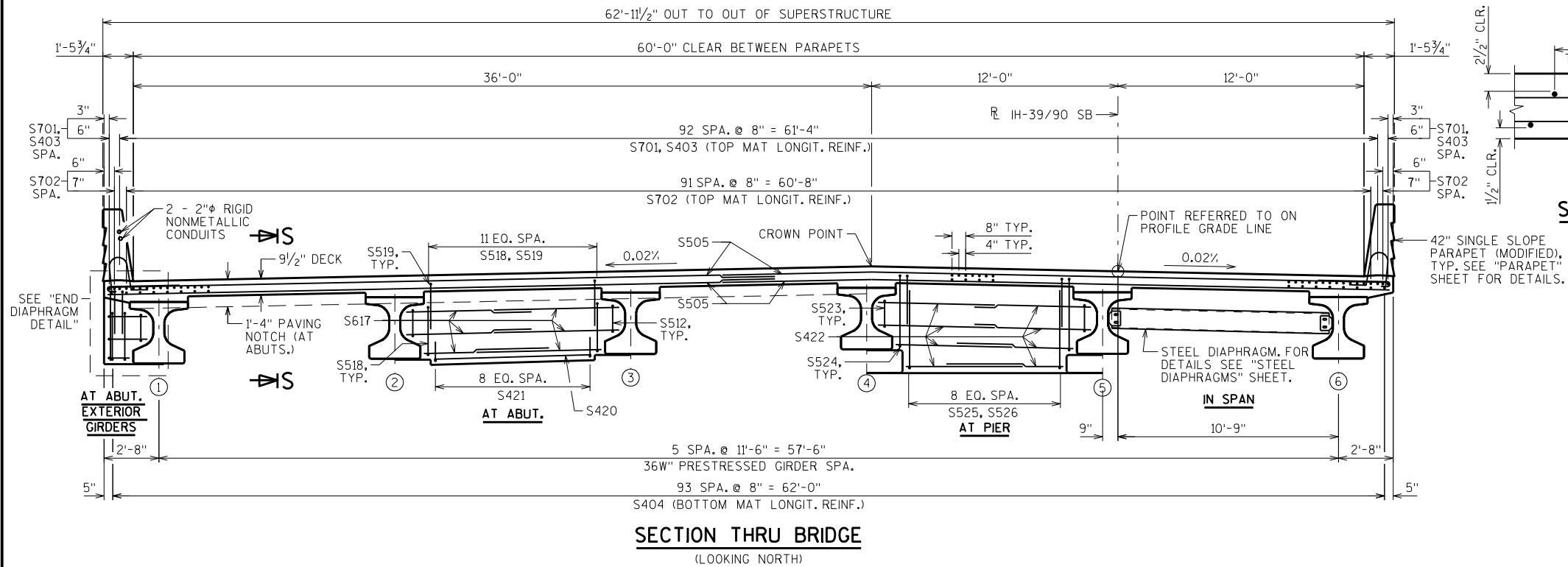


SECTION A-A

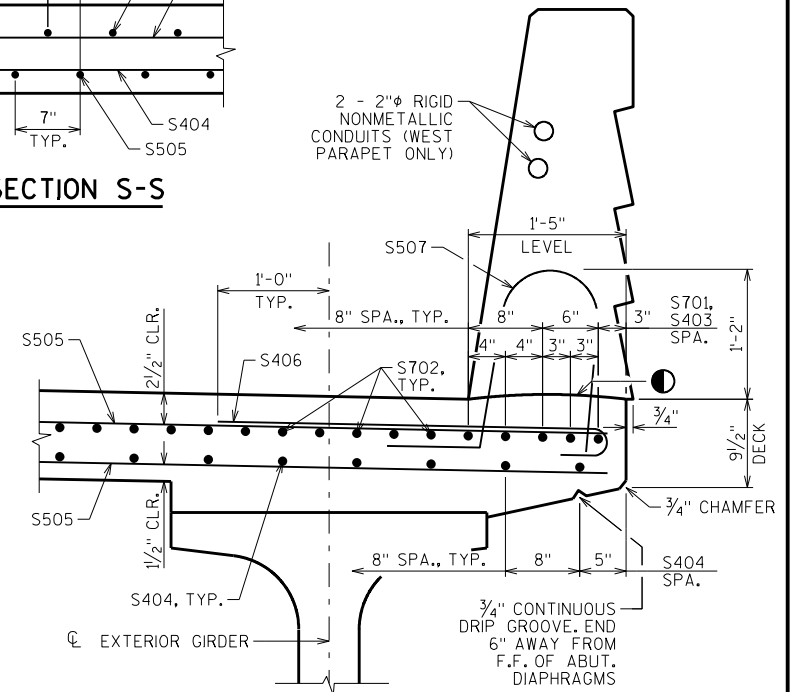
(FOR EXTERIOR ATTACHMENT)



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-707			
DRAWN BY		ABS	PLANS CK'D. SAD
STEEL DIAPHRAGM		SHEET 16	
		605	

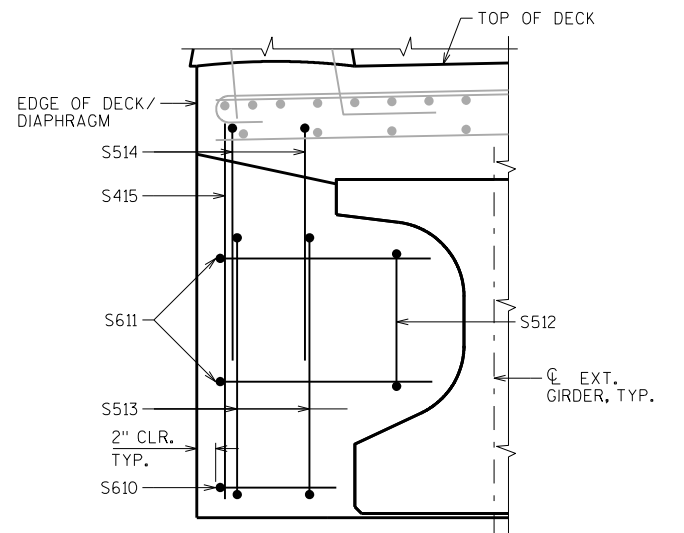
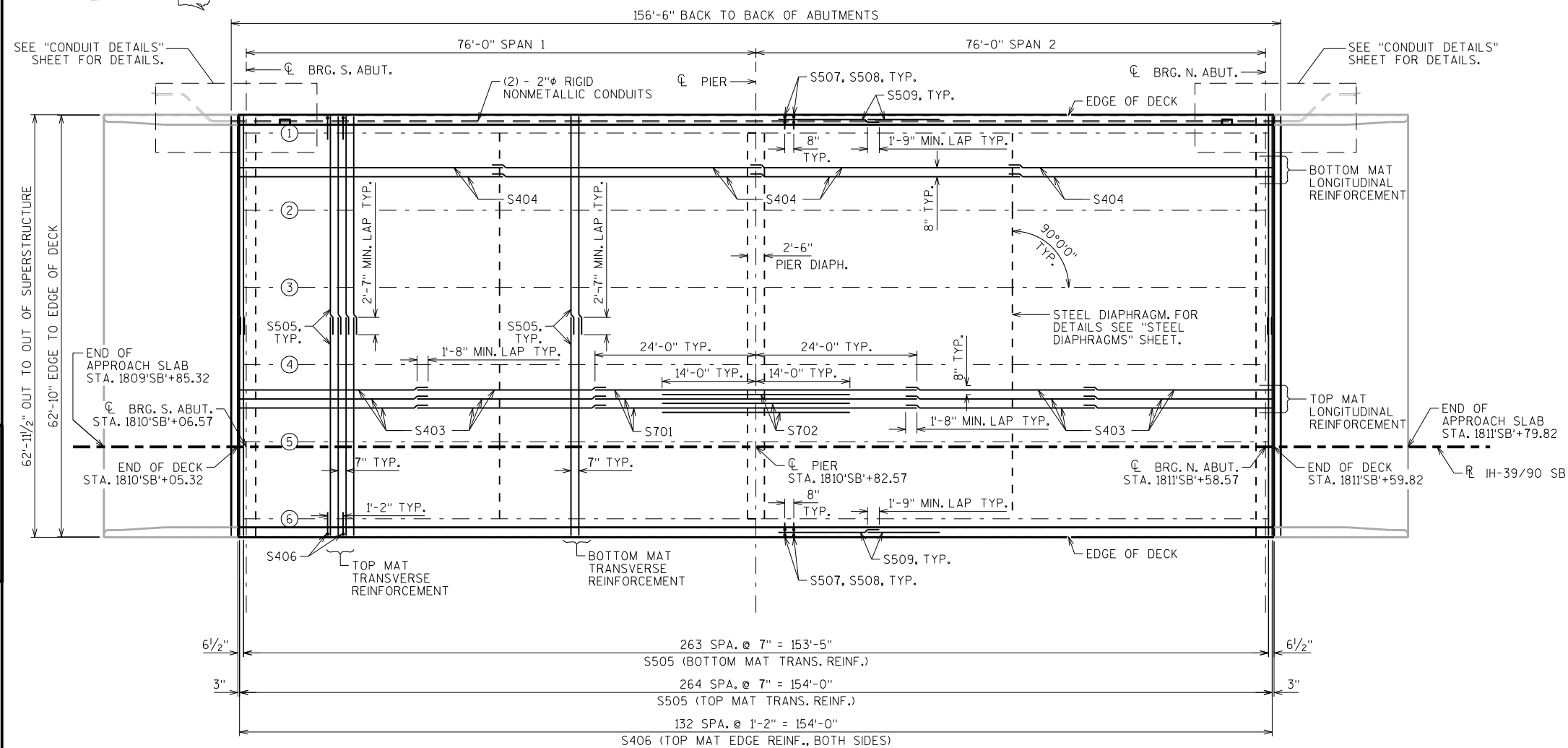


SECTION S-S



EDGE OF DECK DETAIL

● HORIZ. CONST. JOINT. STRIKE OFF AND LEAVE ROUGH AS SHOWN



END DIAPHRAGM DETAIL

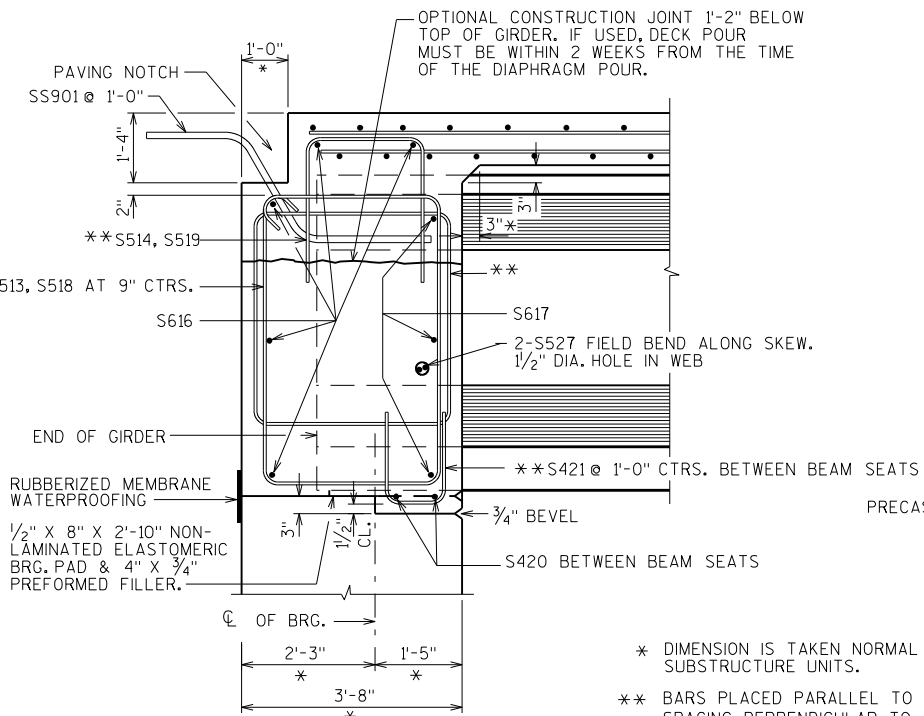
(TYP. ALL ABUT. ENDS)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-707			
DRAWN BY		ABS	PLANS CK'D. SAD
SUPERSTRUCTURE		SHEET 17	
		606	

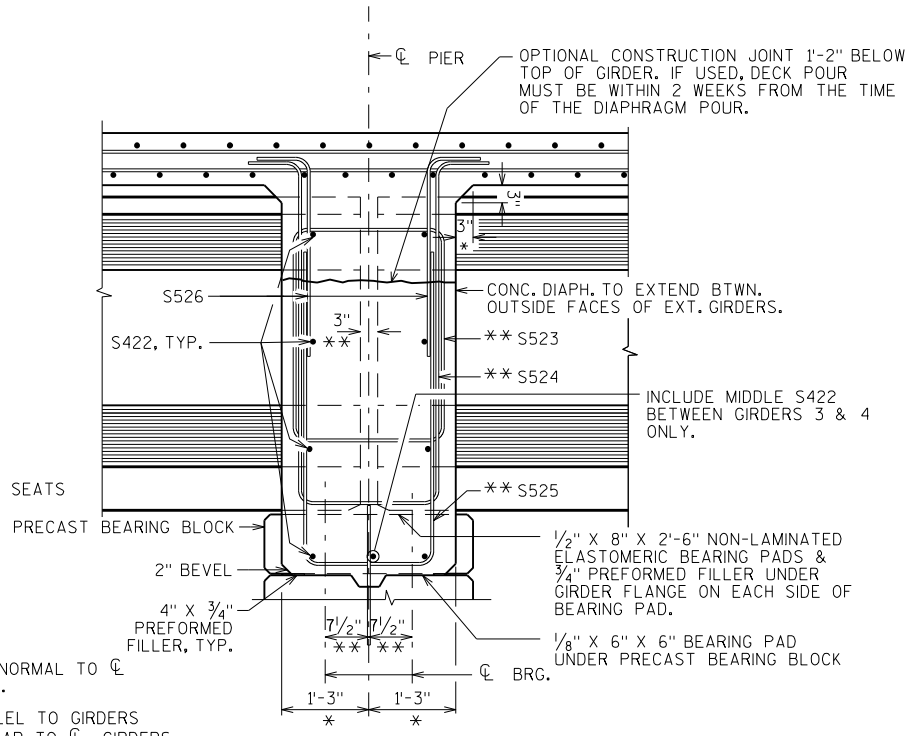
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BILL OF BARS

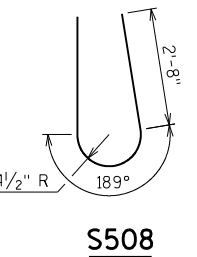
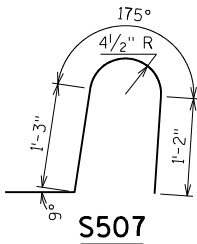
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
S701	X	95	48'-0"			DECK - LONGITUDINAL - CONTINUITY
S702	X	94	28'-0"			DECK - LONGITUDINAL - CONTINUITY
S403	X	380	28'-3"			DECK - LONGITUDINAL - TOP
S404	X	376	39'-9"			DECK - LONGITUDINAL - BOTTOM
S505	X	1058	32'-6"			DECK - TRANSVERSE - TOP & BOTTOM
S406	X	266	4'-0"	X		DECK - TRANSVERSE - EDGE OF DECK
S507	X	464	4'-5"	X		PARAPET - VERTICAL
S508	X	464	6'-8"	X		PARAPET - VERTICAL
S509	X	48	52'-7"			PARAPET HORIZONTAL
S610	X	4	5'-2"	X		ABUT. DIAPH. - HORIZONTAL - ENDS - BOTTOM
S611	X	8	7'-0"	X		ABUT. DIAPH. - HORIZONTAL - ENDS
S512	X	24	10'-4"	X		ABUT. DIAPH. - STIRRUPS - AT GIRDERS
S513	X	8	12'-2"	X		ABUT. DIAPH. - STIRRUPS - ENDS
S514	X	8	6'-9"	X		ABUT. DIAPH. - VERTICAL - ENDS
S415	X	8	3'-0"			ABUT. DIAPH. - VERTICAL - ENDS
S616	X	20	32'-9"			ABUT. DIAPH. - HORIZONTAL - B.F.
S617	X	60	6'-2"			ABUT. DIAPH. - HORIZONTAL
S518	X	120	12'-2"	X		ABUT. DIAPH. - STIRRUPS
S519	X	120	7'-1"	X		ABUT. DIAPH. - VERTICAL
S420	X	20	7'-8"			ABUT. DIAPH. - HORIZ. - BTWN. BEAM SEATS
S421	X	90	3'-7"	X		ABUT. DIAPH. - VERT. - BTWN. BEAM SEATS
S422	X	82	5'-9"			PIER DIAPH. - HORIZONTAL
S523	X	10	8'-0"	X		PIER DIAPH. - STIRRUPS - AT GIRDERS
S524	X	10	10'-2"	X		PIER DIAPH. - VERTICAL
S525	X	45	9'-7"	X		PIER DIAPH. - VERTICAL
S526	X	90	3'-2"	X		PIER DIAPH. - VERTICAL
S527	X	24	6'-0"			ABUT. DIAPH. - THRU GIRDERS



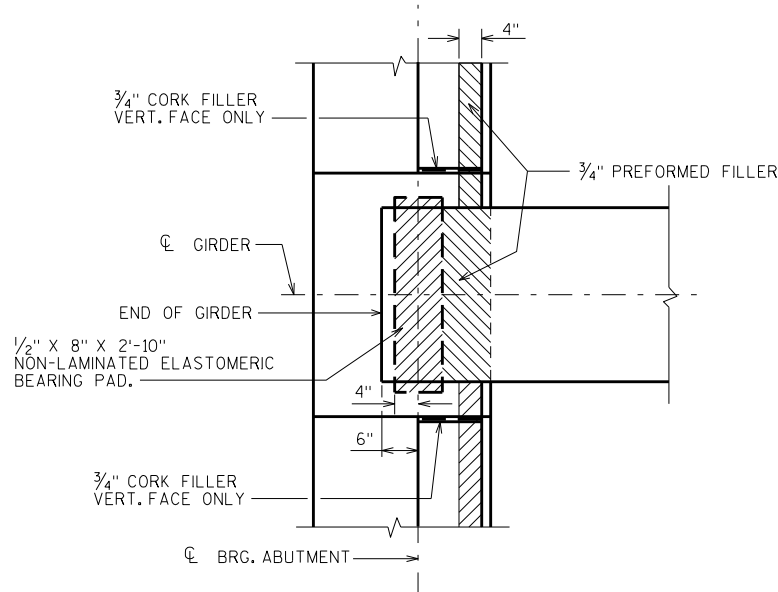
PART LONGIT. SECTION



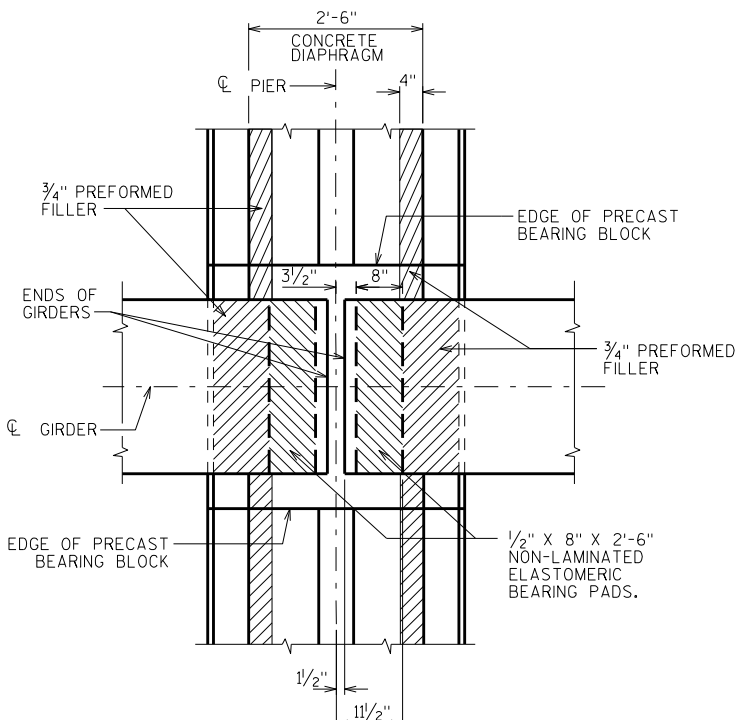
AT PIER DIAPHRAGM



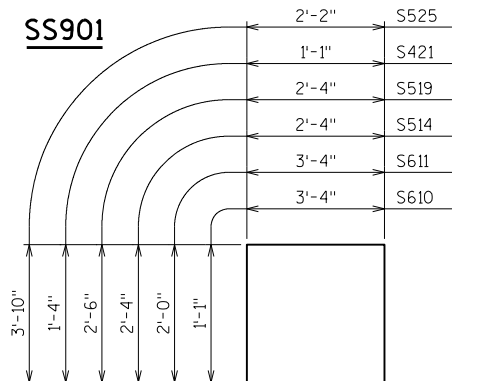
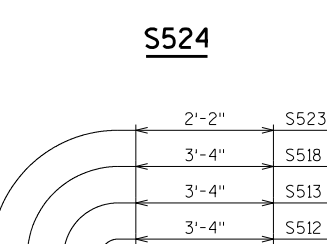
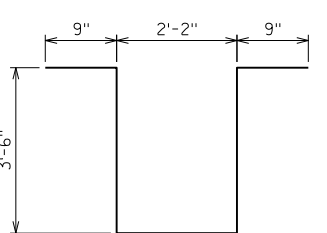
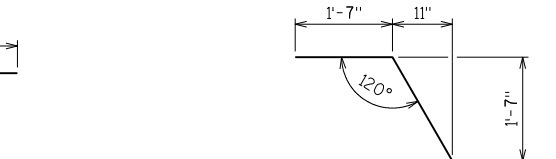
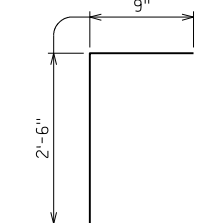
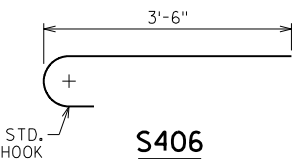
STAINLESS STEEL REINFORCEMENT → SS901 S 126 5'-0" X CONC. ABUT. DIAPH. TO APPROACH SLAB



ABUT. BEARING PAD DETAIL



PIER BEARING PAD DETAIL



S610, S611, S514, S519, S421, S525

TOP OF DECK ELEVATIONS

	S. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	N. ABUT.
LT EOD	902.87	902.94	903.01	903.08	903.14	903.21	903.27	903.33	903.39	903.45	903.51	903.56	903.62	903.68	903.73	903.78	903.83	903.88	903.93	903.98	904.03
G1	902.90	902.97	903.04	903.10	903.17	903.23	903.29	903.35	903.41	903.47	903.53	903.59	903.65	903.70	903.75	903.81	903.86	903.91	903.96	904.00	904.05
G2	903.13	903.20	903.27	903.33	903.40	903.46	903.52	903.58	903.65	903.70	903.76	903.82	903.88	903.93	903.98	904.04	904.09	904.14	904.19	904.23	904.28
G3	903.36	903.43	903.50	903.56	903.63	903.69	903.75	903.81	903.88	903.93	903.99	904.05	904.11	904.16	904.21	904.27	904.32	904.37	904.42	904.46	904.51
G4	903.59	903.66	903.73	903.79	903.86	903.92	903.98	904.04	904.10	904.16	904.22	904.28	904.34	904.39	904.44	904.50	904.55	904.60	904.65	904.69	904.74
CROWN	903.59	903.66	903.73	903.80	903.86	903.93	903.99	904.05	904.11	904.17	904.23	904.28	904.34	904.40	904.45	904.50	904.55	904.60	904.65	904.70	904.75
G5	903.37	903.44	903.51	903.57	903.64	903.70	903.76	903.82	903.89	903.94	904.00	904.06	904.12	904.17	904.22	904.28	904.33	904.38	904.43	904.47	904.52
PGL	903.35	903.42	903.49	903.56	903.62	903.69	903.75	903.81	903.87	903.93	903.99	904.04	904.10	904.16	904.21	904.26	904.31	904.36	904.41	904.46	904.51
G6	903.14	903.21	903.28	903.34	903.41	903.47	903.53	903.59	903.65	903.71	903.77	903.83	903.89	903.94	903.99	904.05	904.10	904.15	904.20	904.24	904.29
RT EOD	903.11	903.18	903.25	903.32	903.38	903.45	903.51	903.57	903.63	903.69	903.75	903.80	903.86	903.92	903.97	904.02	904.07	904.12	904.17	904.22	904.27

NO. DATE REVISION BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-707

DRAWN BY ABS PLANS CK'D. SAD

SUPERSTRUCTURE
DETAILS

SHEET 18

607



NOTE: THE FIRST OR FIRST TWO DIGITS OF THE
BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.		LENGTH	BENT	BAR SERIES	LOCATION
		SOUTH	NORTH				
T501	X	61	61	11'-10"	X		APPROACH SLAB FOOTING - STIRRUPS
T802	X	24	24	32'-8"			APPROACH SLAB FOOTING - TRANS.
T803	X	104	104	21'-4"	X		APPROACH SLAB - LONG. - BOTTOM
T504	X	64	64	19'-6"			APPROACH SLAB - LONG. - TOP
T505	X	42	42	32'-7"			APPROACH SLAB - TRANS. - BOTTOM
T506	X	42	42	32'-9"			APPROACH SLAB - TRANS. - TOP
T507	X	40	40	4'-1"	X		APPROACH SLAB - TRANS. - TOP - WING



NOTE: SEE "SUPERSTRUCTURE" SHEET FOR TYPICAL CROSS SECTION DETAILS.



** MEASURED NORMAL TO ABUTMENT.

- (T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THICKNESS) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING
- (T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THICKNESS) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

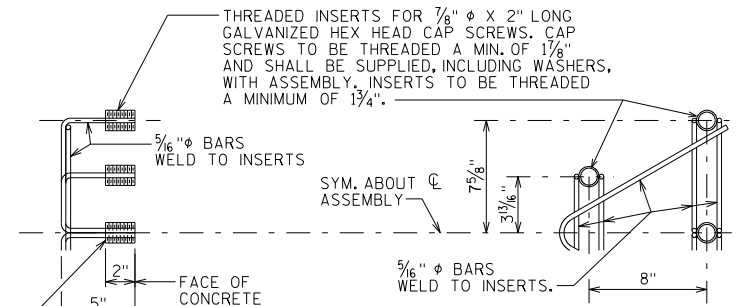
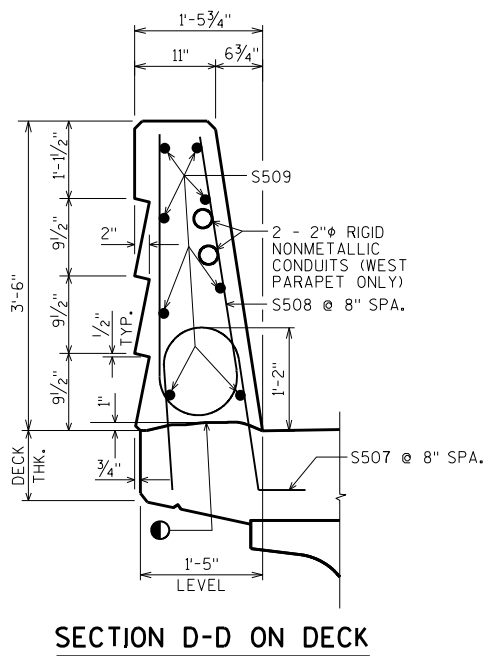
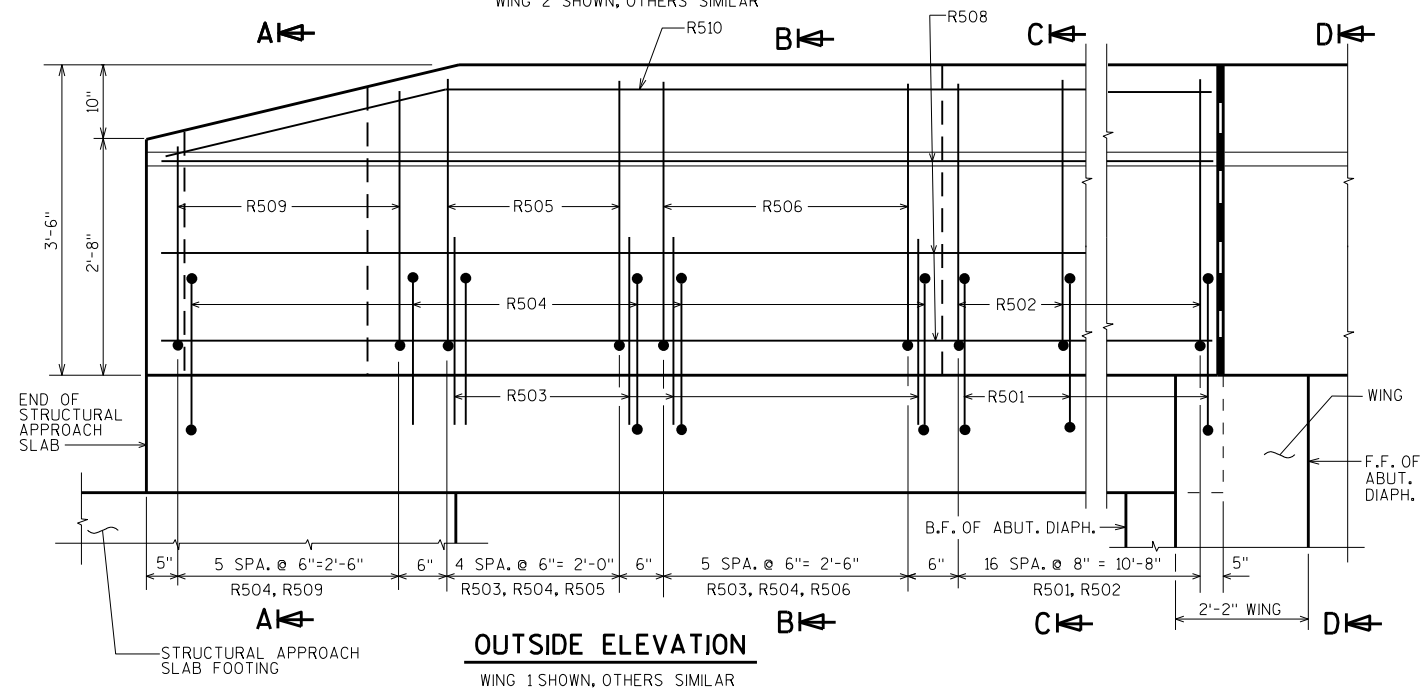
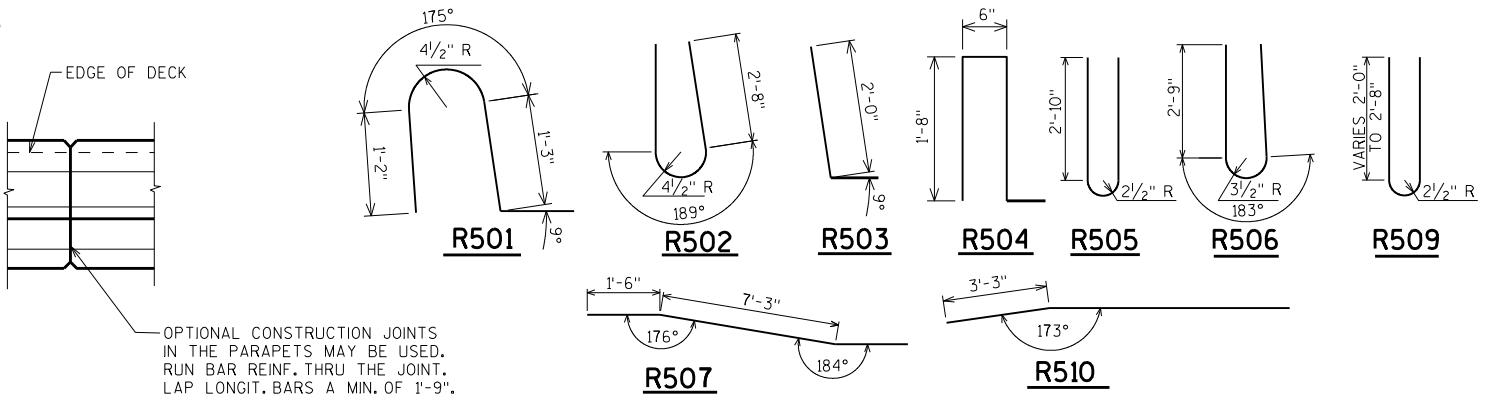
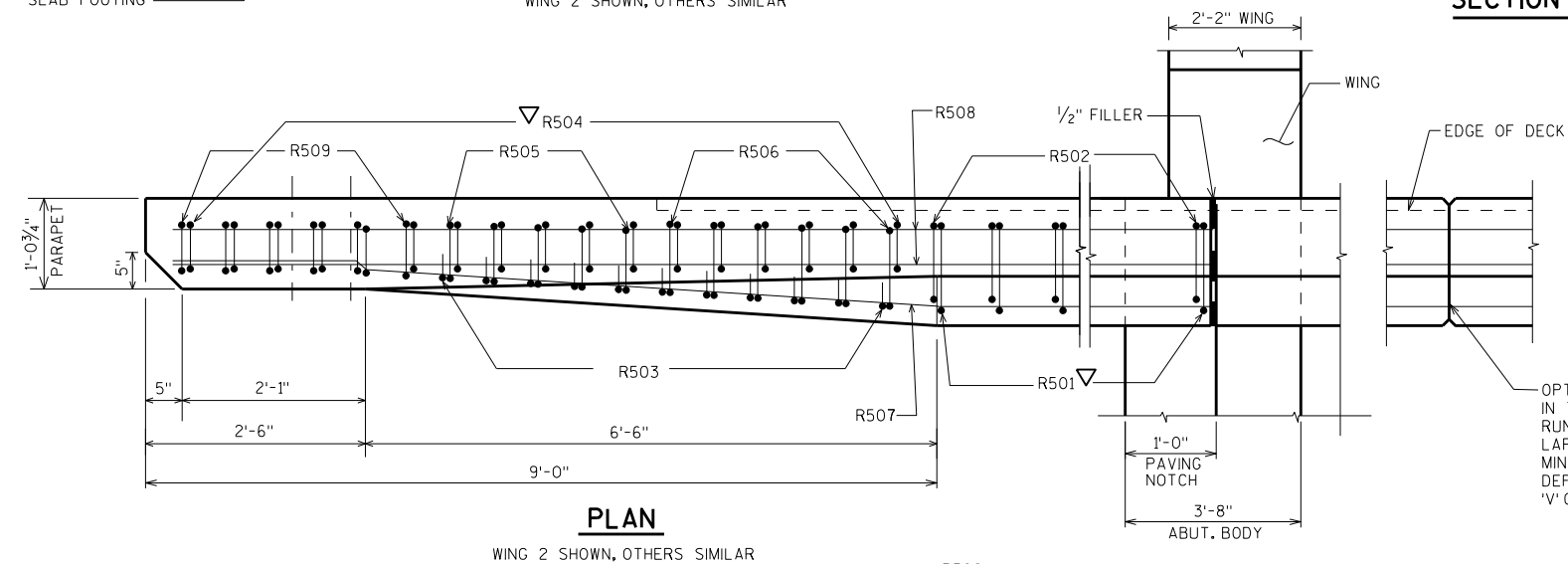
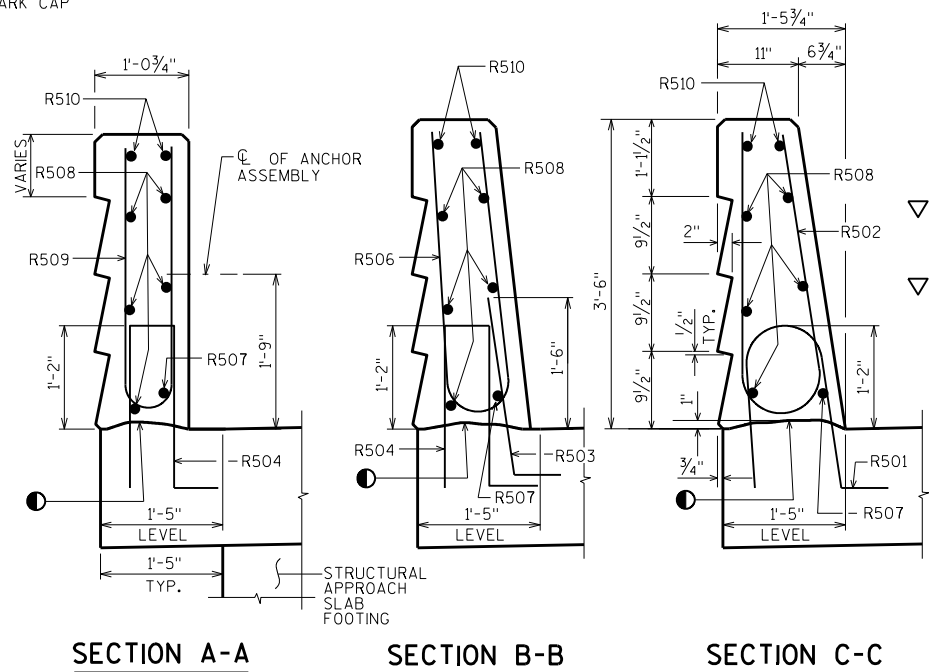
NO.	DATE	REVISION			BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION					
STRUCTURE B-13-707					
		DRAWN BY	ABS	PLANS CK'D.	SAD
STRUCTURAL APPROACH SLAB			SHEET 19		
			608		

FOR STRUCTURAL APPROACH SLAB PARAPETS

▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

MARK	NO. REQD.	LENGTH
R509	4 SERIES OF 6	4'-9" TO 6'-1"

BUNDLE AND TAG EACH SERIES SEPARATELY.



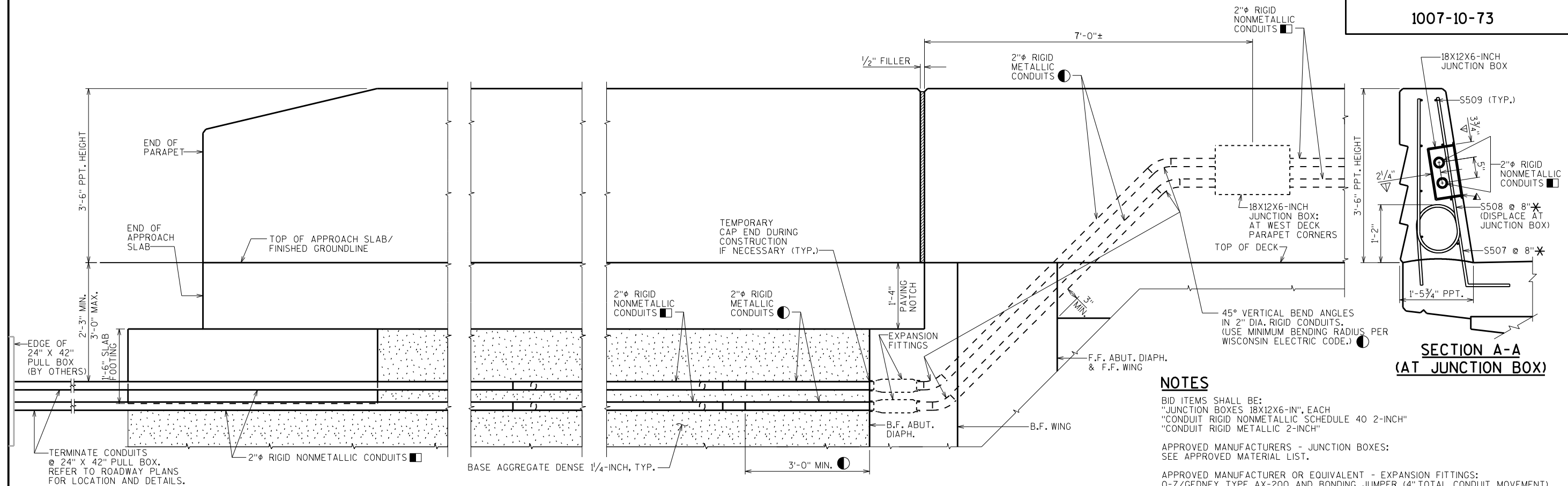
NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED
IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

● CONST. JOINT - STRIKE OFF AS SHOWN.

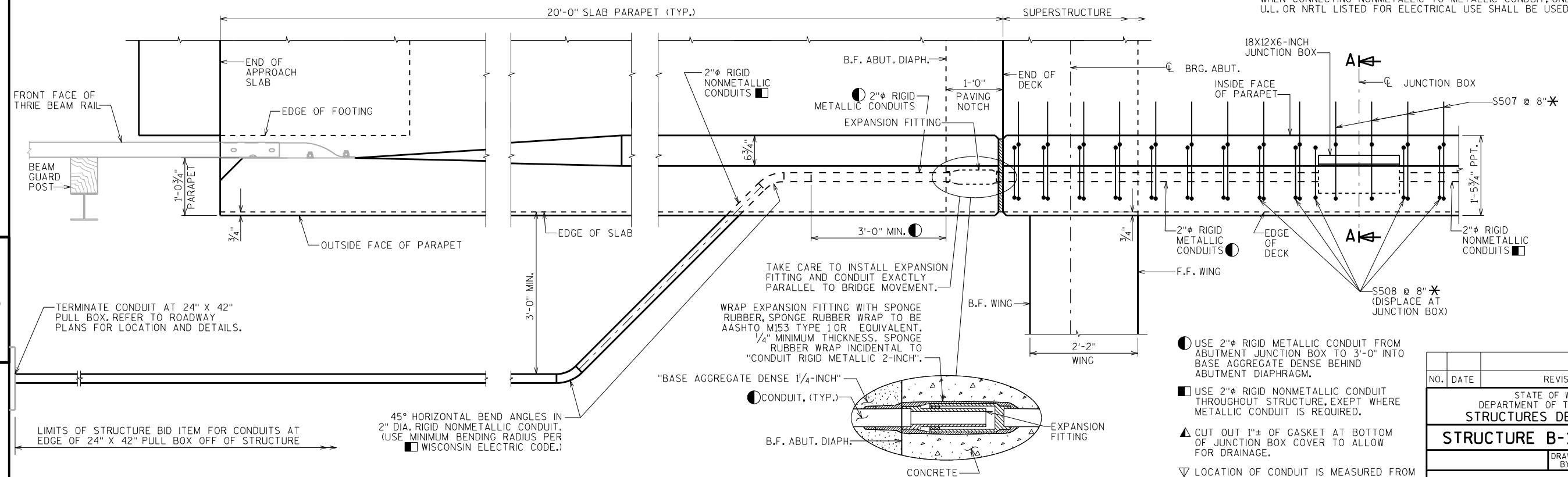
▽ R501 AND R504 BARS TO BE TIED TO
STRUCTURAL APPROACH SLAB STEEL
BEFORE STRUCTURAL APPROACH SLAB
IS POURED.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-707			
		DRAWN BY	ABS PLANS CK'D. SAD
MODIFIED SINGLE SLOPE PARAPET 42SS		SHEET 20	
		609	



OUTSIDE ELEVATION OF WINGWALL/STRUCTURAL APPROACH SLAB/PARAPET SHOWING CONDUITS

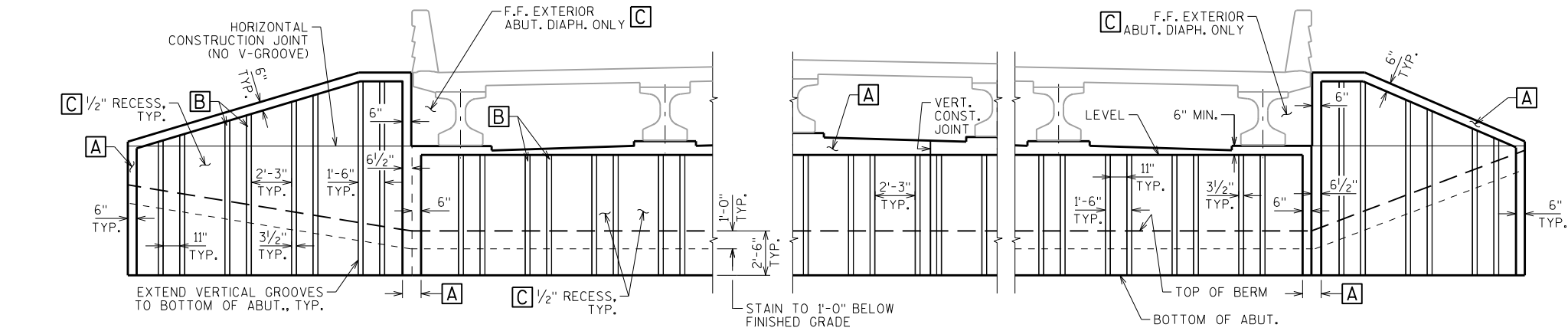
(TYPICAL AT WINGS 2 & 3)



PLAN VIEW OF WINGWALL/STRUCTURAL APPROACH SLAB/PARAPET SHOWING CONDUITS

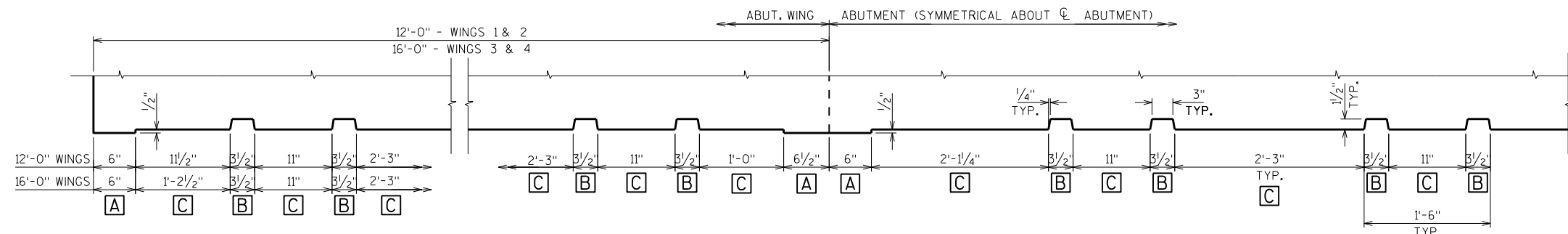
(TYPICAL AT WINGS 2 & 3)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-707			
DRAWN BY ABS/JPH		PLANS CKD. SAD	
CONDUIT DETAILS			SHEET 21
			610



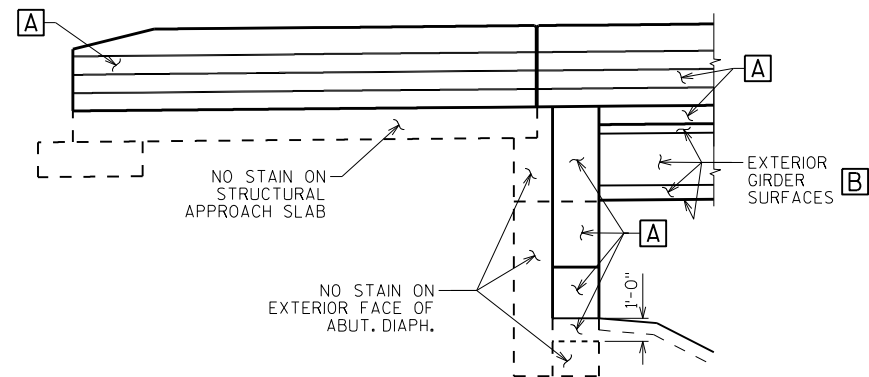
ABUTMENT ELEVATION LOOKING AT F.F.

(TYPICAL AT BOTH ABUTMENTS)



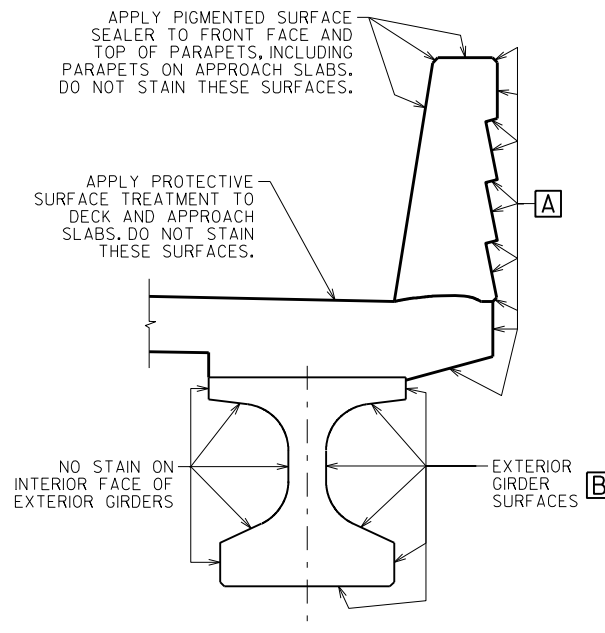
PLAN RUSTICATION DETAIL AT ABUTMENTS

(TYPICAL AT BOTH ABUTMENTS)

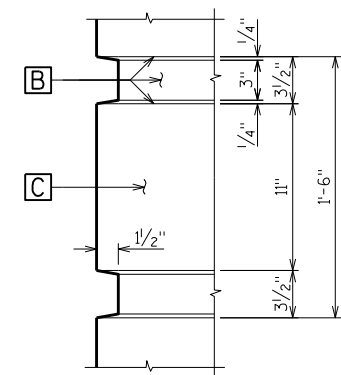


ELEVATION

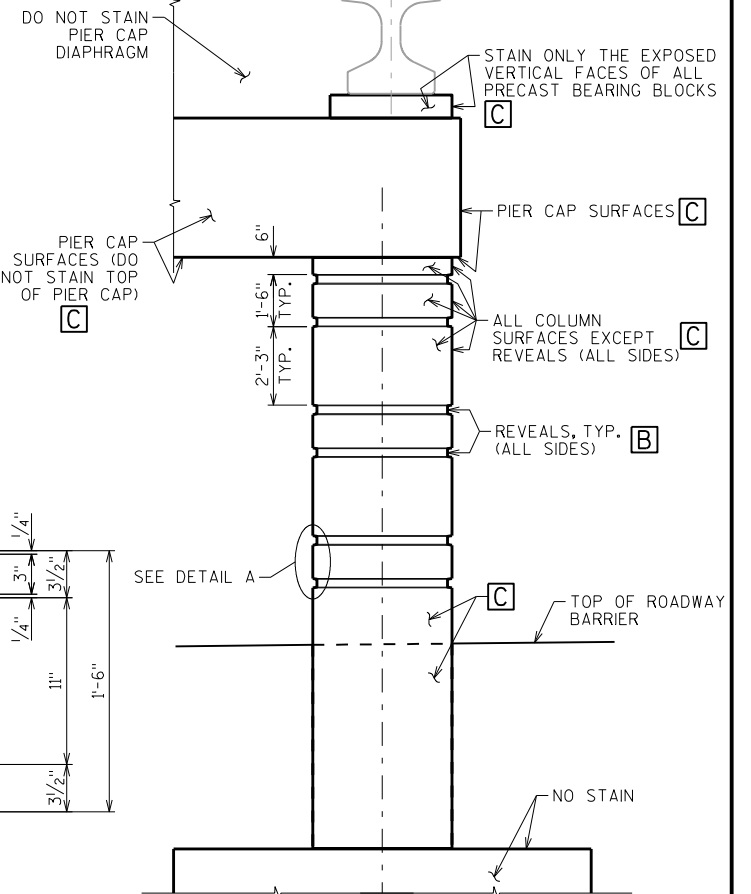
(TYPICAL AT BOTH ABUTMENTS)



PARTIAL DECK CROSS SECTION



DETAIL A



TYPICAL PIER COLUMN ELEVATION

(TYPICAL AT ALL PIER COLUMNS)

NOTES:

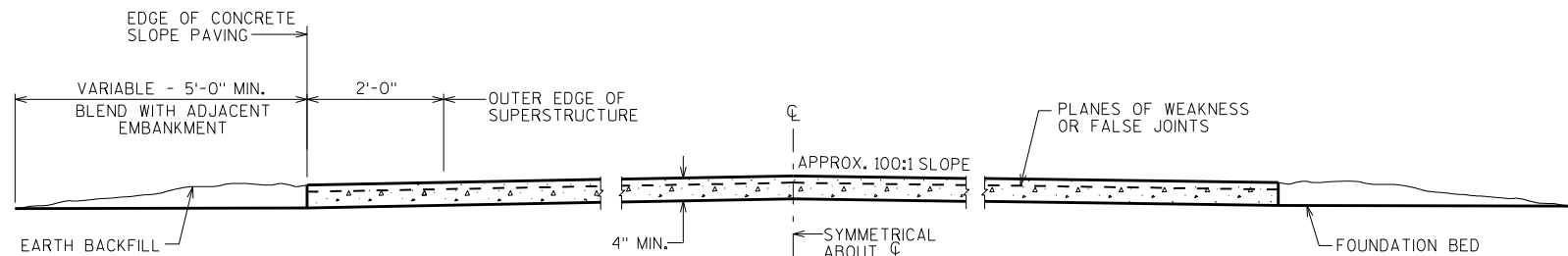
STAINING OF CONCRETE SURFACE AREAS TO BE PAID FOR UNDER THE BID ITEM "CONCRETE STAINING B-13-707".

IF TOUCH UP PAINTING IS REQUIRED, IT SHALL BE DONE TO THE SATISFACTION OF THE FIELD ENGINEER AT NO ADDITIONAL COST.

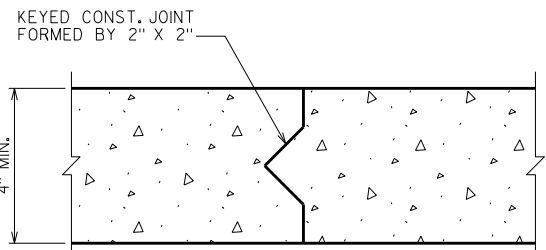
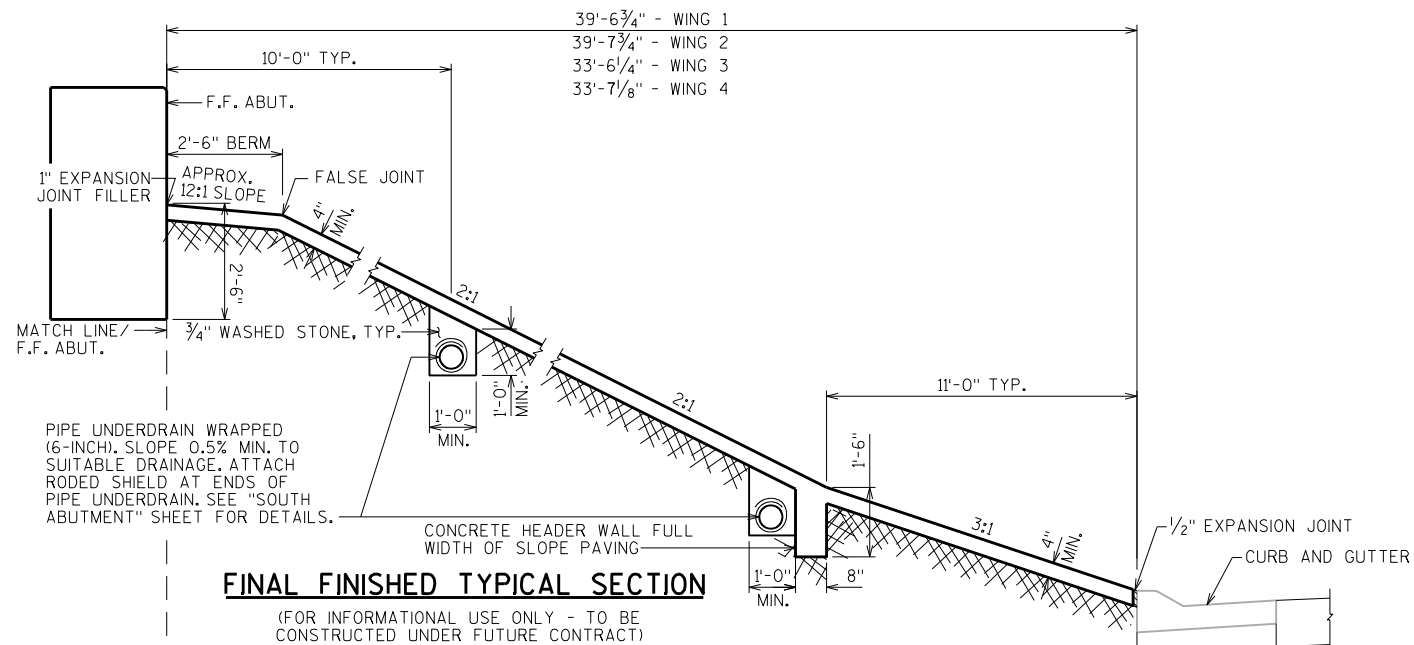
CONCRETE STAINING SCHEDULE

MARK	FEDERAL COLOR NUMBER	LOCATION
A	36642	PARAPET, EDGE OF DECK, AND ABUTMENT COPING
B	30140	EXTERIOR GIRDER AND REVEALS
C	30372	PIER, ABUTMENT AND WINGWALL

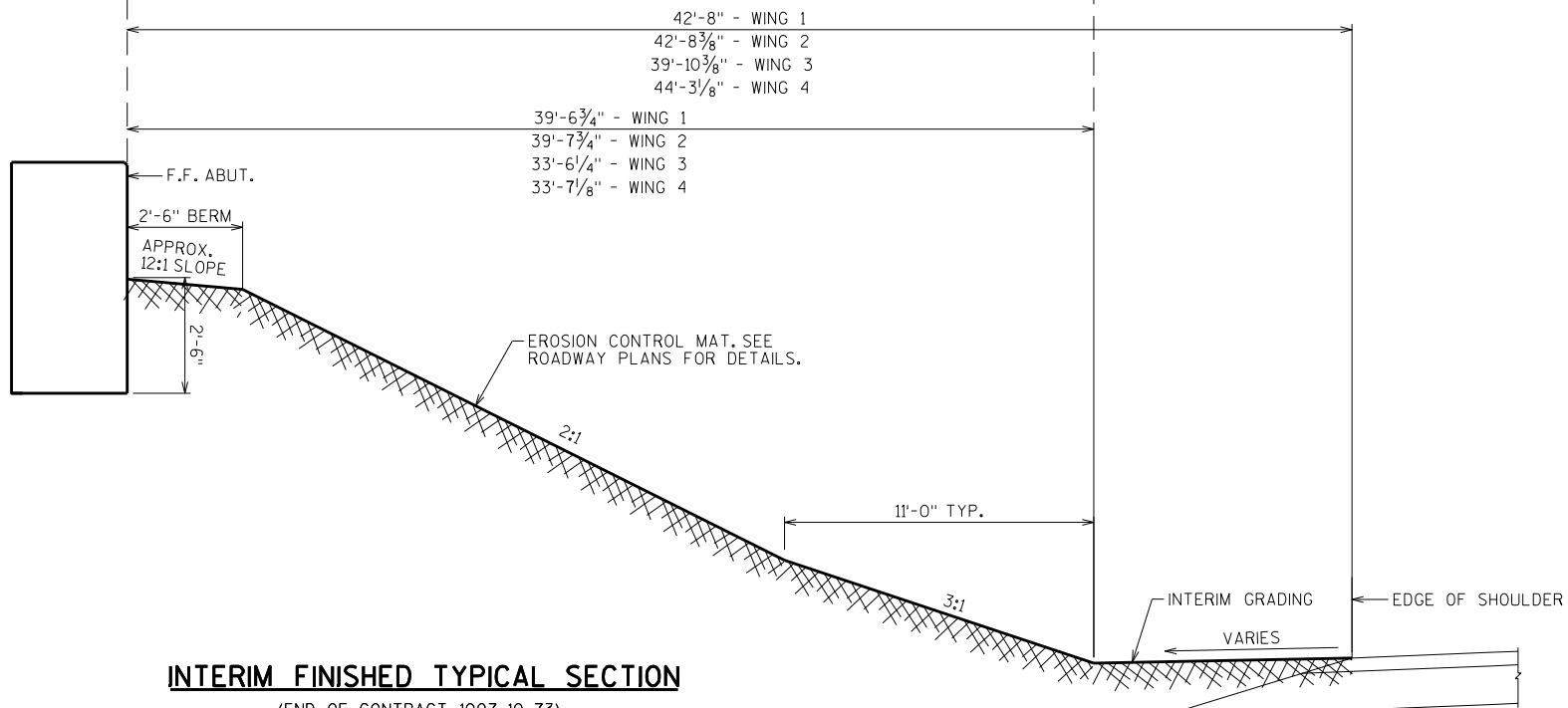
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-707			
DRAWN BY		ABS	PLANS CK'D. SAD
AESTHETIC DETAILS		SHEET 22	
		611	

**SECTION A-A**

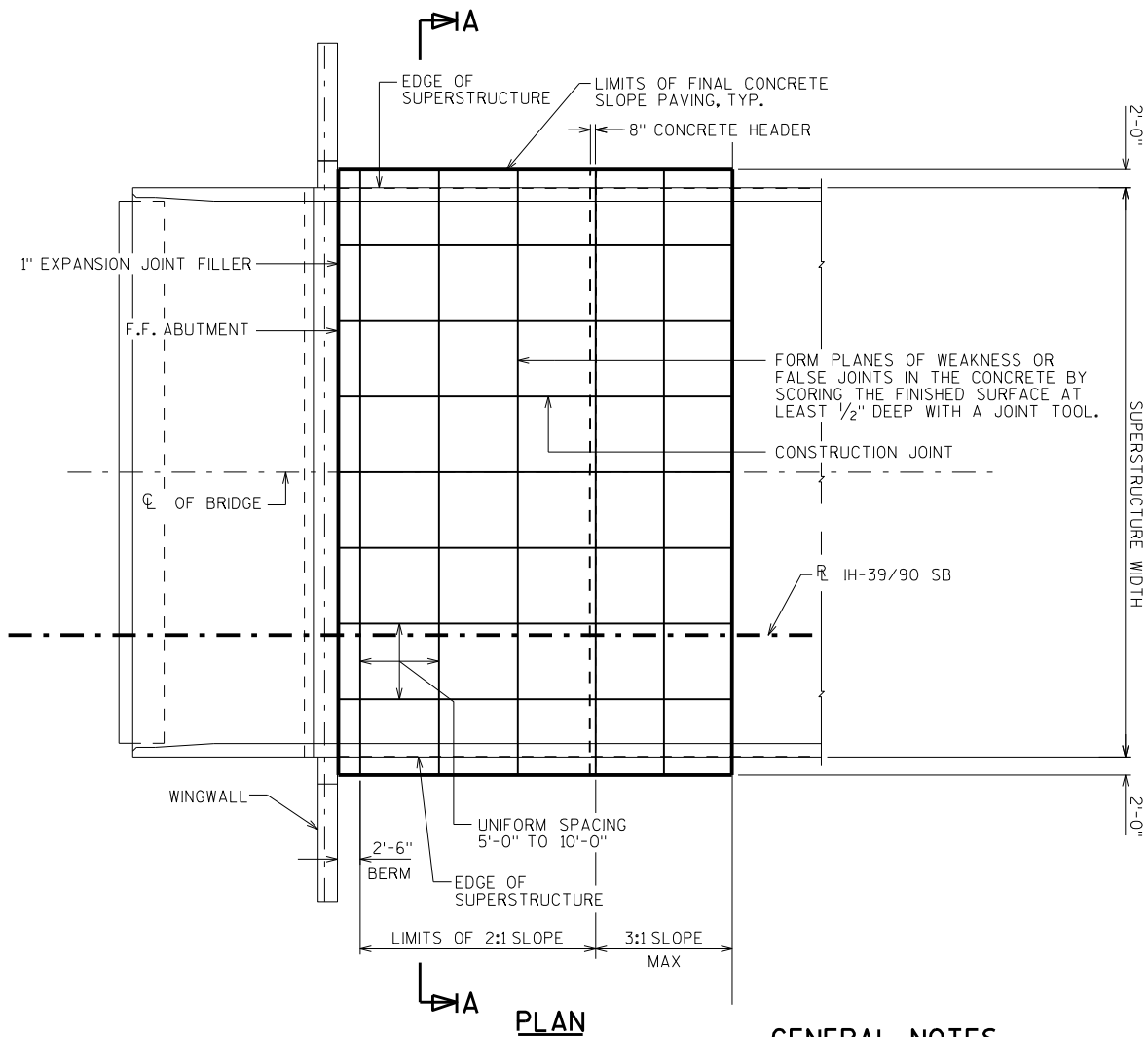
SHOWING SECTION THRU C.I.P. SLOPE PAVING

**CONSTRUCTION JOINT DETAIL****FINAL FINISHED TYPICAL SECTION**

(FOR INFORMATIONAL USE ONLY - TO BE CONSTRUCTED UNDER FUTURE CONTRACT)

**INTERIM FINISHED TYPICAL SECTION**

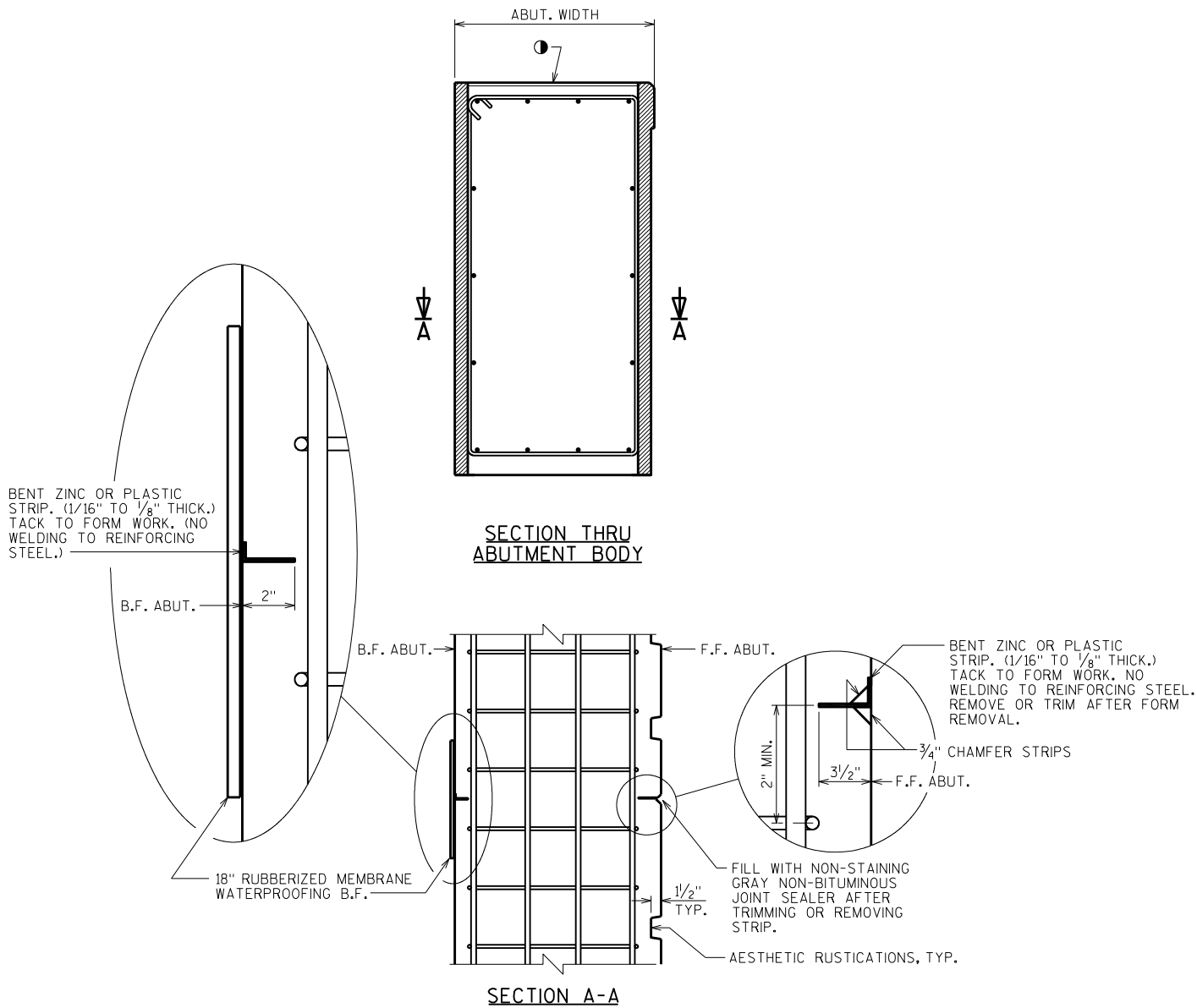
(END OF CONTRACT 1007-10-73)

CROSS SECTION THRU SLOPE PAVING AT ABUTMENTS**PLAN**CONSTRUCTION JOINT DESIGN
(SOUTH ABUT. SHOWN, NORTH ABUT. SIMILAR)**GENERAL NOTES**

DETAILS OF CONSTRUCTION NOT SHOWN HEREIN SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-707			
DRAWN BY		ABS	PLANS CK'D. SAD
SLOPE PAVING (CONCRETE CAST-IN-PLACE)		SHEET 23	
		612	



ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE. SAW CUTTING IS NOT ALLOWED.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

- 1 USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP. SAW CUTTING IS NOT ALLOWED.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-707			
DRAWN BY		ABS	PLANS CK'D. SAD
ALTERNATE CONSTRUCTION JOINT			SHEET 24
			613

DESIGN DATA

LIVE LOAD:

DESIGN LOADING; HL-93
INVENTORY RATING FACTOR: RF=1.20
OPERATING RATING FACTOR: RF=1.59
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY (HPC) DECK, PARAPET, DIAPHRAGMS, APPROACH SLAB $f'_c = 4,000$ P.S.I.
CONCRETE MASONRY ALL OTHER (INCLUDING APPROACH SLAB FTG.) $f'_c = 3,500$ P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 $f_y = 60,000$ P.S.I.
BAR STEEL REINFORCEMENT STAINLESS, GRADE 60 $f_y = 60,000$ P.S.I.
54W" PRESTRESSED GIRDERS, CONCRETE MASONRY $f'_c = 8,000$ P.S.I.
STRANDS- 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS WITH SPREAD FOOTING TO BE SUPPORTED ON SOUND ROCK WITH A REQUIRED FACTORED BEARING RESISTANCE OF 12,000 PSF ***. A GEOTECHNICAL ENGINEER WILL DETERMINE THE FACTORED BEARING RESISTANCE BY VISUAL INSPECTION PRIOR TO CONSTRUCTION OF THE ABUTMENT FOOTING WITHIN 3 DAYS OF NOTIFICATION.

*** THE FACTORED BEARING RESISTANCE IS THE VALUE USED FOR DESIGN.

CURVE DATA

ℓ IH 39/90 SB	ℓ EAST CHURCH RD.
P.I. = STA. 1924+00.00'SB'	P.I. = STA. 51+09.63'CH'
$\Delta = 16^\circ 15' 54''$	$\Delta = 0^\circ 51' 40''$
D = 0° 21' 47"	D = 0° 15' 00"
T = 2255.53	T = 172.23
L = 4480.72	L = 344.44
R = 15784.00	R = 22918.31
S.E. = NC	S.E. = NC
P.C. = STA. 1901+44.48'SB'	P.C. = STA. 49+37.40'CH'
P.T. = STA. 1946+25.19'SB'	P.T. = STA. 52+81.85'CH'

TRAFFIC VOLUME

IH 39/90	EAST CHURCH RD.
A.D.T.=70,300 (2040)	A.D.T.=750 (2040)
R.D.S.=70 M.P.H.	R.D.S.=55 M.P.H.

STRUCTURE DESIGN CONTACTS:

RUTH A. COISMAN (608) 261-8205
LAURA SHADEWALD (608) 267-9592

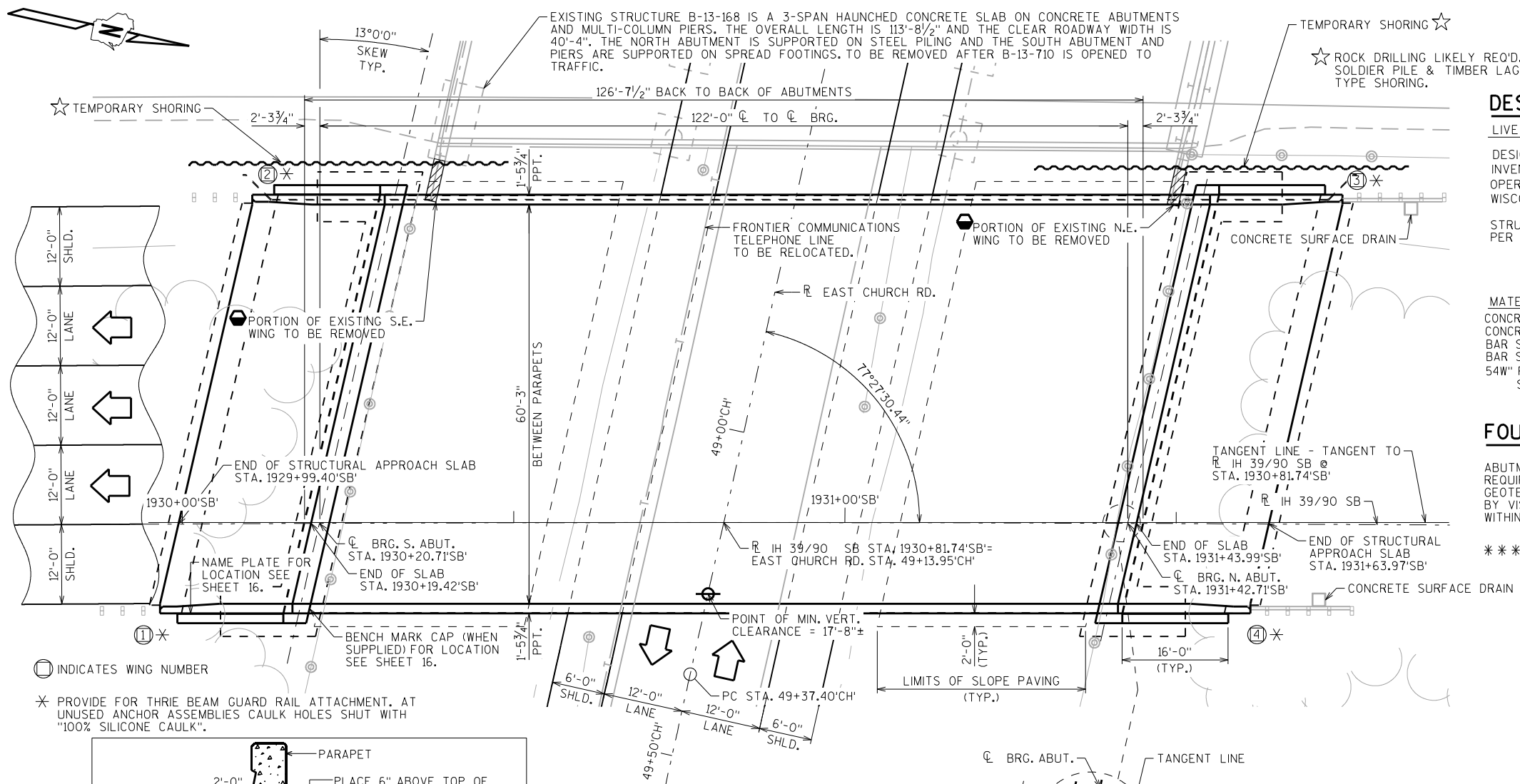
LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT WINGS 1 & 2
6. SOUTH ABUTMENT DETAILS
7. NORTH ABUTMENT
8. NORTH ABUTMENT WINGS 3 & 4
9. NORTH ABUTMENT DETAILS
10. 54W" PRESTRESSED GIRDER
11. 54W" PRESTRESSED GIRDER DETAILS
12. STEEL DIAPHRAGM
13. SUPERSTRUCTURE CROSS SECTION
14. SUPERSTRUCTURE PLAN
15. SUPERSTRUCTURE DETAILS
16. SINGLE SLOPE PARAPET 42SS (MODIFIED)
17. CONDUIT DETAILS
18. AESTHETIC DETAILS
19. SLOPE PAVING (CRUSHED AGGREGATE)
20. ALTERNATE CONSTRUCTION JOINT
21. SOUTH STRUCTURAL APPROACH SLAB
22. NORTH STRUCTURAL APPROACH SLAB

GENERAL
PLAN

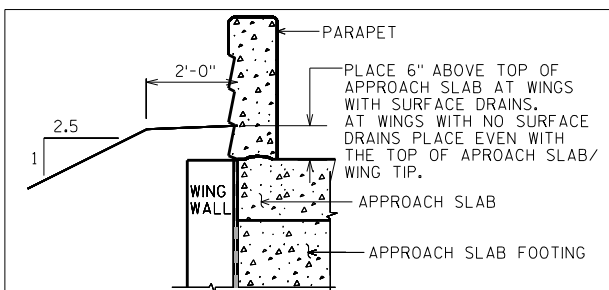
SHEET 1 OF 22

614



⊙ INDICATES WING NUMBER

* PROVIDE FOR THREE BEAM GUARD RAIL ATTACHMENT. AT UNUSED ANCHOR ASSEMBLIES CAULK HOLES SHUT WITH "100% SILICONE CAULK".



TYPICAL FILL SECTION AT END OF
STRUCTURAL APPROACH SLABS

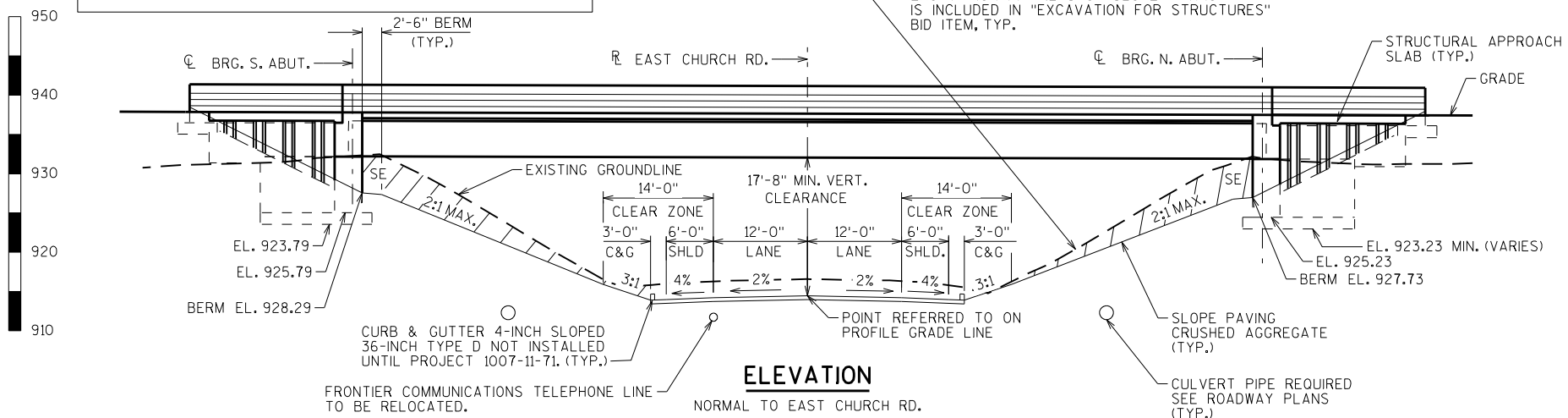
PLAN

(SINGLE SPAN 54W" PRESTRESSED GIRDERS)

● REMOVE APPROX. 6'-4"± OF EXIST. S.E. WING AND 7'-0"± OF EXIST. N.E. WING OF B-13-168 AS REQUIRED TO INSTALL TEMPORARY SHORING. REMOVAL SHALL BE DEFINED BY FULL-DEPTH SAWCUT.

TANGENT OFFSETS

SUBSTRUCTURE UNIT	
SOUTH ABUT.	NORTH ABUT.
0'-1 3/8"	0'-1 3/8"



ELEVATION

FRONTIER COMMUNICATIONS TELEPHONE LINE TO BE RELOCATED.

NORMAL TO EAST CHURCH RD.

CULVERT PIPE REQUIRED SEE ROADWAY PLANS (TYP.)

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF DECK SURFACE
AND TOP OF APPROACH SLAB SURFACE.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF THE PARAPETS, INCLUDING PARAPETS ON APPROACH SLABS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING MATERIAL TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS.

THE CONCRETE QUANTITIES FOR THE PARAPETS, SUPERSTRUCTURE DECK, APPROACH SLAB (EXCLUDING THE APP. SLAB FOOTING), CONCRETE DIAPHRAGMS AND HAUNCH OVER GIRDERS SHALL BE PAID FOR UNDER THE BID ITEM "HPC MASONRY STRUCTURES."

THE PARTIAL REMOVAL OF THE EXISTING EAST ABUTMENT WING WALLS OF B-13-168 FOR
INSTALLATION OF THE TEMPORARY SHORING SHALL BE PAID FOR UNDER THE BID ITEM
"REMOVING OLD STRUCTURE STA. 1930+40'SB'."

COMPLETELY REMOVE THE EXISTING STRUCTURE B-13-168 AFTER SB TRAFFIC HAS BEEN MOVED TO B-13-710. SEE ROADWAY STAGING PLANS.

THE CONSTRUCTION OF B-13-710 IS CONSTRAINED BY THE EXISTING SB BRIDGE B-13-168, AS WELL AS EXISTING NB BRIDGE B-13-169. THE HORIZONTAL CLEARANCE BETWEEN THE EAST EDGE OF B-13-710 AND THE WEST EDGE OF B-13-169 IS APPROX. 40 FEET.

THE RUSTICATIONS IN THE ABUTMENTS ARE INCLUDED IN THE BID ITEM "CONCRETE MASONRY BRIDGES".

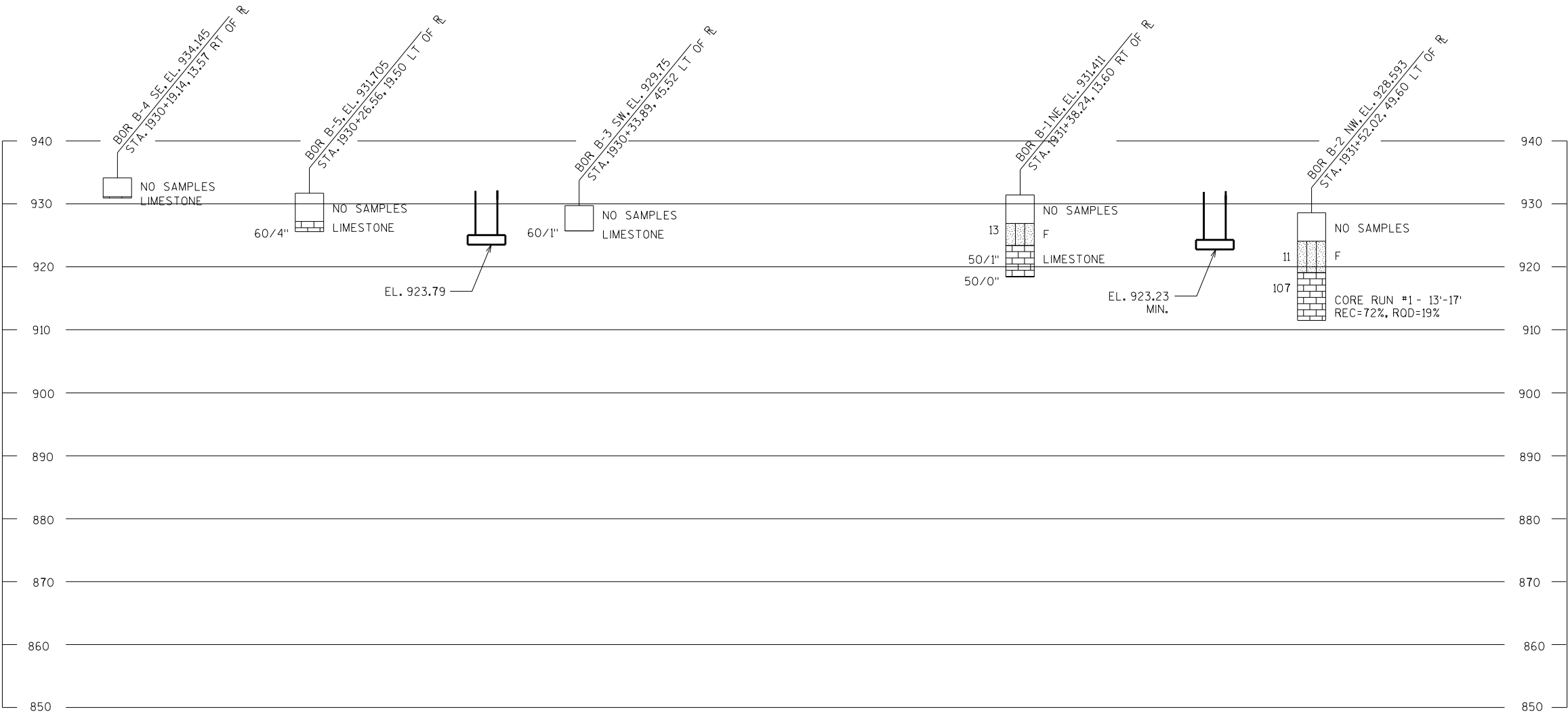
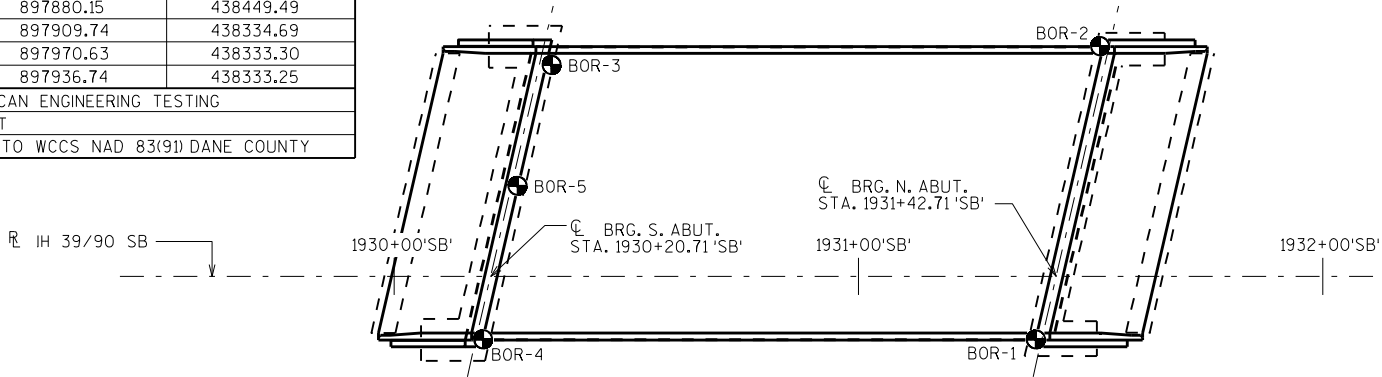
THE RUSTICATIONS IN THE BACK FACES OF PARAPETS ARE INCLUDED IN THE BID ITEM "HPC MASONRY STRUCTURES".



8

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BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	7/24/2015	897944.84	438449.47
2	7/25/2015	897880.15	438449.49
3	7/25/2015	897909.74	438334.69
4	7/25/2015	897970.63	438333.30
5	7/25/2015	897936.74	438333.25
BORINGS COMPLETED BY: AMERICAN ENGINEERING TESTING			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) DANE COUNTY			



STATE PROJECT NUMBER

1007-10-73

MATERIAL SYMBOLS

ASPHALT

CONCRETE

SAND

BOULDERS OR COBBLES

SHALE

TOPSOIL

FILL

CLAY

LIMESTONE

SANDSTONE

PEAT

GRAVEL

SILT

BEDROCK (UNKNOWN)

IGNEOUS/META

LEGEND OF BORING

BORING #/EL. STA./OFFSET

ST

0.25

17

F-C

COBBLE OR BOULDER

WEATHERED LIMESTONE

CORE RUN #1 - 24'-29'

REC=80%, ROD=72%

(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

▽ AT TIME OF DRILLING

▼ END OF DRILLING

▽ AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

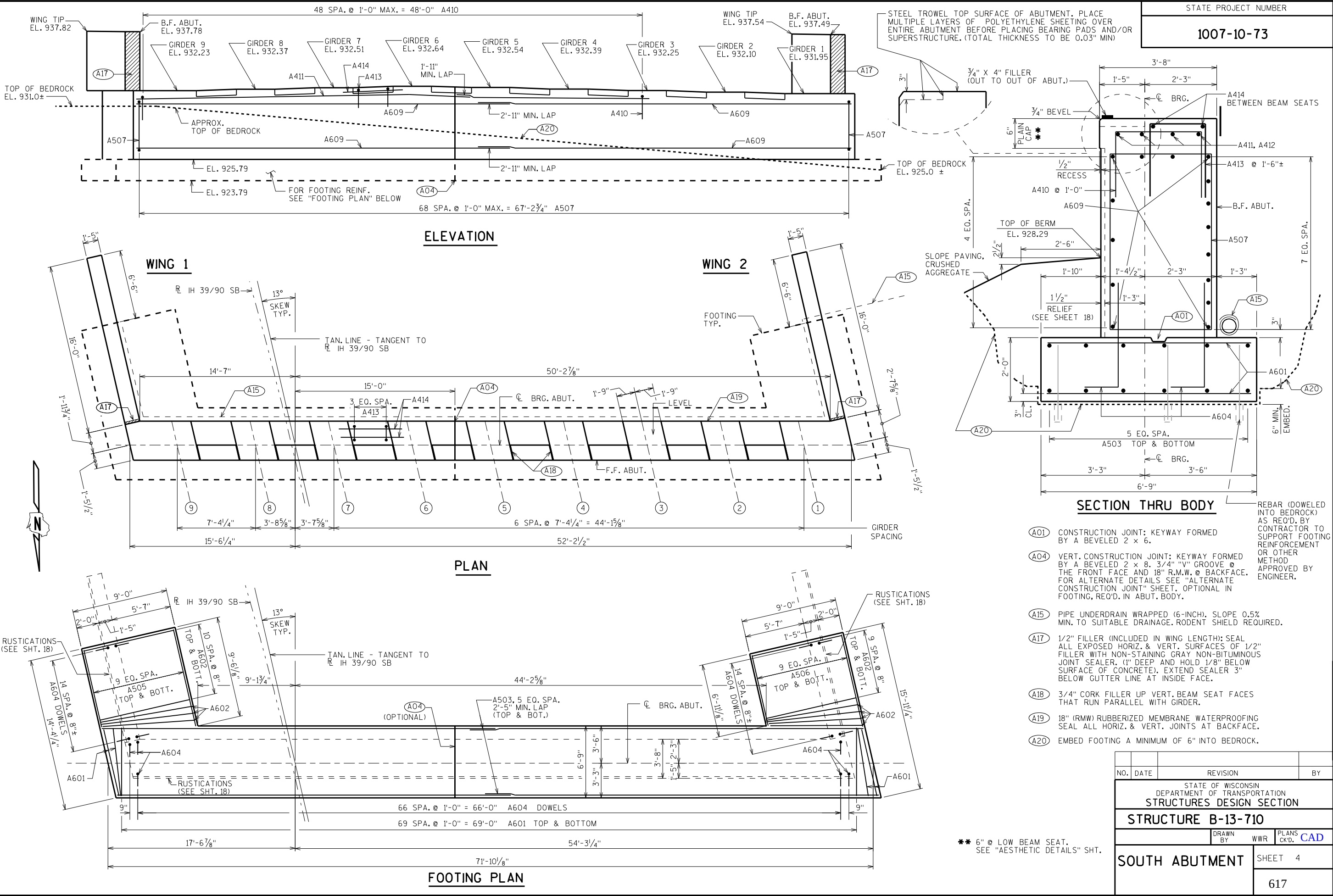
BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-710			
DRAWN BY PR/WWR		PLANS CKD. CAD	
SUBSURFACE EXPLORATION		SHEET 3	
		616	

8

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SCALE =

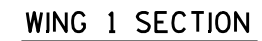
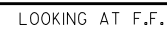


- (A01) CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 6.
- (A04) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 8. 3/4" V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE. FOR ALTERNATE DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET. OPTIONAL IN FOOTING, REQ'D. IN ABUT. BODY.
- (A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- (A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- (A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.
- (A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- (A20) EMBED FOOTING A MINIMUM OF 6" INTO BEDROCK.
- REBAR (DOVELED INTO BEDROCK) AS REQ'D. BY CONTRACTOR TO SUPPORT FOOTING REINFORCEMENT OR OTHER METHOD APPROVED BY ENGINEER.

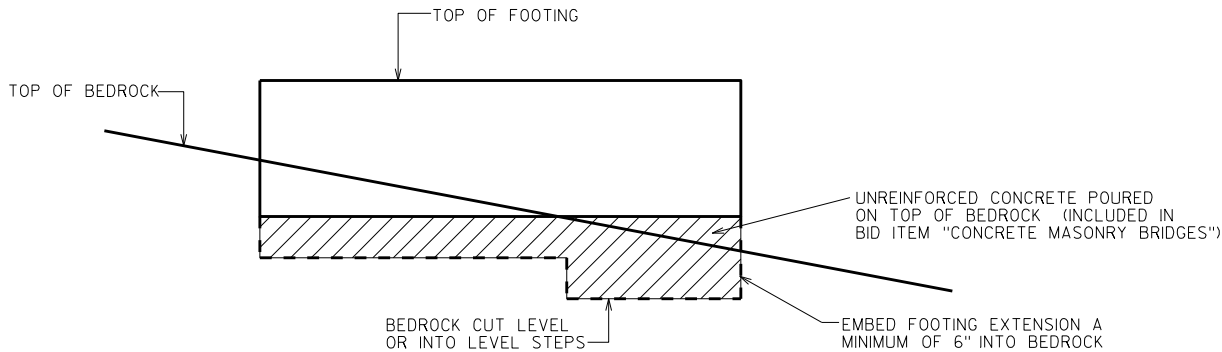
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-710			
DRAWN BY WWR		PLANS CKD. CAD	
SOUTH ABUTMENT			SHEET 4
			617

** 6" @ LOW BEAM SEAT.
SEE "AESTHETIC DETAILS" SHT.

SCALE =



- | | | | |
|---|------|--------------|-----------------|
| | | | |
| NO. | DATE | REVISION | BY |
| STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION | | | |
| STRUCTURE B-13-710 | | | |
| | | DRAWN BY WWR | PLANS CK'D. CAD |
| SOUTH ABUTMENT
WINGS 1 & 2 | | SHEET 5 | |
| | | 618 | |



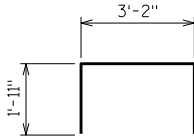
BEDROCK VARIABILITY DETAIL

VARIABLE BEDROCK MAY NECESSITATE EXTENDED FOOTING DEPTHS TO ENSURE CONCRETE IS POURED ON TOP OF BEDROCK.

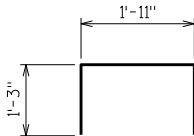
A604



A507



A410



A413

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
A505	2 SERIES OF 10	6'-11" TO 9'-0"
A506	2 SERIES OF 10	6'-5" TO 8'-6"

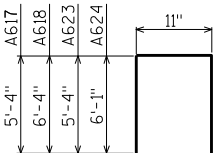
BUNDLE AND TAG EACH SERIES SEPARATELY.

BILL OF BARS

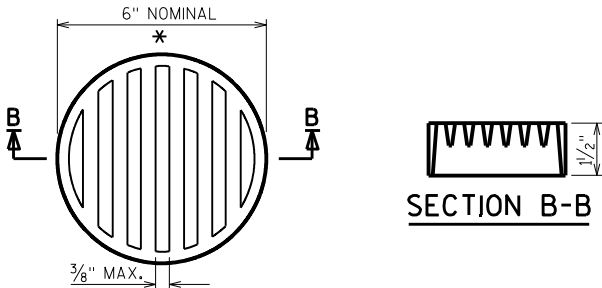
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A601		148	6'-5"			FOOTING-HORIZ.
A602		56	8'-8"			FOOTING-HORIZ.
A503		24	37'-0"			FOOTING-HORIZ.
A604		196	4'-8"	X		FOOTING-VERT.-DOWELS
A505		20	8'-0"		▲	FOOTING-HORIZ.
A506		20	7'-6"		▲	FOOTING-HORIZ.
A507		69	18'-0"	X		BODY-VERT.-STIRRUP
A608		NOT USED				
A609		30	35'-2"			BODY-HORIZ.
A410		49	6'-10"	X		BODY-VERT.
A411		4	32'-11"			BODY-HORIZ.
A412		4	15'-6"			BODY-HORIZ.
A413		32	4'-3"	X		BODY-VERT.-BTWN. BEAM SEATS
A414		16	5'-9"			BODY-HORIZ.-BTWN. BEAM SEATS
A615	X	30	9'-5"			WING 1-VERT.
A516	X	14	12'-6"			WING 1-HORIZ.
A617	X	15	11'-3"	X		WING 1-VERT.
A618	X	7	13'-3"	X		WING 1-VERT.
A519	X	14	15'-8"			WING 1-HORIZ.
A520	X	4	7'-11"			WING 1-HORIZ.
A621	X	30	9'-3"			WING 2-VERT.
A522	X	14	12'-10"			WING 2-HORIZ.
A623	X	15	11'-3"	X		WING 2-VERT.
A624	X	7	12'-9"	X		WING 2-VERT.
A525	X	14	15'-8"			WING 2-HORIZ.
A526	X	2	7'-11"			WING 2-HORIZ.

▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



A617, A618, A623, A624



RODENT SHIELD DETAIL

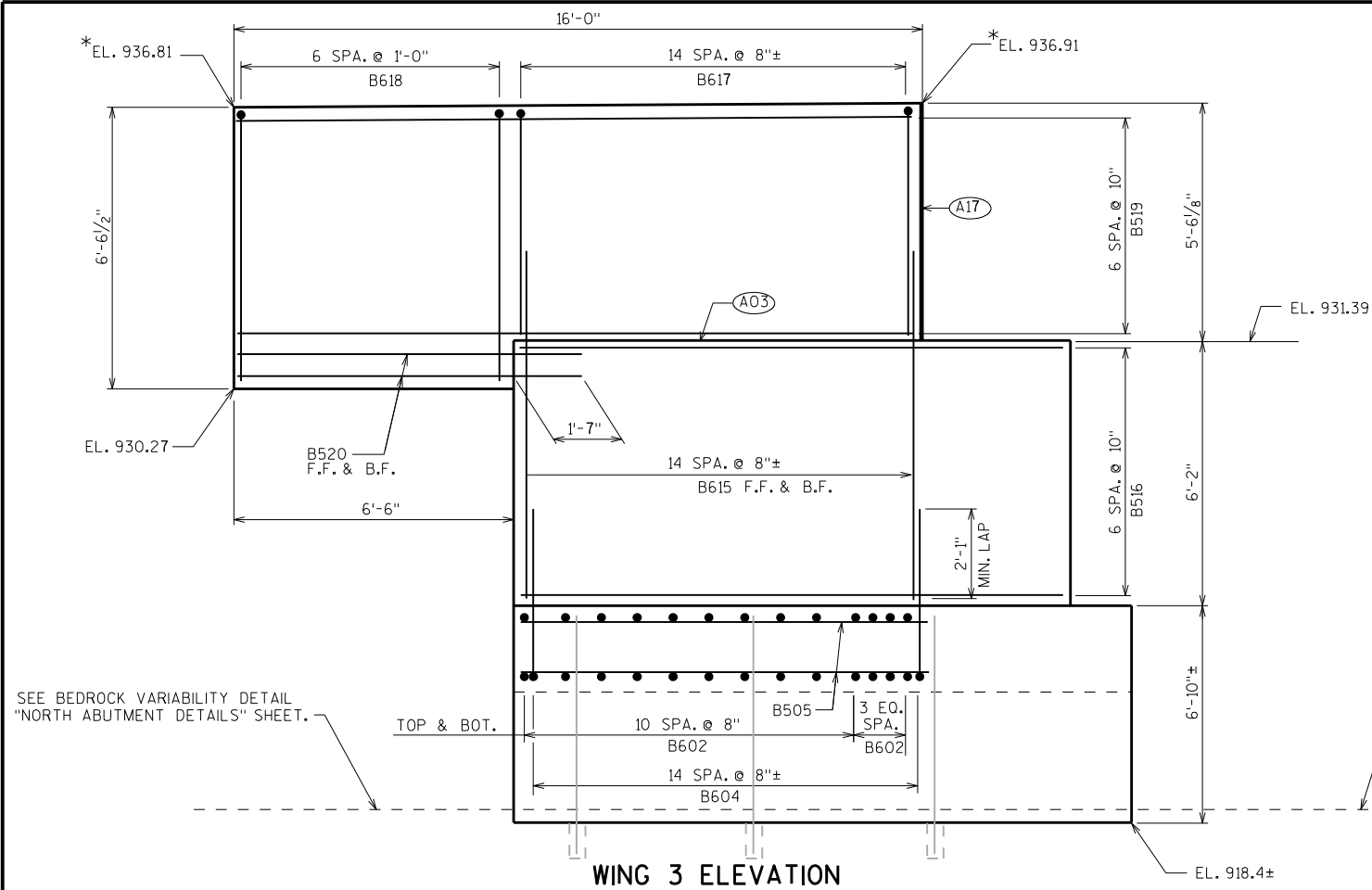
* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS ARE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO.10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

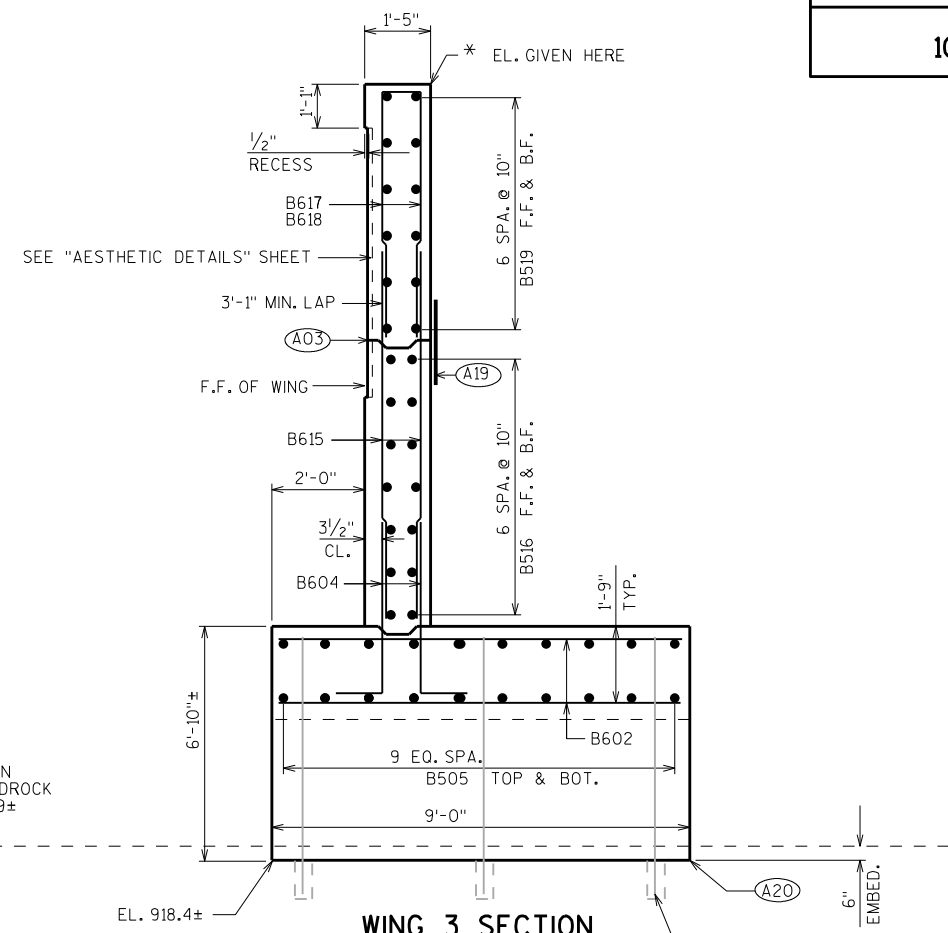
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-710			
DRAWN BY		WWR	PLANS CK'D. CAD
SOUTH ABUTMENT DETAILS		SHEET 6	
		619	





WING 3 ELEVATION

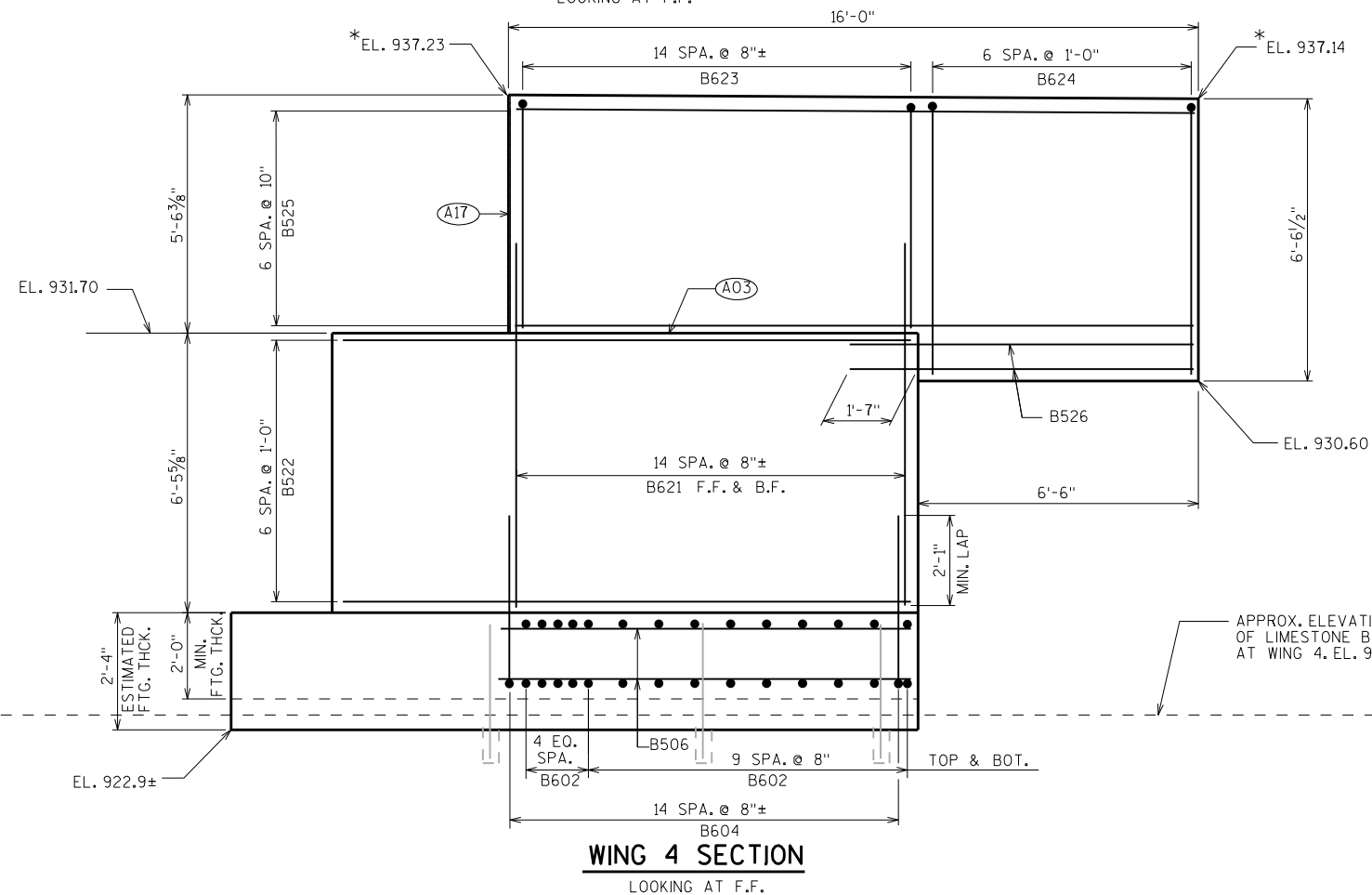
LOOKING AT F.F.



WING 3 SECTION

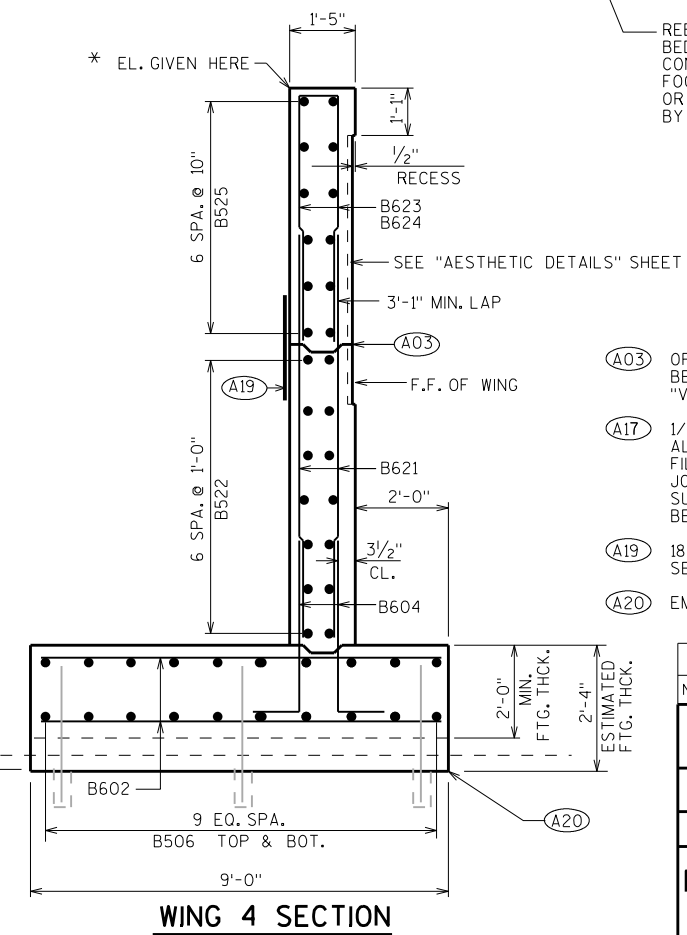
REBAR (DOWELED INTO BEDROCK) AS REQ'D. BY CONTRACTOR TO SUPPORT FOOTING REINFORCEMENT, OR OTHER METHOD APPROVED BY ENGINEER.

- A03 OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).
- A17 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- A20 EMBED FOOTING A MINIMUM OF 6" INTO BEDROCK.



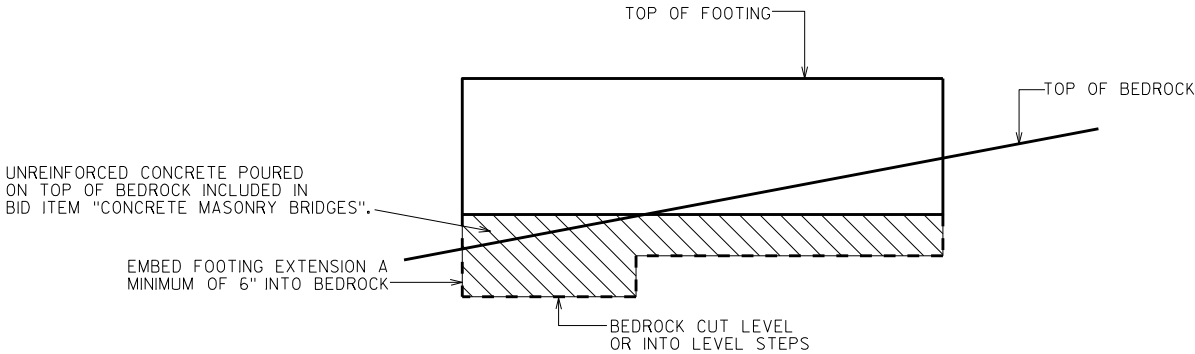
WING 4 SECTION

LOOKING AT F.F.



WING 4 SECTION

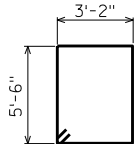
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-710			
DRAWN BY WWR		PLANS CK'D. CAD	
NORTH ABUTMENT WINGS 3 & 4			SHEET 8
			621



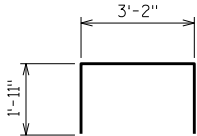
BEDROCK VARIABILITY DETAIL

VARIABLE BEDROCK MAY NECESSITATE EXTENDED FOOTING DEPTHS TO ENSURE CONCRETE IS POURED ON TOP OF BEDROCK.

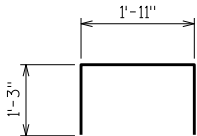
B604



B507



B410



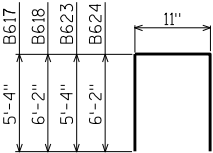
B413

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BEV'T	BAR SERIES	LOCATION
B601		148	6'-5"			FOOTING-HORIZ.
B602		56	8'-8"			FOOTING-HORIZ.
B503		24	37'-0"			FOOTING-HORIZ.
B604		196	4'-8"	X		FOOTING-VERT.-DOWELS
B505		20	8'-0"		▲	FOOTING-HORIZ.
B506		20	7'-6"		▲	FOOTING-HORIZ.
B507		69	18'-7"	X		BODY-VERT.-STIRRUP
B608		NOT USED				BODY-HORIZ. B.F.
B609		30	35'-2"			BODY-HORIZ.
B410		50	6'-10"	X		BODY-VERT.
B411		4	36'-6"			BODY-HORIZ.
B412		4	12'-2"			BODY-HORIZ.
B413		32	4'-3"	X		BODY-VERT.-BTWN. BEAM SEATS
B414		16	5'-9"			BODY-HORIZ.-BTWN. BEAM SEATS
B615	X	30	8'-9"			WING 3-VERT.
B516	X	14	12'-6"			WING 3-HORIZ.
B617	X	15	11'-3"	X		WING 3-VERT.
B618	X	7	12'-11	X		WING 3-VERT.
B519	X	14	15'-8"			WING 3-HORIZ.
B520	X	4	7'-11"			WING 3-HORIZ.
B621	X	30	9'-6"			WING 4-VERT.
B522	X	14	12'-10			WING 4-HORIZ.
B623	X	15	11'-3"	X		WING 4-VERT.
B624	X	7	12'-11	X		WING 4-VERT.
B525	X	14	15'-8"			WING 4-HORIZ.
B526	X	4	7'-11"			WING 4-HORIZ.

▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

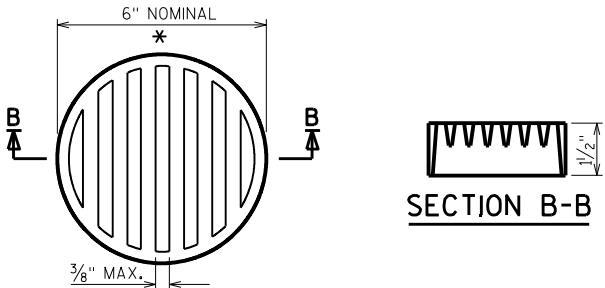


B617, B618, B623, B624

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
B505	2 SERIES OF 10	6'-11" TO 9'-0"
B506	2 SERIES OF 10	6'-5" TO 8'-6"

BUNDLE AND TAG EACH SERIES SEPARATELY.



RODENT SHIELD DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS ARE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO.10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-710			
DRAWN BY		WWR	PLANS CK'D. CAD
NORTH ABUTMENT DETAILS		SHEET	9
			622

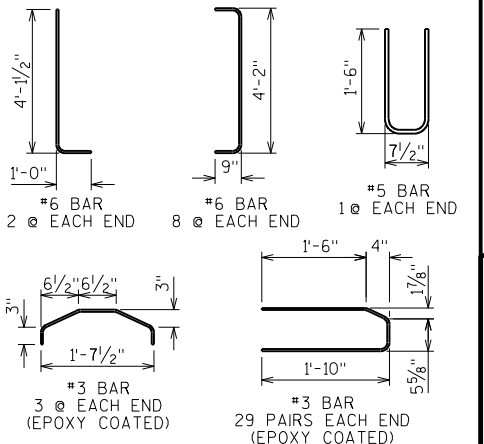
TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 15" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 15" OF THE TOP FLANGE.

STRANDS SHALL BE FLUSH WITH END OF GIRDER.
ENDS OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS
JOINT SEALER.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

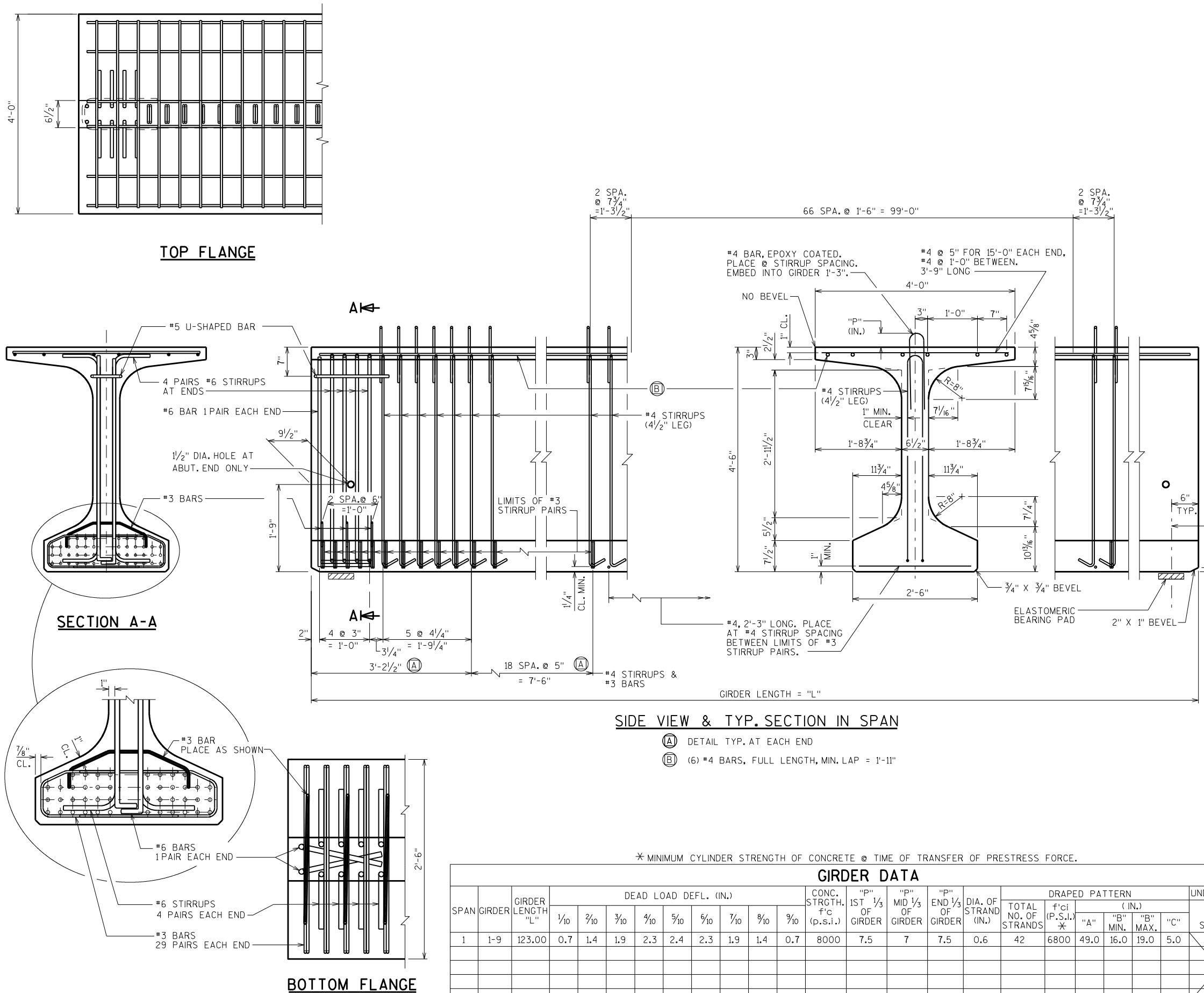
PRESTRESSING STRANDS SHALL BE (0.6" DIA.)-7 WIRE
LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF
270,000 PSI.

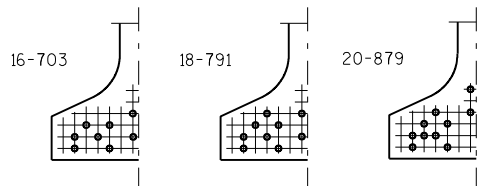
FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE
"STEEL DIAPHRAGM" SHEET.



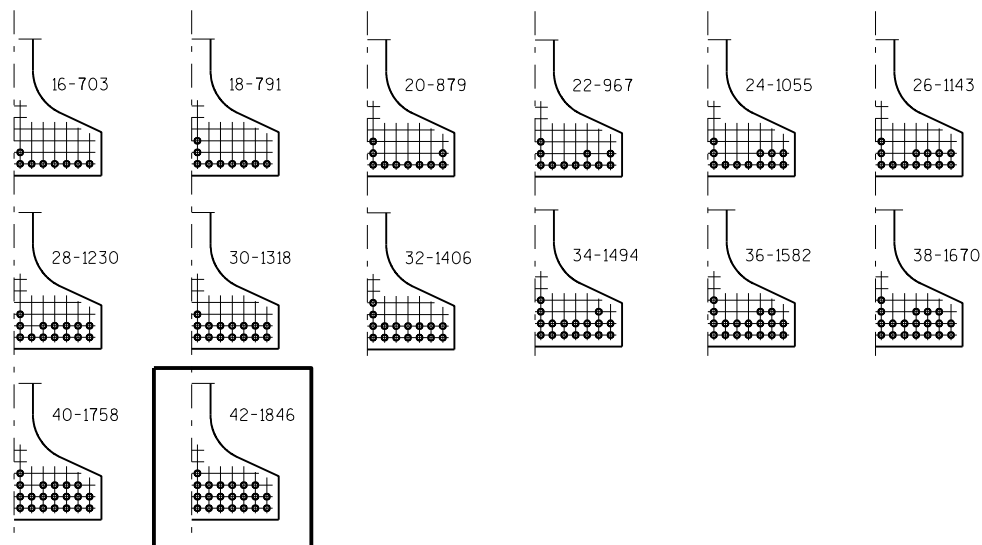
NO.	DATE	REVISION			BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION					
STRUCTURE B-13-710					
			DRAWN BY	WWR	PLANS CK'D. CAD
54W" PRESTRESSED GIRDER				SHEET 10	
				623	

7-13
G54W

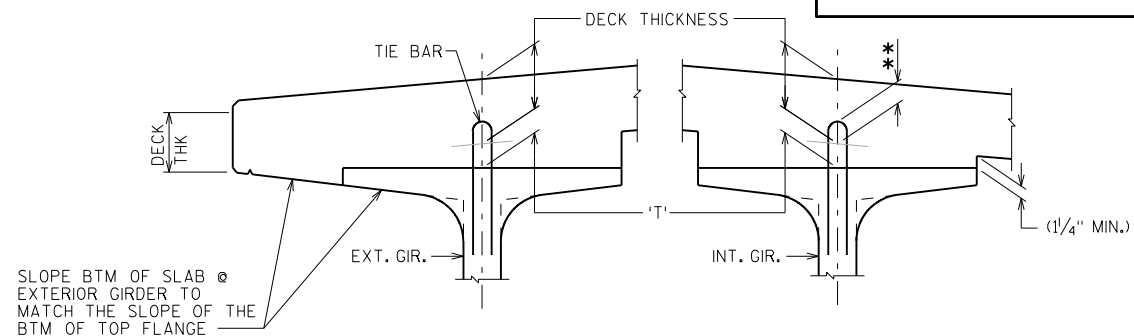




STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6" ϕ STRANDS

ARRANGEMENT AT ϕ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6" ϕ STRANDS

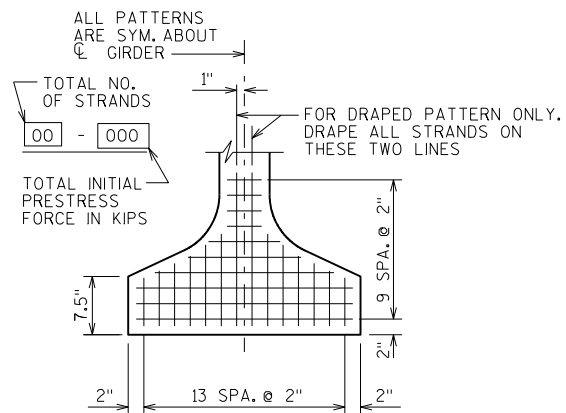
DECK HAUNCH DETAIL

IF $1/4$ " MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN $1/2$ " OR, ** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

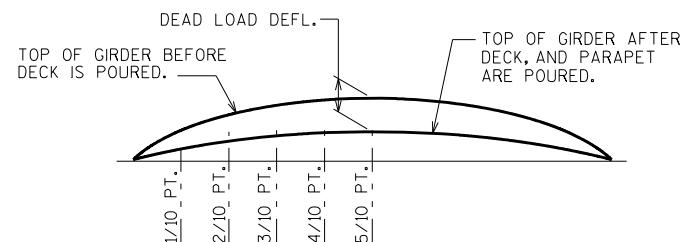
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ϕ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- DECK THICKNESS
= HAUNCH HEIGHT 'T'

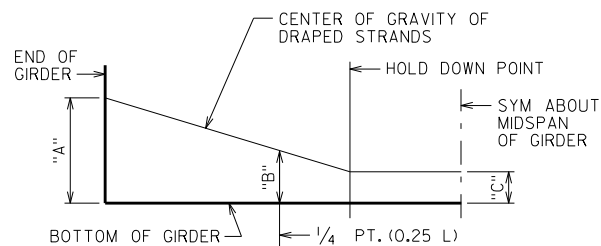
NOTE: AN AVERAGE HAUNCH ('T') OF 3.3" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".



TYP. STRAND PATTERN



DEAD LOAD DEFLECTION DIAGRAM



DRAPED STRAND PROFILE

*THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) *
1	4.6

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T'.
USE ACTUAL GIRDER SHOTS.
THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-710			
DRAWN BY WWR		PLANS CK'D. CAD	
54W" PRESTRESSED GIRDER DETAILS		SHEET 11	
		624	

NOTES

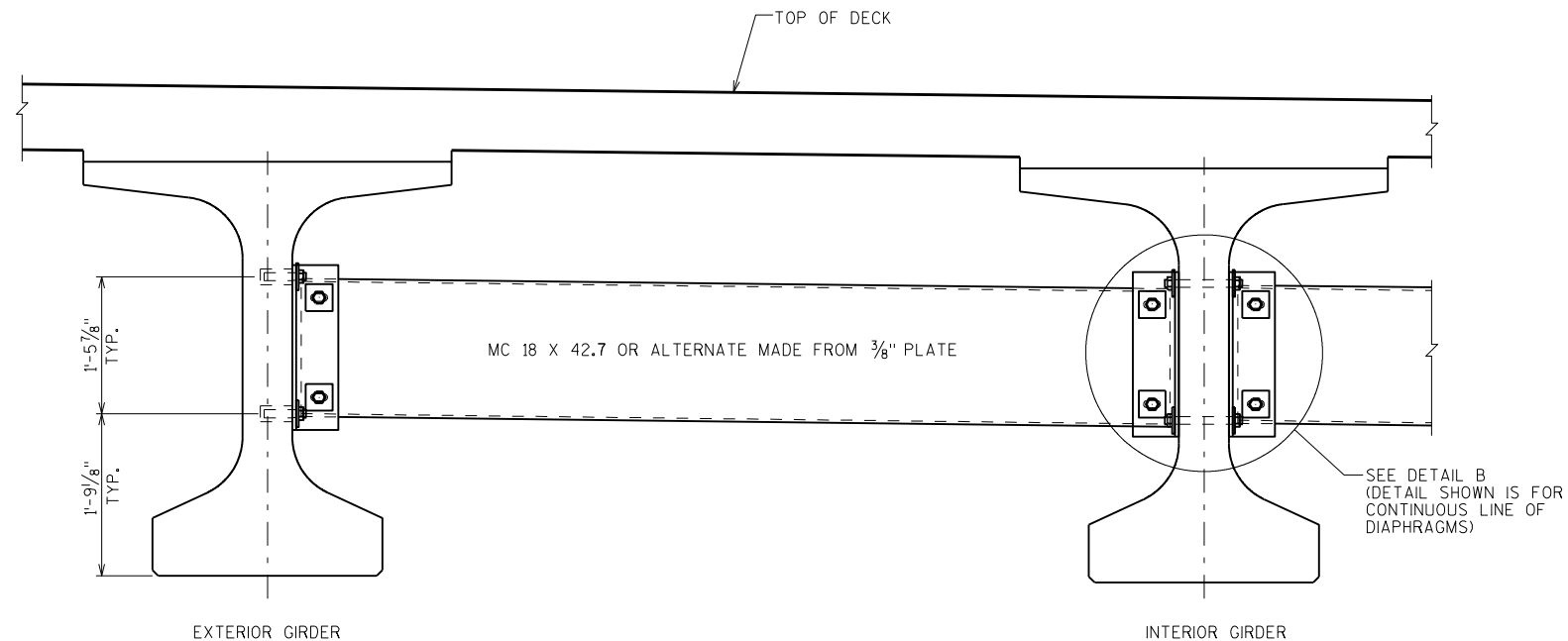
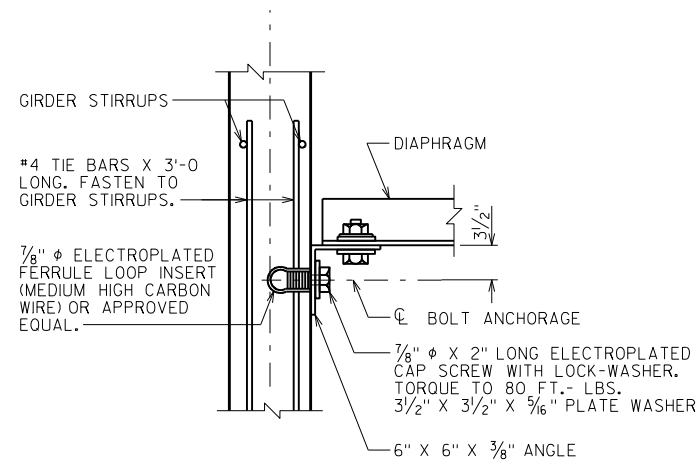
ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-13-710, EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

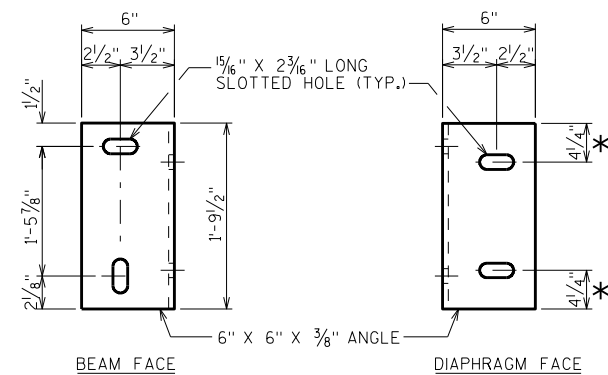
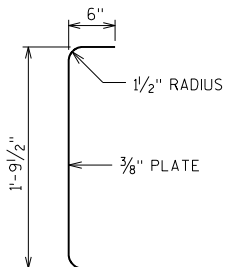
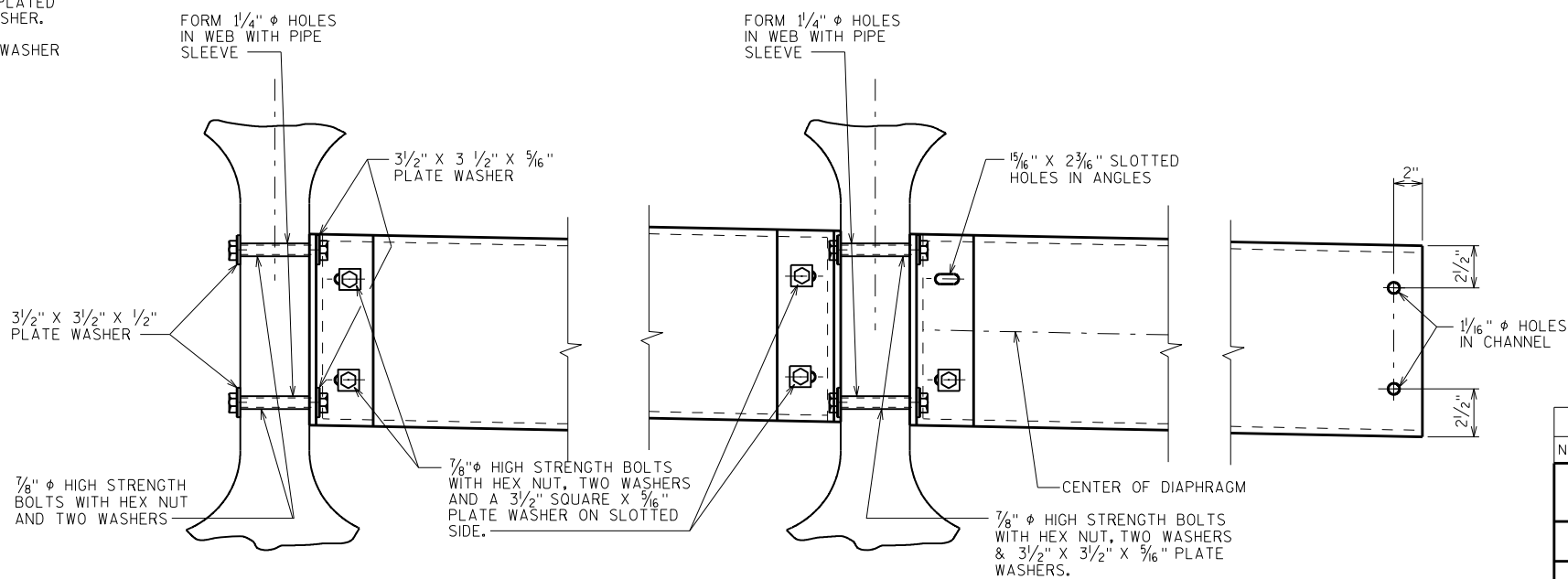
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S10F OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

FOR DIAPHRAGM LOCATIONS SEE "SUPERSTRUCTURE PLAN" SHEET.

**PART TRANSVERSE SECTION AT DIAPHRAGM****SECTION A-A**

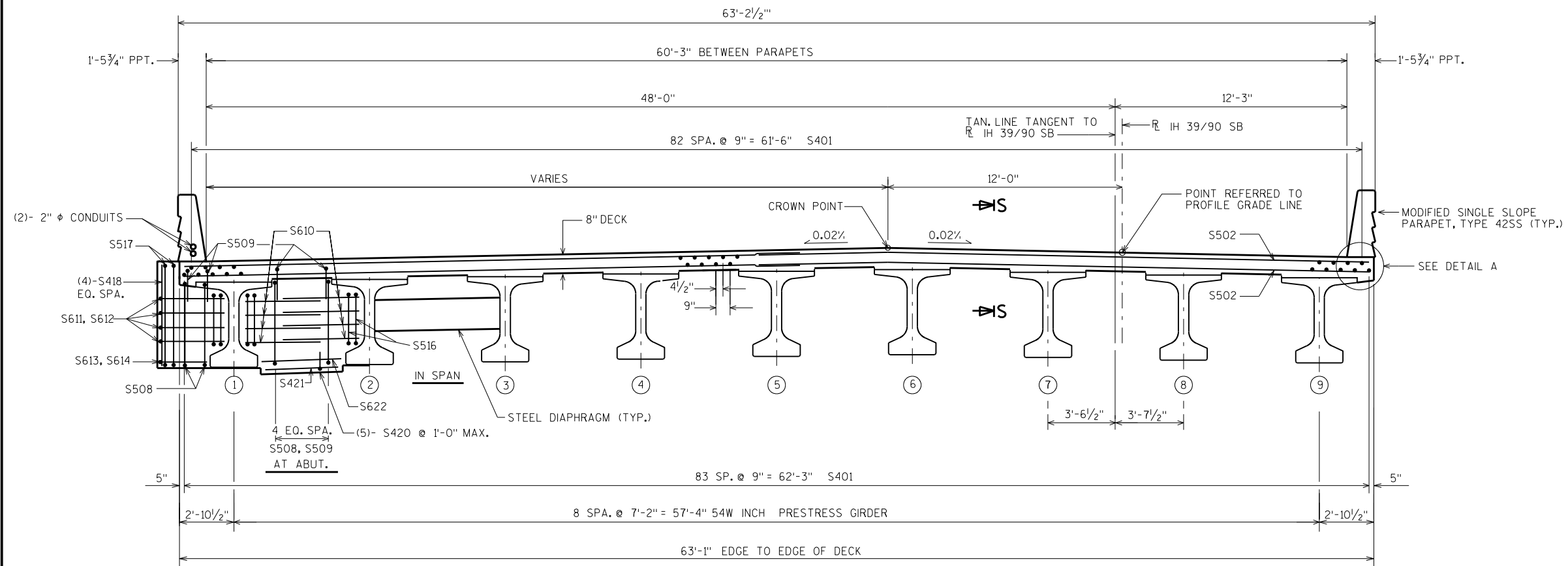
(FOR EXTERIOR ATTACHMENT)

**DIAPHRAGM SUPPORT*** 2 $\frac{1}{2}$ " FOR ALTERNATE PLATE DIAPHRAGM**SECTION THRU ALTERNATE DIAPHRAGM****DETAIL B**

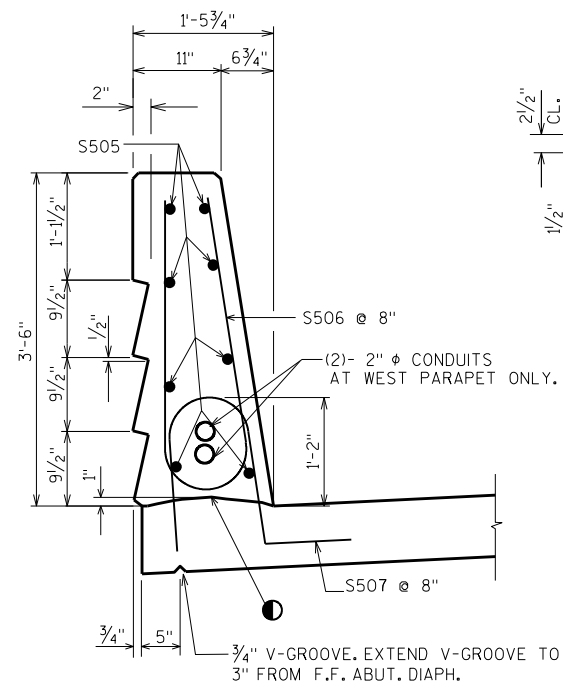
(FOR STAGGERED DIAPHRAGM)

(FOR CONTINUOUS LINE OF DIAPHRAGMS)

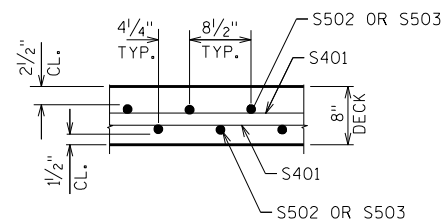
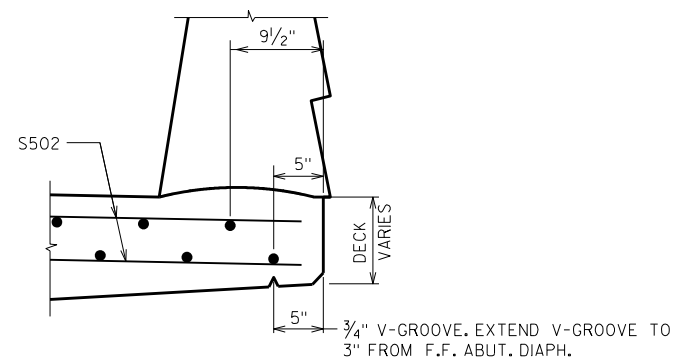
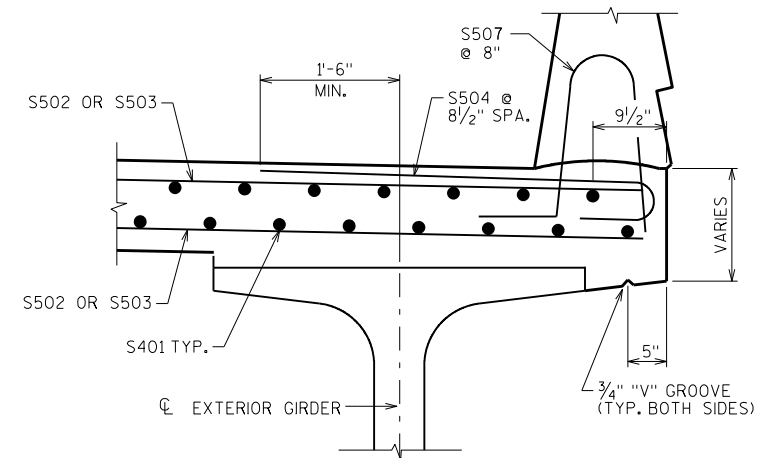
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-710			
DRAWN BY		WWR	PLANS CK'D. CAD
STEEL DIAPHRAGM			SHEET 12
			625

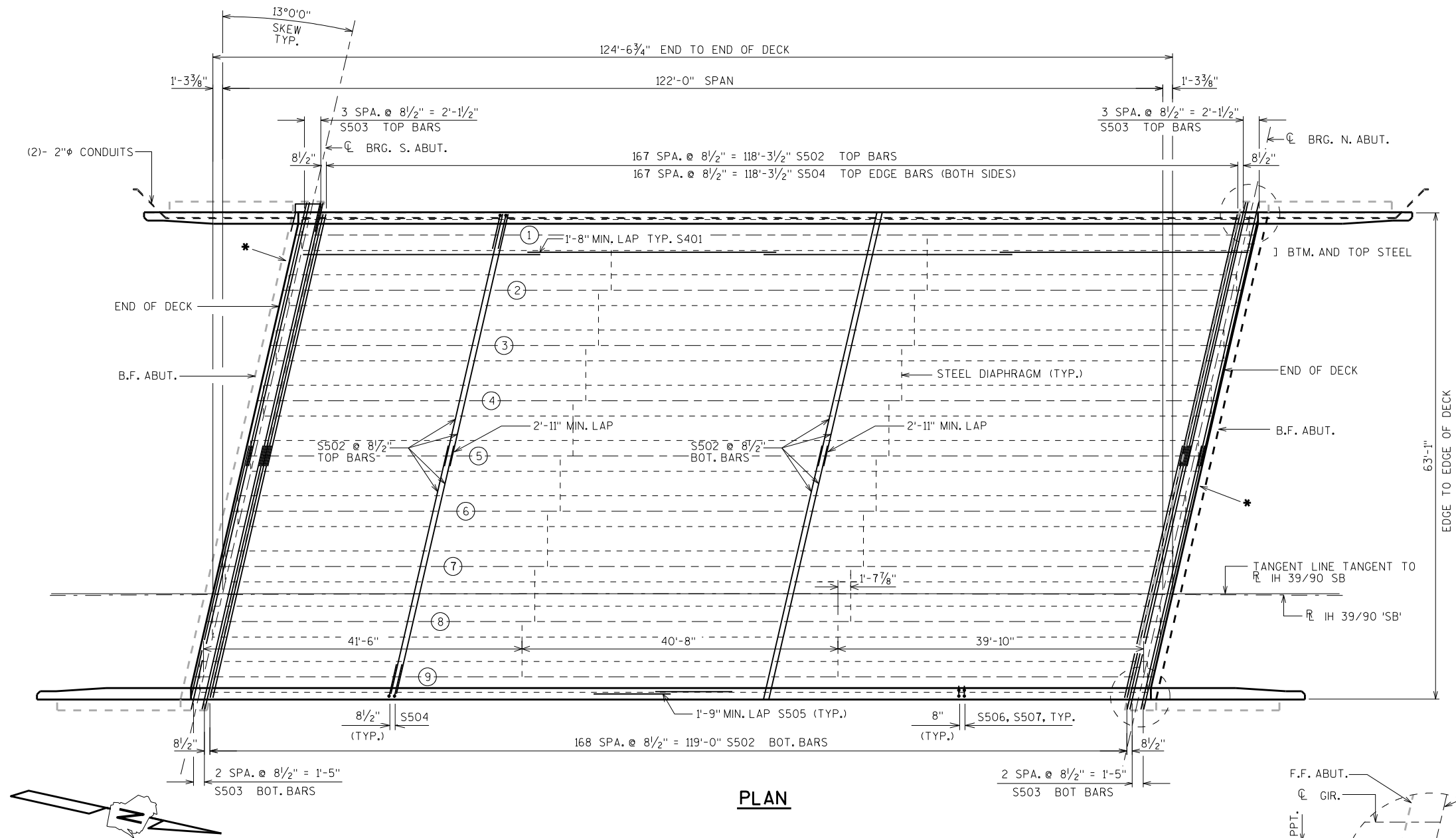
**CROSS SECTION THRU ROADWAY**

(LOOKING NORTH)

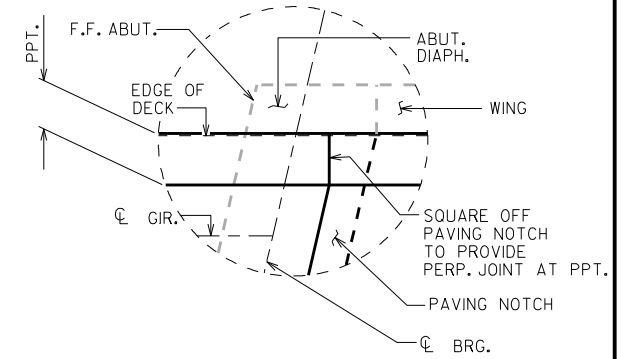
**SECTION THRU PARAPET ON BRIDGE**

● HORIZ. CONST. JOINT-STRIKE OFF
AND LEAVE ROUGH

**SECTION S-S****DETAIL A**



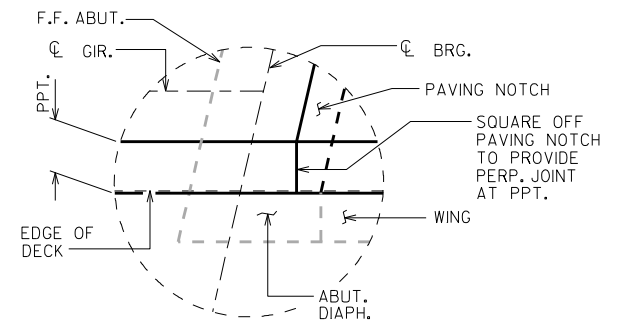
PLAN



CORNER DETAIL

NW CORNER SHOWN,
SE CORNER SIMILAR

* LIMITS OF PAVING NOTCH ARE:
1'-0" W X 1'-4" D X LENGTH OF
ABUT. BETWEEN WINGWALLS.
(SQUARE NOTCH OFF IN ORDER
TO PROVIDE PERPENDICULAR JOINT
FOR PARAPET)



CORNER DETAIL

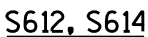
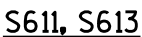
NE CORNER SHOWN,
SW CORNER SIMILAR

TOP OF DECK ELEVATIONS

	S. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	N. ABUT.
W. EOD	937.48	937.44	937.39	937.34	937.29	937.24	937.18	937.12	937.06	936.99	936.92
GIR. 1	937.52	937.48	937.43	937.38	937.33	937.28	937.22	937.16	937.10	937.03	936.96
GIR. 2	937.67	937.63	937.58	937.53	937.48	937.43	937.37	937.31	937.25	937.18	937.12
GIR. 3	937.82	937.78	937.73	937.68	937.63	937.58	937.52	937.46	937.40	937.34	937.27
GIR. 4	937.97	937.93	937.88	937.83	937.78	937.73	937.67	937.62	937.55	937.49	937.42
GIR. 5	938.12	938.08	938.03	937.98	937.93	937.88	937.83	937.77	937.71	937.64	937.57
GIR. 6	938.21	938.17	938.13	938.08	938.03	937.98	937.92	937.87	937.81	937.74	937.67
GIR. 7	938.08	938.04	937.99	937.95	937.90	937.84	937.79	937.73	937.67	937.61	937.54
GIR. 8	937.94	937.90	937.86	937.81	937.76	937.71	937.65	937.60	937.54	937.47	937.41
GIR. 9	937.80	937.76	937.72	937.67	937.62	937.57	937.52	937.46	937.40	937.34	937.27
E. EOD	937.76	937.72	937.68	937.64	937.59	937.54	937.48	937.43	937.37	937.30	937.24

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STRUCTURE B-13-710			
DRAWN BY		WWR	PLANS CK'D. CAD
SUPERSTRUCTURE PLAN		SHEET 14	
		627	

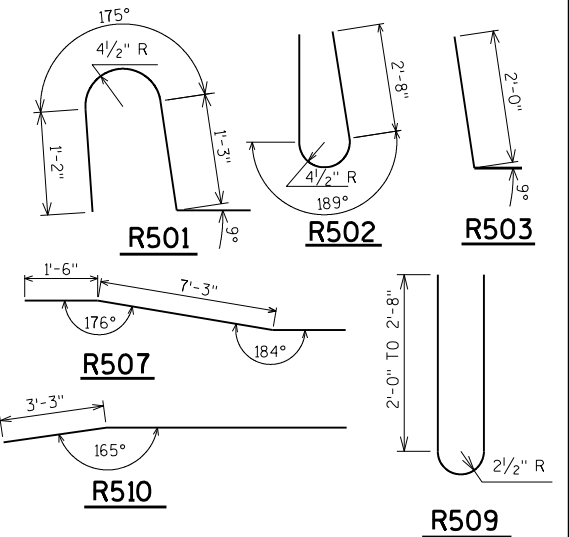
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S401	X	668	32'-4"			LONGITUDINAL - TOP & BOTTOM
S502	X	674	33'-7"			TRANSVERSE - TOP AND BOTTOM
S503	X	28	35'-2"			TRANSVERSE - TOP AND BOTTOM - AT ABUT. DIAPH.
S504	X	336	4'-9"	X		TRANSVERSE - TOP - EDGE OF DECK
S505	X	64	32'-6"			PPT. HORIZ.
S506	X	376	6'-8"	X		PPT. VERT.
S507	X	376	4'-5"	X		PPT. VERT.
S508	X	88	15'-0"	X		ABUT. DIAPH. - VERT.
S509	X	88	6'-4"	X		ABUT. DIAPH. - VERT.
S610	X	128	4'-3"			ABUT. DIAPH. - HORIZ.
S611	X	8	10'-0"	X		ABUT. DIAPH. END- HORIZ.- S.E. & N.W. CORNERS
S612	X	8	10'-5"	X		ABUT. DIAPH. END- HORIZ.- S.W. & N.E. CORNERS
S613	X	2	8'-11"	X		ABUT. DIAPH. END- HORIZ.- S.E. & N.W. CORNERS
S614	X	2	9'-5"	X		ABUT. DIAPH. END- HORIZ.- S.W. & N.E. CORNERS
S615	X	28	33'-6"			ABUT. DIAPH. - HORIZ.-BACKFACE
S516	X	72	12'-8"	X		ABUT. DIAPH. - VERT.
S517	X	16	10'-9"	X		ABUT. DIAPH. END- VERT.
S418	X	16	5'-4"			ABUT. DIAPH. END- VERT.
S519	X	36	6'-0"			ABUT. DIAPH. - HORIZ. - THRU GIRDERS
S420	X	80	3'-5"	X		ABUT. DIAPH. - VERT.
S421	X	32	3'-5"			ABUT. DIAPH. - HORIZ.
S622	X	16	4'-5"			ABUT. DIAPH. - HORIZ.



