MAD MARCH 2015

PROJECT ID: 1003-10-71

COUNTY: ROCK

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS = 634

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1003-10-71	----------	---

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

ILLINOIS STATE LINE - MADISON

CTH S. SHOPIERE ROAD INTERCHANGE

IH 39

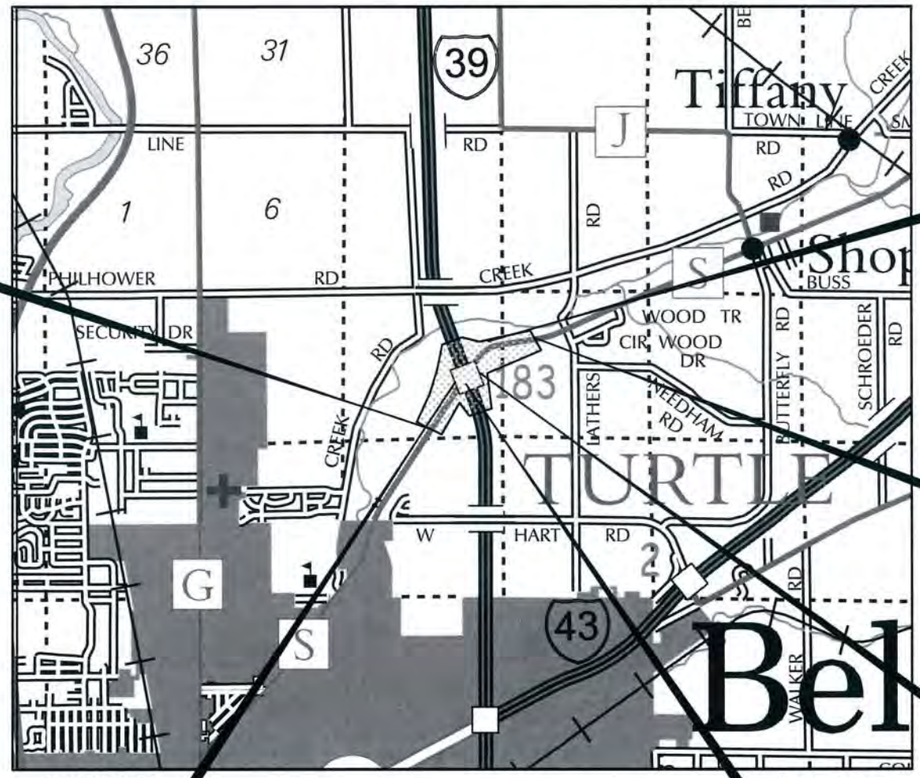
ROCK COUNTY

STATE PROJECT NUMBER

1003-10-71







BEGIN PROJECT
STA. 9+00.00 'S'
X=504,134.19
Y=222,290.86

STRUCTURE R-53-34

END PROJECT
STA. 63+75.00 'S'

STRUCTURE R-53-31

STRUCTURE R-53-30

STRUCTURE B-53-313

LAYOUT SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.000 MI.

"COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), ROCK COUNTY, NAD 1983 (2007)." VERTICAL DATUM BASED NAVD 88 (2007)

DESIGN DESIGNATION **CTH S**

A.A.D.T.	2015	= 5,200
A.A.D.T.	2035	= 7,900
D.H.V.	2035	= 909
D.D.		= 62/38
T.		= 6.9%
DESIGN SPEED		= 50 MPH
ESALS		= 1,014,700

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE		ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	95.36
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)	
SLOPE INTERCEPT		UTILITIES	
REFERENCE LINE		ELECTRIC	E
EXISTING CULVERT		FIBER OPTIC	FO
PROPOSED CULVERT (Box or Pipe)		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
		STORM SEWER	SS
MARSH AREA		TELEPHONE	T
		WATER	W
		UTILITY PEDESTAL	
WOODED OR SHRUB AREA		POWER POLE	
		TELEPHONE POLE	

ACCEPTED FOR ROCK COUNTY

10/29/14 (Date) Benjamin J. Coopman Jr. (DIRECTOR OF PUBLIC WORKS)

ORIGINAL PLANS PREPARED BY

Batterman
engineers surveyors planners

R.H. BATTERMAN & CO., INC.
2857 BARTELLS DRIVE
BELOIT, WI 53511
P 608.365.4464
TF 877.457.2235
608.365.1850

WISCONSIN PROFESSIONAL ENGINEER
TODD W. NEEDHAM
E-38332
JANESVILLE
WI

10/28/14 (Date) Todd Needham (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	R.H. BATTERMAN & CO., INC.
Designer	R.H. BATTERMAN & CO., INC.
Project Manager	STEVE MARSHALL
Regional Examiner	JIM BUSCHKOPF
Regional Supervisor	KIMBERLY SCHAUDER
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 10/30/2014 (Signature)

E

2

GENERAL NOTES

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 COORDINATE CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE, UTILITIES AND LOCAL GOVERNMENT BEFORE THE START OF CONSTRUCTION WORK.

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS, BUT IS MEASURED AND PAID FOR AS EXCAVATION COMMON. THE LOCATION OF EBS SHALL BE DETERMINED BY THE ENGINEER.

ALL WASTE MATERIAL RESULTING FROM THE VARIOUS CONSTRUCTION OPERATIONS ADJACENT TO PAVEMENT UNDER TRAFFIC SHALL BE ENTIRELY REMOVED AND PROPERLY DISPOSED OF IMMEDIATELY OR AS DIRECTED BY THE ENGINEER.

PAVEMENT REMOVAL SHALL BE REMOVED TO AN EXISTING JOINT OR AS DIRECTED BY THE ENGINEER UTILIZING A SAWCUT.

RADII DIMENSIONS FOR THE CURB & GUTTER ARE TO THE FLANGE OF THE CURB. CURB & GUTTER PLAN GRADES ARE AT THE FLANGE LINE UNLESS OTHERWISE NOTED.

THE EXACT LOCATIONS OF ALL DRIVEWAY ENTRANCES ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

THE EROSION CONTROL FEATURES ARE SHOWN ON THE PLAN AND ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH A TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY SHALL BE RESTORED AS DIRECTED BY THE ENGINEER.

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

DETAILS OF CONSTRUCTION NOT SHOWN ON THE PLAN SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

RESTORATION OF EXPOSED SLOPE AND DITCHES SHALL TAKE PLACE NOT MORE THAN 7 DAYS AFTER FINISHED GRADING IS COMPLETE.

THE CONTRACTORS PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINT FROM BEING LOCATED WITHIN A DRIVING OR TURNING LANE.

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/INCH.

SELECT CRUSHED MATERIAL SHALL BE USED IN ALL EBS AREAS.

ALL INLET RIM GRADES ARE TO THE FLANGE OF CURB.

OFFSETS TO INLETS AND MANHOLES ARE TO CENTER OF STRUCTURE. OFFSETS FOR APRON ENDWALLS ARE TO END OF PIPE.

THE CONTRACTOR SHALL COORDINATE ALL UTILITY ADJUSTMENTS WITH THE APPROPRIATE UTILITY.

THE CONTRACTOR SHALL MAINTAIN ACCESS FOR ALL PROPERTY OWNERS ALONG PROJECT. A MINIMUM OF 15' SHALL BE MAINTAINED TO ALLOW SAFE TRAVEL OF AFFECTED OWNERS.

ADJUST TRAFFIC CONTROL DEVICE LOCATIONS TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ABBREVIATIONS

AP	ACCESS POINT/DRIVEWAY CONNECTION
AR	ACCESS RIGHTS
AC	ACRES
ASPH	ASPHALT
AVG	AVERAGE
ADT	AVERAGE DAILY TRAFFIC
BAD	BASE AGGREGATE DENSE
BM	BENCHMARK
CL	CENTERLINE OR CLASS
CC	CENTER TO CENTER
CE	COMMERCIAL ENTRANCE
CONC	CONCRETE
CMP	CORRUGATED METAL PIPE
CPRC	CULVERT PIPE CORRUGATED STEEL
CSCP	CORRUGATED STEEL CULVERT PIPE
CSM	CERTIFIED SURVEY MAP
CTH	COUNTY TRUNK HIGHWAYS
CULV	CULVERT
CP	CULVERT PIPE
C&G	CURB & GUTTER
D	DEGREE OF CURVATURE
DHV	DESIGN HOURLY VOLUME
DIA	DIAMETER
DWY	DRIVEWAY
E	EAST
ELEV	ELEVATION
EW	ENDWALL
ENT	ENTRANCE
ESALS	EQUIVALENT SINGLE AXLE LOADS
EX	EXISTING
EXC	EXCAVATION
EBS	EXCAVATION BELOW SUBGRADE
EXIST	EXISTING
FF	FACE TO FACE
FERT	FERTILIZER
FE	FEILD ENTRANCE
FG	FINISHED GRADE
FT	FOOT
GV	GAS VALVE
IE	INVERT ELEVATION
INL	INLET
INV	INVERT
IP	IRON PIPE
JCT	JUNCTION
LHF	LEFT HAND FORWARD
L	LENGTH
LS	LUMP SUM
LT	LEFT
MH	MANHOLE
NC	NORMAL CROWN
N	NORTH
PT	POINT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
PL	PROPERTY LINE
PE	PRIVATE ENTRANCE
R/RAD	RADIUS
RCP	REINFORCED CONCRETE PIPE
REQ'D	REQUIRED
RT	RIGHT
R/W	RIGHT-OF-WAY
RHF	RIGHT HAND FORWARD
SALV	SALVAGED
SAN	SANITARY SEWER
SHLDR	SHOULDER
SDD	STANDARD DETAIL DRAWINGS
STA	STATION
STM	STORM SEWER
SE	SUPERELEVATION
SS	STORM SEWER
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
TAN	TANGENT
TLE	TEMPORARY LIMITED EASEMENT
T	TRUCKS
TYP	TYPICAL
VERT	VERTICAL
VC	VERTICAL CURVE
VOL	VOLUME
WV	WATER VALVE
W	WELL
X	EAST GRID COORDINATE
Y	NORTH GRID COORDINATE

UTILITIES

ALLIANT ENERGY (GAS & ELECTRIC)
ATTN: DEAN COPP
935 WBR TOWNLINE ROAD
BELOIT, WI 53511
TELEPHONE: (608) 364-6431
EMAIL: DEANCOPP@ALLIANTENERGY.COM

AT&T WISCONSIN
ATTN: CAROL ANASON
316 W WASHINGTON AVE
MADISON, WI 53703
TELEPHONE: (608) 252-2385
EMAIL: CA2624@ATT.COM

CHARTER COMMUNICATIONS
ATTN: TOM PHILLIPS
2016 CRANSTON ROAD
BELOIT, WI 53511
TELEPHONE: (608) 209-4821
EMAIL: THOMAS.PHILLIPS@CHARTER.COM

DNR LIAISON

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
ATTN: LAURA BUB
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
TELEPHONE: (608) 275-3485
EMAIL: LAURA.BUB@WISCONSIN.GOV

DESIGN CONTACT

R.H. BATTERMAN
ATTN: TODD NEEDHAM, P.E.
2857 BARTELLS DRIVE
BELOIT, WI 53511
TELEPHONE: (608) 365-4464
EMAIL: TNEEDHAM@RHBATTERMAN.COM

ROCK COUNTY HIGHWAY

DIRECTOR OF PUBLIC WORKS
BENJAMIN COOPMAN, JR., P.E.
3715 NEWVILLE ROAD
JANESVILLE, WI 53545
TELEPHONE: (608) 757-5450
EMAIL: COOPMAN@CO.ROCK.WI.US

WISDOT DESIGN CONTACT

I-39/90 SOUTH SEGMENT PROJECT MANAGER
STEVE MARSHALL, P.E.
111 INTERSTATE BLVD.
EDGERTON, WI 53534
TELEPHONE: (608) 884-7134
EMAIL: STEVE.MARSHALL@DOT.WI.GOV

WISDOT CONSTRUCTION CONTACT

I-39/90 SOUTH SEGMENT PROJECT MANAGER
EMMANUEL YARTEY, P.E.
111 INTERSTATE BLVD.
EDGERTON, WI 53534
TELEPHONE: (608) 884-7131
EMAIL: EMMANUEL.YARTEY@DOT.WI.GOV

HMA PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYERS AND GRADATIONS:

4.0" HMA: NORTH BACKAGE ROAD (TORTOISE LANE) AND NORTH FRONTAGE ROAD (SHOPIERE LANE)

TYPE	THICKNESS	LAYERS	MAX. NO. SIZE GRADATION	ASPHALTIC MATERIAL
E-3	1.75"	UPPER LAYER	12.5 MM	PG 64-28
E-3	2.25"	LOWER LAYER	19.0 MM	PG 58-28

4.5" HMA: CTH S EAST OF EAST RAMP TERMINAL AND CTH S SOUTH RAMPS ('ZB', 'ZC')

TYPE	THICKNESS	LAYERS	MAX. NO. SIZE GRADATION	ASPHALTIC MATERIAL
E-3	2.0"	UPPER LAYER	12.5 MM	PG 64-28
E-3	2.5"	LOWER LAYER	19.0 MM	PG 58-28

5.0" HMA: CTH S WEST OF I-39/90, CTH S NORTH RAMPS ('ZA', 'ZD'),
AND SOUTH BACKAGE ROAD (TERRAPIN TRAIL)

TYPE	THICKNESS	LAYERS	MAX. NO. SIZE GRADATION	ASPHALTIC MATERIAL
E-3	2.0"	UPPER LAYER	12.5 MM	PG 64-28
E-3	3.0"	LOWER LAYER	19.0 MM	PG 58-28

NOTE: LOWER LAYER SHALL BE PAVED IN ONE LIFT

4.5" HMA: TEMPORARY RAMP CONNECTIONS.

TYPE	THICKNESS	LAYERS	MAX. NO. SIZE GRADATION	ASPHALTIC MATERIAL
E-3	2.0"	UPPER LAYER	12.5 MM	PG 64-28
E-3	2.5"	LOWER LAYER	19.0 MM	PG 58-28

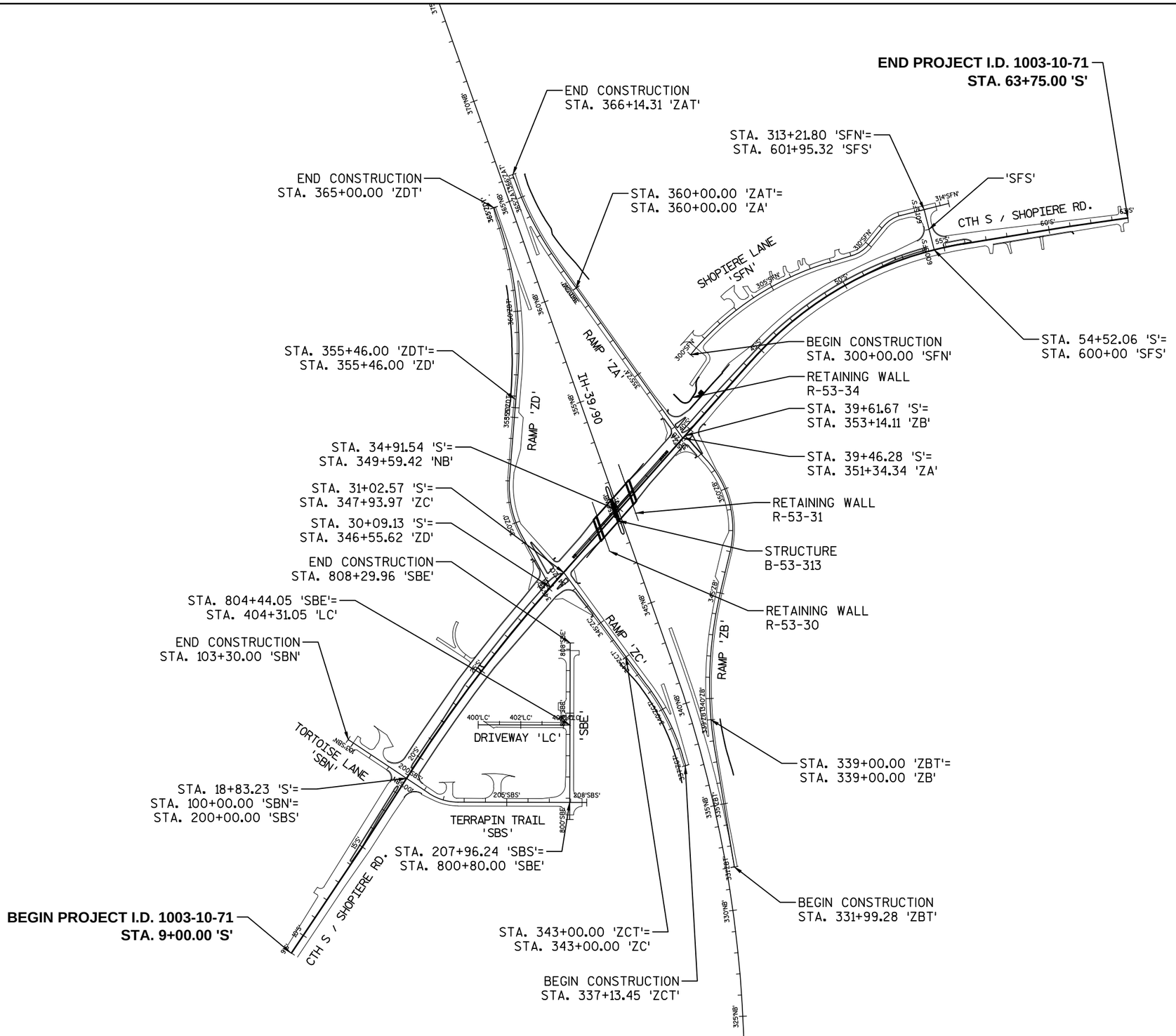
PAVEMENT BORING TABLE

BORING NO.	STATION	LOCATION	THICKNESS (INCHES) ASPHALT	CONCRETE	BASE
SR-11	24+03	23' RT	0	0	24
SR-12	28+96	67' LT	0	10	12
SR-15	41+85	223' LT	12	0	24
SR-16	46+54	220' LT	9.5	0	6
SR-17	50+91	90' LT	10	0	8
SR-18	55+73	17' LT	12	0	6

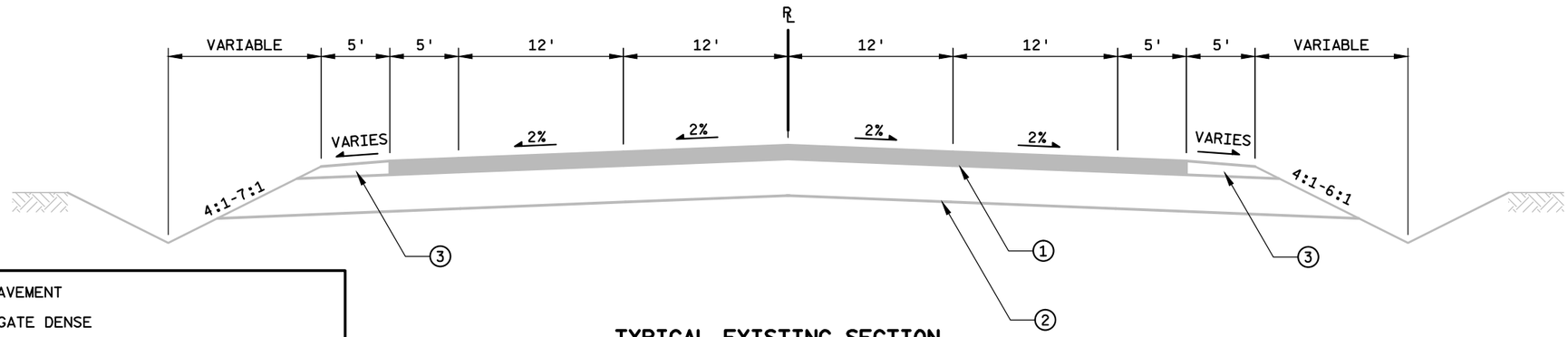
ORDER OF DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
EXISTING TYPICAL SECTIONS
FINISHED TYPICAL SECTIONS
CONSTRUCTION DETAILS
REMOVAL PLAN
PLAN DETAILS
CONTOUR MAP
EROSION CONTROL
STORM SEWER
PLANTING
SIGN REMOVALS
PERMANENT SIGNING
LIGHTING
ITS
PAVEMENT MARKINGS
TRAFFIC CONTROL/CONSTRUCTION STAGING
FENCING
ALIGNMENT DETAILS
CONTROL POINT TIES

DIGGERS HOTLINE
Dial 811 or (800) 242-8511
www.DiggersHotline.com



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PROJECT OVERVIEW	SHEET 3 E

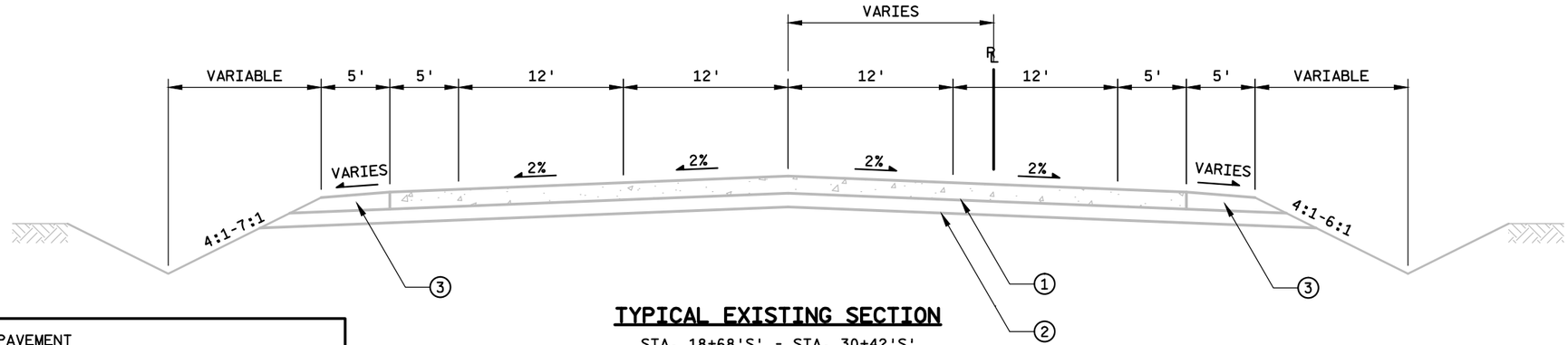


LEGEND

①	EXISTING 6" ASPHALTIC PAVEMENT
②	EXISTING 16" BASE AGGREGATE DENSE
③	EXISTING 6" BASE AGGREGATE DENSE (SHLD.)

TYPICAL EXISTING SECTION

STA. 9+00'S' - STA. 18+68'S'



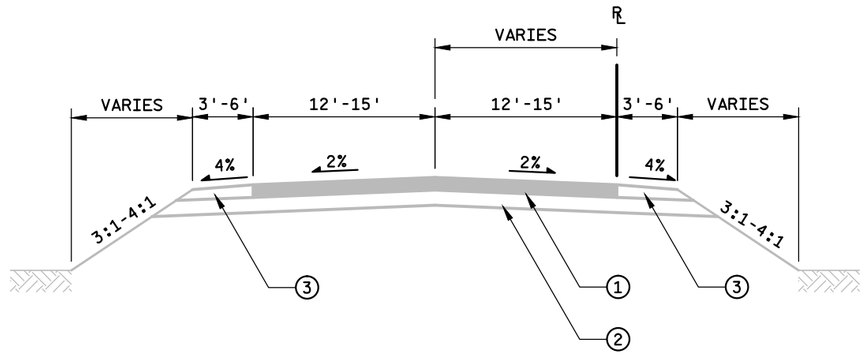
LEGEND

①	EXISTING 7.5" CONCRETE PAVEMENT
②	EXISTING 6" BASE AGGREGATE DENSE
③	EXISTING 7.5" BASE AGGREGATE DENSE (SHLD.)

TYPICAL EXISTING SECTION

STA. 18+68'S' - STA. 30+42'S'

2

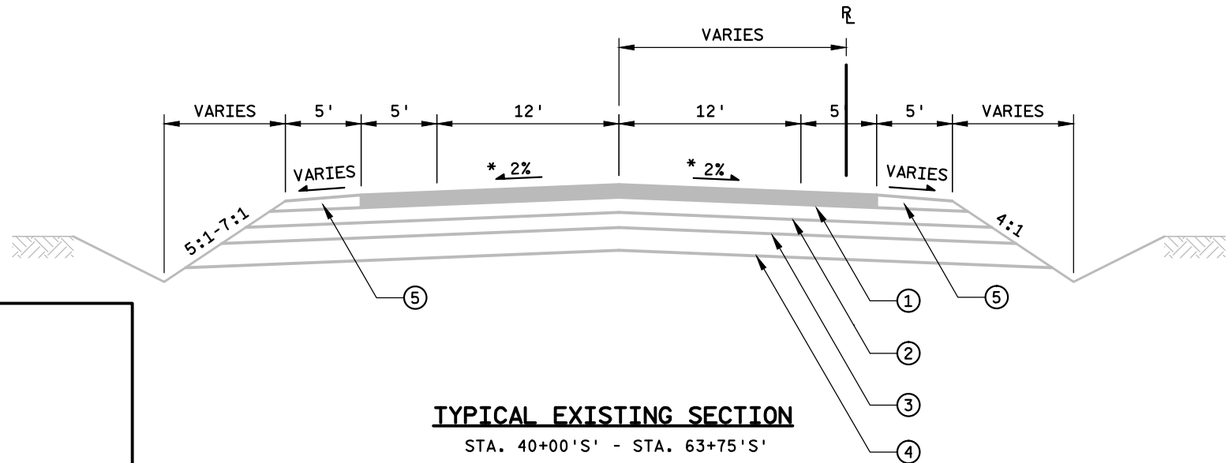


TYPICAL EXISTING SECTION

STA. 30+42'S' - STA. 34+08'S'
STA. 36+82'S' - STA. 40+00'S'

LEGEND

1. EXISTING 4" ASPHALTIC PAVEMENT
2. EXISTING 10" BASE AGGREGATE DENSE
3. EXISTING 4" BASE AGGREGATE DENSE



TYPICAL EXISTING SECTION

STA. 40+00'S' - STA. 63+75'S'

LEGEND

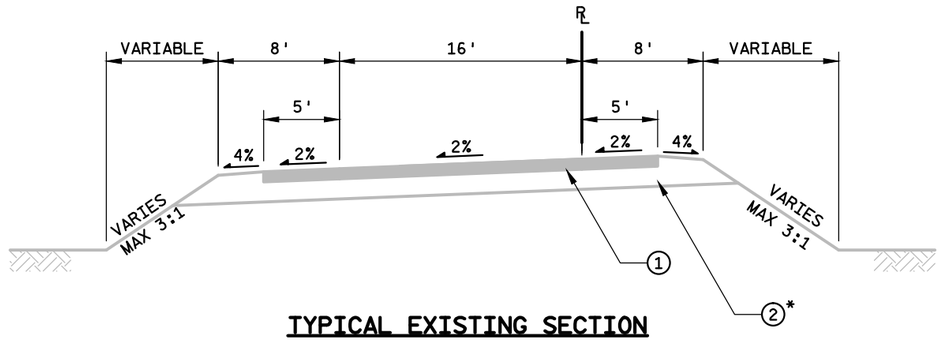
1. EXISTING 5" ASPHALTIC PAVEMENT
2. EXISTING 6" PULVERIZED ASPHALTIC PAVEMENT
3. EXISTING 6" BASE AGGREGATE DENSE (VARIES)
4. EXISTING 9" GRANULAR SUBBASE (VARIES)
5. EXISTING 5" BASE AGGREGATE DENSE (SHLD.)

* ROADWAY IS SUPERELEVATED, SLOPE VARIES

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	TYPICAL SECTIONS: EXISTING CTH S	SHEET 5	E

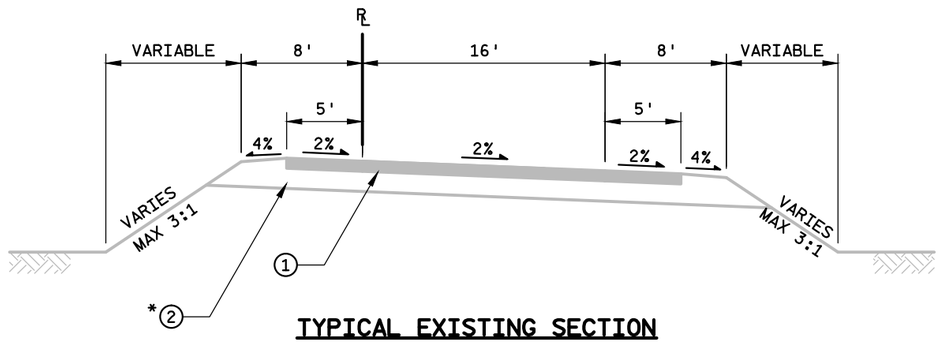
FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_020301_TS.DWG PLOT DATE : 10/14/2014 9:24 AM PLOT BY : ELLYN SUBAK PLOT NAME : ---------- PLOT SCALE : 1 IN: 10 FT WISDOT/CADDS SHEET 42

2



TYPICAL EXISTING SECTION

RAMP 'ZA' & 'ZB'



TYPICAL EXISTING SECTION

RAMP 'ZC' & 'ZD'

LEGEND

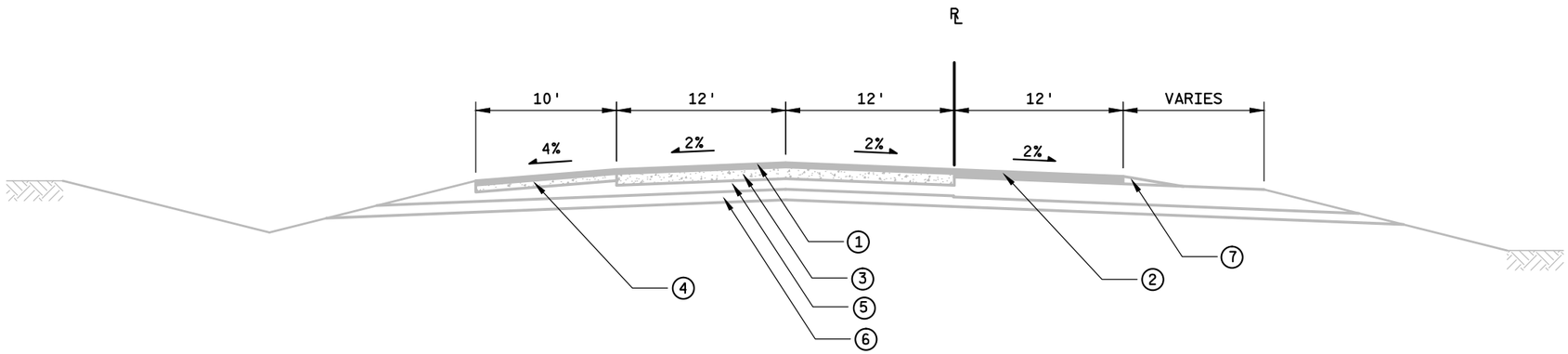
1	EXISTING 4" ASPHALTIC PAVEMENT
*2	EXISTING 8" BASE AGGREGATE DENSE

*PULVERIZED ASPHALT AND CRUSHED AGGREGATE LIES BELOW THE EXISTING 8" BASE AGGREGATE

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	TYPICAL SECTIONS: EXISTING RAMPS	SHEET 6	E

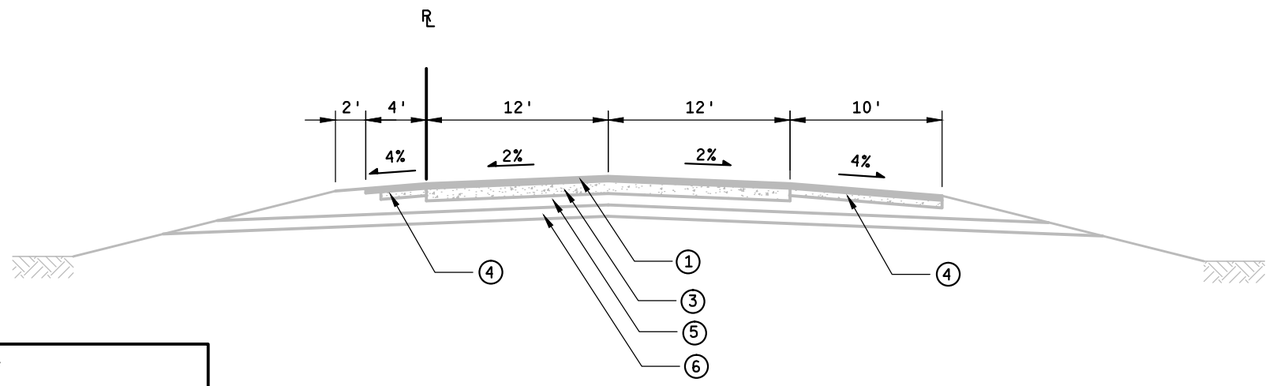
FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_020301_TS.DWG PLOT DATE : 10/14/2014 9:24 AM PLOT BY : ELLYN SUBAK PLOT NAME : ---------- PLOT SCALE : 1 IN: 10 FT WISDOT/CADDS SHEET 42

2



TYPICAL EXISTING SECTION

IH-39/90 SB



TYPICAL EXISTING SECTION

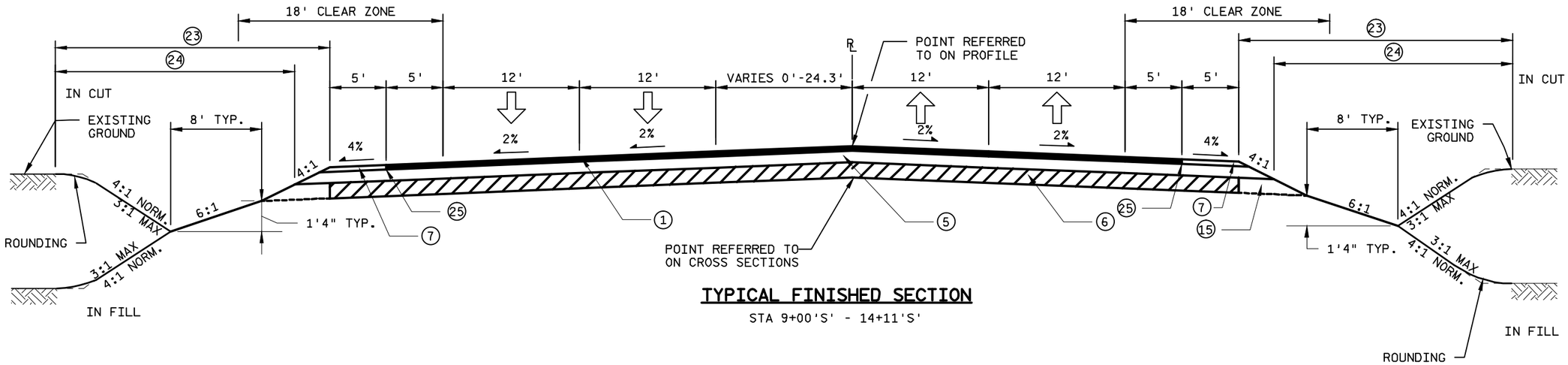
IH-39/90 NB

LEGEND

1. EXISTING 3.5" ASPHALTIC CONCRETE OVERLAY
2. EXISTING 6.5" ASPHALTIC PAVEMENT
3. EXISTING 10" CONTINUOUS REINFORCED CONCRETE PAVEMENT
4. EXISTING 6" NON-REINFORCED CONCRETE SHOULDER
5. EXISTING GRAVEL BASE COURSE
6. EXISTING 9" GRANULAR SUB-BASE
7. EXISTING BASE AGGREGATE DENSE (SHLD.)

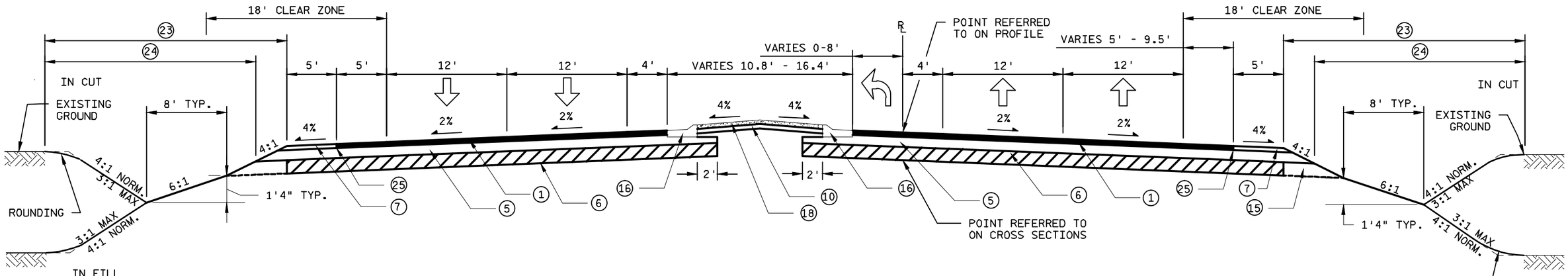
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	TYPICAL SECTIONS: EXISTING IH-39/90	SHEET 7	E

2



TYPICAL FINISHED SECTION

STA 9+00'S' - 14+11'S'



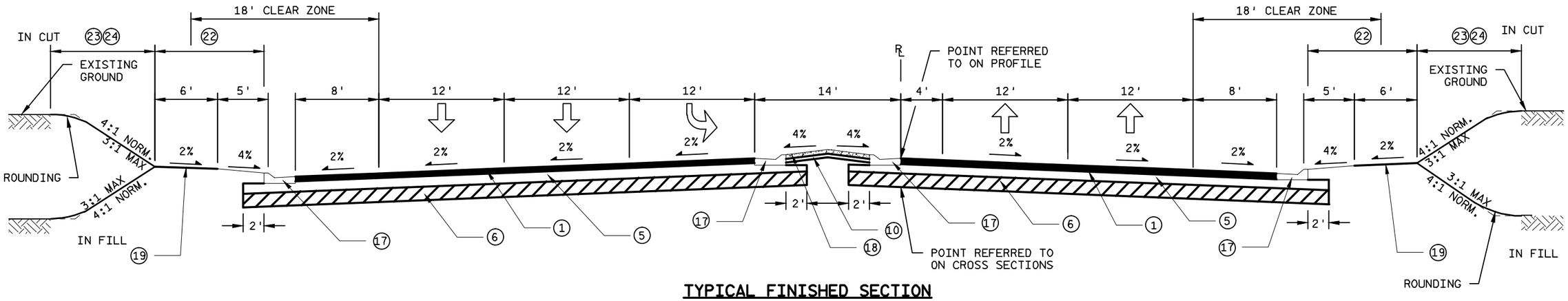
TYPICAL FINISHED SECTION

STA 14+11'S' - 18+83'S'

LEGEND

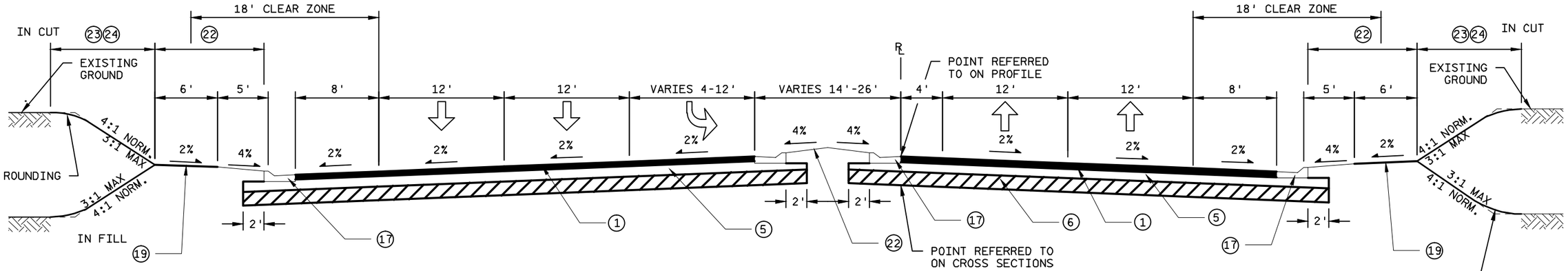
(1)	5-INCH HMA PAVEMENT, TYPE E-3
(5)	12-INCH BASE AGGREGATE DENSE 1¼-INCH
(6)	16-INCH SELECT CRUSHED MATERIAL
(7)	5-INCH BASE AGGREGATE DENSE 3/4-INCH
(15)	CONSTRUCT RELIEF TRENCHES AT 250' INTERVALS AND AT DITCH SAG POINTS
(16)	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D REVERSE SLOPE
(18)	CONCRETE SIDEWALK 5-INCH
(23)	SEED, TEMPORARY SEED, FERTILIZER
(24)	SALVAGED TOPSOIL & MULCH
(25)	SAFETY EDGE TYPICAL - SEE SDD 14B29-01

2



TYPICAL FINISHED SECTION

STA 18+83'S' - 22+00'S'

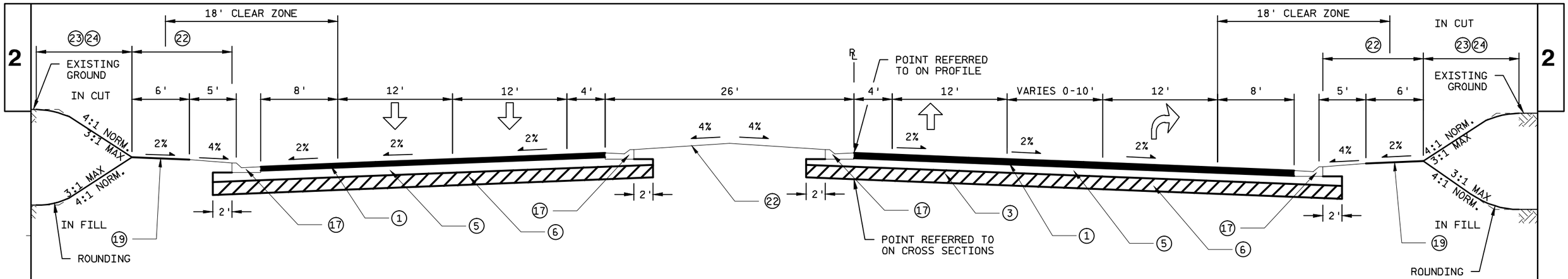


TYPICAL FINISHED SECTION

STA 22+00'S' - 25+50'S'

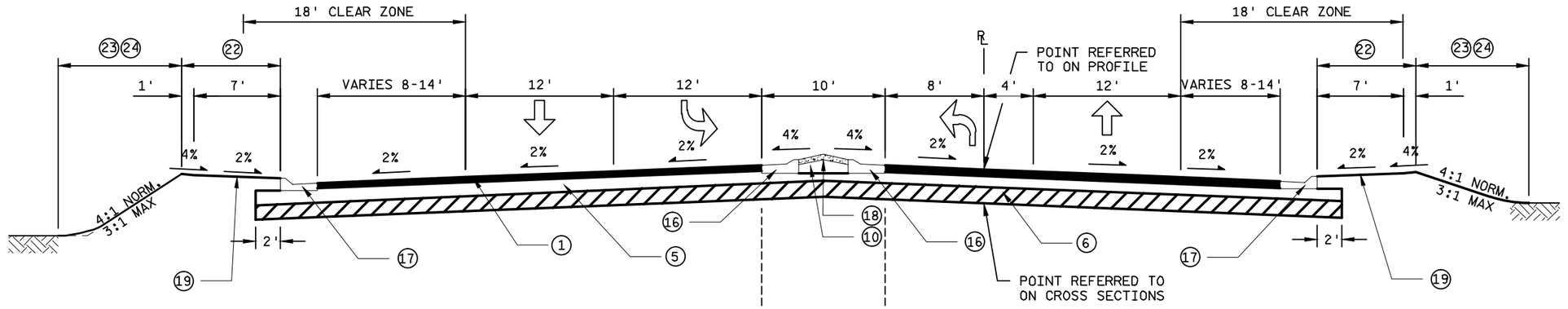
LEGEND

(1)	5-INCH HMA PAVEMENT, TYPE E-3
(5)	12-INCH BASE AGGREGATE DENSE 1¼-INCH
(6)	16-INCH SELECT CRUSHED MATERIAL
(7)	5-INCH BASE AGGREGATE DENSE 3/4-INCH
(10)	4-INCH BASE AGGREGATE DENSE 3/4-INCH
(15)	CONSTRUCT RELIEF TRENCHES AT 250' INTERVALS AND AT DITCH SAG POINTS
(17)	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
(18)	CONCRETE SIDEWALK 5-INCH
(19)	GRADE AT 2% FOR FUTURE SIDEWALK
(22)	SALVAGED TOPSOIL, SEED, TEMPORARY SEED, FERTILIZER & EROSION MAT URBAN CLASS I, TYPE A
(23)	SEED, TEMPORARY SEED, FERTILIZER
(24)	SALVAGED TOPSOIL & MULCH



TYPICAL FINISHED SECTION

STA 25+50'S' - 31+03'S'

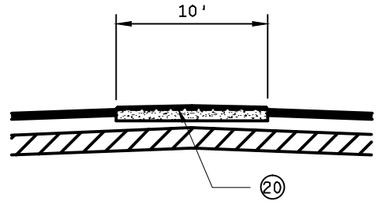


LEGEND

(1)	5-INCH HMA PAVEMENT, TYPE E-3
(5)	12-INCH BASE AGGREGATE DENSE 1¼-INCH
(6)	16-INCH SELECT CRUSHED MATERIAL
(10)	4-INCH BASE AGGREGATE DENSE 3/4-INCH
(16)	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D REVERSE SLOPE
(17)	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
(18)	CONCRETE SIDEWALK 5-INCH
(19)	GRADE AT 2% FOR FUTURE SIDEWALK
(20)	CONCRETE CORRUGATED MEDIAN
(22)	SALVAGED TOPSOIL, SEED, TEMPORARY SEED, FERTILIZER & EROSION MAT URBAN CLASS I, TYPE A
(23)	SEED, TEMPORARY SEED, FERTILIZER
(24)	SALVAGED TOPSOIL & MULCH

TYPICAL FINISHED SECTION

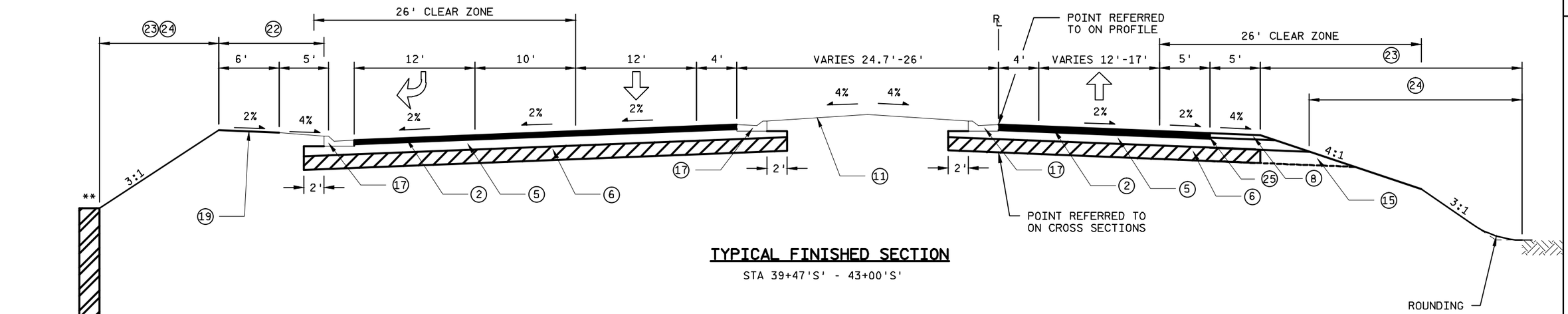
STA 31+03'S' - 33+47'S'
STA 36+00'S' - 39+47'S'
STA 31+83 - 32+03'S'
STA 38+03'S' - 38+53'S'



TYPICAL FINISHED SECTION

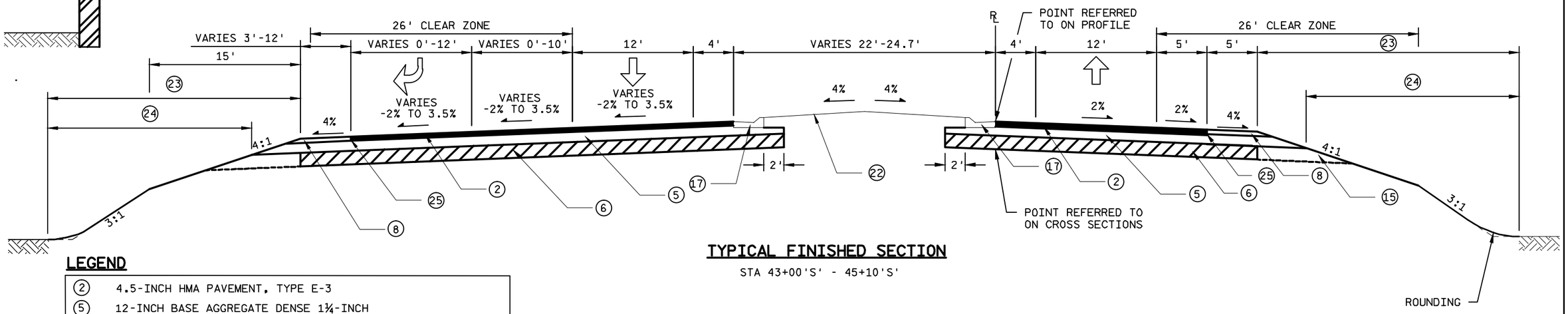
STA 38+03'S' - 38+53'S'

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	TYPICAL SECTIONS: CTH S	SHEET 10	E



TYPICAL FINISHED SECTION

STA 39+47'S' - 43+00'S'



TYPICAL FINISHED SECTION

STA 43+00'S' - 45+10'S'

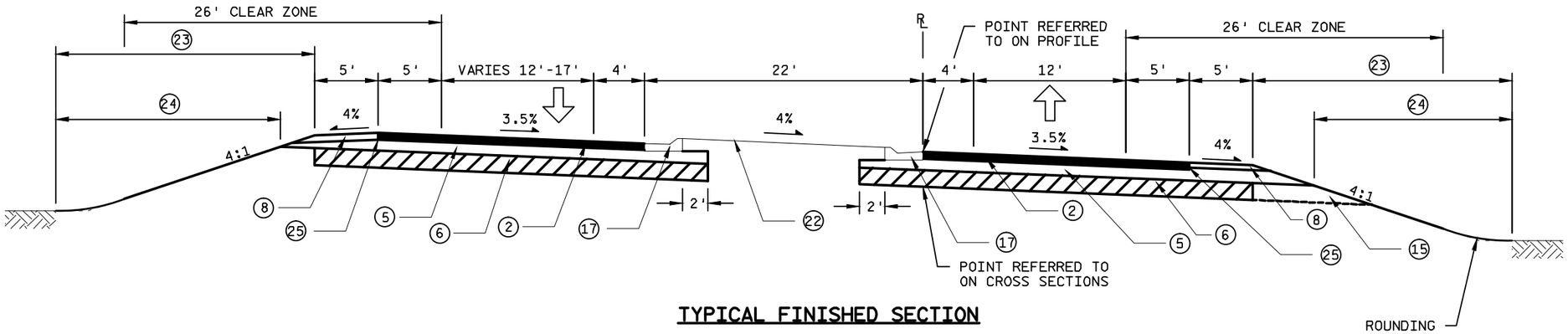
LEGEND

(2)	4.5-INCH HMA PAVEMENT, TYPE E-3
(5)	12-INCH BASE AGGREGATE DENSE 1¼-INCH
(6)	16-INCH SELECT CRUSHED MATERIAL
(8)	4.5-INCH BASE AGGREGATE DENSE 3/4-INCH
(15)	CONSTRUCT RELIEF TRENCHES AT 250' INTERVALS AND AT DITCH SAG POINTS
(17)	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
(19)	GRADE AT 2% FOR FUTURE SIDEWALK
(22)	SALVAGED TOPSOIL, SEED, TEMPORARY SEED, FERTILIZER & EROSION MAT URBAN CLASS I, TYPE A
(23)	SEED, TEMPORARY SEED, FERTILIZER
(24)	SALVAGED TOPSOIL & MULCH
(25)	SAFETY EDGE TYPICAL - SEE SDD 14B29-01

** MSE WALL R-53-34, SEE STRUCTURE PLAN FOR DETAILS

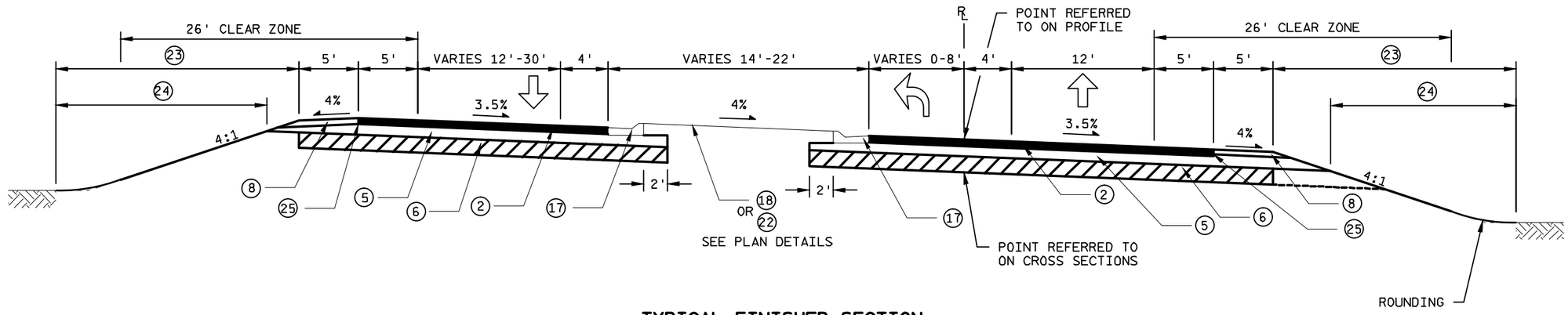
CTH S 'S' - CURVE #2
SUPERELEVATION TABLE

STATION	DESCRIPTION	LEFT SLOPE	RIGHT SLOPE
42+78.18'S'	END NC	-2.00%	-2.00%
43+50.18'S'	ZERO SUPER	0.00%	-2.00%
44+22.17'S'	REV. CROWN	2.00%	-2.00%
44+76.18'S'	BEGIN FS	3.50%	-3.50%
55+51.12'S'	END FS	3.50%	-3.50%
56+05.12'S'	REV. CROWN	2.00%	-2.00%
56+77.12'S'	ZERO SUPER	0.00%	-2.00%
57+49.12'S'	BEGIN NC	-2.00%	-2.00%



TYPICAL FINISHED SECTION

STA 45+10'S' - 51+16'S'



TYPICAL FINISHED SECTION

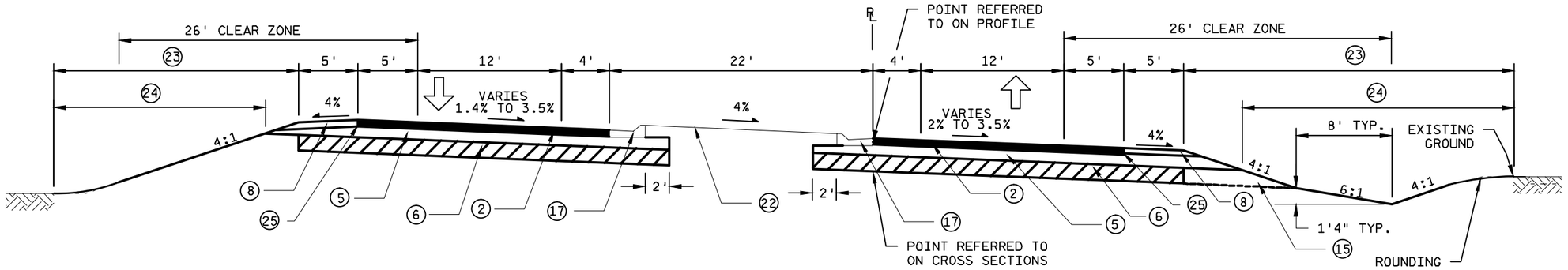
STA 51+16'S' - 54+52'S'

LEGEND

(2)	4.5-INCH HMA PAVEMENT, TYPE E-3
(5)	12-INCH BASE AGGREGATE DENSE 1¼-INCH
(6)	16-INCH SELECT CRUSHED MATERIAL
(8)	4.5-INCH BASE AGGREGATE DENSE 3/4-INCH
(15)	CONSTRUCT RELIEF TRENCHES AT 250' INTERVALS AND AT DITCH SAG POINTS
(17)	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
(18)	CONCRETE SIDEWALK 5-INCH
(22)	SALVAGED TOPSOIL, SEED, TEMPORARY SEED, FERTILIZER & EROSION MAT URBAN CLASS I, TYPE A
(23)	SEED, TEMPORARY SEED, FERTILIZER
(24)	SALVAGED TOPSOIL & MULCH
(25)	SAFETY EDGE TYPICAL - SEE SDD 14B29-01

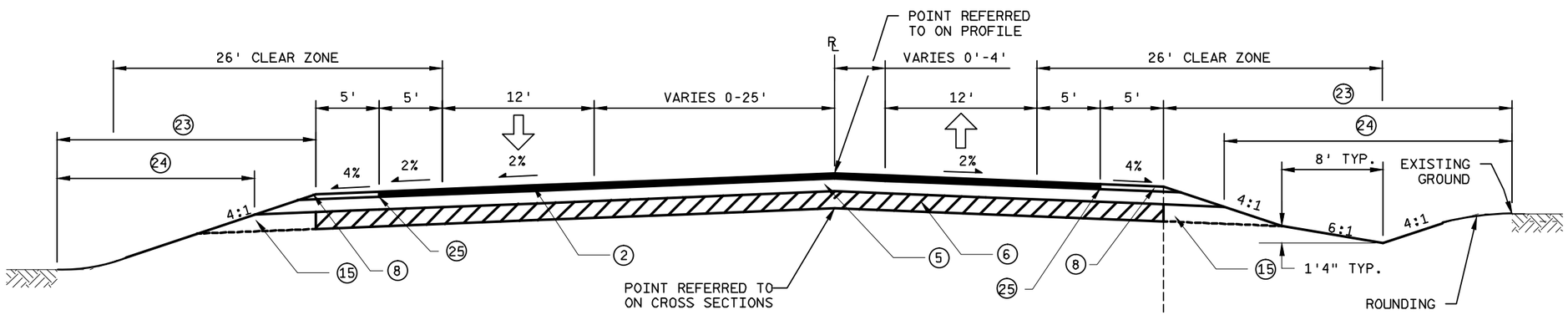
CTH S 'S' - CURVE #2
SUPERELEVATION TABLE

STATION	DESCRIPTION	LEFT SLOPE	RIGHT SLOPE
42+78.18'S'	END NC	-2.00%	-2.00%
43+50.18'S'	ZERO SUPER	0.00%	-2.00%
44+22.17'S'	REV. CROWN	2.00%	-2.00%
44+76.18'S'	BEGIN FS	3.50%	-3.50%
55+51.12'S'	END FS	3.50%	-3.50%
56+05.12'S'	REV. CROWN	2.00%	-2.00%
56+77.12'S'	ZERO SUPER	0.00%	-2.00%
57+49.12'S'	BEGIN NC	-2.00%	-2.00%



TYPICAL FINISHED SECTION

STA 54+52'S' - 56+30'S'



LEGEND

(2)	4.5-INCH HMA PAVEMENT, TYPE E-3
(5)	12-INCH BASE AGGREGATE DENSE 1¼-INCH
(6)	16-INCH SELECT CRUSHED MATERIAL
(8)	4.5-INCH BASE AGGREGATE DENSE 3/4-INCH
(15)	CONSTRUCT RELIEF TRENCHES AT 250' INTERVALS AND AT DITCH SAG POINTS
(17)	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE D
(22)	SALVAGED TOPSOIL, SEED, TEMPORARY SEED, FERTILIZER & EROSION MAT URBAN CLASS I, TYPE A
(23)	SEED, TEMPORARY SEED, FERTILIZER
(24)	SALVAGED TOPSOIL & MULCH
(25)	SAFETY EDGE TYPICAL - SEE SDD 14B29-01

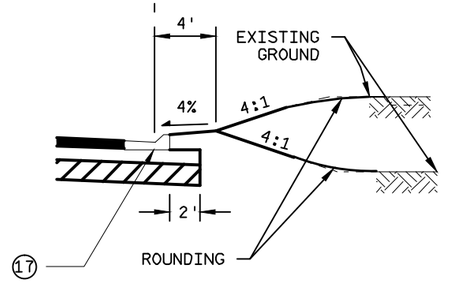
TYPICAL FINISHED SECTION

STA 56+30'S' - 63+75'S'

STA 57+31'S' - 61+00'S'

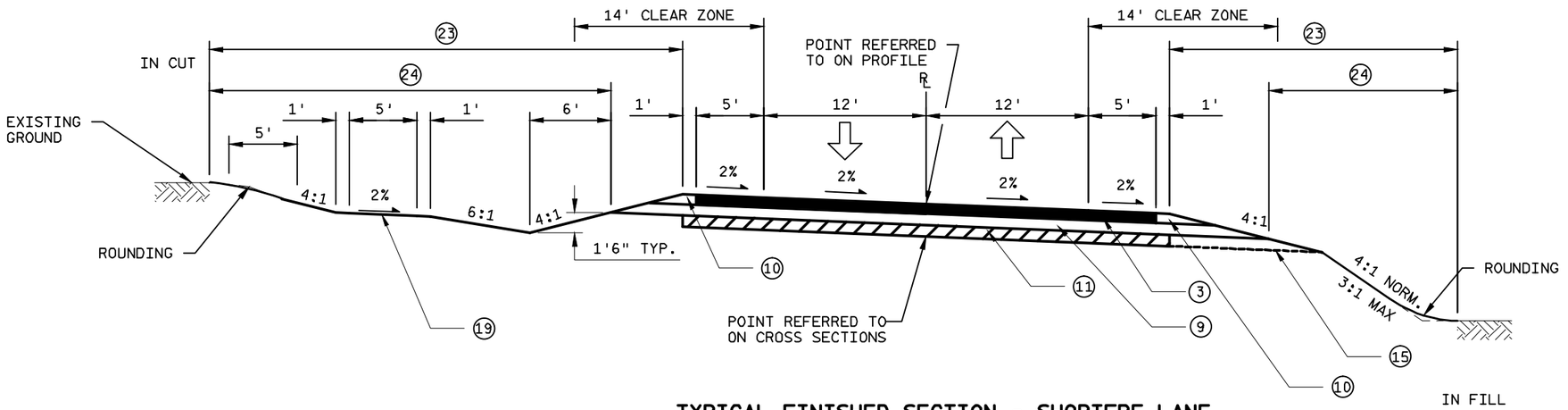
CTH S 'S' - CURVE #2
SUPERELEVATION TABLE

STATION	DESCRIPTION	LEFT SLOPE	RIGHT SLOPE
42+78.18'S'	END NC	-2.00%	-2.00%
43+50.18'S'	ZERO SUPER	0.00%	-2.00%
44+22.17'S'	REV. CROWN	2.00%	-2.00%
44+76.18'S'	BEGIN FS	3.50%	-3.50%
55+51.12'S'	END FS	3.50%	-3.50%
56+05.12'S'	REV. CROWN	2.00%	-2.00%
56+77.12'S'	ZERO SUPER	0.00%	-2.00%
57+49.12'S'	BEGIN NC	-2.00%	-2.00%



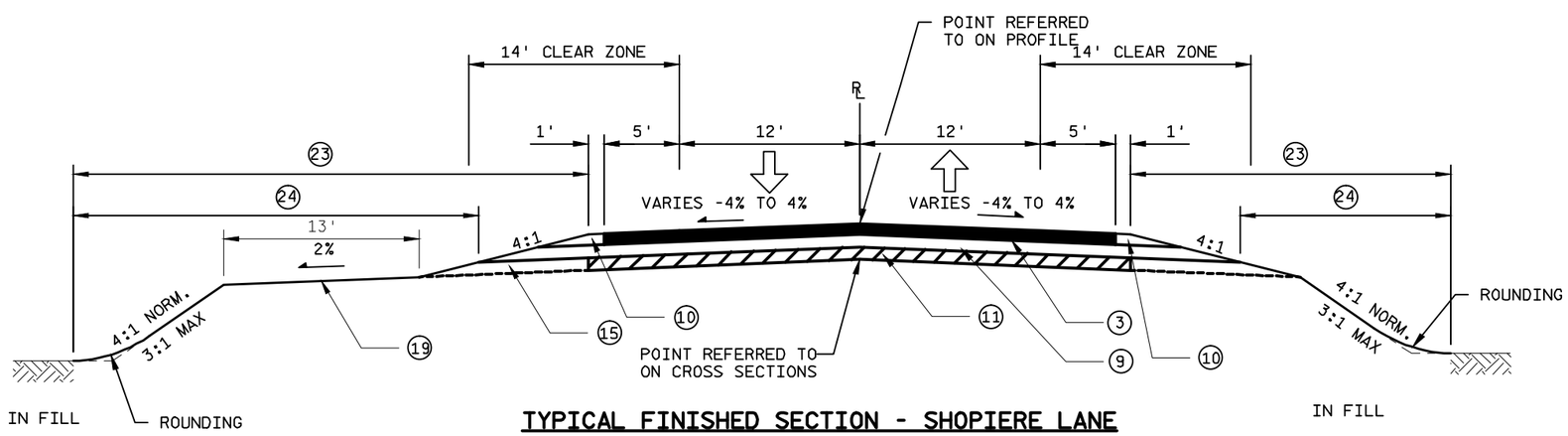
TYPICAL FINISHED SECTION

STA 57+31'S' - 61+00'S'



TYPICAL FINISHED SECTION - SHOPIERE LANE

STA 300+42'SFN' - 308+50'SFN'



TYPICAL FINISHED SECTION - SHOPIERE LANE

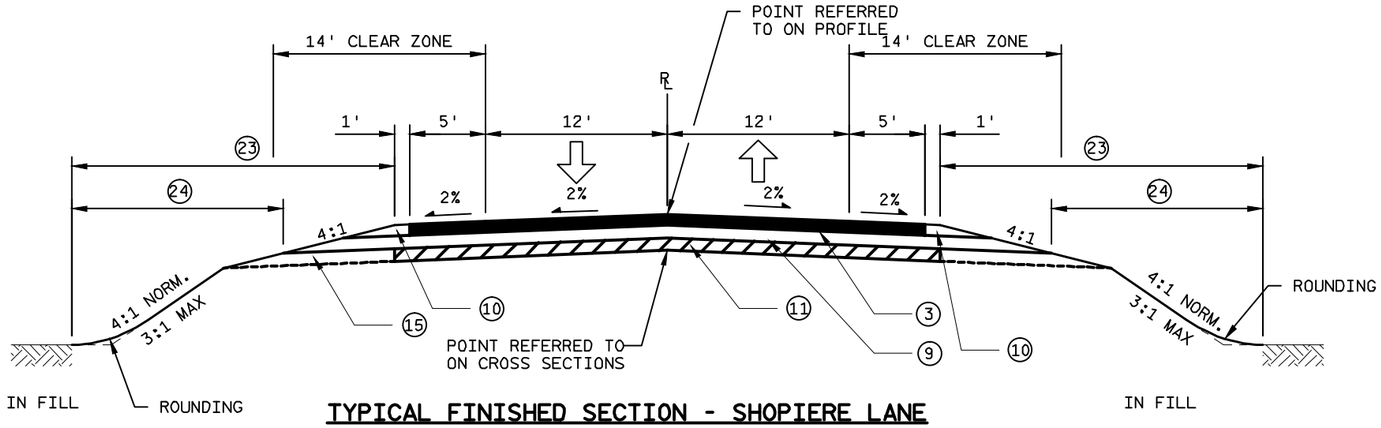
STA 308+50 'SFN' - 312+20 'SFN'

LEGEND

(3)	4-INCH HMA PAVEMENT, TYPE E-3
(9)	10-INCH BASE AGGREGATE DENSE 1¼-INCH
(10)	4-INCH BASE AGGREGATE DENSE 3/4-INCH
(11)	6-INCH BASE AGGREGATE DENSE 3-INCH
(15)	CONSTRUCT RELIEF TRENCHES AT 250' INTERVALS AND AT DITCH SAG POINTS
(19)	GRADE AT 2% FOR FUTURE SIDEWALK
(23)	SEED, TEMPORARY SEED, FERTILIZER
(24)	SALVAGED TOPSOIL & MULCH

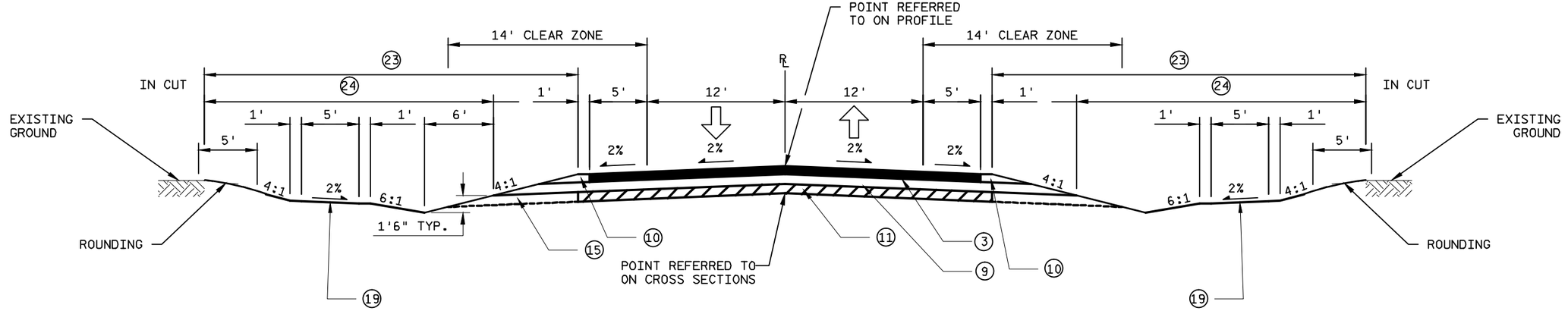
SHOPIERE LN 'SFN' - CURVES #11 & #12
SUPERELEVATION TABLE

STATION	DESCRIPTION	LEFT SLOPE	RIGHT SLOPE
CURVE #11			
308+27.13'	END NC	2.00%	-2.00%
308+61.63'	ZERO SUPER	0.00%	0.00%
309+30.63'	BEGIN FS	-4.00%	4.00%
309+75.30'	END FS	-4.00%	4.00%
310+44.30'	ZERO SUPER	0.00%	0.00%
310+78.80'	BEGIN NC	2.00%	-2.00%
CURVE #12			
310+98.64'	END NC	2.00%	-2.00%
311+33.14'	BEGIN FS	4.00%	-4.00%
311+85.47'	END FS	4.00%	-4.00%
312+19.97'	BEGIN NC	2.00%	-2.00%



TYPICAL FINISHED SECTION - SHOPIERE LANE

STA 601+07'SFS' - 601+95'SFS'

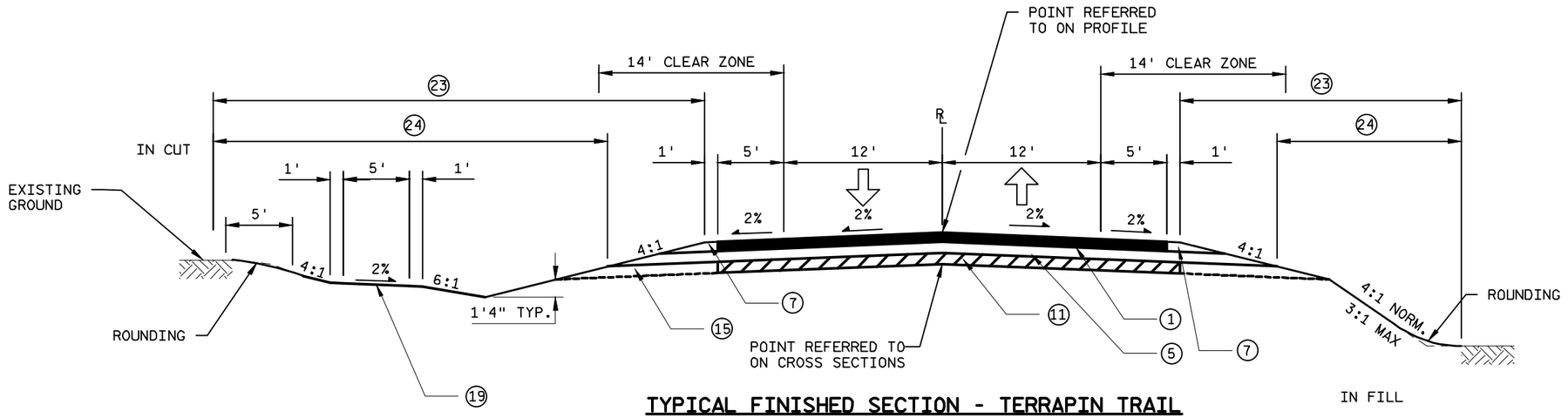


TYPICAL FINISHED SECTION - TORTOISE LANE

STA 101+19'SBN' - 103+00'SBN'

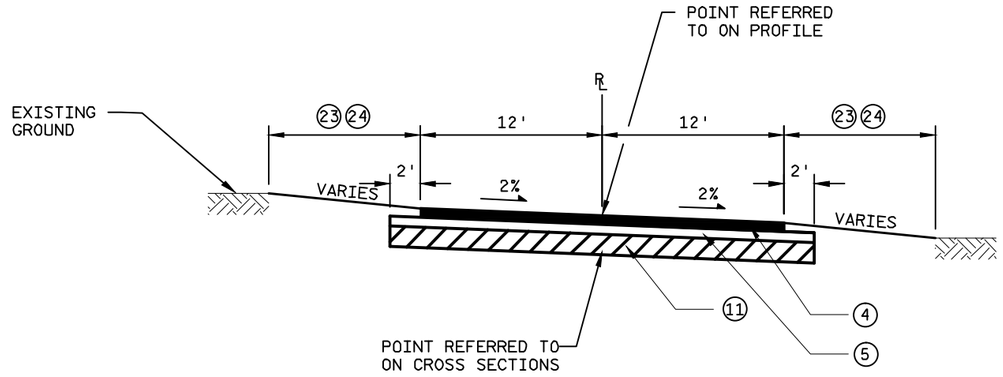
LEGEND

(3)	4-INCH HMA PAVEMENT, TYPE E-3
(9)	10-INCH BASE AGGREGATE DENSE 1¼-INCH
(10)	4-INCH BASE AGGREGATE DENSE 3/4-INCH
(11)	6-INCH BASE AGGREGATE DENSE 3-INCH
(15)	CONSTRUCT RELIEF TRENCHES AT 250' INTERVALS AND AT DITCH SAG POINTS
(19)	GRADE AT 2% FOR FUTURE SIDEWALK
(23)	SEED, TEMPORARY SEED, FERTILIZER
(24)	SALVAGED TOPSOIL & MULCH



TYPICAL FINISHED SECTION - TERRAPIN TRAIL

STA 201+25'SBS' - 207+39'SBS'
STA 801+37'SBE' - 807+55'SBE'



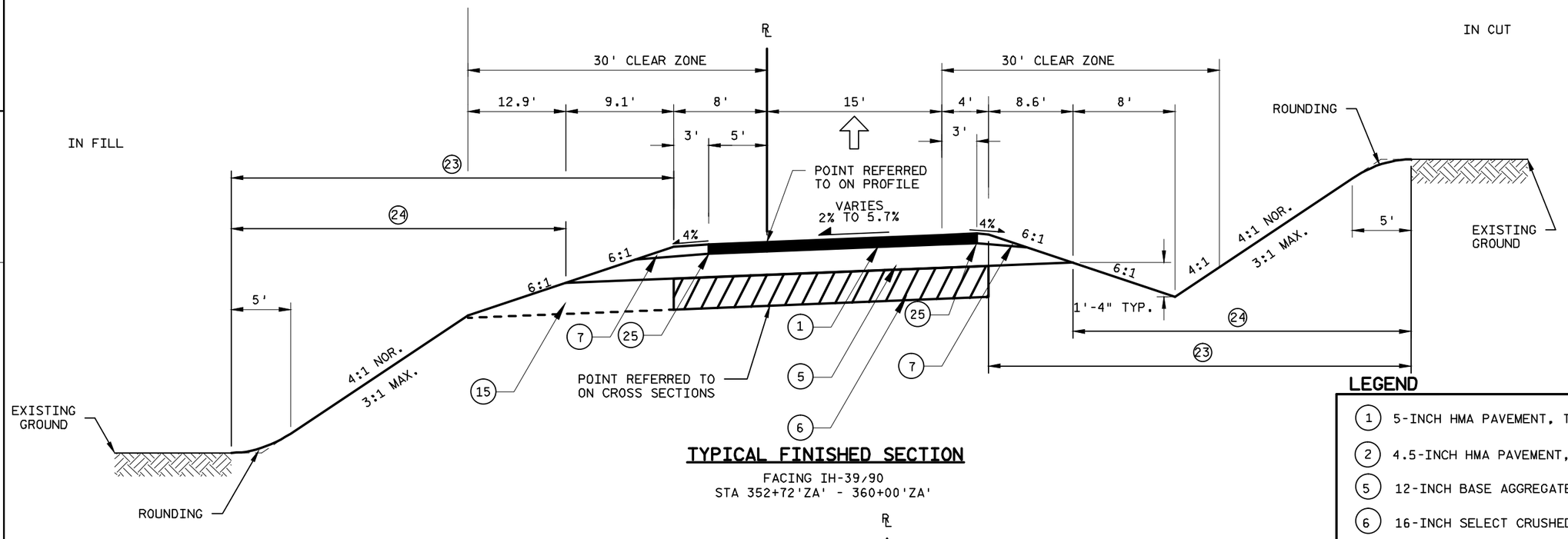
TYPICAL FINISHED SECTION - LC DRIVEWAY

STA 400+50'LC' - 404+14'LC'

LEGEND

(1)	5-INCH HMA PAVEMENT, TYPE E-3
(4)	4-INCH ASPHALTIC SURFACE DRIVEWAY
(5)	12-INCH BASE AGGREGATE DENSE 1¼-INCH
(7)	5-INCH BASE AGGREGATE DENSE 3/4-INCH
(11)	6-INCH BASE AGGREGATE DENSE 3-INCH
(15)	CONSTRUCT RELIEF TRENCHES AT 250' INTERVALS AND AT DITCH SAG POINTS
(19)	GRADE AT 2% FOR FUTURE SIDEWALK
(23)	SEED, TEMPORARY SEED, FERTILIZER
(24)	SALVAGED TOPSOIL & MULCH

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\R-B CAD FILES\SHEETSP_AN\BA_020301_TS.DWG PLOT DATE : 12/17 2014 7:33 AM PLOT BY : RYAN RUDZINSKI PLOT NAME : ---------- PLOT SCALE : 1 IN: 10 FT WISDOT/CADDS SHEET 42



TYPICAL FINISHED SECTION

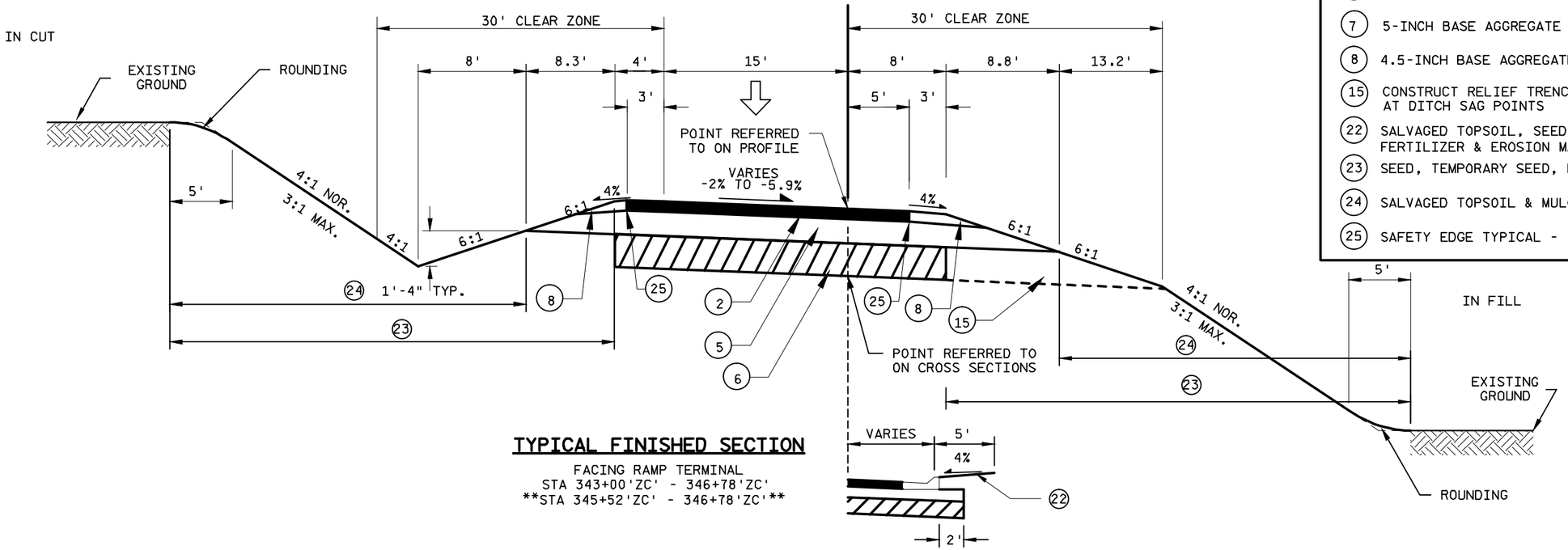
FACING IH-39/90
STA 352+72'ZA' - 360+00'ZA'

IH-39/90 ON-RAMP 'ZA' - CURVE #4
SUPERELEVATION TABLE

STATION	DESCRIPTION	SLOPE
360+97.06'	END NC	2.00%
361+95.72'	BEGIN FS	5.70%
365+45.66'	END FS	5.70%
366+44.33'	BEGIN NC	2.00%

LEGEND

1	5-INCH HMA PAVEMENT, TYPE E-3
2	4.5-INCH HMA PAVEMENT, TYPE E-3
5	12-INCH BASE AGGREGATE DENSE 1 1/4-INCH
6	16-INCH SELECT CRUSHED MATERIAL
7	5-INCH BASE AGGREGATE DENSE 3/4-INCH
8	4.5-INCH BASE AGGREGATE DENSE 3/4-INCH
15	CONSTRUCT RELIEF TRENCHES AT 250' INTERVALS AND AT DITCH SAG POINTS
22	SALVAGED TOPSOIL, SEED, TEMPORARY SEED, FERTILIZER & EROSION MAT URBAN CLASS I, TYPE A
23	SEED, TEMPORARY SEED, FERTILIZER
24	SALVAGED TOPSOIL & MULCH
25	SAFETY EDGE TYPICAL - SEE DETAIL SDD14B29-01



TYPICAL FINISHED SECTION

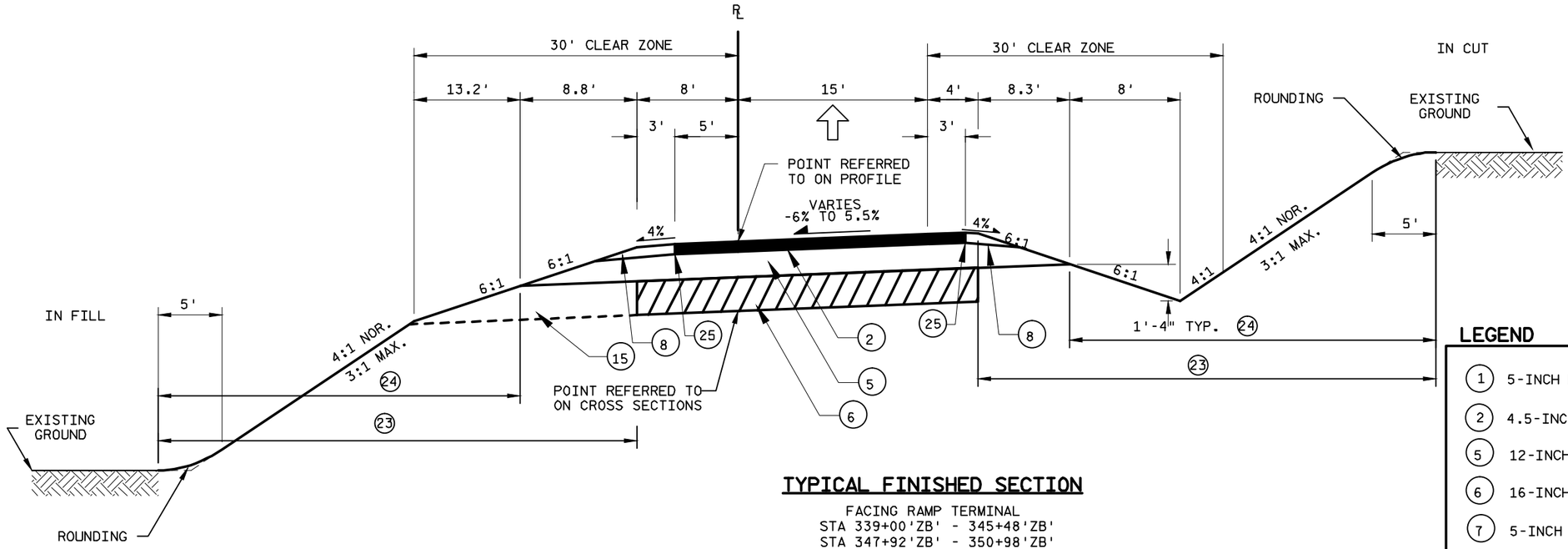
FACING RAMP TERMINAL
STA 343+00'ZC' - 346+78'ZC'
STA 345+52'ZC' - 346+78'ZC'

IH-39/90 ON-RAMP 'ZC'
CURVE #7
SUPERELEVATION TABLE

STATION	DESCRIPTION	SLOPE
335+91.27'	END NC	-3.30%
336+95.05'	BEGIN FS	-5.90%
341+71.35'	END FS	-5.90%
342+75.13'	BEGIN NC	-2.00%

TYPICAL FINISHED SECTION

STA 345+52'ZC' - 346+78'ZC'



TYPICAL FINISHED SECTION

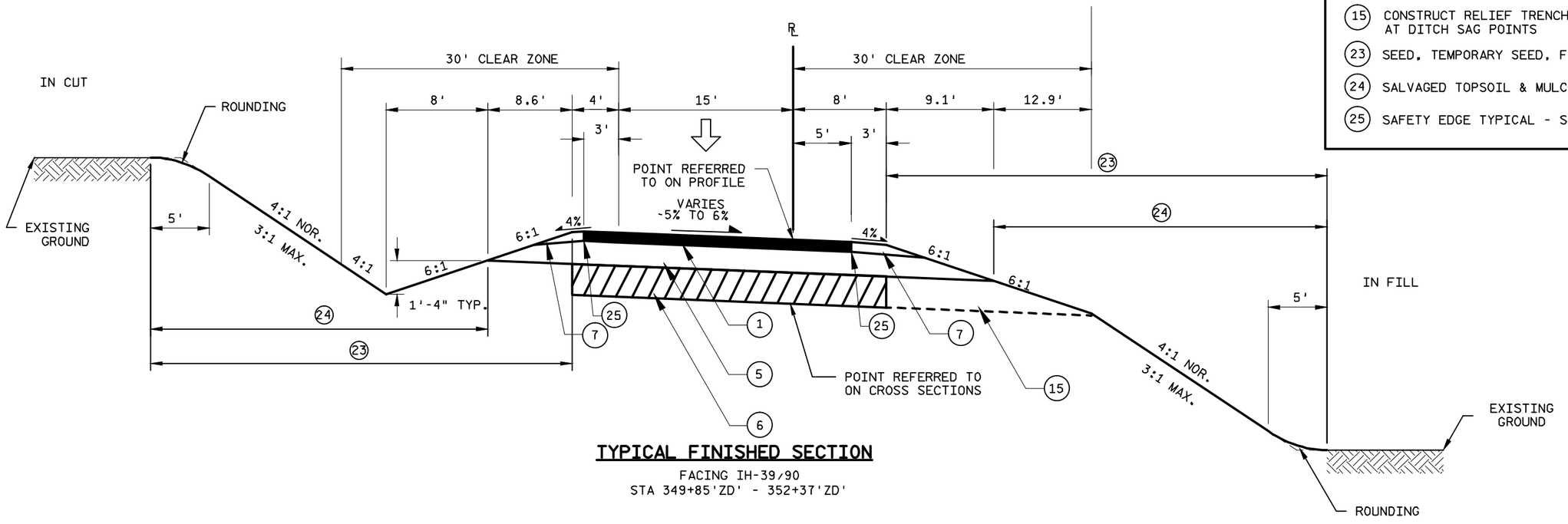
FACING RAMP TERMINAL
STA 339+00'ZB' - 345+48'ZB'
STA 347+92'ZB' - 350+98'ZB'

IH-39/90 OFF-RAMP 'ZB'
CURVES #5 & #6
SUPERELEVATION TABLE

STATION	DESCRIPTION	SLOPE
CURVE #6		
336+54.83'	END NC	1.70%
337+56.39'	BEGIN FS	5.50%
344+58.80'	END FS	5.50%
345+60.36'	BEGIN NC	1.70%
346+09.18	FLAT	0.00%
CURVE #5		
346+53.39'	END NC	-2.00%
347+36.05'	BEGIN FS	-6.00%
351+17.51'	END FS	-6.00%
352+00.18'	BEGIN NC	-2.00%

LEGEND

- (1) 5-INCH HMA PAVEMENT, TYPE E-3
- (2) 4.5-INCH HMA PAVEMENT, TYPE E-3
- (5) 12-INCH BASE AGGREGATE DENSE 1 1/4-INCH
- (6) 16-INCH SELECT CRUSHED MATERIAL
- (7) 5-INCH BASE AGGREGATE DENSE 3/4-INCH
- (8) 4.5-INCH BASE AGGREGATE DENSE 3/4-INCH
- (15) CONSTRUCT RELIEF TRENCHES AT 250' INTERVALS AND AT DITCH SAG POINTS
- (23) SEED, TEMPORARY SEED, FERTILIZER
- (24) SALVAGED TOPSOIL & MULCH
- (25) SAFETY EDGE TYPICAL - SEE SDD 14B29-01



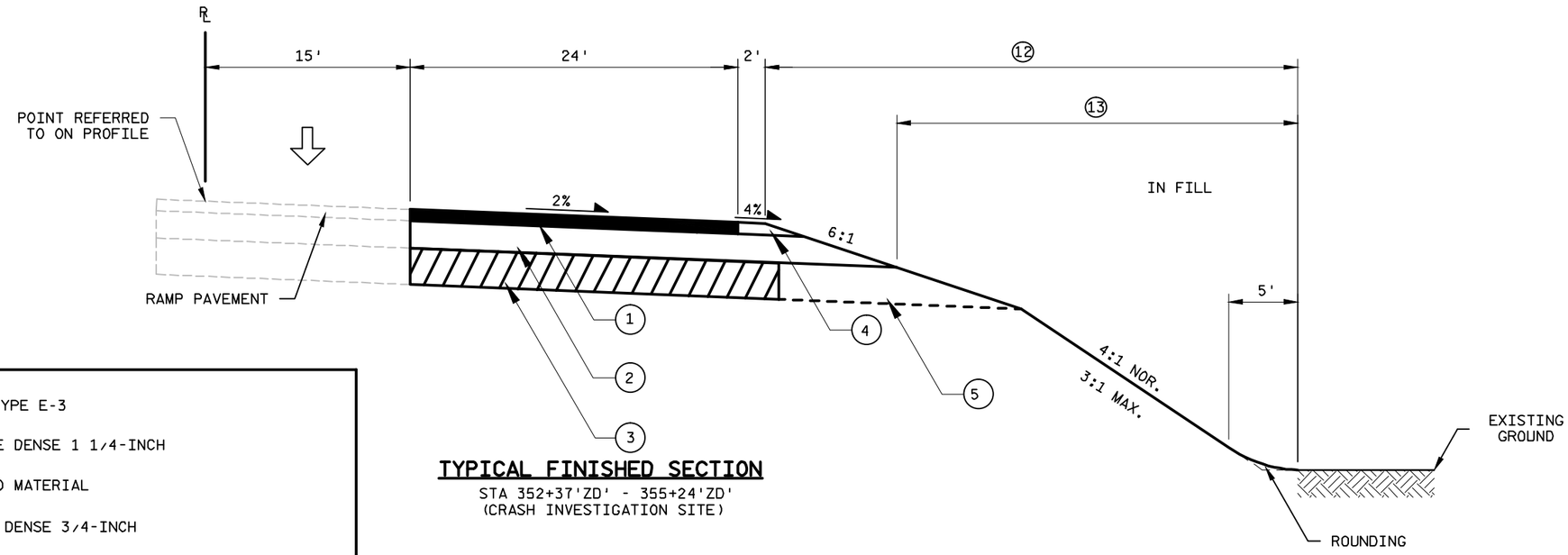
TYPICAL FINISHED SECTION

FACING IH-39/90
STA 349+85'ZD' - 352+37'ZD'

IH-39/90 OFF-RAMP 'ZD'
CURVES #8 & #9
SUPERELEVATION TABLE

STATION	DESCRIPTION	SLOPE
CURVE #8		
348+06.69'	END NC	-2.00%
348+48.02'	ZERO SUPER	0.00%
349+72.02'	BEGIN FS	6.00%
351+73.37'	END FS	6.00%
352+97.37'	ZERO SUPER	0.00%
353+38.70'	BEGIN NC	-2.00%
CURVE #9		
355+46.04'	END NC	-2.00%
356+25.84'	BEGIN FS	-5.00%
365+15.74'	END FS	-5.00%
365+95.54'	BEGIN NC	-2.00%

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	TYPICAL SECTIONS: RAMPS ZB & ZD	SHEET 18	E

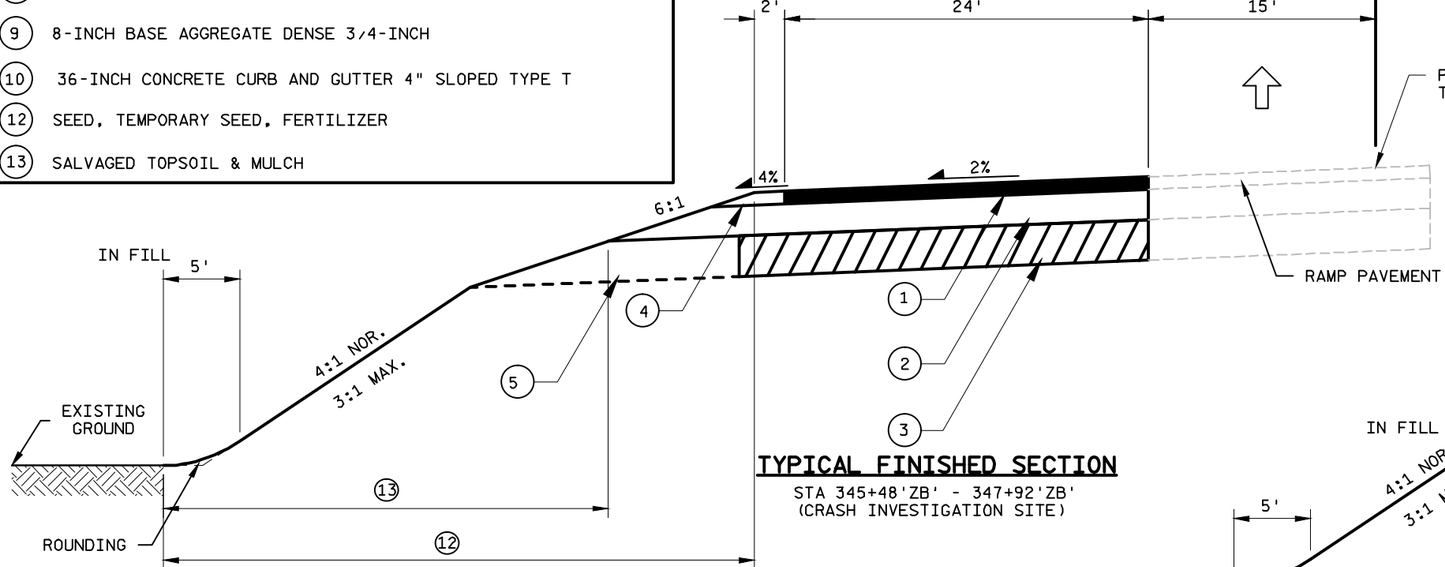


TYPICAL FINISHED SECTION

STA 352+37'ZD' - 355+24'ZD'
(CRASH INVESTIGATION SITE)

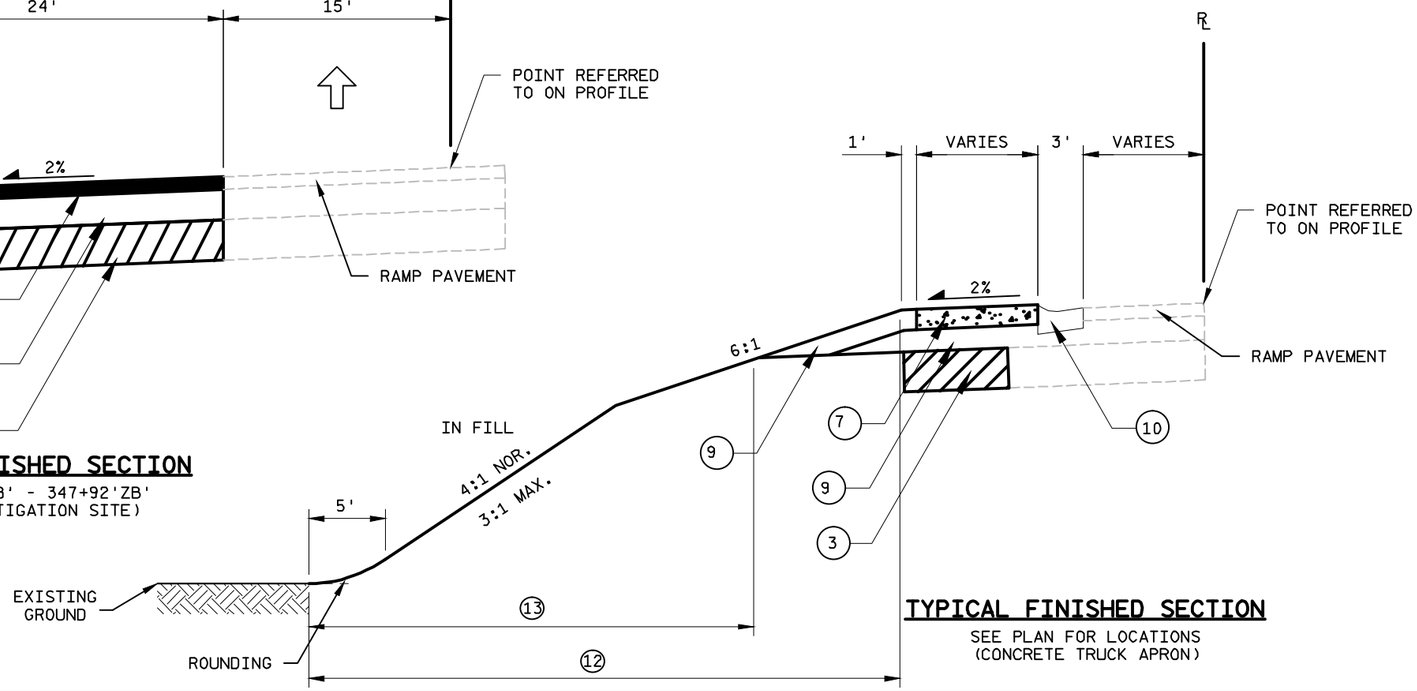
LEGEND

1	5-INCH HMA PAVEMENT, TYPE E-3
2	12-INCH BASE AGGREGATE DENSE 1 1/4-INCH
3	16-INCH SELECT CRUSHED MATERIAL
4	5-INCH BASE AGGREGATE DENSE 3/4-INCH
5	CONSTRUCT RELIEF TRENCHES AT 250' INTERVALS AND AT DITCH SAG POINTS
6	4.5-INCH HMA PAVEMENT, TYPE E-3
7	8-INCH CONCRETE TRUCK APRON, RED.
8	9-INCH BASE AGGREGATE DENSE 1 1/4-INCH
9	8-INCH BASE AGGREGATE DENSE 3/4-INCH
10	36-INCH CONCRETE CURB AND GUTTER 4" SLOPED TYPE T
12	SEED, TEMPORARY SEED, FERTILIZER
13	SALVAGED TOPSOIL & MULCH



TYPICAL FINISHED SECTION

STA 345+48'ZB' - 347+92'ZB'
(CRASH INVESTIGATION SITE)

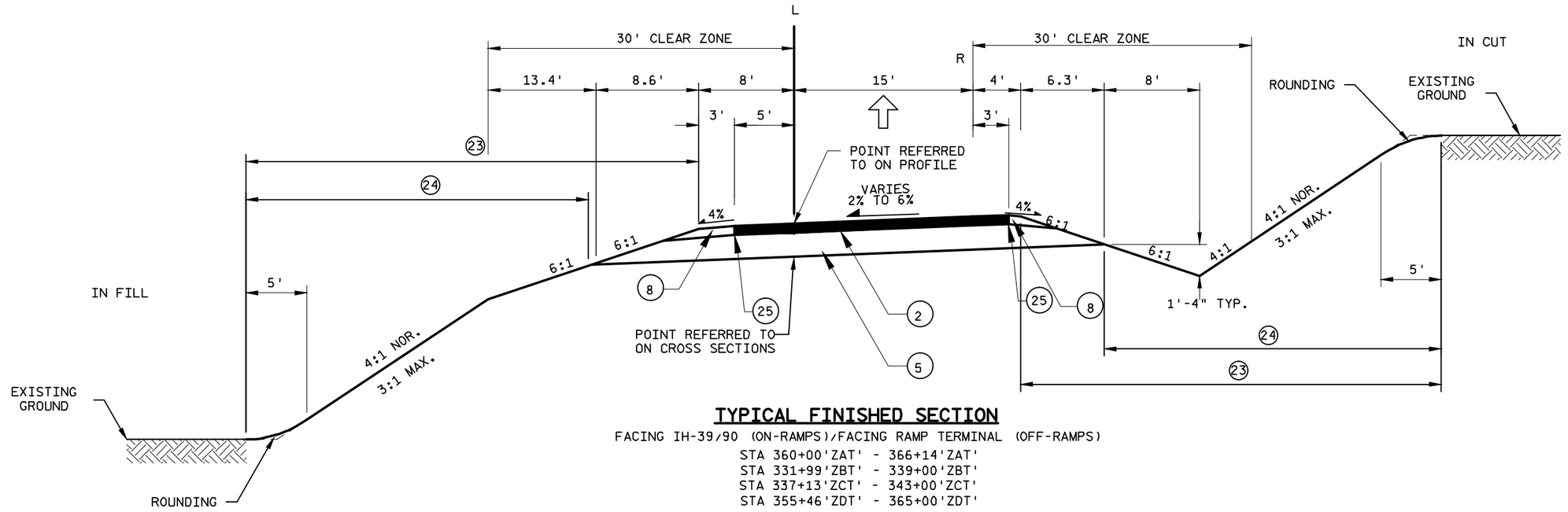


TYPICAL FINISHED SECTION

SEE PLAN FOR LOCATIONS
(CONCRETE TRUCK APRON)

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	TYPICAL SECTIONS: CRASH INVESTIGATION SITES & TRUCK APRON	SHEET 19	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\R-B CAD FILES\SHEETSP_AN\BA_020301_TS.DWG PLOT DATE : 12/17 2014 7:33 AM PLOT BY : RYAN RUDZINSKI PLOT NAME : ---------- PLOT SCALE : 1 IN: 10 FT WISDOT/CADDS SHEET 42



TYPICAL FINISHED SECTION

FACING IH-39/90 (ON-RAMPS)/FACING RAMP TERMINAL (OFF-RAMPS)

STA 360+00'ZAT' - 366+14'ZAT'
STA 331+99'ZBT' - 339+00'ZBT'
STA 337+13'ZCT' - 343+00'ZCT'
STA 355+46'ZDT' - 365+00'ZDT'

LEGEND

(2)	4.5-INCH HMA PAVEMENT, TYPE E-3
(5)	12-INCH BASE AGGREGATE DENSE 1 1/4-INCH
(8)	4.5-INCH BASE AGGREGATE DENSE 3/4-INCH
(23)	SEED, TEMPORARY SEED, FERTILIZER
(24)	SALVAGED TOPSOIL & MULCH
(25)	SAFETY EDGE TYPICAL - SEE SDD 14B29-01

IH-39/90 TEMPORARY ON-RAMP 'ZAT'
CURVE #13
SUPERELEVATION TABLE

STATION	DESCRIPTION	SLOPE
361+18.18'	END NC	2.00%
362+07.28'	BEGIN FS	5.50%
365+14.37'	END FS	5.50%
366+03.46'	BEGIN NC	2.00%

IH-39/90 TEMPORARY OFF-RAMP 'ZBT'
CURVE #17
SUPERELEVATION TABLE

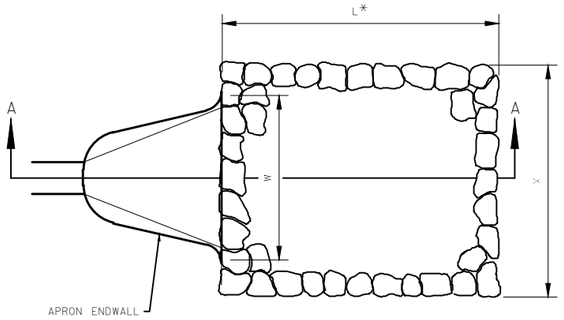
STATION	DESCRIPTION	SLOPE
336+00.00'	END NC	2.00%
337+95.20'	BEGIN FS	5.50%
339+00.00'	END FS	5.50%
339+00.00'	MATCH 'ZB' LINE	5.50%

IH-39/90 TEMPORARY ON-RAMP 'ZCT'
CURVE #16
SUPERELEVATION TABLE

STATION	DESCRIPTION	SLOPE
337+11.96'	END NC	2.00%
338+13.96'	BEGIN FS	6.00%
340+81.80'	END FS	6.00%
341+83.80'	BEGIN NC	2.00%

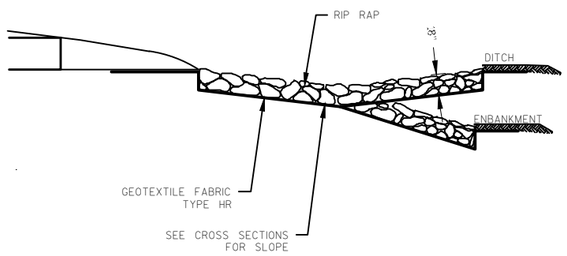
IH-39/90 TEMPORARY OFF-RAMP 'ZDT'
CURVE #15
SUPERELEVATION TABLE

STATION	DESCRIPTION	SLOPE
356+45.54'	END NC	-2.00%
357+22.34'	BEGIN FS	-5.00%
363+93.61'	END FS	-5.00%
364+70.41'	BEGIN NC	-2.00%



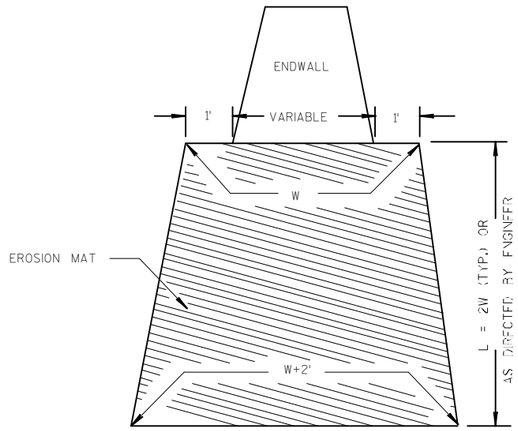
L* = 2W (NOR.) AS INDICATED IN THE EROSION CONTROL PLANS OR AS DIRECTED BY THE ENGINEER.

X = W+2' FOR TYPICAL DISCHARGE INTO DITCH
W+5' FOR CULVERT DISCHARGE DOWN EMBANKMENT SLOPE

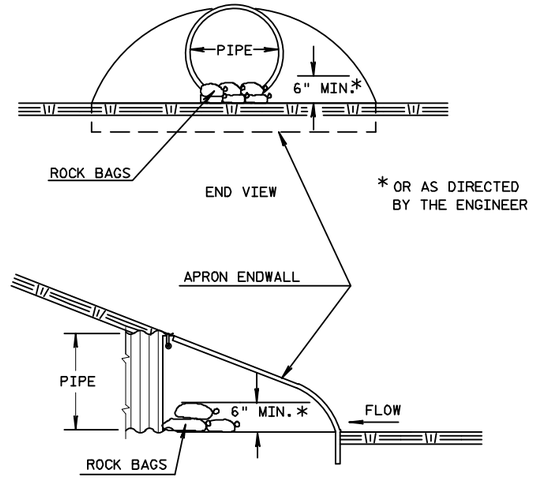


SECTION A-A

MEDIUM RIP RAP AND GEOTEXTILE TYPE HR
AT APRON ENDWALLS

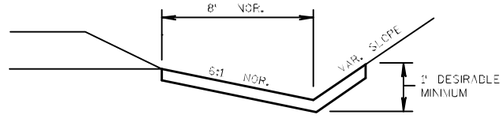


EROSION MAT TREATMENT AT CULVERTS



SIDE VIEW

CULVERT PIPE CHECK



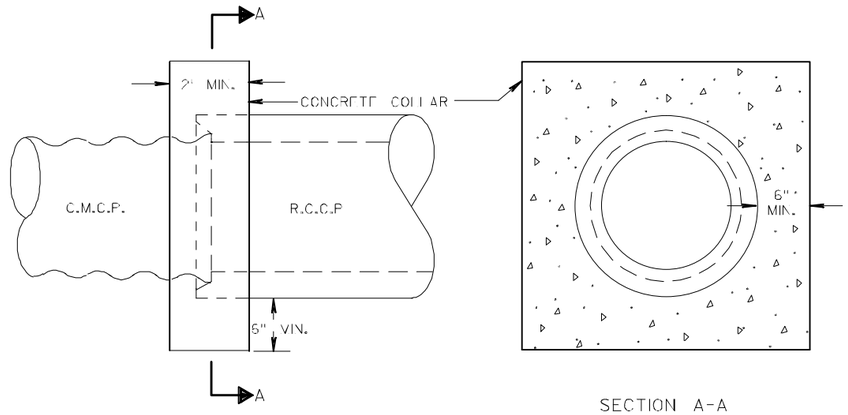
EROSION MAT DETAIL FOR DITCHES

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											

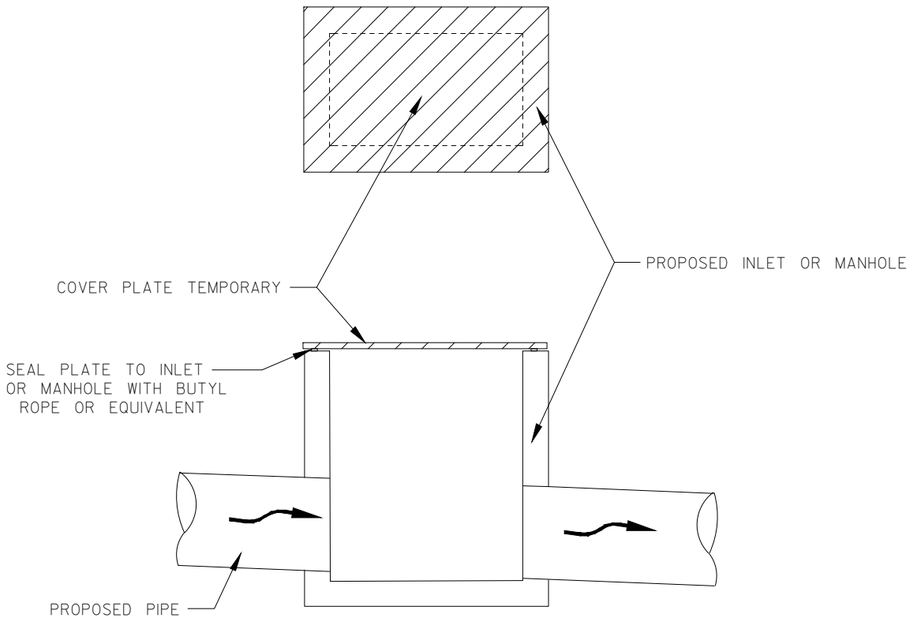
TOTAL PROJECT AREA = 53.0 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 33.0 ACRES

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\R-B CAD FILES\SHEETSPLAN\BA_021001_CD.DWG PLOT DATE : 12/16 2014 1:06 PM PLOT BY : RYAN RUDZINSKI PLOT NAME : ---------- PLOT SCALE : 1 IN: 10 FT WISDOT/CADDS SHEET 42

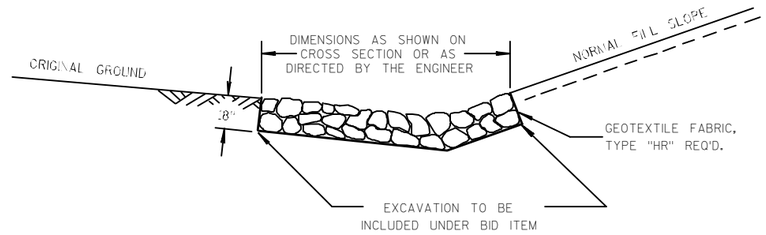


SECTION A-A

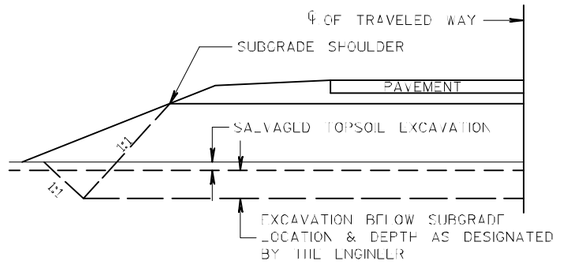
CONNECTION DETAIL R.C.C.P. TO C.M.C.P.



COVER PLATE TEMPORARY DETAIL
SEE STAGING PLAN FOR LOCATIONS

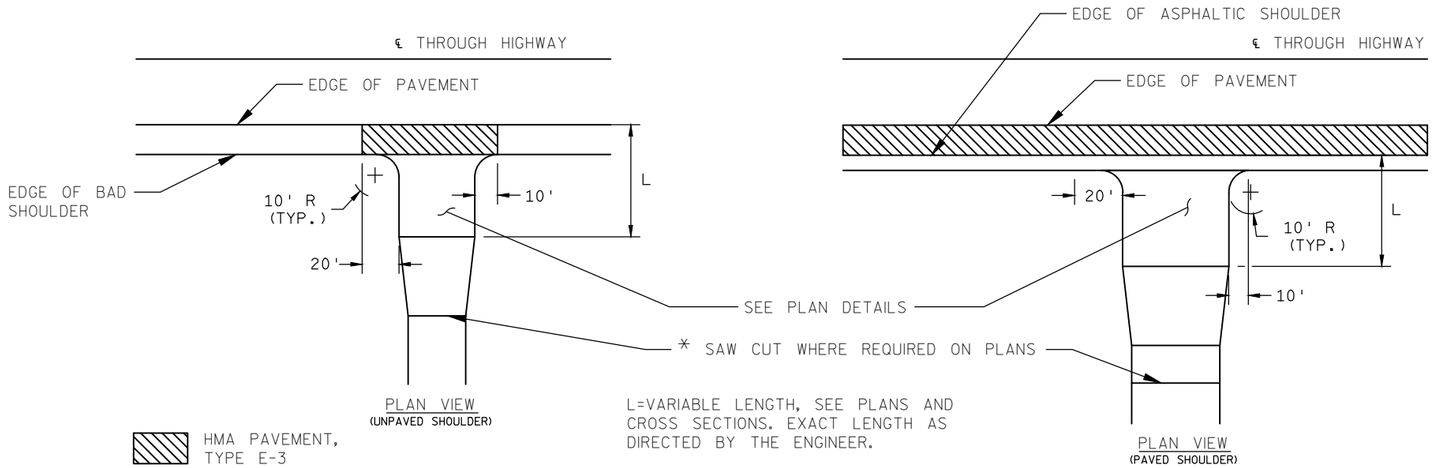


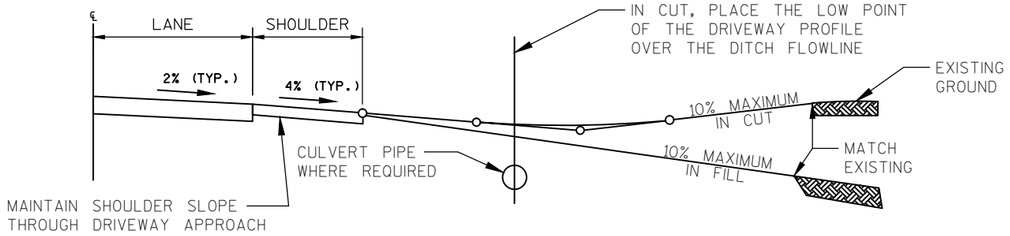
DETAIL FOR RIPRAP MEDIUM IN DITCHES



DETAIL FOR EXCAVATION BELOW SUBGRADE

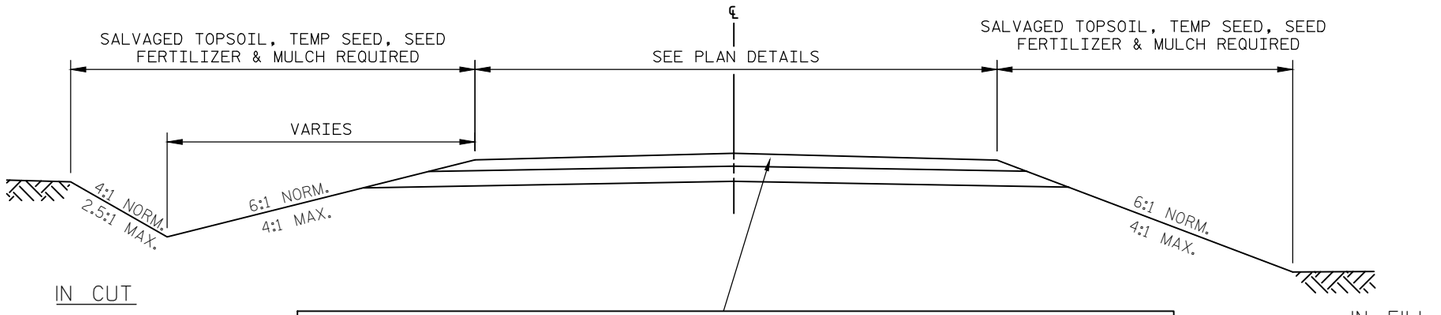
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CONSTRUCTION DETAILS	SHEET 22	E





PROFILE VIEW

TYPICAL DRIVEWAY DETAILS



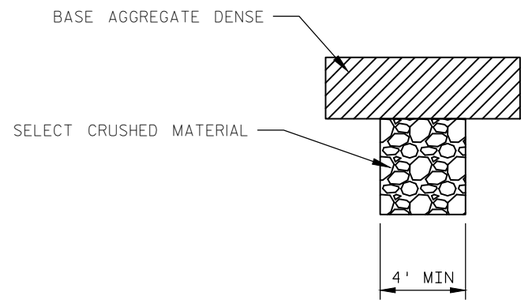
(BAD F.E.'S)
6" BASE AGGREGATE DENSE ¾" OVER
12" BASE AGGREGATE DENSE 1 ¼"

(HMA P.E.'S)
3" ASPHALTIC SURFACE DRIVEWAYS OVER
12" BASE AGGREGATE DENSE 1 ¼"

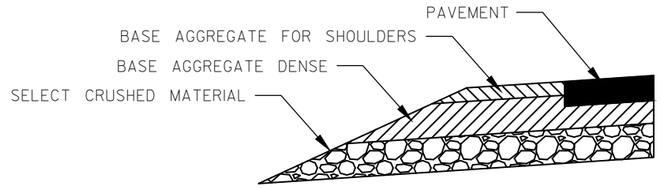
(HMA C.E.'S)
4" ASPHALTIC SURFACE DRIVEWAYS OVER
10" BASE AGGREGATE DENSE 1 ¼" OVER
6" BASE AGGREGATE DENSE 3"

(HMA C.E.'S AT STA. 805+33'SBE')
5" ASPHALTIC SURFACE DRIVEWAYS OVER
10" BASE AGGREGATE DENSE 1 ¼" OVER
6" BASE AGGREGATE DENSE 3"

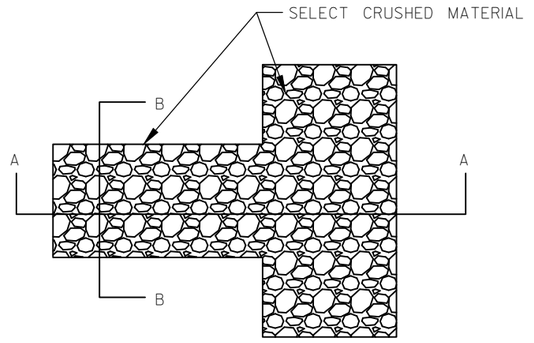
(CONC. P.E.'S)
8" CONCRETE DRIVEWAY OVER
12" BASE AGGREGATE DENSE 1 ¼"



SECTION B-B



SECTION A-A

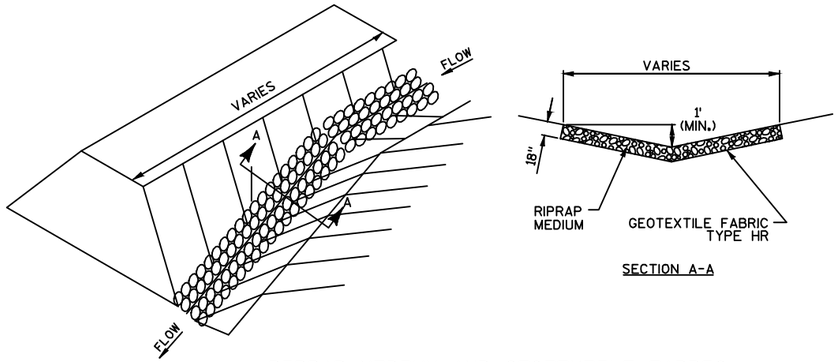


RELIEF TRENCH DETAIL

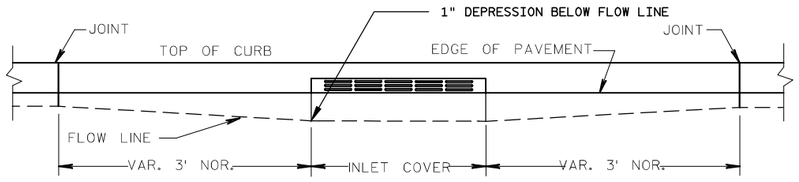
DRAINS ARE TO BE CONSTRUCTED AT EBS LOCATIONS, 250' INTERVALS AND DITCH SAG POINTS.

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

EXCAVATION TO CONSTRUCT FRENCH DRAINS SHALL BE CONSIDERED INCIDENTAL TO THE ITEM SELECT CRUSHED MATERIAL

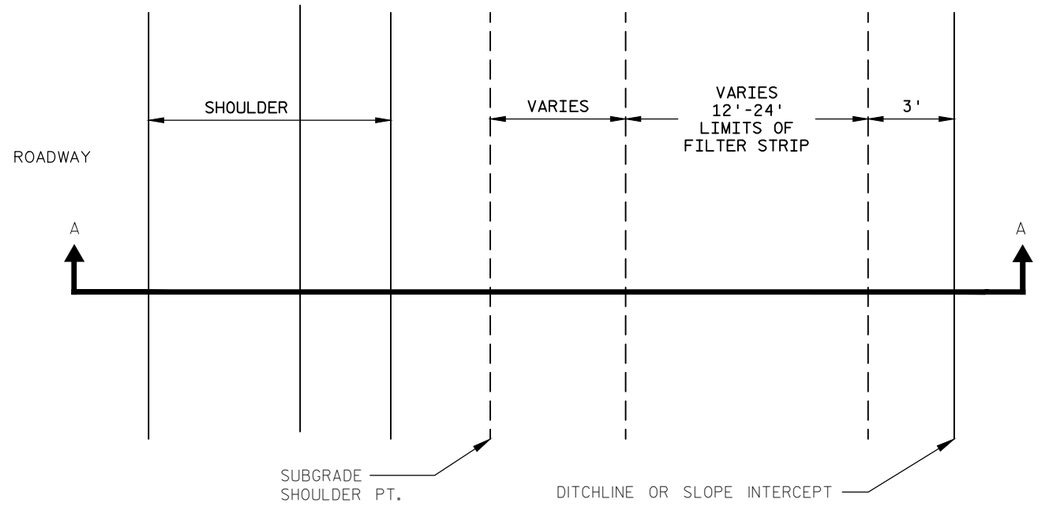


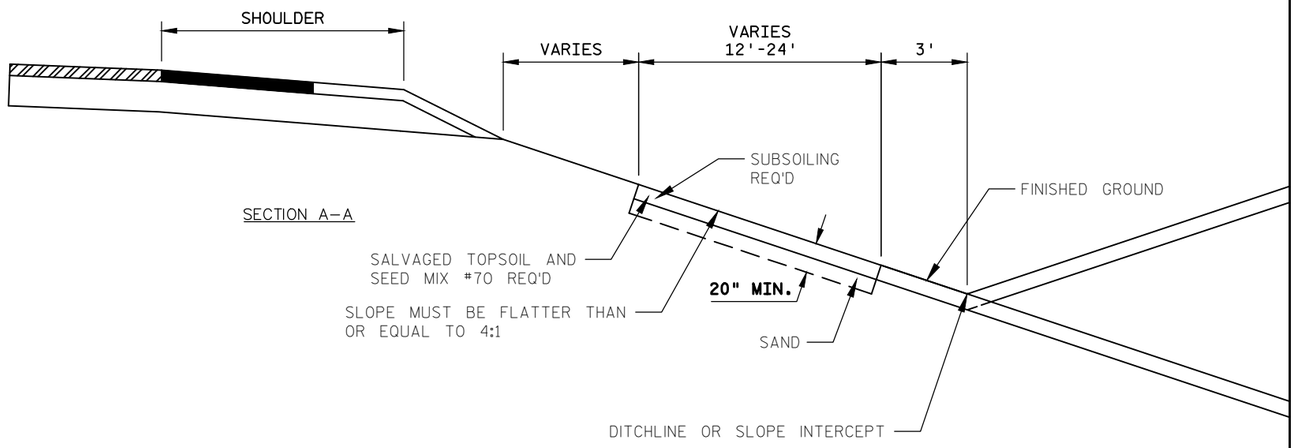
RIPRAP MEDIUM AND GEOTEXTILE FABRIC
TYPE HR AT CUT TO FILL TRANSITIONS



ELEVATION

DETAIL OF CURB AND GUTTER AT INLETS



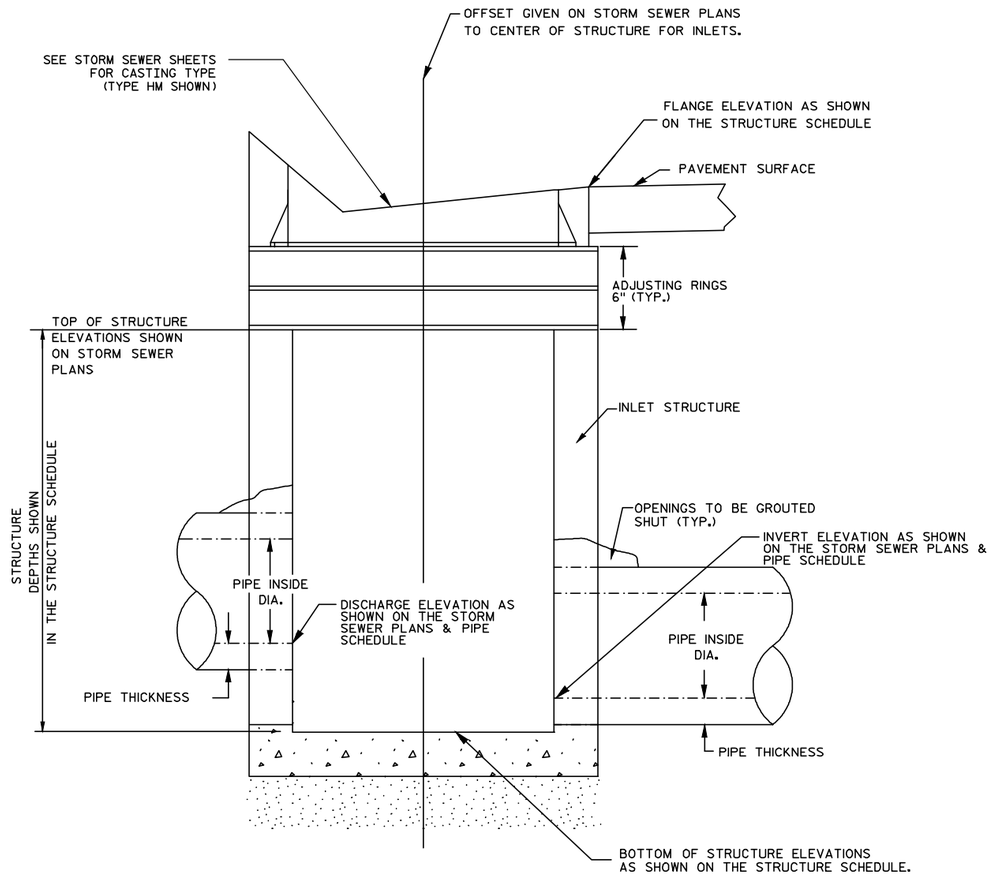


STORMWATER TREATMENT FILTER STRIPS
SEE PLANS FOR LOCATIONS

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, S.D.D. FOR INLETS
2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT.

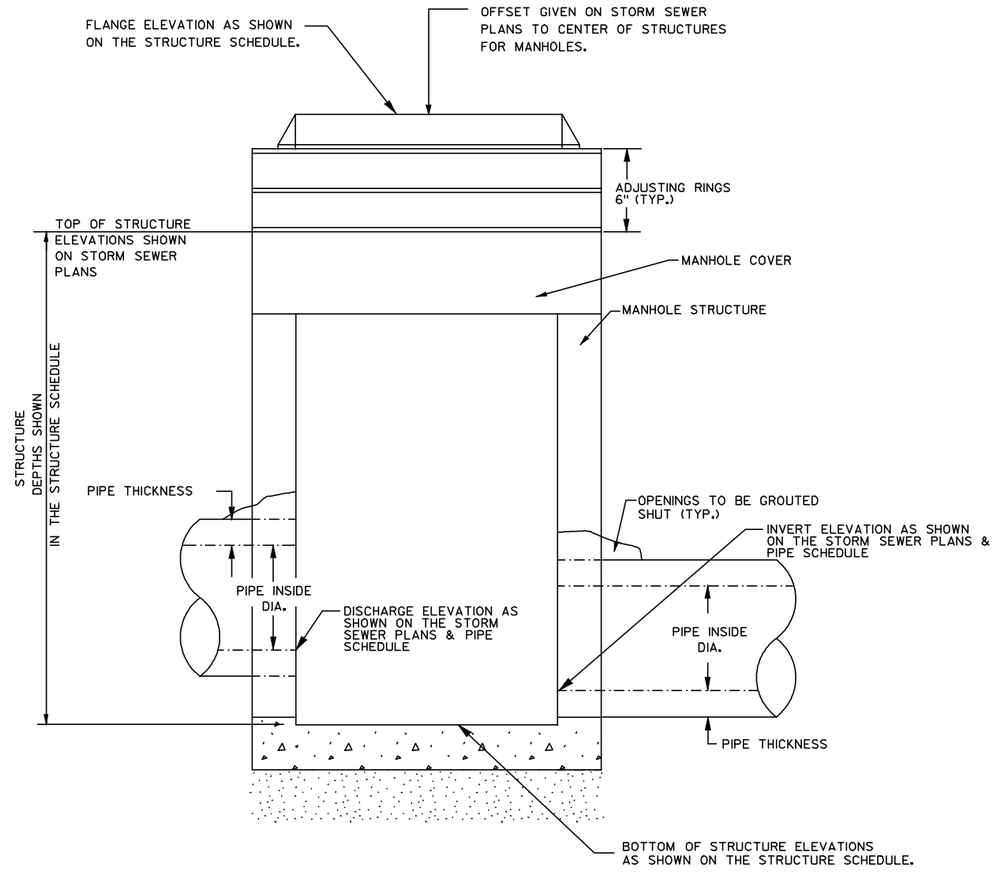


DETAIL OF INLET W/CASTING

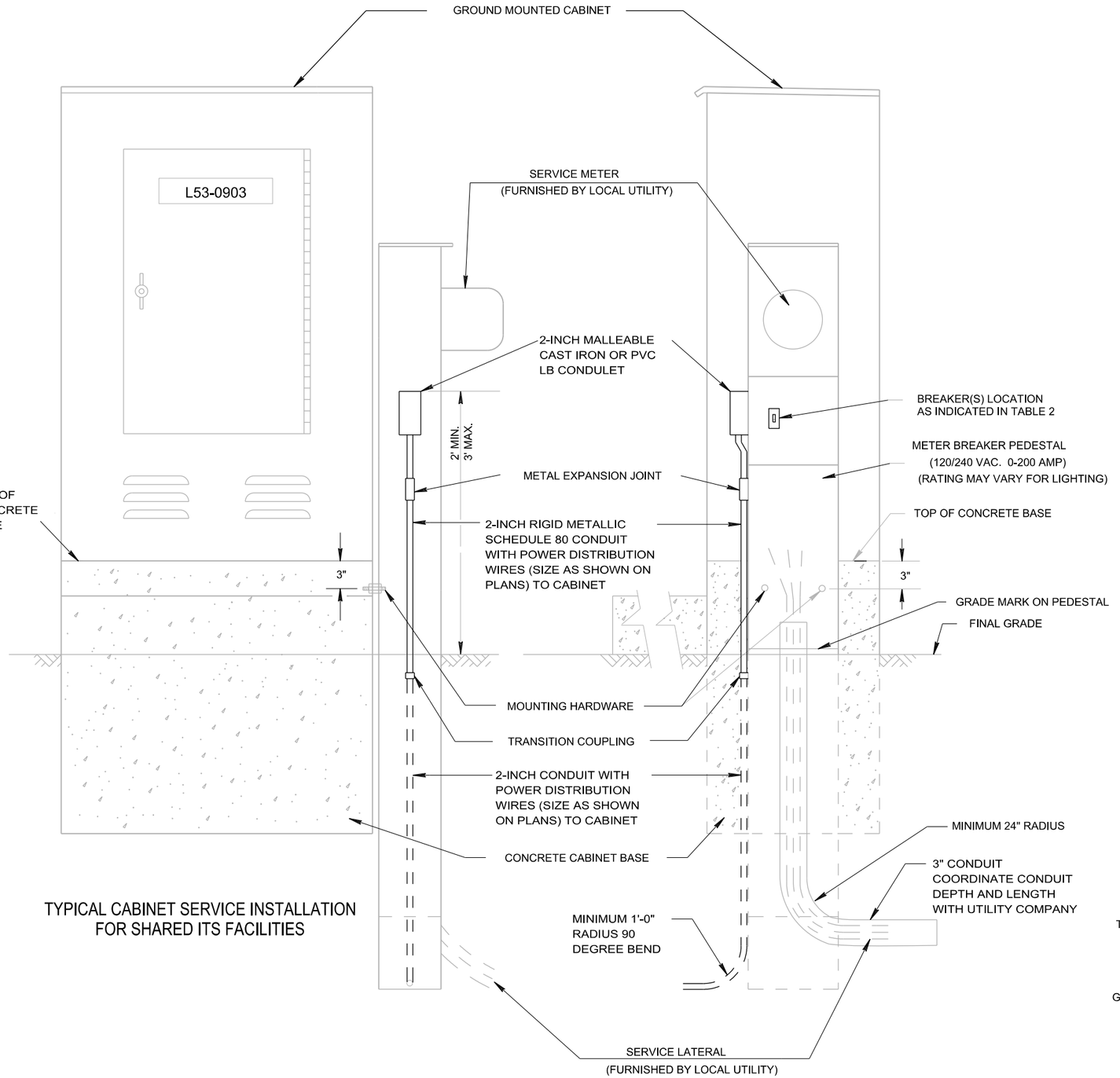
GENERAL NOTES:

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

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP
NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE
PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS,
APPLICABLE SPECIAL PROVISIONS, S.D.D. FOR MANHOLES
3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER.



DETAIL OF MANHOLE W/CASTING



TYPICAL CABINET SERVICE INSTALLATION
FOR SHARED ITS FACILITIES

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE) CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE NO LESS THAN 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

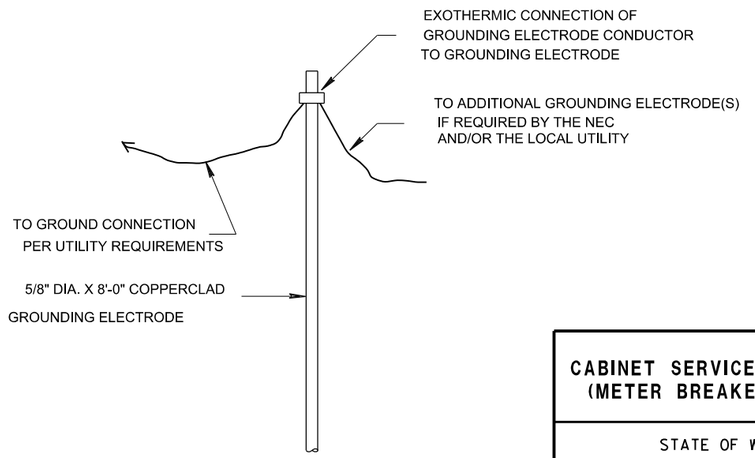
*NOTE: MAIN BREAKER SIZE MAY BE INCREASED IF MAXIMUM POWER DRAW IS EXPECTED TO EXCEED 100 AMPS.

TABLE 1
STANDARD BREAKER SIZES + LABELS

DEVICE TYPE	BREAKER SIZE	BREAKER LABEL
MAIN	*100 AMPS (2P)	MAIN
CCTV	30 AMPS	CCTV/SDS
SPARE	30 AMPS	SPARE

TABLE 2
BREAKER SIZES BY LOCATION

LOCATION	ID	MAIN BREAKER SIZE	SUB-BREAKER #1 SIZE	SUB-BREAKER #2 SIZE	SUB-BREAKER #3 SIZE
IH 39/90 & CTH S	L53-0903 CCTV-53-0039	100 AMPS (2P)	30 AMPS	30 AMPS (SPARE)	



CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CABINET SERVICE INSTALLATION DETAIL	SHEET 26	E

FILE NAME: L:\work\projects\60242867\000_CAD\001_Drawings\Traffic\CTH S Lighting\Shared FTMS Service Detail.DGN
BATCH PRINT SHEET 1 OF 7
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PLOT DATE: 12/16/2014
PLOT TIME: 10:41:44 AM
PLOT SCALE: 1:100
WISDOT/CADDS SHEET 42

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 APPLICABLE SPECIAL PROVISIONS.

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

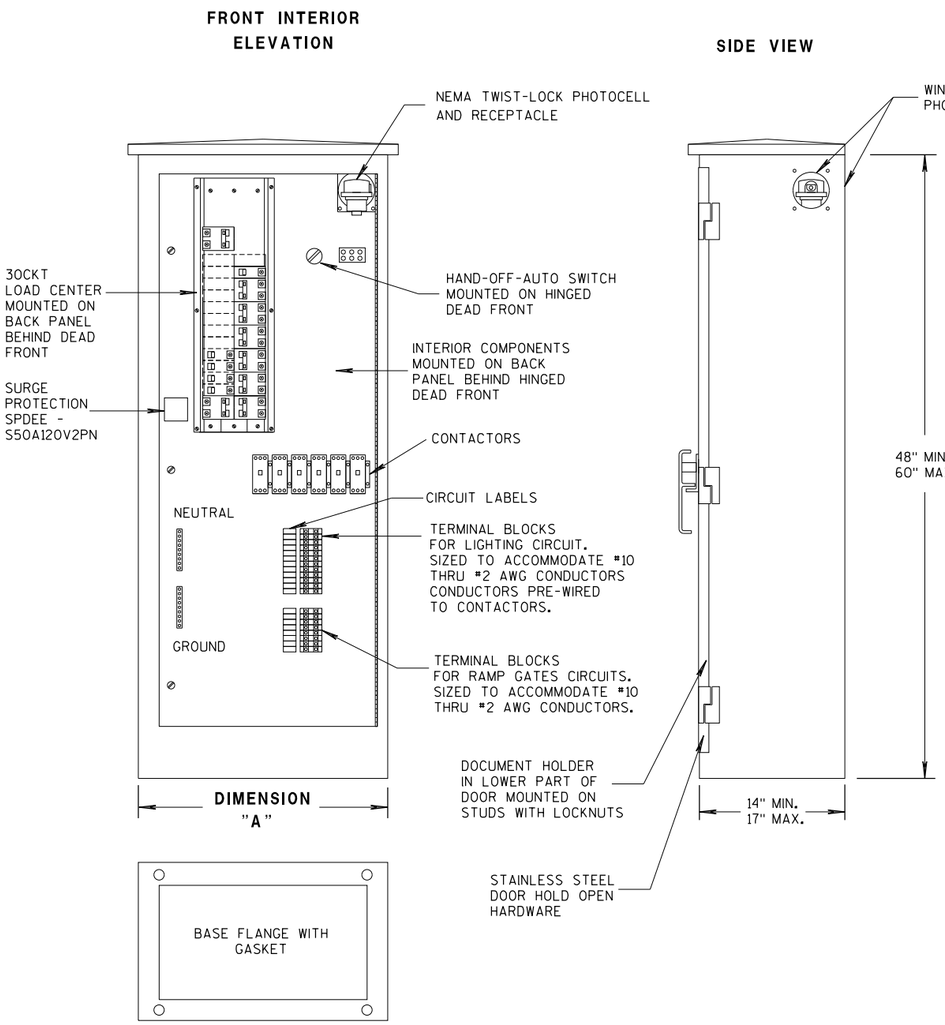
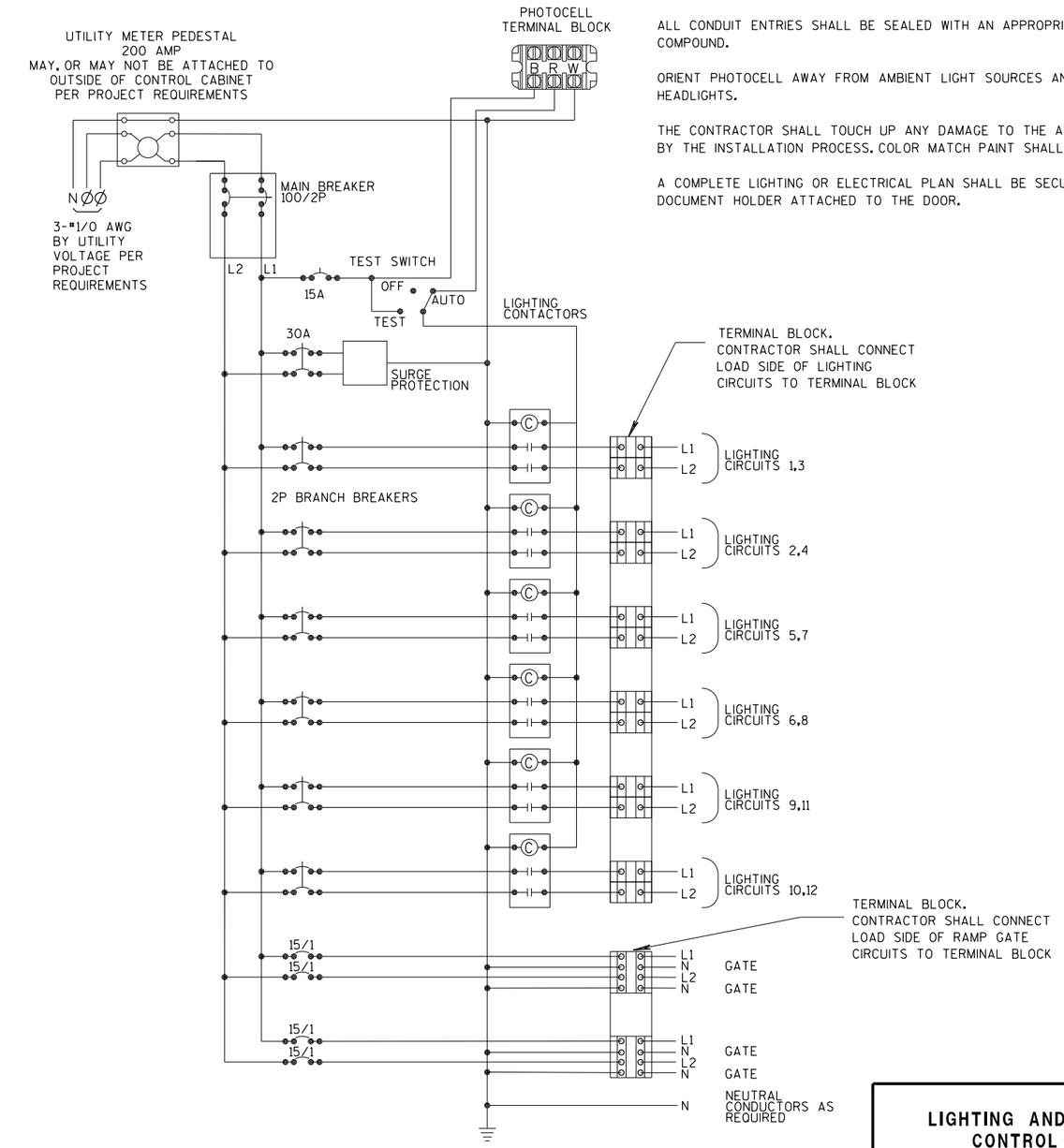


TABLE OF DIMENSIONS (INCHES)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"

LIGHTING CONTROL CABINET



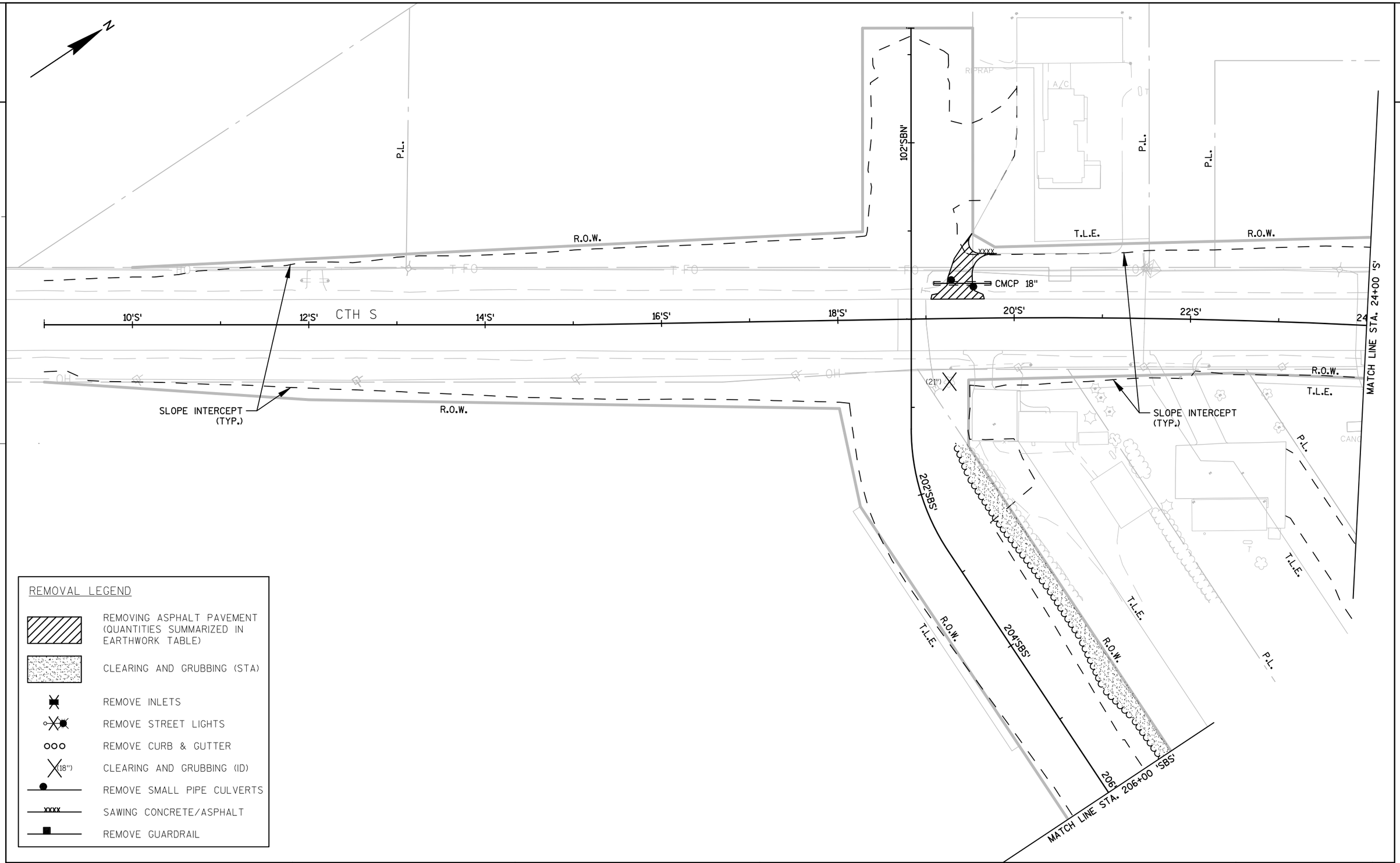
CONTROL CABINET SCHEMATIC

LIGHTING AND RAMP GATE CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER: 1003-10-71	HWY: IH 39	COUNTY: ROCK	LIGHTING AND RAMP GATE CONTROL CABINET DETAIL	SHEET 27	E

FILE NAME: L:\work\projects\60242867\000_CAD\001_Drawings\Traffic\CTH S Lighting\S9D4-1.dgn
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WISDOT/CADDS SHEET 42



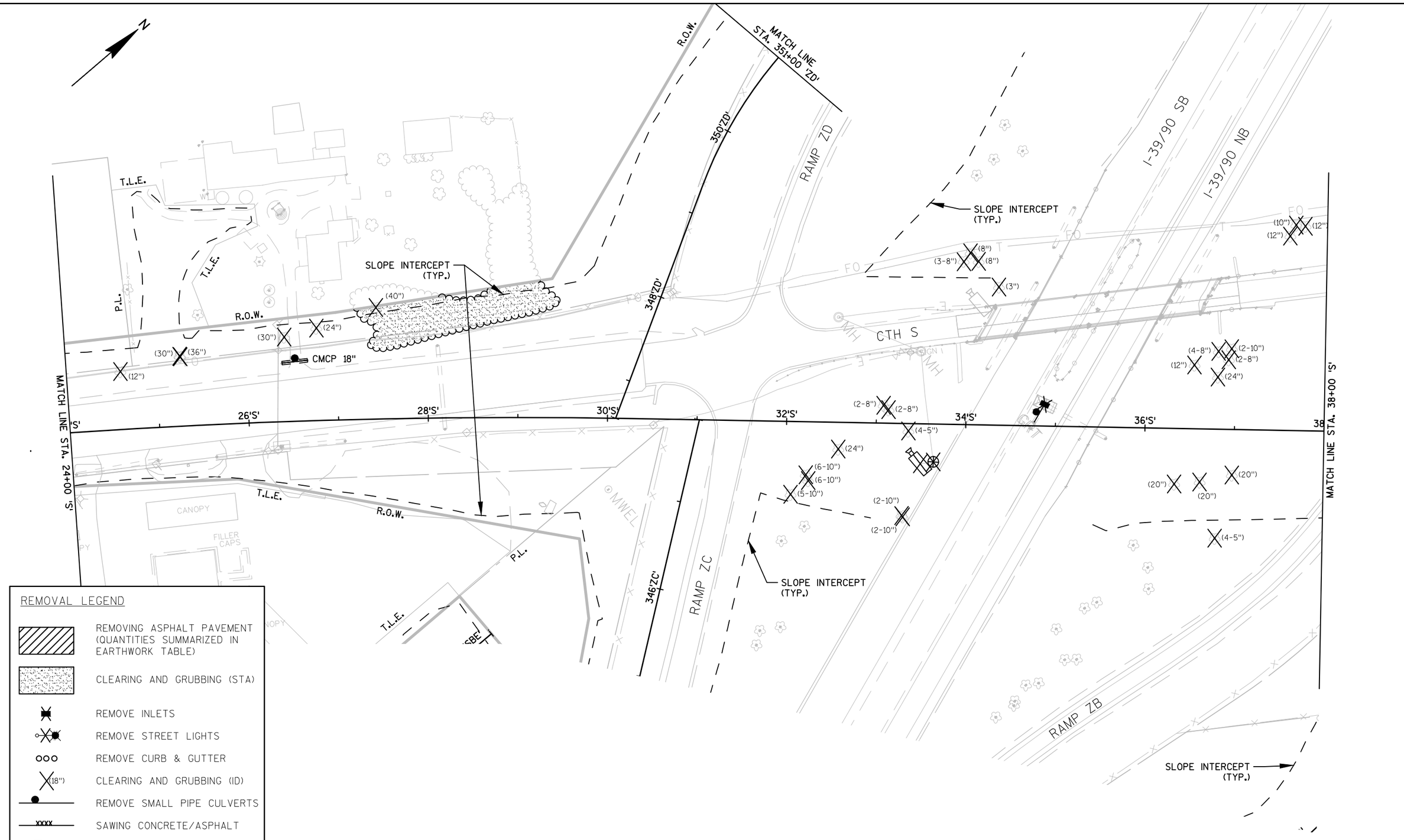
REMOVAL LEGEND

- REMOVING ASPHALT PAVEMENT (QUANTITIES SUMMARIZED IN EARTHWORK TABLE)
- CLEARING AND GRUBBING (STA)
- REMOVE INLETS
- REMOVE STREET LIGHTS
- REMOVE CURB & GUTTER
- (18") CLEARING AND GRUBBING (ID)
- REMOVE SMALL PIPE CULVERTS
- XXXX SAWING CONCRETE/ASPHALT
- REMOVE GUARDRAIL

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 1	SHEET 28	E

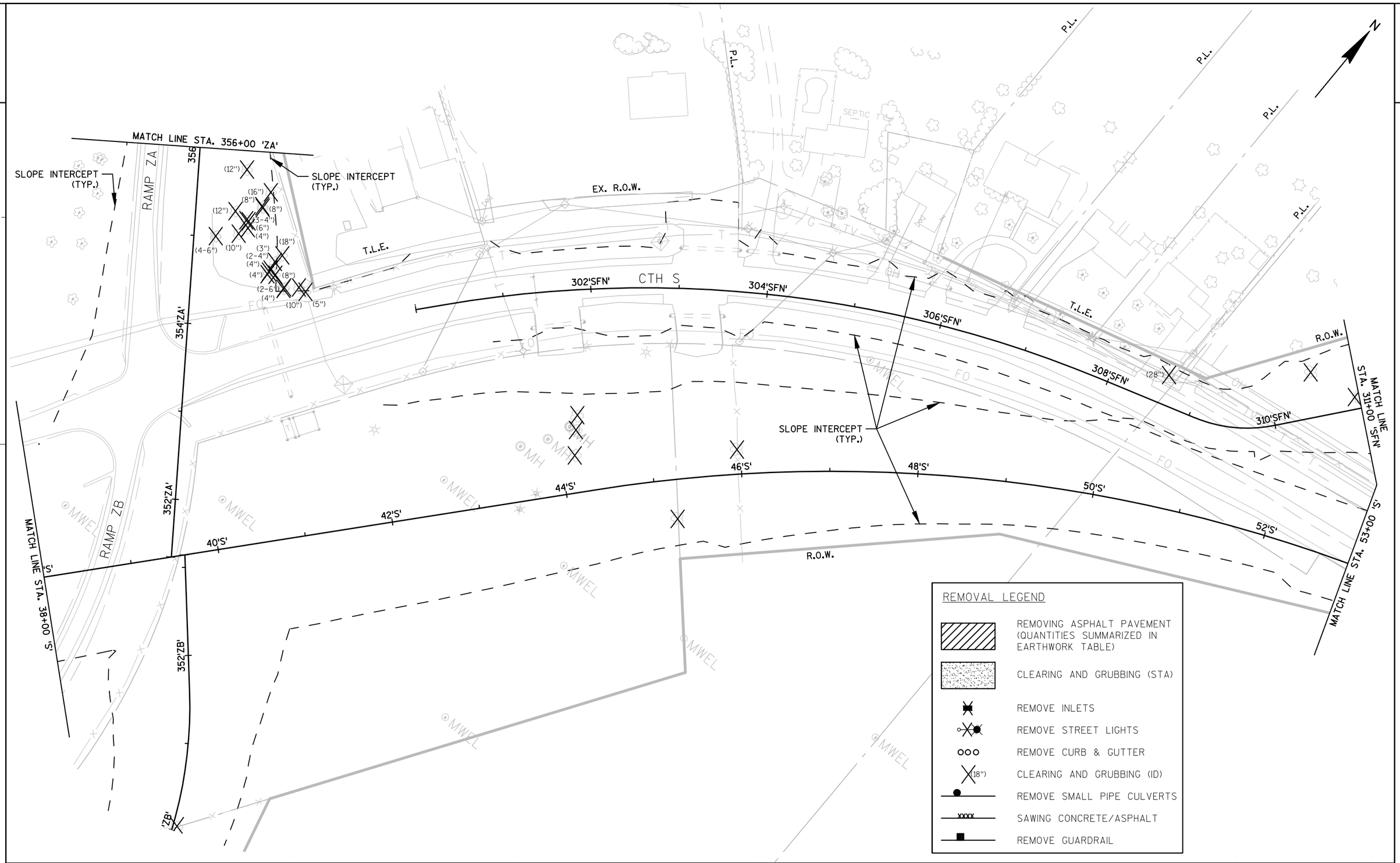
FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_021101_REM.DWG PLOT DATE : 7/1/2014 8:22 AM PLOT BY : LUCAS CHASE PLOT NAME : ---------- PLOT SCALE : 1" = 100'_XREF
WISDOT/CADDS SHEET 42

2



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 1	SHEET 29	E

2



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 1	SHEET 30	E

2

N

MATCH LINE STA. 311+00 'SFN'

312'SFN'

314'SFN'

601'SFS'

(36")

R.O.W.

T.L.E.

P.L.

MATCH LINE STA. 53+00 'S'

54'S'

56'S'

58'S'

60'S'

CTH S 62'S'

R.O.W.

SLOPE INTERCEPT (TYP.)

T.L.E.

P.L.

REMOVAL LEGEND

- REMOVING ASPHALT PAVEMENT (QUANTITIES SUMMARIZED IN EARTHWORK TABLE)
- CLEARING AND GRUBBING (STA)
- REMOVE INLETS
- REMOVE STREET LIGHTS
- REMOVE CURB & GUTTER
- (18") CLEARING AND GRUBBING (ID)
- REMOVE SMALL PIPE CULVERTS
- xxxx SAWING CONCRETE/ASPHALT
- REMOVE GUARDRAIL

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 1	SHEET 31	E

2

N

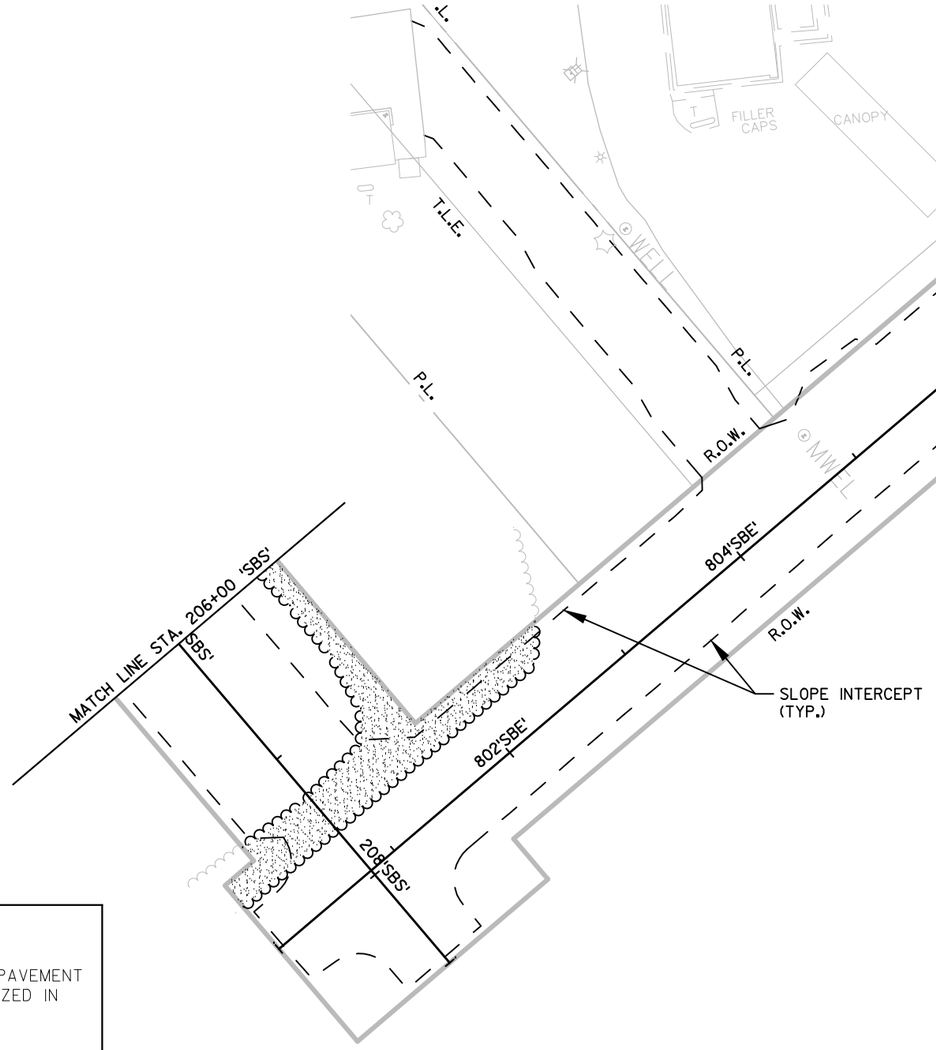
REMOVAL LEGEND

- REMOVING ASPHALT PAVEMENT (QUANTITIES SUMMARIZED IN EARTHWORK TABLE)
- CLEARING AND GRUBBING (STA)
- REMOVE INLETS
- REMOVE STREET LIGHTS
- REMOVE CURB & GUTTER
- (18") CLEARING AND GRUBBING (ID)
- REMOVE SMALL PIPE CULVERTS
- XXXX SAWING CONCRETE/ASPHALT
- REMOVE GUARDRAIL

364'ZD'
364'ZDT'
362'ZD'
362'ZDT'
360'ZD'
360'ZDT'
358'ZD'
358'ZDT'
356'ZD'
356'ZDT'
354'ZD'
352'ZD'
R.O.W.
RAMP ZD
I-39/90 SB
I-39/90 NB
SLOPE INTERCEPT (TYP.)
MATCH LINE STA. 351+00 'ZD'

364'ZA'
364'ZAT'
362'ZA'
362'ZAT'
360'ZA'
358'ZA'
R.O.W.
P.L.
SEPTIC
SIGN
RAMP ZA
SLOPE INTERCEPT (TYP.)
(12")
(12")
(12")
MATCH LINE STA. 356+00 'ZA'

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 1	SHEET 32	E



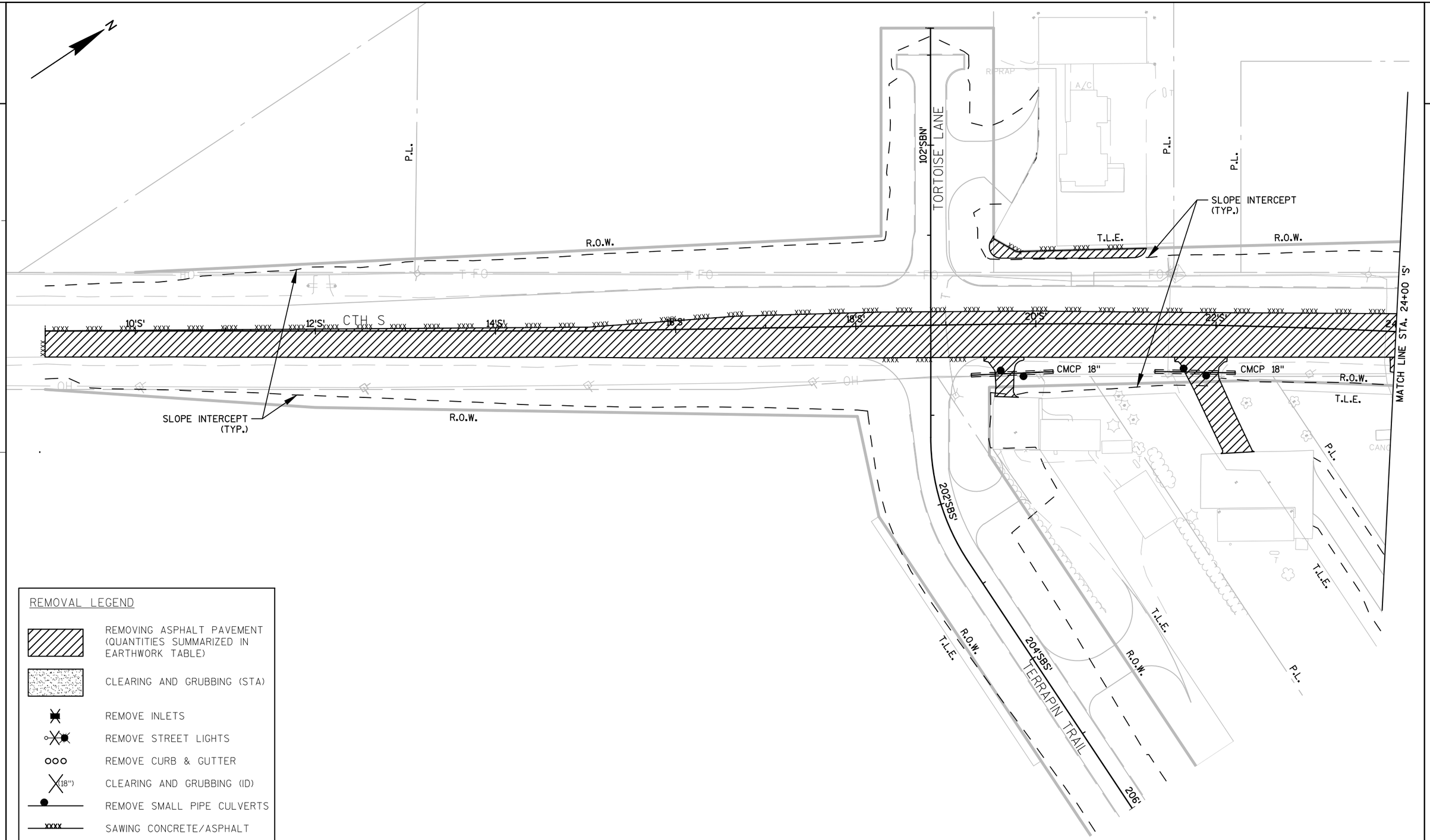


REMOVAL LEGEND

- REMOVING ASPHALT PAVEMENT (QUANTITIES SUMMARIZED IN EARTHWORK TABLE)
- CLEARING AND GRUBBING (STA)
- REMOVE INLETS
- REMOVE STREET LIGHTS
- REMOVE CURB & GUTTER
- (18") CLEARING AND GRUBBING (ID)
- REMOVE SMALL PIPE CULVERTS
- XXXX SAWING CONCRETE/ASPHALT
- REMOVE GUARDRAIL

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 1	SHEET 33	E

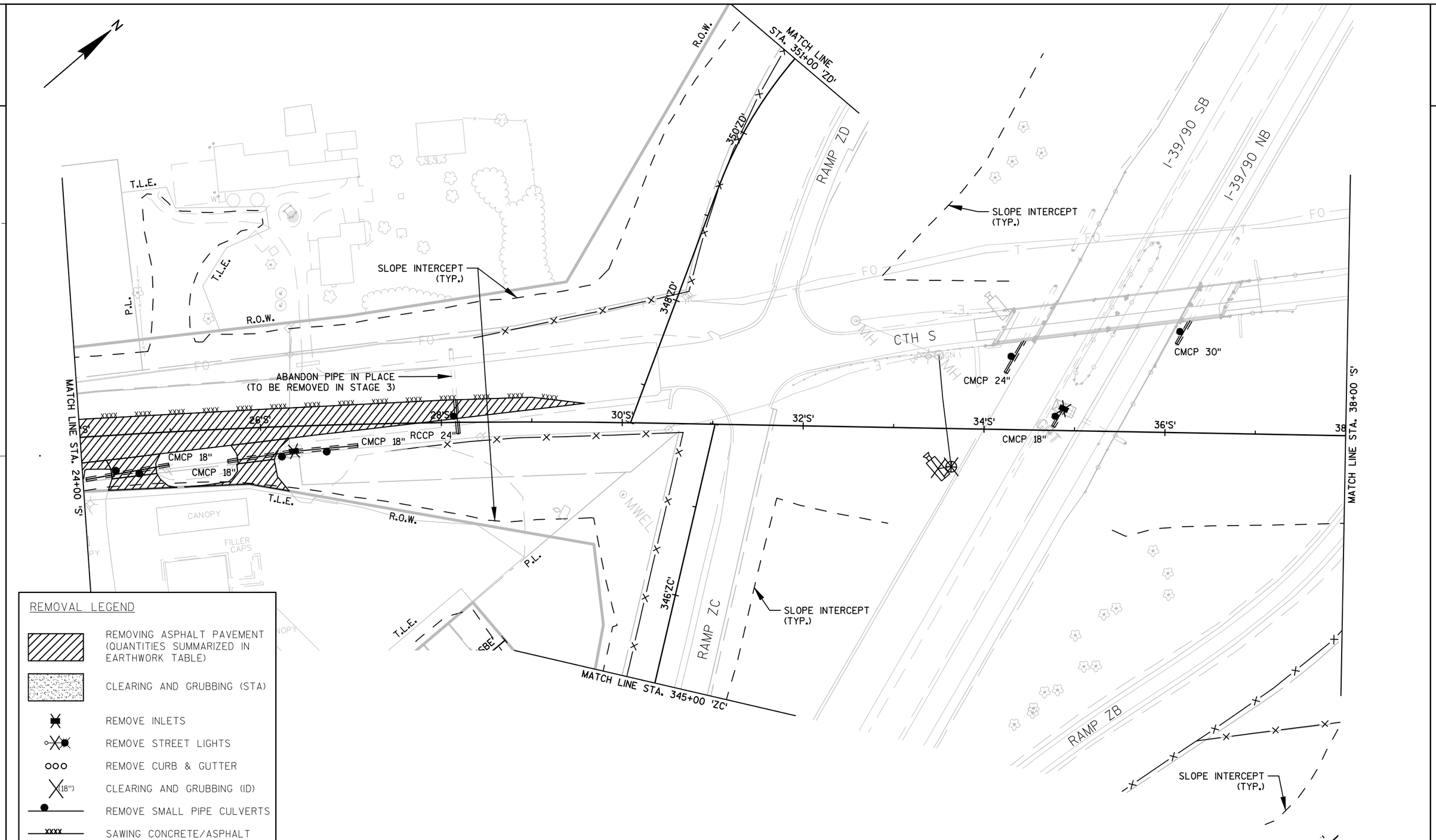
2



REMOVAL LEGEND

- REMOVING ASPHALT PAVEMENT (QUANTITIES SUMMARIZED IN EARTHWORK TABLE)
- CLEARING AND GRUBBING (STA)
- REMOVE INLETS
- REMOVE STREET LIGHTS
- REMOVE CURB & GUTTER
- (18") CLEARING AND GRUBBING (ID)
- REMOVE SMALL PIPE CULVERTS
- XXXX SAWING CONCRETE/ASPHALT
- REMOVE GUARDRAIL

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 2	SHEET 34	E



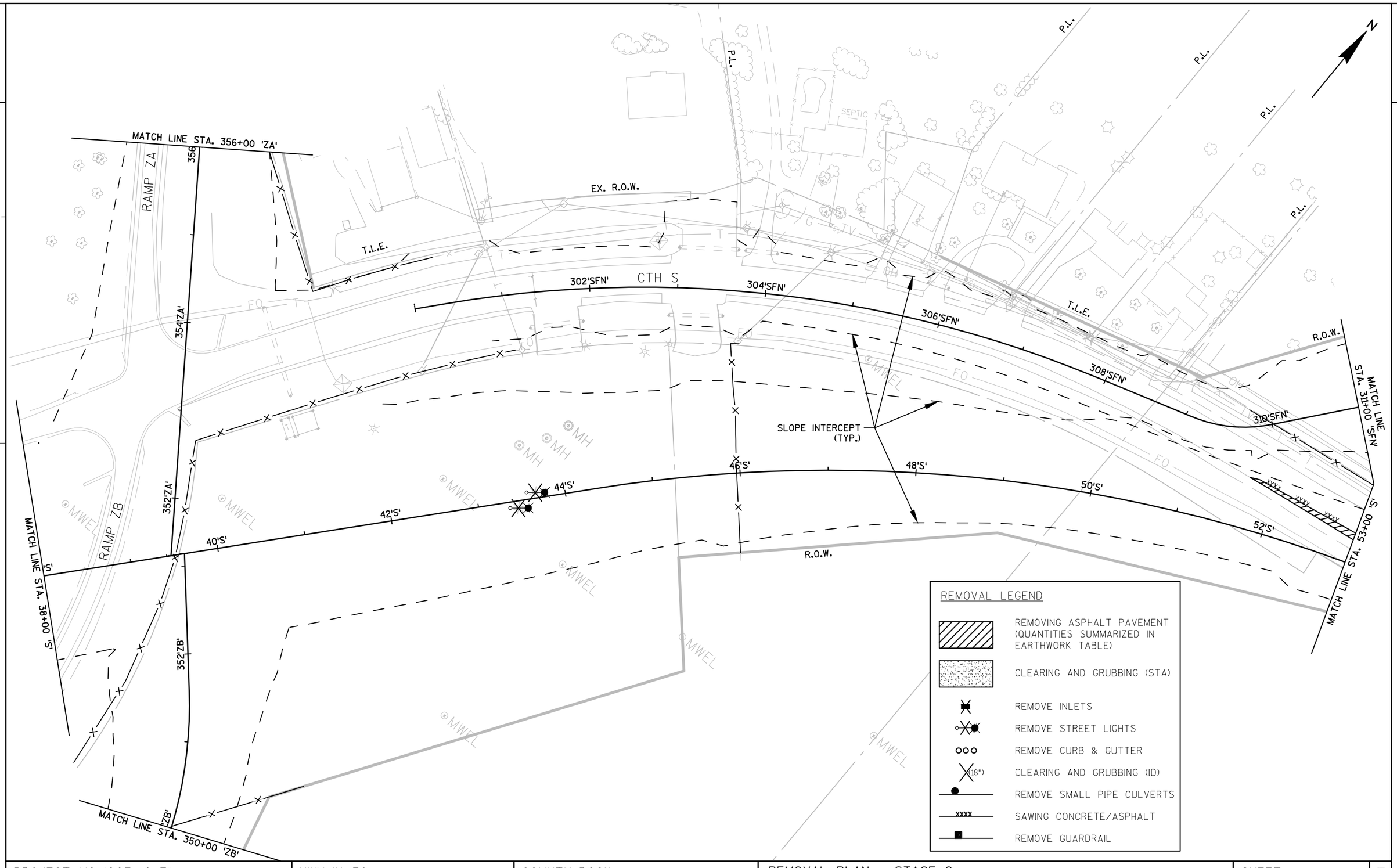
REMOVAL LEGEND

- REMOVING ASPHALT PAVEMENT (QUANTITIES SUMMARIZED IN EARTHWORK TABLE)
- CLEARING AND GRUBBING (STA)
- REMOVE INLETS
- REMOVE STREET LIGHTS
- REMOVE CURB & GUTTER
- CLEARING AND GRUBBING (ID) (18")
- REMOVE SMALL PIPE CULVERTS
- SAWING CONCRETE/ASPHALT
- REMOVE GUARDRAIL

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 2	SHEET 35	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_021101_REM.DWG PLOT DATE : 7/1/2014 8:22 AM PLOT BY : LUCAS CHASE PLOT NAME : ---------- PLOT SCALE : 1" = 100'_XREF
WISDOT/CADDS SHEET 42

2



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 2	SHEET 36	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_021101_REM.DWG PLOT DATE : 7/1/2014 8:22 AM PLOT BY : LUCAS CHASE PLOT NAME : ---------- PLOT SCALE : 1" = 100'_XREF

2

N

MATCH LINE STA. 311+00 'SFN'

312'SFN'

314'SFN'

601'SFS'

R.O.W.

T.L.E.

P.L.

CTH S

54'S

56'S

58'S

60'S

62'S

CMCP 12"

CMCP 12"

CMCP 12"

CMCP 12"

T.L.E.

R.O.W.

MATCH LINE STA. 53+00 'S'

SLOPE INTERCEPT (TYP.)

P.L.

REMOVAL LEGEND

- REMOVING ASPHALT PAVEMENT (QUANTITIES SUMMARIZED IN EARTHWORK TABLE)
- CLEARING AND GRUBBING (STA)
- REMOVE INLETS
- REMOVE STREET LIGHTS
- REMOVE CURB & GUTTER
- (18") CLEARING AND GRUBBING (ID)
- REMOVE SMALL PIPE CULVERTS
- XXXX SAWING CONCRETE/ASPHALT
- REMOVE GUARDRAIL

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 2	SHEET 37	E

2

N

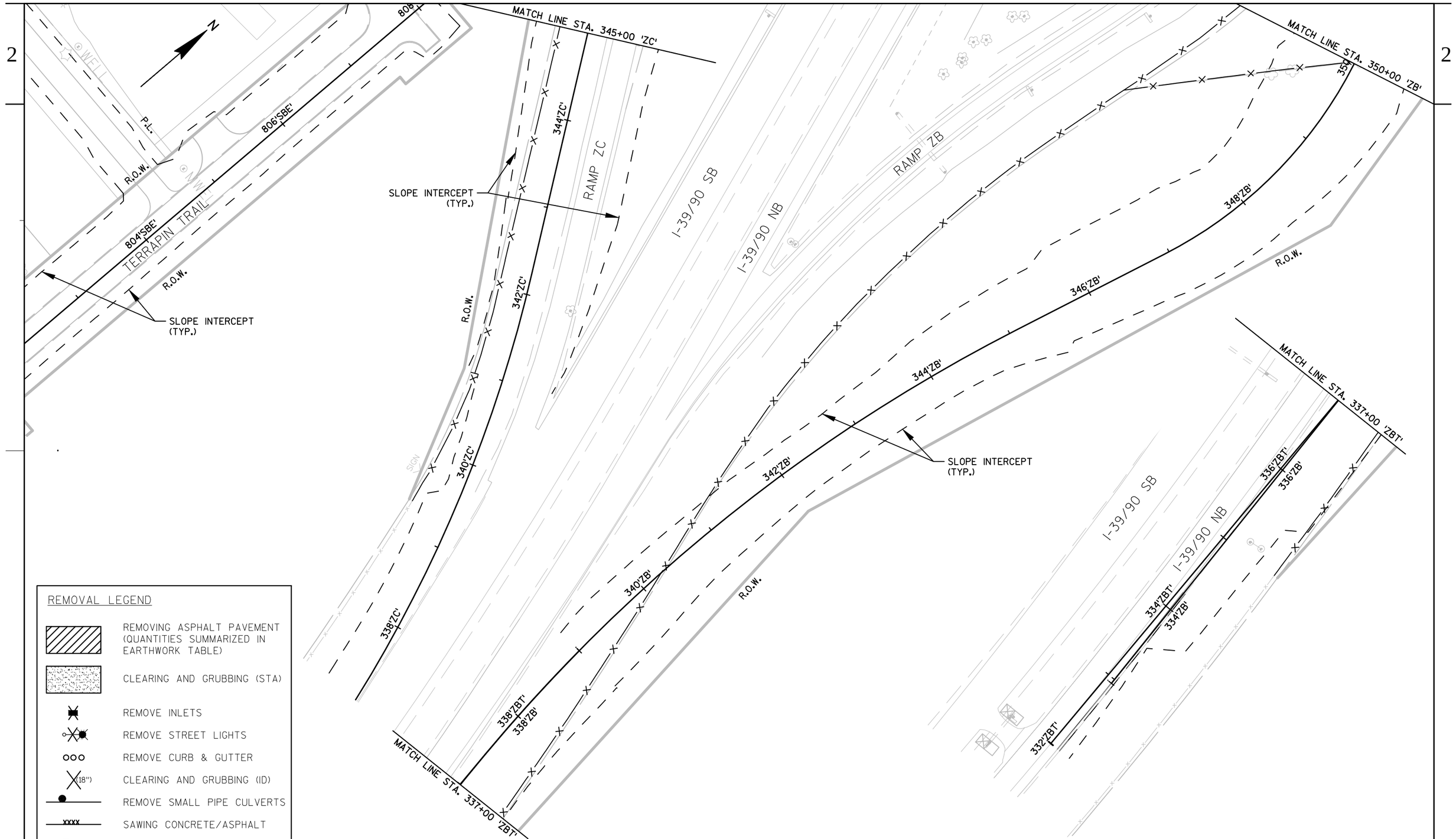
REMOVAL LEGEND

- REMOVING ASPHALT PAVEMENT (QUANTITIES SUMMARIZED IN EARTHWORK TABLE)
- CLEARING AND GRUBBING (STA)
- REMOVE INLETS
- REMOVE STREET LIGHTS
- REMOVE CURB & GUTTER
- (18") CLEARING AND GRUBBING (ID)
- REMOVE SMALL PIPE CULVERTS
- XXXX SAWING CONCRETE/ASPHALT
- REMOVE GUARDRAIL

364'ZD'
364'ZDT'
362'ZD'
362'ZDT'
360'ZD'
360'ZDT'
358'ZD'
358'ZDT'
356'ZD'
356'ZDT'
354'ZD'
352'ZD'
R.O.W.
RAMP ZD
I-39/90 SB
I-39/90 NB
SLOPE INTERCEPT (TYP.)
MATCH LINE STA. 351+00 'ZD'

364'ZA'
364'ZAT'
362'ZA'
362'ZAT'
360'ZA'
358'ZA'
R.O.W.
P.L.
SEPTIC
SIGN
RAMP ZA
SLOPE INTERCEPT (TYP.)
MATCH LINE STA. 356+00 'ZA'

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 2	SHEET 38	E

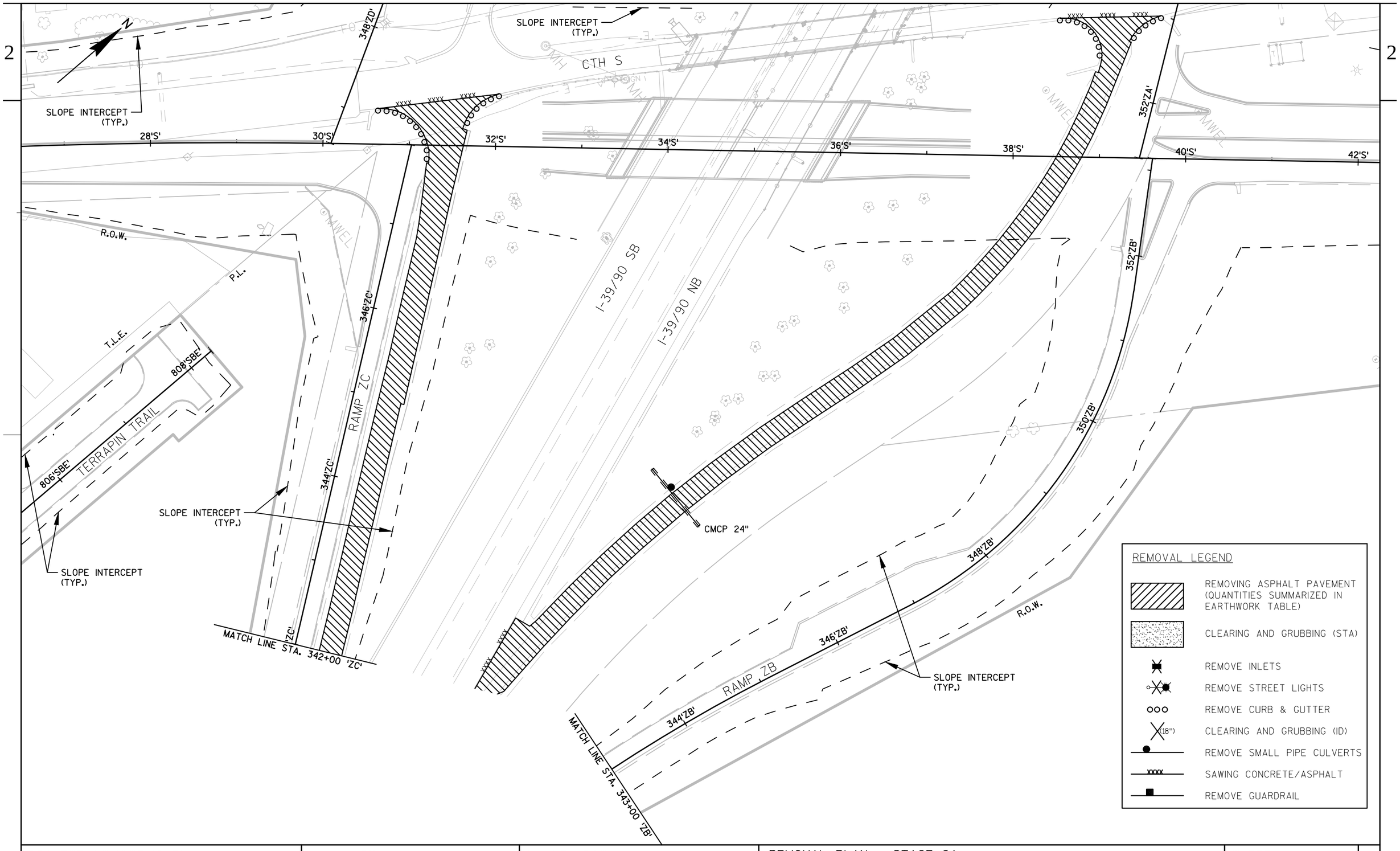


REMOVAL LEGEND

- REMOVING ASPHALT PAVEMENT (QUANTITIES SUMMARIZED IN EARTHWORK TABLE)
- CLEARING AND GRUBBING (STA)
- REMOVE INLETS
- REMOVE STREET LIGHTS
- REMOVE CURB & GUTTER
- (18") CLEARING AND GRUBBING (ID)
- REMOVE SMALL PIPE CULVERTS
- XXXX SAWING CONCRETE/ASPHALT
- REMOVE GUARDRAIL

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 2	SHEET 39	E

2

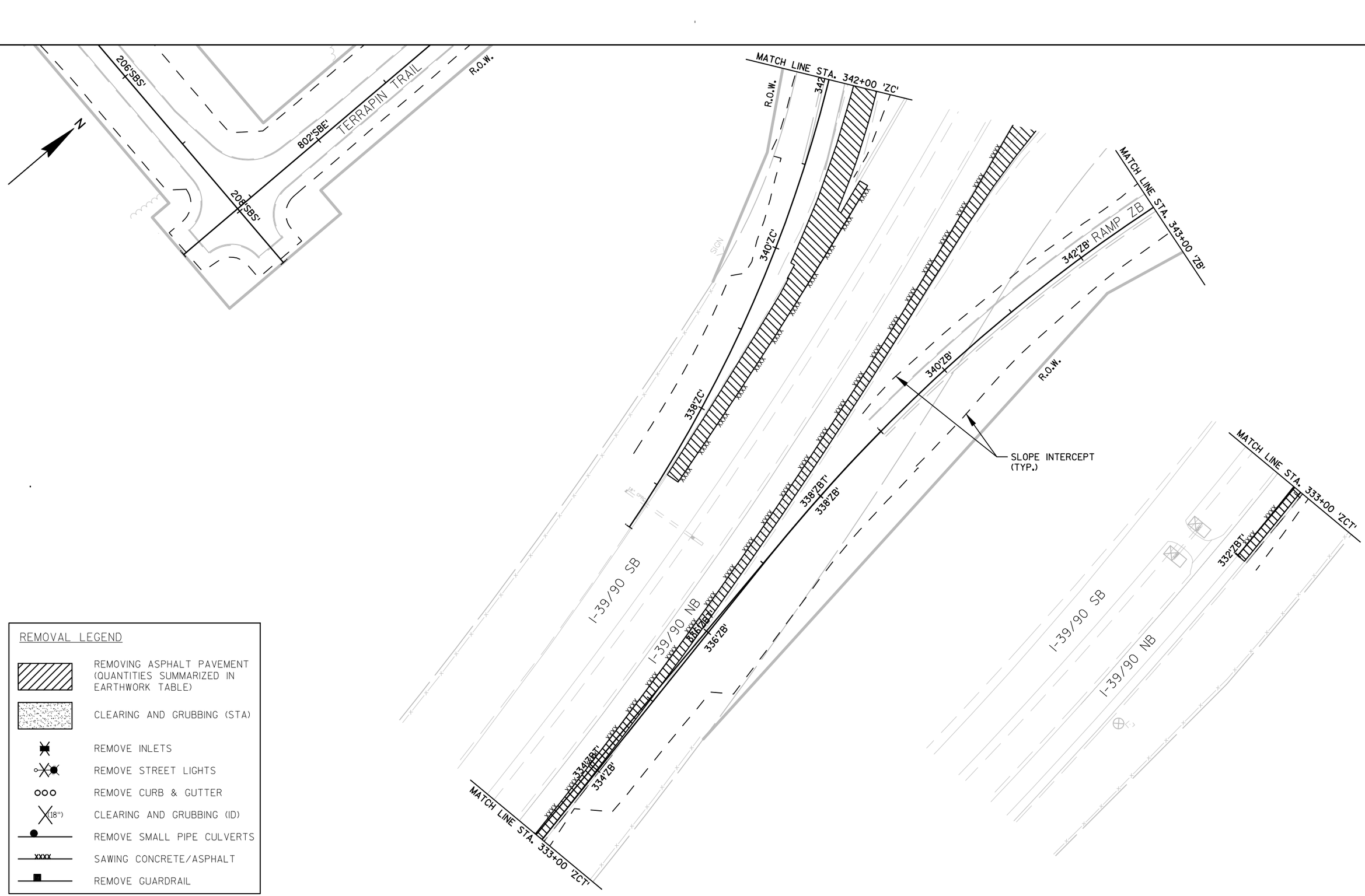


REMOVAL LEGEND

- REMOVING ASPHALT PAVEMENT (QUANTITIES SUMMARIZED IN EARTHWORK TABLE)
- CLEARING AND GRUBBING (STA)
- REMOVE INLETS
- REMOVE STREET LIGHTS
- REMOVE CURB & GUTTER
- (18") CLEARING AND GRUBBING (ID)
- REMOVE SMALL PIPE CULVERTS
- XXXX SAWING CONCRETE/ASPHALT
- REMOVE GUARDRAIL

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 2A	SHEET 40	E

2



REMOVAL LEGEND

- REMOVING ASPHALT PAVEMENT (QUANTITIES SUMMARIZED IN EARTHWORK TABLE)
- CLEARING AND GRUBBING (STA)
- REMOVE INLETS
- REMOVE STREET LIGHTS
- REMOVE CURB & GUTTER
- CLEARING AND GRUBBING (ID) (18")
- REMOVE SMALL PIPE CULVERTS
- SAWING CONCRETE/ASPHALT (XXXX)
- REMOVE GUARDRAIL

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 2A	SHEET 41	E

REMOVAL LEGEND

- REMOVING ASPHALT PAVEMENT (QUANTITIES SUMMARIZED IN EARTHWORK TABLE)
- CLEARING AND GRUBBING (STA)
- REMOVE INLETS
- REMOVE STREET LIGHTS
- REMOVE CURB & GUTTER
- (18") CLEARING AND GRUBBING (ID)
- REMOVE SMALL PIPE CULVERTS
- XXXX SAWING CONCRETE/ASPHALT
- REMOVE GUARDRAIL

N

MATCH LINE STA. 359+00 'ZDT'

R.O.W.

358'ZD'

358'ZDT'

CMCP 24"

SLOPE INTERCEPT (TYP.)

356'ZD'

356'ZDT'

354'ZD'

352'ZD'

RAMP ZD

350'ZD'

348'ZD'

R.O.W.

I-39/90 SB

I-39/90 NB

MATCH LINE STA. 360+00 'ZA'

360

358'ZA'

SLOPE INTERCEPT (TYP.)

356'ZA'

RAMP ZA

R.O.W.

SIGN

P.L.

T.L.E.

354'ZA'

352'ZA'

FO

T

E

MH

SIGN

CTH S

30'S'

32'S'

34'S'

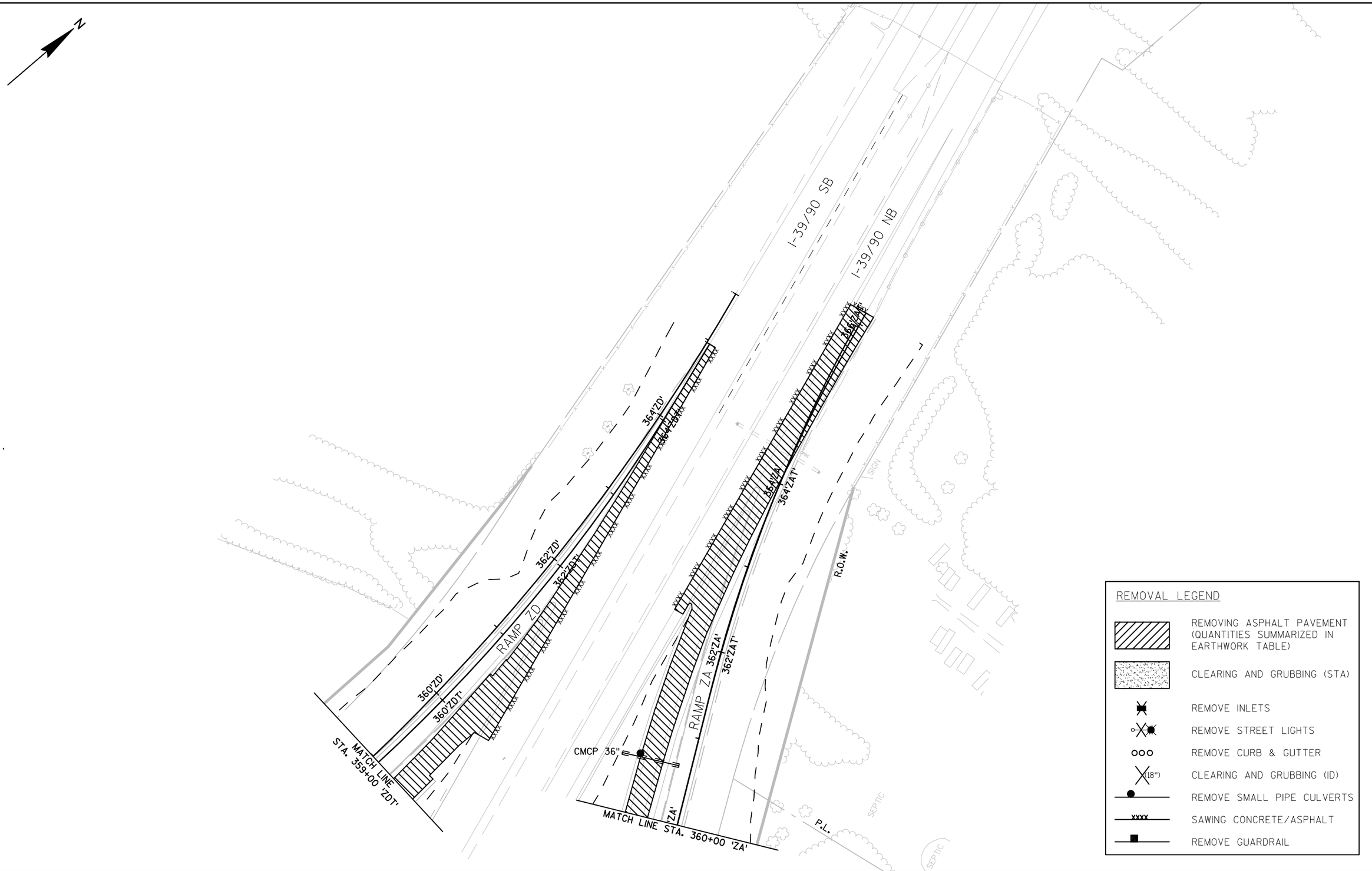
36'S'

38'S'

40'S'

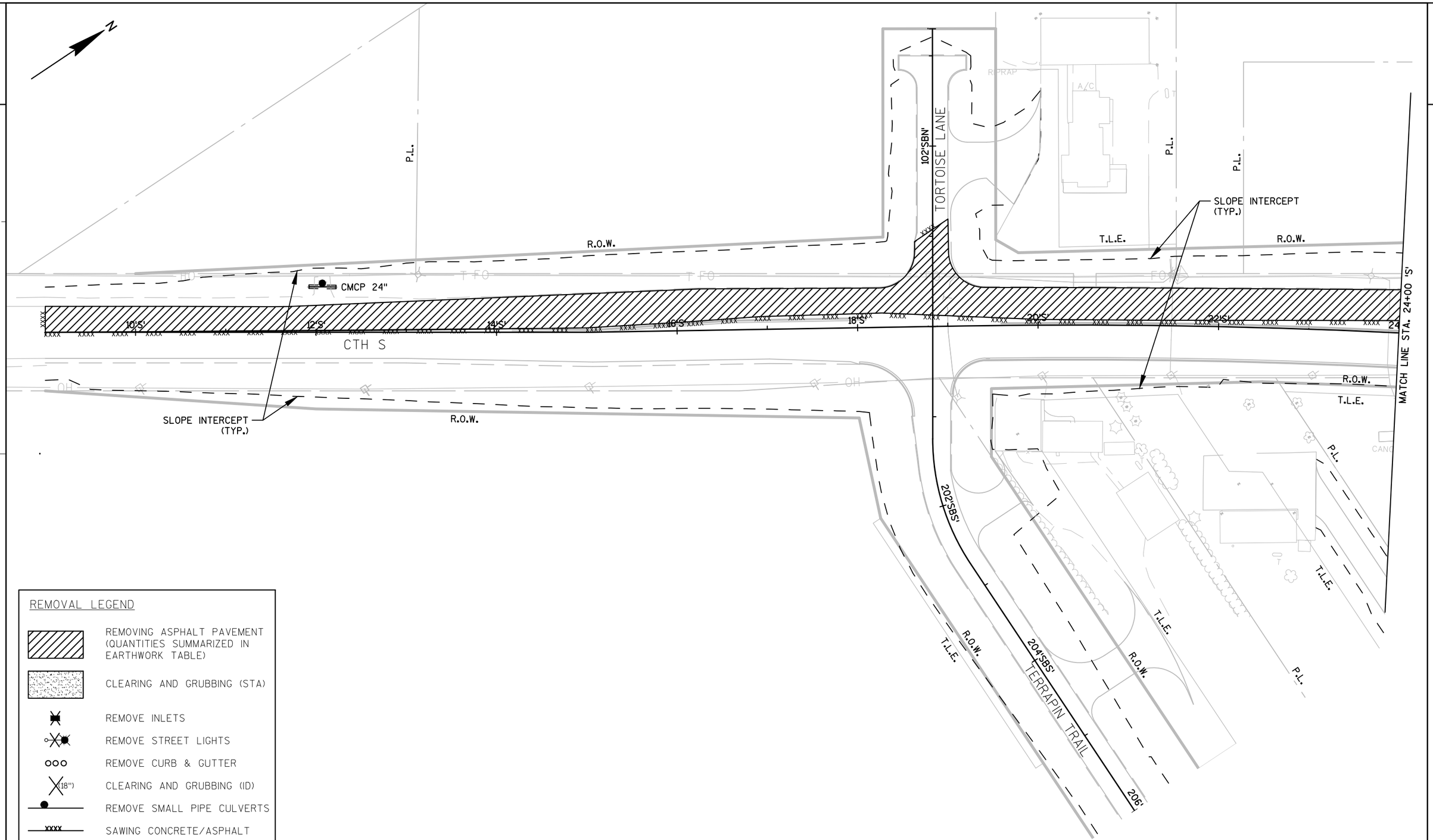
42'S'

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 2B	SHEET 42	E



PROJECT NO:1003-10-71	HWY:IH 39	COUNTY:ROCK	REMOVAL PLAN - STAGE 2B	SHEET 43	E

2

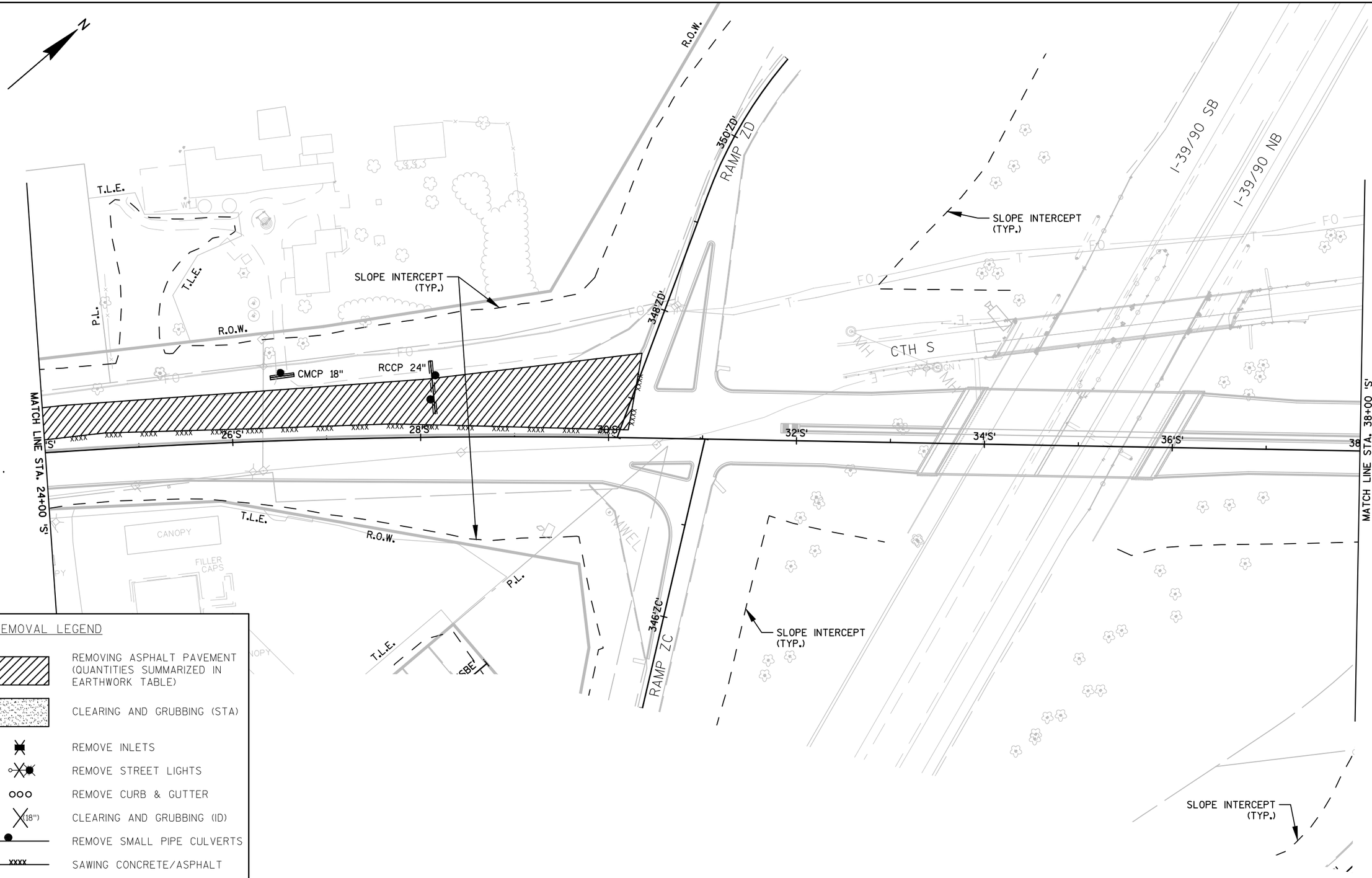


REMOVAL LEGEND

- REMOVING ASPHALT PAVEMENT (QUANTITIES SUMMARIZED IN EARTHWORK TABLE)
- CLEARING AND GRUBBING (STA)
- REMOVE INLETS
- REMOVE STREET LIGHTS
- REMOVE CURB & GUTTER
- CLEARING AND GRUBBING (ID) (18")
- REMOVE SMALL PIPE CULVERTS
- SAWING CONCRETE/ASPHALT (XXXX)
- REMOVE GUARDRAIL

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 3	SHEET 44	E

2

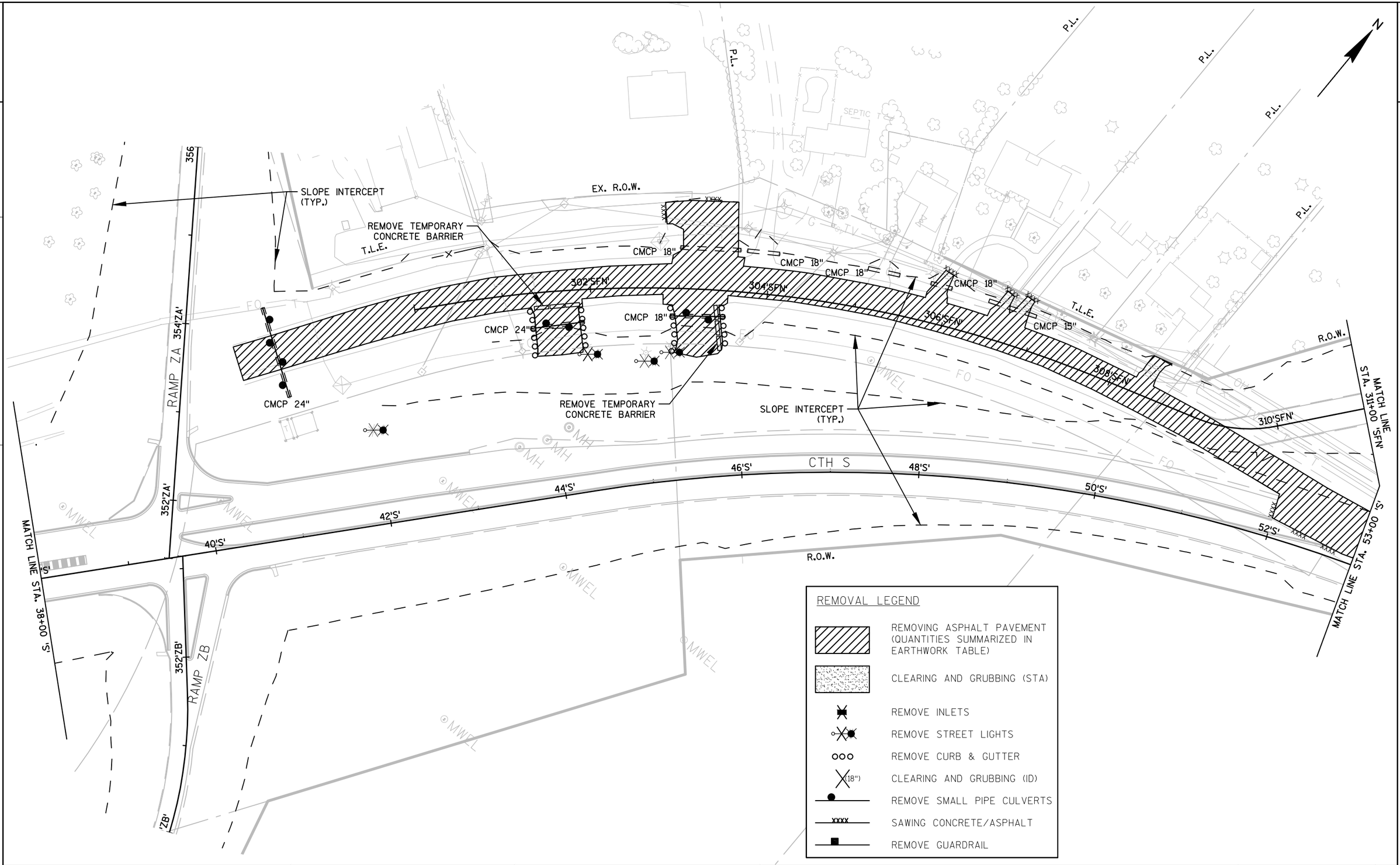


REMOVAL LEGEND

- REMOVING ASPHALT PAVEMENT (QUANTITIES SUMMARIZED IN EARTHWORK TABLE)
- CLEARING AND GRUBBING (STA)
- REMOVE INLETS
- REMOVE STREET LIGHTS
- REMOVE CURB & GUTTER
- (18") CLEARING AND GRUBBING (ID)
- REMOVE SMALL PIPE CULVERTS
- XXXX SAWING CONCRETE/ASPHALT
- REMOVE GUARDRAIL

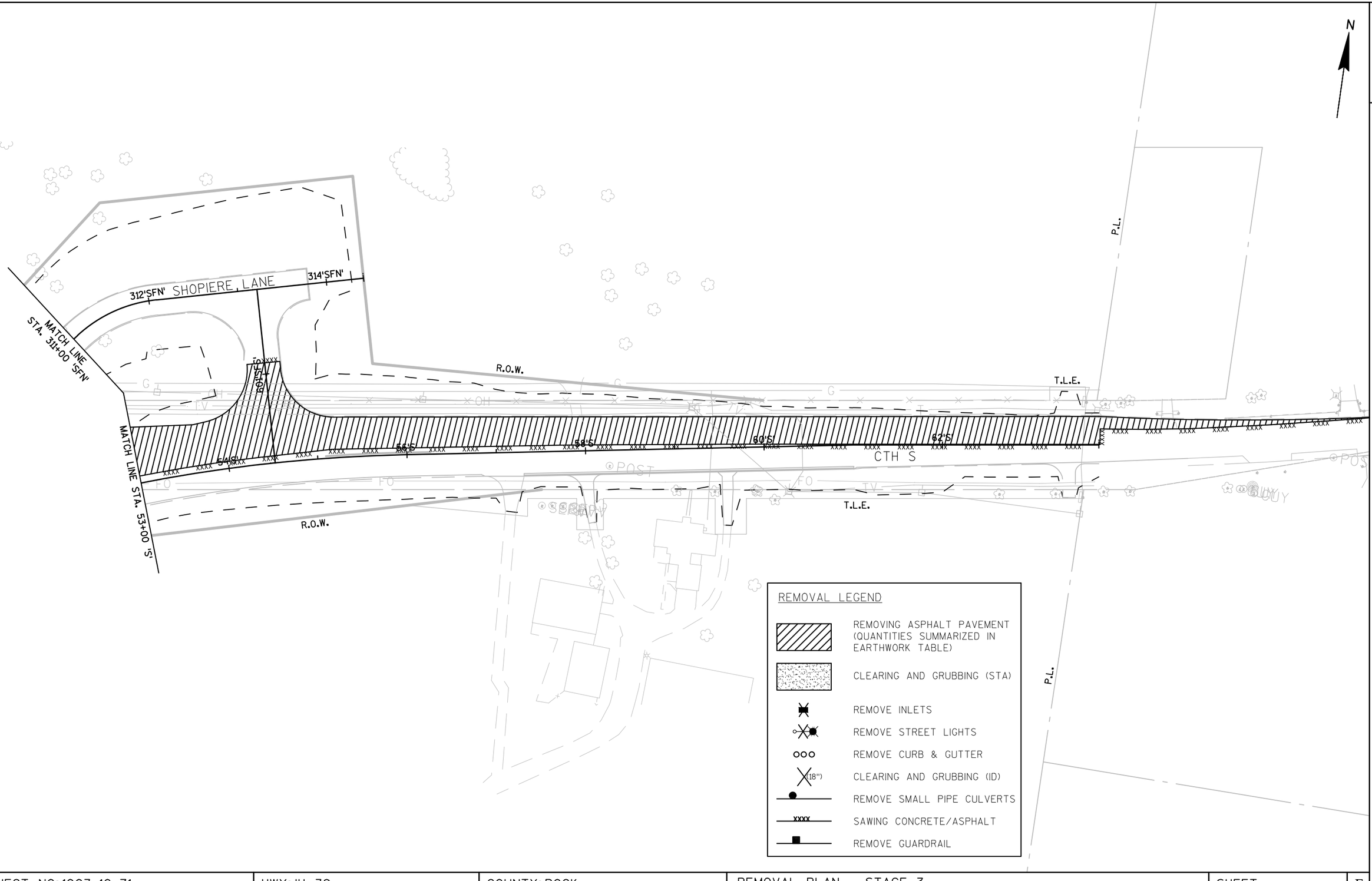
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 3	SHEET 45	E

2



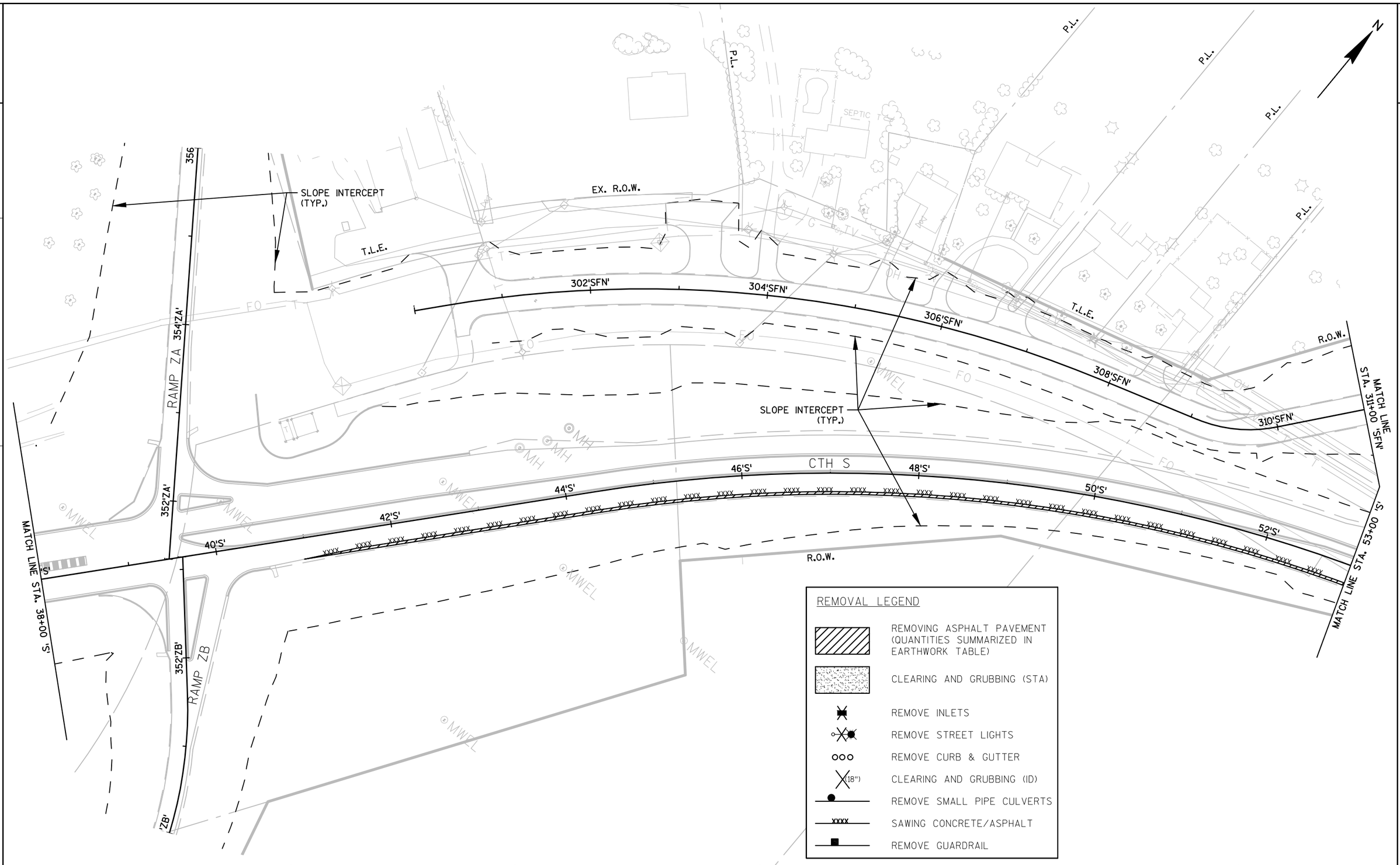
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 3	SHEET 46	E

2



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 3	SHEET 47	E

2



REMOVAL LEGEND

- REMOVING ASPHALT PAVEMENT (QUANTITIES SUMMARIZED IN EARTHWORK TABLE)
- CLEARING AND GRUBBING (STA)
- REMOVE INLETS
- REMOVE STREET LIGHTS
- REMOVE CURB & GUTTER
- (18") CLEARING AND GRUBBING (ID)
- REMOVE SMALL PIPE CULVERTS
- XXXX SAWING CONCRETE/ASPHALT
- REMOVE GUARDRAIL

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 3A	SHEET 48	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_021101_REM.DWG PLOT DATE : 7/1/2014 8:22 AM PLOT BY : LUCAS CHASE PLOT NAME : ---------- PLOT SCALE : 1" = 100'_XREF

2

N

312'SFN' SHOPIERE LANE 314'SFN'

MATCH LINE STA. 311+00 'SFN'

601'SFS'

R.O.W.

T.L.E.

P.L.

54'S' 56'S' 58'S' 60'S' CTH S 62'S'

MATCH LINE STA. 53+00 'S'

R.O.W.

T.L.E.

P.L.

REMOVAL LEGEND

- REMOVING ASPHALT PAVEMENT (QUANTITIES SUMMARIZED IN EARTHWORK TABLE)
- CLEARING AND GRUBBING (STA)
- REMOVE INLETS
- REMOVE STREET LIGHTS
- REMOVE CURB & GUTTER
- CLEARING AND GRUBBING (ID) (18")
- REMOVE SMALL PIPE CULVERTS
- SAWING CONCRETE/ASPHALT (XXXX)
- REMOVE GUARDRAIL

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	REMOVAL PLAN - STAGE 3A	SHEET 49	E

2

REMOVAL LEGEND

- REMOVING ASPHALT PAVEMENT (QUANTITIES SUMMARIZED IN EARTHWORK TABLE)
- CLEARING AND GRUBBING (STA)
- REMOVE INLETS
- REMOVE STREET LIGHTS
- REMOVE CURB & GUTTER
- CLEARING AND GRUBBING (ID) (18")
- REMOVE SMALL PIPE CULVERTS
- SAWING CONCRETE/ASPHALT (XXXX)
- REMOVE GUARDRAIL

N

354'ZD'
RAMP ZD
352'ZD'
350'ZD'
348'ZD'
R.O.W.
SLOPE INTERCEPT (TYP.)
I-39/90 SB
I-39/90 NB
CMCP 18"
CMCP 24"
CMCP 30"
356'ZA'
RAMP ZA
354'ZA'
352'ZA'
R.O.W.
SIGN
P.L.
T.L.E.
SLOPE INTERCEPT (TYP.)
CTH S
28'S'
30'S'
32'S'
34'S'
36'S'
38'S'
40'S'
42'S'
MWEL
R.O.W.
P.L.
T.L.E.
808'SBE'
346'ZC'
RAMP ZC
SLOPE INTERCEPT (TYP.)
352'ZB'
RAMP ZB
350'ZB'
SLOPE INTERCEPT (TYP.)

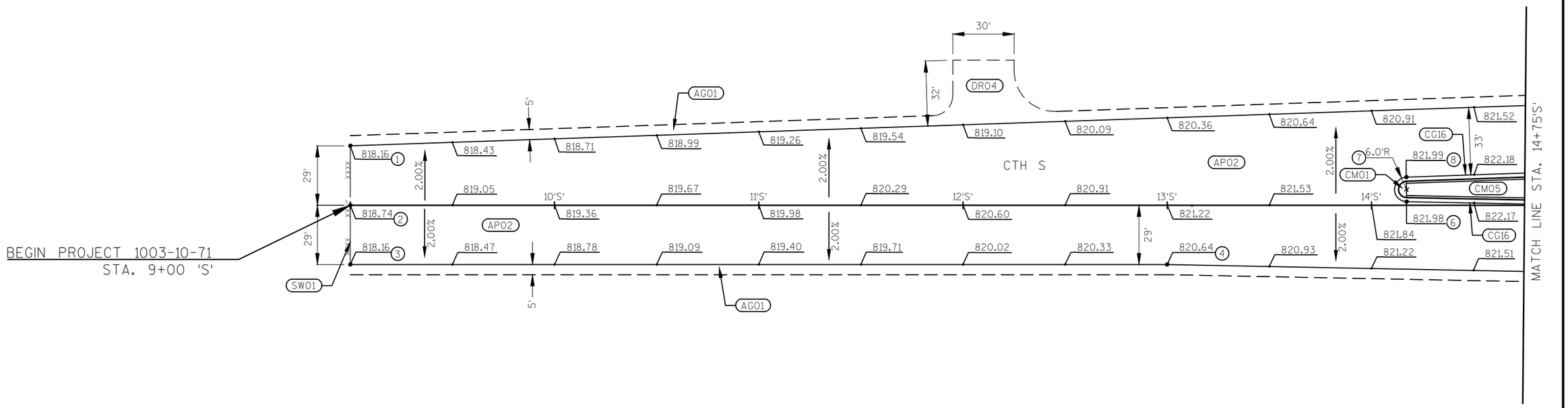
PROJECT NO:1003-10-71	HWY:IH 39	COUNTY:ROCK	REMOVAL PLAN - STAGE 4	SHEET 50	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_021101_REM.DWG PLOT DATE : 7/1/2014 8:22 AM PLOT BY : LUCAS CHASE PLOT NAME : ---------- PLOT SCALE : 1" = 100'_XREF

2

LEGEND

- (AP02) HMA PAVEMENT TYPE E-3, 5-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (CG16) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D REVERSE SLOPE
- (CM01) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM05) CONCRETE SIDEWALK 5-INCH
- (DR04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
- (SW01) SAWING ASPHALT



Point Table		
Point #	Station	Offset
1	9+00.00'S'	29.00 LT
2	9+00.00'S'	0.00 RT
3	9+00.00'S'	29.00 RT
4	12+99.95'S'	29.00 RT
6	14+17.13'S'	1.73 LT
7	14+17.25'S'	7.73 LT
8	14+17.04'S'	13.73 LT

Point Table		
Point #	Station	Offset
5	15+06.33'S'	33.00 RT
9	16+59.57'S'	8.00 LT
10	17+01.63'S'	33.00 RT
11	17+91.63'S'	37.50 RT
12	18+09.02'S'	21.98 LT
13	18+28.29'S'	19.02 LT
14	18+27.03'S'	14.70 LT
15	18+28.15'S'	10.34 LT
16	18+09.57'S'	8.00 LT

Point Table		
Point #	Station	Offset
17	18+01.63'S'	38.00 RT
18	18+01.63'S'	98.00 RT
19	18+61.62'S'	98.97 RT
20	19+02.01'S'	75.35 RT
21	19+42.24'S'	75.97 RT
22	19+40.56'S'	36.00 RT
23	18+08.77'S'	55.00 LT
24	18+27.76'S'	55.00 LT
25	18+27.76'S'	95.00 LT

Point Table		
Point #	Station	Offset
26	18+67.76'S'	94.35 LT
27	18+07.36'S'	53.00 RT
28	18+09.57'S'	83.00 LT
29	19+02.16'S'	118.85 LT
30	19+61.47'S'	118.00 LT
31	19+61.47'S'	58.00 LT
32	19+38.61'S'	11.58 LT
33	19+39.74'S'	7.23 LT
34	19+38.50'S'	2.90 LT

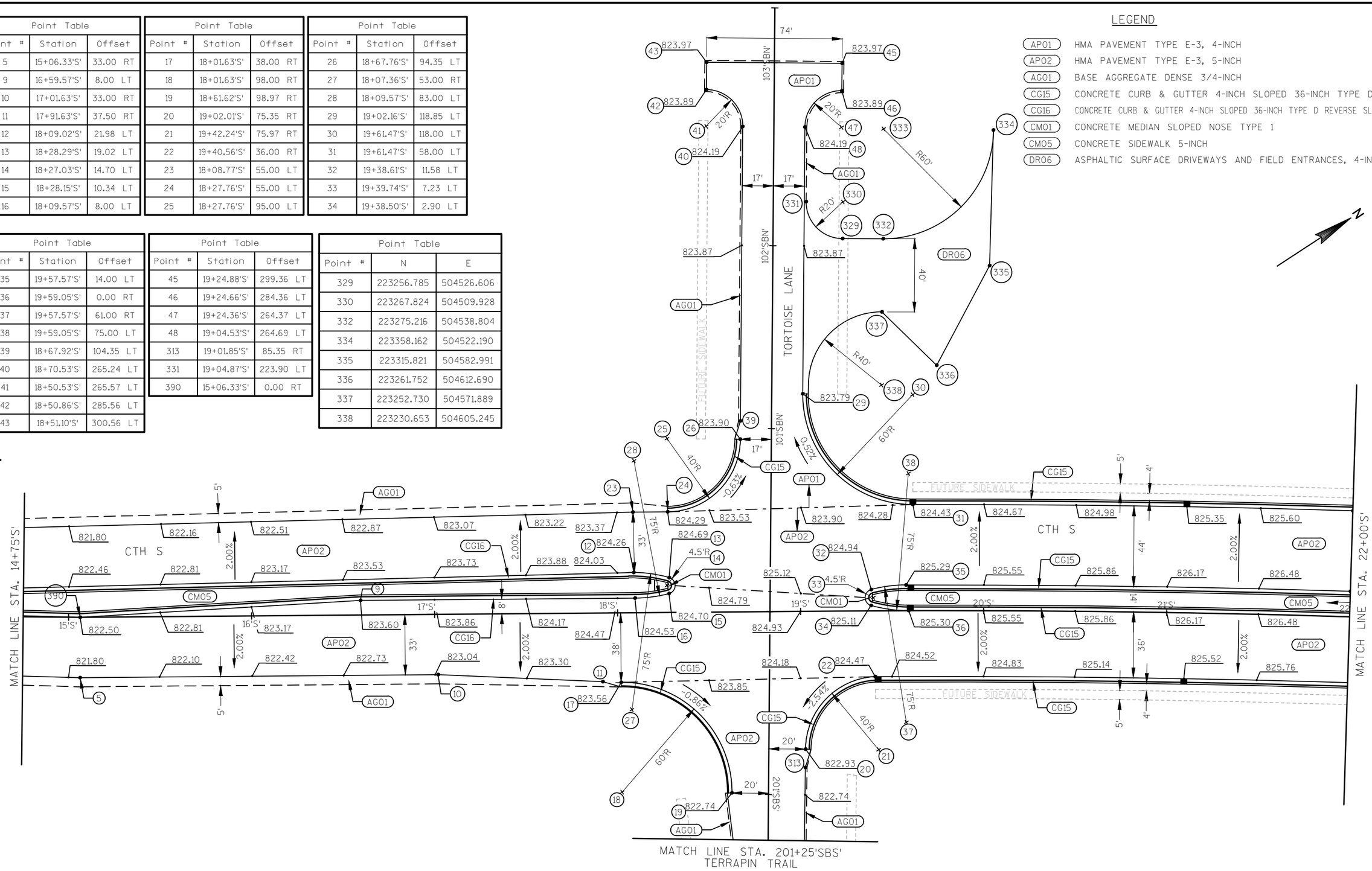
Point Table		
Point #	Station	Offset
35	19+57.57'S'	14.00 LT
36	19+59.05'S'	0.00 RT
37	19+57.57'S'	61.00 RT
38	19+59.05'S'	75.00 LT
39	18+67.92'S'	104.35 LT
40	18+70.53'S'	265.24 LT
41	18+50.53'S'	265.57 LT
42	18+50.86'S'	285.56 LT
43	18+51.10'S'	300.56 LT

Point Table		
Point #	Station	Offset
45	19+24.88'S'	299.36 LT
46	19+24.66'S'	284.36 LT
47	19+24.36'S'	264.37 LT
48	19+04.53'S'	264.69 LT
313	19+01.85'S'	85.35 RT
331	19+04.87'S'	223.90 LT
390	15+06.33'S'	0.00 RT

Point Table		
Point #	N	E
329	223256.785	504526.606
330	223267.824	504509.928
332	223275.216	504538.804
334	223358.162	504522.190
335	223315.821	504582.991
336	223261.752	504612.690
337	223252.730	504571.889
338	223230.653	504605.245

LEGEND

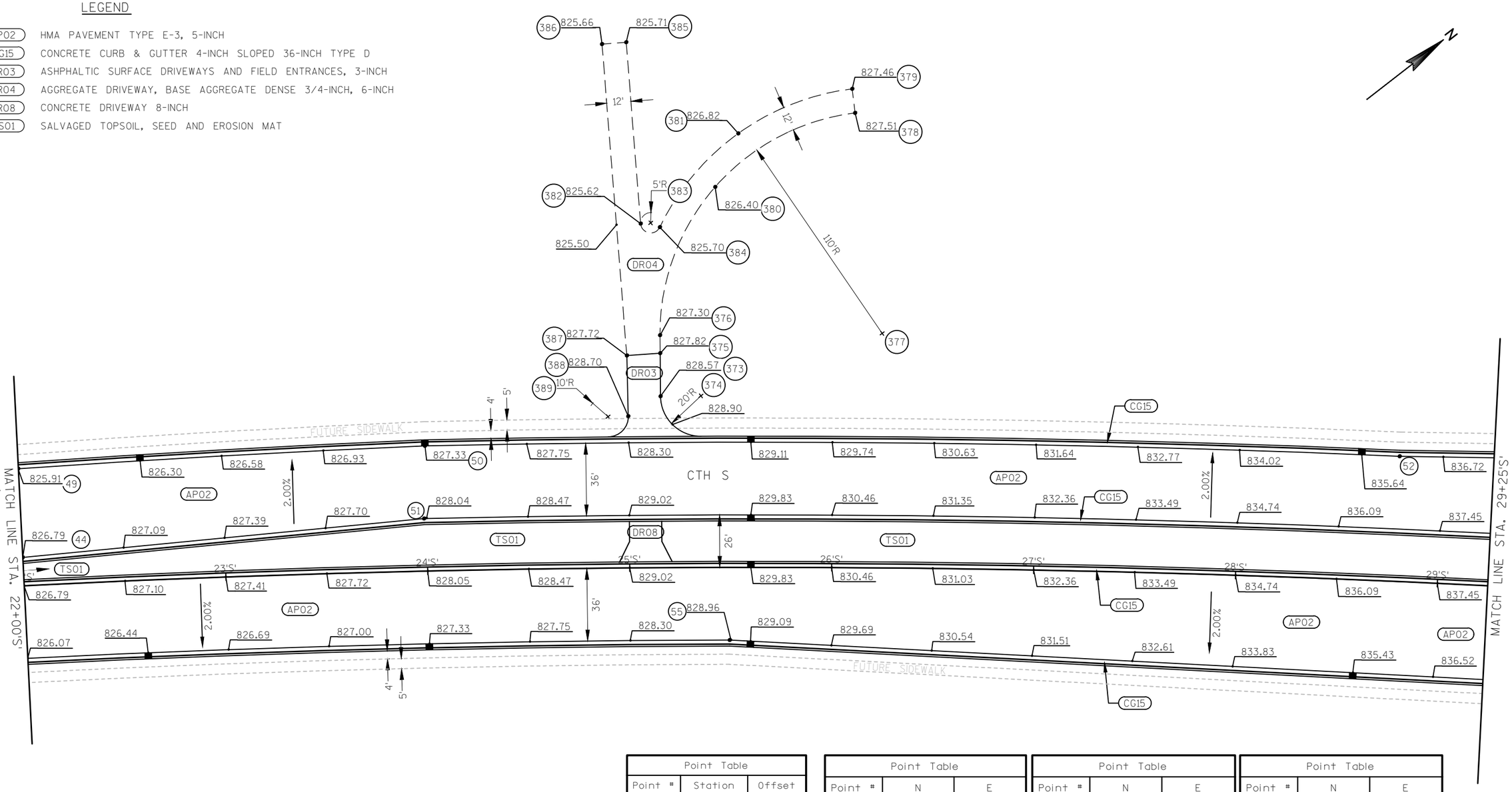
AP01	HMA PAVEMENT TYPE E-3, 4-INCH
AP02	HMA PAVEMENT TYPE E-3, 5-INCH
AG01	BASE AGGREGATE DENSE 3/4-INCH
CG15	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D
CG16	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D REVERSE SLOPE
CM01	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM05	CONCRETE SIDEWALK 5-INCH
DR06	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN DETAILS: CTH S & TORTOISE LANE 'SBN'	SHEET 52	E

LEGEND

AP02	HMA PAVEMENT TYPE E-3, 5-INCH
CG15	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D
DR03	ASHPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH
DR04	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
DR08	CONCRETE DRIVEWAY 8-INCH
TS01	SALVAGED TOPSOIL, SEED AND EROSION MAT



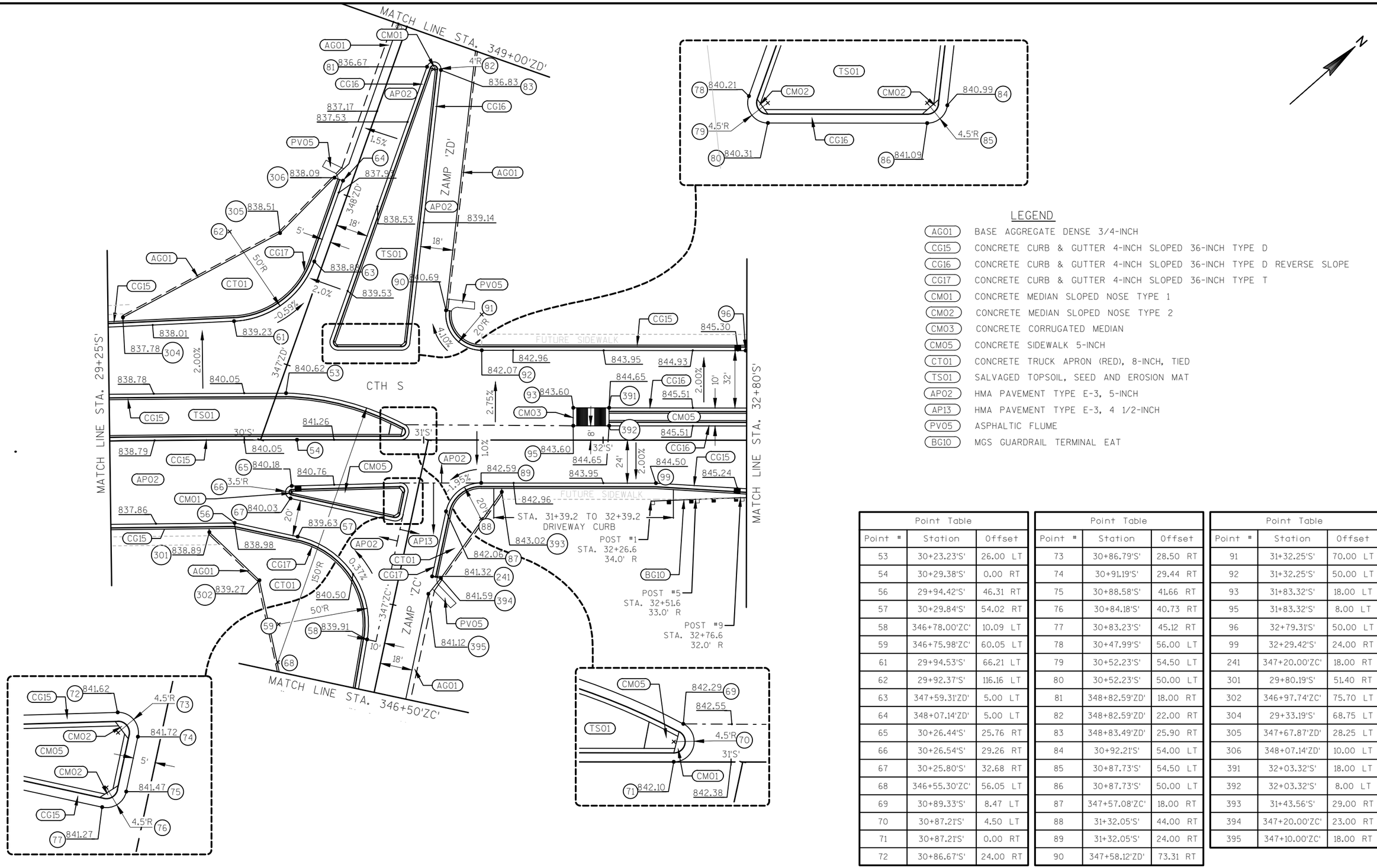
Point Table		
Point #	Station	Offset
44	22+00.00'S'	14.00 LT
49	22+00.00'S'	58.00 LT
50	24+00.00'S'	62.00 LT
51	23+98.75'S'	26.00 LT
52	28+78.63'S'	62.00 LT
55	25+49.46'S'	36.00 RT

Point Table		
Point #	N	E
373	223681.355	504970.877
374	223697.244	504983.024
375	223694.278	504953.973
376	223699.692	504946.891
377	223787.082	505013.697
378	223843.564	504919.305

Point Table		
Point #	N	E
379	223849.726	504909.008
380	223766.368	504905.664
381	223791.661	504891.783
382	223726.053	504897.383
383	223730.230	504900.132
384	223732.468	504904.603

Point Table		
Point #	N	E
385	223775.623	504822.060
386	223765.599	504815.463
387	223680.550	504944.700
388	223662.651	504968.870
389	223654.614	504962.919

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN DETAILS: CTH S	SHEET 53	E



LEGEND

AG01	BASE AGGREGATE DENSE 3/4-INCH
CG15	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D
CG16	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D REVERSE SLOPE
CG17	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE T
CM01	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM02	CONCRETE MEDIAN SLOPED NOSE TYPE 2
CM03	CONCRETE CORRUGATED MEDIAN
CM05	CONCRETE SIDEWALK 5-INCH
CT01	CONCRETE TRUCK APRON (RED), 8-INCH, TIED
TS01	SALVAGED TOPSOIL, SEED AND EROSION MAT
AP02	HMA PAVEMENT TYPE E-3, 5-INCH
AP13	HMA PAVEMENT TYPE E-3, 4 1/2-INCH
PV05	ASPHALTIC FLUME
BG10	MGS GUARDRAIL TERMINAL EAT

Point Table		
Point #	Station	Offset
53	30+23.23'S'	26.00 LT
54	30+29.38'S'	0.00 RT
56	29+94.42'S'	46.31 RT
57	30+29.84'S'	54.02 RT
58	346+78.00'ZC'	10.09 LT
59	346+75.98'ZC'	60.05 LT
61	29+94.53'S'	66.21 LT
62	29+92.37'S'	116.16 LT
63	347+59.31'ZD'	5.00 LT
64	348+07.14'ZD'	5.00 LT
65	30+26.44'S'	25.76 RT
66	30+26.54'S'	29.26 RT
67	30+25.80'S'	32.68 RT
68	346+55.30'ZC'	56.05 LT
69	30+89.33'S'	8.47 LT
70	30+87.21'S'	4.50 LT
71	30+87.21'S'	0.00 RT
72	30+86.67'S'	24.00 RT

Point Table		
Point #	Station	Offset
73	30+86.79'S'	28.50 RT
74	30+91.19'S'	29.44 RT
75	30+88.58'S'	41.66 RT
76	30+84.18'S'	40.73 RT
77	30+83.23'S'	45.12 RT
78	30+47.99'S'	56.00 LT
79	30+52.23'S'	54.50 LT
80	30+52.23'S'	50.00 LT
81	348+82.59'ZD'	18.00 RT
82	348+82.59'ZD'	22.00 RT
83	348+83.49'ZD'	25.90 RT
84	30+92.21'S'	54.00 LT
85	30+87.73'S'	54.50 LT
86	30+87.73'S'	50.00 LT
87	347+57.08'ZC'	18.00 RT
88	31+32.05'S'	44.00 RT
89	31+32.05'S'	24.00 RT
90	347+58.12'ZD'	73.31 RT

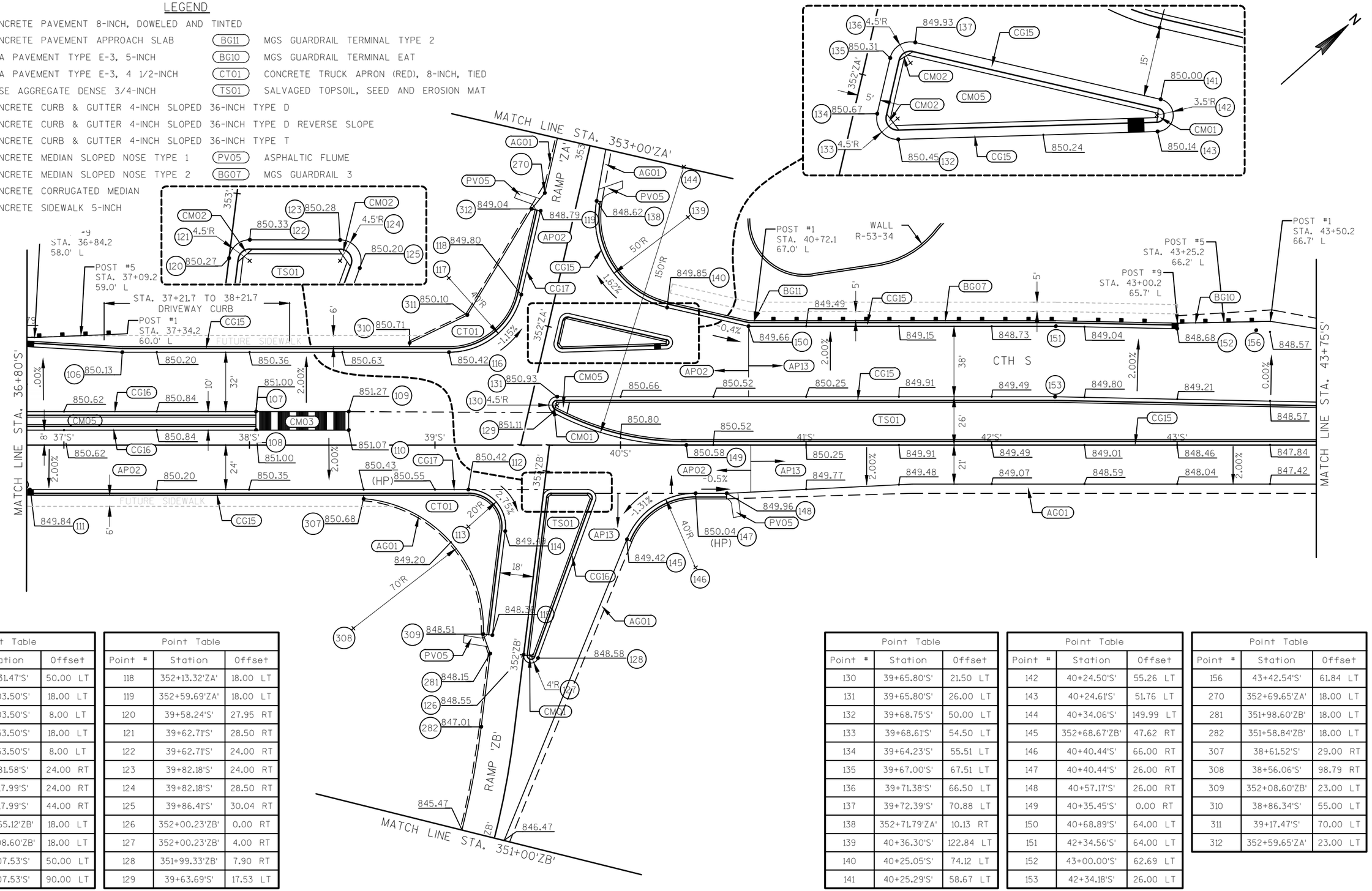
Point Table		
Point #	Station	Offset
91	31+32.25'S'	70.00 LT
92	31+32.25'S'	50.00 LT
93	31+83.32'S'	18.00 LT
95	31+83.32'S'	8.00 LT
96	32+79.31'S'	50.00 LT
99	32+29.42'S'	24.00 RT
241	347+20.00'ZC'	18.00 RT
301	29+80.19'S'	51.40 RT
302	346+97.74'ZC'	75.70 LT
304	29+33.19'S'	68.75 LT
305	347+67.87'ZD'	28.25 LT
306	348+07.14'ZD'	10.00 LT
391	32+03.32'S'	18.00 LT
392	32+03.32'S'	8.00 LT
393	31+43.56'S'	29.00 RT
394	347+20.00'ZC'	23.00 RT
395	347+10.00'ZC'	18.00 RT

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN DETAILS: CTH S	SHEET 54	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_021201_PD.DWG PLOT DATE : 10/31/2014 12:57 PM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:50_XREF
WISDOT/CADDS SHEET 42

LEGEND

CP02	CONCRETE PAVEMENT 8-INCH, DOWELED AND TINTED		
CP12	CONCRETE PAVEMENT APPROACH SLAB	BG11	MGS GUARDRAIL TERMINAL TYPE 2
AP02	HMA PAVEMENT TYPE E-3, 5-INCH	BG10	MGS GUARDRAIL TERMINAL EAT
AP13	HMA PAVEMENT TYPE E-3, 4 1/2-INCH	CT01	CONCRETE TRUCK APRON (RED), 8-INCH, TIED
AG01	BASE AGGREGATE DENSE 3/4-INCH	TS01	SALVAGED TOPSOIL, SEED AND EROSION MAT
CG15	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D		
CG16	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D REVERSE SLOPE		
CG17	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE T		
CM01	CONCRETE MEDIAN SLOPED NOSE TYPE 1	PV05	ASPHALTIC FLUME
CM02	CONCRETE MEDIAN SLOPED NOSE TYPE 2	BG07	MGS GUARDRAIL 3
CM03	CONCRETE CORRUGATED MEDIAN		
CM05	CONCRETE SIDEWALK 5-INCH		



Point Table		
Point #	Station	Offset
106	37+31.47'S'	50.00 LT
107	38+03.50'S'	18.00 LT
108	38+03.50'S'	8.00 LT
109	38+53.50'S'	18.00 LT
110	38+53.50'S'	8.00 LT
111	36+81.58'S'	24.00 RT
112	39+17.99'S'	24.00 RT
113	39+17.99'S'	44.00 RT
114	352+65.12'ZB'	18.00 LT
115	352+08.60'ZB'	18.00 LT
116	39+07.53'S'	50.00 LT
117	39+07.53'S'	90.00 LT

Point Table		
Point #	Station	Offset
118	352+13.32'ZA'	18.00 LT
119	352+59.69'ZA'	18.00 LT
120	39+58.24'S'	27.95 RT
121	39+62.71'S'	28.50 RT
122	39+62.71'S'	24.00 RT
123	39+82.18'S'	24.00 RT
124	39+82.18'S'	28.50 RT
125	39+86.41'S'	30.04 RT
126	352+00.23'ZB'	0.00 RT
127	352+00.23'ZB'	4.00 RT
128	351+99.33'ZB'	7.90 RT
129	39+63.69'S'	17.53 LT

Point Table		
Point #	Station	Offset
130	39+65.80'S'	21.50 LT
131	39+65.80'S'	26.00 LT
132	39+68.75'S'	50.00 LT
133	39+68.61'S'	54.50 LT
134	39+64.23'S'	55.51 LT
135	39+67.00'S'	67.51 LT
136	39+71.38'S'	66.50 LT
137	39+72.39'S'	70.88 LT
138	352+71.79'ZA'	10.13 RT
139	40+36.30'S'	122.84 LT
140	40+25.05'S'	74.12 LT
141	40+25.29'S'	58.67 LT

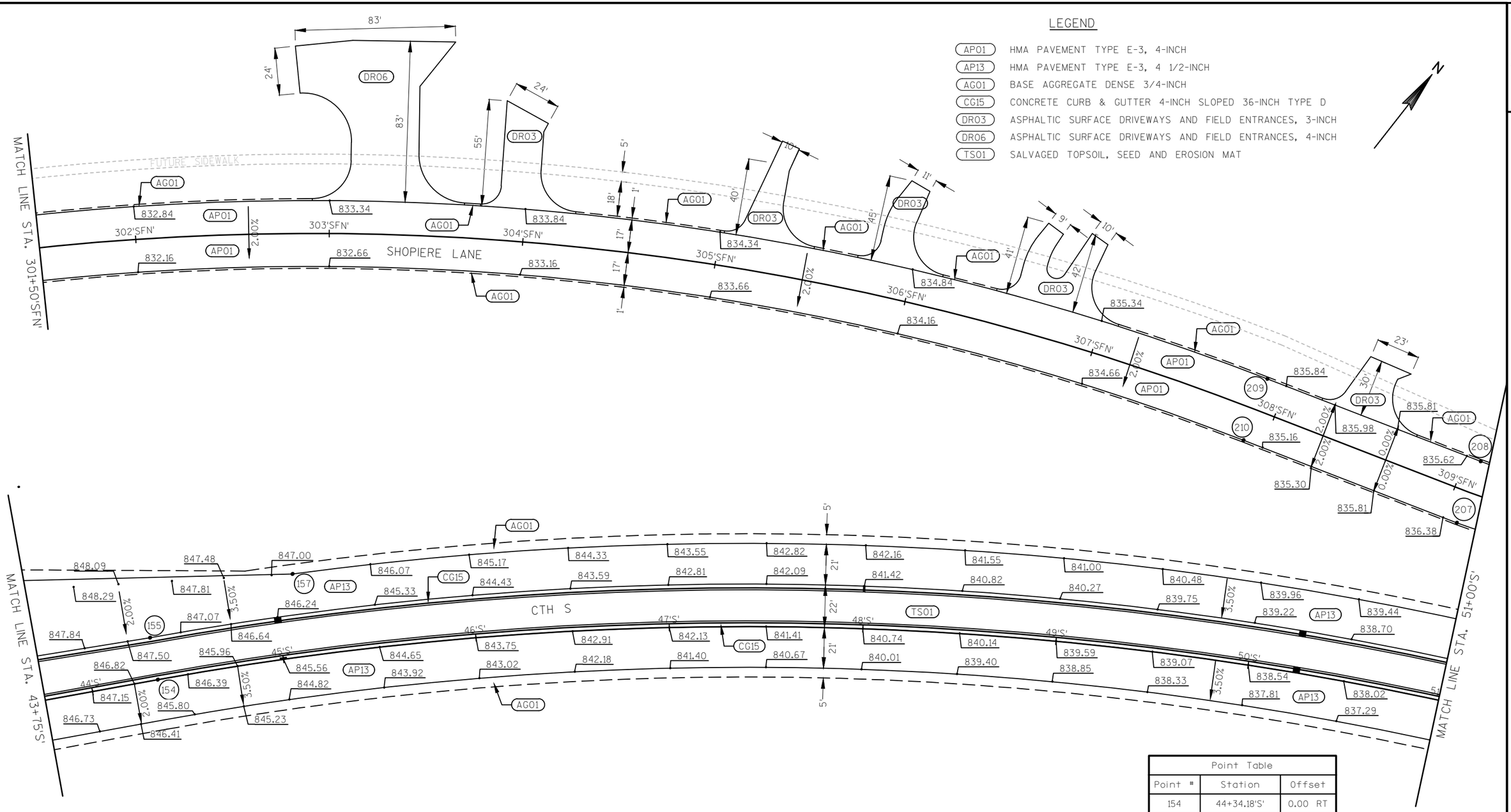
Point Table		
Point #	Station	Offset
142	40+24.50'S'	55.26 LT
143	40+24.61'S'	51.76 LT
144	40+34.06'S'	149.99 LT
145	352+68.67'ZB'	47.62 RT
146	40+40.44'S'	66.00 RT
147	40+40.44'S'	26.00 RT
148	40+57.17'S'	26.00 RT
149	40+35.45'S'	0.00 RT
150	40+68.89'S'	64.00 LT
151	42+34.56'S'	64.00 LT
152	43+00.00'S'	62.69 LT
153	42+34.18'S'	26.00 LT

Point Table		
Point #	Station	Offset
156	43+42.54'S'	61.84 LT
270	352+69.65'ZA'	18.00 LT
281	351+98.60'ZB'	18.00 LT
282	351+58.84'ZB'	18.00 LT
307	38+61.52'S'	29.00 RT
308	38+56.06'S'	98.79 RT
309	352+08.60'ZB'	23.00 LT
310	38+86.34'S'	55.00 LT
311	39+17.47'S'	70.00 LT
312	352+59.65'ZA'	23.00 LT

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN DETAILS: CTH S	SHEET 55	E

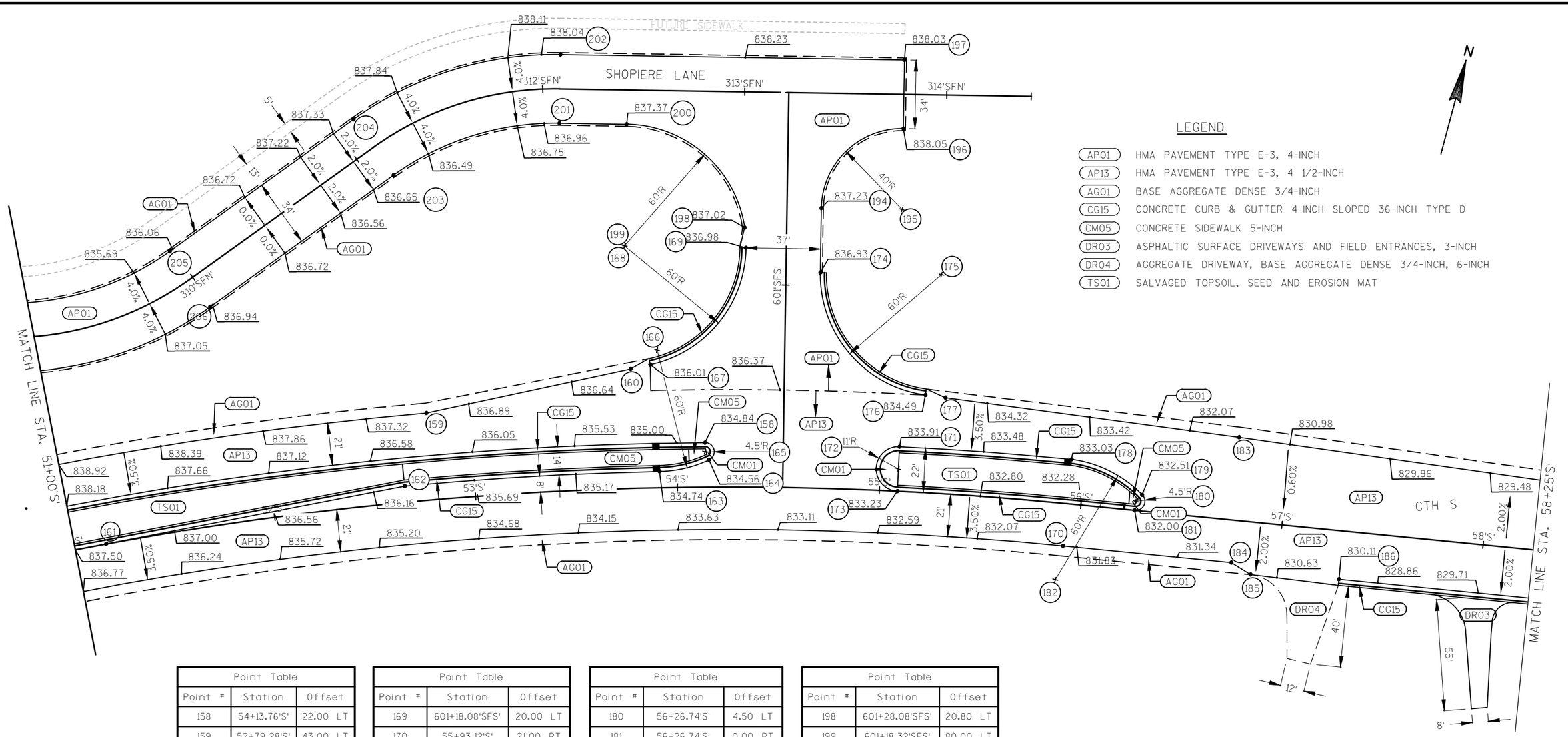
LEGEND

AP01	HMA PAVEMENT TYPE E-3, 4-INCH
AP13	HMA PAVEMENT TYPE E-3, 4 1/2-INCH
AG01	BASE AGGREGATE DENSE 3/4-INCH
CG15	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D
DR03	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH
DR06	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
TS01	SALVAGED TOPSOIL, SEED AND EROSION MAT



Point Table

Point #	Station	Offset
154	44+34.18'S'	0.00 RT
155	44+34.18'S'	22.00 LT
157	45+10.48'S'	43.00 LT
207	309+07.63'SFN'	17.00 RT
208	309+07.63'SFN'	17.00 LT
209	307+89.50'SFN'	17.00 LT
210	307+89.50'SFN'	17.00 RT



Point Table		
Point #	Station	Offset
158	54+13.76'S'	22.00 LT
159	52+79.28'S'	43.00 LT
160	53+78.42'S'	59.02 LT
161	51+15.54'S'	0.00 RT
162	52+65.59'S'	8.00 LT
163	53+91.30'S'	8.00 LT
164	54+15.64'S'	13.42 LT
165	54+13.76'S'	17.50 LT
166	53+91.30'S'	68.00 LT
167	53+87.91'S'	60.89 LT
168	53+77.30'S'	119.84 LT

Point Table		
Point #	Station	Offset
169	601+18.08'SFS'	20.00 LT
170	55+93.12'S'	21.00 RT
171	55+08.87'S'	22.00 LT
172	55+08.87'S'	11.00 LT
173	55+08.87'S'	0.00 RT
174	601+06.40'SFS'	17.00 RT
175	55+24.48'S'	108.04 LT
176	55+20.08'S'	48.22 LT
177	55+29.78'S'	47.47 LT
178	55+93.12'S'	22.00 LT
179	56+29.64'S'	7.94 LT

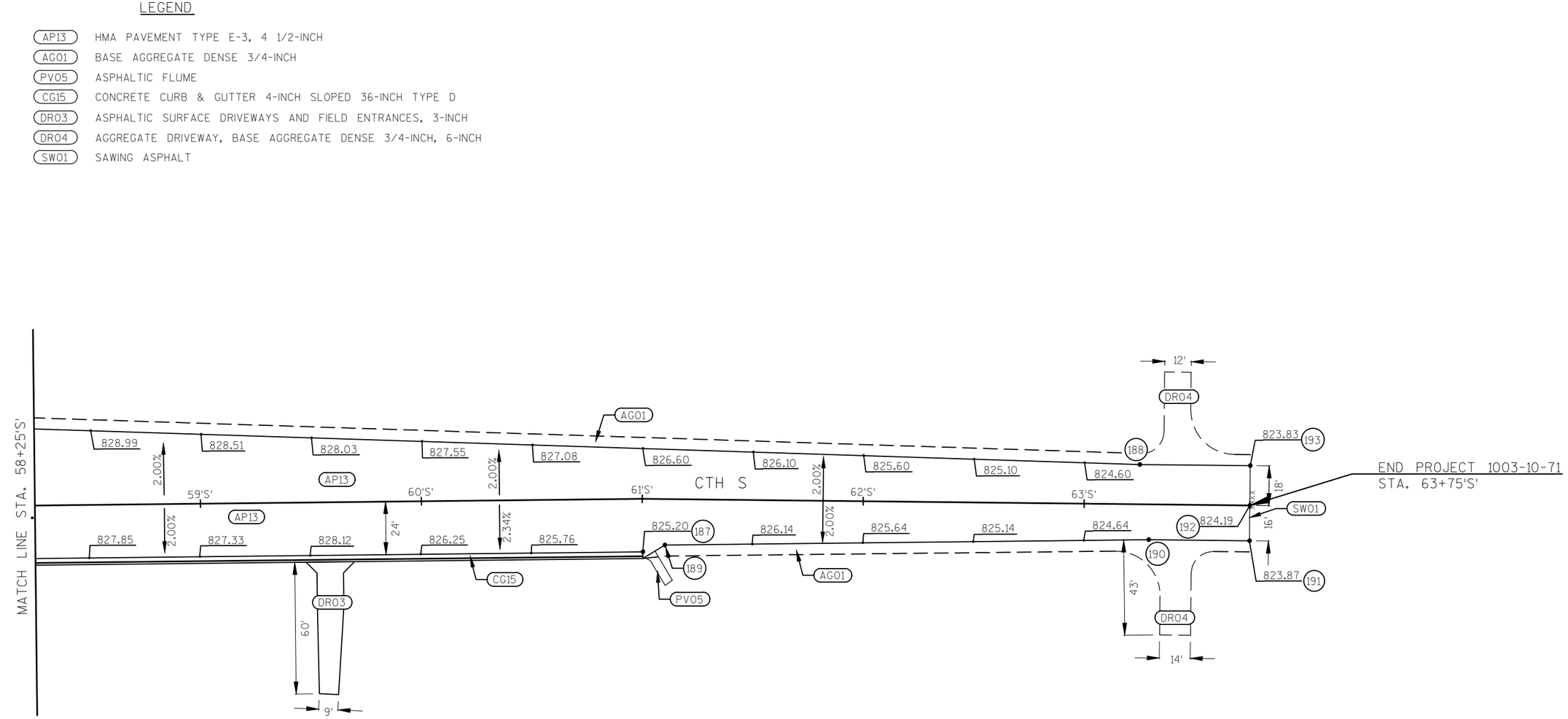
Point Table		
Point #	Station	Offset
180	56+26.74'S'	4.50 LT
181	56+26.74'S'	0.00 RT
182	55+90.95'S'	37.96 RT
183	56+74.59'S'	41.11 LT
184	56+76.89'S'	21.00 RT
185	56+86.89'S'	26.00 RT
186	57+30.69'S'	24.00 RT
194	601+38.32'SFS'	17.00 RT
195	601+38.32'SFS'	57.00 RT
196	313+78.80'SFN'	17.00 RT
197	313+78.80'SFN'	17.00 LT

Point Table		
Point #	Station	Offset
198	601+28.08'SFS'	20.80 LT
199	601+18.32'SFS'	80.00 LT
200	312+41.80'SFN'	17.00 RT
201	312+08.47'SFN'	17.00 RT
202	312+08.47'SFN'	17.00 LT
203	311+10.14'SFN'	17.00 RT
204	311+10.14'SFN'	17.00 LT
205	309+98.30'SFN'	17.00 LT
206	309+98.30'SFN'	17.00 RT

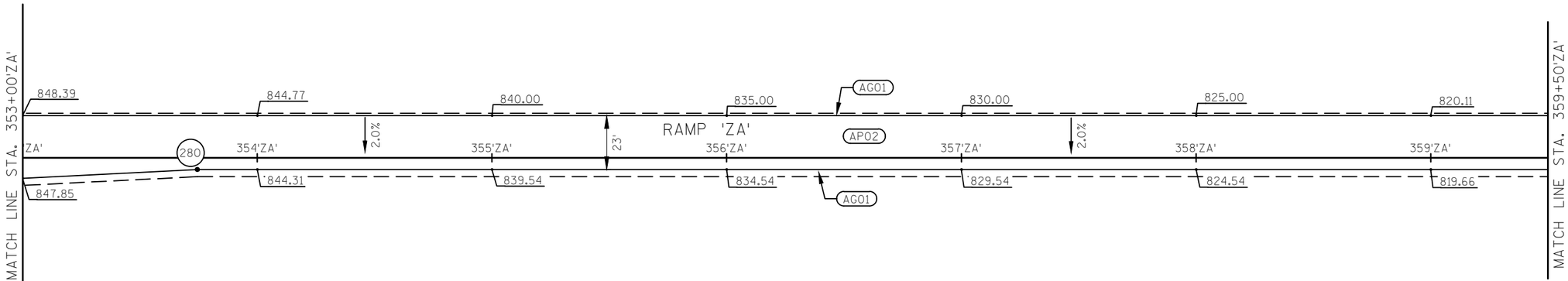
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN DETAILS: CTH S, SHOPIERE LANE 'SFN' & 'SFS'	SHEET 57	E

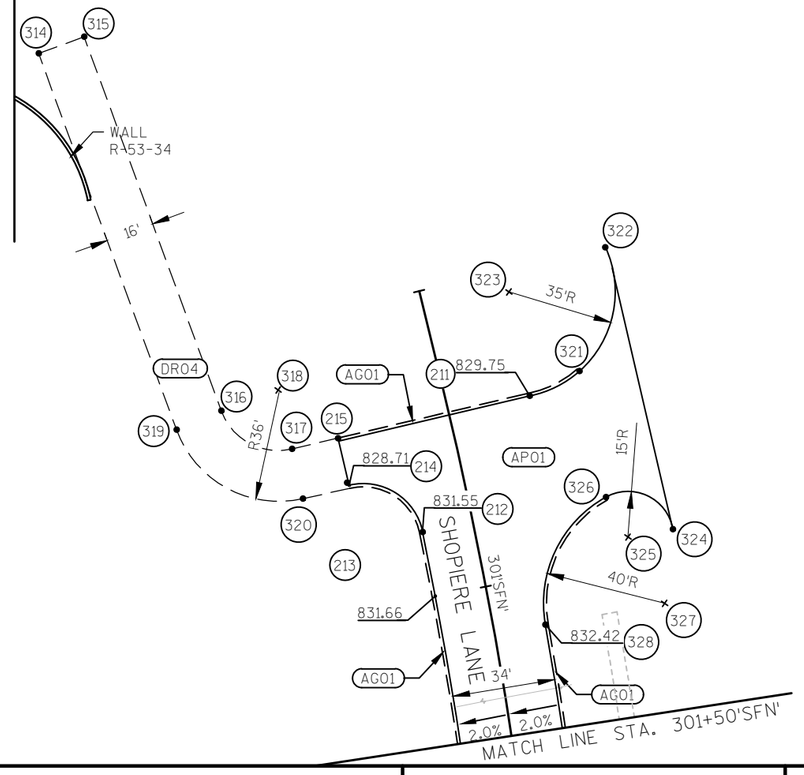
LEGEND

AP13	HMA PAVEMENT TYPE E-3, 4 1/2-INCH
AG01	BASE AGGREGATE DENSE 3/4-INCH
PV05	ASPHALTIC FLUME
CG15	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D
DR03	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH
DR04	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
SW01	SAWING ASPHALT



Point Table		
Point #	Station	Offset
187	61+00.52'S'	23.99 RT
188	63+25.00'S'	18.00 LT
189	61+10.46'S'	20.78 RT
190	63+29.39'S'	16.00 RT
191	63+75.00'S'	16.00 RT
192	63+75.00'S'	0.00 RT
193	63+75.00'S'	18.00 LT





LEGEND

AP01	HMA PAVEMENT TYPE E-3, 4-INCH
AP02	HMA PAVEMENT TYPE E-3, 5-INCH
AG01	BASE AGGREGATE DENSE 3/4-INCH
DR04	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH

Point Table		
Point #	Station	Offset
211	300+42.08'SFN'	27.26 LT
212	300+78.13'SFN'	17.00 RT
213	300+83.98'SFN'	44.42 RT
214	300+56.53'SFN'	37.85 RT
215	300+41.10'SFN'	37.53 RT
280	353+74.41'ZA'	5.00 RT
321	300+38.02'SFN'	45.13 LT
322	300+00.51'SFN'	63.02 LT
323	300+07.30'SFN'	28.69 LT
324	300+93.31'SFN'	64.14 LT
325	300+92.98'SFN'	49.14 LT
326	300+79.15'SFN'	44.62 LT
327	301+15.81'SFN'	57.00 LT
328	301+15.81'SFN'	17.00 LT

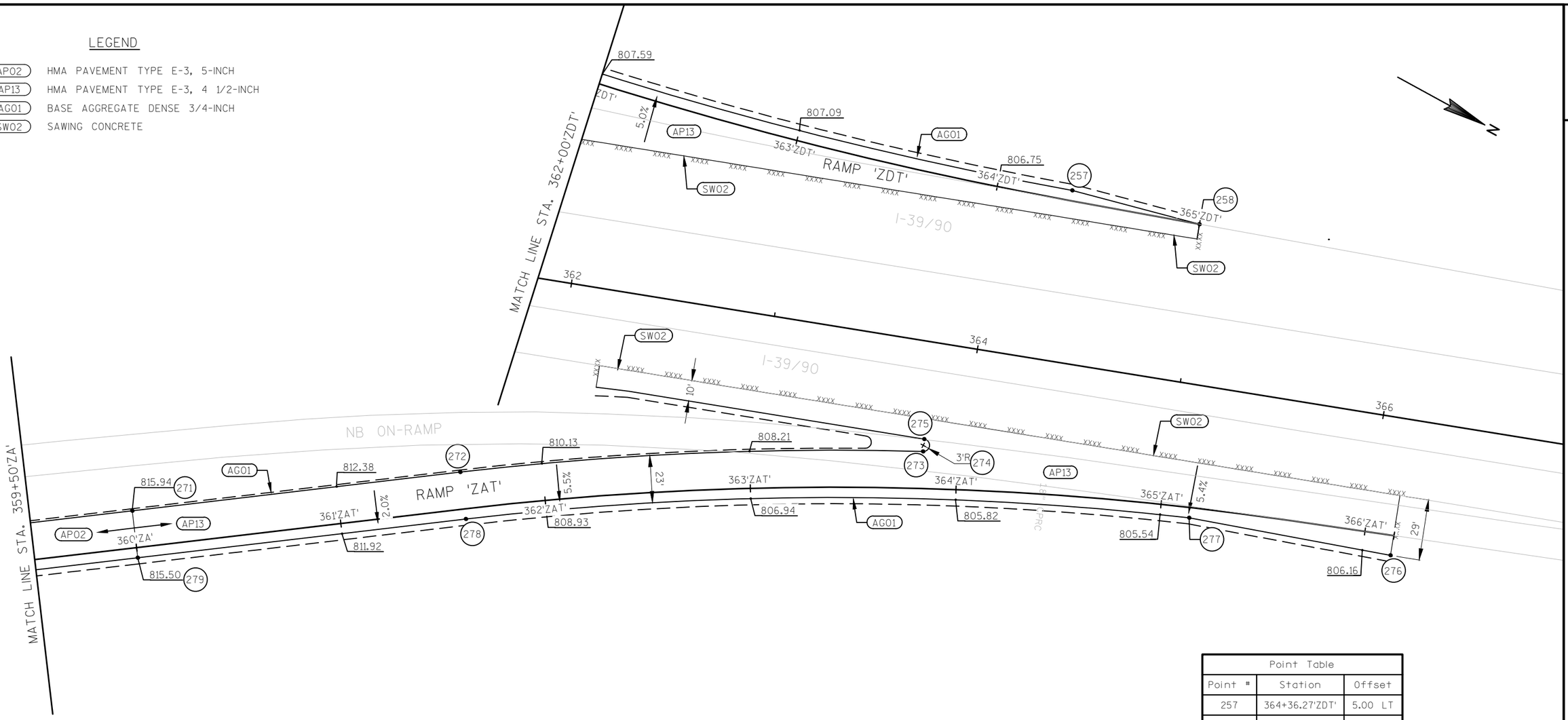
Point Table		
Point #	N	E
314	224956.270	506018.974
315	224965.326	506005.784
316	225073.670	506080.165
317	225100.007	506076.886
318	225084.990	506063.677
319	225065.286	506093.817
320	225112.401	506088.241

2

2

LEGEND

AP02	HMA PAVEMENT TYPE E-3, 5-INCH
AP13	HMA PAVEMENT TYPE E-3, 4 1/2-INCH
AG01	BASE AGGREGATE DENSE 3/4-INCH
SW02	SAWING CONCRETE

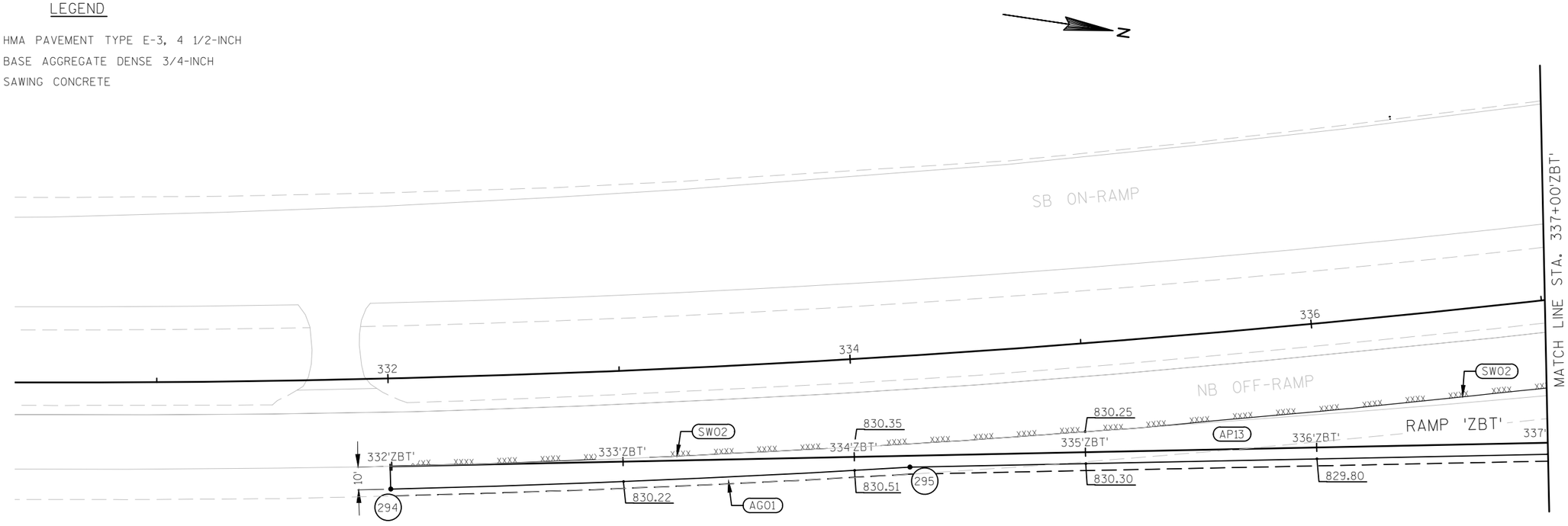


Point Table		
Point #	Station	Offset
257	364+36.27'ZDT'	5.00 LT
258	365+00.00'ZDT'	0.00 RT
271	360+00.00'ZAT'	18.00 LT
272	361+60.62'ZAT'	18.00 LT
273	363+83.45'ZAT'	18.00 LT
274	363+83.45'ZAT'	21.00 LT
275	363+83.84'ZAT'	23.97 LT
276	366+13.99'ZAT'	9.76 RT
277	365+14.31'ZAT'	5.00 RT
278	361+60.62'ZAT'	5.00 RT
279	360+00.00'ZAT'	5.00 RT

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN DETAILS: NB ON-RAMP 'ZA', 'ZAT' & SB OFF-RAMP 'ZDT'	SHEET 60	E

LEGEND

AP13 HMA PAVEMENT TYPE E-3, 4 1/2-INCH
AG01 BASE AGGREGATE DENSE 3/4-INCH
SW02 SAWING CONCRETE



Point Table		
Point #	Station	Offset
294	331+99.31'ZBT'	9.87 RT
295	334+23.95'ZBT'	5.00 RT

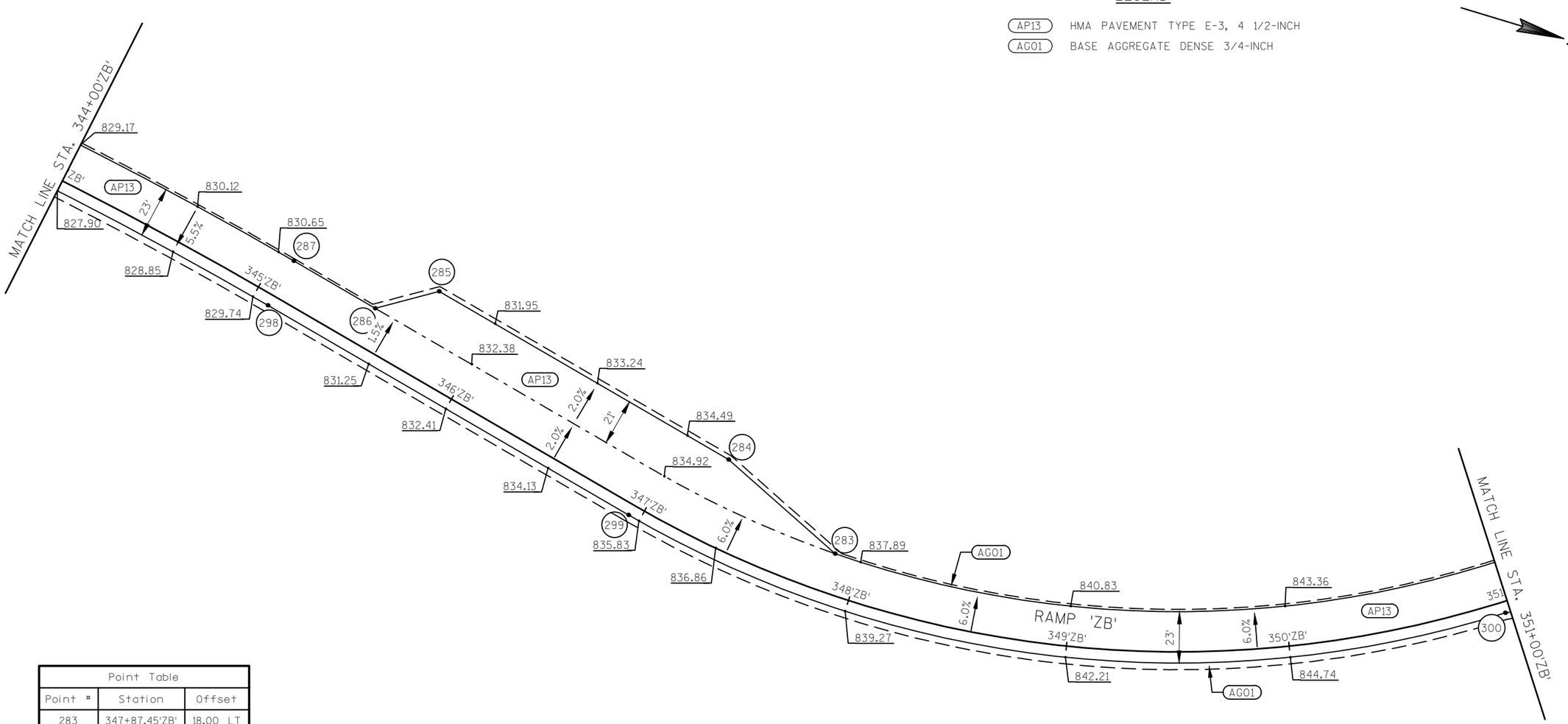
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN DETAILS: NB OFF-RAMP 'ZBT'	SHEET 61	E

2

LEGEND

AP13 HMA PAVEMENT TYPE E-3, 4 1/2-INCH

AG01 BASE AGGREGATE DENSE 3/4-INCH

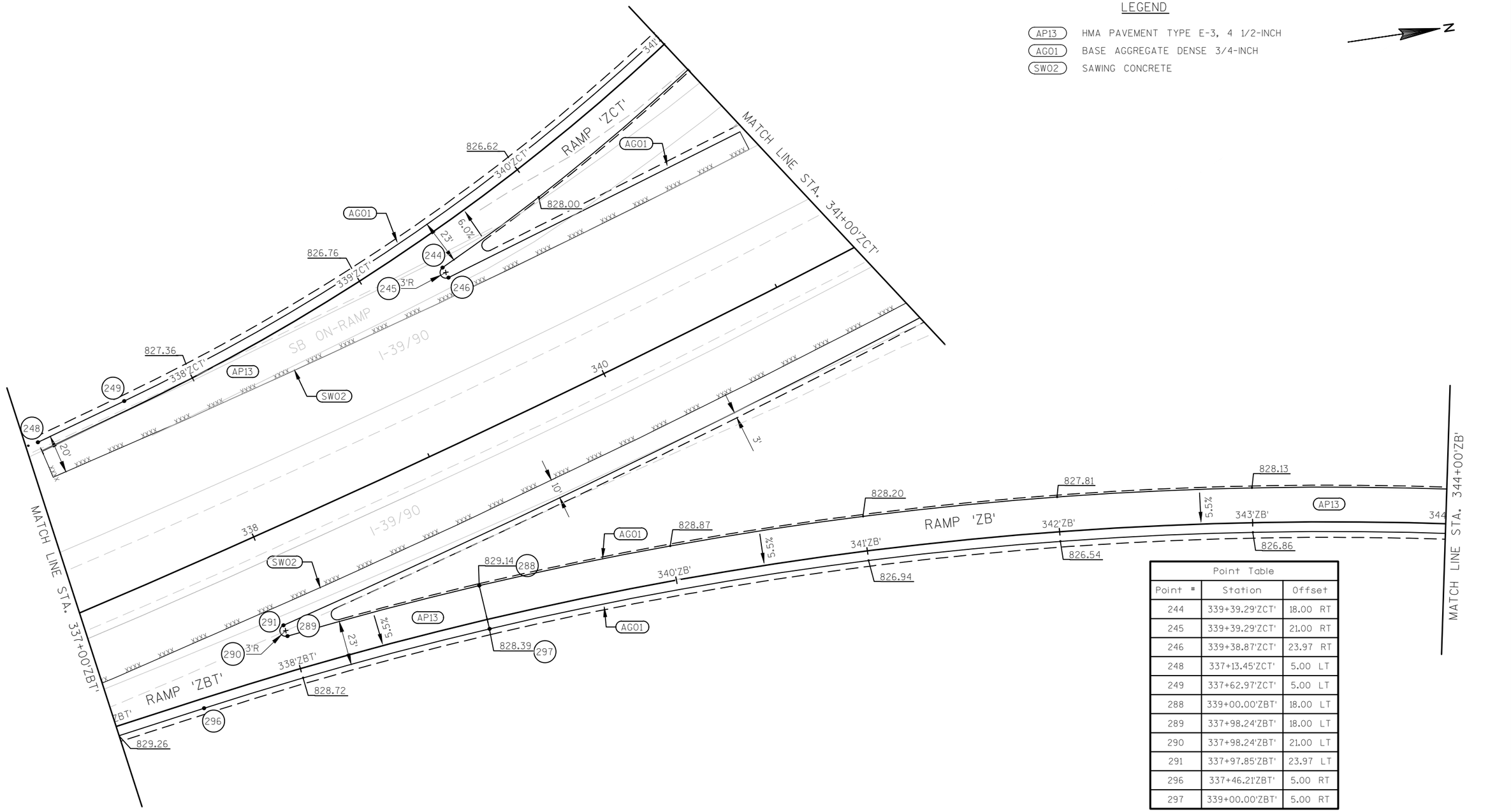


Point Table		
Point #	Station	Offset
283	347+87.45'ZB'	18.00 LT
284	347+23.26'ZB'	38.23 LT
285	345+71.00'ZB'	39.00 LT
286	345+50.00'ZB'	18.00 LT
287	345+07.80'ZB'	18.00 LT
298	345+07.80'ZB'	5.00 RT
299	346+94.73'ZB'	5.00 RT
300	350+97.52'ZB'	5.00 RT

2

LEGEND

AP13 HMA PAVEMENT TYPE E-3, 4 1/2-INCH
AG01 BASE AGGREGATE DENSE 3/4-INCH
SW02 SAWING CONCRETE



Point Table

Point #	Station	Offset
244	339+39.29'ZCT'	18.00 RT
245	339+39.29'ZCT'	21.00 RT
246	339+38.87'ZCT'	23.97 RT
248	337+13.45'ZCT'	5.00 LT
249	337+62.97'ZCT'	5.00 LT
288	339+00.00'ZBT'	18.00 LT
289	337+98.24'ZBT'	18.00 LT
290	337+98.24'ZBT'	21.00 LT
291	337+97.85'ZBT'	23.97 LT
296	337+46.21'ZBT'	5.00 RT
297	339+00.00'ZBT'	5.00 RT

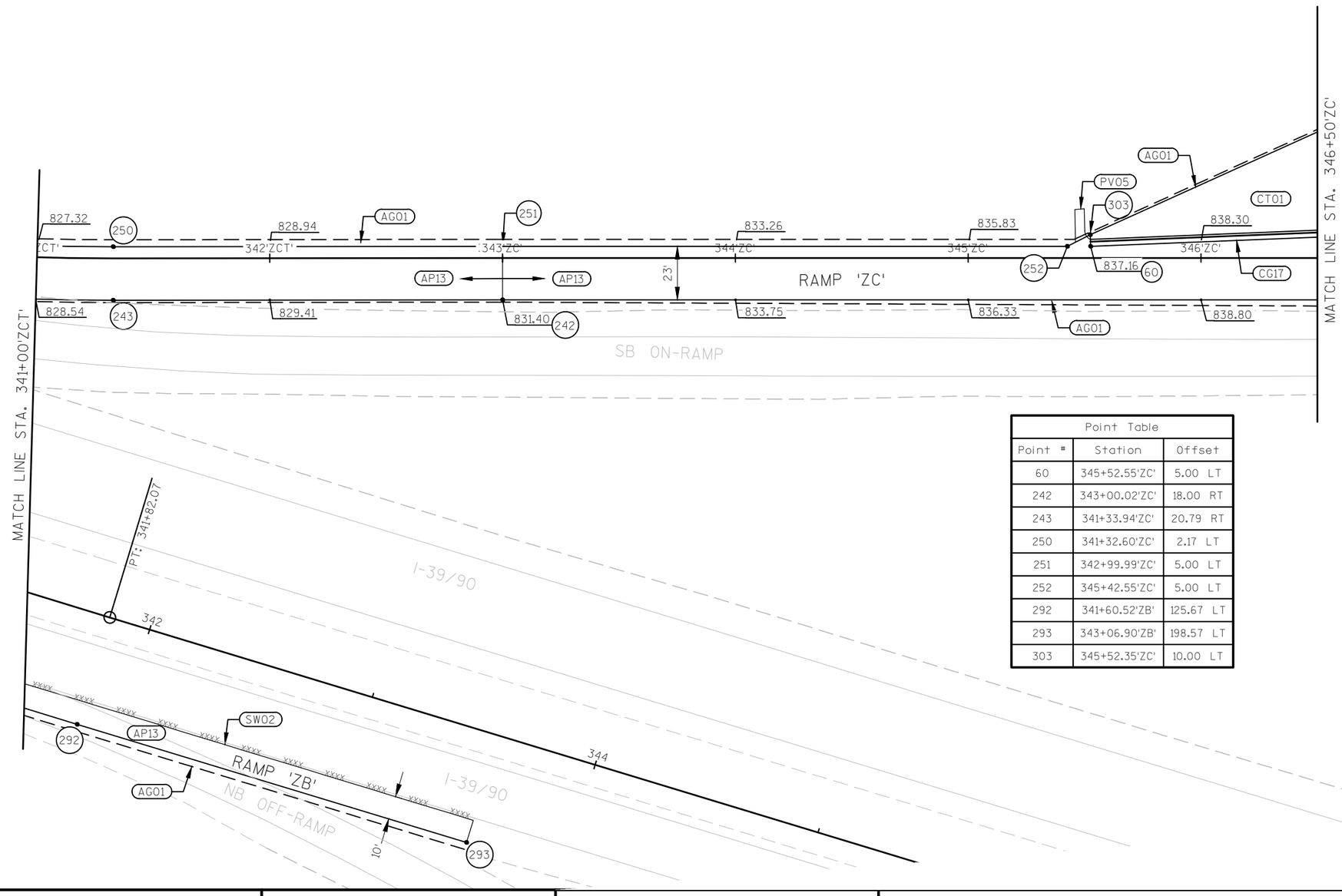
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN DETAILS: NB OFF-RAMP 'ZB', 'ZBT' & SB ON-RAMP 'ZCT'	SHEET 63	E

2

2

LEGEND

AP13	HMA PAVEMENT TYPE E-3, 4 1/2-INCH
AG01	BASE AGGREGATE DENSE 3/4-INCH
CG17	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE T
PV05	ASPHALTIC FLUME
CT01	CONCRETE TRUCK APRON (RED), 8-INCH, TIED
SW02	CONCRETE SAWING



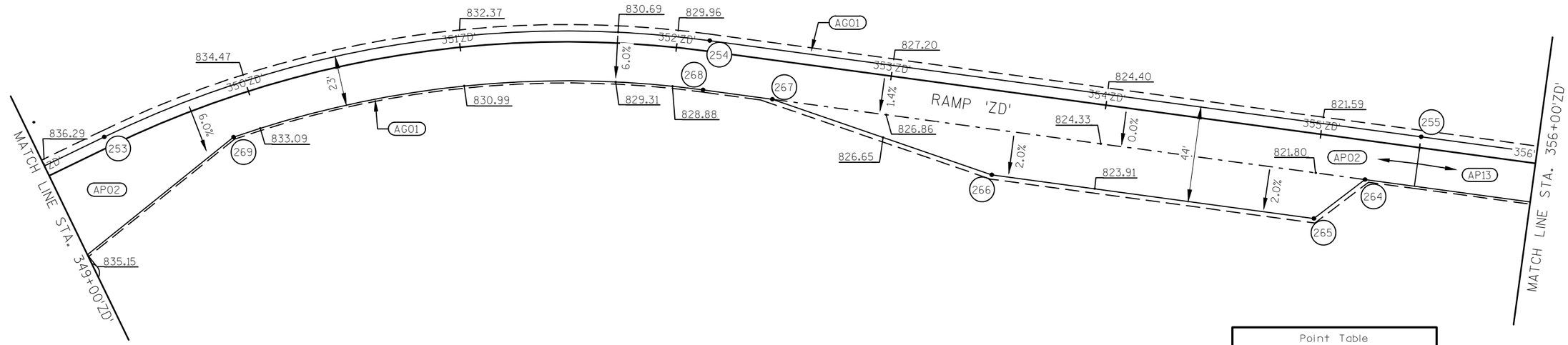
Point Table		
Point #	Station	Offset
60	345+52.55'ZC'	5.00 LT
242	343+00.02'ZC'	18.00 RT
243	341+33.94'ZC'	20.79 RT
250	341+32.60'ZC'	2.17 LT
251	342+99.99'ZC'	5.00 LT
252	345+42.55'ZC'	5.00 LT
292	341+60.52'ZB'	125.67 LT
293	343+06.90'ZB'	198.57 LT
303	345+52.35'ZC'	10.00 LT

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN DETAILS: SB ON-RAMP 'ZC', 'ZCT' & NB OFF-RAMP 'ZB'	SHEET 64	E

2

LEGEND

AP02 HMA PAVEMENT TYPE E-3, 5-INCH
AP13 HMA PAVEMENT TYPE E-3, 4 1/2-INCH
AG01 BASE AGGREGATE DENSE 3/4-INCH



Point Table		
Point #	Station	Offset
253	349+30.69'ZD'	5.00 LT
254	352+14.70'ZD'	5.00 LT
255	355+46.00'ZD'	5.00 LT
264	355+23.00'ZD'	18.00 RT
265	355+02.00'ZD'	39.00 RT
266	353+52.00'ZD'	39.00 RT
267	352+47.00'ZD'	18.00 RT
268	352+14.70'ZD'	18.00 RT
269	349+86.52'ZD'	18.00 RT

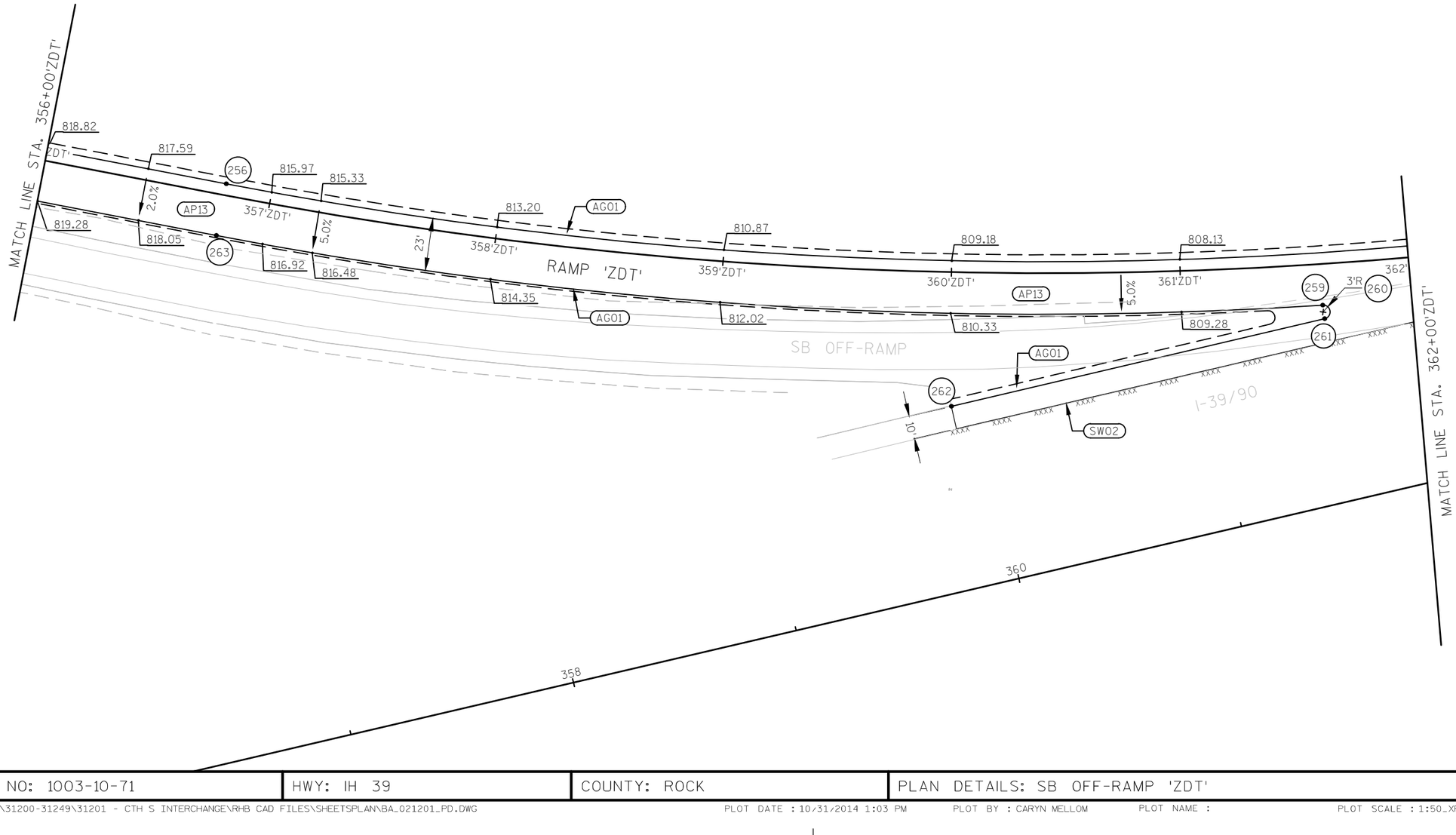
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN DETAILS: SB OFF-RAMP 'ZD'	SHEET 65	E

2

LEGEND

(AP13) HMA PAVEMENT TYPE E-3, 4 1/2-INCH
(AG01) BASE AGGREGATE DENSE 3/4-INCH
(SW02) SAWING CONCRETE

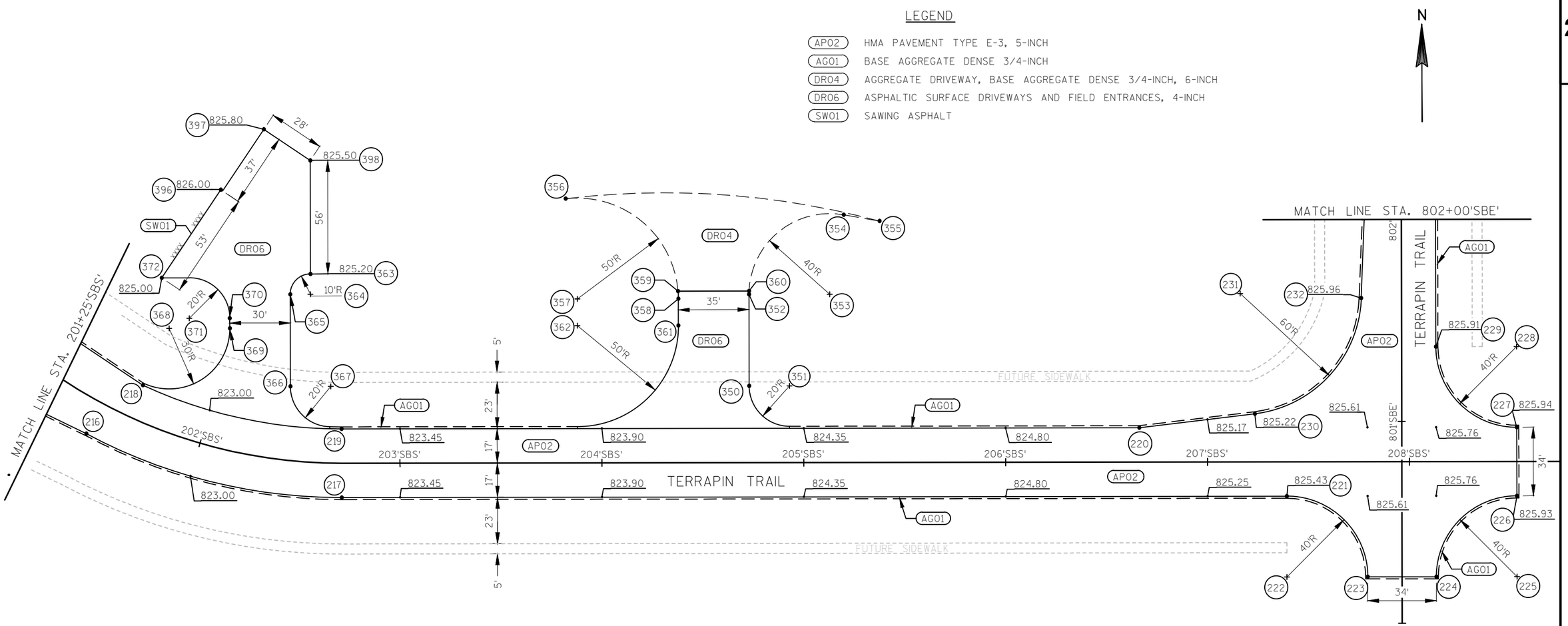
Point Table		
Point #	Station	Offset
256	356+79.68'ZDT'	5.00 LT
259	361+61.26'ZDT'	18.00 RT
260	361+61.26'ZDT'	21.00 RT
261	361+61.75'ZDT'	23.96 RT
262	360+01.13'ZDT'	58.71 RT
263	356+79.68'ZDT'	18.00 RT



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN DETAILS: SB OFF-RAMP 'ZDT'	SHEET 66	E

LEGEND

AP02	HMA PAVEMENT TYPE E-3, 5-INCH
AG01	BASE AGGREGATE DENSE 3/4-INCH
DR04	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
DR06	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
SW01	SAWING ASPHALT



Point Table		
Point #	N	E
350	223037.704	505119.096
351	223037.636	505139.096
352	223083.042	505119.251
353	223082.905	505159.251
354	223122.270	505166.349
355	223119.073	505184.081
356	223130.896	505028.662
357	223081.209	505034.245
358	223081.038	505084.244
359	223084.825	505084.114

Point Table		
Point #	N	E
360	223084.704	505119.292
361	223067.824	505084.199
362	223067.996	505034.199
363	223094.159	504902.057
364	223084.159	504902.042
365	223084.194	504892.042
366	223038.549	504891.886
367	223038.481	504911.886
368	223067.581	504831.985
369	223067.478	504861.985

Point Table		
Point #	N	E
370	223072.479	504862.002
371	223072.547	504842.002
372	223092.613	504828.440
396	223136.156	504857.874
397	223165.965	504879.296
398	223150.448	504902.250

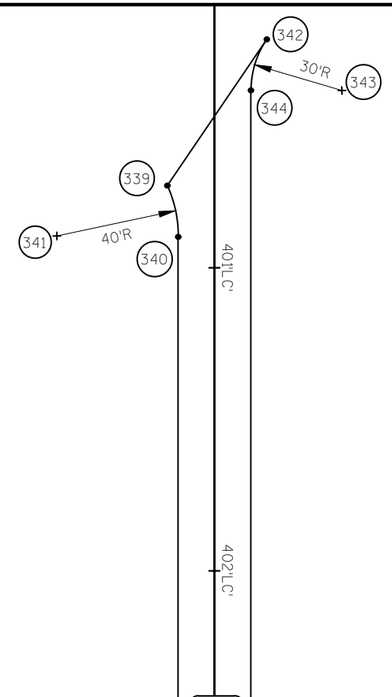
Point Table		
Point #	Station	Offset
216	201+47.78'SBS'	17.00 RT
217	202+71.07'SBS'	17.00 RT
218	201+62.08'SBS'	17.00 LT
219	202+71.07'SBS'	17.00 LT
220	206+66.20'SBS'	17.00 LT
221	207+39.26'SBS'	17.00 RT
222	207+39.26'SBS'	57.00 RT
223	800+23.02'SBE'	17.00 LT
224	800+22.97'SBE'	16.99 RT
225	208+53.26'SBS'	57.00 RT

Point Table		
Point #	Station	Offset
226	208+53.26'SBS'	17.00 RT
227	208+53.20'SBS'	17.00 LT
228	208+53.20'SBS'	57.00 LT
229	801+36.97'SBE'	17.00 RT
230	207+23.43'SBS'	23.87 LT
231	207+16.28'SBS'	83.44 LT
232	801+61.08'SBE'	19.96 LT

2

LEGEND

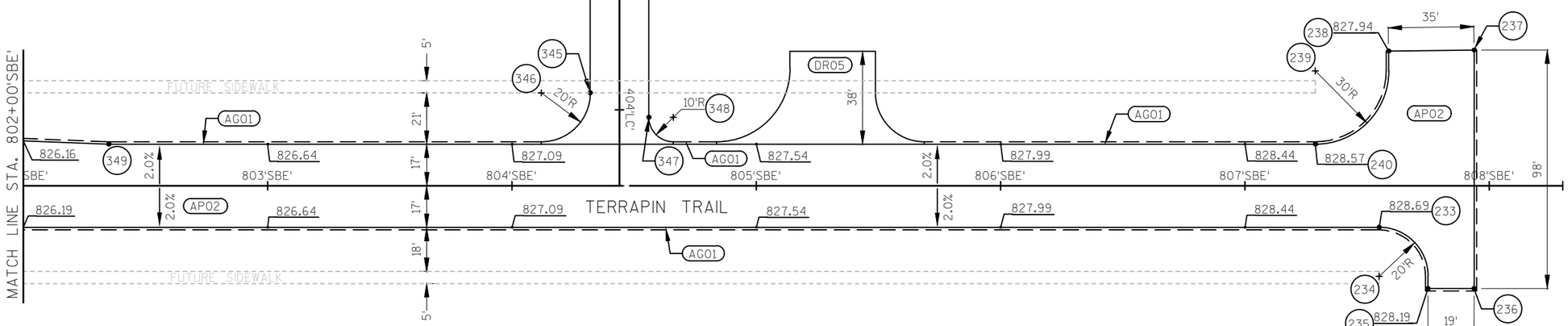
AP02	HMA PAVEMENT TYPE E-3, 5-INCH
AG01	BASE AGGREGATE DENSE 3/4-INCH
DR05	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 5-INCH
DR06	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH



Point Table		
Point #	Station	Offset
233	807+54.91'SBE'	17.00 RT
234	807+54.90'SBE'	37.00 RT
235	807+74.89'SBE'	42.01 RT
236	807+93.69'SBE'	42.03 RT
237	807+93.76'SBE'	55.55 LT
238	807+58.76'SBE'	55.07 LT
239	807+28.76'SBE'	47.00 LT
240	807+28.76'SBE'	17.00 LT
339	400+72.92'LC'	15.59 RT
340	400+89.79'LC'	12.00 RT

Point Table		
Point #	Station	Offset
341	400+89.48'LC'	52.00 RT
342	400+24.63'LC'	17.17 LT
343	400+41.47'LC'	42.00 LT
344	400+41.47'LC'	12.00 LT
345	403+93.05'LC'	12.00 RT
346	804+12.05'SBE'	38.00 LT
347	404+03.05'LC'	12.00 LT
348	804+66.05'SBE'	28.00 LT
349	802+35.04'SBE'	17.00 LT

N

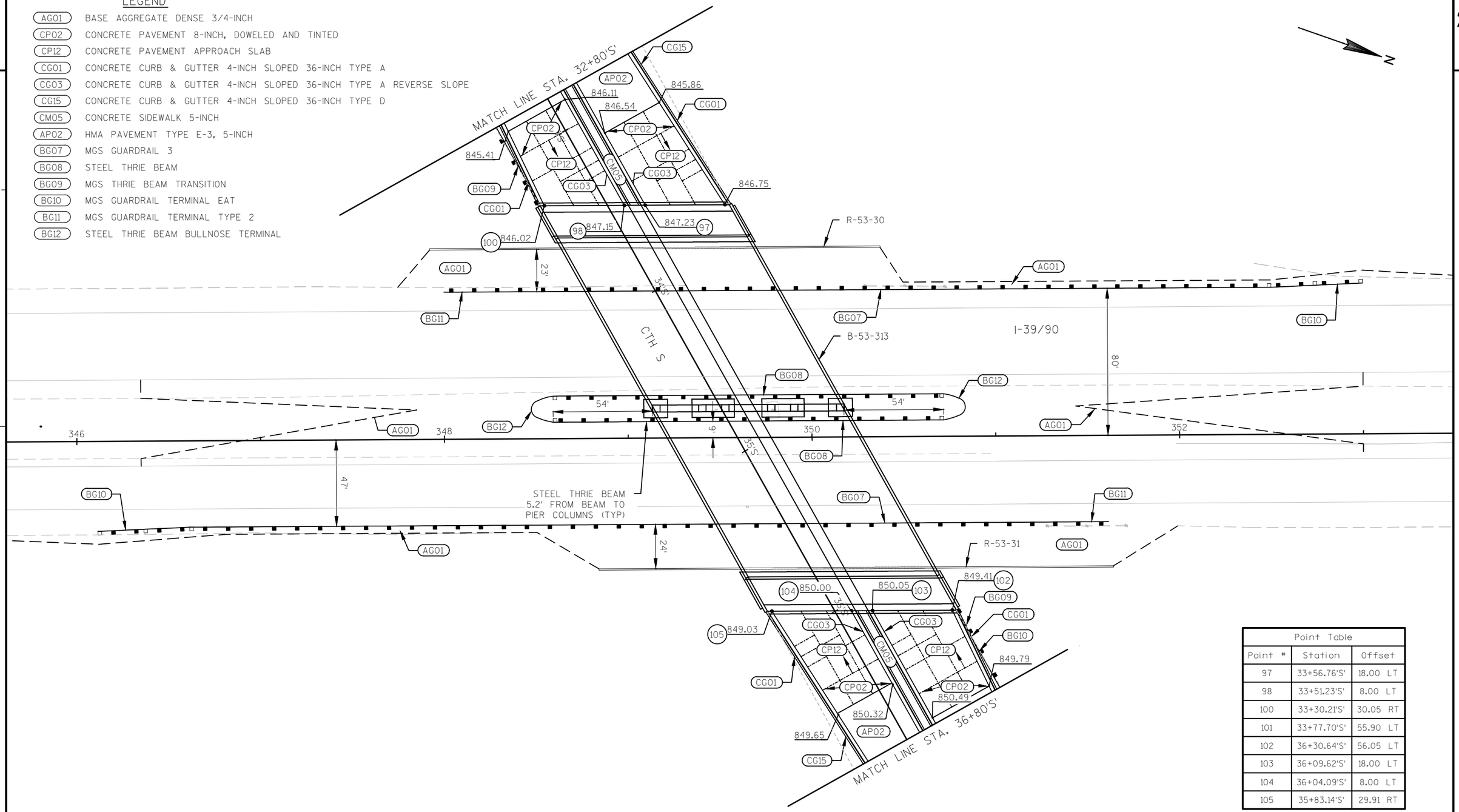


PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN DETAILS: TERRAPIN TRAIL 'SBE' & DRIVEWAY 'LC'	SHEET 68	E

2

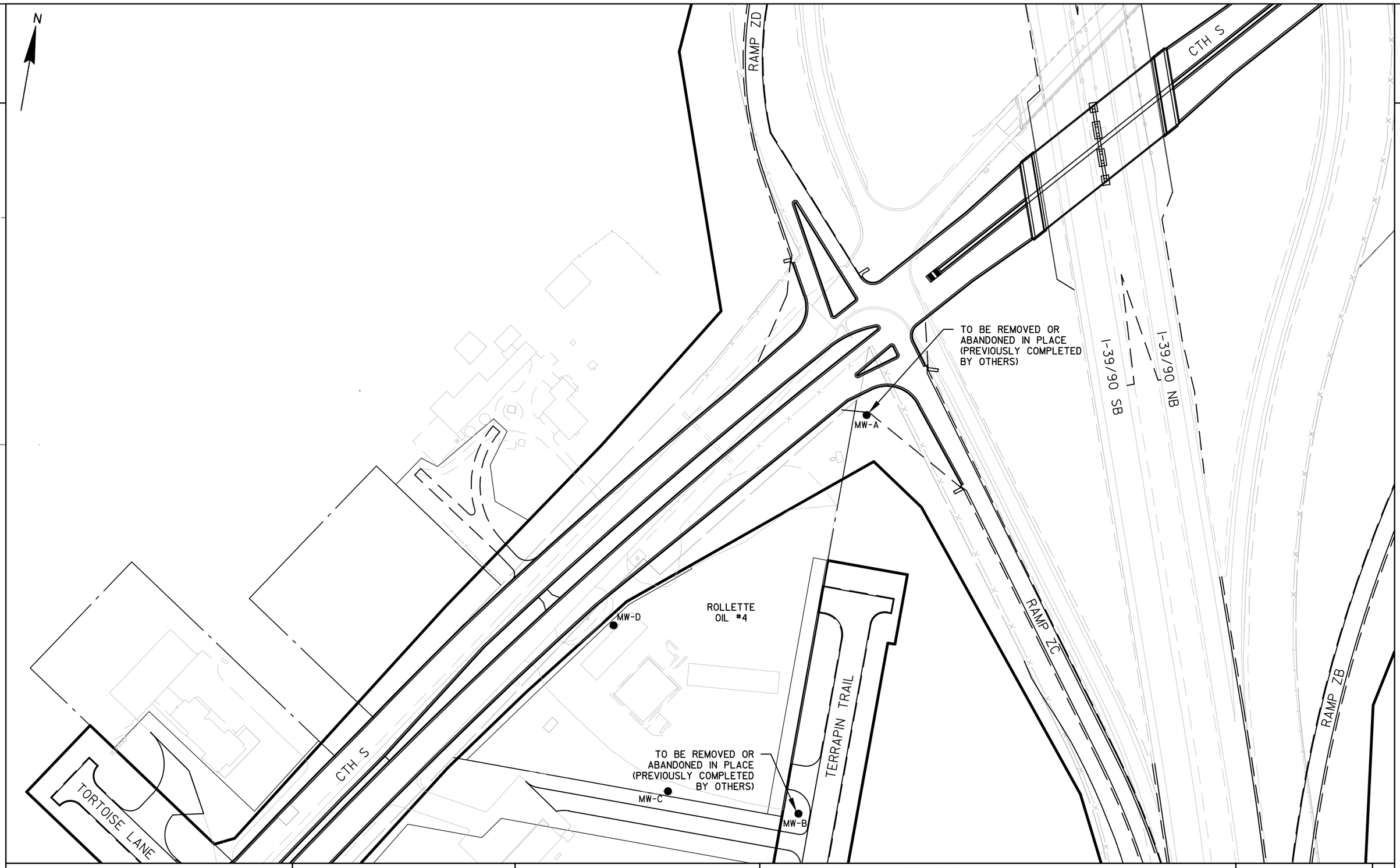
LEGEND

AG01	BASE AGGREGATE DENSE 3/4-INCH
CP02	CONCRETE PAVEMENT 8-INCH, DOWELED AND TINTED
CP12	CONCRETE PAVEMENT APPROACH SLAB
CG01	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
CG03	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A REVERSE SLOPE
CG15	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D
CM05	CONCRETE SIDEWALK 5-INCH
AP02	HMA PAVEMENT TYPE E-3, 5-INCH
BG07	MGS GUARDRAIL 3
BG08	STEEL THRIE BEAM
BG09	MGS THRIE BEAM TRANSITION
BG10	MGS GUARDRAIL TERMINAL EAT
BG11	MGS GUARDRAIL TERMINAL TYPE 2
BG12	STEEL THRIE BEAM BULLNOSE TERMINAL



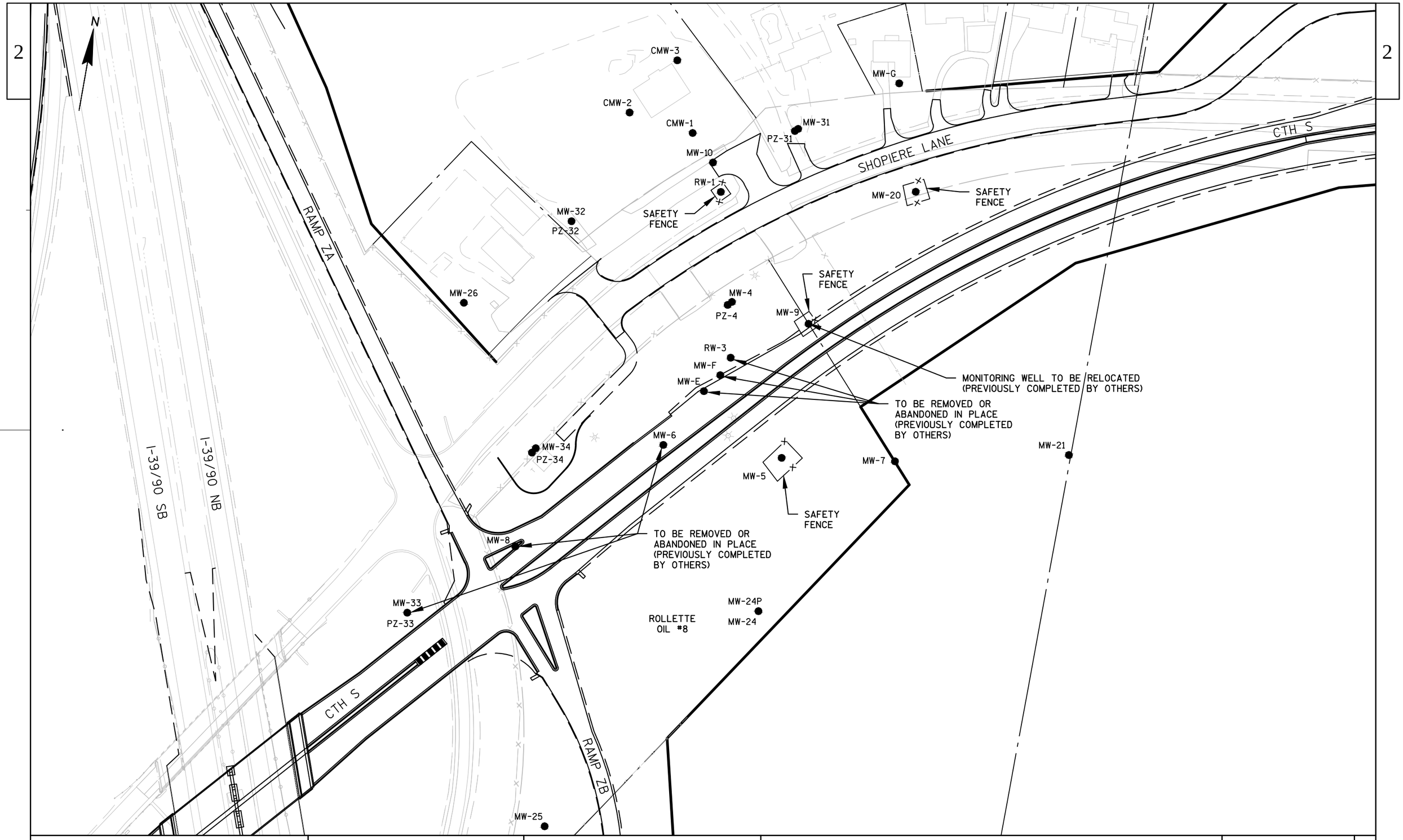
Point Table		
Point #	Station	Offset
97	33+56.76'S'	18.00 LT
98	33+51.23'S'	8.00 LT
100	33+30.21'S'	30.05 RT
101	33+77.70'S'	55.90 LT
102	36+30.64'S'	56.05 LT
103	36+09.62'S'	18.00 LT
104	36+04.09'S'	8.00 LT
105	35+83.14'S'	29.91 RT

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN DETAILS: CTH S	SHEET 69	E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PARCEL 19 WELL PROTECTION PLAN	SHEET 70	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_021202_PD.DWG PLOT DATE : 10/31/2014 9:16 AM PLOT BY : CARYN MELLOM PLOT NAME : ---------- PLOT SCALE : 0.008333

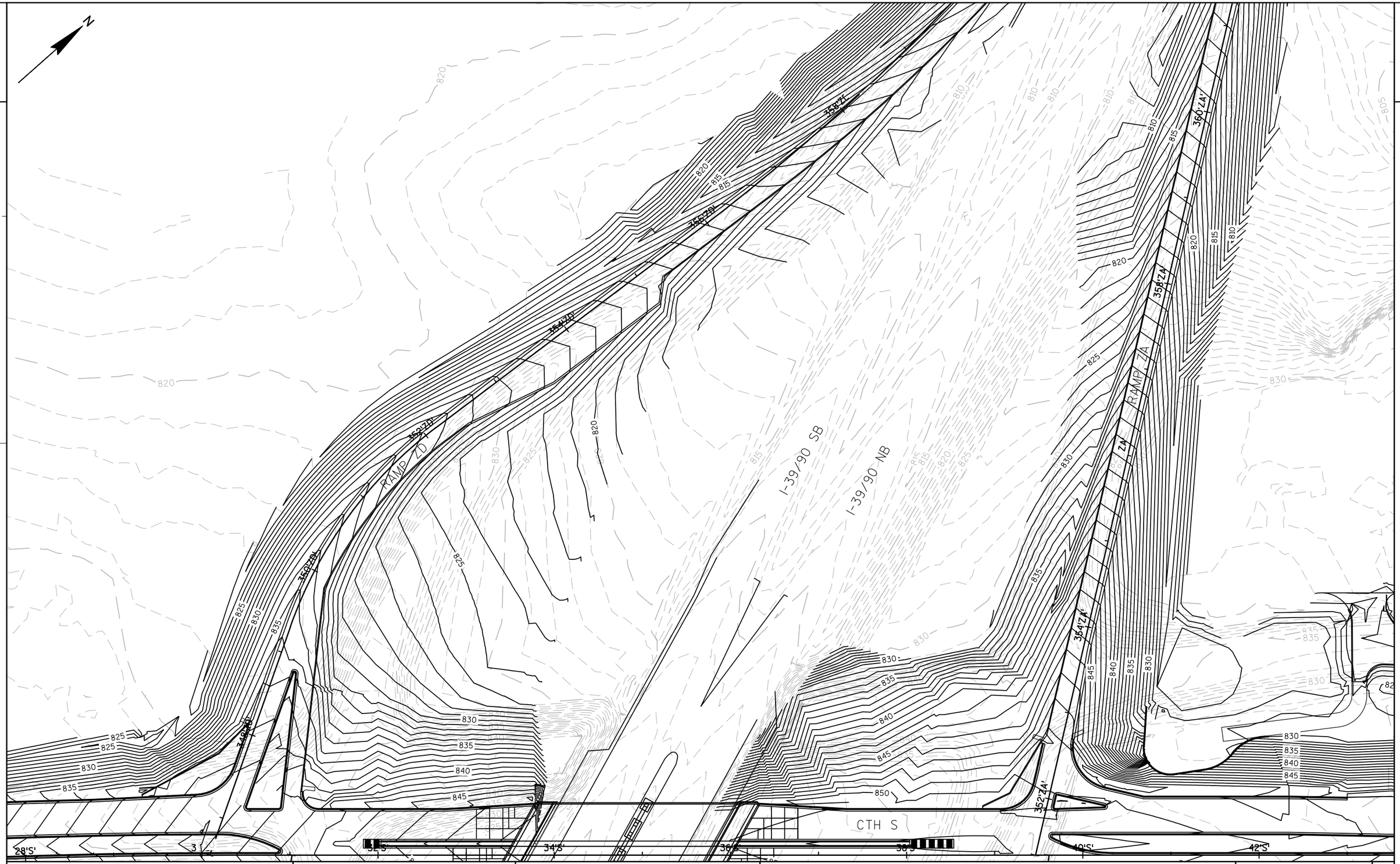


PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PARCEL 19 WELL PROTECTION PLAN	SHEET 71	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_021202_PD.DWG PLOT DATE : 10/31/2014 9:16 AM PLOT BY : CARYN MELLOM PLOT NAME : ---------- PLOT SCALE : 0.008333

WISDOT/CADDS SHEET 42

2



PROJECT NO:1003-10-71	HWY: IH 39	COUNTY: ROCK	CONTOUR MAP	SHEET	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_021601_CM.DWG PLOT DATE : 10/30/2014 11:10 AM PLOT BY : LUCAS CHASE PLOT NAME : _____ PLOT SCALE : 1:100_XREF

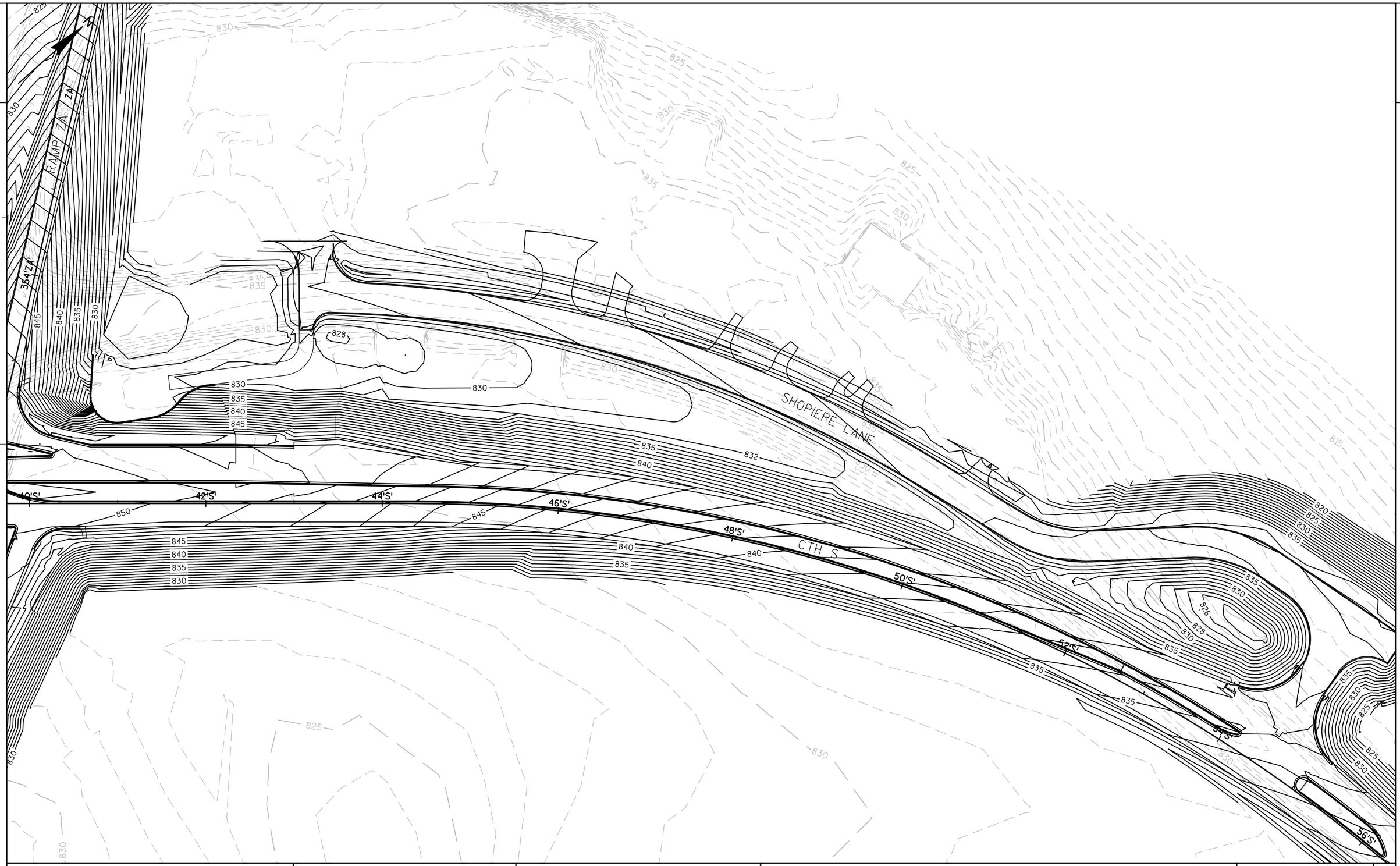
WISDOT/CADDS SHEET 42



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CONTOUR MAP	SHEET 73	E

2

2

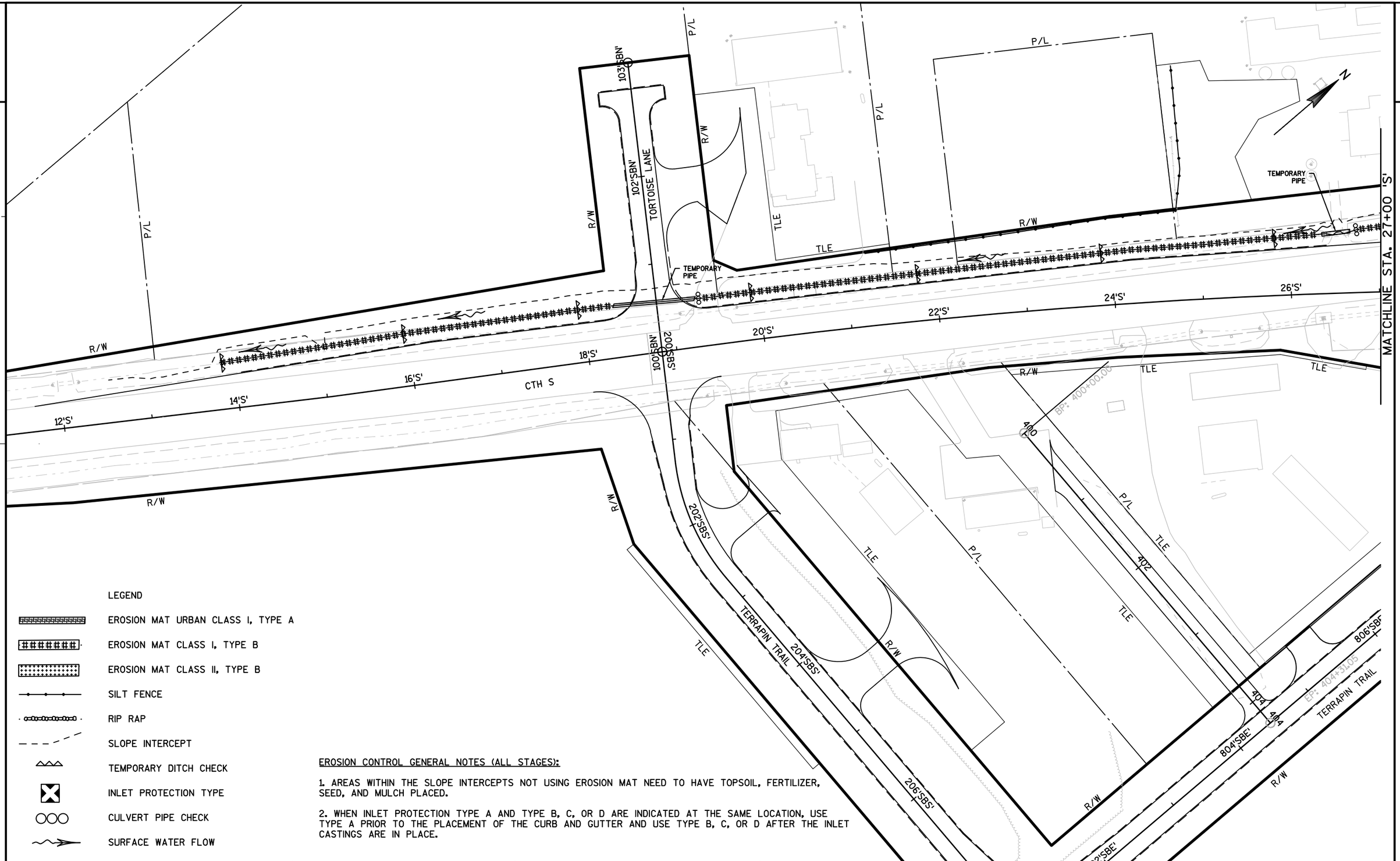


PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CONTOUR MAP	SHEET 74	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_021601_CM.DWG PLOT DATE : 10/30/2014 11:10 AM PLOT BY : LUCAS CHASE PLOT NAME : ---------- PLOT SCALE : 1:100_XREF

WISDOT/CADDS SHEET 42

2



LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

EROSION CONTROL GENERAL NOTES (ALL STAGES):

1. AREAS WITHIN THE SLOPE INTERCEPTS NOT USING EROSION MAT NEED TO HAVE TOPSOIL, FERTILIZER, SEED, AND MULCH PLACED.

2. WHEN INLET PROTECTION TYPE A AND TYPE B, C, OR D ARE INDICATED AT THE SAME LOCATION, USE TYPE A PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND USE TYPE B, C, OR D AFTER THE INLET CASTINGS ARE IN PLACE.