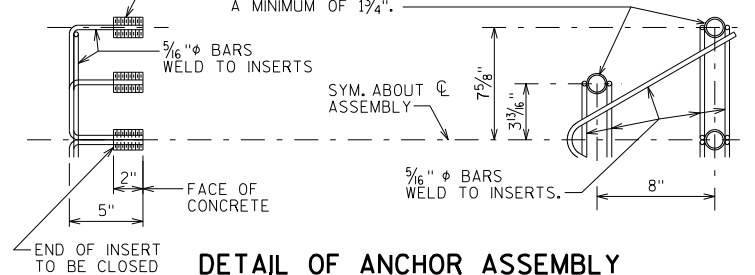
NO.	DATE	REVISION			BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION					
STRUCTURE B-13-710					
			DRAWN BY	WWR	PLANS C'D. CAD
SUPERSTRUCTURE DETAILS				SHEET 15	
				628	

FOR STRUCTURAL APPROACH SLAB PARAPETS

BAR MARK	COAT	WEST ABUT.	EAST ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	34	34	4-5	X		PARAPET VERT.
R502	X	34	34	6-8	X		PARAPET VERT.
R503	X	22	22	2-9	X		PARAPET VERT.
R504	X	34	34	4-4	X		PARAPET VERT.
R505	X	10	10	6-5	X		PARAPET VERT.
R506	X	12	12	6-6	X		PARAPET VERT.
R507	X	2	2	19-5	X		PARAPET HORIZ.
R508	X	10	10	19-5			PARAPET HORIZ.
R509	X	12	12	5-5	X	▲	PARAPET VERT.
R510	X	4	4	19-5	X		PARAPET HORIZ.



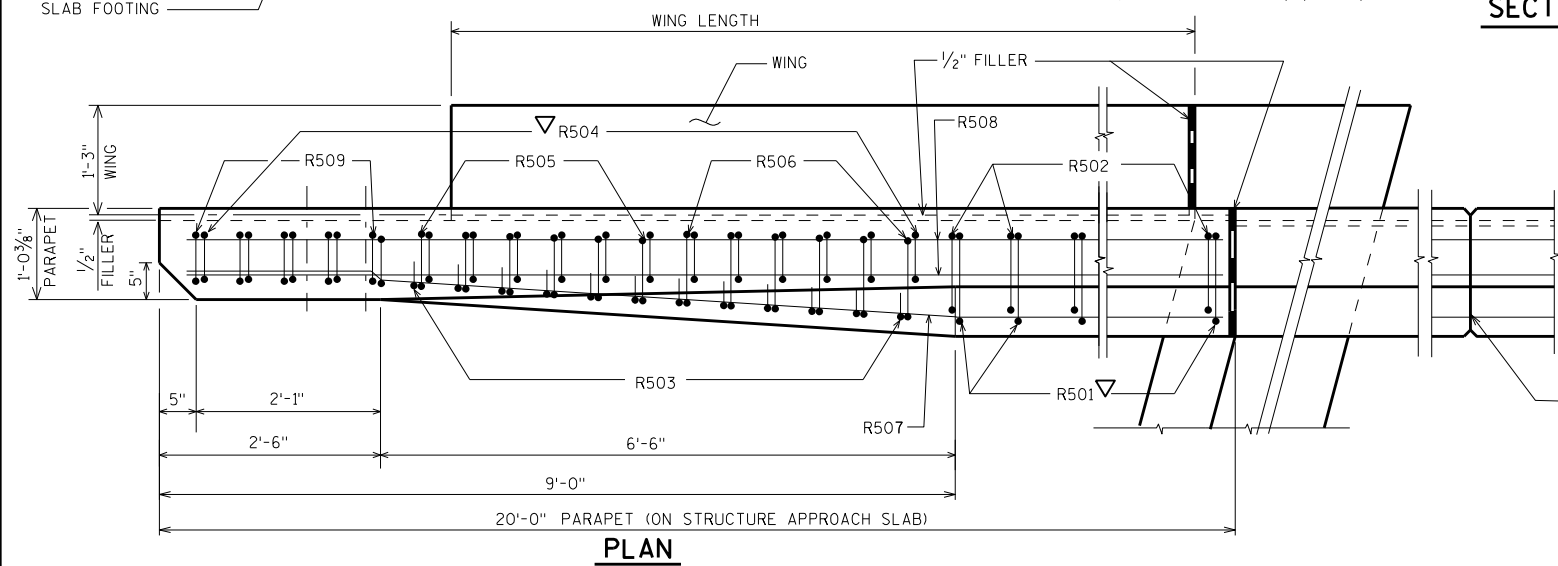
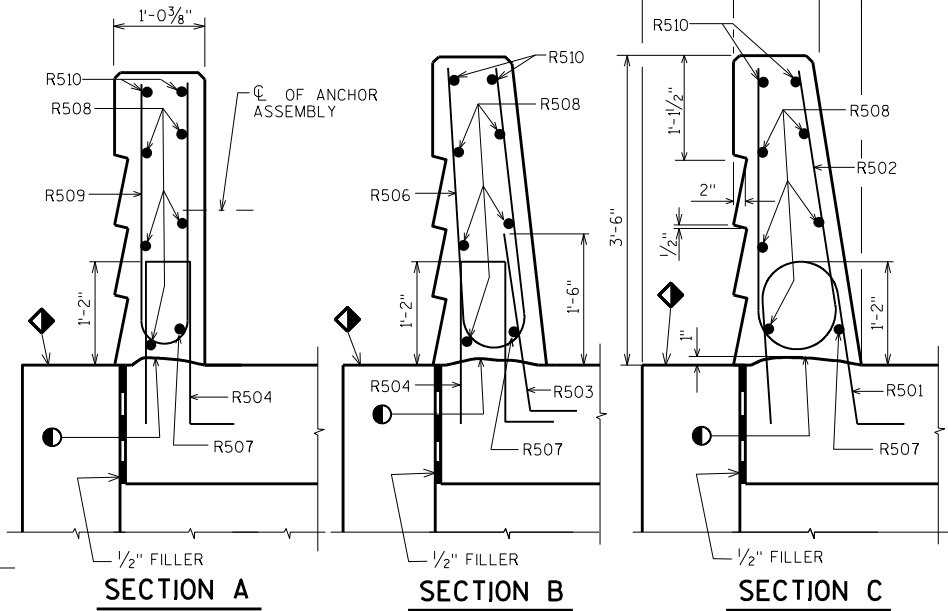
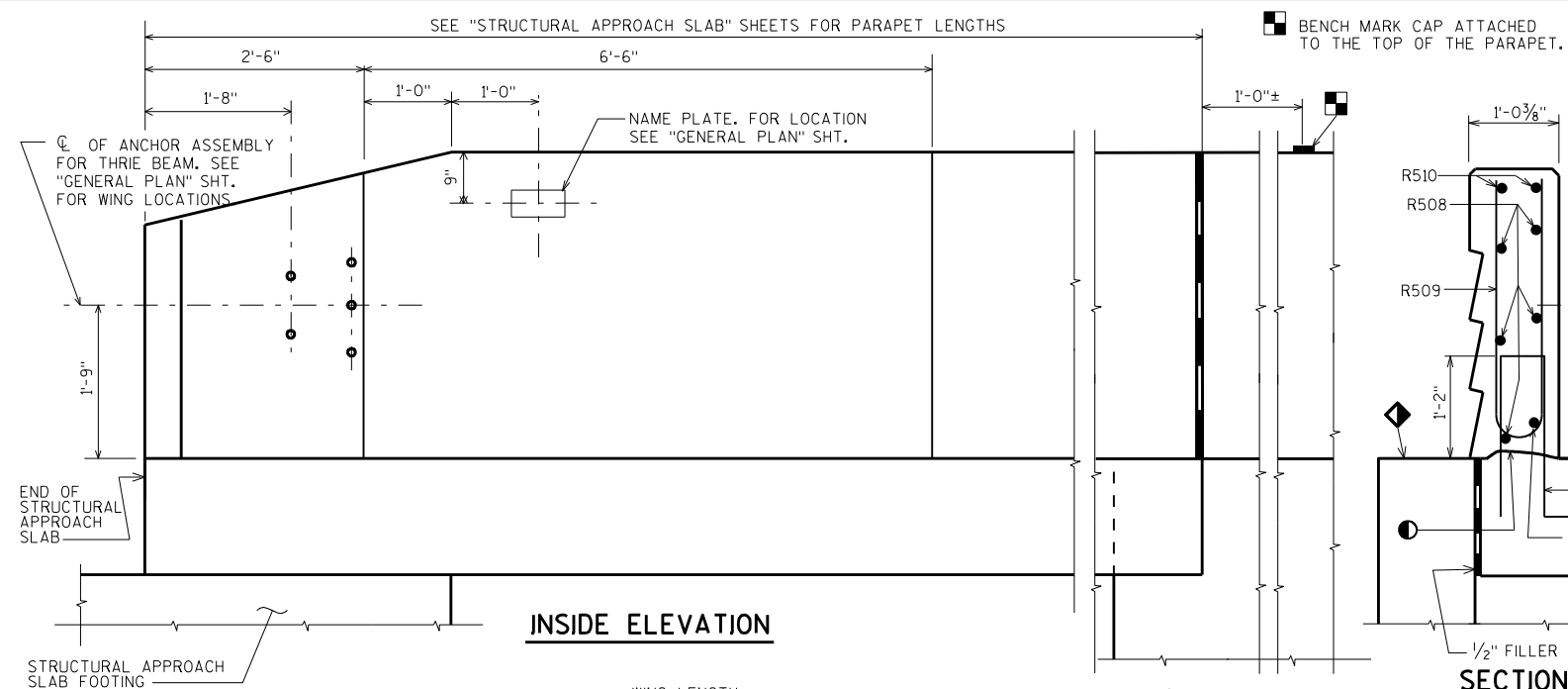
— THREADED INSERTS FOR $\frac{7}{8}$ " ϕ X 2" LONG GALVANIZED HEX HEAD CAP SCREWS. CAP SCREWS TO BE THREADED A MIN. OF $1\frac{1}{4}$ " AND SHALL BE SUPPLIED, INCLUDING WASHERS, WITH ASSEMBLY. INSERTS TO BE THREADED A MINIMUM OF $1\frac{3}{4}$ ".



NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED
IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

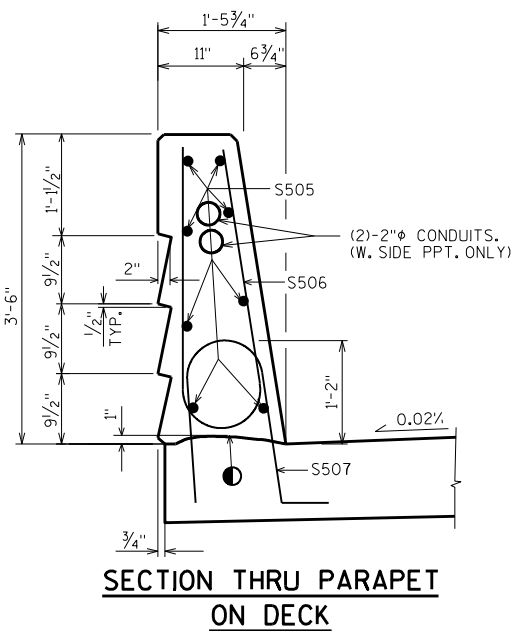
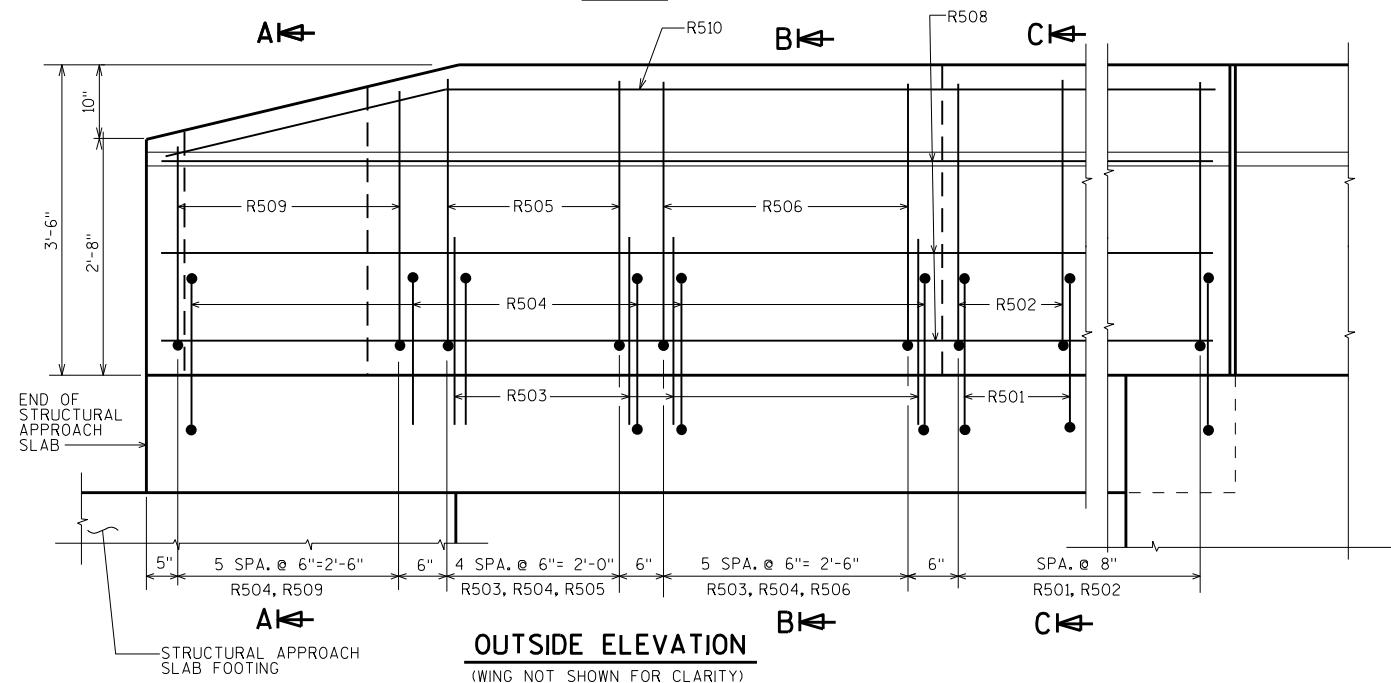
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-710			
		DRAWN BY	WWR
		PLANS CK'D.	CAD
SINGLE SLOPE PARAPET 42SS (MODIFIED)		SHEET 16	
		629	

SS42APP
1-14

— OPTIONAL CONSTRUCTION JOINTS
IN THE PARAPETS MAY BE USED.
RUN BAR REINF. THRU THE JOINT.
LAP LONGIT. BARS A MIN. OF 1'-9".
MIN. JOINT SPACING OF 80'-0".
DEFINE CONST. JOINT WITH A $\frac{3}{4}$ " -
"V" GROOVE.

BUNDLE AND TAG EACH SERIES SEPARATELY

MARK	NO. REQD.	LENGTH
R509	4 SERIES OF 6	4'-9" TO 6'-1"

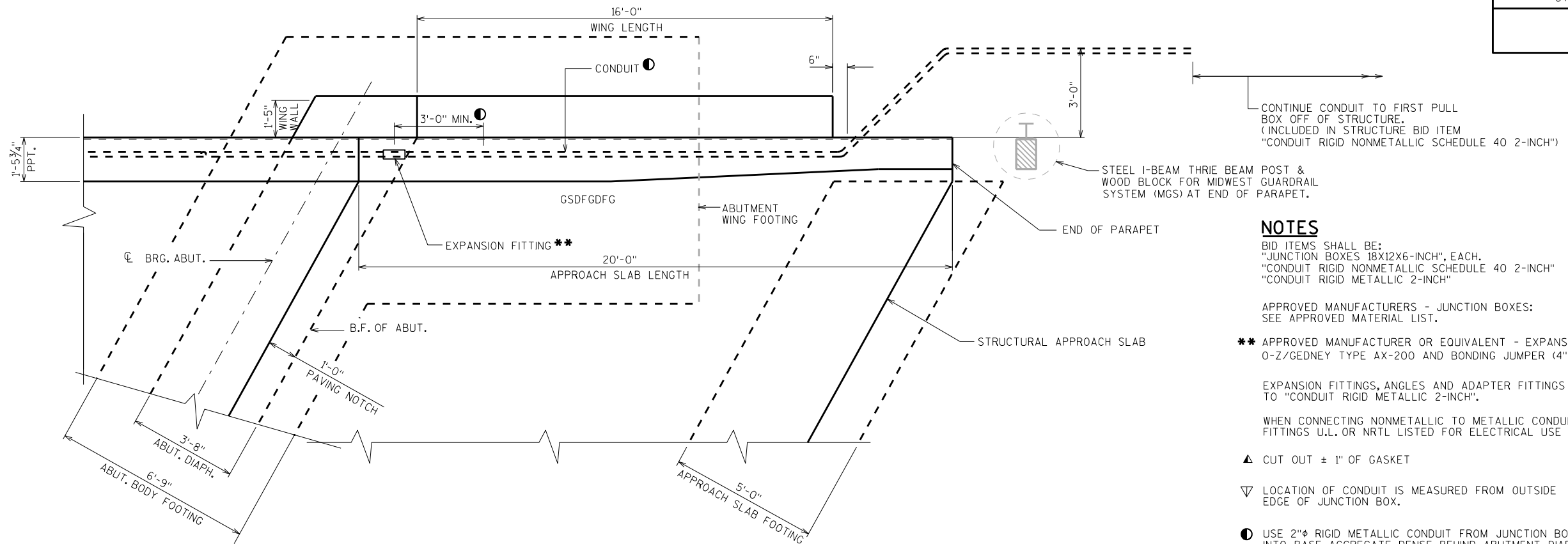


▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR TABLE FOR ACTUAL LENGTHS.

● CONST. JOINT - STRIKE OFF AS SHOWN.

 SLOPE FOR DRAINAGE

▽ R501 AND R504 BARS TO BE TIED TO
STRUCTURAL APPROACH SLAB STEEL
BEFORE STRUCTURAL APPROACH SLAB
IS POURED.

**NOTES**

BID ITEMS SHALL BE:
 "JUNCTION BOXES 18X12X6-INCH", EACH.
 "CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
 "CONDUIT RIGID METALLIC 2-INCH"

APPROVED MANUFACTURERS - JUNCTION BOXES:
 SEE APPROVED MATERIAL LIST.

** APPROVED MANUFACTURER OR EQUIVALENT - EXPANSION FITTING:
 O-Z/GEDNEY TYPE AX-200 AND BONDING JUMPER (4" TOTAL CONDUIT MOVEMENT).

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL
 TO "CONDUIT RIGID METALLIC 2-INCH".

WHEN CONNECTING NONMETALLIC TO METALLIC CONDUIT, ONLY ADAPTER
 FITTINGS U.L. OR NRTL LISTED FOR ELECTRICAL USE SHALL BE USED.

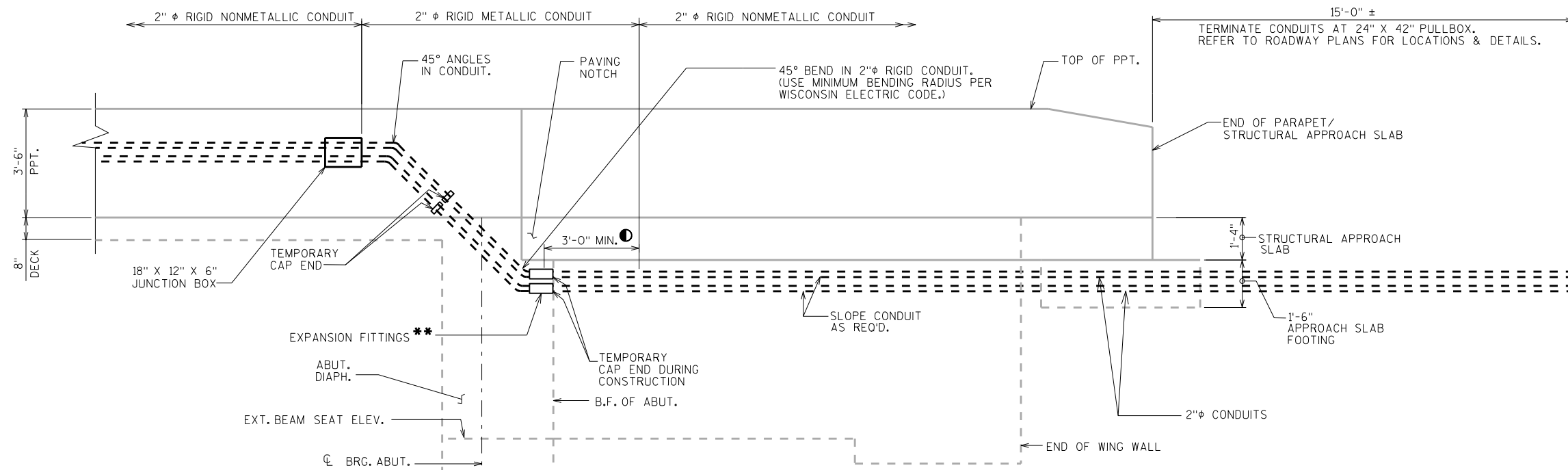
▲ CUT OUT $\pm$ 1" OF GASKET

▽ LOCATION OF CONDUIT IS MEASURED FROM OUTSIDE
 EDGE OF JUNCTION BOX.

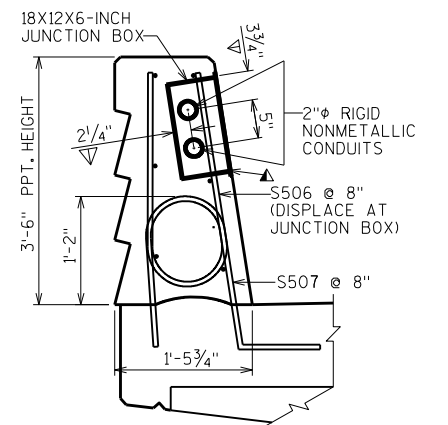
● USE 2" ϕ RIGID METALLIC CONDUIT FROM JUNCTION BOX TO 3'-0"
 INTO BASE AGGREGATE DENSE BEHIND ABUTMENT DIAPHRAGM.

PLAN OF CONDUIT AT ABUTMENT/STRUCTURAL APPROACH SLAB

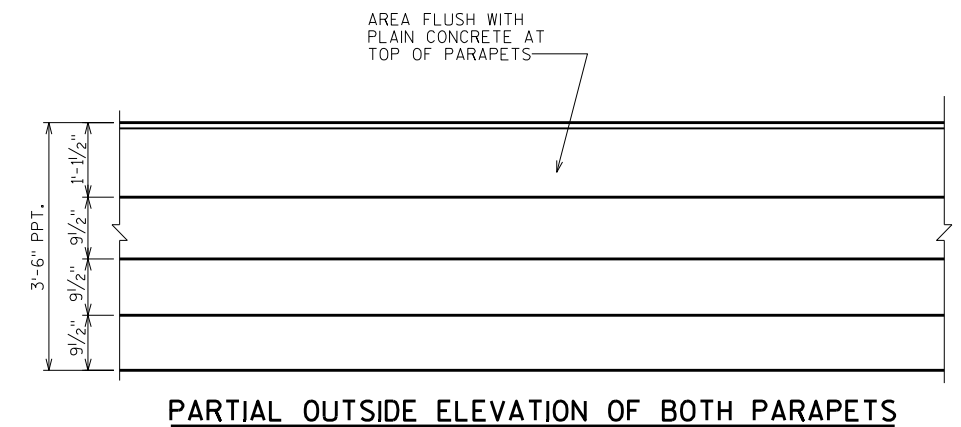
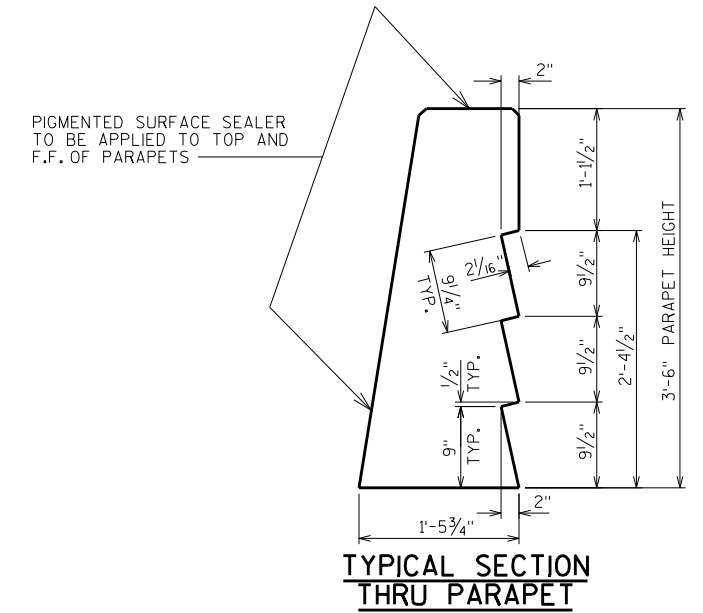
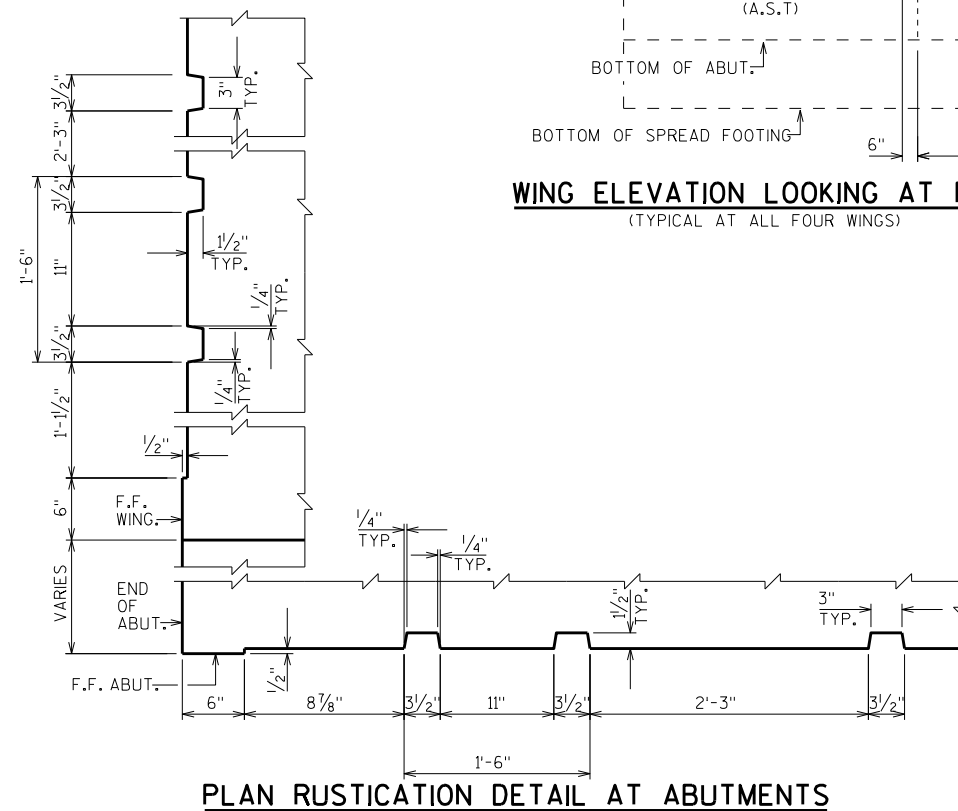
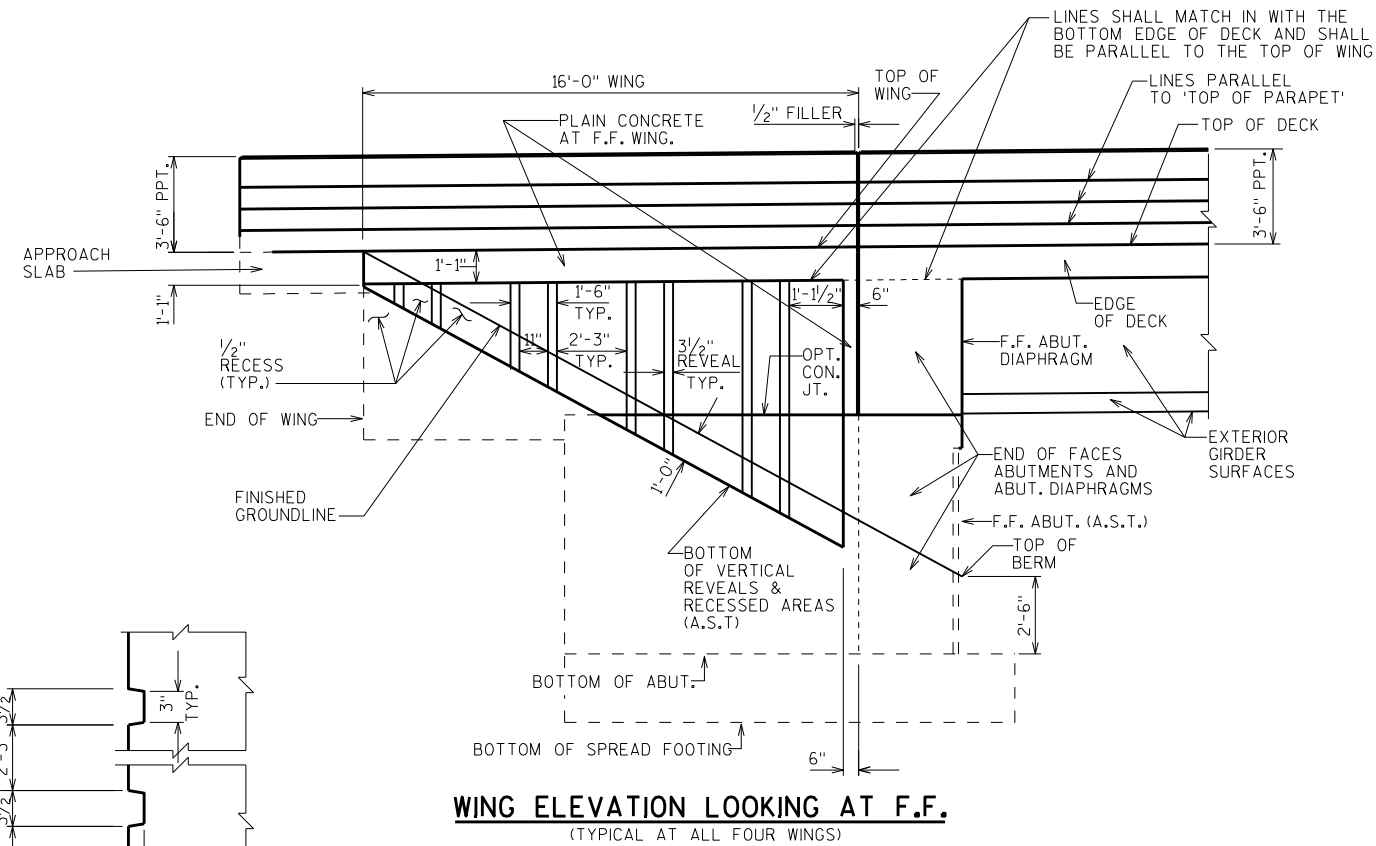
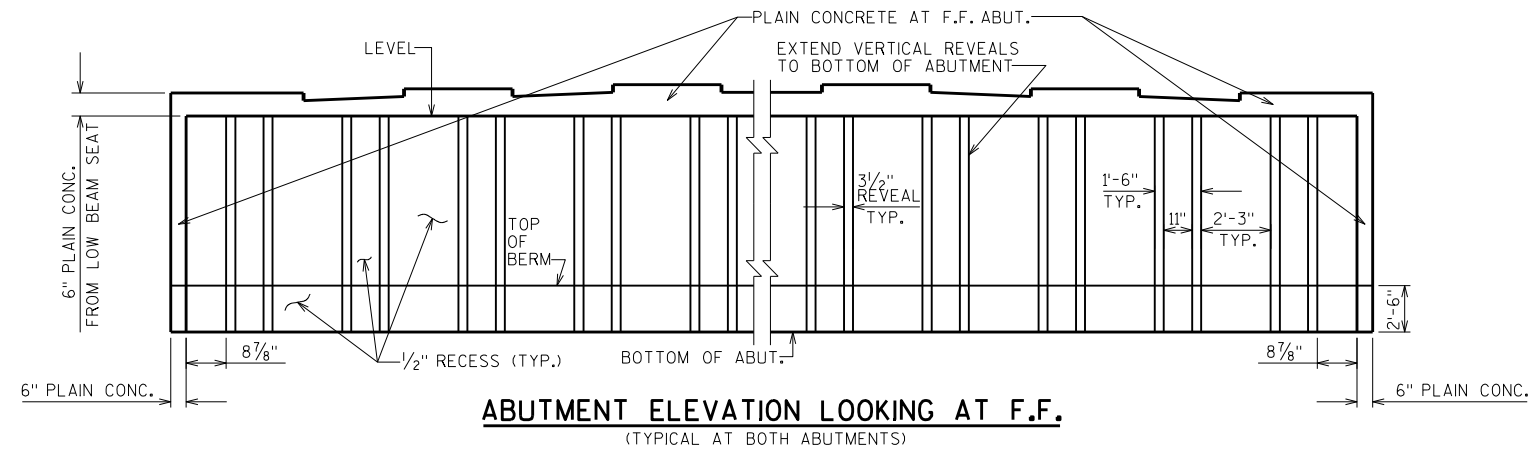
(WING 3 SHOWN, WING 2 SIMILAR)

**INSIDE ELEVATION OF CONDUIT AT ABUTMENT/STRUCTURAL APPROACH SLAB**

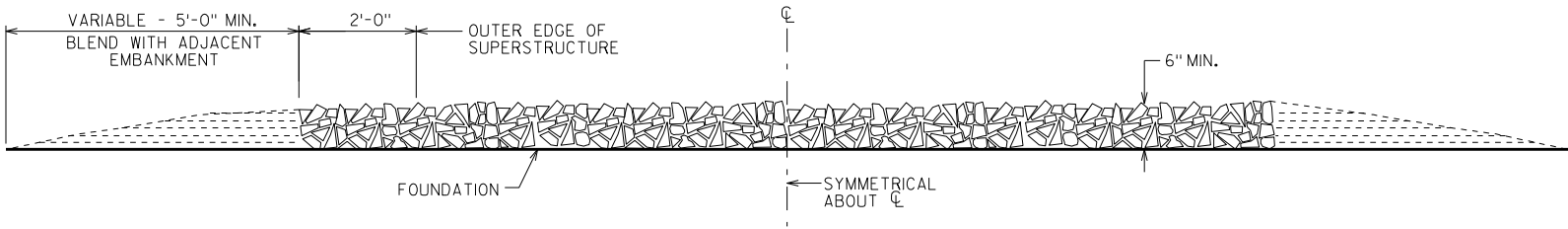
(WING 3 SHOWN, WING 2 SIMILAR)

**SECTION THRU PARAPET
AT JUNCTION BOX**

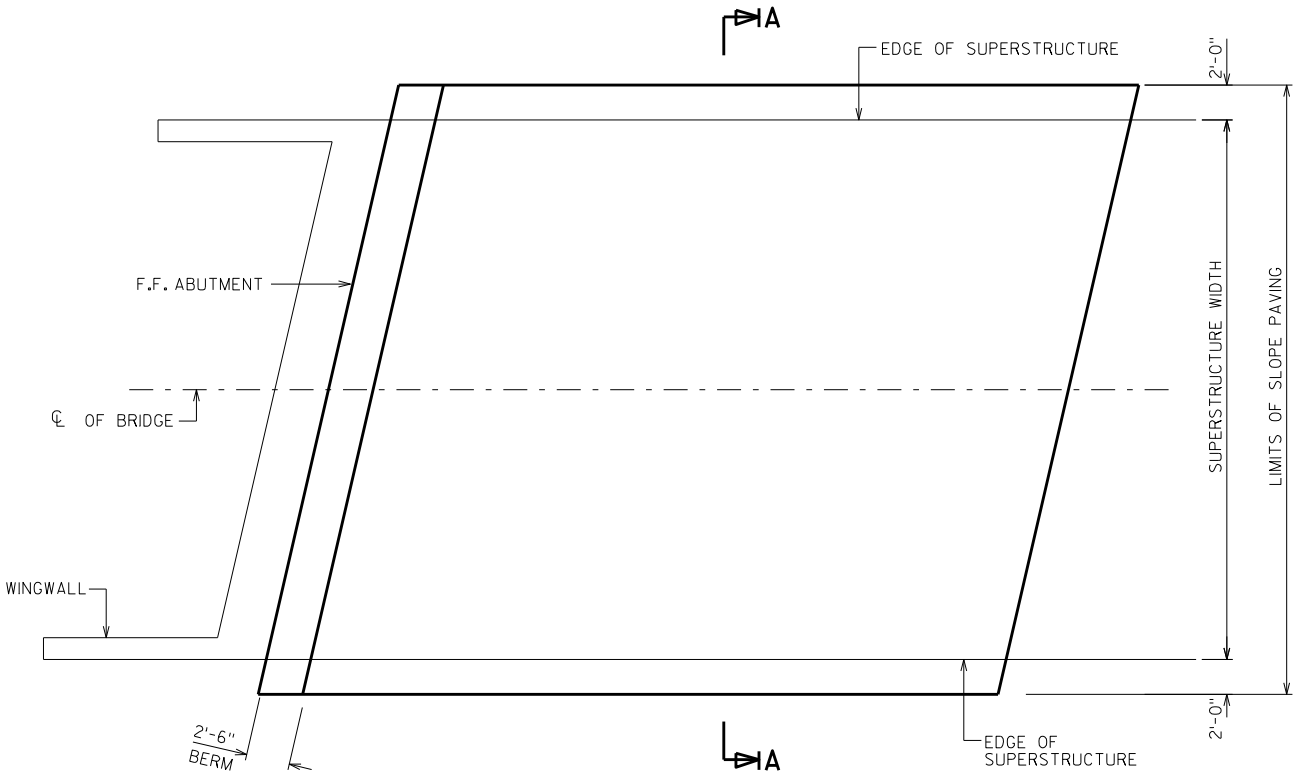
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-710			
DRAWN BY		WWR	PLANS CK'D. CAD
CONDUIT DETAILS			SHEET 17
			630



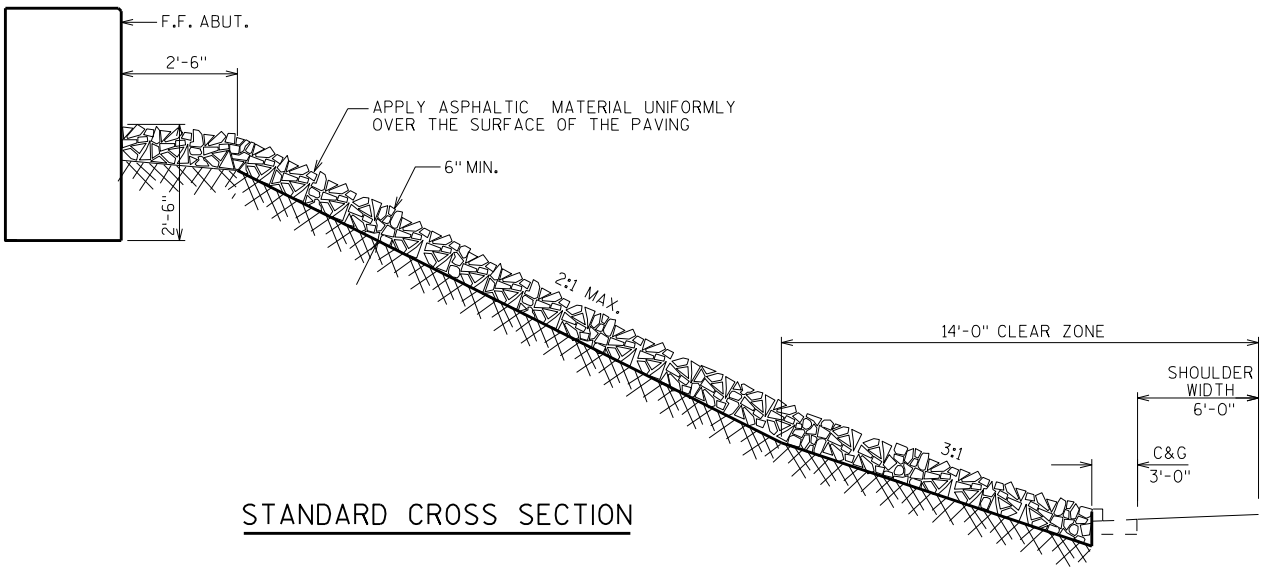
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-710			
DRAWN BY		WWR	PLANS CKD. CAD
AESTHETIC DETAILS		SHEET 18	
		631	



SECTION A-A



PLAN



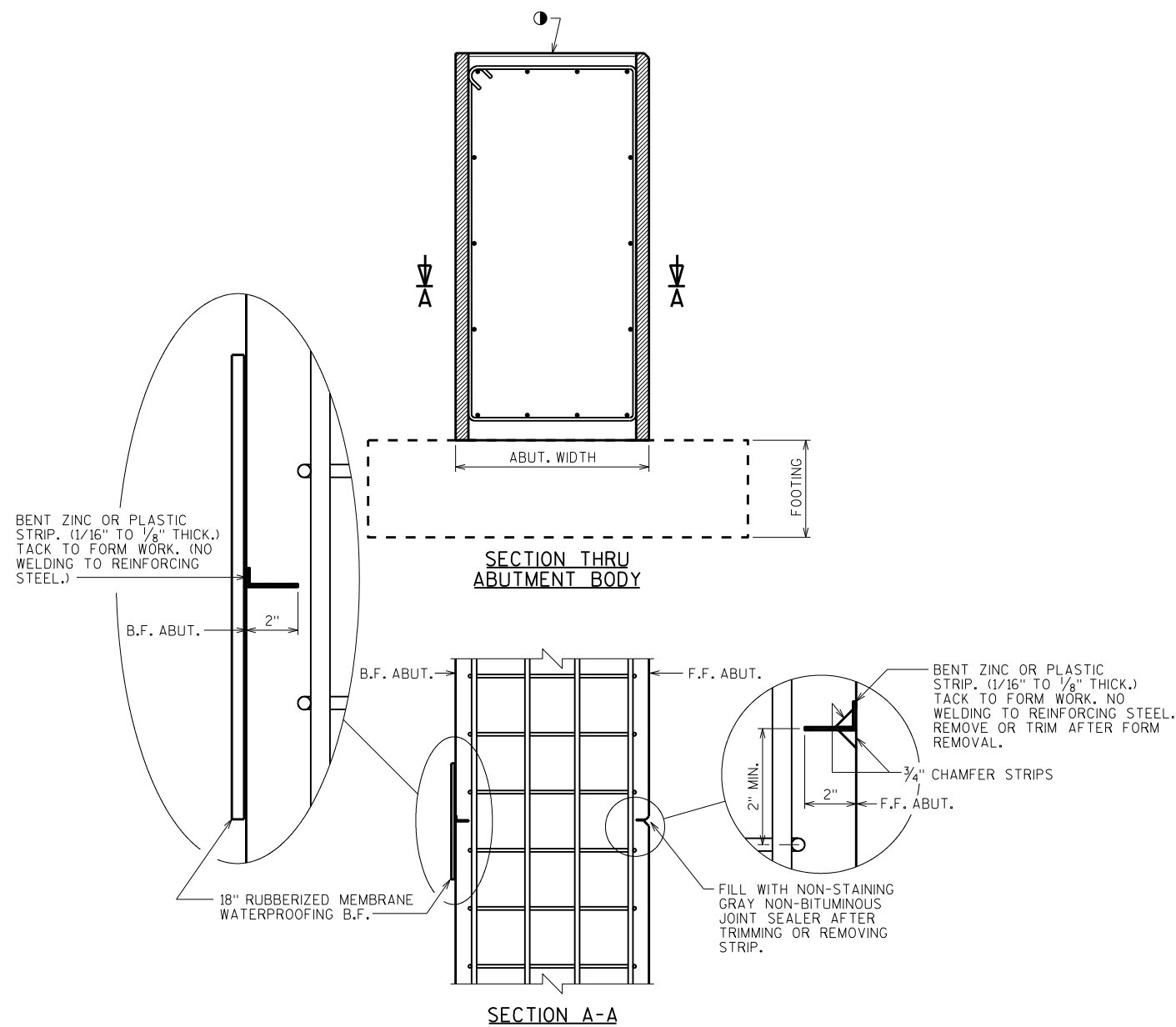
STANDARD CROSS SECTION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-710			
DRAWN BY WWR		PLANS CK'D. CAD	
SLOPE PAVING (CRUSHED AGGREGATE)		SHEET 19	
		632	



ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

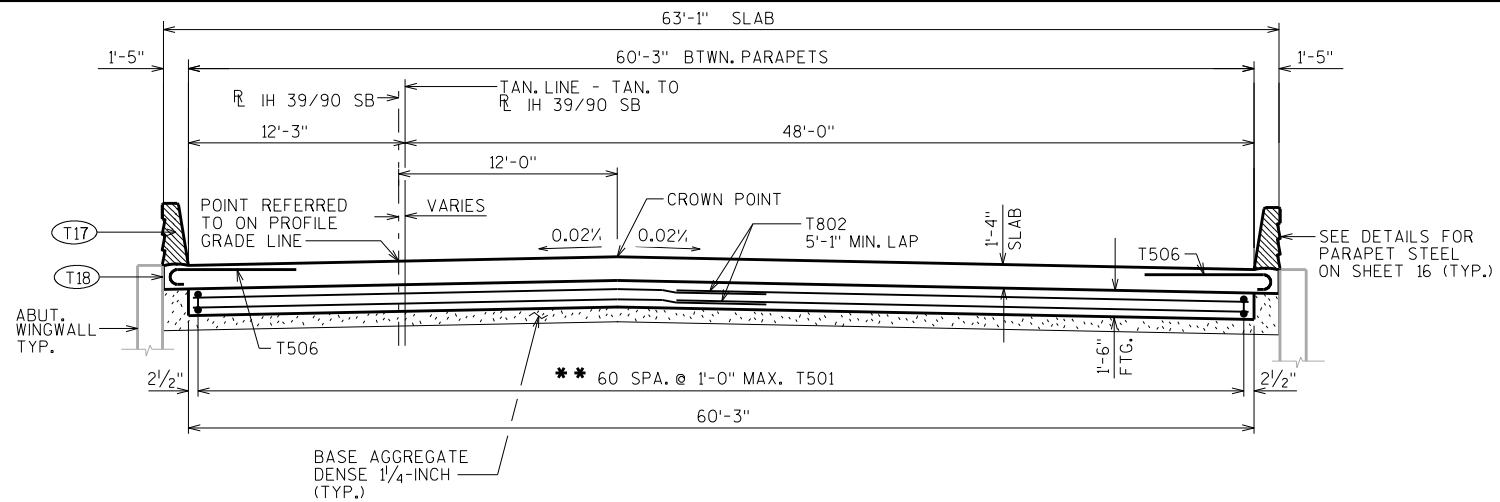
- 1 USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-710			
		DRAWN BY	WWR
		PLANS CK'D.	CAD
ALTERNATE CONSTRUCTION JOINT		SHEET 20	
		633	

BILL OF BARS

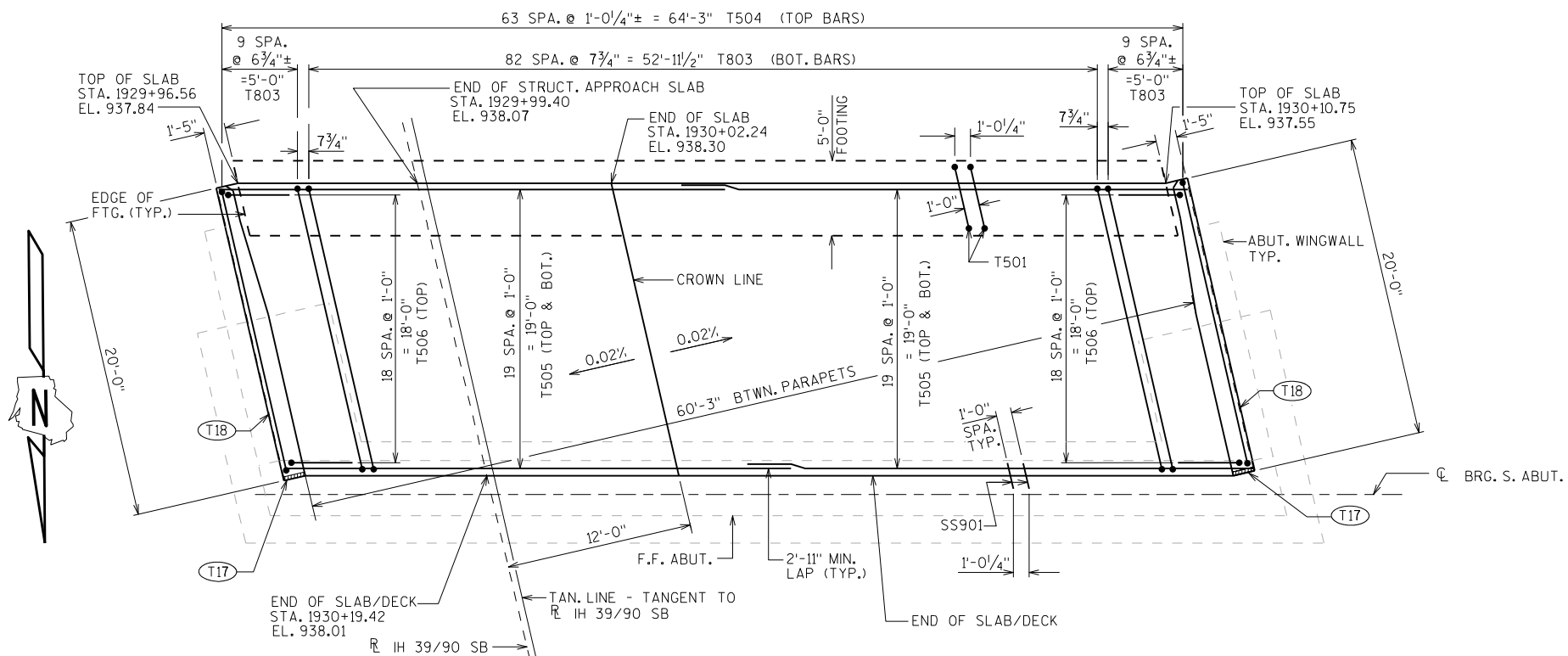
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
T501	X	61	12'-5"	X		APPROACH SLAB FTG. - STIRRUP
T802	X	24	33'-4"			APPROACH SLAB FTG. - TRANS.
T803	X	103	21'-5"	X		APPROACH SLAB - LONG. - BOT.
T504	X	64	19'-7"			APPROACH SLAB - LONG. - TOP
T505	X	80	33'-8"			APPROACH SLAB - TRANS. - TOP & BOT.
T506	X	38	4'-1"	X		APPROACH SLAB - TRANS. - TOP

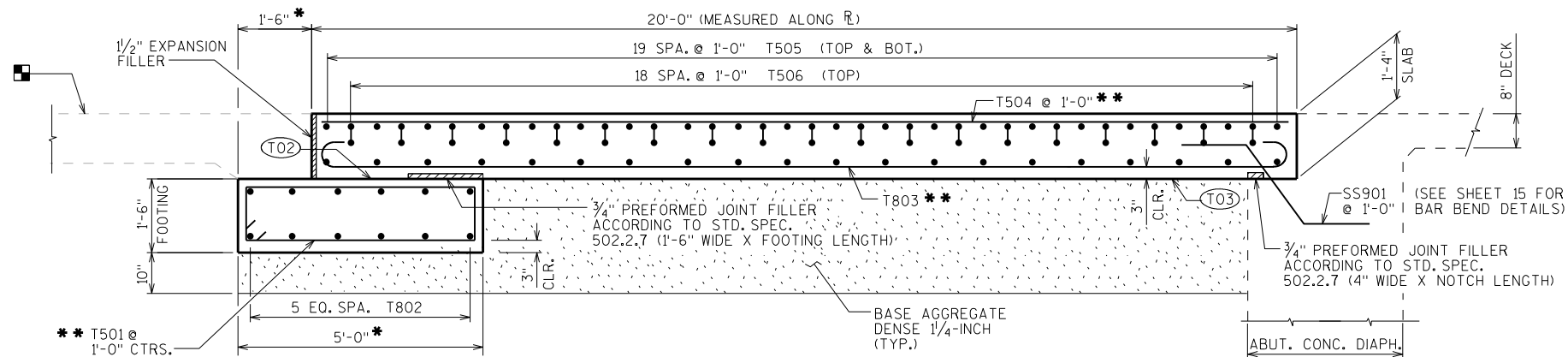


CROSS SECTION THRU ROADWAY - LOOKING SOUTH

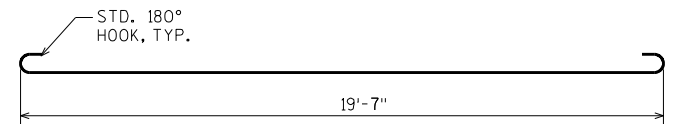
(SHOWING FOOTING STEEL ONLY)



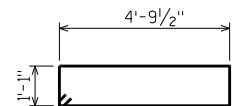
SOUTH STRUCTURAL APPROACH SLAB PLAN



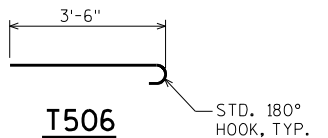
SECTION THRU STRUCTURAL APPROACH SLAB



T803



T501



T506

- (T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING.
- (T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.
- (T17) 1/2" FILLER (INCLUDED IN PARAPET LENGTH); SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER, (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- (T18) 1/2" FILLER PLACED BTWN. ABUT. WINGWALL AND APPROACH SLAB; SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER, (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

* MEASURED NORMAL TO SUBSTRUCTURE

** BARS PLACED PARALLEL TO TAN. LINE SPACING PERPENDICULAR TO TAN. LINE

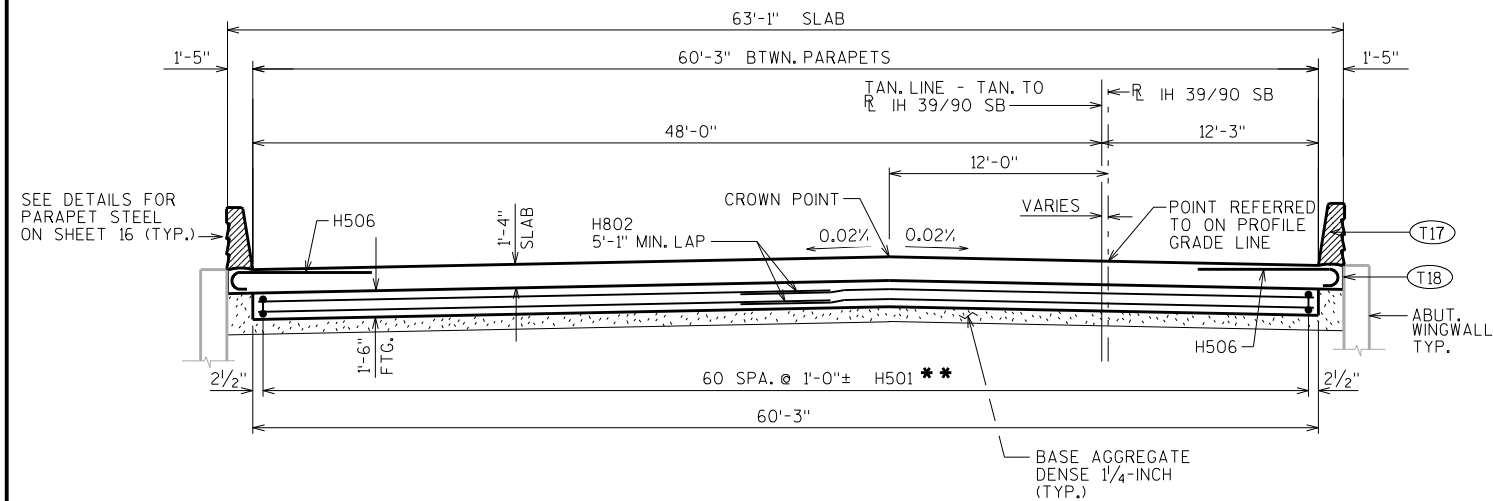
CONCRETE PAVEMENT APPROACH SLAB. SEE ROADWAY PLANS FOR DETAILS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-710			
DRAWN BY WWR		PLANS CK'D. CAD	
SOUTH STRUCTURAL APPROACH SLAB			SHEET 21
			634

BILL OF BARS

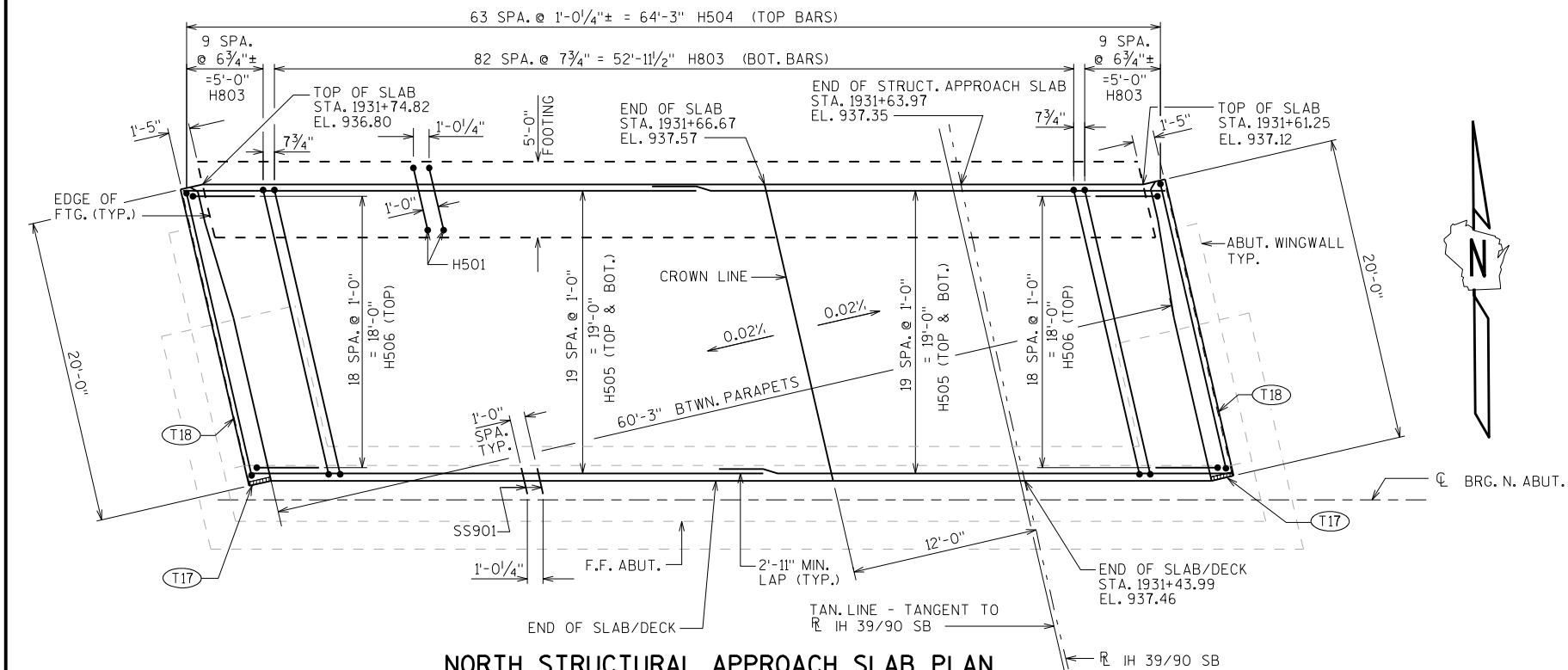
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
H501	X	61	12'-5"	X		APPROACH SLAB FTG. - STIRRUP
H802	X	24	33'-4"			APPROACH SLAB FTG. - TRANS.
H803	X	103	21'-5"	X		APPROACH SLAB - LONG. - BOT.
H504	X	64	19'-7"			APPROACH SLAB - LONG. - TOP
H505	X	80	33'-8"			APPROACH SLAB - TRANS. - TOP & BOT.
H506	X	38	4'-1"	X		APPROACH SLAB - TRANS. - TOP

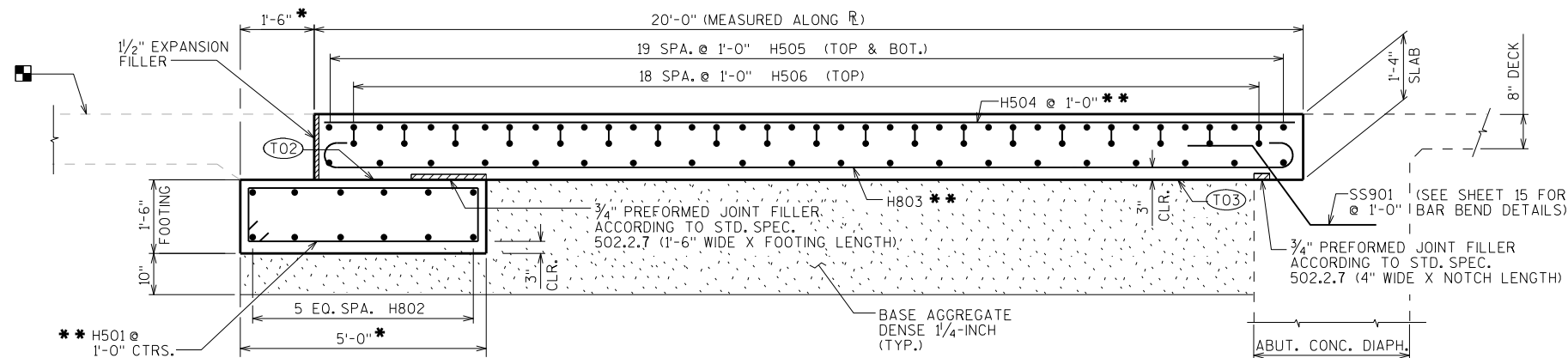


CROSS SECTION THRU ROADWAY - LOOKING NORTH

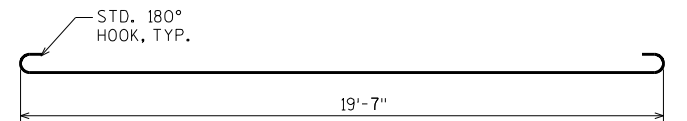
(SHOWING FOOTING STEEL ONLY)



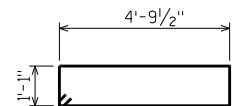
NORTH STRUCTURAL APPROACH SLAB PLAN



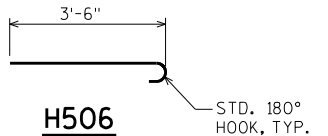
SECTION THRU STRUCTURAL APPROACH SLAB



H803



H501



H506

- (T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING.
- (T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.
- (T17) 1/2" FILLER (INCLUDED IN PARAPET LENGTH); SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER, (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE), EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- (T18) 1/2" FILLER PLACED BTWN. ABUT. WINGWALL AND APPROACH SLAB; SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER, (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE), EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

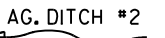
* MEASURED NORMAL TO SUBSTRUCTURE

** BARS PLACED PARALLEL TO TAN. LINE SPACING PERPENDICULAR TO TAN. LINE

CONCRETE PAVEMENT APPROACH SLAB. SEE ROADWAY PLANS FOR DETAILS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-13-710			
DRAWN BY WWR		PLANS CK'D. CAD	
NORTH STRUCTURAL APPROACH SLAB		SHEET 22	
		635	

- ▲ SEE CORNER DETAILS SHEET 3
- △ EXIST. 3-SIDED STRUCTURE TO REMAIN IN PLACE.
- * BUILD APRON AND END OF BOX LEVEL
- INSIDE WALLS TO MATCH EXISTING (TYP.)
- ▲ VERT. CONST. JOINT
- ☒ REMOVE EXISTING WINGS AND WING FOOTINGS.
- INDICATES WING NUMBER
- CONCRETE MASONRY WING ANCHORS, TYPE S (EPOXY ANCHORED), 5/8-INCH , EMBED 6" INTO SOUND CONCRETE AND SPACE AT 1'-0" CENTERS. (TYP. IN ALL WALLS).



1. LAYOUT
2. BOX DETAILS
3. APRON DETAILS
4. SUBSURFACE EXPLORATION

NO.	DATE	REVISION		BY
 Plans Prepared By WISDOT BUREAU OF STRUCTURES				
ACCEPTED	<i>William C. Dreher</i> ^{LLS} CHIEF STRUCTURES DESIGN ENGINEER			8/7/15 DATE
STRUCTURE C-13-3078 STG 1				
IH 39/90 SB OVER AG. DITCH #2				
COUNTY	DANE	TOWN/CITY/VILLAGE	CHRISTIANA	
DESIGN SPEC.				
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS				
DESIGNED BY	MWB	DESIGN CK'D.	DDO	DRAWN BY MBW PLANS CK'D. DFD
LAYOUT			SHEET 1 OF 4	
			636	

SCALE = 4

ELEVATION

OUTLET

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF=1.05
OPERATING RATING FACTOR: RF=1.35
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 255 (KIPS)

CONCRETE MASONRY, GRADE A-FA ————— $f'_c = 3500$ P.S.I.
HIGH STRENGTH BAR STEEL REINFORCEMENT — $f_y = 60000$ P.S.I.

INVERTS TO BE SET 1' BELOW STREAM BED.

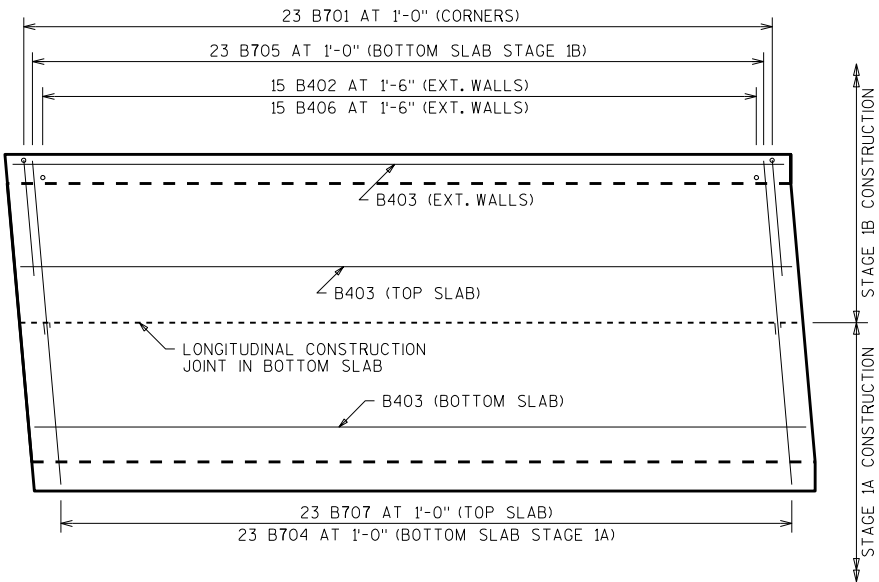
FILLER _____ 3/4" SIZE

CONTRACTOR MAY ELECT TO SUBSTITUTE #1 OR #2 CONCRETE COARSE AGGREGATE, SELECT CRUSHED MATERIAL OR OTHER GRANULAR MATERIAL AS APPROVED BY THE FIELD ENGINEER, IN LIEU OF THE BREAKER RUN, TO BE UTILIZED AS A CONSTRUCTION PLATFORM FOR THE BOX. THE CONTRACTOR IS RESPONSIBLE FOR BASE STABILITY WITH ANY SUBSTITUTED MATERIAL.

BILL OF BARS

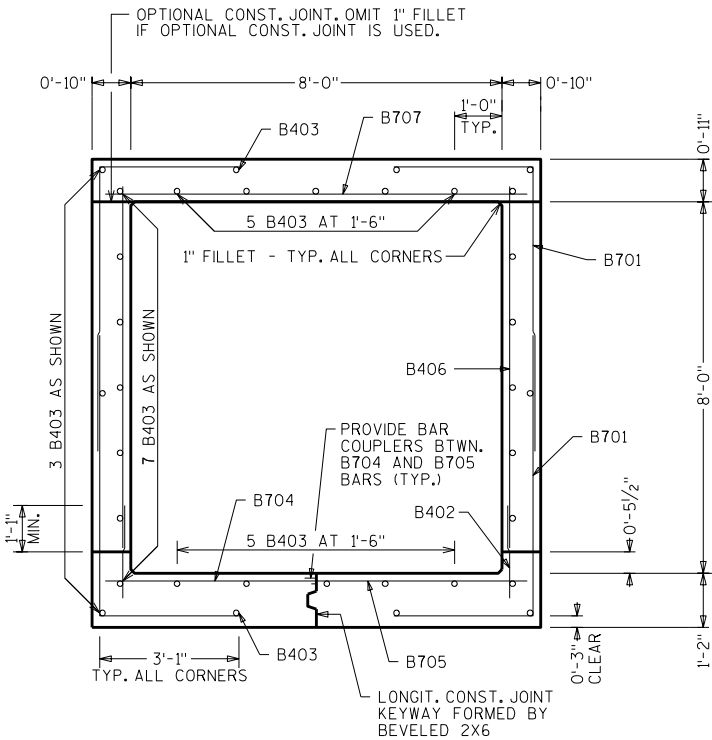
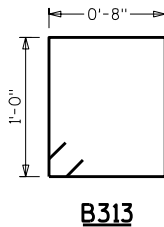
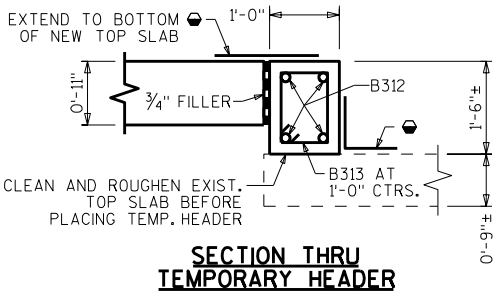
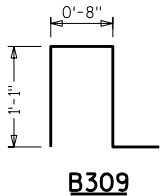
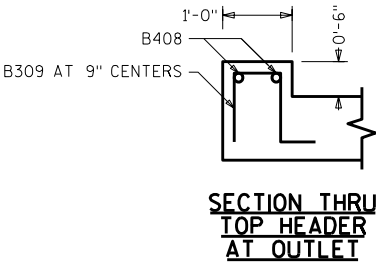
THE FIRST OR FIRST AND SECOND DIGIT OF THE MARK SIGNIFIES THE BAR SIZE. THE DIMENSION IN THE BENT COLUMN IS THE OUT TO OUT HORIZONTAL LEG OF A "L" SHAPED BAR. LONGER BARS OF THE SAME SIZE MAY BE SUBSTITUTED FOR SHORTER BARS. PAYMENT BASED ON BAR LENGTHS AS DETAILED.

MARK	NUMBER REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B701	184	9-2	3-1	NO	CORNERS
B402	60	2-6	NO	NO	WALLS-DOWELS VERT.
B403	68	22-0	NO	NO	TOP & BOTTOM SLAB & WALL
▲ B704	46	4-8	NO	NO	BOTTOM SLAB TRANS. - STAGE 1A
B705	46	4-8	NO	NO	BOTTOM SLAB TRANS. - STAGE 1B
B406	60	8-3	NO	NO	WALLS VERT.
B707	46	9-4	NO	NO	TOP SLAB TRANS.
B408	2	9-4	NO	NO	HEADER HORIZ.
B309	13	3-1	YES	NO	HEADER STIRRUPS VERT.
B510	36	4-0	NO	NO	VERT. CONST. JOINT - NEW WORK
● B511	18	2-6	NO	NO	VERT. CONST. JOINT - EXISTING
B312	4	9-4	NO	NO	TEMP. HEADER HORIZ.
B313	10	3-9	YES	NO	TEMP. HEADER VERT. STIRRUPS



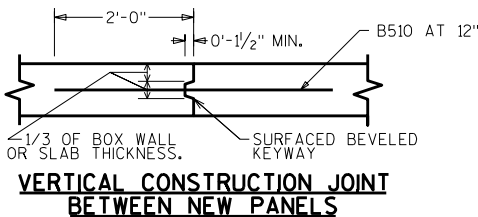
PLAN VIEW OF OUTLET PANEL

USE IDENTICAL STEEL IN OTHER PANELS. APRON AND HEADER ARE NOT SHOWN.

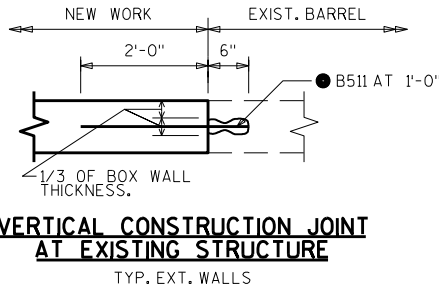


TYPICAL SECTION THRU BOX

ALL LONGITUDINAL BARS NOT LABELED ARE B403 AS SHOWN.



2" DEEP SAW CUT WITHIN 12 HOURS AFTER POURING MAY BE USED IN LIEU OF CONST. JT. IN BOTTOM SLAB.



- CONCRETE MASONRY ANCHORS, TYPE S (EPOXY ANCHORED), 5/8-INCH, EMBED 6" INTO SOUND CONCRETE AND SPACE AT 1'-0" CENTERS (TYP. IN EXT. WALLS).
- 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING
- ▲ BAR LENGTH COMPUTED TO C.C. OF CONST. JOINT, MODIFY TO BAR COUPLER MANUFACTURER RECOMMENDATIONS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-13-3078 STG 1			
DRAWN BY		MWB	PLANS CK'D. DFD
BOX DETAILS		SHEET 2	637

BILL OF BAR

THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE.
THE DIMENSION IN THE BENT COLUMN IS THE OUT TO OUT HORIZONTAL LEG OF AN L - SHAPED BAR.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
U401		16	5 - 6	1 - 0		OUTLET APRON AND CUTOFF WALL
U402		5	15 - 10			OUTLET APRON AND CUTOFF WALL
U403		14	13 - 2		*	" APRON
U404		10	16 - 11			" APRON
U405		1	3 - 9			" APRON
U406		1	7 - 7			" APRON
U407		1	11 - 5			" APRON
U408		1	4 - 3			" APRON
U409		1	7 - 11			" APRON
U410		1	11 - 6			" APRON
U511		2	16 - 1			WING 1 -HORIZONTAL - BOTH FACES
U412		2	15 - 0			WING " -HORIZONTAL -APRON BOTT. SLAB
U413		4	15 - 0			WING " -HORIZONTAL - BOTH FACES
U414		2	5 - 1			WING " -HORIZONTAL - BOTH FACES
U415		2	8 - 10			WING " -HORIZONTAL - BOTH FACES
U416		2	12 - 8			WING " -HORIZONTAL - BOTH FACES
U417		9	5 - 1			WING " -VERTICAL - BACK FACE
U518	X	17	11 - 6	7 - 4	*	WING " -VERTICAL - BACK FACE
U419	X	7	12 - 0	7 - 4	*	WING " -VERTICAL - BACK FACE
U420		11	5 - 3		*	WING " -VERTICAL - FRONT FACE
U521		2	15 - 7			WING 2 -HORIZONTAL - BOTH FACES
U422		2	14 - 5			WING " -HORIZONTAL -APRON BOTT. SLAB
U423		4	14 - 5			WING " -HORIZONTAL - BOTH FACES
U424		2	5 - 3			WING " -HORIZONTAL - BOTH FACES
U425		2	9 - 2			WING " -HORIZONTAL - BOTH FACES
U426		2	13 - 1			WING " -HORIZONTAL - BOTH FACES
U427		9	5 - 0			WING " -VERTICAL - BACK FACE
U528	X	17	11 - 6	7 - 4	*	WING " -VERTICAL - BACK FACE
U429	X	7	11 - 11	7 - 4	*	WING " -VERTICAL - BACK FACE
U430		11	5 - 3		*	WING " -VERTICAL - FRONT FACE
U431	X	22	2 - 3			WINGS 1 AND 2 - DOWELS - FRONT FACE
D401		10	3 - 6	1 - 0		INLET CUTOFF WALL
D402		2	9 - 4			INLET CUTOFF WALL

* LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

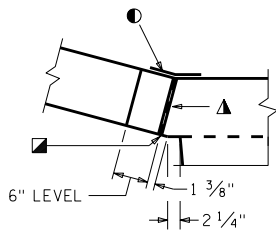
BUNDLE AND TAG EACH SERIES SEPARATELY

BAR MARK	NO. REQ'D.	LENGTHS FOR EACH SERIES
U403	1 SERIES OF 14	9 - 7 TO 16 - 8
U518	1 SERIES OF 17	10 - 0 TO 13 - 0
U419	1 SERIES OF 7	10 - 9 TO 13 - 2
U420	1 SERIES OF 11	2 - 4 TO 8 - 2
U528	1 SERIES OF 17	9 - 11 TO 13 - 1
U429	1 SERIES OF 7	10 - 9 TO 13 - 1
U430	1 SERIES OF 11	2 - 4 TO 8 - 2

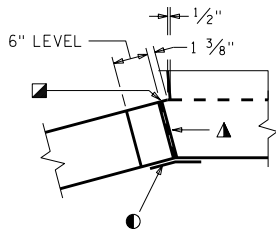
▲ 3/4" FILLER TYPICAL. EXTEND FILLER FROM HORIZ. CONST. JT. TO TOP OF WING.

■ 1" BEVEL TYPICAL

● 18" RUBBERIZED MEMBRANE WATER-PROOFING, EXTEND FROM HORIZ. CONST. JT. TO TOP OF WALL.

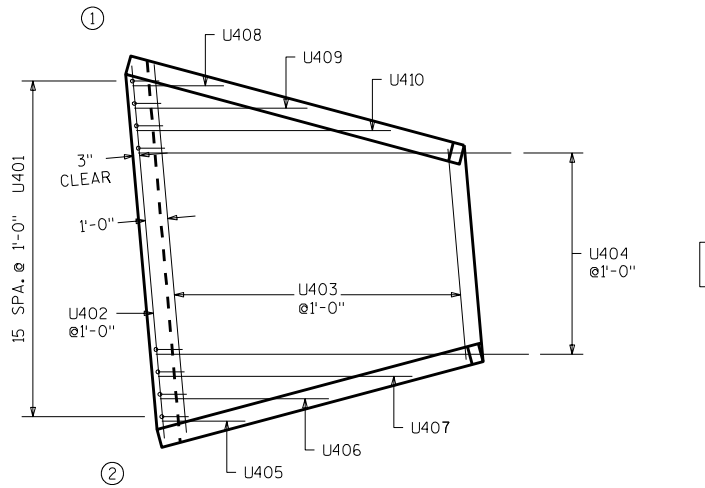
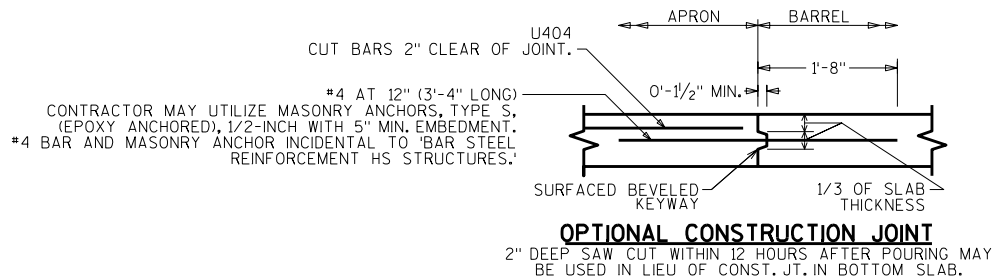


CORNER 1

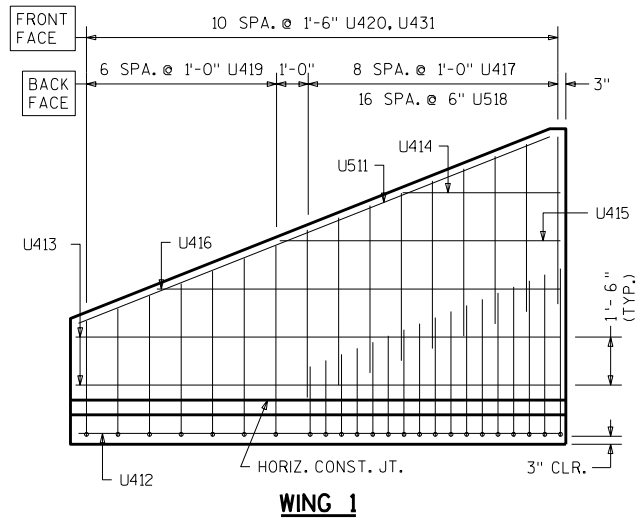


CORNER 2

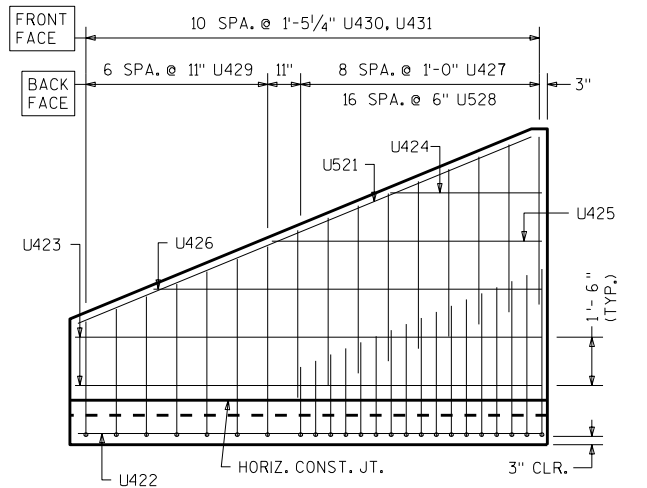
CORNER DETAILS



APRON REINF.

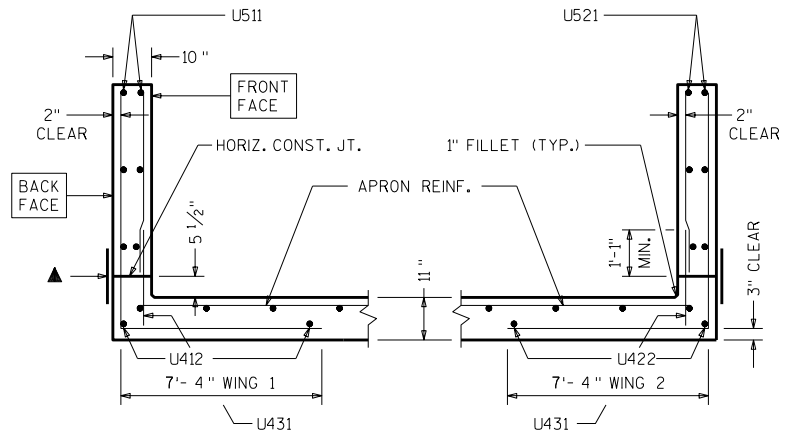


WING 1



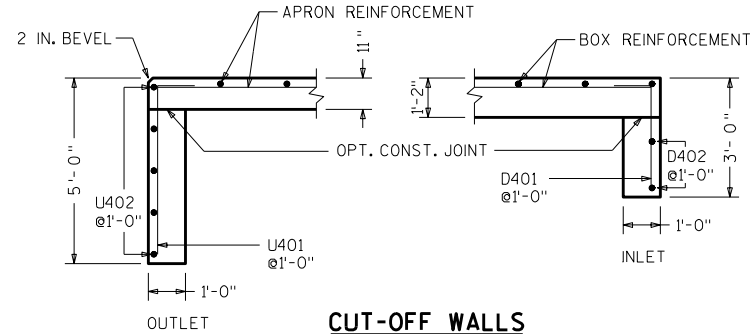
WING 2

▲ 18" RUBBERIZED MEMBRANE WATER-PROOFING, PLACE ALONG HORIZ. CONST. JT. FOR ENTIRE WING LENGTH (TYP.).



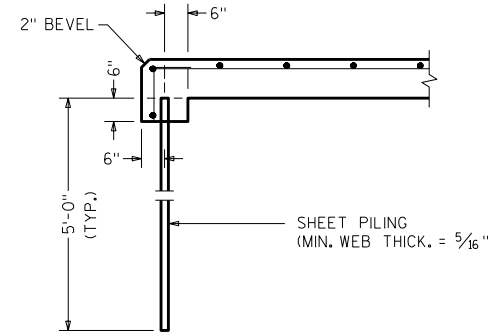
SECTION THRU WINGS

AT RIGHT ANGLES TO WING WALLS



CUT-OFF WALLS

SECTION THRU THE WALLS



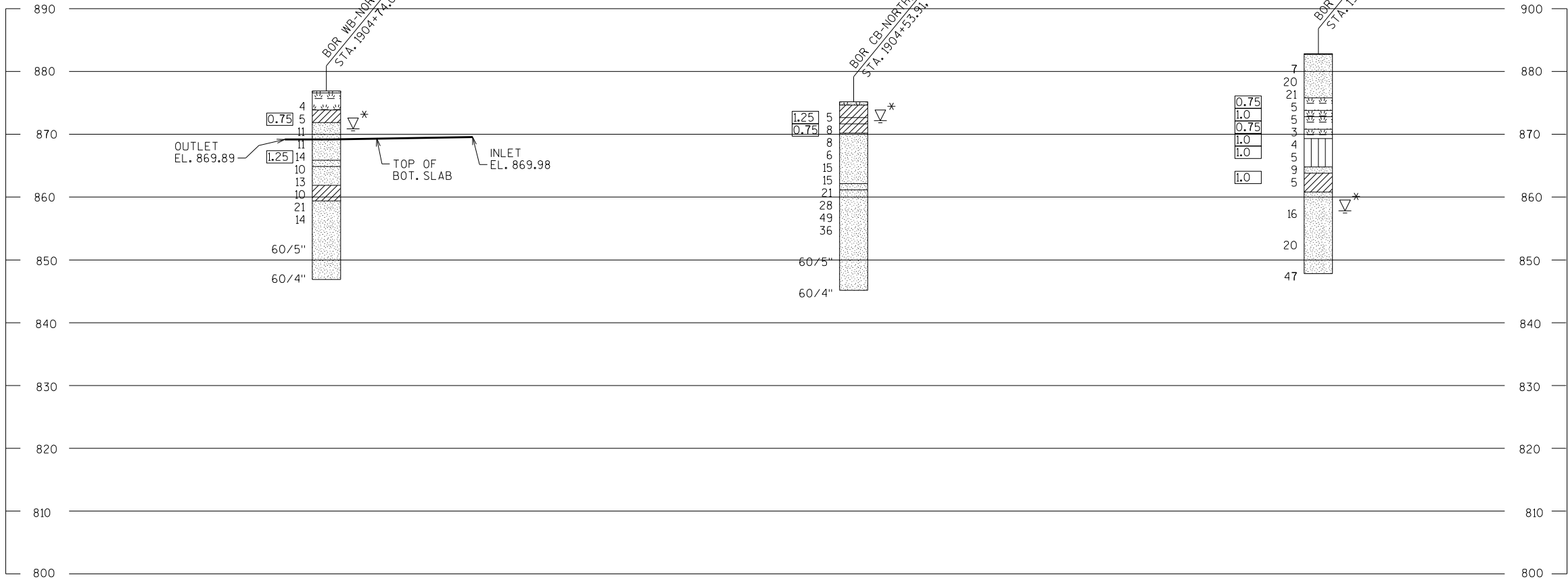
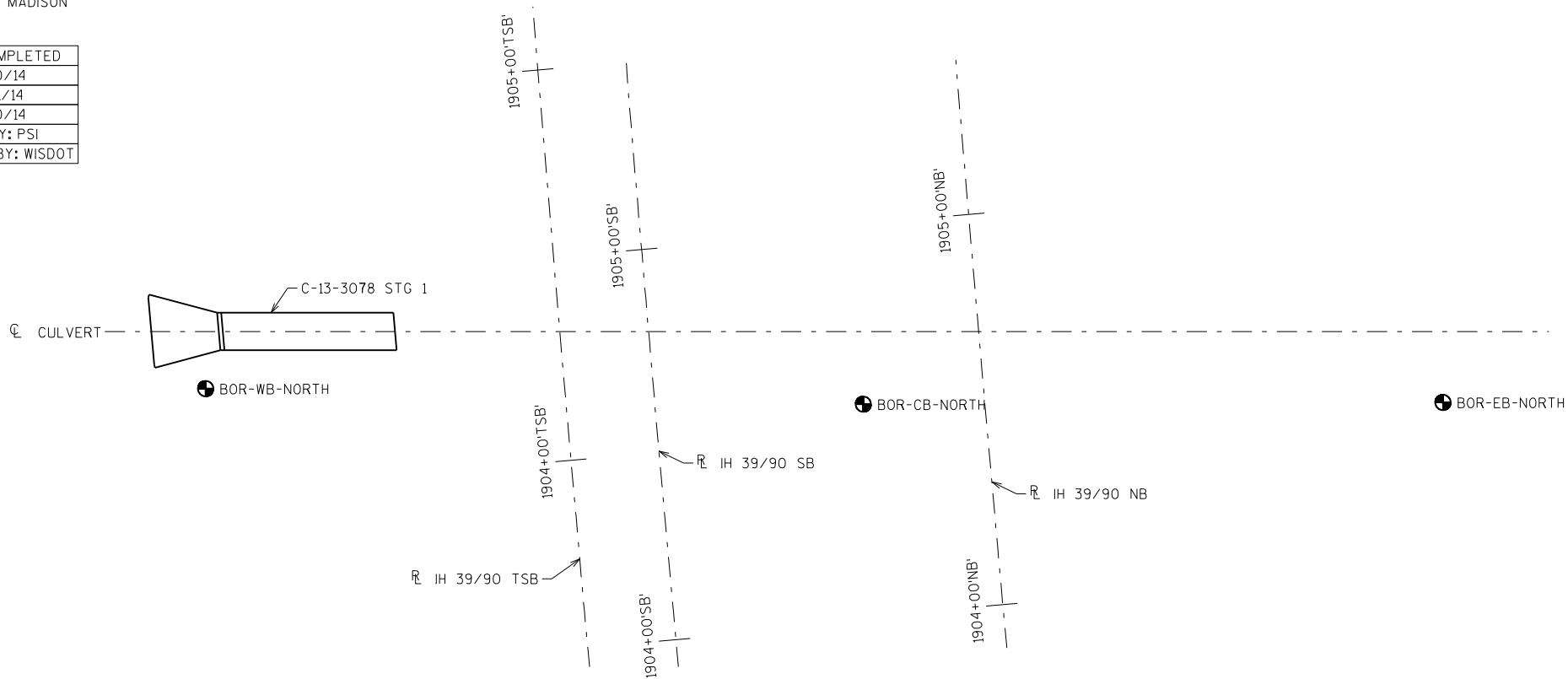
ALTERNATE CUT-OFF WALLS

THE ABOVE ALT. MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONC. CUT-OFF WALLS. PAYMENT WILL BE BASED ON THE CONC. CUT-OFF WALLS.

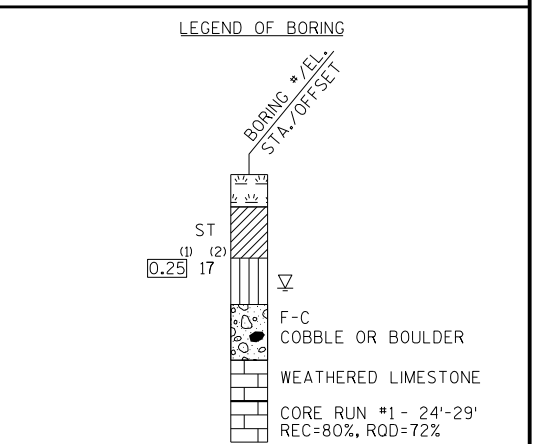
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-13-3078 STG 1			
DRAWN BY		MWB	PLANS CK'D. DFD
APRON DETAILS		SHEET	3
			638

ILLINOIS STATE LINE - MADISON

BORING #	DATE COMPLETED
WB-SOUTH	3/20/14
CB-NORTH	3/21/14
EB-NORTH	3/20/14
BORINGS COMPLETE BY: PSI	
REPORT COMPLETED BY: WISDOT	



STATE PROJECT NUMBER		
1007-10-79		
MATERIAL SYMBOLS		
ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/META



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-13-3078 STG 1			
DRAWN BY PR/MWB		PLANS CKD. DFD	
SUBSURFACE EXPLORATION			SHEET 4
			639

* THE GROUND WATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.

DESIGN DATA

SIGN STRUCTURE WAS DESIGNED BASED ON THE FOLLOWING:
VARIABLE MESSAGE SIGN (VMS) PARAMETERS:
SIGN AREA - 223 SF
SIGN WEIGHT - 4000 LB.

ADDITIONAL SIGN AREA - 307 SF
MAX. SIGN DEPTH - 8'-10"
THE WEIGHT OF ADDITIONAL SIGN PANEL AND BRACKETS IS EQUIVALENT TO 3.0 PSF ASSUMED EVENLY DISTRIBUTED TO SIGN AREA.

DESIGNED ACCORDING TO AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS".

DEAD LOAD - 3 PSF OF SIGN, WT. OF SUPPORTING STRUCTURE, CATWALK AND RAILINGS.
LIVE LOAD - SINGLE LINE LOAD OF 500 LBS. DISTRIBUTED OVER 2'-0" OF CATWALK.
ICE LOAD - 3 PSF TO ONE FACE OF SIGN AND AROUND SURFACE OF MEMBERS
WIND PRESSURE - 90 MPH (3-SECOND GUST) TO SIGN AREA AND EXPOSED MEMBERS

WIND COMPONENTS	NORMAL	TRANSVERSE
COMBINATION 1	1.0	0.2
COMBINATION 2	0.6	0.3

GROUP LOADS	% OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD + WIND	133
3. DEAD + ICE + 1/2 (WIND)*	133

*MIN. VALUE OF 25 PSF FOR GROUP 3

MATERIAL PROPERTIES

CONCRETE MASONRY.....	f'c = 3.5 K.S.I.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....	fy = 60 K.S.I.
UPRIGHT, API-5L-X42.....	fy=42,000 PSI
STRUCTURAL ANGLES, PLATES & BARS, ASTM A709 GRADE 36.....	fy=36,000 PSI
ANCHOR BOLTS, ASTM F1554 GRADE 55.....	fy=55,000 PSI
HIGH STRENGTH BOLTS, A325.....	fy=92,000 PSI
STRUCTURAL MEMBERS GALVANIZED.....	A123
HARDWARE GALVANIZED.....	A153 CLASS C

FOUNDATION DATA

THE FOLLOWING ASSUMPTIONS WERE USED FOR THE DESIGN OF THE FOUNDATION SYSTEM. A GEOTECHNICAL REPORT HAS BEEN PREPARED FOR THIS STRUCTURE AND IS AVAILABLE UPON REQUEST FROM WISDOT SW REGION.

ALLOWABLE END BEARING PRESSURE 4.0 TSF

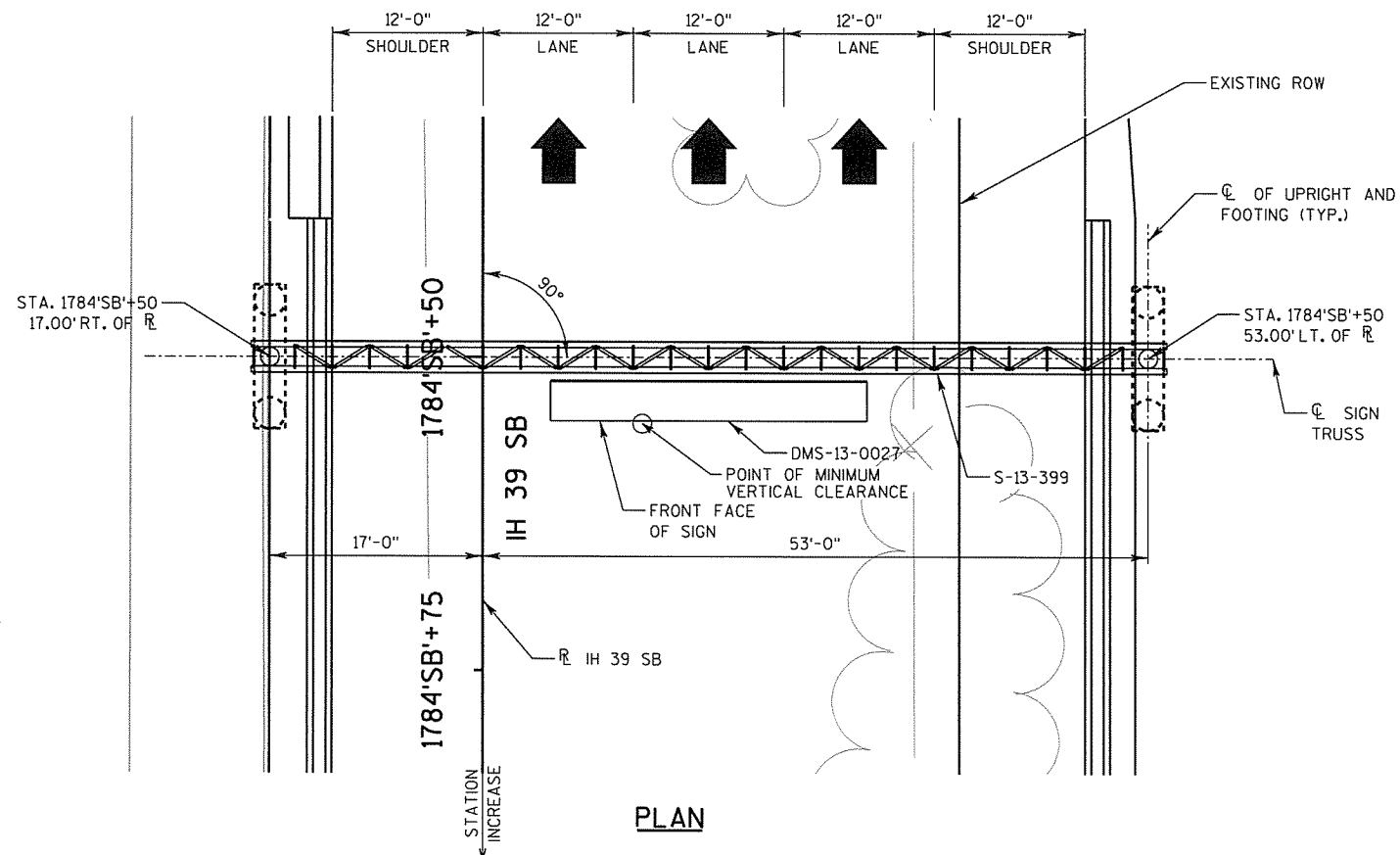
TEMPORARY CASING SHOULD BE PLANNED DURING THE EXCAVATION OF THE DRILLED SHAFT FOUNDATION. CONTRACTOR SHOULD BE PREPARED TO UTILIZED DRILLING MUD OR OTHER TECHNIQUES DURING CONSTRUCTION IF A CLEAN, STABLE EXCAVATION BASE IS NOT MAINTAINED.

LIST OF DRAWINGS

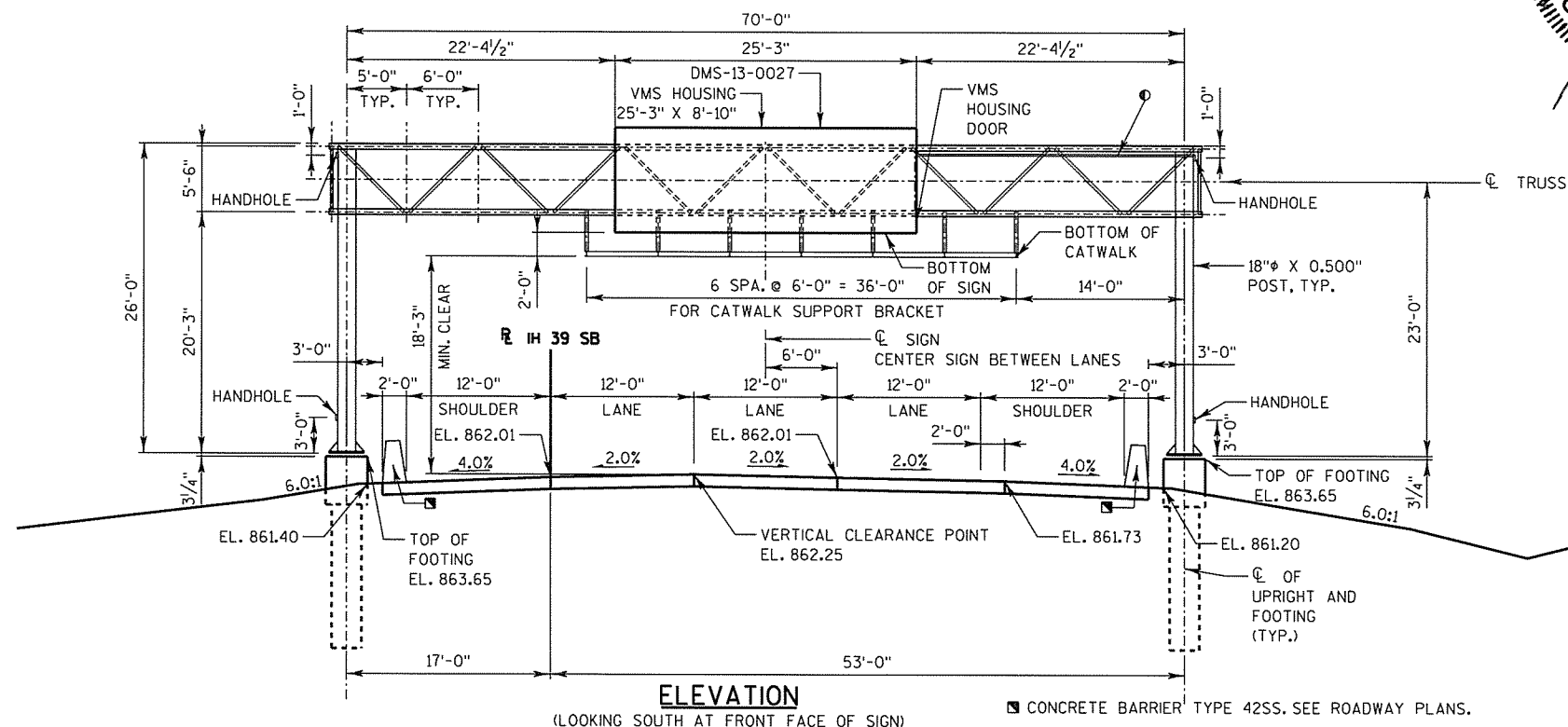
1. PLAN AND ELEVATION
2. SIGN BRIDGE NOTES & DETAILS
3. SUBSURFACE EXPLORATION
4. SIGN BRIDGE DETAILS
5. VMS SIGN PANEL MOUNTING DETAILS
6. CATWALK DETAILS
7. HANDHOLE DETAILS
8. TRUSS POST CONNECTION & BASE PLATES
9. EAST FOOTING DETAILS
10. WEST FOOTING DETAILS

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE: WILLIAM DREHER (608) 266-8489
CONSULTANT: MICHAEL D. RADTKE (414) 347-1607



PLAN



ELEVATION

(LOOKING SOUTH AT FRONT FACE OF SIGN)

■ CONCRETE BARRIER TYPE 42SS. SEE ROADWAY PLANS.

- PROVIDE TWO "CONDUIT RIGID METALLIC 2-INCH" TO RUN FROM THE TOP UPRIGHT HANHOLE TO THE BASE OF THE DMS SIGN. TWO 2-INCH FLEXIBLE CONDUITS SHALL BE PROVIDED TO CONNECT THE RIGID METALLIC CONDUIT TO THE BACK OF THE DMS SIGN AND IS INCLUDED IN THE BID ITEM "CONDUIT RIGID METALLIC 2-INCH".

BENCH MARK

NO.	STATION	OFFSET	DESCRIPTION	ELEV.
558A	1754+67.17 'NB'	61.10' RT	"X" ON NW SIGN BOLT	853.80
559A	1823+53.05 'SB'	20.83' LT	"X" ON SE SIGN BOLT	887.49

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEM	UNIT	QUANTITY
636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	28
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT	LB	4675
641.6600	SIGN BRIDGE S-13-0399	LS	1
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	70

ALL ITEMS ARE CATEGORY 6000.
DYNAMIC MESSAGE SIGN AND HOUSING WILL BE STATE-FURNISHED.
SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR INSTALLATION.

NO.	DATE	REVISION	BY
emcs 1300 W. Canal Street, Suite 200 Milwaukee, WI 53233 414.347.1607 Fax 414.347.1347			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION ACCEPTED <i>William C. Dreher</i> 11/18/15 CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE S-13-399			
IH 39 SB BRIDGE TRUSS			
COUNTY	DANE	TOWN	ALBION
DESIGN SPEC.			
AASHTO STD. SPEC. FOR STR. SUPPORTS			
DESIGNED BY	SKR	DESIGN CK'D.	MDR
DRAWN BY	SKR	PLANS CK'D.	MDR
PLAN AND ELEVATION			SHEET 1 OF 10 640

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ELEVATIONS ARE IN FEET UNLESS OTHERWISE SHOWN.ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO NAVD 88 DATUM.

BEVEL EXPOSED EDGES OF CONCRETE 1" UNLESS OTHERWISE NOTED.

THE FIRST DIGIT OF A THREE DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK INDICATE THE SIZE OF THE BAR.

USE 3" CLEAR CONCRETE COVER FOR ALL REINFORCEMENT UNLESS OTHERWISE NOTED.

THE COST FOR A SIGN BRIDGE IDENTIFICATION PLAQUE IS INCLUDED IN BID ITEM "SIGN BRIDGE S-13-399". LOCATE AND FABRICATE IN ACCORDANCE WITH S.D.D. 12A 4 "STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS".

SIGNS OR BLANKS SHALL BE INSTALLED ON TRUSS AT TIME OF ERECTION.BLANKS SHALL BE 1/4 THE LENGTH OF THE BRIDGE,2'-0" DEEPER THAN CENTER TO CENTER OF CHORDS AND SHALL BE CENTERED ON THE BRIDGE. SIGNS SHALL BE AS DESIGNATED IN PLANS.

THE UPPER 1-6" OF ANCHOR BOLTS,NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH THE AASHTO SPECIFICATION AS STATED IN SECTION 641OF THE WISDOT STANDARD SPECIFICATIONS.

SIGN BRIDGE IS TO BE LOCATED NORMAL TO THE REFERENCE LINE.THE CONTRACTOR SHALL VERIFY LOCATIONS OF ELECTRICAL FEEDS PRIOR TO FABRICATION OF SIGN BRIDGE MEMBERS.

HANDHOLES AND GROUND RODS ARE REQUIRED.

ALTERNATE DESIGNS ARE NOT ALLOWED.

ALL COMPONENTS SHALL BE GALVANIZED AFTER FABRICATION EXCEPT REINFORCEMENT BARS, LOWER PORTION OF ANCHOR RODS, ALUMINUM AND OTHER NON FERROUS INCIDENTALS.

TRUSS SECTIONS SHALL BE MADE IN MULTIPLES OF 6'-0" EXCEPT THAT THE BRACING PANEL NEAREST EACH POST MAY VARY TO MAKE UP THE NEEDED SECTION LENGTH.WELDED CHORD SPLICES ARE NOT PERMITTED.

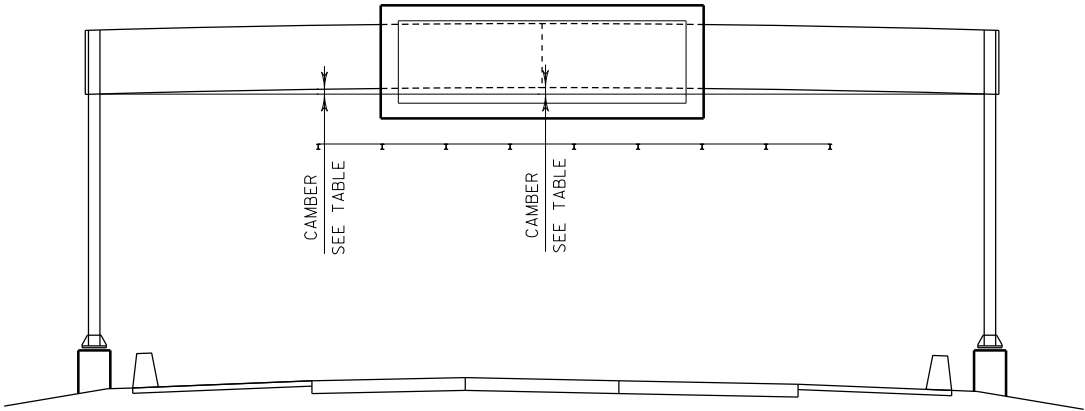
UNLESS NOTED OTHERWISE ALL BOLTED CONNECTIONS SHALL BE MADE WITH 3/4" ϕ A325 BOLTS, GALVANIZED ASTM A153,CLASS C, AND SHALL INCLUDE DTI WASHERS.

WELDED CONNECTIONS CAN BE USED IN LIEU OF BOLTED CONNECTIONS IF UNIT CAN BE GALVANIZED IN ONE PIECE.

WELD TEST AS PER AWS D1.1.

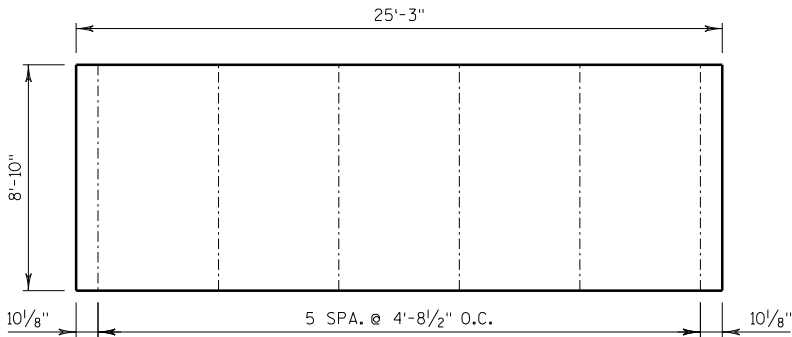
CAMBER TABLE

STRUCTURE	SPAN	CAMBER @ MIDPT (IN)	CAMBER @ 1/4 PT (IN)
S-13-399	70'-0"	1 1/4"	7/8"



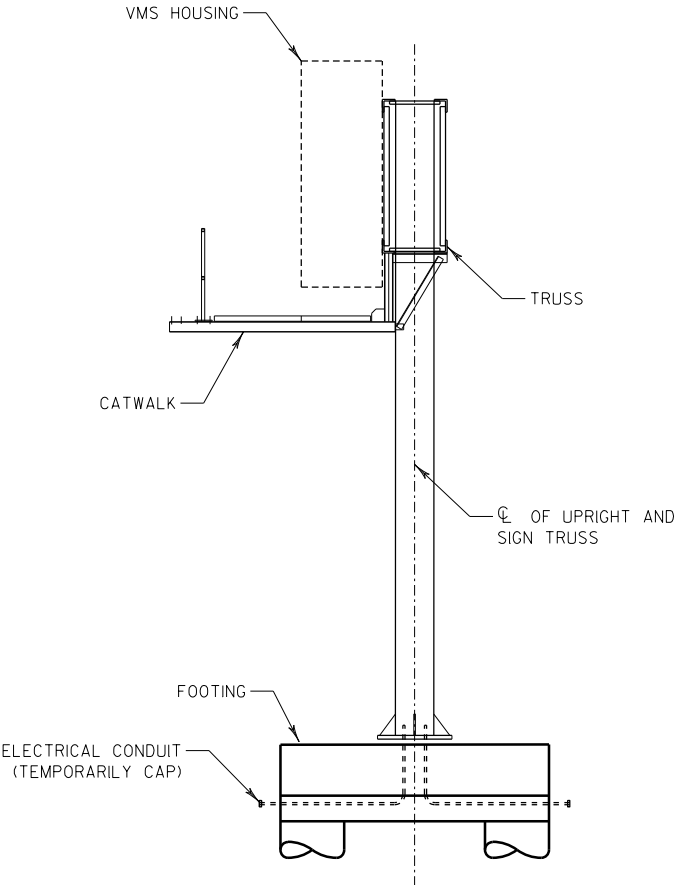
CAMBER DETAIL

NOTE: CAMBERS SHOWN ARE AT C. OF SPAN AND AT THE QUARTER POINTS



VMS PANEL MOUNTING POST SPACING DETAIL

NOTE: POST SPACING MAY BE ADJUSTED +/- 4" AS REQUIRED IF CONFLICT WITH TRUSS DETAILS IS ENCOUNTERED.



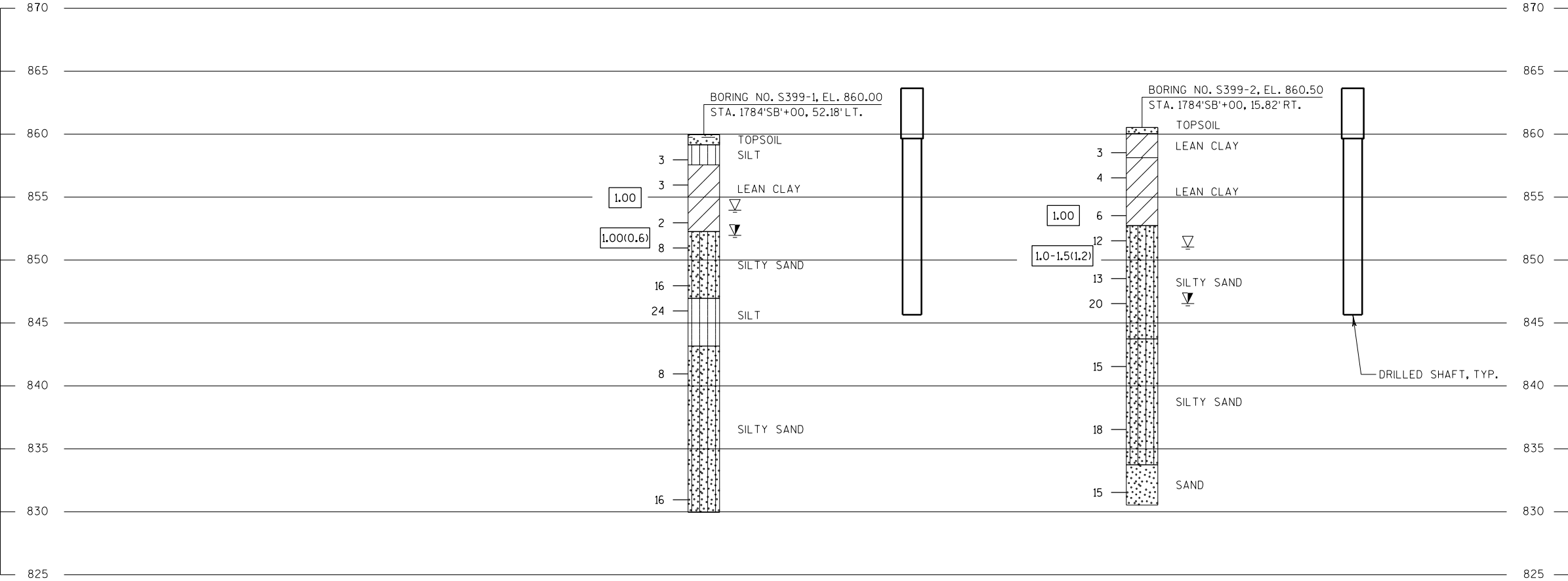
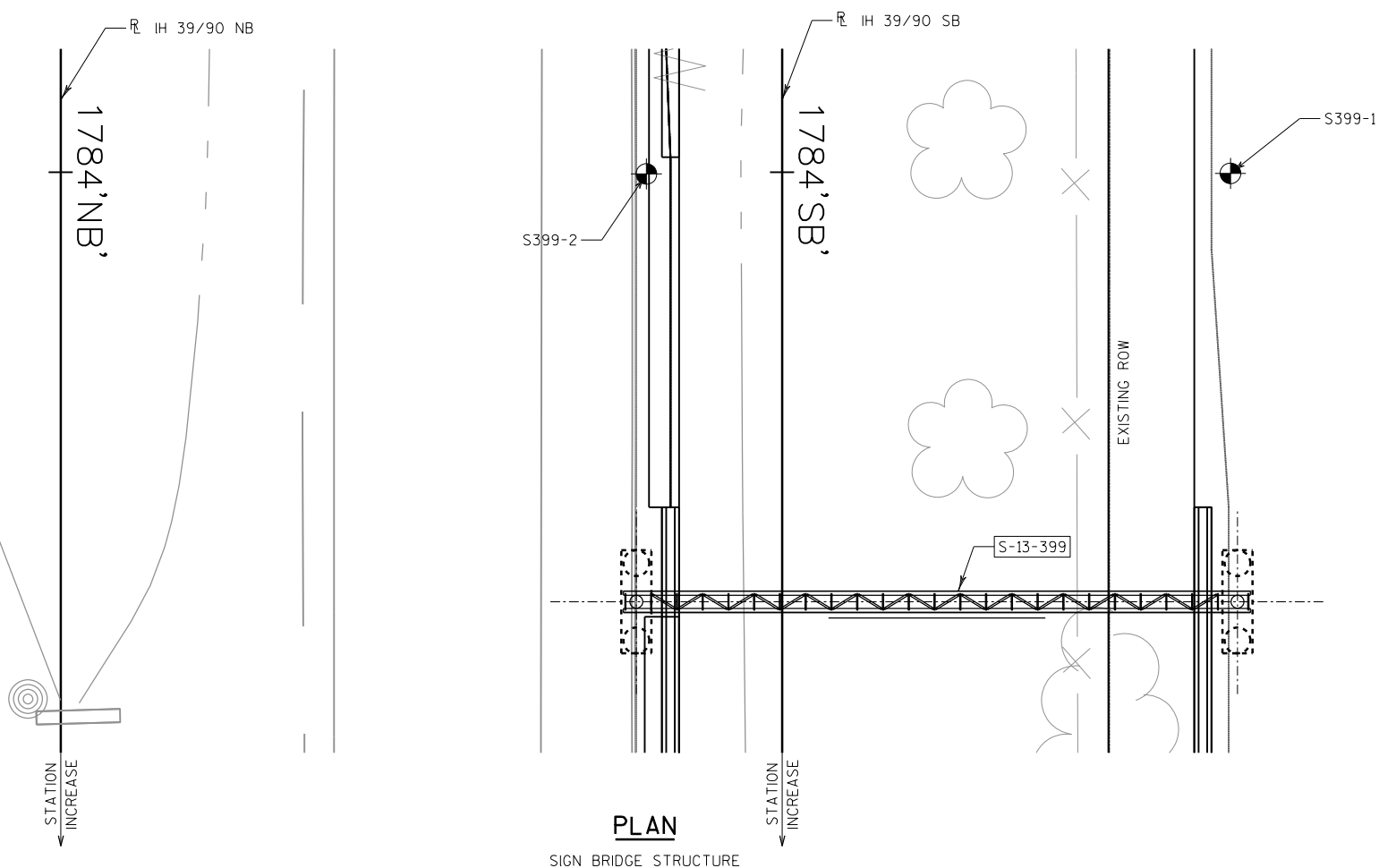
END VIEW

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-399			
DRAWN BY SKR		PLANS CK'D. MDR	
SIGN BRIDGE NOTES & DETAILS			SHFFT 2 OF 10 641

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
S399-1	JUNE 6, 2014	424333	901092
S399-2	JUNE 6, 2014	424332	901160
BORINGS COMPLETED BY: GESTRA ENGINEERING, INC.			
REPORT COMPLETED BY: GESTRA ENGINEERING, INC.			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) DANE COUNTY			

BORING STATIONS AND OFFSETS ARE
BASED ON IH 39/90 SB R.L.

⊗ DENOTES SOIL BORING LOCATION



STATE PROJECT NUMBER			
1007-10-75			
MATERIAL SYMBOLS			
ASPHALT	TOPSOIL	PEAT	
CONCRETE	FILL	GRAVEL	
SAND	CLAY	SILT	
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)	
SHALE	SANDSTONE	IGNEOUS/META	

LEGEND OF BORING	
	BORING # EL. STA./OFF-SET
	ST
	(1) 0.25 (2) 17
	▽
	F-C
	COBBLE OR BOULDER
	WEATHERED LIMESTONE
	CORE RUN #1 - 24'-29' REC=80%, ROD=72%
GROUND WATER ELEVATION	
	▽ AT TIME OF DRILLING
	▽ END OF DRILLING
	▽ AFTER DRILLING
ABBREVIATIONS	
F-FINE	M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE S-13-399			
DRAWN BY		SKR	PLANS CK'D. MDR
SUBSURFACE EXPLORATION		SHEET 3 OF 10 642	



GENERAL NOTES

TRUSS SECTIONS SHALL BE MADE IN MULTIPLES OF 6'-0", EXCEPT THAT THE BRACING PANEL NEAREST EACH POST MAY VARY TO MAKE UP THE NEEDED SECTION LENGTH.

WELDED CHORD SPLICES ARE NOT PERMITTED.

UNLESS OTHERWISE SHOWN, ALL WELDS SHALL BE 1/4" FILLET
WELDS ALL AROUND.

BOLTED SPLICES SHALL NOT BE LOCATED BEHIND VMS SIGNS.

PROVIDE TWO 1/16" BRASS, STAINLESS STEEL OR GALVANIZED STEEL SHIMS AT EACH FLANGE TO BRING TRUSS INTO CORRECT CAMBER AND ALIGNMENT.

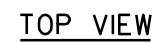
TRUSSES SHALL BE SHOP ASSEMBLED AND MATCH MARKED.

ALL VIEWS OF THE TRUSSES ARE DRAWN FROM THE INSIDE OF THE TRUSS LOOKING OUT.

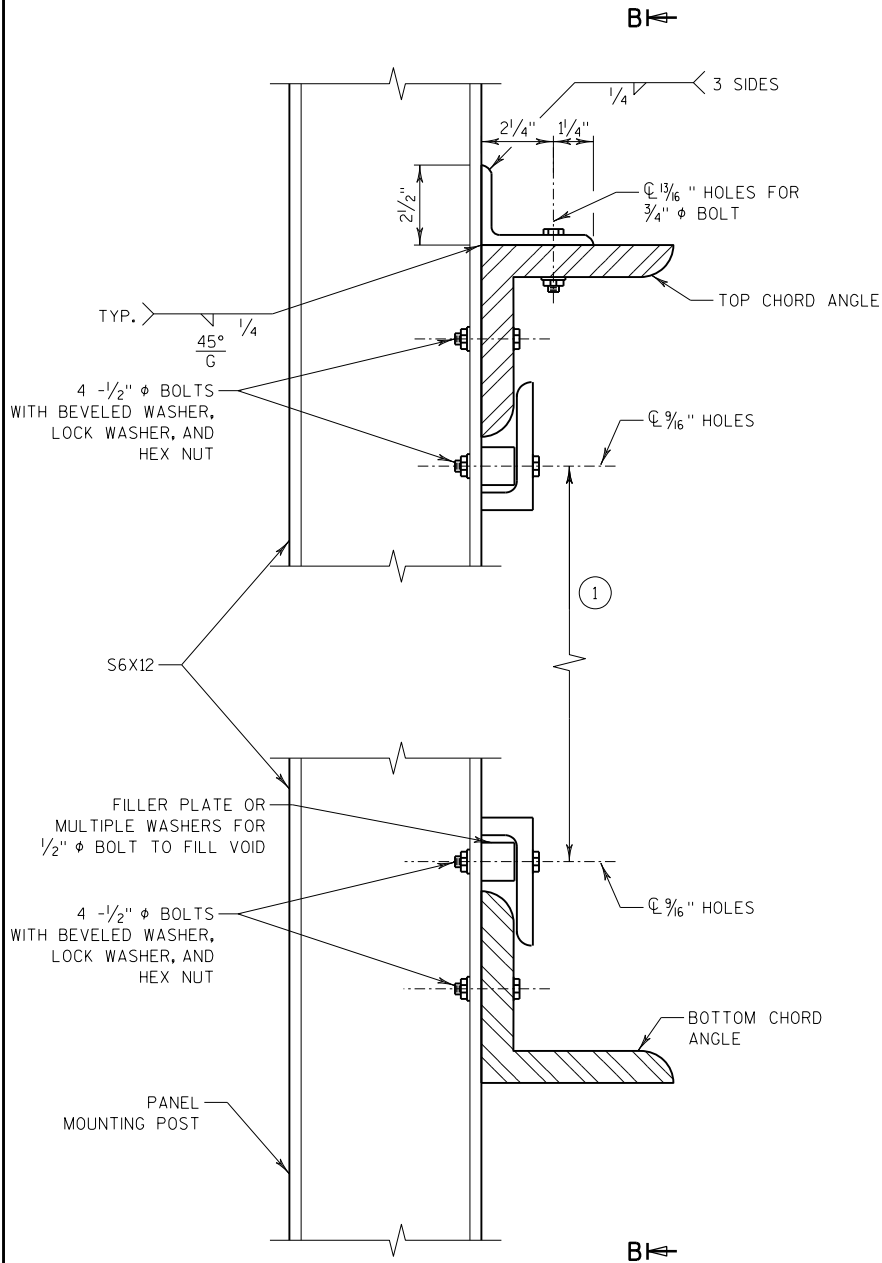
SEE DRAWING 8 FOR POST CONNECTION DETAILS.

CHORD SPLICES, IF REQUIRED, SHALL BE IN ACCORDANCE WITH PLATE "F" DETAIL.

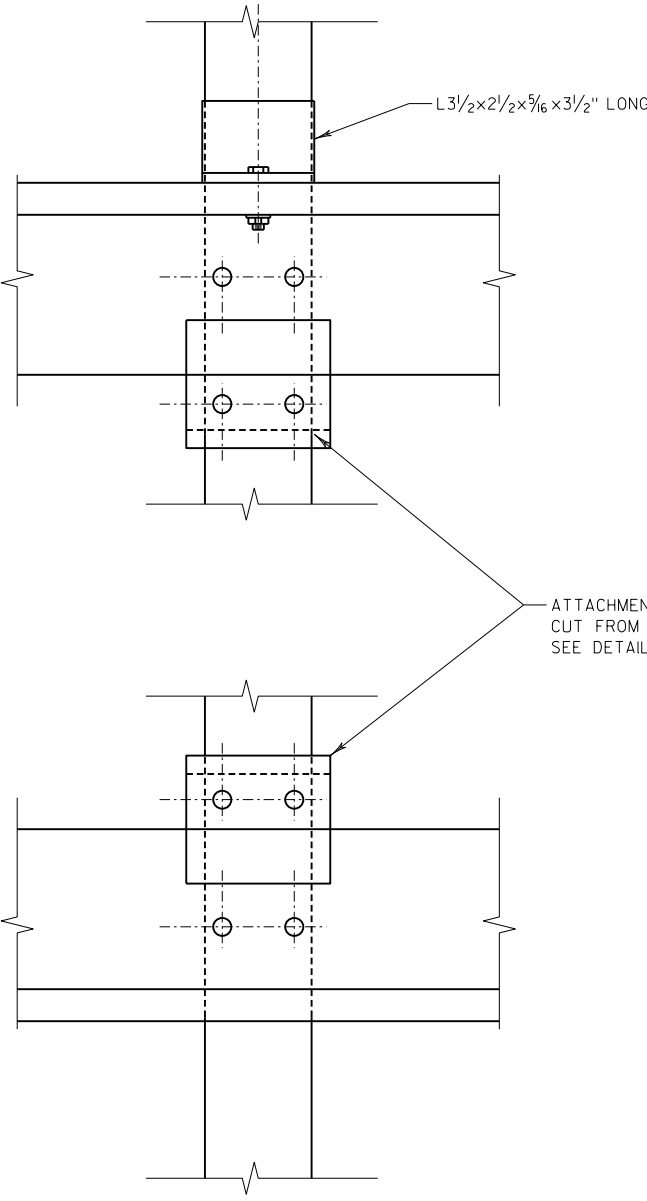
CHORD SPLICES SHALL BE AT THE TOP OF DIAGONAL MEMBERS FOR PROPER WELDING.



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-399			
DRAWN BY		TEO	PLANS CK'D. MDR
SIGN BRIDGE DETAILS		SHEET 4 OF 10 643	



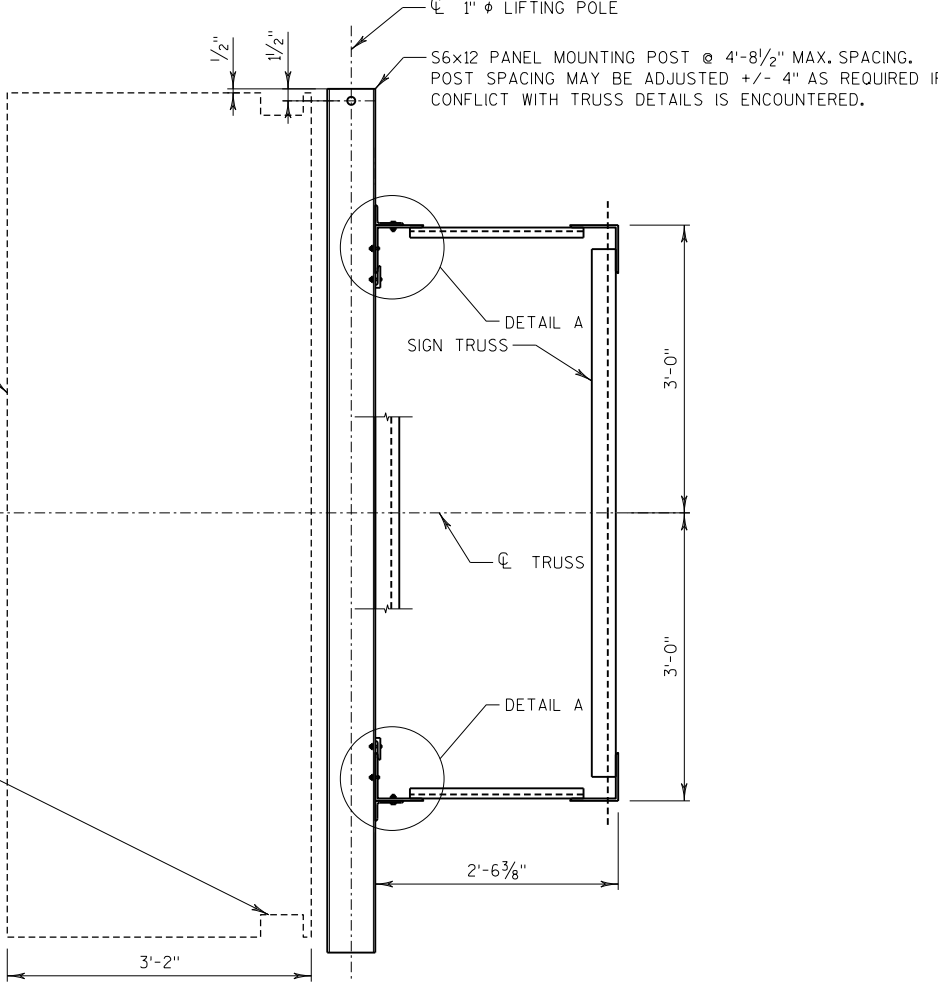
DETAIL A



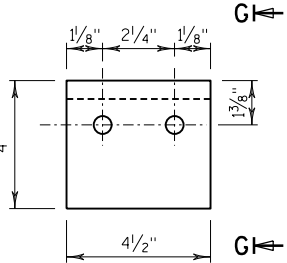
SECTION B-B

VARIABLE MESSAGE SIGN (VMS)
AND HOUSING (STATE FURNISHED)

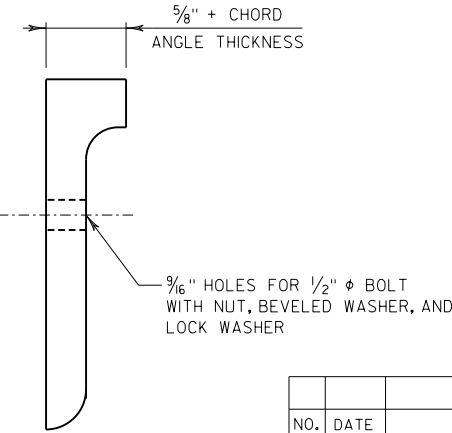
C-CHANNEL PROVIDED ENTIRE SIGN
LENGTH TOP & BOTTOM FOR MOUNTING
OF SIGN. SEE FABRICATION DETAILS.



SECTION
THRU TRUSS



DETAIL B

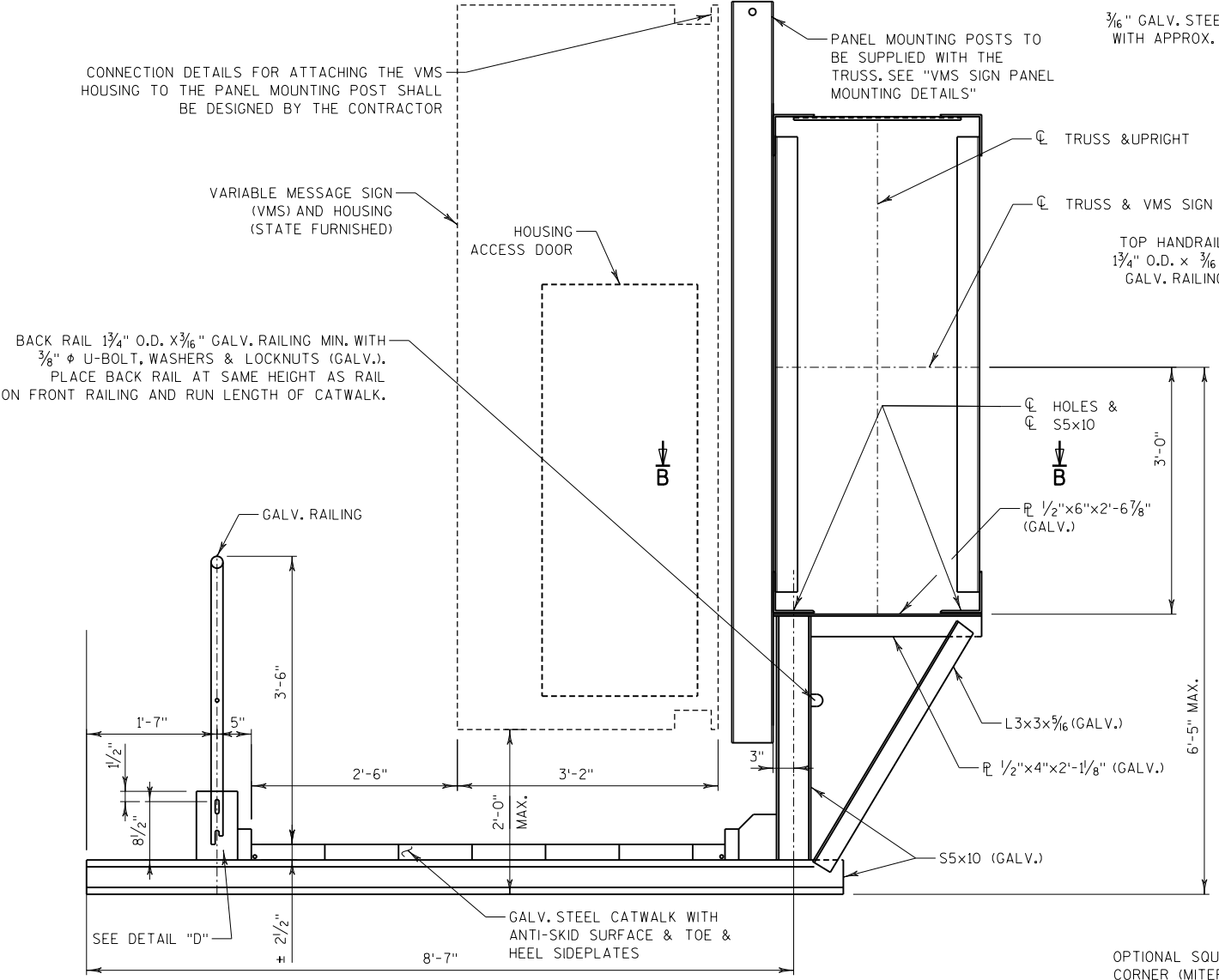


SECTION G-G

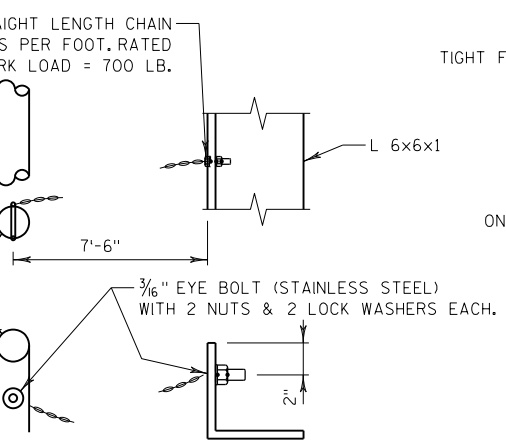
GENERAL NOTES

- 1 (TRUSS DEPTH) - (TOP & BOTTOM CHORD ANGLE LEGS) - 1/4".
- SUPPLY PANEL MOUNTING POSTS, BOLTS, MOUNTING ANGLES, AND SPACERS WITH TRUSS. THE COST OF MOUNTING THE STATE-SUPPLIED VMS SIGN TO THE TRUSS IS CONSIDERED INCLUDED IN BID ITEM 'SIGN BRIDGE S-13-399'.