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	EROSION CONTROL - STAGE 1	SHEET 75	E

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

MATCHLINE STA. 27+00 'S'

28'S' 30'S' 32'S' 34'S' 36'S' 38'S' 40'S' 42'S'

CTH S

R/W

P/L

TLE

SB OFF RAMP

SB OFF RAMP (ZD)

NB OFF RAMP (ZB)

NB ON RAMP (ZA)

SB ON RAMP (ZC)

IH-39/90 SB

IH-39/90 NB

346'ZC' 347'ZC' 348'ZD' 350'ZD' 352'ZD'

346'NB' 348'NB' 350'NB' 352'NB' 354'NB' 356'NB'

351'ZA' 352'ZA' 354'ZA' 356'ZA'

352'ZB' 353'ZB'

EROSION CONTROL GENERAL NOTES (ALL STAGES):

1. AREAS WITHIN THE SLOPE INTERCEPTS NOT USING EROSION MAT NEED TO HAVE TOPSOIL, FERTILIZER, SEED, AND MULCH PLACED.

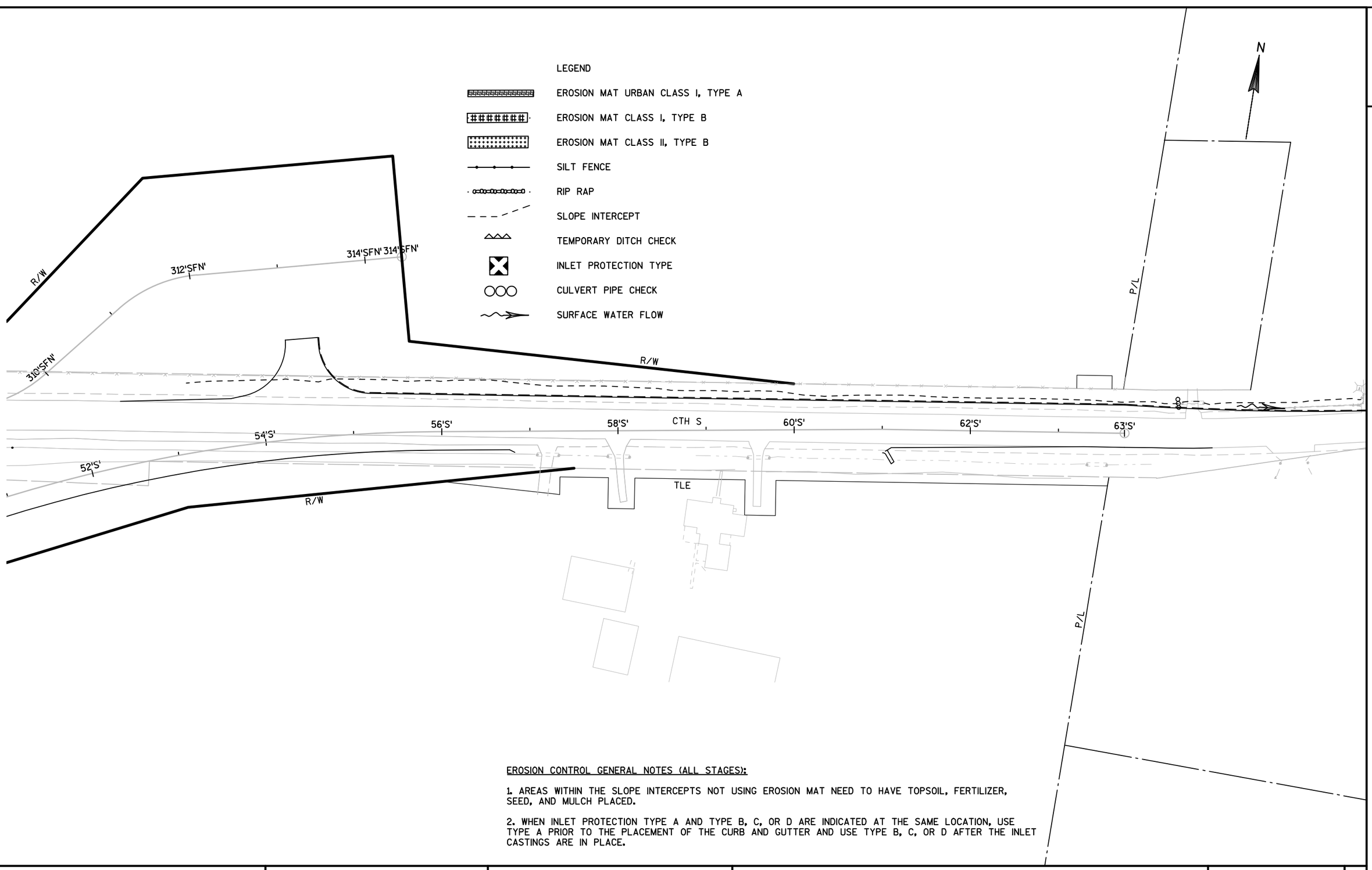
2. WHEN INLET PROTECTION TYPE A AND TYPE B, C, OR D ARE INDICATED AT THE SAME LOCATION, USE TYPE A PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND USE TYPE B, C, OR D AFTER THE INLET CASTINGS ARE IN PLACE.

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	EROSION CONTROL - STAGE 1	SHEET 76	E

2

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE
- CULVERT PIPE CHECK
- SURFACE WATER FLOW



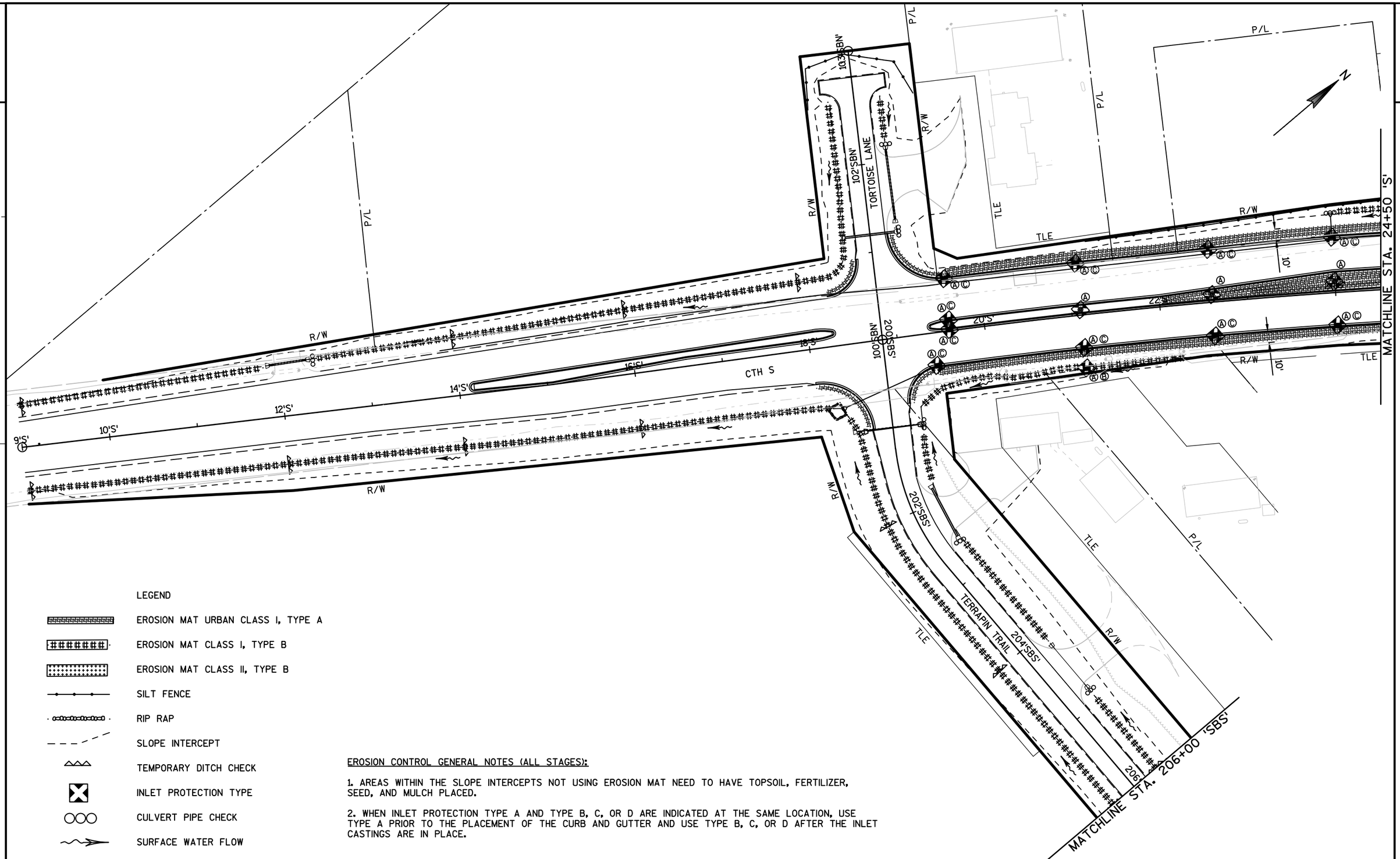
EROSION CONTROL GENERAL NOTES (ALL STAGES):

1. AREAS WITHIN THE SLOPE INTERCEPTS NOT USING EROSION MAT NEED TO HAVE TOPSOIL, FERTILIZER, SEED, AND MULCH PLACED.

2. WHEN INLET PROTECTION TYPE A AND TYPE B, C, OR D ARE INDICATED AT THE SAME LOCATION, USE TYPE A PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND USE TYPE B, C, OR D AFTER THE INLET CASTINGS ARE IN PLACE.

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	EROSION CONTROL - STAGE 1	SHEET 77	E

2



LEGEND

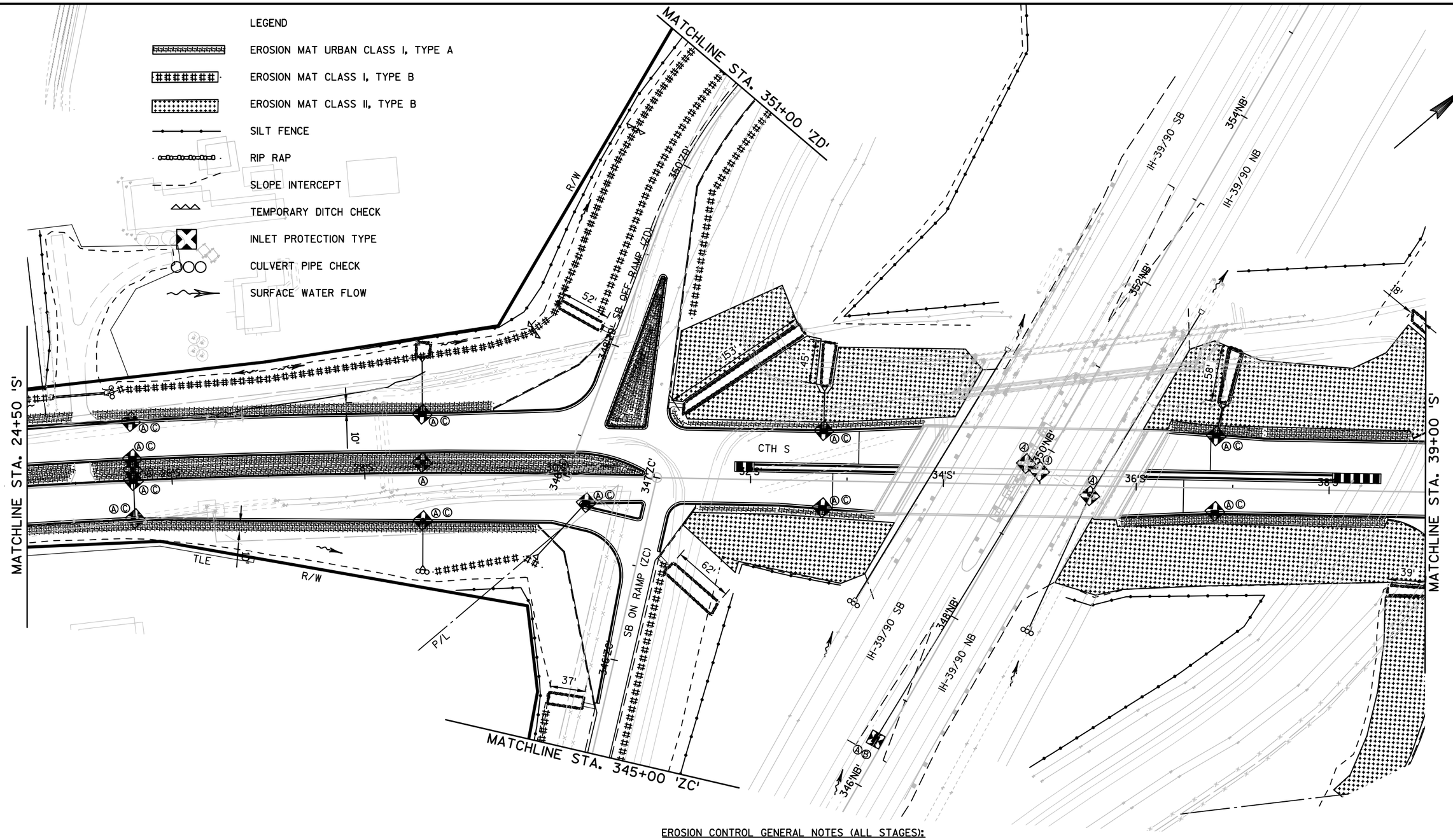
- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

EROSION CONTROL GENERAL NOTES (ALL STAGES):

1. AREAS WITHIN THE SLOPE INTERCEPTS NOT USING EROSION MAT NEED TO HAVE TOPSOIL, FERTILIZER, SEED, AND MULCH PLACED.

2. WHEN INLET PROTECTION TYPE A AND TYPE B, C, OR D ARE INDICATED AT THE SAME LOCATION, USE TYPE A PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND USE TYPE B, C, OR D AFTER THE INLET CASTINGS ARE IN PLACE.

2

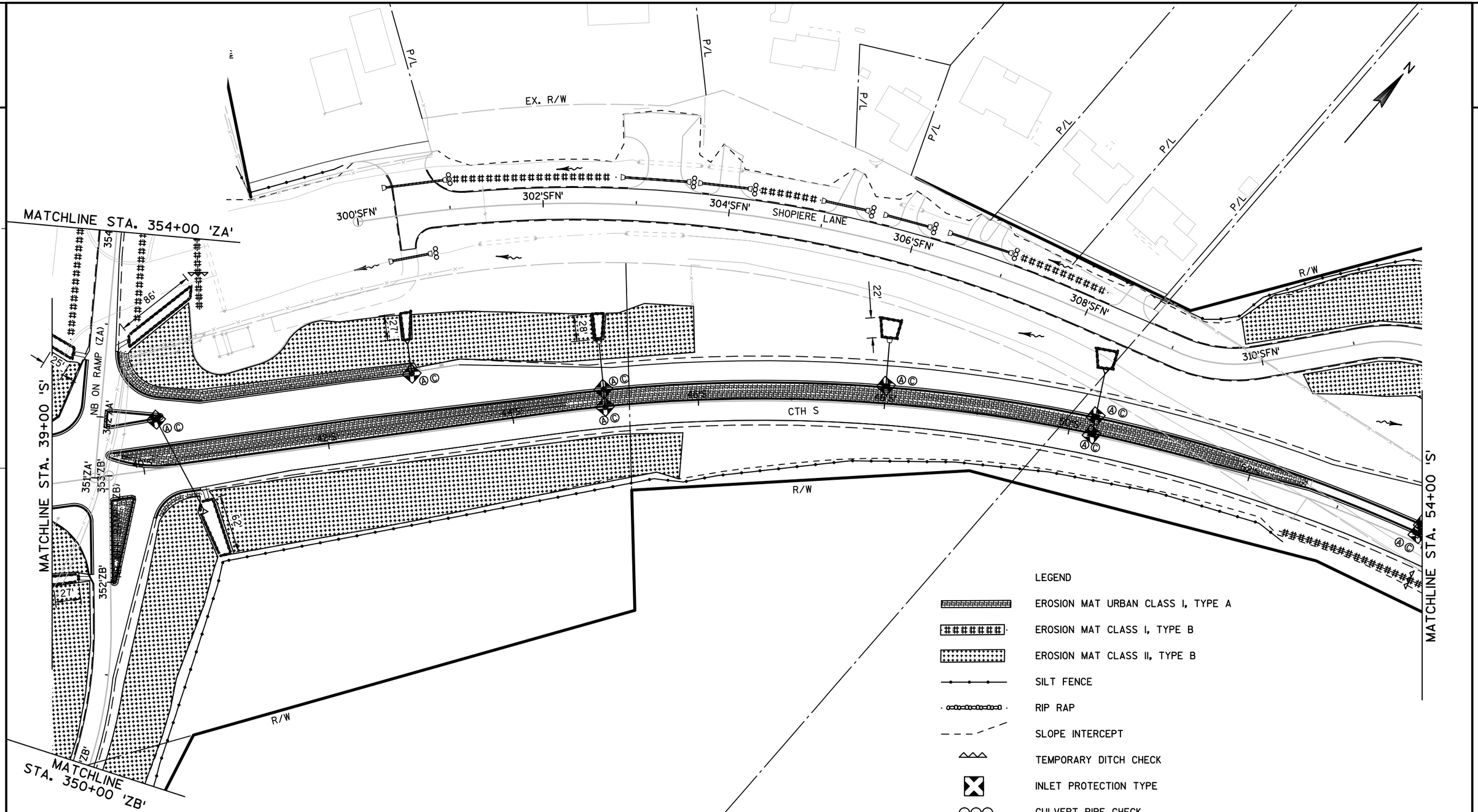


EROSION CONTROL GENERAL NOTES (ALL STAGES):

1. AREAS WITHIN THE SLOPE INTERCEPTS NOT USING EROSION MAT NEED TO HAVE TOPSOIL, FERTILIZER, SEED, AND MULCH PLACED.

2. WHEN INLET PROTECTION TYPE A AND TYPE B, C, OR D ARE INDICATED AT THE SAME LOCATION, USE TYPE A PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND USE TYPE B, C, OR D AFTER THE INLET CASTINGS ARE IN PLACE.

2



LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

EROSION CONTROL GENERAL NOTES (ALL STAGES):

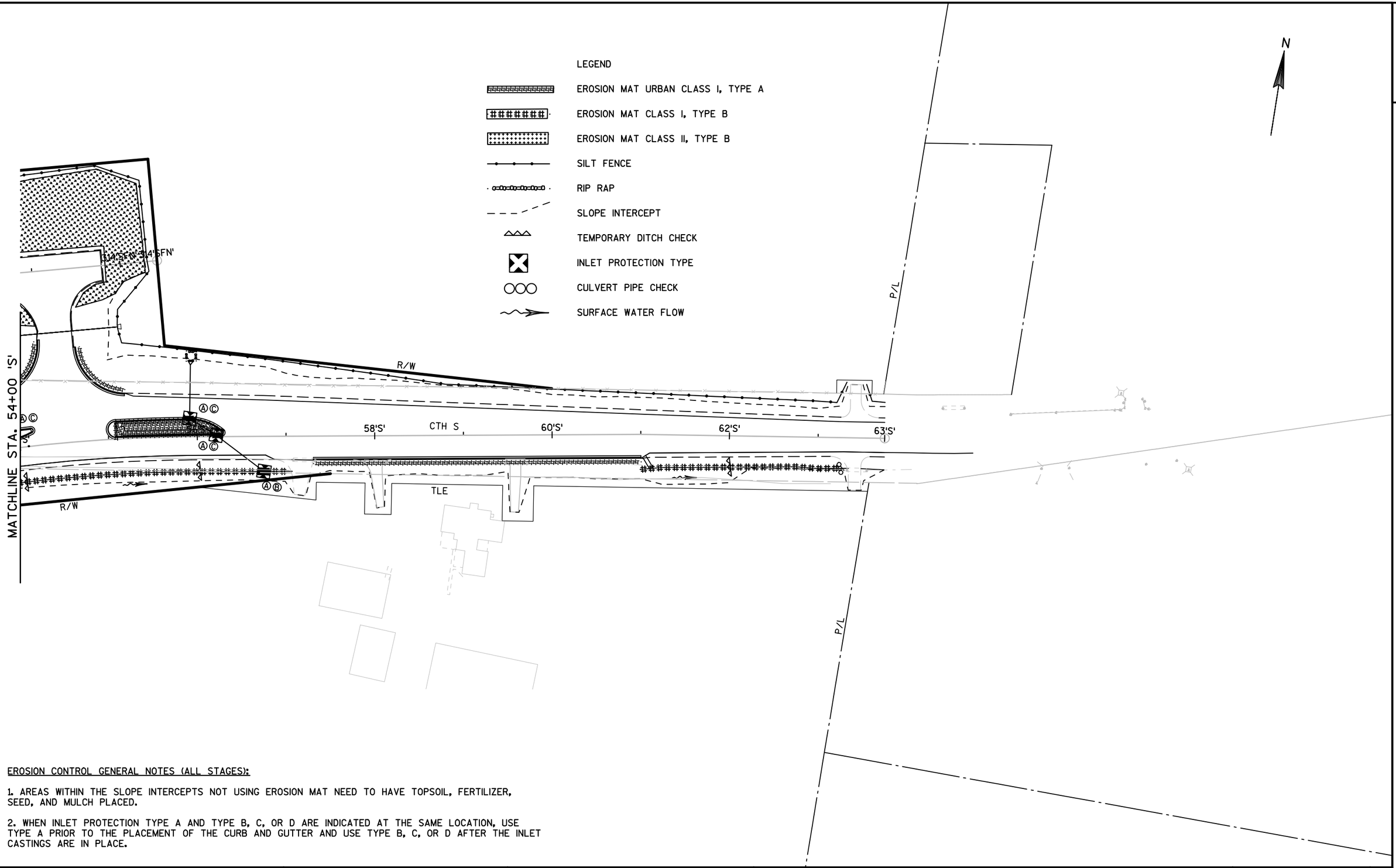
1. AREAS WITHIN THE SLOPE INTERCEPTS NOT USING EROSION MAT NEED TO HAVE TOPSOIL, FERTILIZER, SEED, AND MULCH PLACED.

2. WHEN INLET PROTECTION TYPE A AND TYPE B, C, OR D ARE INDICATED AT THE SAME LOCATION, USE TYPE A PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND USE TYPE B, C, OR D AFTER THE INLET CASTINGS ARE IN PLACE.

2

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE
- CULVERT PIPE CHECK
- SURFACE WATER FLOW



EROSION CONTROL GENERAL NOTES (ALL STAGES):

1. AREAS WITHIN THE SLOPE INTERCEPTS NOT USING EROSION MAT NEED TO HAVE TOPSOIL, FERTILIZER, SEED, AND MULCH PLACED.

2. WHEN INLET PROTECTION TYPE A AND TYPE B, C, OR D ARE INDICATED AT THE SAME LOCATION, USE TYPE A PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND USE TYPE B, C, OR D AFTER THE INLET CASTINGS ARE IN PLACE.

2

N

MATCHLINE STA. 206+00 'SBS'

P/L

P/L

TLE

TLE

402

404

R/W

TLE

800'SBE'

802'SBE'

804'SBE'

806'SBE'

808'SBE'

208'SBS'

208'SBS'

EP: 404+31.05

TERRAPIN TRAIL

R/W

MATCHLINE STA.345+00 'ZC'

R/W

R/W

344'ZC'

343'ZCT'

342'ZC'

342'ZCT'

SB ON RAMP (ZC)

340'ZC'

340'ZCT'

344'NB'

EX. R/W

338'ZC'

338'ZCT'

340'NB'

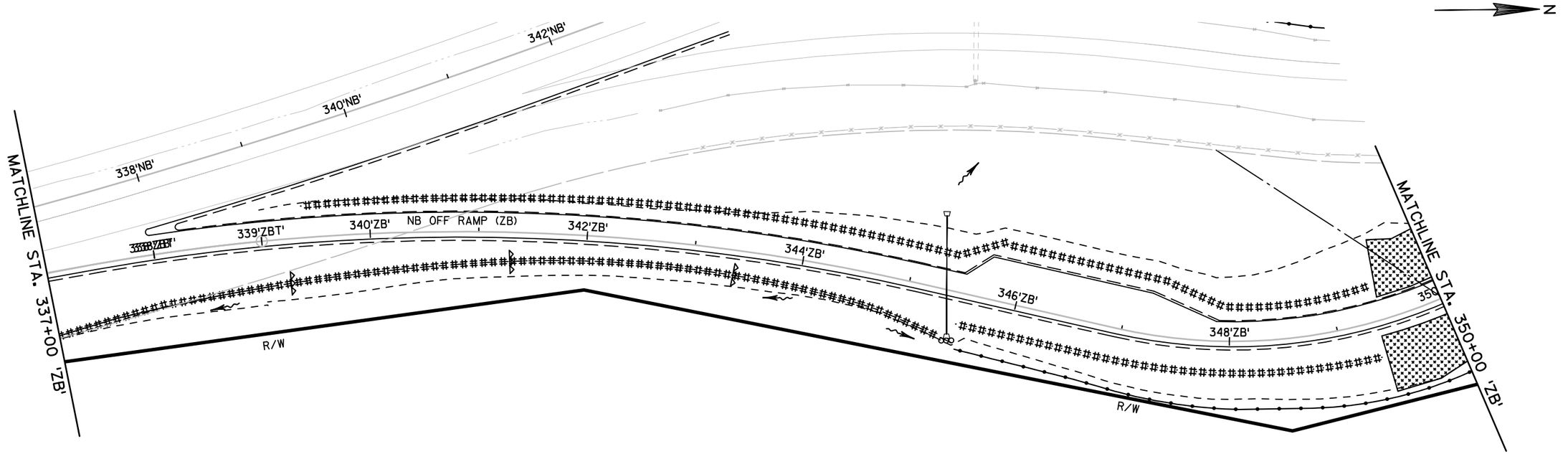
LEGEND

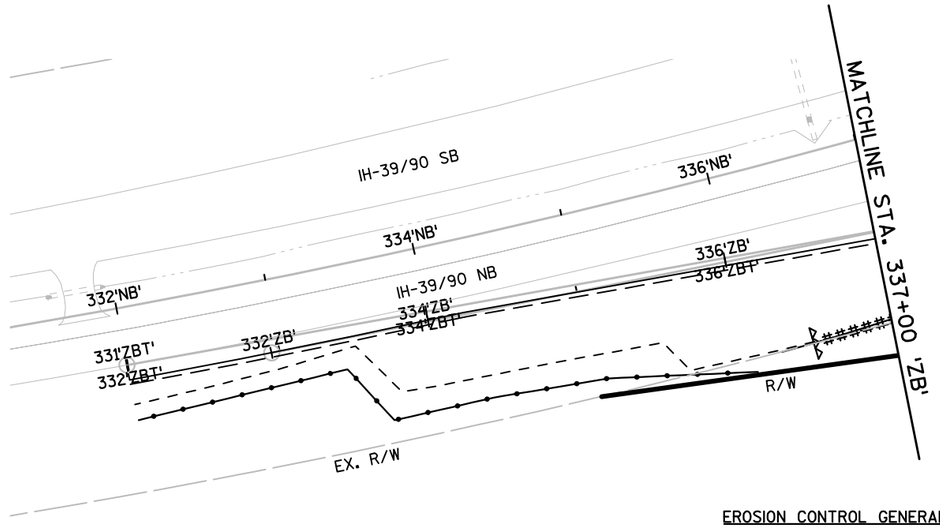
- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

EROSION CONTROL GENERAL NOTES (ALL STAGES):

1. AREAS WITHIN THE SLOPE INTERCEPTS NOT USING EROSION MAT NEED TO HAVE TOPSOIL, FERTILIZER, SEED, AND MULCH PLACED.

2. WHEN INLET PROTECTION TYPE A AND TYPE B, C, OR D ARE INDICATED AT THE SAME LOCATION, USE TYPE A PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND USE TYPE B, C, OR D AFTER THE INLET CASTINGS ARE IN PLACE.





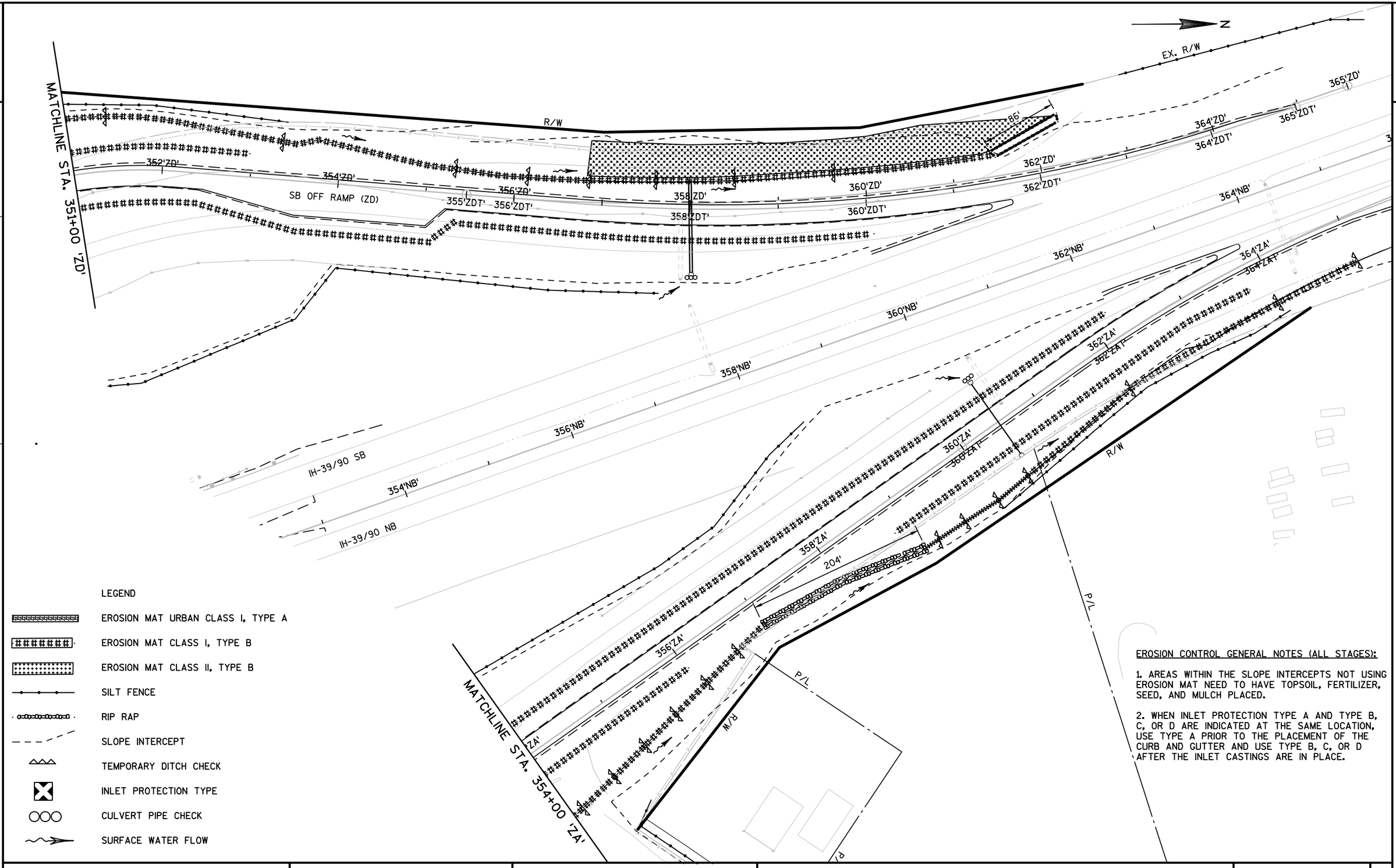
LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

EROSION CONTROL GENERAL NOTES (ALL STAGES):

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LEGEND

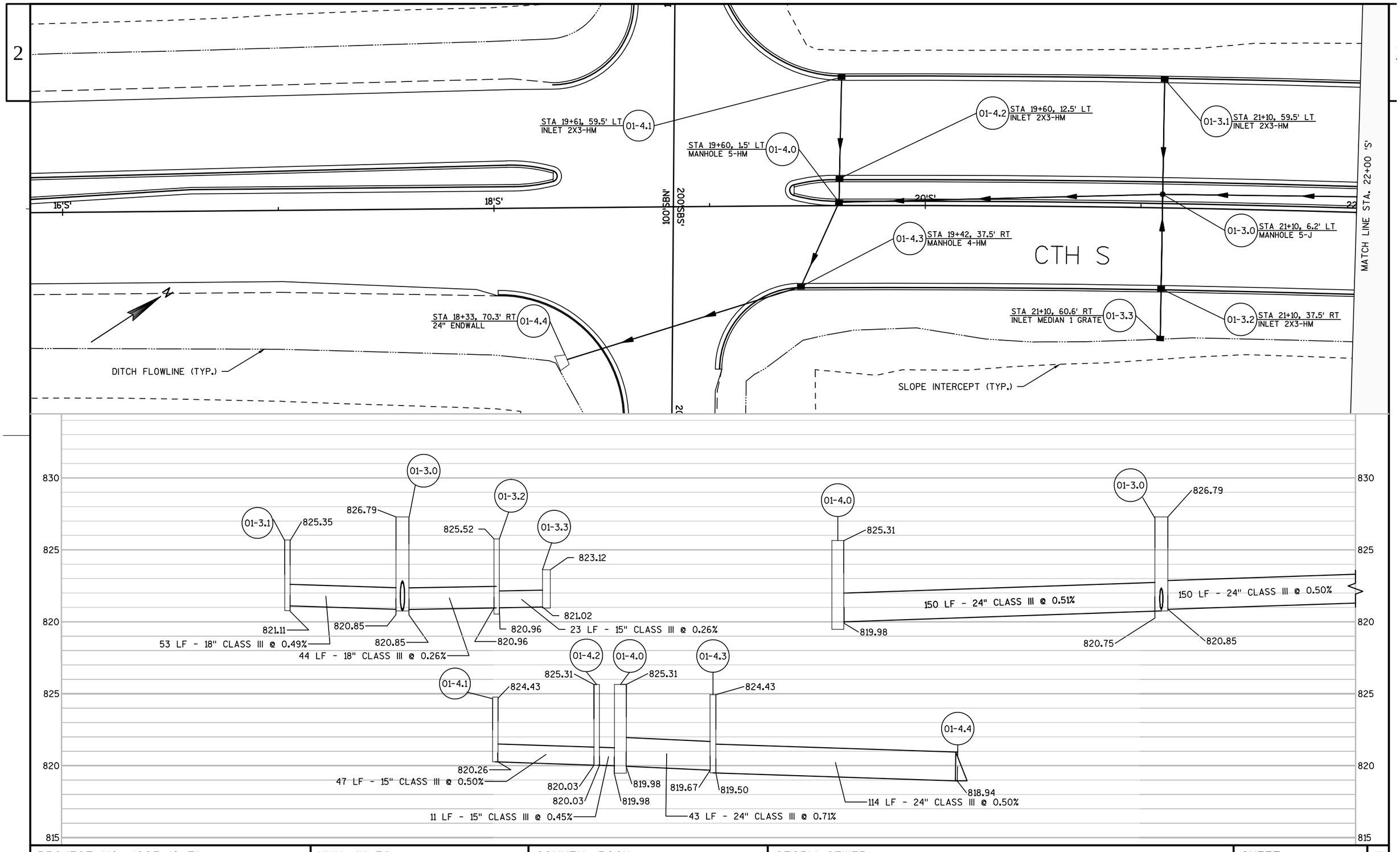
- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

EROSION CONTROL GENERAL NOTES (ALL STAGES):

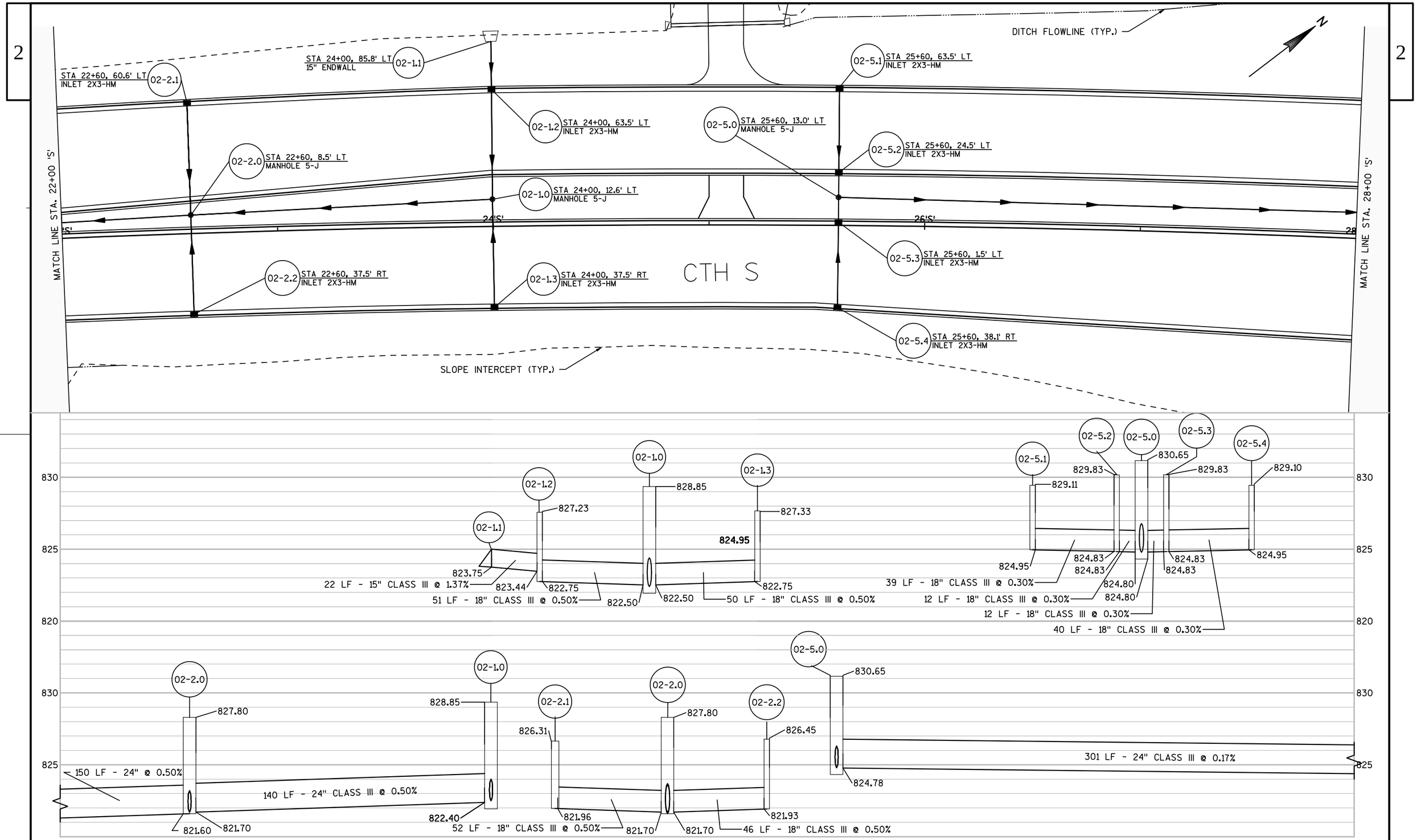
1. AREAS WITHIN THE SLOPE INTERCEPTS NOT USING EROSION MAT NEED TO HAVE TOPSOIL, FERTILIZER, SEED, AND MULCH PLACED.

2. WHEN INLET PROTECTION TYPE A AND TYPE B, C, OR D ARE INDICATED AT THE SAME LOCATION, USE TYPE A PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND USE TYPE B, C, OR D AFTER THE INLET CASTINGS ARE IN PLACE.

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY:	EROSION CONTROL	SHEET 84	E



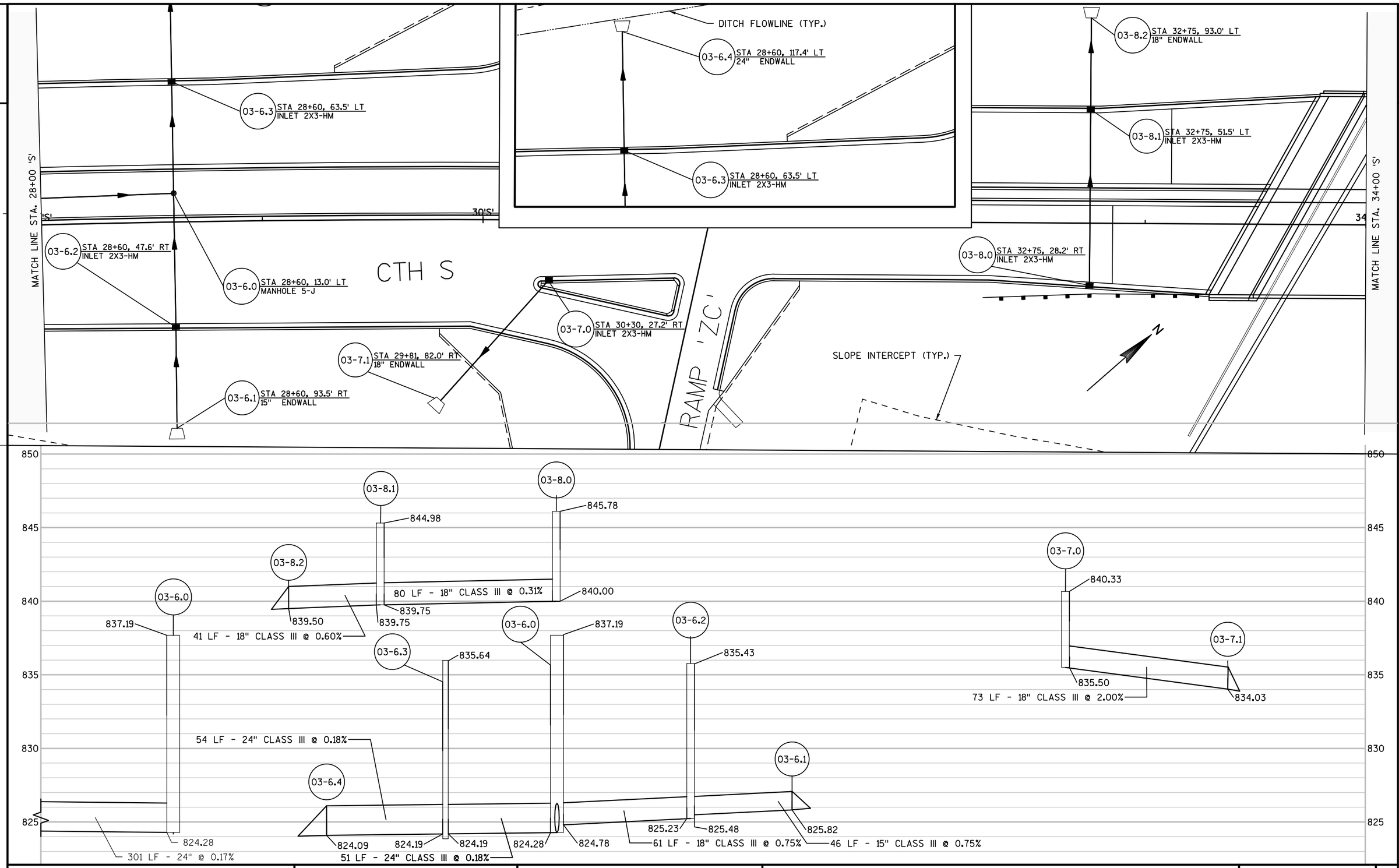
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	STORM SEWER	SHEET 85	E



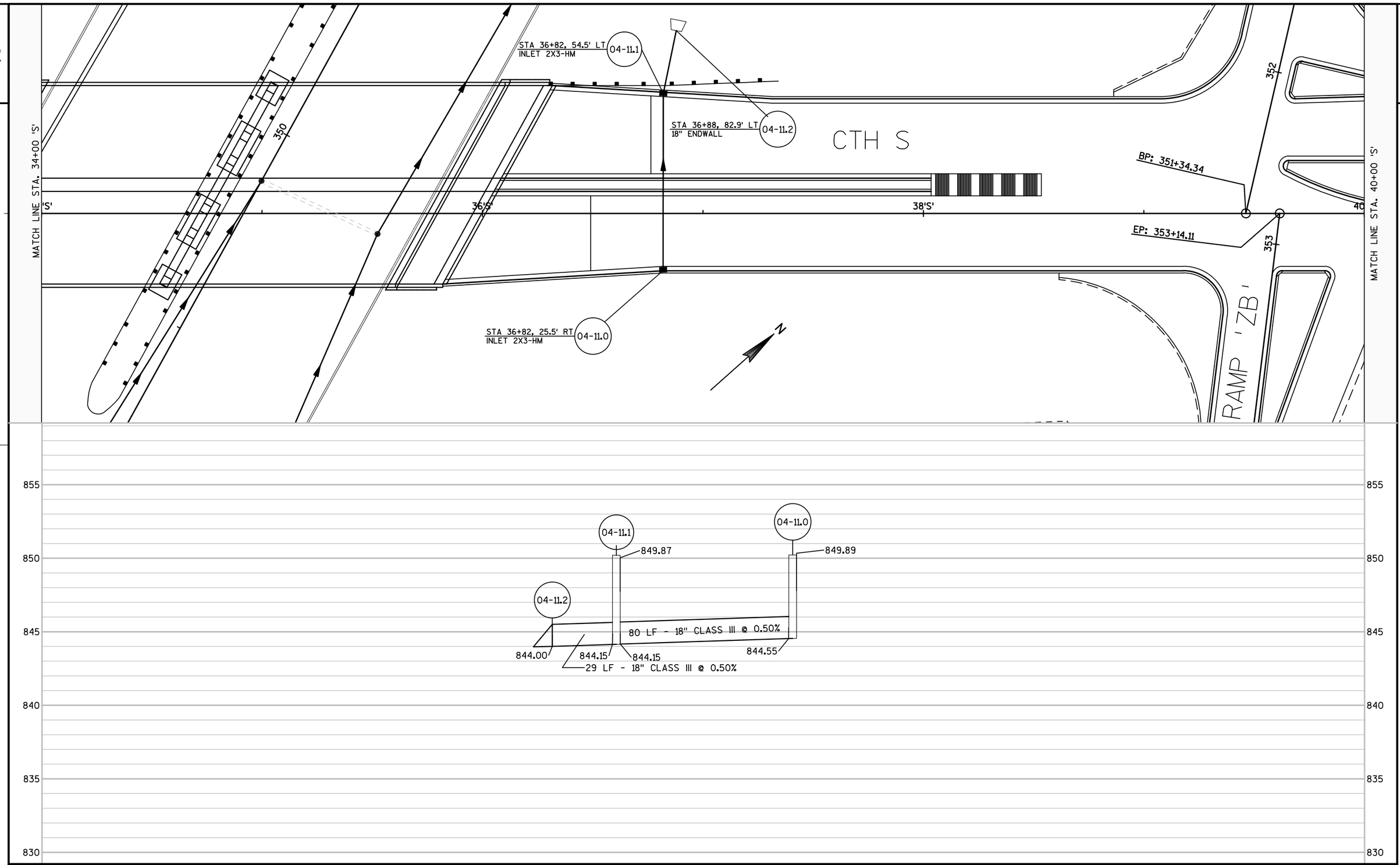
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	STORM SEWER	SHEET 86	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\DESIGN\EDGELINES\BA_0301_SS.DWG PLOT DATE : 10/16/2014 10:50 AM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 41



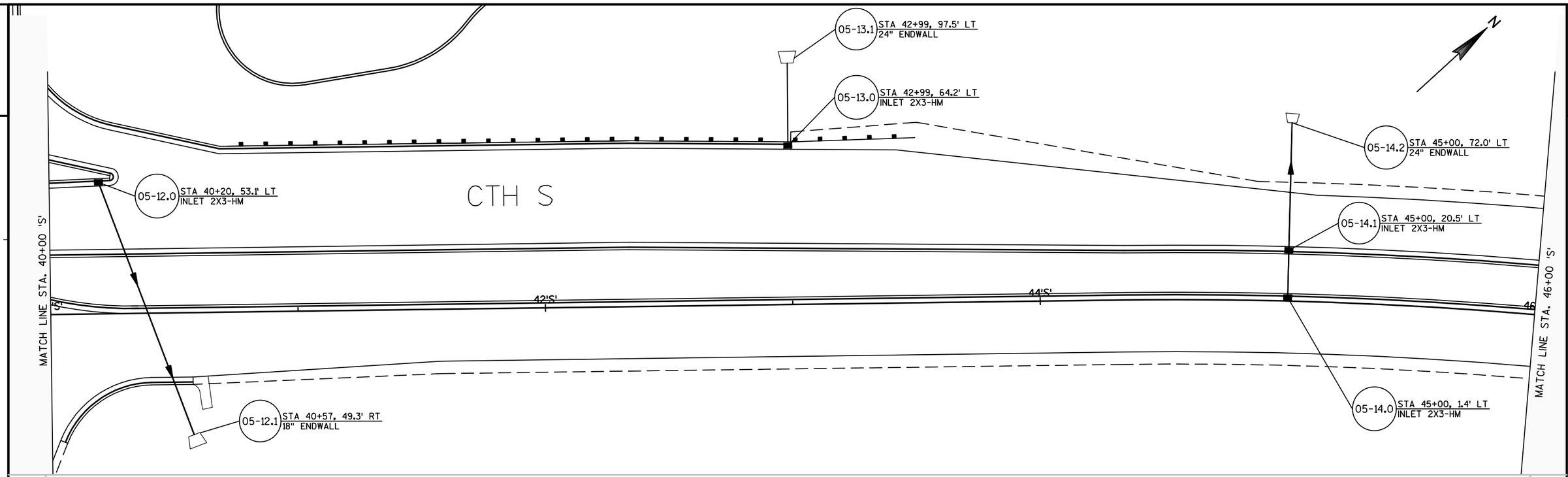
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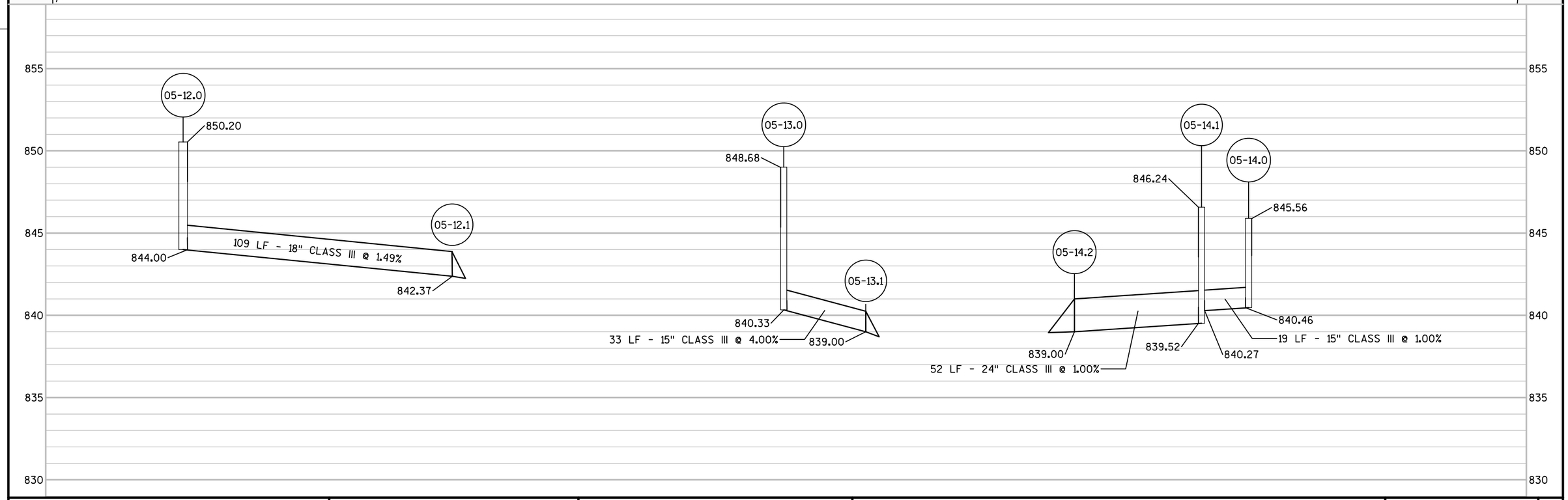


2

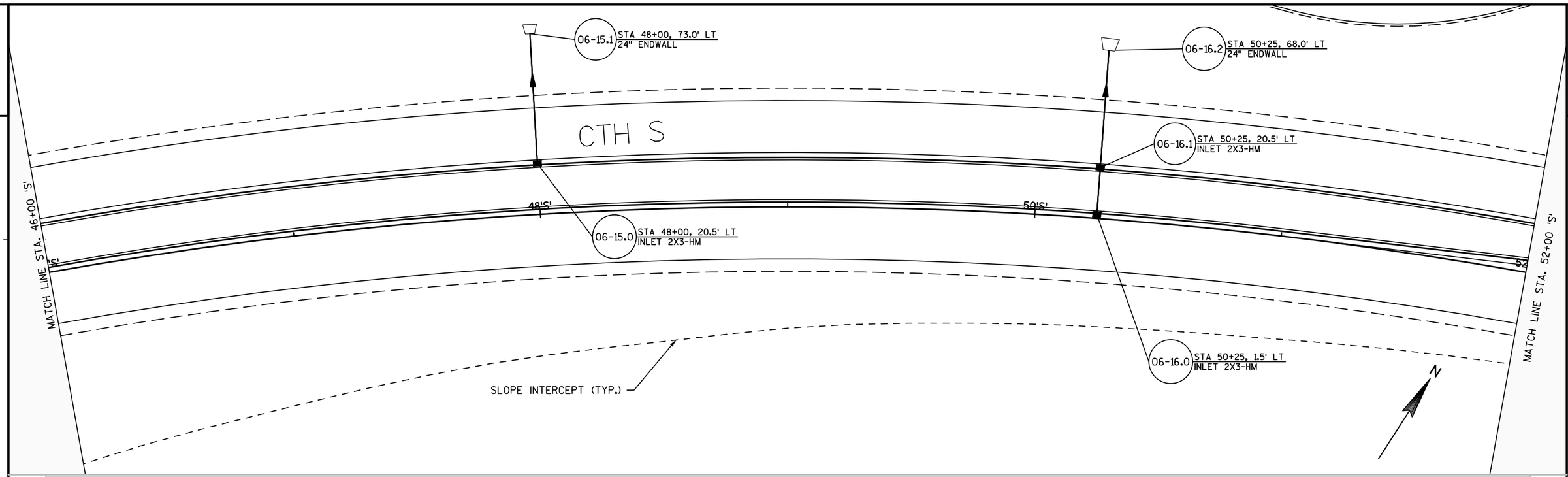
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	STORM SEWER	SHEET	E

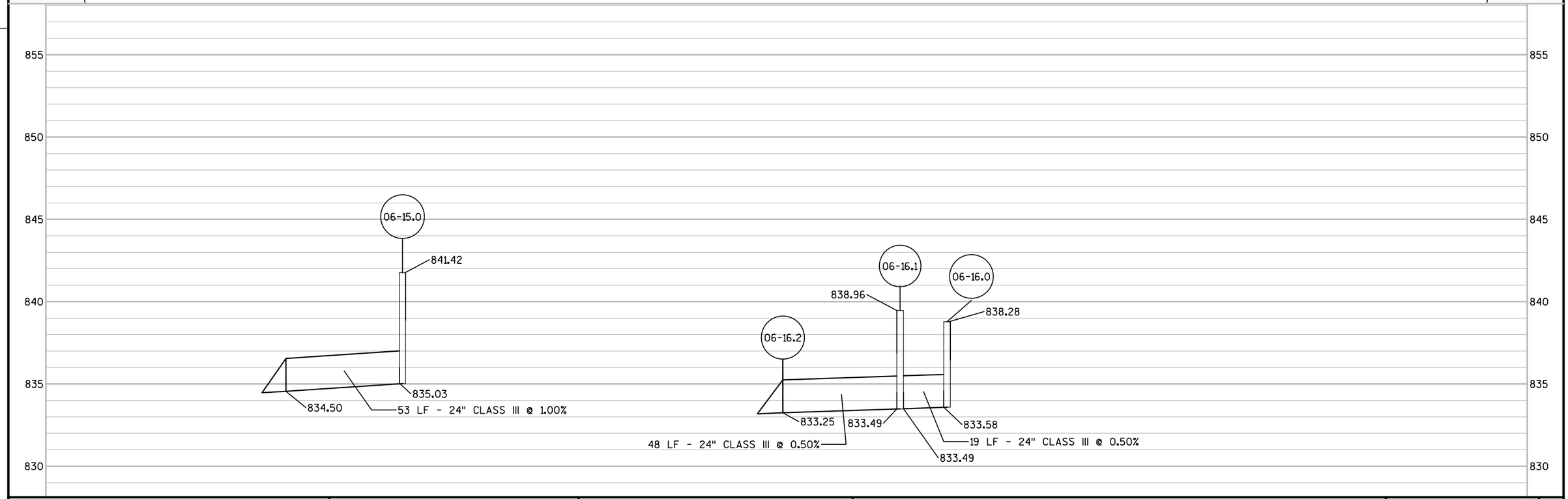
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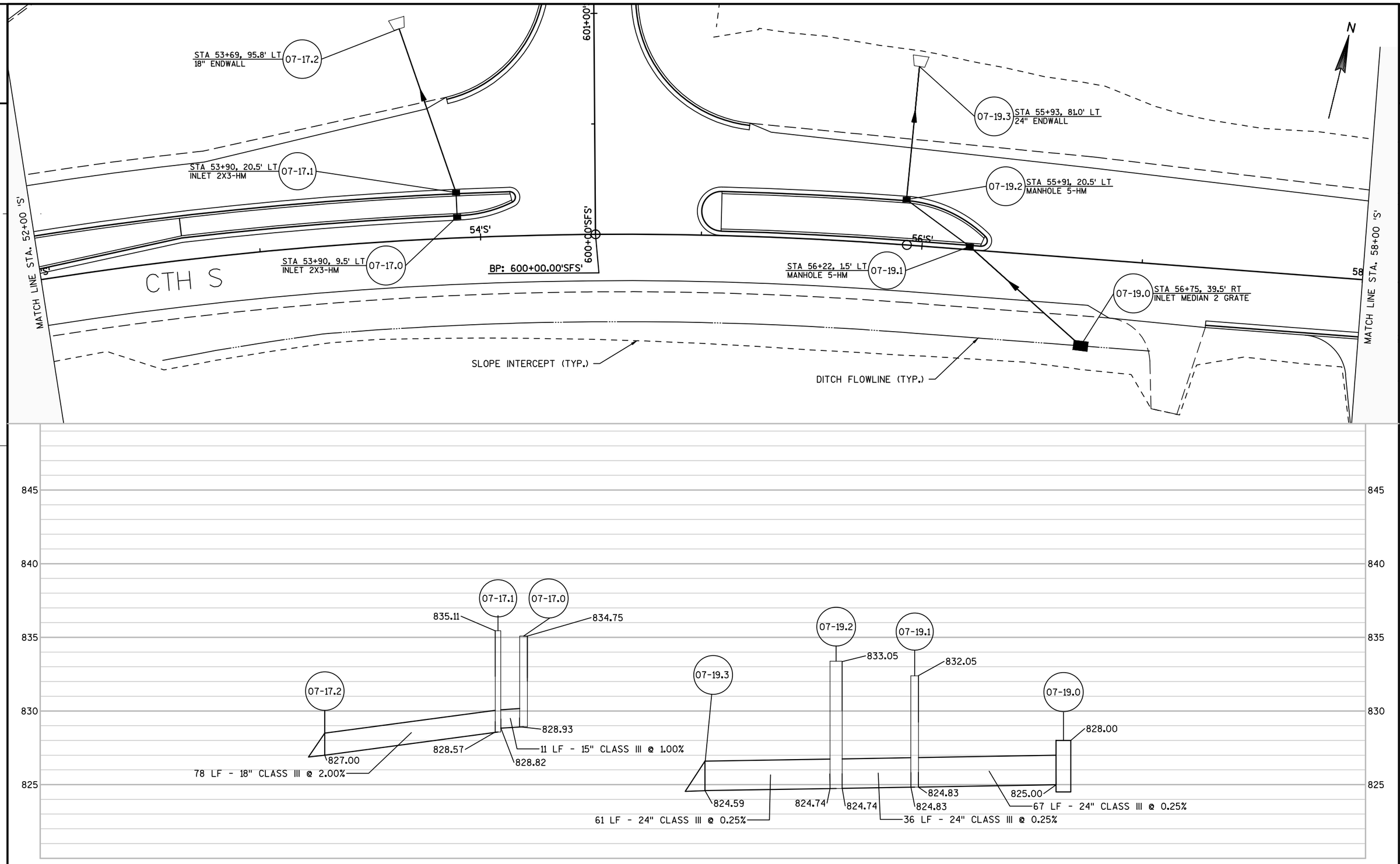
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	STORM SEWER	SHEET 89	E





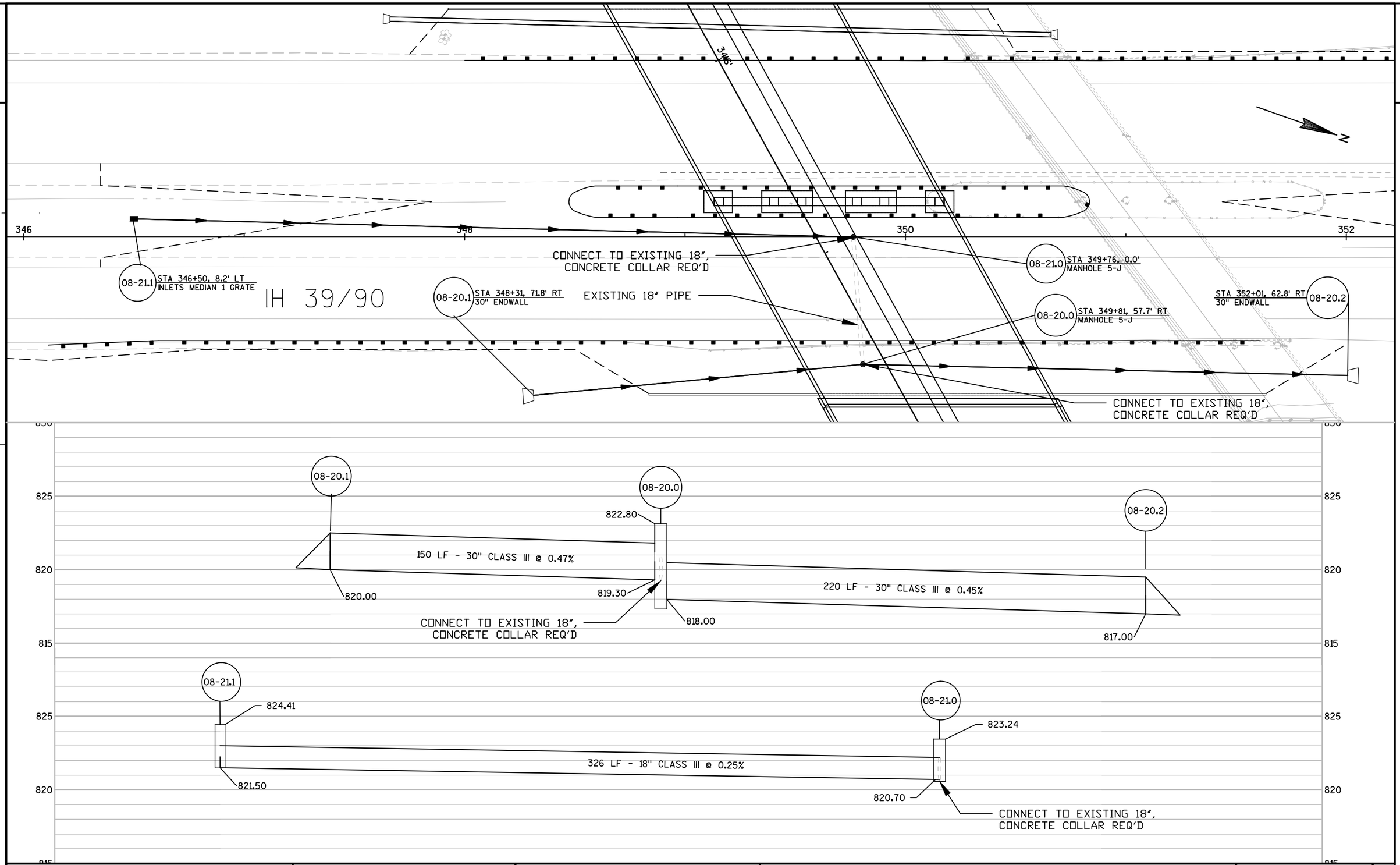
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	STORM SEWER	SHEET	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\DESIGN\EDGELINES\BA_0301_SS.DWG PLOT DATE : 10/16/2014 10:52 AM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:40_XREF



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	STORM SEWER	SHEET	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\DESIGN\EDGELINES\BA_0301_SS.DWG PLOT DATE : 10/16/2014 10:52 AM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 41



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	STORM SEWER	SHEET	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\DESIGN\EDGELINES\BA_0301_SS.DWG PLOT DATE : 12/16/2014 11:07 AM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 41

2

2

P/L

P/L

P/L

R/W

R/W

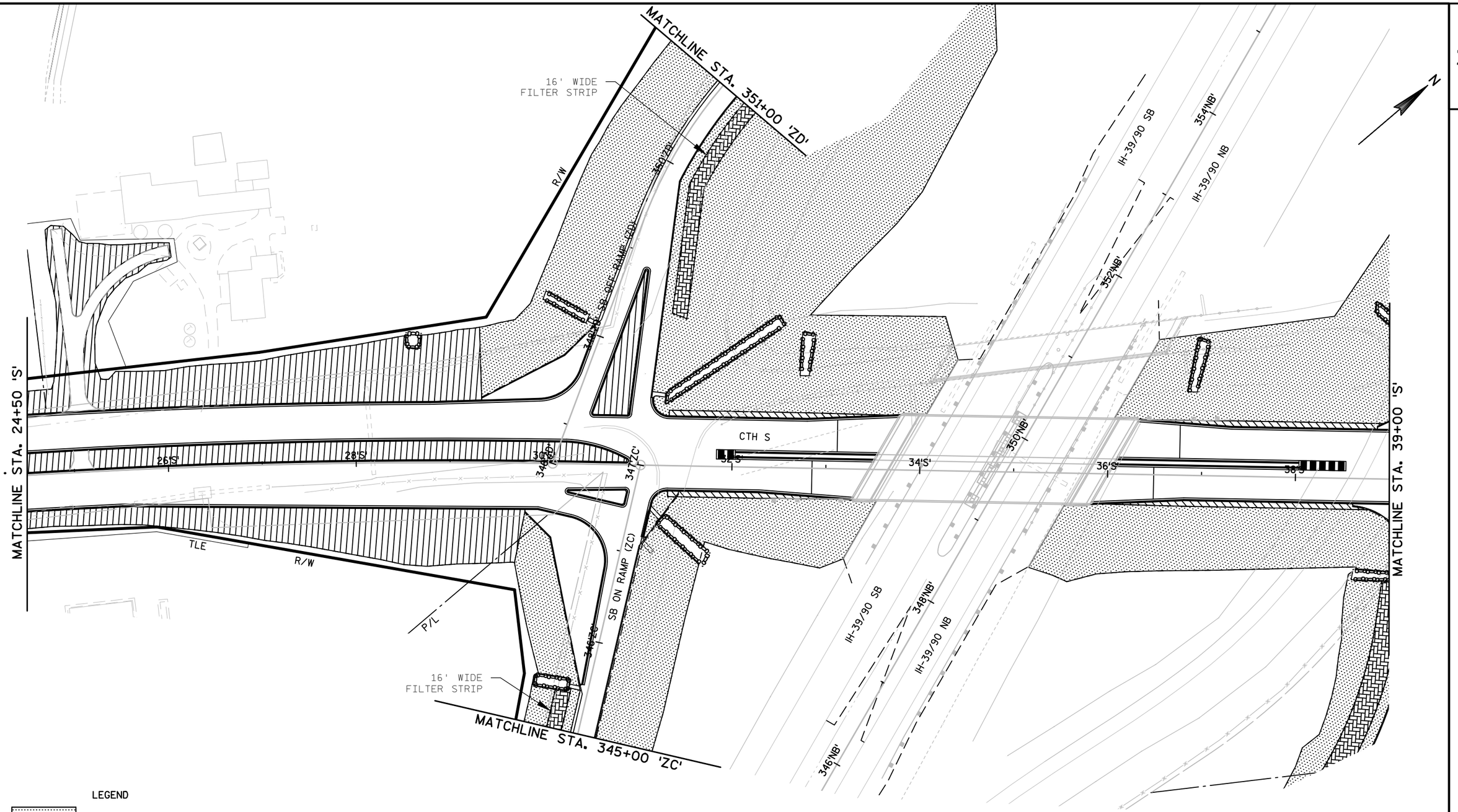
R/W

R/W

TLE

TLE

TLE

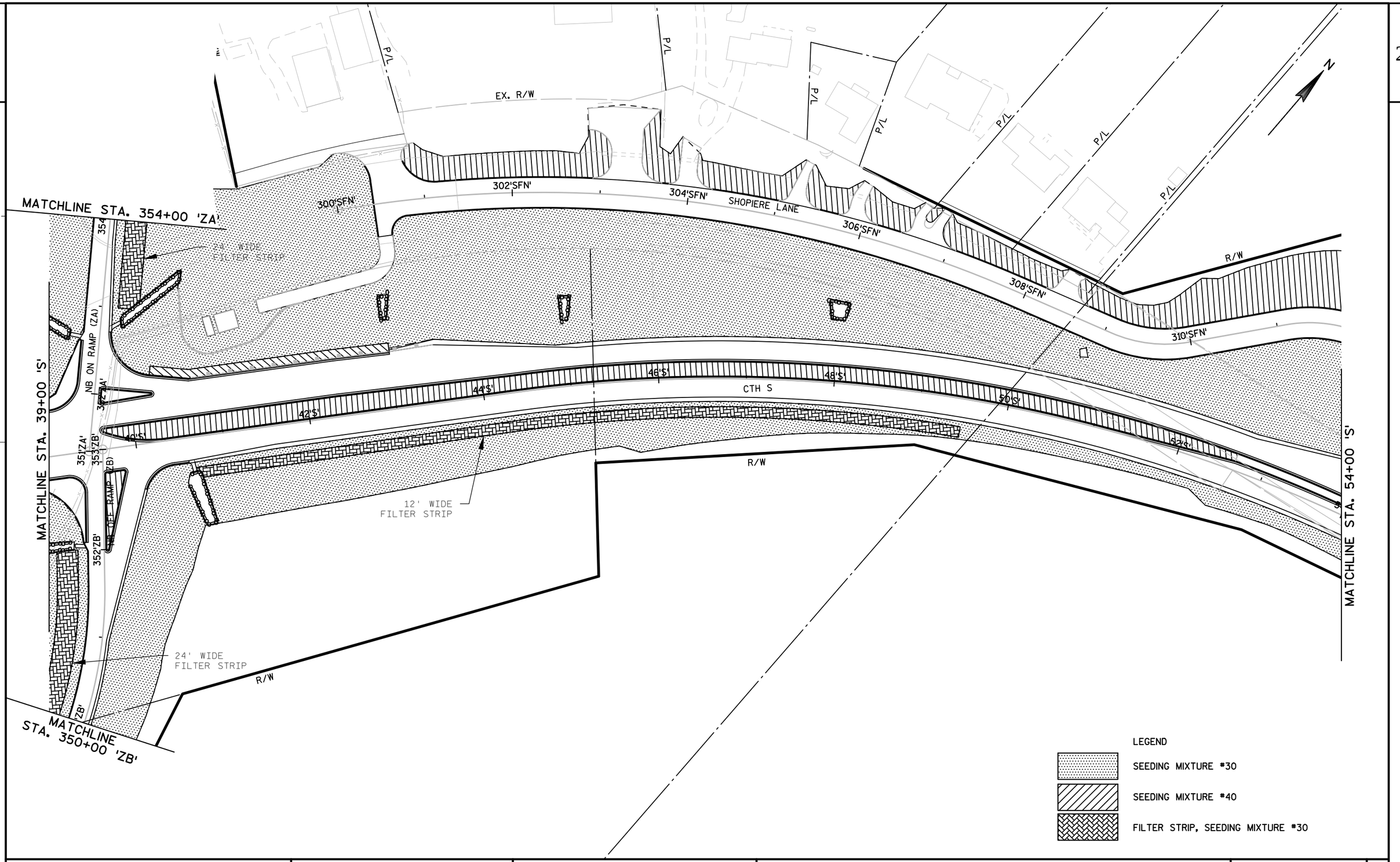


LEGEND

- SEEDING MIXTURE *30
- SEEDING MIXTURE *40
- FILTER STRIP, SEEDING MIXTURE *30

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLANTING	SHEET 94	E

2



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLANTING	SHEET 95	E

2

N

MATCHLINE STA. 54+00 'S'

314'SFN' 314'SFN'

R/W

56'S'

58'S'

CTH S

60'S'

62'S'

63'S'

P/L

R/W

TLE

P/L

LEGEND

SEEDING MIXTURE *30

SEEDING MIXTURE *40

FILTER STRIP, SEEDING MIXTURE *30

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLANTING	SHEET	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_023101_PL.DWG PLOT DATE : 12/18/2014 8:01 AM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:100

2

N

MATCHLINE STA. 206+00 'SBS'

P/L

P/L

TLE

TLE

402

404

404

R/W

TLE

800'SBE'

802'SBE'

804'SBE'

806'SBE'

808'SBE'

208'SBS'

208'SBS'

EP: 404+31.05

TERRAPIN TRAIL

R/W

MATCHLINE STA.345+00 'ZC'

16' WIDE
FILTER STRIP

R/W

344'ZC'

343'ZCT'

342'ZC'

342'ZCT'

R/W

340'ZC'

340'ZCT'

SB ON RAMP (ZC)

344'NB'

EX. R/W

338'ZC'

338'ZCT'

340'NB'

LEGEND

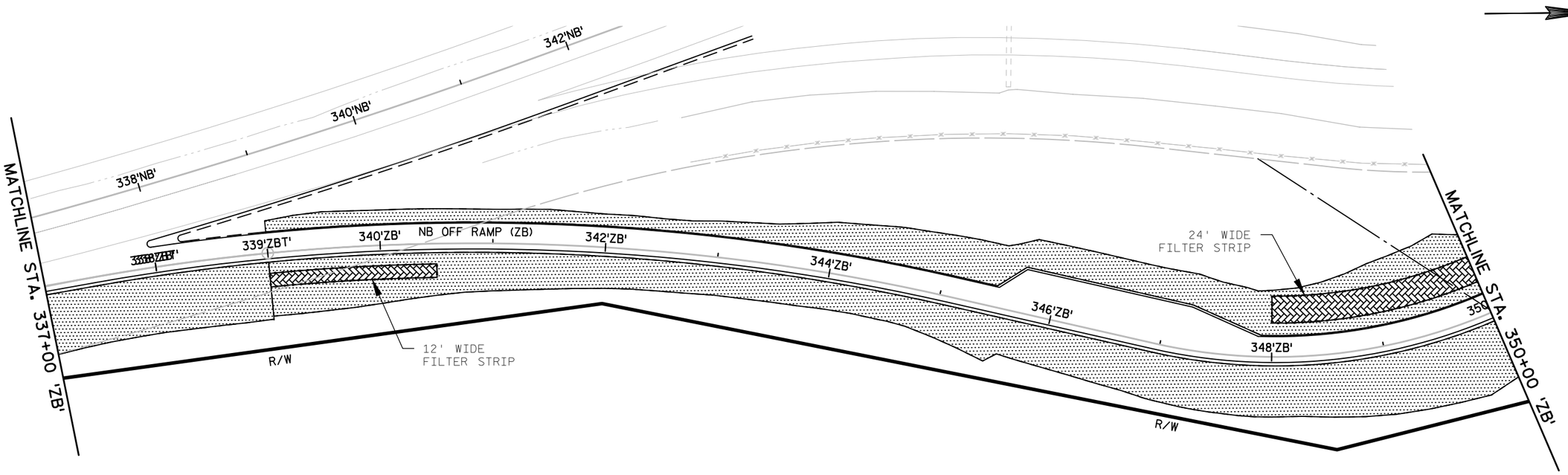
SEEDING MIXTURE *30

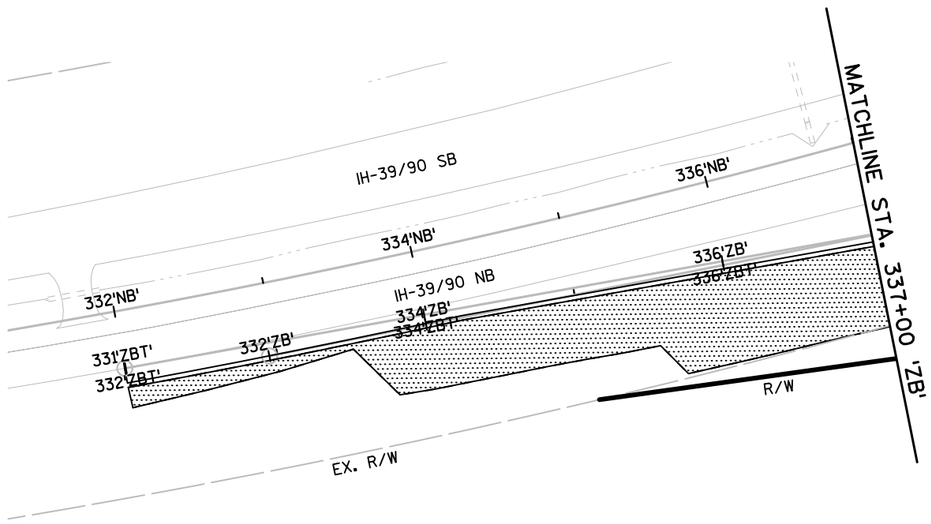
SEEDING MIXTURE *40

FILTER STRIP, SEEDING MIXTURE *30

PROJECT NO:1003-10-71	HWY: IH 39	COUNTY: ROCK	PLANTING	SHEET 97	E

2





LEGEND

SEEDING MIXTURE *30

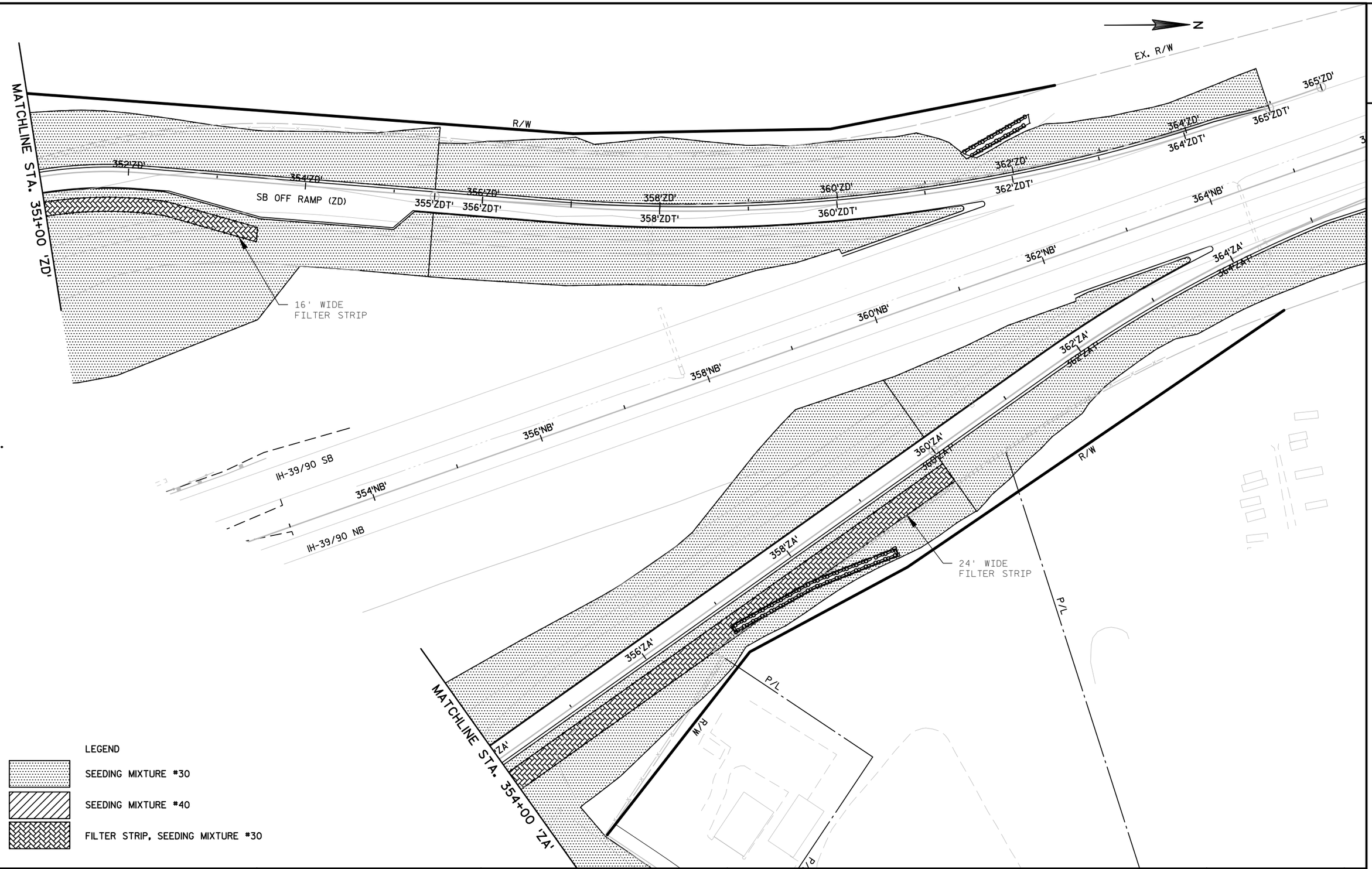
SEEDING MIXTURE *40

FILTER STRIP, SEEDING MIXTURE *30

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLANTING	SHEET	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_023101_PL.DWG PLOT DATE : 12/18/2014 8:02 AM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:100.0002

WISDOT/CADDS SHEET 42



PROJECT NO:1003-10-71	HWY: IH 39	COUNTY:	PLANTING	SHEET 99	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_023101_PL.DWG PLOT DATE : 12/18/2014 8:03 AM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

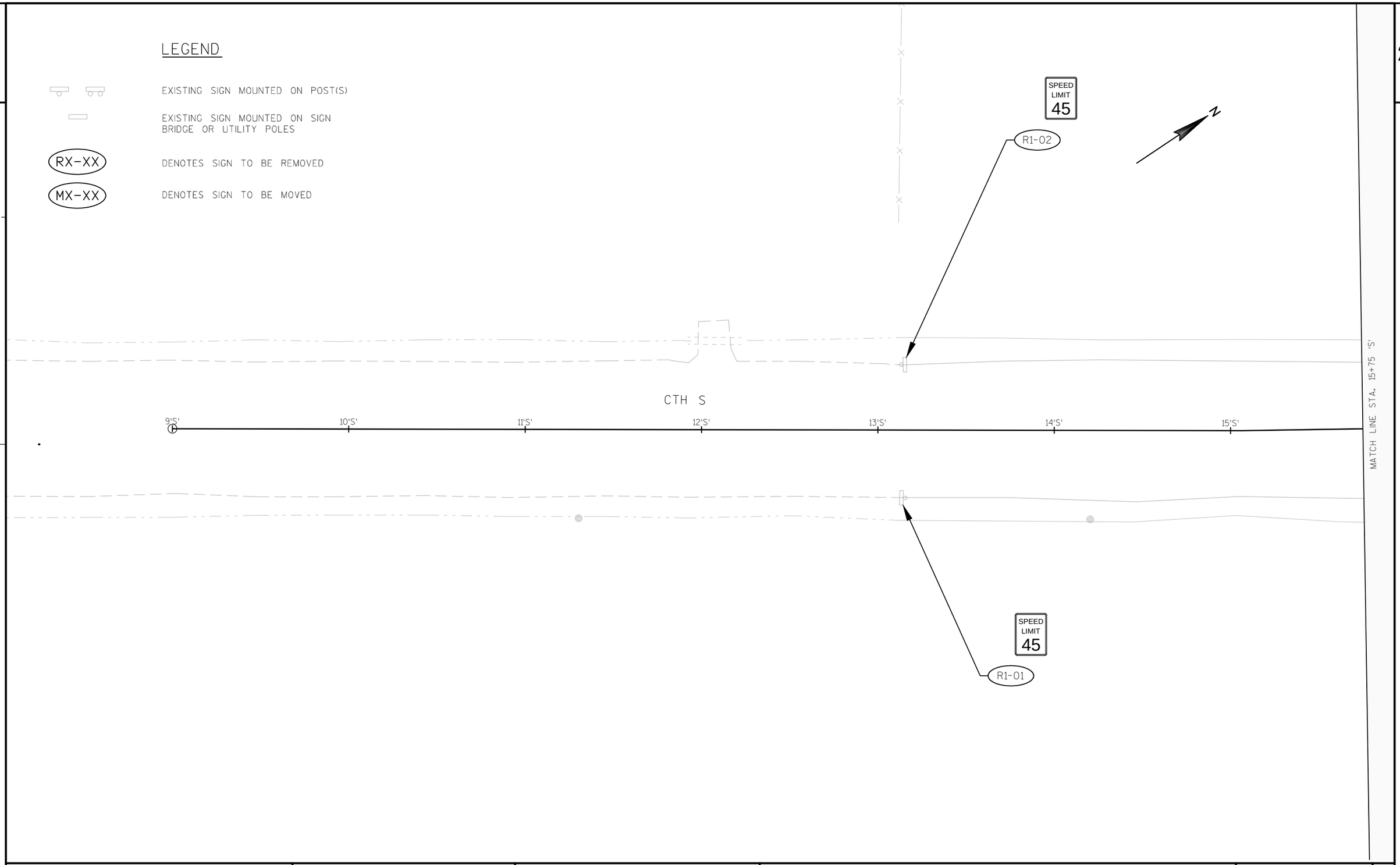
LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON SIGN BRIDGE OR UTILITY POLES

RX-XX DENOTES SIGN TO BE REMOVED

MX-XX DENOTES SIGN TO BE MOVED



2

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	SIGN REMOVALS: CTH S	SHEET 100	E

2

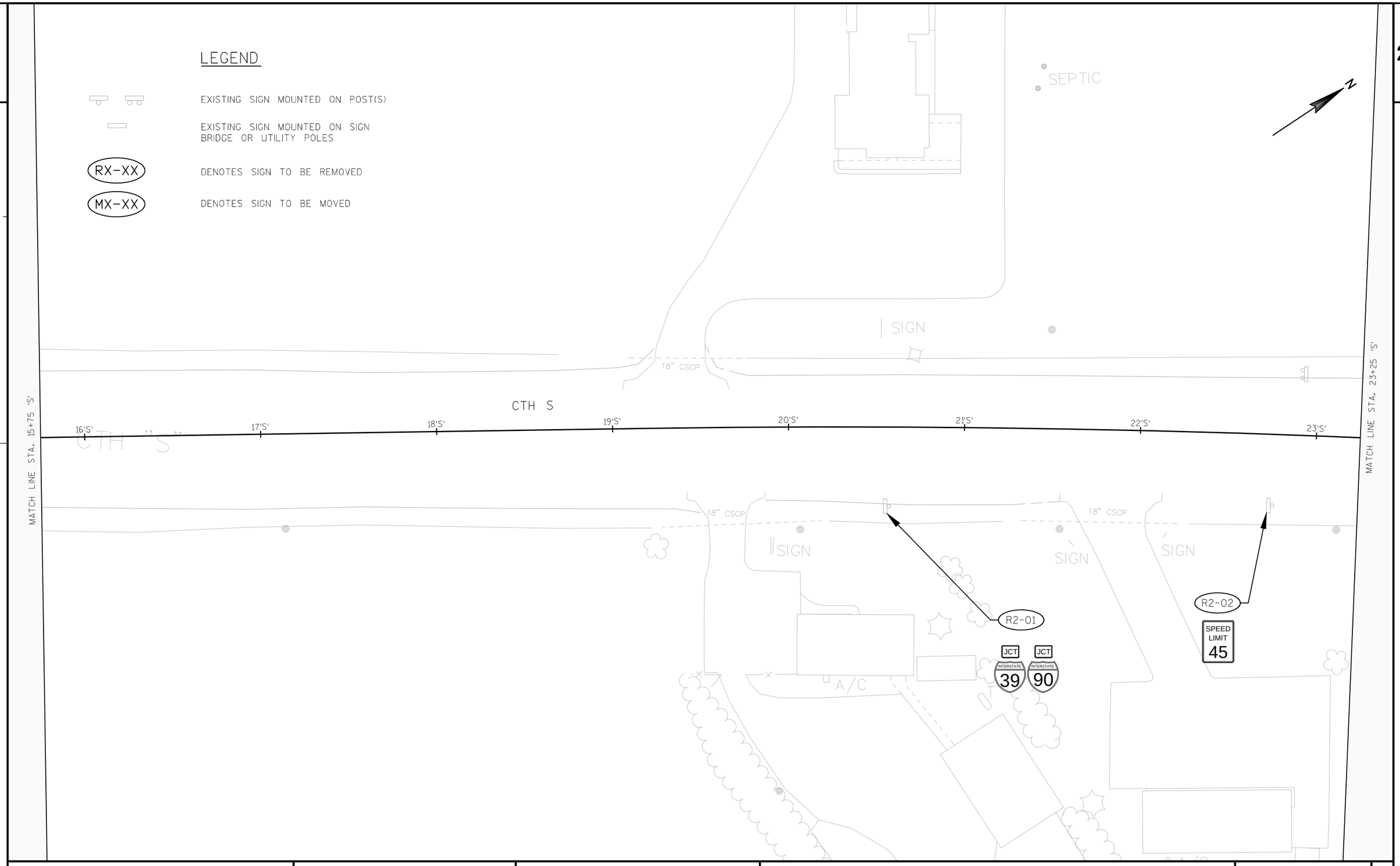
LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON SIGN BRIDGE OR UTILITY POLES

RX-XX — DENOTES SIGN TO BE REMOVED

MX-XX — DENOTES SIGN TO BE MOVED



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	SIGN REMOVALS: CTH S	SHEET 101	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_023201_SR.DWG PLOT DATE : 10/27/2014 9:02 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:50_XREF

2

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON SIGN BRIDGE OR UTILITY POLES

RX-XX DENOTES SIGN TO BE REMOVED

MX-XX DENOTES SIGN TO BE MOVED

RUINS

CTH S

MATCH LINE STA. 23+25 'S'

MATCH LINE STA. 30+75 'S'

24'S' 25'S' 26'S' 27'S' 28'S' 29'S' 30'S'

18" CSCP

24" RCCP

SPEED LIMIT 45

R3-05

R3-06

SOUTH INTERSTATE 39 EAST INTERSTATE 90

N

348'ZD'

347'ZD'

346'ZD'

SIGN

CANOPY

FILLER CAPS

SEPTIC

R3-01

R3-02

R3-04

NORTH INTERSTATE 39 WEST INTERSTATE 90 SOUTH INTERSTATE 39 EAST INTERSTATE 90

Shopiere
Madison
Rockford

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	SIGN REMOVALS: CTH S	SHEET 102	E

2

STOP
R4-01

RAMP 'ZD'

DO NOT ENTER
R4-03

R4-04

SOUTH INTERSTATE 39 EAST INTERSTATE 90

R4-05

R4-06

CTH S

SIGN

R4-08
Madison

R4-07

349'ZD'

347'ZC'

32'S'

33'S'

34'S'

35'S'

36'S'

37'S'

38'S'

MATCH LINE STA. 30+75 'S'

MATCH LINE STA. 38+25 'S'

352'NB'

351'NB'

350'NB'

349'NB'

348'NB'

347'NB'

I-39/90 SB

I-39/90 NB

24" CSCP

20" CSCP

18" CPCW

W

INL

R4-10

Rockford
R4-11

CTH "S"

R4-09

N

R4-02
PEDESTRIANS
BICYCLES
NON-MOTORIZED TRAFFIC
MOTOR BICYCLES
PROHIBITED

RAMP 'ZC'

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON SIGN BRIDGE OR UTILITY POLES

RX-XX DENOTES SIGN TO BE REMOVED

MX-XX DENOTES SIGN TO BE MOVED

M4-12
WEIGH STATION 2 MILES

WRONG WAY
R4-15

WRONG WAY
R4-13

SIGN

SIGN

RAMP 'ZB'

R4-14

Beloit
Shopiere

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	SIGN REMOVALS: CTH S	SHEET 103	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_023201_SR.DWG PLOT DATE : 10/27/2014 9:04 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:50_XREF

WISDOT/CADDS SHEET 42

2

RAMP 'ZA'

RAMP 'ZB'

354'ZA'

353'ZA'

352'ZA'

353'ZB'

352'ZB'

CTH S

24" CSCP

18" CSCP

SIGN

T

W W W W

R5-01

R5-02

R5-03

R5-04

R5-05

R5-06

R5-07

R5-08

R5-09

R5-10

STOP

DO NOT ENTER

WEIGHT LIMIT CLASS B

COUNTY S

Beloit
Rockford
Madison

SPEED LIMIT 45

NORTH WEST INTERSTATE 39 90

SOUTH EAST NORTH WEST INTERSTATE 39 90 39 90

H

39'S' 40'S' 41'S' 42'S' 43'S' 44'S' 45'S'

MATCH LINE STA. 38+25 'S'

MATCH LINE STA. 45+75 'S'

N

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON SIGN BRIDGE OR UTILITY POLES

RX-XX DENOTES SIGN TO BE REMOVED

MX-XX DENOTES SIGN TO BE MOVED

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	SIGN REMOVALS: CTH S	SHEET 104	E

2

2

18" CSCP

12" CSCP

W

CTH S

R6-01

JCT INTERSTATE 39

JCT INTERSTATE 90

SPEED LIMIT 45

R6-03

N

46'S'

47'S'

48'S'

49'S'

50'S'

51'S'

52'S'

53'S'

R6-02

SPEED LIMIT 45

MATCH LINE STA. 45+75 'S'

MATCH LINE STA. 53+25 'S'

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON SIGN BRIDGE OR UTILITY POLES

RX-XX DENOTES SIGN TO BE REMOVED

MX-XX DENOTES SIGN TO BE MOVED

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	SIGN REMOVALS: CTH S	SHEET 105	E

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON SIGN BRIDGE OR UTILITY POLES

RX-XX DENOTES SIGN TO BE REMOVED

MX-XX DENOTES SIGN TO BE MOVED

I-39/90 NB

I-39/90 SB

RAMP 'ZD'

RAMP 'ZA'

357'NB' 358'NB' 359'NB' 360'NB' 361'NB'

361'ZD' 361'ZDT'

MILE 183

I 39/90

M7-02

R7-03

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED

R7-01

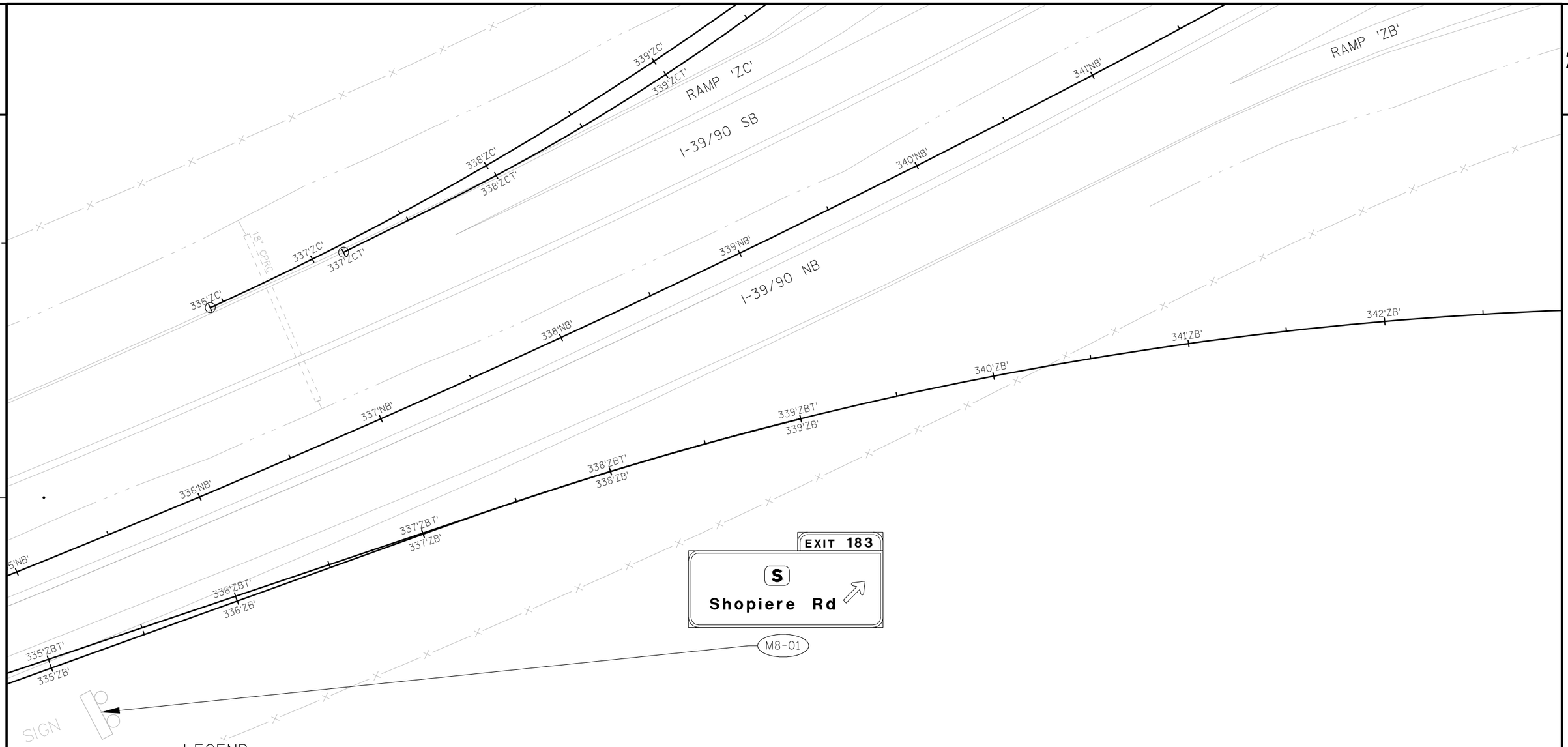
355'ZA' 356'ZA' 357'ZA' 358'ZA' 359'ZA' 360'ZA' 360'ZAT' 361'ZA' 361'ZAT' 362'ZA' 362'ZAT'

SIGN

SEPTIC

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	SIGN REMOVALS: NB ON-RAMP 'ZA'	SHEET 106	E

2



LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON SIGN BRIDGE OR UTILITY POLES

RX-XX — DENOTES SIGN TO BE REMOVED

MX-XX — DENOTES SIGN TO BE MOVED

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	SIGN REMOVALS: NB OFF-RAMP 'ZB'	SHEET 107	E

2

IH-39/90 SB

IH-39/90 NB

343'NB'

344'NB'

345'NB'

343'ZB'

344'ZB'

345'ZB'

346'ZB'

347'ZB'

348'ZB'

349'ZB'

350'ZB'

RAMP 'ZB'

24" dSOP

SIGN

SIGN

R9-01

ALTERNATE
INTERSTATE
43

R9-02

EXIT
183

R9-03

R9-04

SOUTH
COUNTY
S

NORTH
COUNTY
S

N

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON SIGN BRIDGE OR UTILITY POLES

RX-XX — DENOTES SIGN TO BE REMOVED

MX-XX — DENOTES SIGN TO BE MOVED

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	SIGN REMOVALS: NB OFF-RAMP 'ZB'	SHEET 108	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_023201_SR.DWG PLOT DATE : 10/27/2014 9:06 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:50_XREF

2

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON SIGN BRIDGE OR UTILITY POLES

RX-XX — DENOTES SIGN TO BE REMOVED

MX-XX — DENOTES SIGN TO BE MOVED

N

295'

SIGN

SIGN

340'ZC'

340'ZCT'

341'ZC'

341'ZCT'

342'ZC'

342'ZCT'

343'ZC'

343'ZCT'

344'ZC'

345'ZC'

346'ZC'

347'ZC'

RAMP 'ZC'

341'NB'

342'NB'

343'NB'

344'NB'

IH-39/90 SB

IH-39/90 NB

RAMP 'ZB'

I 39/90

M10-01

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	SIGN REMOVALS: SB ON-RAMP 'ZC'	SHEET 109	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_023201_SR.DWG PLOT DATE : 10/27/2014 9:07 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:50_XREF

2

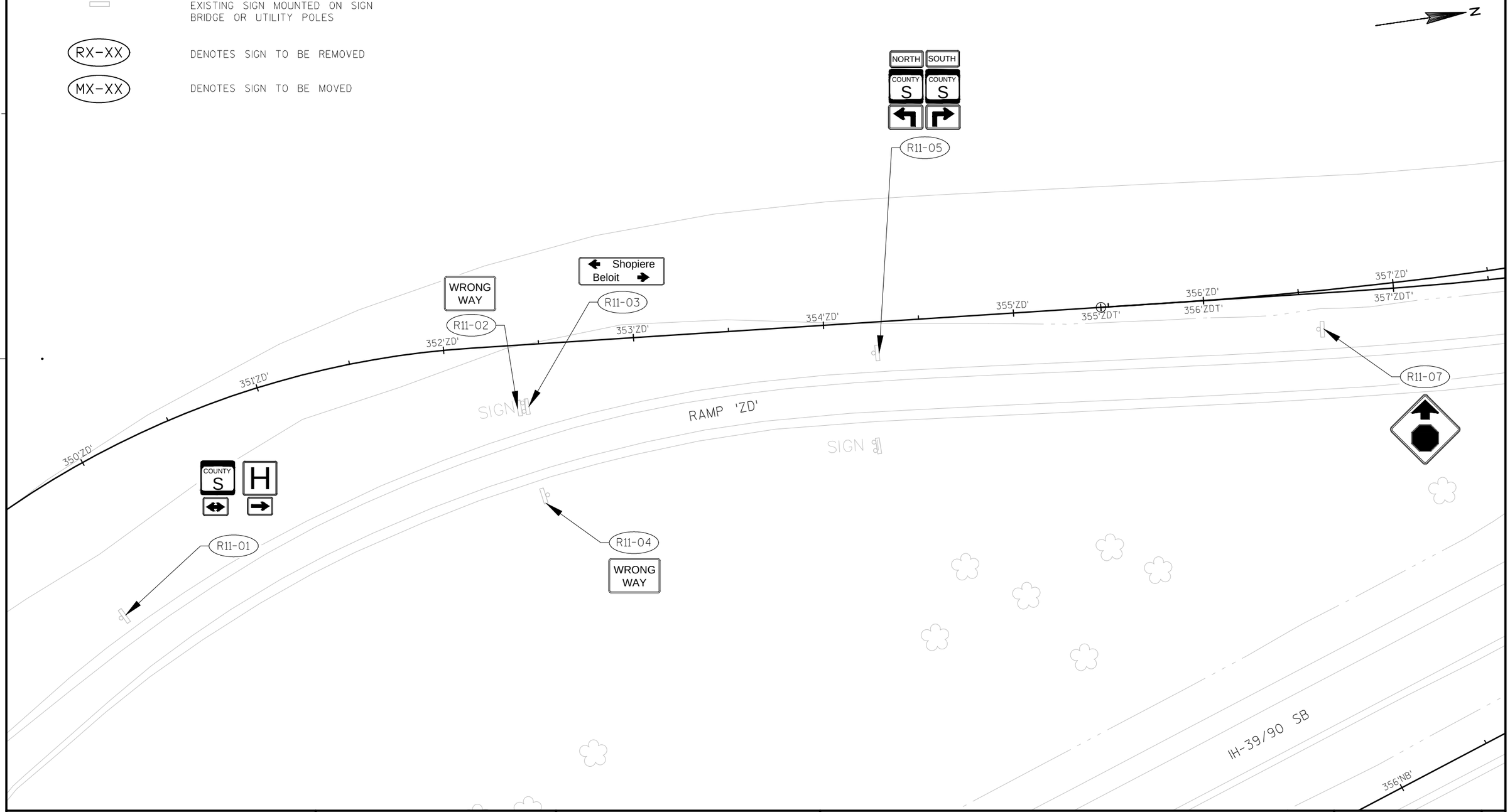
LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON SIGN BRIDGE OR UTILITY POLES

RX-XX DENOTES SIGN TO BE REMOVED

MX-XX DENOTES SIGN TO BE MOVED



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	SIGN REMOVALS: SB OFF-RAMP 'ZD'	SHEET 110	E

2

2

N

359'ZD'
360'ZD'
361'ZD'
362'ZD'
363'ZD'
364'ZD'
365'ZD'
359'ZDT'
360'ZDT'
361'ZDT'
362'ZDT'
363'ZDT'
364'ZDT'
365'ZDT'
359'NB'
360'NB'
361'NB'
362'NB'
363'NB'
364'NB'
365'NB'
366'NB'
362'ZA'
363'ZA'
363'ZAT'
364'ZA'
364'ZAT'
365'ZA'
365'ZAT'

EXIT
183

MILE
1
8
3

R12-01

RAMP 'ZD'

IH-39/90 SB

IH-39/90 NB

RAMP 'ZA'

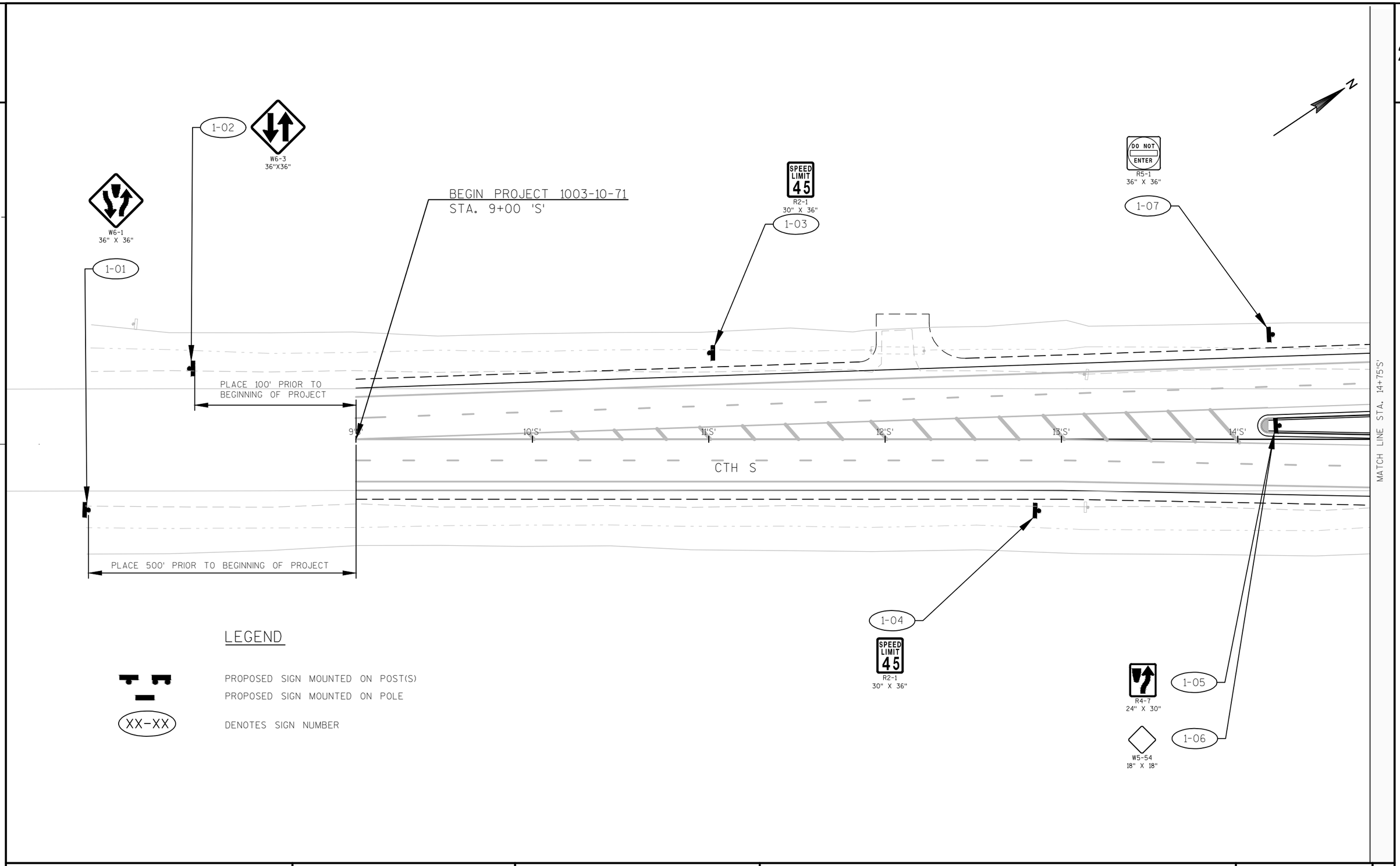
SIGN

SIGN

CPRC

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	SIGN REMOVALS: SB OFF-RAMP 'ZD'	SHEET 111	E

2



LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POLE

XX-XX — DENOTES SIGN NUMBER

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PERMANENT SIGNING: CTH S	SHEET 112	E

2

N

ONE WAY
R6-1R
36" X 12"
2-15

STOP
R1-1
30" x 30"
2-16

DIVIDED HIGHWAY
R6-3
30" x 24"
2-17

ONE WAY
R6-1L
36" X 12"
2-18

W6-2
36"X36"
2-19

WRONG WAY
R5-1A
42" x 30"
2-20

102'SBN'

101'SBN'

TORTOISE LANE

2-14

DEAD END
W14-1
30" X 30"

2-13

DO NOT ENTER
R5-1
36" x 36"

WRONG WAY
R5-1A
42" x 30"
2-12

15'S'

16'S'

17'S'

18'S'

100'SBN'

200'SBS'

19'S'

20'S'

21'S'

22

CTH S

2-04

2-05

R4-7
24" X 30"

2-01

JCT JCT
INTERSTATE 39 INTERSTATE 90
J1-2
48" x 39"

2-02

WRONG WAY
R5-1A
42" x 30"

2-03

DO NOT ENTER
R5-1
36" x 36"

2-06

ONE WAY
R6-1L
36" X 12"

TERRAPIN TRAIL

201'SBS'

202'SBS'

2-07

ONE WAY
R6-1R
36" X 12"

2-08

STOP
R1-1
30" x 30"

2-09

DIVIDED HIGHWAY
R6-3
30" x 24"

2-10

NORTH WEST SOUTH EAST
INTERSTATE 39 INTERSTATE 90 INTERSTATE 39 INTERSTATE 90
USE LEFT LANE | USE LEFT LANE | USE RIGHT LANE | USE RIGHT LANE
J2-4
96" X 57"

2-11

WRONG WAY
R5-1A
42" x 30"

LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POLE

XX-XX

DENOTES SIGN NUMBER

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PERMANENT SIGNING: CTH S	SHEET 113	E

FILE NAME :J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_023201_PS.DWG PLOT DATE : 12/18/2014 8:09 AM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:50_XREF

WISDOT/CADDS SHEET 42

2

2

LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POLE

XX-XX DENOTES SIGN NUMBER

COVER PERMANENT SIGN UNTIL ALTERNATE ROUTE IS OPERATIONAL

MATCH LINE STA. 22+00'S'

MATCH LINE STA. 29+25'S'

CTH S

23'S' 24'S' 25'S' 26'S' 27'S' 28'S' 29'S'

3-01 Rockford D1-1 66" X 15"

3-02 DO NOT ENTER R5-1 36" X 36"

3-03 Shopiere Madison D1-2 66" X 24"

3-04 ONE WAY R6-2L 36" X 48"

3-05 RIGHT LANE MUST TURN RIGHT R3-7R 30" X 30"

3-06 SOUTH EAST 39 90 J3-2 48" X 57"

3-07 RAMP CLOSED ~~USE~~ ALT ROUTE R11-54-F 48"X30"

3-08 WRONG WAY R5-1A 42" X 30"

3-09

3-10 ALTERNATE 39 COUNTY S J4-2 48" X 36"

3-11 SPEED LIMIT 45 R2-1 30" X 36"

3-12 WRONG WAY R5-1A 42" X 30"

3-13 H D9-2 24" X 24"

3-14 M6-1 21" X 21"

3-15 DO NOT ENTER R5-1 36" X 36"

CANOPY

FILLER CAPS

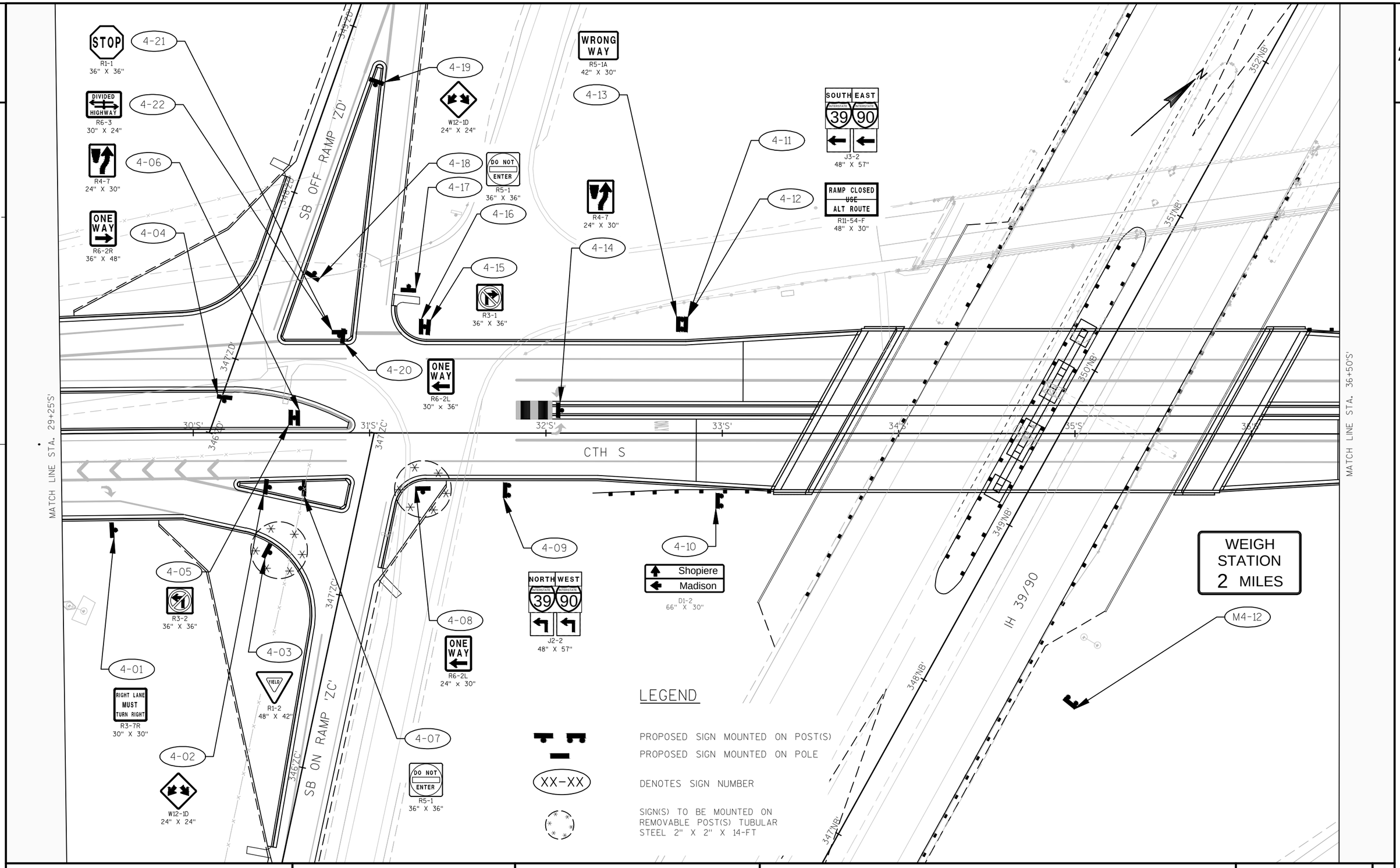
CANOPY

400'±LC'

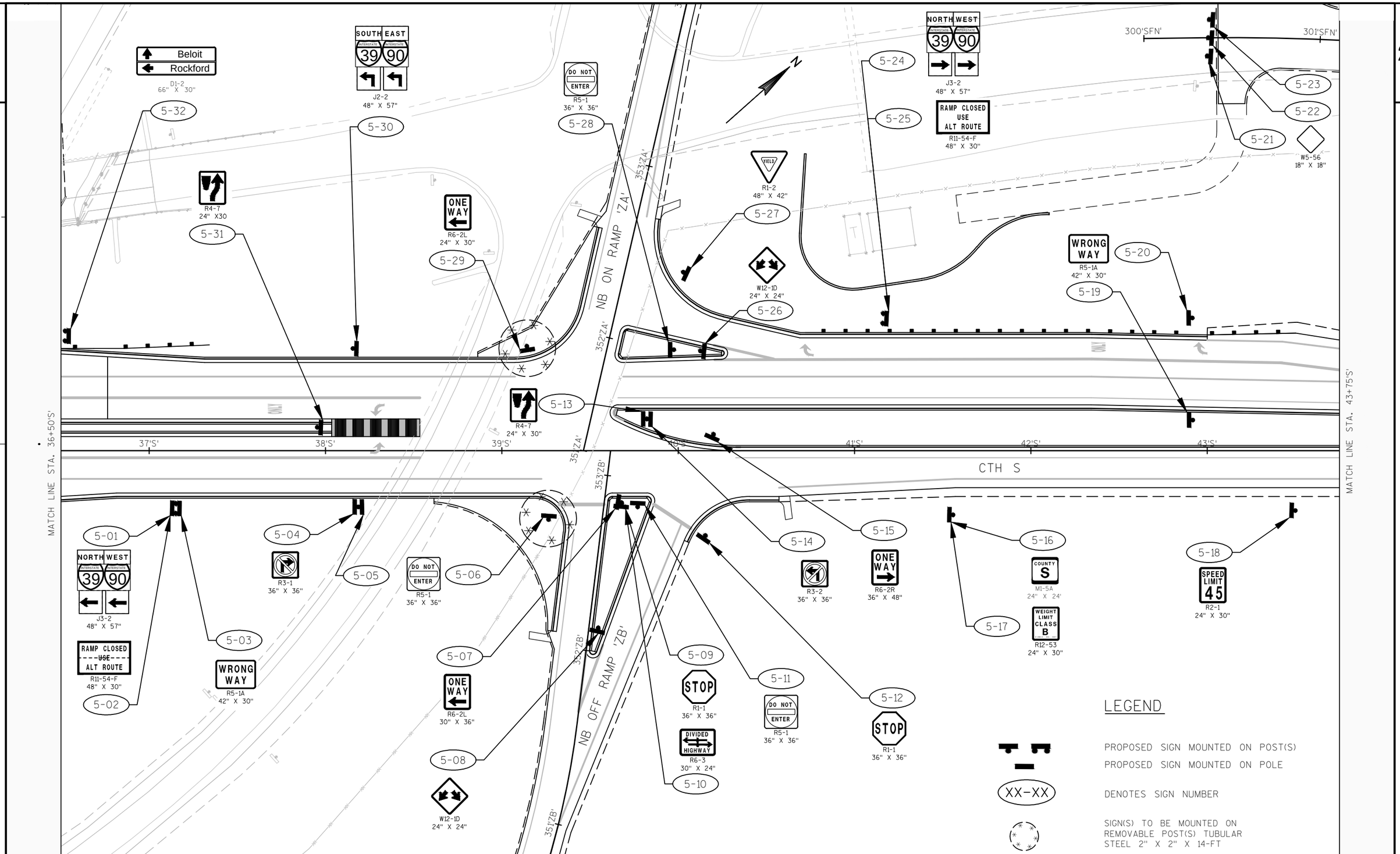
401'±LC'

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PERMANENT SIGNING: CTH S	SHEET 114 E

2



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PERMANENT SIGNING: CTH S	SHEET 115	E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PERMANENT SIGNING: CTH S	SHEET E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_023201_PS.DWG PLOT DATE : 10/27/2014 10:44 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:50_XREF
WISDOT/CADDS SHEET 42

2

302'SFN' 303'SFN' 304'SFN' 305'SFN' 306'SFN' 307'SFN' 308'SFN' 309'SFN'

SHOPIERE LANE

N

SOUTH EAST NORTH WEST
39 90 39 90
J2-4
96" X 57"

6-02

JCT JCT
39 90
J1-2
48" X 39"

6-03

CTH S

44'S' 45'S' 46'S' 47'S' 48'S' 49'S' 50'S'

MATCH LINE STA. 43+75'S'

MATCH LINE STA. 51+00'S'

6-01

Beloit
Rockford
Madison
D1-3
66" X 36"

LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POLE

XX-XX DENOTES SIGN NUMBER

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PERMANENT SIGNING: CTH S	SHEET 117	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_023201_PS.DWG PLOT DATE : 10/27/2014 10:44 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:50_XREF

WISDOT/CADDS SHEET 42

2

SHOPIERE LANE

CTH S

312'SFN'
313'SFN'
314'SFN'
311'SFN'
310'SFN'
601'SFS'
600'SFS'
53'S'
54'S'
55'S'
56'S'
57'S'
58'S'
MATCH LINE STA. 51+00'S'
MATCH LINE STA. 58+25'S'

7-01 — WRONG WAY, R5-1A, 42" X 30"

7-02 — W6-2, 36"X36"

7-03 — DO NOT ENTER, R5-1, 36" X 36"

7-04 — R4-7, 24" X 30"

7-05 — ONE WAY, R6-2L, 36" X 48"

7-06 — R4-7, 24" X 30"; DO NOT ENTER, R5-1, 36" X 36"

7-07

7-08 — R4-7, 24" X 30"

7-09 — W5-54, 18" X 18"

7-10 — WRONG WAY, R5-1A, 42" X 30"

7-11 — DO NOT ENTER, R5-1, 36" X 36"

7-12 — NO OUTLET, W14-2, 30" X 30"

7-13 — W5-56, 18"X18"

7-14 — W1-6, 36" X 18"

7-15 — W5-56, 18"X18"

7-16 — W5-56, 18"X18"

7-17 — W1-6, 36" X 18"

7-18 — ONE WAY, R6-1R, 36" X 12"

7-19 — STOP, R1-1, 30" X 30"

7-20 — DIVIDED HIGHWAY, R6-3, 30" X 24"

7-21 — SPEED LIMIT 25, R2-1, 24" X 30"

7-22 — W3-1, 30" X 30"

N

LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POLE

XX-XX — DENOTES SIGN NUMBER

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PERMANENT SIGNING: CTH S	SHEET 118	E

2

2

N

END PROJECT 1003-10-71
STA. 63+75 'S'

W6-1
36" X 36"

8-02

PLACE 325' FROM END OF PROJECT

MATCH LINE STA. 58+25'S'

59'S'

60'S'

61'S'

62'S'

63'S'

64'S'

PLACE 100' FROM
END OF PROJECT

8-01

W6-3
36"X36"

LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POLE

XX-XX

DENOTES SIGN NUMBER

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PERMANENT SIGNING: CTH S	SHEET 119	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_023201_PS.DWG PLOT DATE : 10/27/2014 10:45 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:50_XREF
WISDOT/CADDS SHEET 42

2

2

IH 39/90

358'NB'

359'NB'

360'NB'

N

M7-02

NB ON RAMP 'ZA'

353'ZA' 354'ZA' 355'ZA' 356'ZA' 357'ZA' 358'ZA' 359'ZA' 360'ZA'

9-01

PEDESTRIANS
BICYCLES
NON MOTORIZED TRAFFIC
MOTOR BICYCLES
PROHIBITED

R5-57
36" X 36"

LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POLE

XX-XX DENOTES SIGN NUMBER

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PERMANENT SIGNING: NB ON RAMP 'ZA'	SHEET 120	E

2

328'NB'
329'NB'
330'NB'
331'NB'
332'NB'
333'NB'
334'NB'
335'NB'
IH 39/90
332'ZBT'
333'ZBT'
333'ZB'
334'ZBT'
334'ZB'
335'ZBT'
335'ZB'
NB OFF RAMP 'ZB'
MATCHLINE STA. 335+50 'ZB'
N

10-02

ALTERNATE INTERSTATE 39

J2-1
36" X 84"

PLACE SIGN 10-02 ALONG
SIDE EXISTING "EXIT 183
1 MILE AHEAD" SIGN.

M8-01

EXIT 183
S
Shopiere Rd

10-01

ALTERNATE INTERSTATE 43 | ALTERNATE INTERSTATE 39

J3-2
48" X 57"

10-03

CRASH
INVESTIGATION
SITE
EXIT 183

D4-52
156" X 126"

PLACE SIGN 10-03
APPROXIMATELY ¼ MILE
PRIOR TO EXISTING "EXIT 183
1 MILE AHEAD" SIGN.

LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POLE

XX-XX — DENOTES SIGN NUMBER

COVER PERMANENT SIGN UNTIL
ALTERNATE ROUTE IS OPERATIONAL

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PERMANENT SIGNING: NB OFF RAMP 'ZB'	SHEET 121	E

2

2

N

SB ON RAMP 'ZC'

IH 39/90

NB OFF RAMP 'ZB'

336'ZC'
337'ZC'
337'ZCT'
338'ZC'
338'ZCT'
339'ZC'
339'ZCT'
340'ZCT'

18" CPRC

336'NB'
337'NB'
338'NB'
339'NB'
340'NB'
341'NB'
342'NB'
343'NB'

336'ZBT'
336'ZB'
337'ZBT'
337'ZB'
338'ZBT'
338'ZB'
339'ZBT'
339'ZB'
340'ZB'
341'ZB'
342'ZB'
343'ZB'

MATCHLINE STA. 335+50 'ZB'

MATCHLINE STA. 343+25 'ZB'

11-01

EXIT
183

E5-1A
72" X 60"

11-02

W3-1
36" X 36"

LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POLE

XX-XX DENOTES SIGN NUMBER

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PERMANENT SIGNING: NB OFF RAMP 'ZB'	SHEET 122	E

2

N

59/90

MATCHLINE STA. 343+25 'ZB'

NB OFF RAMP 'ZB'

344'ZB' 345'ZB' 346'ZB' 347'ZB' 348'ZB' 349'ZB' 350'ZB' 351'ZB' 352'ZB'

D4-56-L
36" X 36"
12-01

NO PARKING EXCEPT CRASH INVESTIGATION VEHICLES
R8-55
42" X 36"
12-03

WRONG WAY
R5-1A
42" X 30"
12-07

12-06

12-05

ALTERNATE 39 H COUNTY S
J3-3
72" X 57"

12-04

Beloit
Shopiere
D1-2
66" X 30"

12-02

ALTERNATE 39
J2-1
24" X 57"

LEGEND

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

XX-XX DENOTES SIGN NUMBER

COVER PERMANENT SIGN UNTIL ALTERNATE ROUTE IS OPERATIONAL

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PERMANENT SIGNING: NB OFF RAMP 'ZB'	SHEET 123	E

2

2

LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POLE

XX-XX DENOTES SIGN NUMBER

808'SBE'

808'SBE'

N

PEDESTRIANS
BICYCLES
NON MOTORIZED TRAFFIC
MOTOR BICYCLES
PROHIBITED

R5-57
36" X 36"

13-01

339'ZC'

339'ZCT'

340'ZC'

340'ZCT'

341'ZC'

341'ZCT'

342'ZC'

342'ZCT'

343'ZC'

343'ZCT'

344'ZC'

345'ZC'

346'ZC'

SB ON RAMP 'ZC'

339'NB'

340'NB'

341'NB'

342'NB'

343'NB'

344'NB'

345'NB'

IH 39/90

M10-01

339'ZBT'

340'ZB'

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PERMANENT SIGNING: SB ON RAMP 'ZC'	SHEET 124	E

2

N

Beloit
Shopiere
D1-2
66" X 30"

14-04

ALTERNATE
INTERSTATE
39
J2-1
24" X 57"

14-06

COUNTY
S
ALTERNATE
INTERSTATE
39
H
J3-3
72" X 57"

14-03

351'ZD'
352'ZD'
353'ZD'
354'ZD'
355'ZD'
355'ZDT'
356'ZD'
356'ZDT'
357'
SB OFF RAMP 'ZD'
MATCHLINE STA. 357+00 'ZD'

14-07

D4-56-L
36" X 36"

14-02

WRONG WAY
R5-1A
42" X 30"

14-01

14-05

NO PARKING EXCEPT CRASH INVESTIGATION VEHICLES
R8-55
42" X 36"

355'NB'

LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POLE

XX-XX — DENOTES SIGN NUMBER

COVER PERMANENT SIGN UNTIL ALTERNATE ROUTE IS OPERATIONAL

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PERMANENT SIGNING: SB OFF RAMP 'ZD'	SHEET 125	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_023201_PS.DWG PLOT DATE : 10/27/2014 10:47 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:50_XREF

WISDOT/CADDS SHEET 42

2

LEGEND

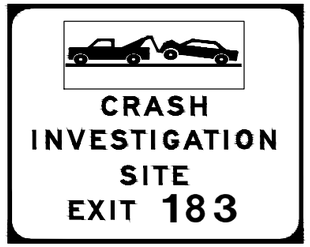
PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POLE

XX-XX DENOTES SIGN NUMBER

COVER PERMANENT SIGN UNTIL ALTERNATE ROUTE IS OPERATIONAL

N



D4-52
156"X126"

15-05

PLACE SIGN 15-05 APPROXIMATELY ¼ MILE BEFORE THE EXISTING "EXIT 183 1 MILE AHEAD SIGN"

15-04



J2-1
36" X 84"

PLACE SIGN 15-04 ALONG SIDE EXISTING "EXIT 183 1 MILE AHEAD" SIGN.



W3-1
36" X 36"

15-01



E5-1A
72"X60"

15-02

15-03



J3-1
36" X 84"

PLACE SIGN 15-03 ALONG SIDE EXISTING "EXIT 183 SHOPIERE ROAD RIGHT" SIGN.

MATCHLINE STA. 357+00 'ZD'

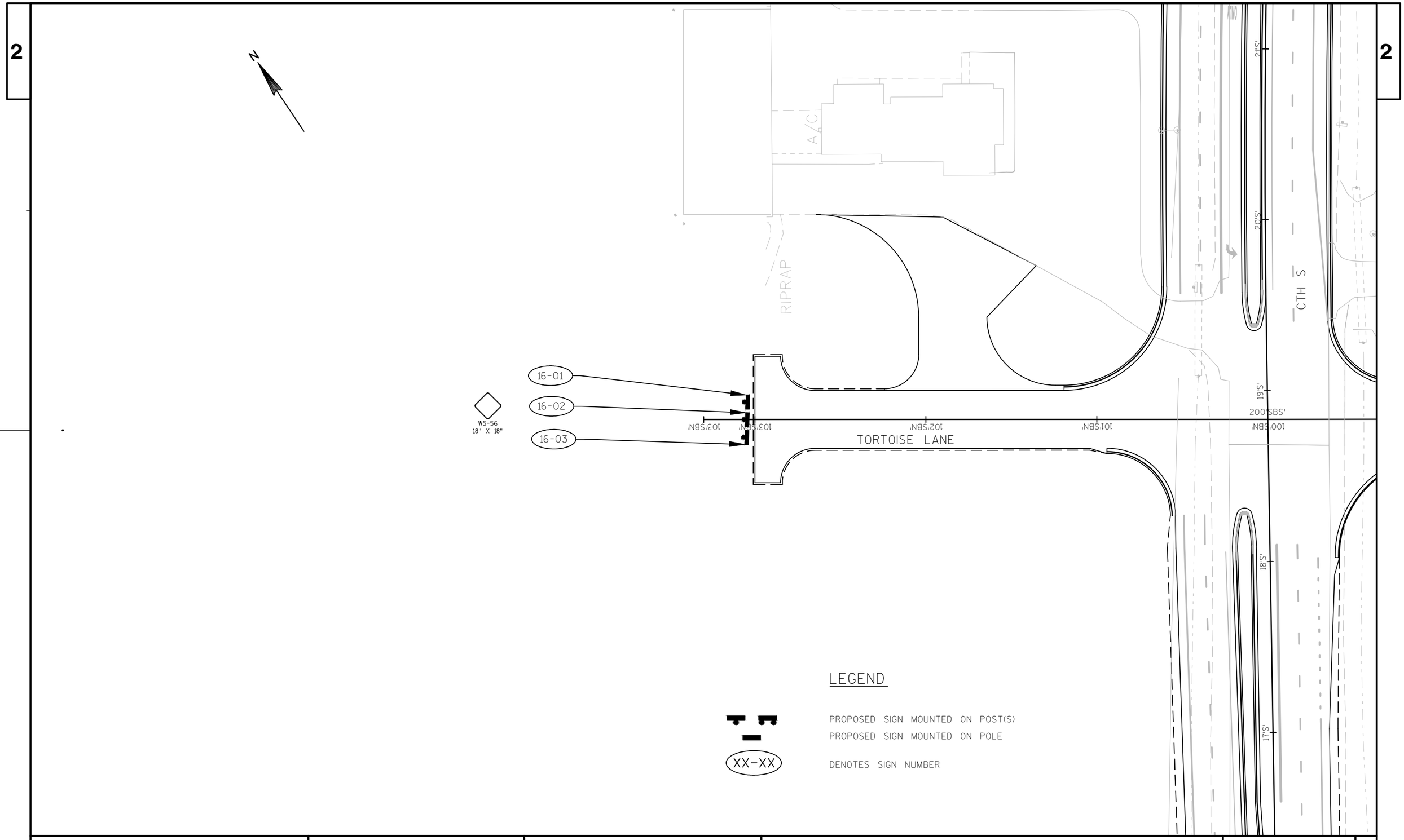
SB OFF RAMP 'ZD'

IH 39/90

NB ON RAMP 'ZA'

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PERMANENT SIGNING: SB OFF RAMP 'ZD'	SHEET 126	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_023201_PS.DWG PLOT DATE : 10/27/2014 10:47 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:50_XREF



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PERMANENT SIGNING: TORTOISE LANE 'SBN'	SHEET 127	E

2

2

CTH S

TERRAPIN TRAIL

201'SBS'
202'SBS'
203'SBS'
204'SBS'
205'SBS'
206'SBS'
207'SBS'
208'SBS'
801'SBE'
802'SBE'
803'SBE'
800'SBE'

N

LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POLE

XX-XX — DENOTES SIGN NUMBER

17-01
NO OUTLET
W14-2
30" X 30"

17-02
SPEED LIMIT 25
R2-1
24" X 30"

SPEED LIMIT 25
R2-1
24" X 30"
17-03

17-04
W5-56
18" X 18"

17-05
W1-6
36" X 18"

17-06
W5-56
18" X 18"

17-07
W5-56
18" X 18"

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PERMANENT SIGNING: TERRAPIN TRAIL 'SBS'	SHEET 128	E

2

2

206'SBS'

207'SBS'

208'SBS'

202'LC'

403'LC'

404'LC'

FILLER CAPS

CANOPY

N

801'SBE' 802'SBE' 803'SBE' 804'SBE' 805'SBE' 806'SBE' 807'SBE' 808'SBE'

TERRAPIN TRAIL

18-03

W5-56
18" X 18"

18-04

W1-6
36" X 18"

18-01

W5-56
18" X 18"

18-02

W5-56
18" X 18"

18-05

18-06

W5-56
18" X 18"

18-07

LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POLE

XX-XX DENOTES SIGN NUMBER

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PERMANENT SIGNING: TERRAPIN TRAIL 'SBE'	SHEET 129	E

2

2

RAMP CLOSURE GATE SUMMARY

G-53-18
1 - CLOSURE GATES HARDWIRED 28-FT
1 - CONCRETE BASES TYPE 5
1 - TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE

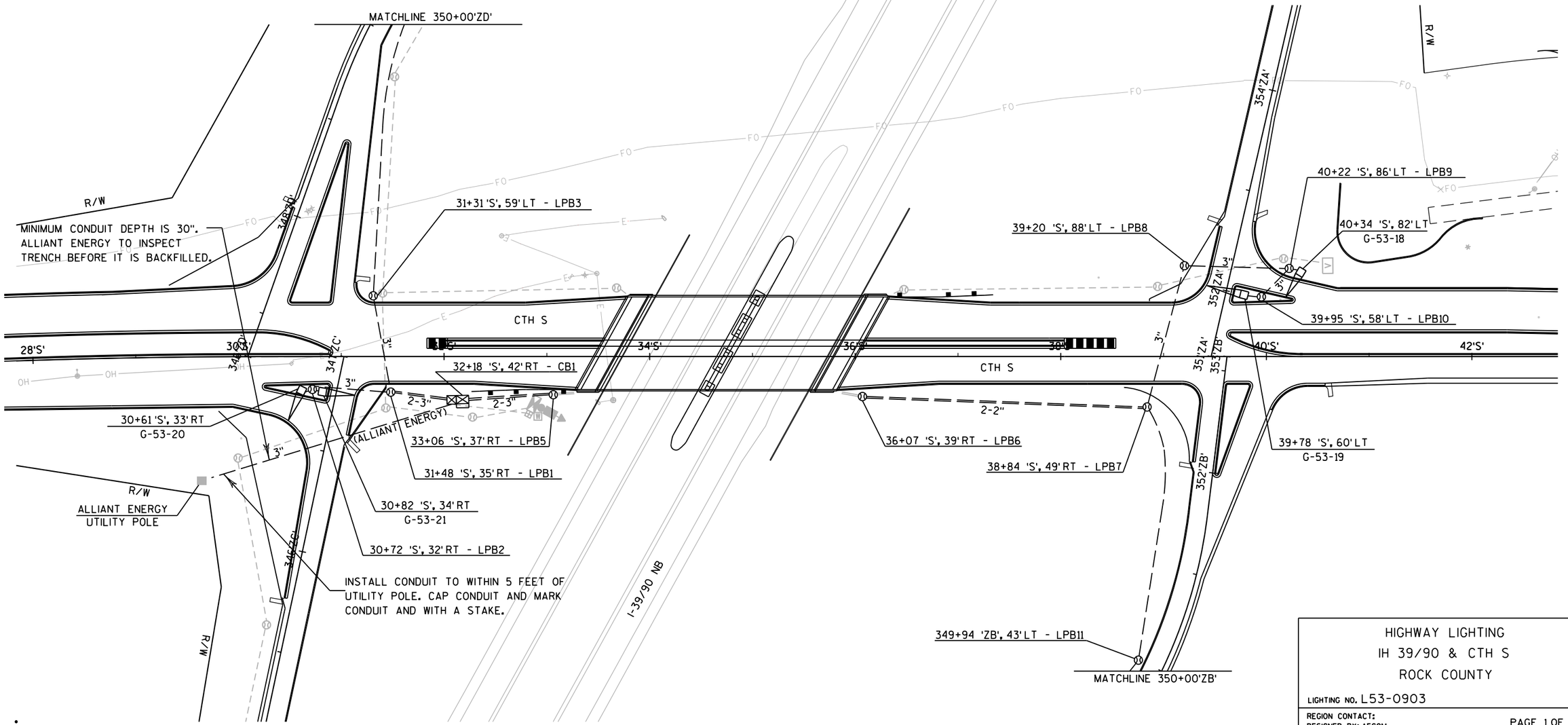
G-53-20
1 - CLOSURE GATES HARDWIRED 32-FT
1 - CONCRETE BASES TYPE 5
1 - TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE

G-53-19
1 - CLOSURE GATES HARDWIRED 37-FT
1 - CONCRETE BASES TYPE 5
1 - TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE

G-53-21
1 - CLOSURE GATES HARDWIRED 32-FT
1 - CONCRETE BASES TYPE 5
1 - TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE

LEGEND
- CONCRETE CONTROL CABINET BASE
- SINGLE ARM LIGHTING UNIT
- PULL BOX (24"X42" STEEL)
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- RAMP CLOSURE GATE
- ELECTRICAL SERVICE METER

NOTE
1. GRAYSHADE REPRESENTS EXISTING ROADWAY, UTILITIES, AND PROPOSED ITS.



HIGHWAY LIGHTING
IH 39/90 & CTH S
ROCK COUNTY

LIGHTING NO. L53-0903

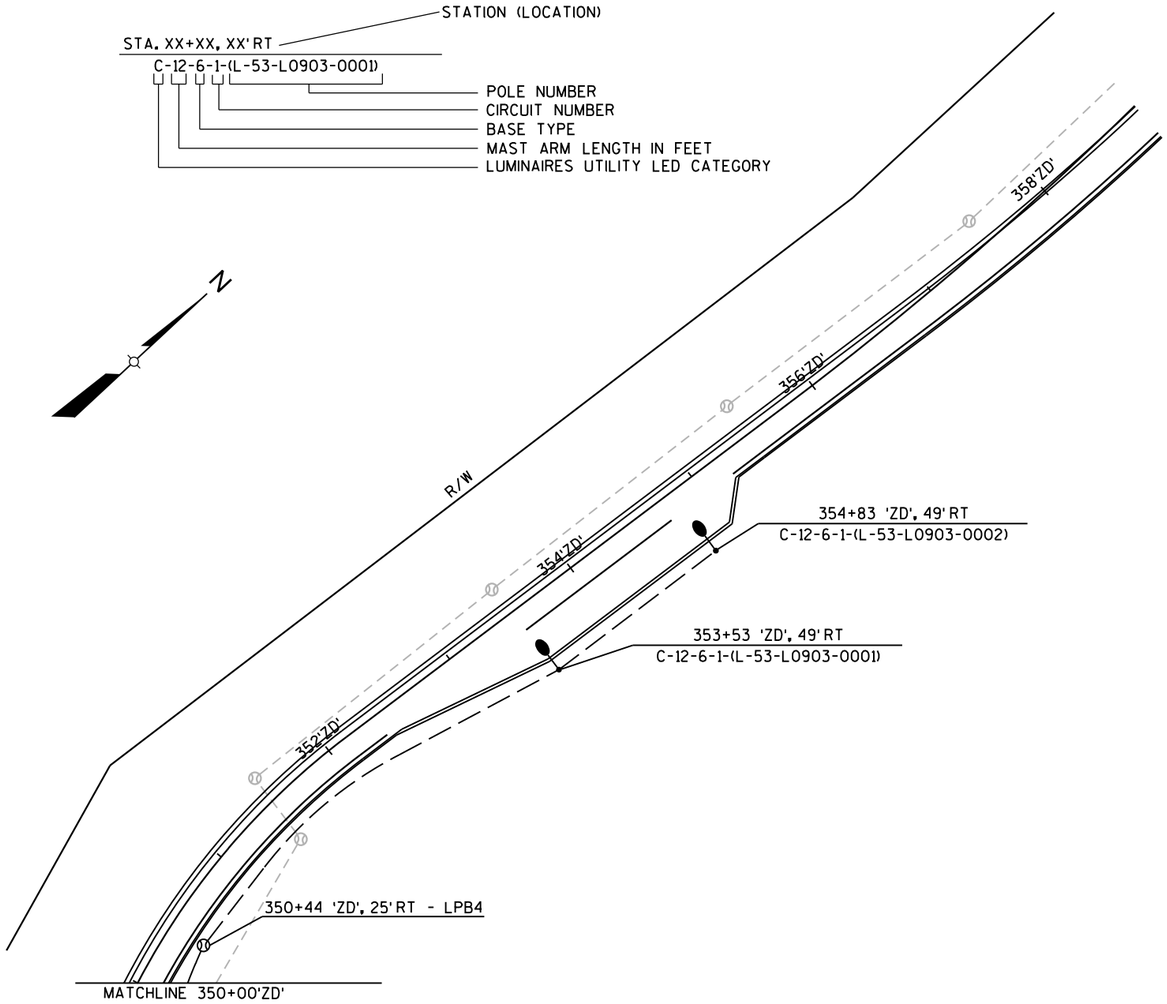
REGION CONTACT:
DESIGNED BY: AECOM

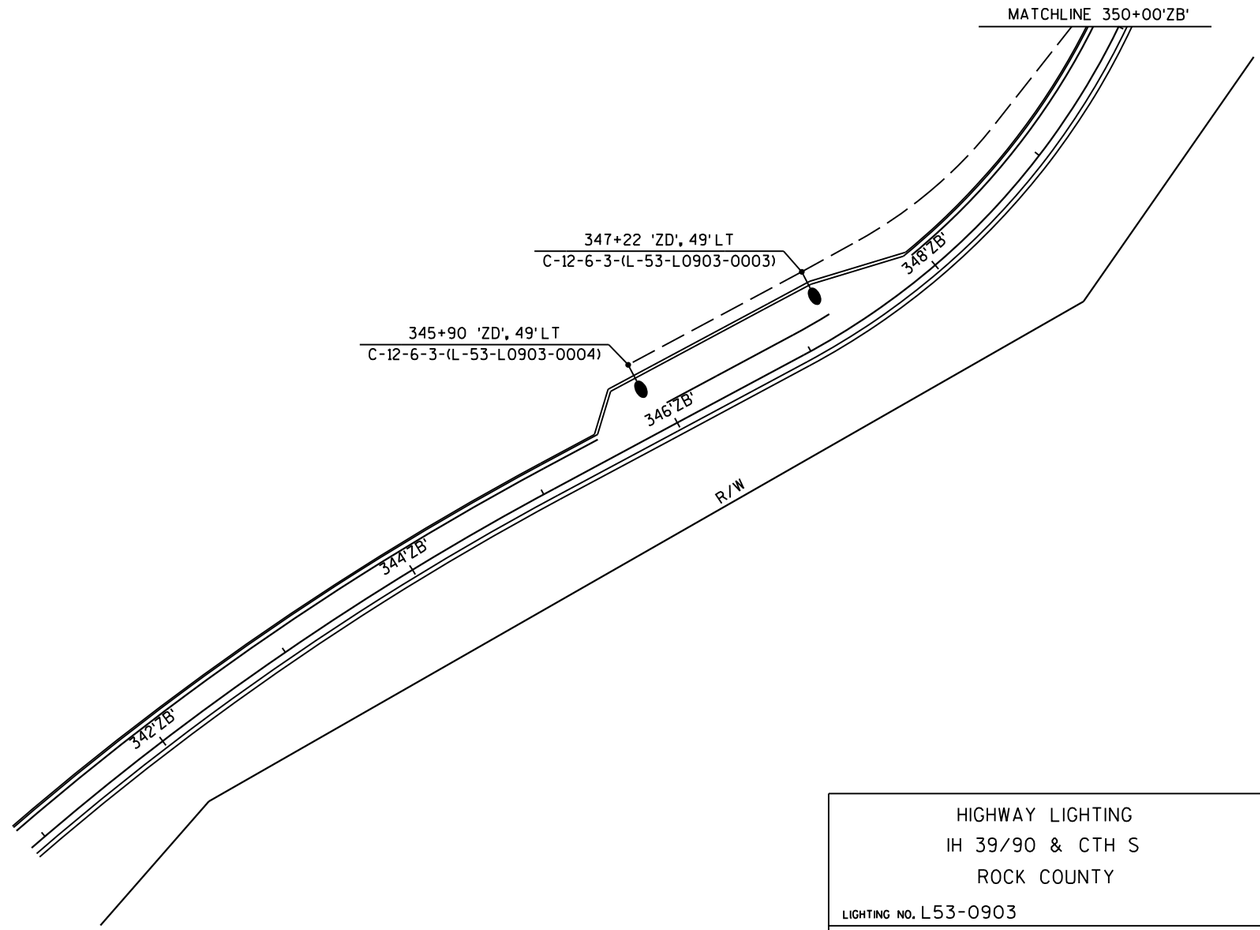
PAGE 1 OF 3

PROJECT NUMBER: 1003-10-71	HWY: IH 39	COUNTY: ROCK	LIGHTING PLAN	SHEET 130	E

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PLOT DATE: 12/16/2014
PLOT TIME: 10:41:51 AM
PLOT SCALE: 1:100
WISDOT/CADDS SHEET 42

2





LEGEND

- CONCRETE CONTROL CABINET BASE
- SINGLE ARM LIGHTING UNIT
- PULL BOX (24"X42" STEEL)
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- RAMP CLOSURE GATE
- ELECTRICAL SERVICE METER

NOTE

1. GRAYSHADE REPRESENTS EXISTING ROADWAY, UTILITIES, AND PROPOSED ITS.

HIGHWAY LIGHTING
IH 39/90 & CTH S
ROCK COUNTY

LIGHTING NO. L53-0903

REGION CONTACT:
DESIGNED BY: AECOM

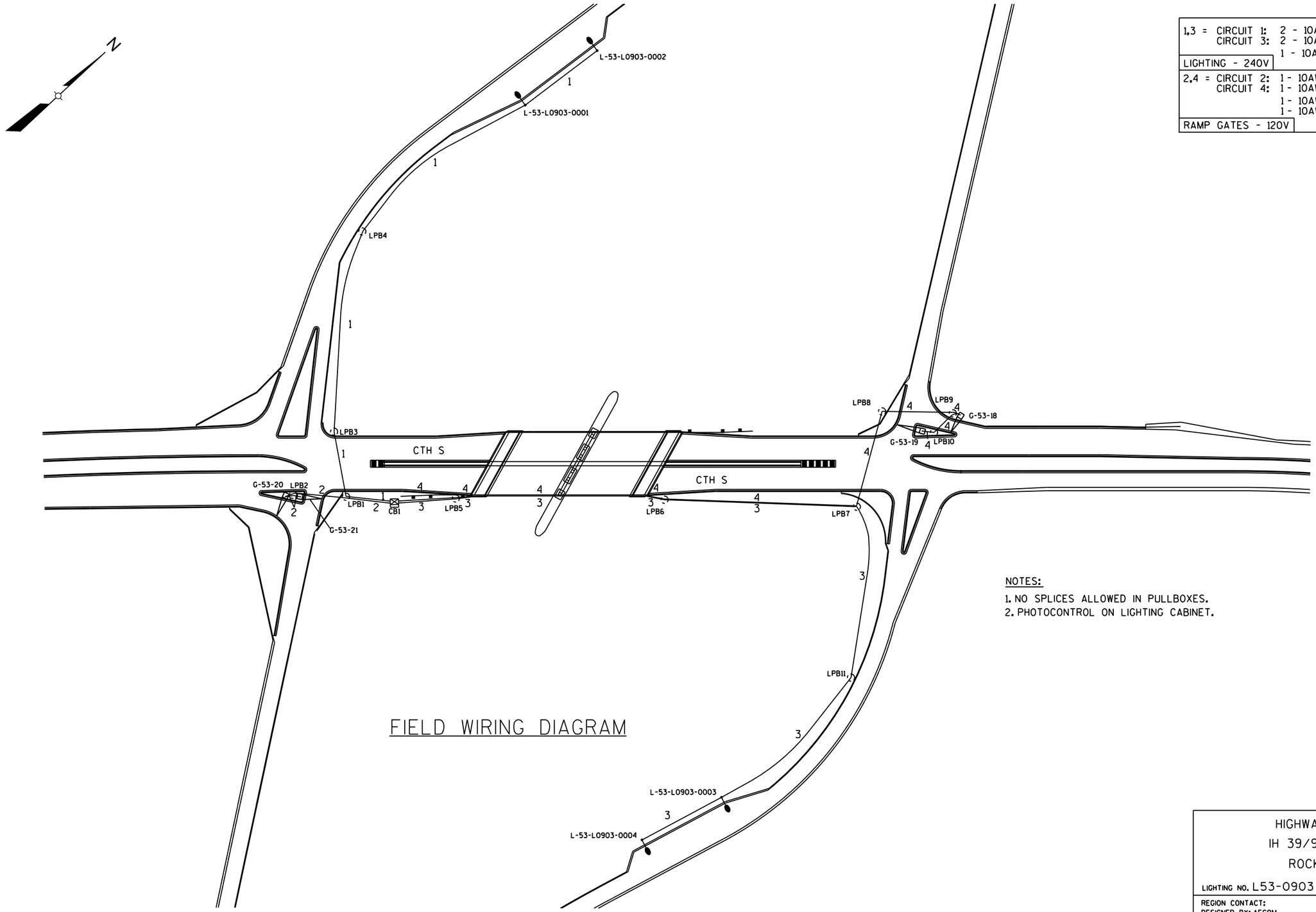
PAGE 2 OF 3

PROJECT NUMBER: 1003-10-71	HWY: IH 39	COUNTY: ROCK	LIGHTING PLAN	SHEET 131	E

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PLOT DATE: 12/16/2014
PLOT TIME: 10:41:53 AM
PLOT SCALE: 1:100
WISDOT/CADDS SHEET 42

2

1,3 = CIRCUIT 1:	2 - 10AWG
CIRCUIT 3:	2 - 10AWG
	1 - 10AWG GND
LIGHTING - 240V	
2,4 = CIRCUIT 2:	1 - 10AWG
CIRCUIT 4:	1 - 10AWG
	1 - 10AWG NEUTRAL
	1 - 10AWG GND
RAMP GATES - 120V	



FIELD WIRING DIAGRAM

NOTES:

1. NO SPLICES ALLOWED IN PULLBOXES.
2. PHOTOCONTROL ON LIGHTING CABINET.

HIGHWAY LIGHTING
IH 39/90 & CTH S
ROCK COUNTY

LIGHTING NO. L53-0903

REGION CONTACT:
DESIGNED BY: AECOM

PAGE 3 OF 3

PROJECT NUMBER: 1003-10-71	HWY: IH 39	COUNTY: ROCK	LIGHTING PLAN	SHEET 132	E

GENERAL NOTES

THESE PLANS AND THE ASSOCIATED SPECIAL PROVISIONS REFLECT CONDITIONS KNOWN DURING THE DEVELOPMENT OF THE PLANS AND TECHNICAL 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 TECHNICAL 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 OTHER THAN MINOR ADJUSTMENTS.

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 BORING WERE MADE WHERE CONDUITS, PULL BOXES, COMMUNICATION VAULTS, 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 (AND/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, AND 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.

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.

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 (608-246-5367), OR SECONDARY (608-516-6400), A MINIMUM OF TWO (2) WEEKS PRIOR TO THE NEED TO STAKE THE FOLLOWING ITEMS: CCTV CAMERAS, COMMUNICATION VAULTS, ITS FIELD CABINETS, MICROWAVE DETECTORS, PULL BOXES, WIRELESS MESH NODES, AND WOOD POLES.

HAND DIG TRENCHES CROSSING EXISTING CONDUIT CONTAINING FIBER OPTIC CABLE.

VISUALLY VERIFY DEPTHS OF EXISTING CONDUITS CONTAINING FIBER OPTIC CABLE PRIOR TO CROSSING BY DIRECTIONAL BORE OR SPECIAL METHOD.

ITS LEGEND

DESCRIPTION	SYMBOL
CCTV CAMERA	
ITS FIELD CABINET GROUND MOUNTED	
ITS POLE MOUNTED CABINET	
MICROWAVE DETECTOR	
DETECTOR ZONE	
WIRELESS MESH NODE	W
RAMP GATE	
POLE	
ITS CONDUIT	
OVERHEAD SERVICE CONDUCTOR	—OH—
PULL BOX 24X42	
METER BREAKER PEDESTAL	
COMMUNICATIONS VAULT	V
ELECTRICAL SERVICE METER SOCKET	
ELECTRICAL SERVICE BREAKER DISCONNECT BOX	
WOOD POLE	

NOTE: EXISTING COMPONENTS, EXISTING ROADWAY, AND PROPOSED LIGHTING SHOWN IN GRAY SHADE

ITS STANDARD ABBREVIATIONS

CCTV	CLOSED CIRCUIT TELEVISION
SDS	SYSTEM DETECTOR STATION
CV	COMMUNICATION VAULT
PB	PULL BOX
WMN	WIRELESS MESH NODE

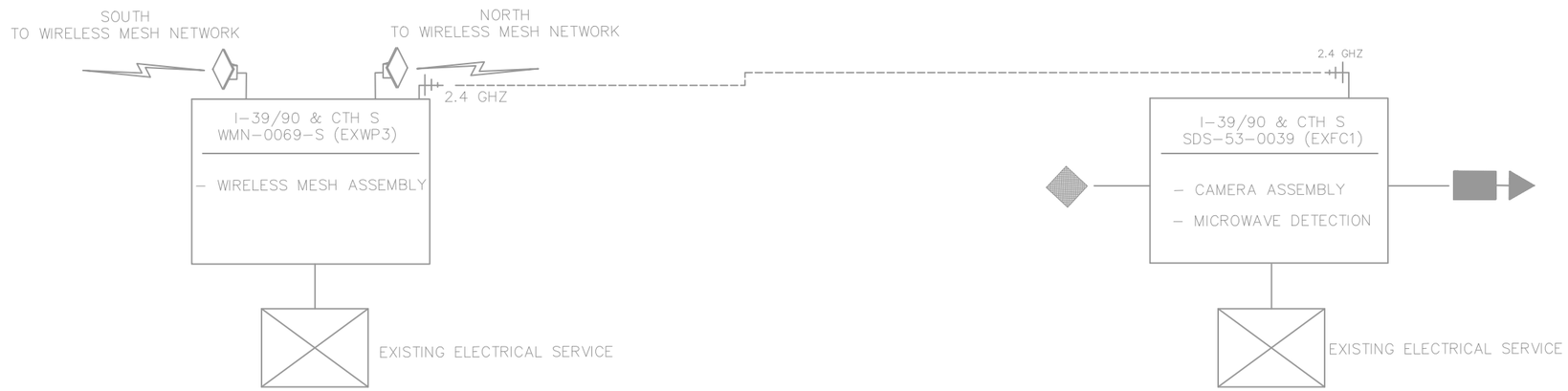
CONTACTS

WisDOT SW REGION
2101 WRIGHT ST
MADISON, WI 53704
KYLE HEMP
(608)246-5367
kyle.hemp@dot.wi.gov
GRAHAM HEITZ
(608)246-5362
graham.heitz@dot.wi.gov

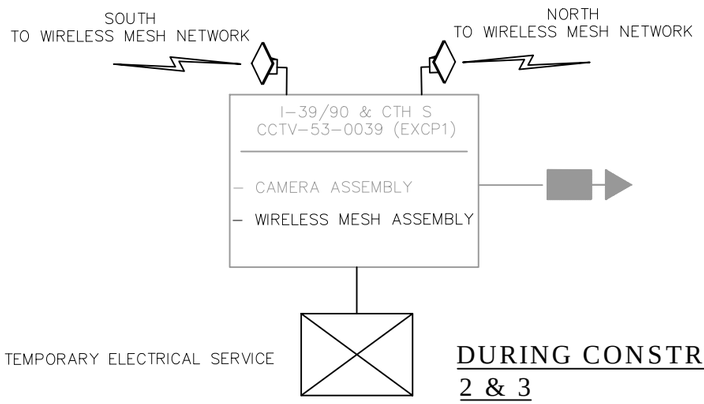
WisDOT STATEWIDE TRAFFIC OPERATIONS CENTER
433 W. ST. PAUL AVE, SUITE 300
MILWAUKEE, WI 53203
DEAN BEEKMAN
(414)227-2154
dean.beekman@dot.wi.gov
DON SCHELL
donald.schell@dot.wi.gov
(414)227-2148

AECOM
1350 DEMING WAY, SUITE 100
MIDDLETON, WI 53562
JEFFREY SANDBERG
(608)828-8161
jeff.sandberg@aecom.com

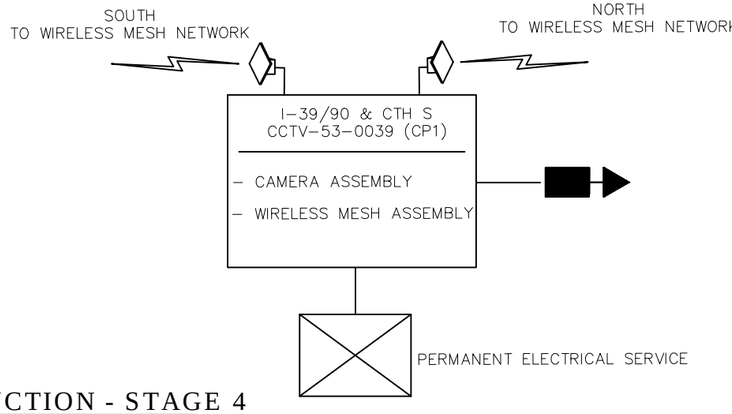
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EXISTING

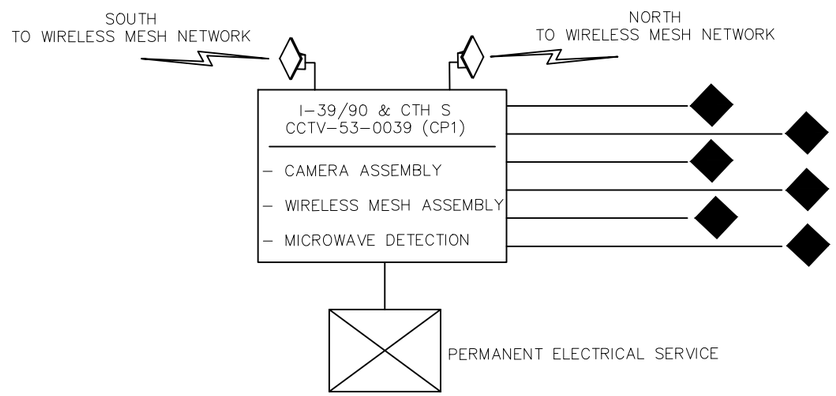


DURING CONSTRUCTION - STAGE 1, 2 & 3



DURING CONSTRUCTION - STAGE 4

I-39/90 & CTH S
ITS DEPLOYMENT
COMMUNICATIONS OVERVIEW



LEGEND

- WIRELESS MESH NETWORK
- 2.4 GHZ WIRELESS COMMUNICATIONS
- CCTV CAMERA
- MICROWAVE DETECTOR

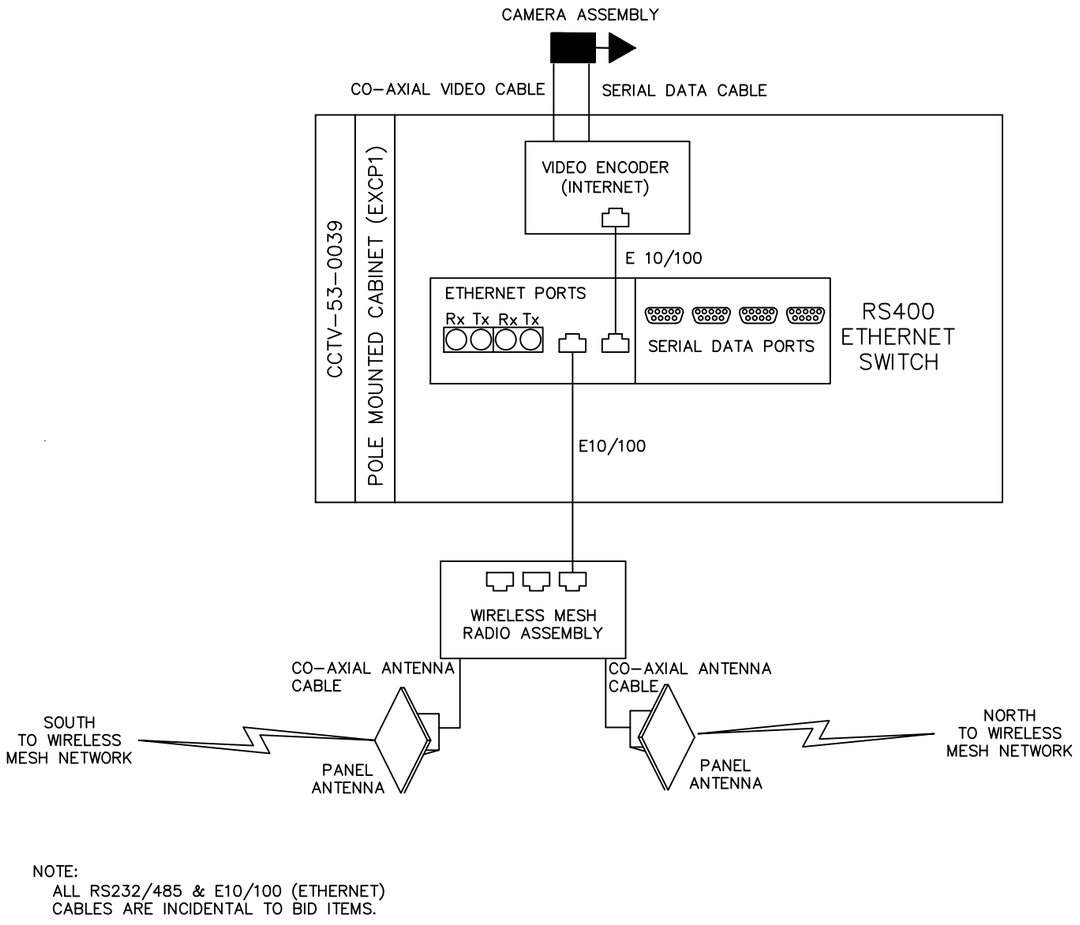
NOTES

ALL CABLING AND CONNECTORS INSIDE CABINETS ARE INCIDENTAL TO OTHER ITEMS.

GRAYSHADE REPRESENTS EXISTING.

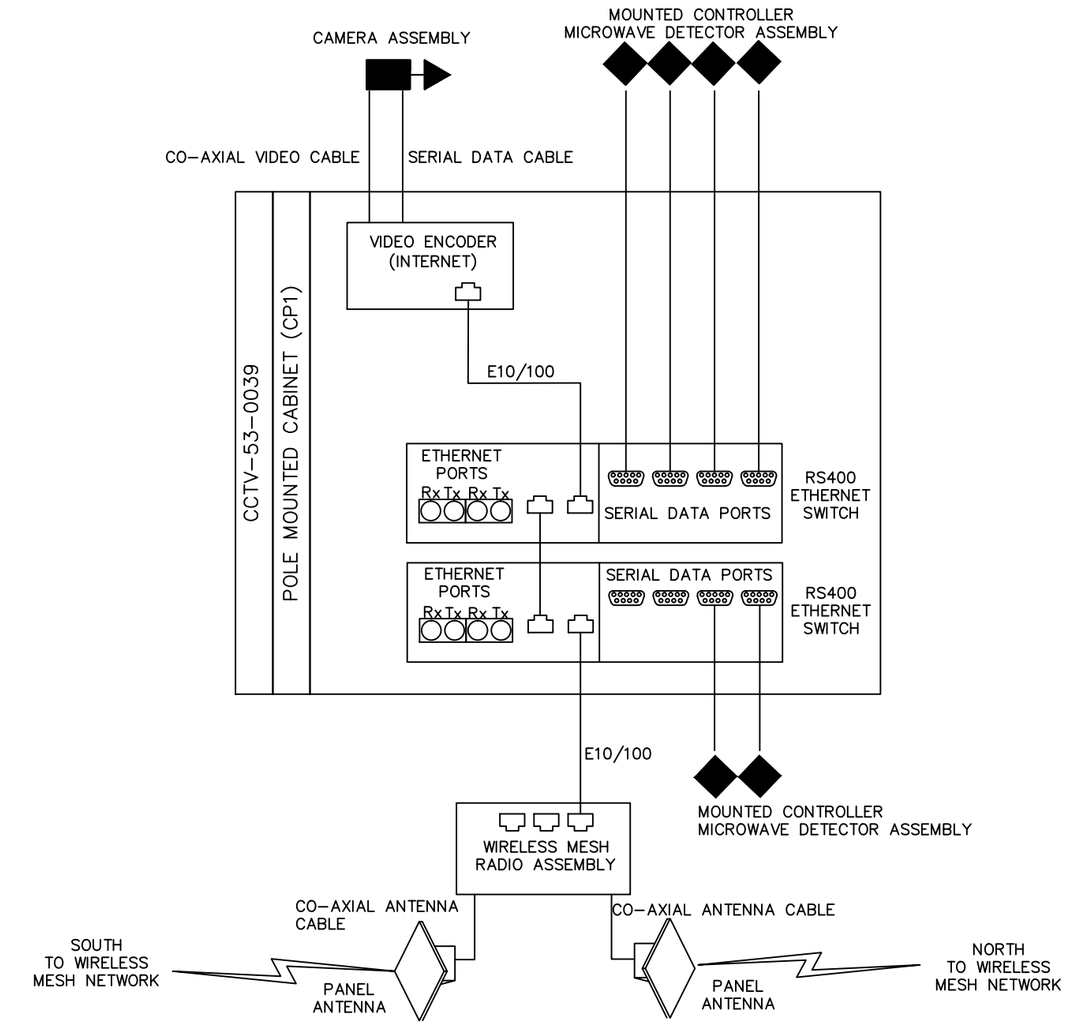
PROPOSED

PROJECT NO:1003-10-71	HWY:IH 39	COUNTY:ROCK	ITS COMMUNICATIONS OVERVIEW	SHEET 134	E



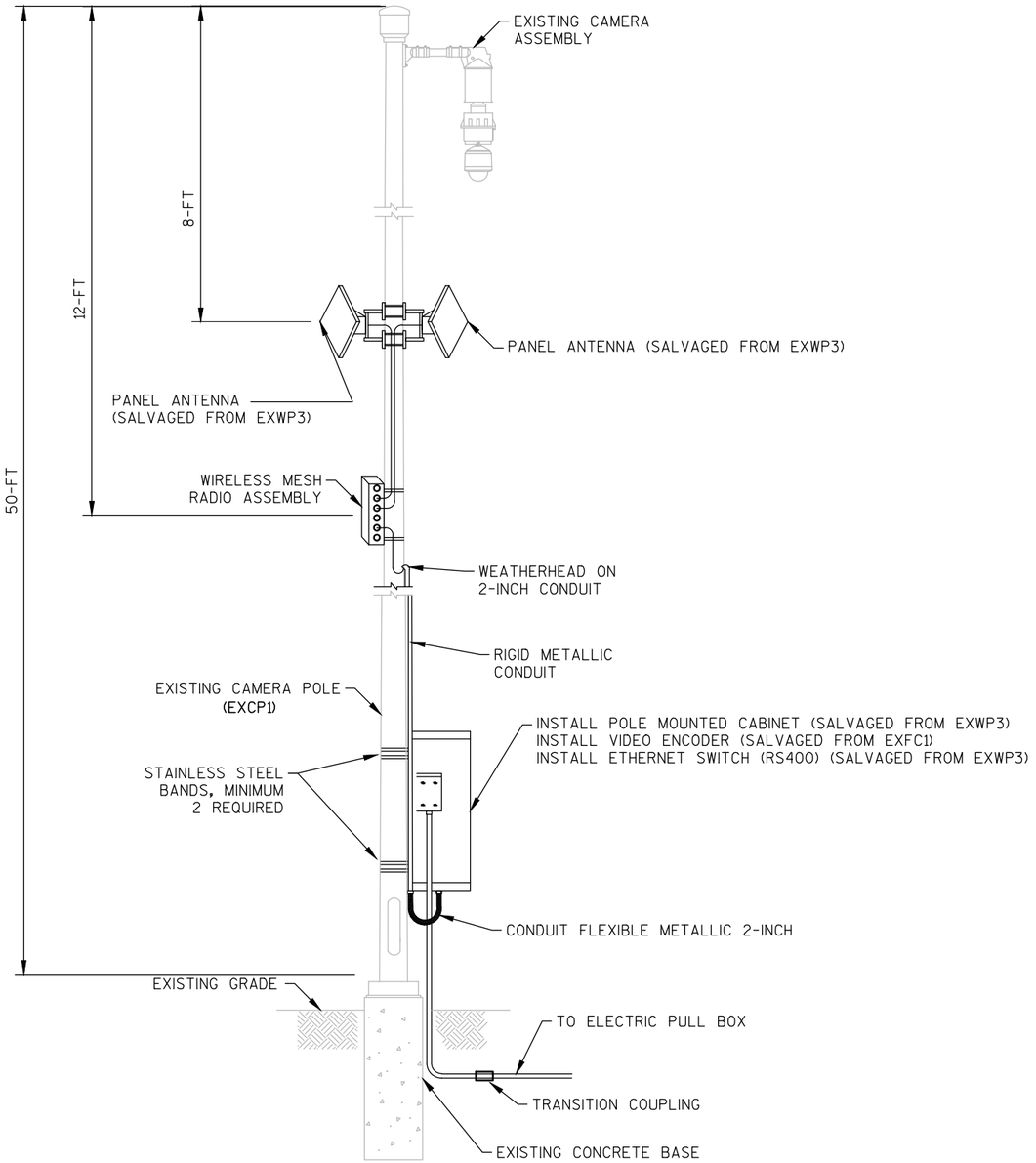
NOTE:
ALL RS232/485 & E10/100 (ETHERNET) CABLES ARE INCIDENTAL TO BID ITEMS.

TEMPORARY ITS COMMUNICATION SCHEMATIC
DURING CONSTRUCTION STAGE 1, 2 & 3



ITS COMMUNICATION SCHEMATIC
DURING CONSTRUCTION STAGE 4 AND FINAL CONDITION

TEMPORARY ITS CONSTRUCTION DETAILS FOR CONSTRUCTION STAGES 1, 2 & 3



EXISTING CAMERA POLE WITH
CAMERA LOWERING HARDWARE

EXCP1

(NOT TO SCALE)

GENERAL NOTES

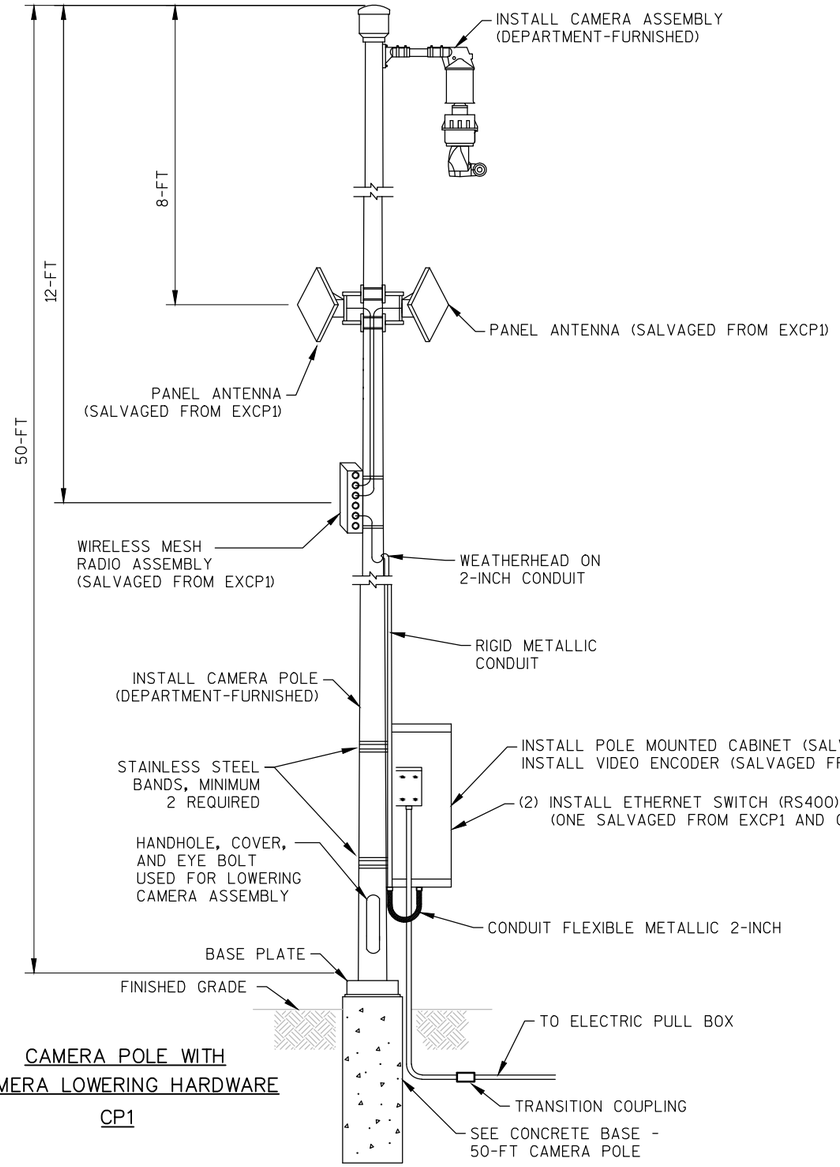
SECURE LOOSE CABLES TO POLE AT 5-FT INTERVALS.

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

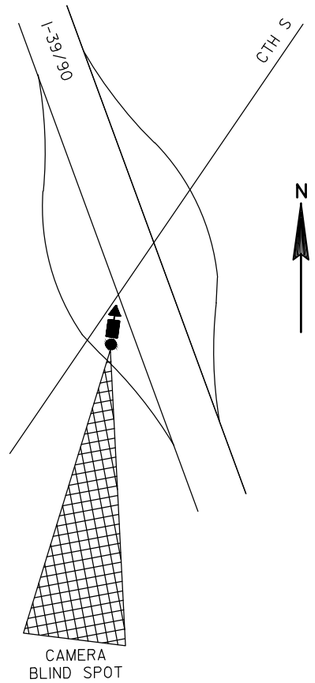
MOUNT EQUIPMENT UTILIZING STAINLESS STEEL BANDS OR METHOD APPROVED BY THE ENGINEER.

ORIENT ANTENNAS TO OPTIMIZE SIGNAL STRENGTH.

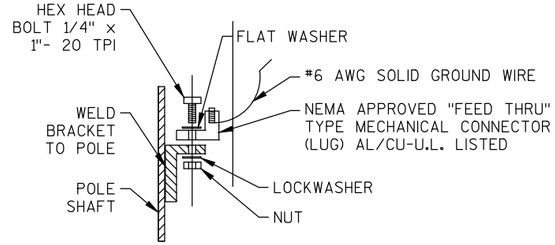
CONDUIT FLEXIBLE METALLIC SHALL BE LIQUID TIGHT.



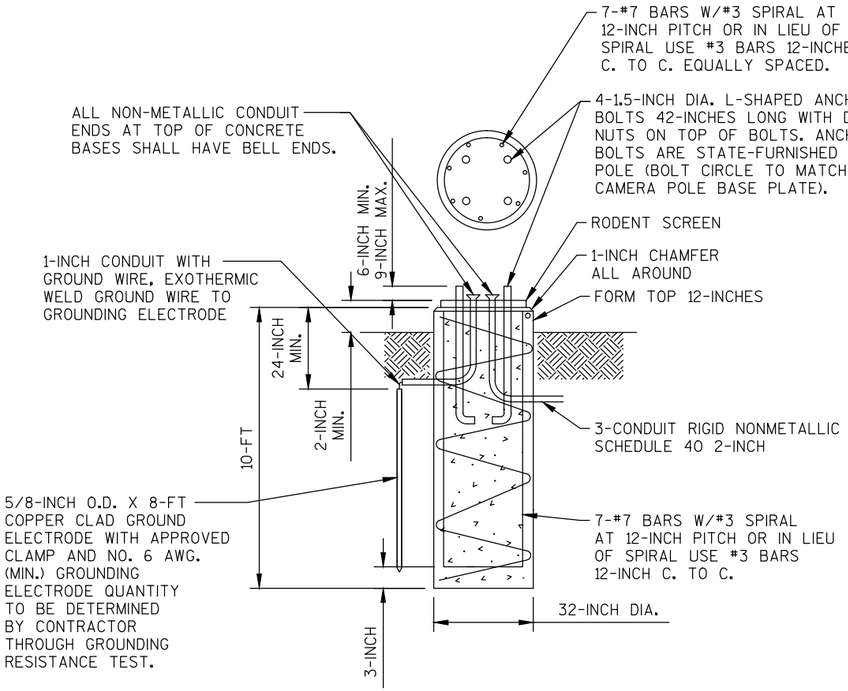
CAMERA POLE WITH
CAMERA LOWERING HARDWARE
CP1



CAMERA ORIENTATION DETAIL



FIELD INSTALLED GROUNDING LUG



MATERIALS DATA

CONCRETE f'c=3,500 psi

HIGH STRENGTH BAR STEEL REINFORCEMENT fy = 60,000 psi

CONCRETE BASE, 50-FT CAMERA POLE

GENERAL NOTES

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.

ORIENT ANTENNAS TO OPTIMIZE SIGNAL STRENGTH.

CONDUIT FLEXIBLE METALLIC SHALL BE LIQUID TIGHT.

NOTES

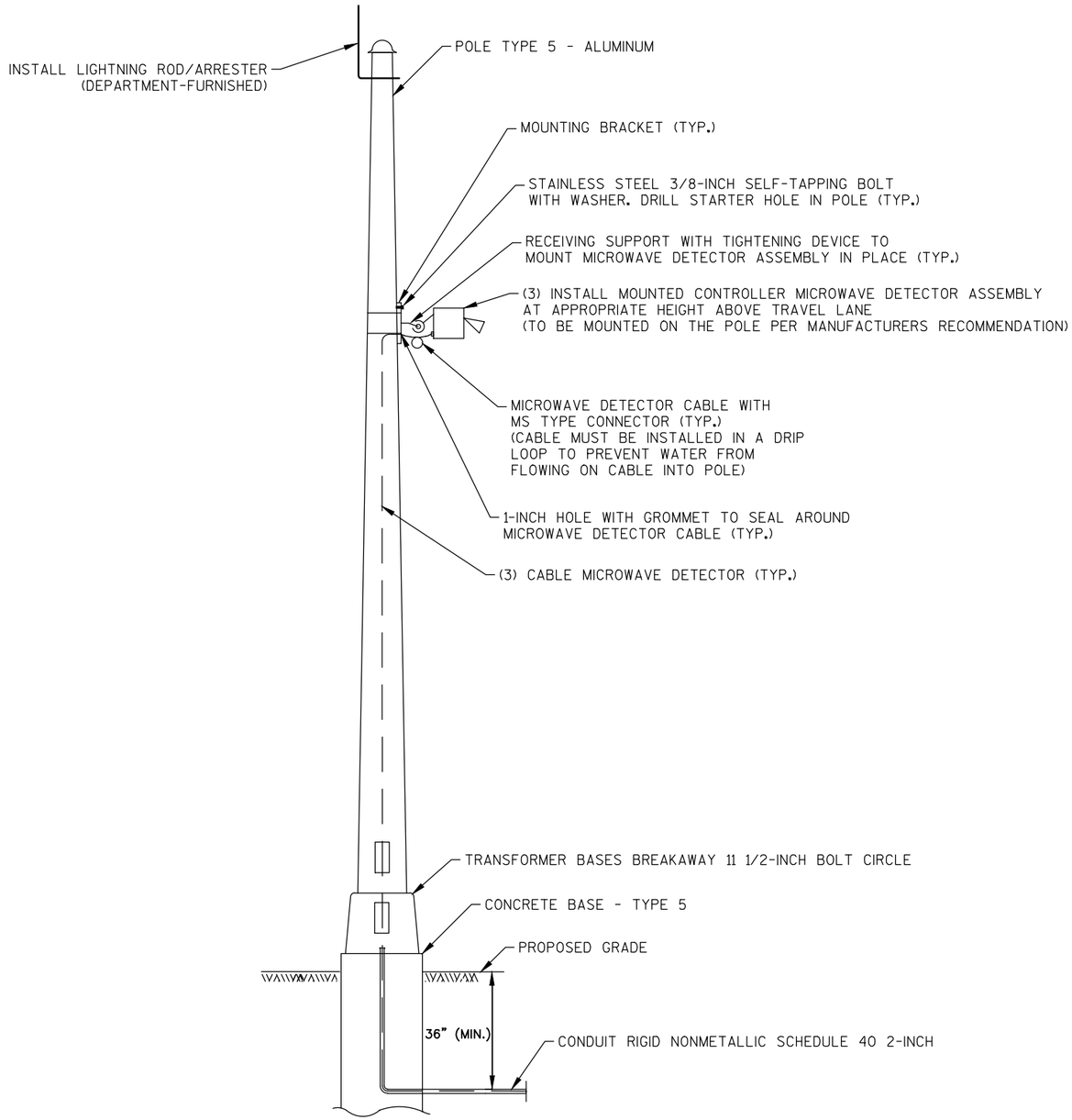
1) ALL HARDWARE AND FASTENERS SHALL BE STAINLESS STEEL.

2) POLE DRAWINGS SHOWN FOR BIDDING INFORMATION PURPOSES ONLY. POLES WILL BE DEPARTMENT-FURNISHED.

3) CONTRACTOR SHALL CONFIRM BOLT PATTERN OF CAMERA POLE PRIOR TO CONSTRUCTION OF CONCRETE BASE.

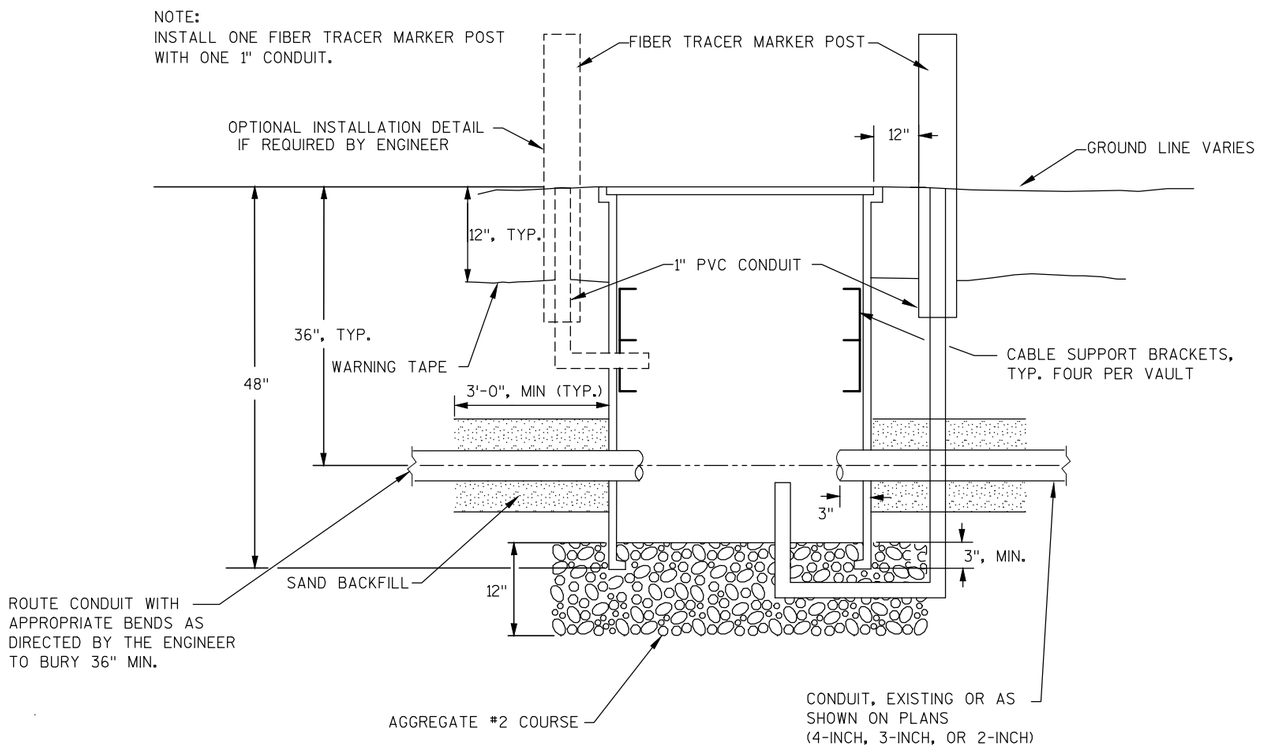
4) CONTRACTOR SHALL INSTALL GROUNDING LUG AS SHOWN.

(NOT TO SCALE)

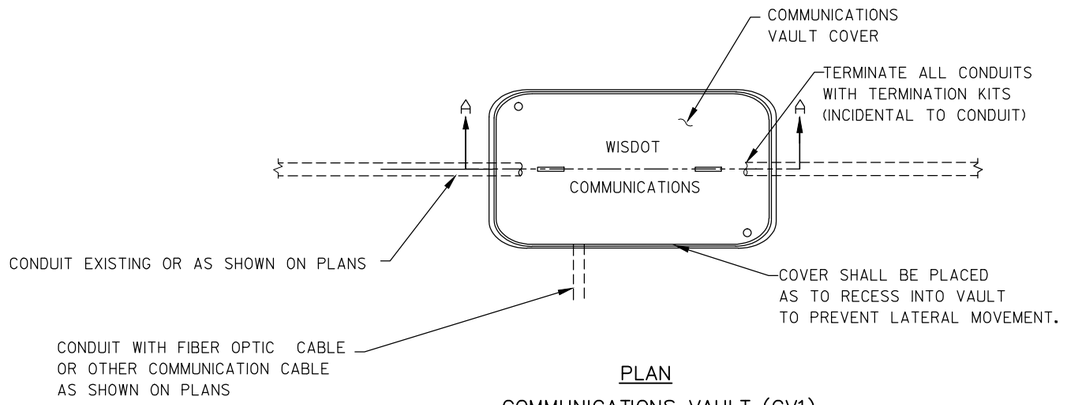


MICROWAVE DETECTOR INSTALLATION ON
TYPE 5 POLE

SDS-53-0039S (MD1)
SDS-53-0039N (MD2)

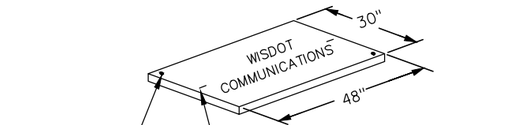


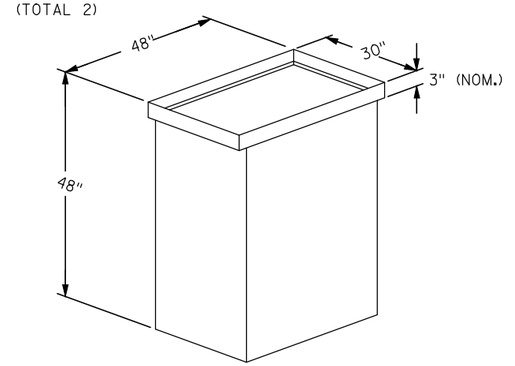
SECTION A–A



PLAN

COMMUNICATIONS VAULT (CV1)



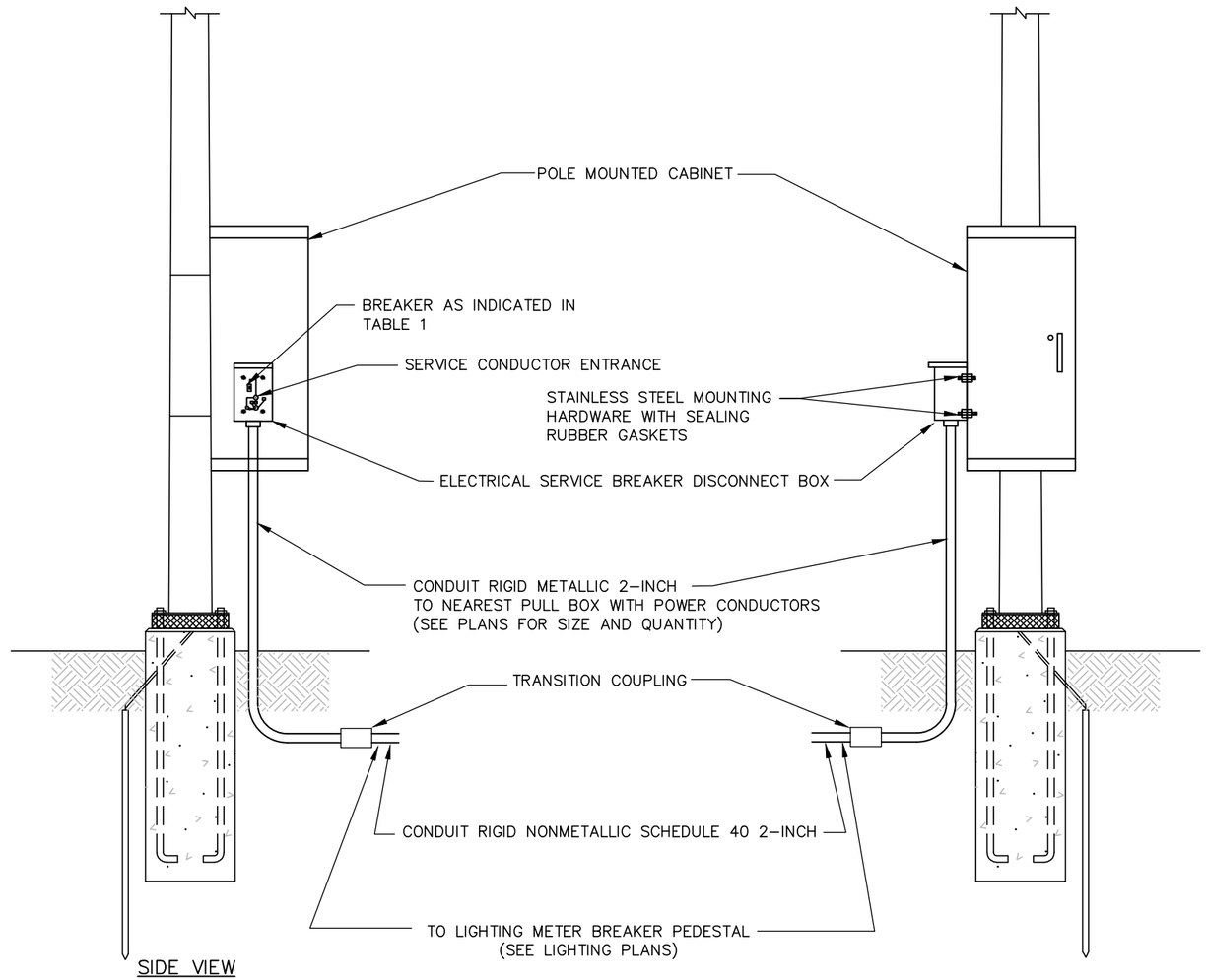


ISOMETRIC

NOTES

1) BOX SHALL HAVE AN OPEN BASE.
2) COVER SHALL HAVE A MINIMUM DESIGN LOAD OF 15,000 LBS AND SHALL LOCK.
3) ALL OPENINGS IN STRUCTURE MUST BE MACHINED AT TIME OF FABRICATION, OR PUNCH DRIVEN AT TIME OF PLACEMENT.
4) VAULTS SHALL BE OF ONE-PIECE CONSTRUCTION. TWO-PIECE/STACKABLE VAULTS WILL NOT BE PERMITTED.
5) FIELD PLACEMENT OF COMMUNICATIONS VAULTS SHALL BE AS DIRECTED BY THE ENGINEER.

2



SIDE VIEW

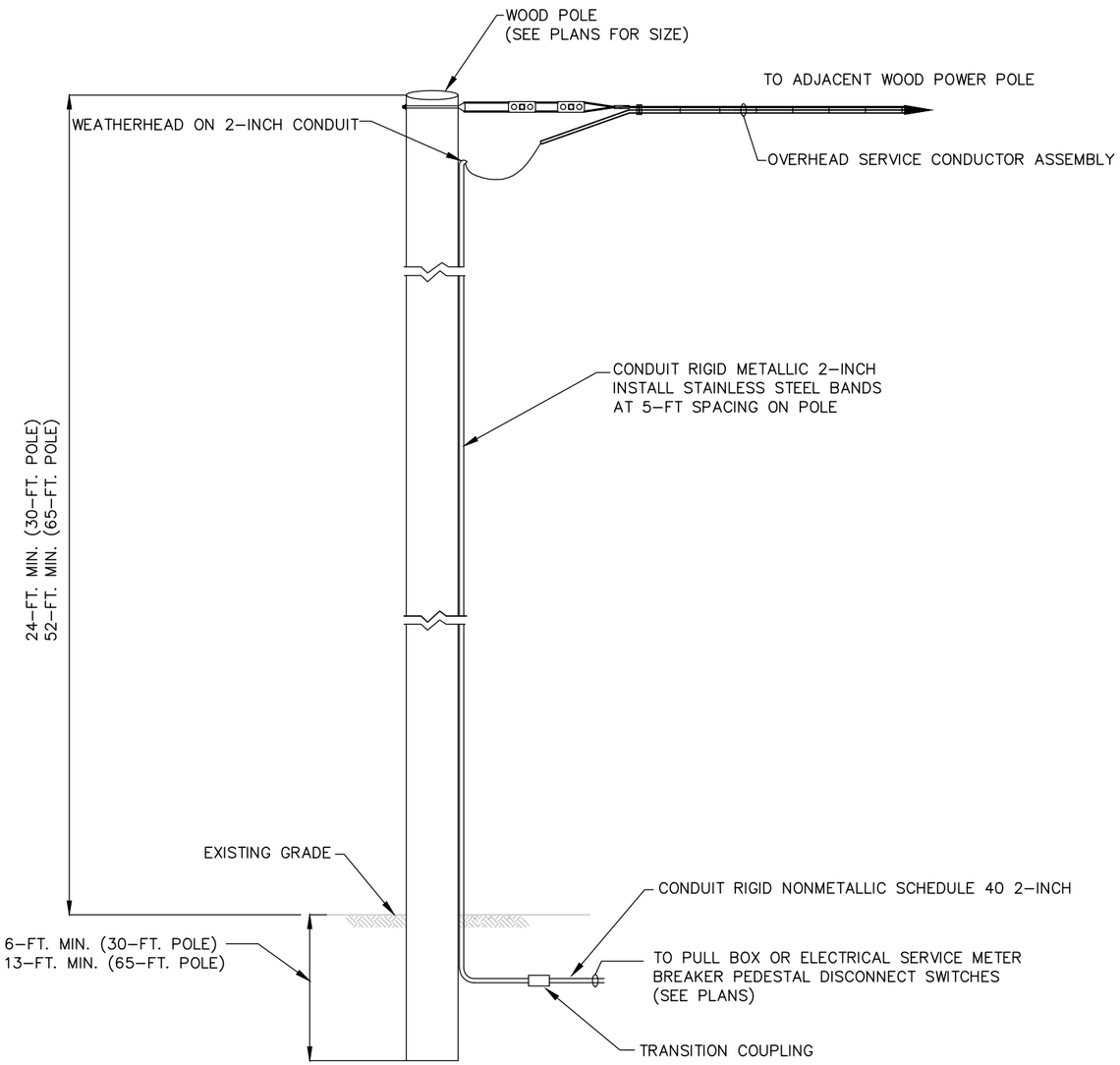
FRONT VIEW

TABLE 1			
BREAKER SIZES BY LOCATION			
LOCATION	ID	MAIN BREAKER SIZE	SUB BREAKER SIZE
I–39/90 @ CTH S	CCTV–53–0039 SDS–53–0039 WMN–0069–S	30 AMPS	30 AMPS (SPARE)

POLE MOUNTED CABINET
ELECTRICAL SERVICE BREAKER DISCONNECT BOX

(NOT TO SCALE)

NOT TO SCALE

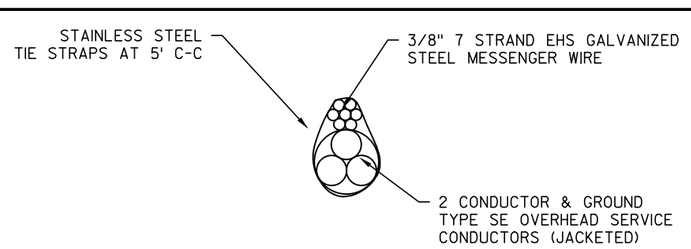


WOOD POLE
WITH WEATHERHEAD AND RISER

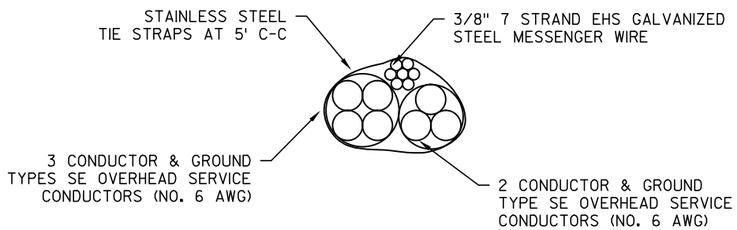
GENERAL NOTES:
MOUNT EQUIPMENT UTILIZING STAINLESS STEEL BANDS OR METHOD APPROVED BY THE ENGINEER.

PROJECT NO: 1003–10–71	HWY: IH 39	COUNTY: ROCK	OVERHEAD SERVICE CONSTRUCTION DETAILS	SHEET 141	E

2



CONDUCTOR LASHING DETAIL - NO. 6 or NO. 2 AWG
OVERHEAD SERVICE CONDUCTORS
N.T.S.

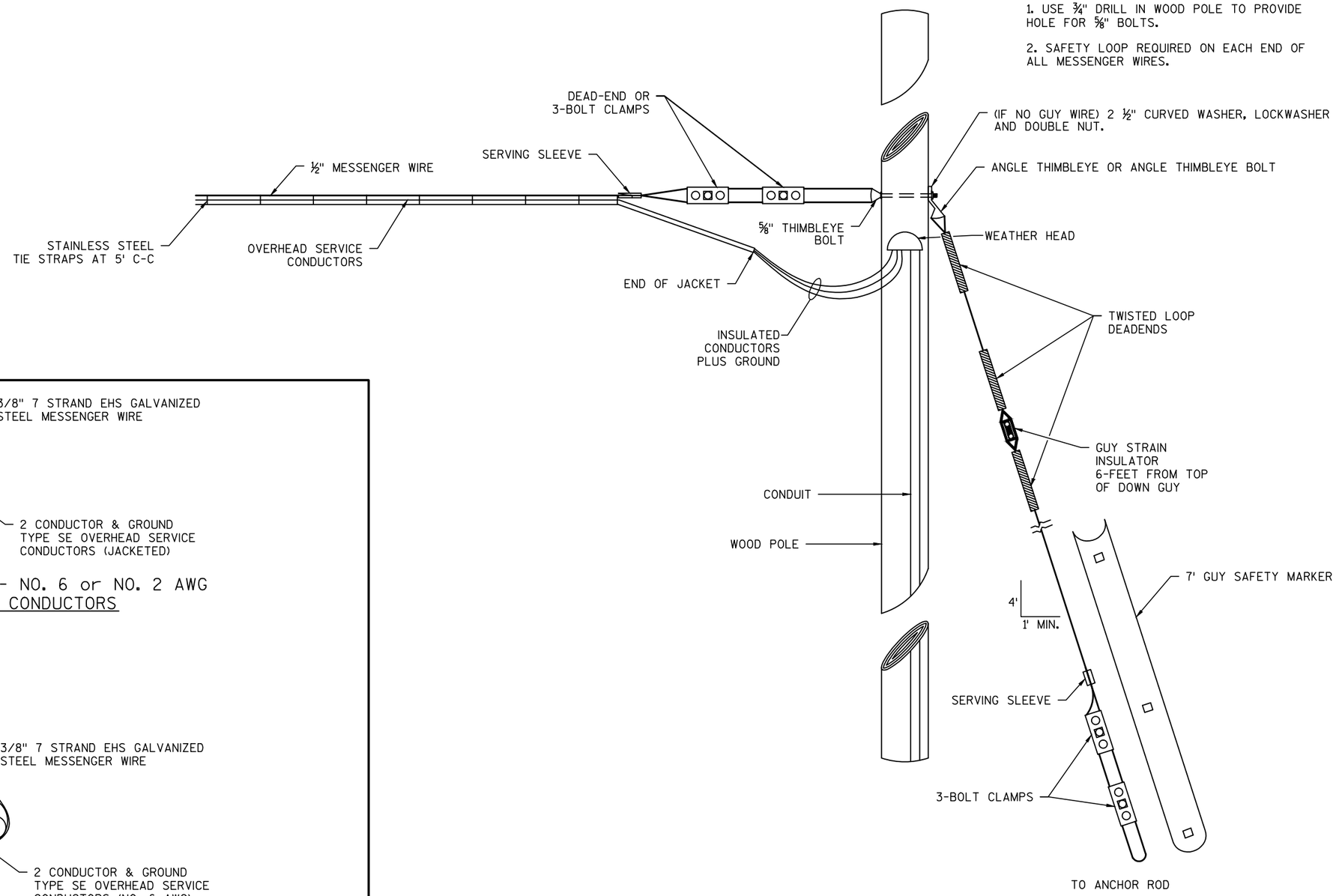


CONDUCTOR LASHING DETAIL - NO. 6 AWG - 3 WIRE
AND NO. 6 AWG - 4 WIRE AWG
OVERHEAD SERVICE CONDUCTORS
N.T.S.

GENERAL NOTES

1. USE ¾" DRILL IN WOOD POLE TO PROVIDE HOLE FOR ⅝" BOLTS.

2. SAFETY LOOP REQUIRED ON EACH END OF ALL MESSENGER WIRES.



OVERHEAD SERVICE POLE ATTACHMENT DETAIL
N.T.S.

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	OVERHEAD SERVICE CONSTRUCTION DETAILS	SHEET 142	E

SALVAGE WIRELESS MESH NODE ITS EQUIPMENT
(SEE CONSTRUCTION NOTE 2)

SALVAGE AND REINSTALL 65-FOOT WOOD POLE
(SEE TEMPORARY ITS PLAN FOR REINSTALLATION LOCATION)

EXWP3

EXWP2

SALVAGE AND REINSTALL 30-FOOT WOOD POLE
(SEE TEMPORARY ITS PLAN FOR REINSTALLATION LOCATION)

REMOVE CABLE AND
ABANDON CONDUIT

REMOVING 50-FOOT CAMERA POLE
REMOVE CONCRETE BASE

SALVAGE TEMPORARY ITS EQUIPMENT
(SEE CONSTRUCTION NOTE 2)

REMOVE AERIAL CABLE (INCIDENTAL)

REMOVE WOOD POLE (30-FOOT)

REMOVE CABLE AND
ABANDON CONDUIT

EXWP1

EXMB1

REMOVE CABLE AND
ABANDON CONDUIT

EXCP1

EXPB1

REMOVE CABLE AND
ABANDON CONDUIT

REMOVE ELECTRICAL SERVICE
METER BREAKER PEDESTAL

EXFC1

REMOVE PULL BOX

EXPB2

EXMB2

REMOVE PULL BOX

REMOVE ELECTRICAL SERVICE
METER BREAKER PEDESTAL

REMOVE CABLE AND
ABANDON CONDUIT

REMOVE ITS FIELD CABINET
REMOVE CONCRETE BASE

EXPB3

EXMD1

SALVAGE VIDEO ENCODER
(SEE CONSTRUCTION NOTE 2)

REMOVE PULL BOX

REMOVE CABLE AND
ABANDON CONDUIT

REMOVE TYPE 5 POLE
REMOVE CONCRETE BASE

SB OFF-RAMP
IH 39 SB
IH 39 NB
NB ON-RAMP
SB ON-RAMP
NB OFF-RAMP
CTH S
GUY
R/W
OH
SIGN
355
350
345

ITS LEGEND

DESCRIPTION	SYMBOL
CCTV CAMERA	
POLE MOUNTED CABINET	
ITS FIELD CABINET	
POLE	
MICROWAVE DETECTOR	
PULL BOX 24X36	
ITS CONDUIT	
WIRELESS MESH NODE	W
WOOD POLE	
METER BREAKER PEDESTAL	

NOTE: GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES

1. THE EXISTING CCTV CAMERA SHALL REMAIN OPERATIONAL UNTIL THE END OF CONSTRUCTION STAGE 3.

2. SALVAGED ITS EQUIPMENT AT EXWP3 AND EXFC1 TO BE REMOVED AND REINSTALLED AT EXCP1 AT THE START OF CONSTRUCTION STAGE 1. SALVAGED ITS EQUIPMENT AT EXCP1 TO BE REMOVED AND REINSTALLED AT CP1 AT THE END OF CONSTRUCTION STAGE 3. SEE ITS PLANS FOR CP1 LOCATION.

3. EXISTING RAMP GATE BARRICADES WILL BE REMOVED BY THE DEPARTMENT.

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	ITS REMOVAL PLANS	SHEET 143	E

(1) (1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
(3) ELECTRICAL WIRE LIGHTING 2 AWG

(2) (3) ELECTRICAL WIRE LIGHTING 2 AWG
IN EXISTING CONDUIT

OVERHEAD SERVICE CONDUCTOR ASSEMBLY (MIN 25' CLEARANCE ABOVE EXISTING AND PROPOSED ROADWAY)
(3) ELECTRICAL WIRE LIGHTING 2 AWG

65-FOOT WOOD POLE

(1) 2-INCH RIGID METALLIC CONDUIT (INCIDENTAL)
(3) ELECTRICAL WIRE LIGHTING 2 AWG

EXISTING CCTV CAMERA (CCTV-53-0039)
(1) INSTALL POLE MOUNTED CABINET (SALVAGED FROM EXWP3)
(1) INSTALL WIRELESS MESH RADIO ASSEMBLY (SALVAGED FROM EXWP3)
(1) INSTALL ETHERNET SWITCH (SALVAGED FROM EXWP3)
(1) INSTALL VIDEO ENCODER (SALVAGED FROM EXFC1)
(1) ELECTRICAL SERVICE BREAKER DISCONNECT BOX
(INSTALL SALVAGED ITS EQUIPMENT DURING CONSTRUCTION STAGE 1)

EXWP3
EXWP2
EXMB1
WP1
EXPB1
EXCP1
OH
INSTALL CONDUIT
INTO EXISTING ITEM
OVERHEAD SERVICE CONDUCTOR ASSEMBLY
(3) ELECTRICAL WIRE LIGHTING 2 AWG

IH 39 SB
IH 39 NB
CTH S
R/W
SIGN

ITS LEGEND

DESCRIPTION	SYMBOL
CCTV CAMERA	
POLE MOUNTED CABINET	
POLE	
PULL BOX 24X36	
ITS CONDUIT	
WIRELESS MESH NODE	W
WOOD POLE	
METER BREAKER PEDESTAL	
OVERHEAD SERVICE CONDUCTOR	OH
ELCTRICAL SERVICE BREAKER DISCONNECT BOX	

NOTE: GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION STAGING LEGEND

DESCRIPTION	SYMBOL
STAGE 1	
STAGE 2	
STAGE 3	

CONSTRUCTION NOTES

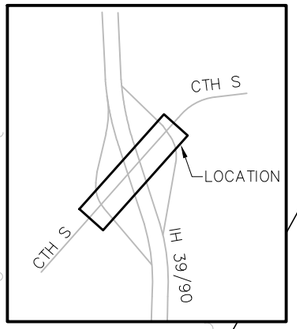
1. GUY WIRES ARE REQUIRED FOR EXWP2, EXWP3, WP1.
2. PROVIDE AT LEAST 25' CLEARANCE BETWEEN OVERHEAD CABLES AND ROADWAY SURFACE BETWEEN EXWP3 AND WP1.
3. FOLLOWING INSTALLATION OF PERMANENT ITS EQUIPMENT, THE TEMPORARY ITS SYSTEM CAN BE REMOVED. COMPLETE THE FOLLOWING WORK:
   - (3) REMOVE WOOD POLE (EXWP2, EXWP3, WP1)
   - (1) REMOVE ELECTRICAL SERVICE BREAKER DISCONNECT BOX (EXCP1)
   - REMOVE CABLE (EXMB1 TO EXWP2, WP1 TO EXCP1)
   - REMOVE AERIAL CABLE (INCIDENTAL) (EXWP2 TO WP1)
   - ABANDON CONDUIT (WP1 TO EXPB1, EXPB1 TO EXCP1)

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	TEMPORARY ITS PLAN - STAGE 1, 2 & 3	SHEET 144	E

① (2) CONDUIT RIGID NONMETALLIC SCHEDULE 40 3–INCH
(1) WITH (6) CABLE MICROWAVE DETECTOR
(2) ELECTRICAL WIRE LIGHTING 10 AWG

② (2) CONDUIT RIGID NONMETALLIC SCHEDULE 40 3–INCH
(1) WITH (3) CABLE MICROWAVE DETECTOR

③ CONNECT INTO METER BREAKER PEDESTAL AT LIGHTING CABINET
(SEE LIGHTING PLANS)



MATCHLINE 352+09.40'ZD'

MATCHLINE 355+09.69'NB'

MATCHLINE 356+23.34'ZA'

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 3–INCH
(3) CABLE MICROWAVE DETECTOR
(1) ELECTRICAL WIRE LIGHTING 10 AWG

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 3–INCH
(3) CABLE MICROWAVE DETECTOR
(1) ELECTRICAL WIRE LIGHTING 10 AWG

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 3–INCH
(3) CABLE MICROWAVE DETECTOR
(1) ELECTRICAL WIRE LIGHTING 10 AWG

(2) CONDUIT RIGID NONMETALLIC SCHEDULE 40 3–INCH
(FOR FUTURE USE)

(2) CONDUIT RIGID NONMETALLIC SCHEDULE 40 3–INCH
(FOR FUTURE USE)

(2) CONDUIT RIGID NONMETALLIC SCHEDULE 40 3–INCH
(FOR FUTURE USE)

SEE BRIDGE PLANS (TYP.)

FIBER TRACER MARKER POST REQ'D

STRUCTURE
B–53–313

SEE LIGHTING PLANS (TYP.)

CAMERA ARM ALIGNMENT
ALIGN BOLT CIRCLE TO BE
SQUARE TO THIS LINE

CCTV–53–0039
WMN–0069–S
(1) BASE CAMERA POLE 50–FT
(1) INSTALL CAMERA POLE (DEPARTMENT–FURNISHED)
(1) INSTALL CAMERA ASSEMBLY (DEPARTMENT–FURNISHED)
(1) INSTALL POLE MOUNTED CABINET (SALVAGED FROM EXCP1)
(1) INSTALL ETHERNET SWITCH (RS400) (SALVAGED FROM EXCP1)
(1) INSTALL ETHERNET SWITCH (RS400) (DEPARTMENT–FURNISHED)
(1) INSTALL VIDEO ENCODER (SALVAGED FROM EXCP1)
(1) INSTALL WIRELESS MESH RADIO ASSEMBLY (SALVAGED FROM EXCP1)
(1) ELECTRICAL SERVICE BREAKER DISCONNECT BOX
(2) PLAQUES SEQUENCE IDENTIFICATION

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2–INCH
(3) ELECTRICAL WIRE LIGHTING 6 AWG
(1) ELECTRICAL WIRE LIGHTING 10 AWG

(2) CONDUIT RIGID NONMETALLIC SCHEDULE 40 3–INCH
(1) WITH (6) CABLE MICROWAVE DETECTOR
(2) ELECTRICAL WIRE LIGHTING 10 AWG

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 3–INCH
(3) CABLE MICROWAVE DETECTOR
(1) ELECTRICAL WIRE LIGHTING 10 AWG

CONSTRUCTION NOTES

1. THE CCTV CAMERA SHALL BE INSTALLED AND OPERATIONAL PRIOR TO THE COMMENCEMENT OF CONSTRUCTION STAGE 4.

ITS LEGEND

DESCRIPTION	SYMBOL
CCTV CAMERA	
POLE MOUNTED CABINET	
POLE	
PULL BOX 24X42	PB
COMMUNICATIONS VAULT	V
ITS CONDUIT	
WIRELESS MESH NODE	W
RAMP CLOSURE GATE	
METER BREAKER PEDESTAL	
ELECTRICAL SERVICE BREAKER DISCONNECT BOX	

NOTE: GRAYSHADE REPRESENTS EXISTING UNLESS OTHERWISE NOTED

ITS STANDARD ABBREVIATIONS

CCTV – – – – CLOSED CIRCUIT TELEVISON
PB – – – – PULL BOX
CV – – – – COMMUNICATION VAULT
WMN – – – – WIRELESS MESH NODE

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	ITS PLANS	SHEET 145	E

MATCHLINE 343+53.98'ZC'

MATCHLINE 344+69.60'NB'

MATCHLINE 348+39.42'ZB'

TERRAPIN TRAIL

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH CONDUIT
(3) CABLE MICROWAVE DETECTOR

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH
(3) CABLE MICROWAVE DETECTOR

SDS-53-0039S
(1) CONCRETE BASE TYPE 5
(1) POLE TYPE 5, ALUMINUM
(1) TRANSFORMER BASE BREAKAWAY 11½-INCH BOLT CIRCLE
(3) INSTALL MOUNTED CONTROLLER MICROWAVE DETECTOR ASSEMBLY (DEPARTMENT-FURNISHED)
(1) INSTALL LIGHTNING ARRESTER (DEPARTMENT-FURNISHED)
(1) PLAQUES SEQUENCE IDENTIFICATION

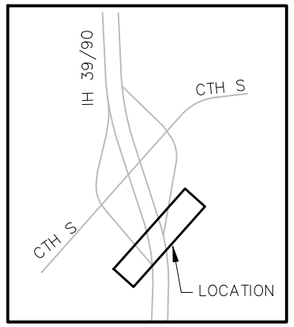
SEE LIGHTING PLANS (TYP.)

PB5
PB6
PB7
MD1

342'ZC'
340'ZC'
338'ZC'
336'ZC'

342'ZB'
340'ZB'
338'ZB'
336'ZB'
348'ZB'
346'ZB'
344'ZB'

SB IH 39/90 ON-RAMP
NB OFF-RAMP
IH 39 SB
IH 39 NB
R/W
SIGN
340
335



ITS LEGEND

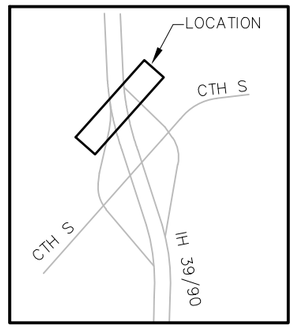
DESCRIPTION	SYMBOL
POLE	●
MICROWAVE DETECTOR	◆
DETECTION ZONE	⊂⊃
PULL BOX 24X36	◑
ITS CONDUIT	- - -

NOTE: GRAYSHADE REPRESENTS EXISTING UNLESS OTHERWISE NOTED.

ITS STANDARD ABBREVIATIONS

SDS ---- SYSTEM DETECTOR STATION
PB ---- PULL BOX
MD ---- MICROWAVE DETECTOR

PROJECT NO:1003-10-71	HWY: IH 39	COUNTY: ROCK	ITS PLANS	SHEET 146	E



ITS LEGEND

DESCRIPTION	SYMBOL
POLE	●
MICROWAVE DETECTOR	◆
DETECTION ZONE	⬭
PULL BOX 24X36	◑
ITS CONDUIT	- - -

NOTE: GRAYSHADE REPRESENTS EXISTING UNLESS OTHERWISE NOTED.

ITS STANDARD ABBREVIATIONS

SDS ---- SYSTEM DETECTOR STATION
PB ---- PULL BOX
MD ---- MICROWAVE DETECTOR

SDS-53-0039N
(1) CONCRETE BASE TYPE 5
(1) POLE TYPE 5, ALUMINUM
(1) TRANSFORMER BASE BREAKAWAY 11½-INCH BOLT CIRCLE
(3) INSTALL MOUNTED CONTROLLER MICROWAVE DETECTOR ASSEMBLY (DEPARTMENT-FURNISHED)
(1) INSTALL LIGHTNING ARRESTER (DEPARTMENT-FURNISHED)
(1) PLAQUES SEQUENCE IDENTIFICATION

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH
(3) CABLE MICROWAVE DETECTOR
(1) ELECTRICAL WIRE LIGHTING 10 AWG

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH
(3) CABLE MICROWAVE DETECTOR
(1) ELECTRICAL WIRE LIGHTING 10 AWG

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH
(3) CABLE MICROWAVE DETECTOR
(1) ELECTRICAL WIRE LIGHTING 10 AWG

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH
(3) CABLE MICROWAVE DETECTOR
(1) ELECTRICAL WIRE LIGHTING 10 AWG

SEE LIGHTING PLANS (TYP.)