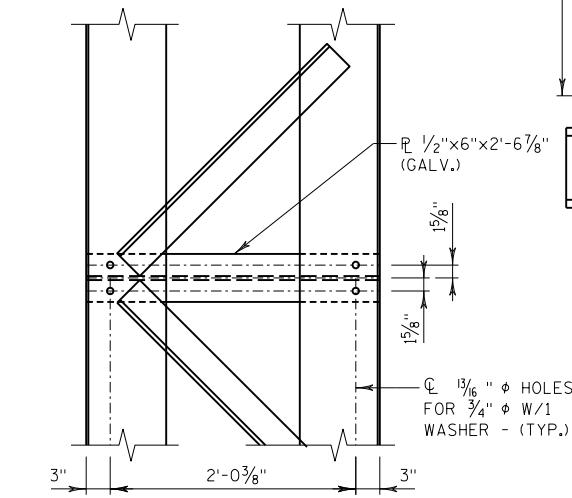
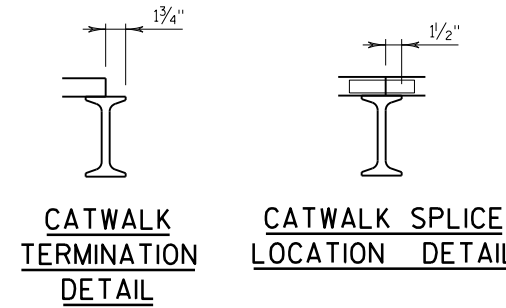
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-399			
DRAWN BY		TEO	PLANS CK'D. MDR
VMS SIGN AND PANEL MOUNTING DETAILS		SHFFT 5 OF 10 644	



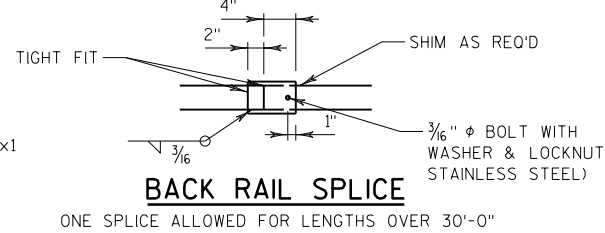
SECTION THRU WALKWAY



SAFETY CHAIN DETAIL



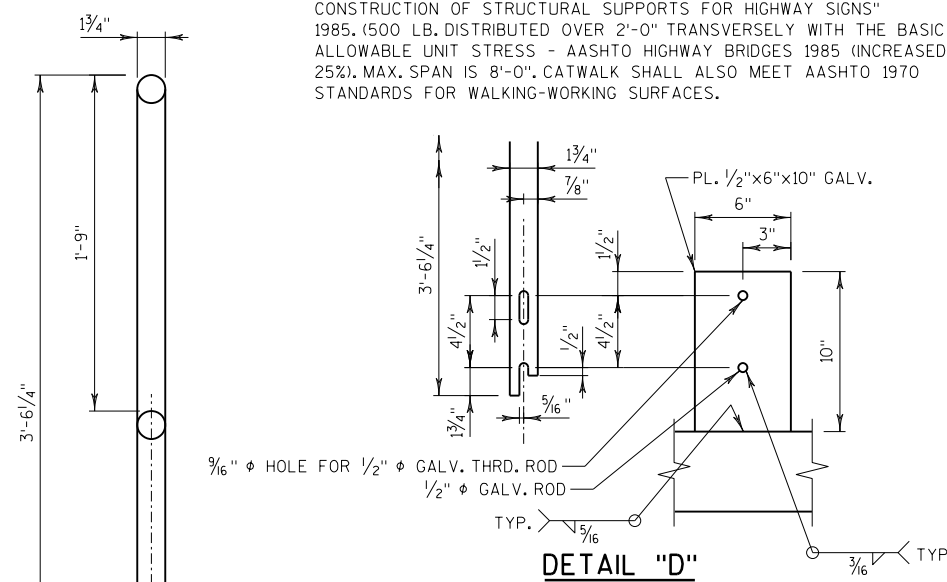
SECTION B-B



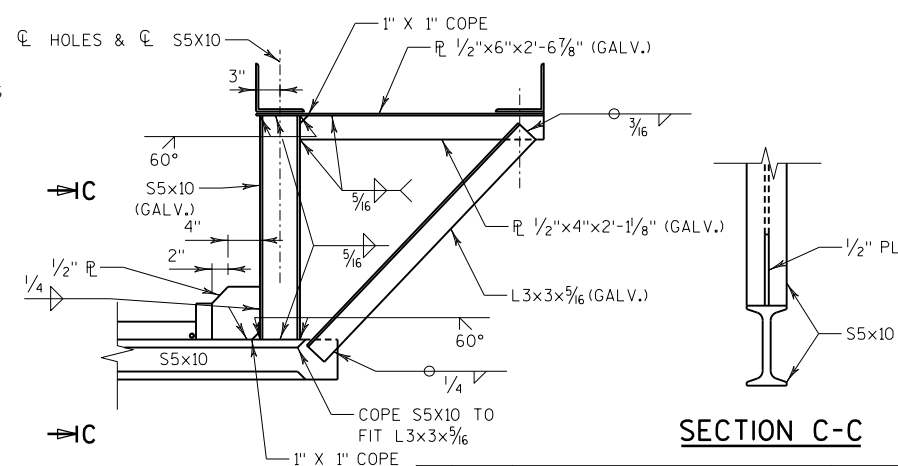
BACK RAIL SPLICE

ONE SPLICE ALLOWED FOR LENGTHS OVER 30'-0"

NOTE:
CATWALK SHALL MEET AASHTO "SPECIFICATIONS FOR THE DESIGN & CONSTRUCTION OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS" 1985. (500 LB. DISTRIBUTED OVER 2'-0" TRANSVERSELY WITH THE BASIC ALLOWABLE UNIT STRESS - AASHTO HIGHWAY BRIDGES 1985 (INCREASED 25%). MAX. SPAN IS 8'-0". CATWALK SHALL ALSO MEET AASHTO 1970 STANDARDS FOR WALKING-WORKING SURFACES.

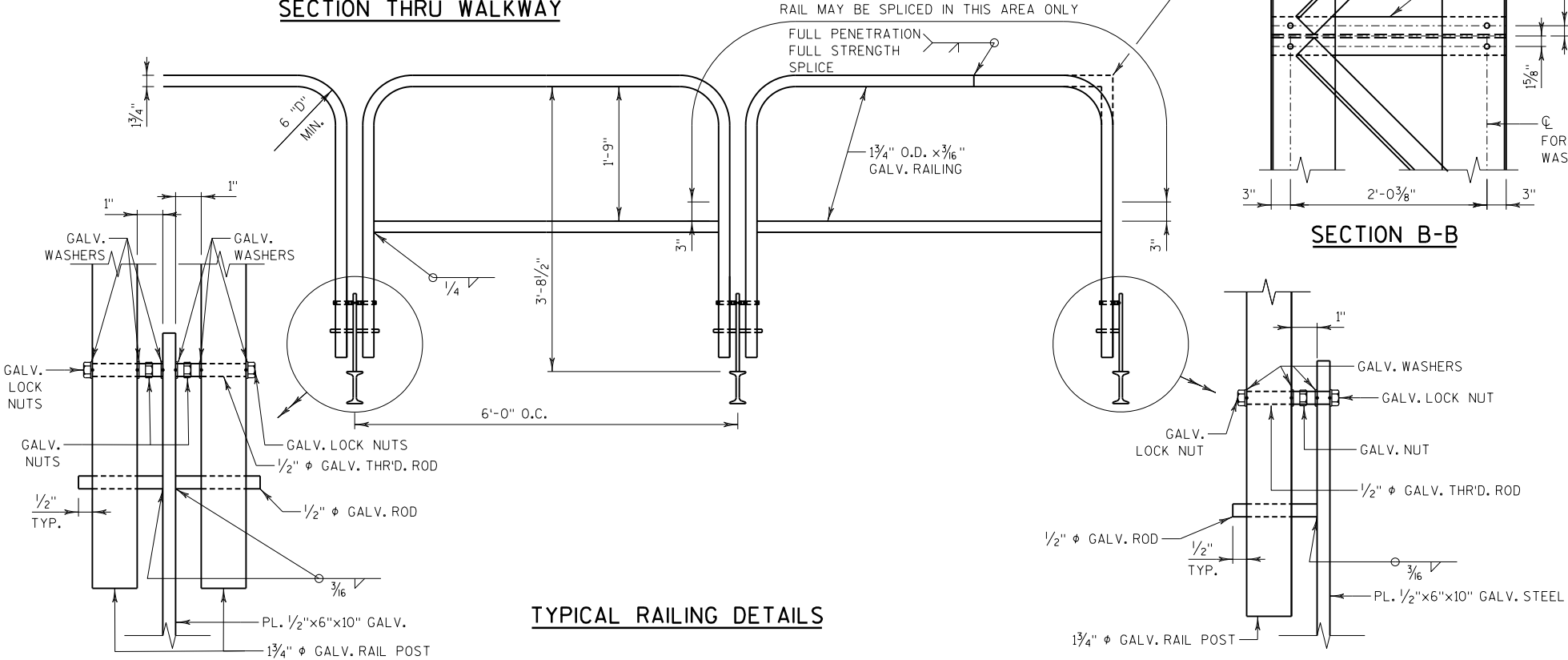


RAIL POST DETAIL



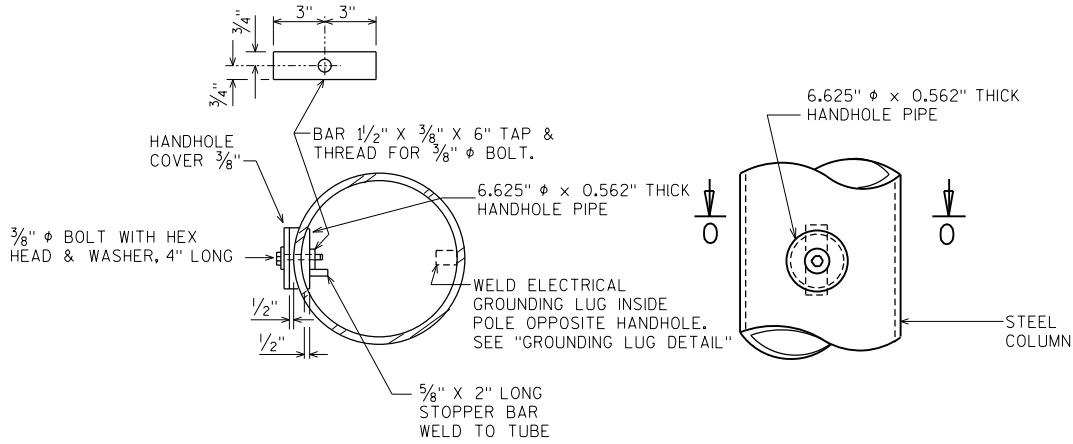
BRACKET DETAIL

SECTION C-C



TYPICAL RAILING DETAILS

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-399			
DRAWN BY		TEO	PLANS CK'D. MDR
CATWALK DETAILS			SHFFT 6 OF 10 645

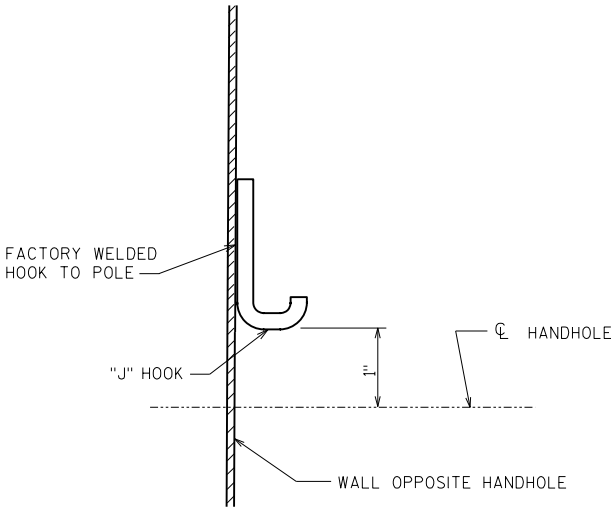


SECTION 'O'

HANDHOLE DETAILS

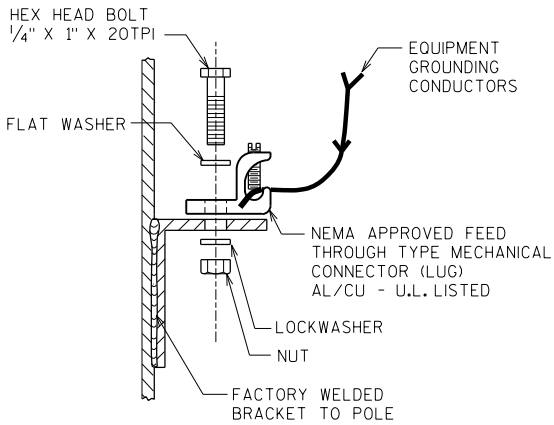
HANDHOLE NOTES

HANDHOLES SHALL BE LOCATED IN THE COLUMN AS DETAILED ON SHEET 1. COLUMNS WITH HANDHOLES SHALL BE NEAR THE ELECTRICAL SERVICE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE ELECTRICAL SERVICE ENTRANCE WITH THE DISTRICT TRAFFIC SECTION PRIOR TO FABRICATION OF THE SIGN BRIDGE COLUMNS AND MEMBERS. CONDUIT (AS REQ'D) SHALL BE LOCATED, PLACED AND SIZED AS SHOWN IN THIS PLAN SET AND ON THE ELECTRICAL DETAIL PLAN SHEETS.



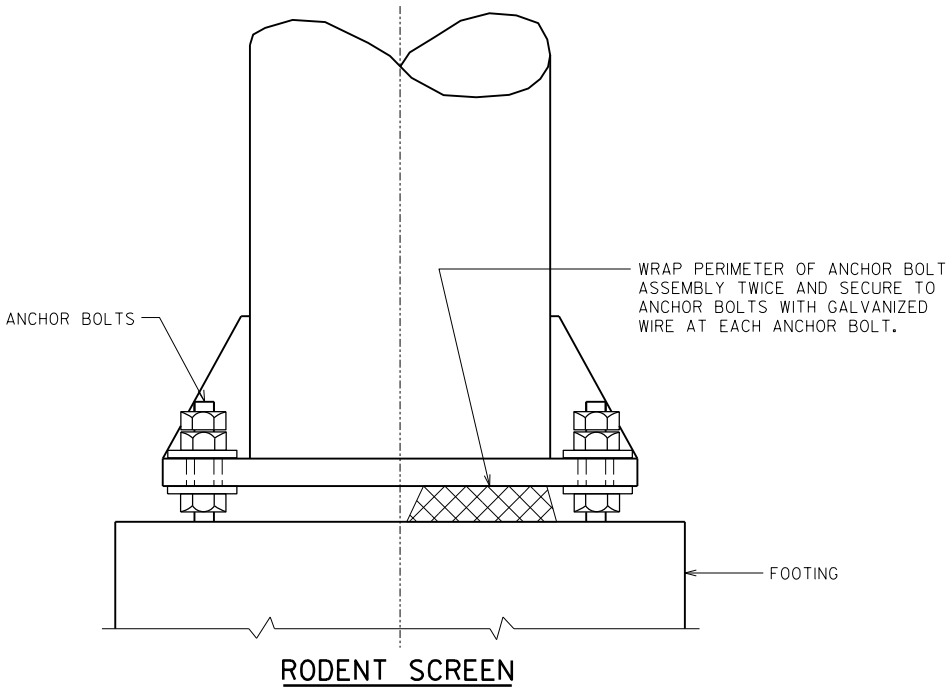
TYPICAL "J" HOOK LOCATION

THE "J" HOOK SHALL BE FACTORY WELDED TO THE INSIDE OF THE COLUMN. THE "J" HOOK SHALL BE ATTACHED ABOVE THE CENTERLINE OF THE UPPER HANDHOLE AND MOUNTED DIRECTLY OPPOSITE THE HANDHOLE AS SHOWN IN THE DRAWING.



GROUNDING LUG DETAIL

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL.

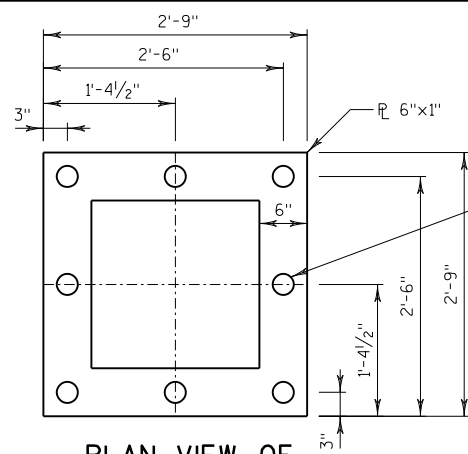


RODENT SCREEN

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-399			
DRAWN BY		TEO	PLANS CK'D. SKR
HANDHOLE DETAILS		SHFFT 7 OF 10 646	

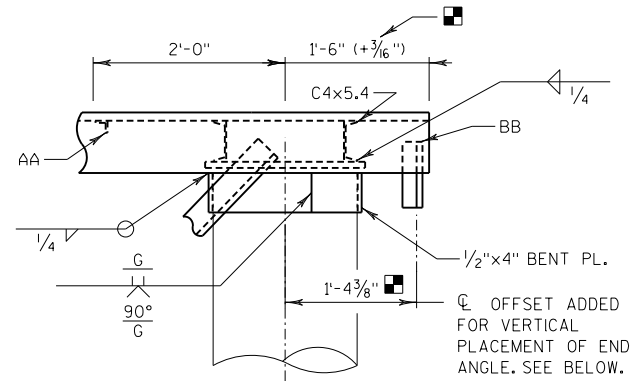
Diagram illustrating the assembly of a vertical post with the following components and dimensions:

- BURR THREADS AFTER ERECTION**: Indicated at the top of the post.
- SEMI-FINISHED HEAVY HEX NUTS**: Located near the top of the post.
- WASHER**: Located below the semi-finished heavy hex nuts.
- HEAVY HEX LEVELING NUT**: Located below the washer.
- TOP ANCHOR PLATE**: Indicated by a star symbol at the top of the post.
- BOTTOM ANCHOR PLATE**: Located at the base of the post.
- 3 NUTS BOT. ONLY, GALVANIZED NUT, NO BOT. WASHER**: Indicated at the base of the post.
- *GALVANIZE TOP 1'-6" AFTER FABRICATION**: A note indicating the galvanizing requirement for the top section of the post.
- Dimensions**:
 - 1'-2" THD.**: Dimension for the top section of the post.
 - 3'-10 1/2"**: Total dimension for the post length.
 - 6" THD.**: Dimension for the bottom section of the post.



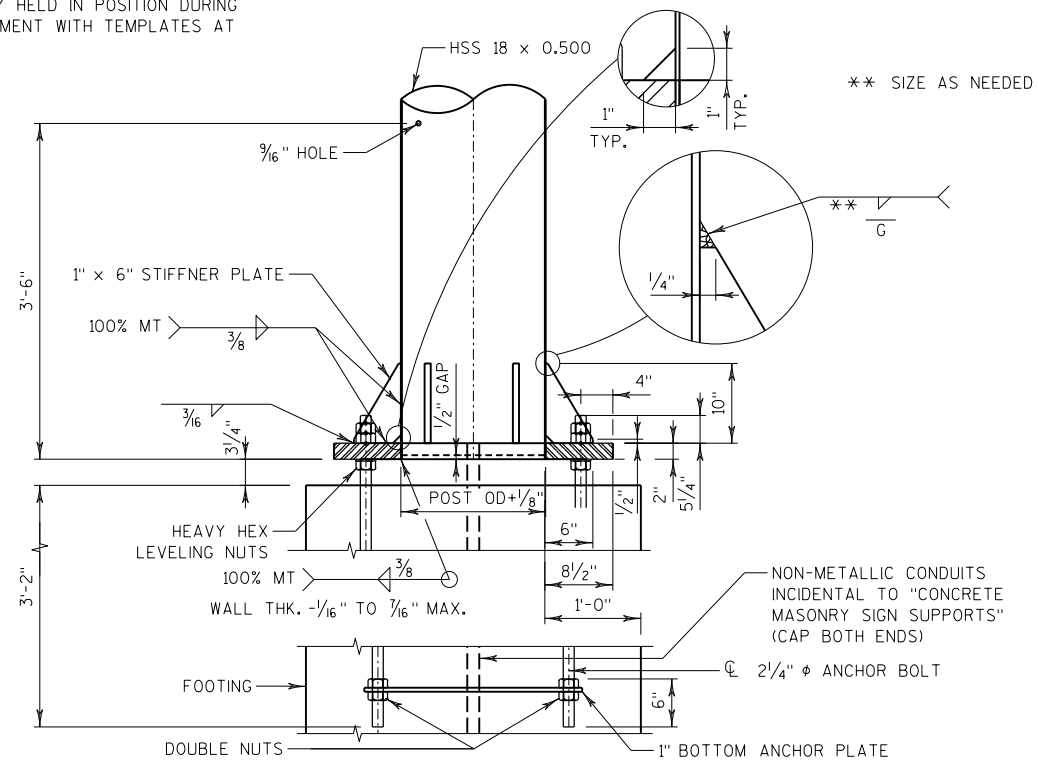
PLAN VIEW OF
TOP & BOTTOM
ANCHOR PLATES

☆ PROVIDE TOP ANCHOR PLATE AND
REMOVE AFTER CONCRETE HAS SET

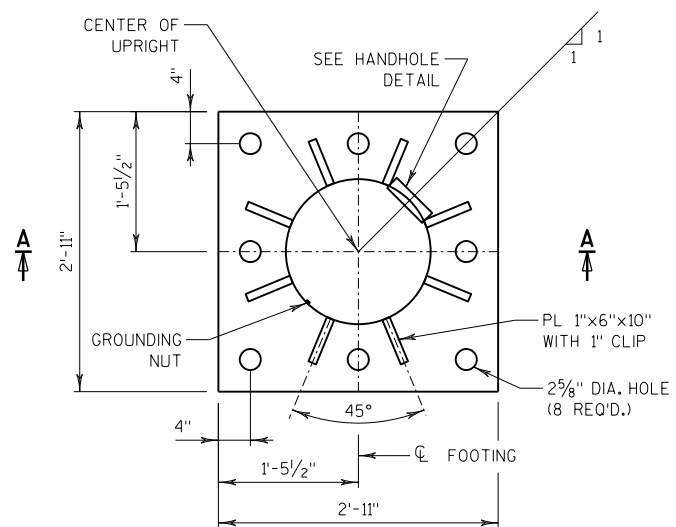


ANCHOR BOLT DETAIL

* PRIOR TO INSTALLATION, ANCHOR BOLTS SHALL BE RIGIDLY HELD IN POSITION DURING CONCRETE PLACEMENT WITH TEMPLATES AT TOP & BOTTOM

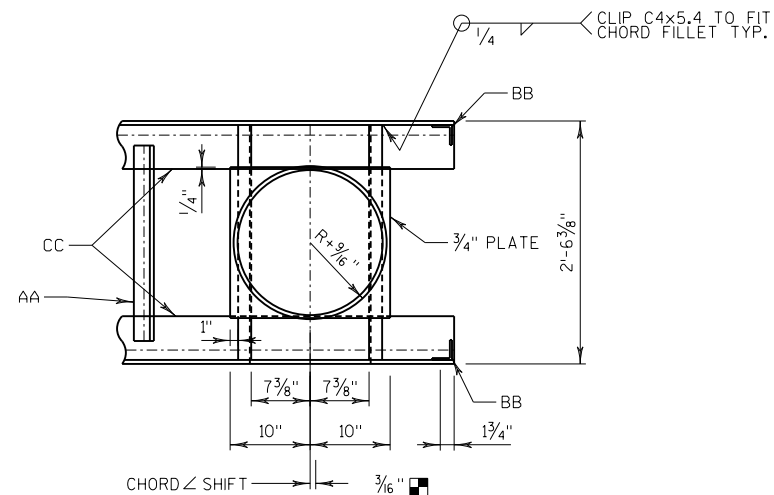


SECTION A-A

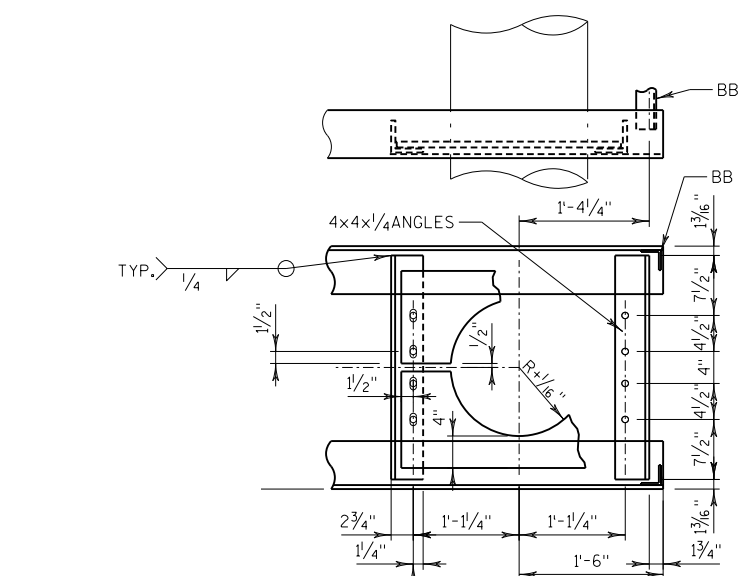


PLAN VIEW

(BASE PLATE)



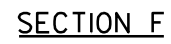
UPPER JUNCTION



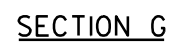
LOWER JUNCTION

$\frac{13}{16}$ " DIA. HOLES IN 4"x4"x $\frac{1}{4}$ " ANGLES
 $\frac{13}{16}$ " x $\frac{1}{4}$ " SLOTS IN $\frac{1}{2}$ " CHOKER PLATES
 FOR $\frac{3}{4}$ " DIA. BOLTS

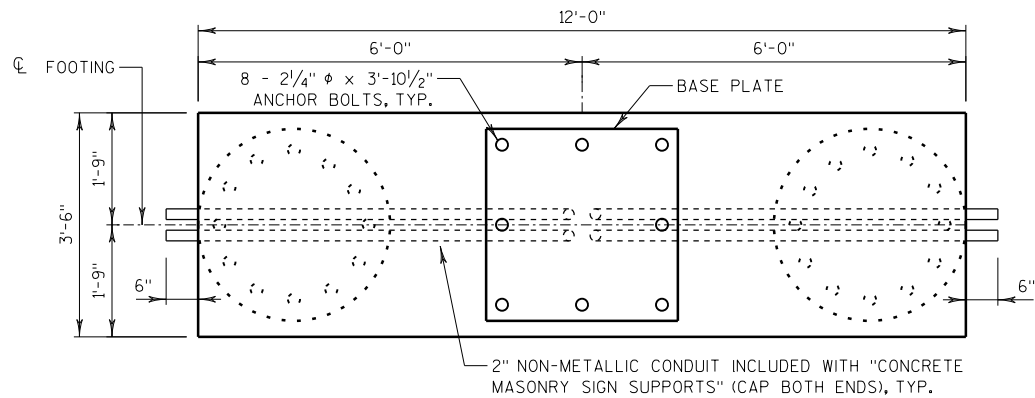
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-399			
DRAWN BY		TEO	PLANS CK'D. MDR
TRUSS POST CONNECTION & BASE PLATES		SHEET 8 OF 10 647	



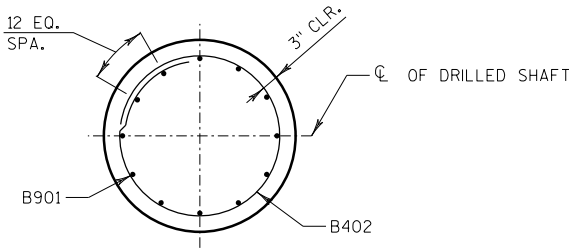
BAR MARK	COAT	NO.	LENGTH	BENT	LOCATION
A901	X	24	17'-6"		SHAFT VERT.
A402	X	28	9'-4"	X	SHAFT STIRRUP
A503	X	10	13'-8"	X	CAP STIRRUP
A804	X	10	15'-11"	X	CAP LONG.-TOP & BOT.
A505	X	8	8'-7"	X	CAP END HORIZ.
A506	X	2	10'-7"	X	CAP STIRRUP
A507	X	6	11'-6"		CAP LONG. - SIDES



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-399			
DRAWN BY		TEO	PLANS CK'D. MDR
EAST FOOTING DETAILS		SHEET 9 OF 10 648	



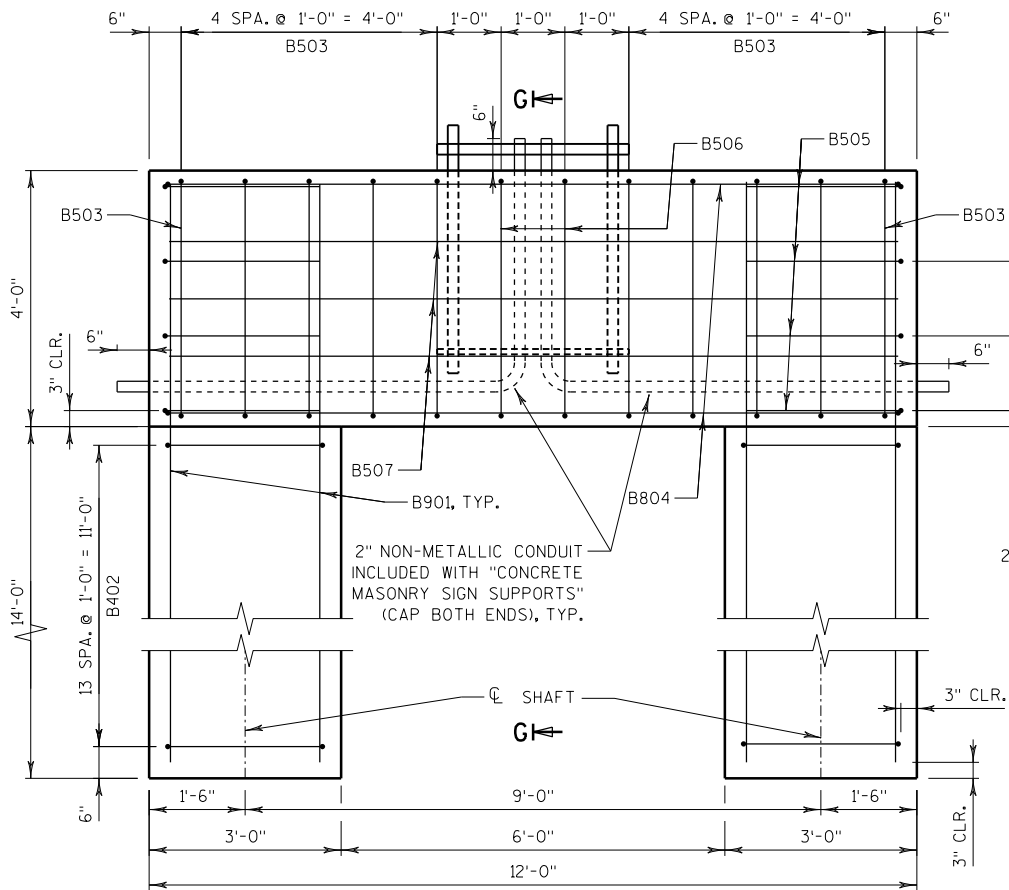
PLAN



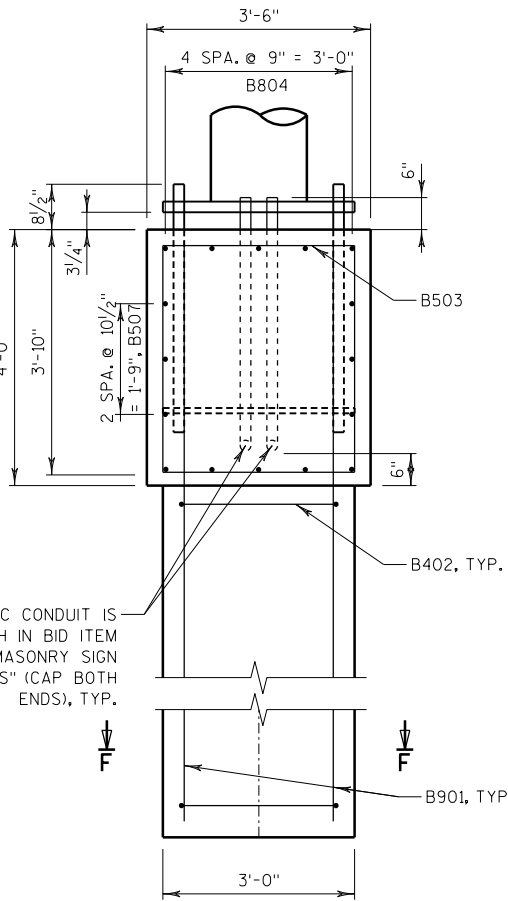
SECTION F

BILL OF BARS

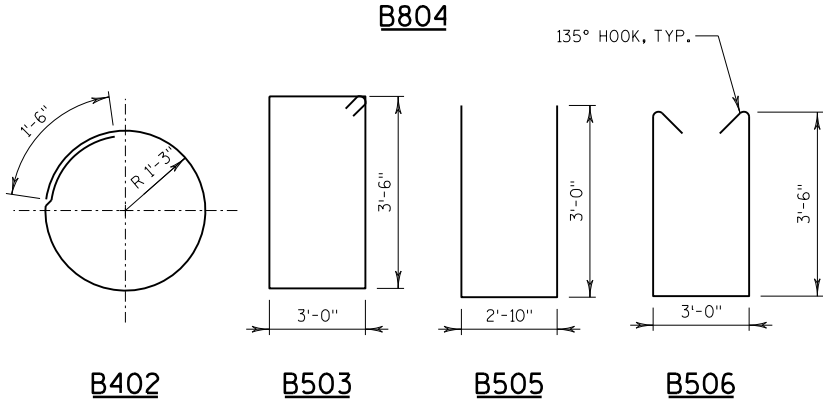
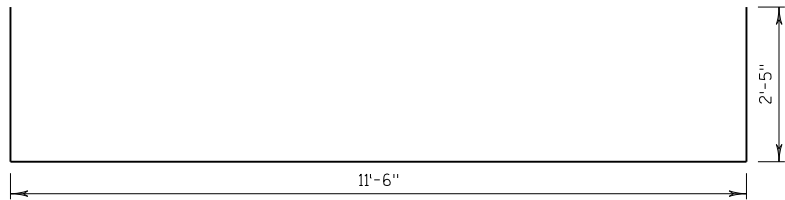
BAR MARK	COAT	NO.	LENGTH	BENT	LOCATION
B901	X	24	17'-6"		SHAFT VERT.
B402	X	28	9'-4"	X	SHAFT STIRRUP
B503	X	10	13'-8"	X	CAP STIRRUP
B804	X	10	15'-11"	X	CAP LONG.-TOP & BOT.
B505	X	8	8'-7"	X	CAP END HORIZ.
B506	X	2	10'-7"	X	CAP STIRRUP
B507	X	6	11'-6"		CAP LONG. - SIDES



ELEVATION



SECTION G



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-399			
DRAWN BY	TEO	PLANS CK'D.	MDR
WEST FOOTING DETAILS		SHFFT 10 OF 10 649	



NO.	STATION	OFFSET	DESCRIPTION	ELEV.
559A	1823+53.05 'SB	20.83' LT	"X" ON SE SIGN BOLT	887.49
650C	1880+34.05 'SB	57.56' LT	"X" ON SE SIGN BOLT	908.92

8



1. PLAN AND ELEVATION
2. CANTILEVER TRUSS FOOTING
3. GALVANIZED STEEL CANTILEVER SIGN TRUSS
4. GALVANIZED STEEL CANTILEVER SIGN TRUSS DETAILS

ITEM NO.	BID ITEM	UNIT	QUANTITY
636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	8
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT	LB	980
641.1200	SIGN BRIDGE CANTILEVERED S-13-400	LS	1

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\09 STRUCTURES\S-13-0400\Plan\080101_gp_S130400.dgn

BRIDGE OFFICE: WILLIAM DREHER (608) 266-8489
CONSULTANT: MICHAEL D. RADTKE (414) 347-1607



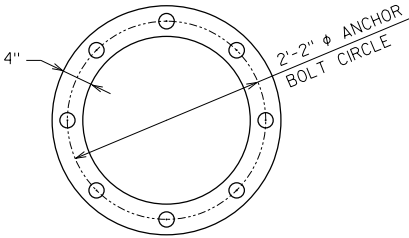
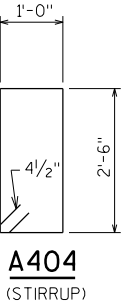
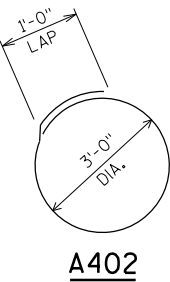
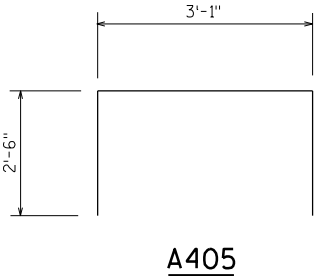
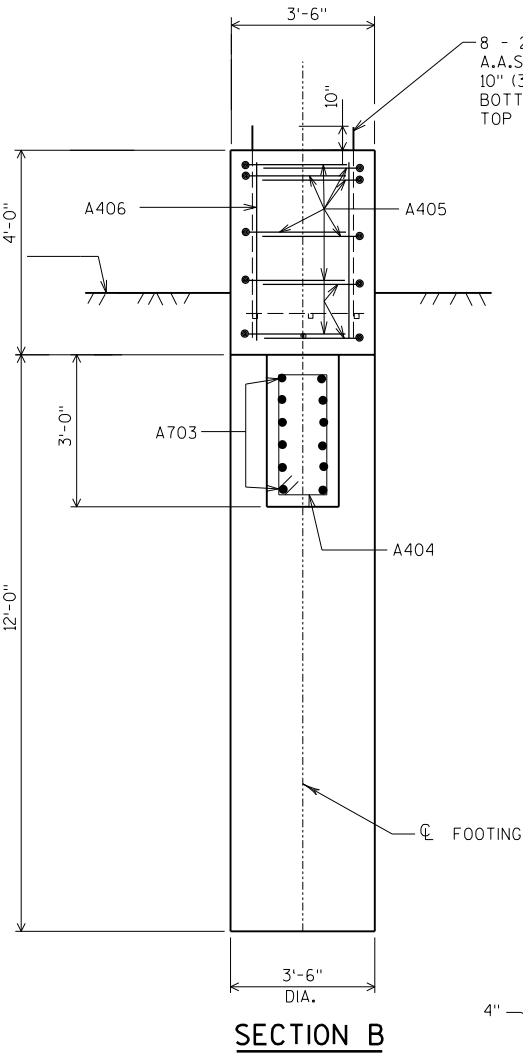
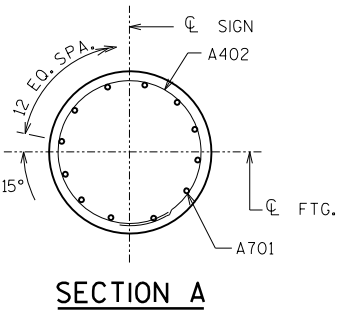
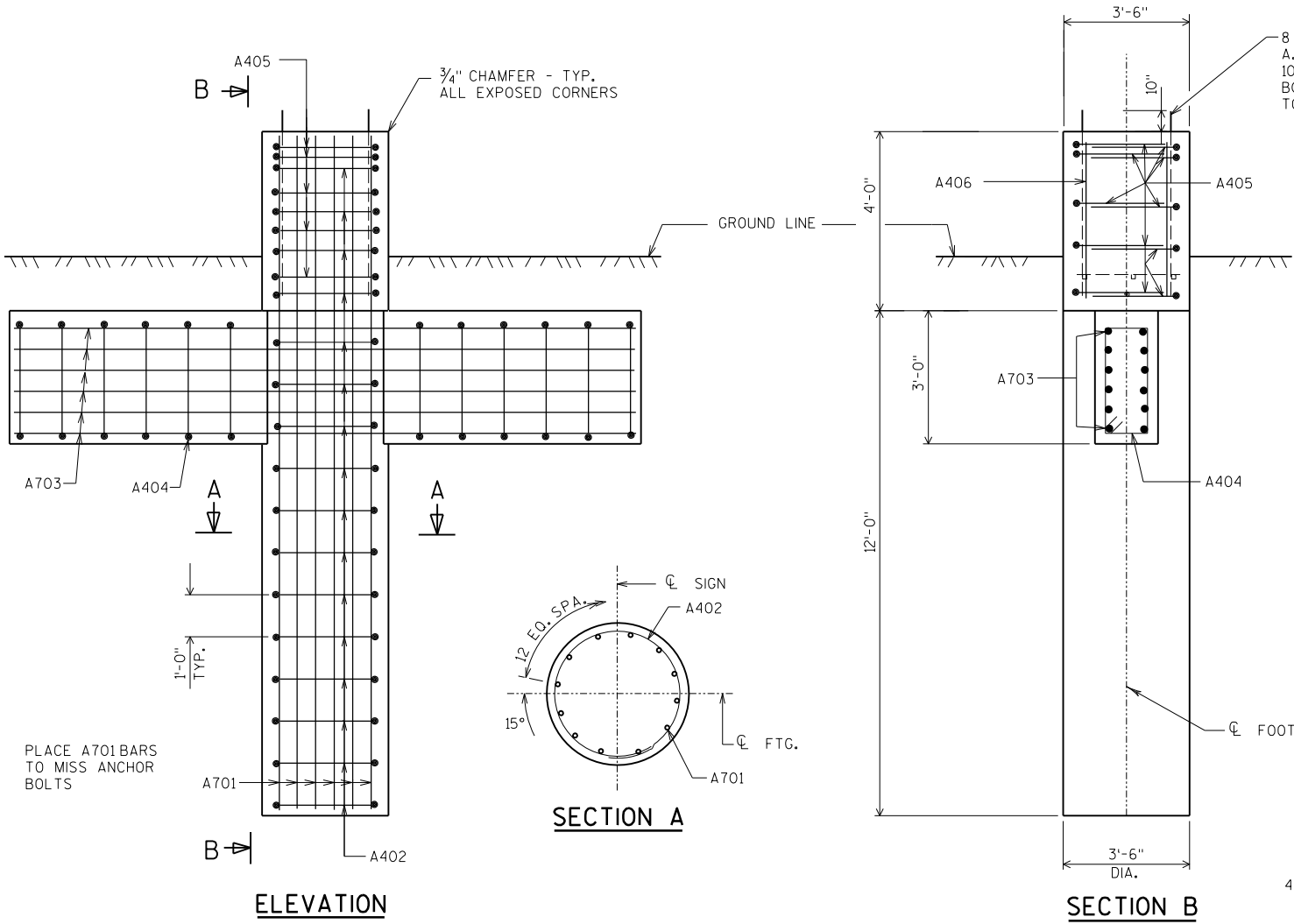
NO.	DATE	REVISION	BY
emcs ^{INC}			
1300 W. Canal Street, Suite 200 Milwaukee, WI 53233 414.347.1607 Fax 414.347.1347			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED	<i>William C. Debiec</i> SOR		11/18/15
CHIEF STRUCTURES DESIGN ENGINEER			DATE
STRUCTURE S-13-400			
IH 39 SB OFF RAMP TO US 51			
COUNTY	DANE	TOWN	ALBION
DESIGN SPEC. AASHTO STD. SPEC. FOR STR. SUPPORTS			
DESIGNED BY	SKR	DESIGN CK'D. MDR	DRAWN BY SKR
		PLAN'S CK'D. MDR	
PLAN AND ELEVATION		650	OF 4

NOTE:
THE FIRST OR FIRST TWO DIGITS OF A
BAR MARK SIGNIFIES THE BAR SIZE.

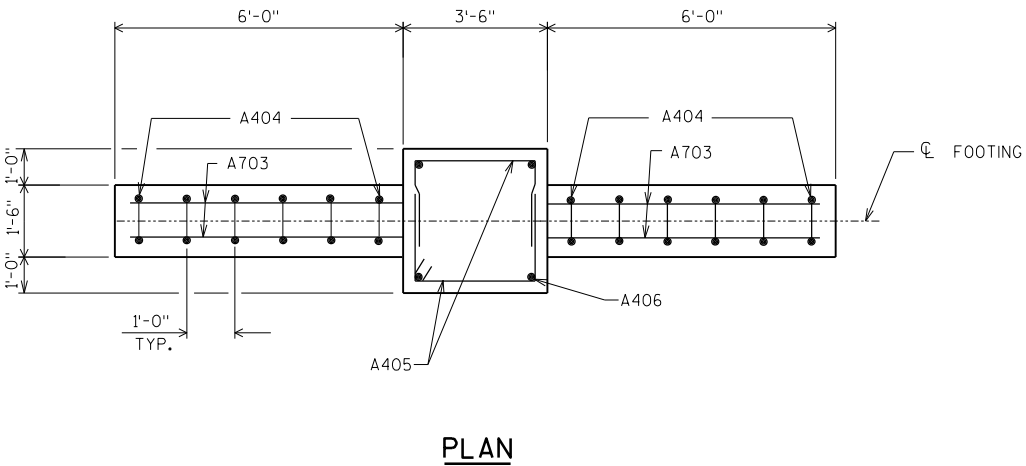
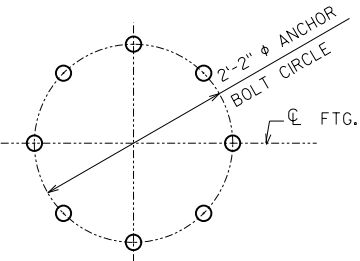
BILL OF BARS

980 LB.

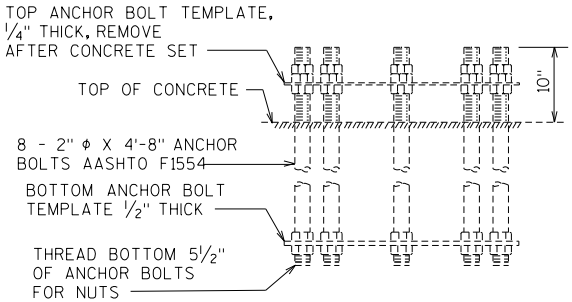
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	CUT. DIAG.	BUN-DLE	LOCATION
A701		12	15'-6"				FOOTING - COLUMN/TOP
A402		16	10'-6"	X			FOOTING - COLUMN/TOP
A703		12	15'-0"				FOOTING - WINGS
A404		12	7'-6"	X			FOOTING - WINGS
A405		10	7'-11"	X			FOOTING - TOP
A406		4	3'-6"				FOOTING - TOP - COLUMNS



TOP VIEW OF TOP & BOTTOM TEMPLATES



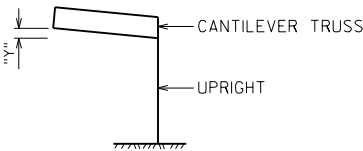
PLAN



ANCHOR BOLT DETAILS

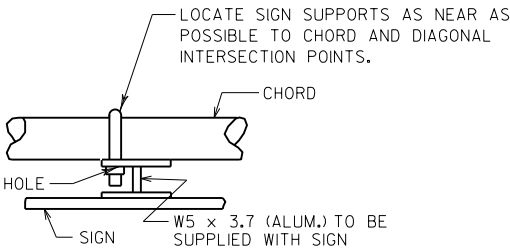
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-400			
DRAWN BY		TEO	PLANS CK'D. SKR
CANTILEVER TRUSS FOOTING		SHFFT 2 OF 4 651	

STRUCTURE	"A"	"L"	"B"	"D"	"Y"	ELEV. "R"	ELEV. "T"
S-13-400	28'-0"	24'-9"	3	5'-6"	1 3/4"	891.31	889.17



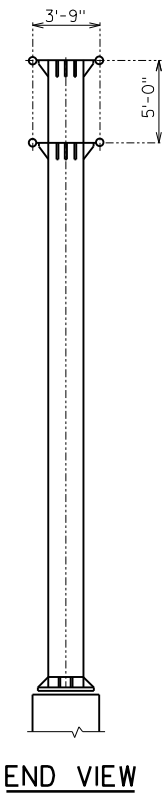
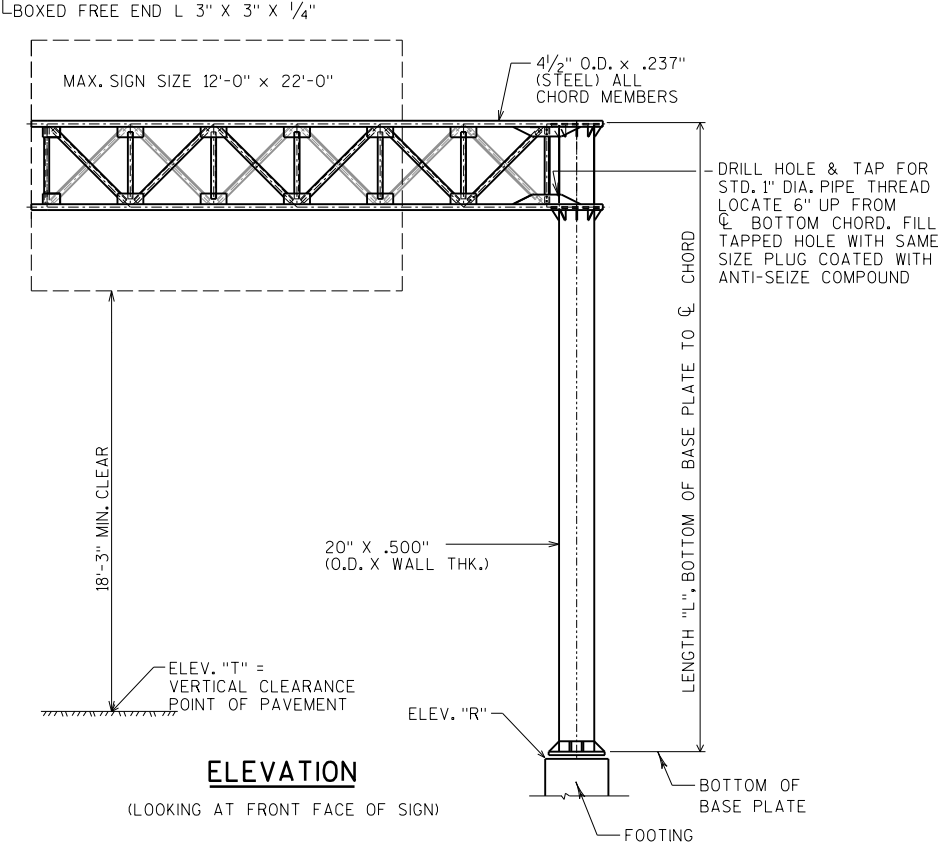
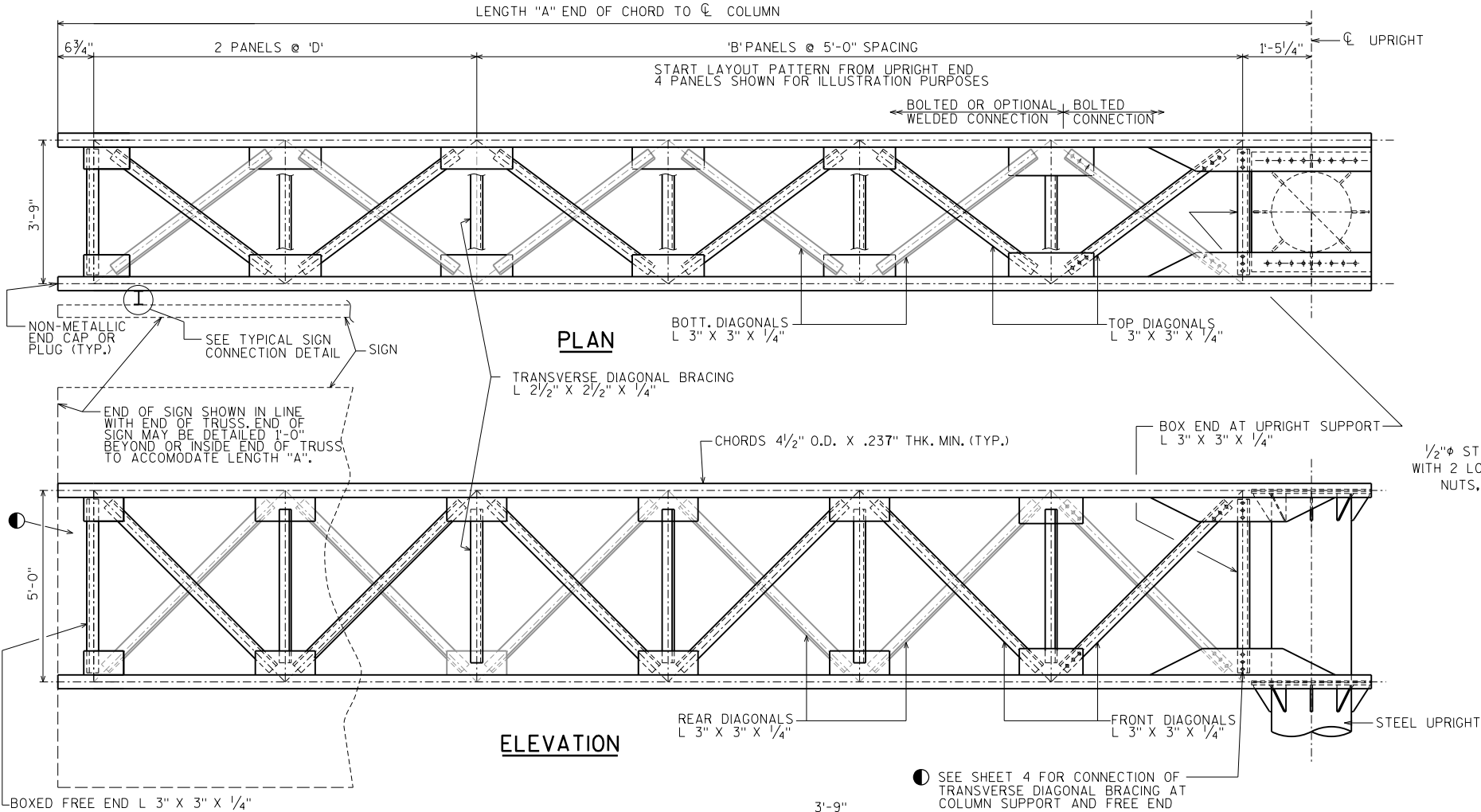
CAMBER DIAGRAM

D-D

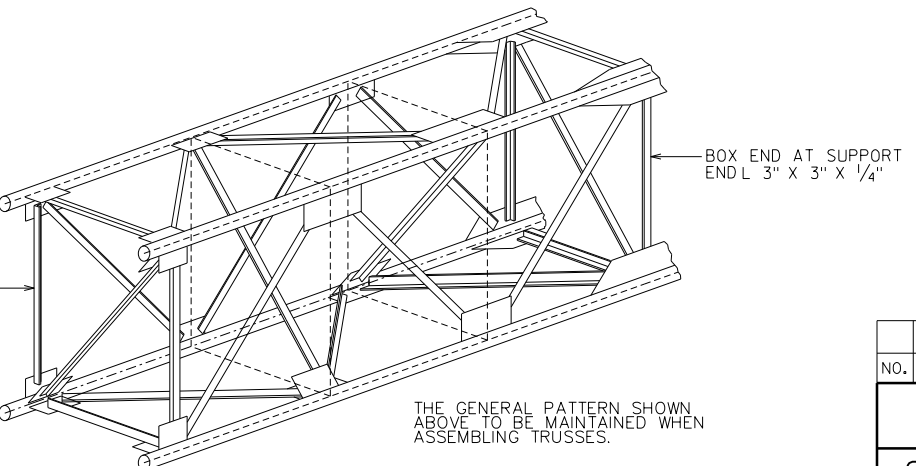


SECTION D-D

TYPICAL SIGN CONNECTION



END VIEW

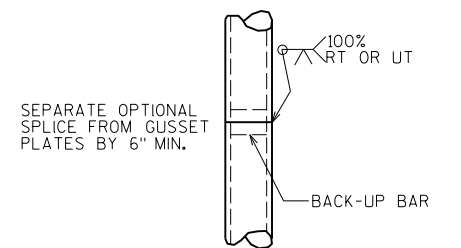


TYPICAL TRUSS SECTION

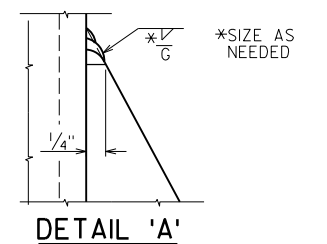
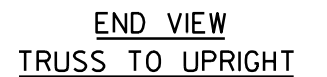
NO.	DATE	REVISION	BY		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION					
STRUCTURE S-13-400					
		DRAWN BY	TEO	PLANS CK'D.	SKR
GALVANIZED STEEL		SHFFT 3 OF 4			
CANTILEVER SIGN		652			
TRUSS					



(LOOKING DOWN @ BOTT. HORIZ. PLANE @ FRONT CHORD)



OPTIONAL COLUMN
OR CHORD SPLICE
DETAIL



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-400			
DRAWN BY		TEO	PLANS CK'D. SKR
GALVANIZED STEEL		SHEET 4 OF 4	
CANTILEVERED SIGN		653	
TRUSS DETAILS			

9

STATION	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Select Crushed Material (TONS) FACTOR 1.9
		Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh	Rock	EBS	Roadway Embankment	Select Crushed Material	Mass Ordinate	
1715+00.00'TSB'	0.00	16.17	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0.00	0	0	0	0	0	0	0	0	0
1716+00.00'TSB'	100.00	15.98	0.00	0.00	0.00	0.00	0.00	60	0	0	0	0	0	60	0	0	0	0	0	0.00	60.00	0.00
1717+00.00'TSB'	100.00	17.51	0.00	0.00	0.00	0.00	0.00	62	0	0	0	0	0	122	0	0	0	0	0	0.00	122.00	0.00
1718+00.00'TSB'	100.00	29.01	0.00	0.00	0.00	0.00	0.00	86	0	0	0	0	0	208	0	0	0	0	0	0.00	208.00	0.00
1719+00.00'TSB'	100.00	34.75	0.00	0.00	0.00	0.00	0.00	118	0	0	0	0	0	326	0	0	0	0	0	0.00	326.00	0.00
1720+00.00'TSB'	100.00	28.69	0.00	0.00	0.00	0.00	0.00	117	0	0	0	0	0	443	0	0	0	0	0	0.00	443.00	0.00
1721+00.00'TSB'	100.00	35.38	0.00	0.00	0.00	0.00	0.00	119	0	0	0	0	0	562	0	0	0	0	0	0.00	562.00	0.00
1721+75.58'TSB'	75.58	30.71	0.00	0.00	0.00	0.00	0.00	93	0	0	0	0	0	655	0	0	0	0	0	0.00	655.00	0.00
1722+00.00'TSB'	24.42	35.65	0.09	0.00	0.00	0.00	0.00	30	0	0	0	0	0	685	0	0	0	0	0	0.00	685.00	0.00
1723+00.00'TSB'	100.00	32.65	0.00	0.00	0.00	0.00	0.00	126	0	0	0	0	0	811	0	0	0	0	0	0.00	811.00	0.00
1724+00.00'TSB'	100.00	30.30	0.00	0.00	0.00	0.00	0.00	117	0	0	0	0	0	928	0	0	0	0	0	0.00	928.00	0.00
1725+00.00'TSB'	100.00	29.23	0.00	0.00	0.00	0.00	0.00	110	0	0	0	0	0	1,038	0	0	0	0	0	0.00	1,038.00	0.00
1726+00.00'TSB'	100.00	32.76	0.00	0.00	0.00	0.00	0.00	115	0	0	0	0	0	1,153	0	0	0	0	0	0.00	1,153.00	0.00
1727+00.00'TSB'	100.00	31.96	0.00	0.00	0.00	0.00	0.00	120	0	0	0	0	0	1,273	0	0	0	0	0	0.00	1,273.00	0.00
1728+00.00'TSB'	100.00	30.57	0.00	0.00	0.00	0.00	0.00	116	0	0	0	0	0	1,389	0	0	0	0	0	0.00	1,389.00	0.00
1729+00.00'TSB'	100.00	25.29	0.02	0.00	0.00	0.00	0.00	103	0	0	0	0	0	1,492	0	0	0	0	0	0.00	1,492.00	0.00
1730+00.00'TSB'	100.00	29.13	0.00	0.00	0.00	0.00	0.00	101	0	0	0	0	0	1,593	0	0	0	0	0	0.00	1,593.00	0.00
1731+00.00'TSB'	100.00	30.15	0.00	0.00	0.00	0.00	0.00	110	0	0	0	0	0	1,703	0	0	0	0	0	0.00	1,703.00	0.00
1732+00.00'TSB'	100.00	31.34	0.00	0.00	0.00	0.00	0.00	114	0	0	0	0	0	1,817	0	0	0	0	0	0.00	1,817.00	0.00
1733+00.00'TSB'	100.00	33.16	0.00	0.00	0.00	0.00	0.00	119	0	0	0	0	0	1,936	0	0	0	0	0	0.00	1,936.00	0.00
1734+00.00'TSB'	100.00	30.09	0.00	0.00	0.00	0.00	0.00	117	0	0	0	0	0	2,053	0	0	0	0	0	0.00	2,053.00	0.00
1735+00.00'TSB'	100.00	32.77	0.00	0.00	0.00	0.00	0.00	116	0	0	0	0	0	2,169	0	0	0	0	0	0.00	2,169.00	0.00
1736+00.00'TSB'	100.00	30.21	0.00	0.00	0.00	0.00	0.00	117	0	0	0	0	0	2,286	0	0	0	0	0	0.00	2,286.00	0.00
1737+00.00'TSB'	100.00	28.40	0.00	0.00	0.00	0.00	0.00	109	0	0	0	0	0	2,395	0	0	0	0	0	0.00	2,395.00	0.00
1738+00.00'TSB'	100.00	29.88	0.00	0.00	0.00	0.00	0.00	108	0	0	0	0	0	2,503	0	0	0	0	0	0.00	2,503.00	0.00
1739+00.00'TSB'	100.00	25.27	0.00	0.00	0.00	0.00	0.00	102	0	0	0	0	0	2,605	0	0	0	0	0	0.00	2,605.00	0.00
1740+00.00'TSB'	100.00	27.87	0.00	0.00	0.00	0.00	0.00	98	0	0	0	0	0	2,703	0	0	0	0	0	0.00	2,703.00	0.00
1741+00.00'TSB'	100.00	26.96	0.00	0.00	0.00	0.00	0.00	102	0	0	0	0	0	2,805	0	0	0	0	0	0.00	2,805.00	0.00
1742+00.00'TSB'	100.00	29.77	0.00	0.00	0.00	0.00	0.00	105	0	0	0	0	0	2,910	0	0	0	0	0	0.00	2,910.00	0.00
1743+00.00'TSB'	100.00	33.99	0.00	0.00	0.00	0.00	0.00	118	0	0	0	0	0	3,028	0	0	0	0	0	0.00	3,028.00	0.00
1743+58.95'TSB'	58.95	32.32	0.00	0.00	0.00	0.00	0.00	72	0	0	0	0	0	3,100	0	0	0	0	0	0.00	3,100.00	0.00
1744+00.00'TSB'	41.05	29.40	0.00	0.00	0.00	0.00	0.00	47	0	0	0	0	0	3,147	0	0	0	0	0	0.00	3,147.00	0.00
1745+00.00'TSB'	100.00	30.11	0.00	0.00	0.00	86.98	0.00	110	0	0	0	161	0	3,257	0	0	0	161	161	0.00	3,418.00	0.00
1745+32.62'TSB'	32.62	30.08	0.00	0.00	0.00	91.87	0.00	36	0	0	0	108	0	3,293	0	0	0	269	269	0.00	3,562.00	0.00
1745+55.80'TSB'	23.17	31.24	0.00	0.00	0.00	94.76	0.00	26	0	0	0	80	0	3,319	0	0	0	349	349	0.00	3,668.00	0.00
1746+00.00'TSB'	44.20	26.28	0.45	0.00	0.00	100.00	0.00	47	0	0	0	159	0	3,366	0	0	0	508	508	0.00	3,874.00	0.00
1747+00.00'TSB'	100.00	27.13	0.89	0.00	0.00	113.59	0.00	99	2	0	0	396	0	3,465	2	0	0	904	906	0.00	4,367.00	0.00
1748+00.00'TSB'	100.00	27.77	0.91	0.00	0.00	125.37	0.00	102	3	0	0	443	0	3,567	5	0	0	1,347	1,352	0.00	4,909.00	0.00
1748+03.60'TSB'	3.60	27.77	0.95	0.00	0.00	124.35	0.00	4	0	0	0	17	0	3,571	5	0	0	1,364	1,369	0.00	4,930.00	0.00
1748+79.60'TSB'	76.00	23.25	9.03	0.00	0.00	127.75	0.00	72	14	0	0	355	0	3,643	19	0	0	1,719	1,738	0.00	5,343.00	0.00
1749+00.00'TSB'	20.40	23.21	10.76	0.00	0.00	130.55	0.00	18	7	0	0	98	0	3,661	26	0	0					

STATION	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Select Crushed Material (TONS) FACTOR 1.9
		Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh	Rock	EBS	Roadway Embankment	Select Crushed Material	Mass Ordinate	
1766+00.00'TSB'	100.00	25.76	69.20	0.00	0.00	331.17	0.00	93	254	0	0	1,185	0	5,289	2,614	0	0	18,630	21,244	0.00	21,305.00	0.00
1767+00.00'TSB'	100.00	26.18	99.10	0.00	0.00	332.01	0.00	96	312	0	0	1,228	0	5,385	2,926	0	0	19,858	22,784	0.00	22,317.00	0.00
1768+00.00'TSB'	100.00	24.04	132.44	0.00	0.00	337.23	0.00	93	429	0	0	1,239	0	5,478	3,355	0	0	21,097	24,452	0.00	23,220.00	0.00
1769+00.00'TSB'	100.00	24.14	134.93	0.00	0.00	0.00	0.00	89	495	0	0	625	0	5,567	3,850	0	0	21,722	25,572	0.00	23,439.00	0.00
1769+50.00'TSB'	50.00	27.89	128.52	0.00	0.00	0.00	0.00	48	244	0	0	0	0	5,615	4,094	0	0	21,722	25,816	0.00	23,243.00	0.00
1769+82.09'TSB'	32.09	1.91	280.13	0.00	0.00	0.00	0.00	18	243	0	0	0	0	5,633	4,337	0	0	21,722	26,059	0.00	23,018.00	0.00
1769+88.54'TSB'	6.44	1.65	276.50	0.00	0.00	0.00	0.00	0	66	0	0	0	0	5,633	4,403	0	0	21,722	26,125	0.00	22,952.00	0.00
1770+00.00'TSB'	11.46	19.74	198.98	0.00	0.00	0.00	0.00	5	101	0	0	0	0	5,638	4,504	0	0	21,722	26,226	0.00	22,856.00	0.00
1771+00.00'TSB'	100.00	38.31	159.79	0.00	0.00	0.00	0.00	107	664	0	0	0	0	5,745	5,168	0	0	21,722	26,890	0.00	22,299.00	0.00
1772+00.00'TSB'	100.00	28.25	200.25	0.00	0.00	0.00	0.00	123	667	0	0	0	0	5,868	5,835	0	0	21,722	27,557	0.00	21,755.00	0.00
372+09.91'NBE'	0.00	6.70	0.64	0.00	0.00	0.00	0.00	0	0	0	0	0	0	5,868	5,835	0	0	21,722	27,557	0.00	21,755.00	0.00
373+00.00'NBE'	90.09	7.76	1.59	0.00	0.00	0.00	0.00	24	4	0	0	0	0	5,892	5,839	0	0	21,722	27,561	0.00	21,775.00	0.00
374+00.00'NBE'	100.00	6.37	6.98	0.00	0.00	0.00	0.00	26	16	0	0	0	0	5,918	5,855	0	0	21,722	27,577	0.00	21,785.00	0.00
375+00.00'NBE'	100.00	7.04	12.52	0.00	0.00	0.00	0.00	25	36	0	0	0	0	5,943	5,891	0	0	21,722	27,613	0.00	21,774.00	0.00
375+15.53'NBE'	15.53	6.90	13.90	0.00	0.00	0.00	0.00	4	8	0	0	0	0	5,947	5,899	0	0	21,722	27,621	0.00	21,770.00	0.00
376+00.00'NBE'	84.47	7.02	15.36	0.00	0.00	0.00	0.00	22	46	0	0	0	0	5,969	5,945	0	0	21,722	27,667	0.00	21,746.00	0.00
377+00.00'NBE'	100.00	6.64	11.97	0.00	0.00	0.00	0.00	25	51	0	0	0	0	5,994	5,996	0	0	21,722	27,718	0.00	21,720.00	0.00
378+00.00'NBE'	100.00	6.22	12.97	0.00	0.00	0.00	0.00	24	46	0	0	0	0	6,018	6,042	0	0	21,722	27,764	0.00	21,698.00	0.00
379+00.00'NBE'	100.00	6.87	18.72	0.00	0.00	0.00	0.00	24	59	0	0	0	0	6,042	6,101	0	0	21,722	27,823	0.00	21,663.00	0.00
380+00.00'NBE'	100.00	7.40	10.91	0.00	0.00	0.00	0.00	26	55	0	0	0	0	6,068	6,156	0	0	21,722	27,878	0.00	21,634.00	0.00
381+00.00'NBE'	100.00	9.17	7.17	0.00	0.00	0.00	0.00	31	33	0	0	0	0	6,099	6,189	0	0	21,722	27,911	0.00	21,632.00	0.00
381+22.99'NBE'	22.99	8.73	6.42	0.00	0.00	0.00	0.00	8	6	0	0	0	0	6,107	6,195	0	0	21,722	27,917	0.00	21,634.00	0.00
381+82.98'NBE'	59.99	8.85	3.64	0.00	0.00	0.00	0.00	20	11	0	0	0	0	6,127	6,206	0	0	21,722	27,928	0.00	21,643.00	0.00
382+00.00'NBE'	17.02	9.39	2.26	0.00	0.00	0.00	0.00	6	2	0	0	0	0	6,133	6,208	0	0	21,722	27,930	0.00	21,647.00	0.00
382+08.25'NBE'	8.25	9.61	1.96	0.00	0.00	0.00	0.00	3	1	0	0	0	0	6,136	6,209	0	0	21,722	27,931	0.00	21,649.00	0.00
382+16.06'NBE'	7.81	9.79	1.66	0.00	0.00	0.00	0.00	3	1	0	0	0	0	6,139	6,210	0	0	21,722	27,932	0.00	21,651.00	0.00
383+00.00'NBE'	83.94	15.26	0.00	0.00	0.00	0.00	0.00	39	3	0	0	0	0	6,178	6,213	0	0	21,722	27,935	0.00	21,687.00	0.00
383+02.99'NBE'	2.99	15.40	0.00	0.00	0.00	0.00	0.00	2	0	0	0	0	0	6,180	6,213	0	0	21,722	27,935	0.00	21,689.00	0.00
383+97.73'NBE'	94.74	13.94	112.45	0.00	0.00	0.00	0.00	51	197	0	0	0	0	6,231	6,410	0	0	21,722	28,132	0.00	21,543.00	0.00
384+00.00'NBE'	2.27	13.93	130.92	0.00	0.00	0.00	0.00	1	10	0	0	0	0	6,232	6,420	0	0	21,722	28,142	0.00	21,534.00	0.00
384+13.31'NBE'	13.31	13.45	60.28	0.00	0.00	0.00	0.00	7	47	0	0	0	0	6,239	6,467	0	0	21,722	28,189	0.00	21,494.00	0.00
384+14.00'NBE'	0.69	12.56	60.56	0.00	0.00	0.00	0.00	0	2	0	0	0	0	6,239	6,469	0	0	21,722	28,191	0.00	21,492.00	0.00
384+25.00'NBE'	11.00	12.95	60.22	0.00	0.00	0.00	0.00	5	25	0	0	0	0	6,244	6,494	0	0	21,722	28,216	0.00	21,472.00	0.00
384+92.46'NBE'	67.46	15.36	72.67	0.00	0.00	0.00	0.00	35	166	0	0	0	0	6,279	6,660	0	0	21,722	28,382	0.00	21,341.00	0.00
385+00.00'NBE'	7.54	15.78	31.89	0.00	0.00	0.00	0.00	4	15	0	0	0	0	6,283	6,675	0	0	21,722	28,397	0.00	21,330.00	0.00
385+81.00'NBE'	81.00	16.76	0.00	0.00	0.00	0.00	0.00	49	48	0	0	0	0	6,332	6,723	0	0	21,722	28,445	0.00	21,331.00	0.00
385+81.93'NBE'	0.93	20.60	0.00	0.00	0.00	0.00	0.00	1	0	0	0	0	0	6,333	6,723	0	0	21,722	28,445	0.00	21,332.00	0.00
386+00.00'NBE'	18.07	24.41	0.25	0.00	0.00	0.00	0.00	15	0	0	0	0	0	6,348	6,723	0	0	21,722	28,445	0.00		

STATION	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Select Crushed Material (TONS) FACTOR 1.9
		Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh	Rock	EBS	Roadway Embankment	Select Crushed Material	Mass Ordinate	
561+00.00'NBE'	100.00	30.97	0.00	0.00	0.00	0.00	0.00	110	0	0	0	0	0	7,707	6,731	0	0	21,722	28,453	0.00	22,698.00	0.00
562+00.00'NBE'	100.00	34.82	0.00	0.00	0.00	0.00	0.00	122	0	0	0	0	0	7,829	6,731	0	0	21,722	28,453	0.00	22,820.00	0.00
563+00.00'NBE'	100.00	30.14	0.00	0.00	0.00	0.00	0.00	120	0	0	0	0	0	7,949	6,731	0	0	21,722	28,453	0.00	22,940.00	0.00
564+00.00'NBE'	100.00	43.37	0.01	0.00	0.00	0.00	0.00	136	0	0	0	0	0	8,085	6,731	0	0	21,722	28,453	0.00	23,076.00	0.00
565+00.00'NBE'	100.00	37.07	0.00	0.00	0.00	0.00	0.00	149	0	0	0	0	0	8,234	6,731	0	0	21,722	28,453	0.00	23,225.00	0.00
566+00.00'NBE'	100.00	27.57	0.00	0.00	0.00	0.00	0.00	120	0	0	0	0	0	8,354	6,731	0	0	21,722	28,453	0.00	23,345.00	0.00
567+00.00'NBE'	100.00	28.62	0.00	0.00	0.00	0.00	0.00	104	0	0	0	0	0	8,458	6,731	0	0	21,722	28,453	0.00	23,449.00	0.00
567+56.74'NBE'	56.74	28.65	0.00	0.00	0.00	0.00	0.00	60	0	0	0	0	0	8,518	6,731	0	0	21,722	28,453	0.00	23,509.00	0.00
380+00.00'SBE'	0.00	16.64	0.03	0.00	0.00	0.00	0.00	0	0	0	0	0	0	8,518	6,731	0	0	21,722	28,453	0.00	23,509.00	0.00
380+44.48'SBE'	44.48	16.53	0.01	0.00	0.00	0.00	0.00	27	0	0	0	0	0	8,545	6,731	0	0	21,722	28,453	0.00	23,536.00	0.00
381+00.00'SBE'	55.52	12.91	0.01	0.00	0.00	0.00	0.00	30	0	0	0	0	0	8,575	6,731	0	0	21,722	28,453	0.00	23,566.00	0.00
381+04.48'SBE'	4.48	12.54	0.03	0.00	0.00	0.00	0.00	2	0	0	0	0	0	8,577	6,731	0	0	21,722	28,453	0.00	23,568.00	0.00
381+29.75'SBE'	25.27	11.91	0.01	0.00	0.00	0.00	0.00	11	0	0	0	0	0	8,588	6,731	0	0	21,722	28,453	0.00	23,579.00	0.00
382+00.00'SBE'	70.25	12.83	0.00	0.00	0.00	0.00	0.00	32	0	0	0	0	0	8,620	6,731	0	0	21,722	28,453	0.00	23,611.00	0.00
382+24.48'SBE'	24.48	15.18	0.00	0.00	0.00	0.00	0.00	13	0	0	0	0	0	8,633	6,731	0	0	21,722	28,453	0.00	23,624.00	0.00
382+57.29'SBE'	32.80	19.27	0.00	0.00	0.00	0.00	0.00	21	0	0	0	0	0	8,654	6,731	0	0	21,722	28,453	0.00	23,645.00	0.00
382+57.40'SBE'	0.11	16.57	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	8,654	6,731	0	0	21,722	28,453	0.00	23,645.00	0.00
383+00.00'SBE'	42.60	16.74	0.00	0.00	0.00	0.00	0.00	26	0	0	0	0	0	8,680	6,731	0	0	21,722	28,453	0.00	23,671.00	0.00
383+19.22'SBE'	19.22	16.41	0.00	0.00	0.00	0.00	0.00	12	0	0	0	0	0	8,692	6,731	0	0	21,722	28,453	0.00	23,683.00	0.00
384+00.00'SBE'	80.78	13.37	0.00	0.00	0.00	0.00	0.00	45	0	0	0	0	0	8,737	6,731	0	0	21,722	28,453	0.00	23,728.00	0.00
384+13.96'SBE'	13.96	12.79	0.00	0.00	0.00	0.00	0.00	7	0	0	0	0	0	8,744	6,731	0	0	21,722	28,453	0.00	23,735.00	0.00
385+00.00'SBE'	86.04	14.08	0.00	0.00	0.00	0.00	0.00	43	0	0	0	0	0	8,787	6,731	0	0	21,722	28,453	0.00	23,778.00	0.00
385+68.00'SBE'	68.00	13.16	0.00	0.00	0.00	0.00	0.00	34	0	0	0	0	0	8,821	6,731	0	0	21,722	28,453	0.00	23,812.00	0.00
385+96.44'SBE'	28.44	10.51	4.17	0.00	0.00	0.00	0.00	12	2	0	0	0	0	8,833	6,733	0	0	21,722	28,455	0.00	23,822.00	0.00
386+00.00'SBE'	3.56	12.29	3.14	0.00	0.00	0.00	0.00	2	0	0	0	0	0	8,835	6,733	0	0	21,722	28,455	0.00	23,824.00	0.00
387+00.00'SBE'	100.00	14.09	0.15	0.00	0.00	0.00	0.00	49	6	0	0	0	0	8,884	6,739	0	0	21,722	28,461	0.00	23,867.00	0.00
387+72.13'SBE'	72.13	17.98	0.00	0.00	0.00	0.00	0.00	43	0	0	0	0	0	8,927	6,739	0	0	21,722	28,461	0.00	23,910.00	0.00
388+00.00'SBE'	27.87	46.31	0.00	0.00	0.00	0.00	0.00	33	0	0	0	0	0	8,960	6,739	0	0	21,722	28,461	0.00	23,943.00	0.00
388+45.12'SBE'	45.12	19.08	0.08	0.00	0.00	0.00	0.00	55	0	0	0	0	0	9,015	6,739	0	0	21,722	28,461	0.00	23,998.00	0.00
388+48.40'SBE'	3.28	17.58	0.67	0.00	0.00	0.00	0.00	2	0	0	0	0	0	9,017	6,739	0	0	21,722	28,461	0.00	24,000.00	0.00
389+00.00'SBE'	51.60	17.43	0.00	0.00	0.00	0.00	0.00	33	1	0	0	0	0	9,050	6,740	0	0	21,722	28,462	0.00	24,032.00	0.00
390+00.00'SBE'	100.00	14.94	0.09	0.00	0.00	0.00	0.00	60	0	0	0	0	0	9,110	6,740	0	0	21,722	28,462	0.00	24,092.00	0.00
391+00.00'SBE'	100.00	17.02	0.03	0.00	0.00	0.00	0.00	59	0	0	0	0	0	9,169	6,740	0	0	21,722	28,462	0.00	24,151.00	0.00
391+14.09'SBE'	14.09	15.27	0.46	0.00	0.00	0.00	0.00	8	0	0	0	0	0	9,177	6,740	0	0	21,722	28,462	0.00	24,159.00	0.00
392+00.00'SBE'	85.91	12.96	1.35	0.00	0.00	0.00	0.00	45	3	0	0	0	0	9,222	6,743	0	0	21,722	28,465	0.00	24,201.00	0.00
393+00.00'SBE'	100.00	13.81	0.00	0.00	0.00	0.00	0.00	50	3	0	0	0	0	9,272	6,746	0	0	21,722	28,468	0.00	24,248.00	0.00
394+00.00'SBE'	100.00	12.73	0.05	0.00	0.00	0.00	0.00	49	0	0	0	0	0	9,321	6,746	0	0	21,722	28,468	0.00	24,297.00	0.00
395+00.00'SBE'	100.00	12.45	0.37	0.00	0.00	0.00	0.00	47	1	0	0	0	0	9,368	6,747	0	0	21,722	28,469	0.00	24,343.00	0.00
396+00.00'SBE'	100.00	11.94	0.26	0.00	0.00	0.00	0.00	45	1	0	0	0	0	9,413	6,748	0	0	21,722	28,470	0.00	24,387.00	0.00
397+00.00'SBE'	100.00	10.52	2.10	0.00	0.00	0.00	0.00	42	4	0	0	0	0	9,455	6,752	0	0	21,722	28,474	0.00	24,425.00	0.00
398+00.00'SBE'	100.00	11.73	0.78	0.00	0.00	0.00	0.00	41	5	0	0	0	0	9,496	6,757	0	0	21,722	28,479	0.00	24,461.00	0.00
427+52.20'SBE' RT	0.00	22.83	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	9,496	6,757	0	0	21,722	28,479	0.00	24,461.00	0.00
428+00.00'SBE' RT	47.80	22.07	0.00	0.00	0.00	0.00	0.00	40	0	0	0	0	0	9,536	6,757	0	0	21,722	28,479	0.00	24,501.00	0.00
429+00.00'SBE' RT	100.00	23.88	0.00	0.00	0.00	0.00	0.00	85	0	0	0	0	0	9,621	6,757	0	0	21,722	28,479	0.00	24,586.00	0.00
430+00.00'SBE' RT	100.00	24.46	0.00	0.00	0.00	0.00	0.00	90	0	0	0	0	0	9,711	6,757	0	0	21,722	28,479	0.00	24,676.00	0.00
431+00.00'SBE' RT	100.00	23.79	1.81	0.00	0.00	0.00	0.00	89	3	0	0	0	0	9,800	6,760	0	0	21,722	28,482	0.00	24,762.00	0.00
432+00.00'SBE' RT	100.00	22.42	4.69	0.00	0.00	0.00	0.00	86	12	0	0	0	0	9,886	6,772	0	0	21,722	28,494	0.00	24,836.00	0.00
433+00.00'SBE' RT	100.00	22.53	5.91	0.00	0.00	0.00	0.00	83	20	0	0	0	0	9,969	6,792	0	0	21,722	28,514	0.00	24,899.00	0.00
434+00.00'SBE' RT	100.00	23.64	38.82	0.00	0.00	0.00	0.00	85	83	0	0	0	0	10,054	6,875	0	0	21,722	28,597	0.00	24,901.00	0.00
434+12.72'SBE' RT	12.72	23.42	62.51	0.00	0.00	0.00	0.00	11	24	0	0	0	0	10,065	6,899	0	0	21,722	28,621	0.00	24,888.00	0.00
435+00.00'SBE' RT	87.28	21.22	6.73	0.00	0.00	0.00	0.00	72	112	0	0	0	0	10,137	7,011	0	0	21,722	28,733	0.00	24,848.00	0.00
436+00.00'SBE' RT	100.00	21.22	2.20	0.00	0.00	0.00	0.00	79	17	0	0	0	0	10,216	7,028	0	0	21,722	28,750	0.00	24,910.00	0.00
437+00.00'SBE' RT	100.00	22.91	0.70	0.00	0.00	0.00	0.00	82	5	0	0	0	0	10,298	7,033	0	0	21,722	28,755	0.00	24,987.00	0.00
438+00.00'SBE' RT	100.00	22.44	5.54	0.00	0.00	0.00	0.00	84	12	0	0	0	0	10,382	7,045	0	0	21,722	28,767	0.00	25,059.00	0.00
439+00.00'SBE' RT	100.00	21.34	3.31	0.00	0.00	0.00	0.00	81	16	0	0	0	0	10,463	7,061	0	0	21,722	28,783	0.00	25,124.00	0.00
439+28.54'SBE' RT	28.54	22.30	1.36	0.00	0.00	0.00	0.00	23	2	0	0	0	0	10,486	7,063	0	0	21,722	28,785	0.00	25,145.00	0.00
527+00.00'SBE' RT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	10,486	7,063	0						

STATION	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Select Crushed Material (TONS) FACTOR 1.9
		Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh	Rock	EBS	Roadway Embankment	Select Crushed Material	Mass Ordinate	
531+41.84'SBE' RT	41.84	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	10,486	7,063	0	0	21,722	28,785	0.00	25,145.00	0.00
532+54.85'SBE' RT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	10,486	7,063	0	0	21,722	28,785	0.00	25,145.00	0.00
533+00.00'SBE' RT	45.15	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	10,486	7,063	0	0	21,722	28,785	0.00	25,145.00	0.00
534+00.00'SBE' RT	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	10,486	7,063	0	0	21,722	28,785	0.00	25,145.00	0.00
535+00.00'SBE' RT	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	10,486	7,063	0	0	21,722	28,785	0.00	25,145.00	0.00
536+00.00'SBE' RT	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	10,486	7,063	0	0	21,722	28,785	0.00	25,145.00	0.00
537+00.00'SBE' RT	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	10,486	7,063	0	0	21,722	28,785	0.00	25,145.00	0.00
538+00.00'SBE' RT	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	10,486	7,063	0	0	21,722	28,785	0.00	25,145.00	0.00
539+00.00'SBE' RT	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	10,486	7,063	0	0	21,722	28,785	0.00	25,145.00	0.00
540+00.00'SBE' RT	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	10,486	7,063	0	0	21,722	28,785	0.00	25,145.00	0.00
540+10.31'SBE' RT	10.31	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	10,486	7,063	0	0	21,722	28,785	0.00	25,145.00	0.00
541+00.00'SBE' RT	89.69	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	10,486	7,063	0	0	21,722	28,785	0.00	25,145.00	0.00
542+00.00'SBE' RT	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	10,486	7,063	0	0	21,722	28,785	0.00	25,145.00	0.00
543+00.00'SBE' RT	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	10,486	7,063	0	0	21,722	28,785	0.00	25,145.00	0.00
544+00.00'SBE' RT	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	10,486	7,063	0	0	21,722	28,785	0.00	25,145.00	0.00
545+00.00'SBE' RT	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	10,486	7,063	0	0	21,722	28,785	0.00	25,145.00	0.00
545+42.08'SBE' RT	42.08	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	10,486	7,063	0	0	21,722	28,785	0.00	25,145.00	0.00
546+00.00'SBE' RT	57.92	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	10,486	7,063	0	0	21,722	28,785	0.00	25,145.00	0.00

STATION	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Select Crushed Material (TONS) FACTOR 1.9
		Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh	Rock	EBS	Roadway Embankment	Select Crushed Material	Mass Ordinate	
537+00.00'SBE' LT	100.00	15.77	0.00	0.00	0.00	0.00	0.00	58	0	0	0	0	0	11,050	7,063	0	0	21,722	28,785	0.00	25,709.00	0.00
538+00.00'SBE' LT	100.00	15.53	0.00	0.00	0.00	0.00	0.00	58	0	0	0	0	0	11,108	7,063	0	0	21,722	28,785	0.00	25,767.00	0.00
539+00.00'SBE' LT	100.00	15.53	0.00	0.00	0.00	0.00	0.00	58	0	0	0	0	0	11,166	7,063	0	0	21,722	28,785	0.00	25,825.00	0.00
540+00.00'SBE' LT	100.00	15.41	0.00	0.00	0.00	0.00	0.00	57	0	0	0	0	0	11,223	7,063	0	0	21,722	28,785	0.00	25,882.00	0.00
540+10.31'SBE' LT	10.31	15.44	0.00	0.00	0.00	0.00	0.00	6	0	0	0	0	0	11,229	7,063	0	0	21,722	28,785	0.00	25,888.00	0.00
541+00.00'SBE' LT	89.69	15.56	0.00	0.00	0.00	0.00	0.00	51	0	0	0	0	0	11,280	7,063	0	0	21,722	28,785	0.00	25,939.00	0.00
542+00.00'SBE' LT	100.00	15.65	0.00	0.00	0.00	0.00	0.00	58	0	0	0	0	0	11,338	7,063	0	0	21,722	28,785	0.00	25,997.00	0.00
543+00.00'SBE' LT	100.00	15.86	0.00	0.00	0.00	0.00	0.00	58	0	0	0	0	0	11,396	7,063	0	0	21,722	28,785	0.00	26,055.00	0.00
544+00.00'SBE' LT	100.00	16.05	0.00	0.00	0.00	0.00	0.00	59	0	0	0	0	0	11,455	7,063	0	0	21,722	28,785	0.00	26,114.00	0.00
545+00.00'SBE' LT	100.00	16.03	0.00	0.00	0.00	0.00	0.00	59	0	0	0	0	0	11,514	7,063	0	0	21,722	28,785	0.00	26,173.00	0.00
545+42.08'SBE' LT	42.08	16.13	0.00	0.00	0.00	0.00	0.00	25	0	0	0	0	0	11,539	7,063	0	0	21,722	28,785	0.00	26,198.00	0.00
546+00.00'SBE' LT	57.92	15.92	0.00	0.00	0.00	0.00	0.00	34	0	0	0	0	0	11,573	7,063	0	0	21,722	28,785	0.00	26,232.00	0.00
547+00.00'SBE' LT	100.00	15.68	0.00	0.00	0.00	0.00	0.00	59	0	0	0	0	0	11,632	7,063	0	0	21,722	28,785	0.00	26,291.00	0.00
548+00.00'SBE' LT	100.00	15.90	0.00	0.00	0.00	0.00	0.00	58	0	0	0	0	0	11,690	7,063	0	0	21,722	28,785	0.00	26,349.00	0.00
548+42.92'SBE' LT	42.92	15.78	0.00	0.00	0.00	0.00	0.00	25	0	0	0	0	0	11,715	7,063	0	0	21,722	28,785	0.00	26,374.00	0.00
548+52.37'SBE' LT	9.45	15.78	0.00	0.00	0.00	0.00	0.00	6	0	0	0	0	0	11,721	7,063	0	0	21,722	28,785	0.00	26,380.00	0.00
548+77.58'SBE' LT	25.21	15.77	0.00	0.00	0.00	0.00	0.00	15	0	0	0	0	0	11,736	7,063	0	0	21,722	28,785	0.00	26,395.00	0.00
549+00.00'SBE' LT	22.42	15.83	0.00	0.00	0.00	0.00	0.00	13	0	0	0	0	0	11,749	7,063	0	0	21,722	28,785	0.00	26,408.00	0.00
549+46.92'SBE' LT	46.92	15.46	0.00	0.00	0.00	0.00	0.00	27	0	0	0	0	0	11,776	7,063	0	0	21,722	28,785	0.00	26,435.00	0.00
550+00.00'SBE' LT	53.08	15.62	0.00	0.00	0.00	0.00	0.00	31	0	0	0	0	0	11,807	7,063	0	0	21,722	28,785	0.00	26,466.00	0.00
550+41.47'SBE' LT	41.47	16.06	0.00	0.00	0.00	0.00	0.00	24	0	0	0	0	0	11,831	7,063	0	0	21,722	28,785	0.00	26,490.00	0.00
551+00.00'SBE' LT	58.53	16.43	0.00	0.00	0.00	0.00	0.00	35	0	0	0	0	0	11,866	7,063	0	0	21,722	28,785	0.00	26,525.00	0.00
551+36.01'SBE' LT	36.01	16.74	0.00	0.00	0.00	0.00	0.00	22	0	0	0	0	0	11,888	7,063	0	0	21,722	28,785	0.00	26,547.00	0.00
551+74.20'SBE' LT	38.19	16.65	0.00	0.00	0.00	0.00	0.00	24	0	0	0	0	0	11,912	7,063	0	0	21,722	28,785	0.00	26,571.00	0.00
552+00.00'SBE' LT	25.80	16.59	0.00	0.00	0.00	0.00	0.00	16	0	0	0	0	0	11,928	7,063	0	0	21,722	28,785	0.00	26,587.00	0.00
552+08.44'SBE' LT	8.44	16.52	0.00	0.00	0.00	0.00	0.00	5	0	0	0	0	0	11,933	7,063	0	0	21,722	28,785	0.00	26,592.00	0.00
552+68.86'SBE' LT	60.42	18.97	0.00	0.00	0.00	0.00	0.00	40	0	0	0	0	0	11,973	7,063	0	0	21,722	28,785	0.00	26,632.00	0.00
553+00.00'SBE' LT	31.14	18.61	0.00	0.00	0.00	0.00	0.00	22	0	0	0	0	0	11,995	7,063	0	0	21,722	28,785	0.00	26,654.00	0.00
553+20.61'SBE' LT	20.61	18.64	0.00	0.00	0.00	0.00	0.00	14	0	0	0	0	0	12,009	7,063	0	0	21,722	28,785	0.00	26,668.00	0.00
UNDISTRIBUTED		0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	2,172	1,086	12,009	7,063	0	0	23,894	29,871	1,086.10	28,840.20	2,063.59

STATION	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Select Crushed Material (TONS) FACTOR 1.9
		Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh	Rock	EBS	Roadway Embankment	Select Crushed Material	Mass Ordinate	
1715+00.00'TSB'	0.00	40.36	1.84	0.00	0.00	117.90	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1716+00.00'TSB'	100.00	30.28	4.88	0.00	0.00	91.93	0.00	131	12	0	0	389	0	131	12	0	0	389	401	0.00	508.00	
1717+00.00'TSB'	100.00	32.41	16.32	0.00	0.00	70.97	0.00	116	39	0	0	302	0	247	51	0	0	691	742	0.00	887.00	
1718+00.00'TSB'	100.00	31.09	1.23	0.00	0.00	86.25	0.00	118	33	0	0	291	0	365	84	0	0	982	1,066	0.00	1,263.00	
1719+00.00'TSB'	100.00	24.72	5.31	0.00	0.00	83.58	0.00	103	12	0	0	314	0	468	96	0	0	1,296	1,392	0.00	1,668.00	
1720+00.00'TSB'	100.00	31.35	0.02	0.00	0.00	88.24	0.00	104	10	0	0	318	0	572	106	0	0	1,614	1,720	0.00	2,080.00	
1721+00.00'TSB'	100.00	24.73	4.12	0.00	0.00	91.32	0.00	104	8	0	0	333	0	676	114	0	0	1,947	2,061	0.00	2,509.00	
1721+75.58'TSB'	75.58	23.97	39.54	0.00	0.00	57.60	0.00	68	61	0	0	208	0	744	175	0	0	2,155	2,330	0.00	2,724.00	
1722+00.00'TSB'	24.42	23.91	18.26	0.00	0.00	81.95	0.00	22	26	0	0	63	0	766	201	0	0	2,218	2,419	0.00	2,783.00	
1723+00.00'TSB'	100.00	25.41	6.52	0.00	0.00	106.09	0.00	91	46	0	0	348	0	857	247	0	0	2,566	2,813	0.00	3,176.00	
1724+00.00'TSB'	100.00	25.97	7.36	0.00	0.00	118.11	0.00	95	26	0	0	415	0	952	273	0	0	2,981	3,254	0.00	3,660.00	
1725+00.00'TSB'	100.00	23.90	17.93	0.00	0.00	121.33	0.00	92	47	0	0	443	0	1,044	320	0	0	3,424	3,744	0.00	4,148.00	
1726+00.00'TSB'	100.00	22.17	18.46	0.00	0.00	117.27	0.00	85	67	0	0	442	0	1,129	387	0	0	3,866	4,253	0.00	4,608.00	
1727+00.00'TSB'	100.00	25.39	8.71	0.00	0.00	169.51	0.00	88	50	0	0	531	0	1,217	437	0	0	4,397	4,834	0.00	5,177.00	
1728+00.00'TSB'	100.00	41.04	2.47	0.00	0.00	231.36	0.00	123	21	0	0	742	0	1,340	458	0	0	5,139	5,597	0.00	6,021.00	
1729+00.00'TSB'	100.00	84.18	0.28	0.00	0.00	249.46	0.00	232	5	0	0	890	0	1,572	463	0	0	6,029	6,492	0.00	7,138.00	
1730+00.00'TSB'	100.00	130.25	0.00	0.00	0.00	267.16	0.00	397	1	0	0	957	0	1,969	464	0	0	6,986	7,450	0.00	8,491.00	
1731+00.00'TSB'	100.00	212.10	0.00	0.00	0.00	0.00	0.00	634	0	0	0	495	0	2,603	464	0	0	7,481	7,945	0.00	9,620.00	
1732+00.00'TSB'	100.00	242.70	0.00	0.00	0.00	0.00	0.00	842	0	0	0	0	0	3,445	464	0	0	7,481	7,945	0.00	10,462.00	
1733+00.00'TSB'	100.00	233.81	0.00	0.00	0.00	0.00	0.00	882	0	0	0	0	0	4,327	464	0	0	7,481	7,945	0.00	11,344.00	
1734+00.00'TSB'	100.00	214.81	0.00	0.00	0.00	0.00	0.00	831	0	0	0	0	0	5,158	464	0	0	7,481	7,945	0.00	12,175.00	
1735+00.00'TSB'	100.00	161.50	0.00	0.00	0.00	0.00	0.00	697	0	0	0	0	0	5,855	464	0	0	7,481	7,945	0.00	12,872.00	
1736+00.00'TSB'	100.00	130.84	0.00	0.00	0.00	0.00	0.00	541	0	0	0	0	0	6,396	464	0	0	7,481	7,945	0.00	13,413.00	
1737+00.00'TSB'	100.00	82.70	0.07	0.00	0.00	0.00	0.00	395	0	0	0	0	0	6,791	464	0	0	7,481	7,945	0.00	13,808.00	
1738+00.00'TSB'	100.00	64.23	0.00	0.00	0.00	0.00	0.00	272	0	0	0	0	0	7,063	464	0	0	7,481	7,945	0.00	14,080.00	
1739+00.00'TSB'	100.00	60.17	0.00	0.00	0.00	0.00	0.00	230	0	0	0	0	0	7,293	464	0	0	7,481	7,945	0.00	14,310.00	
1740+00.00'TSB'	100.00	42.34	0.39	0.00	0.00	0.00	0.00	190	1	0	0	0	0	7,483	465	0	0	7,481	7,946	0.00	14,499.00	
1741+00.00'TSB'	100.00	25.33	8.26	0.00	0.00	0.00	0.00	125	16	0	0	0	0	7,608	481	0	0	7,481	7,962	0.00	14,608.00	
1742+00.00'TSB'	100.00	27.45	20.17	0.00	0.00	0.00	0.00	98	53	0	0	0	0	7,706	534	0	0	7,481	8,015	0.00	14,653.00	
1743+00.00'TSB'	100.00	28.18	29.61	0.00	0.00	0.00	0.00	103	92	0	0	0	0	7,809	626	0	0	7,481	8,107	0.00	14,664.00	
1743+58.95'TSB'	58.95	28.70	38.59	0.00	0.00	0.00	0.00	62	74	0	0	0	0	7,871	700	0	0	7,481	8,181	0.00	14,652.00	
1744+00.00'TSB'	41.05	28.71	42.96	0.00	0.00	0.00	0.00	44	62	0	0	0	0	7,915	762	0	0	7,481	8,243	0.00	14,634.00	
1745+00.00'TSB'	100.00	26.18	46.84	0.00	0.00	0.00	0.00	102	166	0	0	0	0	8,017	928	0	0	7,481	8,409	0.00	14,570.00	
1745+32.62'TSB'	32.62	24.82	46.12	0.00	0.00	0.00	0.00	31	56	0	0	0	0	8,048	984	0	0	7,481	8,465	0.00	14,545.00	
1745+55.80'TSB'	23.17	24.59	42.43	0.00	0.00	0.00	0.00	21	38	0	0	0	0	8,069	1,022	0	0	7,481	8,503	0.00	14,528.00	
1746+00.00'TSB'	44.20	24.57	33.43	0.00	0.00	0.00	0.00	40	62	0	0	0	0	8,109	1,084	0	0	7,481	8,565	0.00	14,506.00	
1747+00.00'TSB'	100.00	24.23	25.80	0.00	0.00	0.00	0.00	90	110	0	0	0	0	8,199	1,194	0	0	7,481	8,675	0.00	14,486.00	
1748+00.00'TSB'	100.00	24.27	15.36	0.00	0.00	0.00	0.00	90	76	0	0	0	0	8,289	1,270	0	0	7,481	8,751	0.00	14,500.00	
1748+03.60'TSB'	3.60	24.62	14.86	0.00	0.00	0.00	0.00	3	2	0	0	0	0	8,292	1,272	0	0	7,481	8,753	0.00	14,501.00	
1748+79.60'TSB'	76.00	24.87	15.36	0.00	0.00	0.00	0.00	70	43	0	0	0	0	8,362	1,315	0	0	7,481	8,796	0.00	14,528.00	
1749+00.00'TSB'	20.40	24.52	13.65	0.00	0.00	0.00	0.00	19	11													

STATION	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)							Select Crushed Material (TONS)	
		Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh	Rock	EBS	Roadway Embankment	Select Crushed Material	Mass Ordinate	
																					FACTOR 1.9	
1766+00.00'TSB'	100.00	38.84	0.00	0.00	0.00	0.00	0.00	151	0	0	0	0	0	10,694	1,366	0	0	7,481	8,847	0.00	16,809.00	0.00
1767+00.00'TSB'	100.00	36.66	0.00	0.00	0.00	0.00	0.00	140	0	0	0	0	0	10,834	1,366	0	0	7,481	8,847	0.00	16,949.00	0.00
1768+00.00'TSB'	100.00	37.60	0.00	0.00	0.00	0.00	0.00	138	0	0	0	0	0	10,972	1,366	0	0	7,481	8,847	0.00	17,087.00	0.00
1769+00.00'TSB'	100.00	38.77	0.00	0.00	0.00	0.00	0.00	141	0	0	0	0	0	11,113	1,366	0	0	7,481	8,847	0.00	17,228.00	0.00
1769+50.00'TSB'	50.00	38.75	0.00	0.00	0.00	0.00	0.00	72	0	0	0	0	0	11,185	1,366	0	0	7,481	8,847	0.00	17,300.00	0.00
1772+42.48'SB'	0.00	31.60	181.57	0.00	0.00	0.00	0.00	0	0	0	0	0	0	11,185	1,366	0	0	7,481	8,847	0.00	17,300.00	0.00
1773+00.00'SB'	57.52	29.34	172.23	0.00	0.00	0.00	0.00	65	377	0	0	0	0	11,250	1,743	0	0	7,481	9,224	0.00	16,988.00	0.00
1774+00.00'SB'	100.00	38.51	137.76	0.00	0.00	134.57	0.00	126	574	0	0	249	0	11,376	2,317	0	0	7,730	10,047	0.00	16,789.00	0.00
1775+00.00'SB'	100.00	108.55	42.72	0.00	0.00	203.99	0.00	272	334	0	0	627	0	11,648	2,651	0	0	8,357	11,008	0.00	17,354.00	0.00
1776+00.00'SB'	100.00	348.50	2.55	0.00	0.00	232.75	0.00	846	84	0	0	809	0	12,494	2,735	0	0	9,166	11,901	0.00	18,925.00	0.00
1777+00.00'SB'	100.00	452.62	1.04	0.00	0.00	237.33	0.00	1,484	7	0	0	871	0	13,978	2,742	0	0	10,037	12,779	0.00	21,273.00	0.00
1777+39.87'SB'	39.87	413.35	0.34	0.00	0.00	245.10	0.00	639	1	0	0	356	0	14,617	2,743	0	0	10,393	13,136	0.00	22,267.00	0.00
1778+00.00'SB'	60.13	331.02	0.00	0.00	0.00	259.08	0.00	829	0	0	0	561	0	15,446	2,743	0	0	10,954	13,697	0.00	23,657.00	0.00
1779+00.00'SB'	100.00	205.92	0.05	0.00	0.00	288.17	0.00	994	0	0	0	1,013	0	16,440	2,743	0	0	11,967	14,710	0.00	25,664.00	0.00
1780+00.00'SB'	100.00	115.05	34.48	0.00	0.00	305.94	0.00	594	64	0	0	1,100	0	17,034	2,807	0	0	13,067	15,874	0.00	27,294.00	0.00
1781+00.00'SB'	100.00	43.43	104.03	0.00	0.00	290.04	0.00	293	256	0	0	1,104	0	17,327	3,063	0	0	14,171	17,234	0.00	28,435.00	0.00
1781+34.91'SB'	34.91	38.88	172.34	0.00	0.00	240.08	0.00	53	179	0	0	343	0	17,380	3,242	0	0	14,514	17,756	0.00	28,652.00	0.00
1781+98.91'SB' BK	64.00	121.74	17.59	0.00	0.00	314.90	0.00	190	225	0	0	658	0	17,570	3,467	0	0	15,172	18,639	0.00	29,275.00	0.00
1781+46.44'SB' AH	0.00	121.74	17.59	0.00	0.00	314.90	0.00	0	0	0	0	0	0	17,570	3,467	0	0	15,172	18,639	0.00	29,275.00	0.00
1781+54.44'SB'	8.00	136.29	14.01	0.00	0.00	400.16	0.00	38	5	0	0	106	0	17,608	3,472	0	0	15,278	18,750	0.00	29,414.00	0.00
1782+00.00'SB'	45.56	272.88	6.61	0.00	0.00	416.18	0.00	345	17	0	0	689	0	17,953	3,489	0	0	15,967	19,456	0.00	30,431.00	0.00
1782+74.44'SB'	74.44	1426.83	0.00	0.00	0.00	0.00	0.00	2,343	9	0	0	574	0	20,296	3,498	0	0	16,541	20,039	0.00	33,339.00	0.00
1783+00.00'SB'	25.56	1519.38	0.00	0.00	0.00	0.00	0.00	1,395	0	0	0	0	0	21,691	3,498	0	0	16,541	20,039	0.00	34,734.00	0.00
1783+94.44'SB'	94.44	172.92	49.30	0.00	0.00	86.52	0.00	2,960	86	0	0	151	0	24,651	3,584	0	0	16,692	20,276	0.00	37,759.00	0.00
1784+00.00'SB'	5.56	167.29	47.90	0.00	0.00	84.73	0.00	35	10	0	0	18	0	24,686	3,594	0	0	16,710	20,304	0.00	37,802.00	0.00
1785+00.00'SB'	100.00	132.85	19.83	0.00	0.00	65.43	0.00	556	125	0	0	278	0	25,242	3,719	0	0	16,988	20,707	0.00	38,511.00	0.00
1786+00.00'SB'	100.00	173.39	16.00	0.00	0.00	67.01	0.00	567	66	0	0	245	0	25,809	3,785	0	0	17,233	21,018	0.00	39,257.00	0.00
1787+00.00'SB'	100.00	198.65	4.99	0.00	0.00	170.28	0.00	689	39	0	0	439	0	26,498	3,824	0	0	17,672	21,496	0.00	40,346.00	0.00
1788+00.00'SB'	100.00	187.48	4.38	0.00	0.00	267.75	170.42	715	17	0	0	811	316	27,213	3,841	0	0	18,483	22,008	316.00	41,855.00	600.00
1789+00.00'SB'	100.00	180.48	17.61	0.00	0.00	360.17	168.67	681	41	0	0	1,163	628	27,894	3,882	0	0	19,646	22,584	944.00	43,658.00	1,794.00
1790+00.00'SB'	100.00	91.80	68.78	0.00	0.00	447.12	170.89	504	160	0	0	1,495	629	28,398	4,042	0	0	21,141	23,610	1,573.00	45,497.00	2,989.00
1790+78.00'SB'	78.00	128.39	288.96	0.00	0.00	361.86	177.65	318	517	0	0	1,169	503	28,716	4,559	0	0	22,310	24,793	2,076.00	46,467.00	3,944.00
1791+00.00'SB'	22.00	102.39	355.49	0.00	0.00	338.20	194.34	94	263	0	0	285	152	28,810	4,822	0	0	22,595	25,189	2,228.00	46,583.00	4,233.00
1792+00.00'SB'	100.00	50.11	380.64	0.00	0.00	111.51	0.00	282	1,363	0	0	833	360	29,092	6,185	0	0	23,428	27,025	2,588.00	46,335.00	4,917.00
1793+00.00'SB'	100.00	35.48	350.67	0.00	0.00	0.00	0.00	159	1,354	0	0	207	0	29,251	7,539	0	0	23,635	28,586	2,588.00	45,347.00	4,917.00
1794+00.00'SB'	100.00	18.76	322.41	0.00	0.00	0.00	0.00	100	1,246	0	0	0	0	29,351	8,785	0	0	23,635	29,832	2,588.00	44,201.00	4,917.00
1795+00.00'SB'	100.00	11.21	290.89	0.00	0.00	0.00	0.00	56	1,136	0	0	0	0	29,407	9,921	0	0	23,635	30,968	2,588.00	43,121.00	4,917.00
1796+00.00'SB'	100.00	46.93	109.23	0.00	0.00	0.00	0.00	108	741	0	0	0	0	29,515	10,662	0	0	23,635	31,709	2,588.00	42,488.00	4,917.00
1797+00.00'SB'	100.00	576.09	35.39	0.00	0.00	0.00	0.00	1,154	268	0	0	0	0	30,669	10,930	0	0	23,635	31,977	2,588.00	43,374.00	4,917.00
1798+00.00'SB'	100.00	654.47	58.71	0.00	0.00	0.00	0.00	2,279	174	0	0	0	0	32,948	11,104	0	0	23,635	32,151	2,588.00	45,479.00	4,917.00
1798+91.49'SB'	91.49	926.99	26.02	0.00	0.00	0.00	0.00	2,679	144	0	0	0	0	35,627	11,248	0	0	23,635	32,295	2,588.00	48,014.00	4,917.00
1798+91.61'SB'	0.12	127.22	2.36	0.00	0.00	0.00	0.00	2	0	0	0	0	0	35,629	11,248	0	0	23,635	32,295	2,588.00	48,016.00	4,917.00
1799+00.00'SB'	8.39	126.52	2.69	0.00	0.00	0.00	0.00	39	1	0	0	0	0	35,668	11,249	0	0	23,635	32,296	2,588.00	48,054.00	4,917.00
1800+00.00'SB'	100.00	0.00	3.40	0.00	142.41	0.00	0.00	234	11	0	264	0	0	35,902	11,260	0	264	23,635	32,307	2,588.00	48,541.00	4,917.00
1801+00.00'SB'	100.00	0.00	1.26	0.00	185.38	0.00	0.00	0	9	0	607	0	0	35,902	11,269	0	871	23,635	32,316	2,588.00	49,139.00	4,917.00
1802+00.00'SB'	100.00	0.00	0.69	0.00	215.52	0.00	0.00	0	4	0	742	0	0	35,902	11,273	0	1,613	23,635	32,320	2,588.00	49,877.00	4,917.00
1803+00.00'SB'	100.00	0.01	1.17	0.00	297.09	0.00	0.00	0	3	0	949	0	0	35,902	11,276	0	2,562	23,635	32,323	2,588.00	50,823.00	4,917.00
1803+23.27'SB'	23.27	0.22	1.19	0.00	320.64	0.00	0.00	0	1	0	266	0	0	35,902	11,277	0	2,828	23,635	32,324	2,588.00	51,088.00	4,917.00
1803+25.00'SB'	1.73	0.00	1.22	0.00	0.00	0.00	0.00	0	0	0	10	0	0	35,902	11,277	0	2,838	23,635	32,324	2,588.00	51,098.00	4,917.00
1804+00.00'SB'	75.00	0.00	0.00	0.00	0.00	0.00	0.00	0	2	0	0	0	0	35,902	11,279	0	2,838	23,635	32,326	2,588.00	51,096.00	4,917.00
1819+61.72'SB'	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	35,902	11,279	0	2,838	23,635	32,326	2,588.00	51,096.00	4,917.00
1819+64.53'SB'	2.81	0.00	360.46	0.00	0.00	0.00	0.00	0	19	0	0	0	0	35,902	11,298	0	2,838	23,635	32,345	2,588.00	51,077.00	4,917.00
1819+67.44'SB'	2.92	0.00	361.64	0.00	0.00	0.00	0.00	0	39	0	0	0	0	35,902	11,337	0	2,838	23,635	32,384	2,588.00	51,038.00	4,917.00
1820+00.00'SB'	32.56	0.00	361.67	0.00	0.00	0.00	0.00	0	436	0	0	0										

STATION	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)										Select Crushed Material (TONS) FACTOR 1.9
		Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh	Rock	EBS	Roadway Embankment	Select Crushed Material	Mass Ordinate			
1824+00.00'SB'	77.72	878.69	218.58	0.00	0.00	0.00	0.00	2,537	652	0	0	0	0	42,903	15,912	0	2,838	23,635	36,959	2,588.00	53,464.00	4,917.00		
1825+00.00'SB'	100.00	530.40	278.71	0.00	0.00	0.00	0.00	2,609	921	0	0	0	0	45,512	16,833	0	2,838	23,635	37,880	2,588.00	55,152.00	4,917.00		
1826+00.00'SB'	100.00	241.84	292.57	0.00	0.00	0.00	0.00	1,430	1,058	0	0	0	0	46,942	17,891	0	2,838	23,635	38,938	2,588.00	55,524.00	4,917.00		
1827+00.00'SB'	100.00	97.55	334.64	0.00	0.00	0.00	0.00	629	1,161	0	0	0	0	47,571	19,052	0	2,838	23,635	40,099	2,588.00	54,992.00	4,917.00		
1828+00.00'SB'	100.00	149.00	250.93	0.00	0.00	0.00	0.00	457	1,084	0	0	0	0	48,028	20,136	0	2,838	23,635	41,183	2,588.00	54,365.00	4,917.00		
1829+00.00'SB'	100.00	120.42	229.34	0.00	0.00	0.00	0.00	499	889	0	0	0	0	48,527	21,025	0	2,838	23,635	42,072	2,588.00	53,975.00	4,917.00		
1830+00.00'SB'	100.00	159.93	200.93	0.00	0.00	0.00	0.00	519	797	0	0	0	0	49,046	21,822	0	2,838	23,635	42,869	2,588.00	53,697.00	4,917.00		
1830+10.82'TSB'	0.00	157.58	205.18	0.00	0.00	0.00	0.00	0	0	0	0	0	0	49,046	21,822	0	2,838	23,635	42,869	2,588.00	53,697.00	4,917.00		
1830+27.75'TSB'	16.93	216.37	205.02	0.00	0.00	0.00	0.00	117	129	0	0	0	0	49,163	21,951	0	2,838	23,635	42,998	2,588.00	53,685.00	4,917.00		
1830+36.63'TSB'	8.88	247.17	202.82	0.00	0.00	0.00	0.00	76	67	0	0	0	0	49,239	22,018	0	2,838	23,635	43,065	2,588.00	53,694.00	4,917.00		
1830+66.81'TSB'	30.18	283.86	191.05	0.00	0.00	0.00	0.00	297	220	0	0	0	0	49,536	22,238	0	2,838	23,635	43,285	2,588.00	53,771.00	4,917.00		
1831+00.00'TSB'	33.19	332.14	175.79	0.00	0.00	0.00	0.00	379	225	0	0	0	0	49,915	22,463	0	2,838	23,635	43,510	2,588.00	53,925.00	4,917.00		
1832+00.00'TSB'	100.00	395.43	120.18	0.00	0.00	0.00	0.00	1,347	548	0	0	0	0	51,262	23,011	0	2,838	23,635	44,058	2,588.00	54,724.00	4,917.00		
1832+85.46'TSB'	85.46	604.18	103.23	0.00	0.00	0.00	0.00	1,582	354	0	0	0	0	52,844	23,365	0	2,838	23,635	44,412	2,588.00	55,952.00	4,917.00		
1833+00.00'TSB'	14.54	613.40	83.30	0.00	0.00	0.00	0.00	328	50	0	0	0	0	53,172	23,415	0	2,838	23,635	44,462	2,588.00	56,230.00	4,917.00		
1834+00.00'TSB'	100.00	459.81	44.67	0.00	0.00	0.00	0.00	1,987	237	0	0	0	0	55,159	23,652	0	2,838	23,635	44,699	2,588.00	57,980.00	4,917.00		
1835+00.00'TSB'	100.00	209.48	21.10	0.00	0.00	0.00	0.00	1,239	122	0	0	0	0	56,398	23,774	0	2,838	23,635	44,821	2,588.00	59,097.00	4,917.00		
1836+00.00'TSB'	100.00	162.95	9.55	0.00	0.00	0.00	0.00	690	57	0	0	0	0	57,088	23,831	0	2,838	23,635	44,878	2,588.00	59,730.00	4,917.00		
1837+00.00'TSB'	100.00	303.01	8.34	0.00	0.00	0.00	0.00	863	33	0	0	0	0	57,951	23,864	0	2,838	23,635	44,911	2,588.00	60,560.00	4,917.00		
1838+00.00'TSB'	100.00	316.80	6.33	0.00	0.00	0.00	0.00	1,148	27	0	0	0	0	59,099	23,891	0	2,838	23,635	44,938	2,588.00	61,681.00	4,917.00		
1839+00.00'TSB'	100.00	277.94	5.27	0.00	0.00	0.00	0.00	1,101	21	0	0	0	0	60,200	23,912	0	2,838	23,635	44,959	2,588.00	62,761.00	4,917.00		
1839+37.29'TSB'	37.29	275.13	4.95	0.00	0.00	0.00	0.00	382	7	0	0	0	0	60,582	23,919	0	2,838	23,635	44,966	2,588.00	63,136.00	4,917.00		
1840+00.00'TSB'	62.71	315.15	1.61	0.00	0.00	0.00	0.00	685	8	0	0	0	0	61,267	23,927	0	2,838	23,635	44,974	2,588.00	63,813.00	4,917.00		
1841+00.00'TSB'	100.00	391.92	4.86	0.00	0.00	0.00	0.00	1,309	12	0	0	0	0	62,576	23,939	0	2,838	23,635	44,986	2,588.00	65,110.00	4,917.00		
1842+00.00'TSB'	100.00	407.21	11.94	0.00	0.00	0.00	0.00	1,480	31	0	0	0	0	64,056	23,970	0	2,838	23,635	45,017	2,588.00	66,559.00	4,917.00		
1843+00.00'TSB'	100.00	360.45	18.60	0.00	0.00	0.00	0.00	1,422	57	0	0	0	0	65,478	24,027	0	2,838	23,635	45,074	2,588.00	67,924.00	4,917.00		
1844+00.00'TSB'	100.00	215.53	19.20	0.00	0.00	0.00	0.00	1,067	70	0	0	0	0	66,545	24,097	0	2,838	23,635	45,144	2,588.00	68,921.00	4,917.00		
1845+00.00'TSB'	100.00	117.02	31.55	0.00	0.00	0.00	0.00	616	94	0	0	0	0	67,161	24,191	0	2,838	23,635	45,238	2,588.00	69,443.00	4,917.00		
1846+00.00'TSB'	100.00	72.62	49.45	0.00	0.00	0.00	0.00	351	150	0	0	0	0	67,512	24,341	0	2,838	23,635	45,388	2,588.00	69,644.00	4,917.00		
1847+00.00'TSB'	100.00	47.66	66.12	0.00	0.00	0.00	0.00	223	214	0	0	0	0	67,735	24,555	0	2,838	23,635	45,602	2,588.00	69,653.00	4,917.00		
1848+00.00'TSB'	100.00	49.07	91.90	0.00	0.00	0.00	0.00	179	293	0	0	0	0	67,914	24,848	0	2,838	23,635	45,895	2,588.00	69,539.00	4,917.00		
1848+78.52'TSB'	78.52	47.76	100.13	0.00	0.00	0.00	0.00	141	279	0	0	0	0	68,055	25,127	0	2,838	23,635	46,174	2,588.00	69,401.00	4,917.00		
1849+00.00'TSB'	21.48	48.19	120.71	0.00	0.00	0.00	0.00	38	88	0	0	0	0	68,093	25,215	0	2,838	23,635	46,262	2,588.00	69,351.00	4,917.00		
1850+00.00'TSB'	100.00	42.23	226.35	0.00	0.00	0.00	0.00	167	643	0	0	0	0	68,260	25,858	0	2,838	23,635	46,905	2,588.00	68,875.00	4,917.00		
1850+38.57'TSB'	38.57	41.38	229.24	0.00	0.00	0.00	0.00	60	325	0	0	0	0	68,320	26,183	0	2,838	23,635	47,230	2,588.00	68,610.00	4,917.00		
1851+00.00'TSB																								

STATION	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Select Crushed Material
		Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh	Rock	EBS	Roadway Embankment	Select Crushed Material	Mass Ordinate	FACTOR 1.9
1873+00.00'TSB'	100.00	219.11	1.20	0.00	0.00	0.00	0.00	697	9	0	0	0	0	80,201	29,770	0	2,838	23,635	50,817	2,588.00	76,904.00	4,917.00
1874+00.00'TSB'	100.00	261.40	5.89	0.00	0.00	0.00	0.00	890	13	0	0	0	0	81,091	29,783	0	2,838	23,635	50,830	2,588.00	77,781.00	4,917.00
1875+00.00'TSB'	100.00	351.59	4.26	0.00	0.00	0.00	0.00	1,135	19	0	0	0	0	82,226	29,802	0	2,838	23,635	50,849	2,588.00	78,897.00	4,917.00
1876+00.00'TSB'	100.00	541.21	0.75	0.00	0.00	0.00	0.00	1,653	9	0	0	0	0	83,879	29,811	0	2,838	23,635	50,858	2,588.00	80,541.00	4,917.00
1877+00.00'TSB'	100.00	744.93	0.00	0.00	0.00	0.00	0.00	2,382	1	0	0	0	0	86,261	29,812	0	2,838	23,635	50,859	2,588.00	82,922.00	4,917.00
1878+00.00'TSB'	100.00	612.35	0.01	0.00	0.00	0.00	0.00	2,513	0	0	0	0	0	88,774	29,812	0	2,838	23,635	50,859	2,588.00	85,435.00	4,917.00
1879+00.00'TSB'	100.00	325.10	2.59	0.00	0.00	0.00	0.00	1,736	5	0	0	0	0	90,510	29,817	0	2,838	23,635	50,864	2,588.00	87,166.00	4,917.00
1880+00.00'TSB'	100.00	127.43	8.19	0.00	0.00	0.00	0.00	838	20	0	0	0	0	91,348	29,837	0	2,838	23,635	50,884	2,588.00	87,984.00	4,917.00
1881+00.00'TSB'	100.00	57.90	3.09	0.00	0.00	0.00	0.00	343	21	0	0	0	0	91,691	29,858	0	2,838	23,635	50,905	2,588.00	88,306.00	4,917.00
1882+00.00'TSB'	100.00	26.25	172.22	0.00	0.00	0.00	0.00	156	325	0	0	0	0	91,847	30,183	0	2,838	23,635	51,230	2,588.00	88,137.00	4,917.00
1883+00.00'TSB'	100.00	24.82	291.50	0.00	0.00	0.00	0.00	95	859	0	0	0	0	91,942	31,042	0	2,838	23,635	52,089	2,588.00	87,373.00	4,917.00
1884+00.00'TSB'	100.00	24.93	402.63	0.00	0.00	0.00	0.00	92	1,285	0	0	0	0	92,034	32,327	0	2,838	23,635	53,374	2,588.00	86,180.00	4,917.00
1885+00.00'TSB'	100.00	24.67	428.96	0.00	0.00	0.00	0.00	92	1,540	0	0	0	0	92,126	33,867	0	2,838	23,635	54,914	2,588.00	84,732.00	4,917.00
1886+00.00'TSB'	100.00	25.31	379.61	0.00	0.00	0.00	0.00	93	1,497	0	0	0	0	92,219	35,364	0	2,838	23,635	56,411	2,588.00	83,328.00	4,917.00
1887+00.00'TSB'	100.00	24.78	332.14	0.00	0.00	0.00	0.00	93	1,318	0	0	0	0	92,312	36,682	0	2,838	23,635	57,729	2,588.00	82,103.00	4,917.00
1887+52.11'TSB'	52.11	23.67	302.13	0.00	0.00	0.00	0.00	47	612	0	0	0	0	92,359	37,294	0	2,838	23,635	58,341	2,588.00	81,538.00	4,917.00
1888+00.00'TSB'	47.89	23.70	271.91	0.00	0.00	0.00	0.00	42	509	0	0	0	0	92,401	37,803	0	2,838	23,635	58,850	2,588.00	81,071.00	4,917.00
1888+77.11'TSB'	77.11	23.75	197.98	0.00	0.00	0.00	0.00	68	671	0	0	0	0	92,469	38,474	0	2,838	23,635	59,521	2,588.00	80,468.00	4,917.00
1888+78.19'TSB'	1.08	23.87	197.41	0.00	0.00	0.00	0.00	1	8	0	0	0	0	92,470	38,482	0	2,838	23,635	59,529	2,588.00	80,461.00	4,917.00
1889+00.00'TSB'	21.81	24.97	182.65	0.00	0.00	0.00	0.00	20	154	0	0	0	0	92,490	38,636	0	2,838	23,635	59,683	2,588.00	80,327.00	4,917.00
1890+00.00'TSB'	100.00	25.13	148.33	0.00	0.00	0.00	0.00	93	613	0	0	0	0	92,583	39,249	0	2,838	23,635	60,296	2,588.00	79,807.00	4,917.00
1891+00.00'TSB'	100.00	24.68	119.98	0.00	0.00	0.00	0.00	92	497	0	0	0	0	92,675	39,746	0	2,838	23,635	60,793	2,588.00	79,402.00	4,917.00
1892+00.00'TSB'	100.00	24.33	74.44	0.00	0.00	0.00	0.00	91	360	0	0	0	0	92,766	40,106	0	2,838	23,635	61,153	2,588.00	79,133.00	4,917.00
1893+00.00'TSB'	100.00	24.23	84.62	0.00	0.00	0.00	0.00	90	295	0	0	0	0	92,856	40,401	0	2,838	23,635	61,448	2,588.00	78,928.00	4,917.00
1894+00.00'TSB'	100.00	26.82	48.71	0.00	0.00	0.00	0.00	95	247	0	0	0	0	92,951	40,648	0	2,838	23,635	61,695	2,588.00	78,776.00	4,917.00
1895+00.00'TSB'	100.00	40.22	10.22	0.00	0.00	0.00	0.00	124	109	0	0	0	0	93,075	40,757	0	2,838	23,635	61,804	2,588.00	78,791.00	4,917.00
1896+00.00'TSB'	100.00	32.21	16.95	0.00	0.00	0.00	0.00	134	50	0	0	0	0	93,209	40,807	0	2,838	23,635	61,854	2,588.00	78,875.00	4,917.00
1897+00.00'TSB'	100.00	28.81	15.05	0.00	0.00	0.00	0.00	113	59	0	0	0	0	93,322	40,866	0	2,838	23,635	61,913	2,588.00	78,929.00	4,917.00
1897+02.11'TSB'	2.11	28.81	15.00	0.00	0.00	0.00	0.00	2	1	0	0	0	0	93,324	40,867	0	2,838	23,635	61,914	2,588.00	78,930.00	4,917.00
1898+00.00'TSB'	97.89	29.32	8.90	0.00	0.00	0.00	0.00	105	43	0	0	0	0	93,429	40,910	0	2,838	23,635	61,957	2,588.00	78,992.00	4,917.00
1899+00.00'TSB'	100.00	25.12	27.56	0.00	0.00	0.00	0.00	101	68	0	0	0	0	93,530	40,978	0	2,838	23,635	62,025	2,588.00	79,025.00	4,917.00
1900+00.00'TSB'	100.00	24.49	50.32	0.00	0.00	0.00	0.00	92	144	0	0	0	0	93,622	41,122	0	2,838	23,635	62,169	2,588.00	78,973.00	4,917.00
1901+00.00'TSB'	100.00	25.48	47.98	0.00	0.00	0.00	0.00	93	182	0	0	0	0	93,715	41,304	0	2,838	23,635	62,351	2,588.00	78,884.00	4,917.00
1902+00.00'TSB'	100.00	25.35	68.86	0.00	0.00	0.00	0.00	94	216	0	0	0	0	93,809	41,520	0	2,838	23,635	62,567	2,588.00	78,762.00	4,917.00
1903+00.00'TSB'	100.00	25.86	68.08	0.00	0.00	0.00	0.00	95	254	0	0	0	0	93,904	41,774	0	2,838	23,635	62,821	2,588.00	78,603.00	4,917.00
1903+33.01'TSB'	33.01	26.20	48.71	0.00	0.00	0.00	0.00	32	7													

STATION	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Select Crushed Material (TONS) FACTOR 1.9
		Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh	Rock	EBS	Roadway Embankment	Select Crushed Material	Mass Ordinate	
1920+00.00'TSB'	89.20	440.79	23.55	0.00	0.00	0.00	0.00	1,684	65	0	0	0	0	108,357	47,990	0	2,838	23,635	69,037	2,588.00	86,840.00	4,917.00
1921+00.00'TSB'	100.00	331.31	38.68	0.00	0.00	0.00	0.00	1,430	115	0	0	0	0	109,787	48,105	0	2,838	23,635	69,152	2,588.00	88,155.00	4,917.00
1922+00.00'TSB'	100.00	152.11	65.84	0.00	0.00	0.00	0.00	895	194	0	0	0	0	110,682	48,299	0	2,838	23,635	69,346	2,588.00	88,856.00	4,917.00
1922+77.53'TSB'	77.53	36.48	242.74	0.00	0.00	0.00	0.00	271	443	0	0	0	0	110,953	48,742	0	2,838	23,635	69,789	2,588.00	88,684.00	4,917.00
1923+00.00'TSB'	22.47	3.40	303.72	0.00	0.00	0.00	0.00	17	227	0	0	0	0	110,970	48,969	0	2,838	23,635	70,016	2,588.00	88,474.00	4,917.00
1923+08.17'TSB'	8.17	0.00	294.94	0.00	0.00	0.00	0.00	1	91	0	0	0	0	110,971	49,060	0	2,838	23,635	70,107	2,588.00	88,384.00	4,917.00
1924+00.00'TSB'	91.83	0.00	151.18	0.00	0.00	0.00	0.00	0	759	0	0	0	0	110,971	49,819	0	2,838	23,635	70,866	2,588.00	87,625.00	4,917.00
1925+00.00'TSB'	100.00	0.50	157.66	0.00	0.00	0.00	0.00	1	572	0	0	0	0	110,972	50,391	0	2,838	23,635	71,438	2,588.00	87,054.00	4,917.00
1925+44.00'TSB'	44.00	13.37	127.48	0.00	0.00	0.00	0.00	11	232	0	0	0	0	110,983	50,623	0	2,838	23,635	71,670	2,588.00	86,833.00	4,917.00
1926+00.00'TSB'	56.00	43.42	110.14	0.00	0.00	0.00	0.00	59	246	0	0	0	0	111,042	50,869	0	2,838	23,635	71,916	2,588.00	86,646.00	4,917.00
1926+43.50'SB'	0.00	54.03	97.05	0.00	0.00	0.00	0.00	0	0	0	0	0	0	111,042	50,869	0	2,838	23,635	71,916	2,588.00	86,646.00	4,917.00
1927+00.00'SB'	56.50	94.06	82.67	0.00	0.00	0.00	0.00	155	188	0	0	0	0	111,197	51,057	0	2,838	23,635	72,104	2,588.00	86,613.00	4,917.00
1928+00.00'SB'	100.00	95.71	89.78	0.00	0.00	0.00	0.00	351	319	0	0	0	0	111,548	51,376	0	2,838	23,635	72,423	2,588.00	86,645.00	4,917.00
1928+76.56'SB'	76.56	2.96	151.09	0.00	0.00	0.00	0.00	140	341	0	0	0	0	111,688	51,717	0	2,838	23,635	72,764	2,588.00	86,444.00	4,917.00
1929+00.00'SB'	23.44	0.00	210.41	0.00	0.00	0.00	0.00	1	157	0	0	0	0	111,689	51,874	0	2,838	23,635	72,921	2,588.00	86,288.00	4,917.00
1929+96.55'SB'	96.55	0.00	205.29	0.00	0.00	0.00	0.00	0	743	0	0	0	0	111,689	52,617	0	2,838	23,635	73,664	2,588.00	85,545.00	4,917.00
1931+75.00'SB'	0.00	0.00	330.06	0.00	0.00	0.00	0.00	0	0	0	0	0	0	111,689	52,617	0	2,838	23,635	73,664	2,588.00	85,545.00	4,917.00
1932+00.00'SB'	25.00	0.00	345.78	0.00	0.00	0.00	0.00	0	313	0	0	0	0	111,689	52,930	0	2,838	23,635	73,977	2,588.00	85,232.00	4,917.00
1932+94.82'SB'	94.82	0.00	356.04	0.00	0.00	0.00	0.00	0	1,232	0	0	0	0	111,689	54,162	0	2,838	23,635	75,209	2,588.00	84,000.00	4,917.00
1933+00.00'SB'	5.18	0.00	347.91	0.00	0.00	0.00	0.00	0	68	0	0	0	0	111,689	54,230	0	2,838	23,635	75,277	2,588.00	83,932.00	4,917.00
1933+76.72'SB'	76.72	21.09	121.63	0.00	0.00	0.00	0.00	30	667	0	0	0	0	111,719	54,897	0	2,838	23,635	75,944	2,588.00	83,295.00	4,917.00
1934+00.00'SB'	23.28	61.52	105.79	0.00	4.57	0.00	0.00	36	98	0	2	0	0	111,755	54,995	0	2,840	23,635	76,042	2,588.00	83,235.00	4,917.00
1934+01.65'SB'	1.65	61.86	104.17	0.00	7.43	0.00	0.00	4	6	0	0	0	0	111,759	55,001	0	2,840	23,635	76,048	2,588.00	83,233.00	4,917.00
1934+26.57'SB'	24.92	109.57	91.43	0.00	9.21	0.00	0.00	79	90	0	8	0	0	111,838	55,091	0	2,848	23,635	76,138	2,588.00	83,230.00	4,917.00
1935+00.00'SB'	73.43	167.50	72.16	0.00	79.94	0.00	0.00	377	222	0	121	0	0	112,215	55,313	0	2,969	23,635	76,360	2,588.00	83,506.00	4,917.00
1936+00.00'SB'	100.00	165.61	91.48	0.00	52.06	0.00	0.00	617	303	0	244	0	0	112,832	55,616	0	3,213	23,635	76,663	2,588.00	84,064.00	4,917.00
1937+00.00'SB'	100.00	79.86	133.66	0.00	16.95	0.00	0.00	455	417	0	128	0	0	113,287	56,033	0	3,341	23,635	77,080	2,588.00	84,230.00	4,917.00
1938+00.00'SB'	100.00	104.87	135.15	0.00	47.75	0.00	0.00	342	498	0	120	0	0	113,629	56,531	0	3,461	23,635	77,578	2,588.00	84,194.00	4,917.00
1939+00.00'SB'	100.00	64.91	170.36	0.00	2.87	0.00	0.00	314	566	0	94	0	0	113,943	57,097	0	3,555	23,635	78,144	2,588.00	84,036.00	4,917.00
1939+10.69'SB'	10.69	53.21	195.53	0.00	2.95	0.00	0.00	23	72	0	1	0	0	113,966	57,169	0	3,556	23,635	78,216	2,588.00	83,988.00	4,917.00
1939+14.34'SB'	3.65	51.31	187.70	0.00	1.95	0.00	0.00	7	26	0	0	0	0	113,973	57,195	0	3,556	23,635	78,242	2,588.00	83,969.00	4,917.00
1940+00.00'SB'	85.66	26.34	201.71	0.00	0.21	0.00	0.00	123	618	0	3	0	0	114,096	57,813	0	3,559	23,635	78,860	2,588.00	83,477.00	4,917.00
1941+00.00'SB'	100.00	26.97	165.88	0.00	0.00	0.00	0.00	99	681	0	0	0	0	114,195	58,494	0	3,559	23,635	79,541	2,588.00	82,895.00	4,917.00
1941+38.12'SB'	38.12	81.09	33.26	0.00	0.00	0.00	0.00	76	141	0	0	0	0	114,271	58,635	0	3,559	23,635	79,682	2,588.00	82,830.00	4,917.00
1942+00.00'SB'	61.88	25.67	132.63	0.00	0.00	0.00	0.00	122	190	0	0	0	0	114,393	58,825	0	3,559	23,635	79,872	2,588.00	82,762.00	4,917.00
1943+00.00'SB'	100.00	15.18	97.22																			

	STATION	Distance	AREA (SF)					Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)							Select Crushed Material (TONS) FACTOR 1.9		
			Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh	Rock	EBS	Roadway Embankment		Select Crushed Material	Mass Ordinate
9	1956+00.00'TSB'	62.49	34.08	9.39	0.00	0.00	0.00	0.00	75	44	0	0	0	0	116,921	60,164	0	3,559	23,635	81,211	2,588.00	83,951.00	4,917.00
	1956+03.08'TSB'	3.08	34.48	8.77	0.00	0.00	0.00	0.00	4	1	0	0	0	0	116,925	60,165	0	3,559	23,635	81,212	2,588.00	83,954.00	4,917.00
	1956+82.31'TSB'	79.23	34.15	11.49	0.00	0.00	0.00	0.00	101	30	0	0	0	0	117,026	60,195	0	3,559	23,635	81,242	2,588.00	84,025.00	4,917.00
	1957+00.00'TSB'	17.69	33.62	12.99	0.00	0.00	0.00	0.00	22	8	0	0	0	0	117,048	60,203	0	3,559	23,635	81,250	2,588.00	84,039.00	4,917.00
	1958+00.00'TSB'	100.00	29.99	7.12	0.00	0.00	0.00	0.00	118	37	0	0	0	0	117,166	60,240	0	3,559	23,635	81,287	2,588.00	84,120.00	4,917.00
	1959+00.00'TSB'	100.00	21.95	1.55	0.00	0.00	0.00	0.00	96	16	0	0	0	0	117,262	60,256	0	3,559	23,635	81,303	2,588.00	84,200.00	4,917.00
	1960+00.00'TSB'	100.00	19.11	0.16	0.00	0.00	0.00	0.00	76	3	0	0	0	0	117,338	60,259	0	3,559	23,635	81,306	2,588.00	84,273.00	4,917.00
	1960+63.97'TSB'	63.97	19.14	0.19	0.00	0.00	0.00	0.00	45	0	0	0	0	0	117,383	60,259	0	3,559	23,635	81,306	2,588.00	84,318.00	4,917.00
	556+47.53'SBE'	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	117,383	60,259	0	3,559	23,635	81,306	2,588.00	84,318.00	4,917.00
	557+00.00'SBE'	52.47	24.45	11.42	0.00	0.00	0.00	0.00	24	11	0	0	0	0	117,407	60,270	0	3,559	23,635	81,317	2,588.00	84,331.00	4,917.00
	558+00.00'SBE'	100.00	24.55	17.50	0.00	0.00	0.00	0.00	91	54	0	0	0	0	117,498	60,324	0	3,559	23,635	81,371	2,588.00	84,368.00	4,917.00
	559+00.00'SBE'	100.00	25.31	16.46	0.00	0.00	0.00	0.00	92	63	0	0	0	0	117,590	60,387	0	3,559	23,635	81,434	2,588.00	84,397.00	4,917.00
	559+07.34'SBE'	7.34	26.40	17.92	0.00	0.00	0.00	0.00	7	5	0	0	0	0	117,597	60,392	0	3,559	23,635	81,439	2,588.00	84,399.00	4,917.00
	559+08.70'SBE'	1.36	26.89	12.17	0.00	0.00	0.00	0.00	1	1	0	0	0	0	117,598	60,393	0	3,559	23,635	81,440	2,588.00	84,399.00	4,917.00
	560+00.00'SBE'	91.30	23.42	34.71	0.00	0.00	0.00	0.00	85	79	0	0	0	0	117,683	60,472	0	3,559	23,635	81,519	2,588.00	84,405.00	4,917.00
	561+00.00'SBE'	100.00	24.10	20.67	0.00	0.00	0.00	0.00	88	103	0	0	0	0	117,771	60,575	0	3,559	23,635	81,622	2,588.00	84,390.00	4,917.00
	562+00.00'SBE'	100.00	24.26	7.90	0.00	0.00	0.00	0.00	90	53	0	0	0	0	117,861	60,628	0	3,559	23,635	81,675	2,588.00	84,427.00	4,917.00
	562+30.00'SBE'	30.00	24.31	7.01	0.00	0.00	0.00	0.00	27	8	0	0	0	0	117,888	60,636	0	3,559	23,635	81,683	2,588.00	84,446.00	4,917.00
	563+00.00'SBE'	70.00	23.44	11.45	0.00	0.00	0.00	0.00	62	24	0	0	0	0	117,950	60,660	0	3,559	23,635	81,707	2,588.00	84,484.00	4,917.00
	564+00.00'SBE'	100.00	24.02	4.94	0.00	0.00	0.00	0.00	88	30	0	0	0	0	118,038	60,690	0	3,559	23,635	81,737	2,588.00	84,542.00	4,917.00
	565+00.00'SBE'	100.00	24.16	0.87	0.00	0.00	0.00	0.00	89	11	0	0	0	0	118,127	60,701	0	3,559	23,635	81,748	2,588.00	84,620.00	4,917.00
	566+00.00'SBE'	100.00	24.40	0.02	0.00	0.00	0.00	0.00	90	2	0	0	0	0	118,217	60,703	0	3,559	23,635	81,750	2,588.00	84,708.00	4,917.00
	567+00.00'SBE'	100.00	23.93	0.00	0.00	0.00	0.00	0.00	90	0	0	0	0	0	118,307	60,703	0	3,559	23,635	81,750	2,588.00	84,798.00	4,917.00
	568+00.00'SBE'	100.00	22.46	0.00	0.00	0.00	0.00	0.00	86	0	0	0	0	0	118,393	60,703	0	3,559	23,635	81,750	2,588.00	84,884.00	4,917.00
	568+34.95'SBE'	34.95	22.82	0.00	0.00	0.00	0.00	0.00	29	0	0	0	0	0	118,422	60,703	0	3,559	23,635	81,750	2,588.00	84,913.00	4,917.00
	43+40.00'MG'	0.00	40.43	0.01	0.00	0.00	0.00	0.00	0	0	0	0	0	0	118,422	60,703	0	3,559	23,635	81,750	2,588.00	84,913.00	4,917.00
	43+50.00'MG'	10.00	46.70	19.34	0.00	0.00	0.00	0.00	16	4	0	0	0	0	118,438	60,707	0	3,559	23,635	81,754	2,588.00	84,925.00	4,917.00
	44+00.00'MG'	50.00	47.99	124.97	0.00	0.00	0.00	0.00	88	134	0	0	0	0	118,526	60,841	0	3,559	23,635	81,888	2,588.00	84,879.00	4,917.00
	44+50.00'MG'	50.00	37.28	252.15	0.00	0.00	0.00	0.00	79	349	0	0	0	0	118,605	61,190	0	3,559	23,635	82,237	2,588.00	84,609.00	4,917.00
	45+00.00'MG'	50.00	21.52	381.30	0.00	0.00	0.00	0.00	54	587	0	0	0	0	118,659	61,777	0	3,559	23,635	82,824	2,588.00	84,076.00	4,917.00
	45+50.00'MG'	50.00	9.69	452.45	0.00	0.00	0.00	0.00	29	772	0	0	0	0	118,688	62,549	0	3,559	23,635	83,596	2,588.00	83,333.00	4,917.00
	46+00.00'MG'	50.00	6.13	614.94	0.00	0.00	0.00	0.00	15	988	0	0	0	0	118,703	63,537	0	3,559	23,635	84,584	2,588.00	82,360.00	4,917.00
	46+50.00'MG'	50.00	15.48	774.60	0.00	0.00	0.00	0.00	20	1,287	0	0	0	0	118,723	64,824	0	3,559	23,635	85,871	2,588.00	81,093.00	4,917.00
	47+00.00'MG'	50.00	2.87	974.81	0.00	0.00	0.00	0.00	17	1,620	0	0	0	0	118,740	66,444	0	3,559	23				