MD2
PB16
PB15
PB14
PB13
PB12

362'ZD'
360'ZD'
358'ZD'
356'ZD'
354'ZD'

364'ZD'
365
365'ZD'
364'ZA'
360'ZA'
358'ZA'

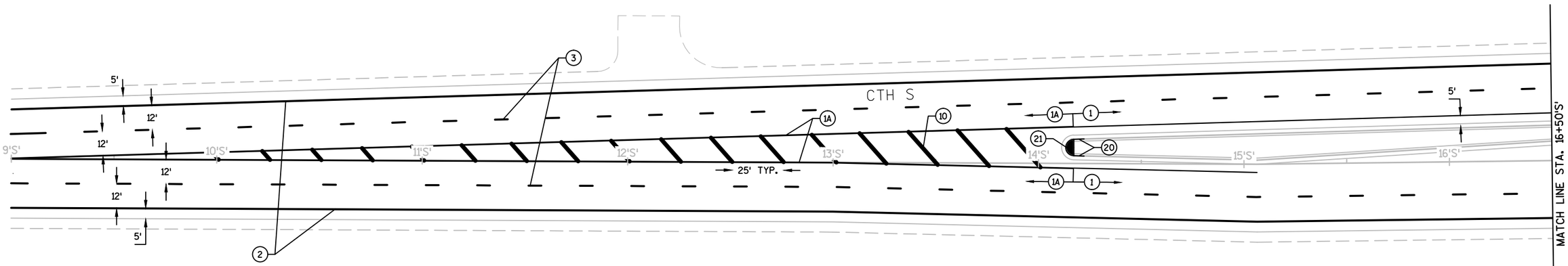
IH 39 SB
IH 39 NB
SB OFF-RAMP
NB IH 39/90 ON-RAMP

R/W
SIGN
SEPTIC

MATCHLINE 352+09.40'ZD'
MATCHLINE 355+09.69'NB'
MATCHLINE 356+23.34'ZA'

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	ITS PLANS	SHEET 147	E

2

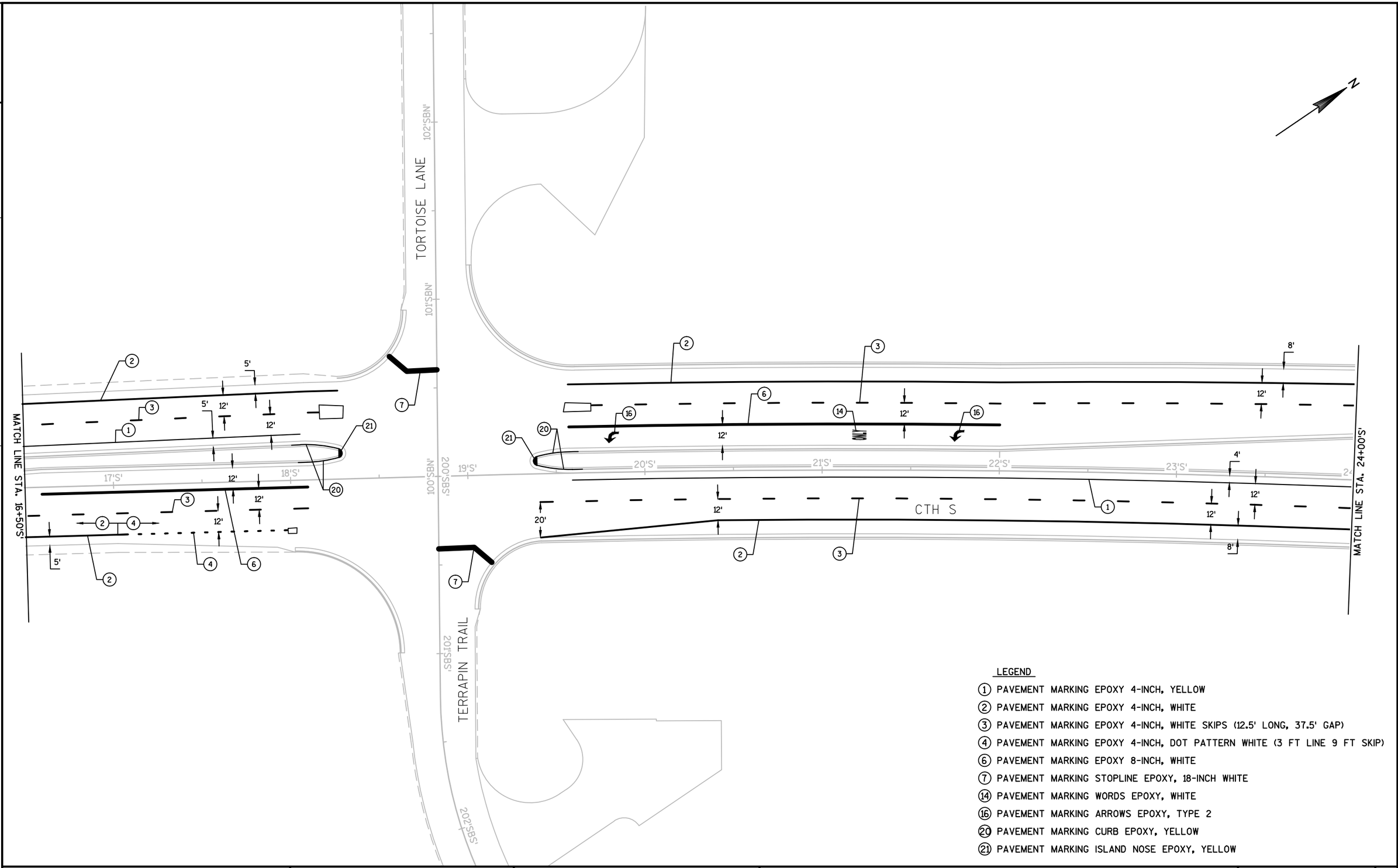


LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH, YELLOW
(1A) PAVEMENT MARKING EPOXY 4-INCH, DOUBLE YELLOW
(2) PAVEMENT MARKING EPOXY 4-INCH, WHITE
(3) PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIPS (12.5' LONG, 37.5' GAP)
(10) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
(20) PAVEMENT MARKING CURB EPOXY, YELLOW
(21) PAVEMENT MARKING ISLAND NOSE EPOXY, YELLOW

PROJECT NO:1003-10-71	HWY: IH 39	COUNTY: ROCK	PAVEMENT MARKING	SHEET 148	E

2



LEGEND

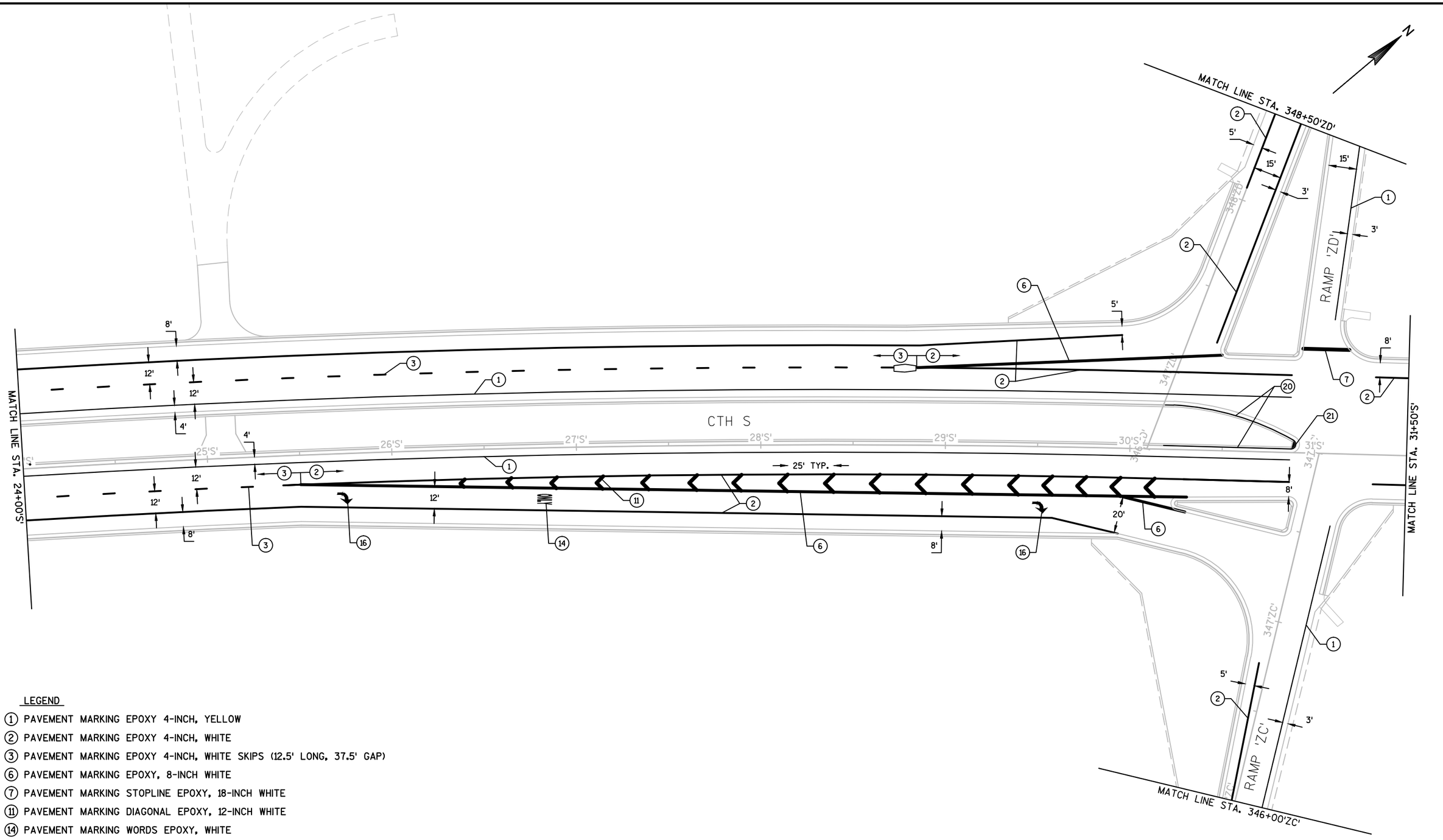
1. PAVEMENT MARKING EPOXY 4-INCH, YELLOW
2. PAVEMENT MARKING EPOXY 4-INCH, WHITE
3. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIPS (12.5' LONG, 37.5' GAP)
4. PAVEMENT MARKING EPOXY 4-INCH, DOT PATTERN WHITE (3 FT LINE 9 FT SKIP)
6. PAVEMENT MARKING EPOXY 8-INCH, WHITE
7. PAVEMENT MARKING STOPLINE EPOXY, 18-INCH WHITE
14. PAVEMENT MARKING WORDS EPOXY, WHITE
16. PAVEMENT MARKING ARROWS EPOXY, TYPE 2
20. PAVEMENT MARKING CURB EPOXY, YELLOW
21. PAVEMENT MARKING ISLAND NOSE EPOXY, YELLOW

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PAVEMENT MARKING	SHEET 149	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_024501_PM.DWG PLOT DATE : 12/16/2014 1:35 PM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:50_XREF

WISDOT/CADDS SHEET 42

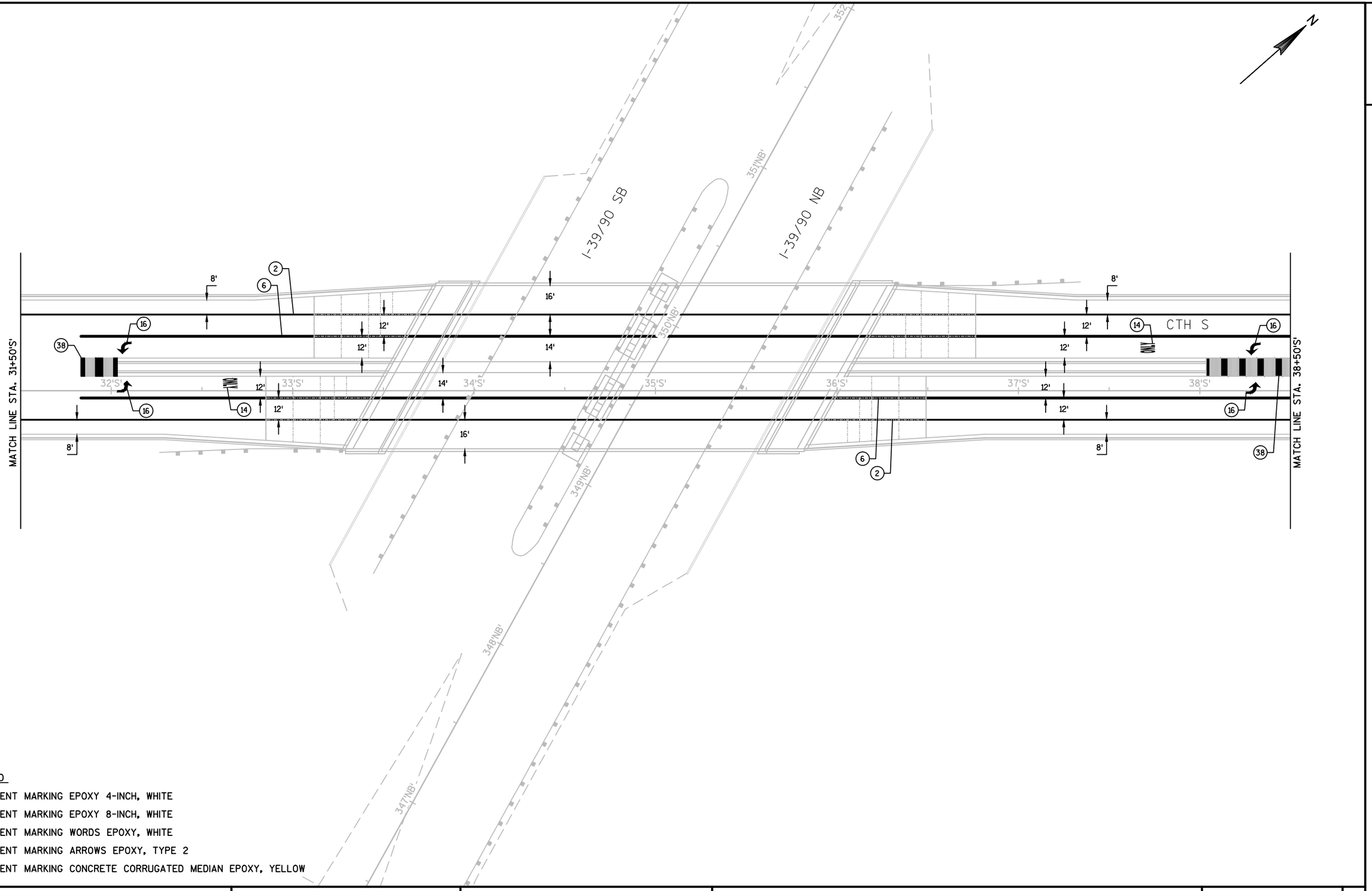
2



LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH, YELLOW
(2) PAVEMENT MARKING EPOXY 4-INCH, WHITE
(3) PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIPS (12.5' LONG, 37.5' GAP)
(6) PAVEMENT MARKING EPOXY, 8-INCH WHITE
(7) PAVEMENT MARKING STOPLINE EPOXY, 18-INCH WHITE
(11) PAVEMENT MARKING DIAGONAL EPOXY, 12-INCH WHITE
(14) PAVEMENT MARKING WORDS EPOXY, WHITE
(16) PAVEMENT MARKING ARROWS EPOXY, TYPE 2
(20) PAVEMENT MARKING CURB EPOXY, YELLOW
(21) PAVEMENT MARKING ISLAND NOSE EPOXY, YELLOW

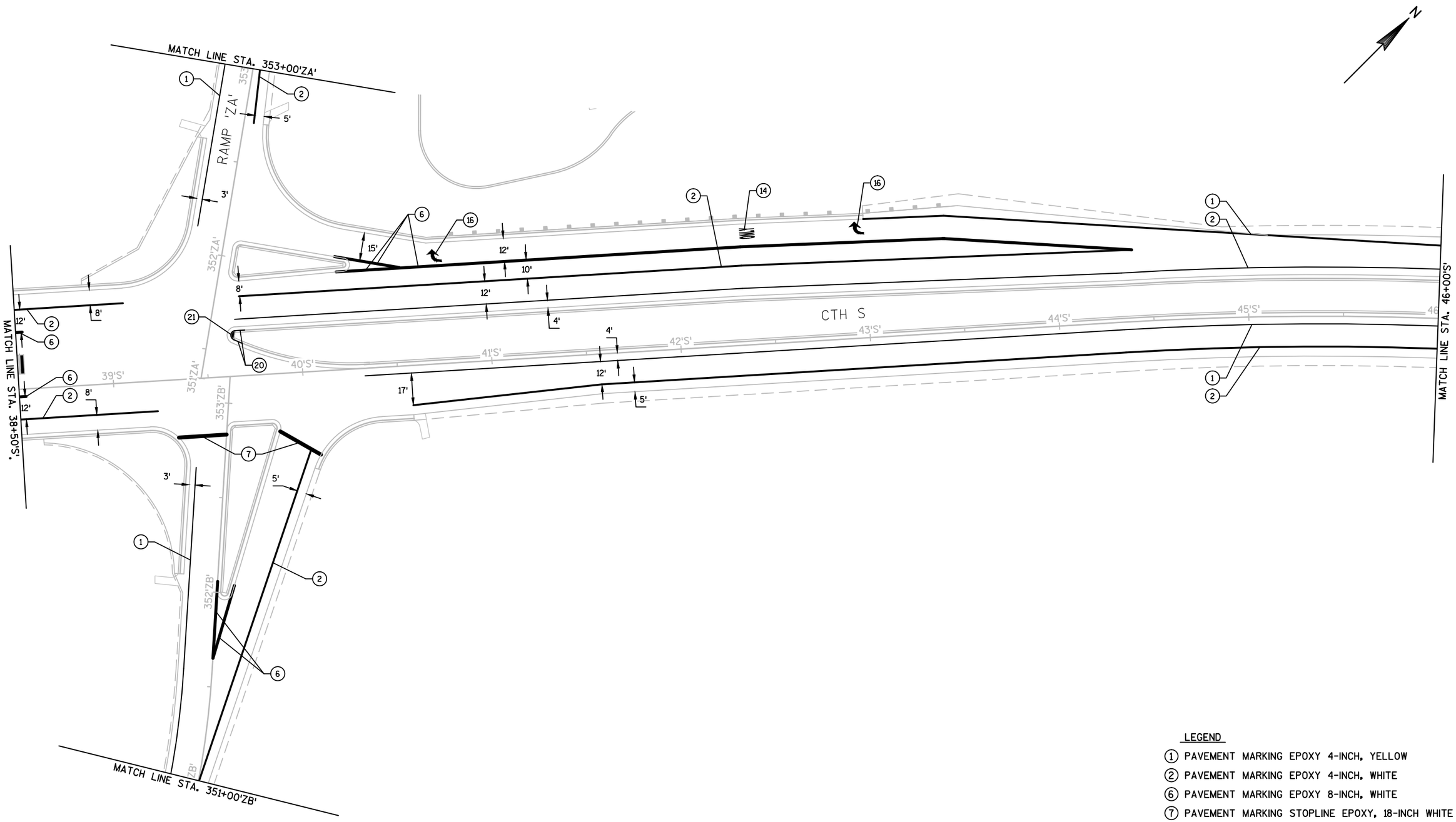
PROJECT NO:1003-10-71	HWY: IH 39	COUNTY: ROCK	PAVEMENT MARKING	SHEET 150	E



LEGEND

(2) PAVEMENT MARKING EPOXY 4-INCH, WHITE
(6) PAVEMENT MARKING EPOXY 8-INCH, WHITE
(14) PAVEMENT MARKING WORDS EPOXY, WHITE
(16) PAVEMENT MARKING ARROWS EPOXY, TYPE 2
(38) PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY, YELLOW

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PAVEMENT MARKING	SHEET 151	E



LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH, YELLOW
2. PAVEMENT MARKING EPOXY 4-INCH, WHITE
6. PAVEMENT MARKING EPOXY 8-INCH, WHITE
7. PAVEMENT MARKING STOPLINE EPOXY, 18-INCH WHITE
14. PAVEMENT MARKING WORDS EPOXY, WHITE
16. PAVEMENT MARKING ARROWS EPOXY, TYPE 2
20. PAVEMENT MARKING CURB EPOXY, YELLOW
21. PAVEMENT MARKING ISLAND NOSE EPOXY, YELLOW

PROJECT NO:1003-10-71	HWY:IH 39	COUNTY:ROCK	PAVEMENT MARKING	SHEET 152	E

2

N

SHOPIERE LANE

304'SFN' 305'SFN' 306'SFN' 307'SFN' 308'SFN' 309'SFN' 310'SFN' 311'SFN'

CTH S

47'S' 48'S' 49'S' 50'S' 51'S' 52'S' 53'S'

MATCH LINE STA. 46+00'S'

MATCH LINE STA. 53+00'S'

5' 12' 4' 4' 12' 5' 12' 12'

① ② ⑥

LEGEND

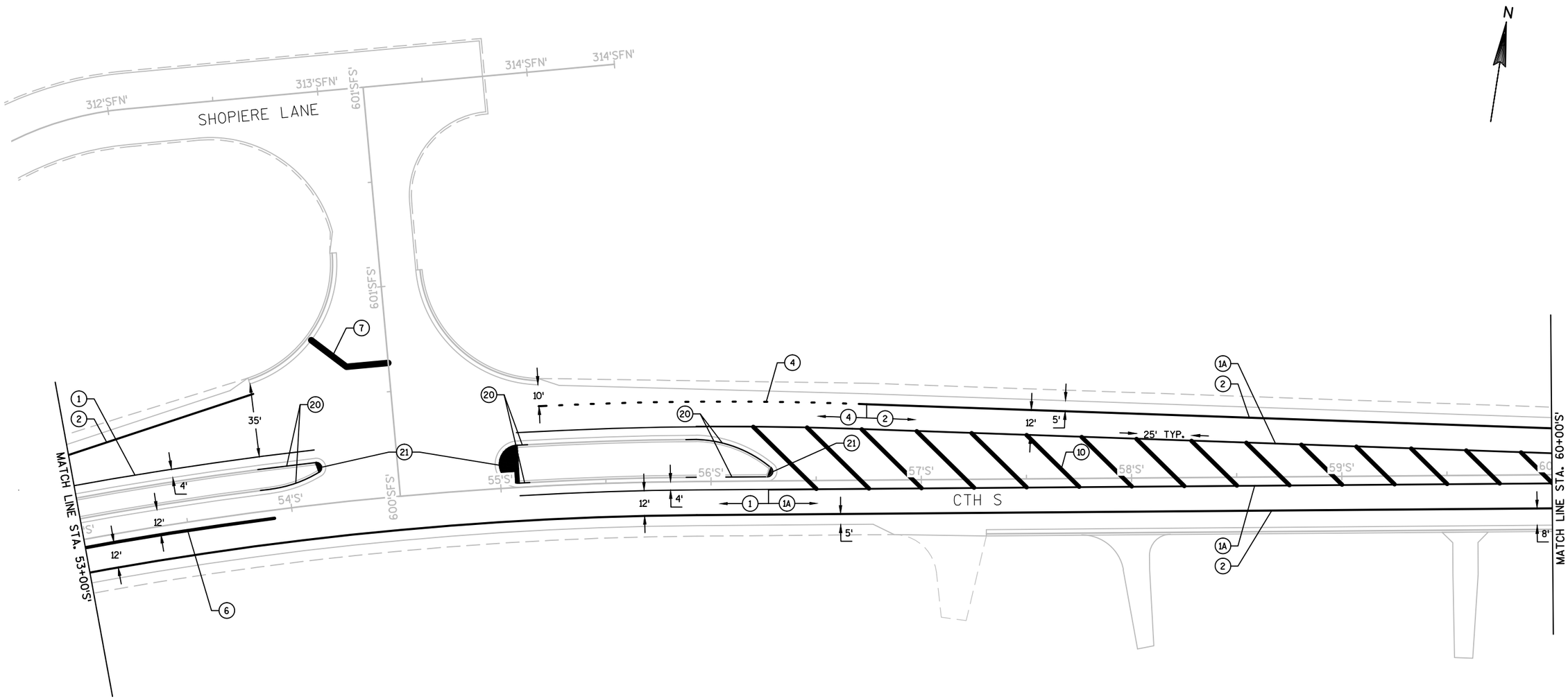
① PAVEMENT MARKING EPOXY 4-INCH, YELLOW

② PAVEMENT MARKING EPOXY 4-INCH, WHITE

⑥ PAVEMENT MARKING EPOXY 8-INCH, WHITE

PROJECT NO:1003-10-71	HWY: IH 39	COUNTY:ROCK	PAVEMENT MARKING	SHEET 153	E

2



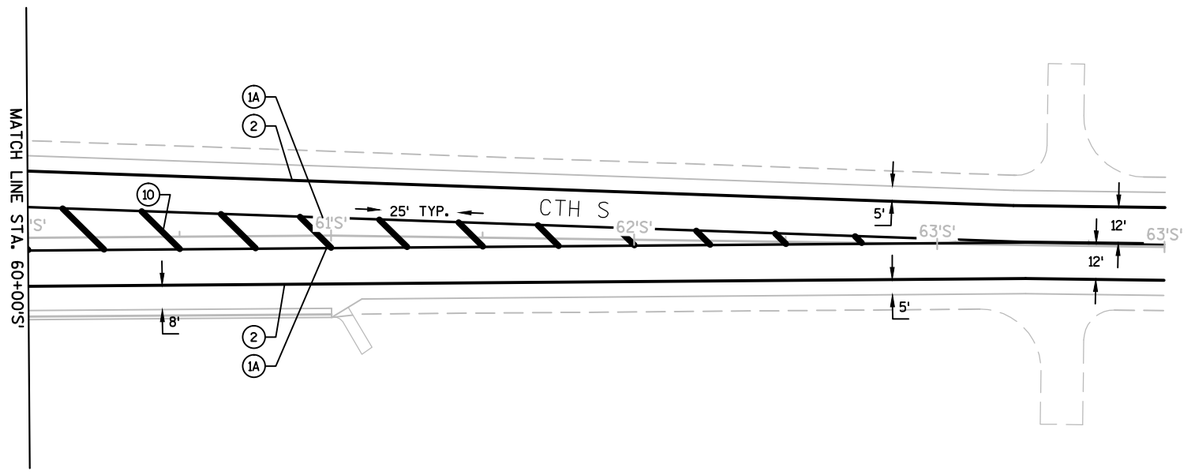
LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH, YELLOW
(1A) PAVEMENT MARKING EPOXY 4-INCH, DOUBLE YELLOW
(2) PAVEMENT MARKING EPOXY 4-INCH, WHITE
(4) PAVEMENT MARKING EPOXY 4-INCH, DOT PATTERN WHITE (3 FT LINE 9 FT SKIP)
(6) PAVEMENT MARKING EPOXY 8-INCH, WHITE
(7) PAVEMENT MARKING STOPLINE EPOXY, 18-INCH WHITE
(10) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
(20) PAVEMENT MARKING CURB EPOXY, YELLOW
(21) PAVEMENT MARKING ISLAND NOSE EPOXY, YELLOW

PROJECT NO:1003-10-71	HWY: IH 39	COUNTY: ROCK	PAVEMENT MARKING	SHEET 154	E

2

N



LEGEND

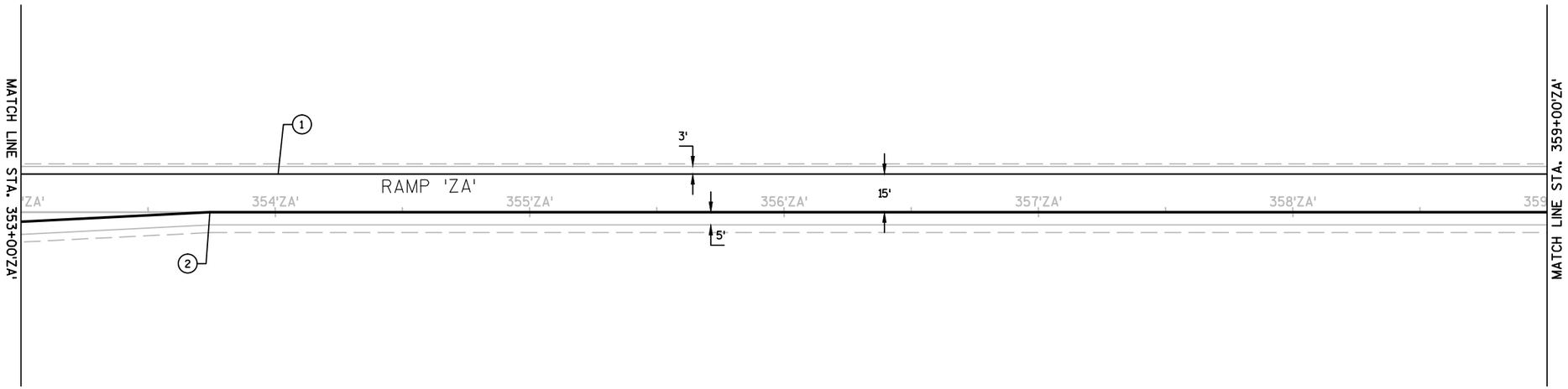
(1) PAVEMENT MARKING EPOXY 4-INCH, YELLOW

(1A) PAVEMENT MARKING EPOXY 4-INCH, DOUBLE YELLOW

(2) PAVEMENT MARKING EPOXY 4-INCH, WHITE

(10) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW

2



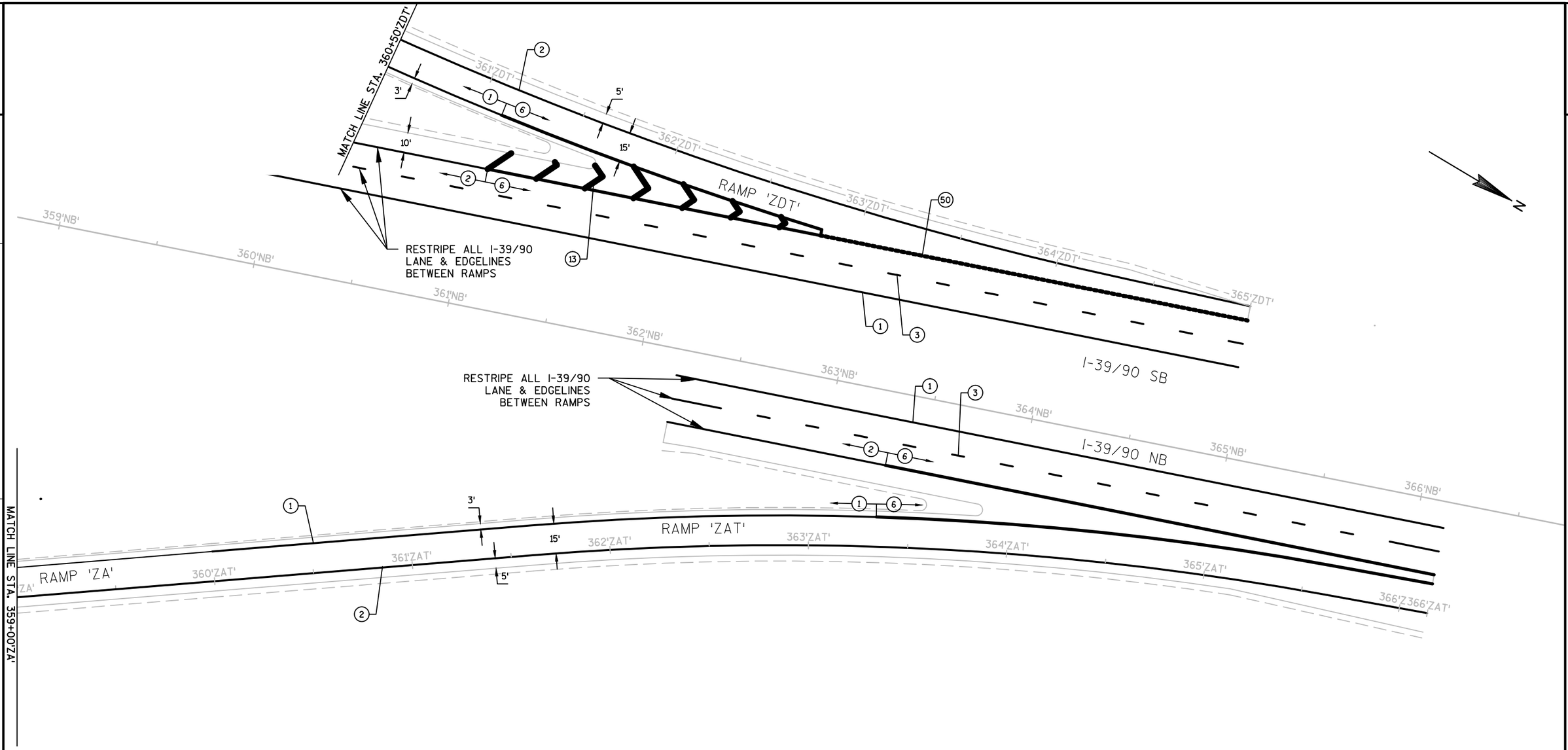
LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH, YELLOW

(2) PAVEMENT MARKING EPOXY 4-INCH, WHITE

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PAVEMENT MARKING	SHEET 156	E

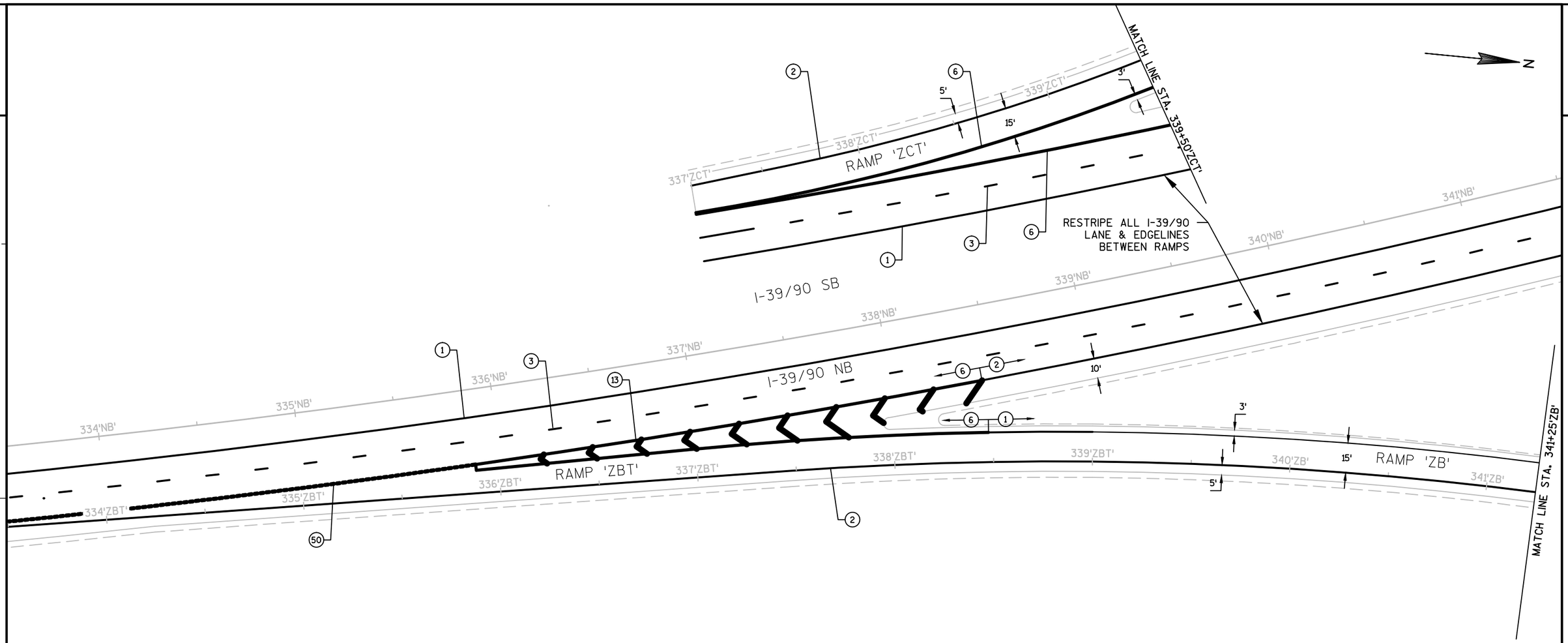
2



LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH, YELLOW
(2) PAVEMENT MARKING EPOXY 4-INCH, WHITE
(3) PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIPS (12.5' LONG, 37.5' GAP)
(6) PAVEMENT MARKING EPOXY 8-INCH, WHITE
(13) PAVEMENT MARKING DIAGONAL EPOXY, 24-INCH WHITE
(50) PAVEMENT MARKING EPOXY 4-INCH, DOT PATTERN WHITE (3 FT LINE 9 FT SKIP)

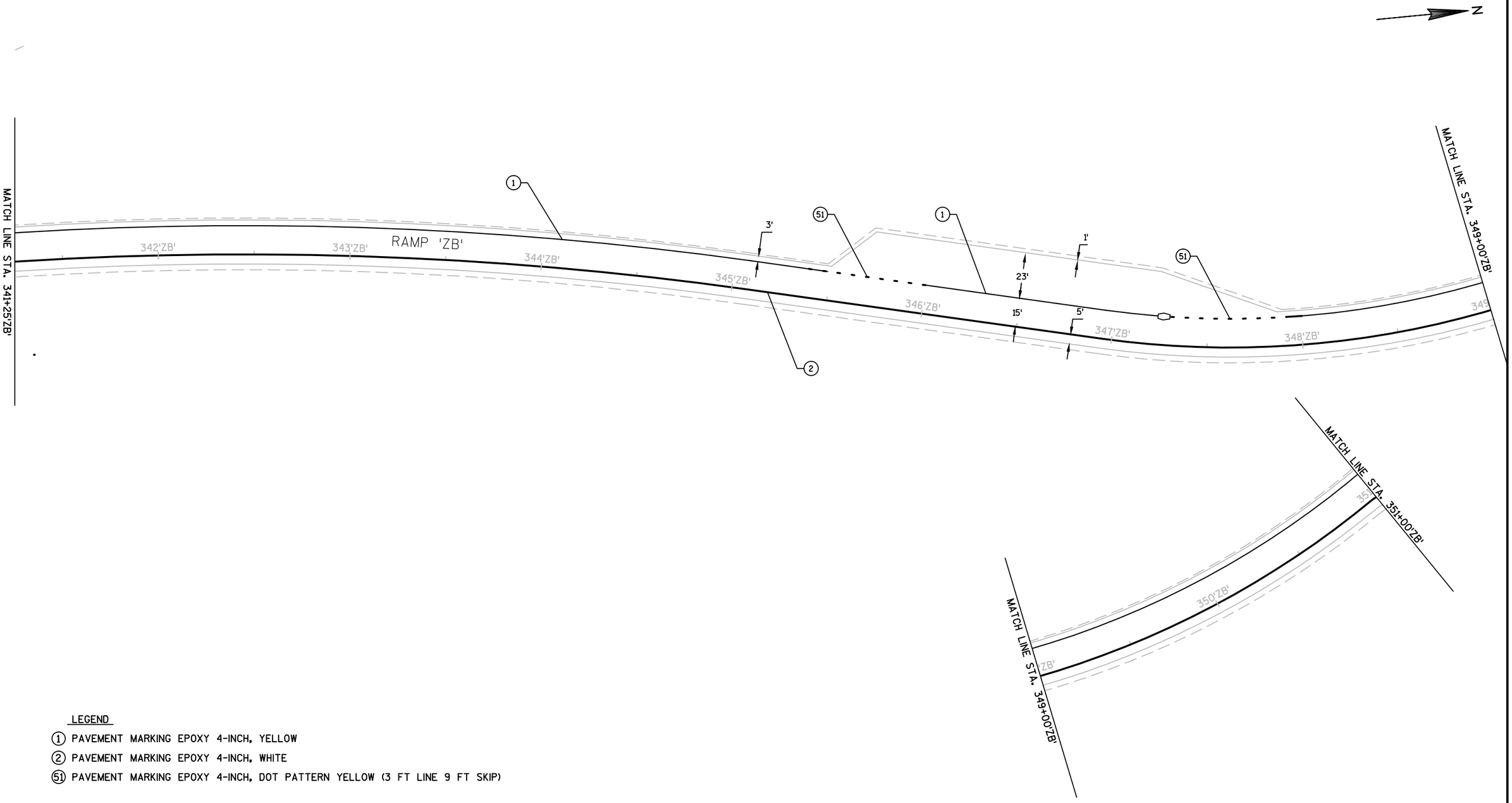
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PAVEMENT MARKING	SHEET 157	E



LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH, YELLOW
(2) PAVEMENT MARKING EPOXY 4-INCH, WHITE
(3) PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIPS (12.5' LONG, 37.5' GAP)
(6) PAVEMENT MARKING EPOXY 8-INCH, WHITE
(13) PAVEMENT MARKING DIAGONAL EPOXY, 24-INCH WHITE
(50) PAVEMENT MARKING EPOXY 4-INCH, DOT PATTERN WHITE (3 FT LINE 9 FT SKIP)

2



LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH, YELLOW

(2) PAVEMENT MARKING EPOXY 4-INCH, WHITE

(51) PAVEMENT MARKING EPOXY 4-INCH, DOT PATTERN YELLOW (3 FT LINE 9 FT SKIP)

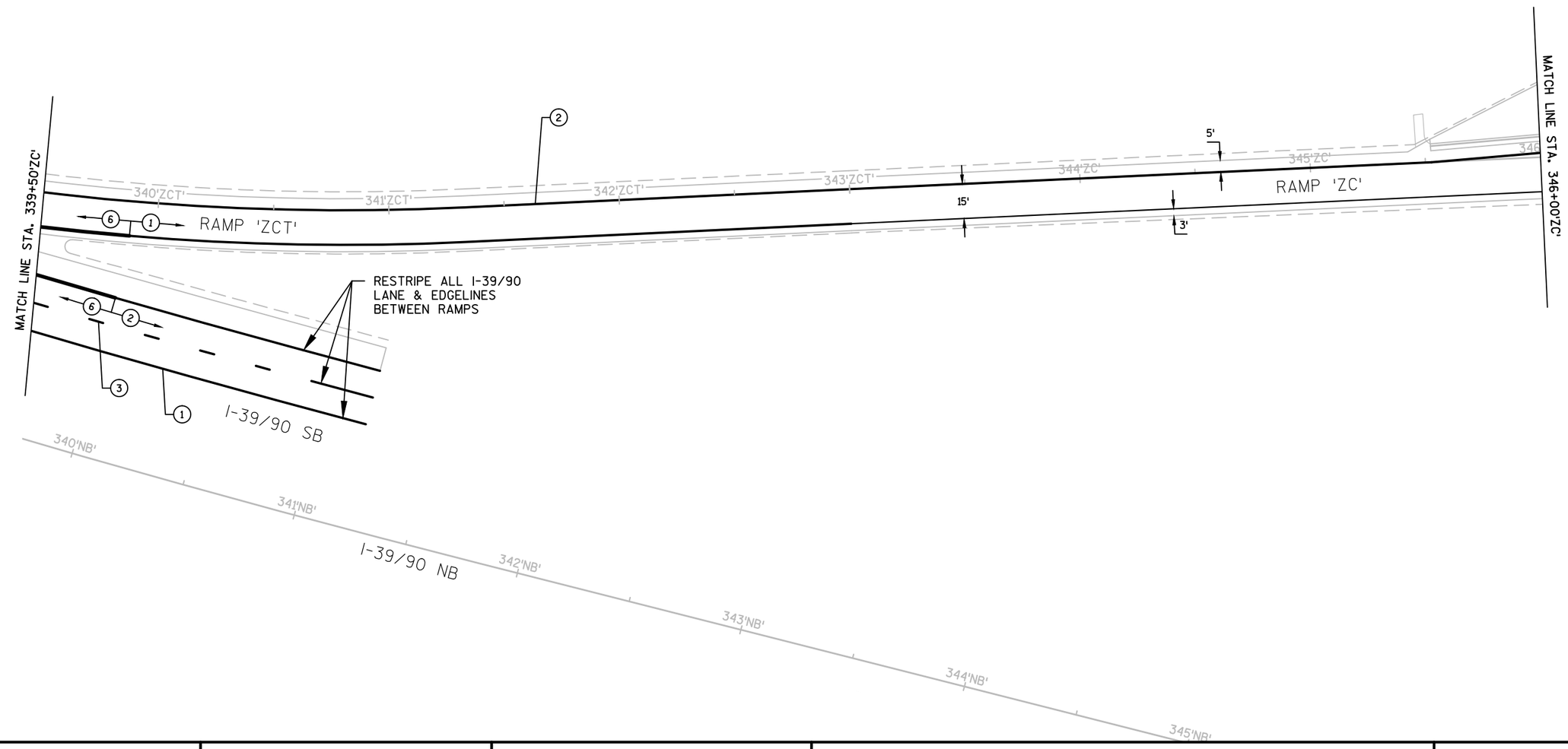
PROJECT NO:1003-10-71	HWY: IH 39	COUNTY: ROCK	PAVEMENT MARKING	SHEET 159	E

2

2

LEGEND

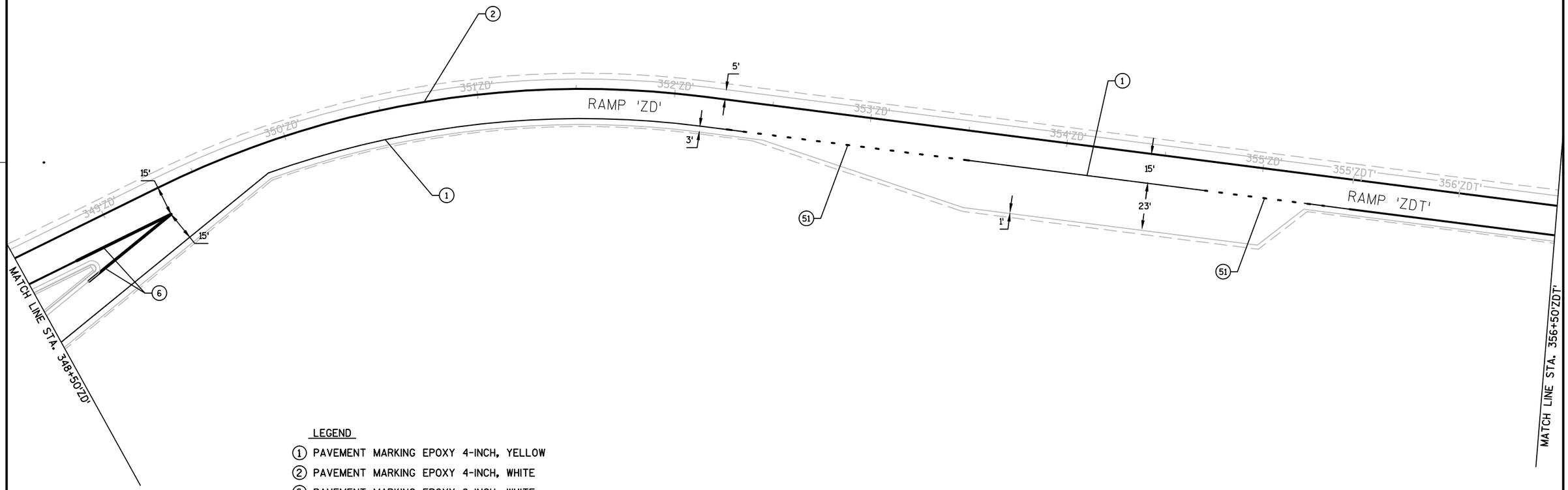
① PAVEMENT MARKING EPOXY 4-INCH, YELLOW
② PAVEMENT MARKING EPOXY 4-INCH, WHITE
③ PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIPS (12.5' LONG, 37.5' GAP)
⑥ PAVEMENT MARKING EPOXY 8-INCH, WHITE



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PAVEMENT MARKING	SHEET 160	E

2

N



LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH, YELLOW
(2) PAVEMENT MARKING EPOXY 4-INCH, WHITE
(6) PAVEMENT MARKING EPOXY 8-INCH, WHITE
(51) PAVEMENT MARKING EPOXY 4-INCH, DOT PATTERN YELLOW (3 FT LINE 9 FT SKIP)

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PAVEMENT MARKING	SHEET 161	E

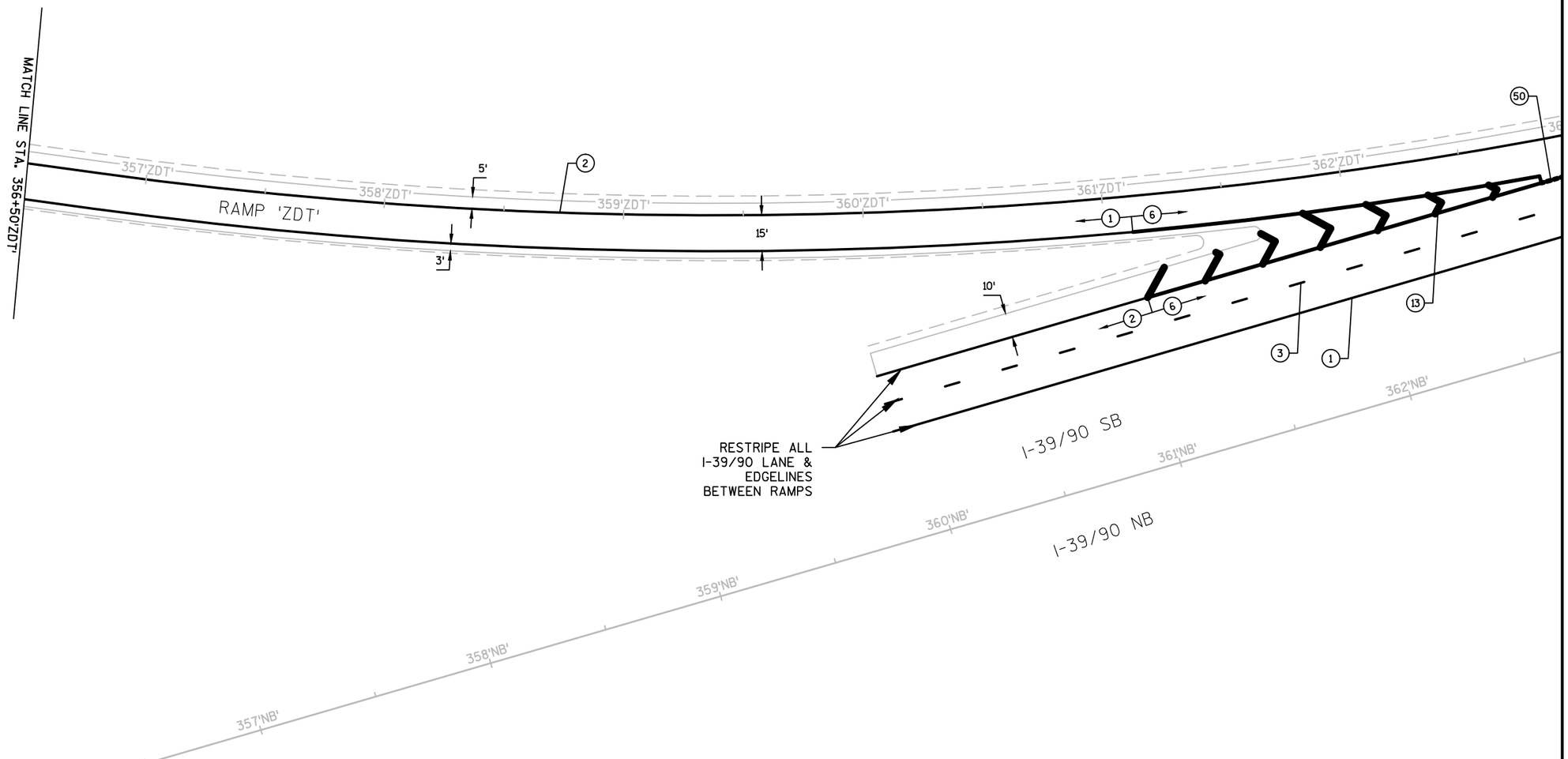
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2

LEGEND

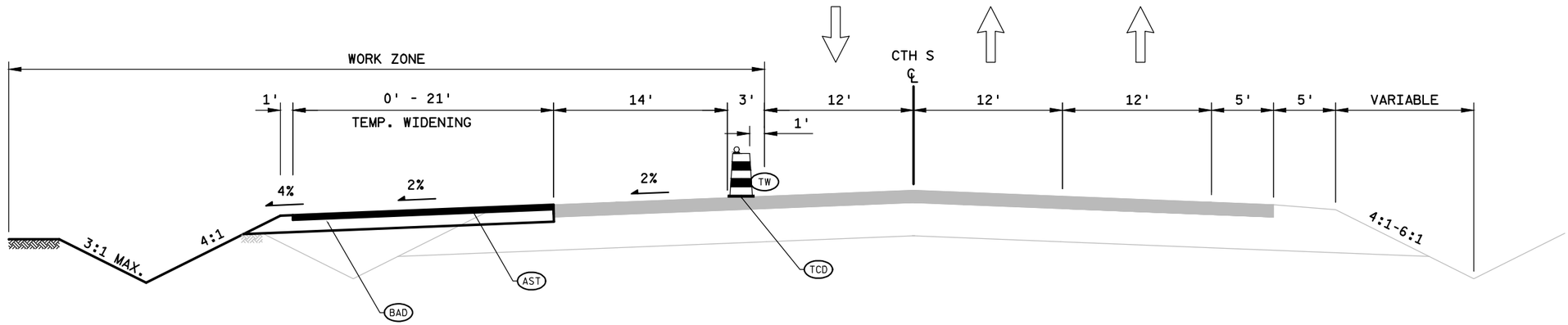
(1) PAVEMENT MARKING EPOXY 4-INCH, YELLOW
(2) PAVEMENT MARKING EPOXY 4-INCH, WHITE
(3) PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIPS (12.5' LONG, 37.5' GAP)
(6) PAVEMENT MARKING EPOXY 8-INCH, WHITE
(13) PAVEMENT MARKING DIAGONAL EPOXY, 24-INCH WHITE
(50) PAVEMENT MARKING EPOXY 4-INCH, DOT PATTERN WHITE (3 FT LINE 9 FT SKIP)

N



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PAVEMENT MARKING	SHEET 162	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_024501_PM.DWG PLOT DATE : 10/27/2014 11:31 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:50_XREF

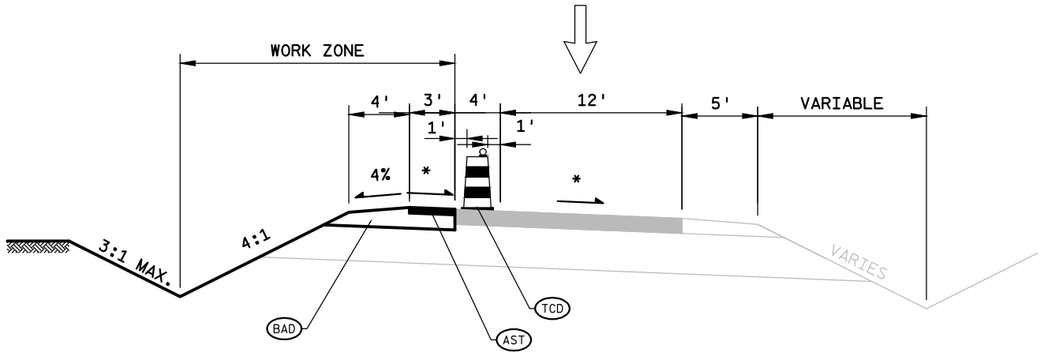


STAGING TYPICAL SECTION - STAGE 1

STA 9+00'S' - 30+00'S'

LEGEND

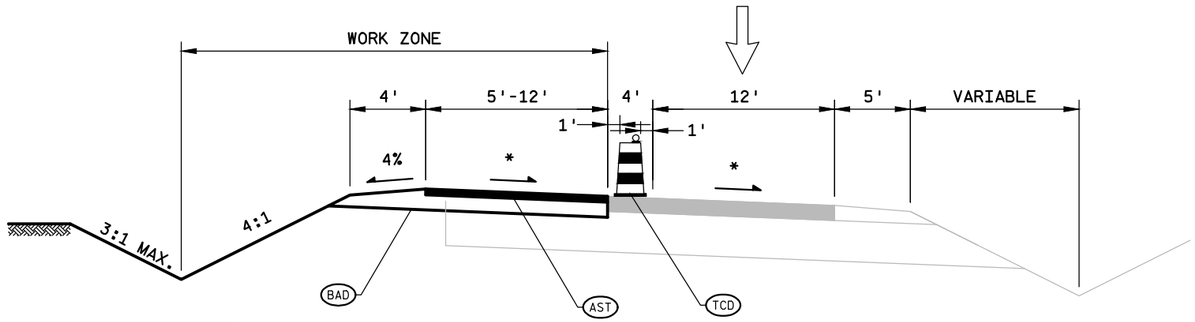
TW	TEMPORARY PAVEMENT MARKING, 4-INCH, WHITE
TY	TEMPORARY PAVEMENT MARKING, 4-INCH, YELLOW
TDY	TEMPORARY PAVEMENT MARKING, 4-INCH, DOUBLE YELLOW
T8W	TEMPORARY PAVEMENT MARKING, 8-INCH, WHITE
TCD	TRAFFIC CONTROL DRUM
FTM	FLEXIBLE TUBULAR MARKERS, 50' SPACING
CBT	CONCRETE BARRIER TEMPORARY PRECAST
AST	ASPHALTIC SURFACE TEMPORARY, 4.5-INCH
BAD	BASE AGGREGATE DENSE 1 1/4-INCH, 12-INCHES



STAGING TYPICAL SECTION - STAGE 1

RAMP ZC

* MATCH EXISTING CROSS SLOPE OF RAMP



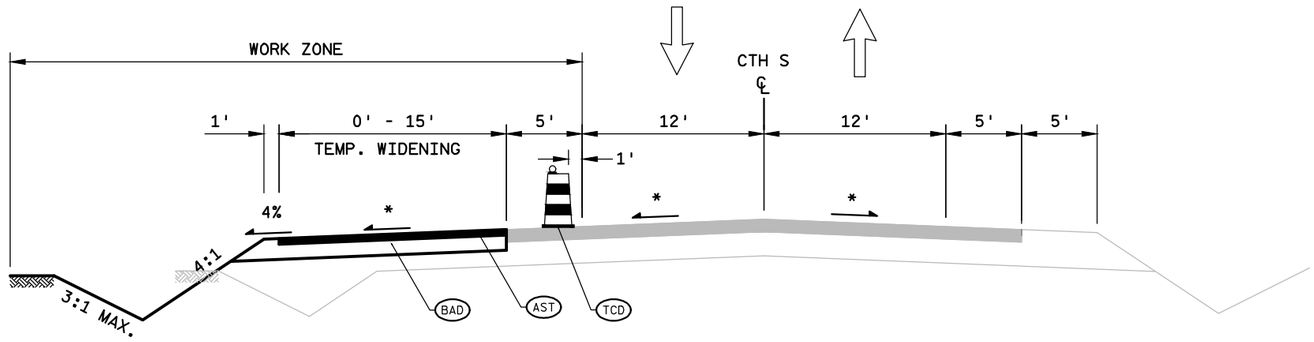
STAGING TYPICAL SECTION - STAGE 1

RAMP ZD

* MATCH EXISTING CROSS SLOPE OF RAMP

LEGEND

TW	TEMPORARY PAVEMENT MARKING, 4-INCH, WHITE
TY	TEMPORARY PAVEMENT MARKING, 4-INCH, YELLOW
TDY	TEMPORARY PAVEMENT MARKING, 4-INCH, DOUBLE YELLOW
T8W	TEMPORARY PAVEMENT MARKING, 8-INCH, WHITE
TCD	TRAFFIC CONTROL DRUM
FTM	FLEXIBLE TUBULAR MARKERS, 50' SPACING
CBT	CONCRETE BARRIER TEMPORARY PRECAST
AST	ASPHALTIC SURFACE TEMPORARY, 4.5-INCH
BAD	BASE AGGREGATE DENSE 1 1/4-INCH, 12-INCHES



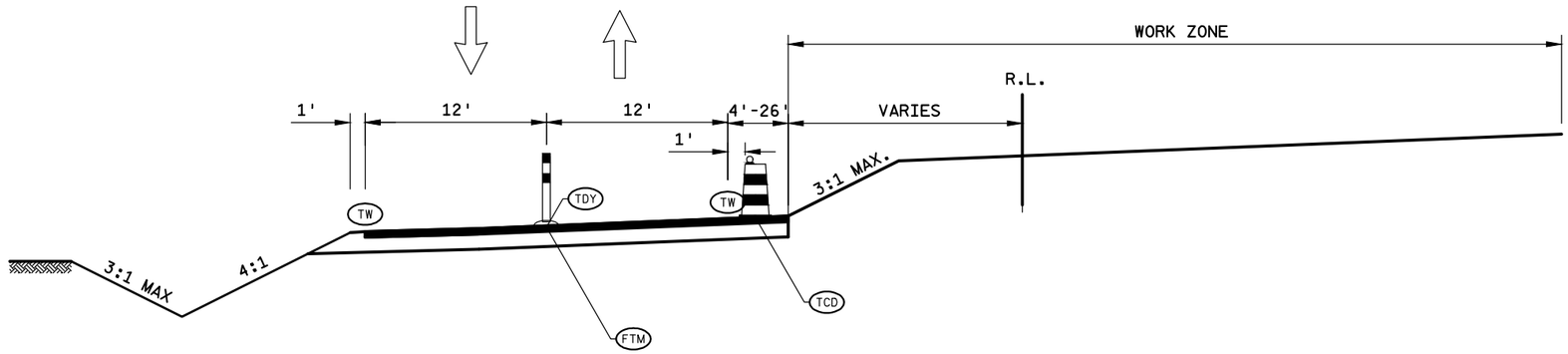
* MATCH EXISTING CROSS SLOPE OF RAMP

STAGING TYPICAL SECTION - STAGE 1

STA 53+50'S' - 67+00'S'

LEGEND

TW	TEMPORARY PAVEMENT MARKING, 4-INCH, WHITE
TY	TEMPORARY PAVEMENT MARKING, 4-INCH, YELLOW
TDY	TEMPORARY PAVEMENT MARKING, 4-INCH, DOUBLE YELLOW
T8W	TEMPORARY PAVEMENT MARKING, 8-INCH, WHITE
TCD	TRAFFIC CONTROL DRUM
FTM	FLEXIBLE TUBULAR MARKERS, 50' SPACING
CBT	CONCRETE BARRIER TEMPORARY PRECAST
AST	ASPHALTIC SURFACE TEMPORARY, 4.5-INCH
BAD	BASE AGGREGATE DENSE 1 1/4-INCH, 12-INCHES

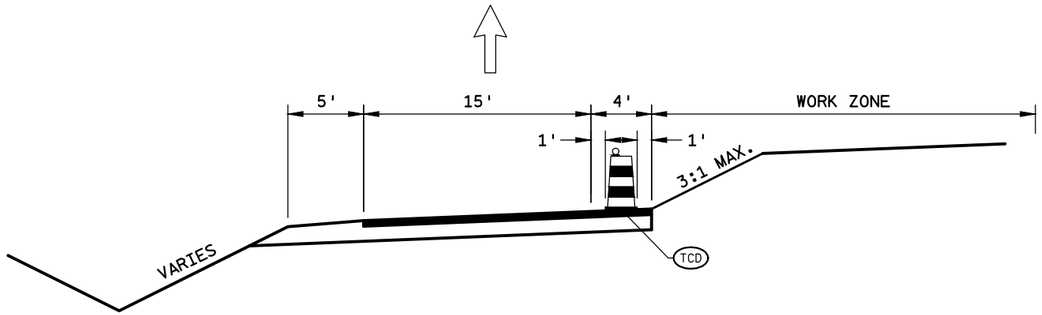


STAGING TYPICAL SECTION - STAGE 2 & 2A

STA 9+00'S' - 30+50'S'

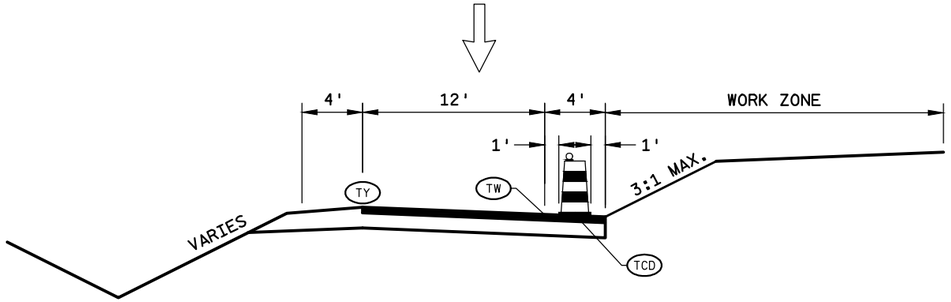
LEGEND

TW	TEMPORARY PAVEMENT MARKING, 4-INCH, WHITE
TY	TEMPORARY PAVEMENT MARKING, 4-INCH, YELLOW
TDY	TEMPORARY PAVEMENT MARKING, 4-INCH, DOUBLE YELLOW
T8W	TEMPORARY PAVEMENT MARKING, 8-INCH, WHITE
TCD	TRAFFIC CONTROL DRUM
FTM	FLEXIBLE TUBULAR MARKERS, 50' SPACING
CBT	CONCRETE BARRIER TEMPORARY PRECAST
AST	ASPHALTIC SURFACE TEMPORARY, 4.5-INCH
BAD	BASE AGGREGATE DENSE 1 1/4-INCH, 12-INCHES



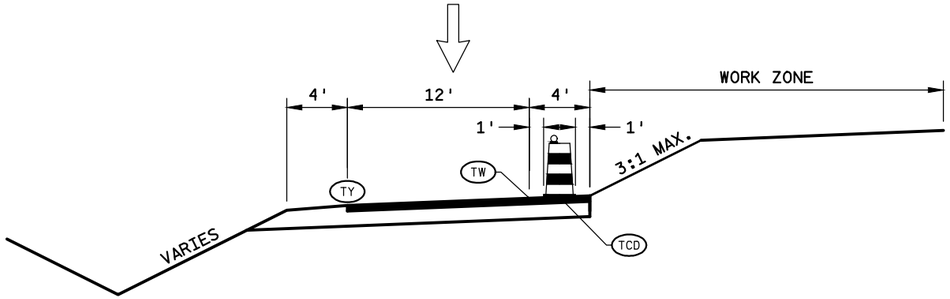
STAGING TYPICAL SECTION - STAGE 2 & 2A

RAMP ZA



STAGING TYPICAL SECTION - STAGE 2 & 2B

RAMP ZC

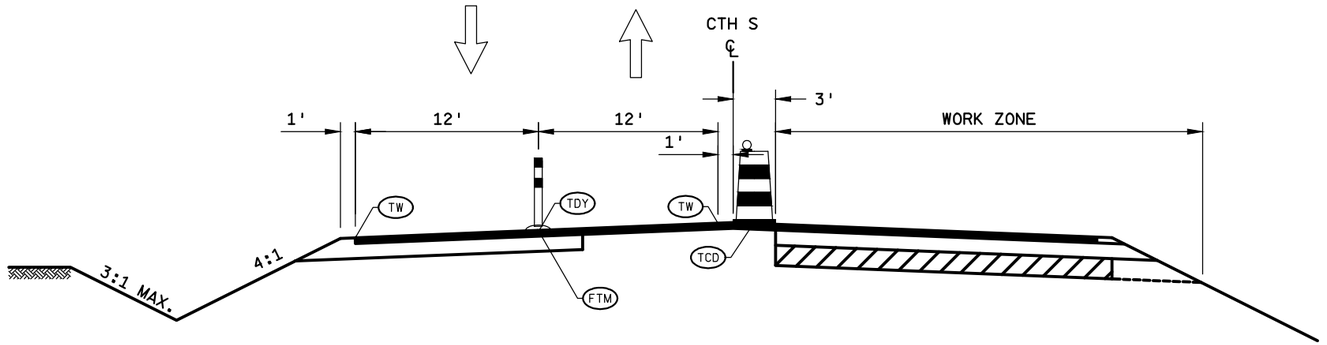


STAGING TYPICAL SECTION - STAGE 2 & 2A

RAMP ZD

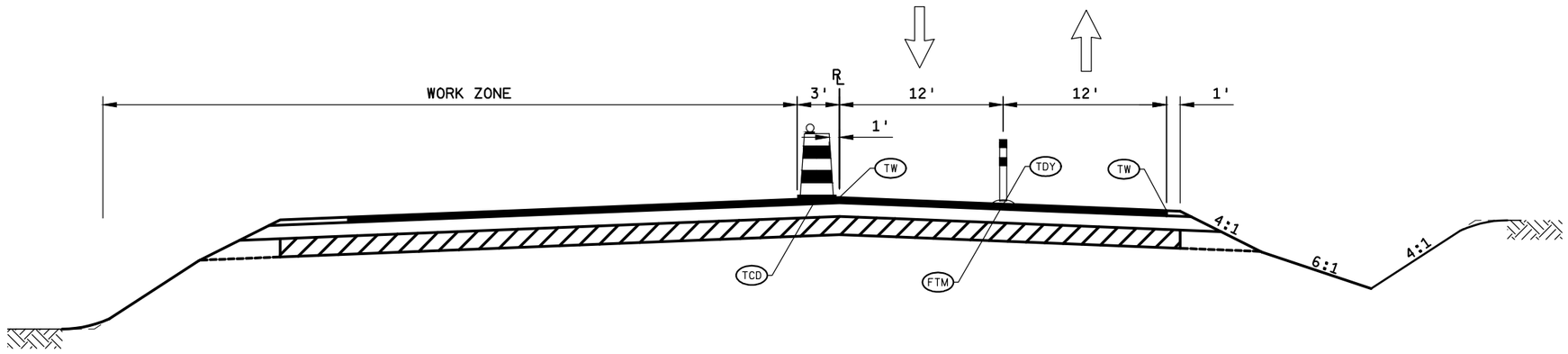
LEGEND

TW	TEMPORARY PAVEMENT MARKING, 4-INCH, WHITE
TY	TEMPORARY PAVEMENT MARKING, 4-INCH, YELLOW
TDY	TEMPORARY PAVEMENT MARKING, 4-INCH, DOUBLE YELLOW
T8W	TEMPORARY PAVEMENT MARKING, 8-INCH, WHITE
TCD	TRAFFIC CONTROL DRUM
FTM	FLEXIBLE TUBULAR MARKERS, 50' SPACING
CBT	CONCRETE BARRIER TEMPORARY PRECAST
AST	ASPHALTIC SURFACE TEMPORARY, 4.5-INCH
BAD	BASE AGGREGATE DENSE 1 1/4-INCH, 12-INCHES



STAGING TYPICAL SECTION - STAGE 2

STA 52+00'S' - 63+75'S'

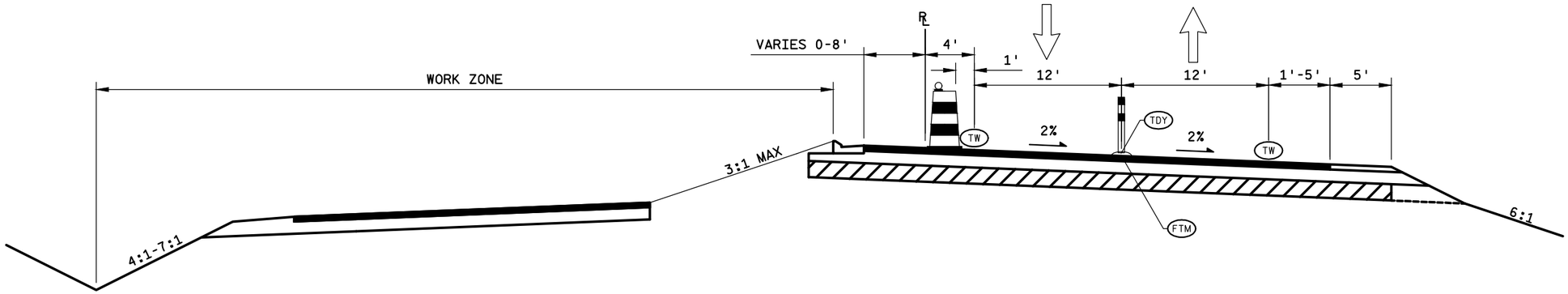


STAGING TYPICAL SECTION - STAGE 2B & 3

STA 55+00'S' - 63+75'S'

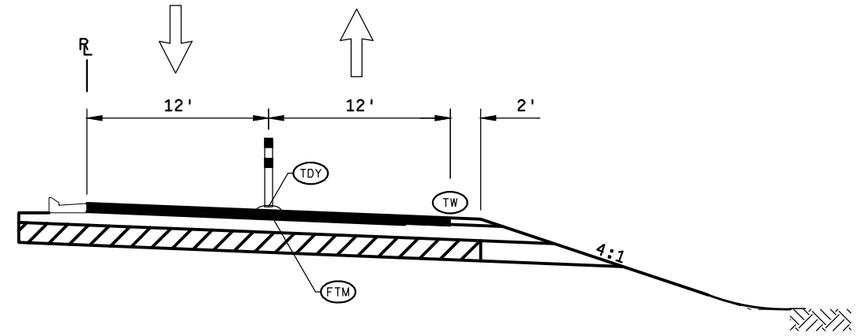
LEGEND

TW	TEMPORARY PAVEMENT MARKING, 4-INCH, WHITE
TY	TEMPORARY PAVEMENT MARKING, 4-INCH, YELLOW
TDY	TEMPORARY PAVEMENT MARKING, 4-INCH, DOUBLE YELLOW
T8W	TEMPORARY PAVEMENT MARKING, 8-INCH, WHITE
TCD	TRAFFIC CONTROL DRUM
FTM	FLEXIBLE TUBULAR MARKERS, 50' SPACING
CBT	CONCRETE BARRIER TEMPORARY PRECAST
AST	ASPHALTIC SURFACE TEMPORARY, 4.5-INCH
BAD	BASE AGGREGATE DENSE 1 1/4-INCH, 12-INCHES



STAGING TYPICAL SECTION - STAGE 2B & 3

STA 9+00'S' - 29+00'S'

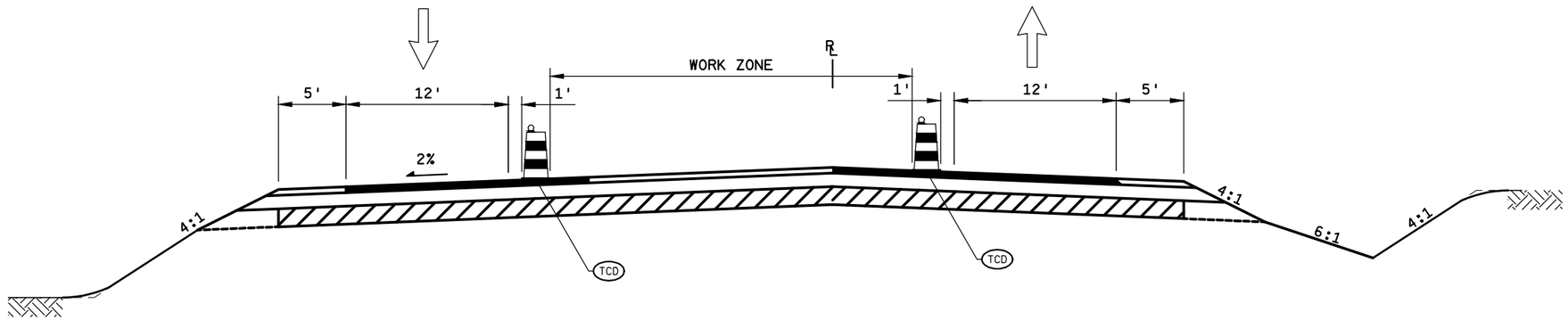


STAGING TYPICAL SECTION - STAGE 2B & 3

STA 40+00'S' - 55+00'S'

LEGEND

TW	TEMPORARY PAVEMENT MARKING, 4-INCH, WHITE
TY	TEMPORARY PAVEMENT MARKING, 4-INCH, YELLOW
TDY	TEMPORARY PAVEMENT MARKING, 4-INCH, DOUBLE YELLOW
T8W	TEMPORARY PAVEMENT MARKING, 8-INCH, WHITE
TCD	TRAFFIC CONTROL DRUM
FTM	FLEXIBLE TUBULAR MARKERS, 50' SPACING
CBT	CONCRETE BARRIER TEMPORARY PRECAST
AST	ASPHALTIC SURFACE TEMPORARY, 4.5-INCH
BAD	BASE AGGREGATE DENSE 1 1/4-INCH, 12-INCHES

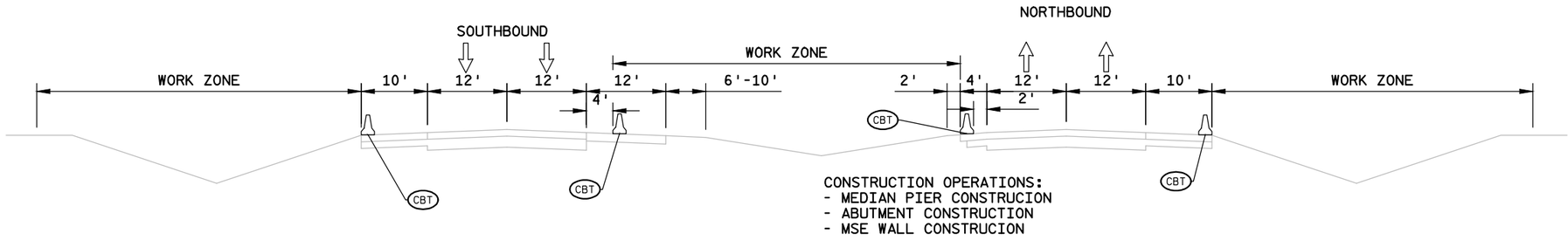


STAGING TYPICAL SECTION - STAGE 3A

STA 9+00'S' TO 31+00'S'
STA 55+00'S' TO 56+50'S'

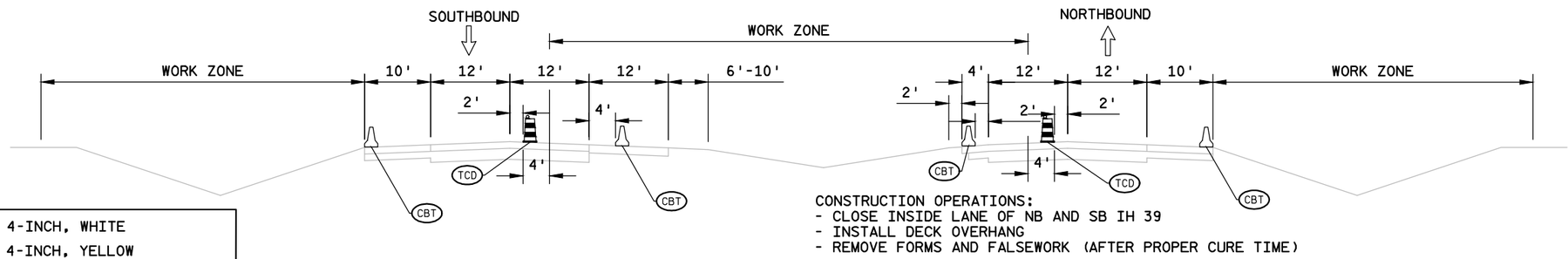
LEGEND

TW	TEMPORARY PAVEMENT MARKING, 4-INCH, WHITE
TY	TEMPORARY PAVEMENT MARKING, 4-INCH, YELLOW
TDY	TEMPORARY PAVEMENT MARKING, 4-INCH, DOUBLE YELLOW
T8W	TEMPORARY PAVEMENT MARKING, 8-INCH, WHITE
TCD	TRAFFIC CONTROL DRUM
FTM	FLEXIBLE TUBULAR MARKERS, 50' SPACING
CBT	CONCRETE BARRIER TEMPORARY PRECAST
AST	ASPHALTIC SURFACE TEMPORARY, 4.5-INCH
BAD	BASE AGGREGATE DENSE 1 1/4-INCH, 12-INCHES



STAGING TYPICAL SECTION - STAGE 1 & 2

IH 39 (DAY TIME OPERATION)

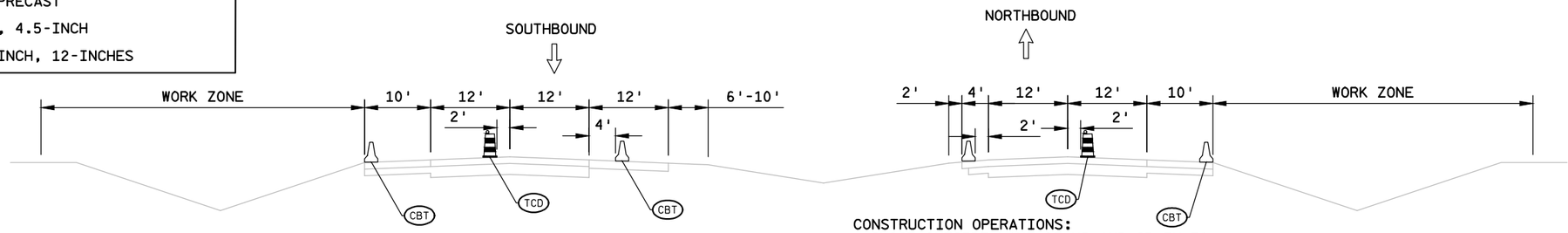


STAGING TYPICAL SECTION - STAGE 2

IH 39 (NIGHT TIME OPERATIONS)

LEGEND

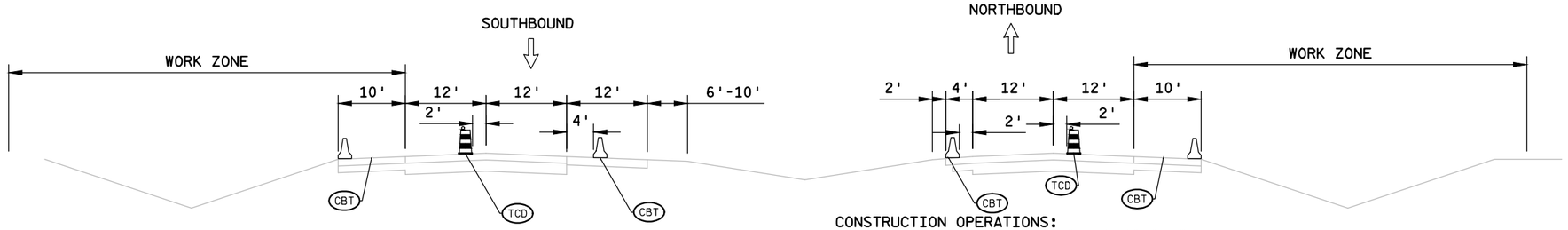
TW	TEMPORARY PAVEMENT MARKING, 4-INCH, WHITE
TY	TEMPORARY PAVEMENT MARKING, 4-INCH, YELLOW
TDY	TEMPORARY PAVEMENT MARKING, 4-INCH, DOUBLE YELLOW
T8W	TEMPORARY PAVEMENT MARKING, 8-INCH, WHITE
TCD	TRAFFIC CONTROL DRUM
FTM	FLEXIBLE TUBULAR MARKERS, 50' SPACING
CBT	CONCRETE BARRIER TEMPORARY PRECAST
AST	ASPHALTIC SURFACE TEMPORARY, 4.5-INCH
BAD	BASE AGGREGATE DENSE 1 1/4-INCH, 12-INCHES



STAGING TYPICAL SECTION - STAGE 2

IH 39 (NIGHT TIME OPERATIONS)

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	TRAFFIC CONTROL TYPICAL SECTIONS - IH 39 STAGE 1 & 2	SHEET 171	E



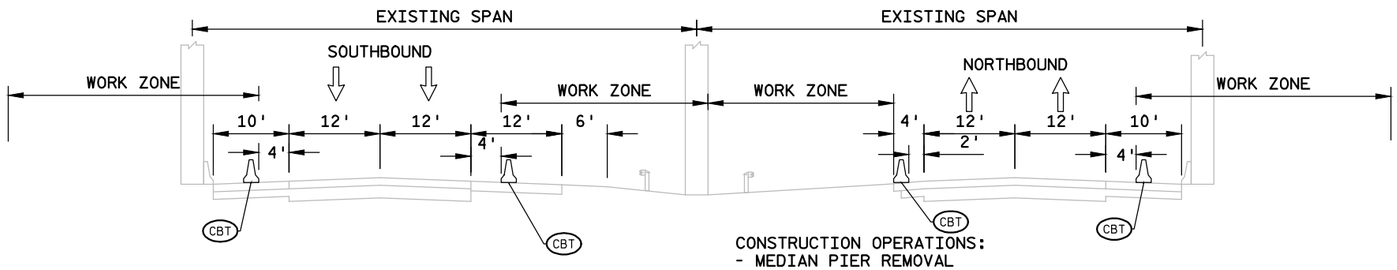
CONSTRUCTION OPERATIONS:
- CLOSE OUTSIDE LANE OF NB AND SB IH 39
- CONSTRUCT TEMPORARY RAMP CONNECTIONS
- REMOVE OLD RAMP CONNECTIONS AT IH 39

LEGEND

TW	TEMPORARY PAVEMENT MARKING, 4-INCH, WHITE
TY	TEMPORARY PAVEMENT MARKING, 4-INCH, YELLOW
TDY	TEMPORARY PAVEMENT MARKING, 4-INCH, DOUBLE YELLOW
T8W	TEMPORARY PAVEMENT MARKING, 8-INCH, WHITE
TCD	TRAFFIC CONTROL DRUM
FTM	FLEXIBLE TUBULAR MARKERS, 50' SPACING
CBT	CONCRETE BARRIER TEMPORARY PRECAST
AST	ASPHALTIC SURFACE TEMPORARY, 4.5-INCH
BAD	BASE AGGREGATE DENSE 1 1/4-INCH, 12-INCHES

STAGING TYPICAL SECTION - STAGE 2A & 2B

IH 39 (NIGHT TIME OPERATIONS)

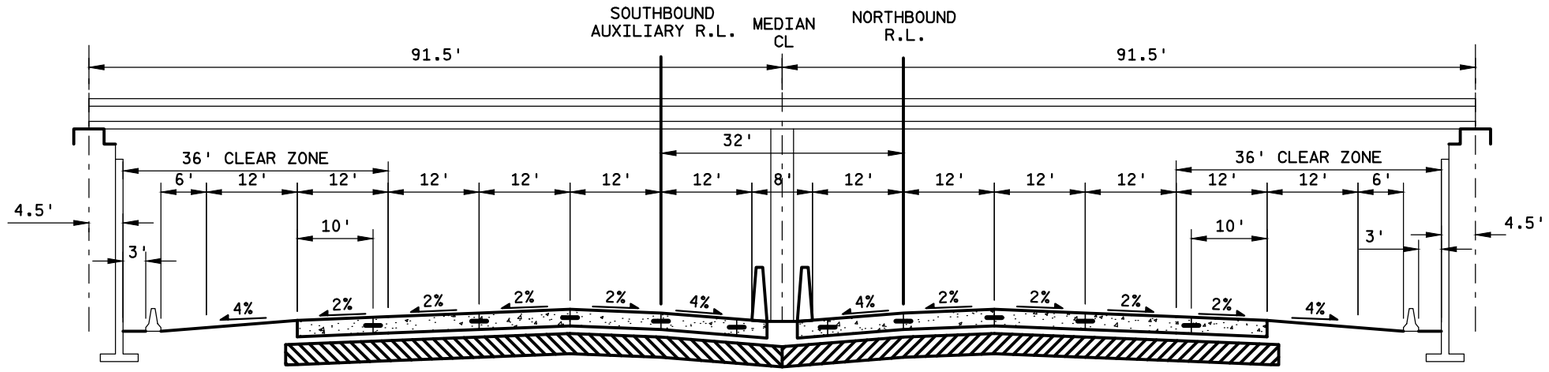


CONSTRUCTION OPERATIONS:
- MEDIAN PIER REMOVAL
- OUTSIDE PIER AND ABUTMENT REMOVAL

STAGING TYPICAL SECTION - STAGE 4

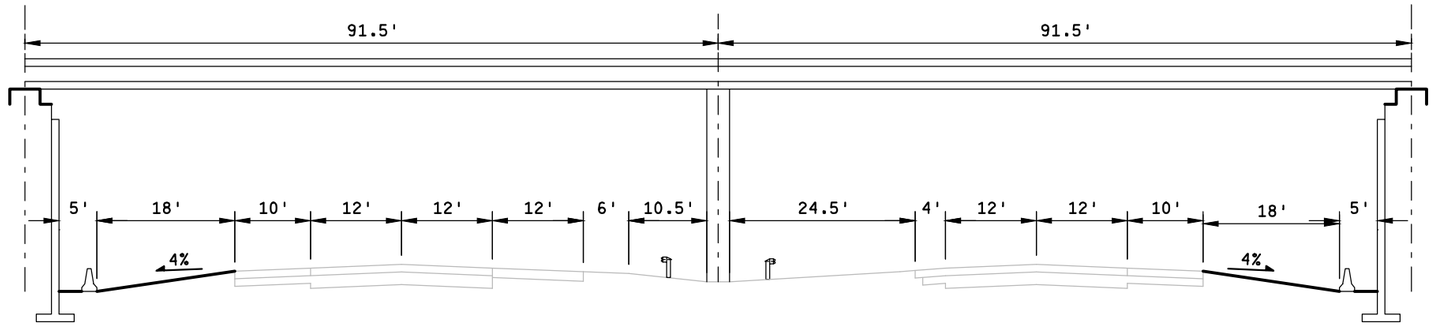
IH 39 (NIGHT TIME OPERATIONS)

2



TYPICAL FUTURE FINISHED SECTION

IH 39 UNDER CTH S (B-53-313)



TYPICAL INTERIM FINISHED SECTION

IH 39 UNDER CTH S (B-53-313)

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	TYPICAL SECTIONS - IH 39 UNDER CTH S	SHEET 173	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_020301_TS-STAGING.DWG PLOT DATE : 10/14/2014 2:07 PM PLOT BY : LUCAS CHASE PLOT NAME : ---------- PLOT SCALE : 1 IN: 10 FT WISDOT/CADDS SHEET 42

TRAFFIC CONTROL GENERAL NOTES (ALL STAGES):

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 DISTANCE OF 200 FEET (500 FEET DESIRABLE) TO EXISTING SIGNS.

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. REMOVING/REPLACING SIGNS WILL BE INCIDENTAL TO OTHER TRAFFIC CONTROL ITEMS.

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

IF SIGNS ARE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TRAFFIC CONTROL SIGNING SHALL CONFORM TO: PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICED, THE WISCONSIN SUPPLEMENT TO THE MUTCD, AND OTHER CONTRACT DOCUMENTS.

THE TURNING OF TRAFFIC CONTROL DEVICES WHEN NOT IN USE TO OBSCURE THE MESSAGE WILL NOT BE ALLOWED.

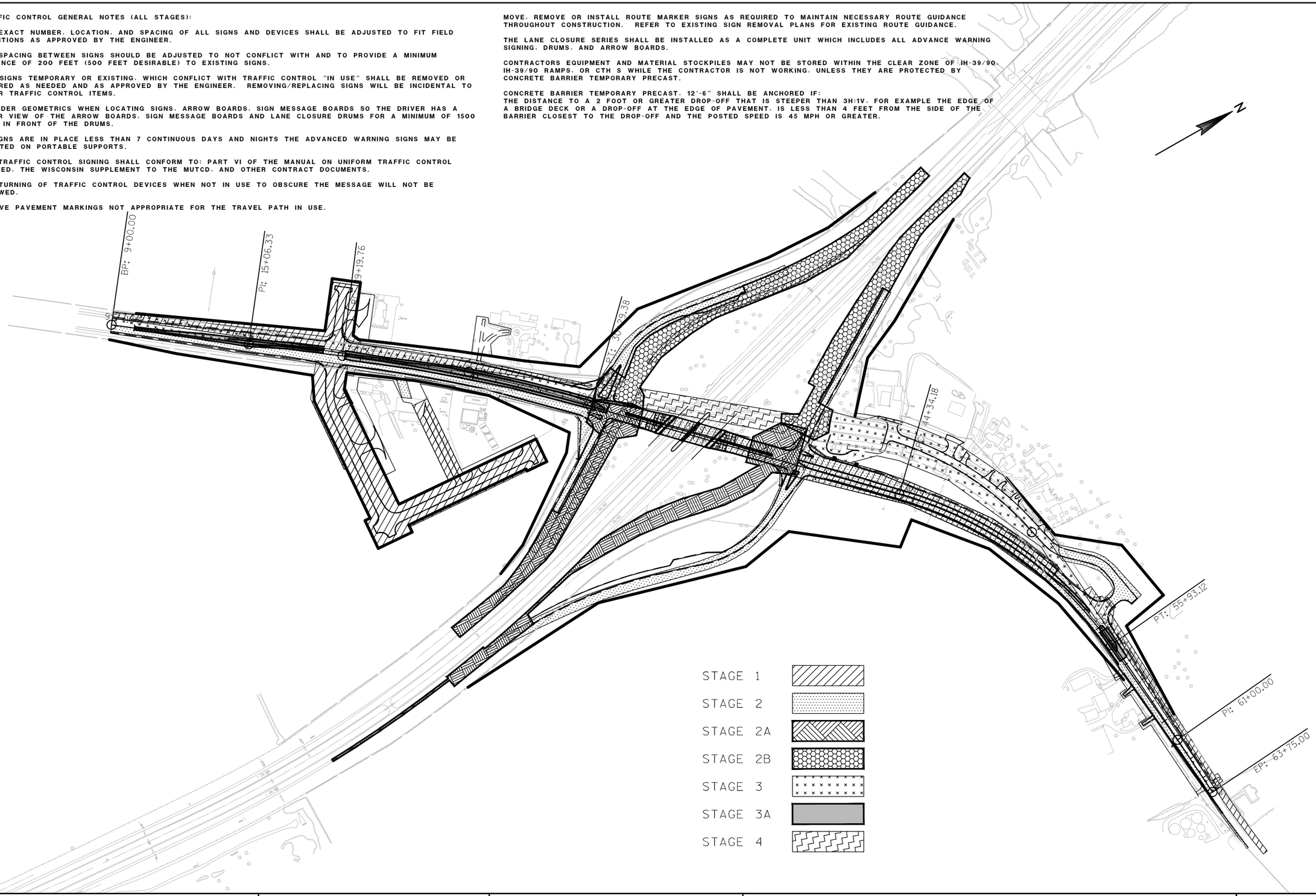
REMOVE PAVEMENT MARKINGS NOT APPROPRIATE FOR THE TRAVEL PATH IN USE.

MOVE, REMOVE OR INSTALL ROUTE MARKER SIGNS AS REQUIRED TO MAINTAIN NECESSARY ROUTE GUIDANCE THROUGHOUT CONSTRUCTION. REFER TO EXISTING SIGN REMOVAL PLANS FOR EXISTING ROUTE GUIDANCE.

THE LANE CLOSURE SERIES SHALL BE INSTALLED AS A COMPLETE UNIT WHICH INCLUDES ALL ADVANCE WARNING SIGNING, DRUMS, AND ARROW BOARDS.

CONTRACTORS EQUIPMENT AND MATERIAL STOCKPILES MAY NOT BE STORED WITHIN THE CLEAR ZONE OF IH-39/90, IH-39/90 RAMPS, OR CTH S WHILE THE CONTRACTOR IS NOT WORKING, UNLESS THEY ARE PROTECTED BY CONCRETE BARRIER TEMPORARY PRECAST.

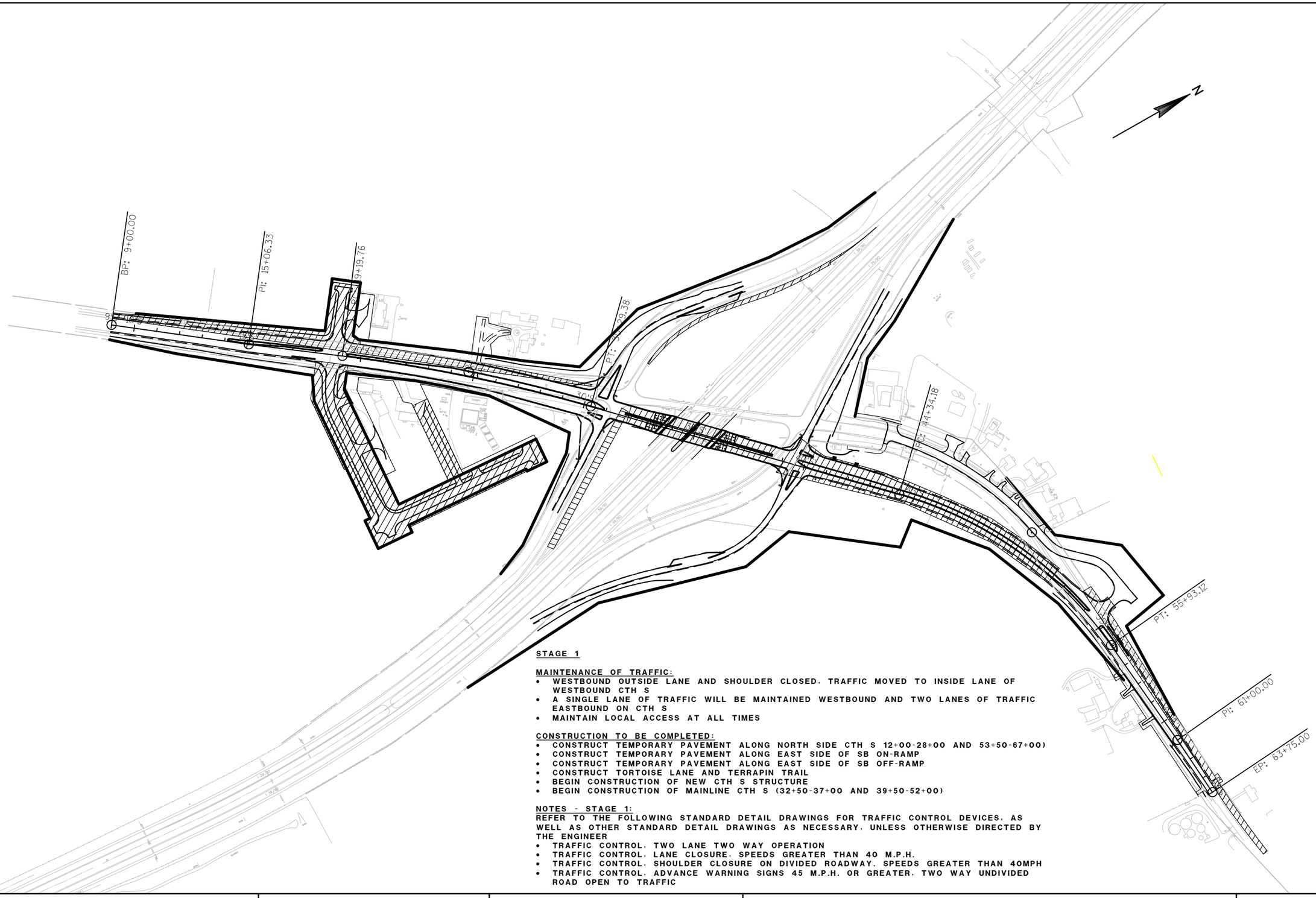
CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
THE DISTANCE TO A 2 FOOT OR GREATER DROP-OFF THAT IS STEEPER THAN 3H:1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROP-OFF AT THE EDGE OF PAVEMENT, IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROP-OFF AND THE POSTED SPEED IS 45 MPH OR GREATER.



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PROJECT STAGING - CTH S	SHEET	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_025001_TC.DWG PLOT DATE : 10/14/2014 2:09 PM PLOT BY : LUCAS CHASE PLOT NAME : ---------- PLOT SCALE : 1 IN:400 FT

2



STAGE 1

MAINTENANCE OF TRAFFIC:

- WESTBOUND OUTSIDE LANE AND SHOULDER CLOSED, TRAFFIC MOVED TO INSIDE LANE OF WESTBOUND CTH S
- A SINGLE LANE OF TRAFFIC WILL BE MAINTAINED WESTBOUND AND TWO LANES OF TRAFFIC EASTBOUND ON CTH S
- MAINTAIN LOCAL ACCESS AT ALL TIMES

CONSTRUCTION TO BE COMPLETED:

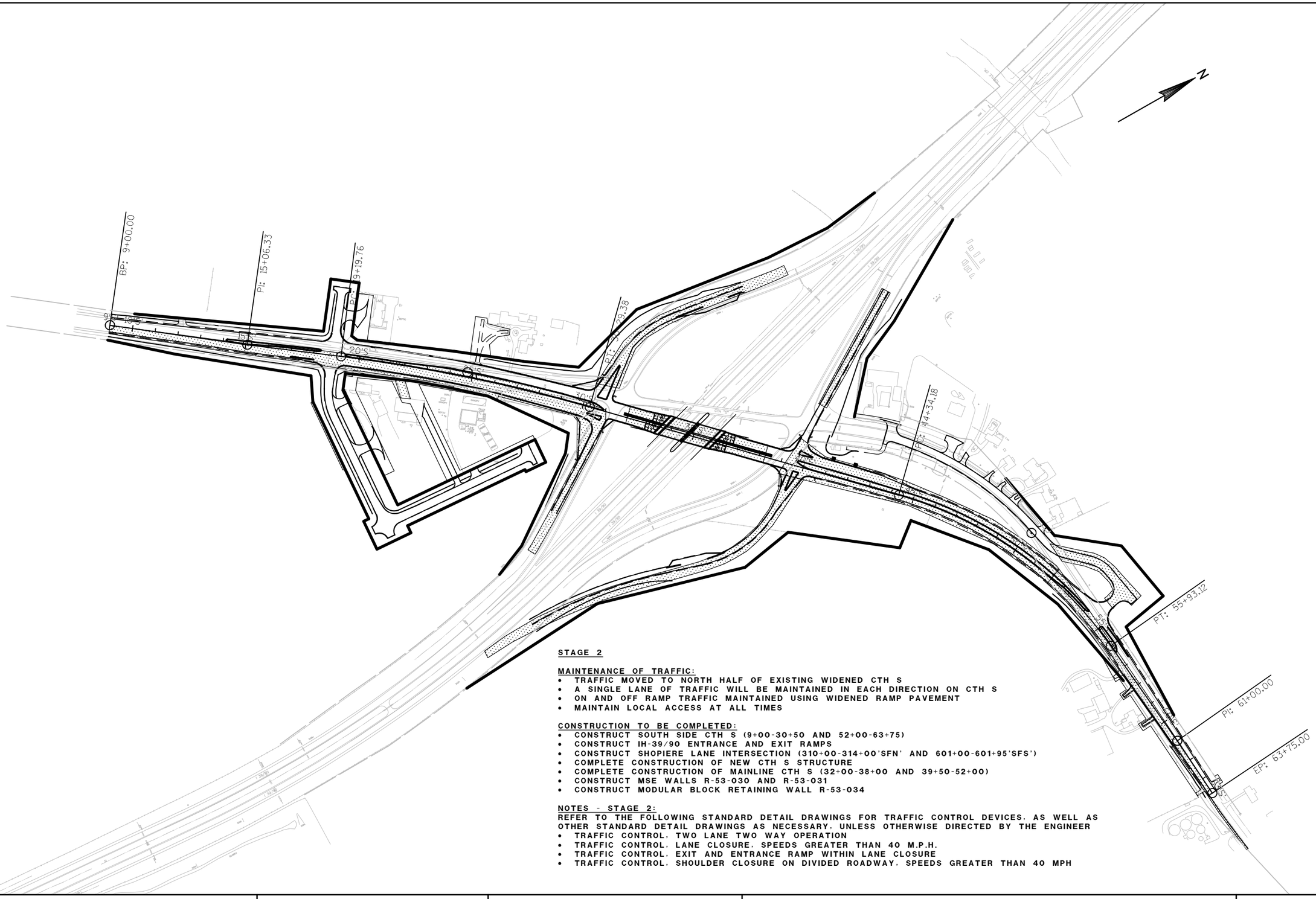
- CONSTRUCT TEMPORARY PAVEMENT ALONG NORTH SIDE CTH S 12+00-28+00 AND 53+50-67+00)
- CONSTRUCT TEMPORARY PAVEMENT ALONG EAST SIDE OF SB ON-RAMP
- CONSTRUCT TEMPORARY PAVEMENT ALONG EAST SIDE OF SB OFF-RAMP
- CONSTRUCT TORTOISE LANE AND TERRAPIN TRAIL
- BEGIN CONSTRUCTION OF NEW CTH S STRUCTURE
- BEGIN CONSTRUCTION OF MAINLINE CTH S (32+50-37+00 AND 39+50-52+00)

NOTES - STAGE 1:

REFER TO THE FOLLOWING STANDARD DETAIL DRAWINGS FOR TRAFFIC CONTROL DEVICES, AS WELL AS OTHER STANDARD DETAIL DRAWINGS AS NECESSARY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER

- TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
- TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.
- TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40MPH
- TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC

2

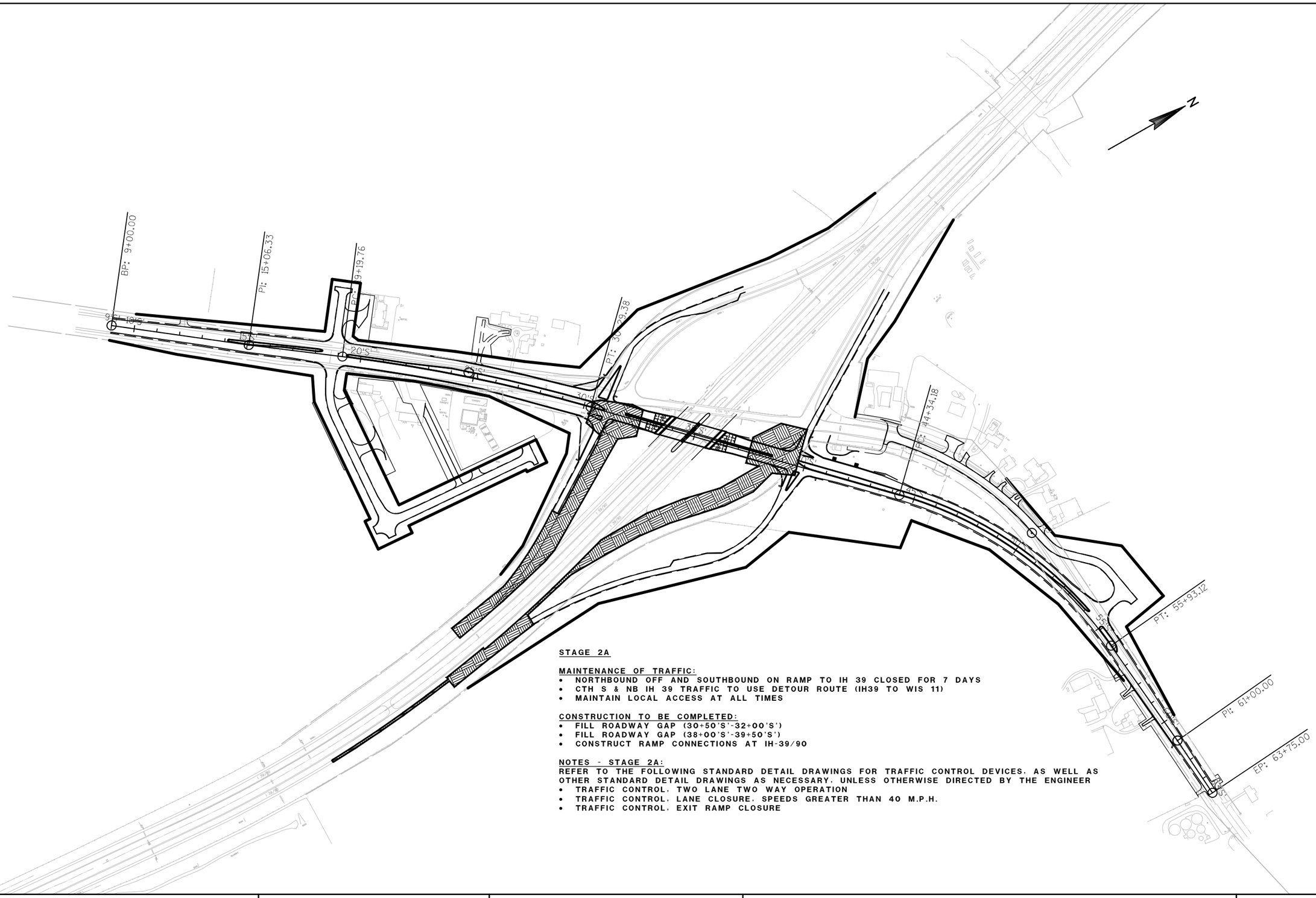


STAGE 2

MAINTENANCE OF TRAFFIC:
- TRAFFIC MOVED TO NORTH HALF OF EXISTING WIDENED CTH S
- A SINGLE LANE OF TRAFFIC WILL BE MAINTAINED IN EACH DIRECTION ON CTH S
- ON AND OFF RAMP TRAFFIC MAINTAINED USING WIDENED RAMP PAVEMENT
- MAINTAIN LOCAL ACCESS AT ALL TIMES

CONSTRUCTION TO BE COMPLETED:
- CONSTRUCT SOUTH SIDE CTH S (9+00-30+50 AND 52+00-63+75)
- CONSTRUCT IH-39/90 ENTRANCE AND EXIT RAMPS
- CONSTRUCT SHOPIERE LANE INTERSECTION (310+00-314+00'SFN' AND 601+00-601+95'SFS')
- COMPLETE CONSTRUCTION OF NEW CTH S STRUCTURE
- COMPLETE CONSTRUCTION OF MAINLINE CTH S (32+00-38+00 AND 39+50-52+00)
- CONSTRUCT MSE WALLS R-53-030 AND R-53-031
- CONSTRUCT MODULAR BLOCK RETAINING WALL R-53-034

NOTES - STAGE 2:
REFER TO THE FOLLOWING STANDARD DETAIL DRAWINGS FOR TRAFFIC CONTROL DEVICES, AS WELL AS OTHER STANDARD DETAIL DRAWINGS AS NECESSARY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER
- TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
- TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.
- TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE
- TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH



STAGE 2A

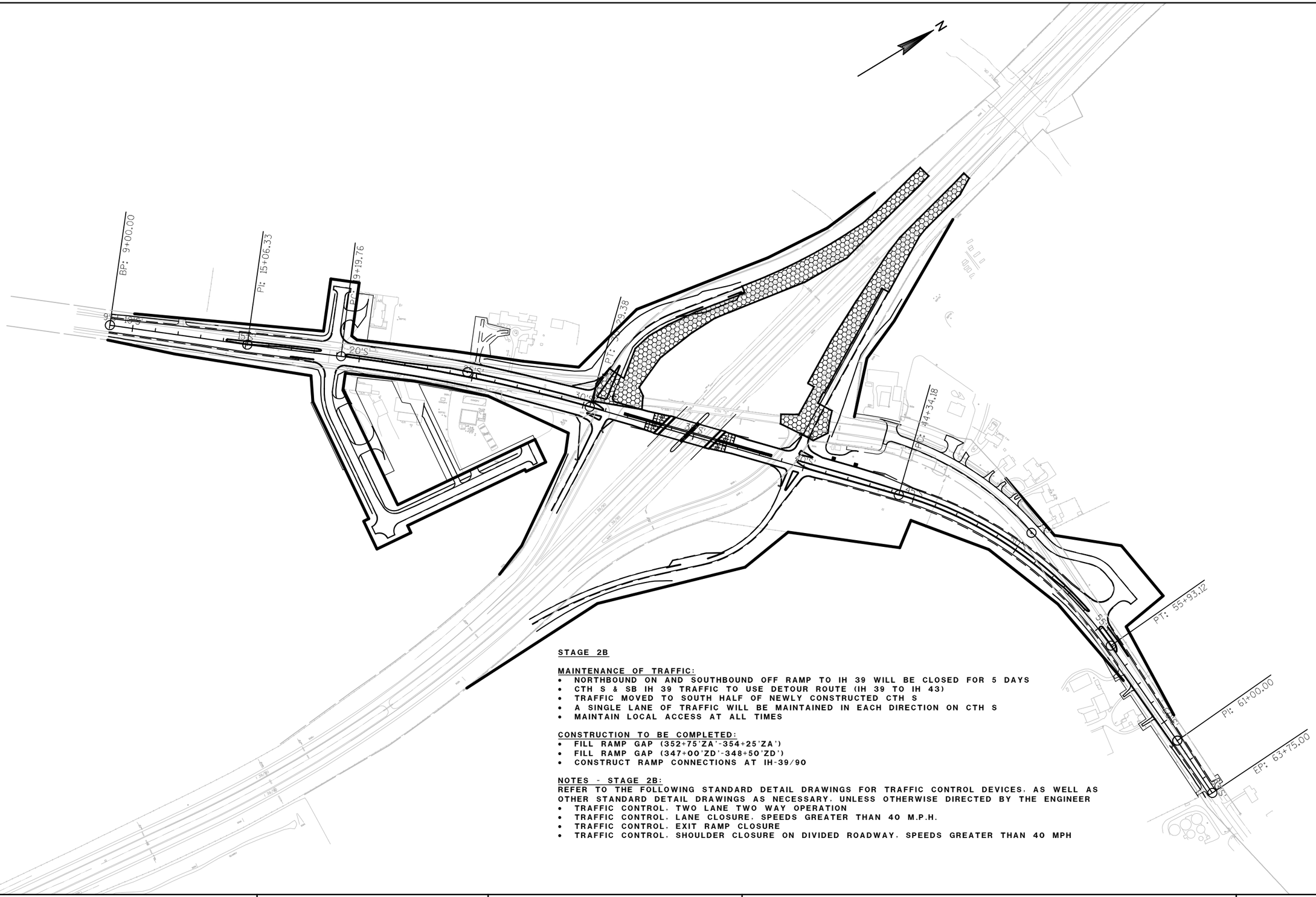
MAINTENANCE OF TRAFFIC:
- NORTHBOUND OFF AND SOUTHBOUND ON RAMP TO IH 39 CLOSED FOR 7 DAYS
- CTH S & NB IH 39 TRAFFIC TO USE DETOUR ROUTE (IH39 TO WIS 11)
- MAINTAIN LOCAL ACCESS AT ALL TIMES

CONSTRUCTION TO BE COMPLETED:
- FILL ROADWAY GAP (30+50'S'-32+00'S')
- FILL ROADWAY GAP (38+00'S'-39+50'S')
- CONSTRUCT RAMP CONNECTIONS AT IH-39/90

NOTES - STAGE 2A:
REFER TO THE FOLLOWING STANDARD DETAIL DRAWINGS FOR TRAFFIC CONTROL DEVICES, AS WELL AS OTHER STANDARD DETAIL DRAWINGS AS NECESSARY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER
- TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
- TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.
- TRAFFIC CONTROL, EXIT RAMP CLOSURE

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 2A	SHEET 177	E

2



STAGE 2B

MAINTENANCE OF TRAFFIC:
- NORTHBOUND ON AND SOUTHBOUND OFF RAMP TO IH 39 WILL BE CLOSED FOR 5 DAYS
- CTH S & SB IH 39 TRAFFIC TO USE DETOUR ROUTE (IH 39 TO IH 43)
- TRAFFIC MOVED TO SOUTH HALF OF NEWLY CONSTRUCTED CTH S
- A SINGLE LANE OF TRAFFIC WILL BE MAINTAINED IN EACH DIRECTION ON CTH S
- MAINTAIN LOCAL ACCESS AT ALL TIMES

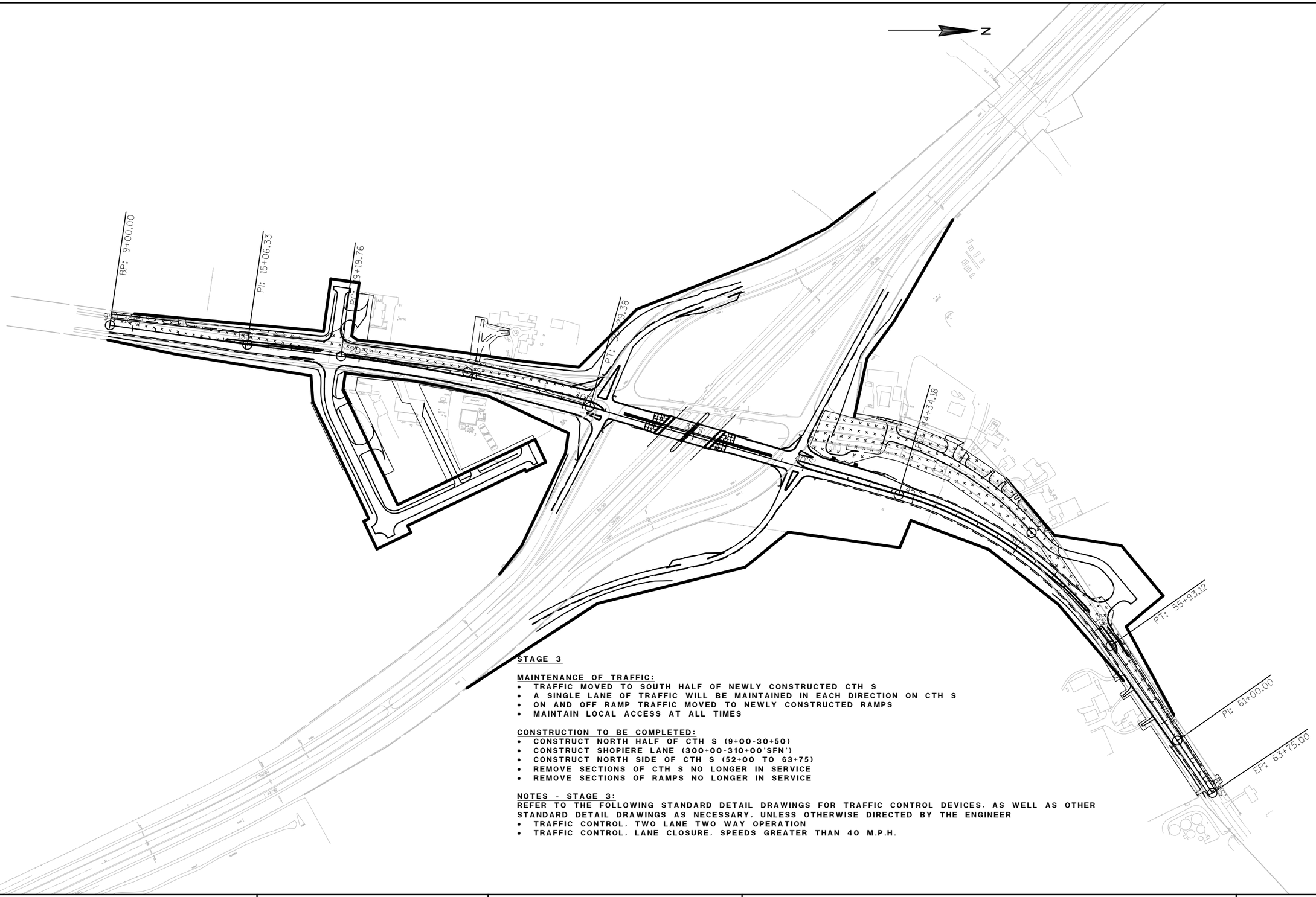
CONSTRUCTION TO BE COMPLETED:
- FILL RAMP GAP (352+75'ZA'-354+25'ZA')
- FILL RAMP GAP (347+00'ZD'-348+50'ZD')
- CONSTRUCT RAMP CONNECTIONS AT IH-39/90

NOTES - STAGE 2B:
REFER TO THE FOLLOWING STANDARD DETAIL DRAWINGS FOR TRAFFIC CONTROL DEVICES, AS WELL AS OTHER STANDARD DETAIL DRAWINGS AS NECESSARY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER
- TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
- TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.
- TRAFFIC CONTROL, EXIT RAMP CLOSURE
- TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 2B	SHEET	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_025001_TC.DWG PLOT DATE : 10/14/2014 2:10 PM PLOT BY : LUCAS CHASE PLOT NAME : ---------- PLOT SCALE : 1 IN:400 FT
WISDOT/CADDS SHEET 42

2



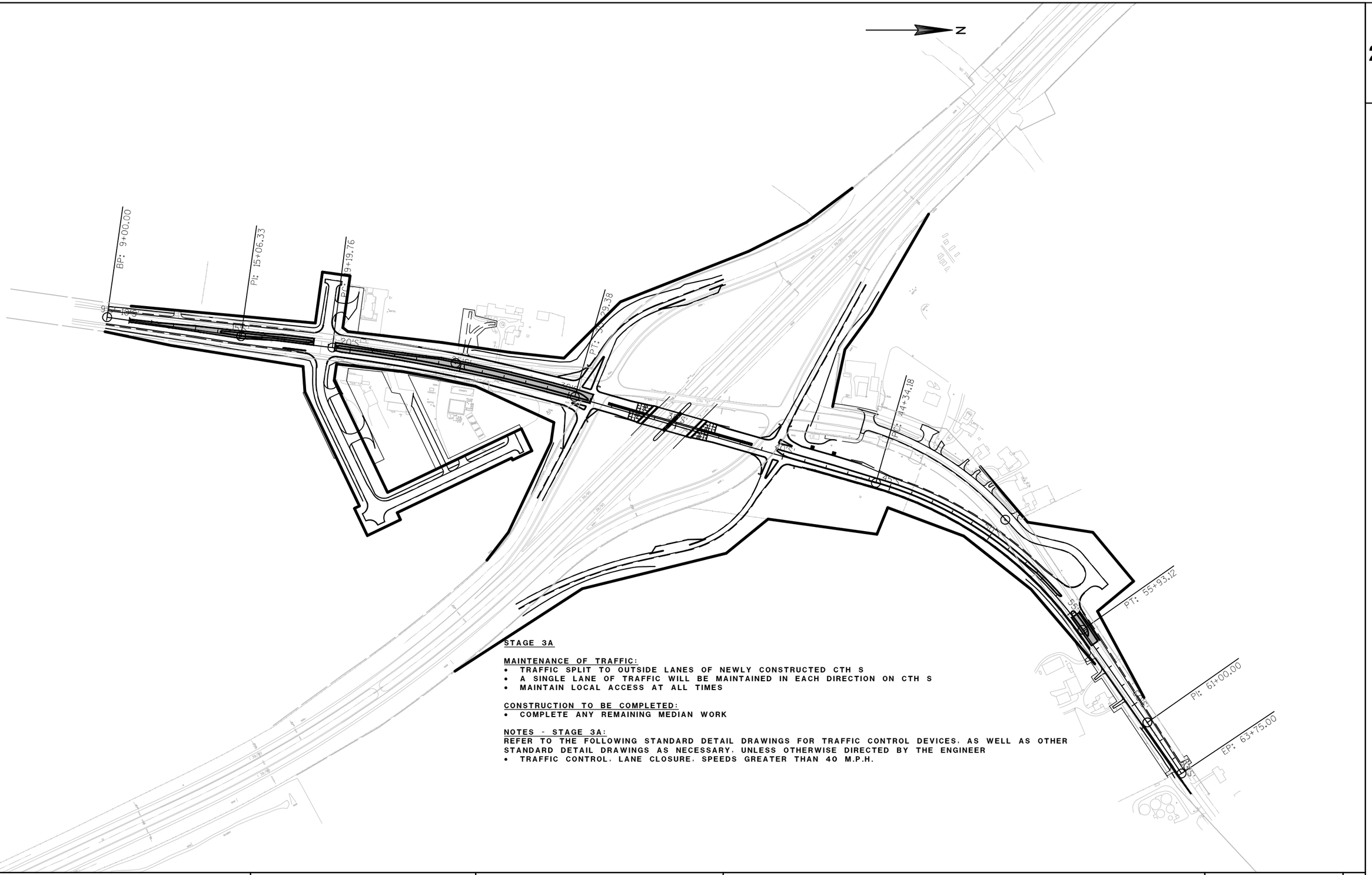
STAGE 3

MAINTENANCE OF TRAFFIC:
- TRAFFIC MOVED TO SOUTH HALF OF NEWLY CONSTRUCTED CTH S
- A SINGLE LANE OF TRAFFIC WILL BE MAINTAINED IN EACH DIRECTION ON CTH S
- ON AND OFF RAMP TRAFFIC MOVED TO NEWLY CONSTRUCTED RAMPS
- MAINTAIN LOCAL ACCESS AT ALL TIMES

CONSTRUCTION TO BE COMPLETED:
- CONSTRUCT NORTH HALF OF CTH S (9+00-30+50)
- CONSTRUCT SHOPIERE LANE (300+00-310+00'SFN')
- CONSTRUCT NORTH SIDE OF CTH S (52+00 TO 63+75)
- REMOVE SECTIONS OF CTH S NO LONGER IN SERVICE
- REMOVE SECTIONS OF RAMPS NO LONGER IN SERVICE

NOTES - STAGE 3:
REFER TO THE FOLLOWING STANDARD DETAIL DRAWINGS FOR TRAFFIC CONTROL DEVICES, AS WELL AS OTHER STANDARD DETAIL DRAWINGS AS NECESSARY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER
- TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
- TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.

2



STAGE 3A

MAINTENANCE OF TRAFFIC:
- TRAFFIC SPLIT TO OUTSIDE LANES OF NEWLY CONSTRUCTED CTH S
- A SINGLE LANE OF TRAFFIC WILL BE MAINTAINED IN EACH DIRECTION ON CTH S
- MAINTAIN LOCAL ACCESS AT ALL TIMES

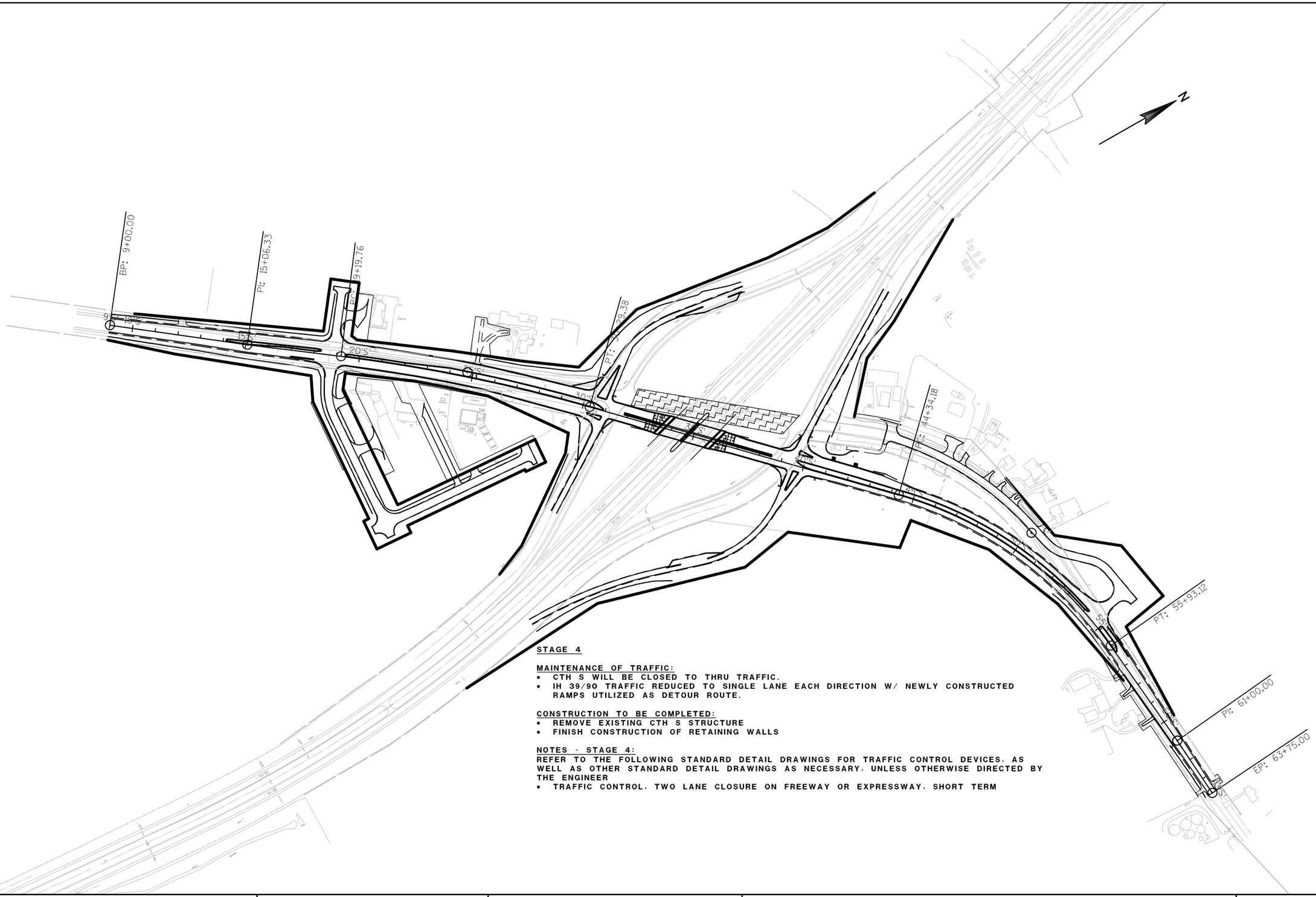
CONSTRUCTION TO BE COMPLETED:
- COMPLETE ANY REMAINING MEDIAN WORK

NOTES - STAGE 3A:
REFER TO THE FOLLOWING STANDARD DETAIL DRAWINGS FOR TRAFFIC CONTROL DEVICES, AS WELL AS OTHER STANDARD DETAIL DRAWINGS AS NECESSARY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER
- TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 3A	SHEET	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_025001_TC.DWG PLOT DATE : 10/14/2014 2:11 PM PLOT BY : LUCAS CHASE PLOT NAME : ---------- PLOT SCALE : 1 IN:400 FT
WISDOT/CADDS SHEET 42

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STAGE 4

MAINTENANCE OF TRAFFIC:
- CTH S WILL BE CLOSED TO THRU TRAFFIC.
- IH 39/90 TRAFFIC REDUCED TO SINGLE LANE EACH DIRECTION W/ NEWLY CONSTRUCTED RAMPS UTILIZED AS DETOUR ROUTE.

CONSTRUCTION TO BE COMPLETED:
- REMOVE EXISTING CTH S STRUCTURE
- FINISH CONSTRUCTION OF RETAINING WALLS

NOTES - STAGE 4:
REFER TO THE FOLLOWING STANDARD DETAIL DRAWINGS FOR TRAFFIC CONTROL DEVICES, AS WELL AS OTHER STANDARD DETAIL DRAWINGS AS NECESSARY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER
- TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT TERM

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 4	SHEET	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_025001_TC.DWG PLOT DATE : 10/14/2014 2:11 PM PLOT BY : LUCAS CHASE PLOT NAME : ---------- PLOT SCALE : 1 IN:400 FT
WISDOT/CADDS SHEET 42

2

FLEXIBLE TUBULAR MARKER POSTS
ALONG CENTERLINE *

* SEE SDD "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION" FOR FLEXIBLE TUBULAR MARKER POSTS AND SIGNS NOT SHOWN IN PLANS

G20-2A
48"x24"
END ROAD WORK

500' N.T.S.
100'
50' (TYP.)

BP: 9+00.00
STA. 9+00
12.0'L

STA. 102+36
0.3'R

STA. 106+91
19.2'L

EP: 106+06.33

STA. 109+30
71.7'L

LANE CLOSED
R11-2(MOD)
48"x30"

STA. 109+67
96.8'L

STA. 109+67
60.2'L

STA. 110+08
20.8'L

STA. 111+28
20.7'L

R=40'

100' (TYP.)

CTH S

STA. 108+90
20.2'L

STA. 109+30
60.9'L

STA. 19+46
36.6'R

STA. 18+00
35.0'R

R=60'

R=40'

STA. 18+58
88.0'R

STA. 18+59
98.9'R

STA. 19+05
75.4'R

JCT INTERSTATE 39 JCT INTERSTATE 90
EXISTING SIGN TO REMAIN

MATCH LINE SEE BELOW

500' N.T.S.

ROAD WORK 500 FT.
W20-1
48"x48"

SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD

TEMPORARY MARKING LEGEND

(1) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE

FLEXIBLE TUBULAR MARKER POSTS
ALONG CENTERLINE *

* SEE SDD "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION" FOR FLEXIBLE TUBULAR MARKER POSTS AND SIGNS NOT SHOWN IN PLANS

STA. 114+90
18.3'L

100' (TYP.)

STA. 118+82
0.3'L

LANE CLOSED
R11-2(MOD)
48"x30"

EP: 119+29.38

MATCH LINE SEE ABOVE

RAMP ZD

STA. 31+52
111.2'L

STA. 31+17
84.2'L

34°20'

RAMP ZC

EXISTING SIGN TO REMAIN
NORTH WEST SOUTH EAST INTERSTATE 39 90 39 90

EXISTING SIGN TO REMAIN
Shopiere
Madison
Rockford

EXISTING SIGN TO REMAIN
SOUTH EAST INTERSTATE 39 90

EXISTING SIGN TO REMAIN
SOUTH EAST INTERSTATE 39 90

I-39/90 SB
I-39/90 NB

EXISTING SIGN TO REMAIN
Rockford

CTH S

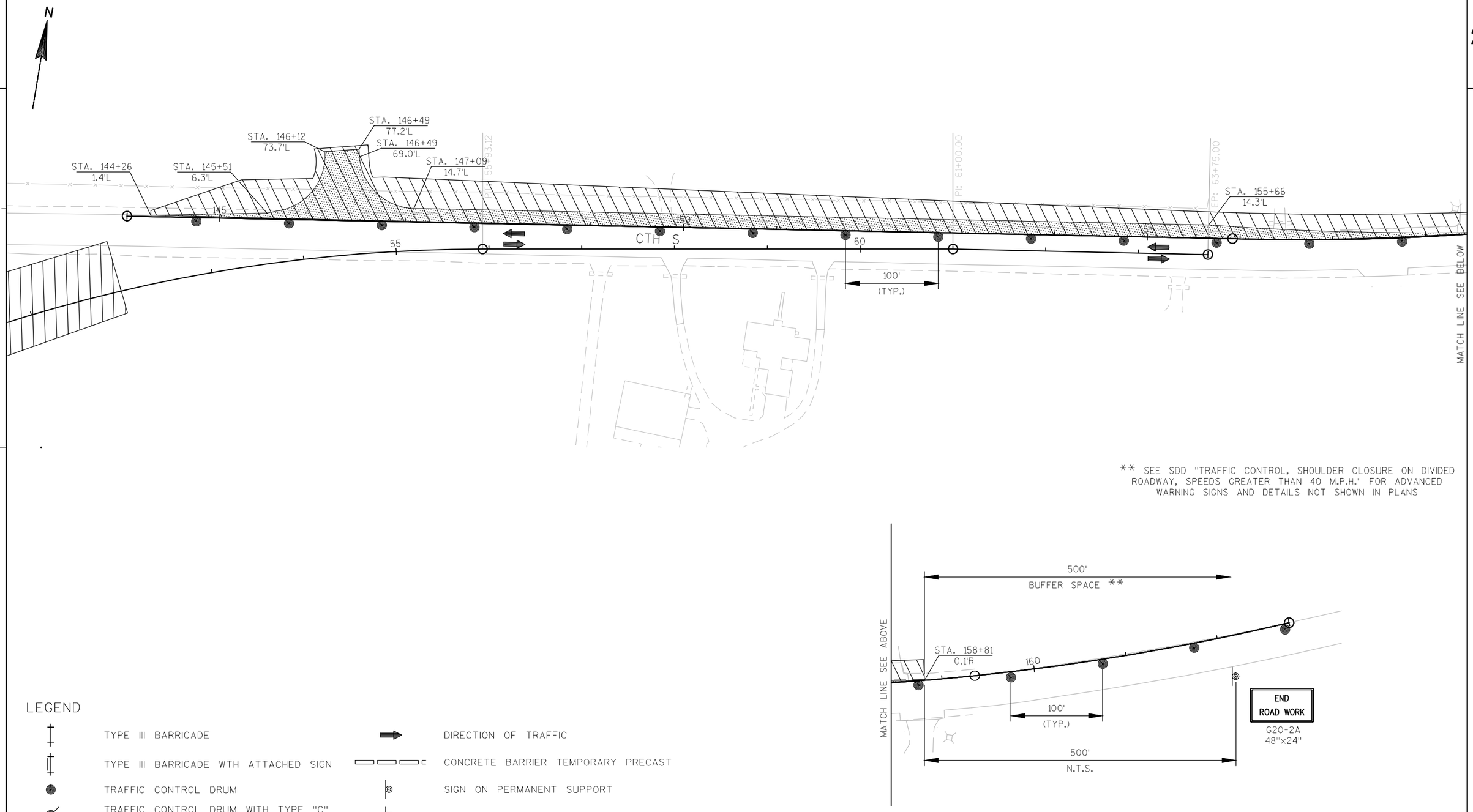
RIGHT LANE CLOSED AHEAD
W20-5
48"x48"

35 MPH

NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 1	SHEET 182	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_025001_TC-STAGES.DWG PLOT DATE : 12/17/2014 8:24 AM PLOT BY : LUCAS CHASE PLOT NAME : ---------- PLOT SCALE : 1" = 100'_XREF
WISDOT/CADDS SHEET 42



** SEE SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

LEGEND

	TYPE III BARRICADE		DIRECTION OF TRAFFIC
	TYPE III BARRICADE WTH ATTACHED SIGN		CONCRETE BARRIER TEMPORARY PRECAST
	TRAFFIC CONTROL DRUM		SIGN ON PERMANENT SUPPORT
	TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT		SIGN ON TEMPORARY SUPPORT
	WORK AREA		FLASHING ARROW BOARD
	TEMPORARY PAVEMENT		FLASHING LIGHT BOARD

NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 1	SHEET 183	E

2

N

G20-2A
48"x24"
END
ROAD WORK

INSTALL G20-2A SIGN
AT STA. 371+00'NB'
FOR DURATION OF
THE PROJECT

365'ZA'

200' TAPER

50'
(TYP.)

500'

365'NB' LEFT SHOULDER CLOSED **

360'NB'

355'NB'

STA. 356+85

I-39/90 NB

I-39/90 SB

CRASH CUSHIONS
TEMPORARY

100'
(TYP.)

STA. 359+30
59.3'R

EP: 365+96.43

RIGHT SHOULDER
CLOSED **

365'ZD'

360'ZA'

355'ZA'

RAMP ZA

352'ZA'

CTH S

STA. 352+90

STA. 358+72
66.1'R

EXTEND EXISTING
24" CMCP 8' EAST

STA. 359+30
64.8'R

STA. 358+57
66.0'R

360'ZD'

STA. 356+33
68.7'R

RAMP ZD

STA. 354+11
60.0'R

STA. 351+94
90.3'R

STA. 352+23
83.5'R

355'ZD'

MATCH LINE SEE NEXT SHEET

** SEE SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD

NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 1	SHEET 184	E

2

2

LEGEND

TYPE III BARRICADE

TYPE III BARRICADE WTH ATTACHED SIGN

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

WORK AREA

TEMPORARY PAVEMENT

DIRECTION OF TRAFFIC

CONCRETE BARRIER TEMPORARY PRECAST

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

FLASHING ARROW BOARD

FLASHING LIGHT BOARD

N

RAMP ZB

345'ZB'

340'ZB'

STA. 343+55

STA. 342+37

I-39/90 NB

CRASH CUSHIONS TEMPORARY

100' (TYP.)

200' TAPER

RIGHT SHOULDER CLOSED **

LEFT SHOULDER CLOSED **

350'NB'

345'NB'

340'NB'

I-39/90 SB

MATCH LINE SEE PREVIOUS SHEET

STA. 346+80

STA. 344+99 59.4'R

STA. 344+99 55.8'R

CTH S

RAMP ZC

345'ZC'

340'ZC'

337'ZC'

INSTALL G20-2A SIGN AT STA. 331+00'NB' FOR DURATION OF THE PROJECT

END ROAD WORK

G20-2A 48"x24"

** SEE SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

STA. 350+53 113.0'R

STA. 350+52 107.9'R

347'ZD'

350'ZD'

NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 1	SHEET 185	E

2

2

N

G20-2A
48"x24"
END
ROAD WORK

INSTALL G20-2A SIGN
AT STA. 371+00'NB'
FOR DURATION OF
THE PROJECT

365'ZA'

360'ZA'

355'ZA'

RAMP ZA

CTH S

STA. 352+90

LANE
CLOSED
R11-2(MOD)
48"x30"

100'
(TYP.)

STA. 356+85

I-39/90 NB

500' BUFFER ***

365'NB'

350'

360'NB'

355'NB'

50'
(TYP.)

BP: 365+96.37

780' TAPER

I-39/90 SB

RIGHT SHOULDER
CLOSED **

365'ZD'

360'ZD'

EXTEND EXISTING
24" CMCP 8' EAST

CRASH CUSHIONS
TEMPORARY

RAMP ZD

355'ZD'

MATCH LINE SEE NEXT SHEET

** SEE SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

*** SEE SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD

NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 1 (CLOSE INSIDE LANES)	SHEET 186	E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD

N

RAMP ZB

345'ZB'

340'ZB'

STA. 343+55

STA. 342+37

R11-2(MOD)
48"x30"
LANE CLOSED

RIGHT SHOULDER CLOSED **

780' TAPER ***

350'

50'
(TYP.)

I-39/90 NB

350'NB'

345'NB'

340'NB'

CRASH CUSHIONS TEMPORARY

I-39/90 SB

100'
(TYP.)

STA. 346+80

STA. 344+99
59.4'R

STA. 344+99
55.8'R

337'ZC'

340'ZC'

INSTALL G20-2A SIGN AT STA. 331+00'NB' FOR DURATION OF THE PROJECT

END ROAD WORK

G20-2A
48"x24"

RAMP ZC

345'ZC'

CTH S

MATCH LINE SEE PREVIOUS SHEET

STA. 350+53
113.0'R

STA. 350+52
107.9'R

347'ZD'

350'ZD'

** SEE SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

*** SEE SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 1 (CLOSE INSIDE LANES)	SHEET 187	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_025001_TC-STAGES.DWG PLOT DATE : 12/17/2014 8:24 AM PLOT BY : LUCAS CHASE PLOT NAME : ---------- PLOT SCALE : 1" = 100'_XREF

WISDOT/CADDS SHEET 42

** SEE SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

*** SEE SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

**** SEE SDD "TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE" FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

G20-2A
48"x24"
END
ROAD WORK

INSTALL G20-2A SIGN AT STA. 371+00'NB' FOR DURATION OF THE PROJECT

EXIT

E5-1
60"x48"
MOVABLE
EXIT SIGN

RAMP ZA

355'ZA'

360'ZA'

365'ZA'

352'ZA'

CTH S

STA. 352+90

STA. 356+85

I-39/90 NB

200' TAPER

365'NB'

LEFT SHOULDER CLOSED **

360'NB'

500'

355'NB'

25'
(TYP.)

STA. 356+96.33

STA. 363+76
34.0'R

I-39/90 SB

RIGHT LANE CLOSED ***

365'ZD'

100'
(TYP.)

CRASH CUSHIONS
TEMPORARY

EXTEND EXISTING
24" CMCP 8' EAST

STA. 361+79
41.1'R

360'ZD'

RAMP ZD

355'ZD'

200' ****

200'

200'

LANE
CLOSED
R11-2(MOD)
48"x30"

MATCH LINE SEE NEXT SHEET

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD

TEMPORARY MARKING LEGEND

(1) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE

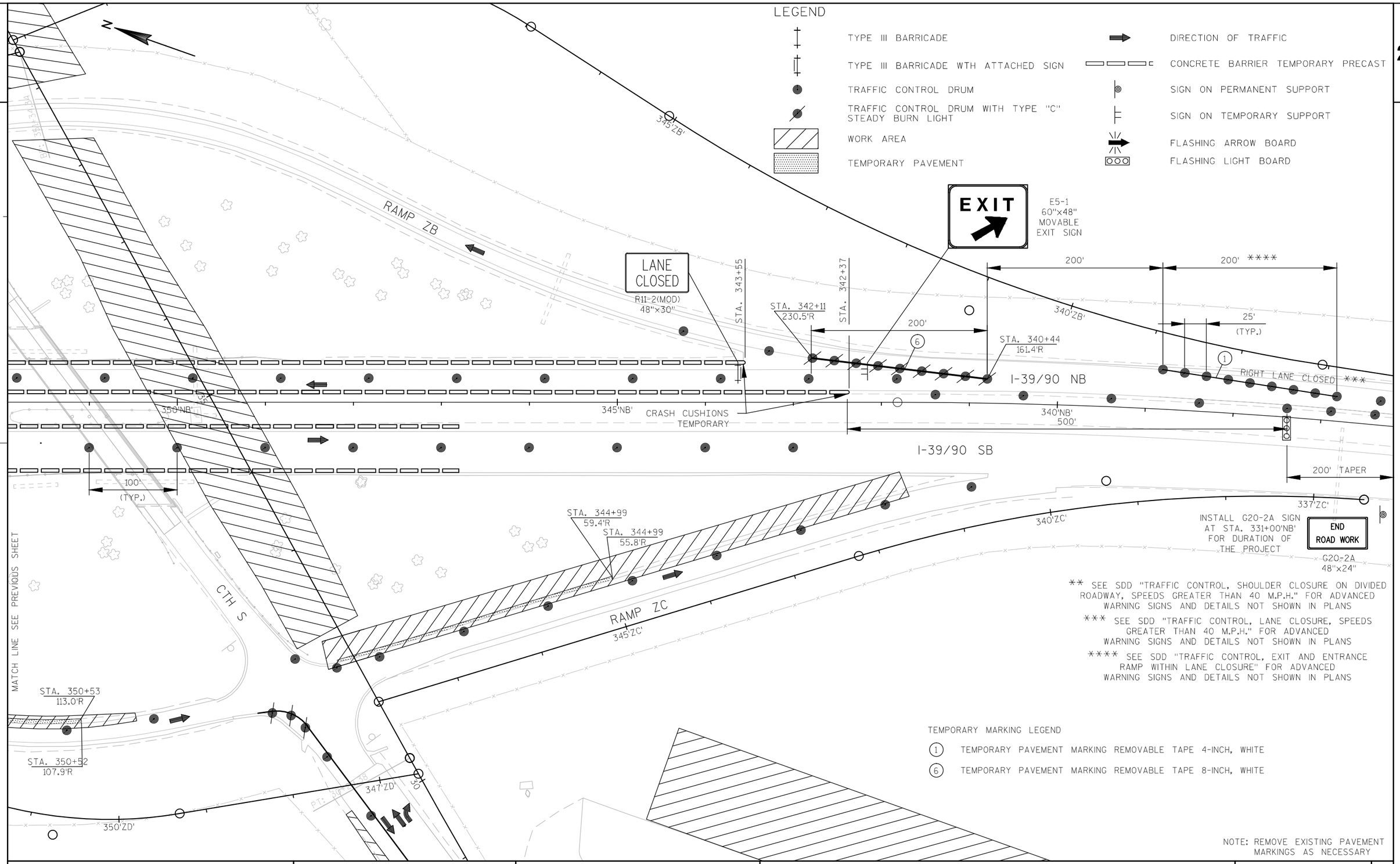
(6) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE

NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 1 (CLOSE OUTSIDE LANES)	SHEET 188	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_025001_TC-STAGES.DWG PLOT DATE : 12/17/2014 8:24 AM PLOT BY : LUCAS CHASE PLOT NAME : ---------- PLOT SCALE : 1" = 100'_XREF

WISDOT/CADDS SHEET 42



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 1 (CLOSE OUTSIDE LANES)	SHEET 189	E

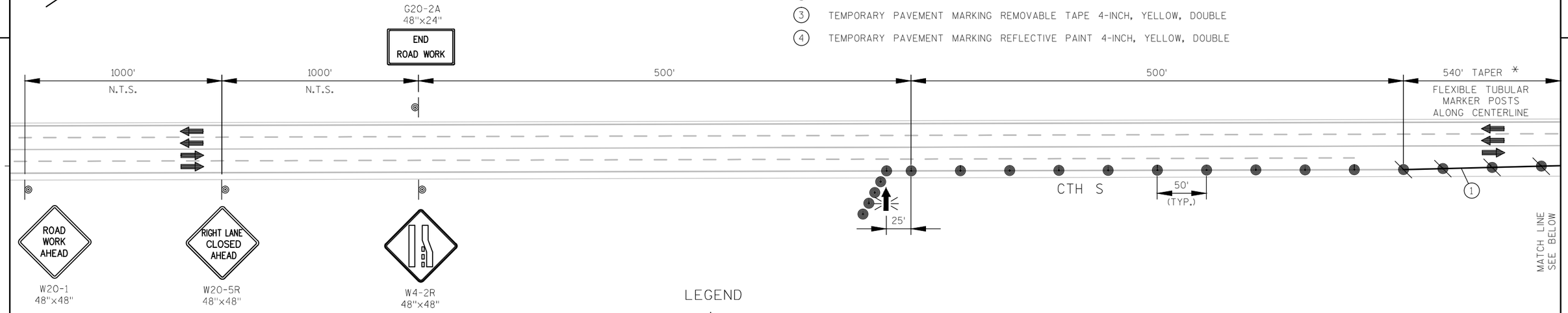
2

2

* SEE SDD "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION" FOR FLEXIBLE TUBULAR MARKER POSTS AND SIGNS NOT SHOWN IN PLANS

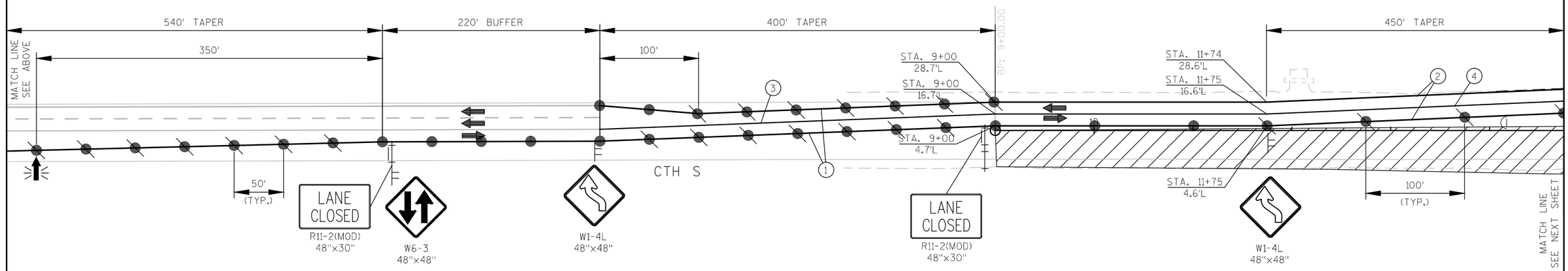
TEMPORARY MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH, WHITE
3. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW, DOUBLE
4. TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH, YELLOW, DOUBLE



LEGEND

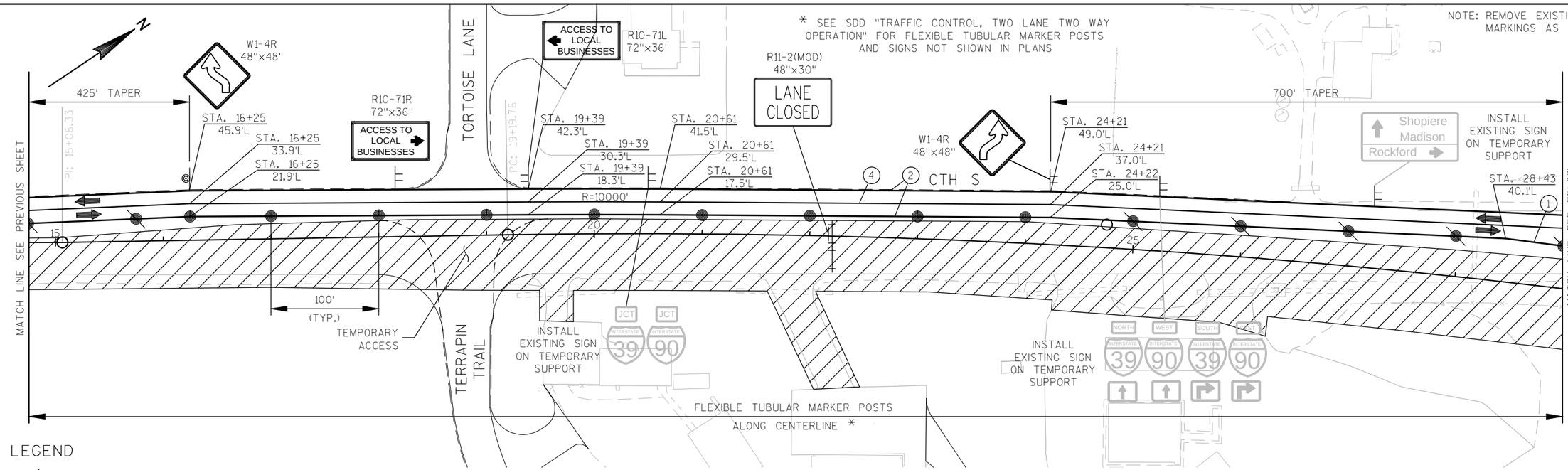
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD



FLEXIBLE TUBULAR MARKER POSTS
ALONG CENTERLINE *

NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 2	SHEET 190	E



LEGEND

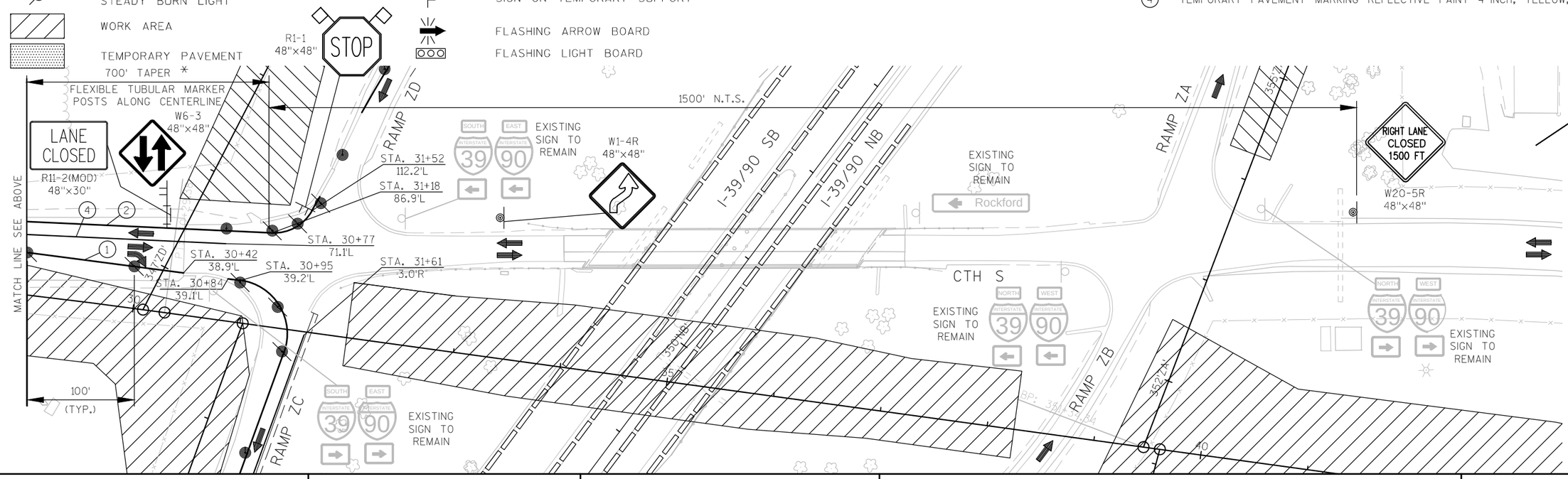
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD

TEMPORARY MARKING LEGEND

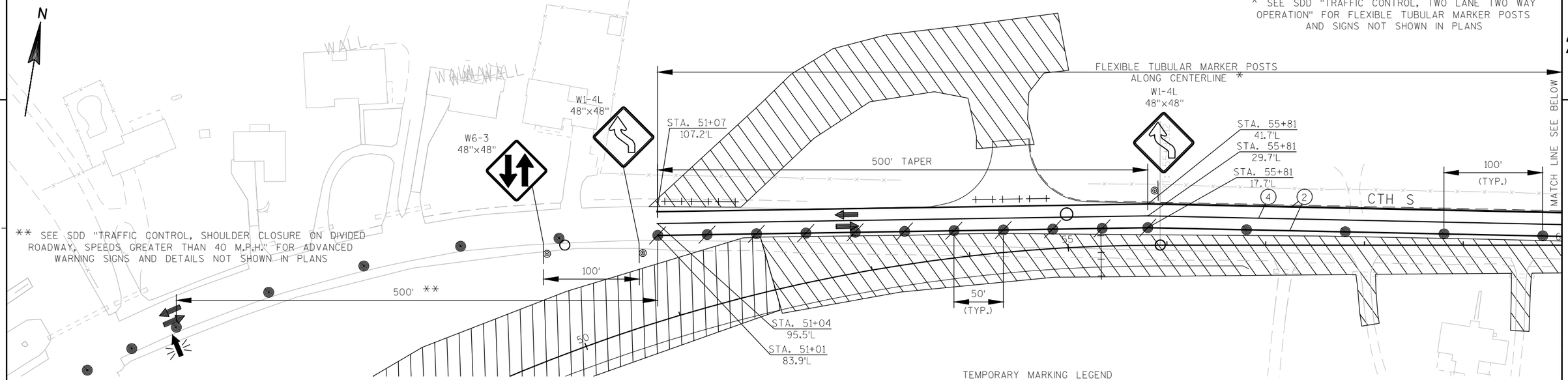
(1) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE

(2) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH, WHITE

(4) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH, YELLOW, DOUBLE



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 2	SHEET 191	E

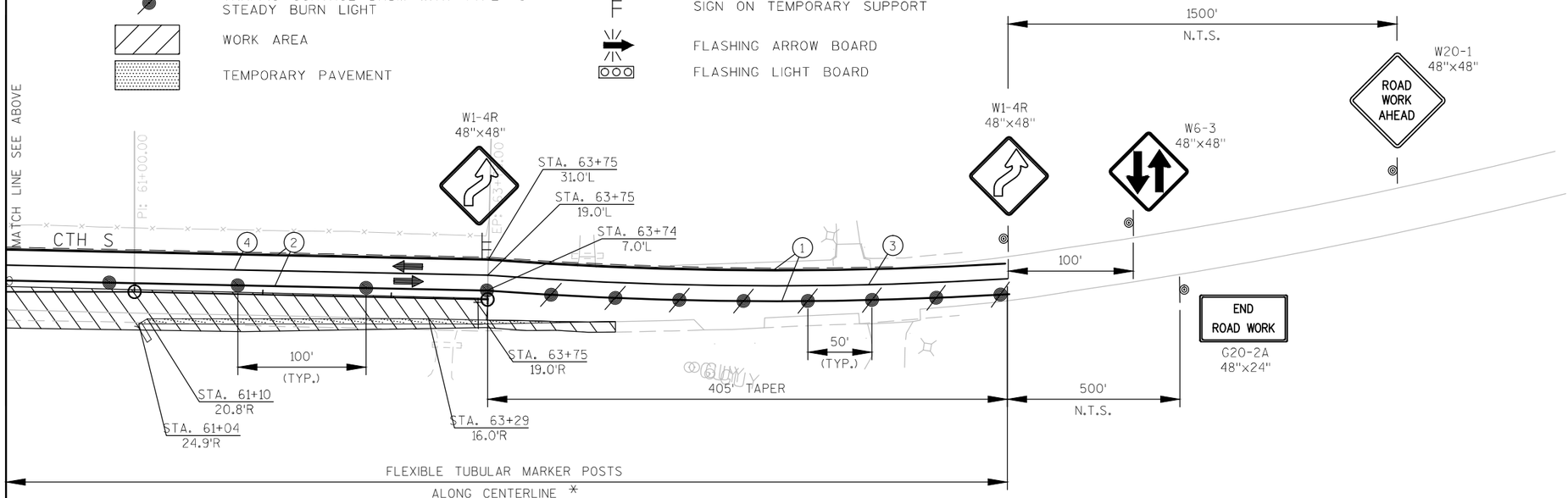


LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD

TEMPORARY MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH, WHITE
3. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW, DOUBLE
4. TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH, YELLOW, DOUBLE



NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 2	SHEET 192	E

2

N

G20-2A
48"x24"
STA. 371+00'NB'

END
ROAD WORK

365'ZA'

365'NB'

EPR: 365+96.33

LEFT SHOULDER CLOSED **

50'
(TYP.)

RIGHT SHOULDER CLOSED **

365'ZD'

** SEE SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

STA. 362+22
23.5'R

360'ZA'

50'
(TYP.)

RAMP ZA

EPC: 361+79.08

STA. 361+79
41.1'R

100'
(TYP.)

360'NB'

360'ZD'

395'ZA'

STA. 356+85

CRASH CUSHIONS
TEMPORARY

I-39/90 NB

355'NB'

I-39/90 SB

352'ZA'

STA. 352+90

CTH S

RAMP ZD

STA. 355+78
66.2'R

STA. 355+79
54.1'R

STA. 354+11
60.1'R

355'ZD'

STA. 354+10
48.0'R

MATCH LINE SEE NEXT SHEET

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD

TEMPORARY MARKING LEGEND

(2) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH, WHITE

(5) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH, YELLOW

NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 2	SHEET 193	E

TEMPORARY MARKING LEGEND

(2) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH, WHITE

(5) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH, YELLOW

N

RAMP ZB

345'ZB'

340'ZB'

STA. 343+55

STA. 342+37

RIGHT SHOULDER CLOSED **

500'

100' (TYP.)

I-39/90 NB

350'NB'

345'NB'

340'NB'

LEFT SHOULDER CLOSED **

I-39/90 SB

CRASH CUSHIONS TEMPORARY

STA. 339+84
27.2'R

200' TAPER

337'ZC'

100' (TYP.)

STA. 342+50
38.4'R

340'ZC'

G20-2A
48"x24"
STA. 331+00'NB'

END ROAD WORK

MATCH LINE SEE PREVIOUS SHEET

STA. 346+80

STA. 345+50
56.5'R

STA. 345+50
44.5'R

RAMP ZC

CTH S

R1-1
48"x48"

STOP

STA. 347+82
45.2'R

345'ZC'

STA. 349+81
110.4'R

STA. 349+11
96.7'R

347'ZD'

350'ZD'

TERRAPIN TRAIL

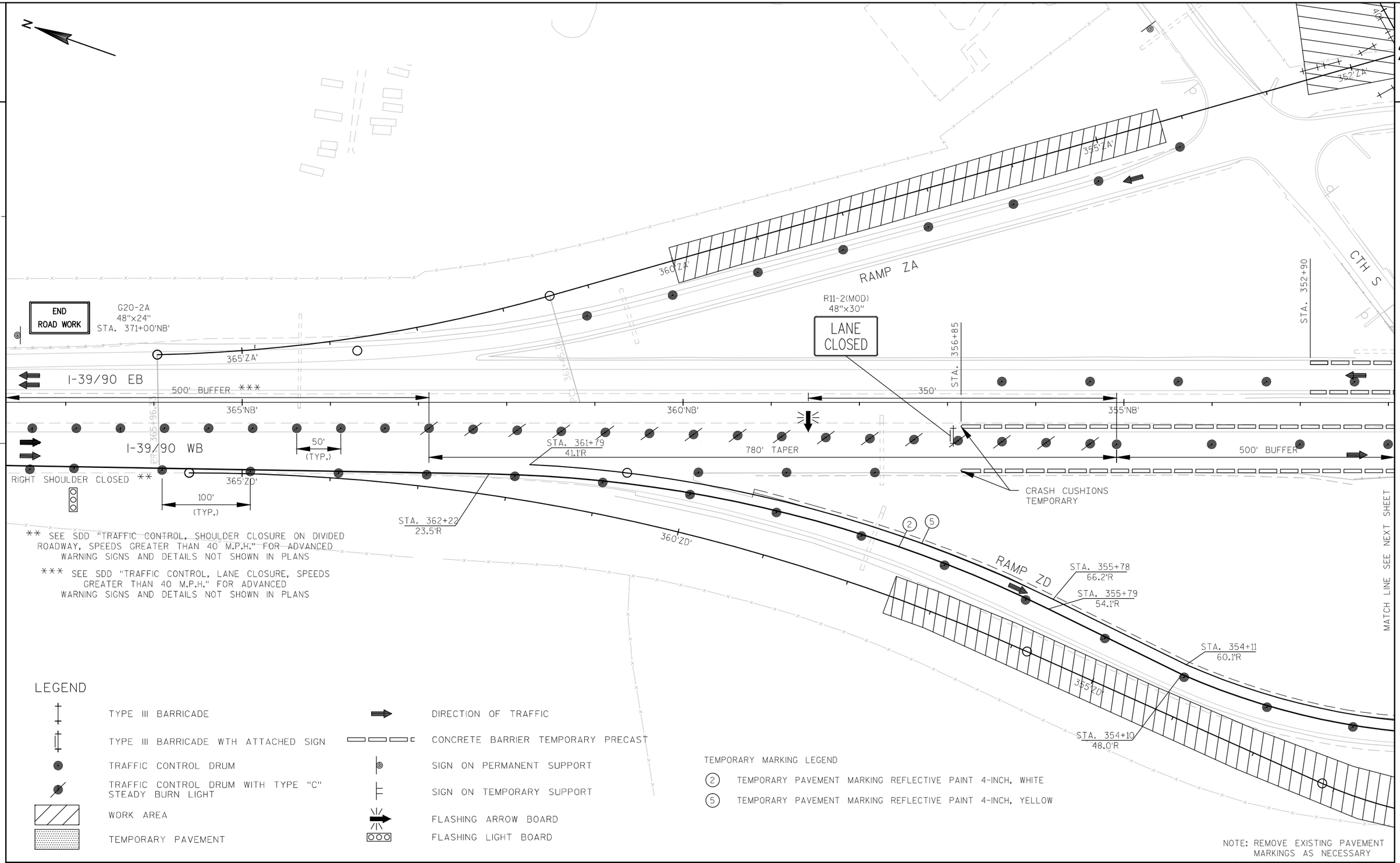
** SEE SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD

NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 2	SHEET 194	E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 2 (NIGHT OPERATIONS-CLOSE INSIDE LANES)	SHEET 195	E

TEMPORARY MARKING LEGEND

(2) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH, WHITE

(5) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH, YELLOW

N

345'ZB'

RAMP ZB

R11-2(MOD)
48"x30"
LANE CLOSED

STA. 343+55

STA. 342+37

340'ZB'

780' TAPER ***

RIGHT SHOULDER CLOSED **

500' BUFFER

350'

50'
(TYP.)

I-39/90 NB

350'NB'

345'NB'

340'NB'

CRASH CUSHIONS TEMPORARY

I-39/90 SB

STA. 339+84
27.2'R

100'
(TYP.)

STA. 342+50
38.4'R

337'ZC'

340'ZC'

END ROAD WORK
G20-2A
48"x24"
STA. 331+00'NB'

500' BUFFER

STA. 346+80

STA. 345+50
56.5'R

STA. 345+50
44.5'R

RAMP ZC

CTH S

R1-1
48"x48"
STOP

STA. 347+82
45.2'R

345'ZC'

STA. 349+81
110.4'R

STA. 349+11
96.7'R

347'ZD'

350'ZD'

TERRAPIN TRAIL

MATCH LINE SEE PREVIOUS SHEET

** SEE SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

*** SEE SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD

NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 2 (NIGHT OPERATIONS-CLOSE INSIDE LANES)	SHEET 196	E

2

** SEE SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

*** SEE SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

**** SEE SDD "TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE" FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

END ROAD WORK
G20-2A
48"x24"
STA. 371+00'NB'

EXIT
E5-1
60"x48"
MOVABLE
EXIT SIGN

RAMP ZA

360'ZA'

365'ZA'

395'ZA'

352'ZA'

CTH S

STA. 352+90

STA. 356+85

I-39/90 NB

200' TAPER

365'NB'

LEFT SHOULDER CLOSED **

360'NB'

500'

355'NB'

100'
(TYP.)

STA. 365+96.3

1

25' (TYP.)

I-39/90 SB

STA. 363+76
34.0'R

6

STA. 361+79
41.1'R

RIGHT LANE CLOSED ***

365'ZD'

CRASH CUSHIONS
TEMPORARY

STA. 362+22
23.5'R

STA. 361+79
41.1'R

2

5

360'ZD'

RAMP ZD

STA. 355+78
66.2'R

STA. 355+79
54.1'R

200' ****

200'

200'

LANE
CLOSED
R11-2(MOD)
48"x30"

STA. 354+11
60.1'R

355'ZD'

STA. 354+10
48.0'R

MATCH LINE SEE NEXT SHEET

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD

TEMPORARY MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH, WHITE
5. TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH, YELLOW
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE

NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 2 (NIGHT OPERATIONS-CLOSE OUTSIDE LANES)	SHEET 197	E

TEMPORARY MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH, WHITE
5. TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH, YELLOW
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE

** SEE SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

*** SEE SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

**** SEE SDD "TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE" FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

EXIT

E5-1
60"x48"
MOVABLE
EXIT SIGN

R11-2(MOD)
48"x30"
LANE CLOSED

STA. 343+55

STA. 342+37

STA. 342+11
230.5'R

200'

200' ****

STA. 340+44
161.4'R

25' (TYP.)

RIGHT LANE CLOSED ***

I-39/90 NB

340'NB'
LEFT SHOULDER CLOSED **
500'

345'NB'
CRASH CUSHIONS
TEMPORARY

350'NB'

I-39/90 SB

STA. 339+84
27.2'R

200' TAPER

100'
(TYP.)

STA. 342+50
38.4'R

337'ZC'

340'ZC'

END
ROAD WORK

G20-2A
48"x24"

STA. 346+80

STA. 345+50
56.5'R

STA. 345+50
44.5'R

RAMP ZC

RAMP ZB

345'ZB'

340'ZB'

MATCH LINE SEE PREVIOUS SHEET

R1-1
48"x48"
STOP

CTH S

STA. 347+82
45.2'R

345'ZC'

STA. 349+81
110.4'R

STA. 349+11
96.7'R

RAMP ZD

347'ZD'

350'ZD'

TERRAPIN TRAIL

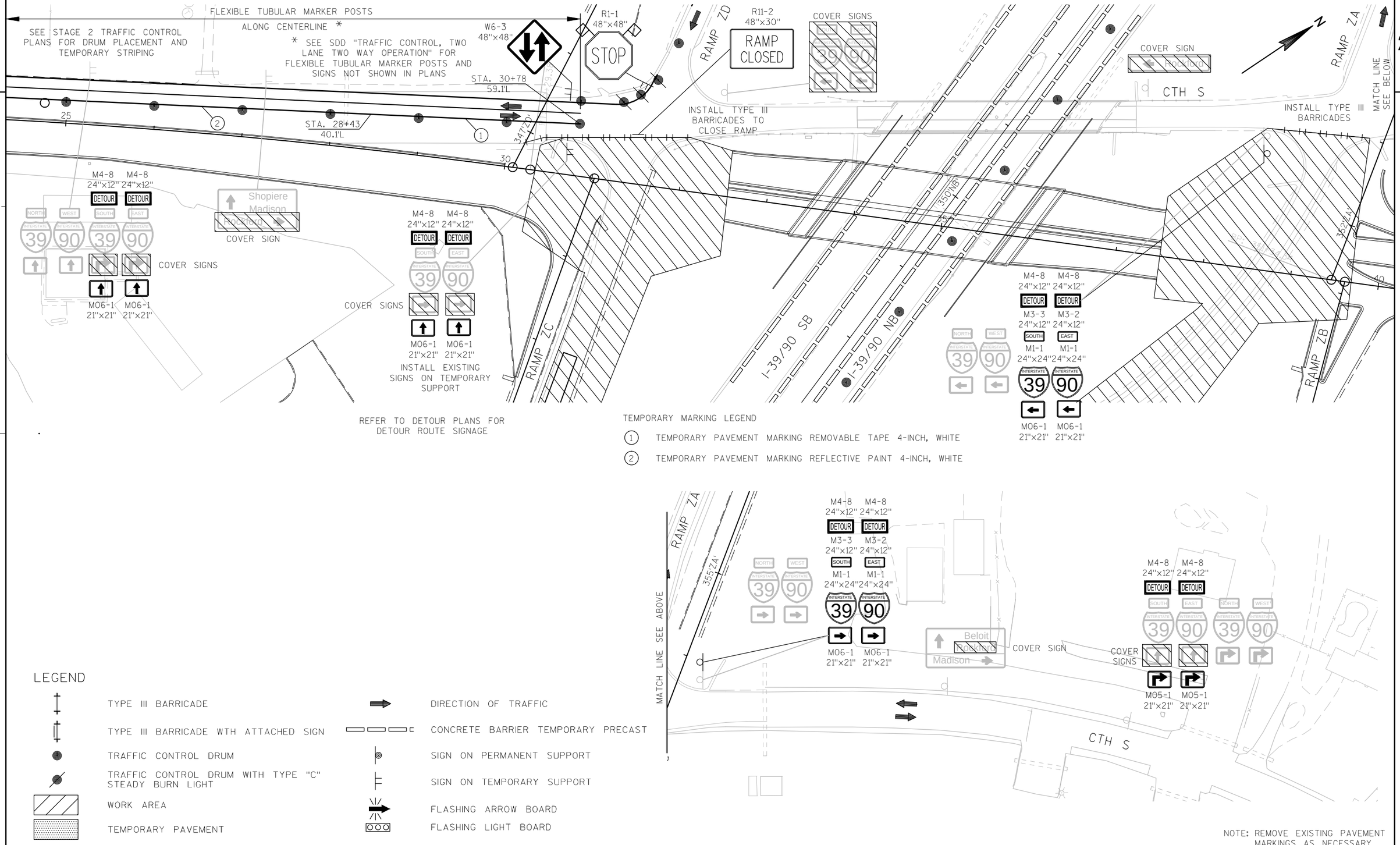
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD

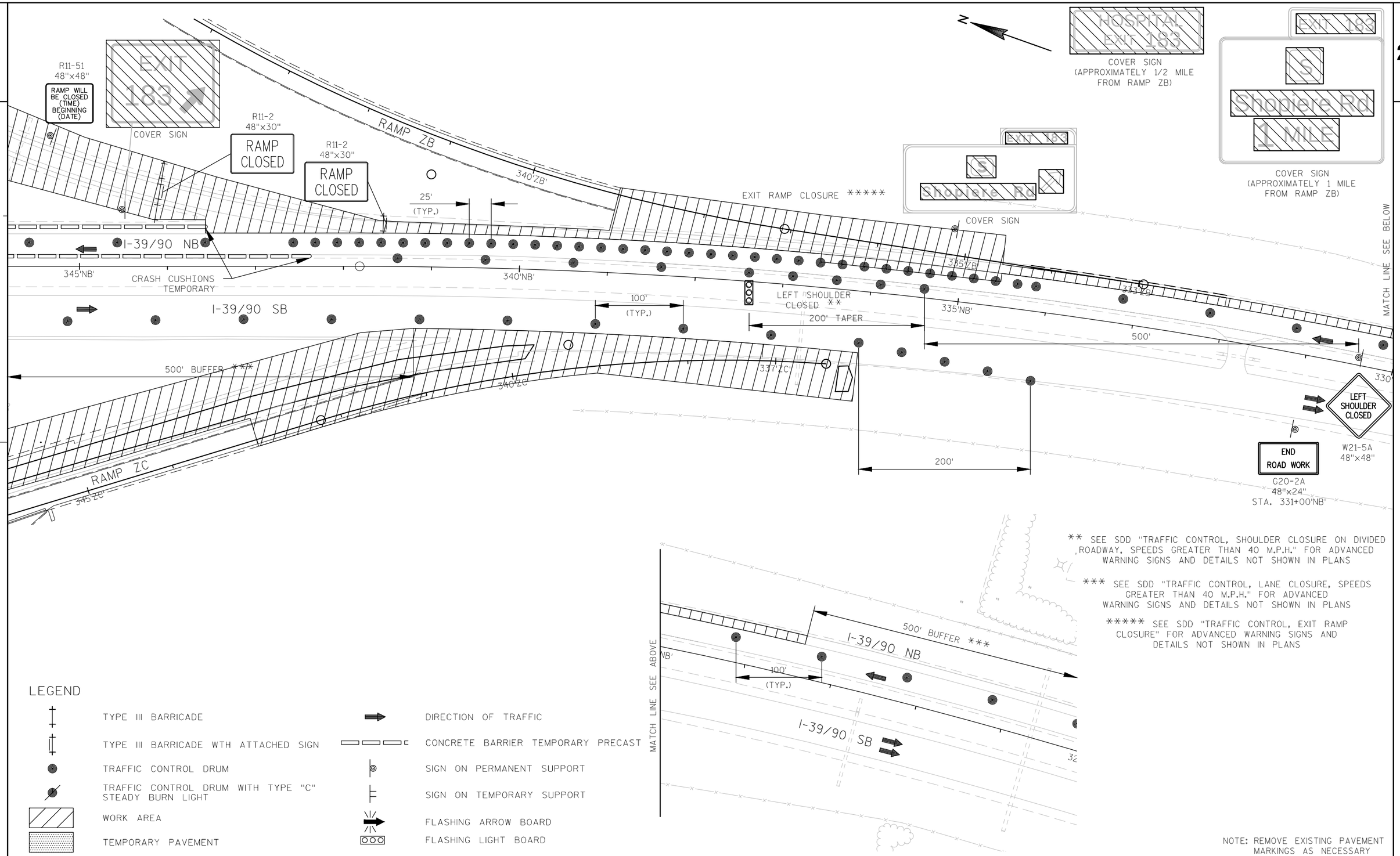
NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 2 (NIGHT OPERATIONS-CLOSE OUTSIDE LANES)	SHEET 198	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_025001_TC-STAGES.DWG PLOT DATE : 12/17/2014 8:26 AM PLOT BY : LUCAS CHASE PLOT NAME : ---------- PLOT SCALE : 1" = 100'_XREF
WISDOT/CADDS SHEET 42



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 2A	SHEET 199	E



** SEE SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

*** SEE SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

***** SEE SDD "TRAFFIC CONTROL, EXIT RAMP CLOSURE" FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD

NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

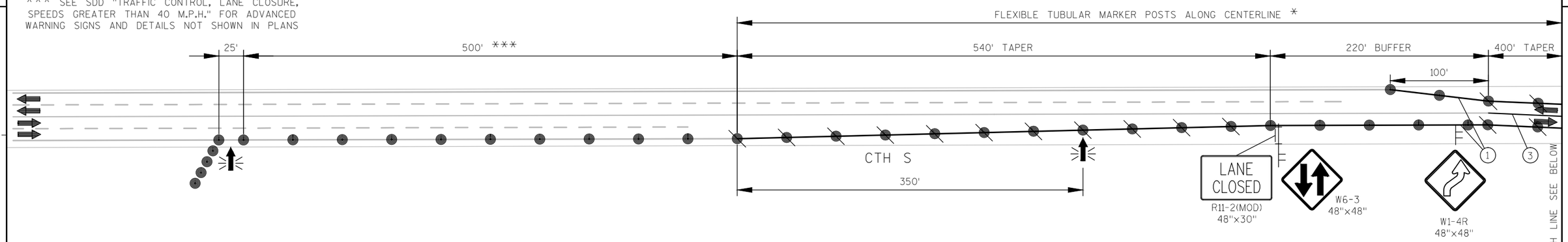
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 2A	SHEET 200	E

2

2

* SEE SDD "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION" FOR FLEXIBLE TUBULAR MARKER POSTS AND SIGNS NOT SHOWN IN PLANS

*** SEE SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS



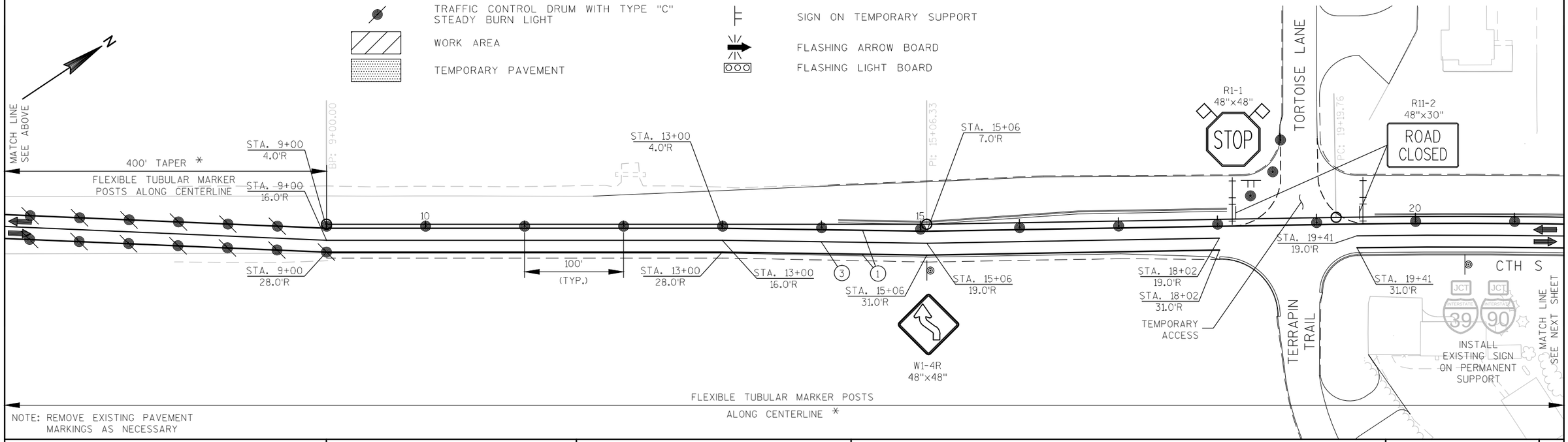
TEMPORARY MARKING LEGEND

(1) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE

(3) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW, DOUBLE

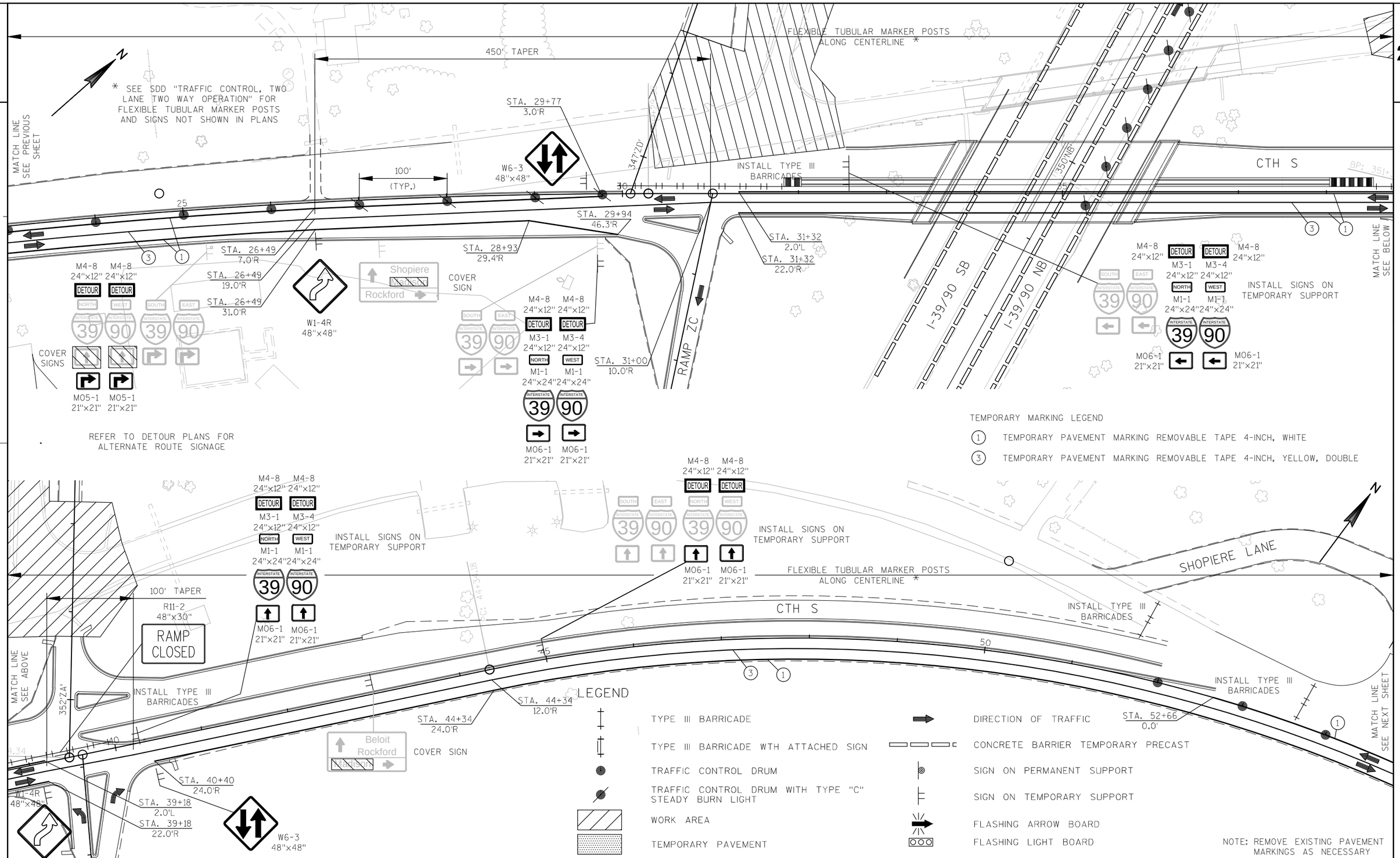
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD



NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

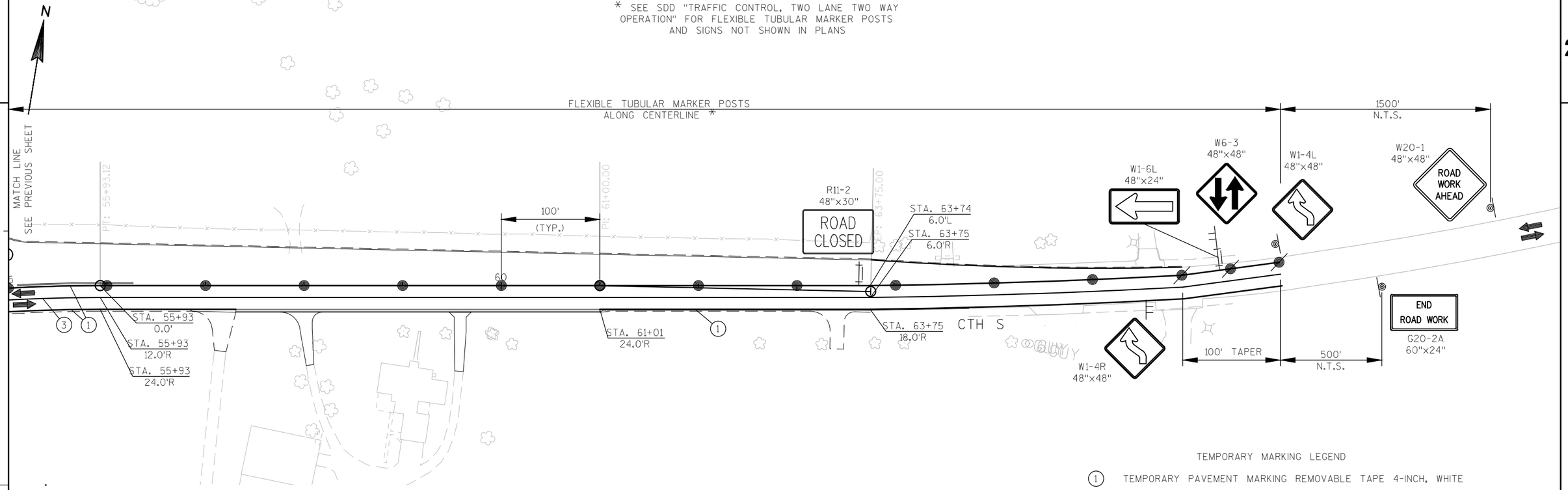
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 2B	SHEET 201	E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 2B	SHEET 202	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_025001_TC-STAGES.DWG PLOT DATE : 12/17/2014 8:26 AM PLOT BY : LUCAS CHASE PLOT NAME : ---------- PLOT SCALE : 1" = 100'_XREF
WISDOT/CADDS SHEET 42

* SEE SDD "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION" FOR FLEXIBLE TUBULAR MARKER POSTS AND SIGNS NOT SHOWN IN PLANS



TEMPORARY MARKING LEGEND

(1) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE

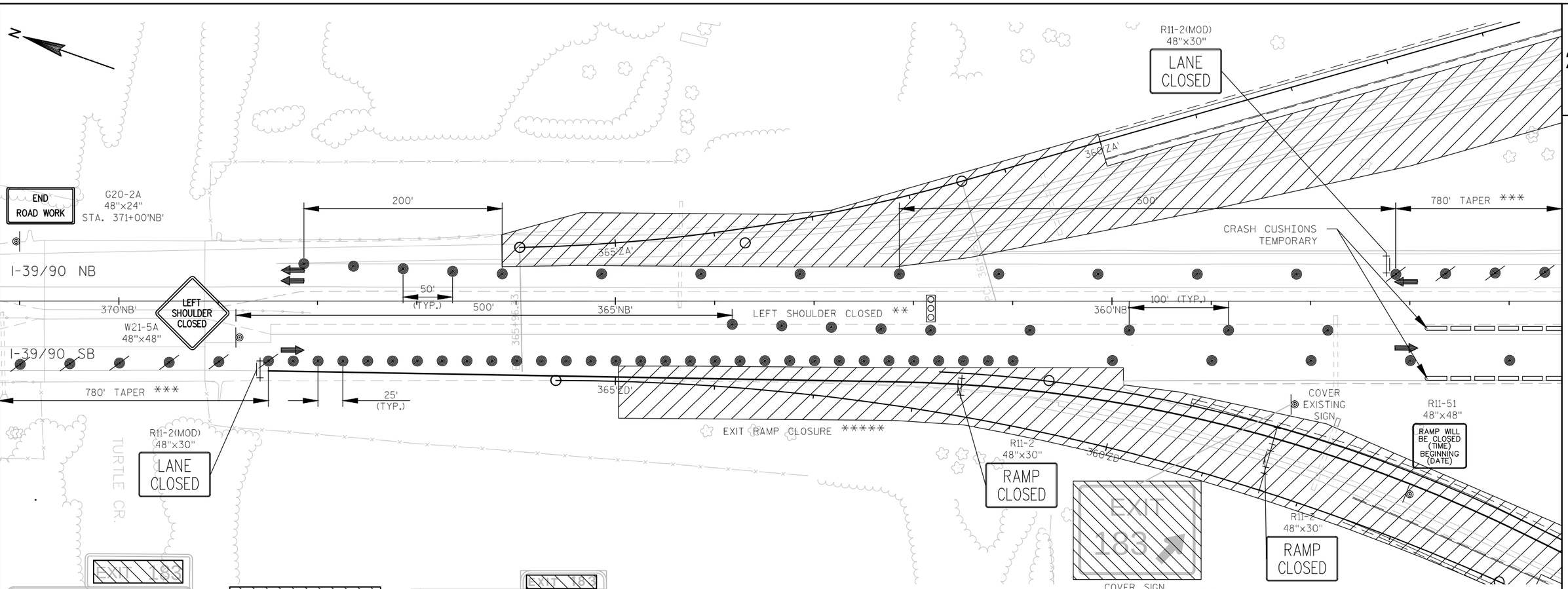
(3) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW, DOUBLE

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD

NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 2B	SHEET 203	E



** SEE SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

*** SEE SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

***** SEE SDD "TRAFFIC CONTROL, EXIT RAMP CLOSURE" FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

SEE STAGE 2 TRAFFIC CONTROL PLANS FOR FURTHER INFORMATION

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD

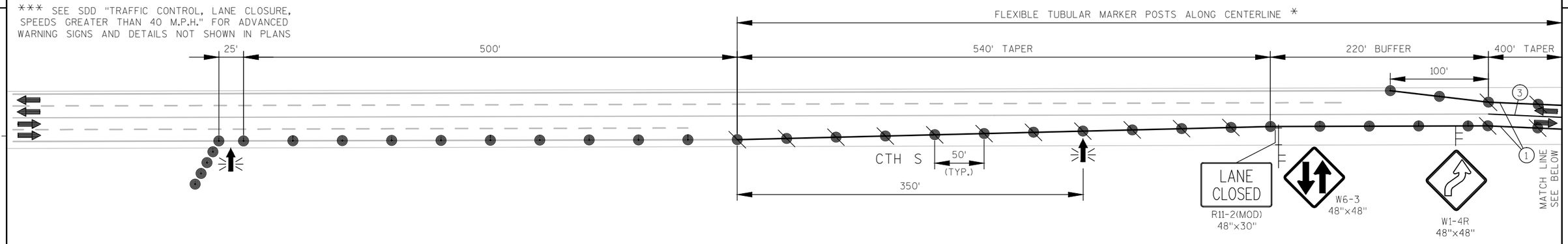
NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 2B	SHEET 204	E

2

* SEE SDD "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION" FOR FLEXIBLE TUBULAR MARKER POSTS AND SIGNS NOT SHOWN IN PLANS

*** SEE SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS



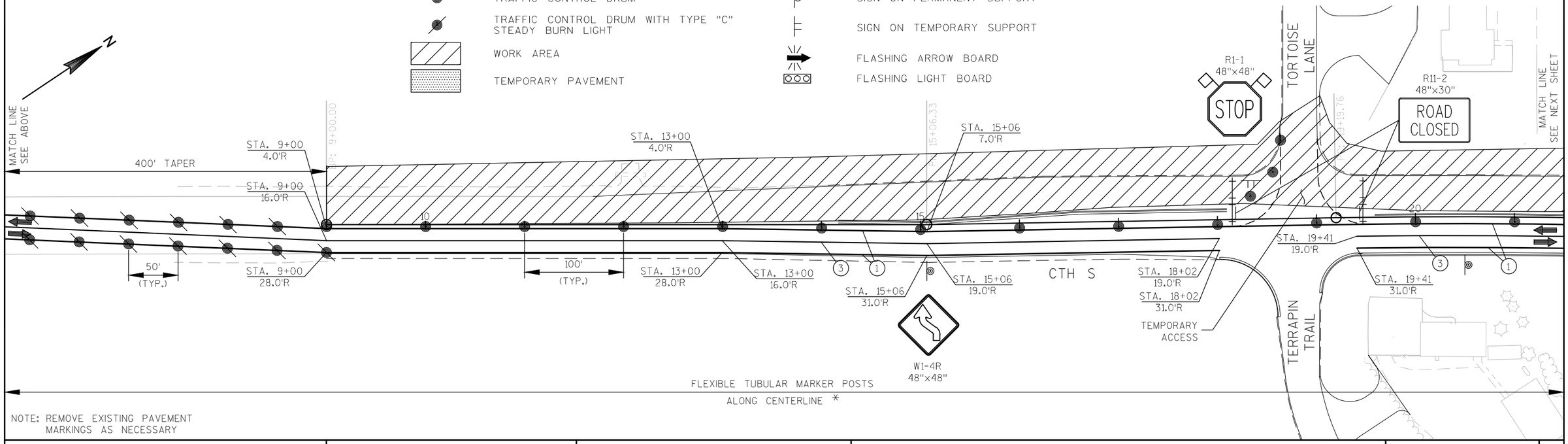
TEMPORARY MARKING LEGEND

(1) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE

(3) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW, DOUBLE

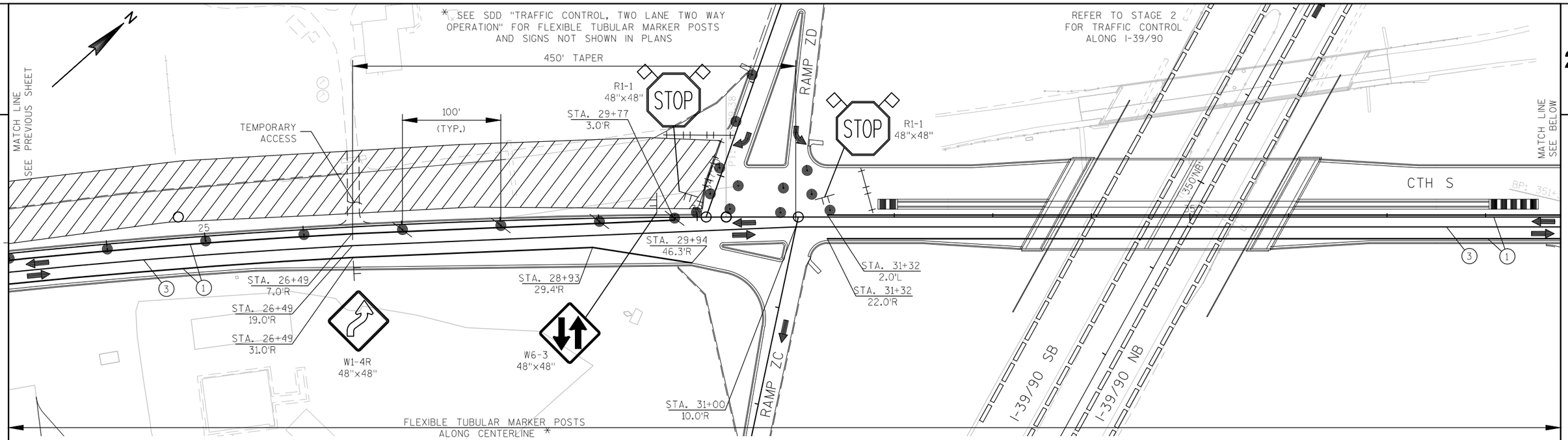
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD



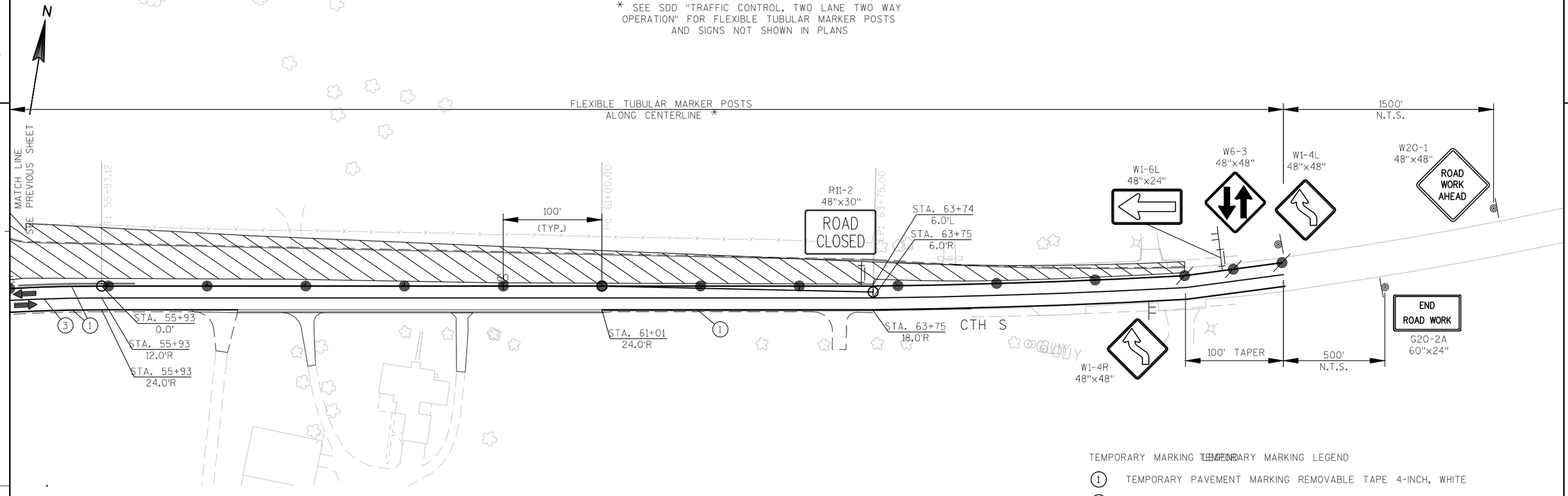
NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 3	SHEET 205 E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 3	SHEET 206	E

* SEE SDD "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION" FOR FLEXIBLE TUBULAR MARKER POSTS AND SIGNS NOT SHOWN IN PLANS



TEMPORARY MARKING LEGEND

(1) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE

(3) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW, DOUBLE

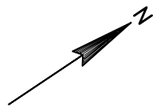
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD

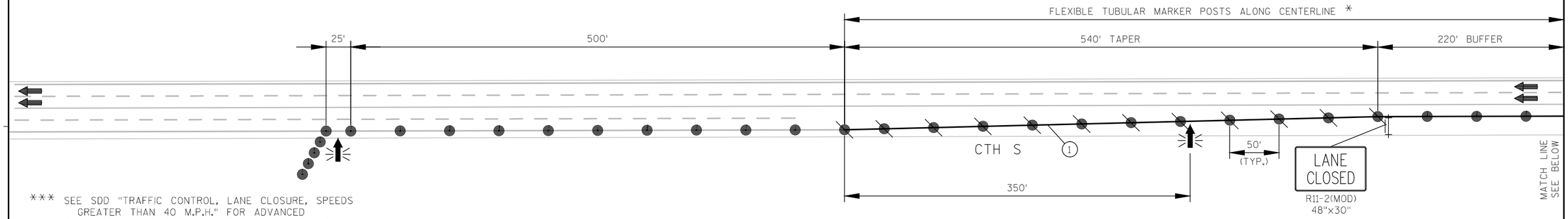
NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 3	SHEET 207	E

2



* SEE SDD "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION" FOR FLEXIBLE TUBULAR MARKER POSTS AND SIGNS NOT SHOWN IN PLANS



*** SEE SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

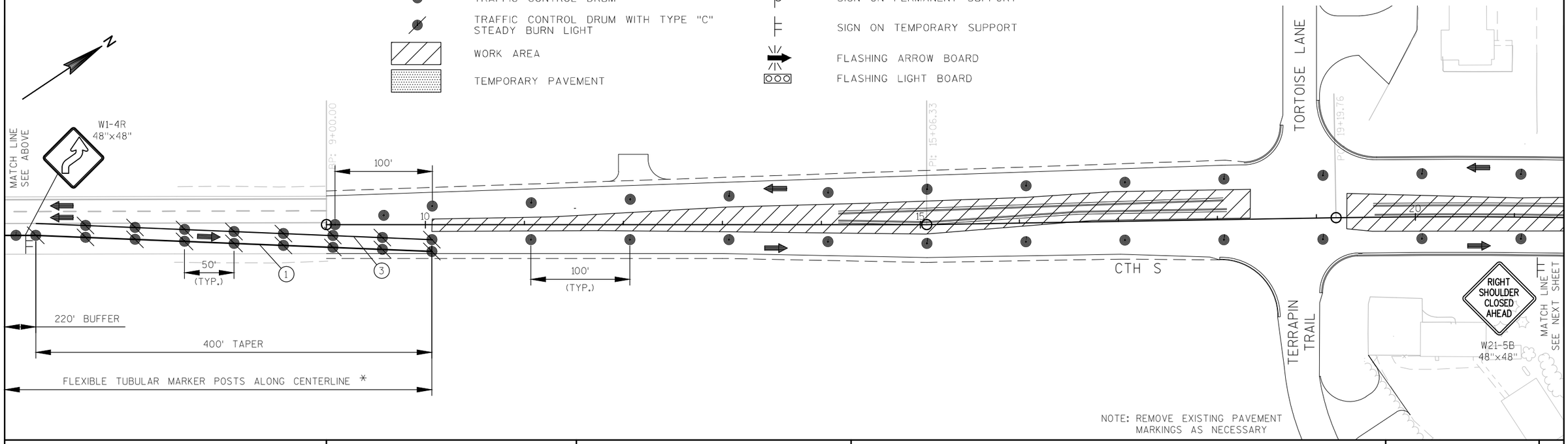
TEMPORARY MARKING LEGEND

(1) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE

(3) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW, DOUBLE

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD



NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 3A	SHEET 208 E

2

2

* SEE SDD "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION" FOR FLEXIBLE TUBULAR MARKER POSTS AND SIGNS NOT SHOWN IN PLANS

REFER TO STAGE 2 FOR TRAFFIC CONTROL ALONG I-39/90

RAMP ZD

RAMP ZC

RAMP ZA

RAMP ZB

CTH S

SHOPIERE LANE

I-39/90 SB

I-39/90 NB

W1-4R
48"×48"

400' TAPER

352'ZB'

352'ZA'

350'NB'

25

30

40

45

50

100'
(TYP.)

50'
(TYP.)

200'

500'

RIGHT SHOULDER CLOSED

W21-5A
48"×48"

MATCH LINE
SEE PREVIOUS SHEET

MATCH LINE
SEE BELOW

MATCH LINE
SEE NEXT SHEET

MATCH LINE
SEE ABOVE

44+34.18 PC

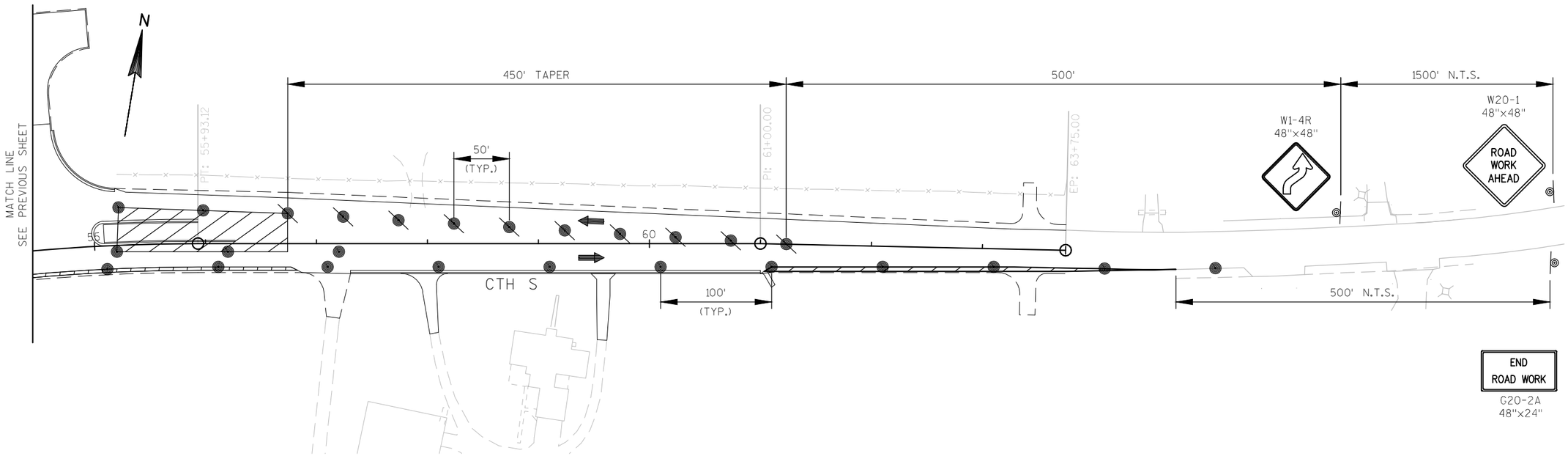
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD

NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 3A	SHEET 209	E

* SEE SDD "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION" FOR FLEXIBLE TUBULAR MARKER POSTS AND SIGNS NOT SHOWN IN PLANS

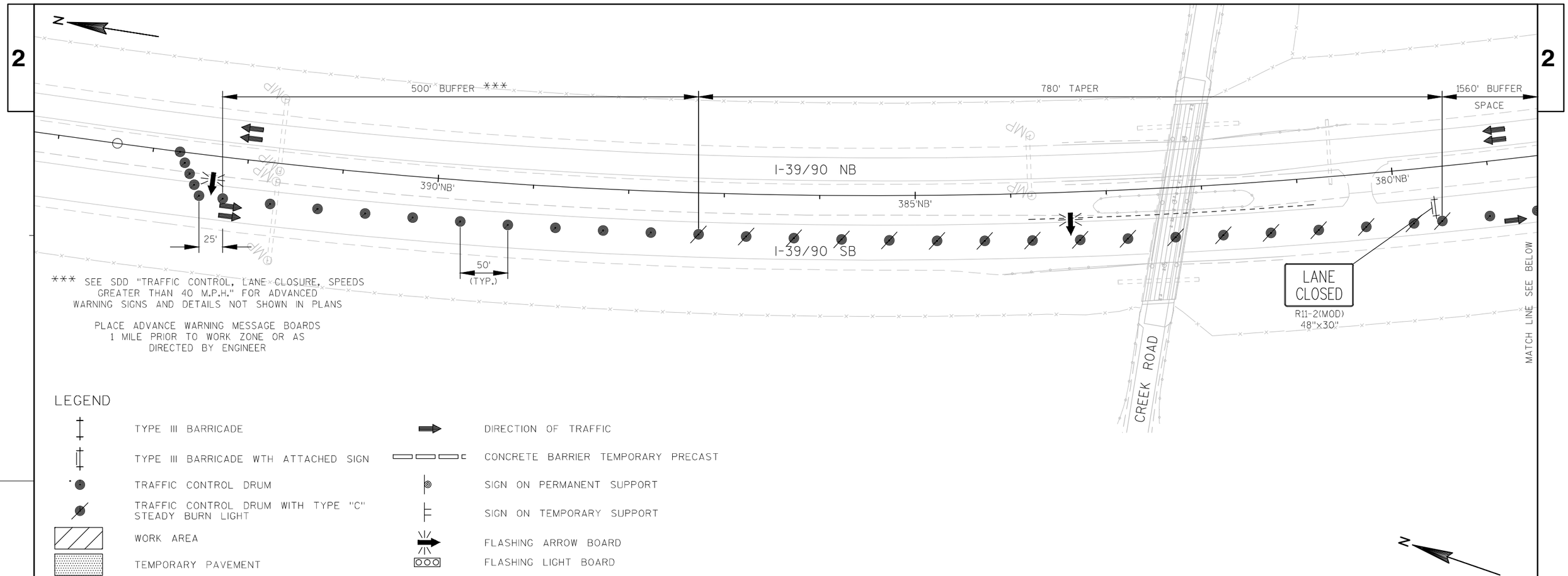


LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD

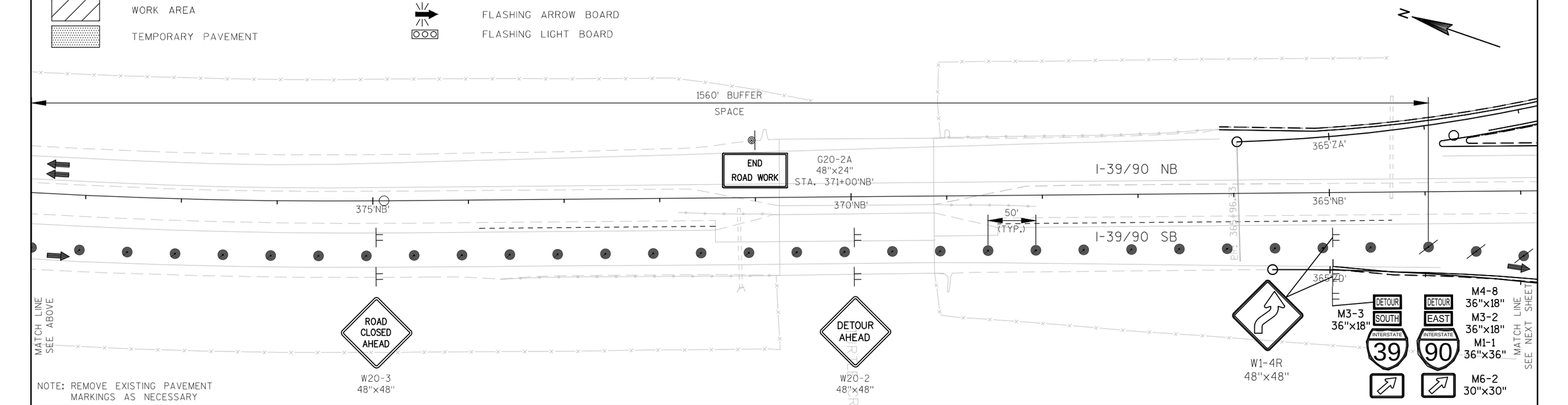
NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 3A	SHEET 210	E



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD



NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 4	SHEET 211	E

N

RAMP ZB

STATE PATROL UNITS WILL BE USED TO GUIDE TRAFFIC THROUGH THE INTERSECTIONS AT CTH S

M4-8 36"x18" — DETOUR NORTH
M3-1 36"x18"
M1-1 36"x36" — INTERSTATE 39
M6-1 30"x30"
DETOUR WEST — INTERSTATE 90
M3-4 36"x18"

352'ZA'

BP: 351+34.34

355'ZA'

RAMP ZA

360'ZA'

R11-2 48"x30" ROAD CLOSED

R11-2 48"x30" ROAD CLOSED

STA. 356+85

STA. 352+90

I-39/90 NB

360'NB'

355'NB'

350'NB'

50' (TYP.)

I-39/90 SB

CRASH CUSHIONS TEMPORARY

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN ON PLANS

MATCH LINE SEE PREVIOUS SHEET

MATCH LINE SEE NEXT SHEET

360'ZD'

SPEED LIMIT 30

W3-5 36"x36"

RAMP ZD

355'ZD'

SPEED LIMIT 30

W3-5 24"x36"

M4-8 36"x18" — DETOUR SOUTH
M3-3 36"x18"
M1-1 36"x36" — INTERSTATE 39
M6-1 30"x30"
DETOUR EAST — INTERSTATE 90
M3-2 36"x18"

STATE PATROL UNITS WILL BE USED TO GUIDE TRAFFIC THROUGH THE INTERSECTIONS AT CTH S

25' (TYP.)

347'ZD'

RAMP ZC

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 4	SHEET 212 E

STATE PATROL UNITS WILL BE USED TO GUIDE TRAFFIC THROUGH THE INTERSECTIONS AT CTH S

W3-5
24"x36"
SPEED LIMIT 30

345'ZB'

RAMP ZB

W3-5
36"x36"
SPEED LIMIT 30

340'ZB'

R11-2
48"x30"
ROAD CLOSED

R11-2
48"x30"
ROAD CLOSED

1560' BUFFER SPACE

50' (TYP.)

335'ZB'

333'ZB'

MATCH LINE SEE PREVIOUS SHEET

STA. 343+55

STA. 342+37

I-39/90 NB

345'NB'

340'NB'

335'NB'

I-39/90 SB

TEMPORARY CRASH CUSHIONS REQUIRED

W1-4R
48"x48"

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN ON PLANS

337'ZC'

340'ZC'

M3-1
36"x18"
DETOUR NORTH INTERSTATE 39

DETOUR WEST INTERSTATE 90

M4-8
36"x18"

M3-4
36"x18"

M1-1
36"x36"

M6-2
30"x30"

STA. 346+80

RAMP ZC

345'ZC'

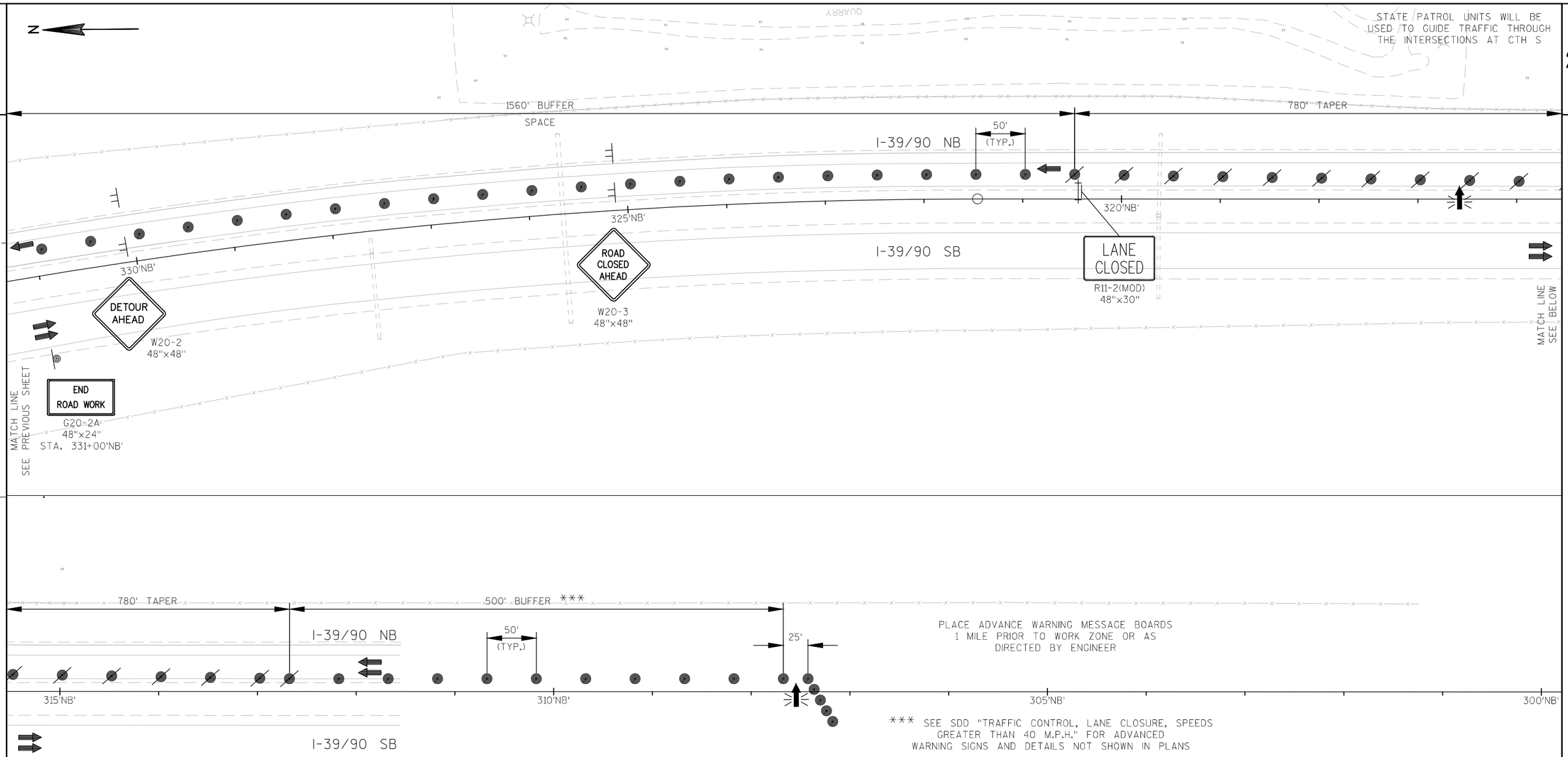
MATCH LINE SEE NEXT SHEET

NOTE: REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC
- CONCRETE BARRIER TEMPORARY PRECAST
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- FLASHING LIGHT BOARD

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 4	SHEET 213	E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CTH S - STAGE 4	SHEET 214	E

2

N

CTH G

E PHILHOWER ROAD

E L T TOWNLINE ROAD

WOODMAN ROAD

STH 11

S PATRICK ROAD

M4-8A
24"x18"
END DETOUR

COUNTY S

CTH S

IH 39/90

DETAIL VIEW 1

DETAIL VIEW 2

DETOUR
M4-8
36"x18"

DETOUR
M4-8
36"x18"

DETOUR
M4-8
36"x18"

SOUTH
M3-3
36"x18"

EAST
M3-2
36"x18"

COUNTY
S
M1-5A
36"x36"

M4-8A
24"x18"
END DETOUR

NORTH WEST
INTERSTATE 39 90

SOUTH EAST
INTERSTATE 39 90

INTERSTATE 39
M1-1
36"x36"

INTERSTATE 90
M1-1
36"x36"

CTH J

AVALON ROAD

S LATHERS ROAD

E CREEK ROAD

CTH S/SHOPIERE ROAD

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.

ALL EXISTING SIGNS THAT NEED TO BE COVERED SHALL BE COVERED WITH A BLANK ORANGE PANEL.

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

ALL DETOUR ROUTE SIGN SPACING SHALL FOLLOW STANDARD DETAIL DRAWING 15C2.

LEGEND

11 NEW SIGN	WORK ZONE
11 EXISTING SIGN	NEW POST MOUNTED SIGN
11 EXISTING SIGN TO BE COVERED WITH BLANK ORANGE PANEL	EXISTING POST MOUNTED SIGN
DETOUR ROUTE	

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	TRAFFIC CONTROL - DETOUR - STAGE 2A - OVERVIEW	SHEET 215 E

2

N

WOODMAN RD.

DETOUR
M4-8
36"x18"

SOUTH
M3-3
36"x18"

INTERSTATE 39
M1-1
36"x36"

M05-2R
30"x30"

DETOUR
M4-8
36"x18"

EAST
M3-2
36"x18"

INTERSTATE 90
M1-1
36"x36"

M05-2R
30"x30"

DETOUR
M4-8
36"x18"

COUNTY S
M1-5A
36"x36"

M05-2R
30"x30"

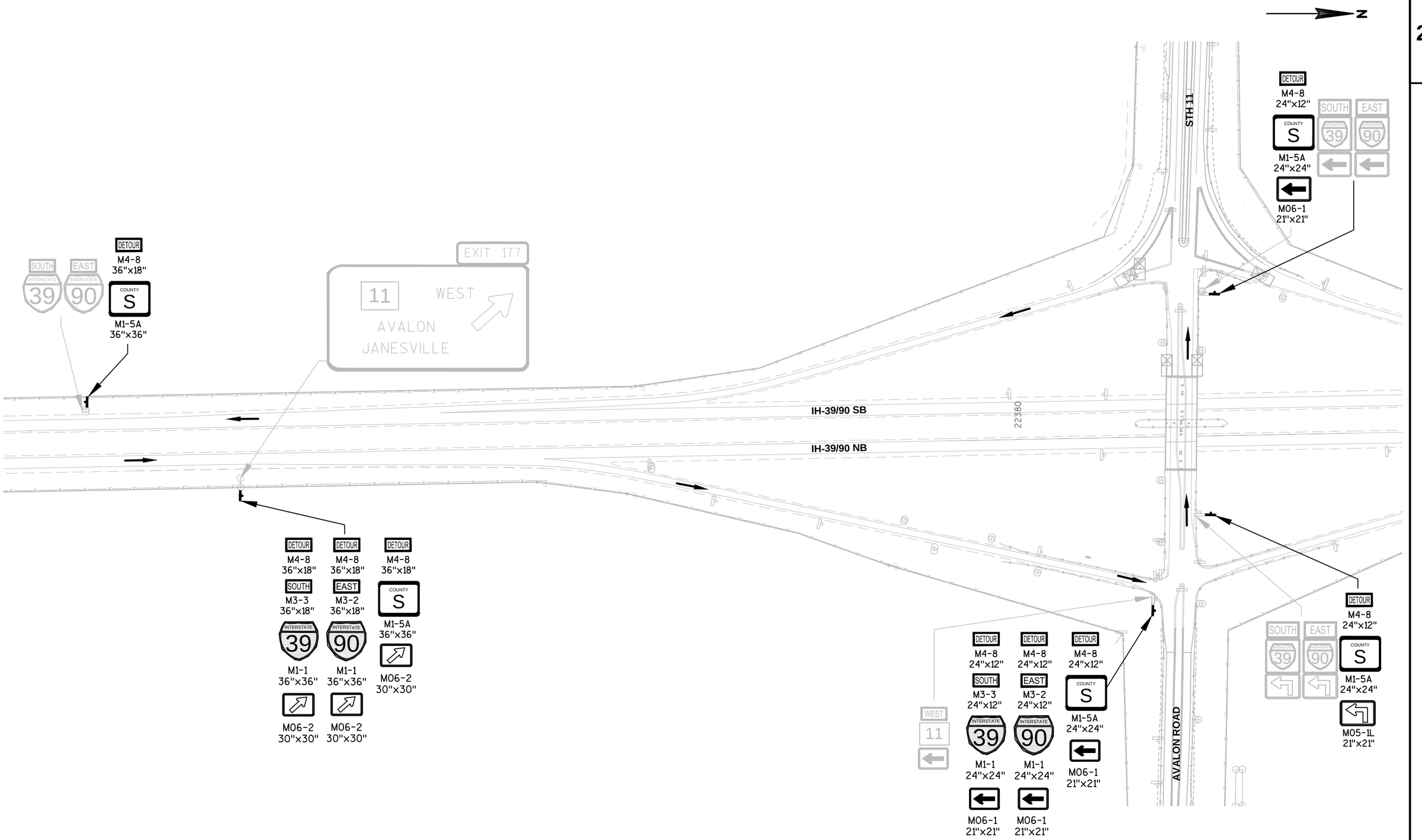
IH-39/90 SB

IH-39/90 NB

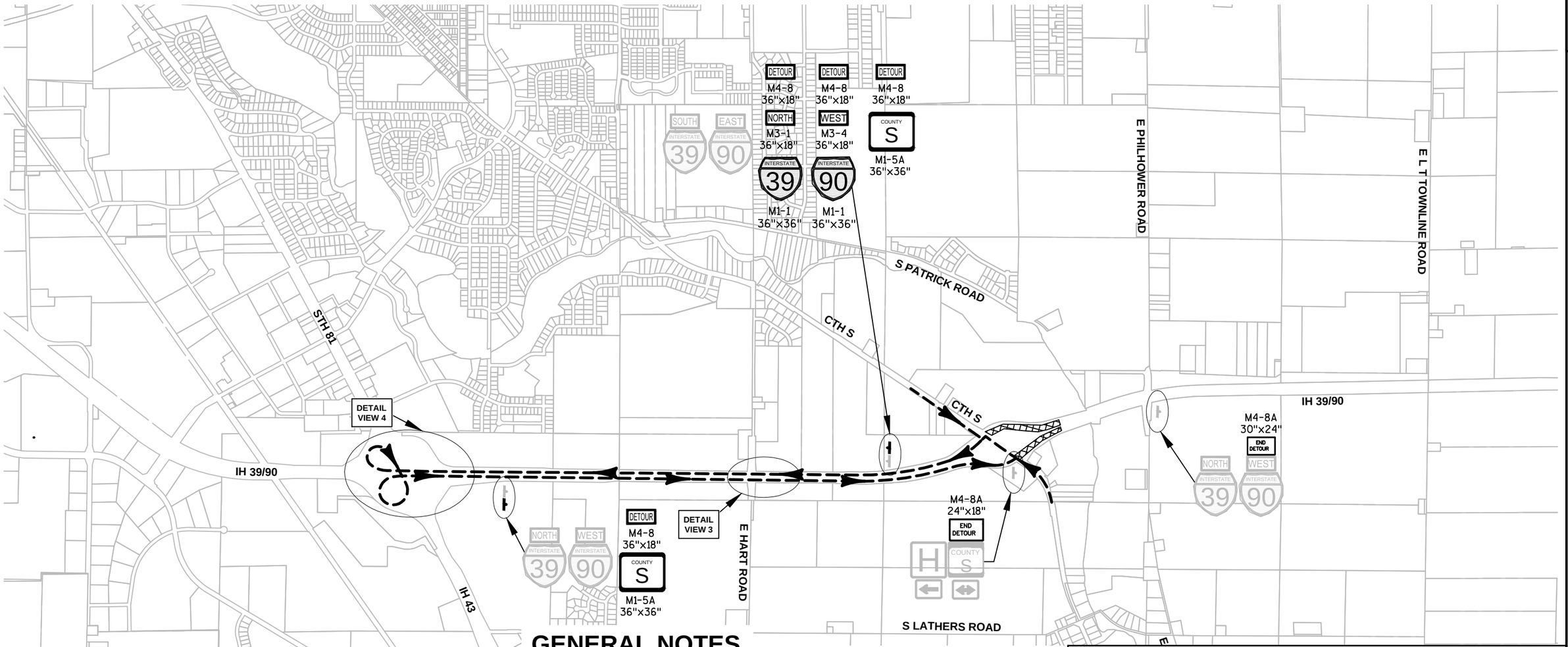
EXIT 177

11 WEST
AVALON
JANESVILLE
1 MILE

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	TRAFFIC CONTROL - DETOUR - STAGE 2A - DETAIL VIEW 1	SHEET 216 E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	TRAFFIC CONTROL - DETOUR - STAGE 2A - DETAIL VIEW 2	SHEET 217 E



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.

ALL EXISTING SIGNS THAT NEED TO BE COVERED SHALL BE COVERED WITH A BLANK ORANGE PANEL.

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

ALL DETOUR ROUTE SIGN SPACING SHALL FOLLOW STANDARD DETAIL DRAWING 15C2.

LEGEND

- 11 — NEW SIGN
- 11 — EXISTING SIGN
- 11 — EXISTING SIGN TO BE COVERED WITH BLANK ORANGE PANEL
- DETOUR ROUTE
- WORK ZONE
- NEW POST MOUNTED SIGN
- EXISTING POST MOUNTED SIGN

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	TRAFFIC CONTROL - DETOUR - STAGE 2B - OVERVIEW	SHEET 218 E

2

N

HART ROAD

DETOUR
M4-8
36"x18"

DETOUR
M4-8
36"x18"

DETOUR
M4-8
36"x18"

NORTH
M3-1
36"x18"

WEST
M3-4
36"x18"

COUNTY
S
M1-5A
36"x36"

INTERSTATE
39
M1-1
36"x36"

INTERSTATE
90
M1-1
36"x36"

SECOND RIGHT
M4-22R
36"x30"

SECOND RIGHT
M4-22R
36"x30"

SECOND RIGHT
M4-22R
36"x30"

EXITS 185 A-B
11
81
BELOIT
MILWAUKEE
1 MILE

I 39/90

I 39/90

IH-39/90 SB

IH-39/90 NB

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	TRAFFIC CONTROL - DETOUR - STAGE 2B - DETAIL VIEW 3	SHEET 219 E

2

N

WIS 81

DETOUR
M4-8
24"x12"
COUNTY
S
M1-5A
24"x24"
M6-1
21"x21"

SOUTH
39
EAST
90

DETOUR
M4-8
36"x18"
NORTH
M3-1
36"x18"
INTERSTATE
39
M1-1
36"x36"
M6-1
30"x30"

DETOUR
M4-8
36"x18"
WEST
M3-4
36"x18"
INTERSTATE
90
M1-1
36"x36"
M6-1
30"x30"

DETOUR
M4-8
36"x18"
COUNTY
S
M1-5A
36"x36"
M6-1
30"x30"

DETOUR
M4-8
24"x12"
COUNTY
S
M1-5A
24"x24"
M6-1
21"x21"

I 39/90

IH-39/90 SB

IH-39/90 NB

IH-43

EXIT 185A
81
BELOIT
WEST

EXIT 185A
INTERSTATE
43
NORTH
MILWAUKEE
1/3 MILE

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	TRAFFIC CONTROL - DETOUR - STAGE 2B - DETAIL VIEW 4	SHEET 220 E

LEGEND

EXISTING FENCE TO REMAIN

CHAIN LINK FENCE, 6 FT.

TERRAPIN TRAIL

R/W

N

25+86'S',
59.07' RT

26'S'

27+00'S',
117.02' LT

28'S'

3' TYP.

347+75'ZD',
118.15' LT

6-FT. CHAIN LINK FENCE

346+37'ZC',
98.32' LT

345+51'ZC',
67.02' LT

30'S'

MATCH LINE 348+00 RAMP ZD

339+29'ZCT',
57.16' LT MATCH EXISTING

341+02'ZCT',
46.52' LT

338'ZC'

338'ZCT'

340'ZC'

340'ZCT'

342'ZC'

342'ZCT'

344'ZC'

346'ZC'

RAMP ZC

ZCT ZC

336'ZBT'

336'ZB'

PC: 337+46.21

338'ZBT'

338'ZB'

EP: 339+00.00

334+88'ZBT',
71.95' RT MATCH EXISTING

ZBT ZB

340'ZB'

RAMP ZB

342'ZB'

I-39/90 SB

I-39/90 NB

CTH S

6-FT. CHAIN LINK FENCE

342+00'ZB',
46.96' RT

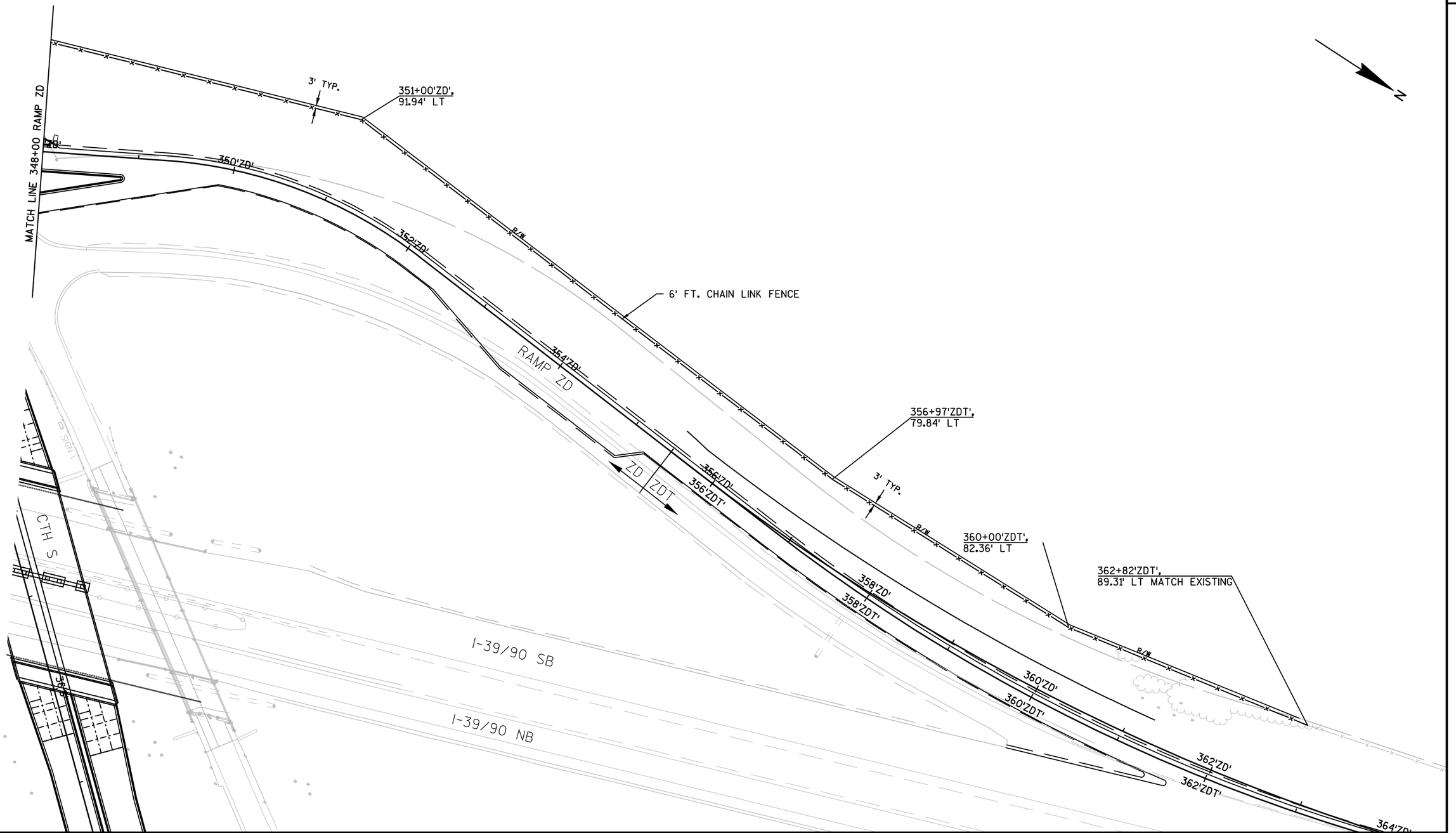
MATCH LINE 342+50
RAMP ZB

PROJECT NO: 1003-10-71	HWY: IH 39/90	COUNTY: ROCK	FENCING PLAN	SHEET 221	E

LEGEND

EXISTING FENCE TO REMAIN

CHAIN LINK FENCE, 6 FT.

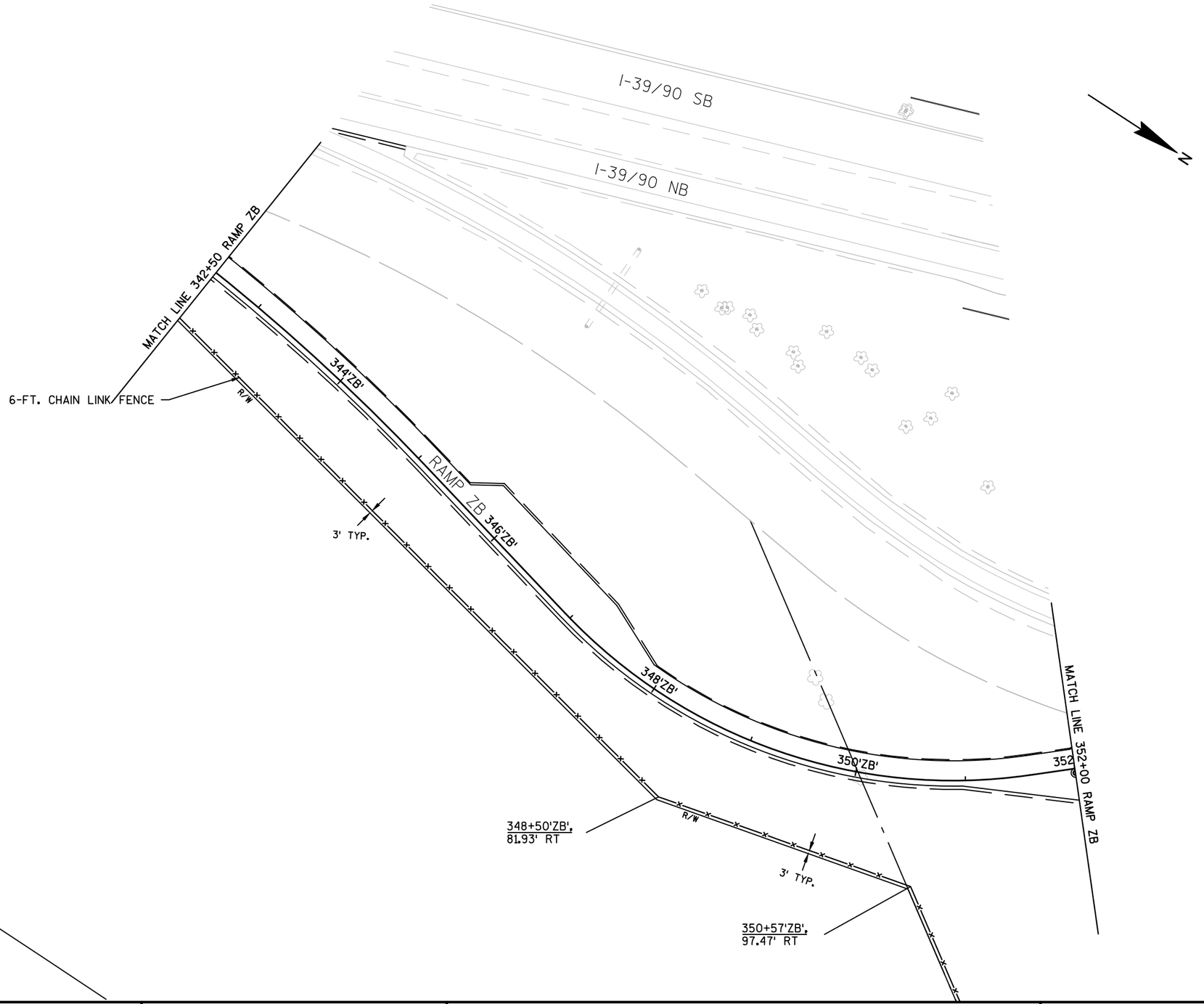


PROJECT NO: 1003-10-71	HWY: IH 39/90	COUNTY: ROCK	FENCING PLAN	SHEET 222	E

LEGEND

EXISTING FENCE TO REMAIN

CHAIN LINK FENCE, 6 FT.



PROJECT NO: 1003-10-71	HWY: IH 39/90	COUNTY: ROCK	FENCING PLAN	SHEET	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_027101_FN.DWG PLOT DATE : 10/15/2014 8:38 AM PLOT BY : ELLYN SUBAK PLOT NAME : PLOT SCALE : 1:100_XREF

2

I-39/90 SB

I-39/90 NB

CTH S

38'S'

MATCH LINE 352+00 RAMP ZB

ZB'

40'S'

352'ZA'

354'ZA'

356'ZA'

358'ZA'

RAMP ZA

360'ZA'

362'ZA'

362'ZAT'

364'ZA'

364'ZAT'

ZA ZAT

3' TYP.

R/W

357+00'ZA',
61.94' RT

3' TYP.

359+00'ZA',
87.00' RT

6 FT. CHAIN LINK FENCE

3' TYP.

R/W

364+28'ZAT',
74.72' RT MATCH EXISTING

3' TYP.

R/W

354+45'ZA',
138.25' RT

42+93'S',
287.01' LT

42'S'

44'S'

46'S'

HWY 39

SHOPIERE LANE

6-FT. CHAIN LINK
FENCE

3' TYP.

R/W

45+08'S',
216.37' RT

45+17'S',
86.91' RT

3' TYP.

R/W

45+95'S',
87.54' RT

N

LEGEND

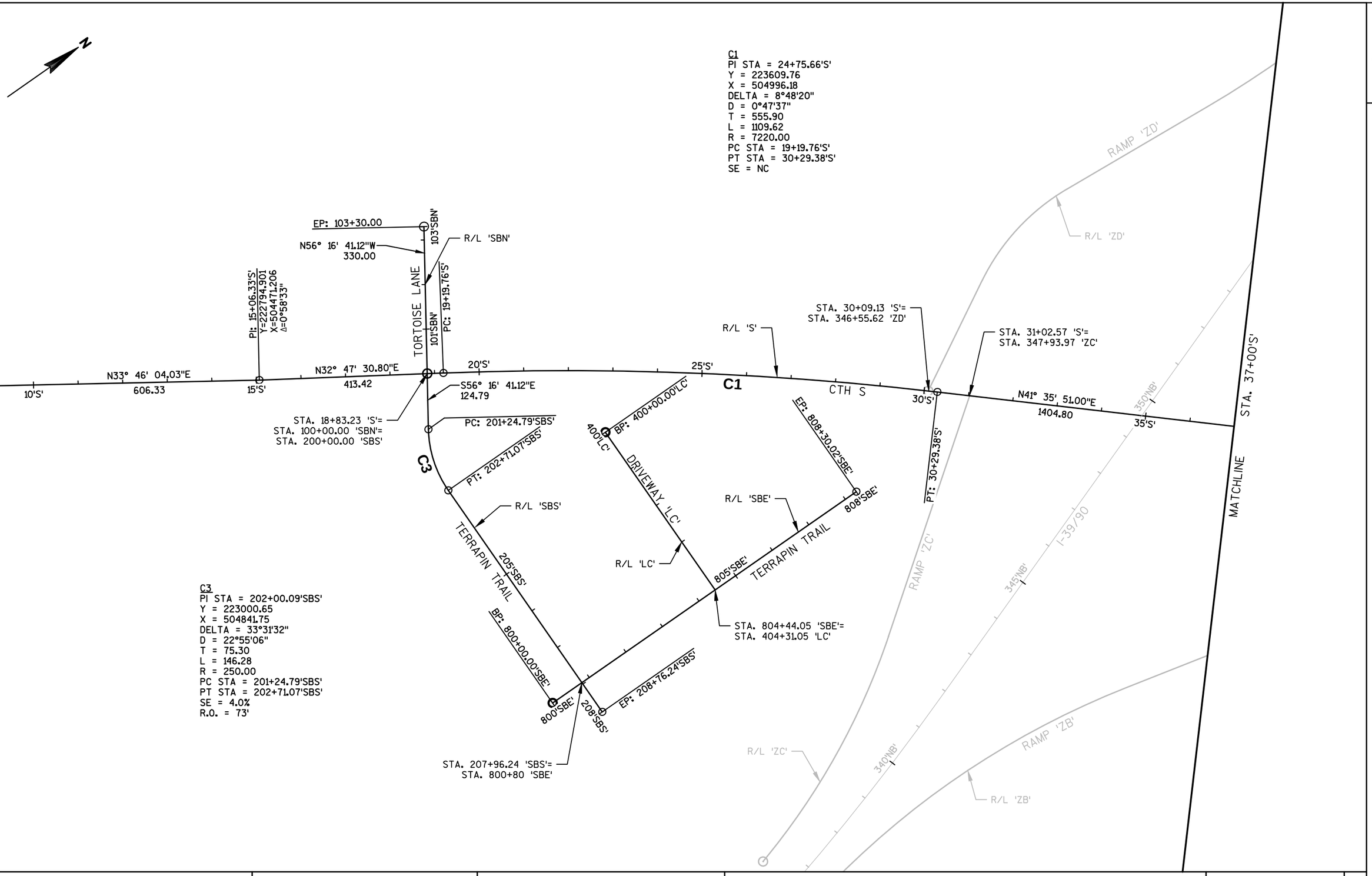
EXISTING FENCE TO REMAIN

CHAIN LINK FENCE, 6 FT.

PROJECT NO: 1003-10-71	HWY: IH 39/90	COUNTY: ROCK	FENCING PLAN	SHEET 224	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_027101_FN.DWG PLOT DATE : 10/15/2014 8:38 AM PLOT BY : ELLYN SUBAK PLOT NAME : PLOT SCALE : 1:100_XREF

2



C3
PI STA = 202+00.09'SBS'
Y = 223000.65
X = 504841.75
DELTA = 33°31'32"
D = 22°55'06"
T = 75.30
L = 146.28
R = 250.00
PC STA = 201+24.79'SBS'
PT STA = 202+71.07'SBS'
SE = 4.0%
R.O. = 73'

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	ALIGNMENT DIAGRAM	SHEET 225	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_027201_ALI.DWG PLOT DATE : 8/6/2013 9:07 AM PLOT BY : CARYN MELLOM PLOT NAME : ---------- PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

2

N

C10
PI STA = 304+21.39'SFN'
Y = 225422.34
X = 506286.22
DELTA = 32°06'52"
D = 4°14'39"
T = 388.57
L = 756.68
R = 1350.00
PC STA = 300+32.82'SFN'
PT STA = 307+89.50'SFN'
SE = 2.0%
R.O. = 34'

C11
PI STA = 309+54.32'SFN'
Y = 225583.63
X = 506815.57
DELTA = 33°43'59"
D = 37°12'18"
T = 46.69
L = 90.67
R = 154.00
PC STA = 309+07.63'SFN'
PT STA = 309+98.30'SFN'
SE = 4.0%
R.O. = 69'

C12
PI STA = 311+61.05'SFN'
Y = 225745.66
X = 506948.29
DELTA = 36°34'58"
D = 37°12'18"
T = 50.90
L = 98.33
R = 154.00
PC STA = 311+10.14'SFN'
PT STA = 312+08.47'SFN'
SE = 4.0%
R.O. = 69'

C2
PI STA = 50+37.18'S'
Y = 225526.97
X = 506698.22
DELTA = 39°03'36"
D = 3°22'13"
T = 603.00
L = 1158.93
R = 1700.00
PC STA = 44+34.18'S'
PT STA = 55+93.12'S'
SE = 3.5%
R.O. = 126'

STA. 313+21.80'SFN'
STA. 601+95.32'SFS'
EP: 314+41.80'SFN'
PT: 312+08.47'SFN'
N39° 19' 14.77"E
111.84
PC: 311+10.14'SFN'
PT: 309+98.30'SFN'
PC: 309+07.63'SFN'
PT: 307+89.50'SFN'
314'SFN'
N75° 54' 12.41"E
233.33
N14° 05' 47.59"W
195.32
310'SFN'
C12
C11
R/L 'SFS'
55'S'
N80° 39' 27.10"E
506.88
60'S'
N81° 54' 26.73"E
275.00
63'S'
PI: 61+00.00'S'
Y=225707.149
X=507793.383
Δ=1°15'00"
EP: 63+75.00'S'
R/L 'SFN'
305'SFN'
C10
N73° 03' 13.51"E
118.13
50'S'
C2
CTH S
STA. 54+52.06'S'=
STA. 600+00.00'SFS'
PT: 55+93.12'S'
R/L 'S'
SHOPIERE LANE
PC: 300+32.82'SFN'
BP: 300+00.00'SFN'
300'SFN'
N40° 56' 21.63"E
32.82
45'S'
PC: 44+34.18'S'
40'S'
STA. 39+46.28'S'=
STA. 351+34.34'ZA'
STA. 39+61.67'S'=
STA. 353+14.11'ZB'
MATCHLINE
STA. 37+00'S'
RAMP 'ZB'
R/L 'ZB'
RAMP 'ZA'
R/L 'ZA'
RAMP 'ZD'
R/L 'ZD'
I-39/90
365NB
355NB

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	ALIGNMENT DIAGRAM	SHEET 226	E

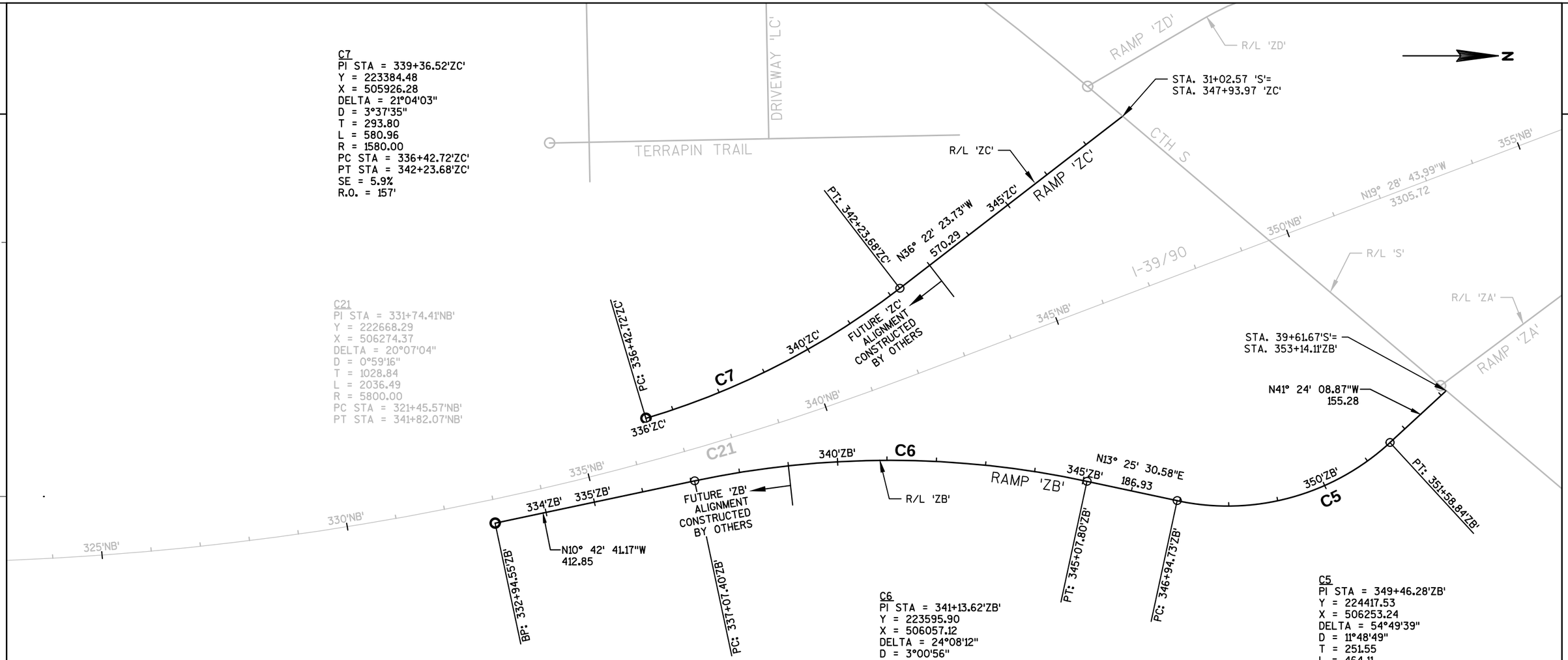
2

C7
PI STA = 339+36.52'ZC'
Y = 223384.48
X = 505926.28
DELTA = 21°04'03"
D = 3°37'35"
T = 293.80
L = 580.96
R = 1580.00
PC STA = 336+42.72'ZC'
PT STA = 342+23.68'ZC'
SE = 5.9%
R.O. = 157'

C21
PI STA = 331+74.41'NB'
Y = 222668.29
X = 506274.37
DELTA = 20°07'04"
D = 0°59'16"
T = 1028.84
L = 2036.49
R = 5800.00
PC STA = 321+45.57'NB'
PT STA = 341+82.07'NB'

C6
PI STA = 341+13.62'ZB'
Y = 223595.90
X = 506057.12
DELTA = 24°08'12"
D = 3°00'56"
T = 406.23
L = 800.40
R = 1900.00
PC STA = 337+07.40'ZB'
PT STA = 345+07.80'ZB'
SE = 5.5%
R.O. = 147'

C5
PI STA = 349+46.28'ZB'
Y = 224417.53
X = 506253.24
DELTA = 54°49'39"
D = 11°48'49"
T = 251.55
L = 464.11
R = 485.00
PC STA = 346+94.73'ZB'
PT STA = 351+58.84'ZB'
SE = 6.0%
R.O. = 124'



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	ALIGNMENT DIAGRAM - FINAL RAMPS 'ZB' & 'ZC'	SHEET 227	E

2

2

C8
PI STA = 350+76.90'ZD'
Y = 224378.90
X = 505147.80
DELTA = 33°33'05"
D = 11°48'49"
T = 146.21
L = 284.01
R = 485.00
PC STA = 349+30.69'ZD'
PT STA = 352+14.70'ZD'
SE = 6.0%
R.O. = 124'

C9
PI STA = 360+78.11'ZD'
Y = 225385.29
X = 505228.49
DELTA = 24°03'48"
D = 2°27'33"
T = 496.60
L = 978.56
R = 2330.00
PC STA = 355+81.51'ZD'
PT STA = 365+60.07'ZD'
SE = 5.0%
R.O. = 133'

C22
PI STA = 384+21.35'NB'
Y = 227634.89
X = 504517.66
DELTA = 18°24'45"
D = 0°59'41"
T = 933.56
L = 1851.02
R = 5760.00
PC STA = 374+87.79'NB'
PT STA = 393+38.81'NB'

C4
PI STA = 363+71.95'ZA'
Y = 225719.98
X = 505257.06
DELTA = 14°46'29"
D = 3°16'27"
T = 226.89
L = 451.27
R = 1750.00
PC STA = 361+45.06'ZA'
PT STA = 365+96.33'ZA'
SE = 5.7%
R.O. = 152'

N

PC: 349+30.69'ZD'
PT: 352+14.70'ZD'
PC: 355+81.51'ZD'
PT: 365+60.07'ZD'
PC: 374+87.79'NB'
PC: 361+45.06'ZA'
PT: 365+96.33'ZA'
STA. 30+09.13 'S'=
STA. 346+55.62 'ZD'
STA. 39+46.28'S'=
STA. 351+34.34'ZA'
FUTURE 'ZD' ALIGNMENT CONSTRUCTED BY OTHERS
FUTURE 'ZA' ALIGNMENT CONSTRUCTED BY OTHERS
N28° 58' 01.31"W 275.07
N4° 35' 03.62"E 366.81
N19° 28' 43.99"W 3305.72
N35° 23' 57.66"W 1010.71
R/L 'ZD'
R/L 'S'
R/L 'ZC'
R/L 'ZA'
R/L 'ZB'
350'ZD'
355'ZD'
360'ZD'
365'ZD'
365'ZA'
360'ZA'
355'ZA'
352'ZA'
350'NB'
355'NB'
360'NB'
365'NB'
370'NB'
345'NB'
375'NB'
C8
C9
C4
C22
RAMP 'ZD'
RAMP 'ZA'
RAMP 'ZC'
RAMP 'ZB'
CTH S
I-39/90
SHOPIERE LANE

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	ALIGNMENT DIAGRAM - FINAL RAMPS 'ZA' & 'ZD'	SHEET 228	E

2

N

C16
PI STA = 339+49.64'ZCT'
Y = 223397.81
X = 505917.00
DELTA = 19°15'46"
D = 5°12'31"
T = 186.67
L = 369.82
R = 1100.00
PC STA = 337+62.97'ZCT'
PT STA = 341+32.79'ZCT'
SE = 6.0%
R.O. = 153'

DRIVEWAY 'LC'
TERRAPIN TRAIL
RAMP 'ZD'
R/L 'ZD'
R/L 'ZC'
RAMP 'ZC'
CTH S
355'NB'
350'NB'
I-39/90
345'NB'
R/L 'S'
R/L 'ZA'
RAMP 'ZA'
340'NB'
335'NB'
330'NB'
325'NB'
EP: 343+00.00'ZCT'
PT: 341+32.79'ZCT'
STA. 343+00.00'ZCT'=
STA. 343+00.00'ZC'
R/L 'ZCT'
342'ZCT'
N36° 26' 35.94"W
167.22
340'ZCT'
C16
BP: 337+13.45'ZCT'
PC: 337+62.97'ZCT'
338'ZCT'
RAMP 'ZCT'
N17° 10' 50.27"W
49.52
Δ=20°07'04"
332'ZBT'
334'ZBT'
336'ZBT'
RAMP 'ZBT'
C17
RAMP 'ZB'
STA. 339+00.00'ZBT'=
STA. 339+00.00'ZB'
N9° 32' 27.56"W
546.93
R/L 'ZBT'
PC: 337+46.21'ZBT'
EP: 339+00.00'ZBT'
BP: 331+99.28'ZBT'
R/L 'ZB'

C17
PI STA = 338+23.15'ZBT'
Y = 223310.84
X = 506113.05
DELTA = 4°38'16"
D = 3°00'56"
T = 76.94
L = 153.79
R = 1900.00
PC STA = 337+46.21'ZBT'
PT STA = 339+00.00'ZBT'
SE = 5.5%
R.O. = 147'

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	ALIGNMENT DIAGRAM - TEMPORARY RAMPS 'ZBT' & 'ZCT'	SHEET 229	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_027201_ALI.DWG PLOT DATE : 8/6/2013 9:07 AM PLOT BY : CARYN MELLOM PLOT NAME : ---------- PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

C15
PI STA = 360+63.11'ZDT'
Y = 225370.34
X = 505227.30
DELTA = 22°56'10"
D = 3°01'53"
T = 383.43
L = 756.59
R = 1890.00
PC STA = 356+79.68'ZDT'
PT STA = 364+36.27'ZDT'
SE = 5.0%
R.O. = 128'

N

STA. 355+46.00'ZDT'=
STA. 355+46.00'ZD'

BP: 355+46.00'ZDT'

PC: 356+79.68'ZDT'

PT: 364+36.27'ZDT'

EP: 365+00.00'ZDT'

N18° 21' 06.31"W
63.73

N4° 35' 03.62"E
133.68

N35° 24' 35.67"W
160.62

N20° 24' 54.94"W
53.28

STA. 360+00.00'ZAT'=
STA. 360+00.00'ZA'

BP: 360+00.00'ZAT'

PC: 361+60.62'ZAT'

PT: 365+61.03'ZAT'

EP: 366+14.31'ZAT'

C13
PI STA = 363+61.97'ZAT'
Y = 225711.81
X = 505262.78
DELTA = 14°59'41"
D = 3°44'41"
T = 201.36
L = 400.41
R = 1530.00
PC STA = 361+60.62'ZAT'
PT STA = 365+61.03'ZAT'
SE = 5.5%
R.O. = 140'

TERRAPIN TRAIL

CTH S

I-39/90

RAMP 'ZD'

RAMP 'ZC'

RAMP 'ZA'

RAMP 'ZB'

RAMP 'ZDT'

RAMP 'ZAT'

C15

C13

SHOPIERE LANE

R/L 'ZD'

R/L 'S'

R/L 'ZC'

R/L 'ZA'

R/L 'ZB'

R/L 'ZDT'

R/L 'ZAT'

345'NB'

350'NB'

355'NB'

360'NB'

365'NB'

370'NB'

356'ZDT'

358'ZDT'

360'ZDT'

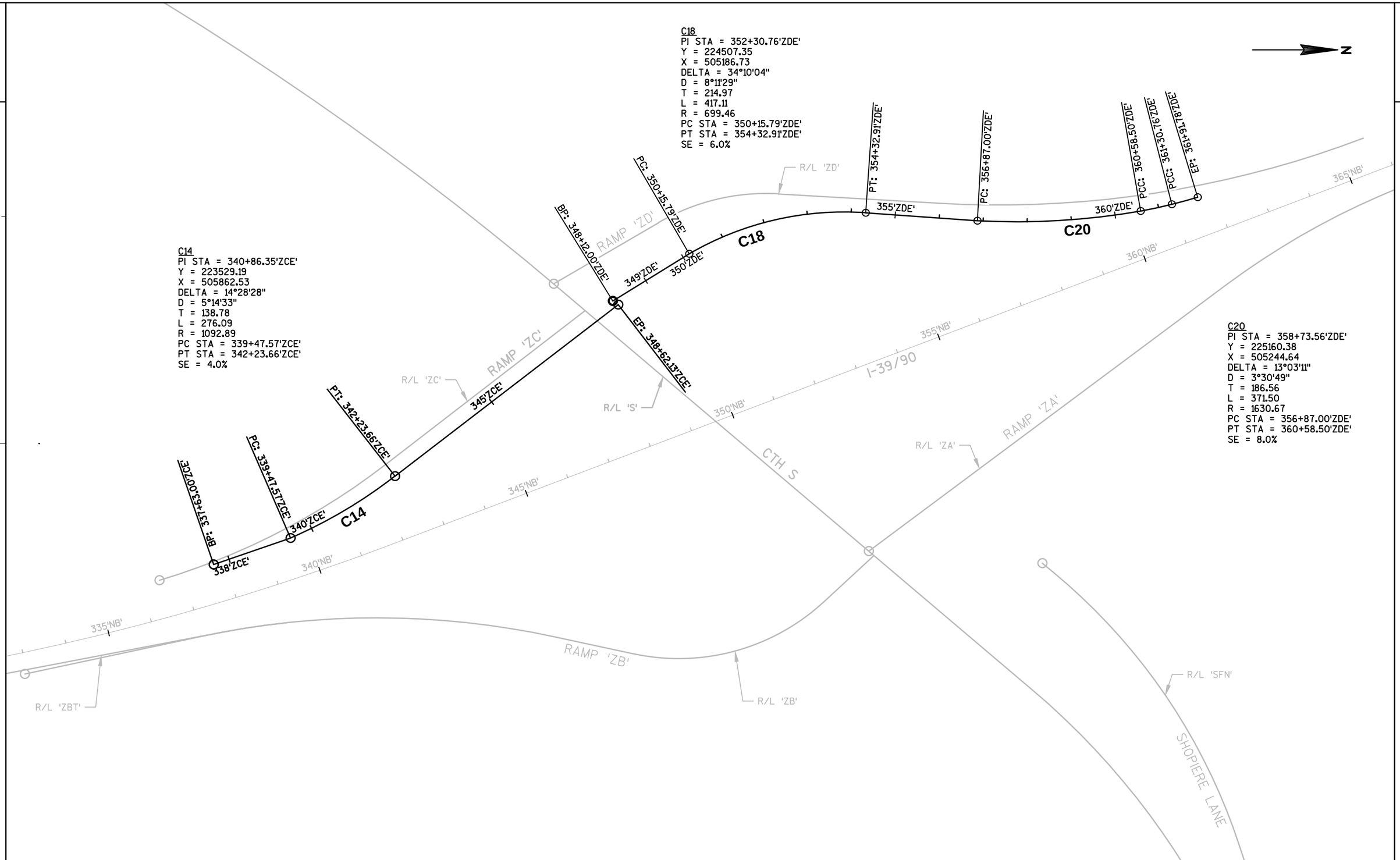
362'ZDT'

364'ZDT'

362'ZAT'

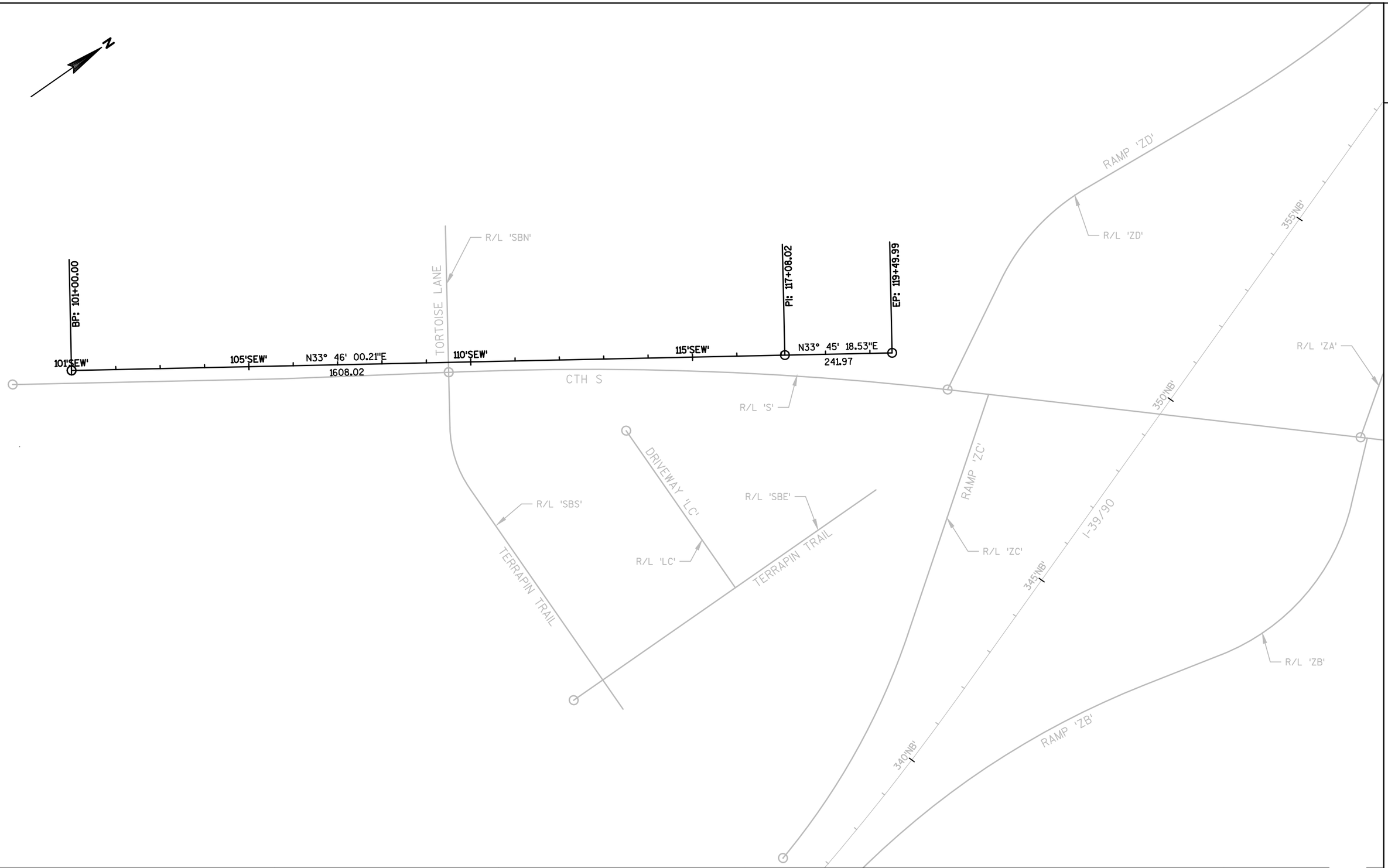
364'ZAT'

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	ALIGNMENT DIAGRAM - TEMPORARY RAMPS 'ZAT' & 'ZDT'	SHEET 230	E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	ALIGNMENT DIAGRAM - OFFSET ALIGNMENTS 'ZCE' & 'ZDE'	SHEET 231	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_027201_ALI.DWG PLOT DATE : 8/6/2013 9:07 AM PLOT BY : CARYN MELLOM PLOT NAME : ---------- PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	ALIGNMENT DIAGRAM - TEMPORARY WIDENING 'SEW'	SHEET 232 E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_027201_ALI.DWG PLOT DATE : 8/6/2013 9:07 AM PLOT BY : CARYN MELLOM PLOT NAME : ---------- PLOT SCALE : 1 IN:200 FT

2

N

EP: 162+79.32'SEE'

PC: 155+91.80'SEE'

160'SEE'

C19

155'SEE'

BP: 144+00.00'SEE'

145'SEE'

N81° 50' 00.80"E 1191.80

150'SEE'

144'SEE'

R/L 'SFN'

CTH S

SHOPIERE LANE

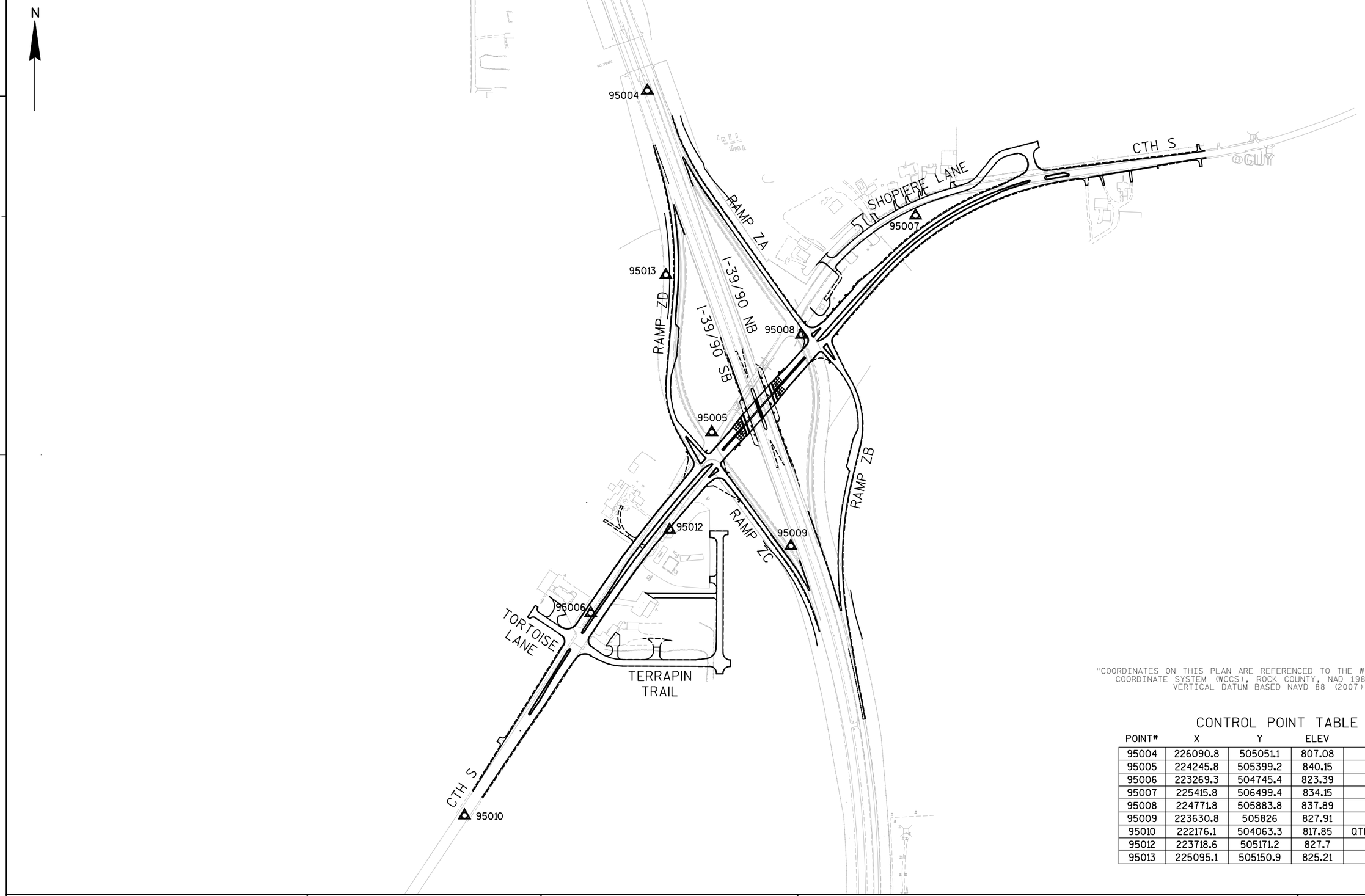
R/L 'S'

R/L 'ZA'

R/L 'ZB'

C19
PI STA = 159+37.53'SEE'
Y = 225813.27
X = 508431.61
DELTA = 14°59'15"
D = 2°10'48"
T = 345.74
L = 687.53
R = 2628.35
PC STA = 155+91.80'SEE'
PT STA = 162+79.32'SEE'
SE = 3.0%

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	ALIGNMENT DIAGRAM - TEMPORARY WIDENING 'SEE'	SHEET 233 E



"COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), ROCK COUNTY, NAD 1983 (2007)."
VERTICAL DATUM BASED NAVD 88 (2007)

CONTROL POINT TABLE

POINT#	X	Y	ELEV	DESC
95004	226090.8	505051.1	807.08	REBAR
95005	224245.8	505399.2	840.15	REBAR
95006	223269.3	504745.4	823.39	REBAR
95007	225415.8	506499.4	834.15	REBAR
95008	224771.8	505883.8	837.89	REBAR
95009	223630.8	505826	827.91	REBAR
95010	222176.1	504063.3	817.85	QTR ALUM DISK
95012	223718.6	505171.2	827.7	REBAR
95013	225095.1	505150.9	825.21	REBAR

DATE 07JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1003-10-71 QUANTITY
0010	201.0105	Clearing	STA	37.000	37.000
0020	201.0120	Clearing	ID	187.000	187.000
0030	201.0205	Grubbing	STA	37.000	37.000
0040	201.0220	Grubbing	ID	187.000	187.000
0050	203.0100	Removing Small Pipe Culverts	EACH	29.000	29.000
0060	203.0200	Removing Old Structure (station) 001. 34'S'+21.31	LS	1.000	1.000
0070	203.0225.S	Debris Containment (structure) 001. B-53-0044	LS	1.000	1.000
0080	204.0100	Removing Pavement	SY	10,352.000	10,352.000
0090	204.0110	Removing Asphaltic Surface	SY	887.000	887.000
0100	204.0150	Removing Curb & Gutter	LF	737.000	737.000
0110	204.0157	Removing Concrete Barrier	LF	354.000	354.000
0120	204.0165	Removing Guardrail	LF	1,082.000	1,082.000
0130	204.0170	Removing Fence	LF	7,378.000	7,378.000
0140	204.0195	Removing Concrete Bases	EACH	9.000	9.000
0150	204.0210	Removing Manholes	EACH	1.000	1.000
0160	204.0220	Removing Inlets	EACH	1.000	1.000
0170	204.0245	Removing Storm Sewer (size) 001. 18-Inch	LF	142.000	142.000
0180	204.0270	Abandoning Culvert Pipes	EACH	1.000	1.000
0190	204.9060.S	Removing (Item Description) 001. Light Poles	EACH	6.000	6.000
0200	205.0100	Excavation Common	CY	92,914.000	92,914.000
0210	206.1000	Excavation for Structures Bridges (structure) 001. B-53-313	LS	1.000	1.000
0220	208.0100	Borrow	CY	228,023.000	228,023.000
0230	210.0100	Backfill Structure	CY	560.000	560.000
0240	213.0100	Finishing Roadway (project) 001. 1003-10-71	EACH	1.000	1.000
0250	305.0110	Base Aggregate Dense 3/4-Inch	TON	12,700.000	12,700.000
0260	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	77,042.000	77,042.000
0270	305.0130	Base Aggregate Dense 3-Inch	TON	6,400.000	6,400.000
0280	312.0110	Select Crushed Material	TON	58,000.000	58,000.000
0290	405.0100	Coloring Concrete Red	CY	295.000	295.000
0300	415.0080	Concrete Pavement 8-Inch	SY	624.000	624.000
0310	415.0410	Concrete Pavement Approach Slab	SY	274.000	274.000
0320	416.0180	Concrete Driveway 8-Inch	SY	41.000	41.000
0330	416.0508	Concrete Roundabout Truck Apron 8-Inch	SY	1,335.000	1,335.000
0340	455.0105	Asphaltic Material PG58-28	TON	600.000	600.000
0350	455.0120	Asphaltic Material PG64-28	TON	380.000	380.000
0360	455.0605	Tack Coat	GAL	4,000.000	4,000.000
0370	460.1103	Hma Pavement Type E-3	TON	19,000.000	19,000.000
0380	460.2000	Incentive Density HMA Pavement	DOL	12,300.000	12,300.000
0390	460.4000	HMA Cold Weather Paving	TON	1,500.000	1,500.000
0400	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	5,000.000	5,000.000
0410	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	800.000	800.000
0420	465.0125	Asphaltic Surface Temporary	TON	1,600.000	1,600.000
0430	465.0315	Asphaltic Flumes	SY	100.000	100.000
0440	465.0400	Asphaltic Shoulder Rumble Strips	LF	1,090.000	1,090.000
0450	502.0100	Concrete Masonry Bridges	CY	493.000	493.000
0460	502.3200	Protective Surface Treatment	SY	2,809.000	2,809.000
0470	503.0146	Prestressed Girder Type I 45W-Inch	LF	2,529.000	2,529.000
0480	505.0405	Bar Steel Reinforcement HS Bridges	LB	24,930.000	24,930.000

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DATE 07JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE 1003-10-71

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0490	505.0605	Bar Steel Reinforcement HS Coated Bridges	LB	258,170.000	258,170.000
0500	506.2605	Bearing Pads Elastomeric Non-Laminated	EACH	48.000	48.000
0510	506.4000	Steel Diaphragms (structure) 001. B-53-313	EACH	44.000	44.000
0520	511.1200	Temporary Shoring (structure) 001. R-53-30	SF	360.000	360.000
0530	511.1200	Temporary Shoring (structure) 002. R-53-31	SF	460.000	460.000
0540	516.0500	Rubberized Membrane Waterproofing	SY	52.000	52.000
0550	517.1010.S	Concrete Staining (structure) 001. B-53-313	SF	10,307.000	10,307.000
0560	517.1010.S	Concrete Staining (structure) 002. R-53-30	SF	2,252.000	2,252.000
0570	517.1010.S	Concrete Staining (structure) 003. R-53-31	SF	4,019.000	4,019.000
0580	517.1050.S	Architectural Surface Treatment (structure) 001. B-53-313	SF	2,492.000	2,492.000
0590	520.4018	Culvert Pipe Temporary 18-Inch	LF	153.000	153.000
0600	520.4024	Culvert Pipe Temporary 24-Inch	LF	30.000	30.000
0610	520.4030	Culvert Pipe Temporary 30-Inch	LF	15.000	15.000
0620	520.8000	Concrete Collars for Pipe	EACH	5.000	5.000
0630	521.0118	Culvert Pipe Corrugated Steel 18-Inch	LF	824.000	824.000
0640	521.1503	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 18-Inch 4 To 1	EACH	24.000	24.000
0650	521.1518	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 18-Inch 6 To 1	EACH	6.000	6.000
0660	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	548.000	548.000
0670	522.0136	Culvert Pipe Reinforced Concrete Class III 36-Inch	LF	96.000	96.000
0680	522.0324	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	72.000	72.000
0690	522.0330	Culvert Pipe Reinforced Concrete Class IV 30-Inch	LF	104.000	104.000
0700	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	3.000	3.000
0710	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	5.000	5.000
0720	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	14.000	14.000
0730	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	4.000	4.000
0740	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	2.000	2.000
0750	523.0414	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 14x23-Inch	LF	56.000	56.000
0760	523.0514	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 14x23-Inch	EACH	2.000	2.000
0770	550.0020	Pre-Boring Rock or Consolidated Materials	LF	960.000	960.000
0780	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	1,800.000	1,800.000
0790	601.0551	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type A	LF	450.000	450.000
0800	601.0553	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D	LF	11,550.000	11,550.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1003-10-71 QUANTITY
0810	601.0582	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type T	LF	682.000	682.000
0820	602.0410	Concrete Sidewalk 5-Inch	SF	8,650.000	8,650.000
0830	603.8000	Concrete Barrier Temporary Precast Delivered	LF	3,990.000	3,990.000
0840	603.8125	Concrete Barrier Temporary Precast Installed	LF	3,990.000	3,990.000
0850	604.0400	Slope Paving Concrete	SY	56.000	56.000
0860	606.0200	Riprap Medium	CY	637.000	637.000
0870	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	212.000	212.000
0880	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	1,276.000	1,276.000
0890	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	1,339.000	1,339.000
0900	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	370.000	370.000
0910	611.0530	Manhole Covers Type J	EACH	7.000	7.000
0920	611.0627	Inlet Covers Type HM	EACH	32.000	32.000
0930	611.0642	Inlet Covers Type MS	EACH	4.000	4.000
0940	611.2004	Manholes 4-Ft Diameter	EACH	1.000	1.000
0950	611.2005	Manholes 5-Ft Diameter	EACH	10.000	10.000
0960	611.3230	Inlets 2x3-Ft	EACH	28.000	28.000
0970	611.3901	Inlets Median 1 Grate	EACH	2.000	2.000
0980	611.3902	Inlets Median 2 Grate	EACH	1.000	1.000
0990	611.8120.S	Cover Plates Temporary	EACH	4.000	4.000
1000	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	805.000	805.000
1010	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	4.000	4.000
1020	614.0220	Steel Thrie Beam Bullnose Terminal	EACH	2.000	2.000
1030	614.0230	Steel Thrie Beam	LF	275.000	275.000
1040	614.0905	Crash Cushions Temporary	EACH	4.000	4.000
1050	614.2300	Mgs Guardrail 3	LF	1,200.000	1,200.000
1060	614.2500	Mgs Thrie Beam Transition	LF	80.000	80.000
1070	614.2610	Mgs Guardrail Terminal EAT	EACH	5.000	5.000
1080	614.2620	Mgs Guardrail Terminal Type 2	EACH	3.000	3.000
1090	616.0206	Fence Chain Link 6-FT	LF	6,300.000	6,300.000
1100	616.0700.S	Fence Safety	LF	7,050.000	7,050.000
1110	619.1000	Mobilization	EACH	1.000	1.000
1120	620.0100	Concrete Corrugated Median	SF	700.000	700.000
1130	620.0300	Concrete Median Sloped Nose	SF	1,015.000	1,015.000
1140	624.0100	Water	MGAL	3,400.000	3,400.000
1150	625.0500	Salvaged Topsoil	SY	160,000.000	160,000.000
1160	627.0200	Mulching	SY	128,000.000	128,000.000
1170	628.1504	Silt Fence	LF	11,600.000	11,600.000
1180	628.1520	Silt Fence Maintenance	LF	11,600.000	11,600.000
1190	628.1905	Mobilizations Erosion Control	EACH	11.000	11.000
1200	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
1210	628.2004	Erosion Mat Class I Type B	SY	15,200.000	15,200.000
1220	628.2006	Erosion Mat Urban Class I Type A	SY	9,500.000	9,500.000
1230	628.2023	Erosion Mat Class II Type B	SY	27,000.000	27,000.000
1240	628.6510	Soil Stabilizer Type B	ACRE	35.000	35.000
1250	628.7005	Inlet Protection Type A	EACH	50.000	50.000
1260	628.7010	Inlet Protection Type B	EACH	5.000	5.000

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DATE 07JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1003-10-71 QUANTITY
1270	628.7015	Inlet Protection Type C	EACH	35.000	35.000
1280	628.7504	Temporary Ditch Checks	LF	1,600.000	1,600.000
1290	628.7555	Culvert Pipe Checks	EACH	130.000	130.000
1300	628.7560	Tracking Pads	EACH	10.000	10.000
1310	628.7570	Rock Bags	EACH	15.000	15.000
1320	629.0205	Fertilizer Type A	CWT	80.000	80.000
1330	630.0130	Seeding Mixture No. 30	LB	3,000.000	3,000.000
1340	630.0140	Seeding Mixture No. 40	LB	800.000	800.000
1350	630.0200	Seeding Temporary	LB	2,000.000	2,000.000
1360	633.0100	Delineator Posts Steel	EACH	40.000	40.000
1370	633.0500	Delineator Reflectors	EACH	60.000	60.000
1380	633.5200	Markers Culvert End	EACH	36.000	36.000
1390	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	3.000	3.000
1400	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	71.000	71.000
1410	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	39.000	39.000
1420	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	21.000	21.000
1430	634.0620	Posts Wood 4x6-Inch X 20-FT	EACH	11.000	11.000
1440	634.0622	Posts Wood 4x6-Inch X 22-FT	EACH	3.000	3.000
1450	634.0812	Posts Tubular Steel 2x2-Inch X 12-FT	EACH	3.000	3.000
1460	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	1.000	1.000
1470	635.0200	Sign Supports Structural Steel HS	LB	2,994.000	2,994.000
1480	636.0100	Sign Supports Concrete Masonry	CY	5.000	5.000
1490	636.0500	Sign Supports Steel Reinforcement	LB	294.000	294.000
1500	637.1220	Signs Type I Reflective SH	SF	273.000	273.000
1510	637.2210	Signs Type II Reflective H	SF	1,207.110	1,207.110
1520	637.2215	Signs Type II Reflective H Folding	SF	40.000	40.000
1530	637.2220	Signs Type II Reflective SH	SF	40.500	40.500
1540	637.2230	Signs Type II Reflective F	SF	135.500	135.500
1550	638.2101	Moving Signs Type I	EACH	1.000	1.000
1560	638.2102	Moving Signs Type II	EACH	2.000	2.000
1570	638.2602	Removing Signs Type II	EACH	46.000	46.000
1580	638.3000	Removing Small Sign Supports	EACH	56.000	56.000
1590	638.3100	Removing Structural Steel Sign Supports	EACH	2.000	2.000
1600	638.4000	Moving Small Sign Supports	EACH	3.000	3.000
1610	642.5201	Field Office Type C	EACH	1.000	1.000
1620	643.0100	Traffic Control (project) 001. 1003-10-71	EACH	1.000	1.000
1630	643.0300	Traffic Control Drums	DAY	43,400.000	43,400.000
1640	643.0420	Traffic Control Barricades Type III	DAY	3,400.000	3,400.000
1650	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	580.000	580.000
1660	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	580.000	580.000
1670	643.0705	Traffic Control Warning Lights Type A	DAY	2,600.000	2,600.000
1680	643.0715	Traffic Control Warning Lights Type C	DAY	13,300.000	13,300.000
1690	643.0800	Traffic Control Arrow Boards	DAY	1,300.000	1,300.000
1700	643.0900	Traffic Control Signs	DAY	8,000.000	8,000.000
1710	643.0910	Traffic Control Covering Signs Type I	EACH	10.000	10.000
1720	643.0920	Traffic Control Covering Signs Type II	EACH	15.000	15.000
1730	643.1050	Traffic Control Signs PCMS	DAY	600.000	600.000
1740	643.2000	Traffic Control Detour (project) 001. 1003-10-71	EACH	1.000	1.000
1750	643.3000	Traffic Control Detour Signs	DAY	1,800.000	1,800.000
1760	645.0120	Geotextile Fabric Type HR	SY	1,322.000	1,322.000

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DATE 07JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1003-10-71 QUANTITY
1770	646.0106	Pavement Marking Epoxy 4-Inch	LF	43,600.000	43,600.000
1780	646.0126	Pavement Marking Epoxy 8-Inch	LF	5,200.000	5,200.000
1790	646.0600	Removing Pavement Markings	LF	27,500.000	27,500.000
1800	647.0166	Pavement Marking Arrows Epoxy Type 2	EACH	10.000	10.000
1810	647.0356	Pavement Marking Words Epoxy	EACH	5.000	5.000
1820	647.0456	Pavement Marking Curb Epoxy	LF	350.000	350.000
1830	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	180.000	180.000
1840	647.0606	Pavement Marking Island Nose Epoxy	EACH	7.000	7.000
1850	647.0726	Pavement Marking Diagonal Epoxy 12-Inch	LF	1,100.000	1,100.000
1860	647.0746	Pavement Marking Diagonal Epoxy 24-Inch	LF	260.000	260.000
1870	647.0856	Pavement Marking Concrete Corrugated Median Epoxy	SF	700.000	700.000
1880	649.0200	Temporary Pavement Marking Reflective Paint 4-Inch	LF	19,750.000	19,750.000
1890	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	34,050.000	34,050.000
1900	649.0801	Temporary Pavement Marking Removable Tape 8-Inch	LF	900.000	900.000
1910	652.0125	Conduit Rigid Metallic 2-Inch	LF	96.000	96.000
1920	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	2,784.000	2,784.000
1930	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	5,573.000	5,573.000
1940	652.0700.S	Install Conduit into Existing Item	EACH	1.000	1.000
1950	653.0140	Pull Boxes Steel 24x42-Inch	EACH	31.000	31.000
1960	653.0222	Junction Boxes 18x12x6-Inch	EACH	4.000	4.000
1970	653.0905	Removing Pull Boxes	EACH	3.000	3.000
1980	654.0105	Concrete Bases Type 5	EACH	6.000	6.000
1990	654.0106	Concrete Bases Type 6	EACH	4.000	4.000
2000	654.0230	Concrete Control Cabinet Bases Type L30	EACH	1.000	1.000
2010	655.0610	Electrical Wire Lighting 12 AWG	LF	2,524.000	2,524.000
2020	655.0615	Electrical Wire Lighting 10 AWG	LF	15,698.000	15,698.000
2030	655.0625	Electrical Wire Lighting 6 AWG	LF	279.000	279.000
2040	655.0635	Electrical Wire Lighting 2 AWG	LF	1,005.000	1,005.000
2050	656.0200	Electrical Service Meter Breaker Pedestal (location) 001. IH 39/90 & CTH S	LS	1.000	1.000
2060	656.0500	Electrical Service Breaker Disconnect Box (location) 001. Temporary ITS	LS	1.000	1.000
2070	656.0500	Electrical Service Breaker Disconnect Box (location) 002. Permanent ITS	LS	1.000	1.000
2080	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	10.000	10.000
2090	657.0322	Poles Type 5-Aluminum	EACH	2.000	2.000
2100	657.0327	Poles Type 6-Aluminum	EACH	4.000	4.000
2110	657.0710	Luminaire Arms Truss Type 4 1/2-Inch Clamp 12-FT	EACH	4.000	4.000
2120	659.0802	Plaques Sequence Identification	EACH	4.000	4.000
2130	659.1125	Luminaires Utility LED C	EACH	4.000	4.000
2140	662.1028.S	Ramp Closure Gates Hardwired 28-FT	EACH	1.000	1.000
2150	662.1032.S	Ramp Closure Gates Hardwired 32-FT	EACH	2.000	2.000
2160	662.1037.S	Ramp Closure Gates Hardwired 37-FT	EACH	1.000	1.000
2170	662.3028.S	Ramp Closure Gate Arms Stockpile 28-FT	EACH	1.000	1.000
2180	662.3032.S	Ramp Closure Gate Arms Stockpile 32-FT	EACH	1.000	1.000
2190	662.3037.S	Ramp Closure Gate Arms Stockpile 37-FT	EACH	1.000	1.000
2200	662.4000.S	Ramp Closure Gate Flashers Stockpile	EACH	4.000	4.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1003-10-71 QUANTITY
2210	670.0100	Field System Integrator	LS	1.000	1.000
2220	670.0200	ITS Documentation	LS	1.000	1.000
2230	672.0250	Base Camera Pole 50-FT	EACH	1.000	1.000
2240	673.0105	Communication Vault Type 1	EACH	1.000	1.000
2250	673.0225.S	Install Pole Mounted Cabinet	EACH	2.000	2.000
2260	674.0200	Cable Microwave Detector	LF	9,492.000	9,492.000
2270	674.0300	Remove Cable	LF	670.000	670.000
2280	675.0300	Install Mounted Controller Microwave Detector Assembly	EACH	6.000	6.000
2290	675.0400.S	Install Ethernet Switch	EACH	3.000	3.000
2300	677.0100	Install Camera Pole	EACH	1.000	1.000
2310	677.0200	Install Camera Assembly	EACH	1.000	1.000
2320	677.0300.S	Install Video Encoder	EACH	2.000	2.000
2330	677.9051.S	Removing 50-Foot Camera Pole	EACH	1.000	1.000
2340	678.0500	Communication System Testing	LS	1.000	1.000
2350	690.0150	Sawing Asphalt	LF	5,600.000	5,600.000
2360	690.0250	Sawing Concrete	LF	4,000.000	4,000.000
2370	SPV.0035	Special 700. High Performance Concrete (HPC) Masonry Structures	CY	985.000	985.000
2380	SPV.0060	Special 001. Baseline CPM Progress Schedule	EACH	1.000	1.000
2390	SPV.0060	Special 002. CPM Progress Schedule Updates and Accepted Revisions	EACH	7.000	7.000
2400	SPV.0060	Special 350. Lighting and Ramp Gate Control Cabinet 120/240 30-Inch	EACH	1.000	1.000
2410	SPV.0060	Special 401. Remove ITS Field Cabinet	EACH	1.000	1.000
2420	SPV.0060	Special 402. Remove Electrical Service Breaker Disconnect Box	EACH	1.000	1.000
2430	SPV.0060	Special 403. Remove Electrical Service Meter Breaker Pedestal	EACH	2.000	2.000
2440	SPV.0060	Special 404. Install Wireless Mesh Radio Assembly	EACH	2.000	2.000
2450	SPV.0060	Special 405. Salvage Video Encoder	EACH	1.000	1.000
2460	SPV.0060	Special 406. Salvage Wireless Mesh Node ITS Equipment	EACH	1.000	1.000
2470	SPV.0060	Special 407. Salvage Temporary ITS Equipment	EACH	1.000	1.000
2480	SPV.0060	Special 408. Remove Type 5 Pole	EACH	1.000	1.000
2490	SPV.0060	Special 409. Remove Wood Pole	EACH	4.000	4.000
2500	SPV.0060	Special 410. 65-Foot Wood Pole	EACH	1.000	1.000
2510	SPV.0060	Special 411. Salvage And Reinstall 30-Foot Wood Pole	EACH	1.000	1.000
2520	SPV.0060	Special 412. Salvage And Reinstall 65-Foot Wood Pole	EACH	1.000	1.000
2530	SPV.0060	Special 413. Fiber Tracer Marker Post	EACH	1.000	1.000
2540	SPV.0085	Special 700. Bar Steel Reinforcement Hs Stainless Bridges	LB	3,094.000	3,094.000
2550	SPV.0090	Special 001. Removing HMA Pavement Notched Wedge Longitudinal Joint Milling	LF	5,000.000	5,000.000
2560	SPV.0090	Special 401. Overhead Service Conductor Assembly 3-Wire	LF	290.000	290.000
2570	SPV.0090	Special 700. Fence Chain Link Polymer Coated 6-FT	LF	508.000	508.000
2580	SPV.0090	Special 850. Fence Chain Link Polymer Coated 4-Ft	LF	220.000	220.000
2590	SPV.0105	Special 001. Survey Project 1003-10-71	LS	1.000	1.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1003-10-71 QUANTITY
2600	SPV.0105	Special 002. Concrete Pavement Joint Layout	LS	1.000	1.000
2610	SPV.0105	Special 850. Railing Tubular Screening R-53-30	LS	1.000	1.000
2620	SPV.0105	Special 851. Railing Tubular Screening R-53-31	LS	1.000	1.000
2630	SPV.0165	Special 001. Stormwater Treatment Filter Strip	SF	52,000.000	52,000.000
2640	SPV.0165	Special 700. Longitudinal Grooving Bridge Deck	SF	21,240.000	21,240.000
2650	SPV.0165	Special 850. Wall Concrete Panel Mechanically Stabilized Earth LRFD/QMP R-53-30	SF	2,374.000	2,374.000
2660	SPV.0165	Special 851. Wall Concrete Panel Mechanically Stabilized Earth LRFD/QMP R-53-31	SF	4,159.000	4,159.000
2670	SPV.0165	Special 852. Wall Concrete Panel Mechanically Stabilized Earth LRFD/QMP R-53-34	SF	2,289.000	2,289.000
2680	SPV.0195	Special 001. Excavation, Hauling, And Disposal of Petroleum-Contaminated Soil	TON	100.000	100.000
2690	SPV.0195	Special 002. QMP Base Aggregate Dense 1 1/4-Inch Compaction	TON	72,000.000	72,000.000

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CLEARING AND GRUBBING

	STATION	LOCATION	201.0105 CLEARING STA	201.0120 CLEARING ID	201.0205 GRUBBING STA	201.0220 GRUBBING ID
CATEGORY 1000	19+25'S'	RT	---	21	---	21
	24+60'S'	LT	---	12	---	12
	25+26'S'	LT	---	36	---	36
	26+42'S'	LT	---	30	---	30
	26+78'S'	LT	---	24	---	24
	27+00-30+00'S'	LT	3	---	3	---
	31+00-35+00'S'	RT & LT	4	---	4	---
	36+00-38+00'S'	RT & LT	2	---	2	---
	44+00-46+00'S'	RT & LT	2	---	2	---
	54+00'S'	LT	---	36	---	36
	354+00-364+00'ZA'	RT & LT	10	---	10	---
	350+00-351+00'ZB'	RT	1	---	1	---
	360+00-363+00'ZDT'	LT	3	---	3	---
	201+00 - 208+00'SBS'	LT	7	---	7	---
	800+00 - 803+00'SBE'	LT	3	---	3	---
	308+61'SFN'	LT	---	28	---	28
	310+00-312+00'SFN'	RT & LT	2	---	2	---
	TOTAL CATEGORY 1000		37	187	37	187

REMOVING PAVEMENT

	STATION	LOCATION	204.0100 REMOVING PAVEMENT SY	204.0110 REMOVING ASPHALTIC SURFACE SY	REMARKS
CATEGORY 1000					
STAGE 2	18+67-30+43'S'	RT & LT	4771	---	
	SUBTOTAL STAGE 2		4771	---	
STAGE 2A	331+94-343+57'NB'	RT	1292	---	RAMP 'ZB' TIE-IN
	337+17-341+40'NB'	LT	470	---	RAMP 'ZC' TIE-IN
	SUBTOTAL STAGE 2A		1762	---	
STAGE 2B	362+20-366+14'NB'	RT	438	---	RAMP 'ZA' TIE-IN
	359+88-365+04'NB'	LT	573	---	RAMP 'ZD' TIE-IN
	SUBTOTAL STAGE 2B		1011	---	
STAGE 3	18+67-30+43'S'	LT	2808	---	
	63+75-END'S'	LT	---	245	
	SUBTOTAL STAGE 3		2808	245	
STAGE 3A	40+97-56+83'S'	RT	---	512	
	61+04-END'S'	RT	---	130	
	SUBTOTAL STAGE 3A		---	642	
	TOTAL CATEGORY 1000		10352	887	

REMOVING CURB AND GUTTER

	STATION	LOCATION	204.0150 REMOVING CURB & GUTTER LF	REMARKS
CATEGORY 1000				
STAGE 2A	30+63-31+23'S'	RT & LT	98	
	31+62-32+02'S'	LT	60	
	38+51-38+97'S'	LT	80	
	39+35-39+69'S'	LT	45	
	SUBTOTAL STAGE 2A		283	
STAGE 2B	31+06-31+68'S'	LT	87	
	31+91-32+42'S'	LT	86	
	39+13-39+32'S'	LT	28	
	39+74-40+32'S'	LT	93	
	SUBTOTAL STAGE 2B		294	
STAGE 3	301+35'SFN'	RT	40	
	301+84'SFN'	RT	40	
	302+99'SFN'	RT	40	
	303+46'SFN'	RT	40	
	SUBTOTAL STAGE 3		160	
	TOTAL CATEGORY 1000		737	

REMOVING BARRIER & GUARDRAIL

	STATION	LOCATION	204.0165 REMOVING GUARDRAIL LF	204.0157 REMOVING CONCRETE BARRIER LF	REMARKS
CATEGORY 1000					
STAGE 1	350+10-350+75'NB'	LT	137	---	GUARDRAIL ON INTERSTATE
	SUBTOTAL STAGE 1		137	---	
STAGE 2B	31+87-32+49'S'	LT	67	---	SE CORNER OF BRIDGE
	SUBTOTAL STAGE 2B		67	---	
STAGE 3	44+23'S'	LT	---	108	
	45+85'S'	LT	---	36	
	SUBTOTAL STAGE 3		---	144	
STAGE 4	31+87-34+00'S'	LT	153	---	SE CORNER OF BRIDGE
	33+52-34+20'S'	LT	69	---	SW CORNER OF BRIDGE
	36+70-37+39'S'	LT	69	---	NE CORNER OF BRIDGE
	36+91-37+71'S'	LT	80	---	NW CORNER OF BRIDGE
	350+75-351+90'NB'	LT	237	---	GUARDRAIL I-39 MEDIAN
	350+75-351+90'NB'	RT	160	105	I-39 RT SHLDR
	350+75-351+90'NB'	LT	110	105	I-39 LT SHLDR
	SUBTOTAL STAGE 4		878	210	
	TOTAL CATEGORY 1000		1082	354	

REMOVING FENCE

	STATION	LOCATION	204.0170 REMOVING FENCE LF	REMARKS
CATEGORY 1000				
STAGE 1	53+42-55+23'S'	LT	189	
	STAGE 1 SUBTOTAL		189	
STAGE 2	27+45-30+68'S'	RT	323	
	28+37-30+71'S'	LT	244	
	39+51-43+69'S'	LT	510	
	41+52-43+52'S'	LT	201	
	45+96'S'	RT & LT	248	
	51+49-53+43'S'	LT	210	
	354+45-364+26'ZA'	RT	1011	
	335+00-353+14'ZB'	RT	2163	
	339+36-347+77'ZC'	LT	835	
	348+15-362+61'ZD'	LT	1444	
	STAGE 2 SUBTOTAL		7189	
	TOTAL CATEGORY 1000		7378	

REMOVING LIGHT POLES

	STATION	LOCATION	204.0195 REMOVING CONCRETE BASES EACH	204.9060.S.001 REMOVING LIGHT POLES EACH	REMARKS
CATEGORY 1000					
STAGE 2	43+45 'S'	RT	1	1	
	43+66 'S'	LT	1	1	
	STAGE 2 SUBTOTAL		2	2	
STAGE 3	41+96 'S'	LT	1	1	
	301+91'SFN'	RT	1	1	
	302+63'SFN'	RT	1	1	
	302+92'SFN'	RT	1	1	
	STAGE 3 SUBTOTAL		4	4	
	TOTAL CATEGORY 1000		6	6	

REMOVING STORM SEWER STRUCTURES

	STATION	LOCATION	204.0220 REMOVING INLETS EACH	204.0210 REMOVING MANHOLES EA	REMARKS
CATEGORY 1000					
STAGE 1	INTERSTATE MEDIAN		---	1	
STAGE 2	26+35'S' 28' RT		1	---	
	TOTAL CATEGORY 1000		1	1	

REMOVING STORM SEWER

	STATION	LOCATION	204.0245.001 18-INCH LF	REMARKS
CATEGORY 1000				
STAGE 2	25+62-26+34'S'	RT	72	
	26+37-27+07'S'	RT	70	
	TOTAL CATEGORY 1000		142	

REMOVING SMALL PIPE CULVERTS

	STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.0270 ABANDONING CULVERT PIPES EACH	REMARKS
CATEGORY 1000					
STAGE 1	19+42'S'	LT	1	---	18" CMCP
	26+55'S'	LT	1	---	18" CMCP
	350+46'NB'	LT	1	---	24" CMCP, REMOVE ENOUGH TO BUILD NEW BRIDGE
	351+46'NB'	RT	1	---	30" CMCP, REMOVE ENOUGH TO BUILD NEW BRIDGE
	STAGE 1 SUBTOTAL		4	---	
STAGE 2	19+45'S'	RT	1	---	18" CMCP
	21+75'S'	RT	1	---	18" CMCP
	24+54'S'	RT	1	---	18" CMCP
	28+18'S'	RT & LT	1	1	24" RCCP, REMOVE ENOUGH TO BUILD NB CTH S LANES
	57+20'S'	RT	1	---	12" CMCP
	58+00'S'	RT	1	---	12" CMCP
	59+59'S'	RT	1	---	12" CMCP
	63+44'S'	RT	1	---	12" CMCP
	STAGE 2 SUBTOTAL		8	1	
STAGE 2A	345+11'ZB'	LT	1	---	24" CMCP
	STAGE 2A SUBTOTAL		1	---	
STAGE 2B	360+65'ZAT'	LT	1	---	36" CMCP
	357+91'ZDT'	RT	1	---	24" CMCP
	STAGE 2B SUBTOTAL		2	---	
STAGE 3	12+07'S'	LT	1	---	24" CMCP
	26+56'S'	LT	1	---	18"CMCP
	28+18'S'	LT	1	---	COMPLETE REMOVAL OF 24" RCCP
	41+02'S'	LT	1	---	24" CMCP
	301+60'SFN'	RT	1	---	24" CMCP
	303+21'SFN'	RT	1	---	18" CMCP
	303+30'SFN'	LT	1	---	18" CMCP
	303+94'SFN'	LT	1	---	18" CMCP
	305+24'SFN'	LT	1	---	18" CMCP
	305+90'SFN'	LT	1	---	18" CMCP
	306+70'SFN'	LT	1	---	15" CMCP
	STAGE 3 SUBTOTAL		11	---	
STAGE 4	350+46'NB'	LT	1	---	24" CMCP, COMPLETE REMOVAL
	351+63'NB'	LT	1	---	18" CMCP
	351+46'NB'	RT	1	---	30" CMCP, COMPLETE REMOVAL
	STAGE 4 SUBTOTAL		3	---	
	TOTAL CATEGORY 1000		29	1	

TEMPORARY PAVEMENT

	STATION		305.0110 *BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 *BASE AGGREGATE DENSE 1 1/4-INCH TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON
CATEGORY 1000					
STAGE 1	9+00 - 28+00	'S'	400	2004	721
	53+38 - 67+25	'S'	378	1590	564
	344+27 - 347+94	'ZC'	79	129	30
	349+72 - 359+32	'ZD'	223	631	187
	STAGE 1 SUBTOTAL		1080	4354	1502
STAGE 2	61+10 - 66+60	'S'	---	---	50
	STAGE 2 SUBTOTAL		---	---	50
	UNDISTRIBUTED		120	146	48
	TOTAL CATEGORY 1000		1200	4500	1600

* ADDITIONAL QUANTITY LISTED IN BASE AGGREGATE SUMMARY

CONTAMINATED SOIL EXCAVATION

STATION	LOCATION	SPV.0195.001 EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL TON
CATEGORY 1000		
40+00-45+00'S'	CTH S	100
TOTAL CATEGORY 1000		100

TEMPORARY BARRIER

STATION	LOCATION	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF	614.0905 CRASH CUSHIONS TEMPORARY EACH	REMARKS
CATEGORY 1000					
STAGE 1 346+80-356+80'NB'	SB I-90 MEDIAN	1000	1000	1	
346+80-356+80'NB'	SB I-90 SHOULDER	1000	1000	1	
342+38-352+88'NB'	NB I-90 MEDIAN	1050	1050	1	
343+48-352+88'NB'	NB I-90 SHOULDER	940	940	1	
TOTAL CATEGORY 1000		3990	3990	4	

BASE AGGREGATE ITEMS

STATION		305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 * BASE AGGREGATE DENSE 1 1/4-INCH TON	305.0130 BASE AGGREGATE DENSE 3-INCH TON	312.0110 SELECT CRUSHED MATERIAL TON	624.0100 WATER MGAL	SPV.0195.002 QMP BASE AGGREGATE DENSE 1 1/4-INCH COMPACTION TON
STAGE 1	200+87 - 208+54 'SBS'	358	3055	1259	---	92	3055
	800+00 - 808+30 'SBE'	263	2419	1231	---	73	2419
	400+00 - 404+31 'LC'	---	547	361	---	16	547
	100+00 - 103+30 'SBN'	35	904	578	---	27	904
	STAGE 1 SUBTOTAL	656	6925	3430	---	208	6925
STAGE 2	9+00 - 30+00 'S'	288	8044	---	9241	322	8044
	32+55 - 33+65 'S'	---	867	---	996	26	867
	35+81 - 37+50 'S'	---	1167	---	1340	35	1167
	39+60 - 63+75 'S'	876	11073	---	11918	443	11073
	354+25 - 360+00 'ZA'	2510	1436	---	1453	43	1436
	339+00 - 352+74 'ZB'	571	4048	---	4191	121	4048
	340+38 - 347+57 'ZC'	283	2270	---	2060	68	2270
	348+50 - 361+18 'ZD'	459	3201	---	1974	96	3201
	309+98 - 313+79 'SFN'	105	1168	721	---	35	1168
	STAGE 2 SUBTOTAL	5091	33273	721	33174	1189	33273
STAGE 2A	30+00 - 32+55 'S'	---	1060	---	1217	32	1060
	37+50 - 39+60 'S'	---	1671	---	1920	50	1671
	351+75 - 352+60 'ZA'	22	46	---	97	---	46
	331+99 - 339+00 'ZB'	307	1911	---	119	57	1911
	337+13 - 340+38 'ZC'	118	885	---	---	27	885
	STAGE 2A SUBTOTAL	447	5573	---	3353	166	5573
STAGE 2B	30+00 - 32+55 'S'	---	857	---	985	26	857
	352+67 - 354+25 'ZA'	57	420	---	430	13	420
	360+00 - 366+18 'ZA'	221	1668	---		50	1668
	347+51 - 348+50 'ZD'	57	583	---	1207	18	583
	361+18 - 365+00 'ZD'	172	1367	---		41	1367
	STAGE 2B SUBTOTAL	508	4895	---	2622	147	4895
STAGE 3	9+00 - 30+00 'S'	182	8075	---	9275	323	8075
	52+44 - 63+75 'S'	324	3437	---	3724	137	3437
	300+31 - 309+98 'SFN'	322	3251	1663	---	98	3251
	STAGE 3 SUBTOTAL	827	14762	1663	12999	558	14762
STAGE 4	345+00 - 354+00 'NB'	2500	---	---	---	---	---
	STAGE 4 SUBTOTAL	2500					
	UNDISTRIBUTED	1470	6572	587	5853	32	6572
	TOTAL CATEGORY 1000	11500	72000	6400	58000	2300	72000

* ADDITIONAL QUANTITY LISTED IN STRUCTURES PLAN

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EARTHWORK SUMMARY

Division	From/To Station	Location	205.0100 Common Excavation (1) (CY) Cut (2)	EBS Excavation (3)	Salvaged/ Unusable Pavement Material	Available Material (5)	Unexpanded Fill	Expanded Fill (5) Factor 1.25	Mass Ordinate +/- (6)	Waste	208.0100 Borrow	Comment:
1	102+68/119+40	CTH S Temporary Widening - Stage 1	2,632	0	0	2,632	245	306	2,326	2,326	-2,326	Waste Used in Division 1
	145+00/158+34.89	CTH S Temporary Widening - Stage 1	562	0	0	562	721	901	-339	0	339	
	344+27.57/347+93.97	Ramp 'ZC' Temporary Widening - Stage 1	98	0	0	98	457	571	-473	0	473	
	349+75.72/359+97.68	Ramp 'ZD' Temporary Widening - Stage 1	342	0	0	342	656	820	-478	0	478	
	101+19/103+00	NW Backage Road 'SBN' - Stage 1 Construction	445	0	0	445	30	38	407	407	-407	
	200+99.31/207+23.43	SW Backage Road 'SBS' - Stage 1 Construction	5,433	1,000	0	5,433	141	176	6,557	6,557	-6,557	
	800+23.03/807+93.76	E Backage Road 'SBE' - Stage 1 Construction	242	1,000	0	242	878	1,098	444	444	-444	
	800+23.03/801+61.08	'SBE' & 'SBS' Intersection - Stage 1 Construction	1	0	0	1	610	762	-761	0	761	
	400+26/404+31.05	Driveway LC - Stage 1 Construction	510	250	0	510	44	55	780	780	-780	
	600+38/601+95.32	South Frontage Road 'SFS' - Stage 1 Construction	0	900	0	0	7,162	8,953	-7,783	0	7,783	
		Division 1 Subtotal	10,266	3,150	0	10,266	10,945	13,681	680	10,514	-680	Net Waste of 680 CY in Division 1
2	9+00/63+75	CTH S - Stage 2 Construction	8,609	6,750	848	7,761	126,973	158,716	-142,180	0	142,180	
	200+36/201+00	CTH S - Stage 2 Construction	560	0	0	560	41	51	509	509	-509	
	354+25/360+00	Ramp 'ZA' - Stage 2 Construction	1,773	0	0	1,773	7,642	9,552	-7,779	0	7,779	
	339+00/352+89.67	Ramp 'ZB' - Stage 2 Construction	1,948	2,500	0	1,948	33,913	42,391	-37,193	0	37,193	
	343+00/347+93.97	Ramp 'ZC' - Stage 2 Construction	38	0	0	38	9,792	12,241	-12,202	0	12,202	
	341+00/343+00	Ramp 'ZCT' - Stage 2 Construction	99	0	0	99	624	780	-680	0	680	
	348+00/355+46	Ramp 'ZD' - Stage 2 Construction	1,771	2,000	50	1,721	13,772	17,215	-12,894	0	12,894	
	355+46/357+50	Ramp 'ZDT' - Stage 2 Construction	2,598	0	0	2,598	345	431	2,167	2,167	-2,167	
		Division 2 Subtotal	17,397	11,250	898	16,499	193,101	241,376	-210,253	2,677	210,253	
2A	30+00/39+76.14	CTH S - Stage 2A Construction	2,362	0	182	2,180	10,048	12,560	-10,380	0	10,380	
	331+99.28/339+00	Ramp 'ZBT' Interstate Tie-In - Stage 2A Construction	869	0	211	658	1,065	1,331	-673	0	673	
	343+00/347+93.97	Ramp 'ZC' - Stage 2A Construction	1,126	0	0	1,126	466	583	544	544	-544	
	337+13.45/343+00	Ramp 'ZCT' Interstate Tie-In - Stage 2A Construction	653	0	60	593	446	558	36	36	-36	
		Division 2A Subtotal	5,010	0	453	4,557	12,025	15,031	-10,474	579	10,474	
2B	352+71.79/360+00	Ramp 'ZA' - Stage 2B Construction	3,634	0	196	3,438	4,580	5,725	-2,287	0	2,287	
	360+00/366+14.31	Ramp 'ZAT' Interstate Tie-In - Stage 2B Construction	1,555	0	70	1,485	4,044	5,054	-3,569	0	3,569	
	348+00/355+23	Ramp 'ZD' - Stage 2B Construction	11,374	1,000	155	11,219	65	81	12,438	12,438	-12,438	
	357+50/365+00	Ramp 'ZDT' Interstate Tie-In - Stage 2B Construction	5,943	0	144	5,799	1,633	2,042	3,757	3,757	-3,757	
		Division 2B Subtotal	22,506	1,000	565	21,941	10,322	12,903	10,338	16,195	-10,338	Net Waste of 10,338 CY in Division 2B
3	9+00/63+75	CTH S - Stage 3 Construction	9,676	1,000	1,424	8,252	14,309	17,886	-8,334	0	8,334	
	100+55.09/101+19.07	CTH S & 'SBS' Intersection - Stage 3 Construction	253	0	0	253	22	27	226	226	-226	
	300+42.1/313+78.8	NE Frontage Road 'SFN' - Stage 3 Construction	10,906	500	672	10,234	16,873	21,091	-10,207	0	10,207	
		Division 3 Subtotal	20,835	1,500	2,096	18,739	31,204	39,004	-18,315	226	18,315	11,018 CY Wasted
		Grand Total	76,014	16,900	4,012	72,002	257,596	321,995	-228,023	30,191	228,023	
		Total Common Exc		92,914								

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
3) EBS Excavation to be backfilled with Select Crushed material.
EBS in Fill - Excavated EBS Material is useable in Fills outside the 1:1 slope. EBS quantity not factored into fill quantity.
EBS Backfill is to be filled with Select Crushed Material

4) Available Material = Cut - Salvaged/Unusuable Pavement Material
5) Expanded Fill. Factor = 1.25
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.
7) Removal of temporary widening is included with the removal of existing material in the appropriate stage.