	STATION	Distance	AREA (SF)					Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)							Select Crushed Material (TONS) FACTOR 1.9		
			Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh	Rock	EBS	Roadway Embankment		Select Crushed Material	Mass Ordinate
9	798+91.61'KC'	0.00	798.72	23.79	0.00	0.00	0.00	0.00	0	0	0	0	0	0	121,701	76,303	0	3,559	23,635	97,350	2,588.00	72,592.00	4,917.00
	799+00.00'KC'	8.39	819.49	24.66	0.00	0.00	0.00	0.00	251	8	0	0	0	0	121,952	76,311	0	3,559	23,635	97,358	2,588.00	72,835.00	4,917.00
	799+50.00'KC'	50.00	935.73	27.15	0.00	0.00	0.00	0.00	1,625	48	0	0	0	0	123,577	76,359	0	3,559	23,635	97,406	2,588.00	74,412.00	4,917.00
	800+00.00'KC'	50.00	0.00	32.19	0.00	1082.85	0.00	0.00	866	55	0	1,003	0	0	124,443	76,414	0	4,562	23,635	97,461	2,588.00	76,226.00	4,917.00
	800+50.00'KC'	50.00	0.00	37.22	0.00	1100.58	0.00	0.00	0	64	0	2,022	0	0	124,443	76,478	0	6,584	23,635	97,525	2,588.00	78,184.00	4,917.00
	801+00.00'KC'	50.00	0.00	38.63	0.00	1062.86	0.00	0.00	0	70	0	2,003	0	0	124,443	76,548	0	8,587	23,635	97,595	2,588.00	80,117.00	4,917.00
	801+50.00'KC'	50.00	0.00	0.00	0.00	1208.54	0.00	0.00	0	36	0	2,103	0	0	124,443	76,584	0	10,690	23,635	97,631	2,588.00	82,184.00	4,917.00
	802+00.00'KC'	50.00	0.00	0.00	0.00	1279.68	0.00	0.00	0	0	0	2,304	0	0	124,443	76,584	0	12,994	23,635	97,631	2,588.00	84,488.00	4,917.00
	802+50.00'KC'	50.00	0.00	0.00	0.00	1371.01	0.00	0.00	0	0	0	2,454	0	0	124,443	76,584	0	15,448	23,635	97,631	2,588.00	86,942.00	4,917.00
	803+00.00'KC'	50.00	0.00	0.00	0.00	1379.69	0.00	0.00	0	0	0	2,547	0	0	124,443	76,584	0	17,995	23,635	97,631	2,588.00	89,489.00	4,917.00
	803+50.00'KC'	50.00	0.00	0.00	0.00	1359.24	0.00	0.00	0	0	0	2,536	0	0	124,443	76,584	0	20,531	23,635	97,631	2,588.00	92,025.00	4,917.00
	804+00.00'KC'	50.00	0.00	0.00	0.00	1208.12	0.00	0.00	0	0	0	2,377	0	0	124,443	76,584	0	22,908	23,635	97,631	2,588.00	94,402.00	4,917.00
	804+50.00'KC'	50.00	0.00	0.00	0.00	1033.81	0.00	0.00	0	0	0	2,076	0	0	124,443	76,584	0	24,984	23,635	97,631	2,588.00	96,478.00	4,917.00
	805+00.00'KC'	50.00	0.00	0.00	0.00	804.59	0.00	0.00	0	0	0	1,702	0	0	124,443	76,584	0	26,686	23,635	97,631	2,588.00	98,180.00	4,917.00
	805+50.00'KC'	50.00	0.00	0.00	0.00	605.65	0.00	0.00	0	0	0	1,306	0	0	124,443	76,584	0	27,992	23,635	97,631	2,588.00	99,486.00	4,917.00
	806+00.00'KC'	50.00	0.00	0.00	0.00	418.91	0.00	0.00	0	0	0	949	0	0	124,443	76,584	0	28,941	23,635	97,631	2,588.00	100,435.00	4,917.00
	806+50.00'KC'	50.00	257.23	0.36	0.00	0.00	0.00	0.00	238	0	0	388	0	0	124,681	76,584	0	29,329	23,635	97,631	2,588.00	101,061.00	4,917.00
	807+00.00'KC'	50.00	151.48	14.75	0.00	0.00	0.00	0.00	378	14	0	0	0	0	125,059	76,598	0	29,329	23,635	97,645	2,588.00	101,425.00	4,917.00
	807+50.00'KC'	50.00	95.10	67.98	0.00	0.00	0.00	0.00	228	77	0	0	0	0	125,287	76,675	0	29,329	23,635	97,722	2,588.00	101,576.00	4,917.00
	808+00.00'KC'	50.00	59.62	142.84	0.00	0.00	0.00	0.00	143	195	0	0	0	0	125,430	76,870	0	29,329	23,635	97,917	2,588.00	101,524.00	4,917.00
	808+50.00'KC'	50.00	34.55	184.22	0.00	0.00	0.00	0.00	87	303	0	0	0	0	125,517	77,173	0	29,329	23,635	98,220	2,588.00	101,308.00	4,917.00
	809+00.00'KC'	50.00	15.03	207.20	0.00	0.00	0.00	0.00	46	362	0	0	0	0	125,563	77,535	0	29,329	23,635	98,582	2,588.00	100,992.00	4,917.00
	809+50.00'KC'	50.00	15.60	180.64	0.00	0.00	0.00	0.00	28	359	0	0	0	0	125,591	77,894	0	29,329	23,635	98,941	2,588.00	100,661.00	4,917.00
	810+00.00'KC'	50.00	15.27	146.58	0.00	0.00	0.00	0.00	29	303	0	0	0	0	125,620	78,197	0	29,329	23,635	99,244	2,588.00	100,387.00	4,917.00
	810+50.00'KC'	50.00	10.66	165.92	0.00	0.00	0.00	0.00	24	289	0	0	0	0	125,644	78,486	0	29,329	23,635	99,533	2,588.00	100,122.00	4,917.00
	811+00.00'KC'	50.00	7.98	185.24	0.00	0.00	0.00	0.00	17	325	0	0	0	0	125,661	78,811	0	29,329	23,635	99,858	2,588.00	99,814.00	4,917.00
	811+50.00'KC'	50.00	4.03	167.09	0.00	0.00	0.00	0.00	11	326	0	0	0	0	125,672	79,137	0	29,329	23,635	100,184	2,588.00	99,499.00	4,917.00
	812+00.00'KC'	50.00	4.73	125.14	0.00	0.00	0.00	0.00	8	271	0	0	0	0	125,680	79,408	0	29,329	23,635	100,455	2,588.00	99,236.00	4,917.00
	812+50.00'KC'	50.00	6.97	58.43	0.00	0.00	0.00	0.00	11	170	0	0	0	0	125,691	79,578	0	29,329	23,635	100,625	2,588.00	99,077.00	4,917.00
	813+00.00'KC'	50.00	30.73	22.33	0.00	0.00	0.00	0.00	35	75	0	0	0	0	125,726	79,653	0	29,329	23,635	100,700	2,588.00	99,037.00	4,917.00
	813+50.00'KC'	50.00	92.85	7.60	0.00	0.00	0.00	0.00	114	28	0	0	0	0	125,840	79,681	0	29,329	23,635	100,728	2,588.00	99,123.00	4,917.00
	814+00.00'KC'	50.00	121.40	0.00	0.00	0.00	0.00	0.00	198	7	0	0	0	0	126,038								

STATION	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Select Crushed Material (TONS)
		Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh	Rock	EBS	Roadway Embankment	Select Crushed Material	Mass Ordinate	FACTOR 1.9
819+50.00'KD'	50.00	376.28	26.88	0.00	0.00	0.00	0.00	609	52	0	0	0	0	132,842	88,793	0	29,329	23,635	109,840	2,588.00	97,013.00	4,917.00
820+00.00'KD'	50.00	365.61	13.08	0.00	0.00	0.00	0.00	687	37	0	0	0	0	133,529	88,830	0	29,329	23,635	109,877	2,588.00	97,663.00	4,917.00
820+50.00'KD'	50.00	307.99	31.68	0.00	0.00	0.00	0.00	624	41	0	0	0	0	134,153	88,871	0	29,329	23,635	109,918	2,588.00	98,246.00	4,917.00
821+00.00'KD'	50.00	249.51	37.13	0.00	0.00	0.00	0.00	516	64	0	0	0	0	134,669	88,935	0	29,329	23,635	109,982	2,588.00	98,698.00	4,917.00
821+19.29'KD'	19.29	256.41	34.70	0.00	0.00	0.00	0.00	181	26	0	0	0	0	134,850	88,961	0	29,329	23,635	110,008	2,588.00	98,853.00	4,917.00
UNDISTRUBUTED	-	0.00	0.00	0.00	0.00	0.00	0.00	0	0	1,349	4,448	1,349	1,349.00	134,850	88,961	1,349	33,777	24,984	110,008	3,937.00	105,999.00	7,480.00

STATION	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Select Crushed Material (TONS) FACTOR 1.9
		Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh	Rock	EBS	Roadway Embankment	Select Crushed Material	Mass Ordinate	
1803+23.27'SB'	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1803+25.00'SB'	1.73	0.24	1.22	0.00	212.25	0.00	0.00	0	0	0	7	0	0	0	0	0	7	0	0	0.00	7.00	0.00
1804+00.00'SB'	75.00	9.72	0.00	0.00	195.64	0.00	0.00	14	2	0	567	0	0	14	2	0	574	0	2	0.00	586.00	0.00
1805+00.00'SB'	100.00	49.82	26.79	0.00	116.55	0.00	0.00	110	50	0	578	0	0	124	52	0	1,152	0	52	0.00	1,224.00	0.00
1805+61.72'SB'	61.72	54.98	5.51	0.00	93.72	0.00	0.00	120	37	0	240	0	0	244	89	0	1,392	0	89	0.00	1,547.00	0.00
1806+00.00'SB'	38.28	63.14	4.39	0.00	79.36	0.00	0.00	84	7	0	123	0	0	328	96	0	1,515	0	96	0.00	1,747.00	0.00
1807+00.00'SB'	100.00	0.00	28.25	0.00	7.35	0.00	0.00	117	60	0	161	0	0	445	156	0	1,676	0	156	0.00	1,965.00	0.00
1808+00.00'SB'	100.00	0.00	102.99	0.00	0.00	0.00	0.00	0	243	0	14	0	0	445	399	0	1,690	0	399	0.00	1,736.00	0.00
1808+39.56'SB'	39.56	0.00	122.32	0.00	0.00	0.00	0.00	0	165	0	0	0	0	445	564	0	1,690	0	564	0.00	1,571.00	0.00
1808+63.82'SB'	24.26	0.00	131.90	0.00	0.00	0.00	0.00	0	114	0	0	0	0	445	678	0	1,690	0	678	0.00	1,457.00	0.00
1808+87.00'SB'	23.18	0.00	144.96	0.00	0.00	0.00	0.00	0	119	0	0	0	0	445	797	0	1,690	0	797	0.00	1,338.00	0.00
1809+00.00'SB'	13.00	0.00	154.45	0.00	0.00	0.00	0.00	0	72	0	0	0	0	445	869	0	1,690	0	869	0.00	1,266.00	0.00
1809+24.99'SB'	24.99	0.00	170.20	0.00	0.00	0.00	0.00	0	150	0	0	0	0	445	1,019	0	1,690	0	1,019	0.00	1,116.00	0.00
1809+83.82'SB'	58.83	0.00	348.02	0.00	0.00	0.00	0.00	0	565	0	0	0	0	445	1,584	0	1,690	0	1,584	0.00	551.00	0.00
1809+85.32'SB'	1.50	0.00	374.92	0.00	0.00	0.00	0.00	0	20	0	0	0	0	445	1,604	0	1,690	0	1,604	0.00	531.00	0.00
1811+79.82'SB'	0.00	0.49	448.81	0.00	0.00	0.00	0.00	0	0	0	0	0	0	445	1,604	0	1,690	0	1,604	0.00	531.00	0.00
1811+81.32'SB'	1.50	0.40	442.46	0.00	0.00	0.00	0.00	0	25	0	0	0	0	445	1,629	0	1,690	0	1,629	0.00	506.00	0.00
1812+00.00'SB'	18.68	0.00	434.84	0.00	0.00	0.00	0.00	0	303	0	0	0	0	445	1,932	0	1,690	0	1,932	0.00	203.00	0.00
1813+00.00'SB'	100.00	0.00	507.85	0.00	0.00	0.00	0.00	0	1,746	0	0	0	0	445	3,678	0	1,690	0	3,678	0.00	-1,543.00	0.00
1813+01.32'SB'	1.32	0.00	509.03	0.00	0.00	0.00	0.00	0	25	0	0	0	0	445	3,703	0	1,690	0	3,703	0.00	-1,568.00	0.00
1814+00.00'SB'	98.68	0.00	617.11	0.00	0.00	0.00	0.00	0	2,058	0	0	0	0	445	5,761	0	1,690	0	5,761	0.00	-3,626.00	0.00
1814+07.34'SB'	7.34	0.00	625.61	0.00	0.00	0.00	0.00	0	169	0	0	0	0	445	5,930	0	1,690	0	5,930	0.00	-3,795.00	0.00
1814+32.36'SB'	25.02	16.30	631.82	0.00	0.00	0.00	0.00	8	583	0	0	0	0	453	6,513	0	1,690	0	6,513	0.00	-4,370.00	0.00
1814+57.38'SB'	25.02	74.45	606.81	0.00	0.00	0.00	0.00	42	574	0	0	0	0	495	7,087	0	1,690	0	7,087	0.00	-4,902.00	0.00
1815+00.00'SB'	42.62	56.02	506.27	0.00	0.00	0.00	0.00	103	879	0	0	0	0	598	7,966	0	1,690	0	7,966	0.00	-5,678.00	0.00
1816+00.00'SB'	100.00	0.00	664.77	0.00	0.00	0.00	0.00	104	2,169	0	0	0	0	702	10,135	0	1,690	0	10,135	0.00	-7,743.00	0.00
1816+69.17'SB'	69.17	0.00	925.67	0.00	0.00	0.00	0.00	0	2,037	0	0	0	0	702	12,172	0	1,690	0	12,172	0.00	-9,780.00	0.00
1816+77.01'SB'	7.84	0.00	917.13	0.00	0.00	0.00	0.00	0	268	0	0	0	0	702	12,440	0	1,690	0	12,440	0.00	-10,048.00	0.00
1817+00.00'SB'	22.99	0.00	909.83	0.00	0.00	0.00	0.00	0	778	0	0	0	0	702	13,218	0	1,690	0	13,218	0.00	-10,826.00	0.00
1817+89.17'SB'	89.17	0.00	669.48	0.00	0.00	0.00	0.00	0	2,608	0	0	0	0	702	15,826	0	1,690	0	15,826	0.00	-13,434.00	0.00
1818+00.00'SB'	10.83	0.00	629.86	0.00	0.00	0.00	0.00	0	261	0	0	0	0	702	16,087	0	1,690	0	16,087	0.00	-13,695.00	0.00
1818+69.17'SB'	69.17	0.00	378.46	0.00	0.00	0.00	0.00	0	1,292	0	0	0	0	702	17,379	0	1,690	0	17,379	0.00	-14,987.00	0.00
1819+00.00'SB'	30.83	0.00	340.32	0.00	0.00	0.00	0.00	0	410	0	0	0	0	702	17,789	0	1,690	0	17,789	0.00	-15,397.00	0.00
1819+09.17'SB'	9.17	0.00	339.01	0.00	0.00	0.00	0.00	0	115	0	0	0	0	702	17,904	0	1,690	0	17,904	0.00	-15,512.00	0.00
1819+61.72'SB'	52.55	0.00	351.11	0.00	0.00	0.00	0.00	0	672	0	0	0	0	702	18,576	0	1,690	0	18,576	0.00	-16,184.00	0.00
1914+00.00'TSB'	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	702	18,576	0	1,690	0	18,576	0.00	-16,184.00	0.00
1914+79.50'TSB'	79.50	47.77	0.00	0.00	0.00	0.00	0.00	70	0	0	0	0	0	772	18,576	0	1,690	0	18,576	0.00	-16,114.00	0.00
1915+00.00'TSB'	20.50	96.25	0.00	0.00	0.00	0.00	0.00	55	0	0	0	0	0	827	18,576	0	1,690	0	18,576	0.00	-16,059.00	0.00
1916+00.00'TSB'	100.00	117.20	0.00	0.00	0.00	0.00	0.00	395	0	0	0	0	0	1,222	18,576	0	1,690	0	18,576	0.00	-15,664.00	0.00
1917+00.00'TSB'	100.00	106.51	0.00	0.00	0.00	0.00	0.00	414	0	0	0	0	0	1,636	18,576	0	1,690	0	18,576	0.00	-15,250.00	0.00
1917+42.80'TSB'	42.80	94.18	0.23	0.00	0.00	0.00	0.00	159	0	0	0	0	0	1,795	18,576	0	1,690	0	18,576	0.00	-15,091.00	0.00
1917+70.79'TSB'	28.00	100.36	0.82	0.00	0.00	0.00	0.00	101	1	0	0	0	0	1,896	18,577	0	1,690	0	18,577	0.00	-14,991.00	0.00
1918+00.00'TSB'	29.21	106.40	1.68	0.00	0.00	0.00	0.00	112	1	0	0	0	0	2,008	18,578	0	1,690	0	18,578	0.00	-14,880.00	0.00
1918+26.80'TSB'	26.80	114.95	2.67	0.00	0.00	0.00	0.00	110	2	0	0	0	0	2,118	18,580	0	1,690	0	18,580	0.00	-14,772.00	0.00
1919+00.00'TSB'	73.20	147.02	5.81	0.00	0.00	0.00	0.00	355	12	0	0	0	0	2,473	18,592	0	1,690	0	18,592	0.00	-14,429.00	0.00
1919+10.80'TSB'	10.80	155.52	6.34	0.00	0.00	0.00	0.00	60	2	0	0	0	0	2,533	18,594	0	1,690	0	18,594	0.00	-14,371.00	0.00
1920+00.00'TSB'	89.20	130.55	17.50	0.00	0.00	0.00	0.00	473	39	0	0	0	0	3,006	18,633	0	1,690	0	18,633	0.00	-13,937.00	0.00
1921+00.00'TSB'	100.00	128.02	37.16	0.00	0.00	0.00	0.00	479	101	0	0	0	0	3,485	18,734	0	1,690	0	18,734	0.00	-13,559.00	0.00
1922+00.00'TSB'	100.00	126.10	72.29	0.00	0.00	0.00	0.00	471	203	0	0	0	0	3,956	18,937	0	1,690	0	18,937	0.00	-13,291.00	0.00
1922+77.53'TSB'	77.53	100.38	95.57	0.00	0.00	0.00	0.00	325	241	0	0	0	0	4,281	19,178	0	1,690	0	19,178	0.00	-13,207.00	0.00
1923+00.00'TSB'	22.47	100.24	102.26	0.00	0.00	0.00	0.00	83	82	0	0	0	0	4,364	19,260	0	1,690	0	19,260	0.00	-13,206.00	0.00
1923+08.17'TSB'	8.17	101.01	104.38	0.00	0.00	0.00	0.00	30	31	0	0	0	0	4,394	19,291	0	1,690	0	19,291	0.00	-13,207.00	0.00
1924+00.00'TSB'	91.83	110.33	127.59	0.00	0.00	0.00	0.00	359	394	0	0	0	0	4,753	19,685	0	1,690	0	19,685	0.00	-13,242.00	0.00
1925+00.00'TSB'	100.00	82.93	157.77	0.00	0.00	0.00	0.00	358	528	0	0	0	0	5,111	20,213	0	1,690	0	20,213	0.00	-13,412.00	0.00
1925+44.00'TSB'	44.00	82.89	170.32	0.00	0.00	0.00	0.00	135	267	0	0	0	0	5,246	20,480	0	1,690	0	20,480	0.00	-13,544.00	0.00
1926+00.00'TSB'	56.00	72.46	186.33	0.00	0.00	0.00	0.00	161	370	0	0	0	0	5,407	20,850	0	1,690	0	20,850	0.00	-13,753.00	0.00
1926+43.50'SB'	5.38	81.93	175.52	0.00	0.56	0.00	0.00	15	36	0	0	0	0	5,422	20,886	0	1,690	0	20,886	0.00	-13,774.00	0.00
1927+00.00'SB'	56.50	74.48	178.42	0.00	0.00	0.00																

STATION	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Select Crushed Material (TONS) FACTOR 1.9
		Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh	Rock	EBS	Roadway Embankment	Select Crushed Material	Mass Ordinate	
1931+75.00'SB'	0.00	43.59	196.47	0.00	0.29	0.00	0.00	0	0	0	0	0	0	6,247	23,368	0	1,803	0	23,368	0.00	-15,318.00	0.00
1932+00.00'SB'	25.00	46.02	193.90	0.00	1.35	0.00	0.00	41	181	0	1	0	0	6,288	23,549	0	1,804	0	23,549	0.00	-15,457.00	0.00
1932+94.82'SB'	94.82	51.10	181.69	0.00	6.21	0.00	0.00	171	660	0	13	0	0	6,459	24,209	0	1,817	0	24,209	0.00	-15,933.00	0.00
1933+00.00'SB'	5.18	51.41	181.54	0.00	5.81	0.00	0.00	10	35	0	1	0	0	6,469	24,244	0	1,818	0	24,244	0.00	-15,957.00	0.00
1933+76.72'SB'	76.72	52.30	169.10	0.00	7.12	0.00	0.00	147	498	0	18	0	0	6,616	24,742	0	1,836	0	24,742	0.00	-16,290.00	0.00
1934+00.00'SB'	23.28	46.51	165.55	0.00	12.41	0.00	0.00	43	144	0	8	0	0	6,659	24,886	0	1,844	0	24,886	0.00	-16,383.00	0.00
1934+01.65'SB'	1.65	44.49	165.31	0.00	14.33	0.00	0.00	3	10	0	1	0	0	6,662	24,896	0	1,845	0	24,896	0.00	-16,389.00	0.00
1934+26.57'SB'	24.92	16.43	161.62	0.00	36.33	0.00	0.00	28	151	0	23	0	0	6,690	25,047	0	1,868	0	25,047	0.00	-16,489.00	0.00
1935+00.00'SB'	73.43	9.92	155.66	0.00	37.84	0.00	0.00	36	431	0	101	0	0	6,726	25,478	0	1,969	0	25,478	0.00	-16,783.00	0.00
1936+00.00'SB'	100.00	18.21	145.00	0.00	41.14	0.00	0.00	52	557	0	146	0	0	6,778	26,035	0	2,115	0	26,035	0.00	-17,142.00	0.00
1937+00.00'SB'	100.00	8.36	132.33	0.00	0.00	0.00	0.00	49	514	0	76	0	0	6,827	26,549	0	2,191	0	26,549	0.00	-17,531.00	0.00
1938+00.00'SB'	100.00	8.36	115.94	0.00	0.00	0.00	0.00	31	460	0	0	0	0	6,858	27,009	0	2,191	0	27,009	0.00	-17,960.00	0.00
1939+00.00'SB'	100.00	8.36	98.92	0.00	0.00	0.00	0.00	31	398	0	0	0	0	6,889	27,407	0	2,191	0	27,407	0.00	-18,327.00	0.00
1939+10.69'SB'	10.69	8.36	96.67	0.00	0.00	0.00	0.00	3	39	0	0	0	0	6,892	27,446	0	2,191	0	27,446	0.00	-18,363.00	0.00
1939+14.34'SB'	3.65	8.36	95.95	0.00	0.00	0.00	0.00	1	13	0	0	0	0	6,893	27,459	0	2,191	0	27,459	0.00	-18,375.00	0.00
1940+00.00'SB'	85.66	8.36	72.06	0.00	0.00	0.00	0.00	27	267	0	0	0	0	6,920	27,726	0	2,191	0	27,726	0.00	-18,615.00	0.00
1941+00.00'SB'	100.00	46.28	32.75	0.00	0.00	0.00	0.00	101	194	0	0	0	0	7,021	27,920	0	2,191	0	27,920	0.00	-18,708.00	0.00
1941+38.12'SB'	38.12	54.13	17.92	0.00	0.00	0.00	0.00	71	36	0	0	0	0	7,092	27,956	0	2,191	0	27,956	0.00	-18,673.00	0.00
1942+00.00'SB'	61.88	70.04	4.99	0.00	0.00	0.00	0.00	142	26	0	0	0	0	7,234	27,982	0	2,191	0	27,982	0.00	-18,557.00	0.00
1943+00.00'SB'	100.00	89.71	0.00	0.00	0.00	0.00	0.00	296	9	0	0	0	0	7,530	27,991	0	2,191	0	27,991	0.00	-18,270.00	0.00
1944+00.00'SB'	100.00	123.17	0.00	0.00	0.00	0.00	0.00	394	0	0	0	0	0	7,924	27,991	0	2,191	0	27,991	0.00	-17,876.00	0.00
1944+49.26'SB'	49.26	142.83	0.00	0.00	0.00	0.00	0.00	243	0	0	0	0	0	8,167	27,991	0	2,191	0	27,991	0.00	-17,633.00	0.00
1945+00.00'SB'	50.74	153.82	0.00	0.00	0.00	0.00	0.00	279	0	0	0	0	0	8,446	27,991	0	2,191	0	27,991	0.00	-17,354.00	0.00
1945+16.57'SB'	16.57	158.47	0.00	0.00	0.00	0.00	0.00	96	0	0	0	0	0	8,542	27,991	0	2,191	0	27,991	0.00	-17,258.00	0.00
1946+00.00'SB'	83.43	170.10	0.00	0.00	0.00	0.00	0.00	508	0	0	0	0	0	9,050	27,991	0	2,191	0	27,991	0.00	-16,750.00	0.00
1946+25.19'SB'	25.19	171.73	0.00	0.00	0.00	0.00	0.00	159	0	0	0	0	0	9,209	27,991	0	2,191	0	27,991	0.00	-16,591.00	0.00
1947+00.00'SB'	74.81	177.22	0.00	0.00	0.00	0.00	0.00	483	0	0	0	0	0	9,692	27,991	0	2,191	0	27,991	0.00	-16,108.00	0.00
1948+00.00'SB'	100.00	170.51	8.54	0.00	0.00	0.00	0.00	644	16	0	0	0	0	10,336	28,007	0	2,191	0	28,007	0.00	-15,480.00	0.00
549+01.62'SBE'	0.00	164.06	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	10,336	28,007	0	2,191	0	28,007	0.00	-15,480.00	0.00
549+46.92'SBE'	45.30	163.15	0.00	0.00	0.00	0.00	0.00	274	0	0	0	0	0	10,610	28,007	0	2,191	0	28,007	0.00	-15,206.00	0.00
550+00.00'SBE'	53.08	157.08	0.00	0.00	0.00	0.00	0.00	315	0	0	0	0	0	10,925	28,007	0	2,191	0	28,007	0.00	-14,891.00	0.00
550+41.47'SBE'	41.47	145.65	0.00	0.00	0.00	0.00	0.00	232	0	0	0	0	0	11,157	28,007	0	2,191	0	28,007	0.00	-14,659.00	0.00
551+00.00'SBE'	58.53	128.97	0.00	0.00	0.00	0.00	0.00	298	0	0	0	0	0	11,455	28,007	0	2,191	0	28,007	0.00	-14,361.00	0.00
551+36.01'SBE'	36.01	118.68	0.00	0.00	0.00	0.00	0.00	165	0	0	0	0	0	11,620	28,007	0	2,191	0	28,007	0.00	-14,196.00	0.00
551+74.20'SBE'	38.19	106.48	0.00	0.00	0.00	0.00	0.00	159	0	0	0	0	0	11,779	28,007	0	2,191	0	28,007	0.00	-14,037.00	0.00
552+00.00'SBE'	25.80	104.12	0.00	0.00	0.00	0.00	0.00	101	0	0	0	0	0	11,880	28,007	0	2,191	0	28,007	0.00	-13,936.00	0.00
552+68.86'SBE'	68.86	90.45	0.08	0.00	0.00	0.00	0.00	248	0	0	0	0	0	12,128	28,007	0	2,191	0	28,007	0.00	-13,688.00	0.00
553+00.00'SBE'	31.14	85.58	0.00	0.00	0.00	0.00	0.00	102	0	0	0	0	0	12,230	28,007	0	2,191	0	28,007	0.00	-13,586.00	0.00
553+20.61'SBE'	20.61	29.53	0.00	0.00	0.00	0.00	0.00	44	0	0	0	0	0	12,274	28,007	0	2,191	0	28,007	0.00	-13,542.00	0.00
553+63.53'SBE'	42.92	0.06	0.00	0.00	0.00	0.00	0.00	24	0	0	0	0	0	12,298	28,007	0	2,191	0	28,007	0.00	-13,518.00	0.00
554+00.00'SBE'	36.47	0.05	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	12,298	28,007	0	2,191	0	28,007	0.00	-13,518.00	0.00
554+58.20'SBE'	58.20	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	12,298	28,007	0	2,191	0	28,007	0.00	-13,518.00	0.00
47+65.00'EKN'	0.00	8.83	0.38	0.00	0.00	0.00	0.00	0	0	0	0	0	0	12,298	28,007	0	2,191	0	28,007	0.00	-13,518.00	0.00
48+00.00'EKN'	35.00	9.77	0.16	0.00	0.00	0.00	0.00	12	0	0	0	0	0	12,310	28,007	0	2,191	0	28,007	0.00	-13,506.00	0.00
48+50.00'EKN'	50.00	107.59	0.09	0.00	0.00	0.00	0.00	109	0	0	0	0	0	12,419	28,007	0	2,191	0	28,007	0.00	-13,397.00	0.00
49+00.00'EKN'	50.00	110.24	0.53	0.00	0.00	0.00	0.00	202	1	0	0	0	0	12,621	28,008	0	2,191	0	28,008	0.00	-13,196.00	0.00
49+50.00'EKN'	50.00	75.09	0.00	0.00	62.18	0.00	0.00	172	0	0	58	0	0	12,793	28,008	0	2,249	0	28,008	0.00	-12,966.00	0.00
50+00.00'EKN'	50.00	95.32	0.00	0.00	82.03	0.00	0.00	158	0	0	134	0	0	12,951	28,008	0	2,383	0	28,008	0.00	-12,674.00	0.00
50+50.00'EKN'	50.00	654.42	0.00	0.00	97.79	0.00	0.00	694	0	0	166	0	0	13,645	28,008	0	2,549	0	28,008	0.00	-11,814.00	0.00
51+00.00'EKN'	50.00	122.74	290.92	0.00	101.16	0.00	0.00	720	269	0	184	0	0	14,365	28,277	0	2,733	0	28,277	0.00	-11,179.00	0.00
51+50.00'EKN'	50.00	146.03	291.70	0.00	97.12	0.00	0.00	249	539	0	184	0	0	14,614	28,816	0	2,917	0	28,816	0.00	-11,285.00	0.00
51+99.99'EKN'	49.99	380.13	0.00	0.00	163.98	0.00	0.00	487	270	0	242	0	0	15,101	29,086	0	3,159	0	29,086	0.00	-10,826.00	0.00
52+00.00'KN'	0.00	380.15	0.00	0.00	221.52	0.00	0.00	0	0	0	0	0	0	15,101	29,086	0	3,159	0	29,086	0.00	-10,826.00	0.00
52+50.00'KN'	50.00	457.01	0.00	0.00	344.59	0.00	0.00	775	0	0	524	0	0	15,876	29,086	0	3,683	0	29,086	0.00	-9,527.00	0.00
53+00.00'KN'	50.00	466.55	0.00	0.00	307.37	0.00	0.00	855	0	0	604	0	0	16,731	29,086	0	4,287	0	29,086	0.00	-8,068.00	0.00
53+50.00'KN'	50.00	463.59	0.00	0.00	241.67	0.00	0.00	861	0	0	508	0	0	17,592	29,086	0	4,795	0	29,086	0.00	-6,699.00	0.00
54+00.00'KN'	50.00																					

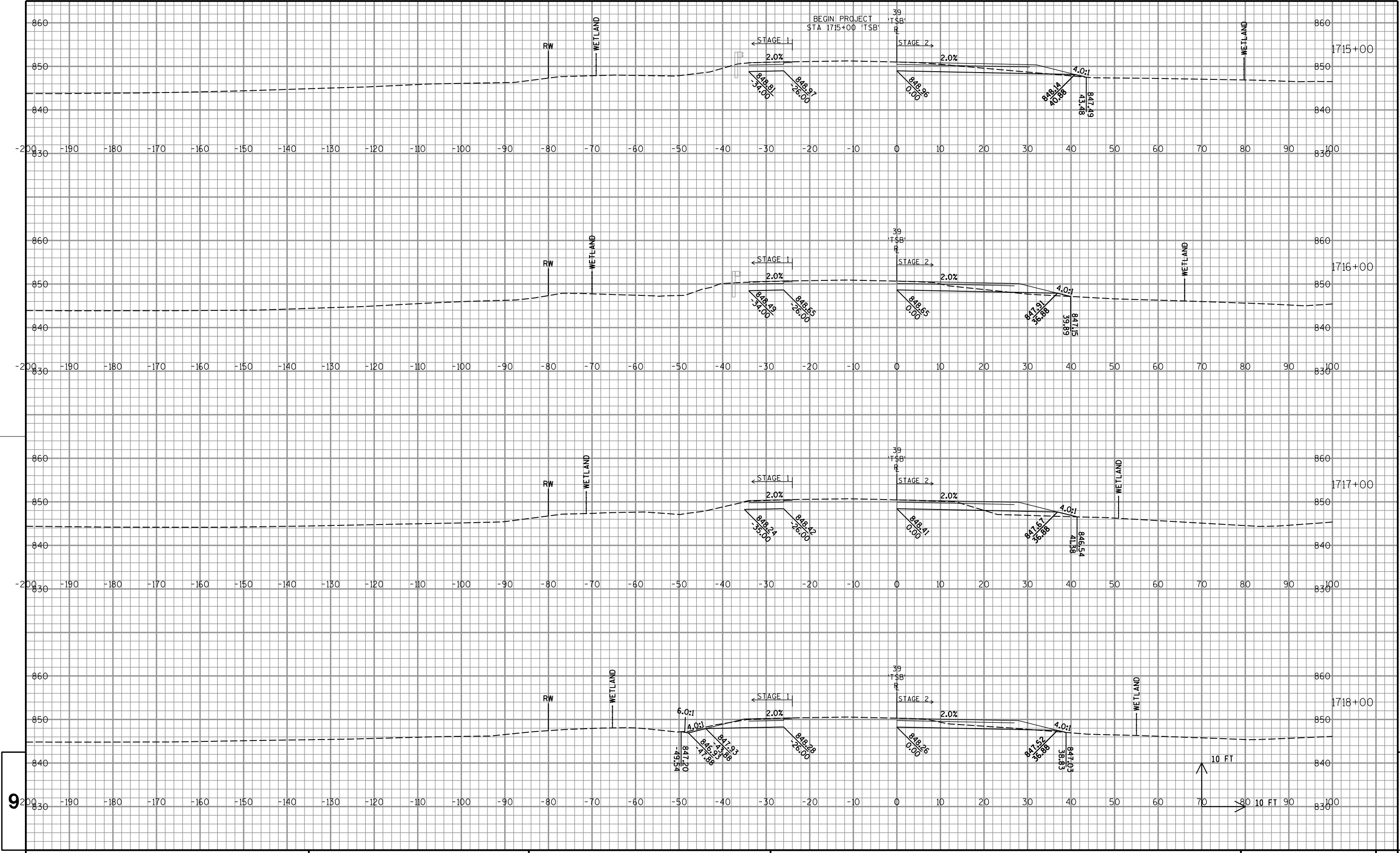
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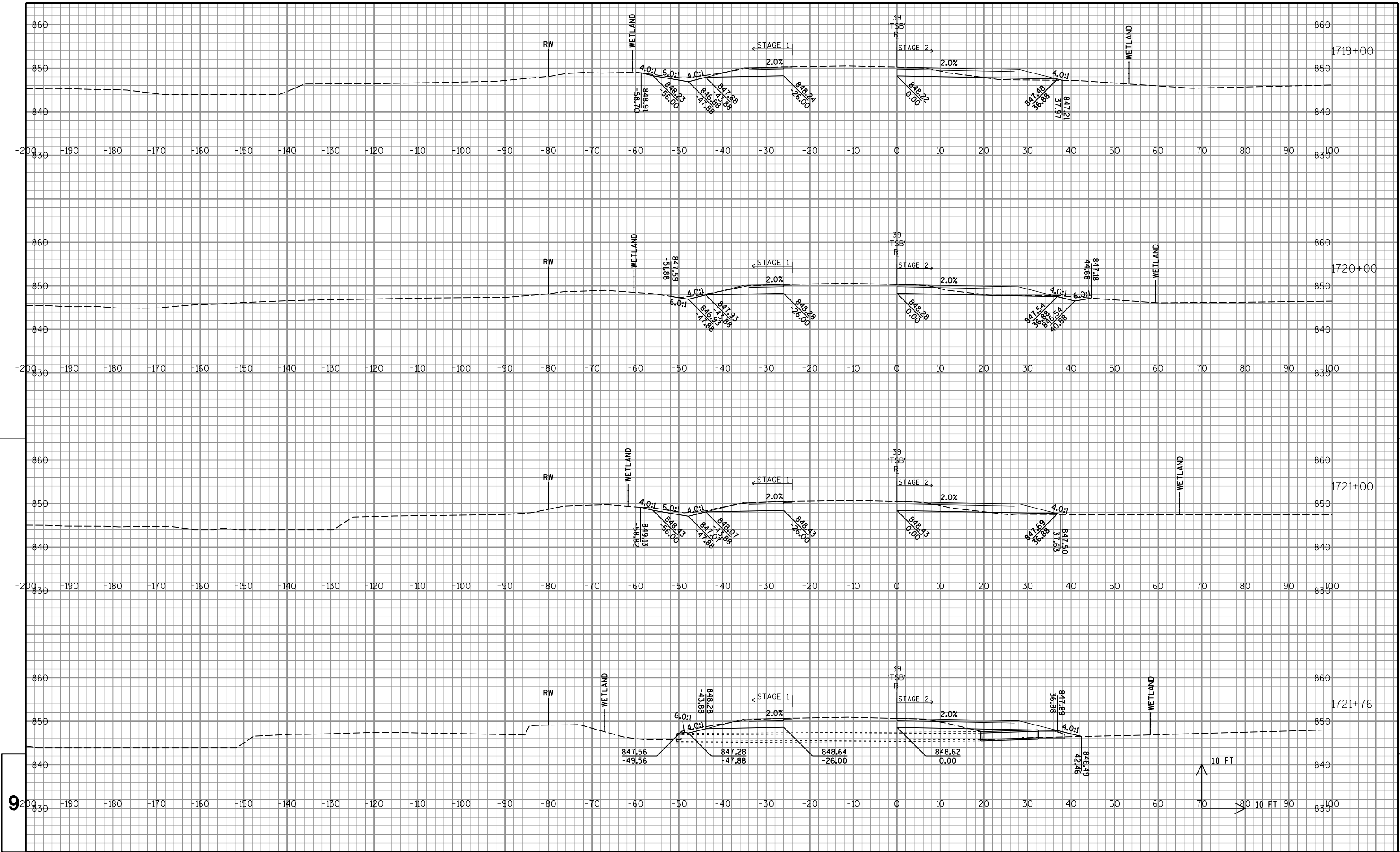
STATION	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Select Crushed Material (TONS) FACTOR 1.9
		Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh	Rock	EBS	Roadway Embankment	Select Crushed Material	Mass Ordinate	
57+00.00'KN'	50.00	306.60	0.00	0.00	0.00	0.00	0.00	610	0	0	61	0	0	23,321	29,086	0	6,727	0	29,086	0.00	962.00	0.00
57+50.00'KN'	50.00	251.17	0.00	0.00	0.00	0.00	0.00	516	0	0	0	0	0	23,837	29,086	0	6,727	0	29,086	0.00	1,478.00	0.00
58+00.00'KN'	50.00	222.29	0.00	0.00	0.00	0.00	0.00	438	0	0	0	0	0	24,275	29,086	0	6,727	0	29,086	0.00	1,916.00	0.00
58+50.00'KN'	50.00	217.20	0.00	0.00	0.00	0.00	0.00	407	0	0	0	0	0	24,682	29,086	0	6,727	0	29,086	0.00	2,323.00	0.00
59+00.00'KN'	50.00	130.00	0.00	0.00	0.00	0.00	0.00	321	0	0	0	0	0	25,003	29,086	0	6,727	0	29,086	0.00	2,644.00	0.00
59+50.00'KN'	50.00	96.71	0.00	0.00	0.00	0.00	0.00	210	0	0	0	0	0	25,213	29,086	0	6,727	0	29,086	0.00	2,854.00	0.00
60+00.00'KN'	50.00	96.02	0.00	0.00	0.00	0.00	0.00	178	0	0	0	0	0	25,391	29,086	0	6,727	0	29,086	0.00	3,032.00	0.00
60+50.00'KN'	50.00	95.18	0.00	0.00	0.00	0.00	0.00	177	0	0	0	0	0	25,568	29,086	0	6,727	0	29,086	0.00	3,209.00	0.00
61+00.00'KN'	50.00	89.14	0.00	0.00	0.00	0.00	0.00	171	0	0	0	0	0	25,739	29,086	0	6,727	0	29,086	0.00	3,380.00	0.00
61+50.00'KN'	50.00	89.99	0.00	0.00	0.00	0.00	0.00	166	0	0	0	0	0	25,905	29,086	0	6,727	0	29,086	0.00	3,546.00	0.00
62+00.00'KN'	50.00	85.98	0.00	0.00	0.00	0.00	0.00	163	0	0	0	0	0	26,068	29,086	0	6,727	0	29,086	0.00	3,709.00	0.00
62+50.00'KN'	50.00	81.60	0.00	0.00	0.00	0.00	0.00	155	0	0	0	0	0	26,223	29,086	0	6,727	0	29,086	0.00	3,864.00	0.00
63+00.00'KN'	50.00	85.78	0.00	0.00	0.00	0.00	0.00	155	0	0	0	0	0	26,378	29,086	0	6,727	0	29,086	0.00	4,019.00	0.00
805+50.00'KC'	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	26,378	29,086	0	6,727	0	29,086	0.00	4,019.00	0.00
806+00.00'KC'	50.00	0.00	0.00	0.00	54.99	0.00	0.00	0	0	0	51	0	0	26,378	29,086	0	6,778	0	29,086	0.00	4,070.00	0.00
806+50.00'KC'	50.00	197.69	0.00	0.00	0.00	0.00	0.00	183	0	0	51	0	0	26,561	29,086	0	6,829	0	29,086	0.00	4,304.00	0.00
807+00.00'KC'	50.00	210.14	0.00	0.00	0.00	0.00	0.00	378	0	0	0	0	0	26,939	29,086	0	6,829	0	29,086	0.00	4,682.00	0.00
807+50.00'KC'	50.00	229.35	0.00	0.00	0.00	0.00	0.00	407	0	0	0	0	0	27,346	29,086	0	6,829	0	29,086	0.00	5,089.00	0.00
808+00.00'KC'	50.00	245.95	0.00	0.00	0.00	0.00	0.00	440	0	0	0	0	0	27,786	29,086	0	6,829	0	29,086	0.00	5,529.00	0.00
808+50.00'KC'	50.00	219.97	0.00	0.00	0.00	0.00	0.00	431	0	0	0	0	0	28,217	29,086	0	6,829	0	29,086	0.00	5,960.00	0.00
809+00.00'KC'	50.00	210.49	0.00	0.00	0.00	0.00	0.00	399	0	0	0	0	0	28,616	29,086	0	6,829	0	29,086	0.00	6,359.00	0.00
809+50.00'KC'	50.00	194.22	0.00	0.00	0.00	0.00	0.00	375	0	0	0	0	0	28,991	29,086	0	6,829	0	29,086	0.00	6,734.00	0.00
810+00.00'KC'	50.00	183.55	0.00	0.00	0.00	0.00	0.00	350	0	0	0	0	0	29,341	29,086	0	6,829	0	29,086	0.00	7,084.00	0.00
810+50.00'KC'	50.00	170.41	0.00	0.00	0.00	0.00	0.00	328	0	0	0	0	0	29,669	29,086	0	6,829	0	29,086	0.00	7,412.00	0.00
811+00.00'KC'	50.00	133.10	0.00	0.00	0.00	0.00	0.00	281	0	0	0	0	0	29,950	29,086	0	6,829	0	29,086	0.00	7,693.00	0.00
811+50.00'KC'	50.00	72.70	0.00	0.00	6.64	0.00	0.00	191	0	0	6	0	0	30,141	29,086	0	6,835	0	29,086	0.00	7,890.00	0.00
812+00.00'KC'	50.00	42.35	0.00	0.00	0.00	0.00	0.00	107	0	0	6	0	0	30,248	29,086	0	6,841	0	29,086	0.00	8,003.00	0.00
812+50.00'KC'	50.00	15.19	2.09	0.00	0.00	0.00	0.00	53	2	0	0	0	0	30,301	29,088	0	6,841	0	29,088	0.00	8,054.00	0.00
813+00.00'KC'	50.00	7.71	0.05	0.00	0.00	0.00	0.00	21	2	0	0	0	0	30,322	29,090	0	6,841	0	29,090	0.00	8,073.00	0.00
813+50.00'KC'	50.00	1.31	0.00	0.00	0.00	0.00	0.00	8	0	0	0	0	0	30,330	29,090	0	6,841	0	29,090	0.00	8,081.00	0.00
813+52.85'KC'	2.85	1.13	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	30,330	29,090	0	6,841	0	29,090	0.00	8,081.00	0.00
808+17.30'KD'	0.00	2.86	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	30,330	29,090	0	6,841	0	29,090	0.00	8,081.00	0.00
808+50.00'KD'	32.70	4.72	0.00	0.00	0.00	0.00	0.00	5	0	0	0	0	0	30,335	29,090	0	6,841	0	29,090	0.00	8,086.00	0.00
809+00.00'KD'	50.00	7.53	2.58	0.00	0.00	0.00	0.00	11	2	0	0	0	0	30,346	29,092	0	6,841	0	29,092	0.00	8,095.00	0.00
809+50.00'KD'	50.00	24.26	8.89	0.00	0.00	0.00	0.00	29	11	0	0	0	0	30,375	29,103	0	6,841	0	29,103	0.00	8,113.00	0.00
810+00.00'KD'	50.00	60.84	0.00	0.00	0.00	0.00	0.00	79	8	0	0	0	0	30,454	29,111	0	6,841	0	29,111	0.00	8,184.00	0.00
810+50.00'KD'	50.00	110.61	0.00	0.00	17.26	0.00	0.00	159	0	0	16	0	0	30,613	29,111	0	6,857	0	29,111	0.00	8,359.00	0.00
811+00.00'KD'	50.00	184.12	0.00	0.00	0.00	0.00	0.00	273	0	0	16	0	0	30,886	29,111	0	6,873	0	29,111	0.00	8,648.00	0.00
811+50.00'KD'	50.00	257.82	0.00	0.00	0.00	0.00	0.00	409	0	0	0	0	0	31,295	29,111	0	6,873	0	29,111	0.00	9,057.00	0.00
812+00.00'KD'	50.00	256.59	0.00	0.00	0.00	0.00	0.00	476	0	0	0	0	0	31,771	29,111	0	6,873	0	29,111	0.00	9,533.00	0.00
812+50.00'KD'	50.00	241.61	0.00	0.00	0.00	0.00	0.00	461	0	0	0	0	0	32,232	29,111	0	6,873	0	29,111	0.00	9,994.00	0.00
813+00.00'KD'	50.00	254.97	0.00	0.00	0.00	0.00	0.00	460	0	0	0	0	0	32,692	29,111	0	6,873	0	29,111	0.00	10,454.00	0.00
813+50.00'KD'	50.00	275.00	0.00	0.00	0.00	0.00	0.00	491	0	0	0	0	0	33,183	29,111	0	6,873	0	29,111	0.00	10,945.00	0.00
814+00.00'KD'	50.00	293.35	0.00	0.00	0.00	0.00	0.00	526	0	0	0	0	0	33,709	29,111	0	6,873	0	29,111	0.00	11,471.00	0.00
814+50.00'KD'	50.00	311.13	0.00	0.00	0.00	0.00	0.00	560	0	0	0	0	0	34,269	29,111	0	6,873	0	29,111	0.00	12,031.00	0.00
815+00.00'KD'	50.00	184.30	0.00	0.00	0.00	0.00	0.00	459	0	0	0	0	0	34,728	29,111	0	6,873	0	29,111	0.00	12,490.00	0.00
815+50.00'KD'	50.00	1.91	0.85	0.00	0.00	0.00	0.00	172	1	0	0	0	0	34,900	29,112	0	6,873	0	29,112	0.00	12,661.00	0.00
816+00.00'KD'	50.00	0.00	0.00	0.00	0.00	0.00	0.00	2	1	0	0	0	0	34,902	29,113	0	6,873	0	29,113	0.00	12,662.00	0.00
45+50.00'CH'	0.00	45.66	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	34,902	29,113	0	6,873	0	29,113	0.00	12,662.00	0.00
46+00.00'CH'	50.00	64.08	0.00	0.00	0.00	0.00	0.00	102	0	0	0	0	0	35,004	29,113	0	6,873	0	29,113	0.00	12,764.00	0.00
46+50.00'CH'	50.00	153.50	0.00	0.00	0.00	0.00	0.00	201	0	0	0	0	0	35,205	29,113	0	6,873	0	29,113	0.00	12,965.00	0.00
46+60.00'CH'	10.00	177.97	0.00	0.00	0.39	0.00	0.00	61	0	0	0	0	0	35,266	29,113	0	6,873	0	29,113	0.00	13,026.00	0.00
47+00.00'CH'	40.00	26.14	0.00	0.00	228.80	0.00	0.00	151	0	0	170	0	0	35,417	29,113	0	7,043	0	29,113	0.00	13,347.00	0.00
47+50.00'CH'	50.00	23.26	0.00	0.00	490.37	0.00	0.00	46	0	0	666	0	0	35,463	29,113	0	7,709	0	29,113	0.00	14,059.00	0.00
48+00.00'CH'	50.00	26.45	0.00	0.00	886.95	0.00	0.00	46	0	0	1,275	0	0	35,509	29,113	0	8,984	0	29,113	0.00	15,380.00	0.00
48+22.99'CH'	22.99	24.79	6.47	0.00	886.28	0.00	0.00	22	3	0	755	0	0	35,531	29,116	0	9,739	0	29,116	0.00	16,154.00	0.00
48+33.90'CH'	10.91	23.96	23.43	0.00	843.07	0.00	0.00	10	6	0	349	0	0	35,541	29,122	0	10,088					

STATION	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Select Crushed Material (TONS) FACTOR 1.9
		Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh	Rock	EBS	Roadway Embankment	Select Crushed Material	Mass Ordinate	
50+00.00'CH'	33.73	22.47	0.00	0.00	107.29	0.00	0.00	28	0	0	170	0	0	35,695	29,464	0	12,180	0	29,464	0.00	18,411.00	0.00
50+50.00'CH'	50.00	26.24	0.09	0.00	553.58	0.00	0.00	45	0	0	612	0	0	35,740	29,464	0	12,792	0	29,464	0.00	19,068.00	0.00
51+00.00'CH'	50.00	23.82	0.00	0.00	1199.75	0.00	0.00	46	0	0	1,623	0	0	35,786	29,464	0	14,415	0	29,464	0.00	20,737.00	0.00
51+50.00'CH'	50.00	23.84	0.00	0.00	1129.66	0.00	0.00	44	0	0	2,157	0	0	35,830	29,464	0	16,572	0	29,464	0.00	22,938.00	0.00
52+00.00'CH'	50.00	24.45	0.00	0.00	983.05	0.00	0.00	45	0	0	1,956	0	0	35,875	29,464	0	18,528	0	29,464	0.00	24,939.00	0.00
52+50.00'CH'	50.00	17.20	0.00	0.00	1013.20	0.00	0.00	39	0	0	1,848	0	0	35,914	29,464	0	20,376	0	29,464	0.00	26,826.00	0.00
52+81.85'CH'	31.85	24.39	0.00	0.00	1070.92	0.00	0.00	25	0	0	1,229	0	0	35,939	29,464	0	21,605	0	29,464	0.00	28,080.00	0.00
53+00.00'CH'	18.15	24.45	0.00	0.00	1009.16	0.00	0.00	16	0	0	699	0	0	35,955	29,464	0	22,304	0	29,464	0.00	28,795.00	0.00
53+50.00'CH'	50.00	24.10	0.00	0.00	838.93	0.00	0.00	45	0	0	1,711	0	0	36,000	29,464	0	24,015	0	29,464	0.00	30,551.00	0.00
54+00.00'CH'	50.00	26.73	0.00	0.00	725.84	0.00	0.00	47	0	0	1,449	0	0	36,047	29,464	0	25,464	0	29,464	0.00	32,047.00	0.00
54+50.00'CH'	50.00	27.57	0.00	0.00	663.23	0.00	0.00	50	0	0	1,286	0	0	36,097	29,464	0	26,750	0	29,464	0.00	33,383.00	0.00
55+00.00'CH'	50.00	27.90	0.00	0.00	0.00	0.00	0.00	51	0	0	614	0	0	36,148	29,464	0	27,364	0	29,464	0.00	34,048.00	0.00
55+50.00'CH'	50.00	25.98	0.00	0.00	508.97	0.00	0.00	50	0	0	471	0	0	36,198	29,464	0	27,835	0	29,464	0.00	34,569.00	0.00
56+00.00'CH'	50.00	27.45	0.00	0.00	437.62	0.00	0.00	49	0	0	876	0	0	36,247	29,464	0	28,711	0	29,464	0.00	35,494.00	0.00
56+50.00'CH'	50.00	25.84	0.10	0.00	349.83	0.00	0.00	49	0	0	729	0	0	36,296	29,464	0	29,440	0	29,464	0.00	36,272.00	0.00
57+00.00'CH'	50.00	24.58	0.00	0.00	206.69	0.00	0.00	47	0	0	515	0	0	36,343	29,464	0	29,955	0	29,464	0.00	36,834.00	0.00
57+50.00'CH'	50.00	24.68	0.00	0.00	21.68	0.00	0.00	46	0	0	211	0	0	36,389	29,464	0	30,166	0	29,464	0.00	37,091.00	0.00
UNDISTRIBUTED		0.00	0.00	0.00	0.00	0.00	0.00	0	0	364	1,820	364	364	36,389	29,464	364	31,986	364	29,464	364.00	39,639.00	691.60

STATION	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Select Crushed Material (TONS) FACTOR 1.9
		Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh	Rock	EBS	Roadway Embankment	Select Crushed Material	Mass Ordinate	
1769+00.00'TSB'	0.00	38.77	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1769+50.10'TSB'	50.10	113.58	0.00	0.00	0.00	0.00	0	141	0	0	0	0	0	141	0	0	0	0	0	0.00	141.00	0.00
1769+82.09'TSB'	31.99	107.02	0.00	0.00	0.00	0.00	0	131	0	0	0	0	0	272	0	0	0	0	0	0.00	272.00	0.00
1769+88.54'TSB'	6.44	106.39	0.00	0.00	0.00	0.00	0	25	0	0	0	0	0	297	0	0	0	0	0	0.00	297.00	0.00
1770+00.00'TSB'	11.46	104.28	0.00	0.00	0.00	0.00	0	45	0	0	0	0	0	342	0	0	0	0	0	0.00	342.00	0.00
1771+00.00'TSB'	100.00	99.63	0.00	0.00	0.00	0.00	0	378	0	0	0	0	0	720	0	0	0	0	0	0.00	720.00	0.00
1772+00.00'TSB'	100.00	111.31	0.11	0.00	0.00	0.00	0	391	0	0	0	0	0	1,111	0	0	0	0	0	0.00	1,111.00	0.00
1772+42.48'SB'	0.00	148.35	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	1,111	0	0	0	0	0	0.00	1,111.00	0.00
1773+00.00'SB'	57.52	174.19	0.00	0.00	0.00	0.00	0	344	0	0	0	0	0	1,455	0	0	0	0	0	0.00	1,455.00	0.00
1774+00.00'SB'	100.00	210.34	0.00	0.00	0.00	0.00	0	712	0	0	0	0	0	2,167	0	0	0	0	0	0.00	2,167.00	0.00
1775+00.00'SB'	100.00	197.38	0.00	0.00	0.00	0.00	0	755	0	0	0	0	0	2,922	0	0	0	0	0	0.00	2,922.00	0.00
1776+00.00'SB'	100.00	234.10	0.00	0.00	0.00	0.00	0	799	0	0	0	0	0	3,721	0	0	0	0	0	0.00	3,721.00	0.00
1777+00.00'SB'	100.00	262.45	0.00	0.00	0.00	0.00	0	920	0	0	0	0	0	4,641	0	0	0	0	0	0.00	4,641.00	0.00
1777+39.87'SB'	39.87	270.49	0.00	0.00	0.00	0.00	0	393	0	0	0	0	0	5,034	0	0	0	0	0	0.00	5,034.00	0.00
1778+00.00'SB'	60.13	271.26	0.00	0.00	0.00	0.00	0	603	0	0	0	0	0	5,637	0	0	0	0	0	0.00	5,637.00	0.00
1779+00.00'SB'	100.00	256.56	0.00	0.00	0.00	0.00	0	977	0	0	0	0	0	6,614	0	0	0	0	0	0.00	6,614.00	0.00
1780+00.00'SB'	100.00	231.64	0.00	0.00	0.00	0.00	0	904	0	0	0	0	0	7,518	0	0	0	0	0	0.00	7,518.00	0.00
1781+00.00'SB'	100.00	232.93	0.23	0.00	0.00	0.00	0	860	0	0	0	0	0	8,378	0	0	0	0	0	0.00	8,378.00	0.00
1781+34.91'SB'	34.91	244.97	2.31	0.00	0.00	0.00	0	309	2	0	0	0	0	8,687	2	0	0	0	2	0.00	8,685.00	0.00
1781+46.44'SB'	64.00	122.66	1.22	0.00	0.00	0.00	0	436	4	0	0	0	0	9,123	6	0	0	0	6	0.00	9,117.00	0.00
1781+54.44'SB'	8.00	121.11	1.17	0.00	0.00	0.00	0	36	0	0	0	0	0	9,159	6	0	0	0	6	0.00	9,153.00	0.00
1782+00.00'SB'	45.56	112.09	1.88	0.00	0.00	0.00	0	197	3	0	0	0	0	9,356	9	0	0	0	9	0.00	9,347.00	0.00
1782+74.44'SB'	74.44	155.71	0.00	0.00	0.00	0.00	0	369	3	0	0	0	0	9,725	12	0	0	0	12	0.00	9,713.00	0.00
1783+00.00'SB'	25.56	157.89	0.00	0.00	0.00	0.00	0	148	0	0	0	0	0	9,873	12	0	0	0	12	0.00	9,861.00	0.00
1783+94.44'SB'	94.44	93.11	1.66	0.00	0.00	0.00	0	439	3	0	0	0	0	10,312	15	0	0	0	15	0.00	10,297.00	0.00
1784+00.00'SB'	5.56	106.88	1.57	0.00	0.00	0.00	0	21	0	0	0	0	0	10,333	15	0	0	0	15	0.00	10,318.00	0.00
1785+00.00'SB'	100.00	114.01	1.55	0.00	0.00	0.00	0	409	6	0	0	0	0	10,742	21	0	0	0	21	0.00	10,721.00	0.00
1786+00.00'SB'	100.00	145.55	0.00	0.00	0.00	0.00	0	481	3	0	0	0	0	11,223	24	0	0	0	24	0.00	11,199.00	0.00
1787+00.00'SB'	100.00	158.64	0.00	0.00	0.00	0.00	0	563	0	0	0	0	0	11,786	24	0	0	0	24	0.00	11,762.00	0.00
1788+00.00'SB'	100.00	169.85	0.00	0.00	0.00	0.00	0	608	0	0	0	0	0	12,394	24	0	0	0	24	0.00	12,370.00	0.00
1789+00.00'SB'	100.00	178.18	0.02	0.00	0.00	0.00	0	645	0	0	0	0	0	13,039	24	0	0	0	24	0.00	13,015.00	0.00
1790+00.00'SB'	100.00	185.19	0.40	0.00	0.00	0.00	0	673	1	0	0	0	0	13,712	25	0	0	0	25	0.00	13,687.00	0.00
1790+78.00'SB'	78.00	427.15	1.67	0.00	0.00	0.00	0	884	3	0	0	0	0	14,596	28	0	0	0	28	0.00	14,568.00	0.00
1791+00.00'SB'	22.00	374.96	1.78	0.00	0.00	0.00	0	327	1	0	0	0	0	14,923	29	0	0	0	29	0.00	14,894.00	0.00
1792+00.00'SB'	100.00	206.54	0.62	0.00	0.00	0.00	0	1,077	4	0	0	0	0	16,000	33	0	0	0	33	0.00	15,967.00	0.00
1793+00.00'SB'	100.00	256.59	0.00	0.00	0.00	0.00	0	858	1	0	0	0	0	16,858	34	0	0	0	34	0.00	16,824.00	0.00
1794+00.00'SB'	100.00	283.49	0.00	0.00	0.00	0.00	0	1,000	0	0	0	0	0	17,858	34	0	0	0	34	0.00	17,824.00	0.00
1795+00.00'SB'	100.00	304.42	0.00	0.00	0.00	0.00	0	1,089	0	0	0	0	0	18,947	34	0	0	0	34	0.00	18,913.00	0.00
1796+00.00'SB'	100.00	330.59	0.00	0.00	0.00	0.00	0	1,176	0	0	0	0	0	20,123	34	0	0	0	34	0.00	20,089.00	0.00
1797+00.00'SB'	100.00	358.86	0.00	0.00	0.00	0.00	0	1,277	0	0	0	0	0	21,400	34	0	0	0	34	0.00	21,366.00	0.00
1798+00.00'SB'	100.00	384.52	0.00	0.00	0.00	0.00	0	1,377	0	0	0	0	0	22,777	34	0	0	0	34	0.00	22,743.00	0.00
1798+91.49'SB'	91.49	396.22	0.00	0.00	0.00	0.00	0	1,323	0	0	0	0	0	24,100	34	0	0	0	34	0.00	24,066.00	0.00
1798+91.61'SB'	0.12	396.23	0.00	0.00	0.00	0.00	0	2	0	0	0	0	0	24,102	34	0	0	0	34	0.00	24,068.00	0.00
1799+00.00'SB'	8.39	396.43	0.00	0.00	0.00	0.00	0	123	0	0	0	0	0	24,225	34	0	0	0	34	0.00	24,191.00	0.00
1800+00.00'SB'	100.00	155.77	0.00	0.00	263.01	0.00	0	1,023	0	0	487	0	0	25,248	34	0	487	0	34	0.00	25,701.00	0.00
1801+00.00'SB'	100.00	147.25	0.00	0.00	296.07	0.00	0	561	0	0	1,035	0	0	25,809	34	0	1,522	0	34	0.00	27,297.00	0.00
1802+00.00'SB'	100.00	155.83	0.00	0.00	299.90	0.00	0	561	0	0	1,104	0	0	26,370	34	0	2,626	0	34	0.00	28,962.00	0.00
1803+00.00'SB'	100.00	169.20	0.00	0.00	282.86	0.00	0	602	0	0	1,079	0	0	26,972	34	0	3,705	0	34	0.00	30,643.00	0.00
1803+23.27'SB'	23.27	187.23	0.00	0.00	266.07	0.00	0	154	0	0	237	0	0	27,126	34	0	3,942	0	34	0.00	31,034.00	0.00
1803+25.00'SB'	1.73	188.83	0.00	0.00	264.80	0.00	0	12	0	0	17	0	0	27,138	34	0	3,959	0	34	0.00	31,063.00	0.00
1804+00.00'SB'	75.00	226.50	0.00	0.00	232.61	0.00	0	577	0	0	691	0	0	27,715	34	0	4,650	0	34	0.00	32,331.00	0.00
1805+00.00'SB'	100.00	111.57	0.00	0.00	313.29	0.00	0	626	0	0	1,011	0	0	28,341	34	0	5,661	0	34	0.00	33,968.00	0.00
1805+61.72'SB'	61.72	93.53	0.00	0.00	281.84	0.00	0	234	0	0	680	0	0	28,575	34	0	6,341	0	34	0.00	34,882.00	0.00
1806+00.00'SB'	38.28	90.62	0.00	0.00	268.25	0.00	0	131	0	0	390	0	0	28,706	34	0	6,731	0	34	0.00	35,403.00	0.00
1807+00.00'SB'	100.00	88.56	0.00	0.00	229.43	0.00	0	332	0	0	922	0	0	29,038	34	0	7,653	0	34	0.00	36,657.00	0.00
1808+00.00'SB'	100.00	98.31	0.00	0.00	191.63	0.00	0	346	0	0	780	0	0	29,384	34	0	8,433	0	34	0.00	37,783.00	0.00
1808+39.56'SB'	39.56	96.10	0.00	0.00	174.64	0.00	0	142	0	0	268	0	0	29,526	34	0	8,701	0	34	0.00	38,193.00	0.00
1808+63.82'SB'	24.26	90.32	0.00	0.00	171.52	0.00	0	84	0	0	155	0	0	29,610	34	0	8,856	0	34	0.00	38,432.00	0.00
1808+87.00'SB'	23.18	71.94	0.00	0.00	165.85	0.00	0	70	0	0	145	0	0	29,680	34	0	9,001	0	34	0.00	38,647.00	0.00
1809+00.00'SB'	13.00	89.61	0.00	0.00	159.66	0.00	0	39	0	0	78	0	0	29,719	34							

STATION	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								Select Crushed Material (TONS) FACTOR 1.9
		Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh Exc	Rock Exc	EBS	Select Crushed Material	Cut	Fill	Marsh	Rock	EBS	Roadway Embankment	Select Crushed Material	Mass Ordinate	
1809+85.32'SB'	1.50	73.03	0.00	0.00	142.48	0.00	0	4	0	0	8	0	0	29,988	34	0	9,545	0	34	0.00	39,499.00	0.00
1811+79.82'SB'	0.00	66.69	24.90	0.00	0.00	0.00	0	0	0	0	0	0	0	29,988	34	0	9,545	0	34	0.00	39,499.00	0.00
1811+81.32'SB'	1.50	66.01	24.87	0.00	0.00	0.00	0	4	1	0	0	0	0	29,992	35	0	9,545	0	35	0.00	39,502.00	0.00
1812+00.00'SB'	18.68	106.15	29.26	0.00	0.00	0.00	0	60	19	0	0	0	0	30,052	54	0	9,545	0	54	0.00	39,543.00	0.00
1813+00.00'SB'	100.00	87.04	41.32	0.00	0.00	0.00	0	358	131	0	0	0	0	30,410	185	0	9,545	0	185	0.00	39,770.00	0.00
1813+01.32'SB'	1.32	86.69	41.61	0.00	0.00	0.00	0	4	2	0	0	0	0	30,414	187	0	9,545	0	187	0.00	39,772.00	0.00
1814+00.00'SB'	98.68	61.14	71.33	0.00	0.00	0.00	0	270	206	0	0	0	0	30,684	393	0	9,545	0	393	0.00	39,836.00	0.00
1814+07.34(4)	7.34	58.90	73.60	0.00	0.00	0.00	0	16	20	0	0	0	0	30,700	413	0	9,545	0	413	0.00	39,832.00	0.00
1814+32.36(4)	25.02	51.32	71.07	0.00	0.00	0.00	0	51	67	0	0	0	0	30,751	480	0	9,545	0	480	0.00	39,816.00	0.00
1814+57.38(4)	25.02	45.09	80.03	0.00	0.00	0.00	0	45	70	0	0	0	0	30,796	550	0	9,545	0	550	0.00	39,791.00	0.00
1815+00.00'SB'	42.62	37.44	93.13	0.00	0.00	0.00	0	65	137	0	0	0	0	30,861	687	0	9,545	0	687	0.00	39,719.00	0.00
1816+00.00'SB'	100.00	22.00	125.65	0.00	0.00	0.00	0	110	405	0	0	0	0	30,971	1,092	0	9,545	0	1,092	0.00	39,424.00	0.00
1816+69.17'SB'	69.17	15.07	128.57	0.00	0.00	0.00	0	47	326	0	0	0	0	31,018	1,418	0	9,545	0	1,418	0.00	39,145.00	0.00
1816+77.01'SB'	7.84	14.36	132.76	0.00	0.00	0.00	0	4	38	0	0	0	0	31,022	1,456	0	9,545	0	1,456	0.00	39,111.00	0.00
1817+00.00'SB'	22.99	12.22	147.75	0.00	0.00	0.00	0	11	119	0	0	0	0	31,033	1,575	0	9,545	0	1,575	0.00	39,003.00	0.00
1817+89.17'SB'	89.17	8.03	196.08	0.00	0.00	0.00	0	33	568	0	0	0	0	31,066	2,143	0	9,545	0	2,143	0.00	38,468.00	0.00
1818+00.00'SB'	10.83	8.00	201.13	0.00	0.00	0.00	0	3	80	0	0	0	0	31,069	2,223	0	9,545	0	2,223	0.00	38,391.00	0.00
1818+69.17'SB'	69.17	7.82	231.68	0.00	0.00	0.00	0	20	554	0	0	0	0	31,089	2,777	0	9,545	0	2,777	0.00	37,857.00	0.00
1819+00.00'SB'	30.83	7.74	244.65	0.00	0.00	0.00	0	9	272	0	0	0	0	31,098	3,049	0	9,545	0	3,049	0.00	37,594.00	0.00
1819+09.17'SB'	9.17	7.72	249.63	0.00	0.00	0.00	0	3	84	0	0	0	0	31,101	3,133	0	9,545	0	3,133	0.00	37,513.00	0.00
1819+61.72'SB'	52.55	7.72	271.11	0.00	0.00	0.00	0	15	507	0	0	0	0	31,116	3,640	0	9,545	0	3,640	0.00	37,021.00	0.00
1819+64.53'SB'	2.81	7.72	272.29	0.00	0.00	0.00	0	1	28	0	0	0	0	31,117	3,668	0	9,545	0	3,668	0.00	36,994.00	0.00
1819+67.44'SB'	2.92	7.72	273.47	0.00	0.00	0.00	0	1	29	0	0	0	0	31,118	3,697	0	9,545	0	3,697	0.00	36,966.00	0.00
1820+00.00'SB'	32.56	7.72	286.56	0.00	0.00	0.00	0	9	338	0	0	0	0	31,127	4,035	0	9,545	0	4,035	0.00	36,637.00	0.00
1821+00.00'SB'	100.00	7.72	331.81	0.00	0.00	0.00	0	29	1,145	0	0	0	0	31,156	5,180	0	9,545	0	5,180	0.00	35,521.00	0.00
1821+17.99'SB'	17.99	7.72	340.24	0.00	0.00	0.00	0	5	224	0	0	0	0	31,161	5,404	0	9,545	0	5,404	0.00	35,302.00	0.00
1821+19.27'SB'	1.28	7.72	339.93	0.00	0.00	0.00	0	0	16	0	0	0	0	31,161	5,420	0	9,545	0	5,420	0.00	35,286.00	0.00
1822+00.00'SB'	80.73	7.72	362.08	0.00	0.00	0.00	0	23	1,050	0	0	0	0	31,184	6,470	0	9,545	0	6,470	0.00	34,259.00	0.00
1822+20.31'SB'	20.31	7.72	363.36	0.00	0.00	0.00	0	6	273	0	0	0	0	31,190	6,743	0	9,545	0	6,743	0.00	33,992.00	0.00
1822+68.62'SB'	48.31	7.72	364.77	0.00	0.00	0.00	0	14	651	0	0	0	0	31,204	7,394	0	9,545	0	7,394	0.00	33,355.00	0.00
1823+00.00'SB'	31.38	7.72	366.53	0.00	0.00	0.00	0	9	425	0	0	0	0	31,213	7,819	0	9,545	0	7,819	0.00	32,939.00	0.00
1823+22.28'SB'	22.28	7.72	388.76	0.00	0.00	0.00	0	6	312	0	0	0	0	31,219	8,131	0	9,545	0	8,131	0.00	32,633.00	0.00
1824+00.00'SB'	77.72	7.72	398.01	0.00	0.00	0.00	0	22	1,132	0	0	0	0	31,241	9,263	0	9,545	0	9,263	0.00	31,523.00	0.00
1825+00.00'SB'	100.00	7.72	307.58	0.00	0.00	0.00	0	29	1,307	0	0	0	0	31,270	10,570	0	9,545	0	10,570	0.00	30,245.00	0.00
1826+00.00'SB'	100.00	7.72	284.20	0.00	0.00	0.00	0	29	1,096	0	0	0	0	31,299	11,666	0	9,545	0	11,666	0.00	29,178.00	0.00
1827+00.00'SB'	100.00	7.72	248.19	0.00	0.00	0.00	0	29	986	0	0	0	0	31,328	12,652	0	9,545	0	12,652	0.00	28,221.00	0.00
1828+00.00'SB'	100.00	7.72	219.80	0.00	0.00	0.00	0	29	867	0	0	0	0	31,357	13,519	0	9,545	0	13,519	0.00	27,383.00	0.00
1829+00.00'SB'	100.00	7.72	193.51	0.00	0.00	0.00	0	29	765	0	0	0	0	31,386	14,284	0	9,545	0	14,284	0.00	26,647.00	0.00
1830+00.00'SB'	100.00	7.72	158.29	0.00	0.00	0.00	0	29	651	0	0	0	0	31,415	14,935	0	9,545	0	14,935	0.00	26,025.00	0.00
1830+10.82'TSB'	0.00	4.05	155.43	0.00	0.00	0.00	0.00	0	0	0	0	0	0	31,415	14,935	0	9,545	0	14,935	0.00	26,025.00	0.00
1830+27.75'TSB'	16.93	4.05	144.76	0.00	0.00	0.00	0.00	3	94	0	0	0	0	31,418	15,029	0	9,545	0	15,029	0.00	25,934.00	0.00
1830+36.63'TSB'	8.88	4.05	139.09	0.00	0.00	0.00	0.00	1	47	0	0	0	0	31,419	15,076	0	9,545	0	15,076	0.00	25,888.00	0.00
1830+66.81'TSB'	30.18	4.05	117.60	0.00	0.00	0.00	0.00	5	143	0	0	0	0	31,424	15,219	0	9,545	0	15,219	0.00	25,750.00	0.00
1831+00.00'TSB'	33.19	4.06	97.17	0.00	0.00	0.00	0.00	5	132	0	0	0	0	31,429	15,351	0	9,545	0	15,351	0.00	25,623.00	0.00
1832+00.00'TSB'	100.00	4.06	32.49	0.00	0.00	0.00	0.00	15	240	0	0	0	0	31,444	15,591	0	9,545	0	15,591	0.00	25,398.00	0.00
1832+85.46'TSB'	85.46	11.36	0.10	0.00	0.00	0.00	0.00	24	52	0	0	0	0	31,468	15,643	0	9,545	0	15,643	0.00	25,370.00	0.00
1833+00.00'TSB'	14.54	16.36	0.10	0.00	0.00	0.00	0.00	7	0	0	0	0	0	31,475	15,643	0	9,545	0	15,643	0.00	25,377.00	0.00
1834+00.00'TSB'	100.00	44.90	0.00	0.00	0.00	0.00	0.00	113	0	0	0	0	0	31,588	15,643	0	9,545	0	15,643	0.00	25,490.00	0.00
1835+00.00'TSB'	100.00	64.20	0.00	0.00	0.00	0.00	0.00	202	0	0	0	0	0	31,790	15,643	0	9,545	0	15,643	0.00	25,692.00	0.00
1836+00.00'TSB'	100.00	76.48	0.00	0.00	0.00	0.00	0.00	261	0	0	0	0	0	32,051	15,643	0	9,545	0	15,643	0.00	25,953.00	0.00
1837+00.00'TSB'	100.00	68.48	0.15	0.00	0.00	0.00	0.00	268	0	0	0	0	0	32,319	15,643	0	9,545	0	15,643	0.00	26,221.00	0.00
UNDISTRIBUTED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	323	1,616	323	323	32,319	15,643	323	11,161	323	15,966	323.00	28,483.00	613.70





PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET

674

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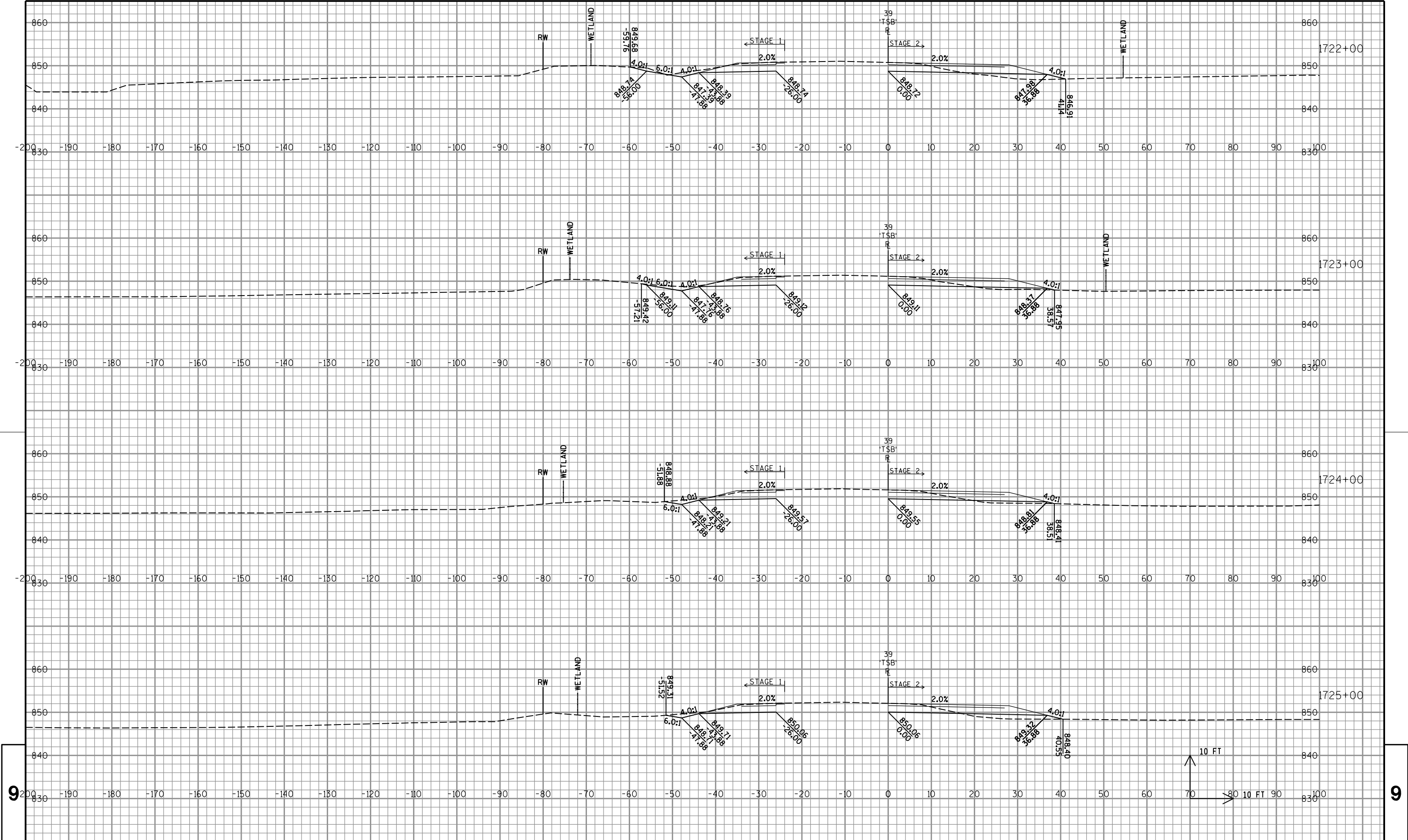
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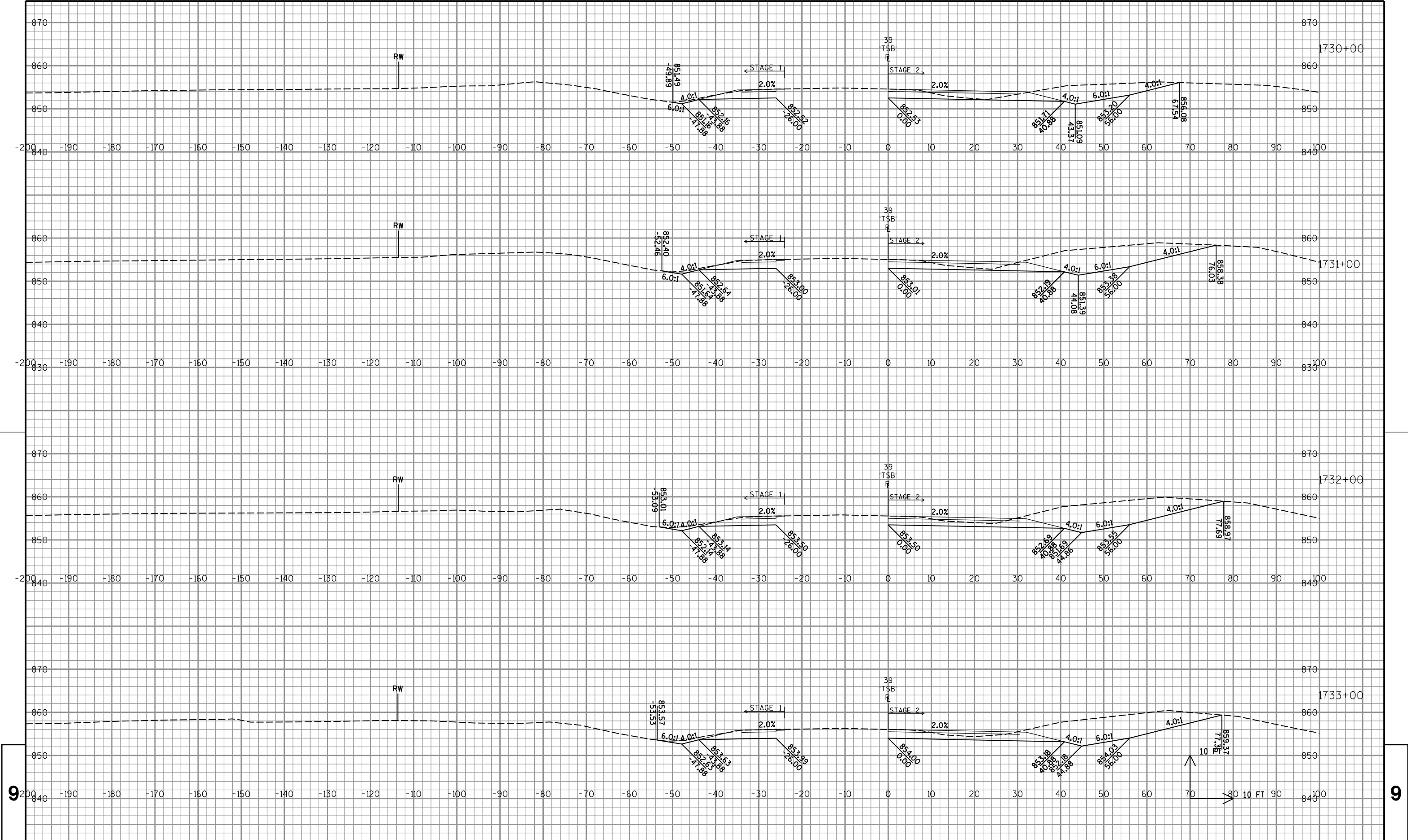
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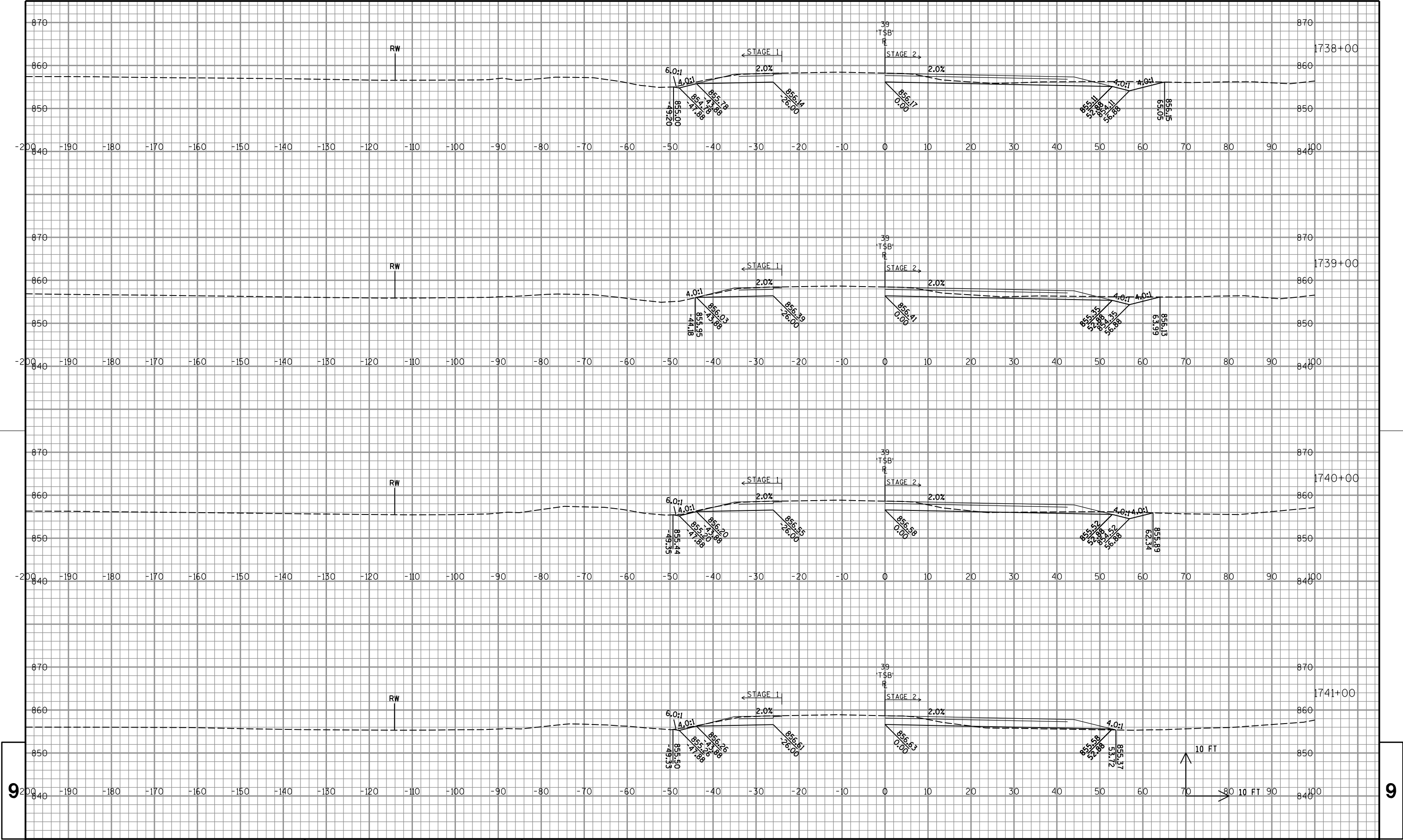
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WISDOT/CADDs SHEET 21







PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET

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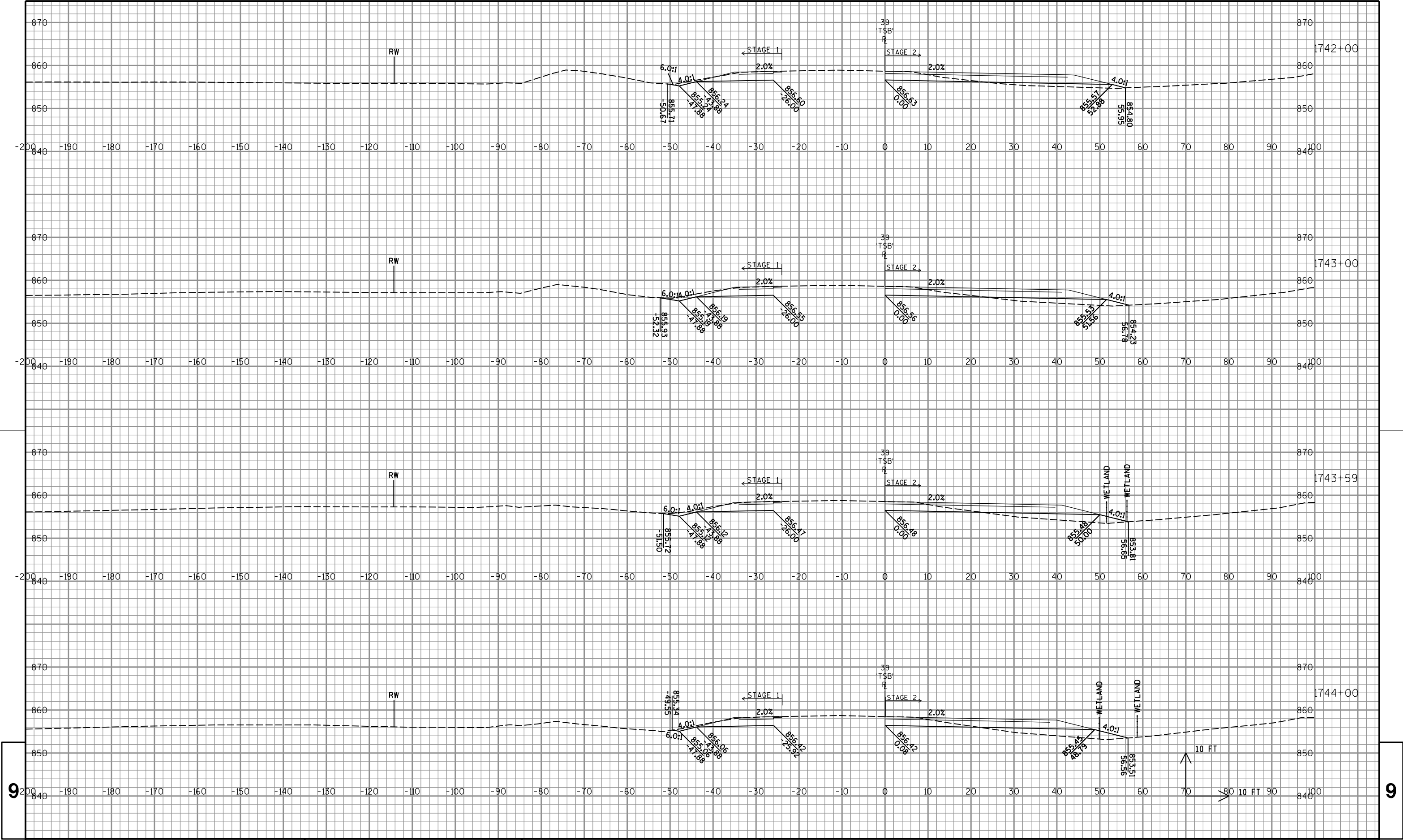
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WISDOT/CADDs SHEET 21



PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET

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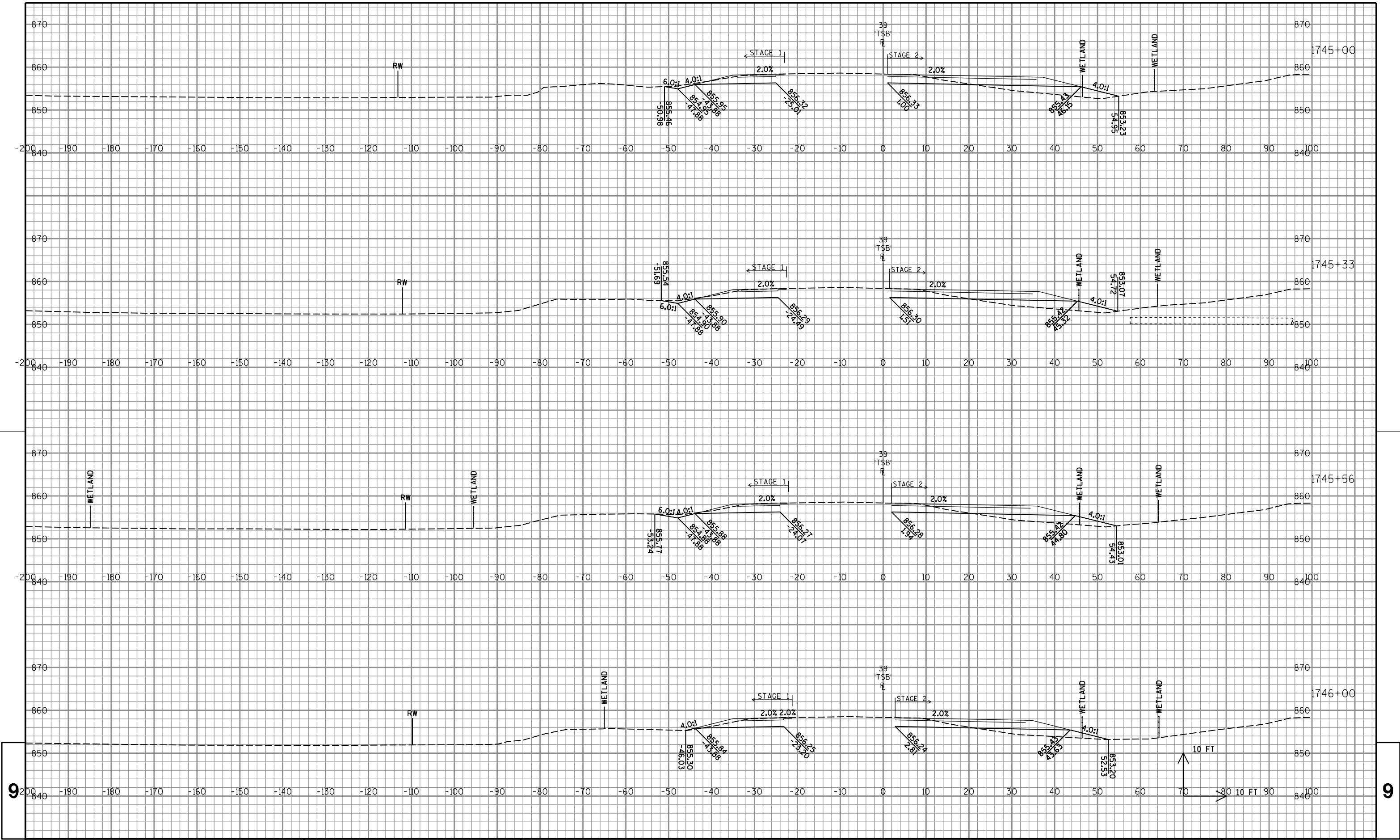
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WISDOT/CADDs SHEET 21



PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET

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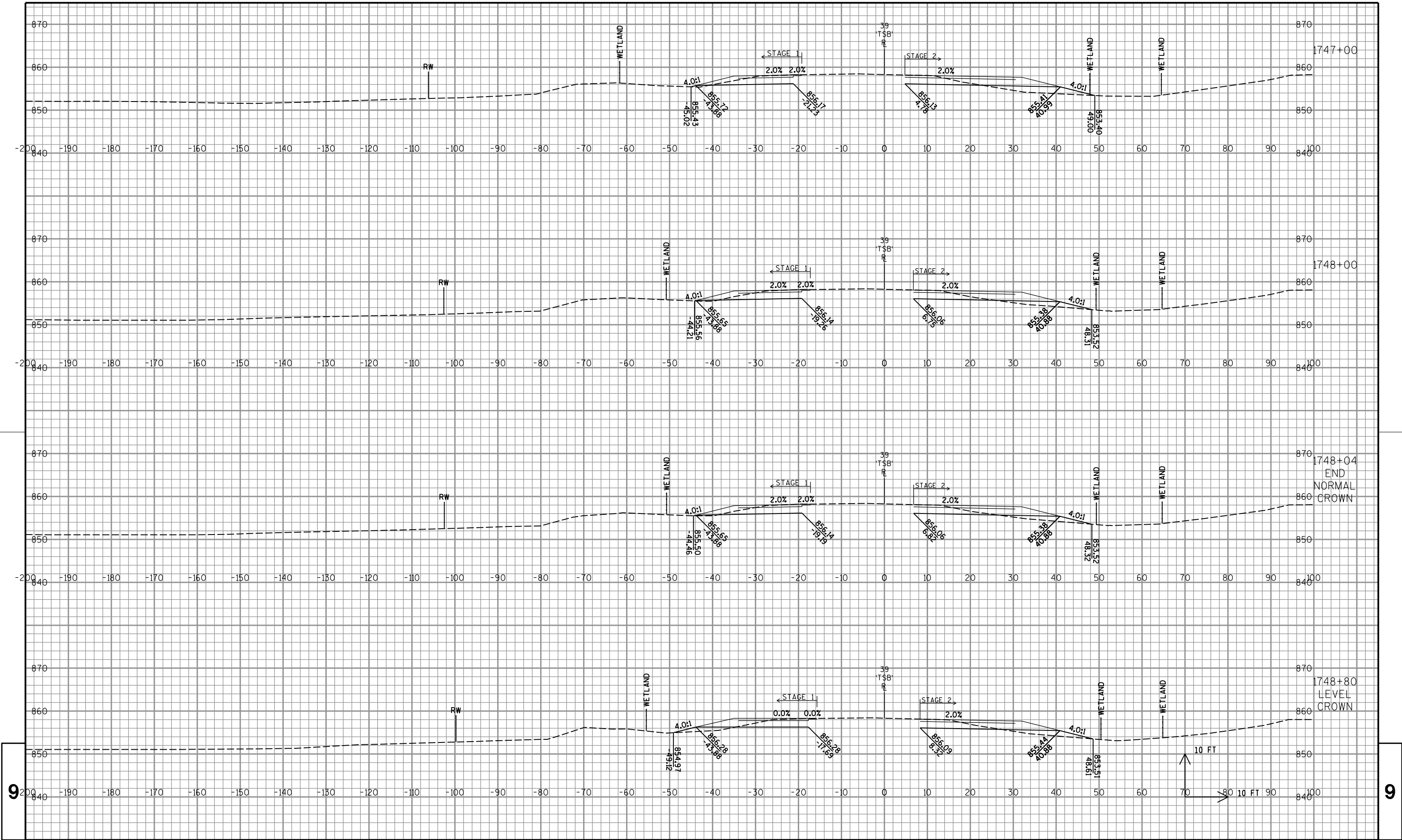
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WISDOT/CADDs SHEET 21



PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET

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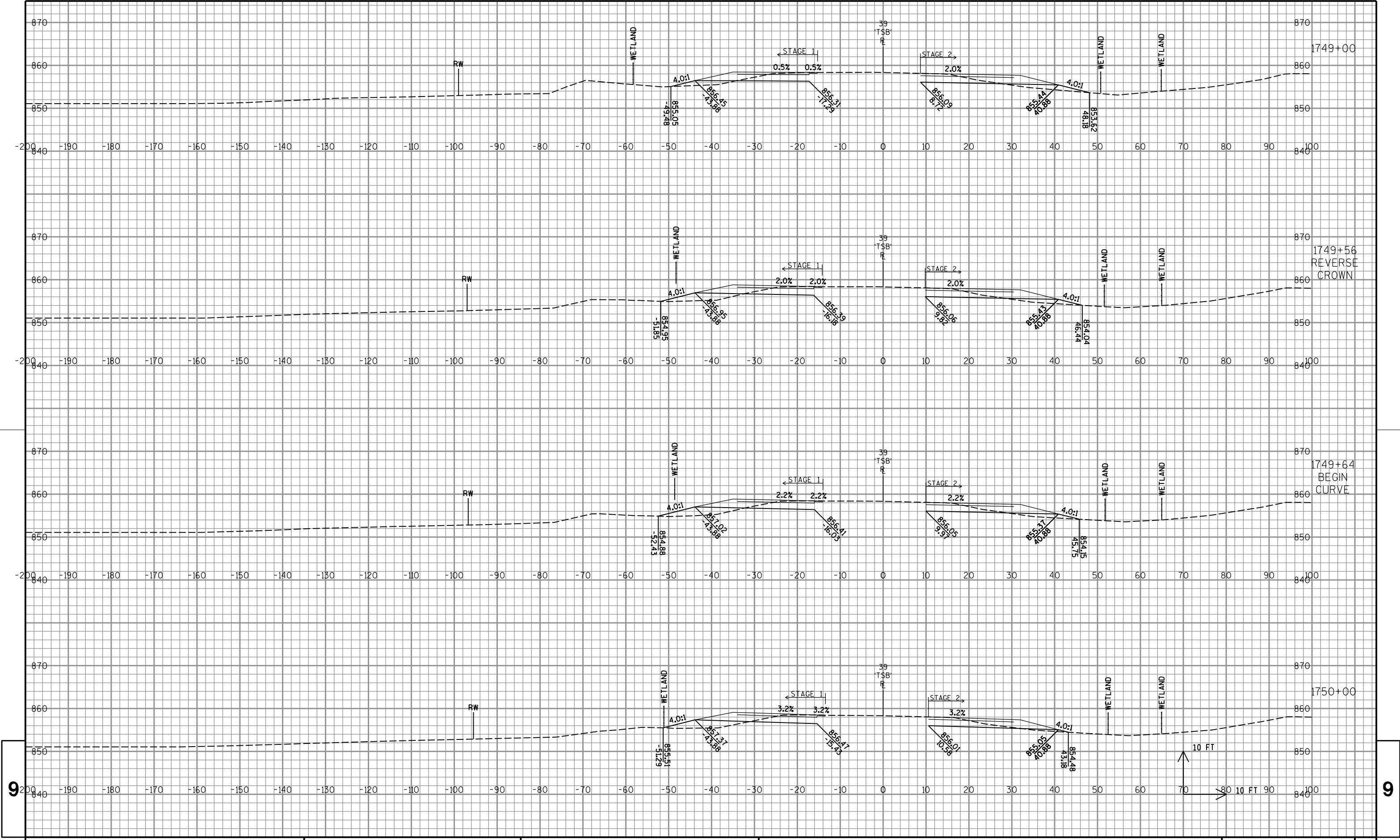
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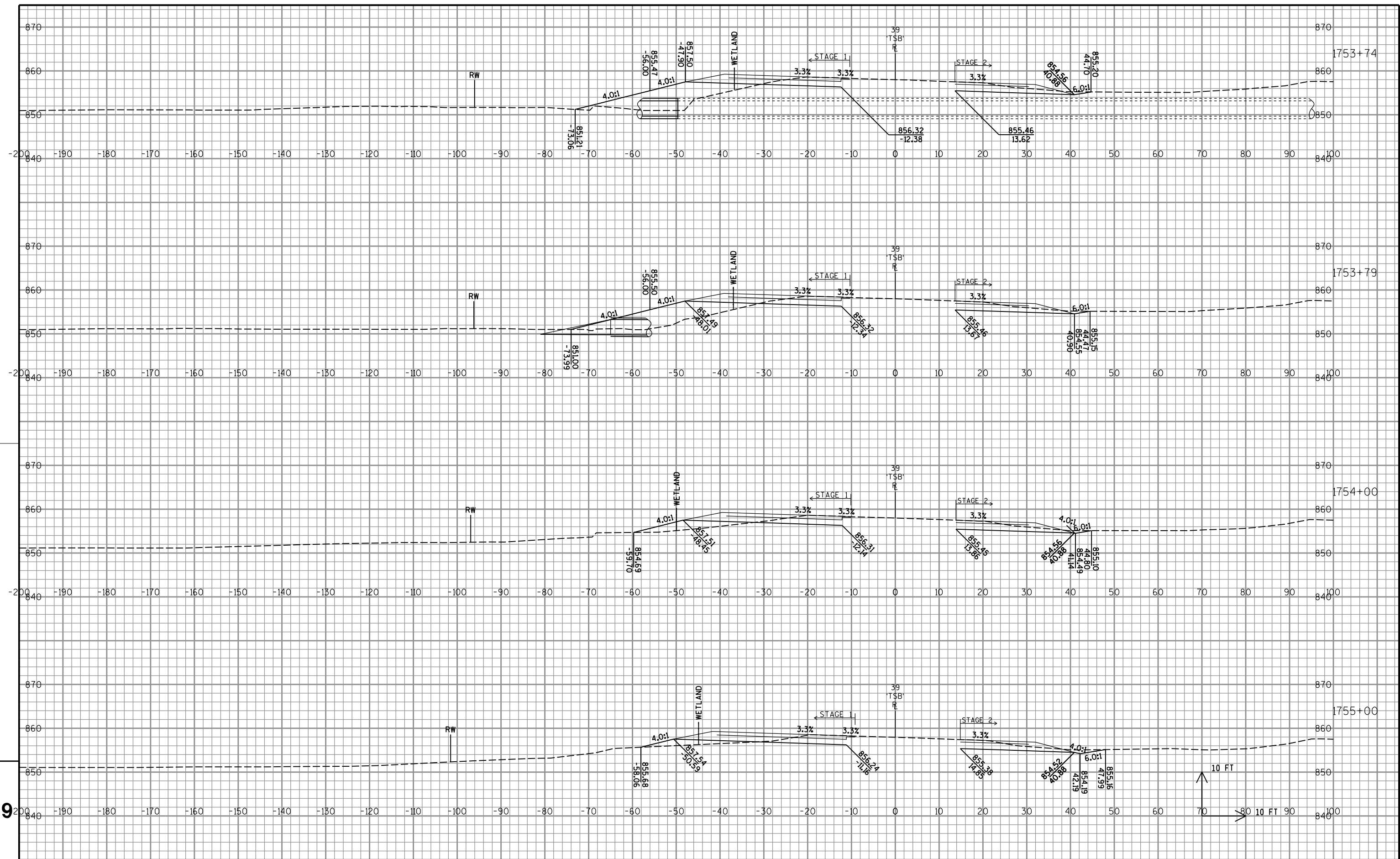
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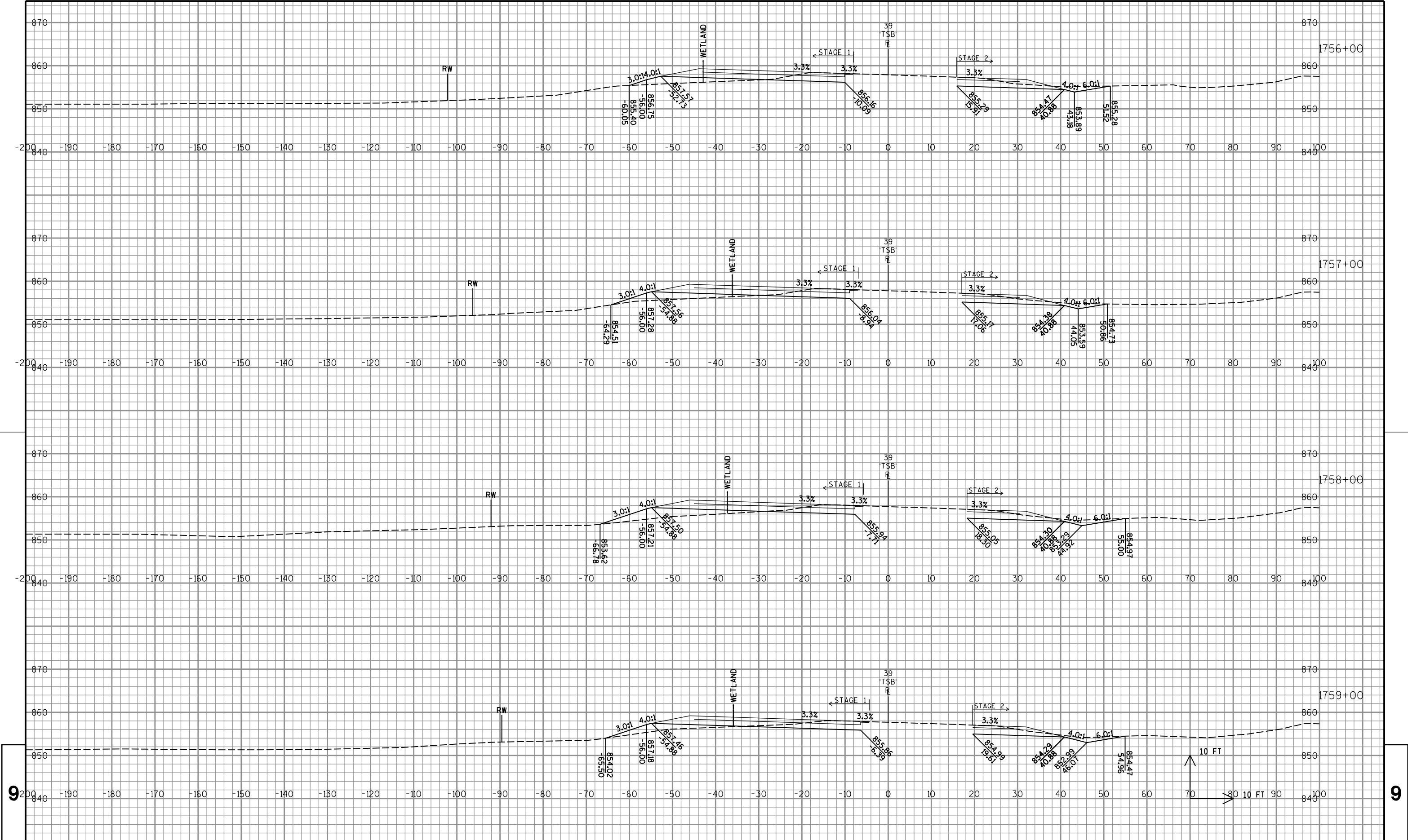
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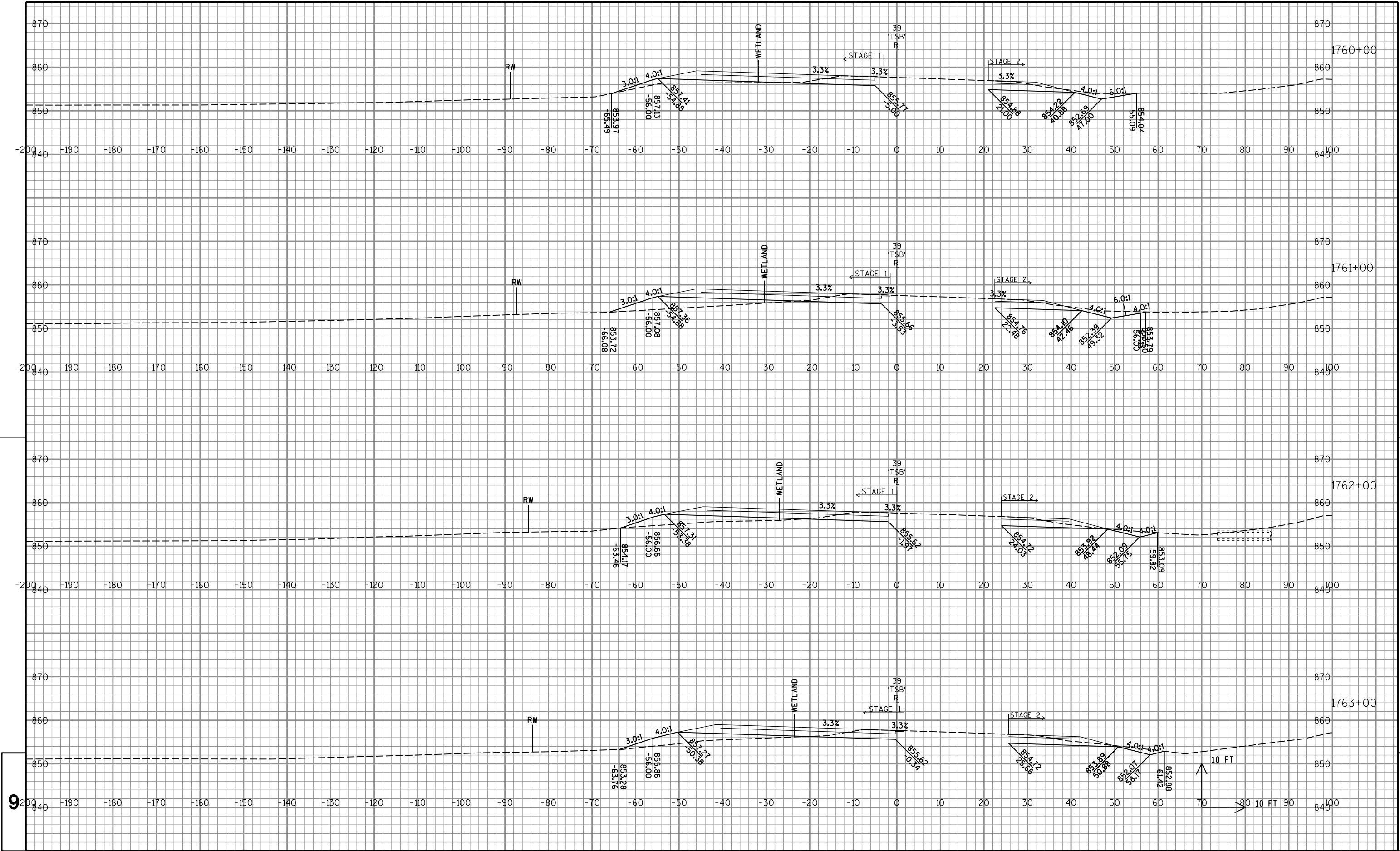
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WISDOT/CADDs SHEET 21









PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET

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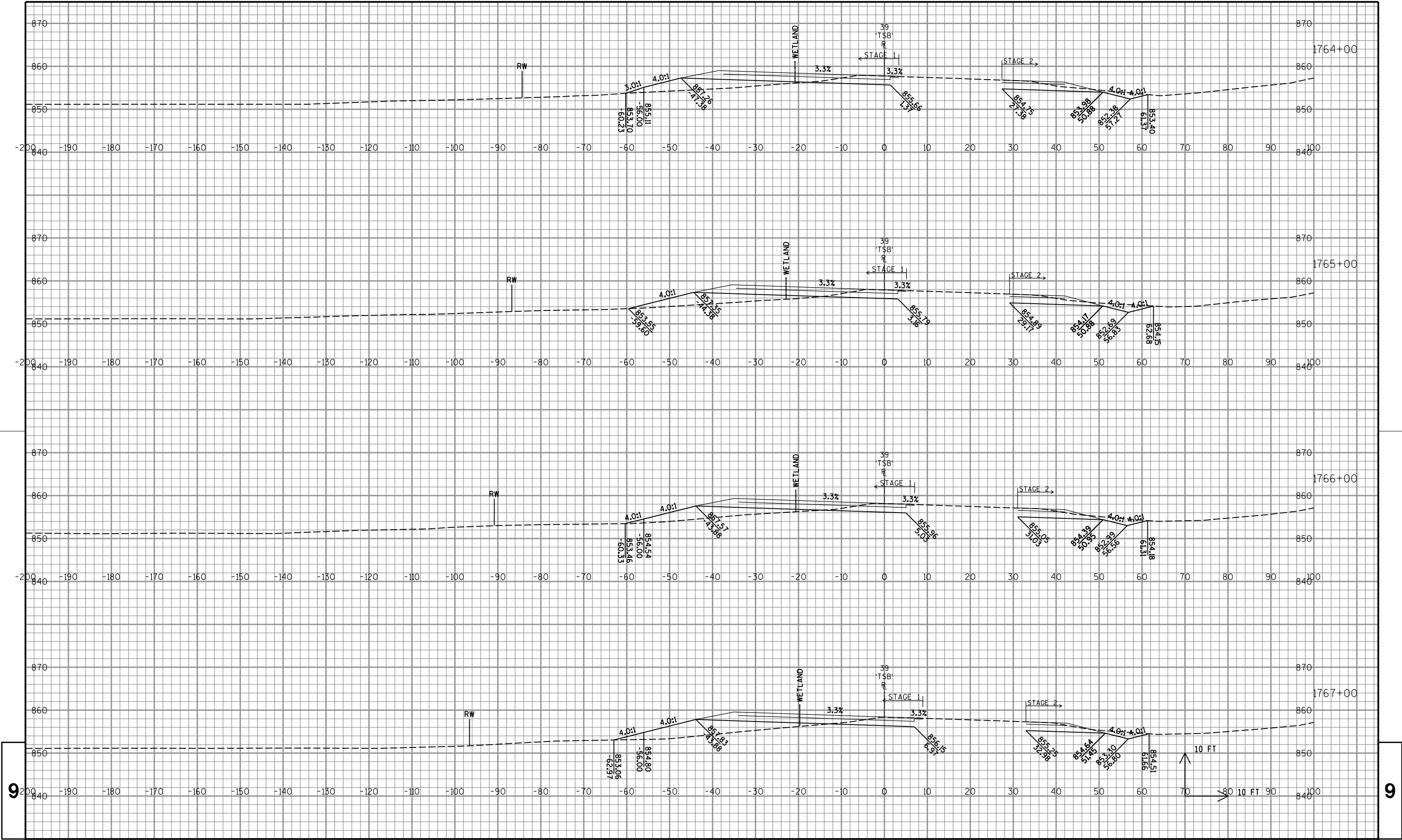
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WISDOT/CADDs SHEET 21



PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET

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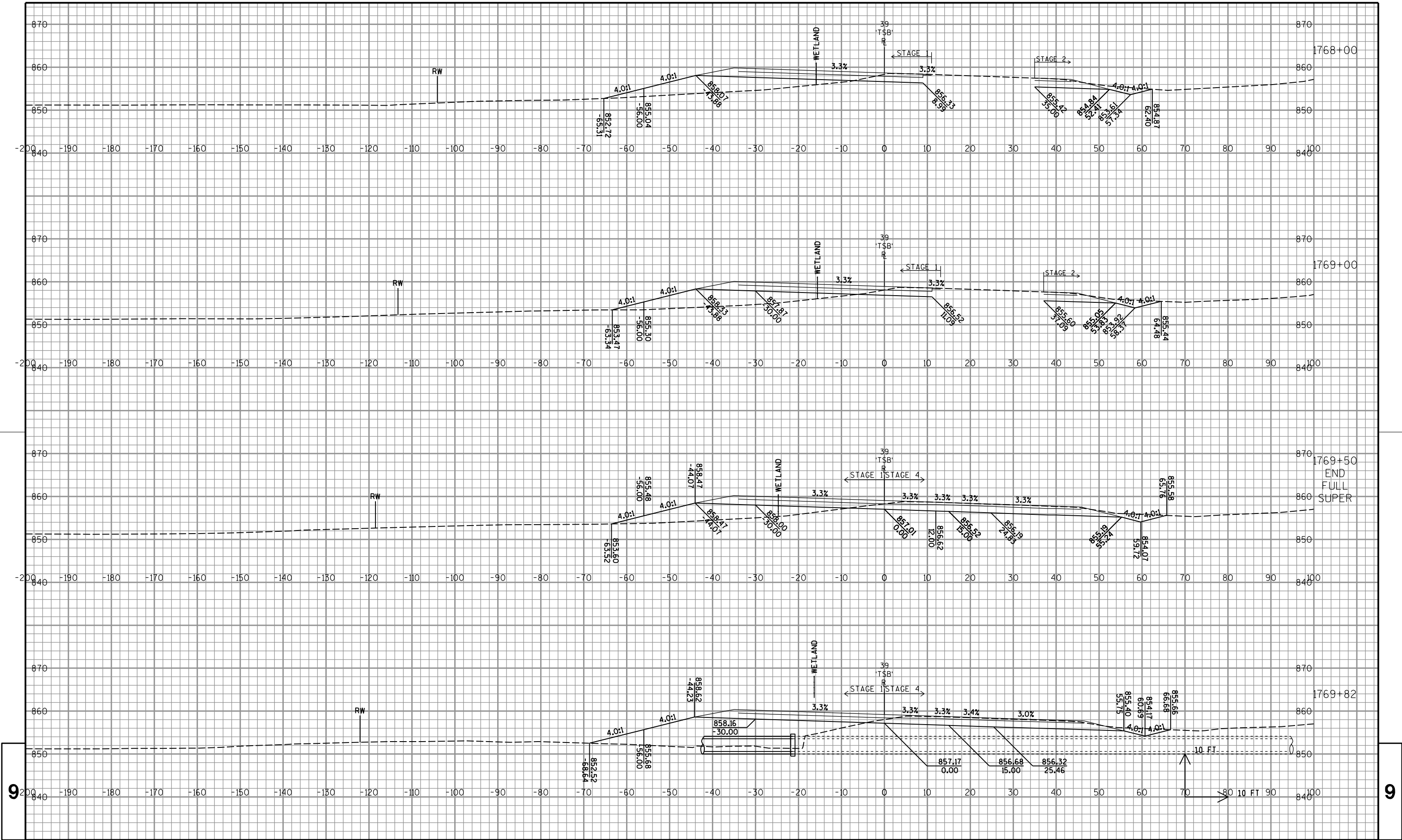
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WISDOT/CADDs SHEET 21



PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET

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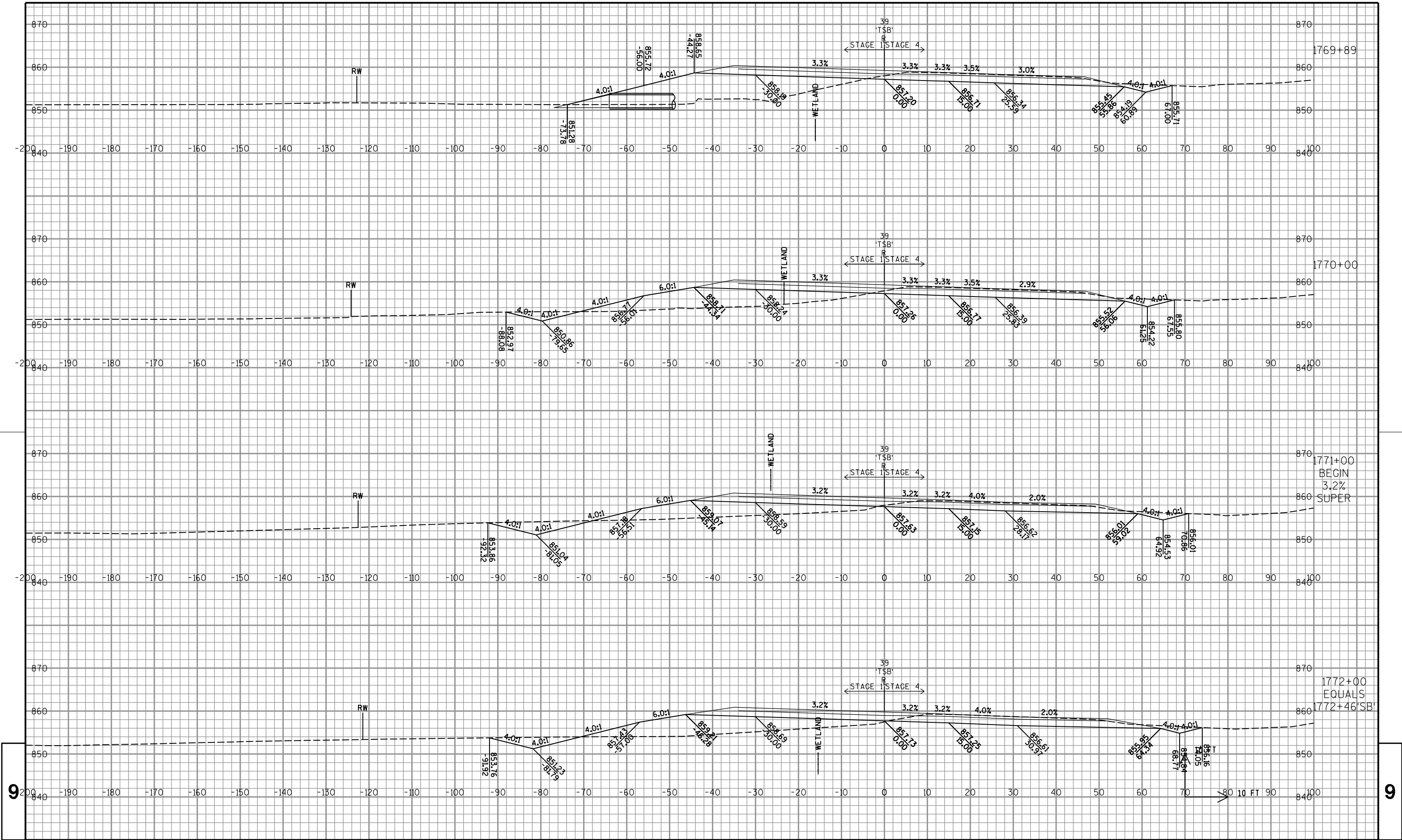
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WISDOT/CADDs SHEET 21



PROJECT NO:1007-10-79

HWY:IH 39

COUNTY:DANE

CROSS SECTIONS:IH 39/90 SB

SHEET

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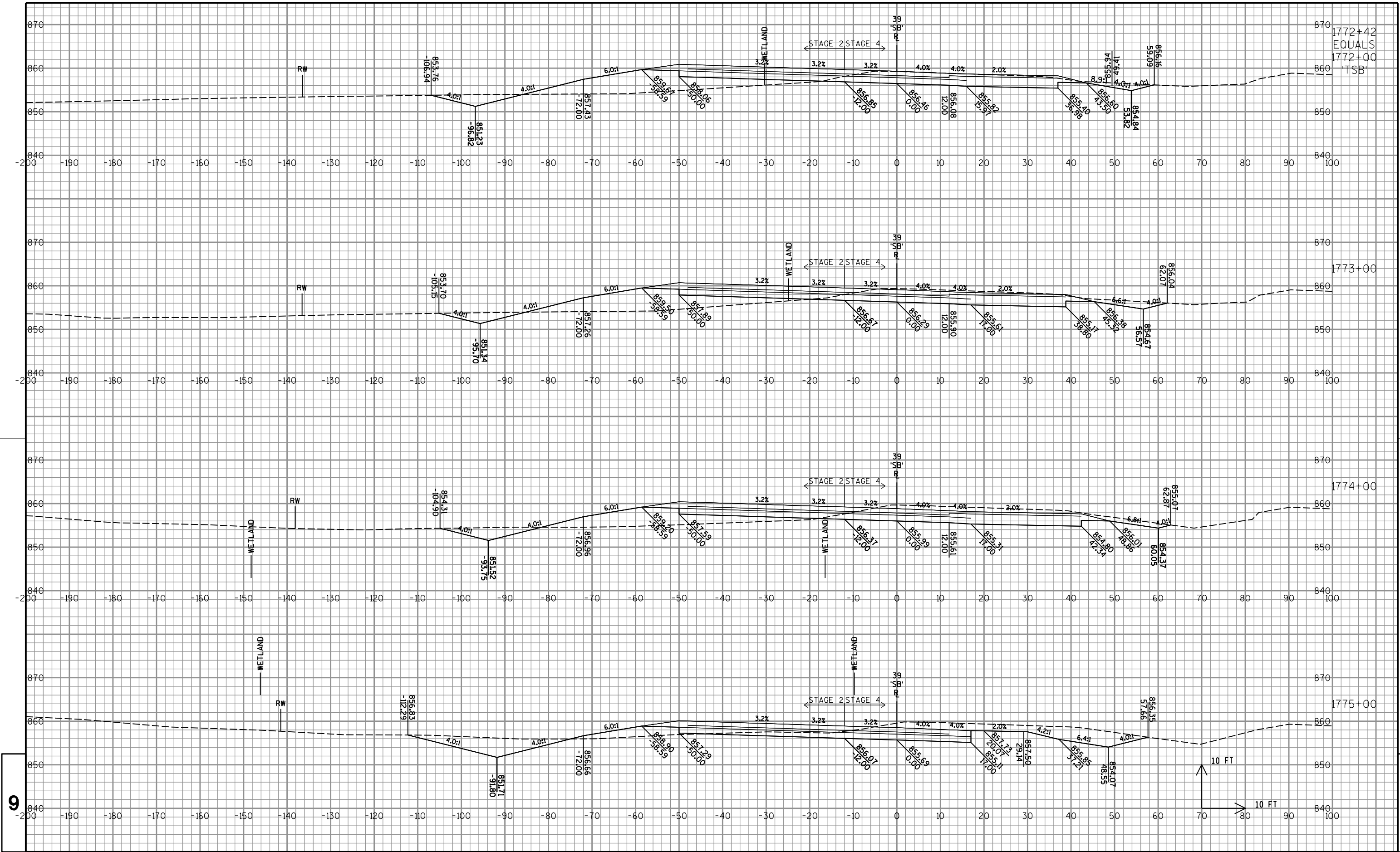
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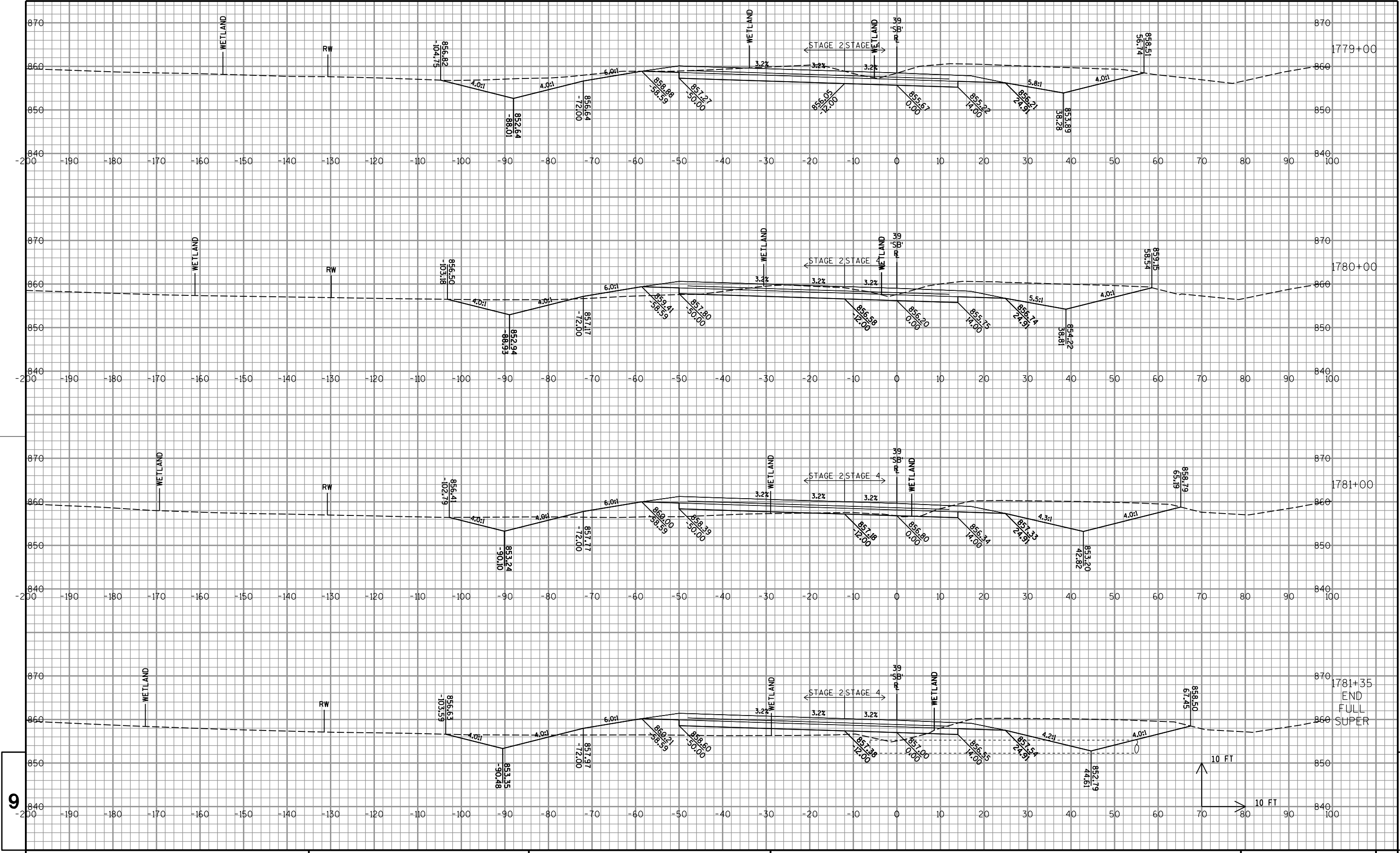
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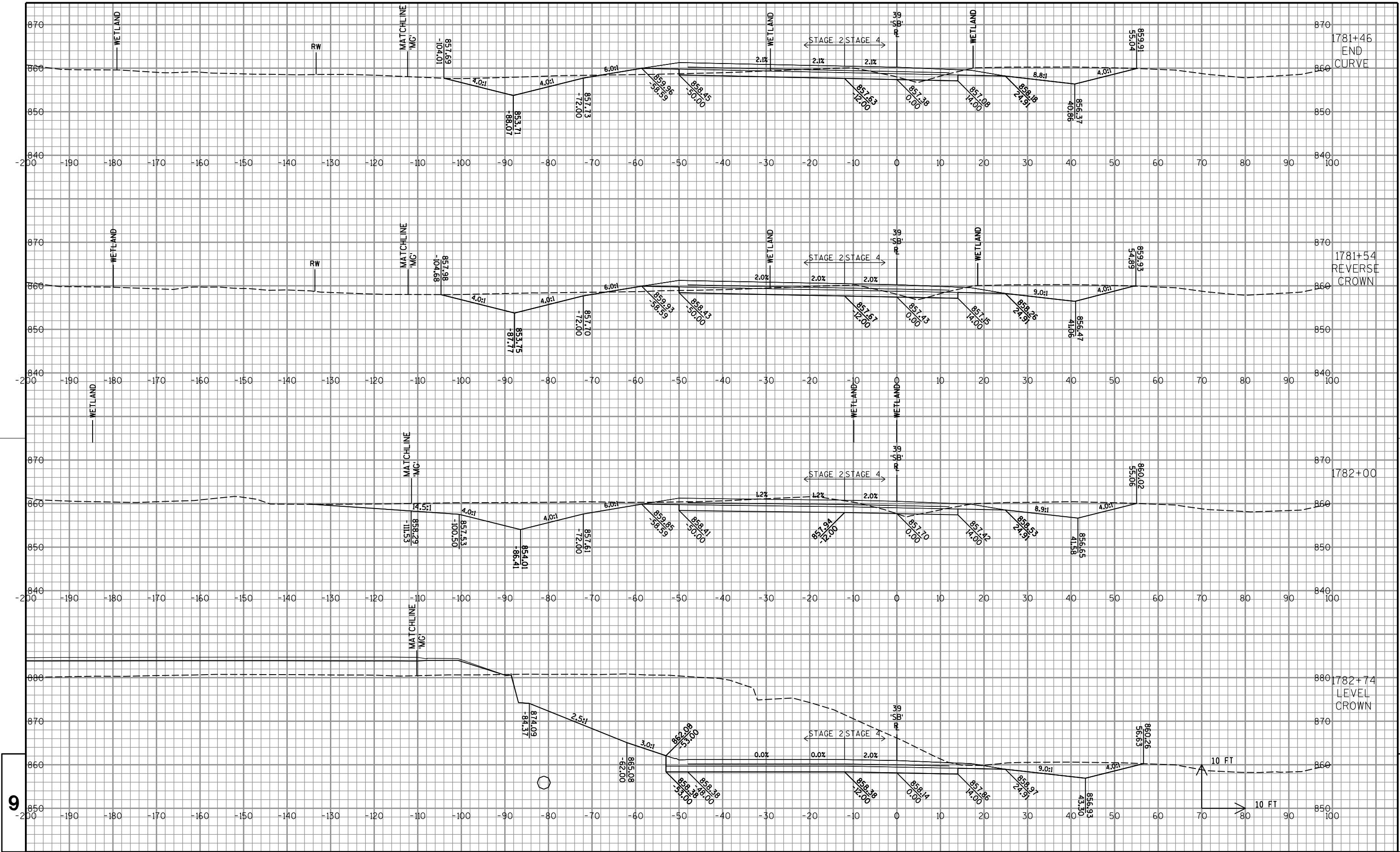
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WISDOT/CADDs SHEET 21







PROJECT NO: 1007-10-79

HWY: IH 39

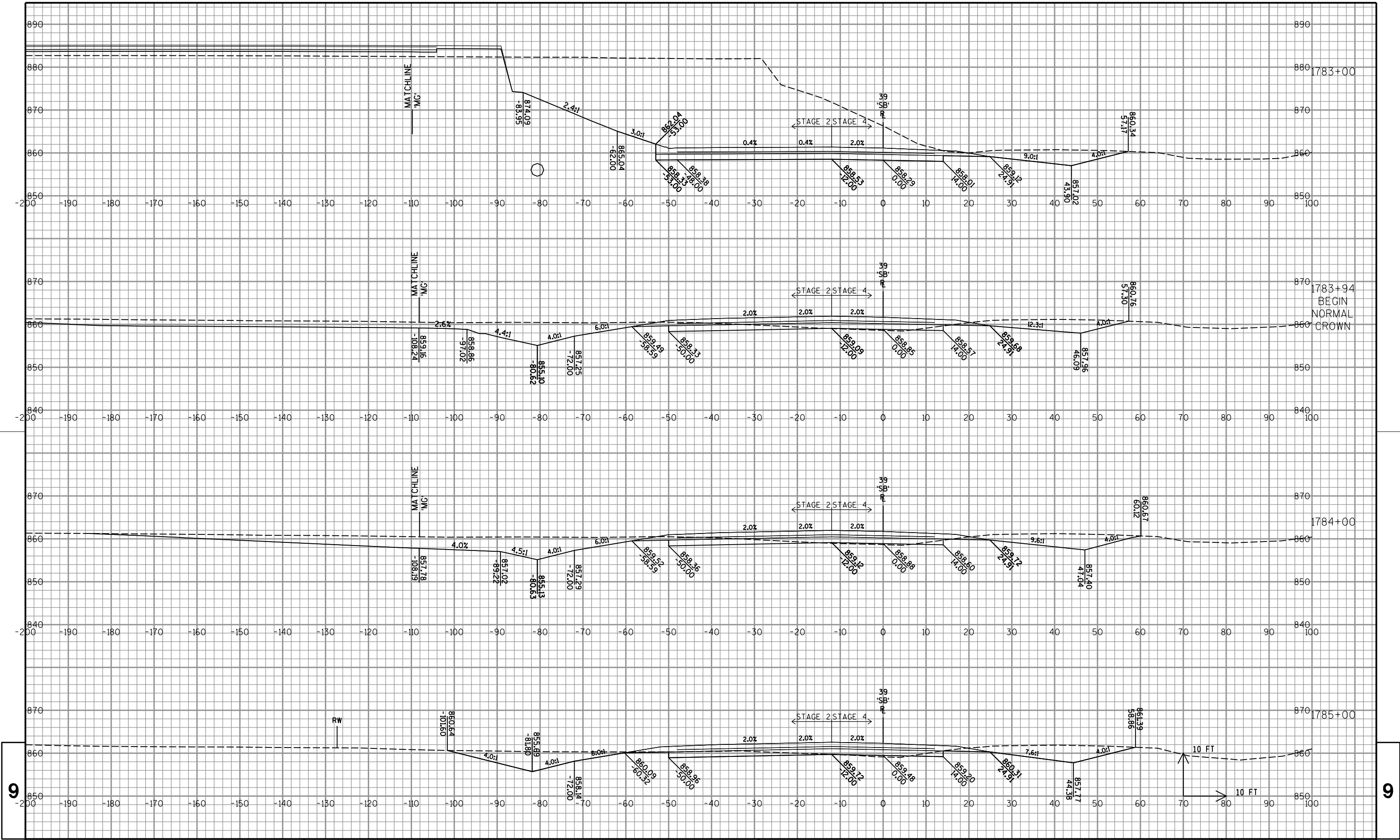
COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET

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PROJECT NO:1007-10-79

HWY:IH 39

COUNTY:DANE

CROSS SECTIONS:IH 39/90 SB

SHEET

695

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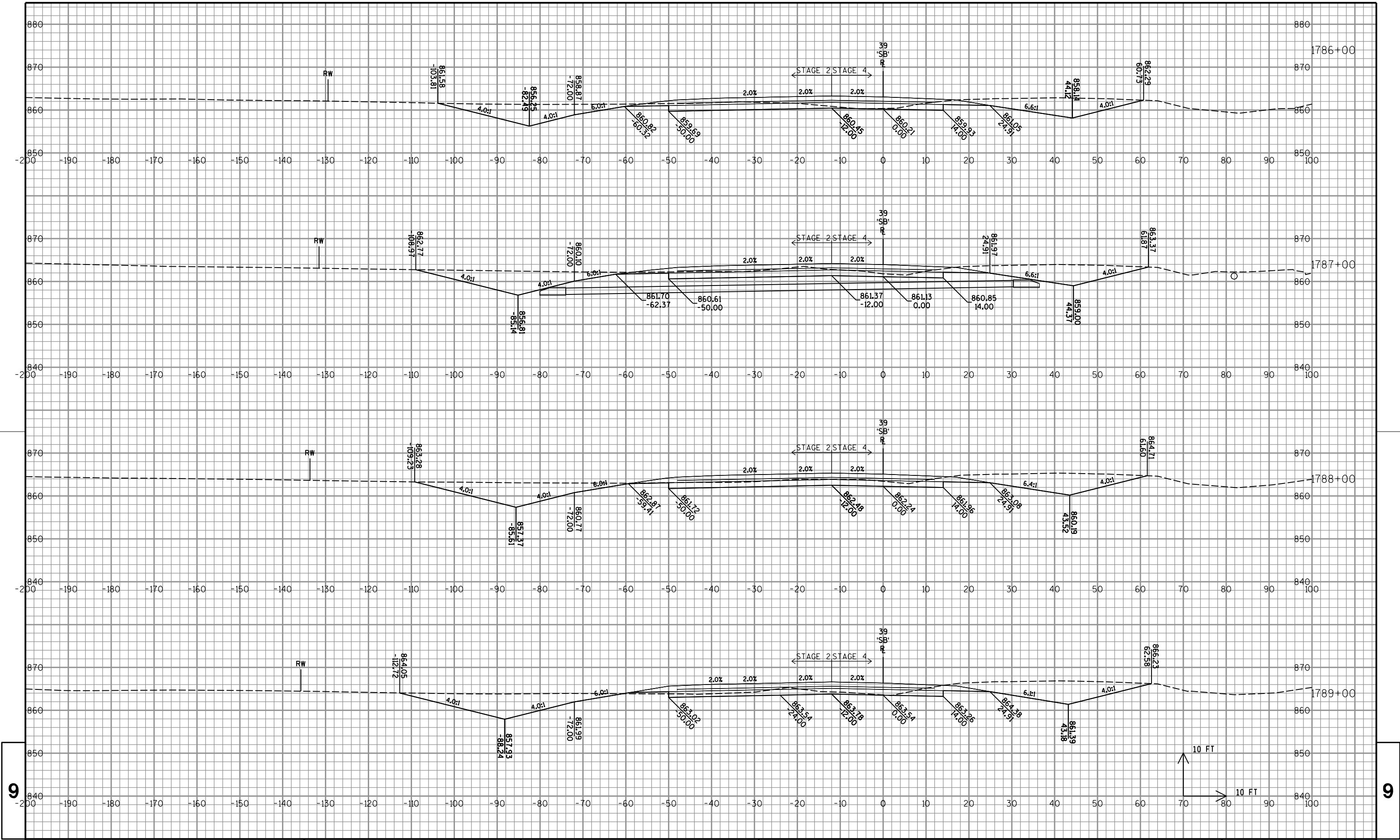
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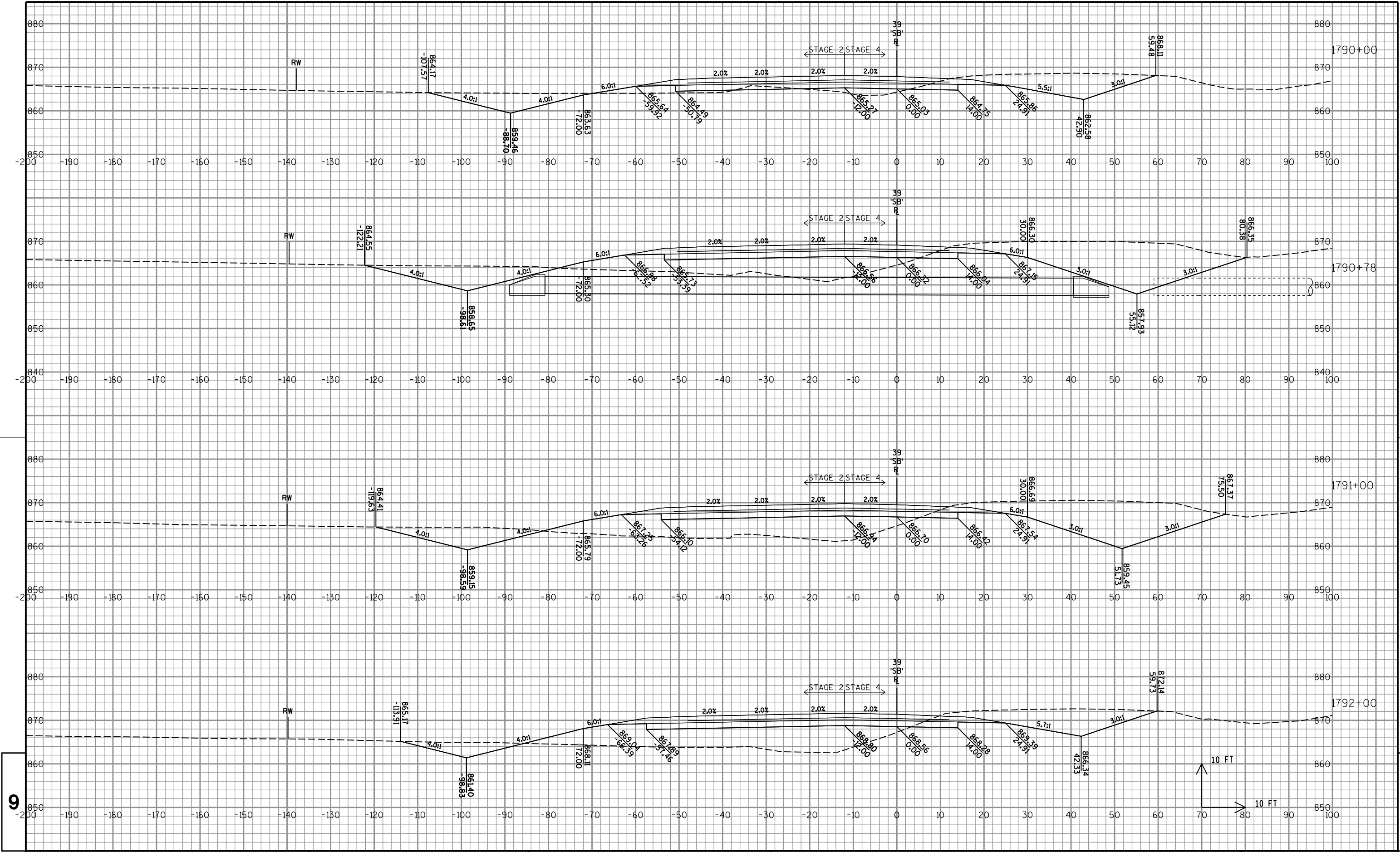
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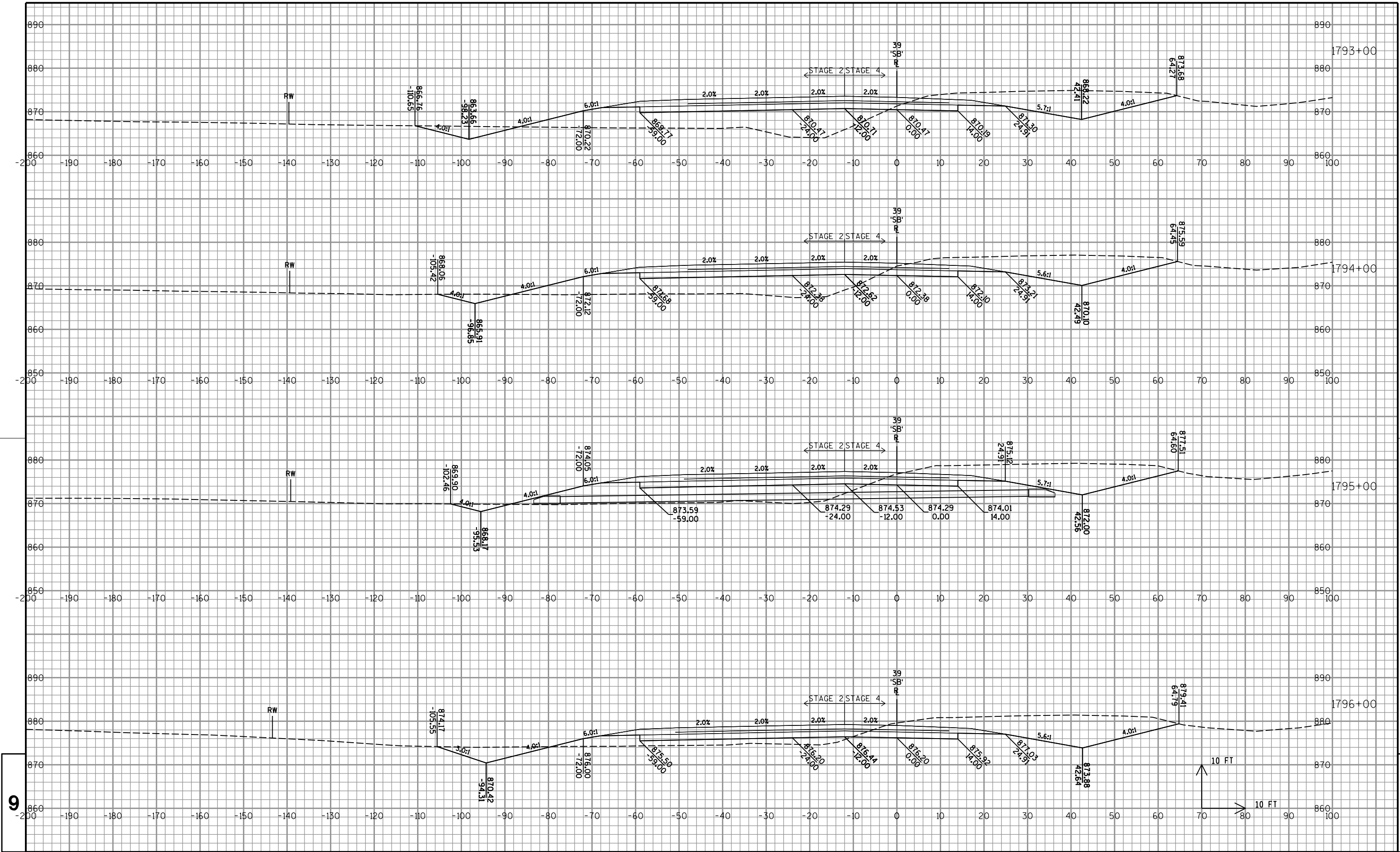
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WISDOT/CADDs SHEET 21







PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET

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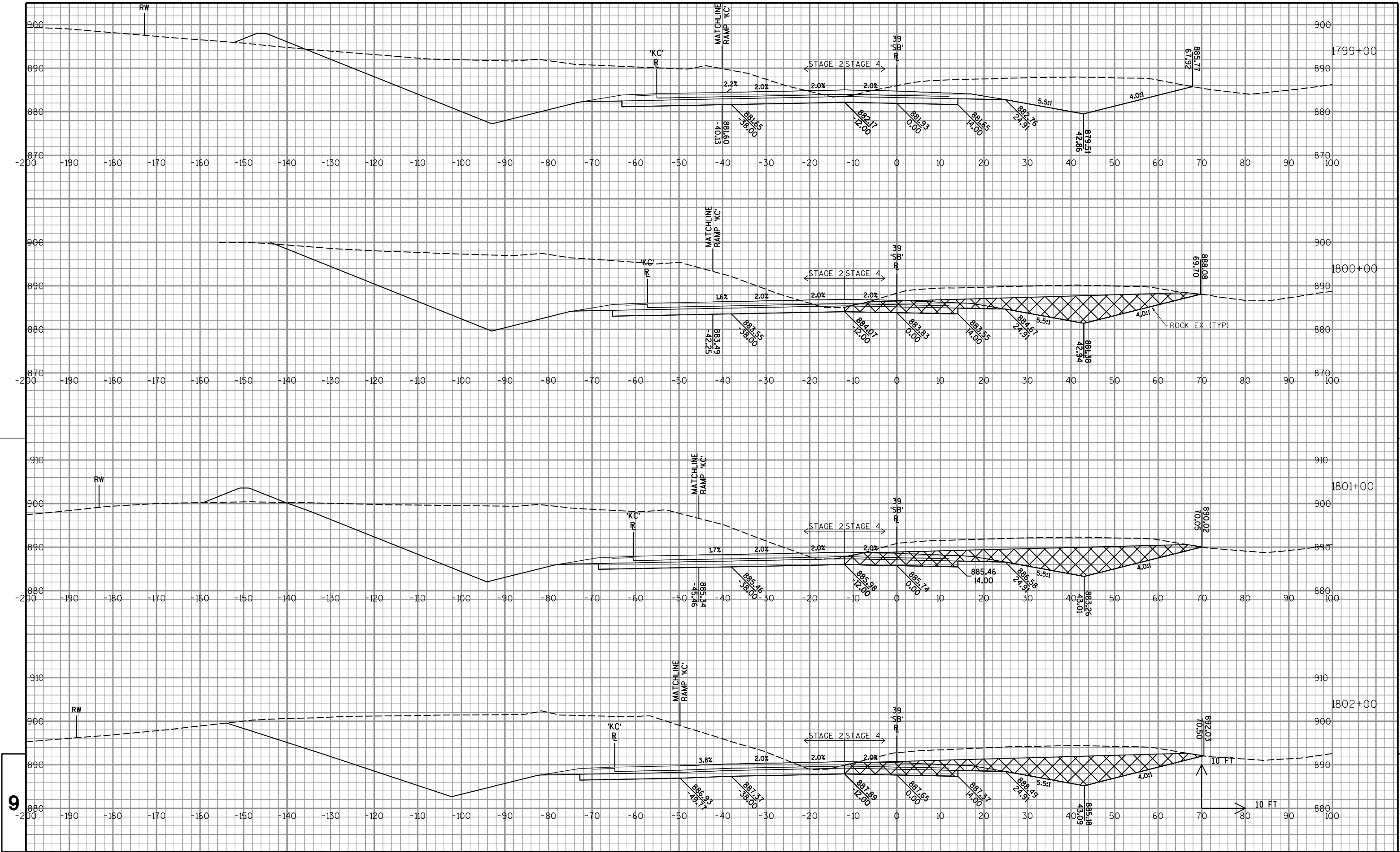
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WISDOT/CADDs SHEET 21



PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

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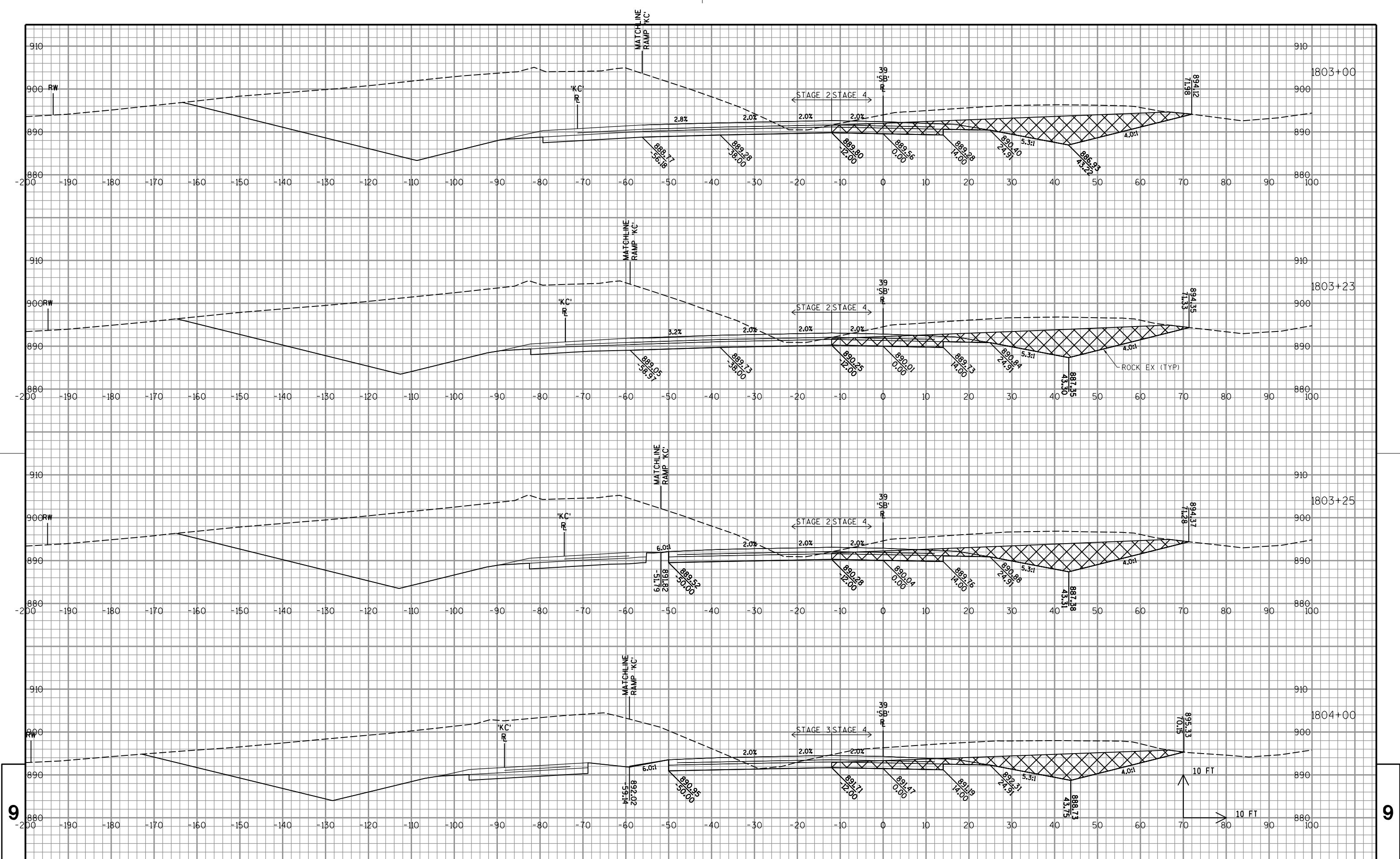
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PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

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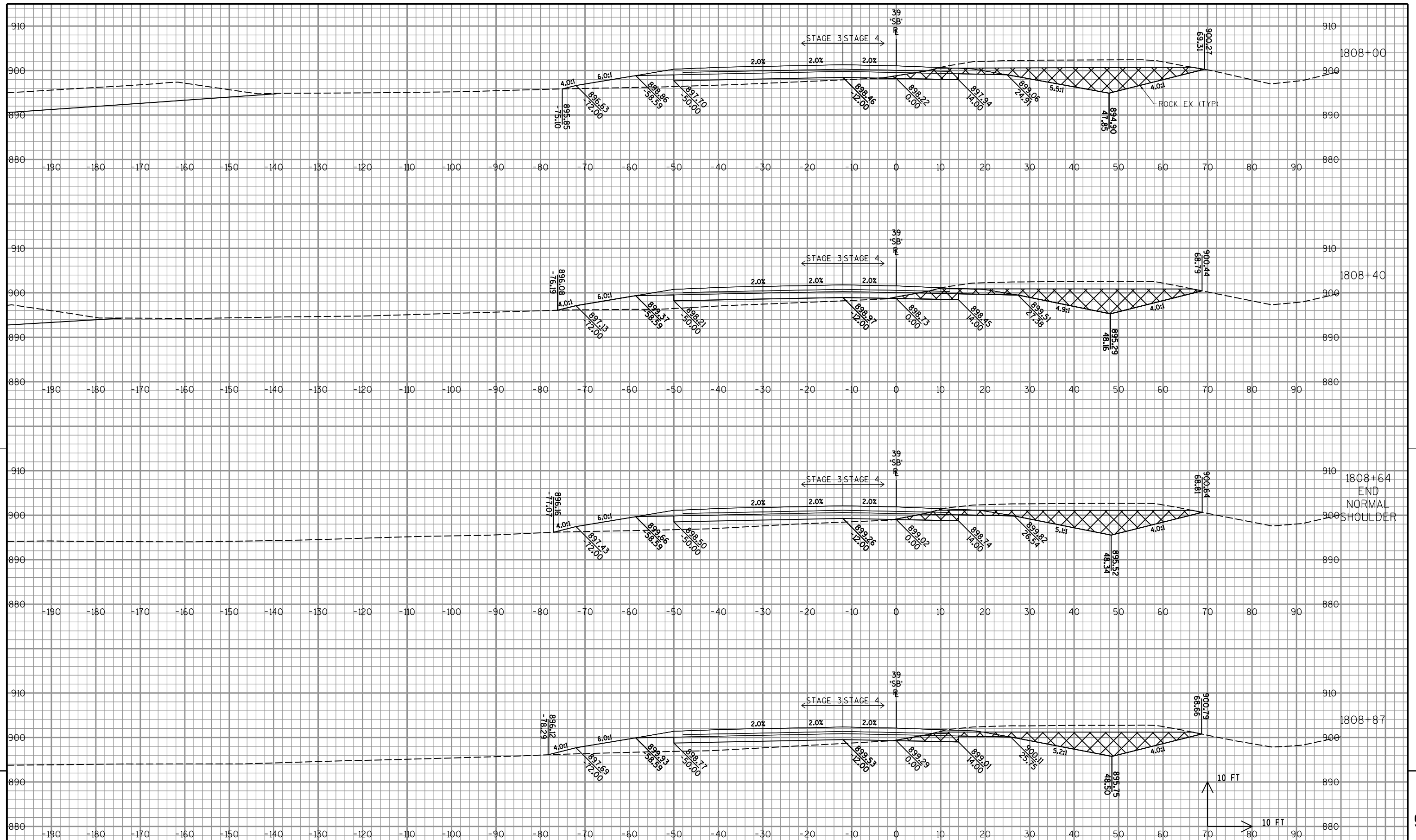
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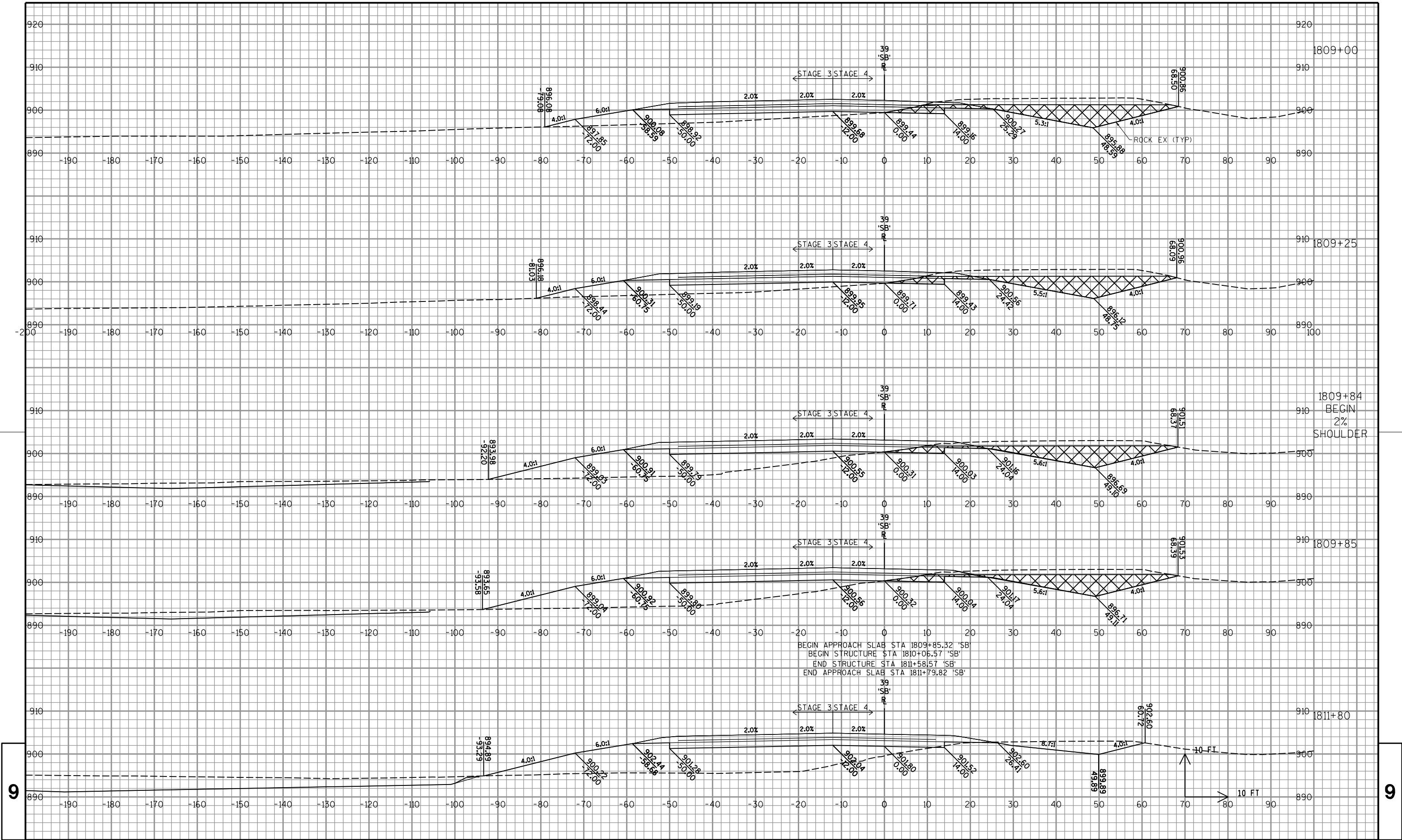
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WISDOT/CADDs SHEET 21





PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

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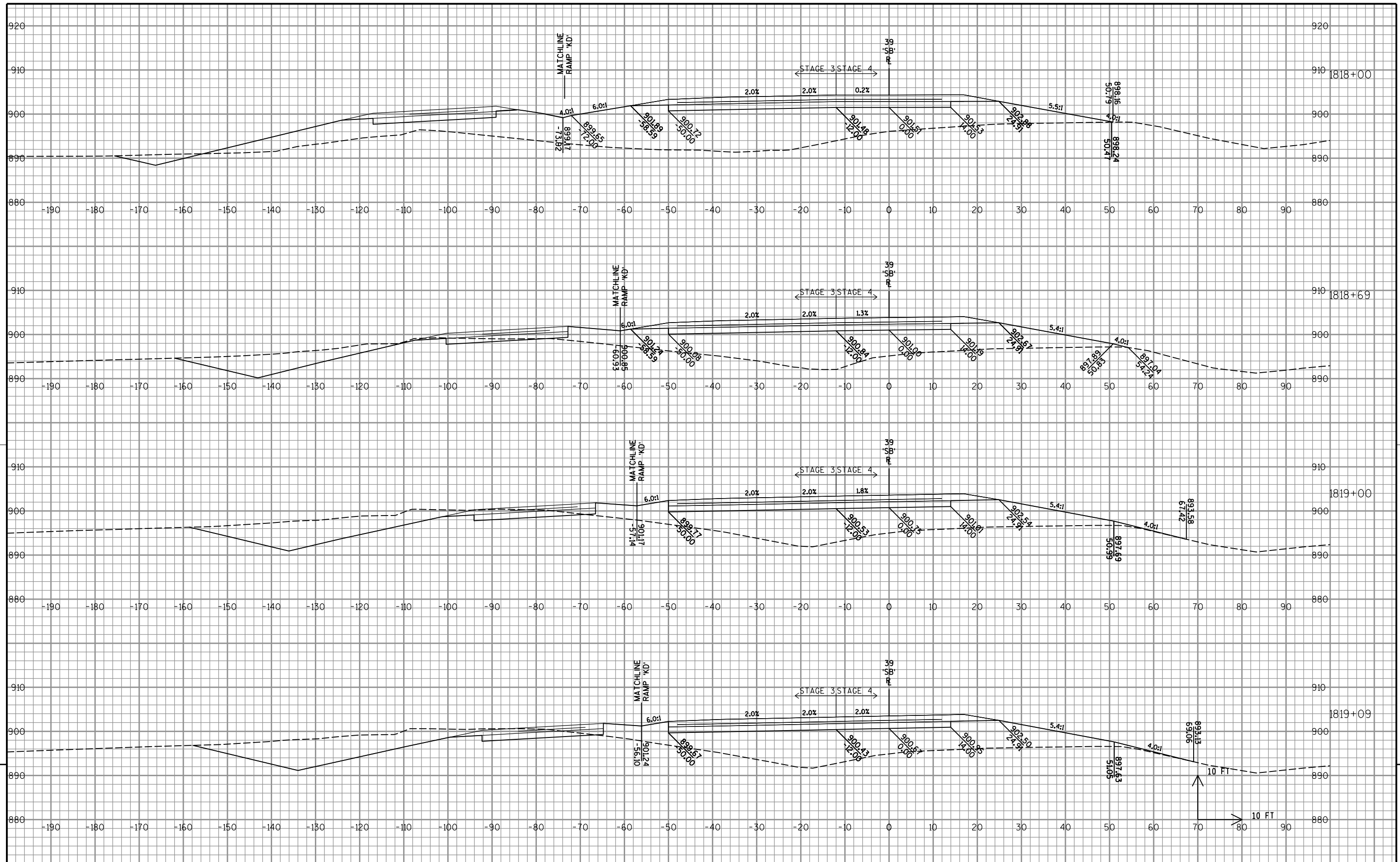
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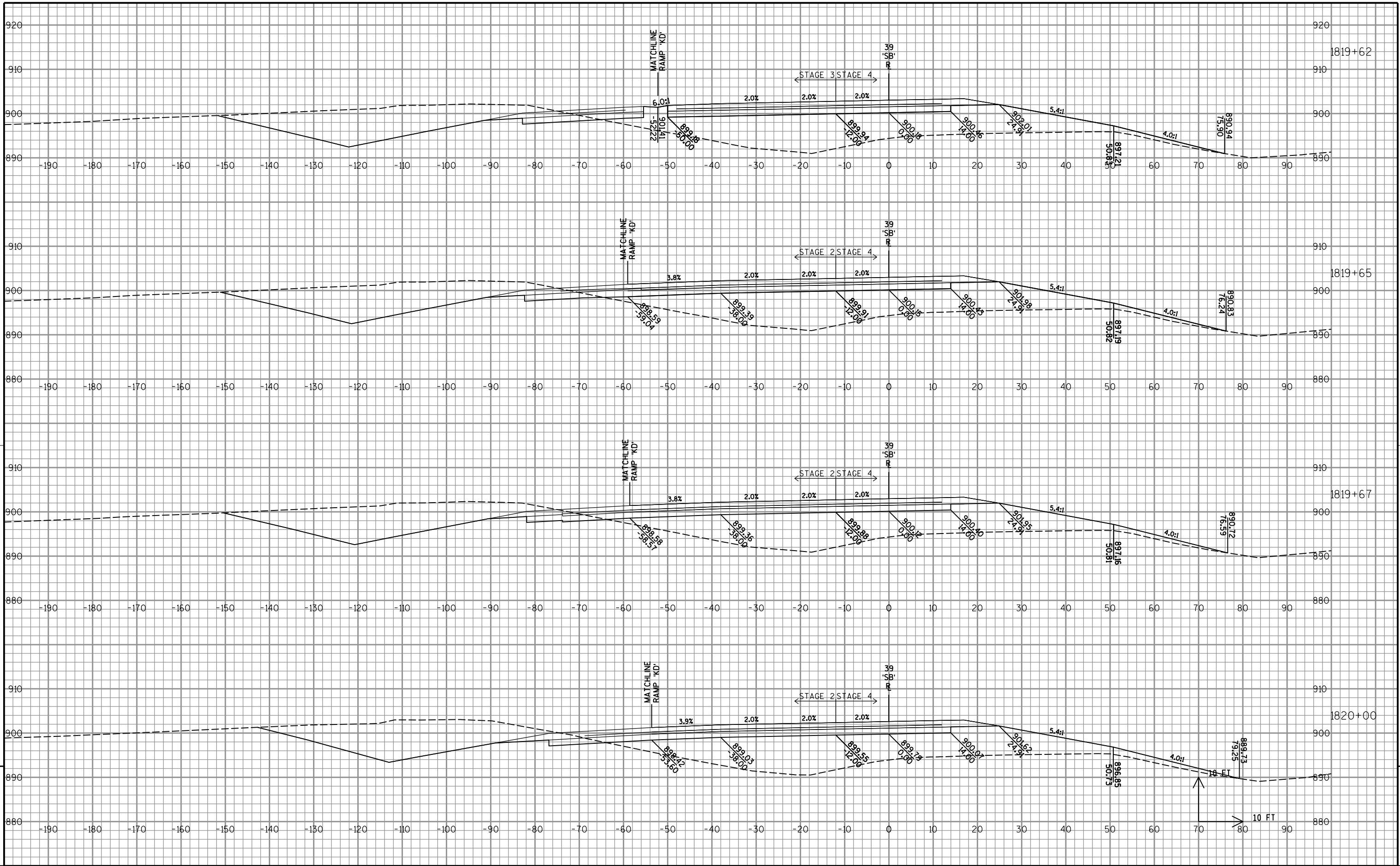
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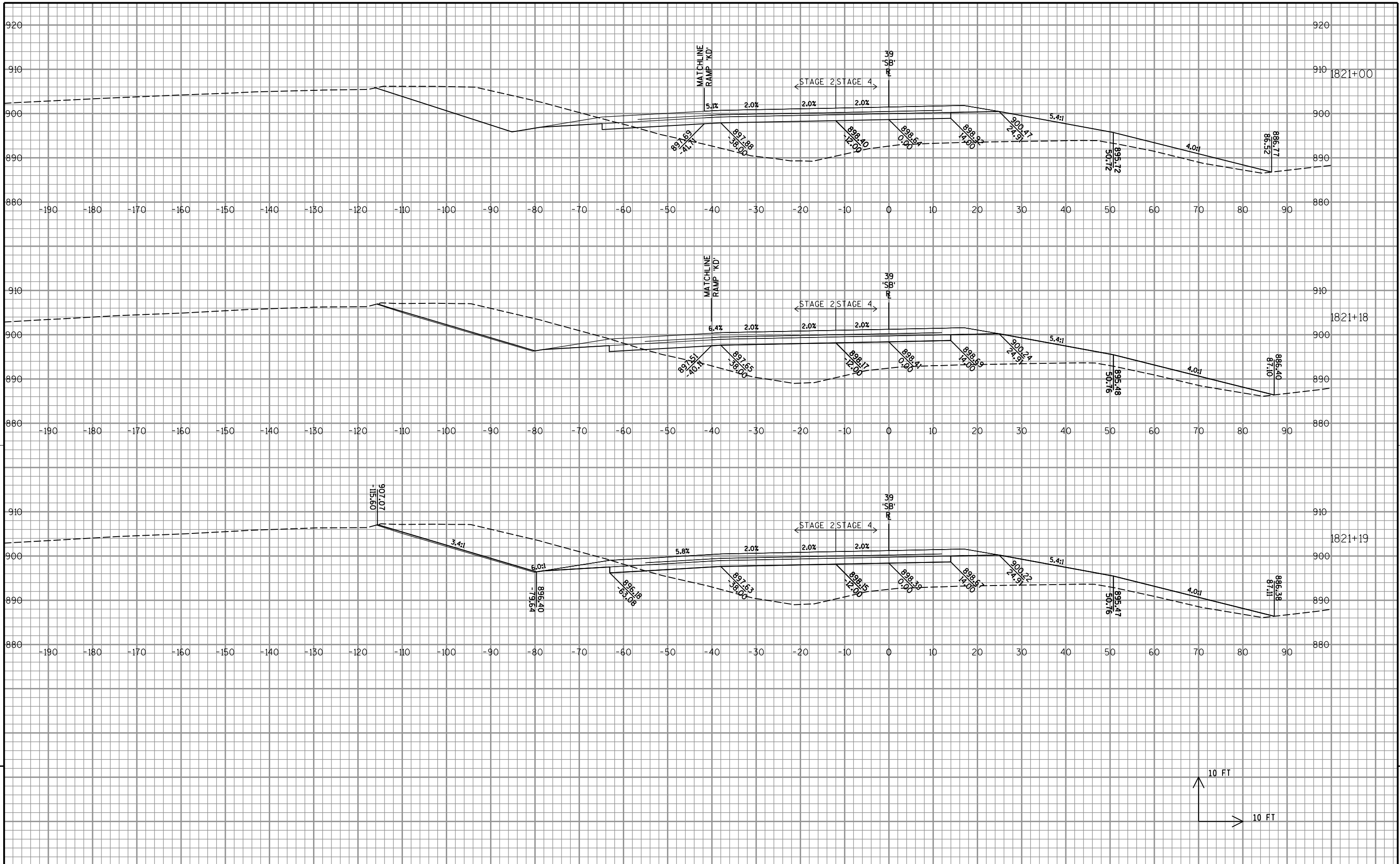
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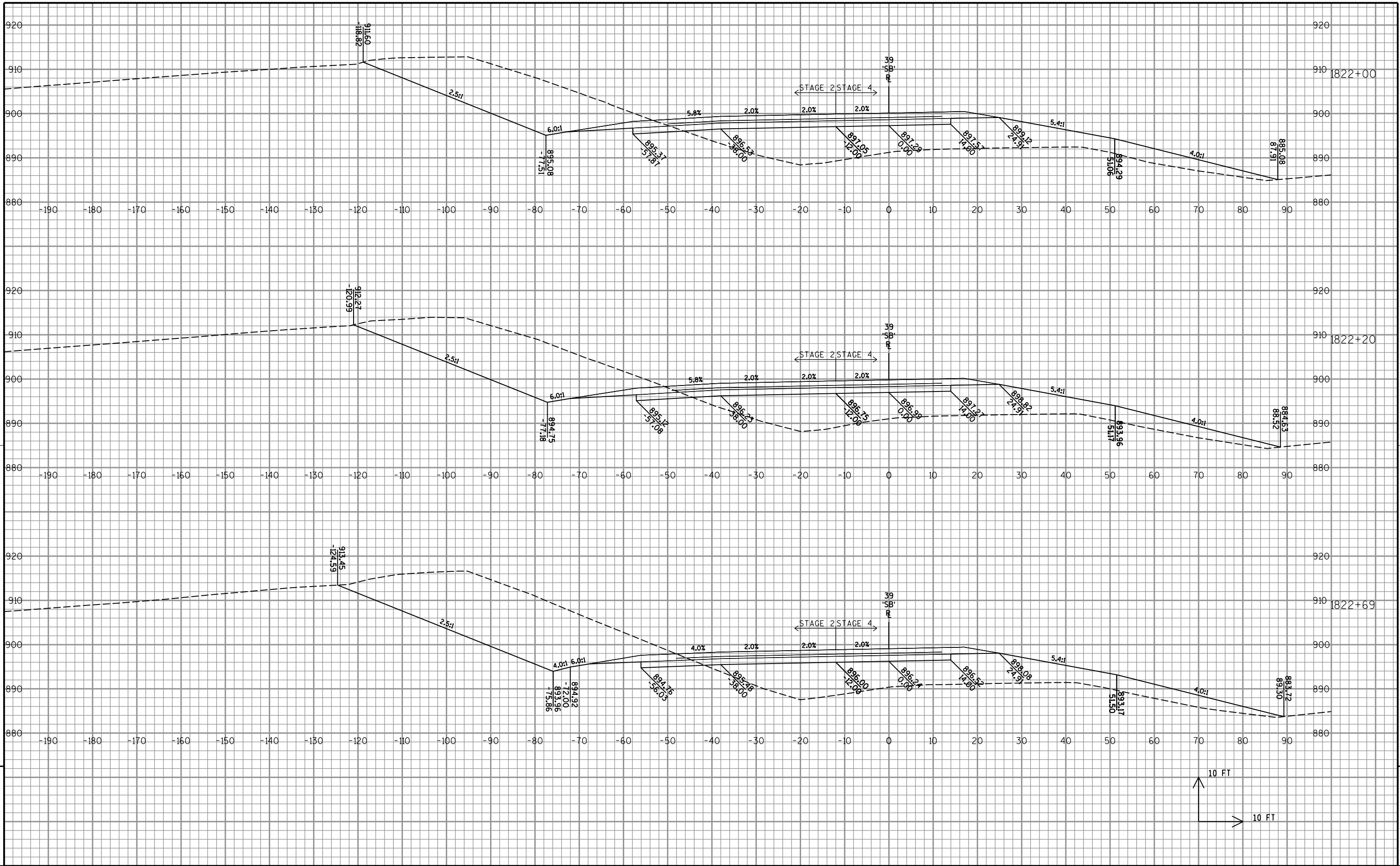
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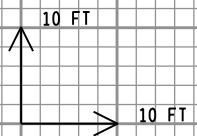
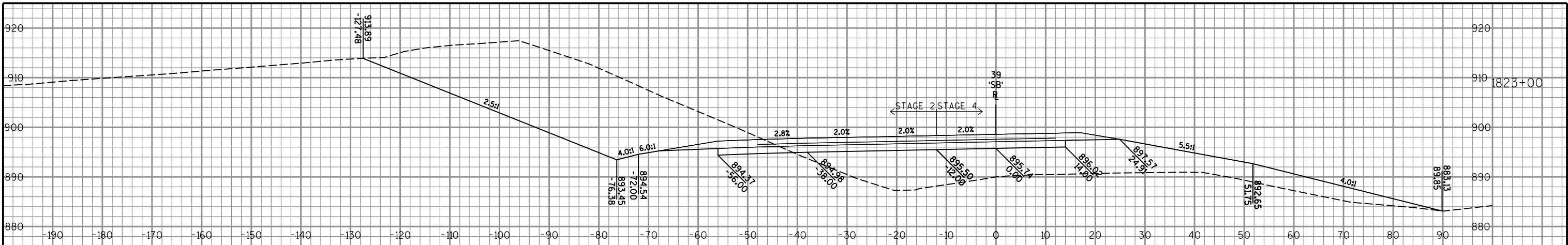
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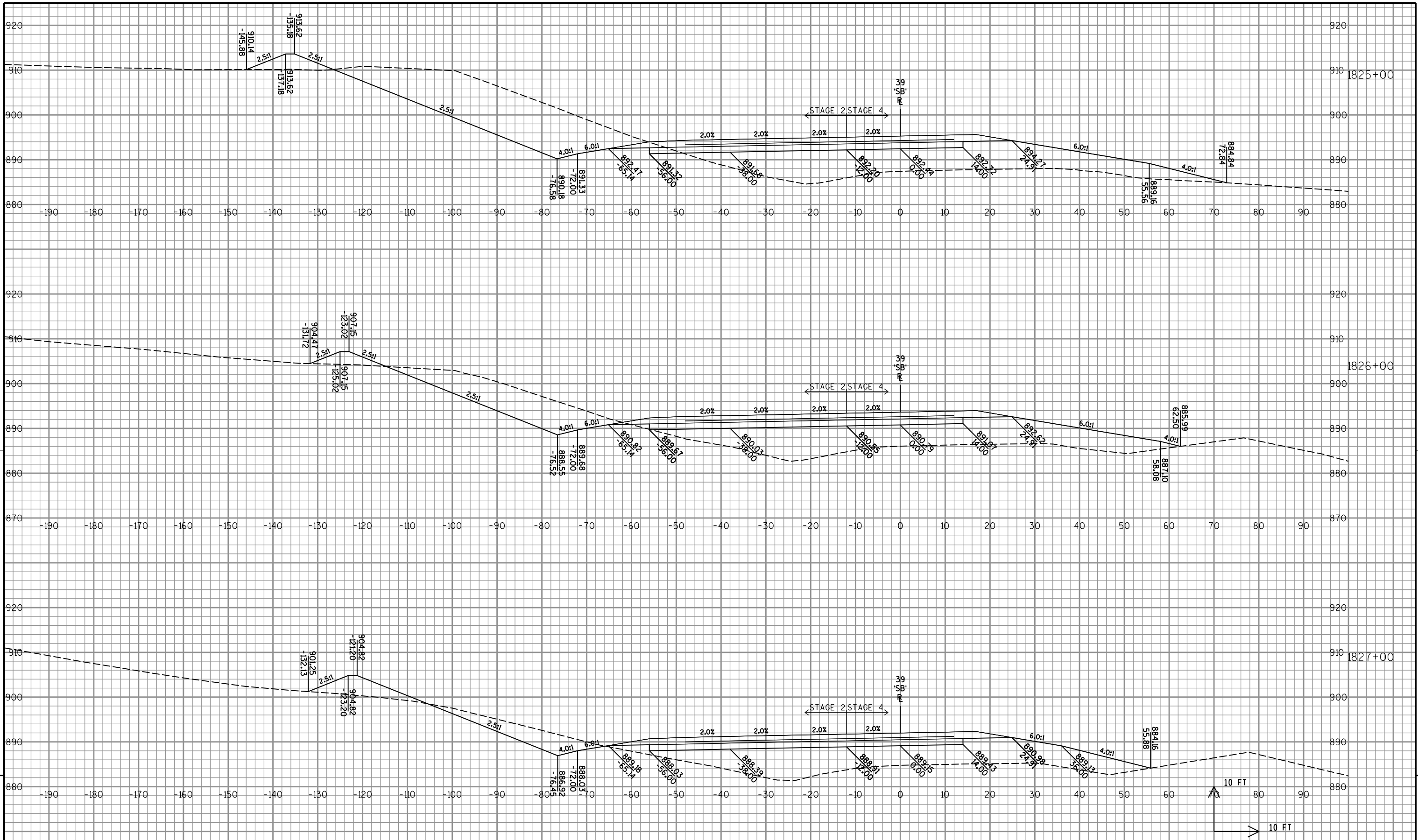


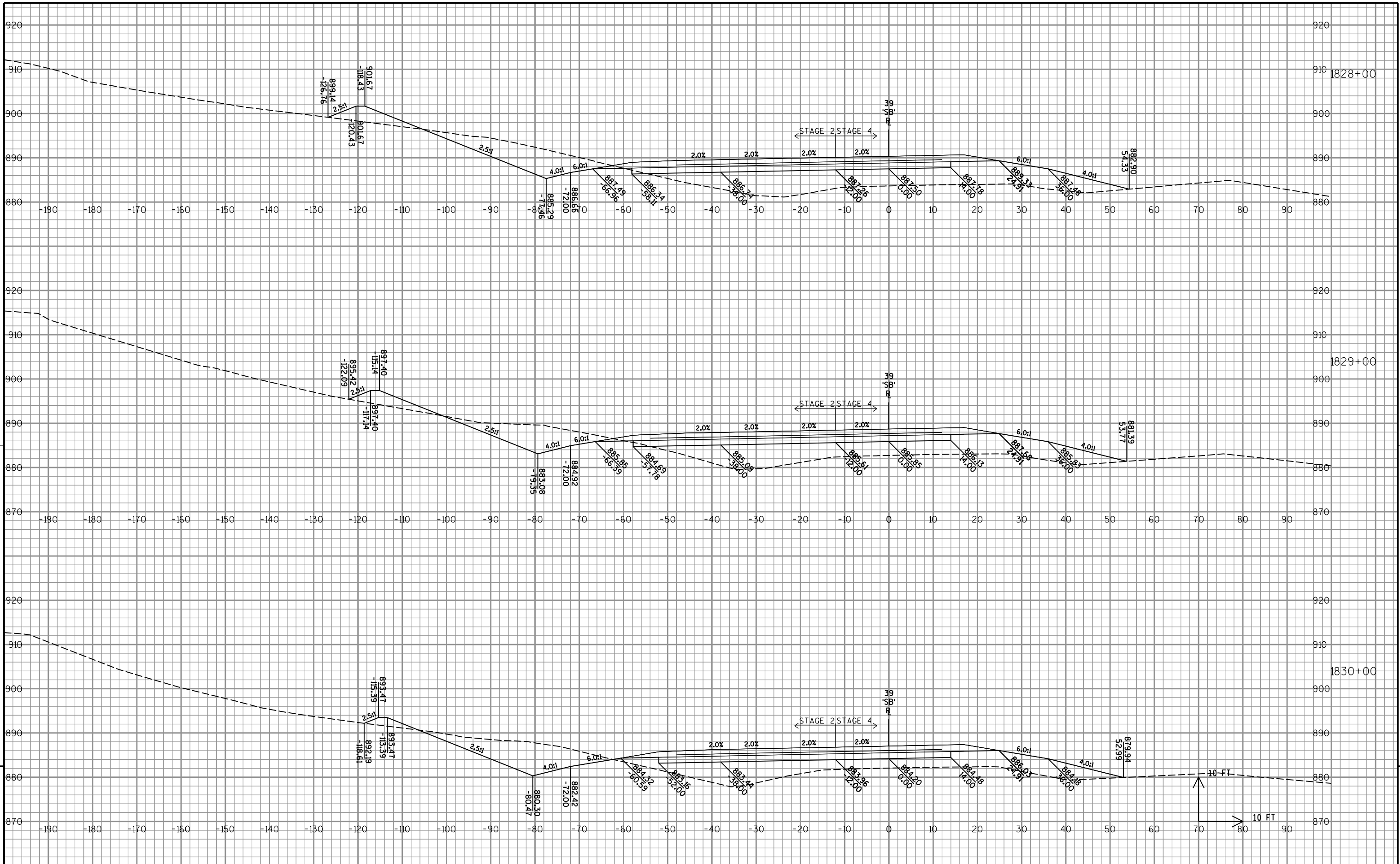


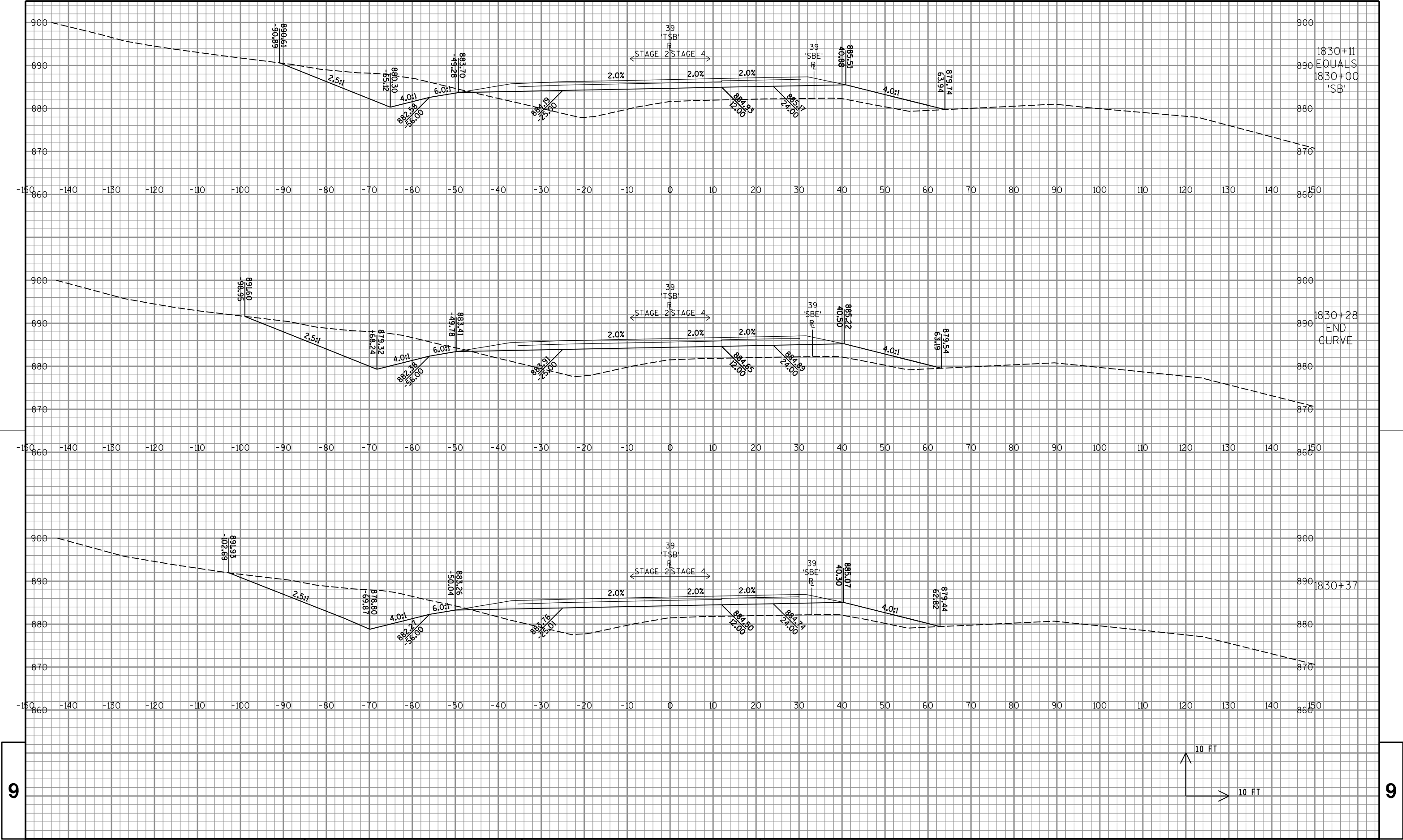


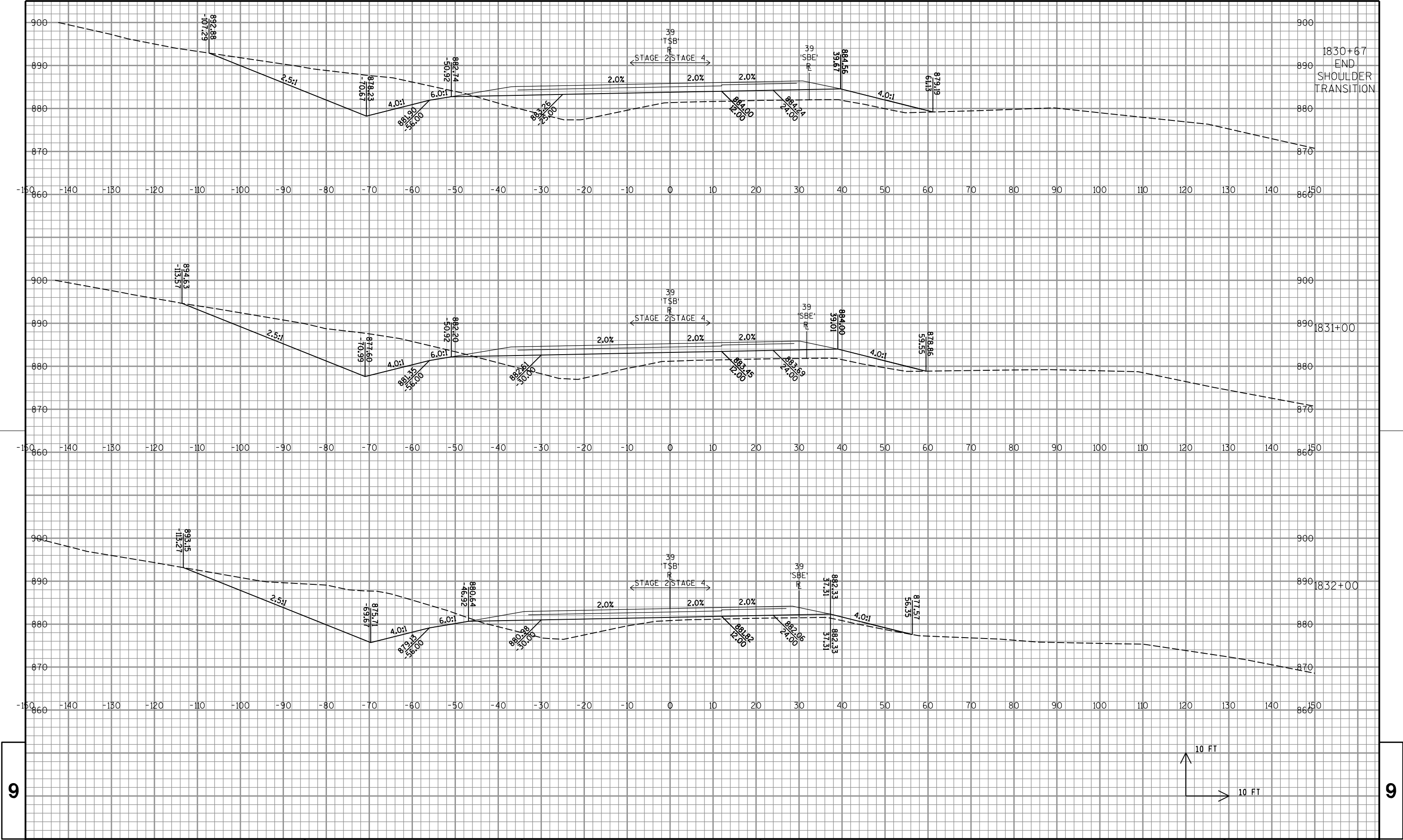












9

9

PROJECT NO:1007-10-79

HWY:IH 39

COUNTY:DANE

CROSS SECTIONS:IH 39/90 SB

SHEET

716

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet.sPlan\090101_xs.dgn

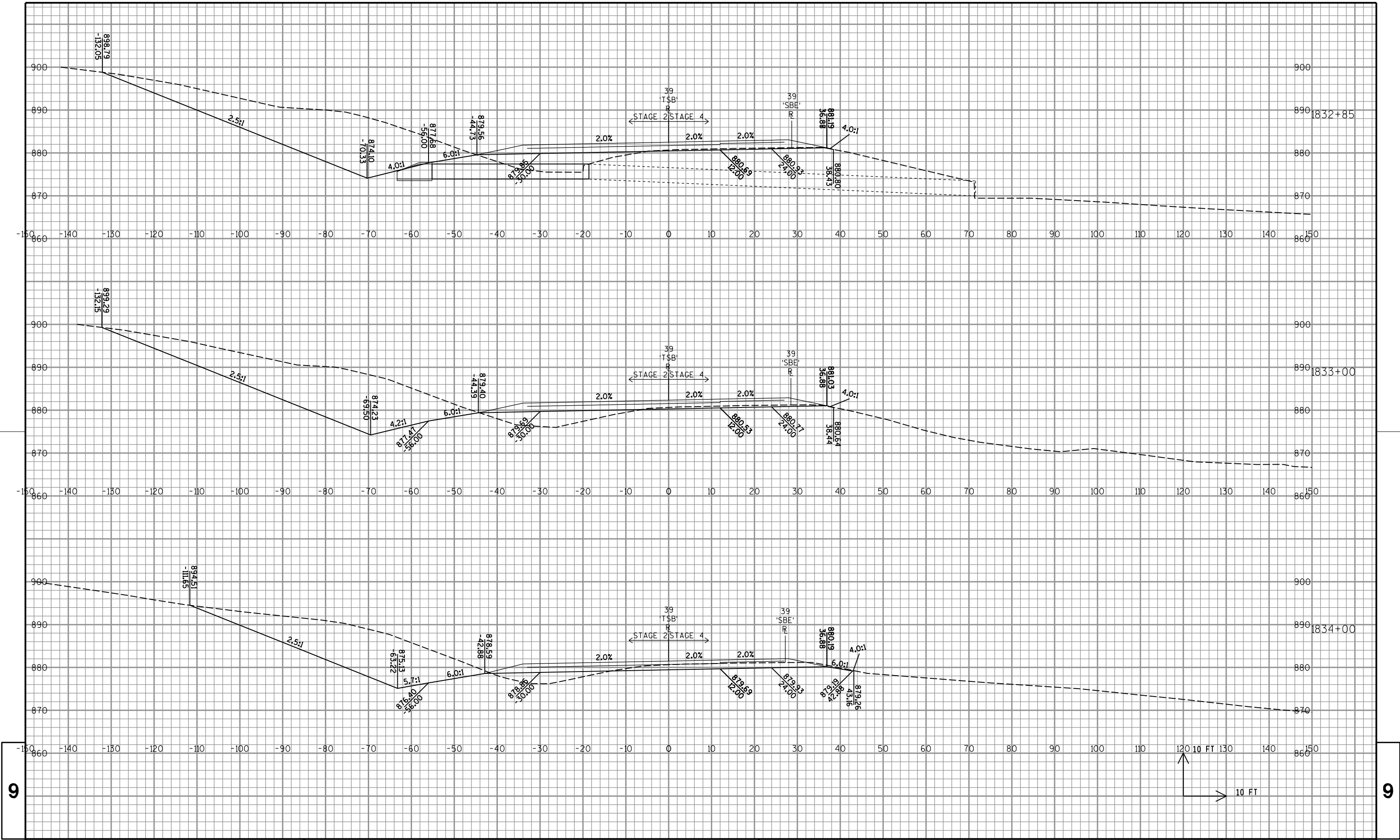
PLOT DATE : 10/16/2015

PLOT BY : c+1

PLOT NAME :

PLOT SCALE : 1:20

WISDOT/CADDs SHEET 21



PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET

717

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\090101_xs.dgn

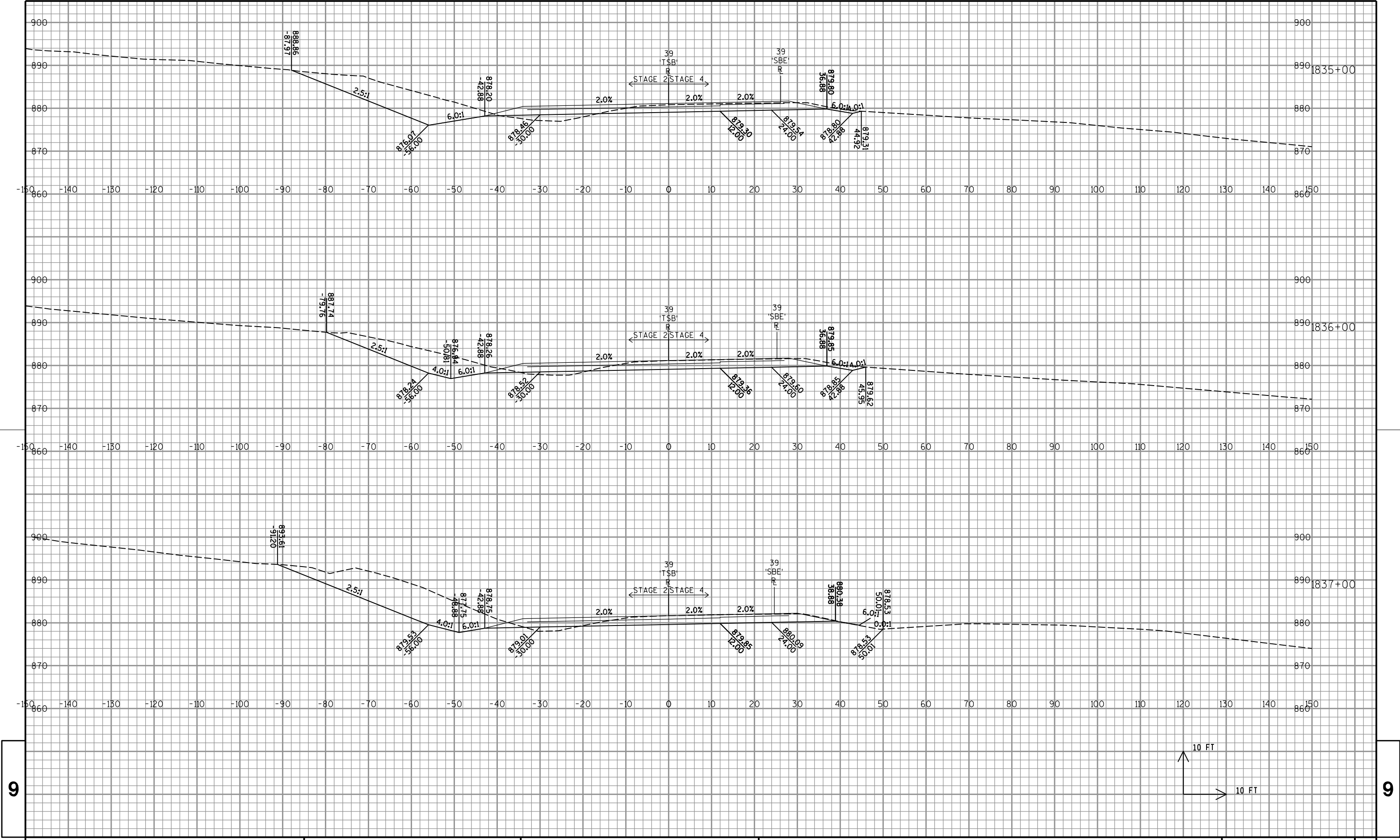
PLOT DATE : 10/16/2015

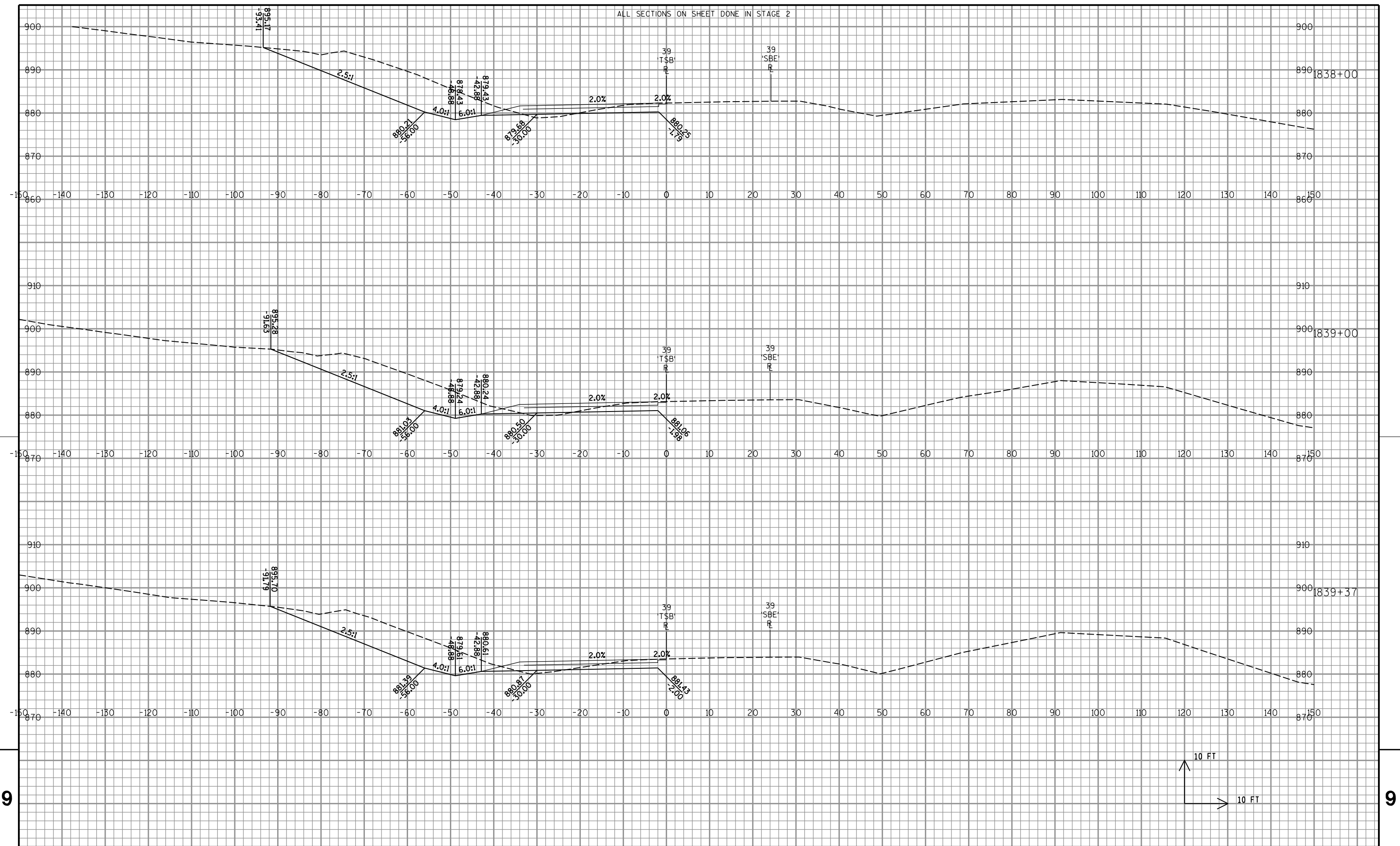
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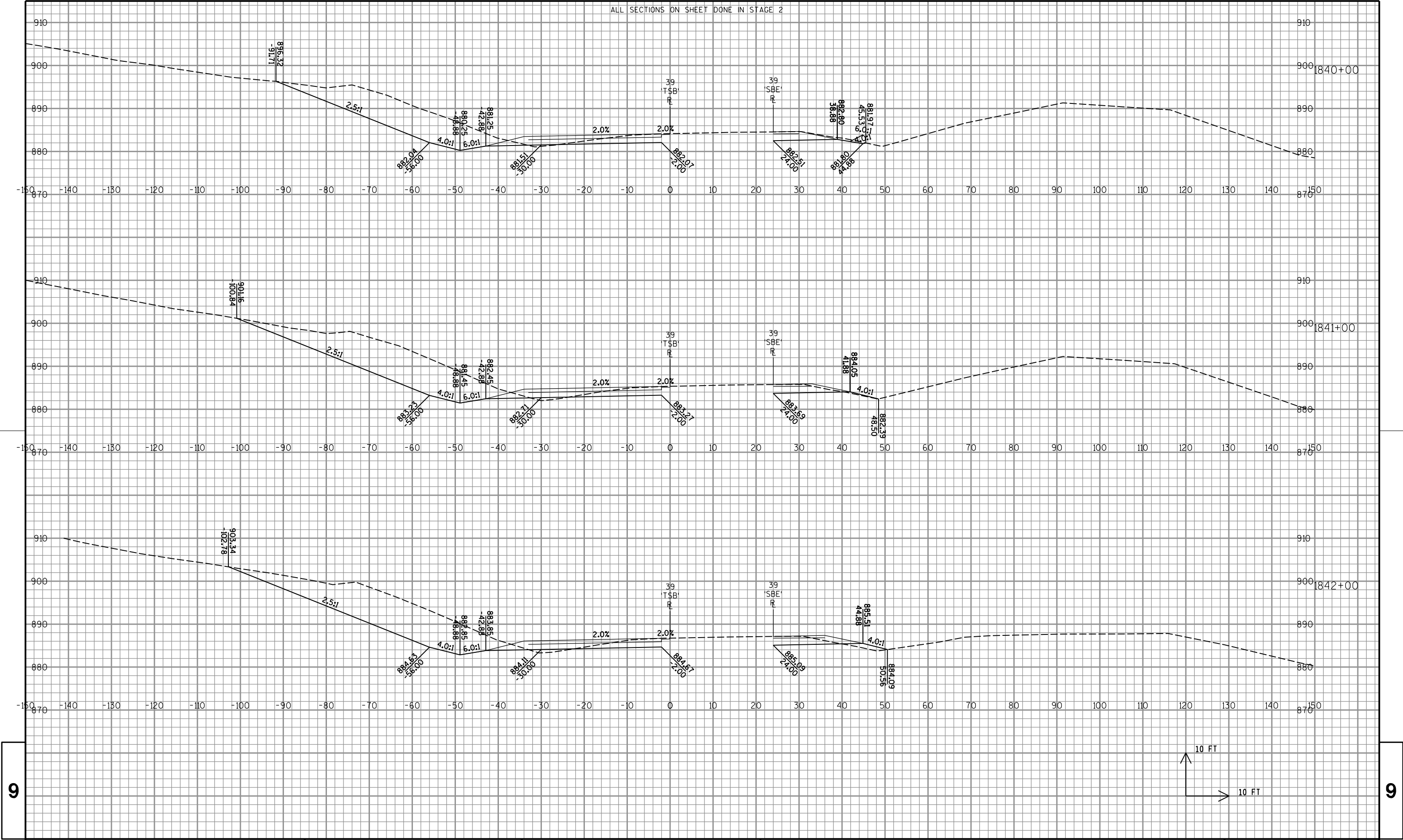
PLOT NAME :

PLOT SCALE : 1:20

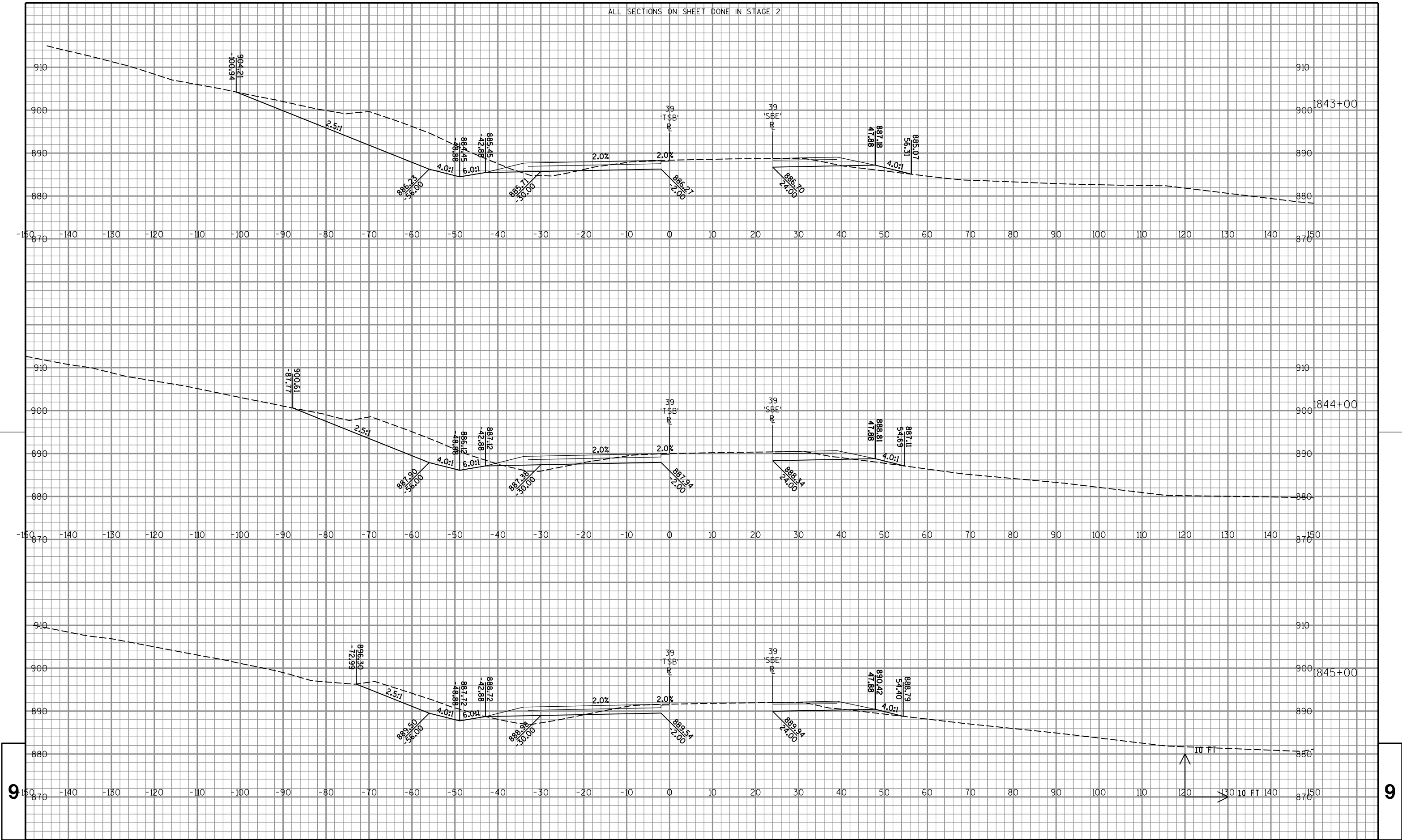
WISDOT/CADDs SHEET 21







ALL SECTIONS ON SHEET DONE IN STAGE 2



PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET

721

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet.sPlan\090101_xs.dgn

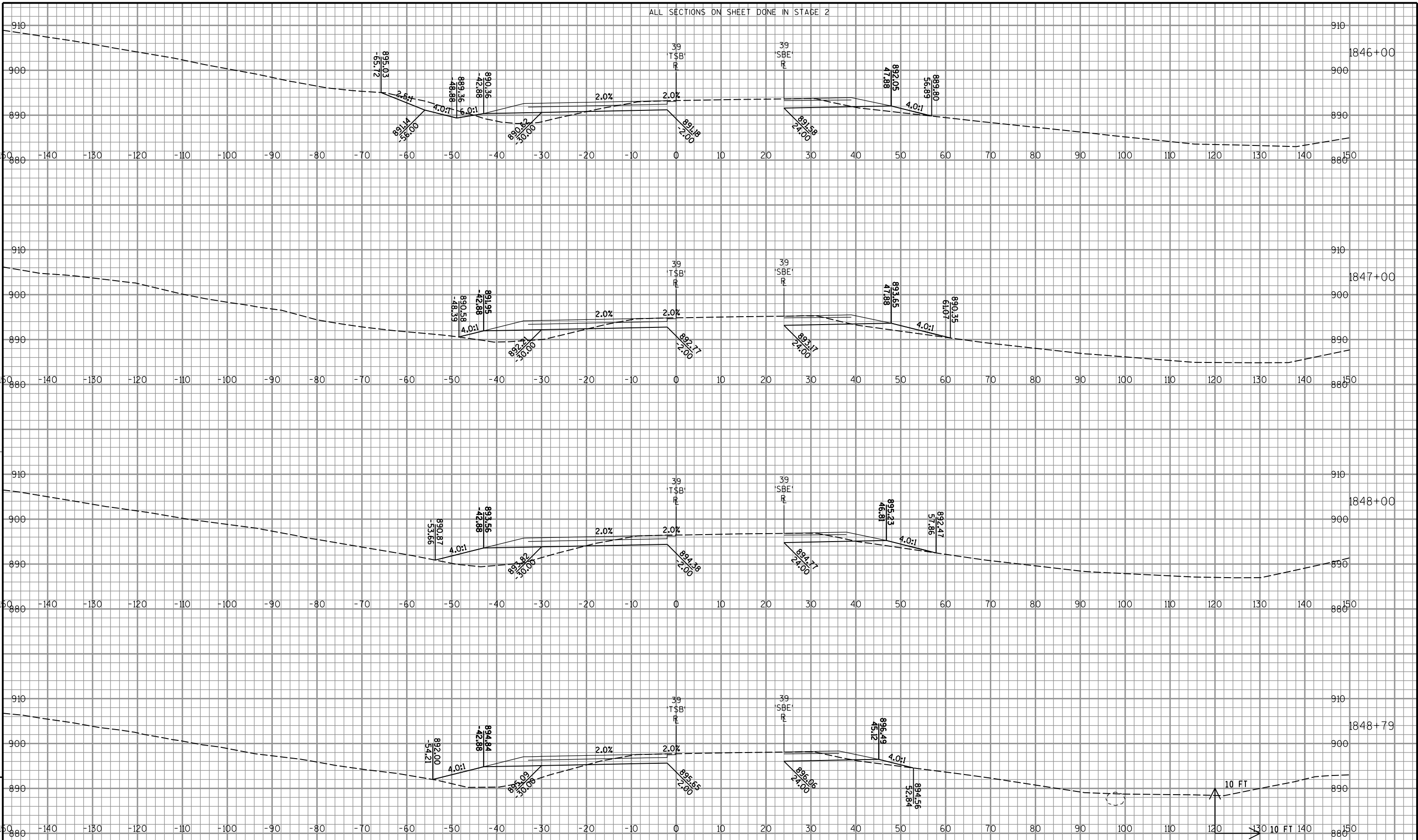
PLOT DATE : 10/16/2015

PLOT BY : cti

PLOT NAME :

PLOT SCALE : 1:20

WISDOT/CADDs SHEET 21



PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET

722

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\090101_xs.dgn

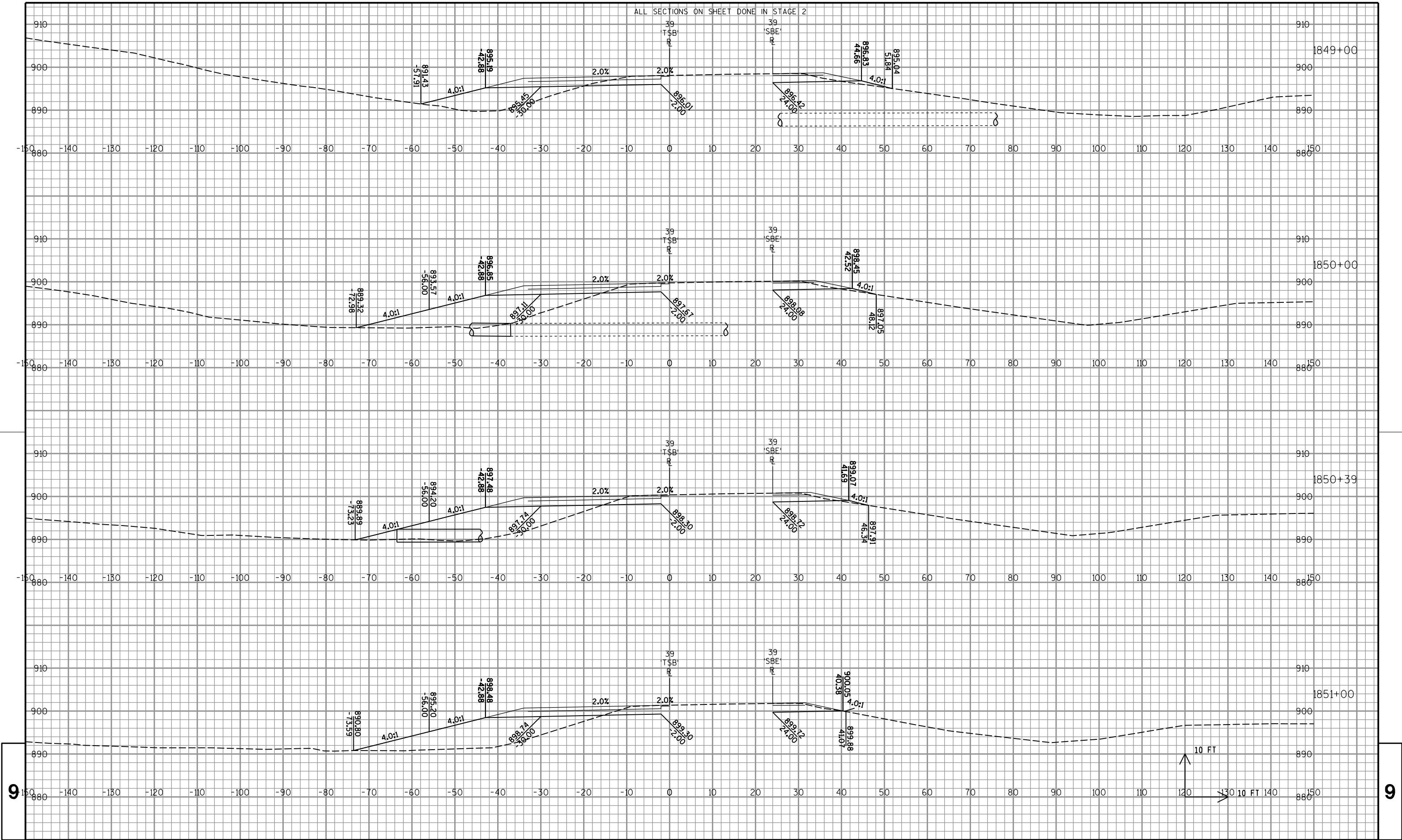
PLOT DATE : 10/16/2015

PLOT BY : cti

PLOT NAME :

PLOT SCALE : 1:20

WISDOT/CADDs SHEET 21



PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET

723

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\090101_xs.dgn

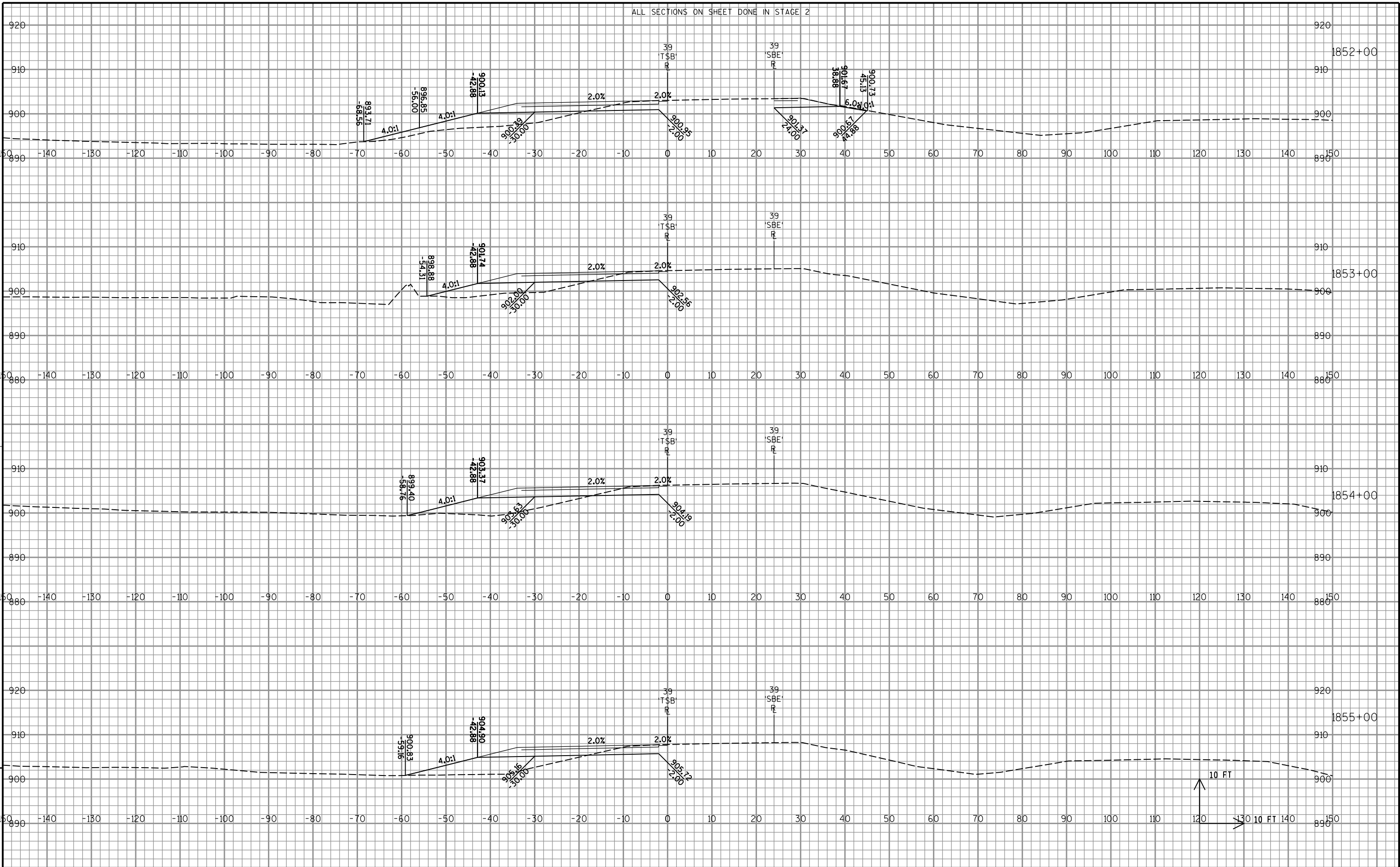
PLOT DATE : 10/16/2015

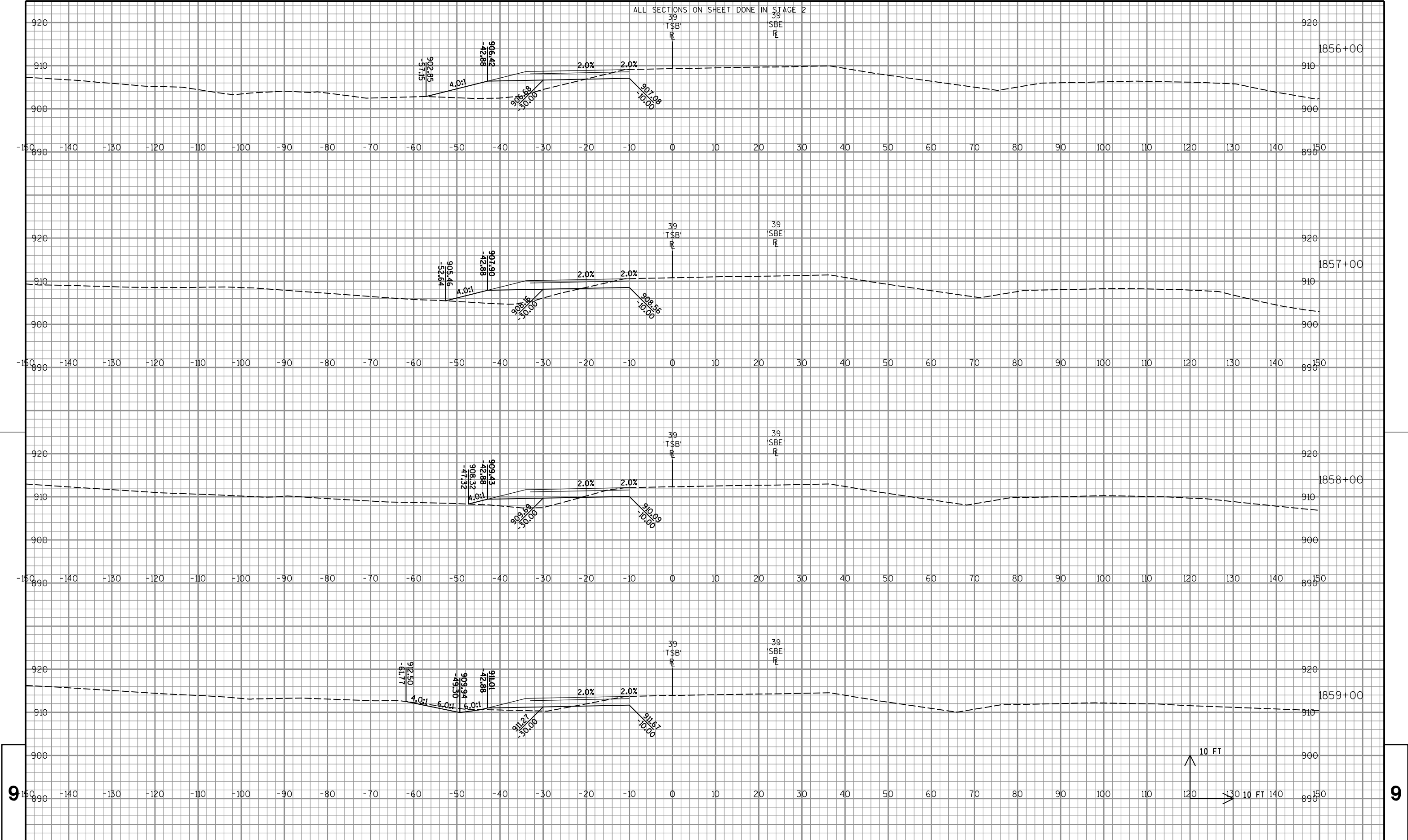
PLOT BY : cti

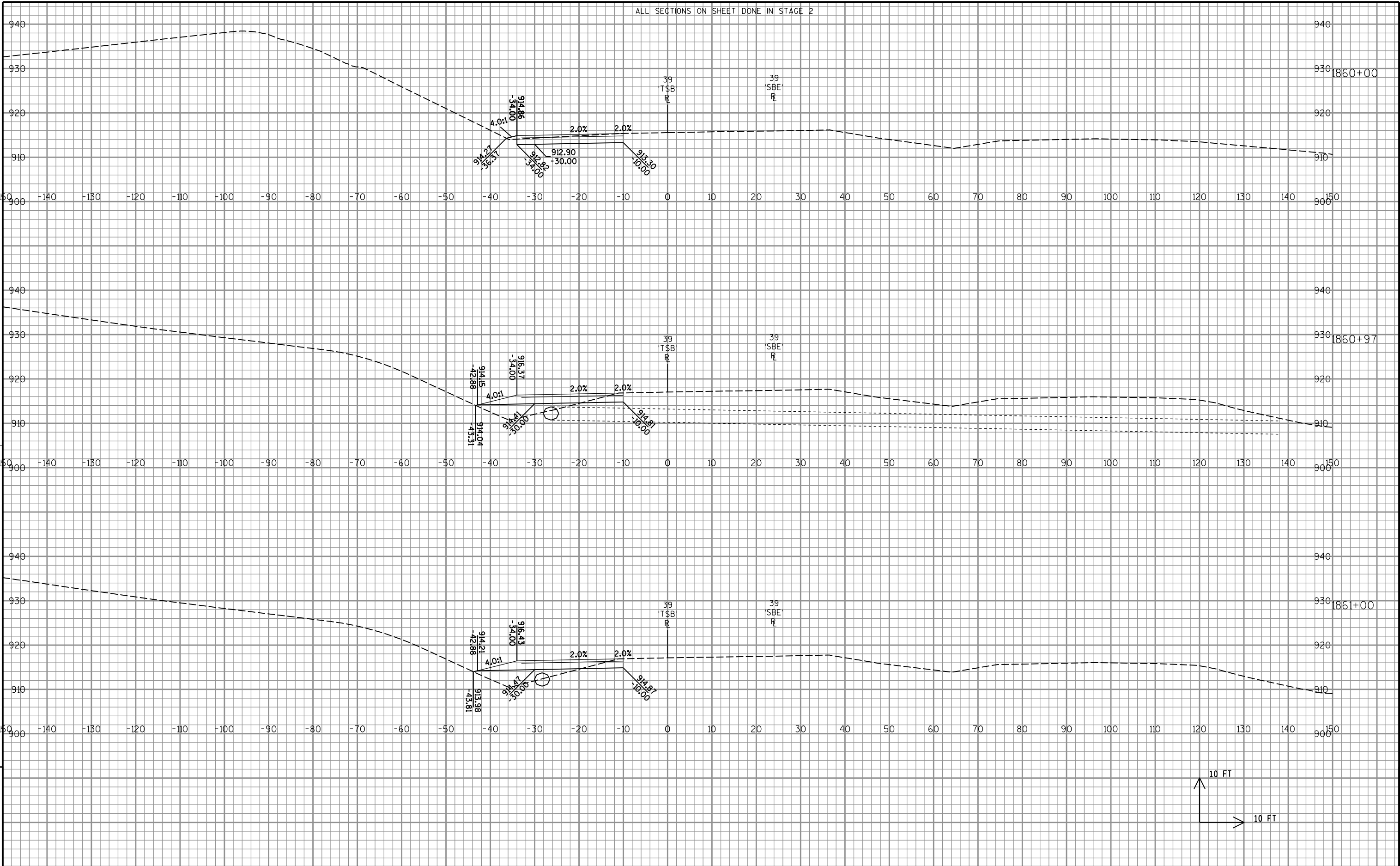
PLOT NAME :

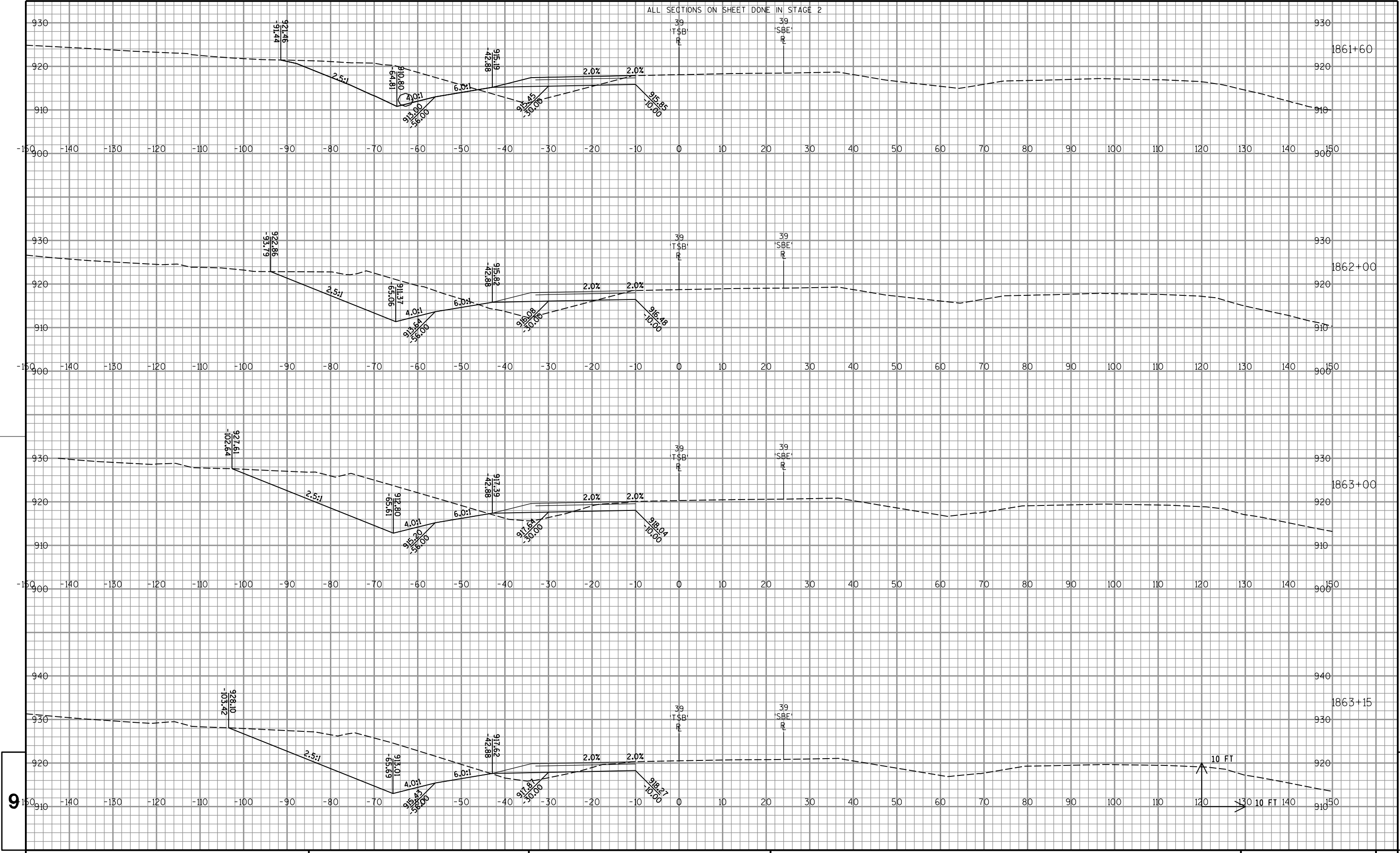
PLOT SCALE : 1:20

WISDOT/CADDs SHEET 21

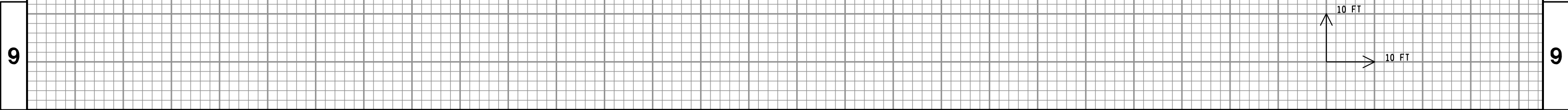
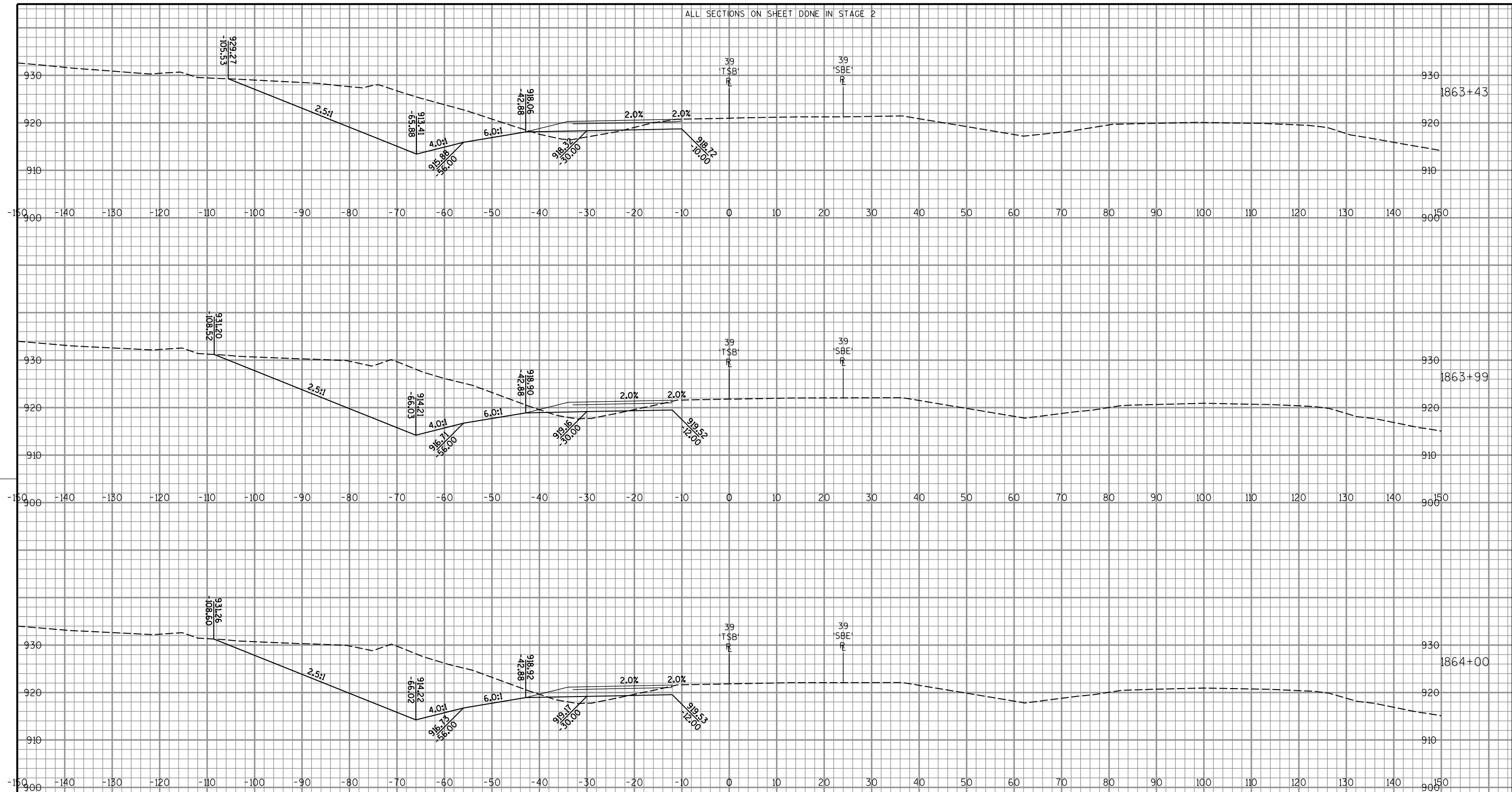








ALL SECTIONS ON SHEET DONE IN STAGE 2



PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET

728

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet.sPlan\090101_.xsn

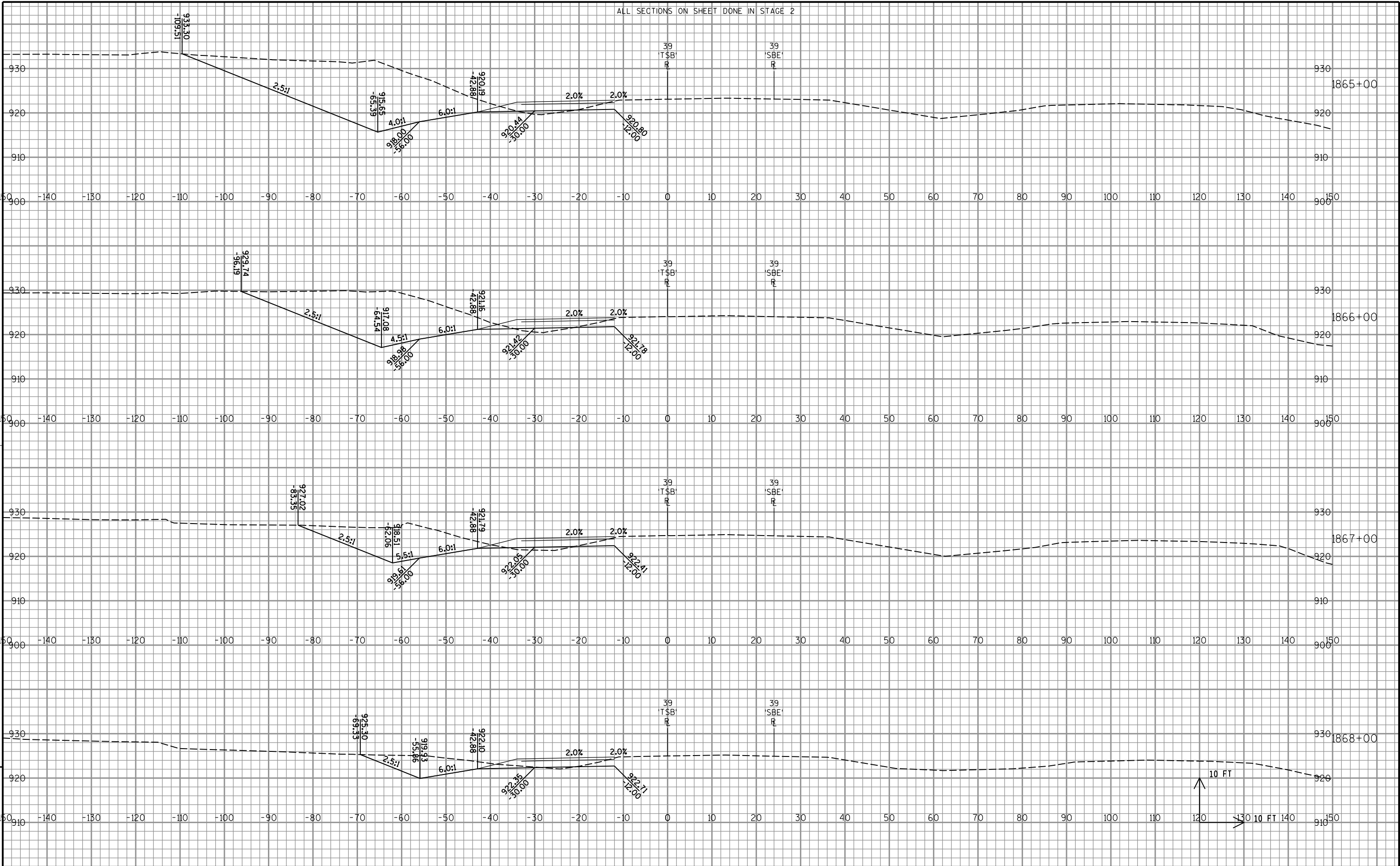
PLOT DATE : 10/16/2015

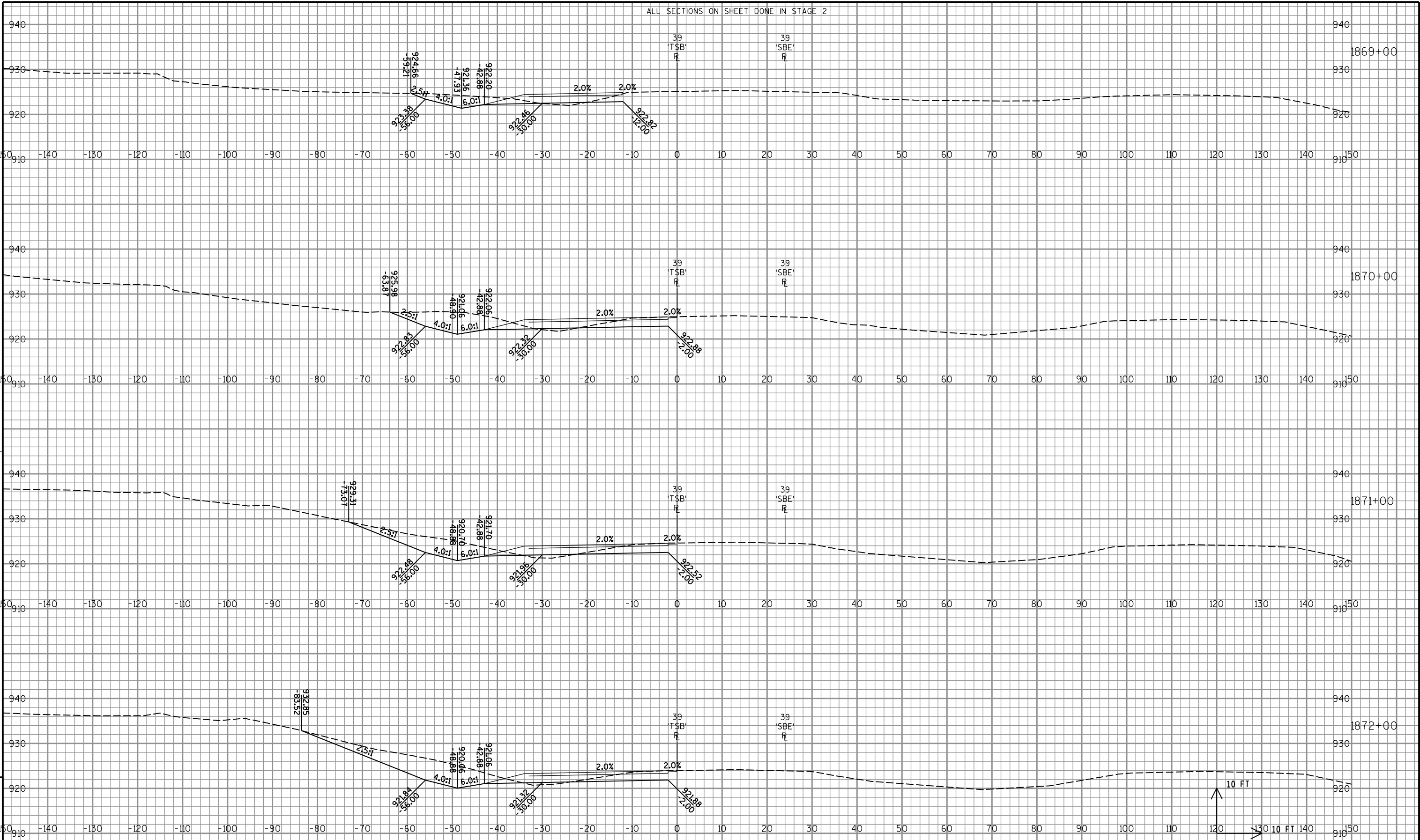
PLOT BY : cti

PLOT NAME :

PLOT SCALE : 1:20

WISDOT/CADDs SHEET 21





PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET

730

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\090101_xs.dgn

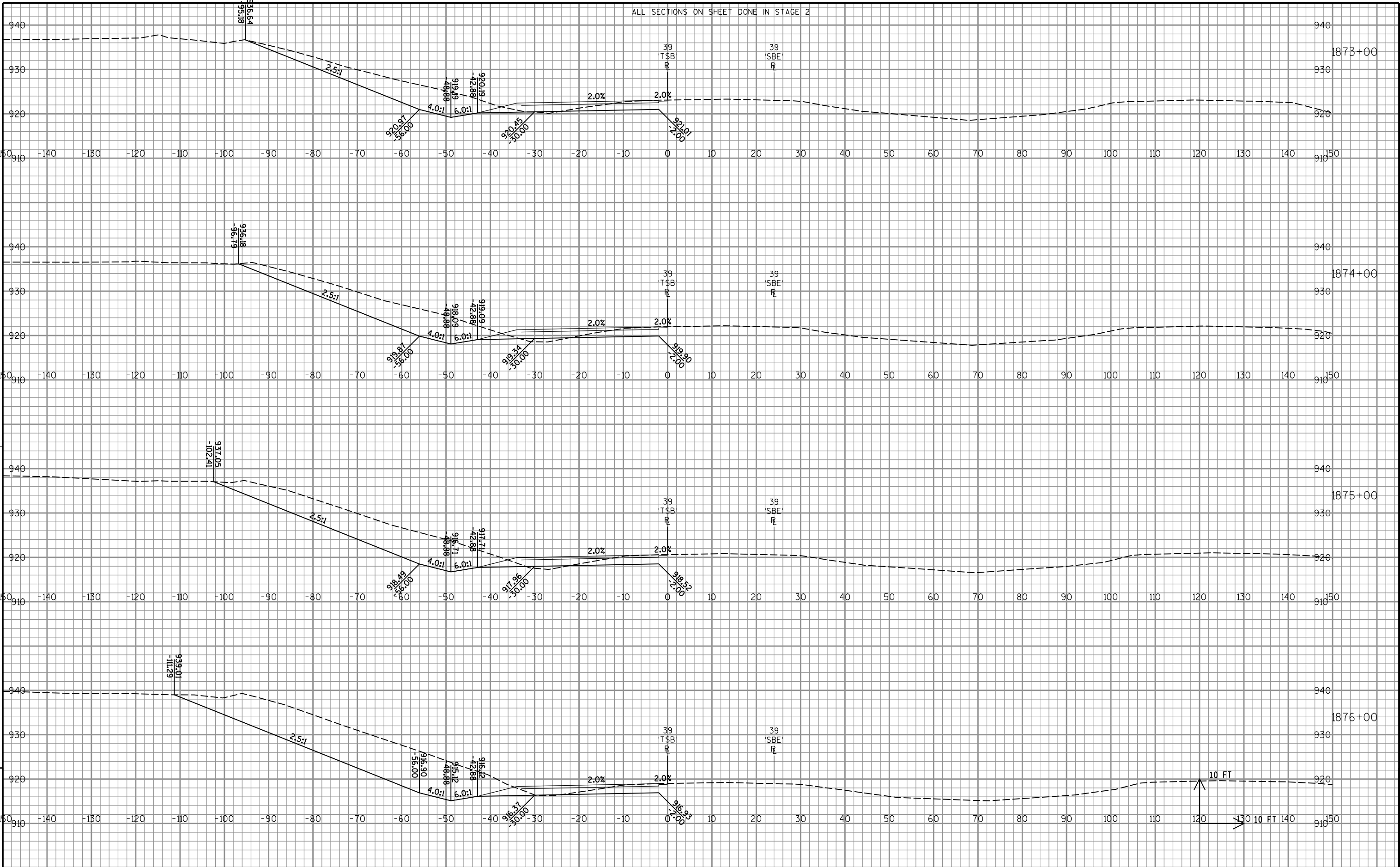
PLOT DATE : 10/16/2015

PLOT BY : ct1

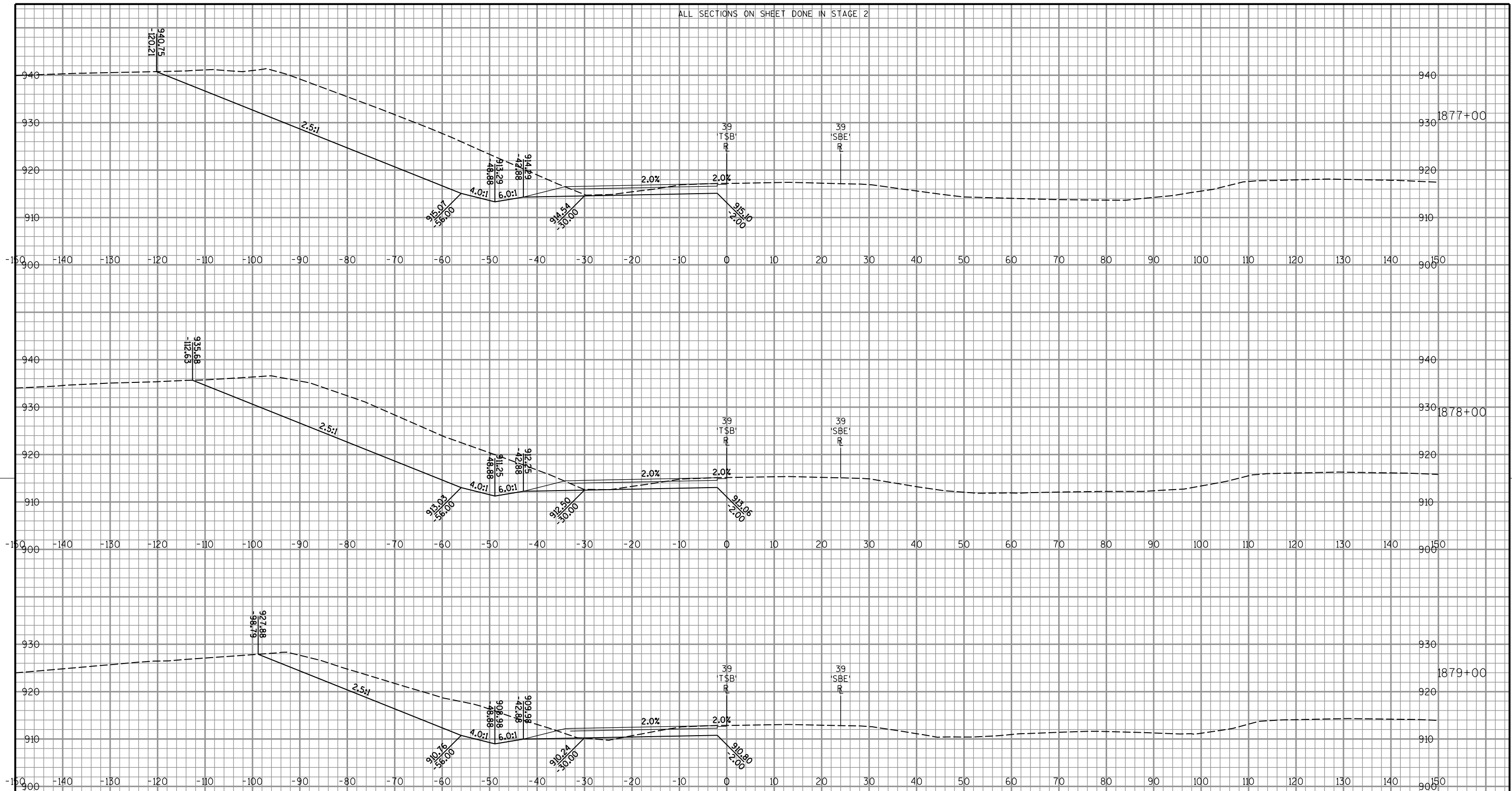
PLOT NAME :

PLOT SCALE : 1:20

WISDOT/CADDs SHEET 21



ALL SECTIONS ON SHEET DONE IN STAGE 2



9

9

10 FT
10 FT

PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET 732

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\090101_xs.dgn

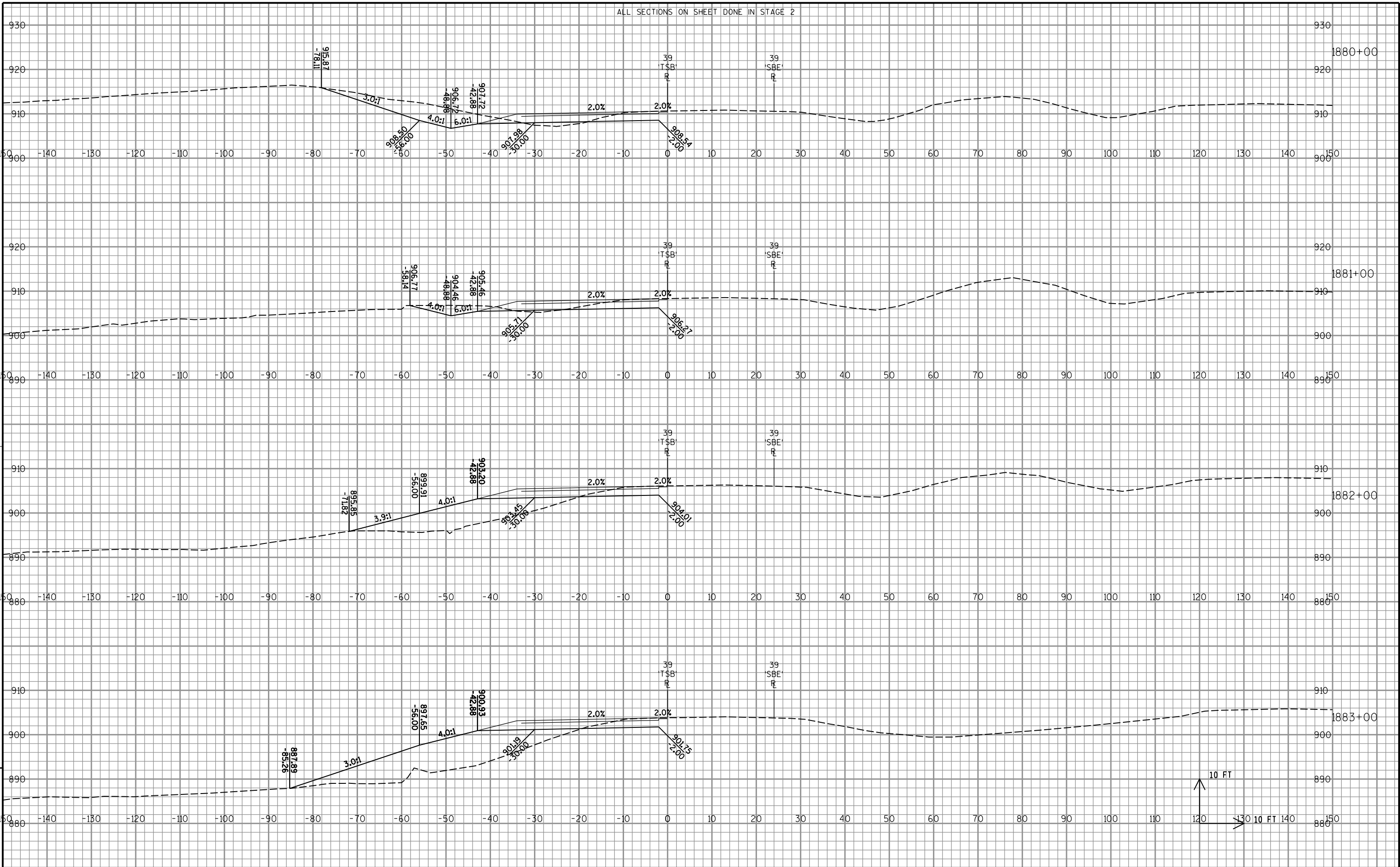
PLOT DATE : 10/16/2015

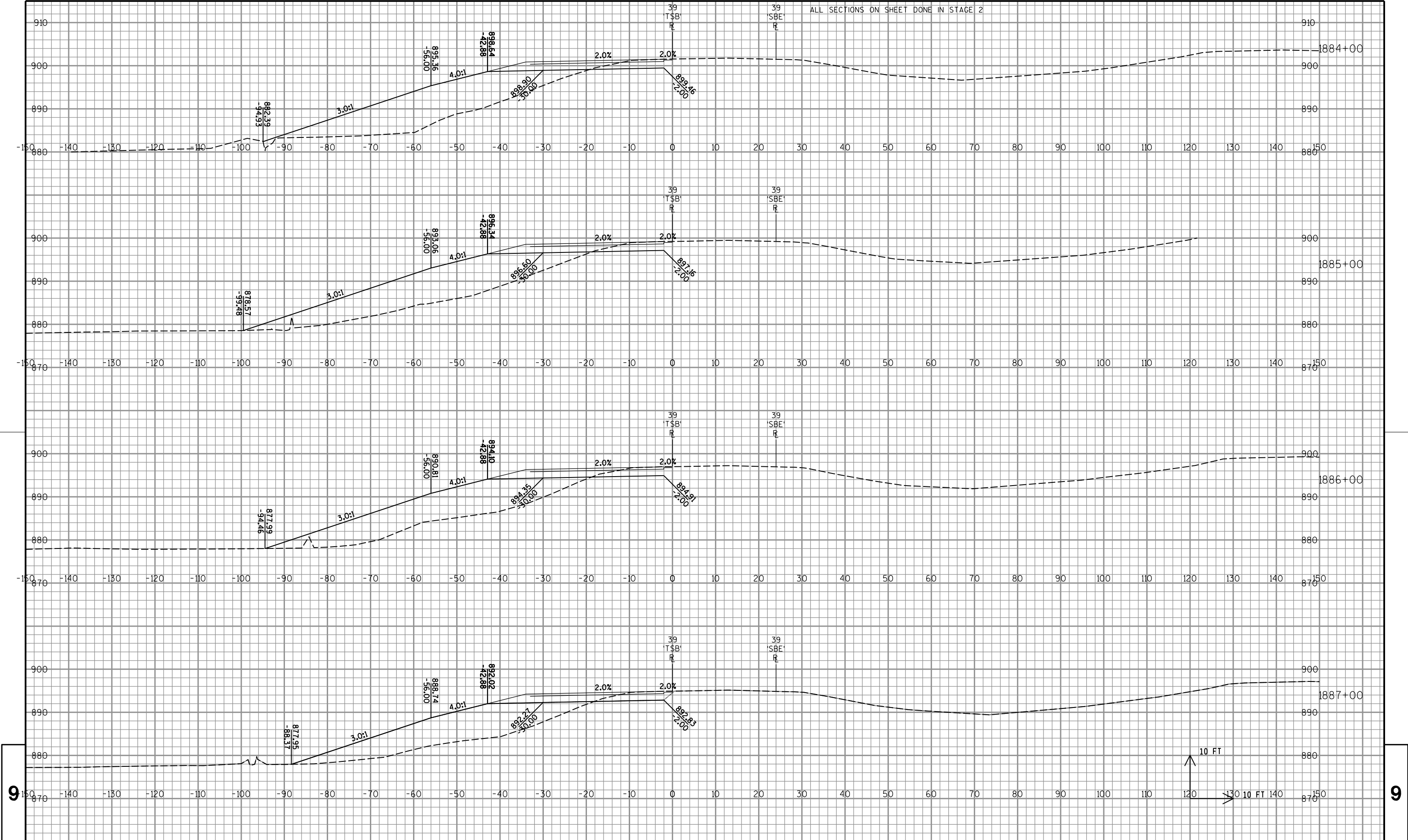
PLOT BY : ct+1

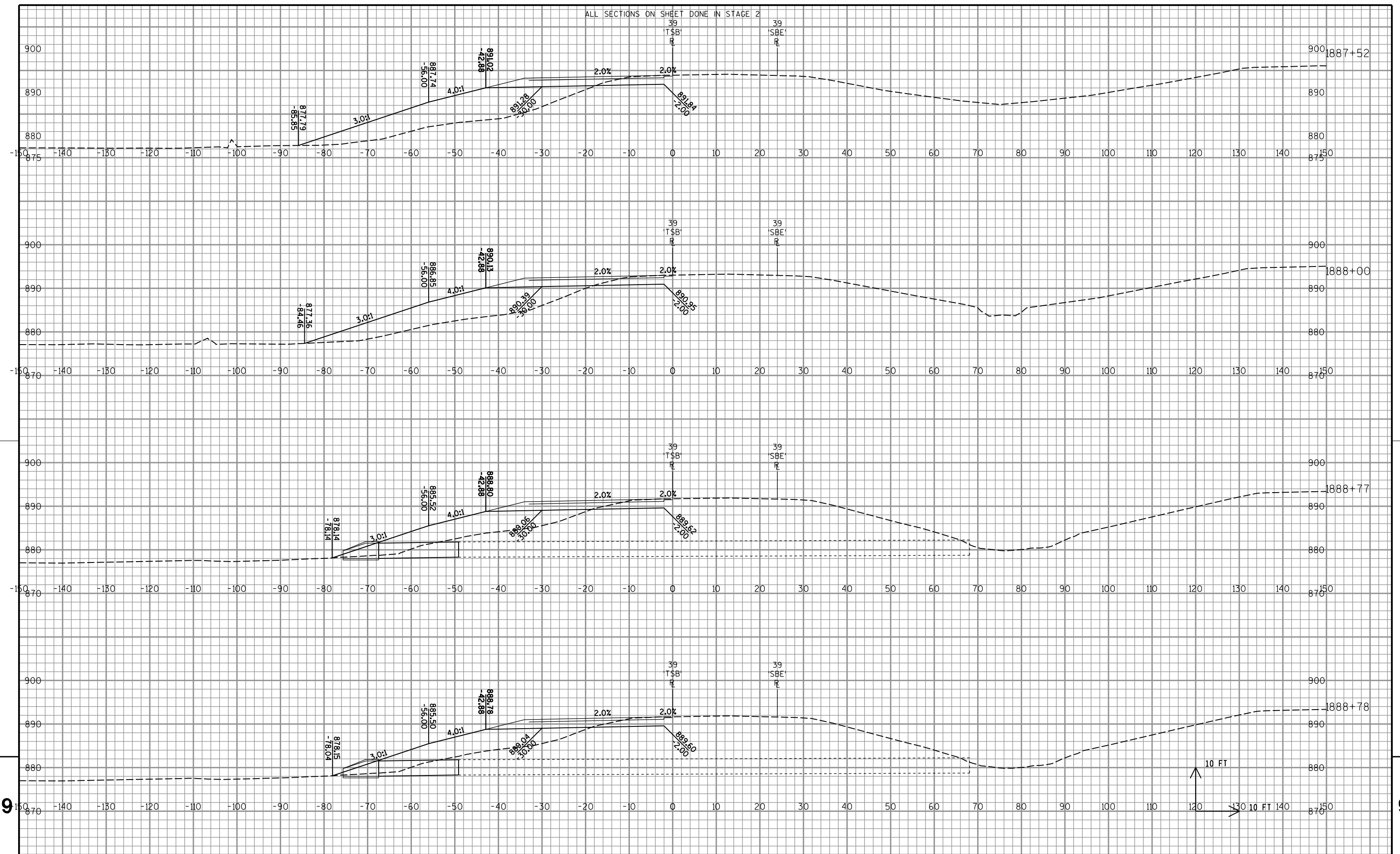
PLOT NAME :