ASPHALT PAVEMENT ITEMS

	STATION			THICKNESS	455.0105 ASPHALTIC MATERIAL PG58-28	455.0120 ASPHALTIC MATERIAL PG64-28	455.0605 TACK COAT	460.1103 HMA PAVEMENT TYPE E-3	460.4000 HMA COLD WEATHER PAVING	460.4110.S REHEATING HMA PAVEMENT LONGITUDINAL JOINTS	SPV.0090.001 REMOVING HMA PAVEMENT NOTCHED WEDGE LONGITUDINAL JOINT MILLING
				INCHES	TON	TON	GAL	TON	TON	LF	LF
CATEGORY 1000											
STAGE 1	200+87	- 208+54	'SBS'	5	29.8	11.9	162	904	---	---	---
	800+00	- 808+30	'SBE'	5	27.8	11.1	150	843	---	---	---
	100+00	- 103+30	'SBN'	4	6.0	4.7	44	195	---	---	---
	STAGE 1 SUBTOTAL				63.7	27.8	356	1942	---	---	---
STAGE 2	9+00	- 28+00	'S'	5	83.7	55.8	452	2537	---	400	400
	32+55	- 33+11	'S'	5	1.9	1.3	10	58	---	---	---
	32+55	- 32+85	'S'	5	1.1	0.7	6	33	---	---	---
	36+76	- 37+50	'S'	5	2.5	1.7	14	76	---	---	---
	36+49	- 37+50	'S'	5	3.3	2.2	18	101	---	---	---
	39+60	- 40+69	'S'	5	5.0	3.3	28	152	---	---	---
	39+60	- 40+69	'S'	5	3.3	2.2	18	101	---	---	---
	40+68	- 63+75	'S'	4.5	49.3	39.5	320	1615	---	---	---
	40+68	- 53+85	'S'	4.5	28.0	22.4	182	915	---	---	---
	354+25	- 360+00	'ZA'	5	13.6	9.1	74	411	---	---	---
	339+00	- 352+74	'ZB'	4.5	33.2	14.7	216	1086	---	---	---
	340+38	- 347+57	'ZC'	4.5	16.7	7.4	108	547	---	---	---
	348+50	- 355+46	'ZD'	5	18.4	12.3	100	558	---	---	---
	355+46	- 361+18	'ZDT'	4.5	11.3	9.0	74	370	---	---	---
	309+98	- 313+79	'SFN'	4	12.9	10.0	92	416	---	---	---
	STAGE 2 SUBTOTAL				284.2	191.6	1712	8977	---	400	400
STAGE 2A	30+00	- 32+55	'S'	5	8.3	5.5	44	251	---	---	---
	37+50	- 39+60	'S'	5	17.7	11.8	96	536	---	200	200
	327+75	- 339+00	'ZBT'	4.5	15.8	7.0	102	517	---	---	---
	337+13	- 340+38	'ZCT'	4.5	8.6	3.8	56	281	---	---	---
	STAGE 2A SUBTOTAL				50.4	28.1	298	1586	---	200	200
STAGE 2B	30+00	- 32+55	'S'	5	15.4	10.3	84	467	---	200	200
	352+67	- 354+25	'ZA'	5	4.1	2.7	22	124	---	---	---
	360+00	- 366+18	'ZAT'	4.5	15.0	6.7	98	490	---	---	---
	361+18	- 365+00	'ZDT'	4.5	8.3	3.7	54	271	---	---	---
	352+42	- 355+25	'ZD'	5	4.6	3.1	24	139	---	300	300
	STAGE 2B SUBTOTAL				47.3	26.4	282	1490	---	500	500
STAGE 3	9+00	- 30+00	'S'	5	83.1	55.4	450	2519	800	1600	1600
	52+44	- 63+75	'S'	4.5	28.5	22.8	186	933	400	1800	1800
	300+31	- 309+98	'SFN'	4	25.0	19.5	180	809	300	---	---
	STAGE 3 SUBTOTAL				136.6	97.7	816	4261	1500	3400	3400
	UNDISTRIBUTED				17.8	8.9	536	745	---	500	500
	TOTAL CATEGORY 1000				600	380	4000	19000	1500	5000	5000

ASPHALT FLUMES

STATION	LOCATION	465.0315 ASPHALTIC FLUMES SY
CATEGORY 1000		
40+61'S'	RT	9
61+06'S'	RT	10
352+63'ZA'	LT	9
352+75'ZA'	RT	9
352+05'ZB'	LT	9
345+50'ZC'	LT	10
347+53'ZC'	RT	11
347+62'ZD'	RT	10
348+11'ZD'	LT	9
UNDISTRIBUTED		15
TOTAL CATEGORY 1000		100

ASPHALTIC SHOULDER RUMBLE STRIPS

STATION	LOCATION	465.0400 ASPHALTIC SHOULDER RUMBLE STRIP LF
CATEGORY 1000		
337+93-343+57'NB'	RT	570
339+44-341+20'NB'	LT	180
359+88-361+57'NB'	LT	170
362+20-363+86'NB'	RT	170
TOTAL CATEGORY 1000		1090

ASPHALT DRIVEWAYS

	STATION		LOCATION	THICKNESS INCHES	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON
CATEGORY 1000					
STAGE 1	201+62-202+64	'SBS'	LT	4	150
	203+89-204+93	'SBS'	LT	4	77
	804+84-805+68	'SBE'	LT	5	49
	400+25-404+14	'LC'	RT	4	222
	STAGE 1 SUBTOTAL				498
STAGE 2	57+91 - 58+13	'S'	RT	3	10
	59+48 - 59+70	'S'	RT	3	13
	STAGE 2 SUBTOTAL				23
STAGE 3	24+95 - 25+21	'S'	LT	3	14
	300+31- 301+15	'SFN'	LT	4	57
	302+91-303+69	'SFN'	LT	4	103
	303+77-304+26	'SFN'	LT	3	21
	305+02-305+49	'SFN'	LT	3	12
	305+71-306+16	'SFN'	LT	3	14
	306+44-307+07	'SFN'	LT	3	23
	308+20-308+72	'SFN'	LT	3	13
	STAGE 3 SUBTOTAL				257
	UNDISTRIBUTED				22
	TOTAL CATEGORY 1000				800

CONCRETE ISLANDS

	STATION		LOCATION	620.0100 CONCRETE CORRUGATED MEDIAN SF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF	SLOPED NOSE TYPE
CATEGORY 1000						
STAGE 2	39+64'S'		MEDIAN	---	60	1
	39+64'S'		ISLAND	---	25	2
	39+64'S'		ISLAND	---	25	2
	40+26'S'		ISLAND	---	45	1
	348+84'ZD'		ISLAND	---	50	1
	352+92'ZB'		ISLAND	---	25	2
	352+92'ZB'		ISLAND	---	25	2
	351+98'ZB'		ISLAND	---	50	1
	STAGE 2 SUBTOTAL			---	305	
STAGE 2A	30+88'S'		ISLAND	---	25	2
	30+88'S'		ISLAND	---	25	2
	30+25'S'		ISLAND	---	45	1
	31+83 -32+03'S'		MEDIAN	200	---	---
	38+03-38+53'S'		MEDIAN	500	---	---
	STAGE 2A SUBTOTAL			700	95	
STAGE 2B	347+18'ZD'		ISLAND	---	25	2
	347+32'ZD'		ISLAND	---	25	2
	STAGE 2B SUBTOTAL			---	50	
STAGE 3	54+16'S'		MEDIAN	---	60	1
	55+09'S'		MEDIAN	---	195	1
	STAGE 3 SUBTOTAL			---	255	
STAGE 3A	14+13'S'		MEDIAN	---	70	1
	18+28'S'		MEDIAN	---	60	1
	19+38'S'		MEDIAN	---	60	1
	30+89'S'		MEDIAN	---	60	1
	56+29'S'		MEDIAN	---	60	1
	STAGE 3A SUBTOTAL			---	310	
	TOTAL CATEGORY 1000			700	1015	

3

CURB AND GUTTER

STATION	LOCATION	601.0553 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D LF	601.0551 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A LF	601.0582 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE T LF
CATEGORY 1000				
STAGE 2 15+06-30+67'S'	RT/LT	2700	---	125
32+55-33+79'S'	RT/LT	175	225	---
35+82-37+50'S'	RT/LT	350	225	---
39+64-61+00'S'	RT/LT	3460	---	---
351+98-352+92'ZB'	ISLAND	190	---	---
348+50-348+84'ZD'	ISLAND	60	---	---
345+53-346+78'ZC'	TRUCK APRON	---	---	125
352+09-352+65'ZB'	TRUCK APRON	---	---	56
STAGE 2 SUBTOTAL		6935	450	306
STAGE 2A 30+25-30+88'S'	ISLAND	135	---	---
31+14-32+55'S'	RT	160	---	---
31+81-32+55'S'	MEDIAN	140	---	---
37+50-38+62'S'	RT	110	---	---
37+50-38+04'S'	MEDIAN	110	---	---
37+50-38+86'S'	LT	140	---	---
38+86-39+55'S'	TRUCK APRON	---	---	119
38+62-39+36'S'	TRUCK APRON	---	---	87
STAGE 2A SUBTOTAL		795	---	206
STAGE 2B 31+14-32+55'S'	LT	150	---	---
347+18-348+50'ZD'	ISLAND	285	---	---
347+47-348+07'ZD'	TRUCK APRON	---	---	60
STAGE 2B SUBTOTAL		435	---	60
STAGE 3 14+18-30+31'S'	RT/LT	2505	---	110
52+00-56+27'S'	RT/LT	620	---	---
STAGE 3 SUBTOTAL		3125	---	110
STAGE 3A 18+10-18+26'S'	MEDIAN	35	---	---
19+41-19+59'S'	MEDIAN	35	---	---
30+00-30+85'S'	MEDIAN	150	---	---
55+93-56+27'S'	MEDIAN	40	---	---
STAGE 3A SUBTOTAL		260	---	---
TOTAL CATEGORY 1000		11550	450	682

CONCRETE SIDEWALK

STATION	LOCATION	602.0410 CONCRETE SIDEWALK 5-INCH SF
CATEGORY 1000		
STAGE 3A 14+18-18+28'S'	MEDIAN	3070
19+39-22+00'S'	MEDIAN	2050
30+25-30+90'S'	ISLAND	510
32+00-33+54'S'	MEDIAN	600
36+07-38+03'S'	MEDIAN	790
39+70-40+25'S'	ISLAND	470
52+65-54+12'S'	MEDIAN	1160
TOTAL CATEGORY 1000		8650

CONCRETE DRIVEWAYS

STATION	LOCATION	416.0180 CONCRETE DRIVEWAY 8-INCH SY
CATEGORY 1000		
STAGE 3A 24+95-25+21'S'	MEDIAN	41
TOTAL CATEGORY 1000		41

3

CONCRETE TRUCK APRON

STATION	LOCATION	405.0100 COLORING CONCRETE RED CY	416.0508 CONCRETE ROUNDABOUT TRUCK APRON 8-INCH SY
CATEGORY 1000			
STAGE 2 345+52-347+23 'ZC'	TRUCK APRON	155	700
STAGE 2 SUBTOTAL		155	700
STAGE 2A 351+76-352+60 'ZA'	TRUCK APRON	30	140
352+08-352+82 'ZB'	TRUCK APRON	40	175
		70	315
STAGE 3 347+20-348+07 'ZD'	TRUCK APRON	70	320
		70	320
CATEGORY 1000 TOTAL		295	1335

BEAM GUARD

STATION	LOCATION	614.0220 STEEL THRIE BEAM BULLNOSE TERMINAL EACH	614.0230 STEEL THRIE BEAM LF	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 EACH	REMARKS
CATEGORY 1000								
STAGE 3 32+27-33+32'S'	RT	---	---	12.5	40	1	---	
36+29-37+34'S'	LT	---	---	12.5	40	1	---	
40+72-43+50'S'	LT	---	---	225	---	1	1	
STAGE 3 SUBTOTAL		---	---	250	80	3	1	
STAGE 4 348+47-350+84'NB'	IH 39/90 MEDIAN	2	275	---	---	---	---	
346+11-351+11'NB'	IH 39/90 NB	---	---	500	---	1	1	
348+00-353+00'NB'	IH 39/90 SB	---	---	450	---	1	1	
STAGE 4 SUBTOTAL		2	275	950	---	2	2	
TOTAL CATEGORY 1000		2	275	1200	80	5	3	

CONCRETE PAVEMENT

STATION	LOCATION	415.0080 CONCRETE PAVEMENT 8-INCH SY	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY	SPV.0105.002 CONCRETE PAVEMENT JOINT LAYOUT LS
CATEGORY 1000				
32+85-33+51'S'	CTH S EB	150	79	---
33+12-33+78'S'	CTH S WB	162	58	---
35+83-36+49'S'	CTH S EB	162	58	---
36+31-36+76'S'	CTH S WB	150	79	---
32+85-36+76'S'	CTH S	---	---	1
TOTAL CATEGORY 1000		624	274	1

CULVERT PIPE SUMMARY

		CULVERT PIPE										
		520.4018	520.4024	520.4030	522.0124	522.0136	522.0324	522.0330	523.0414	521.0118	520.8000	
		*TEMPORARY 18-IN	*TEMPORARY 24-IN	*TEMPORARY 30-IN	REINF. CONC. CL III 24-IN	REINF. CONC. CL III 36-IN	REINF. CONC. CL IV 24-IN	REINF. CONC. CL IV 30-IN	REINF. CONC. HORIZ. ELL. CL HE-IV 14X23-IN	*CORR. STEEL 18-IN	CONCRETE COLLARS FOR PIPE	
STATION	LOCATION	LF	LF	LF	LF	LF	LF	LF	LF	LF	EACH	REMARKS
CATEGORY 1000												
11+85-12+30'S'	LT	---	---	---	---	---	---	---	---	42	---	DW CULVERT
24+83-25+34'S'	LT	---	---	---	---	---	---	---	---	52	---	DW CULVERT
24+83-25+34'S'	LT	25	---	---	---	---	---	---	---	---	---	TEMP DW CULVERT IN STAGE 1
33+87'S'	RT/LT	---	15	---	304	---	---	---	---	---	---	TEMP CONNECT IN STAGE 1
349+76 (ST#08+21.0)	I 39 MEDIAN	---	---	---	---	---	---	---	---	---	1	CONNECT TO STRUCT. 08-21.0
36+00'S'	LT	---	---	15	---	---	---	---	---	---	---	TEMP CONNECT IN STAGE 1
63+30-63+67'S'	RT	---	---	---	---	---	---	---	---	37	---	DW CULVERT
360+50'ZAT'	RT/LT	---	---	---	---	96	---	---	---	---	---	X-CULVERT
345+20-345+44'ZB'	RT/LT	---	---	---	108	---	---	---	---	---	---	X-CULVERT
357+99-358+02'ZDT'	RT/LT	---	15	---	---	---	---	104	---	---	1	X-CULVERT-EXTEND EXISTING IN STAGE 1
100+75'SBN'	LT	128	---	---	---	---	---	---	---	---	---	TEMP X-CULVERT IN STAGE 1
101+20'SBN'	RT/LT	---	---	---	---	---	---	---	56	---	---	X-CULVERT
101+34-102+14'SBN'	RT	---	---	---	---	---	---	---	---	80	---	DW CULVERT
201+00'SBS'	RT/LT	---	---	---	---	---	72	---	---	---	---	X-CULVERT
201+81-202+51'SBS'	LT	---	---	---	---	---	---	---	---	62	---	DW CULVERT
204+03-204+88'SBS'	LT	---	---	---	---	---	---	---	---	86	---	DW CULVERT
804+27-804+71'SBE'	LT	---	---	---	---	---	---	---	---	40	---	DW CULVERT
805+04-805+60'SBE'	LT	---	---	---	---	---	---	---	---	56	---	DW CULVERT
601+25'SFS'	RT/LT	---	---	---	136	---	---	---	---	---	---	X-CULVERT
300+35-300+95'SFN'	LT	---	---	---	---	---	---	---	---	62	---	DW CULVERT
300+31-300+71'SFN'	RT	---	---	---	---	---	---	---	---	38	---	DW CULVERT
302+31-303+52'SFN'	LT	---	---	---	---	---	---	---	---	66	---	DW CULVERT
303+69-304+17'SFN'	LT	---	---	---	---	---	---	---	---	50	---	DW CULVERT
305+00-305+43'SFN'	LT	---	---	---	---	---	---	---	---	44	---	DW CULVERT
305+67-306+10'SFN'	LT	---	---	---	---	---	---	---	---	45	---	DW CULVERT
306+37-307+00'SFN'	LT	---	---	---	---	---	---	---	---	64	---	DW CULVERT
UNDISTRIBUTED		---	---	---	---	---	---	---	---	---	3	
TOTAL CATEGORY 1000		153	30	15	548	96	72	104	56	824	5	

* MINIMUM PIPE THICKNESS: STEEL 0.064 IN, ALUMINUM 0.06 IN

CULVERT ENDWALL SUMMARY

		APRON ENDWALLS FOR CULVERT PIPE							
		522.1024	522.1030	522.1036	523.0514	521.1503	521.1518	633.5200	
		*REINF. CONCRETE 24-IN	*REINF. CONCRETE 30-IN	REINF. CONCRETE 36-IN	REINF. CONCRETE HORIZ. ELL. 14X23-IN	SLOPED SIDE DRAINS STEEL 18-IN 4 TO 1	SLOPED SIDE DRAINS STEEL 18-IN 6 TO 1	* MARKERS CULVERT END	
STATION	LOCATION	EACH	EACH	EACH	EACH	EACH	EACH	EACH	REMARKS
CATEGORY 1000									
11+85-12+30'S'	LT	---	---	---	---	---	2	2	DW CULVERT
24+83-25+34'S'	LT	---	---	---	---	---	2	2	DW CULVERT
33+87'S'	RT/LT	2	---	---	---	---	---	2	X-CULVERT-I 39/90 SHLDR
36+00'S'	LT	---	---	---	---	---	---	---	X-CULVERT-I 39/90 SHLDR
63+30-63+67'S'	RT	---	---	---	---	---	2	2	DW CULVERT
360+50'ZAT'	RT/LT	---	---	2	---	---	---	2	X-CULVERT
345+20-345+44'ZB'	RT/LT	2	---	---	---	---	---	2	X-CULVERT
357+99-358+02'ZDT'	RT/LT	---	2	---	---	---	---	2	X-CULVERT
101+20'SBN'	RT/LT	---	---	---	2	---	---	2	X-CULVERT
101+34-102+14'SBN'	RT	---	---	---	---	2	---	---	DW CULVERT
201+00'SBS'	RT/LT	2	---	---	---	---	---	2	X-CULVERT
201+81-202+51'SBS'	LT	---	---	---	---	2	---	---	DW CULVERT
204+03-204+88'SBS'	LT	---	---	---	---	2	---	---	DW CULVERT
804+27-804+71'SBE'	LT	---	---	---	---	2	---	---	DW CULVERT
805+04-805+60'SBE'	LT	---	---	---	---	2	---	---	DW CULVERT
601+25'SFS'	RT/LT	2	---	---	---	---	---	2	X-CULVERT
300+35-300+95'SFN'	LT	---	---	---	---	2	---	---	DW CULVERT
300+31-300+71'SFN'	RT	---	---	---	---	2	---	---	DW CULVERT
302+31-303+57'SFN'	LT	---	---	---	---	2	---	---	DW CULVERT
303+69-304+17'SFN'	LT	---	---	---	---	2	---	---	DW CULVERT
305+00-305+43'SFN'	LT	---	---	---	---	2	---	---	DW CULVERT
305+67-306+10'SFN'	LT	---	---	---	---	2	---	---	DW CULVERT
306+37-307+00'SFN'	LT	---	---	---	---	2	---	---	DW CULVERT
TOTAL CATEGORY 1000		8	2	2	2	24	6	20	

* ADDITIONAL QUANTITIES LISTED IN STORM SEWER SUMMARY

3

STORM SEWER PIPE SUMMARY

FROM STRUCTURE NO.		TO STRUCTURE NO.	INLET ELEV.	OUTLET ELEV.	SLOPE %	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF
CATEGORY 1000									
01-4.1	-	01-4.2	820.26	820.03	0.50%	47	---	---	---
01-4.2	-	01-4.0	820.03	819.98	0.45%	11	---	---	---
01-4.0	-	01-4.3	819.98	819.67	0.71%	---	---	43	---
01-4.3	-	01-4.4	819.50	818.94	0.50%	---	---	114	---
01-3.3	-	01-3.2	821.02	820.96	0.26%	23	---	---	---
01-3.2	-	01-3.0	820.96	820.85	0.26%	---	44	---	---
01-3.1	-	01-3.0	821.11	820.85	0.49%	---	53	---	---
01-3.0	-	01-4.0	820.75	819.98	0.51%	---	---	150	---
02-2.1	-	02-2.0	821.96	821.70	0.50%	---	52	---	---
02-2.2	-	02-2.0	821.93	821.70	0.50%	---	46	---	---
02-1.1	-	02-1.2	823.75	823.44	1.37%	22	---	---	---
02-1.2	-	02-1.0	822.75	822.50	0.50%	---	51	---	---
02-1.3	-	02-1.0	822.75	822.50	0.50%	---	50	---	---
02-1.0	-	02-2.0	822.40	821.70	0.50%	---	---	140	---
02-2.0	-	01-3.0	821.60	820.85	0.50%	---	---	150	---
02-5.4	-	02-5.3	824.95	824.83	0.30%	---	40	---	---
02-5.3	-	02-5.0	824.83	824.80	0.30%	---	12	---	---
02-5.1	-	02-5.2	824.95	824.83	0.30%	---	39	---	---
02-5.2	-	02-5.0	824.83	824.80	0.30%	---	12	---	---
02-5.0	-	03-6.0	824.78	824.28	0.17%	---	---	301	---
03-6.1	-	03-6.2	825.82	825.48	0.75%	46	---	---	---
03-6.2	-	03-6.0	825.23	824.78	0.75%	---	61	---	---
03-6.0	-	03-6.3	824.28	824.19	0.18%	---	---	51	---
03-6.3	-	03-6.4	824.19	824.09	0.18%	---	---	54	---
03-7.0	-	03-7.1	835.50	834.03	2.00%	---	73	---	---
03-8.0	-	03-8.1	840.00	839.75	0.31%	---	80	---	---
03-8.1	-	03-8.2	839.75	839.50	0.60%	---	41	---	---
04-11.0	-	04-11.1	844.55	844.15	0.50%	---	80	---	---
04-11.1	-	04-11.2	844.15	844.00	0.50%	---	29	---	---
05-12.0	-	05-12.1	844.00	842.37	1.49%	---	109	---	---
05-13.0	-	05-13.1	840.33	839.00	4.00%	33	---	---	---
05-14.0	-	05-14.1	840.46	840.27	1.00%	19	---	---	---
05-14.1	-	05-14.2	839.52	839.00	1.00%	---	---	52	---
06-15.0	-	06-15.1	835.03	834.50	1.00%	---	---	53	---
06-16.0	-	06-16.1	833.58	833.49	0.50%	---	---	19	---
06-16.1	-	06-16.2	833.49	833.25	0.50%	---	---	48	---
07-17.0	-	07-17.1	828.93	828.82	1.00%	11	---	---	---
07-17.1	-	07-17.2	828.57	827.00	2.00%	---	78	---	---
07-19.0	-	07-19.1	825.00	824.83	0.25%	---	---	67	---
07-19.1	-	07-19.2	824.83	824.74	0.25%	---	---	36	---
07-19.2	-	07-19.3	824.74	824.59	0.25%	---	---	61	---
08-20.1	-	08-20.0	820.80	819.30	0.73%	---	---	---	150
08-20.0	-	08-20.2	818.00	817.00	0.45%	---	---	---	220
08-21.1	-	08-21.0	821.50	820.70*	0.25%	---	326	---	---
TOTAL CATEGORY 1000						212	1276	1339	370

* FIELD VERIFY

STORM SEWER ENDWALL SUMMARY

STRUCT. NO.	STATION	OFFSET	APRON ENDWALLS FOR CULVERT PIPE REINF. CONCRETE 522.1015 15-INCH EACH	522.1018 18-INCH EACH	*522.1024 24-INCH EACH	*522.1030 30-INCH EACH	633.5200 * MARKERS CULVERT END EACH
CATEGORY 1000							
01-4.4	18+33'S'	70.3'RT	---	---	1	---	1
02-1.1	24+00'S'	85.8'LT	1	---	---	---	1
03-6.1	28+60'S'	93.5'RT	1	---	---	---	1
03-6.4	28+60'S'	117.4'LT	---	---	1	---	1
03-7.1	29+81'S'	82'RT	---	1	---	---	1
03-8.2	32+75'S'	93.0'LT	---	1	---	---	1
04-11.2	36+88'S'	82.9'LT	---	1	---	---	1
05-12.1	40+57'S'	49.3'RT	---	1	---	---	1
05-13.1	42+99'S'	97.5'LT	1	---	---	---	1
05-14.2	45+00'S'	72.0'LT	---	---	1	---	1
06-15.1	48+00'S'	73.0'LT	---	---	1	---	1
06-16.2	50+25'S'	68.0'LT	---	---	1	---	1
07-17.2	53+69'S'	95.8'LT	---	1	---	---	1
07-19.3	55+93'S'	81.0'LT	---	---	1	---	1
08-20.1	348+31'NB'	71.8'RT	---	---	---	1	1
08-20.2	352+01'NB'	62.8'RT	---	---	---	1	1
TOTAL CATEGORY 1000			3	5	6	2	16

* ADDITIONAL QUANTITY LISTED IN CULVERT ENDWALL SUMMARY

RIP RAP ITEMS

	STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE FABRIC TYPE HR SY
CATEGORY 1000				
STAGE 2	18+33'S'	EW 01-4.4	8	17
	352+65'ZA'	FLUME LT	42	84
	40+63'S'	FLUME RT	52	103
	352+04'ZB'	FLUME LT	29	58
	345+49'ZC'	FLUME LT	21	41
	STAGE 2 SUBTOTAL		152	303
STAGE 3	32+75'S'	EW 03-9.0	19	38
	36+88'S'	EW 04-12.0	19	38
	42+99'S'	EW 05-13.1	10	20
	45+00'S'	EW 05-14.2	10	19
	48+00'S'	EW 06-15.1	11	21
	50+25'S'	EW 06-16.2	11	21
	53+67'S'	EW 07-18.0	5	11
	55+93'S'	EW 07-21.0	5	9
	352+78'ZA'	FLUME RT	47	94
	357+00-359+00'ZA'	DITCH RT	91	181
	347+44'ZC'	FLUME RT	36	118
	347+66'ZD'	FLUME RT	83	166
	348+12'ZD'	FLUME LT	29	59
	361+51'ZD'	DITCH LT	47	94
	28+60'S'	EW 03-6.4	8	17
	STAGE 3 SUBTOTAL		431	906
	UNDISTRIBUTED		54	113
	TOTAL CATEGORY 1000		637	1322

STORMWATER TREATMENT FILTER STRIP

STATION	LOCATION	SPV.0165.001 STORMWATER TREATMENT FILTER STRIP SF	616.0700.S SAFETY FENCE * LF
CATEGORY 1000			
353+00'ZA'-360+00'ZA'	RT	16800	1500
348+00-353+50'ZD'	RT	8800	1000
45+50-49+50'S'	RT	4800	800
40+50-45+50'S'	RT	6000	1000
348+00-352+00'ZB'	LT	9600	800
339+00'ZB'-340+50'ZB'	RT	1800	300
343+00-345+50'ZC'	LT	4000	500
UNDISTRIBUTED		200	100
TOTAL CATEGORY 1000		52000	6000

* ADDITIONAL QUANTITY LISTED IN FENCING SUMMARY

STORM SEWER STRUCTURE SUMMARY

STRUCT. NO.	STATION	OFFSET	TOP STRUCTURE ELEV	RIM ELEV	INLETS 611.3230 2X3-FT EACH	INLETS 611.3901 MEDIAN 1 GRATE EACH	INLETS 611.3902 MEDIAN 2 GRATE EACH	MANHOLES 611.2004 4-FT DIAMETER EACH	MANHOLES 611.2005 5-FT DIAMETER EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0627 INLET COVERS TYPE HM EACH	611.0642 INLET COVERS TYPE MS EACH	611.8120.S COVER PLATES TEMPORARY EACH
CATEGORY 1000													
01-4.3	19+42'S'	37.5'RT	823.43	824.43	---	---	---	1	---	---	1	---	---
01-4.0	19+60'S'	1.5'LT	824.06	825.31	---	---	---	---	1	---	1	---	---
01-4.2	19+60'S'	12.5'LT	824.31	825.31	1	---	---	---	---	---	1	---	---
01-4.1	19+61'S'	59.5'LT	823.43	824.43	1	---	---	---	---	---	1	---	---
01-3.3	21+10'S'	60.6'RT	823.12	823.12	---	1	---	---	---	---	---	1	---
01-3.2	21+10'S'	37.5'RT	824.52	825.52	1	---	---	---	---	---	1	---	---
01-3.0	21+10'S'	6.2'LT	825.54	826.79	---	---	---	---	1	1	---	---	---
01-3.1	21.10'S'	59.5'LT	824.35	825.35	1	---	---	---	---	---	1	---	---
02-2.2	22+60'S'	37.5'RT	825.45	826.45	1	---	---	---	---	---	1	---	---
02-2.0	22+60'S'	8.5'LT	826.55	827.80	---	---	---	---	1	1	---	---	---
02-2.1	22+60'S'	60.6'LT	825.31	826.31	1	---	---	---	---	---	1	---	---
02-1.3	24+00'S'	37.5'RT	826.33	827.33	1	---	---	---	---	---	1	---	---
02-1.0	24+00'S'	12.6'LT	827.60	828.85	---	---	---	---	1	1	---	---	---
02-1.2	24+00'S'	63.5'LT	826.23	827.23	1	---	---	---	---	---	1	---	---
02-5.4	25+60'S'	38.1'RT	828.10	829.10	1	---	---	---	---	---	1	---	---
02-5.3	25+60'S'	1.5'LT	828.83	829.83	1	---	---	---	---	---	1	---	---
02-5.0	25+60'S'	13.0'LT	829.40	830.65	---	---	---	---	1	1	---	---	---
02-5.2	25+60'S'	24.5'LT	828.83	829.83	1	---	---	---	---	---	1	---	---
02-5.1	25+60'S'	63.5'LT	828.11	829.11	1	---	---	---	---	---	1	---	---
03-6.2	28+60'S'	47.6'RT	834.43	835.43	1	---	---	---	---	---	1	---	---
03-6.0	28+60'S'	13.0'LT	835.94	837.19	---	---	---	---	1	1	---	---	1
03-6.3	28+60'S'	63.5'LT	834.64	835.64	1	---	---	---	---	---	1	---	1
03-7.0	30+30'S'	27.2'RT	839.33	840.33	1	---	---	---	---	---	1	---	---
03-8.0	32+75'S'	28.2RT	844.78	845.78	1	---	---	---	---	---	1	---	---
03-8.1	32+75'S'	51.5'LT	843.98	844.98	1	---	---	---	---	---	1	---	---
04-11.0	36+82'S'	25.5'RT	848.89	849.89	1	---	---	---	---	---	1	---	---
04-11.1	36+82'S'	54.5'RT	848.87	849.87	1	---	---	---	---	---	1	---	---
05-12.0	40+20'S'	53.1'LT	849.20	850.20	1	---	---	---	---	---	1	---	---
05-13.0	42+99'S'	64.2'LT	847.68	848.71	1	---	---	---	---	---	1	---	---
05-14.0	45+00'S'	1.4'LT	844.56	845.56	1	---	---	---	---	---	1	---	---
05-14.1	45+00'S'	20.5'LT	845.24	846.24	1	---	---	---	---	---	1	---	---
06-15.0	48+00'S'	20.5'LT	842.92	841.42	1	---	---	---	---	---	1	---	---
06-16.0	50+25'S'	1.5'LT	836.51	838.28	1	---	---	---	---	---	1	---	---
06-16.1	50+25'S'	20.5'LT	837.18	838.96	1	---	---	---	---	---	1	---	---
07-17.0	53+90'S'	9.5'LT	833.75	834.75	1	---	---	---	---	---	1	---	---
07-17.1	53+90'S'	20.5'LT	834.10	835.11	1	---	---	---	---	---	1	---	---
07-19.0	56+75'S'	39.5'RT	828.05	828.00	---	---	1	---	---	---	---	2	---
07-19.1	56+22'S'	1.5'LT	831.05	832.05	---	---	---	---	1	---	1	---	1
07-19.2	55+91'S'	20.5'LT	832.05	833.05	---	---	---	---	1	---	1	---	1
08-20.0	349+81'NB'	57.7'RT	821.55	822.80	---	---	---	---	1	1	---	---	---
08-21.0	349+76'NB'	--	821.99	823.24	---	---	---	---	1	1	---	---	---
08-21.1	349+76'NB'	8.2'LT	824.41	824.41	---	1	---	---	---	---	---	1	---
TOTAL CATEGORY 1000					28	2	1	1	10	7	32	4	4

DELINEATORS

	STATION	LOCATION	633.0100 DELINEATOR POSTS STEEL EACH	633.0500 DELINEATOR REFLECTORS EACH
CATEGORY 1000				
STAGE 3	360+00-366+14'ZAT'	RT	7	10
	331+99'ZBT'-341+00'ZB'	RT	9	17
	343+00-337+13'ZCT'	LT	6	9
	359+50-365+00'ZDT'	LT	6	11
	UNDISTRIBUTED		12	13
	TOTAL CATEGORY 1000		40	60

FENCING

	STATION	LOCATION	616.0206 FENCE CHAIN LINK 6-FT LF	616.0700.S SAFETY FENCE LF	REMARKS
CATEGORY 1000					
STAGE 1	20+38-20+68'S'	RT	---	100	SEPTIC TANK
	22+80-23+37'S'	RT	---	140	SEPTIC TANK
	24+60-25+60'S'	LT	---	150	TREES
	43+60-44+00'S'	RT	---	160	MONITORING WELL
	45+10-45+40'S'	LT	---	100	MONITORING WELL
	402+00-402+70'LC	RT	---	180	SEPTIC TANK
	305+05-305+40'SFN'	RT	---	120	MONITORING WELL
	308+00'SEN'	LT	---	100	TREE
	STAGE 1 SUBTOTAL		---	1050	
STAGE 3	25+85'S'-339+30'ZC'	SW QUADRANT	1095	---	R/W FENCE
	334+87'ZB'-45+95'S'	SE QUADRANT	2300	---	R/W FENCE
	27+00'S'-362+82'ZDT'	NW QUADRANT	1780	---	R/W FENCE
	42+93'S'-364+27'ZA'	NE QUADRANT	1125	---	R/W FENCE
	STAGE 3 SUBTOTAL		6300	---	
	TOTAL CATEGORY 1000		6300	1050	

EROSION CONTROL ITEMS

STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2004 EROSION MAT CLASS 1 TYPE B SY	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	628.2023 EROSION MAT CLASS II TYPE B SY	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7560 TRACKING PADS EACH	628.7570 ROCK BAGS EACH
CATEGORY 1000													
9+00-63+75'S' STAGE 1	LT	---	---	1245	---	---	---	---	---	192	12	---	---
9+00-30+90'S'	RT/LT	780	780	2477	4351	---	24	1	17	216	16	---	---
31+25-39+30'S'	RT/LT	656	656	---	1084	9136	8	1	4	---	12	---	---
40+05-63+75'S'	RT/LT	2034	2034	600	3057	6424	13	1	11	96	4	---	---
352+70'ZA'-366+00'ZAT'	RT/LT	930	930	2002	---	---	---	---	---	336	6	---	---
332+00'ZBT'-352+70'ZB'	RT/LT	1477	1477	2027	120	3671	---	---	---	96	4	---	---
337+00'ZCT'-347+50'ZC'	RT/LT	664	664	1310	---	---	---	---	---	96	---	---	---
347+60'ZD'-365+00'ZDT'	RT/LT	1637	1637	2683	350	2015	---	---	---	216	4	---	---
101+20-103+00'SBN'	RT/LT	193	193	205	---	---	---	---	---	---	8	---	---
200+75-208+00'SBS'	RT/LT	230	230	1054	---	---	---	---	---	96	12	---	---
801+00-808+30'SBE'	RT/LT	874	874	401	---	---	---	---	---	---	8	---	---
400+00-403+75'LC'	RT/LT	651	651	---	---	---	---	---	---	---	---	---	---
300+00-314+41'SFN'	RT/LT	1028	1028	307	---	4532	---	---	---	---	24	---	---
UNDISTRIBUTED		446	446	889	538	1222	5	2	3	256	20	10	15
TOTAL CATEGORY 1000		11600	11600	15200	9500	27000	50	5	35	1600	130	10	15

MOBILIZATION EROSION CONTROL

LOCATION	628.1905 MOBILIZATION EROSION CONTROL EACH	628.1910 EMERGENCY MOBILIZATION EROSION CONTROL EACH
CATEGORY 1000		
STAGE 1	1	---
STAGE 2B	3	1
STGE 2A	1	1
STAGE 2B	1	1
STAGE 3	3	1
STAGE 3A	1	---
STAGE 4	1	---
TOTAL CATEGORY 1000	11	4

RESTORATION ITEMS

STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	628.6510 SOIL STABILIZER TYPE B ACRE	629.0205 FERTILIZER TYPE A CWT	630.0130 SEEDING MIXTURE #30 LB	630.0140 SEEDING MIXTURE #40 LB	630.0200 SEEDING TEMPORARY LB
CATEGORY 1000								
9+00-30+00'S' TEMP DITCH	LT	2222	1533	0.46	1.0	---	---	75
9+00-30+90'S'	RT/LT	16020	10325	3.31	6.5	---	309	464
31+25-39+30'S'	RT/LT	10784	564	2.23	0.4	190	---	---
40+05-63+75'S'	RT/LT-FILTER STRIP	18276	10548	3.78	6.6	305	66	98
55+00-63+75'S' TEMP DITCH	LT	890	1458	0.18	0.9	---	---	39
352+70'ZA'-366+00'ZAT'	RT/LT-FILTER STRIP	16869	16201	3.49	10.2	329	---	141
332+00'ZBT'-352+70'ZB'	RT/LT-FILTER STRIP	32061	27773	6.62	17.5	606	---	83
337+00'ZCT'-347+50'ZC'	RT/LT-FILTER STRIP	7386	7076	1.53	4.5	154	---	96
347+60'ZD'-365+00'ZDT'	RT/LT-FILTER STRIP	24678	20622	5.10	13.0	464	---	245
101+20-103+00'SBN'	RT/LT	1074	1069	0.22	0.7	---	23	34
200+75-208+00'SBS'	RT/LT	4995	4541	1.03	2.9	---	101	151
801+00-808+30'SBE'	RT/LT	2343	2742	0.48	1.7	---	56	84
400+00-403+75'LC'	RT/LT	913	913	0.19	0.6	---	17	24
300+00-314+41'SFN'	RT/LT	15074	11485	3.11	7.2	200	94	142
UNDISTRIBUTED		6415	11150	3.27	6.4	752	134	324
TOTAL CATEGORY 1000		160000	128000	35.00	80.0	3000	800	2000

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TRAFFIC CONTROL

STATION	643.0300 TRAFFIC CONTROL DRUMS DAYS	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAYS	643.0500 FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 FLEXIBLE TUBULAR MARKER BASES EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAYS	643.0800 TRAFFIC CONTROL ARROW BOARDS DAYS
CATEGORY 1000							
STAGE 1 W. OF PROJECT LIMITS - 32+00'S'	590	40	45	45	80	60	0
52+95'S' - E. OF PROJECT LIMITS	500	0	0	0	0	0	20
RAMP ZB	230	0	0	0	0	190	0
RAMP ZC	210	0	0	0	0	0	0
RAMP ZD	440	0	0	0	0	190	0
NB I 39/90	1590	40	0	0	80	330	60
SB I 39/90	1670	40	0	0	80	330	60
STAGE 1 SUBTOTAL	5230	120	45	45	240	1100	140
STAGE 2 W. OF PROJECT LIMITS - 32+00'S'	5510	360	67	67	570	3000	140
52+95'S' - E. OF PROJECT LIMITS	2570	500	34	34	0	1360	70
RAMP ZA	570	0	0	0	0	0	0
RAMP ZB	790	0	0	0	0	640	0
RAMP ZC	570	0	0	0	0	0	0
RAMP ZD	1860	0	0	0	0	640	0
NB I 39/90	5430	140	0	0	290	1140	210
SB I 39/90	5720	140	0	0	290	1140	210
STAGE 2 SUBTOTAL	23020	1140	101	101	1150	7920	630
STAGE 2A W. OF PROJECT LIMITS - 32+00'S'	830	180	67	67	90	410	20
52+95'S' - E. OF PROJECT LIMITS	400	80	34	34	0	210	10
RAMP ZA	90	0	0	0	0	0	0
RAMP ZD	180	0	0	0	0	0	0
NB I 39/90	1110	60	0	0	70	180	30
SB I 39/90	620	10	0	0	20	180	30
STAGE 2A SUBTOTAL	3230	330	101	101	180	980	90
STAGE 2B W. OF PROJECT LIMITS - 32+00'S'	570	100	66	66	50	250	20
52+95'S' - E. OF PROJECT LIMITS	140	90	72	72	30	20	0
NB I 39/90	420	10	0	0	20	120	20
SB I 39/90	650	40	0	0	50	120	20
STAGE 2B SUBTOTAL	1780	240	138	138	150	510	60
STAGE 3 W. OF PROJECT LIMITS - 32+00'S'	3250	490	66	66	220	1230	70
32+00'S' - E. OF PROJECT LIMITS	670	410	72	72	300	110	0
NB I 39/90	670	0	0	0	0	0	70
SB I 39/90	790	0	0	0	0	0	70
STAGE 3 SUBTOTAL	5380	900	138	138	520	1340	210
STAGE 3A W. OF PROJECT LIMITS - 32+00'S'	510	40	23	23	10	150	10
32+00'S' - E. OF PROJECT LIMITS	320	0	0	0	0	100	10
NB I 39/90	100	0	0	0	0	0	10
SB I 39/90	120	0	0	0	0	0	10
STAGE 3A SUBTOTAL	1050	40	23	23	10	250	40
STAGE 4 NB I 39/90	790	180	0	0	70	250	20
SB I 39/90	810	210	0	0	70	240	20
STAGE 4 SUBTOTAL	1600	390	0	0	140	490	40
UNDISTRIBUTED	2110	240	34	34	210	710	90
TOTAL CATEGORY 1000	43400	3400	580	580	2600	13300	1300

TRAFFIC CONTROL SIGNS

STATION	643.0900 TRAFFIC CONTROL SIGNS DAYS	643.3000 TRAFFIC CONTROL DETOUR SIGNS DAYS	643.0910 COVERING SIGNS TYPE I EACH	643.0920 COVERING SIGNS TYPE II EACH	643.1050 PORTABLE CHANGEABLE MESSAGE SIGNS DAYS
CATEGORY 1000					
STAGE 1 CTH S	230	0	0	0	38
I 39/90	460	0	0	0	38
STAGE 1 SUBTOTAL	690	0	0	0	76
STAGE 2 CTH S	2290	0	0	0	130
I 39/90	1640	0	0	0	130
STAGE 2 SUBTOTAL	3930	0	0	0	260
STAGE 2A CTH S	360	280	0	6	20
I 39/90	210	620	4	0	20
STAGE 2A SUBTOTAL	570	900	4	6	40
STAGE 2B CTH S	230	220	0	4	14
I 39/90	160	590	3	0	14
STAGE 2B SUBTOTAL	390	810	3	4	28
STAGE 3 CTH S	1050	0	0	0	68
I 39/90	520	0	0	0	68
STAGE 3 SUBTOTAL	1570	0	0	0	136
STAGE 3A CTH S	60	0	0	0	10
I 39/90	80	0	0	0	10
STAGE 3A SUBTOTAL	140	0	0	0	20
STAGE 4 CTH S	0	0	0	0	20
I 39/90	300	0	0	0	20
STAGE 4 SUBTOTAL	300	0	0	0	40
UNDISTRIBUTED	410	90	3	5	0
TOTAL CATEGORY 1000	8000	1800	10	15	600

REMOVING SIGNS

	SIGN NO.	SIGN CODE	638.2101 MOVING SIGNS TYPE I EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.2102 MOVING SIGNS TYPE II EACH	638.3100 REMOVING STRUCTURAL STEEL SIGN SUPPORTS EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	SIGN MOUNTED ON SAME POST AS	MESSAGE
CATEGORY 1000										
STAGE 1	R1-02	R2-1	--	1	1	--	--	--	--	SPEED LIMIT 45 MPH
	R3-05	R2-1	--	1	1	--	--	--	--	SPEED LIMIT 45 MPH
STAGE 1 SUBTOTAL			--	2	2	--	--	--	--	
STAGE 2	R1-01	R2-1	--	1	1	--	--	--	--	SPEED LIMIT 45 MPH
	R2-01	J1-2	--	1	1	--	--	--	--	JUNCTION ASSEMBLY
	R2-02	R2-1	--	1	1	--	--	--	--	SPEED LIMIT 45 MPH
	R3-01	W4-2-R	--	1	1	--	--	--	--	RIGHT LANE ENDS
	R3-02	J2-4	--	1	2	--	--	--	--	ROUTE TURN ASSEMBLY
	R3-04	D1-3	--	1	2	--	--	--	--	TRIPLE DESTINATION/ARROW
	R4-02	R5-57	--	1	1	--	--	--	--	PEDESTRIANS, ETC., PROHIBITED
	R7-01	R5-57	--	1	1	--	--	--	--	PEDESTRIANS, ETC., PROHIBITED
	R11-03	D1-2/R5-1-A	--	1	2	--	--	--	R11-02	TWO DESTINATIONS (ARROWS)
	R11-05	J2-2	--	1	1	--	--	--	--	ROUTE TURN ASSEMBLY
	R11-07	W3-1	--	1	1	--	--	--	--	STOP AHEAD
STAGE 2 SUBTOTAL			--	11	14	--	--	--	--	
STAGE 2A	R3-06	J3-2	--	1	1	--	--	--	--	ROUTE TURN ASSEMBLY
	R4-13	R5-1-A	--	1	1	--	--	--	--	WRONG WAY
	R4-14	D1-2/R5-1-A	--	1	2	--	--	--	R4-15	TWO DESTINATIONS (ARROWS)/WRONG WAY
	R5-03	R1-1	--	1	1	--	--	--	--	STOP SIGN
	R5-04	R5-1	--	1	1	--	--	--	--	DO NOT ENTER
	R5-05	D9-2/M1-5-A	--	1	1	--	--	--	--	HOSPITAL LEFT ARROW & COUNTY MARKER
	R9-01	J3-1	--	1	1	--	--	--	--	ALTERNATE I-43
	R9-02	E5-1-B	--	1	2	--	--	--	--	EXIT SIGN WITH ARROW
	R9-03	W3-1	--	1	1	--	--	--	--	STOP AHEAD
	R9-04	J2-2	--	1	1	--	--	--	--	ROUTE TURN ASSEMBLY
	M8-01	E4-1-A	1	--	--	--	2	--	--	EXIT 183 SHOPIERE RD.
STAGE 2A SUBTOTAL			1	10	12	--	2	--	--	
STAGE 2B	R4-01	R1-1	--	1	1	--	--	--	--	STOP
	R4-03	R5-1-A	--	1	1	--	--	--	--	DO NOT ENTER
	R4-04	R3-1/J2-2/R3-1	--	1	1	--	--	--	R4-05	ROUTE TURN ASSY. & NO RT TURN
	R4-06	W5-52-L	--	1	1	--	--	--	--	BRIDGE MARKER
	R4-07	W5-52-R	--	1	1	--	--	--	R5-02	BRIDGE MARKER
	R4-08	D1-1	--	1	2	--	--	--	--	ONE DESTINATION (ARROW)
	R4-09	W5-52-L	--	1	1	--	--	--	--	BRIDGE MARKER
	R4-10	W5-52-R	--	1	1	--	--	--	--	BRIDGE MARKER
	R4-11	D1-1	--	1	2	--	--	--	--	ONE DESTINATION (ARROW)
	R5-01	J2-2/R3-1	--	1	1	--	--	--	--	ROUTE TURN ASSY. & NO RT TURN
	R5-06	J3-2	--	1	1	--	--	--	--	ROUTE TURN ASSEMBLY
	R5-07	R12-53	--	1	1	--	--	--	--	WEIGHT LIMIT & ROUTE ASSURANCE
	R5-08	D1-3	--	1	2	--	--	--	--	THREE DESTINATION (ARROWS)
	R5-09	R2-1	--	1	1	--	--	--	--	SPEED LIMIT 45 MPH
	R5-10	J2-4	--	1	2	--	--	--	--	ROUTE TURN ASSEMBLY
	R11-01	D9-2/J2-1	--	1	1	--	--	--	--	HOSPITAL LT AND ROUTE TURN ASSY.
	R11-04	R5-1-A	--	1	1	--	--	--	--	WRONG WAY
	R12-01	E5-1-A/D10-3	--	1	2	--	--	--	--	EXIT WITH ARROW, MILE MARKER
STAGE 2B SUBTOTAL			--	18	23	--	--	--	--	
STAGE 3	M4-12	D8-1	--	--	--	1	--	2	--	WEIGHT STATION 2 MILES
	R6-01	J1-2	--	1	1	--	--	--	--	JUNCTION ASSEMBLY
	R6-02	R2-1	--	1	1	--	--	--	--	SPEED LIMIT 45 MPH
	R6-03	R2-1	--	1	1	--	--	--	--	SPEED LIMIT 45 MPH
	M7-02	W4-1	--	--	--	1	--	1	--	MERGING TRAFFIC
	R7-03	D10-3	--	1	1	--	--	--	--	MILE MARKER
	M10-01	W4-1	--	1	1	--	--	--	--	MERGING TRAFFIC
STAGE 3 SUBTOTAL			--	5	5	2	--	3	--	
TOTAL CATEGORY 1000			1	46	56	2	2	3	--	

PERMANENT SIGNING TYPE II

SIGN NO.	STATION	SIGN CODE	SIGN SIZE IN X IN	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	637.2220 SIGNS TYPE II REFLECTIVE SH SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0612 POSTS WOOD 4X6 IN 12 FT EACH	634.0614 POSTS WOOD 4X6 IN 14 FT EACH	634.0616 POSTS WOOD 4X6 IN 16 FT EACH	634.0618 POSTS WOOD 4X6 IN 18 FT EACH	634.0620 POSTS WOOD 4X6 IN 20 FT EACH	634.0622 POSTS WOOD 4X6 IN 22 FT EACH	634.0812 POSTS TUBULAR STEEL 2X2-INCH 12 FT EACH	634.0814 POSTS TUBULAR STEEL 2X2-INCH 14 FT EACH	MOUNTED ON SAME POST AS	MESSAGE
CATEGORY 1000																	
1-01	4+00'S'	W6-1	36"X36"	---	---	---	9	---	1	---	---	---	---	---	---		DIVDED HIGHWAY AHEAD
1-02	8+00'S'	W6-3	36"X36"	---	---	---	9	---	1	---	---	---	---	---	---		TWO-WAY TRAFFIC
1-03	11+00'S'	R2-1	30"X36"	7.5	---	---	---	---	1	---	---	---	---	---	---		SPEED LIMIT 45
1-04	12+85'S'	R2-1	30"X36"	7.5	---	---	---	---	1	---	---	---	---	---	---		SPEED LIMIT 45
1-05	14+24'S'	R4-7	24"X30"	5	---	---	---	---	---	1	---	---	---	---	---		KEEP RIGHT
1-06	14+24'S'	W5-54	18"X18"	---	---	---	2.25	---	---	---	---	---	---	---	---	1-05	REFLECTIVE SQUARE
1-07	14+24'S'	R5-1	36"X36"	9	---	---	---	---	1	---	---	---	---	---	---		DO NOT ENTER
2-01	16+00'S'	J1-2	48"X39"	13	---	---	---	---	---	2	---	---	---	---	---		JCT 39/90
2-02	16+00'S'	R5-1-A	42"X30"	8.75	---	---	---	---	---	---	---	---	---	---	---	2-01	WRONG WAY
2-03	17+85'S'	R5-1	36"X36"	9	---	---	---	---	---	1	---	---	---	---	---		DO NOT ENTER
2-04	18+17'S'	R4-7	24"X30"	5	---	---	---	---	1	---	---	---	---	---	---		KEEP RIGHT
2-05	19+48'S'	R4-7	24"X30"	5	---	---	---	---	1	---	---	---	---	---	---		KEEP RIGHT
2-06	19+20'S'	R6-1-L	36"X12"	3	---	---	---	---	---	---	---	---	---	---	---	2-08	ONE WAY
2-07	19+20'S'	R6-1-R	36"X12"	3	---	---	---	---	---	---	---	---	---	---	---	2-08	ONE WAY
2-08	19+20'S'	R1-1	30"X30"	5.18	---	---	---	---	---	---	2	---	---	---	---		STOP SIGN
2-09	19+20'S'	R6-3	30"X24"	5	---	---	---	---	---	---	---	---	---	---	---	2-08	DIVIDED HIGHWAY
2-10	21+00'S'	J2-4	96"X57"	38	---	---	---	---	---	---	2	---	---	---	---		J ASSY
2-11	21+00'S'	R5-1-A	42"X30"	8.75	---	---	---	---	---	---	---	---	---	---	---	2-10	WRONG WAY
2-12	21+47'S'	R5-1-A	42"X30"	8.75	---	---	---	---	1	---	---	---	---	---	---		WRONG WAY
2-13	19+74'S'	R5-1	36"X36"	9	---	---	---	---	1	---	---	---	---	---	---		DO NOT ENTER
2-14	19+20'S'	W14-1	30"X30"	---	---	---	6.25	---	1	---	---	---	---	---	---		DEAD END
2-15	18+50'S'	R6-1-R	36"X12"	3	---	---	---	---	---	---	---	---	---	---	---	2-16	ONE WAY
2-16	18+50'S'	R1-1	30"X30"	5.18	---	---	---	---	---	---	2	---	---	---	---		STOP SIGN
2-17	18+50'S'	R6-3	30"X24"	5	---	---	---	---	---	---	---	---	---	---	---	2-16	DIVDED HIGHWAY
2-18	18+50'S'	R6-1-L	36"X12"	3	---	---	---	---	---	---	---	---	---	---	---	2-16	ONE WAY
2-19	17+55'S'	W6-2	36"X36"	---	---	---	9	---	---	---	---	---	---	---	---	2-20	DIVIDED HIGHWAY ENDS
2-20	17+55'S'	R5-1-A	42"X30"	8.75	---	---	---	---	1	---	---	---	---	---	---		WRONG WAY
3-01	24+22'S'	D1-1	66"X15"	6.875	---	---	---	---	2	---	---	---	---	---	---		ROCKFORD
3-02	24+22'S'	R5-1	36"X36"	9	---	---	---	---	---	---	---	---	---	---	---	3-01	DO NOT ENTER
3-03	24+22'S'	D1-2	66"X24"	11	---	---	---	---	2	---	---	---	---	---	---		SHOPIERE/MADISON
3-04	25+05'S'	R6-2-L	36"X48"	12	---	---	---	---	---	1	---	---	---	---	---		ONE WAY
3-05	26+14'S'	R3-7-R	30"X30"	6.25	---	---	---	---	1	---	---	---	---	---	---		RT LANE MUST TURN RT
3-06	28+14'S'	J3-2	48"X57"	19	---	---	---	---	---	---	---	2	---	---	---		J ASSY
3-07	28+14'S'	R11-54-F	48"X30"	---	10	---	---	---	---	---	---	---	---	---	---	3-06	RAMP CLOSED USE ALT ROUTE
3-08	28+14'S'	R5-1-A	42"X30"	8.75	---	---	---	---	---	---	---	---	---	---	---	3-06	WRONG WAY
3-09	28+14'S'	R5-1-A	42"X30"	8.75	---	---	---	---	1	---	---	---	---	---	---		WRONG WAY
3-10	29+15'S'	J4-2	48"X36"	12	---	---	---	---	2	---	---	---	---	---	---		J ASSY
3-11	27+30'S'	R2-1	30"X36"	7.5	---	---	---	---	1	---	---	---	---	---	---		SPEED LIMIT 45
3-12	27+30'S'	R5-1-A	42"X30"	8.75	---	---	---	---	---	---	---	---	---	---	---	3-11	WRONG WAY
3-13	25+51'S'	D9-2	24"X24"	4	---	---	---	---	---	1	---	---	---	---	---		HOSPITAL
3-14	25+51'S'	M6-1	21"X21"	3.063	---	---	---	---	---	---	---	---	---	---	---	3-13	AHEAD ARROW
3-15	25+51'S'	R5-1	36"X36"	9	---	---	---	---	---	---	---	---	---	---	---	3-13	DO NOT ENTER
4-01	29+50'S'	R3-7-R	30"X30"	6.25	---	---	---	---	---	1	---	---	---	---	---		RT LANE MUST TURN RT
4-02	30+42'S'	W12-1-D	24"X24"	---	---	---	4	---	1	---	---	---	---	---	---		DOUBLE DOWN ARROWS
4-03	30+43'S'	R1-2	48"X42"	7	---	---	---	---	---	---	---	---	---	---	1		YIELD
4-04	30+18'S'	R6-2-R	36"X48"	12	---	---	---	---	---	1	---	---	---	---	---		ONE WAY
4-05	30+55'S'	R3-2	36"X36"	9	---	---	---	---	---	1	---	---	---	---	---		NO LEFT TURN
4-06	30+55'S'	R4-7	24"X30"	5	---	---	---	---	---	---	---	---	---	---	---	4-05	KEEP RIGHT
4-07	30+63'S'	R5-1	36"X36"	9	---	---	---	---	1	---	---	---	---	---	---		DO NOT ENTER
4-08	31+30'S'	R6-2-L	24"X30"	5	---	---	---	---	---	---	---	---	---	1	---		ONE WAY
4-09	31+79'S'	J2-2	48"X57"	19	---	---	---	---	---	2	---	---	---	---	---		J ASSY
4-10	33+00'S'	D1-2	66"X30"	13.75	---	---	---	---	2	---	---	---	---	---	---		SHOPIERE/MADISON
4-11	32+78'S'	J3-2	48"X57"	19	---	---	---	---	---	---	---	2	---	---	---		J ASSY
4-12	32+78'S'	R11-54-F	48"X30"	---	10	---	---	---	---	---	---	---	---	---	---	4-11	RAMP CLOSED USE ALT ROUTE
4-13	32+78'S'	R5-1-A	42"X30"	8.75	---	---	---	---	---	---	---	---	---	---	---	4-11	WRONG WAY
4-14	32+08'S'	R4-7	24"X30"	5	---	---	---	---	1	---	---	---	---	---	---		KEEP RIGHT
4-15	31+31'S'	R3-1	36"X36"	9	---	---	---	---	---	---	---	---	---	---	---	4-16	NO RIGHT TURN
4-16	31+31'S'	R5-1	36"X36"	9	---	---	---	---	1	---	---	---	---	---	---		DO NOT ENTER
4-17	31+22'S'	R5-1	36"X36"	9	---	---	---	---	---	1	---	---	---	---	---		DO NOT ENTER
4-18	30+69'S'	R5-1	36"X36"	9	---	---	---	---	1	---	---	---	---	---	---		DO NOT ENTER
4-19	348+75'ZD'	W12-1-D	24"X24"	---	---	---	4	---	1	---	---	---	---	---	---		DOUBLE DOWN ARROWS
4-20	30+82'S'	R6-2-L	30"X36"	7.5	---	---	---	---	---	---	---	---	---	---	---	4-21	ONE WAY
4-21	30+82'S'	R1-1	36"X36"	7.46	---	---	---	---	---	---	1	---	---	---	---		STOP SIGN
4-22	30+82'S'	R6-3	30"X24"	5	---	---	---	---	---	---	---	---	---	---	---	4-21	DIVIDED HIGHWAY
M4-12	348+30'NB'	E5-56-A	---	---	---	---	---	---	---	---	---	---	3	---	---		
5-01	37+15'S'	J3-2	48"X57"	19	---	---	---	---	---	---	---	2	---	---	---		J ASSY

CONTINUED ON NEXT PAGE

PERMANENT SIGNING TYPE II

SIGN NO.	STATION	SIGN CODE	SIGN SIZE IN X IN	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	637.2220 SIGNS TYPE II REFLECTIVE SH SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0612 POSTS WOOD 4X6 INCH 12 FT EACH	634.0614 POSTS WOOD 4X6 INCH 14 FT EACH	634.0616 POSTS WOOD 4X6 INCH 16 FT EACH	634.0618 POSTS WOOD 4X6 INCH 18 FT EACH	634.0620 POSTS WOOD 4X6 INCH 20 FT EACH	634.0622 POSTS WOOD 4X6 INCH 22 FT EACH	634.0812 POSTS TUBULAR STEEL 2X2-INCH 12 FT EACH	634.0814 POSTS TUBULAR STEEL 2X2-INCH 14 FT EACH	MOUNTED ON SAME POST AS	MESSAGE
5-02	37+15'S'	R11-54-F	48"X30"	---	10	---	---	---	---	---	---	---	---	---	---	5-01	RAMP CLOSED USE ALT ROUTE
5-03	37+15'S'	R5-1-A	42"X30"	8.75	---	---	---	---	---	---	---	---	---	---	---	5-01	WRONG WAY
5-04	38+19'S'	R3-1	36"X36"	9	---	---	---	---	1	---	---	---	---	---	---		NO RIGHT TURN
5-05	38+19'S'	R5-1	36"X36"	9	---	---	---	---	---	---	---	---	---	---	---	5-04	DO NOT ENTER
5-06	39+27'S'	R5-1	36"X36"	9	---	---	---	---	---	---	---	---	---	1	---		DO NOT ENTER
5-07	39+68'S'	R6-2-L	30"X36"	7.5	---	---	---	---	---	---	---	---	---	---	---	5-09	ONE WAY
5-08	352+12'ZB'	W12-1D	24"X24"	---	---	---	4	---	1	---	---	---	---	---	---		DOUBLE DOWN ARROWS
5-09	39+68'S'	R1-1	36"X36"	7.46	---	---	---	---	---	---	1	---	---	---	---		STOP SIGN
5-10	39+68'S'	R6-3	30"X24"	5	---	---	---	---	---	---	---	---	---	---	---	5-09	DIVIDED HIGHWAY
5-11	39+77'S'	R5-1	36"X36"	9	---	---	---	---	---	1	---	---	---	---	---		DO NOT ENTER
5-12	40+15'S'	R1-1	36"X36"	7.46	---	---	---	---	---	1	---	---	---	---	---		STOP SIGN
5-13	39+83'S'	R4-7	24"X30"	5	---	---	---	---	---	1	---	---	---	---	---		KEEP RIGHT
5-14	39+83'S'	R3-2	36"X36"	9	---	---	---	---	---	---	---	---	---	---	---	5-13	NO LEFT TURN
5-15	40+20'S'	R6-2-R	36"X48"	12	---	---	---	---	---	1	---	---	---	---	---		ONE WAY
5-16	41+54'S'	M1-5-A	24"X24"	4	---	---	---	---	---	1	---	---	---	---	---		CTH S
5-17	41+54'S'	R12-53	24"X30"	5	---	---	---	---	---	---	---	---	---	---	---	5-16	WEIGHT LIMIT CL B
5-18	43+48'S'	R2-1	24"x30"	5	---	---	---	---	1	---	---	---	---	---	---		SPEED LIMIT 45
5-19	42+90'S'	R5-1-A	42"X30"	8.75	---	---	---	---	1	---	---	---	---	---	---		WRONG WAY
5-20	42+90'S'	R5-1-A	42"X30"	8.75	---	---	---	---	1	---	---	---	---	---	---		WRONG WAY
5-21	300+38'SFN'	W5-56	18"X18"	---	---	2.25	---	1	---	---	---	---	---	---	---		END OF ROAD MARKERS
5-22	300+38'SFN'	W5-56	18"X18"	---	---	2.25	---	1	---	---	---	---	---	---	---		END OF ROAD MARKERS
5-23	300+38'SFN'	W5-56	18"X18"	---	---	2.25	---	1	---	---	---	---	---	---	---		END OF ROAD MARKERS
5-24	41+18'S'	J3-2	48"X57"	19	---	---	---	---	---	---	---	2	---	---	---		J ASSY
5-25	41+18'S'	R11-54-F	48"X30"	---	10	---	---	---	---	---	---	---	---	---	---	5-24	RAMP CLOSED USE ALT ROUTE
5-26	40+14'S'	W12-1-D	24"X24"	---	---	---	4	1	---	---	---	---	---	---	---		DOUBLE DOWN ARROWS
5-27	40+04'S'	R1-2	48"X42"	7	---	---	---	---	---	1	---	---	---	---	---		YIELD
5-28	40+00'S'	R5-1	36"X36"	9	---	---	---	---	---	1	---	---	---	---	---		DO NOT ENTER
5-29	39+14'S'	R6-2-L	24"X30"	5	---	---	---	---	---	---	---	---	---	1	---		ONE WAY
5-30	38+20'S'	J2-2	48"X57"	19	---	---	---	---	---	1	---	---	---	---	---		J ASSY
5-31	37+97'S'	R4-7	24"X30"	5	---	---	---	---	1	---	---	---	---	---	---		KEEP RIGHT
5-32	36+55'S'	D1-2	66"X30"	13.75	---	---	---	---	2	---	---	---	---	---	---		BELOIT/ROCKFORD
6-02	48+00'S'	J2-4	96"x57"	38	---	---	---	---	---	---	2	---	---	---	---		J ASSY
6-01	46+00'S'	D1-3	66"x36"	16.5	---	---	---	---	---	2	---	---	---	---	---		BELOIT ROCKFORD MADISON
6-03	50+95'S'	J1-2	48"x39"	13	---	---	---	---	2	---	---	---	---	---	---		JCT 39/90
7-01	51+84'S'	R5-1-A	42"X30"	8.75	---	---	---	---	1	---	---	---	---	---	---		WRONG WAY
7-02	53+89'S'	W6-2	36"X36"	---	---	---	9	---	---	---	---	---	---	---	---	7-03	DIVIDED HIGHWAY ENDS
7-03	53+89'S'	R5-1	36"X36"	9	---	---	---	---	1	---	---	---	---	---	---		DO NOT ENTER
7-04	54+09'S'	R4-7	24"X30"	5	---	---	---	---	1	---	---	---	---	---	---		KEEP RIGHT
7-05	54+40'S'	R6-2-L	36"X48"	12	---	---	---	---	---	1	---	---	---	---	---		ONE WAY
7-06	55+13'S'	R4-7	24"X30"	5	---	---	---	---	1	---	---	---	---	---	---		KEEP RIGHT
7-07	56+00'S'	R5-1	36"X36"	9	---	---	---	---	1	---	---	---	---	---	---		DO NOT ENTER
7-08	56+20'S'	R4-7	24"X30"	5	---	---	---	---	---	1	---	---	---	---	---		KEEP RIGHT
7-09	56+20'S'	W5-54	18"X18"	---	---	---	2.25	---	---	---	---	---	---	---	---	7-08	REFLECTIVE SQUARE
7-10	57+21'S'	R5-1-A	42"X30"	8.75	---	---	---	---	1	---	---	---	---	---	---		WRONG WAY
7-11	55+28'S'	R5-1	36"X36"	9	---	---	---	---	---	1	---	---	---	---	---		DO NOT ENTER
7-12	601+16'SFS'	W14-2	30"X30"	---	---	---	6.25	---	---	1	---	---	---	---	---		NO OUTLET
7-13	313+85'SFN'	W5-56	18"X18"	---	---	2.25	---	---	1	---	---	---	---	---	---		END OF ROAD MARKERS
7-14	313+85'SFN'	W1-6	36"X18"	---	---	---	4.5	---	---	1	---	---	---	---	---		NIGHT ARROW
7-15	313+85'SFN'	W5-56	18"X18"	---	---	2.25	---	---	---	---	---	---	---	---	---	7-14	END OF ROAD MARKERS
7-16	313+85'SFN'	W5-56	18"X18"	---	---	2.25	---	---	1	---	---	---	---	---	---		END OF ROAD MARKERS
7-17	313+32'SFN'	W1-6	36"X18"	---	---	---	4.5	---	1	---	---	---	---	---	---		NIGHT ARROW
7-18	54+08'S'	R6-1-R	36"X12"	3	---	---	---	---	---	---	---	---	---	---	---	7-19	ONE WAY
7-19	54+08'S'	R1-1	30"X30"	5.18	---	---	---	---	---	---	1	---	---	---	---		STOP SIGN
7-20	54+08'S'	R6-3	30"X24"	5	---	---	---	---	---	---	---	---	---	---	---	7-19	DIVIDED HIGHWAY
7-21	311+36'SFN'	R2-1	24"X30"	5	---	---	---	---	1	---	---	---	---	---	---		SPEED LIMIT 25
7-22	309+93'SFN'	W3-1	30"X30"	---	---	---	6.25	---	1	---	---	---	---	---	---		STOP AHEAD
8-01	64+75'S'	W6-3	36"X36"	---	---	---	9	---	1	---	---	---	---	---	---		TWO LANE ROAD
8-02	67+00'S'	W6-1	36"X36"	---	---	---	9	---	1	---	---	---	---	---	---		DIVIDED HIGHWAY AHEAD
9-01	353+00'ZA'	R5-57	36"X36"	9	---	---	---	---	1	---	---	---	---	---	---		PEDESTRIANS PROHIBITED
10-01	332+00'ZBT'	J3-2	48"X57"	19	---	---	---	---	---	---	---	2	---	---	---		J ASSY
10-02	279+20'NB'	J2-1	36"X84"	21	---	---	---	---	---	---	---	---	1	---	---		ALTERNATE I-39
11-01	338+52'ZB'	E5-1-A	72"X60"	30	---	---	---	---	---	---	2	---	---	---	---		EXIT 183
11-02	343+00'ZB'	W3-1	36"X36"	---	---	---	9	---	---	1	---	---	---	---	---		STOP AHEAD
12-01	345+00'ZB'	D4-56-L	36"X36"	9	---	---	---	---	1	---	---	---	---	---	---		CRASH INVESTIGATION

CONTINUED ON NEXT PAGE

PERMANENT SIGNING TYPE II

SIGN NO.	STATION	SIGN CODE	SIGN SIZE IN X IN	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	637.2220 SIGNS TYPE II REFLECTIVE SH	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0612 POSTS WOOD 4X6 INCH 12 FT EACH	634.0614 POSTS WOOD 4X6 INCH 14 FT EACH	634.0616 POSTS WOOD 4X6 INCH 16 FT EACH	634.0618 POSTS WOOD 4X6 INCH 18 FT EACH	634.0620 POSTS WOOD 4X6 INCH 20 FT EACH	634.0622 POSTS WOOD 4X6 INCH 22 FT EACH	634.0812 POSTS TUBULAR STEEL 2X2-INCH 12 FT EACH	634.0814 POSTS TUBULAR STEEL 2X2-INCH 14 FT EACH	MOUNTED ON SAME POST AS	MESSAGE
12-02	346+03'ZB'	J2-1	24"X57"	9.5	---	---	---	---	---	1	---	---	---	---	---		ALTERNATE I-39
12-03	346+55'ZB'	R8-55	42"X36"	10.5	---	---	---	---	---	1	---	---	---	---	---		NO PARKING
12-04	349+00'ZB'	D1-2	66"X30"	13.75	---	---	---	---	2	---	---	---	---	---	---		BELOIT/SHOPIERE
12-05	351+00'ZB'	J3-3	72"X57"	28.5	---	---	---	---	---	---	2	---	---	---	---		J ASSY
12-06	351+00'ZB'	R5-1-A	42"X30"	8.75	---	---	---	---	---	---	---	---	---	---	---	12-05	WRONG WAY
12-07	351+00'ZB'	R5-1-A	42"X30"	8.75	---	---	---	---	1	---	---	---	---	---	---		WRONG WAY
13-01	345+20'ZC'	R5-57	36"X36"	9	---	---	---	---	1	---	---	---	---	---	---		PEDESTRIANS PROHIBITED
14-01	350+00'ZD'	R5-1-A	42"X30"	8.75	---	---	---	---	1	---	---	---	---	---	---		WRONG WAY
14-02	350+02'ZD'	R5-1-A	42"X30"	8.75	---	---	---	---	---	---	---	---	---	---	---	14-03	WRONG WAY
14-03	350+02'ZD'	J3-3	72"X57"	28.5	---	---	---	---	---	---	2	---	---	---	---		J ASSY
14-04	352+46'ZD'	D1-2	66"X30"	13.75	---	---	---	---	2	---	---	---	---	---	---		BELOIT/SHOPIERE
14-05	354+17'ZD'	R8-55	42"X36"	10.5	---	---	---	---	---	1	---	---	---	---	---		NO PARKING
14-06	355+00'ZD'	J2-1	24"X57"	9.5	---	---	---	---	---	1	---	---	---	---	---		ALTERNATE I-39
14-07	355+30'ZD'	D4-56-L	36"X36"	9	---	---	---	---	---	1	---	---	---	---	---		CRASH INVESTIGATION
15-01	357+00'ZD'	W3-1	36"X36"	---	---	---	9	---	---	1	---	---	---	---	---		STOP AHEAD
15-02	360+48'ZDT'	E5-1-A	72"X60"	30	---	---	---	---	---	---	2	---	---	---	---		EXIT 183
15-03		J3-1	36"X84"	21	---	---	---	---	---	---	---	1	---	---	---		ALTERNATE I-39
15-04	413+28'NB'	J2-1	36"X84"	21	---	---	---	---	---	---	---	1	---	---	---		ALTERNATE I-39
16-01	103+04'SBN'	W5-56	18"X18"	---	---	2.25	---	---	1	---	---	---	---	---	---		END OF ROAD MARKERS
16-02	103+04'SBN'	W5-56	18"X18"	---	---	2.25	---	---	1	---	---	---	---	---	---		END OF ROAD MARKERS
16-03	103+04'SBN'	W5-56	18"X18"	---	---	2.25	---	---	1	---	---	---	---	---	---		END OF ROAD MARKERS
17-01	201+25'SBS'	W14-2	30"X30"	---	---	---	6.25	---	---	1	---	---	---	---	---		NO OUTLET
17-02	203+00'SBS'	R2-1	24"X30"	5	---	---	---	---	---	1	---	---	---	---	---		SPEED LIMIT 25
17-03	206+50'SBS'	R2-1	24"X30"	5	---	---	---	---	---	1	---	---	---	---	---		SPEED LIMIT 25
17-04	800+20'SBE'	W5-56	18"X18"	---	---	2.25	---	---	1	---	---	---	---	---	---		END OF ROAD MARKERS
17-05	800+20'SBE'	W1-6	36"X18"	---	---	---	4.5	---	---	1	---	---	---	---	---		NIGHT ARROW
17-06	800+20'SBE'	W5-56	18"X18"	---	---	2.25	---	---	---	---	---	---	---	---	---	17-05	END OF ROAD MARKERS
17-07	800+20'SBE'	W5-56	18"X18"	---	---	2.25	---	---	1	---	---	---	---	---	---		END OF ROAD MARKERS
18-01	208+57'SBS'	W5-56	18"X18"	---	---	2.25	---	---	1	---	---	---	---	---	---		END OF ROAD MARKERS
18-02	208+57'SBS'	W5-56	18"X18"	---	---	2.25	---	---	---	---	---	---	---	---	---	18-04	END OF ROAD MARKERS
18-03	208+57'SBS'	W5-56	18"X18"	---	---	2.25	---	---	1	---	---	---	---	---	---		END OF ROAD MARKERS
18-04	208+57'SBS'	W1-6	36"X18"	---	---	---	4.5	---	---	1	---	---	---	---	---		NIGHT ARROW
18-05	807+96'SBE'	W5-56	18"X18"	---	---	2.25	---	---	1	---	---	---	---	---	---		END OF ROAD MARKERS
18-06	807+96'SBE'	W5-56	18"X18"	---	---	2.25	---	---	1	---	---	---	---	---	---		END OF ROAD MARKERS
18-07	807+96'SBE'	W5-56	18"X18"	---	---	2.25	---	---	1	---	---	---	---	---	---		END OF ROAD MARKERS
TOTAL CATEGORY 1000				1207.11	40	40.5	135.5	3	71	39	21	11	3	3	1		

PERMANENT SIGNING TYPE I

SIGN NO.	SIGN CODE	SIGN SIZE IN X IN	STEEL POST TYPE	637.1220 SIGNS TYPE I REFLECTIVE SH SF	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS LB	636.0100 SIGN SUPPORTS CONCRETE MASONRY CY	636.0500 SIGN SUPPORTS STEEL REINF. LB	REMARKS
CATEGORY 1000								
M8-01	E4-1	---	B	---	1000	1.68	98	MOUNT M8-01 SIGN ON NEW POSTS
10-03	D4-52	156"X126"	B	136.5	997	1.66	98	CRASH INV. SITE EXIT 183 NB
15-05	D4-53	156"X126"	B	136.5	997	1.66	98	CRASH INV. SITE EXIT 183 SB
TOTAL CATEGORY 1000				273.00	2994.00	5.00	294	

PAVEMENT MARKING

STATION	LOCATION	646.0106 PAVEMENT MARKING EPOXY 4-INCH WHITE LF	646.0106 PAVEMENT MARKING EPOXY 4-INCH YELLOW LF	646.0126 PAVEMENT MARKING EPOXY 8-INCH LF	647.0456 PAVEMENT MARKING CURB EPOXY LF	647.0566 PAVEMENT MARKING STOP LINE EPOXY 18-INCH WHITE LF	647.0606 PAVEMENT MARKING ISLAND NOSE EPOXY EACH	647.0726 PAVEMENT MARKING DIAGONAL EPOXY 12-INCH LF	647.0746 PAVEMENT MARKING DIAGONALEPOXY 24-INCH LF	647.0356 PAVEMENT MARKING WORDS EPOXY EACH	647.0166 PAVEMENT MARKING ARROWS EPOXY TYPE 2 EACH	647.0856 PAVEMENT MARKING CORRUGATED MEDIAN EPOXY SF
CATEGORY 1000												
WEST OF PROJECT LIMITS	NB/SB CTH S	525	1800	---	---	---	---	---	---	---	---	---
9+00-18+52'S'	NB/SB CTH S	2545	2204	150	79	64	2	236	---	---	---	---
19+40-30+88'S'	NB/SB CTH S	2964	1836	925	192	---	2	205	---	2	4	---
31+31-39+24'S'	NB/SB CTH S	1566	---	1340	---	---	---	---	---	2	4	700
39+64-54+16'S'	NB/SB CTH S	2635	2545	582	67	41	2	---	---	1	2	---
56+75-63+75	NB/SB CTH S	1747	3169	---	10	---	1	603	---	---	---	---
EAST OF PROJECT LIMITS	NB/SB CTH S	906	616	---	---	---	---	---	---	---	---	---
352+11'ZA'-366+14'ZAT'	RAMP A	2454	1516	565	---	---	---	---	---	---	---	---
331+99.28'ZBT'-352+85'ZB'	RAMP B	3916	2451	600	---	50	---	---	144	---	---	---
337+13'ZCT'-347+58'ZC'	RAMP C	2082	1170	560	---	---	---	---	---	---	---	---
347+60'ZD'-365+00'ZDT'	RAMP D	3092	1662	450	---	25	---	---	107	---	---	---
UNDISTRIBUTED		168	31	28	2	---	---	56	9	---	---	---
TOTAL CATEGORY 1000		24600	19000	5200	350	180	7	1100	260	5	10	700

SAWING PAVEMENT

STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	REMARKS
CATEGORY 1000				
STAGE 1 19+49-19+81'S'	LT	50	---	DRIVEWAY
STAGE 1 SUBTOTOAL		50	---	
STAGE 2 9+00-18+67 'S'	RT & LT	1065	---	MAINLINE
18+67-29+58'S'	RT & LT	---	1093	MAINLINE
19+54-21+22'S'	LT	177	---	DRIVEWAY
19+54-19+80'S'	RT	26	---	DRIVEWAY
22+09-22+46'S'	RT	37	---	DRIVEWAY
24+28-25+04'S'	RT	76	---	DRIVEWAY
25+13-26+29'S'	RT	117	---	DRIVEWAY
51+70-63+75'S'	LT	1234	---	MAINLINE
STAGE 2 SUBTOTOAL		2732	1093	
STAGE 2A 30+63-32+02'S'	LT	140	---	EXISTING RAMP
38+51-39+68'S'	LT	117	---	EXISTING RAMP
337+13-339+94'ZCT'	RT	---	423	RAMP TIE-IN
331+99-343+02'ZB'	LT	---	1190	RAMP TIE-IN
STAGE 2A SUBTOTAL		257	1613	
STAGE 2B 360+04-365+00'ZDT'	RT	---	526	RAMP TIE-IN
362+31-366+14'ZAT'	RT & LT	---	435	RAMP TIE-IN
STAGE 2B SUBTOTAL		---	961	
STAGE 3 9+00'S'	LT	29	---	MAINLINE
18+65-19+02'S'	LT	45	---	MAINLINE
63+75'S'	LT	18	---	MAINLINE
302+85'SFN'	LT	25	---	DRIVEWAY
303+11-303+60'SFN'	LT	54	---	DRIVEWAY
305+89-306+00'SFN'	LT	11	---	DRIVEWAY
306+60-306+69'SFN'	LT	9	---	DRIVEWAY
306+82-306+92'SFN'	LT	10	---	DRIVEWAY
STAGE 3 SUBTOTAL		201	---	
STAGE 3A 40+97-56+83	RT	1572	---	MAINLINE
61+04-END OF PROJECT	RT	372	---	MAINLINE
STAGE 3A SUBTOTAL		1944	---	
UNDISTRIBUTED		466	333	
TOTAL CATEGORY 1000		5600	4000	

TEMPORARY PAVEMENT MARKING

STATION	LOCATION	646.0600 REMOVING PAVEMENT MARKINGS LF	649.0200 REFLECTIVE PAINT 4-INCH WHITE LF	649.0200 REFLECTIVE PAINT 4-INCH YELLOW LF	649.0400 REMOVABLE TAPE 4-INCH YELLOW LF	649.0400 REMOVABLE TAPE 4-INCH WHITE LF	649.0801 REMOVABLE TAPE 8-INCH WHITE LF
CATEGORY 1000							
STAGE 1 W. OF PROJECT LIMITS-32+00'S'	LT	5050	0	0	0	2287	0
RAMP ZB	RAMP ZB	0	0	0	0	200	200
RAMP ZD	RAMP ZD	0	0	0	0	200	200
STAGE 1 SUBTOTAL		5050	0	0	0	2687	400
STAGE 2 W. OF PROJECT LIMITS-32+00'S'	LT	5500	4233	4368	800	1760	0
52+95'S'-E. OF PROJECT LIMITS	LT	6700	2582	2584	810	809	0
RAMP ZB	RAMP ZB	0	904	253	0	200	200
RAMP ZC	RAMP ZC	1250					
RAMP ZD	RAMP ZD	3550	1825	1169	0	200	200
STAGE 2 SUBTOTAL		17000	9544	8374	1610	2969	400
STAGE 2A W. OF PROJECT LIMITS-32+00'S'	LT	0	0	0	0	237	0
STAGE 2A SUBTOTAL		0	0	0	0	237	0
STAGE 2B W. OF PROJECT LIMITS-32+00'S'	RT	275	0	0	5118	5826	0
52+95'S'-E. OF PROJECT LIMITS	RT	0	0	0	7168	5328	0
STAGE 2B SUBTOTAL		275	0	0	12286	11154	0
STAGE 3A W. OF PROJECT LIMITS-32+00'S'	RT	0	0	0	800	1160	0
STAGE 3A SUBTOTAL		0	0	0	800	1160	0
UNDISTRIBUTED		5175	956	876	1404	1703	100
TOTAL CATEGORY 1000		27500	10500	9250	15300	18750	900

ITS MISCELLANEOUS ITEMS

	670.0100 FIELD SYSTEM INTEGRATOR LS	670.0200 ITS DOCUMENTATION LS	678.0500 COMMUNICATION SYSTEM TESTING LS
CATEGORY 1200			
PROJECT 1003-10-71			
IH 39/90 & CTH S	1	1	1
PROJECT TOTAL	1	1	1

ITS PULL BOX & COMMUNICATION VAULT ITEMS

ITEM	STATION	OFFSET	653.0140 PULL BOXES STEEL 24 X 42-INCH EA	673.0105 COMMUNICATION VAULT TYPE 1 EA	SPV.0060.413 FIBER TRACER MARKER POST EA
CATEGORY 1200					
PROJECT 1003-10-71					
PB1	32+28 'S'	59' RT	1	--	--
PB2	31+43 'S'	50' RT	1	--	--
PB3	346+76 'ZC'	80' LT	1	--	--
PB4	345+23 'ZC'	19' LT	1	--	--
PB5	342+80 'ZC'	19' LT'	1	--	--
PB6	340+77 'ZC'	16' LT	1	--	--
PB7	339+52 'ZC'	18' LT	1	--	--
PB8	31+40 'S'	62' LT	1	--	--
PB9	349+63 'ZD'	43' RT	1	--	--
PB10	351+45 'ZD'	31' RT	1	--	--
PB11	351+52 'ZD'	19' LT	1	--	--
PB12	353+50 'ZD'	20' LT	1	--	--
PB13	355+47 'ZD'	23' LT	1	--	--
PB14	357+49 'ZD'	18' LT	1	--	--
PB15	359+52 'ZD'	18' LT	1	--	--
PB16	361+46 'ZD'	19' LT	1	--	--
PB17	33+68 'S'	67' LT	1	--	--
PB18	36+47 'S'	65' LT	1	--	--
PB19	38+94 'S'	68' LT	1	--	--
PB20	352+43 'ZA'	47' RT	1	--	--
CV1	40+59 'S'	88' LT	--	1	1
PROJECT TOTALS			20	1	1

ITS POLES AND BASES

ITEM	STATION	OFFSET	654.0105 CONCRETE BASES TYPE 5 EA	657.0255 TRANSFORMER BASE BREAKAWAY 11 1/2-INCH BOLT CIRCLE EA	657.0322 POLES TYPE 5 ALUMINUM EA	672.0250 BASE CAMERA POLE 50-FT EA	677.0100 INSTALL CAMERA POLE EA	SPV.0060.410 65-FOOT WOOD POLE EA	SPV.0060.411 SALVAGE AND REINSTALL 30-FOOT WOOD POLE EA	SPV.0060.412 SALVAGE AND REINSTALL 65-FOOT WOOD POLE EA
CATEGORY 1200										
PROJECT 1003-10-71										
TEMPORARY ITS										
EXWP2	350+85 'NB'	470' LT	--	--	--	--	--	--	1	--
EXWP3	350+99 'NB'	467' LT	--	--	--	--	--	--	--	1
WP1	349+61 'NB'	295' LT	--	--	--	--	--	1	--	--
PERMANENT										
CP1	32+94 'S'	50' RT	--	--	--	1	1	--	--	--
MD1	339+34'ZC'	30' LT	1	1	1	--	--	--	--	--
MD2	361+77 'ZD'	30' LT	1	1	1	--	--	--	--	--
PROJECT TOTALS			2	2	2	1	1	1	1	1

ITS CONDUIT AND CABLE ITEMS

FROM	TO	LINEAR DISTANCE	WIRE SLACK LF	NUMBER OF CONDUITS	NUMBER OF ELECTRICAL WIRES LIGHTING 10 AWG	NUMBER OF ELECTRICAL WIRES LIGHTING 6 AWG	NUMBER OF ELECTRICAL WIRES LIGHTING 2 AWG	NUMBER OF MICROWAVE DETECTOR CABLES	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EA	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF	655.0625 ELECTRICAL WIRE LIGHTING 6 AWG LF	655.0635 ELECTRICAL WIRE LIGHTING 2 AWG LF	674.0200 CABLE MICROWAVE DETECTOR LF	SPV.0090.401 OVERHEAD SERVICE CONDUCTOR ASSEMBLY 3-WIRE LF
CATEGORY 1200																
PROJECT 1003-10-71																
TEMPORARY ITS																
EXMB1	EXWP2	15	38	1	--	--	3	--	15	--	--	--	--	159	--	--
EXWP2	EXWP3	100	--	--	--	--	--	--	--	--	--	--	--	--	--	90
EXWP3	WP1	200	--	--	--	--	--	--	--	--	--	--	--	--	--	200
WP1	EXPB1	30	82	1	--	--	3	--	30	--	1	--	--	336	--	--
EXPB1	EXCP1	160	10	--	--	--	3	--	--	--	--	--	--	510	--	--
PERMANENT																
SOURCE OF POWER	CP1	75	18	1	1	3	--	--	75	--	--	93	279	--	--	--
CP1	PB1	70	10	2	2	--	--	6	--	140	--	160	--	--	480	--
PB1	PB2	85	17	2	2	--	--	6	--	170	--	204	--	--	612	--
PB2	PB3	155	17	1	1	--	--	3	--	155	--	172	--	--	516	--
PB3	PB4	165	17	1	1	--	--	3	--	165	--	182	--	--	546	--
PB4	PB5	245	17	1	1	--	--	3	--	245	--	262	--	--	786	--
PB5	PB6	205	17	1	1	--	--	3	--	205	--	222	--	--	666	--
PB6	PB7	125	17	1	1	--	--	3	--	125	--	142	--	--	426	--
PB7	MD1	25	32	1	1	--	--	3	--	25	--	57	--	--	171	--
PB2	PB8	115	17	2	1	--	--	3	--	230	--	132	--	--	396	--
PB8	PB9	210	17	1	1	--	--	3	--	210	--	227	--	--	681	--
PB9	PB10	170	17	1	1	--	--	3	--	170	--	187	--	--	561	--
PB10	PB11	55	17	1	1	--	--	3	--	55	--	72	--	--	216	--
PB11	PB12	200	17	1	1	--	--	3	--	200	--	217	--	--	651	--
PB12	PB13	200	17	1	1	--	--	3	--	200	--	217	--	--	651	--
PB13	PB14	205	17	1	1	--	--	3	--	205	--	222	--	--	666	--
PB14	PB15	205	17	1	1	--	--	3	--	205	--	222	--	--	666	--
PB15	PB16	200	17	1	1	--	--	3	--	200	--	217	--	--	651	--
PB16	MD2	35	15	1	1	--	--	3	--	35	--	50	--	--	150	--
PB8	PB17	230	--	2	--	--	--	--	--	460	--	--	--	--	--	--
PB18	PB19	250	--	2	--	--	--	--	--	500	--	--	--	--	--	--
PB19	PB20	130	--	2	--	--	--	--	--	260	--	--	--	--	--	--
PB20	CV1	45	--	2	--	--	--	--	--	90	--	--	--	--	--	--
PROJECT TOTALS									120	4250	1	3257	279	1005	9492	290

ITS ITEMS

ITEM	STATION	OFFSET	656.0500.001 ELECTRICAL SERVICE BREAKER DISCONNECT BOX TEMPORARY ITS LS	656.0500.002 ELECTRICAL SERVICE BREAKER DISCONNECT BOX PERMANENT ITS LS	659.0802 PLAQUES SEQUENCE IDENTIFICATION EA	673.0225.S INSTALL POLE MOUNTED CABINET EA	675.0300 INSTALL MOUNTED CONTROLLER MICROWAVE DETECTOR ASSEMBLY EA	675.0400.S INSTALL ETHERNET SWITCH EA	677.0200 INSTALL CAMERA ASSEMBLY EA	677.0300.S INSTALL VIDEO ENCODER EA	SPV.0060.404 INSTALL WIRELESS MESH RADIO ASSEMBLY EA	SPV.0060.405 SALVAGE VIDEO ENCODER EA	SPV.0060.406 SALVAGE WIRELESS MESH NODE ITS EQUIPMENT EA	SPV.0060.407 SALVAGE TEMPORARY ITS EQUIPMENT EA
CATEGORY 1200														
PROJECT 1003-10-71														
TEMPORARY ITS														
EXCP1	350+43 'NB'	135' LT	1	--	--	1	--	1	--	1	1	--	--	1
EXFC1	349+51 'NB'	179' LT	--	--	--	--	--	--	--	--	--	1	--	--
EXWP3	350+98 'NB'	466' LT	--	--	--	--	--	--	--	--	--	--	1	--
PERMANENT														
CP1	32+94 'S'	50' RT	--	1	2	1	--	2	1	1	1	--	--	--
MD1	339+34 'ZC'	30' LT	--	--	1	--	3	--	--	--	--	--	--	--
MD2	361+77 'ZD'	30' LT	--	--	1	--	3	--	--	--	--	--	--	--
PROJECT TOTALS			1	1	4	2	6	3	1	2	2	1	1	1

ITS REMOVAL ITEMS

ITEM	STATION	OFFSET	204.0195 REMOVE CONCRETE BASES EA	653.0905 REMOVE PULL BOXES EA	677.9051.S REMOVING 50-FOOT CAMERA POLE EA	SPV.0060.401 REMOVE ITS FIELD CABINET EA	SPV.0060.402 REMOVE ELECTRICAL SERVICE BREAKER DISCONNECT BOX EA	SPV.0060.403 REMOVE ELECTRICAL SERVICE METER BREAKER PEDESTAL EA	SPV.0060.408 REMOVE TYPE 5 POLE EA	SPV.0060.409 REMOVE WOOD POLE EA
CATEGORY 1200										
PROJECT 1003-10-71										
EXISTING										
EXCP1	350+43 'NB'	135' LT	1	--	1	--	--	--	--	--
EXFC1	349+51 'NB'	179' LT	1	--	--	1	--	--	--	--
EXMD1	348+51 'NB'	109' LT	1	--	--	--	--	--	1	--
EXPB1	349+51 'NB'	267' LT	--	1	--	--	--	--	--	--
EXPB2	349+64 'NB'	168' LT	--	1	--	--	--	--	--	--
EXPB3	348+64 'NB'	95' LT	--	1	--	--	--	--	--	--
EXMB1	348+86 'NB'	432' LT	--	--	--	--	--	1	--	--
EXMB2	349+41 'NB'	192' LT	--	--	--	--	--	1	--	--
EXWP1	348+99 'NB'	434' LT	--	--	--	--	--	--	--	1
TEMPORARY ITS										
EXWP2 (TEMPORARY ITS)	348+32 'NB'	549' LT	--	--	--	--	--	--	--	1
EXWP3 (TEMPORARY ITS)	348+94 'NB'	484' LT	--	--	--	--	--	--	--	1
WP1 (TEMPORARY ITS)	349+62 'NB'	296' LT	--	--	--	--	--	--	--	1
EXCP1	350+43 'NB'	135' LT	--	--	--	--	1	--	--	--
PROJECT TOTALS			3	3	1	1	1	2	1	4

ITS CABLE REMOVALS

ITEM	674.0300 REMOVE CABLE LF
CATEGORY 1200	
PROJECT 1003-10-71	
EXISTING	
EXMB1 - EXWP1	15
EXWP2 - EXWP3	20
EXCP1 - EXPB1	165
EXPB1 - EXPB2	105
EXPB2 - EXFC1	15
EXPB2 - EXPB3	125
EXPB3 - EXMD1	20
TEMPORARY ITS	
EXMB1 - EXWP2	15
WP1 - EXPB1	30
EXPB1 - EXCP1	160
PROJECT TOTALS	670

3

LIGHTING CONDUIT, CABLE, AND ELECTRICAL WIRE

LOC.	TO LOC.	* 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.	* 655.0615 ELECTRICAL WIRE LIGHTING 10 AWG L.F.
CB1	ALLIANT ENERGY		255		
CB1	LPB1		146	92	588
LPB1	LPB2		74		576
LPB2	G-53-20	11			270
LPB2	G-53-21	10		29	96
LPB1	LPB3		95		387
LPB3	LPB4		294		984
LPB4	L-0001	302		312	972
L-0001	L-0002	130			420
CB1	LPB5		176	107	678
LPB5	LPB6				2010
LPB6	LPB7	554			1866
LPB7	LPB8		142		528
LPB8	LPB9		102		408
LPB9	G-53-18	12		33	204
LPB9	LPB10		39		219
LPB10	G-53-19	18		37	120
LPB7	LPB11	252			858
LPB11	L-0003	257		259	837
L-0003	L-0004	130			420
LPB3	CB1			192	
LPB6	CB1			364	
LPB7	G-53-18			314	
LPB8	G-53-18			173	
L-0001	LUMINAIRE			153	
L-0002	LUMINAIRE			153	
L-0003	LUMINAIRE			153	
L-0004	LUMINAIRE			153	
	TOTAL	1676	1323	2524	12441

CONCRETE BASES

BASE NO.	** LOCATION	* 654.0105 CONCRETE BASE TYPE 5 EACH	654.0106 CONCRETE BASE TYPE 6 EACH	654.0230 CONCRETE CONTROL CABINET BASE TYPE L30 EACH
CB1	32+18 'S', 42' RT			1
L-0001	353+53 'ZD', 49' LT		1	
L-0002	354+83 'ZD', 49' LT		1	
L-0003	347+22 'ZD', 49' RT		1	
L-0004	345+90 'ZD', 49' RT		1	
G-53-18	40+34 'S', 82' LT	1		
G-53-19	39+78 'S', 60' LT	1		
G-53-20	30+61 'S', 33' RT	1		
G-53-21	30+82 'S', 34' RT	1		
	TOTAL	4	4	1

PULL BOXES

PULL BOX NO.	LOCATION	* 653.0140 PULL BOXES STEEL 24"x42" EACH
LPB1	31+48 'S', 35' RT.	1
LPB2	30+72 'S', 32' RT.	1
LPB3	31+31 'S', 59' LT.	1
LPB4	350+47 'ZD', 25' RT.	1
LPB5	33+06 'S', 37' RT.	1
LPB6	36+07 'S', 39' RT.	1
LPB7	38+84 'S', 49' RT.	1
LPB8	39+22 'S', 88' RT	1
LPB9	40+22 'S', 86' LT	1
LPB10	39+95 'S', 58' LT	1
LPB11	349+94 'ZB', 43' LT.	1
	TOTAL	11

LEGEND

* ADDITIONAL ITEMS FOR QUANTITIES LISTED IN ITS MISCELLANEOUS QUANTITIES SHEETS

** FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

ALL ITEMS ON THIS SHEET ARE CATEGORY 1100

LIGHTING NO. L53-0903
IH 39/90 & CTH S

PAGE 1 OF 2

LIGHTING & GATE EQUIPMENT

BASE NO.	* 657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0327 POLES TYPE 6- ALUMINUM EACH	657.0710 LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 12-FT EACH	659.1125 LUMINAIRES UTILITY LED-C EACH	662.1028.S RAMP CLOSURE GATES HARDWIRED 28-FT EACH	662.1032.S RAMP CLOSURE GATES HARDWIRED 32-FT EACH	662.1037.S RAMP CLOSURE GATES HARDWIRED 37-FT EACH	662.3028.S RAMP CLOSURE GATE ARMS STOCKPILE 28-FT EACH	662.3032.S RAMP CLOSURE GATE ARMS STOCKPILE 32-FT EACH	662.3037.S RAMP CLOSURE GATE ARMS STOCKPILE 37-FT EACH	662.4000.S RAMP CLOSURE GATE FLASHERS STOCKPILE EACH
L-001	1	1	1	1							
L-002	1	1	1	1							
L-003	1	1	1	1							
L-004	1	1	1	1							
G-53-18	1				1			1			1
G-53-19	1						1			1	1
G-53-20	1					1			1		1
G-53-21	1					1					1
TOTAL	8	4	4	4	1	2	1	1	1	1	4

ELECTRICAL SERVICE METER BREAKER PEDESTAL

CONTROL CABINET NO.	** LOCATION	656.0200.0001 ELECTRICAL SERVICE METER BREAKER PEDESTAL L.S.
CB1	IH 39/90 & CTH S	1
	TOTAL	1

LIGHTING CONTROL CABINET

CONTROL CABINET NO.	** LOCATION	SPV.0060.350 LIGHTING & RAMP CONTROL CABINET 120/240 30-INCH EACH
CB1	32+18 'S', 42' RT.	1
	TOTAL	1

LEGEND

* ADDITIONAL ITEMS FOR QUANTITIES LISTED IN ITS MISCELLANEOUS QUANTITIES SHEETS

** FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

ALL ITEMS ON THIS SHEET ARE CATEGORY 1100

LIGHTING NO. L53-0903
IH 39/90 & CTH S

PAGE 2 OF 2

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BATCH PRINT SHEET 7 OF 7
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PLOT DATE: 12/16/2014
PLOT TIME: 10:41:58 AM
PLOT SCALE: 1:40
WISDOT/CADDS SHEET 42

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TRANSPORTATION PROJECT PLAT TITLE SHEET



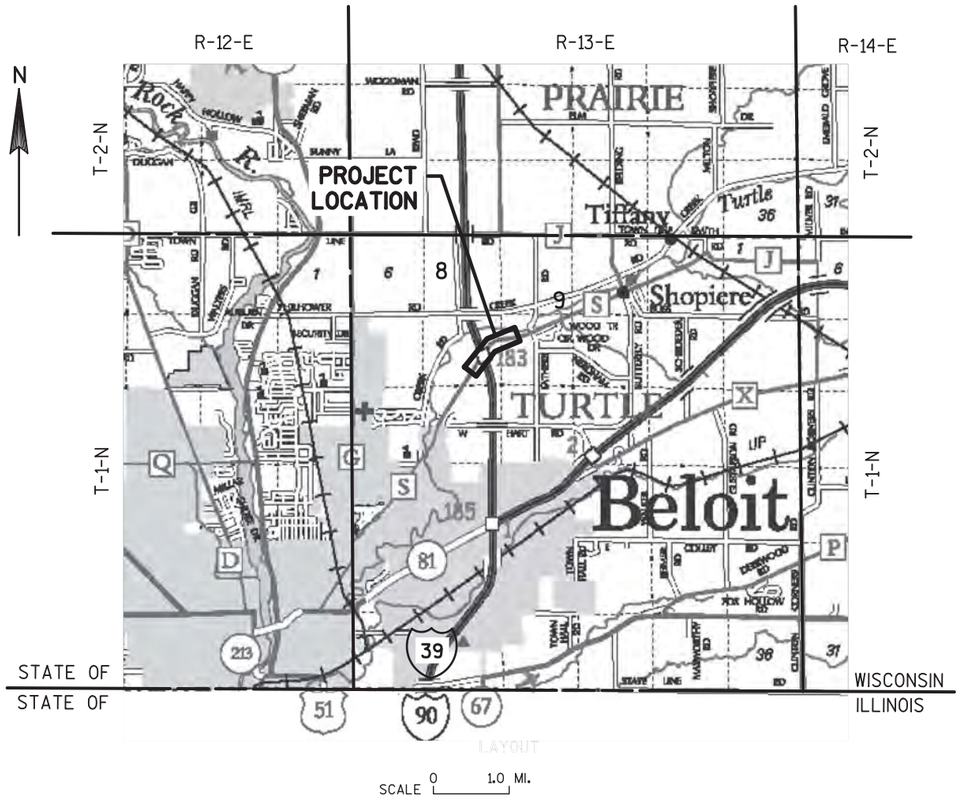
PROJECT NO. 1003-10-23

ILLINOIS STATE LINE - MADISON

SHOPIERE ROAD, CTH S INTERCHANGE

IH 39

ROCK COUNTY



THE NOTES, CONVENTIONAL SYMBOLS AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 1003-10-23.

NOTES:

DISTANCES FROM THE RIGHT OF WAY LINE TO BUILDINGS ARE APPROXIMATE ONLY.

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

POSITIONS ON THIS PLAT ARE WISCONSIN COUNTY COORDINATE SYSTEM, ROCK COUNTY ZONE, NAD83 (2007) IN US SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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.

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

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, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

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 THE CENTERLINE OF EXISTING PAVEMENTS.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4"X24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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(2)171, EXISTING HIGHWAY RIGHT-OF-WAY FOR CTH S (SHOPIERE ROAD) ESTABLISHED FROM PREVIOUS PROJECTS 5989-02-85, S 0451(6) AND CSM 766180, CSM 778995, AND CSM 916614, I-90-3(2)171, PLAT OF SURVEY BY RH BATTERMAN ON 1/16/1991, PLAT OF SURVEY BY RH BATTERMAN ON 11/11/1954 AND PLAT OF SURVEY BY CLAYTON SHIMEALL ON 8/1/1963.

EXISTING ACCESS CONTROL ALONG ROUTE FOR I-39/90 ESTABLISHED FROM PREVIOUS PROJECT I-90-3(2)171 AND QUIT CLAIM DEED DOCUMENT NO. 616818.

TEMPORARY LIMITED EASEMENT (TLE)

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) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

EASEMENT FOR HIGHWAY PURPOSES (HE)

AN EASEMENT FOR HIGHWAY PURPOSES (HE), 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.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION OFFICE IN MADISON.

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RIGHT	RT
CENTERLINE	C/L	RIGHT OF WAY	R/W
CERTIFIED SURVEY MAP	CSM	SECTION	SEC
CONCRETE	CONC	SEPTIC VENT	SEPV
COUNTY	CO	SQUARE FEET	SF
COUNTY TRUNK HIGHWAY	CTH	STATE TRUNK HIGHWAY	STH
DISTANCE	DIST	STATION	STA
CORNER	COR	SUBDIVISION	SUBD
DOCUMENT NUMBER	DOC	TANGENT	TAN
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
GAS VALVE	GV	TRANSPORTATION PROJECT PLAT	TPP
GRID NORTH	GN	UNITED STATES HIGHWAY	USH
HIGHWAY EASEMENT	HE	VOLUME	V
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CURVE DATA

LONG CHORD	LC
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	Δ
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC) — W (TYPE)
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
NATIONAL GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
TLE BOUNDARY POINT 135

SECTION CORNER
NOTATION FOR COMBUSTABLE FLUIDS — CAUTION
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES — CAUTION
R/W MONUMENT
NON-MONUMENTED R/W POINT
FOUND IRON PIN IP
VALVE (GAS, WATER, ETC.) (TYPE)
SIGN SIGN
OFF-PREMISE SIGN I-25 SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	●	○
TELEPHONE POLE	◪	⌀
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)	✱	✳

ACCESS CONTROLLED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)

BRIDGE
PARCEL NUMBER 25
UTILITY NUMBER 40

CONVENTIONAL UTILITY SYMBOLS

WATER —W—
GAS —G—
TELEPHONE —T—
OVERHEAD TRANSMISSION LINES —OH—
ELECTRIC —E—
CABLE TELEVISION —TV—
FIBER OPTIC —FO—
SANITARY SEWER —SAN—
STORM SEWER —SS—

PROJECT NUMBER 1003-10-23 - 4.01

SHEET 2 OF 2

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\TPP\31201_TPP TITLE.DWG PLOT DATE : 8/12/2013 2:55 PM PLOT BY : CARYN MELLOM PLOT NAME : ----------

1003-10-23 4.01

TRANSPORTATION PROJECT PLAT NO: 1003-10-23 - 4.01

THAT PART OF LOT 1 OF C.S.M. 916614 LOCATED IN THE SW 1/4 OF THE SE 1/4 AND NW 1/4 OF THE SE 1/4 OF SECTION 8. ALSO THAT PART OF LOT 1 OF C.S.M. 778995 LOCATED IN THE SW 1/4 OF THE SE 1/4 OF SECTION 8. ALSO THAT PART OF THE NW 1/4 OF THE SE 1/4 AND SW 1/4 OF THE SE 1/4 OF SECTION 8, ALL IN T. 1 N., R. 13 E., TOWN OF TURTLE, ROCK COUNTY, WISCONSIN.

RELOCATION ORDER FOR ILLINOIS STATE LINE TO MADISON, SHOPIERE ROAD, CTH S INTERCHANGE.

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 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 (1) OR (2), WISCONSIN STATUTES.

POSITIONS ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, ROCK COUNTY ZONE, NAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES. GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREON IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR I-39/90 ESTABLISHED FROM PREVIOUS PROJECT I-90-3(21)171 AND EXISTING HIGHWAY RIGHT-OF-WAY FOR CTH S (SHOPIERE ROAD) ESTABLISHED FROM PREVIOUS PROJECTS 5989-02-85, I-90-3(21)171, CSM 778995, AND CSM 916614. EXISTING ACCESS CONTROL FOR I-39/90 ESTABLISHED FROM PREVIOUS PROJECT I-90-3(21)171.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION OFFICE IN MADISON.

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN ROCK COUNTY, WISCONSIN AT 10:29 AM ON 30th JUNE 2014 AS DOCUMENT # 2006235 AND FILED IN TPP-122 & 123

Randal Loyes
SIGNATURE OF REGISTER OF DEEDS

THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE COUNTY REGISTER OF DEEDS

263

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1003-10-23 - 4.01
SHEET 1 OF 2
AMENDMENT NO:

1003-10-23 4.01

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	ACRES REQUIRED R/W NEW	R/W EXISTING	R/W TOTAL	TLE ACRES
1	TURTLE CREEK DEVELOPMENT	FEE & TLE	2.606	---	2.606	0.075
2	FERDINAND L & BARBARA J KLOBUCAR REV TRUST	FEE, AR, TLE	0.086	---	0.086	0.575
3	L&C AUTOMOTIVE, INC.	FEE, AR, TLE	0.031	---	0.031	0.862
4	LOIS E. COBURN RORABECK TRUST	FEE, AR, TLE	3.171	---	3.171	0.606
6	GARY W & MICHELLE HAHN J FAMILY TRUST	FEE	0.054	---	0.054	---
7	JEFTAR, LLC	FEE, AR, TLE	0.128	---	0.128	0.336

Course	Bearing	Distance
100 - 101	N 30°58'05" E	829.08'
101 - 102	N 56°16'41" W	230.88'
102 - 103	N 33°43'19" E	125.00'
103 - 104	S 56°16'41" E (N 56°16'00" W)	233.94'
104 - 127	N 63°38'05" E	28.83'
127 - 105	N 32°17'52" E	426.77'
105 - 106	N 34°02'13" E	305.20'
106 - 107	N 31°41'44" E	244.46'
107 - 108	N 19°10'12" W	357.56'
108 - 109	N 04°12'29" E	446.01'
110 - 111	S 50°28'39" W	3.89'
111 - 112	S 50°28'39" W	337.45'
112 - 113	S 37°57'42" W	183.44'
113 - 114	S 36°00'28" W	148.75'
114 - 115	S 32°18'08 W	300.05'
115 - 116	S 56°16'41" E	75.29'
116 - 117	S 89°48'13" E (S 89°49'30" E)	556.04'
117 - 118	N 00°10'06" E (S 00°11'30" W)	664.99'
118 - 119	S 89°49'54" E	2.71'
119 - 120	S 00°18'27" W	829.99'
120 - 121	N 89°48'13" W	0.70'
121 - 122	N 00°10'46" E	25.00'
122 - 123	N 89°48'13" W	567.02'
123 - 124	N 68°23'19" W	113.72'
124 - 125	S 34°43'06" W	601.74'
125 - 126	S 37°34'55" W	300.67'

R/W Station & Offset		
Point	Station	Offset
100	10+00.00 'S'	65.00'
101	18+29.84 'S'	100.00'
102	103+30.00 'SBN'	55.00'
103	103+30.00 'SBN'	70.00'
104	19+54.32 'S'	95.00'
105	24+00.00 'S'	100.00'
106	27+00.00 'S'	120.00'
107	29+37.43 'S'	155.00'
108	351+00.00 'ZD'	95.00'
109	355+24.81 'ZD'	81.79'
110	29+24.49 'S'	127.50'
111	29+20.59 'S'	126.84'
112	25+85.00 'S'	62.00'
113	24+00.00 'S'	60.00'
114	22+50.00 'S'	60.00'
115	19+47.37 'S'	70.00'
116	201+51.06 'SBS'	63.97'
117	207+41.19 'SBS'	85.00'
118	808+30.02 'SBE'	55.00'
119	808+30.02 'SBE'	52.29'
120	800+00.03 'SBE'	54.30'
121	800+00.03 'SBE'	55.00'
122	207+41.26 'SBS'	55.00'
123	201+94.22 'SBS'	70.00'
124	18+00.00 'S'	100.00'
125	12+00.00 'S'	85.00'
126	9+00.00 'S'	65.00'
127	19+78.88 'S'	80.38'

TLE Station & Offset		
Point	Station	Offset
129	102+85.00 'SBN'	70.00'
130	102+85.00 'SBN'	139.31'
131	20+23.48 'S'	86.28'
132	21+51.81 'S'	90.42'
133	21+51.88 'S'	85.42'
134	24+71.61 'S'	103.62'
135	24+62.23 'S'	267.22'
136	25+10.34 'S'	270.29'
137	25+18.74 'S'	246.85'
138	26+15.41 'S'	244.04'
139	26+17.82 'S'	219.16'
140	25+71.52 'S'	200.41'
141	25+43.81 'S'	159.25'
142	25+60.00 'S'	109.08'
147	808+30.02 'SBE'	75.00'
148	804+75.72 'SBE'	75.00'
149	22+75.78 'S'	70.22'
150	25+84.59 'S'	67.03'
151	26+81.97 'S'	87.55'
152	26+82.99 'S'	82.65'
153	804+05.71 'SBE'	55.00'
154	22+53.39 'S'	160.18'
155	22+15.46 'S'	160.19'
156	21+56.19 'S'	76.02'
157	20+02.85 'S'	83.20'
158	201+47.79 'SBS'	119.45'
159	206+00.00 'SBS'	135.00'
160	206+00.00 'SBS'	85.00'
161	205+00.00 'SBS'	55.00'
162	205+00.00 'SBS'	65.00'
163	201+96.52 'SBS'	79.55'

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S):	INTEREST REQUIRED
205	AT&T WISCONSIN (WISCONSIN BELL, INC)	RELEASE OF RIGHTS

Batterman

I, JEFFREY R. GARDE, 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1003-10-23 - 4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND

Jeffrey R. Garde DATE 06/13/14

(PRINTED NAME) JEFFREY R. GARDE

(REGISTRATION NUMBER) S-2766

WISCONSIN JEFFREY R. GARDE S-2766 BRODHEAD WIS. LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER IS APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION OFFICE

(SIGNATURE) David R. Miller DATE 6/13/2014

(PRINTED NAME) DAVID R. MILLER

PI STA. = 350+76.90'ZD'
Y = 224378.900
X = 505147.799
DELTA = 33°33'05"RT
D = 1°48'49"
TAN = 146.21'
L = 284.01'
R = 485.00'

PI STA. = 24+75.66'S'
Y = 223609.761
X = 504996.184
DELTA = 8°48'20"RT
D = 0°47'37"
TAN = 555.90'
L = 1109.62'
R = 7220.00'
DA = N41° 35' 51"E

PI STA. = 202+00.09'SBS'
Y = 223000.655
X = 504841.751
DELTA = 33°31'32"LT
D = 22°55'06"
TAN = 75.30'
L = 146.28'
R = 250.00'

STA. EQUATION:
30+09.13'S'=
346+55.62'ZD'

STA. EQUATION:
18+83.23'S'=
100+00.00'SBN'=
200+00.00'SBS'

STA. EQUATION:
207+96.24'SBS'=
800+80.00'SBE'

PT: 352+14.70'ZD'
PI: 350+76.90'ZD'
PC: 349+30.69'ZD'
PT: 30+29.38'S'
PC: 19+19.76'S'
PT: 15+06.33'S'
PC: 201+24.79'SBS'
PI: 202+00.09'SBS'
PT: 202+71.07'SBS'

FOUND POLY-ALUM. MONUMENT
Y = 224871.570
X = 501411.881

FOUND ALUMINUM MONUMENT
Y = 224826.902
X = 506721.940

FOUND ALUMINUM MONUMENT
Y = 222176.071
X = 504063.277

FOUND 1" IRON PIPE
Y = 222165.964
X = 506704.051

S89°30'56"E 3691.01' 1/4 CORNER TO R/W
S89°30'56"E 295.25' R/W TO 1/16 LINE
N89°30'56"W 1324.01' 1/4 CORNER TO 1/16 LINE
82.00' R/W TO R/L
213.25' R/L TO 1/16 LINE
1/4 LINE
1/16 LINE
STA. 355+30.67'ZD'
355.97'
AUX R/L 'A'
R/L=N04°35'04"E
139/90
GN
SCALE, FEET
0 100 200
S0°18'27"W 780.17' 1/4 LINE TO R/L
N28°58'01"W 427.85'
S00°18'27"W 194.35' R/L TO R/W
S00°18'27"W 114.53' R/W TO R/W
805'SBE'
R/L=N0°10'06"E
802'SBE'
S0°18'27"W 747.78' SEC. LINE TO R/W
N33°46'04"E 100.00' ALONG R/L
N56°13'56"W 65.00' R/L TO R/W
N33°46'04"E 94.95' ALONG R/W
S89°46'51"E 72.17' SEC. CORNER TO R/W LINE
N89°46'51"W 1248.23' 1/16 LINE TO R/W
N89°46'51"W 1320.40' SEC. CORNER TO 1/16 LINE
SECTION LINE
R/L=S56°16'41"E
R/L=N32°47'13"E
R/L=S89°48'13"E
R/L=N33°46'04"E
TOWN
TURTLE
NW-SE
SW-SE
OF
TERRAPIN TRAIL
TORTOISE LANE
(SHOPIERE ROAD) CTH S
EXISTING CTH S R/L
LOT 1 C.S.M. 916614 VOL 9, PAGE 111-112
LOT 1 C.S.M. 778995 VOLUME 2 PAGE 196
AT&T WISCONSIN (WISCONSIN BELL, INC.) PARCEL 7 NO RECORD OF EASEMENT
AT&T WISCONSIN (WISCONSIN BELL, INC) PARCEL 1 NO RECORD OF EASEMENT 205'SBS'
TLE-SLOPES 0.072 ACRES
TLE - DRIVEWAY & SLOPES 0.371 ACRES
TLE-DRIVEWAY/SLOPES 0.163 ACRES
TLE-DRIVEWAY 0.862 ACRES
TLE - DRIVEWAY 0.336 ACRES
TLE-DRIVEWAY 0.575 ACRES
TLE-SLOPES 0.075 ACRES
LOCATION MAP
CREEK ROAD
HART ROAD
CTH S
SHEET LOCATION
T. 1 N. R. 13 E.
NOT TO SCALE

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\TPP\31201_TPP.DWG
APPRAISAL PLAT DATE :
PLOT DATE : 7/14/2014 2:49 PM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1'=200'

TRANSPORTATION PROJECT PLAT NO: 1003-10-23 - 4.02

THAT PART OF THE NE 1/4 OF THE SE 1/4. ALSO THAT PART OF THE SE 1/4 OF THE SE 1/4, ALL IN SECTION 8, T. 1 N., R. 13 E., TOWN OF TURTLE, ROCK COUNTY, WISCONSIN.

RELOCATION ORDER FOR ILLINOIS STATE LINE TO MADISON, SHOPIERE ROAD, CTH S INTERCHANGE.

SCALE, FEET 0 100 200 GN

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 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 (1) OR (2), WISCONSIN STATUTES.

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN ROCK COUNTY, WISCONSIN AT 11:12 AM ON 8th JULY 2014 AS DOCUMENT # 2006791 AND FILED IN TPP-124

Randal Loyes
SIGNATURE OF REGISTER OF DEEDS

THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE COUNTY REGISTER OF DEEDS

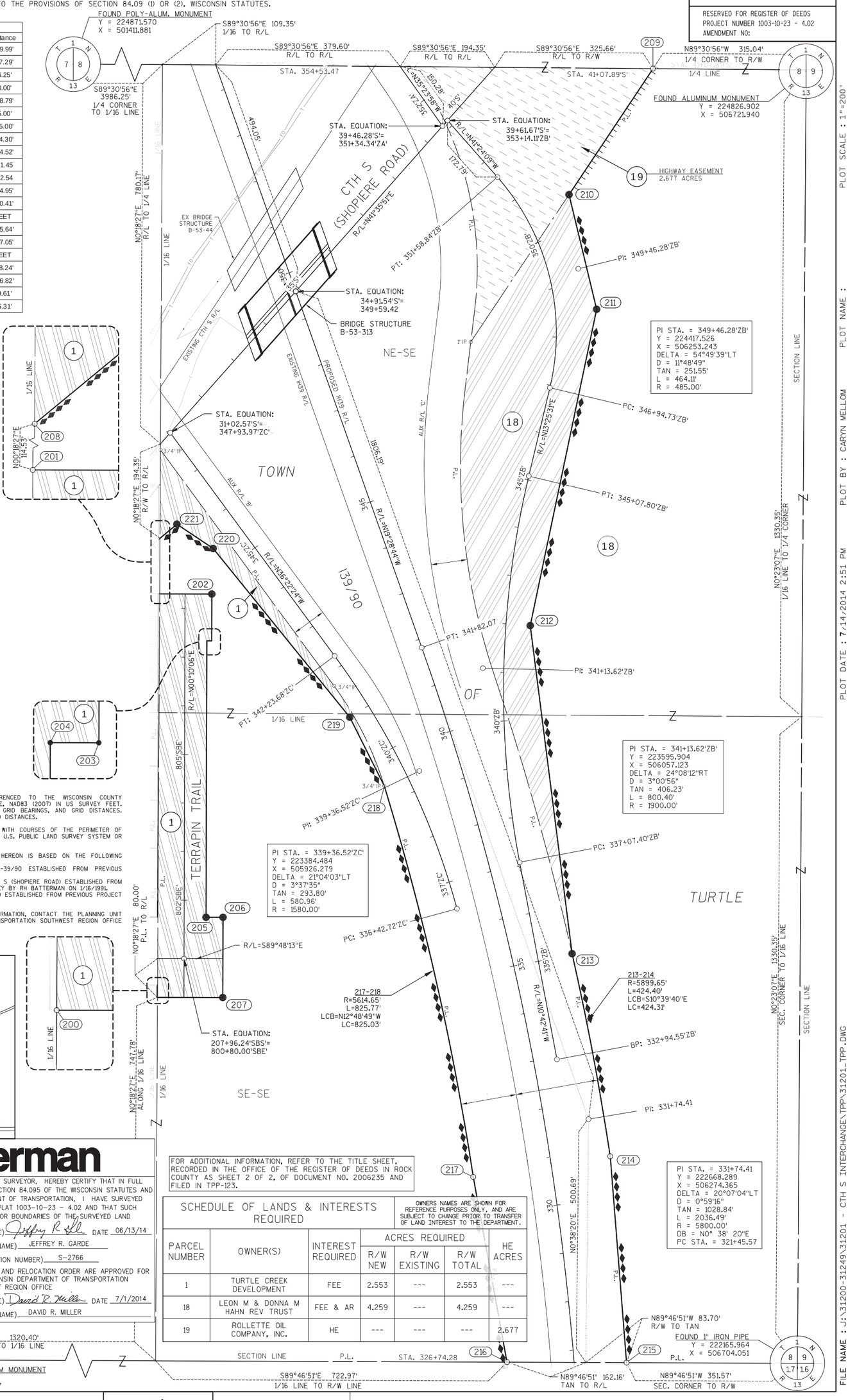
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1003-10-23 - 4.02
AMENDMENT NO:

264

1003-10-23 4.02

R/W Course Table		
Course	Bearing	Distance
200 - 201	N 00°18'27" E	829.99'
201 - 202	S 89°49'54" E	107.29'
202 - 203	S 00°10'06" W	96.25'
203 - 204	N 89°49'54" W	10.00'
204 - 205	S 00°10'06" W	568.79'
205 - 206	S 89°48'57" E	35.00'
206 - 207	S 00°10'06" W	165.00'
207 - 200	N 89°48'13" W	134.30'
200 - 208	N 00°18'27" E	944.52'
209 - 210	S 33°41'10" W	311.45
210 - 211	S 13°33'02" E	242.54
211 - 212	S 11°51'29" W	664.95'
212 - 213	S 07°16'22" E	680.41'
213 - 214	SEE CURVE ON SHEET	
214 - 215	S 04°30'48" E	425.64'
216 - 217	N 10°20'05" W	387.05'
217 - 218	SEE CURVE ON SHEET	
218 - 219	N 26°39'36" W	158.24'
219 - 220	N 38°58'38" W	446.82'
220 - 221	N 56°11'49" W	89.61'
221 - 208	S 50°28'39" W	45.31'

R/W Station & Offset		
Point	Station	Offset
200	800+00.03 'SBE'	54.30'
201	808+30.02 'SBE'	52.29'
202	808+30.02 'SBE'	55.00'
203	807+33.77 'SBE'	55.00'
204	807+33.77 'SBE'	45.00'
205	801+64.98 'SBE'	45.00'
206	801+64.97 'SBE'	80.00'
207	799+99.96 'SBE'	80.00'
208	346+31.81 'ZC'	145.63'
209	351+34.21 'ZB'	388.69'
210	350+54.84 'ZB'	100.00'
211	348+50.00 'ZB'	85.00'
212	342+00.00 'ZB'	50.00'
213	335+02.49 'ZB'	71.02'
214	330+82.61	122.60'
215	326+65.42	107.41'
216	326+86.11	137.58'
217	330+82.70	162.40'
218	339+36.84 'ZC'	51.28'
219	341+00.00 'ZC'	45.00'
220	345+50.00 'ZC'	70.00'
221	346+34.30 'ZC'	100.39'



POSITIONS ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, ROCK COUNTY ZONE, NAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREON IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR I-39/90 ESTABLISHED FROM PREVIOUS PROJECT I-90-3(21)171 AND
EXISTING HIGHWAY RIGHT-OF-WAY FOR CTH S (SHOPIERE ROAD) ESTABLISHED FROM PROJECT I-90-3(21)171 AND PLAT OF SURVEY BY RH BATTERMAN ON 1/16/1991.
EXISTING ACCESS CONTROL ALONG I-39/90 ESTABLISHED FROM PREVIOUS PROJECT I-90-3(21)171.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION OFFICE IN MADISON.

FOR ADDITIONAL INFORMATION, REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN ROCK COUNTY AS SHEET 2 OF 2, OF DOCUMENT NO. 2006235 AND FILED IN TPP-123.

Batterman

I, JEFFREY R. GARDE, 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1003-10-23 - 4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND

(SIGNATURE) Jeffrey R. Garde DATE 06/13/14
(PRINTED NAME) JEFFREY R. GARDE
(REGISTRATION NUMBER) S-2766

WISCONSIN JEFFREY R. GARDE S-2766 BRODHEAD WIS. LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION OFFICE

(SIGNATURE) David R. Miller DATE 7/1/2014
(PRINTED NAME) DAVID R. MILLER

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	ACRES REQUIRED R/W NEW	R/W EXISTING	R/W TOTAL	HE ACRES
1	TURTLE CREEK DEVELOPMENT	FEE	2.553	---	2.553	---
18	LEON M & DONNA M HAHN REV TRUST	FEE & AR	4.259	---	4.259	---
19	ROLLETTE OIL COMPANY, INC.	HE	---	---	---	2.677

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\TPP\31201_TPP.DWG
APPRAISAL PLAT DATE : ----------
PLOT DATE : 7/14/2014 2:51 PM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1"=200'

TRANSPORTATION PROJECT PLAT NO: 1003-10-23 - 4.03

THAT PART OF LOT 1 OF CSM 766180 LOCATED IN THE SE 1/4 OF THE NE 1/4. ALSO THAT PART OF THE SE 1/4 OF THE NE 1/4 AND SW 1/4 OF THE NE 1/4. ALL LOCATED IN SECTION 8, T. 1 N., R. 13 E., TOWN OF TURTLE, ROCK COUNTY, WISCONSIN.

RELOCATION ORDER FOR ILLINOIS STATE LINE TO MADISON, SHOPIERE ROAD, CTH S INTERCHANGE.

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 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 (1) OR (2), WISCONSIN STATUTES.

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN ROCK COUNTY, WISCONSIN AT 11:42 AM ON 11th JULY 2014 AS DOCUMENT # 2007095 AND FILED IN TPP-126

Randal Leyes
SIGNATURE OF REGISTER OF DEEDS

THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE COUNTY REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1003-10-23 - 4.03
AMENDMENT NO:___

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	ACRES REQUIRED			TLE ACRES	HE ACRES
			R/W NEW	R/W EXISTING	R/W TOTAL		
4	LOIS E. COBURN RORABECK TRUST	FEE	0.268	---	0.268	---	---
8	COUNTY OF ROCK	FEE & TLE	0.048	---	0.048	0.069	---
9	CHARLES K. DEFOOR TRUST	FEE	0.338	---	0.338	---	---
11	EL VENADO HOLDINGS, LLC	FEE	0.249	0.165	0.414	---	---
13	BARBARA CHRISTENSEN & MARK SEYMOUR	FEE	0.005	0.070	0.075	---	---
14	WILBUR BRISCOE	FEE & TLE	0.018	0.076	0.094	0.012	---
16	CHRIS A & LAURIE A EHLE	FEE & TLE	0.031	0.076	0.107	0.012	---
17	UNKNOWN	FEE	0.002	---	0.002	---	---
18	LEON E. & DONNA M. HAHN REV TRUST	FEE & AR	2.045	---	2.045	---	---
19	ROLLETTE OIL COMPANY, INC.	HE	---	---	---	---	3.330

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S):	INTEREST REQUIRED
214	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS

POSITIONS ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, ROCK COUNTY ZONE, NAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES. GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

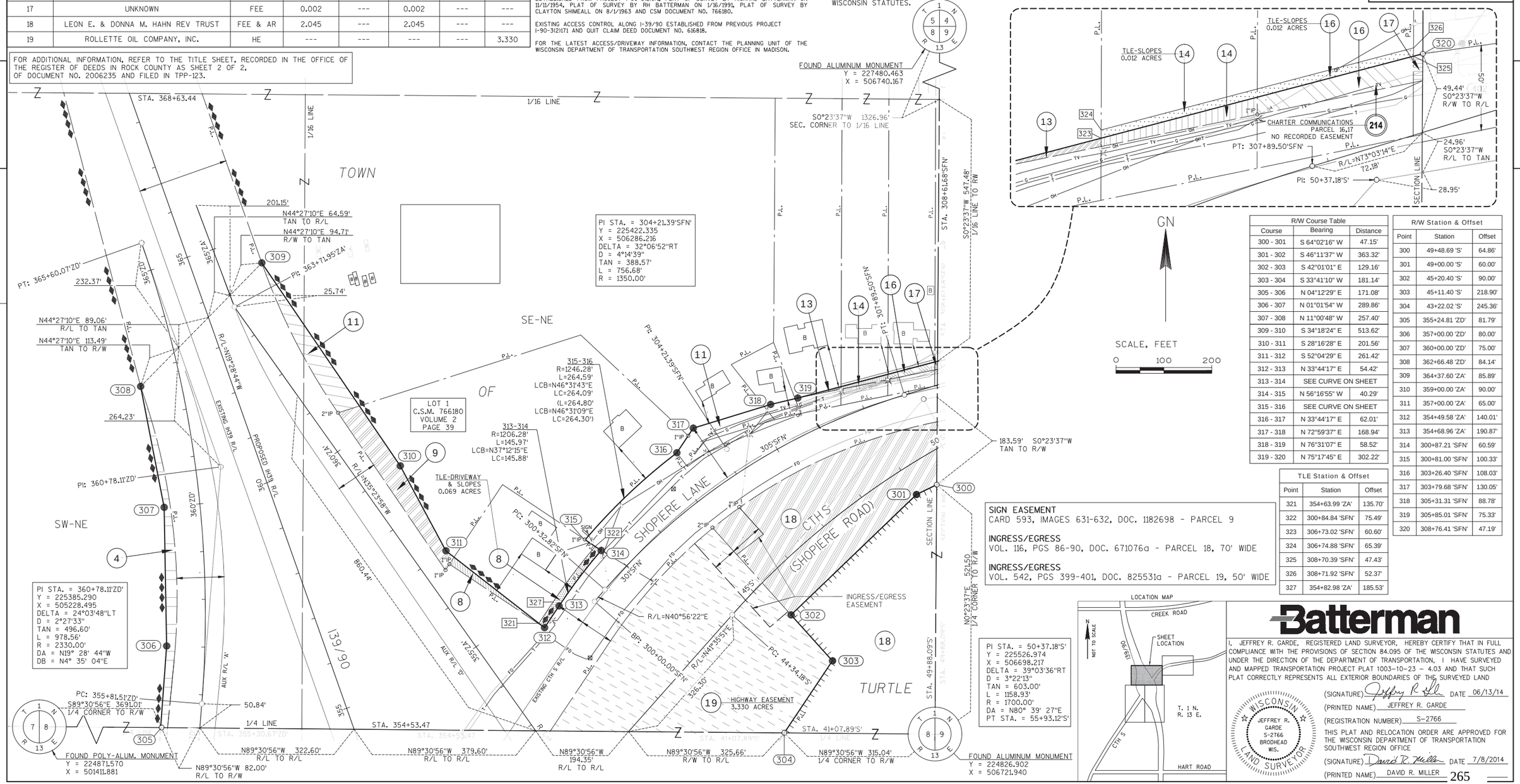
RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER SURVEYS OF PUBLIC RECORD.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREON IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR I-39/90 ESTABLISHED FROM PREVIOUS PROJECT I-90-3(21)171 AND EXISTING HIGHWAY RIGHT-OF-WAY FOR CTH S (SHOPIERE ROAD) ESTABLISHED FROM PROJECT I-90-3(21)171, PLAT OF SURVEY BY RICHARD BATTERMAN ON 11/11/1954, PLAT OF SURVEY BY RH BATTERMAN ON 1/16/1991, PLAT OF SURVEY BY CLAYTON SHIMEALL ON 8/1/1963 AND CSM DOCUMENT NO. 766180.

EXISTING ACCESS CONTROL ALONG I-39/90 ESTABLISHED FROM PREVIOUS PROJECT I-90-3(21)171 AND QUIT CLAIM DEED DOCUMENT NO. 636818.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION OFFICE IN MADISON.

FOR ADDITIONAL INFORMATION, REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN ROCK COUNTY AS SHEET 2 OF 2, OF DOCUMENT NO. 2006235 AND FILED IN TPP-123.



R/W Course Table		
Course	Bearing	Distance
300 - 301	S 64°02'16" W	47.15'
301 - 302	S 46°11'37" W	363.32'
302 - 303	S 42°01'01" E	129.16'
303 - 304	S 33°41'10" W	181.14'
305 - 306	N 04°12'29" E	171.08'
306 - 307	N 01°01'54" W	289.86'
307 - 308	N 11°00'48" W	257.40'
309 - 310	S 34°18'24" E	513.62'
310 - 311	S 28°16'28" E	201.56'
311 - 312	S 52°04'29" E	261.42'
312 - 313	N 33°44'17" E	54.42'
313 - 314	SEE CURVE ON SHEET	
314 - 315	N 56°16'55" W	40.29'
315 - 316	SEE CURVE ON SHEET	
316 - 317	N 33°44'17" E	62.01'
317 - 318	N 72°59'37" E	168.94'
318 - 319	N 76°31'07" E	58.52'
319 - 320	N 75°17'45" E	302.22'

R/W Station & Offset		
Point	Station	Offset
300	49+48.69 'S'	64.86'
301	49+00.00 'S'	60.00'
302	45+20.40 'S'	90.00'
303	45+11.40 'S'	218.90'
304	43+22.02 'S'	245.36'
305	355+24.81 'ZD'	81.79'
306	357+00.00 'ZD'	80.00'
307	360+00.00 'ZD'	75.00'
308	362+66.48 'ZD'	84.14'
309	364+37.60 'ZA'	85.89'
310	359+00.00 'ZA'	90.00'
311	357+00.00 'ZA'	65.00'
312	354+49.58 'ZA'	140.01'
313	354+68.96 'ZA'	190.87'
314	300+87.21 'SFN'	60.59'
315	300+81.00 'SFN'	100.33'
316	303+26.40 'SFN'	108.03'
317	303+79.68 'SFN'	130.05'
318	305+31.31 'SFN'	88.78'
319	305+85.01 'SFN'	75.33'
320	308+76.41 'SFN'	47.19'

TLE Station & Offset		
Point	Station	Offset
321	354+63.99 'ZA'	135.70'
322	300+84.84 'SFN'	75.49'
323	306+73.02 'SFN'	60.60'
324	306+74.88 'SFN'	65.39'
325	308+70.39 'SFN'	47.43'
326	308+71.92 'SFN'	52.37'
327	354+82.98 'ZA'	185.53'

SIGN EASEMENT
CARD 593, IMAGES 631-632, DOC. 1182698 - PARCEL 9

INGRESS/EGRESS
VOL. 116, PGS 86-90, DOC. 671076a - PARCEL 18, 70' WIDE

INGRESS/EGRESS
VOL. 542, PGS 399-401, DOC. 825531a - PARCEL 19, 50' WIDE

LOCATION MAP

Batterman

I, JEFFREY R. GARDE, 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1003-10-23 - 4.03 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND

(SIGNATURE) Jeffrey R Garde DATE 06/13/14
(PRINTED NAME) JEFFREY R. GARDE
(REGISTRATION NUMBER) S-2766

WISCONSIN JEFFREY R. GARDE S-2766 BRODHEAD WIS. LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION OFFICE

(SIGNATURE) David R. Miller DATE 7/8/2014
(PRINTED NAME) DAVID R. MILLER

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\TPP\31201_TPP.DWG
APPRAISAL PLAT DATE : ----------
PLOT DATE : 7/18/2014 8:22 AM
PLOT BY : CARYN MELLOM
PLOT NAME :
PLOT SCALE : 1"=200'

TRANSPORTATION PROJECT PLAT NO: 1003-10-23 - 4.04

THAT PART OF THE SW 1/4 OF THE NW 1/4 OF SECTION 9, T. 1 N., R. 13 E., TOWN OF TURTLE, ROCK COUNTY, WISCONSIN.

RELOCATION ORDER FOR ILLINOIS STATELINE TO MADISON, SHOPIERE ROAD, CTH S INTERCHANGE.

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 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 (1) OR (2), WISCONSIN STATUTES.

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN ROCK COUNTY, WISCONSIN AT 11:19 AM ON 8th JULY 2014 AS DOCUMENT # 2006792 AND FILED IN TPP-125

Randal Leyes
SIGNATURE OF REGISTER OF DEEDS

THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE COUNTY REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1003-10-23 - 4.04
AMENDMENT NO:

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	ACRES REQUIRED			TLE ACRES
			R/W NEW	R/W EXISTING	R/W TOTAL	
18	LEON E. & DONNA M. HAHN REV TRUST	FEE, AR, TLE	3.169	---	3.169	0.256

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S):	INTEREST REQUIRED
202	WISCONSIN POWER & LIGHT COMPANY- ELECTRIC	RELEASE OF RIGHTS
203	WISCONSIN POWER & LIGHT COMPANY - GAS	RELEASE OF RIGHTS
214	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS

(203) **WISCONSIN POWER & LIGHT COMPANY - GAS**
EASEMENT CARD 365, IMAGES 362-367
DOCUMENT 1078463, PARCEL 18

(202) **WISCONSIN POWER & LIGHT COMPANY - ELECTRIC**
VOL. 59, PG 46, DOC. 606541a - PARCEL 18

SCALE, FEET
0 100 200

GN

FOUND ALUMINUM MONUMENT
Y = 227480.463
X = 506740.167

S0°23'37"W 1326.96'
SEC. CORNER TO 1/16 LINE

S88°47'19"E 1327.89'
SEC. LINE TO 1/16 LINE

S0°23'37"W 547.48'
R/W TO 1/16 LINE

PI STA. = 309+54.32'SFN'
Y = 225583.633
X = 506815.573
DELTA = 33°43'59"LT
D = 37°12'18"
TAN = 46.69'
L = 90.67'
R = 154.00'

PI STA. = 311+61.05'SFN'
Y = 225745.656
X = 506948.285
DELTA = 36°34'58"RT
D = 37°12'18"
TAN = 50.90'
L = 98.33'
R = 154.00'

TOWN

STA. EQUATION:
313+21.80'SFN'=
601+95.32'SFS'

PI: 312+08.47'SFN'

PI: 311+61.05'SFN'

PC: 311+10.14'SFN'

STA. 308+61.68'SFN'

1/16 LINE

SEC. LINE

P.L.

N0°23'37"E 49.44'
R/L TO R/W

R/L=N73°03'14"E

EXISTING CTH S R/L

N0°23'37"E 24.96'
TAN TO R/L

CTH S R/L TANGENT

PI: 50+37.18'S'

N0°23'37"E 183.59'
R/W TO TAN

400

401

402

403

404

405

406

409

410

18

SHOPIERE LANE

CTH S (SHOPIERE ROAD)

60'S'

R/L=N75°54'12"E

R/L=N14°05'48"W

R/L=N80°39'27"E

R/L=N81°54'27"E

574.05'

55'S'

50'S'

63+75'S'

429

202 WISCONSIN POWER & LIGHT COMPANY-ELECTRIC PARCEL 18

203 WISCONSIN POWER & LIGHT COMPANY-GAS PARCEL 18

214 CHARTER COMMUNICATIONS PARCEL 18
NO RECORD OF EASEMENT

PI: 61+00.00'S'
Y=225707.143
X=507793.383
DELTA=1°15'00" RT

S0°20'57"W 330.38'
1/16 LINE TO R/W

TLE-DRIVEWAY/SLOPES
0.242 ACRES

PT: 309+98.30'SFN'

PI: 309+54.32'SFN'

PC: 309+01.65'SFN'

STA. EQUATION:
54+52.06'S'=
600+00.00'SFS'

PI: 55+93.12'S'

OF

SW-NW

TURTLE

PI STA. = 50+37.18'S'
Y = 225526.974
X = 506698.217
DELTA = 39°03'36"RT
D = 3°22'13"
TAN = 603.00'
L = 1158.93'
R = 1700.00'
DB = N41° 35' 51"E
PC STA. = 44+34.18'S'

SECTION LINE

N0°23'37"E 521.50'
1/4 CORNER TO R/W

STA. 49+88.09'S'

1/4 LINE

S88°47'43"E 1328.92'
1/4 CORNER TO 1/16 LINE

FOUND ALUMINUM MONUMENT
Y = 224826.902
X = 506721.940

N0°20'57"E 895.34'
1/4 LINE TO R/W

1/16 LINE

T. 1 N.
R. 13 E.

18 TLE-DRIVEWAY
0.014 ACRES

203 WISCONSIN POWER & LIGHT COMPANY - GAS PARCEL 18

415 416 407 414 417 408 418

1"IP

3/4"IP

S0°20'57"W 50.55' R/L TO R/W

18 TLE-DRIVEWAY/SLOPES
0.242 ACRES

18 TLE-DRIVEWAY/SLOPES
0.242 ACRES

409 427 426 423 422 419 428 425 424 421 420

B

POSITIONS ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, ROCK COUNTY ZONE, NAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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.

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

EXISTING HIGHWAY RIGHT-OF-WAY FOR CTH S (SHOPIERE ROAD) ESTABLISHED FROM PROJECT 5989-02-85 AND S 045(6).

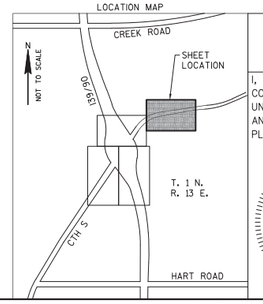
FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION OFFICE IN MADISON.

R/W Station & Offset		
Point	Station	Offset
400	49+48.69 'S'	64.86'
401	308+76.41 'SFN'	47.19'
402	309+01.81 'SFN'	46.20'
403	311+79.19 'SFN'	119.94'
404	314+41.80 'SFN'	115.00'
405	55+65.28 'S'	103.13'
406	60+00.00 'S'	52.21'
407	63+73.01 'S'	50.00'
408	63+58.17 'S'	50.00'
409	57+50.00 'S'	42.38'
410	53+00.00 'S'	60.00'

TLE Station & Offset		
Point	Station	Offset
414	63+20.00 'S'	50.00'
415	63+20.00 'S'	65.00'
416	63+60.00 'S'	65.00'
417	63+60.00 'S'	50.00'
418	63+56.68 'S'	60.00'
419	59+79.01 'S'	57.37'
420	59+77.85 'S'	97.15'
421	59+43.15 'S'	96.60'
422	59+43.80 'S'	56.32'
423	58+18.85 'S'	53.88'
424	58+18.09 'S'	88.87'
425	57+88.09 'S'	88.22'
426	57+88.86 'S'	53.23'
427	57+33.87 'S'	52.03'
428	57+33.44 'S'	72.02'
429	56+00.00 'S'	56.73'

R/W Course Table		
Course	Bearing	Distance
400 - 401	N 00°23'37" E	257.98'
401 - 402	N 75°17'45" E	25.42'
402 - 403	N 34°25'42" E	296.38'
403 - 404	N 75°54'12" E	285.09'
404 - 405	S 14°05'48" E	211.18'
405 - 406	N 87°16'57" E	439.34'
406 - 407	N 81°54'33" E	374.12'
408 - 409	S 81°54'27" W	607.16'
409 - 410	S 75°11'27" W	440.26'
410 - 400	S 64°02'16" W	337.84'

LOCATION MAP



Batterman

I, JEFFREY R. GARDE, 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1003-10-23 - 4.04 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND

WISCONSIN JEFFREY R. GARDE S-2766 BRODHEAD WIS. LAND SURVEYOR

(SIGNATURE) Jeffrey R Garde DATE 06/13/14
(PRINTED NAME) JEFFREY R. GARDE
(REGISTRATION NUMBER) S-2766

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION OFFICE

(SIGNATURE) David R Miller DATE 7/1/2014
(PRINTED NAME) DAVID R. MILLER

FOR ADDITIONAL INFORMATION, REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN ROCK COUNTY AS SHEET 2 OF 2, OF DOCUMENT NO. 2006235 AND FILED IN TPP-123.

Date: 6-13-2014

TRANSPORTATION PROJECT PLAT NO: 1003-10-23 - 4.05

SHOPIERE ROAD, CTH S INTERCHANGE
ILLINOIS STATE LINE TO MADISON, ROCK COUNTY, WISCONSIN.

4

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE

R/W POINT NUMBER COORDINATE TABLE		
POINT NUMBER	Y	X
100	222410.117	504135.738
101	223121.018	504562.353
102	223249.194	504370.320
103	223353.162	504439.716
104	223223.289	504634.290
105	223596.839	504888.158
106	223849.755	505058.989
107	224057.756	505187.431
108	224395.486	505070.020
109	224840.292	505102.747
110	223863.290	505392.749
111	223860.815	505389.748
112	223646.067	505129.446
113	223501.436	505016.604
114	223381.106	504929.154
115	223127.489	504768.810
116	223085.690	504831.433
117	223083.785	505387.467
118	223748.771	505389.419
119	223748.763	505392.134
120	222918.783	505387.678
121	222918.786	505386.977
122	222943.786	505387.053
123	222945.729	504820.040
124	222987.612	504714.318
125	222493.002	504371.598
126	222254.730	504188.224
127	223236.094	504660.124
200	222918.783	505387.678
201	223748.763	505392.134

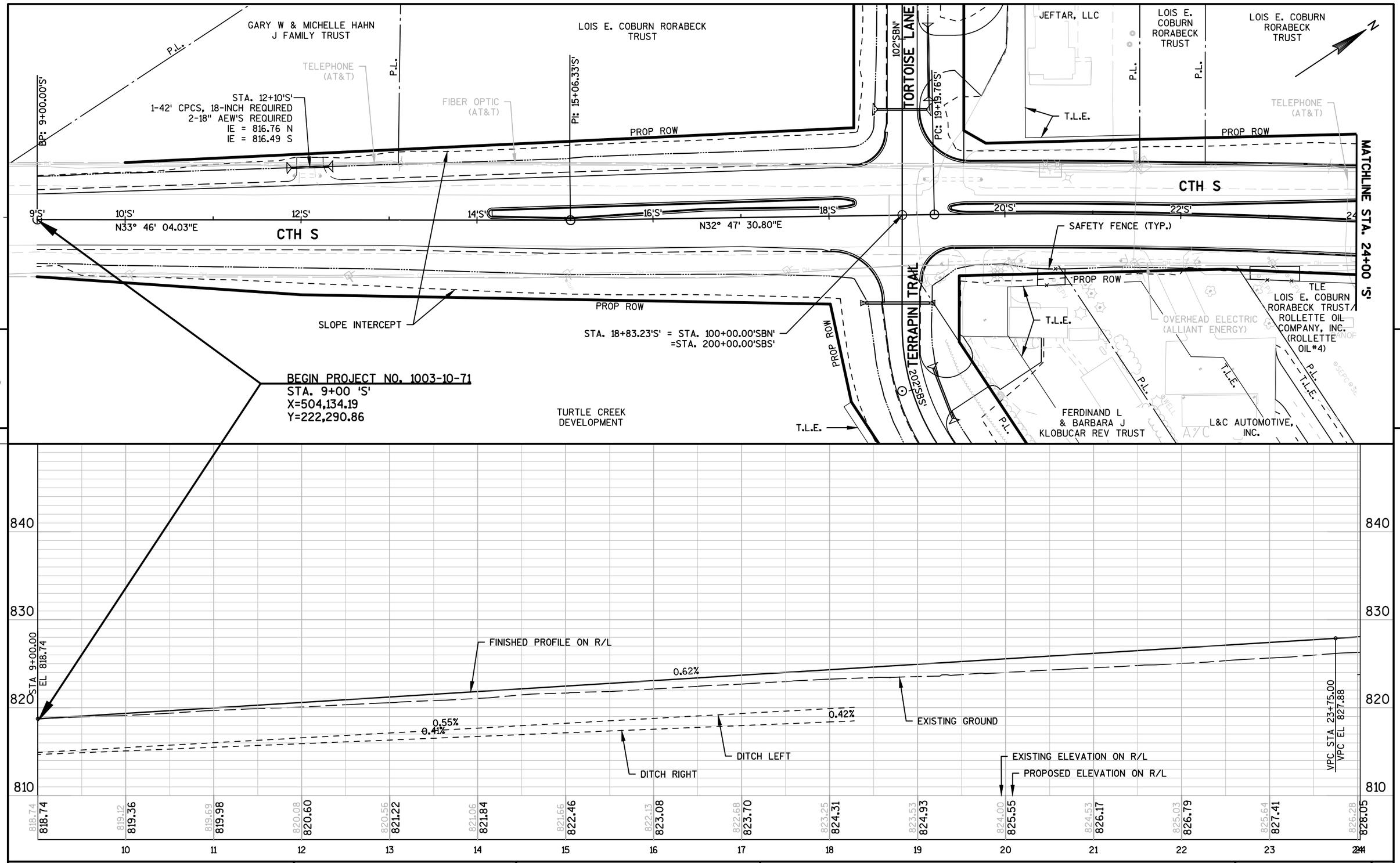
R/W POINT NUMBER COORDINATE TABLE		
POINT NUMBER	Y	X
202	223748.448	505499.419
203	223652.197	505499.136
204	223652.226	505489.136
205	223083.440	505487.466
206	223083.327	505522.466
207	222918.323	505521.981
208	223863.290	505392.749
209	224829.266	506406.909
210	224570.113	506234.166
211	224334.321	506290.994
212	223683.561	506154.354
213	223008.621	506240.489
214	222591.634	506318.986
215	222167.310	506352.480
216	222168.242	506106.627
217	222549.016	506037.191
218	223353.500	505854.215
219	223494.918	505783.213
220	223842.271	505502.161
221	223892.124	505427.700
300	225348.088	506725.522
301	225327.447	506683.131
302	225075.944	506420.926
303	224979.989	506507.376
304	224829.266	506406.909
305	224840.292	505102.747
306	225010.910	505115.301
307	225300.727	505110.082
308	225553.384	505060.909
309	225811.684	505314.321

R/W POINT NUMBER COORDINATE TABLE		
POINT NUMBER	Y	X
310	225387.413	505603.810
311	225209.905	505699.286
312	225049.231	505905.494
313	225094.488	505935.720
314	225210.677	506023.926
315	225233.040	505990.416
316	225414.732	506182.070
317	225466.299	506216.511
318	225515.710	506378.060
319	225529.352	506434.968
320	225606.065	506727.293
400	225348.088	506725.522
401	225606.065	506727.293
402	225612.516	506751.876
403	225856.984	506919.443
404	225926.420	507195.952
405	225721.598	507247.387
406	225742.428	507686.235
407	225795.083	508056.636
408	225693.990	508056.020
409	225608.518	507454.905
410	225495.988	507029.271

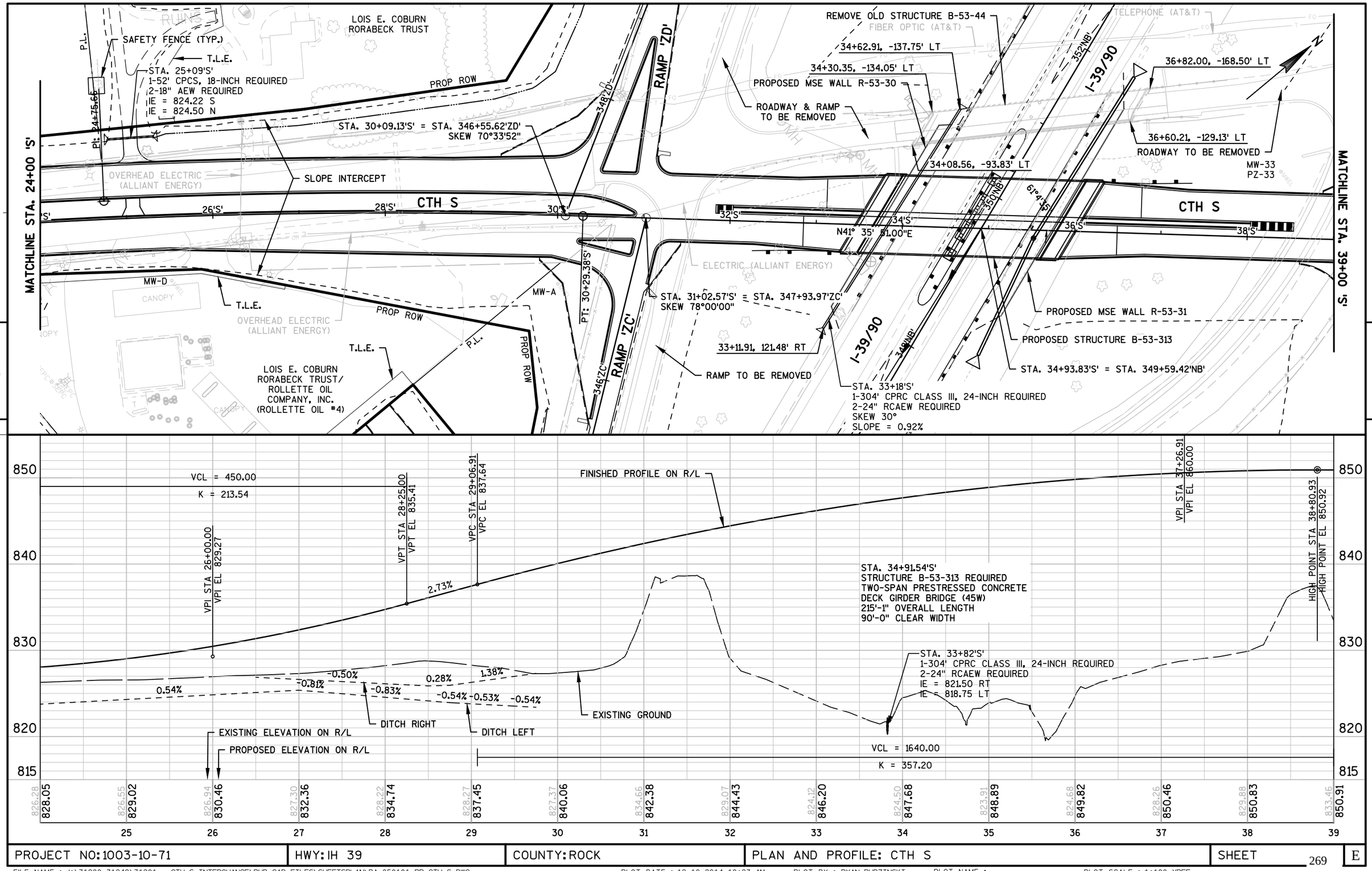
POSITIONS ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, ROCK COUNTY ZONE, NAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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APPRAISAL PLAT DATE : ----------

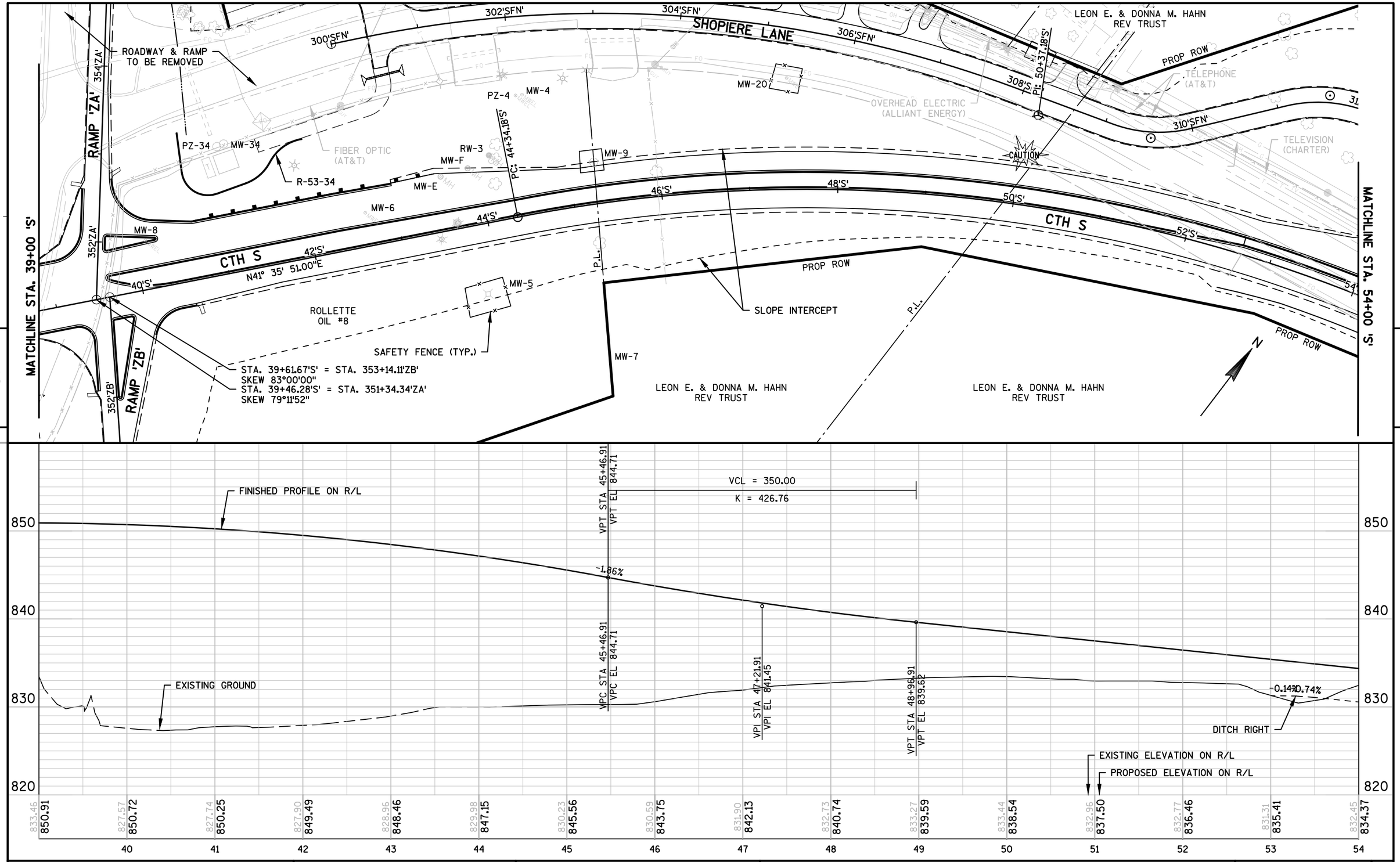
PLOT DATE : 7/1/2014 11:47 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1"=200'



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN AND PROFILE: CTH S	SHEET 268	E

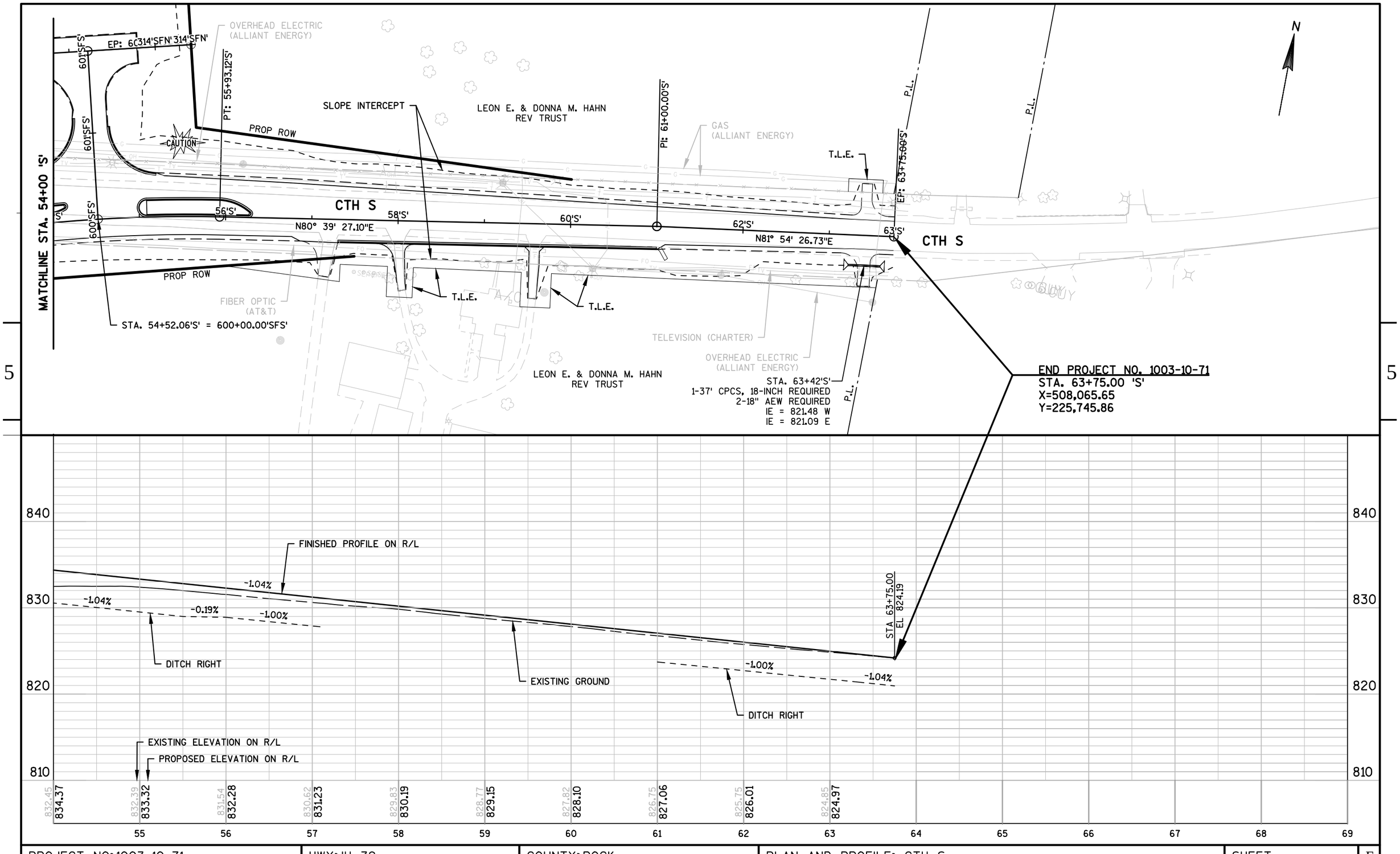


PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN AND PROFILE: CTH S	SHEET 269 E

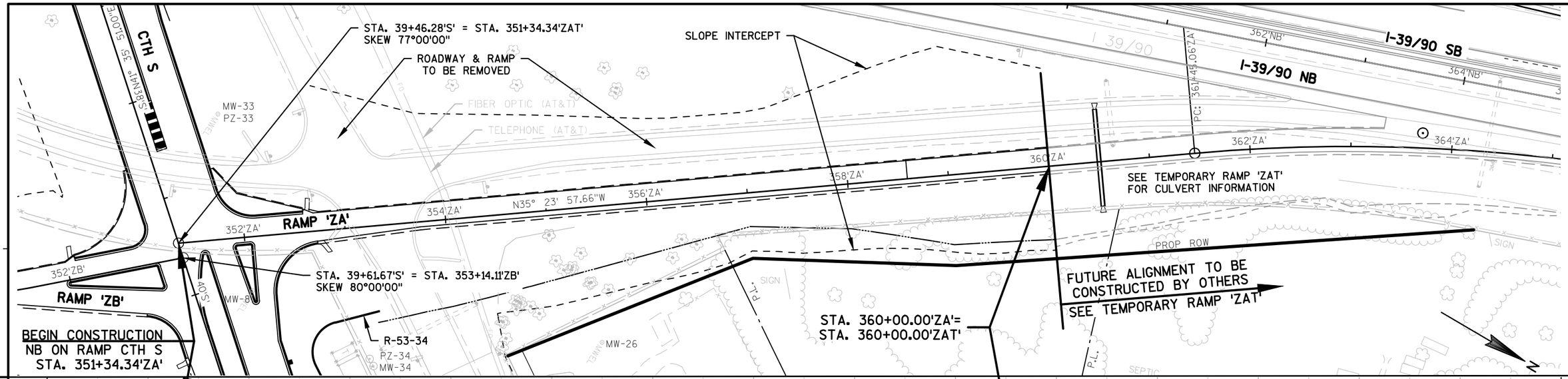


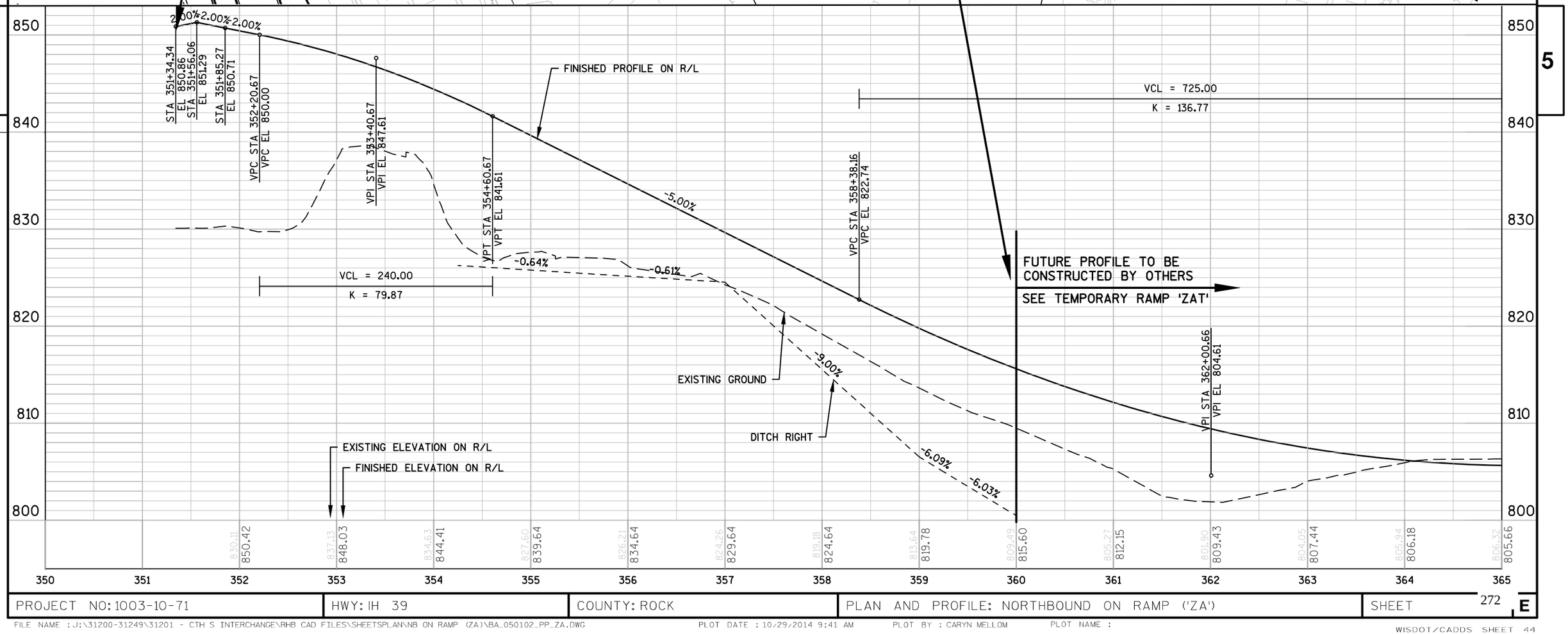
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN AND PROFILE: CTH S	SHEET 270	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_050101_PP_CTH S.DWG PLOT DATE : 12/18/2014 10:24 AM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:100_XREF
WISDOT/CADDS SHEET 44

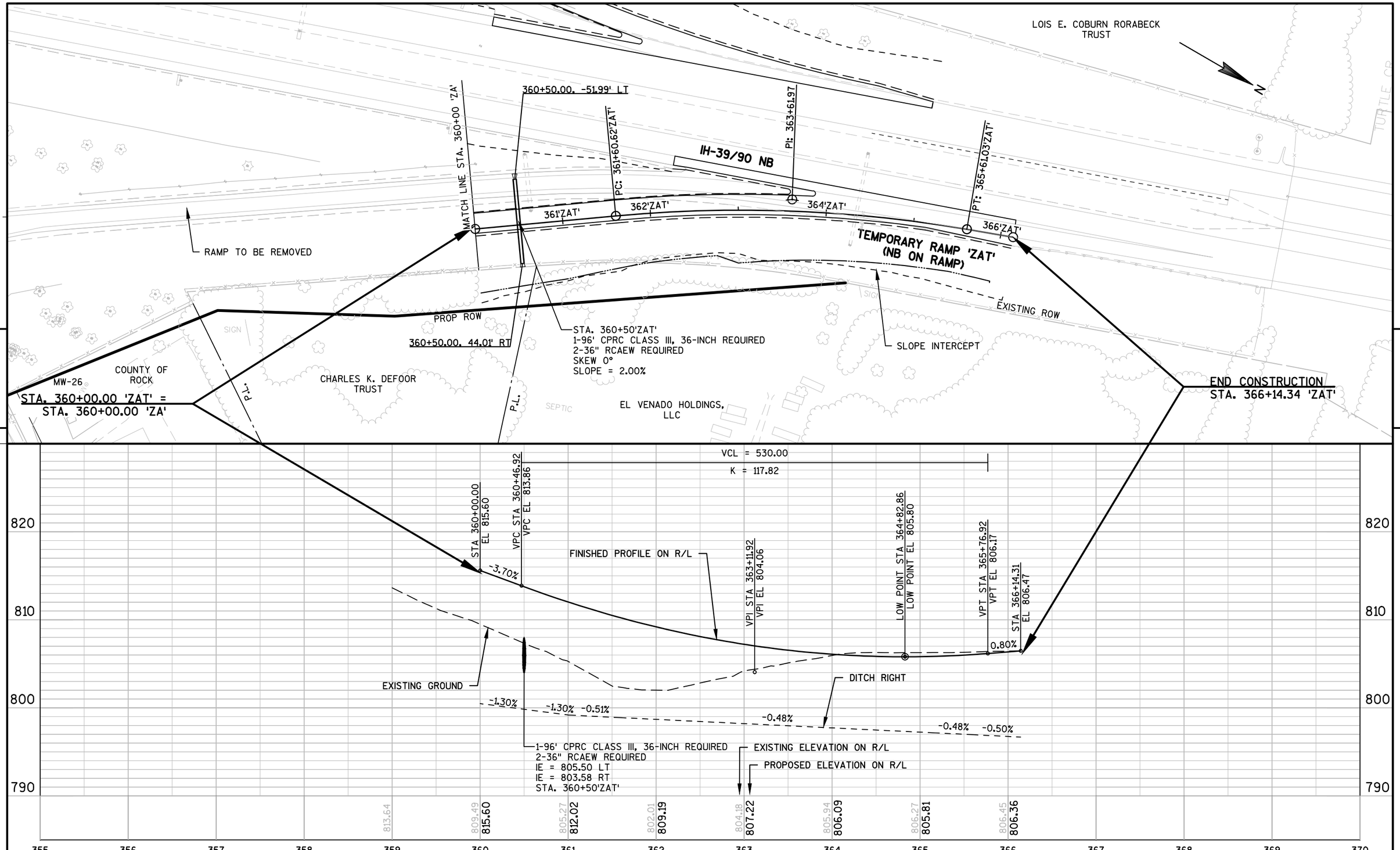


PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN AND PROFILE: CTH S	SHEET 271	E

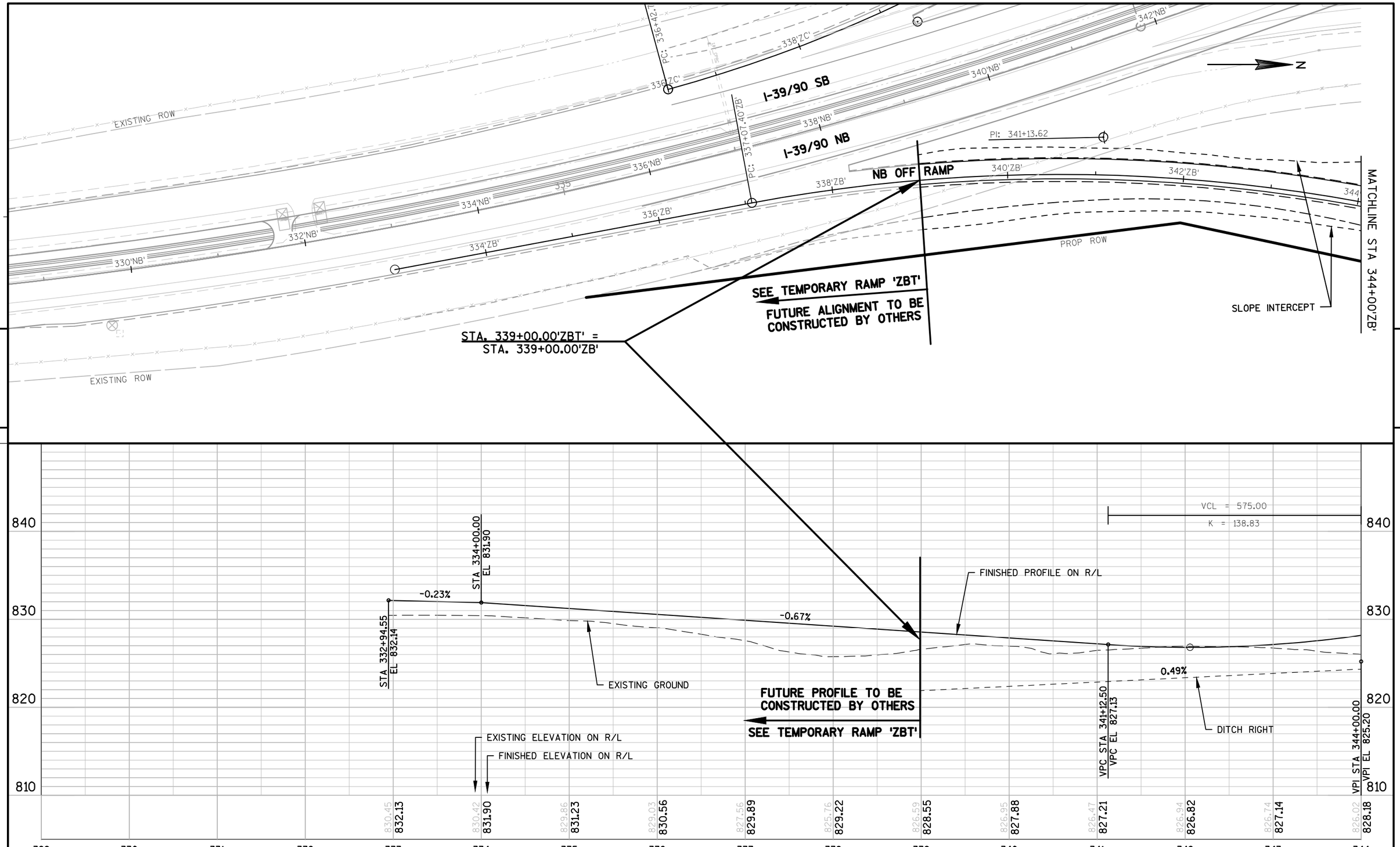




PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN AND PROFILE: NORTHBOUND ON RAMP ('ZA')	SHEET 272 E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN AND PROFILE: TEMPORARY NORTHBOUND ON RAMP 'ZAT'	SHEET 273 E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN AND PROFILE: NORTHBOUND OFF RAMP ('ZB')	SHEET 274 E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\NB OFF RAMP (ZB)\BA_050104_PP_ZB.DWG PLOT DATE : 12/18/2014 10:42 AM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:100_XREF

WISDOT/CADDS SHEET 44

MATCHLINE STA 344+00'ZB'

345+20.14, -66.21' L

STA. 345+32'ZB'
1-108'- CPRC CLASS III, 24-INCH REQUIRED
2-24" AEW REQUIRED
SKEW 13° RHF
SLOPE = 0.50%

PT: 345+07.80'ZB'

345+43.70, 39.76' R

PC: 346+94.73'ZB'

RAMP 'ZB'

RAMP TO BE REMOVED

PROP ROW

SLOPE INTERCEPT

MW-25

PI: 351+58.84'ZB'

PI: 349+46.28

ROLLETTE OIL #8

STA. 39+61.67'S' = STA. 353+14.11'ZB'
SKEW 83°00'00"

END CONSTRUCTION
NB OFF RAMP
STA. 353+14.11 'ZB'

STA. 39+46.28'S' = STA. 351+34.34'ZA'
SKEW 79°11'52"

MW-33
PZ-33

RAMP 'ZA'

ROADWAY TO BE REMOVED

CTH S

MW-8

MW-6

MW-26

PZ-34
MW-34

R-53-34

MW-32
PZ-32

TELEPHONE (AT&T)

FIBER OPTIC (AT&T)

OVERHEAD ELECTRIC (ALLIANT ENERGY)

N

VPT STA 344+00.00
VPI EL 825.20

VPT STA 346+87.50
VPT EL 835.18

VPC STA 347+25.00
VPC EL 836.48

VPI STA 349+00.00
VPI EL 842.56

VPT STA 350+75.00
VPT EL 846.05

STA 353+14.11
EL 850.83

FINISHED PROFILE ON R/L

EXISTING GROUND

3.47%

2.00%

-0.50%

DITCH RIGHT

STA. 345+32'ZB'
1-108'- CPRC CLASS III, 24-INCH REQUIRED
2-24" AEW REQUIRED
IE = 825.00 R
IE = 824.46 L

VCL = 350.00
K = 237.37

EXISTING ELEVATION ON R/L
FINISHED ELEVATION ON R/L

| | | |

TURTLE CREEK
DEVELOPMENT

POST

IH-39/90 NB

334'ZBT'

336'ZBT'

338'ZBT'

PC: 337+46.21'ZBT'

PI: 338+23.15

MATCH LINE STA. 339+00 'ZB'

TEMPORARY RAMP 'ZBT'
(NB OFF RAMP)

EXISTING ROW

PROP ROW

SLOPE INTERCEPT

BEGIN CONSTRUCTION
STA. 332+00.00 'ZBT'

STA. 339+00.00'ZBT' =
STA. 339+00.00'ZB'

LEON M & DONNA M HAHN
REV TRUST

N

5

5

850
840
830
820
815

STA 332+00.00
EL 830.18

STA 334+00.00
EL 830.38

STA 336+00.00
EL 829.90

STA 339+00.00
EL 828.55

0.10%

-0.24%

-0.45%

FINISHED PROFILE ON R/L

EXISTING GROUND

EXISTING ELEVATION ON R/L

FINISHED ELEVATION ON R/L

0.50%

0.49%

0.49%

DITCH RIGHT

830.17 830.18
830.30 830.28
830.40 830.38
830.21 830.14
829.67 829.90
827.70 829.45
825.76 829.00
828.55

326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 341

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN AND PROFILE: TEMPORARY NORTHBOUND OFF RAMP 'ZBT'	SHEET 276 E

STA 30+09.13 'S' = STA 346+55.62 'ZD'
SKEW 80°00'

STA 31+02.57 'S' = STA 347+93.97'ZC'
SKEW 78°00'00"

FUTURE ALIGNMENT TO BE CONSTRUCTED BY OTHERS
SEE TEMPORARY RAMP 'ZCT'

SLOPE INTERCEPT

PROP ROW

OVERHEAD ELECTRIC (ALLIANT ENERGY)

P.I.

MW-A

30'S'

PT: 30+29.38'S' = 348'ZD'

N28° 58' 01.31"W

RAMP 'ZD'

CTH S

346'ZC'

344'ZC'

342'ZC'

340'ZC'

338'ZC'

N36° 22' 23.73"W

RAMP 'ZC'

PC: 336+42.72'ZC'

SIGN

335

336'NB'

I-39/90 SB

336'ZD'

338'NB'

I-39/90 NB

340'NB'

338'ZD'

342'NB'

344'NB'

345

PT: 339+36.52

PT: 341+82.07

PT: 342+23.68'ZC'

RAMP TO BE REMOVED

SLOPE INTERCEPT

FIBER OPTIC (AT&T)

TELEPHONE (AT&T)

ELECTRIC (ALLIANT ENERGY)

32'S'

51.00'E

N41° 35'

I 39/90

5

5

STA. 343+00.00'ZCT' =
STA. 343+00.00'ZC'

END CONSTRUCTION
SB ON RAMP CTH S
STA. 347+93.97 'ZC'

VCL = 700.00
K = 206.77

FUTURE PROFILE TO BE CONSTRUCTED BY OTHERS
SEE TEMPORARY RAMP 'ZCT'

VPT STA 344+00.00
VPT EL 833.39

VPC STA 345+20.00
VPC EL 836.49

VPI STA 346+00.00
VPI EL 838.56

VPT STA 346+80.00
VPT EL 840.16

STA 347+93.97
EL 842.44

2.59%

2.00%

VCL = 160.00
K = 273.09

STA 336+42.72
EL 827.59

VPC STA 337+00.00
VPC EL 827.13

VPI STA 340+50.00
VPI EL 824.33

-0.80%

FINISHED PROFILE ON R/L

0.43%

EXISTING GROUND

DITCH LEFT

EXISTING ELEVATION ON R/L

FINISHED ELEVATION ON R/L

850
840
830
820

827.93 **827.13** 827.41 **826.57** 825.70 **826.50** 823.10 **826.91** 823.95 **827.80** 824.82 **829.18** 824.94 **831.04** 825.25 **833.39** 826.58 **835.97** 828.18 **838.44** 829.56 **840.56**

335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN AND PROFILE: SOUTHBOUND ON RAMP ('ZC')	SHEET 277 E

EXISTING ROW

EXISTING ROW

LEON M & DONNA M HAHN
REV TRUST

BEGIN CONSTRUCTION
STA. 337+13.45'ZCT'

PROP ROW

IH-39/90 SB

TURTLE CREEK
DEVELOPMENT

MW-A

SLOPE INTERCEPT

PC: 337+62.97'ZCT'

PI: 339+49.64'ZCT'

PT: 341+32.79'ZCT'

MATCH LINE STA. 343+00 'ZC'

PROP ROW

338'ZCT'

340'ZCT'

342'ZCT'

TEMPORARY RAMP 'ZCT'
(SB ON RAMP)

RAMP TO BE REMOVED

STA. 343+00.00'ZCT' =
STA. 343+00.00'ZC'

VCL = 325.00
K = 125.10

FINISHED PROFILE ON R/L

STA 337+13.45
EL 828.17

VPC STA 338+91.95
VPC EL 827.10

VPI STA 340+54.45
VPI EL 826.13

VPT STA 342+16.95
VPT EL 829.38

STA 343+00.00
EL 831.04

-0.60%

0.29%

0.27%

0.29%

0.48%

0.49%

0.46%

0.42%

2.00%

DITCH LEFT

EXISTING GROUND

EXISTING ELEVATION ON R/L

FINISHED ELEVATION ON R/L

| | | |

STA. 30+09.13'S' = STA. 346+55.62'ZD'
SKEW 80°00'00"

PC: 349+30.69'ZD'

PI: 350+76.90'ZD'

PT: 352+14.70'ZD'

SLOPE INTERCEPT

EXISTING ROW

PROP ROW

PC: 355+81.51'ZD'

PROP ROW

350'ZD'

352'ZD'

N4° 35' 04"E

354'ZD'

348'ZD'

356'ZD'

358'ZD'

360'ZD'

MATCHLINE STA 361+00'ZD'

RAMP 'ZD'

RAMP TO BE REMOVED

BEGIN CONSTRUCTION
SB OFF RAMP
STA. 346+55.62 'ZD'

SEE TEMPORARY RAMP 'ZDT'
FOR CULVERT INFORMATION

MW-A

PT: 30+29.38'S'

STA. 31+02.57'S' = STA. 347+93.97'ZC'
SKEW 78°00'00"

SLOPE INTERCEPT

SEE TEMPORARY RAMP 'ZDT'
FUTURE ALIGNMENT TO BE
CONSTRUCTED BY OTHERS

346'ZC'

RAMP 'ZC'

CTH S

FIBER OPTIC (AT&T)

TELEPHONE (AT&T)

STA. 355+46.00'ZDT'=
STA. 355+46.00'ZDT'

I-39/90 SB

I-39/90 NB

360'NB'

PI: 360+78.11

5

5

STA 346+55.62
EL 840.28

STA 346+83.16
EL 840.50

0.81%

-2.00%

FINISHED PROFILE ON R/L

VCL = 400.00
K = 212.37

VPC STA 357+00.00
VPC EL 816.18

VPI STA 359+00.00
VPI EL 810.71

VPT STA 361+00.00
VPT EL 809.00

VPC STA 350+10.00
VPC EL 833.97

VPI STA 351+60.00
VPI EL 830.97

VPT STA 352+10.00
VPT EL 826.86

-0.76%

-0.86%

-1.69%

-0.41%

-2.74%

-2.11%

DITCH RIGHT

EXISTING GROUND

VCL = 300.00
K = 406.69

EXISTING ELEVATION ON R/L

FINISHED ELEVATION ON R/L

SEE TEMPORARY RAMP 'ZDT'

FUTURE PROFILE TO BE
CONSTRUCTED BY OTHERS

830
820
810
800

835.01	825.00	823.79	822.64	821.52	821.16	822.47	820.76	819.69	816.96	814.03	810.83	808.91	806.94	804.76
840.17	838.17	836.17	834.17	832.07	829.72	827.13	824.40	821.66	818.92	816.18	813.68	811.65	810.09	809.00

346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361

PROJECT NO:1003-10-71	HWY: IH 39	COUNTY:ROCK	PLAN AND PROFILE: SOUTHBOUND OFF RAMP ('ZD')	SHEET 279 E

LOIS E. COBURN RORABECK TRUST

MATCH LINE STA. 355+46 'ZD'

PROP ROW

PC: 356+79.68'ZDT'

SLOPE INTERCEPT

357+99.38, -32.25' LT

EXISTING ROW

PT: 364+36.27'ZDT'

356'ZDT'

358'ZDT'

TEMPORARY RAMP 'ZDT'
(SB OFF RAMP)

360'ZDT'

362'ZDT'

364'ZDT'

IH-39/90 SB

358+02.43, 71.71' RT

STA. 358+01'ZDT'
1-104' CPRC CLASS IV, 30-INCH REQUIRED
2-30" RCAEW REQUIRED
SKEW 2° RHF
SLOPE = 0.50%

PI: 360+63.11

STA. 355+46.00'ZDT' =
STA. 355+46.00'ZD'

END CONSTRUCTION
STA. 365+00.00 'ZDT'

SIGN

EL VENADO HOLDINGS, LLC

VCL = 350.00

K = 156.23

FINISHED PROFILE ON R/L

VPC STA 357+85.78
VPC EL 813.83

VPI STA 359+60.78
VPI EL 809.03

VPT STA 361+35.78
VPT EL 808.16

STA 355+46.00
EL 820.40

STA 363+50.00
EL 807.09

STA 365+00.00
EL 806.78

-2.74%

-0.50%

-0.20%

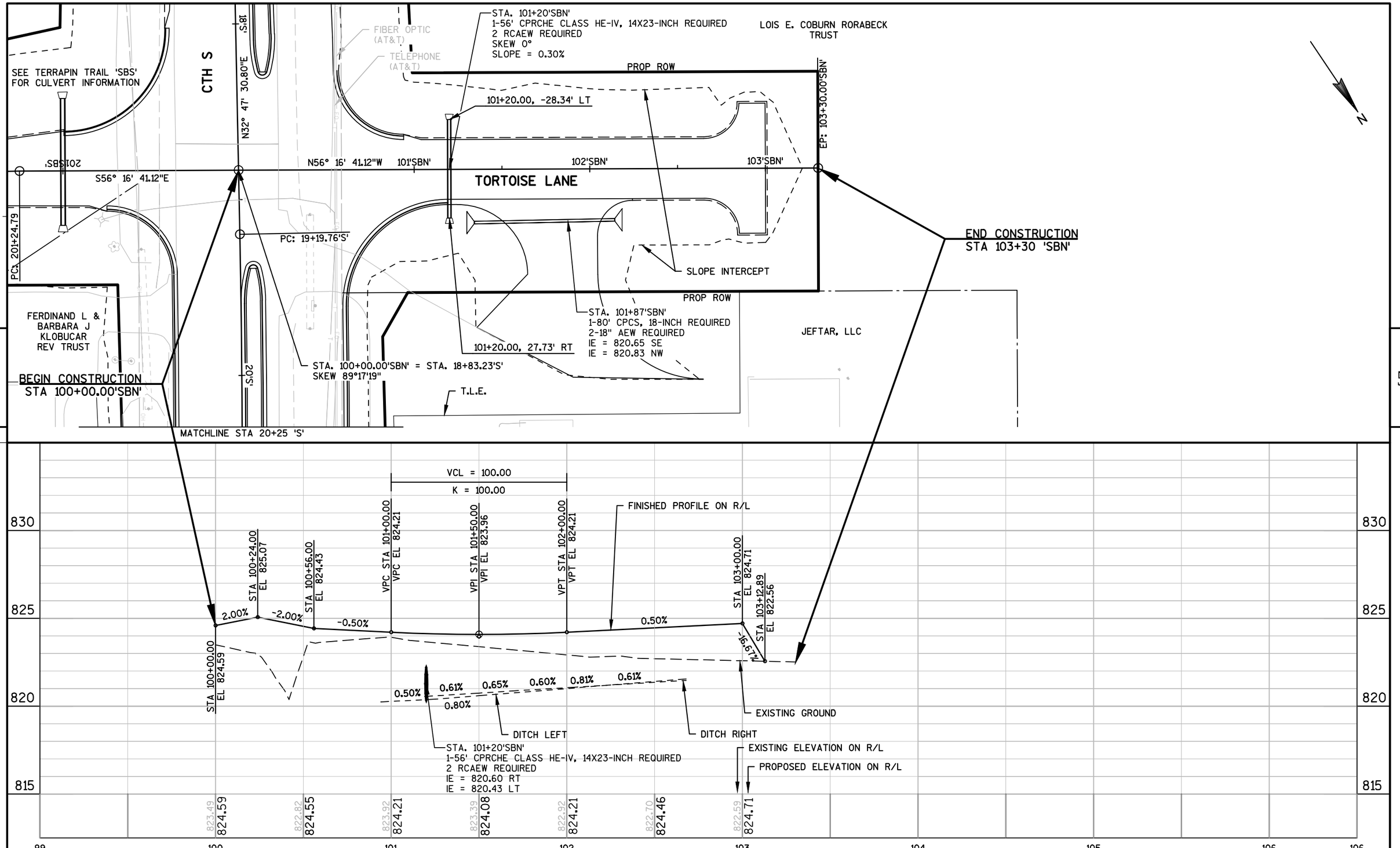
DITCH RIGHT

EXISTING GROUND

STA. 358+01'ZDT'
1-104' CPRC CLASS IV, 30-INCH REQUIRED
2-30" RCAEW REQUIRED
IE = 808.52 RT
IE = 808.00 LT

EXISTING ELEVATION ON R/L
FINISHED ELEVATION ON R/L

| | | |



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN AND PROFILE: TORTOISE LANE	SHEET 281 E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_050110_PP_SBN.DWG PLOT DATE : 12/17/2014 8:55 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:50_XREF

WISDOT/CADDS SHEET 44

STA. 200+00.00'SBS' = STA. 18+83.23'S'
SKEW = 90°56'29"

PC: 19+19.76'S'

CTH S

T.L.E.

FERDINAND L &
BARBARA J KLOBUCAR
REV TRUST

201+00.00, -31.00' LT

STA. 204+57'SBS' LT
1-86' CPCS, 18-INCH REQUIRED
2-18" AEW'S
IE = 820.84 E
IE = 820.42 W

PROP ROW

P.L.

PROP ROW

MATCHLINE STA 207+00 'SBS'

P.L.

PC: 201+24.79'SBS'

PI: 202+00.09

PT: 202+71.07'SBS'

201'SBS'

202'SBS'

203'SBS'

204'SBS'

205'SBS'

206'SBS'

207'

TERRAPIN TRAIL

N

STA. 201+00'SBS'
1-72' CPRC CLASS IV, 24-INCH REQUIRED
2-24" RCAEW REQUIRED
SKEW = 0° RHF
SLOPE = 0.28%

STA. 202+32'SBS' LT
1-62' CPCS, 18-INCH REQUIRED
2-18" AEW'S
IE = 819.68 E
IE = 819.37 W

201+00.00, 41.17' RT

PROP ROW

TURTLE CREEK
DEVELOPMENT

SLOPE INTERCEPT

T.L.E.

BEGIN CONSTRUCTION
STA 200+00.00'SBS'

VCL = 100.00

K = 71.43

STA 200+00.00
EL 824.57

STA 200+36.00
EL 823.85
VPC STA 200+45.96
VPC EL 823.75

VPI STA 200+95.96
VPI EL 823.25

LOW POINT STA 201+17.38
LOW POINT EL 823.39

VPT STA 201+45.96
VPT EL 823.45

FINISHED PROFILE ON R/L

-2.00%

1.00%

0.40%

-5.83%

0.50%

DITCH LEFT

DITCH RIGHT

-0.47%

0.50%

0.42%

0.43%

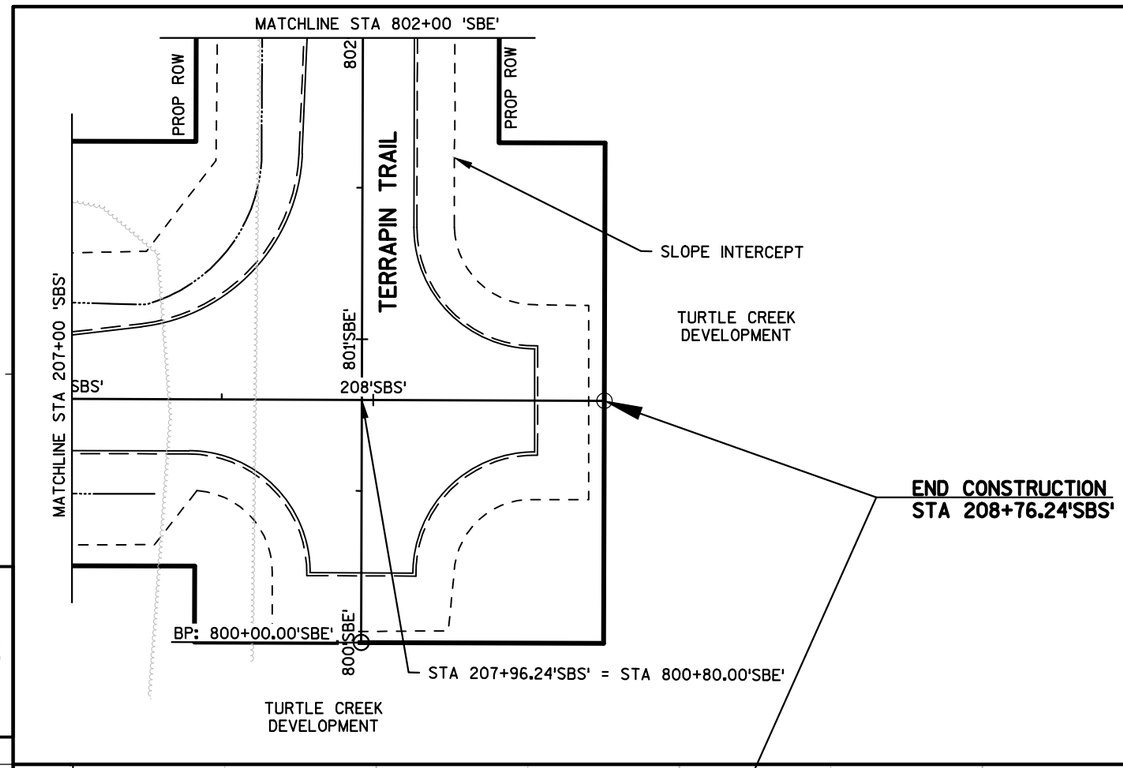
STA. 201+00'SBS'
1-72' CPRC CLASS IV, 24-INCH REQUIRED
2-24" RCAEW REQUIRED
IE = 819.00 LT
IE = 818.80 RT

EXISTING ELEVATION ON R/L

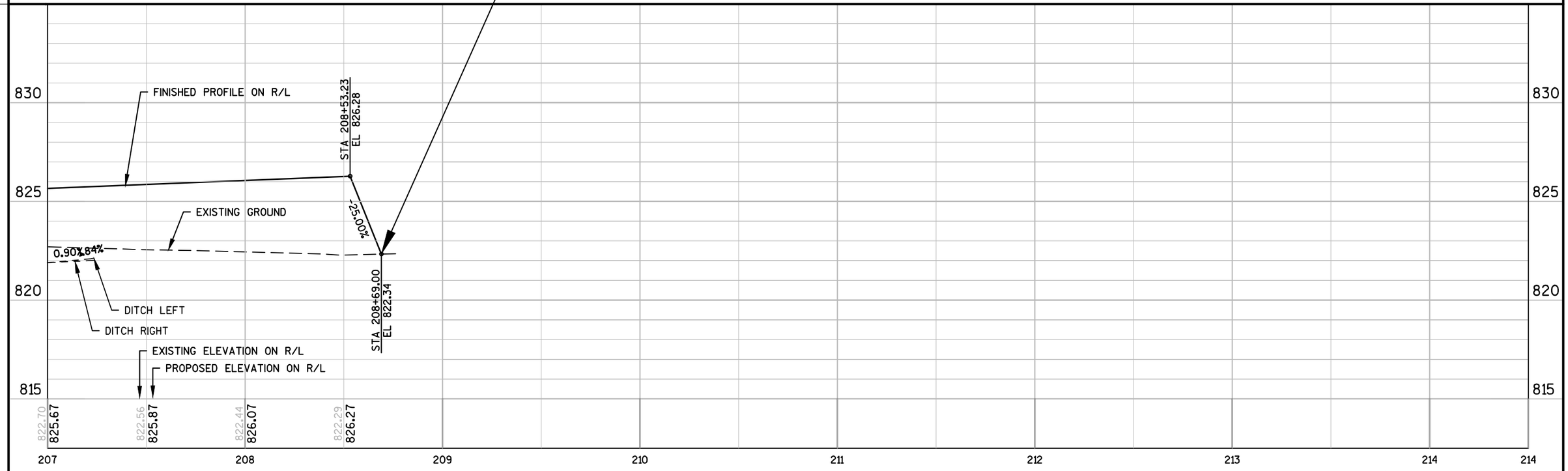
PROPOSED ELEVATION ON R/L

EXISTING GROUND

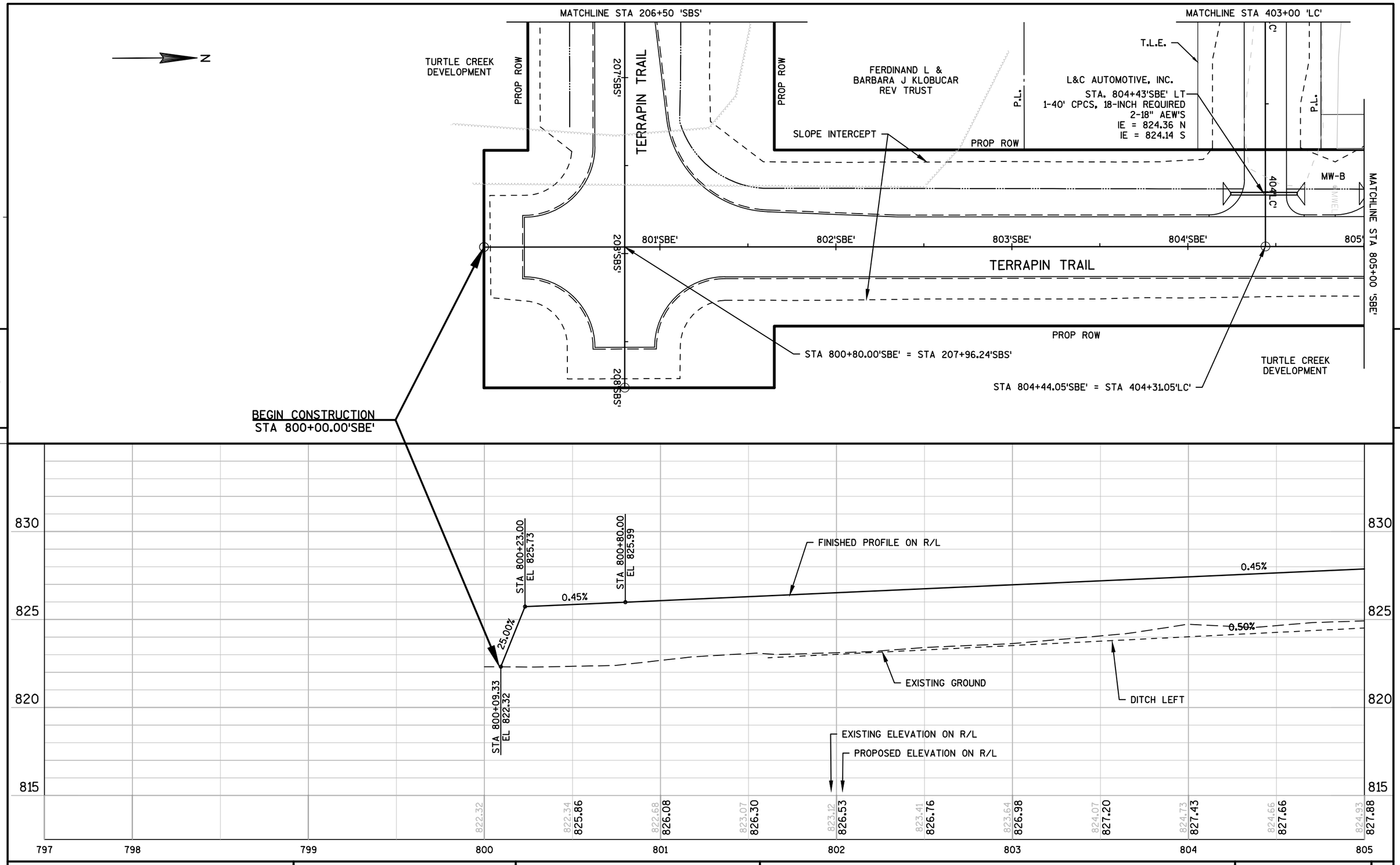
| | | |







PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN AND PROFILE: TERRAPIN TRAIL	SHEET 283	E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN AND PROFILE: TERRAPIN TRAIL	SHEET 284 E

N

STA. 805+29'SBE' LT
1-56' CPCS, 18-INCH REQUIRED
2-18" AEW'S
IE = 824.86 N
IE = 824.52 S

LOIS E. COBURN
RORABECK TRUST/
ROLLETTE OIL
COMPANY, INC.
(ROLLETTE OIL #4)

T.L.E.

PROP ROW

P.L.

MATCHLINE STA 805+00 'SBE'

SBE' 806'SBE' 807'SBE' 808'SBE'

TERRAPIN TRAIL

PROP ROW

SLOPE INTERCEPT

TURTLE CREEK
DEVELOPMENT

END CONSTRUCTION
STA 808+30.02'SBE'

EXISTING ROW

PROP ROW

MW-A

CTH S

30'S'

347'ZD'

PT: 30+29.38'S

RAMP 'ZD'

31'S'

347'ZC'

RAMP 'ZC'

32'S'

346'ZC'

5

5

FINISHED PROFILE ON R/L

STA 807+94.76
EL 829.21

-25.00%

1.33%

STA 808+03.74
EL 826.96

EXISTING GROUND

DITCH LEFT

EXISTING ELEVATION ON R/L

PROPOSED ELEVATION ON R/L

830
825
820
815

| | | |

MW-32
PZ-32

CHARLES K.
DEFOOR TRUST

EXISTING ROW

COUNTY OF
ROCK

STA. 300+65'SFN' LT
1-62' CPCS, 18-INCH REQUIRED
2-18" AEW'S
IE = 829.50 E
IE = 829.00 W

TLE

EXISTING ROW

PC: 300+32.82

MW-10
STA. 303+35'SFN' LT
1-66' CPCS, 18-INCH REQUIRED
2-18" AEW'S
IE = 830.90 E
IE = 830.68 W

OVERHEAD ELECTRIC
(ALLIANT ENERGY)

RW-1

TELEPHONE
(AT&T)

STA. 303+93'SFN' LT
1-50' CPCS, 18-INCH REQUIRED
2-18" AEW'S
IE = 831.23 E
IE = 830.97 W

MW-31
PZ-31

EL VENADO
HOLDINGS, LLC

P.I.

TIMOTHY H.
CURTIS

MW-G

BARBARA
CHRISTENSEN &
MARK SEYMOUR

TELEVISION
(CHARTER)

GAS
(ALLIANT ENERGY)

PROP ROW

P.I.

STA. 305+21'SFN' LT
1-44' CPCS, 18-INCH REQUIRED
2-18" AEW'S
IE = 831.78 E
IE = 831.54 W

PI: 304+21.18

301'SFN'
302'SFN'
303'SFN'
304'SFN'
305'SFN'
306'SFN'
307

SHOPIERE LANE

SLOPE INTERCEPT

SAFETY FENCE

MW-20

STA. 300+51'SFN' RT
1-38' CPCS, 18-INCH REQUIRED
2-18" AEW'S
IE = 827.86 E
IE = 827.64 W

FIBER OPTIC
(AT&T)

MW-4
PZ-4

P.I.

STA. 305+89'SFN' LT
1-45' CPCS, 18-INCH REQUIRED
2-18" AEW'S
IE = 832.08 E
IE = 831.87 W

STA. 306+69'SFN' LT
1-64' CPCS, 18-INCH REQUIRED
2-18" AEW'S
IE = 832.50 E
IE = 832.19 W

MATCHLINE STA 307+00 'SBS'

BEGIN CONSTRUCTION
STA 300+00.00'SFN'

5

5

STA 300+00.00
EL 827.50

10.00%

STA 300+42.10
EL 831.71

EXISTING GROUND

FINISHED PROFILE ON R/L

0.50%

DITCH LEFT

EXISTING ELEVATION ON R/L

PROPOSED ELEVATION ON R/L

SEE CONTOUR MAP
FOR MORE INFORMATION

840
835
830
825

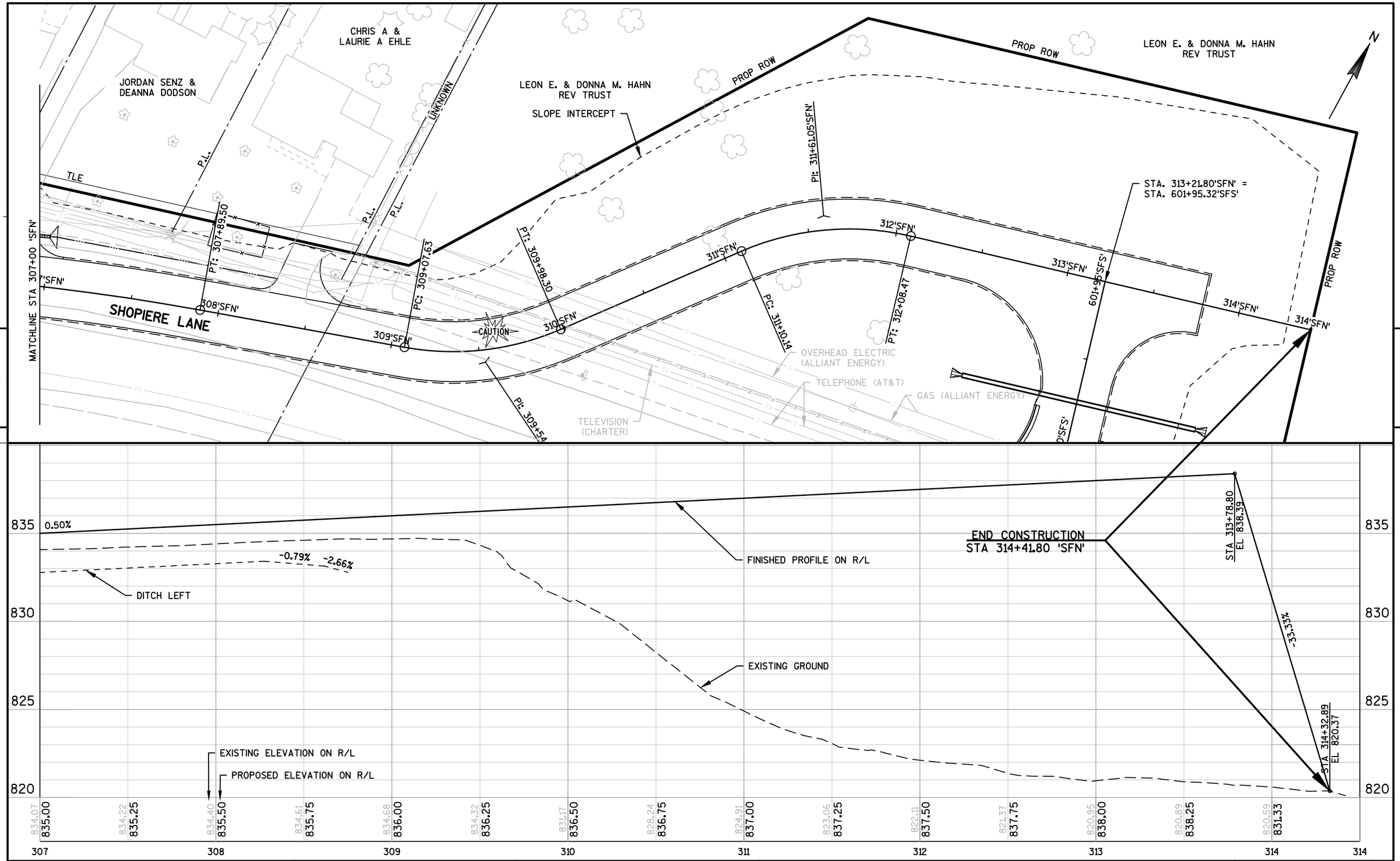
834.30	834.05	833.81	833.69	834.01
827.50	831.75	832.00	832.25	832.50

833.96	833.85	833.83	833.85	833.82	833.81	833.88
832.75	833.00	833.25	833.50	833.75	834.00	834.25

833.88	833.93	834.07	
834.50	834.75	835.00	

299 300 301 302 303 304 305 306 307

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN AND PROFILE: SHOPIERE LANE	SHEET 286 E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN AND PROFILE: SHOPIERE LANE	SHEET 287	E

MATCHLINE STA 312+00 'SFN'

N

STA. 600+00.00'SFS' = STA. 54+52.06'S'

LEON E. & DONNA M. HAHN
REV TRUST

BEGIN CONSTRUCTION
STA 600+00.00'SFS'

TELEPHONE (AT&T)
TELEVISION (CHARTER)

54'S'

CTH S

55'S'

600+00'SFS'

N14° 05' 47.59"W

CAUTION

601+00'SFS'

601+25.00, -66.97' LT

SHOPIERE LANE

313'SFN'

601+95'SFS'

N75° 54' 12.41"E

STA. 601+95.32'SFS' = STA. 313+21.80'SFN'

SLOPE INTERCEPT

PROP ROW

LEON E. & DONNA M. HAHN
REV TRUST

END CONSTRUCTION
STA 601+95.32'SFS'

STA. 601+25'SFS'
1-136' CPRC CLASS III, 24-INCH REQUIRED
2-24" RCAEW REQUIRED
SKEW 0°
SLOPE = 1.00%

601+25.00, 69.03' RT

GAS
(ALLIANT ENERGY)

314'SFN'

PROP ROW

OVERHEAD ELECTRIC
(ALLIANT ENERGY)

PT: 55+03.46

5

5

835
830
825
820

3.50%

0.95%

STA 600+00.00
EL 835.13

STA 600+44.20
EL 836.68

STA 601+95.32
EL 838.11

FINISHED PROFILE ON R/L

EXISTING GROUND

STA. 601+25'SFS'
1-24" CPRC CLASS III REQUIRED
2-24" RCAEW'S REQUIRED
IE = 824.50 LT
IE = 823.14 RT

EXISTING ELEVATION ON R/L

PROPOSED ELEVATION ON R/L

832.49 835.13
830.17 836.73
824.89 837.21
822.36 837.68

597 598 599 600 601 602 603 604 604

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN AND PROFILE: SHOPIERE LANE	SHEET 288 E

STA. 404+31.05'LC' = STA. 804+44.05'SBE'
SKEW 90°

T.L.E.

LOIS E. COBURN RORABECK
TRUST/ROLLETTE OIL
COMPANY, INC.
(ROLLETTE OIL #4)

MATCH EXISTING
PARKING LOT

MW-C

MW-B

T.L.E.

400'LC' | 401'LC' | S89° 49' 54"E | 402'LC' | 403'LC' | 404'LC'

805+00'SBE'

804+00'SBE'

TERRAPIN TRAIL

PROP ROW

TURTLE CREEK
DEVELOPMENT

N

TLE
SLOPE INTERCEPT

SAFETY FENCE

STA. 404+01'LC'
1-40' CMCP, 18-INCH REQUIRED
2-18" AEW'S
IE = 824.36 N
IE = 824.14 S

L&C AUTOMOTIVE, INC.

SEPTIC

SEPC

SEPV

WELL

MWEL

BEGIN CONSTRUCTION
STA 400+00 'LC'

END CONSTRUCTION
STA 404+31.05 'LC'

FINISHED PROFILE ON R/L

EXISTING GROUND

EXISTING ELEVATION ON R/L

PROPOSED ELEVATION ON R/L

0.58%

0.22%

2.00%

STA 400+25.03
EL 826.30

STA 400+45.97
EL 826.42

STA 404+11.05
EL 827.21

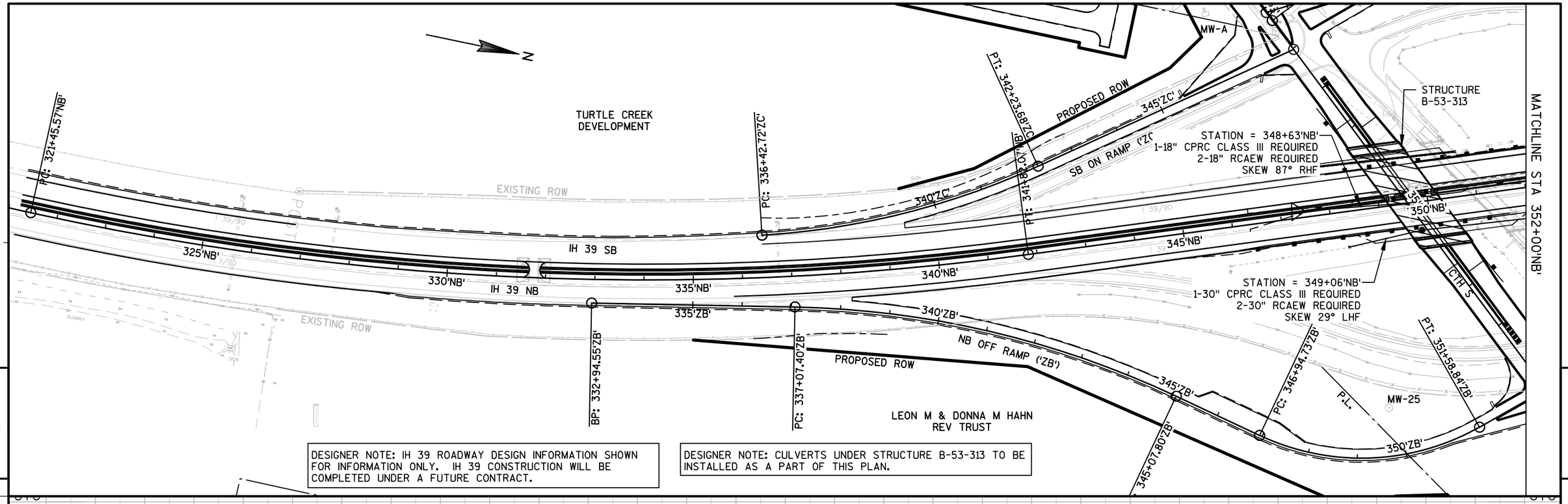
STA 404+31.05
EL 827.61

	399	400	401	402	403	404	405
EXISTING ELEVATION ON R/L	826.24	826.33	825.82	825.82	825.62	826.13	826.95	827.55	825.21
PROPOSED ELEVATION ON R/L		826.43	826.54	826.64	826.75	826.86	826.97	827.08	827.19

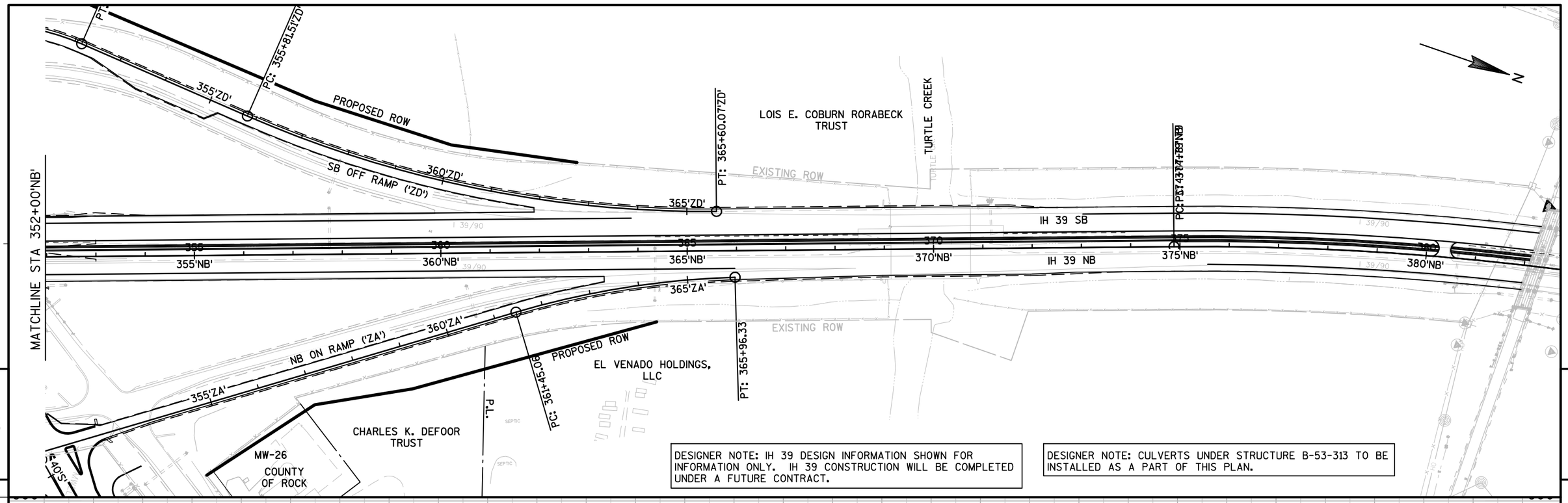
835 / 830 / 825 / 820

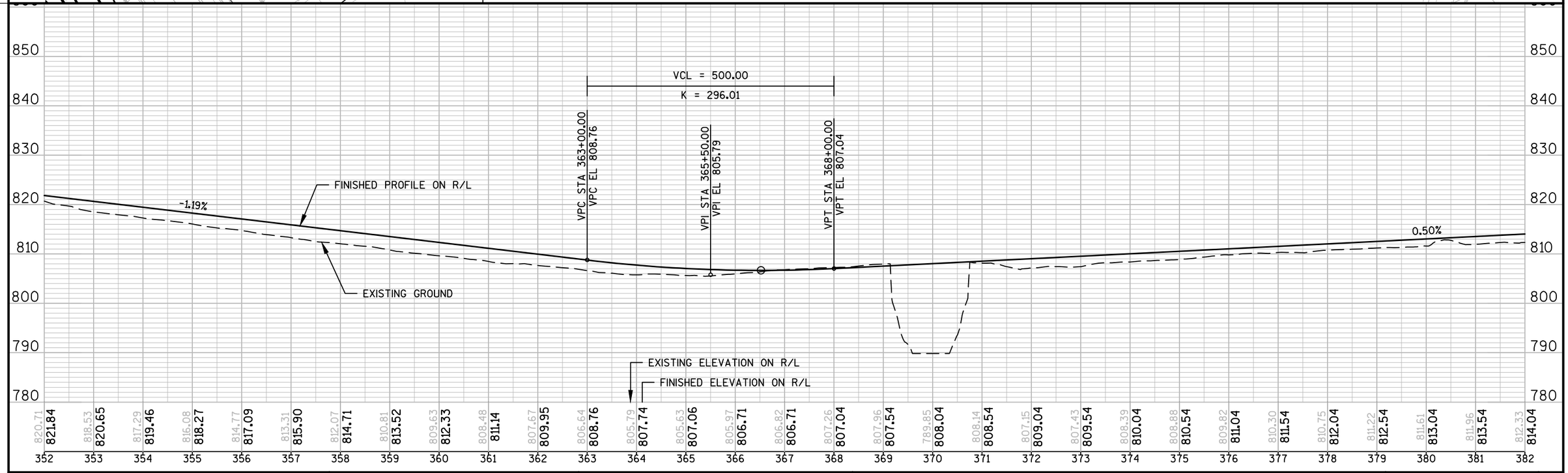
5

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	PLAN AND PROFILE: DRIVEWAY 'LC'	SHEET 289 E



PROJECT NO: FUTURE CONTRACT	HWY: IH 39	COUNTY: ROCK	PLAN AND PROFILE: IH 39	SHEET 290	E





PROJECT NO: FUTURE CONTRACT	HWY: IH 39	COUNTY: ROCK	PLAN AND PROFILE: IH 39	SHEET 291	E

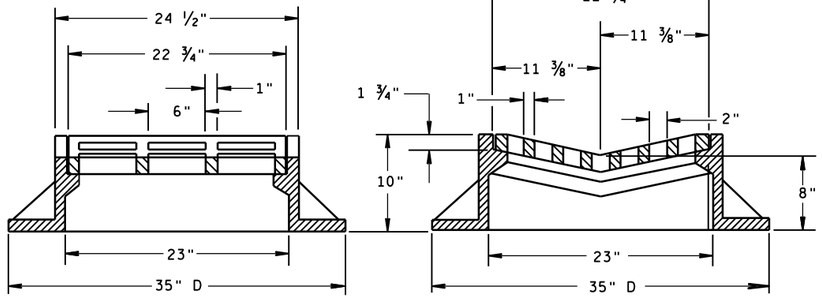
Standard Detail Drawing List

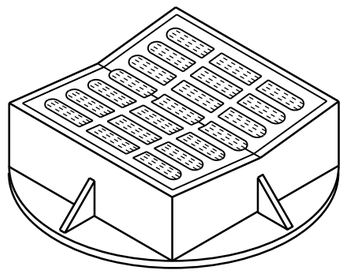
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C07-01	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-01	INLETS MEDIAN 1 AND 2 GRATE
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
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
08F07-05	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE FRAINS
08F08-02	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED CROSS DRAINS
09B02-08	CONDUIT UNDER PAVED HIGHWAYS
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C14-01	CONCRETE CONTROL CABINET BASE, TYPE L
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D04-01	LIGHTING CONTROL CABINET
09E01-13D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-13E	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6 (35 FEET)
09E01-13G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
09H11-01	IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS
11B01-05	CONCRETE CORRUGATED MEDIAN
11B02-02	CONCRETE MEDIAN NOSE
12A03-10	NAME PLATE (STRUCTURES)
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13A03-05	CONCRETE PAVEMENT SHOULDERS
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13B02-07A	CONCRETE BRIDGE APPROACH
13B02-07B	STRUCTURAL APPROACH SLAB AND CONCRETE BRIDGE APPROACH
13C01-17	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C18-02A	CONCRETE PAVEMENT JOINTING
13C18-02B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-02C	CONCRETE PAVEMENT JOINT TIES
13C18-02D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
13C18-02E	CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS
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"
14B08-01A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B26-03A	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-03B	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-03C	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-03D	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-03E	STEEL THRIE BEAM BULLNOSE TERMINAL
14B29-01	SAFETY EDGE
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)

Standard Detail Drawing List

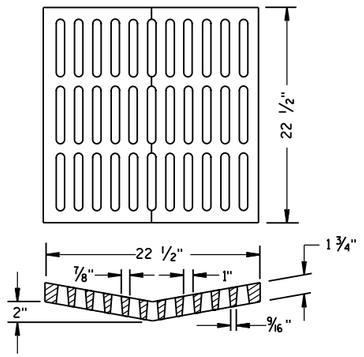
14B44-02B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-03A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03J	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
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
15B03-13A	FENCE CHAIN LINK
15B03-13B	FENCE CHAIN LINK
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C04-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C11-05	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C18-03	MEDIAN ISLAND MARKING
15C19-02A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-02B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C19-02C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C21-05	SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS
15C26-02	END-OF-ROADWAY SIGNING
15C27-01	DOUBLE ARROW WARNING SIGN PLACEMENT
15C31-01D	PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D03-02	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER
15D06-03	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
15D12-04	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D14-02	TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS)
15D15-01	TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE
15D16-02	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-02	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-02	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D27-02	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D28-02	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D35-01A	RAMP GATE HARD WIRED
15D35-01B	RAMP GATE HARD WIRED
15D35-01C	RAMP GATE HARD WIRED
15D35-01D	RAMP GATE HARD WIRED

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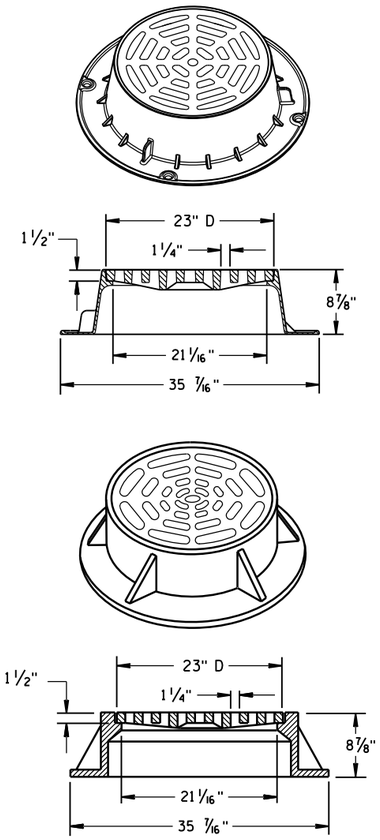


TYPE "B"



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"

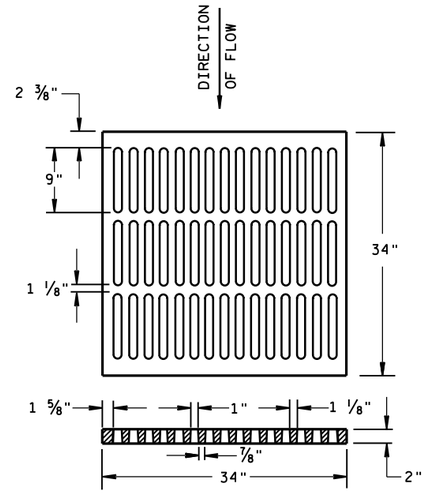
NOTE: EITHER CASTING IS ACCEPTABLE

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.

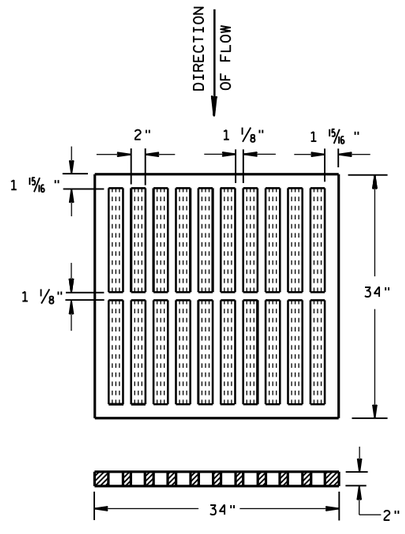
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



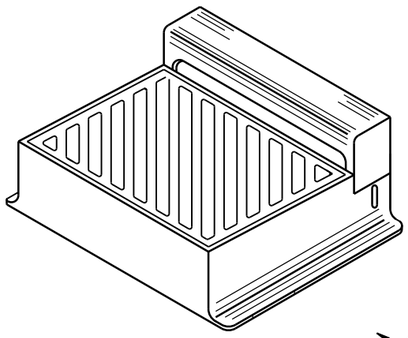
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

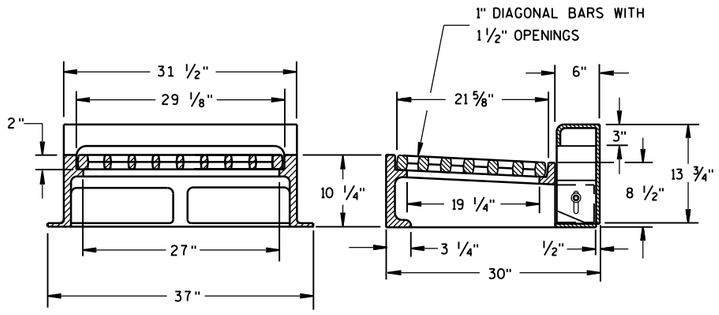


TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

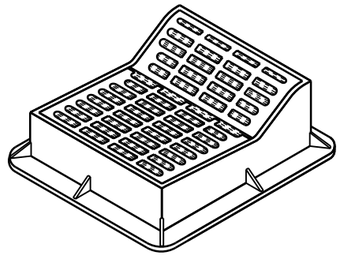
INLET COVERS
TYPE B, B-A, C,
MS, MS-A, & WM

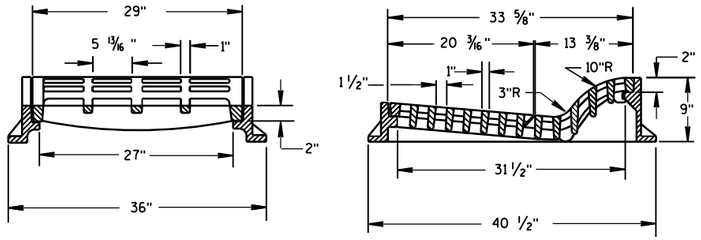
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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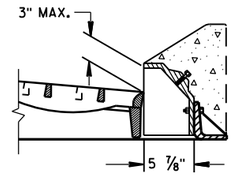
S.D.D. 8 A 5-19b





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

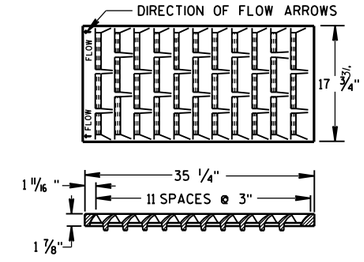
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

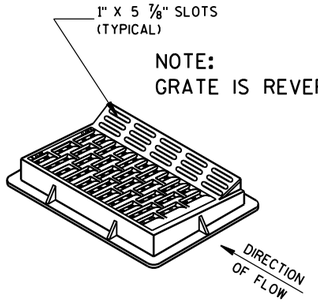
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

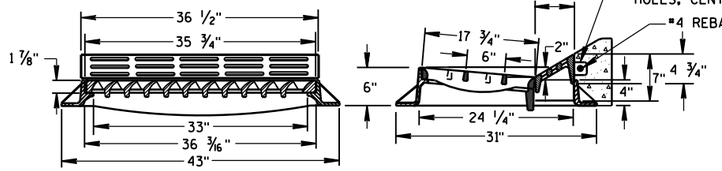
GENERAL NOTES

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.



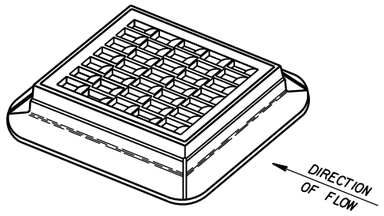


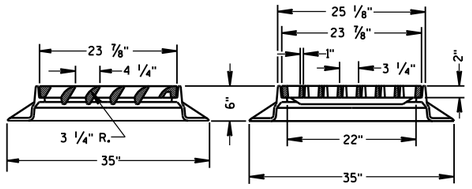


TYPE "HM"

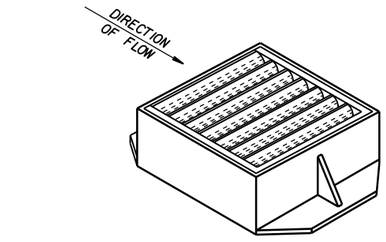
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

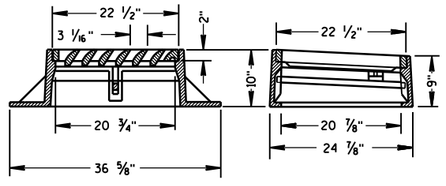
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



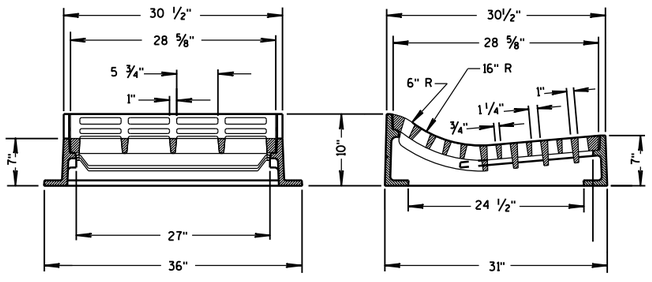


TYPE "S"



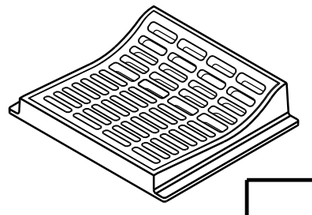


TYPE "V"



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-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE

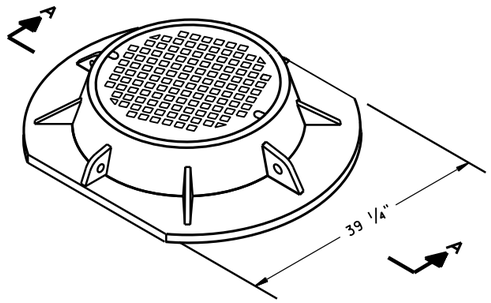
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

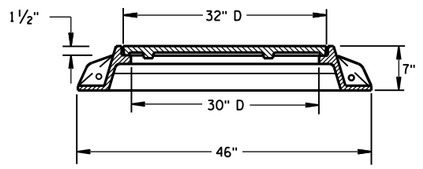
295

FHWA

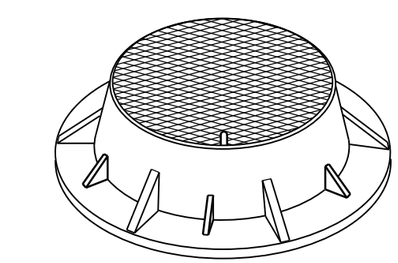
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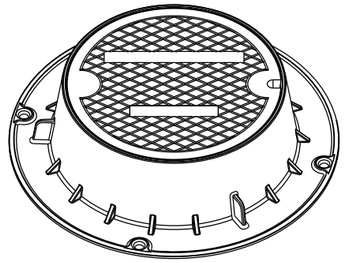
S.D.D. 8 A 5-19c

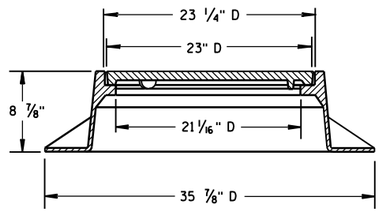


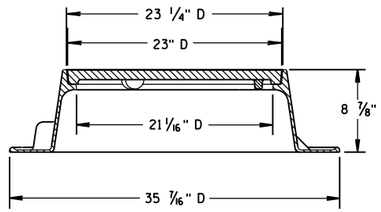


SECTION A-A
TYPE "K"









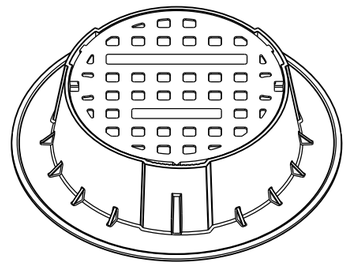
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

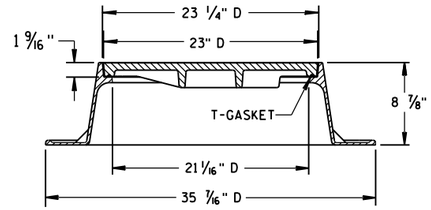
GENERAL NOTES

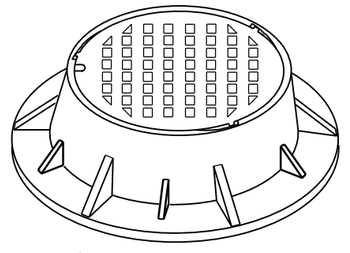
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

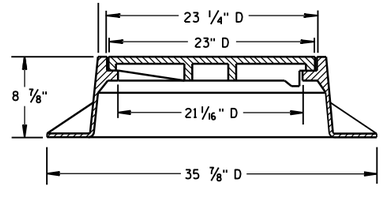
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

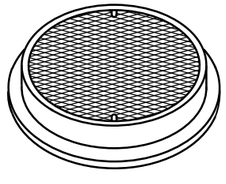


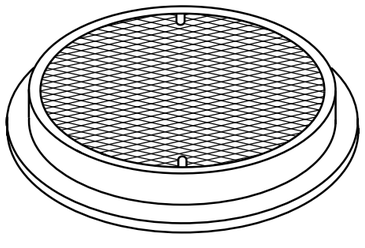


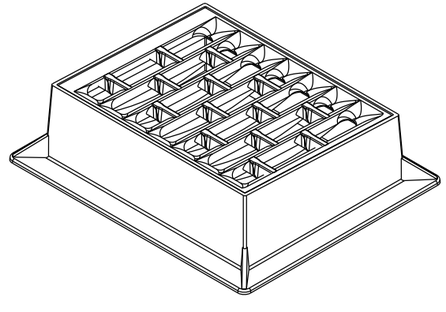


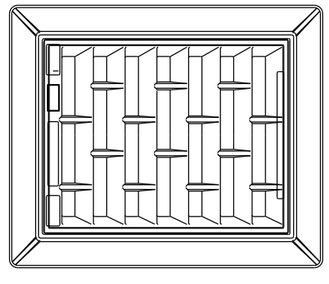


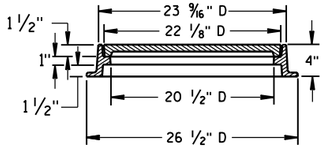
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



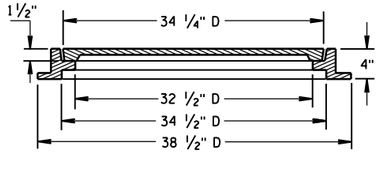




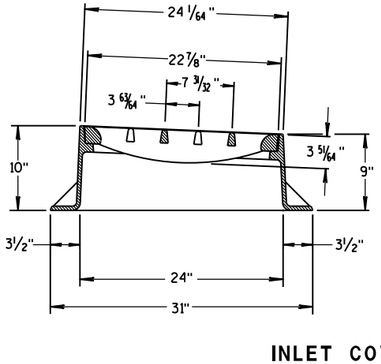


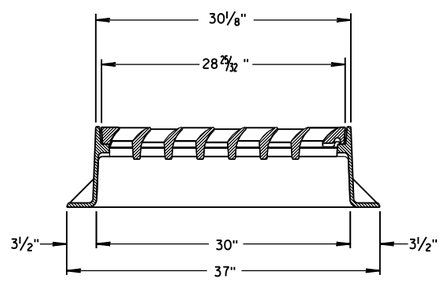


TYPE "L"



TYPE "M"





INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

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DEPARTMENT OF TRANSPORTATION

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11/27/2013
DATE
FHWA

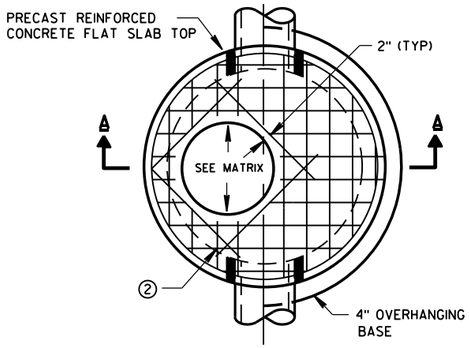
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

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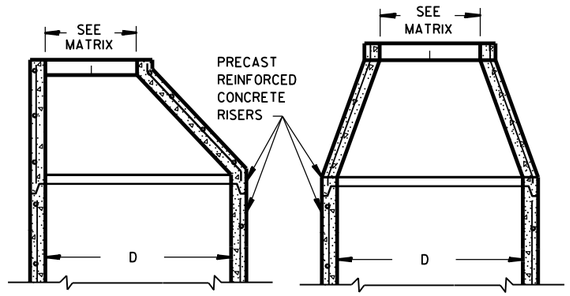
S.D.D. 8 A 5-19d

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S.D.D. 8 A 5-19d

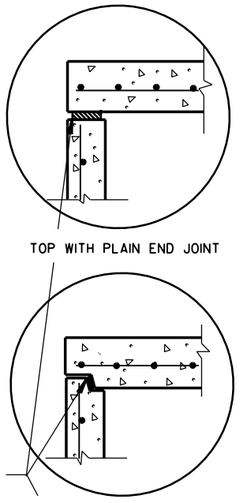


PLAN VIEW CIRCULAR OPENING



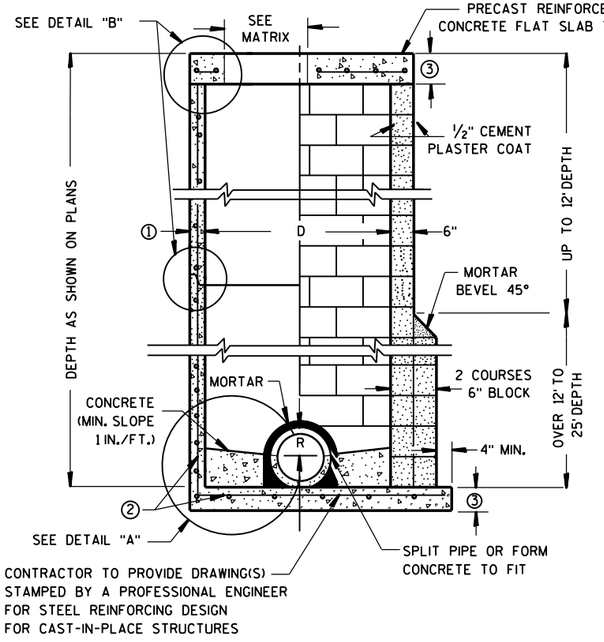
OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



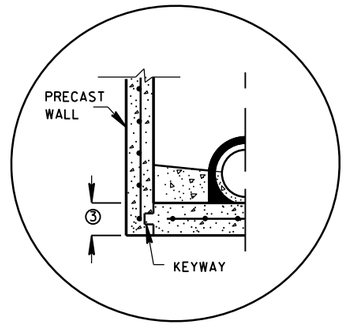
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

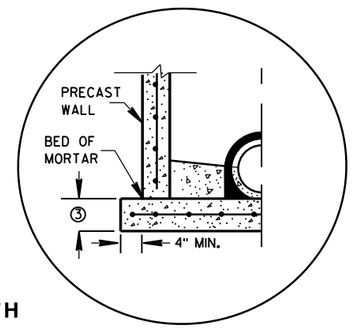


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

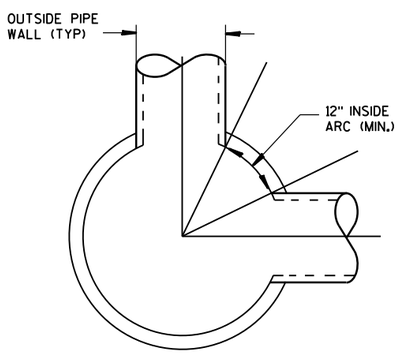


PRECAST REINFORCED
CONCRETE WITH INTEGRAL BASE OPTION



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 MANHOLE 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 CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE 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 ½" 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.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

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, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES 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".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

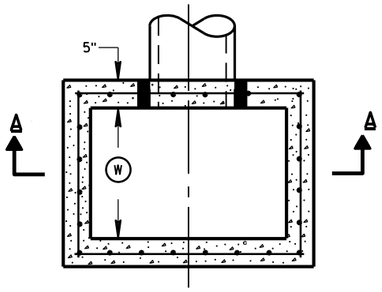
MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

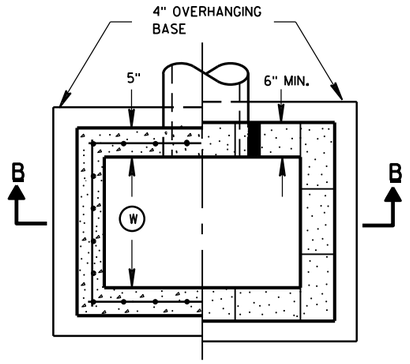
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

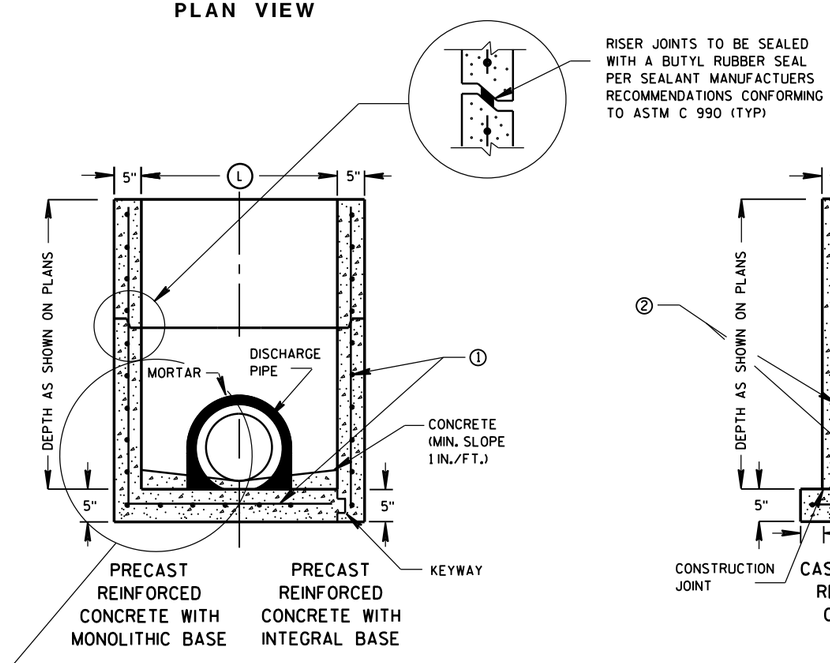
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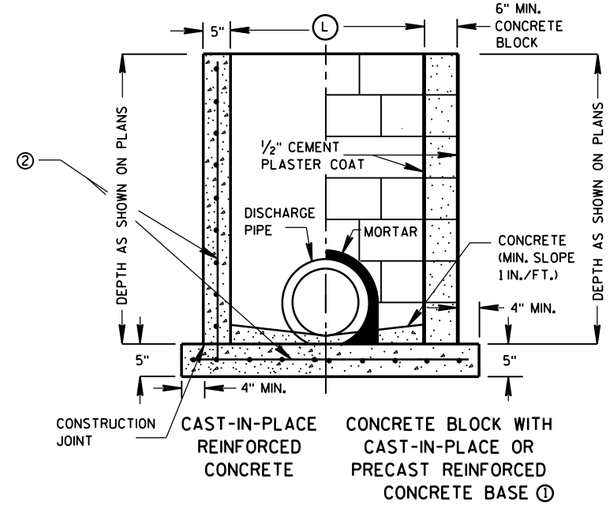
PLAN VIEW



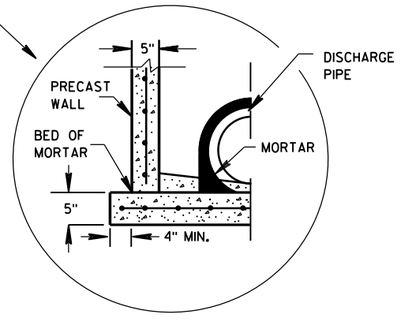
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

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.

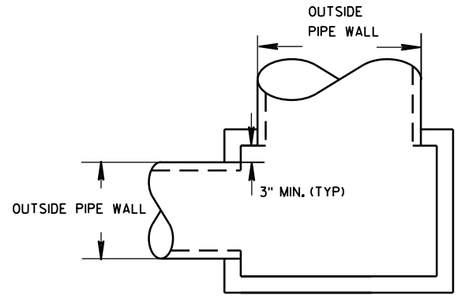
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (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

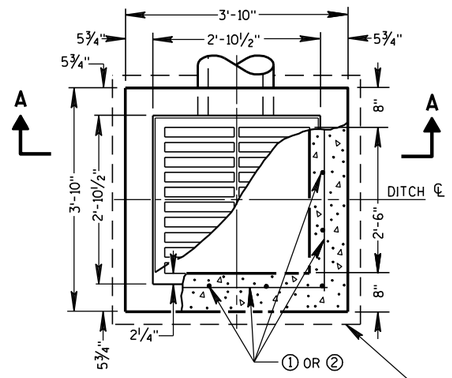
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6/5/2012
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FHWA

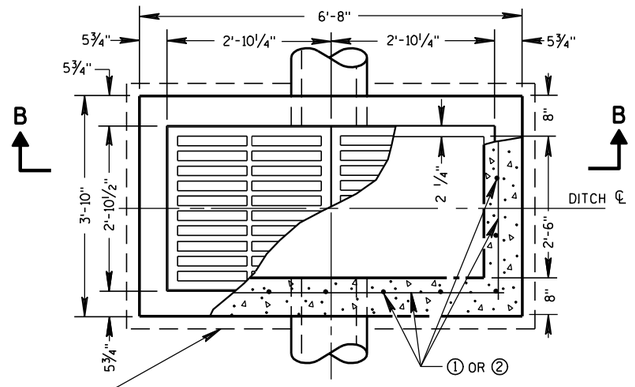
/S/ Jerry H. Zogg
ROADWAY STANDARDS DE
ENGINEER

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S.D.D. 8 C 7-1

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

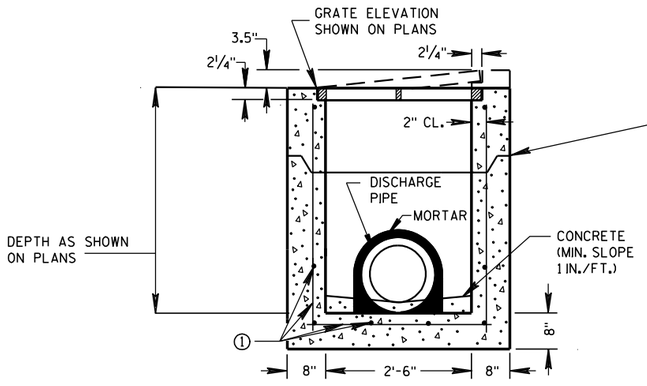


PLAN VIEW

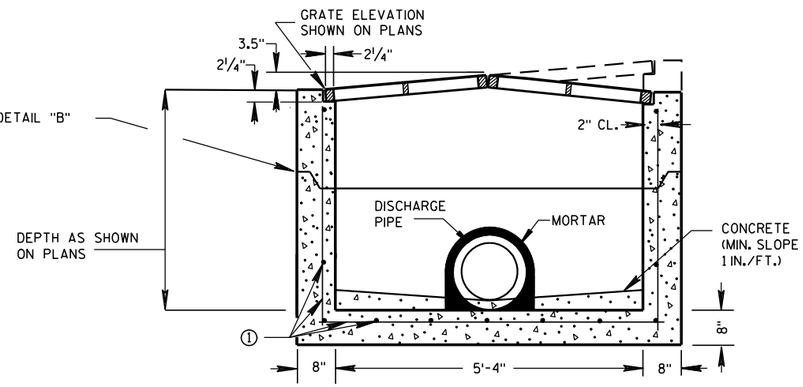


PLAN VIEW

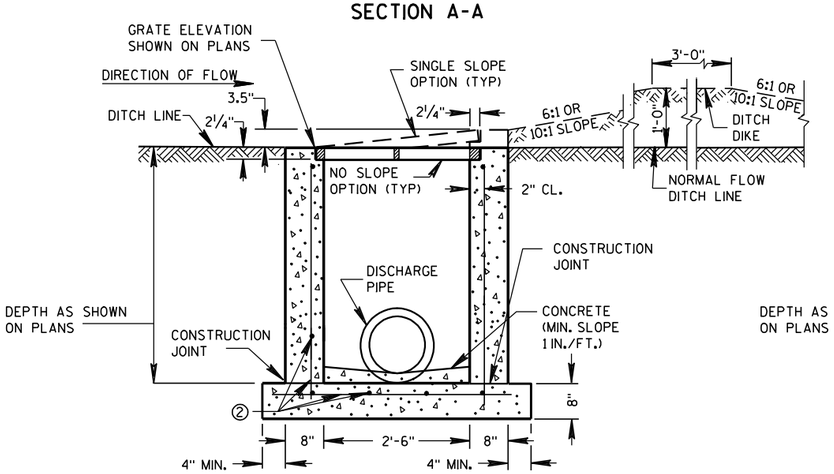
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



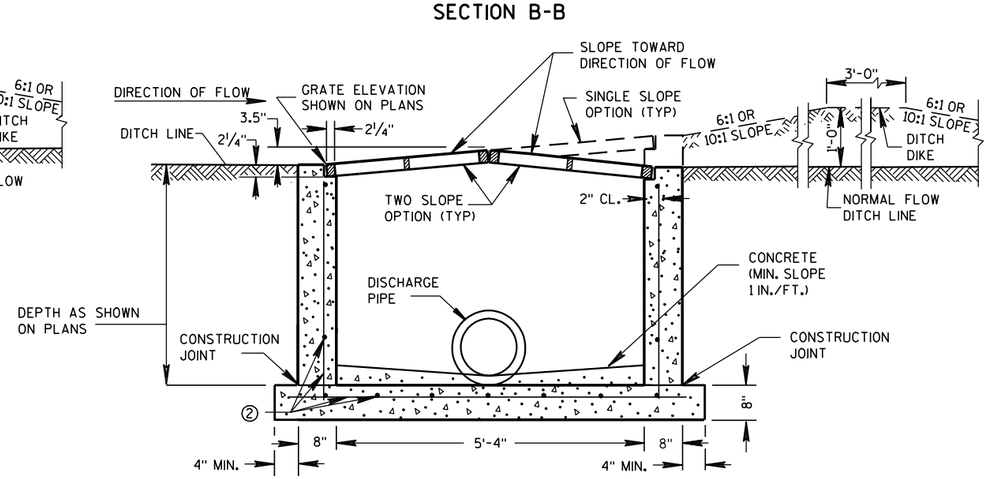
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

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, 1G-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.

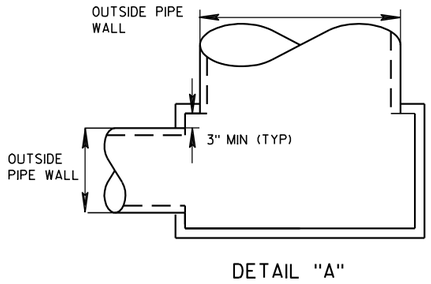
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

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.

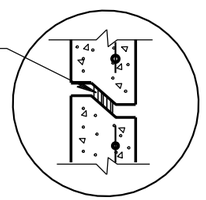
PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	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)



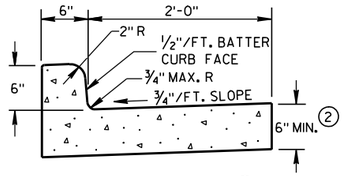
DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

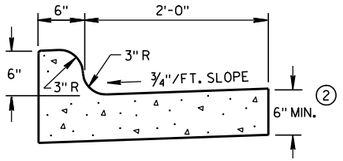
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

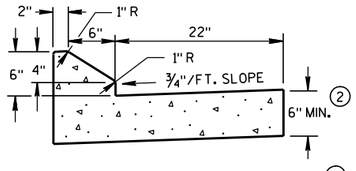
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S.D.D. 8 C 8-1



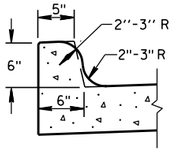
TYPES A & D (1)



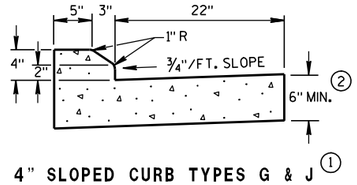
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

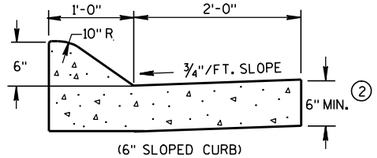


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

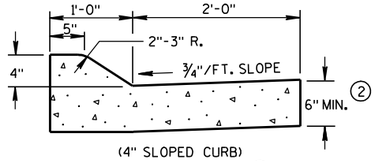


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

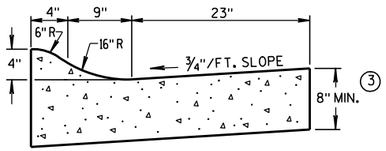


(6" SLOPED CURB)



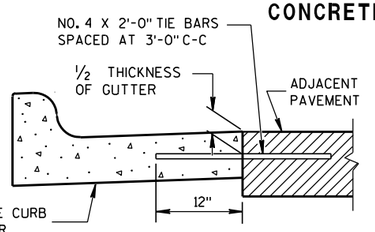
(4" SLOPED CURB)

TYPES A & D (1)

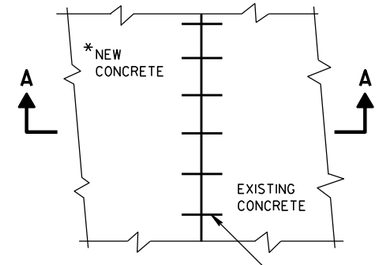


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

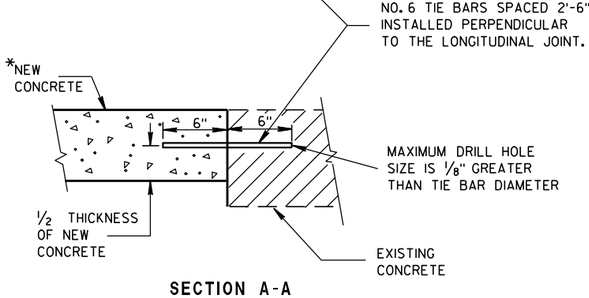


TYPICAL TIE BAR LOCATION (1)



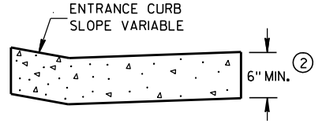
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW

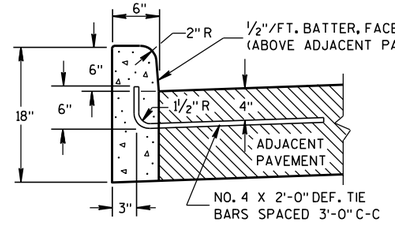


SECTION A-A

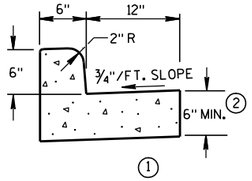
TIE BARS DRILLED INTO EXISTING PAVEMENT



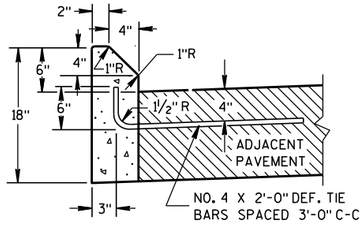
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



(1)
TYPES A & D

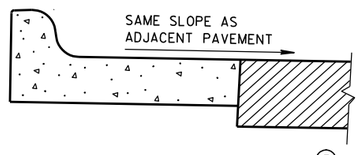


(1)
TYPES A & D
CONCRETE CURB & GUTTER 18"



(1)
TYPES G & J

CONCRETE CURB



REVERSE SLOPE GUTTER (5)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

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.

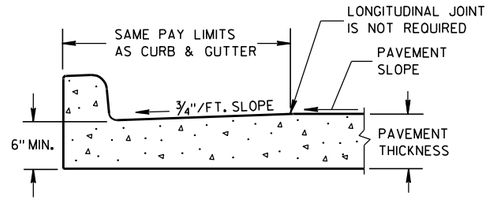
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

(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.

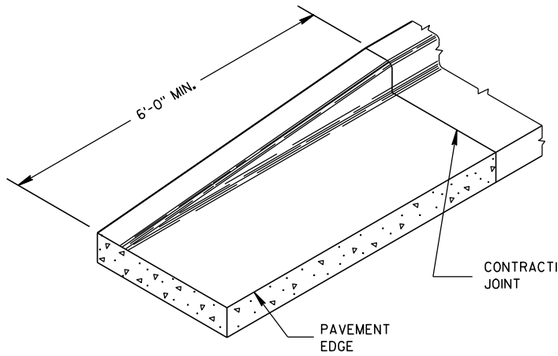
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(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



END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

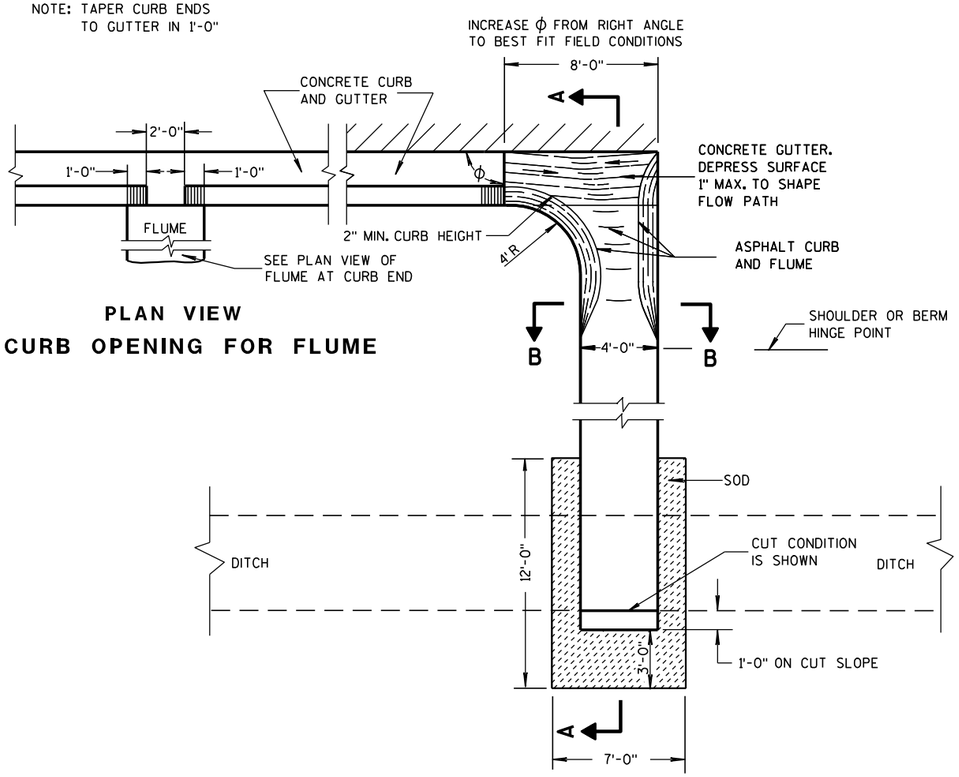
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
300
FHWA
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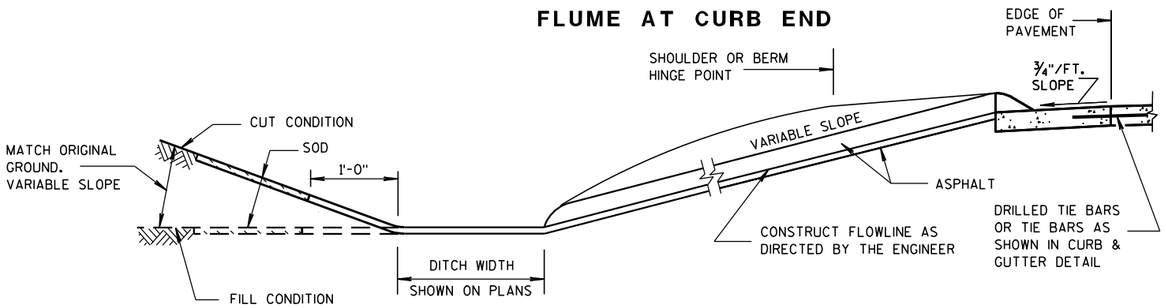
S.D.D. 8 D 1-17

ASPHALTIC FLUME

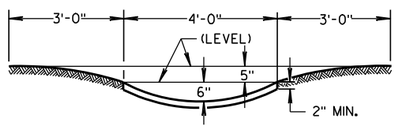


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

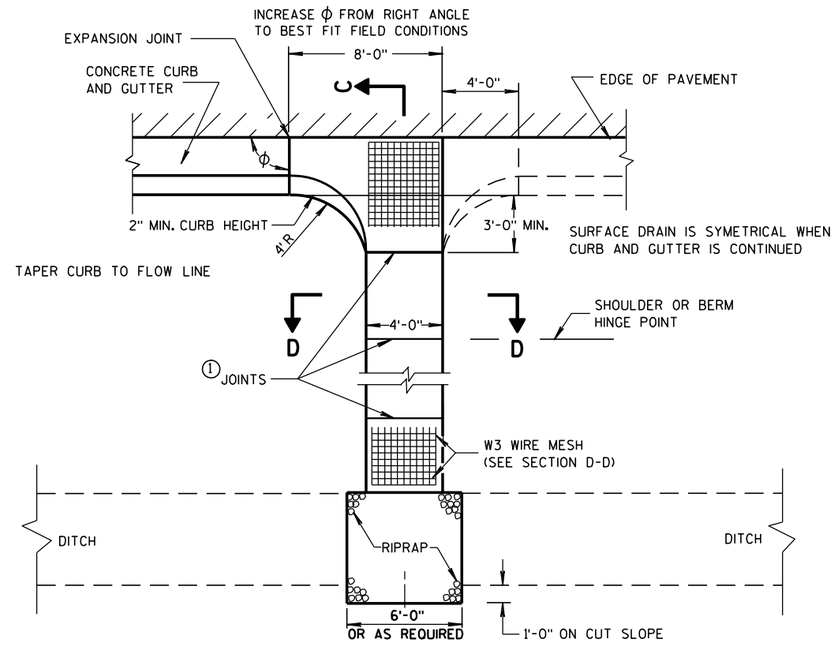
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

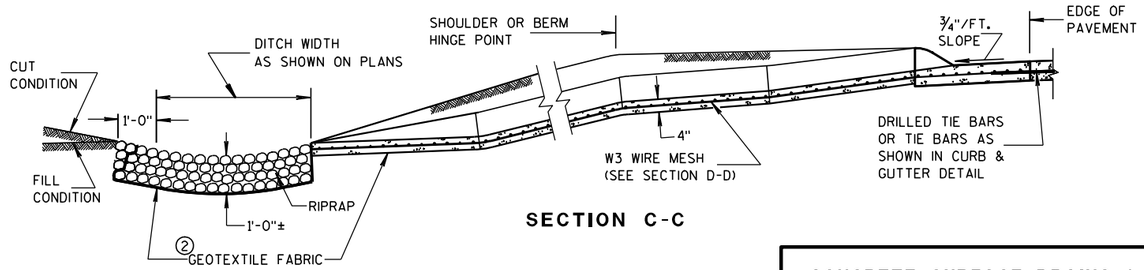
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

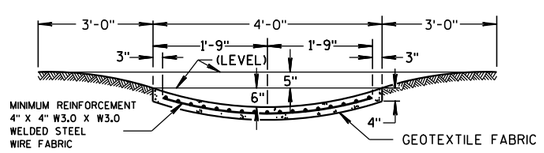
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9-4-08 DATE — /S/ Jerry H. ... ROADWAY STANDARDS ENGINEER — MENT

FHWA

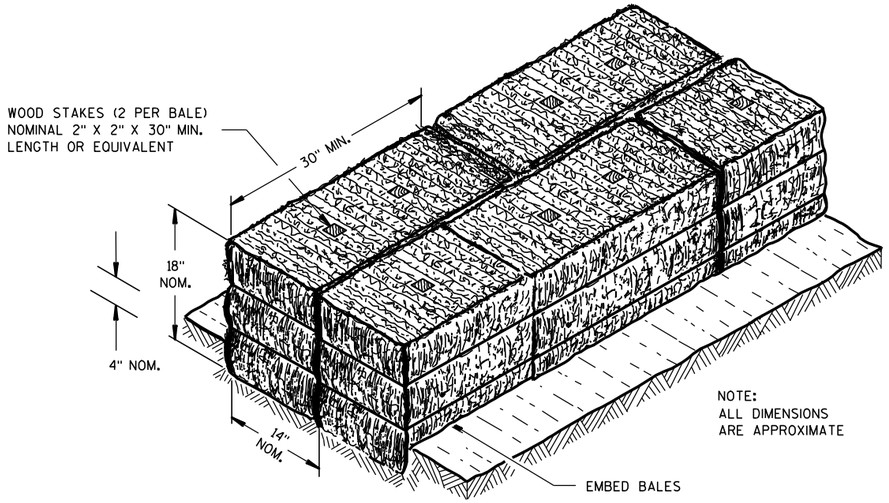
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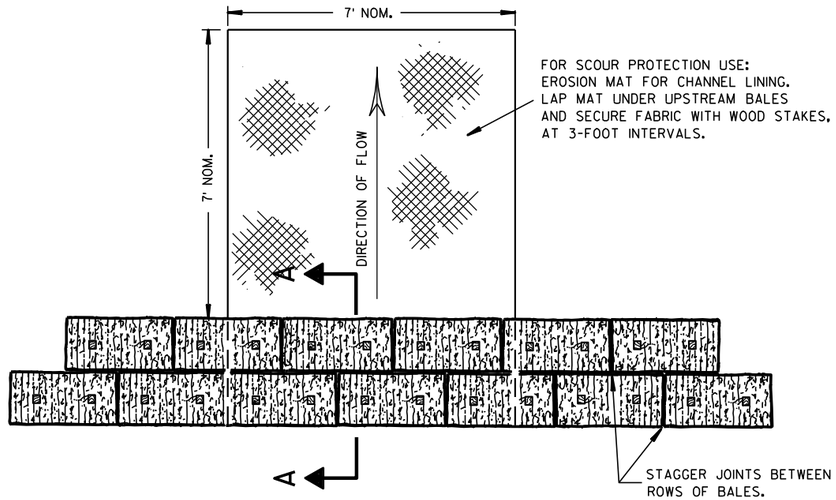
S.D.D. 8 D 4-5

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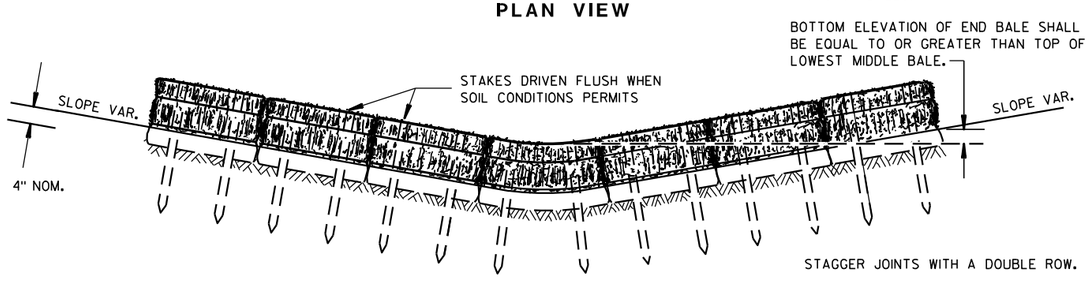
S.D.D. 8 D 4-5



SECTION A-A



PLAN VIEW



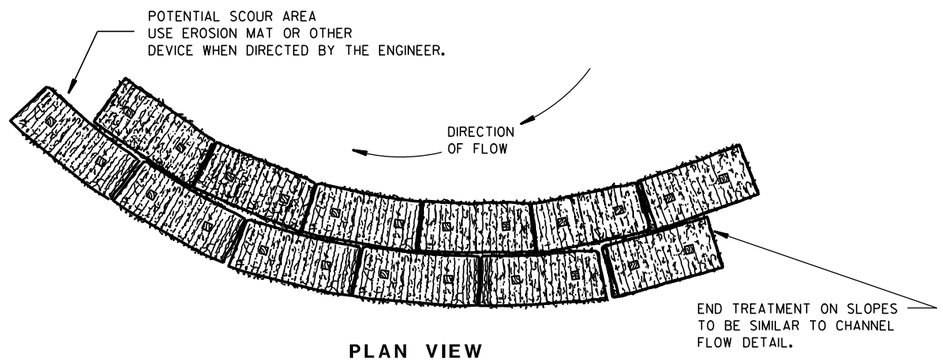
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

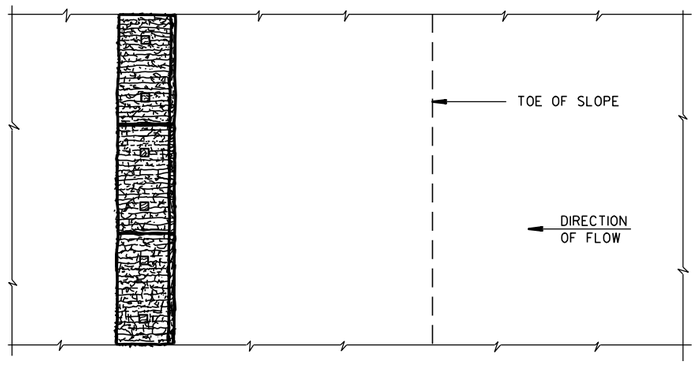
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

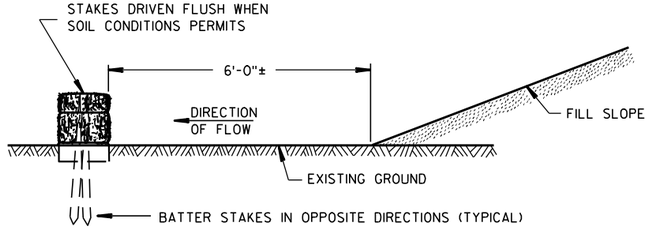


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

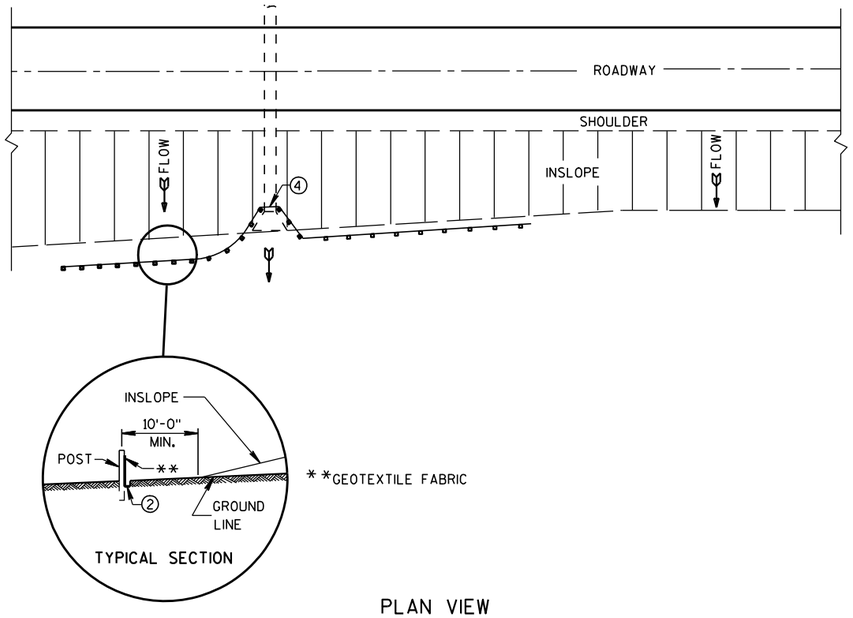
6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

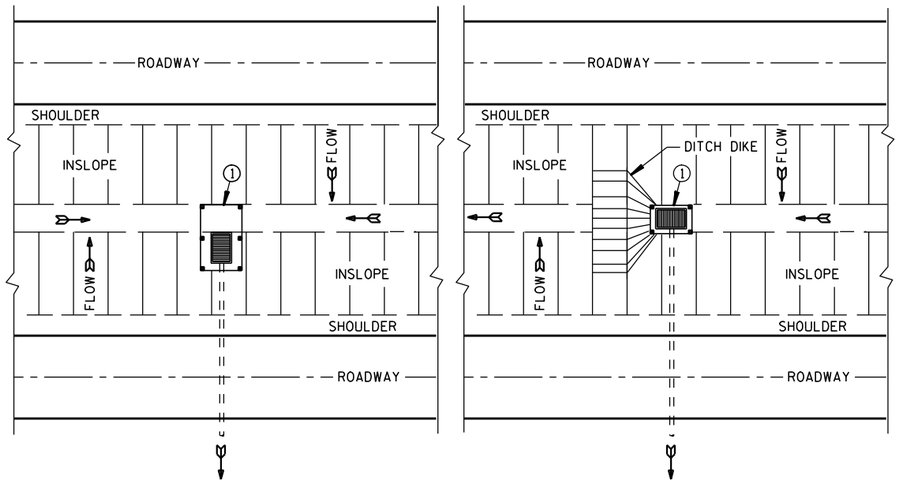
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



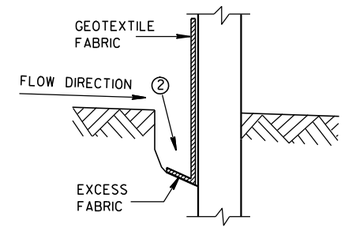
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

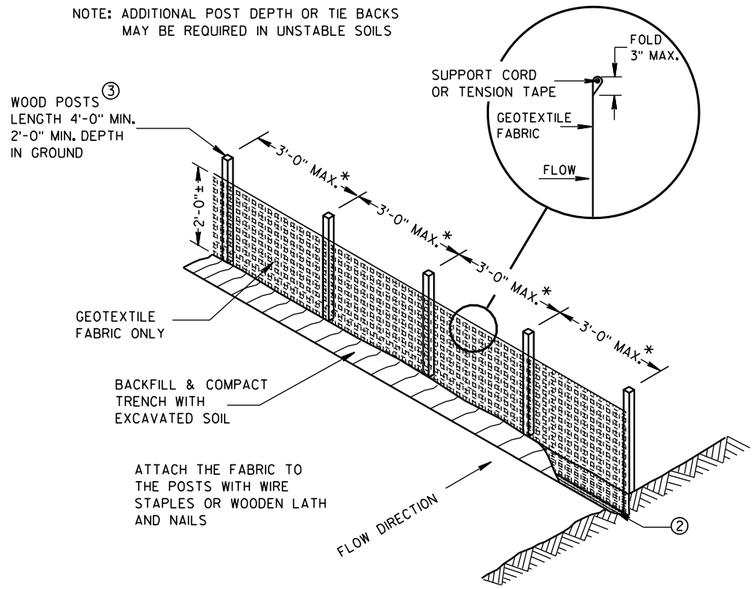
GENERAL NOTES

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 1⅛" X 1⅛" 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.

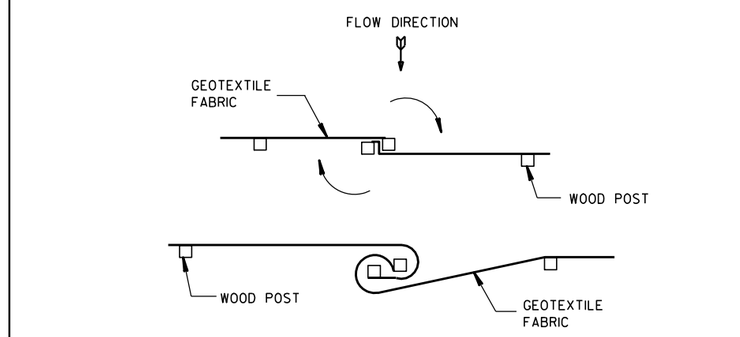


TRENCH DETAIL

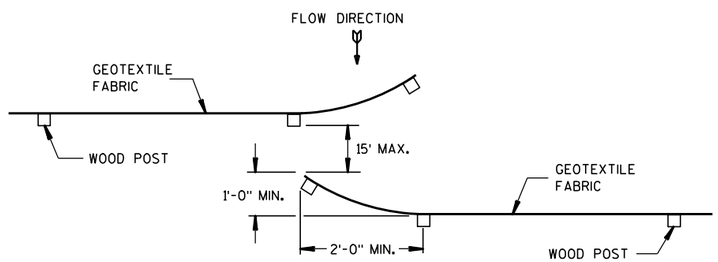


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

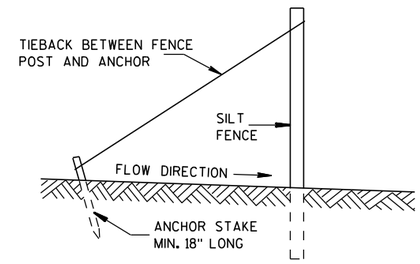


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

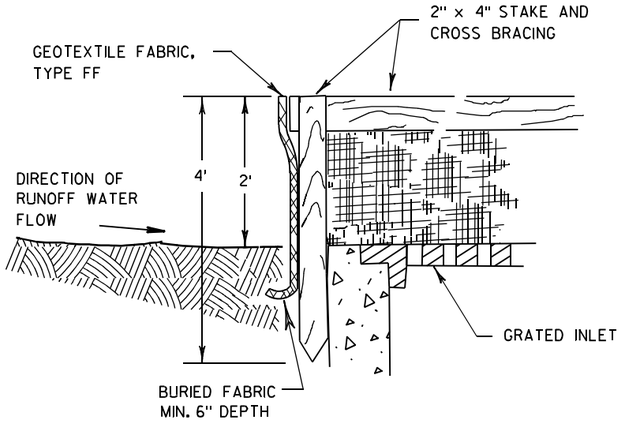
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

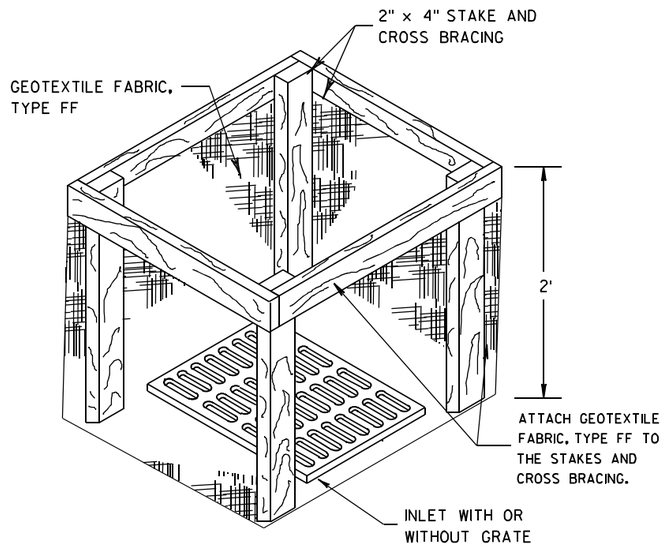
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S.D.D. 8 E 9-6

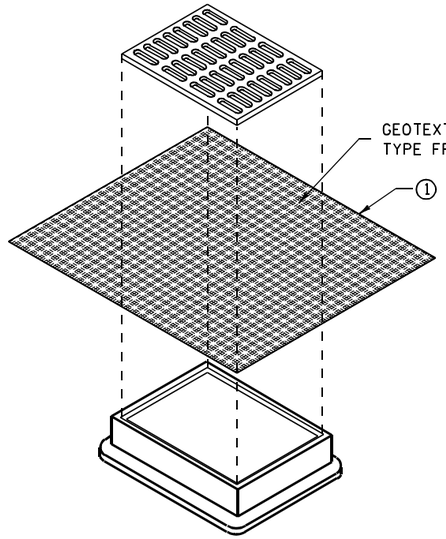
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S.D.D. 8 E 9-6



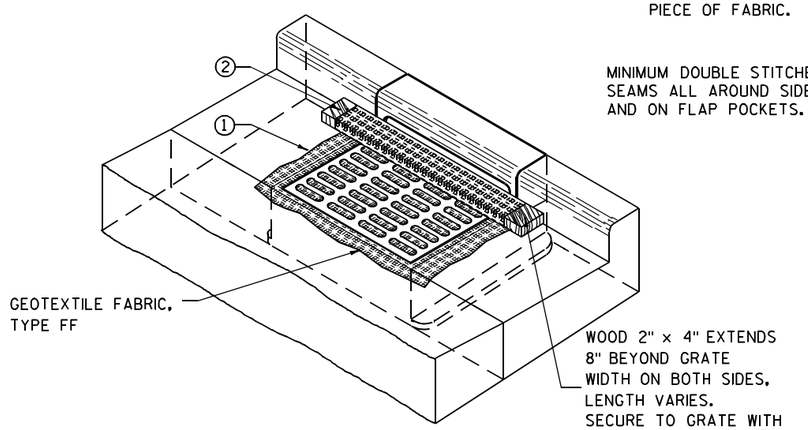


INLET PROTECTION, TYPE A

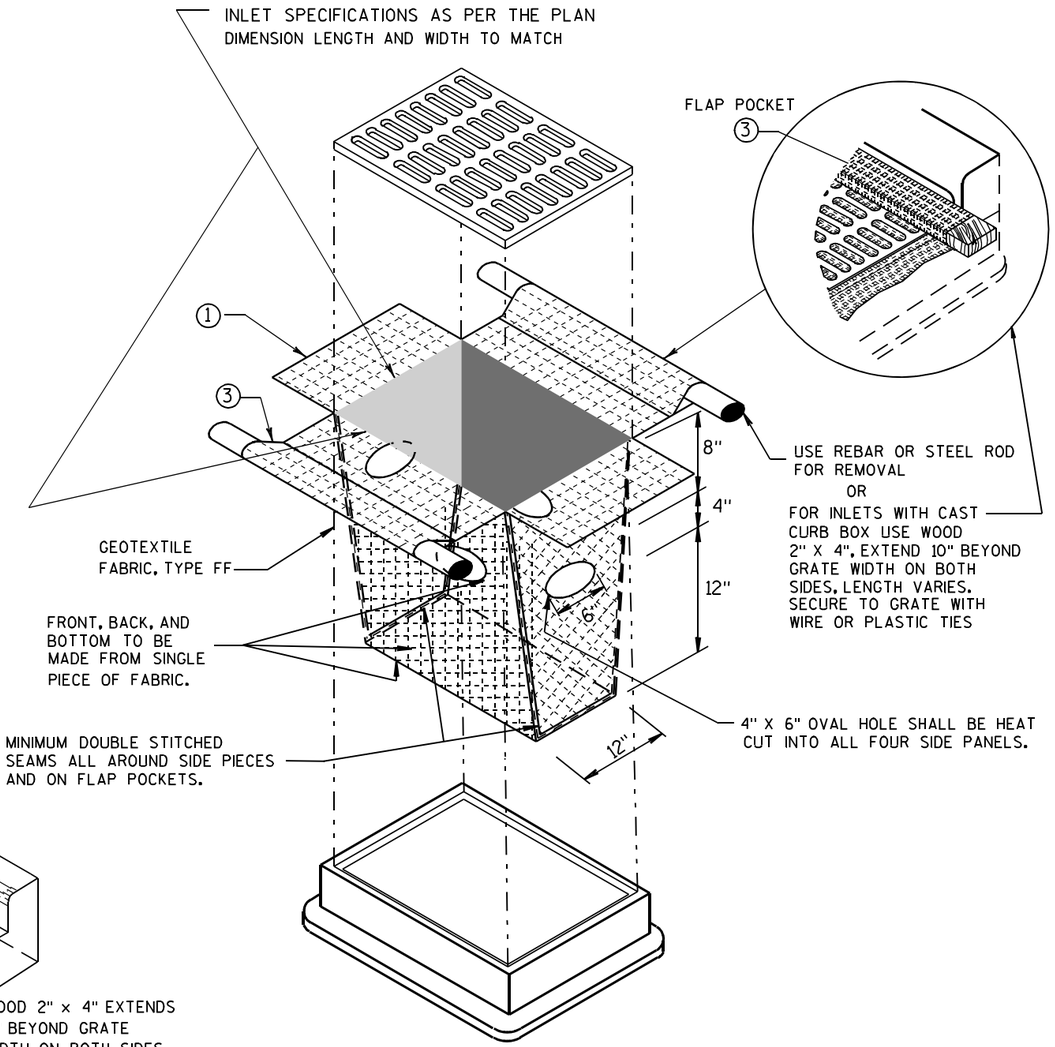


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

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.

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 A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

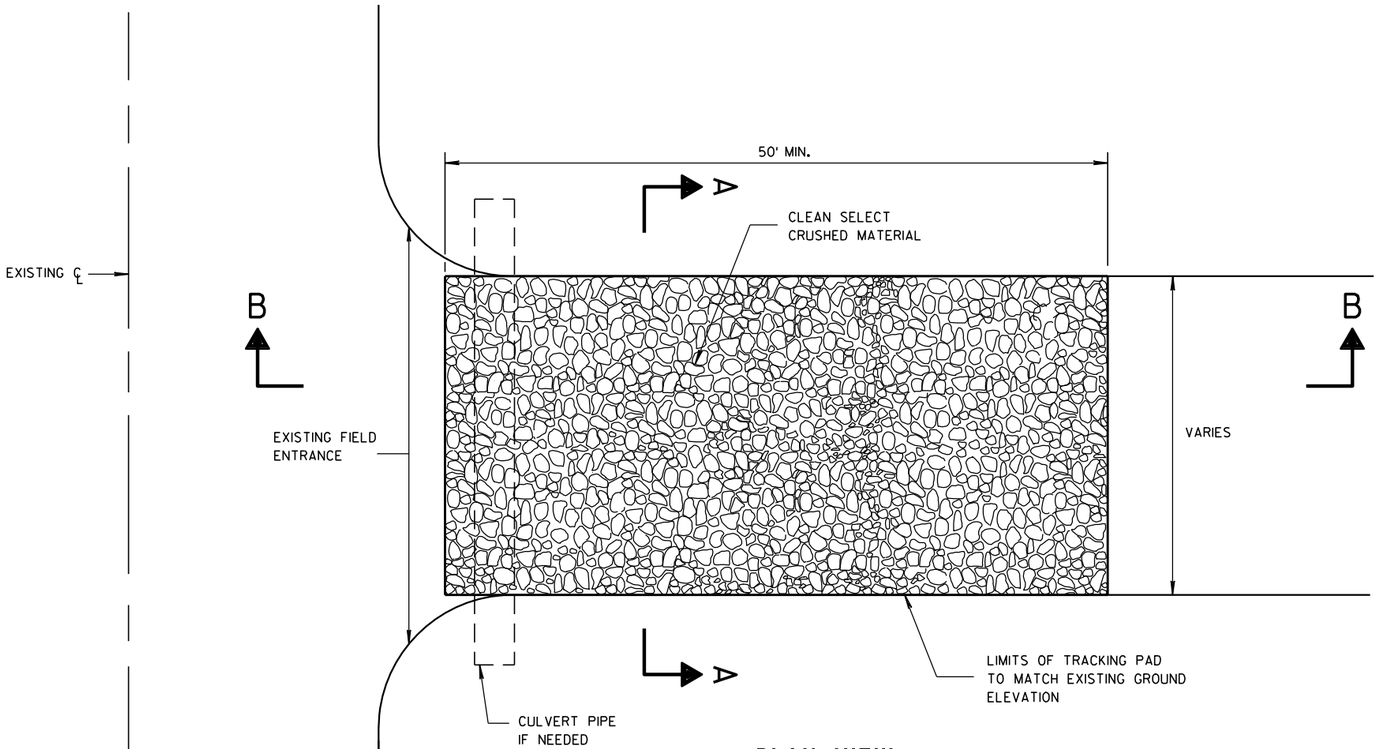
FHWA

6

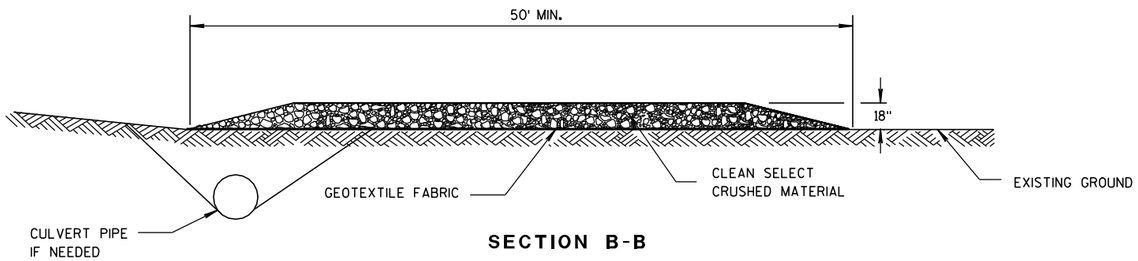
S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



PLAN VIEW



SECTION B-B

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.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

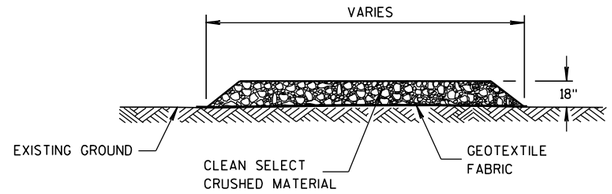
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/24/2011 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 8 E 14-1

METAL APRON ENDWALLS

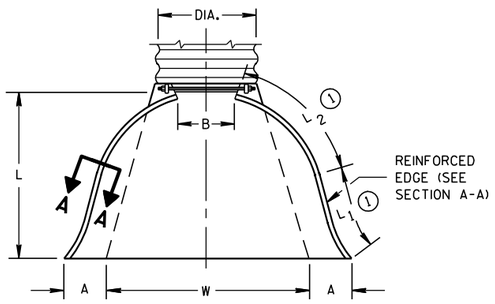
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

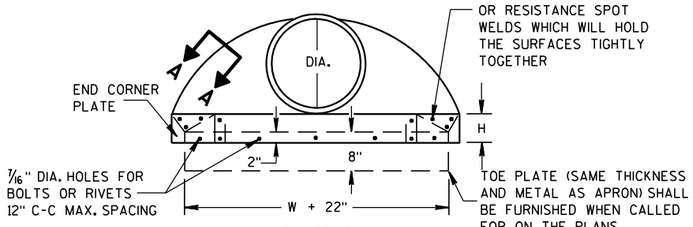
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
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

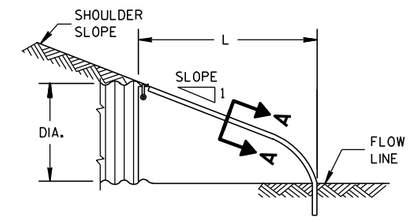
*MINIMUM
**MAXIMUM



PLAN VIEW

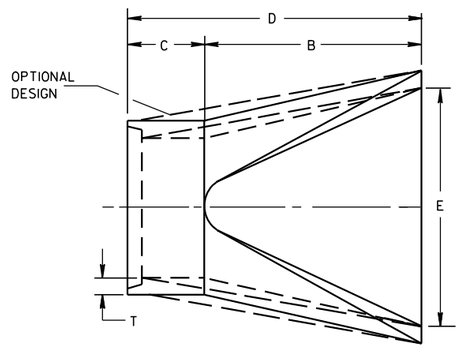


END VIEW

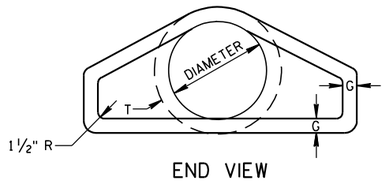


SIDE ELEVATION

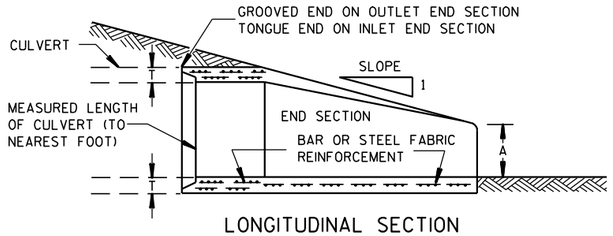
METAL ENDWALLS



PLAN

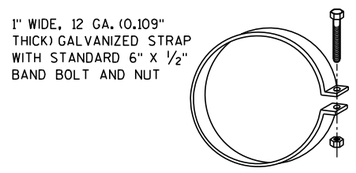


END VIEW



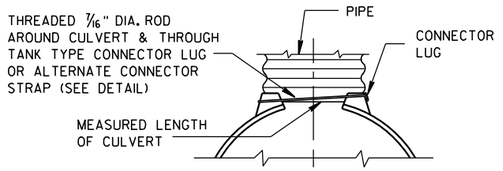
LONGITUDINAL SECTION

CONCRETE ENDWALLS

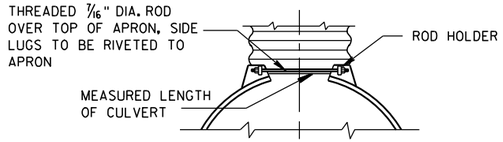


ALTERNATE FOR TYPE 1 CONNECTION

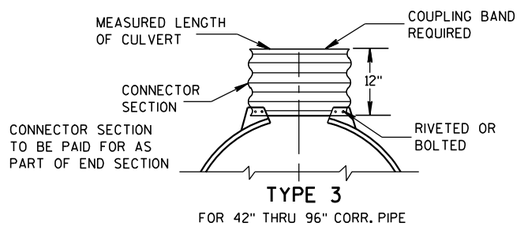
END SECTION CONNECTOR STRAP



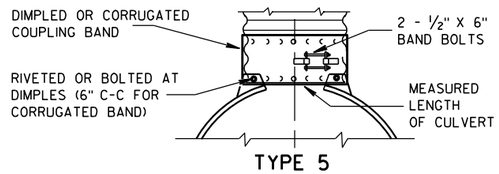
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

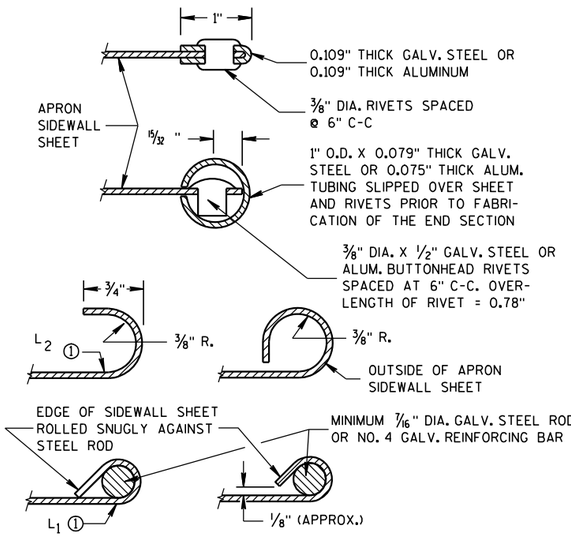
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

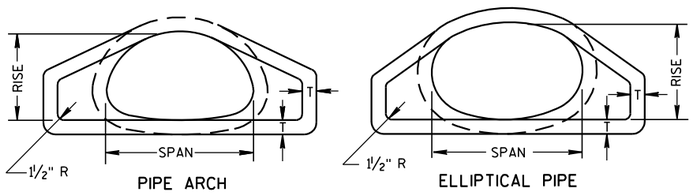
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

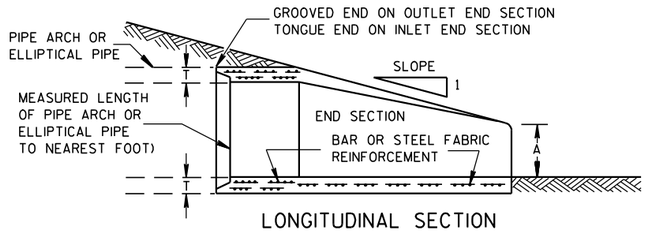
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
306
FHWA

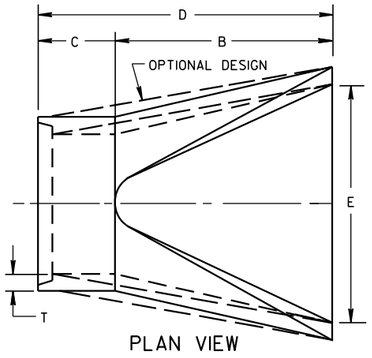
6
S.D.D. 8 F 1-11



END VIEW

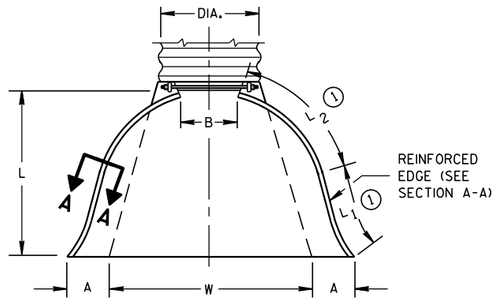


LONGITUDINAL SECTION

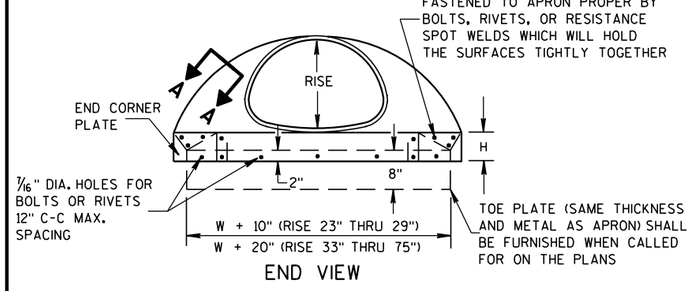


PLAN VIEW

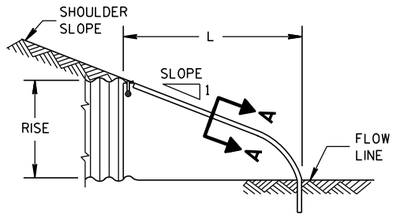
CONCRETE ENDWALLS



PLAN VIEW

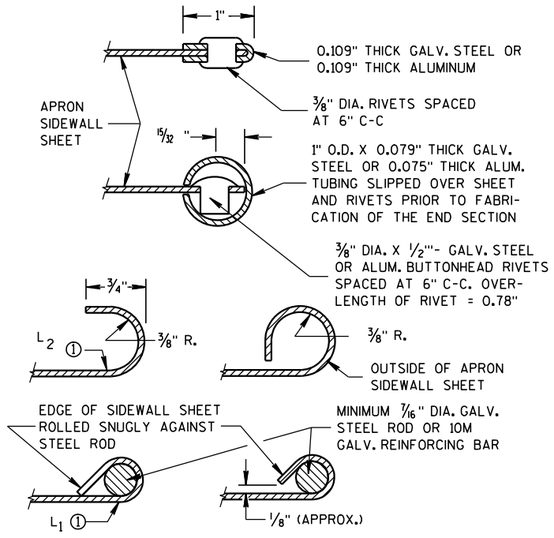


END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ 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) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ 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	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

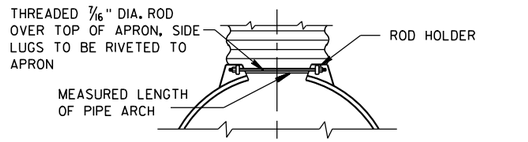
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	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	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

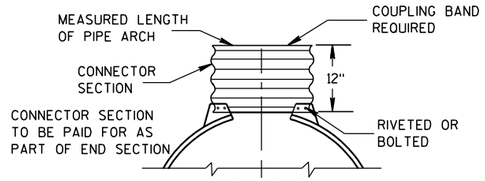
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



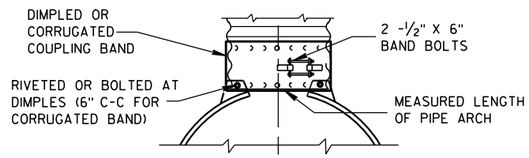
TYPE 2

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

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. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

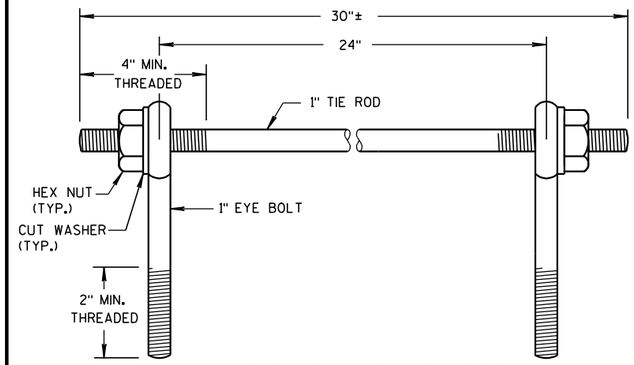
FHWA

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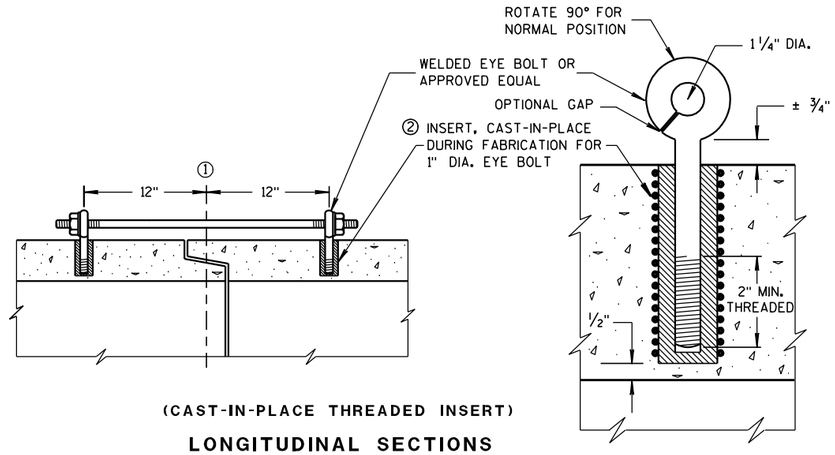
S.D.D. 8 F 2-1

6

S.D.D. 8 F 2-1



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

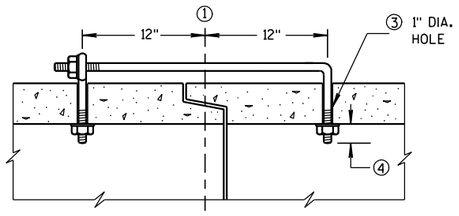
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

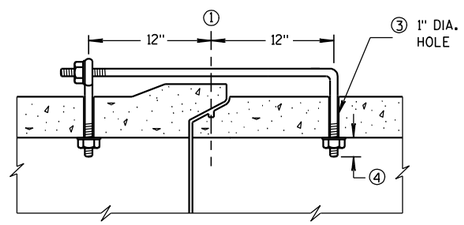
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

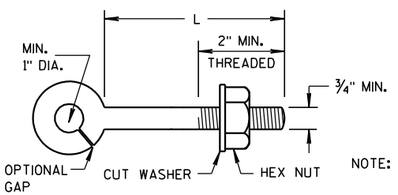


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

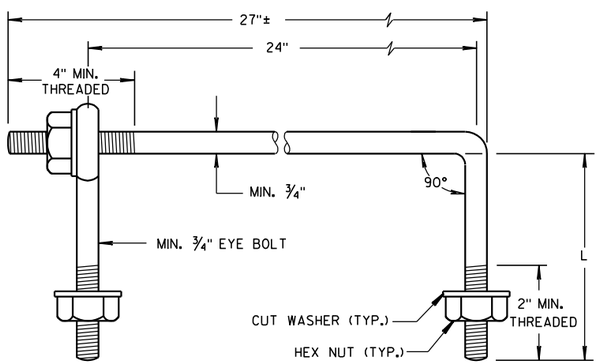
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

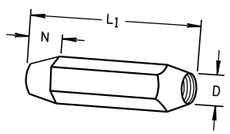
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

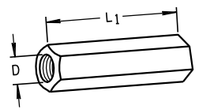
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES



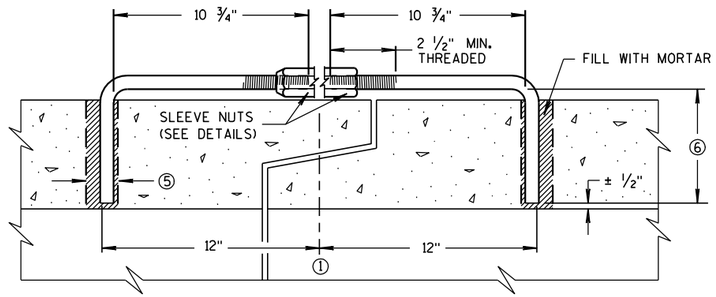
TAPERED



PLAIN

RIGHT AND LEFT THREADS

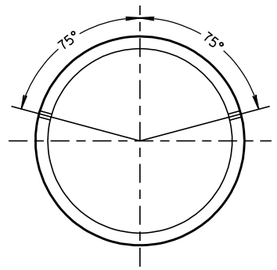
SLEEVE NUTS



LONGITUDINAL SECTION

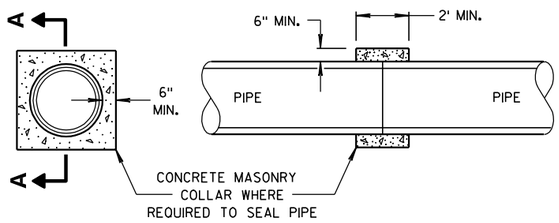
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

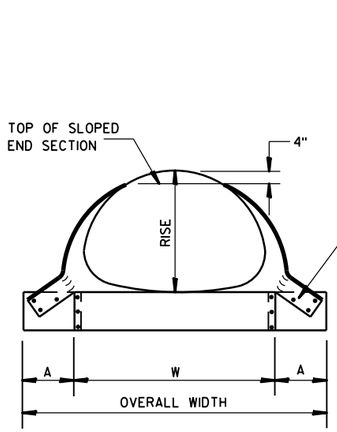
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

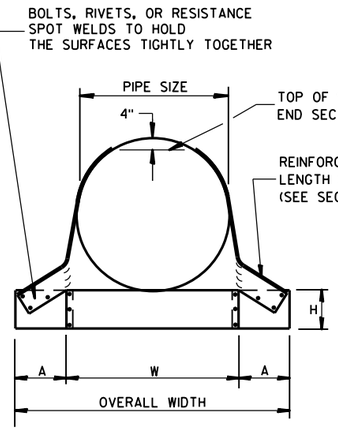
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
308
FHWA

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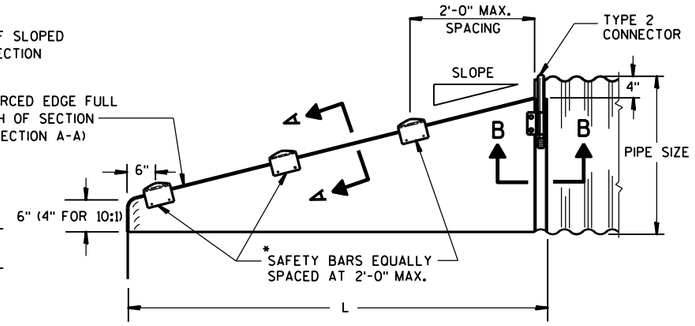
S.D.D. 8 F 4-7



FRONT VIEW



FRONT VIEW



SIDE VIEW

GENERAL NOTES

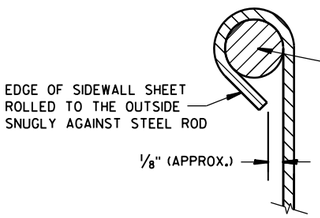
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SLOPED END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 521 FOR STEEL APRON ENDWALLS.

SAFETY BARS SHALL BE FABRICATED FROM GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL.

STEEL APRON ENDWALLS FOR CULVERT PIPE
SLOPED SIDE DRAINS

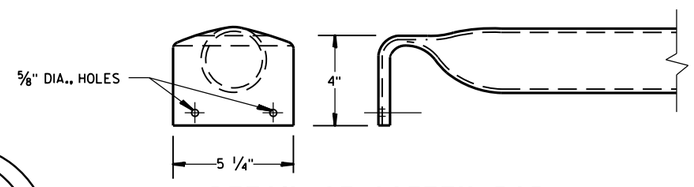
PIPE DIA. (IN.)	MIN. THICK. (Inches)	DIMENSIONS (Inches)				L DIMENSIONS					
		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	.064	8	6	21	37	4:1	20	6:1	30	10:1	70
18	.064	8	6	24	40	4:1	32	6:1	48	10:1	100
21	.064	8	6	27	43	4:1	44	6:1	66	10:1	130
24	.064	8	6	30	46	4:1	56	6:1	84	10:1	160
30	.109	12	9	36	60	4:1	80	6:1	120	10:1	220
36	.109	12	9	42	66	4:1	104	6:1	156	10:1	280
42	.109	16	12	48	80	4:1	128	6:1	192	——	——
48	.109	16	12	54	86	4:1	152	6:1	228	——	——
54	.109	16	12	60	92	4:1	176	6:1	264	——	——
60	.109	16	12	66	98	4:1	200	6:1	300	——	——



SECTION A-A

*NOTE:
THREE SAFETY BARS ARE SHOWN. ACTUAL NUMBER OF BARS REQUIRED AT A 2'-0" C-C MAX. SPACING WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

3" GALVANIZED PIPE. FLATTEN ENDS, THEN BEND OUTSIDE 4" TO MATCH END SECTION SIDES.

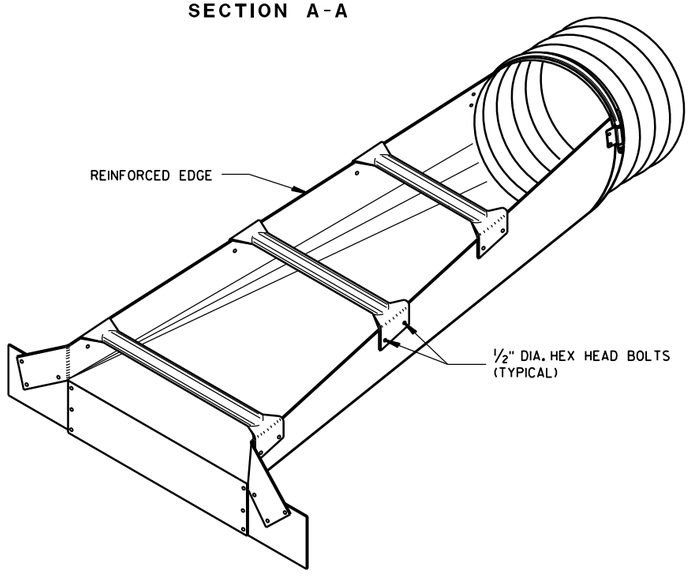


DETAIL OF SAFETY BAR

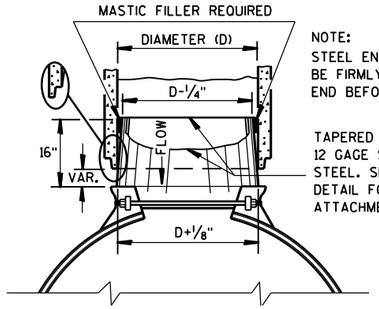
STEEL APRON ENDWALLS FOR PIPE ARCH
SLOPED SIDE DRAINS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) ①	DIMENSIONS (Inches) A	H	W	OVERALL WIDTH	L DIMENSIONS SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	17	13	.064 *	7	6	30	44	4:1	19	6:1	30	10:1 ②	70
18	21	15	.064 *	8	6	27	43	4:1	20	6:1	30	10:1	70
21	24	18	.064 *	8	6	30	46	4:1	32	6:1	48	10:1	100
24	28	20	.064 *	8	6	34	50	4:1	40	6:1	60	10:1	120
30	35	24	.079 *	12	9	41	65	4:1	56	6:1	84	10:1	160
36	42	29	.109 *	12	9	48	72	4:1	76	6:1	114	10:1	210
42	49	33	.109	16	12	55	87	4:1	92	6:1	138	——	——
48	57	38	.109	16	12	63	95	4:1	112	6:1	168	——	——
54	64	43	.109	16	12	70	102	4:1	132	6:1	198	——	——

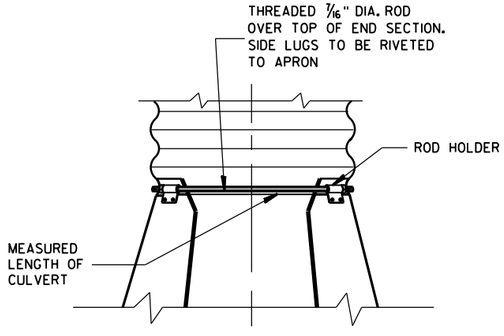
① * MINIMUM THICKNESS OF ALL 10:1 SLOPED SIDE DRAINS IS 0.109".
② ACTUAL SLOPE GREATER THAN 10:1.



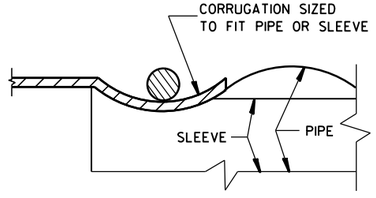
ISOMETRIC VIEW



STEEL ADAPTER SLEEVE FOR CONCRETE PIPE



TYPE 2
CONNECTION DETAIL



SECTION B-B

STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

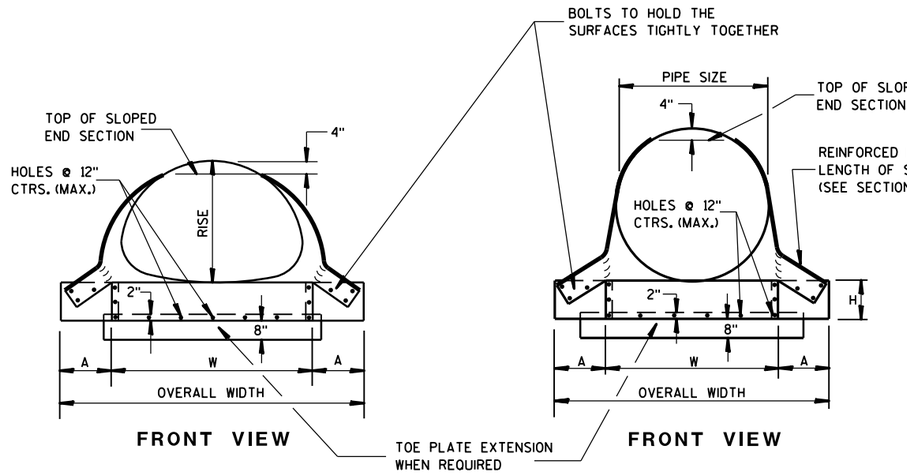
APPROVED
9/14/2012 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 F 7-5

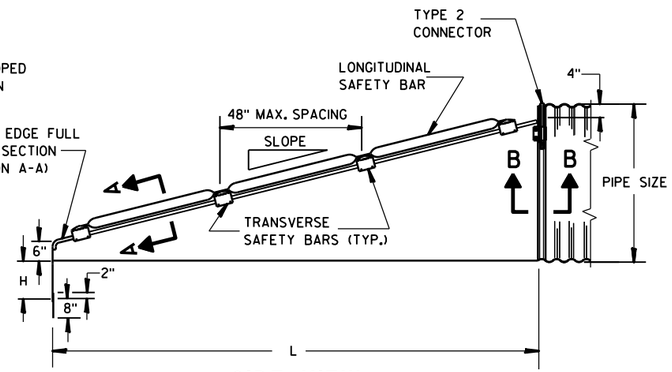
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S.D.D. 8 F 7-5



FRONT VIEW

FRONT VIEW



SIDE VIEW
(48" SIZE ILLUSTRATED)

GENERAL NOTES

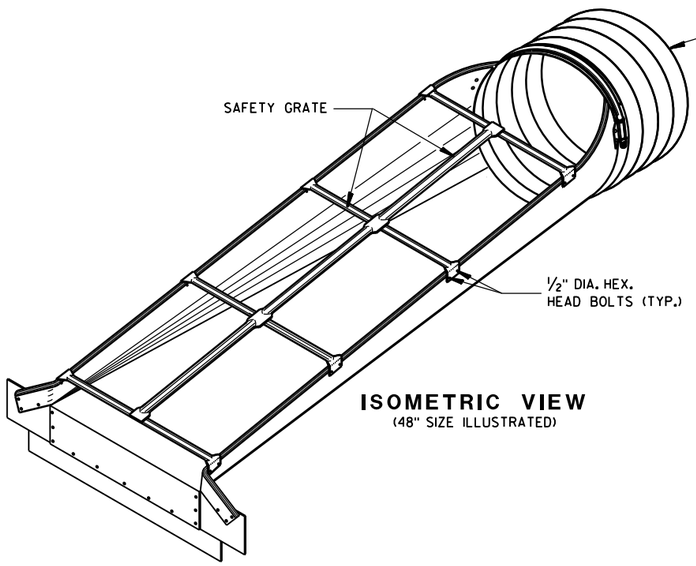
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

SAFETY GRATES SHALL BE FABRICATED FROM 3-INCH DIAMETER GALVANIZED PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL. THE LONGITUDINAL BAR SHALL BE WELDED TO THE TRANSVERSE BARS WHERE THE BARS CROSS. THE NUMBER OF TRANSVERSE BARS REQUIRED WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

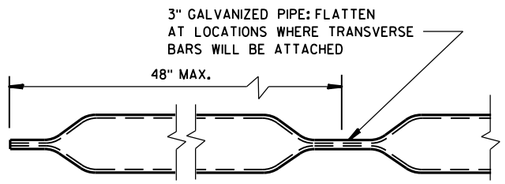
SLOPED STEEL ENDWALLS LOCATED AT THE ENDS OF CONCRETE CULVERT PIPE SHALL BE FURNISHED WITH STEEL ADAPTER SLEEVES.