PLOT SCALE : 1:20

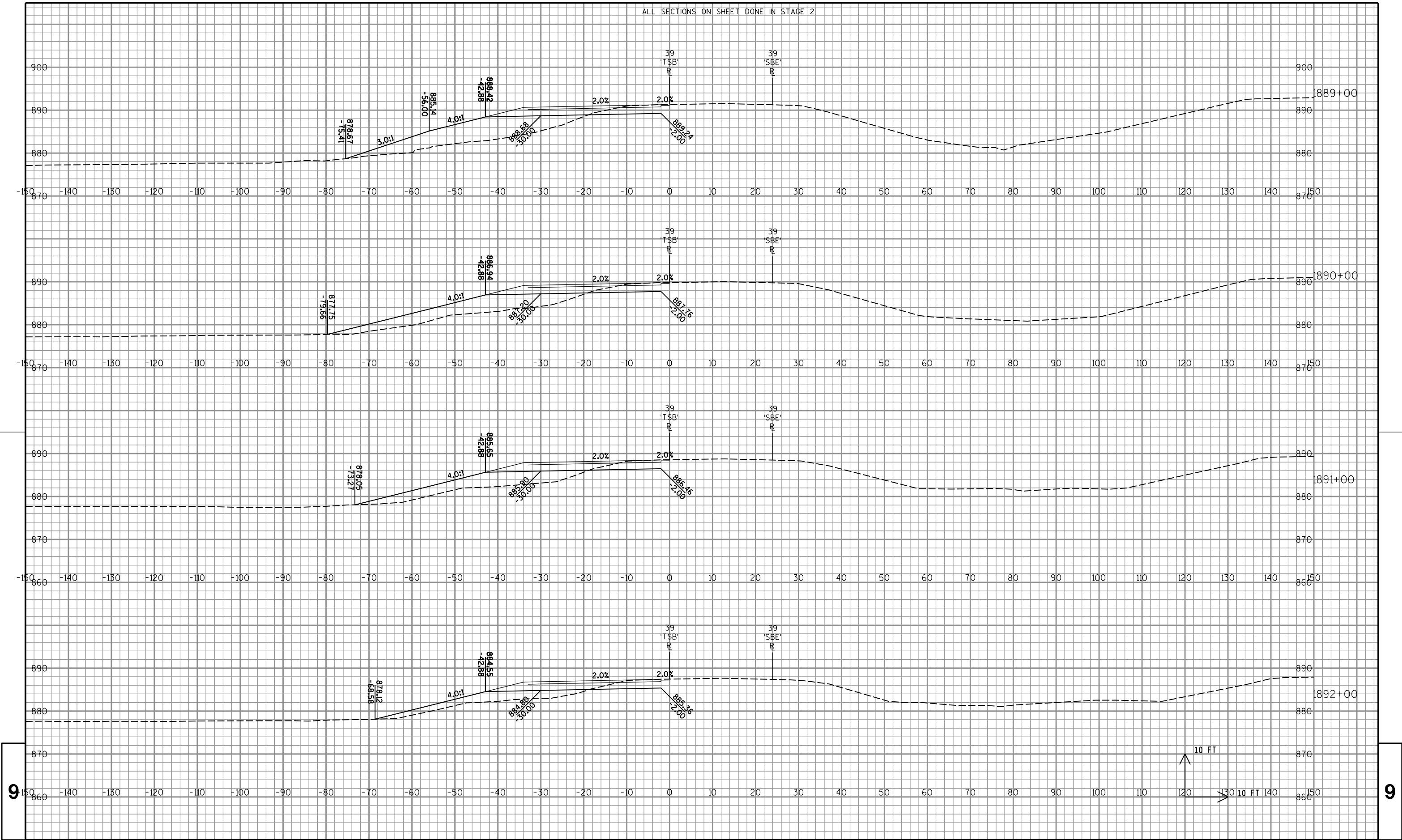
WISDOT/CADDs SHEET 21

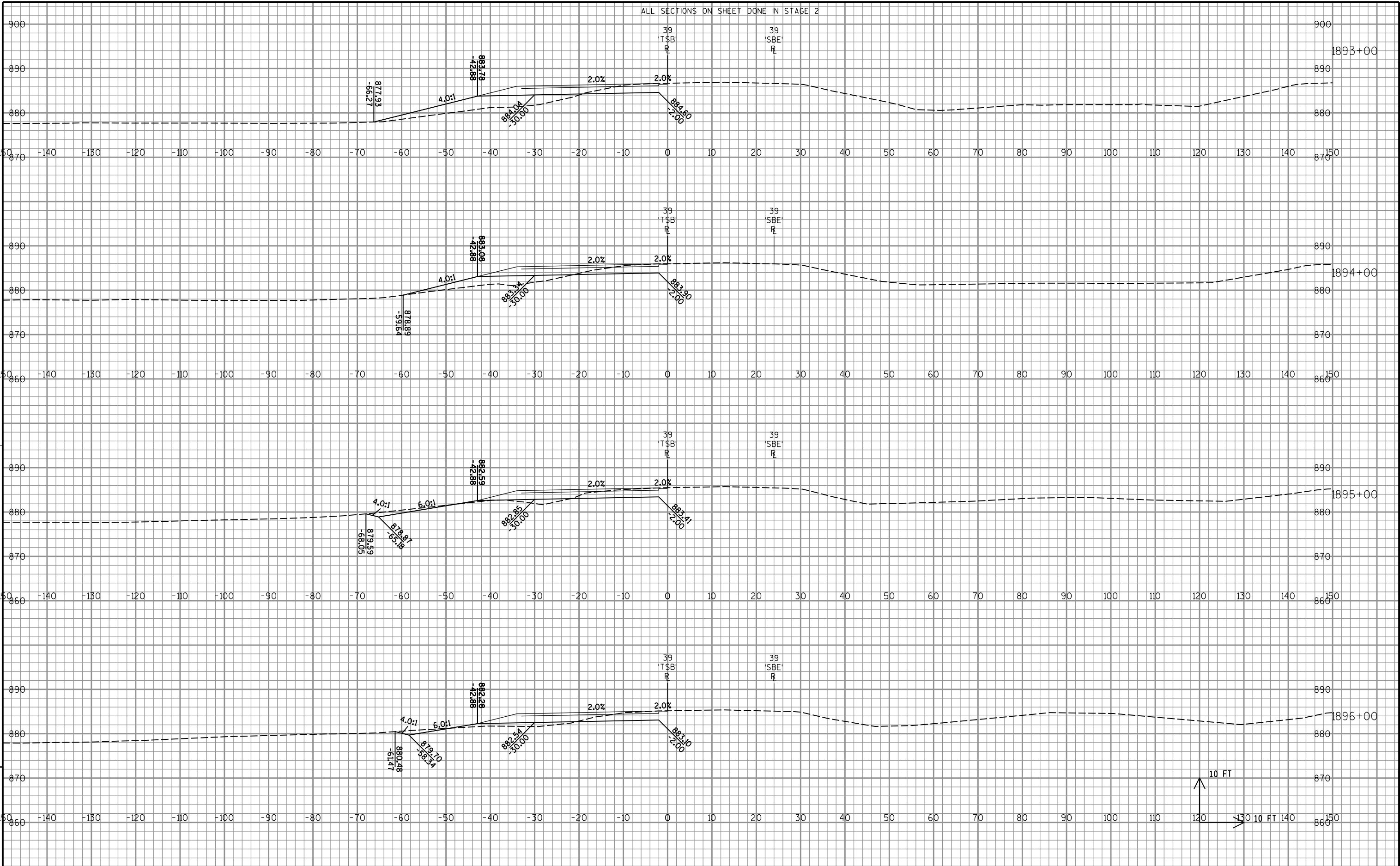


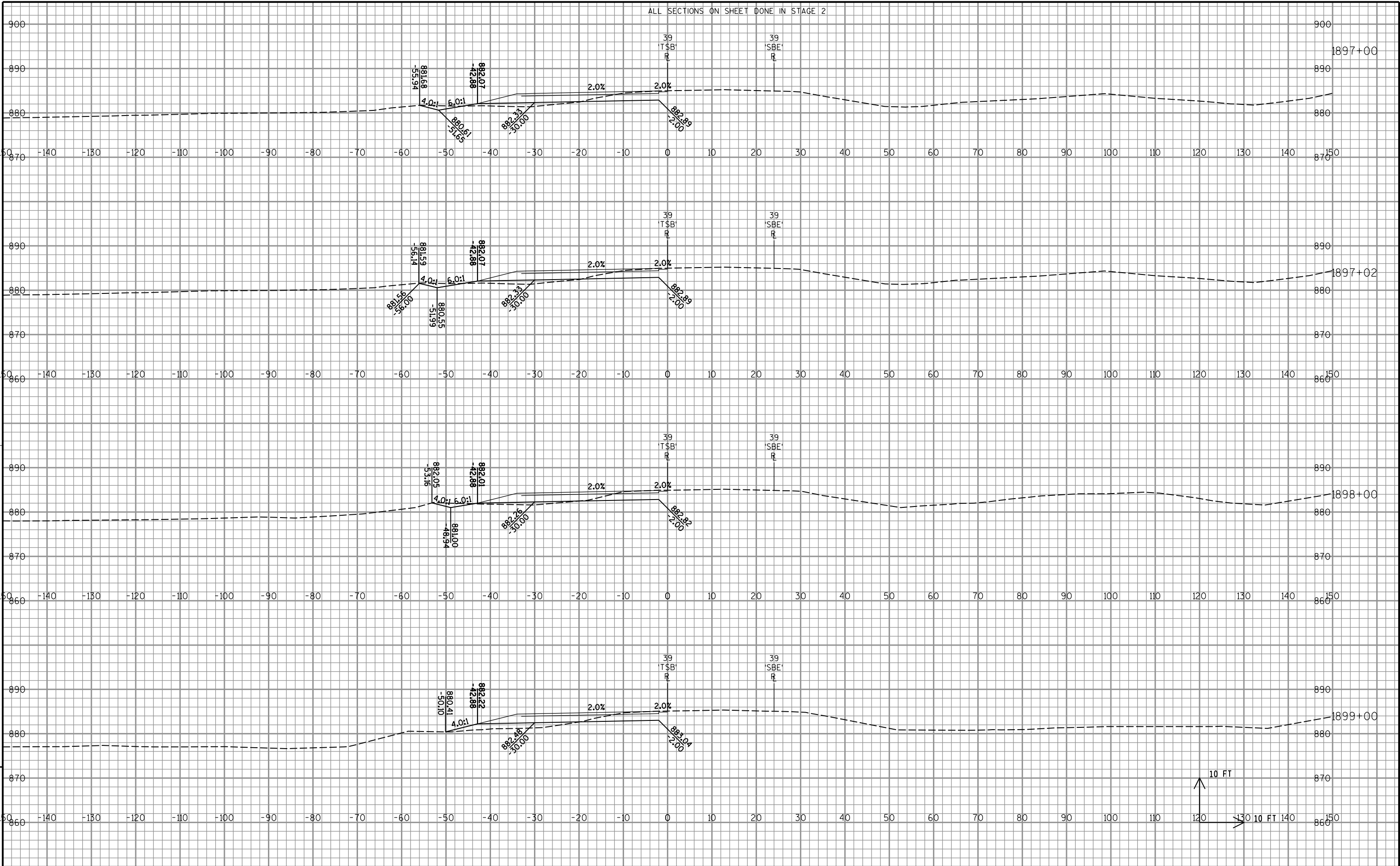


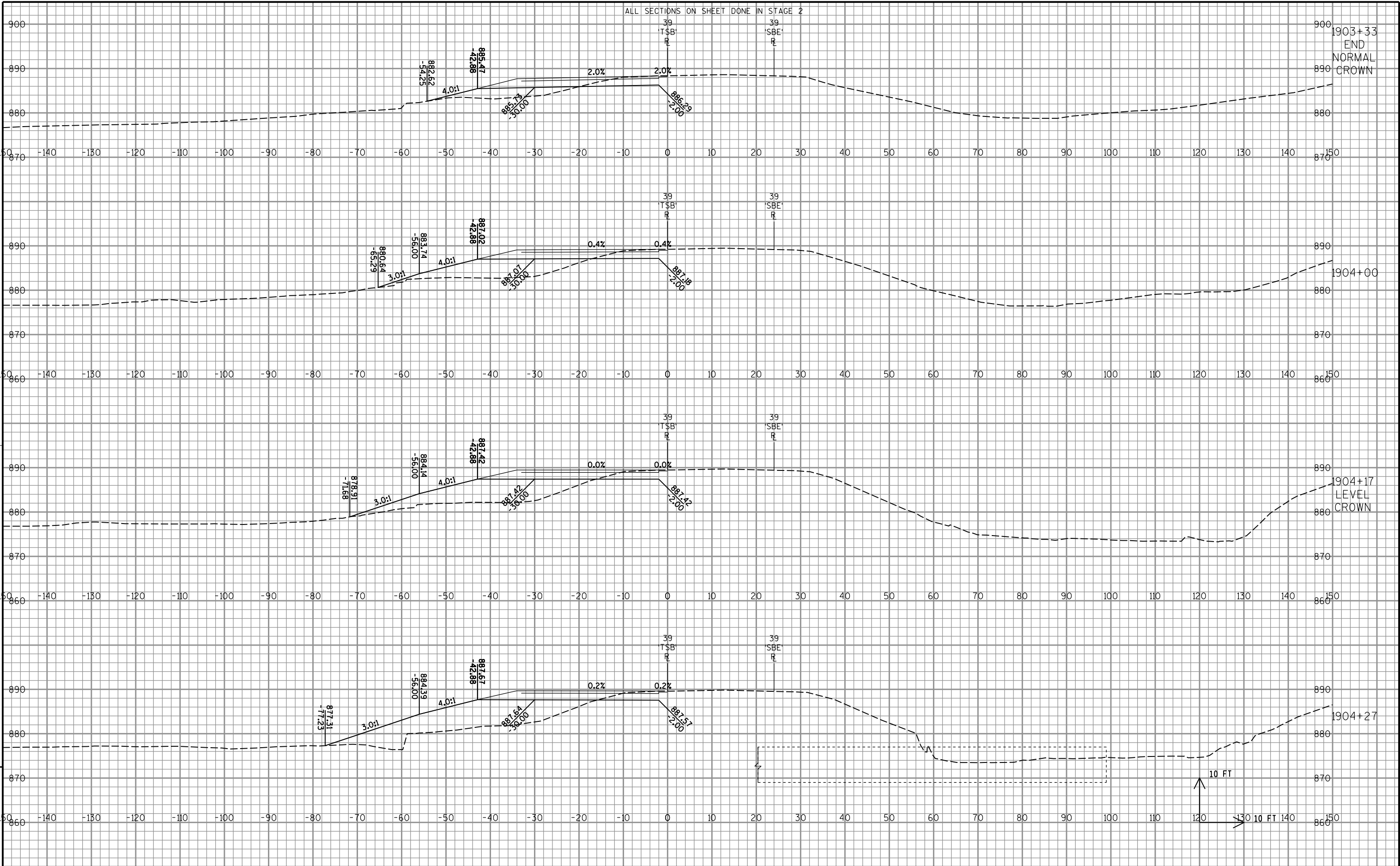


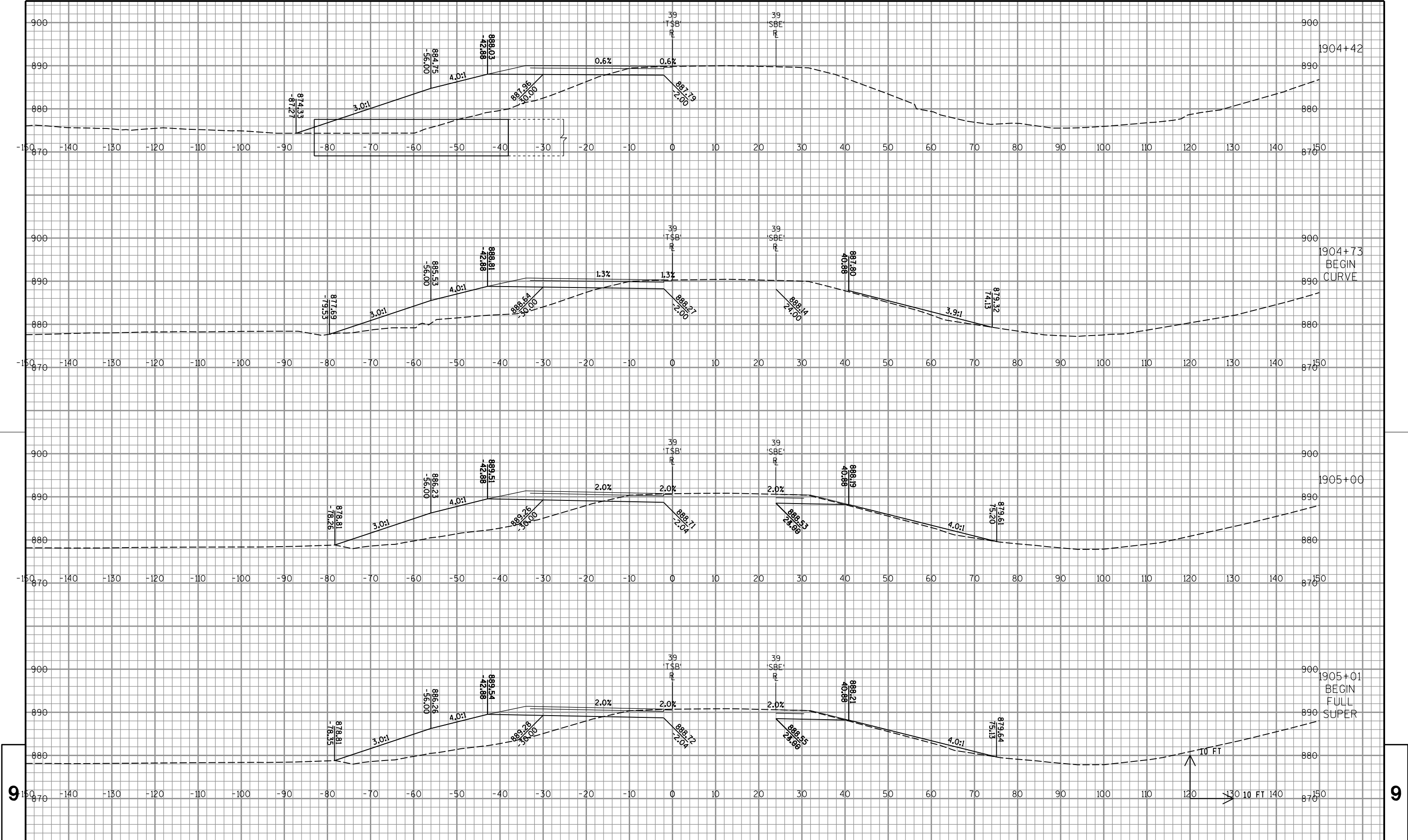
ALL SECTIONS ON SHEET DONE IN STAGE 2

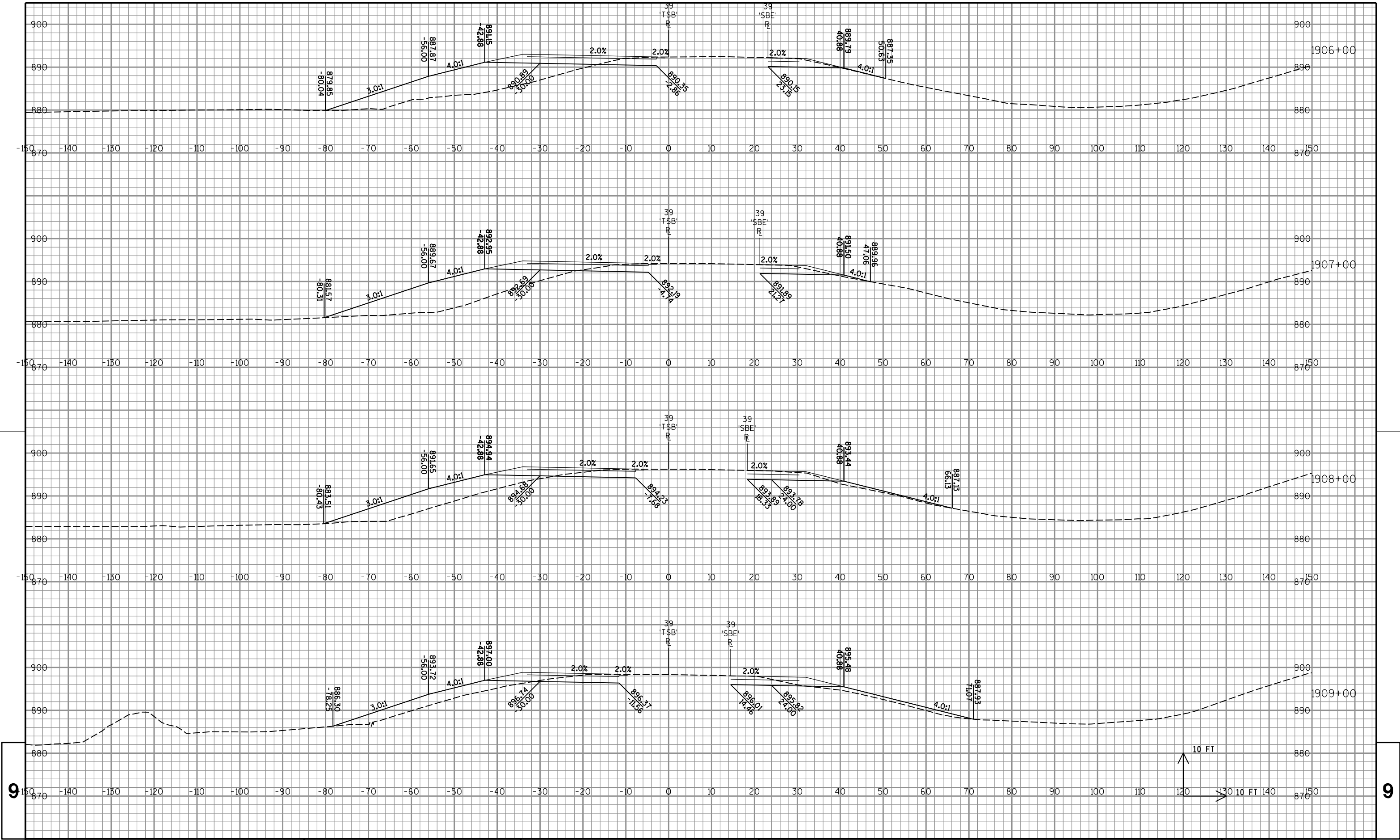


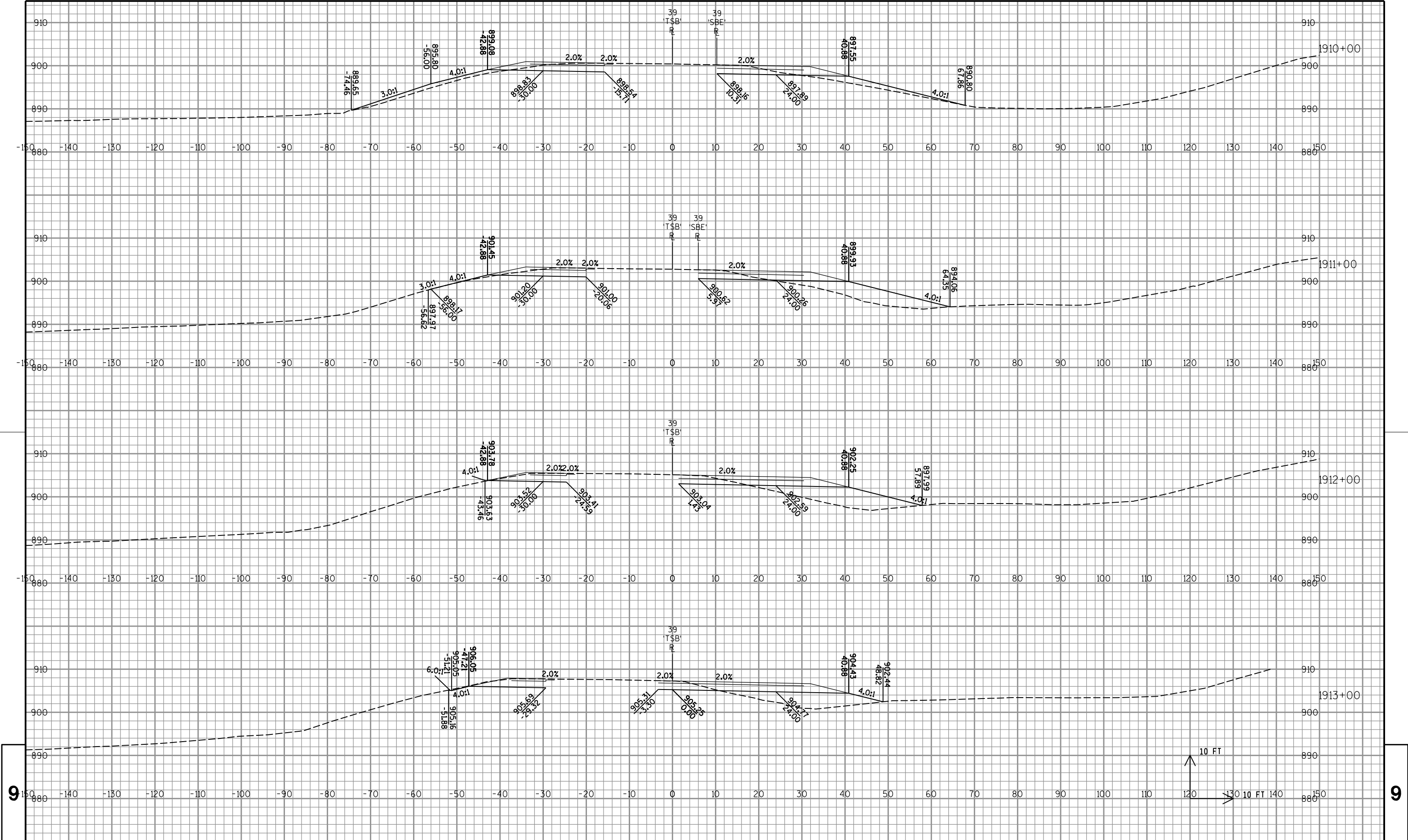


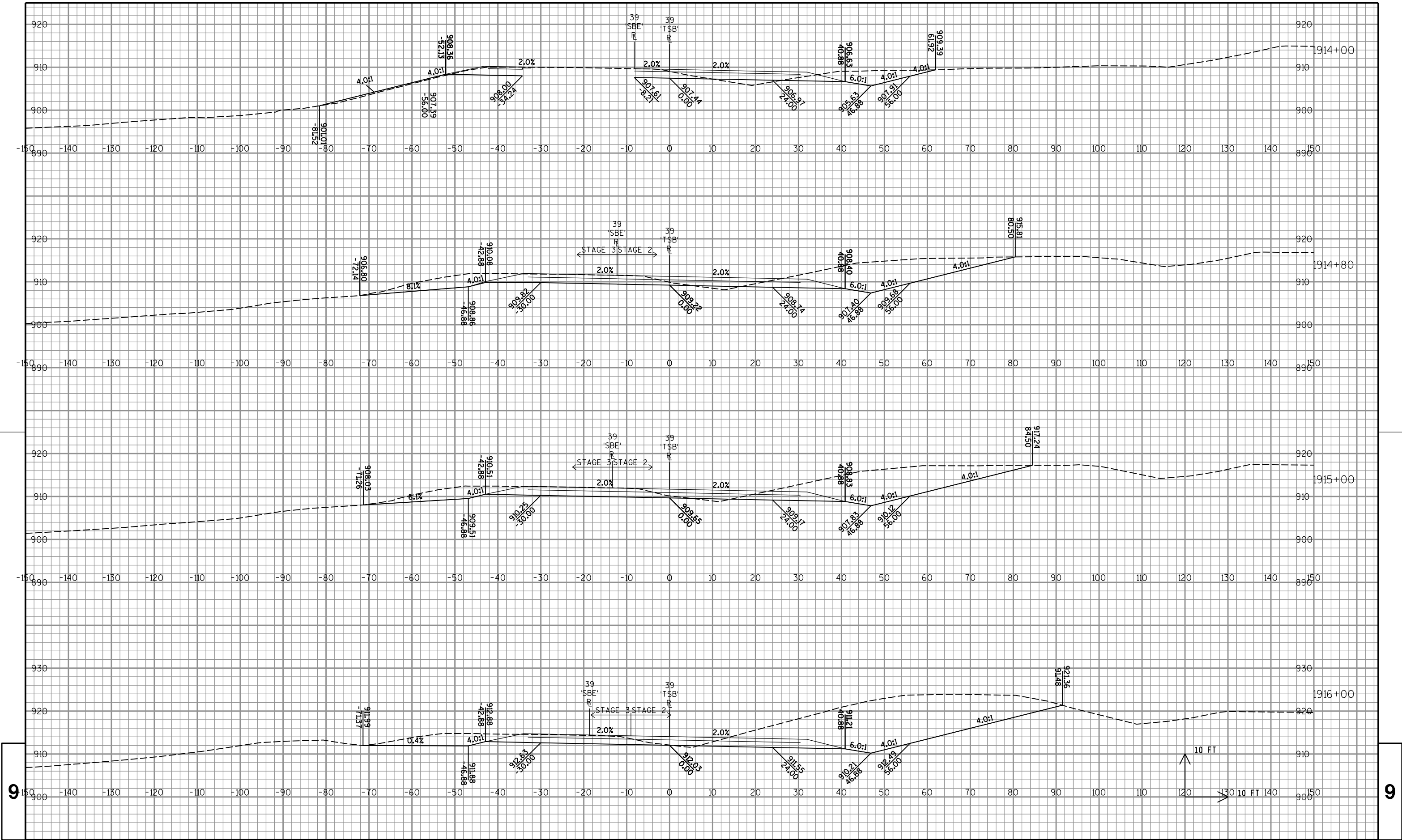












PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET

744

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\090101_xs.dgn

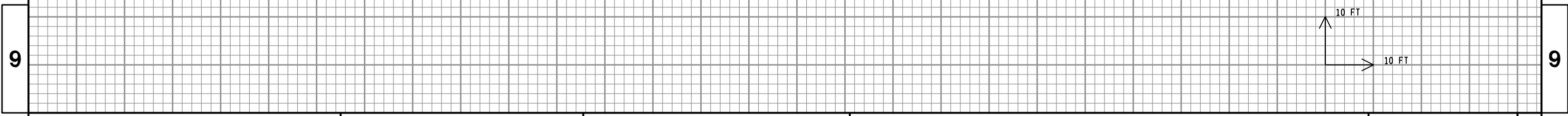
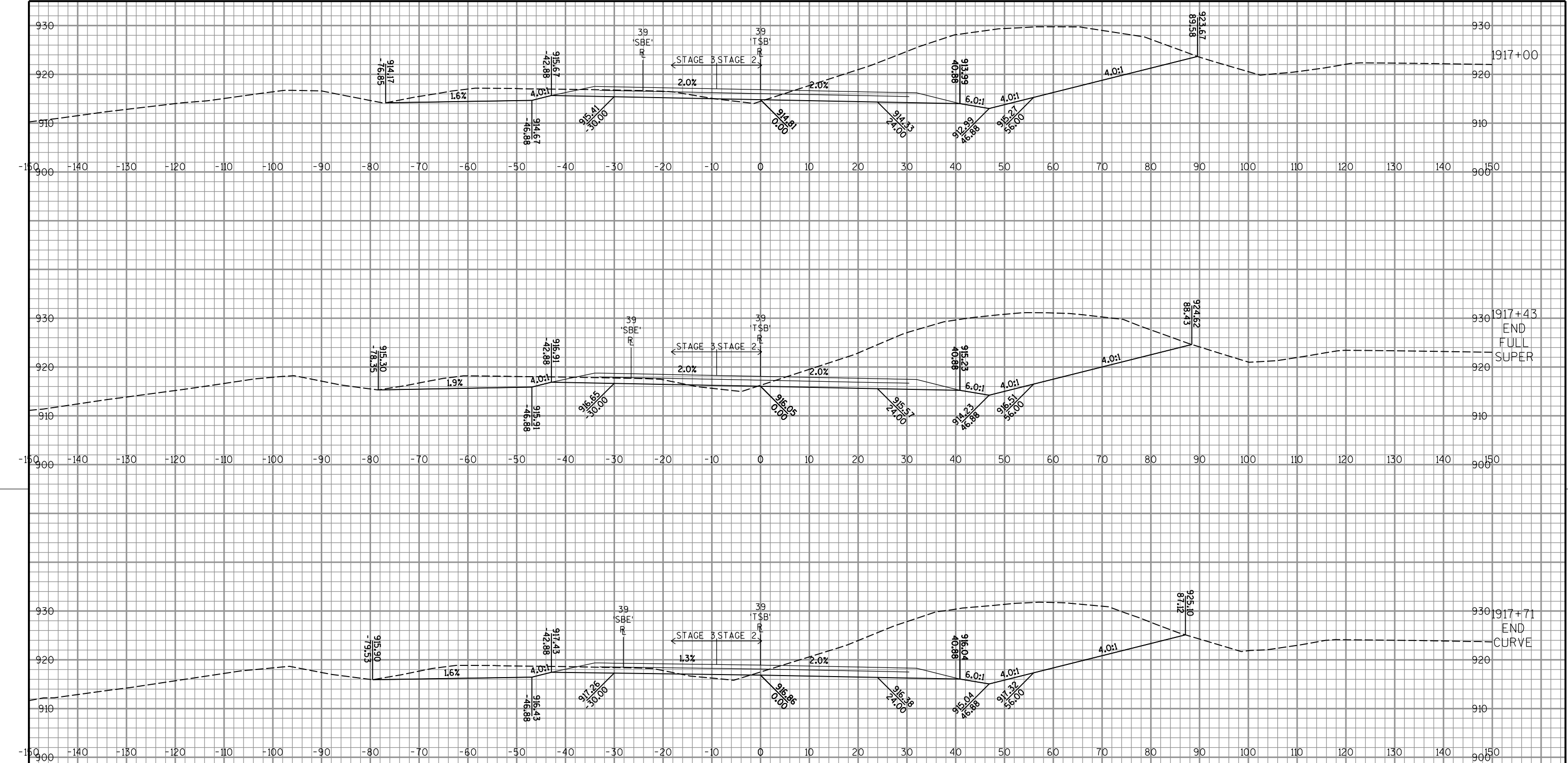
PLOT DATE : 10/16/2015

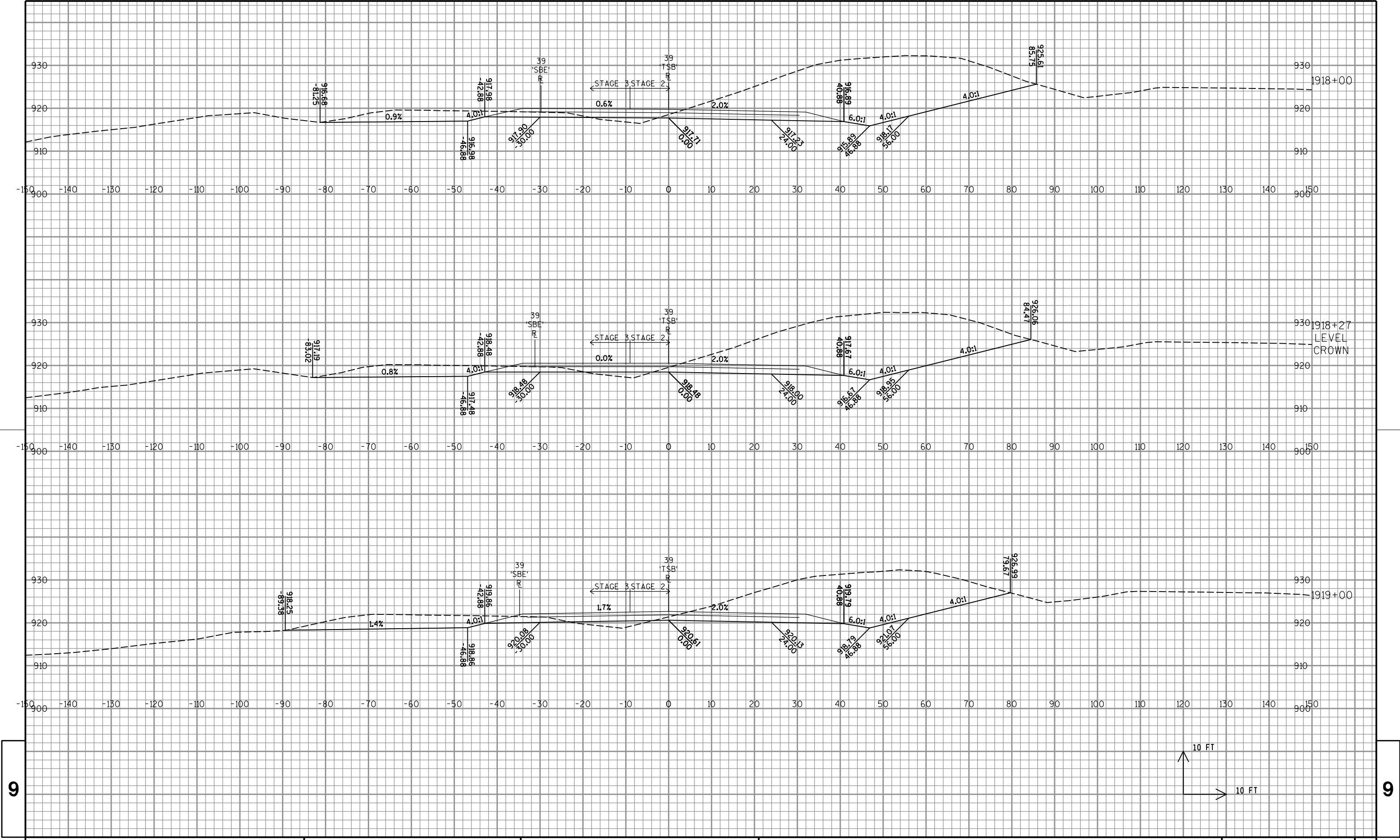
PLOT BY : cti

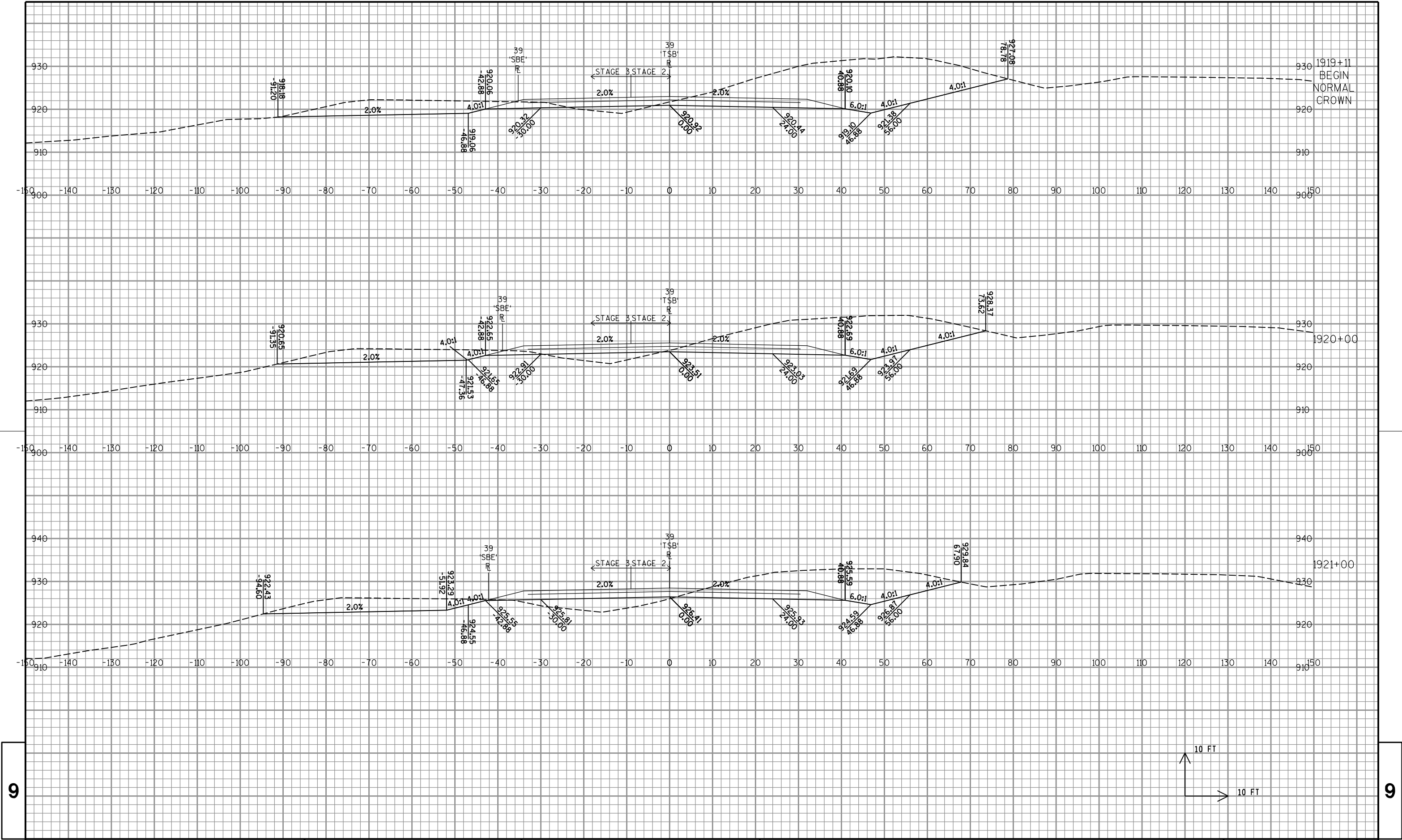
PLOT NAME :

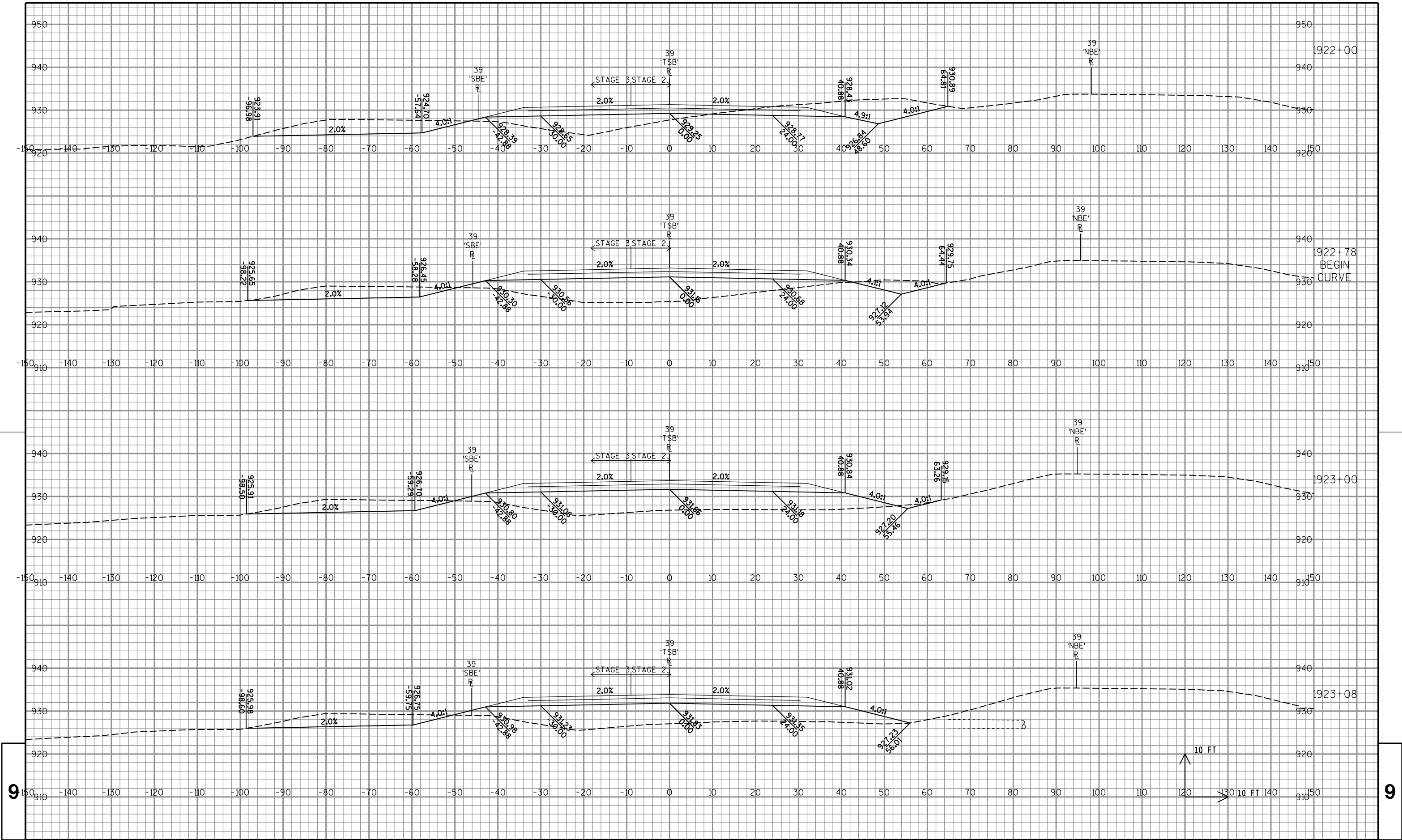
PLOT SCALE : 1:20

WISDOT/CADDs SHEET 21









PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET

748

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\090101_xs.dgn

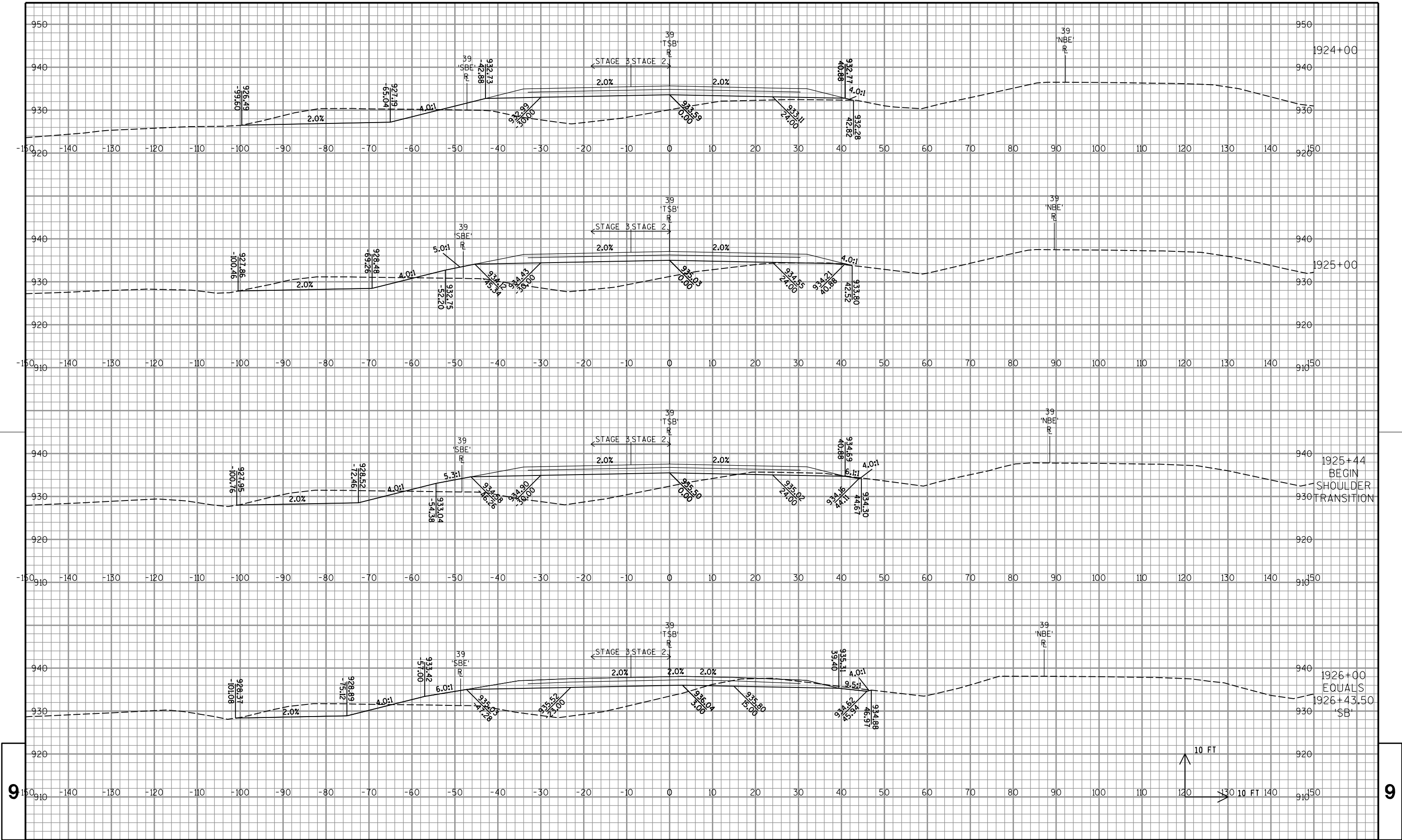
PLOT DATE : 10/16/2015

PLOT BY : cti

PLOT NAME :

PLOT SCALE : 1:20

WISDOT/CADDs SHEET 21



PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET

749

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\090101_xs.dgn

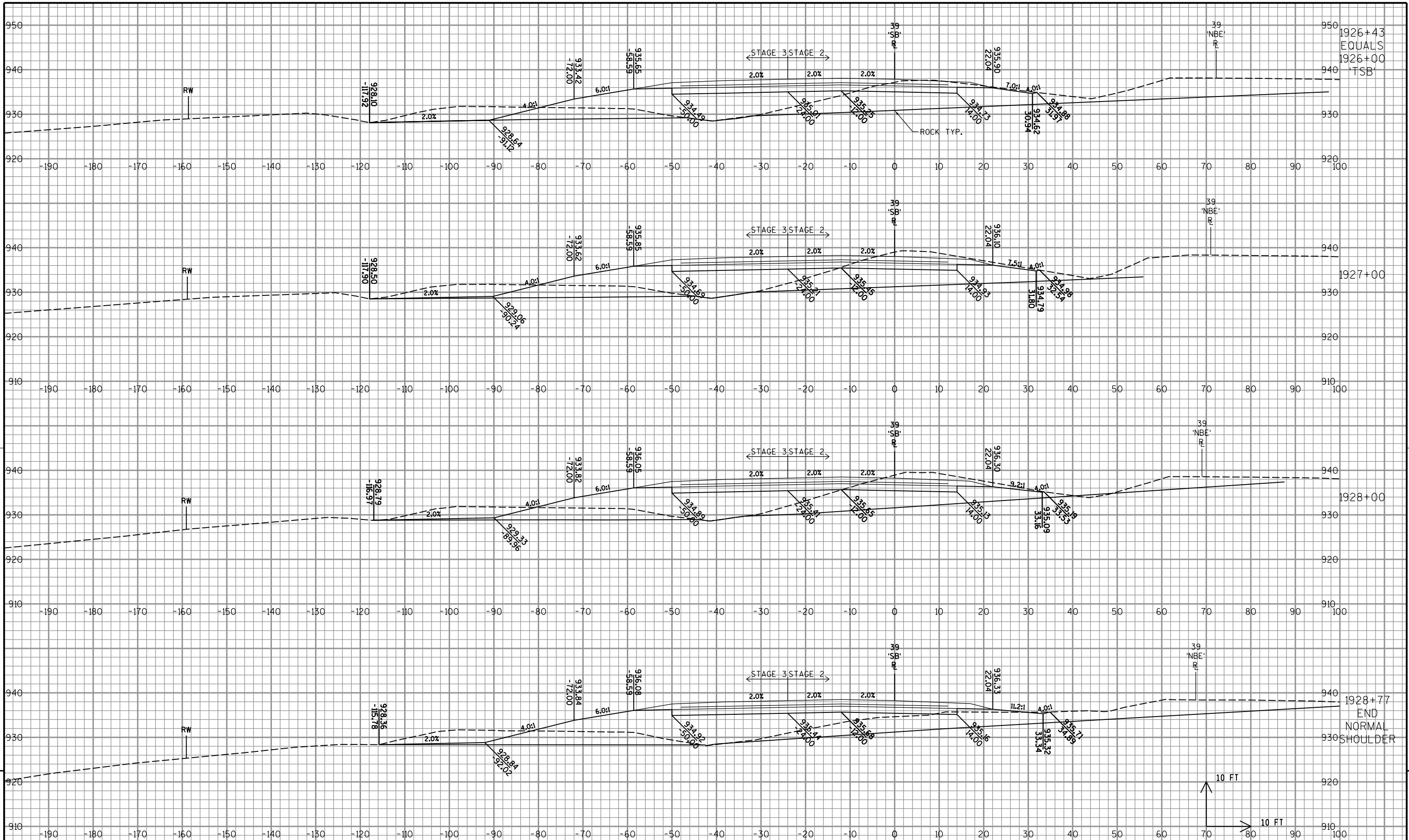
PLOT DATE : 10/16/2015

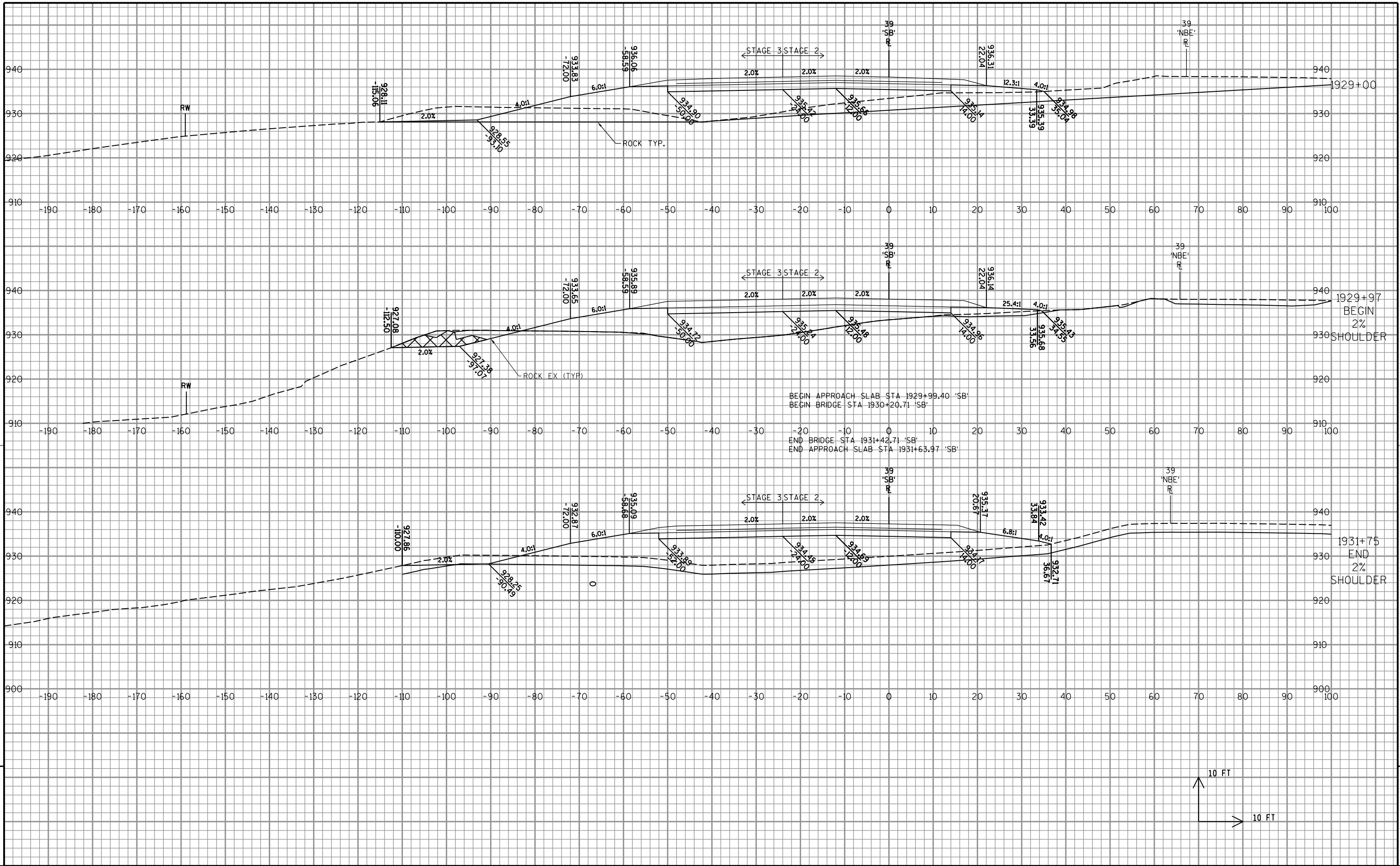
PLOT BY : cti

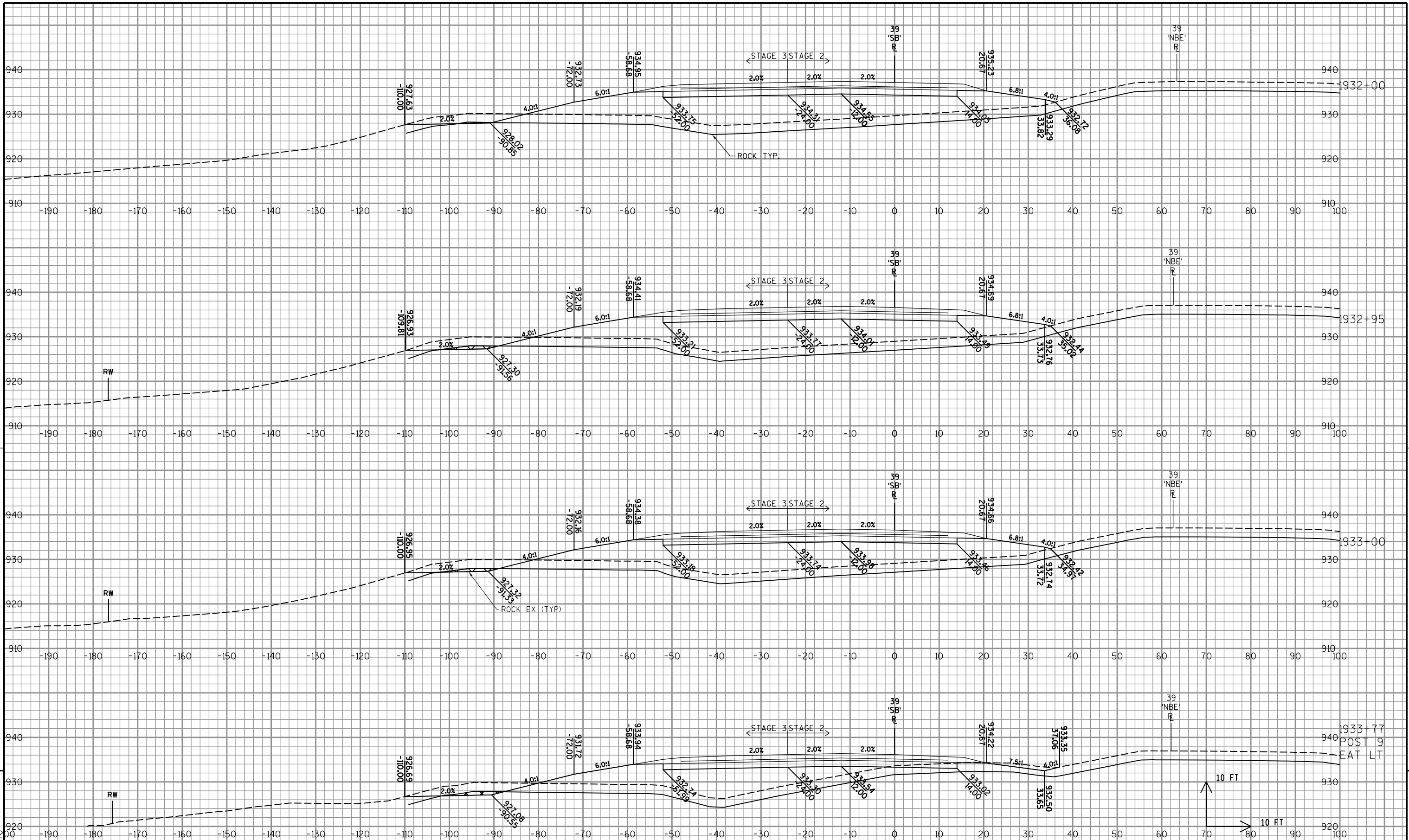
PLOT NAME :

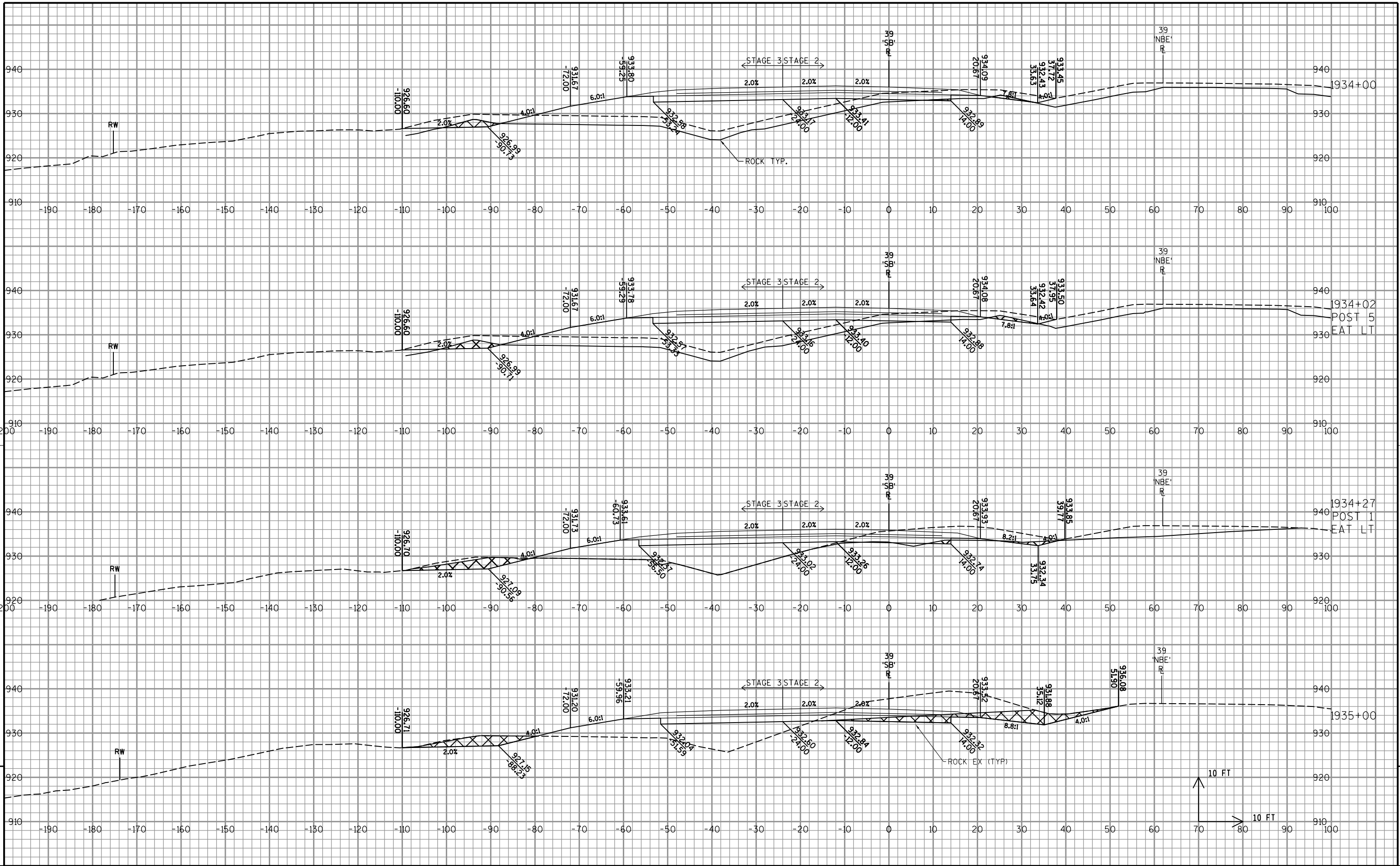
PLOT SCALE : 1:20

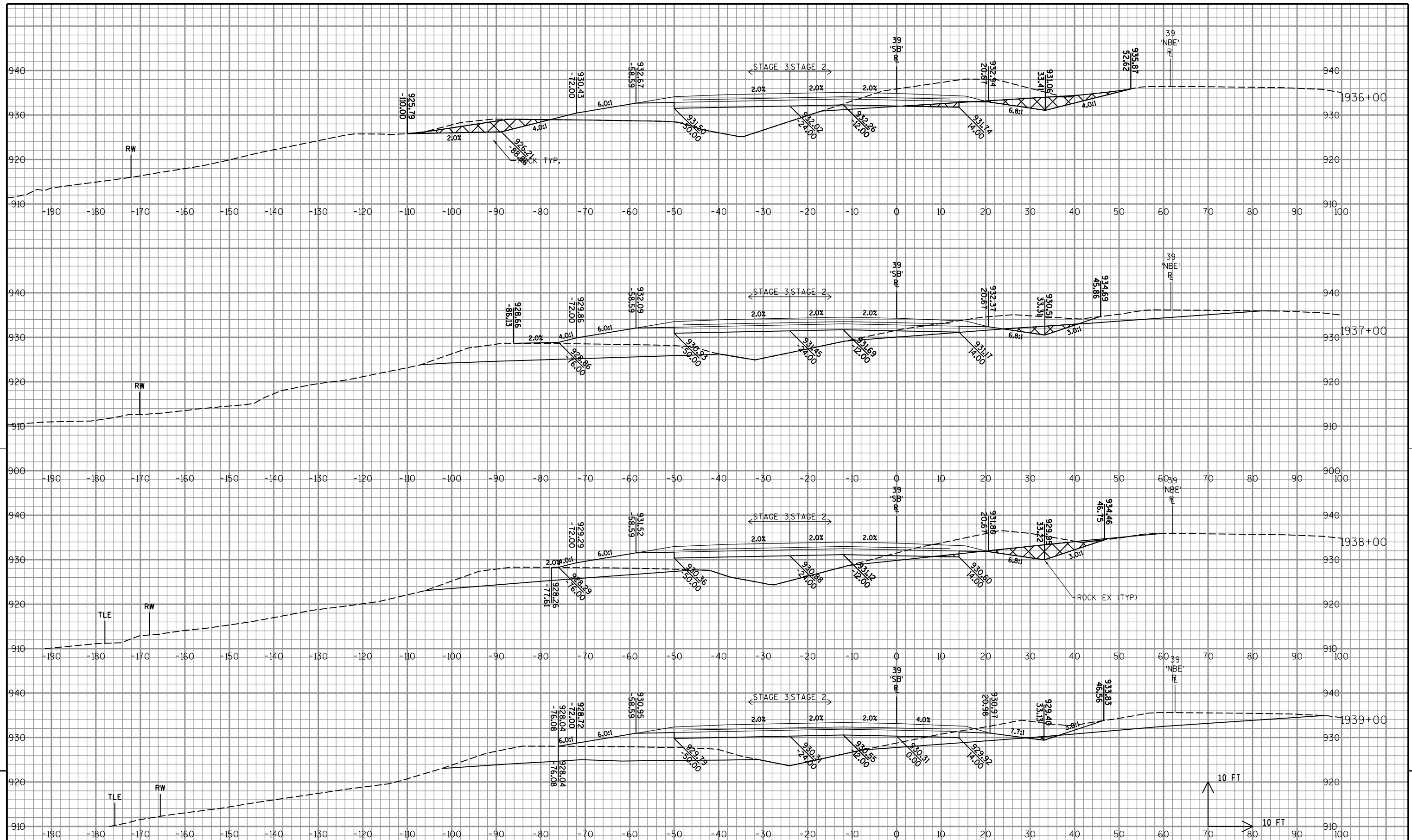
WISDOT/CADDs SHEET 21

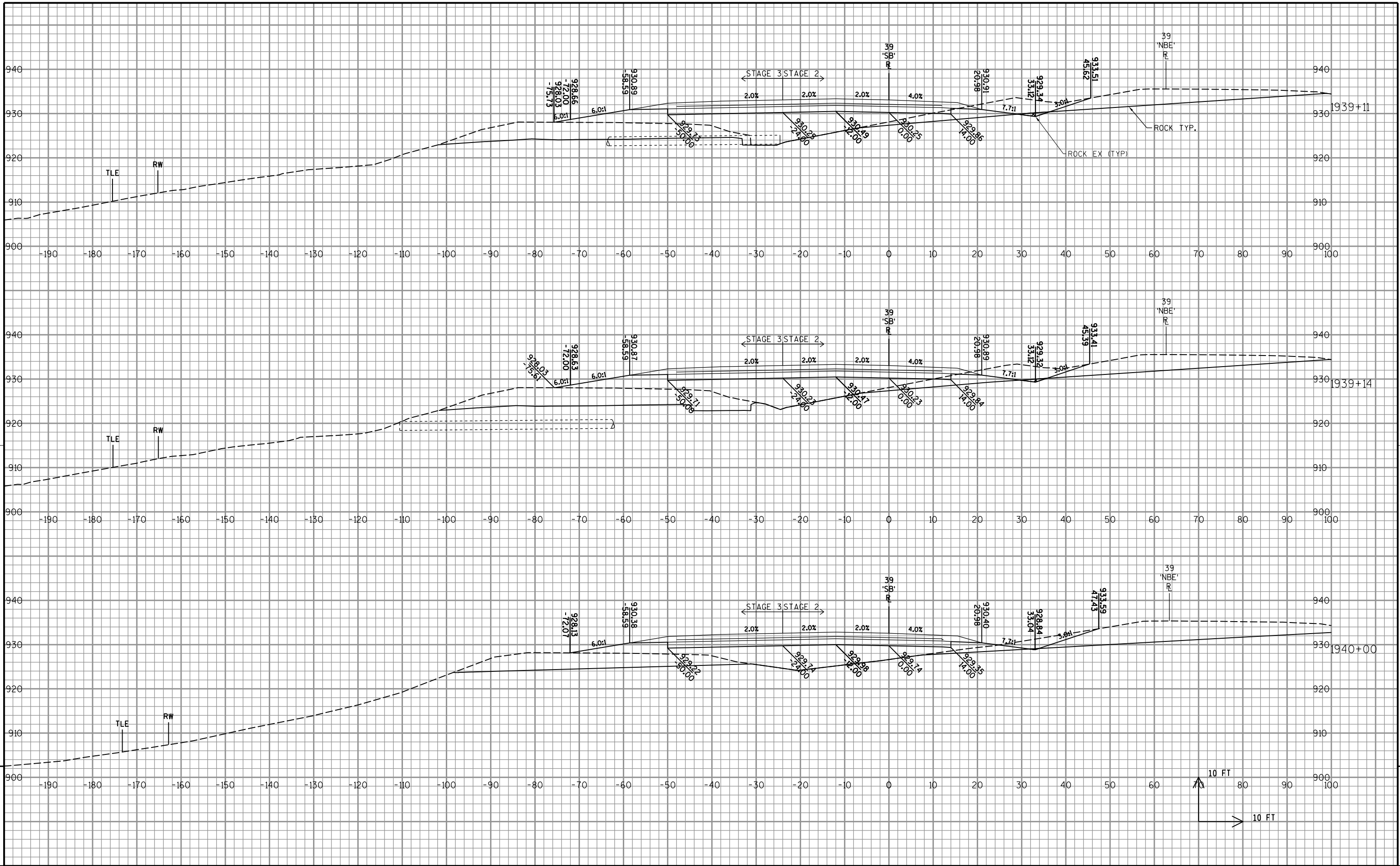












PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB

SHEET

755

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\090101_xs.dgn

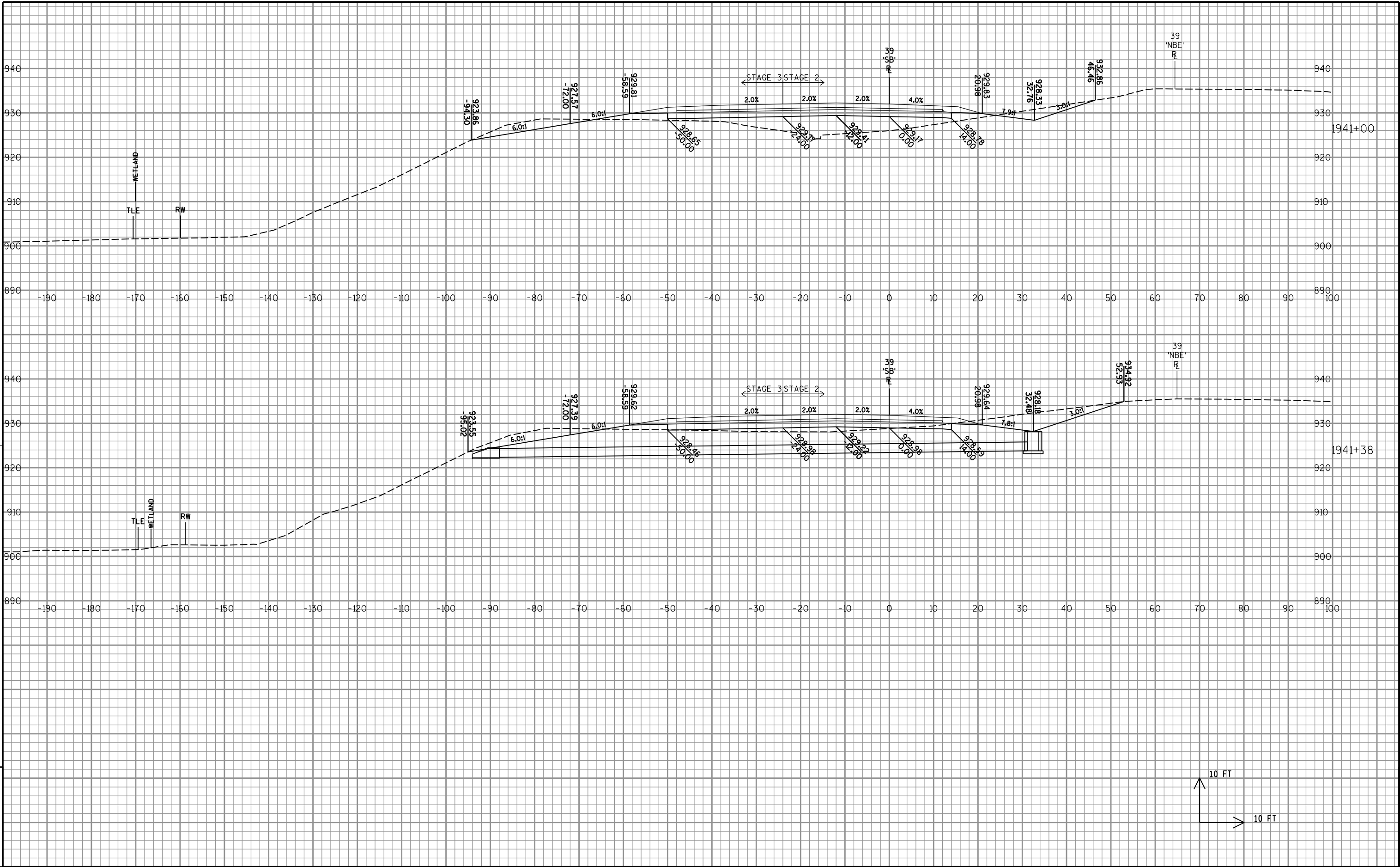
PLOT DATE : 10/16/2015

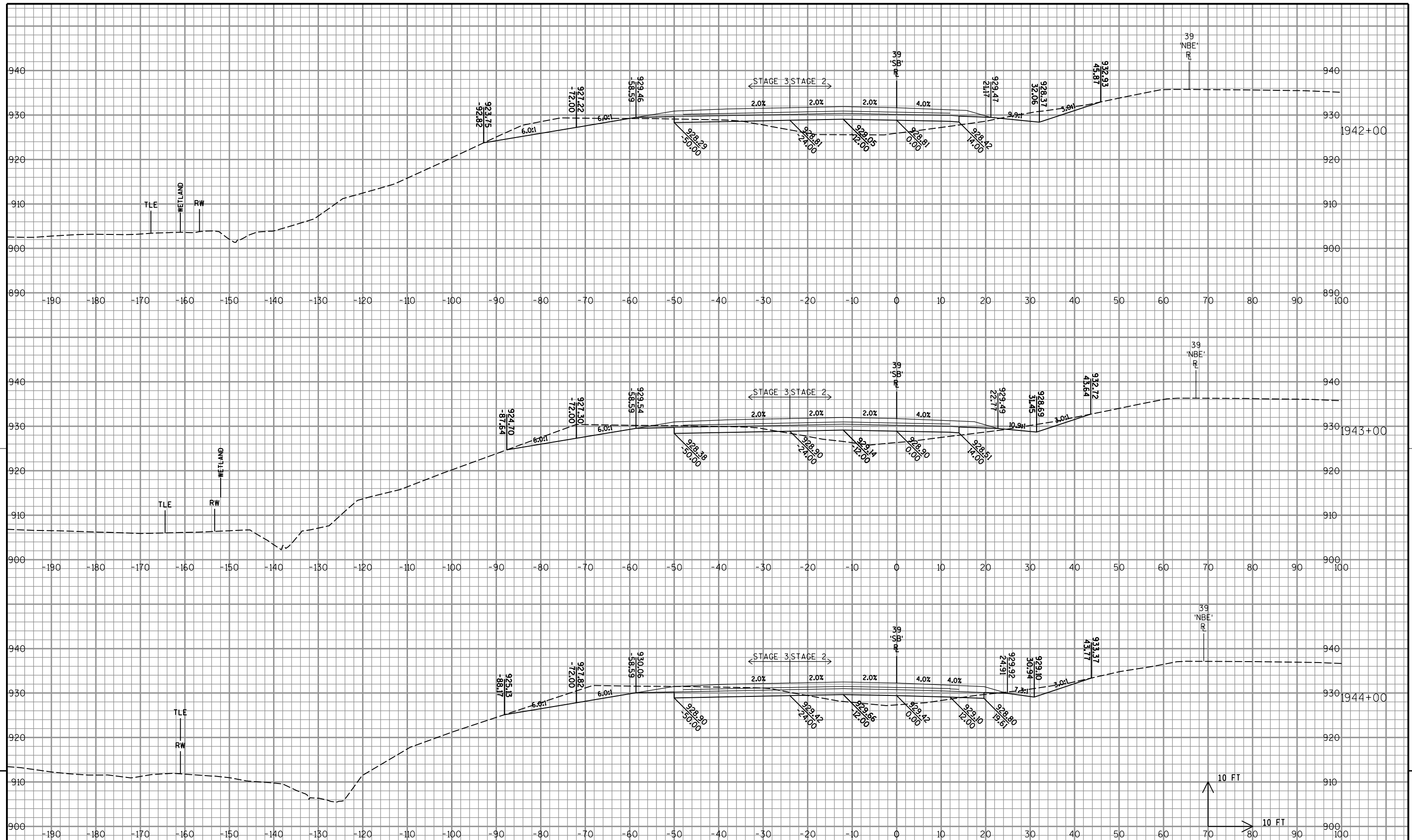
PLOT BY : cti

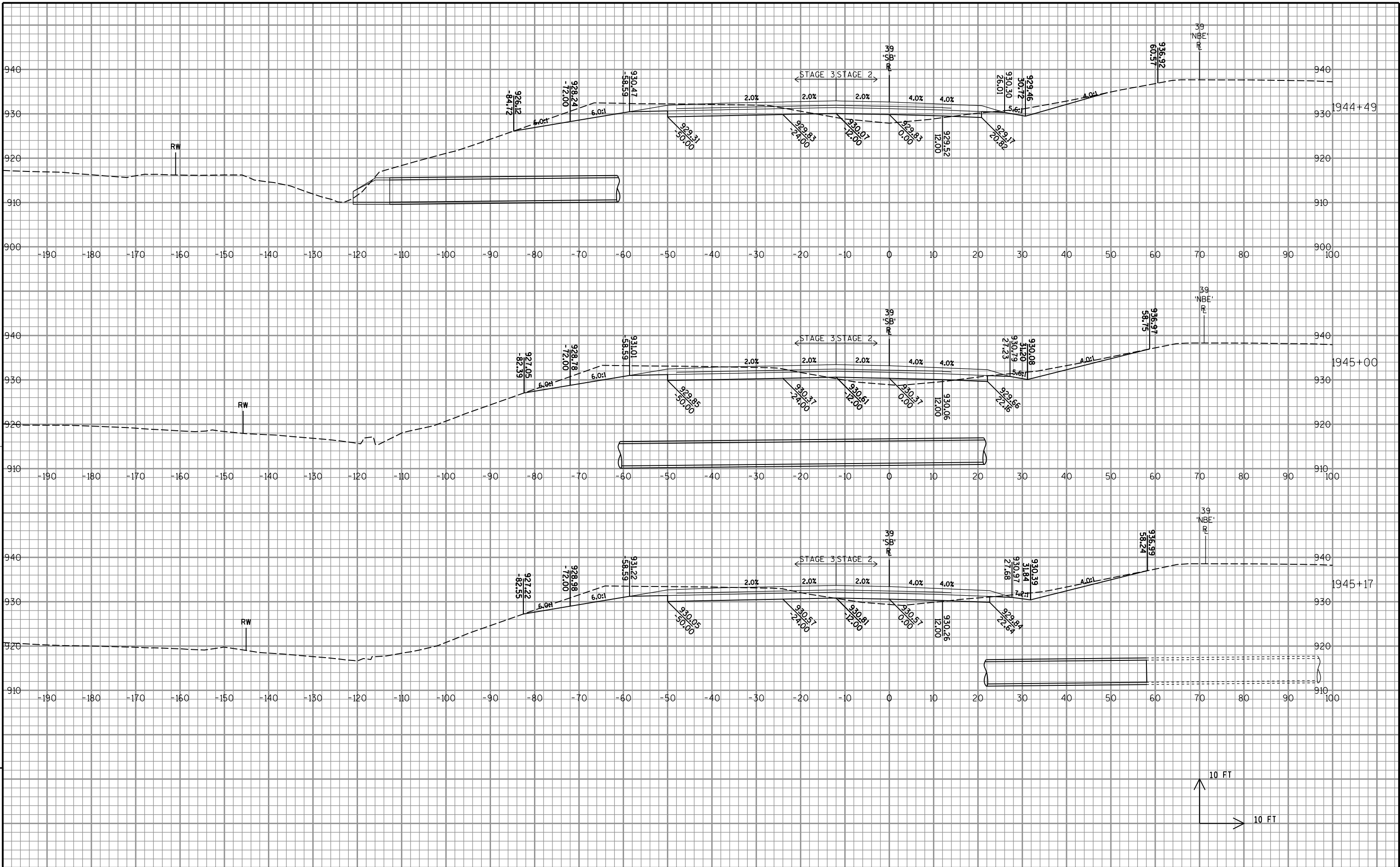
PLOT NAME :

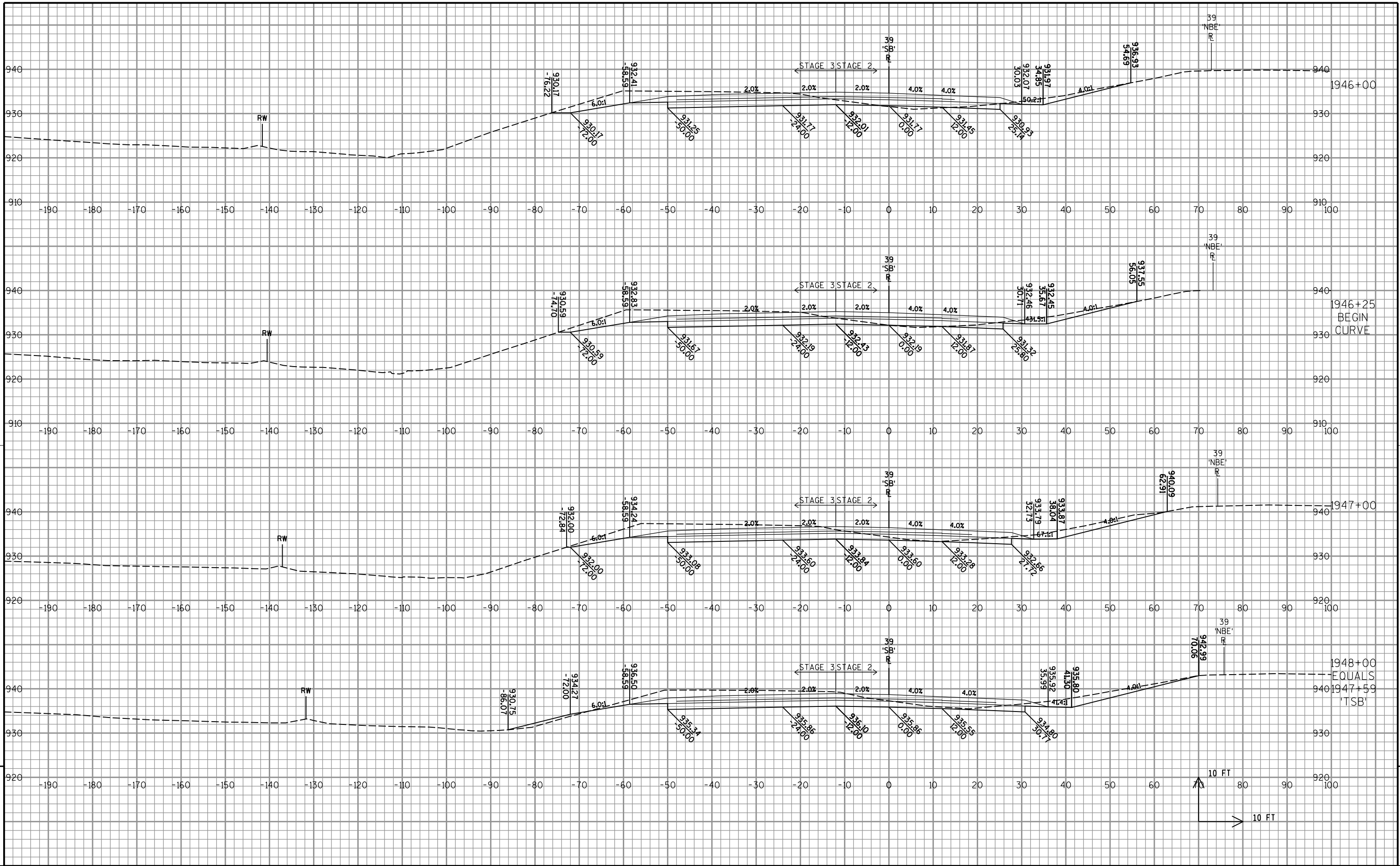
PLOT SCALE : 1:20

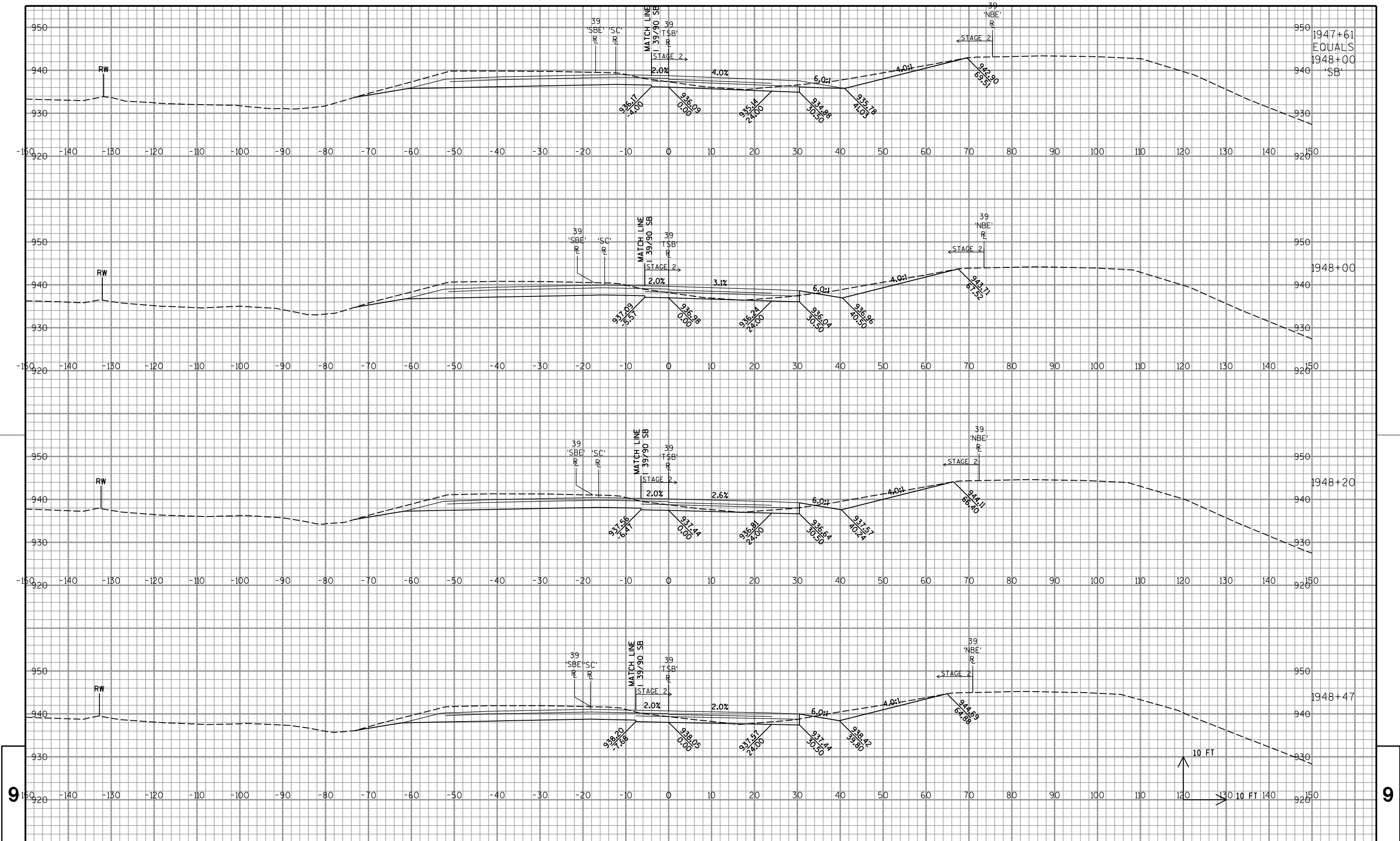
WISDOT/CADDs SHEET 21











PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 CROSSOVER

SHEET

760

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\090101_xs.dgn

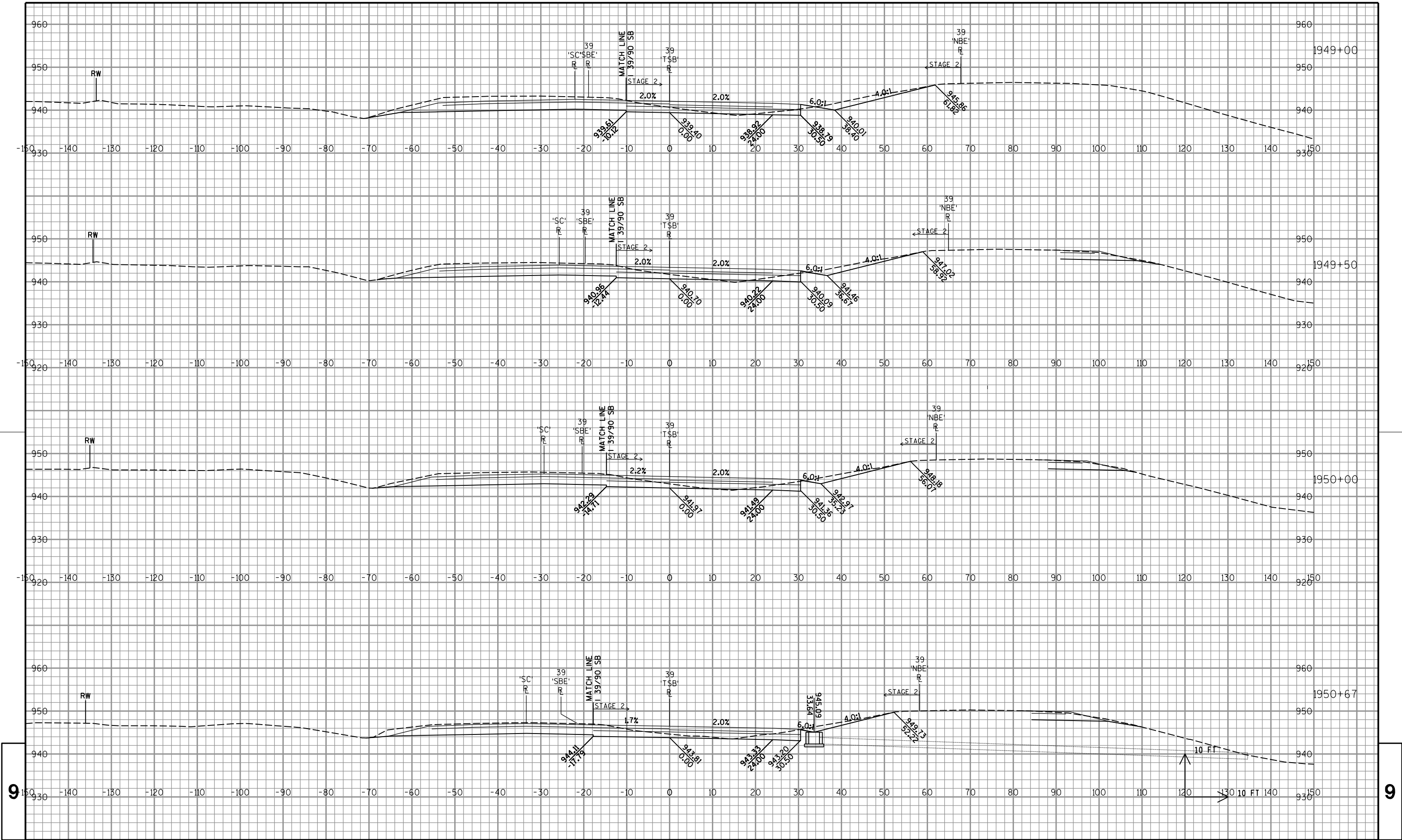
PLOT DATE : 10/16/2015

PLOT BY : ct1

PLOT NAME :

PLOT SCALE : 1:20

WISDOT/CADDs SHEET 21



PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 CROSSOVER

SHEET

761

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet.sPlan\090101_xs.dgn

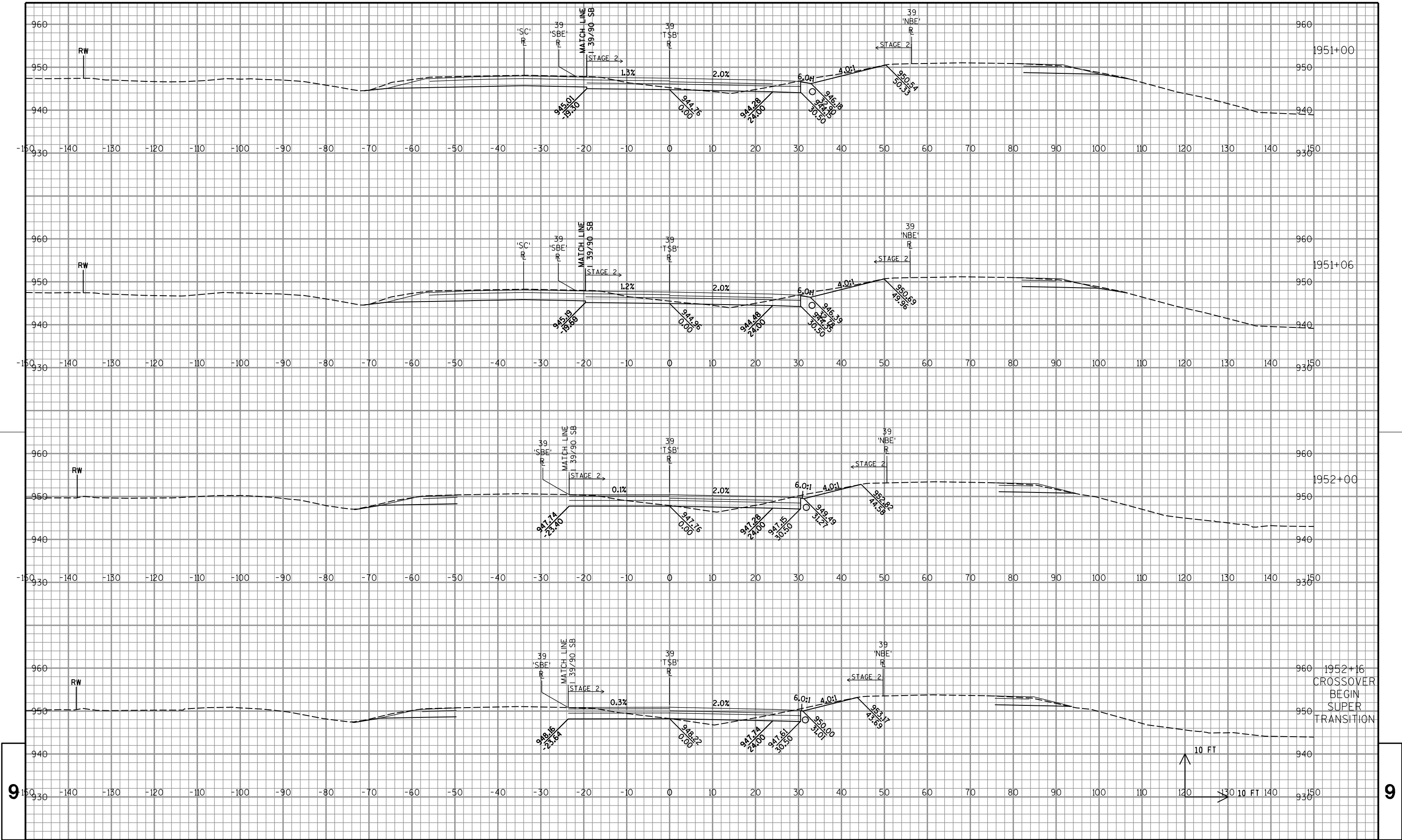
PLOT DATE : 10/16/2015

PLOT BY : cti

PLOT NAME :

PLOT SCALE : 1:20

WISDOT/CADDs SHEET 21



PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 CROSSOVER

SHEET

762

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\090101_xs.dgn

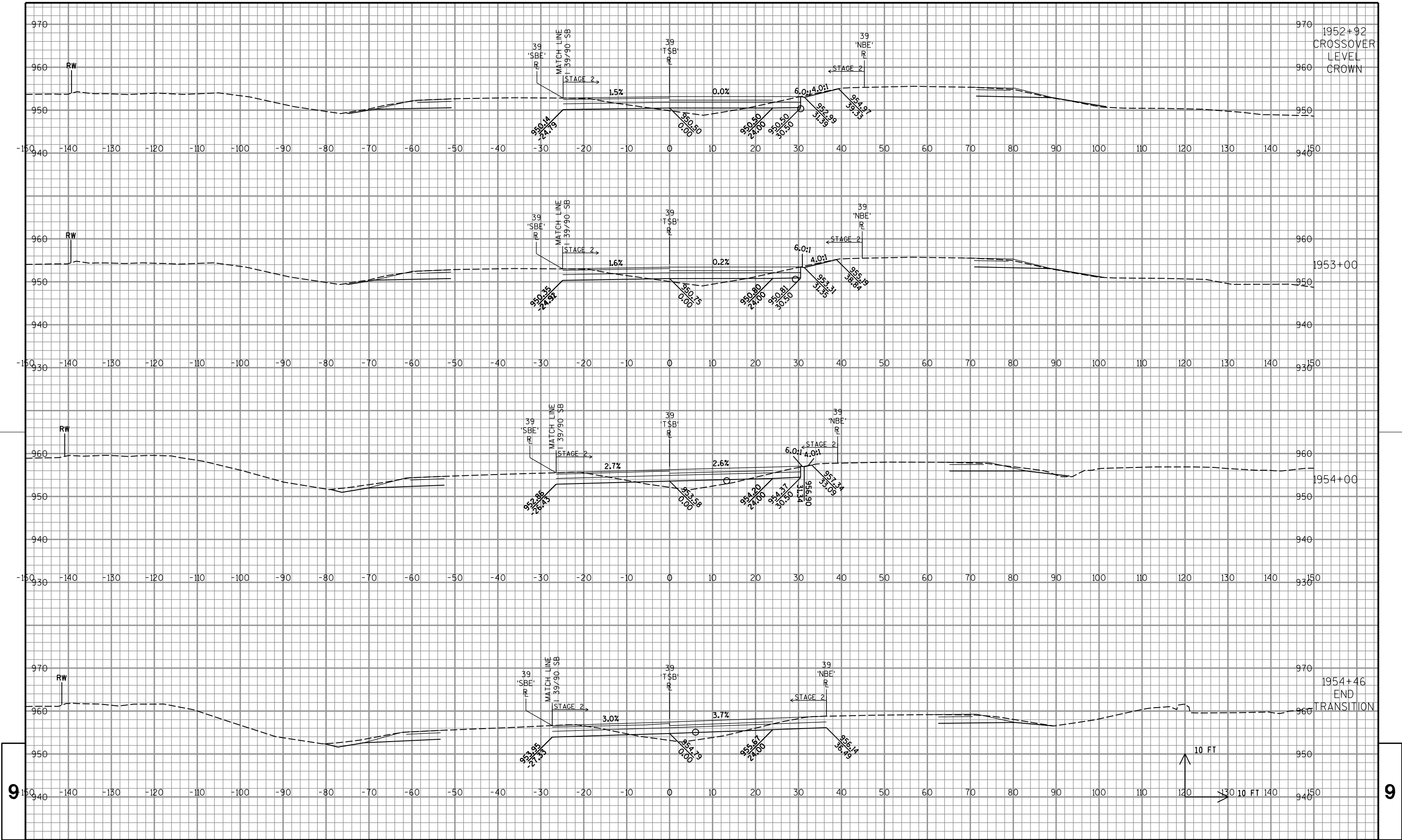
PLOT DATE : 10/16/2015

PLOT BY : cti

PLOT NAME :

PLOT SCALE : 1:20

WISDOT/CADDs SHEET 21



PROJECT NO:1007-10-79

HWY:IH 39

COUNTY:DANE

CROSS SECTIONS:IH 39/90 SB

SHEET

763

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\090101_xs.dgn

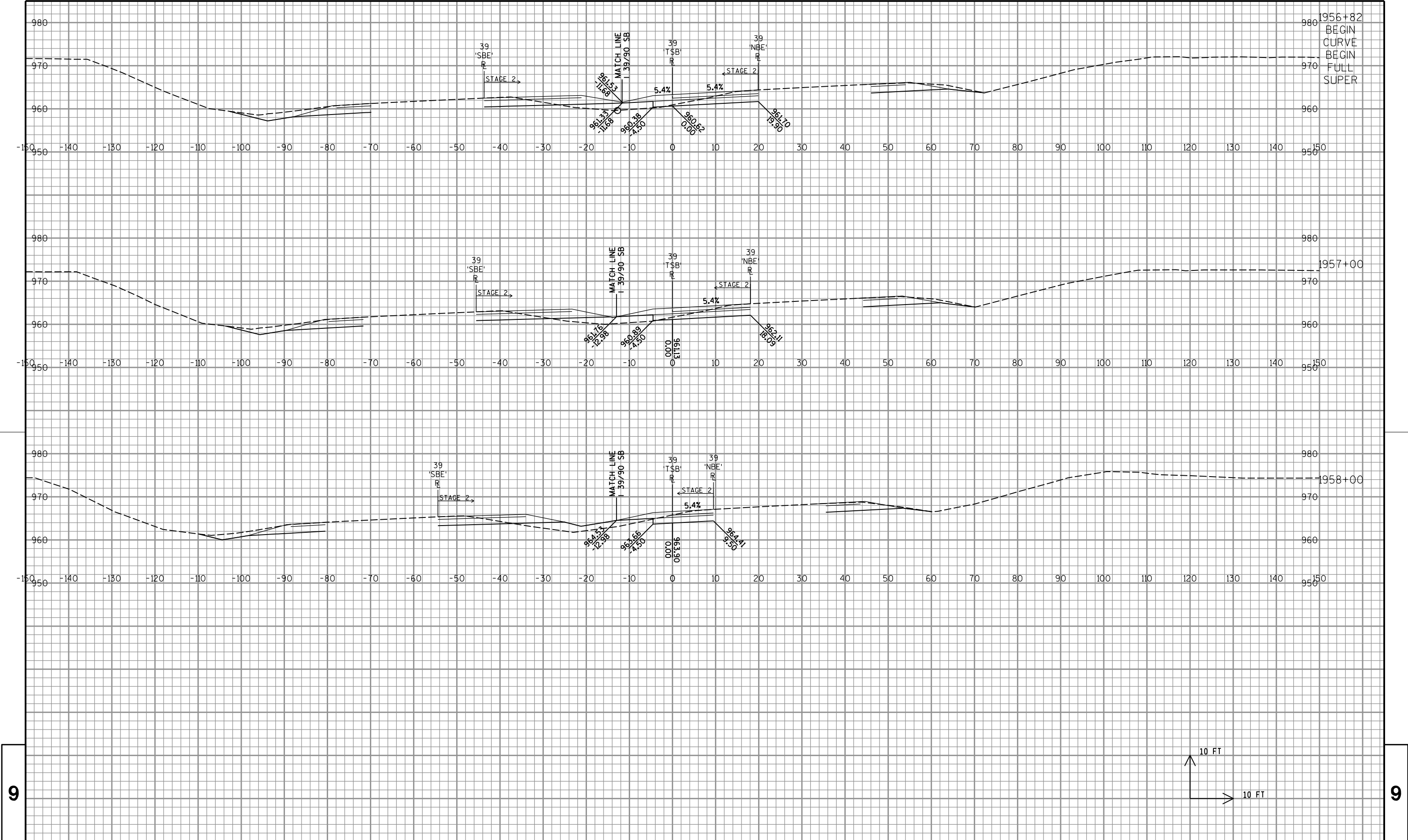
PLOT DATE : 10/16/2015

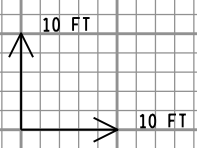
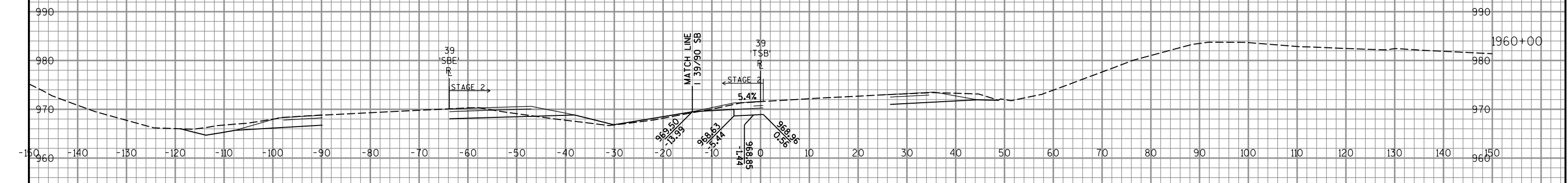
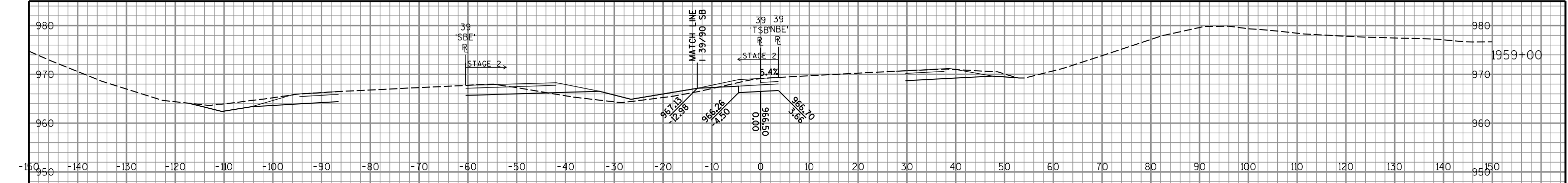
PLOT BY : cti

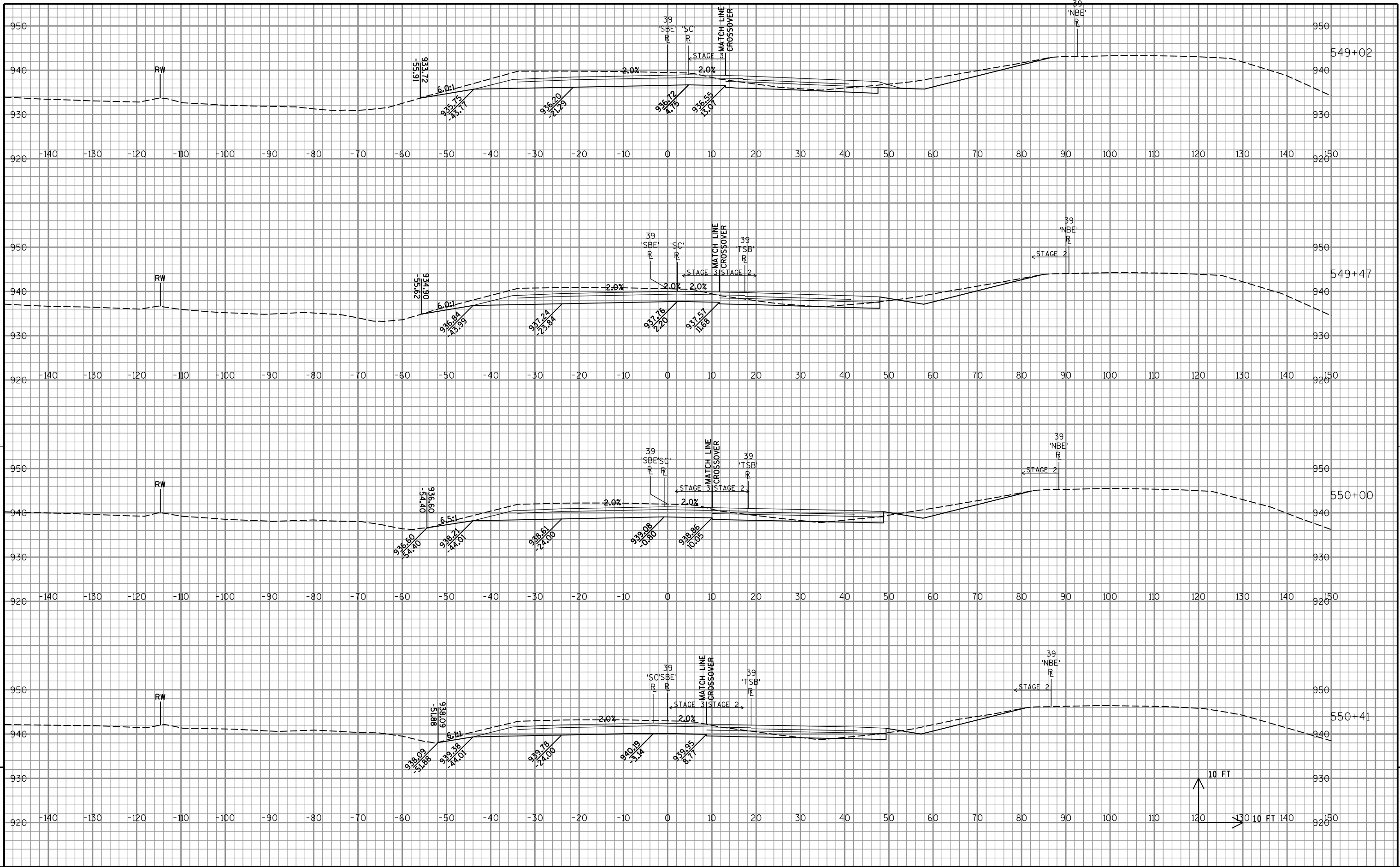
PLOT NAME :

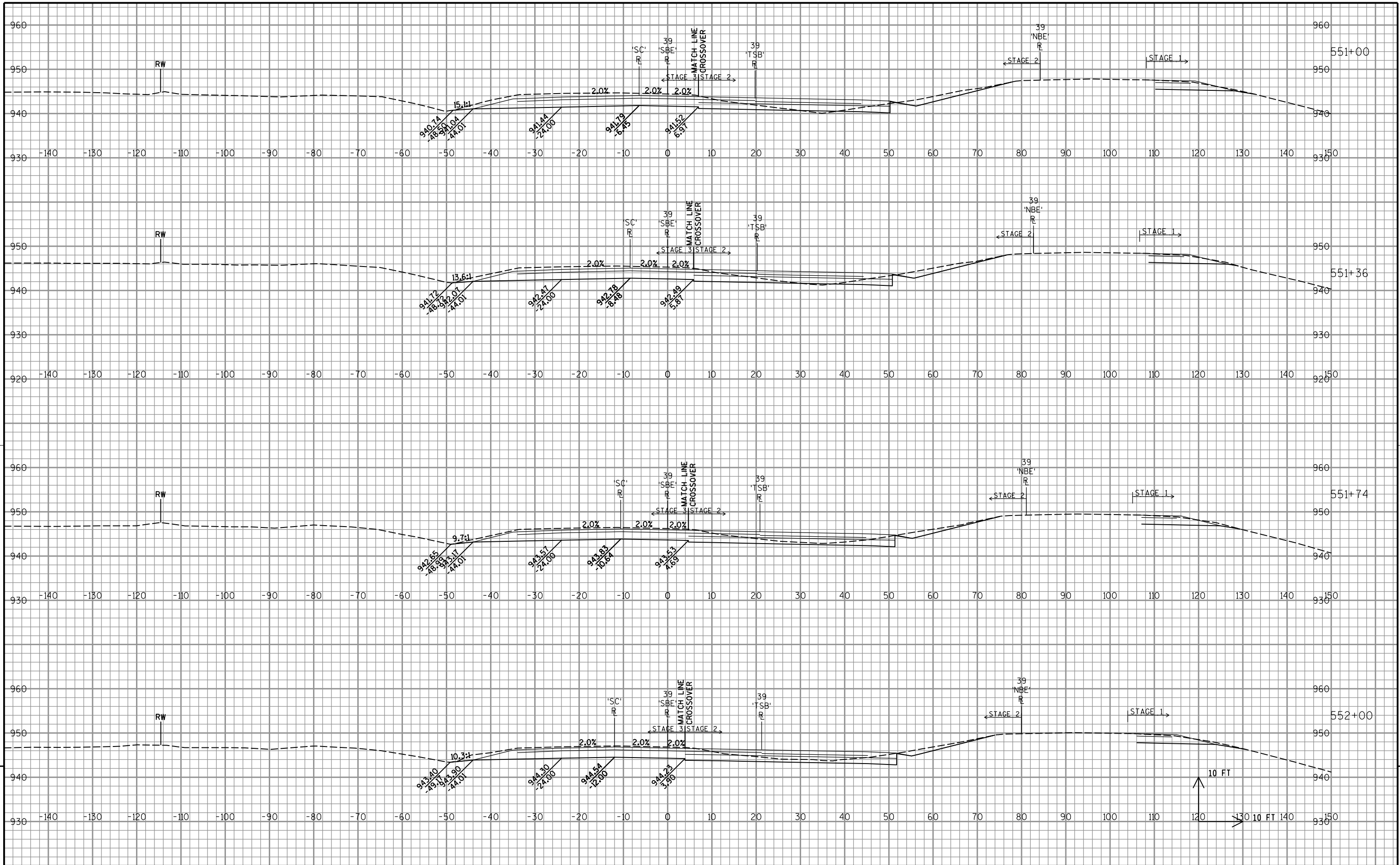
PLOT SCALE : 1:20

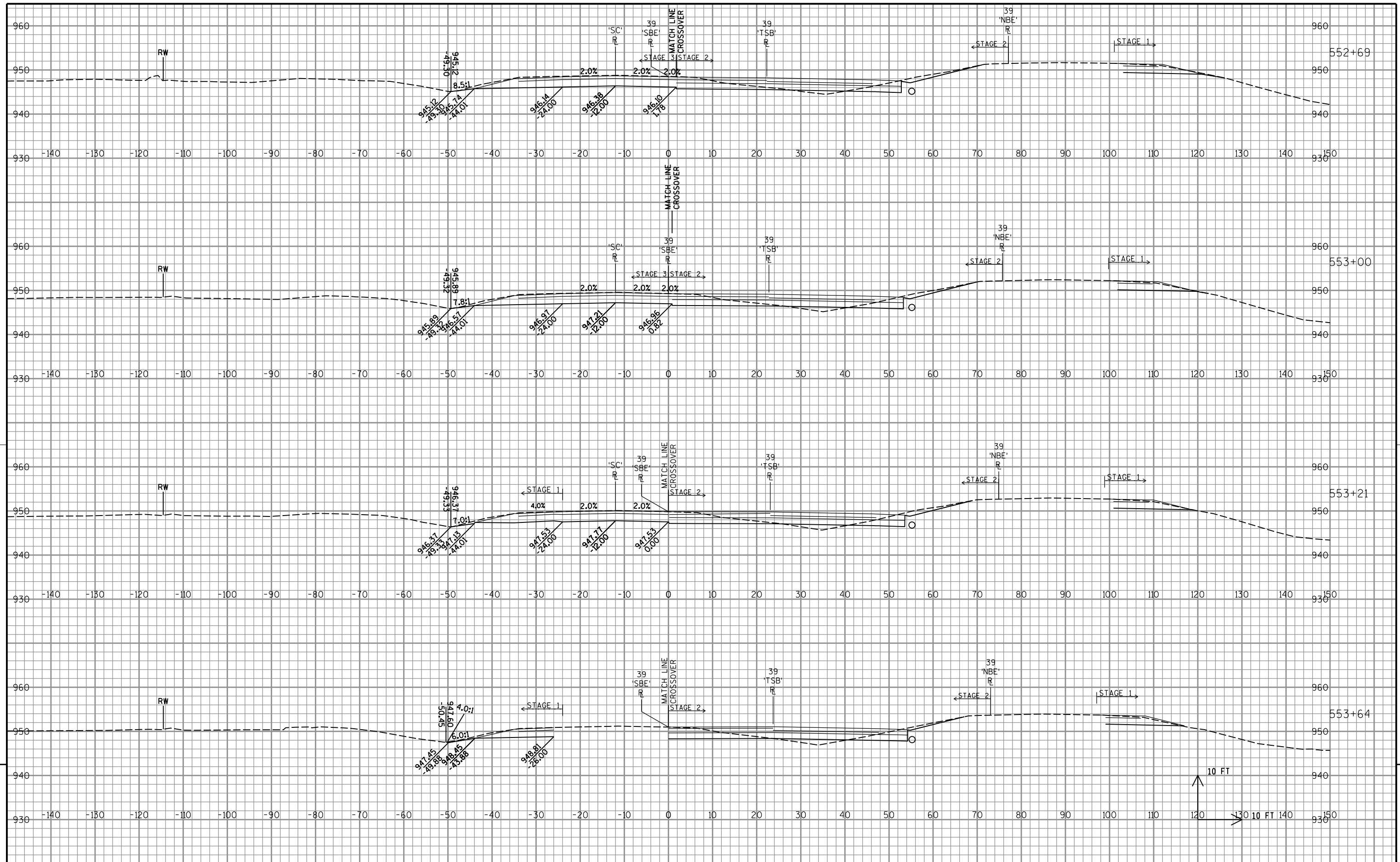
WISDOT/CADDS SHEET 21

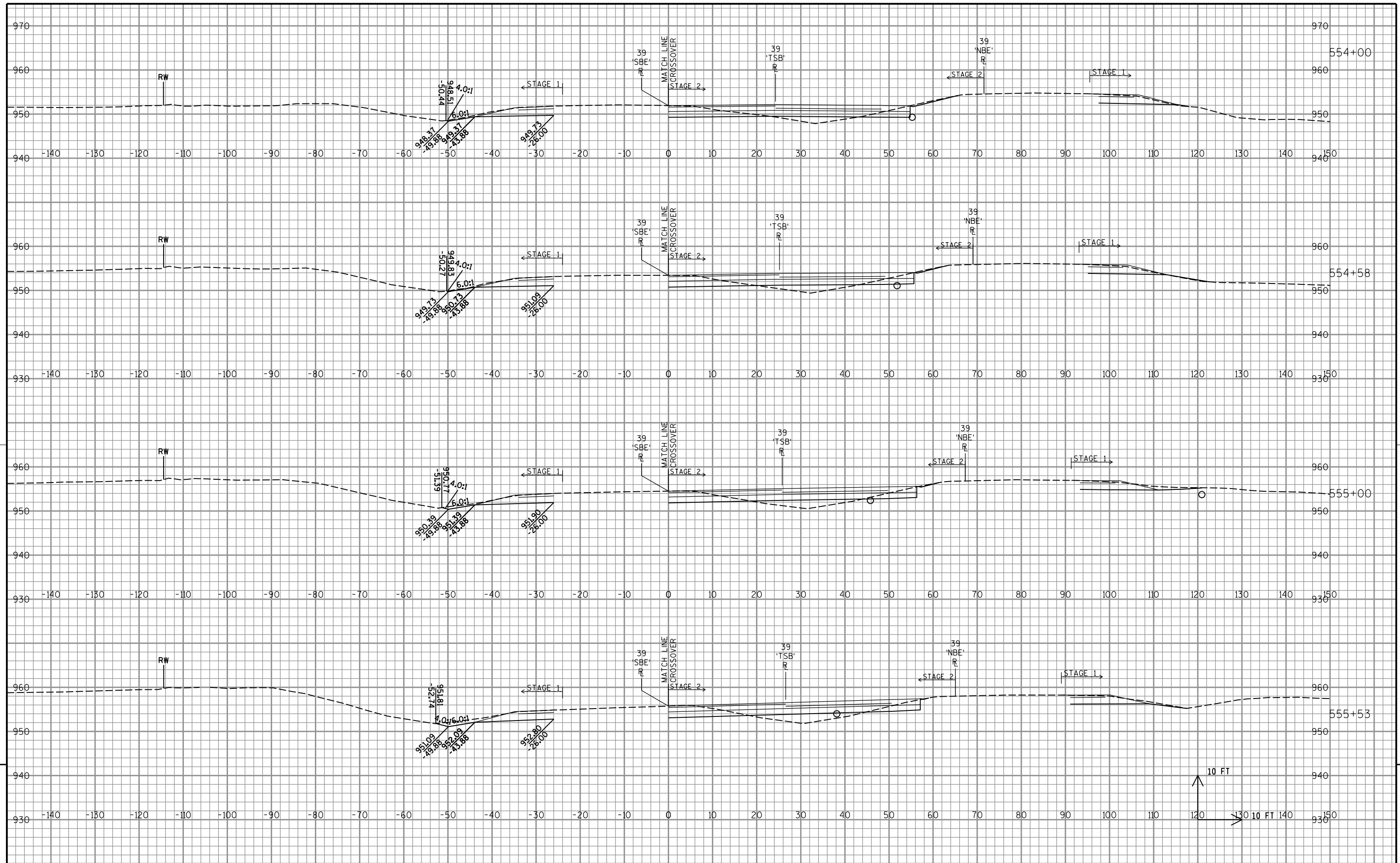


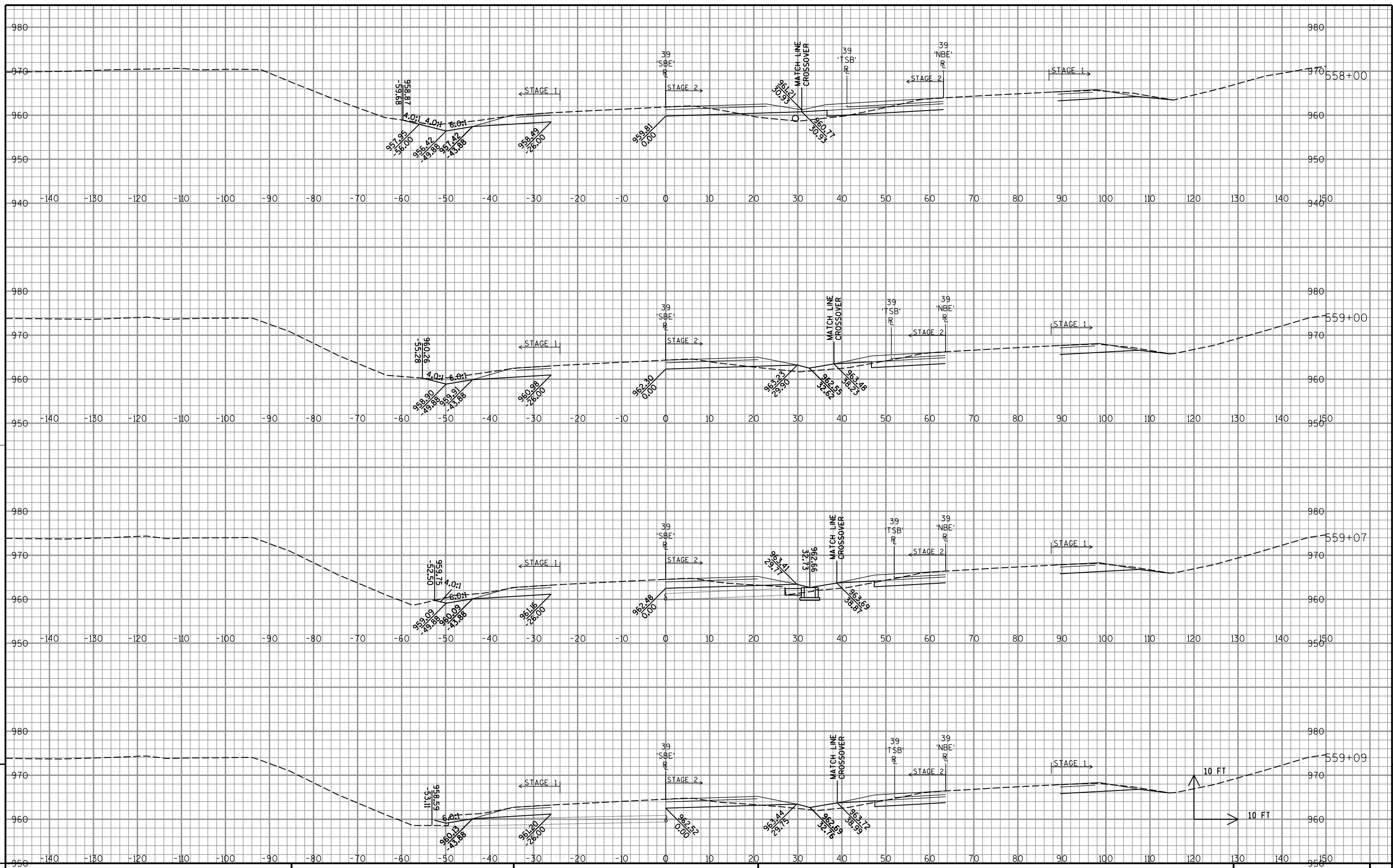


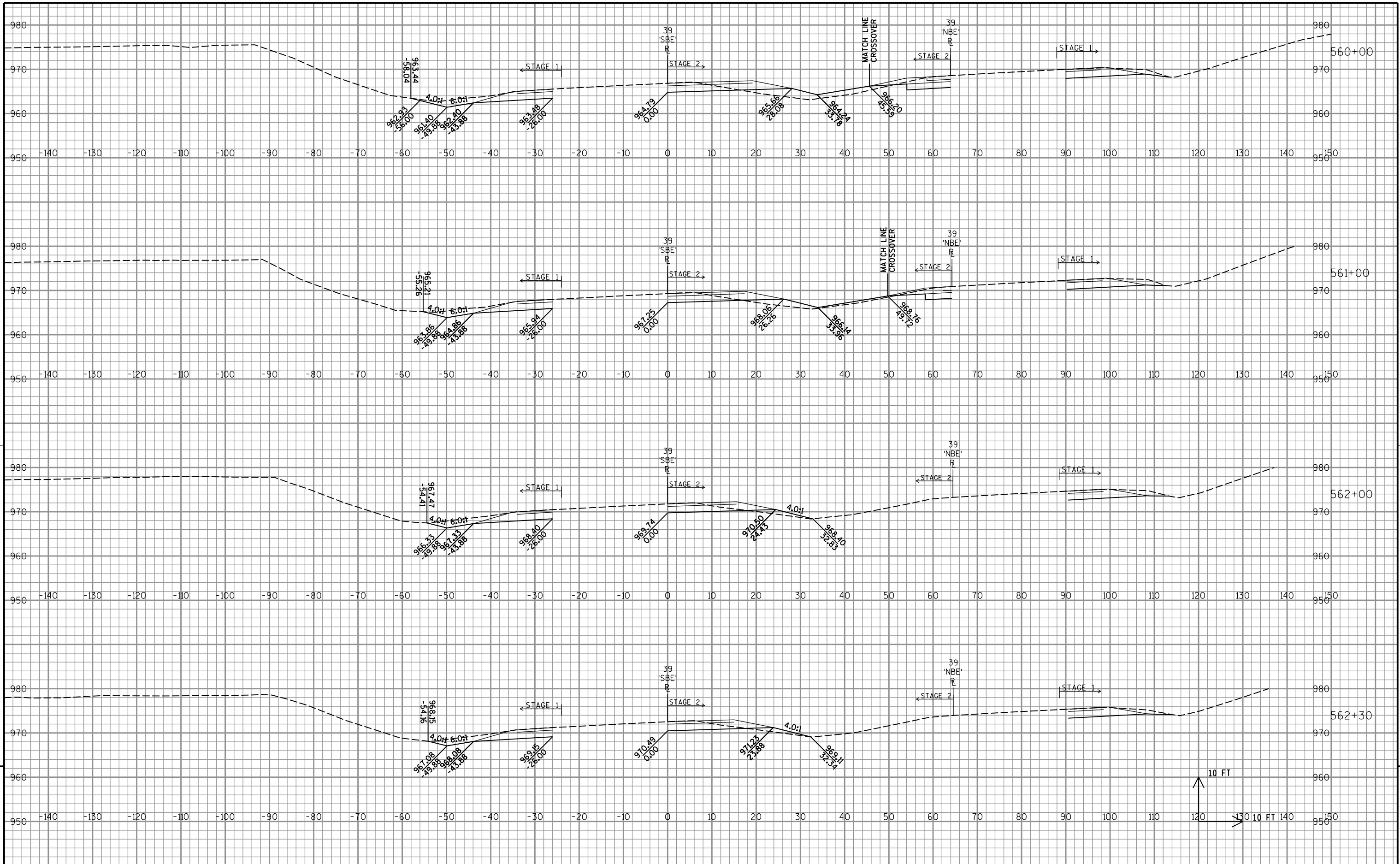


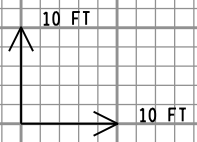


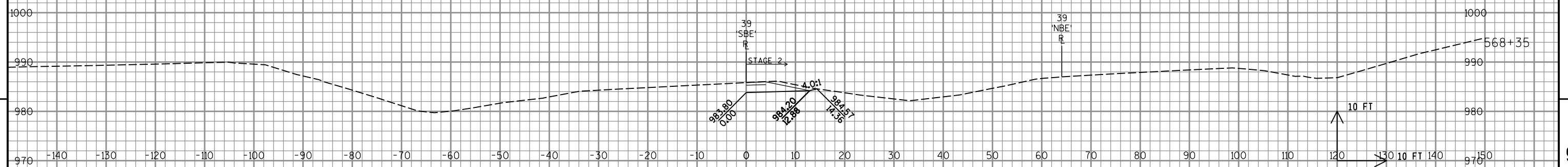
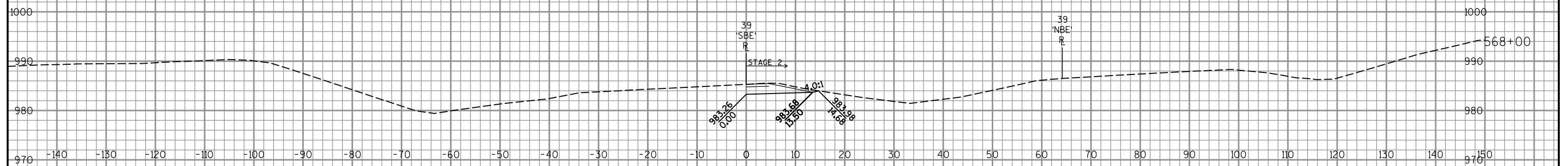
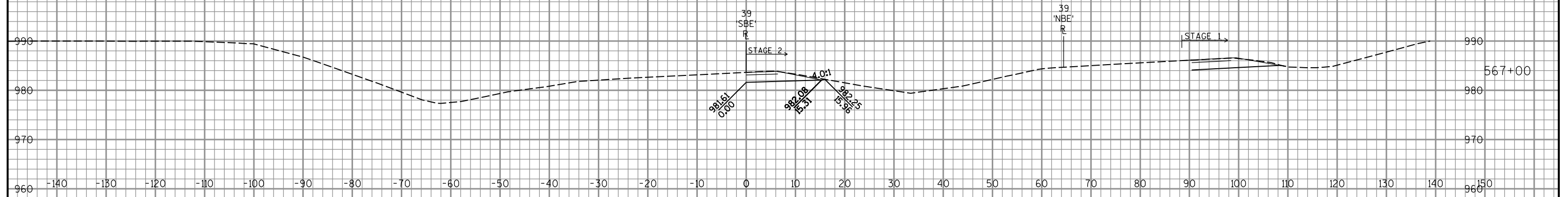
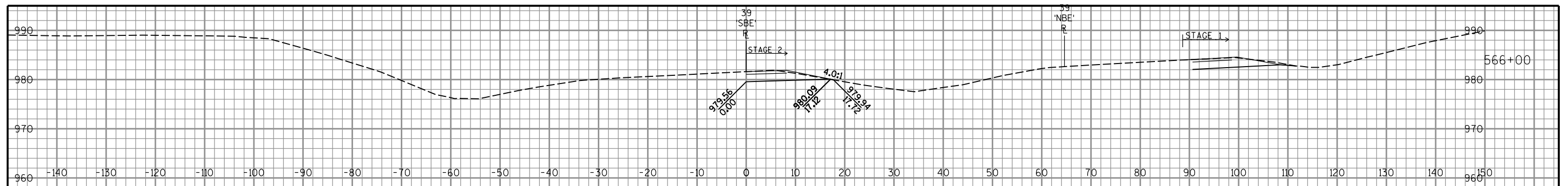


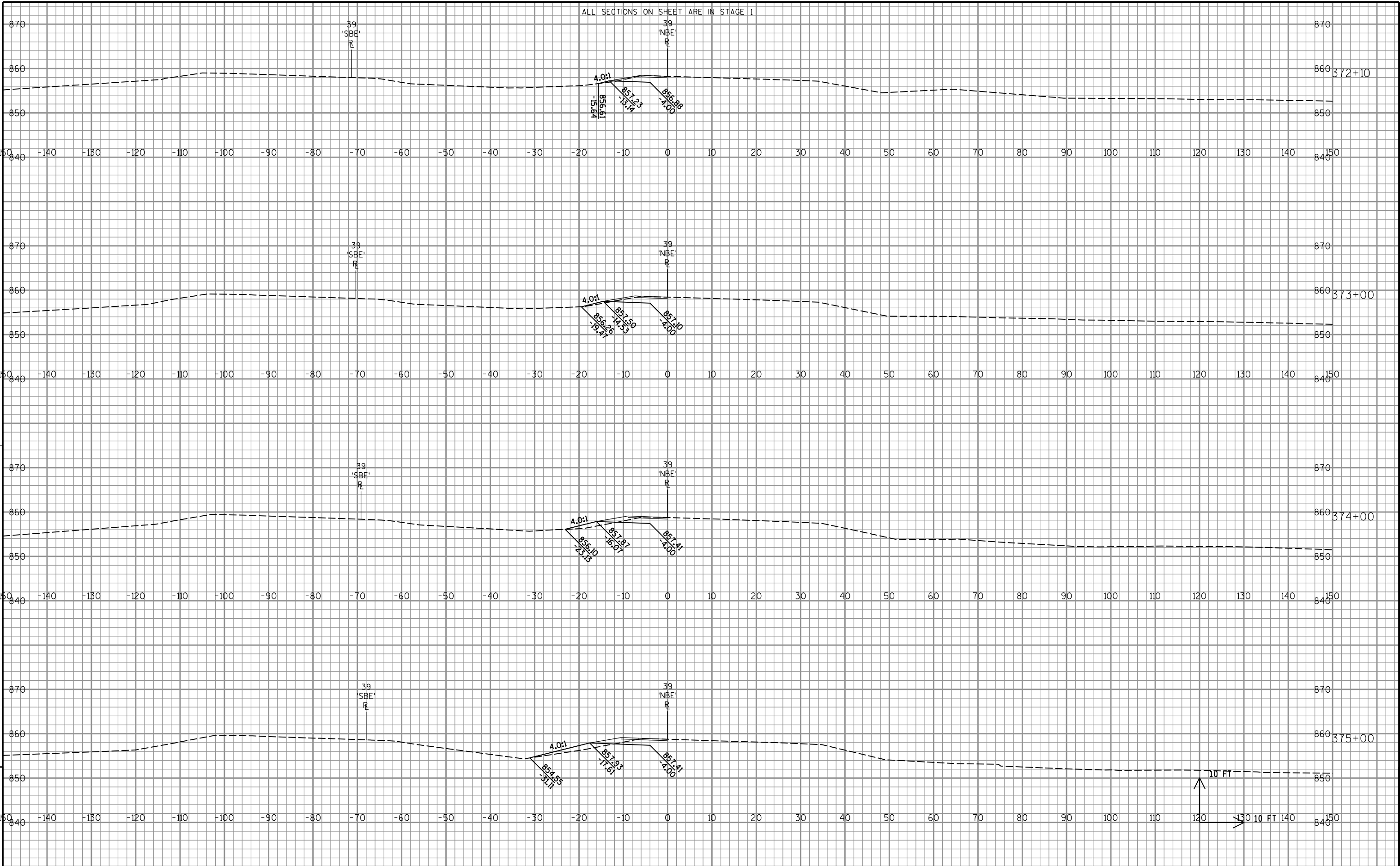


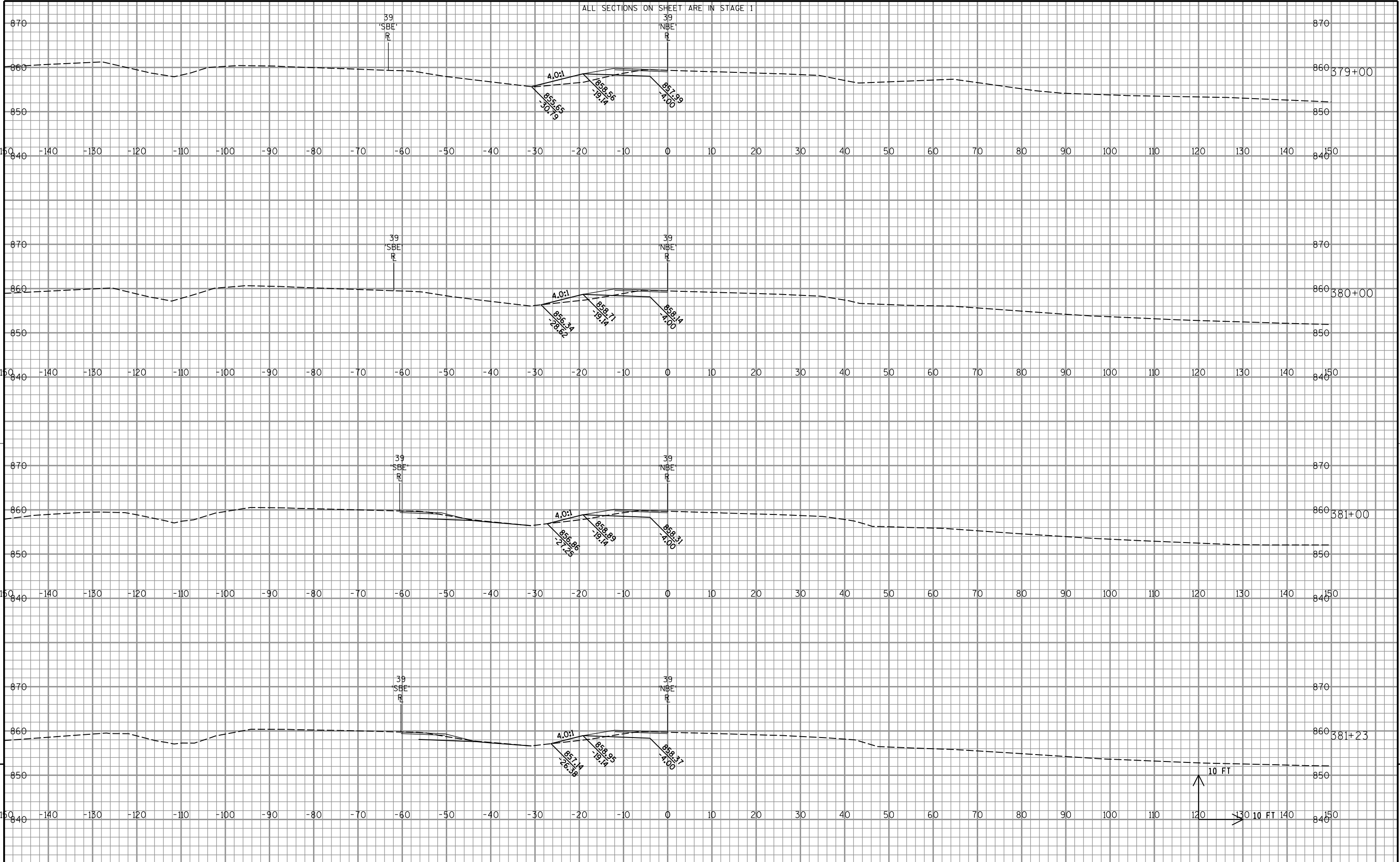


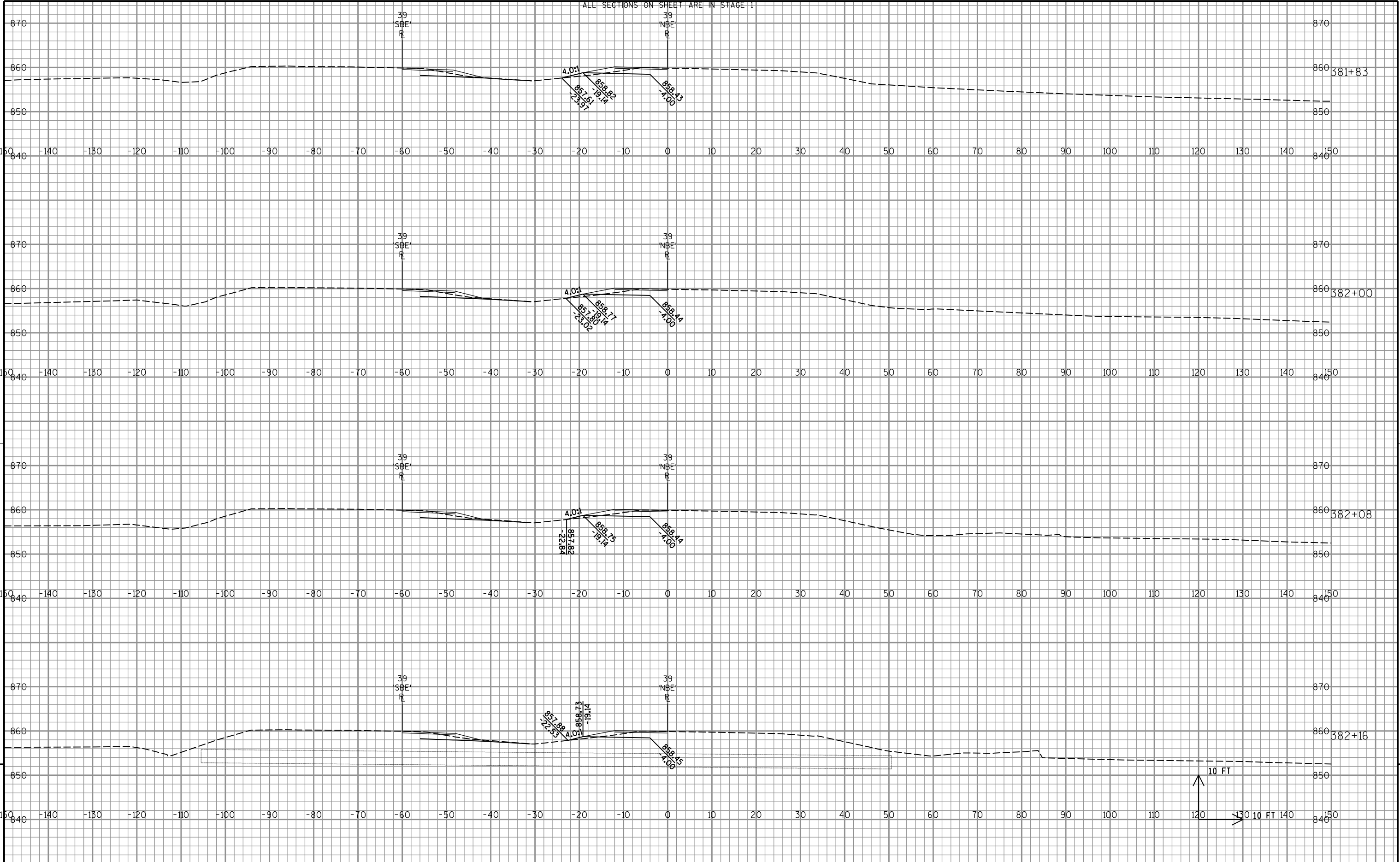


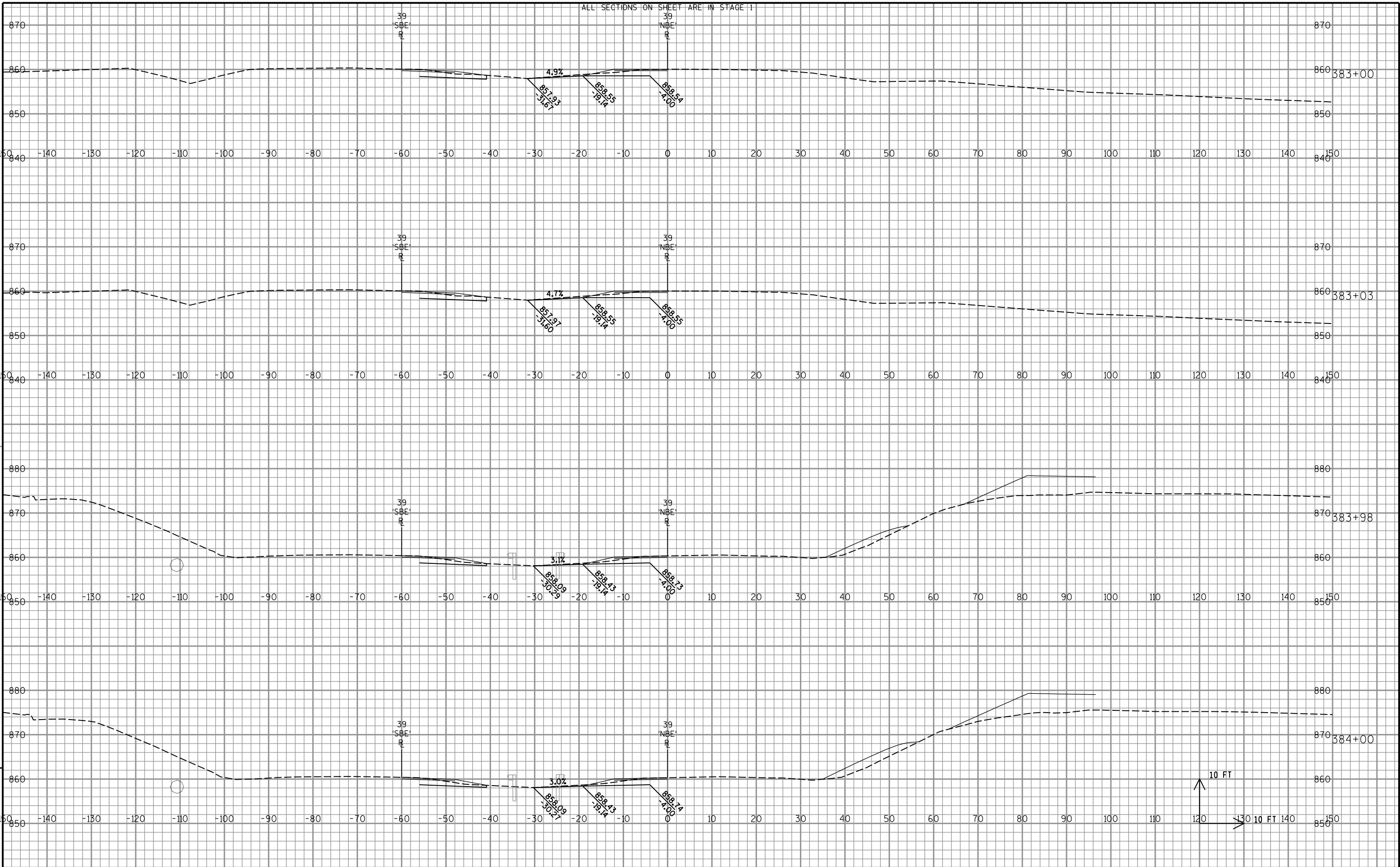


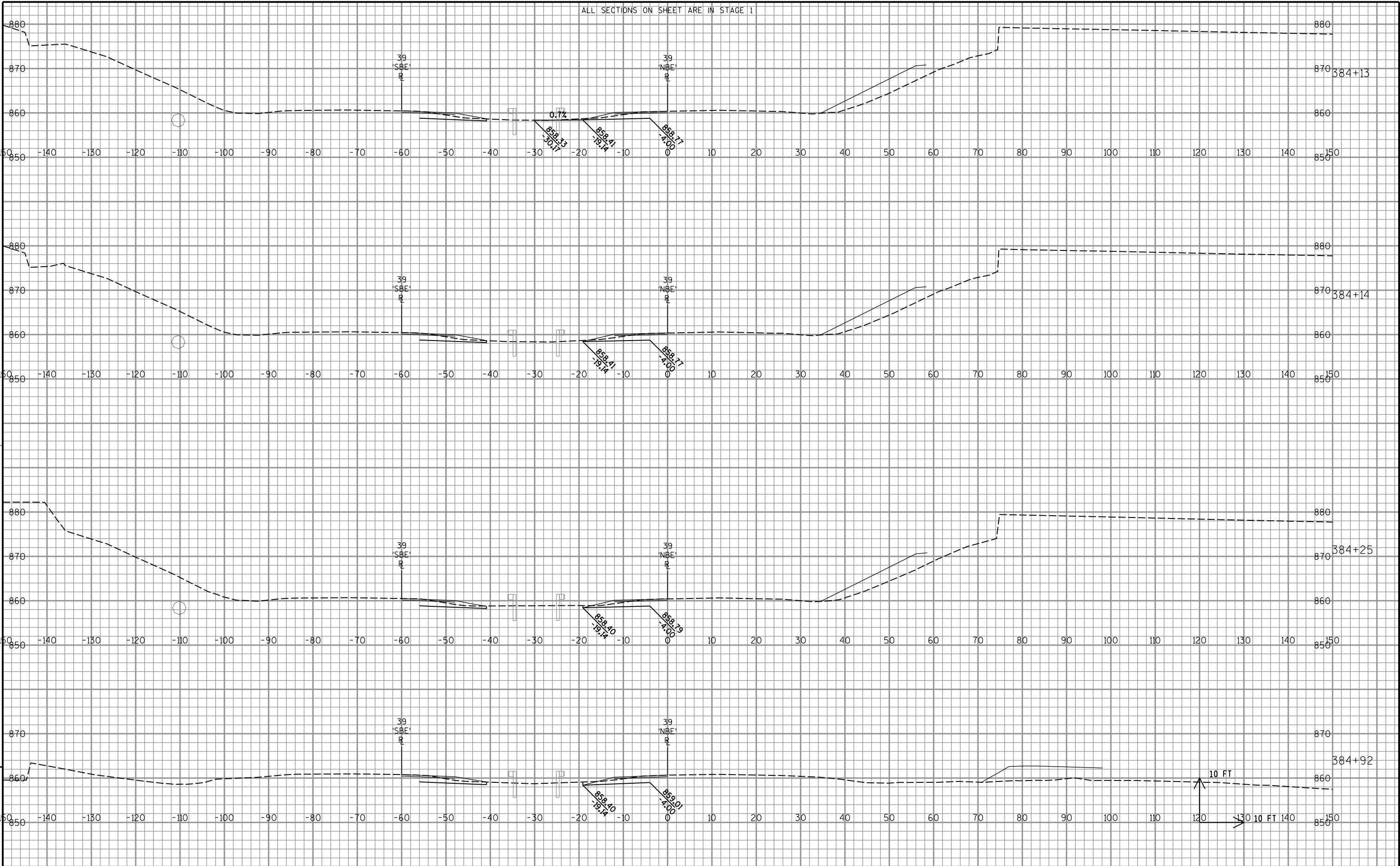


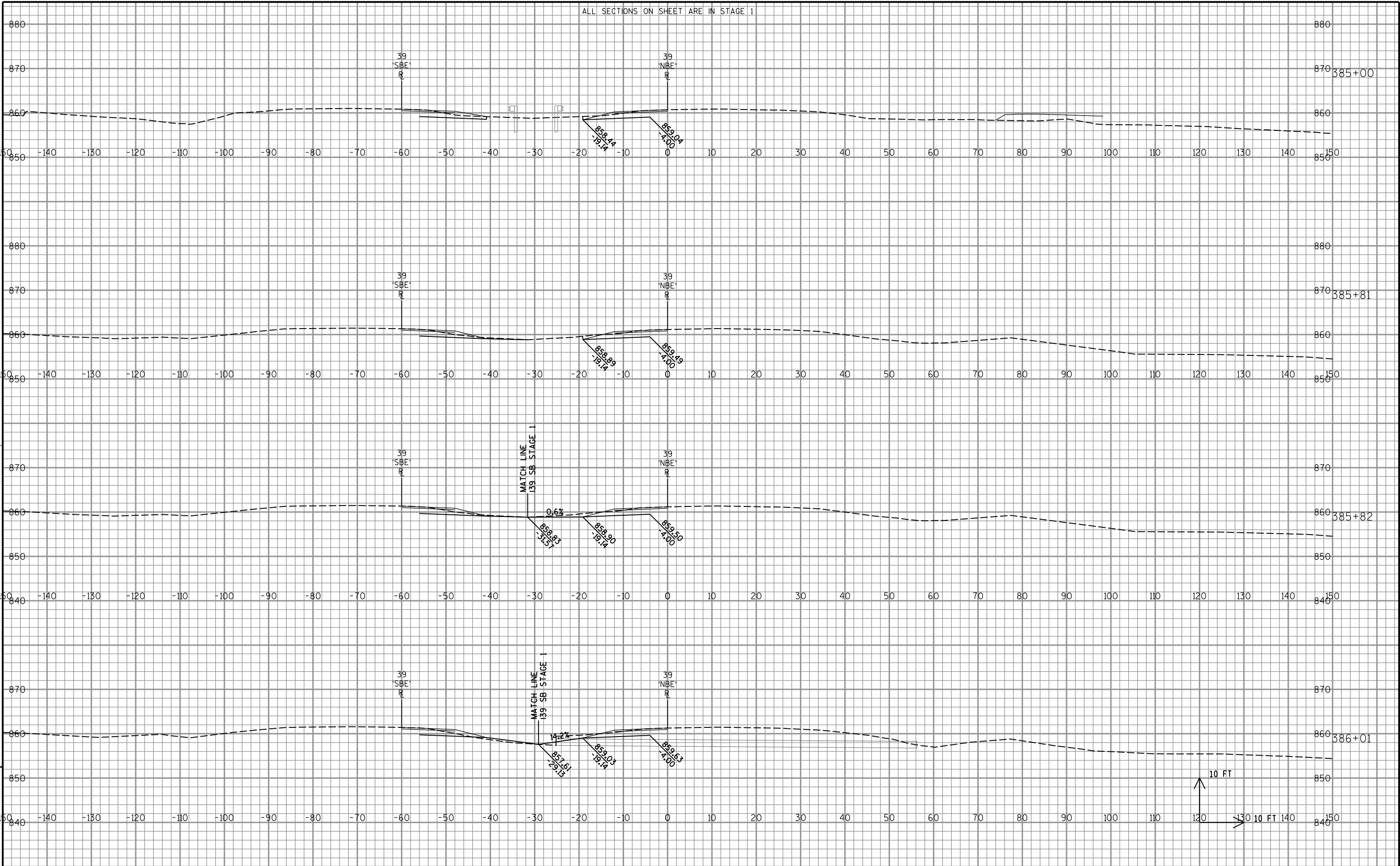


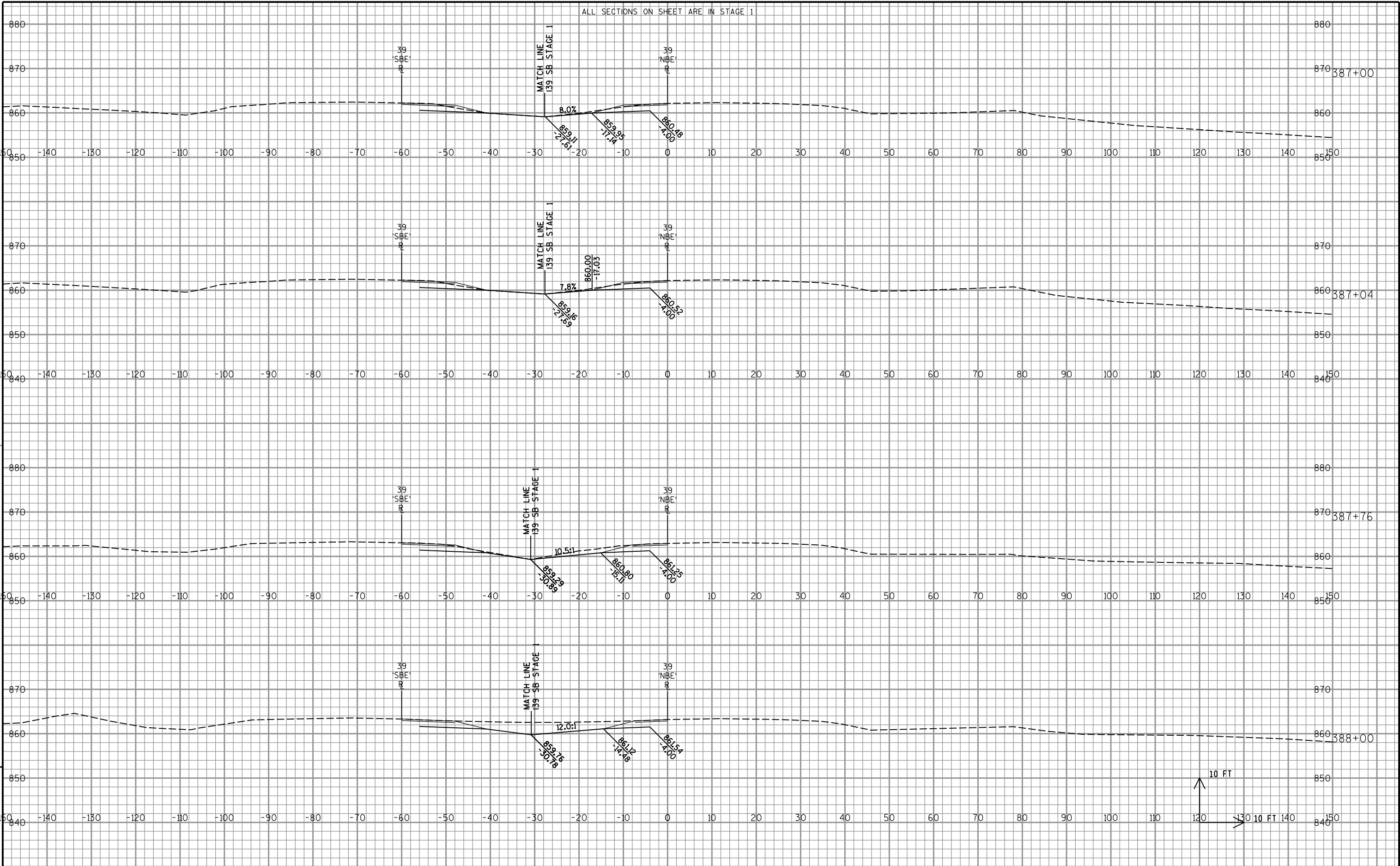


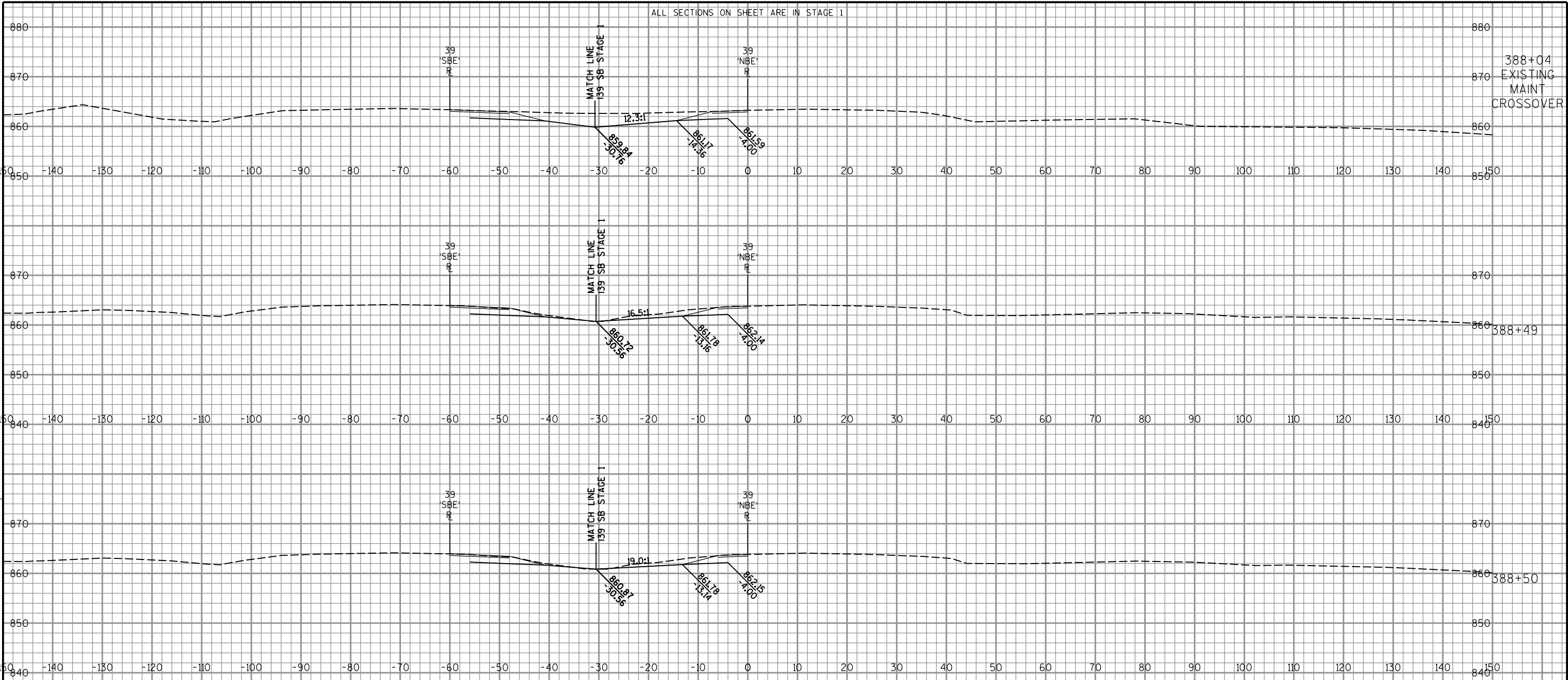




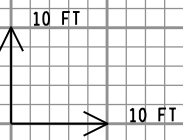




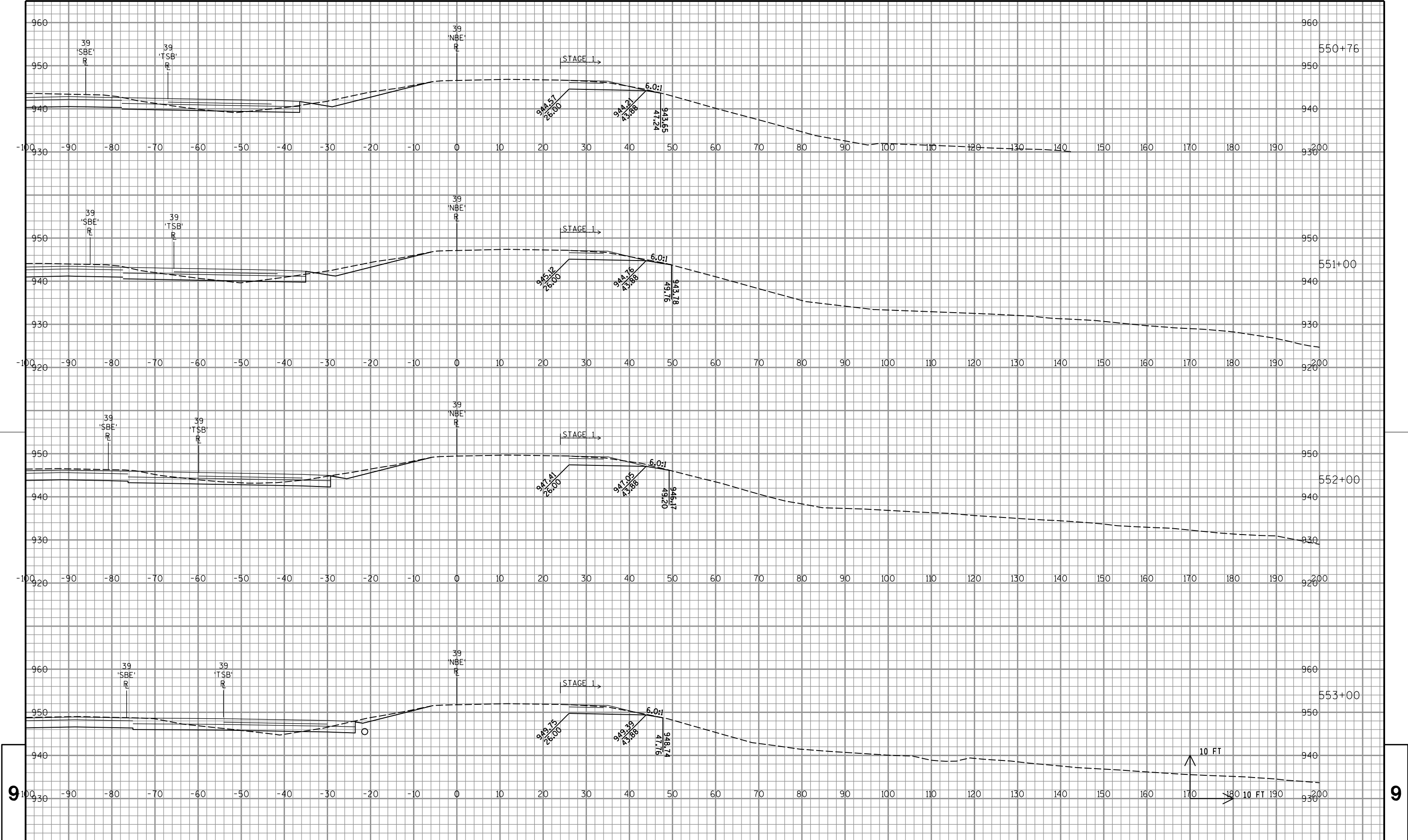




9



9



PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 NB

SHEET

785

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\090101_xs.dgn

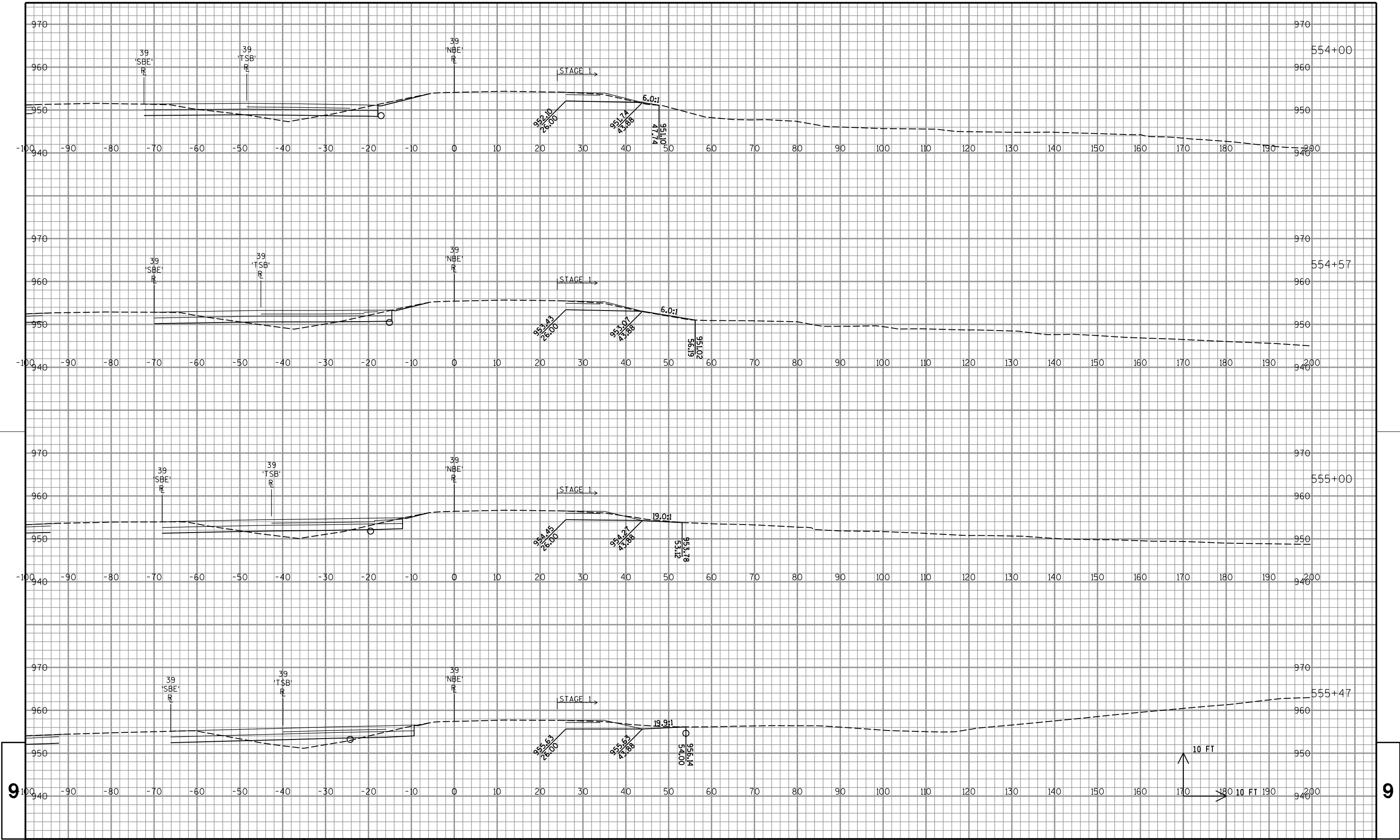
PLOT DATE : 10/16/2015

PLOT BY : ct1

PLOT NAME :

PLOT SCALE : 1:20

WISDOT/CADDs SHEET 21



PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 NB

SHEET

786

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\090101_xs.dgn

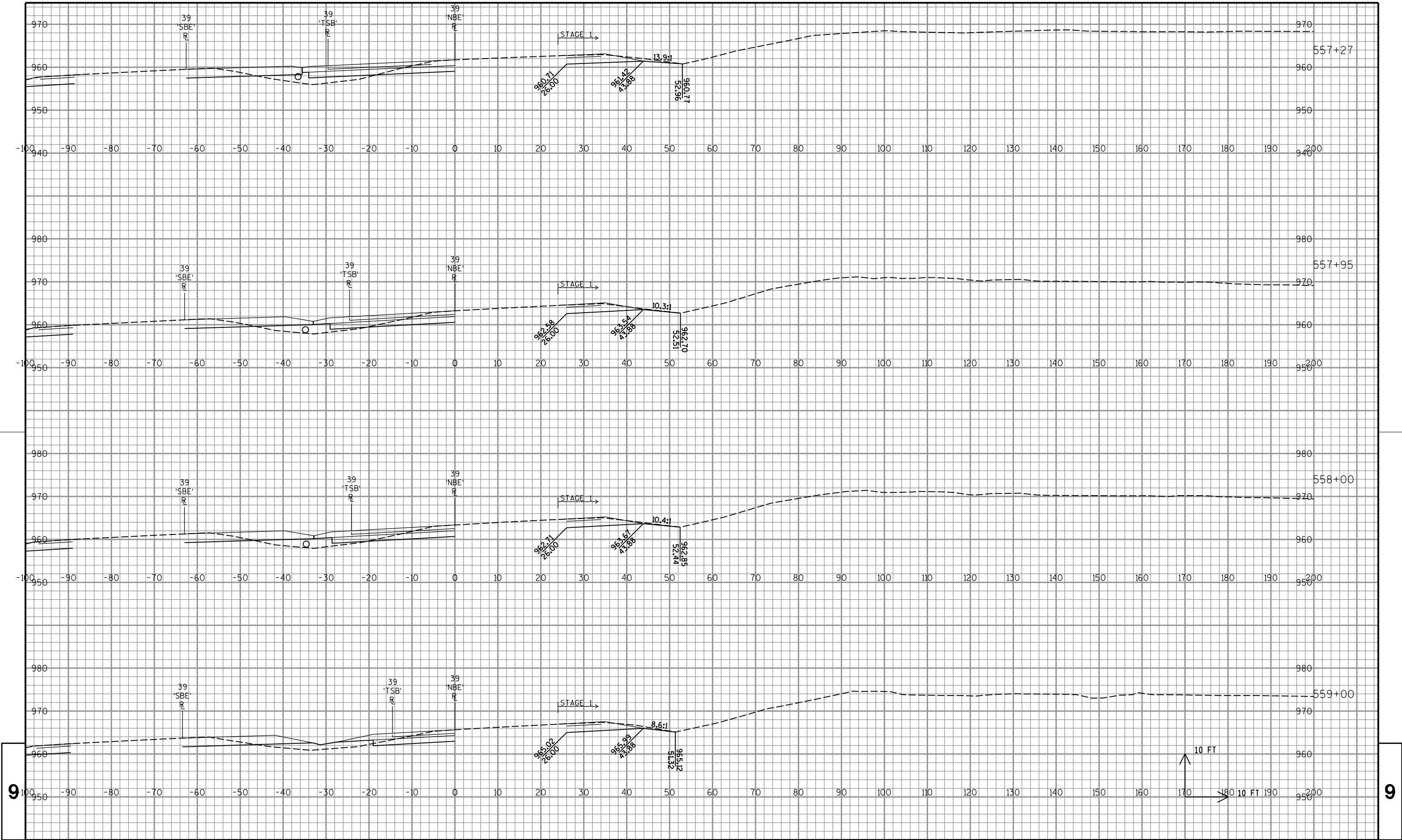
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PLOT BY : ct1

PLOT NAME :

PLOT SCALE : 1:20

WISDOT/CADDs SHEET 21



PROJECT NO:1007-10-79

HWY:IH 39

COUNTY:DANE

CROSS SECTIONS:IH 39/90 NB

SHEET

788

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\090101_xs.dgn

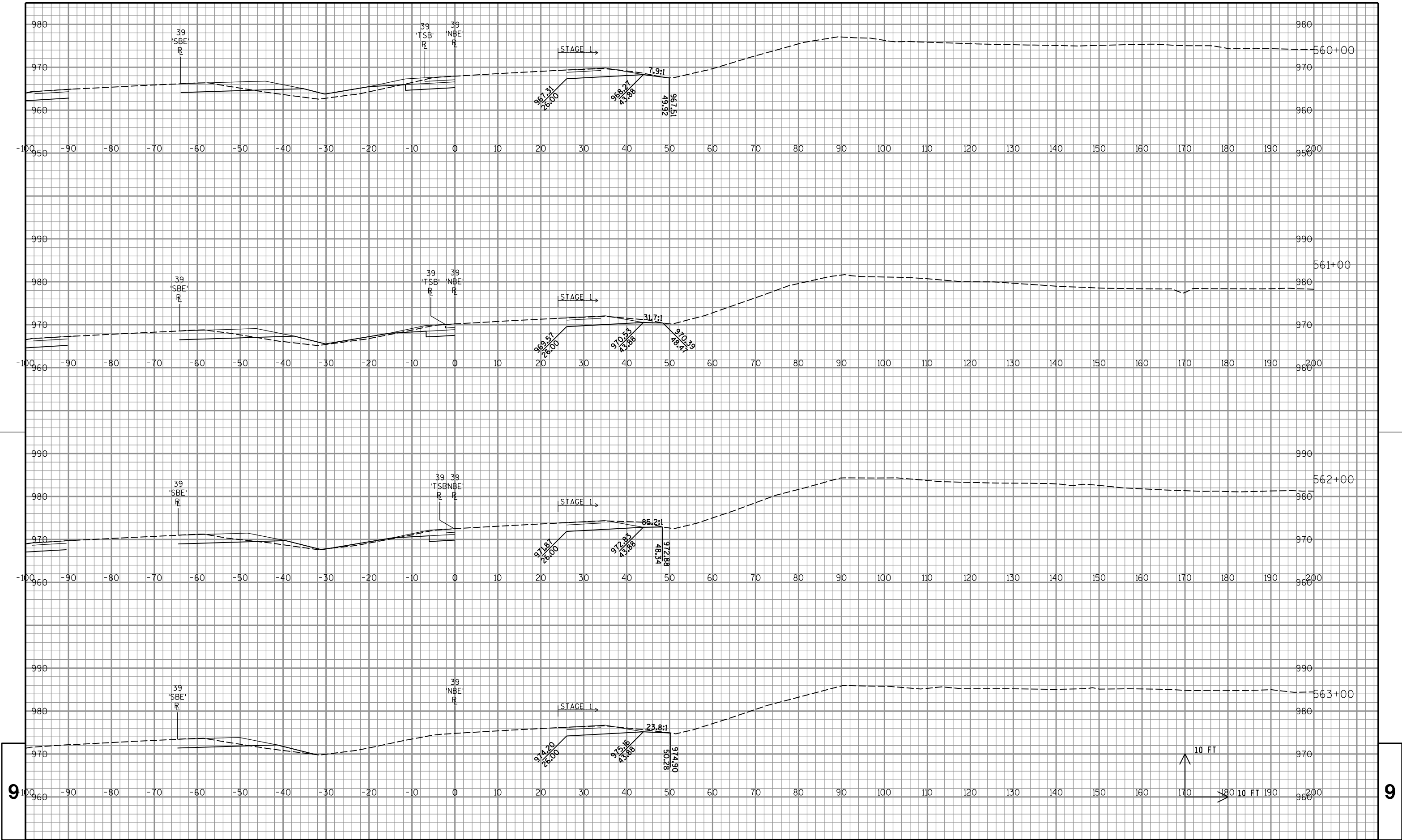
PLOT DATE : 10/16/2015

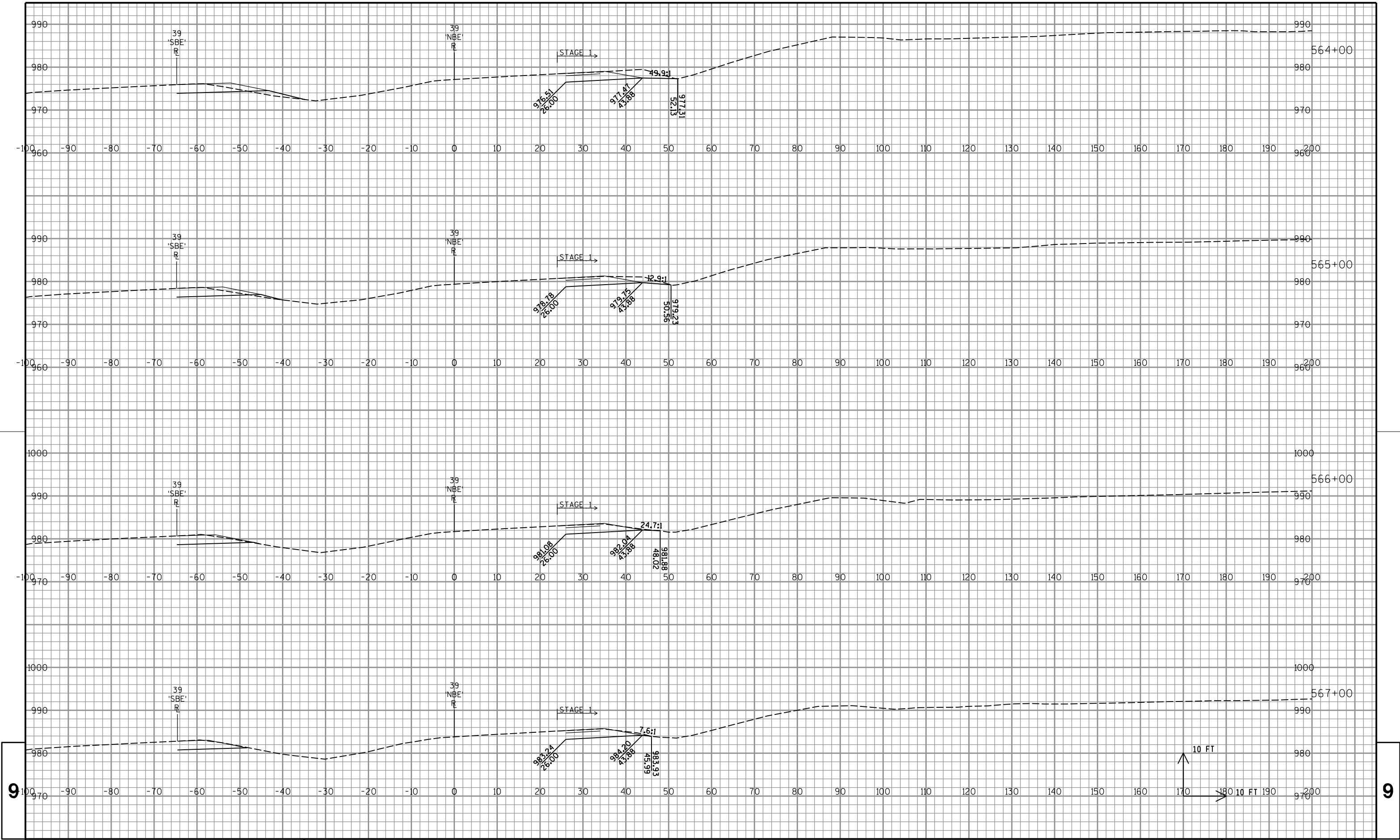
PLOT BY : ct1

PLOT NAME :

PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21





PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 NB

SHEET 790

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\090101_xs.dgn

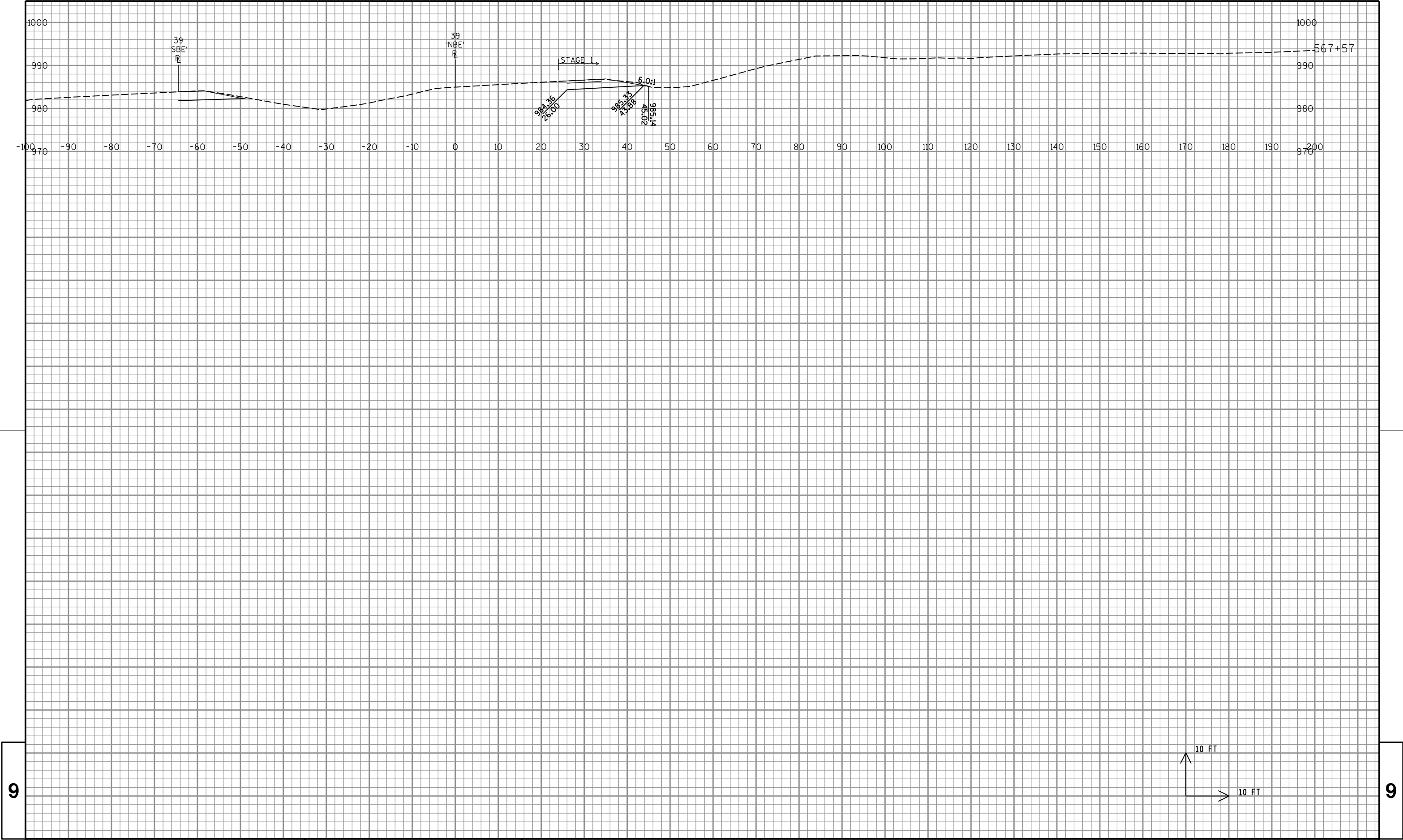
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PLOT NAME :

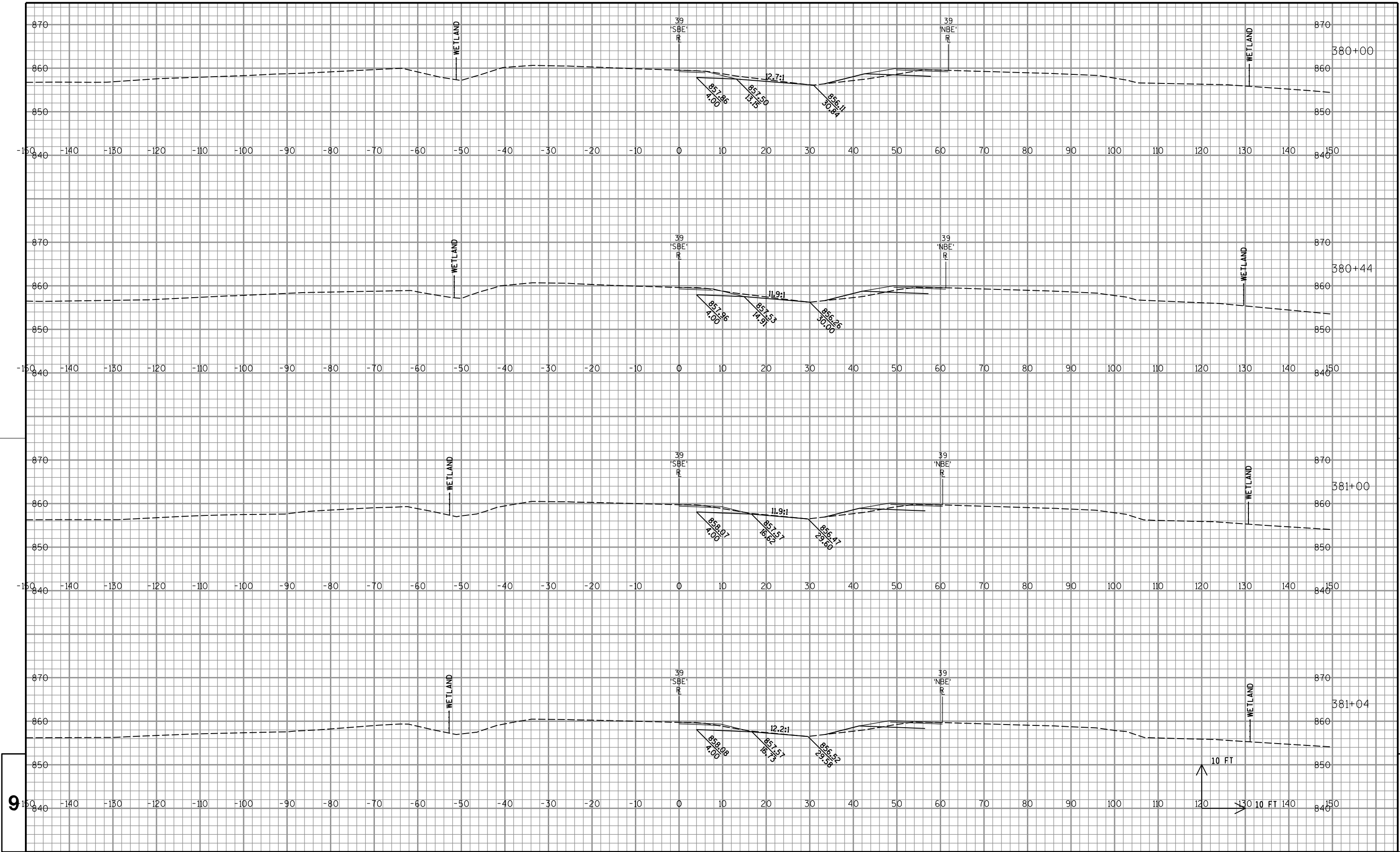
PLOT SCALE : 1:20

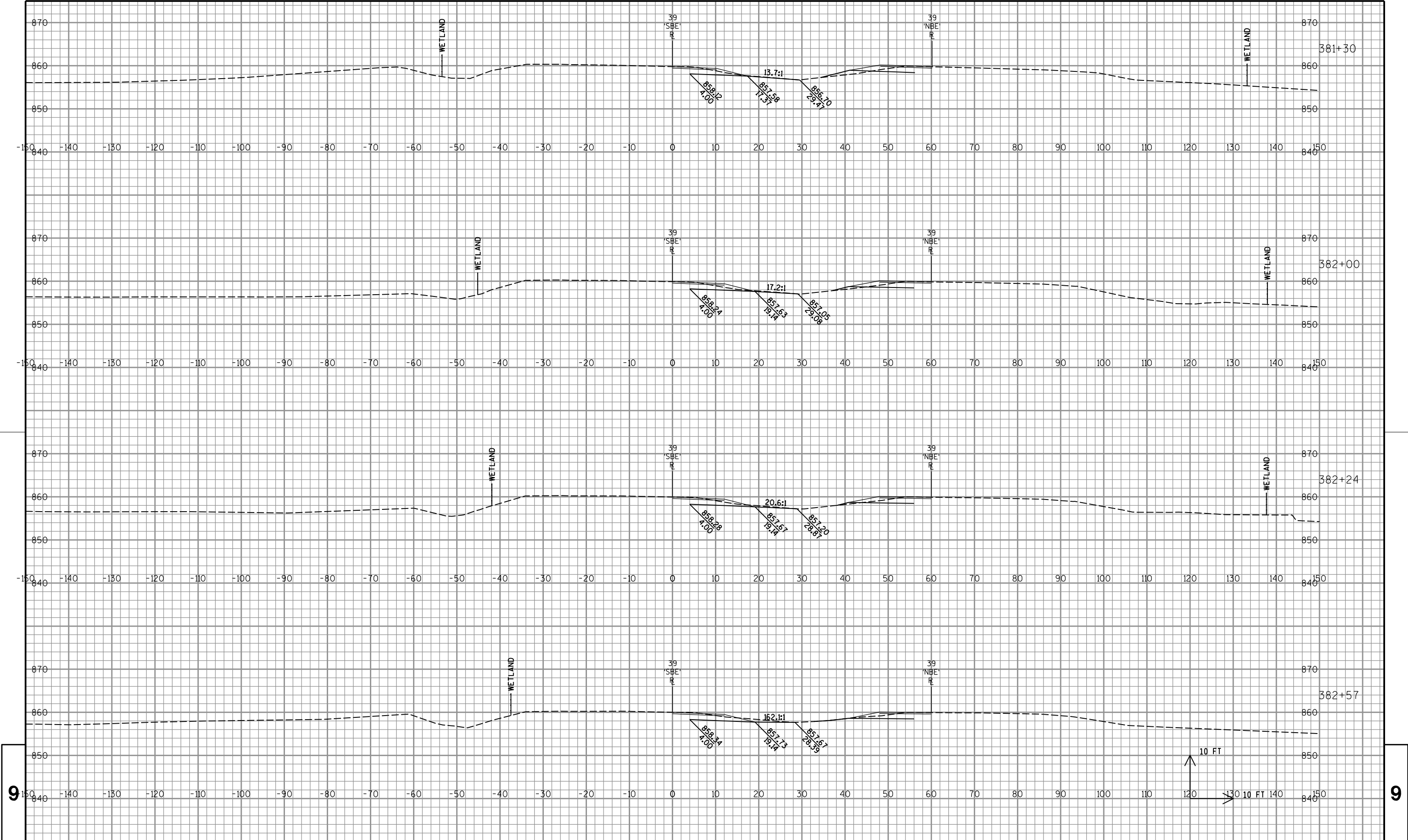
WISDOT/CADDs SHEET 21

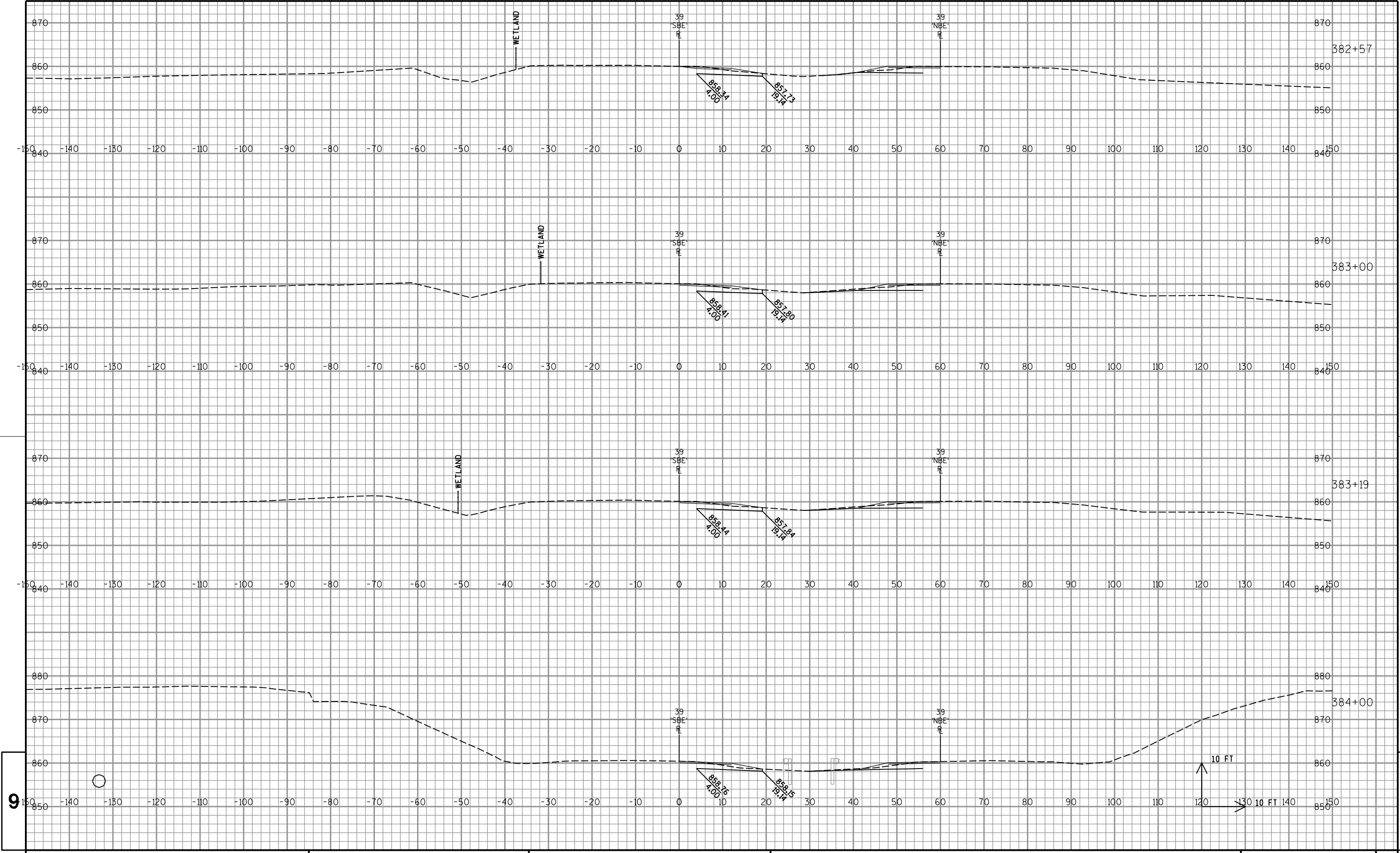


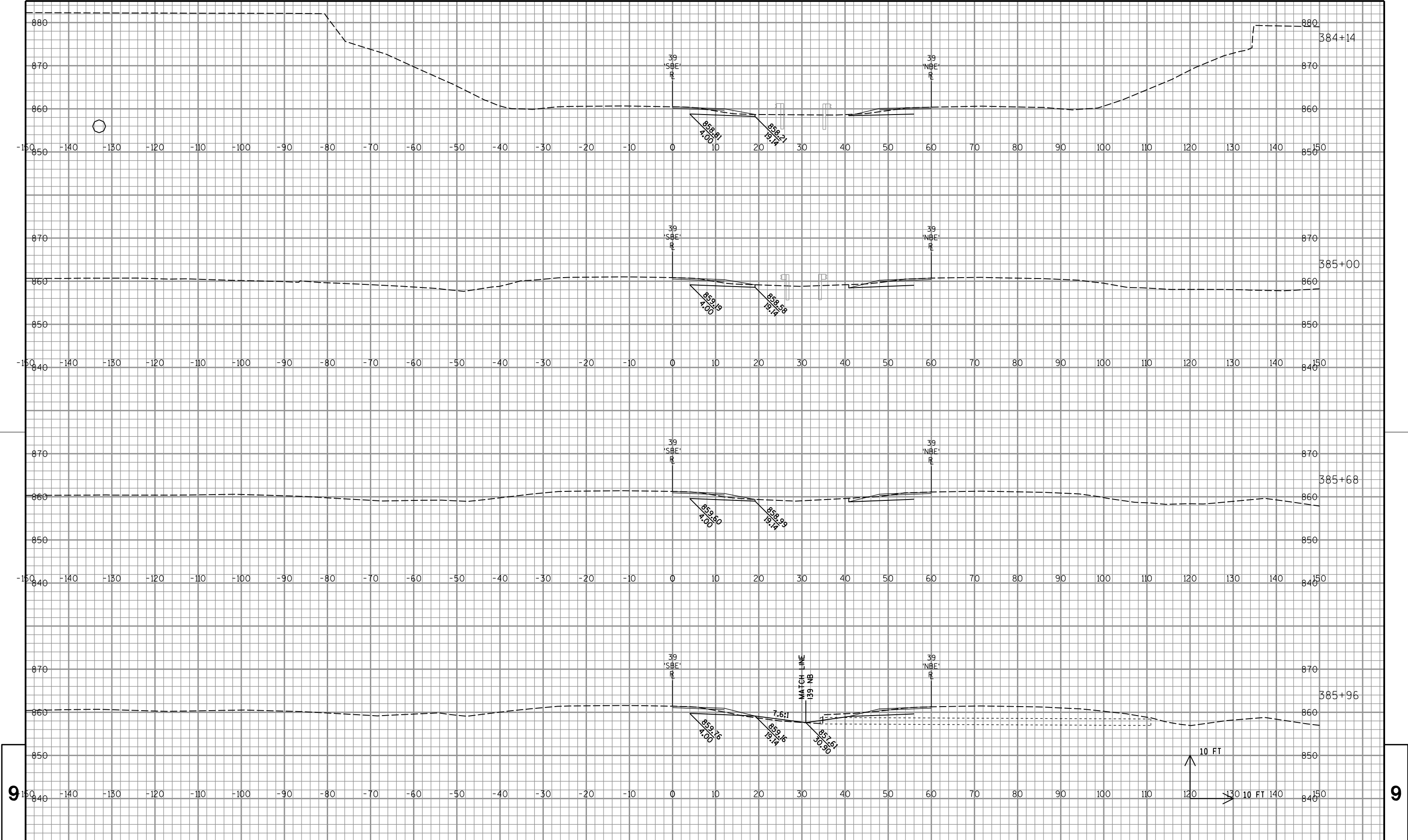
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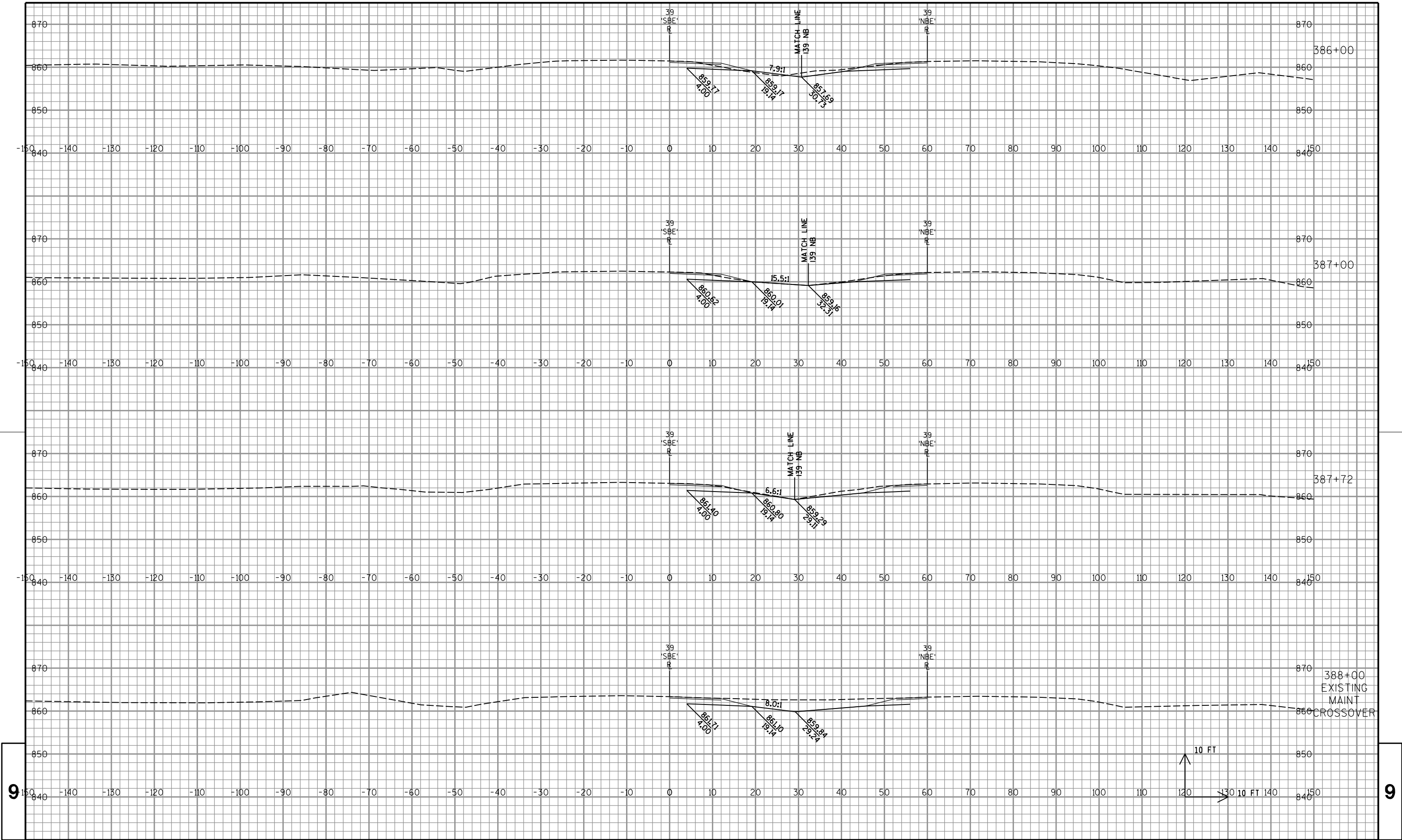
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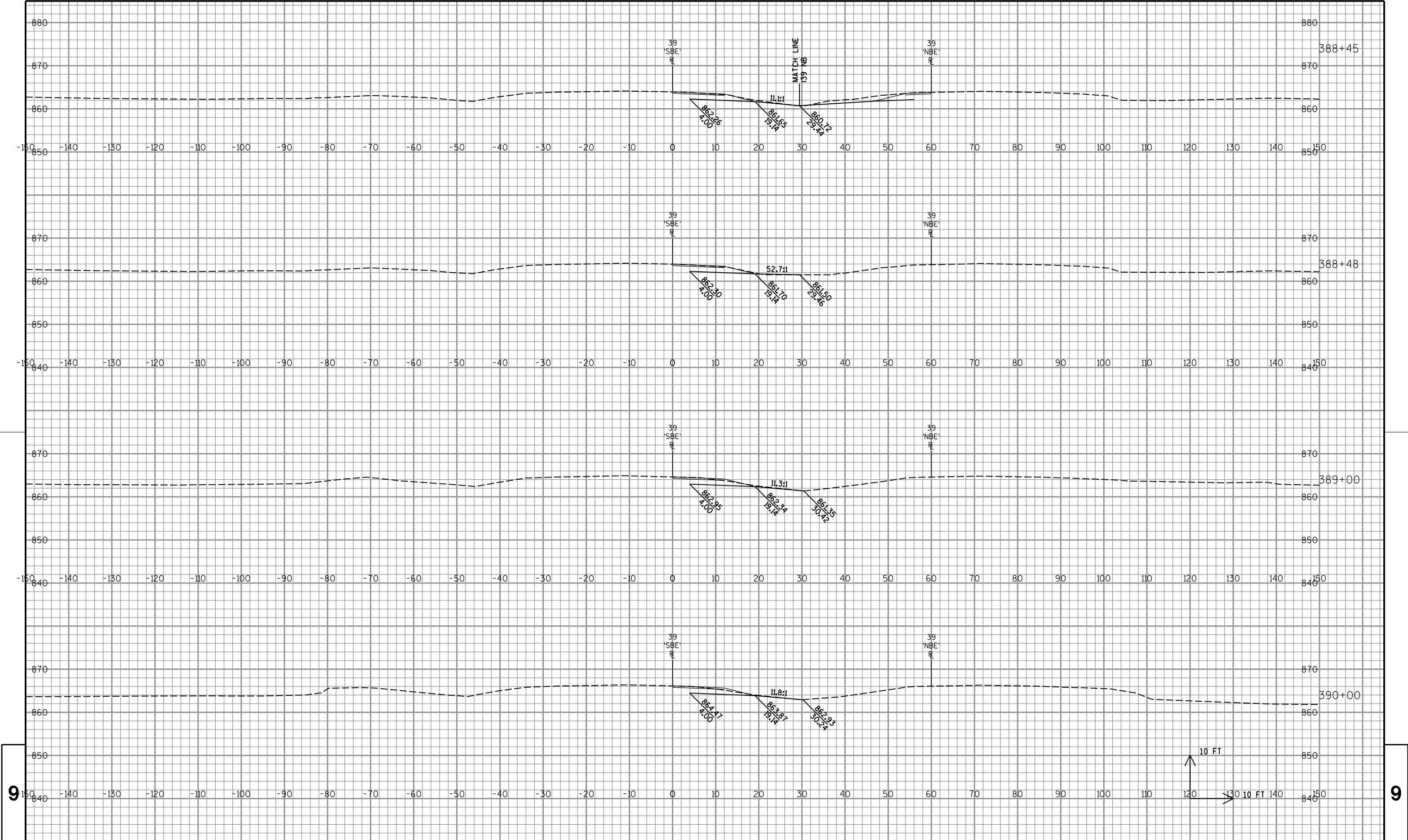


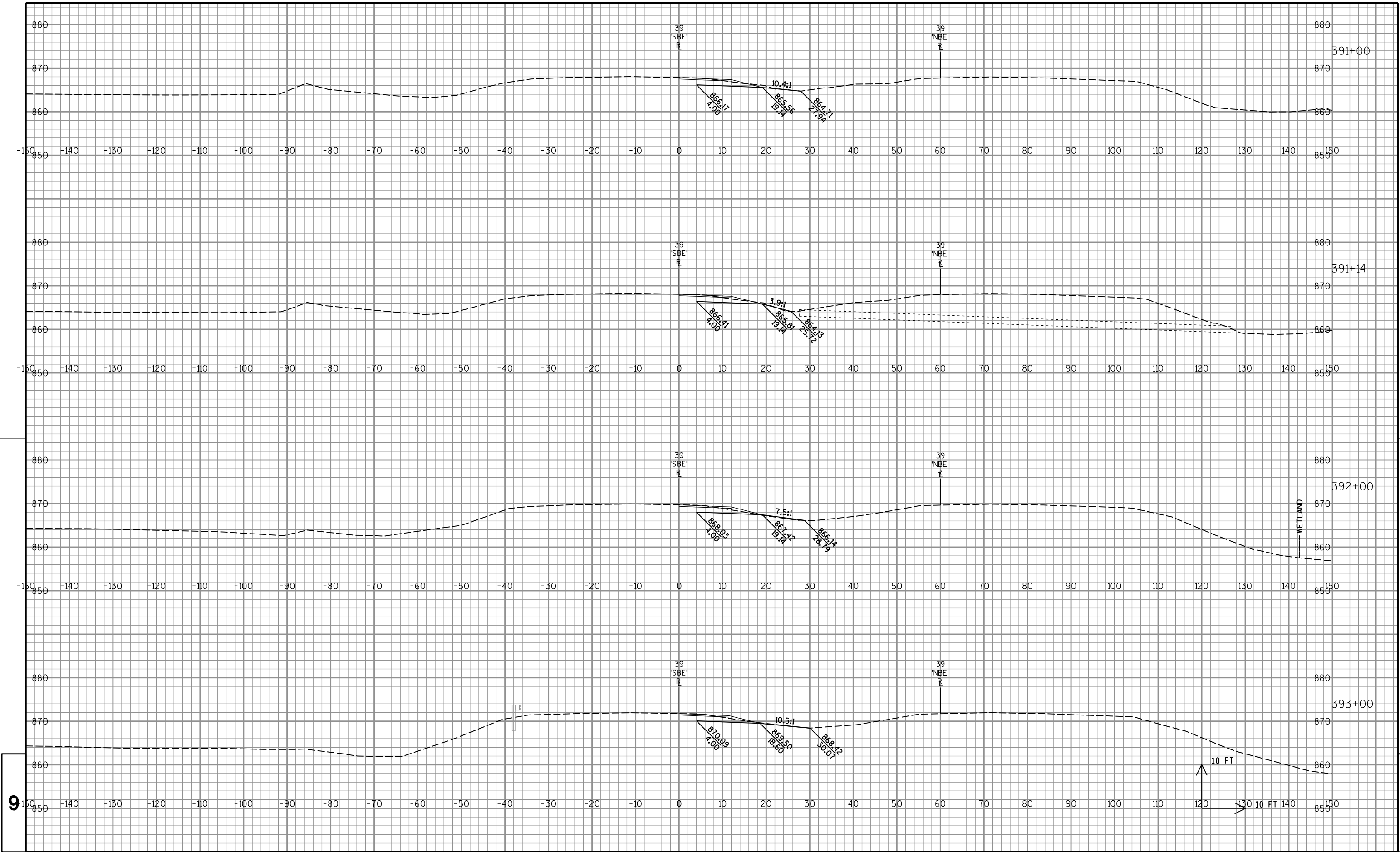


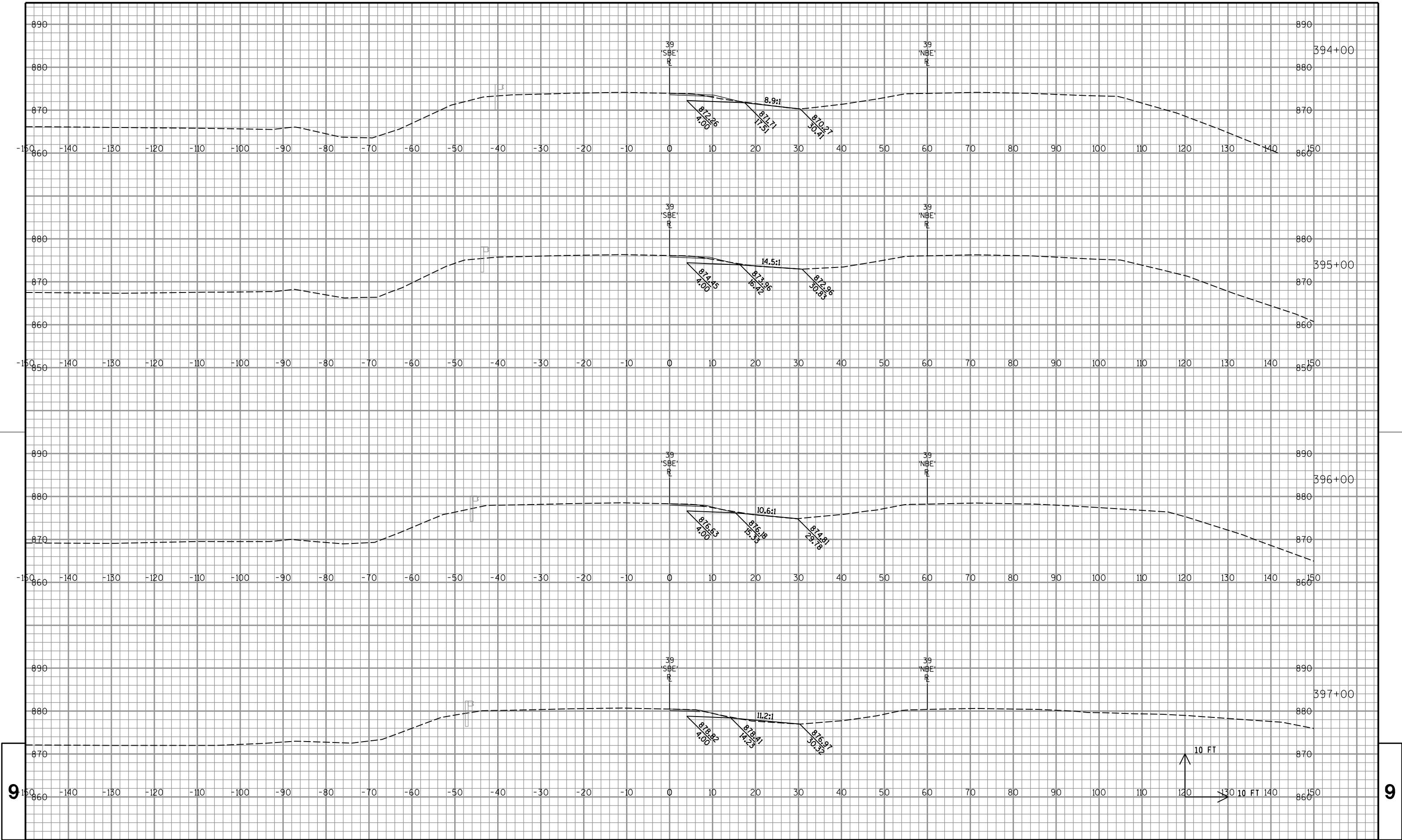












PROJECT NO: 1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB STAGE 1 TEMPORARY

SHEET

799

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\090101_xs.dgn

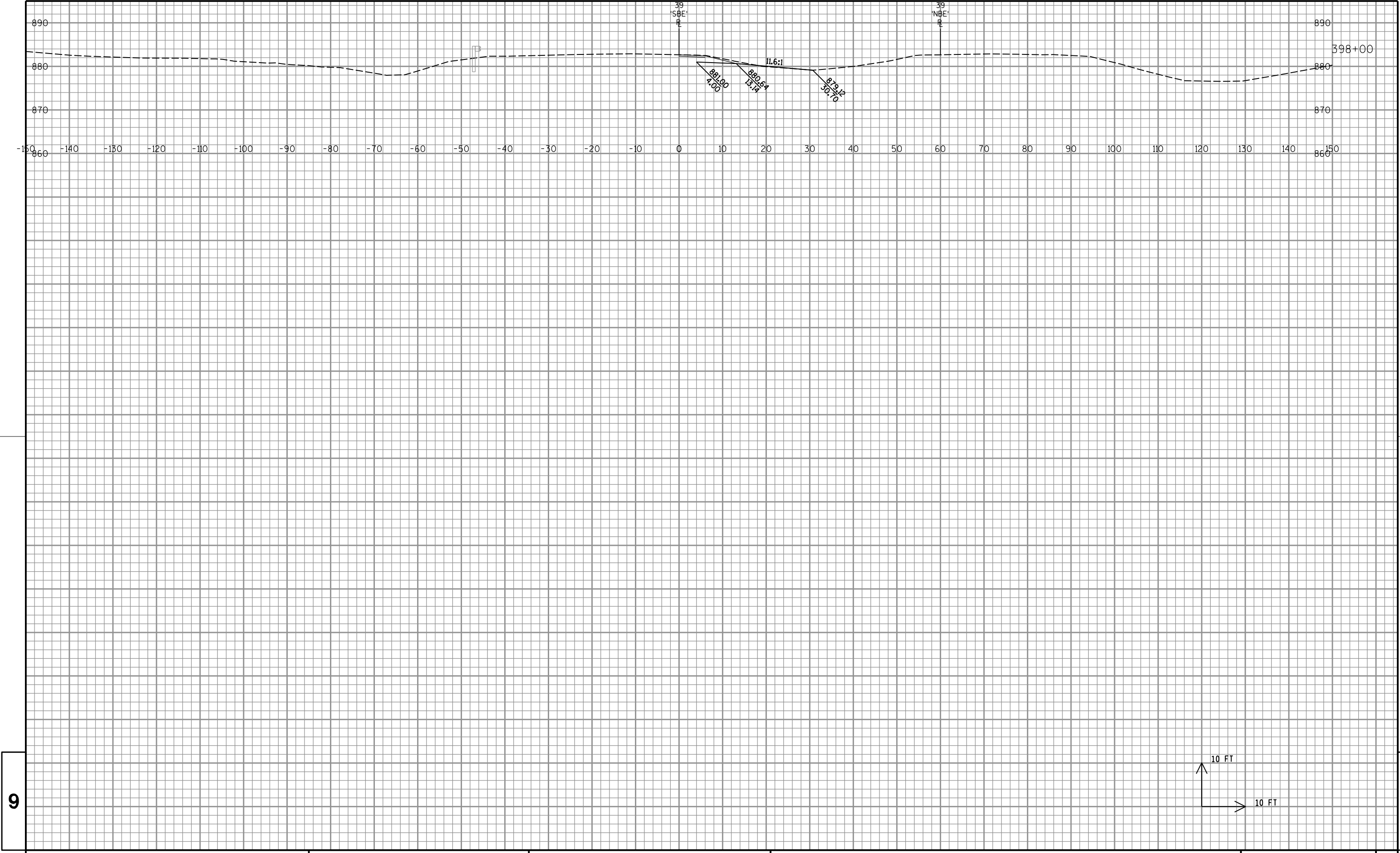
PLOT DATE : 10/16/2015

PLOT BY : ct1

PLOT NAME :

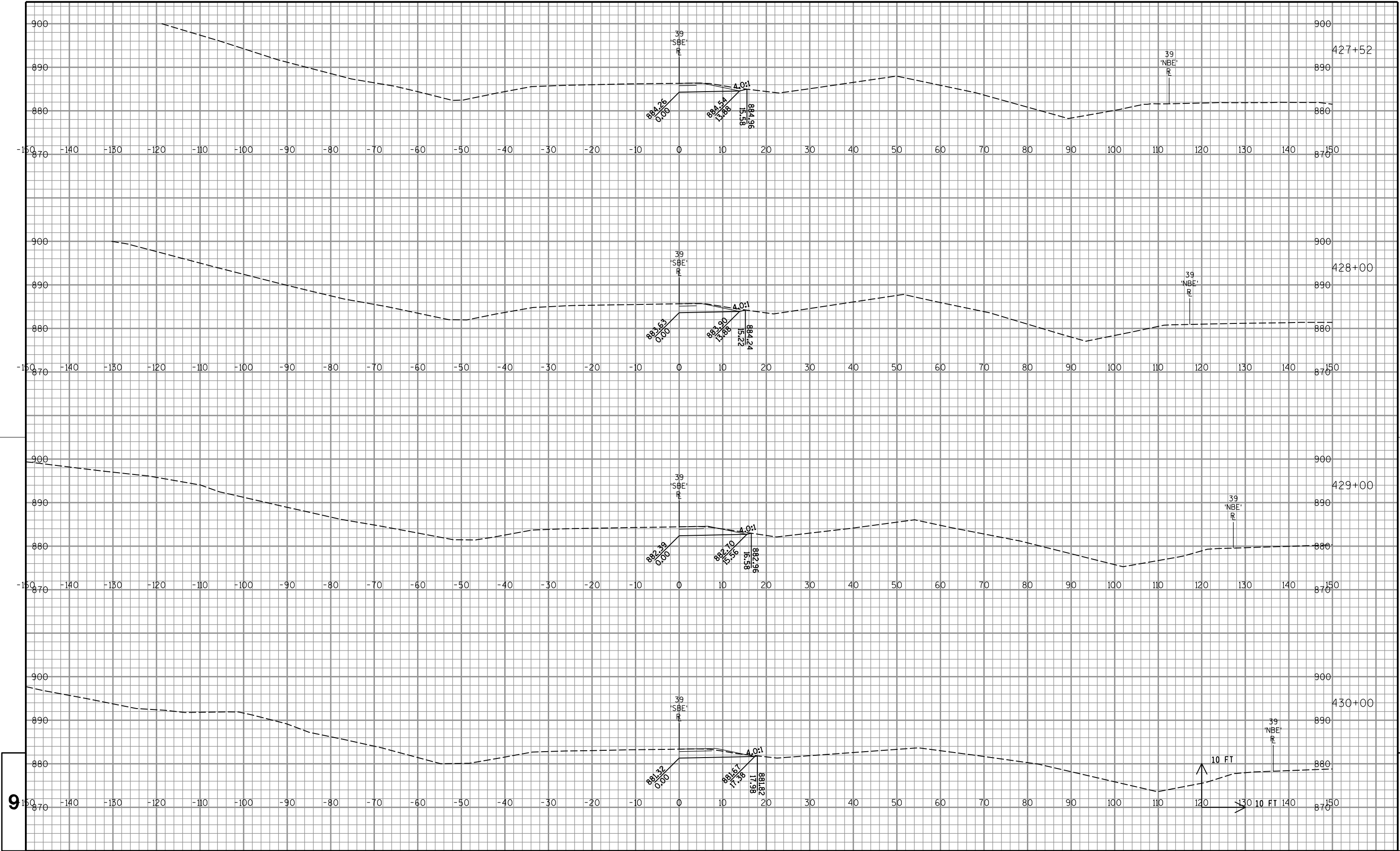
PLOT SCALE : 1:20

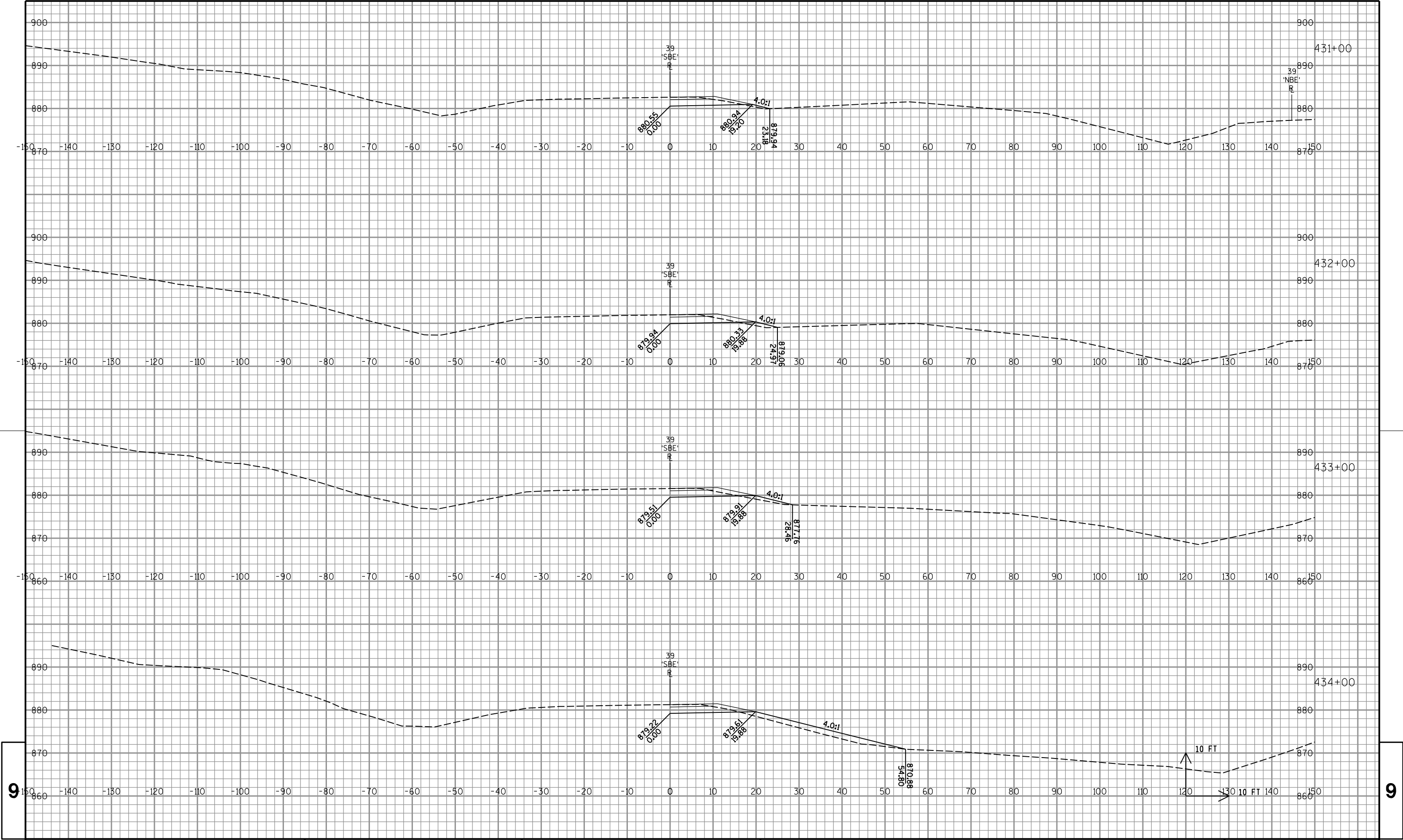
WISDOT/CADDs SHEET 21



9

9





PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: IH 39/90 SB STAGE 1 TEMPORARY

SHEET

802

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\090101_xs.dgn

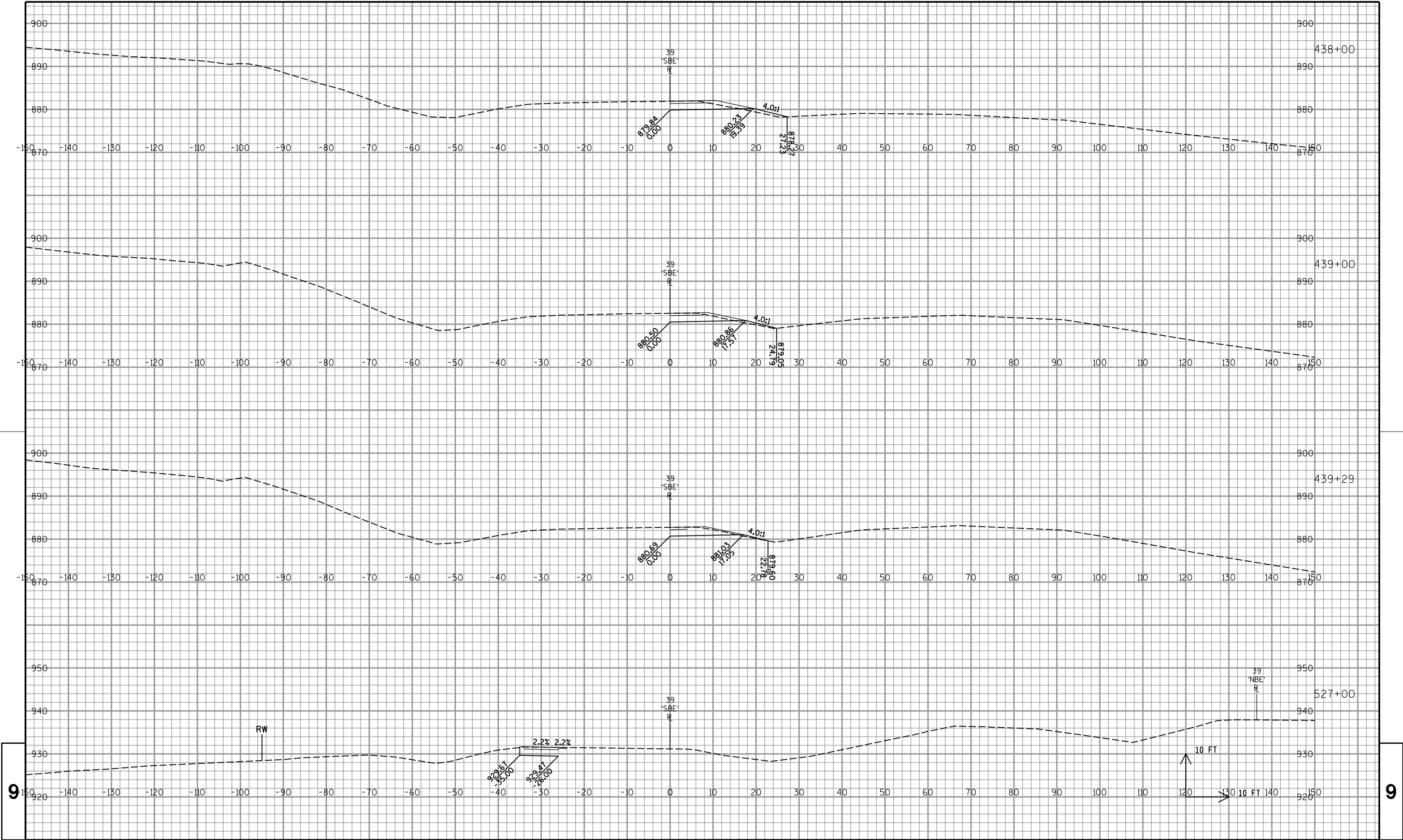
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PLOT BY : c+1

PLOT NAME :

PLOT SCALE : 1:20

WISDOT/CADDs SHEET 21



PROJECT NO:1007-10-79

HWY:IH 39

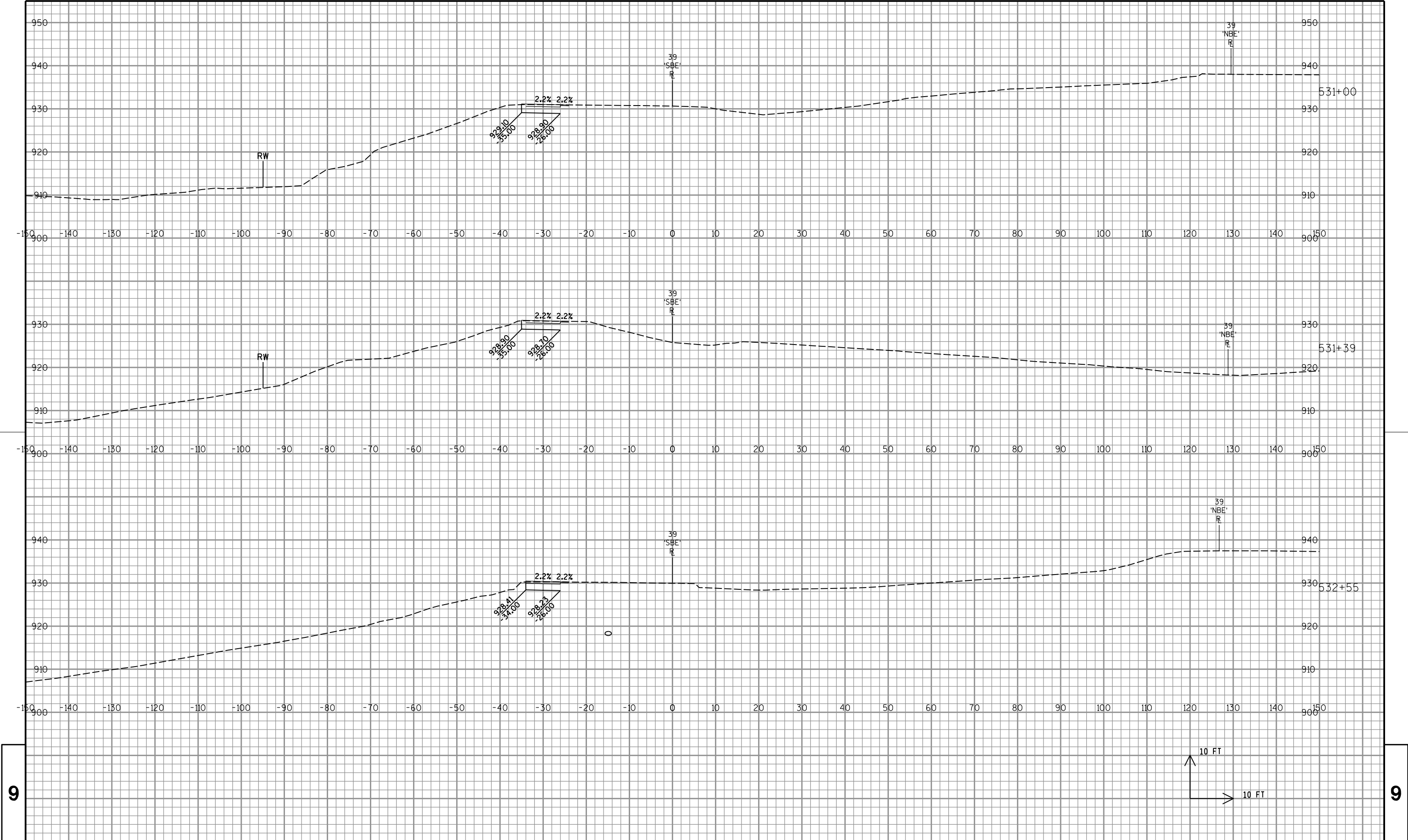
COUNTY:DANE

CROSS SECTIONS: IH 39/90 SB STAGE 1 TEMPORARY

SHEET

804

E



PROJECT NO:1007-10-79

HWY:IH 39

COUNTY:DANE

CROSS SECTIONS:IH 39/90 SB STAGE 1 TEMPORARY

SHEET

806

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\090101_xs.dgn

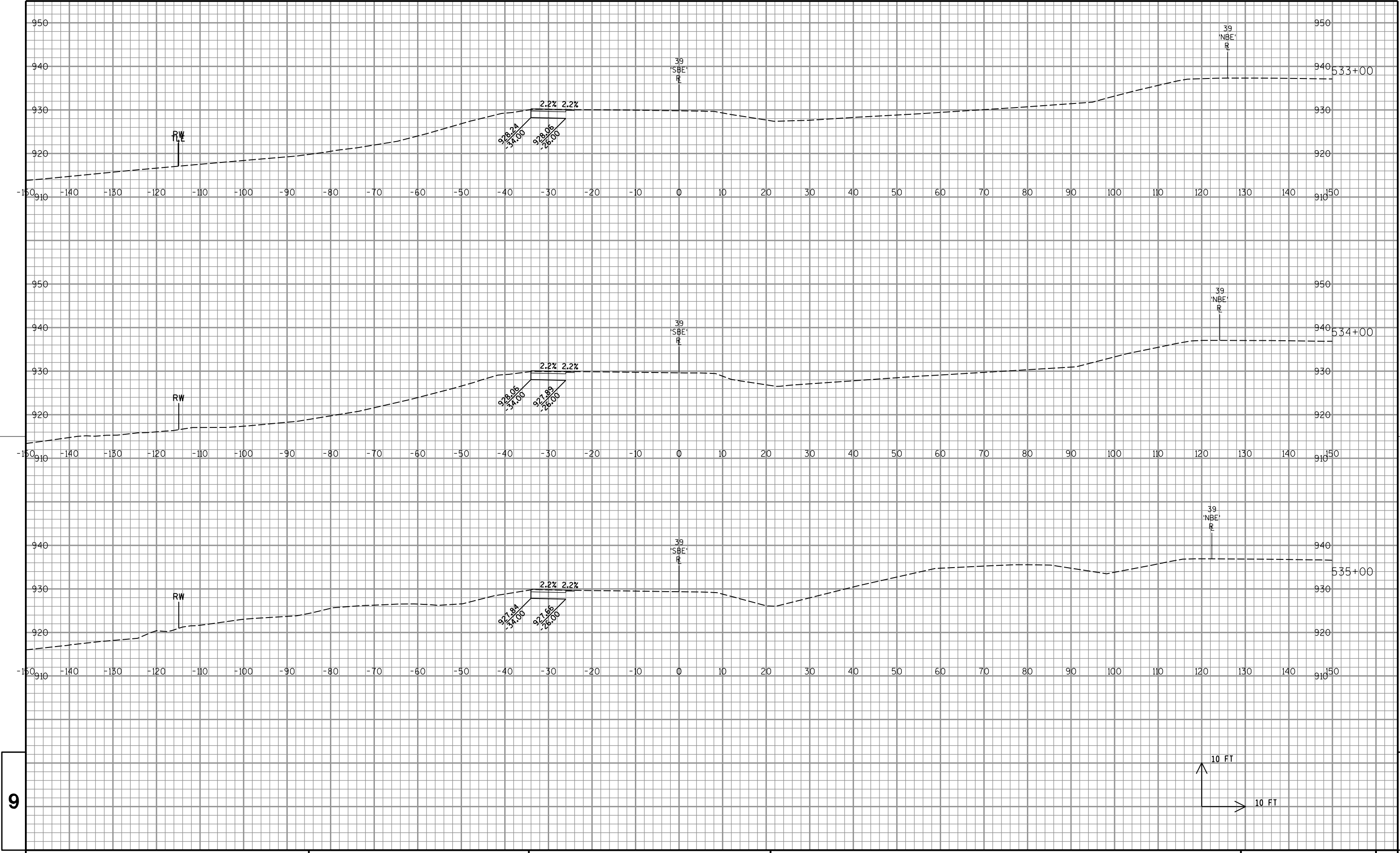
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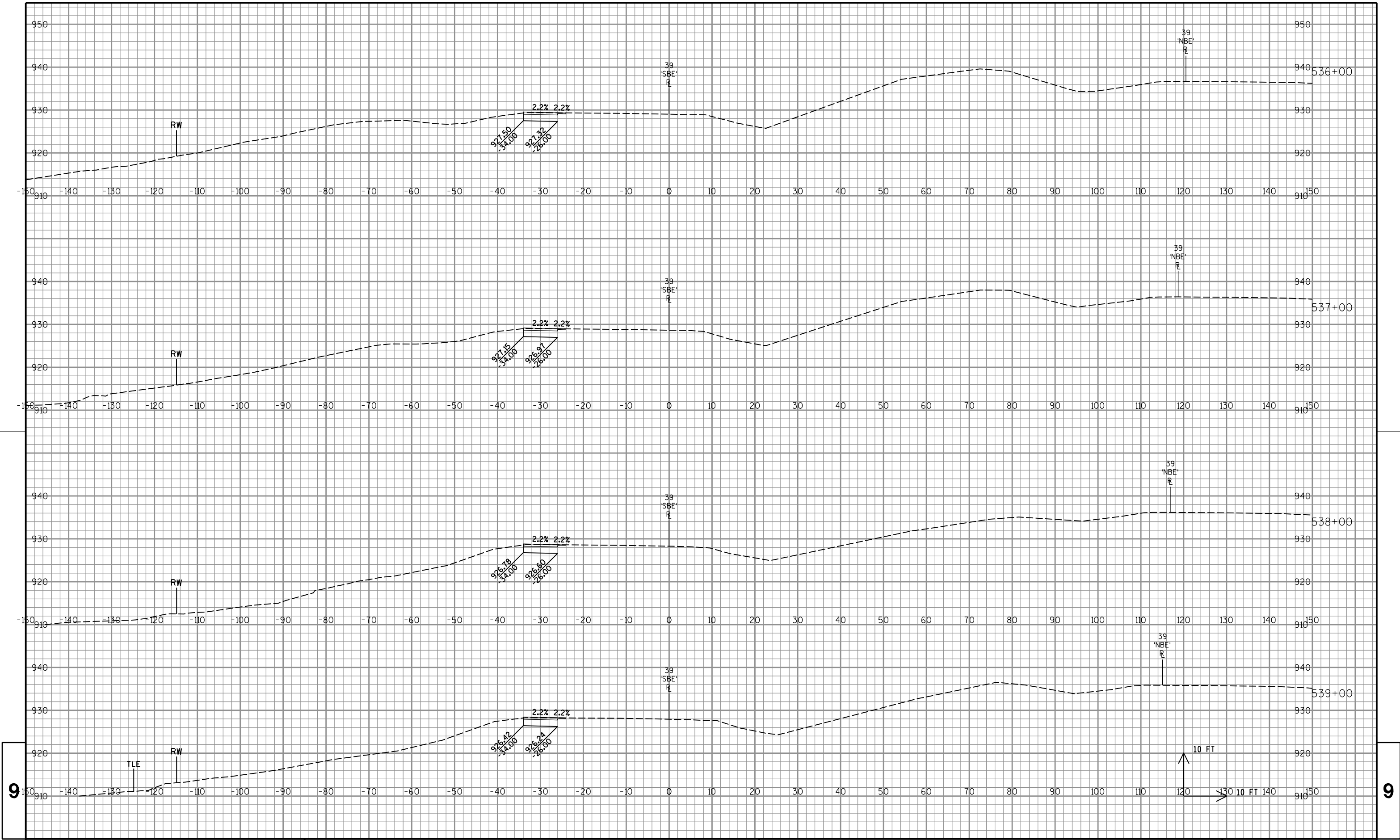
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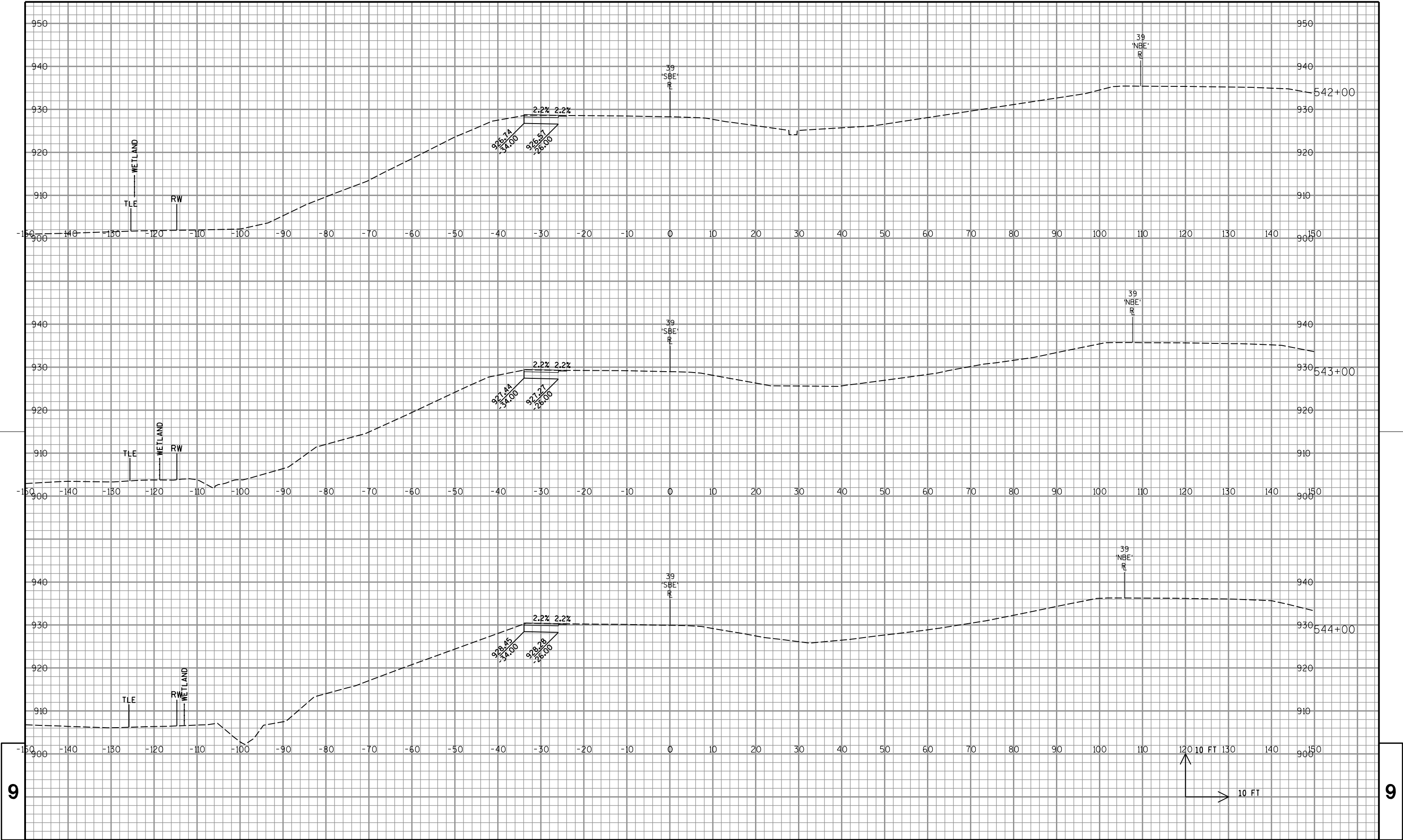
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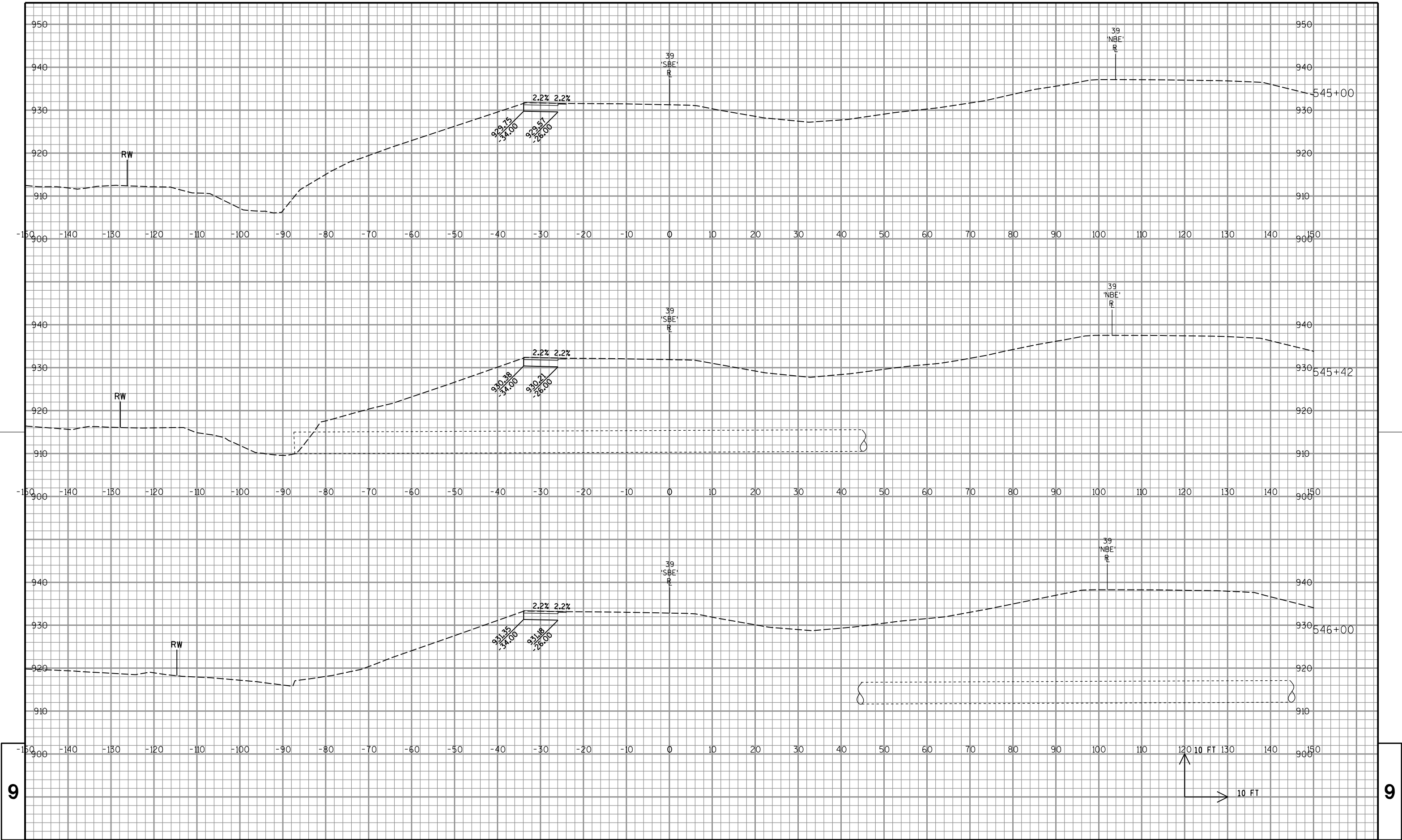
PLOT SCALE : 1:20

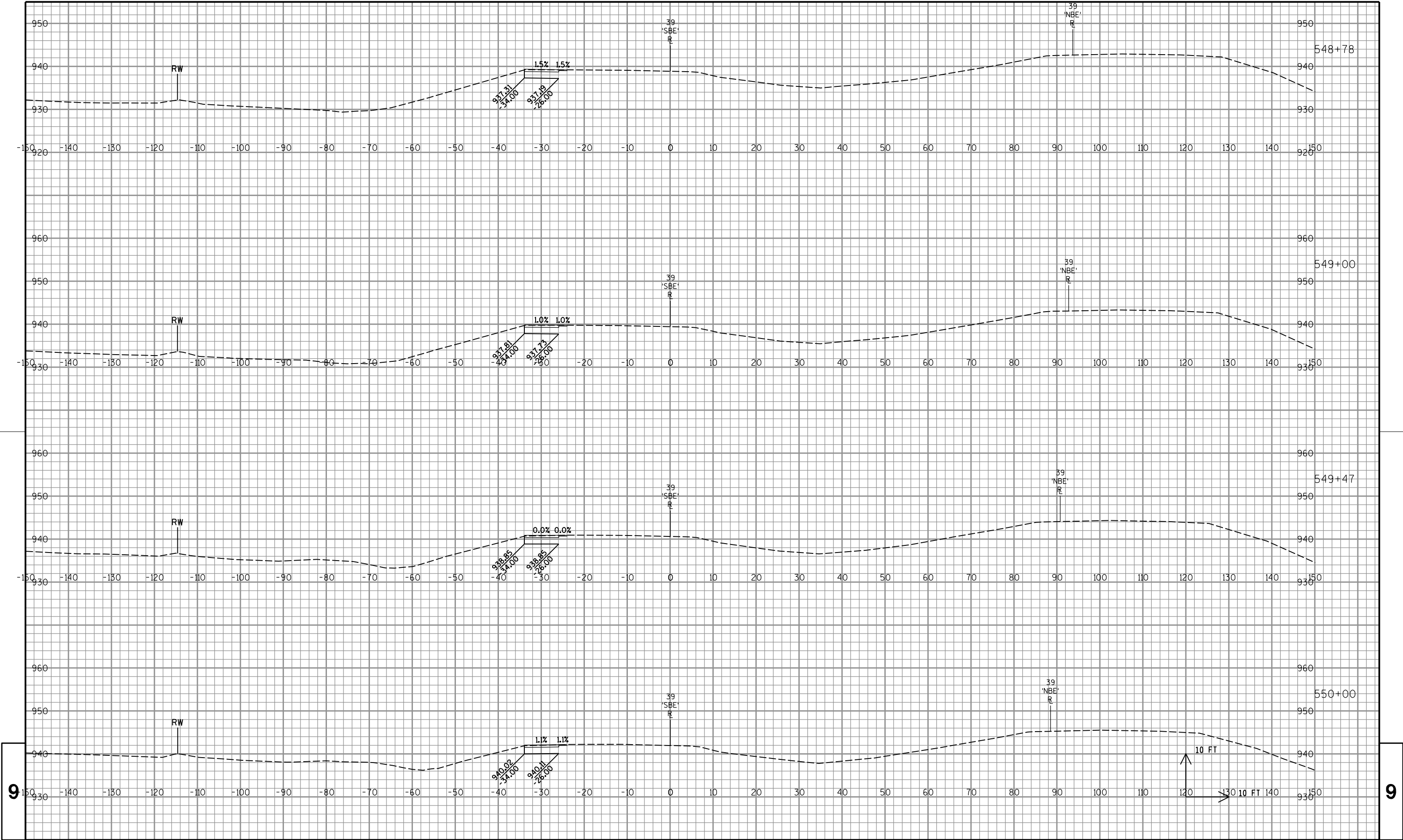
WISDOT/CADDs SHEET 21











PROJECT NO:1007-10-79

HWY:IH 39

COUNTY:DANE

CROSS SECTIONS:IH 39/90 SB STAGE 1 TEMPORARY

SHEET

813

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071079\Sheet\Plan\090101_xs.dgn

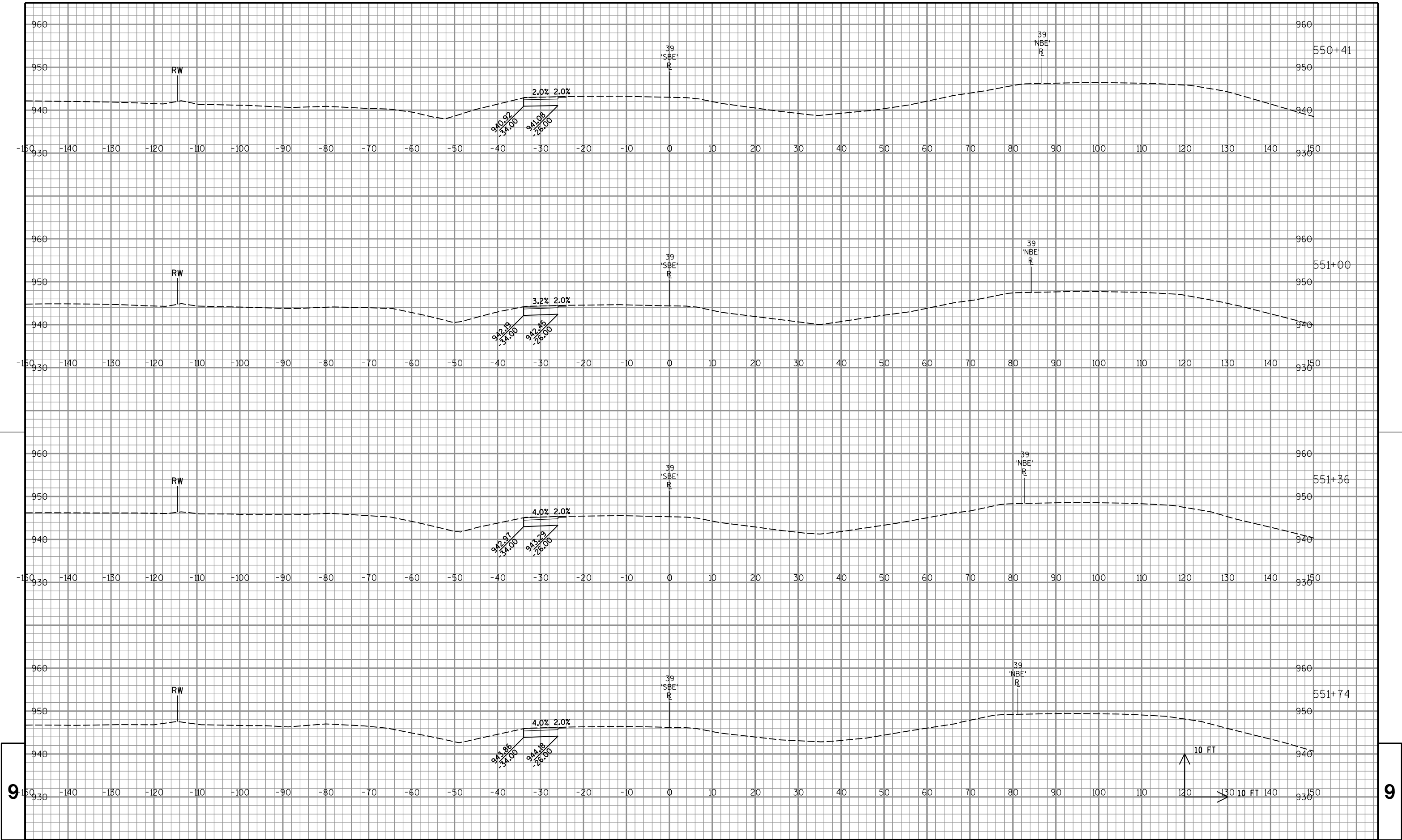
PLOT DATE : 10/16/2015

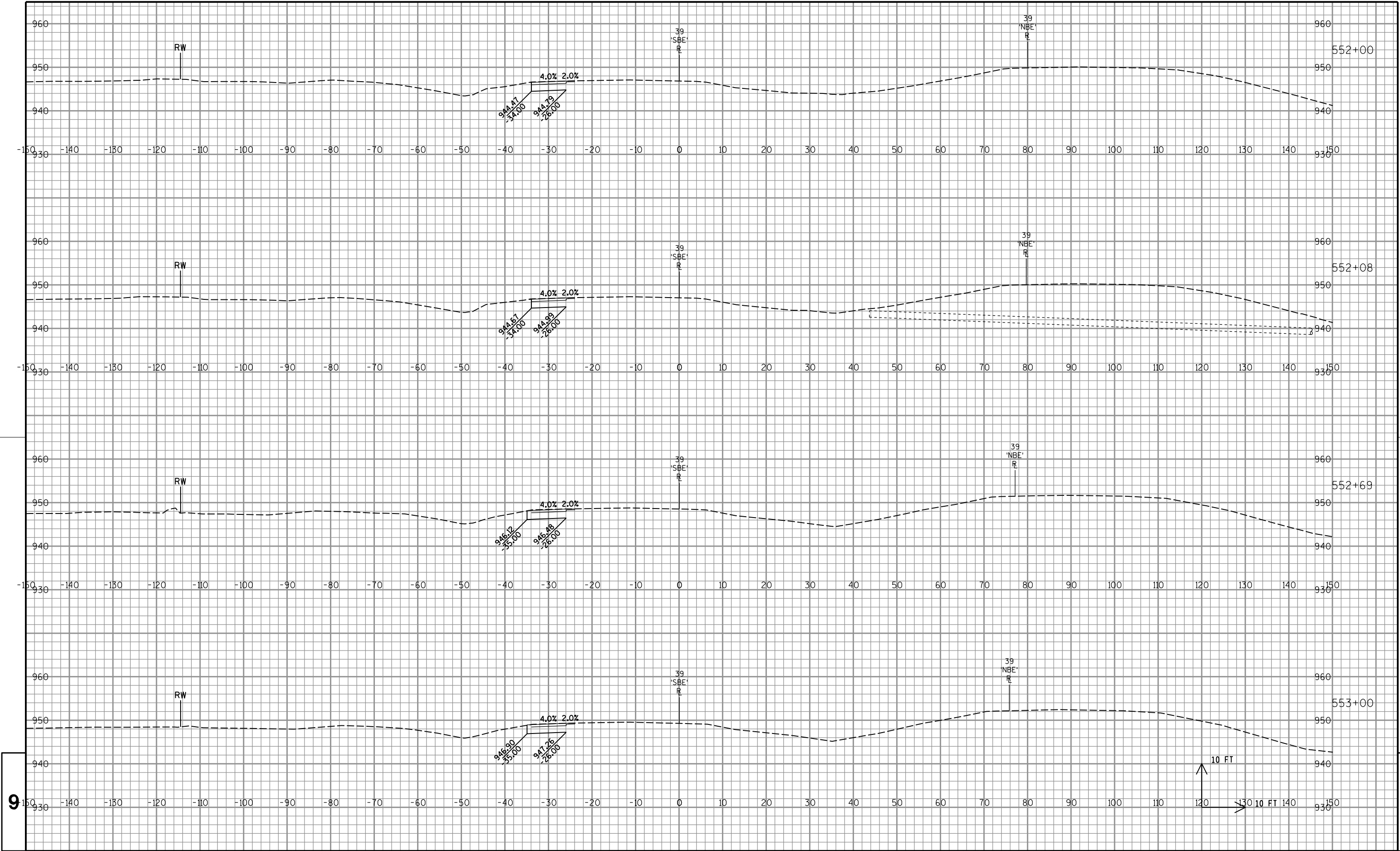
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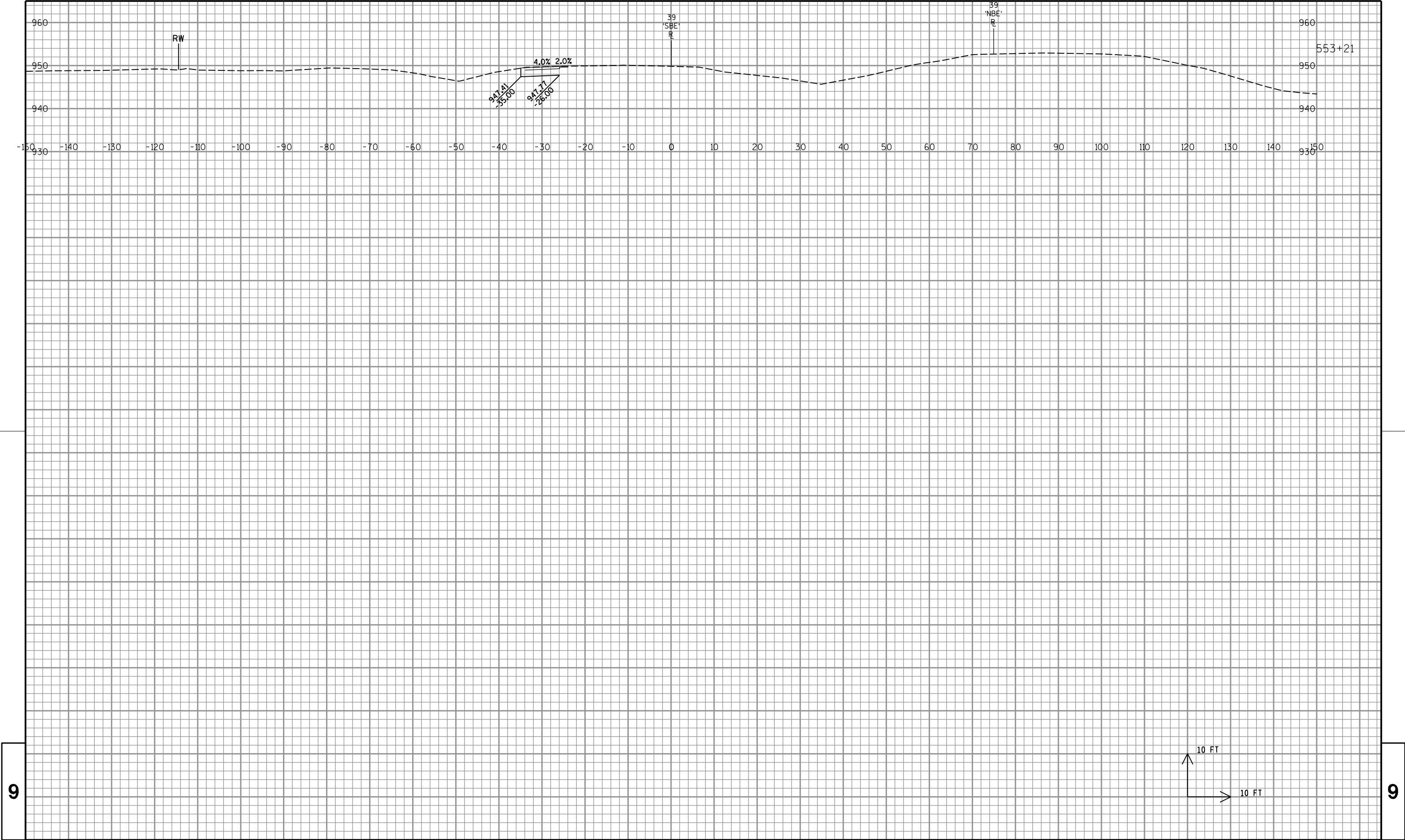
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PLOT SCALE : 1:20

WISDOT/CADDs SHEET 21

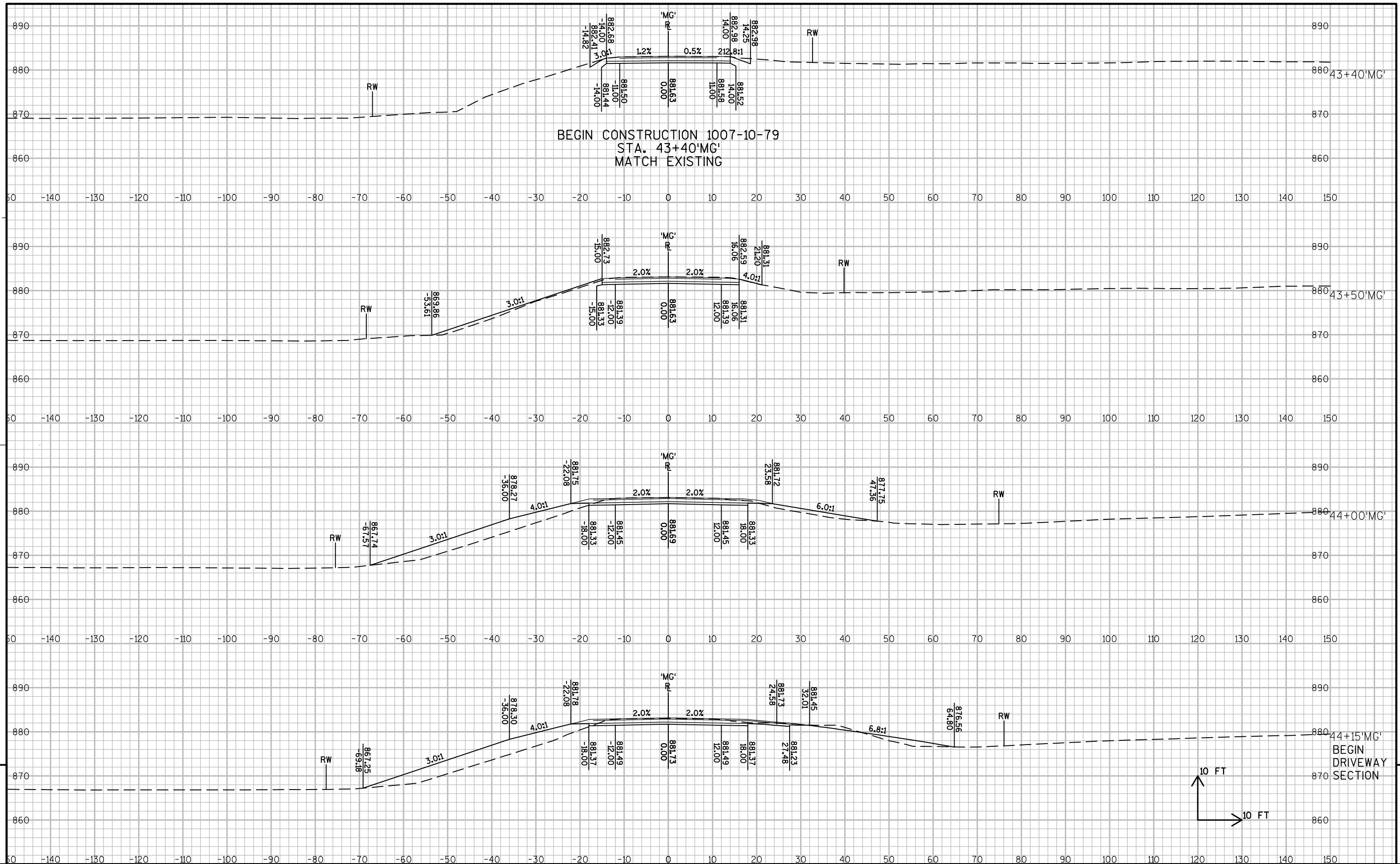


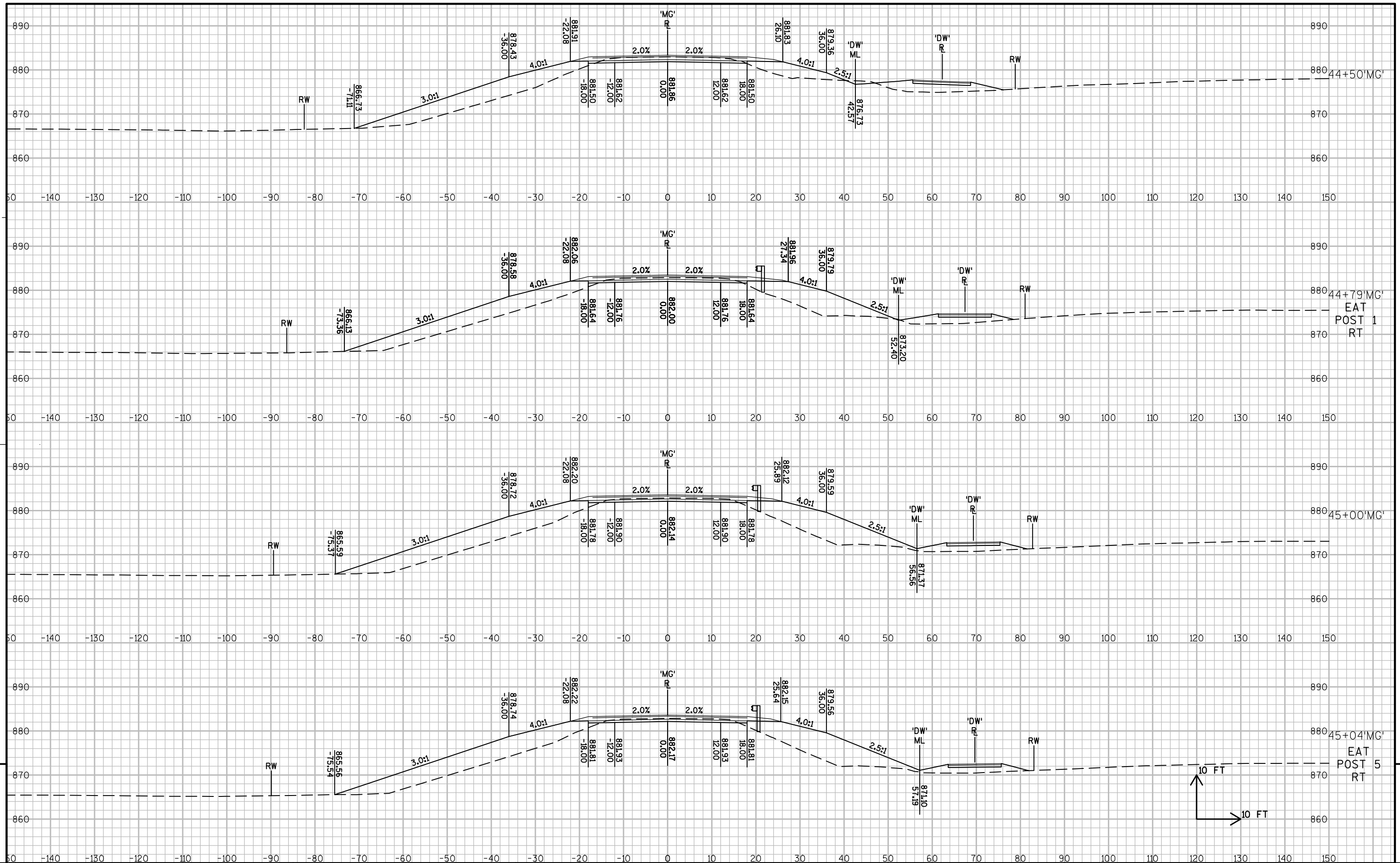


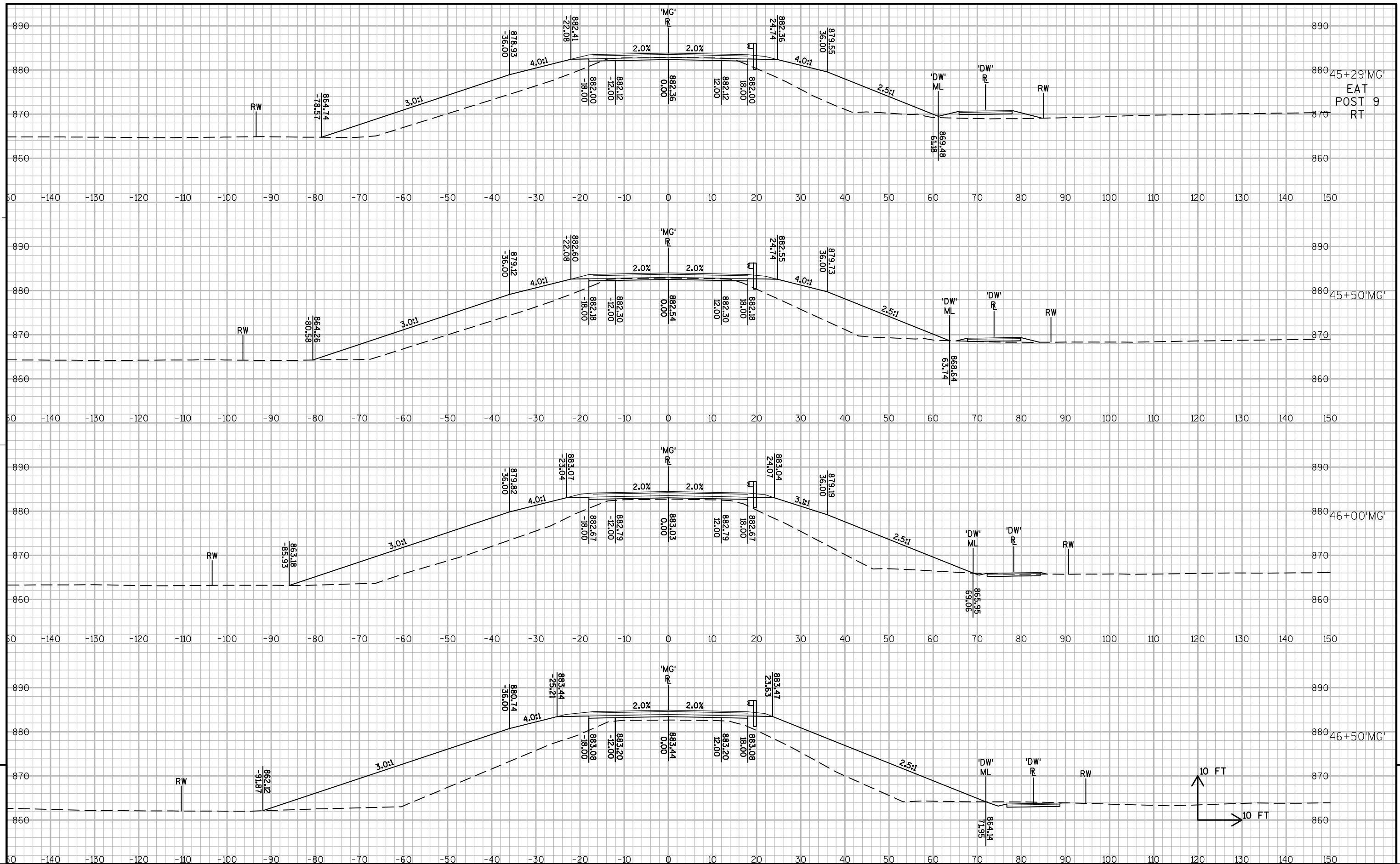


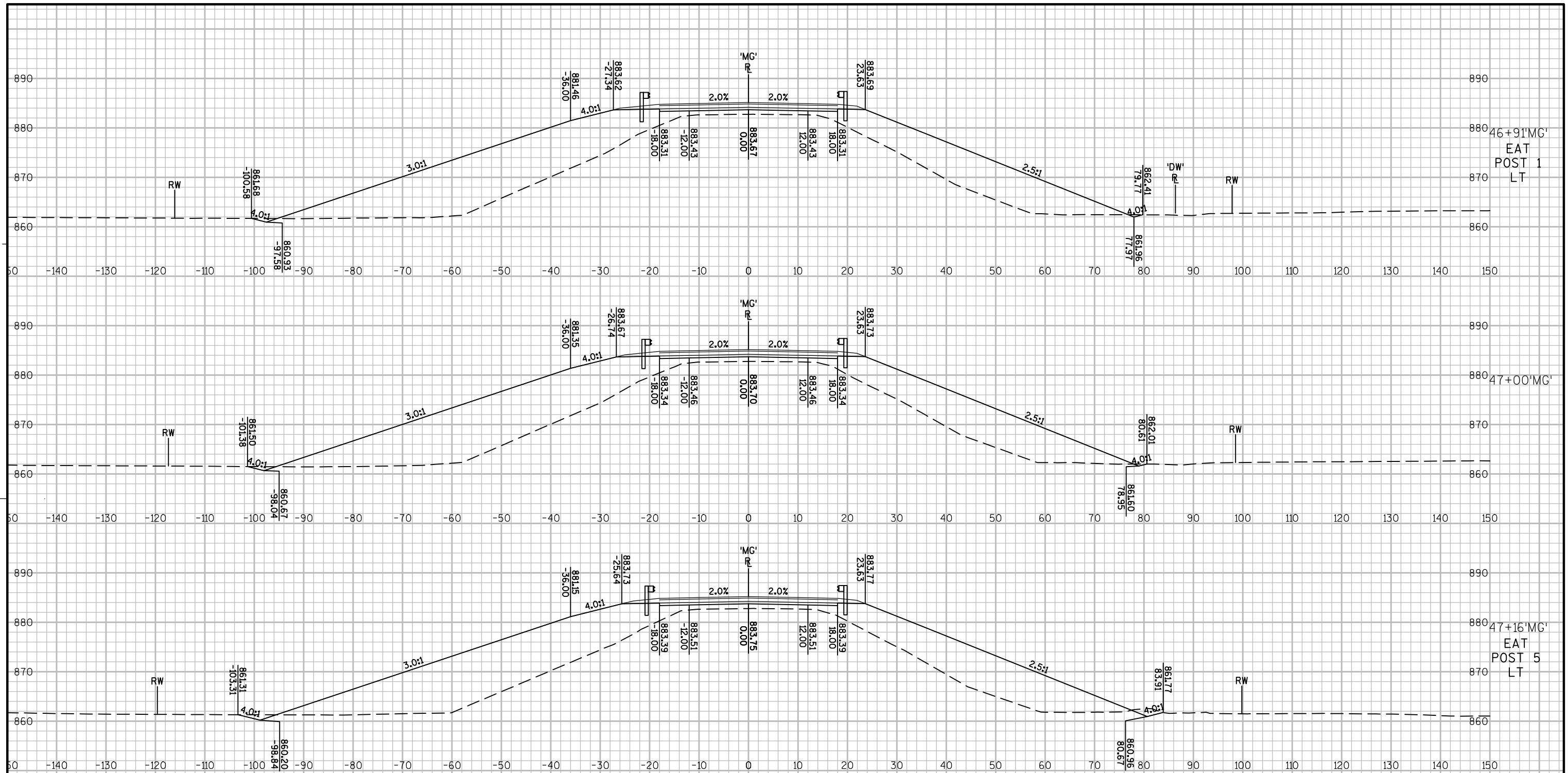
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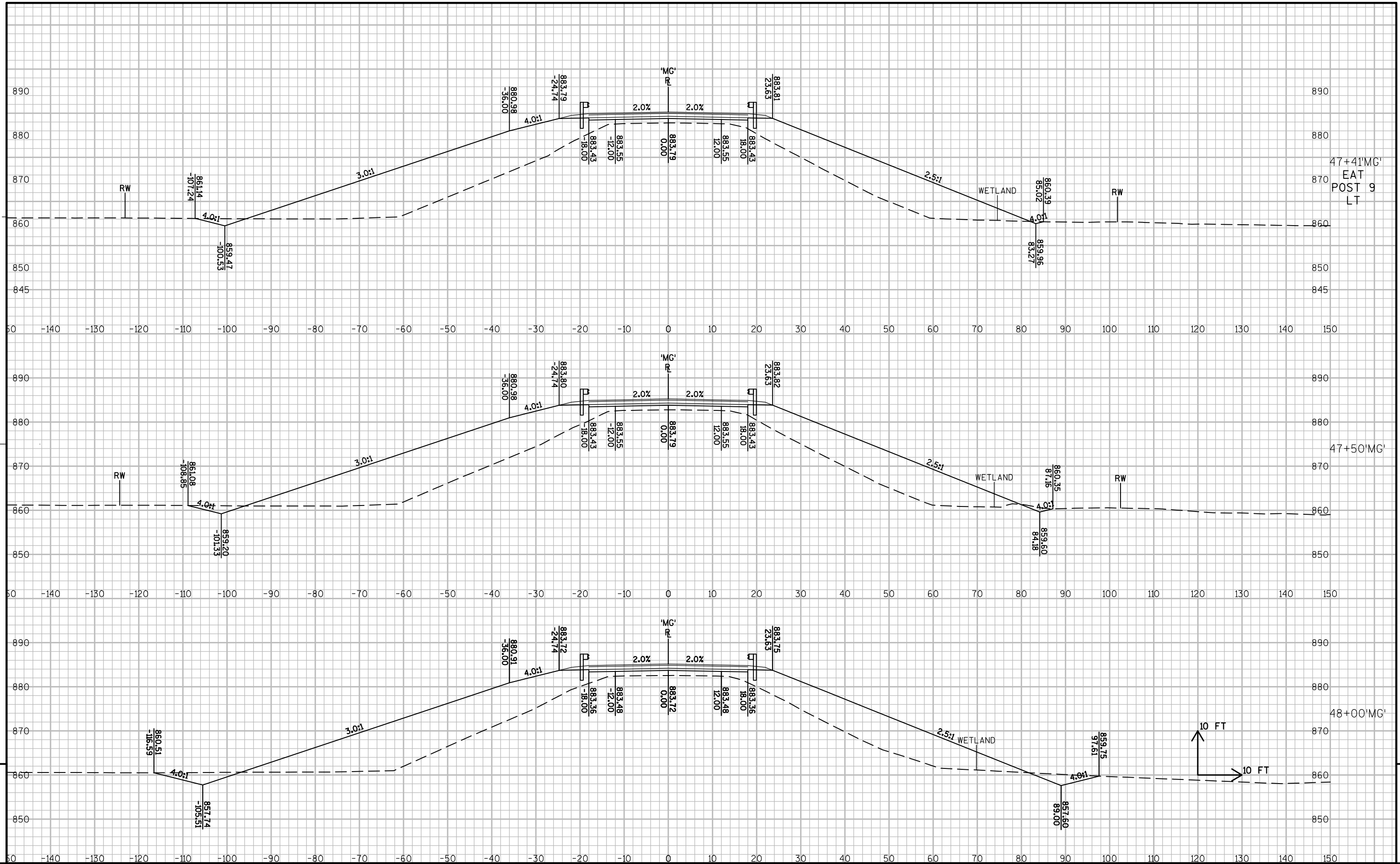
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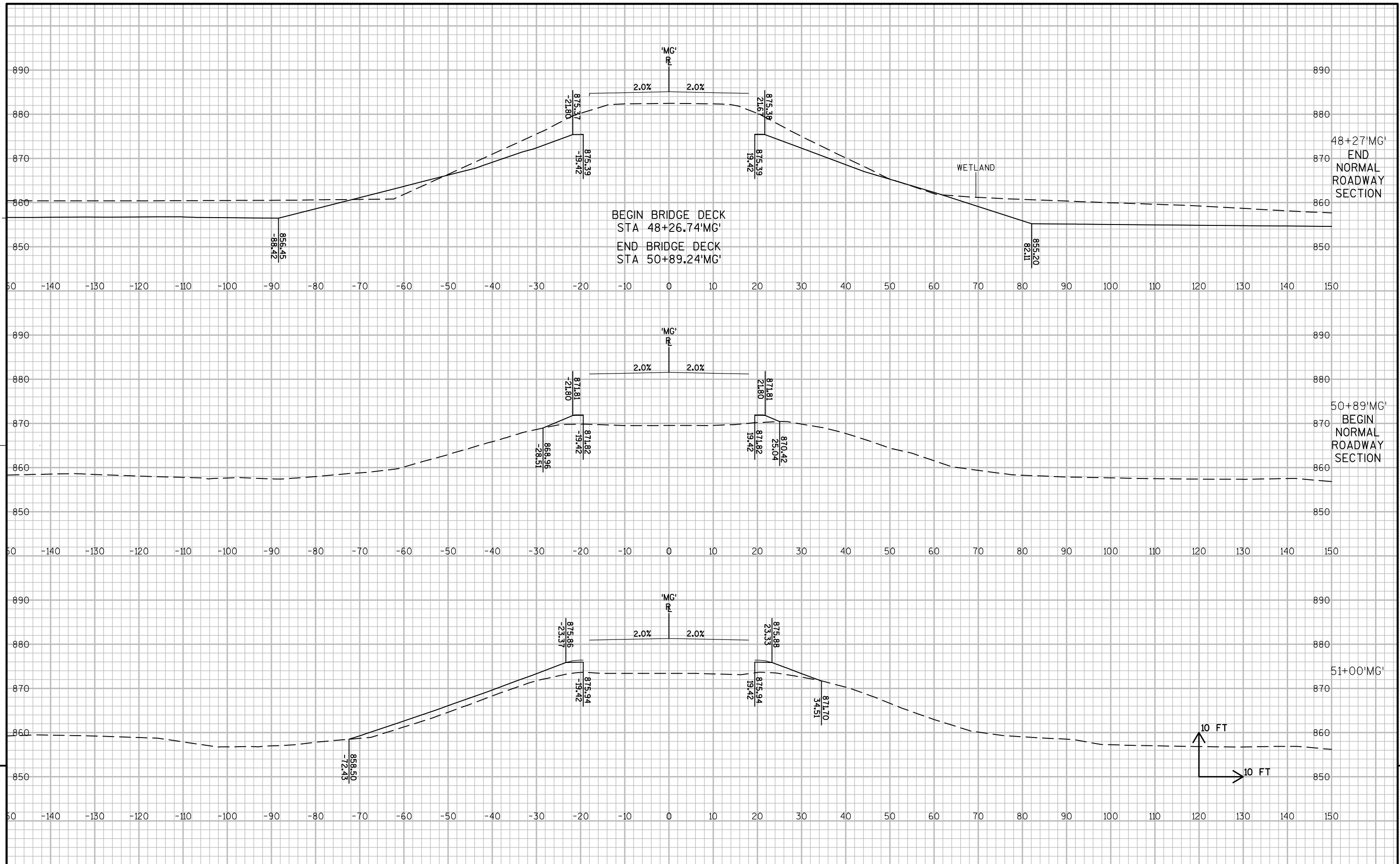