STEEL APRON ENDWALLS FOR CULVERT PIPE CROSS DRAINS

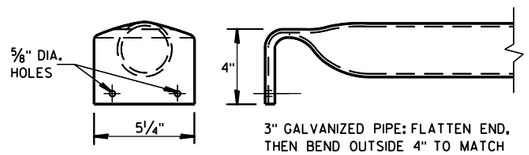
PIPE DIA. (IN.)	MIN. THICK.		DIMENSIONS (Inches)				L DIMENSIONS			
	IN.	GAGE	A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
36	.109	12	12	9	42	66	4:1	104	6:1	156
42	.109	12	16	12	48	80	4:1	128	6:1	192
48	.109	12	16	12	54	86	4:1	152	6:1	228
54	.109	12	16	12	60	92	4:1	176	6:1	264
60	.109	12	16	12	66	98	4:1	200	6:1	300



ISOMETRIC VIEW
(48" SIZE ILLUSTRATED)



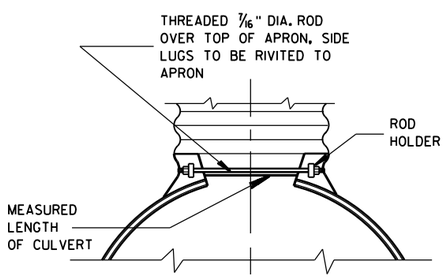
LONGITUDINAL SAFETY BAR



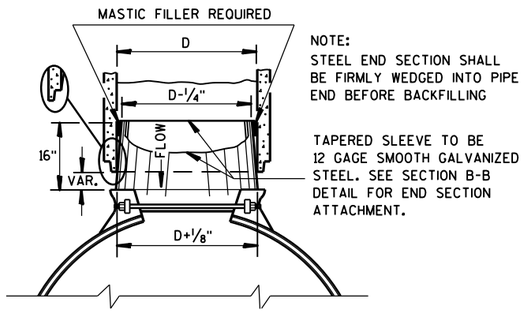
TRANSVERSE SAFETY BAR

STEEL APRON ENDWALLS FOR PIPE ARCH SLOPED CROSS DRAINS

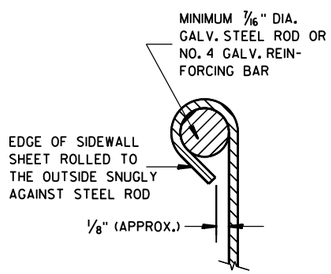
EQUIV. DIA. (IN.)	INCHES		MIN. THICK.		DIMENSIONS (Inches)				L DIMENSIONS			
	SPAN	RISE	IN.	GAGE	A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
30	35	24	.079	14	12	9	41	65	4:1	56	6:1	84
36	42	29	.109	12	12	9	48	72	4:1	76	6:1	114
42	49	33	.109	12	16	12	55	87	4:1	92	6:1	138
48	57	38	.109	12	16	12	63	95	4:1	112	6:1	168
54	64	43	.109	12	16	12	70	102	4:1	132	6:1	198
60	71	47	.109	12	16	12	77	109	4:1	148	6:1	222



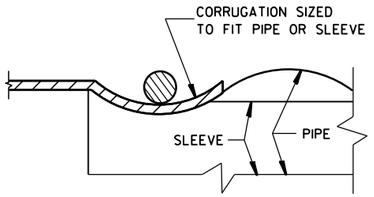
TYPE 2 CONNECTOR DETAIL



STEEL ADAPTER SLEEVE FOR CONCRETE PIPE



SECTION A-A



SECTION B-B

STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED CROSS DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

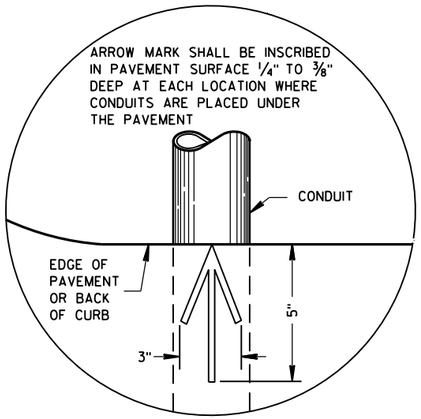
FHWA

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S.D.D. 8 F 8-2

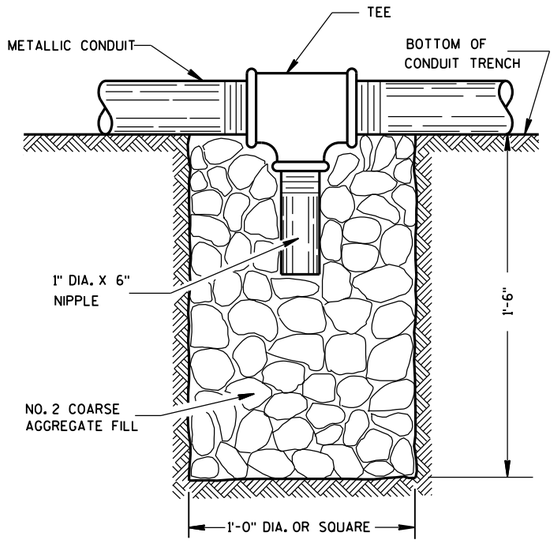
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S.D.D. 8 F 8-2



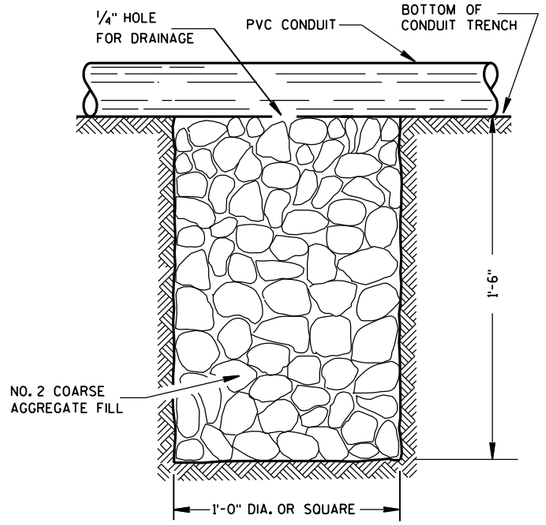
PLAN VIEW

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.

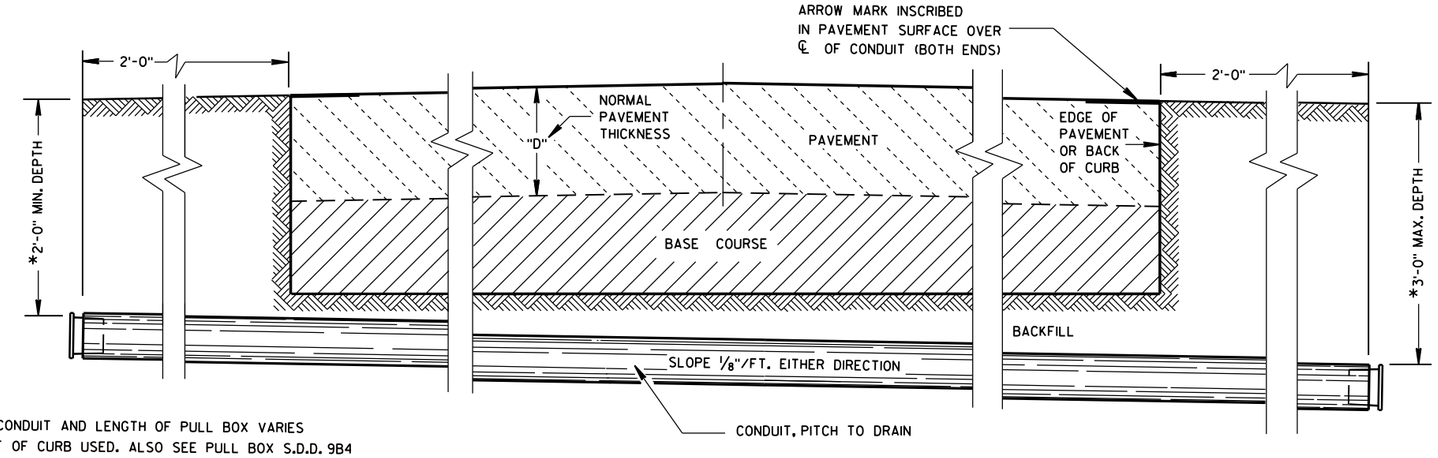
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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.).

POLY ROPE OR A PULL 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 UNDER PAVED HIGHWAYS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2014 — DATE

/S/ Ahmet Demirbilek — STATE ELECTRICAL

FHWA

6

S.D.D. 9 B 2-8

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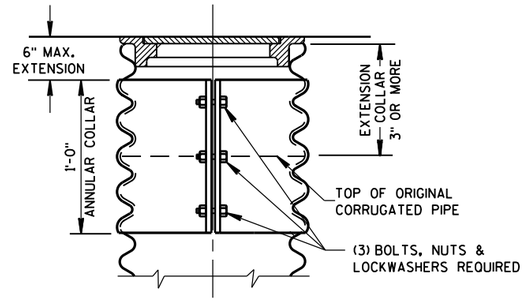
S.D.D. 9 B 2-8

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

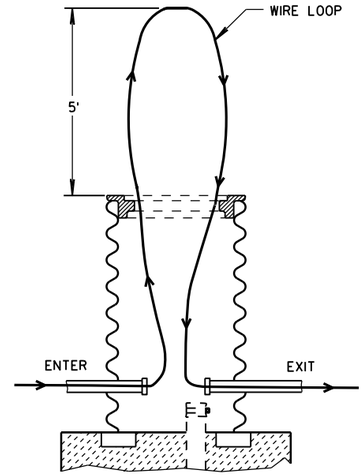
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	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.

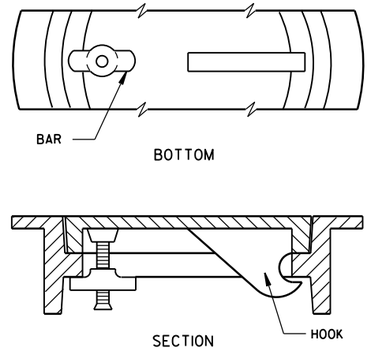
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

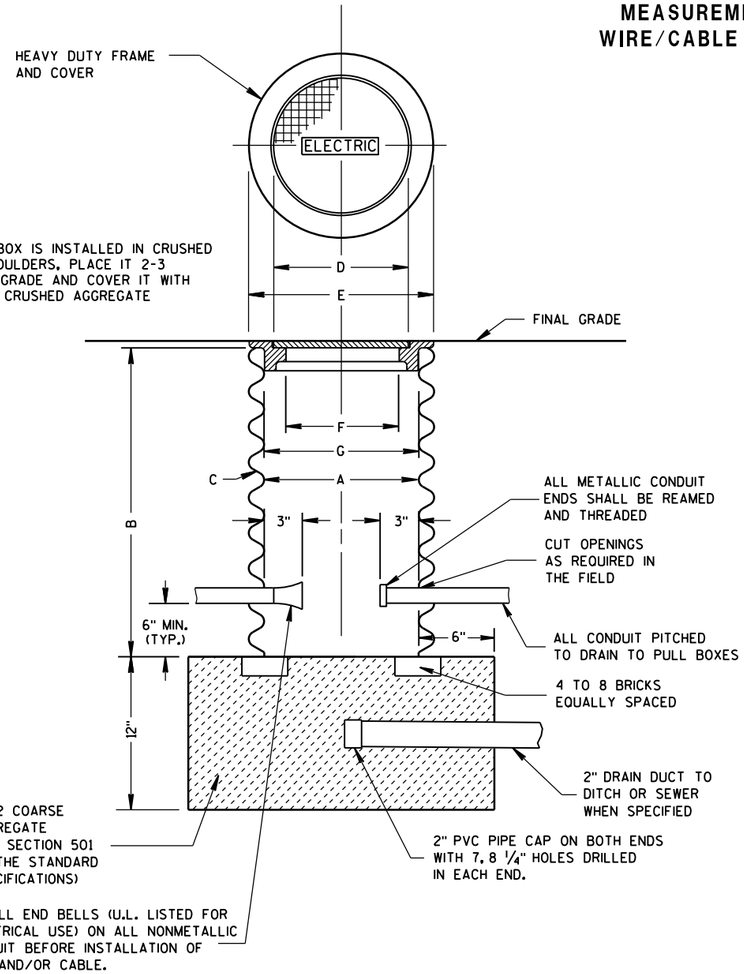


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



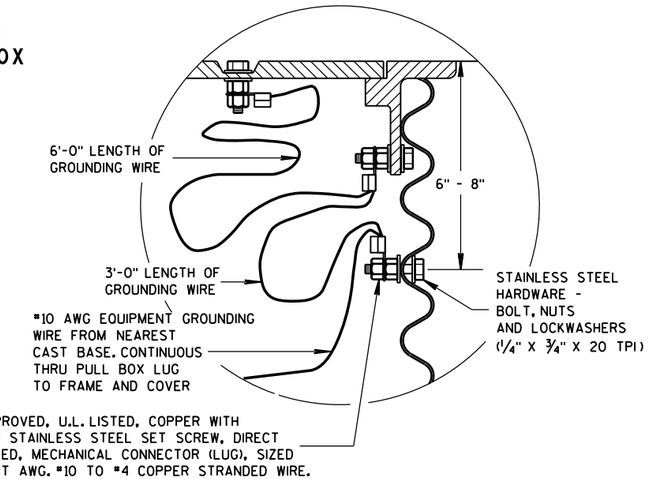
ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

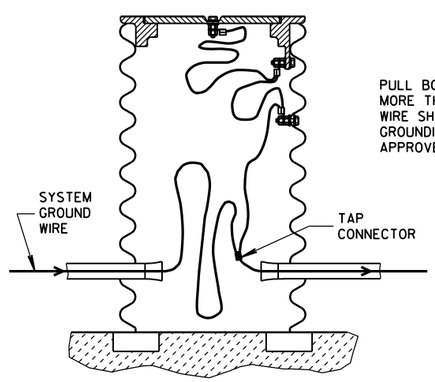


WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

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

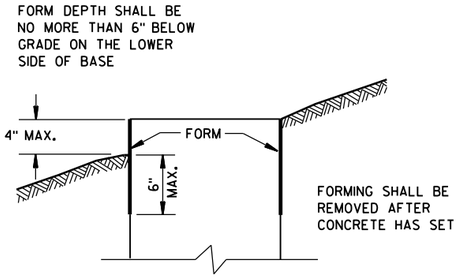
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

312

6

S.D.D. 9 B 4-11



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.

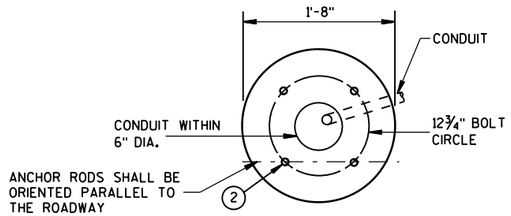
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

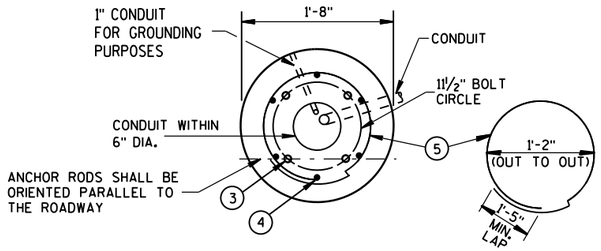
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

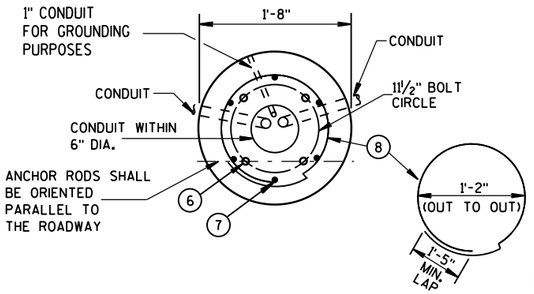
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

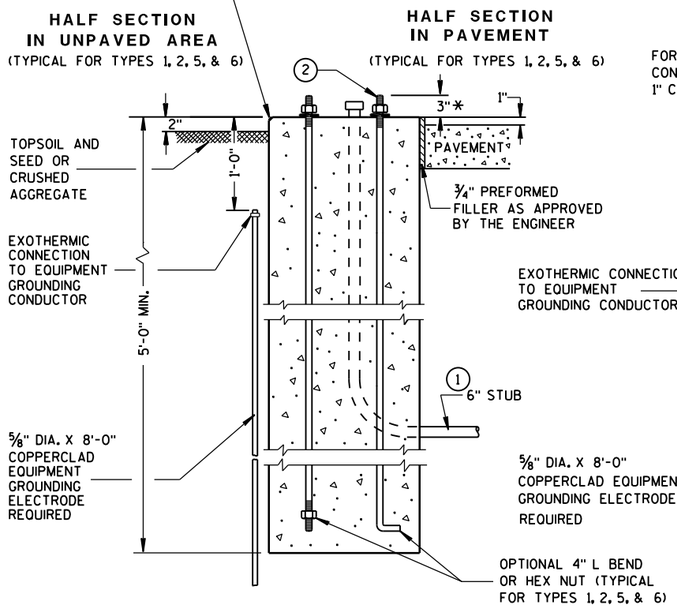


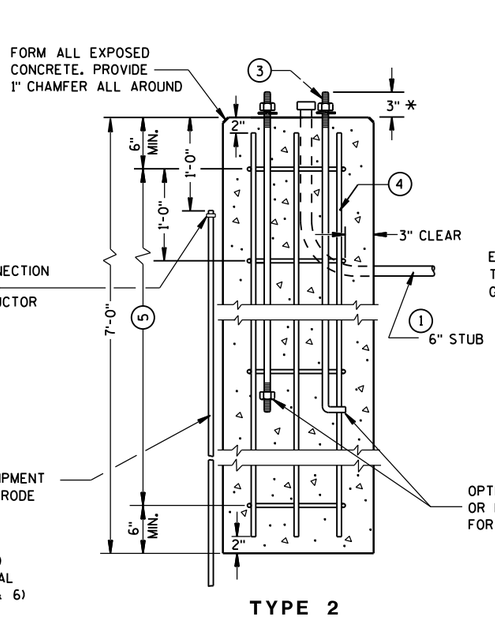




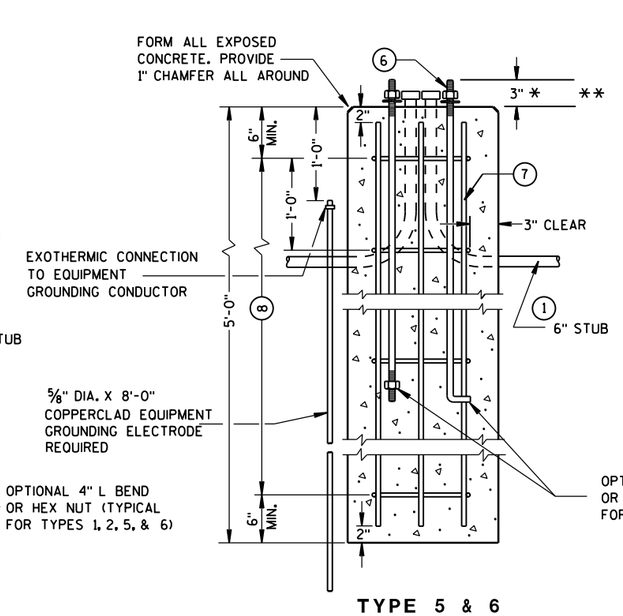
HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5, & 6)

HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5, & 6)





TYPE 2



TYPE 5 & 6

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± 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
FHWA

6

S.D.D. 9 C 2-7

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.

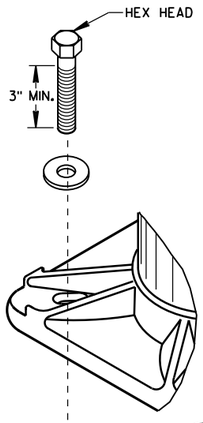
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

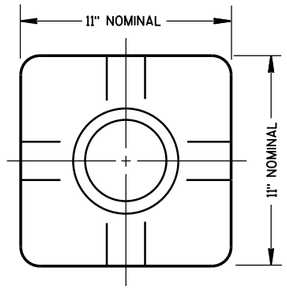
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

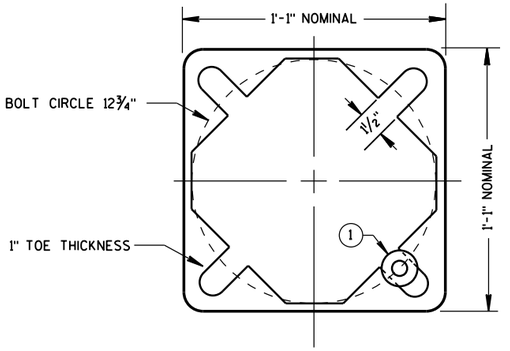
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

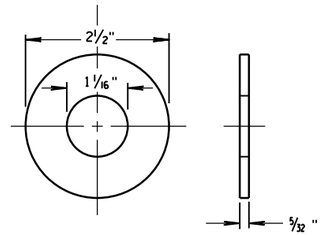




TOP VIEW
(PEDESTAL BASE)

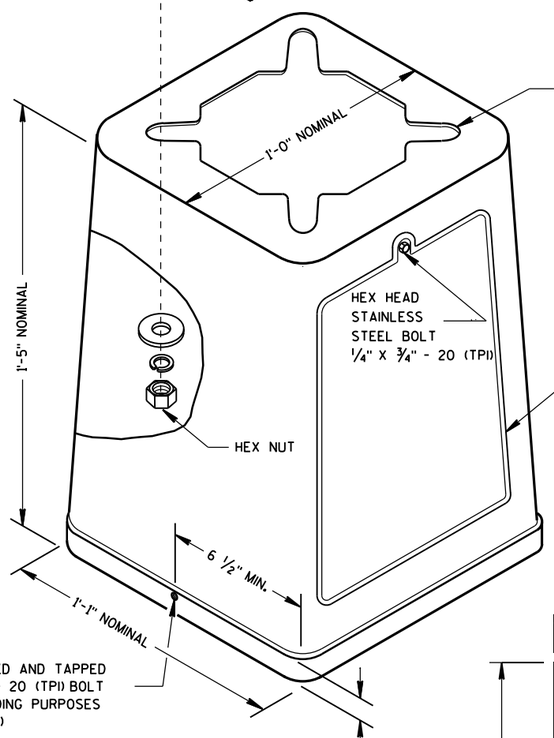


BOTTOM VIEW
(PEDESTAL BASE)

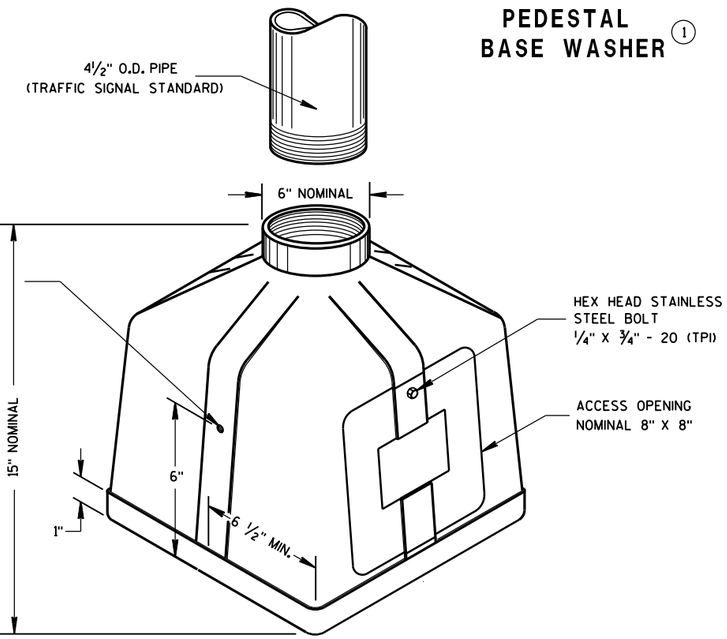


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

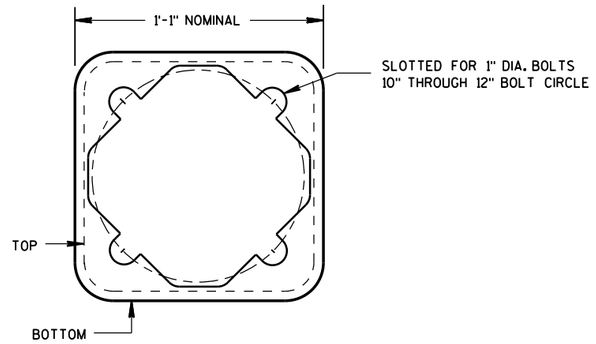


ISOMETRIC VIEW

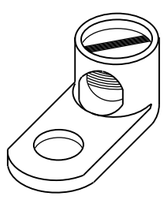


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

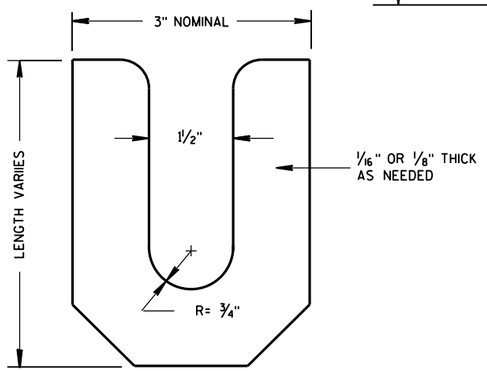


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

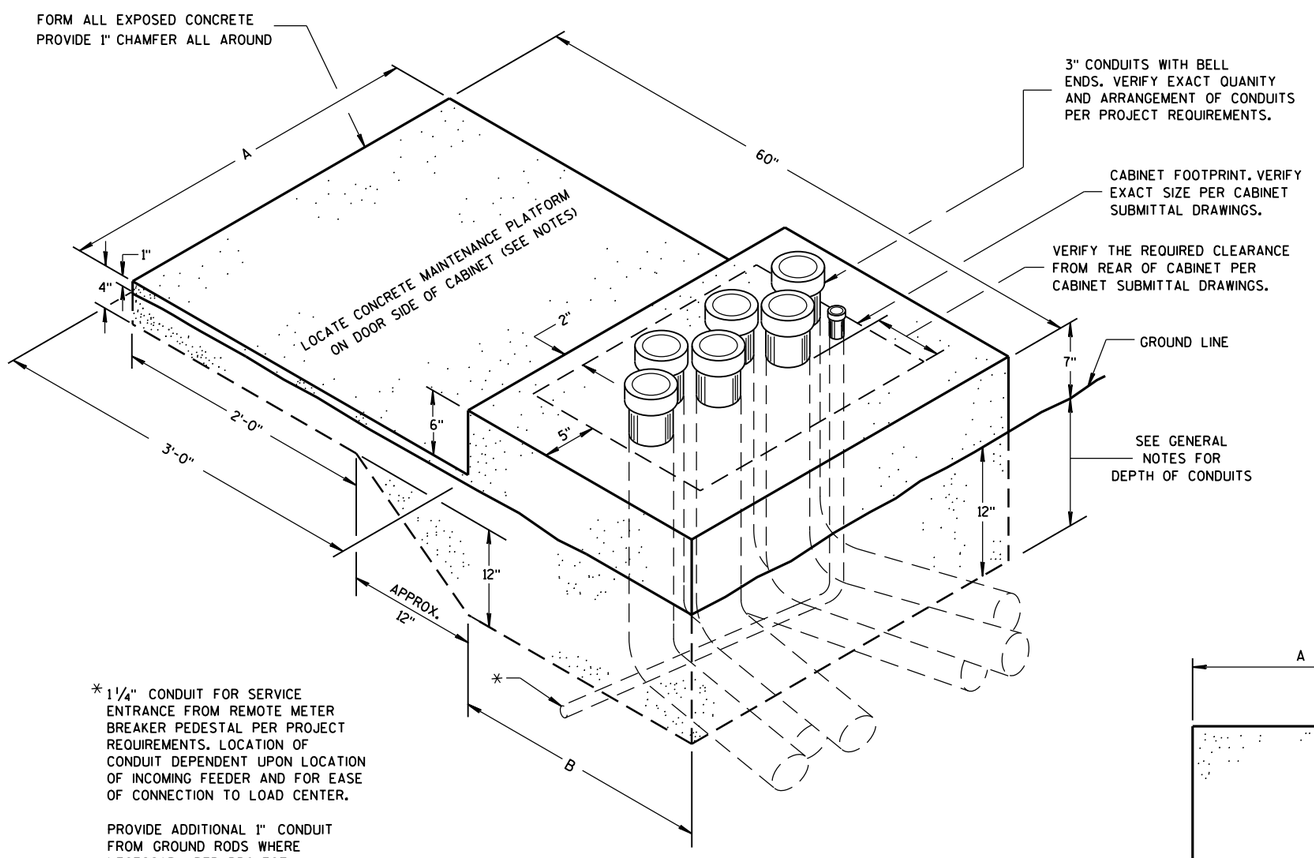
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* 1¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

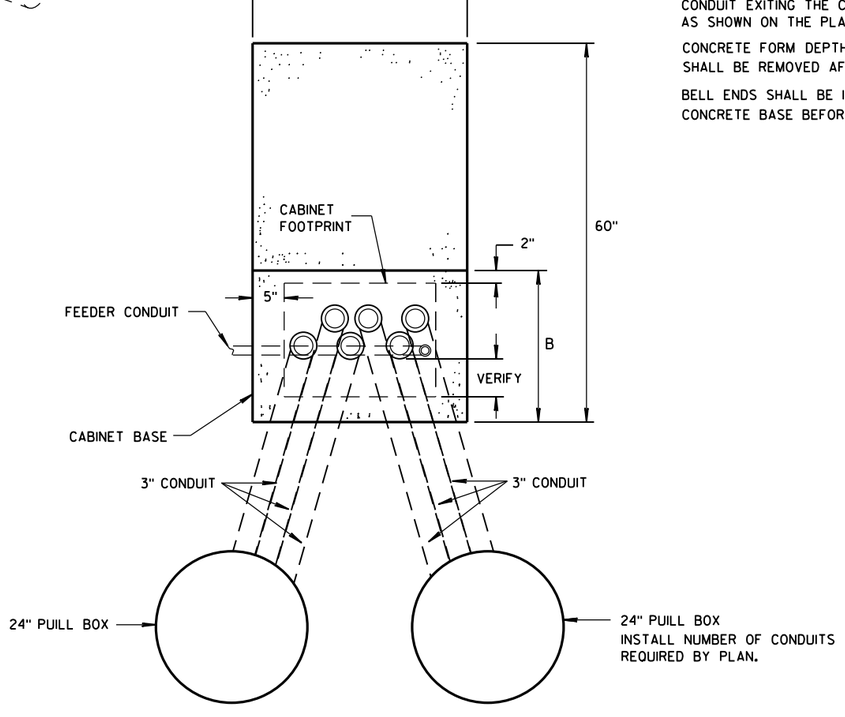
PROVIDE ADDITIONAL 1" CONDUIT FROM GROUND RODS WHERE NECESSARY PER PROJECT REQUIREMENTS.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS	
		A	B
L24	24"	34"	24"
L30	30"	40"	24"



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

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 BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

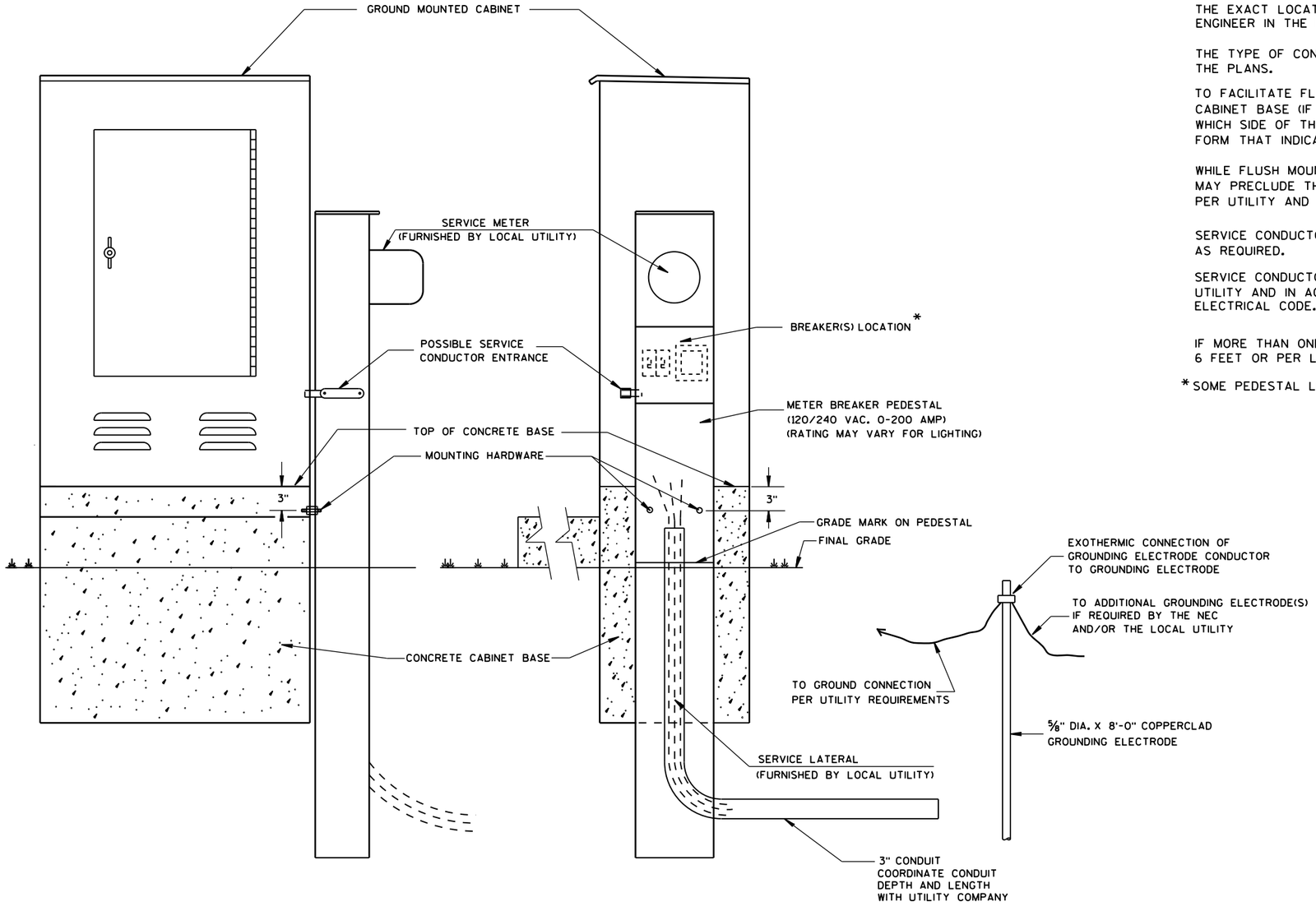
CONCRETE CONTROL CABINET BASE, TYPE L

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DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Thomas Gonring — STATE LIGHTING ENGINE
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TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

*SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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S.D.D. 9 D 1-5

GENERAL NOTES

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

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

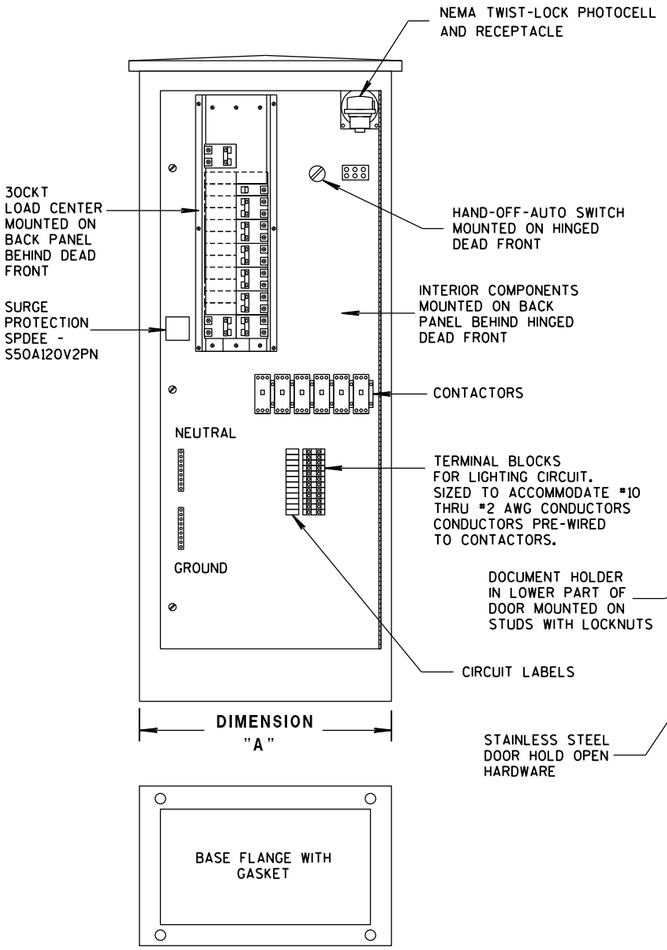
ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

FRONT INTERIOR ELEVATION



SIDE VIEW

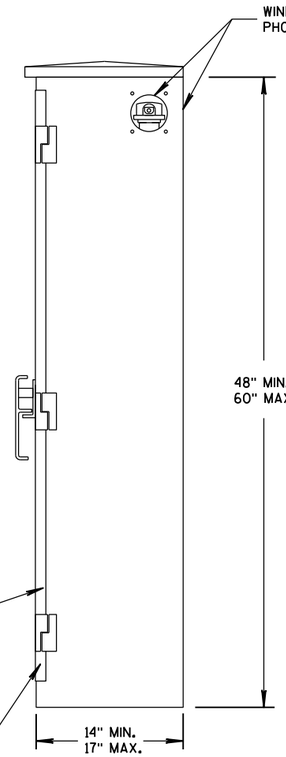
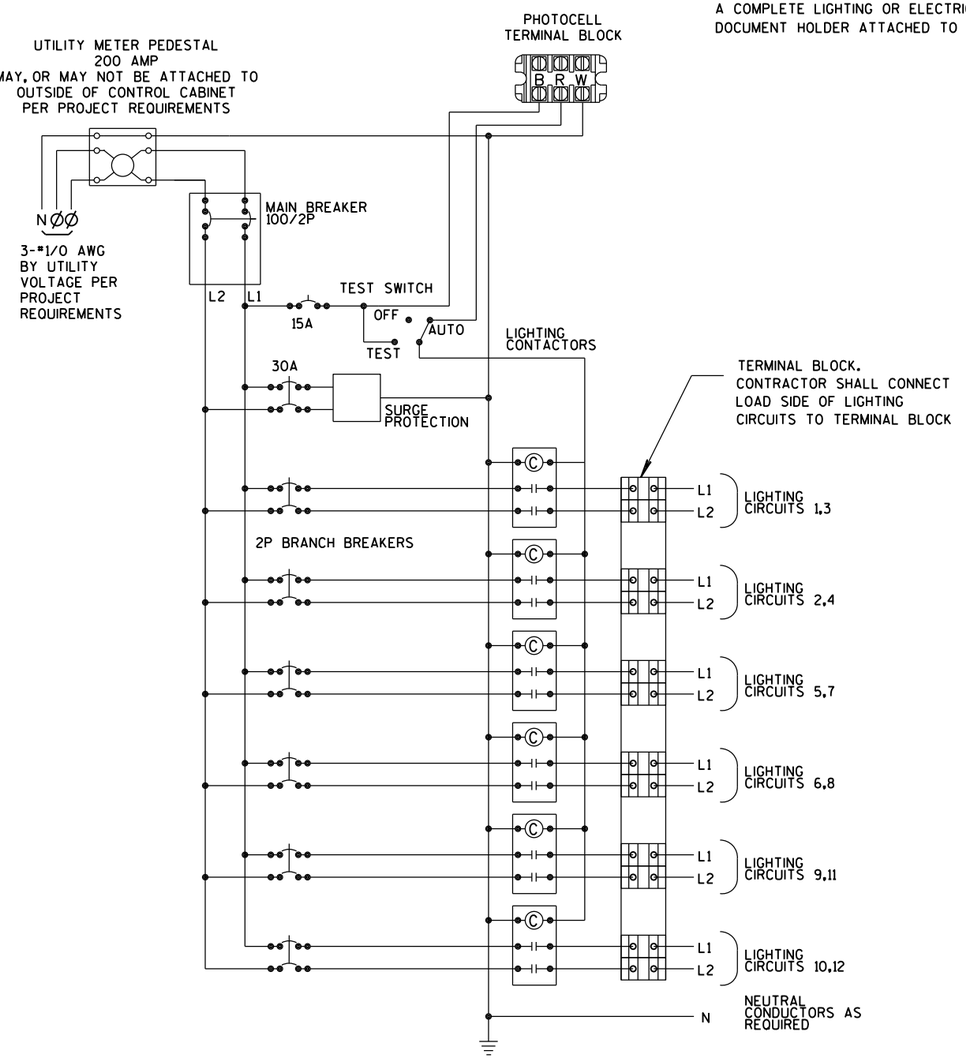


TABLE OF DIMENSIONS (INCHES)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"



CONTROL CABINET SCHEMATIC

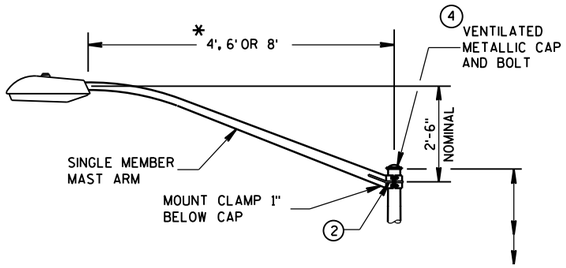
LIGHTING CONTROL CABINET

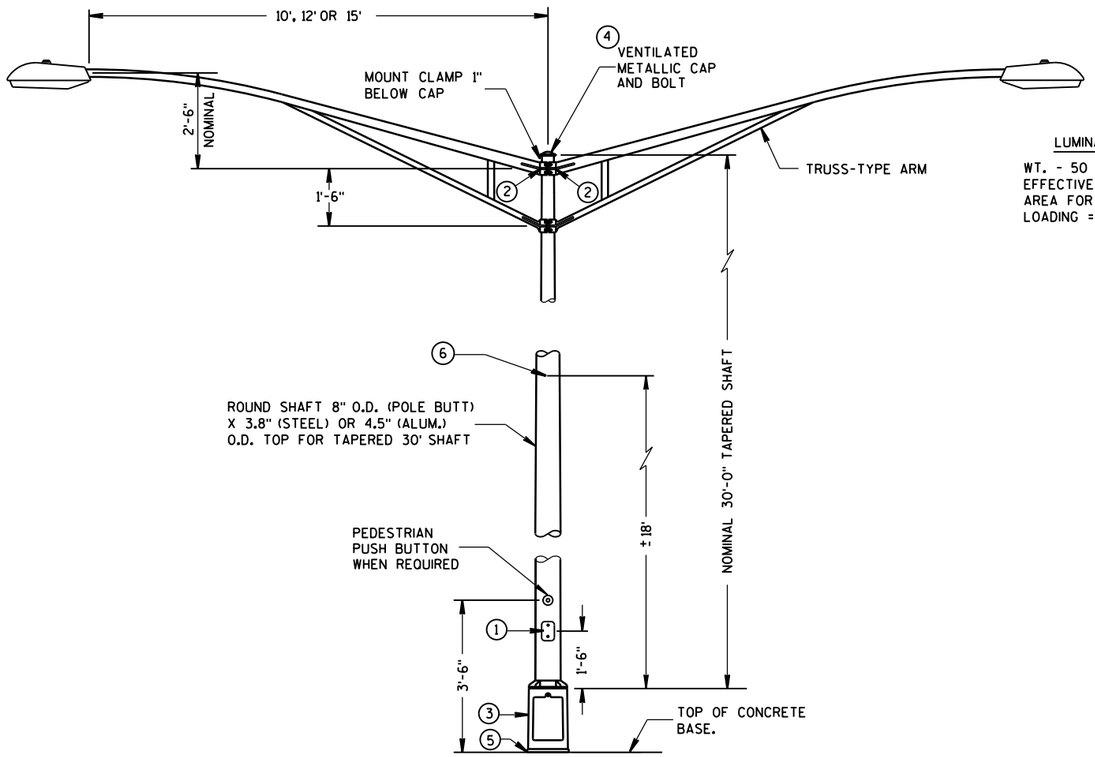
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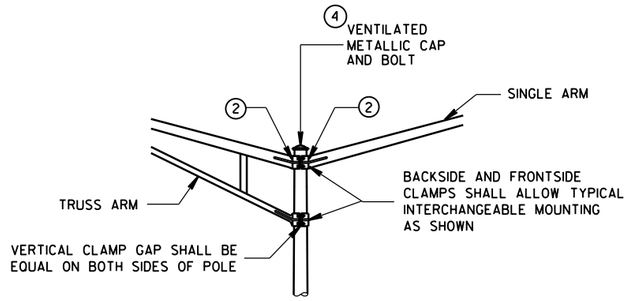
6
S.D.D. 9 D 4-1

*RISE FOR 4' ARM SHALL BE 2'-0".





TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONEECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

6

S.D.D. 9 E 1-13d

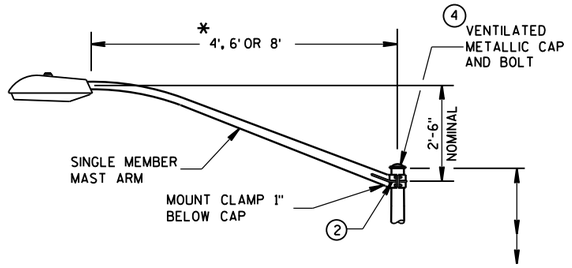
POLE MONTINGS FOR
LIGHTING UNITS, TYPE 5
(30 FEET)

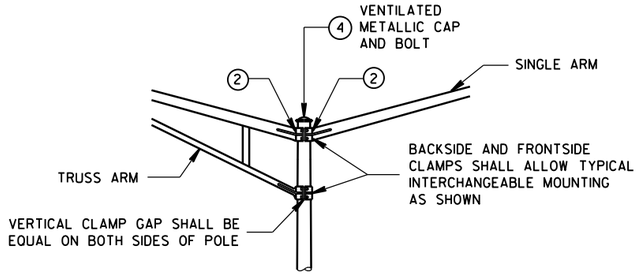
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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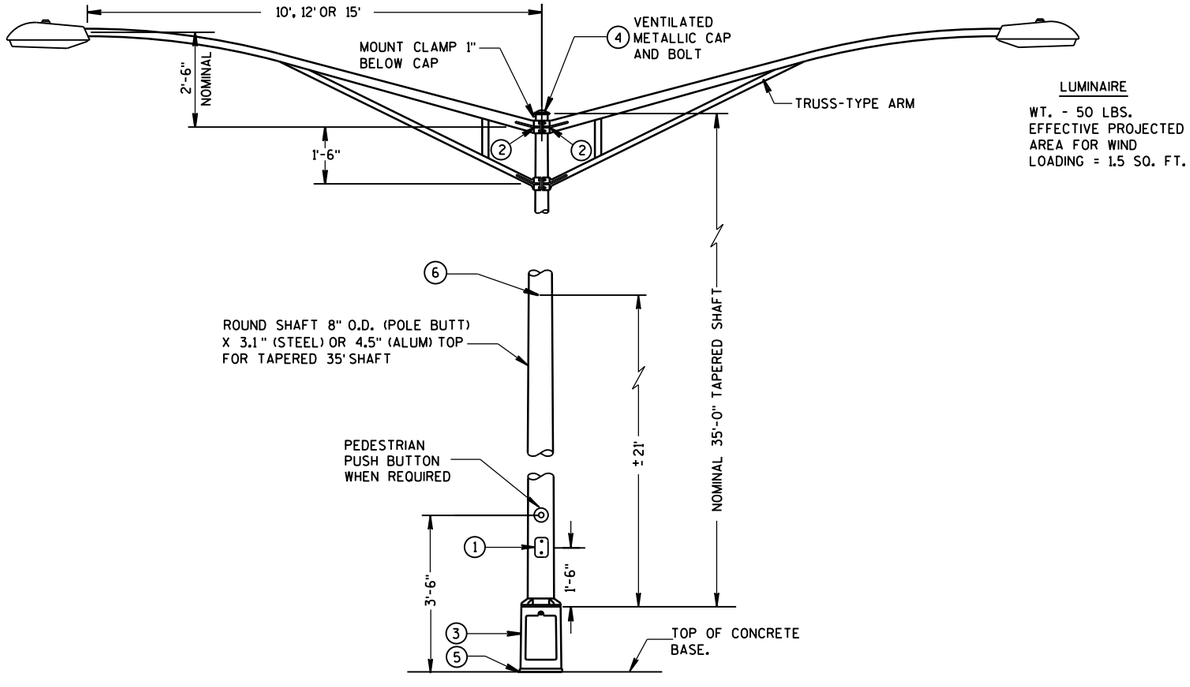
S.D.D. 9 E 1-13d

* RISE FOR 4' ARM SHALL BE 2'-0".





INTERCHANGEABLE MOUNTING DETAIL



TYPE 6 POLE MOUNTING CONFIGURATION

(MAXIMUM LOAD)

LIGHTING ONLY

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM ~~TO THE PERTINENT~~ REQUIREMENTS OF THE CONTRACT.

ALL TYPE 6 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE EITHER GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 6 ALUMINUM POLES, SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 6 ALUMINUM POLES SHALL HAVE MINIMUM WALL THICKNESS OF 0.219".

TYPE 6 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

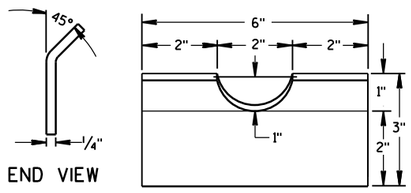
(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6 (35 FEET)

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S.D.D. 9 E 1-13e

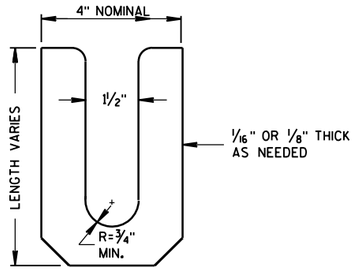


END VIEW

FRONT VIEW

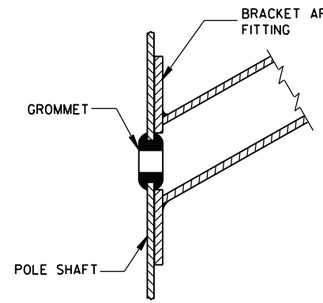
RECTANGULAR CLAMP SHIM

(4 TO A SET)

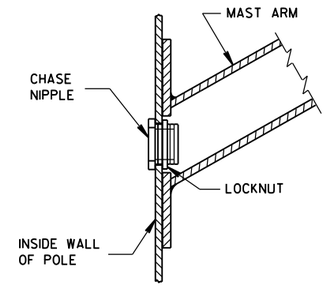


LEVELING SHIM (15)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13) OUTSIDE SHIM DIAMETER - (4.5" O.D. FOR LUMINAIRE MAST ARM)
(6.625" O.D. FOR TROMBONE MAST ARM)

(14) VARIABLE SHIM THICKNESS - (0.10", 0.25", 0.35", 0.53" OR 0.70")

SHIM THICKNESS FOR TROMBONE MAST ARMS MAY BE TYPICALLY 0.25", 0.35", 0.53" OR 0.70".

SHIM THICKNESS FOR LUMINAIRE MAST ARMS MAY BE TYPICALLY 0.10", 0.25" OR 0.35".

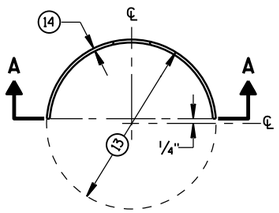
SHIM MATERIAL SHALL BE ALUMINUM ALLOY.

SHIM THICKNESS SHALL BE IMPRESSED INTO EACH SHIM. NUMERALS SHALL BE 1/4" HIGH AND LEGIBLE.

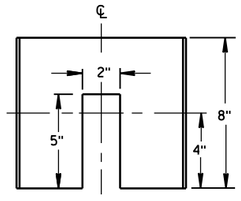
THE CONTRACTOR SHALL SUBMIT TWO COPIES OF ALL SHIM SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

(15) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



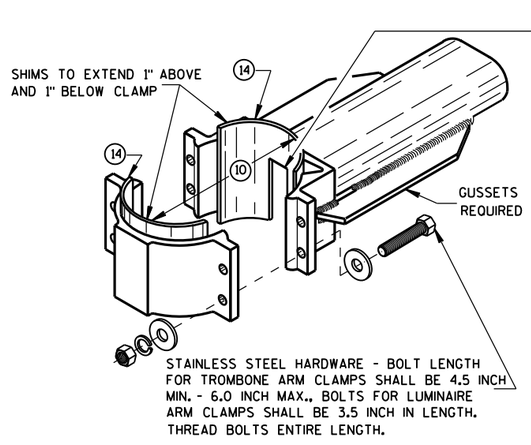
PLAN VIEW



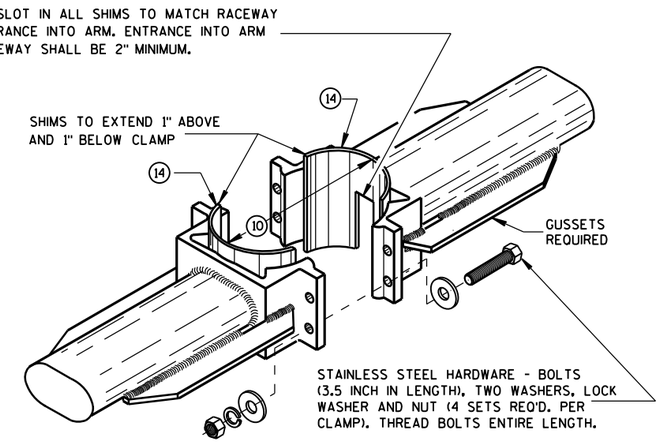
SECTION A-A

CIRCULAR CLAMP SHIM

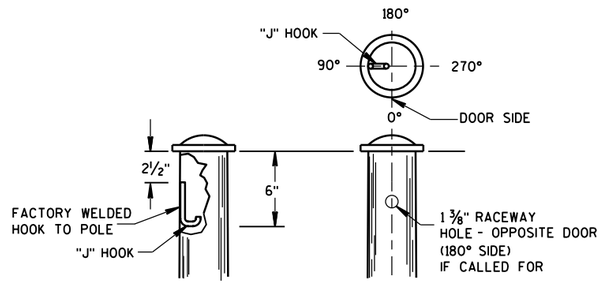
(2 TO A SET)



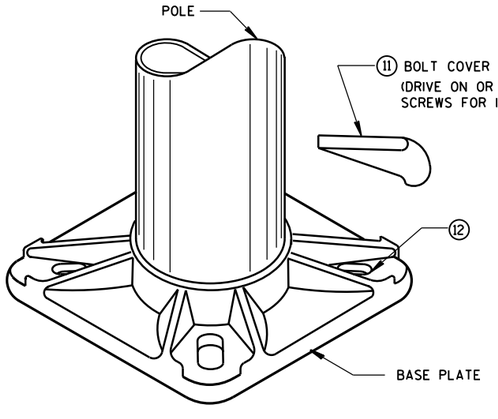
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



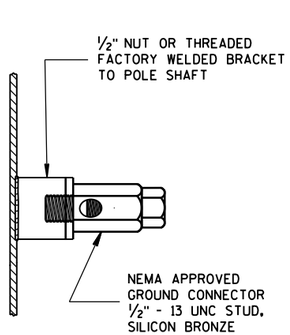
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

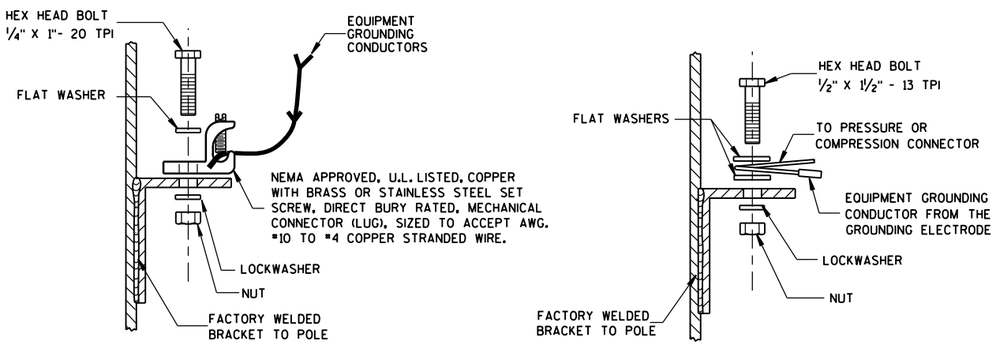


TYPICAL "J" HOOK LOCATION



BASE PLATE





TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

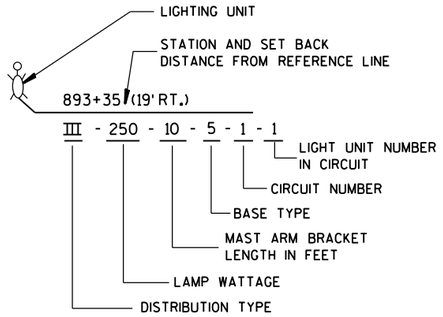
HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

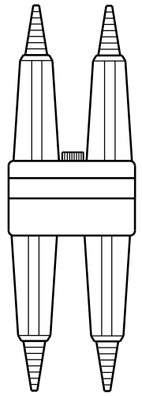
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

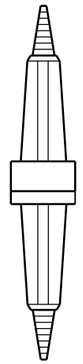
S.D.D. 9 E 1-13g
S.D.D. 9 E 1-13g



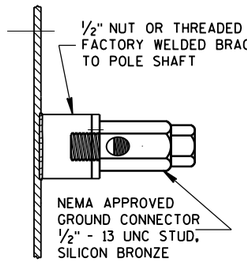
LIGHTING UNIT CODE
(TYPICAL)

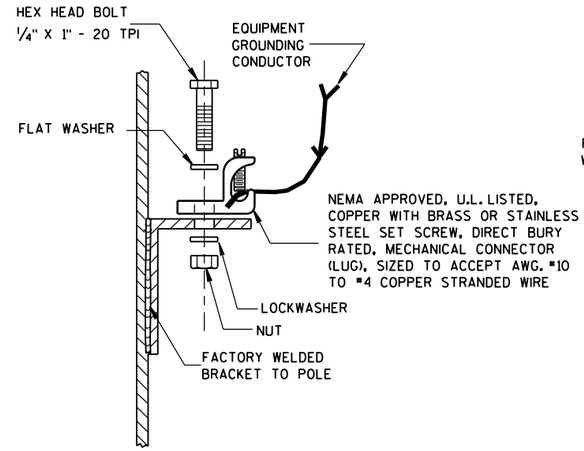


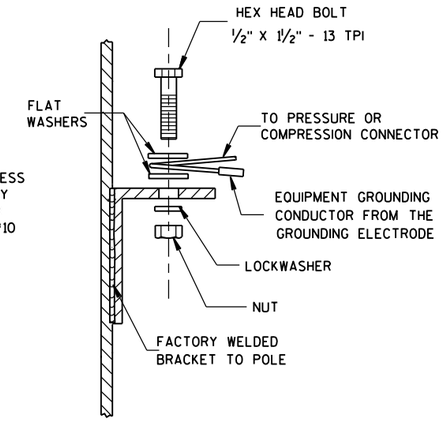
DETAIL "A"
BREAKAWY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



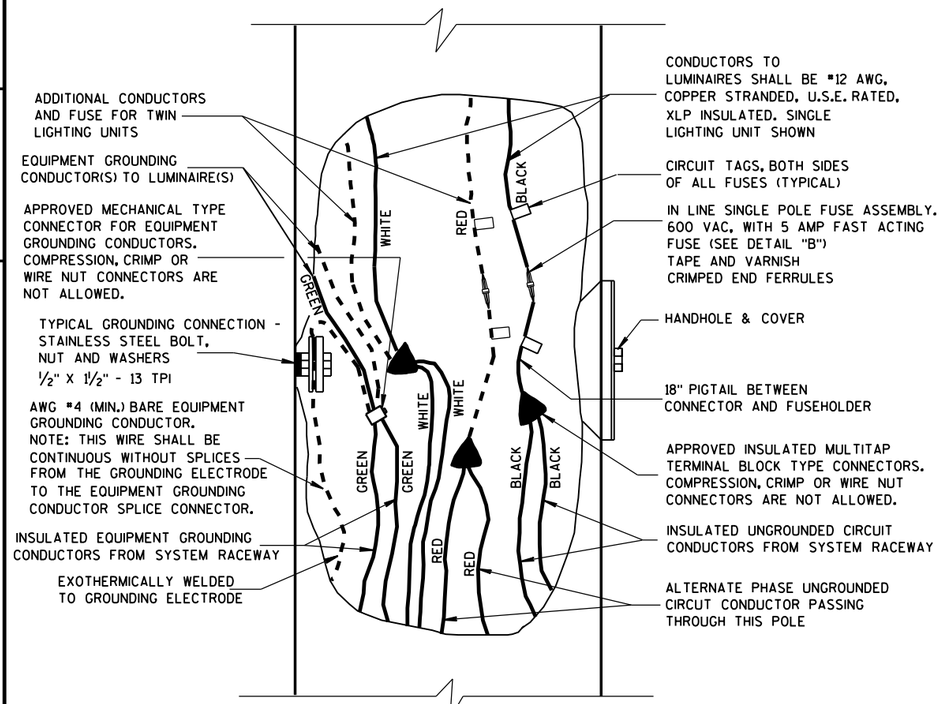
DETAIL "B"
BREAKAWY SINGLE POLE WITH WATERPROOF INSULATING BOOT



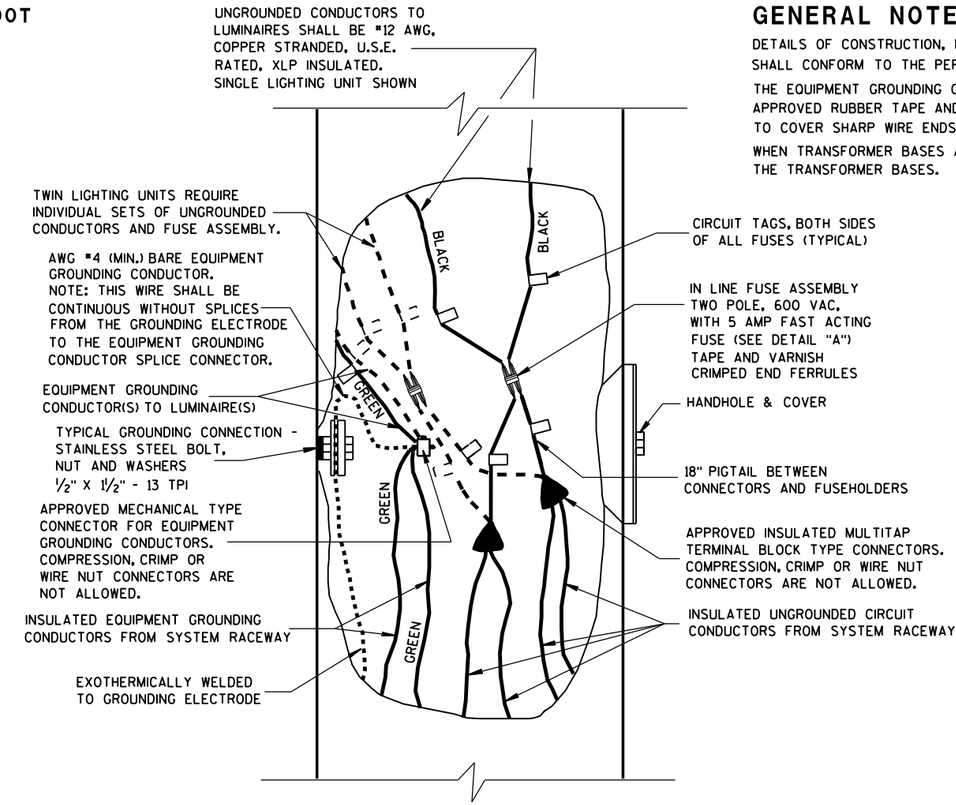




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

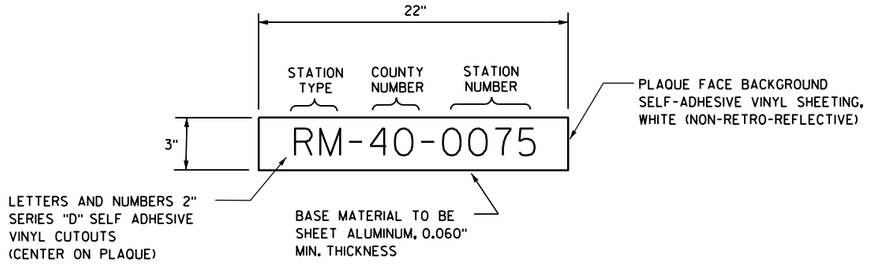
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

NON-FREEWAY LIGHTING UNIT POLE WIRING

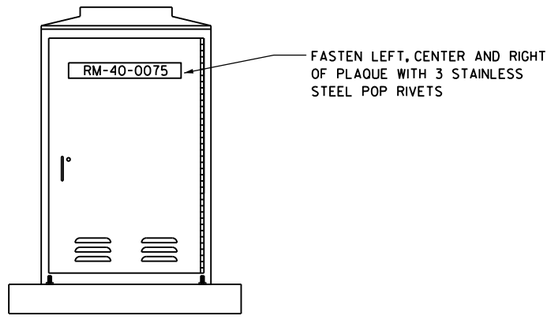
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6
S.D.D. 9 E 3-5

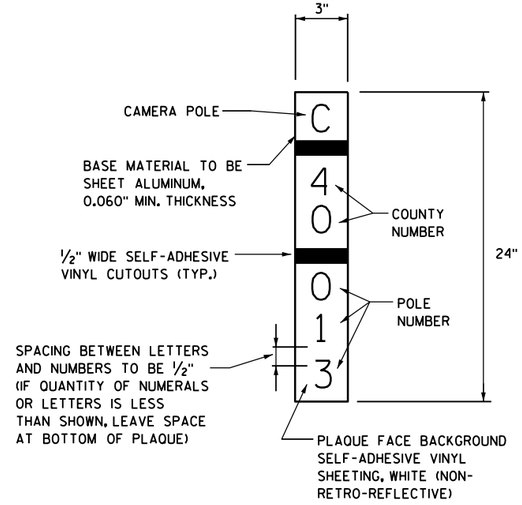


CONTROL CABINET IDENTIFICATION PLAQUE DETAIL

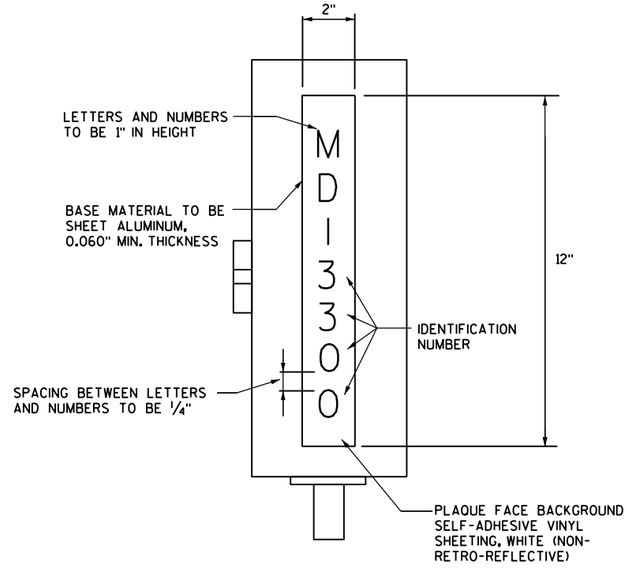


CONTROL CABINET IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS

(TYPICAL ALL CONTROL CABINETS)



POLE IDENTIFICATION PLAQUE DETAIL



MICROWAVE DETECTOR FIELD CABINET IDENTIFICATION PLAQUE DETAIL

GENERAL NOTES

1. TWO PLAQUES PER CABINET REQUIRED ON CONTROL CABINET.
2. FASTEN ONE PLAQUE ON FRONT DOOR, UPPER HALF.
3. FASTEN ONE PLAQUE ON SIDE FACING LOCAL STREET. IF NO LOCAL STREET NEARBY, OR IF SUCH LOCATION COINCIDES WITH LOCATION OF PLAQUE IN NOTE (2), FASTEN PLAQUE ON REAR OF CABINET, UPPER HALF.
4. COUNTY NUMBER NOT REQUIRED ON RAMP METER CABINETS.

LEGEND STATION TYPE

RM - RAMP METER
CCTV - CLOSED CIRCUIT TELEVISION
ATR - AUTOMATIC TRAFFIC RECORDER
SDS - SYSTEM DETECTOR STATION
MD - MICROWAVE DETECTOR

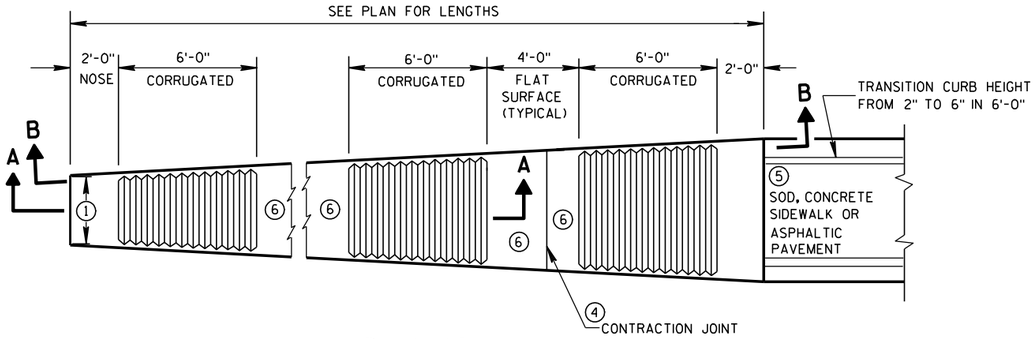
IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demribilek — STATE ELECTRICAL
FHWA

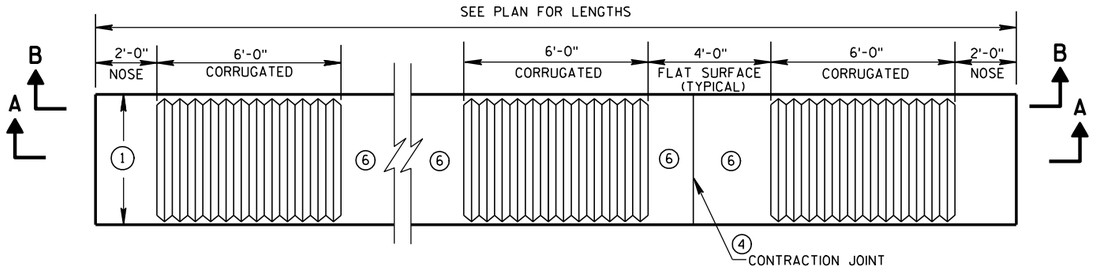
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S.D.D. 9 H 11-1



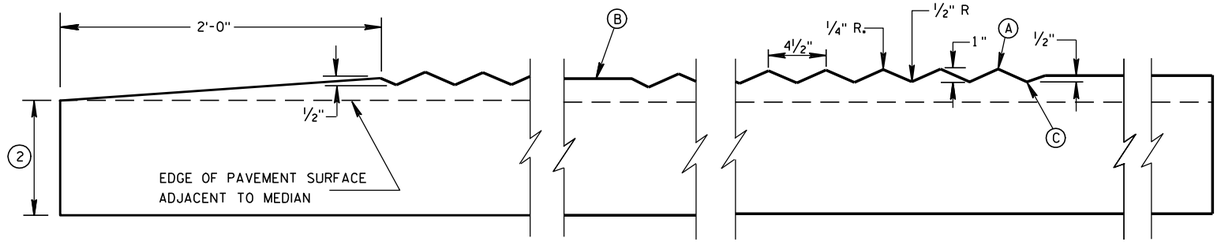
PLAN VIEW

VARIABLE WIDTH CONCRETE CORRUGATED MEDIAN



PLAN VIEW

UNIFORM WIDTH CONCRETE CORRUGATED MEDIAN



SECTION A-A

LONGITUDINAL SECTION

GENERAL NOTES

(1) SEE PLANS FOR CONSTANT OR VARIABLE WIDTH.

(2) THE DEPTH OF THE CONCRETE CORRUGATED MEDIAN SHALL BE 9-INCHES UNLESS SHOWN OTHERWISE IN THE PLAN.

ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

(2) ASPHALTIC CONCRETE OVER NEW OR EXISTING CONCRETE BASE COURSE, OR PAVEMENT.

(3) ASPHALTIC PAVEMENT OVER BASE AGGREGATE DENSE.

(3) 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.

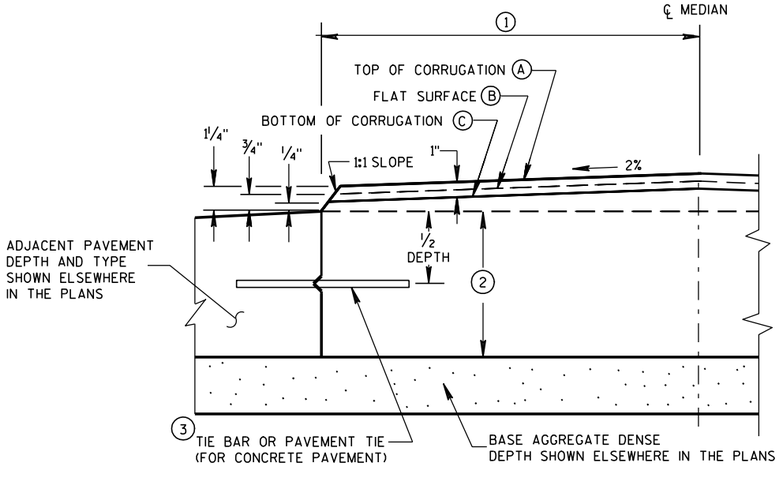
INSTALL TIE BARS TO MAINTAIN A MINIMUM OF 3-INCHES OF COVER BETWEEN THE TIE BAR AND THE CONCRETE SURFACE (BOTTOM AND TOP).

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE PAVEMENT OR 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.

(4) CONCRETE CORRUGATED MEDIAN CONTRACTION JOINTS SHALL BE CONSTRUCTED TO MATCH THE JOINTS IN ADJACENT CONCRETE PAVEMENT. WHERE ADJACENT PAVEMENT IS ASPHALT WITH BASE AGGREGATE DENSE. TRANSVERSE CONTRACTION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS.

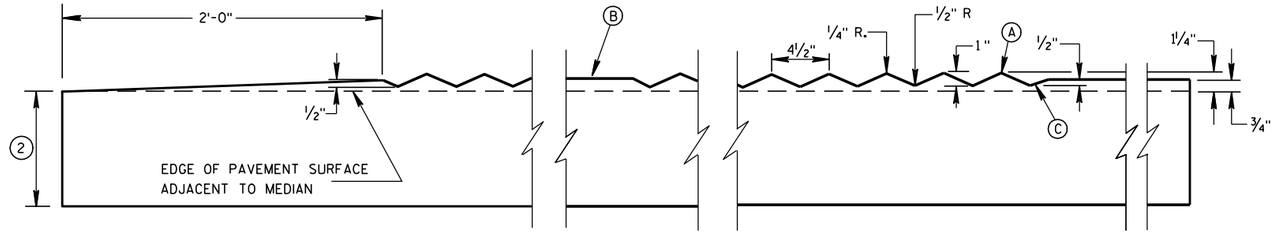
(5) SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.

(6) YELLOW MARKING ON FLAT SURFACE WHEN MEDIAN SEPARATES OPPOSING TRAFFIC.



HALF CROSS SECTION

(2) CONCRETE CORRUGATED MEDIAN AND ADJACENT PAVEMENT



SECTION B-B

LONGITUDINAL SECTION

CONCRETE CORRUGATED MEDIAN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/17/07
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

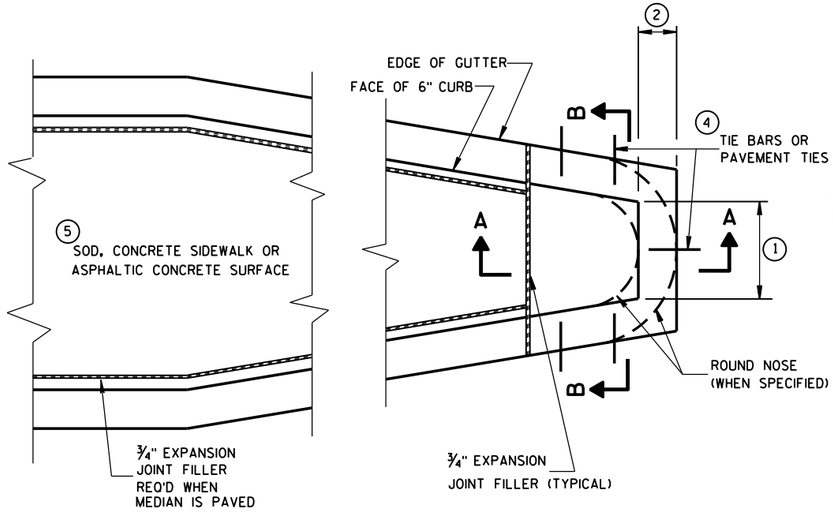
FHWA

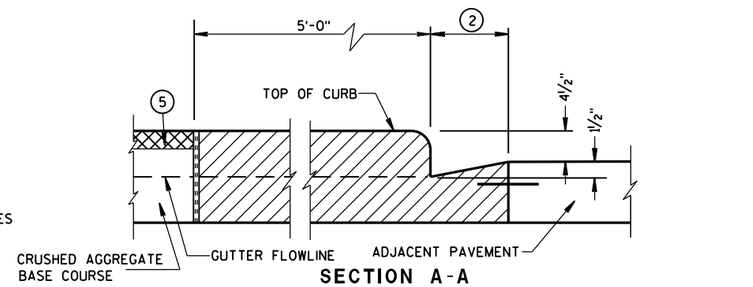
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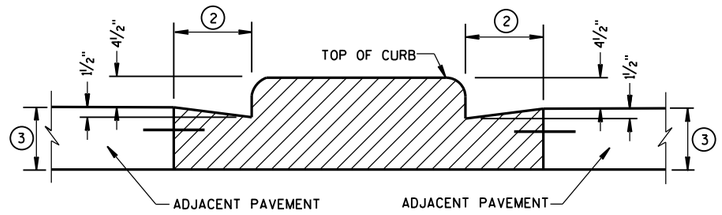
S.D.D. 11 B 1-5

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S.D.D. 11 B 1-5







CONCRETE MEDIAN BLUNT NOSE DETAIL

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.

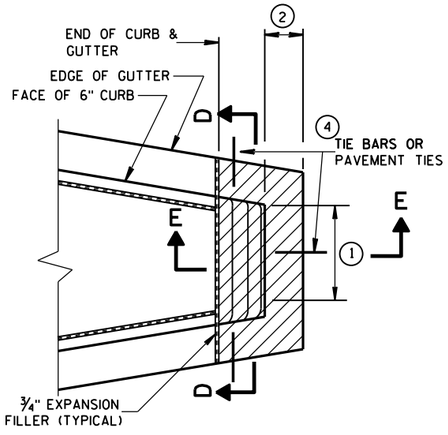
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

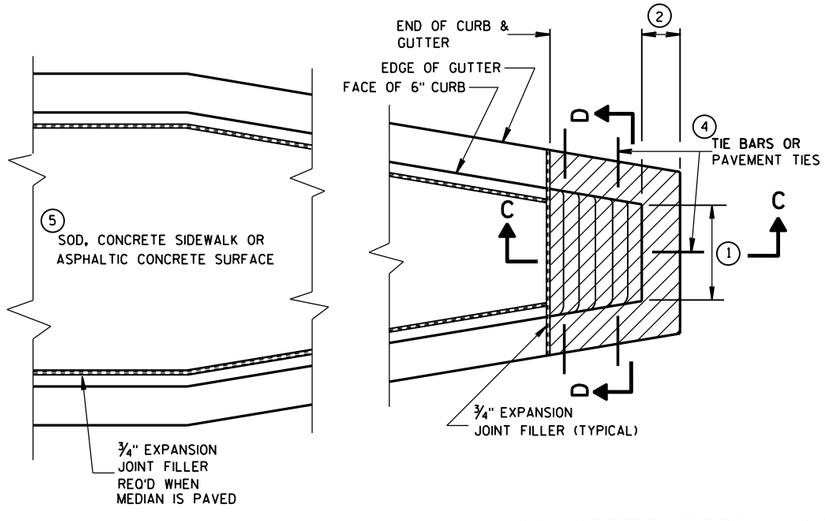
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

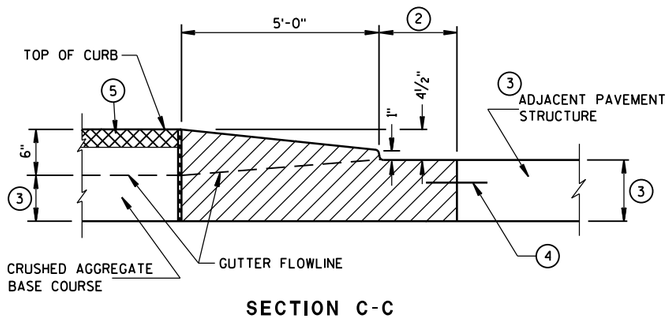
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

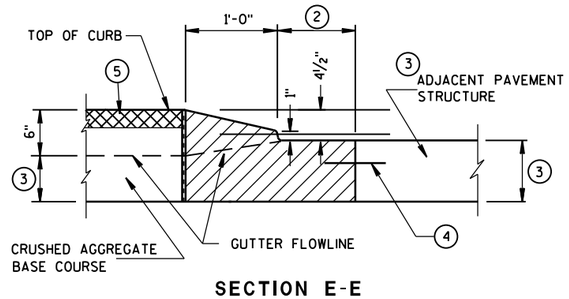
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



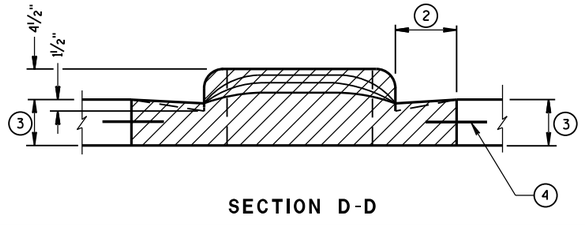






CONCRETE MEDIAN SLOPED NOSE TYPE 2

CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

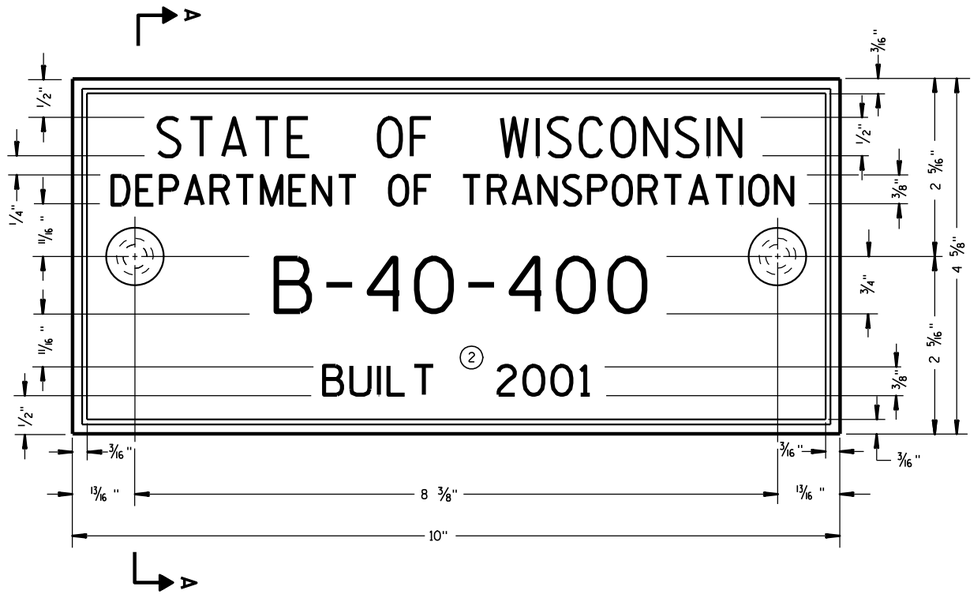
FHWA

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S.D.D. 11 B 2-2

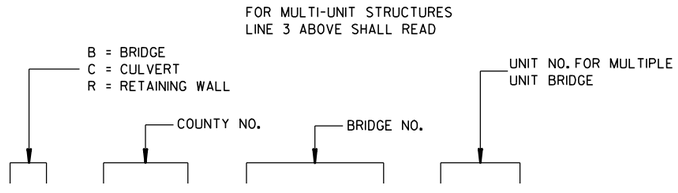
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S.D.D. 11 B 2-2



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

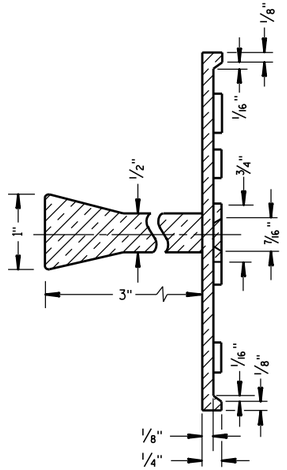
GENERAL NOTES

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.

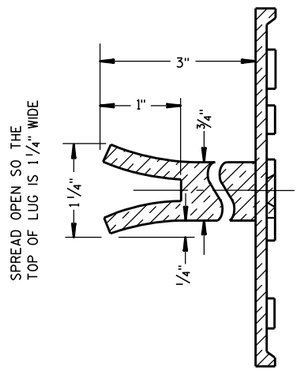
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

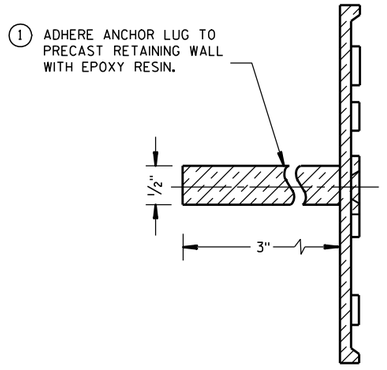
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

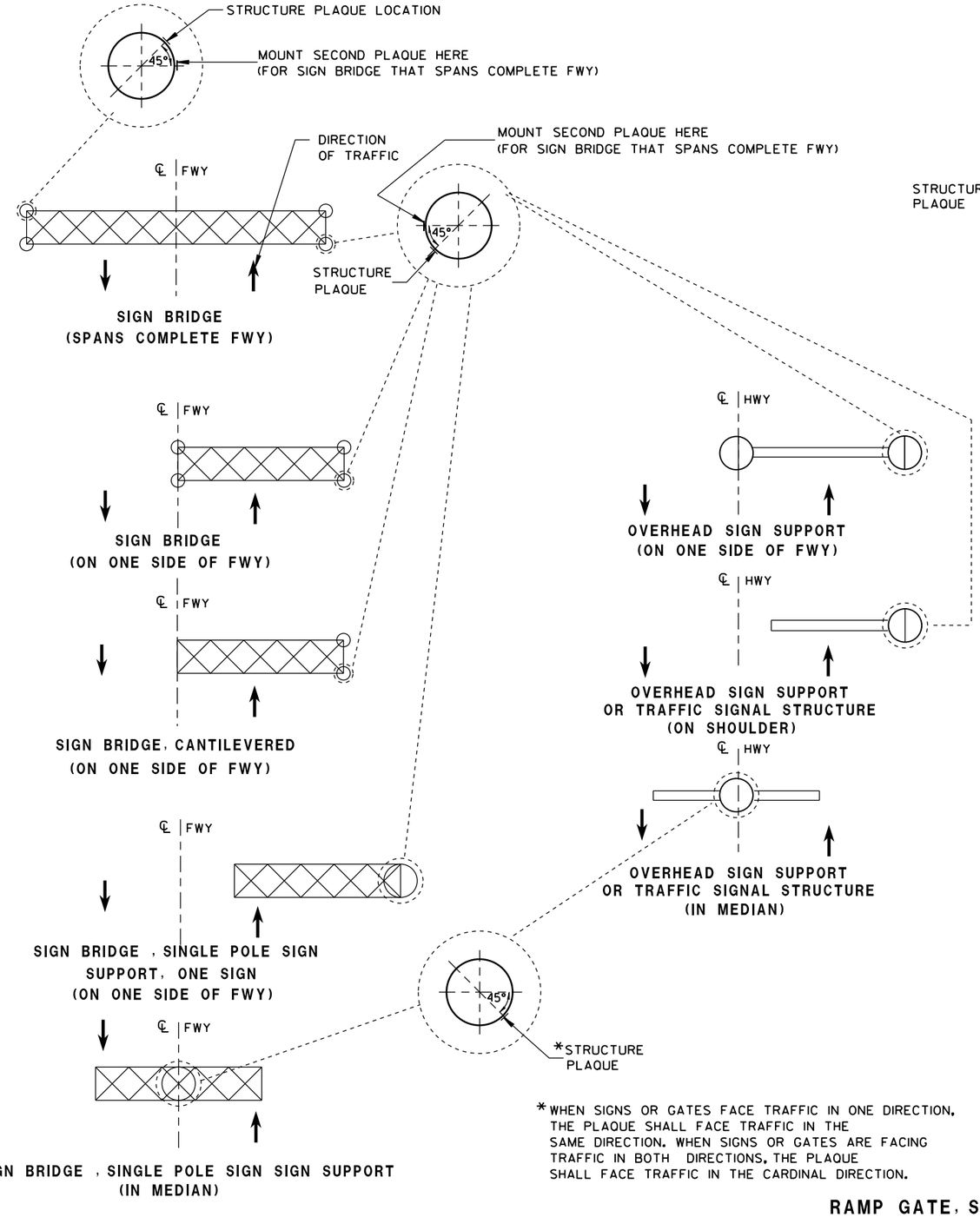
APPROVED

3/26/10 DATE — /S/ Scot Beck — CHIEF STRUCTURAL DEVELOPMENT ENGINEER

FHWA

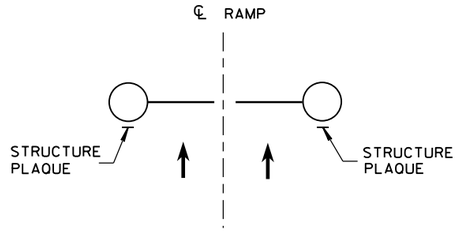
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S.D.D. 12 A 3-10

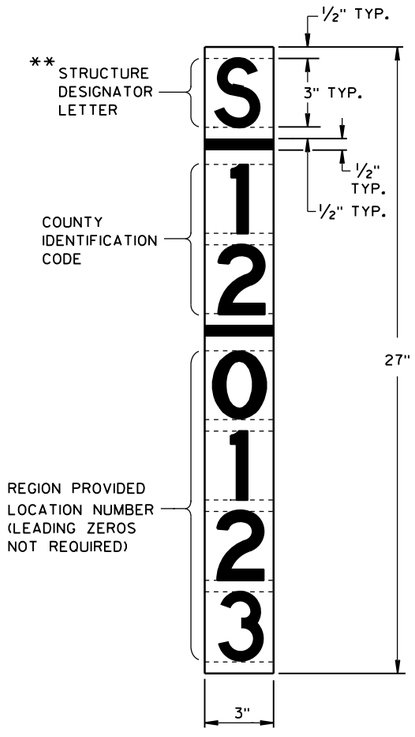


*WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.

LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES



RAMP GATE
(ACROSS FWY ON-RAMP)



** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

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.

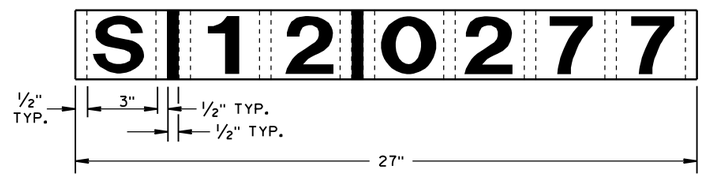
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" 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

STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

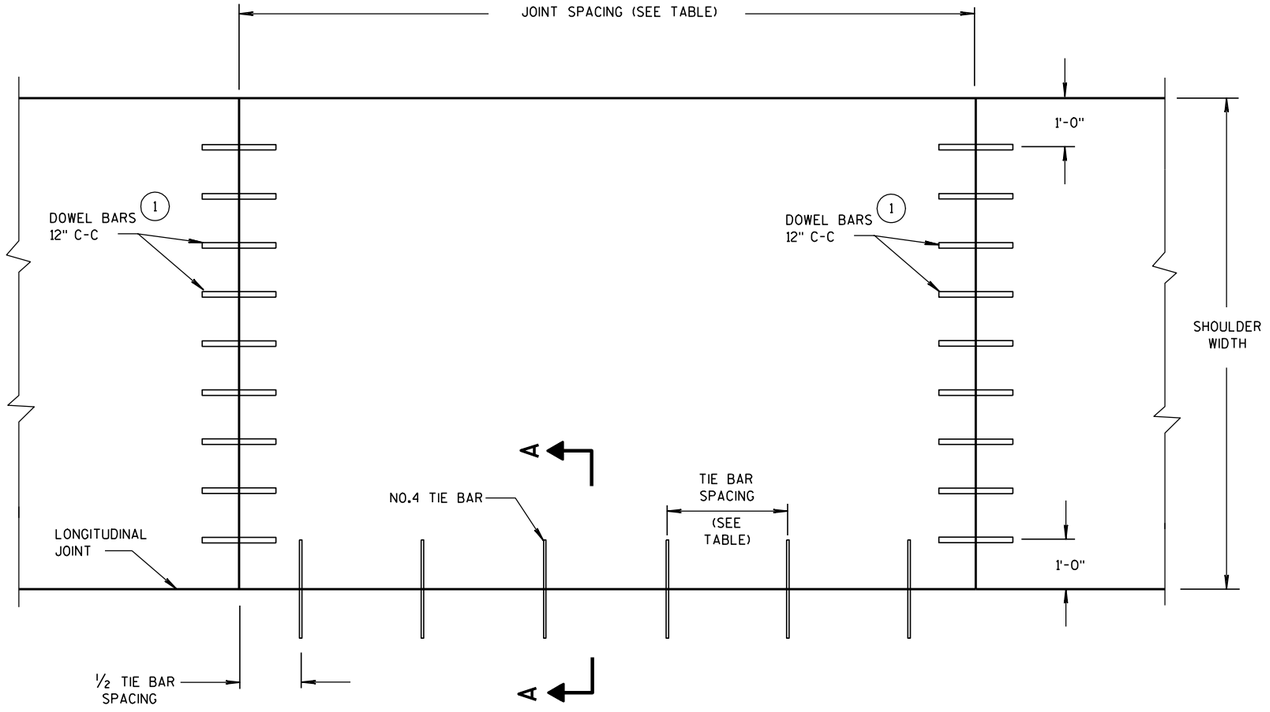
APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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S.D.D. 12 A 4-3

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S.D.D. 12 A 4-3



PLAN VIEW

CONCRETE PAVEMENT SHOULDER

PAVEMENT TYPE OF TRAFFIC LANES	TIE BAR SPACING	SHOULDER JOINT SPACING
NON-REINFORCED	30"	MATCH JOINT SPACING OF ADJACENT TRAFFIC LANE
CONTINUOUSLY REINFORCED	30"	15' FOR 6' TO 10' WIDE SHOULDERS
CONTINUOUSLY REINFORCED	36"	12' FOR 3' WIDE SHOULDERS

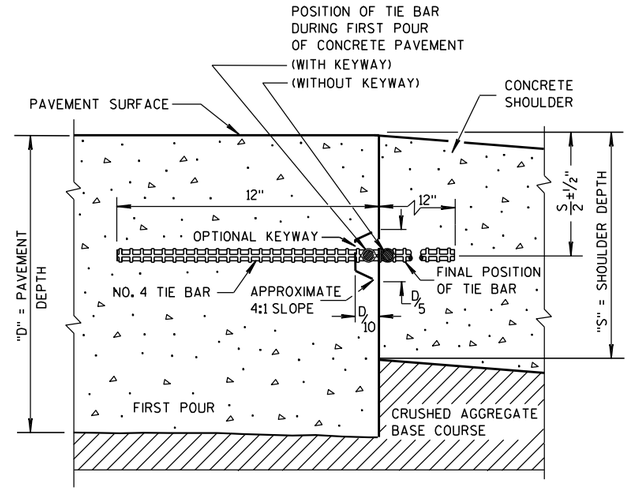
GENERAL NOTES

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

(1)

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	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.

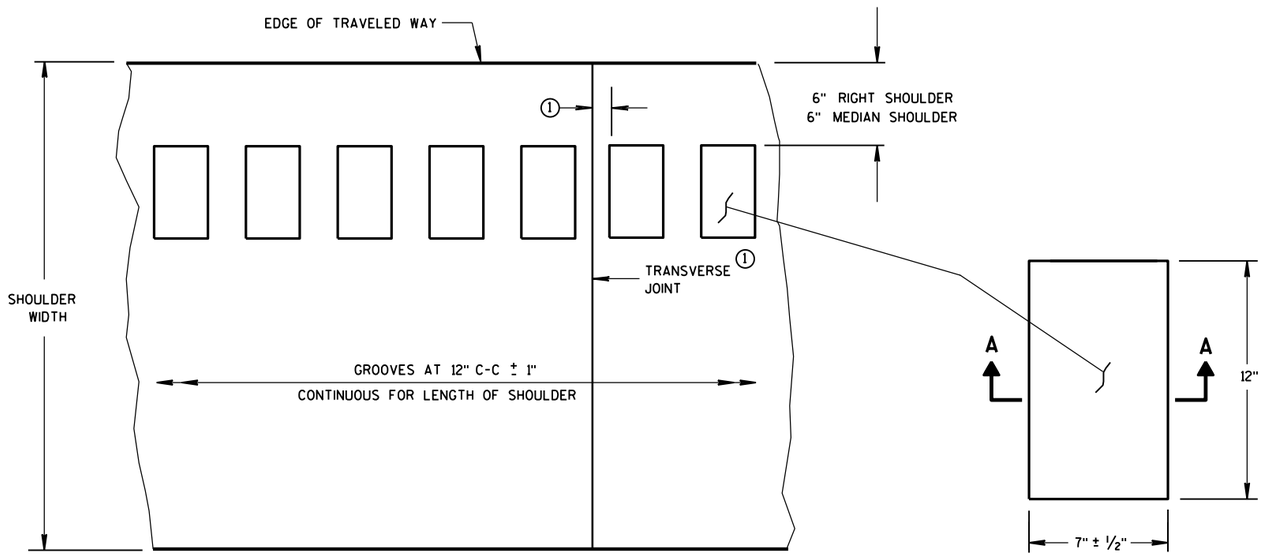
CONCRETE PAVEMENT SHOULDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/15/2011 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & D — INEER
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S.D.D. 13 A 3-5



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

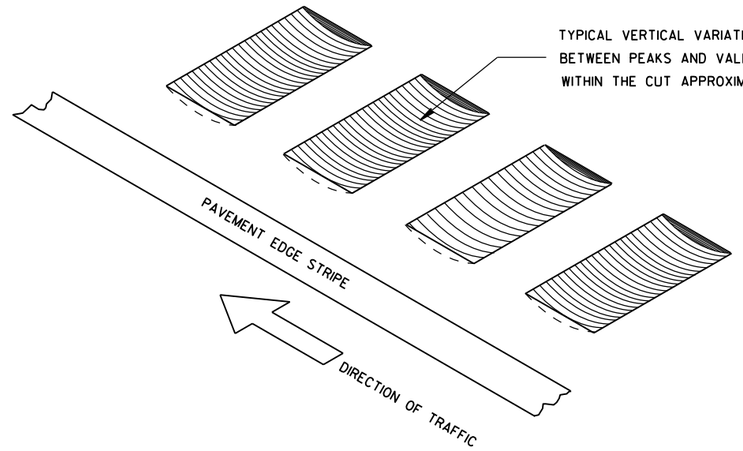
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

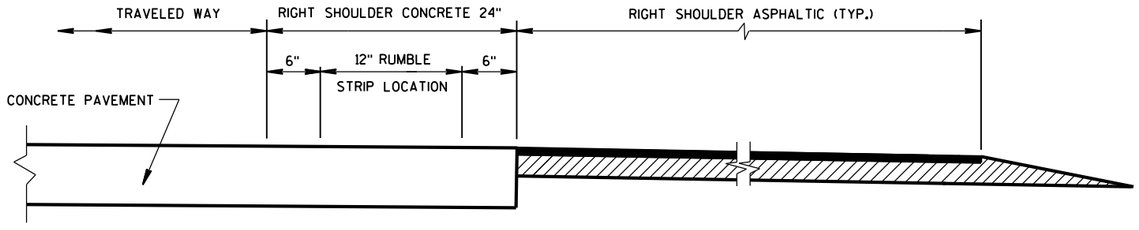
RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

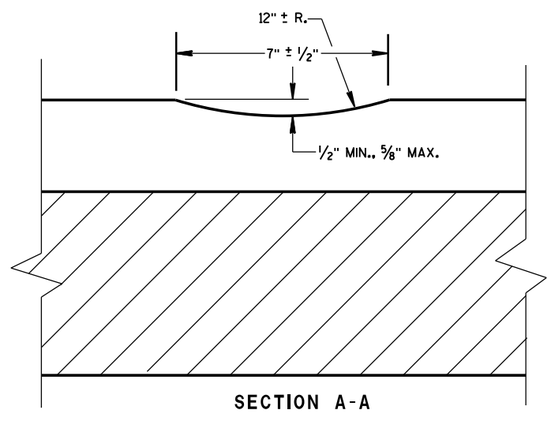
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



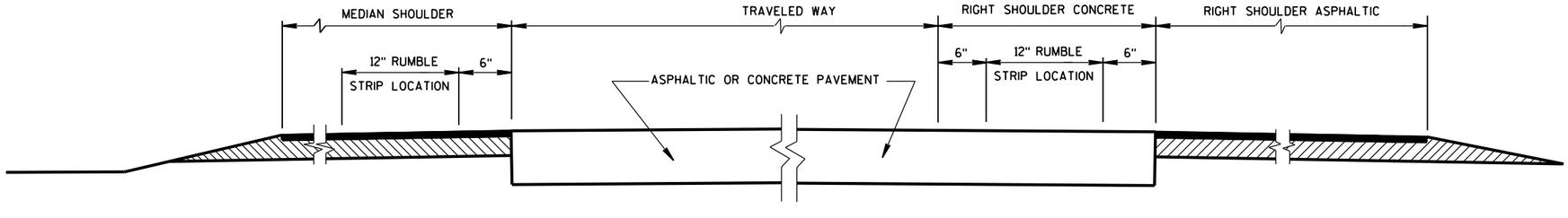
ISOMETRIC



SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION A-A



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)

SHOULDER RUMBLE STRIP, MILLING

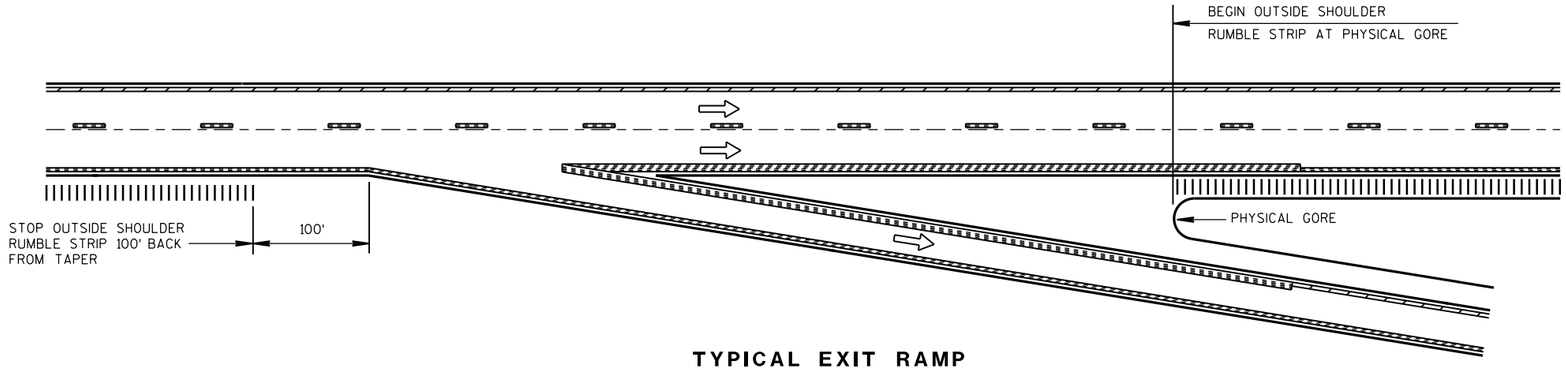
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 13 A 5-5a

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S.D.D. 13 A 5-5a



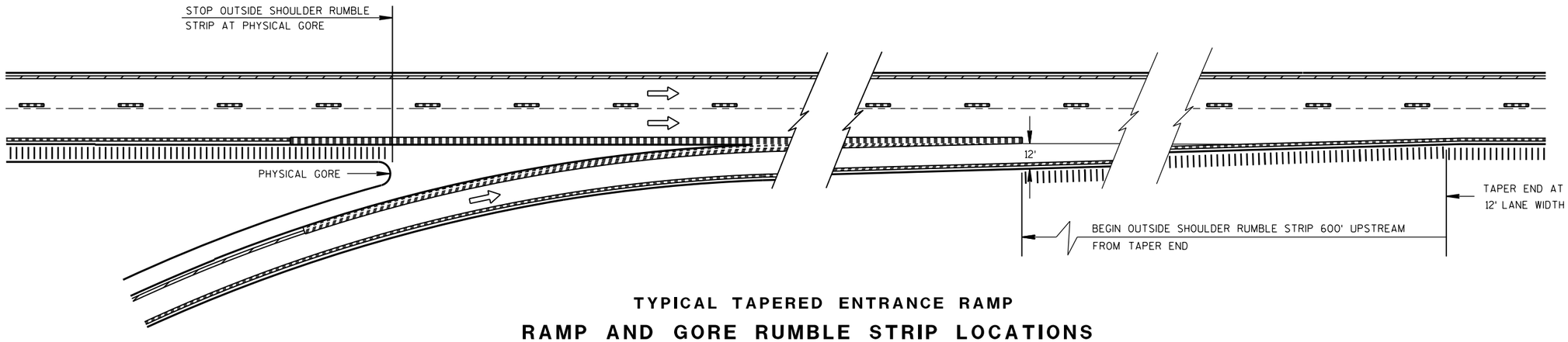
TYPICAL EXIT RAMP

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

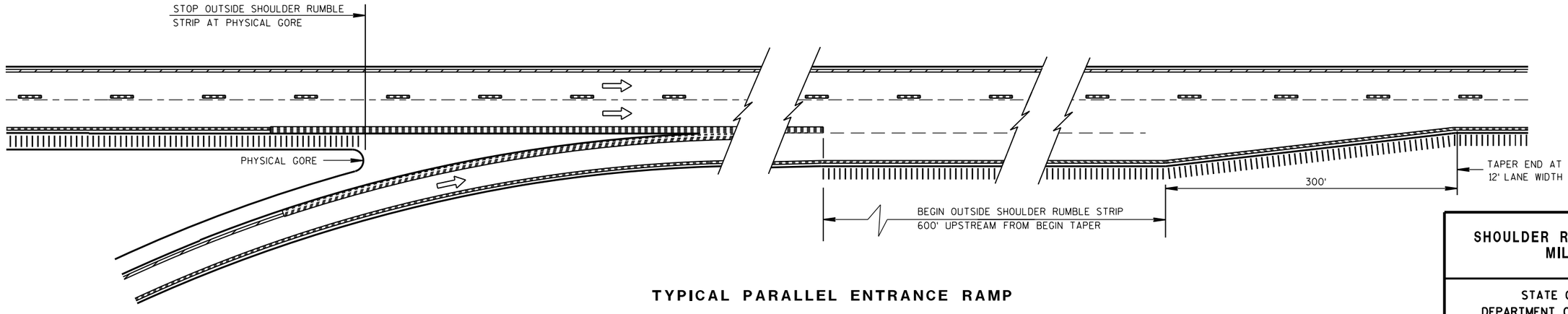
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/17/2012
DATE

/S/ Jerry H. Zoga
ROADWAY STANDARDS ENGINEER

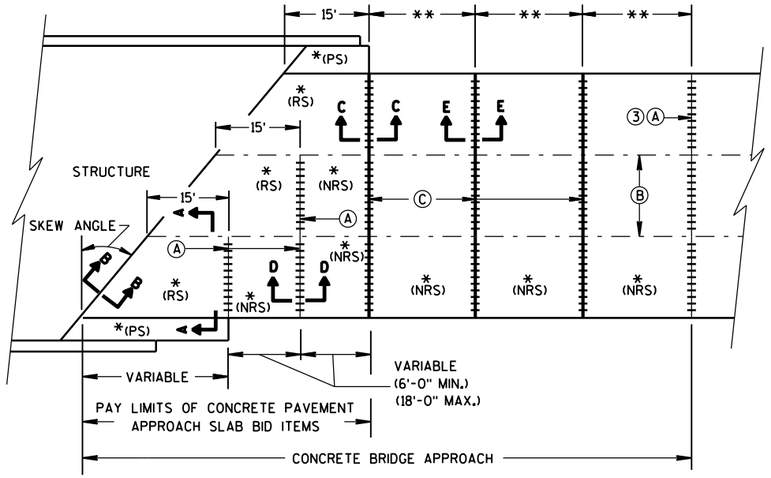
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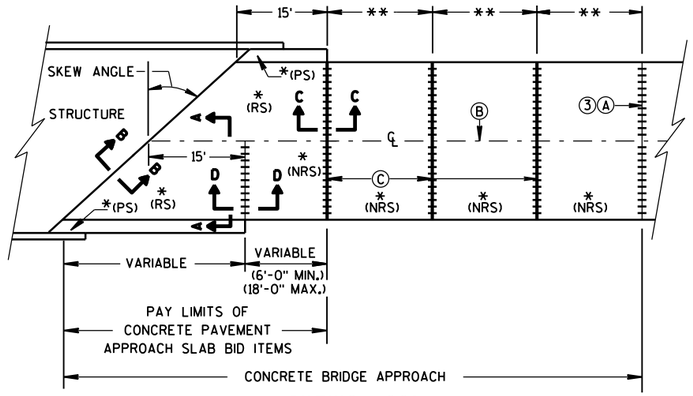
S.D.D. 13 A 5-5b

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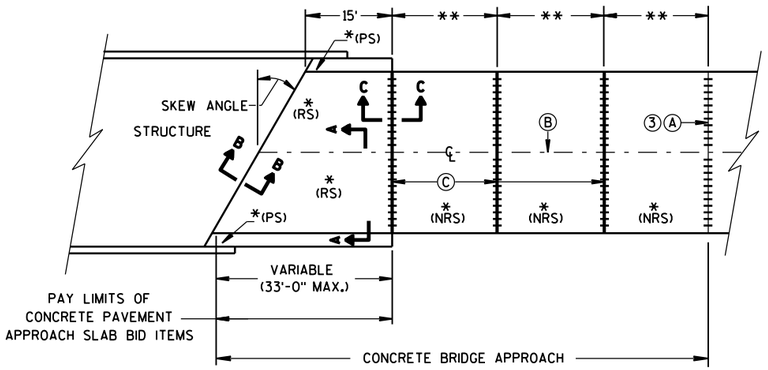
S.D.D. 13 A 5-5b



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >30°
(PAVEMENT WIDTH ≤30')



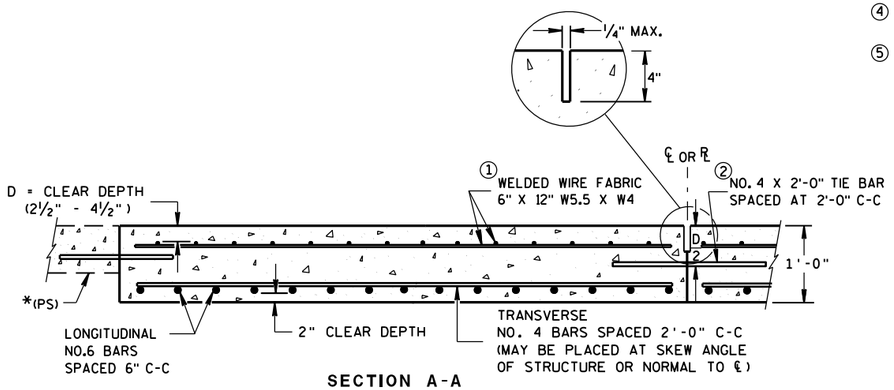
SKEWS ≤30°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

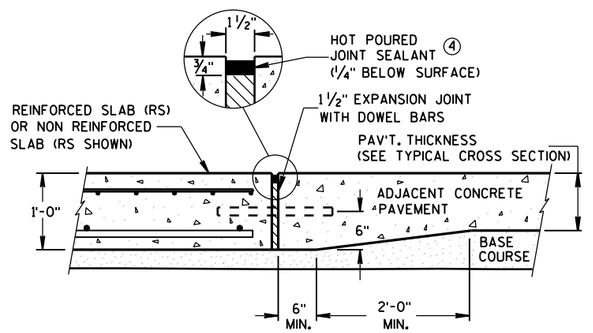
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER: CONCRETE PAVEMENT, OR CONCRETE SURFACE DRAIN (SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

**STANDARD TRANSVERSE JOINT SPACING (SEE SDD 13C4, SDD 13C11, & SDD 13C13)
***STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11, & SDD 13C13)

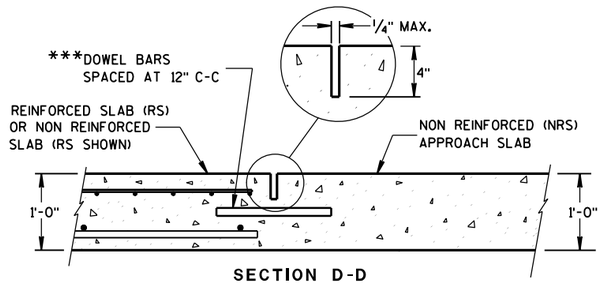
Ⓐ STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄
Ⓑ STANDARD LONGITUDINAL JOINT AND TIE BARS.
Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄



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.

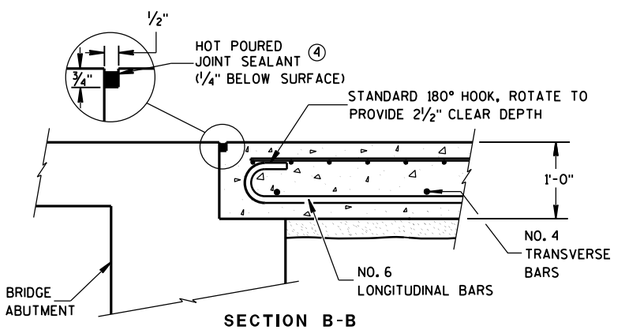
① THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

② THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

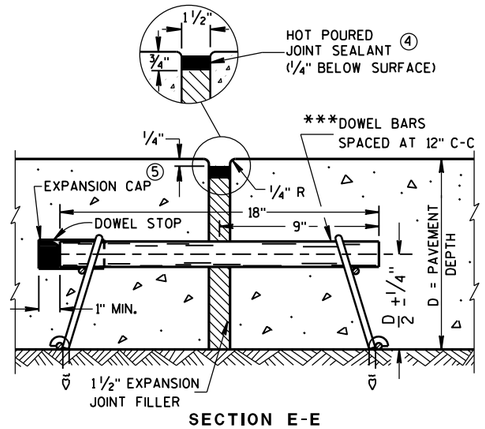
③ DO NOT DOWEL A CONTRACTION JOINT THAT ABUTS AN HMA PAVEMENT.

④ USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.

⑤ 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



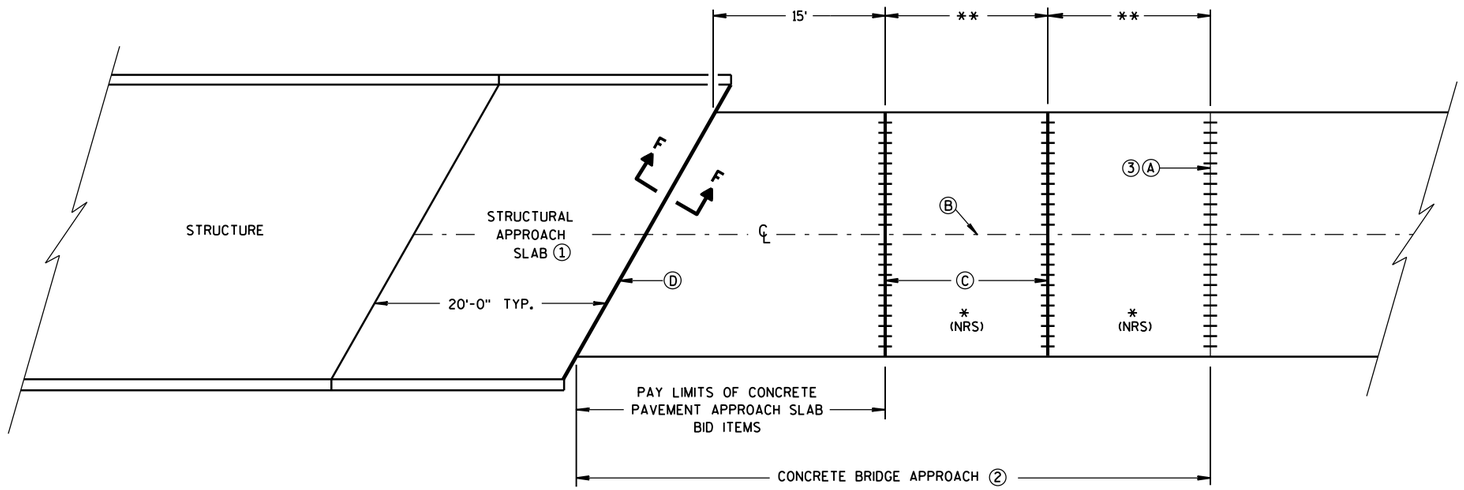
SECTION E-E
EXPANSION JOINT

CONCRETE BRIDGE APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2014 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & DE
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S.D.D. 13 B 2-7a



BRIDGE APPROACHES

GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE BRIDGE APPROACH.

① CONFORM TO APPLICABLE BRIDGE MANUAL STANDARD DRAWINGS FOR *STRUCTURAL APPROACH SLABS* (SEE CHAPTER 12 - ABUTMENTS).

② CONFORM TO SHEET (a) OF THIS SET FOR *CONCRETE BRIDGE APPROACH* DETAILS, WITH ONE EXCEPTION — WHEN CONSTRUCTING A *CONCRETE BRIDGE APPROACH* NEXT TO A *STRUCTURAL APPROACH SLAB*, AS SHOWN IN THE DETAIL DRAWING, THE *CONCRETE BRIDGE APPROACH* WILL ONLY HAVE TWO EXPANSION JOINTS; THE THIRD EXPANSION JOINT IS AT THE END OF THE *STRUCTURAL APPROACH SLAB*.

③ DO NOT DOWEL A CONTRACTION JOINT THAT ABUTS AN HMA PAVEMENT.

*(NRS) = NON-REINFORCED CONCRETE SLAB

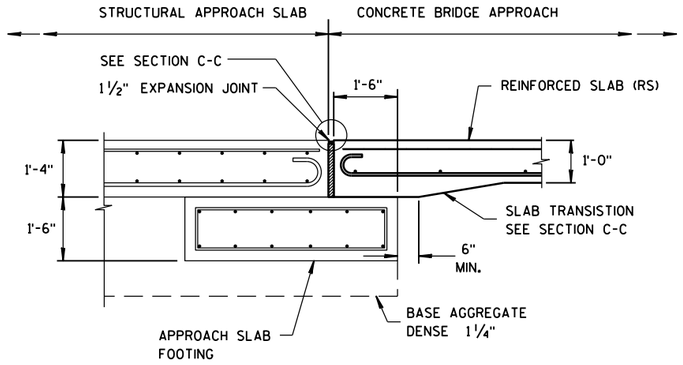
**STANDARD TRANSVERSE JOINT SPACING (SEE SDD 13C4, SDD 13C11, & SDD 13C13)

Ⓐ STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄

Ⓑ STANDARD LONGITUDINAL JOINT AND TIE BARS.

Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄

Ⓓ 1½" EXPANSION JOINT (NO DOWELS)



SECTION F-F

FOOTING DETAIL

STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

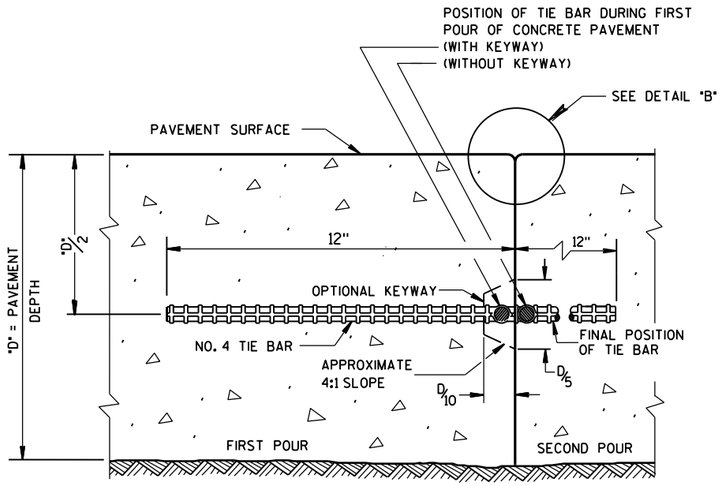
STRUCTURAL APPROACH SLAB AND CONCRETE BRIDGE APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

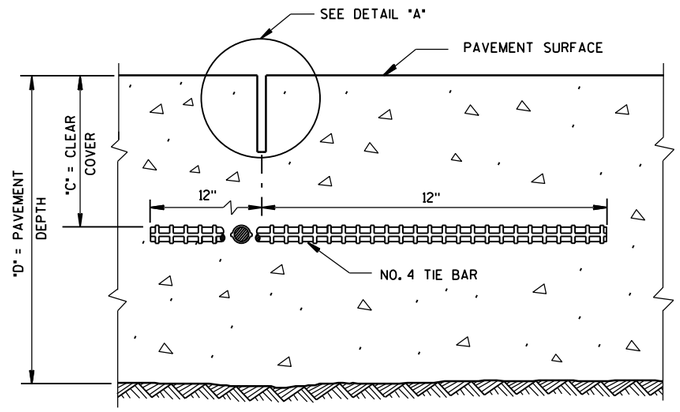
APPROVED
June, 2014 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & DE
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S.D.D. 13 B 2-7b



CONSTRUCTION JOINT



SAWED JOINT

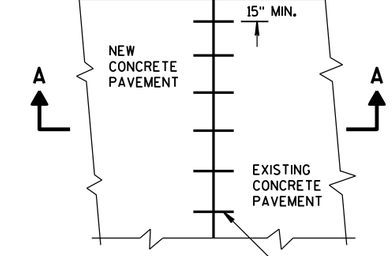
GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

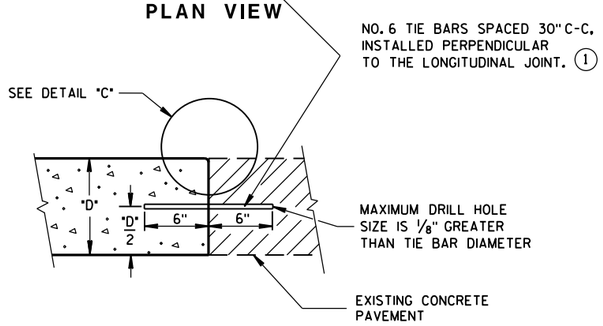
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

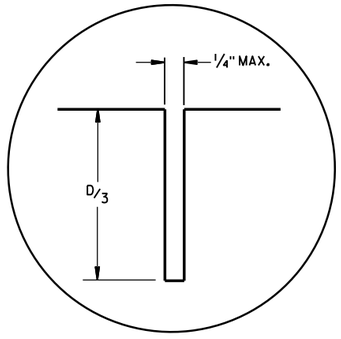
(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



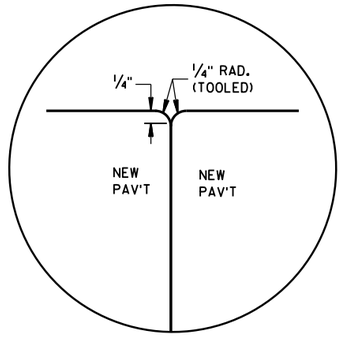
PLAN VIEW



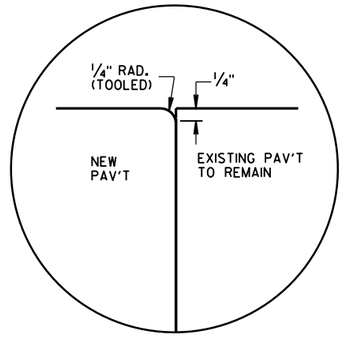
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



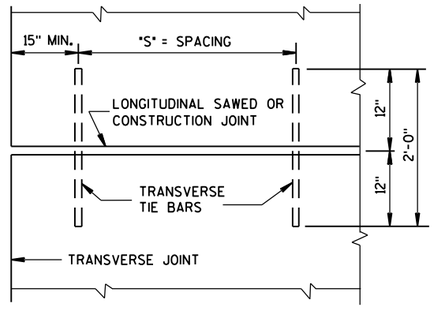
DETAIL "B"



DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH "D"	CLEAR COVER "C"	MAXIMUM TIE BAR SPACING "S"	
		PAVEMENT WIDTH	
		24' OR 26'	≥30'
6, 6 1/2"	3"±1/2"	48"	42"
7, 7 1/2"	3 1/4"±1"	45"	36"
8, 8 1/2"	3 3/4"±1"	39"	30"
9, 9 1/2"	4 1/4"±1"	33"	27"
10, 10 1/2"	4 3/4"±1"	30"	24"
11, 11 1/2"	5 1/4"±1"	27"	21"
12"	5 3/4"±1"	24"	21"



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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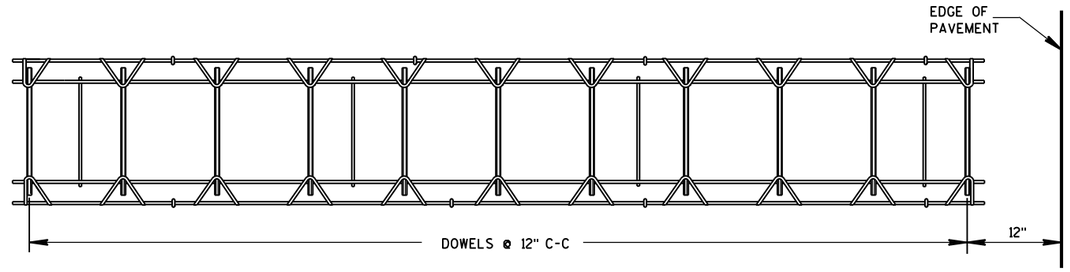
9/2014 — DATE

/S/ Deb Bischoff — PAVEMENT POLICY & DE ... NEER

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S.D.D. 13 C 1-17

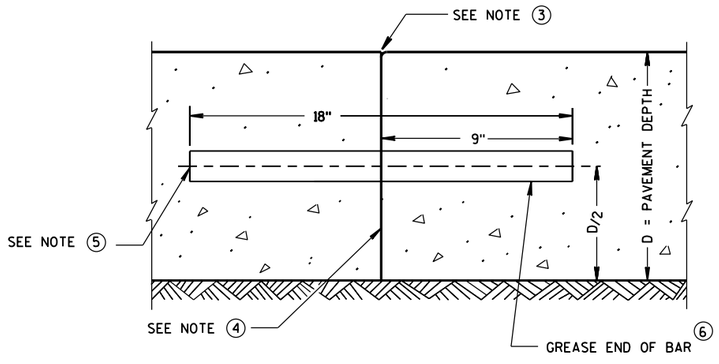


PLAN VIEW

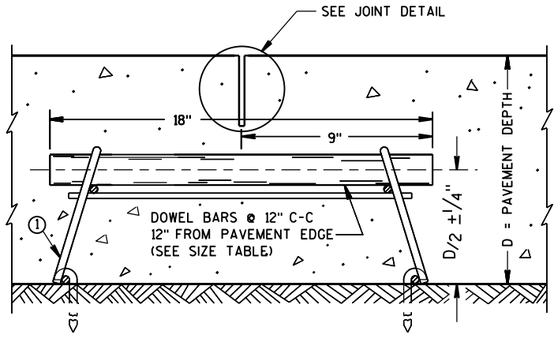


SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



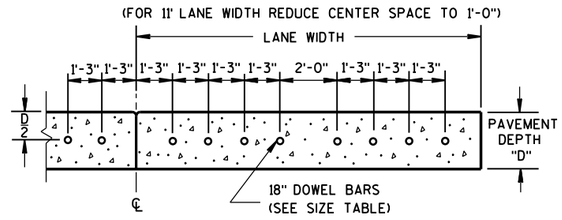
TRANSVERSE CONSTRUCTION JOINT



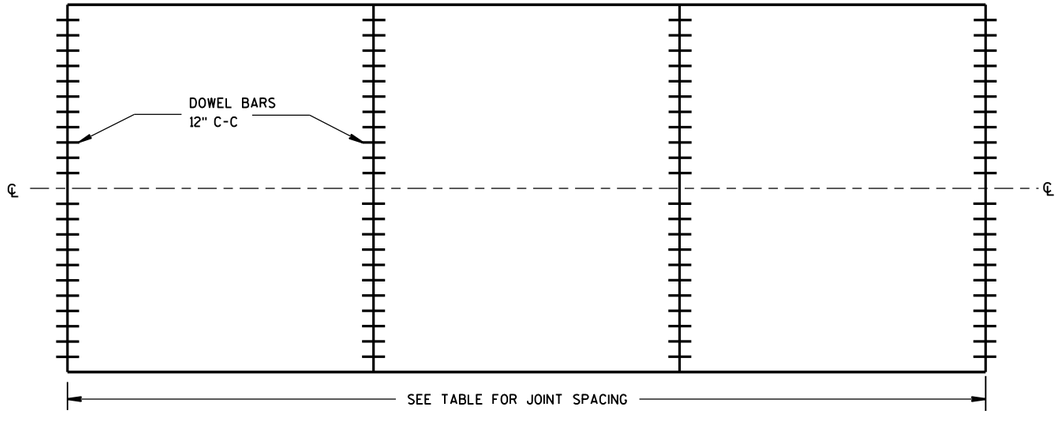
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS

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.

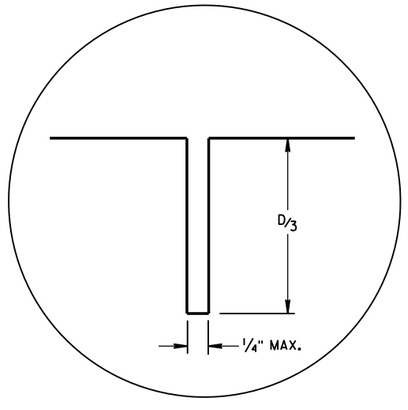
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

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 ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



JOINT DETAIL

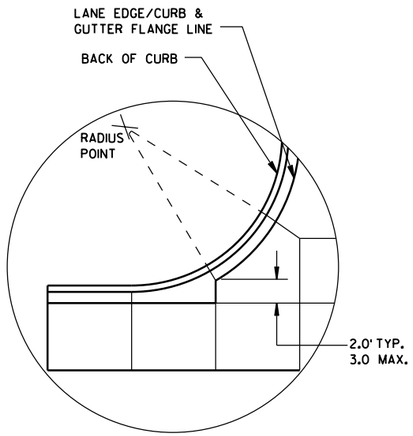
URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

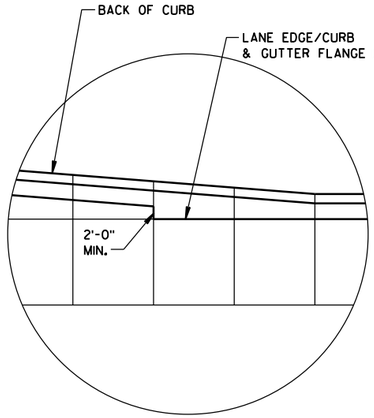
APPROVED
5/3/2013 DATE
/S/ Deb Bischoff
PAVEMENT POLICY & DE ENGINEER
FHWA

6

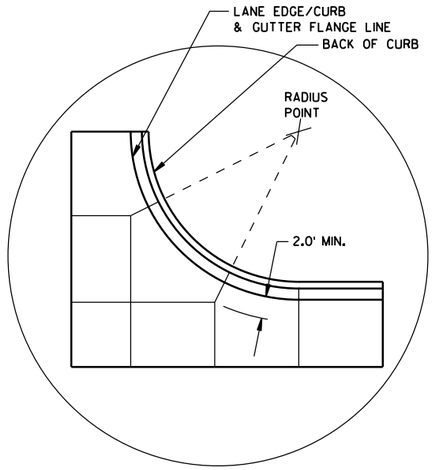
S.D.D. 13 C 13-8



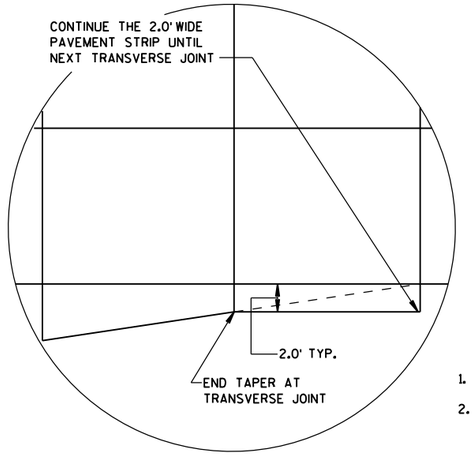
DETAIL "A"



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.

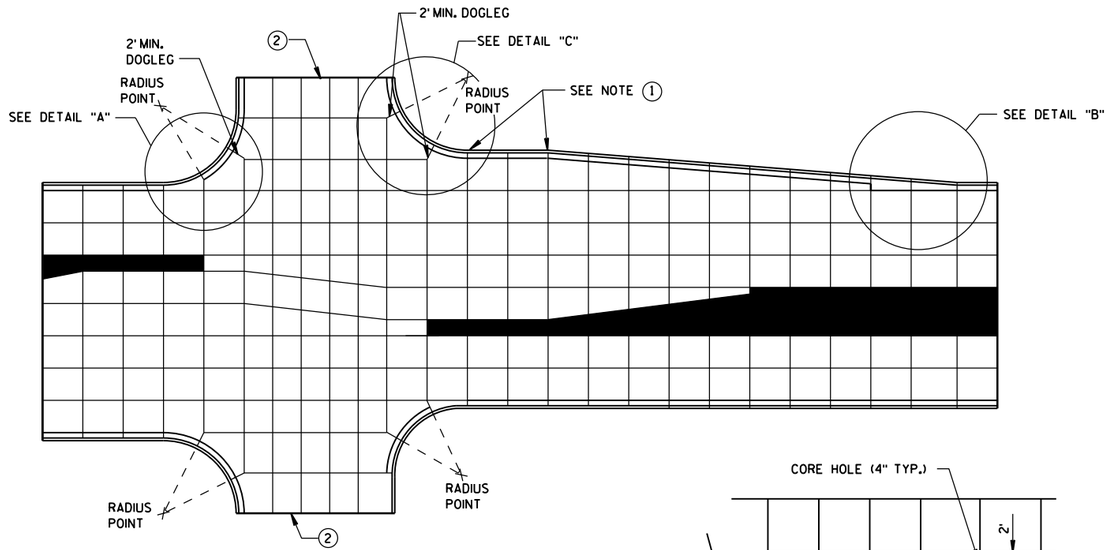
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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.

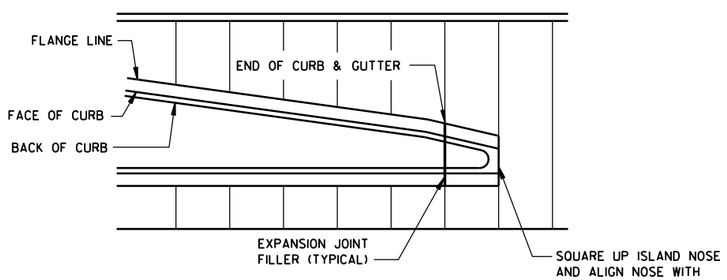


STANDARD INTERSECTION

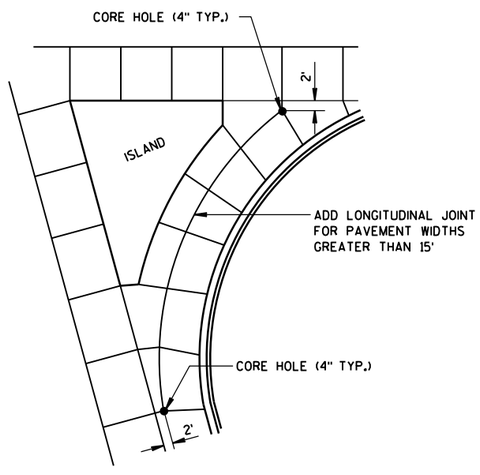
PAVEMENT DEPTH AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'

SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

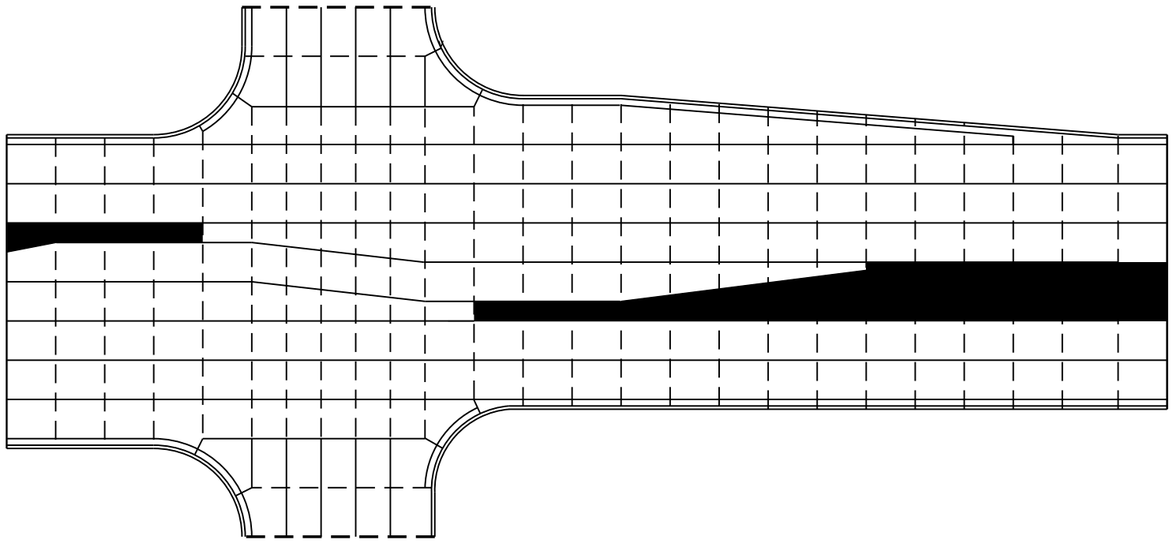
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S.D.D. 13 C 18-2a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

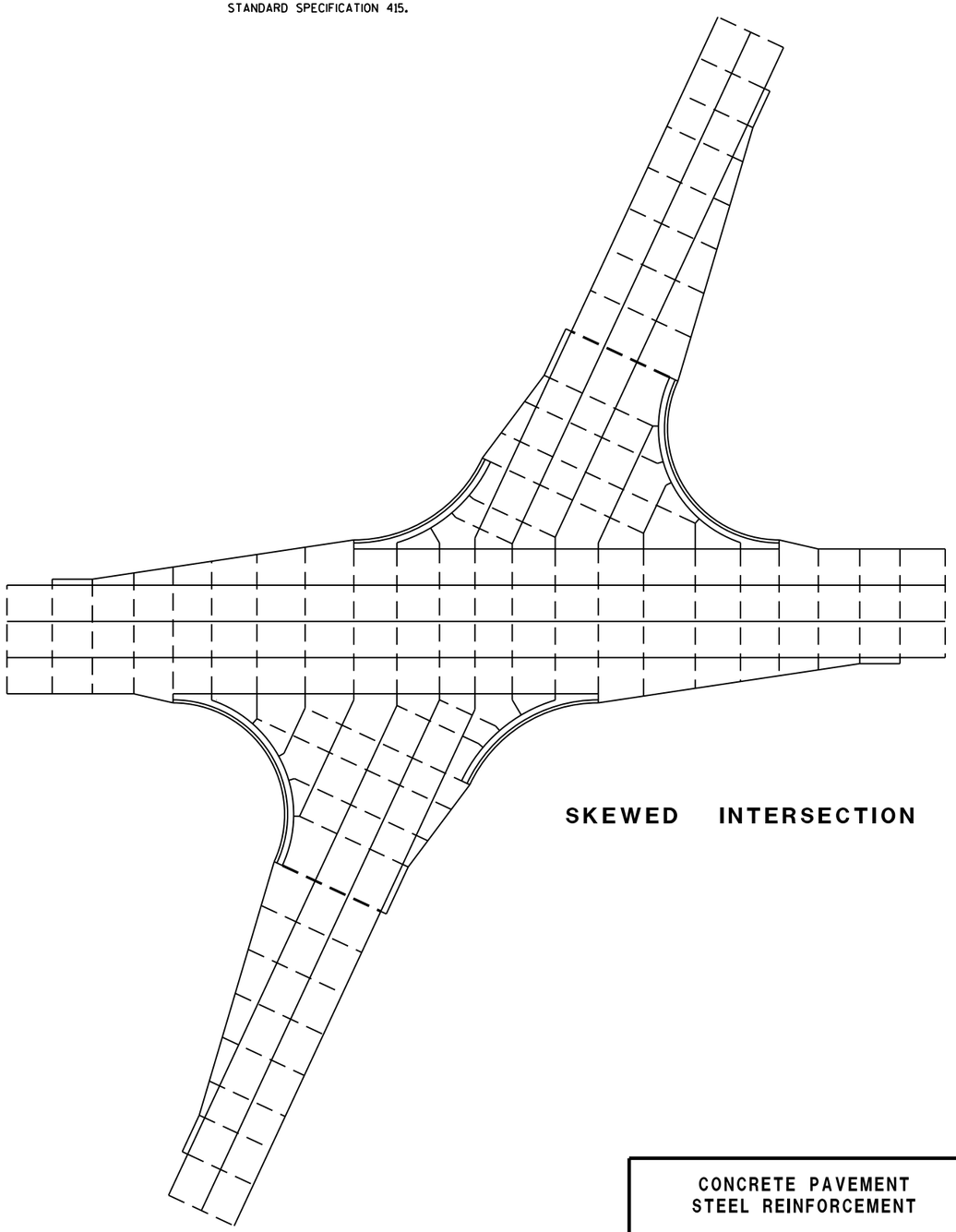
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

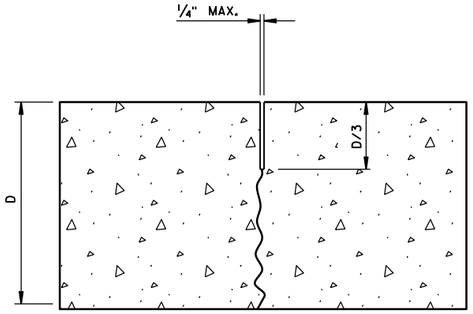
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

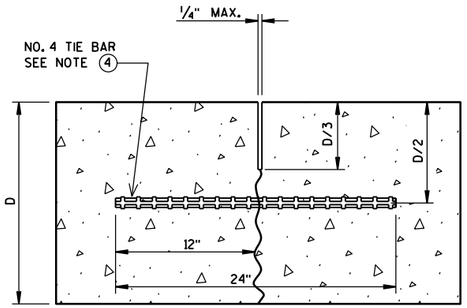
S.D.D. 13 C 18-2b

6

S.D.D. 13 C 18-2b



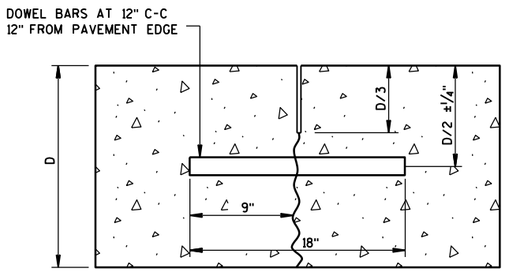
UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

GENERAL NOTES

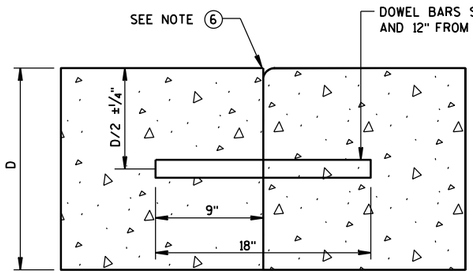
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. SPACE TIE BARS AT LONGITUDINAL CONSTRUCTION OR CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C1.
5. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
6. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.



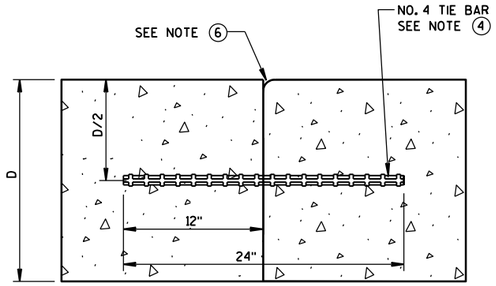
DOWELED-TRANSVERSE

CONTRACTION JOINTS

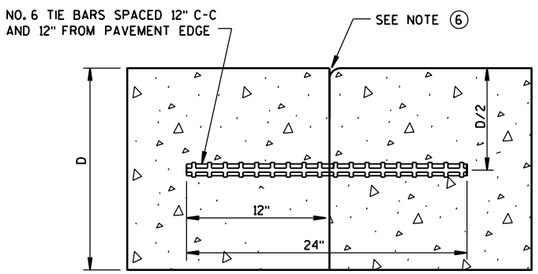
SEE NOTE (2)



DOWELED TRANSVERSE

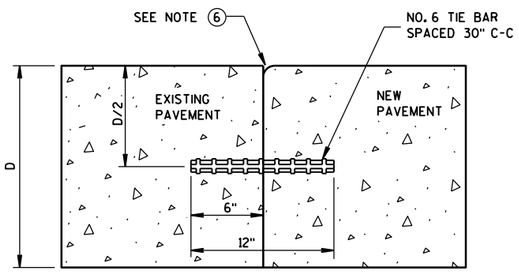


TIED LONGITUDINAL



TIED TRANSVERSE

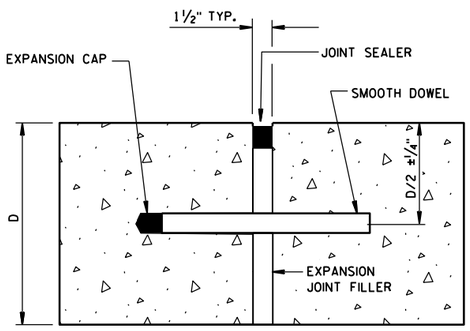
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

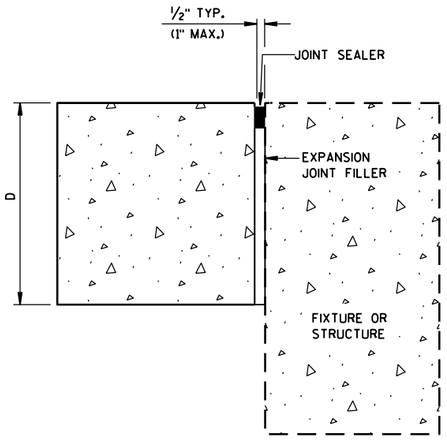
CONSTRUCTION JOINTS

SEE NOTE (5)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

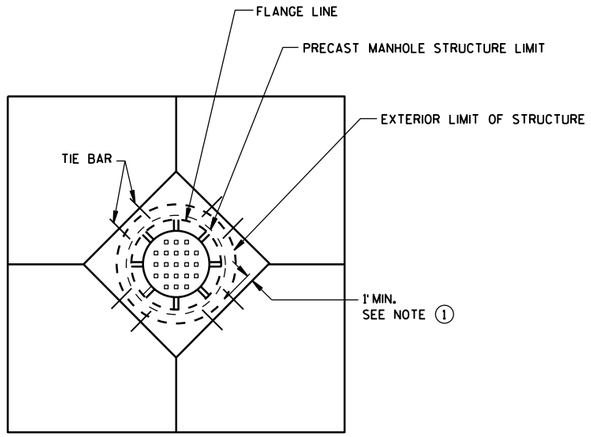
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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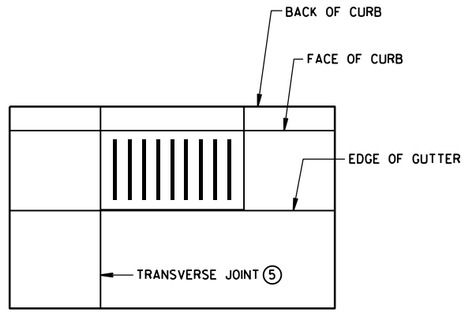
S.D.D. 13 C 18-2c

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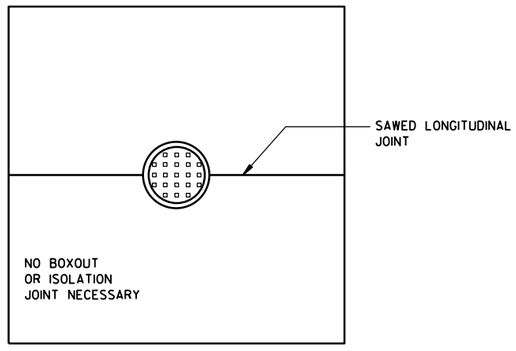
S.D.D. 13 C 18-2c



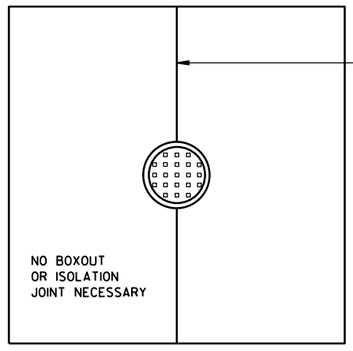
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



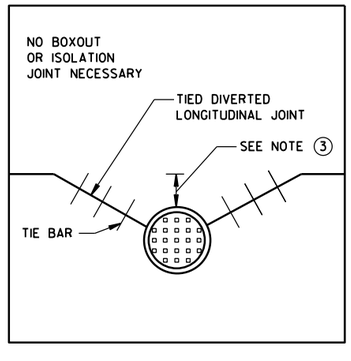
INLET WITH TRANSVERSE JOINT



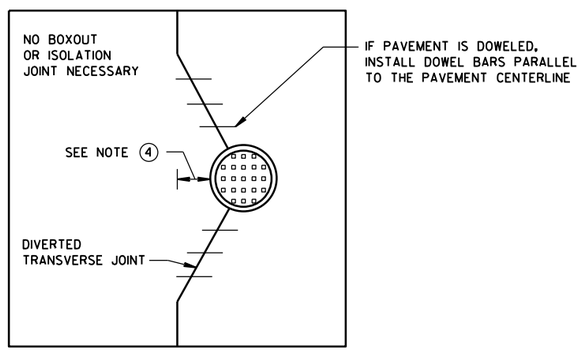
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION 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 LONGITUDIAL 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

5-3-2013 — DATE

/S/ Deb Bischoff — PAVEMENT POLICY & DE

NEER

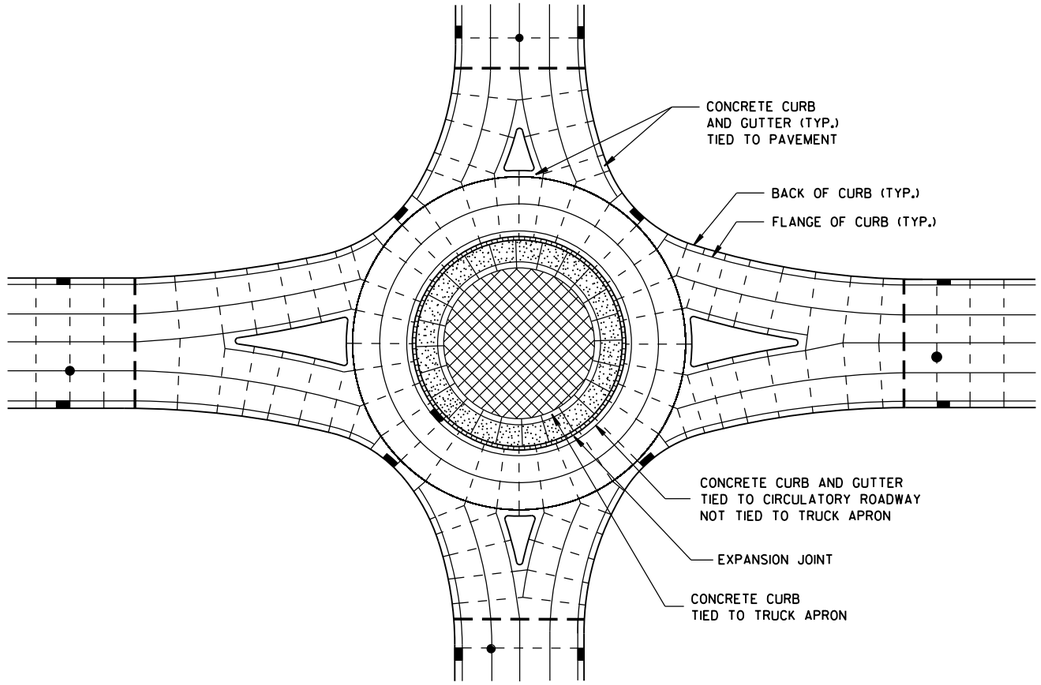
FHWA

6

S.D.D. 13 C 18-2d

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT
- TRUCK APRON
- CENTRAL ISLAND
- UTILITY STRUCTURES



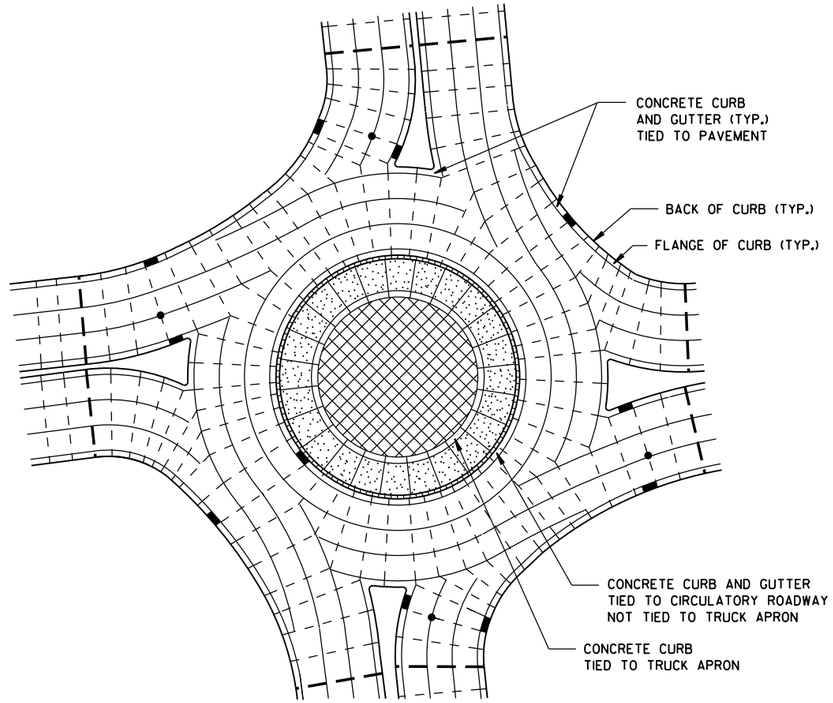
ISOLATED CIRCLE JOINT LAYOUT FOR ROUNDABOUTS

GENERAL NOTES

MAXIMUM JOINT SPACING IS IN ACCORDANCE WITH THE TABLE SHOWN ON SDD 13C18 SHEET "a".

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.

DO NOT DOWEL OR TIE THE TRUCK APRON TRANSVERSE JOINTS.

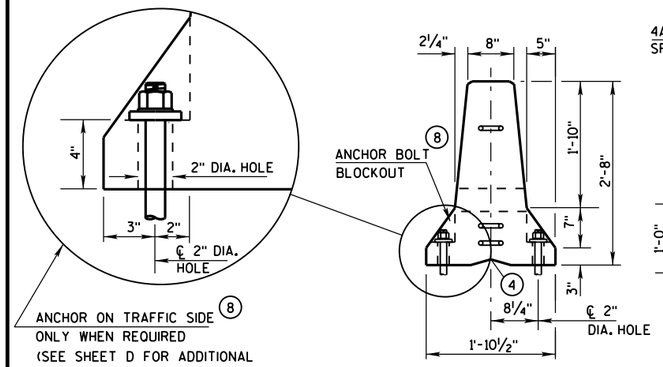


PINWHEEL JOINT LAYOUT FOR ROUNDABOUTS

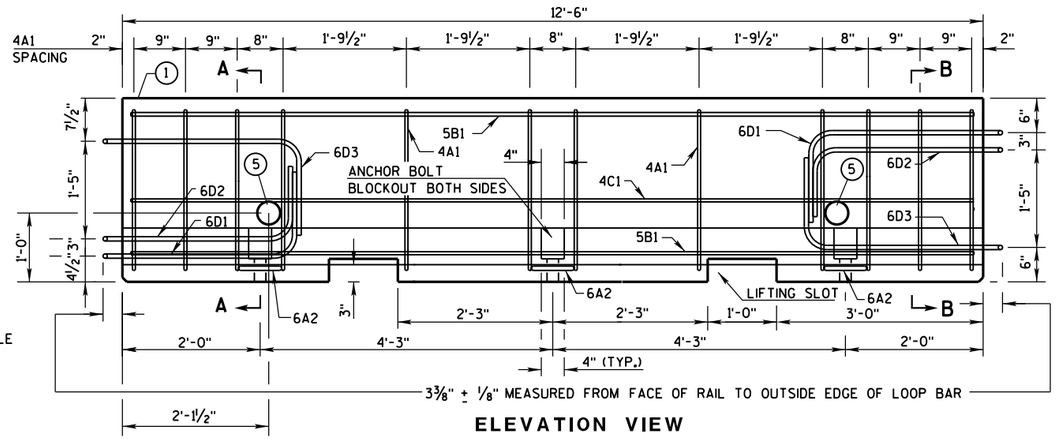
CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 5-3-2013 DATE — /S/ Deb Bischoff, PAVEMENT POLICY & DE ENGINEER FHWA

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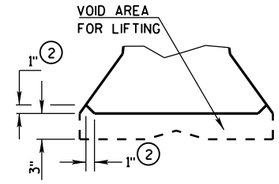
S.D.D. 13 C 18-2e



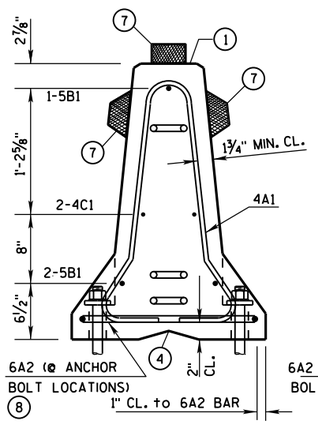
END VIEW



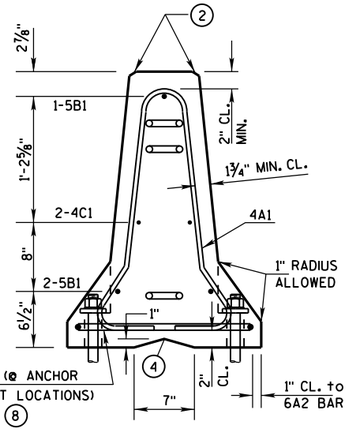
ELEVATION VIEW



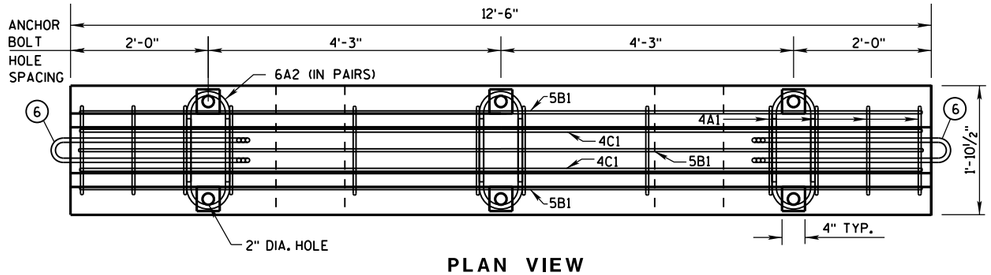
DETAIL "B"
LIFTING SLOT DETAIL



SECTION A-A
(STIRRUP PLACEMENT)

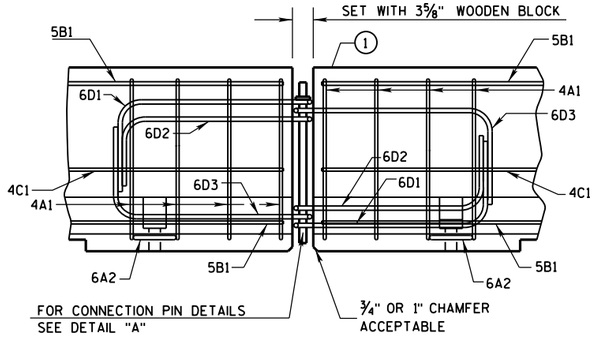


SECTION B-B
(STIRRUP PLACEMENT)

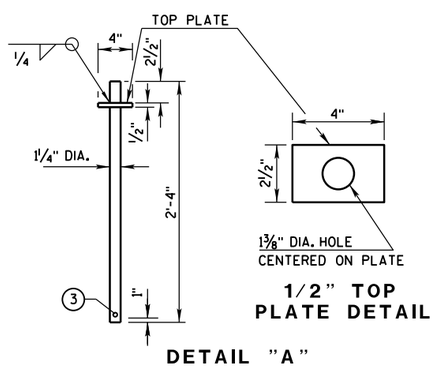


PLAN VIEW

DETAILS OF BARRIER SECTION

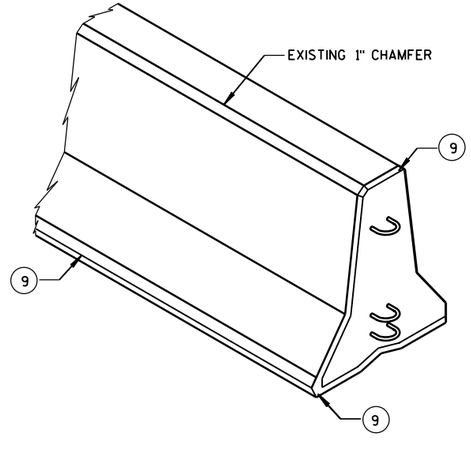


DETAILS OF BARRIER CONNECTION



1/2" TOP
PLATE DETAIL

DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-14(a) THRU 14B7-14(h).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 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 ¾" 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 3-½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" 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 EPOXY 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: WI CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) A ⅜" 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.

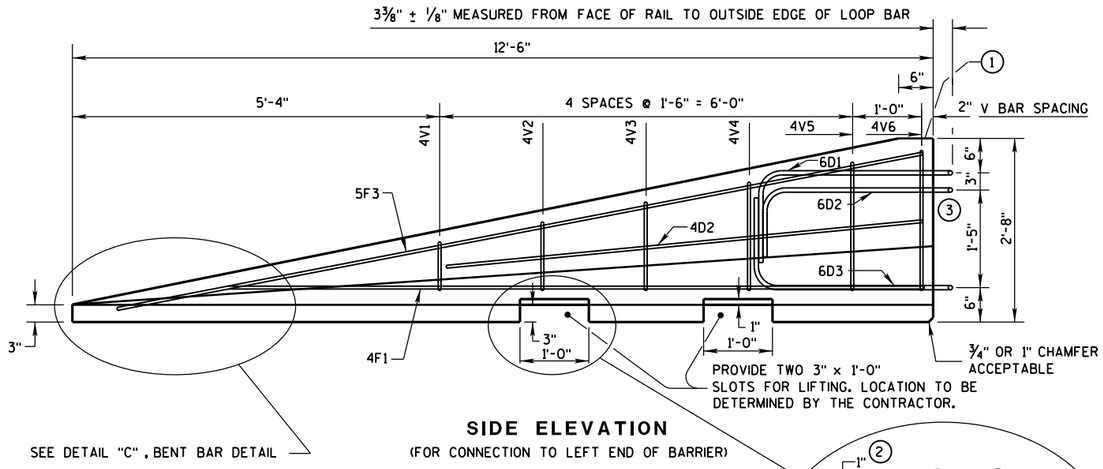
(8) SEE SHEET D FOR ANCHORING CRITERIA.

(9) 1" CHAMFER OPTIONAL.

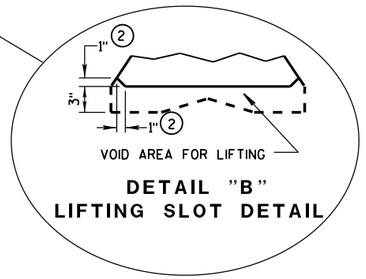
CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

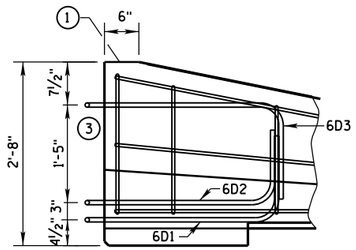
6
S.D.D. 14 B 7-14a



SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



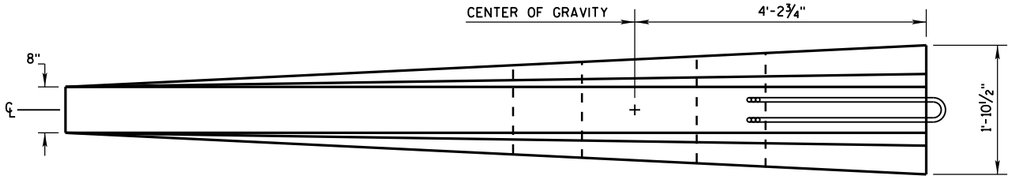
DETAIL "B"
LIFTING SLOT DETAIL



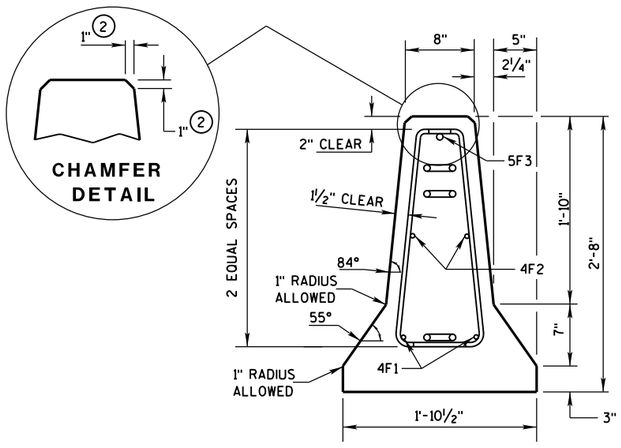
SIDE ELEVATION
LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)

GENERAL NOTES

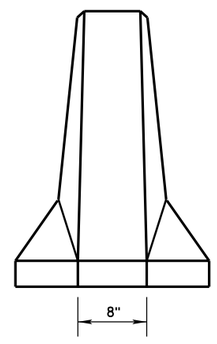
1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



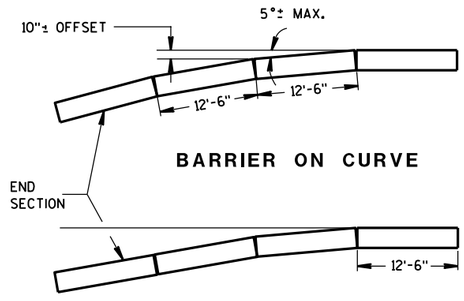
PLAN VIEW



END SECTION



FRONT ELEVATION



BARRIER ON CURVE

FLARE AT BARRIER END

POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

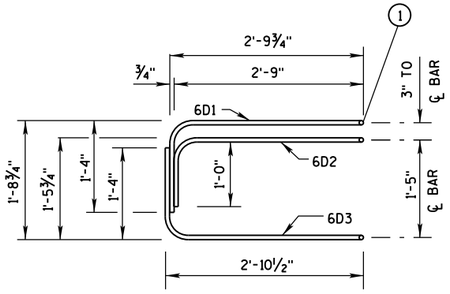
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 14 B 7-14b

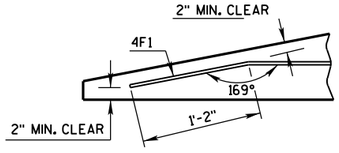
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

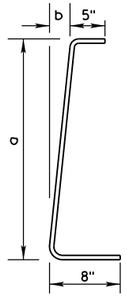
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY



DETAIL "C"
BENT BAR DETAIL



BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

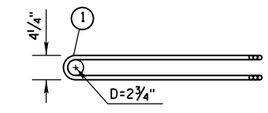
GENERAL NOTES

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

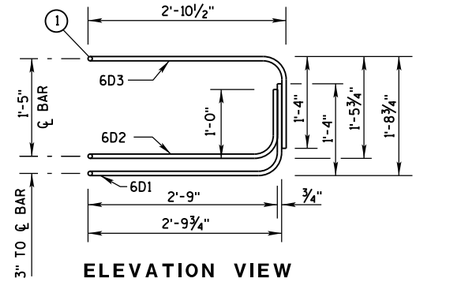
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

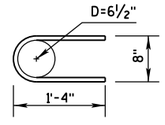
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



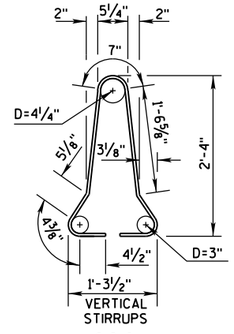
PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



ELEVATION VIEW



6A2



4A1

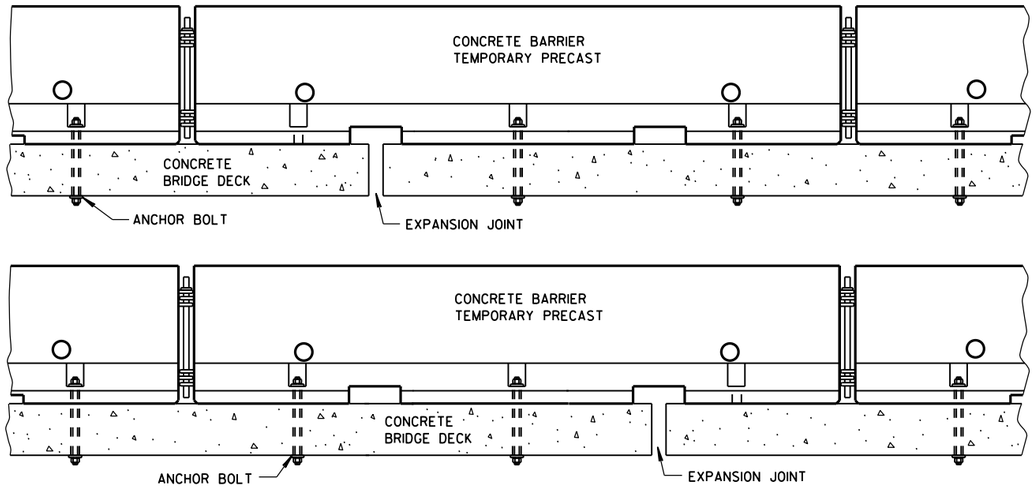
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

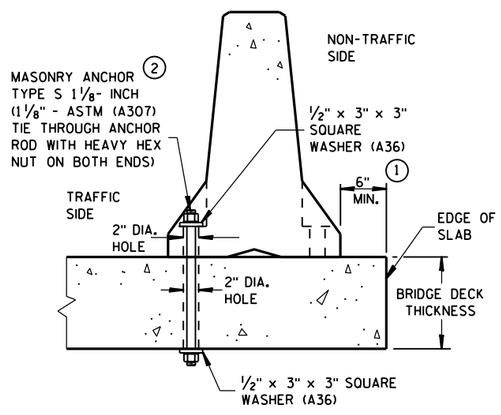
6

S.D.D. 14 B 7-14c



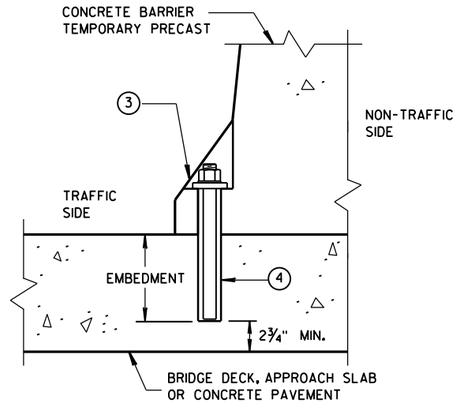
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(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 NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



REMOVABLE ADHESIVE BONDED ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT ②

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

GENERAL NOTES

① 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.

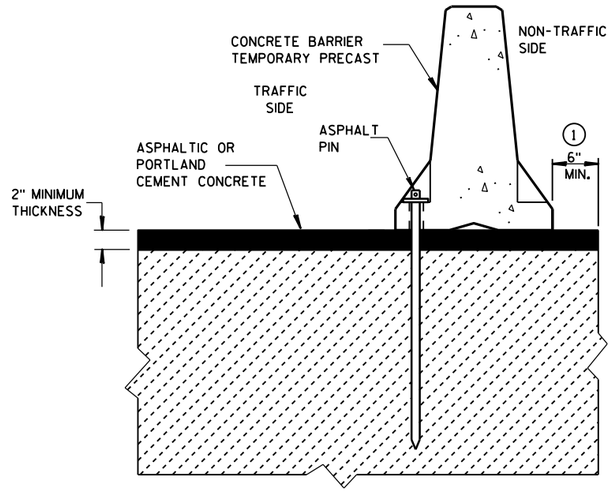
② ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED (EPOXY) 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 1⅛-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 ALLANCHOR 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 COMMERICAL GROUT OR EPOXY MATERIAL IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.

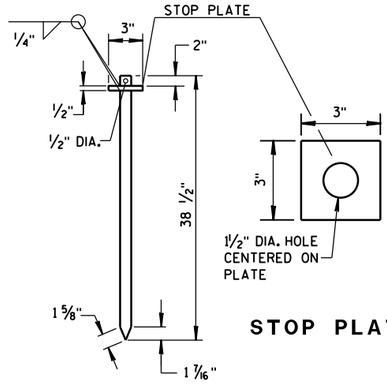
③ 1⅛" DIAMENTER A307 THREADED ROD, ½" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL, ASTM A563A HEAVY HEX NUT.

④ ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.



STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

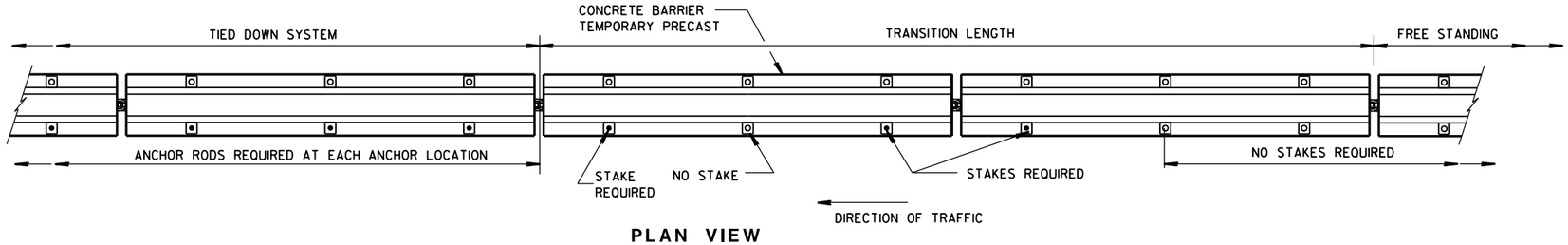
(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



STOP PLATE

ASPHALT PIN

(ASTM A36 STEEL)



PLAN VIEW

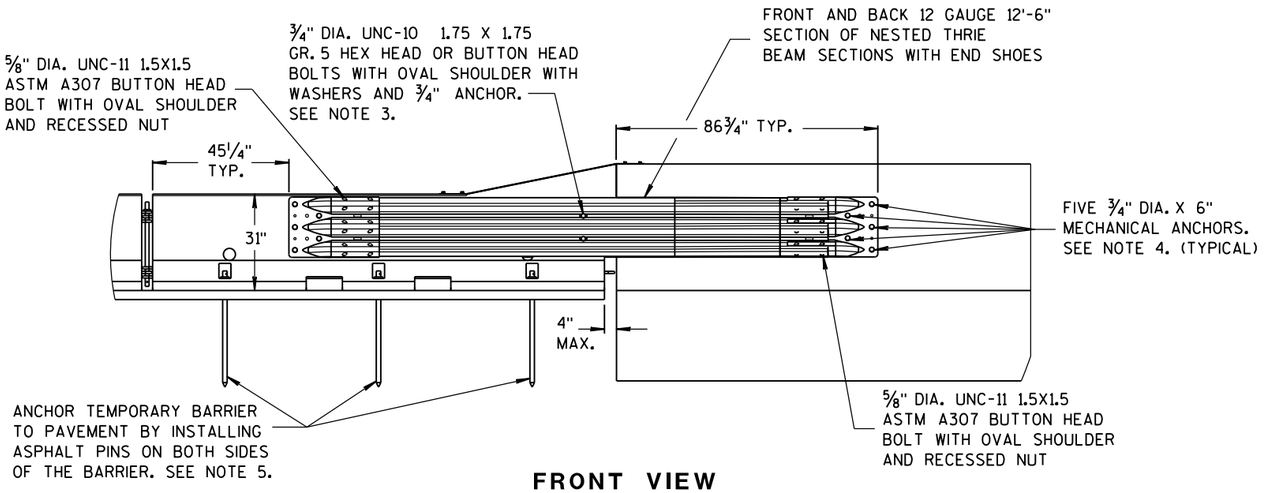
FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

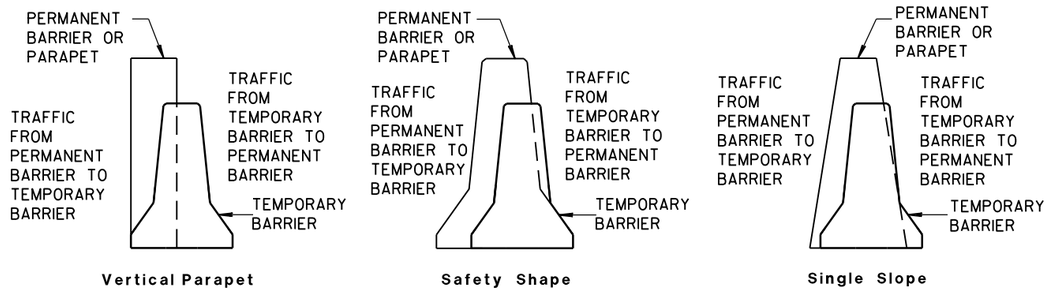
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-14d



FRONT VIEW

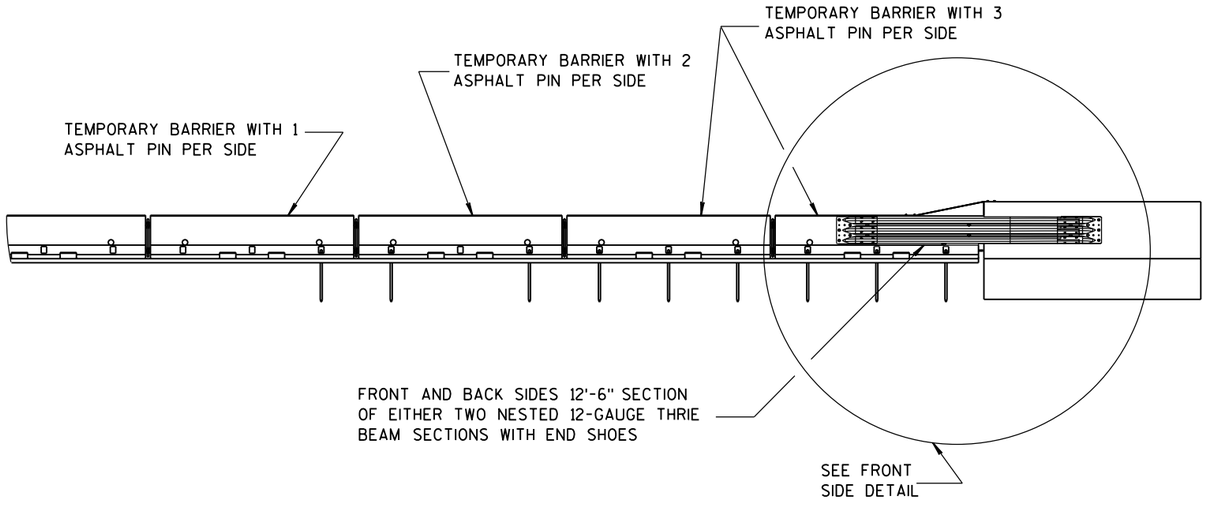


TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

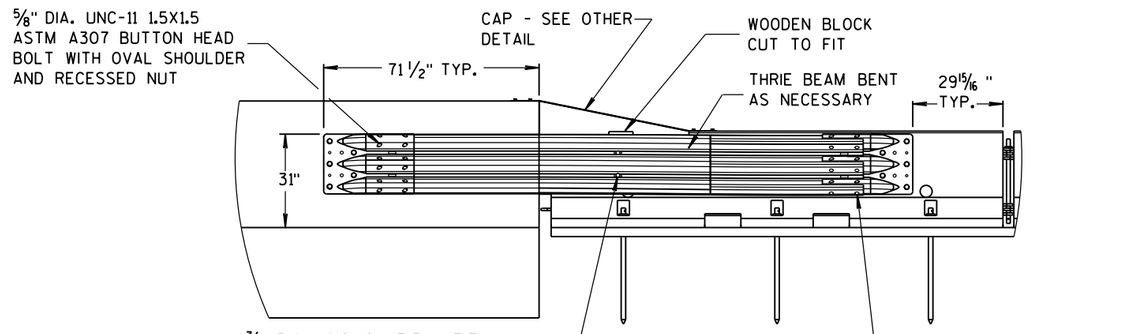
NOTES

NESTED THRIE BEAM IS REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS.

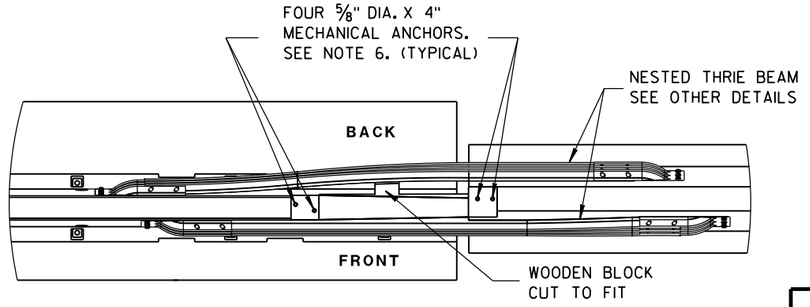
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR EPOXY 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 EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.



FRONT VIEW



BACK VIEW



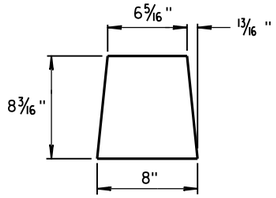
PLAN VIEW

BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

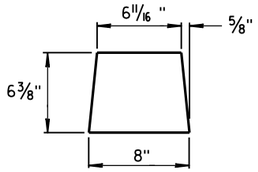
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

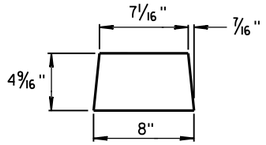
6
S.D.D. 14 B 7-14e



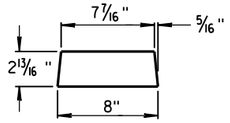
GUSSET 1



GUSSET 2

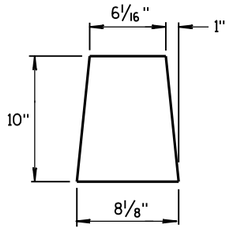


GUSSET 3

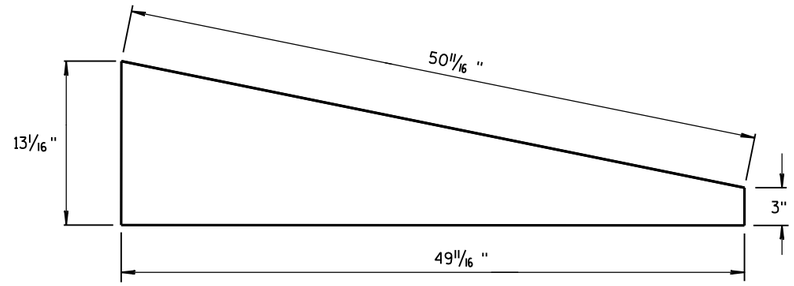


GUSSET 4

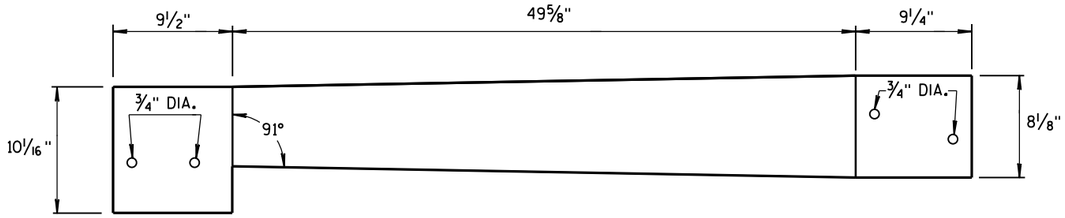
GUSSETS

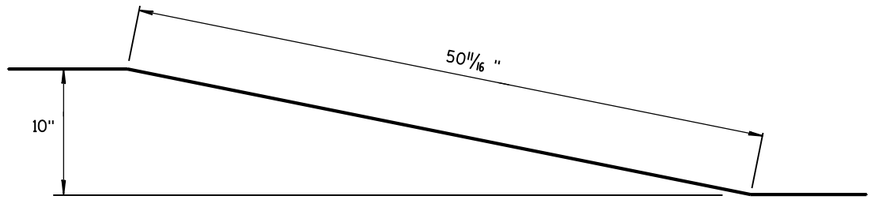


END PLATE



SIDE PLATE

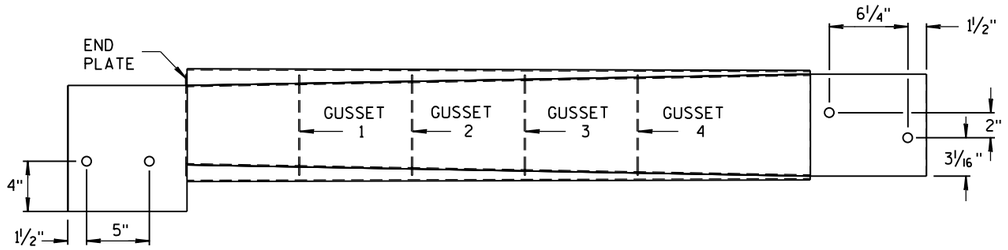


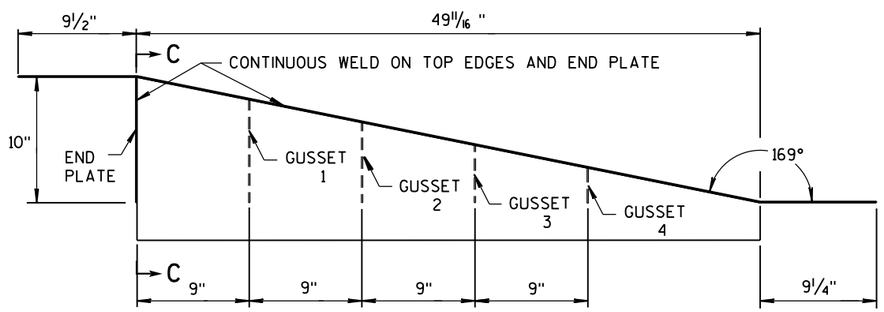


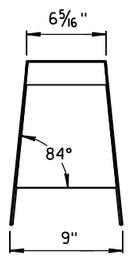
TOP PLATE

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.

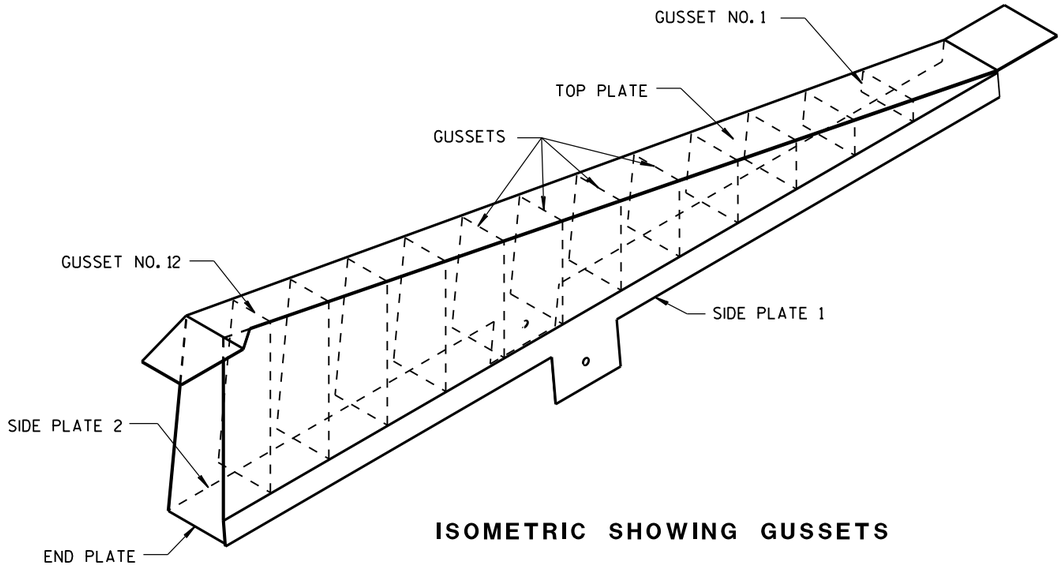
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

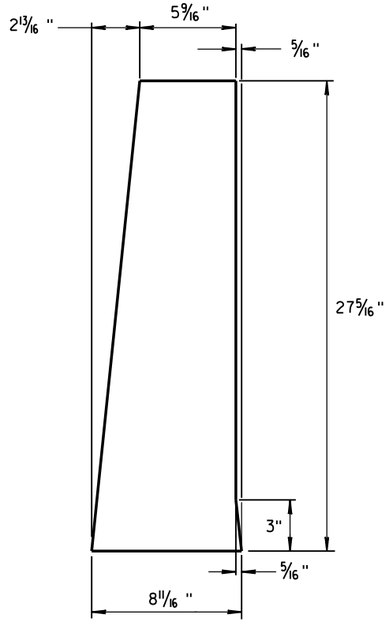
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 7-14f

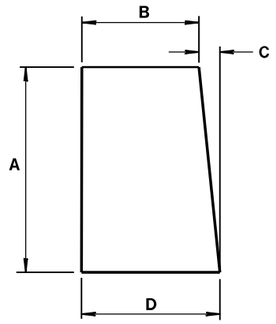


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



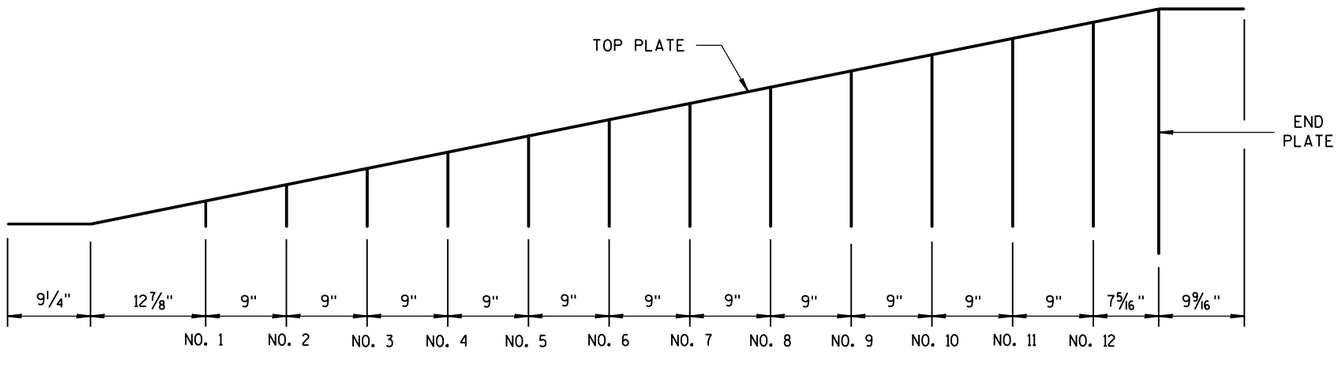
GUSSETS 1 - 12

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 11/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	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 15/16 "	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.



GUSSET LOCATION

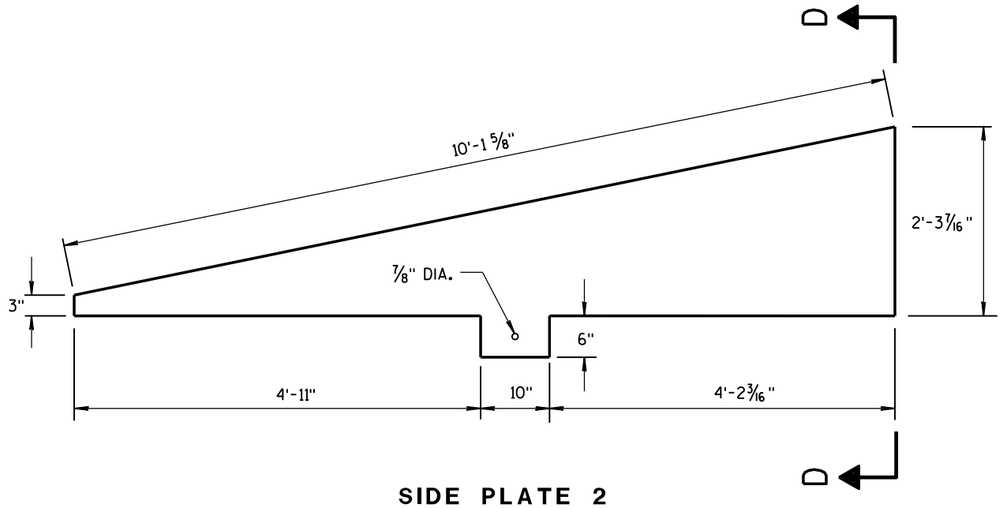
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

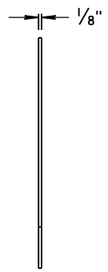
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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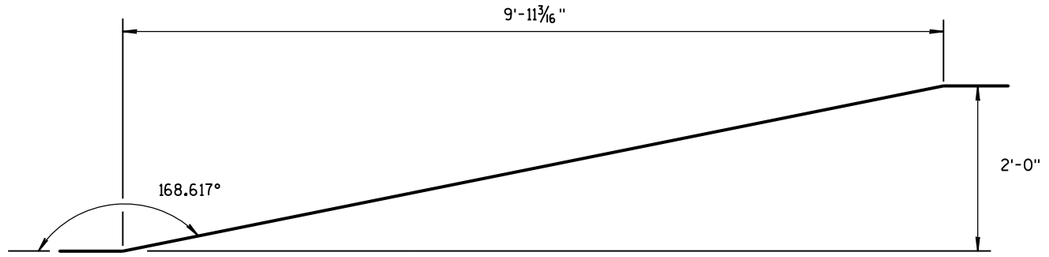
S.D.D. 14 B 7-14g



SIDE PLATE 2

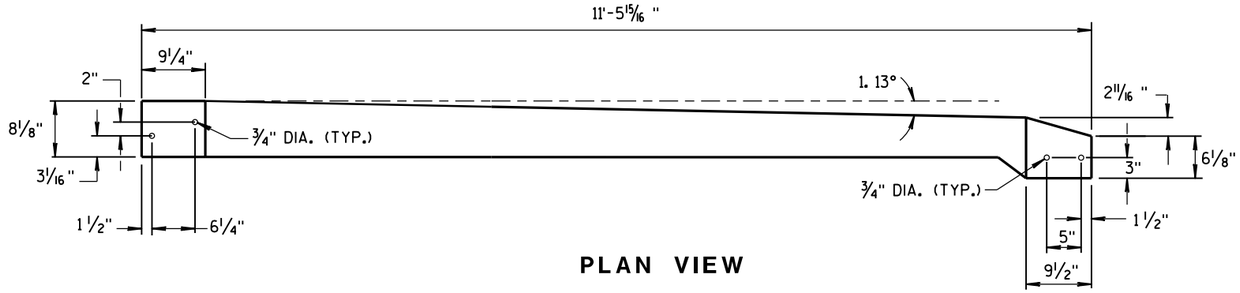


END VIEW



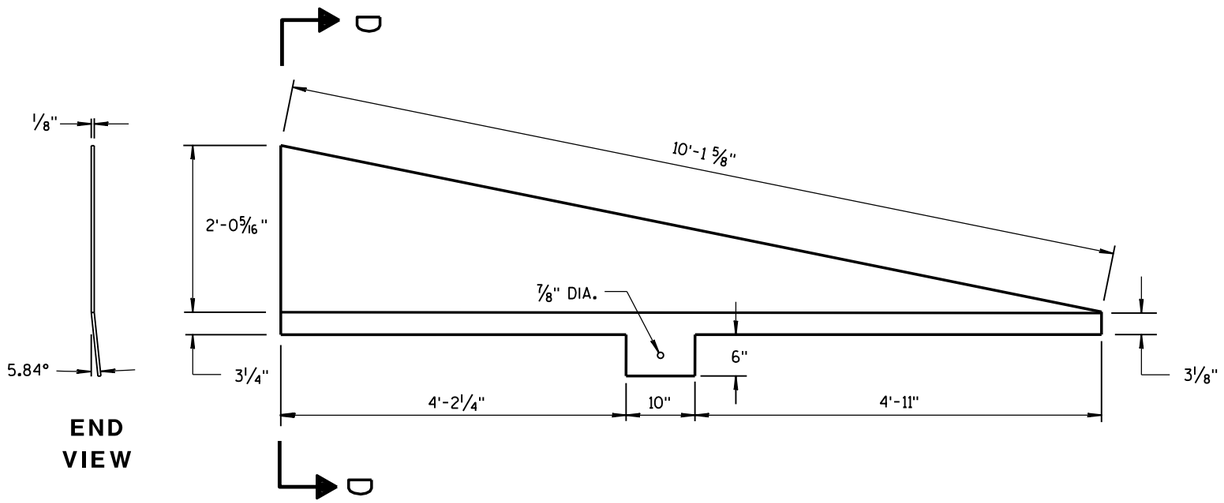
SIDE VIEW

TOP PLATE



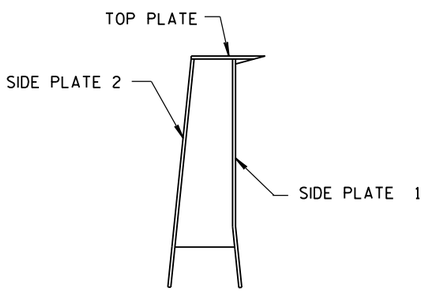
PLAN VIEW

TOP PLATE



END VIEW

SIDE PLATE 1



SECTION D-D

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

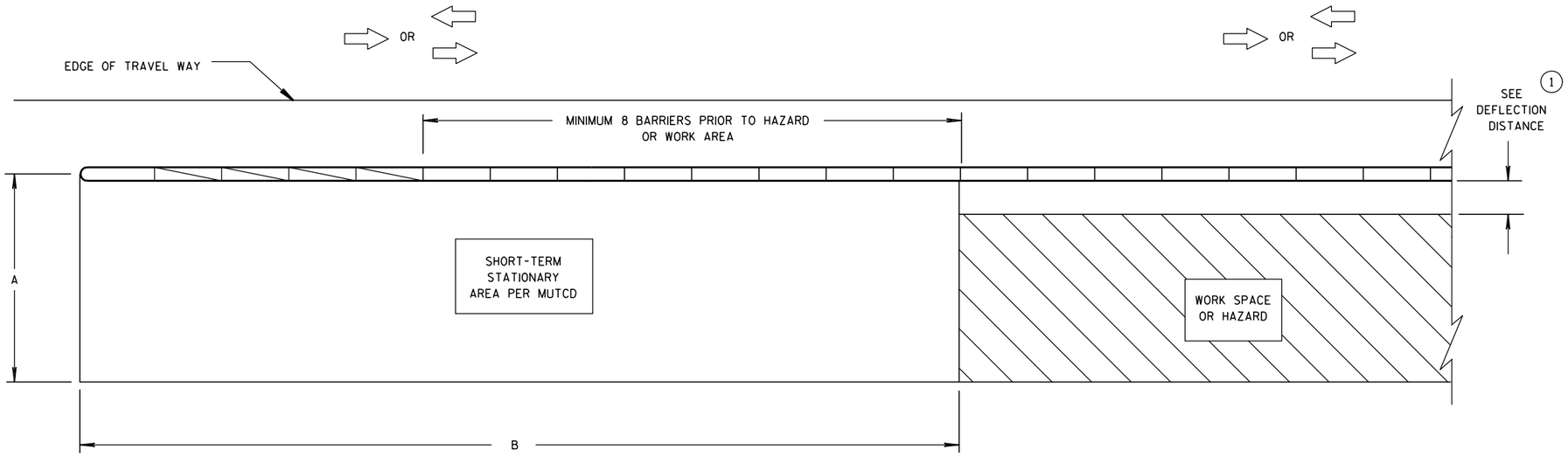
APPROVED
June 2014 — DATE
/S/ Jerry H. Zoaa — ROADWAY STANDARD DEVELOPMENT ENGINEER
FHWA

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S.D.D. 14 B 7-14h

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S.D.D. 14 B 7-14h



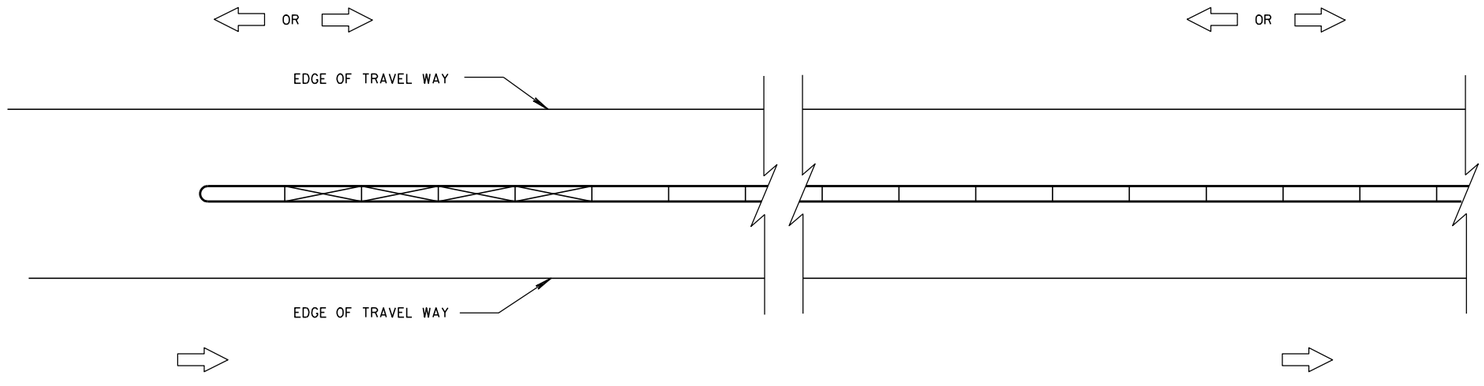
CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

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



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON BOTH SIDES OF 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

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.

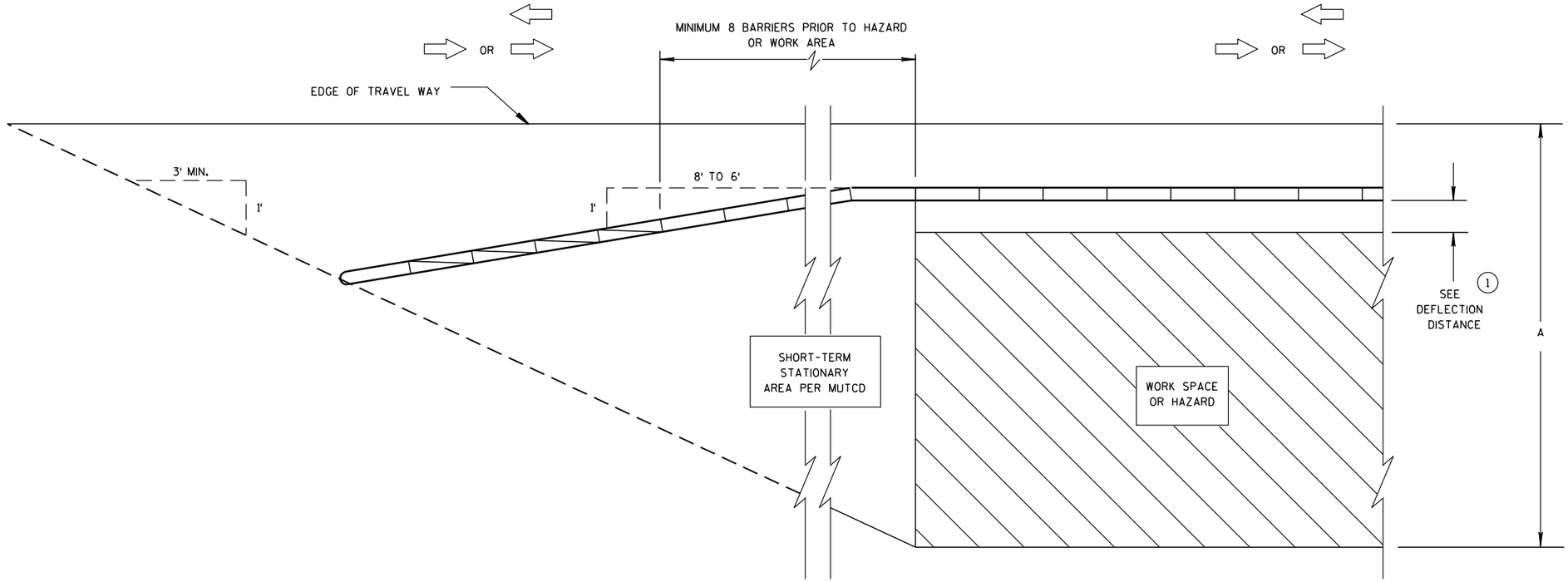
(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

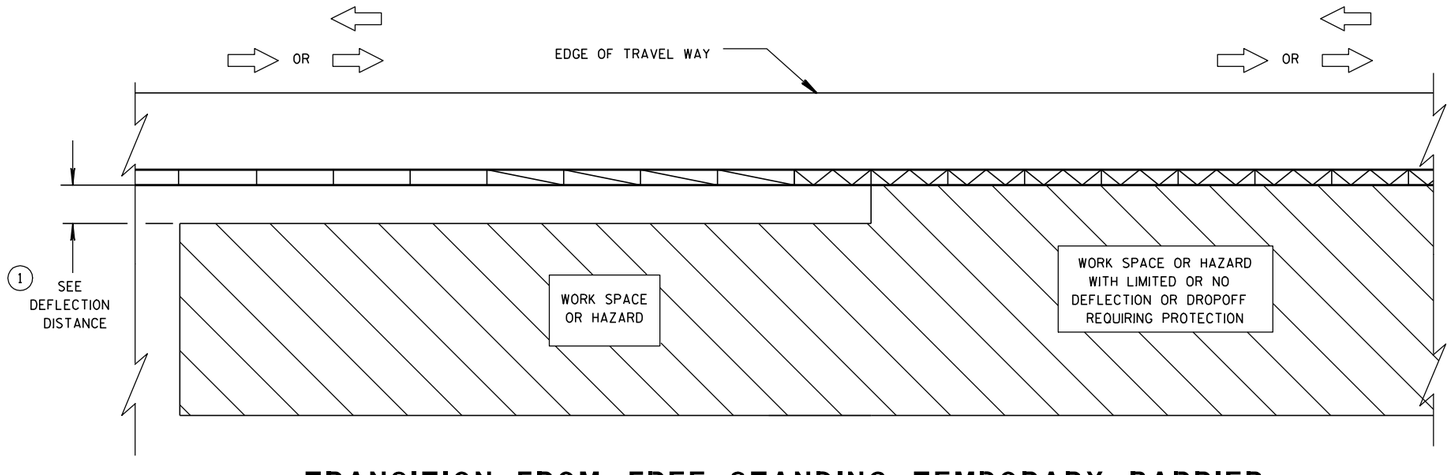
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 14 B 8-1a



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

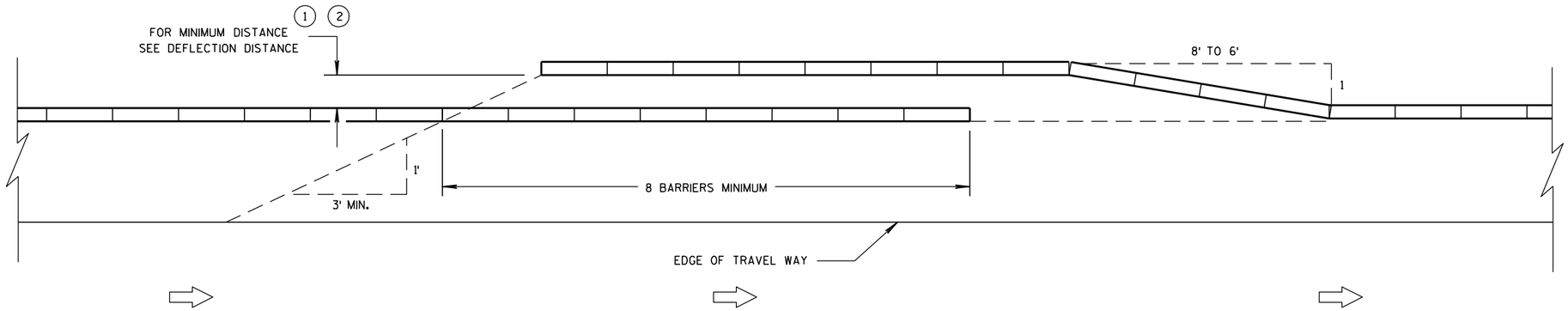
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

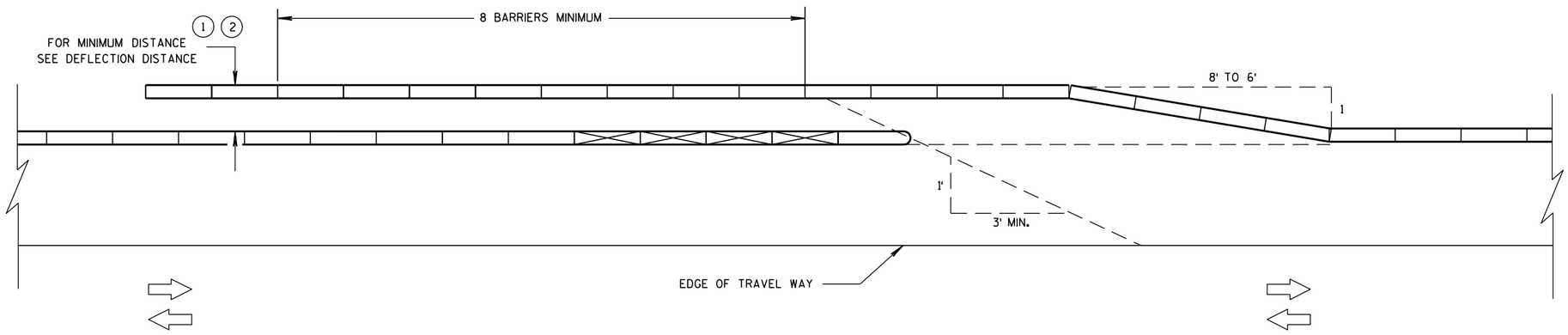
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

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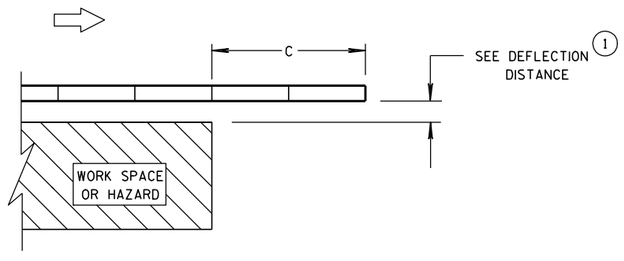
S.D.D. 14 B 8-1b



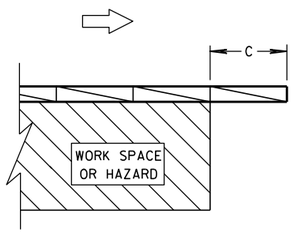
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

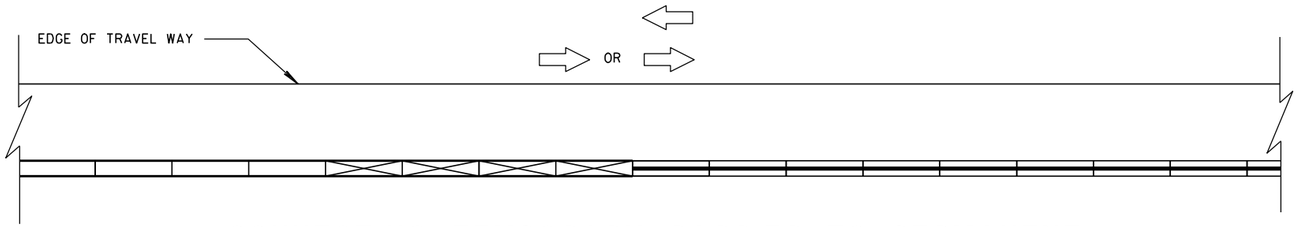
LEGEND

- 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

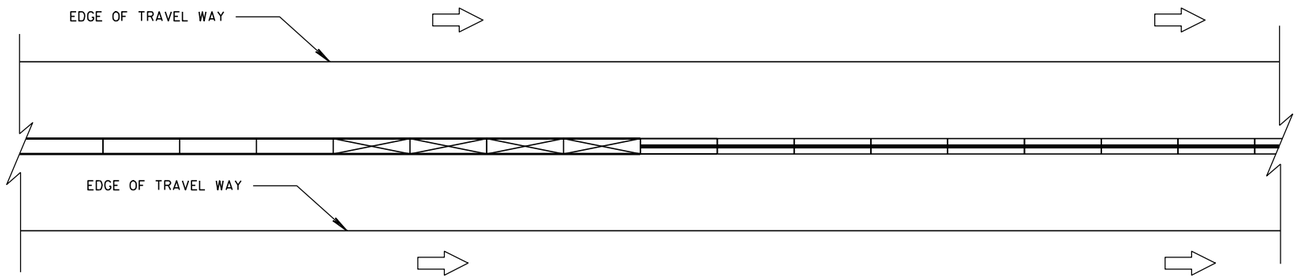
CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 8-1c



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

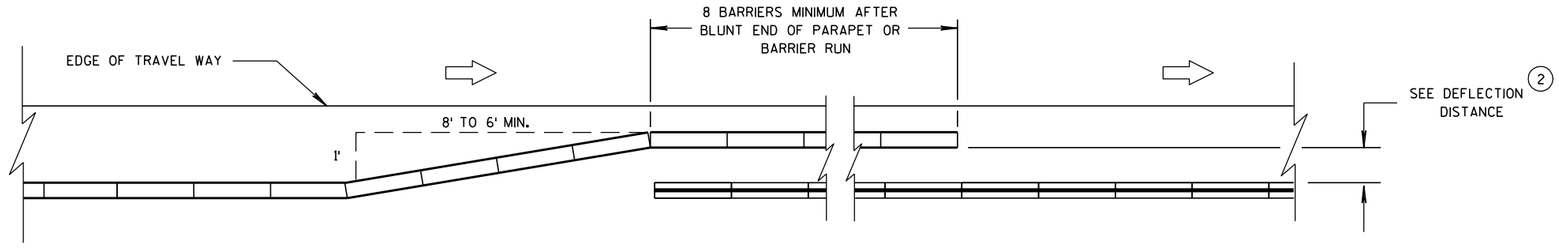
SEE FREE STANDING TRANSITION
TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION
TO TIED-DOWN SYSTEM DETAILS

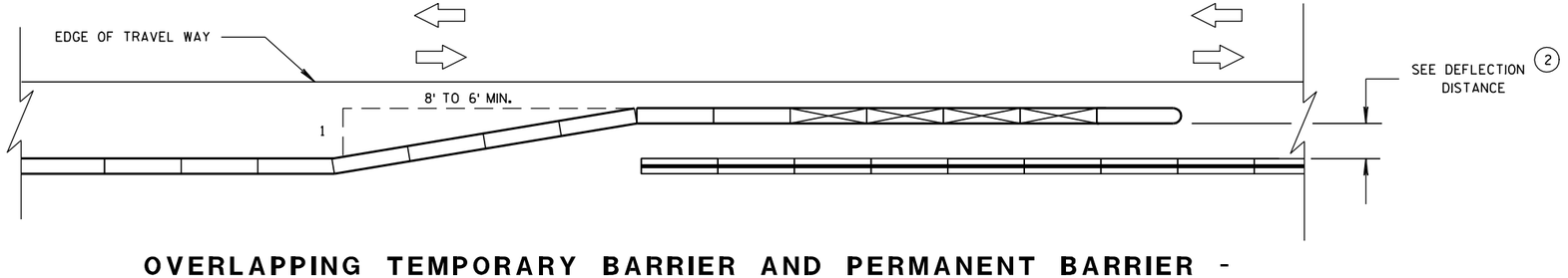
3 PINS PLACED ON
TRAFFIC SIDE OF BARRIER

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 TRANSPO...

6
S.D.D. 14 B 8-1d

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

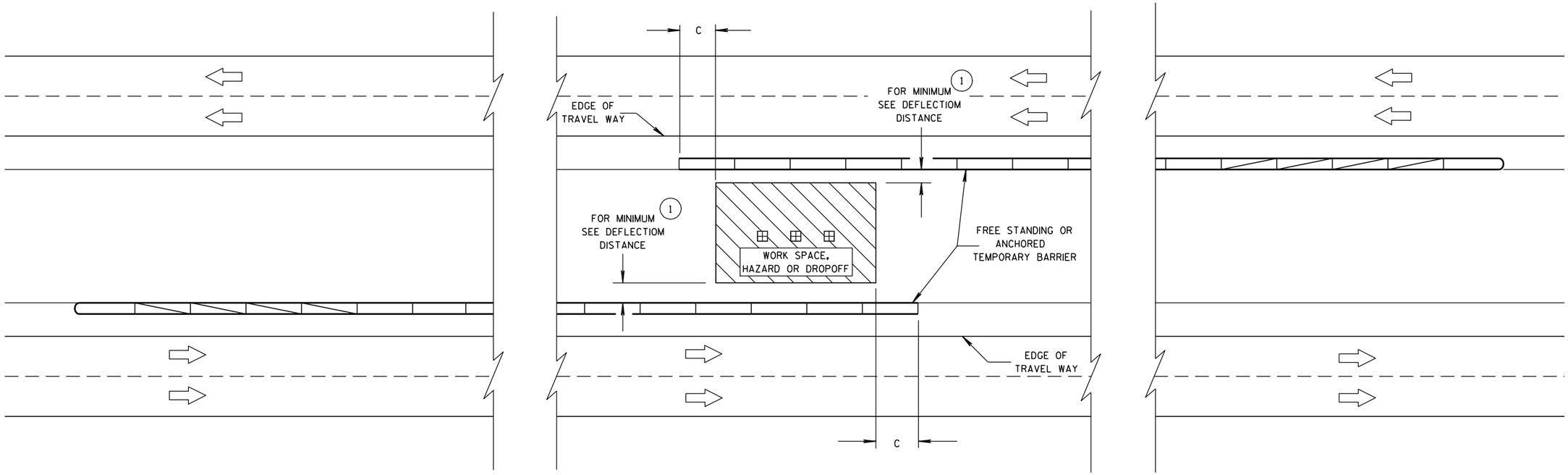
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE (2)

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



CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

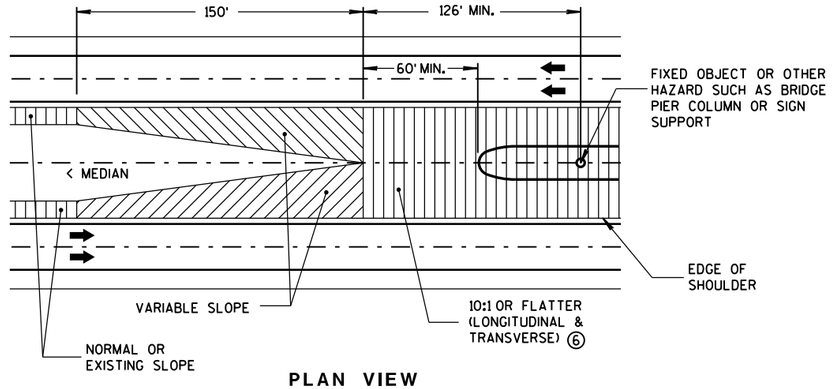
APPROVED

8/31/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINNER

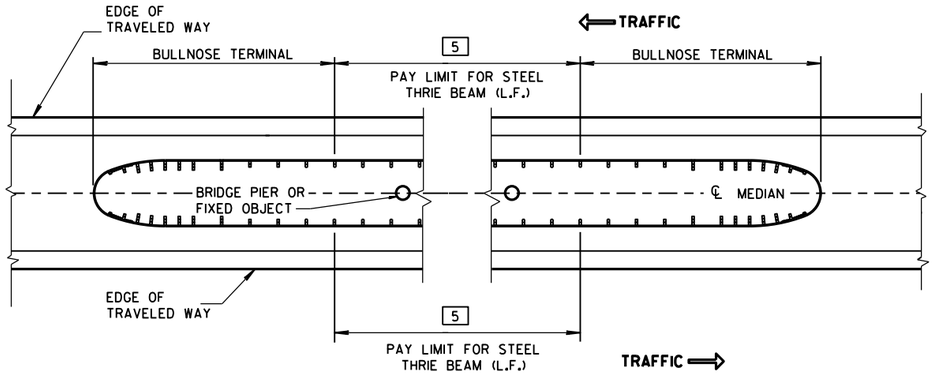
FHWA

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S.D.D. 14 B 8-1e

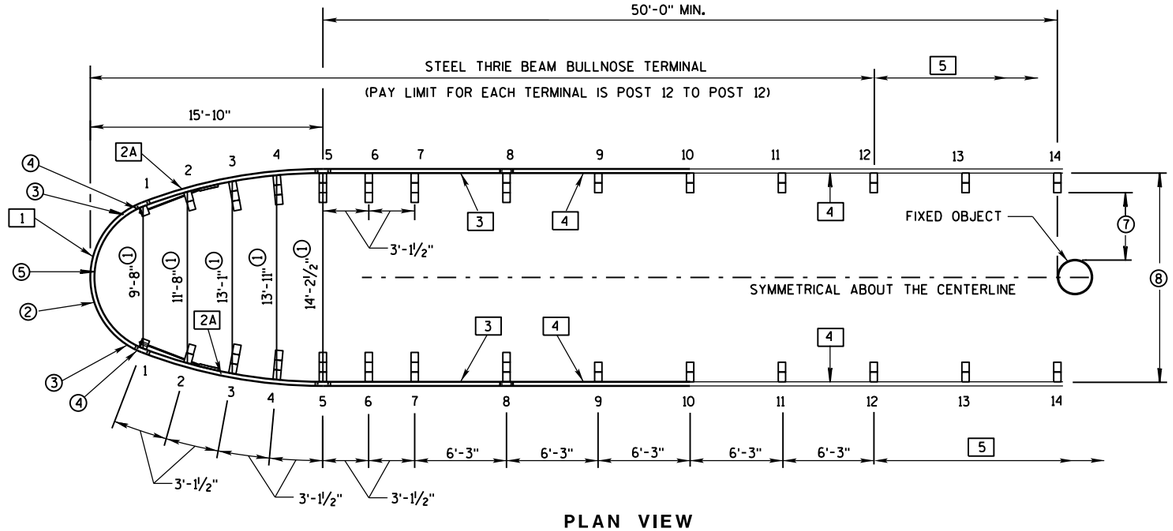


PLAN VIEW

GRADING AT BULLNOSE
(ALL INSTALLATIONS)

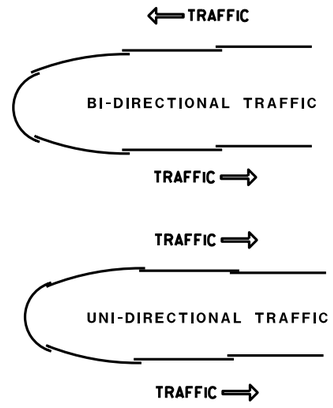


MEDIAN HAZARD PROTECTION PAY LIMITS



PLAN VIEW

TYPICAL BULLNOSE LAYOUT



LAPPING DETAIL
(ALL INSTALLATIONS)

GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.

PUNCHING, DRILLING, CUTTING OR WELDING IS NOT PERMITTED ON ANY GALVANIZED THRIE BEAM ACCESSORY OR TERMINAL ACCESSORY.

OTHER ANCHOR CABLE ASSEMBLIES HAVING 40,000 LBS. MIN. BREAKING STRENGTH MAY BE USED.

FOR POSTS 2 THROUGH 14, IF POST CANNOT BE INSTALLED AT SPECIFIED LOCATION 1 EXTRA STANDARD WOOD BLOCK MAY BE ADDED.

THE USE OF STEEL POSTS ON THE BULLNOSE IS NOT ALLOWED.

BOLTS AND ALL NECESSARY HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

ALL THRIE BEAM SHALL BE 12-GAUGE.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½" AND 12" DIAMETER AROUND POST. SEE SDD 14B15 OR SDD 14B42 FOR MORE INFORMATION.

[1] SLOTTED THRIE BEAM RAIL NO. 1. (POST 1 TO POST 1)

[2A] SLOTTED THRIE BEAM RAIL NO. 2A. (POST 1 TO POST 5)

[3] SLOTTED THRIE BEAM RAIL NO. 3. (POST 5 TO POST 8)

[4] UNBENT STANDARD THRIE-BEAM RAIL NO.4. (POST 8 TO POST 10 & POST 10 TO POST 12)

[5] BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.

① DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST OR BLOCK.

② U-BOLT CABLE CLIPS (3 PER CABLE) SPACED OUT ON NOSE, TO HOLD CABLE TO BACKSIDE OF THE RAIL.

③ NOSE CABLE W/SWAGGED END BUTTONS.

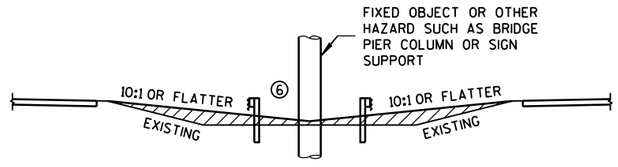
④ NOSE CABLE ANCHOR PLATE (BACKSIDE OF SPLICE).

⑤ THE SLACK IN THE NOSE CABLES SHALL BE EVENLY DISTRIBUTED BETWEEN THE CABLE CLIP FASTENERS AND POST NO. 1 ON EITHER SIDE OF THE NOSE.

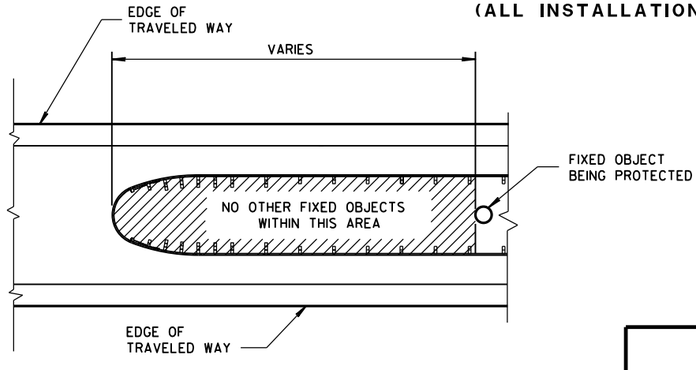
⑥ PROVIDE SUITABLE DRAINAGE WHEN MEDIAN GRADING IMPEDES NORMAL FLOW.

⑦ 2'-6" MINIMUM LATERAL DISTANCE BETWEEN BACK OF POST AND FACE OF FIXED OBJECT.

⑧ MAXIMUM WIDTH OF SYSTEM IS 14'-2½" MEASURED FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.



MEDIAN GRADING SECTION
(ALL INSTALLATIONS)

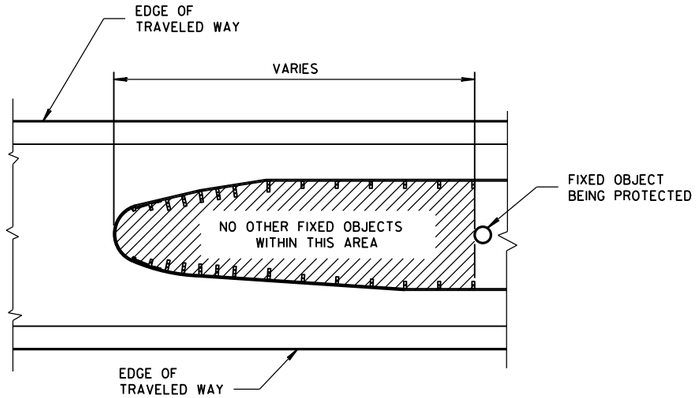


HAZARD FREE AREA INSIDE BULLNOSE

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6
S.D.D. 14 B 26-3a



HAZARD FREE
AREA INSIDE BULLNOSE

GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.

FOR POSTS 2 THROUGH 14, IF POST CANNOT BE INSTALLED AT SPECIFIED LOCATION 1 EXTRA STANDARD WOOD BLOCK MAY BE ADDED.

[1] SLOTTED THRIE BEAM RAIL NO. 1. (POST 1 TO POST 1)

[2A] SLOTTED THRIE BEAM RAIL NO. 2A, (POST 1 TO POST 5)

[2B] SLOTTED THRIE BEAM RAIL NO. 2B, (POST 1 TO POST 5)

[3] SLOTTED THRIE BEAM RAIL NO. 3. (POST 5 TO POST 8)

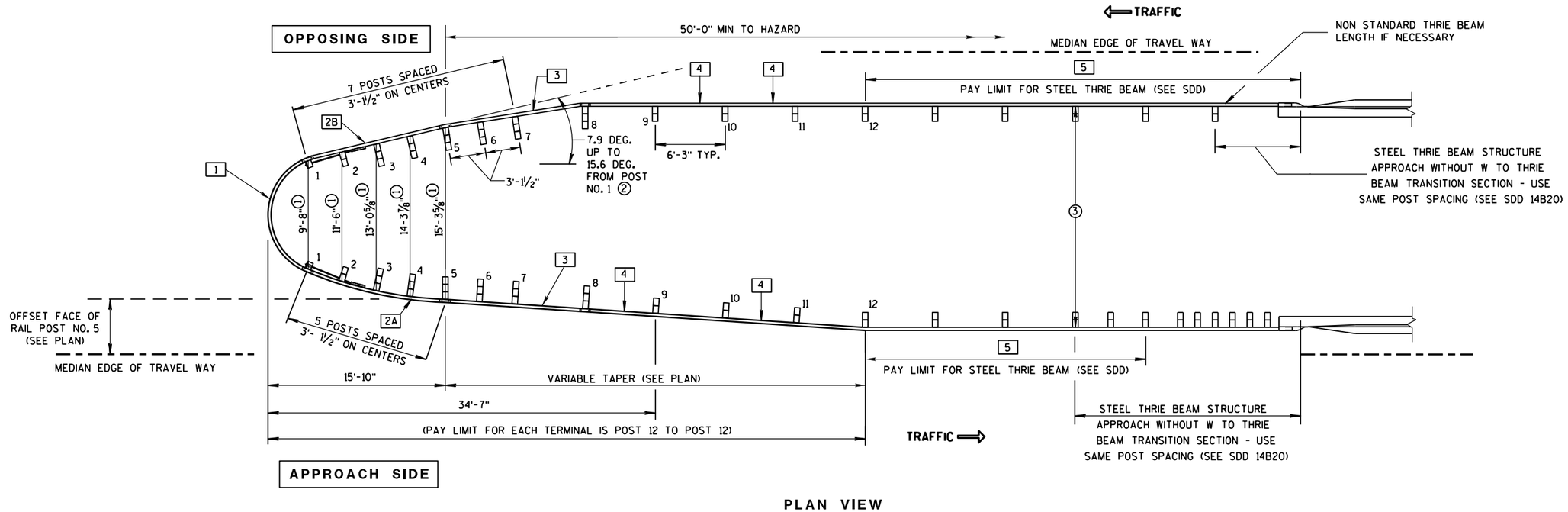
[4] UNBENT STANDARD THRIE-BEAM RAIL NO. 4, (POST 8 TO POST 10 & POST 10 TO POST 12)

[5] BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.

① DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST.

② TAPER BEGINNING AT POST NO. 1 MUST CONTINUE TO POST NO. 5. PAST POST NO. 5 TAPER MAY END OR BE EXTENDED UP TO 15.6 DEGREES TO FIT VARIABLE MEDIAN WIDTHS. (SEE PLAN)

③ FOR MEDIANS WIDER THAN 14'-2½" MEASURED FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.



PLAN VIEW

WIDENED BULLNOSE DESIGN

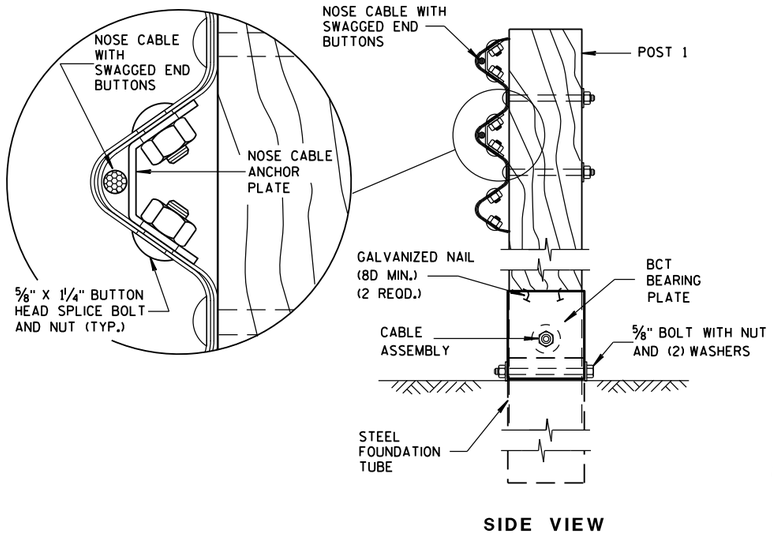
(INSTALLATION AT TWIN BRIDGES WITH BI-DIRECTIONAL TRAFFIC SHOWN)

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

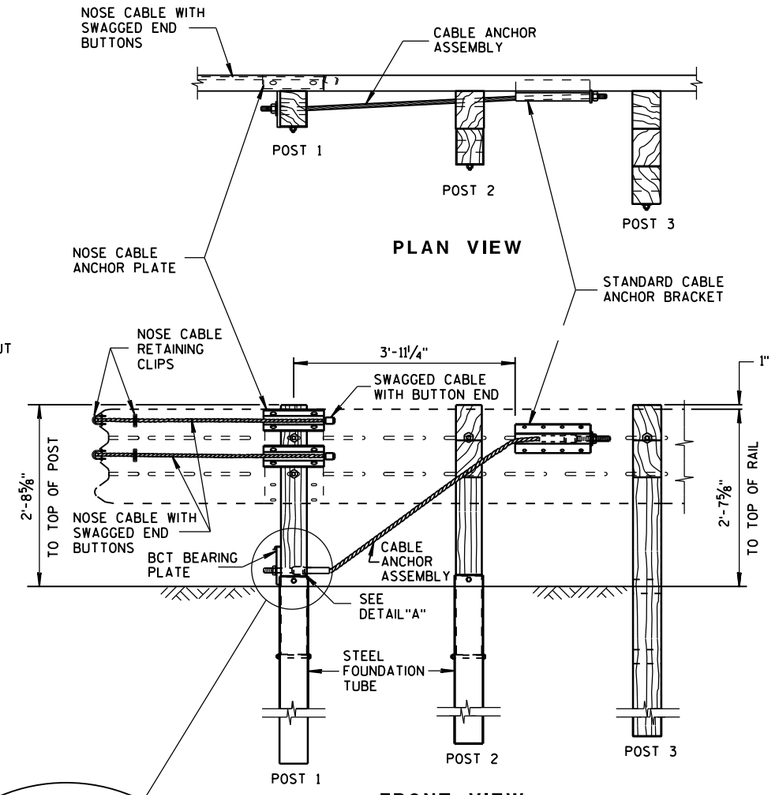
6

S.D.D. 14 B 26-3b



SIDE VIEW

NOSE CABLE ASSEMBLY AT POST NO. 1



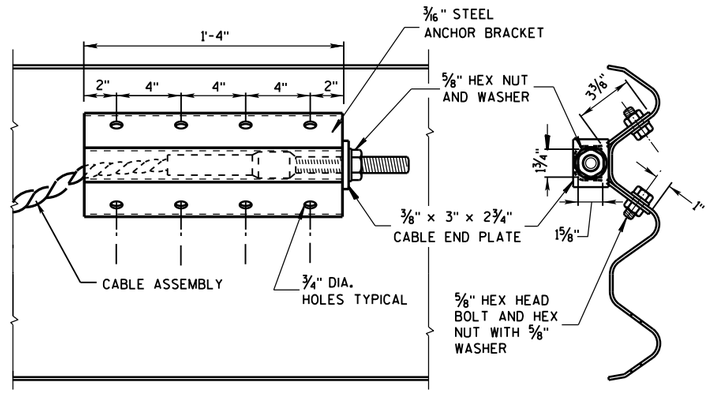
PLAN VIEW

FRONT VIEW

NOSE CABLE ANCHOR AND STANDARD BRACKET ASSEMBLY

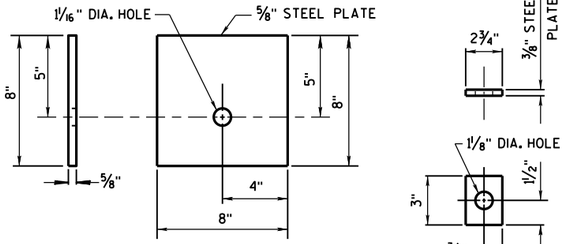
GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.



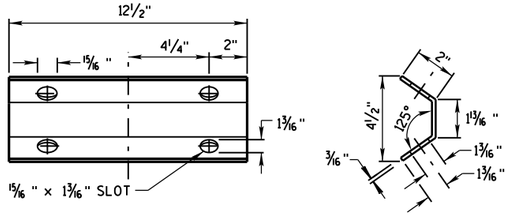
FRONT VIEW END VIEW

DETAILS OF CABLE ANCHOR BRACKET



BCT BEARING PLATE

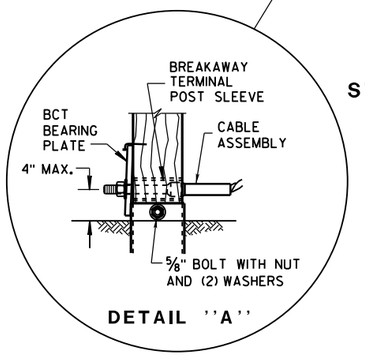
CABLE END PLATE



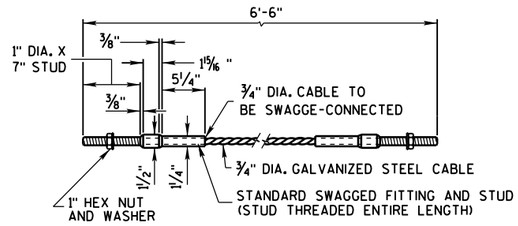
ELEVATION VIEW END VIEW

NOSE CABLE ANCHOR PLATE

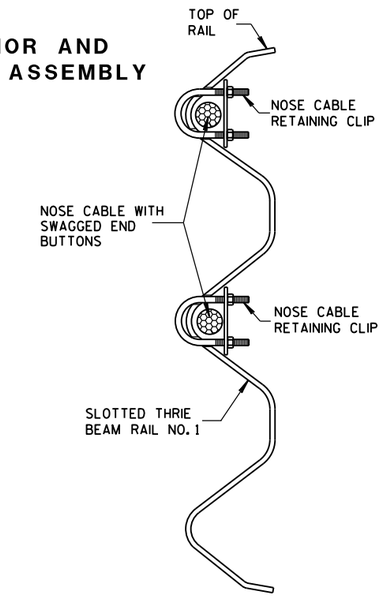
NOTE: 12 1/2" x 5 13/16" x 3/16" STEEL PLATE (A306)



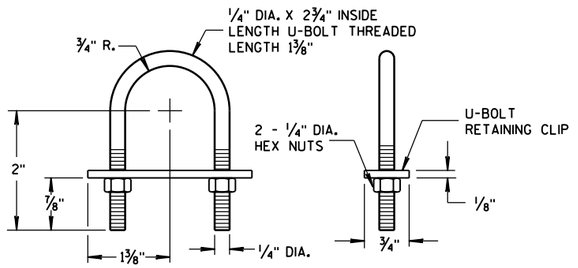
DETAIL ''A''



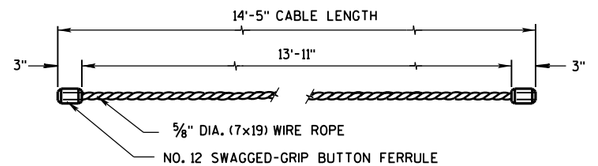
DETAILS OF CABLE ANCHOR ASSEMBLY



PLACEMENT OF NOSE CABLE RETAINING CLIP



NOSE CABLE RETAINING CLIP



NOSE CABLE WITH SWAGGED END BUTTONS

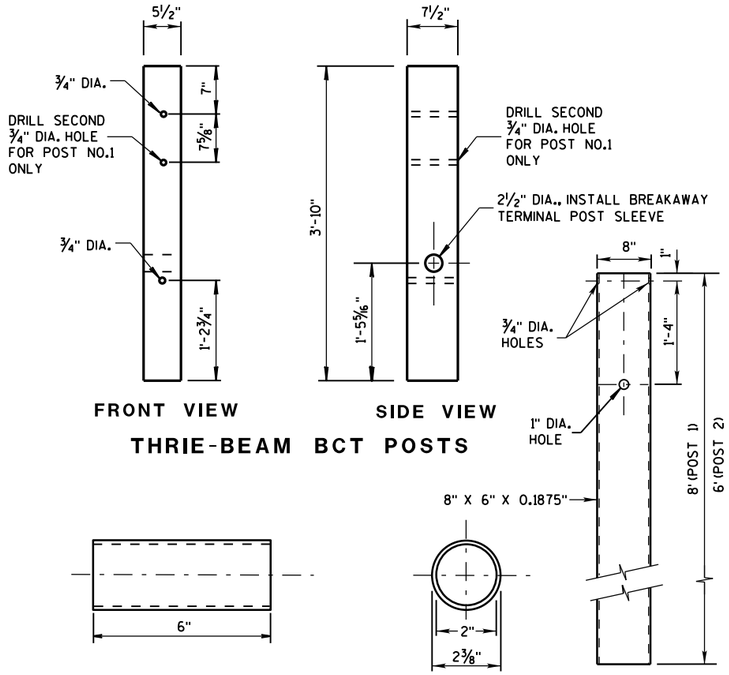
TO PULL OFF SWAGGED GRIP BUTTON FERRULE FROM WIRE ROPE REQUIRES A FORCE EQUAL TO 98% OF THE WIRE ROPE'S BREAKING STRENGHT.

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

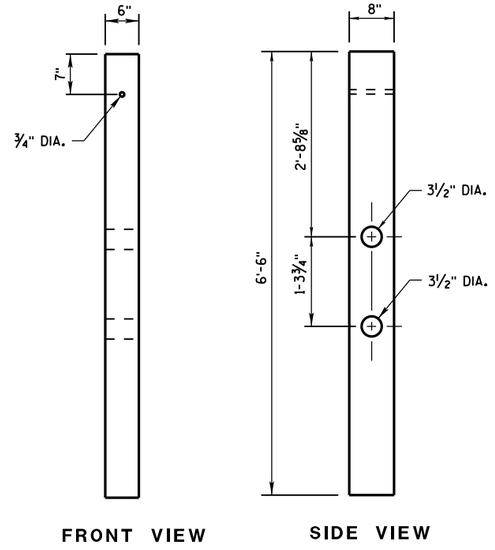
S.D.D. 14 B 26-3c



THRIE-BEAM BCT POSTS

BREAKAWAY TERMINAL POST SLEEVE

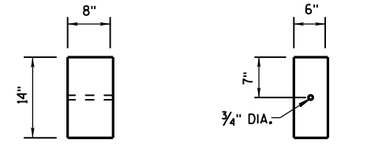
STEEL FOUNDATION TUBE



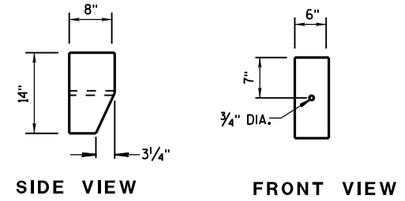
THRIE-BEAM CRT WOOD POSTS

GENERAL NOTES

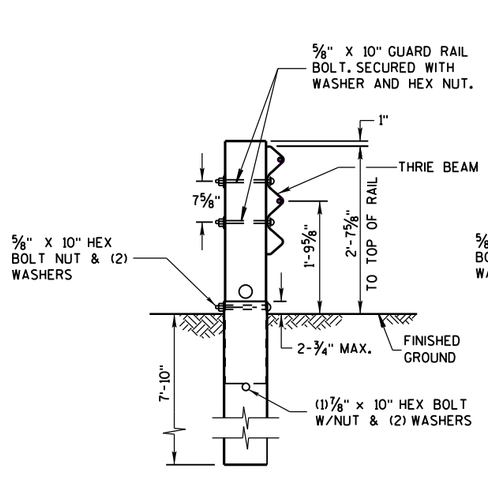
SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.



STANDARD WOOD BLOCK

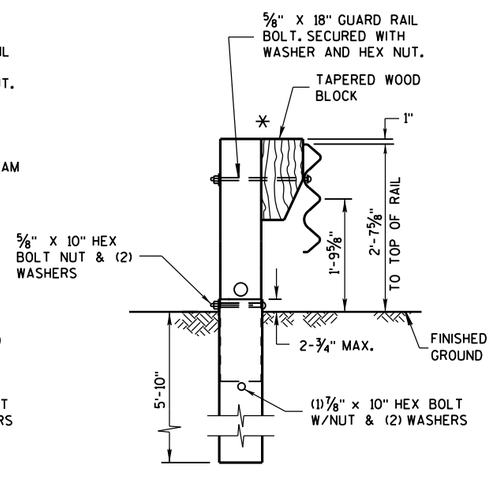


TAPERED WOOD BLOCK



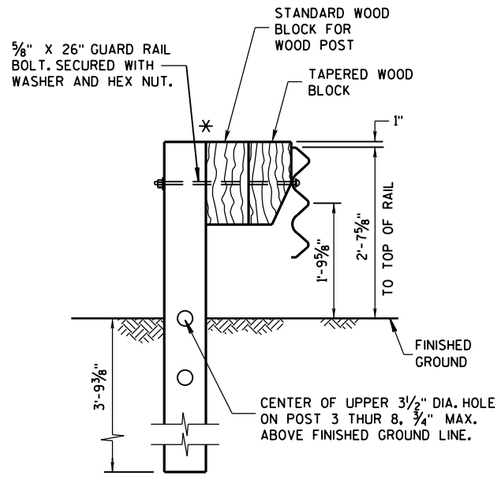
THRIE-BEAM BCT POST
(WITH 8'-0" FOUNDATION TUBE)

POST NO. 1



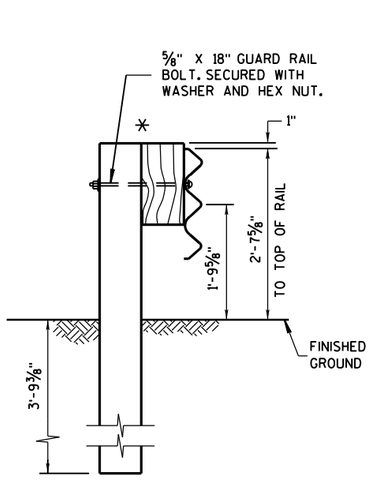
THRIE-BEAM BCT POST
(WITH 6'-0" FOUNDATION TUBE AND 1'-2" TAPERED BLOCK)

POST NO. 2



THRIE-BEAM CRT POST
(6'-6" LONG POST WITH 1'-2" BLOCK AND 1'-2" TAPERED BLOCK)

POST NO. 3,4,5,6,7, & 8



THRIE-BEAM POST
(6'-6" LONG POST WITH 1'-2" BLOCK)

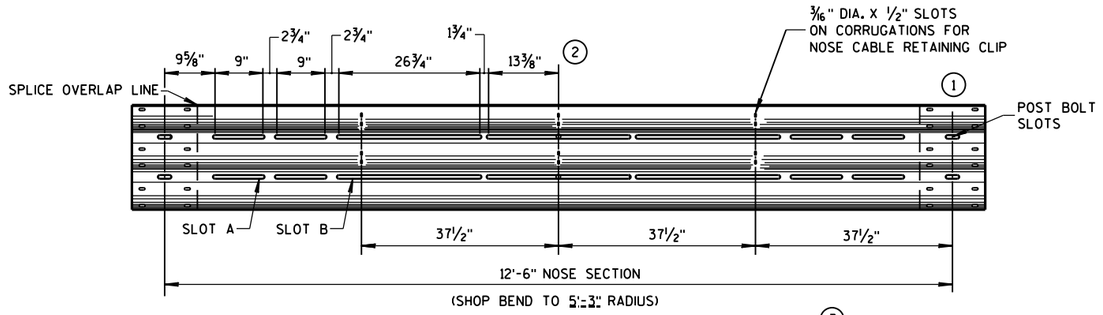
POST NO. 9,10,11,& 12

(ALSO USE FOR STEEL THRIE BEAM BEYOND POST 12)

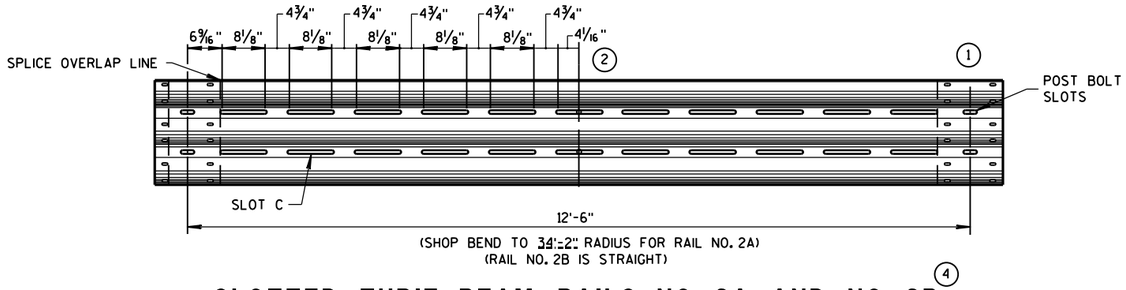
* IF NEEDED DUE TO AN UNDERGROUND OBSTACLE ADD 1 ADDITIONAL STANDARD BLOCKOUT TO POST.

STEEL THRIE BEAM BULLNOSE TERMINAL

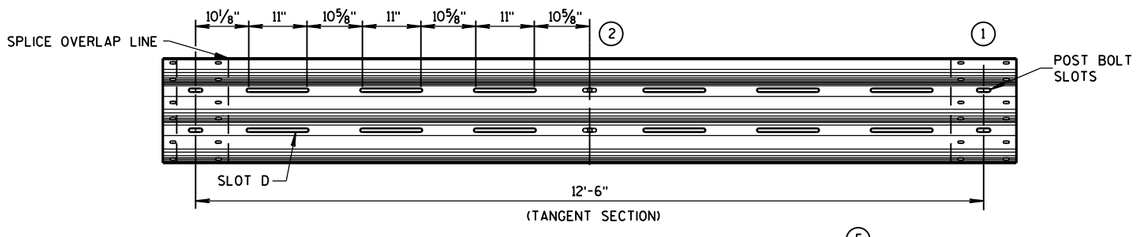
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



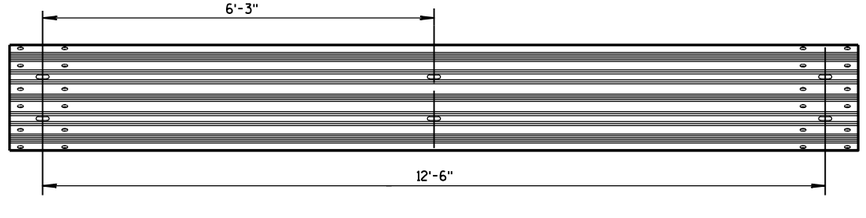
SLOTTED THRIE BEAM RAIL NO. 1 (3)



SLOTTED THRIE BEAM RAILS NO. 2A AND NO. 2B (4)



SLOTTED THRIE BEAM RAIL NO. 3 (5)



UNBENT STANDARD THRIE BEAM RAIL NO. 4 AND NO. 5

GENERAL NOTES

SEE STANADRD DETAIL DRAWINGS 14 B 26a-e.

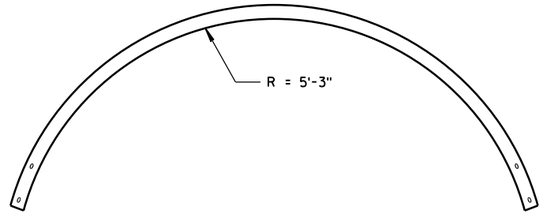
(1) SLOTTED THRIE BEAM RAIL DIMENSIONS SHOWN ARE BEFORE BENDING TO THE RADIUS SHOWN.

(2) SLOT SIZE AND SPACING SYMMETRIC.

(3) SLOTTED THRIE BEAM RAIL NO. 1, 12'-6", SHOP BEND TO R=5'-3".

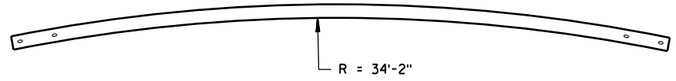
(4) SLOTTED THRIE BEAM RAIL NO. 2A, 12'-6", SHOP BEND TO R=34'-2".
SLOTTED THRIE BEAM RAIL NO. 2B, 12'-6", RAIL IS STRAIGHT.

(5) SLOTTED THRIE BEAM RAIL NO. 3, 12'-6", TANGENT.



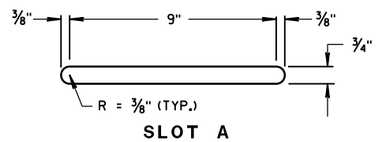
PLAN VIEW

SLOTTED THRIE BEAM RAIL NO. 1

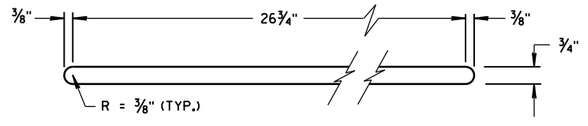


PLAN VIEW

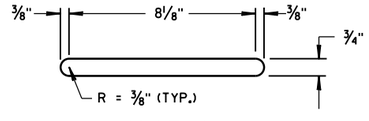
SLOTTED THRIE BEAM RAIL NO. 2A



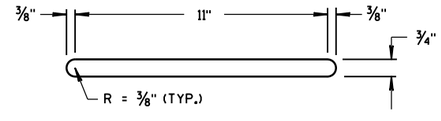
SLOT A



SLOT B



SLOT C



SLOT D

SLOT DETAILS

STEEL THRIE BEAM
BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

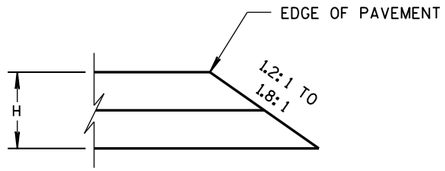
NT

6

S.D.D. 14 B 26-3e

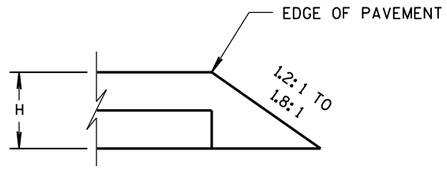
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S.D.D. 14 B 26-3e



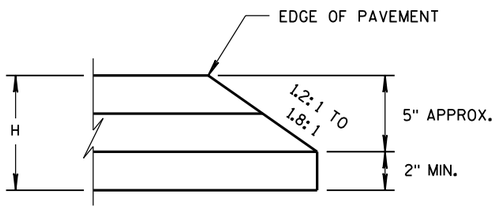
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



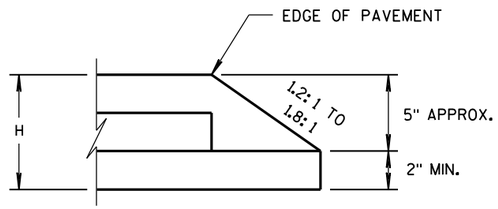
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

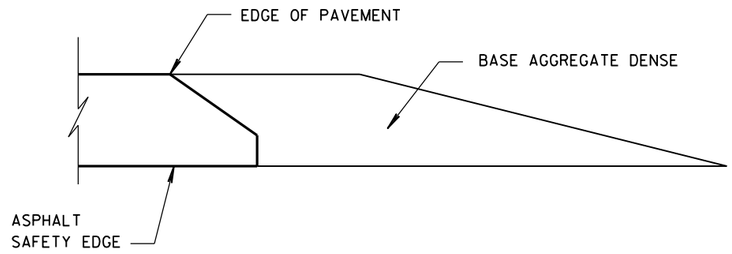
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

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.

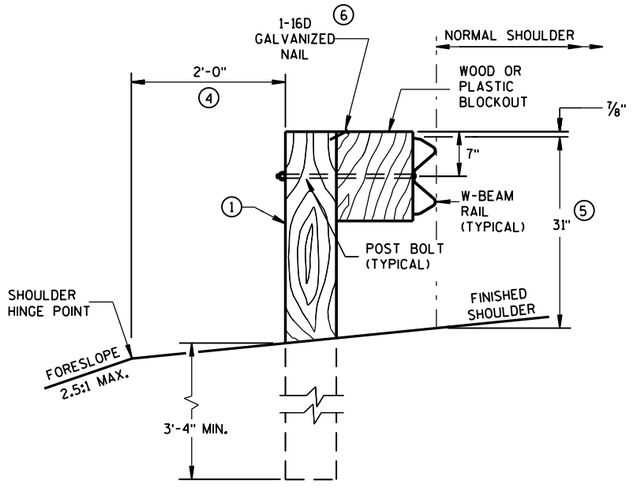
2. USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

3. IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½ INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD 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).

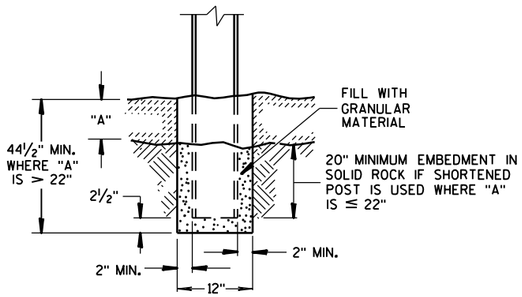
5. FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

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.



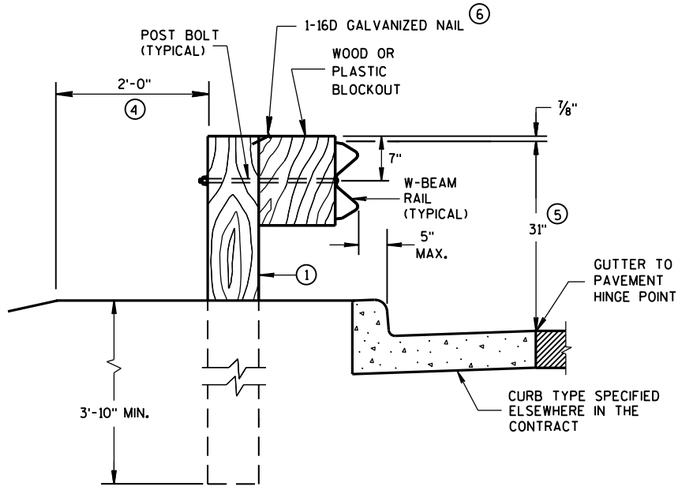
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



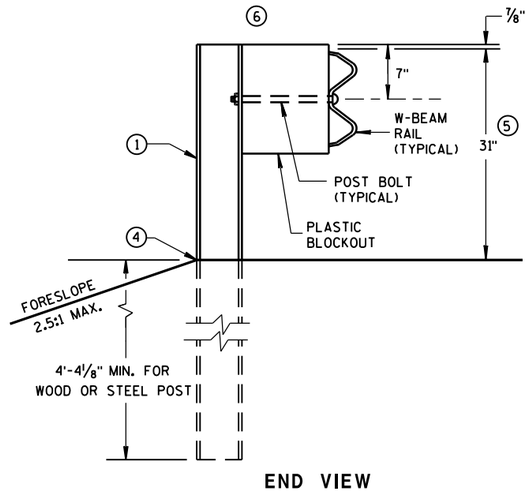
END VIEW

SETTING STEEL OR WOOD POST IN ROCK 3



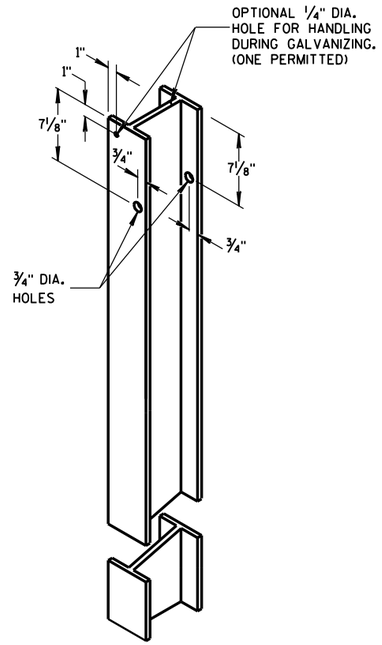
END VIEW

LOCATED ALONG A CURBED ROADWAY

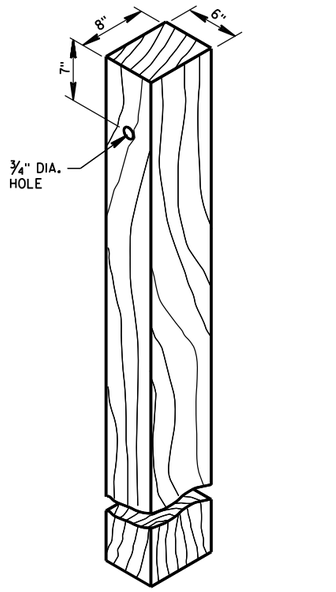


END VIEW

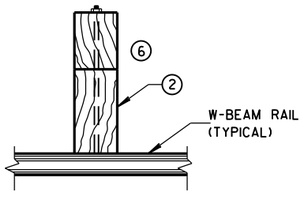
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



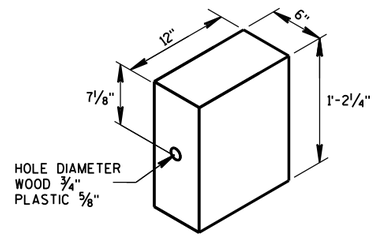
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) 1



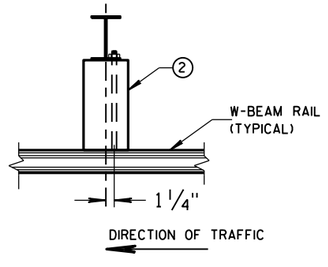
WOOD POST
(6" X 8") NOMINAL 1



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT 2

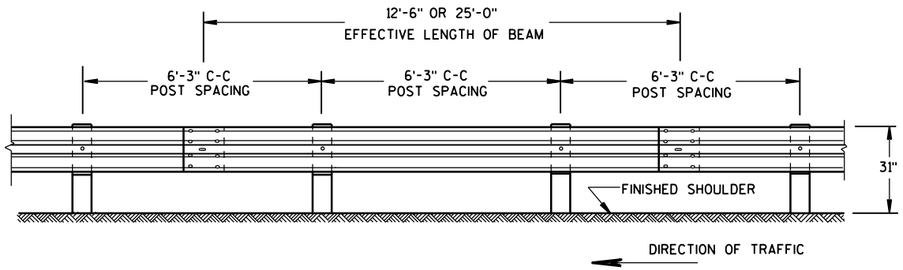


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

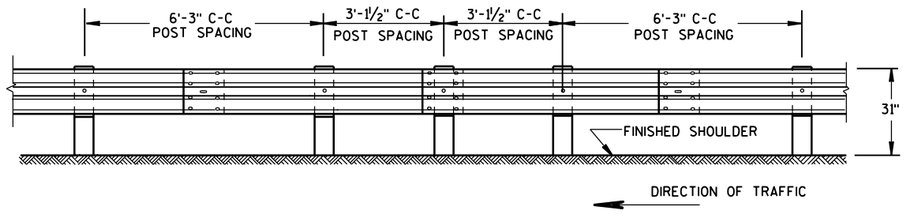
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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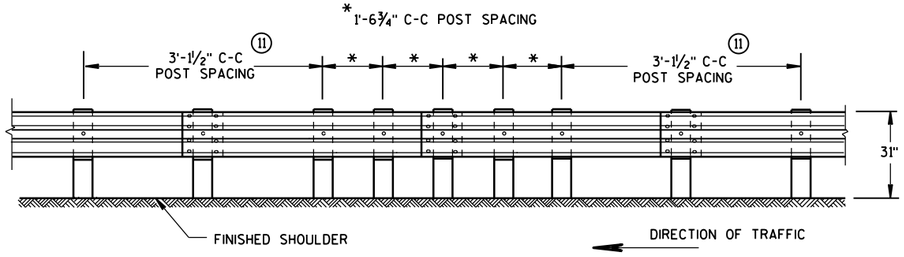
FRONT VIEW

POST SPACING STANDARD INSTALLATION



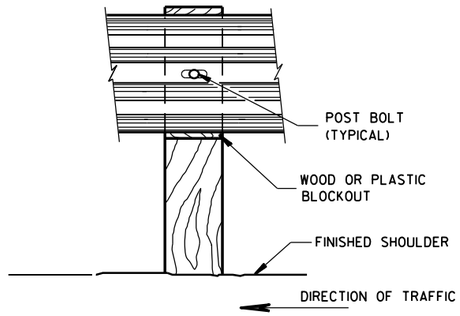
FRONT VIEW

HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)

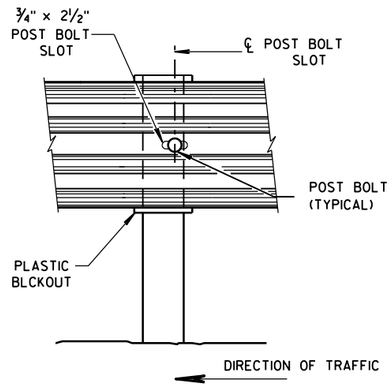


FRONT VIEW

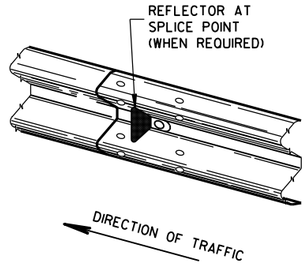
QUARTER POST SPACING (QS)

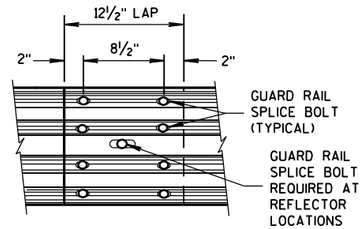


FRONT VIEW AT WOOD POST



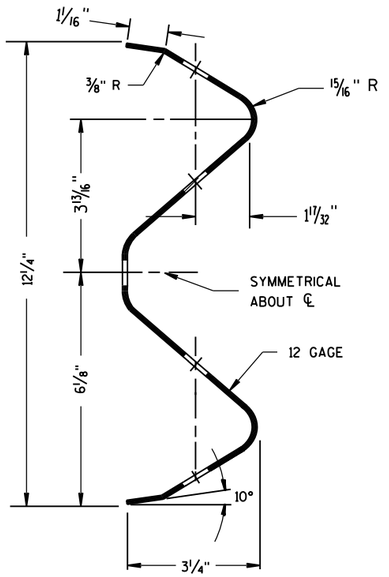
FRONT VIEW AT STEEL POST



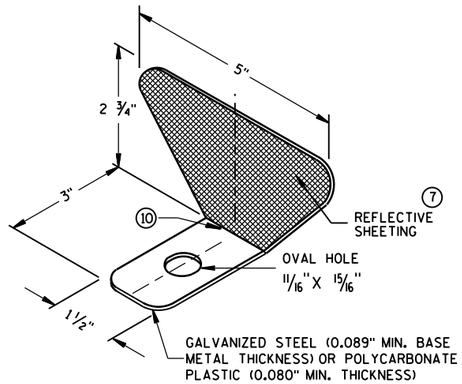


FRONT VIEW

MID-SPAN BEAM SPLICE



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION ⑦

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° ± 1° 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 ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

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 ⑨ 1	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 2 ⑩	3

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

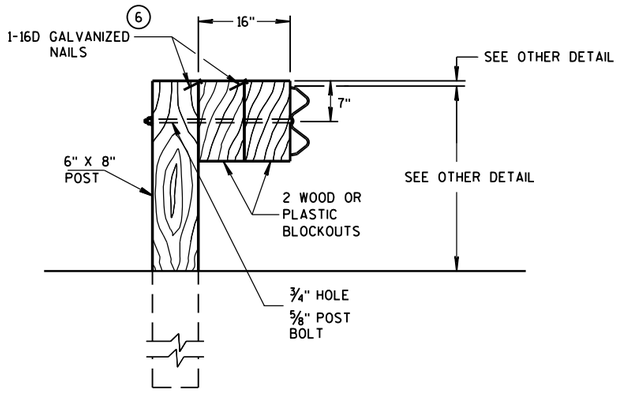
STATE OF WISCONSIN
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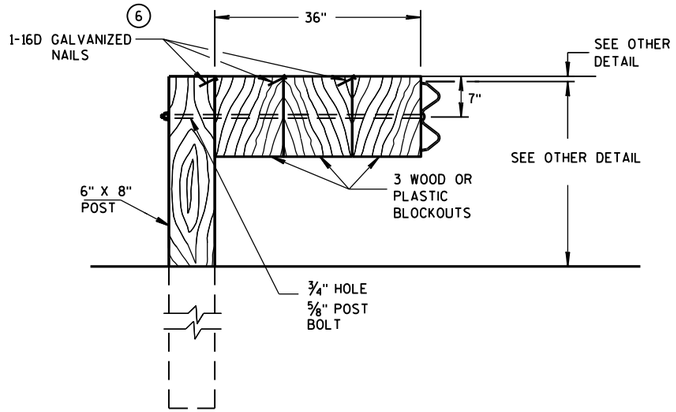
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DETAIL FOR 16" BLOCKOUT DEPTH

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.

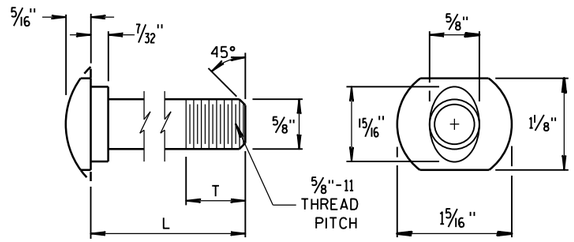


DETAIL FOR 36" BLOCKOUT DEPTH

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.

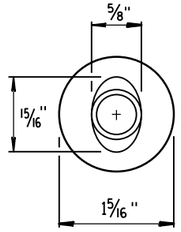
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

NOTE: 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 1/16".
2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

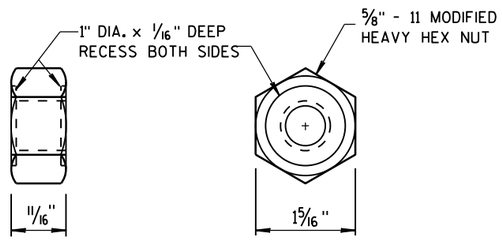


POST BOLT TABLE

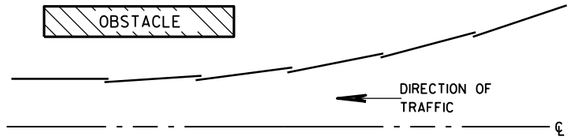
L	T (MIN.)
1¼"	1⅛"
2"	1¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

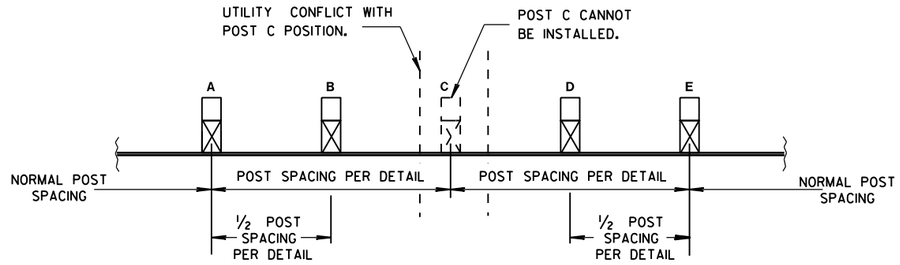


POST BOLT AND RECESS NUT

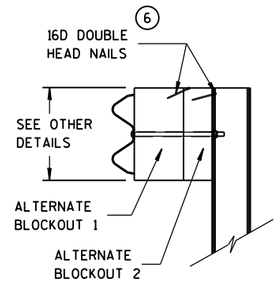


PLAN VIEW

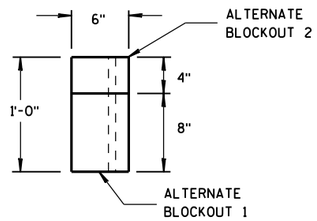
BEAM LAPPING DETAIL



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
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS (360) ENGINEER
FHWA

6

S.D.D. 14 B 42-3c

6

S.D.D. 14 B 42-3c

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.

(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

(G) ½" 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.

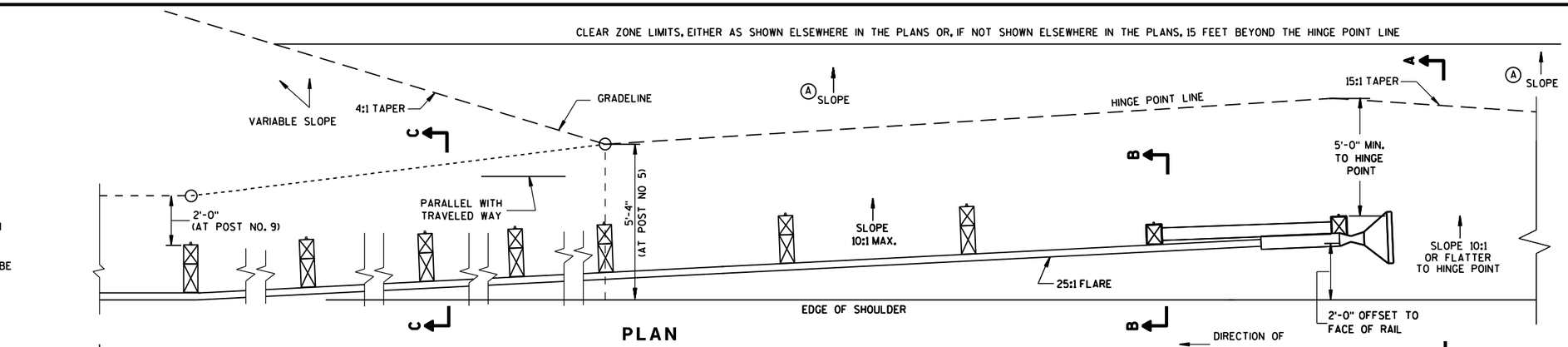
SEE SDD 14B42 FOR MORE INFORMATION.

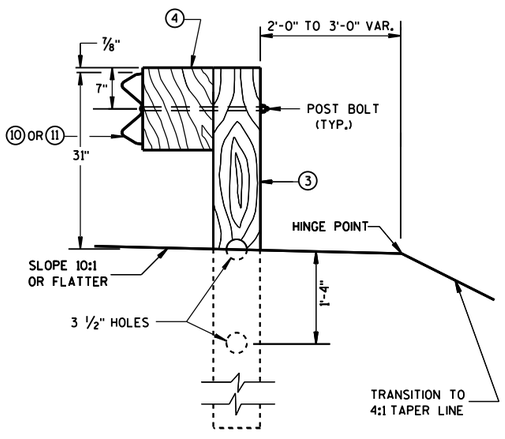
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

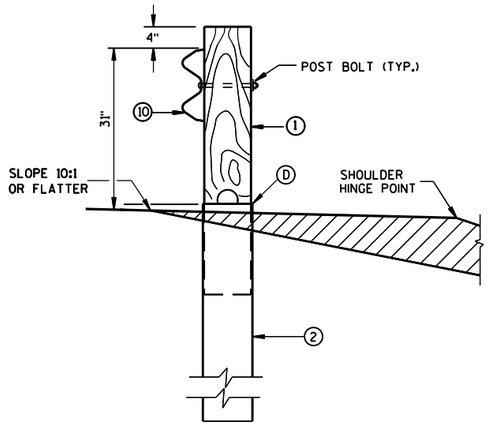
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

THE CENTER OF THE UPPER 3½" 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.

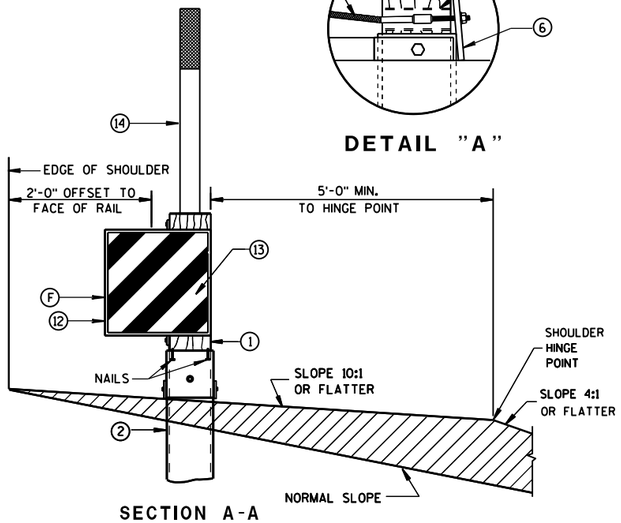




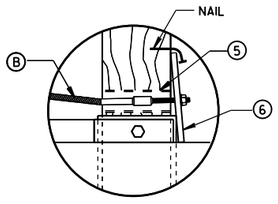
SECTION C-C
TYPICAL AT POST NOS. 3-9



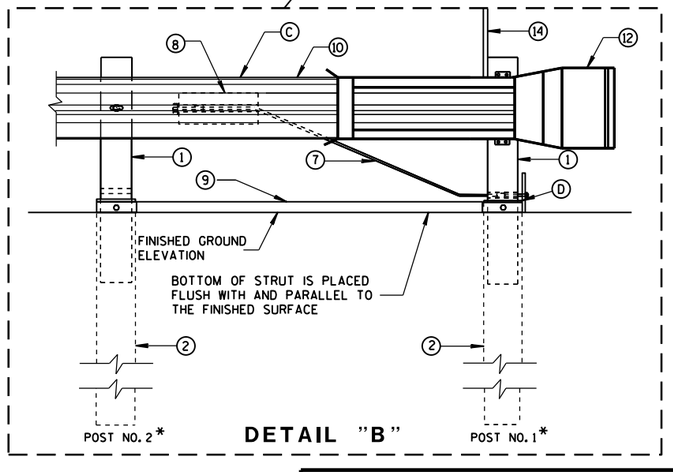
SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"

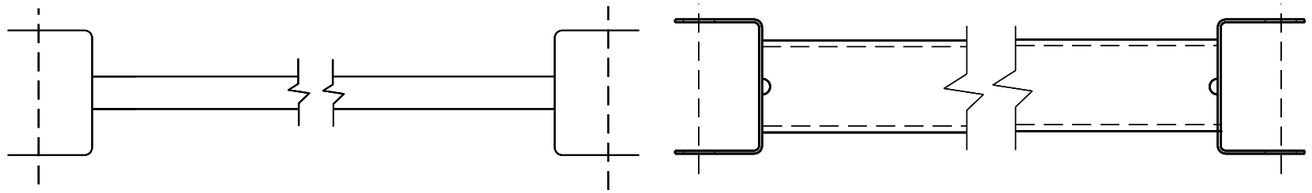


DETAIL "B"

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

S.D.D. 14 B 44-2a

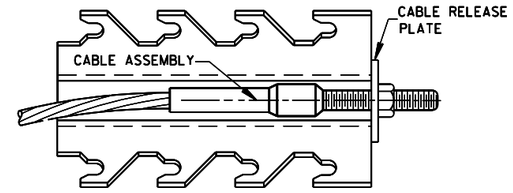


(9) (H)

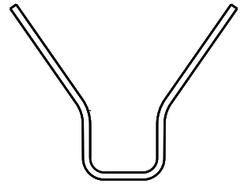
GENERIC GROUND STRUT

BILL OF MATERIALS

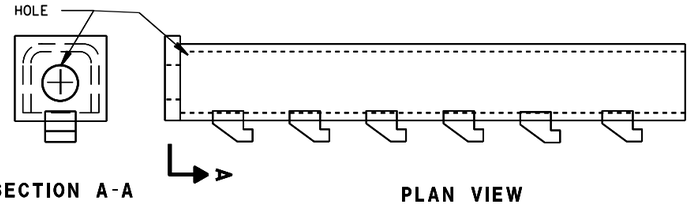
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR 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)



FRONT VIEW



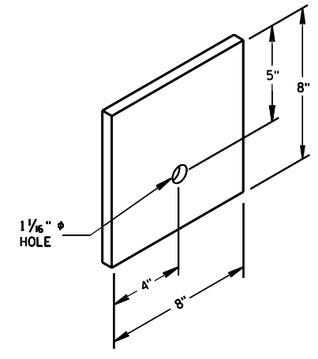
SECTION B-B



SECTION A-A

PLAN VIEW

GENERIC ANCHOR CABLE BOX (8) (H)



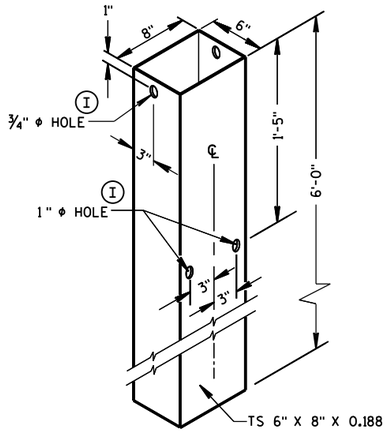
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

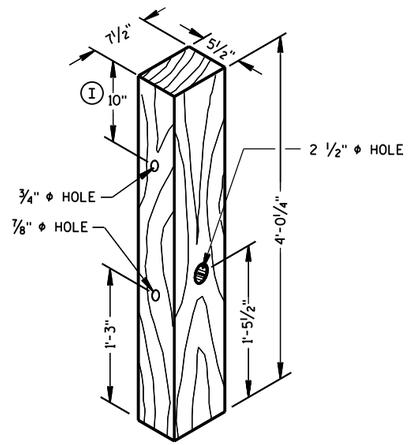
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 44-2b

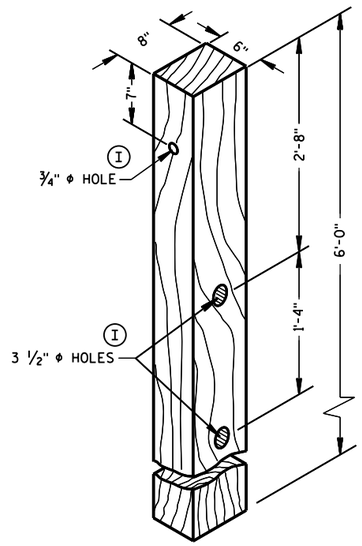


FOUNDATION TUBE (2)



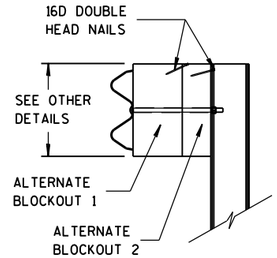
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

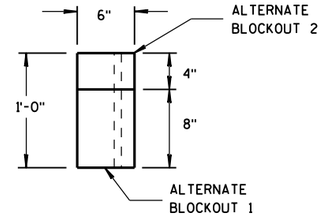


POSTS NUMBER 3-9

WOOD CRT POST (3)

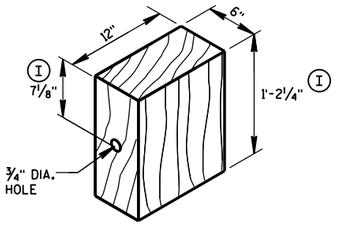


SIDE VIEW



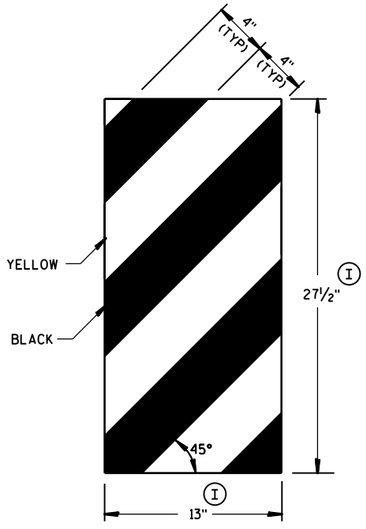
TOP VIEW

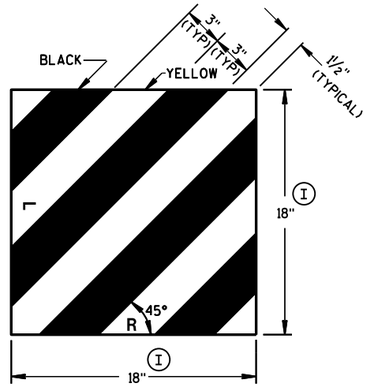
ALTERNATE WOOD BLOCKOUT DETAIL



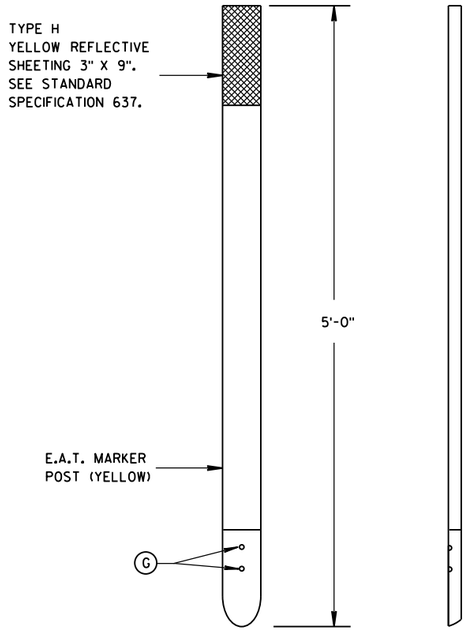
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2





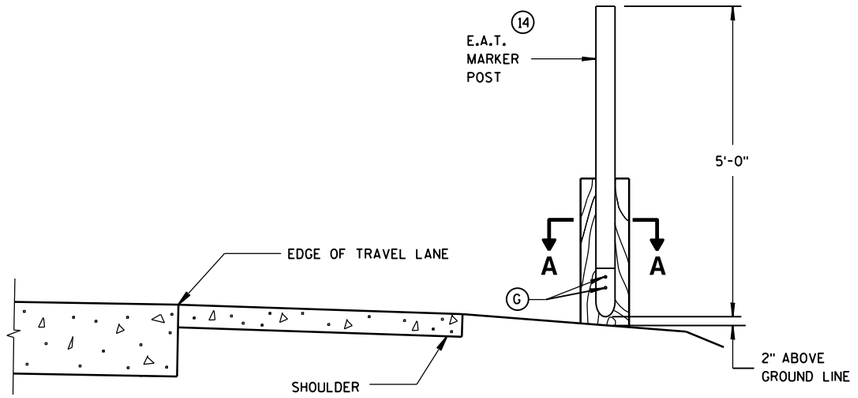
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

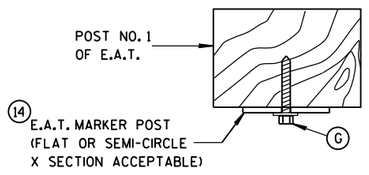
SIDE VIEW

E.A.T. MARKER POST (14)



TYPICAL INSTALLATION OF E.A.T. MARKER POST BACKSIDE OF POST NO. 1

(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A

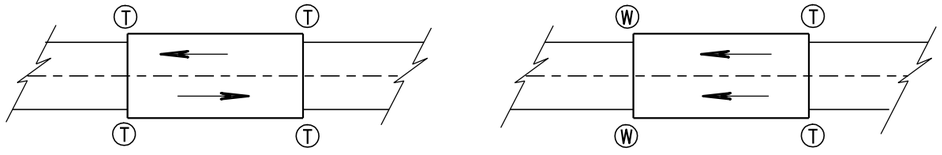
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 14 B 44-2c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

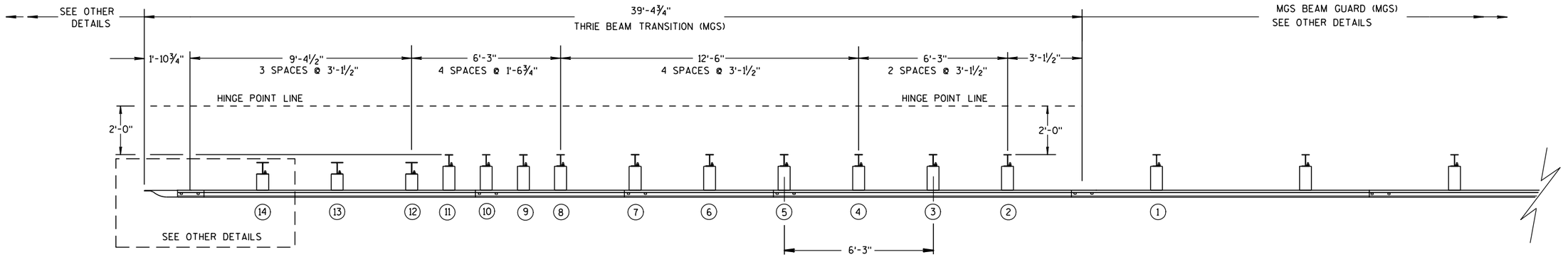
BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

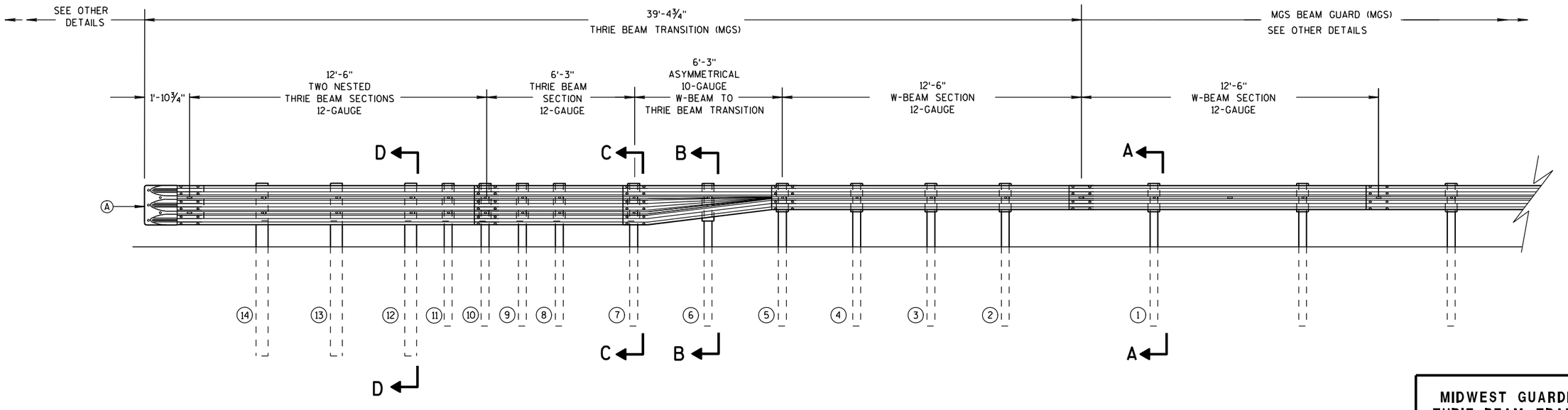
TRANSITION USES STEEL POSTS ONLY.

SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

Ⓐ BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	364

6

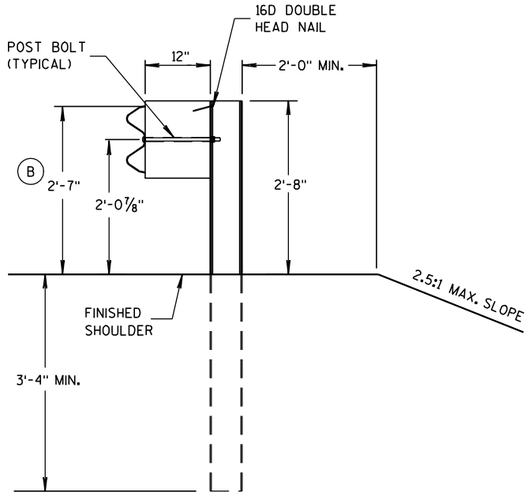
S.D.D. 14 B 45-3a

6

S.D.D. 14 B 45-3a

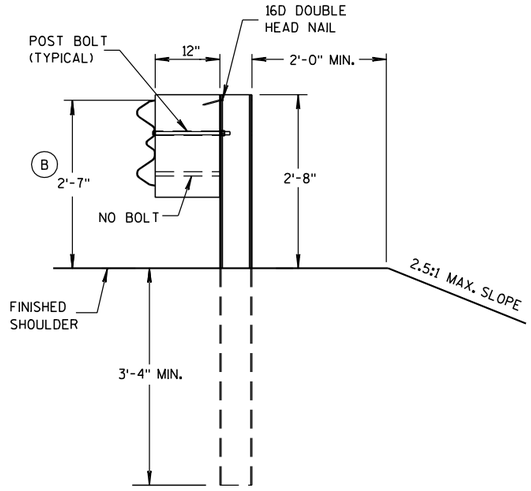
GENERAL NOTES

(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



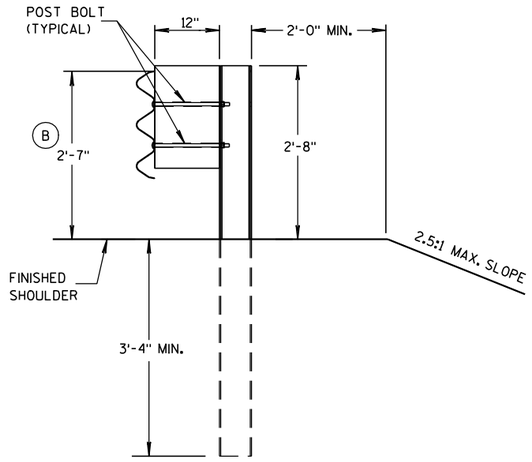
SECTION A-A

POSTS 1-5



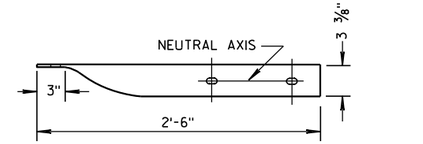
SECTION B-B

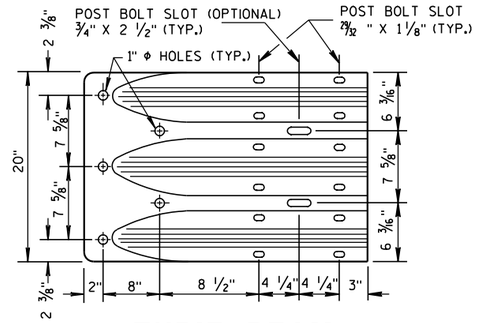
POST 6



SECTION C-C

POSTS 7-11





THRIE BEAM TERMINAL CONNECTOR

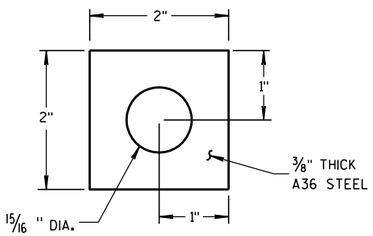
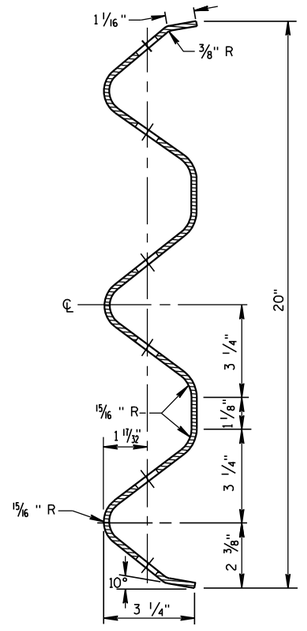
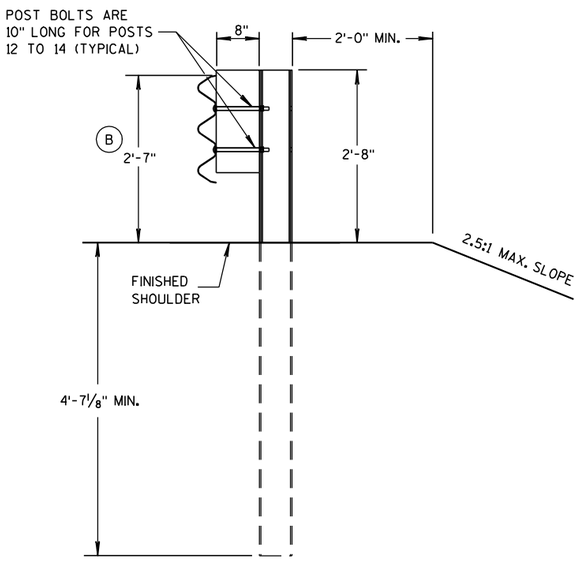


PLATE WASHER DETAIL

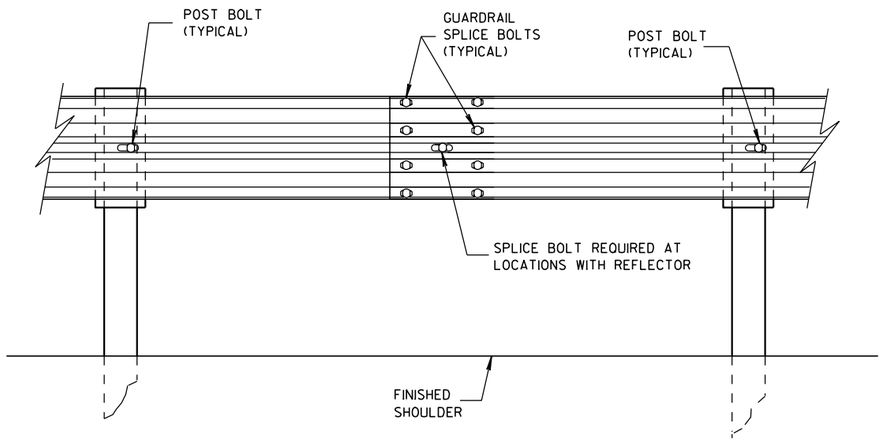


SECTION THRU THRIE BEAM RAIL ELEMENT



SECTION D-D

POSTS 12-14



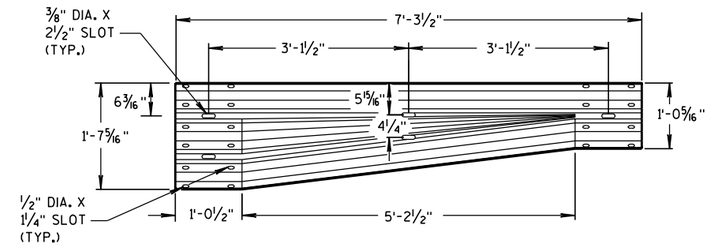
SPLICE DETAIL

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

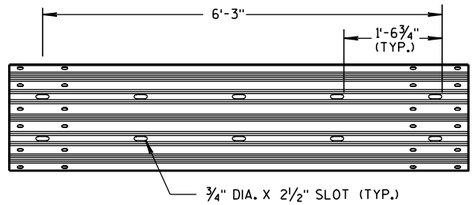
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

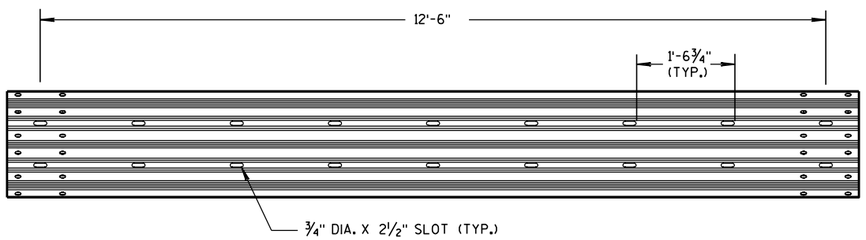
S.D.D. 14 B 45-3b



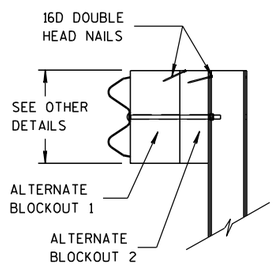
W-BEAM TO THRIE BEAM TRANSITION SECTION



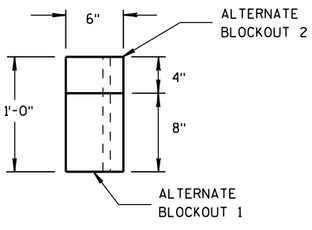
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

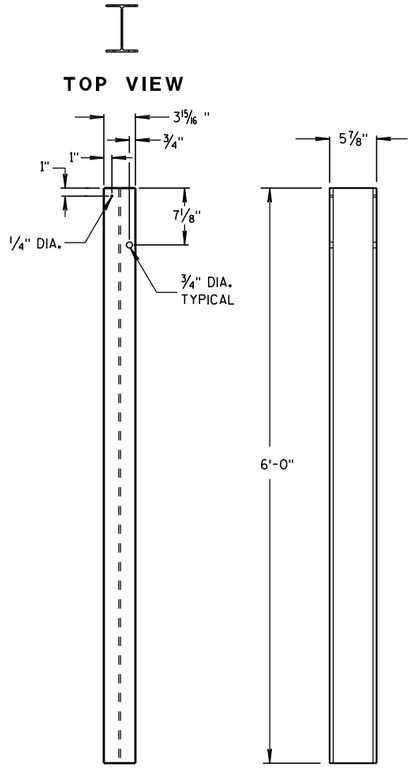


SIDE VIEW

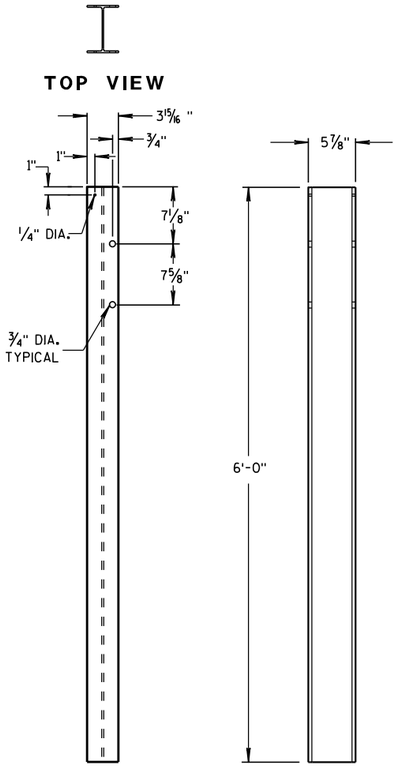


TOP VIEW

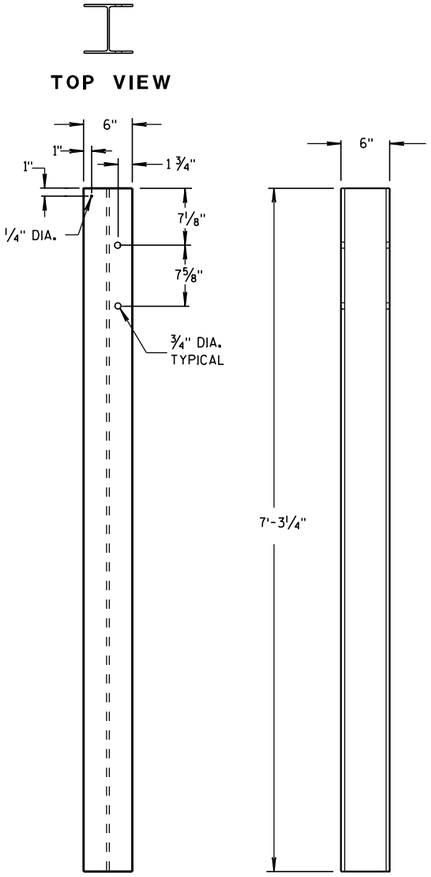
ALTERNATE WOOD BLOCKOUT DETAIL



STEEL POSTS 1-5

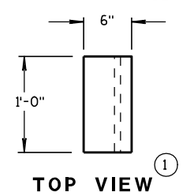


STEEL POSTS 6-11

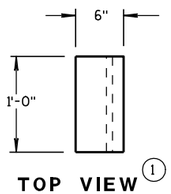


STEEL POSTS 12-14

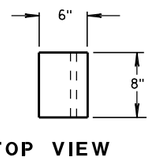
(1) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.



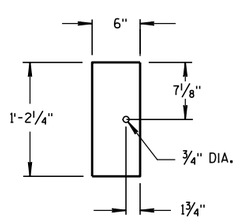
TOP VIEW (1)



TOP VIEW (1)

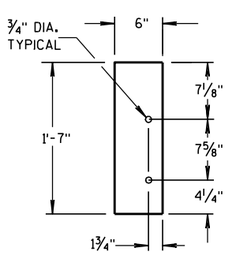


TOP VIEW



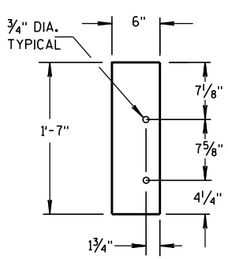
FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-11



FRONT VIEW

BLOCKOUT POSTS 12-14

STEEL POST SIZES

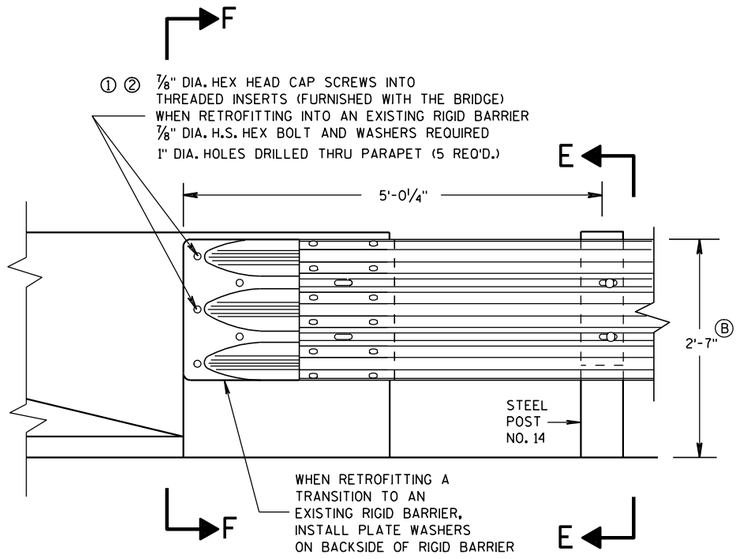
POST NUMBER	SECTION TYPE	LENGTH
(1)	W6x9	72"
(2)	W6x9	72"
(3)	W6x9	72"
(4)	W6x9	72"
(5)	W6x9	72"
(6)	W6x9	72"
(7)	W6x9	72"
(8)	W6x9	72"
(9)	W6x9	72"
(10)	W6x9	72"
(11)	W6x9	72"
(12)	W6x15	87 1/8"
(13)	W6x15	87 1/8"
(14)	W6x15	87 1/8"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

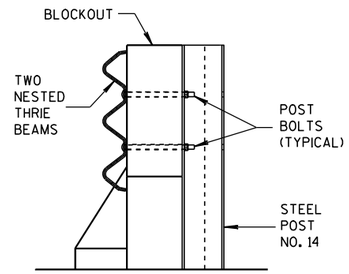
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 45-3c



FRONT VIEW



SECTION E-E

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

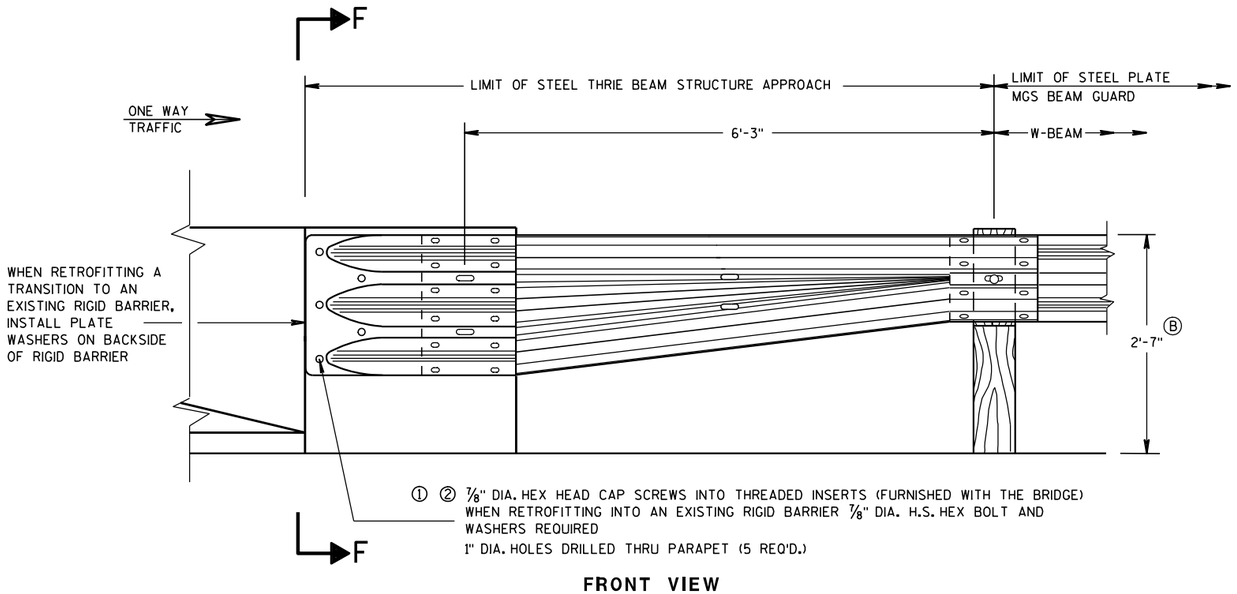
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

② 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.

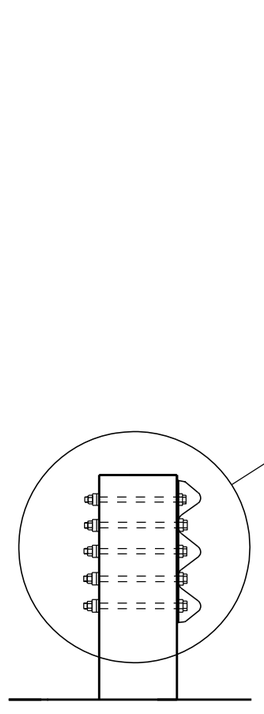
③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".

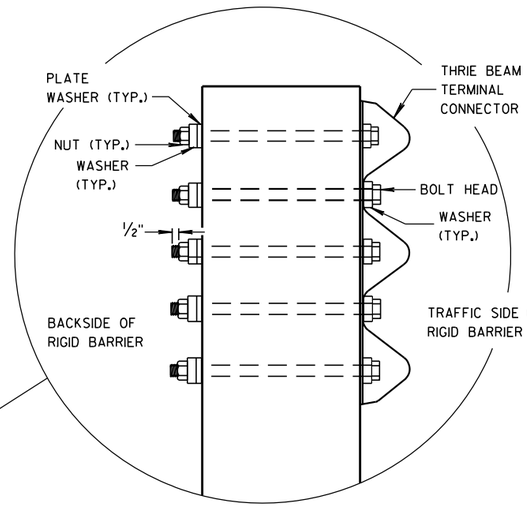
THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS



FRONT VIEW



SECTION F-F



W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(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

8/31/2012 — DATE

/S/ Jerry H. [illegible] — ROADWAY STANDARDS [illegible] ENGINEER

FHWA

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

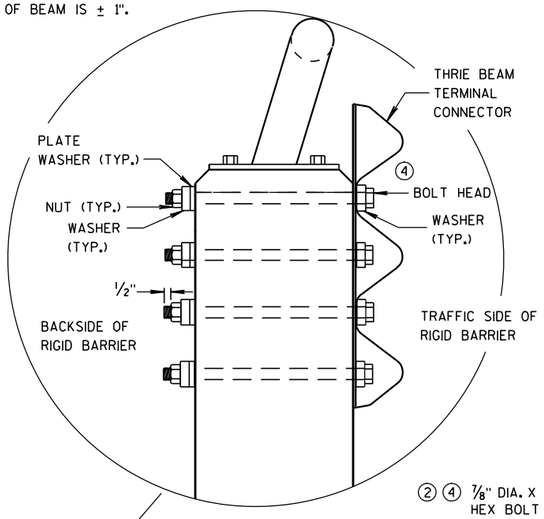
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

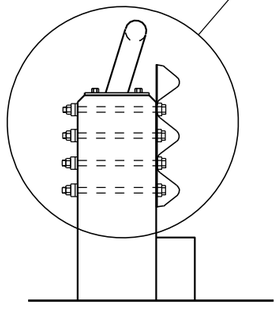
② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. 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.

③ 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". BLOCK IS INCIDENTAL TO THE CONTRACT.

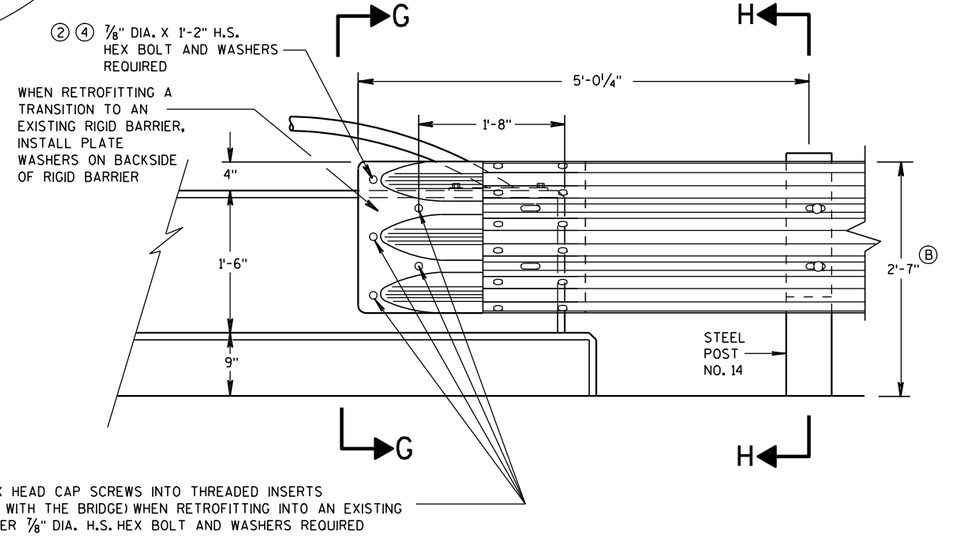
④ BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.

Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".

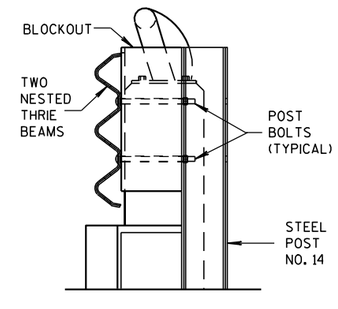




SECTION G-G

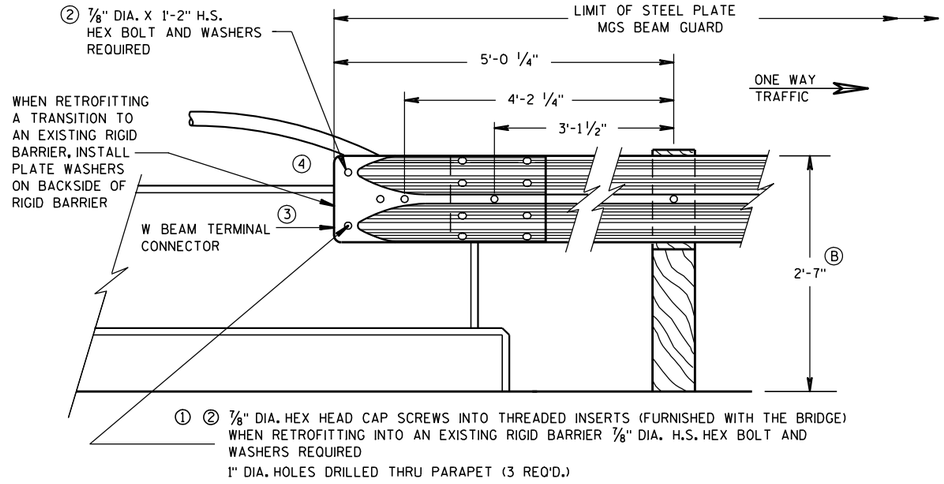


FRONT VIEW



SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

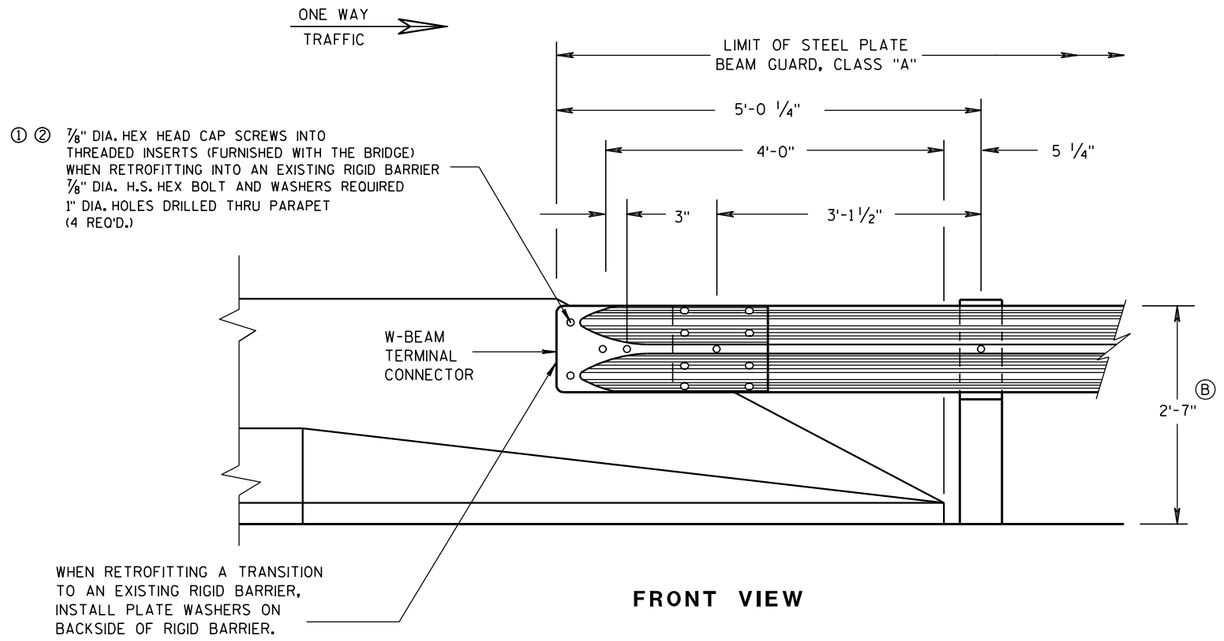


FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(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	
8-31-2012 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

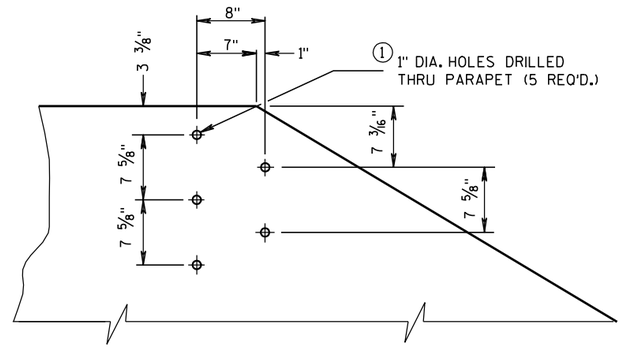
(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

GENERAL NOTES

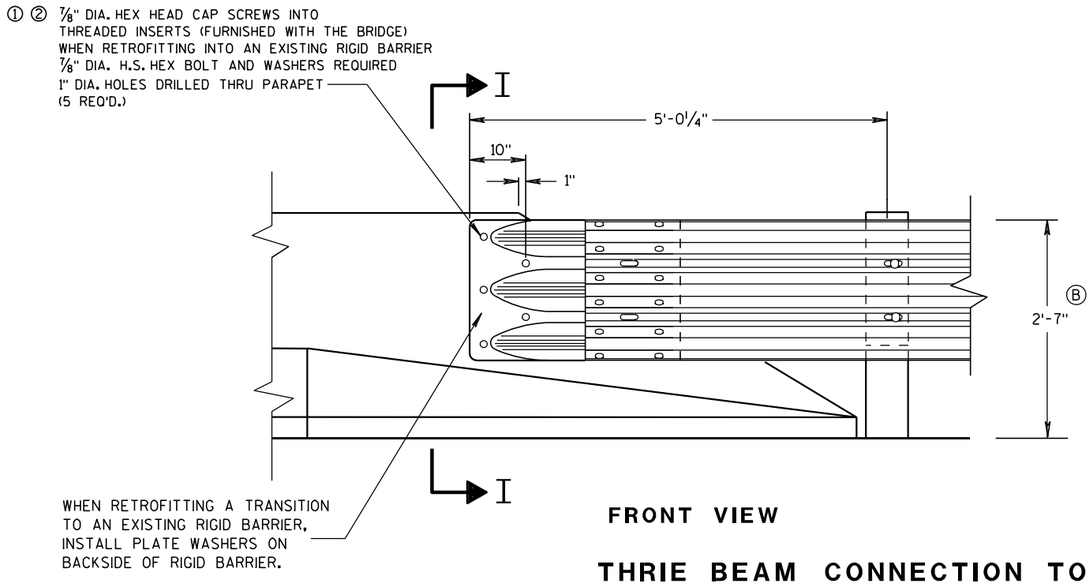
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

② 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.

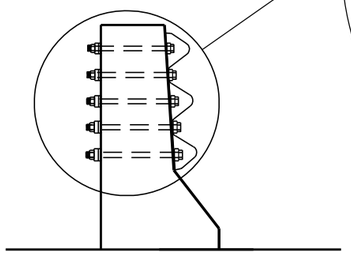
Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".



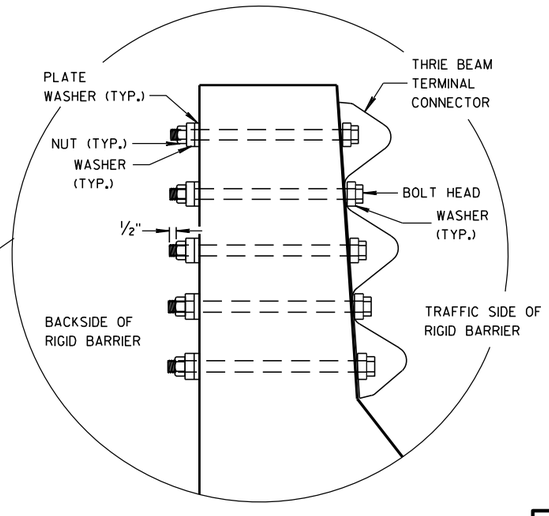
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

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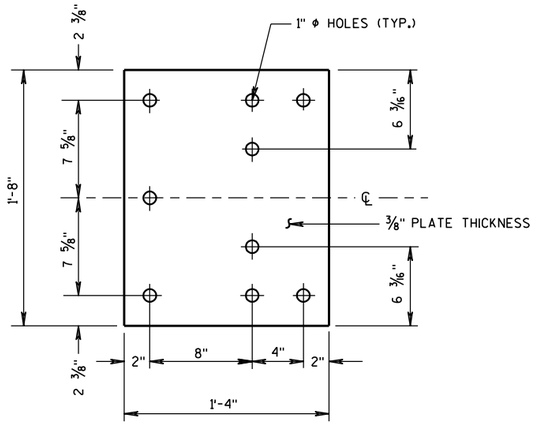
FHWA

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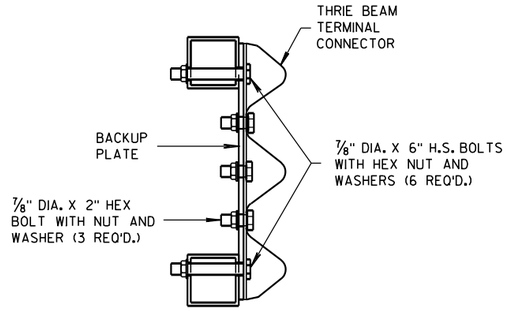
S.D.D. 14 B 45-3f

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S.D.D. 14 B 45-3f



BACK-UP PLATE DETAIL

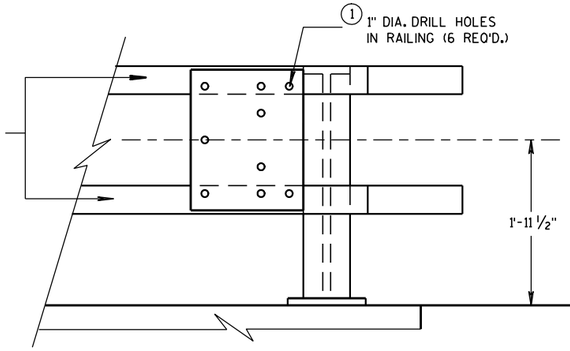


SECTION J-J

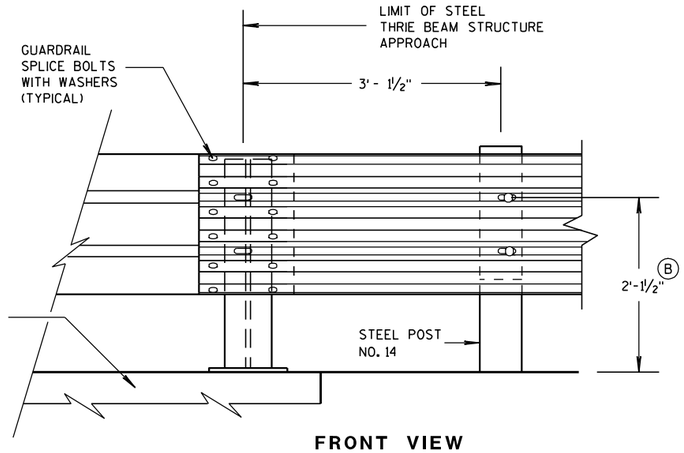
GENERAL NOTES

(1) DRILLING HOLES THROUGH THE PAPRPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(B) TOLERANCE FOR TOP OF BEAM IS ± 1".

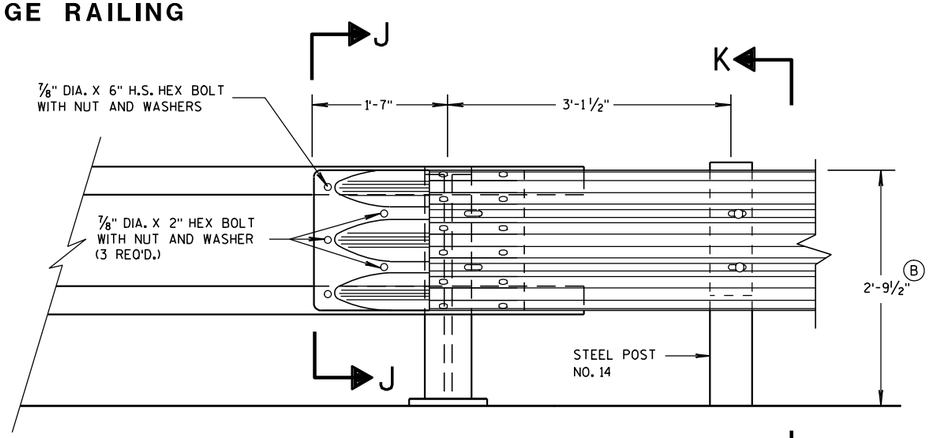


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

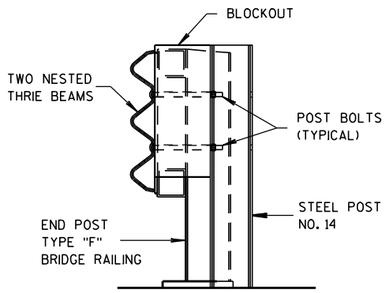


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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8/31/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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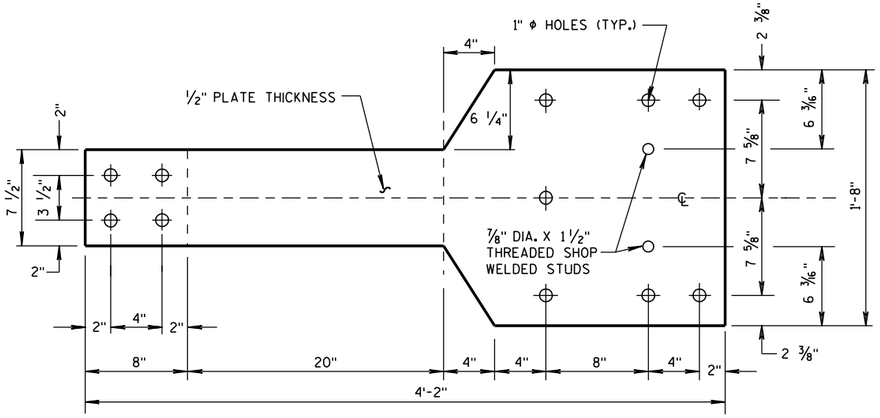
S.D.D. 14 B 45-3g

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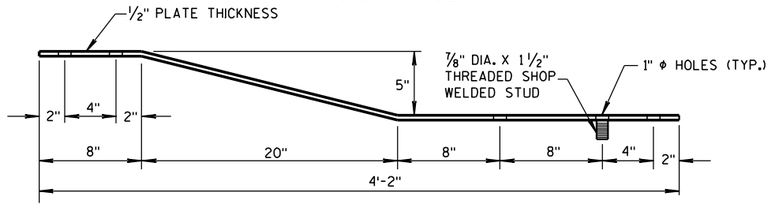
S.D.D. 14 B 45-3g

GENERAL NOTES

(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

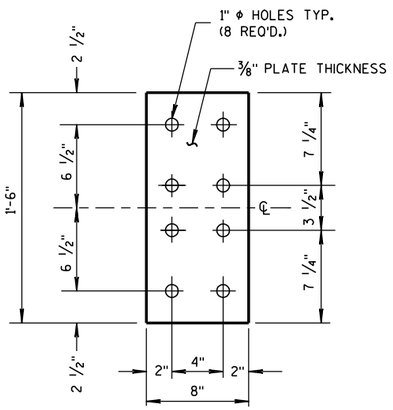


FRONT VIEW



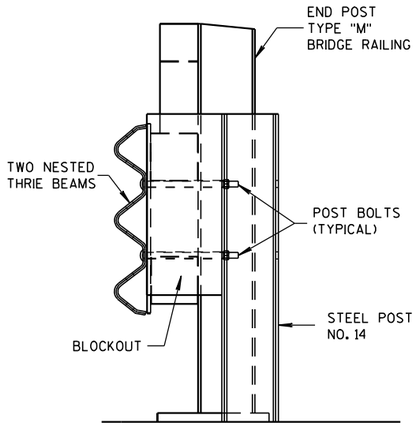
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

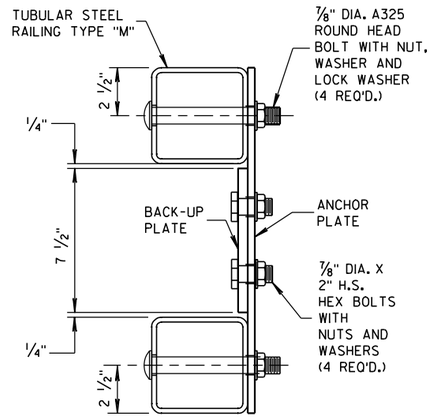


FRONT VIEW

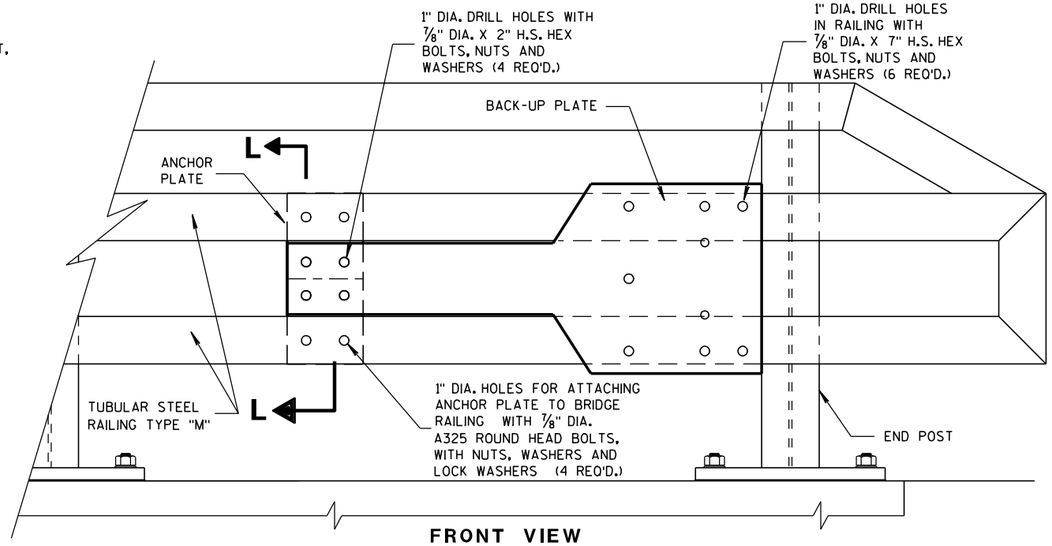
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

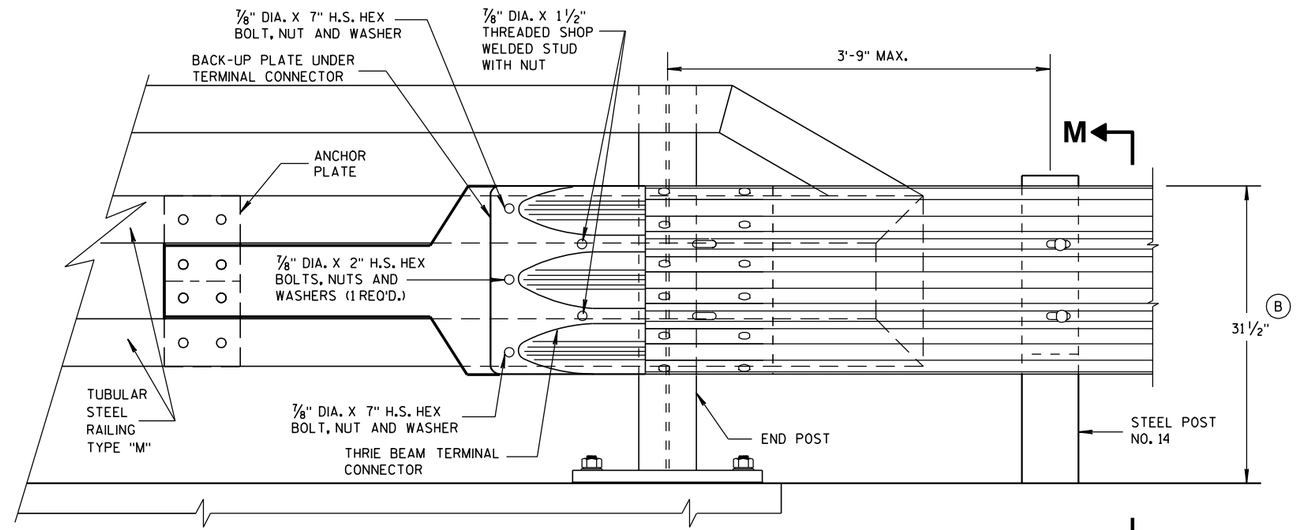


SECTION L-L

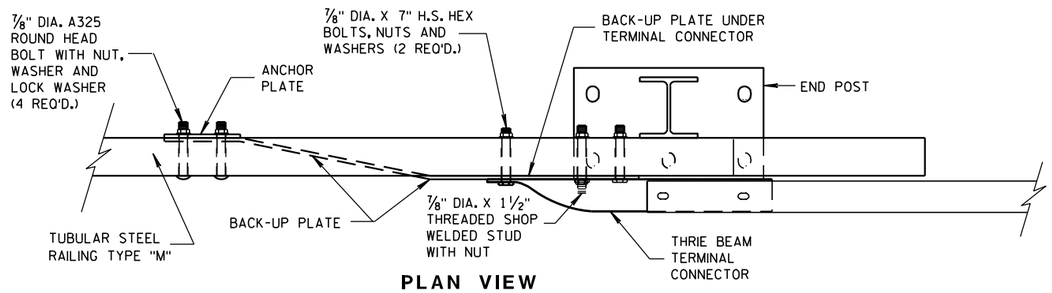


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-31-2012 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

FHWA

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S.D. 14 B 45-3h

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S.D. 14 B 45-3h

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.

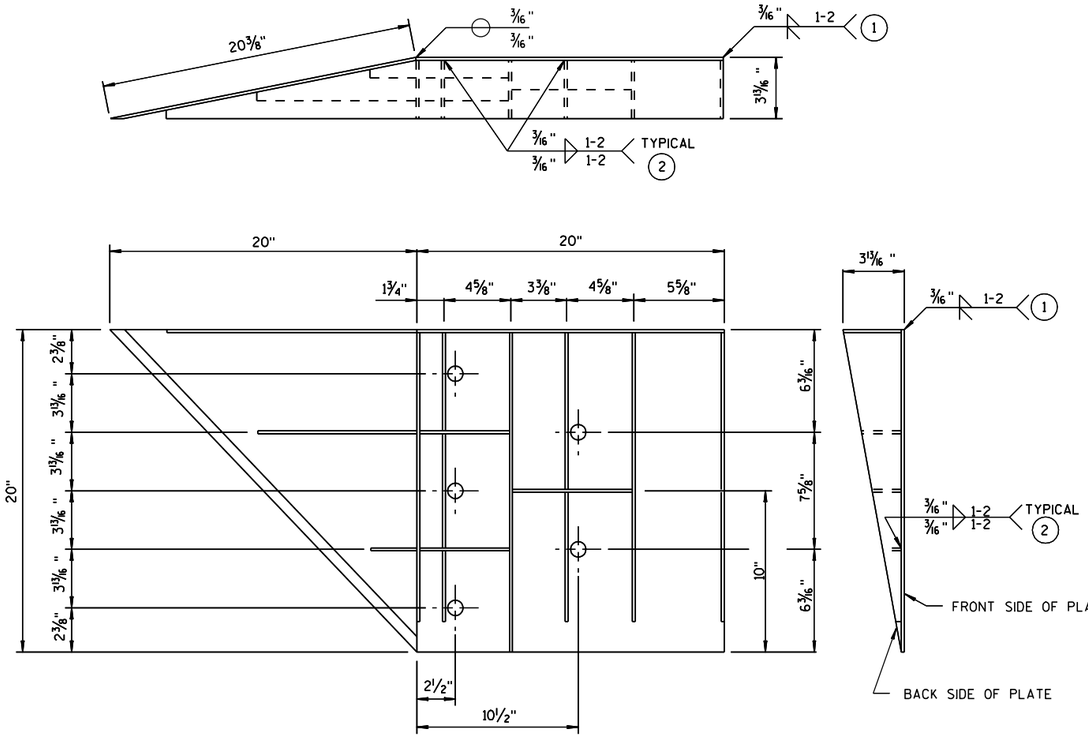
FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(1) 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.

(2) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

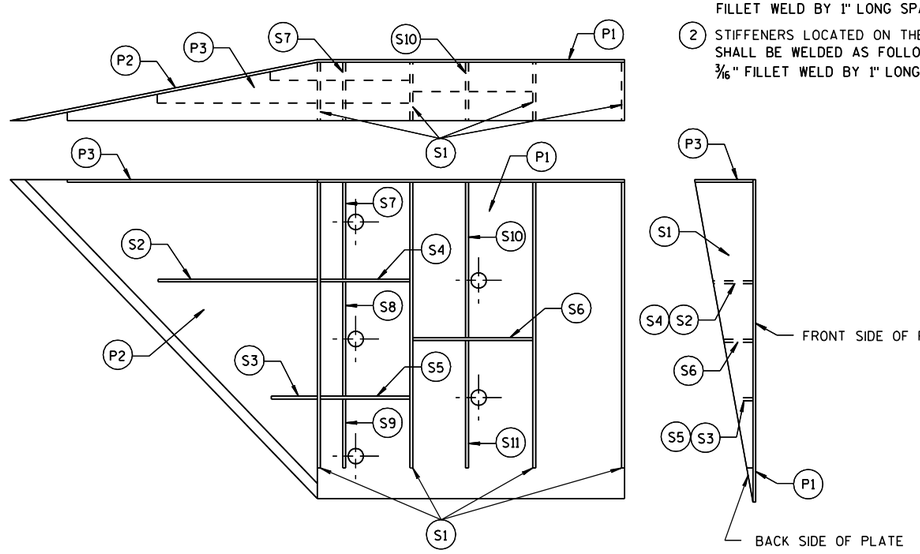


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF 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 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

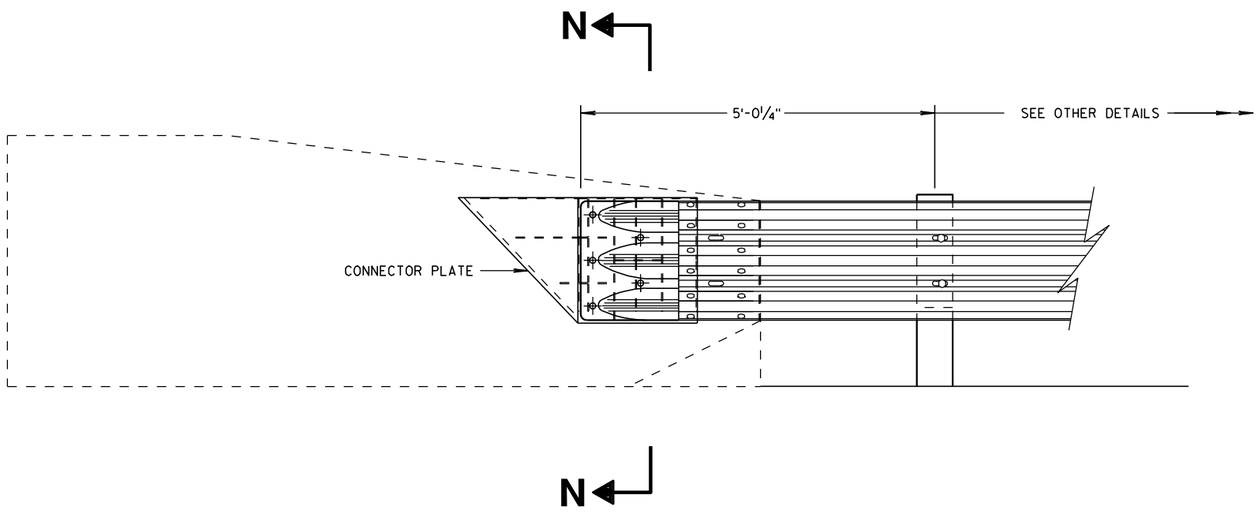
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/S/ Jerry H ---- ROADWAY STANDARDS ENGINEER
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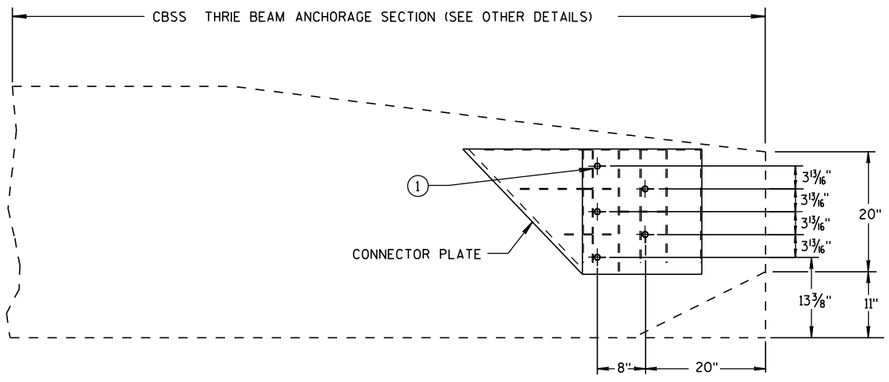
S.D.D. 14 B 45-3i

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S.D.D. 14 B 45-3i



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER

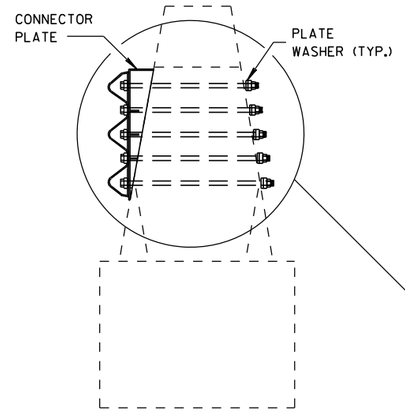


SINGLE SLOPE CONNECTION PLATE PLACEMENT

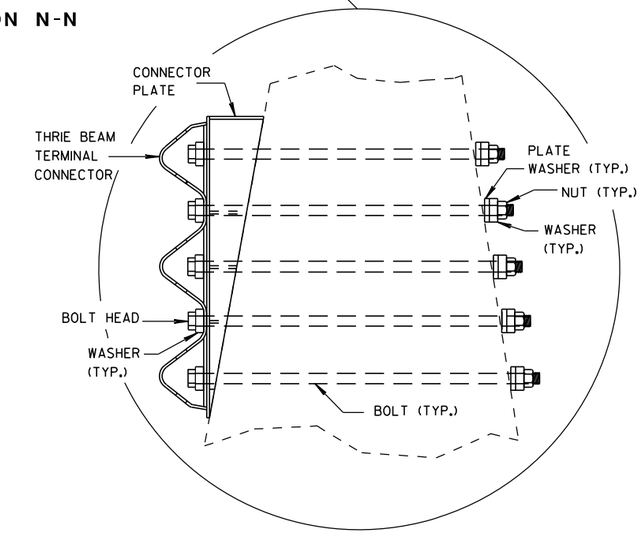
GENERAL NOTES

CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(1) 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 ⅝" 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

8/31/2012
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

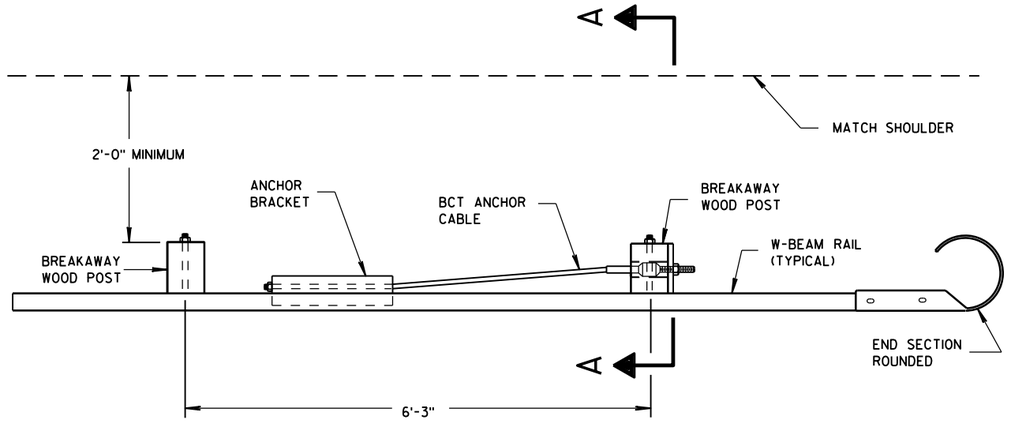
FHWA

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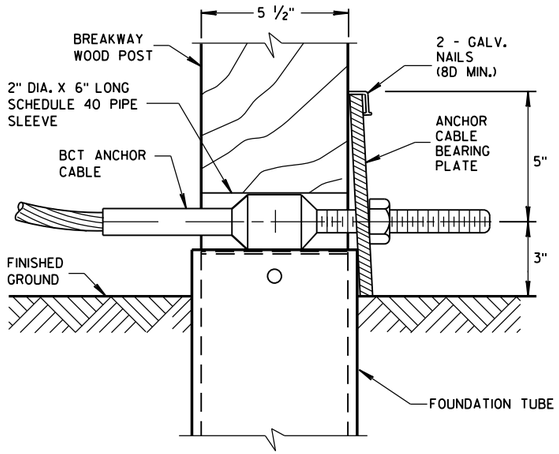
S.D.D. 14 B 45-3j

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S.D.D. 14 B 45-3j



PLAN VIEW



DETAIL A

POST NO. 1
GROUNG STRUT NOT SHOWN FOR CLARITY.

GENERAL NOTES

SEE SDD 14 B 42 FOR MORE INFORMATION.

END SECTION BOLTS AND NUTS HAVE THE SAME MATERIAL REQUIREMENTS AS SPLICE BOLTS.

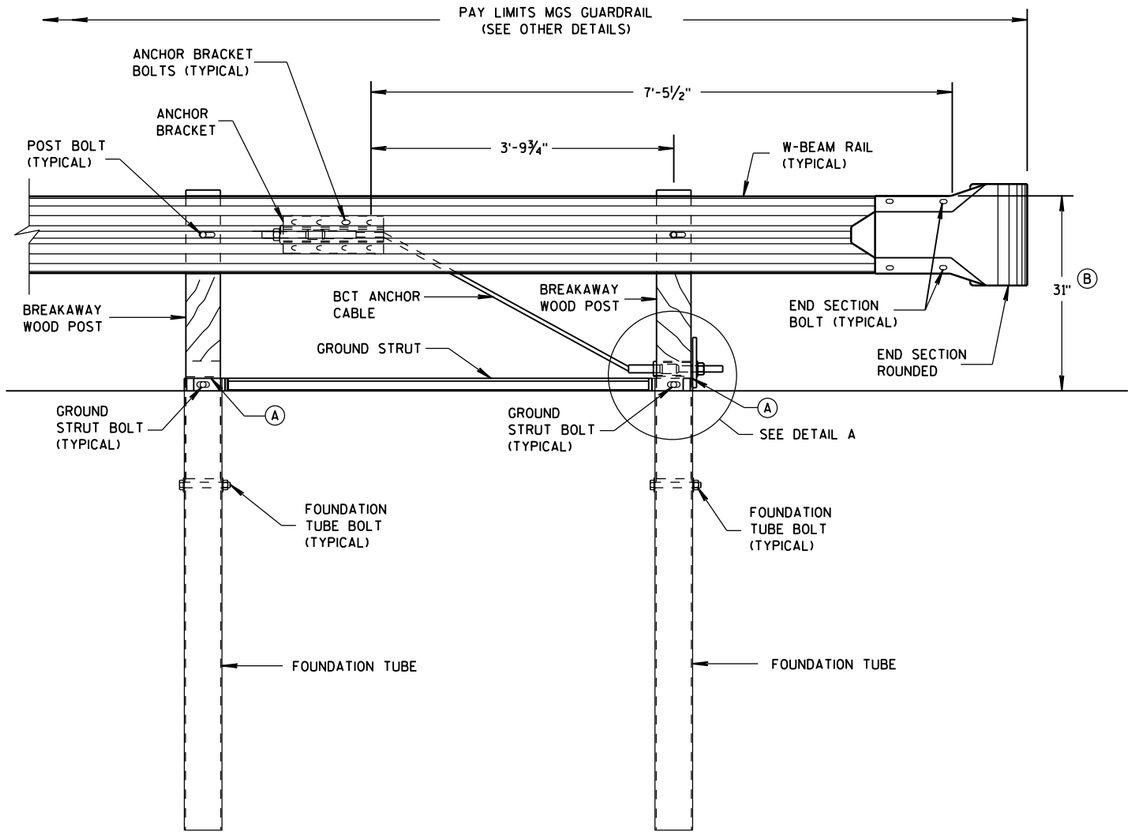
FOUNDATION TUBE BOLTS ARE ⅞" DIAMETER ASTM A307 HEX HEAD BOLT. FOUNDATION TUBE BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅞" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

ANCHOR BRACKET AND GROUND STRUT BOLTS ARE A ⅝" DIAMETER ASTM A307 HEX HEAD BOLT. ANCHOR BRACKET BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅝" 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.

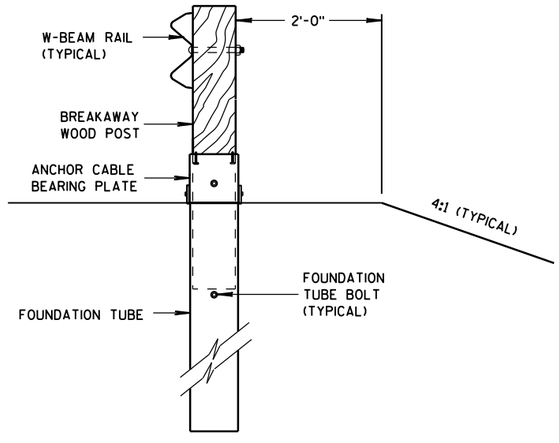
(A) TOP OF FOUNDATION TUBE SHALL BE NO MORE THAN 3" ABOVE FINISHED GROUND.

(B) FOR NEW CONSTRUCTION TOP OF RAIL IS 31" ± 1".
FOR EXISTING INSTALLATIONS TOP OF RAIL IS BETWEEN 27¾" TO 32" ± 1".

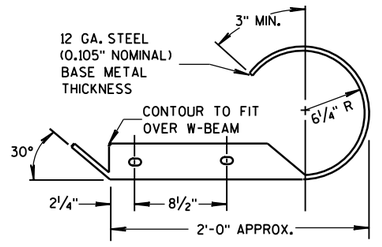


FRONT VIEW

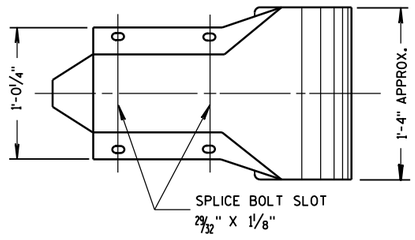
END RAIL DETAIL



SECTION A-A



PLAN VIEW



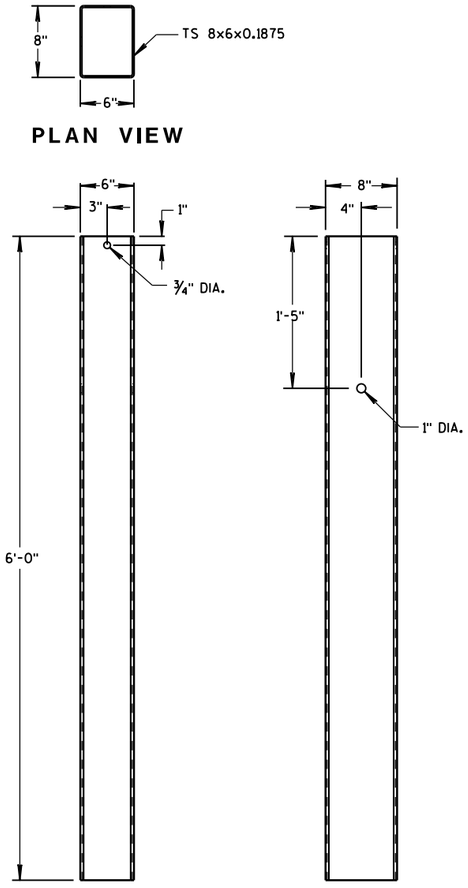
FRONT VIEW

W BEAM END SECTION ROUNDED

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

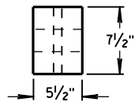
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S.D.D. 14 B 47-2a



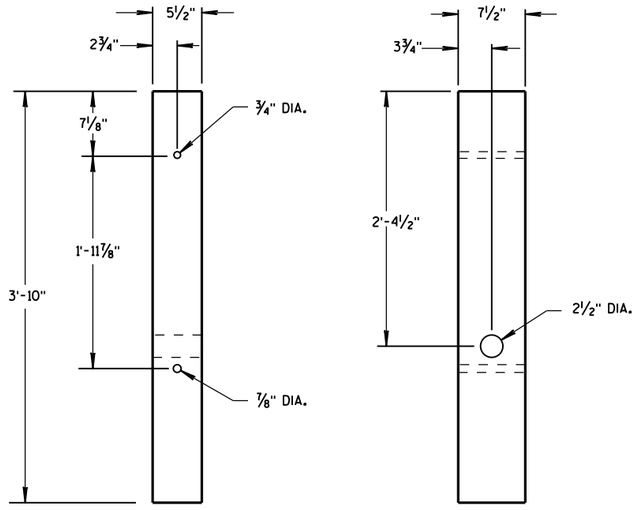
PLAN VIEW

FRONT VIEW SIDE VIEW

FOUNDATION TUBE



PLAN VIEW

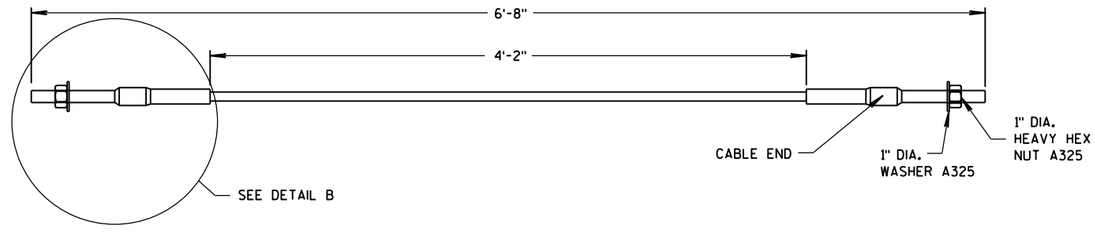


FRONT VIEW SIDE VIEW

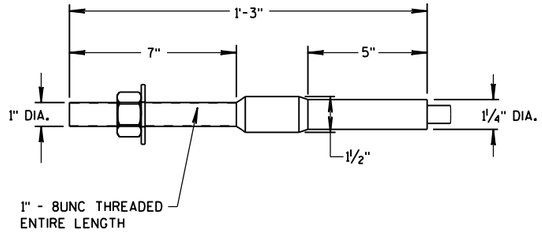
BREAKAWAY WOOD POST

GENERAL NOTES

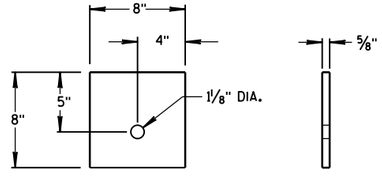
BCT ANCHOR CABLE IS A ¾" DIAMETER 6X19 IWRC IPS GALVANIZED WIRE ROPE. THE SWAGED FITTINGS AND STUD ARE REQUIRED. END FITTING SHALL BE MACHINED FROM HOT-ROLLED CARBON STEEL CONFORMING TO ASTM A576 GRADE 1035 AND GALVANIZED ACCORDING TO ASTM A123. TREADED STUD SHALL CONFORM TO ASTM A325 OR SAE GRADE 5. MINIMUM BREAKING STRENGTH OF WIRE ROPE IS 43,000 LB. WIRE ROPE IS TO BE TAUT.



BCT ANCHOR CABLE



DETAIL B



SIDE VIEW FRONT VIEW

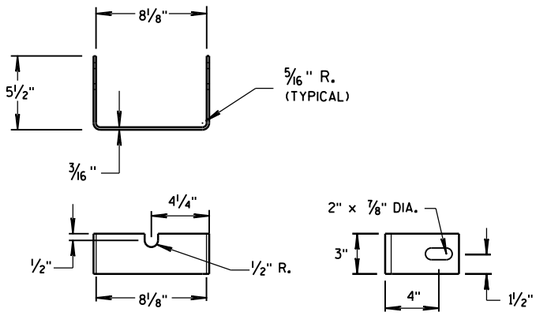
ANCHOR CABLE
BEARING PLATE

MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

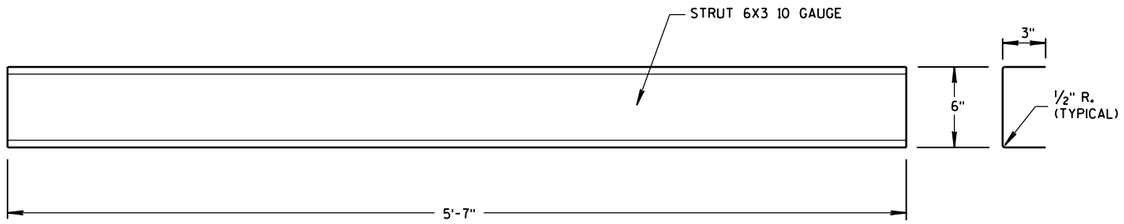
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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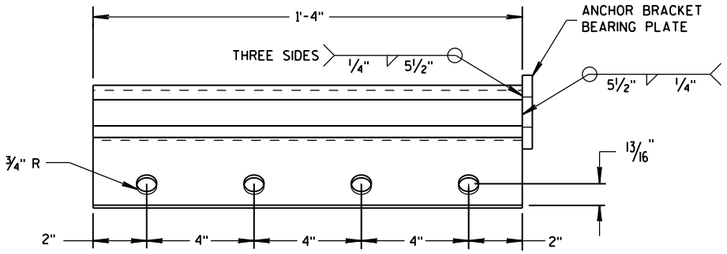
S.D.D. 14 B 47-2b

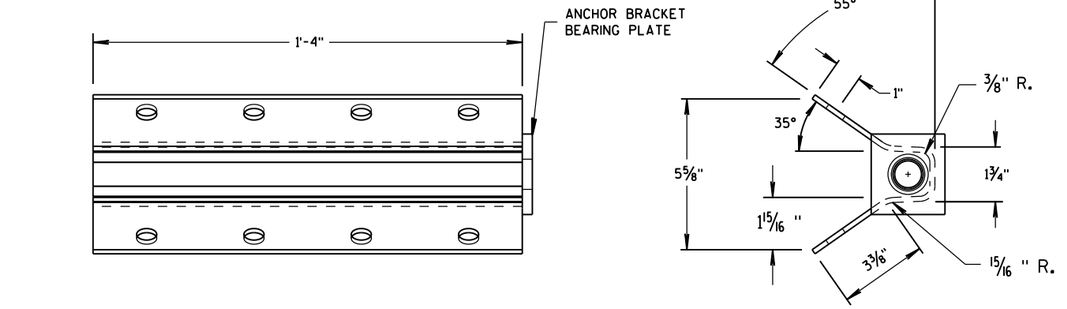


YOKE DETAIL

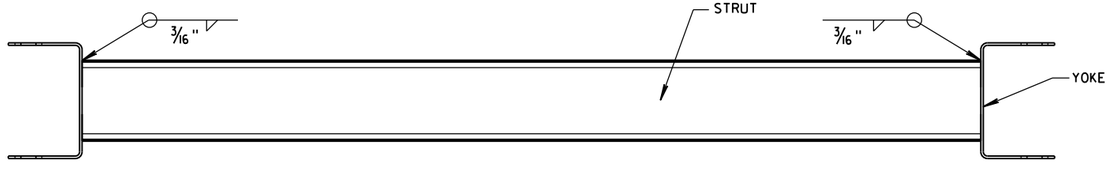


STRUT DETAIL

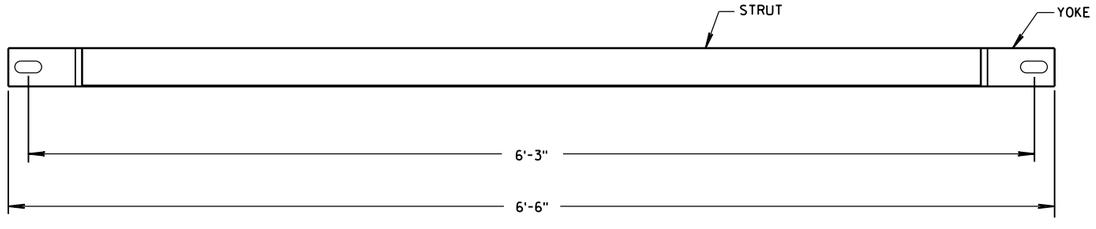




ANCHOR BRACKET

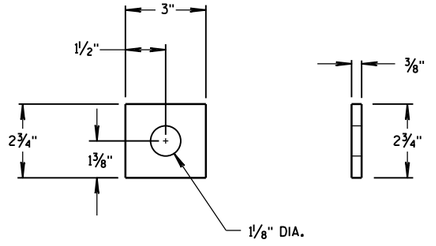


PLAN VIEW



FRONT VIEW

GROUND STRUT DETAIL



ANCHOR BRACKET BEARING PLATE

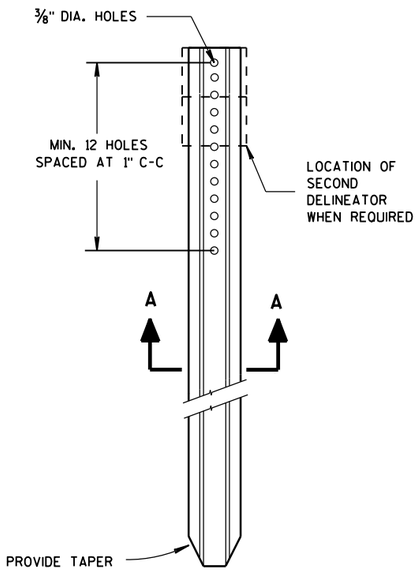
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

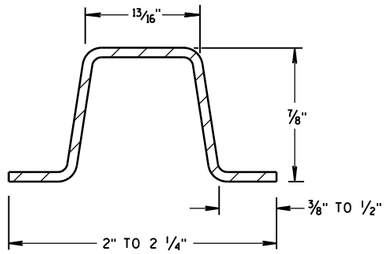
APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 14 B 47-2c

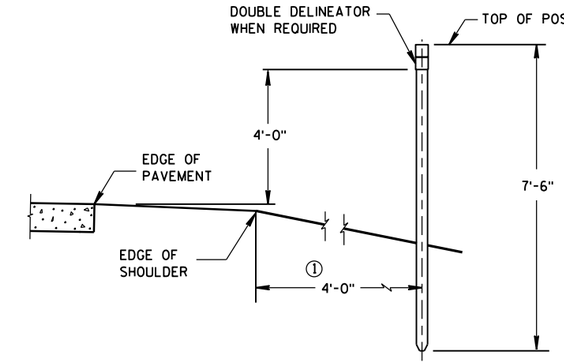


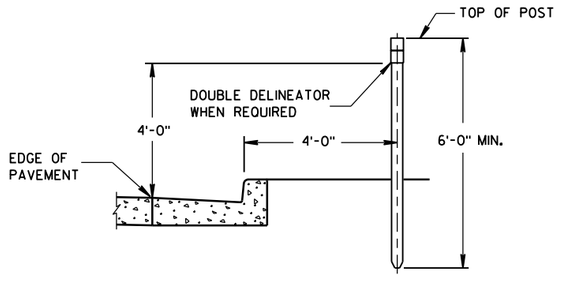
DELINEATOR POST



SECTION A-A

WEIGHT 1.12 LBS PER FT. ± 0.1 LB.



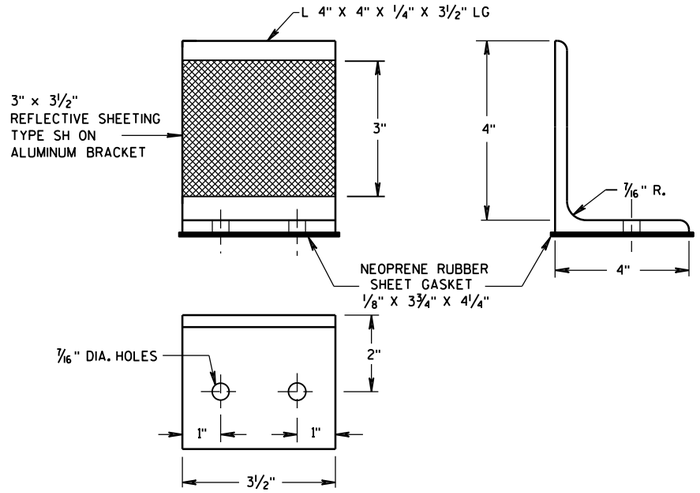


TYPICAL INSTALLATIONS OF DELINEATOR POSTS

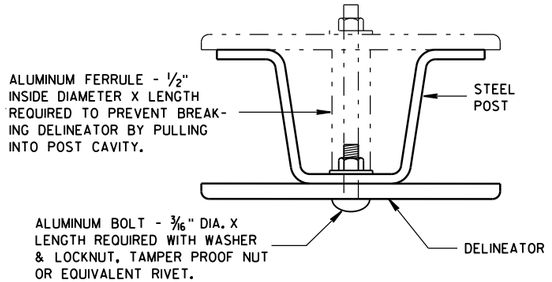
GENERAL NOTES

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

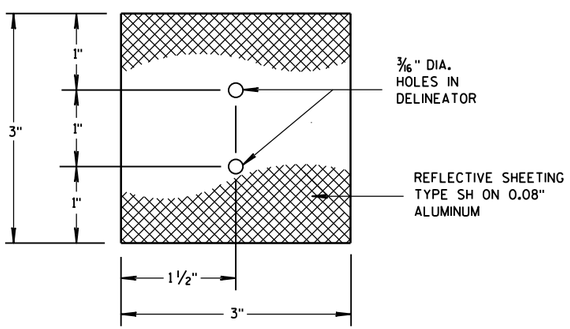
① DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.



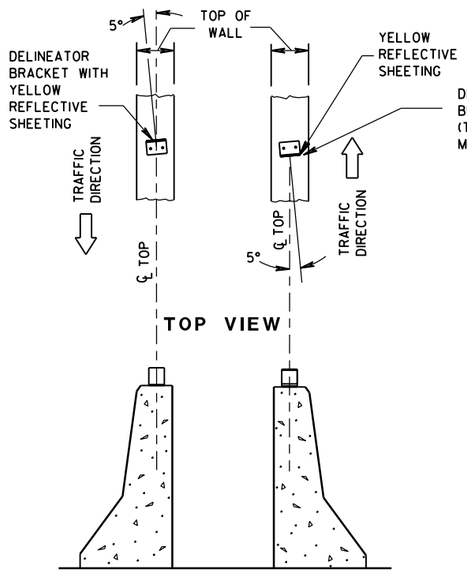
DELINEATOR BRACKET



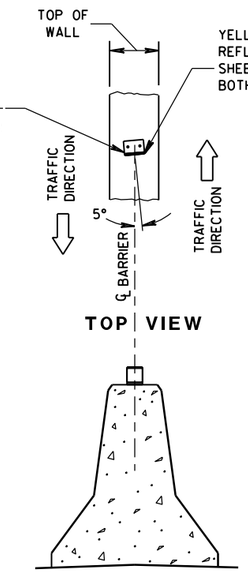
MOUNTING DETAIL FOR DELINEATOR



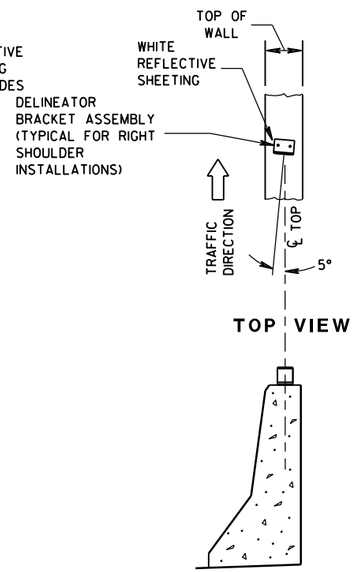
3"x 3" DELINEATOR



DOUBLE BARRIERS IN MEDIAN

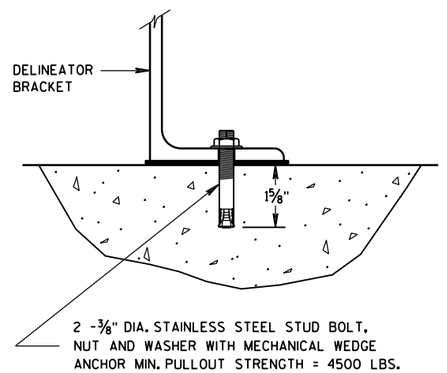


MEDIAN BARRIER



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

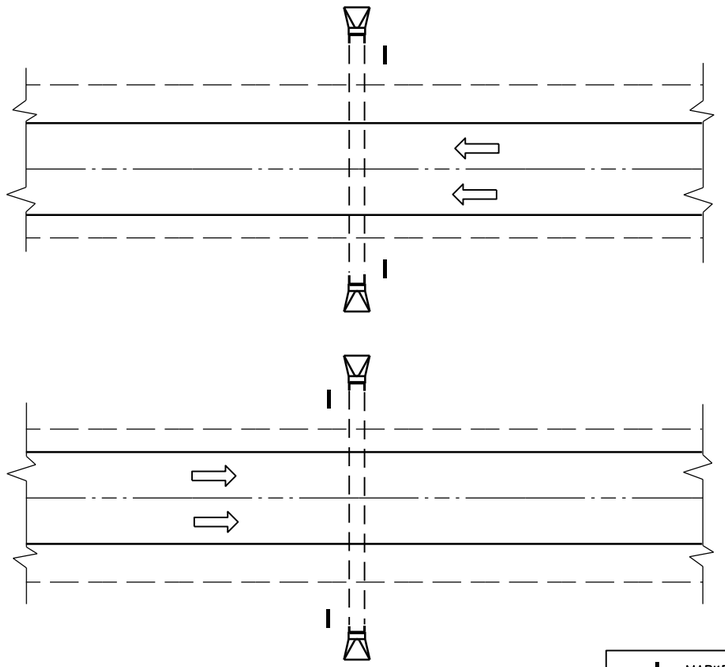
APPROVED
7/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC E 377
FHWA

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S.D.D. 15 A 2-8

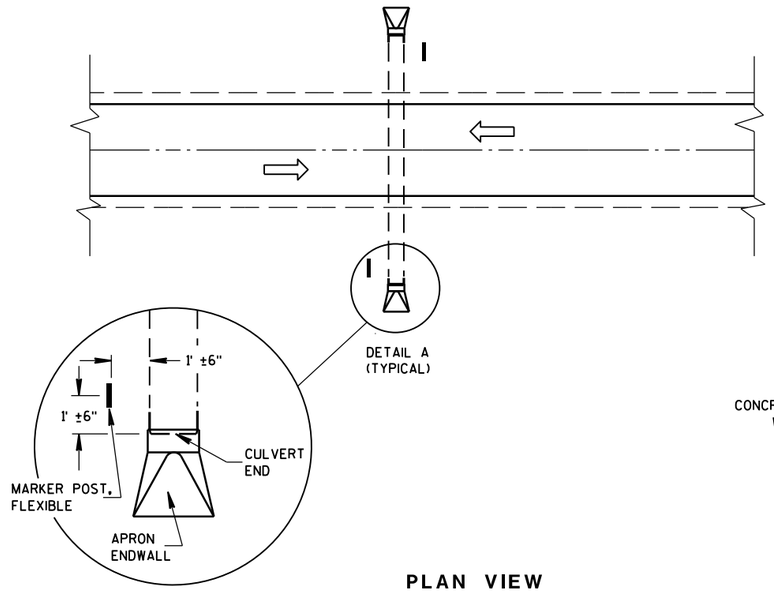
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S.D.D. 15 A 2-8



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

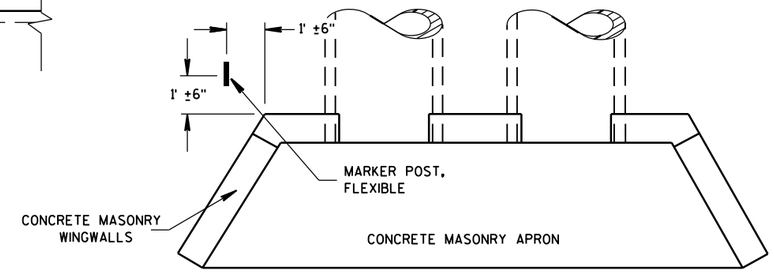
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

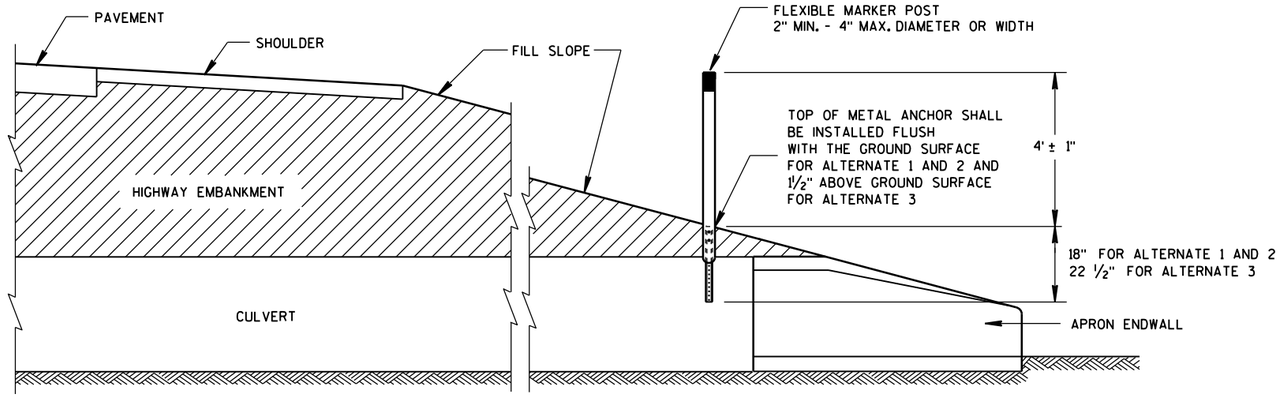
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

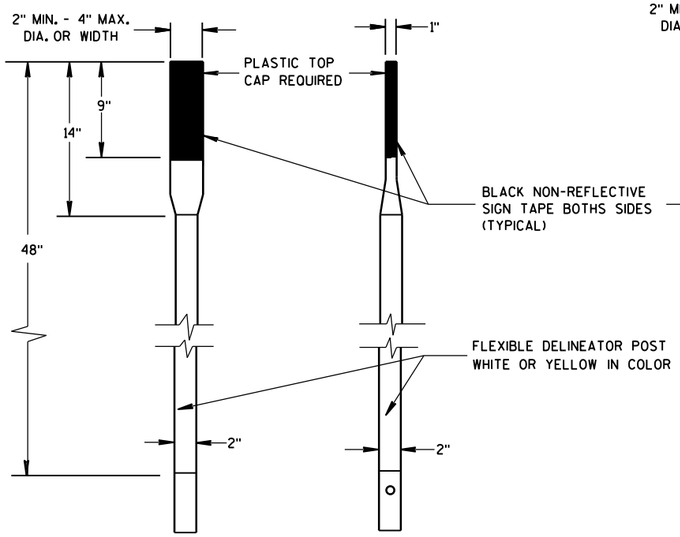
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

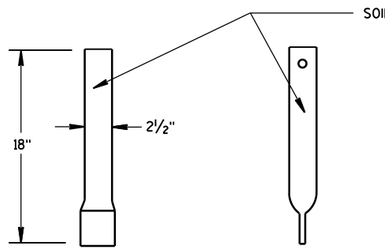
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S.D.D. 15 A 3-2a

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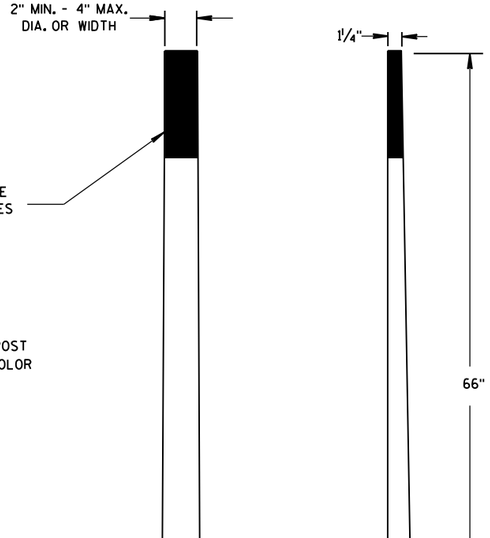
S.D.D. 15 A 3-2a





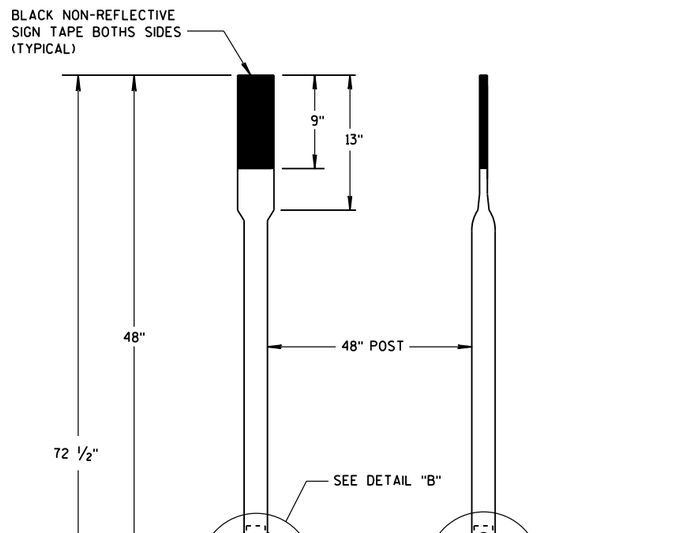
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

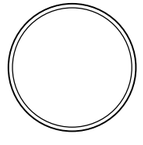
ALTERNATE 2



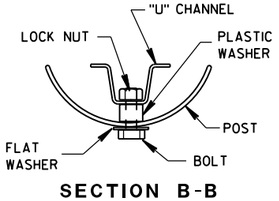
FRONT VIEW SIDE VIEW

ALTERNATE 3

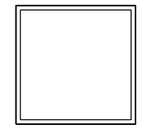
FLEXIBLE MARKER POSTS



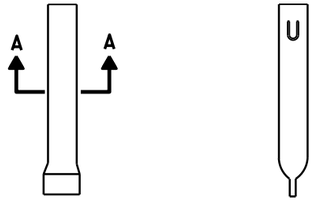
SECTION A-A



SECTION B-B

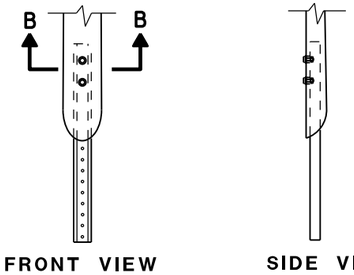


SECTION C-C



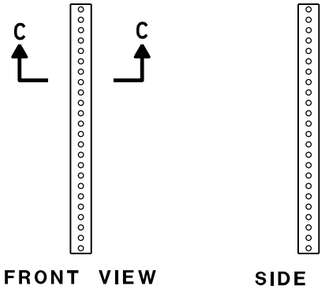
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

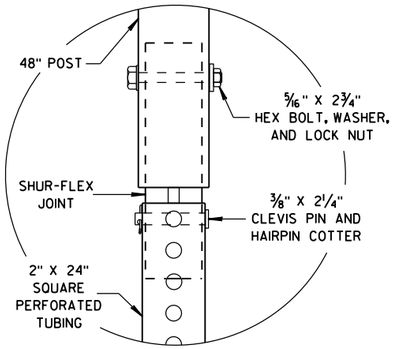
ALTERNATE 2



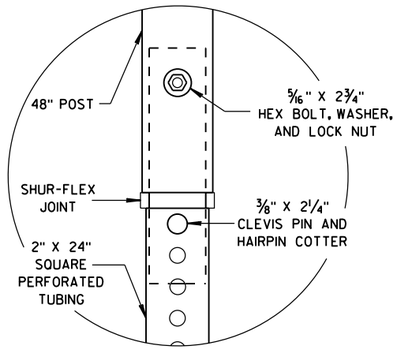
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

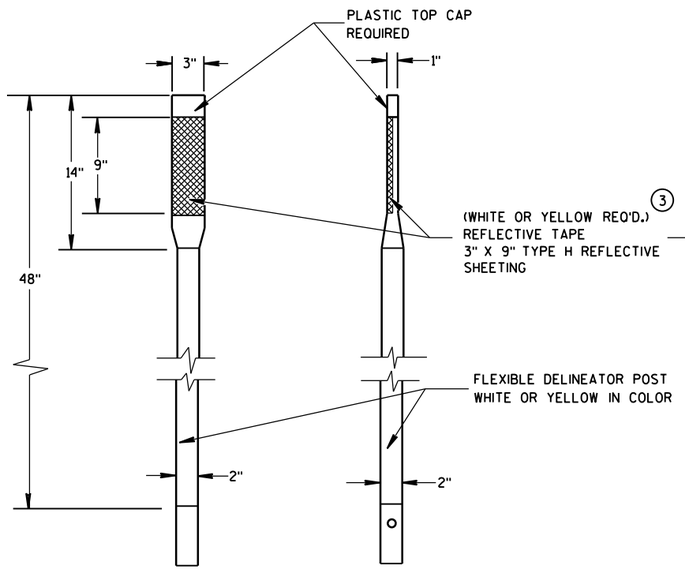
APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

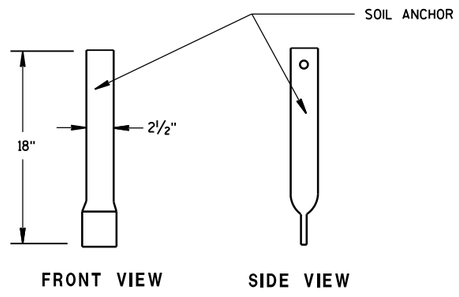
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S.D.D. 15 A 3-2b

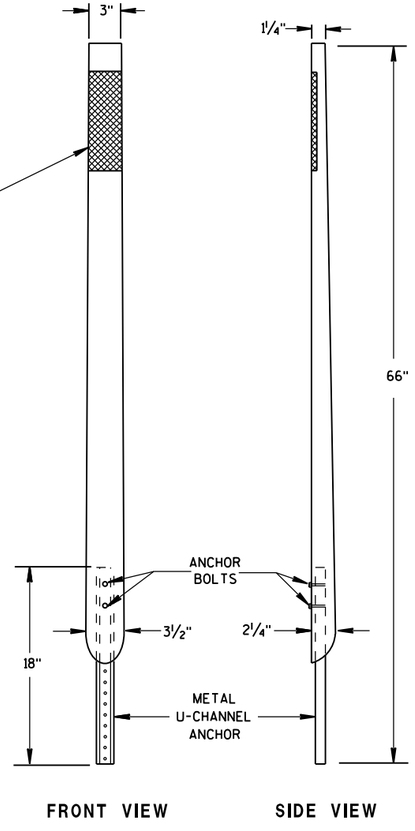
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S.D.D. 15 A 3-2b

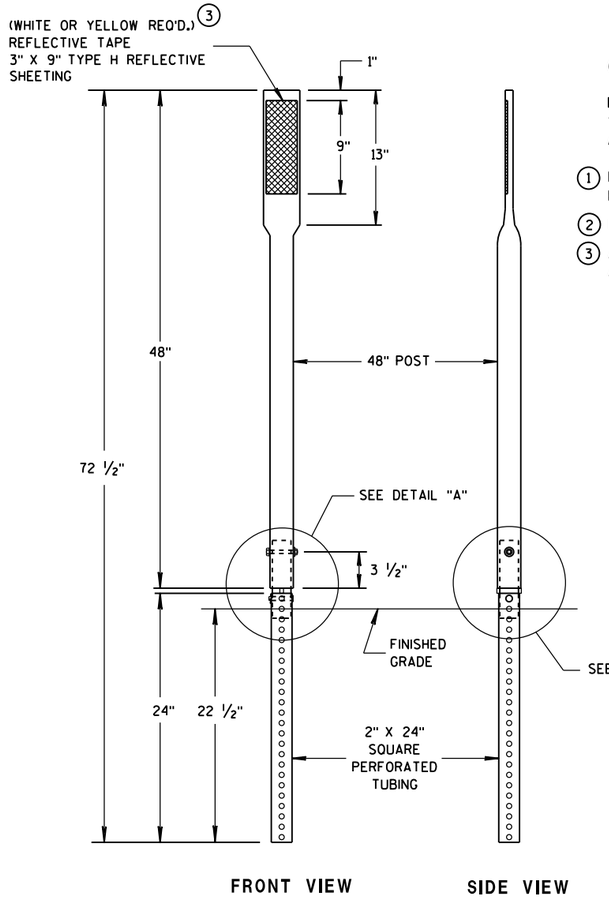




ALTERNATE 1



ALTERNATE 2



ALTERNATE 3

FLEXIBLE DELINEATOR POSTS

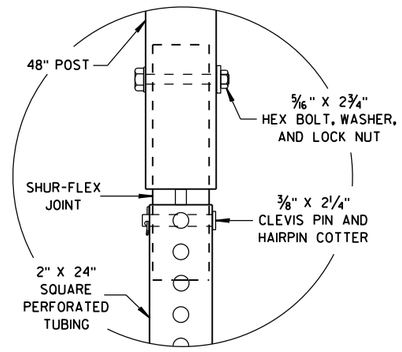
GENERAL NOTES

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

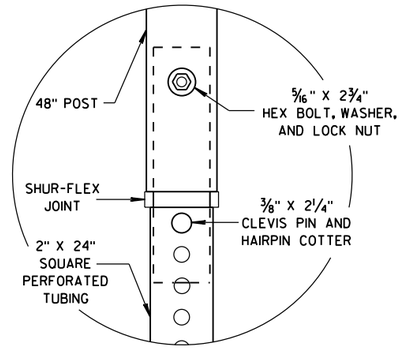
(1) DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.

(2) EITHER ALTERNATE NO. 1, NO. 2 OR NO. 3 MAY BE FURNISHED.

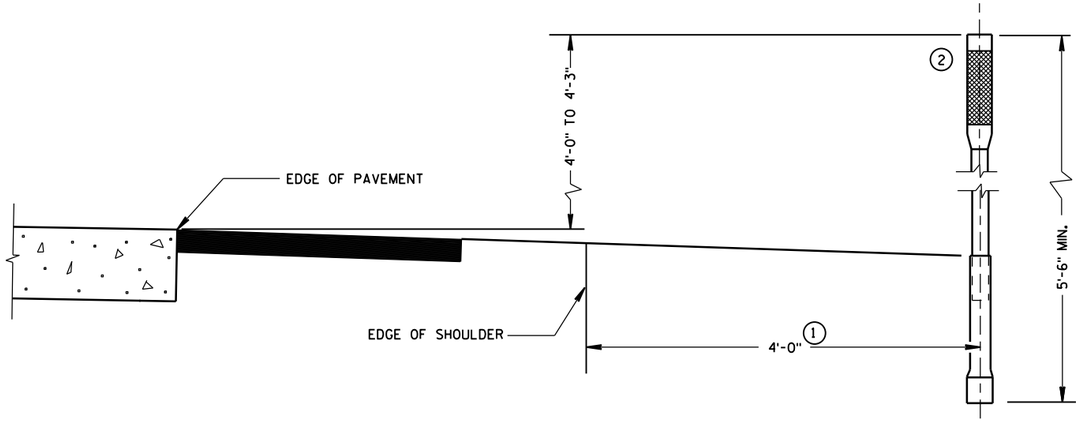
(3) AS PER SECTION 637.2.2.2. OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

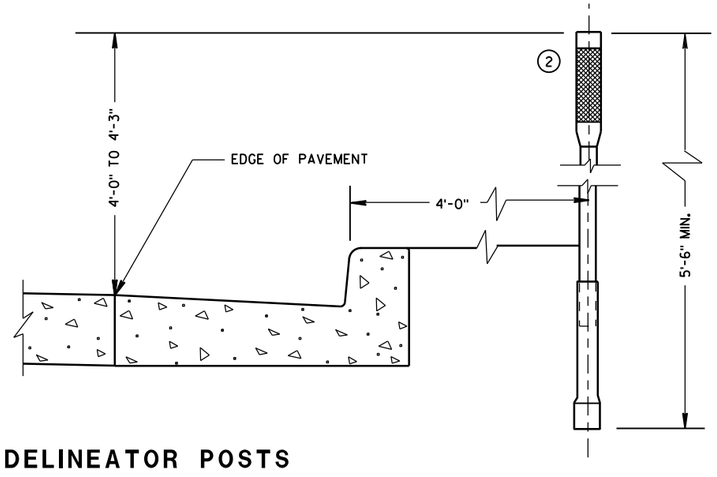


DETAIL A



DETAIL B





TYPICAL INSTALLATIONS OF FLEXIBLE DELINEATOR POSTS

FLEXIBLE DELINEATOR POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-26-2012 DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

6

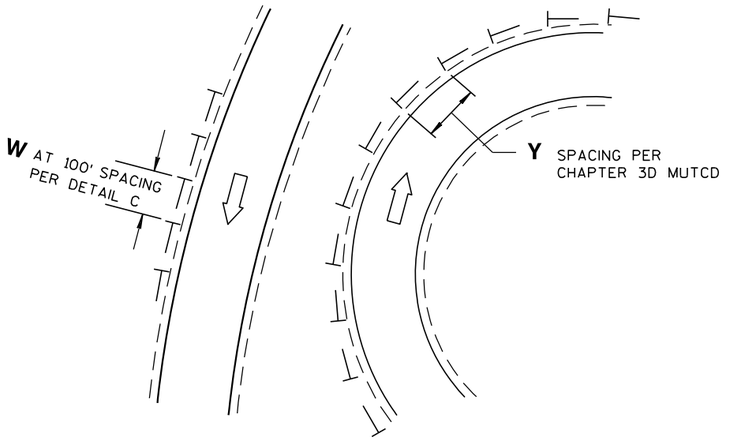
S.D.D. 15 A 4-2

6

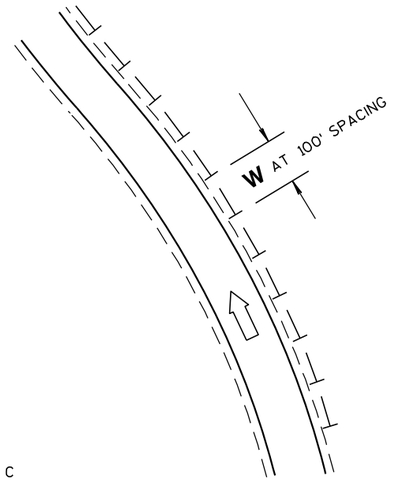
S.D.D. 15 A 4-2

GENERAL NOTES

* USE DOUBLE DELINEATOR ALONG ACCELERATION-DECELERATION LANES AND TAPERS. USE SINGLE DELINEATOR WHEN RAMP PAVEMENT IS FULL WIDTH.



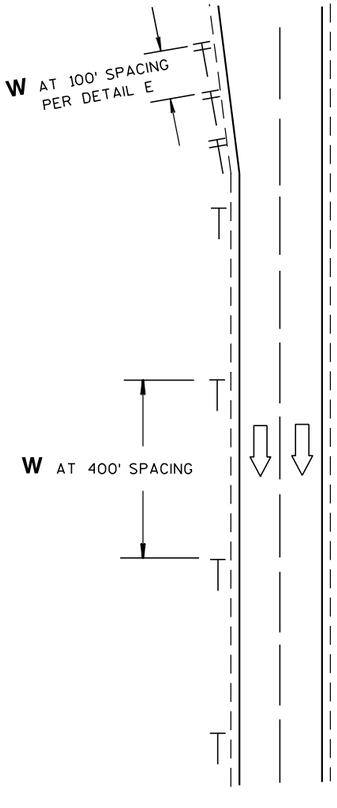
DETAIL A
DELINEATOR LAYOUT AT CURVED RAMP



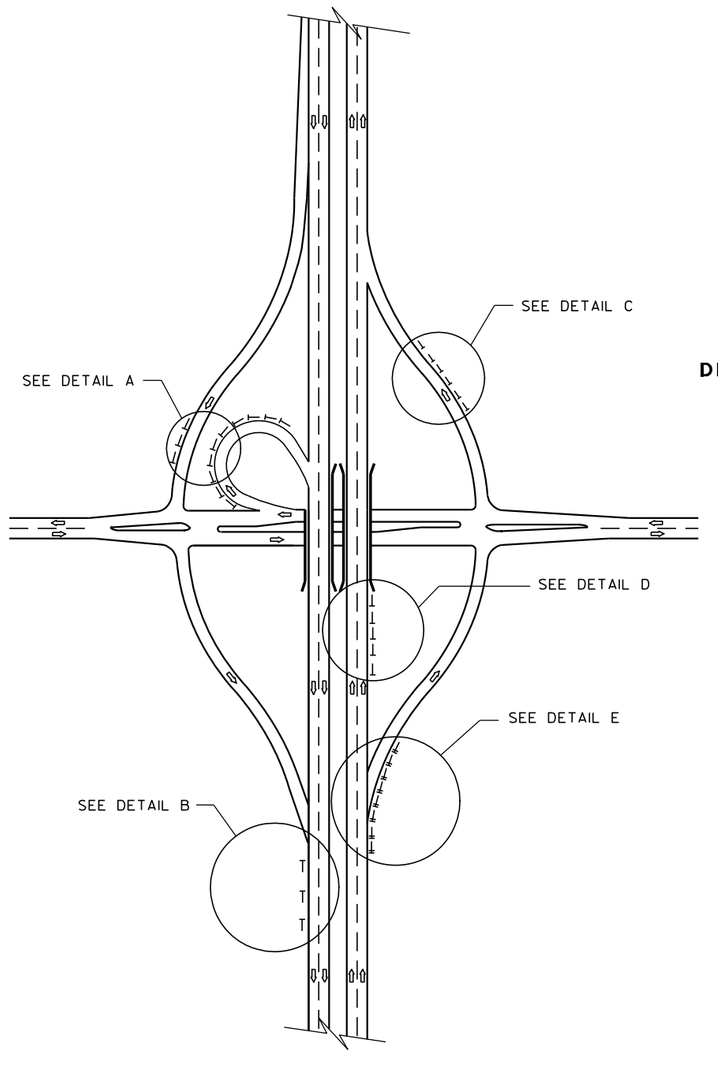
DETAIL C
DELINEATOR LAYOUT ALONG RAMP

LEGEND

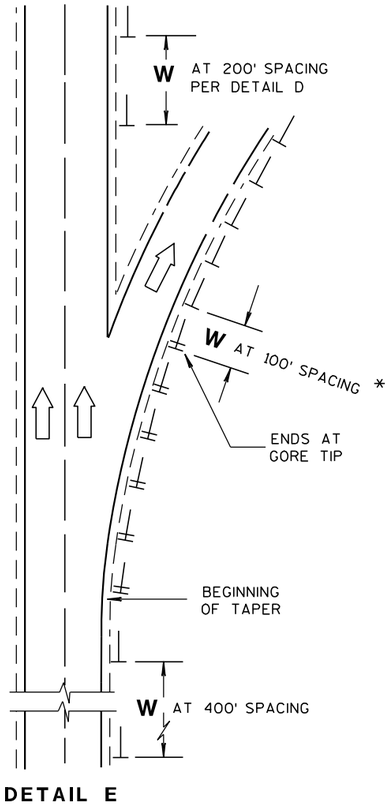
- DIRECTION OF TRAFFIC FLOW
- SINGLE DELINEATOR
- DOUBLE DELINEATOR
- W — WHITE
- Y — YELLOW



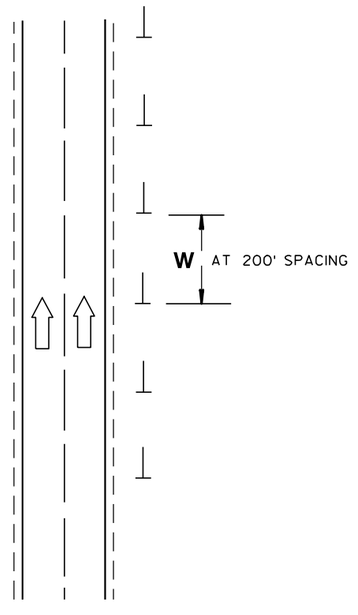
DETAIL B
DELINEATOR LAYOUT ALONG MAINLINE



DELINEATOR LAYOUT



DETAIL E
DELINEATOR LAYOUT FOR ACCELERATION - DECELERATION LANES AND TAPERS AT RAMPS



DETAIL D
DELINEATOR LAYOUT BETWEEN INTERCHANGE RAMPS

DELINEATOR LAYOUT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

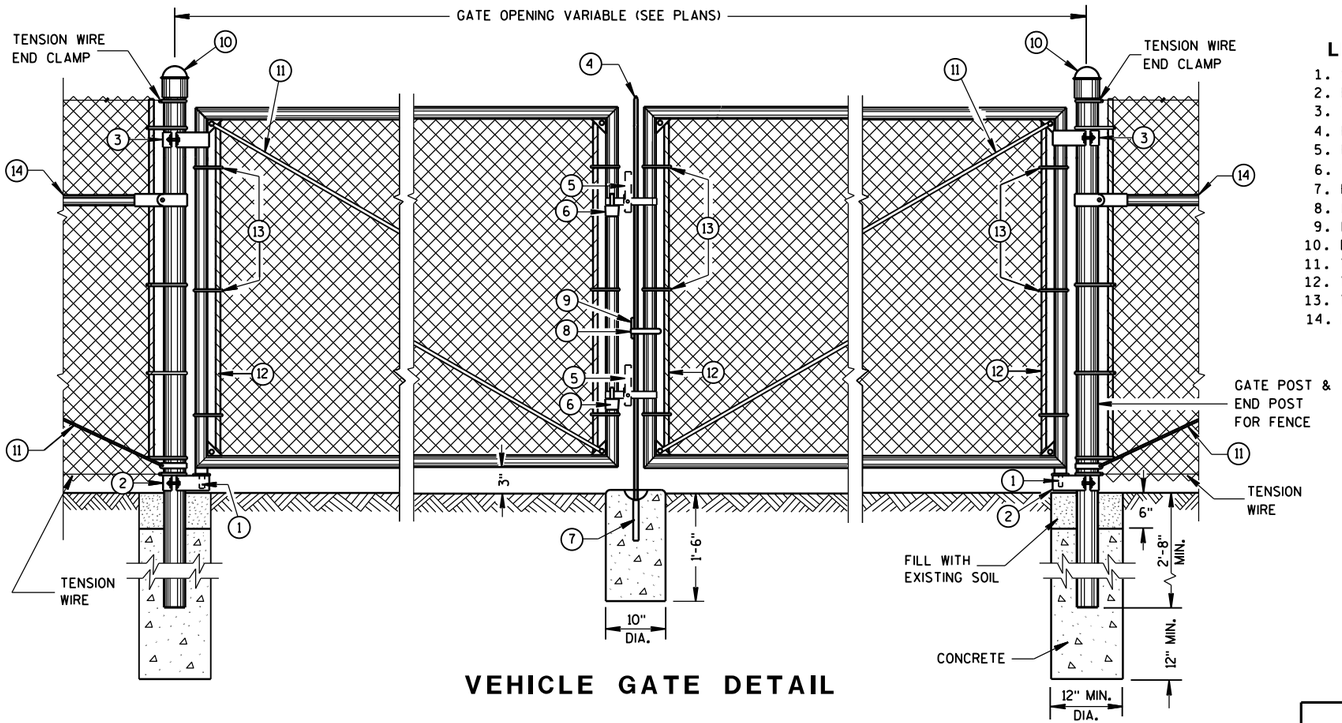
APPROVED
2/5/09 DATE
/S/ Thomas N. Nothdurft STATE TRAFFIC ENGINEER
FHWA

6

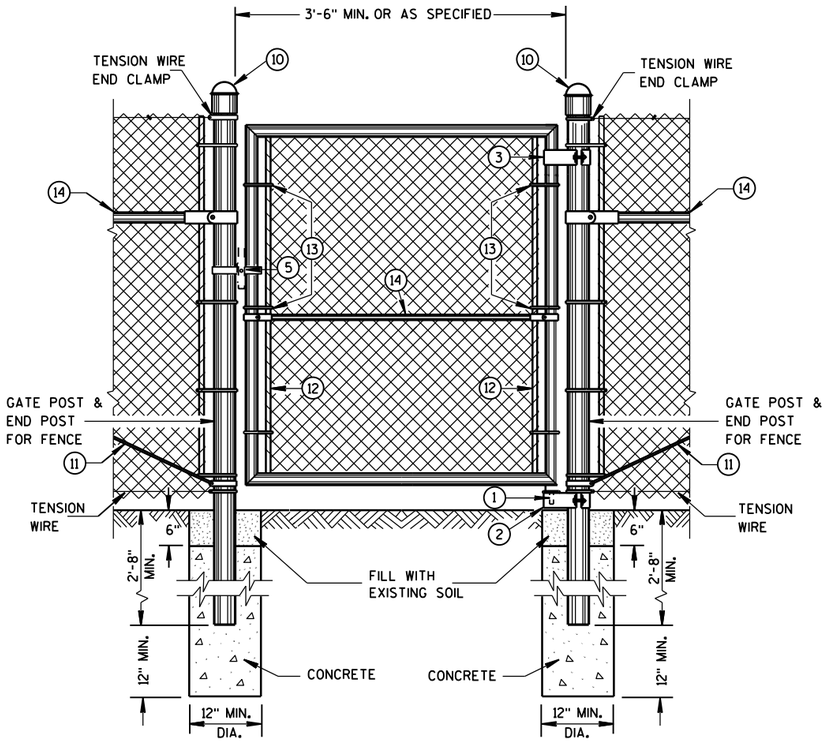
S.D.D. 15 A 6-2

6

S.D.D. 15 A 6-2



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH *
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

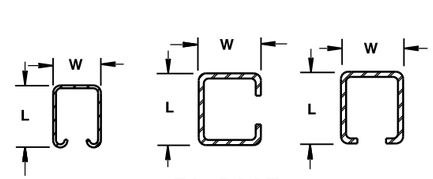
FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

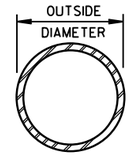
FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.



FS POST



SP POST & RAIL

CROSS SECTIONS OF POSTS AND RAILS

SHAPE, SIZE AND WEIGHT REQUIREMENTS FOR FORMED STEEL FENCE POST

POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.400
FS3	2.250	1.700	2.780

SHAPE, SIZE AND WEIGHT REQUIREMENTS FOR ROUND STEEL FENCE POST

POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS **	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

REQUIRED POST SIZE FOR GATES

USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

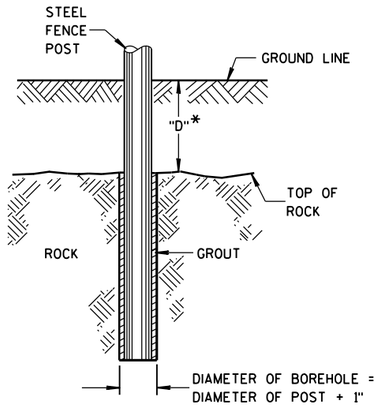
** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

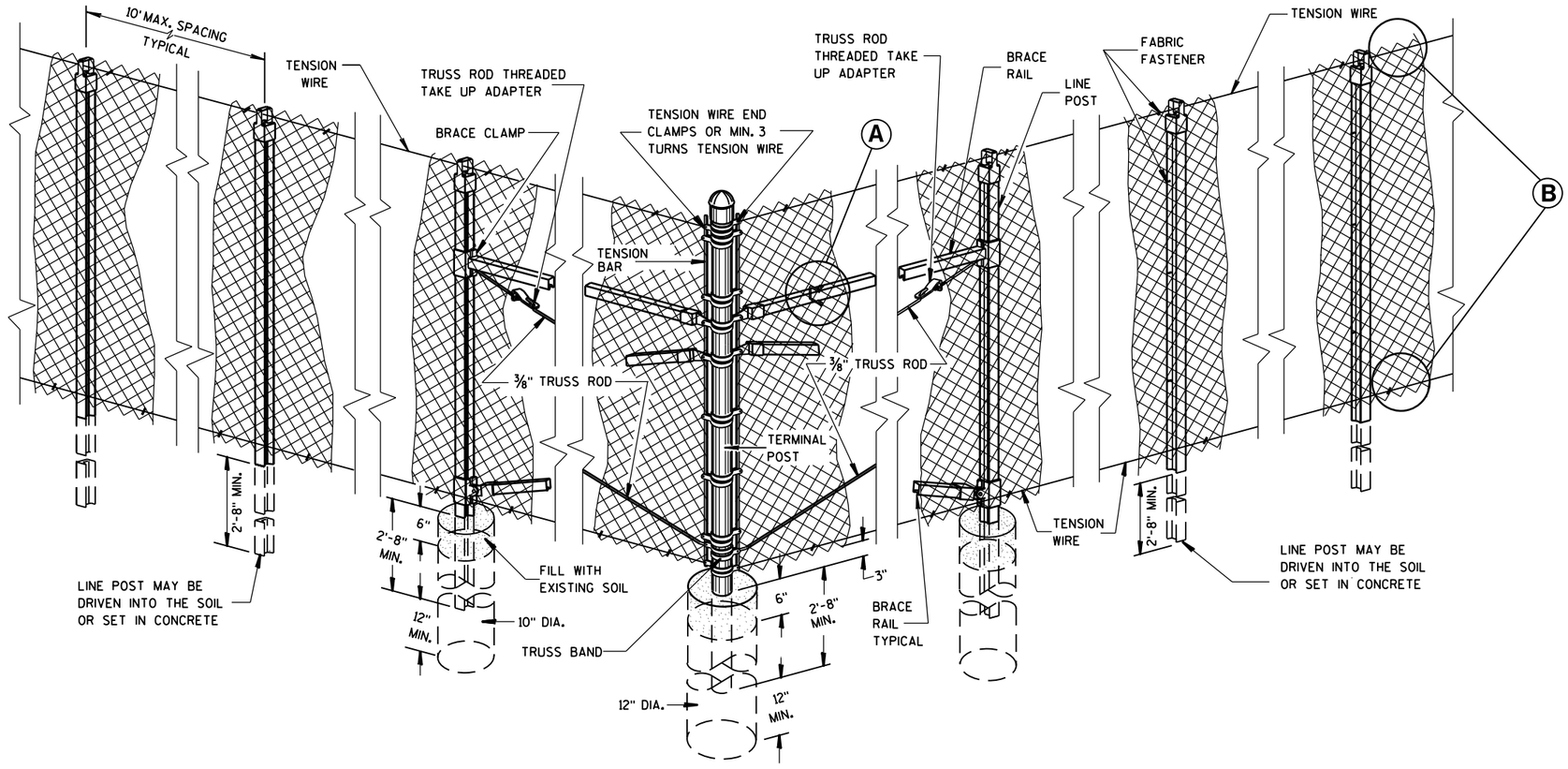
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S.D.D. 15 B 3-13a

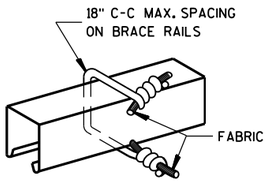


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



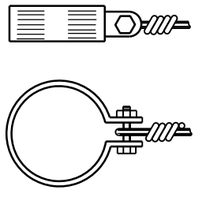
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



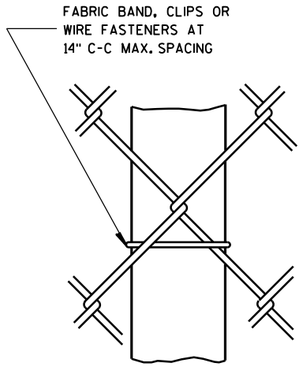
BRACE RAIL

FABRIC FASTENER

Ⓐ



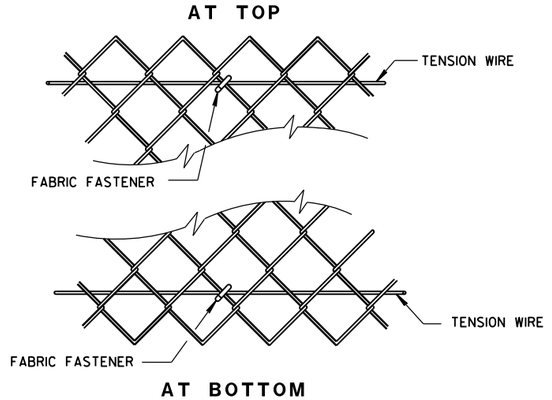
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

Ⓑ

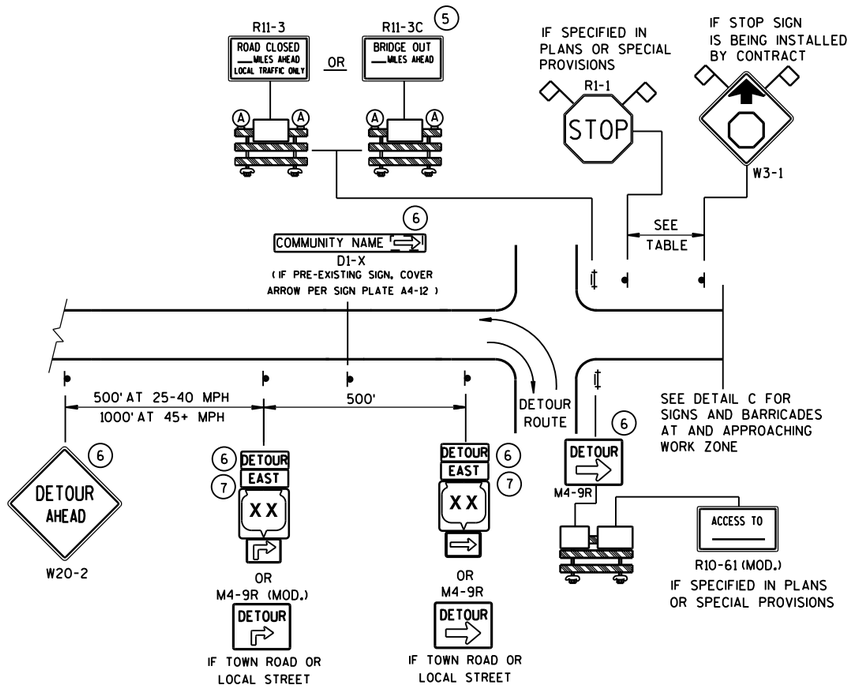
FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/16/2013 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

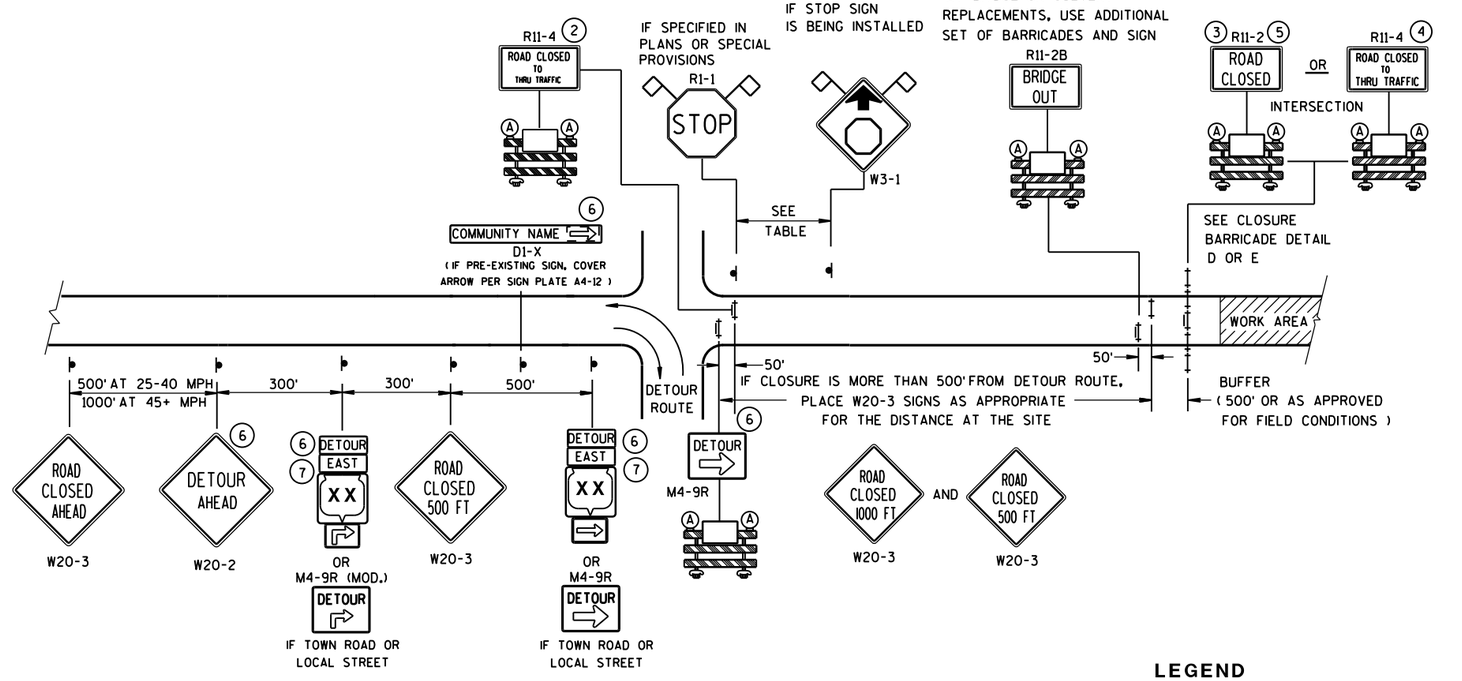
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S.D.D. 15 B 3-13b



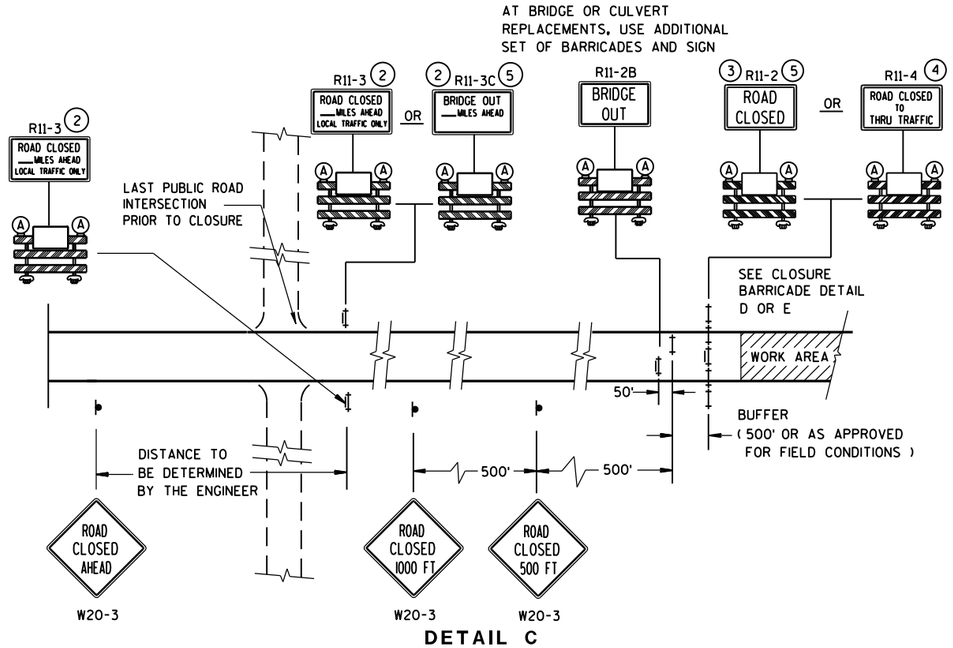
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

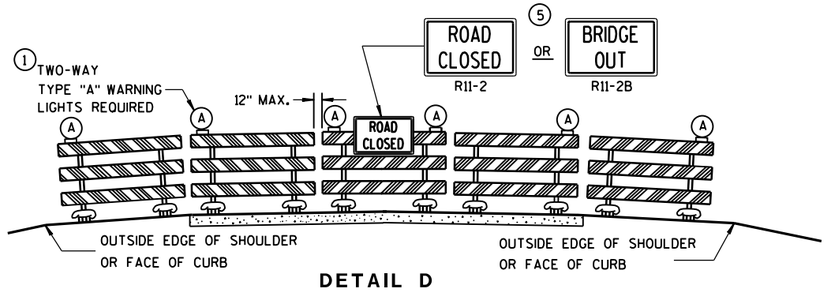
8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

6

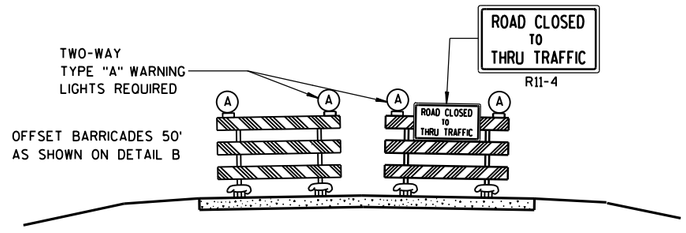
S.D.D. 15 C 2-5a



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 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 2-5b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

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.

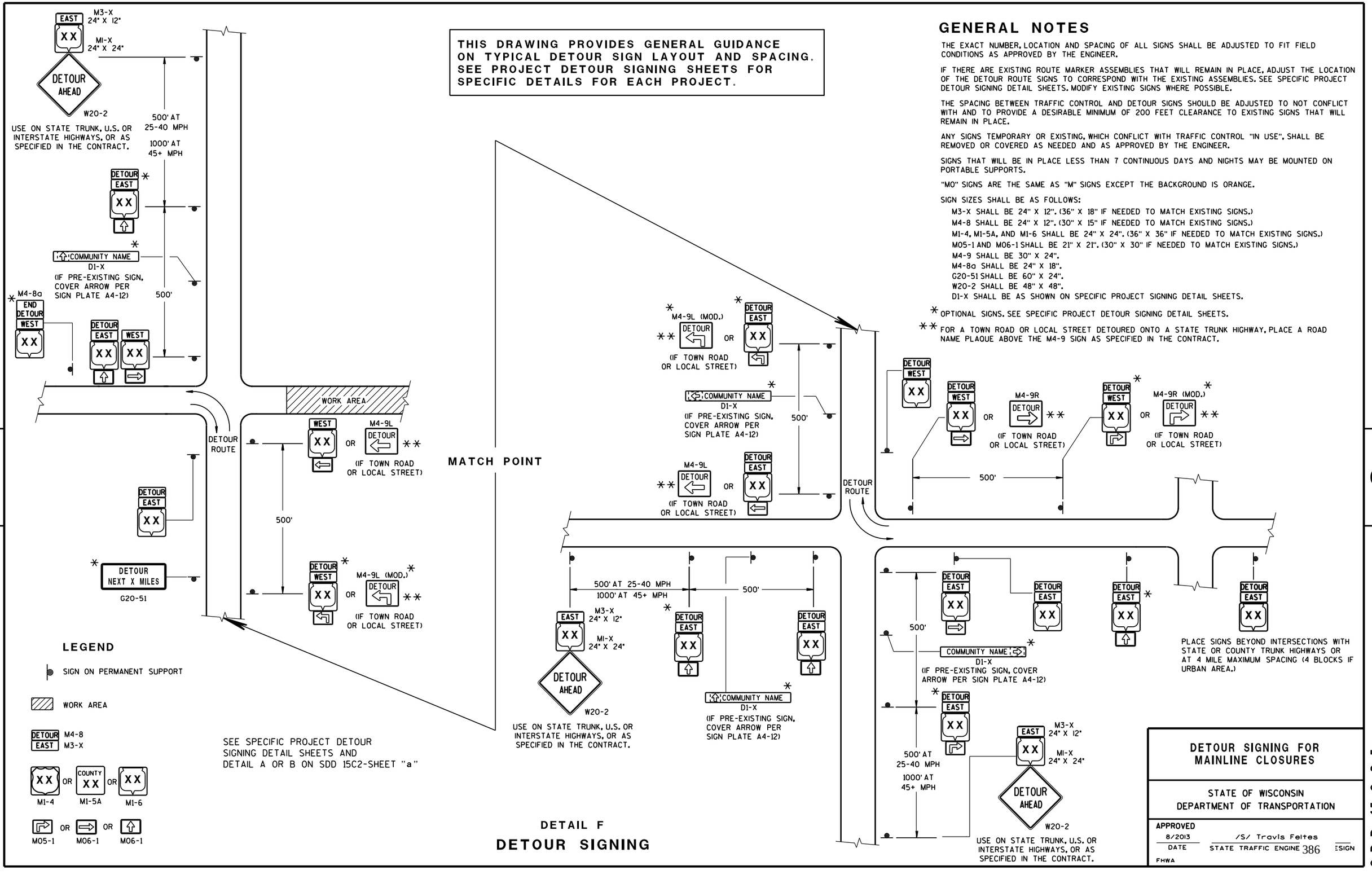
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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.



DETAIL F

DETOUR SIGNING

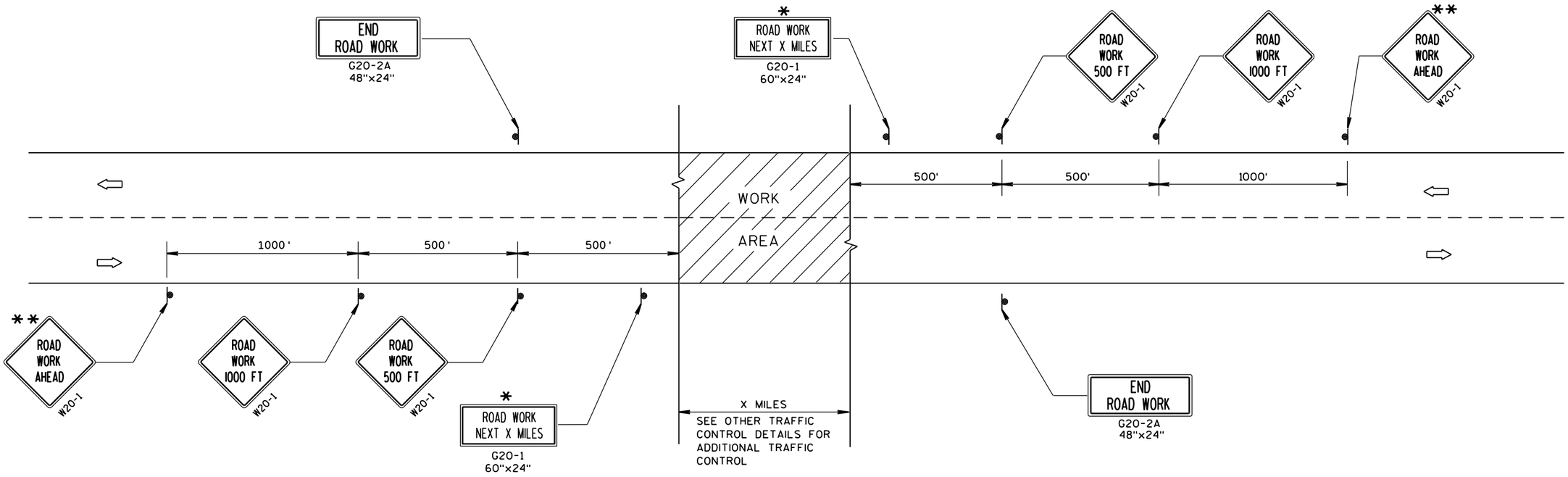
DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

S.D.D. 15 C 2-5c

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.

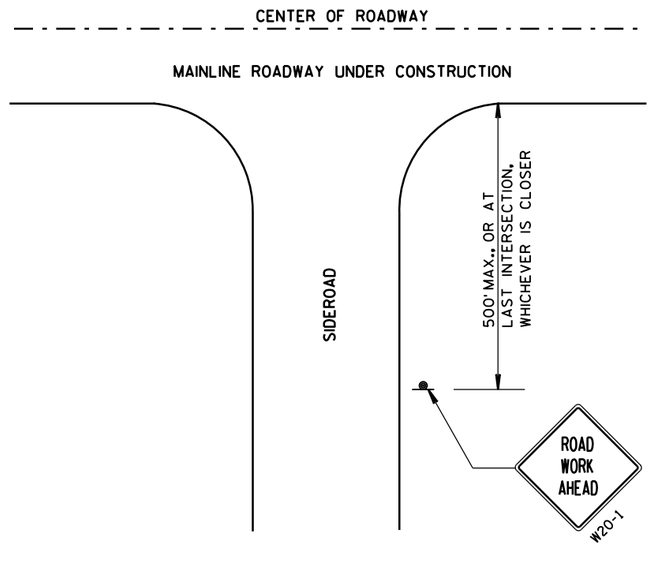
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

FHWA

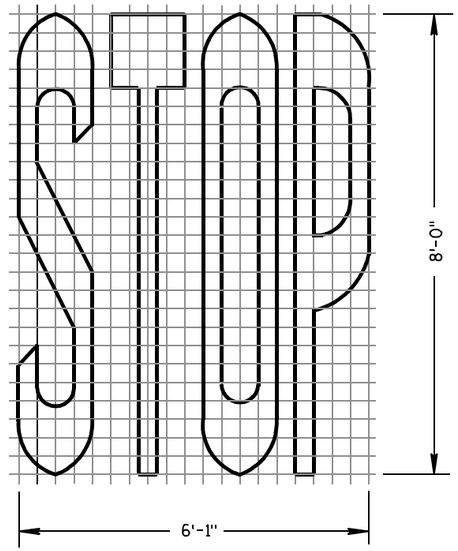
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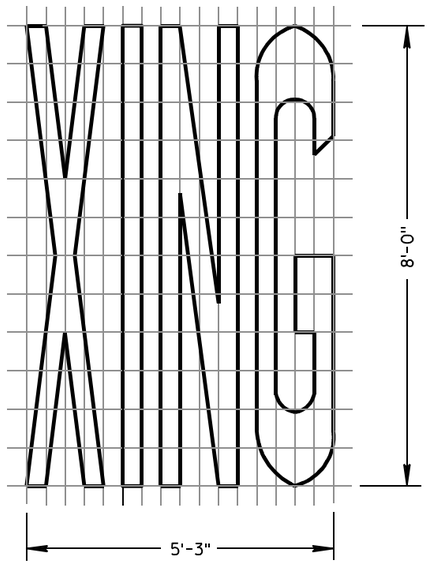
S.D.D. 15 C 4-2

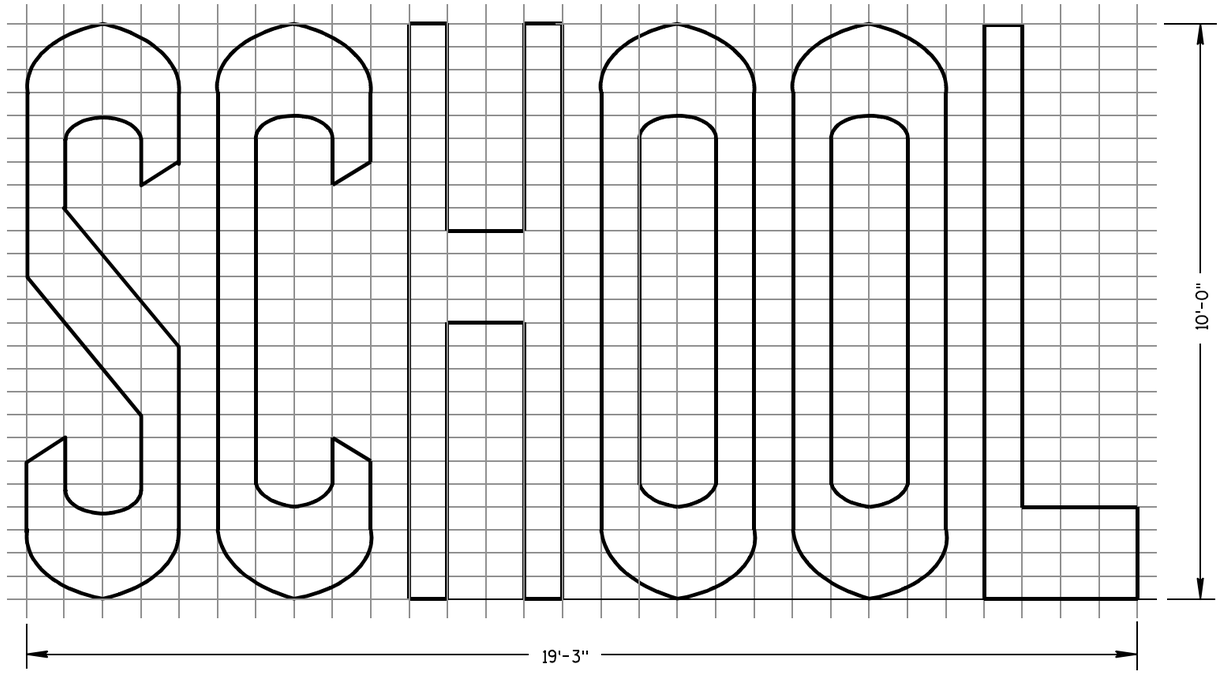
GENERAL NOTES

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

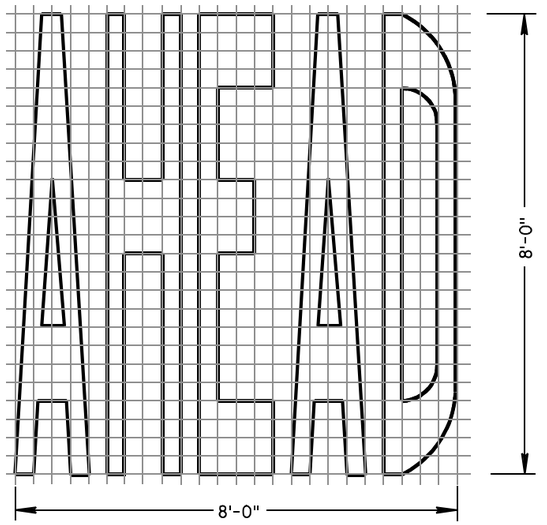
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

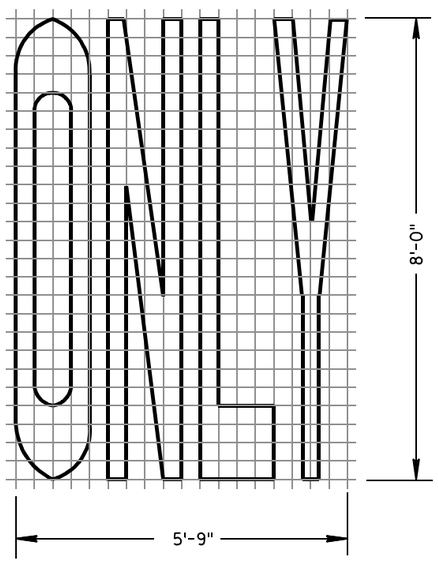


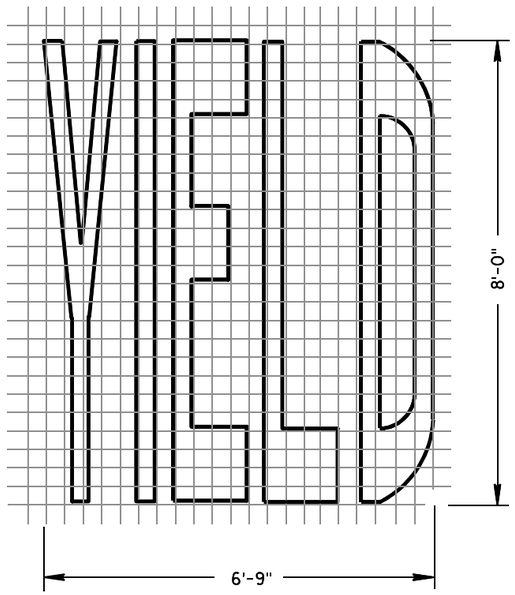


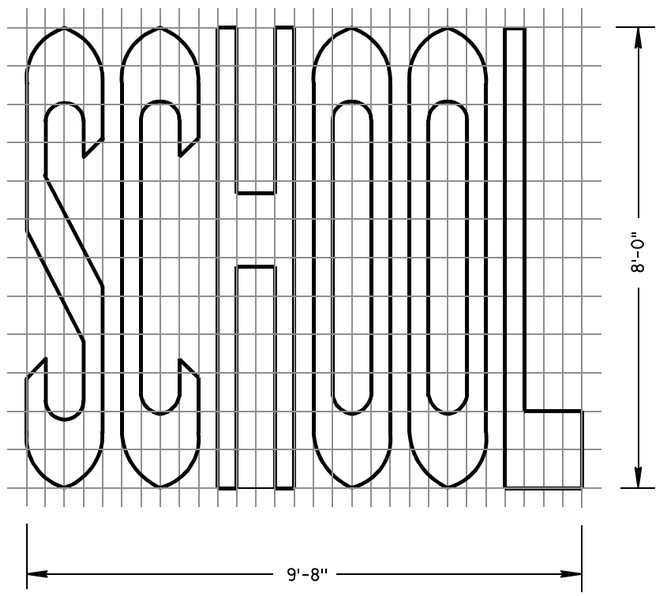


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 — DATE

/S/ Thomas N. Nothohm — STATE TRAFFIC ENGINEER

388 — IGN

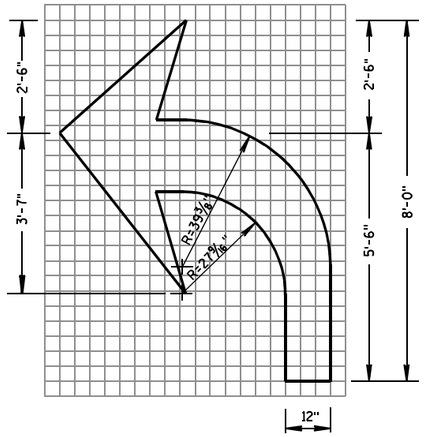
FHWA

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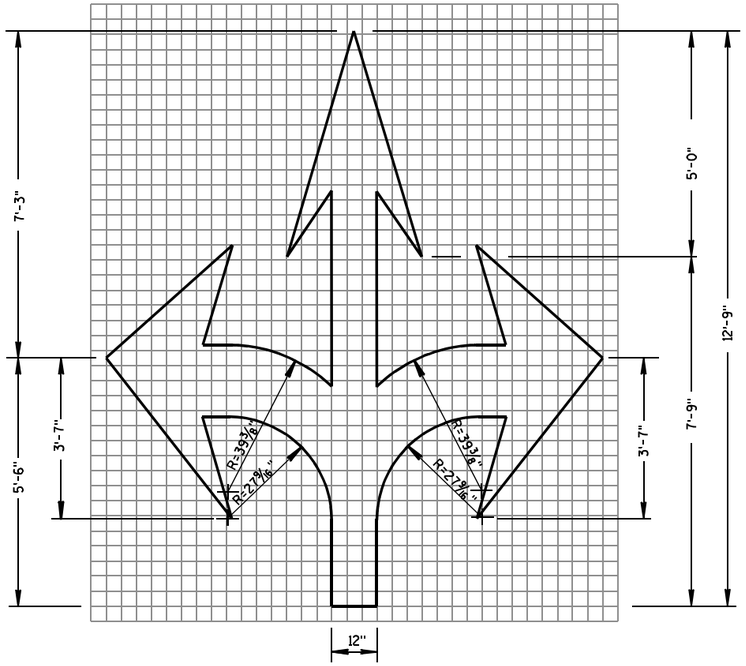
S.D.D. 15 C 7-12b

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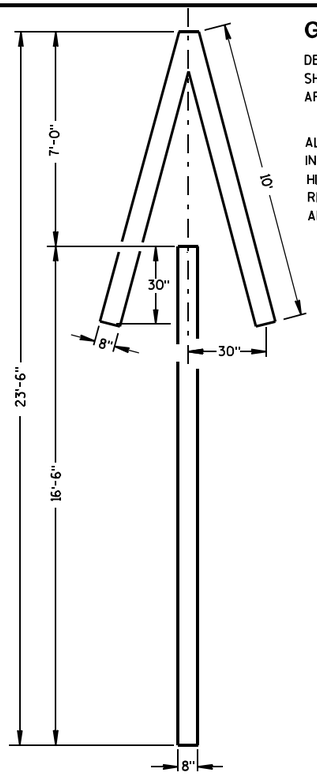
S.D.D. 15 C 7-12b



TYPE 2



TYPE 6

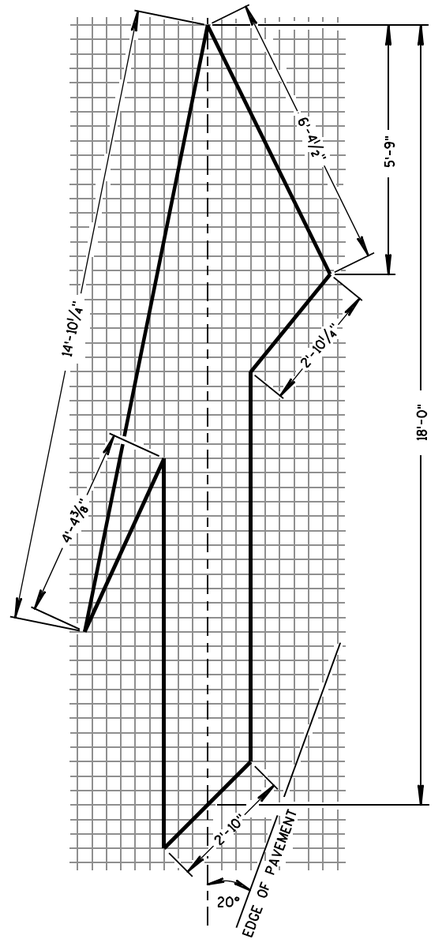


TYPE 4

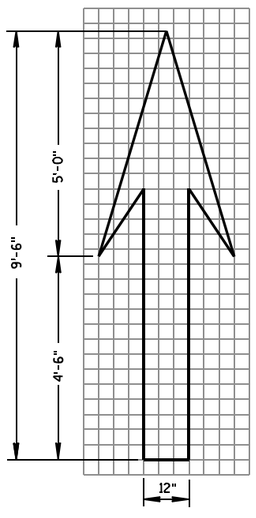
GENERAL NOTES

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

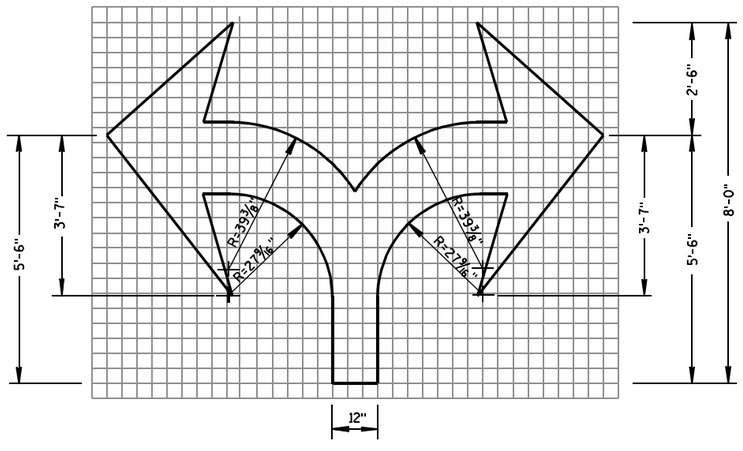
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



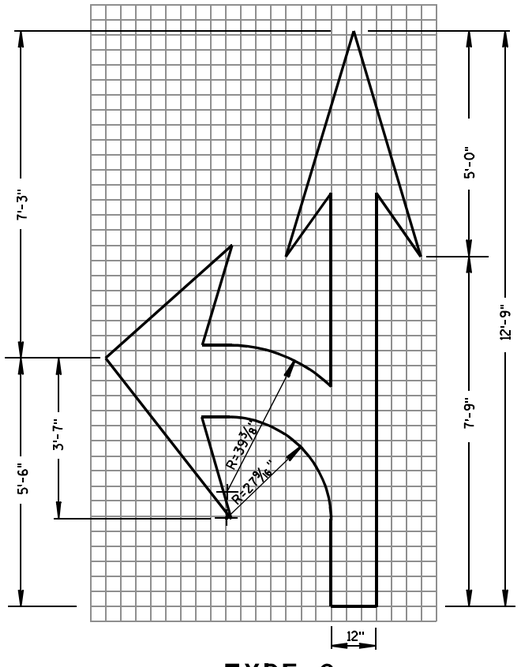
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

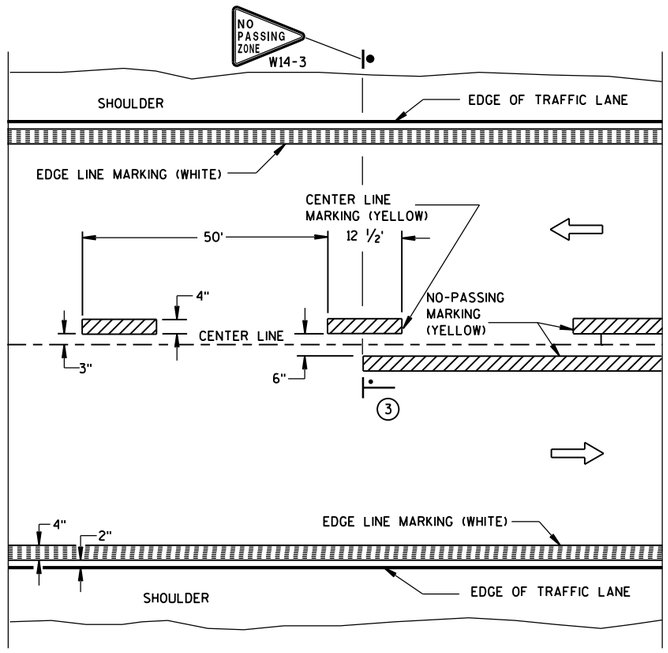
PAVEMENT MARKING ARROWS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 7/1/11 DATE	/S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER
FHWA	

6

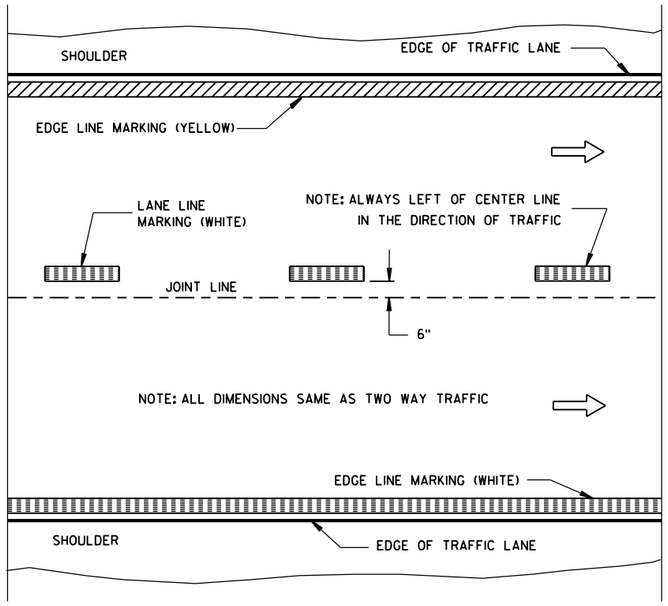
S.D.D. 15 C 7-12c

6

S.D.D. 15 C 7-12c

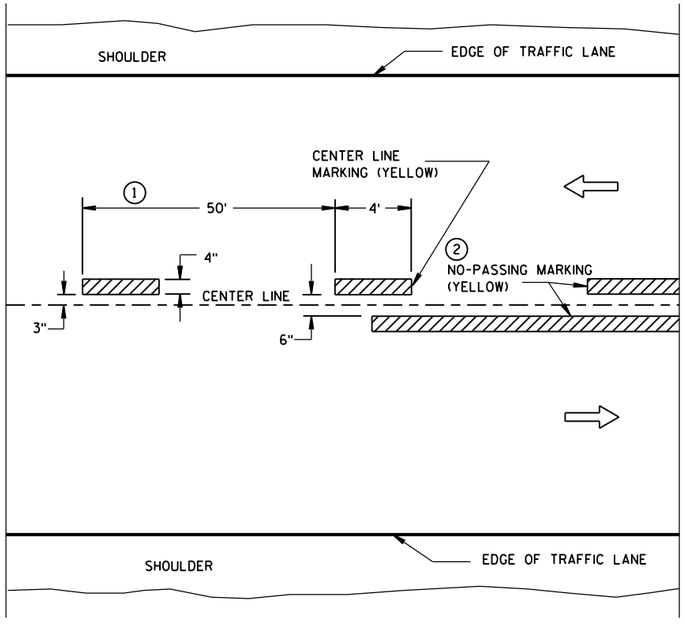


TWO WAY TRAFFIC

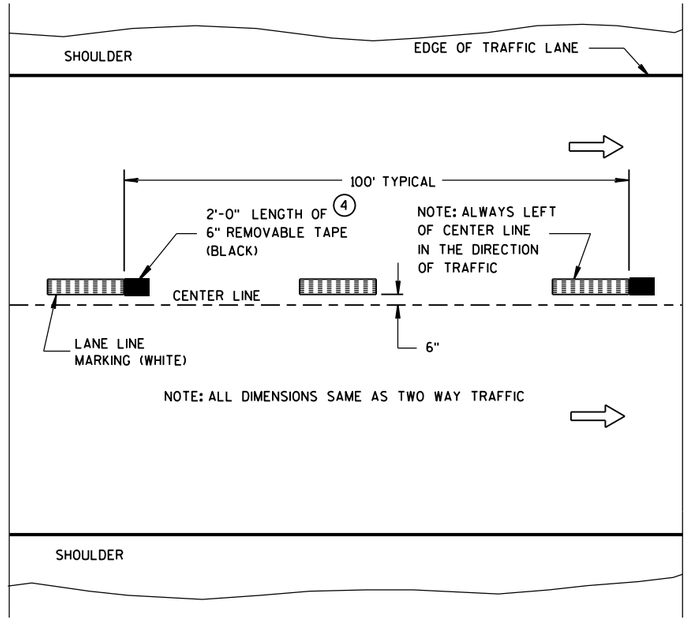


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

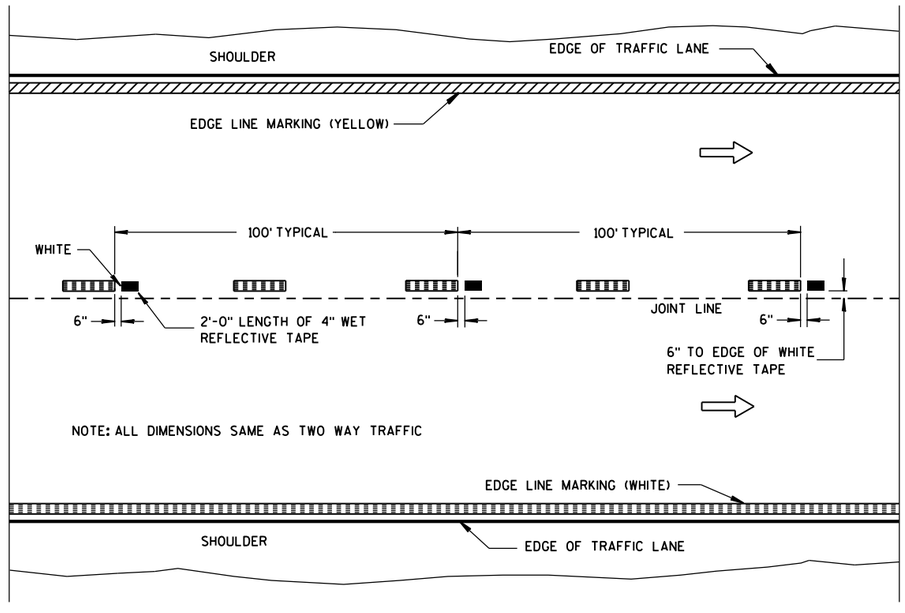
GENERAL NOTES

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

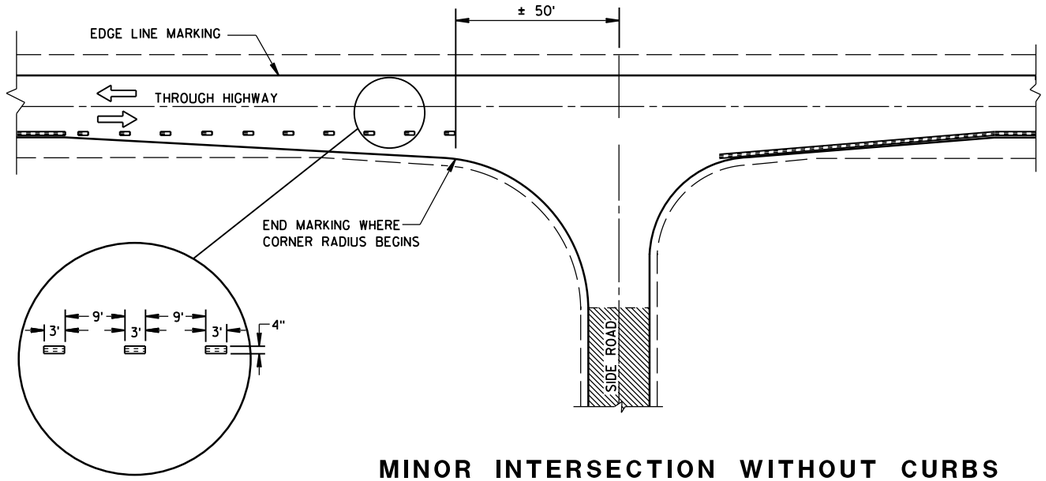
PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-13-2013 DATE
/S/ Travis Feltes STATE TRAFFIC E
FHWA

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S.D.D. 15 C 8-16a



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.

(4) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

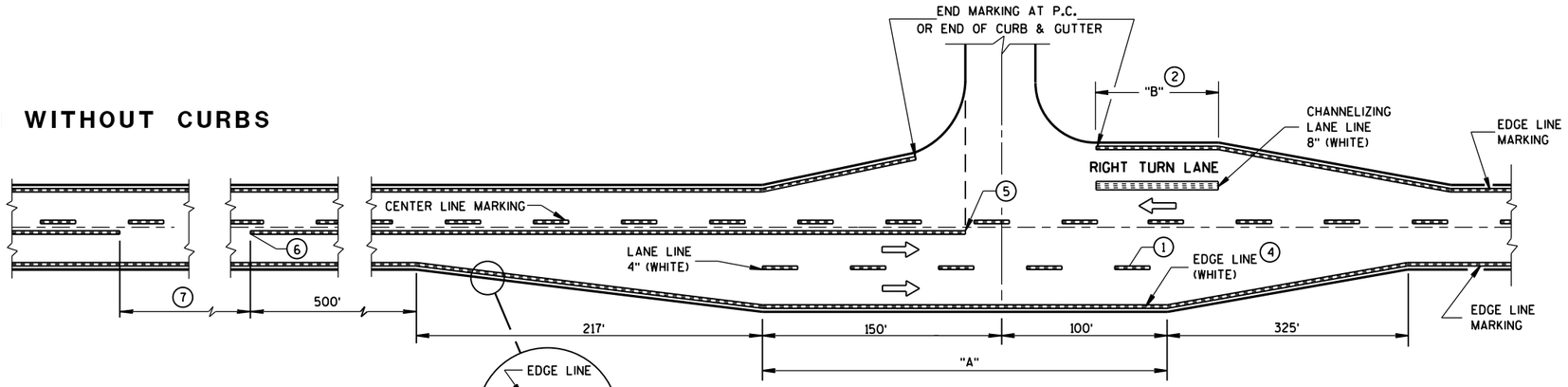
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

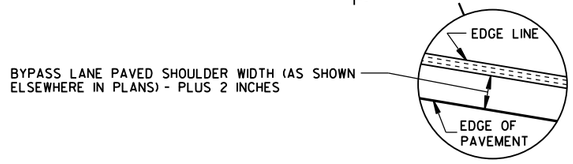
(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

(7)

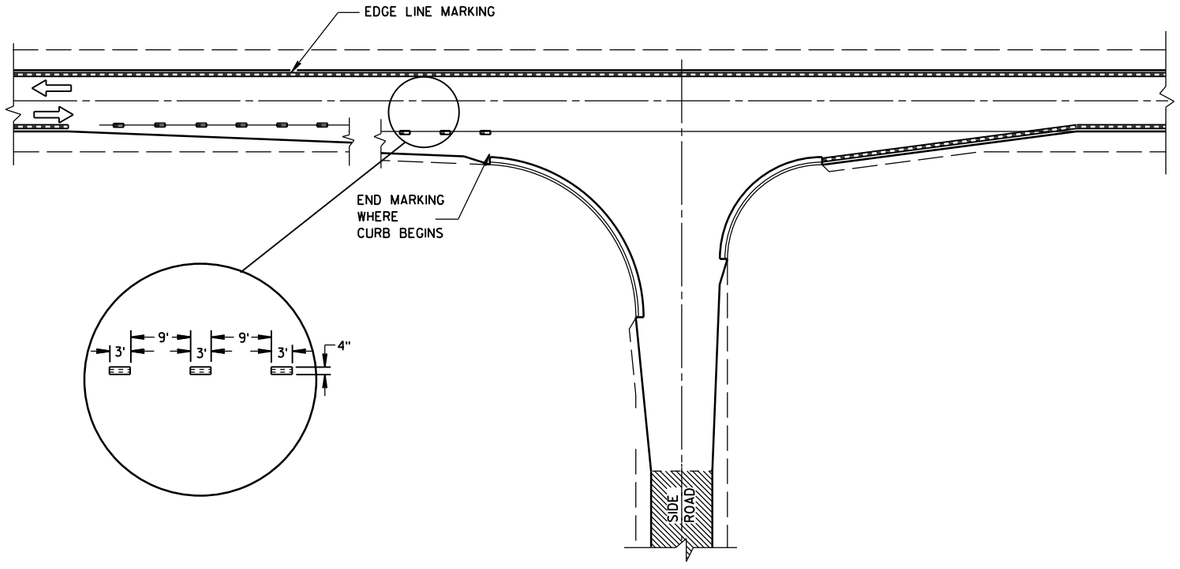
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792





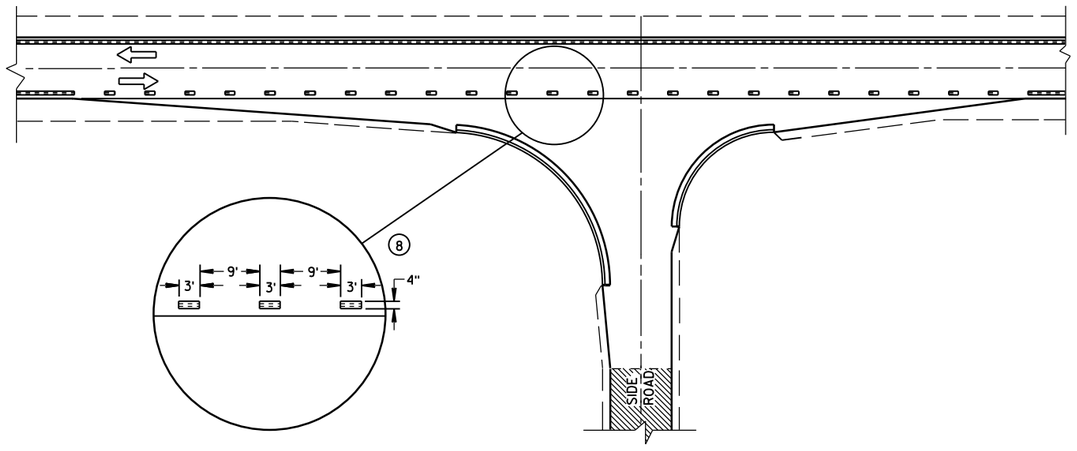
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

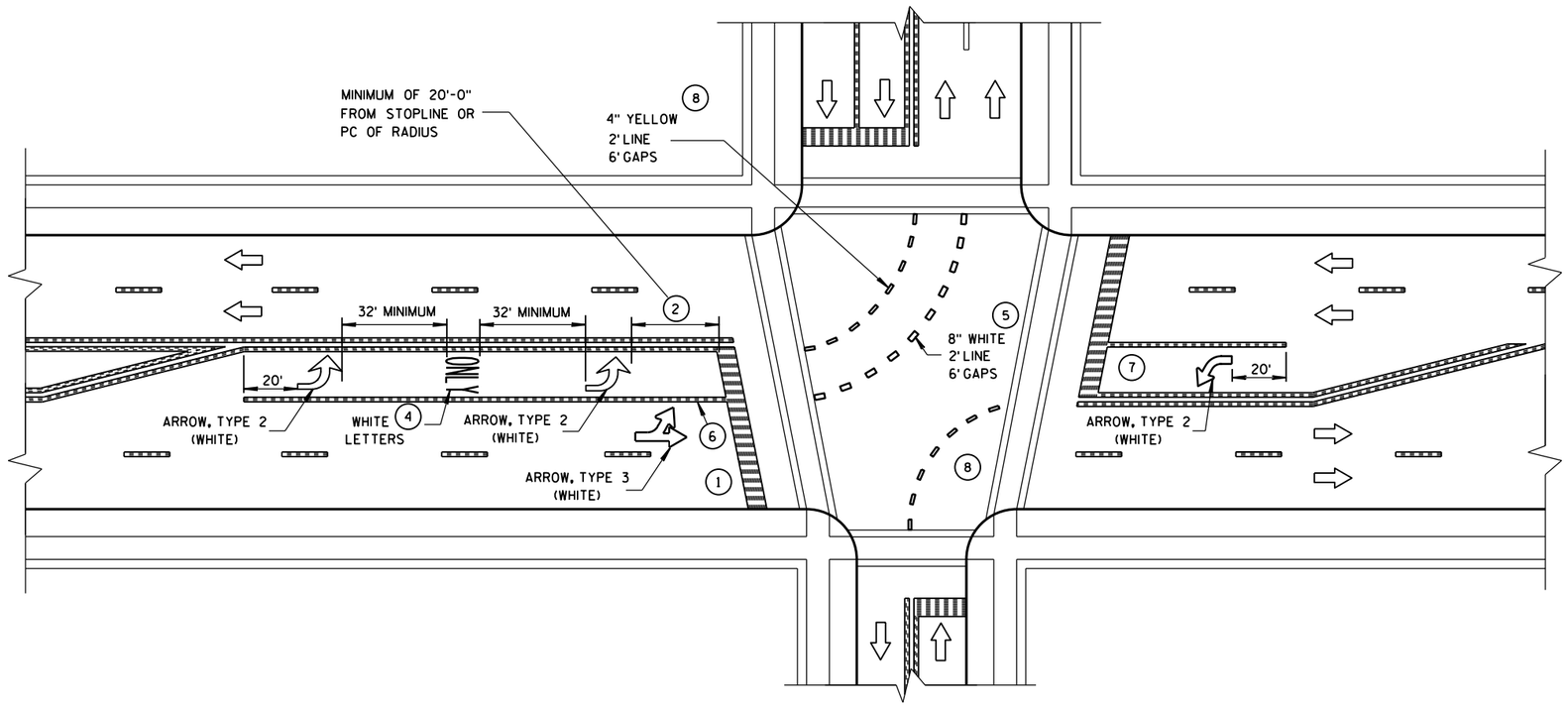
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 15 C 8-16b

6

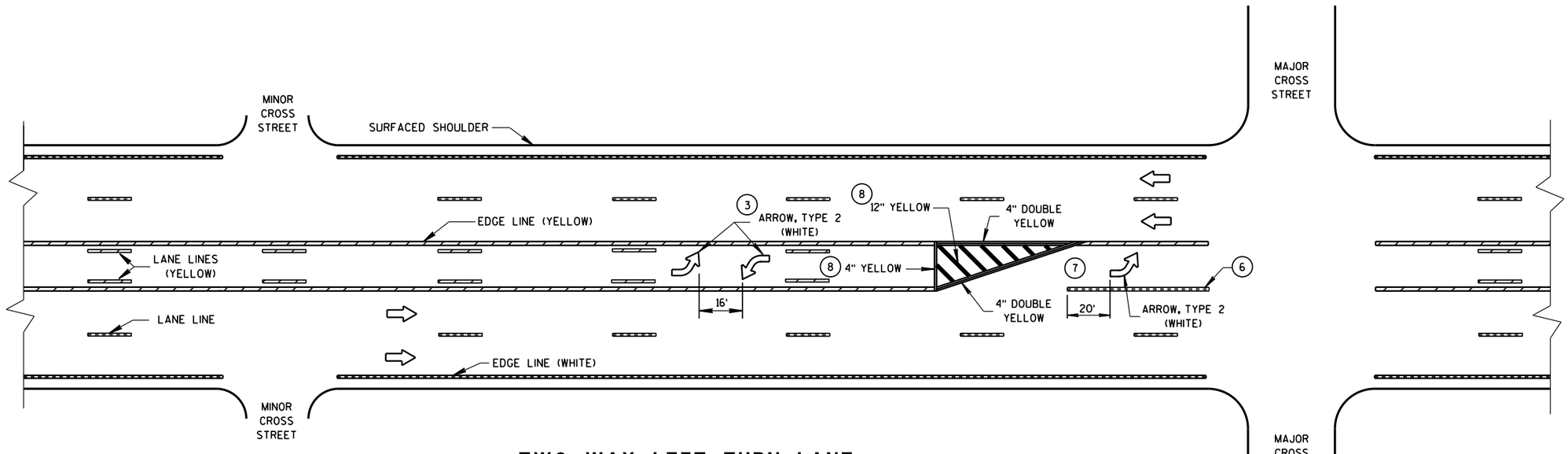
S.D.D. 15 C 8-16b



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



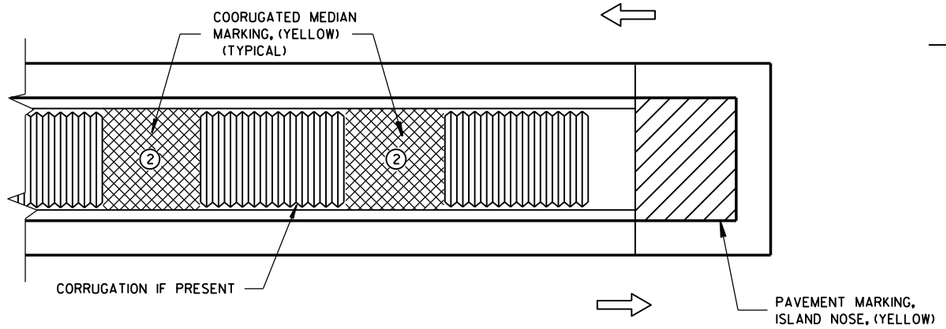
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

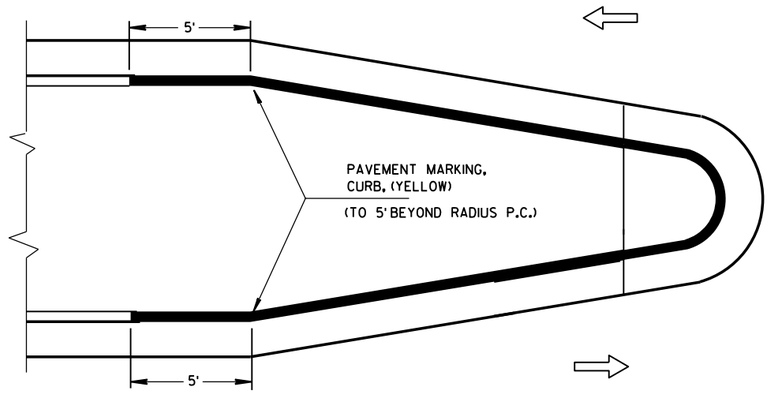
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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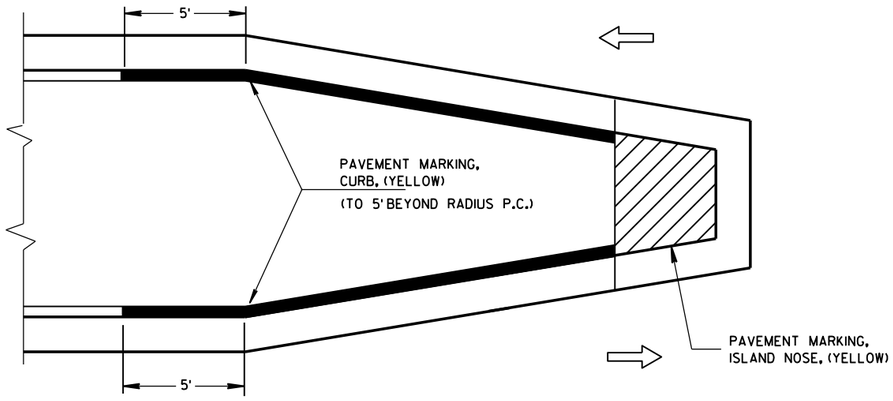
S.D.D. 15 C 8-16e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

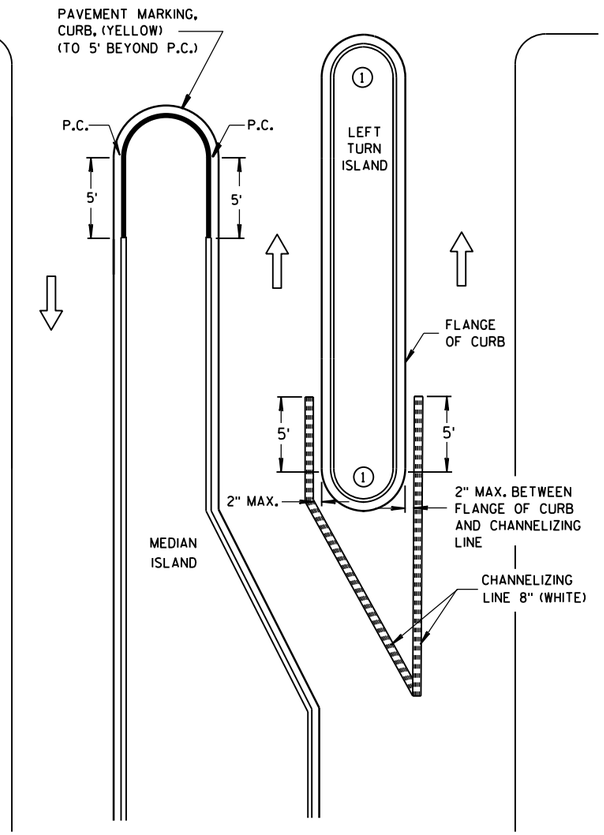


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

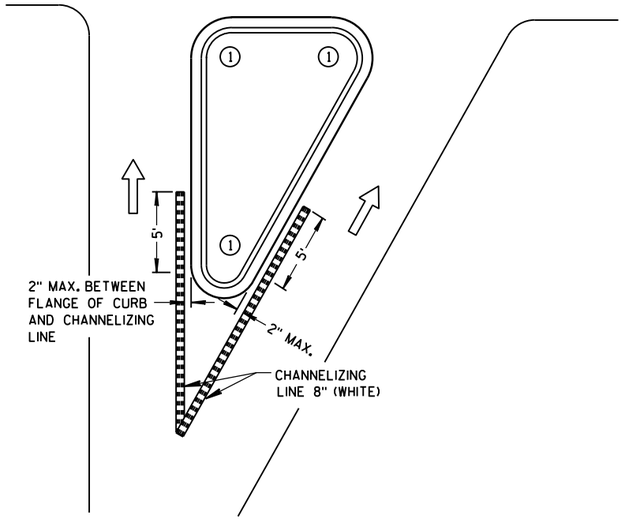


LEFT TURN & MEDIAN ISLAND

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

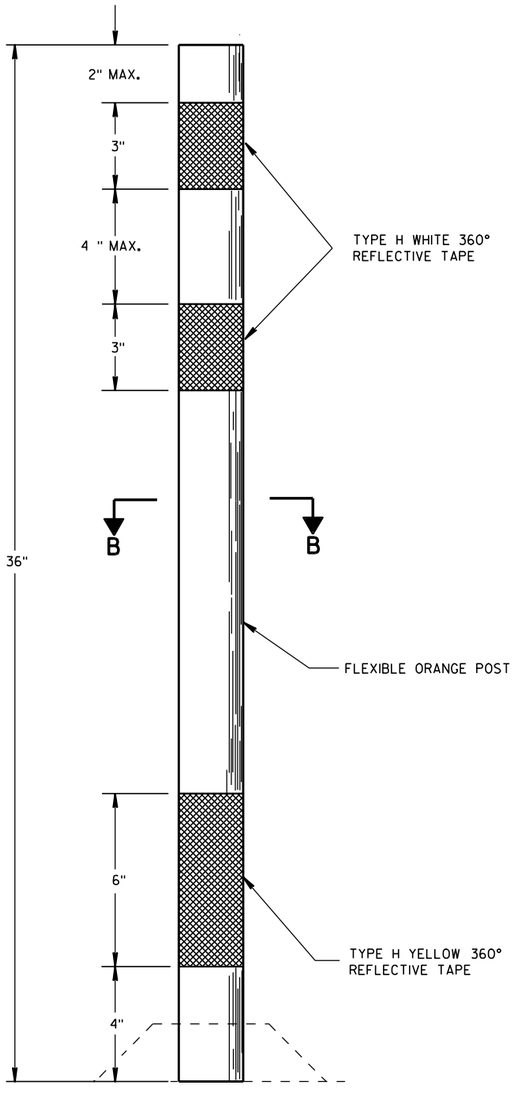
- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS)

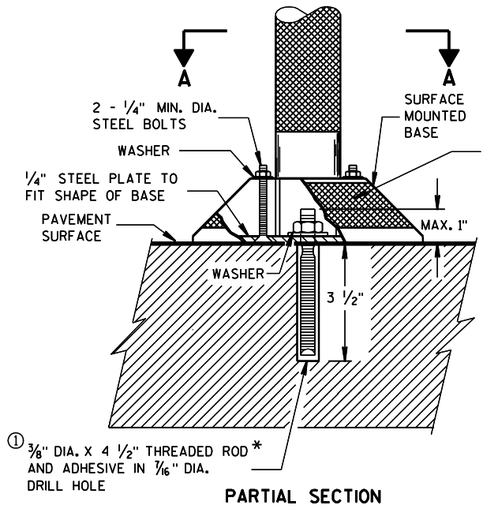
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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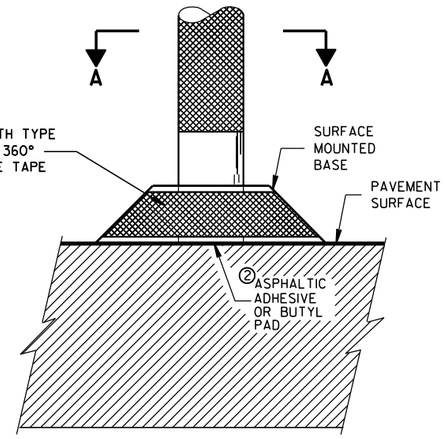
S.D.D. 15 C 8-16f



FLEXIBLE TUBULAR MARKER POST



PARTIAL SECTION TO SHOW BOLTS



POST BASES ON NEW OR EXISTING PAVEMENT

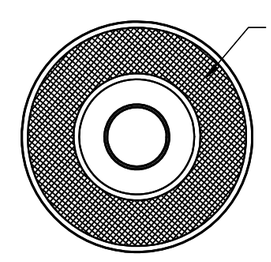
GENERAL NOTES

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.

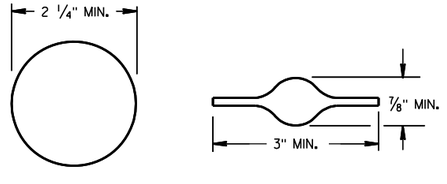
① THREADED ROD SHALL BE MACHINED DOWN TO 0.280 INCH DIA. 1 1/4 INCHES FROM THE TOP.

② THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



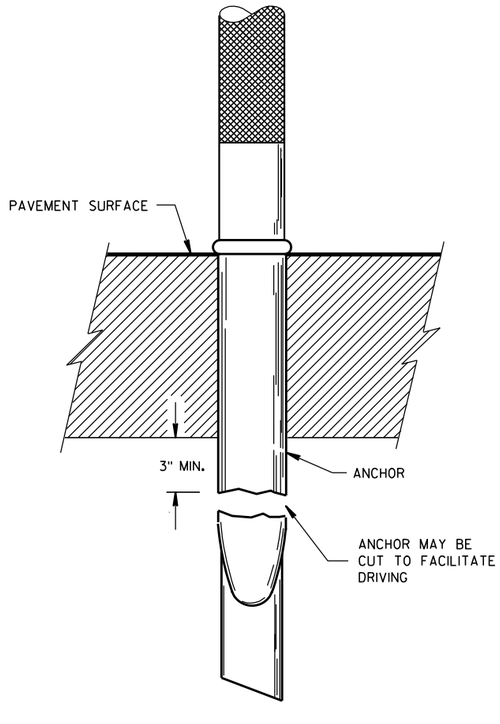
SECTION A-A

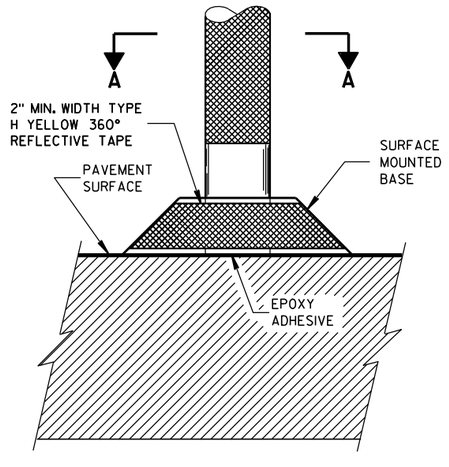
SURFACE MOUNTED BASE



SECTION B-B

ALTERNATIVE SHAPES





POST ANCHOR AND BASE ON PAVEMENT WHICH WILL BE REMOVED

FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2/17/94 DATE

/S/ Chester J. [illegible] DIRECTOR, OFFICE O

FHWA

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S.D.D. 15 C 11-5

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S.D.D. 15 C 11-5

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

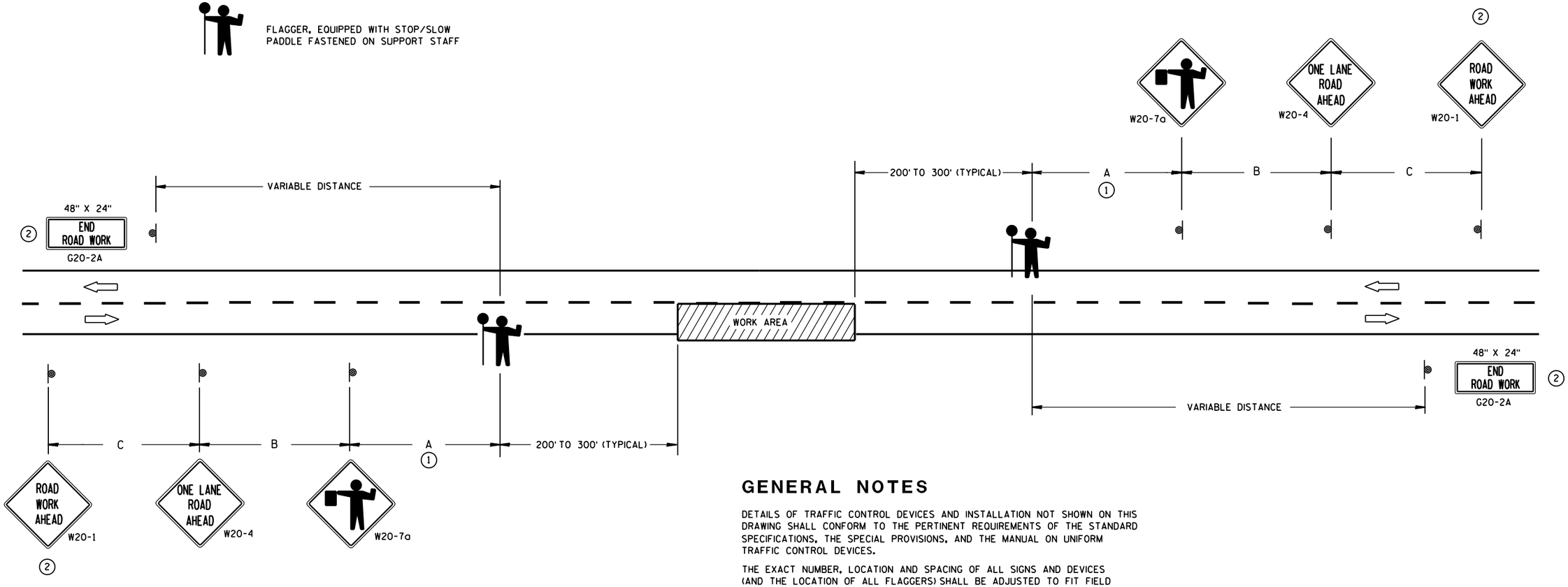
SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



W3-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR 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.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

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

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

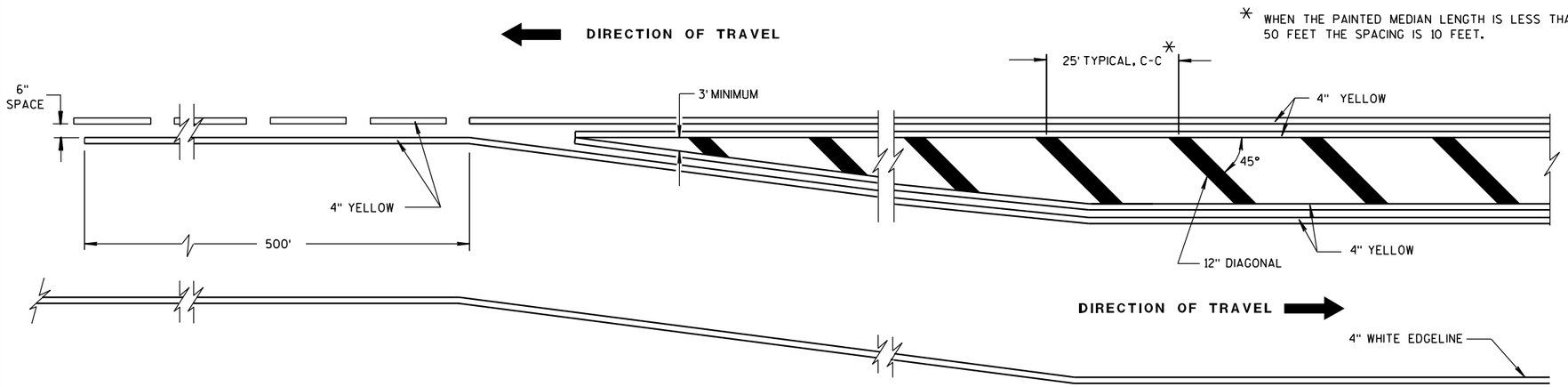
APPROVED
8/2013
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

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S.D.D. 15 C 12-4

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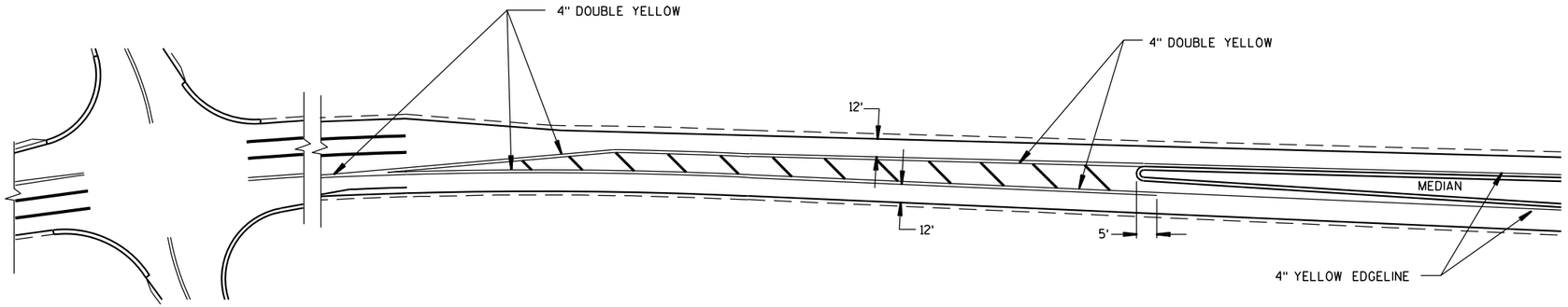
S.D.D. 15 C 12-4



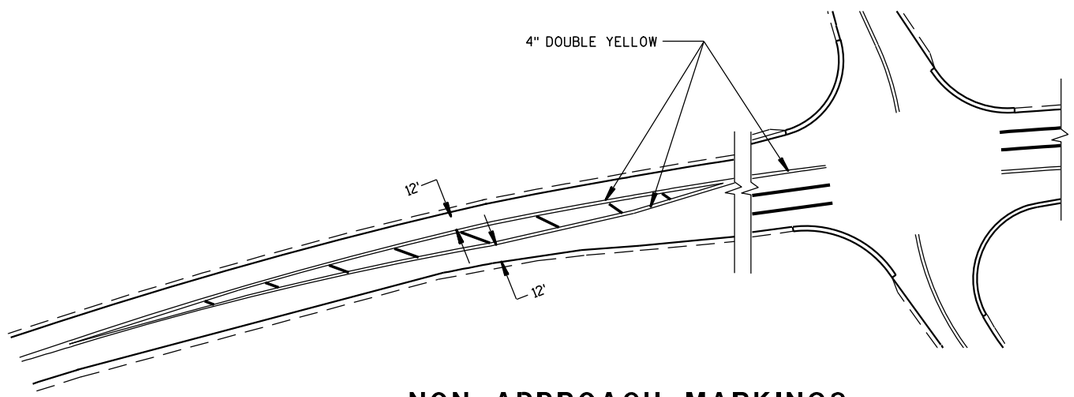
MEDIAN ISLAND DETAIL

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

6

6

S.D.D. 15 C 18-3

S.D.D. 15 C 18-3

MEDIAN ISLAND MARKING

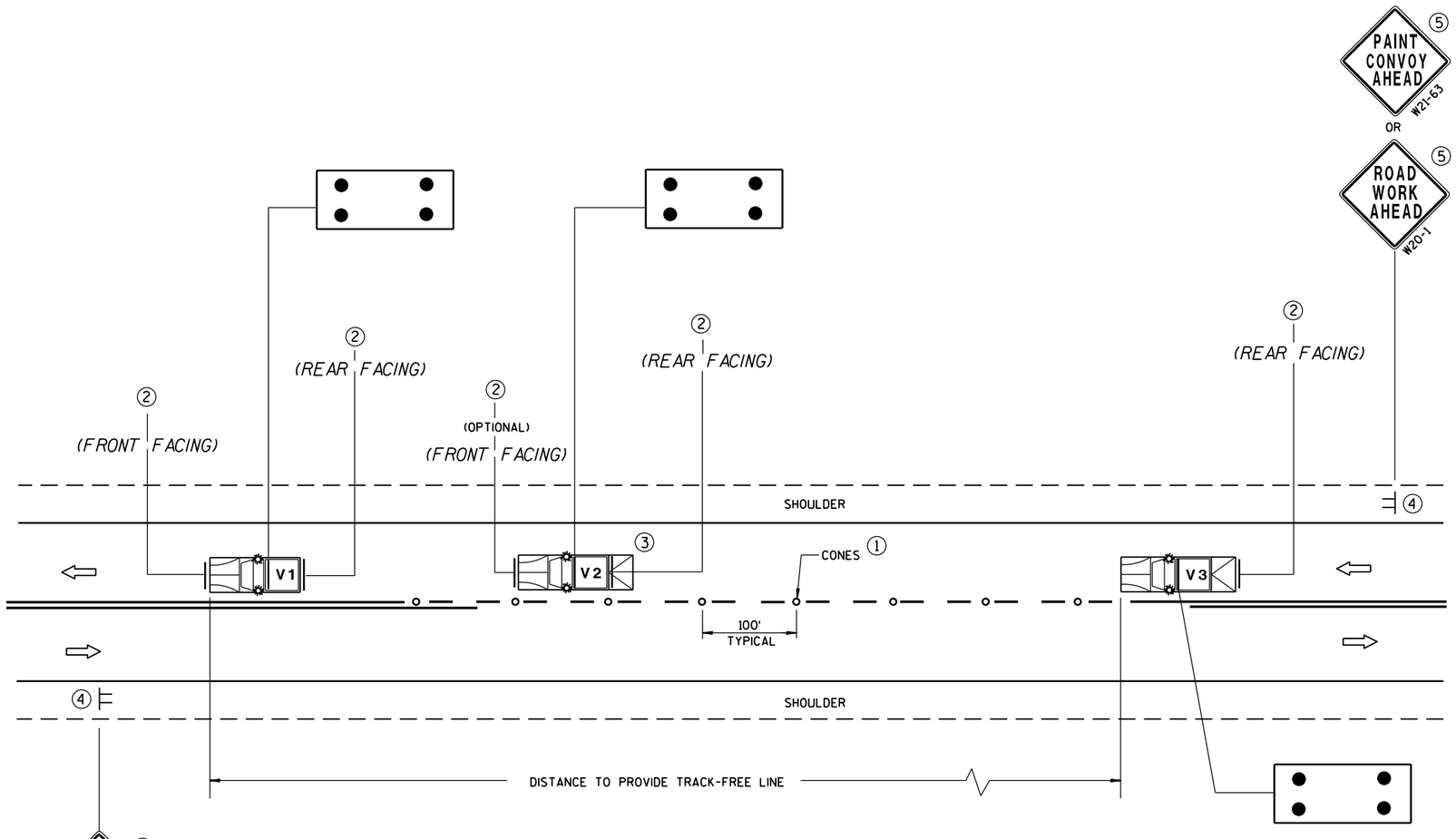
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2-5-09 DATE

/S/ Thomas N. Nothohm
STATE TRAFFIC ENGINEER

FHWA



GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

(1) CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(5) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

- **V1** LEAD VEHICLE
- **V2** SHADOW VEHICLE
- **V3** TRAIL VEHICLE WITH TMA
- **TMA** TRUCK-MOUNTED ATTENUATOR
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- CONES
- FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

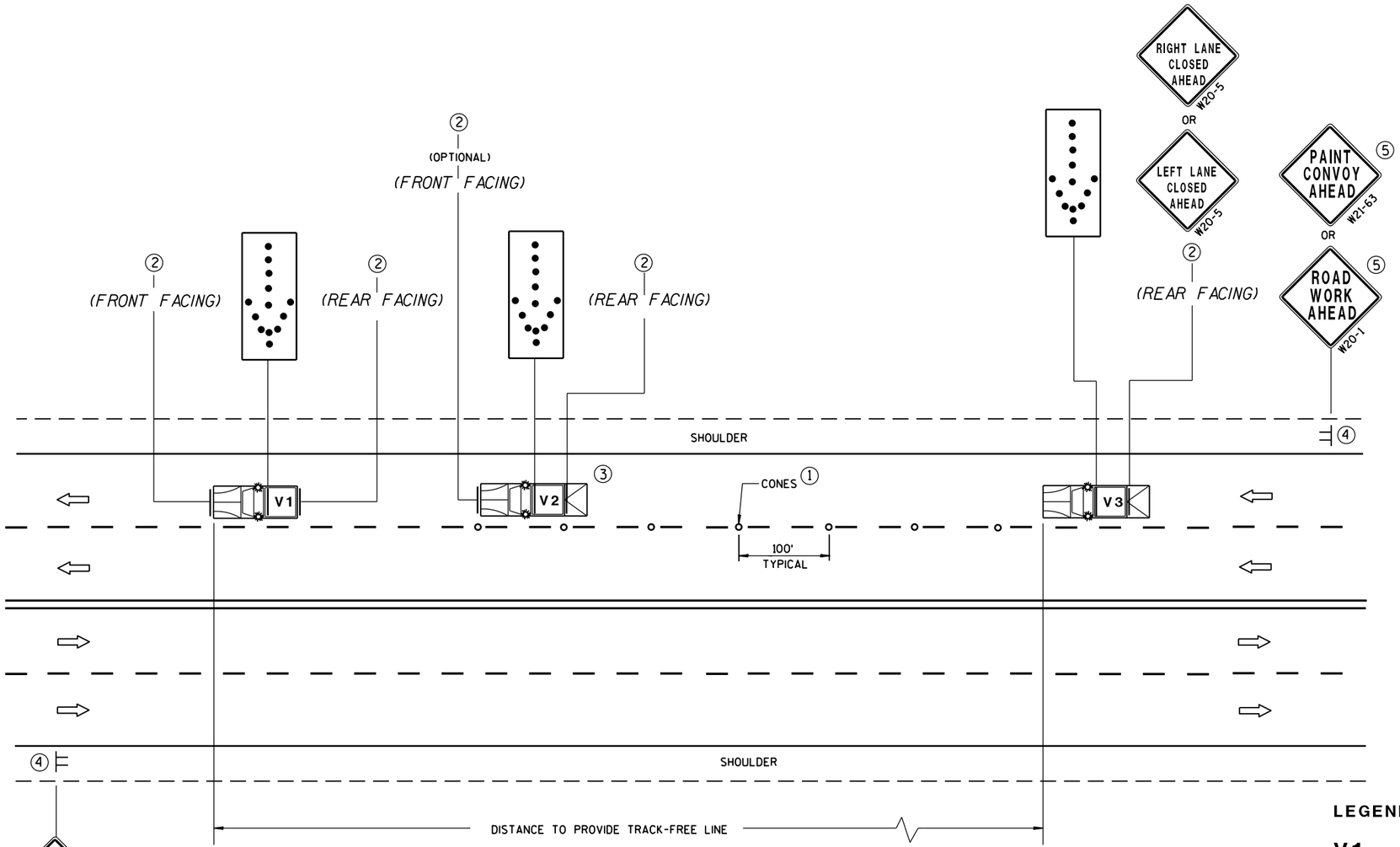
MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/3/2013 DATE FHWA	/S/ Travis Feltes STATE TRAFFIC E

6

S.D.D. 15 C 19-2a

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S.D.D. 15 C 19-2a



PAINT CONVOY AHEAD W21-63
OR
ROAD WORK AHEAD W20-1

MOVING PAVEMENT MARKING OPERATIONS
MULTI-LANE UNDIVIDED ROADWAY

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

FOR EDGELINE MARKING OR IF CONES ARE NOT USED, POSITION THE REARMOST SHADOW VEHICLE ON THE SHOULDER AS SHOWN IN THE MUTCD IF THE SHOULDER HAS ADEQUATE WIDTH.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE OR LANELINE MARKING FOR MULTILANE UNDIVIDED ROADWAYS.

(1) CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(5) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1	LEAD VEHICLE
V2	SHADOW VEHICLE
V3	TRAIL VEHICLE WITH TMA
TMA	TRUCK-MOUNTED ATTENUATOR
	SIGN ON TEMPORARY SUPPORT
	DIRECTION OF TRAFFIC
	CONES
	FLASHING ARROW PANEL (MERGE)

MOVING PAVEMENT MARKING OPERATION
MULTI-LANE UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/3/2013 DATE
/S/ Travis Feltes STATE TRAFFIC EN

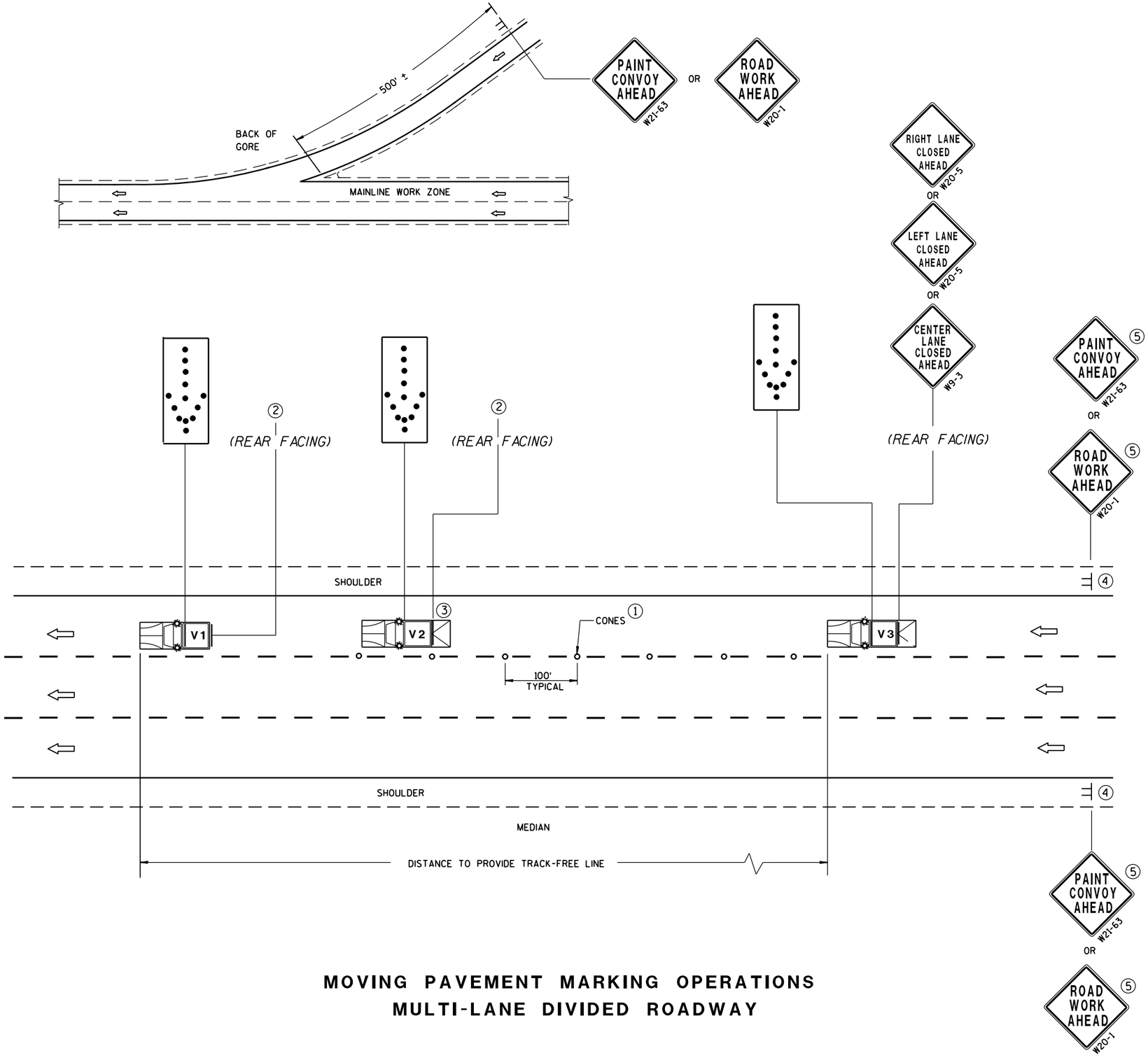
FHWA

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S.D.D. 15 C 19-2b

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S.D.D. 15 C 19-2b



MOVING PAVEMENT MARKING OPERATIONS
MULTI-LANE DIVIDED ROADWAY

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

FOR EDGELINE MARKING OR IF CONES ARE NOT USED, POSITION THE REARMOST SHADOW VEHICLE ON THE SHOULDER AS SHOWN IN THE MUTCD IF THE SHOULDER HAS ADEQUATE WIDTH. USE DOUBLE ARROWS WHEN CONVOY IS IN CENTER LANE ONLY.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

THIS DRAWING SHALL BE USED FOR EDGELINE OR LANELINE MARKING FOR MULTILANE DIVIDED ROADWAYS.

① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

④ SIGNS SHALL BE REPEATED AFTER EVERY ON RAMP OR EVERY THREE MILES.

⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1	LEAD VEHICLE
V2	SHADOW VEHICLE
V3	TRAIL VEHICLE WITH TMA
TMA	TRUCK-MOUNTED ATTENUATOR
	SIGN ON TEMPORARY SUPPORT
	DIRECTION OF TRAFFIC
	CONES
	FLASHING ARROW PANEL (MERGE)

MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/3/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC EN

FHWA

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S.D.D. 15 C 19-2c

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S.D.D. 15 C 19-2c

GENERAL NOTES

SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

A DISTANCE DEPENDENT ON SPEED (SEE TABLE)

(1) WRONG WAY PREVENTION SIGNS ARE DISCUSSED IN T G M 2-15-12

(2) REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT

SYMBOLS

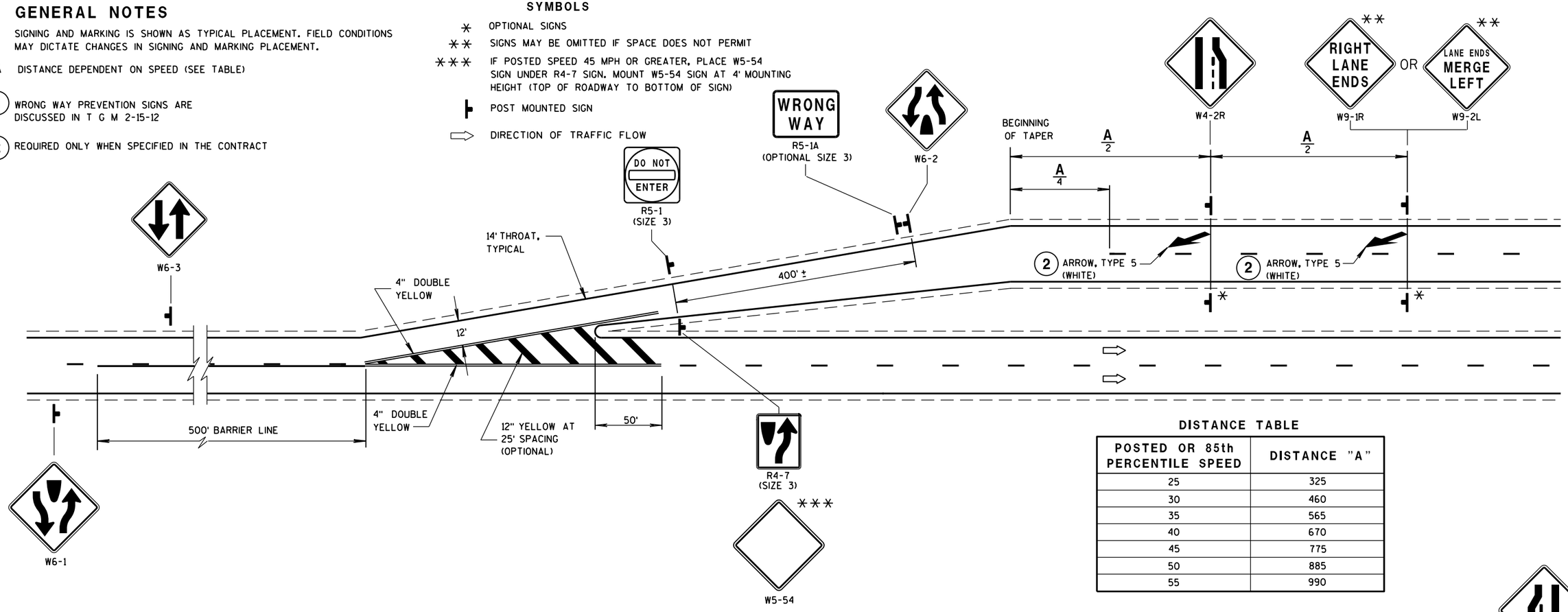
* OPTIONAL SIGNS

** SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT

*** IF POSTED SPEED 45 MPH OR GREATER, PLACE W5-54 SIGN UNDER R4-7 SIGN. MOUNT W5-54 SIGN AT 4' MOUNTING HEIGHT (TOP OF ROADWAY TO BOTTOM OF SIGN)

POST MOUNTED SIGN

DIRECTION OF TRAFFIC FLOW



DISTANCE TABLE

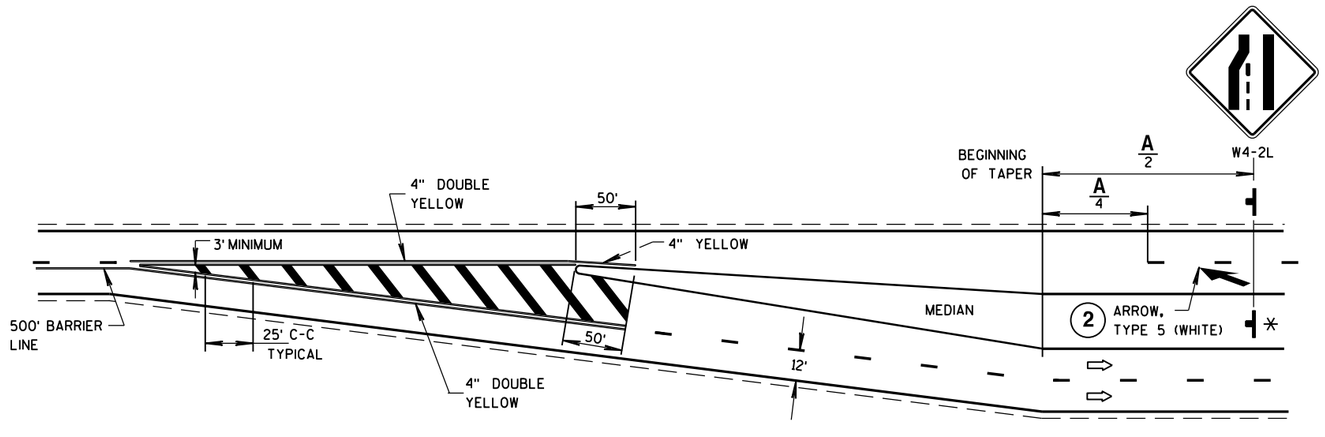
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	325
30	460
35	565
40	670
45	775
50	885
55	990

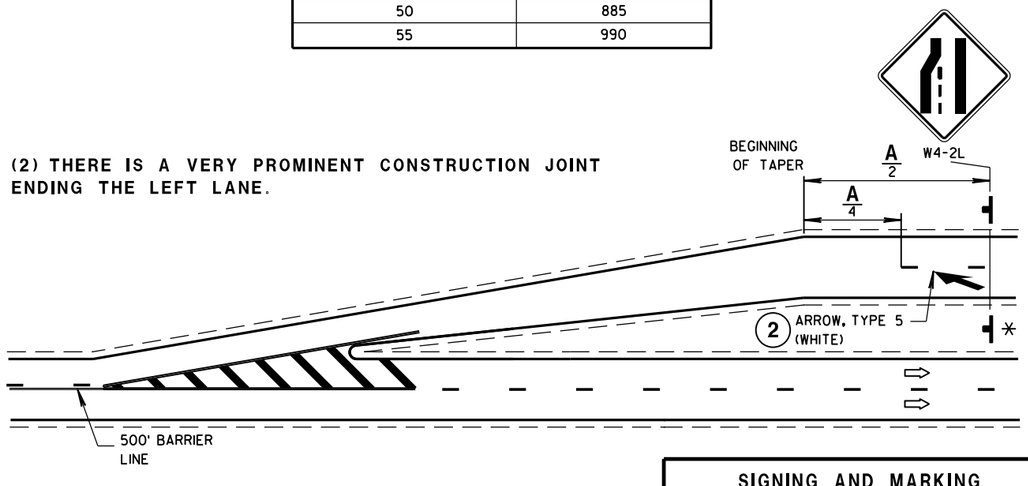
USE W4-2L IF :

(1) THE LEFT LANE IS PUSHED TO THE RIGHT:

OR

(2) THERE IS A VERY PROMINENT CONSTRUCTION JOINT ENDING THE LEFT LANE.





SIGNING AND MARKING
TWO LANE TO FOUR LANE
DIVIDED TRANSITIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/3/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC EN

FHWA

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S.D.D. 15 C 21-5

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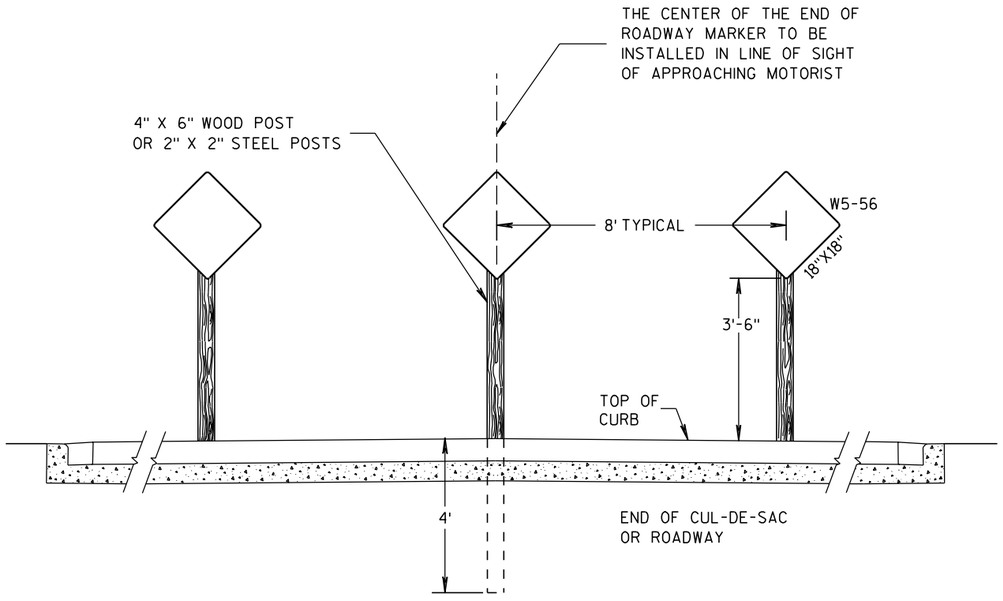
S.D.D. 15 C 21-5

GENERAL NOTES

SIGN LOCATIONS SHOWN ARE TYPICAL PLACEMENT AND MAY BE ADJUSTED BY THE ENGINEER AS FIELD CONDITIONS DICTATE.

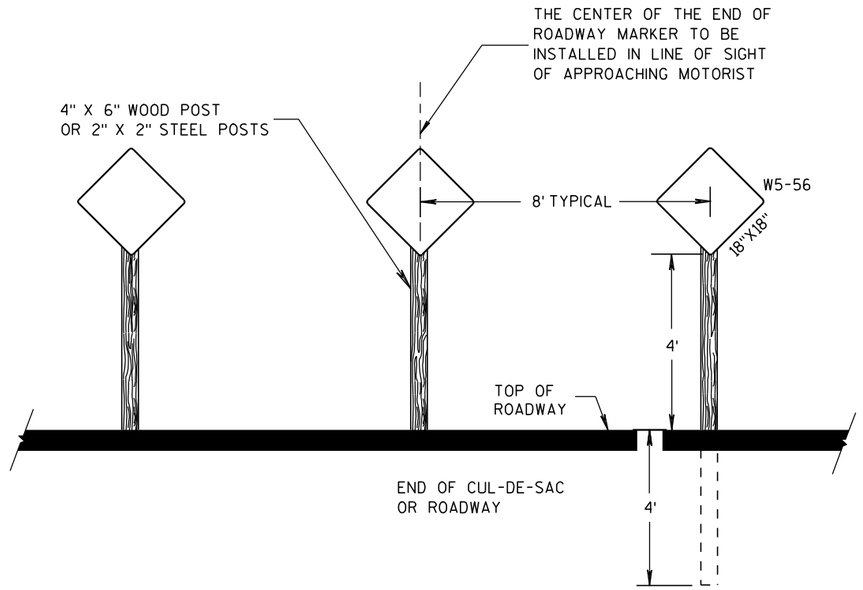
THE MINIMUM NUMBER OF END-OF-ROADWAY SIGNS ARE THREE (AS SHOWN). ADDITIONAL END-OF-ROADWAY SIGNS MAY BE INSTALLED AS FIELD CONDITIONS DICTATE. (SEE SIGNING PLAN).

WHEN BEAMGUARD IS REQUIRED, PLACE END-OF-ROADWAY SIGNING BEHIND BEAMGUARD.



TYPICAL URBAN SIGN INSTALLATION

(WITH CURB & GUTTER)



TYPICAL RURAL SIGN INSTALLATION

(WITHOUT CURB & GUTTER)

6

S.D.D. 15 C 26-2

END-OF-ROADWAY SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/1/2011 — DATE

/S/ Thomas N. Nothohm — STATE TRAFFIC ENGINEER

FHWA

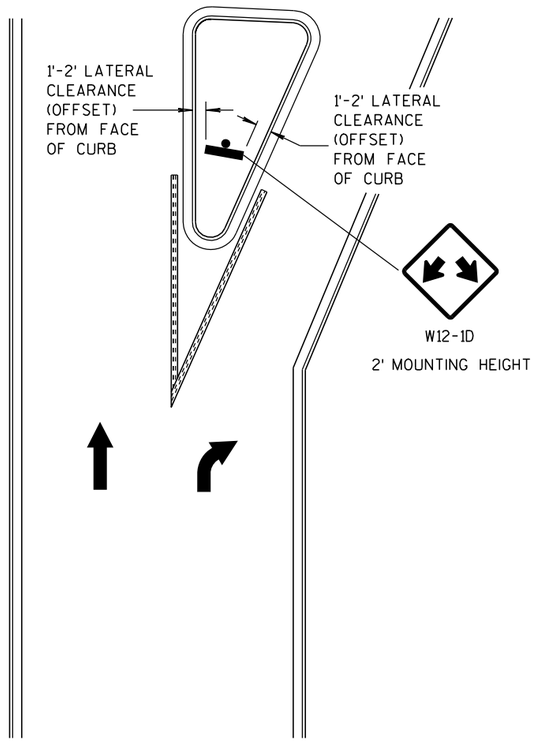
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S.D.D. 15 C 26-2

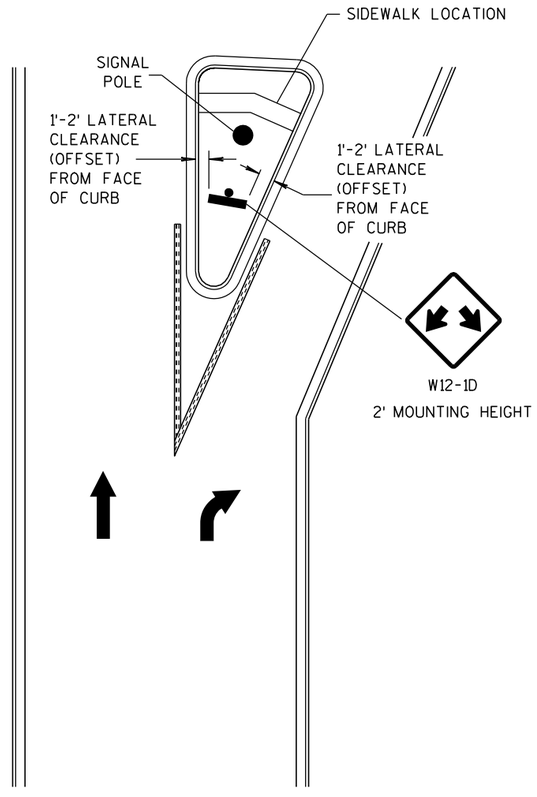
GENERAL NOTE

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

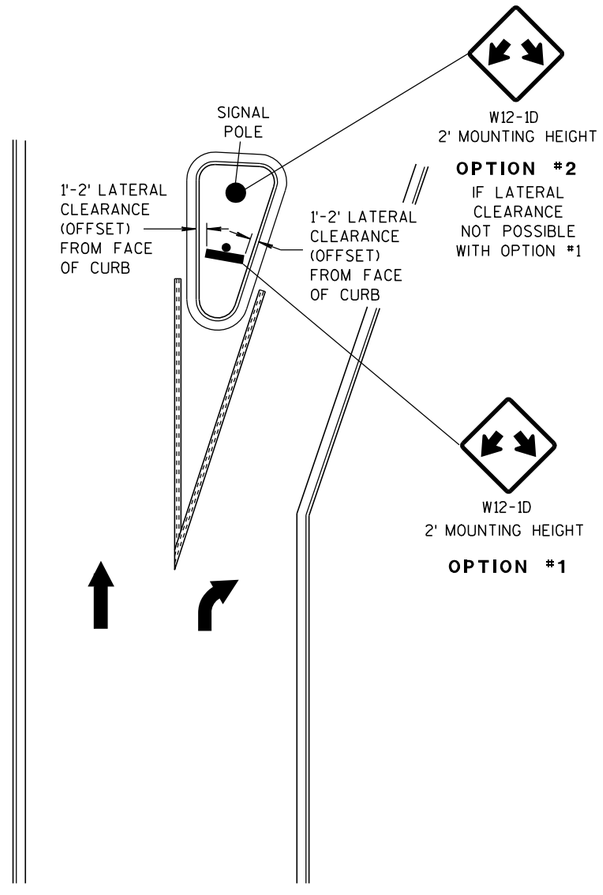
SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.



LARGE RIGHT TURN ISLAND



LARGE RIGHT TURN ISLAND
WITH SIGNAL POLE



SMALL RIGHT TURN ISLAND

DOUBLE ARROW WARNING SIGN PLACEMENT

DOUBLE ARROW WARNING SIGN PLACEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
10-22-08 DATE	/S/ Thomas N. Nothdurft STATE TRAFFIC ENGINEER
FHWA	402 IGN

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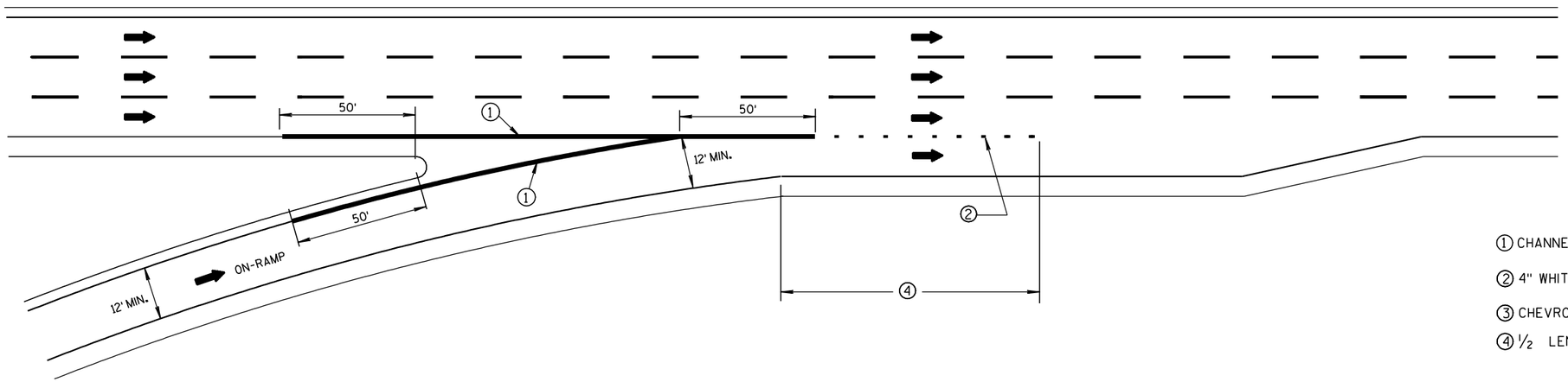
S.D.D. 15 C 27-1

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S.D.D. 15 C 27-1

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.



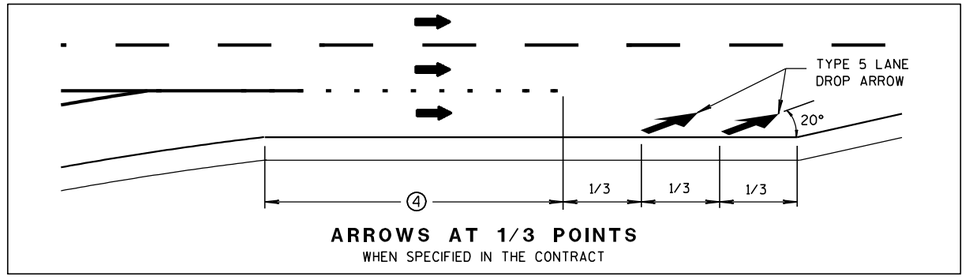
① CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE IN GORE AREA.

② 4" WHITE (3' LINE, 9' GAP).

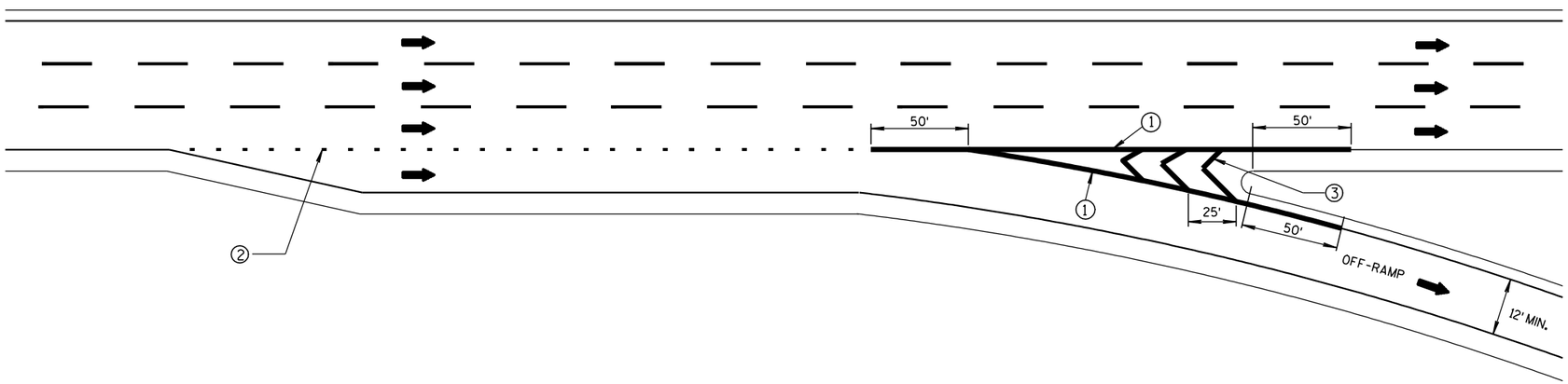
③ CHEVRON MARKING - 24" WHITE WHEN SPECIFIED IN THE CONTRACT.

④ ½ LENGTH OF FULL WIDTH ACCELERATION LANE.

SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE-RAMP



ARROWS AT 1/3 POINTS
WHEN SPECIFIED IN THE CONTRACT



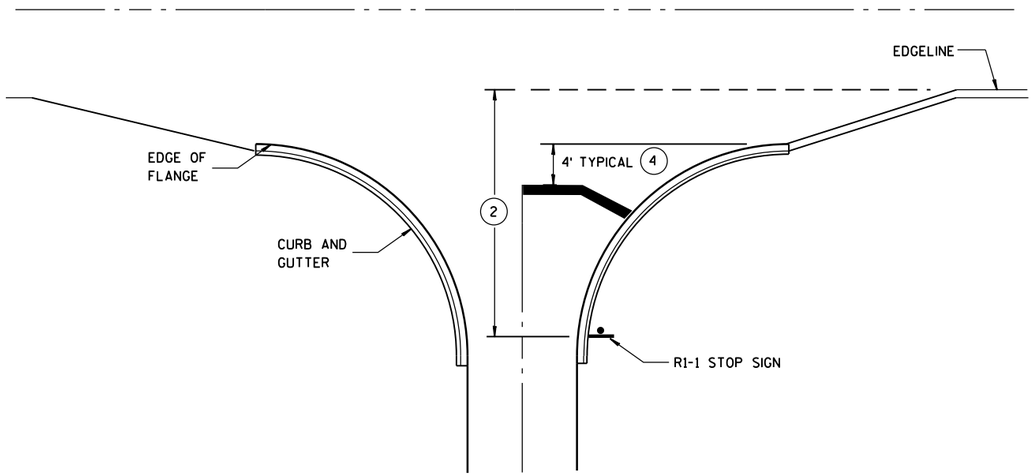
SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT-RAMP

PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP

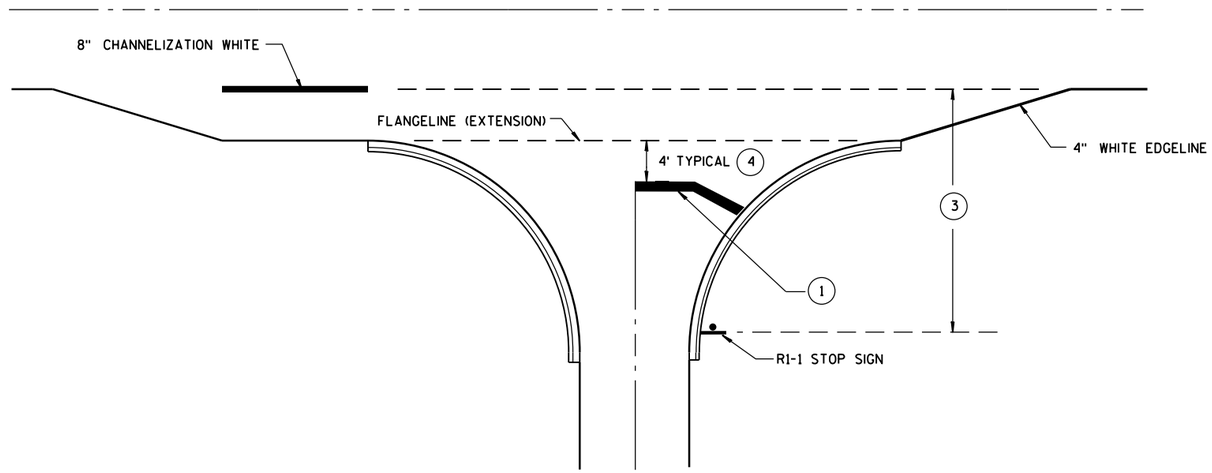
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/23/2011 DATE
/S/ Thomas N. Nothem STATE TRAFFIC ENGINE 403 SIGN
FHWA

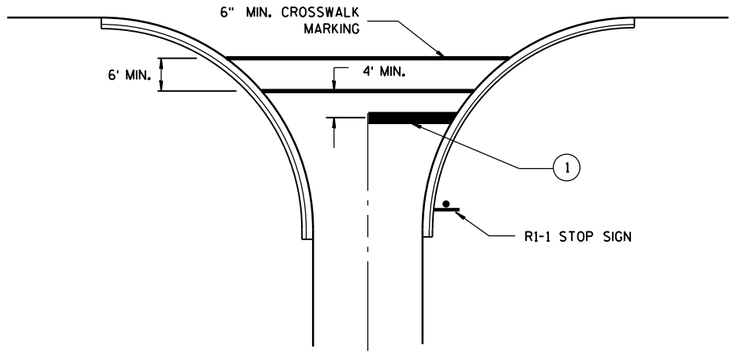
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S.D.D. 15 C 31-1d



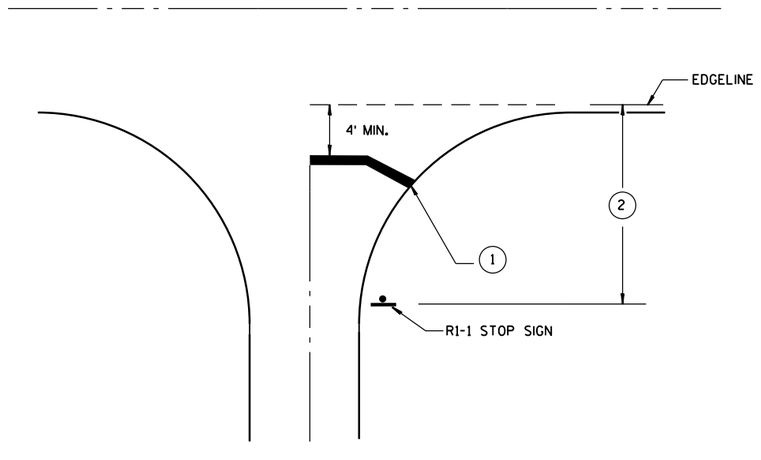
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.
3. IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
4. MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

6

S.D.D. 15 C 33-1

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



W057-52
36"x24"

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.

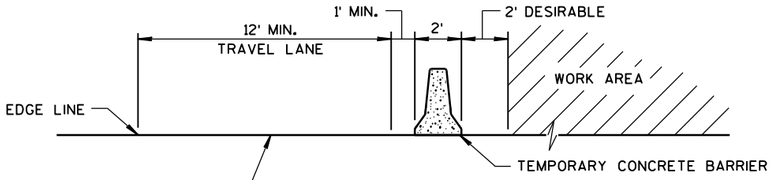
(1) CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUM TAPER.

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.

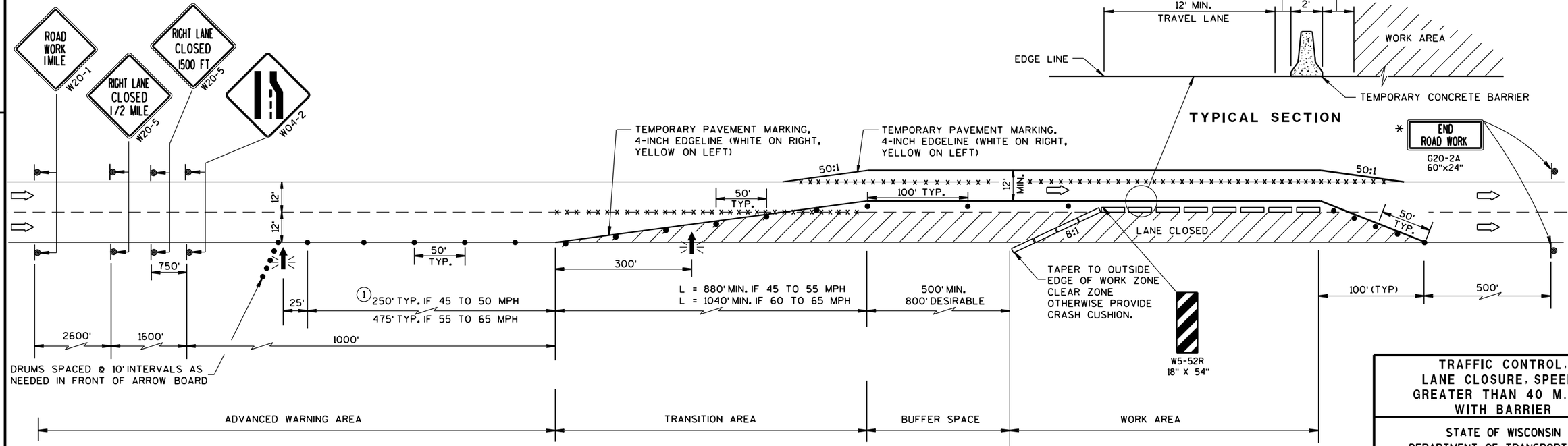
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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.



TYPICAL SECTION



TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

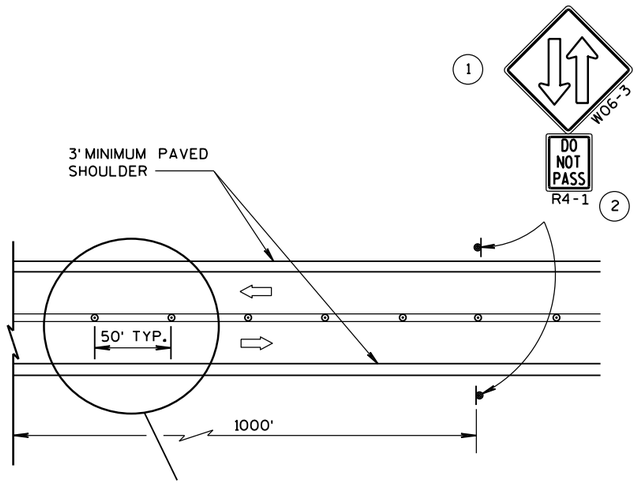
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER — SIGN
FHWA

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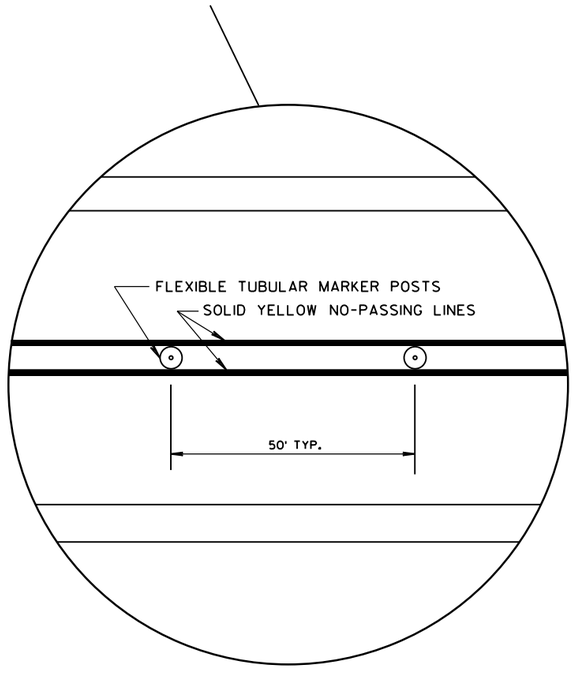
S.D.D. 15 D 3-2

6

S.D.D. 15 D 3-2



TWO LANE, TWO WAY OPERATION



GENERAL NOTES

ALL SIGNS ARE 48"x48" UNLESS OTHERS NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE 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.

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.

A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC AT 50-FOOT SPACING.

COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW.



THE W06-3 WITH THE W057-51 SHALL BE LOCATED 200 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND/OR 500 FEET BEYOND ANY SIDEROAD. THE W06-3 WITH THE R4-1 SHALL BE LOCATED 1000 FEET BEYOND THE W06-3 AND THE W057-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN W06-3 SIGNS.

(2) CONVENTIONAL: 24"x30"
FREEWAY AND EXPRESSWAY: 36"x48"

LEGEND

- SIGN ON PERMANENT SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 DATE
/S/ Travis Feltes STATE TRAFFIC ENGINEER
SIGN
FHWA

6

S.D.D. 15 D 6-3

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMENENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL 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 DESIREABLE) DISTANCE TO EXISTING SIGNS.

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

ALL SIGNS ARE 48"×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.

CONSIDER 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 DRUMS.

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 LONGER THAN 4 OR MORE DAYS AND NIGHTS.

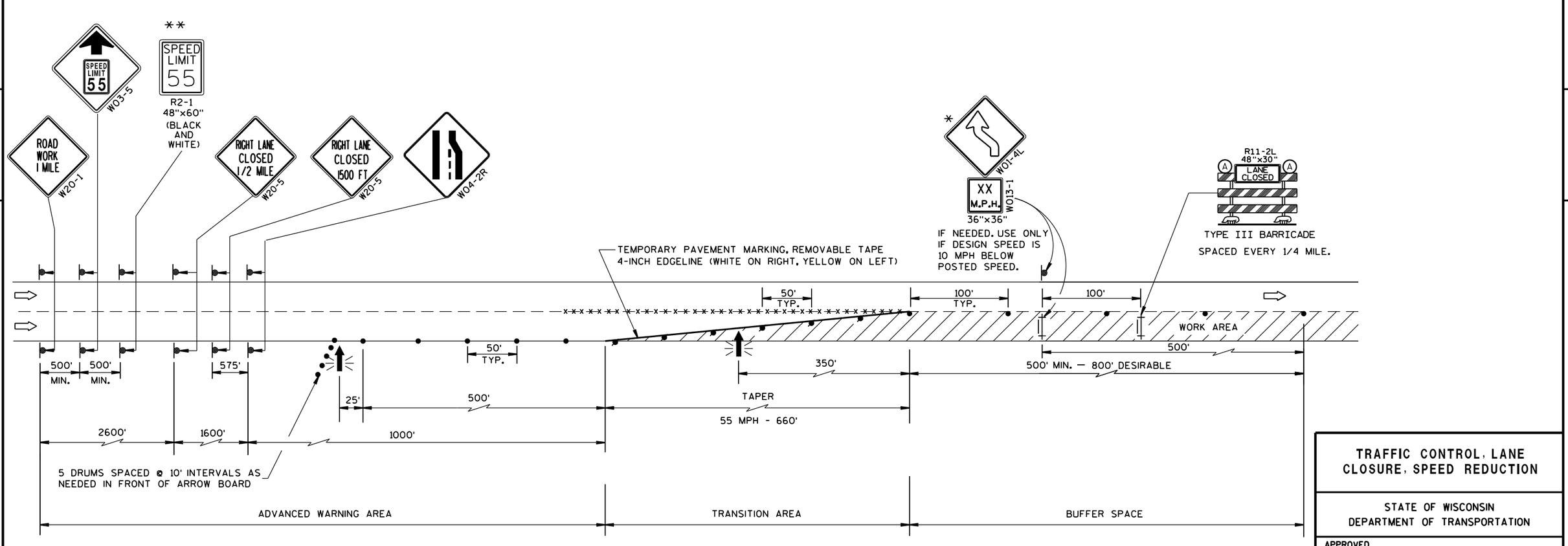
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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 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.

* THE LEFT REVERSE CURVE SIGN (W01-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.

** 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 A 65 MPH RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIREABLE) BEYOND THE "END OF ROADWORK" SIGN.



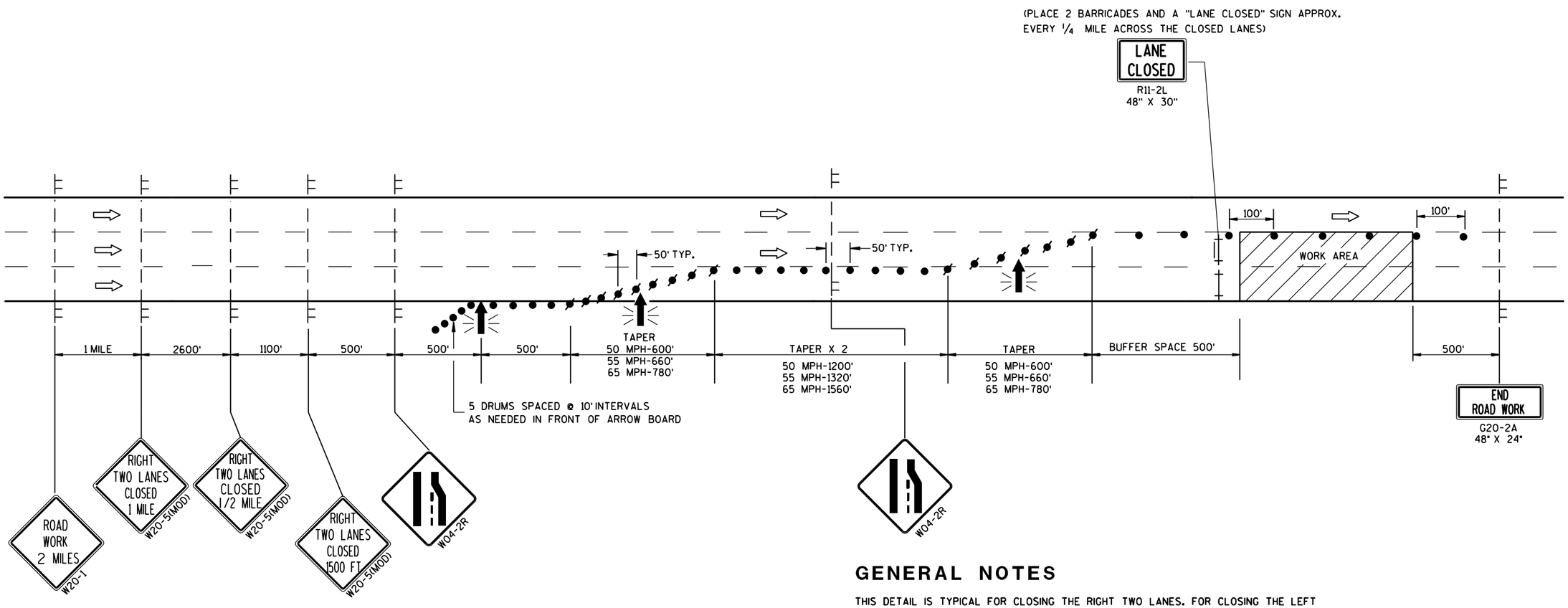
TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3-2014 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

S.D.D. 15 D 12-4

S.D.D. 15 D 12-4



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES. FOR CLOSING THE LEFT TWO LANES, 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.

"WO" SIGNS ARE THE SAME AS "W" SIGNS 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.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

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

WHEN A RAMP OR SIDE ROAD INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

BARRICADES IN A CLOSED LANE 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.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

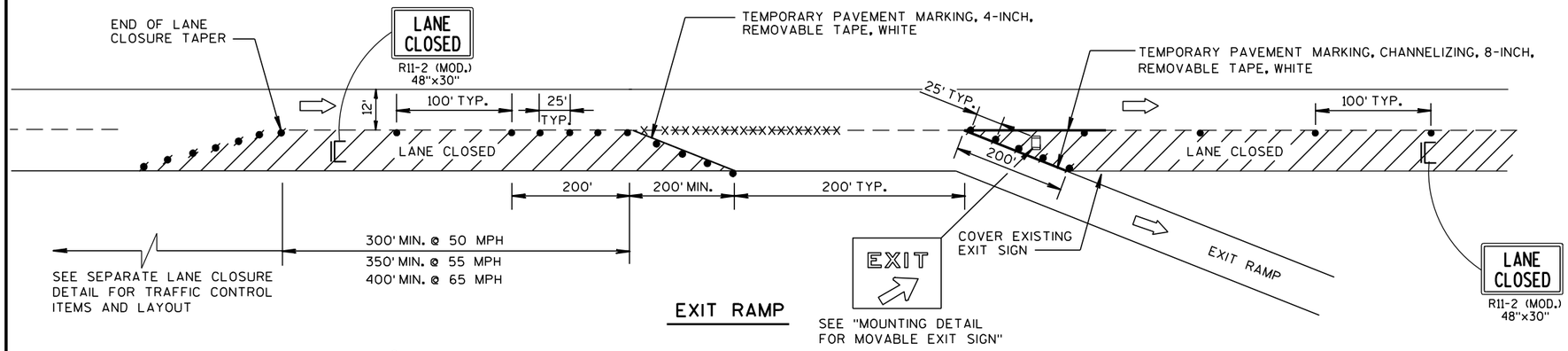
TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT TERM (LESS THAN 24 HOURS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

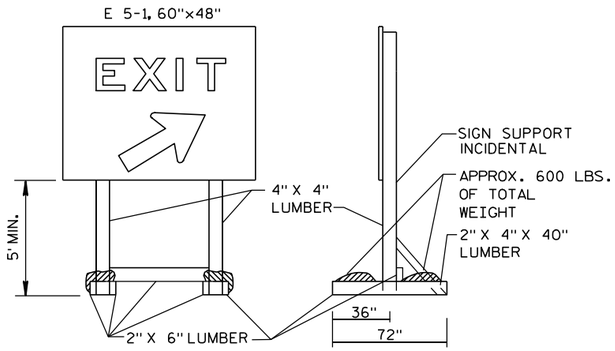
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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S.D.D. 15 D 14-2

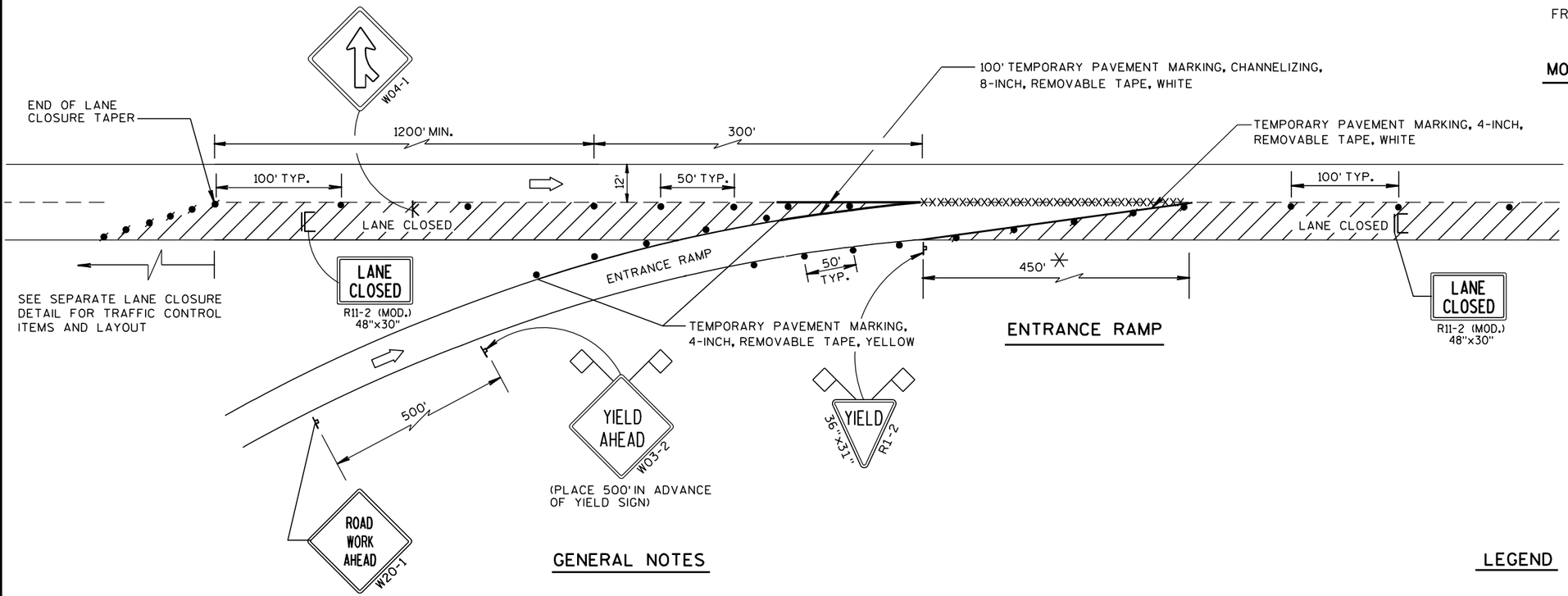


EXIT RAMP



NOTE: ALL LUMBER DIMENSIONS ARE NOMINAL

MOUNTING DETAIL FOR MOVABLE EXIT SIGN



ENTRANCE RAMP

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 DATE
/S/ Chester J. [illegible]
CHIEF SIGNS AND MARKINGS ENGINEER
FHWA

S.D.D. 15 D 15-1

S.D.D. 15 D 15-1

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.

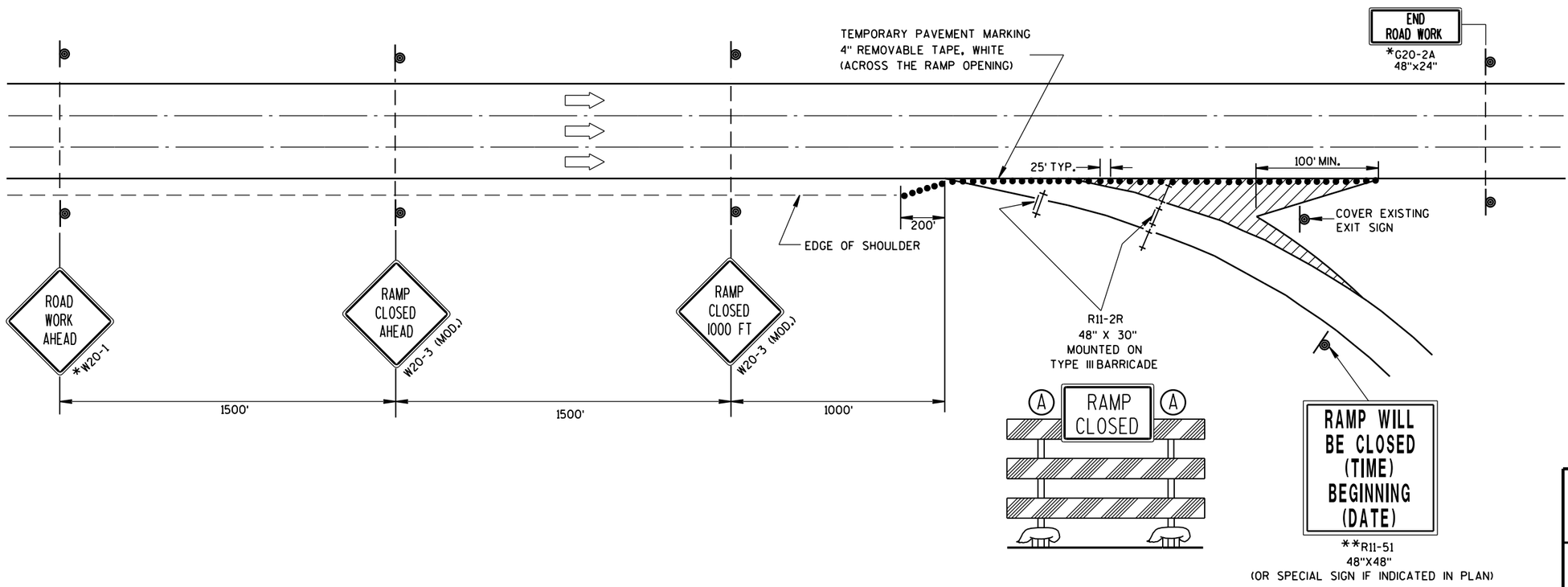
PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

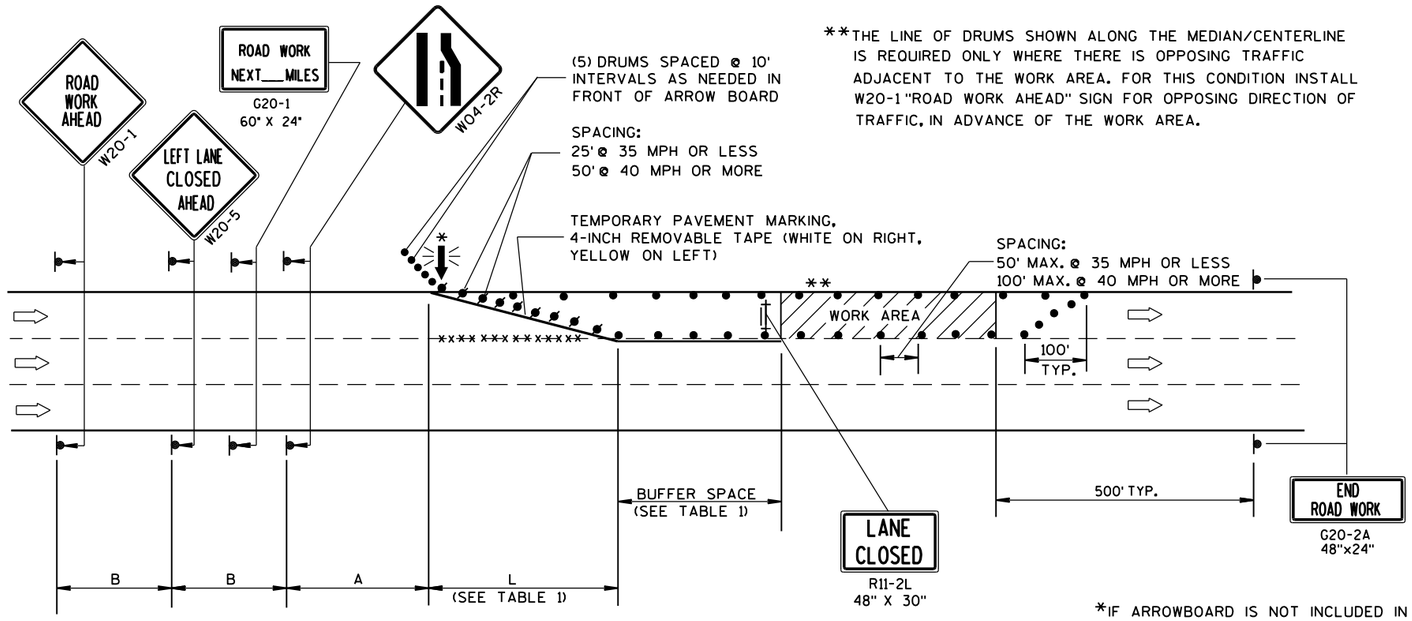
/S/ Travis Feltes
STATE TRAFFIC ENGINEER

DESIGN

FHWA

6

S.D.D. 15 D 16-2



**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

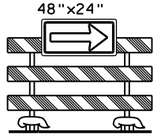


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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 DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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.

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 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE 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.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

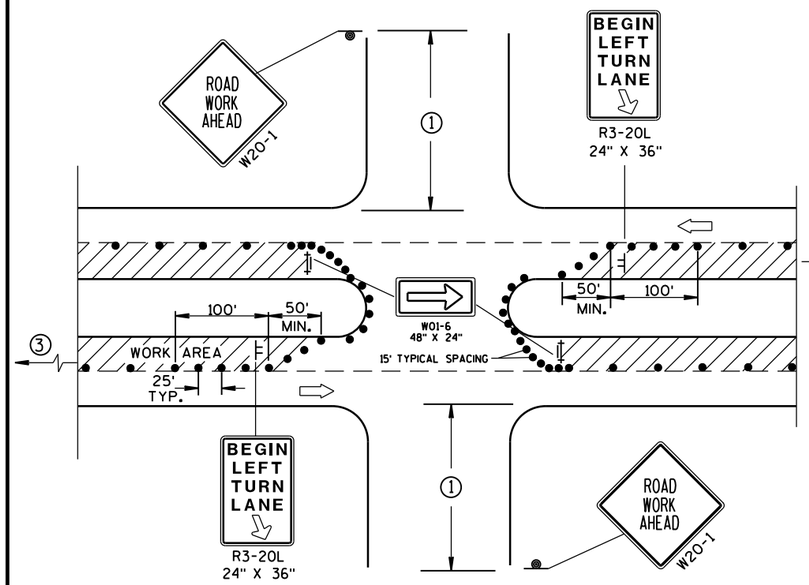
TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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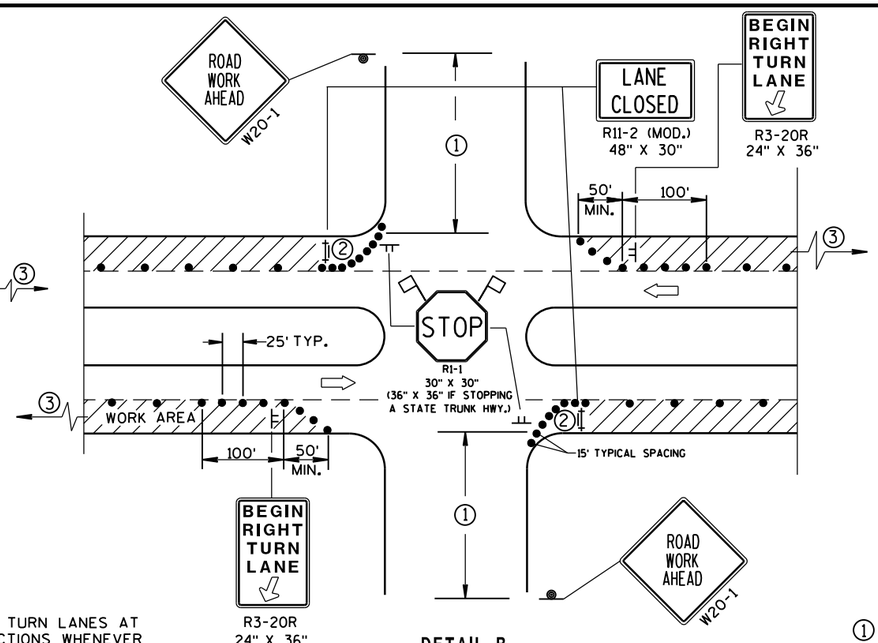
S.D.D. 15 D 20-2



DETAIL A

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



DETAIL B

FOR RIGHT LANE CLOSURE AT INTERSECTION

GENERAL 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 SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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, OR THAT WILL BE PLACED IN A CLOSED LANE, 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.

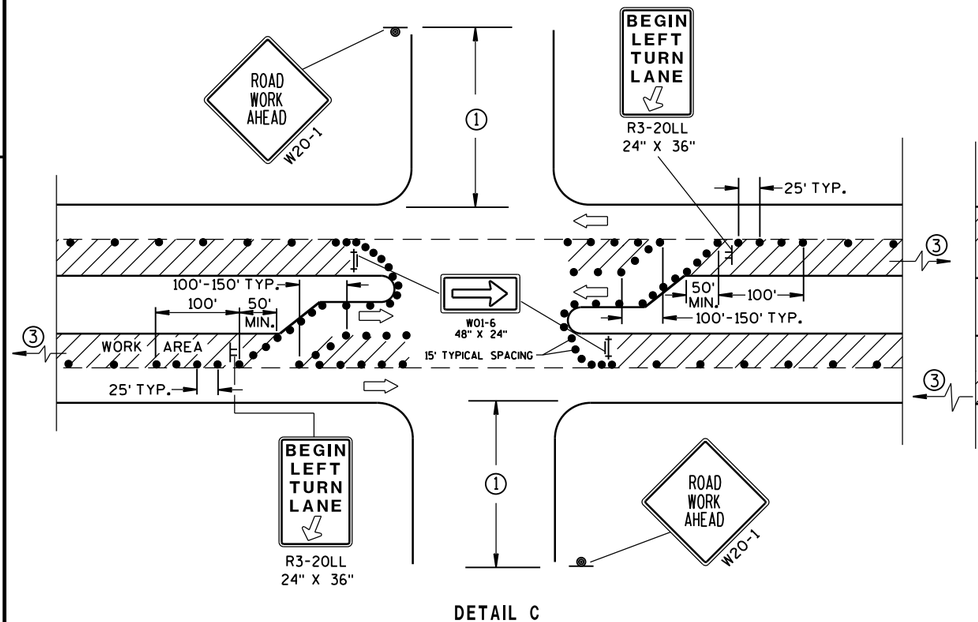
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE 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.

① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

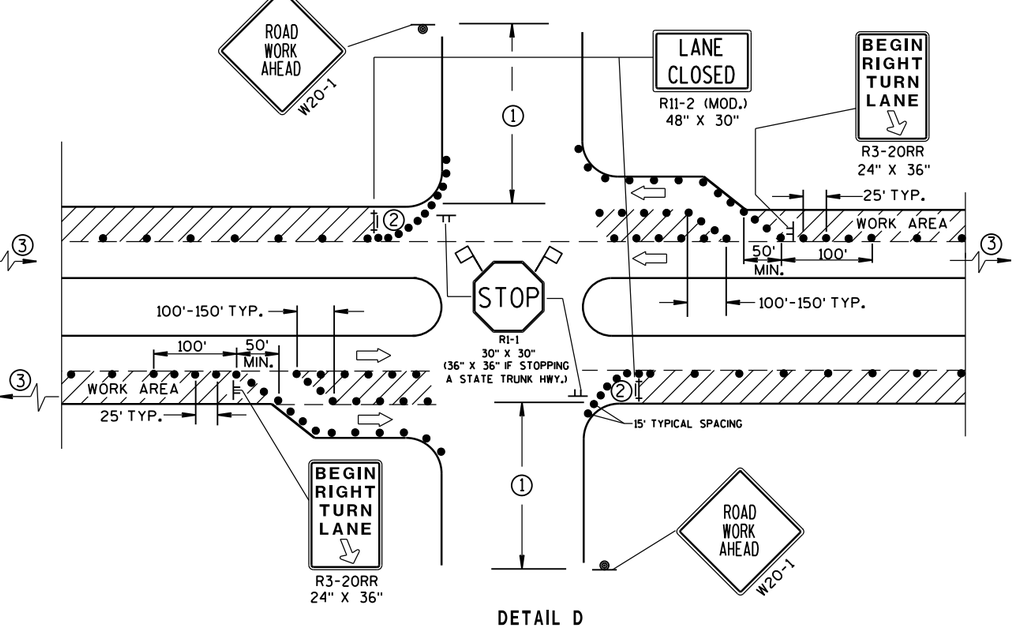
② ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.



DETAIL C

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)



DETAIL D

FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013	/S/ Travis Feltes
DATE	STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 D 21-2

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.

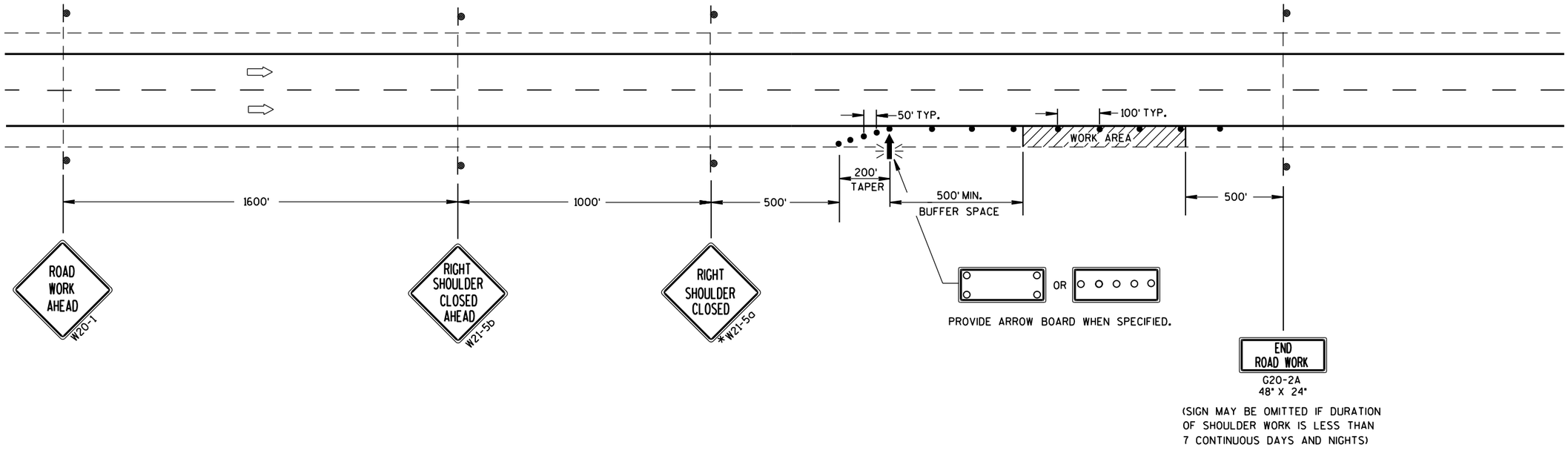
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 D 27-2

GENERAL NOTES

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. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

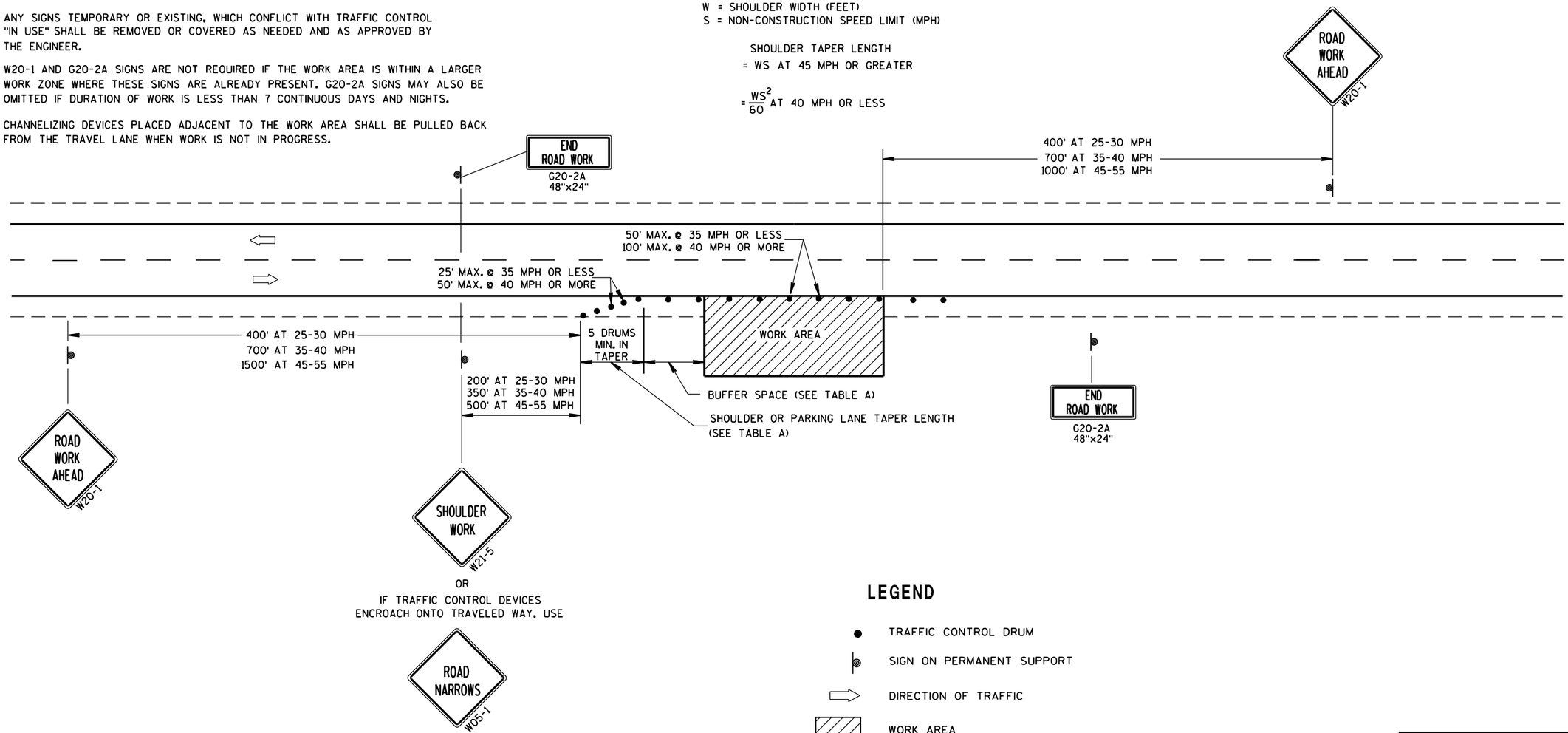
TABLE A

S \ W	SHOULDER TAPER LENGTH (FEET) 4	6	8	10	BUFFER SPACE (FEET)
30	20	30	40	50	85
35	30	45	55	70	120
40	40	55	75	90	170
45	60	90	120	150	220
50	70	100	135	170	280
55	75	110	150	185	335

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

SHOULDER TAPER LENGTH
= WS AT 45 MPH OR GREATER

$= \frac{WS^2}{60}$ AT 40 MPH OR LESS



LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

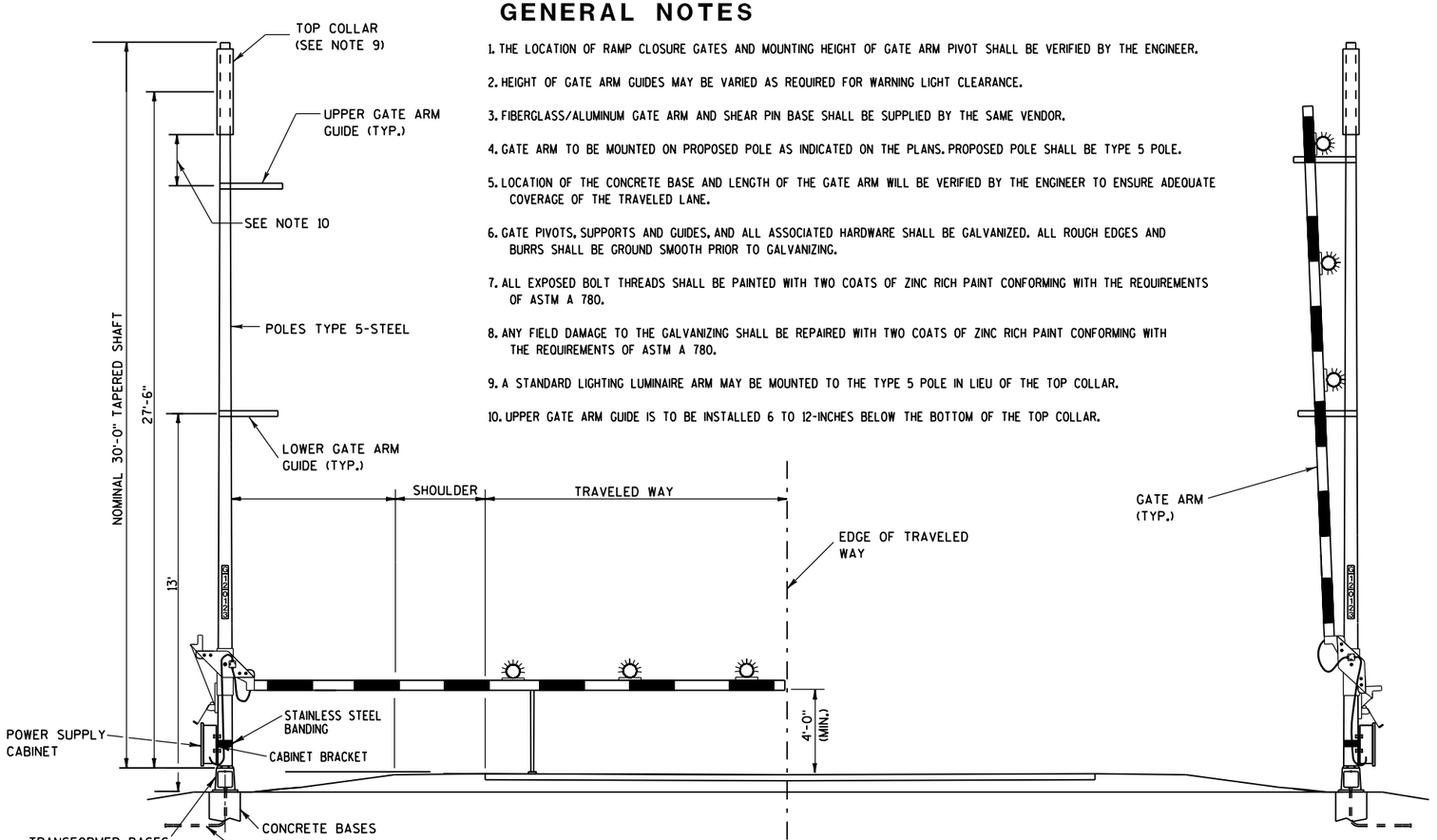
FHWA

6

S.D.D. 15 D 28-2

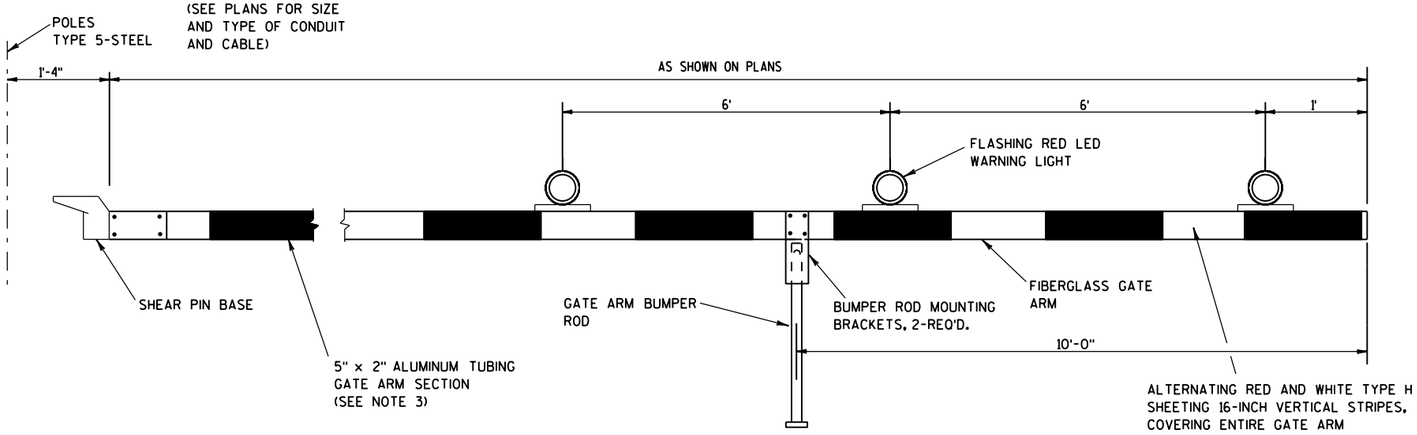
GENERAL NOTES

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.

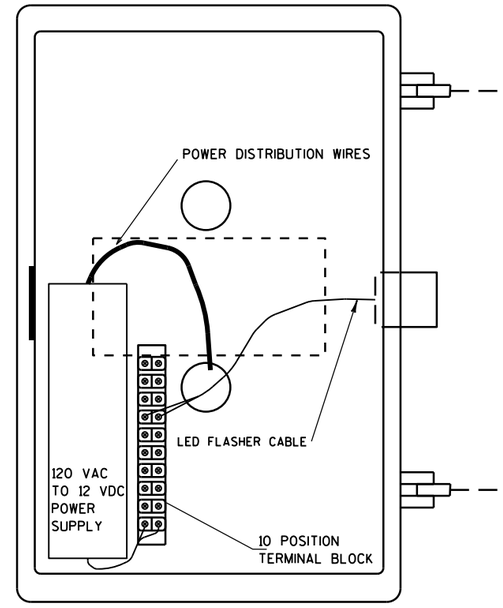


TYPICAL LOWERED POSITION

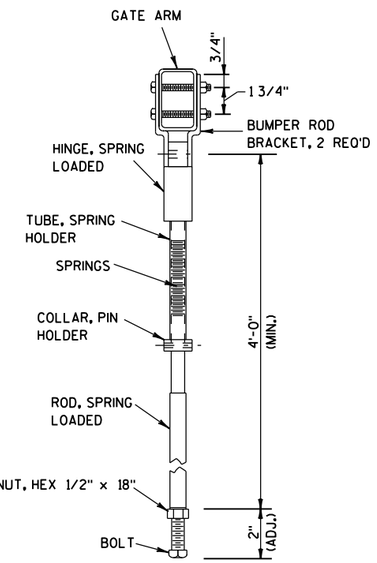
TYPICAL RAISED POSITION



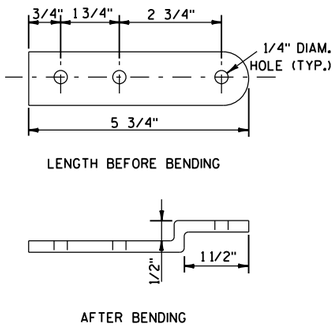
GATE DETAIL
(HARDWIRE POWER OPTION)



POWER SUPPLY CABINET



GATE ARM BUMPER ROD DETAIL

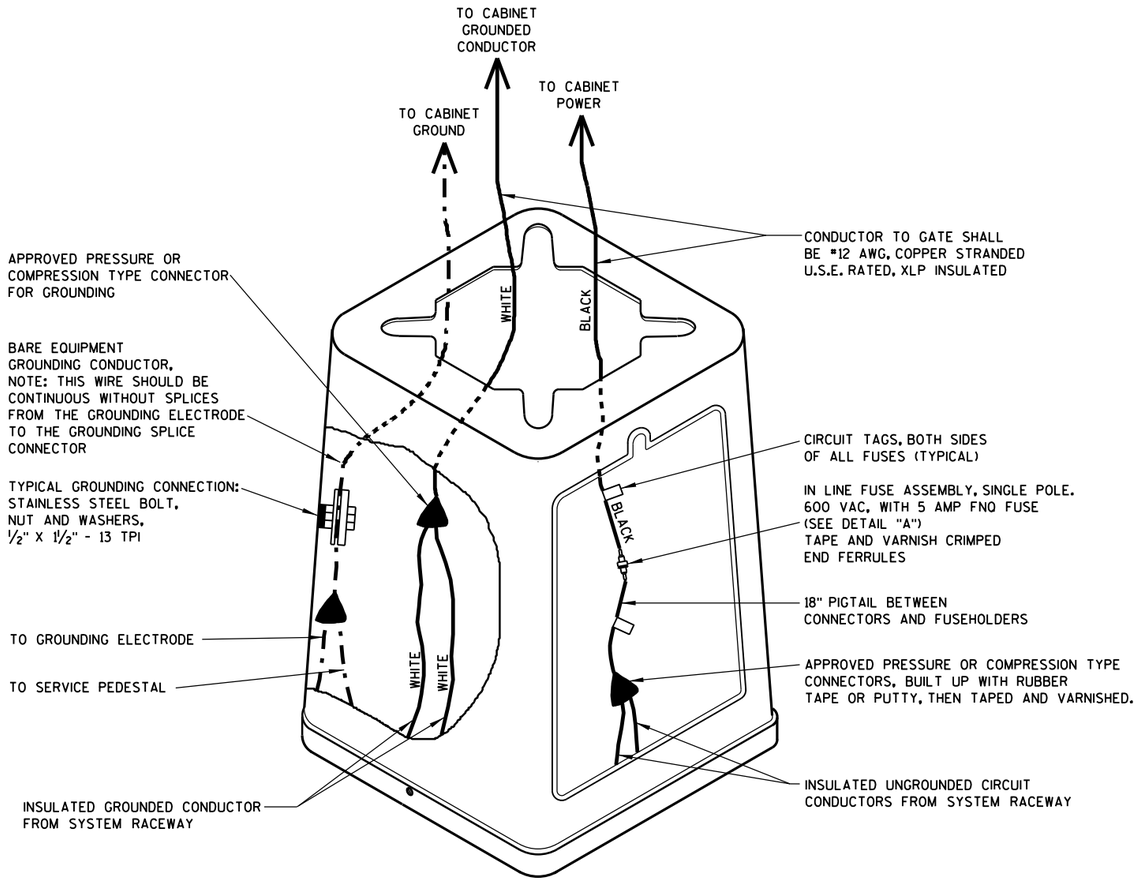


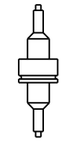
BUMPER ROD MOUNTING
BRACKET DETAIL

RAMP GATE
HARD WIRED

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 15 D 35-1a





DETAIL "A"
SINGLE POLE

6

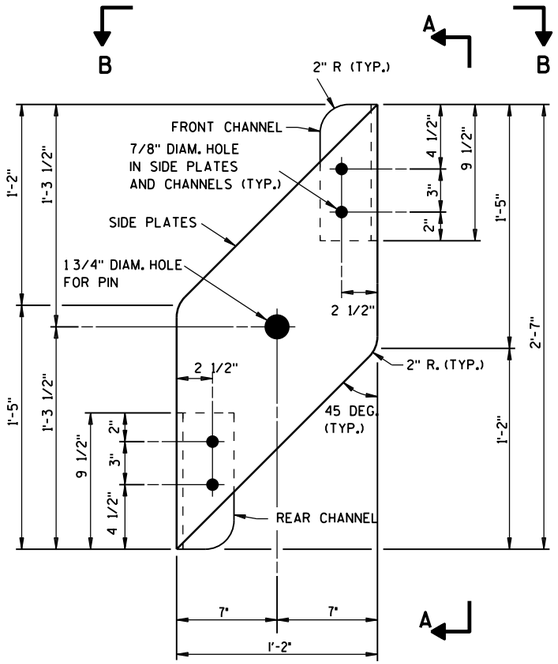
S.D.D. 15 D 35-1b

RAMP GATE
HARD WIRED

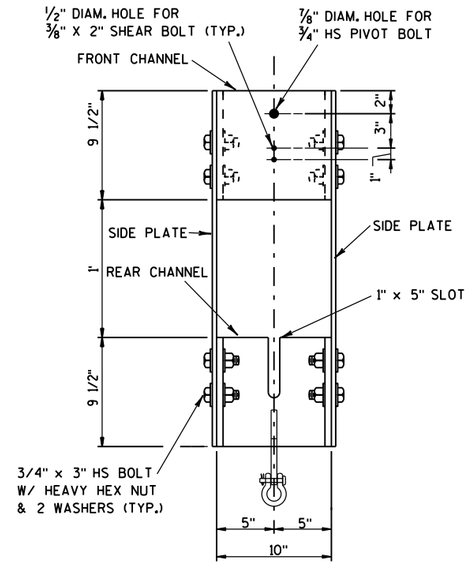
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

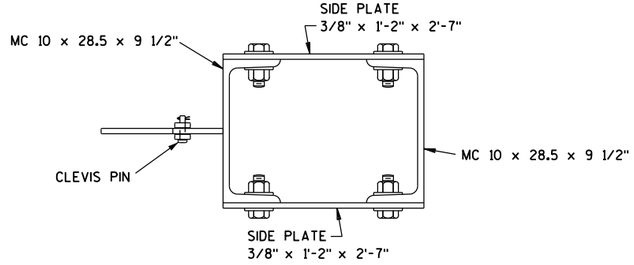
S.D.D. 15 D 35-1b



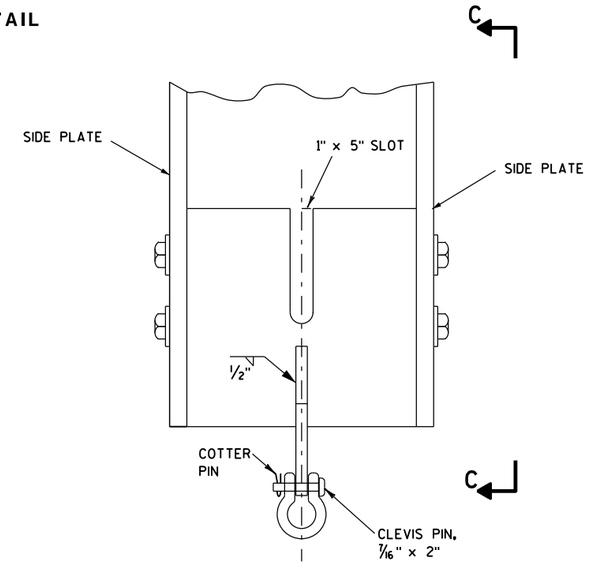
SIDE PLATE DETAIL



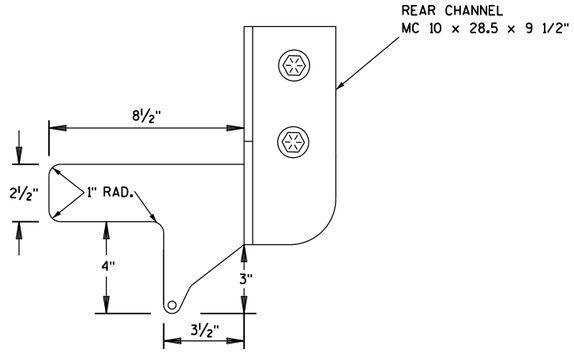
SECTION A-A



SECTION B-B



YOKE ASSEMBLY DETAIL



SECTION C-C

RAMP GATE
HARD WIRED

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 15 D 35-1c

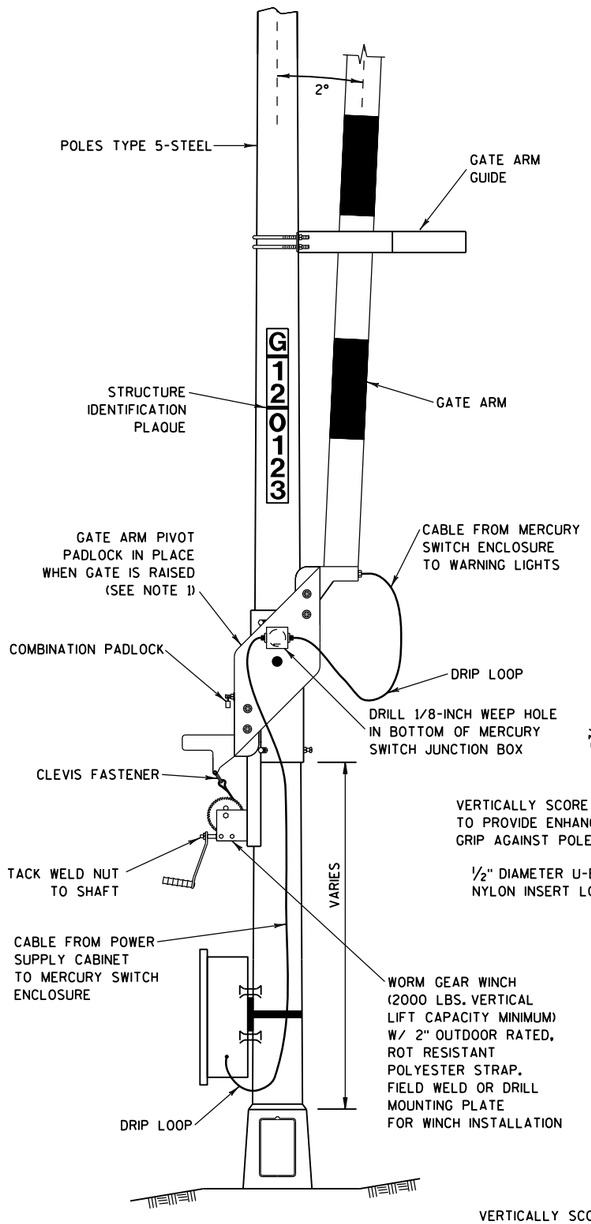
GENERAL NOTES

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.

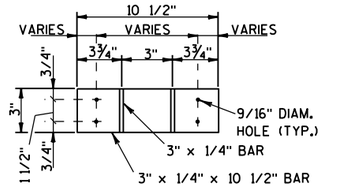
2. WHEN THE GATE IS FULLY LOWERED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE INSIDE OF THE REAR CHANNEL AND PADLOCKED INTO PLACE.

3. ANTI-SEIZE LUBRICATING MATERIAL SHALL BE USED ON ALL BOLT THREADS BEFORE INSTALLATION.

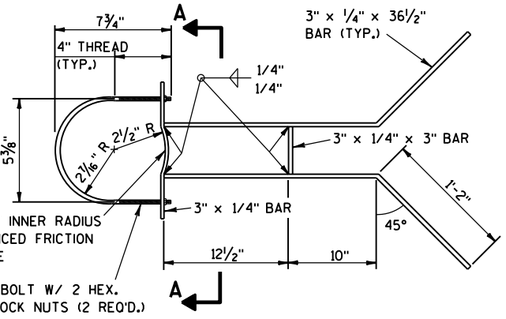
4. ALL BOLTS SHALL BE GALVANIZED AND CONFORM TO ASTM A307, GRADE A, UNLESS DESIGNATED AS HS (HIGH STRENGTH), WHICH SHALL CONFORM TO ASTM A325. BOLTS OF ½" NOMINAL DIAMTER OR LESS MAY BE STAINLESS STEEL.