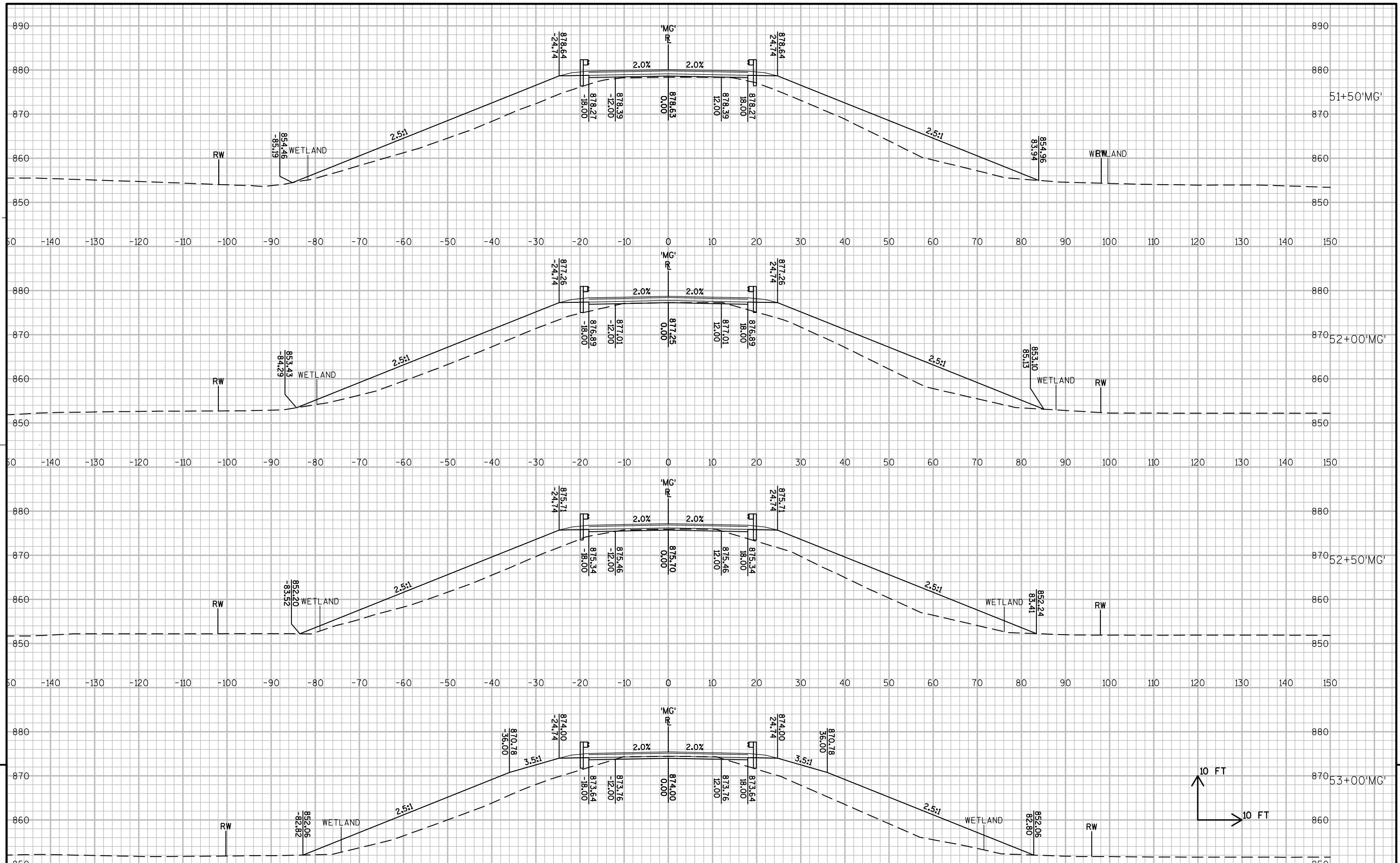


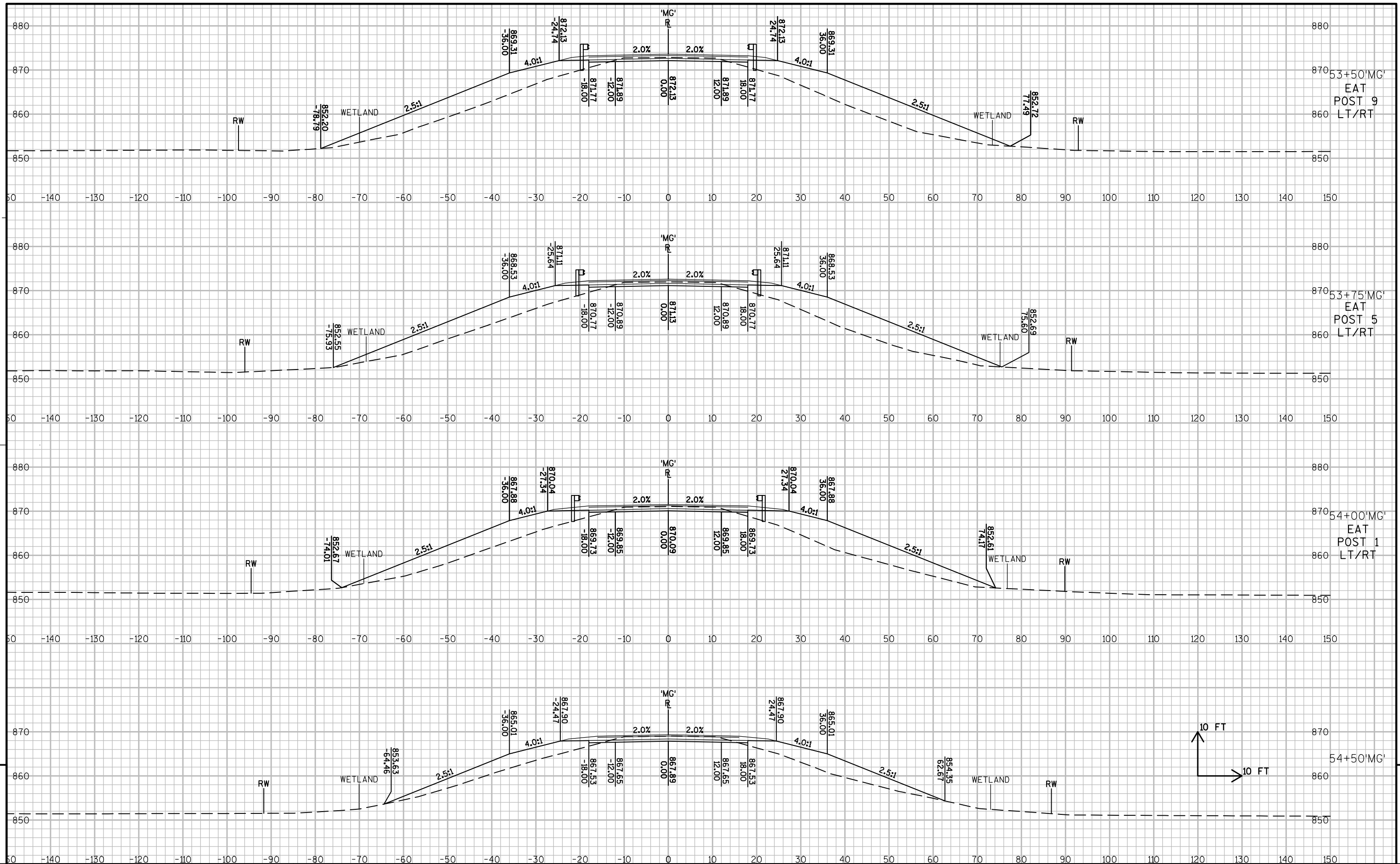


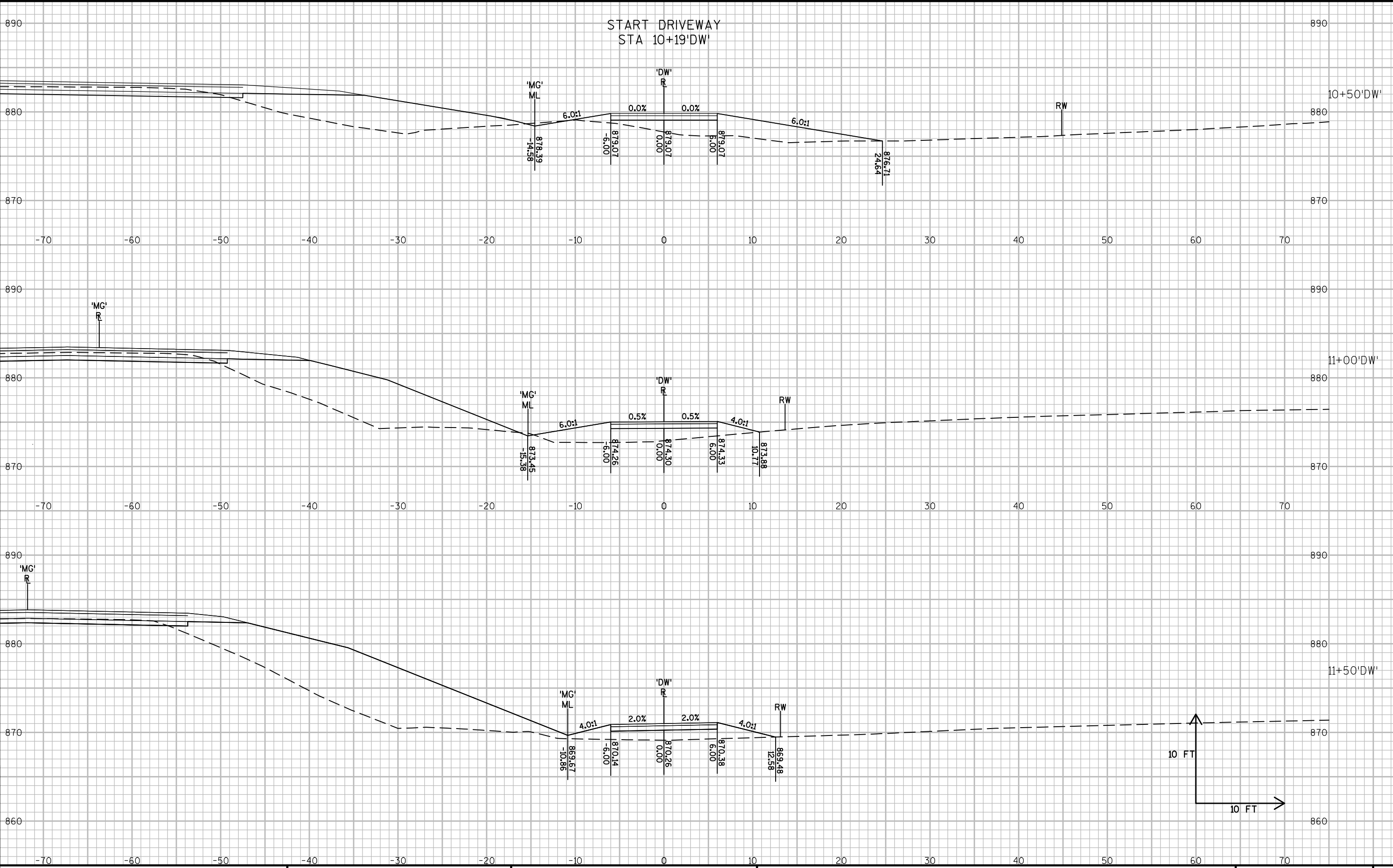


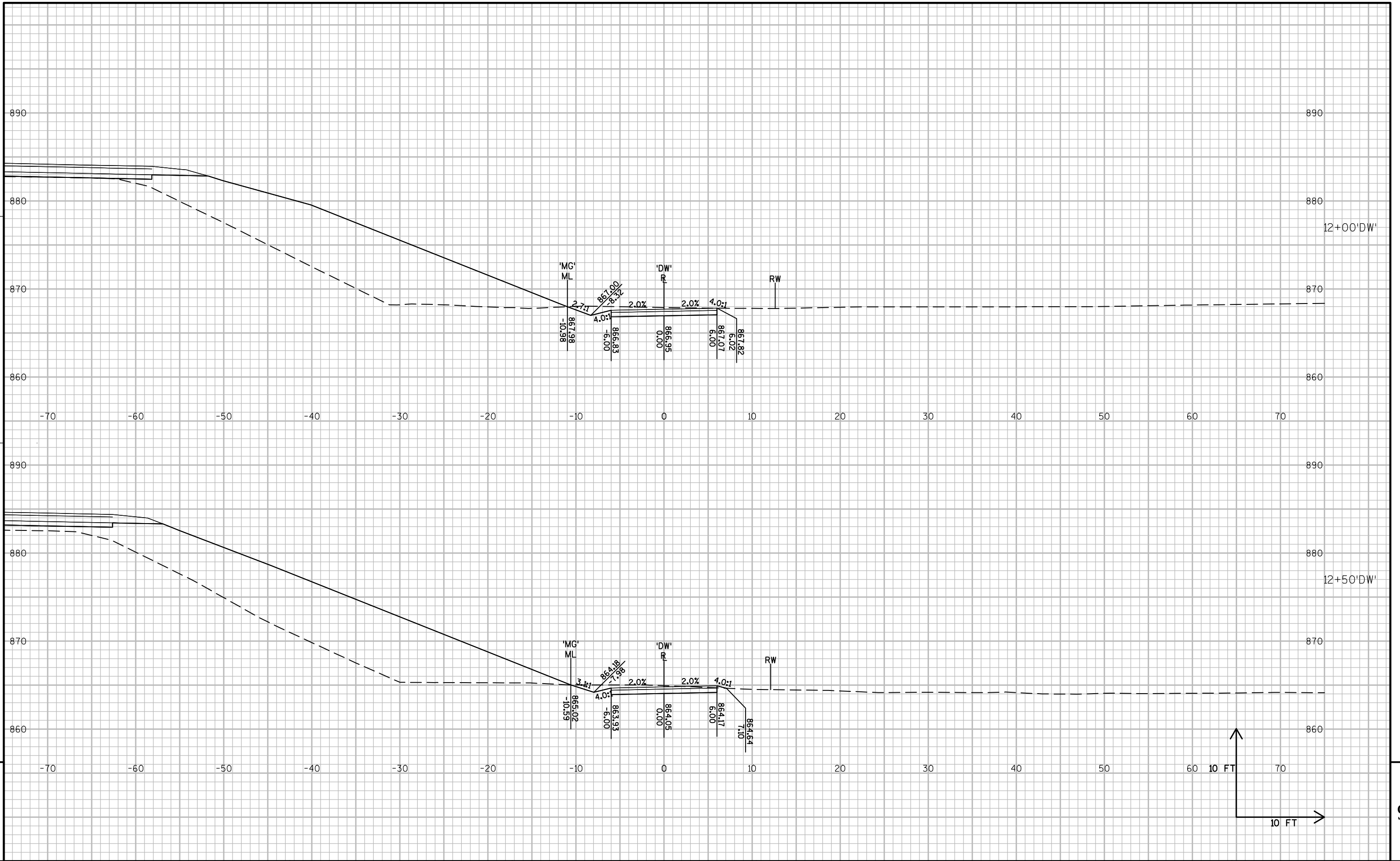


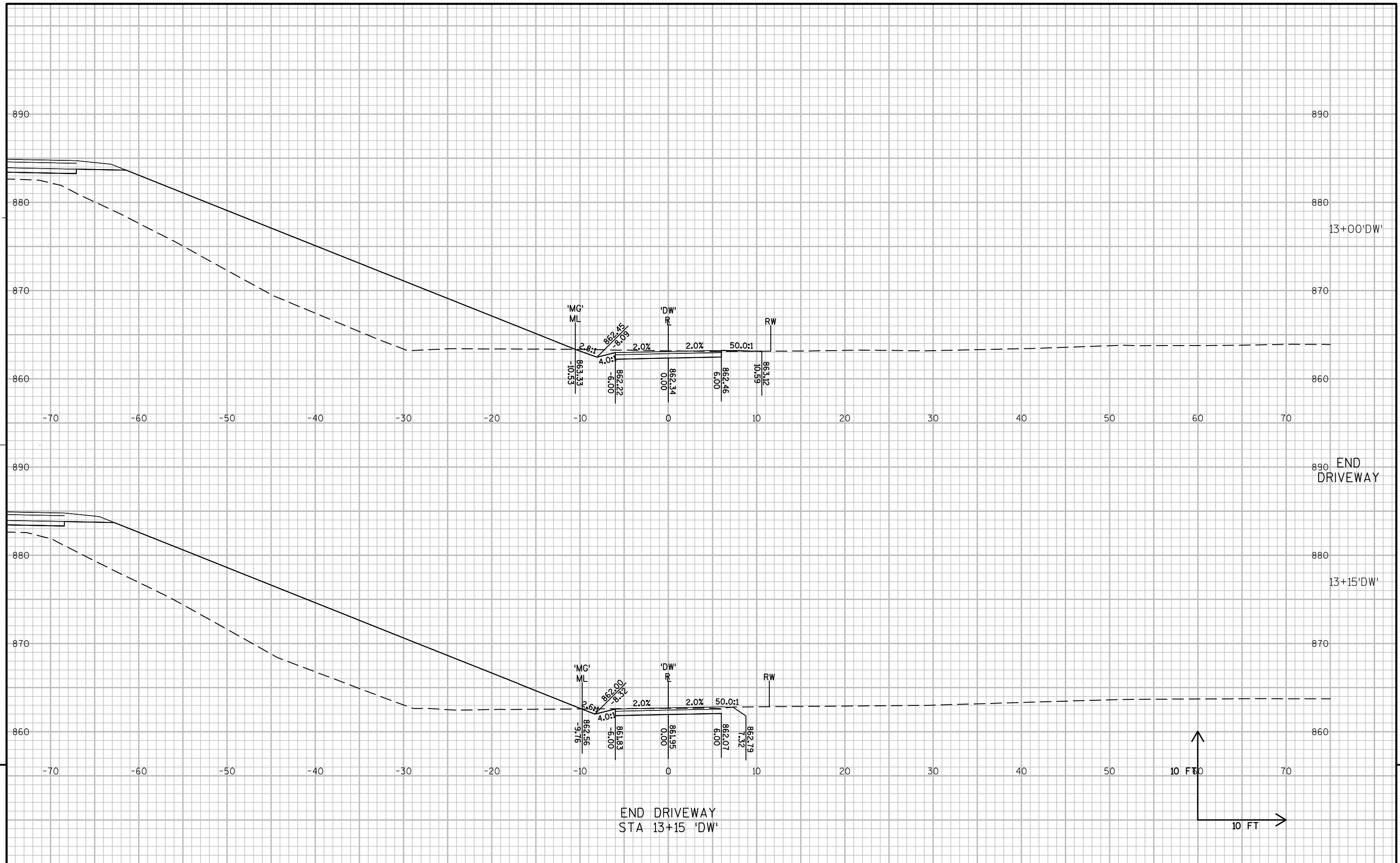


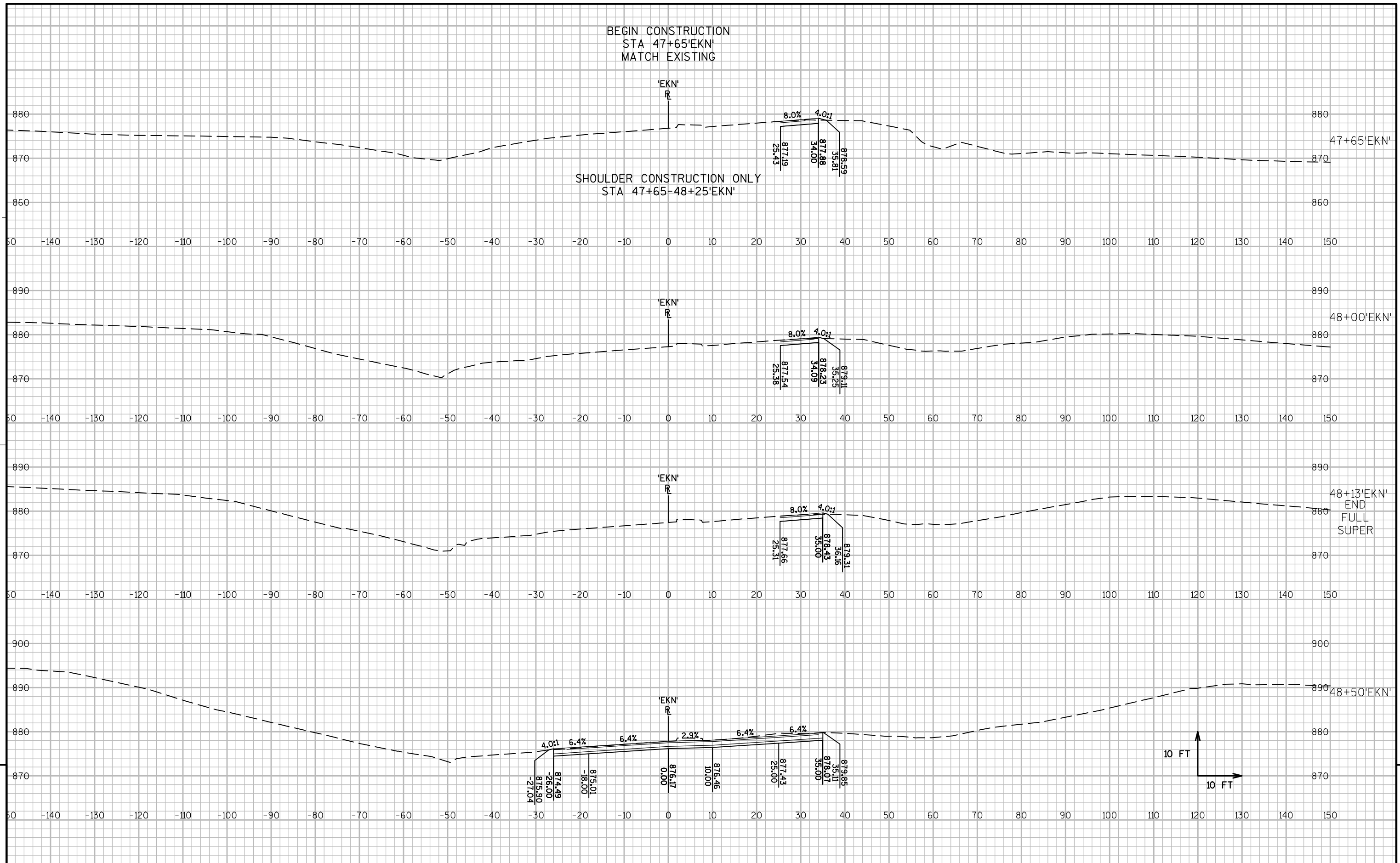


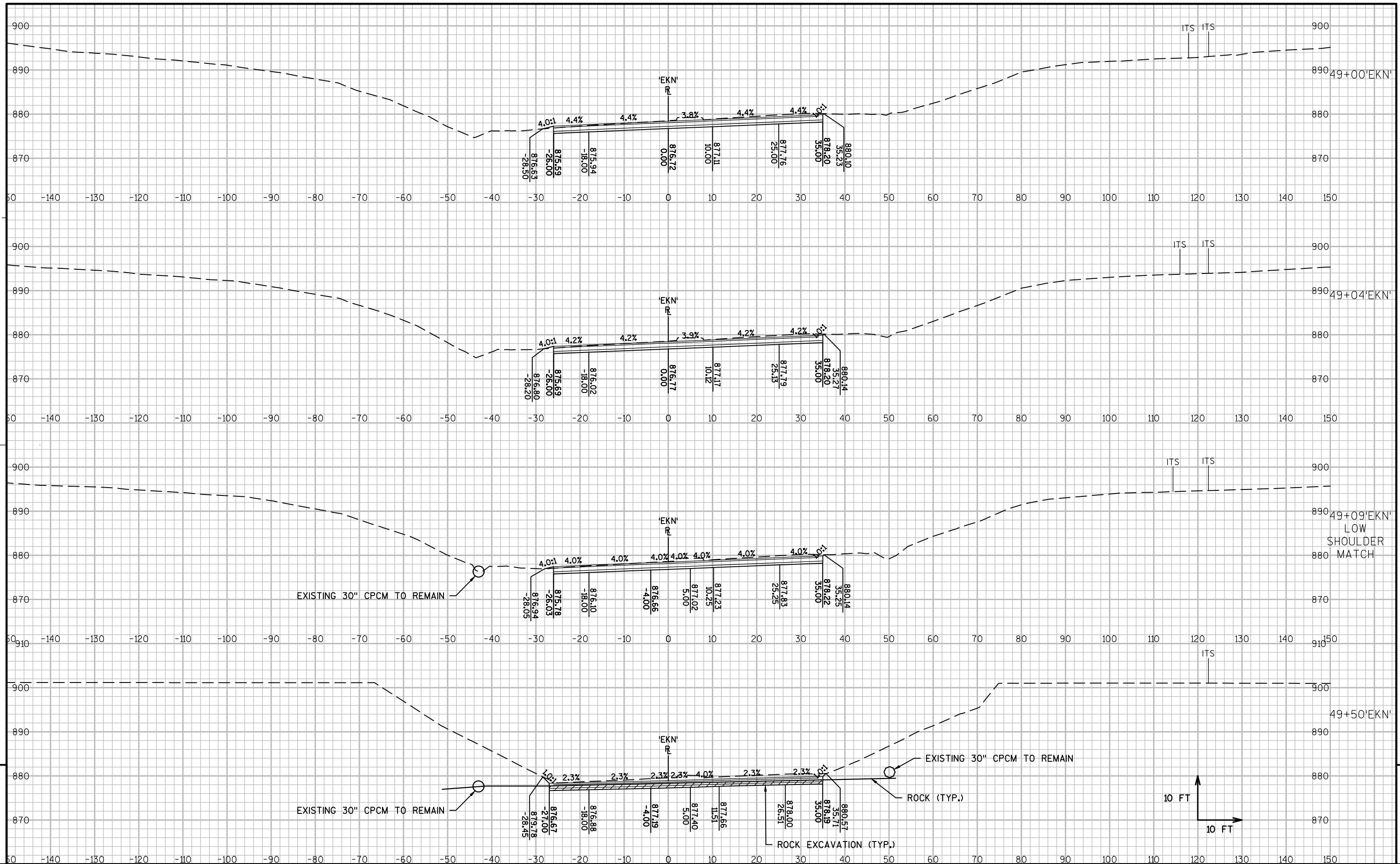


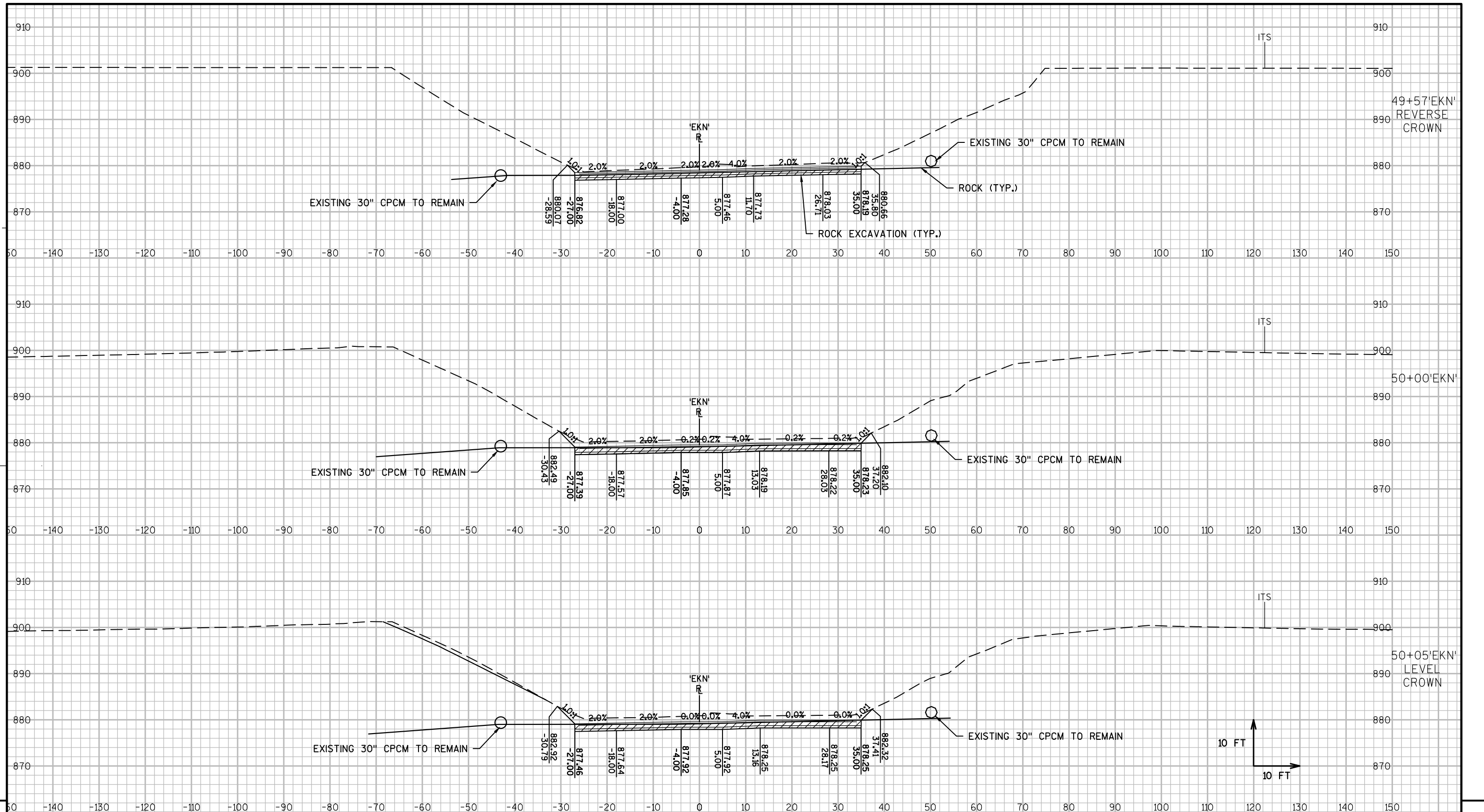


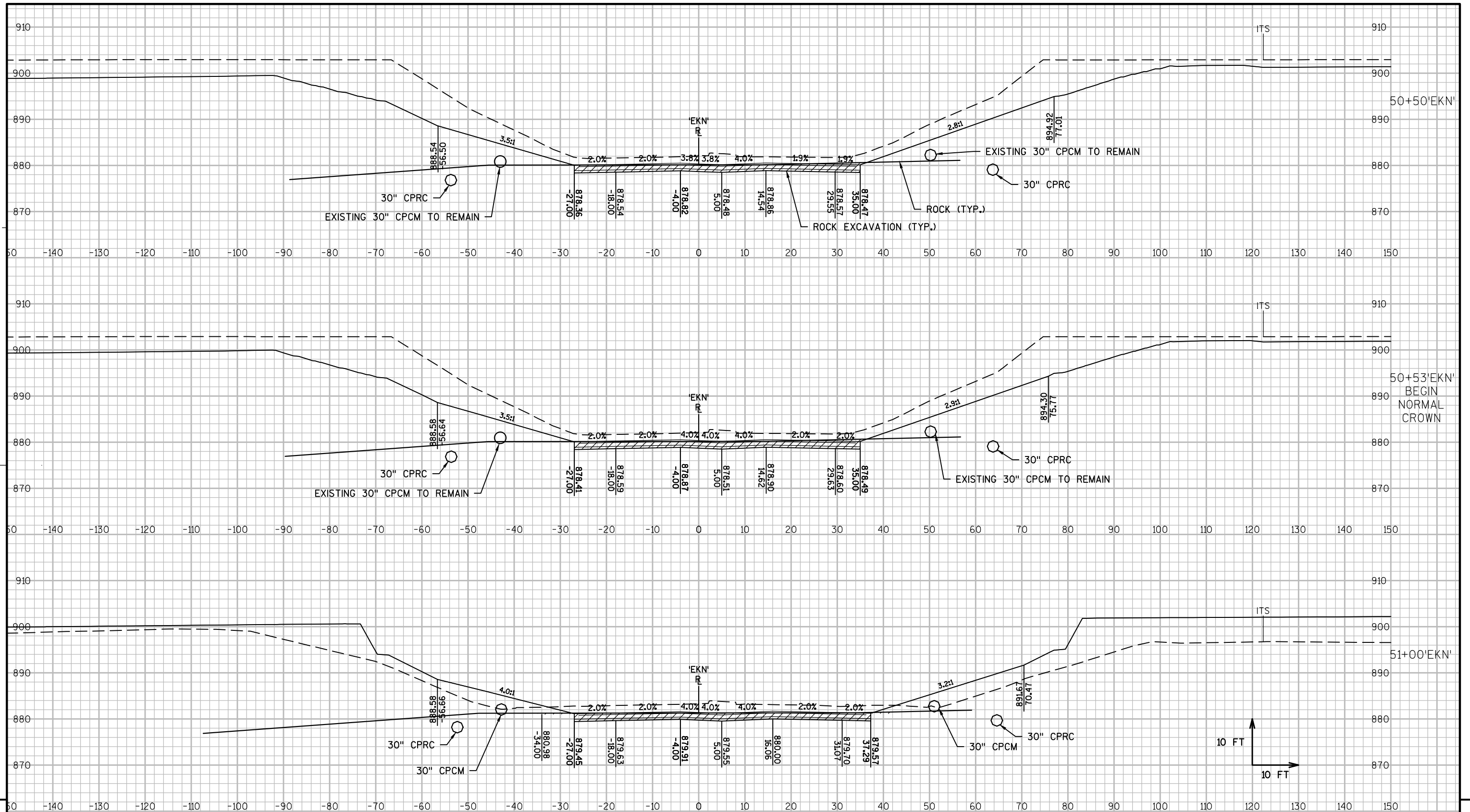


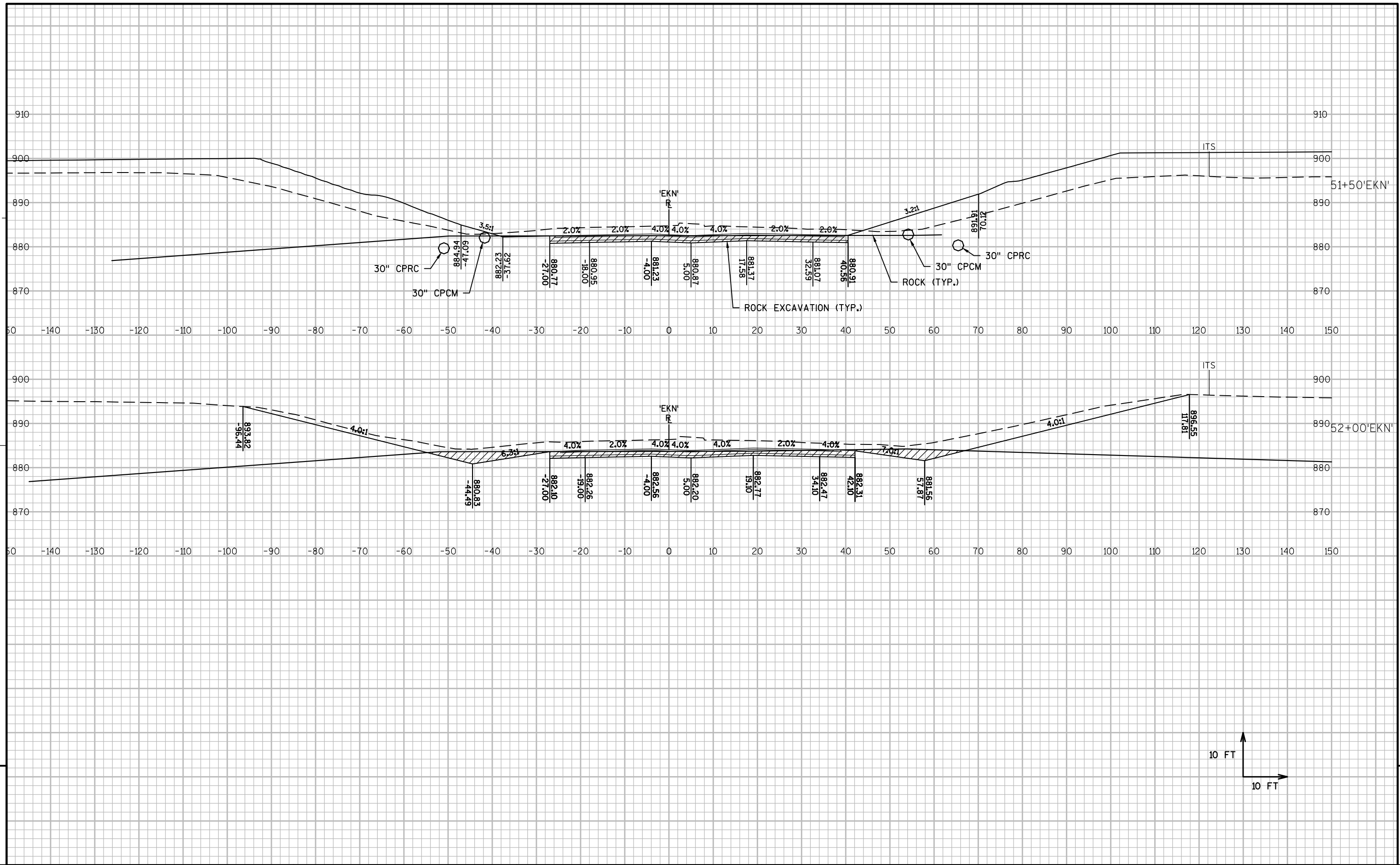


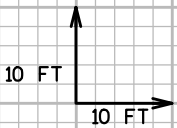
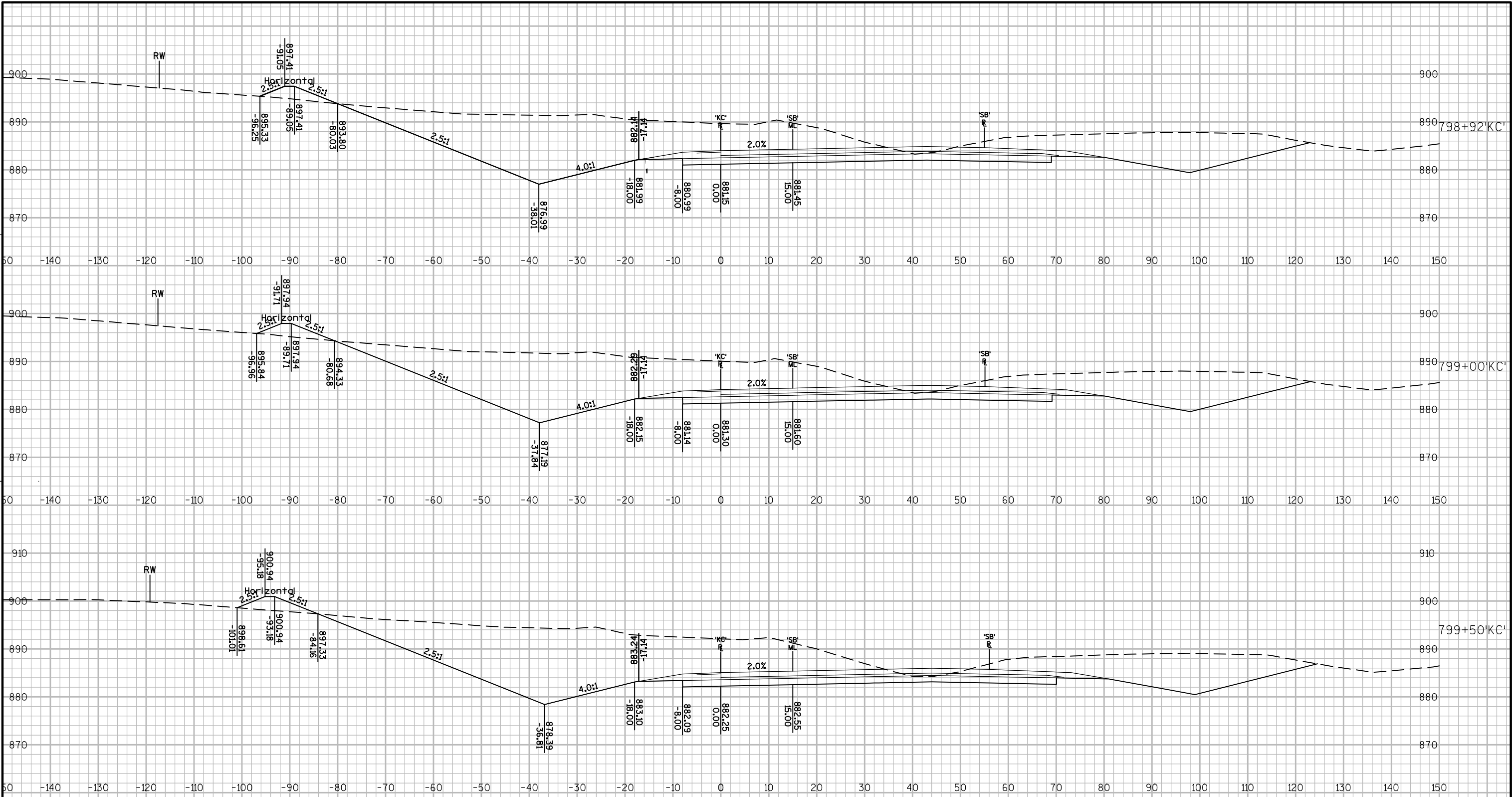


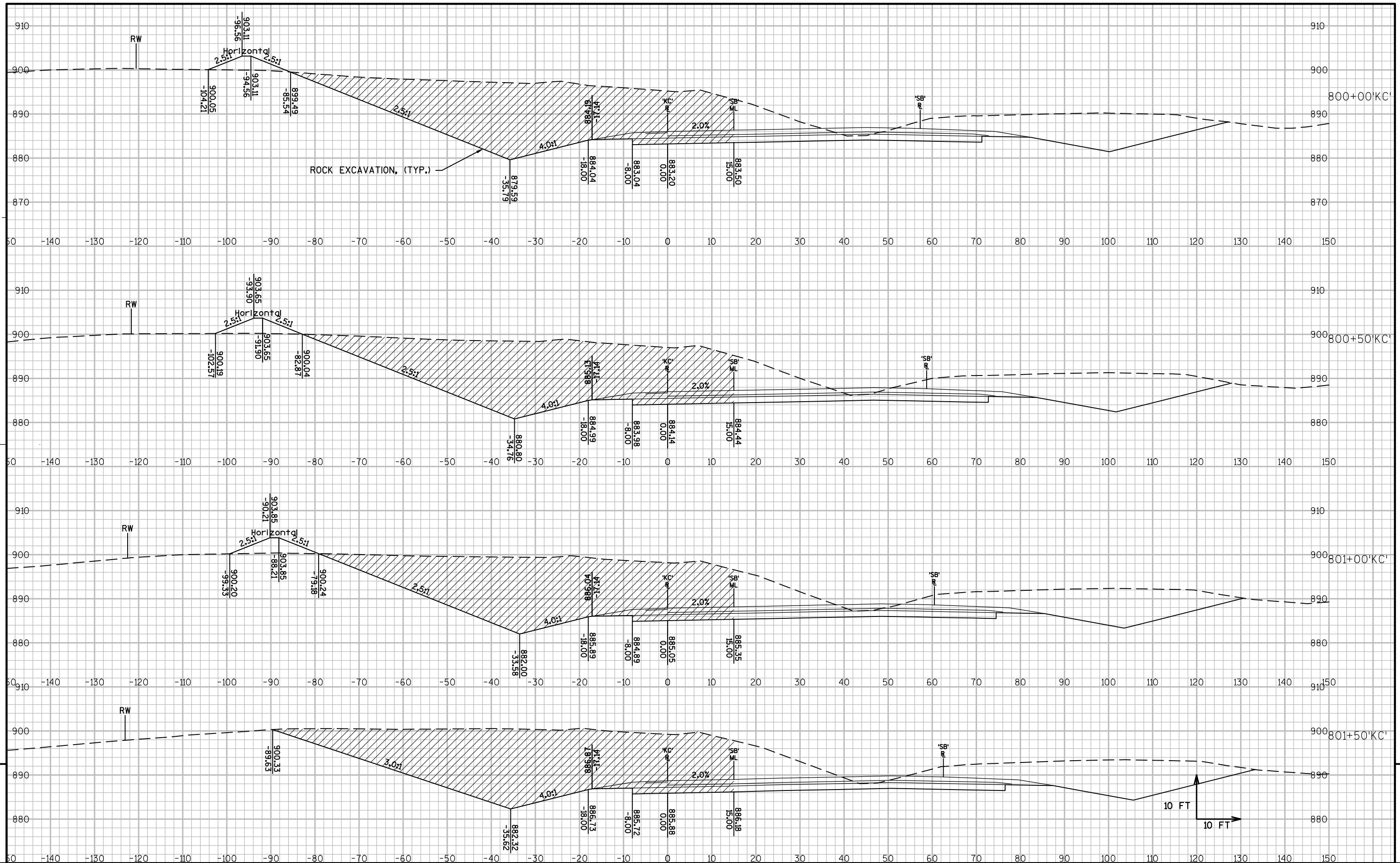


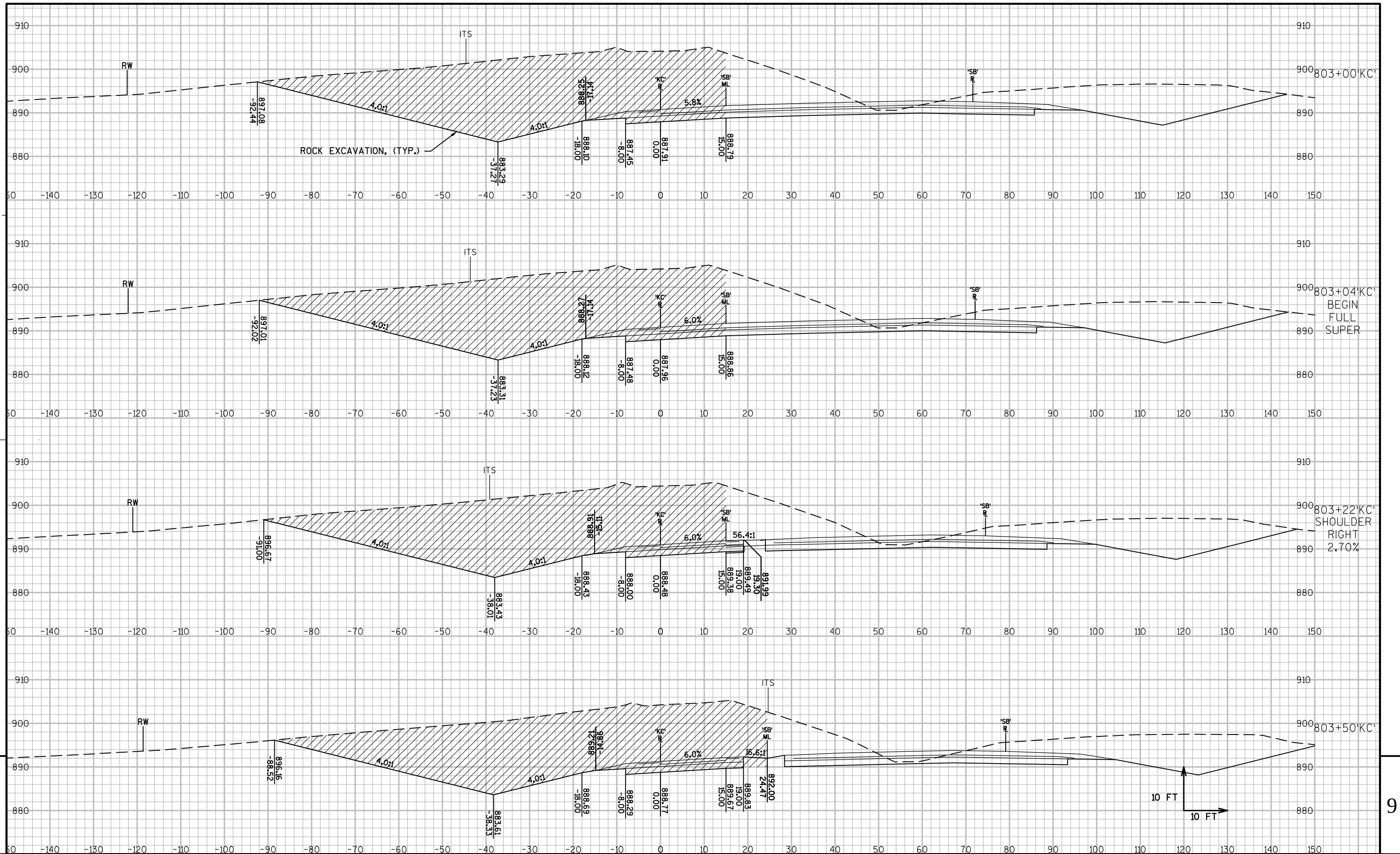


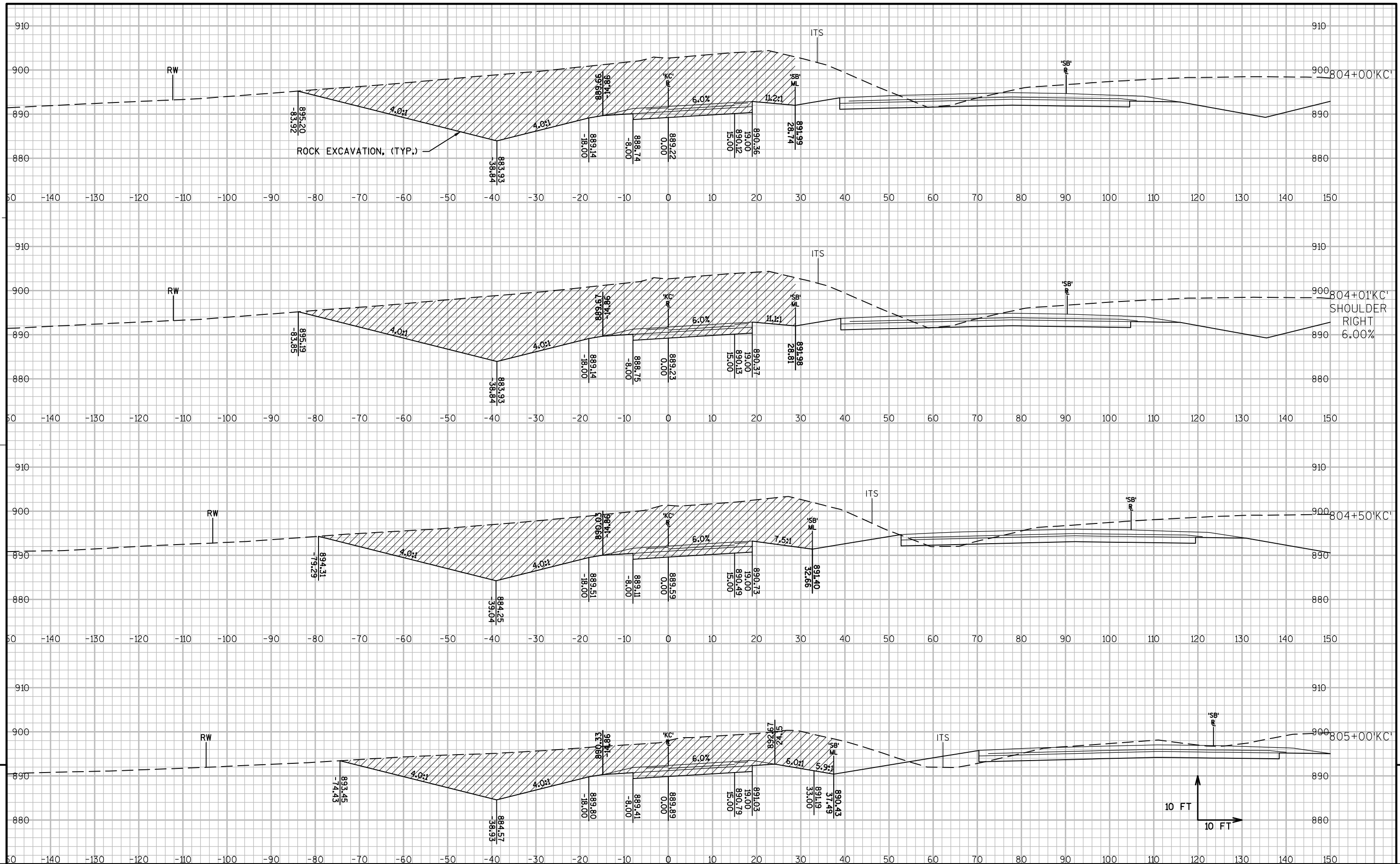


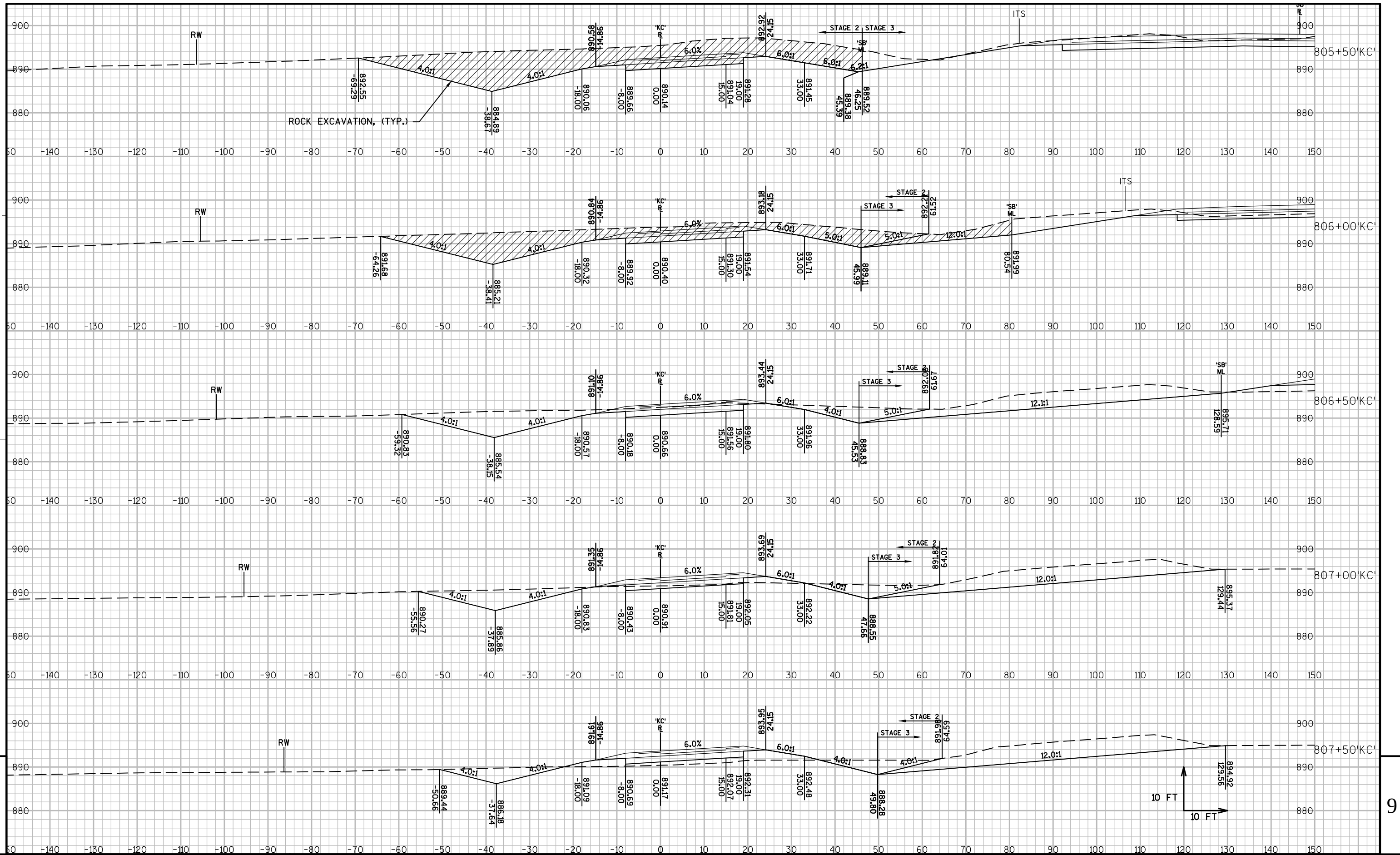


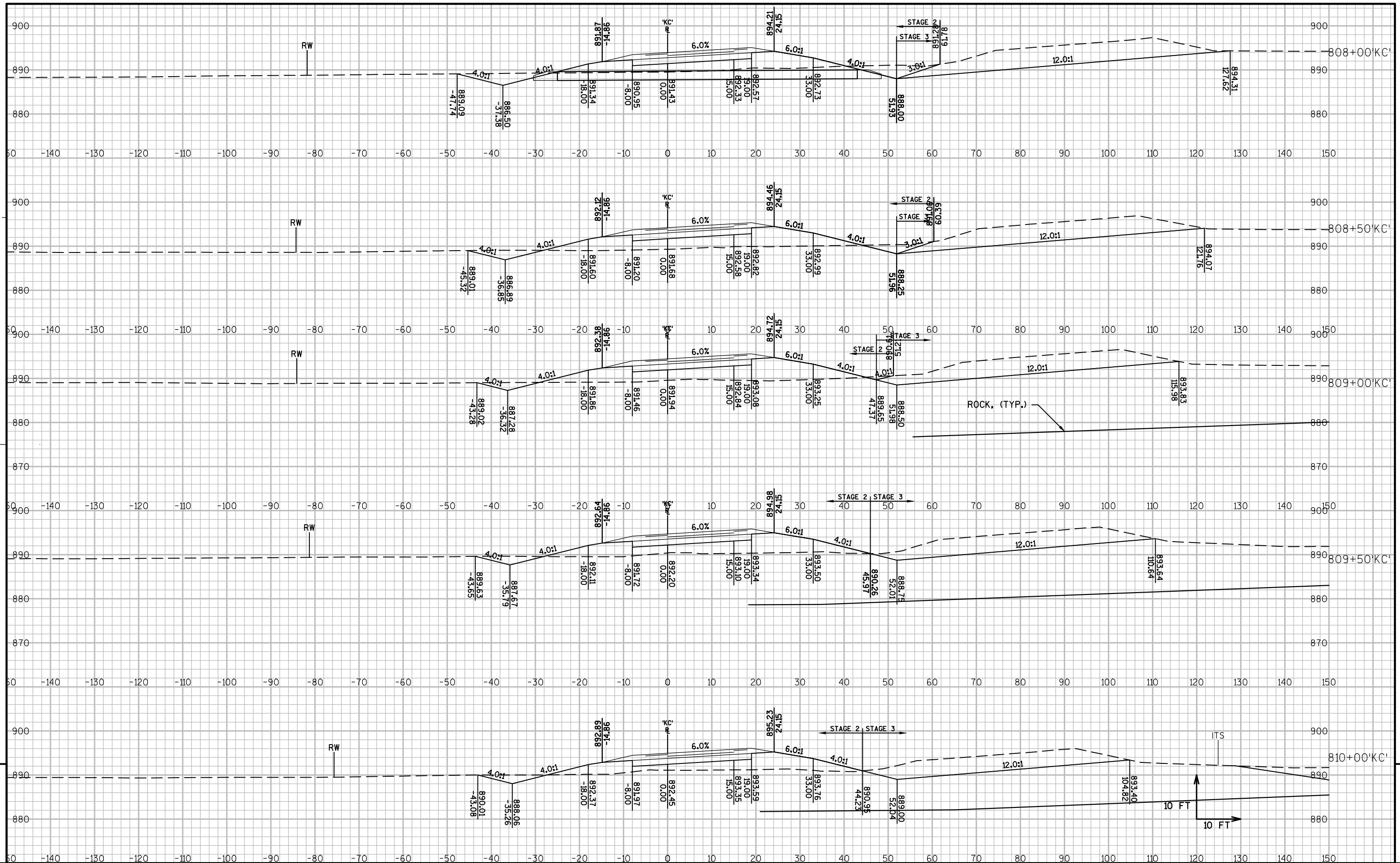


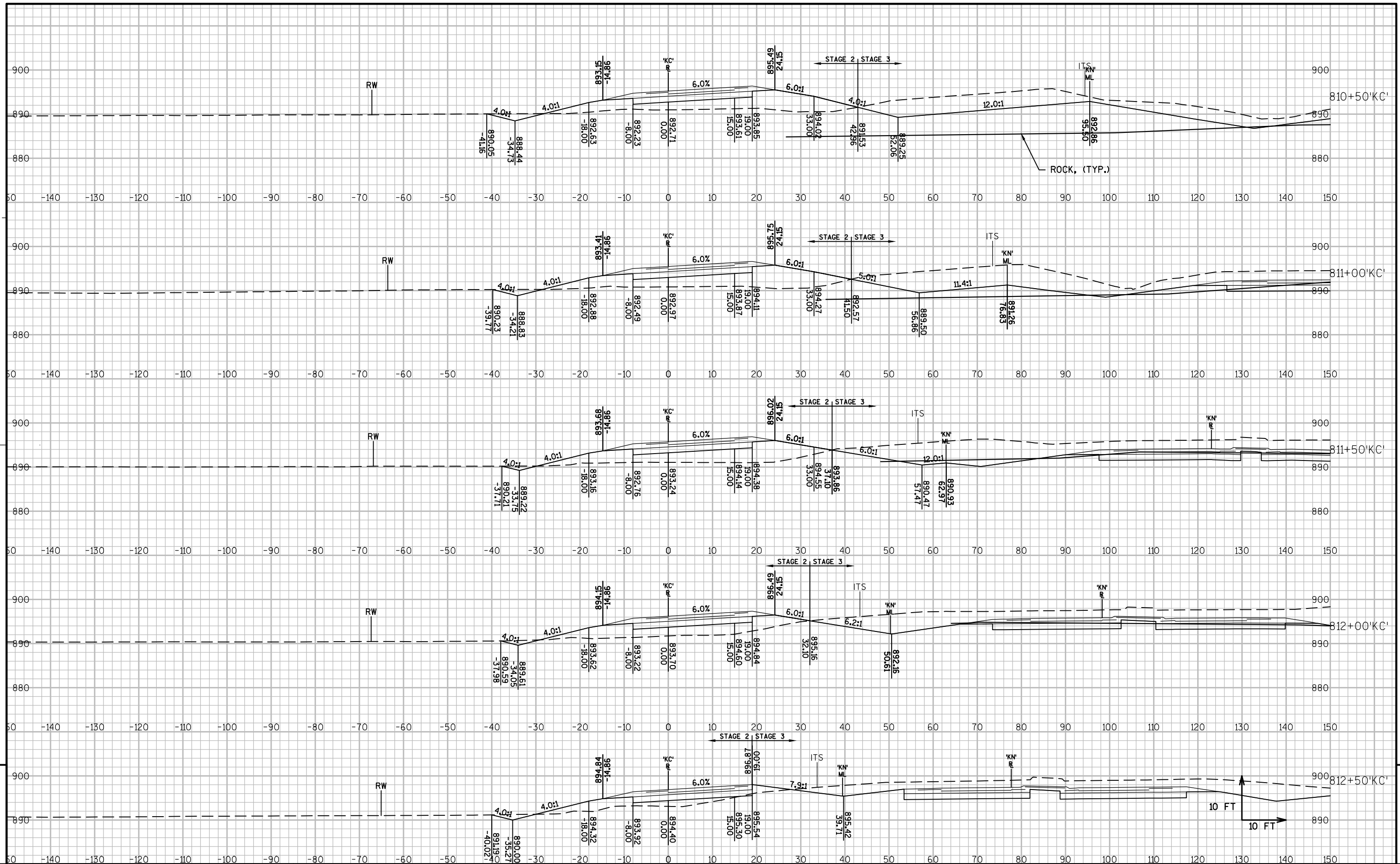


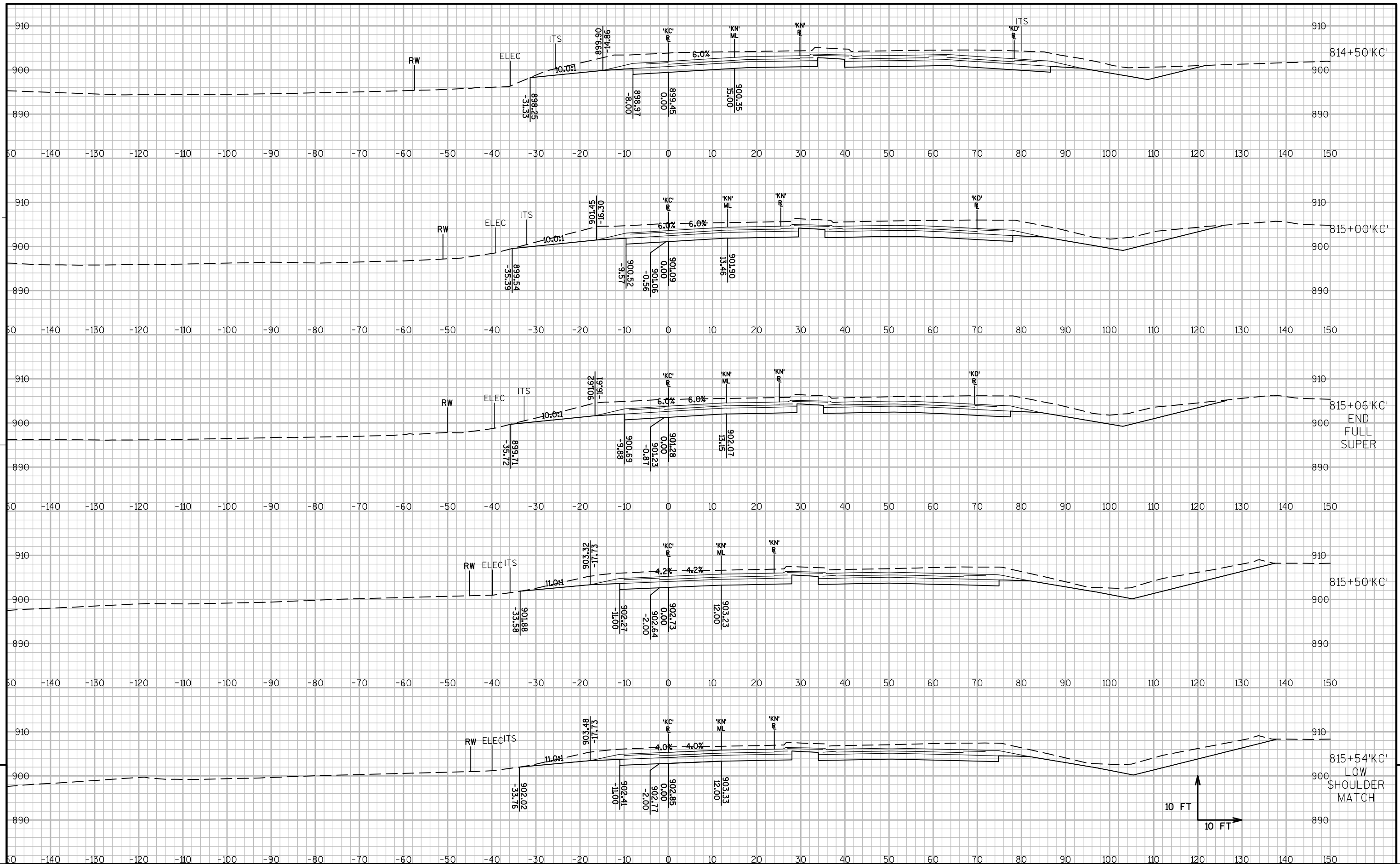


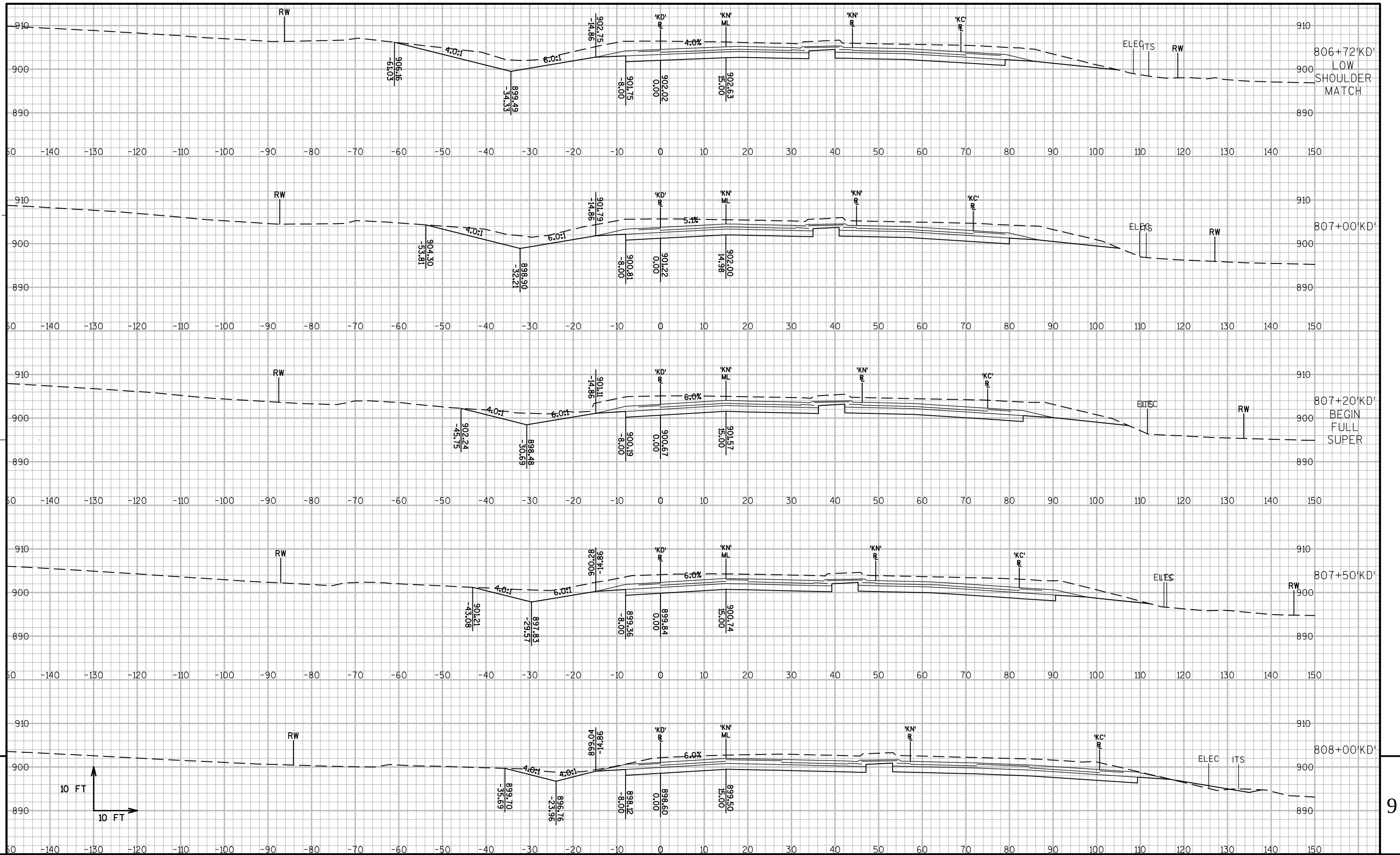


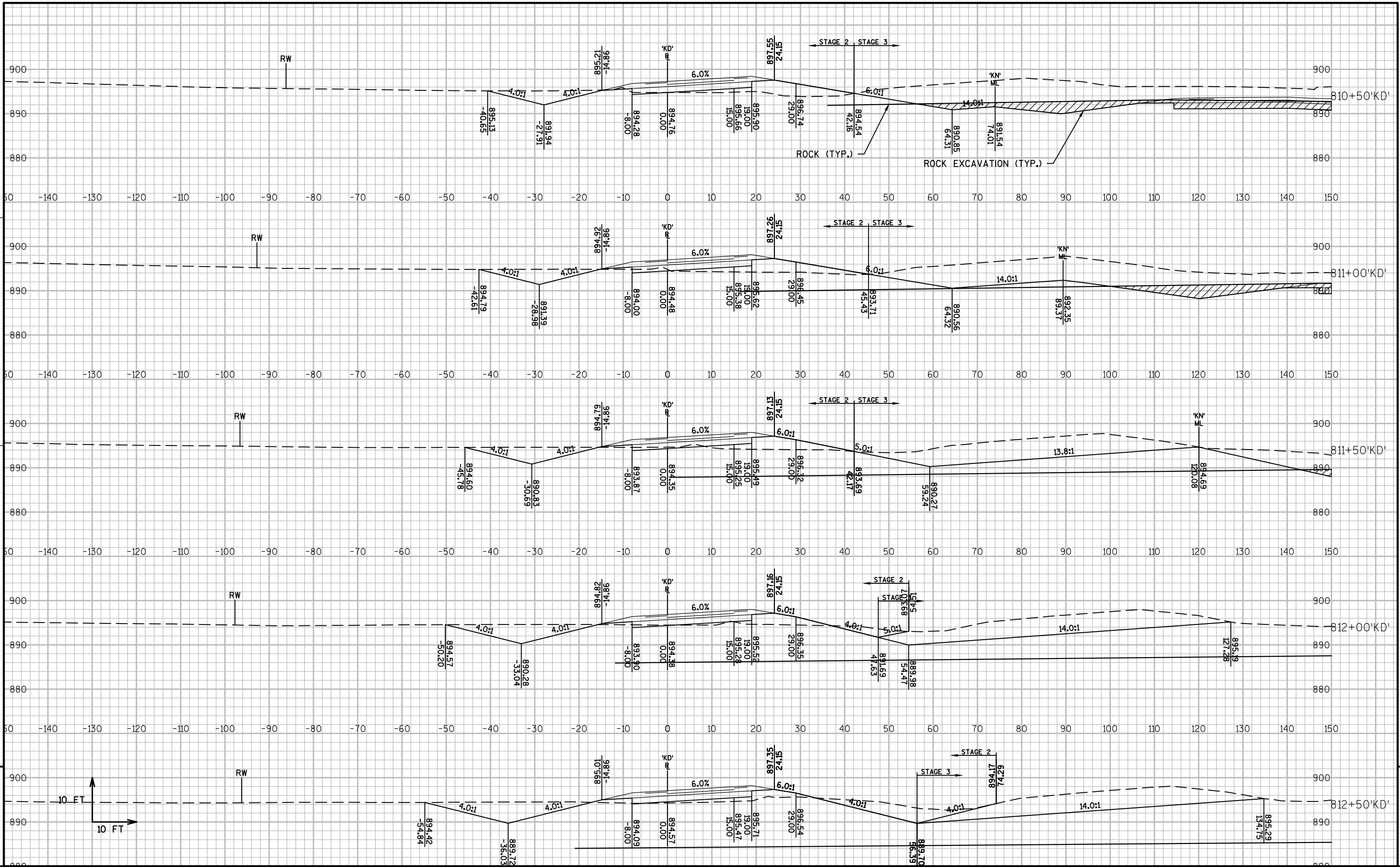


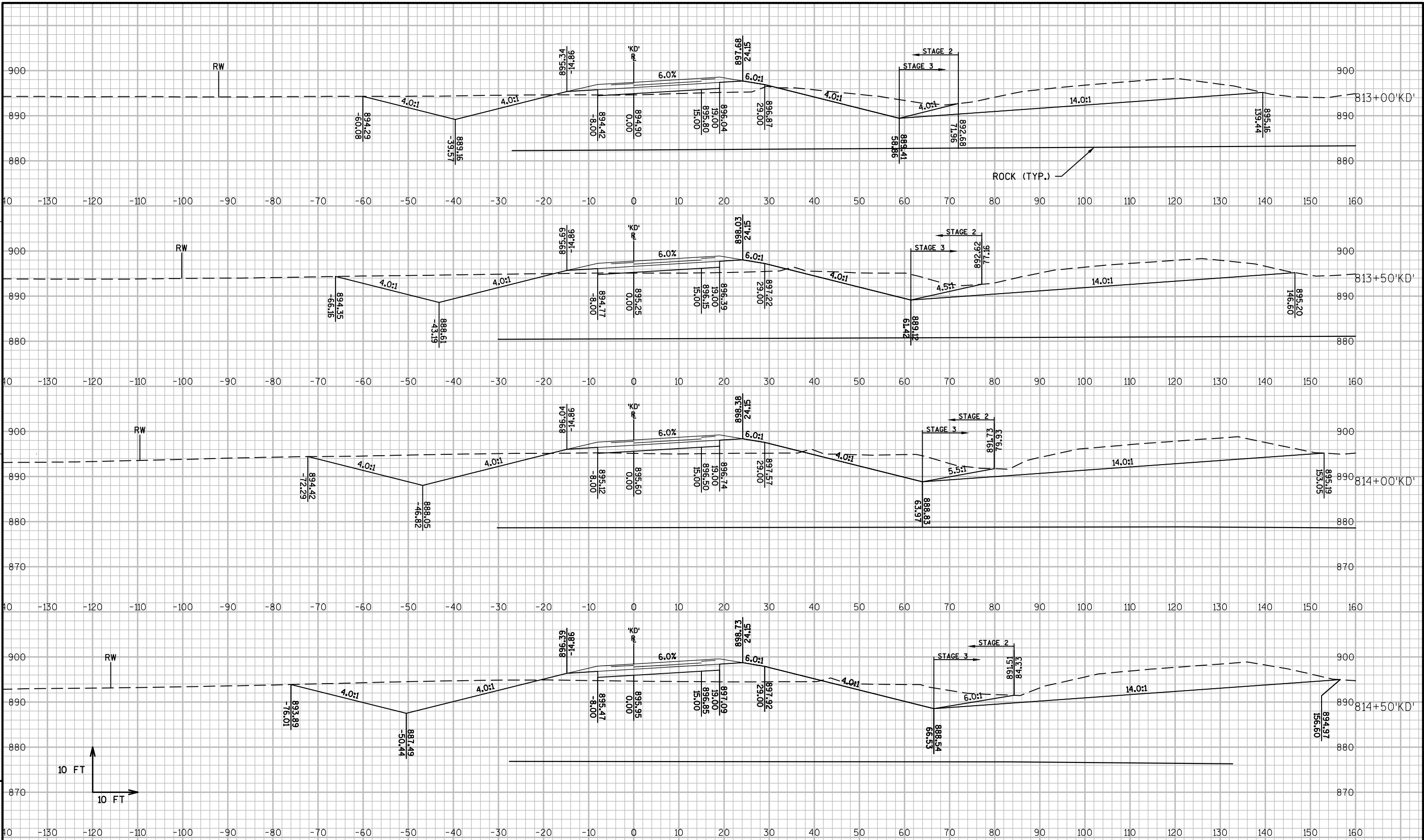












PROJECT NO:1007-10-79

HWY: IH 39

COUNTY: DANE

CROSS SECTIONS: USH 51 - 'KD'

SHEET

847

E

FILE NAME : P:\2012026_IH 39\CIVIL3D\PLANSET\10071079 - USH 51\090201_XS_USH 51.KD.DWG

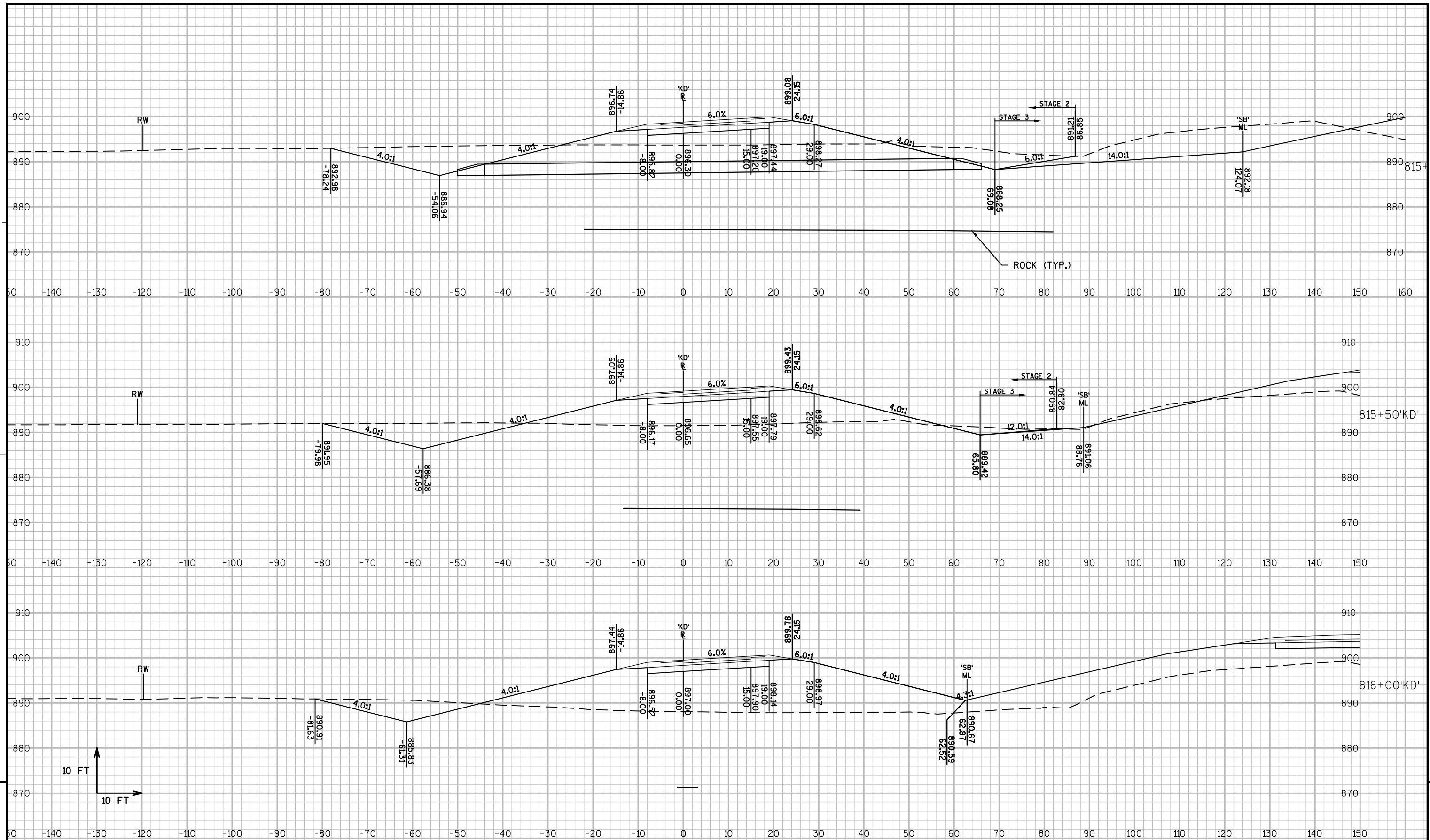
PLOT DATE : 7/24/2015 2:12 PM

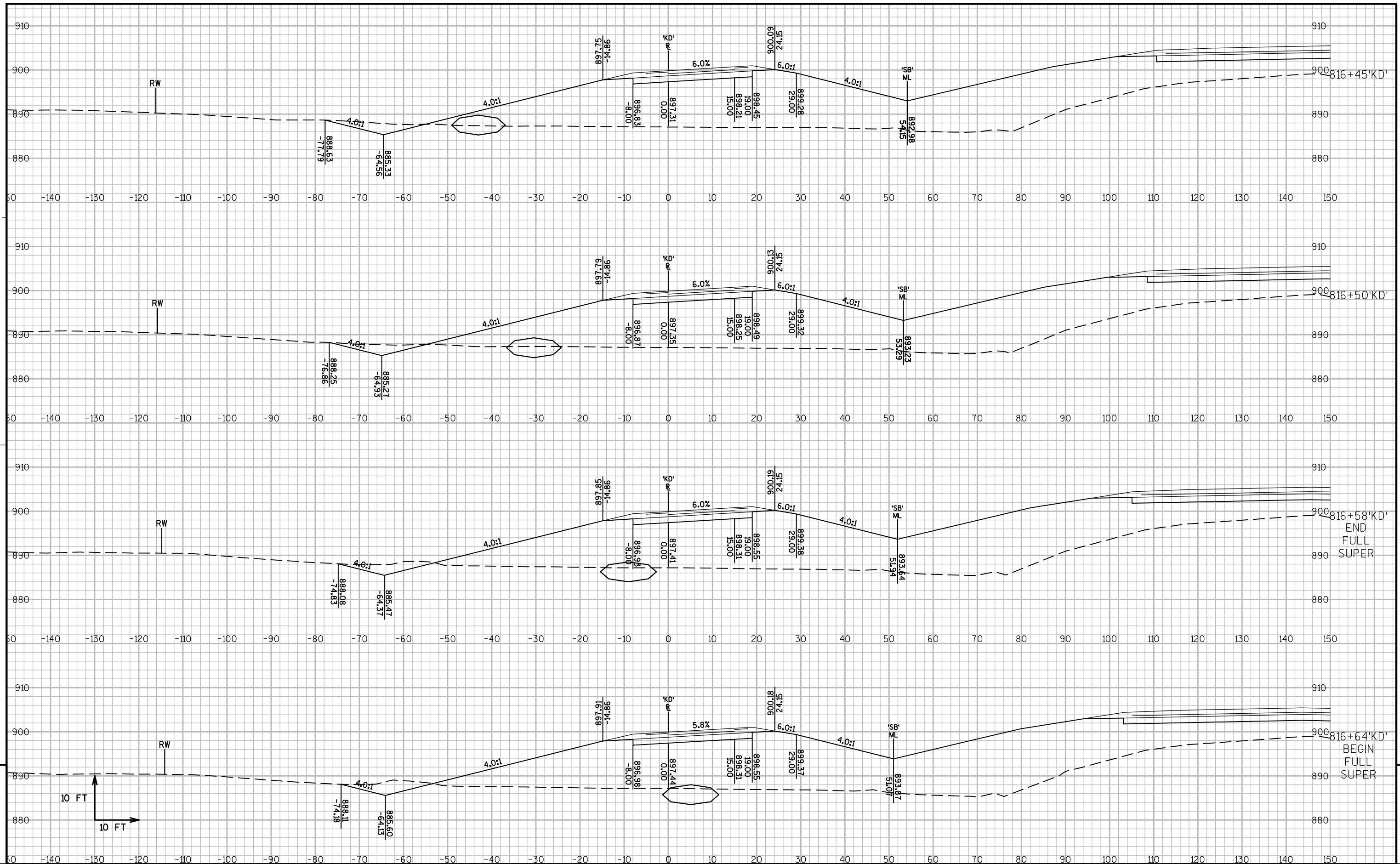
PLOT BY : MATTHEW WISWELL

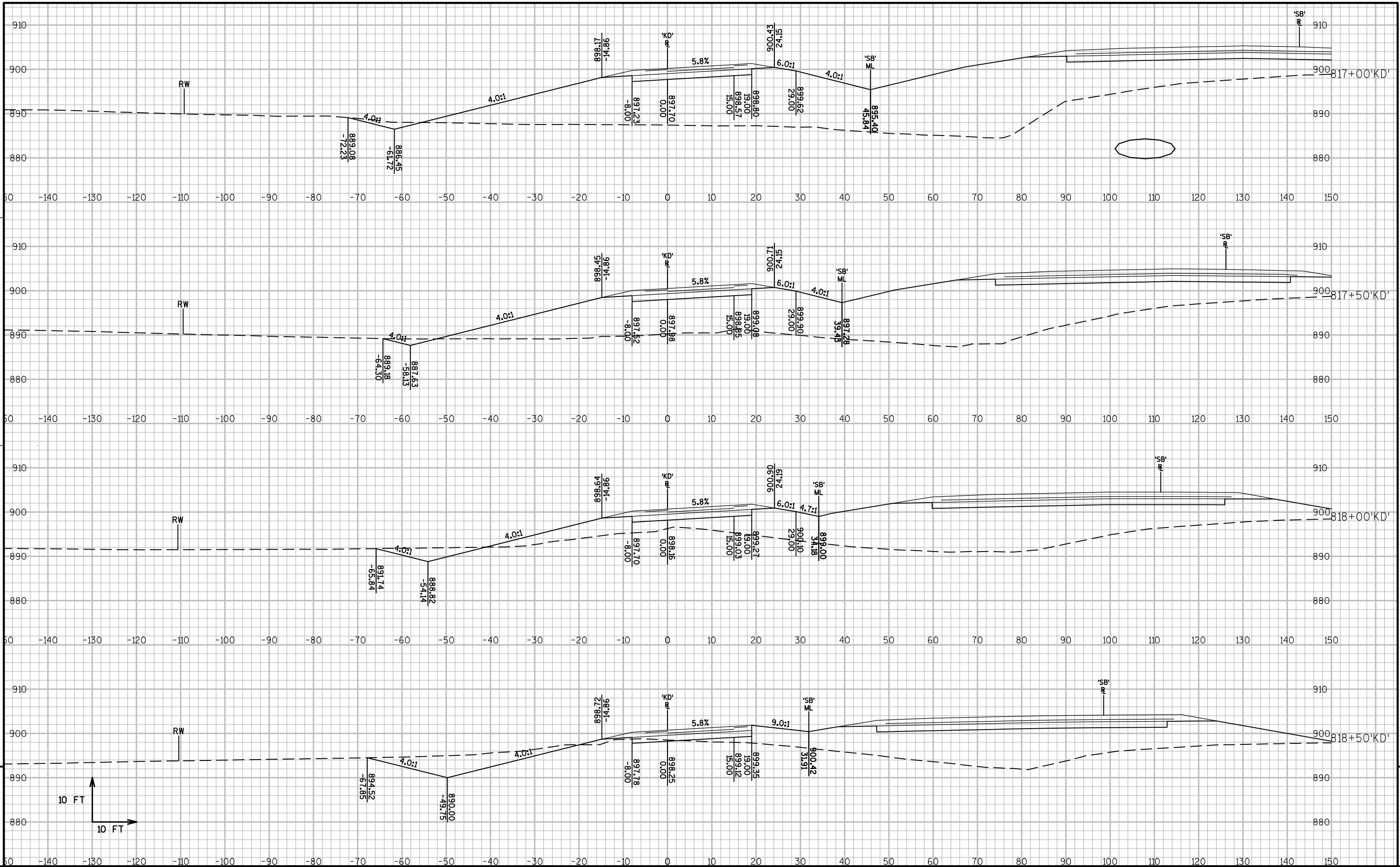
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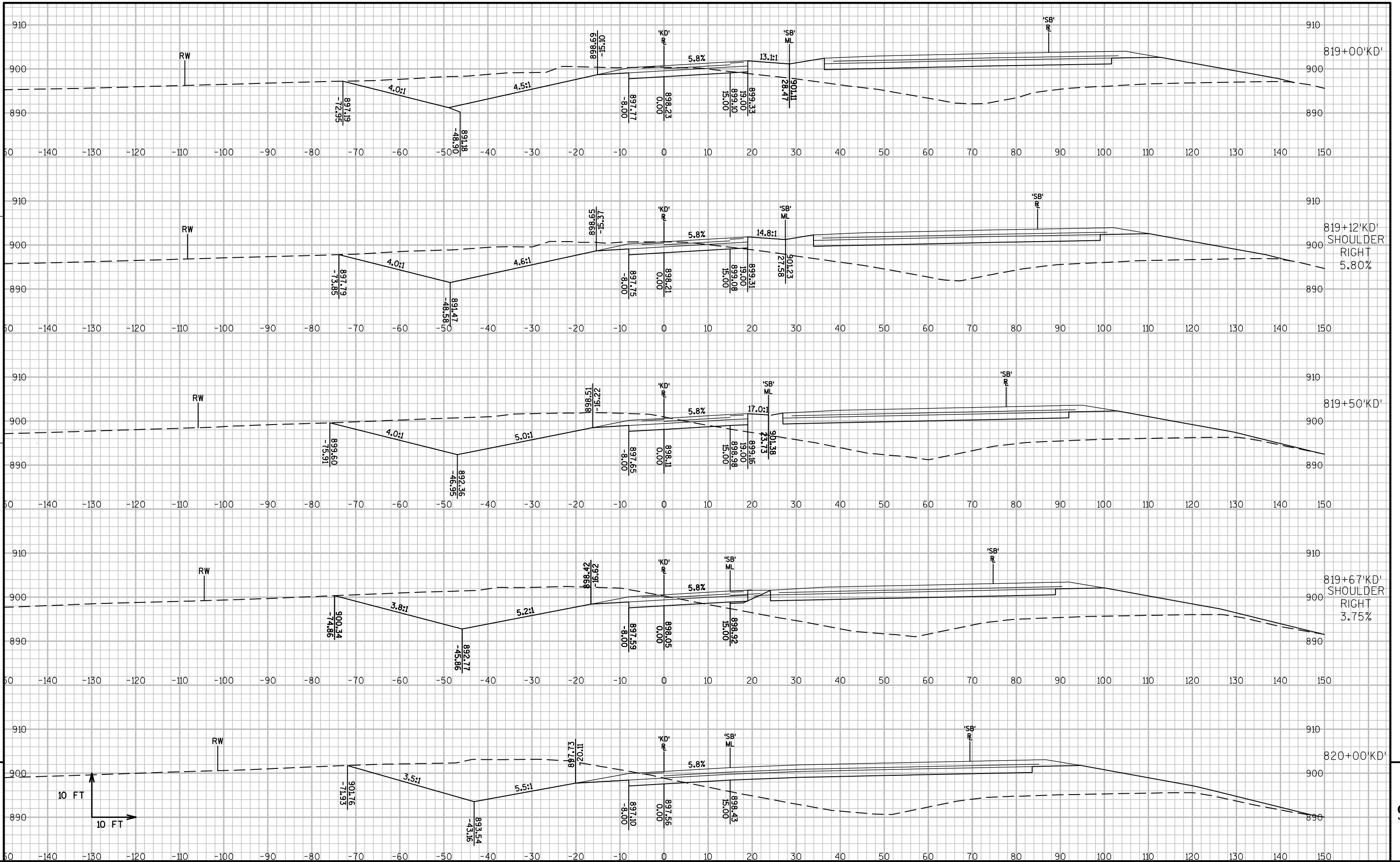
PLOT SCALE : 1:20_XREF

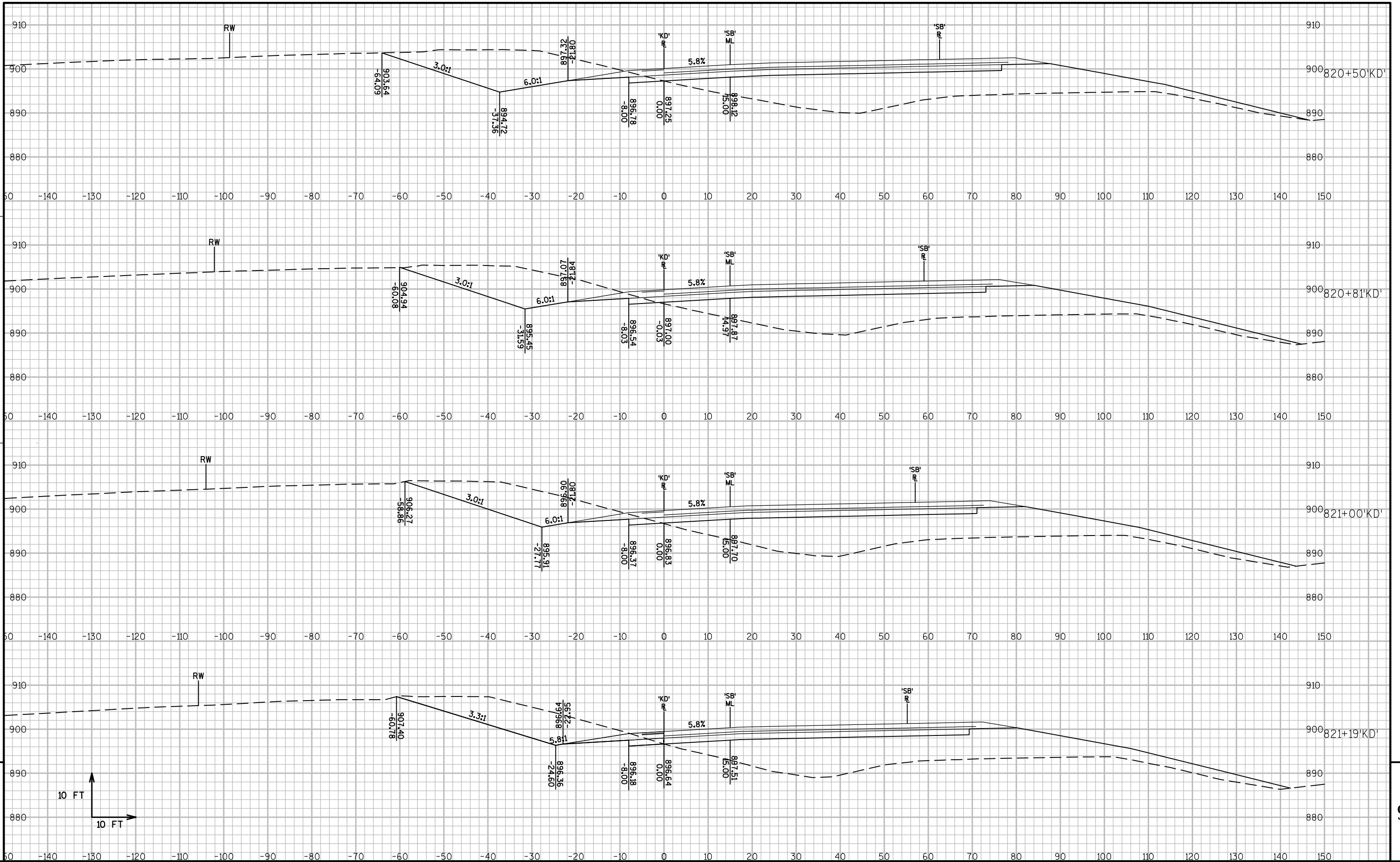
WISDOT/CADDs SHEET 49

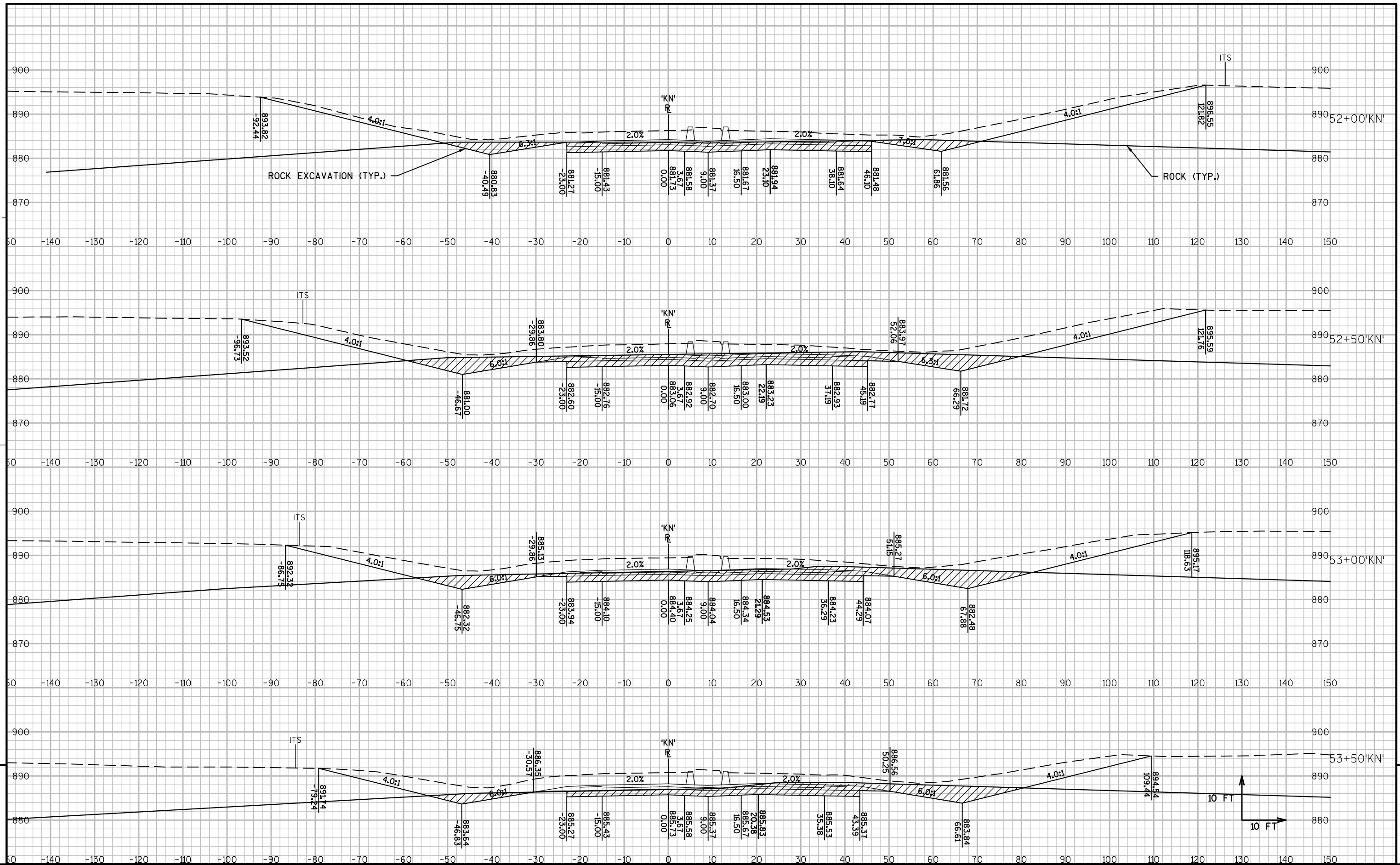


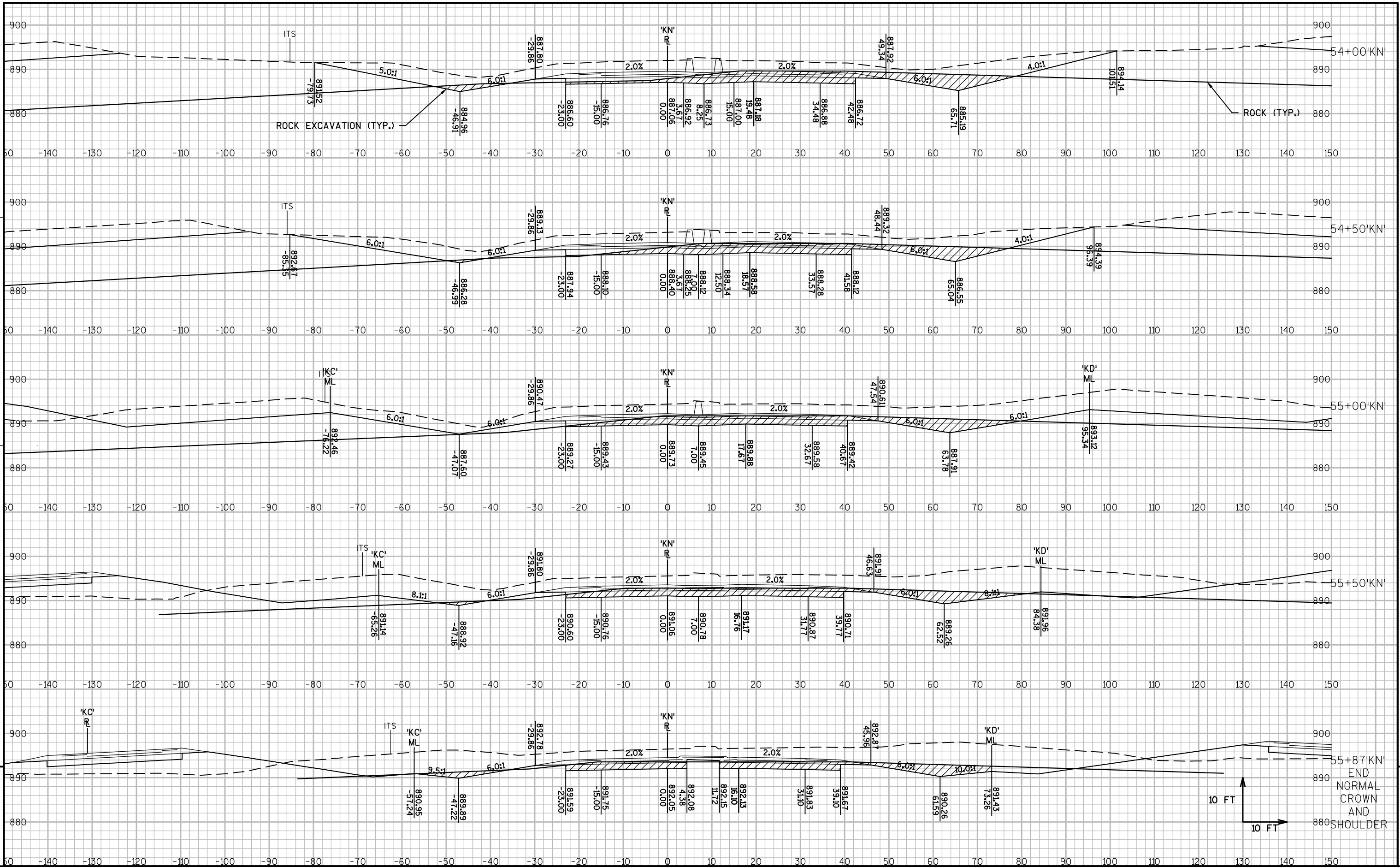


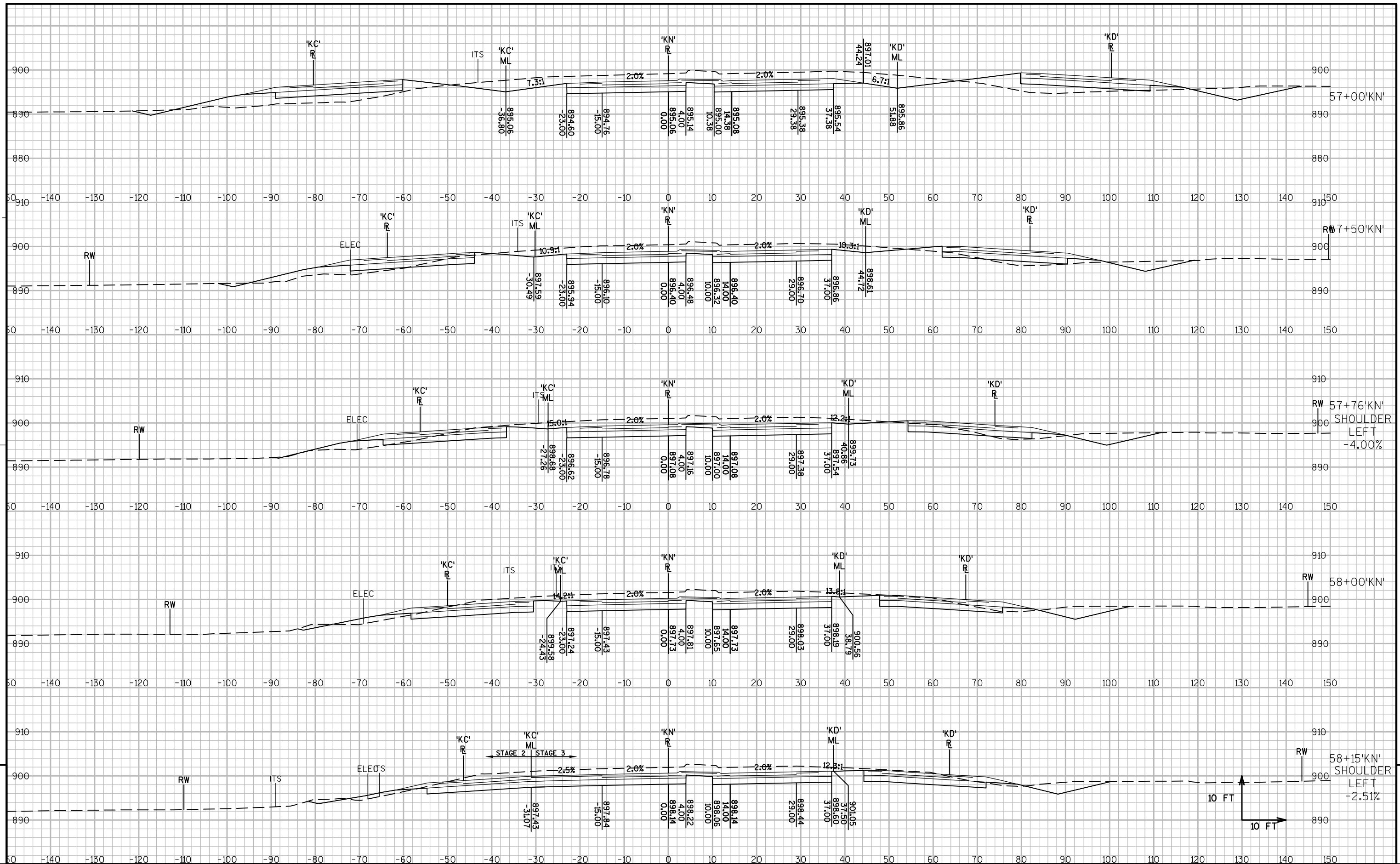


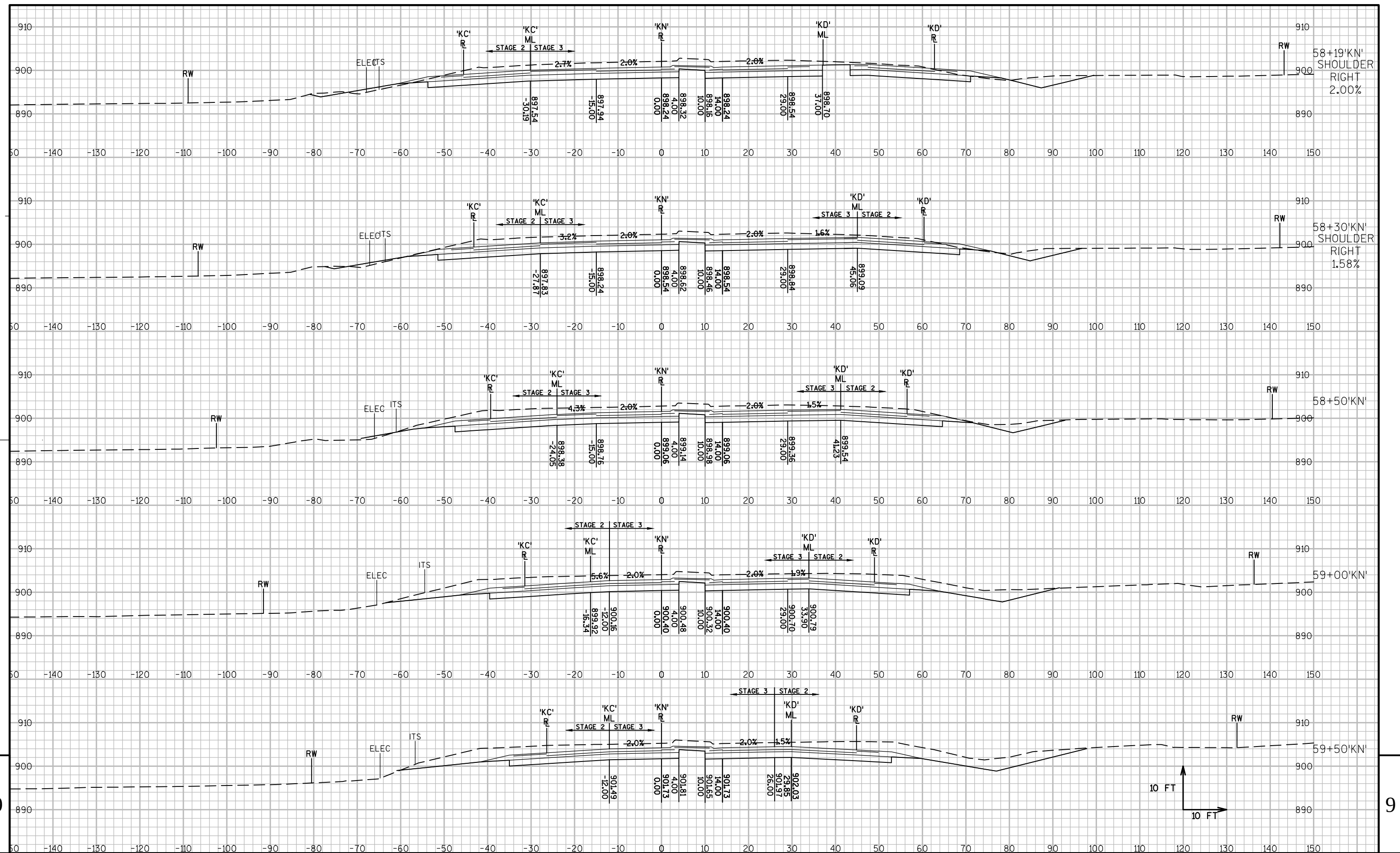


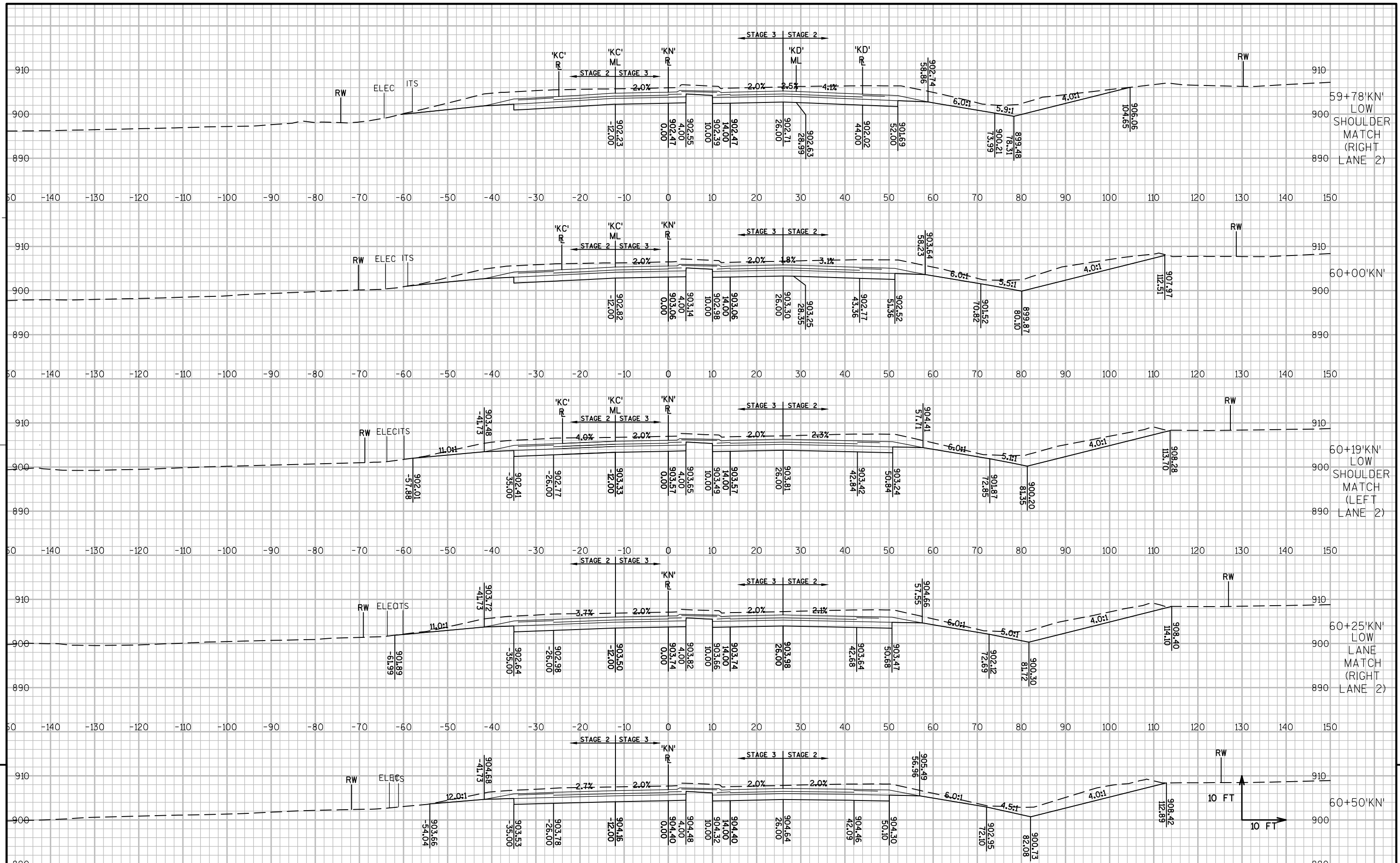


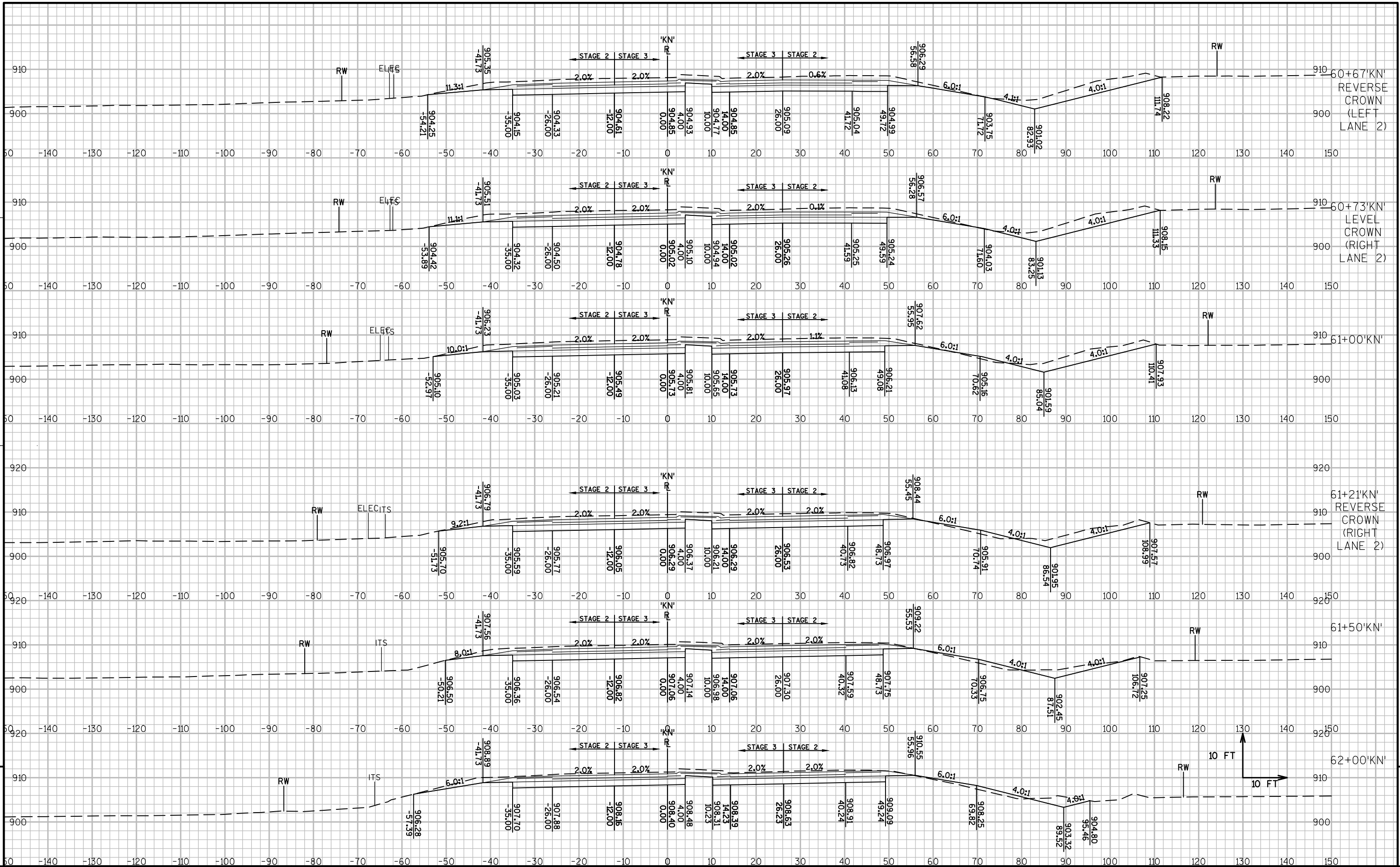


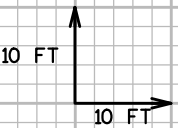
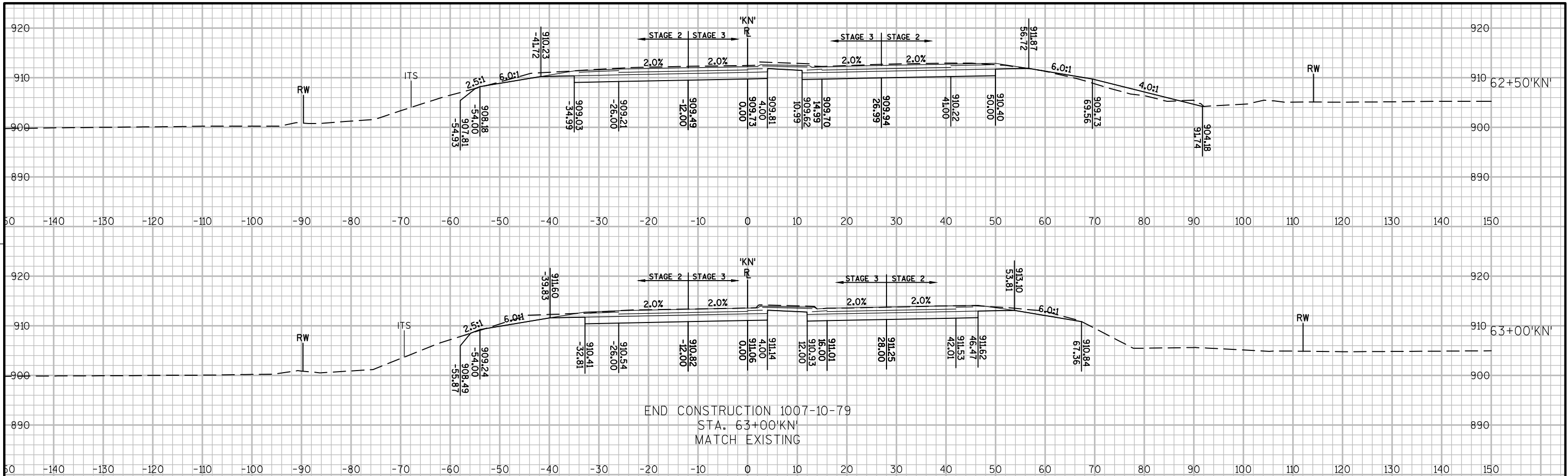


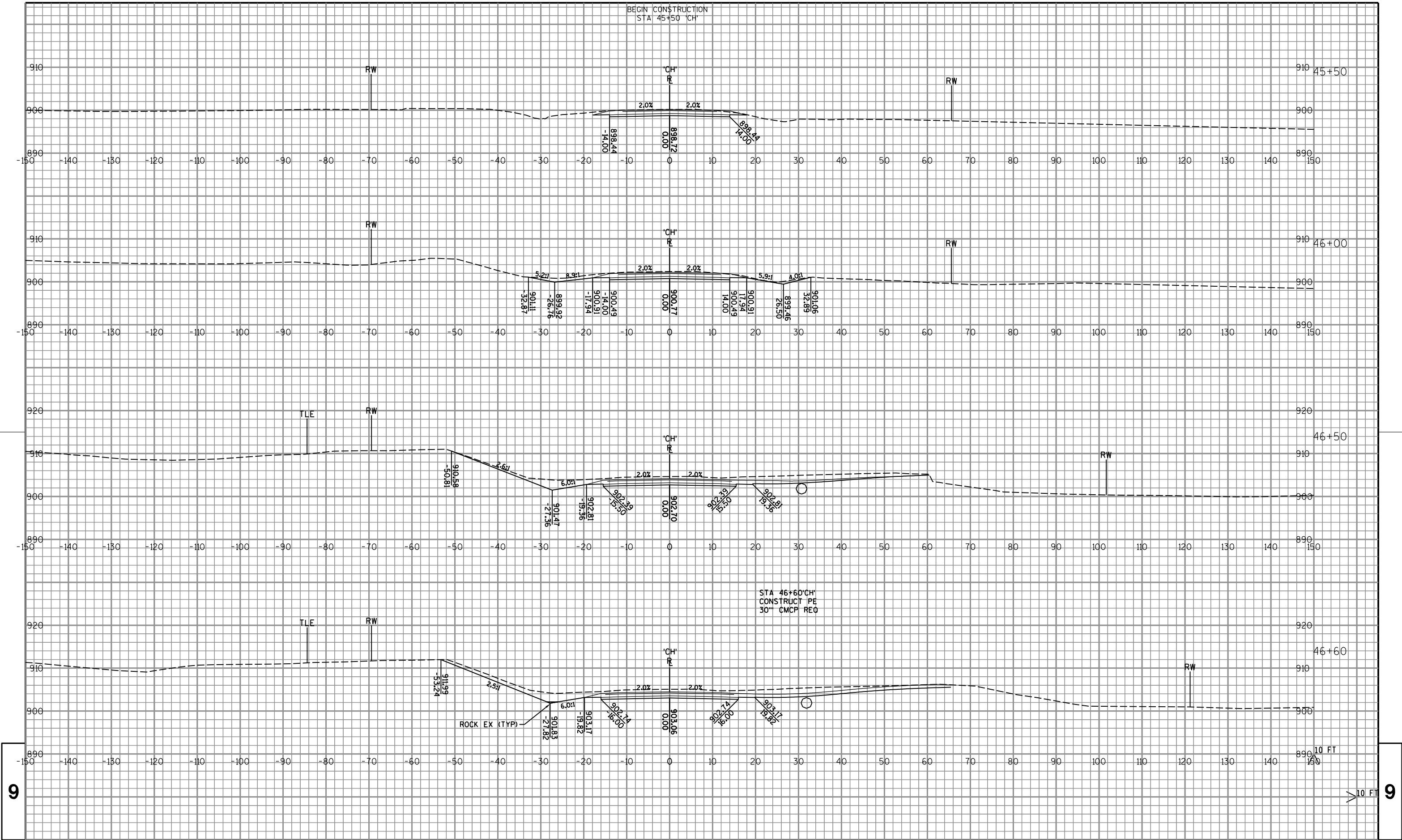


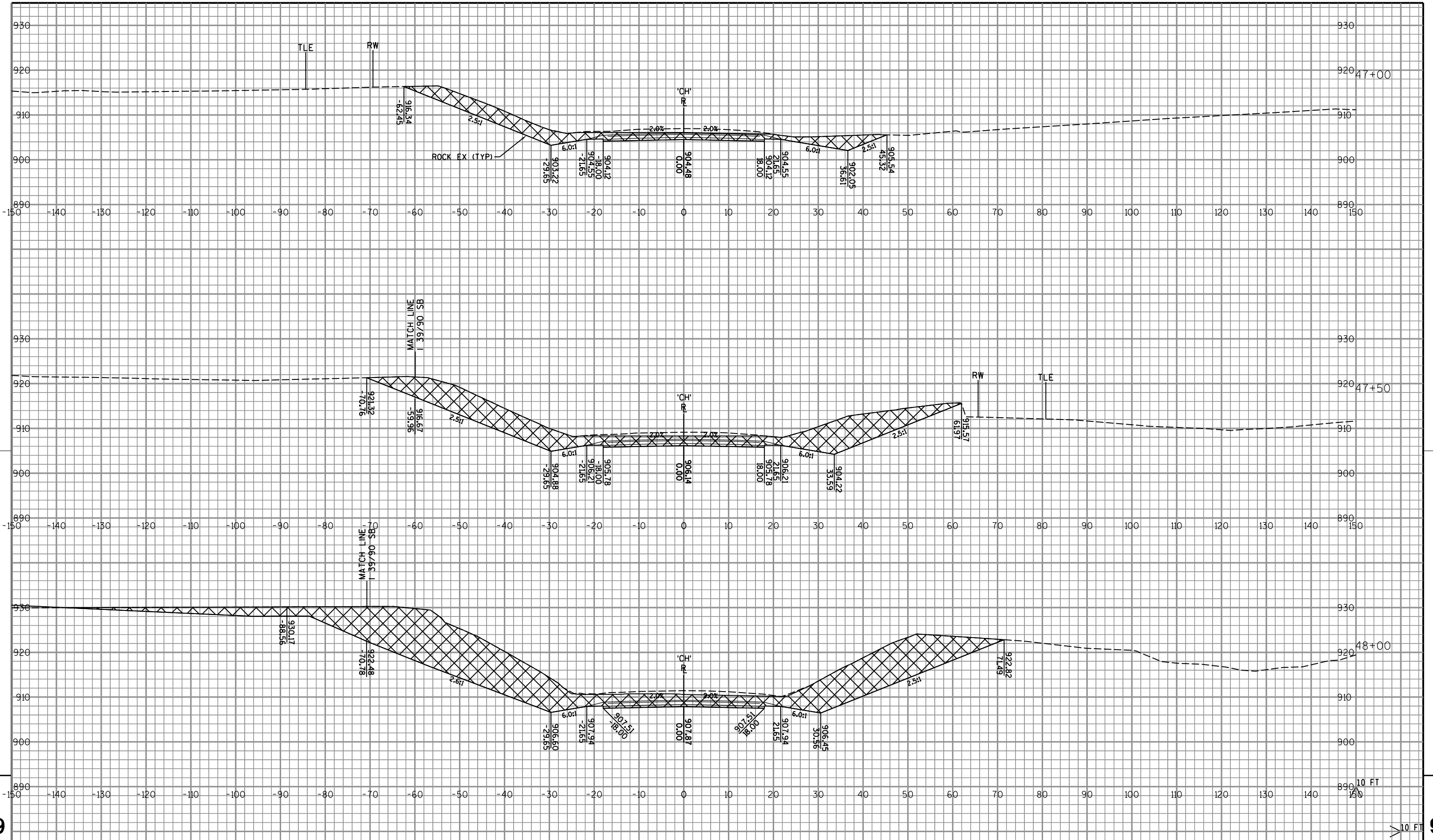


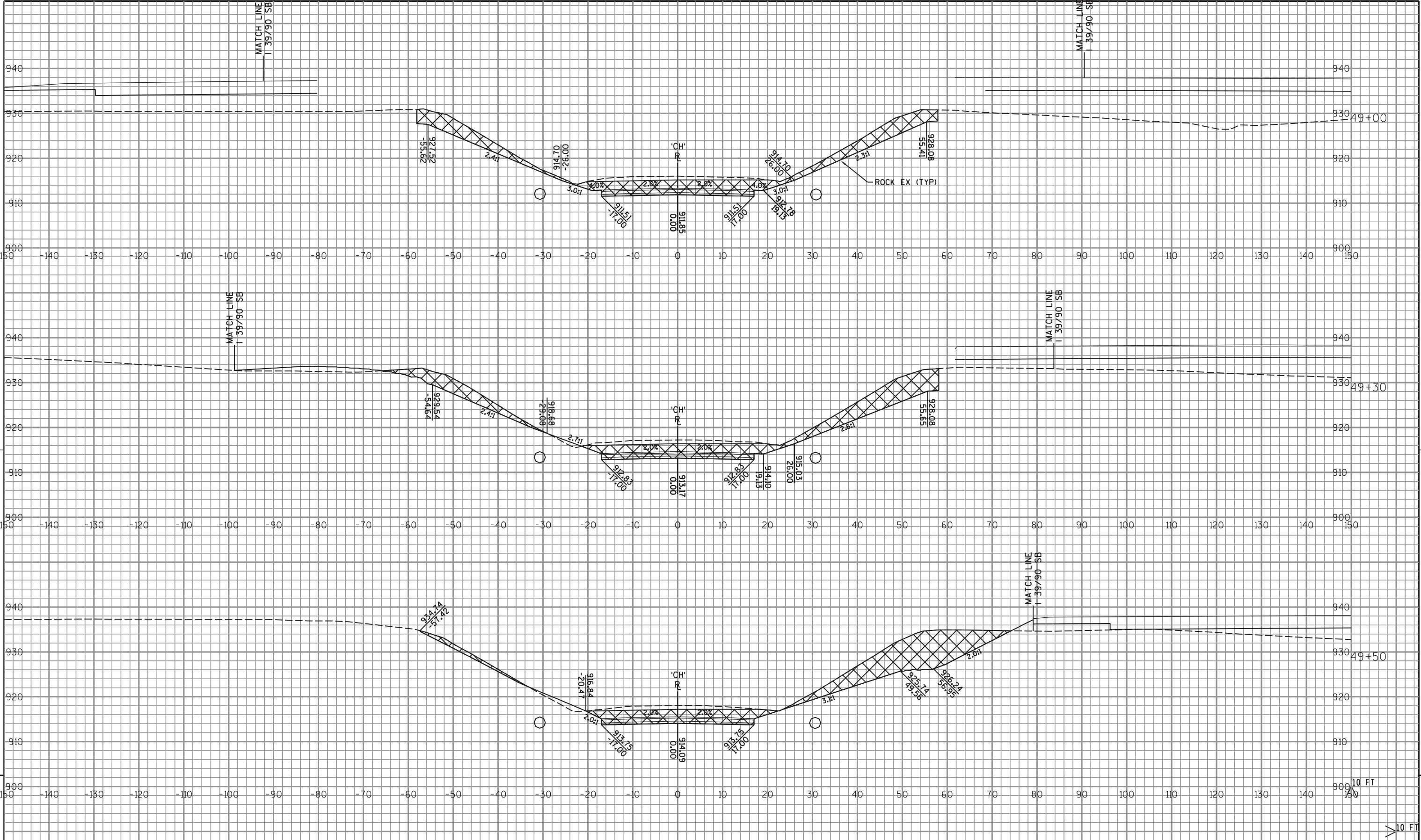


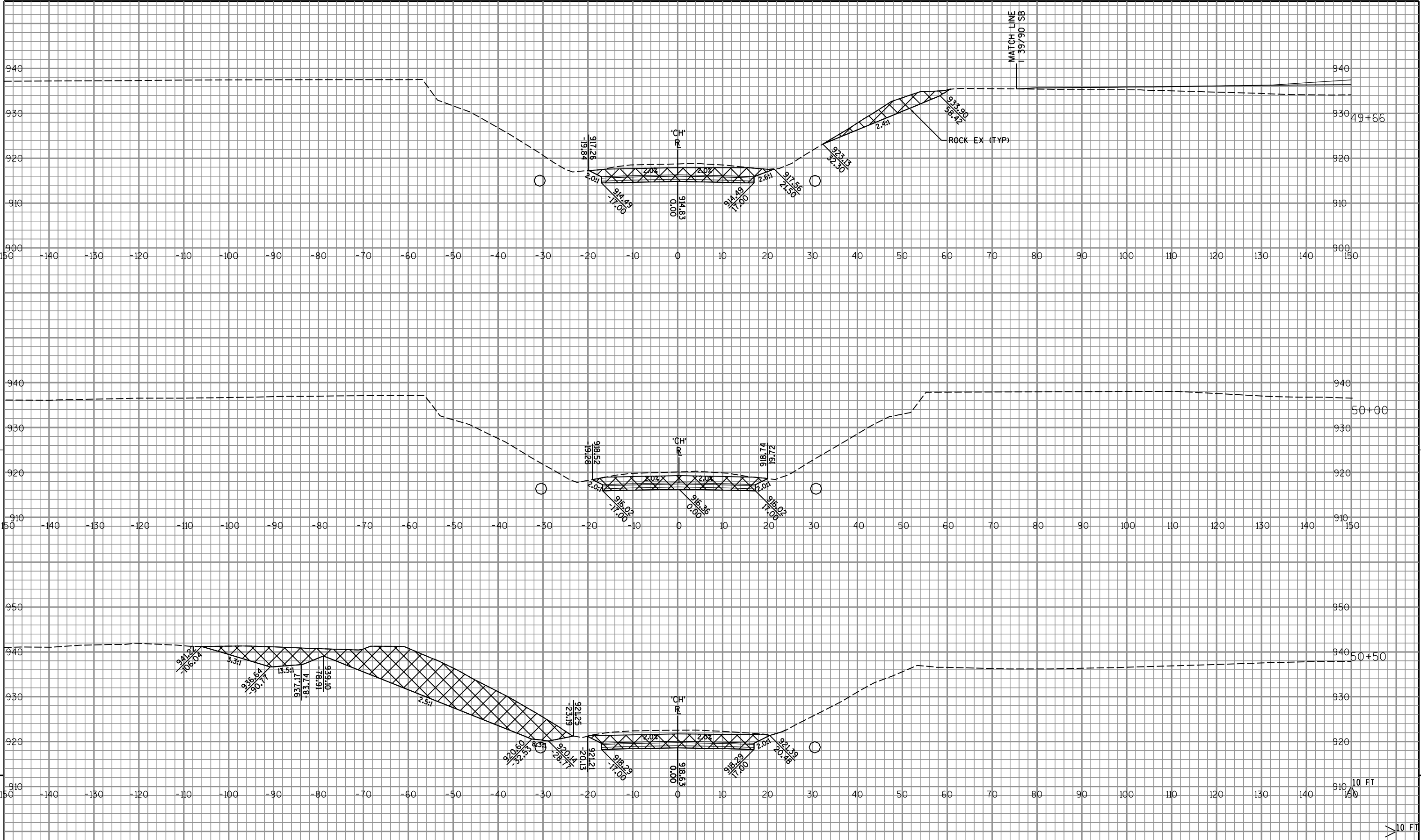


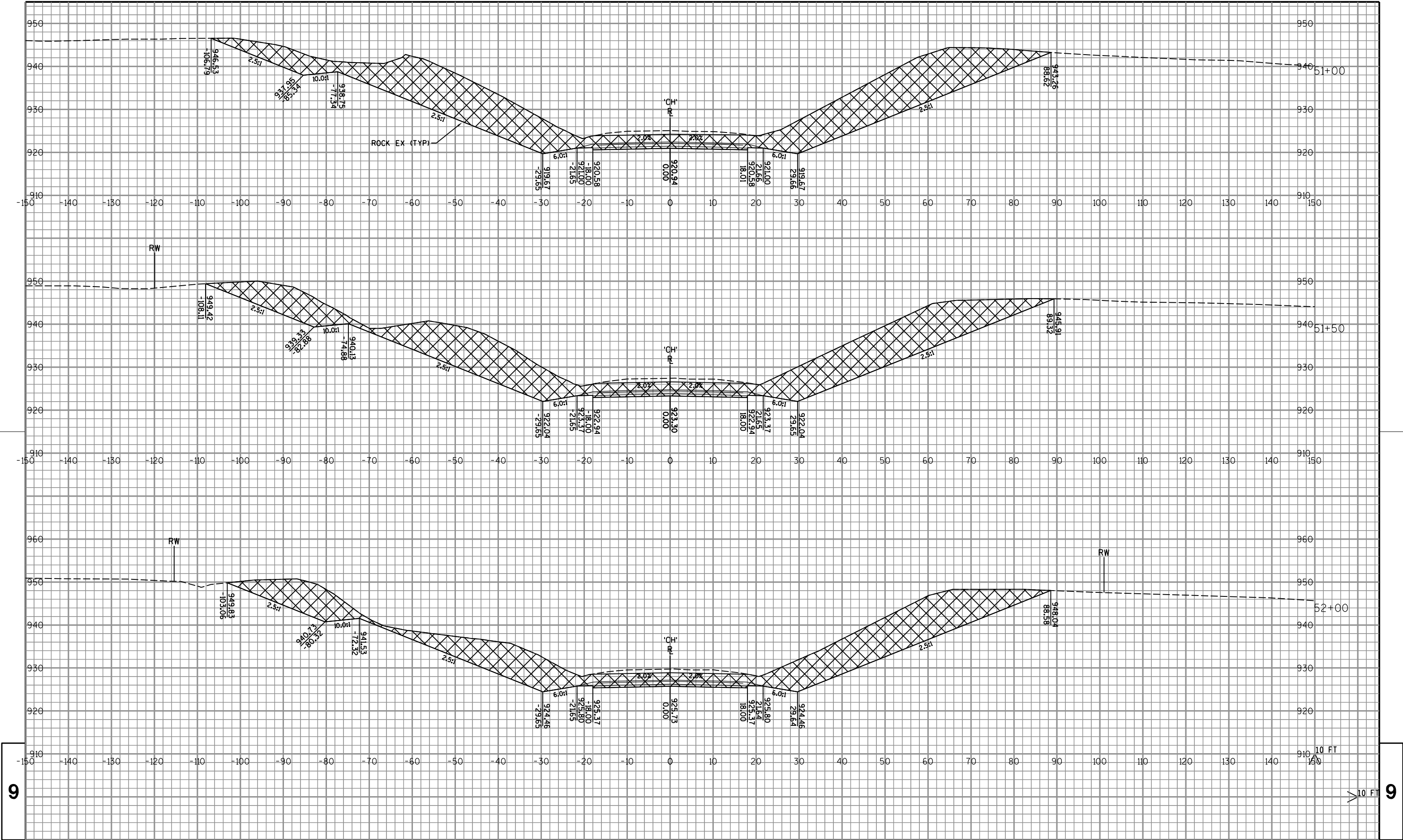


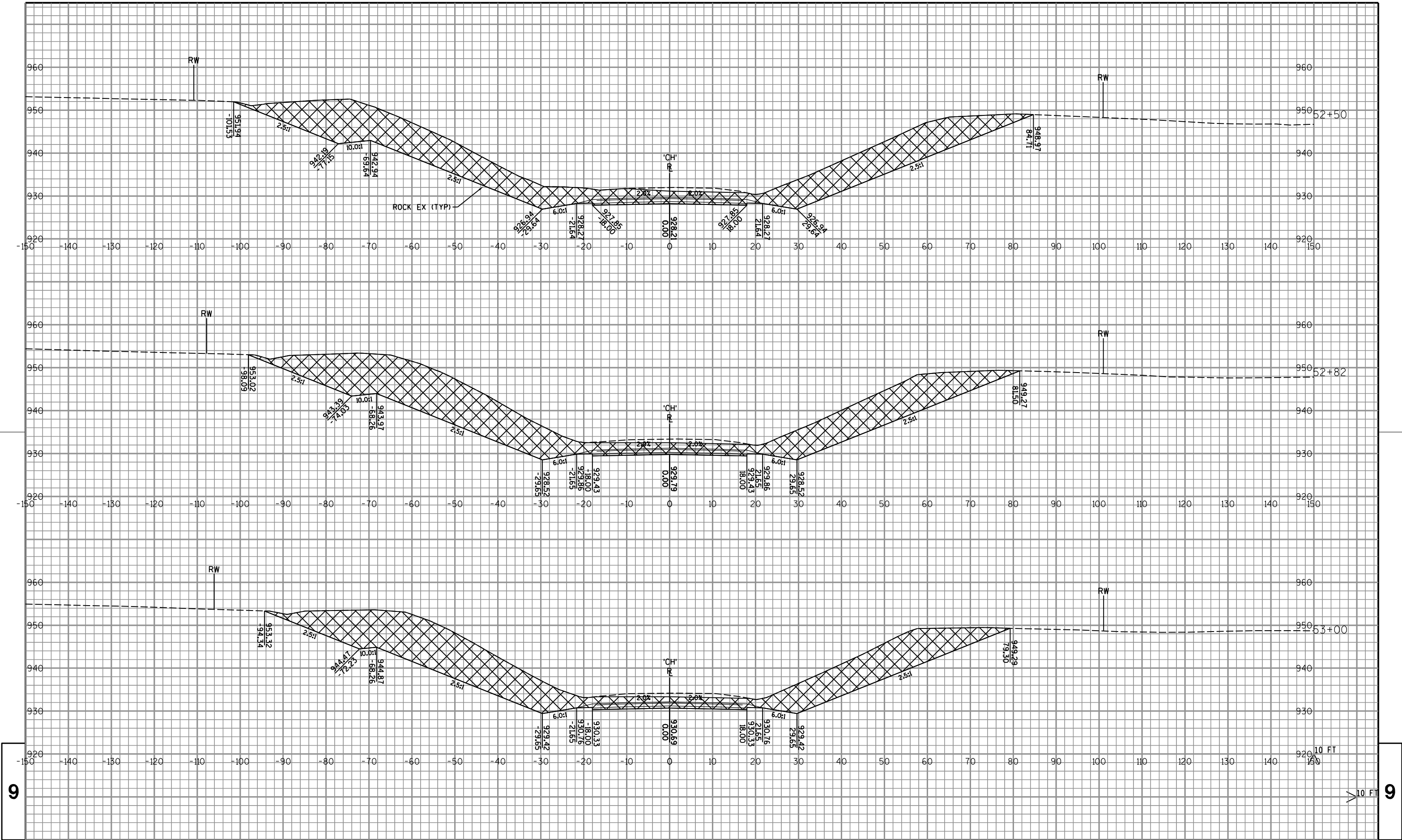


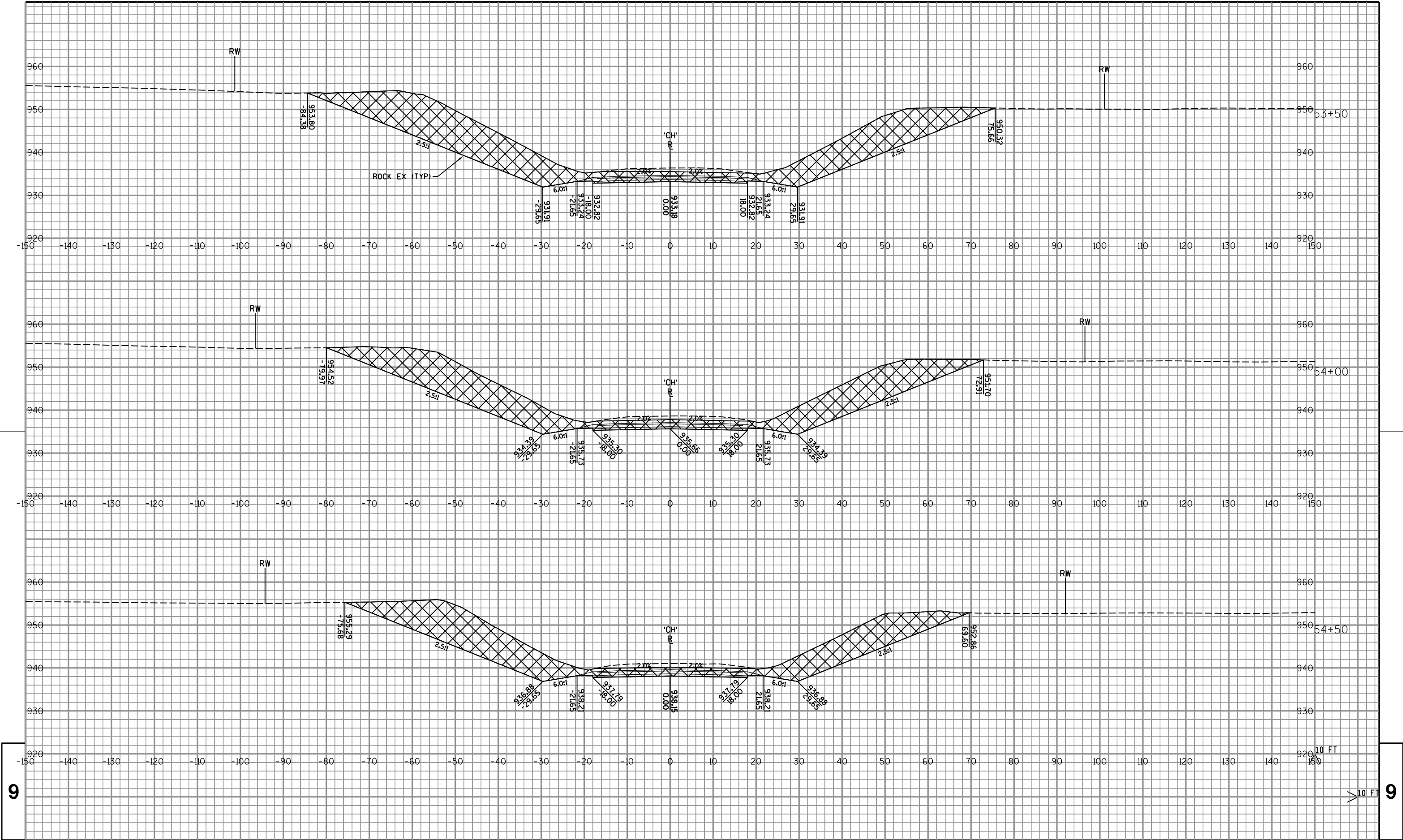












PROJECT NO:1007-10-79

HWY: IH-39

COUNTY: DANE

CROSS SECTIONS: EAST CHURCH ROAD

SHEET

868

E

FILE NAME : P:\47xx\4739.39_DP.I39.DAN\ENG\C3D\10071001\10071073\Sheet\Plan\090209_xs_Church.dgn

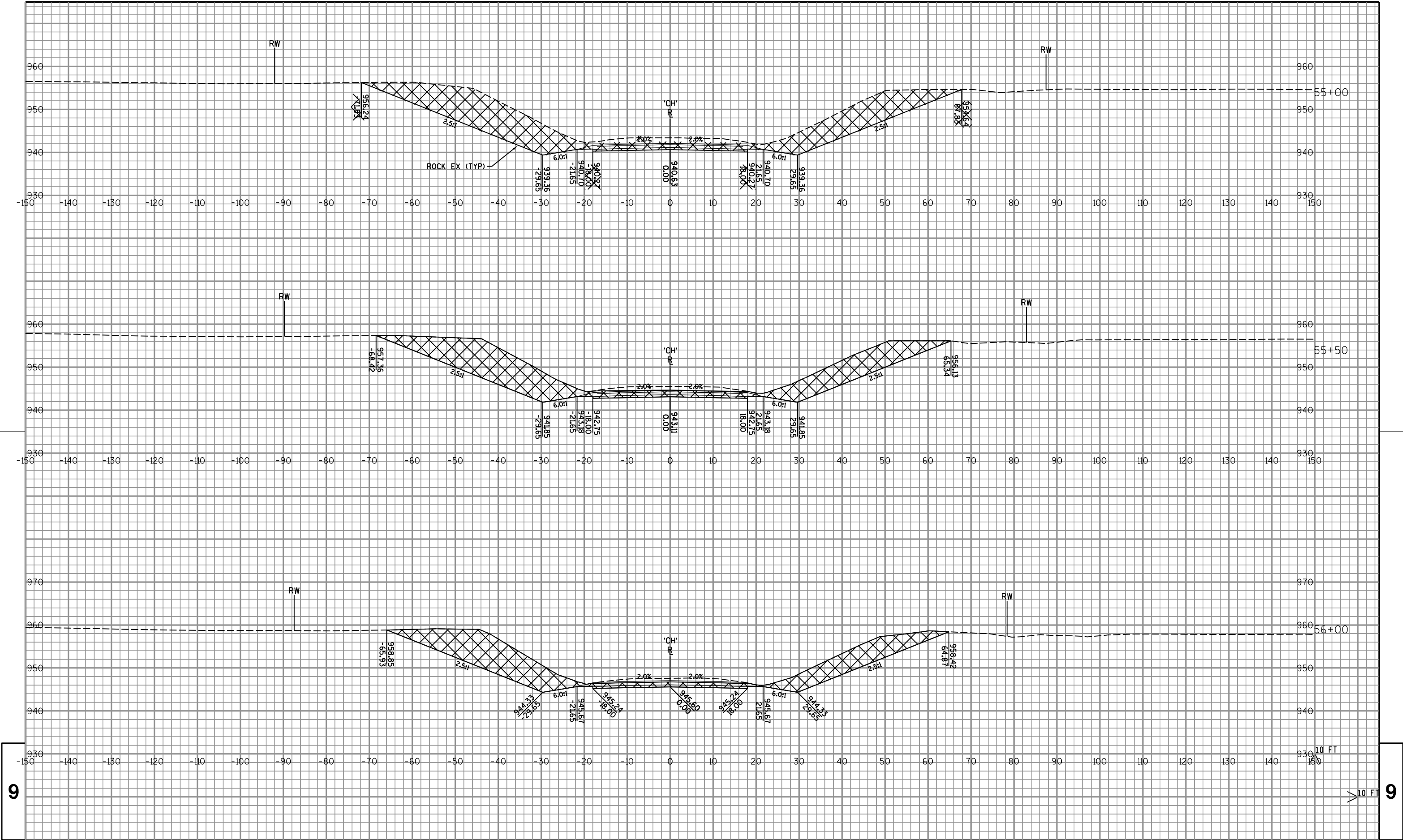
PLOT DATE : 7/28/2015

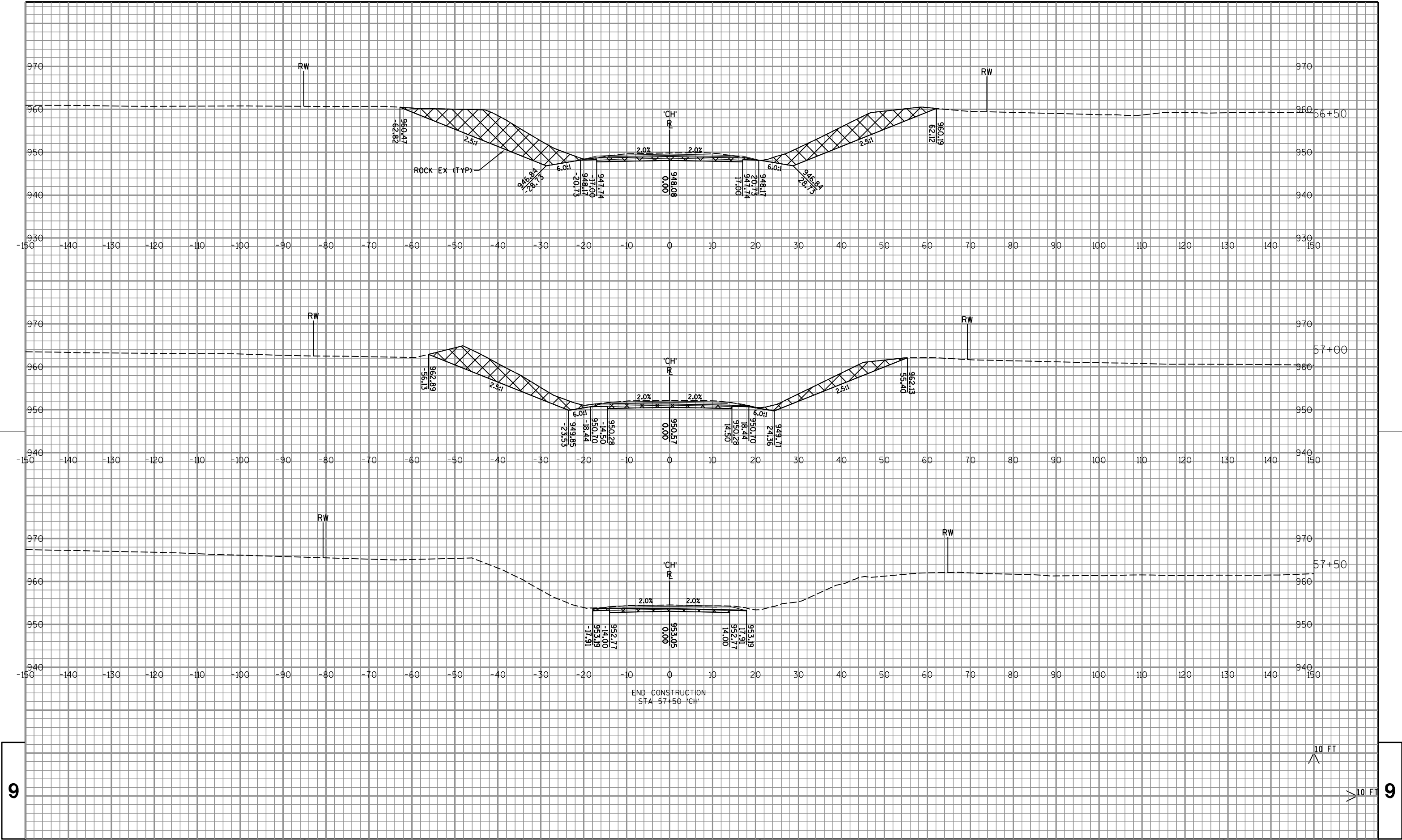
PLOT BY : kjd

PLOT NAME :

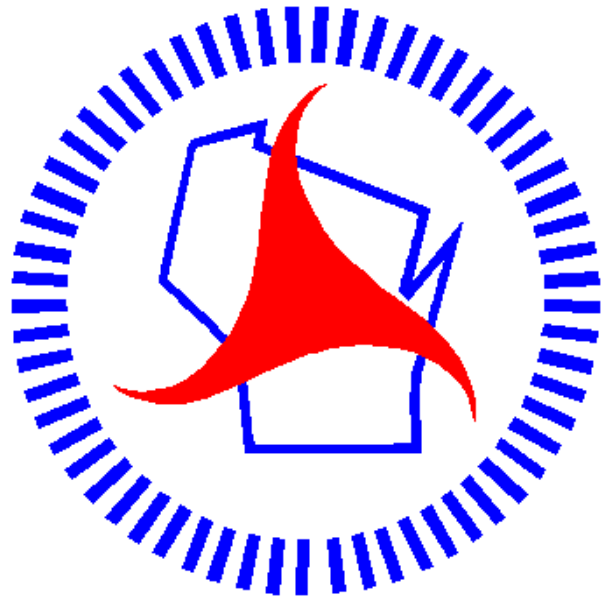
PLOT SCALE : 1:20

WISDOT/CADDs SHEET 21





Notes



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