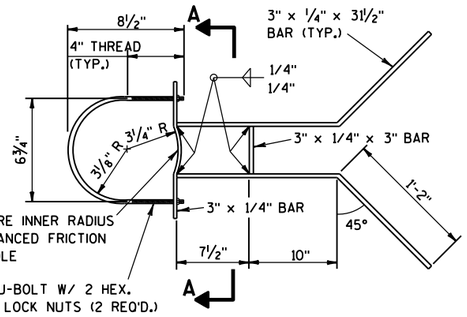
GATE PIVOT ASSEMBLY



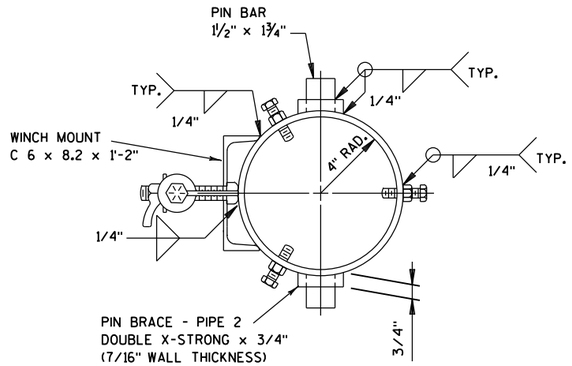
SECTION A-A
U-BOLTS NOT SHOWN



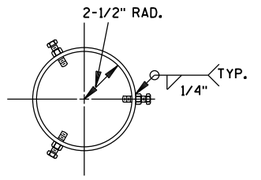
UPPER GATE ARM GUIDE DETAIL



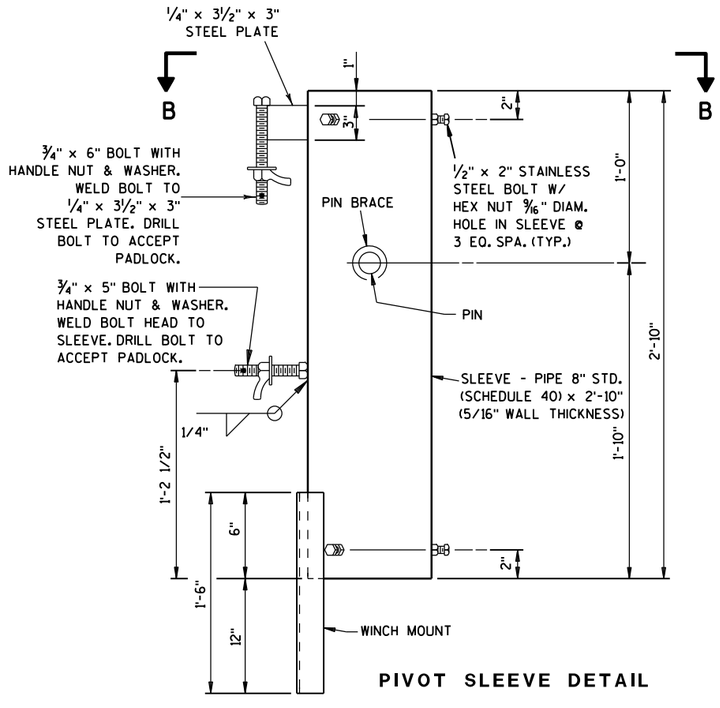
LOWER GATE ARM GUIDE DETAIL



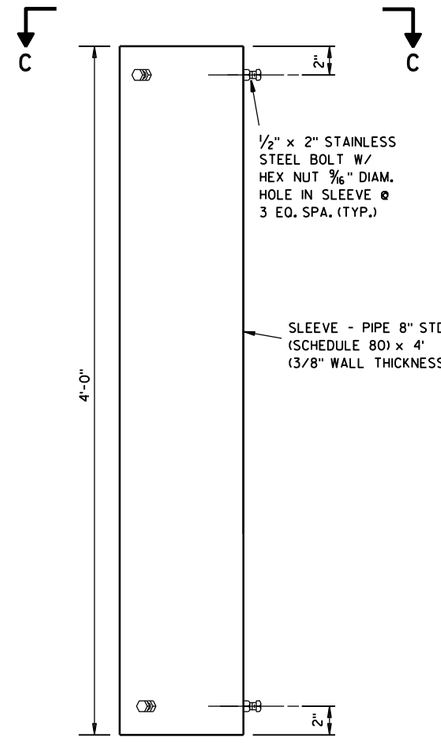
SECTION B-B



SECTION C-C



PIVOT SLEEVE DETAIL



TOP COLLAR

RAMP GATE
HARD WIRED

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

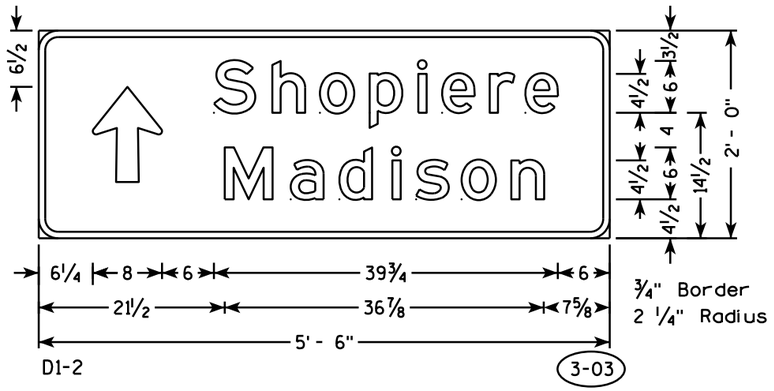
APPROVED
4-30-2013
DATE
/S/ Bill Wondrachek
STATE TRAFFIC MANAGEMENT EN
FHWA

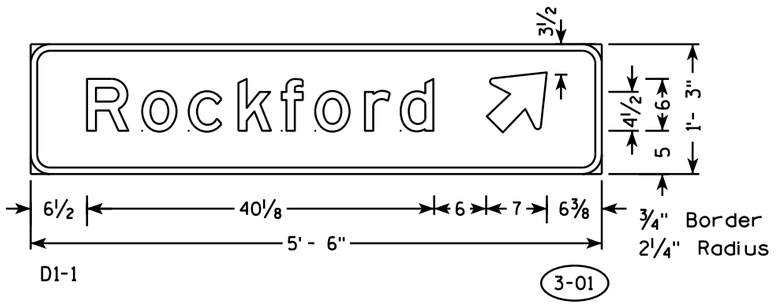
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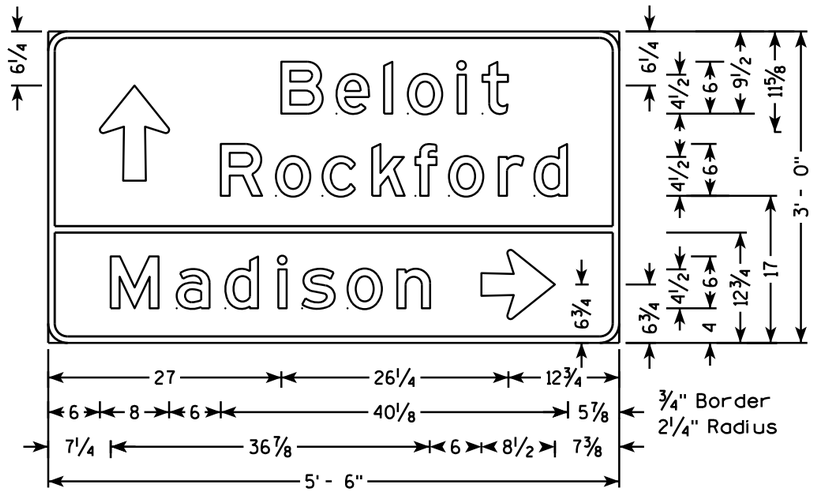
S.D.D. 15 D 35-1d

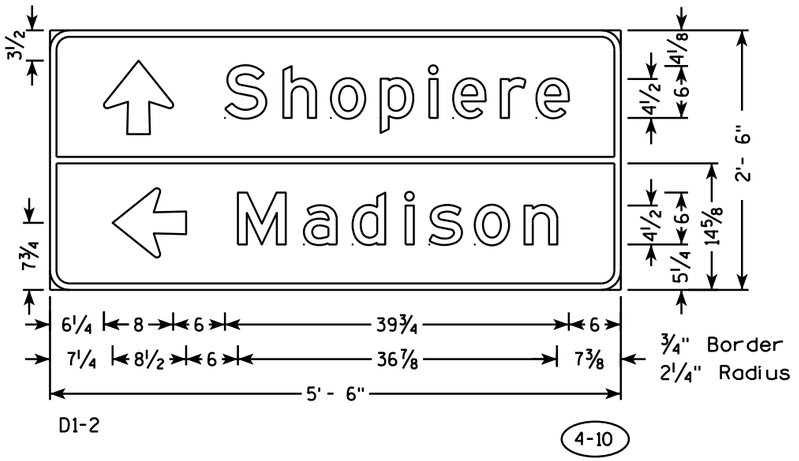
NOTES

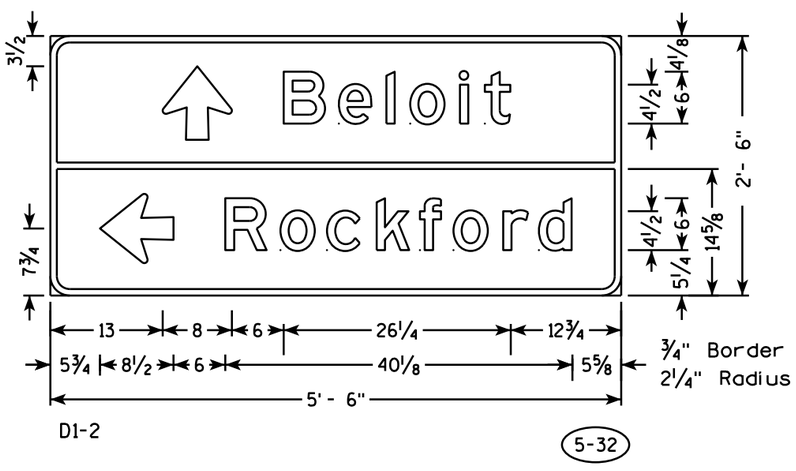
1. All Signs Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E

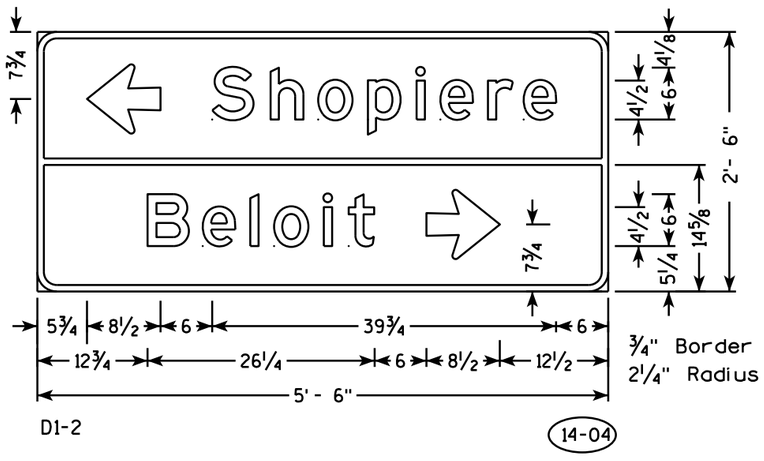


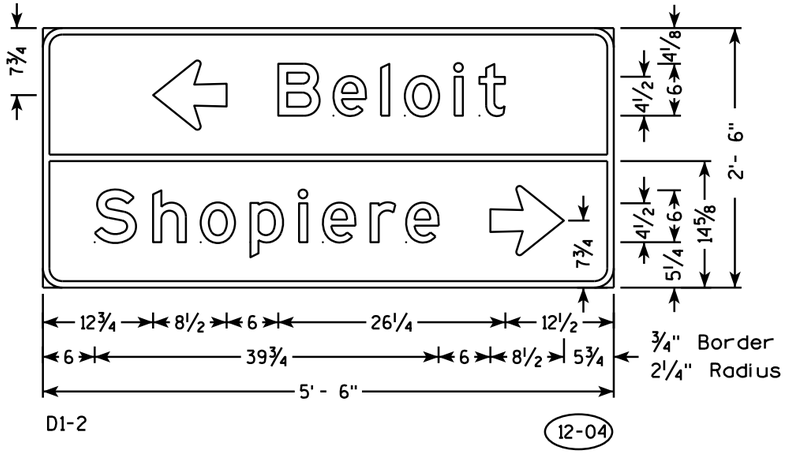








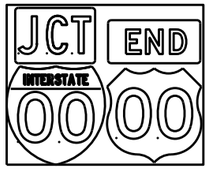




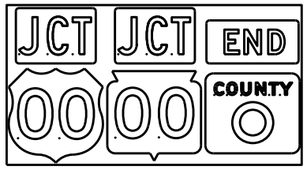
TYPICAL ASSEMBLIES



J1-1



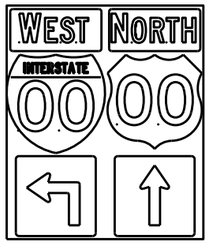
J1-2



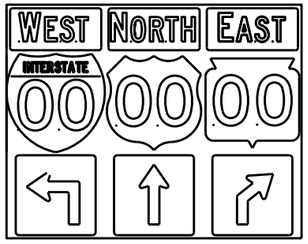
J1-3



J2-1



J2-2

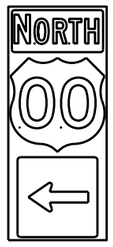


J2-3

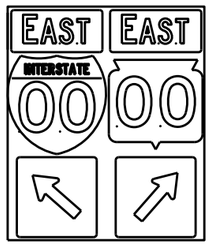


JV

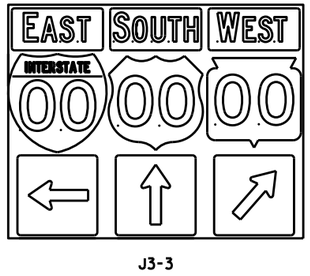
(Typical Vertical J-Assembly
See Note 10 and 11)



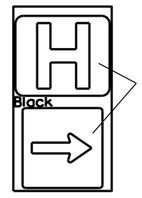
J3-1



J3-2



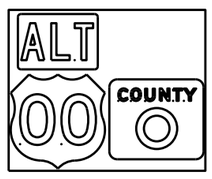
J3-3



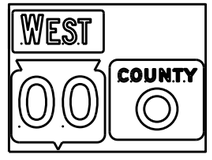
JH-1



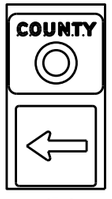
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

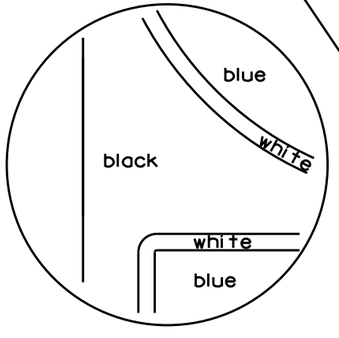


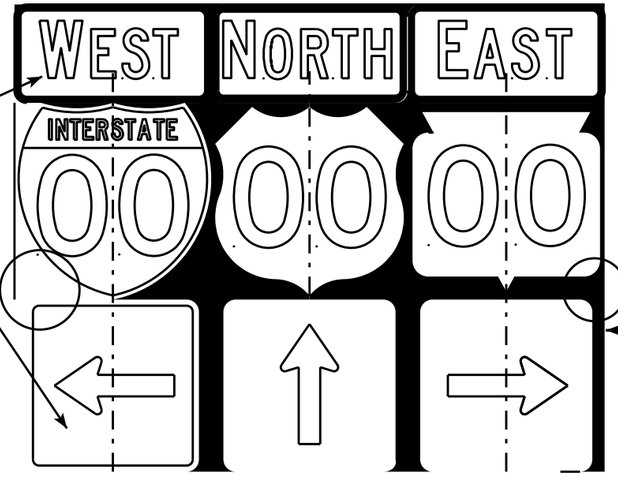
J23-1

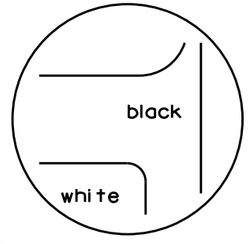


J22-1

[blue background with interstate]







[black background]

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

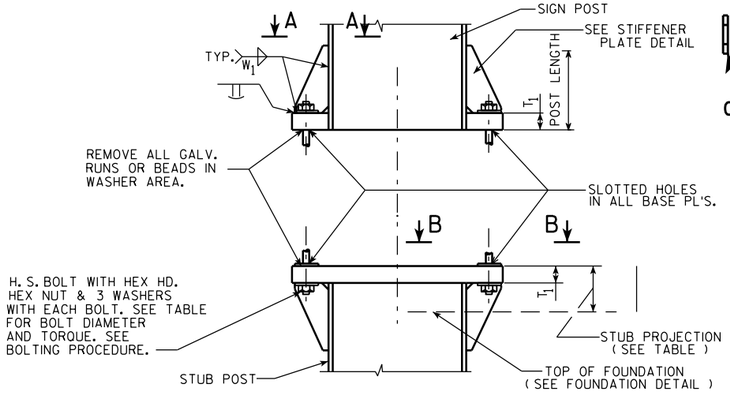
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/14 PL... A2-1S.8

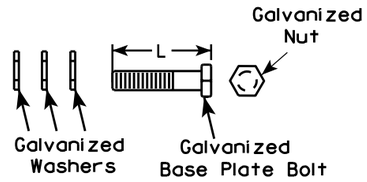
PROJECT NO: | SHEET NO: E

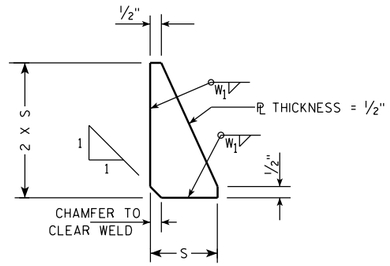
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

WISDOT/CADDS SHEET 42



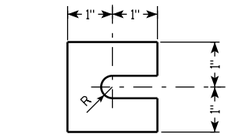
SIGN POST AND STUB POST ELEVATION





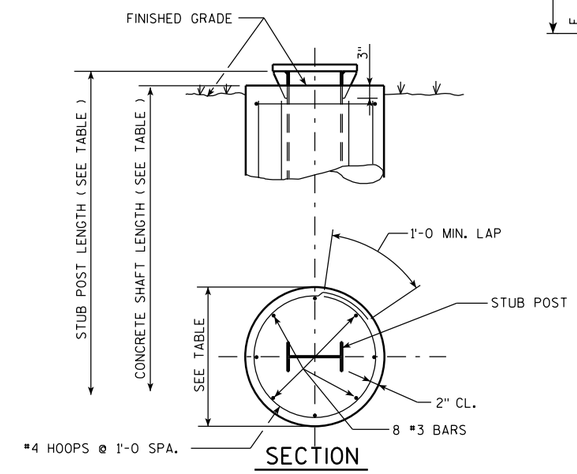
STIFFENER PLATE DETAIL

(SEE TABLE FOR DIMENSIONS)

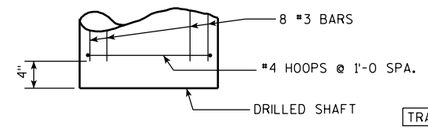


FURNISH 2 @ .012" ± THICK AND 2 @ .032" ± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO A.S.T.M.- B36.

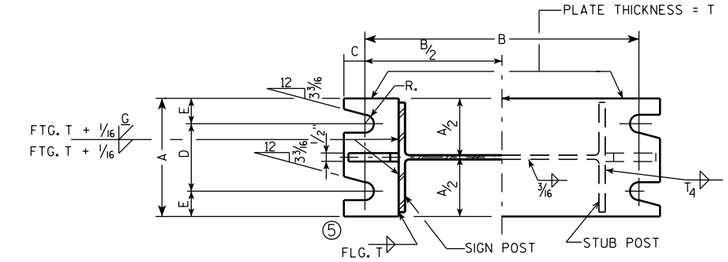
SHIM DETAIL



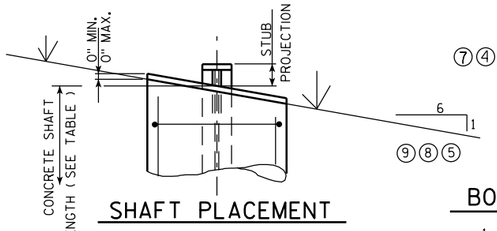
SECTION



FOUNDATION DETAIL



SECTION A-A SECTION B-B



SHAFT PLACEMENT

DESIGN DATA

WIND PRESSURE = 75 M.P.H.
WIND COMPONENTS - NORMAL = 1.0 TRANSVERSE = 0.0
ICE LOAD = 3 P.S.F.

GROUP LOADS	PERCENT OF ALLOWABLE STRESS	
1. DEAD	100	
2. DEAD & WIND	140	
3. DEAD, ICE & ½ WIND[4]	140	[4]25 P.S.F. MIN.

ALLOWABLE SOIL PRESSURE = 1½T / SQ. FT.
WIND LOAD WAS APPLIED TO THE AREA OF THE SIGN AND TO THE SUPPORTING MEMBERS.
ICE LOAD WAS APPLIED TO ONE FACE OF THE SIGN AND AROUND THE SURFACE OF THE SUPPORTING MEMBERS.

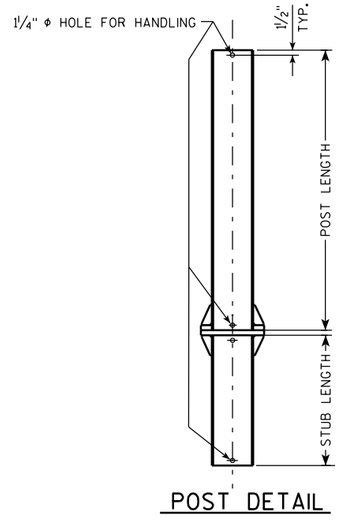
GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
DESIGN CONFORMS WITH A.A.S.H.T.O. SPECIFICATIONS 1985.
ALL POSTS, POST STUBS & ATTACHMENTS SHALL BE A.S.T.M. A709 GRADE 50.
(9) THE POST, BASE PLATES, UPPER SIX INCHES OF STUB POST FLANGE SPLICE PLATE AND FUSE PLATE SHALL BE GALVANIZED AFTER FABRICATION.
H.S. BOLTS, WASHERS & NUTS SHALL BE A325 GALVANIZED WHEN POSTS, POST STUBS AND ATTACHMENTS ARE A709 GRADE 50 AND GALVANIZED.

BOLTING PROCEDURE - BASE CONNECTION

1. ASSEMBLE SIGN POST TO STUB POST WITH BOLTS AND ONE OF THE FLAT WASHERS ON EACH BOLT BETW. PLATES.
2. SHIM AS REQ'D. TO PLUMB POST.
3. PRIOR TO BOLT TIGHTENING LUBRICATE BASE CONNECTION BOLTS WITH BEESWAX OR OTHER HIGH-WAX LUBRICANT.
4. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH 12" OR 15" WRENCH TO BED WASHERS & SHIMS AND TO CLEAN BOLT THREADS, THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE. (SEE TABLE)
5. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

NOTE:
TIGHTEN THE HIGH STRENGTH BOLTS TO THE TORQUE SHOWN. DO NOT OVERTIGHTEN.



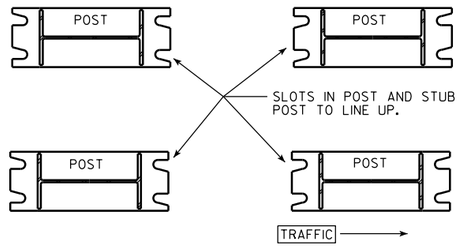
POST DETAIL

QUANTITIES FOR 1 FOOTING		
	CONC. MASONRY C.Y.	REINF. STEEL LBS.
A	0.6	34
B	0.8	49
C	0.9	50
D	0.9	56
E	1.0	62

(7)

REINF.	TYPE	#3	#4
	A	8 @ 4'-5	5 @ 6'-3
	B	8 @ 6'-5	7 @ 6'-3
	C	8 @ 6'-11	7 @ 6'-3
	D	8 @ 7'-5	8 @ 6'-3
	E	8 @ 7'-11	9 @ 6'-3

(7)



POST SLOT ORIENTATION (7)

L	X	TYPE	DIMENSION / POST SIZE	BASE CONNECTION DATA TABLE: BOLT SIZE & TORQUE	A	B	C	D	E	T_1	T_4	W_1	R	S	FOUNDATION DATA: STUB LENGTH	STUB PROJECTION	SHAFT DIAMETER	SHAFT LENGTH	K (2)
3 ¾	(4)	A	W10"X12.0 #/FT.	¾" Φ @ 75#-FT.	5¼"	1'-0⅜"	⅞"	3½"	⅞"	1"	3/16"	5/16"	13/32"	2⅛"	3'-6	3"	2'-0 Φ	5'-0	76.0# (4)
4 ¾	(4)	B	W12"X16.0 #/FT.	⅞" Φ @ 85#-FT.	5½"	1'-4¼"	1"	3½"	1"	1¼"	¼"	5/16"	15/32"	3"	5'-6	3"	2'-0 Φ	7'-0	146.5# (4)
5		C	W12"X19.0 #/FT.	⅞" Φ @ 85#-FT.	5½"	1'-4¼"	1"	3½"	1"	1½"	5/16"	5/16"	15/32"	3"	6'-0	3"	2'-0 Φ	7'-6	182.1#
5		D	W12"X22.0 #/FT.	⅞" Φ @ 85#-FT.	5½"	1'-4¼"	1"	3½"	1"	1½"	⅜"	5/16"	15/32"	3"	6'-6	3"	2'-0 Φ	8'-0	210.5#
5	(3)	E	W12"X26.0 #/FT.	1" Φ @ 90#-FT.	7"	1'-4¼"	1¼"	4"	1½"	1½"	⅜"	5/16"	11/32"	3"	7'-0	3"	2'-0 Φ	8'-6	293.0# (3)

(1) (6) (1)

STRUCTURAL CARBON STEEL PAY WTS. (1 POST) = K+ (POST LENGTH X POST WT.)
" K " INCLUDES STUB, BASE PLATES, STIFFS., BOLTS, AND WASHERS.

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 6/30/14 PLATE NO. A3-1.15

(10)	1-21-14	LUBRICATION OF BASE BOLTS
(9)	4-26-11	REMOVE NON-GALVANIZED
(8)	10-30-96	NOT GALVANIZED/GALVANIZED
(7)	10-30-92	QUANT., A588 EXCEPT., ADD SLOT VIEW
(6)	8-24-87	BASE CONN. WELD
(5)	10-13-81	BASE CONN. WELD & FUSE PL WASHERS
(4)	10-19-79	POST A & B, A572 GR. 50, & K
(2)	11-28-78	"K" (3) 4-23-79 TYPE "E"
(1)	5-4-78	T_1 , T_2 & W_1
NO.	DATE	REVISION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

TYPE A, B, C, D, & E

CONST. SPEC. 2011	DRAWN BY JPH	PLANS CK'D.

FTG. & SIGN SUPPORT DETAILS GROUND MOUNT BREAK-AWAY SIGNS

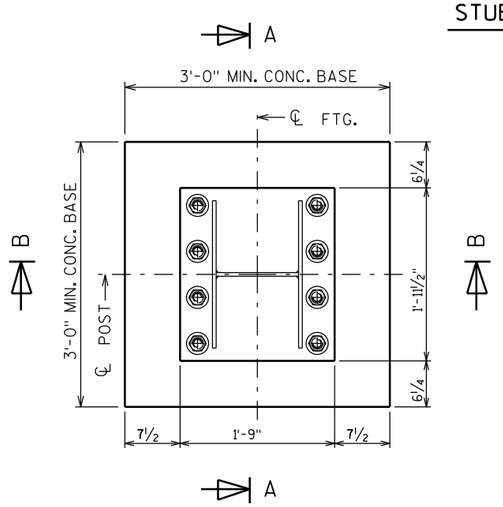
SHEET 421

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

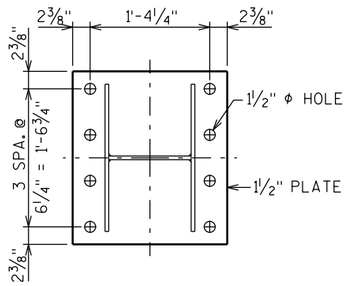
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WISDOT/CADDS SHEET 42

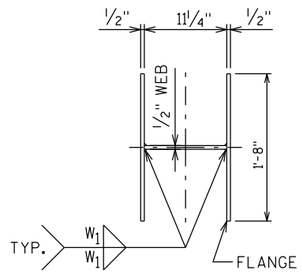
STUB AND MASONRY ANCHOR DETAILS



STUB SECTION



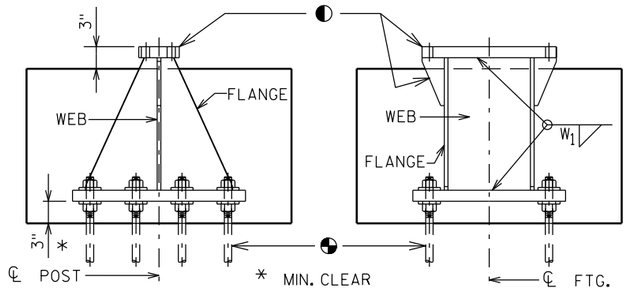
BASE PLATE



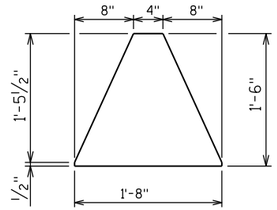
STUB

◐ SEE PLATE NO. A3-1 FOR DETAILS

◒ MASONRY ANCHORS TYPE S 1¼-INCHES (ADHESIVE). ALLOWABLE PULL OUT CAPACITY 14,995 KIPS. EMBED 1'-3" IN ROCK.



SECTION A SECTION B



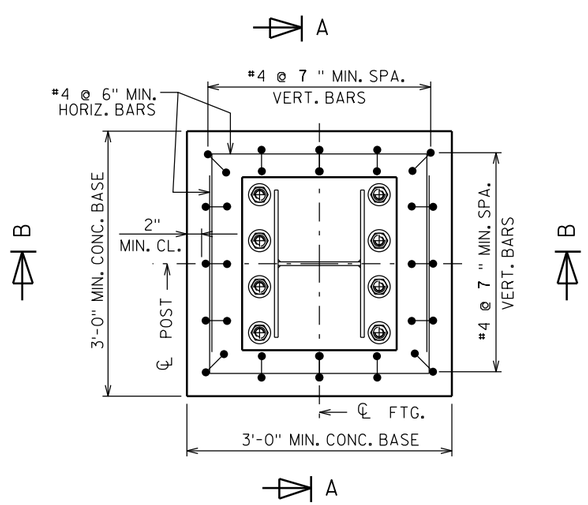
FLANGE

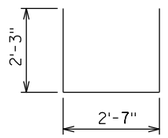
GENERAL NOTES

1. Quantities per Base:
   - REINFORCING BAR STEEL = 62 LBS
   - CONCRETE = 0.6 C.Y.
   - STEEL WEIGHT = 335 LBS
2. All materials, except anchor rod, nuts and washers, are to be A.S.T.M. A709 grade 50. All materials to be galvanized after fabrication.
3. If the contractor encounters rock before reaching the footing depth, per the A3-1 Sign Detail, determine the pull-out capacity of a test adhesive anchor installed in the rock. If the test result equals or exceeds the pull-out capacity of 14,995 KIPS, the contractor may install the breakaway stub for rock, according to this detail.

CONCRETE BASE AND REINFORCING STEEL DETAILS

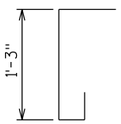
CONCRETE BASE SECTION





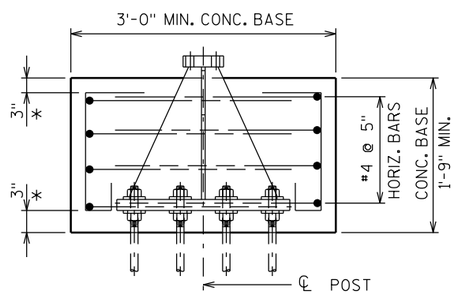
HORIZONTAL BAR

8 BARS @ 6'-11" LENGTH



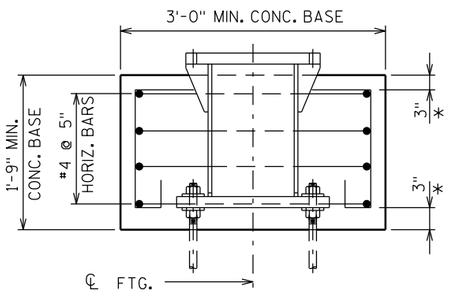
VERTICAL BARS

16 BARS @ 2'-4" LENGTH
MAY BE PLACED IN SKEW
FOR CLEARANCE NEED



SECTION A

* MIN. CLEAR



SECTION B

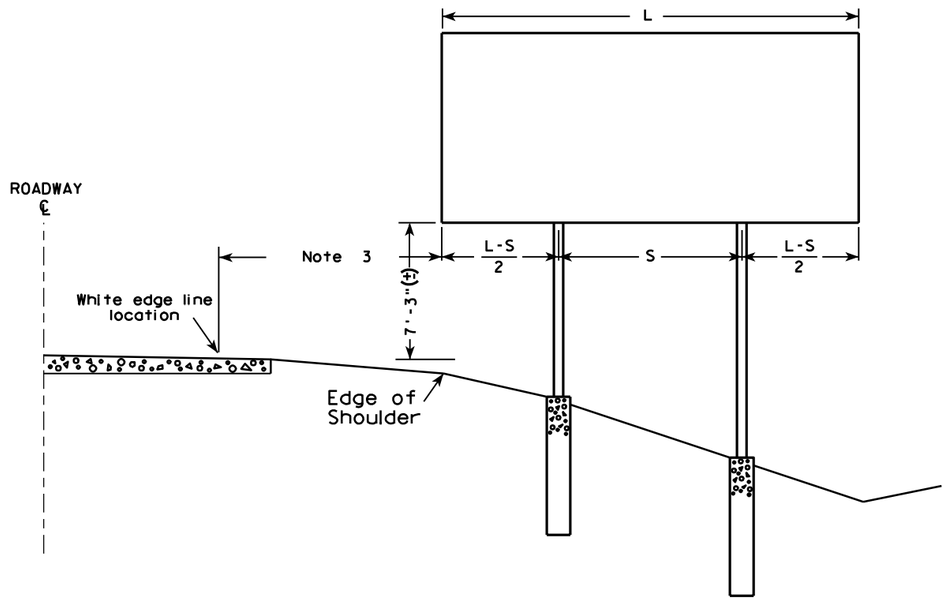
ALTERNATE BREAK-AWAY BASE ON ROCK
A3-1M

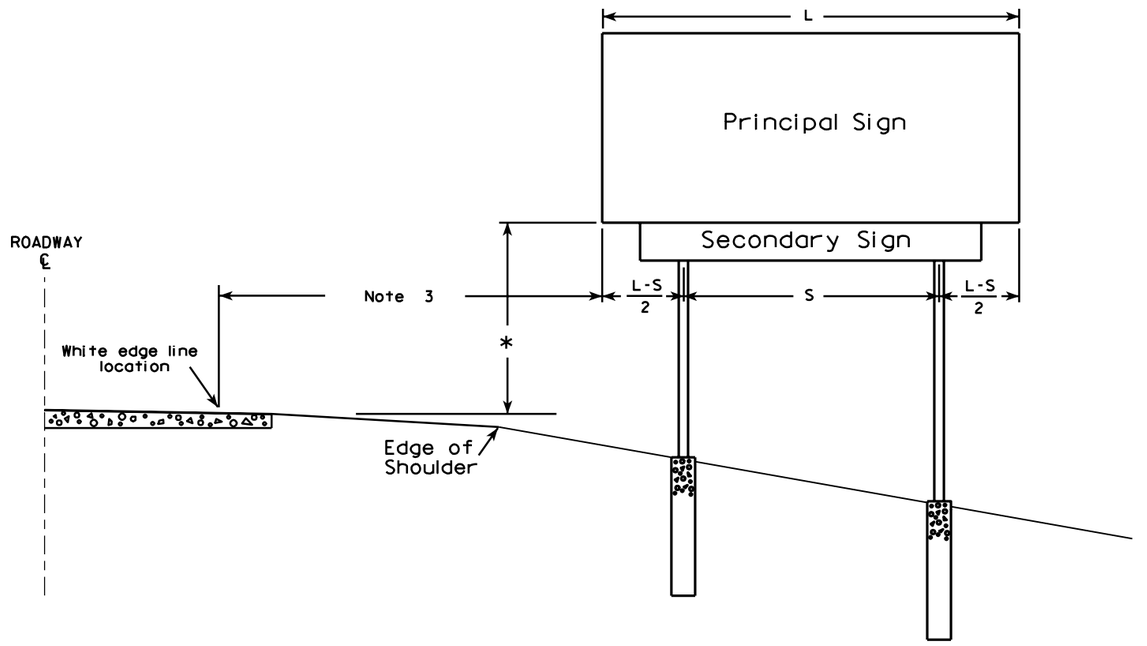
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 2/06/2014 PLATE 422 A3-1M.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E





GENERAL NOTES

1. For a 2 post installation, S equals 3L/5, but shall not be less than 9 ft.
2. For a 3 post installation, S equals 5L/7, but shall not be less than 18 ft., and the space between any two posts shall not be less than 9 ft.
3. Unless noted in the plan, the sign offset distance shall be a minimum of 17'-6", desirable 30'-0".
4. The (±) tolerance shown on this sheet is 3 in.
5. The vertical sign height clearance detailed is measured from the bottom of the sign to the near edge of pavement.
6. Post lengths shown in the miscellaneous quantities are estimated lengths. The contractor shall verify post lengths at the time of final grading.
7. Refer to the Traffic Guidelines Manual for further guidance on minimum vertical clearance requirements.

* Clearance is 8'-3"(±) when the secondary sign is 3 ft. or less in height. For secondary signs larger than 3 ft., the clearance to the bottom of the secondary sign shall be 5'-3"(±).

7

7

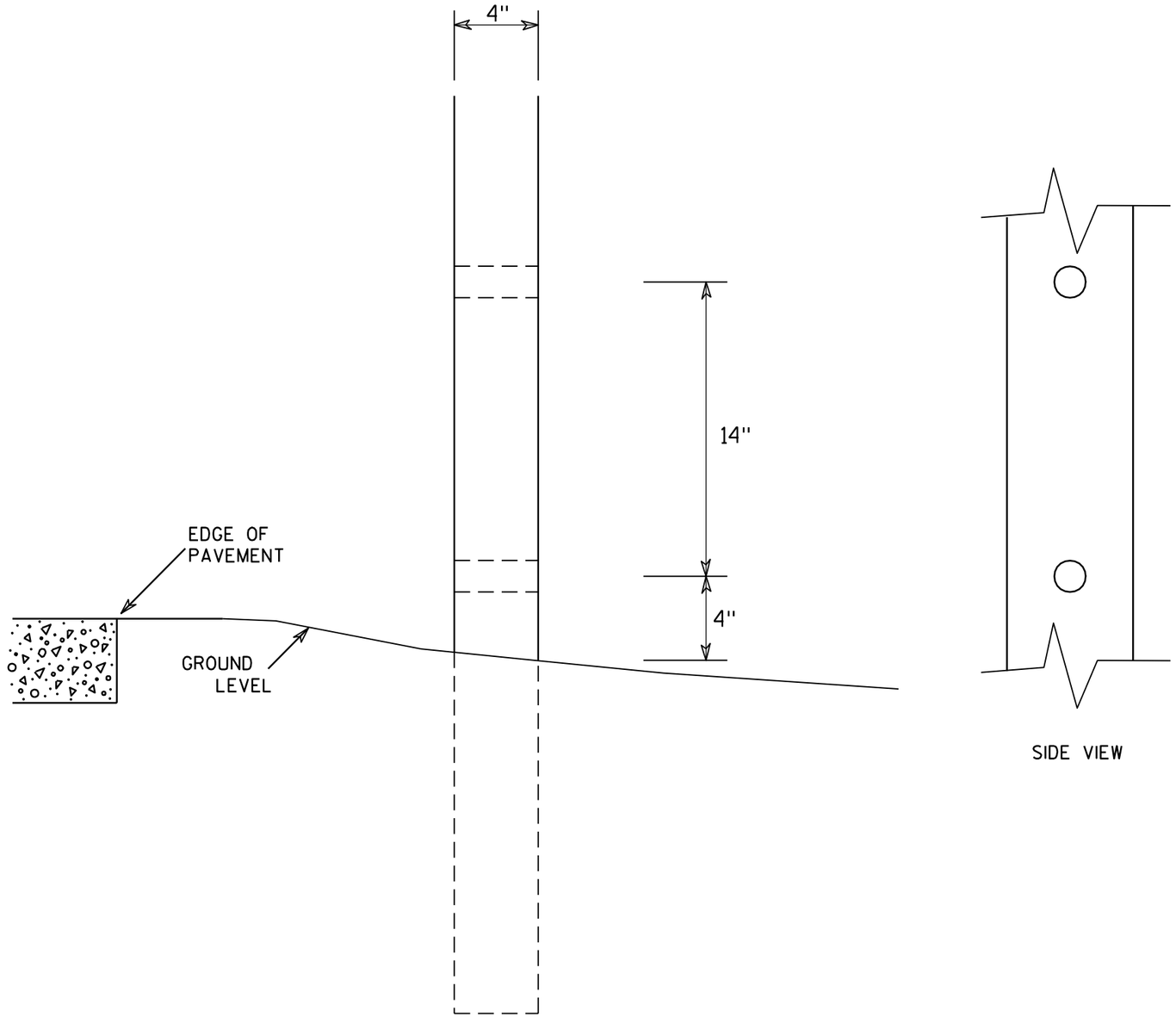
TYPICAL INSTALLATION
OF TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/02/08 PLATE NO. A4-1.9

PROJECT NO:				SHEET NO: 423	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.

7

7

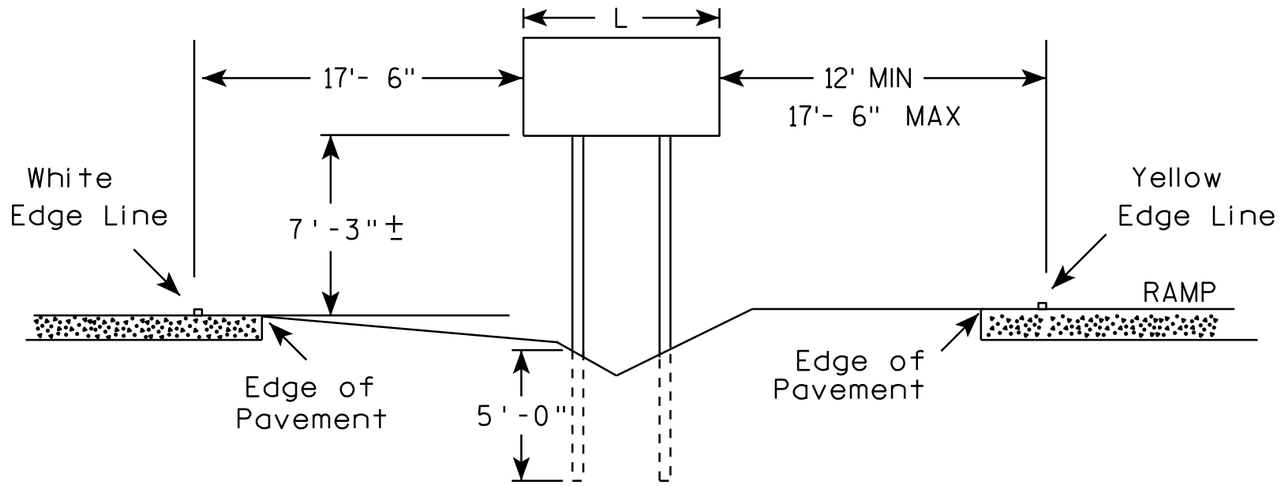
4 X 6 WOOD POST MODIFICATIONS

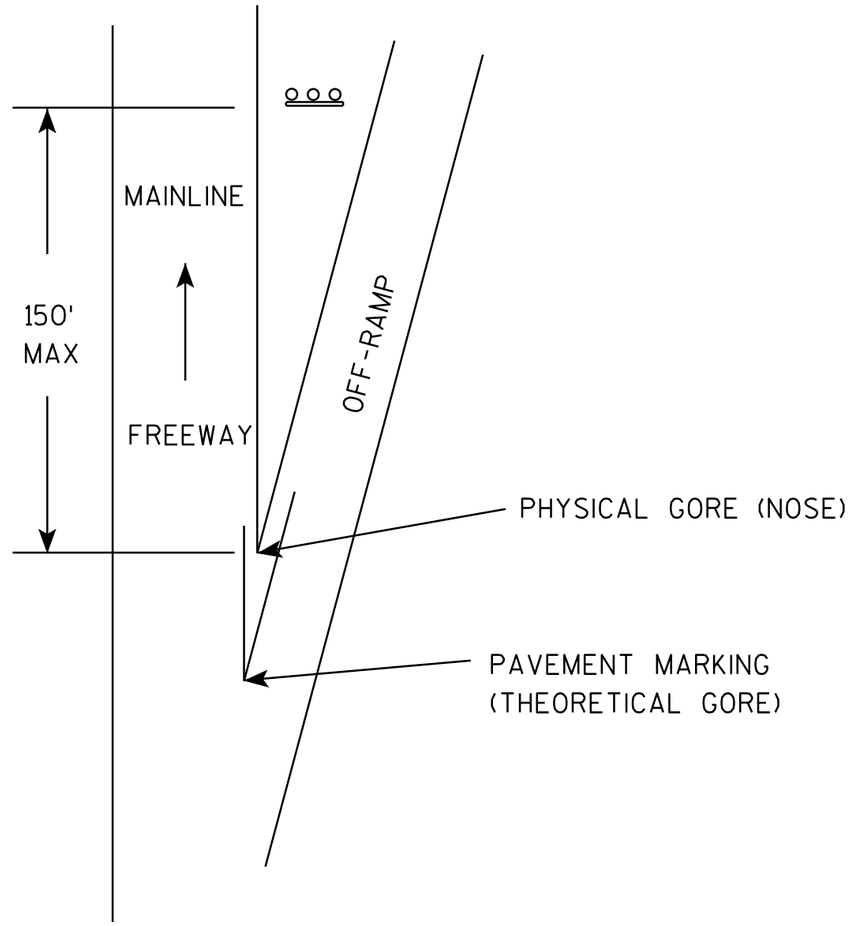
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 424	E





GENERAL NOTES

1. The 150 foot distance from the physical gore (where pavement ends) will normally provide the offsets as shown.
2. If roadway geometrics permit, the sign may be closer than the 150 foot distance as long as the offsets are maintained.
3. At no time shall the location be greater than 150 feet. If the normal offsets cannot be maintained, they can be reduced to 6 feet from the edge of the paved shoulder (both freeway and ramp).
4. The offset from edge of sign to the yellow edge line on the ramp is shown as a minimum of 12 feet and a maximum of 17 feet, 6 inches. Preference is adhering to the maximum rather than the minimum dimension.
5. When L is equal to or exceeds 10 feet, use 3 posts as per A4-4.
6. The (∓) tolerance for the mounting height is 3 inches.

7

7

TYPICAL INSTALLATION
OF TYPE II SIGNS ON
WOOD POSTS IN GORE

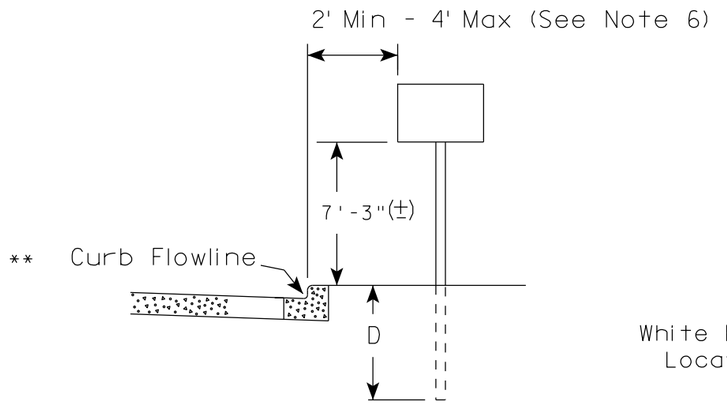
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

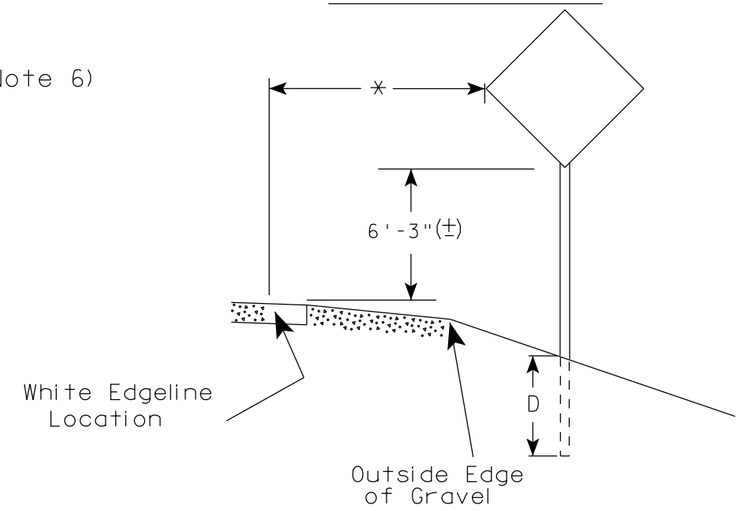
DATE 2/06/14 PLA 425 A4-2.3

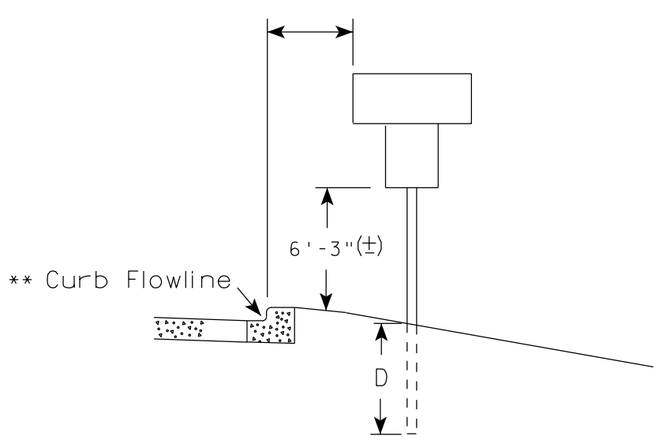
PROJECT NO: | SHEET NO: E

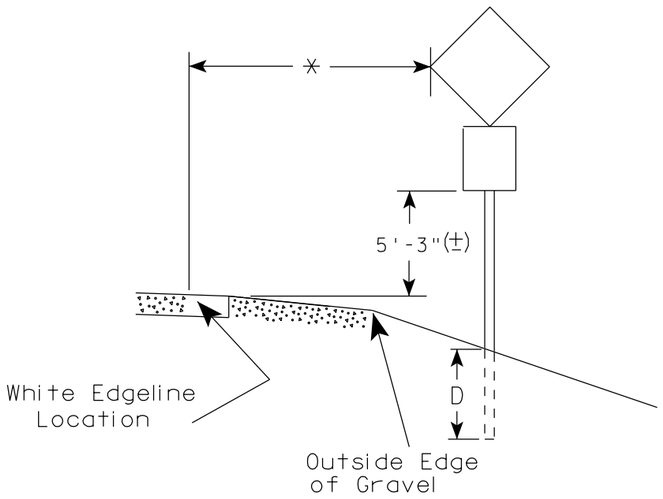
URBAN AREA



RURAL AREA (See Note 2)







** 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.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet, 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 directd 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" (±).

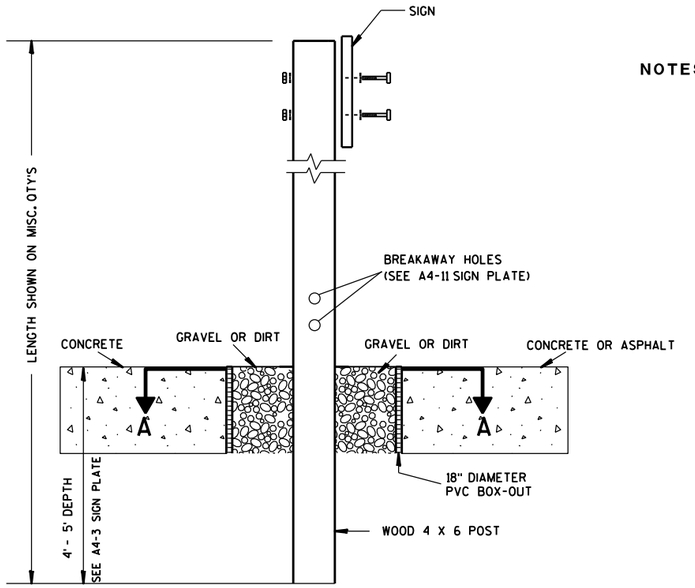
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/14 PLATE NO. A4-3.19

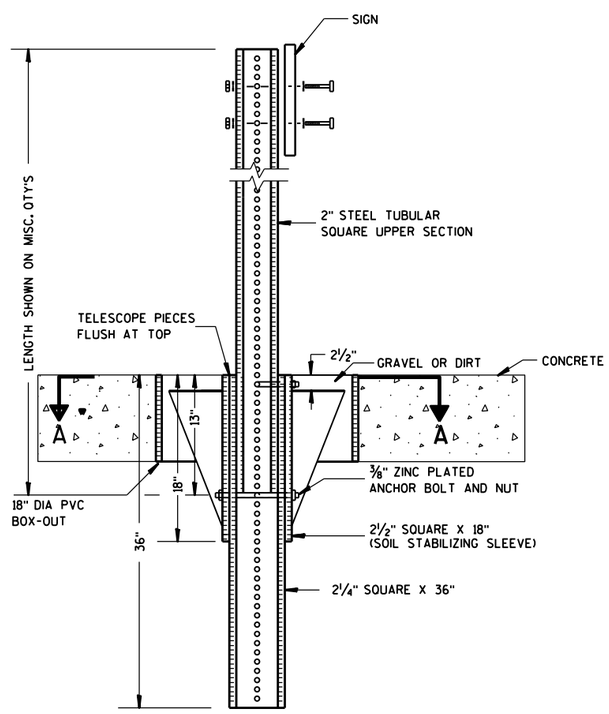
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

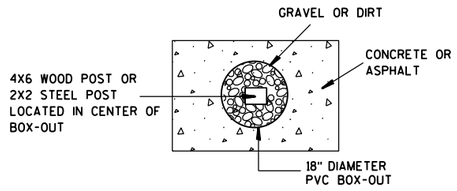
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

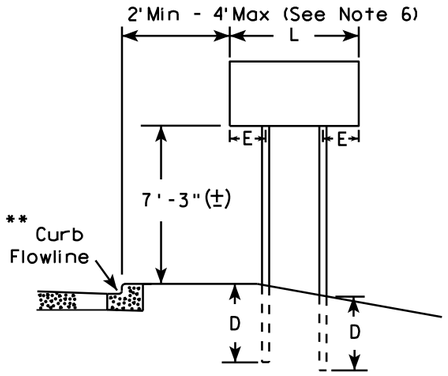
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

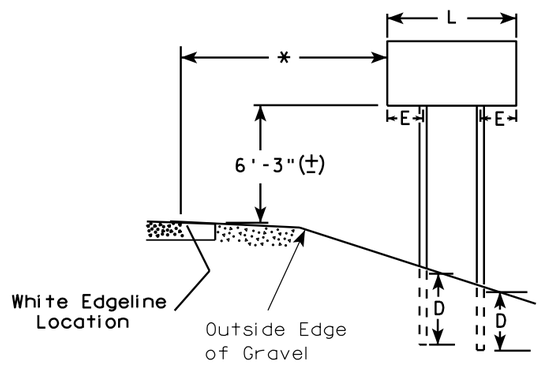
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

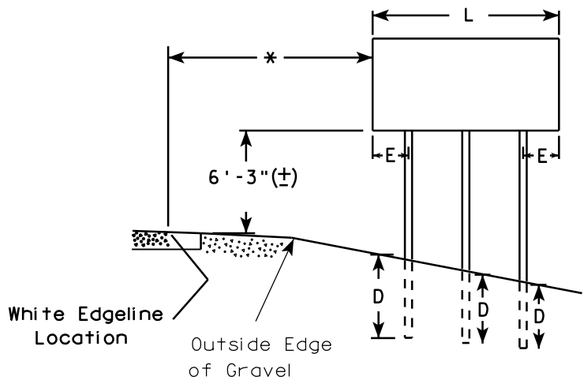
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

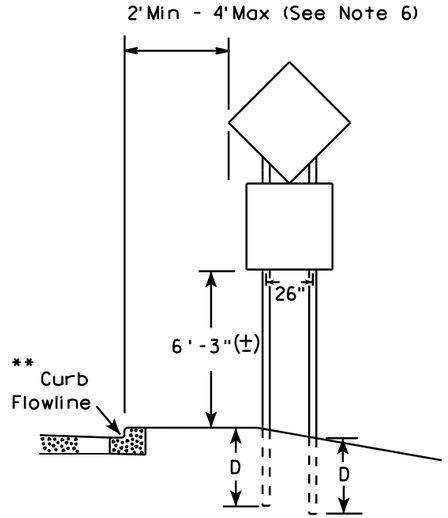
URBAN AREA



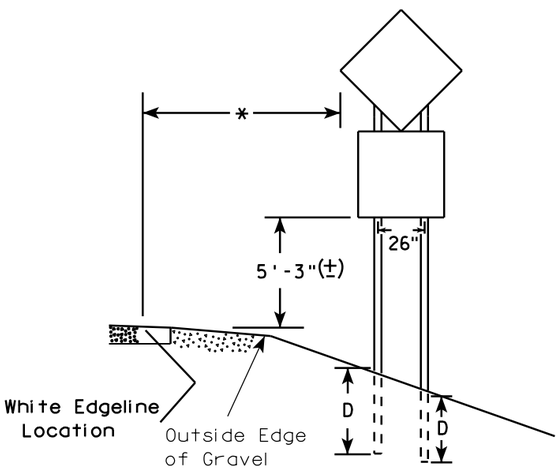
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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 or 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

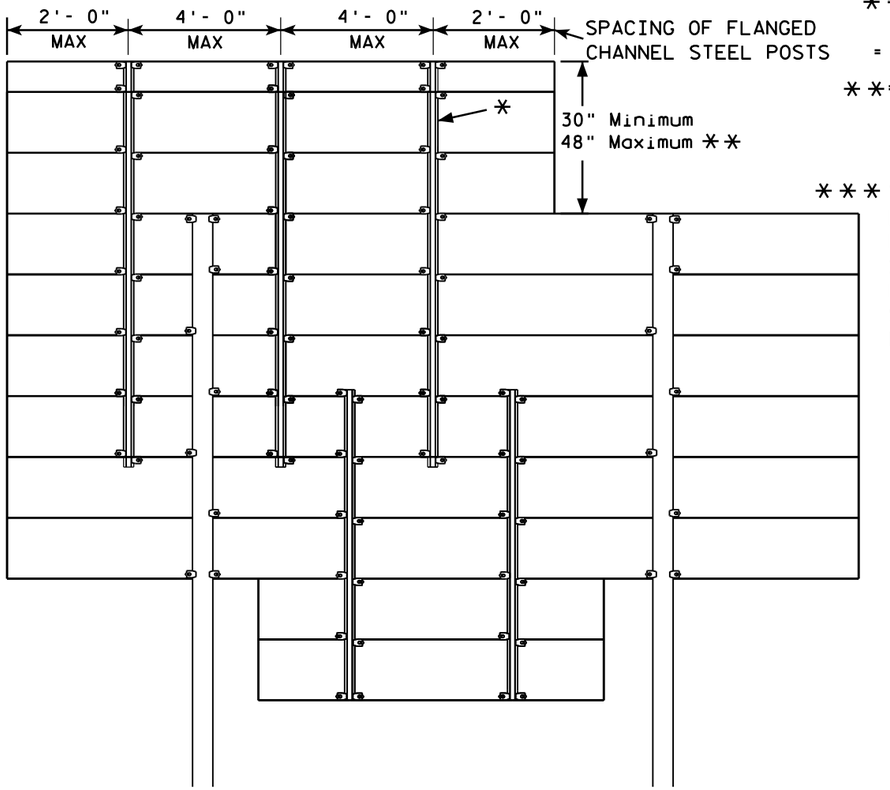
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/14 PLATE NO. A4-4 428 13

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

GROUND MOUNTED SIGN

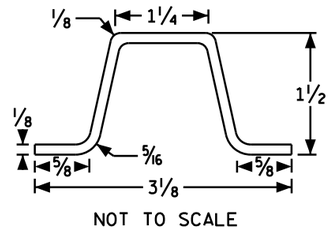


* =2.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

** =FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

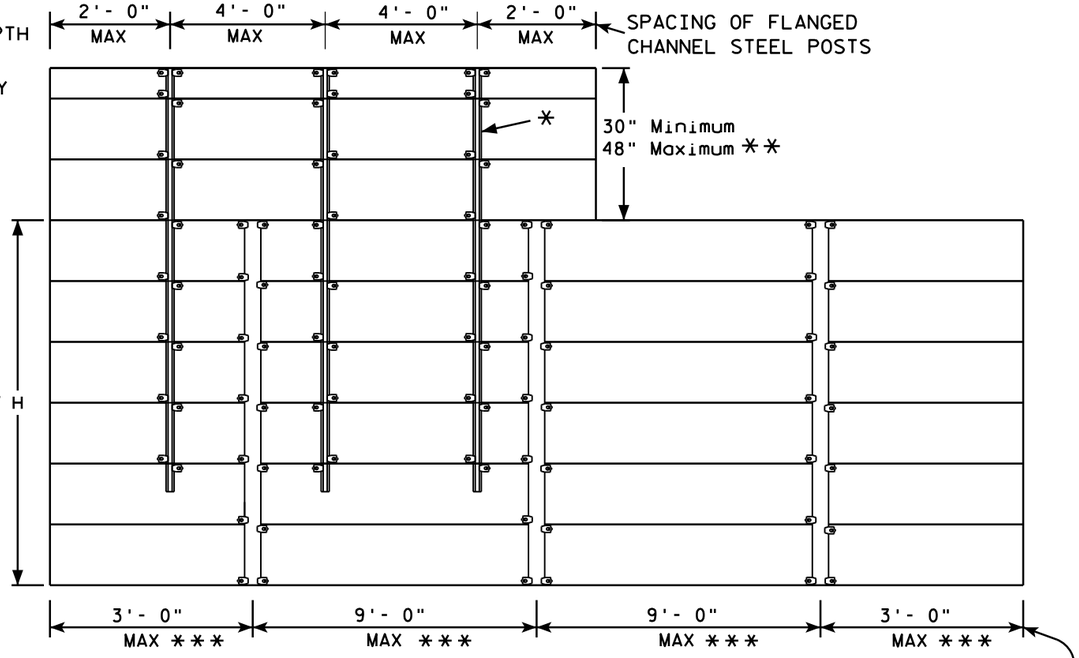
*** THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 16 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 16 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

FLANGE CHANNEL DETAIL



NOT TO SCALE

SIGN BRIDGE MOUNTED SIGN



GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:

   PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
   PANEL LENGTH 9'- 0" - 12'- 0" = 3 CHANNELS
   PANEL LENGTH 13'- 0" OR MORE = 4 CHANNELS

   If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)
6. Structural steel sign supports shall extend to the top of the main signs, as shown on the above details.

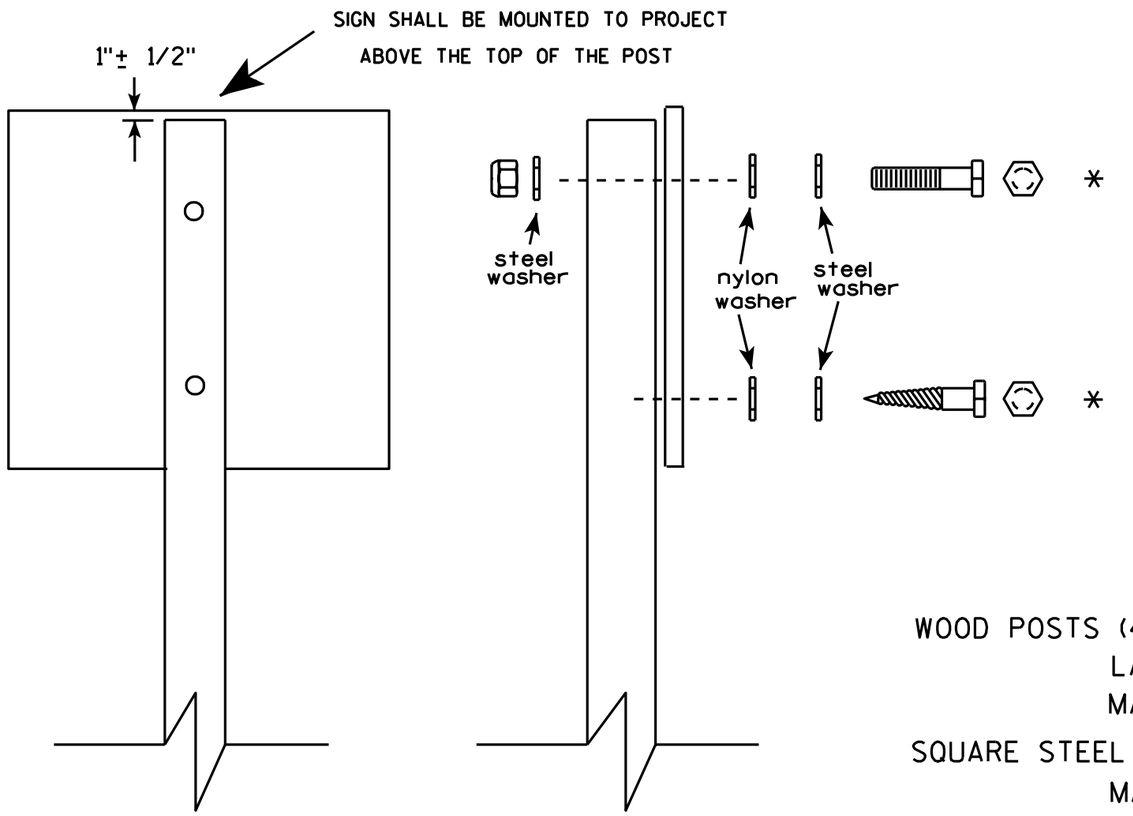
ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/05/13 PLAT 429 A4-6.12

PROJECT NO:				SHEET NO:	E



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

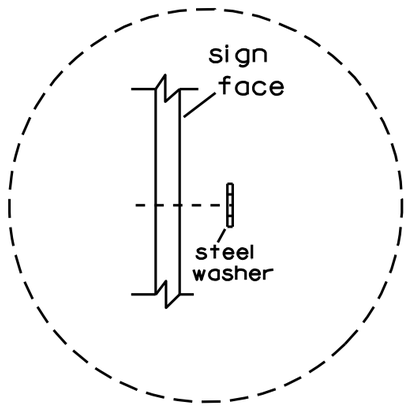
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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 Matthew R Rauch
for State Traffic Engineer

DATE 3/23/10 PLATE NO. A4-8.7

7

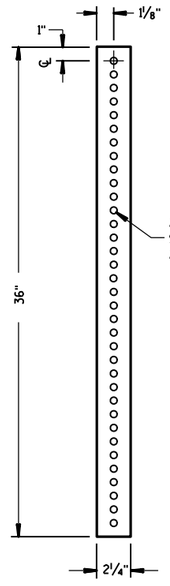
7

PROJECT NO:

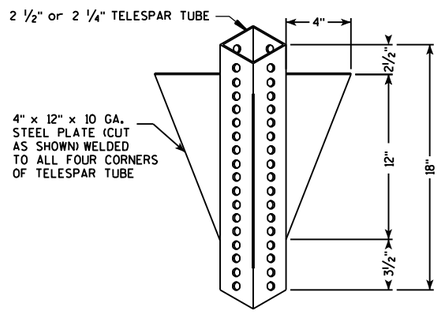
SHEET NO: 430 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

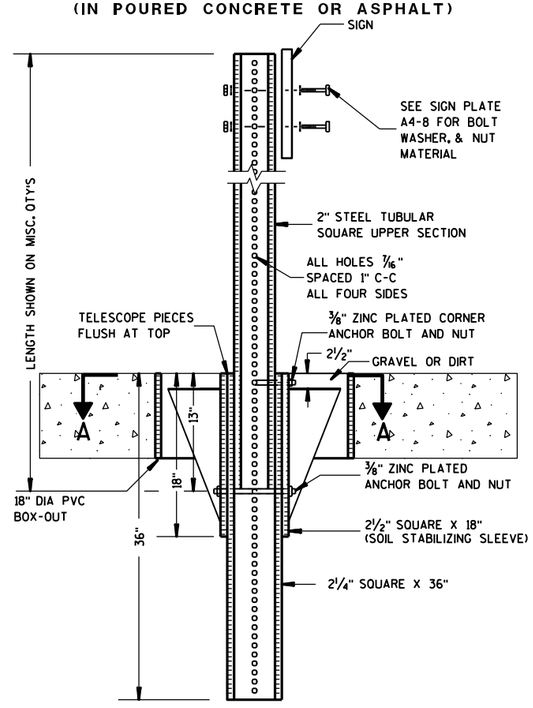
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



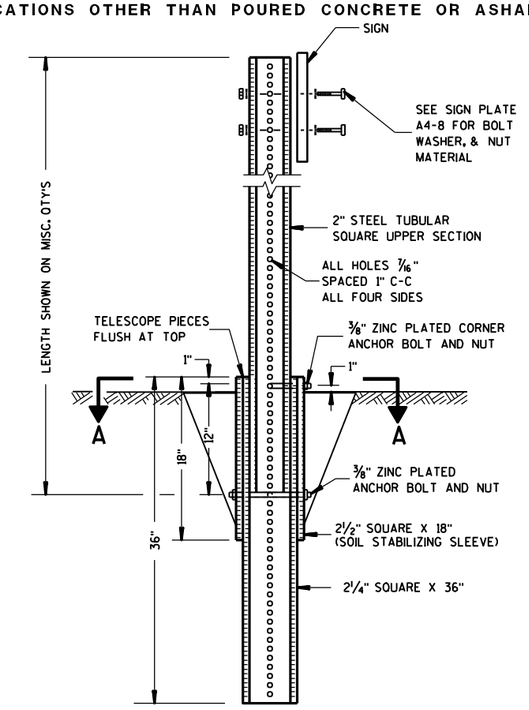
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

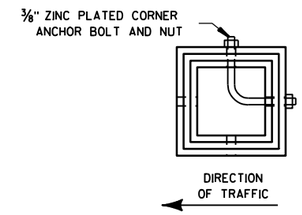


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASHALT)





SECTION A-A

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).

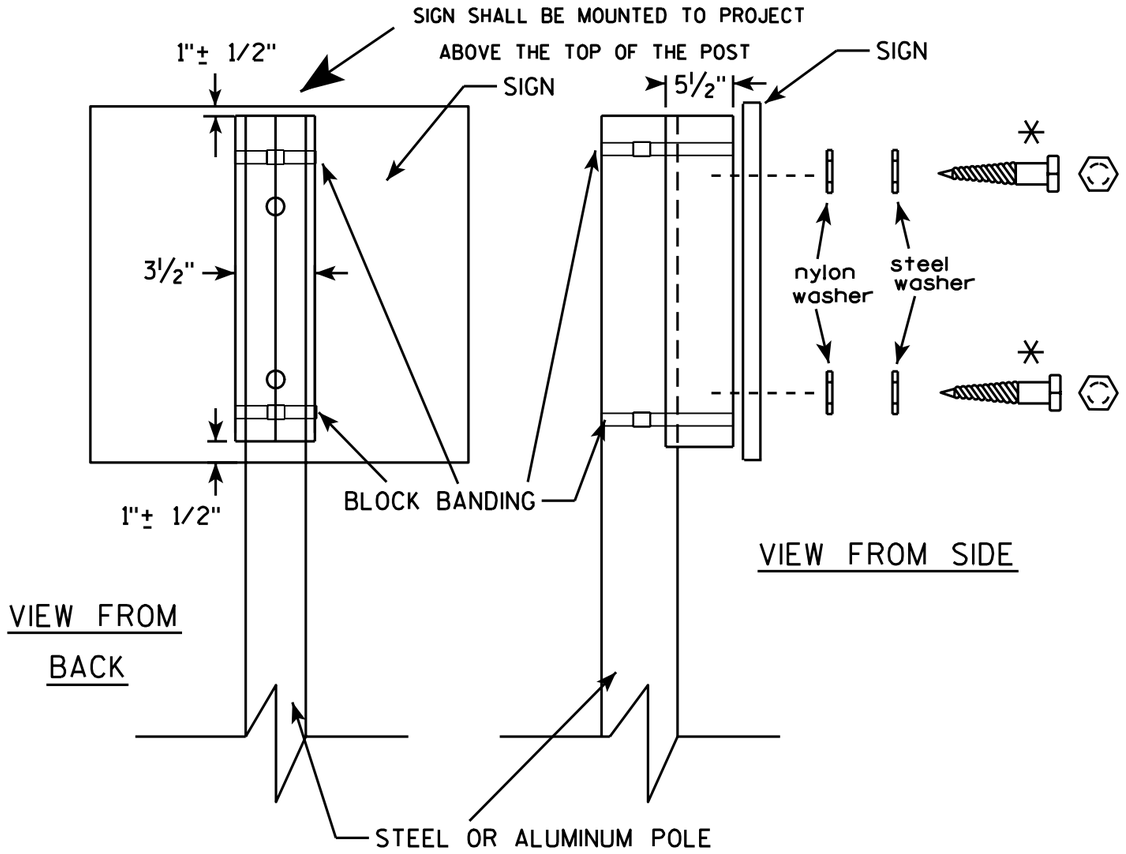
TUBULAR STEEL SIGN POST A4-9

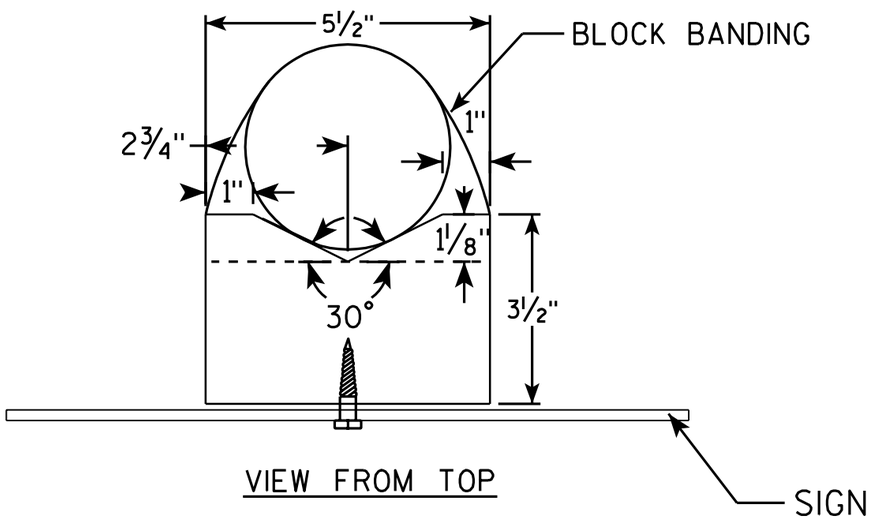
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/30/12 PLATE NO. A4-9.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 431	E





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

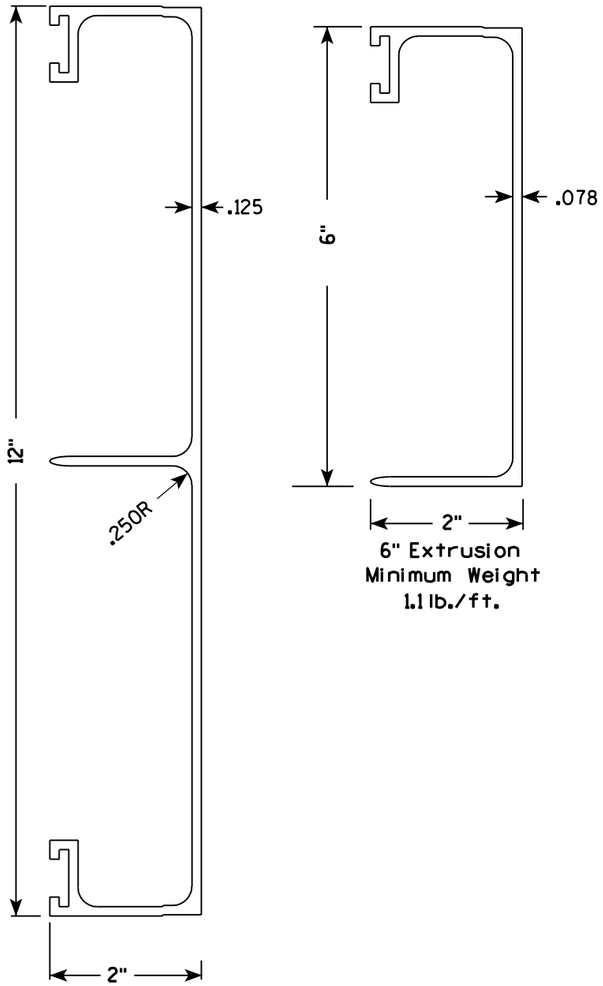
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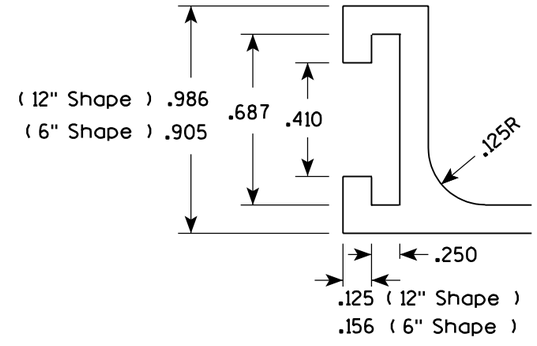
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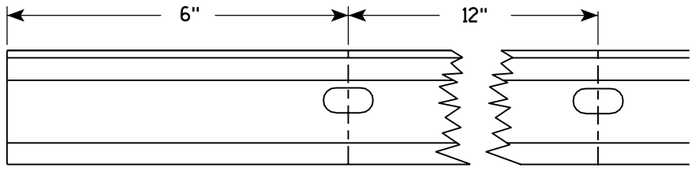
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WISDOT/CADDS SHEET 42

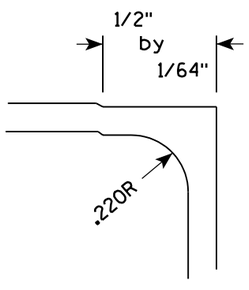
Extruded Shape







Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.

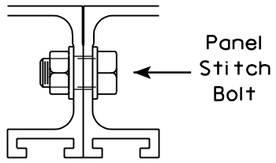


Hardware

STITCH BOLT, WASHER & NUT

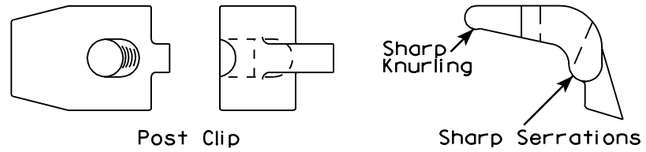
The hardware includes:

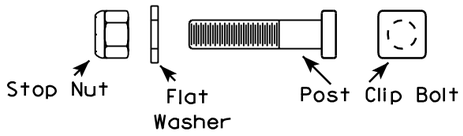
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



POST CLIP, POST CLIP BOLT, WASHER & NUT

Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.





NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

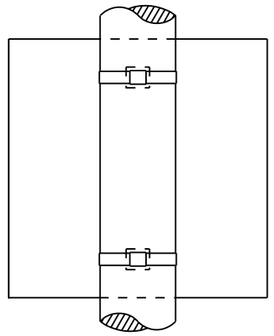
DATE 11/18/99 PLATE NO. A5-2.9

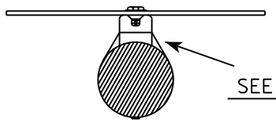
PROJECT NO:

SHEET NO: 433 E

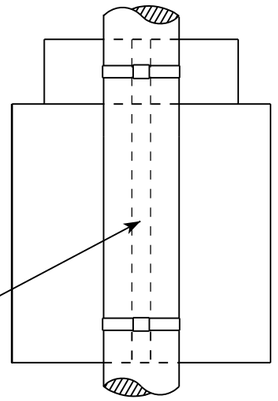
BANDING

SINGLE SIGN



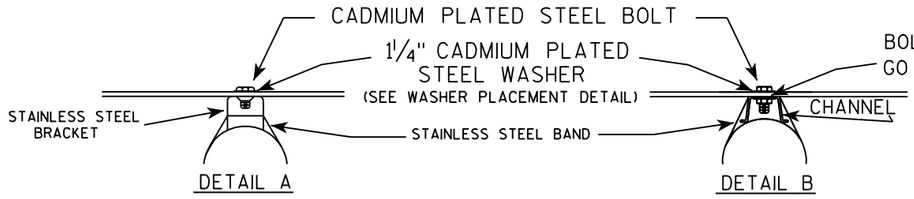


"J" ASSEMBLY

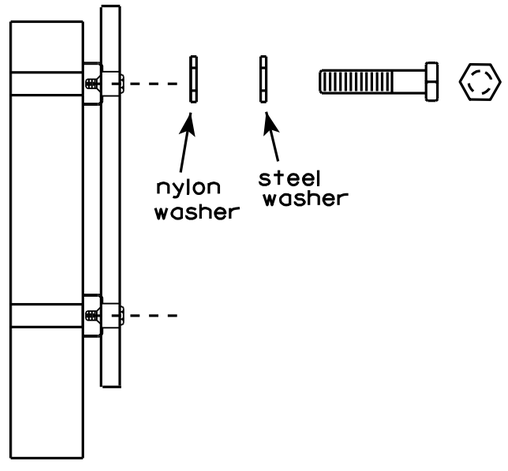


CHANNEL
SEE TYPICAL PANEL INSTALLATION SHEET





WASHER PLACEMENT



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

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

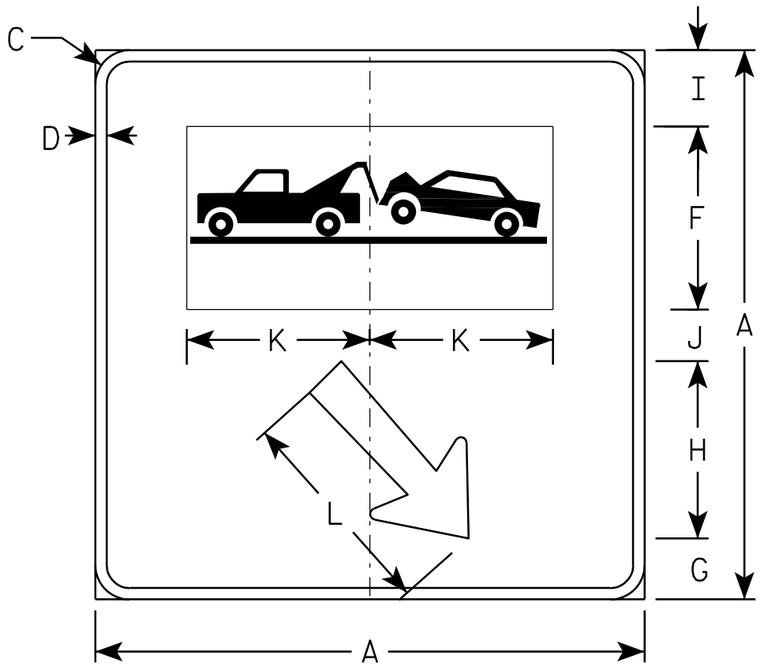
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

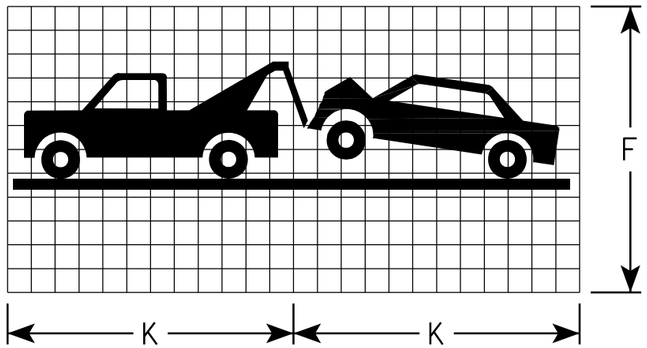
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 434	E



D4-56R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - BLUE
   Message - WHITE
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. D4-56L is same as D4-56R except arrow is reversed.
6. Arrow is from A1-2 Lower Case 4½ Series D & E, with a modified length.



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	36		2 1/4	3/4		12	4	11 5/8	5	3 3/8	12	14															9.0
3																											
4																											
5																											

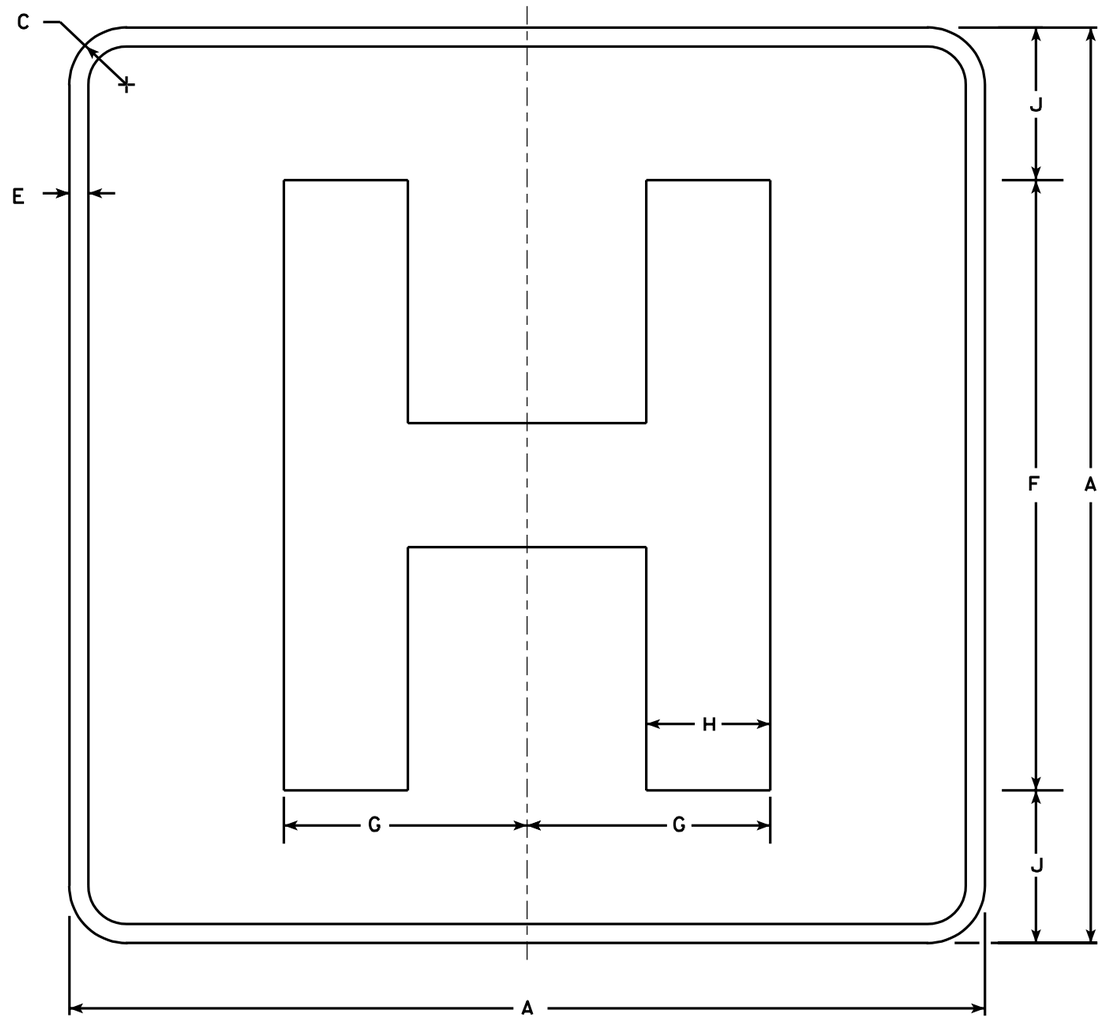
STANDARD SIGN
D4-56 L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/14/2011 PLATE NO. D4-56.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 435	E



D9-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Blue
   Message - White - Type H Reflective
3. Message Series - E Modified
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.

Metric equivalent for this sign is:

SIZE	
1	450 mmX 450 mm
2	600 mmX 600 mm
3	900 mmX 900 mm
4	X
5	X

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		1 1/8		1/2	12	4 3/4	2 3/8		3																	4.0
2	24		1 1/2		1/2	16	6 3/8	3 1/4		4																	4.0
3	36		2 1/4		3/4	24	9 1/2	4 7/8		6																	9.0
4																											
5																											

STANDARD SIGN
D9-2

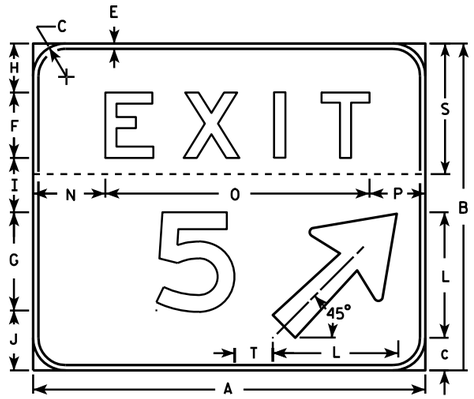
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spong
for State Traffic Engineer

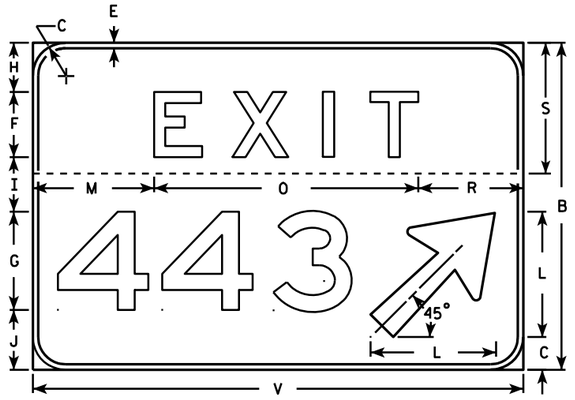
DATE 1/15/02 PLATE NO. D9-2.4

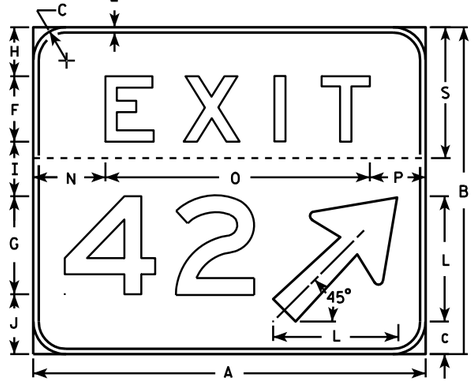
PROJECT NO:

SHEET NO: 436 E

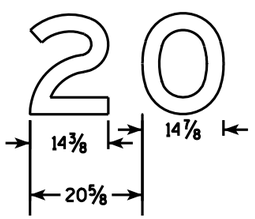


NOTE: T diminision shall be measured from the back of the number to the front of the arrow





EXAMPLE FOR USING SPACING CHART



NOTES

1. Sign is Type II - Type H reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White (Type H reflective)
3. Message Series - E
4. Corners may be square or rounded but the border shall be rounded as shown.
5. Base material for this sign shall be plywood and shall be split into two seperate pieces as shown on each detail by the dashed line (----------).
6. Arrow is Type "A" from sign plate A1-1.
7. Substitute appropriate message, space per the table and adjust placement on sign to achieve proper balance.
8. As per the Standard Spec's, these signs shall not have a vertical joint.

SPACING CHART FOR 18" NUMERALS

NUMBERS	WIDTH	0	1	2	3	4	5	6	7	8	9	A	B	C
0	14 7/8	21 5/8	21 5/8	21 1/4	20 3/8	21 1/4	21 1/4	21 5/8	19 7/8	22 1/8	21 5/8			
1	5 7/8	14	14	14	13 1/8	12 1/8	14	14	12 1/4	14	14			
2	14 3/8	20 5/8	21 1/8	20 5/8	19 3/4	20 1/4	20 5/8	20 5/8	18 7/8	21 1/8	20 5/8			
3	14 3/8	20 3/4	21 1/8	20 3/4	20 1/4	19 3/4	20 3/4	20 3/4	19 3/8	21 1/8	20 3/4			
4	16 5/8	22 7/8	22	22 1/2	21 5/8	21 5/8	22 7/8	22 7/8	20 5/8	23 3/8	22 7/8			
5	14 1/4	20 5/8	20 5/8	20 1/8	18 3/4	18 3/4	20 5/8	20 5/8	18 3/8	20 5/8	20 5/8			
6	14 1/2	21 1/4	20 3/4	20 3/4	19 7/8	19 1/2	20 3/8	20 3/4	19	20 3/4	20 3/8			
7	14 3/8	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4			
8	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8			
9	14 1/2	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4			
A	18	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4	21 5/8	23 7/8	23
B	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8	19 1/2	22 3/8	21 1/2
C	14 1/4	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4	18 3/8	21	19 3/4

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
2																										
3																										
4																										
5	72	60	6		1	12	18	9	10	11	8 7/8	23	22 1/4	13 1/4	48 1/2	10 1/4		19 1/4	24	7		90		96	7 1/2	

1-2 Digit Bid Area	3 Digit Bid Area
Sq. Ft.	
30	37.5

STANDARD SIGN
E5-1A

WISCONSIN DEPT OF TRANSPORTATION

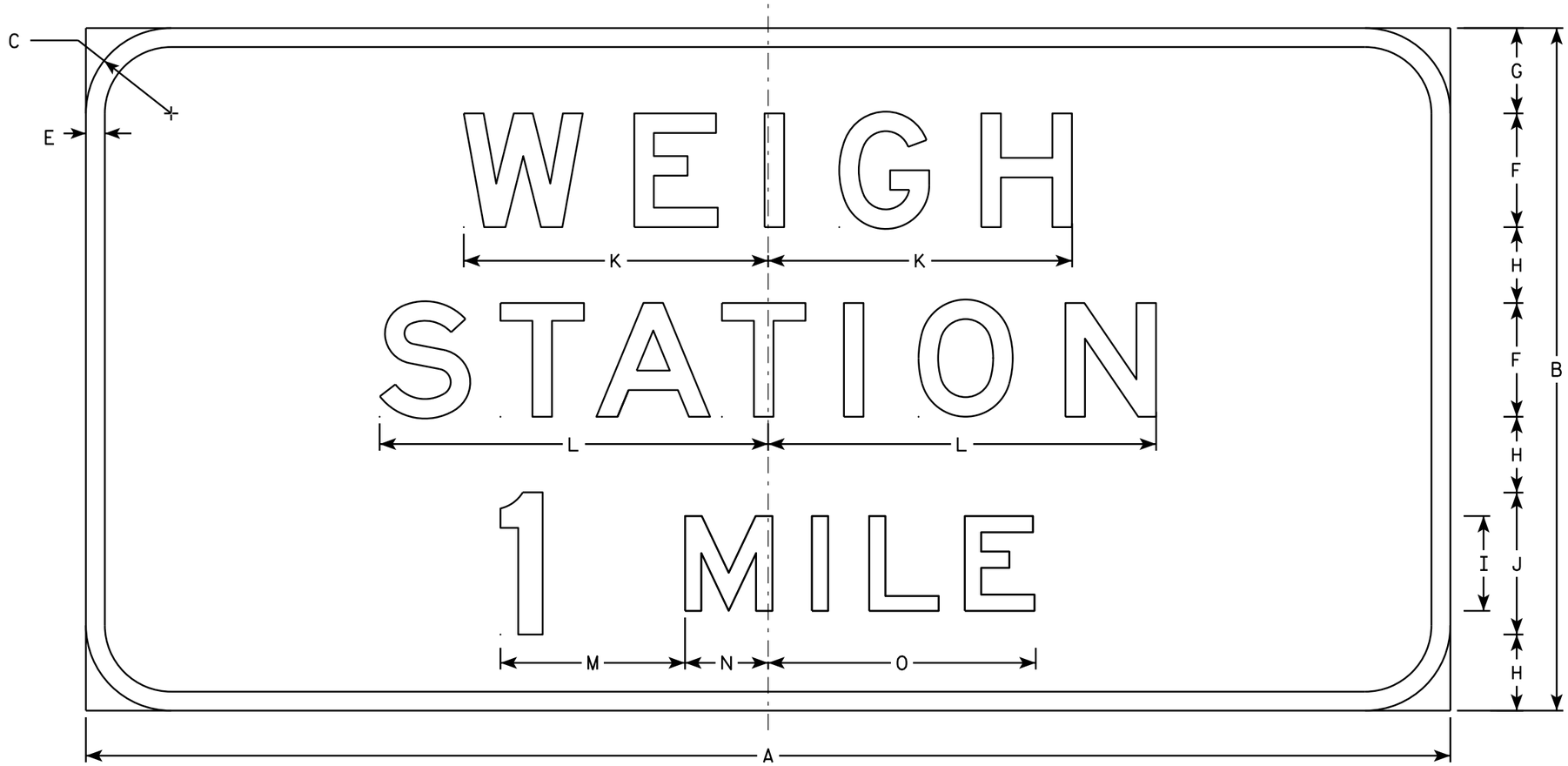
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/11/10 PLATE NO. E5-1A.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 437 | E

NOTES

1. Sign is Type I- Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E



E5-56A

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	144	72	9		2	12	9	8	10	15	32 1/8	41	19 1/2	8 3/4	28 1/4												72.0
5	144	72	9		2	12	9	8	10	15	32 1/8	41	19 1/2	8 3/4	28 1/4												72.0

STANDARD SIGN
E5-56A

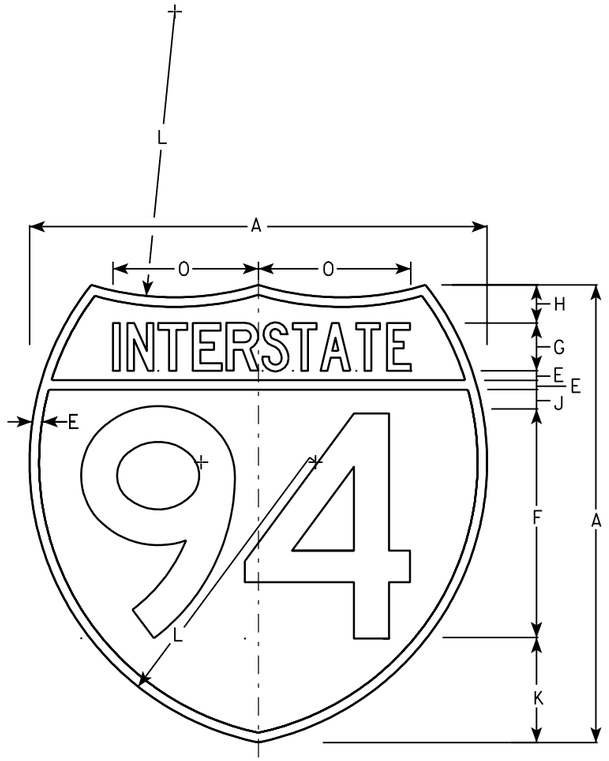
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

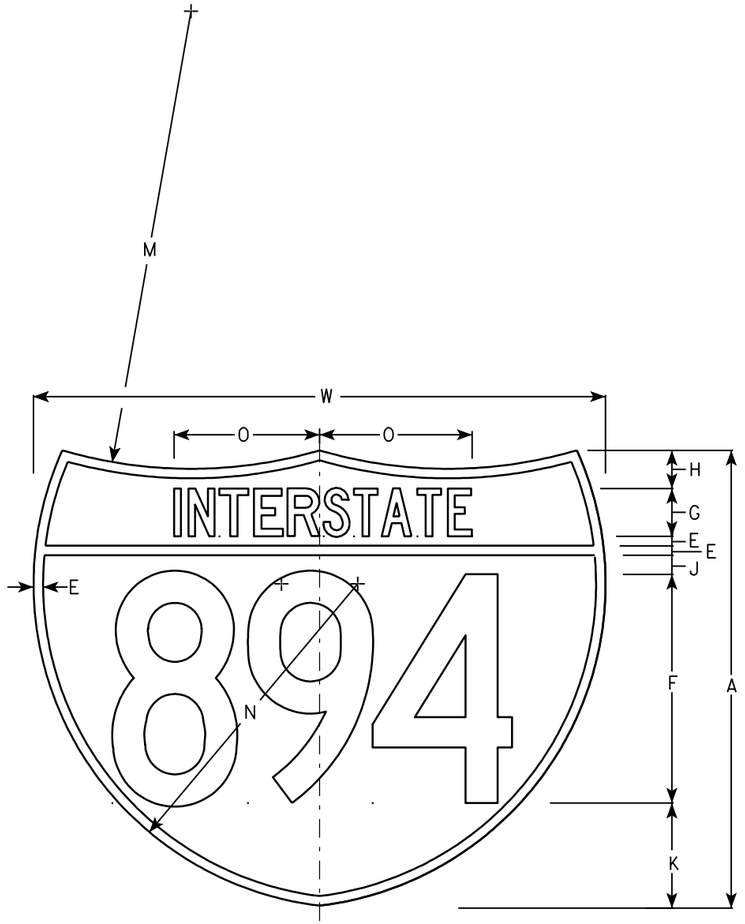
DATE 4/29/14 PLATE NO F5-56A.8

PROJECT NO: | HWY: | COUNTY: | | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\E556A.DGN PLOT DATE : 30-APR-2014 11:55 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.912768:1.000000



M1-1



M1-1A

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 & ajust 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	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
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

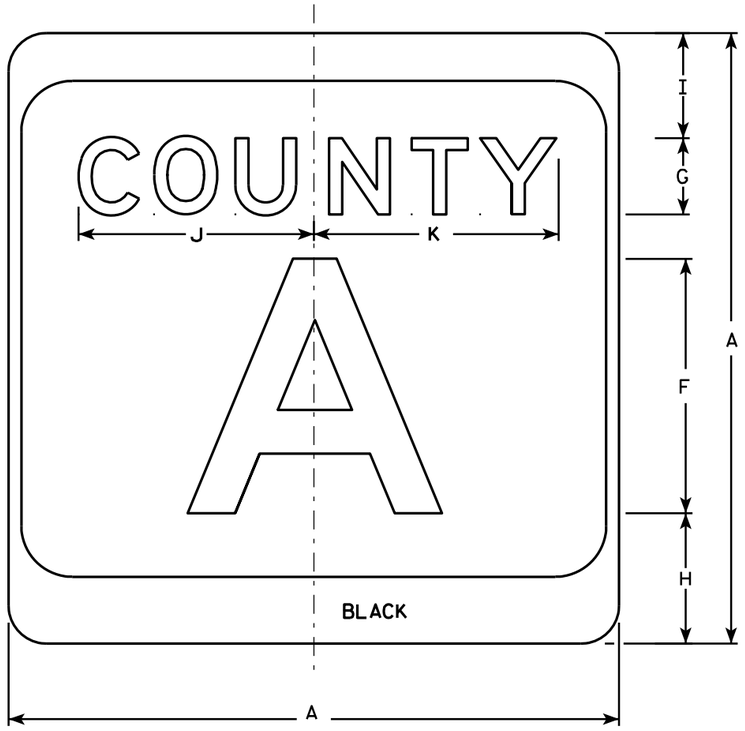
INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

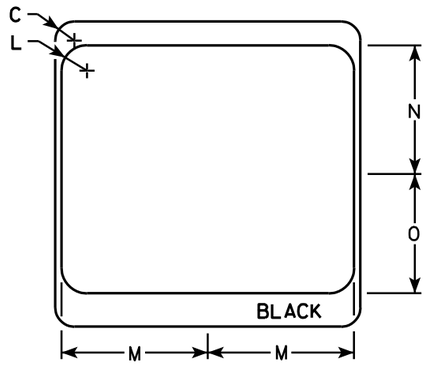
APPROVED Matthew R Rauch
for State Traffic Engineer

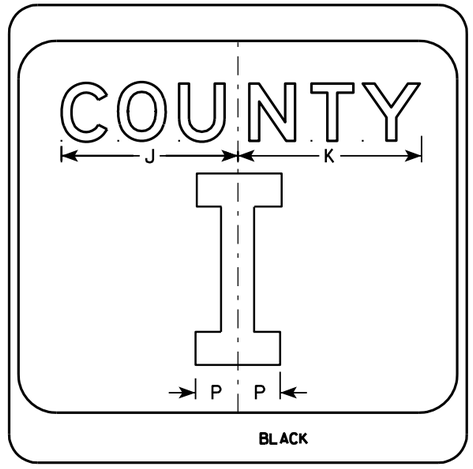
DATE 08/23/05 PLATE NO. M1-1.8

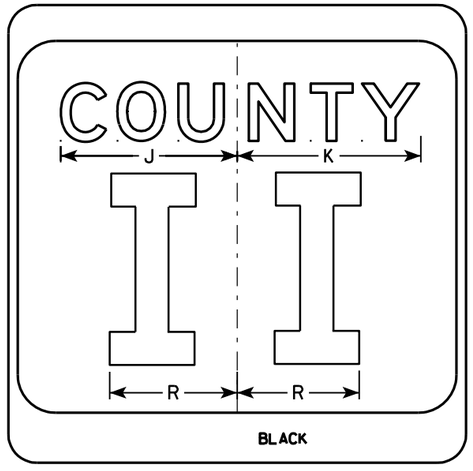
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 439	E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   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. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

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		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

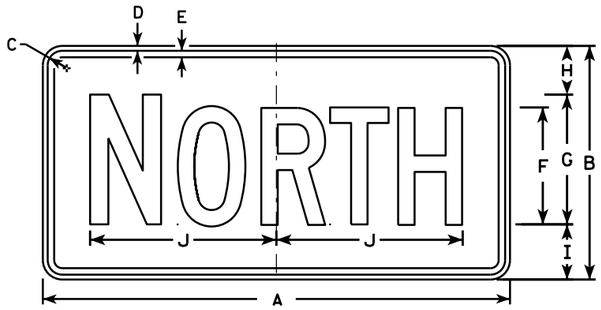
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

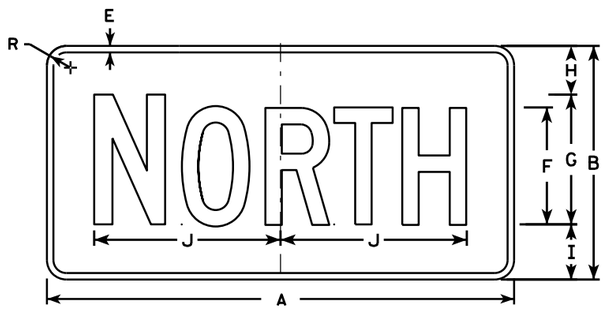
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 440	E



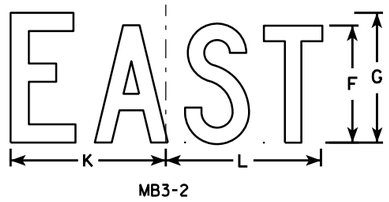
M3-1
MK3-1
MM3-1
MN3-1



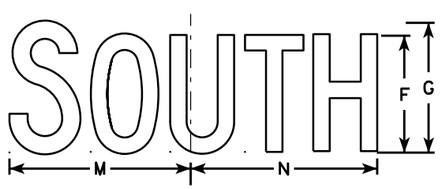
MB3-1



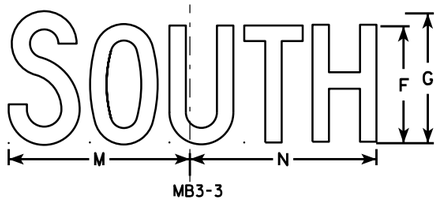
M3-2
MK3-2
MM3-2
MN3-2



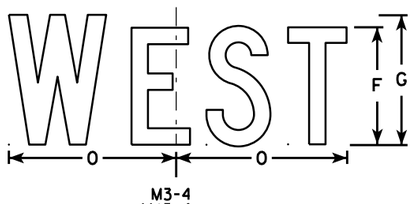
MB3-2



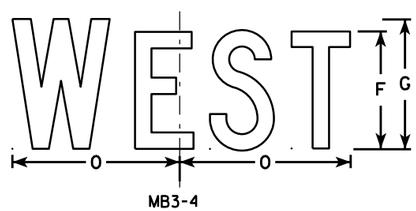
M3-3
MK3-3
MM3-3
MN3-3



MB3-3



M3-4
MK3-4
MM3-4
MN3-4



MB3-4

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
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

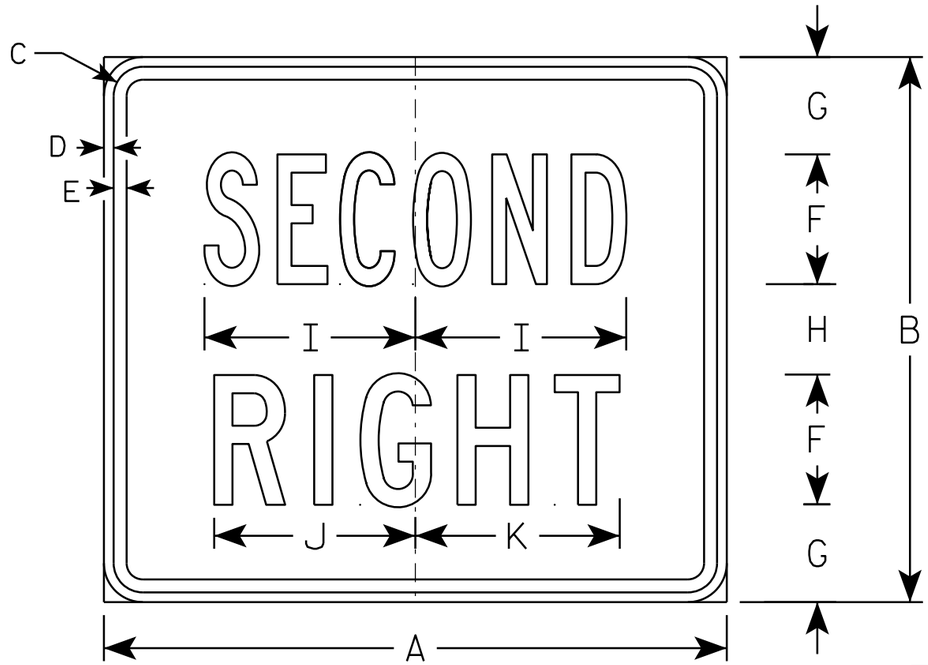
STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

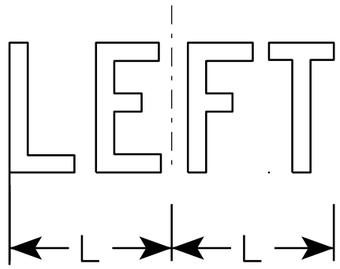
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 6/30/14 PLATE NO M3-1.13

PROJECT NO: | HWY: | COUNTY: | | SHEET NO: E



M4-22R
MB4-22R
MK4-22R
MM4-22R
MN4-22R
MO4-22R
MP4-22R
MR4-22R



M4-22L
MB4-22L
MK4-22L
MM4-22L
MN4-22L
MO4-22L
MP4-22L
MR4-22L

NOTES

1. Sign is Type II - Type H except as Shown
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. M4-22 Background - White
   Message - Black
   MB4-22 Background - Blue
   Message - White
   MK4-22 Background - Green
   Message - White
   MM4-22 Background - White
   Message - Green
   MN4-22 Background - Brown
   Message - White
   MO4-22 Background - Orange - Type F Reflective
   Message - Black
   MP4-22 Background - White
   Message - Blue
   MR4-22 Background - Brown
   Message - Yellow

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	21	1 1/8	3/8	1/2	5	3 3/4	3 1/2	8 1/8	7 3/4	7 7/8																3.5
3	36	30	1 5/8	5/8	3/4	8	4 3/4	4 1/2	13 1/8	12 5/8	12 1/2																7.5
4																											
5																											

STANDARD SIGN
M4-22

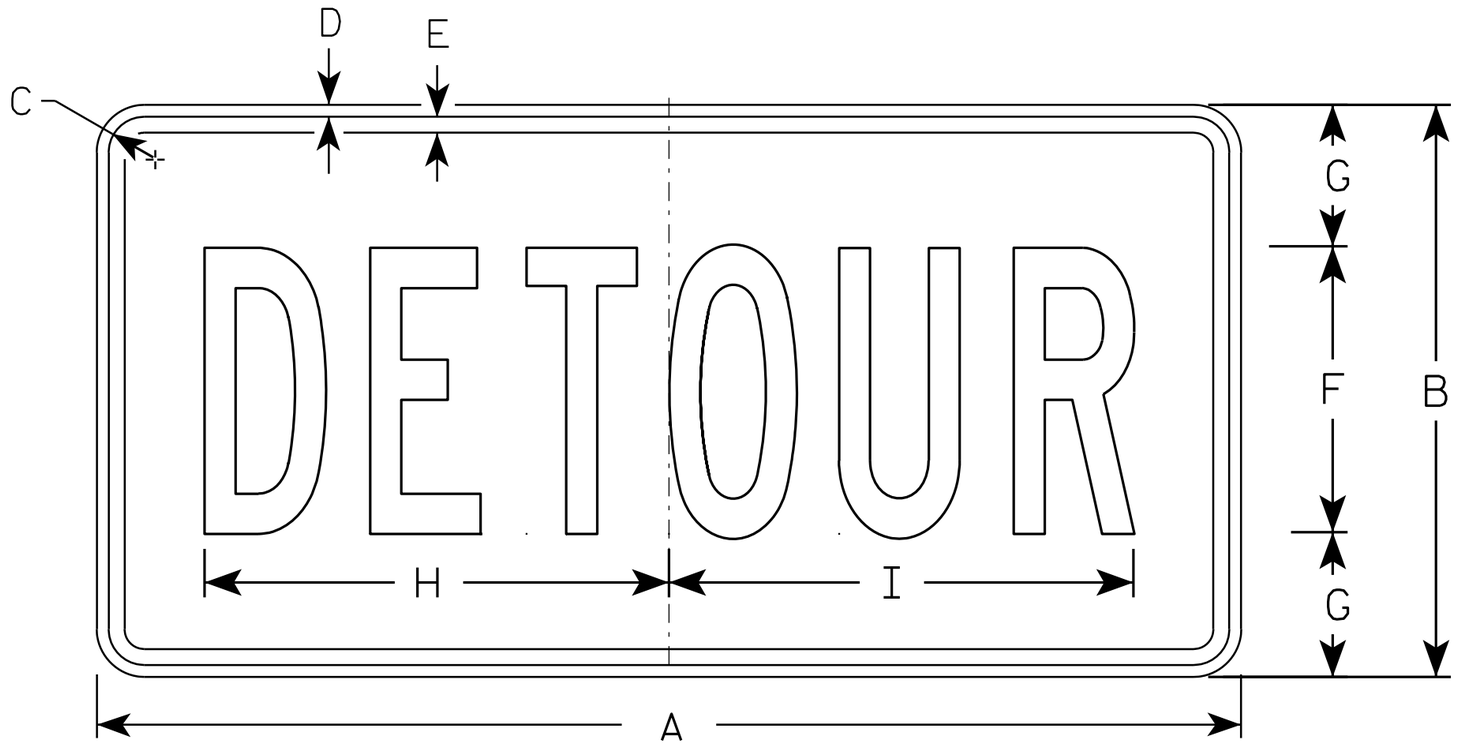
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/26/14 PLATE M4-22.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M422.DGN PLOT DATE : 02-JUL-2014 15:21 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



M4-8

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.

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																											

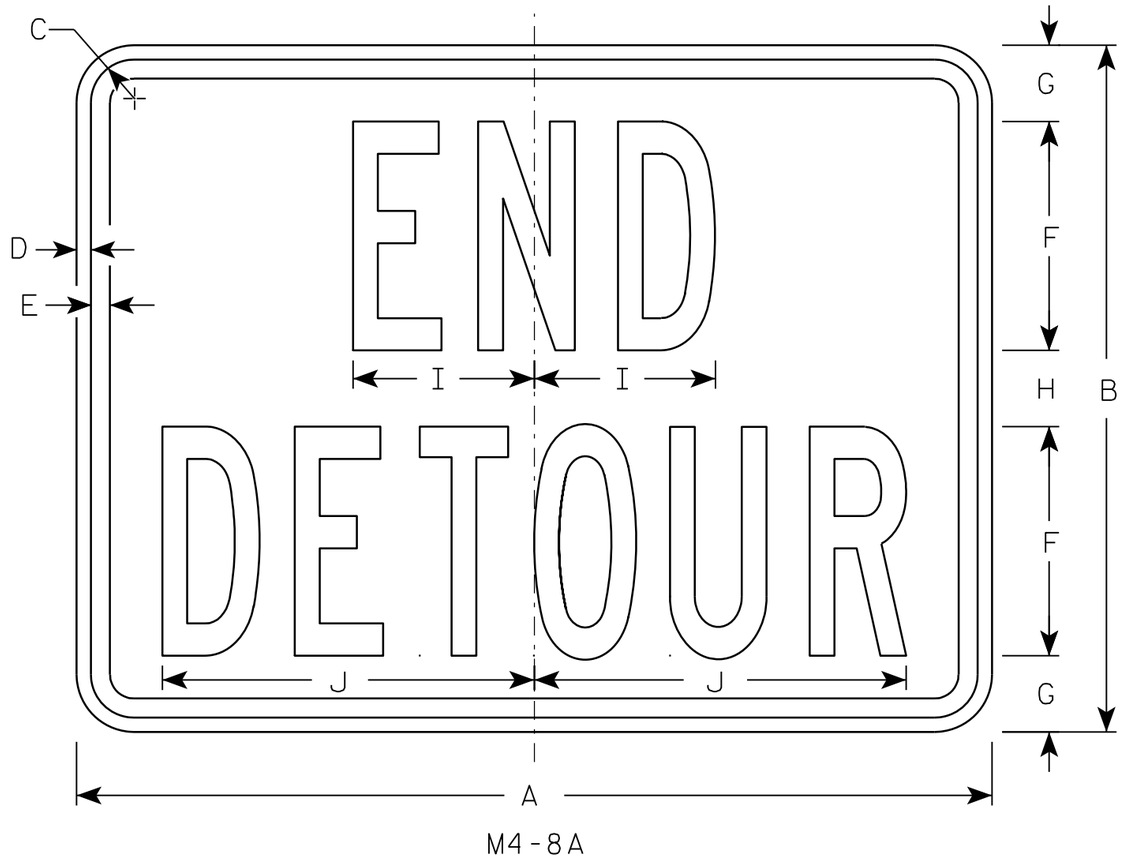
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 443	E



M4-8A

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.

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																											

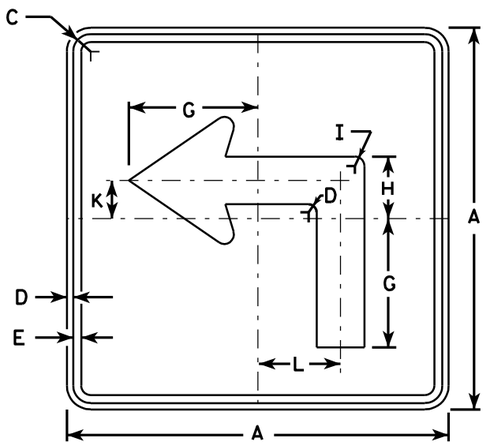
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

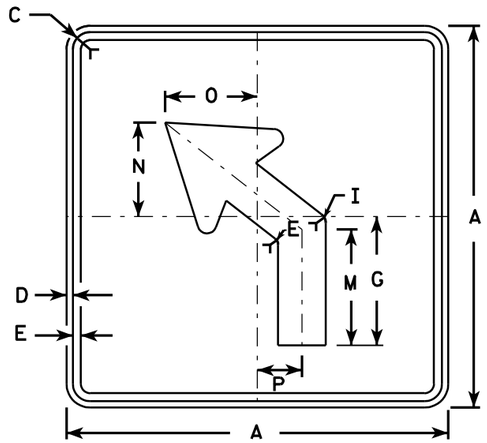
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

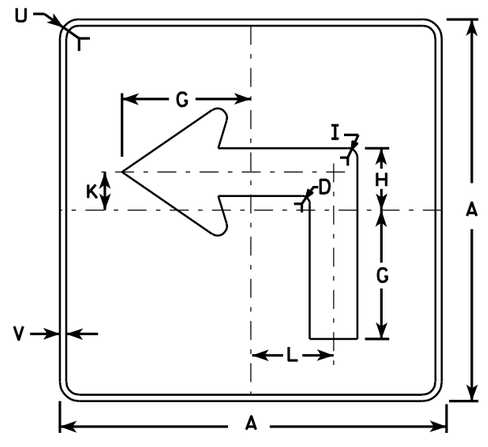
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 444	E



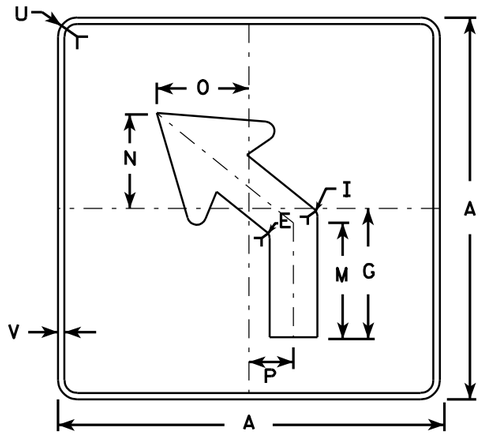
M5-1L
MK5-1L
MM5-1L
MO5-1L
MP5-1L
MR5-1L



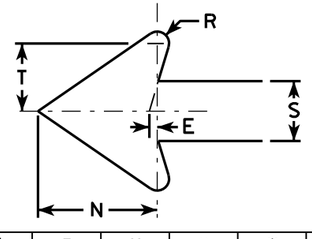
M5-2L
MK5-2L
MM5-2L
MO5-2L
MP5-2L
MR5-2L



MB5-1L
MG5-1L
MN5-1L



MB5-2L
MG5-2L
MN5-2L



NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   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. M5-1 and M5-2 Background - White - Type H Reflective
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White - Type H Reflective
   MG5-1 and MG5-2 Background - Green
   Message - White - Type H Reflective
   MK5-1 and MK5-2 Background - Green
   Message - White Type H Reflective
   MM5-1 and MM5-2 Background - White - Type H Reflective
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White - Type H Reflective
   MO5-1 and MO5-2 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 - Type H Reflective
5. M5-1R same as M5-1L except arrow points right.
6. 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	Q	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 1/8	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 1/8	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 1/8	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

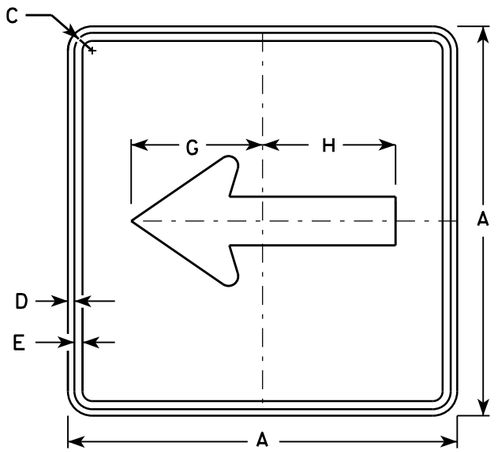
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

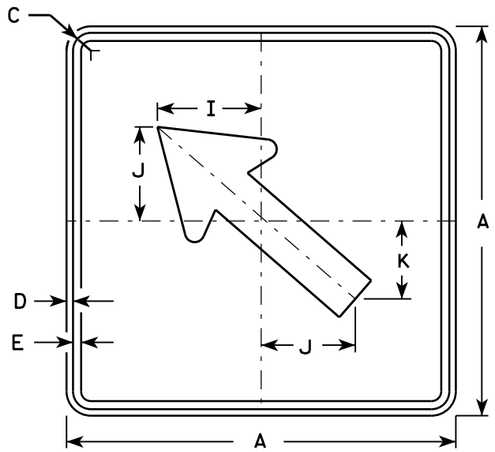
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/29/13 PLATE NO. M5-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 445	E



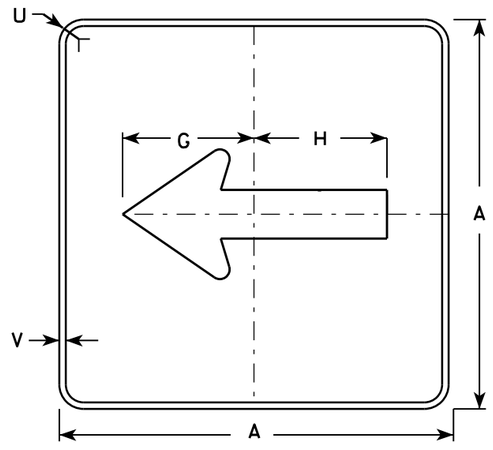
M6-1
MK6-1
MM6-1
MN6-1
MO6-1
MP6-1
MR6-1



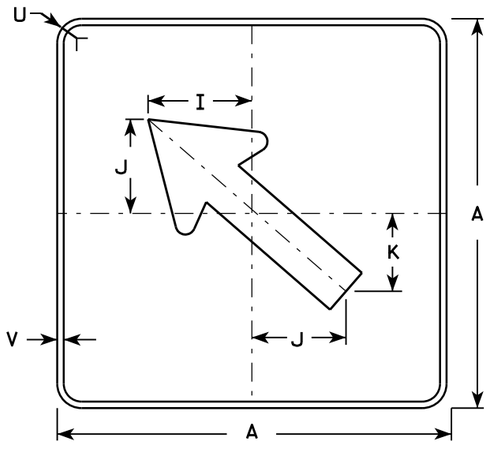
M6-2
MK6-2
MM6-2
MN6-2
MO6-2
MP6-2
MR6-2

NOTES

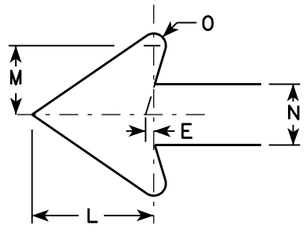
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MG6-1 and MG6-2 Background - Green
   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



MB6-1



MB6-2



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	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

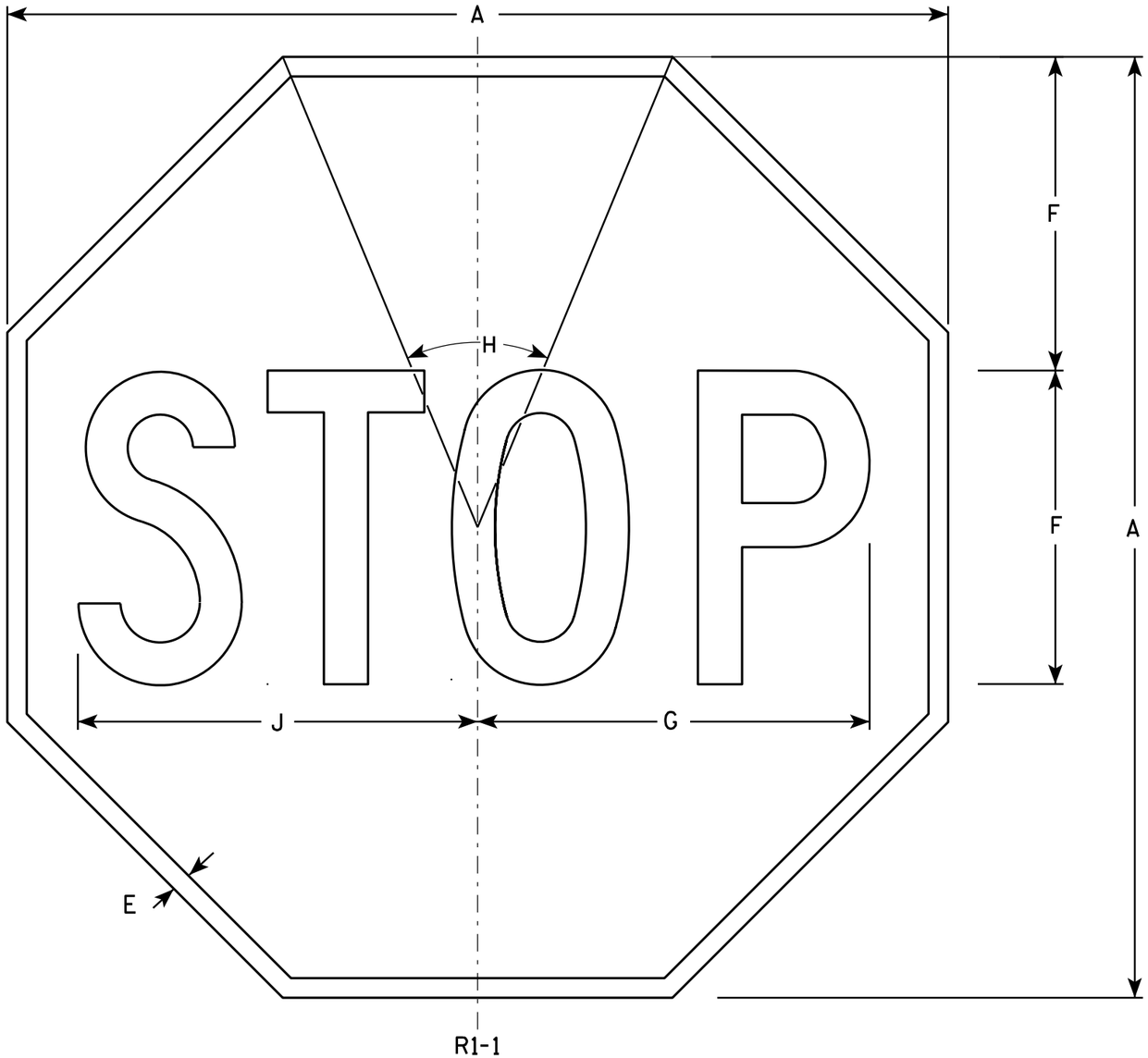
STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/03/14 PLATE 446 M6-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 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 - Red
   Message - White
3. Message 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	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

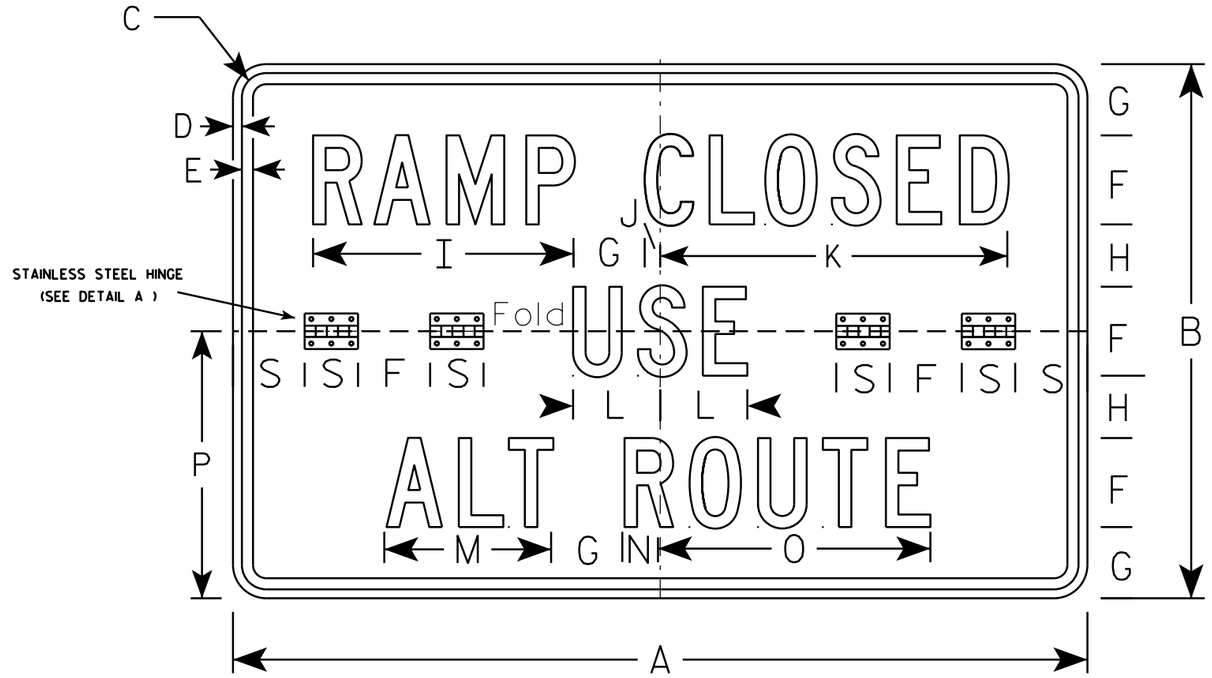
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

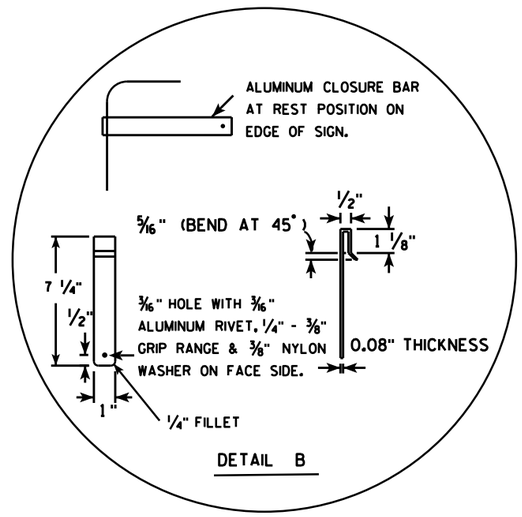
DATE 12/03/10 PLATE NO. R1-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 447	E



R11-54F

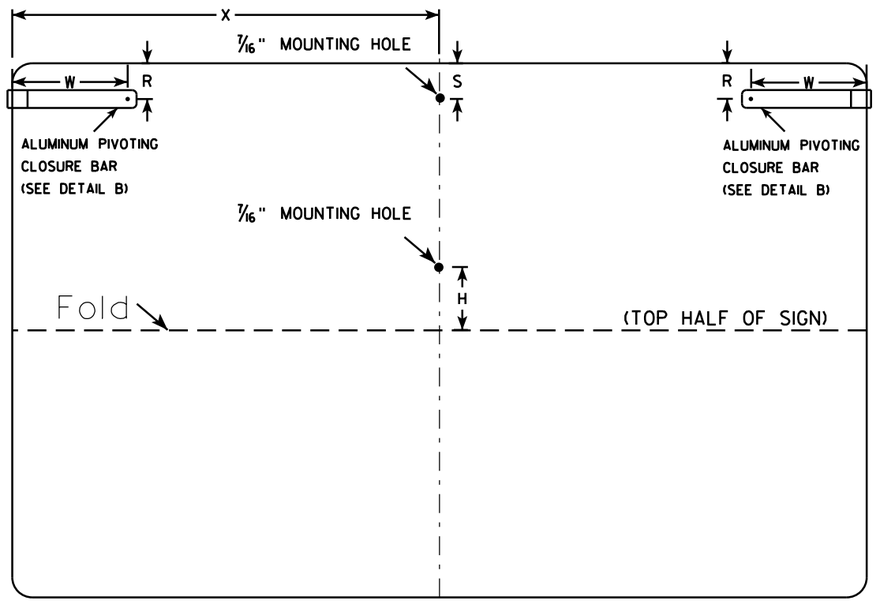
DETAIL A



DETAIL B

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - C
4. Sign Base Material shall be aluminum, corners and borders shall be rounded.
5. All hardware used on the folding sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.
6. Refer to plate A5-3A for sign blank layout.



(BACK VIEW)

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	5	4	3 1/2	14 5/8	7/8	19 1/2	4 7/8	9 3/8	2	15 1/4	15		2	3	2 5/8	1 1/4	11/16	6 1/2	24			10.0
2M	48	30	1 3/8	1/2	5/8	5	4	3 1/2	14 5/8	7/8	19 1/2	4 7/8	9 3/8	2	15 1/4	15		2	3	2 5/8	1 1/4	11/16	6 1/2	24			10.0
3																											
4																											
5																											

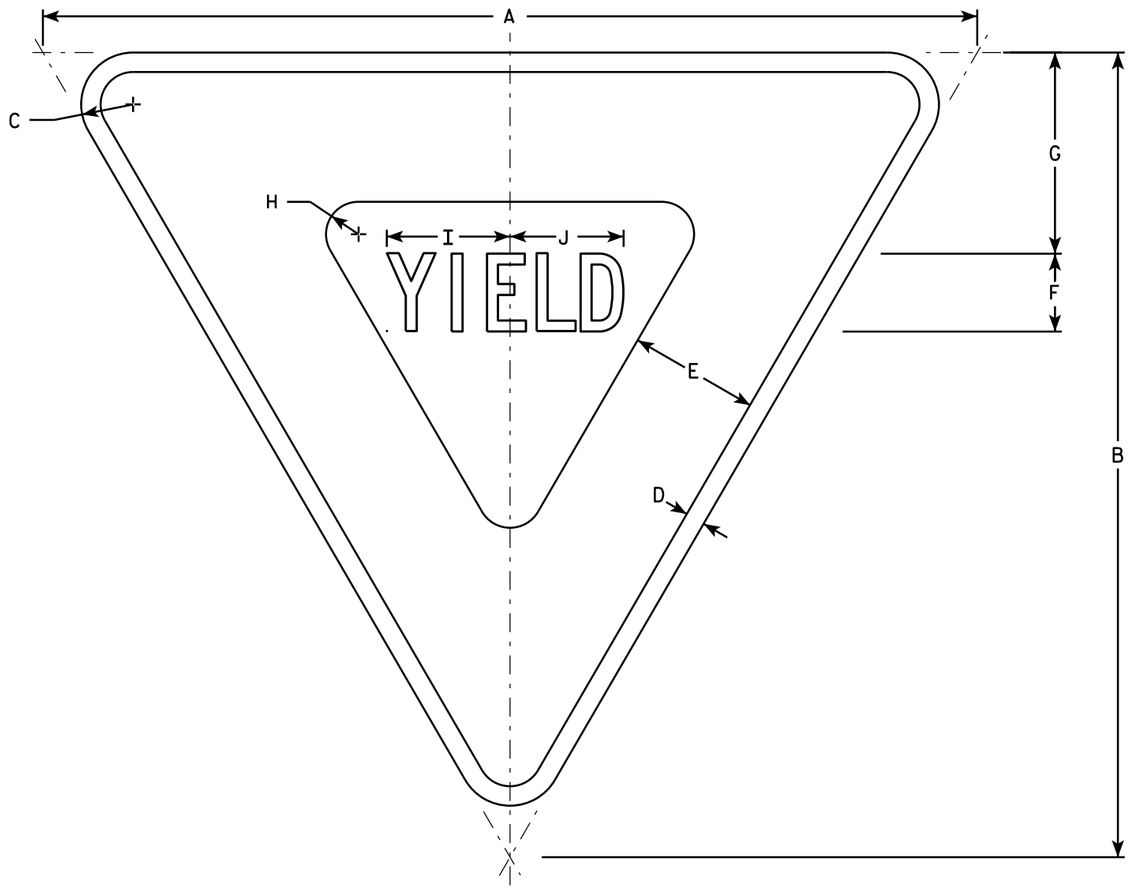
STANDARD SIGN
R11-54F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/28/14 PLATE NO. R11-54F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



R1-2

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 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. The border strip and word message are reflectorized red.

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	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

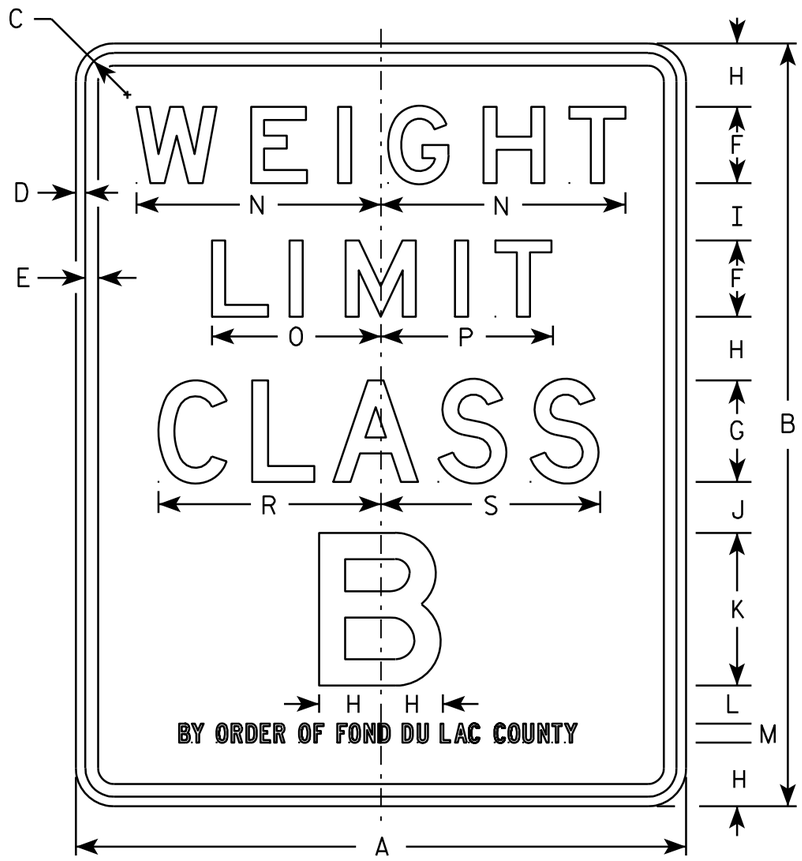
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE P1-2.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



R12-53

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 - 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, 2 & 4 are Series E.
   Line 3 is Series D.
   Line 5 is Series C.
6. Line 5 of the sign shall vary with the name of the maintaining authority.

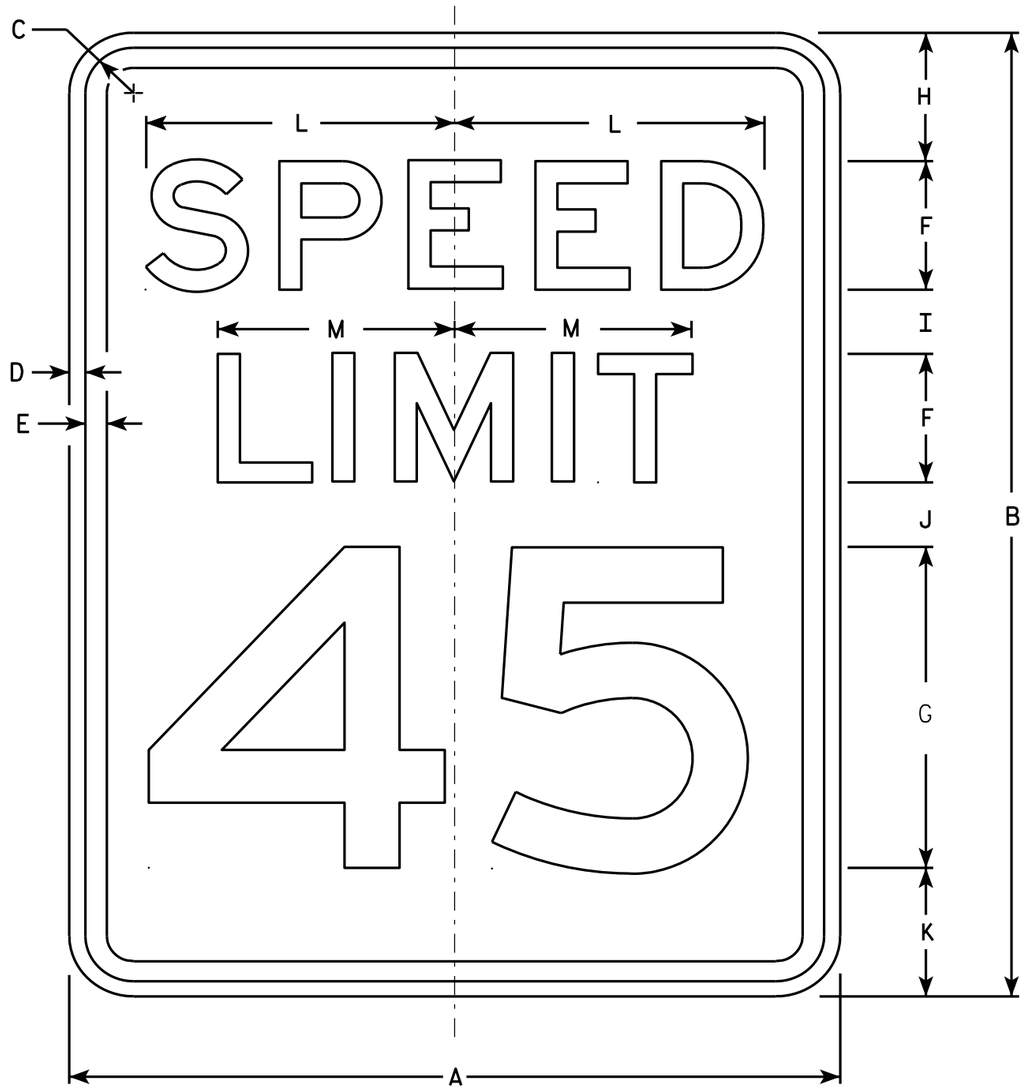
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	30	1 1/8	3/8	1/2	3	4	2 1/2	2 1/4	2	6	1 1/2	3/4	9 5/8	6 5/8	6 3/4		8 3/4	8 5/8								5.0
2M	24	30	1 1/8	3/8	1/2	3	4	2 1/2	2 1/4	2	6	1 1/2	3/4	9 5/8	6 5/8	6 3/4		8 3/4	8 5/8								5.0
3																											
4																											
5																											

STANDARD SIGN
R12-53

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 4/1/11 PLATE NO. R12-53.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 450	E



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

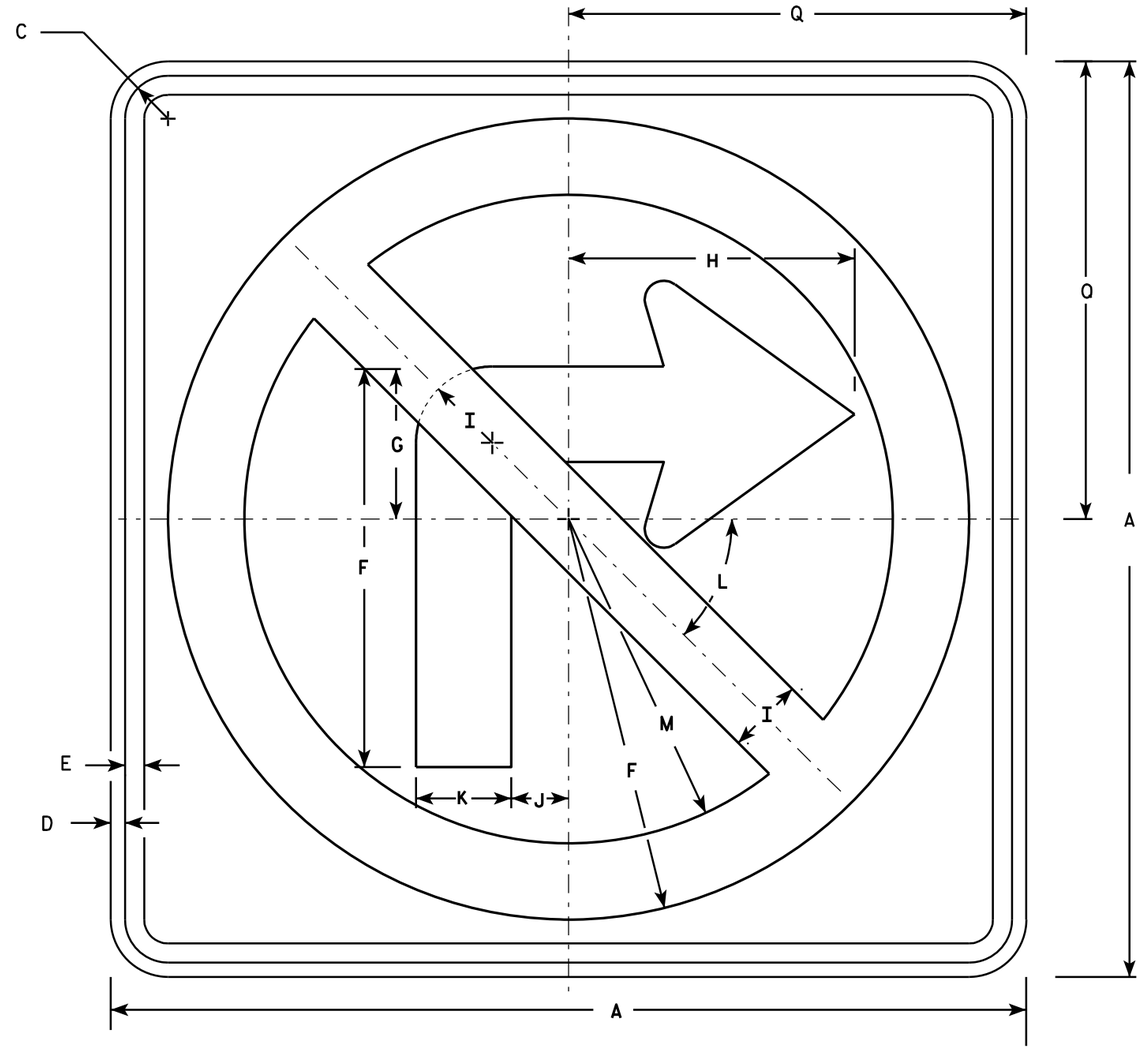
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

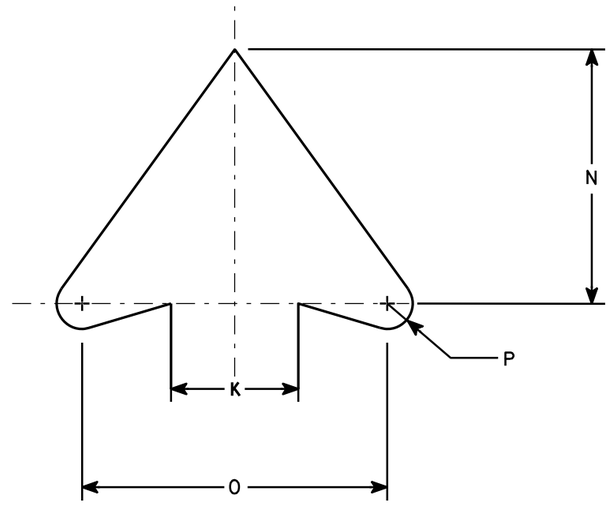
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 451	E



R3-1

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 - 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	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

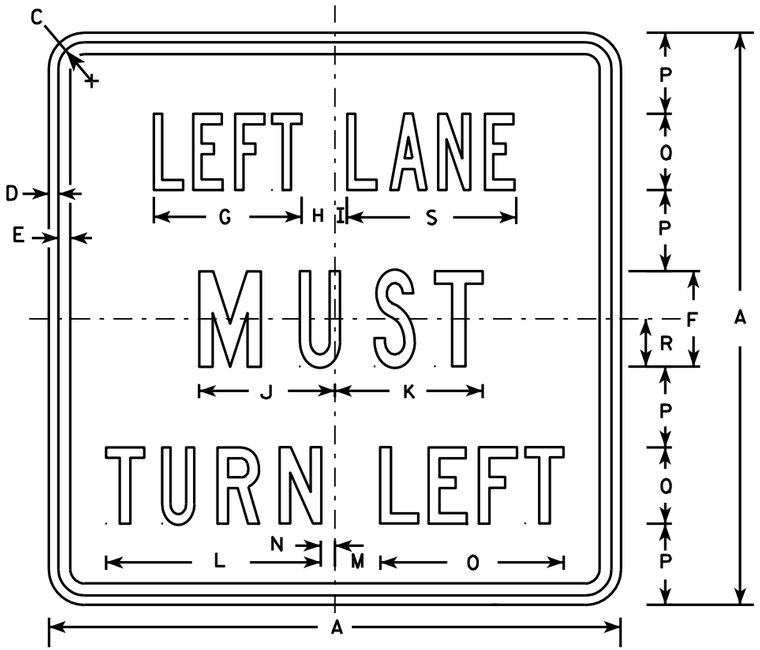
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

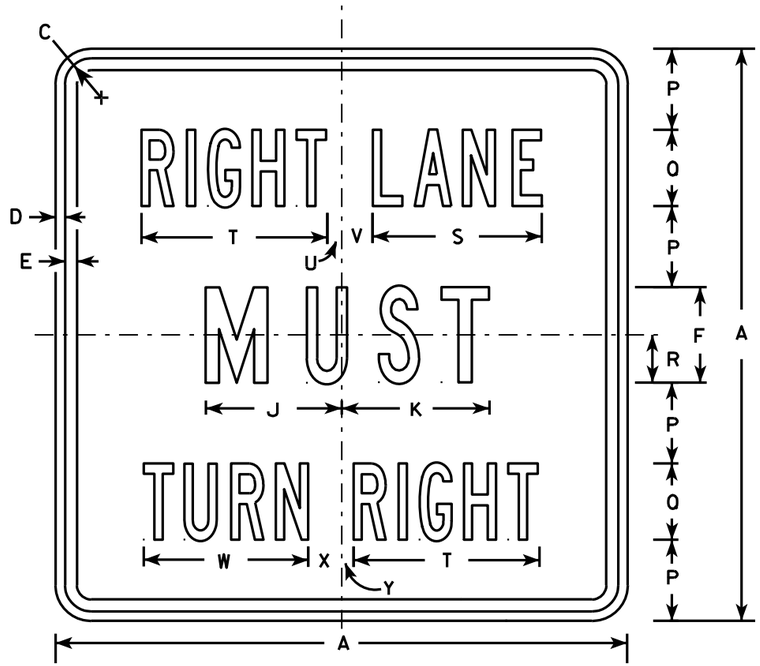
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 452	E



R3-7L



R3-7R

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 - Line 1 is Series B.
   Line 2 is Series C.
   Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.
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	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2S	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2M	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
3	36		1 5/8	5/8	3/4	6	9 5/8	2	1 1/8	8 3/4	9	13 1/2	3 7/8	1 1/2	12 1/2	5	5	3	10 5/8	12	7/8	2 1/4	10 5/8	2 1/8	1		9.00
4	48		2 1/4	3/4	1	8	13 1/2	2 3/8	1 1/2	11 1/2	11 7/8	17 3/4	3 5/8	2 1/2	16 3/8	6 1/2	7	4	14 3/8	16 7/8	5/8	3 1/4	15 1/8	2 3/4	1 1/8		16.00
5																											

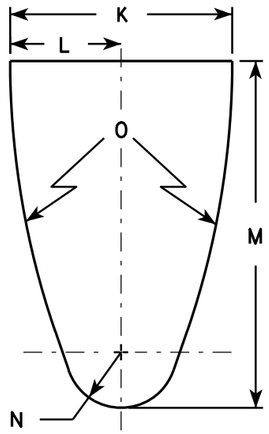
STANDARD SIGN
R3-7L & R3-7R

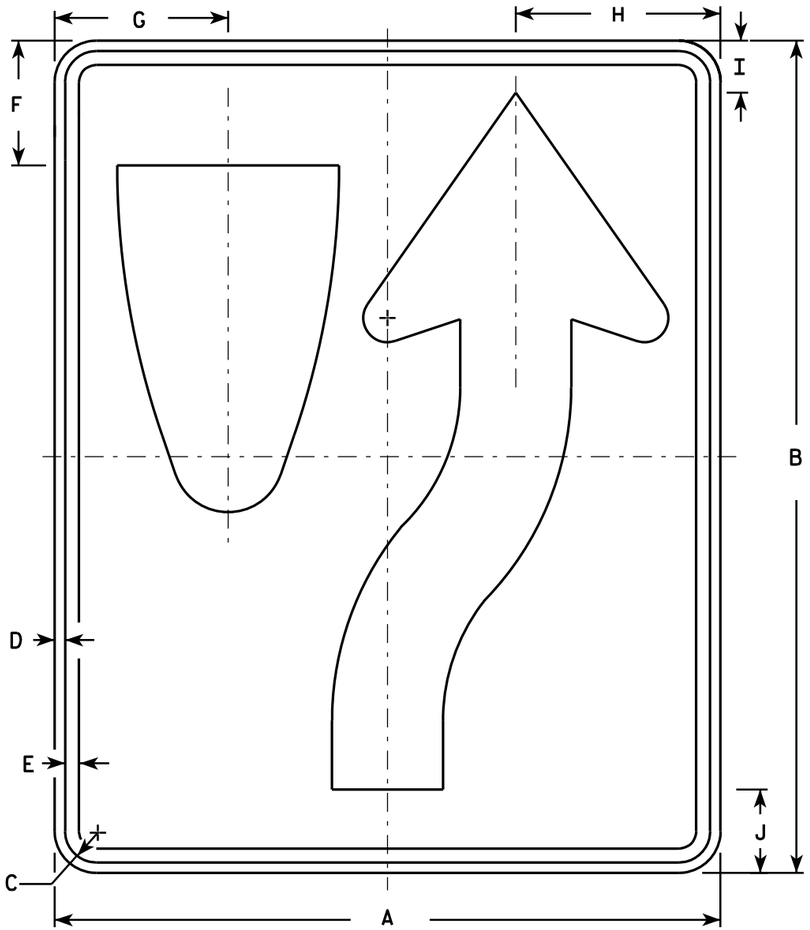
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-7.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 453	E

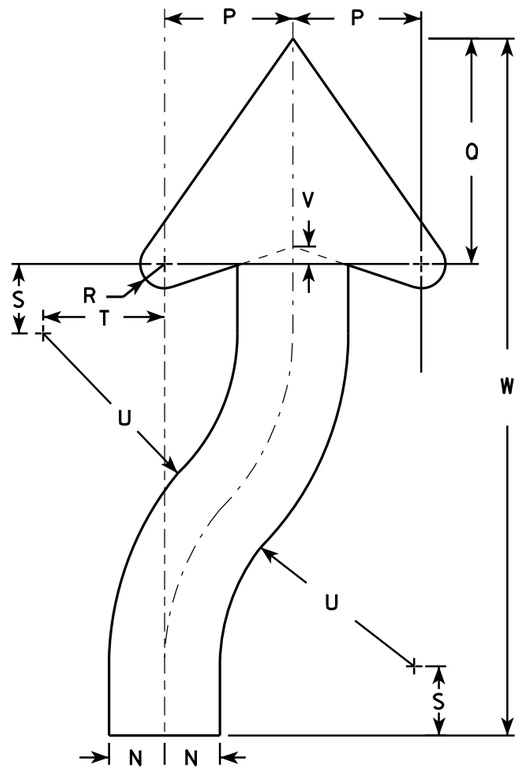




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



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	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

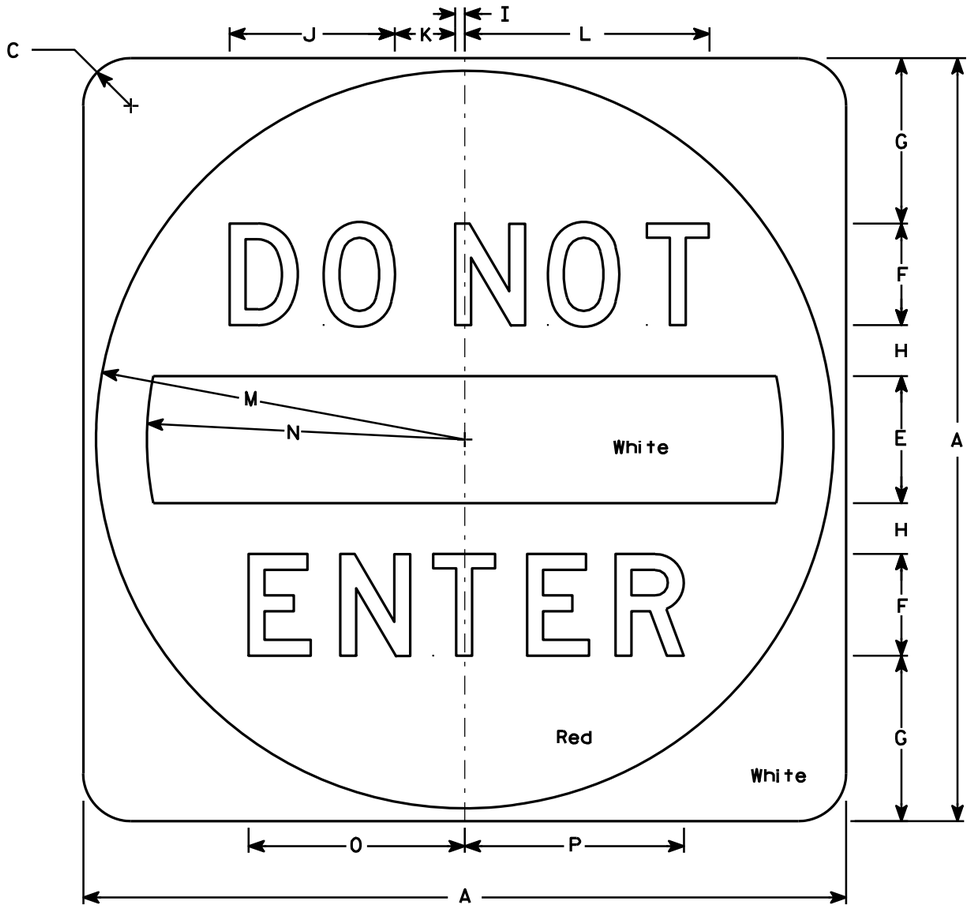
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 454	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors 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	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

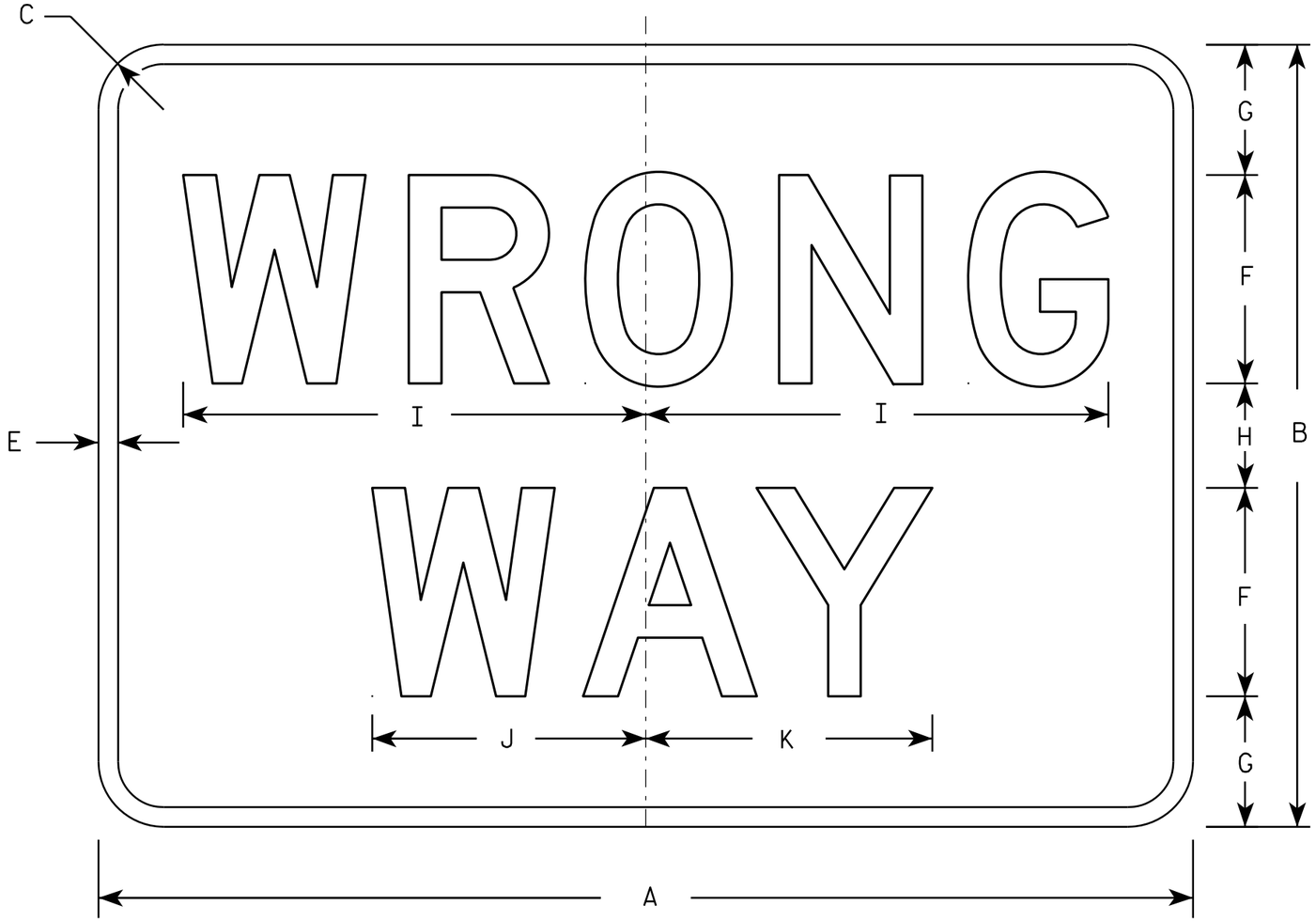
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 455 | E



R5-1A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
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	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 456	E



R5-57

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.

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

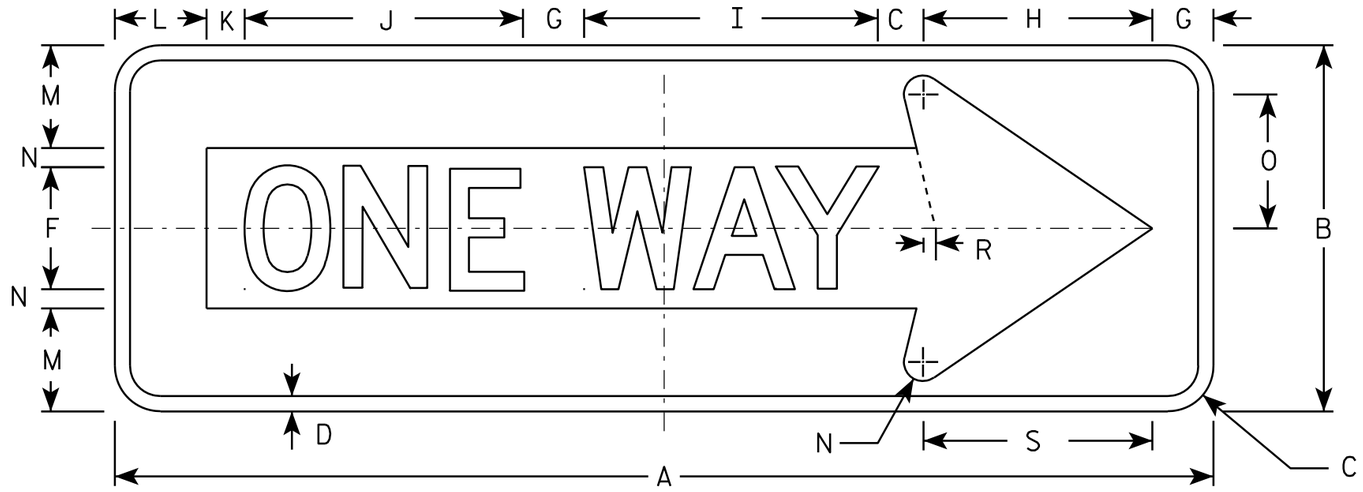
STANDARD SIGN
R5-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-57.10

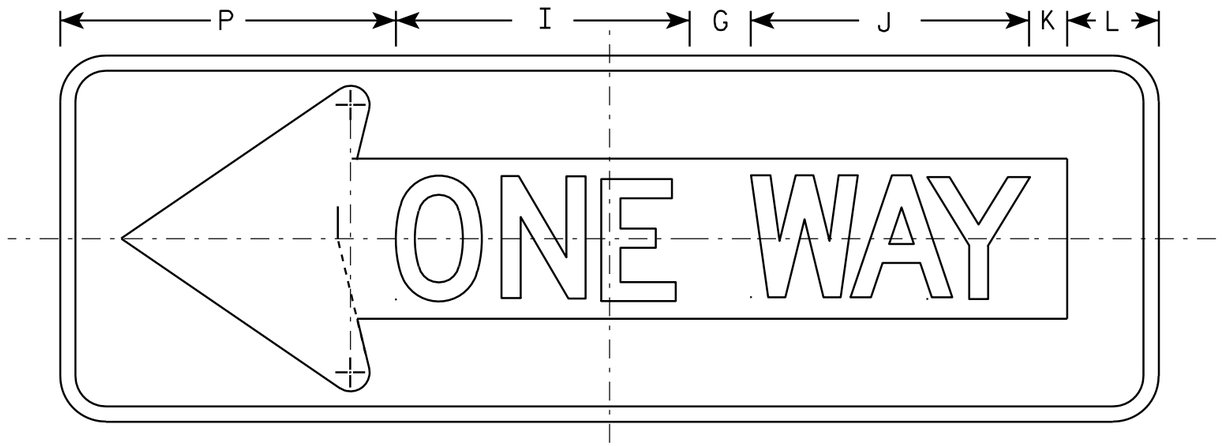
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 457	E



R6-1R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - BLACK
   Message - BLACK LEGEND & WHITE ARROW & BORDER
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.



R6-1L

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	36	12	1 ½	½		4	2	7 ½	9 ⅝	9 ⅛	1 ¼	3	3 ⅜	⅝	4 ⅜	11		⅜	7 ½								3.0
2M	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
3	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
4	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
5																											

STANDARD SIGN
R6-1 L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

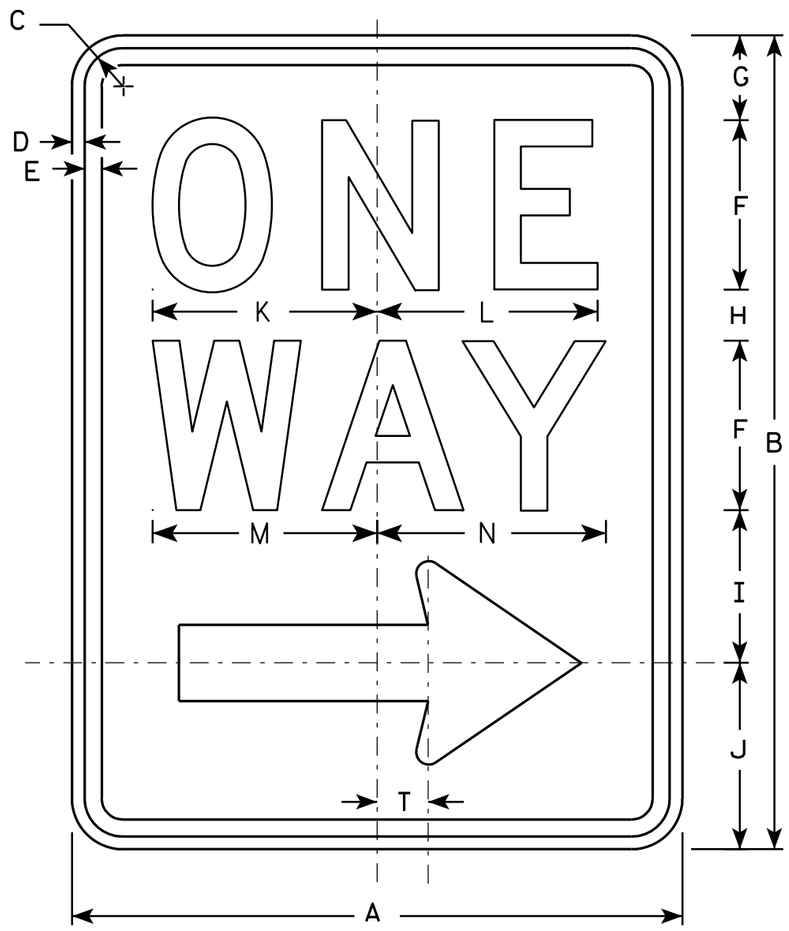
DATE 12/17/10 PLATE NO. R6-1.2

PROJECT NO:

SHEET NO: 458 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R61.DGN PLOT DATE : 17-DEC-2010 14:11 PLOT BY : dotsja

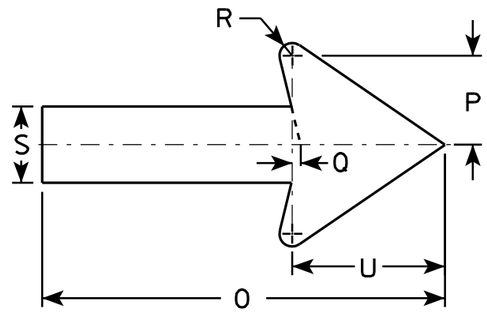
WISDOT/CADDS SHEET 42



R6-2R

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. R6-2L same as R6-2R except arrow points to the left.



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
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

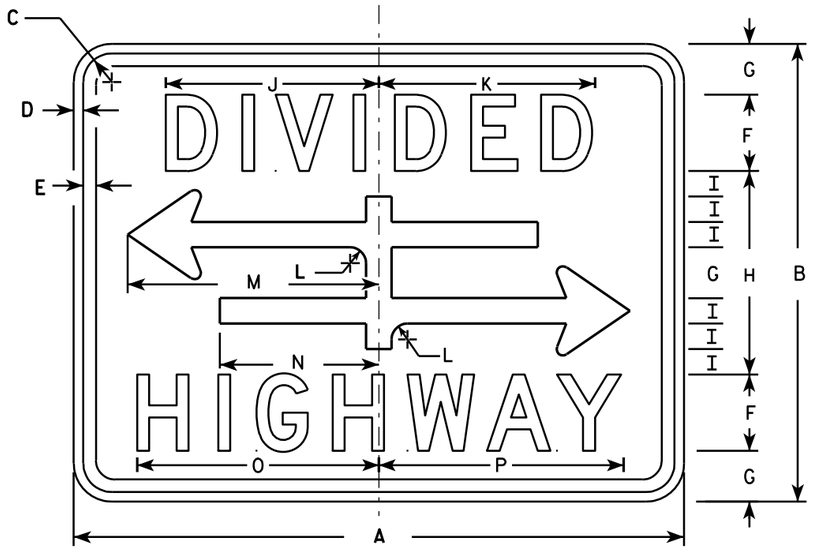
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

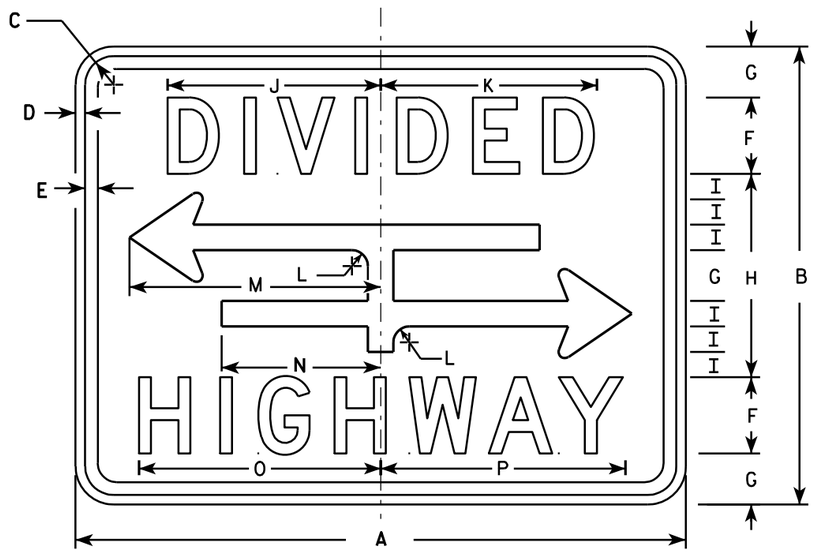
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 459 | E



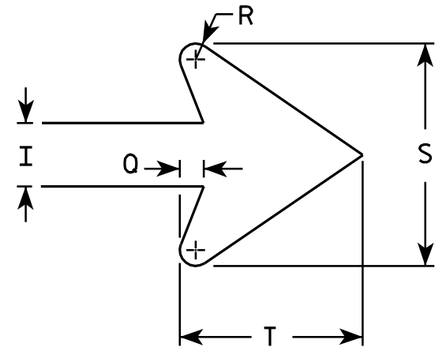
R6-3

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.



R6-3A



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	24	18	1 1/8	3/8	3/8	3	2	8	1	8 3/8	8 1/2	5/8	9 7/8	6 1/4	9 1/2	9 5/8	3/8	1/4	3 1/2	2 3/4							3.0
2S	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
2M	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
3																											
4																											
5																											

STANDARD SIGN
R6-3 & R6-3A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R6-3.5

PROJECT NO:

SHEET NO: 460 E



R8-55

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.

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	42	36	1 3/8	1/2	5/8	4	5 3/8	3	5	13 1/4	16 1/4	14	10 1/2														10.5
2M	42	36	1 3/8	1/2	5/8	4	5 3/8	3	5	13 1/4	16 1/4	14	10 1/2														10.5
3																											
4																											
5																											

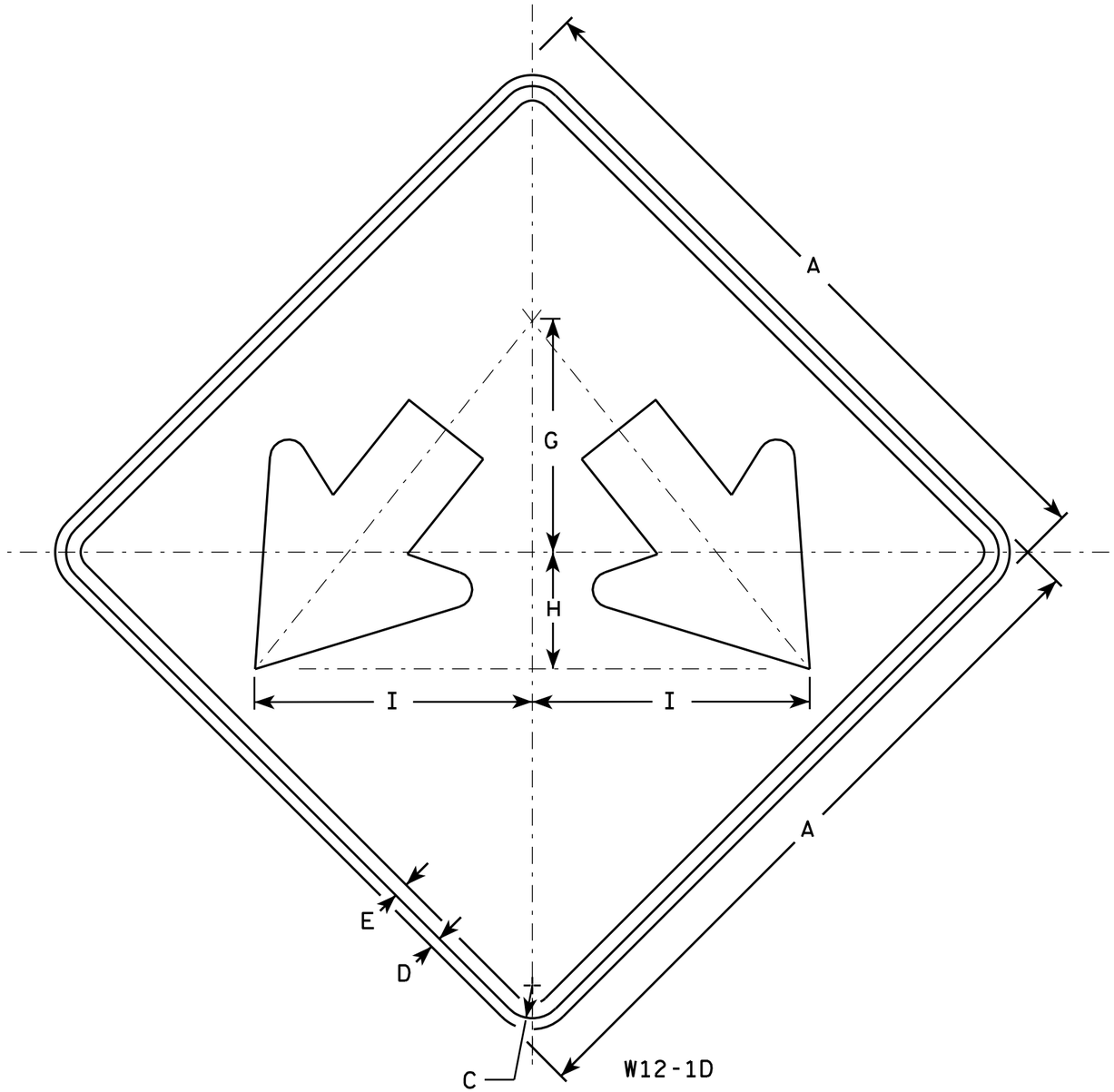
STANDARD SIGN
R8-55

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

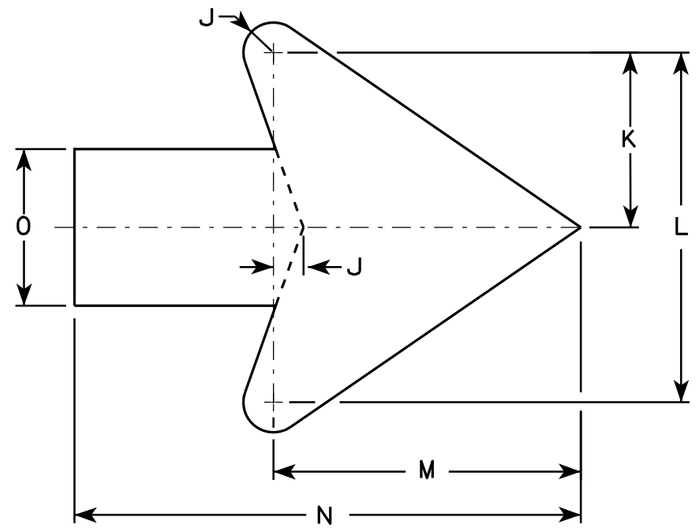
DATE 2/18/2011 PLATE NO. R8-55.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 461	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. 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																											
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 462	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W121D.DGN PLOT DATE : 13-MAR-2013 13:26 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 4.713802:1.000000

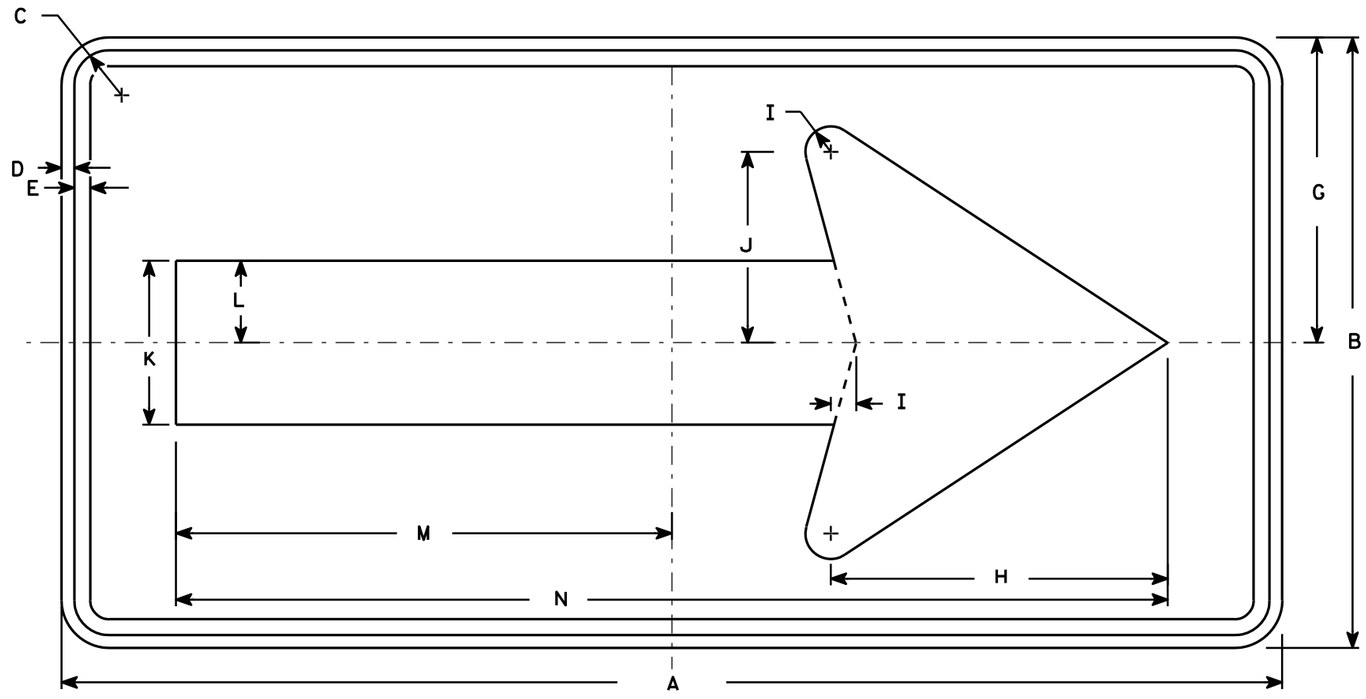
WISDOT/CADDS SHEET 42

7

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 - 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.



W1-6

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	18	1 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
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	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

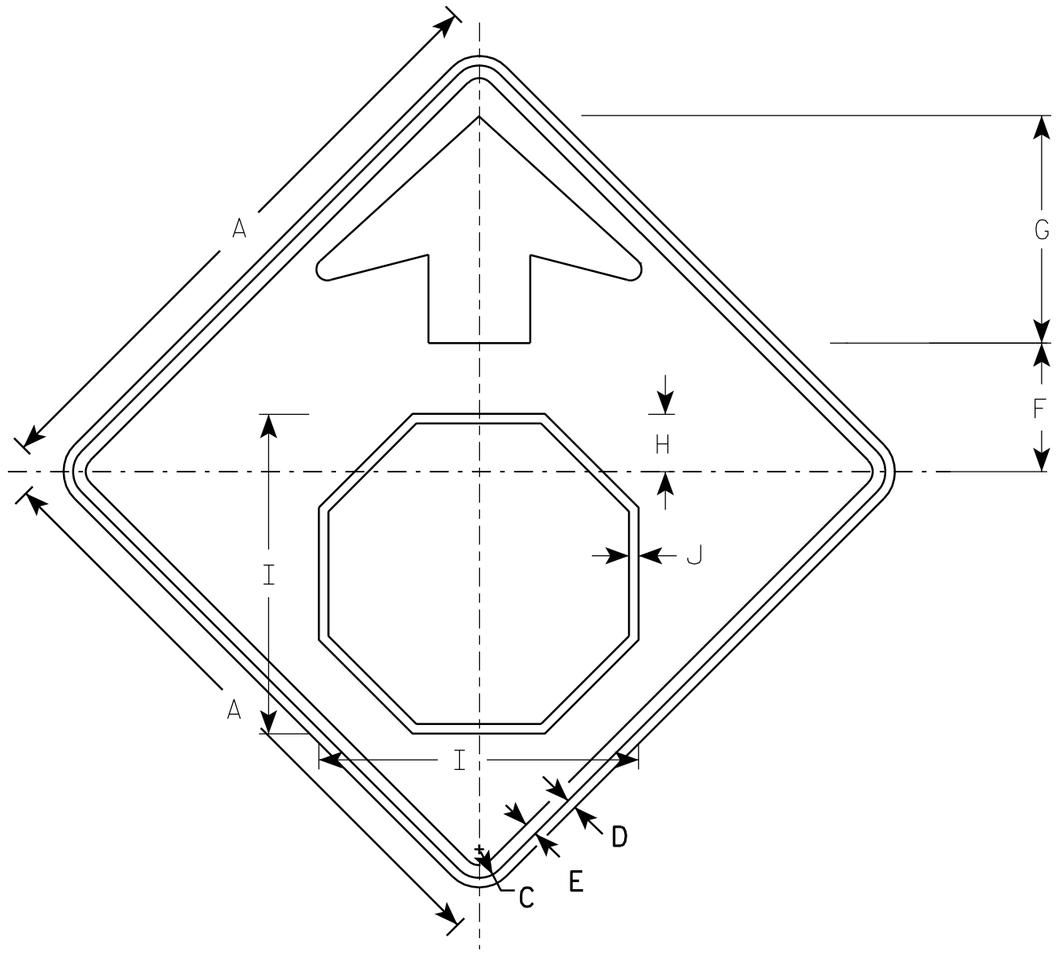
STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-6.8

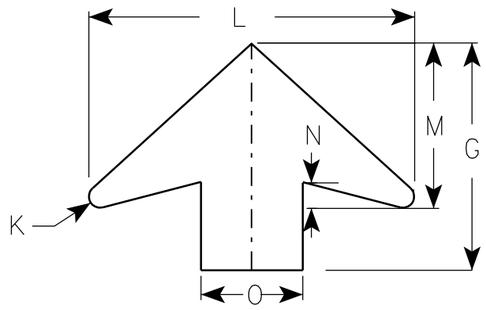
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 463



W3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED 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	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

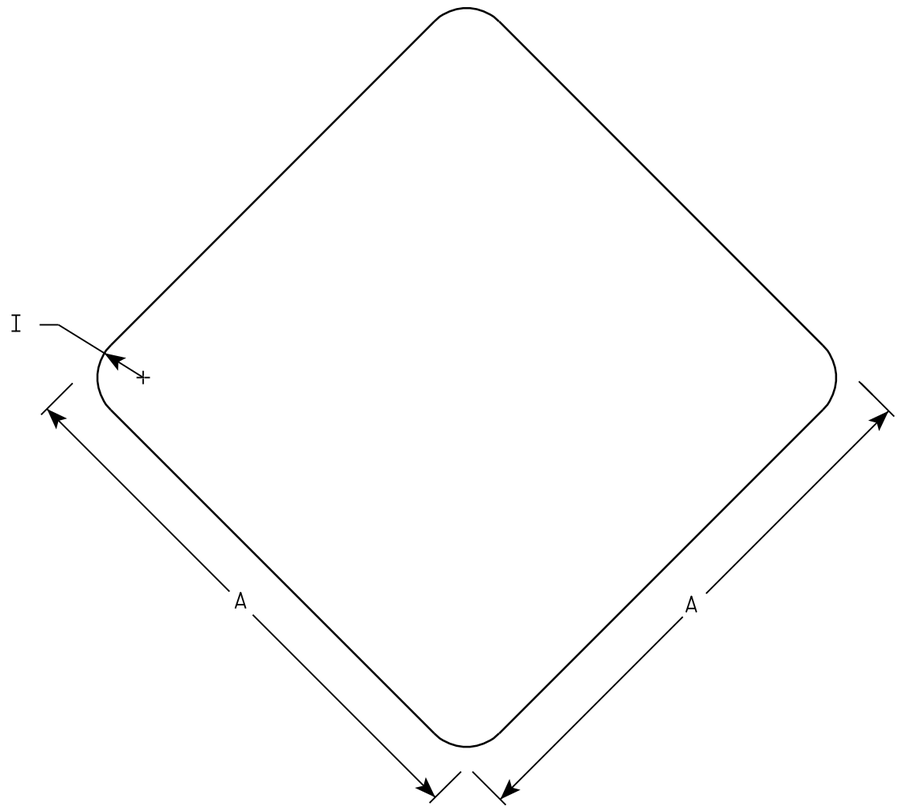
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

SHEET NO: 464 E



W5-54

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
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners 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	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

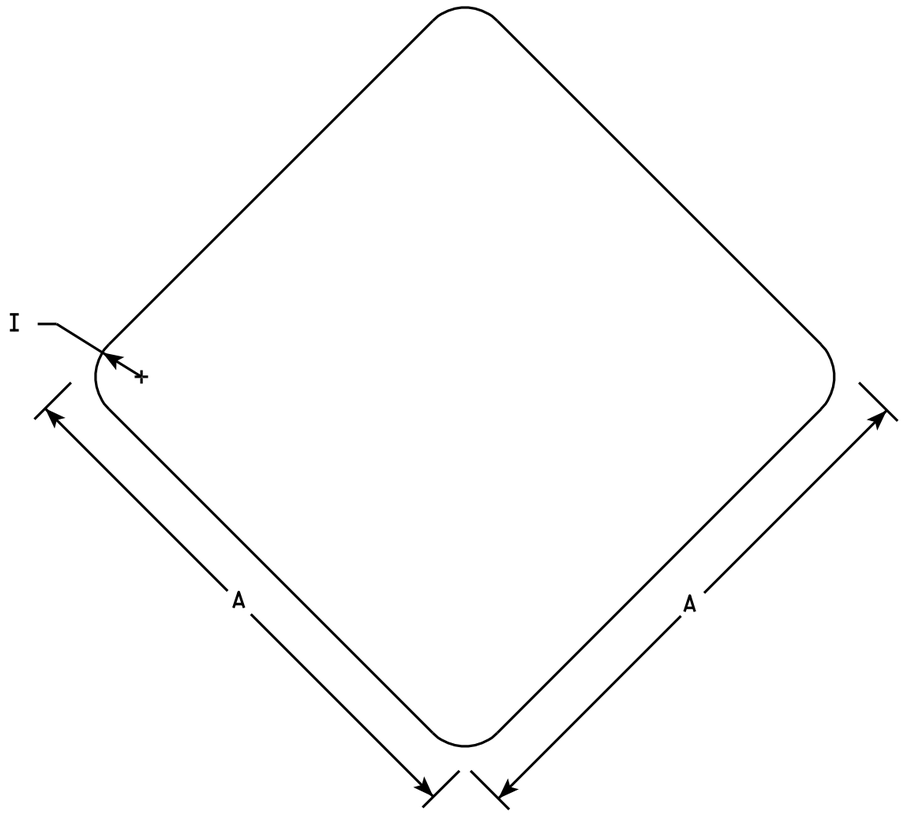
STANDARD SIGN
W5-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/3/10 PLATE NO. W5-54.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 465 | E



W5-56

NOTES

1. Sign is Type II - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners 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	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

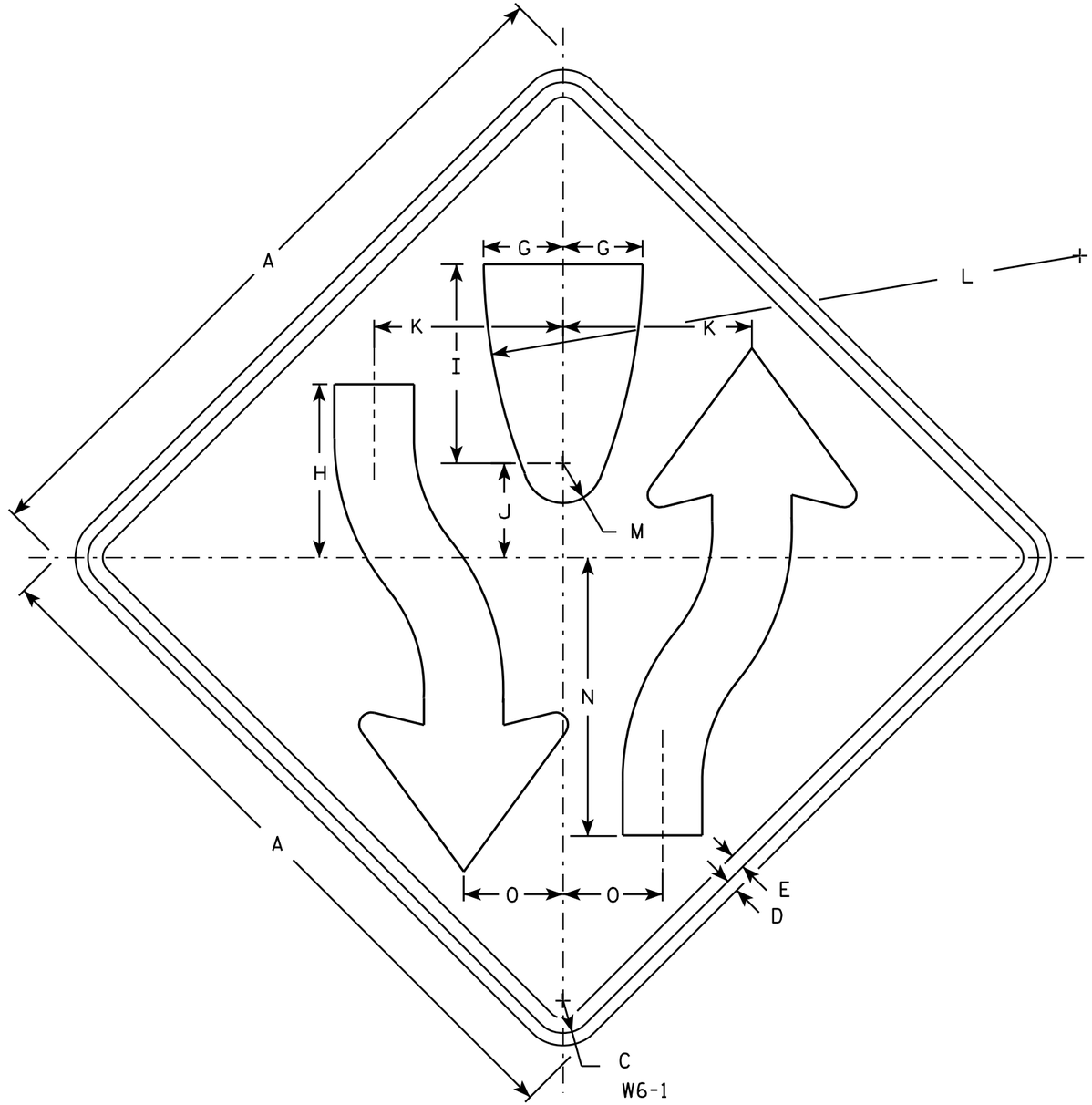
STANDARD SIGN
W5-56

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

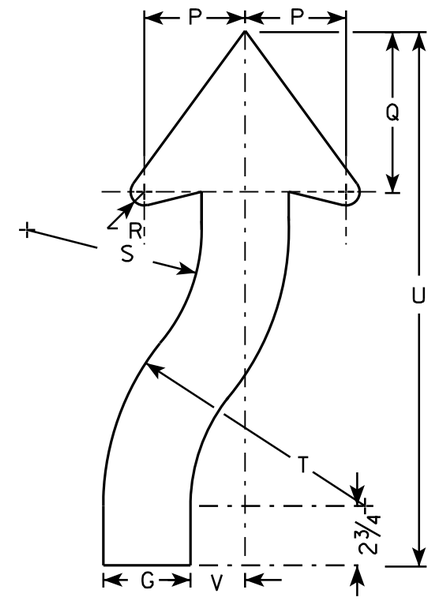
DATE 11/2/10 PLATE NO. W5-56.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 466	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. 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

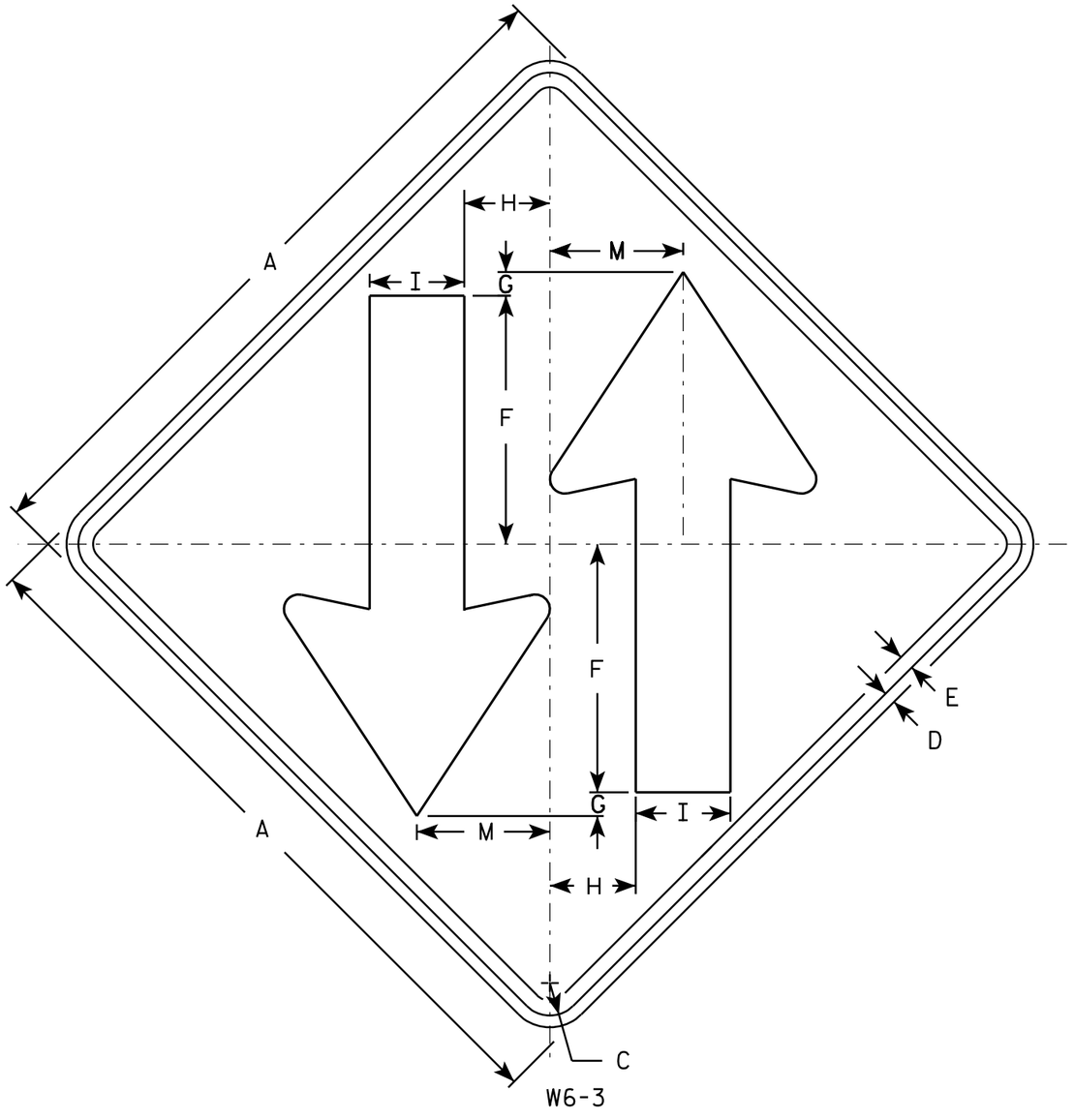
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-1.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 467	E

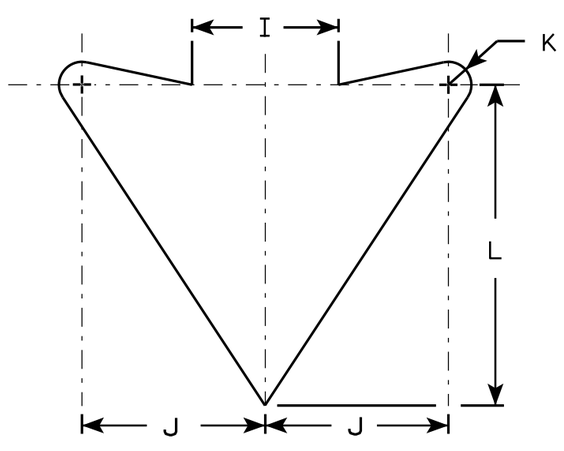
7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W61.DGN PLOT DATE : 12-MAR-2013 14:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.946657:1.000000
WISDOT/CADDS SHEET 42



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.



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	10 1/2	1	3 5/8	4	5	5/8	8 3/4	5 5/8														6.25
2S	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
2M	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
3																											
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

STANDARD SIGN
W6-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

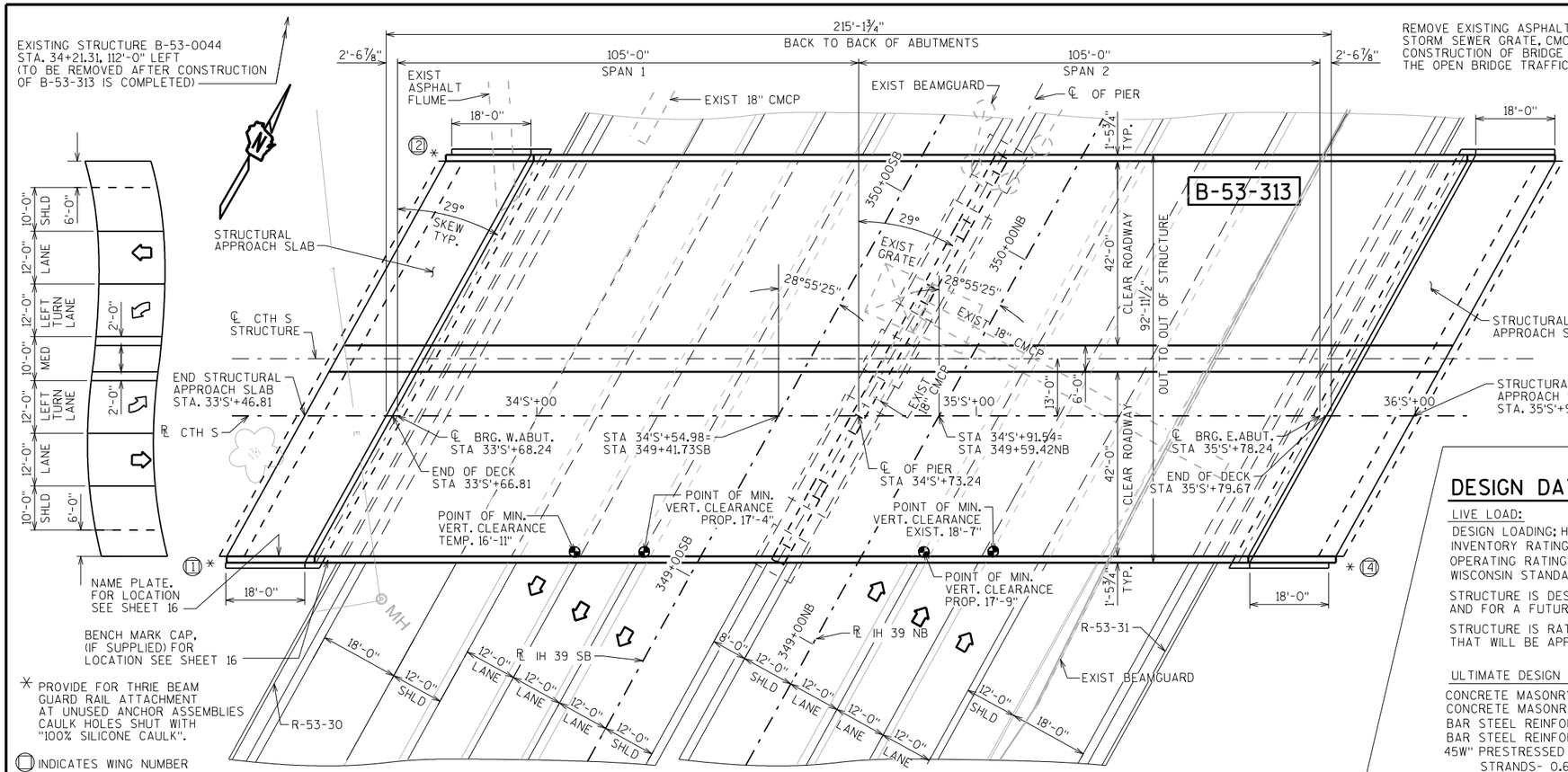
DATE 03/12/13 PLATE NO. W6-3.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 468	E

STATE PROJECT NUMBER
1003-10-71

EXISTING STRUCTURE B-53-0044
STA. 34+21.31, 112'-0" LEFT
(TO BE REMOVED AFTER CONSTRUCTION OF B-53-313 IS COMPLETED)

REMOVE EXISTING ASPHALT FLUMES, BEAMGUARD, STORM SEWER GRATE, CMCP, AS NECESSARY FOR CONSTRUCTION OF BRIDGE B-53-313, WHILE MAINTAINING THE OPEN BRIDGE TRAFFIC OPERATION OF B-53-0044.

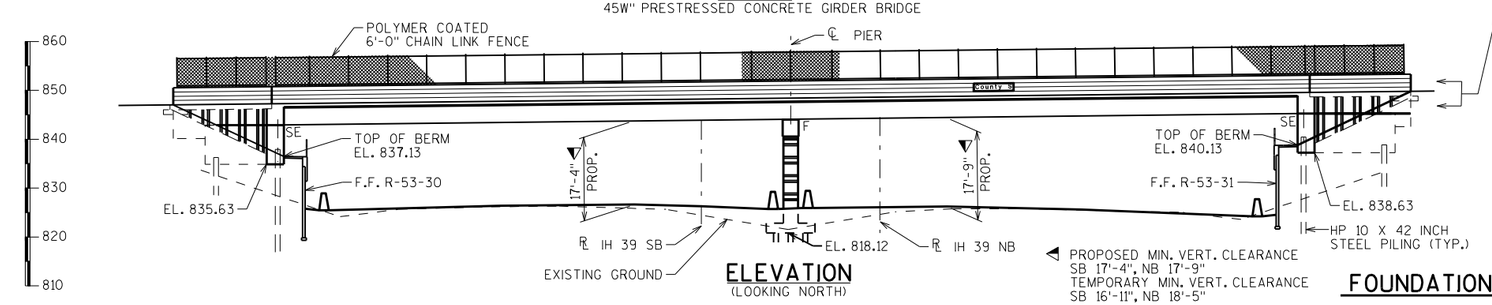


✳ PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT AT UNUSED ANCHOR ASSEMBLIES CAULK HOLES SHUT WITH "100% SILICONE CAULK".

⬡ INDICATES WING NUMBER

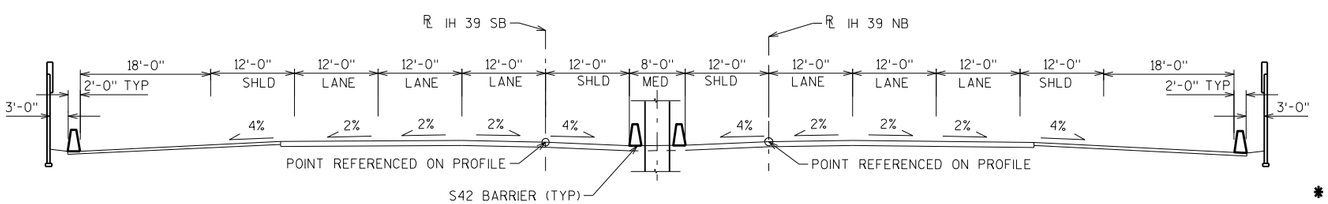
PLAN

45W" PRESTRESSED CONCRETE GIRDER BRIDGE



ELEVATION

(LOOKING NORTH)



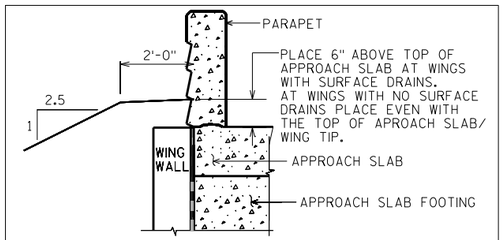
PROPOSED TYPICAL SECTION THRU I.H. 39/90 LOOKING NORTH (UPSTATION) UNDER CTH S

LOOKING NORTH

(FOR INFORMATION ONLY - IH 39/90 TO BE RECONSTRUCTED UNDER FUTURE CONTRACT 1003-10-81)

TRAFFIC VOLUME

IH 39	CTH S
A.D.T.=73,700 (2040)	A.D.T.=7,200 (2040)
R.D.S.=70 M.P.H.	R.D.S.=50 M.P.H.



TYPICAL FILL SECTION AT END OF STRUCTURAL APPROACH SLABS

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF= 1.09
OPERATING RATING FACTOR: RF= 1.42
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 220 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT AND FOR A FUTURE SIDEWALK AS SHOWN ON SHEET 2.

STRUCTURE IS RATED FOR A POLYMER OVERLAY OF 5 POUNDS PER SQUARE FOOT THAT WILL BE APPLIED TO THE ENTIRE BRIDGE DECK AT A FUTURE DATE.

ULTIMATE DESIGN STRESSES:

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	fy =	60,000 P.S.I.
BAR STEEL REINFORCEMENT STAINLESS, GRADE 60	fy =	60,000 P.S.I.
45W" 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.

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 ALTERNATE
10. 45W" PRESTRESSED GIRDER DETAILS
11. 45W" PRESTRESSED GIRDER DETAILS
12. STEEL DIAPHRAGM
13. SUPERSTRUCTURE CROSS SECTION
14. SUPERSTRUCTURE PLAN
15. SUPERSTRUCTURE DETAILS
16. 42SS MODIFIED PARAPET
17. RAIL POST SPACING
18. CONDUIT DETAILS
19. CHAIN LINK FENCE DETAILS
20. AESTHETIC DETAILS
21. ALTERNATE CONSTRUCTION JOINT
22. WEST STRUCTURAL APPROACH SLAB
23. EAST STRUCTURAL APPROACH SLAB

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 INCH STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ✱✱ PER PILE BY SEATING THE PILE IN THE VERY DENSE SANDS AND GRAVELS.
ESTIMATED 30'-0" LONG AT WEST ABUTMENT.
ESTIMATED 30'-0" LONG AT EAST ABUTMENT.

PIER TO BE SUPPORTED ON HP 10 X 42 INCH STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ✱✱ PER PILE BY SEATING THE PILE IN THE VERY DENSE SANDS AND GRAVELS.
ESTIMATED 10'-0" LONG.

PREBORING REQUIRED AT PIER AND ABUTMENT PILES. 10'-0" PER PILE.

✱✱ 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.

STRUCTURE DESIGN CONTACTS:

STEVEN DOOCY (608) 261-6063
AARON BONK (608) 261-0261

NO.	DATE	REVISION	BY

Plans Prepared By WISDOT
BUREAU OF STRUCTURES

ACCEPTED William C. Dreher 1/7/15
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-53-313

CTH S OVER IH 39 NB/SB

COUNTY	TOWN/~~CITY/VILLAGE~~
ROCK	TURTLE

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	SAD	DESIGN CK'D.	ABS	DRAWN BY	WWR	PLANS CK'D.	SAD

GENERAL PLAN

SHEET 1 OF 23

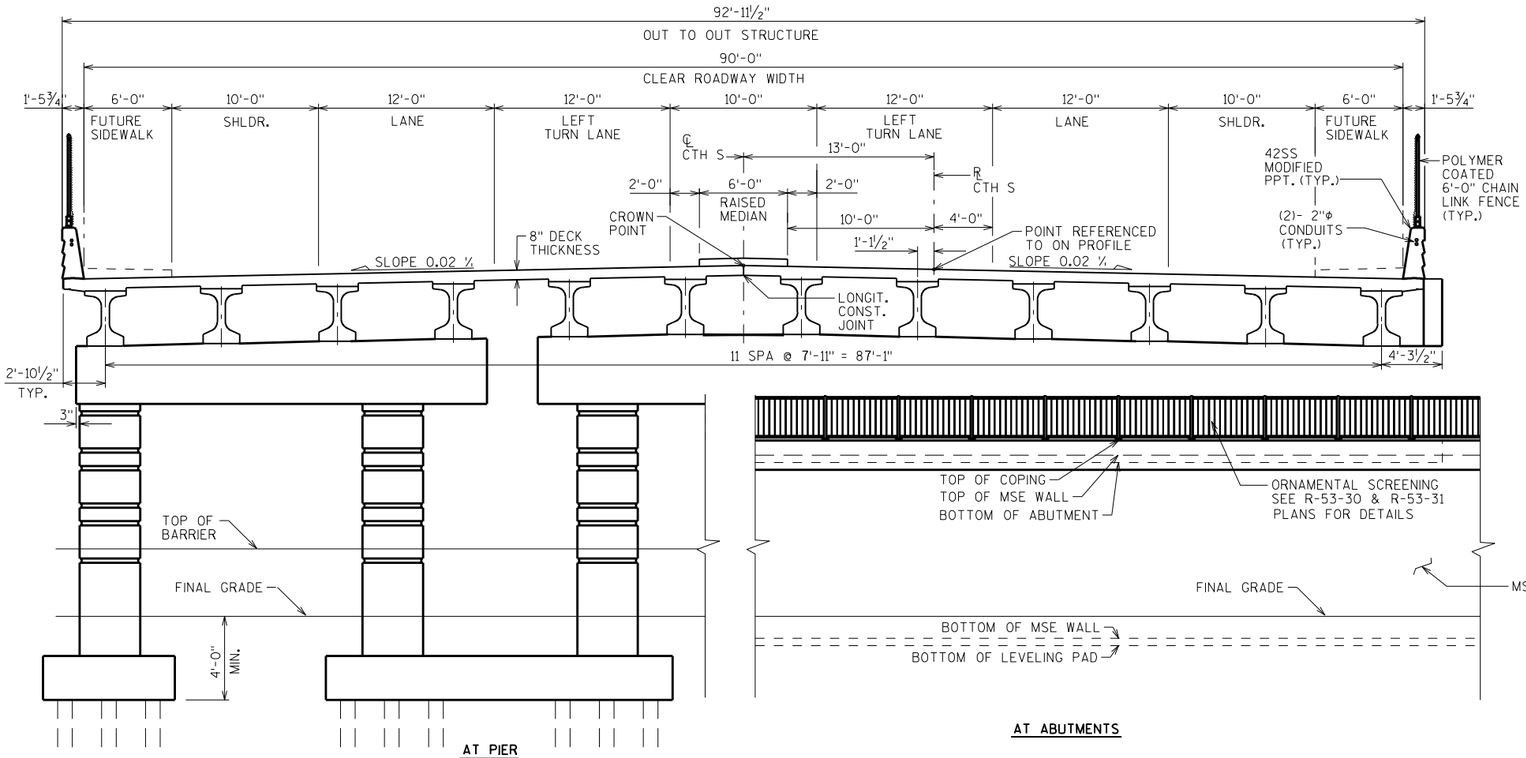
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I.D. 1003-10-01C

DATE: JUNE 2014

SCALE = 15

STATE PROJECT NUMBER
1003-10-71



CROSS SECTION THRU ROADWAY

(LOOKING EAST)

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, MEDIAN, STRUCTURAL APPROACH SLABS, AND THE FRONT FACES AND TOPS OF PARAPETS.

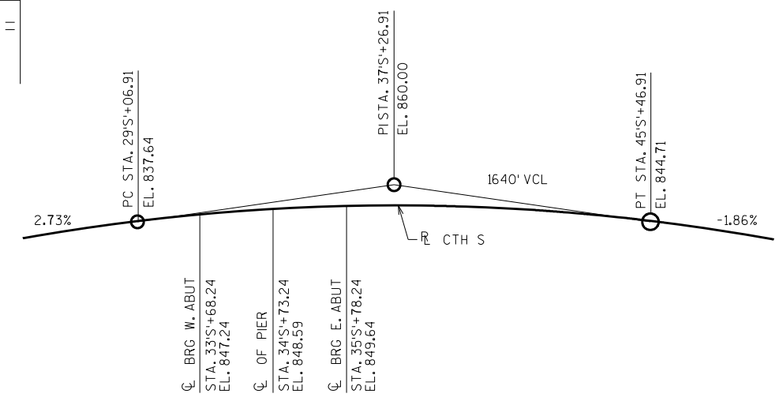
THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

THE EXISTING STRUCTURE (B-53-0044) IS A 4-SPAN, 36" STEEL GIRDER BRIDGE WITH AN OVERALL LENGTH OF 258'-8" AND A CLEAR ROADWAY WIDTH OF 34'-0". THE EAST AND WEST ABUTMENTS ARE SUPPORTED ON TIMBER PILING, AND THE PIER IS SUPPORTED BY A SPREAD FOOTING. THE ENTIRE STRUCTURE IS TO BE RMOVED WILL BE PAID FOR UNDER THE BID ITEM "REMOVING OLD STRUCTURE STA. 34+21.31." (AFTER CONSTRUCTION OF B-53-313 IS COMPLETED)

CONCRETE STAINING AND ARCHITECTURAL SURFACE TREATMENT REQUIRED ON BRIDGE. SEE AESTHETIC DETAILS SHEET FOR DETAILS.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER	WEST APPROACH	WEST ABUT.	PIER	EAST ABUT.	EAST APPROACH	TOTALS
203.0200.001	REMOVING OLD STRUCTURE STA. 34'S'+21.31	LS	———	———	———	———	———	———	1
203.0225.S.001	DEBRIS CONTAINMENT B-53-0044	LS	———	———	———	———	———	———	1
206.1000.001	EXCAVATION FOR STRUCTURES BRIDGES B-53-313	LS	———	———	———	———	———	———	1
210.0100	BACKFILL STRUCTURE	CY	———	———	295	———	265	———	560
305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	———	271	———	———	———	271	542
502.0100	CONCRETE MASONRY BRIDGES	CY	———	29	123	202	110	29	493
502.3200	PROTECTIVE SURFACE TREATMENT	SY	2365	222			———	222	2809
503.0146	PRESTRESSED GIRDER TYPE I 45W-INCH	LF	2529	———	———	———	———	———	2529
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	———	———	9090	6970	8870	———	24,930
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	179,260	21,510	2540	30,880	2470	21,510	258,170
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	———	———	12	24	12	———	48
506.4000.001	STEEL DIAPHRAMS B-53-313	EACH	44	———	———	———	———	———	44
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	———	———	26	———	26	———	52
517.1010.S.001	CONCRETE STAINING B-53-313	SF	5777	———	1025	2480	925	———	10,307
517.1050.S.001	ARCHITECTURAL SURFACE TREATMENT B-53-313	SF	1212	———	690	———	590	———	2492
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	———	———	630	540	630	———	1800
550.0020	PREBORING ROCK OR CONSOLIDATED MATERIAL	LF	———	———	210	540	210	———	960
604.0400	SLOPE PAVING CONCRETE	SY	———	———	28	———	28	———	56
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	4	———	———	———	———	———	4
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	96	———	———	———	———	———	96
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	988	———	———	———	———	———	988
653.0222	JUNCTION BOXES 18X12X6-INCH	EACH	4	———	———	———	———	———	4
SPV.0035.700	HIGH PERFORMANCE CONCRETE (HPC) MASONRY STRUCTURES	CY	785	100	———	———	———	100	985
SPV.0085.700	BAR STEEL REINFORCEMENT HS STAINLESS BRIDGES	LB	———	———	1547	———	1547	———	3094
SPV.0090.700	FENCE CHAIN LINK POLYMER COATED 6-FT	LF	508	———	———	———	———	———	508
SPV.0165.700	LONGITUDINAL GROOVING BRIDGE DECK	SF	17880	1680	———	———	———	1680	21240
	NON-BID ITEMS								
	FILLER	SIZE	———	———	———	———	———	———	½", ¾", 1½"



PROFILE GRADE LINE CTH S



PROFILE GRADE LINE IH 39 NB/SB

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-53-313

DRAWN BY WWR | PLANS CK'D. SAD

CROSS SECTION & QUANTITIES

SHEET 2

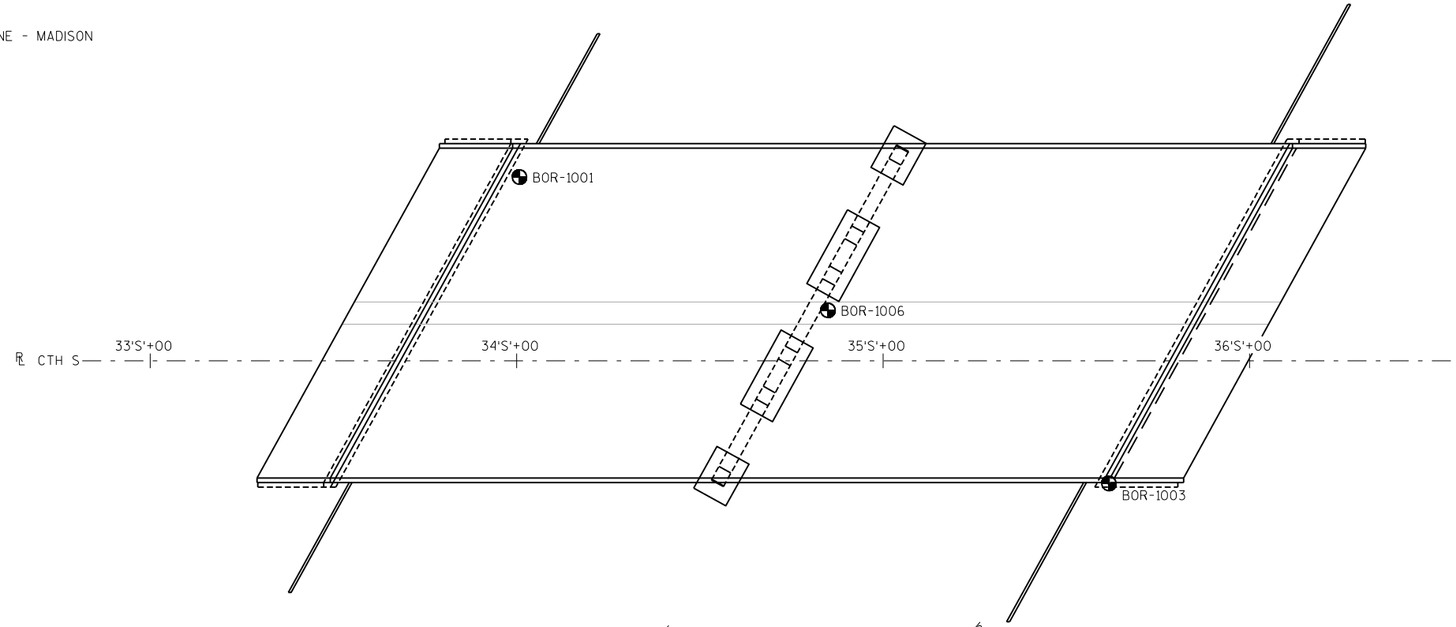
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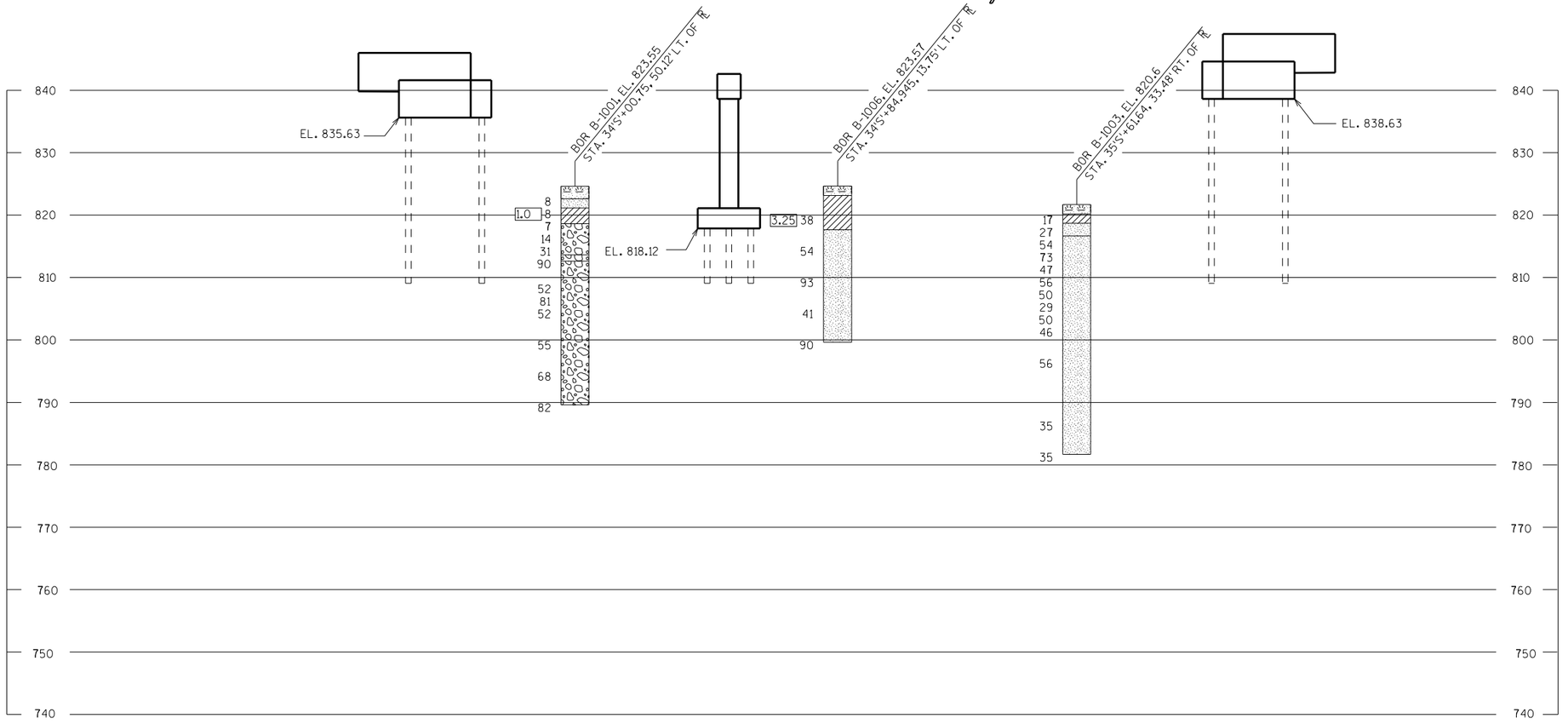
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ILLINOIS STATE LINE - MADISON





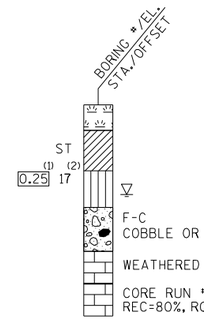
STATE PROJECT NUMBER

1003-10-71

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(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-53-313

DRAWN BY PR/WWR | PLANS CK'D. SAD

SUBSURFACE EXPLORATION

SHEET 3

471

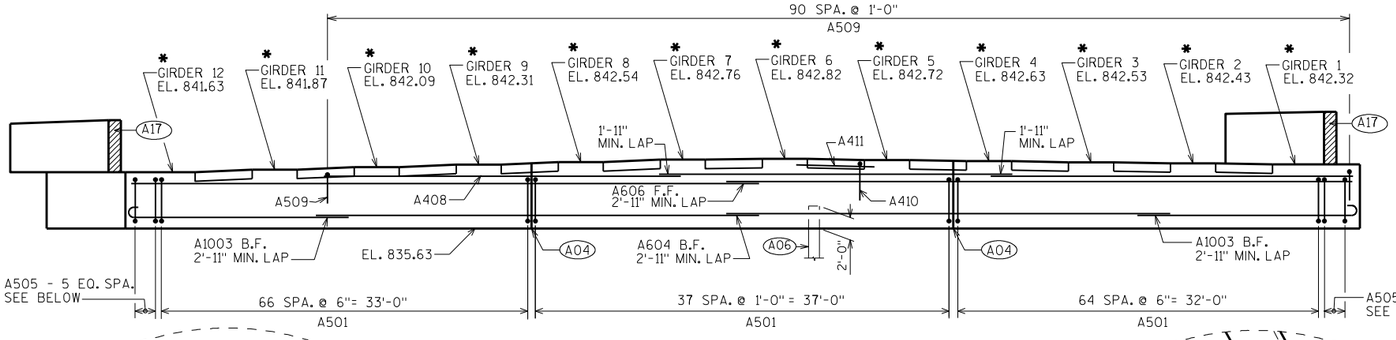
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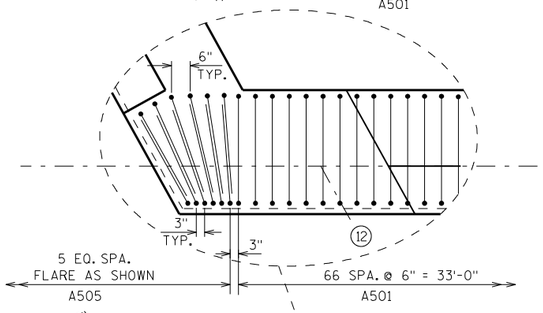
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STATE PROJECT NUMBER

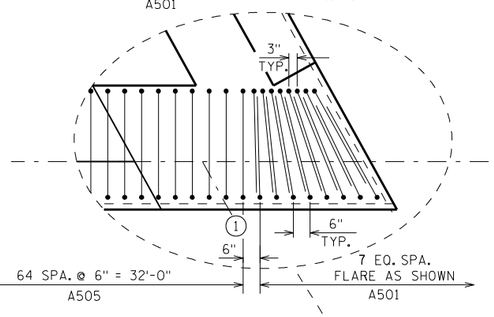
1003-10-71



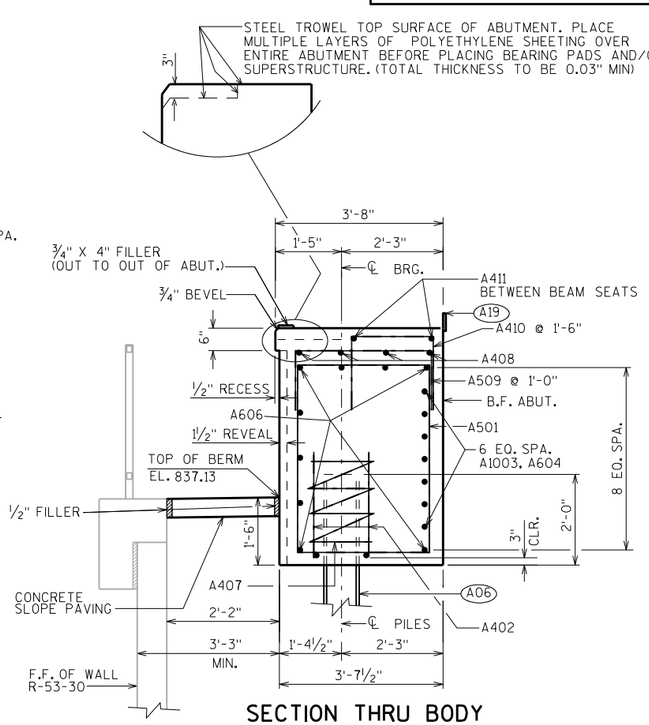
ELEVATION LOOKING WEST



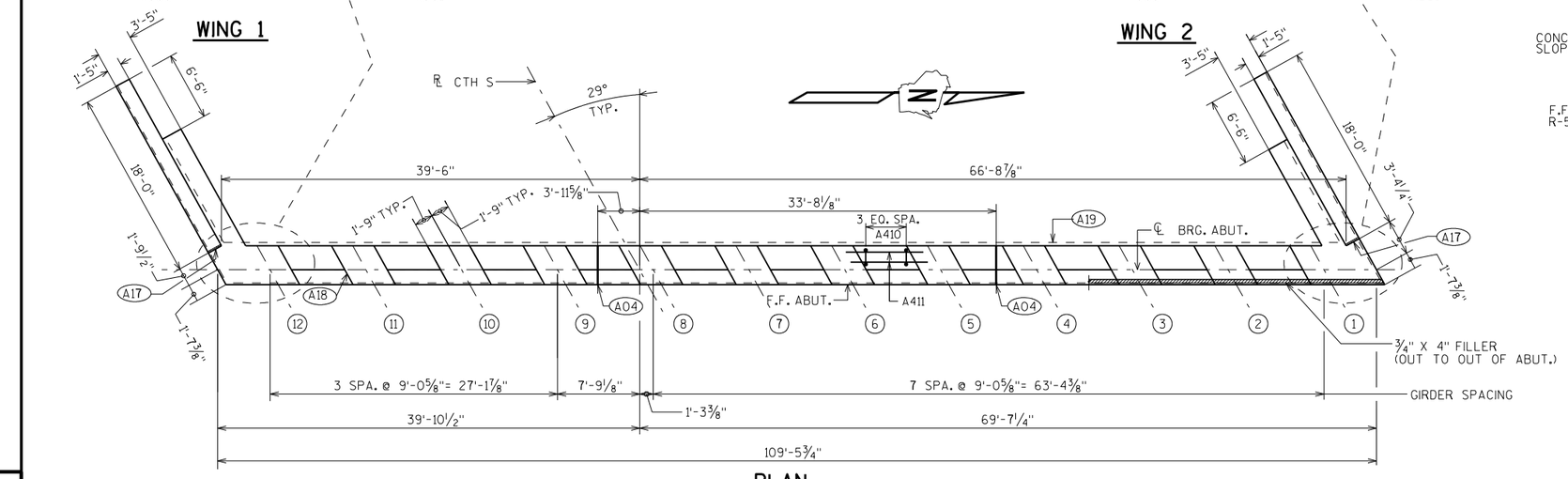
WING 1



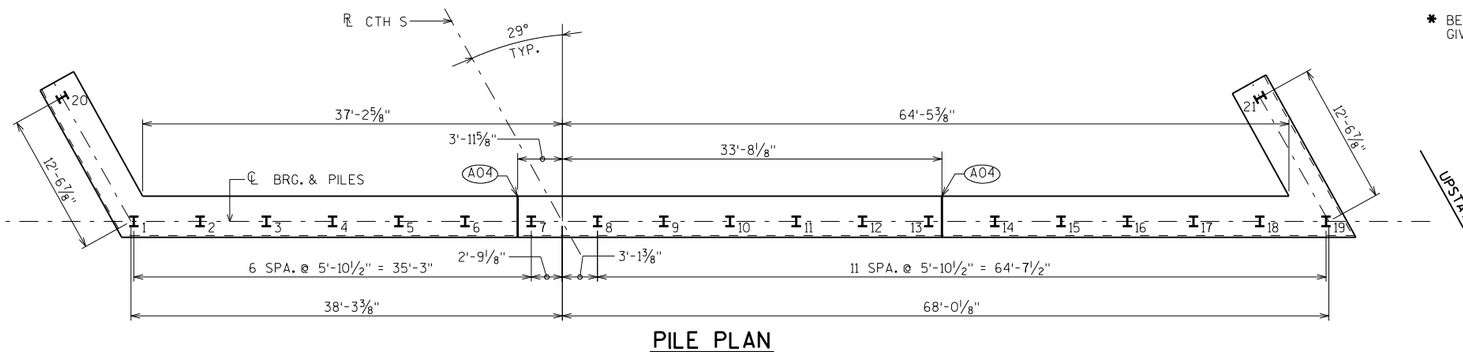
WING 2



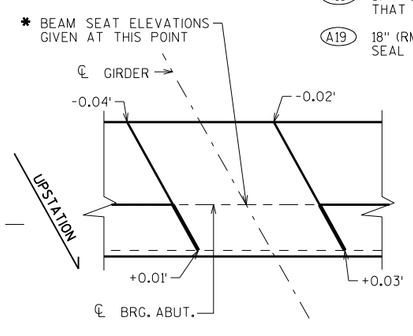
SECTION THRU BODY



PLAN



PILE PLAN



SLOPED BEAM SEAT DETAIL

(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 GROUTED IN PREBORED HOLES. ESTIMATED 30'-0" LONG. PRE-BORING FOR PILES SHALL OCCUR AFTER EXCAVATION FOR RETAINING WALLS IS COMPLETED.

(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-53-313

DRAWN BY WWR | PLANS CK'D. SAD

WEST ABUTMENT

SHEET 4

472

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SCALE =

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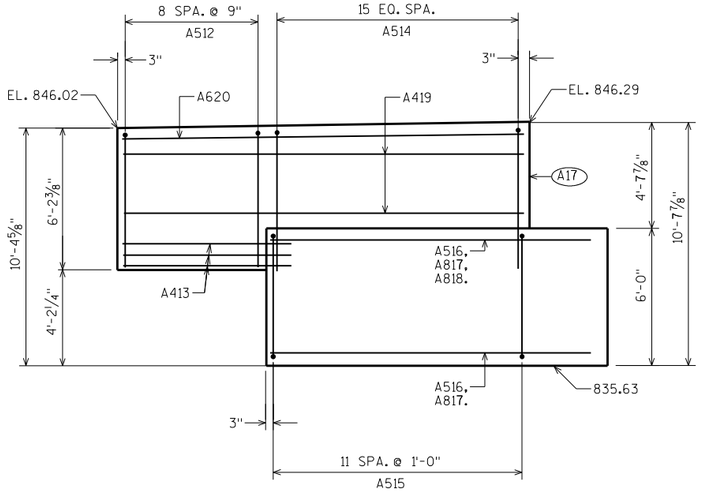
STATE PROJECT NUMBER

1003-10-71

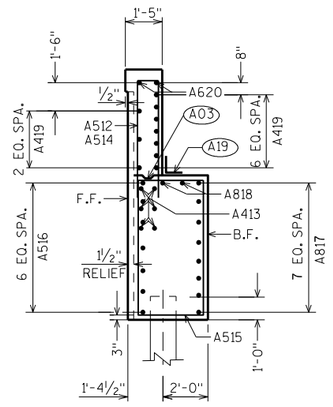
(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(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.

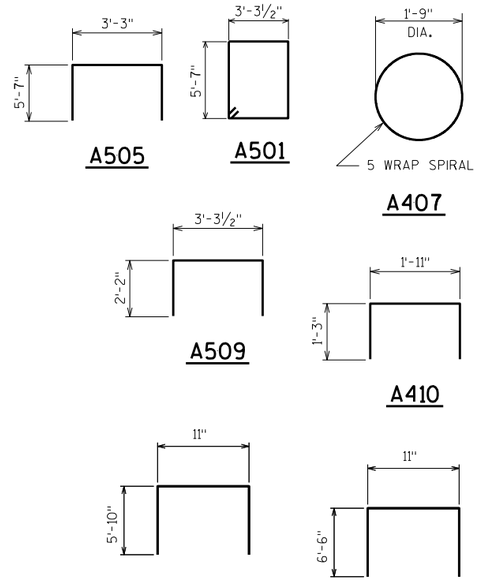
(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.



WING 1 ELEVATION

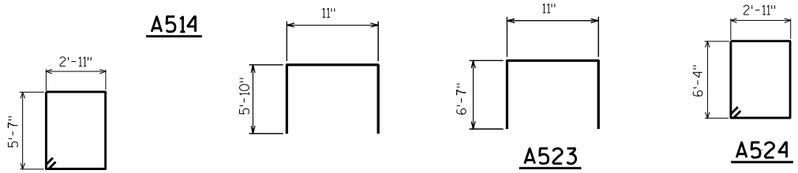


WING 1 SECTION



A512

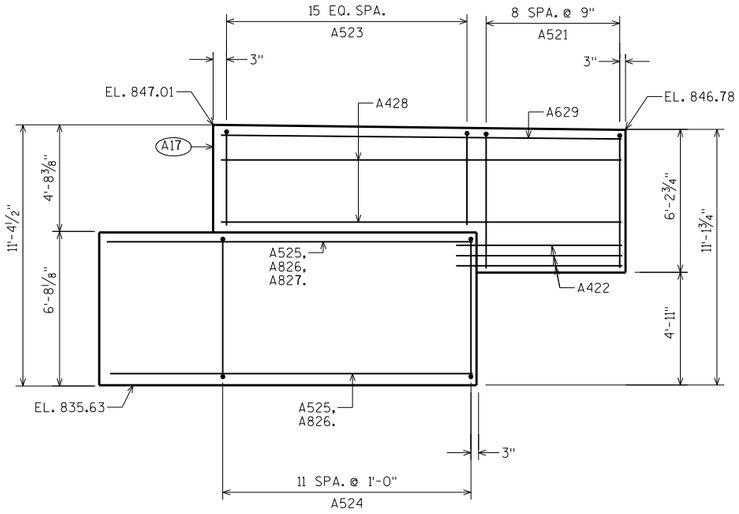
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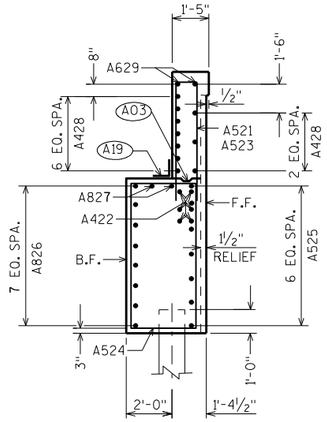
BILL OF BARS

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

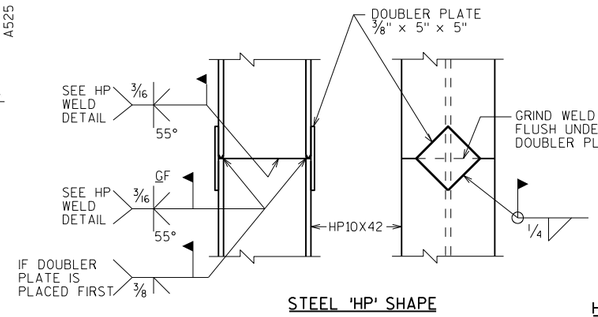
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		170	18'-5"	X		BODY-STIRRUPS
A402		38	2'-3"			PILES- 2 PER PILE
A1003		14	20'-11"	X		BODY-HORIZONTAL
A604		14	39'-6"			BODY-HORIZONTAL
A505		28	14'-2"			BODY-STIRRUP - END
A606		22	56'-0"			BODY-HORIZONTAL
A407		19	28'-0"	X		PILES-1 PER PILE
A408		12	31'-4"			BODY-HORZ. OVER GIRS. 1-10
A509		91	7'-5"	X		BODY-TOP OVER GIRS. 1-10
A410		44	4'-3"	X		BODY-BETWEEN BEAM SEATS
A411		22	7'-0"			BODY-HORZ. EXT
A512	X	9	12'-0"	X		WING 1-VERTICAL
A413	X	6	7'-8"			WING 1-HORIZONTAL
A514	X	16	13'-8"	X		WING 1-VERTICAL
A515	X	12	18'-1"	X		WING 1-STIRRUP
A516	X	7	14'-0"			WING 1-HORIZONTAL
A817	X	8	14'-8"	X		WING 1-HORIZONTAL
A818	X	2	14'-1"	X		WING 1-HORIZONTAL
A419	X	10	17'-8"			WING 1-HORIZONTAL
A620	X	2	17'-8"			WING 1-HORIZONTAL
A521	X	9	12'-4"	X		WING 2-VERTICAL
A422	X	6	7'-8"			WING 2-HORIZONTAL
A523	X	16	13'-10"	X		WING 2-VERTICAL
A524	X	12	19'-0"	X		WING 2-STIRRUP
A525	X	7	15'-0"			WING 2-HORIZONTAL
A826	X	8	14'-2"	X		WING 2-HORIZONTAL
A827	X	2	14'-8"	X		WING 2-HORIZONTAL
A428	X	10	17'-8"			WING 2-HORIZONTAL
A629	X	2	17'-8"			WING 2-HORIZONTAL



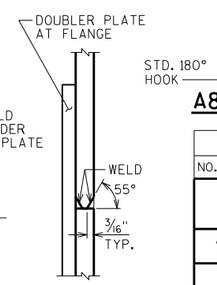
WING 2 ELEVATION



WING 2 SECTION

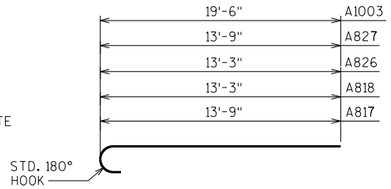


STEEL 'HP' SHAPE



HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE DETAILS



A817, A818, A826, A827, A1003

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-53-313

DRAWN BY WWR | PLANS CK'D. SAD

WEST ABUTMENT DETAILS

SHEET 5

473

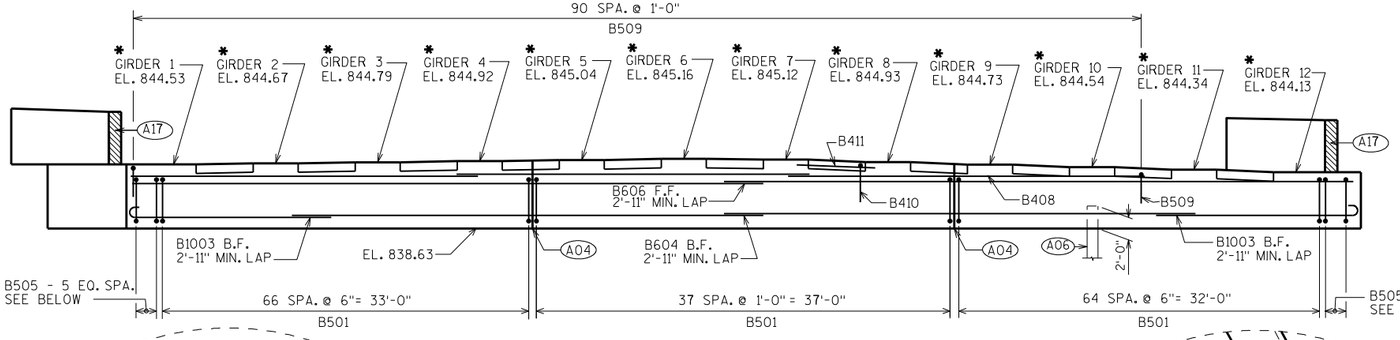
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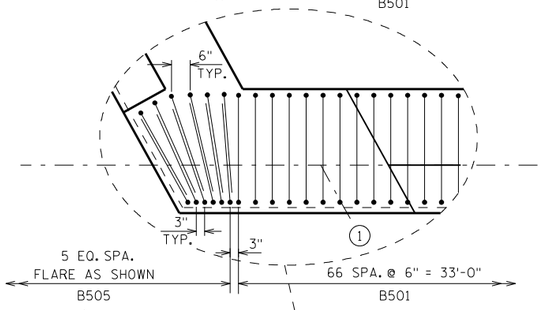
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STATE PROJECT NUMBER

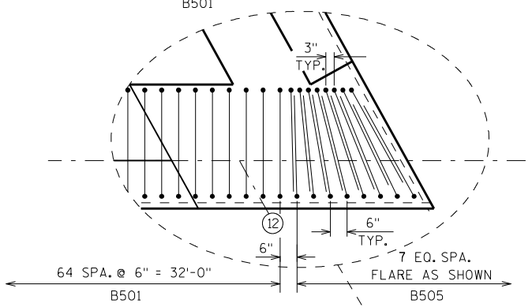
1003-10-71



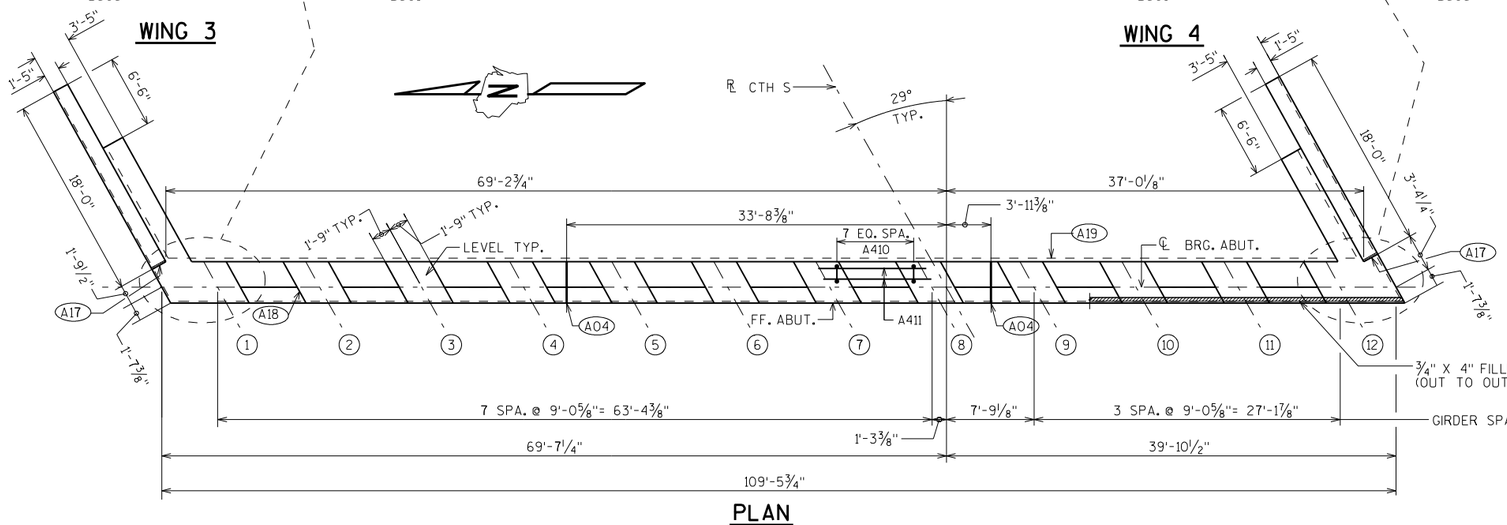
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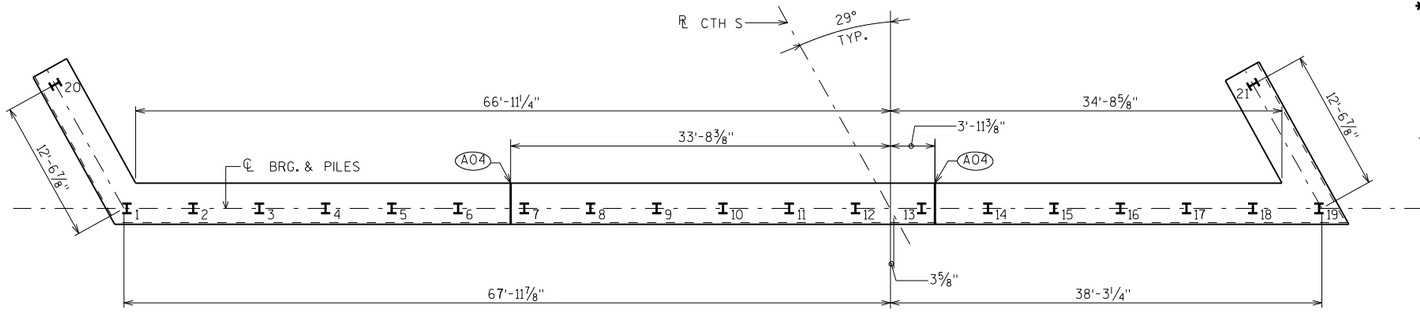
WING 3



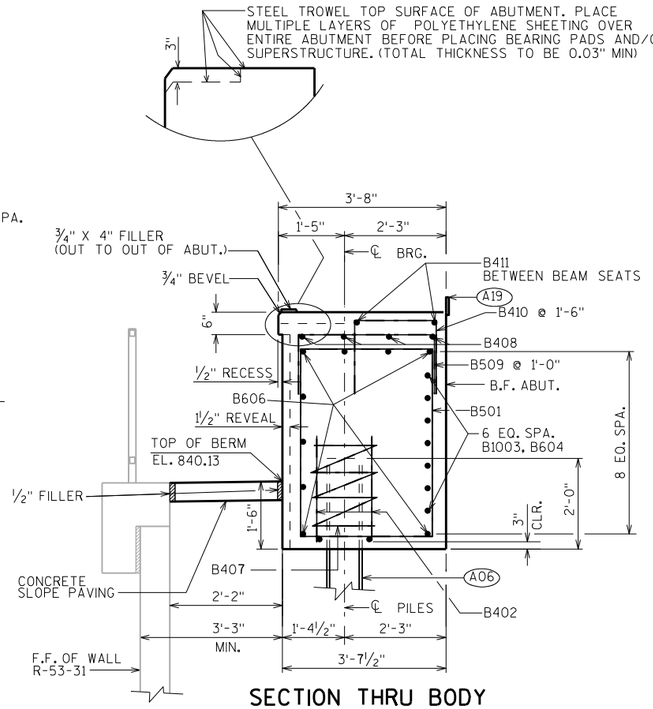
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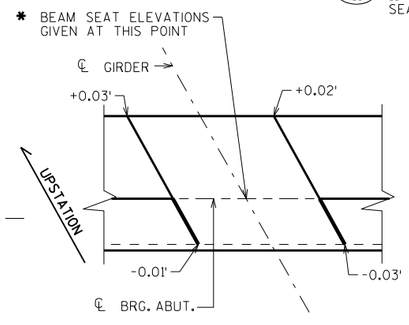
PLAN



PILE PLAN



SECTION THRU BODY



SLOPED BEAM SEAT DETAIL

(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 GROUTED IN PREBORED HOLES. ESTIMATED 30'-0" LONG. PRE-BORING FOR PILES SHALL OCCUR AFTER EXCAVATION FOR RETAINING WALLS IS COMPLETED.

(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
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STRUCTURES DESIGN SECTION

STRUCTURE B-53-313

DRAWN BY WWR | PLANS CK'D. SAD

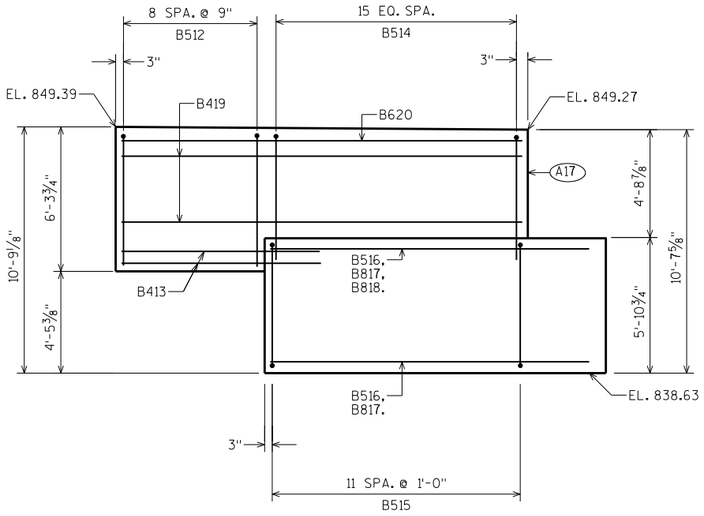
EAST ABUTMENT

SHEET 6

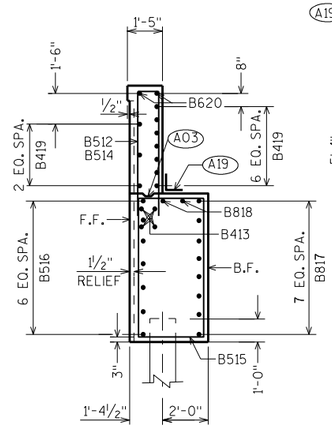
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SCALE =



WING 3 ELEVATION

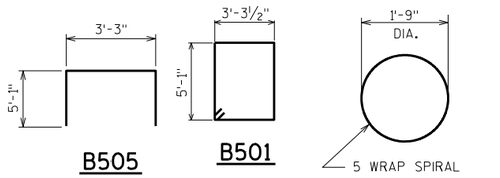


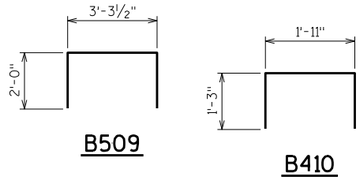
WING 3 SECTION

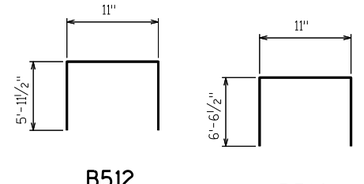
A03 OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 × 6. (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

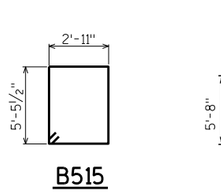
A17 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

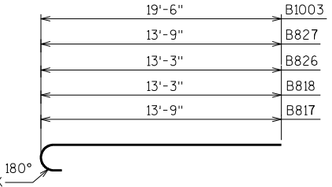
A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.



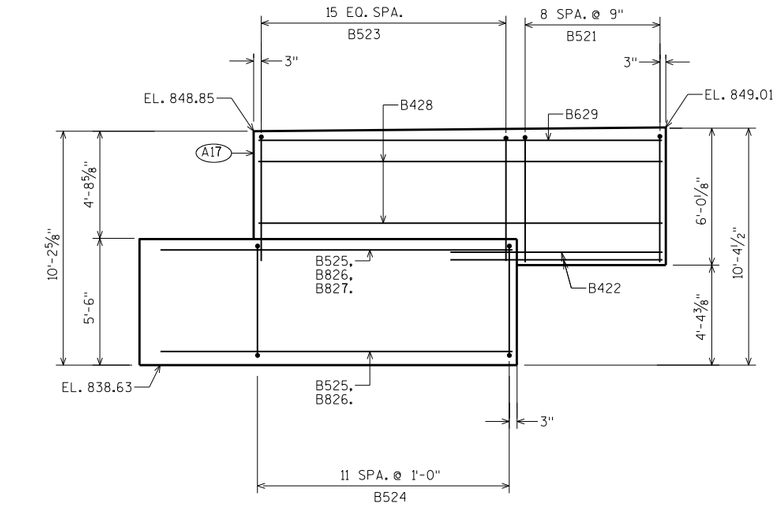




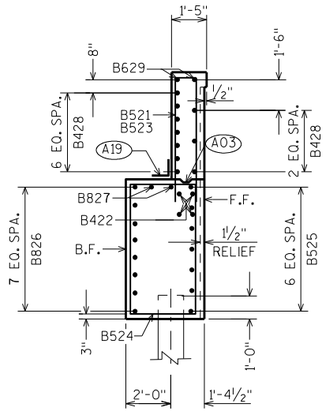




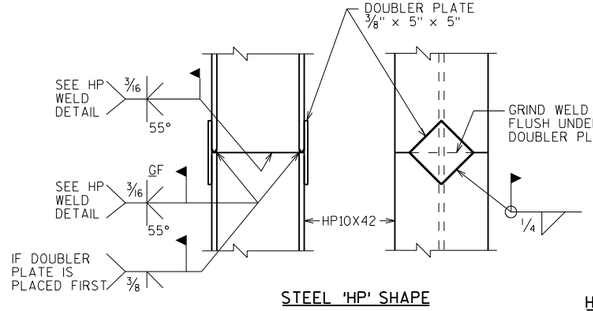
B817, B818, B826, B827, B1003



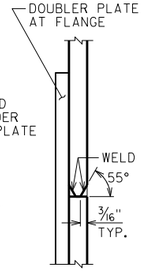
WING 4 ELEVATION



WING 4 SECTION



STEEL 'HP' SHAPE



HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

STATE PROJECT NUMBER

1003-10-71

BILL OF BARS

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		170	17'-5"	X		BODY-STIRRUPS
B402		38	2'-3"			PILES- 2 PER PILE
B1003		14	20'-11"	X		BODY-HORIZONTAL
B604		14	39'-6"			BODY-HORIZONTAL
B605		28	13'-2"			BODY-STIRRUP - END
B606		22	56'-0"			BODY-HORIZONTAL
B407		19	28'-0"	X		PILES-1 PER PILE
B408		12	31'-4"			BODY-HORZ. OVER GIRS. 1-10
B509		91	7'-1"	X		BODY-TOP OVER GIRS. 1-10
B410		44	4'-3"	X		BODY-BETWEEN BEAM SEATS
B411		22	7'-0"			BODY-HORZ. EXT
B512	X	9	12'-5"	X		WING 3-VERTICAL
B413	X	4	7'-8"			WING 3-HORIZONTAL
B514	X	16	13'-9"	X		WING 3-VERTICAL
B515	X	12	17'-4"	X		WING 3-STIRRUP
B516	X	8	14'-0"			WING 3-HORIZONTAL
B817	X	8	14'-8"	X		WING 3-HORIZONTAL
B818	X	2	14'-2"	X		WING 3-HORIZONTAL
B419	X	10	17'-8"			WING 3-HORIZONTAL
B620	X	2	17'-8"			WING 3-HORIZONTAL
B521	X	9	12'-0"	X		WING 4-VERTICAL
B422	X	4	7'-8"			WING 4-HORIZONTAL
B523	X	16	13'-8"	X		WING 4-VERTICAL
B524	X	12	16'-8"	X		WING 4-STIRRUP
B525	X	8	15'-0"			WING 4-HORIZONTAL
B826	X	7	14'-2"	X		WING 4-HORIZONTAL
B827	X	2	14'-8"	X		WING 4-HORIZONTAL
B428	X	10	17'-8"			WING 4-HORIZONTAL
B629	X	2	17'-8"			WING 4-HORIZONTAL

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STRUCTURES DESIGN SECTION

STRUCTURE B-53-313

DRAWN BY WWR | PLANS CK'D. SAD

EAST ABUTMENT DETAILS

SHEET 7

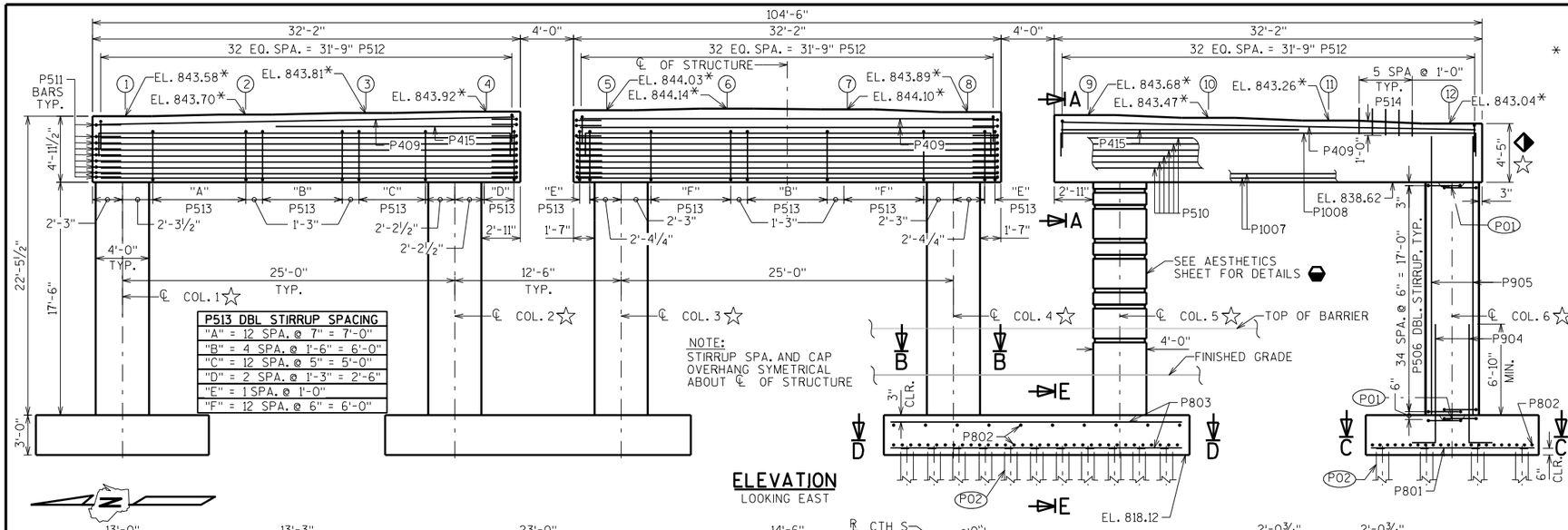
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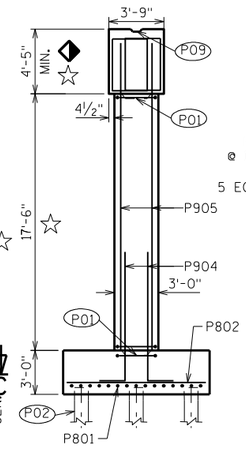
STATE PROJECT NUMBER

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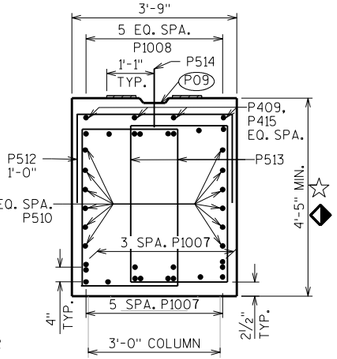


ELEVATION
LOOKING EAST

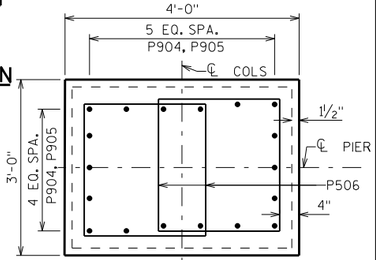
* = SLOPED BEAM SEATS



END ELEVATION



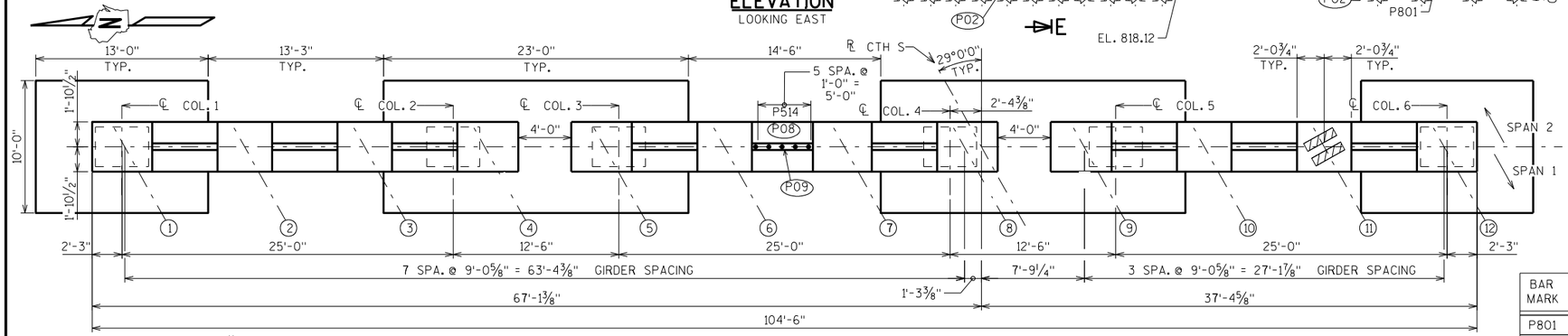
SECTION A-A: THRU CAP



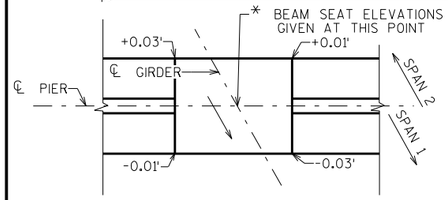
☆SECTION B-B: THRU COLUMN



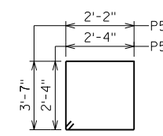
BUNDLING DETAIL



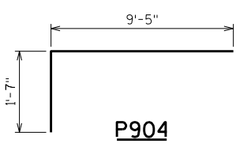
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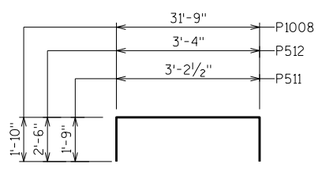
SLOPED BEAM SEAT DETAIL



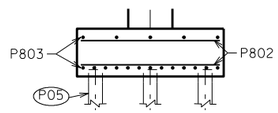
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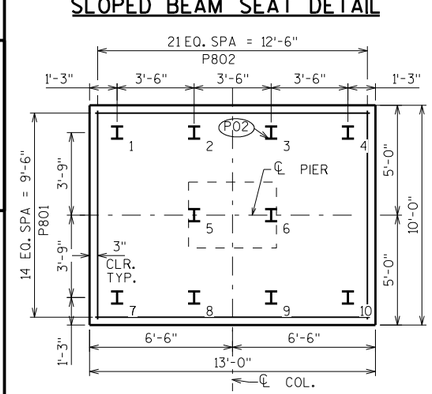
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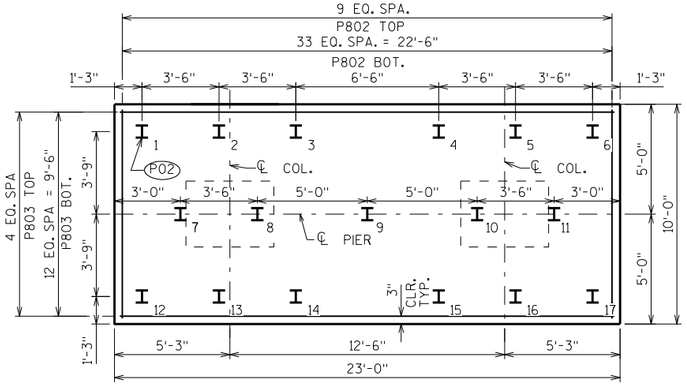
P511, P512, P1008



SECTION E-E: THRU INT. FTG.



SECTION C-C: EXT. COL. FOOTING



SECTION D-D: INT. COL. FOOTING

NOTES:

(P01) 1'-3" X 2'-0" X 2" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

(P02) SUPPORT PIER ON HP 10 x 42 STEEL PILING, ESTIMATED 10'-0" LONG, GROUTED IN PREBORED HOLES.

(P08) P514 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.) PRE-BORING REQUIRED TO 10' BELOW FOOTING.

(P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 x 6 BETWEEN BEAM SEATS.

RUSTICATIONS NOT SHOWN ON ALL COLUMNS FOR CLARITY. SEE AESTHETICS SHEET FOR RUSTICATION DETAILS.

☆ THE CONTRACTOR MAY FURNISH PRECAST PIER CAPS, BEARING BLOCKS, AND COLUMNS IN LIEU OF THE CAST-IN-PLACE PIER WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES DESIGN SECTION. CONTACT DAVE KIEKBUSCH (608-266-5084) OR JAMES LUEBKE (608-266-5098) FOR PRECAST PIER MEMBER STANDARDS. PAYMENT FOR THE PRECAST PIER MEMBERS SHALL BE BASED ON THE QUANTITES 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

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
P801		30	12'-6"			FOOTING
P802		132	9'-6"			FOOTING
P803		36	22'-6"			FOOTING
P904	X	108	10'-6"	X		FOOTING/COLUMN - VERT.
P905	X	108	21'-0"			COLUMN - VERT.
P506	X	432	10'-0"	X		COLUMN - STIRRUP
P1007	X	42	31'-9"			CAP - HORIZ. - BOTTOM
P1008	X	24	34'-10"	X		CAP - HORIZ. - TOP
P409	X	12	31'-9"			CAP - HORIZ. - TOP
P510	X	36	31'-9"			CAP - HORIZ. - SIDE
P511	X	58	6'-6"	X		CAP - END - U-BAR
P512	X	96	8'-1"	X		CAP - VERT. - U-BAR
P513	X	206	12'-2"	X		CAP - STIRRUP
P514	X	45	2'-0"			DOWEL BAR
P415	X	4	7'-10"			CAP - HORIZ. - TOP

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STRUCTURE B-53-313

DRAWN BY SAD | PLANS CK'D. ABS

PIER

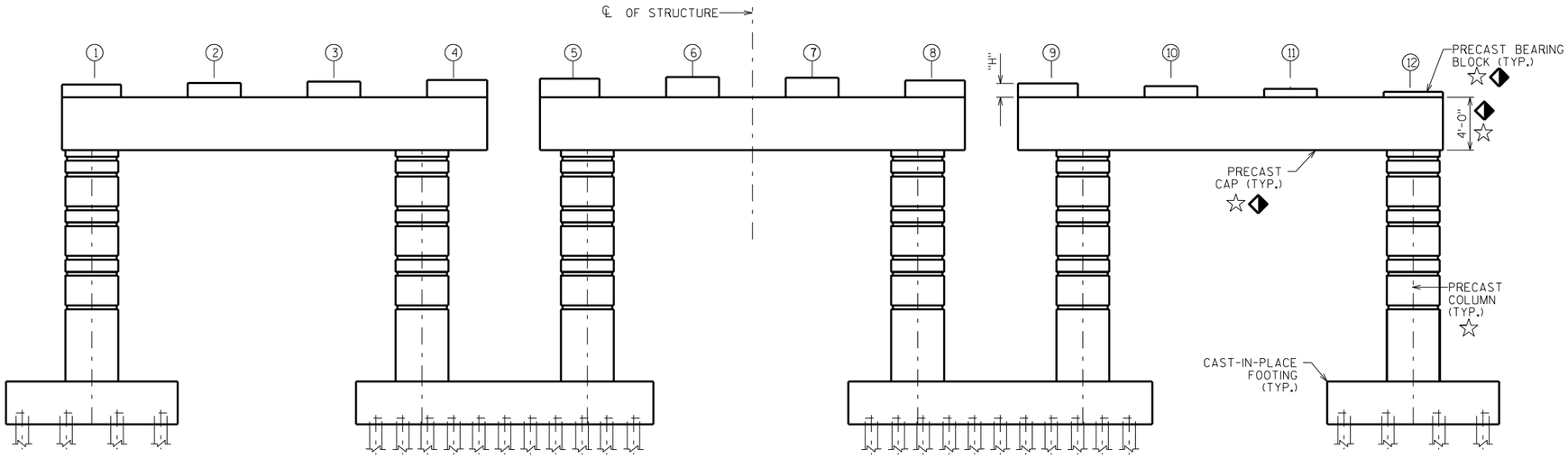
SHEET 8

476

SCALE = 5

STATE PROJECT NUMBER

1003-10-71



ELEVATION OF OPTIONAL PRECAST PIER

FOR INFORMATION ONLY
CONTACT DAVE KIEKBUSCH (608) 266-5084 AND
JAMES LUEBKE (608) 266-5098 FOR PRECAST DETAILS

8

☆ THE CONTRACTOR MAY FURNISH PRECAST PIER CAPS, BEARING BLOCKS, AND COLUMNS IN LIEU OF THE CAST-IN-PLACE PIER WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES DESIGN SECTION. CONTACT DAVE KIEKBUSCH (608-266-5084) OR JAMES LUEBKE (608-266-5098) FOR PRECAST PIER MEMBER STANDARDS. PAYMENT FOR THE PRECAST PIER MEMBERS SHALL BE BASED ON THE QUANTITES 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.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-53-313

DRAWN BY SAD | PLANS CK'D. ABS

PIER ALTERNATE

SHEET 9

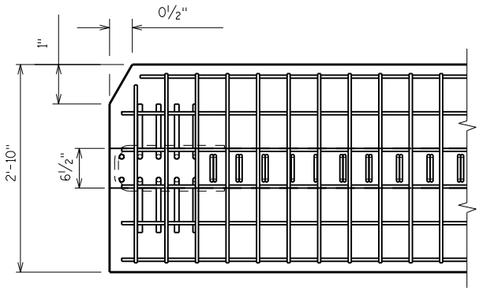
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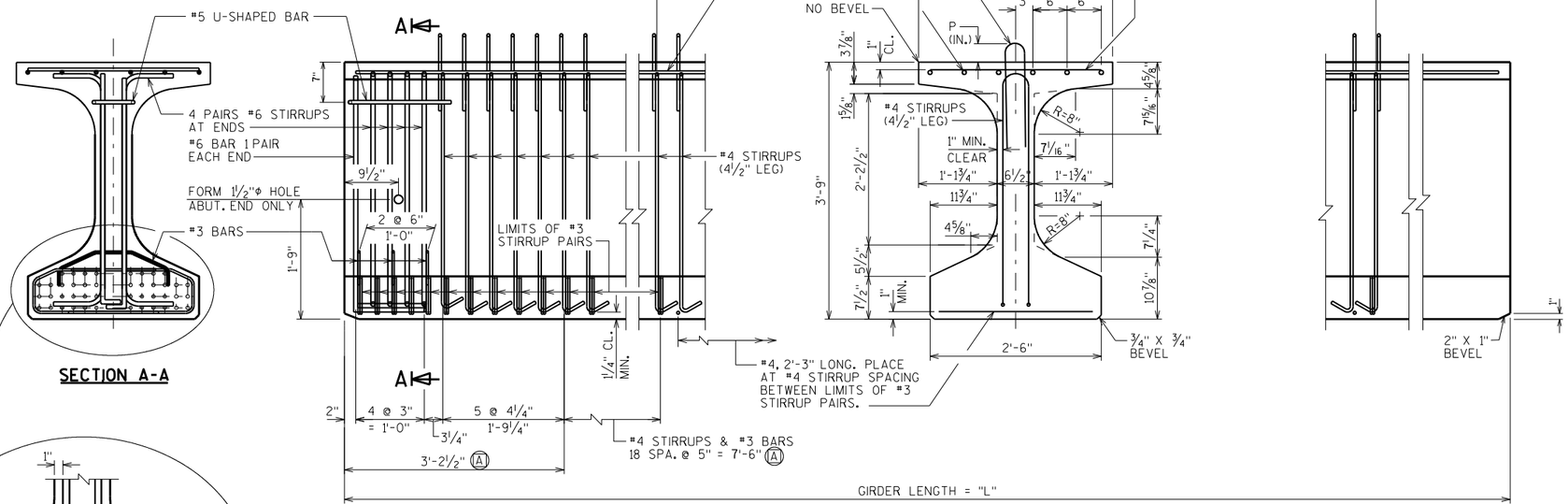
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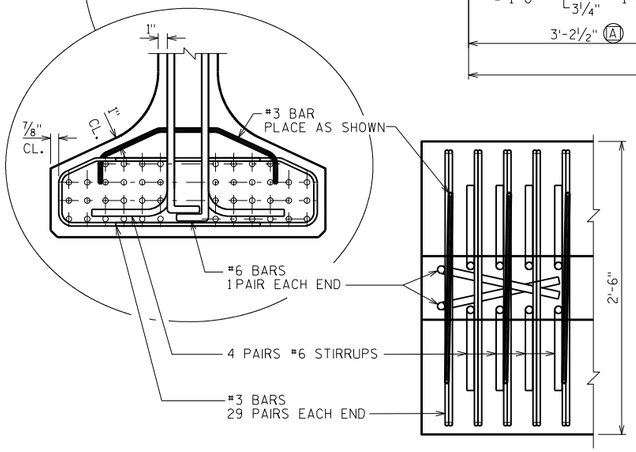
1003-10-71



TOP FLANGE







BOTTOM FLANGE

SIDE VIEW & TYP. SECTION IN SPAN

Ⓐ DETAIL TYP. AT EACH END

Ⓑ (SPAN 1) 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"
(SPAN 2) 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"

NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 8" OF THE 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 THE END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, ENDS 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, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO APPLICATION OF THE SEALER.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

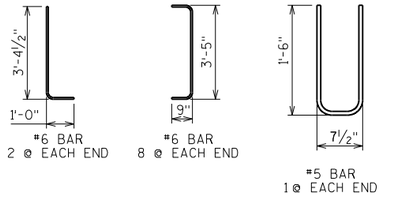
SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT. IF THE FABRICATOR WANTS TO BUILD A BAR STEEL CAGE BY WELDING LONGITUDINAL REINFORCEMENT TO THE #4 STIRRUPS, ONE OPTION IS AVAILABLE:

USE ASTM A706, GRADE 60 REINFORCEMENT AND THE STIRRUP SPACING AS SHOWN ON THE PLANS.

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.



✳ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

SPAN	GIRDER	GIRDER LENGTH "L" (FT.)	DEAD LOAD DEFL. (IN.) 1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	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 TOTAL NO. OF STRANDS	f'ci (P.S.I.) ✳	(IN.) "A"	"B" MIN.	"B" MAX.	"C"	UNDRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) ✳
1	1-12	105.375	0.70	1.33	1.82	2.13	2.23	2.12	1.80	1.31	0.69	8,000	8"	7"	8"	0.6	34	6,800	40	13.75	16.75	5		
2	1-12	105.375	0.69	1.31	1.80	2.12	2.23	2.13	1.82	1.33	0.70	8,000	8"	7"	8"	0.6	34	6,800	40	13.75	16.75	5		

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-53-313

DRAWN BY WWR | PLANS CK'D. SAD

45W" PRESTRESSED GIRDER DETAILS

SHEET 10

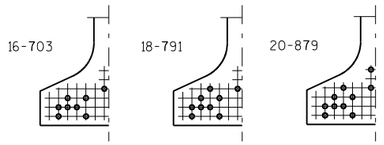
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WED FEB 26 07:42:16 2014 *1-13 G45W

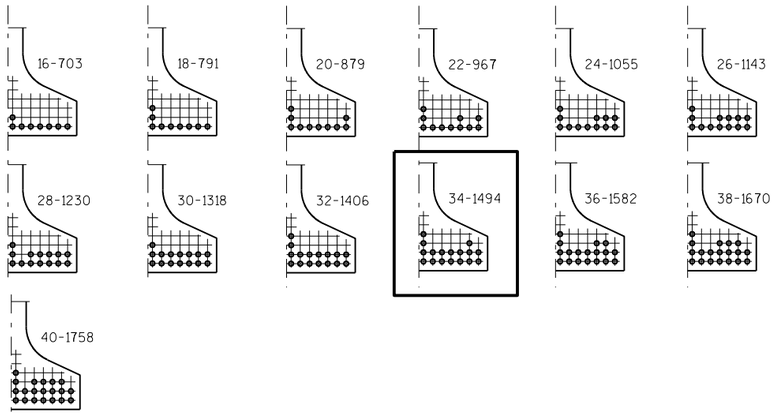
STATE PROJECT NUMBER

1003-10-71



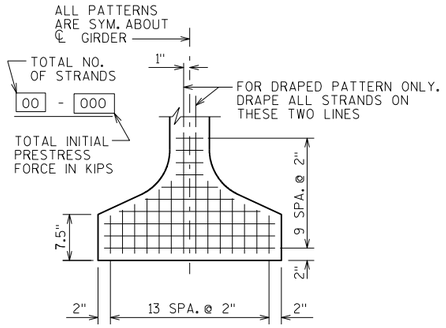
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6"Φ STRANDS

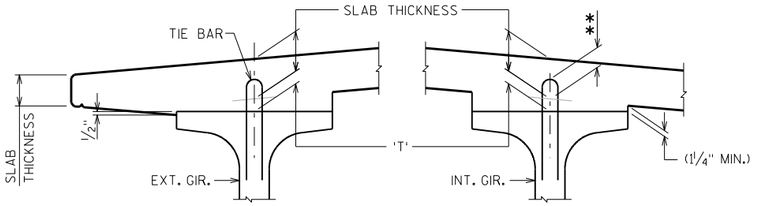


ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6"Φ STRANDS



TYP. STRAND PATTERN



SLAB HAUNCH DETAIL

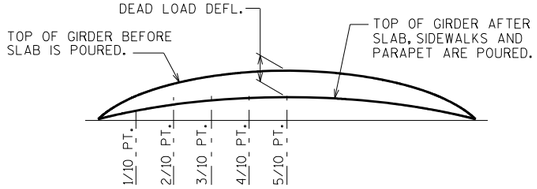
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

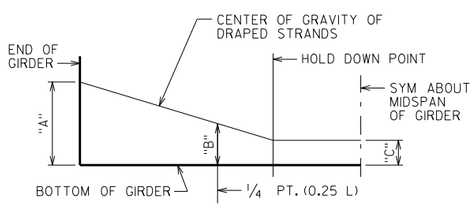
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- SLAB THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 2.87" 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	3.70
2	3.70

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

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STRUCTURE B-53-313

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45W" PRESTRESSED GIRDER DETAILS

SHEET 11

479

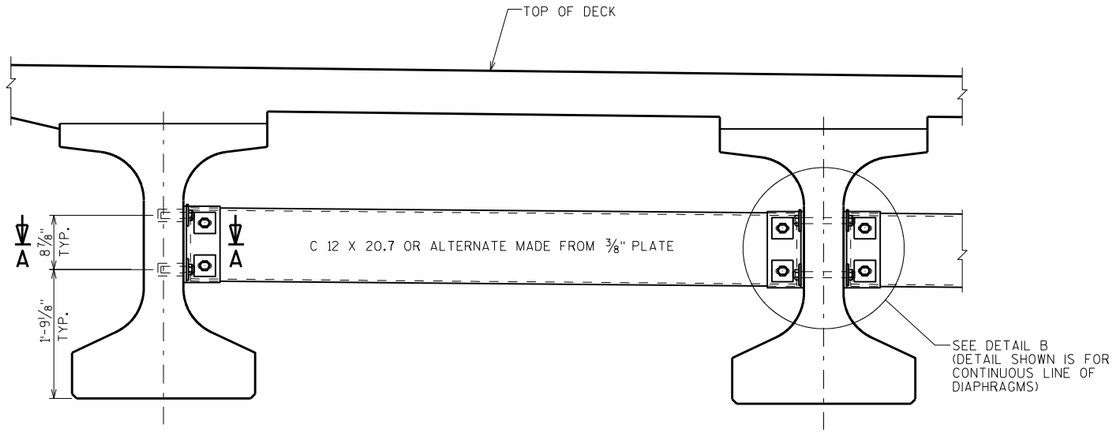
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SCALE =

STATE PROJECT NUMBER
1003-10-71



PART TRANSVERSE SECTION AT DIAPHRAGM

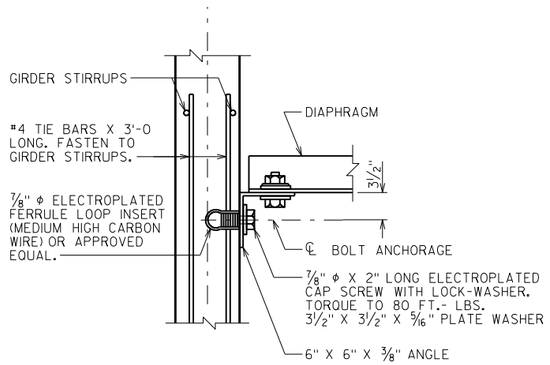
NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-53-313", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

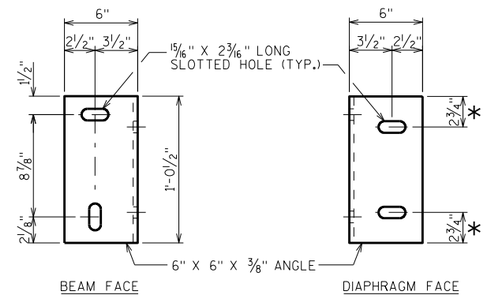
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

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 S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.



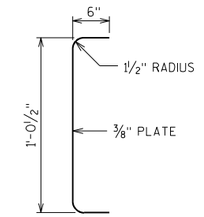
SECTION A-A

(FOR EXTERIOR ATTACHMENT)

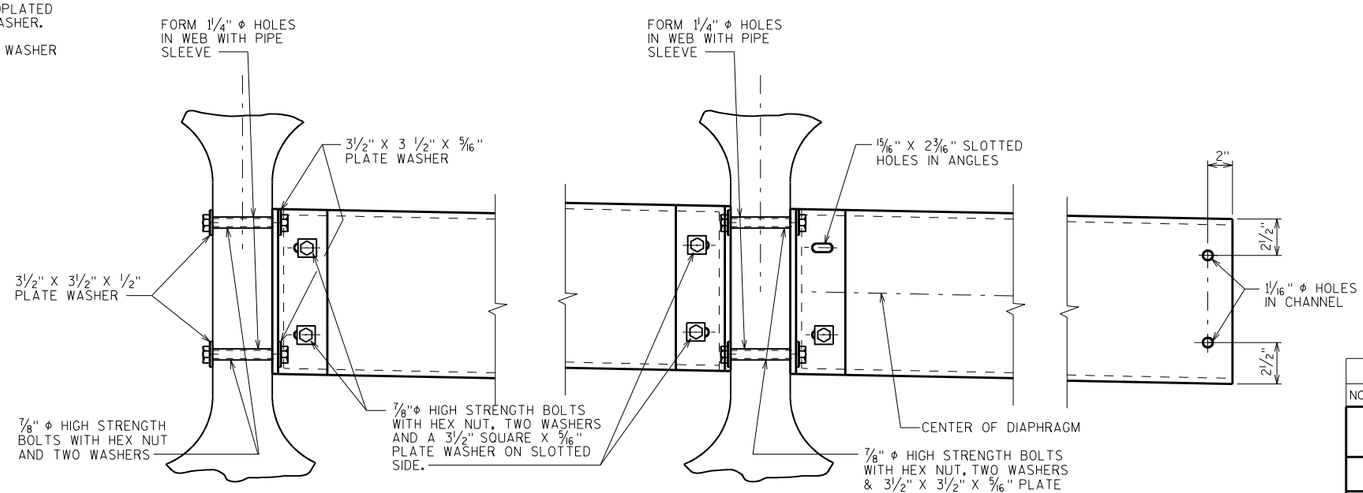


DIAPHRAGM SUPPORT

* 2½" FOR ALTERNATE PLATE DIAPHRAGM



SECTION THRU ALTERNATE DIAPHRAGM



(FOR STAGGERED DIAPHRAGM)

(FOR CONTINUOUS LINE OF DIAPHRAGMS)

DETAIL B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-53-313

DRAWN BY WWR | PLANS CK'D. SAD

STEEL DIAPHRAGM

SHEET 12

480

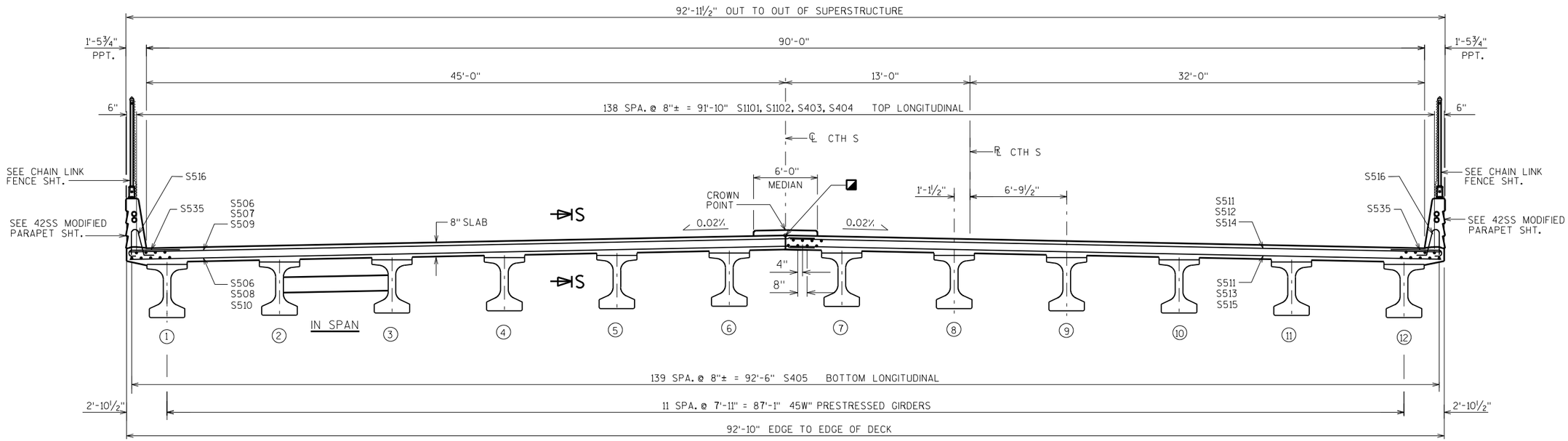
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STATE PROJECT NUMBER

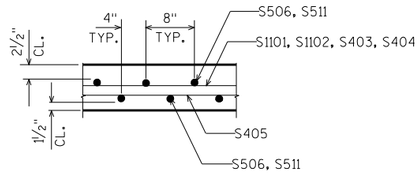
1003-10-71

OPTIONAL LONGITUDINAL CONST. JT. (DECK ONLY)

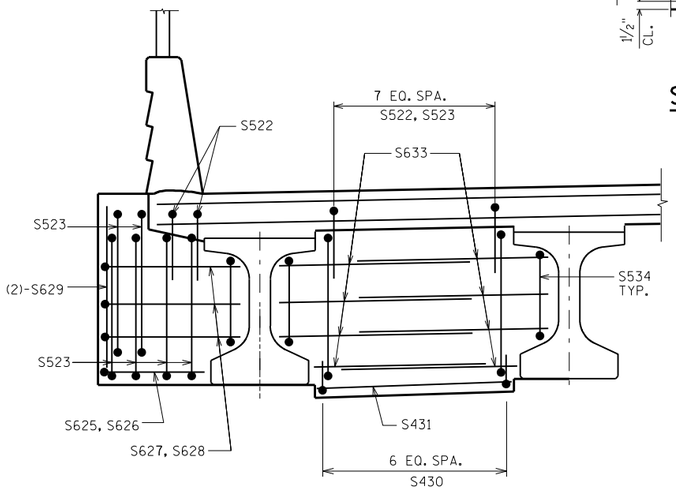


CROSS SECTION THRU ROADWAY

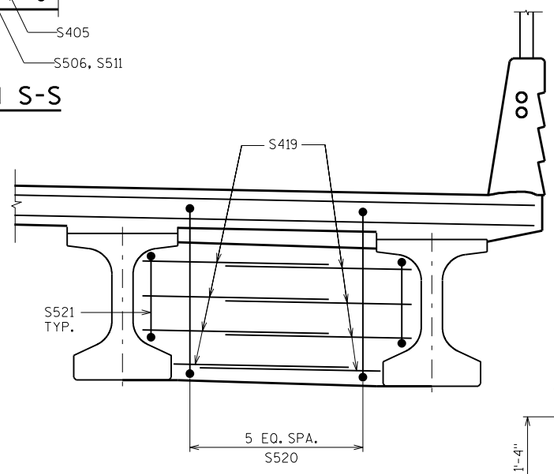
(LOOKING EAST)



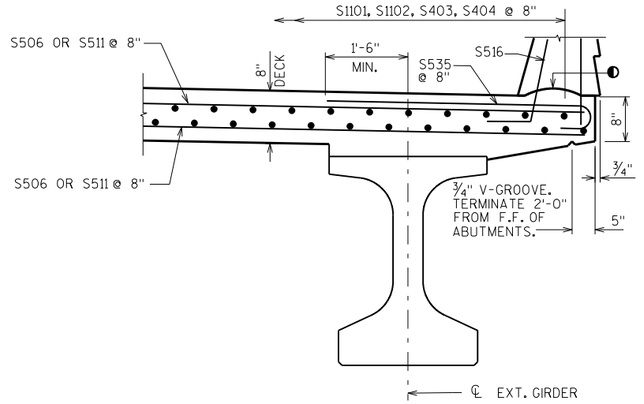
SECTION S-S



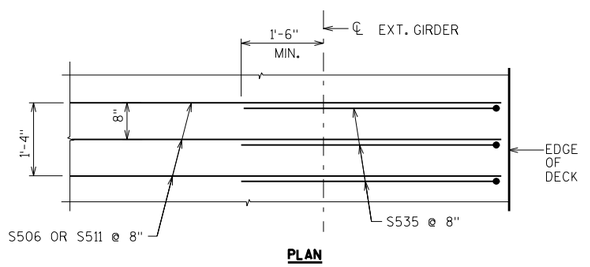
DIAPHRAGM AT ABUTMENT



DIAPHRAGM AT PIER



SECTION



PLAN

ADDITIONAL REINF. DETAIL

SHOWS TOP TRANSVERSE STEEL ONLY.

◐ HORIZ. CONST. JOINT STRIKE OFF AND LEAVE ROUGH AS SHOWN

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-53-313

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SUPERSTRUCTURE CROSS SECTION

SHEET 13

481

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SCALE =

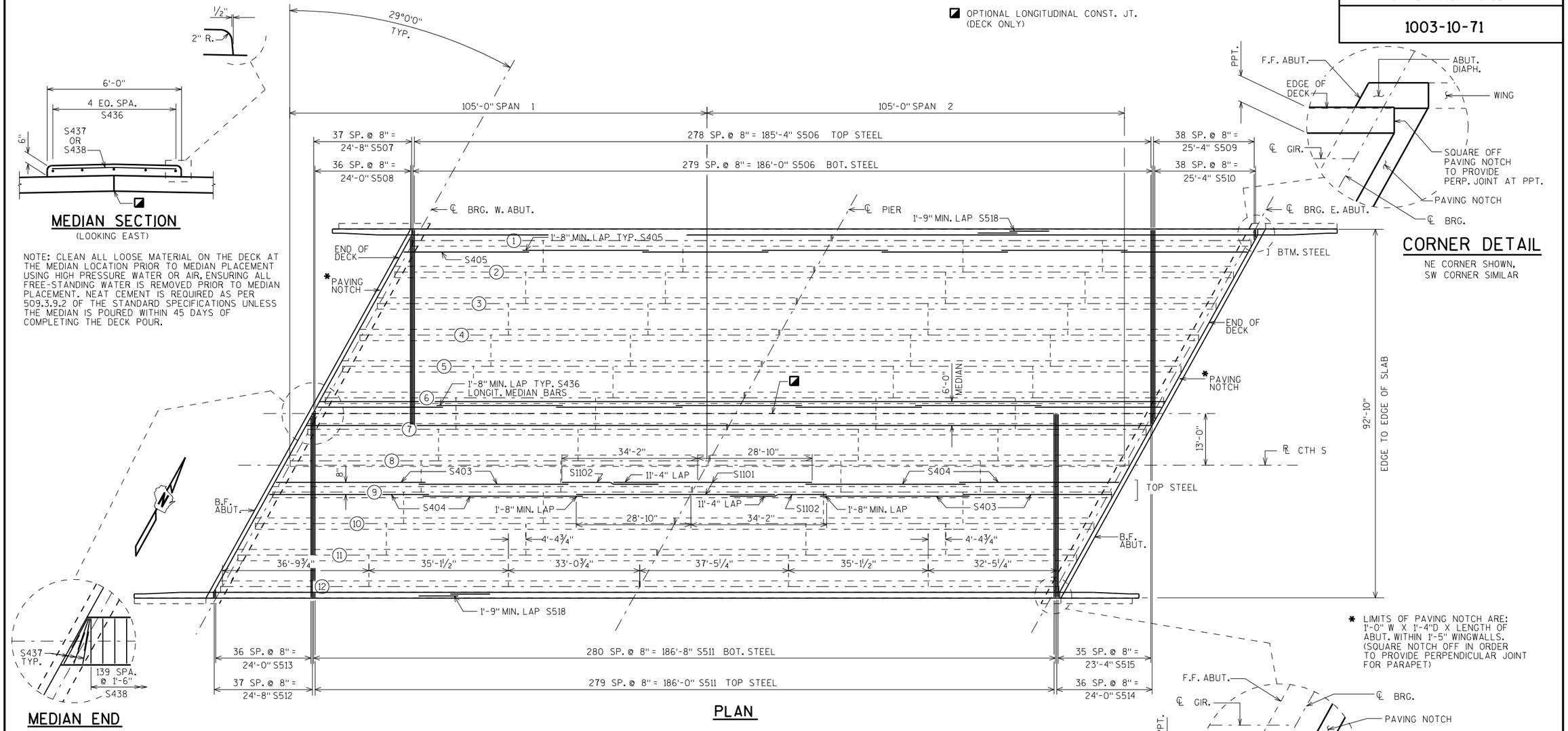
STATE PROJECT NUMBER

1003-10-71

MEDIAN SECTION

(LOOKING EAST)

NOTE: CLEAN ALL LOOSE MATERIAL ON THE DECK AT THE MEDIAN LOCATION PRIOR TO MEDIAN PLACEMENT USING HIGH PRESSURE WATER OR AIR, ENSURING ALL FREE-STANDING WATER IS REMOVED PRIOR TO MEDIAN PLACEMENT. NEAT CEMENT IS REQUIRED AS PER 509.3.9.2 OF THE STANDARD SPECIFICATIONS UNLESS THE MEDIAN IS POURED WITHIN 45 DAYS OF COMPLETING THE DECK POUR.



PLAN

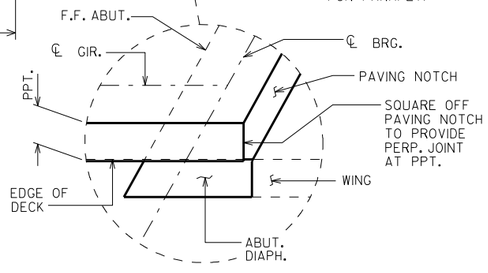
MEDIAN END PLAN (TYP.)

ONLY TRANSVERSE REINFORCEMENT SHOWN

CORNER DETAIL

NE CORNER SHOWN, SW CORNER SIMILAR

* LIMITS OF PAVING NOTCH ARE: 1'-0" W X 1'-4"D X LENGTH OF ABUT. WITHIN 1'-5" WINGWALLS. (SQUARE NOTCH OFF IN ORDER TO PROVIDE PERPENDICULAR JOINT FOR PARAPET)



CORNER DETAIL

SE CORNER SHOWN, NW CORNER SIMILAR

TOP OF DECK ELEVATIONS

	W. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 1	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	E. ABUT.
N. EOD	847.03	847.17	847.31	847.44	847.57	847.70	847.83	847.95	848.07	848.18	848.30	848.41	848.51	848.61	848.71	848.81	848.90	849.00	849.08	849.17	849.25
GIR. 1	847.06	847.20	847.33	847.47	847.60	847.73	847.85	847.97	848.09	848.21	848.32	848.43	848.54	848.64	848.74	848.84	848.93	849.02	849.11	849.20	849.28
GIR. 2	847.16	847.30	847.44	847.57	847.70	847.83	847.96	848.08	848.20	848.32	848.43	848.55	848.65	848.76	848.86	848.96	849.05	849.14	849.23	849.32	849.40
GIR. 3	847.25	847.40	847.54	847.67	847.81	847.94	848.06	848.19	848.31	848.43	848.55	848.66	848.77	848.87	848.98	849.07	849.17	849.26	849.36	849.44	849.53
GIR. 4	847.35	847.50	847.64	847.77	847.91	848.04	848.17	848.30	848.42	848.54	848.66	848.77	848.88	848.99	849.09	849.19	849.29	849.38	849.48	849.56	849.65
GIR. 5	847.45	847.59	847.74	847.88	848.01	848.14	848.28	848.40	848.53	848.65	848.77	848.88	848.99	849.10	849.21	849.31	849.41	849.50	849.60	849.69	849.77
GIR. 6	847.55	847.69	847.84	847.98	848.11	848.25	848.38	848.51	848.63	848.75	848.88	848.99	849.10	849.21	849.32	849.42	849.52	849.62	849.72	849.81	849.90
GIR. 7	847.48	847.63	847.78	847.92	848.06	848.19	848.32	848.45	848.58	848.70	848.83	848.94	849.06	849.17	849.28	849.38	849.48	849.58	849.68	849.77	849.86
GIR. 8	847.26	847.41	847.56	847.70	847.84	847.98	848.11	848.24	848.37	848.49	848.62	848.74	848.85	848.96	849.07	849.18	849.28	849.38	849.48	849.57	849.66
GIR. 9	847.04	847.19	847.34	847.48	847.62	847.76	847.90	848.03	848.16	848.28	848.41	848.53	848.65	848.76	848.87	848.98	849.08	849.18	849.28	849.38	849.47
GIR. 10	846.82	846.97	847.12	847.26	847.41	847.55	847.68	847.82	847.95	848.07	848.20	848.32	848.44	848.55	848.67	848.77	848.88	848.98	849.08	849.18	849.27
GIR. 11	846.59	846.75	846.90	847.05	847.19	847.33	847.47	847.60	847.73	847.86	847.99	848.11	848.23	848.35	848.46	848.57	848.68	848.78	848.88	848.98	849.07
GIR. 12	846.37	846.53	846.68	846.83	846.97	847.11	847.25	847.39	847.52	847.65	847.78	847.90	848.02	848.14	848.26	848.37	848.48	848.58	848.68	848.78	848.88
S. EOD	846.32	846.47	846.62	846.77	846.92	847.06	847.20	847.33	847.47	847.60	847.73	847.85	847.97	848.09	848.20	848.32	848.42	848.53	848.63	848.73	848.83

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-53-313

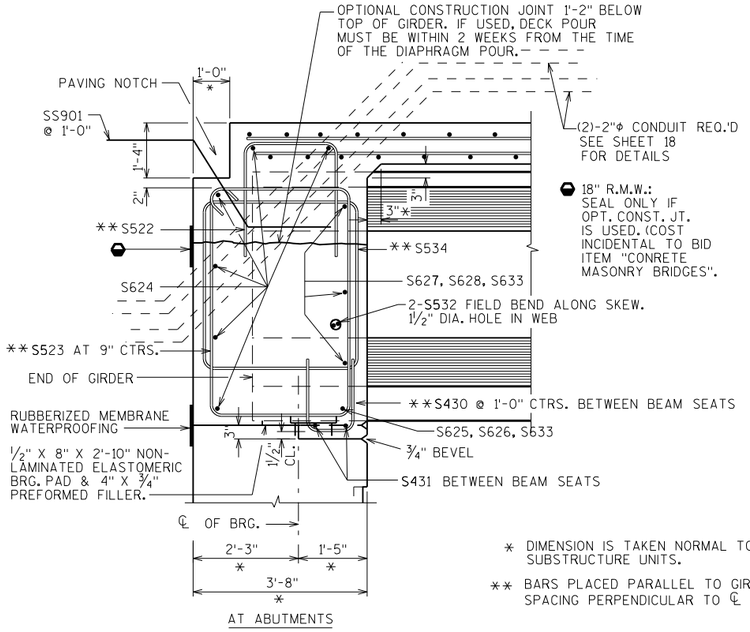
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SUPERSTRUCTURE PLAN

SHEET 14

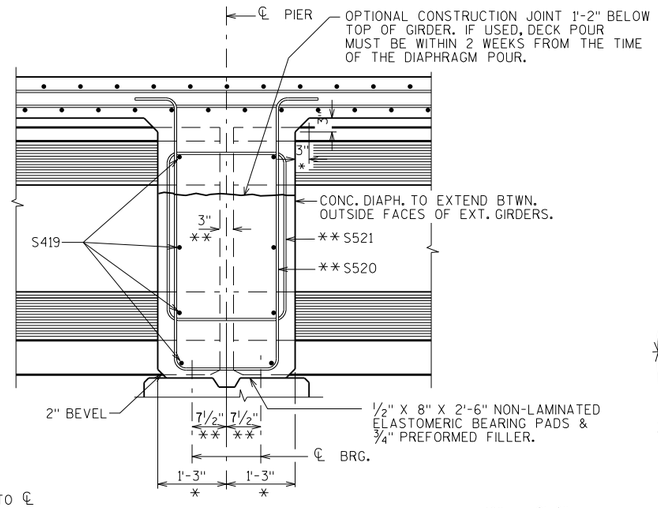
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AT ABUTMENTS

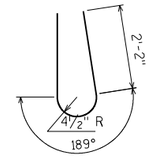
PART LONGIT. SECTION



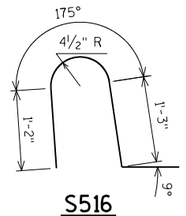
AT PIER DIAPHRAGM

* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

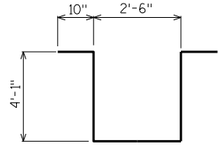
** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS



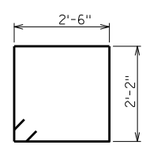
S517



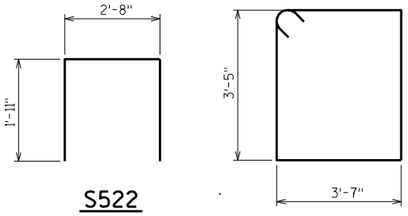
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S520

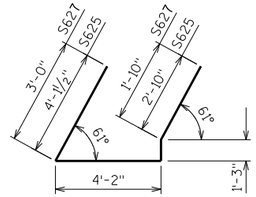


S521

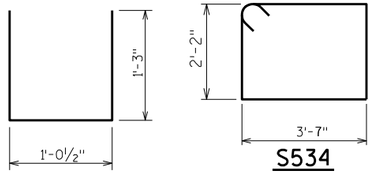


S522

S523



S625, S627



S534

S430

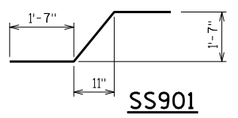
BILL OF BARS

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

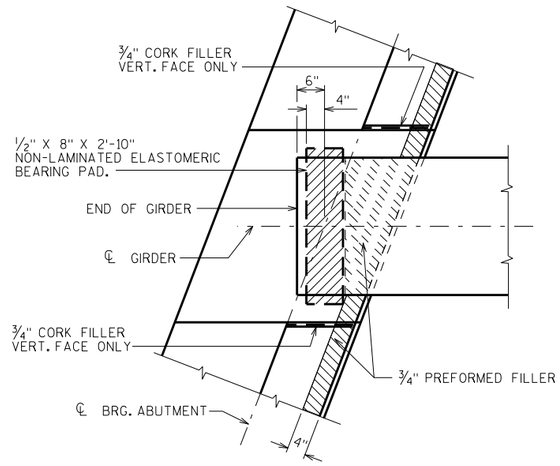
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S1101	X	139	50'-0"			LONGITUDINAL CONTINUITY TOP
S1102	X	139	24'-4"			LONGITUDINAL CONTINUITY TOP
S403	X	278	37'-8"			LONGITUDINAL TOP
S404	X	278	40'-4"			LONGITUDINAL TOP
S405	X	980	31'-10"			LONGITUDINAL BOT.
S506	X	559	49'-0"			TRANSVERSE
S507	X	38	25'-1"		▲	TRANSVERSE-TOP
S508	X	37	25'-1"		▲	TRANSVERSE-BOT.
S509	X	39	25'-4"		▲	TRANSVERSE-TOP
S510	X	39	24'-9"		▲	TRANSVERSE-BOT.
S511	X	561	46'-1"			TRANSVERSE
S512	X	38	23'-5"		▲	TRANSVERSE-TOP
S513	X	37	23'-6"		▲	TRANSVERSE-BOT.
S514	X	37	24'-3"		▲	TRANSVERSE-TOP
S515	X	36	24'-0"		▲	TRANSVERSE-BOT.
S516	X	638	4'-5"	X		PARAPET 42SS VERT.
S517	X	638	5'-8"	X		PARAPET 42SS VERT.
S518	X	112	31'-11"			PARAPET 42SS HORIZ.
S419	X	176	4'-8"			PIER DIAPHRAGM
S520	X	66	11'-10"	X		PIER DIAPHRAGM
S521	X	22	10'-0"	X		PIER DIAPHRAGM
S522	X	184	6'-3"	X		ABUT. DIAPHRAGM
S523	X	200	14'-8"	X		ABUT. DIAPHRAGM
S624	X	36	37'-4"			ABUT. DIAPHRAGM-HORIZ.
S625	X	6	11'-10"	X		ABUT. DIAPHRAGM-WING 2 & 4
S626	X	6	11'-1"	X		ABUT. DIAPHRAGM-WING 1 & 3
S627	X	2	9'-9"	X		ABUT. DIAPHRAGM-WING 2 & 4
S628	X	2	8'-11"	X		ABUT. DIAPHRAGM-WING 1 & 3
S629	X	8	4'-3"			ABUT. DIAPHRAGM END-VERT.
S430	X	154	3'-4"	X		ABUT. DIAPHRAGM
S431	X	44	4'-8"			ABUT. DIAPHRAGM
S532	X	48	6'-0"			ABUT. DIAPHRAGM
S633	X	176	5'-1"			ABUT. DIAPHRAGM
S534	X	48	12'-2"	X		ABUT. DIAPHRAGM
S535	X	632	4'-10"	X		DECK EDGE-TOP
S436	X	35	31'-10"			MEDIAN-LONGITUDINAL
S437	X	12	3'-8"			MEDIAN-TRANSVERSE
S438	X	140	5'-7"			MEDIAN-TRANSVERSE
STAINLESS STEEL ☆ SS901		182	5'-0"	X		ABUT. DIAPH./APPROACH SLAB-DOWEL

▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

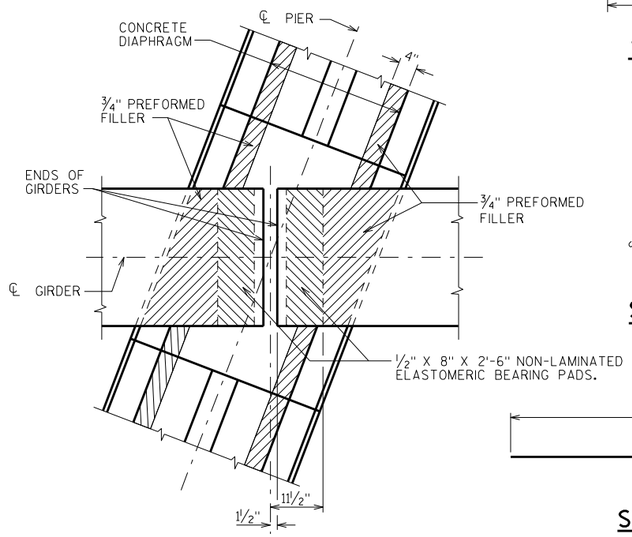
☆ TO BE PAID FOR UNDER SPECIAL PROVISION BID ITEM "BAR STEEL REINFORCEMENT HS STAINLESS BRIDGES"

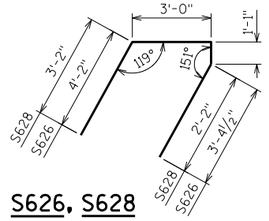


SS901

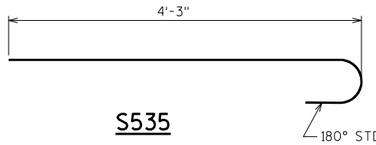


BEARING PAD DETAIL





S626, S628



S535

BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY

MARK	NO. REQD.	LENGTH
S507	1 SERIES OF 38	2'-10" TO 47'-4"
S508	1 SERIES OF 37	3'-5" TO 46'-9"
S509	1 SERIES OF 39	2'-5" TO 48'-2"
S510	1 SERIES OF 39	1'-10" TO 47'-7"
S512	1 SERIES OF 38	1'-2" TO 45'-8"
S513	1 SERIES OF 37	1'-10" TO 45'-1"
S514	1 SERIES OF 37	2'-5" TO 46'-0"
S515	1 SERIES OF 36	2'-9" TO 45'-2"

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-53-313

DRAWN BY WWR | PLANS CK'D. SAD

SUPERSTRUCTURE DETAILS

SHEET 15

483

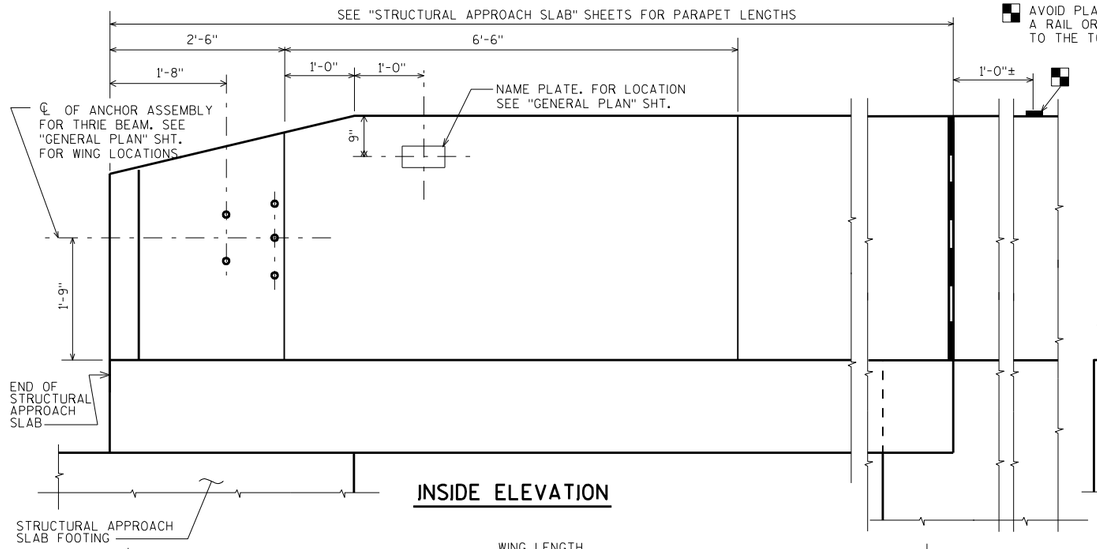
SCALE =

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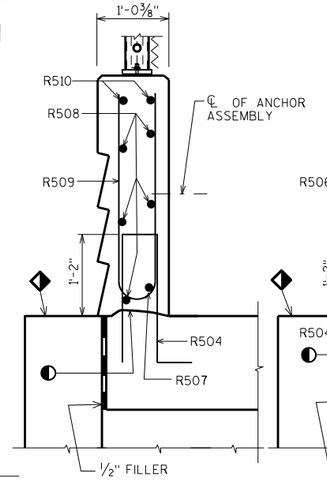
STATE PROJECT NUMBER

1003-10-71

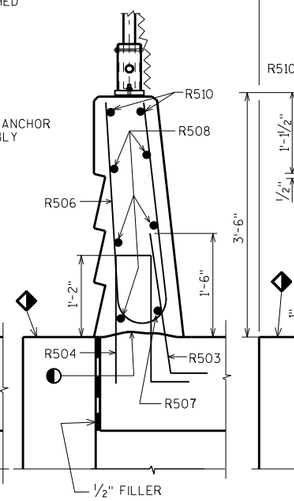


INSIDE ELEVATION

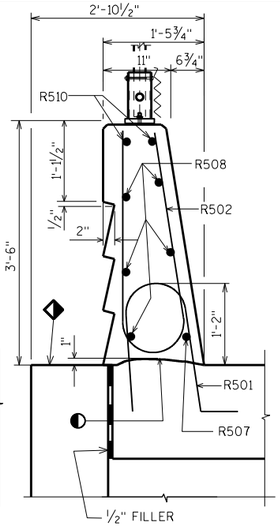
AVOID PLACING A BENCH MARK CAP BELOW A RAIL OR FENCE SYSTEM THAT IS ATTACHED TO THE TOP OF THE PARAPET.



SECTION A



SECTION B

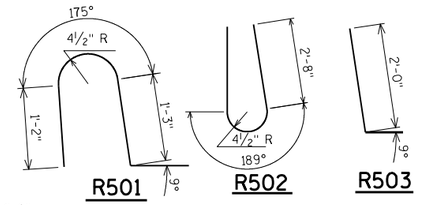


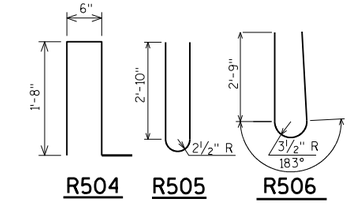
SECTION C

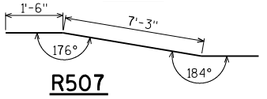
BILL OF BARS

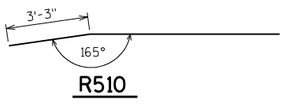
FOR STRUCTURAL APPROACH SLAB PARAPETS

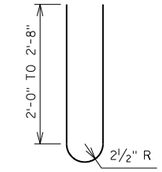
BAR MARK	COAT	WEST ABUT.	EAST ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	34	34	4-5	X		PARAPET VERT.
R502	X	34	34	6-8	X		PARAPET VERT.
R503	X	22	22	2-9	X		PARAPET VERT.
R504	X	34	34	4-4	X		PARAPET VERT.
R505	X	10	10	6-5	X		PARAPET VERT.
R506	X	12	12	6-6	X		PARAPET VERT.
R507	X	2	2	19-5	X		PARAPET HORIZ.
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

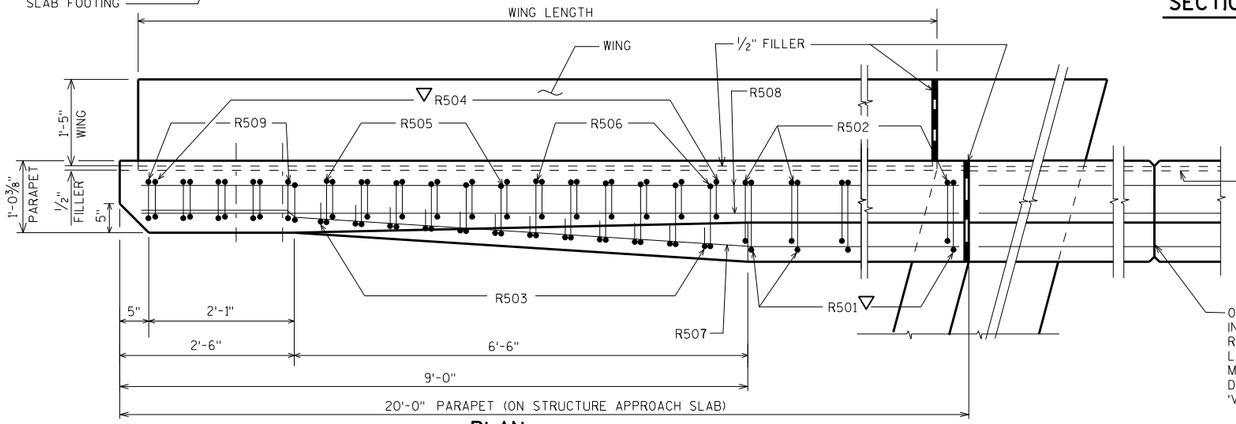












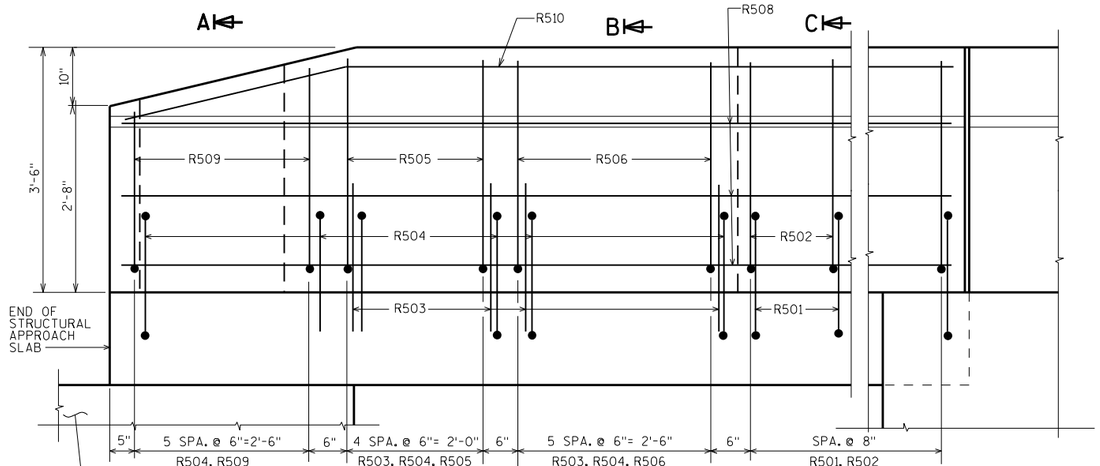
PLAN

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 ¾" - 'V' GROOVE.

BAR SERIES TABLE

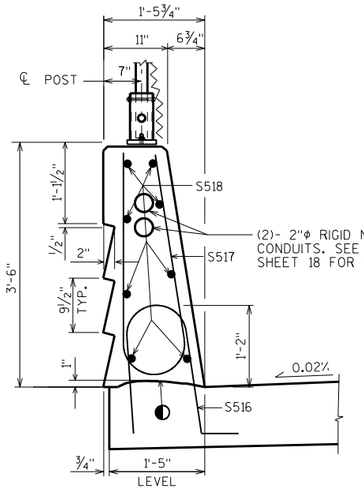
BUNDLE AND TAG EACH SERIES SEPARATELY

MARK	NO. REQD.	LENGTH
R509	4 SERIES OF 6	4'-9" TO 6'-1"



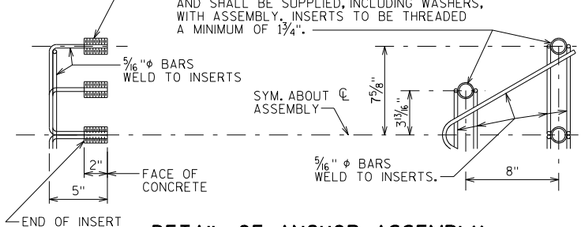
OUTSIDE ELEVATION

(WING NOT SHOWN FOR CLARITY)



SECTION THRU PARAPET ON DECK

THREADED INSERTS FOR ⅞" ϕ X 2" LONG GALVANIZED HEX HEAD CAP SCREWS. CAP SCREWS TO BE THREADED A MIN. OF 1⅞" AND SHALL BE SUPPLIED, INCLUDING WASHERS, WITH ASSEMBLY. INSERTS TO BE THREADED A MINIMUM OF 1¾".



DETAIL OF ANCHOR ASSEMBLY

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.

(2)- 2"ϕ RIGID NON-METALLIC CONDUITS. SEE CONDUIT DETAILS SHEET 18 FOR DETAILS.

▲ 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.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-53-313

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42SS MODIFIED PARAPET

SHEET 16

484

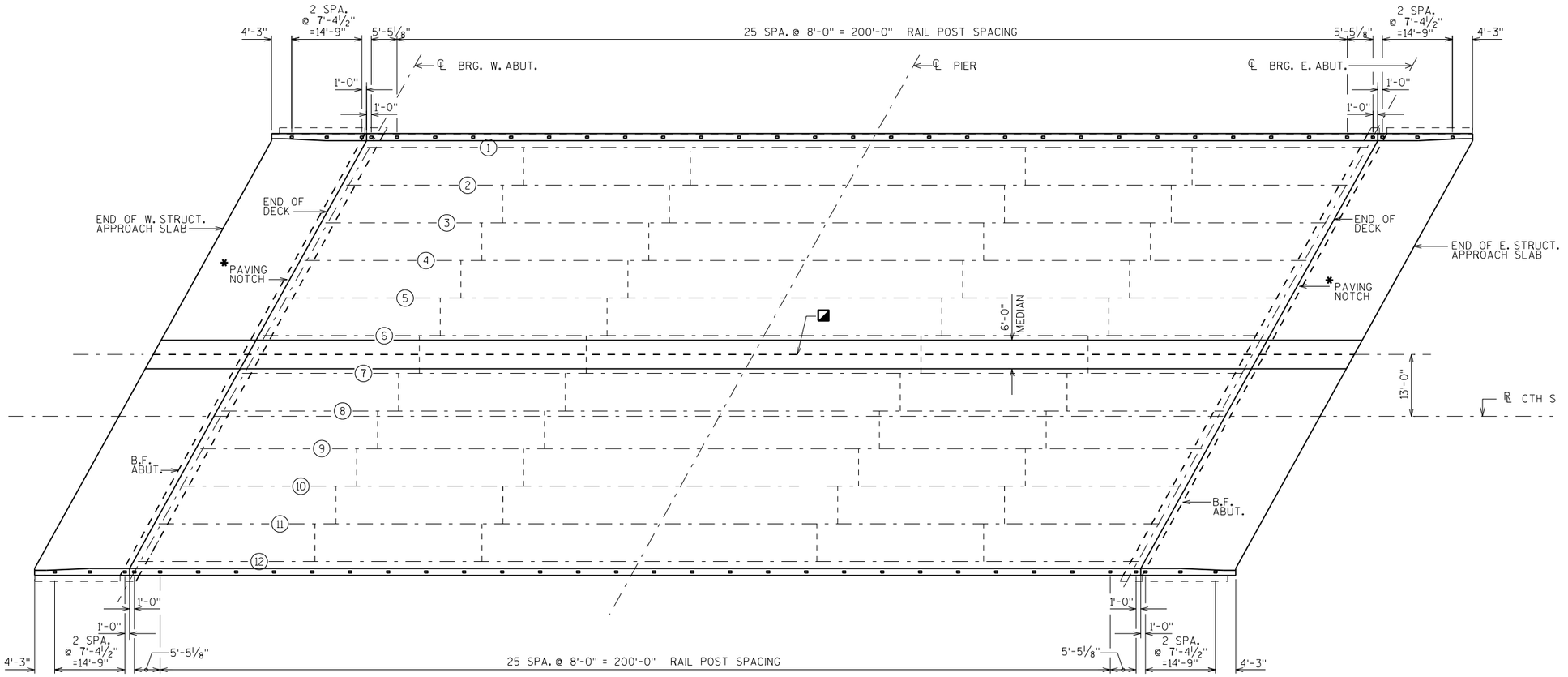
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SS42APP
1-14

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STATE PROJECT NUMBER
1003-10-71



PLAN

OPTIONAL LONGITUDINAL CONST. JT. (DECK ONLY)

* LIMITS OF PAVING NOTCH ARE: 1'-0" W X 1'-4"D X LENGTH OF ABUT. WITHIN 1'-5" WINGWALLS. (SQUARE NOTCH OFF IN ORDER TO PROVIDE PERPENDICULAR JOINT FOR PARAPET)

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STRUCTURE B-53-313

DRAWN BY WWR | PLANS CK'D. SAD

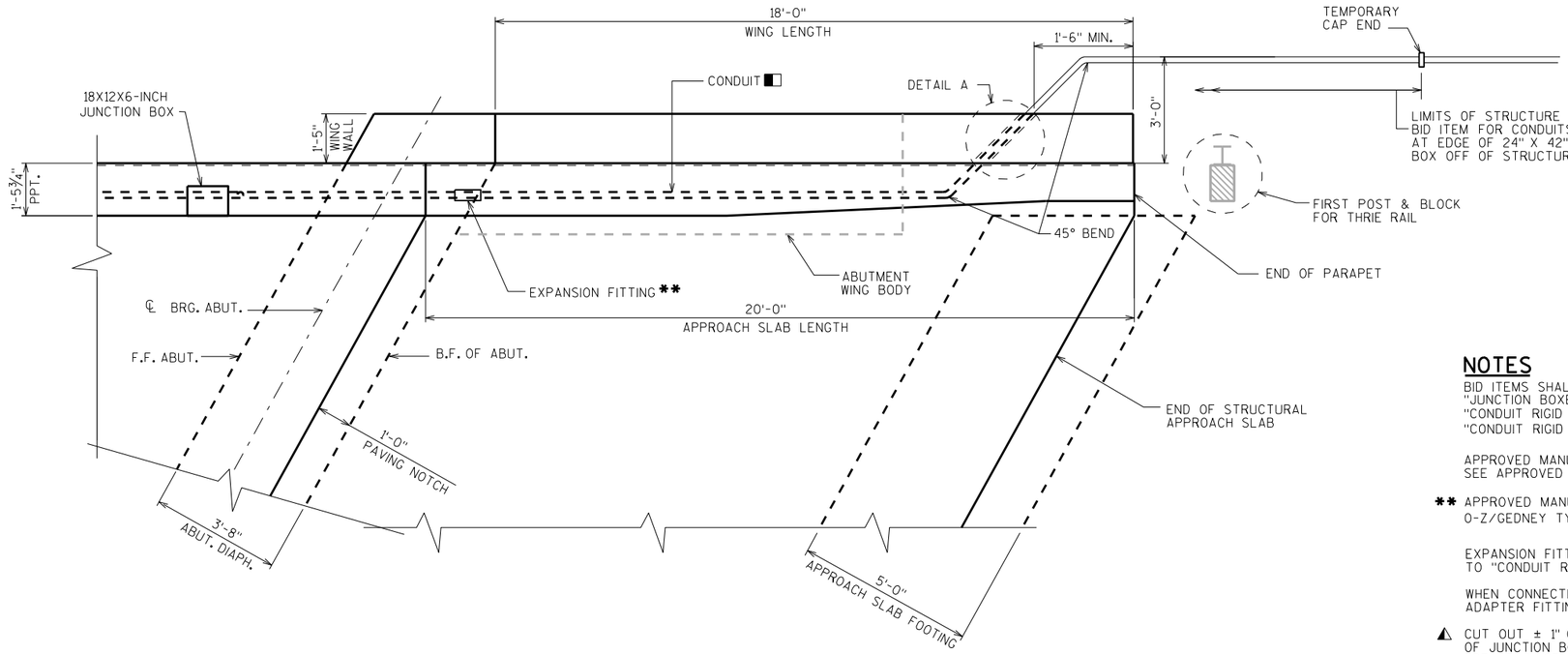
RAIL POST SPACING

SHEET 17

485

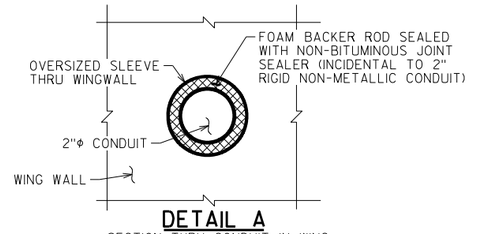
SCALE =

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PLAN OF CONDUIT AT ABUTMENT/STRUCTURAL APPROACH SLAB

(WING 3 SHOWN, WING 1, 2 & 4 SIMILAR)



DETAIL A

SECTION THRU CONDUIT IN WING

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).

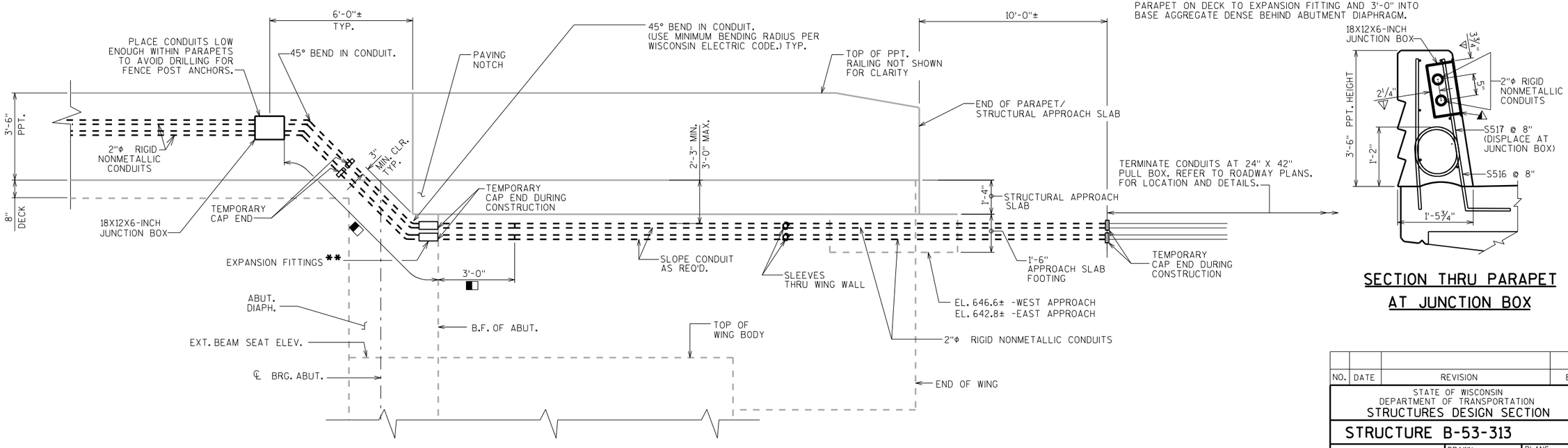
EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. OR NRTL LISTED FOR ELECTRICAL USE SHALL BE USED.

◭ 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.

◧ USE 2"Φ RIGID NONMETALLIC CONDUIT EXCEPT AT EXPANSION FITTING, USE 2"Φ RIGID METALLIC CONDUIT FROM JUNCTION BOX IN PARAPET ON DECK TO EXPANSION FITTING AND 3'-0" INTO BASE AGGREGATE DENSE BEHIND ABUTMENT DIAPHRAGM.



INSIDE ELEVATION OF CONDUIT AT ABUTMENT/STRUCTURAL APPROACH SLAB

(WINGS 3 SHOWN, WINGS 1, 2 & 4 SIMILAR)

SECTION THRU PARAPET AT JUNCTION BOX

NO.	DATE	REVISION	BY

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STRUCTURES DESIGN SECTION

STRUCTURE B-53-313

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CONDUIT DETAILS

SHEET 18

486

8

8

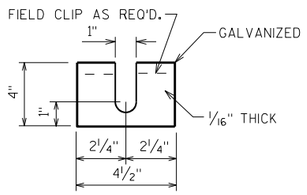
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STATE PROJECT NUMBER

1003-10-71

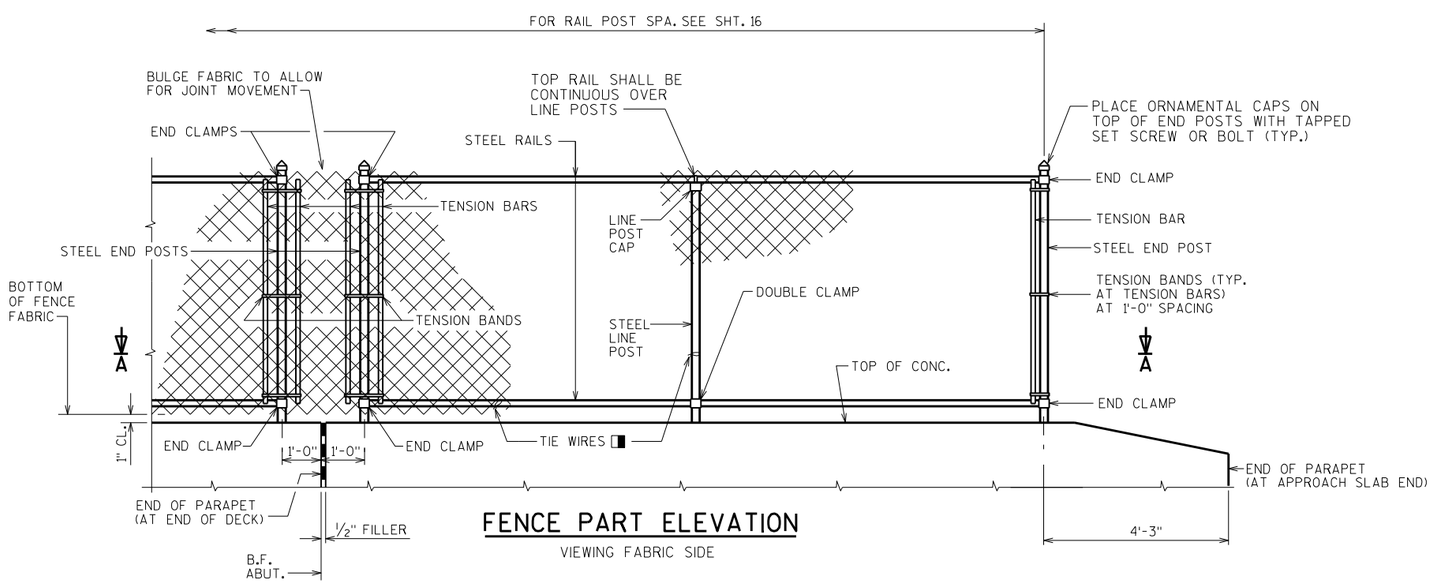
FENCE MEMBER SIZE & WEIGHT

STEEL FENCE MEMBER	OUTSIDE DIAMETER (INCHES)	WEIGHT (LB/FT)
RAILS	1.660	2.27
END POST	2.875	5.80
OVERHANG POST	2.875	5.80
LINE POST	2.375	3.65
POST SLEEVE	4.000	9.12



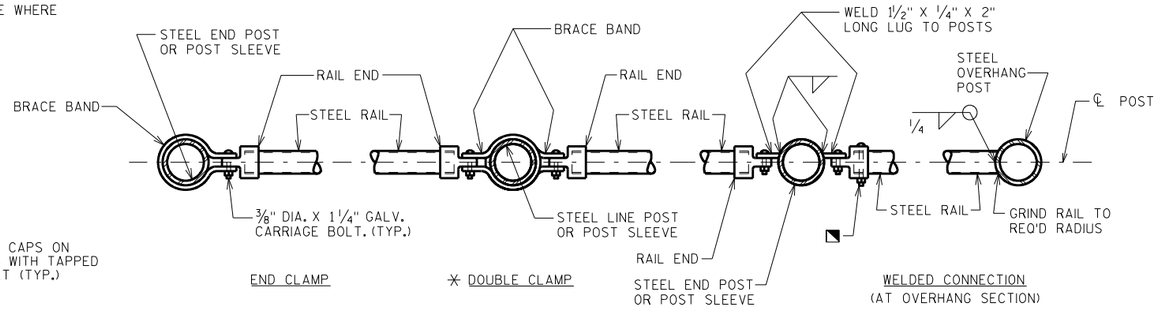
POST SHIM DETAILS

SHIMS REQUIRED ONLY WHEN END POSTS AND LINE POSTS ARE WELDED TO BASE PLATES. PROVIDE 4 SHIMS PER POST. USE WHERE REQUIRED FOR ALIGNMENT.



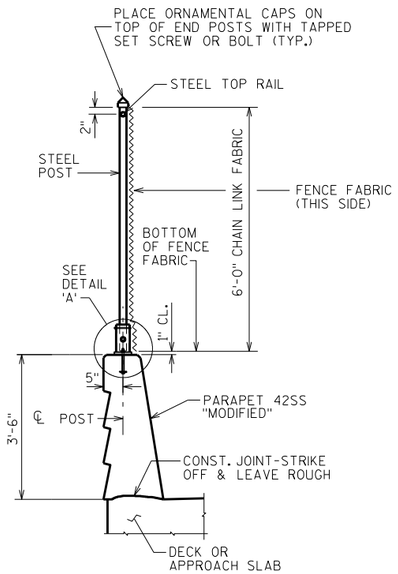
FENCE PART ELEVATION

VIEWING FABRIC SIDE

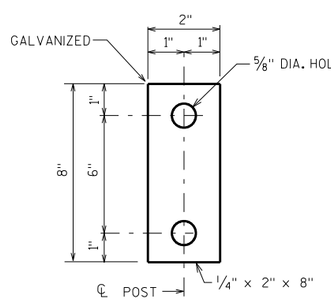


SECTION A-A

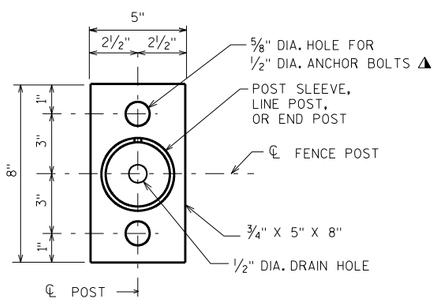
NOTE: PLACE ALL BOLT HEADS ON SIDE OF FENCE ADJACENT TO PEDESTRIANS



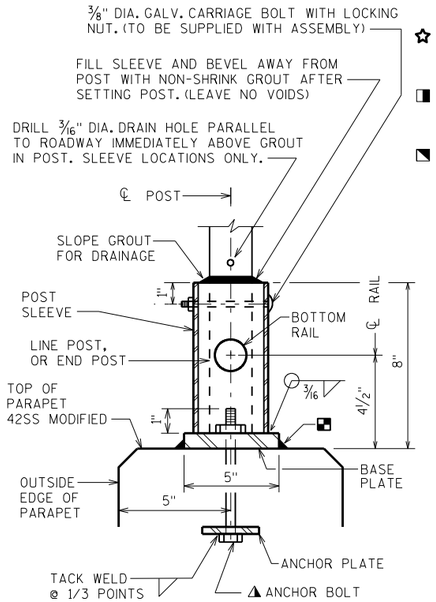
SECTION THRU FENCE



ANCHOR PLATE



BASE PLATE



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.

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 C/L 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.

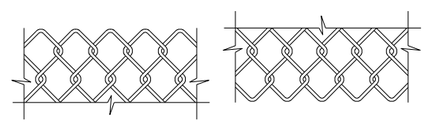
▲ 1/2" DIA. X 6 7/8" LONG GALVANIZED HEX BOLT WITH NUT & WASHER. TYPE "S", 1/2" DIA. CONCRETE MASONRY ANCHORS MAY BE SUBSTITUTED FOR 1/2" DIA. BOLTS. ANCHOR PLATE NOT REQUIRED WHEN TYPE "S" ANCHORS ARE USED. SEE ☆

☆ MASONRY ANCHOR TYPE S 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 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.

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STRUCTURES DESIGN SECTION

STRUCTURE B-53-313

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CHAIN LINK FENCE DETAILS

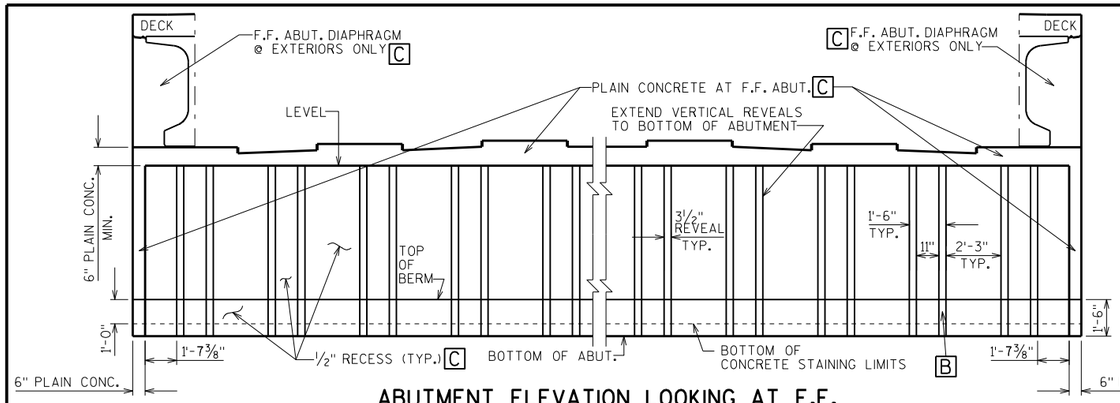
SHEET 19

487

8

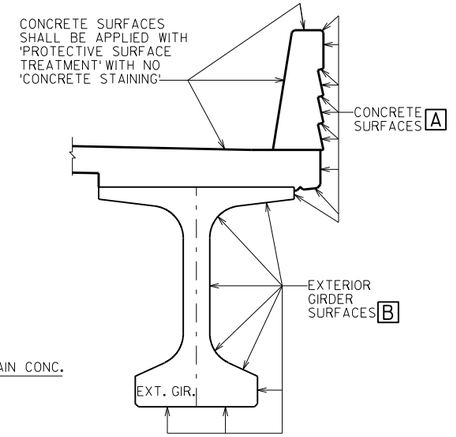
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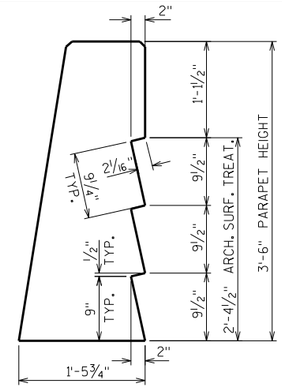


ABUTMENT ELEVATION LOOKING AT F.F.

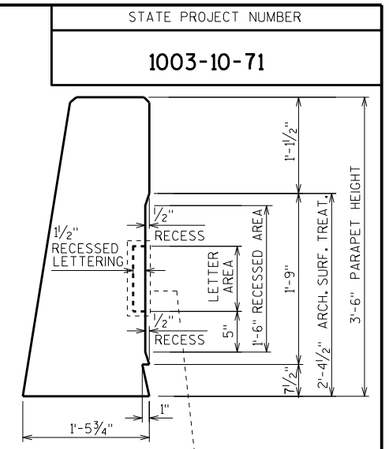
(TYPICAL AT BOTH ABUTMENTS)



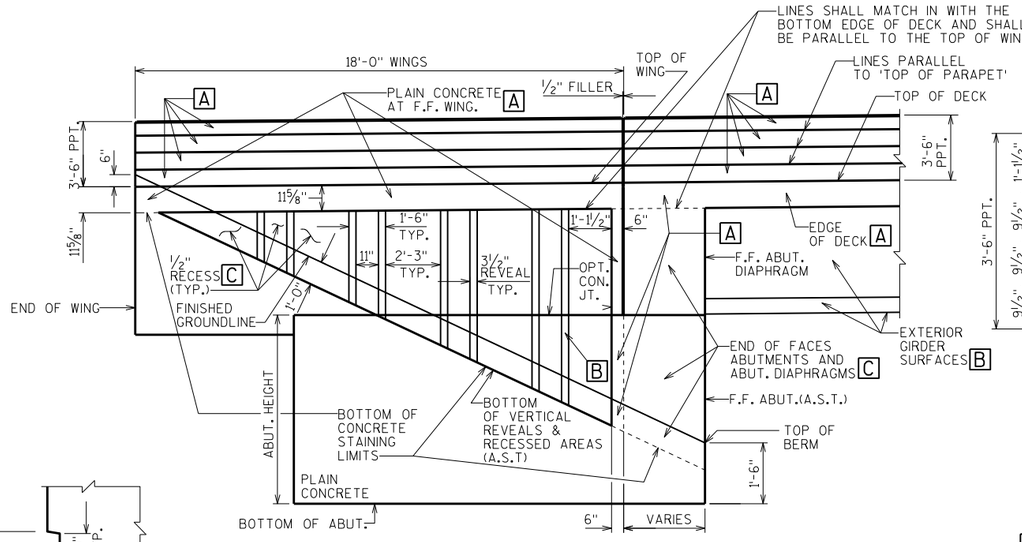
PARTIAL CROSS SECTION AT BOTH EDGES OF DECK



TYPICAL SECTION THRU PARAPET

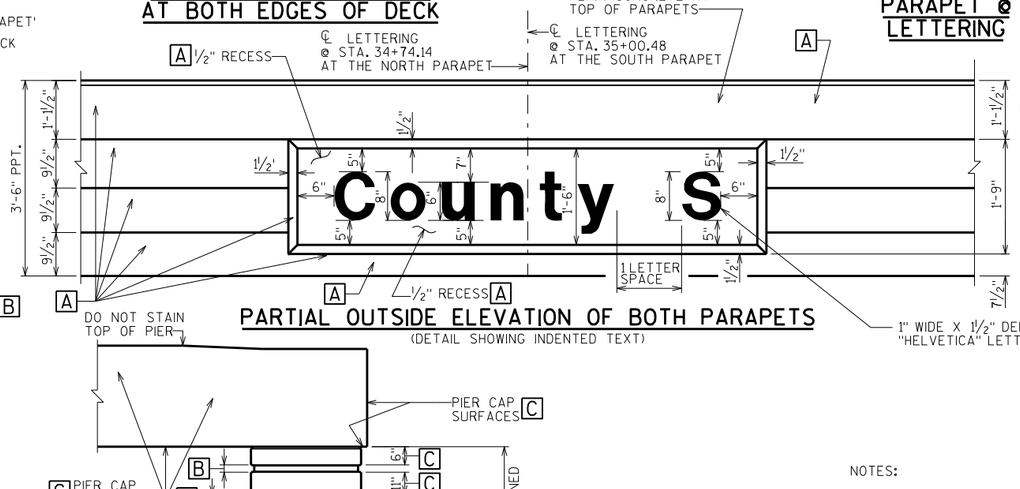


SECTION THRU PARAPET @ LETTERING



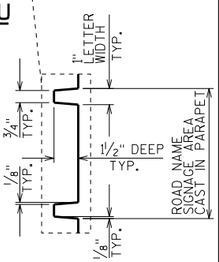
WING ELEVATION LOOKING AT F.F.

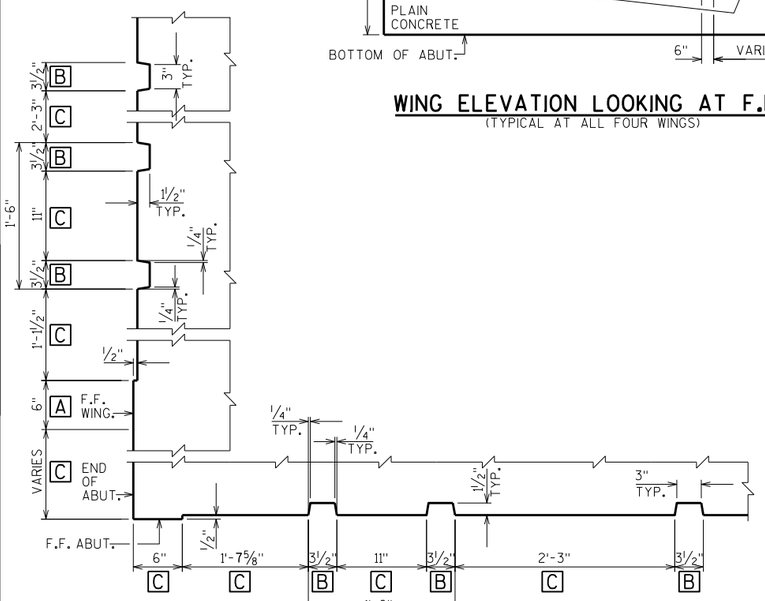
(TYPICAL AT ALL FOUR WINGS)



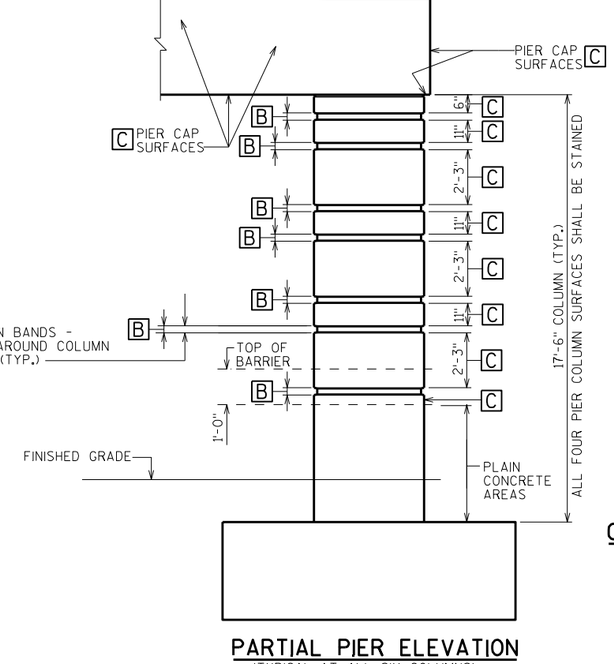
PARTIAL OUTSIDE ELEVATION OF BOTH PARAPETS

(DETAIL SHOWING INDENTED TEXT)





PLAN RUSTICATION DETAIL AT ABUTMENTS



PARTIAL PIER ELEVATION

(TYPICAL AT ALL SIX COLUMNS)

NOTES:

FORMING LETTERING WORK SHALL BE PAID FOR UNDER THE BID ITEM "ARCHITECTURAL SURFACE TREATMENT".

STAINING LETTERING WORK SHALL BE PAID FOR UNDER THE BID ITEM "CONCRETE STAINING B-53-313".

THE LETTERING FONT TYPE SHALL BE "HELVETICA" (1" WIDE X 1½" DEEP) WITH 8" HIGH UPPER CASE LETTERS AND 6" HIGH LOWER CASE LETTERS.

LETTERING SHALL ONLY BE PLACED AT THE OUTSIDE FACES OF PARAPETS.

STAINING OF CONCRETE SURFACE AREAS SHALL BE PAID FOR UNDER THE BID ITEM "CONCRETE STAINING B-53-313".

IF TOUCH UP PAINTING IS REQUIRED, IT SHALL BE DONE TO THE SATISFACTION OF THE FIELD ENGINEER AT NO ADDITIONAL COST.

A.S.T. = ARCHITECTURAL SURFACE TREATMENT

COLOR STAINING SCHEDULE

- A AREAS SHALL BE STAINED WITH FEDERAL COLOR NUMBER 36642.
- B AREAS SHALL BE STAINED WITH FEDERAL COLOR NUMBER 30140.
- C AREAS SHALL BE STAINED WITH FEDERAL COLOR NUMBER 30372.
- D LETTERING SHALL BE STAINED WITH FEDERAL COLOR NUMBER 27038.

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DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-53-313

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AESTHETICS DETAILS

SHEET 20

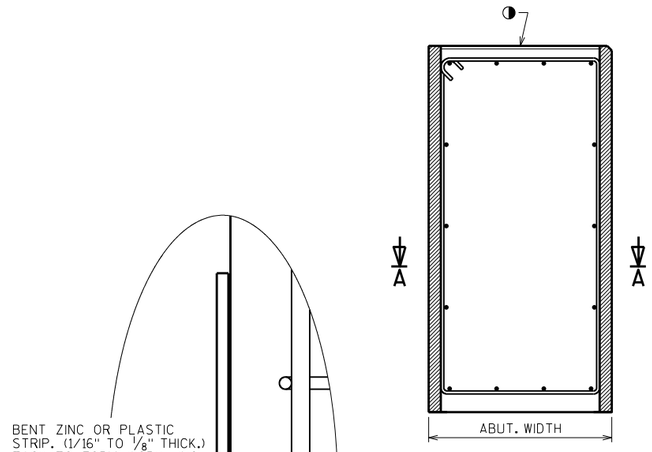
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SCALE = 3

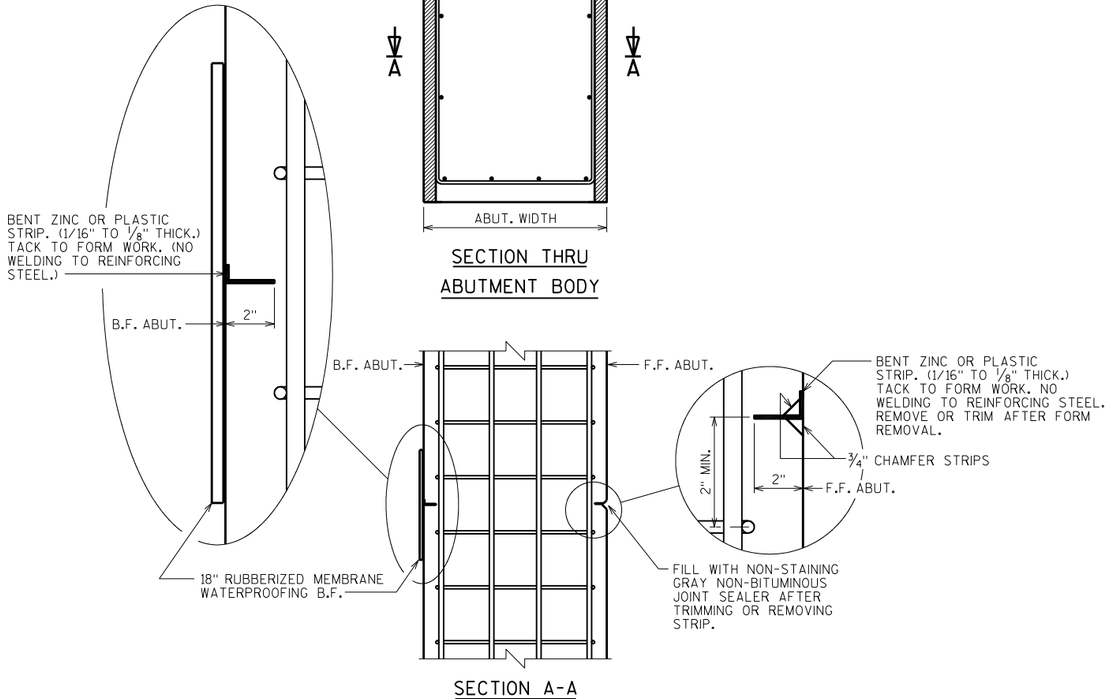
8

8

STATE PROJECT NUMBER
1003-10-71



SECTION THRU
ABUTMENT BODY



SECTION A-A

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.

◑ USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

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STATE OF WISCONSIN
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STRUCTURE B-53-313

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ALTERNATE CONSTRUCTION JOINT

SHEET 21

489

8

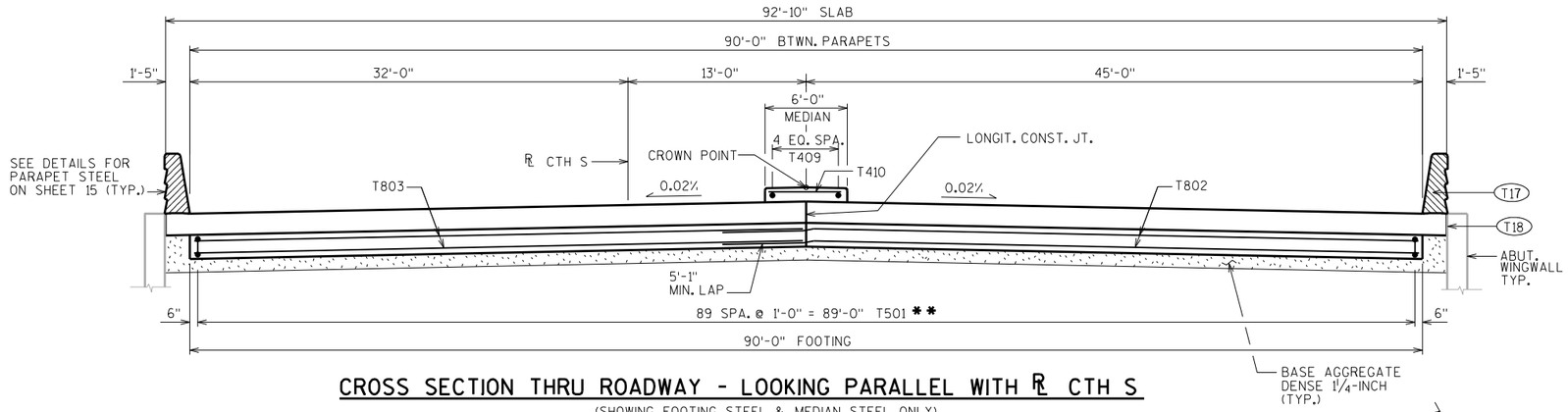
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1 2 3 6

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ALTJOINT
10-08

STATE PROJECT NUMBER
1003-10-71



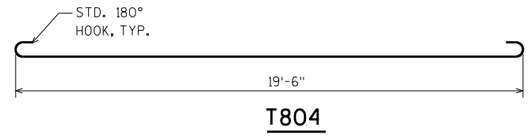
CROSS SECTION THRU ROADWAY - LOOKING PARALLEL WITH ℄ CTH S

(SHOWING FOOTING STEEL & MEDIAN STEEL ONLY)

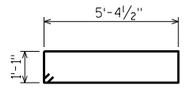
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

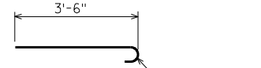
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
T501	X	91	13'-7""	X		APPROACH SLAB FTG. - STIRRUP
T802	X	12	56'-4"			APPROACH SLAB FTG. - TRANS.
T803	X	12	51'-3"			APPROACH SLAB FTG. - TRANS.
T804	X	152	21'-4"	X		APPROACH SLAB - LONG. - BOT.
T505	X	93	19'-6"			APPROACH SLAB - LONG. - TOP
T506	X	42	56'-0"			APPROACH SLAB - LONG - TOP & BOT.
T507	X	42	52'-11			APPROACH SLAB - LONG - TOP & BOT.
T508	X	40	4'-1"	X		APPROACH SLAB - TRANS - TOP.
T409	X	5	19'-8"			MEDIAN - LONG.
T410	X	15	6'-5"			MEDIAN - TRANS.



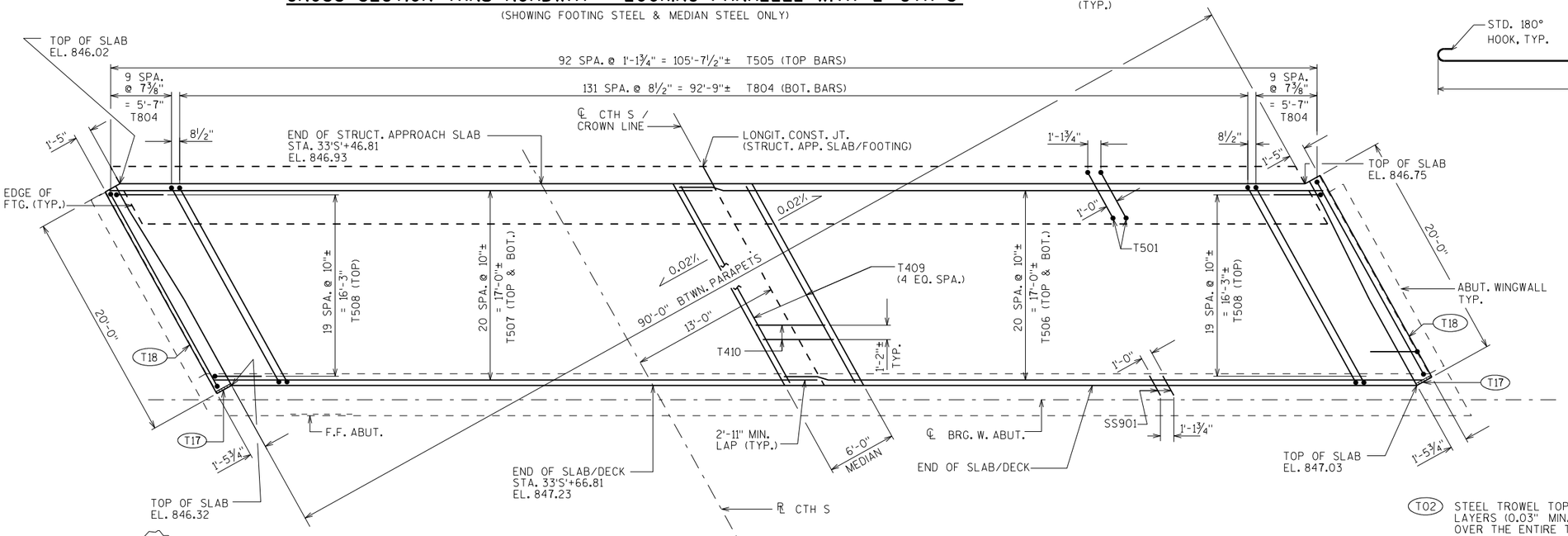
T804



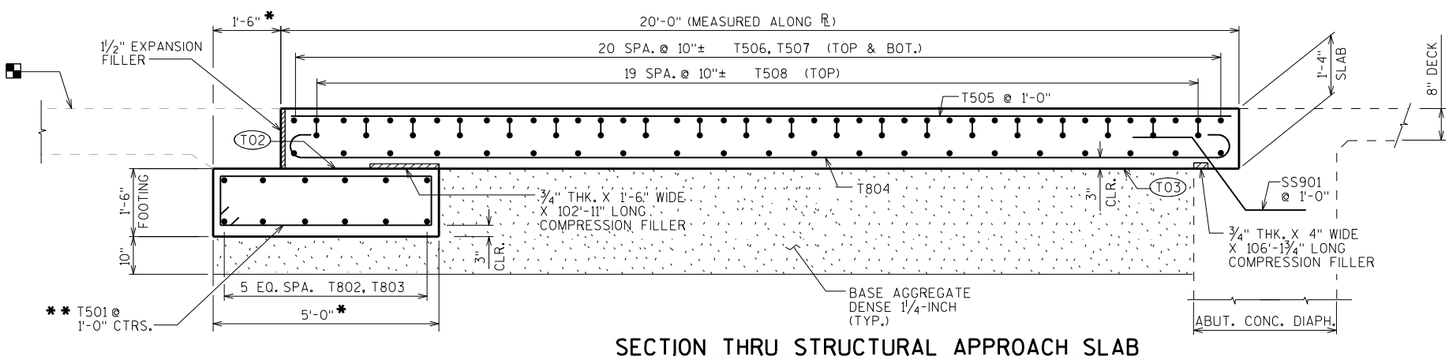
T501



T508



WEST STRUCTURAL APPROACH SLAB PLAN



SECTION THRU STRUCTURAL APPROACH SLAB

(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) ½" FILLER (INCLUDED IN PARAPET LENGTH); SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(T18) ½" FILLER PLACED BTWN. ABUT. WINGWALL AND APPROACH SLAB); SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

* MEASURED NORMAL TO SUBSTRUCTURE

** BARS PLACED PARALLEL TO ℄ SPACING PERPENDICULAR TO ℄

▪ CONCRETE PAVEMENT APPROACH SLAB. SEE ROADWAY PLANS FOR DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-53-313

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WEST STRUCTURAL APPROACH SLAB

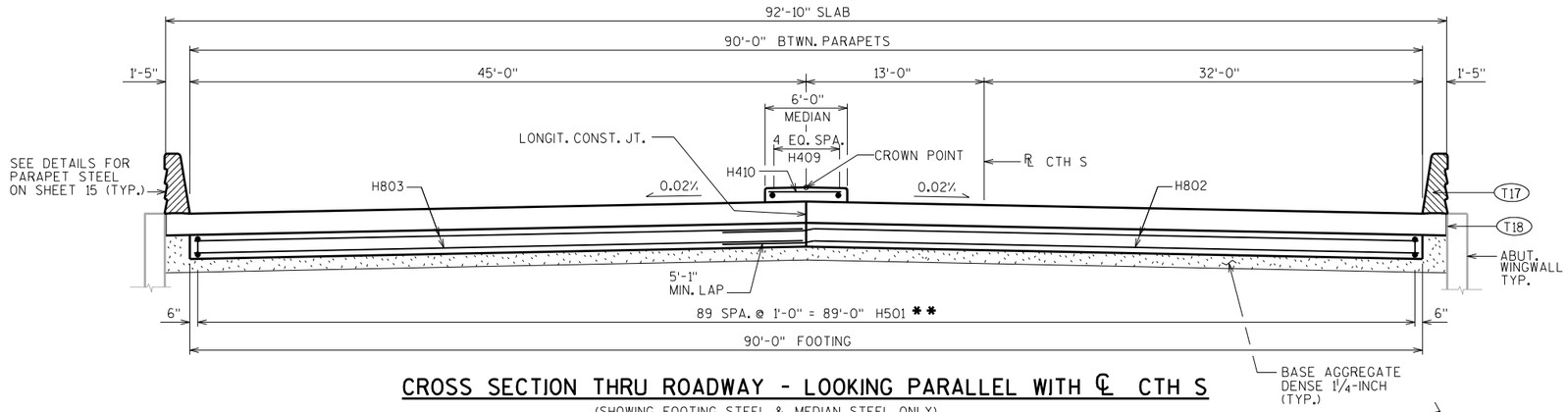
SHEET 22

490

SCALE =

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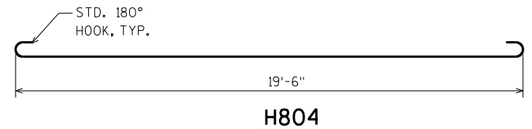
CROSS SECTION THRU ROADWAY - LOOKING PARALLEL WITH ℄ CTH S

(SHOWING FOOTING STEEL & MEDIAN STEEL ONLY)

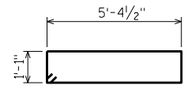
BILL OF BARS

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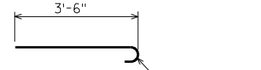
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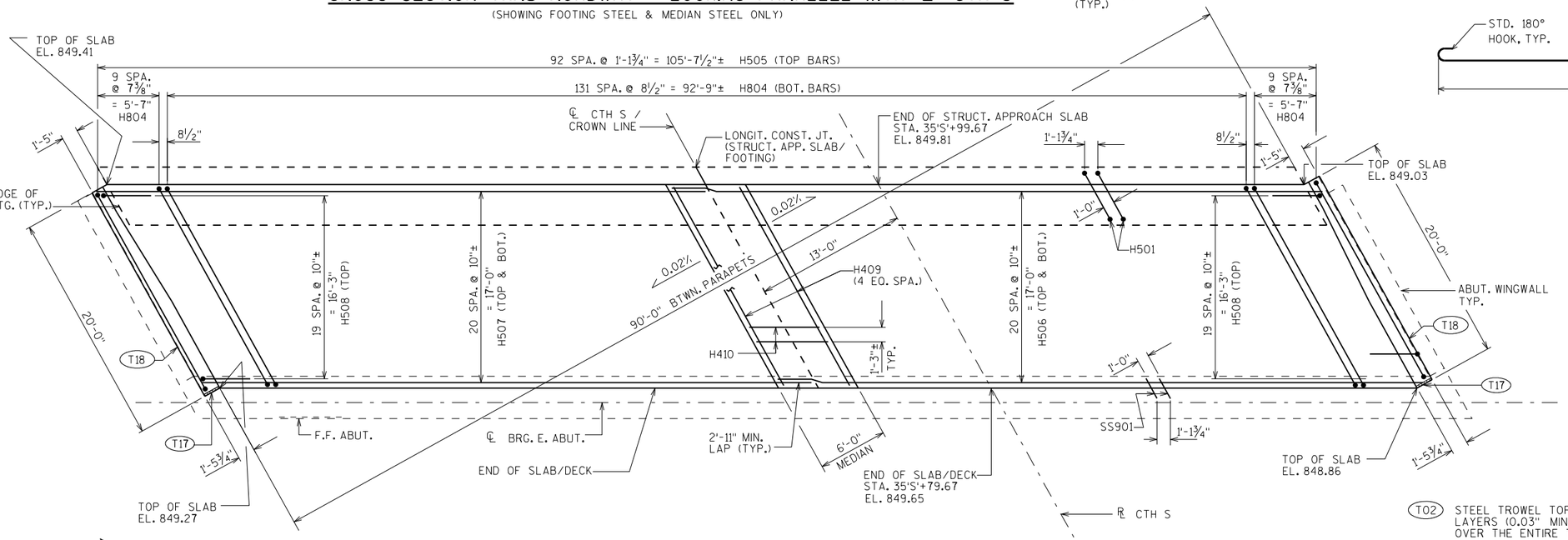
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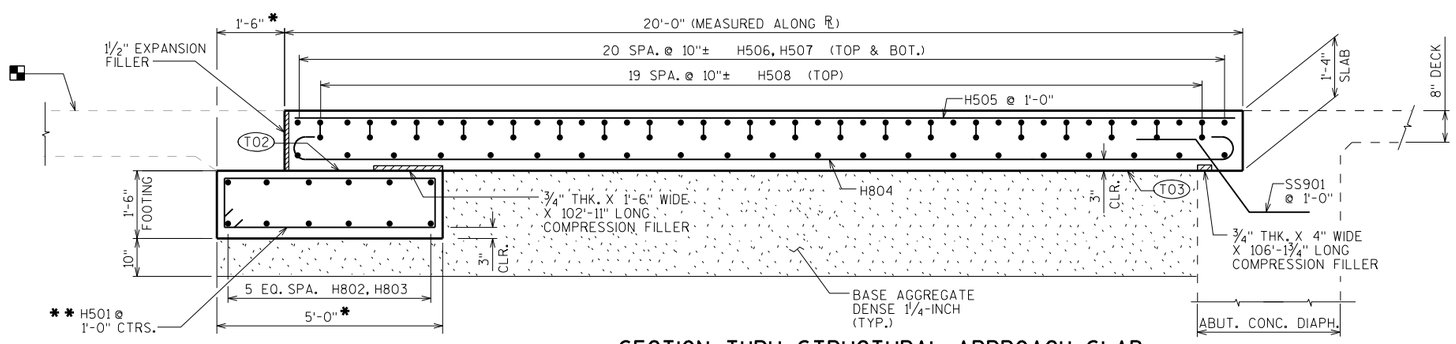
H501



H508



EAST STRUCTURAL APPROACH SLAB PLAN



SECTION THRU STRUCTURAL APPROACH SLAB

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 ½" FILLER (INCLUDED IN PARAPET LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

T18 ½" FILLER PLACED BTWN. ABUT. WINGWALL AND APPROACH SLAB): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

* MEASURED NORMAL TO SUBSTRUCTURE

** BARS PLACED PARALLEL TO ℄ SPACING PERPENDICULAR TO ℄

▪ CONCRETE PAVEMENT APPROACH SLAB. SEE ROADWAY PLANS FOR DETAILS.

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STRUCTURES DESIGN SECTION

STRUCTURE B-53-313

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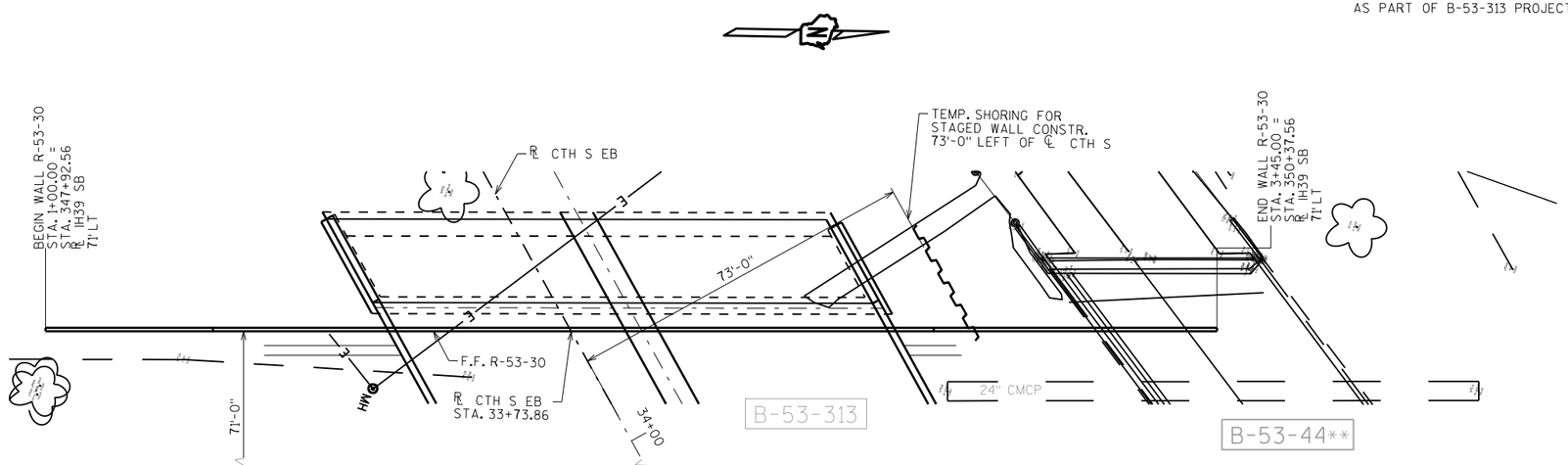
EAST STRUCTURAL APPROACH SLAB

SHEET 23

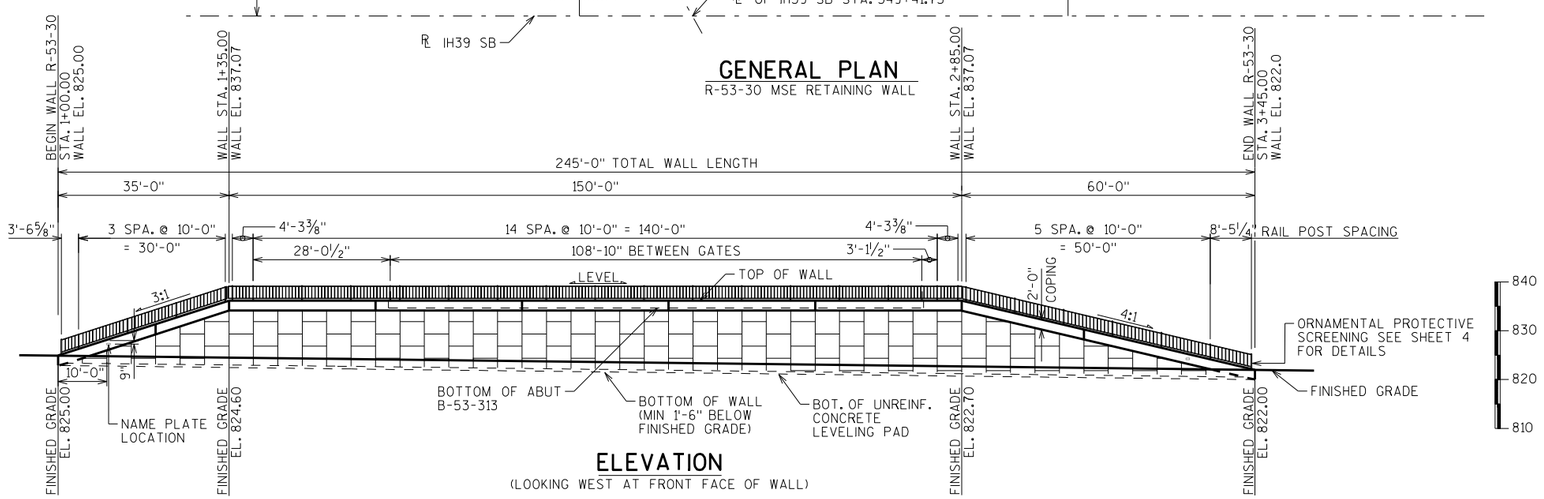
491

SCALE =

** STRUCTURE TO BE REMOVED AS PART OF B-53-313 PROJECT



GENERAL PLAN
R-53-30 MSE RETAINING WALL



ELEVATION
(LOOKING WEST AT FRONT FACE OF WALL)

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
511.1200.001	TEMPORARY SHORING R-53-30	SF	360
517.1010.S.002	CONCRETE STAINING R-53-30	SF	2252
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	265
SPV.0105.850	RAILING TUBULAR SCREENING R-53-30	LS	1
SPV.0165.850	WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP R-53-30	SF	2374
	NON-BID ITEMS		
	PRE-FORMED JOINT FILLER	SIZE	3/4"
	EXPANDED POLYSTYRENE	SIZE	1"
	NON-BITUMINOUS JOINT SEALER	SIZE	1"
	CORK FILLER	SIZE	1"

GEOMETRY TABLE

WALL STATION	IH 39 SB ℄ STA.	℄ OFFSET TO F.F. OF WALL	TOP OF WALL ELEV.	FINISHED GRADE ELEV.
1+00.00	347+92.56	71' LT.	825.00	825.00
1+35.00	348+27.56	71' LT.	837.07	824.60
2+85.00	349+77.56	71' LT.	837.07	822.70
3+45.00	350+37.56	71' LT.	822.00	822.00

NOTE: STATIONS & OFFSET DISTANCES ARE TO FRONT FACE OF WALL.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BEVEL ALL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED

BAR STEEL REINFORCEMENT SHALL HAVE 2" CLEAR COVER UNLESS OTHERWISE SHOWN OR NOTED.

ALL WALL STATIONING AND OFFSETS ARE GIVEN TO THE FRONT FACE OF THE WALL.

THE PLAN QUANTITY FOR THE ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP." IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF THE WALL TO THE TOP OF THE LEVELING PAD, SET A CONSTANT DEPTH OF 1'-6" BELOW FINISHED GRADE.

THE QUANTITY OF CONCRETE MASONRY & REINFORCING STEEL, FOR THE CAST-IN-PLACE COPING, IS PAID FOR UNDER THE ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP."

ALLOWABLE WALL SYSTEMS

WALL CONCRETE PANEL M.S.E. LRFD

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS AND SHOP DRAWINGS FOR THE RETAINING WALLS IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP."

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL SHALL BE DESIGNED USING THE ELEVATIONS GIVEN ON THIS SHEET.

DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL, AS SHOWN.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 240 PSF.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30 DEGREES WITHOUT CERTIFIED TEST VALUES.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY CAST-IN-PLACE COPING — f'c = 3,500 PSI

BAR STEEL REINFORCEMENT, GRADE 60 ——— fy = 60,000 P.S.I.

LIST OF DRAWINGS

1. MSE WALL CONCRETE PANEL
2. WALL DATA & DETAILS
3. WALL DETAILS
4. ORNAMENTAL PROTECTIVE SCREENING
5. SUBSURFACE EXPLORATION

STATE PROJECT NUMBER

1003-10-71

STRUCTURE DESIGN CONTACTS:

STEVEN DOOCY (608) 261-6063

AARON BONK (608) 261-0261

NO.	DATE	REVISION	BY

Plans Prepared By **WISDOT**
BUREAU OF STRUCTURES

ACCEPTED William C. Dreher 12/19/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE R-53-30

MSE WALL ALONG B-53-313 WEST ABUTMENT

COUNTY	TOWN/~~CITY/VILLAGE~~
ROCK	TURTLE

DESIGN SPEC. AASHTO LRFD DESIGN SPEC. 5th EDITION

DESIGNED BY	SAD	DESIGN CK'D.	ABS	DRAWN BY	SAD	PLANS CK'D.	AMB

MSE WALL CONCRETE PANEL

SHEET 1 OF 5

492

I.D. 1003-10-01F

DATE: AUG 2014

SCALE = 15

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STATE PROJECT NUMBER

1003-10-71

SOIL PARAMETERS

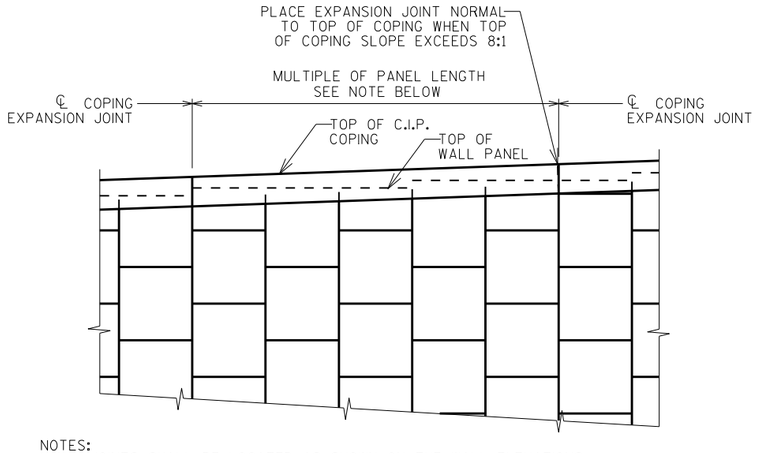
STRATUM LOCATIONS & SOIL DESCRIPTIONS	TOTAL UNIT WEIGHT (PCF)	COHESION (PSF)	FRICTION ANGLE (DEGREES)
GRANULAR BACKFILL, (WITHIN THE WALL IN THE REINFORCING ZONE)	120	0	30
FILL, (BEHIND AND BELOW THE REINFORCEMENT ZONE)	120	0	30
BORING B-1000, STA. 33+49, 33.5 FT RIGHT OF ℄ CTH S			
MEDIUM DENSE, BROWN SAND, TRACE SILT AND CLAY (ELEVATION 819.8 FT. TO 817.3 FT.) **(REMOVED AS EBS)**	110	0	30
MEDIUM STIFF TO STIFF, BROWN LEAN CLAY (ELEVATION 817.3 FT. TO 815.3 FT.) **(REMOVED AS EBS)**	110	1,000	0
DENSE TO VERY DENSE, BROWN SAND, SOME GRAVEL TRACE SILT (ELEVATION 815.3 FT. TO 791.8 FT.)	135	0	36
BORING B-1001, STA. 34+00, 50.12 FT LEFT OF ℄ CTH S			
LOOSE, BROWN SAND, TRACE SILT (ELEVATION 821.6 FT. TO 820.1 FT.) **(REMOVED AS EBS)**	110	0	30
MEDIUM STIFF TO STIFF, BROWN LEAN CLAY (ELEVATION 820.1 FT. TO 817.6 FT.) **(REMOVED AS EBS)**	110	1,000	0
MEDIUM DENSE TO DENSE, BROWN GRAVEL, SOME SAND, TRACE SILT (ELEVATION 817.6 FT. TO 813.6 FT.)	125	0	36
VERY DENSE, BROWN GRAVEL, SOME SAND, TRACE SILT (ELEVATION 813.6 FT. TO 788.6 FT.)	135	0	36

WALL EXTERNAL & OVERALL STABILITY EVALUATION

DIMENSIONS			
WALL HEIGHT (FEET)[1]	13.1	13.5	15.0
EXPOSED WALL HEIGHT (FEET)	11.6	12.0	13.5
FILL HEIGHT BEHIND WALL (FT)	0 (HORIZONTAL - ON EMBANKMENT SIDE SLOPE)	12.5 (FILL BEHIND ABUTMENT)	12.5 (FILL BEHIND ABUTMENT)
MINIMUM LENGTH OF REINFORCEMENT (FEET)	9.4	18.1	18.8
LENGTH OF REIN./WALL HEIGHT	0.72	1.34	1.25
WALL STATION	1+35	1+70	2+75
BORING USED	B-1000	B-1000	B-1001
CAPACITY TO DEMAND RATIO (CDR)[2]			
SLIDING ($CDR_{REQ'D}$ > 1.0)	1.1	1.0	1.1
ECCENTRICITY ($CDR_{REQ'D}$ > 1.0)	1.0	1.0	1.0
GLOBAL STABILITY ($CDR_{REQ'D}$ > 1.0)[3]	1.3 (M) NA (S)[4]	1.0 (M) 1.1 (S)	1.1 (M) NA (S)[4]
BEARING RESISTANCE ($CDR_{REQ'D}$ > 1.0)	1.5	2.3	2.4
FACTORED BEARING RESISTANCE (PSF)	5,700	11,900	12,200

NOTES:

1. THE WALL HEIGHT INCLUDES AN EMBEDMENT OF 1.5 FEET.
2. CDR VALUES ARE PRESENTED IN CHAPTER 14 OF THE BRIDGE MANUAL.
3. M = BISHOP'S METHOD USING MSEW. S = BISHOP'S METHOD USING PCSTABL.
4. NA = NOT APPLICABLE, GLOBAL SLOPE STABILITY WAS EVALUATED WITH STABL AT THE CRITICAL WALL LOCATION IDENTIFIED BY MSEW.

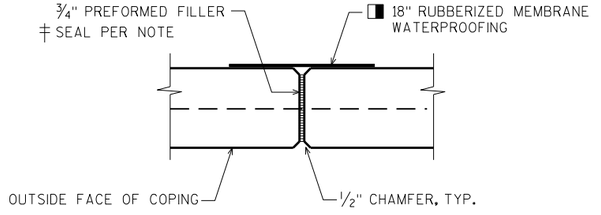


NOTES:
1) ALL JOINTS SHALL BE LOCATED AS SHOWN ON THE WALL ELEVATIONS AND MUST COINCIDE WITH PANEL JOINT ON FRONT FACE.

2) ORNAMENTAL PROTECTIVE SCREENING NOT SHOWN FOR CLARITY. SEE SHEET 4 FOR DETAILS

C.I.P. CONCRETE COPING PARTIAL ELEVATION

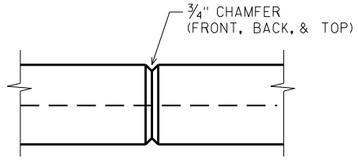
‡ SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONC.)



COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.
MAX. SPACING OF JOINT = 50'

◨ MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO 6" BELOW TOP OF PANELS.



COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT.
MAX. SPACING OF JOINT = 12'

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-53-30

DRAWN BY SAD | PLANS CK'D. ABS

WALL DATA & DETAILS

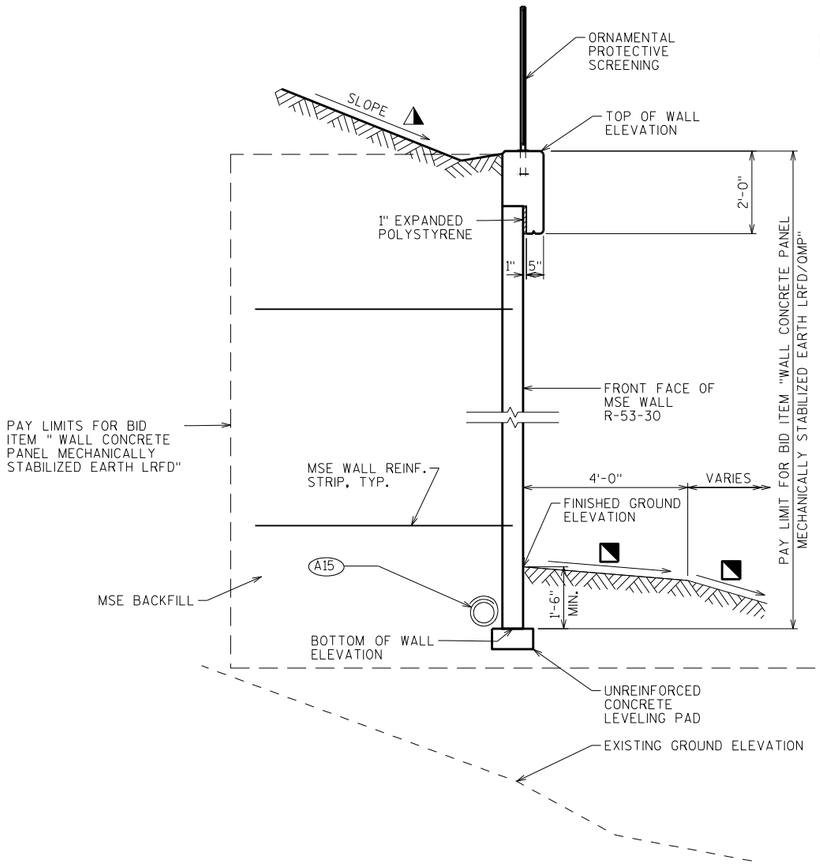
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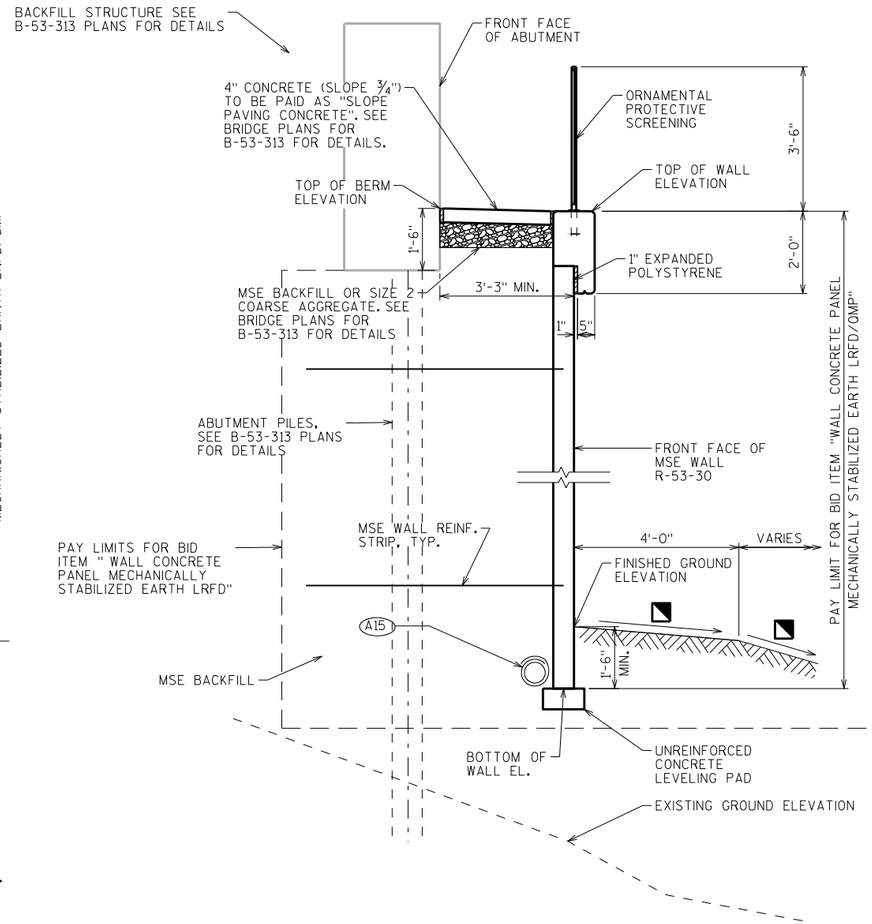
STATE PROJECT NUMBER

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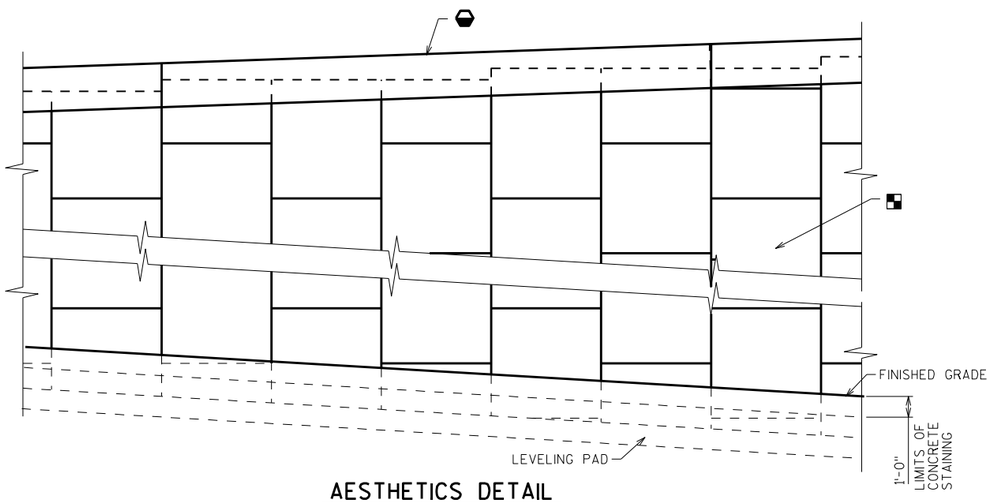
TYPICAL MSE WALL SECTION WITH NO ABUTMENT

LOOKING NORTH

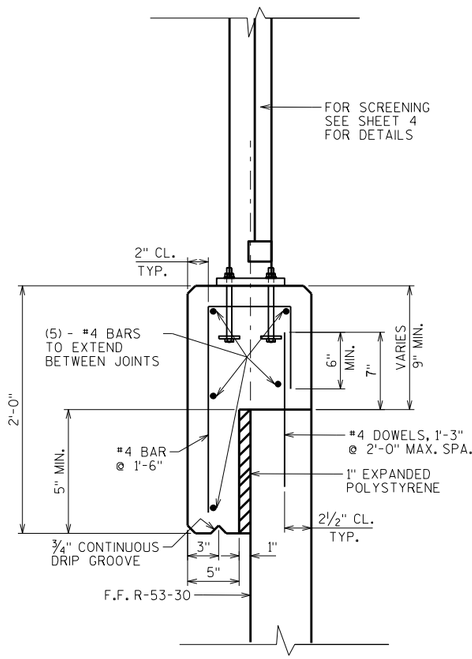


TYPICAL MSE WALL SECTION AT ABUTMENT

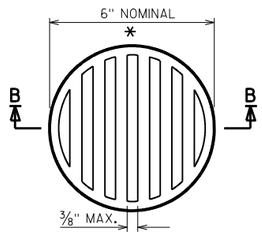
LOOKING NORTH

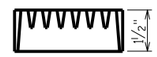


AESTHETICS DETAIL



SECTION THRU COPING





SECTION B-B

RODENT SCREEN DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SCREEN SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SCREEN TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH SHEET METAL SCREWS.

5'-0" X 5'-0" MSE WALL PANEL (TYP.) FEDERAL COLOR NUMBER 30372

2'-0" PLAIN CONCRETE COPING FEDERAL COLOR NUMBER 30140

(A15) PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

SLOPE BEHIND MSE WALL VARIES. SEE ROADWAY PLANS FOR MORE INFORMATION.

SLOPE IN FRONT OF MSE WALL VARIES. SEE ROADWAY PLANS FOR MORE INFORMATION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-53-30

DRAWN BY SAD | PLANS CK'D. AMB

WALL DETAILS

SHEET 3

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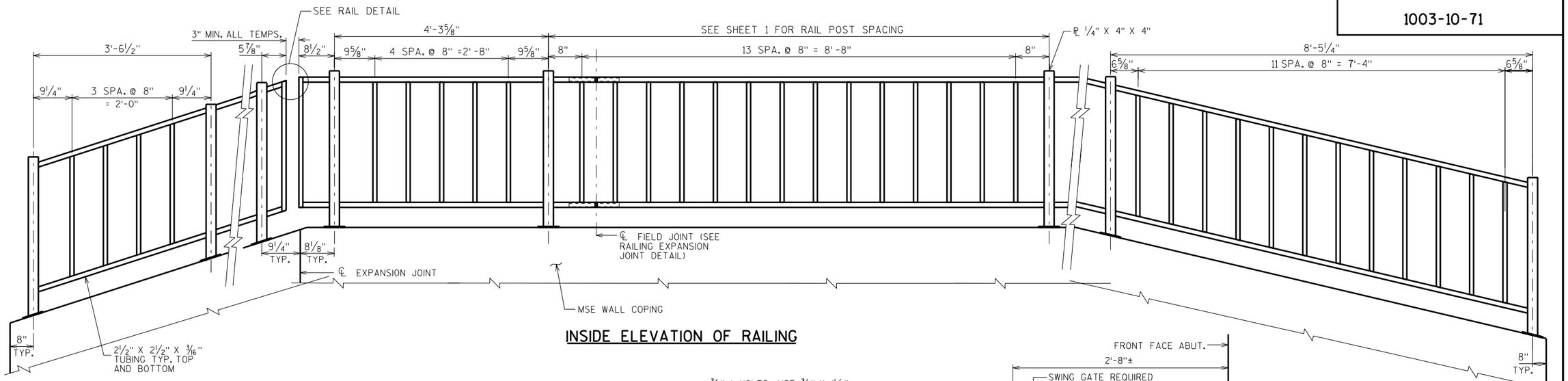
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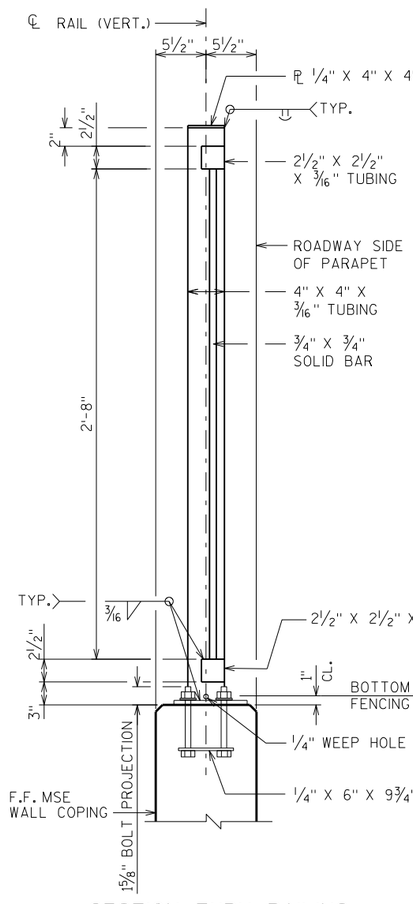
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STATE PROJECT NUMBER

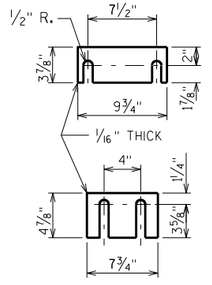
1003-10-71



INSIDE ELEVATION OF RAILING

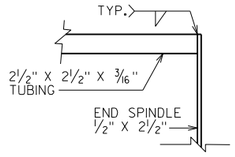


SECTION THRU RAILING

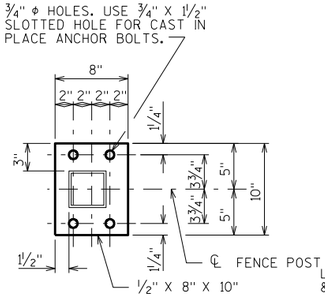


SHIM PLATE DETAILS

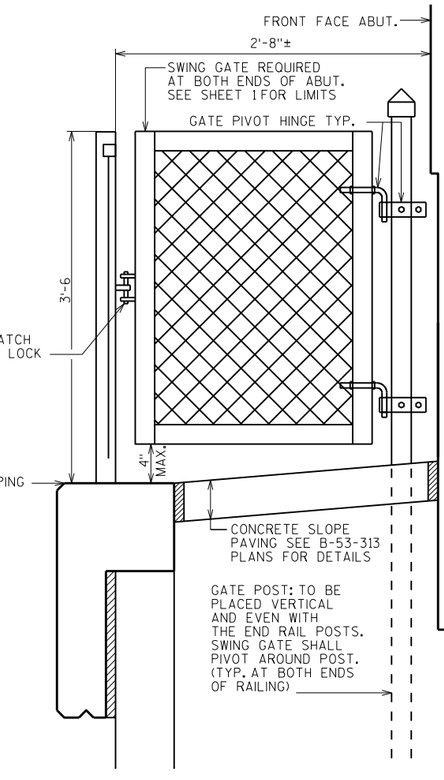
TWO SHIMS OF EACH SIZE REQUIRED PER POST



RAIL DETAIL



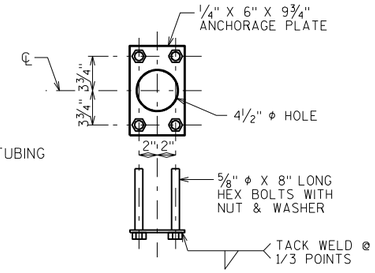
BASE PLATE



SECTION THRU WALL AT GATES

THE END OF THE FABRIC SHALL BE ATTACHED TO THE POST BY MEANS OF A TENSION BAR THREADED THROUGH THE END LOOPS OF THE FABRIC AND SECURED TO THE POST WITH CLAMPS & BOLT. THE FABRIC SHALL BE STRETCHED TO REMOVE ALL SLACK.

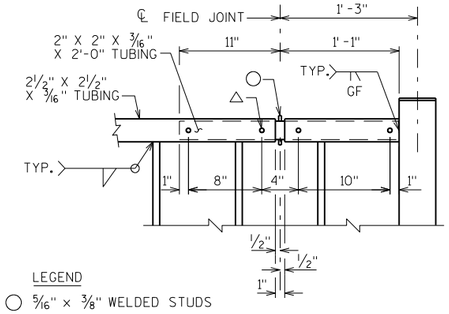
NOTE:
ALL POSTS, GATES AND ASSOCIATED HARDWARE SHALL BE PAINTED (FEDERAL COLOR NO. 30140) AND SHALL BE PAID FOR UNDER THE BID ITEM "RAILING TUBULAR SCREENING R-53-30"



ANCHORAGE DETAIL

⅝" CAST-IN-PLACE ANCHOR BOLTS. MASONRY ANCHORS MAY BE SUBSTITUTED FOR C.I.P. ANCHOR BOLTS. ANCHORAGE PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED.

MASONRY ANCHOR TYPE S ⅝-INCH. EMBED 7" IN CONCRETE.



LEGEND

○ 5⁄16" × ⅜" WELDED STUDS

△ WELD BEAD ON EACH SIDE OF TUBE. GRIND BEADS SO THAT SLEEVE FITS FREELY INSIDE THE 2½" × 2½" TUBE.

RAILING EXPANSION JOINT DETAIL

NOTES

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.

RAILS AND POSTS TO BE ASTM A500, GRADE B. BASE PLATES AND SHIMS TO BE ASTM A709, GRADE 36. ALL GALVANIZED AFTER FABRICATION.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET POSTS NORMAL TO GRADE.

ALL POST SPA. ARE TAKEN HORIZ. ALONG CENTER LINE OF RAILING AT BASE OF POST.

SHIMS SHALL BE USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT.

CAULK AROUND PERIMETER OF BASE PLATES AND FILL PORTION OF SLOTTED HOLES AROUND ANCHOR BOLTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

CUT BOTTOM OF POST TO MAKE VERTICAL IN TRANSVERSE DIRECTION.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.

RAILING TO BE PAINTED AND FENCE FABRIC AND TIES TO BE VINYL COATED. FEDERAL COLOR NO. 30140.

BID ITEM SHALL BE "RAILING TUBULAR SCREENING R-53-30" WHICH SHALL INCLUDE ALL ITEMS SHOWN.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE NOT MORE THAN 3 POSTS.

VENT HOLES SHALL BE DRILLED IN MEMBERS AS REQUIRED TO FACILITATE GALVANIZING.

ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING ALL STEEL RAILING POSTS AND STEEL TUBING SHALL BE GIVEN A #6 BLAST CLEANING BY SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH APPROVED TIE COAT AND TOPCOAT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

ORNAMENTAL PROTECTIVE SCREENING

STRUCTURE R-53-30

DRAWN BY SAD | PLANS CK'D. AMB

ORNAMENTAL PROTECTIVE SCREENING

SHEET 4

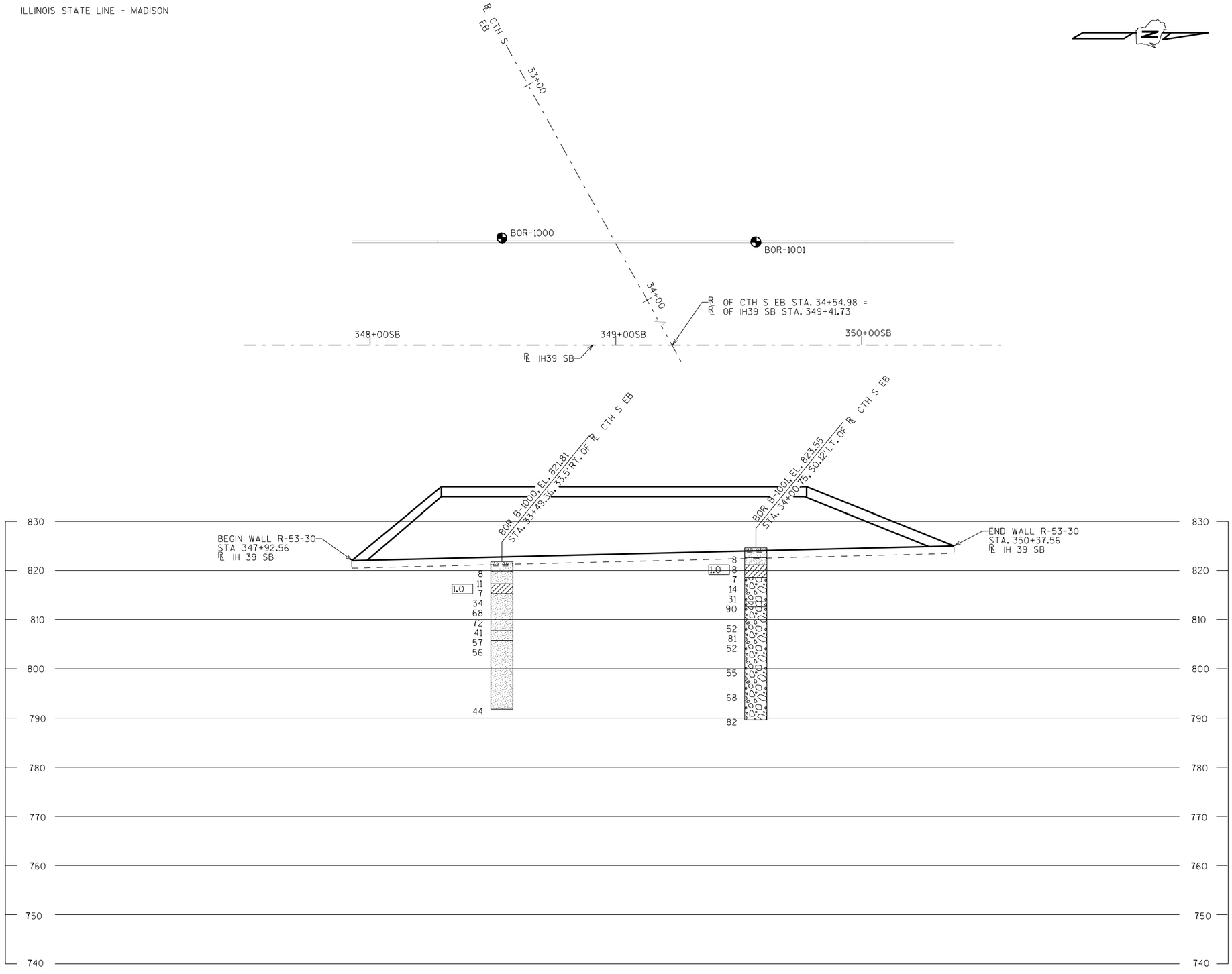
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ILLINOIS STATE LINE - MADISON



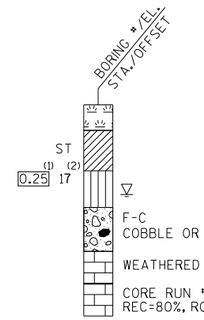
STATE PROJECT NUMBER

1003-10-01

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(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.

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STRUCTURES DESIGN SECTION

STRUCTURE R-53-30

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SUBSURFACE EXPLORATION

SHEET 5

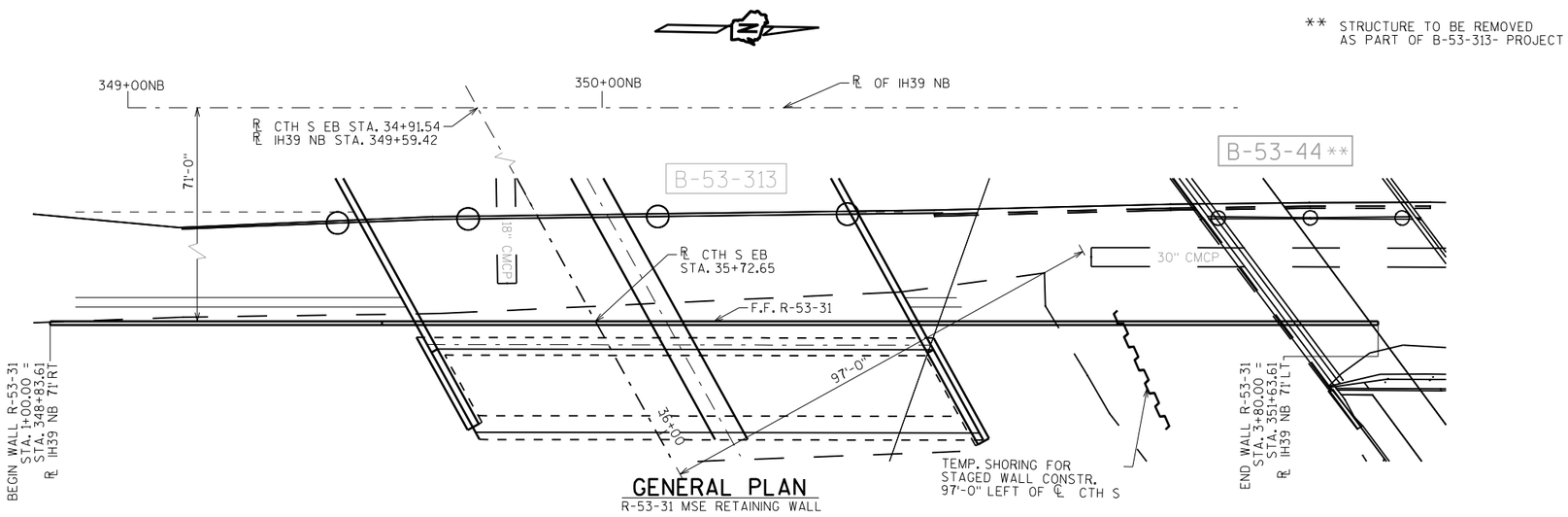
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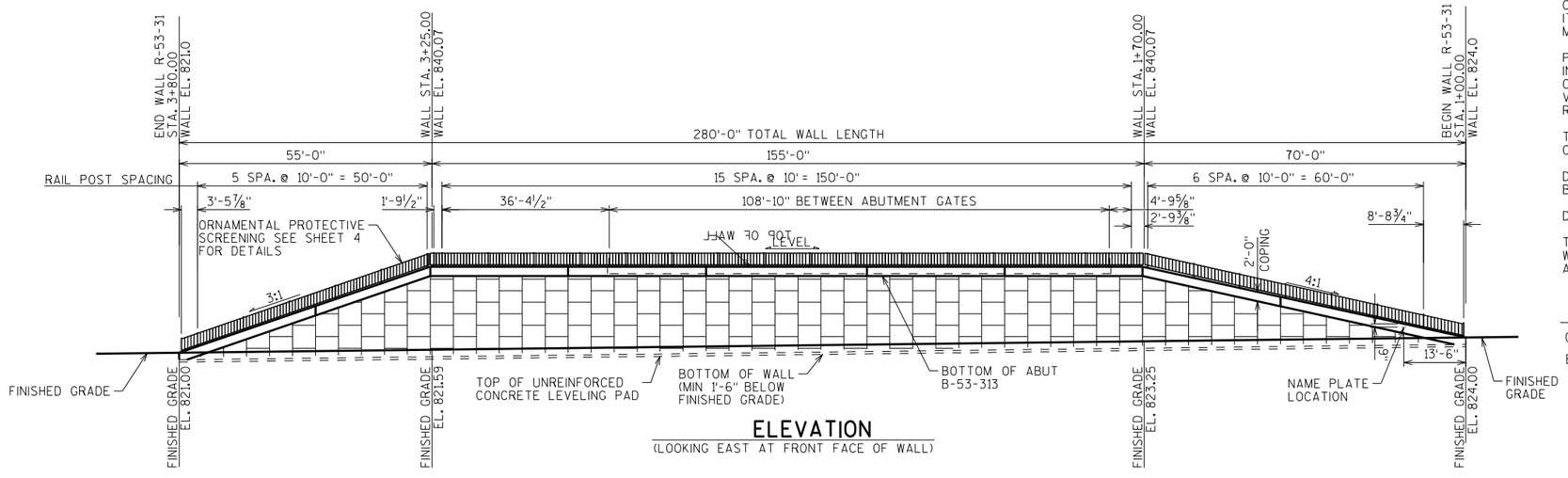
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STATE PROJECT NUMBER
1003-10-71



GENERAL PLAN
R-53-31 MSE RETAINING WALL



ELEVATION
(LOOKING EAST AT FRONT FACE OF WALL)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BEVEL ALL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED

BAR STEEL REINFORCEMENT SHALL HAVE 2" CLEAR COVER UNLESS OTHERWISE SHOWN OR NOTED.

ALL WALL STATIONING AND OFFSETS ARE GIVEN TO THE FRONT FACE OF THE WALL.

THE PLAN QUANTITY FOR THE ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP." IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF THE WALL TO THE TOP OF THE LEVELING PAD, SET A CONSTANT DEPTH OF 1'-6" BELOW FINISHED GRADE.

THE QUANTITY OF CONCRETE MASONRY & REINFORCING STEEL, FOR THE CAST-IN-PLACE COPING, IS PAID FOR UNDER THE ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP."

ALLOWABLE WALL SYSTEMS

WALL CONCRETE PANEL M.S.E. LRFD

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS AND SHOP DRAWINGS FOR THE RETAINING WALLS IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP."

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL SHALL BE DESIGNED USING THE ELEVATIONS GIVEN ON THIS SHEET.

DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL, AS SHOWN.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 240 PSF.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30 DEGREES WITHOUT CERTIFIED TEST VALUES.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY CAST-IN-PLACE COPING —— f'c = 3,500 PSI

BAR STEEL REINFORCEMENT, GRADE 60 —— fy = 60,000 P.S.I.

STRUCTURE DESIGN CONTACTS:

STEVEN DOOCY	(608) 261-6063
AARON BONK	(608) 261-0261

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
511.1200.002	TEMPORARY SHORING R-53-31	SF	460
517.1010.S.003	CONCRETE STAINING R-53-31	SF	4019
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	300
SPV.0105.851	RAILING TUBULAR SCREENING R-53-31	LS	1
SPV.0165.851	WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP R-53-31	SF	4159
	NON-BID ITEMS		
	PRE-FORMED JOINT FILLER	SIZE	3/4"
	EXPANDED POLYSTYRENE	SIZE	1"
	NON-BITUMINOUS JOINT SEALER	SIZE	1"
	CORK FILLER	SIZE	1"

GEOMETRY TABLE

WALL STATION	IH 39 NB ℄ STA.	℄ OFFSET TO F.F. OF WALL	TOP OF WALL ELEV.	FINISHED GRADE ELEV.
1+00.00	348+83.61	71'RT.	824.00	824.00
1+70.00	349+53.61	71'RT.	840.07	823.25
3+25.00	351+08.61	71'RT.	840.07	821.59
3+80.00	351+63.61	71'RT.	821.00	821.00

NOTE: STATIONS & OFFSET DISTANCES ARE TO FRONT FACE OF WALL.

LIST OF DRAWINGS

1. MSE WALL CONCRETE PANEL
2. WALL DATA & DETAILS
3. WALL DETAILS
4. ORNAMENTAL PROTECTIVE SCREENING
5. SUBSURFACE EXPLORATION

NO.	DATE	REVISION	BY

Plans Prepared By **WISDOT**
BUREAU OF STRUCTURES

ACCEPTED William C Dreher 12/19/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE R-53-31

MSE WALL ALONG B-53-313 EAST ABUTMENT

COUNTY	TOWN/~~CITY/VILLAGE~~
ROCK	TURTLE

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
SAD	ABS	SAD	AMB

MSE WALL CONCRETE PANEL

SHEET 1 OF 5

497

I.D. 1003-10-01G

DATE: JULY 2014

SCALE = 15

8

8

STATE PROJECT NUMBER

1003-10-71

SOIL PARAMETERS

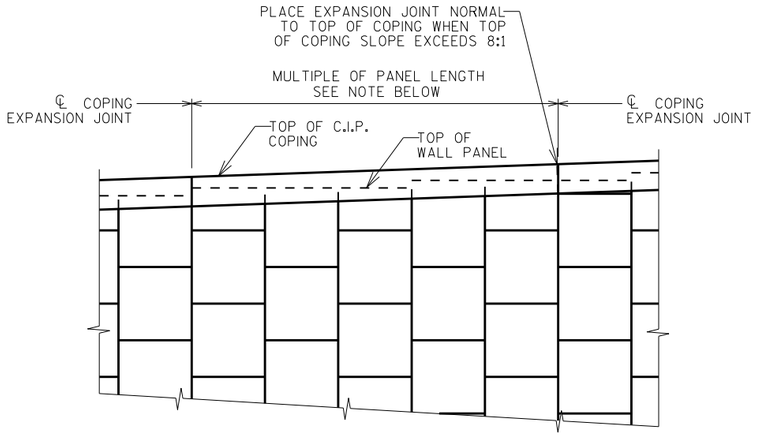
STRATUM LOCATIONS & SOIL DESCRIPTIONS	TOTAL UNIT WEIGHT (PCF)	COHESION (PSF)	FRICTION ANGLE (DEGREES)
GRANULAR BACKFILL, (WITHIN THE WALL IN THE REINFORCING ZONE)	120	0	30
FILL, (BEHIND AND BELOW THE REINFORCEMENT ZONE)	120	0	30
BORING B-1002, STA. 36+11.53, 59.45 FT LEFT OF ℄ CTH S			
STIFF TO VERY STIFF, BROWN LEAN CLAY, LITTLE SAND (ELEVATION 819.5 FT. TO 815.0 FT.)	120	2,000	0
MEDIUM DENSE TO VERY DENSE, BROWN SAND, SOME GRAVEL, TRACE SILT (ELEVATION 815.0 FT. TO 793.0 FT.)	125	0	36
MEDIUM DENSE, BROWN SAND, SOME GRAVEL, TRACE SILT (ELEVATION 793.0 FT. TO 791.0 FT.)	120	0	33
BORING B-1003, STA. 35+61.64, 33.48 FT RIGHT OF ℄ CTH S			
HARD, BROWN LEAN CLAY, LITTLE SAND (ELEVATION 819.1 FT. TO 817.6 FT.)	120	2,000 (ASSUMED NO Q_P)	0
MEDIUM DENSE TO VERY DENSE, BROWN SAND, SOME GRAVEL, TRACE SILT (ELEVATION 817.6 FT. TO 788.6 FT.)	130	0	36
DENSE, BROWN SAND, SOME GRAVEL, TRACE SILT (ELEVATION 788.6 FT. TO 780.6 FT.)	125	0	35

WALL EXTERNAL & OVERALL STABILITY EVALUATION

DIMENSIONS			
WALL HEIGHT (FEET)[1]	17.1	18.2	18.6
EXPOSED WALL HEIGHT (FEET)	15.6	16.7	17.1
FILL HEIGHT BEHIND WALL (FT)	12.5 (FILL BEHIND ABUTMENT)	12.5 (FILL BEHIND ABUTMENT)	0 (HORIZONTAL - ON EMBANKMENT SIDE SLOPE)
MINIMUM LENGTH OF REINFORCEMENT (FEET)	19.9	20.5	13.0[3]
LENGTH OF REIN./WALL HEIGHT	1.16	1.13	0.7
WALL STATION	1+80	2+85	3+25
BORING USED	B-1003	B-1002	B-1002
CAPACITY TO DEMAND RATIO (CDR)[2]			
SLIDING ($CDR_{REQ'D}$ > 1.0)	1.1	1.1	1.2
ECCENTRICITY ($CDR_{REQ'D}$ > 1.0)	1.0	1.0	1.1
GLOBAL STABILITY ($CDR_{REQ'D}$ > 1.0)[4]	1.2 (M) NA (S)[5]	1.3 (M) 1.3 (S)	1.3 (M) NA (S)[5]
BEARING RESISTANCE ($CDR_{REQ'D}$ > 1.0)	2.0	1.0	1.4
FACTORED BEARING RESISTANCE (PSF)	12,700	6,700	6,700

NOTES:

1. THE WALL HEIGHT INCLUDES AN EMBEDMENT OF 1.5 FEET.
2. CDR VALUES ARE PRESENTED IN CHAPTER 14 OF THE BRIDGE MANUAL.
3. REINFORCEMENT LENGTH EQUALS MINIMUM LENGTH OF 70 PERCENT OF TOTAL WALL HEIGHT.
4. M = BISHOP'S METHOD USING MSEW. S = BISHOP'S METHOD USING PCSTABL.
5. NA = NOT APPLICABLE, GLOBAL SLOPE STABILITY WAS EVALUATED WITH STABL AT THE CRITICAL WALL LOCATION IDENTIFIED BY MSEW.

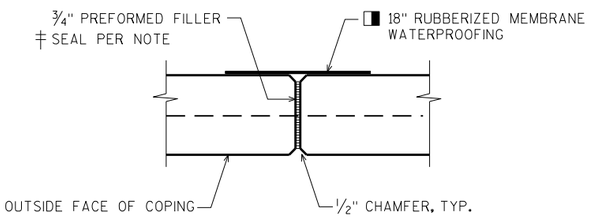


NOTE:
1) ALL JOINTS SHALL BE LOCATED AS SHOWN ON THE WALL ELEVATIONS AND MUST COINCIDE WITH PANEL JOINT ON FRONT FACE.

2) ORNAMENTAL PROTECTIVE SCREENING NOT SHOWN FOR CLARITY.

C.I.P. CONCRETE COPING PARTIAL ELEVATION

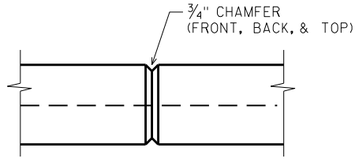
‡ SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONC.)



COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.
MAX. SPACING OF JOINT = 50'

◨ MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO 6" BELOW TOP OF PANELS.



COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT.
MAX. SPACING OF JOINT = 12'

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-53-31

DRAWN BY SAD | PLANS CK'D. ABS

WALL DATA & DETAILS

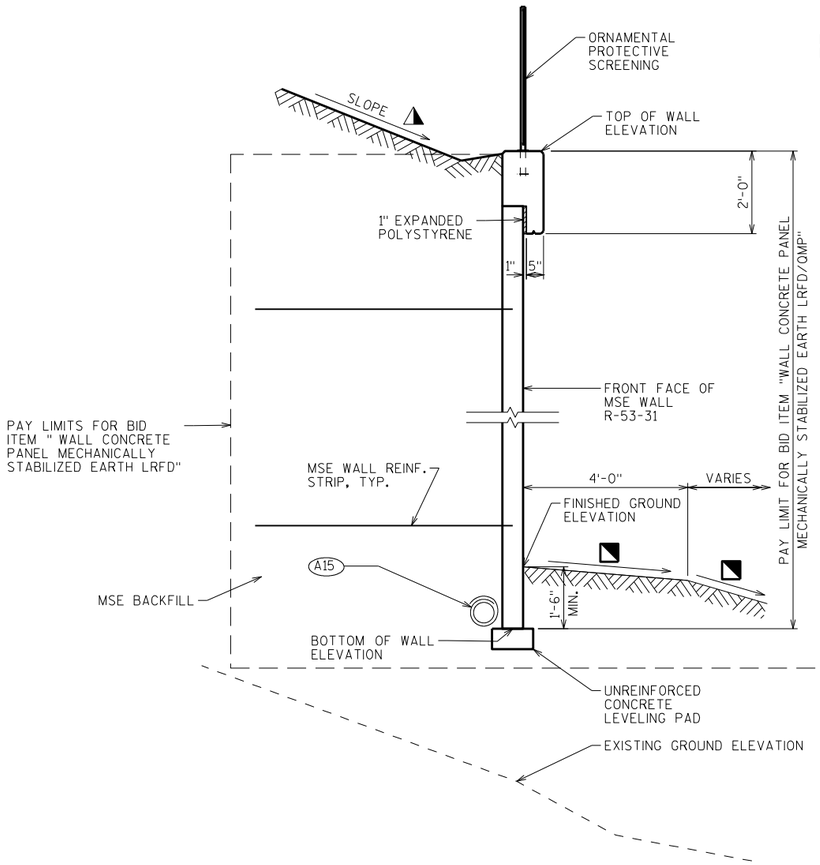
SHEET 2

498

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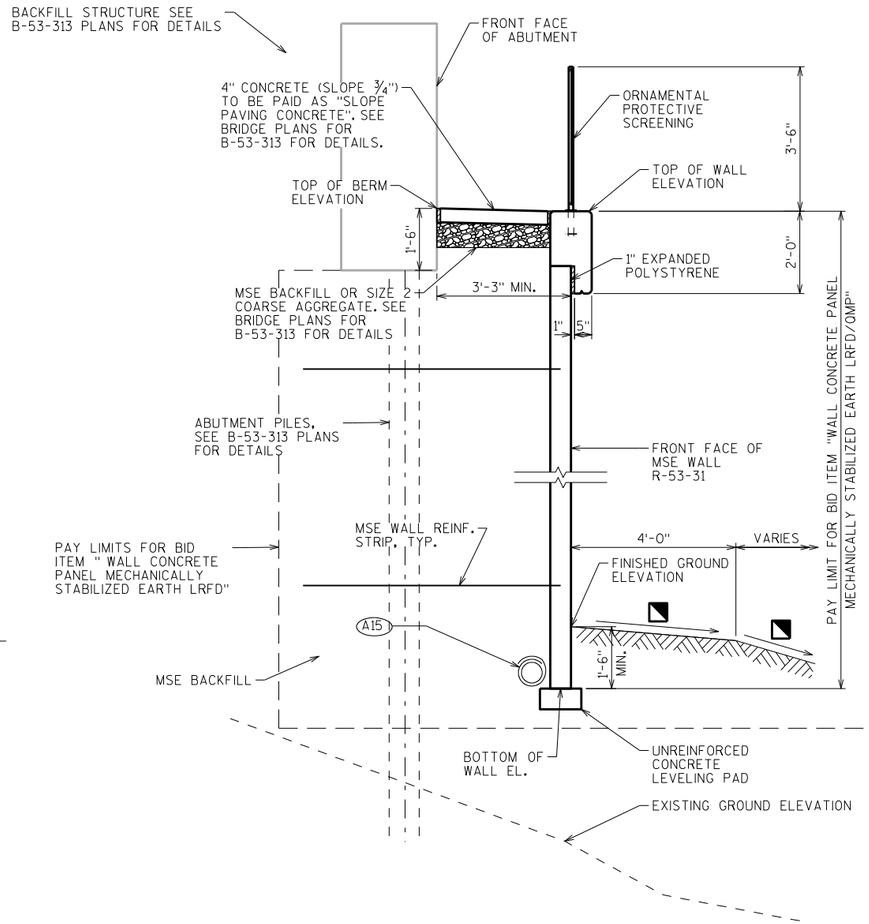
STATE PROJECT NUMBER

1003-10-71



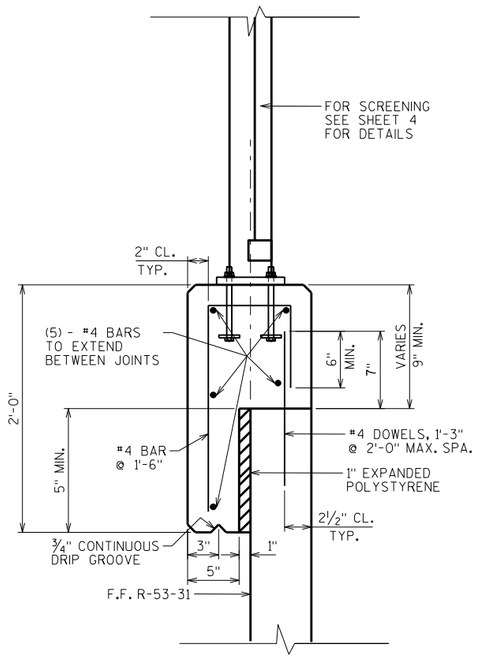
TYPICAL MSE WALL SECTION WITH NO ABUTMENT

LOOKING NORTH

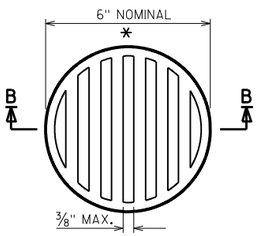


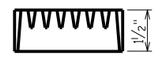
TYPICAL MSE WALL SECTION AT ABUTMENT

LOOKING NORTH



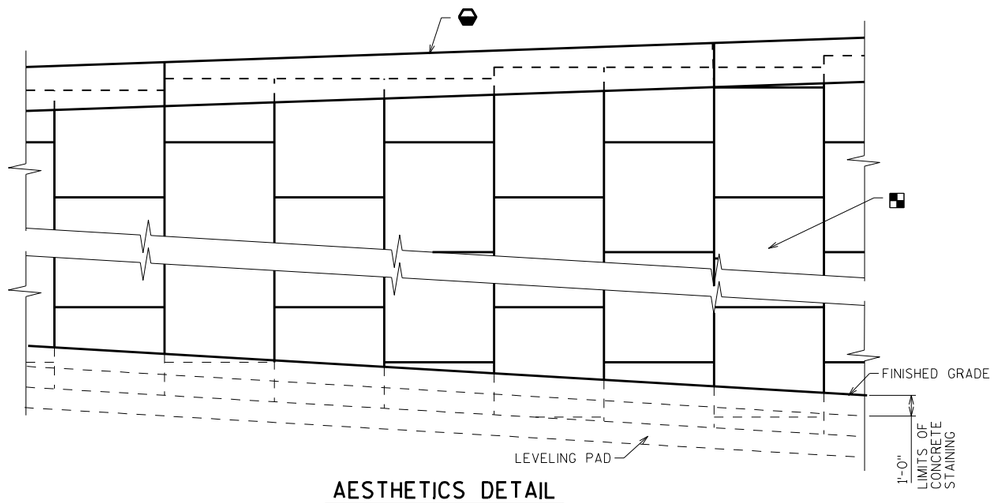
SECTION THRU COPING





SECTION B-B

RODENT SCREEN DETAIL



AESTHETICS DETAIL

5'-0" X 5'-0" MSE WALL PANEL (TYP.) FEDERAL COLOR NUMBER 30372

2'-0" PLAIN CONCRETE COPING FEDERAL COLOR NUMBER 30140

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SCREEN SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SCREEN TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH SHEET METAL SCREWS.

A15 PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

SLOPE BEHIND MSE WALL VARIES. SEE ROADWAY PLANS FOR MORE INFORMATION.

SLOPE IN FRONT OF MSE WALL VARIES. SEE ROADWAY PLANS FOR MORE INFORMATION.

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STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE R-53-31

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WALL DETAILS

SHEET 3

499

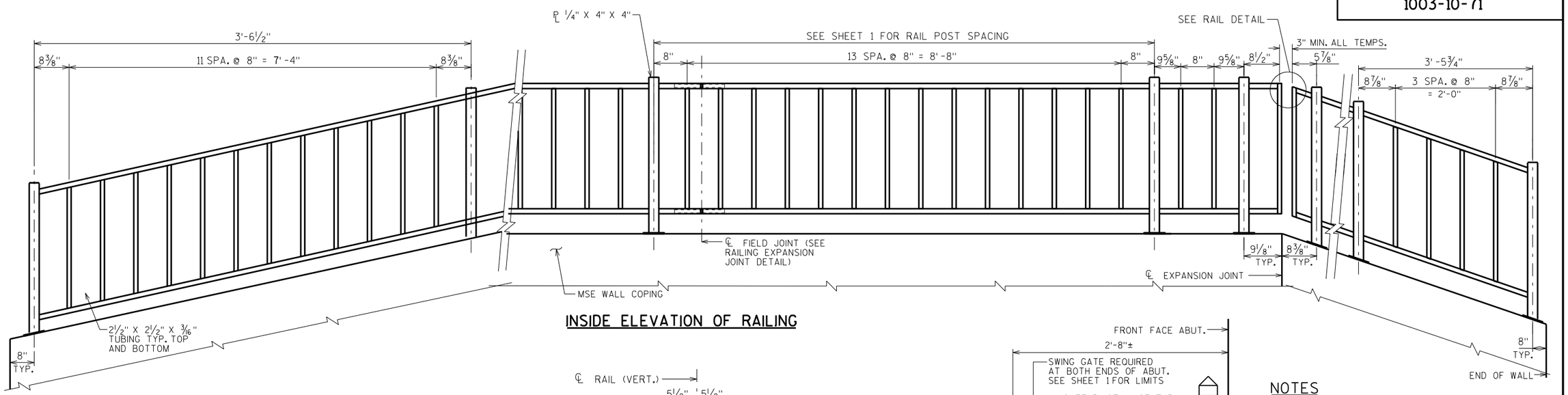
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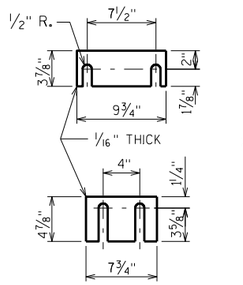
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STATE PROJECT NUMBER

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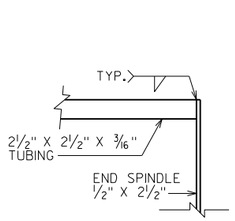


INSIDE ELEVATION OF RAILING

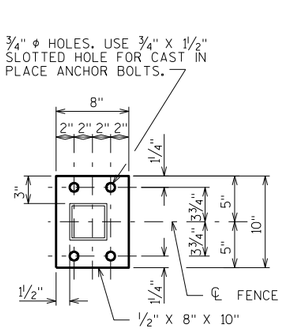


SHIM PLATE DETAILS

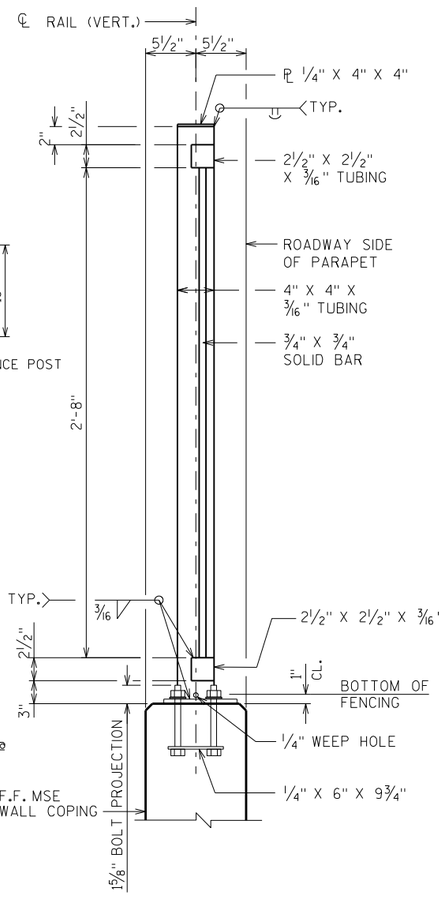
TWO SHIMS OF EACH SIZE REQUIRED PER POST



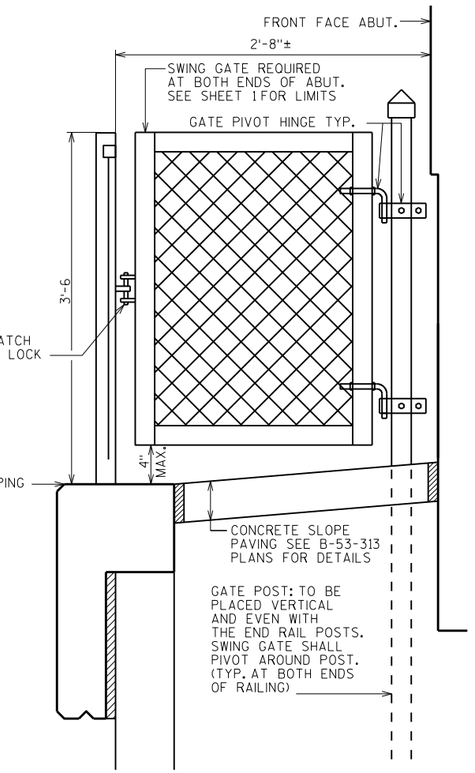
RAIL DETAIL



BASE PLATE



SECTION THRU RAILING



SECTION THRU WALL AT GATES

THE END OF THE FABRIC SHALL BE ATTACHED TO THE POST BY MEANS OF A TENSION BAR THREADED THROUGH THE END LOOPS OF THE FABRIC AND SECURED TO THE POST WITH CLAMPS & BOLT. THE FABRIC SHALL BE STRETCHED TO REMOVE ALL SLACK.

NOTE:
ALL POSTS, GATES AND ASSOCIATED HARDWARE SHALL BE PAINTED (FEDERAL COLOR NO. 30140) AND SHALL BE PAID FOR UNDER THE BID ITEM "RAILING TUBULAR SCREENING R-53-30"

NOTES

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.

RAILS AND POSTS TO BE ASTM A500, GRADE B. BASE PLATES AND SHIMS TO BE ASTM A709, GRADE 36. ALL GALVANIZED AFTER FABRICATION.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET POSTS NORMAL TO GRADE.

ALL POST SPA. ARE TAKEN HORIZ. ALONG CENTER LINE OF RAILING AT BASE OF POST.

SHIMS SHALL BE USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT.

CAULK AROUND PERIMETER OF BASE PLATES AND FILL PORTION OF SLOTTED HOLES AROUND ANCHOR BOLTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

CUT BOTTOM OF POST TO MAKE VERTICAL IN TRANSVERSE DIRECTION.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.

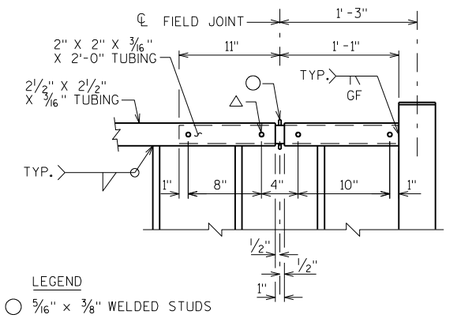
RAILING TO BE PAINTED AND FENCE FABRIC AND TIES TO BE VINYL COATED. FEDERAL COLOR NO. 30140.

BID ITEM SHALL BE "RAILING TUBULAR SCREENING R-53-31" WHICH SHALL INCLUDE ALL ITEMS SHOWN.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE NOT MORE THAN 3 POSTS.

VENT HOLES SHALL BE DRILLED IN MEMBERS AS REQUIRED TO FACILITATE GALVANIZING.

ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING ALL STEEL RAILING POSTS AND STEEL TUBING SHALL BE GIVEN A #6 BLAST CLEANING BY SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH APPROVED TIE COAT AND TOPCOAT.

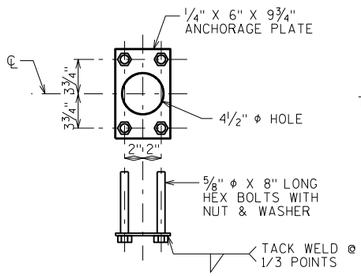


LEGEND

○ 5/16" x 3/8" WELDED STUDS

△ WELD BEAD ON EACH SIDE OF TUBE. GRIND BEADS SO THAT SLEEVE FITS FREELY INSIDE THE 2 1/2" x 2 1/2" TUBE.

RAILING EXPANSION JOINT DETAIL



ANCHORAGE DETAIL

5/8" CAST-IN-PLACE ANCHOR BOLTS. MASONRY ANCHORS MAY BE SUBSTITUTED FOR C.I.P. ANCHOR BOLTS. ANCHORAGE PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED.

MASONRY ANCHOR TYPE S 5/8-INCH. EMBED 7" IN CONCRETE.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-53-31

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ORNAMENTAL PROTECTIVE SCREENING

SHEET 4

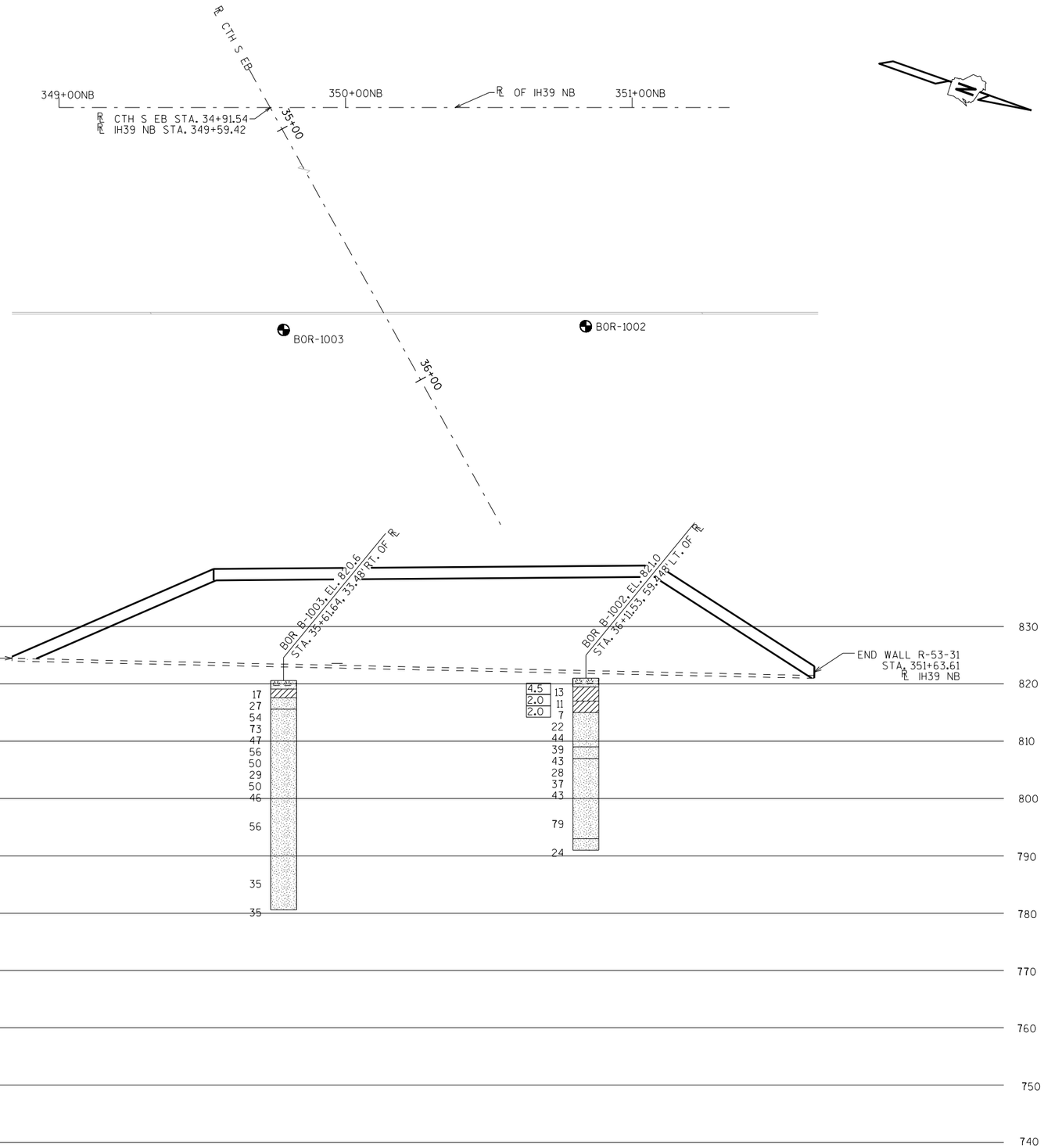
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RAILING TUBULAR SCREENING R-53-31

DATE 7-13

SCALE =

ILLINOIS STATE LINE - MADISON



8

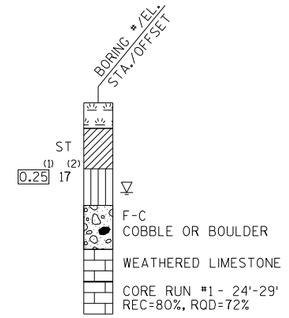
STATE PROJECT NUMBER

1003-10-01

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(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
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STRUCTURES DESIGN SECTION

STRUCTURE R-53-31

DRAWN BY PR | PLANS CK'D. AMB

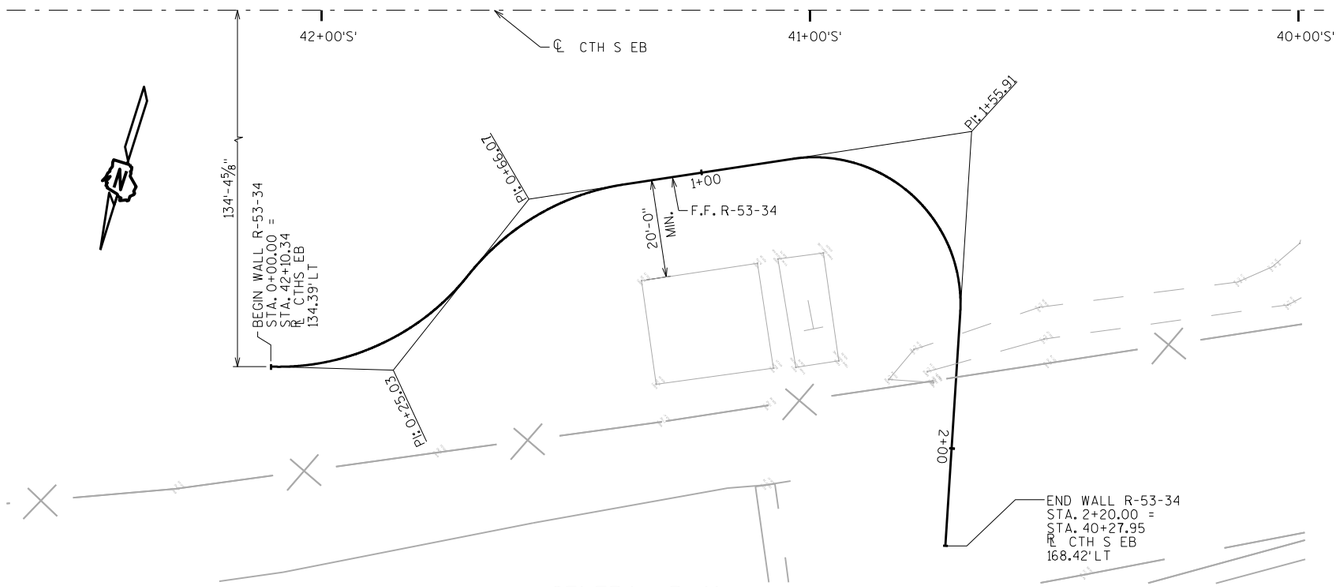
SUBSURFACE EXPLORATION

SHEET 5

501

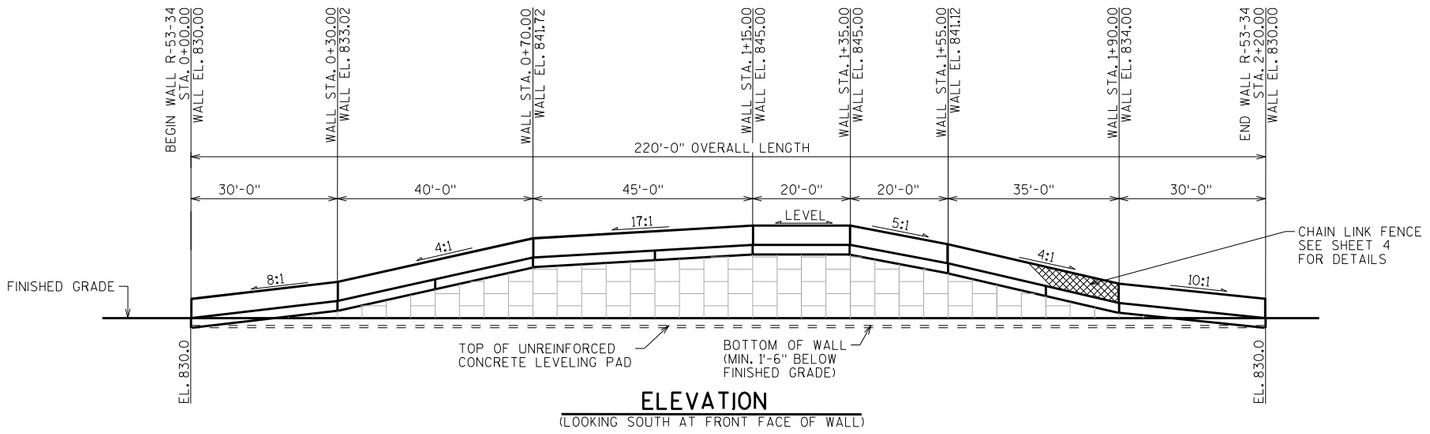
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SCALE =



GENERAL PLAN

R-53-34 MSE RETAINING WALL



ELEVATION

(LOOKING SOUTH AT FRONT FACE OF WALL)

CURVE NOTES:

PI STA = 0+25.03
Y = 224979.600
X = 506031.646
DELTA = 53°11'25"
D = 114°35'30"
T = 25.03'
L = 46.42'
R = 50.00'
PC STA = 0+00.00
PT STA = 0+46.42

PI STA = 0+66.07
Y = 224935.591
X = 506039.408
DELTA = 42°55'17"
D = 114°35'30"
T = 19.66'
L = 37.46'
R = 50.00'
PC STA = 0+46.42
PT STA = 0+83.87

PI STA = 1+55.91
Y = 224858.624
X = 505989.579
DELTA = 102°15'24"
D = 190°59'09"
T = 37.22'
L = 53.54'
R = 30.00'
PC STA = 1+18.69
PT STA = 1+72.23

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BEVEL ALL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED

BAR STEEL REINFORCEMENT SHALL HAVE 2" CLEAR COVER UNLESS OTHERWISE SHOWN OR NOTED.

ALL WALL STATIONING AND OFFSETS ARE GIVEN TO THE FRONT FACE OF THE WALL.

THE PLAN QUANTITY FOR THE ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP." IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF THE WALL TO THE TOP OF THE LEVELING PAD, SET A CONSTANT DEPTH OF 1'-6" BELOW FINISHED GRADE.

THE QUANTITY OF CONCRETE MASONRY & REINFORCING STEEL, FOR THE CAST-IN-PLACE COPING, IS PAID FOR UNDER THE ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP."

ALLOWABLE WALL SYSTEMS

WALL CONCRETE PANEL M.S.E LRFD

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS AND SHOP DRAWINGS FOR THE RETAINING WALLS IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP."

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL SHALL BE DESIGNED USING THE ELEVATIONS GIVEN ON THIS SHEET.

DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL, AS SHOWN.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 240 PSF.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30 DEGREES WITHOUT CERTIFIED TEST VALUES.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY CAST-IN-PLACE COPING — f'c = 3,500 PSI
BAR STEEL REINFORCEMENT, GRADE 60 ——— fy = 60,000 P.S.I.

STRUCTURE DESIGN CONTACTS:

STEVEN DOOCY	(608) 261-6063
AARON BONK	(608) 261-0261

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	240
SPV.0090.850	FENCE CHAIN LINK POLYMER COATED 4-FT.	LF	220
SPV.0165.852	WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP R-53-34	SF	2289
	NON-BID ITEMS		
	PRE-FORMED JOINT FILLER	SIZE	3/4"
	EXPANDED POLYSTYRENE	SIZE	1"
	NON-BITUMINOUS JOINT SEALER	SIZE	1"
	CORK FILLER	SIZE	1"

GEOMETRY TABLE

WALL STATION	CTH S EB ℄ STA.	℄ OFFSET TO F.F. OF WALL	TOP OF WALL ELEV.	FINISHED GRADE ELEV.
0+00.00	42+10.34	134.39'LT	830.00	830.00
0+30.00	41+81.87	126.44'LT	833.02	830.00
0+70.00	41+45.30	98.74'LT.	841.72	830.00
1+15.00	41+05.87	92.17'LT.	845.00	830.00
1+35.00	40+81.53	93.84'LT.	845.00	830.00
1+55.00	40+69.63	109.25'LT.	841.12	830.00
1+90.00	40+70.23	139.14'LT.	834.00	830.00
2+20.00	40+72.26	164.43 LT'	830.00	830.00
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NOTE: STATIONS & OFFSET DISTANCES ARE TO BOTTOM, FRONT FACE OF WALL.

LIST OF DRAWINGS

1. MSE WALL CONCRETE PANEL
2. WALL DATA & DETAILS
3. WALL DETAILS
4. FENCING DETAILS
5. SUBSURFACE EXPLORATION

NO.	DATE	REVISION	BY

Plans Prepared By WISDOT
BUREAU OF STRUCTURES

ACCEPTED William C Ducker 12/17/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE R-53-34

CONCRETE PANEL M.S.E WALL ALONG NE RAMP

COUNTY	TOWN/~~CITY/VILLAGE~~
ROCK	TURTLE

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
SAD	AMB	SAD	AMB

MSE WALL CONCRETE PANEL

SHEET 1 OF 5

502

STATE PROJECT NUMBER

1003-10-71

I.D. 1003-10-01H

DATE: JULY 2014

SCALE = 15

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STATE PROJECT NUMBER

1003-10-71

SOIL PARAMETERS

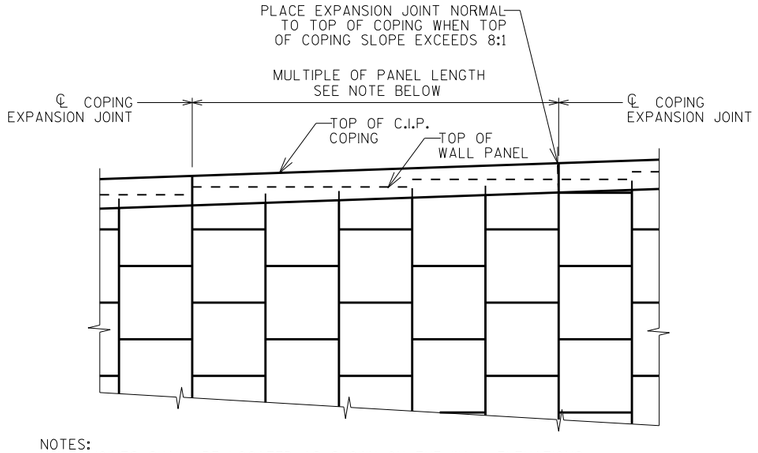
STRATUM LOCATIONS & SOIL DESCRIPTIONS	TOTAL UNIT WEIGHT (PCF)	COHESION (PSF)	FRICTION ANGLE (DEGREES)
GRANULAR BACKFILL, (WITHIN THE WALL IN THE REINFORCING ZONE)	120	0	30
FILL, RETAINED SOIL BEHIND REINFORCED AND IN EBS ZONE BELOW REINFORCEMENT ZONE.	120	0	30
BORING B-1014, (WALL STA. 0+50)			
VERY LOOSE TO LOOSE, BROWN SAND, SOME CLAY (ELEVATION 827.0 FT. TO 825.0 FT.) **(THIS LAYER TO BE RECOMPACTED PRIOR TO NEW FILL PLACEMENT)**	120	0	30
STIFF, BROWN LEAN CLAY, LITTLE SAND (ELEVATION 825.0 FT. TO 819.5 FT.)	115	1,250	0
DENSE TO VERY DENSE, BROWN SAND, SOME GRAVEL, TRACE SILT (ELEVATION 819.5 FT. TO 799.00 FT.)	130	0	36
BORING B-221, (WALL STA. 1+50)			
LOOSE, BROWN SAND, TRACE CLAY (ELEVATION 825.7 FT. TO 822.7 FT.) **(THIS LAYER TO BE RECOMPACTED PRIOR TO NEW FILL PLACEMENT)**	120	0	30
MEDIUM STIFF, BROWN LEAN CLAY, TRACE TO SOME SAND, TRACE GRAVEL (ELEVATION 822.7 FT. TO 815.2 FT.)	110	750	0
DENSE TO VERY DENSE, BROWN SAND, SOME GRAVEL, TRACE SILT (ELEVATION 815.2 FT. TO 798.2 FT.)	130	0	36

WALL EXTERNAL & OVERALL STABILITY EVALUATION

DIMENSIONS				
WALL HEIGHT (FEET)[1]	9.0	16.5	16.5	9.0
EXPOSED WALL HEIGHT (FEET)	7.5	15.0	15.0	7.5
WALL ANGLE BEHIND WALL (DEG)	12.5	18.4	17.9	9.5
MINIMUM LENGTH OF REINFORCEMENT (FEET)	8.0[3]	12.9	12.8	8.0[3]
LENGTH OF REIN./WALL HEIGHT	0.89	0.78	0.78	0.89
WALL STATION	0+50	1+15	1+35	1+70
BORING USED	B-1014	B-1014	B-221	B-221
CAPACITY TO DEMAND RATIO (CDR)[2]				
SLIDING ($CDR_{REQ'D} > 1.0$)	1.05	1.00	1.00	1.09
ECCENTRICITY ($CDR_{REQ'D} > 1.0$)	1.34	1.01	1.00	1.34
GLOBAL STABILITY ($CDR_{REQ'D} > 1.0$)[4]	1.4 (M) NA (S)[5]	1.2 (M) 1.3 (S)	1.2 (M) 1.1 (S)[5]	1.5 (M) 1.4 (S)[5]
BEARING RESISTANCE ($CDR_{REQ'D} > 1.0$)	1.94	1.42	1.41	2.04
FACTORED BEARING RESISTANCE (PSF)	5,400	7,600	7,500	5,400

NOTES:

1. THE WALL HEIGHT INCLUDES AN EMBEDMENT OF 1.5 FEET.
2. CDR VALUES ARE PRESENTED IN CHAPTER 14 OF THE BRIDGE MANUAL.
3. THE LENGTH OF REINFORCEMENT IS THE MINIMUM REQUIRED LENGTH.
4. M = BISHOP'S METHOD USING MSEW. S = BISHOP'S METHOD USING PCSTABL.
5. NA = NOT APPLICABLE, GLOBAL SLOPE STABILITY WAS EVALUATED WITH STABL AT THE CRITICAL WALL LOCATION IDENTIFIED BY MSEW.

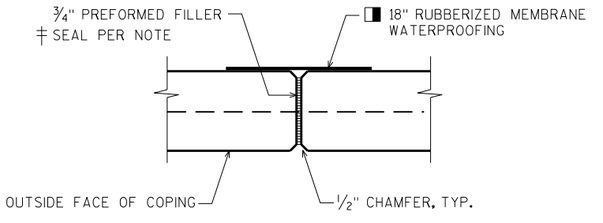


NOTES:
1) ALL JOINTS SHALL BE LOCATED AS SHOWN ON THE WALL ELEVATIONS AND MUST COINCIDE WITH PANEL JOINT ON FRONT FACE.

2) CHAIN LINK FENCE NOT SHOWN FOR CLARITY. SEE SHEET 4 FOR DETAILS

C.I.P. CONCRETE COPING PARTIAL ELEVATION

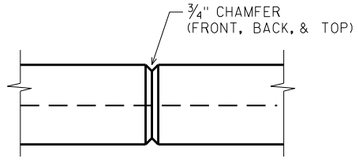
‡ SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONC.)



COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.
MAX. SPACING OF JOINT = 50'

◨ MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO 6" BELOW TOP OF PANELS.



COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT.
MAX. SPACING OF JOINT = 12'

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-53-34

DRAWN BY SAD | PLANS CK'D. ABS

WALL DATA & DETAILS

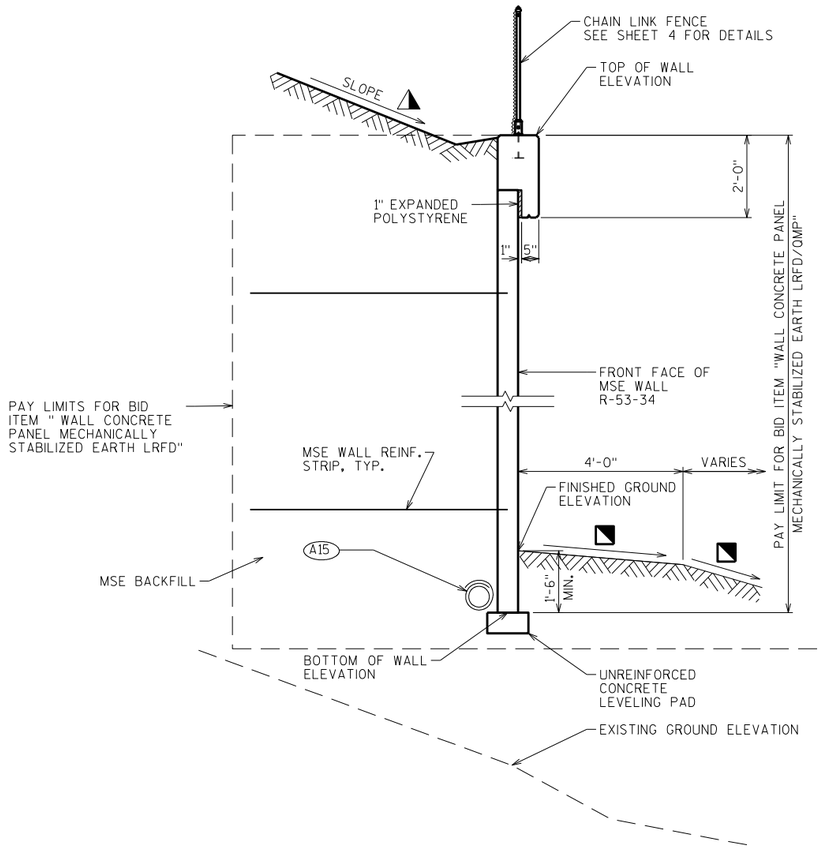
SHEET 2

503

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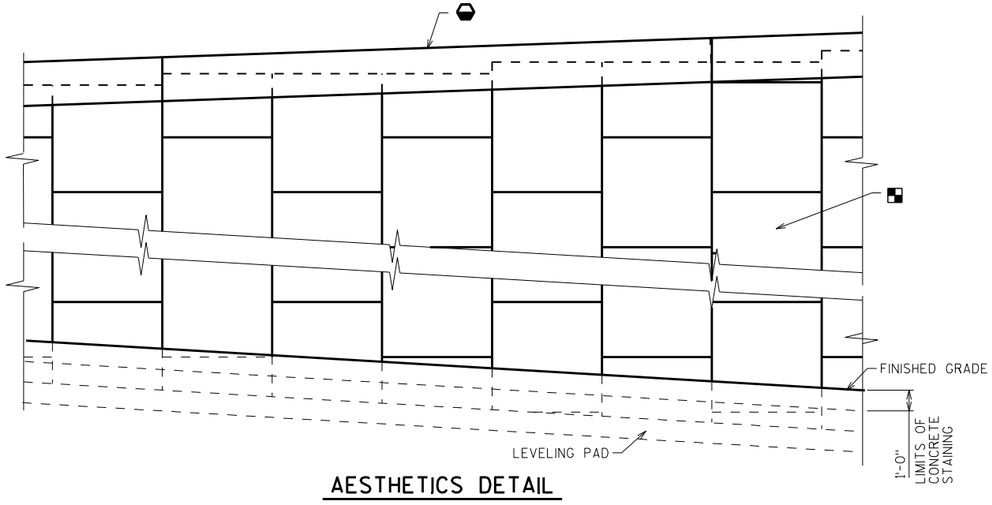
STATE PROJECT NUMBER

1003-10-71

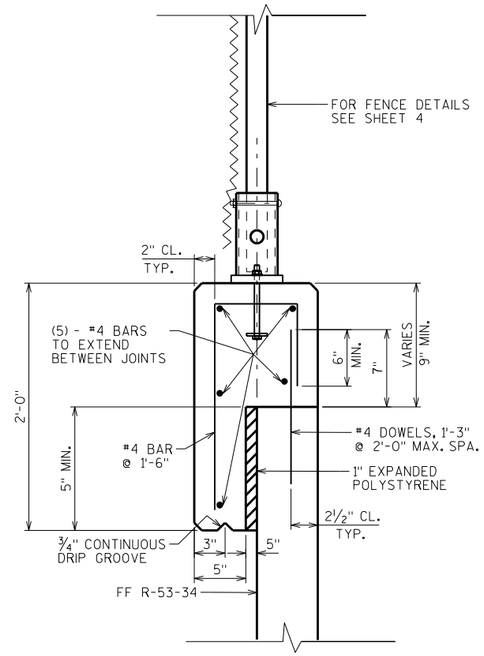


TYPICAL MSE WALL SECTION

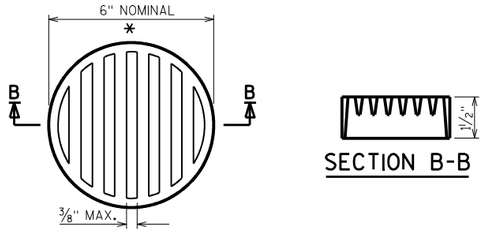
LOOKING WEST



AESTHETICS DETAIL



SECTION THRU COPING



SECTION B-B

RODENT SCREEN DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SCREEN SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SCREEN TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH SHEET METAL SCREWS.

5'-0" X 5'-0" MSE WALL PANEL (TYP.)

2'-0" PLAIN CONCRETE COPING

A15 PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

SLOPE BEHIND MSE WALL VARIES. SEE ROADWAY PLANS FOR MORE INFORMATION.

SLOPE IN FRONT OF MSE WALL VARIES. SEE ROADWAY PLANS FOR MORE INFORMATION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-53-34

DRAWN BY SAD | PLANS CK'D. AMB

WALL DETAILS | SHEET 3 | 504

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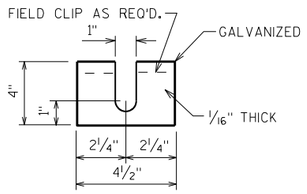
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STATE PROJECT NUMBER

1003-10-71

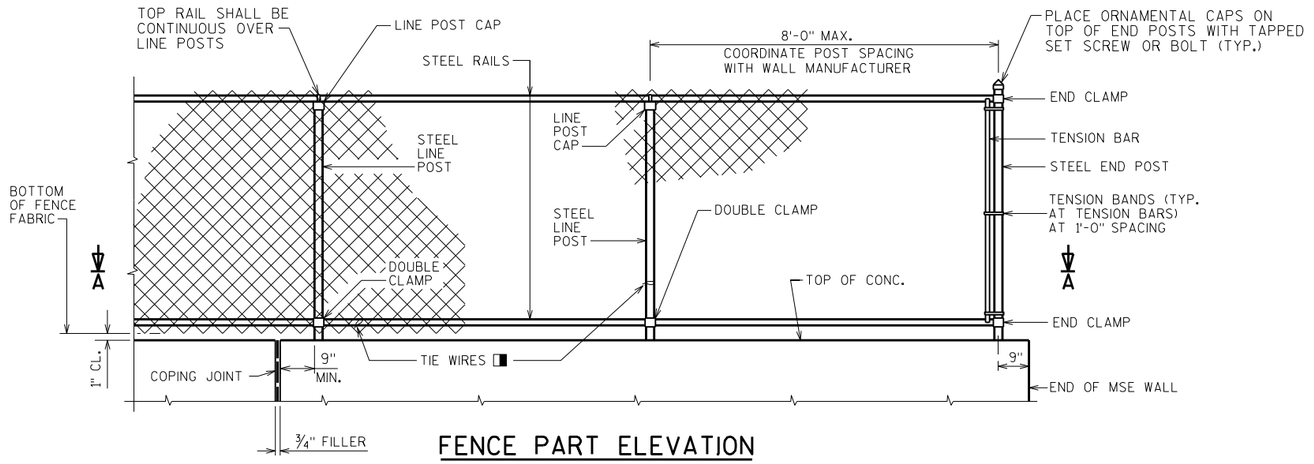
FENCE MEMBER SIZE & WEIGHT

STEEL FENCE MEMBER	OUTSIDE DIAMETER (INCHES)	WEIGHT (LB/FT)
RAILS	1.660	2.27
END POST	2.875	5.80
OVERHANG POST	2.875	5.80
LINE POST	2.375	3.65
POST SLEEVE	4.000	9.12



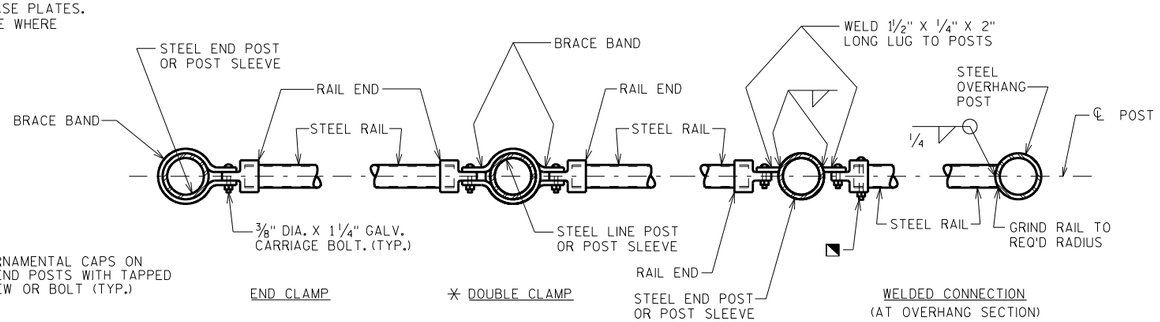
POST SHIM DETAILS

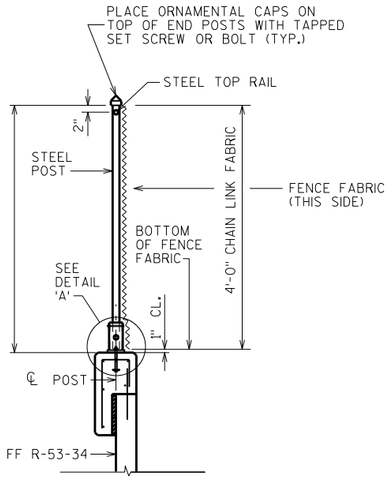
SHIMS REQUIRED ONLY WHEN END POSTS AND LINE POSTS ARE WELDED TO BASE PLATES. PROVIDE 4 SHIMS PER POST. USE WHERE REQUIRED FOR ALIGNMENT.



FENCE PART ELEVATION

VIEWING FABRIC SIDE

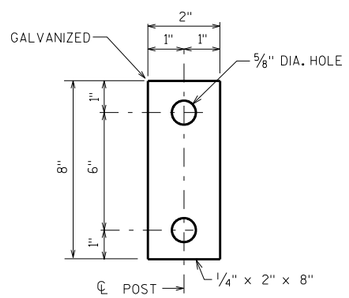




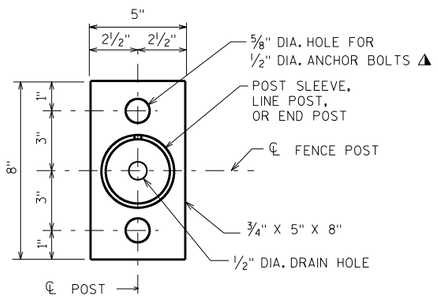
SECTION THRU FENCE

SECTION A-A

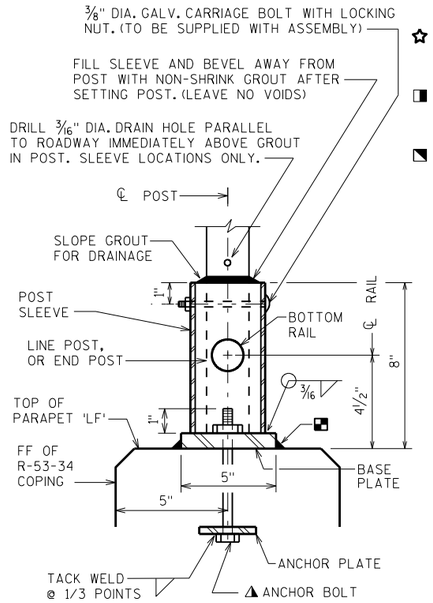
NOTE: PLACE ALL BOLT HEADS ON SIDE OF FENCE ADJACENT TO PEDESTRIANS



ANCHOR PLATE



BASE PLATE



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.

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 STRUCTURE SHALL BE FED. COLOR NO. 30140 IN ACCORDANCE WITH ASTM F934.

THE BID ITEM SHALL BE "FENCE CHAIN LINK POLYMER-COATED 4- 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 C/L 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.

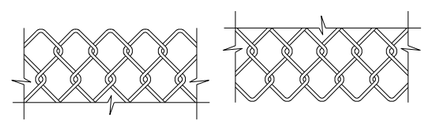
▲ 1/2" DIA. X 6 7/8" LONG GALVANIZED HEX BOLT WITH NUT & WASHER. TYPE "S", 1/2" DIA. CONCRETE MASONRY ANCHORS MAY BE SUBSTITUTED FOR 1/2" DIA. BOLTS. ANCHOR PLATE NOT REQUIRED WHEN TYPE "S" ANCHORS ARE USED. SEE ☆

☆ MASONRY ANCHOR TYPE S 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 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 R-53-34

DRAWN BY SAD | PLANS CK'D. AMB

FENCING DETAILS

SHEET 4

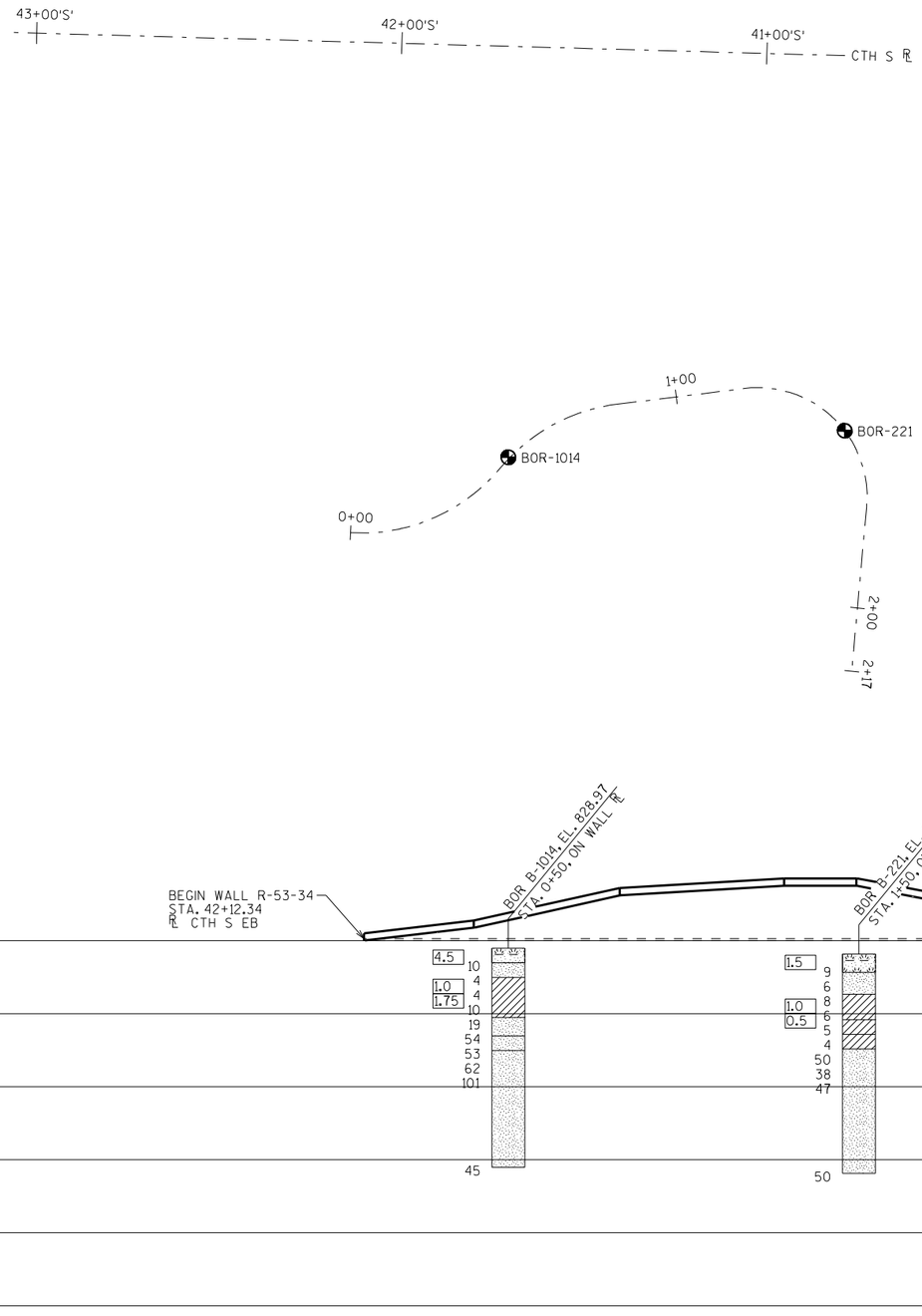
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railchan
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ILLINOIS STATE LINE - MADISON



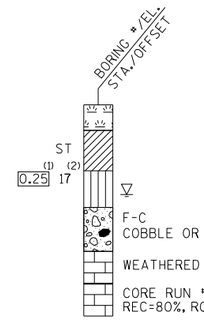
STATE PROJECT NUMBER

1003-10-01

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(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 R-53-34

DRAWN BY PR | PLANS CK'D. AMB

SUBSURFACE EXPLORATION

SHEET 5

506

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SCALE =

NOTES:
1-CUT: CUT INCLUDES SLAVAGED/UNUSABLE PAVEMENT MATERIAL
2-SALVAGED/UNUSABLE PAVEMENT MATERIAL: IS NOT SHOWN IN CROSS SECTIONS
3-FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXCAVATION VOLUME
4-MASS ORDINATE: [(CUT)-(FILL*FILLFACTOR)]

NORTHWEST BACKAGE ROAD 'SBN' - STAGE 1 CONSTRUCTION STA (101+19 - 103+00)

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		
		Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	Mass Ordinate
					Note 1	Note 2	Note 3	Note 1		Note 4
101+19	0.00	174.57	0.00	0.00	0	0	0	0	0	0
101+50	31.00	132.19	0.00	0.00	176	0	0	176	0	176
102+00	50.00	54.69	0.00	0.00	173	0	0	349	0	349
102+50	50.00	24.47	0.00	4.71	73	0	4	422	5	417
103+00	50.00	0.00	0.00	23.38	23	0	26	445	38	407
					445	0	30			

EAST BACKAGE ROAD'SBE' - STAGE 1 CONSTRUCTION STA (800+23-801+61.08)

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		
		Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	Mass Ordinate
					Note 1	Note 2	Note 3	Note 1		Note 4
800+23.03	0	0.00	0.00	0.00	0	0	0	0	0	0
800+50	26.97	0.00	0.00	0.00	0	0	0	0	0	0
801+00	50	0.00	0.00	0.00	0	0	0	0	0	0
801+50	50	0.00	0.00	0.00	0	0	0	0	0	0
802+00	50	1.72	0.00	79.73	2	0	74	2	92	-91
802+50	50	0.86	0.00	71.51	2	0	140	4	267	-263
803+00	50	3.70	0.00	68.49	4	0	130	8	429	-421
803+50	50	4.65	0.00	62.19	8	0	121	16	581	-565
804+00	50	10.35	0.00	40.63	14	0	95	30	700	-670
804+50	50	13.11	0.00	44.01	22	0	78	52	798	-746
805+00	50	6.08	0.00	39.72	18	0	78	69	894	-825
805+50	50	11.66	0.00	27.04	16	0	62	86	972	-886
806+00	50	15.30	0.00	11.61	25	0	36	111	1,016	-906
806+50	50	23.77	0.00	6.56	36	0	17	147	1,038	-891
807+00	50	20.39	0.00	8.22	41	0	14	188	1,055	-867
807+50	50	19.35	0.00	12.47	37	0	19	225	1,079	-854
807+93.76	43.76	2.67	0.00	6.73	18	0	16	242	1,098	-856
					242	0	878			

DRIVEWAY 'LC' - STAGE 1 CONSTRUCTION STA (400+26 - 404+31.05)

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		
		Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Expanded Fill 1.25	Mass Ordinate
					Note 1	Note 2	Note 3	Note 1		Note 4
400+26	0	57.44	0.00	0.00	0	0	0	0	0	0
400+50	24	35.89	0.00	0.29	41	0	0	0	0	41
401+00	50	39.32	0.00	0.53	70	0	1	0	1	110
401+50	50	35.34	0.00	0.00	69	0	0	0	2	179
402+00	50	25.62	0.00	0.00	56	0	0	0	2	235
402+50	50	32.68	0.00	0.00	54	0	0	0	2	289
403+00	50	53.95	0.00	2.28	80	0	2	0	4	367
403+50	50	50.50	0.00	5.84	97	0	8	0	14	454
403+90	40	3.08	0.00	19.03	40	0	18	0	37	471
404+31.05	41.05	0.00	0.00	0.00	2	0	14	0	55	455
					510	0	44			

SOUTHWEST BACKAGE ROAD 'SBS' - STAGE 1 CONSTRUCTION STA (200+99.31 - 207+23.43)

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		
		Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	Mass Ordinate
					Note 1	Note 2	Note 3	Note 1		Note 4
200+99.31	0	503.06	0.00	0.00	0	0	0	0	0	0
201+00	0.69	519.14	0.00	0.00	13	0	0	13	0	13
201+50	50	456.71	0.00	0.36	904	0	0	917	0	916
202+00	50	409.43	0.00	0.07	802	0	0	1,719	1	1,718
202+50	50	375.57	0.00	0.00	727	0	0	2,445	1	2,444
203+00	50	350.74	0.00	0.00	673	0	0	3,118	1	3,117
203+50	50	311.39	0.00	0.00	613	0	0	3,731	1	3,730
204+00	50	256.44	0.00	0.00	526	0	0	4,257	1	4,256
204+50	50	200.67	0.00	0.00	423	0	0	4,680	1	4,679
205+00	50	149.06	0.00	0.00	324	0	0	5,004	1	5,003
205+50	50	87.63	0.00	0.00	219	0	0	5,223	1	5,222
206+00	50	38.00	0.00	2.47	116	0	2	5,339	4	5,336
206+50	50	20.93	0.00	24.32	55	0	25	5,394	35	5,359
207+00	50	11.89	0.00	47.43	30	0	66	5,424	118	5,306
207+23.43	23.43	8.92	0.00	60.23	9	0	47	5,433	176	5,257
					5,433	0	141			

'SBE' & 'SBS' INTERSECTION - STAGE 1 CONSTRUCTION STA (800+23-801+61.08)

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		
		Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	Mass Ordinate
					Note 1	Note 2	Note 3	Note 1		Note 4
800+23.03	0	0.00	0.00	60.59	0	0	0	0	0	0
800+50	26.97	0.00	0.00	116.46	0	0	88	0	111	-111
800+80	30	0.00	0.00	207.73	0	0	180	0	336	-336
801+00	20	0.00	0.00	126.68	0	0	124	0	491	-491
801+50	50	1.17	0.00	77.19	1	0	189	1	726	-725
801+61.08	11.08	0.44	0.00	62.65	0	0	29	1	762	-761
					1	0	610			

SOUTH FRONTRAGE ROAD 'SFS' - STAGE 1 CONSTRUCTION STA (600+38 - 601+95.32)

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		
		Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	Mass Ordinate
					Note 1	Note 2	Note 3	Note 1		Note 4
600+38	0	0.50	0.00	194.96	0	0	0	0	0	0
600+50	12	0.30	0.00	502.50	0	0	155	0	194	-194
601+00	50	0.00	0.00	1076.09	0	0	1,462	0	2,021	-2,020
601+50	50	0.00	0.00	1668.47	0	0	2,541	0	5,197	-5,197
601+95.32	45	0.00	0.00	1911.19	0	0	3,004	0	8,953	-8,952
					0	0	7,162			

NOTES:
1-CUT: CUT INCLUDES SLAVAGED/UNUSABLE PAVEMENT MATERIAL
2-SALVAGED/UNUSABLE PAVEMENT MATERIAL: IS NOT SHOWN IN CROSS SECTIONS
3-FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXCAVATION VOLUME
4-MASS ORDINATE: [(CUT)-(FILL*FILLFACTOR)]

RAMP 'ZA' - STAGE 2 CONSTRUCTION STA (354+25 - 360+00)

STATION	Distance	AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Expanded Fill 1.25	Mass Ordinate Note 4
354+25	0	0.61	0.00	964.51	0	0	0	0	0	0
354+50	25	80.73	0.00	793.64	38	0	814	38	1,017	-980
355+00	50	152.56	0.00	536.41	216	0	1,232	254	2,557	-2,303
355+50	50	161.52	0.00	403.57	291	0	870	544	3,645	-3,100
356+00	50	174.58	0.00	298.04	311	0	650	856	4,457	-3,601
356+50	50	164.23	0.00	237.13	314	0	496	1,169	5,076	-3,907
357+00	50	77.74	0.00	189.47	224	0	395	1,393	5,570	-4,177
357+50	50	85.37	0.00	195.91	151	0	357	1,544	6,016	-4,472
358+00	50	45.29	0.00	238.66	121	0	402	1,665	6,519	-4,854
358+50	50	18.39	0.00	291.31	59	0	491	1,724	7,132	-5,408
359+00	50	5.39	0.00	329.47	22	0	575	1,746	7,851	-6,104
359+50	50	2.79	0.00	372.81	8	0	650	1,754	8,664	-6,910
360+00	50	18.13	0.00	394.72	19	0	711	1,773	9,552	-7,779
360+00	0	18.13	0.00	394.72	0	0	0	1,773	9,552	-7,779
					1,773	0	7,642			

RAMP 'ZC' - STAGE 2 CONSTRUCTION STA (343+00 - 347+93.97)

STATION	Distance	AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Expanded Fill 1.25	Mass Ordinate Note 4
343+00	0	6.37	0.00	136.82	0	0	0	0	0	0
343+50	50	5.32	0.00	202.11	11	0	314	11	392	-381
344+00	50	5.23	0.00	244.97	10	0	414	21	910	-889
344+50	50	4.80	0.00	334.13	9	0	536	30	1,580	-1,550
345+00	50	1.92	0.00	415.11	6	0	694	36	2,447	-2,411
345+50	50	0.25	0.00	507.24	2	0	854	38	3,515	-3,477
346+00	50	0.00	0.00	728.24	0	0	1,144	38	4,945	-4,906
346+50	50	0.00	0.00	962.60	0	0	1,566	38	6,902	-6,863
347+00	50	0.00	0.00	1153.57	0	0	1,959	38	9,351	-9,313
347+50	50	0.00	0.00	526.79	0	0	1,556	38	11,296	-11,257
347+93.97	43.97	0.00	0.00	401.51	0	0	756	38	12,241	-12,202
					38	0	9,792			

RAMP 'ZDT' - STAGE 2 CONSTRUCTION STA (355+46 - 357+50)

STATION	Distance	AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Expanded Fill 1.25	Mass Ordinate Note 4
355+46	0	212.63	0.00	17.70	0	0	0	0	0	0
355+50	4	215.68	0.00	18.50	32	0	3	32	3	28
356+00	50	269.96	0.00	30.01	450	0	45	481	59	422
356+45.54	45.54	347.68	0.00	40.00	521	0	59	1,002	133	869
356+50	4.46	353.35	0.00	41.03	58	0	7	1,060	142	918
356+79.68	29.68	406.18	0.00	50.81	417	0	50	1,478	205	1,273
357+00	20.32	433.06	0.00	61.02	316	0	42	1,793	257	1,536
357+22.34	22.34	409.26	0.00	74.25	349	0	56	2,142	327	1,815
357+50	27.66	481.05	0.00	87.51	456	0	83	2,598	431	2,167
					2,598	0	345			

CTH S & 'SBS' INTERSECTION - STAGE 2 CONSTRUCTION STA (200+36 - 201+00)

STATION	Distance	AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Expanded Fill 1.25	Mass Ordinate Note 4
200+36	0	89.10	0.00	0.00	0	0	0	0	0	0
200+50	14	57.12	0.00	56.19	38	0	15	38	18	20
200+75	25	535.54	0.00	0.00	274	0	26	312	51	262
201+00	25	0.00	0.00	0.00	248	0	0	560	51	509
					560	0	41			

RAMP 'ZB' - STAGE 2 CONSTRUCTION STA (339+00 - 352+89.67)

STATION	Distance	AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Expanded Fill 1.25	Mass Ordinate Note 4
339+00	0	90.93	0.00	3.63	0	0	0	0	0	0
339+50	50	134.73	0.00	5.75	209	0	9	209	11	198
340+00	50	119.36	0.00	4.88	235	0	10	444	23	421
340+50	50	104.37	0.00	2.21	207	0	7	651	31	620
341+00	50	100.58	0.00	1.48	190	0	3	841	36	805
341+50	50	114.45	0.00	3.44	199	0	5	1,040	41	999
342+00	50	117.10	0.00	0.70	214	0	4	1,255	46	1,208
342+50	50	120.42	0.00	0.43	220	0	1	1,475	47	1,427
343+00	50	97.27	0.00	2.39	202	0	3	1,676	51	1,625
343+50	50	60.77	0.00	15.42	146	0	16	1,822	71	1,751
344+00	50	29.01	0.00	41.49	83	0	53	1,906	137	1,768
344+50	50	4.55	0.00	150.81	31	0	178	1,937	360	1,577
345+00	50	0.87	0.00	248.10	5	0	369	1,942	821	1,120
345+50	50	3.02	0.00	331.88	4	0	537	1,945	1,493	453
346+00	50	0.00	0.00	419.30	3	0	696	1,948	2,362	-414
346+50	50	0.00	0.00	456.34	0	0	811	1,948	3,376	-1,428
347+00	50	0.00	0.00	514.50	0	0	899	1,948	4,499	-2,551
347+50	50	0.00	0.00	558.59	0	0	994	1,948	5,741	-3,793
348+00	50	0.00	0.00	572.53	0	0	1,047	1,948	7,050	-5,102
348+50	50	0.00	0.00	693.16	0	0	1,172	1,948	8,515	-6,567
349+00	50	0.00	0.00	948.87	0	0	1,520	1,948	10,416	-8,468
349+50	50	0.00	0.00	1161.51	0	0	1,954	1,948	12,858	-10,910
350+00	50	0.00	0.00	1280.17	0	0	2,261	1,948	15,684	-13,736
350+50	50	0.00	0.00	1485.07	0	0	2,560	1,948	18,885	-16,937
351+00	50	0.00	0.00	1671.61	0	0	2,923	1,948	22,539	-20,590
351+50	50	0.00	0.00	2135.95	0	0	3,526	1,948	26,945	-24,997
352+00	50	0.00	0.00	2468.25	0	0	4,263	1,948	32,274	-30,326
352+50	50	0.00	0.00	3153.89	0	0	5,206	1,948	38,781	-36,833
352+89.67	39.67	0.00	0.00	776.10	0	0	2,887	1,948	42,391	-40,443
					1,948	0	33,913			

RAMP 'ZCT' - STAGE 2 CONSTRUCTION STA (341+00 - 343+00)

STATION	Distance	AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Expanded Fill 1.25	Mass Ordinate Note 4
341+00	0	49.85	0.00	53.12	0	0	0	0	0	0
341+32.79	32.79	23.08	0.00	66.21	44	0	72	44	91	-46
341+50	17.21	16.90	0.00	71.77	13	0	44	57	146	-89
341+83.8	33.8	9.82	0.00	90.60	17	0	102	74	273	-199
342+00	16.2	8.38	0.00	102.89	5	0	58	79	345	-266
342+50	50	6.54	0.00	136.19	14	0	221	93	622	-529
343+00	50	0.00	0.00	0.00	6	0	126	99	780	-680
343+00	0	0.00	0.00	0.00	0	0	0	99	780	-680
					99	0	624			

NOTES:
1-CUT: CUT INCLUDES SLAVAGED/UNUSABLE PAVEMENT MATERIAL
2-SALVAGED/UNUSABLE PAVEMENT MATERIAL: IS NOT SHOWN IN CROSS SECTIONS
3-FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXCAVATION VOLUME
4-MASS ORDINATE: [(CUT)-(FILL*FILLFACTOR)]

CTH S - STAGE 2 CONSTRUCTION STA (9+00 - 63+75)

STATION	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 4
09+00	0	88.74	0.00	2.29	0	0	0	0	0	0
09+50	50	92.85	5.99	2.05	168	11	4	168	5	152
10+00	50	76.73	5.99	1.89	157	11	4	325	10	293
10+50	50	98.90	5.99	1.63	163	11	3	488	14	441
11+00	50	99.04	5.99	0.99	183	11	2	671	17	610
11+50	50	96.28	5.99	1.64	181	11	2	852	20	777
12+00	50	105.34	5.99	1.63	187	11	3	1,039	24	949
12+50	50	109.61	5.99	2.20	199	11	4	1,238	28	1,132
13+00	50	123.07	5.99	0.54	215	11	3	1,453	31	1,333
13+50	50	121.14	5.99	3.61	226	11	4	1,679	36	1,544
14+00	50	139.88	5.99	6.97	242	11	10	1,921	48	1,762
14+50	50	156.99	5.99	8.36	275	11	14	2,196	66	2,008
15+00	50	157.24	5.99	14.50	291	11	21	2,487	92	2,261
15+06.33	6.33	166.76	5.99	12.97	38	1	3	2,525	96	2,294
15+50	43.67	171.98	5.99	11.74	274	10	20	2,799	121	2,533
16+00	50	164.68	5.99	13.27	312	11	23	3,110	150	2,805
16+50	50	168.81	5.99	11.09	309	11	23	3,419	179	3,074
17+00	50	179.78	5.99	8.70	323	11	18	3,742	201	3,363
17+50	50	205.94	5.99	9.46	357	11	17	4,099	222	3,688
18+00	50	200.51	5.99	12.81	376	11	21	4,475	248	4,028
18+50	50	68.59	5.99	5.96	249	11	17	4,725	270	4,244
19+00	50	74.35	5.99	0.00	132	11	6	4,857	277	4,358
19+19.76	19.76	70.52	0.00	0.00	53	0	0	4,910	277	4,411
19+50	30.24	66.51	0.00	2.60	77	0	1	4,987	279	4,486
20+00	50	75.24	0.00	19.58	131	0	21	5,118	304	4,592
20+50	50	65.48	0.00	62.93	130	0	76	5,248	400	4,627
21+00	50	62.47	0.00	58.09	118	0	112	5,367	540	4,605
21+50	50	69.48	0.00	21.17	122	0	73	5,489	632	4,636
22+00	50	68.32	0.00	25.42	128	0	43	5,616	686	4,709
22+50	50	51.50	0.00	57.84	111	0	77	5,727	782	4,724
23+00	50	47.20	0.00	66.14	91	0	115	5,819	925	4,672
23+50	50	42.65	0.00	61.01	83	0	118	5,902	1,073	4,608
24+00	50	37.20	0.00	63.55	74	0	115	5,976	1,217	4,538
24+50	50	38.64	0.00	27.52	70	0	84	6,046	1,322	4,502
24+74.57	24.57	28.14	0.00	26.57	30	0	25	6,077	1,353	4,502
25+00	25.43	7.76	0.00	56.62	17	0	39	6,093	1,402	4,470
25+50	50	1.79	0.00	81.47	9	0	128	6,102	1,562	4,319
26+00	50	2.53	0.00	79.16	4	0	149	6,106	1,748	4,137
26+50	50	0.00	0.00	159.26	2	0	221	6,109	2,024	3,863
27+00	50	1.61	0.00	214.31	1	0	346	6,110	2,456	3,433
27+50	50	2.56	0.00	330.42	4	0	504	6,114	3,086	2,806
28+00	50	7.53	0.00	434.78	9	0	709	6,123	3,972	1,930
28+50	50	16.34	0.00	540.42	22	0	903	6,145	5,101	823
29+00	50	8.20	0.00	690.43	23	0	1,140	6,168	6,525	-579
29+50	50	0.74	0.00	857.78	8	0	1,434	6,176	8,317	-2,362
30+00	50	0.00	0.00	839.91	1	0	1,572	6,177	10,282	-4,327
30+29.38	29.38	0.01	0.00	991.48	0	0	996	6,177	11,528	-5,572
30+50	20.62	0.28	0.00	1131.36	0	0	811	6,177	12,541	-6,585
31+00	50	0.00	0.00	0.00	0	0	1,048	6,178	13,850	-7,895
31+50	50	0.00	0.00	0.00	0	0	0	6,178	13,850	-7,895
32+00	50	13.08	5.99	1311.75	12	11	1,215	6,190	15,369	-9,412
32+50	50	2.88	5.99	1988.46	15	11	3,056	6,204	19,188	-13,228
33+00	50	0.53	5.99	2440.28	3	11	4,101	6,208	24,314	-18,362
33+50	50	0.00	5.99	1092.48	0	11	3,271	6,208	28,403	-22,461
34+00	50	0.00	0.00	0.00	0	0	1,012	6,208	29,667	-23,725
34+50	50	0.00	0.00	0.00	0	0	0	6,208	29,667	-23,725
35+00	50	0.00	0.00	0.00	0	0	0	6,208	29,667	-23,725
35+50	50	0.00	5.99	53.74	0	11	50	6,208	29,730	-23,799
36+00	50	0.08	5.99	1587.52	0	11	1,520	6,208	31,629	-25,709
36+50	50	0.39	5.99	3382.54	0	11	4,602	6,209	37,382	-31,472
37+00	50	0.00	5.99	3144.44	0	11	6,044	6,209	44,936	-39,037
37+50	50	0.00	5.99	2941.55	0	11	5,635	6,209	51,980	-46,093
38+00	50	33.72	5.99	1564.06	31	11	4,172	6,240	57,195	-51,287
38+50	50	0.00	0.00	0.00	31	0	1,448	6,271	59,005	-53,066

CTH S - STAGE 2 CONSTRUCTION STA (9+00 - 63+75) CONTINUED

STATION	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 4
39+00	50	0.00	0.00	0.00	0	0	0	6,271	59,005	-53,066
39+50	50	0.00	0.00	0.00	0	0	0	6,271	59,005	-53,066
40+00	50	0.09	0.00	4014.32	0	0	3,717	6,271	63,651	-57,712
40+50	50	0.00	0.00	3622.41	0	0	7,071	6,272	72,490	-66,551
41+00	50	0.02	5.99	3228.57	0	11	6,343	6,272	80,419	-74,492
41+50	50	0.00	5.99	3249.18	0	11	5,998	6,272	87,917	-82,000
42+00	50	0.00	5.99	3379.70	0	11	6,138	6,272	95,589	-89,683
42+50	50	0.05	5.99	3242.60	0	11	6,132	6,272	103,254	-97,359
42+78.18	28.18	0.00	5.99	3100.13	0	6	3,310	6,272	107,391	-101,502
43+00	21.82	0.00	5.99	2927.30	0	5	2,436	6,272	110,436	-104,552
43+50	50	0.00	5.99	2685.37	0	11	5,197	6,272	116,932	-111,059
43+50.18	0.18	0.00	5.99	2707.75	0	0	18	6,272	116,954	-111,081
44+00	49.82	1.20	5.99	2398.09	1	11	4,711	6,273	122,843	-116,980
44+22.17	22.17	2.16	5.99	2248.39	1	5	1,908	6,274	125,227	-119,368
44+34.18	12.01	2.07	5.99	2164.59	1	3	981	6,275	126,454	-120,597
44+50	15.82	1.16	5.99	2090.62	1	4	1,247	6,276	128,012	-122,157
44+76.18	26.18	2.03	5.99	1939.26	2	6	1,953	6,278	130,454	-124,604
45+00	23.82	0.73	5.99	1829.32	1	5	1,663	6,279	132,532	-126,686
45+50	50	0.00	5.99	1717.99	1	11	3,285	6,279	136,638	-130,802
46+00	50	0.00	5.99	1540.31	0	11	3,017	6,279	140,409	-134,584
46+50	50	0.02	5.99	1259.08	0	11	2,592	6,279	143,649	-137,835
47+00	50	0.00	5.99	1025.53	0	11	2,115	6,280	146,294	-140,491
47+50	50	0.00	5.99	844.52	0	11	1,732	6,280	148,458	-142,666
48+00	50	0.00	5.99	707.48	0	11	1,437	6,280	150,254	-144,474
48+50	50	0.53	5.99	594.33	0	11	1,205	6,280	151,761	-145,991
49+00	50	3.56	5.99	485.87	4	11	1,000	6,284	153,011	-147,248
49+50	50	6.16	5.99	424.11	9	11	843	6,293	154,064	-148,304
50+00	50	0.00	5.99	374.35	6	11	739	6,298	154,989	-149,233
50+13.65	13.65	0.00	5.99	370.92	0	3	188	6,298	155,224	-149,472
50+50	36.35	0.00	5.99	379.71	0	8	505	6,298	155,856	-150,111
51+00	50	0.00	5.99	451.30	0	11	769	6,298	156,817	-151,084
51+50	50	0.00	5.99	96.96	0	11	508	6,298	157,452	-151,730
52+00	50	0.00	5.99	65.76	0	11	151	6,298	157,640	-151,929
52+50	50	5.80	5.99	56.21	5	11	113	6,304	157,782	-152,076
53+00	50	9.12	5.99	57.74	14	11	106	6,318	157,913	-152,205
53+50	50	7.89	5.99	23.95	16	11	76	6,333	158,008	-152,295
54+00	50	12.00	5.99	35.93	18	11	55	6,352	158,077	-152,357
54+50	50	26.72	5.99	19.23	36	11	51	6,388	158,141	-152,396
55+00	50	48.71	5.99	7.43	70	11	25	6,458	158,172	-152,368
55+50	50	67.52	5.99	8.78	108	11	15	6,565	158,191	-152,291
55+51.12	1.12	67.86	5.99	7.18	3	0	0	6,568	158,191	-152,289
55+93.12	42	66.19	5.99	12.56	104	9	15	6,672	158,210	-152,213
56+00	6.88	66.69	5.99	3.90	17	2	2	6,689	158,213	-152,200
56+05.12	5.12	64.38	5.99	13.54	12	1	2	6,702	158,215	-152,191
56+50	44.88	60.48	5.99	4.33	104	10	15	6,805	158,234	-152,116
56+77.12	27.12	61.65	5.99	3.29	61	6	4	6,867	158,238	-152,065
57+00	22.88	67.39	5.99	2.86	55	5	3	6,921	158,242	-152,019
57+49.12	49.12	44.43	5.99	26.00	102	11	26	7,023	158,274	-151,961
57+50	0.88	44.38	5.99	26.25	1	0	1	7,025	158,276	-151,960
58+00	50	52.71	5.99	2.02	90	11	26	7,114	158,308	-151,914
58+50	50	25.49	5.99	32.66	72	11	32	7,187	158,348	-151,893
59+00	50	32.97	5.99	24.12	54	11	53	7,241	158,414	-151,916
59+50	50	70.17	5.99	14.29	96	11	36	7,336	158,459	-151,876
60+00	50	52.81	5.99	39.16	114	11	49	7,450	158,520	-151,835
60+50	50	57.92	5.99	44.86	103	11	78	7,553	158,618	-151,841
61+00	50	64.46	5.99	20.17	113	11	60	7,666	158,693	-151,814
61+00	0	64.84	5.99	13.35	0	0	0	7,666	158,693	-151,814
61+50	50	104.18	5.99	1.79	157	11	14	7,823	158,710	-151,686
62+00	50	82.50	5.99	0.84	173	11	2	7,996	158,713	-151,527
62+50	50	80.81	5.99	0.10	151	11	1	8,147	158,715	-151,388
63+00	50	93.55	5.99	0.03	161	11	0	8,308	158,715	-151,238
63+50	50	122.93	5.99	0.83	200	11	1	8,509	158,716	-151,050
63+75	25	94.10	5.99	0.00	100	6	0	8,609	158,716	-150,955
					8,609	848	126,973			

NOTES:
1-CUT: CUT INCLUDES SLAVAGED/UNUSABLE PAVEMENT MATERIAL
2-SALVAGED/UNUSABLE PAVEMENT MATERIAL: IS NOT SHOWN IN CROSS SECTIONS
3-FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXCAVATION VOLUME
4-MASS ORDINATE: [(CUT)-(FILL*FILLFACTOR)]

RAMP 'ZD' - STAGE 2 CONSTRUCTION STA (348+00 - 355+46)

STATION	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 4
348+00	0	30.70	0.00	986.01	0	0	0	0	0	0
348+50	50	10.10	0.00	1097.33	38	0	1,929	38	2,411	-2,373
349+00	50	7.84	0.00	1049.64	17	0	1,988	54	4,896	-4,842
349+50	50	8.50	0.00	945.30	15	0	1,847	70	7,205	-7,136
350+00	50	6.71	0.00	924.99	14	0	1,732	84	9,370	-9,286
350+50	50	7.07	0.00	822.12	13	0	1,618	96	11,392	-11,296
351+00	50	23.75	0.00	707.80	29	0	1,417	125	13,163	-13,038
351+50	50	27.44	0.00	556.49	47	0	1,171	172	14,626	-14,454
352+00	50	14.47	0.00	393.84	39	0	880	211	15,726	-15,515
352+50	50	72.51	0.00	240.18	81	0	587	292	16,460	-16,168
353+00	50	101.18	5.00	125.10	161	5	338	452	16,883	-16,435
353+50	50	111.63	5.00	54.74	197	9	167	650	17,091	-16,455
354+00	50	145.17	5.00	20.82	238	9	70	887	17,178	-16,314
354+50	50	178.50	5.00	4.61	300	9	24	1,187	17,208	-16,053
355+00	50	235.41	5.00	0.95	383	9	5	1,570	17,214	-15,685
355+46	46	0.00	5.00	0.00	201	9	1	1,771	17,215	-15,494
					1,771	50	13,772			

CTH S - STAGE 2A CONSTRUCTION STA (30+00 - 39+76.14)

STATION	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 4
30+00	0	28.87	0.00	0.00	0	0	0	0	0	0
30+29.38	29.38	30.40	5.00	97.36	32	3	53	32	66	-37
30+50	20.62	0.00	5.00	470.57	12	4	217	44	337	-300
31+00	50	68.95	6.00	95.25	64	10	524	108	992	-901
31+50	50	287.49	6.00	245.90	330	11	316	438	1,387	-977
32+00	50	234.75	5.00	24.10	484	10	250	921	1,700	-816
32+50	50	0.00	5.00	0.00	217	9	22	1,139	1,727	-636
33+00	50	0.00	5.00	0.00	0	9	0	1,139	1,727	-645
33+50	50	0.00	5.00	0.00	0	9	0	1,139	1,727	-655
34+00	50	0.00	5.00	0.00	0	9	0	1,139	1,727	-664
34+50	50	0.00	5.00	0.00	0	9	0	1,139	1,727	-673
35+00	50	0.00	5.00	0.00	0	9	0	1,139	1,727	-682
35+50	50	0.00	5.00	0.00	0	9	0	1,139	1,727	-692
36+00	50	0.00	5.00	0.00	0	9	0	1,139	1,727	-701
36+50	50	0.00	5.00	0.00	0	9	0	1,139	1,727	-710
37+00	50	0.00	5.00	0.00	0	9	0	1,139	1,727	-719
37+50	50	0.00	5.00	0.00	0	9	0	1,139	1,727	-729
38+00	50	234.75	5.00	86.36	217	9	80	1,356	1,827	-621
38+50	50	2.96	5.00	2077.63	220	9	2,004	1,576	4,332	-2,914
39+00	50	371.85	5.00	1579.66	347	9	3,386	1,923	8,565	-6,810
39+50	50	41.60	5.00	1226.92	383	9	2,599	2,306	11,813	-9,684
39+76.14	26.14	75.10	5.00	6.14	56	5	597	2,362	12,559	-10,379
					2,362	182	10,048			

RAMP 'ZBT' INTERSTATE TIE-IN - STAGE 2A CONSTRUCTION STA (331+99.28 - 339+00)

STATION	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 4
331+99.28	0	0.00	0.00	0.00	0	0	0	0	0	0
332+00	0.72	46.76	9.00	0.00	1	0	0	1	0	1
332+50	50	25.40	9.00	0.00	67	17	0	67	0	51
333+00	50	24.92	8.50	0.00	47	16	0	114	0	81
333+50	50	22.55	8.00	1.94	44	15	2	158	2	107
334+00	50	21.68	8.00	12.90	41	15	14	199	19	116
334+50	50	17.89	8.00	35.5	37	15	45	236	75	82
335+00	50	22.36	8.00	47.1	37	15	77	273	171	9
335+50	50	33.67	8.00	66.5	52	15	105	325	303	-85
336+00	50	34.96	8.00	71.8	64	15	128	388	463	-197
336+50	50	26.15	8.00	70.8	57	15	132	445	628	-320
337+00	50	26.66	8.00	68.7	49	15	131	494	792	-450
337+46.21	46.21	47.48	8.00	69.7	63	14	120	557	942	-551
337+50	3.79	31.01	8.00	70.0	6	1	10	563	954	-558
337+95.2	45.2	50.59	8.00	58.2	68	13	105	631	1,086	-635
338+00	4.8	56.02	8.00	54.4	9	1	10	640	1,098	-639
338+23.1	23.1	54.38	8.00	55.9	47	7	46	688	1,155	-655
338+50	26.9	57.84	8.00	58.73	56	8	55	744	1,224	-676
339+00	50	77.58	8.00	34.31	125	15	86	869	1,331	-673
339+00	0	0.00	7.00	32.82	0	0	0	869	1,331	-673
					869	211	1,065			

RAMP 'ZCT' INTERSTATE TIE-IN - STAGE 2A CONSTRUCTION STA (337+13.45 - 343+00)

STATION	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 4
337+13.45	0	4.23	0.00	4.52	0	0	0	0	0	0
337+50	36.55	9.22	4.00	2.63	9	3	5	9	6	0
338+00	50	9.23	4.00	5.04	17	7	7	26	15	1
338+50	50	5.61	4.00	8.82	14	7	13	40	31	-9
339+00	50	5.36	4.00	19.64	10	7	26	50	64	-39
339+50	50	10.09	4.00	34.05	14	7	50	64	126	-94
340+00	50	7.24	2.00	63.4	16	6	90	80	239	-196
340+50	50	32.87	2.00	85.3	37	4	138	118	411	-335
341+00	50	42.47	2.00	28.5	70	4	98	187	534	-392
341+50	50	76.15	2.00	0.00	110	4	19	297	557	-309
342+00	50	85.31	2.00	0.02	150	4	0	447	557	-163
342+50	50	68.90	2.00	0.25	143	4	0	589	558	-25
343+00	50	0.00	2.00	0.00	64	4	0	653	558	35
343+00	0	0.00	2.00	0.00	0	0	0	653	558	35
					653	60	446			

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PROJECT NO: 1003-10-71 | HWY: IH 39 | COUNTY: ROCK | EARTHWORK DATA | SHEET 510 E

NOTES:
1-CUT: CUT INCLUDES SLAVAGED/UNUSABLE PAVEMENT MATERIAL
2-SALVAGED/UNUSABLE PAVEMENT MATERIAL: IS NOT SHOWN IN CROSS SECTIONS
3-FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXCAVATION VOLUME
4-MASS ORDINATE: [(CUT)-(FILL*FILLFACTOR)]

RAMP 'ZA' - STAGE 2B CONSTRUCTION STA (352+71.79 - 360+00)

STATION	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 4
352+71.79	0	38.15	0.00	603.49	0	0	0	0	0	0
353+00	28.21	4.86	7.27	1236.45	22	8	961	22	1,201	-1,187
353+50	50	341.69	7.27	545.81	321	13	1,650	343	3,264	-2,942
354+00	50	289.06	7.27	678.66	584	13	1,134	927	4,681	-3,789
354+50	50	64.33	7.27	26.08	327	13	653	1,255	5,497	-4,291
355+00	50	56.65	7.27	16.58	112	13	40	1,367	5,547	-4,241
355+50	50	55.11	7.27	12.91	103	13	27	1,470	5,581	-4,185
356+00	50	67.75	7.27	9.53	114	13	21	1,584	5,607	-4,111
356+50	50	62.92	7.27	8.05	121	13	16	1,705	5,627	-4,024
357+00	50	61.14	7.27	6.73	115	13	14	1,820	5,644	-3,940
357+50	50	63.07	7.27	5.63	115	13	11	1,935	5,658	-3,852
358+00	50	57.97	7.27	18.94	112	13	23	2,047	5,687	-3,782
358+50	50	196.39	7.27	2.51	236	13	20	2,282	5,712	-3,585
359+00	50	289.03	7.27	2.00	449	13	4	2,732	5,717	-3,154
359+50	50	241.78	7.27	1.82	491	13	4	3,223	5,721	-2,681
360+00	50	201.67	7.27	1.67	411	13	3	3,634	5,725	-2,287
					3,634	196	4,580			

RAMP 'ZAT' INTERSTATE TIE-IN - STAGE 2B CONSTRUCTION STA (360+00 - 366+14.31)

STATION	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 4
360+00	0	292.87	0.00	10.08	0	0	0	0	0	0
360+50	50	221.20	3.00	359.75	476	3	342	476	428	45
361+00	50	116.24	3.00	389.29	312	6	694	788	1,295	-515
361+50	50	64.86	3.00	348.23	168	6	683	956	2,149	-1,206
362+00	50	15.60	3.00	333.59	75	6	631	1,031	2,938	-1,927
362+50	50	0.00	3.00	267.86	14	6	557	1,045	3,634	-2,614
363+00	50	1.31	3.00	153.74	1	6	390	1,046	4,122	-3,106
363+50	50	8.19	3.00	102.71	9	6	237	1,055	4,419	-3,400
364+00	50	36.91	3.00	54.46	42	6	146	1,097	4,601	-3,545
364+50	50	68.98	3.00	32.94	98	6	81	1,195	4,702	-3,554
365+00	50	62.91	3.50	27.28	122	6	56	1,317	4,771	-3,508
365+50	50	59.74	4.00	53.82	114	7	75	1,431	4,865	-3,495
366+00	50	46.51	4.00	85.21	98	7	129	1,529	5,026	-3,565
366+14.31	14.31	52.16	4.00	0.00	26	2	23	1,555	5,054	-3,569
					1,555	70	4,044			

RAMP 'ZD' - STAGE 2B CONSTRUCTION STA (348+00 - 355+23)

STATION	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 4
348+00	0	35.02	0.00	0.61	0	0	0	0	0	0
348+50	50	11.51	6.00	1.60	43	6	2	43	3	35
349+00	50	532.65	6.00	22.05	504	11	22	547	30	500
349+50	50	607.26	6.00	4.71	1,055	11	25	1,602	61	1,514
350+00	50	716.98	6.00	0.00	1,226	11	4	2,829	66	2,723
350+50	50	744.04	6.00	0.00	1,353	11	0	4,181	66	4,065
351+00	50	706.33	6.00	0.00	1,343	11	0	5,524	66	5,397
351+50	50	687.89	6.00	0.00	1,291	11	0	6,815	66	6,677
352+00	50	648.46	6.00	0.26	1,237	11	0	8,053	67	7,903
352+50	50	453.79	6.00	1.94	1,021	11	2	9,073	69	8,910
353+00	50	299.19	6.00	0.00	697	11	2	9,770	71	9,593
353+50	50	186.58	6.00	2.17	450	11	2	10,220	74	10,030
354+00	50	160.52	6.00	0.93	321	11	3	10,542	78	10,336
354+50	50	173.96	6.00	0.93	310	11	2	10,851	80	10,633
355+00	50	197.44	6.00	0.00	344	11	1	11,195	81	10,964
355+23	23	222.76	6.00	0.55	179	5	0	11,374	81	11,138
					11,374	155	65			

RAMP 'ZDT' INTERSTATE TIE-IN - STAGE 2B CONSTRUCTION STA (357+50 - 365+00)

STATION	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 4
357+50	0	228.69	0.00	0.99	0	0	0	0	0	0
358+00	50	760.08	5.00	107.14	916	5	100	916	125	786
358+50	50	575.02	5.00	110.02	1,236	9	201	2,152	376	1,761
359+00	50	462.57	5.00	102.36	961	9	197	3,112	622	2,467
359+50	50	366.54	5.00	82.81	768	9	171	3,880	837	3,011
360+00	50	296.79	5.00	67.46	614	9	139	4,494	1,011	3,442
360+50	50	264.66	5.00	49.71	520	9	108	5,014	1,146	3,817
361+00	50	194.77	5.00	37.69	425	9	81	5,440	1,247	4,132
361+50	50	18.47	5.00	61.24	197	9	92	5,637	1,362	4,206
362+00	50	33.85	5.00	86.08	48	9	136	5,686	1,532	4,074
362+50	50	28.64	6.00	70.34	58	10	145	5,743	1,713	3,941
363+00	50	27.36	6.00	37.77	52	11	100	5,795	1,839	3,857
363+50	50	26.26	6.00	22.90	50	11	56	5,845	1,909	3,825
364+00	50	18.50	6.00	15.98	41	11	36	5,886	1,954	3,810
364+50	50	21.33	6.00	30.03	37	11	43	5,923	2,007	3,783
365+00	50	0.00	6.00	0.00	20	11	28	5,943	2,042	3,757
365+00	0	0.00	6.00	0.00	0	0	0	5,943	2,042	3,757
					5,943	144	1,633			

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PROJECT NO: 1003-10-71 | HWY: IH 39 | COUNTY: ROCK | EARTHWORK DATA | SHEET 511 E

NOTES:
1-CUT: CUT INCLUDES SLAVAGED/UNUSABLE PAVEMENT MATERIAL
2-SALVAGED/UNUSABLE PAVEMENT MATERIAL: IS NOT SHOWN IN CROSS SECTIONS
3-FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXCAVATION VOLUME
4-MASS ORDINATE: [(CUT)-(FILL*FILLFACTOR)]

CTH S & SBN - STAGE 3 CONSTRUCTION STA (100+55.09 - 101+19.07)

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
		Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
					Note 1	Note 2	Note 3	Note 1		Note 4
100+55.09	0	0.00	0.00	0.00	0	0	0	0	0	0
100+75	19.91	89.59	0.00	22.65	33	0	8	33	10	23
101+00	25	187.51	0.00	0.14	128	0	11	161	24	138
101+19.07	19.07	72.63	0.00	7.29	92	0	3	253	27	226
					253	0	22			

RAMP 'ZC' - STAGE 2A CONSTRUCTION STA (343+00 - 347+93.97)

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
		Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
					Note 1	Note 2	Note 3	Note 1		Note 4
343+00	0	86.03	0.00	0.56	0	0	0	0	0	0
343+50	50	76.91	0.00	1.44	151	0	2	151	2	149
344+00	50	68.59	0.00	2.94	135	0	4	286	7	278
344+50	50	60.96	0.00	5.12	120	0	7	406	17	389
345+00	50	62.19	0.00	7.76	114	0	12	520	32	488
345+50	50	58.81	0.00	10.48	112	0	17	632	53	579
346+00	50	64.01	0.00	11.77	114	0	21	745	78	667
346+50	50	70.58	0.00	12.95	125	0	23	870	107	763
347+00	50	78.78	0.00	12.98	138	0	24	1,008	137	871
347+50	50	14.85	0.00	157.41	87	0	158	1,095	334	761
347+93.97	43.97	22.69	0.00	86.48	31	0	199	1,126	583	543
					1,126	0	466			

NORTH FRONTAGE ROAD 'SFN' - STAGE 3 CONSTRUCTION STA (300+42.1 - 313+78.8)

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
		Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
					Note 1	Note 2	Note 3	Note 1		Note 4
300+42.1	0	435.80	0.00	1.07	0	0	0	0	0	0
300+50	7.9	421.30	13.57	33.95	125	4	5	125	6	115
301+00	50	403.20	13.57	7.89	763	25	39	889	55	805
301+50	50	383.30	13.57	0.00	728	25	7	1,617	64	1,499
302+00	50	316.71	13.57	12.83	648	25	12	2,265	79	2,107
302+50	50	298.06	13.57	22.23	569	25	32	2,834	119	2,611
303+00	50	335.47	13.57	0.00	587	25	21	3,421	145	3,146
303+50	50	325.16	13.57	0.00	612	25	0	4,033	145	3,733
304+00	50	273.31	13.57	24.91	554	25	23	4,587	174	4,233
304+50	50	239.23	13.57	28.74	475	25	50	5,061	236	4,620
305+00	50	222.53	13.57	32.17	428	25	56	5,489	307	4,952
305+50	50	188.50	13.57	38.26	381	25	65	5,870	388	5,226
306+00	50	171.72	13.57	39.75	334	25	72	6,203	478	5,444
306+50	50	129.68	13.57	48.95	279	25	82	6,482	581	5,596
307+00	50	96.37	13.57	52.27	209	25	94	6,692	698	5,663
307+50	50	54.54	13.57	48.38	140	25	93	6,831	815	5,661
308+00	50	37.25	13.57	61.24	85	25	102	6,916	942	5,594
308+50	50	30.94	13.57	61.22	63	25	113	6,979	1,083	5,490
309+00	50	14.79	13.57	63.11	42	25	115	7,022	1,227	5,363
309+50	50	1.71	13.57	87.03	15	25	139	7,037	1,401	5,180
310+00	50	32.38	13.57	458.30	32	25	505	7,069	2,032	4,555
310+50	50	36.92	13.57	808.90	64	25	1,173	7,133	3,499	3,127
311+00	50	19.73	13.57	1044.98	52	25	1,717	7,185	5,644	1,009
311+50	50	28.47	13.57	1336.60	45	25	2,205	7,230	8,401	-1,728
312+00	50	23.02	13.57	1541.96	48	25	2,665	7,278	11,733	-5,037
312+50	50	0.58	13.57	1040.49	22	25	2,391	7,299	14,722	-8,029
313+00	50	0.00	13.57	1119.15	1	25	2,000	7,300	17,221	-10,554
313+50	50	0.00	13.57	1097.21	0	25	2,052	7,300	19,786	-13,144
313+78.8	28.8	0.00	13.57	780.58	0	14	1,001	7,300	21,038	-14,410
					7,300	672	16,831			

NOTES:
1-CUT: CUT INCLUDES SLAVAGED/UNUSABLE PAVEMENT MATERIAL
2-SALVAGED/UNUSABLE PAVEMENT MATERIAL: IS NOT SHOWN IN CROSS SECTIONS
3-FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXCAVATION VOLUME
4-MASS ORDINATE: [(CUT)-(FILL*FILLFACTOR)]

CTH S - STAGE 3 CONSTRUCTION STA (9+00 - 63+75)

STATION	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 4
09+00	0	94.08	0.00	0.05	0	0	0	0	0	0
09+50	50	99.19	16.19	7.23	179	30	7	179	8	141
10+00	50	93.38	16.19	9.12	178	30	15	357	27	270
10+50	50	94.48	16.19	9.49	174	30	17	531	49	392
11+00	50	88.51	16.19	13.96	169	30	22	701	76	505
11+50	50	98.09	16.19	13.34	173	30	25	873	108	616
12+00	50	104.96	16.19	1.31	188	30	14	1,061	125	757
12+50	50	105.50	16.19	10.75	195	30	11	1,256	139	908
13+00	50	116.20	16.19	9.71	205	30	19	1,462	162	1,059
13+50	50	124.53	16.19	7.28	223	30	16	1,684	182	1,233
14+00	50	114.19	16.19	18.24	221	30	24	1,906	211	1,394
14+50	50	118.76	16.19	16.49	216	30	32	2,121	252	1,540
15+00	50	121.16	16.19	14.36	222	30	29	2,343	287	1,696
15+50	50	113.04	16.19	13.46	217	30	26	2,560	320	1,851
16+00	50	88.21	16.19	22.71	186	30	33	2,747	361	1,965
16+50	50	92.44	16.19	18.96	167	30	39	2,914	410	2,054
17+00	50	103.13	16.19	9.86	181	30	27	3,095	443	2,172
17+50	50	109.72	16.19	9.15	197	30	18	3,292	465	2,317
18+00	50	102.89	16.19	11.54	197	30	19	3,489	489	2,460
18+50	50	179.66	16.19	16.90	262	30	26	3,750	522	2,659
19+00	50	161.84	0.00	9.84	316	0	25	4,067	553	2,944
19+50	50	53.22	0.00	14.38	199	0	22	4,266	581	3,115
20+00	50	35.14	0.00	22.69	82	0	34	4,348	624	3,154
20+50	50	34.97	0.00	23.23	65	0	43	4,413	677	3,166
21+00	50	32.91	0.00	24.26	63	0	44	4,475	732	3,174
21+50	50	30.55	0.00	28.43	59	0	49	4,534	793	3,172
22+00	50	27.92	0.00	45.38	54	0	68	4,588	878	3,140
22+50	50	24.23	0.00	42.44	48	0	81	4,637	980	3,087
23+00	50	19.58	0.00	60.06	41	0	95	4,677	1,099	3,009
23+50	50	14.74	0.00	82.16	32	0	132	4,709	1,263	2,876
24+00	50	13.83	0.00	94.26	26	0	163	4,735	1,467	2,698
24+50	50	10.79	0.00	100.61	23	0	180	4,758	1,693	2,496
25+00	50	4.23	0.00	112.47	14	0	197	4,772	1,939	2,263
25+50	50	3.41	0.00	149.32	7	0	242	4,779	2,242	1,967
26+00	50	4.41	0.00	183.06	7	0	308	4,786	2,627	1,590
26+50	50	16.99	0.00	209.51	20	0	363	4,806	3,082	1,155
27+00	50	19.49	0.00	271.96	34	0	446	4,840	3,639	632
27+50	50	31.01	0.00	329.15	47	0	557	4,887	4,334	-17
28+00	50	30.91	0.00	381.41	57	0	658	4,944	5,157	-782
28+50	50	40.19	0.00	428.39	66	0	750	5,010	6,094	-1,654
29+00	50	32.04	0.00	409.43	67	0	776	5,077	7,064	-2,557
29+50	50	18.42	0.00	385.41	47	0	736	5,124	7,984	-3,430
30+00	50	9.20	0.00	281.55	26	0	618	5,149	8,756	-4,176
30+50	50	0.00	0.00	0.00	9	0	261	5,158	9,082	-4,494
31+00	50	0.00	0.00	0.00	0	0	0	5,158	9,082	-4,494
31+50	50	0.00	0.00	0.00	0	0	0	5,158	9,082	-4,494
32+00	50	0.00	16.19	167.06	0	30	155	5,158	9,275	-4,717
32+50	50	173.76	16.19	54.05	161	30	205	5,319	9,531	-4,842
33+00	50	235.95	16.19	55.92	379	30	102	5,698	9,658	-4,620
33+50	50	310.29	16.19	58.90	506	30	106	6,204	9,791	-4,277
34+00	50	0.00	16.19	0.00	287	30	55	6,491	9,859	-4,088
34+50	50	0.00	0.00	0.00	0	0	0	6,491	9,859	-4,088
35+00	50	0.00	0.00	0.00	0	0	0	6,491	9,859	-4,088
35+50	50	0.00	0.00	0.00	0	0	0	6,491	9,859	-4,088
36+00	50	0.00	0.00	0.00	0	0	0	6,491	9,859	-4,088
36+50	50	19.96	16.19	97.77	18	30	91	6,509	9,972	-4,212
37+00	50	91.08	16.19	329.16	103	30	395	6,612	10,467	-4,634
37+50	50	37.69	16.19	481.94	119	30	751	6,732	11,405	-5,483
38+00	50	14.96	16.19	437.92	49	30	852	6,780	12,470	-6,529
38+50	50	13.50	16.19	94.52	26	30	493	6,807	13,086	-7,149

CTH S - STAGE 3 CONSTRUCTION STA (9+00 - 63+75) CONTINUED

STATION	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 4
39+00	50	0.00	16.19	0.00	13	30	88	6,819	13,196	-7,276
39+50	50	0.00	0.00	0.00	0	0	0	6,819	13,196	-7,276
40+00	50	0.00	0.00	0.00	0	0	0	6,819	13,196	-7,276
40+50	50	0.00	0.00	0.00	0	0	0	6,819	13,196	-7,276
41+00	50	0.00	0.00	0.00	0	0	0	6,819	13,196	-7,276
41+50	50	0.00	0.00	0.00	0	0	0	6,819	13,196	-7,276
42+00	50	0.00	0.00	0.00	0	0	0	6,819	13,196	-7,276
42+50	50	0.00	0.00	0.00	0	0	0	6,819	13,196	-7,276
43+00	50	0.00	0.00	0.00	0	0	0	6,819	13,196	-7,276
43+50	50	0.00	0.00	0.00	0	0	0	6,819	13,196	-7,276
44+00	50	0.00	0.00	0.00	0	0	0	6,819	13,196	-7,276
44+50	50	0.00	0.00	0.00	0	0	0	6,819	13,196	-7,276
45+00	50	0.00	0.00	0.00	0	0	0	6,819	13,196	-7,276
45+50	50	0.00	0.00	0.00	0	0	0	6,819	13,196	-7,276
46+00	50	0.00	0.00	0.00	0	0	0	6,819	13,196	-7,276
46+50	50	0.00	0.00	0.00	0	0	0	6,819	13,196	-7,276
47+00	50	0.00	0.00	0.00	0	0	0	6,819	13,196	-7,276
47+50	50	0.00	0.00	0.18	0	0	0	6,819	13,196	-7,276
48+00	50	0.00	0.00	21.64	0	0	20	6,819	13,221	-7,301
48+50	50	0.12	0.00	33.25	0	0	51	6,819	13,285	-7,365
49+00	50	4.62	0.00	33.77	4	0	62	6,824	13,362	-7,438
49+50	50	13.58	0.00	24.43	17	0	54	6,840	13,430	-7,488
50+00	50	24.80	0.00	21.69	36	0	43	6,876	13,483	-7,506
50+50	50	35.39	0.00	18.14	56	0	37	6,932	13,529	-7,497
51+00	50	10.13	0.00	51.29	42	0	64	6,974	13,609	-7,535
51+50	50	10.17	0.00	341.88	19	0	364	6,993	14,064	-7,971
52+00	50	16.62	11.00	379.59	25	10	668	7,017	14,899	-8,792
52+50	50	17.91	11.00	282.99	32	20	614	7,049	15,666	-9,547
53+00	50	17.13	11.00	116.49	32	20	370	7,082	16,129	-9,997
53+50	50	22.72	11.00	169.41	37	20	265	7,119	16,460	-10,312
54+00	50	50.70	11.00	6.03	68	20	162	7,187	16,663	-10,467
54+50	50	50.77	12.00	0.00	94	21	6	7,281	16,670	-10,401
55+00	50	50.88	12.00	8.60	94	22	8	7,375	16,680	-10,339
55+50	50	44.20	12.00	117.92	88	22	117	7,463	16,826	-10,420
56+00	50	40.70	12.00	109.16	79	22	210	7,542	17,089	-10,626
56+50	50	65.75	12.00	98.03	99	22	192	7,640	17,329	-10,790
57+00	50	78.57	12.00	53.47	134	22	140	7,774	17,504	-10,854
57+50	50	89.91	12.00	31.02	156	22	78	7,930	17,602	-10,818
58+00	50	83.73	12.00	34.72	161	22	61	8,090	17,678	-10,755
58+50	50	79.75	12.00	26.81	151	22	57	8,242	17,749	-10,697
59+00	50	87.27	12.00	14.70	155	22	38	8,397	17,797	-10,613
59+50	50	75.16	12.00	14.66	150	22	27	8,547	17,831	-10,519
60+00	50	82.13	12.00	6.32	146	22	19	8,693	17,855	-10,420
60+50	50	77.05	12.00	4.19	147	22	10	8,840	17,868	-10,307
61+00	50	71.40	12.00	4.07	137	22	8	8,977	17,877	-10,201
61+50	50	70.51	12.00	1.95	131	22	6	9,109	17,884	-10,099
62+00	50	59.89	12.00	0.00	121	22	2	9,230	17,886	-10,003
62+50	50	62.45	12.00	0.00	113	22	0	9,343	17,886	-9,911
63+00	50	74.41	12.00	0.00	127	22	0	9,470	17,886	-9,807
63+50	50	78.76	12.00	0.00	142	22	0	9,611	17,886	-9,687
63+75	25	60.42	12.00	0.00	64	11	0	9,676	17,886	-9,634
					9,676	1,424	14,309			

NOTES:
1-CUT: CUT INCLUDES SLAVAGED/UNUSABLE PAVEMENT MATERIAL
2-SALVAGED/UNUSABLE PAVEMENT MATERIAL: IS NOT SHOWN IN CROSS SECTIONS
3-FILL: DOES NOT INCLUDE UNUSABLE PAVEMENT EXCAVATION VOLUME
4-MASS ORDINATE: [(CUT)-(FILL*FILLFACTOR)]

CTH S - STAGE 1 TEMPORARY WIDENING CONSTRUCTION STA (102+68 - 119+40)

STATION	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 4
102+68	0	39.00	0.00	2.00	0	0	0	0	0	0
103+00	32	18.97	0.00	2.43	34	0	3	34	3	31
103+50	50	17.25	0.00	0.78	34	0	3	68	7	61
104+00	50	28.21	0.00	0.26	42	0	1	110	8	102
104+50	50	22.41	0.00	0.10	47	0	0	157	9	148
105+00	50	30.30	0.00	3.05	49	0	3	206	12	193
105+50	50	25.83	0.00	6.66	52	0	9	258	24	234
106+00	50	27.89	0.00	8.63	50	0	14	307	41	266
106+50	50	36.03	0.00	10.9	59	0	18	367	64	303
107+00	50	44.46	0.00	12.2	75	0	22	441	91	350
107+50	50	45.75	0.00	13.0	84	0	23	525	120	405
108+00	50	49.43	0.00	10.9 1	88	0	22	613	148	465
108+50	50	61.02	0.00	9.43	102	0	19	715	171	544
109+00	50	60.85	0.00	5.96	113	0	14	828	189	639
109+50	50	59.09	0.00	3.64	111	0	9	939	200	739
110+00	50	121.70	0.00	0.00	167	0	3	1,106	204	902
110+50	50	76.86	0.00	3.90	184	0	4	1,290	209	1,081
111+00	50	72.53	0.00	2.42	138	0	6	1,428	216	1,212
111+50	50	66.91	0.00	2.47	129	0	5	1,558	222	1,336
112+00	50	65.04	0.00	1.09	122	0	3	1,680	226	1,454
112+50	50	54.20	0.00	1.00	110	0	2	1,790	228	1,562
113+00	50	49.14	0.00	1.46	96	0	2	1,886	231	1,655
113+50	50	39.76	0.00	2.21	82	0	3	1,968	235	1,733
114+00	50	27.62	0.00	2.87	62	0	5	2,031	241	1,789
114+50	50	25.32	0.00	3.73	49	0	6	2,080	249	1,831
115+00	50	26.06	0.00	5.24	48	0	8	2,127	259	1,868
115+50	50	25.73	0.00	4.60	48	0	9	2,175	271	1,904
116+00	50	23.13	0.00	6.03	45	0	10	2,220	283	1,937
116+50	50	20.76	0.00	2.97	41	0	8	2,261	293	1,968
117+00	50	25.51	0.00	1.81	43	0	4	2,304	299	2,005
117+50	50	27.41	0.00	0.56	49	0	2	2,353	302	2,051
118+00	50	32.42	0.00	0.00	55	0	1	2,408	302	2,106
118+50	50	39.16	0.00	0.43	66	0	0	2,475	303	2,172
119+00	50	43.43	0.00	0.83	76	0	1	2,551	304	2,247
119+40	40.00	65.59	0.00	0.61	81	0	1	2,632	306	2,326
					2,632	0	245			

CTH S - STAGE 1 TEMPORARY WIDENING CONSTRUCTION STA (145+00 - 158+34.89)

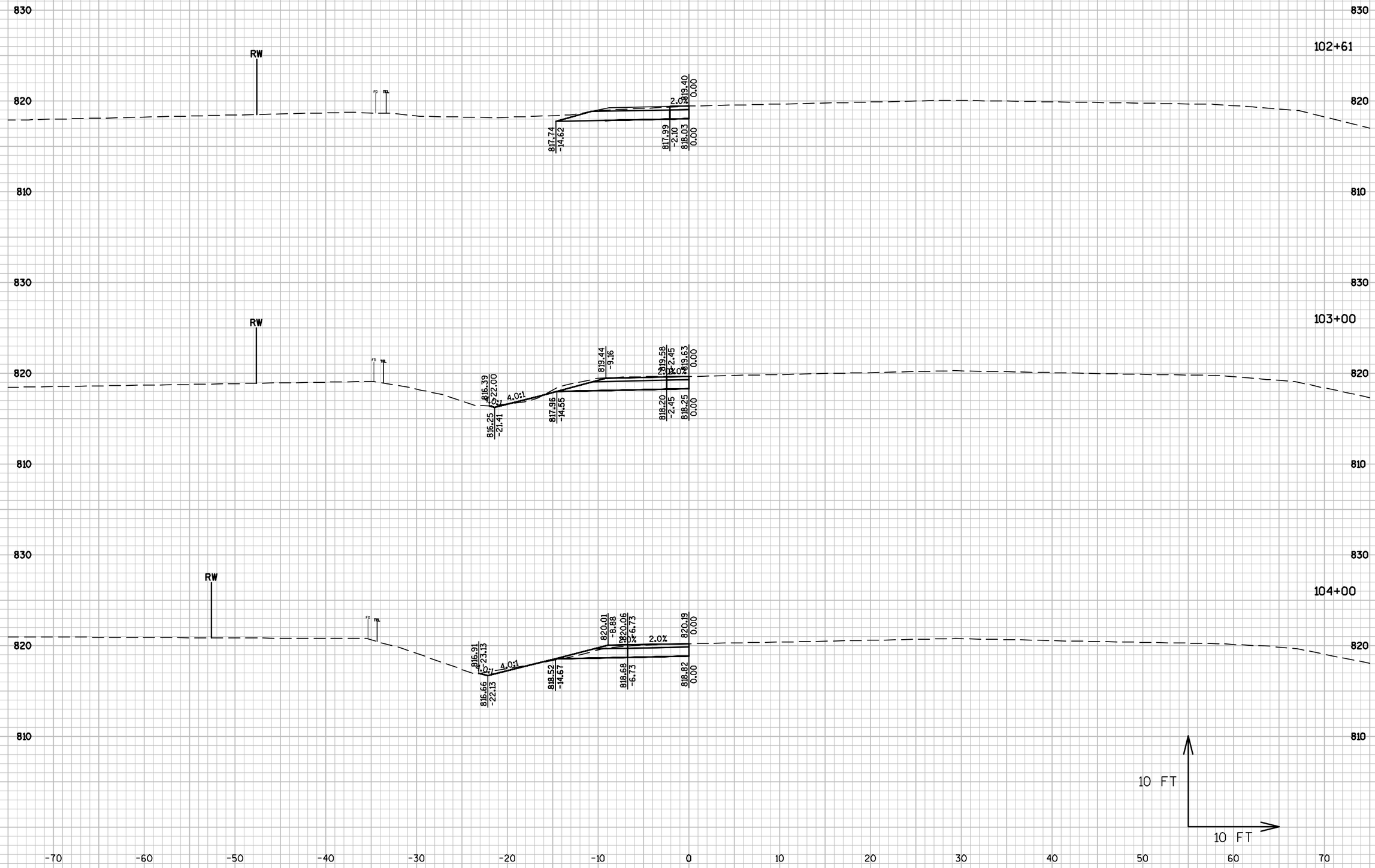
STATION	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 4
145+00	0	10.14	0.00	1.03	0	0	0	0	0	0
145+50	50	9.83	0.00	3.71	18	0	4	18	5	13
146+00	50	9.66	0.00	12.73	18	0	15	37	25	12
146+50	50	9.97	0.00	18.19	18	0	29	55	60	-6
147+00	50	10.02	0.00	31.19	19	0	46	73	117	-44
147+50	50	9.72	0.00	31.50	18	0	58	92	190	-99
148+00	50	9.86	0.00	32.4	18	0	59	110	264	-154
148+50	50	9.59	0.00	37.4	18	0	65	128	345	-217
149+00	50	9.59	0.00	25.7	18	0	59	145	418	-273
149+50	50	9.56	0.00	26.0	18	0	48	163	478	-315
150+00	50	10.39	0.00	24.9	18	0	47	182	537	-355
150+50	50	10.83	0.00	18.6	20	0	40	201	587	-386
151+00	50	10.50	0.00	12.9	20	0	34	221	630	-409
151+50	50	9.79	0.00	17.6	19	0	35	240	673	-433
152+00	50	9.05	0.00	12.0 3	17	0	29	257	710	-453
152+50	50	10.53	0.00	9.85	18	0	20	275	735	-460
153+00	50	10.78	0.00	11.9 7	20	0	20	295	760	-465
153+50	50	11.19	0.00	10.62	20	0	21	315	787	-471
154+00	50	10.59	0.00	9.83	20	0	19	336	810	-475
154+50	50	10.70	0.00	10.43	20	0	19	355	834	-478
155+00	50	10.61	0.00	9.66	20	0	19	375	857	-482
155+50	50	10.66	0.00	4.90	20	0	13	395	874	-479
156+00	50	8.83	0.00	5.86	18	0	10	413	886	-473
156+50	50	23.52	0.00	0.00	30	0	5	443	893	-450
157+00	50	11.13	0.00	1.30	32	0	1	475	895	-420
157+50	50	12.51	0.00	0.44	22	0	2	497	897	-400
158+00	50	12.35	0.00	1.50	23	0	2	520	899	-379
158+34.89	34.89	53.50	0.00	0.80	43	0	1	562	901	-338
					562	0	721			

RAMP 'ZC ' - STAGE 1 TEMPORARY WIDENING CONSTRUCTION STA (344+27.57 - 347+93.97)

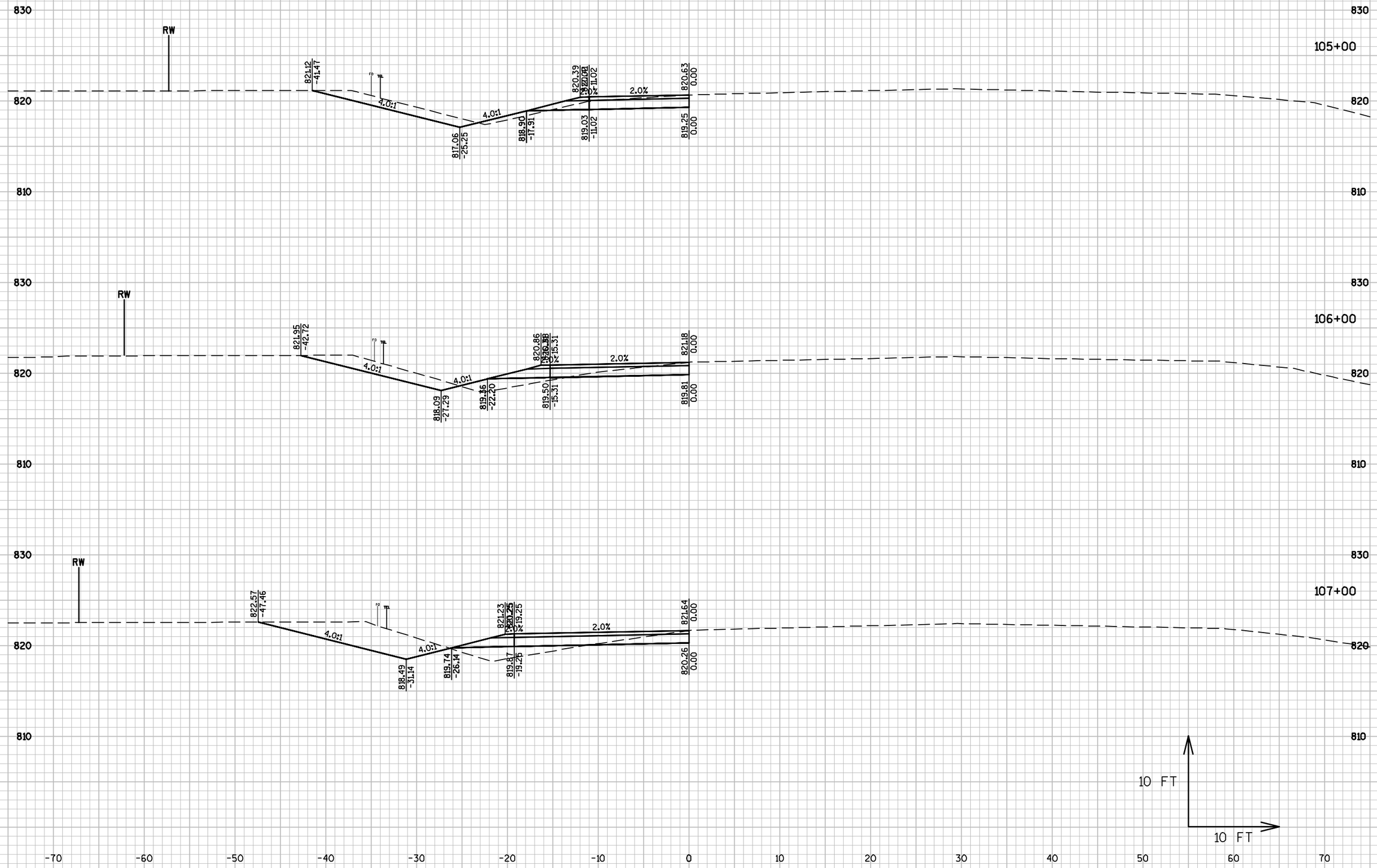
STATION	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 4
344+27.57	0	10.34	0.00	0.49	0	0	0	0	0	0
344+50	22.43	10.03	0.00	2.56	8	0	1	8	2	7
345+00	50	8.94	0.00	10.19	18	0	12	26	16	10
345+50	50	8.57	0.00	12.88	16	0	21	42	43	-1
346+00	50	6.98	0.00	23.81	14	0	34	57	86	-29
346+50	50	5.38	0.00	36.50	11	0	56	68	155	-87
347+00	50	5.04	0.00	62.72	10	0	92	78	270	-192
347+50	50	4.58	0.00	80.13	9	0	132	87	435	-349
347+93.97	43.97	9.79	0.00	53.44	12	0	109	98	571	-473
					98	0	457			

RAMP 'ZD ' - STAGE 1 TEMPORARY WIDENING CONSTRUCTION STA (349+75.72 - 359+97.68)

STATION	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 4
349+75.72	0	6.27	0.00	8.93	0	0	0	0	0	0
350+00	24.28	6.18	0.00	16.83	6	0	12	6	14	-9
350+50	50	6.30	0.00	22.45	12	0	36	17	60	-43
351+00	50	7.90	0.00	6.46	13	0	27	30	93	-63
351+50	50	8.35	0.00	10.13	15	0	15	45	113	-67
352+00	50	8.62	0.00	15.72	16	0	24	61	143	-81
352+50	50	11.80	0.00	7.91	19	0	22	80	170	-90
353+00	50	12.68	0.00	2.45	23	0	10	103	182	-79
353+50	50	12.61	0.00	2.29	23	0	4	126	187	-61
354+00	50	9.28	0.00	6.45	20	0	8	146	197	-51
354+50	50	9.57	0.00	10.9	17	0	16	164	218	-54
355+00	50	10.63	0.00	15.6	19	0	25	182	248	-66
355+50	50	11.20	0.00	24.3	20	0	36	203	293	-91
356+00	50	8.18	0.00	38.9	18	0	58	221	365	-145
356+50	50	7.98	0.00	45.5	15	0	77	236	462	-226
357+00	50	8.80	0.00	37.8	16	0	76	251	557	-306
357+50	50	9.25	0.00	40.1 1	17	0	76	268	652	-384
358+00	50	9.61	0.00	36.00	17	0	74	285	745	-460
358+50	50	8.63	0.00	8.53	17	0	41	302	796	-494
359+00	50	7.10	0.00	5.01	15	0	13	317	812	-495
359+50	50	7.11	0.00	1.04	13	0	6	330	819	-489
359+97.68	47.68	7.10	0.00	0.00	13	0	1	342	820	-478
					342	0	656			

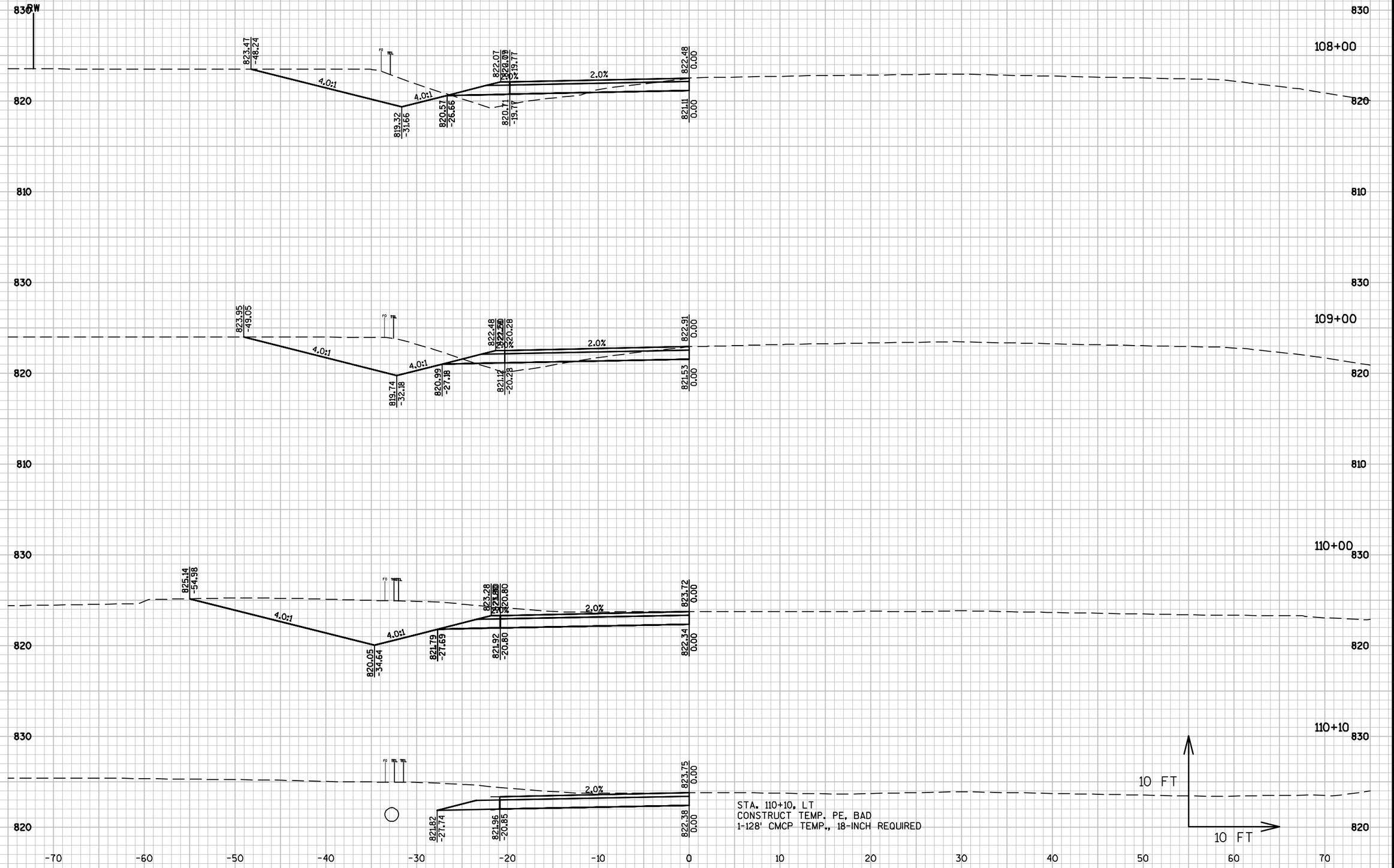


PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S TEMPORARY WIDENING (WEST)-STAGE 1	SHEET 515	E

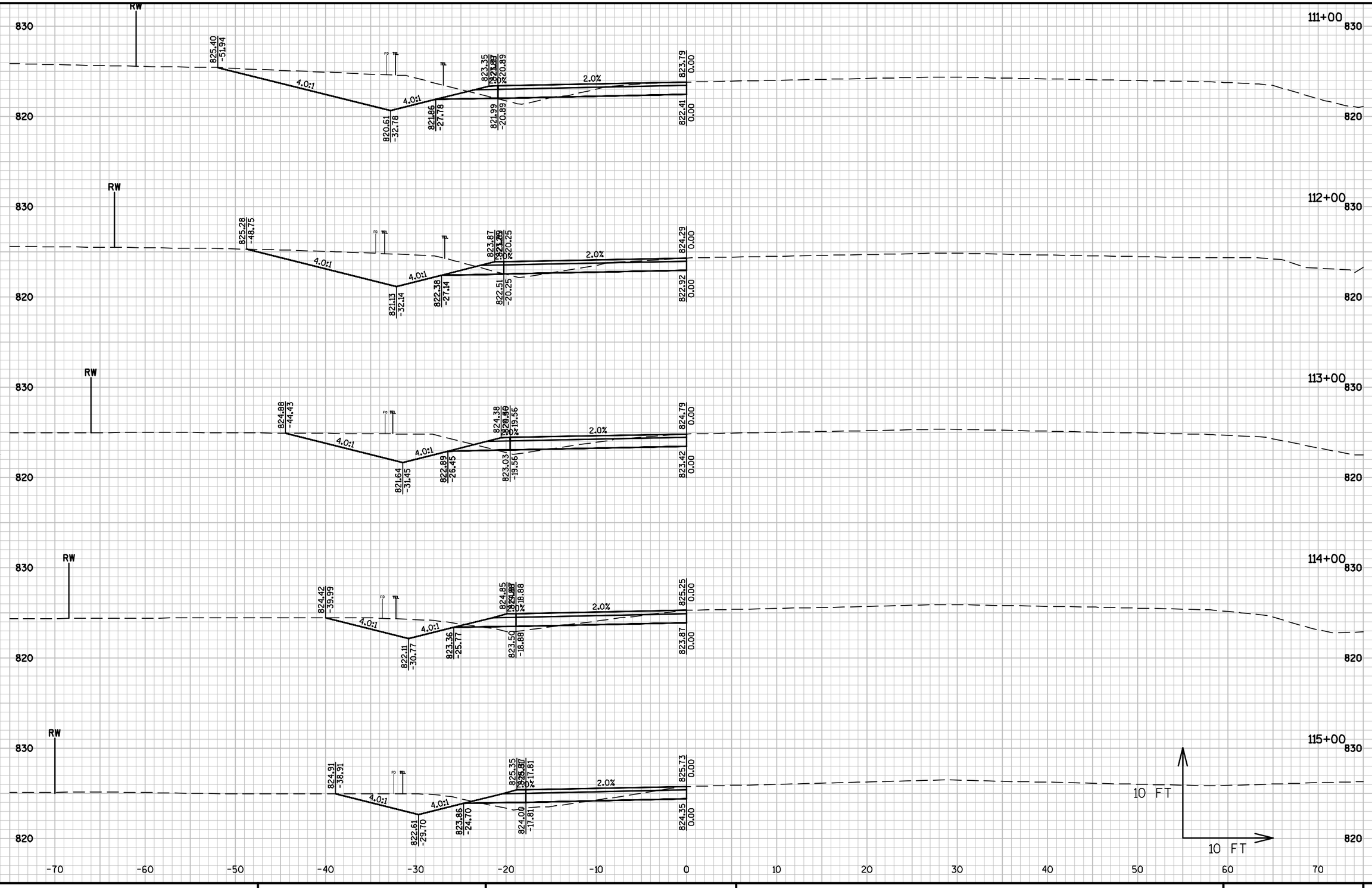


PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S TEMPORARY WIDENING (WEST)-STAGE 1	SHEET 516	E

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WISDOT/CADDS SHEET 49

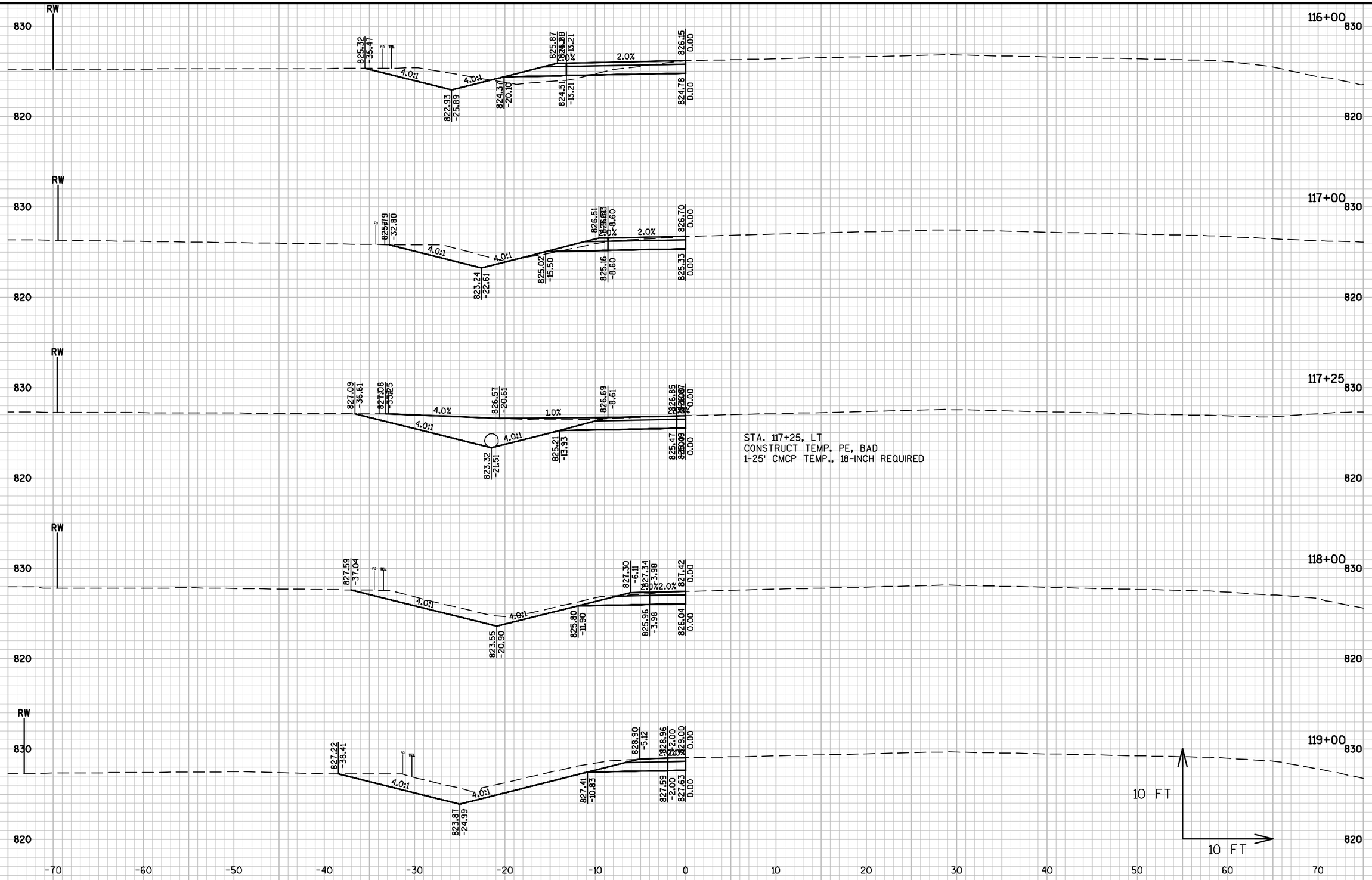


PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S TEMPORARY WIDENING (WEST)-STAGE 1	SHEET 517 E



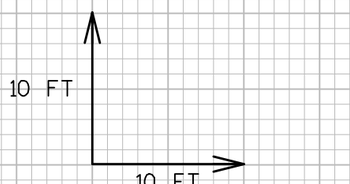
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S TEMPORARY WIDENING (WEST)-STAGE 1	SHEET	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090122_XS_S_TEMP.DWG PLOT DATE : 10/30/2014 5:37 PM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S TEMPORARY WIDENING (WEST) -STAGE 1	SHEET 519	E



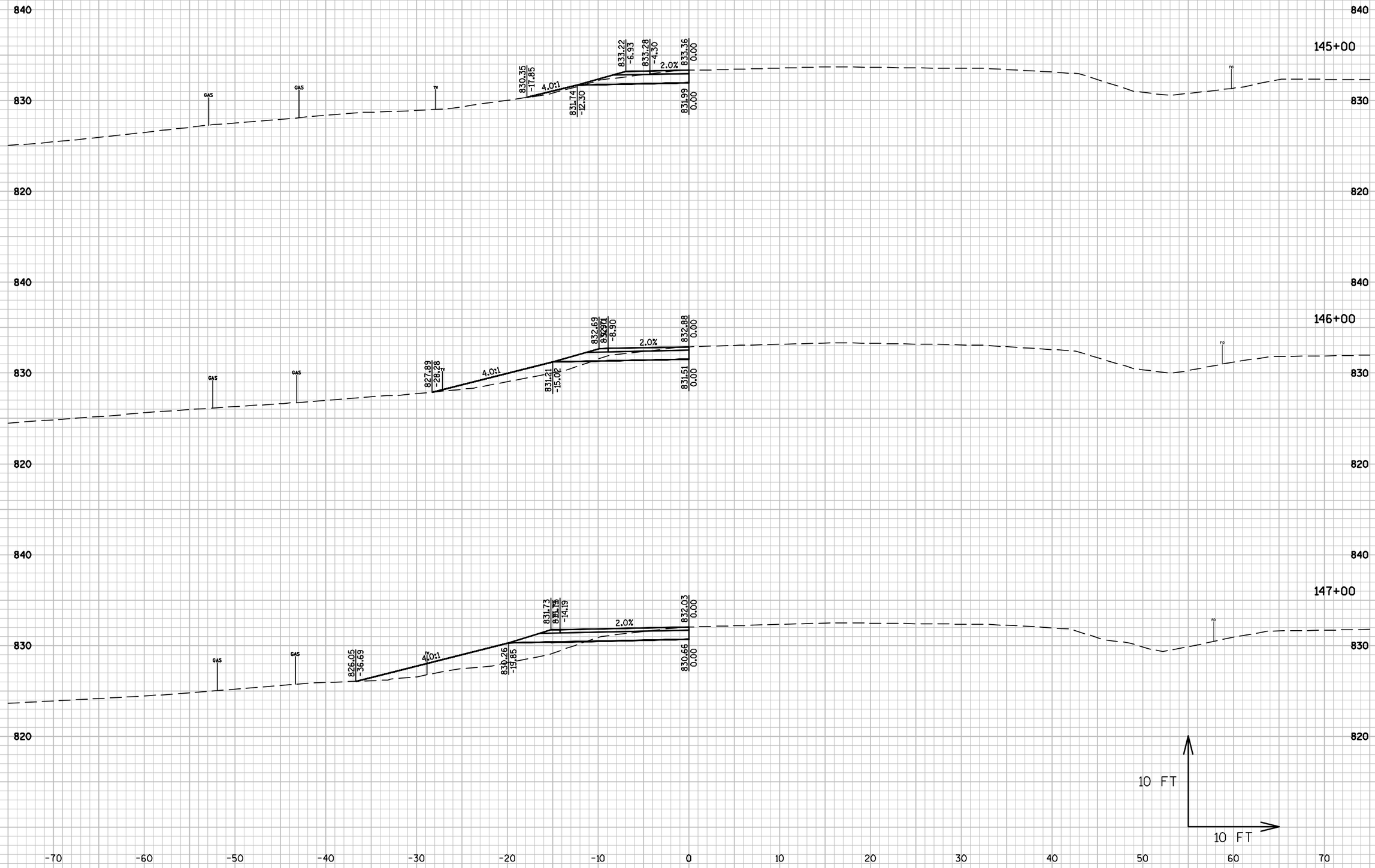


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9 9

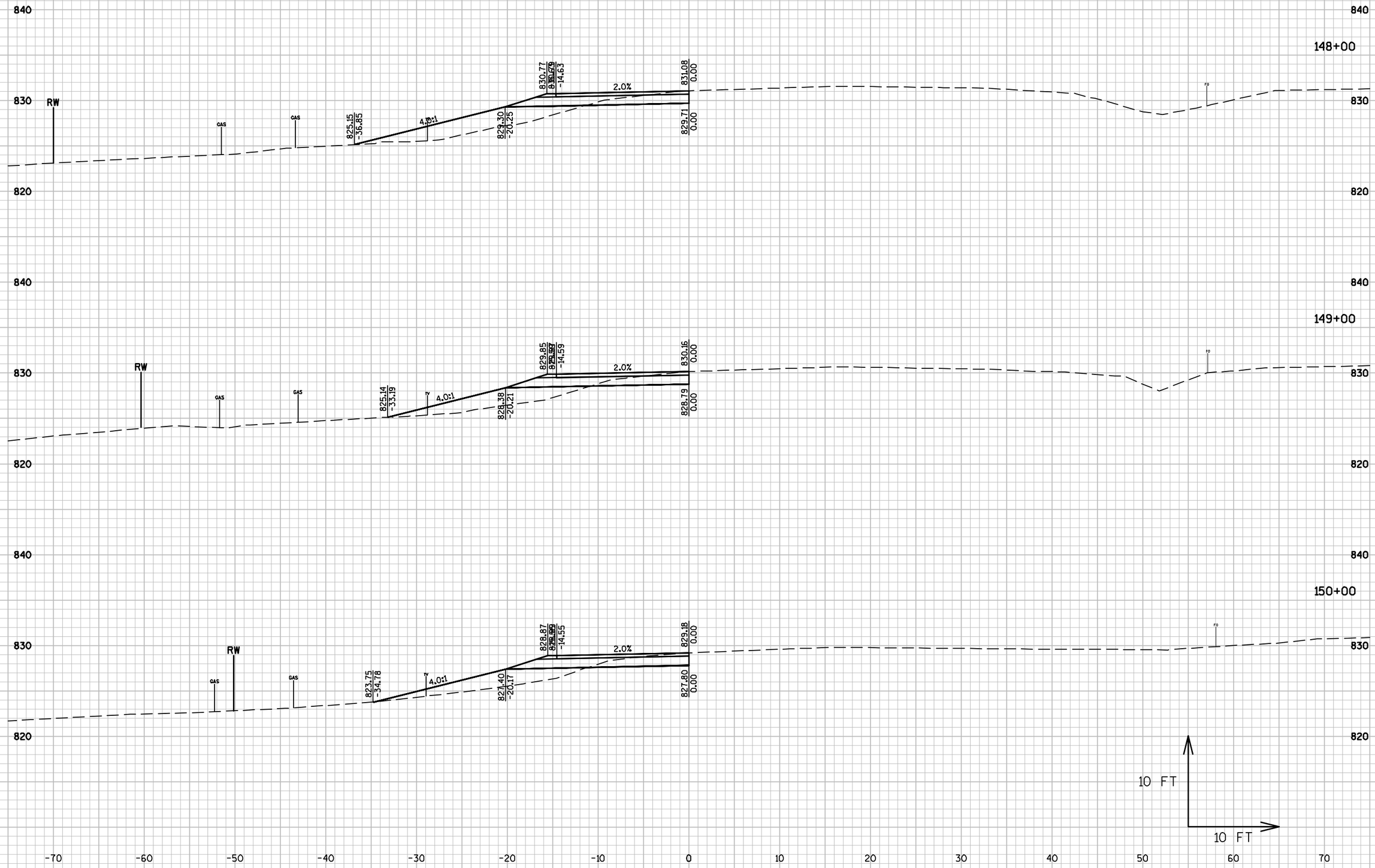
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FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090122_XS_S_TEMP.DWG PLOT DATE : 10/30/2014 5:37 PM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



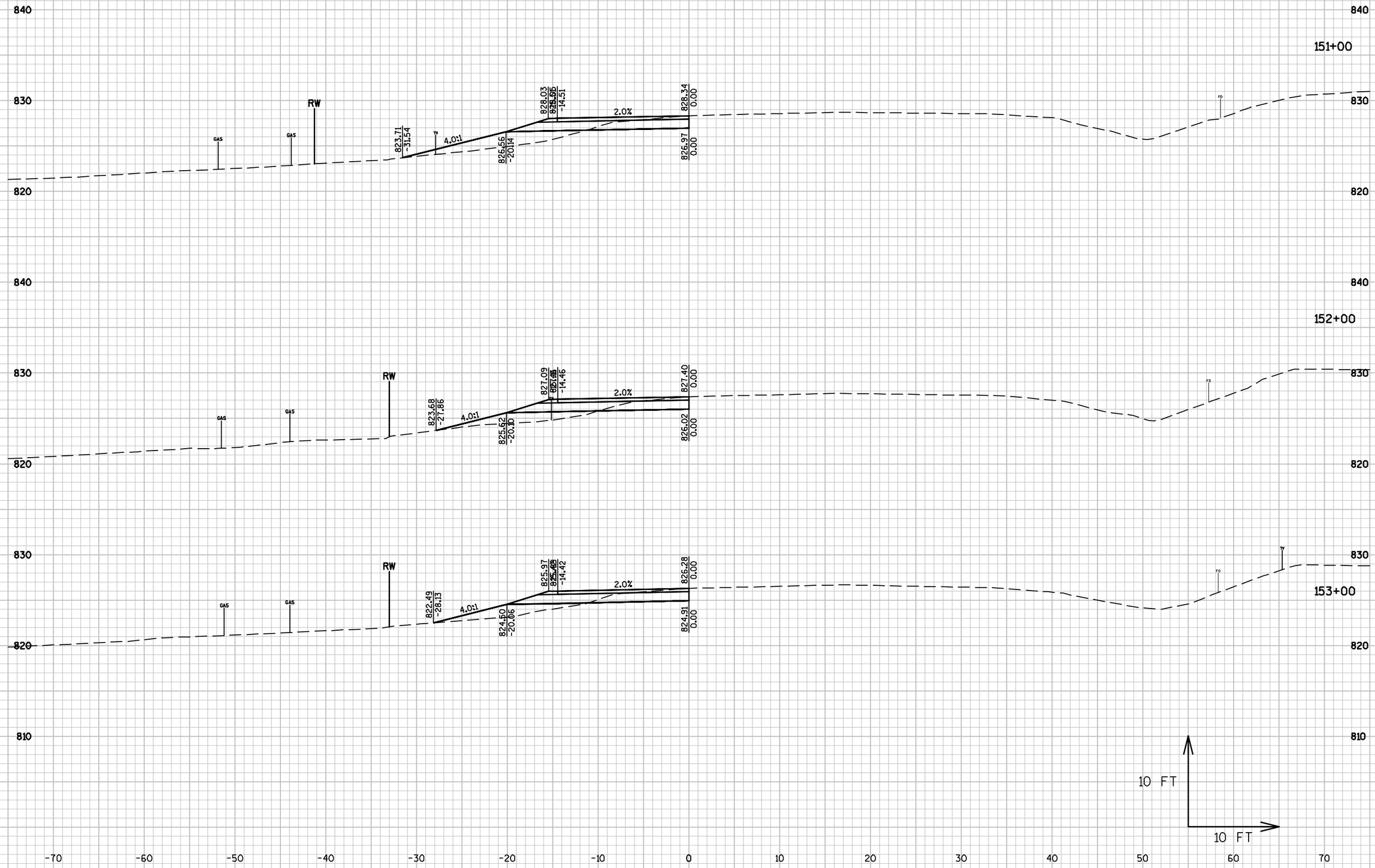
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FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090122_XS_S_TEMP.DWG PLOT DATE : 10/30/2014 5:37 PM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S TEMPORARY WIDENING (EAST) -STAGE 1	SHEET	E

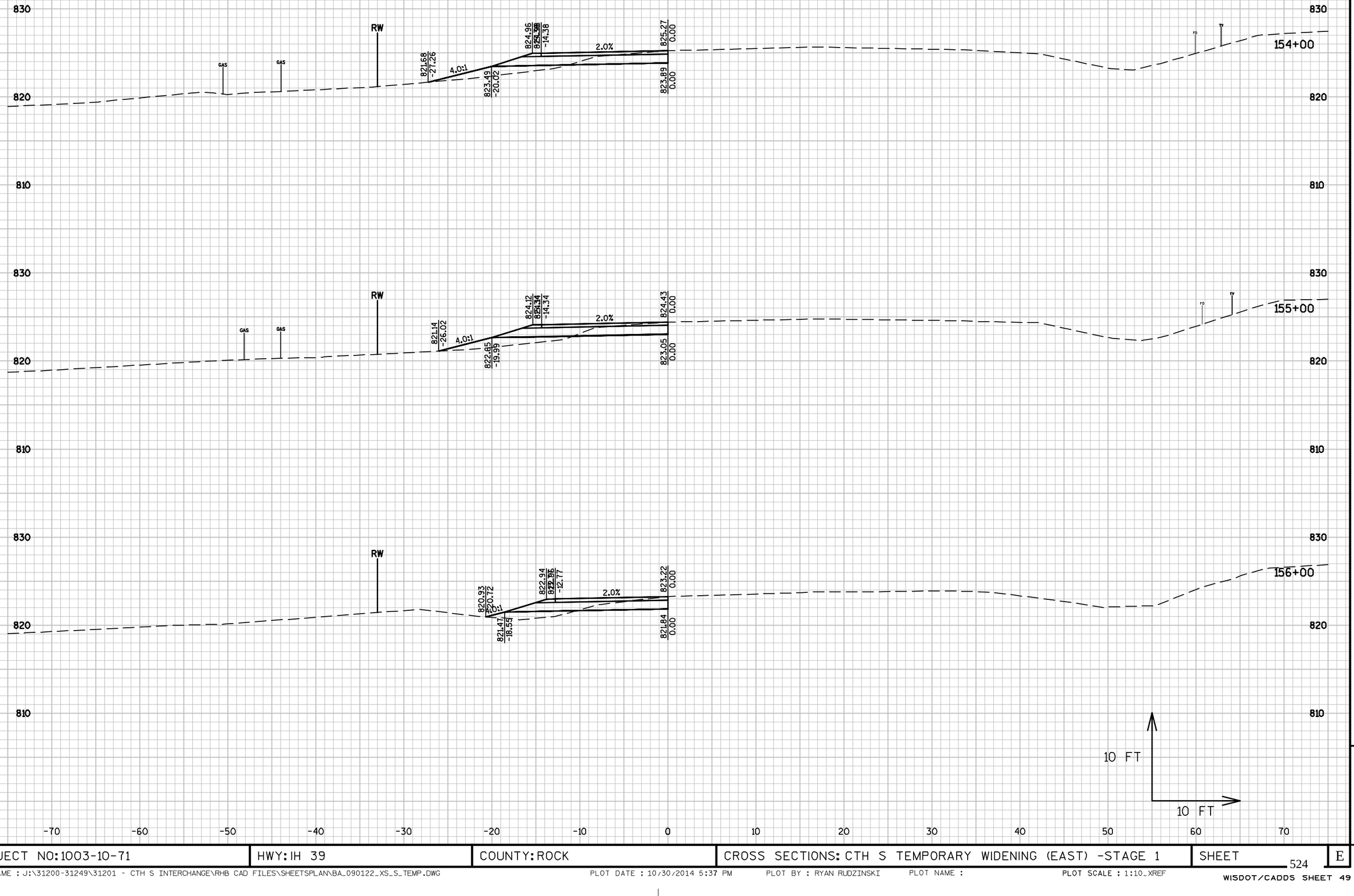
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WISDOT/CADDS SHEET 49



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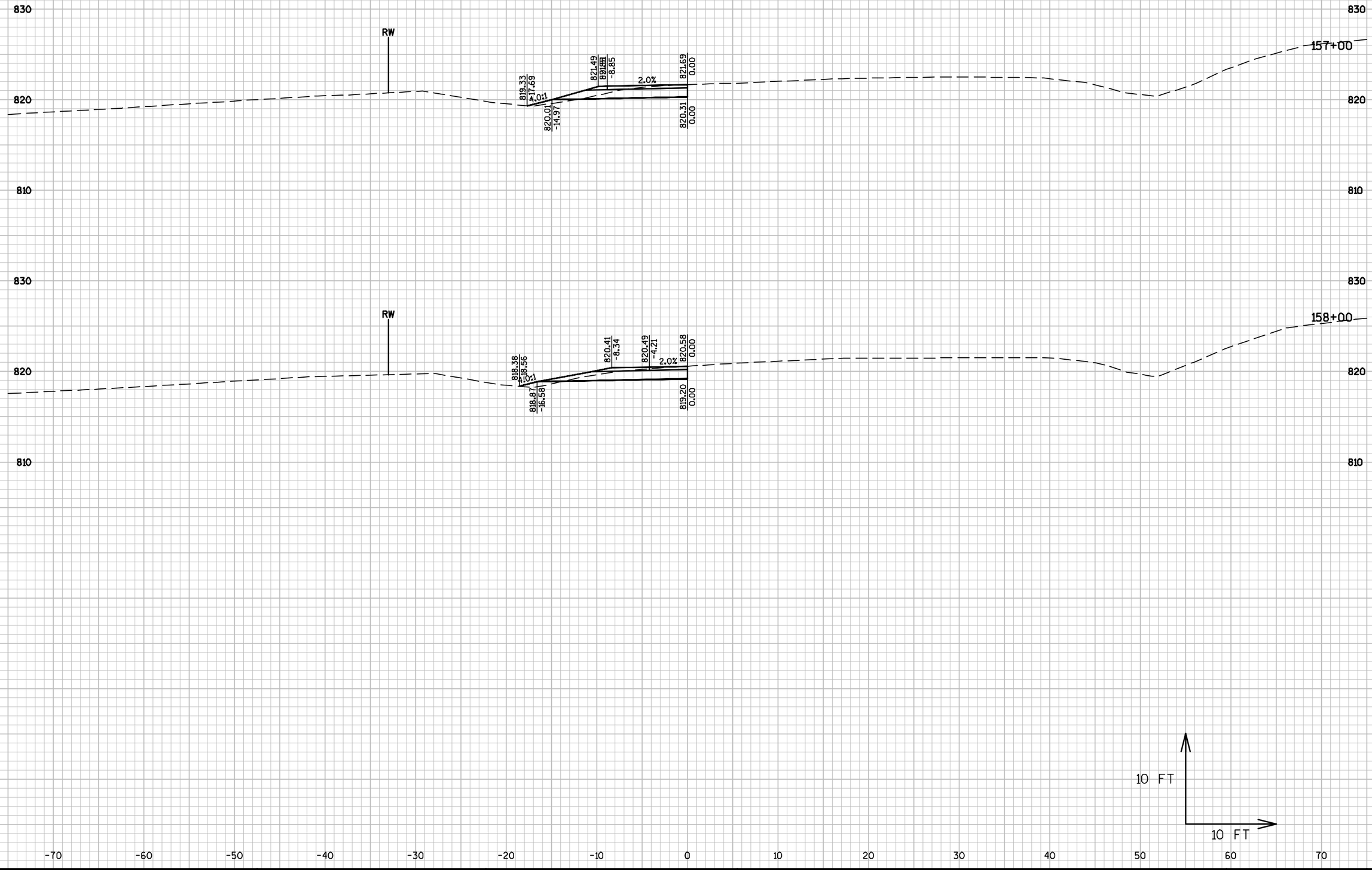
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FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090122_XS_S_TEMP.DWG PLOT DATE : 10/30/2014 5:37 PM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:10_XREF

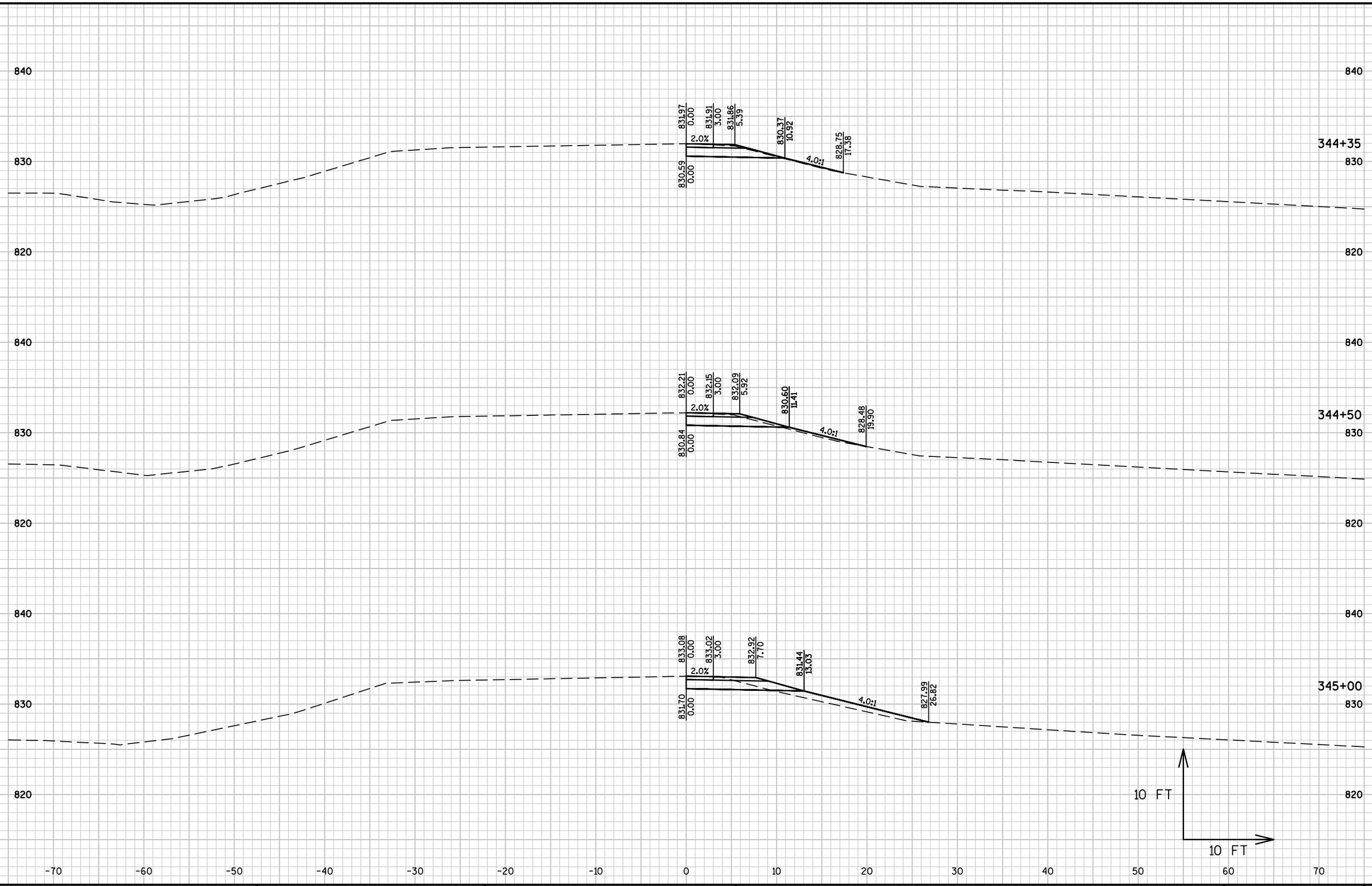
WISDOT/CADDS SHEET 49



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S TEMPORARY WIDENING (EAST) -STAGE 1	SHEET	E

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WISDOT/CADDS SHEET 49

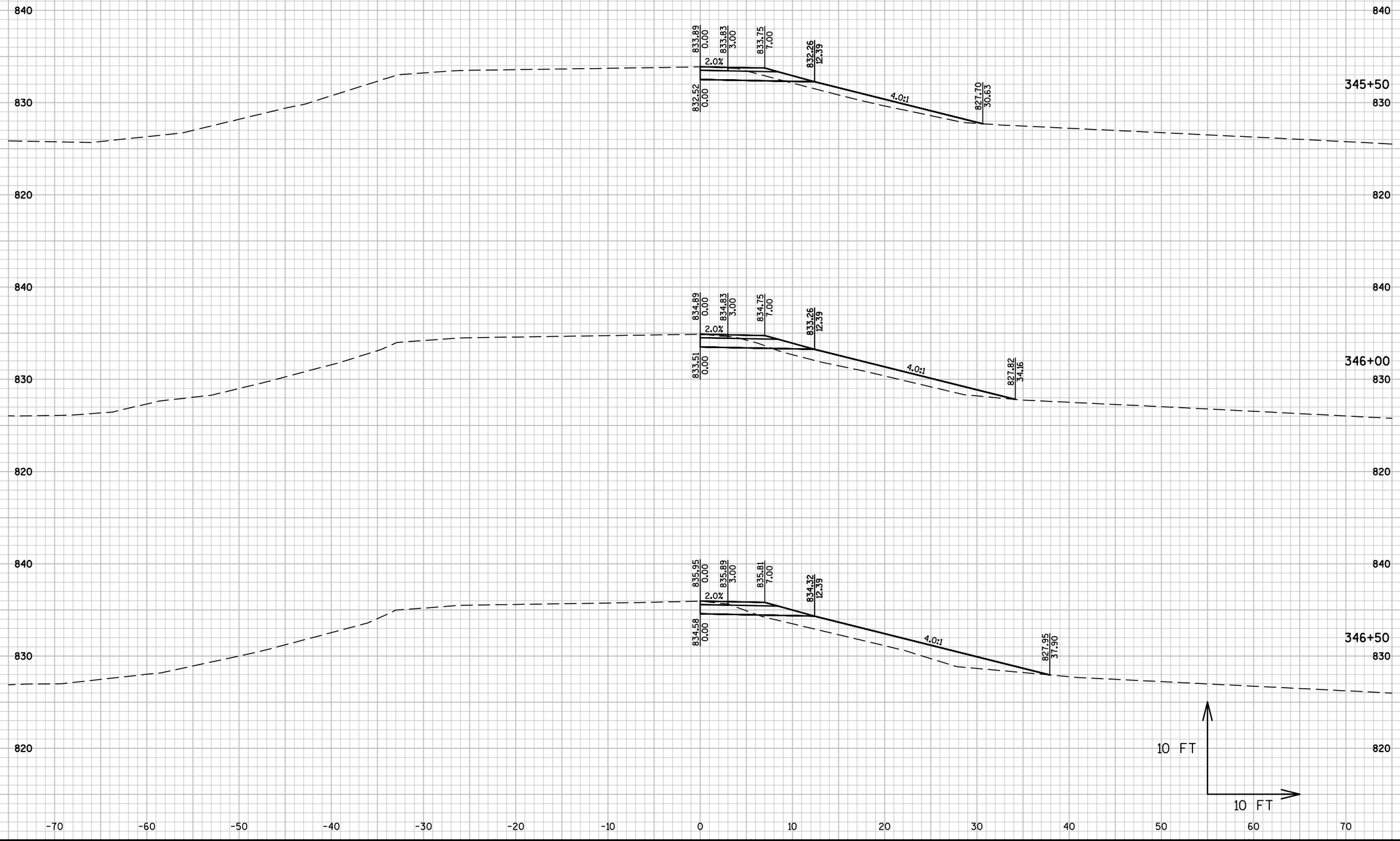


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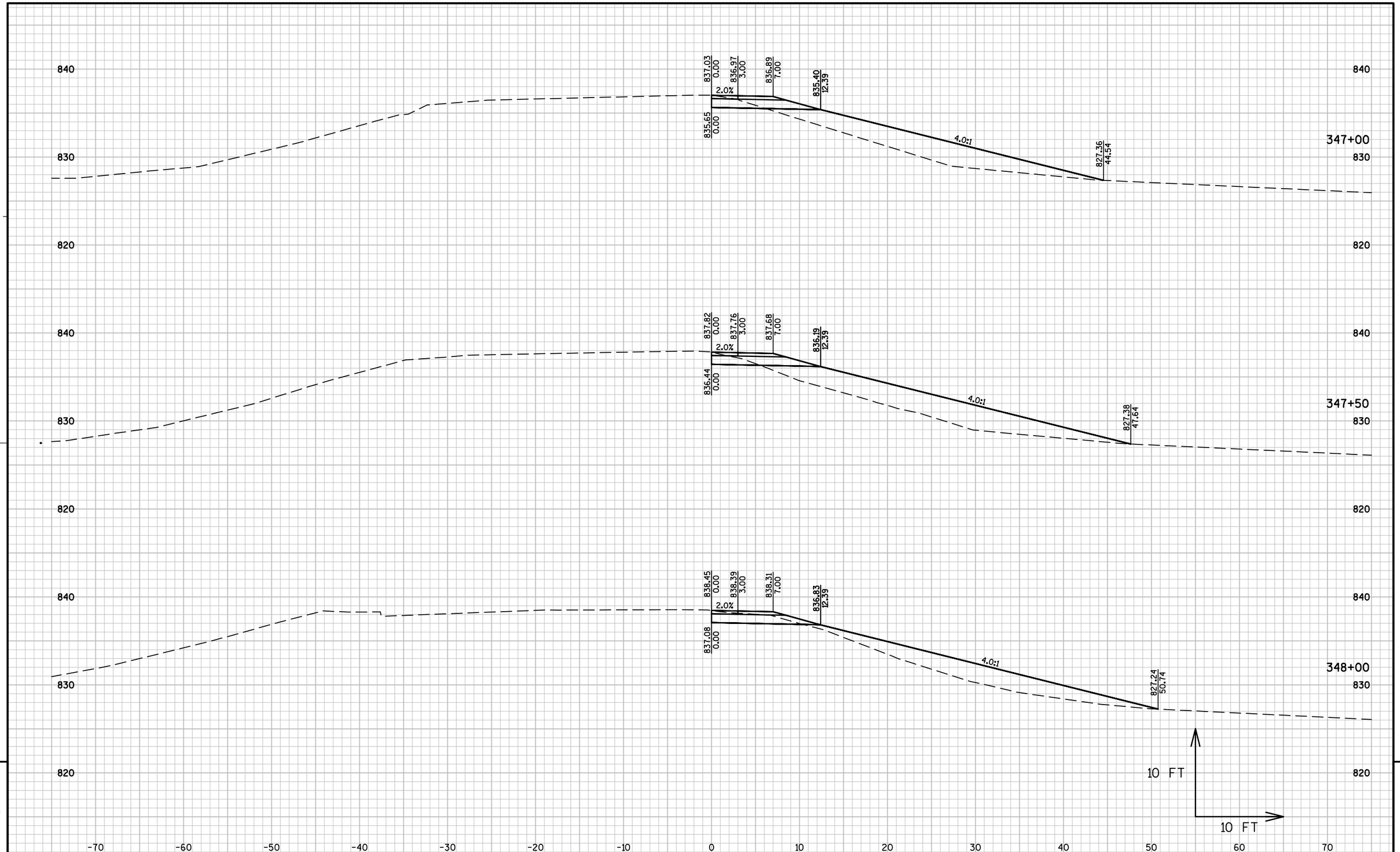
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SB ON RAMP 'ZC' TEMPORARY WIDENING-STAGE 1	SHEET 526	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090120_XS_ZC_TEMP.DWG PLOT DATE : 10/31/2014 8:44 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:10_XREF

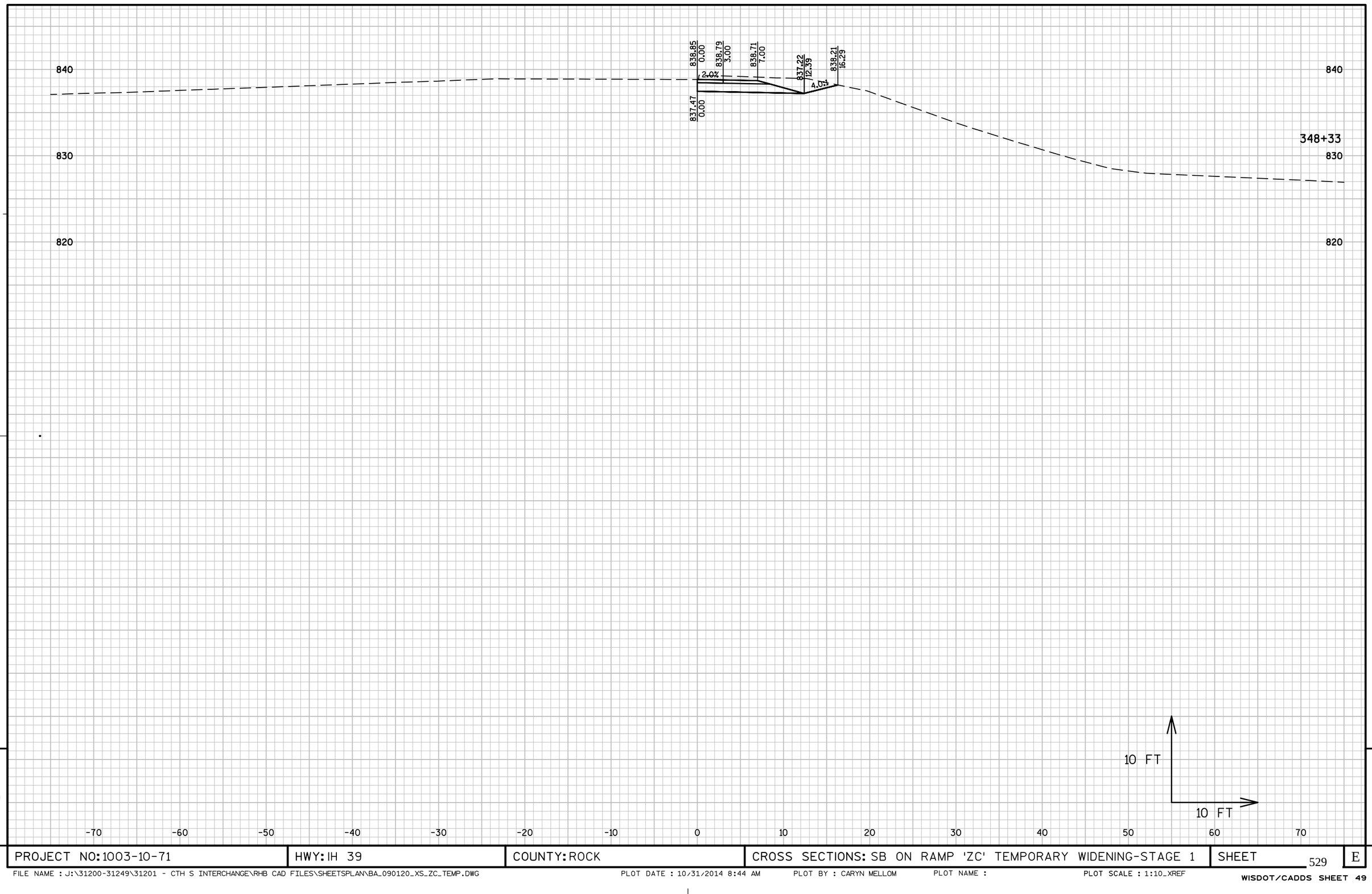


PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SB ON RAMP 'ZC' TEMPORARY WIDENING-STAGE 1	SHEET 527	E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SB ON RAMP 'ZC' TEMPORARY WIDENING-STAGE 1	SHEET 528	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090120_XS_ZC_TEMP.DWG PLOT DATE : 10/31/2014 8:44 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



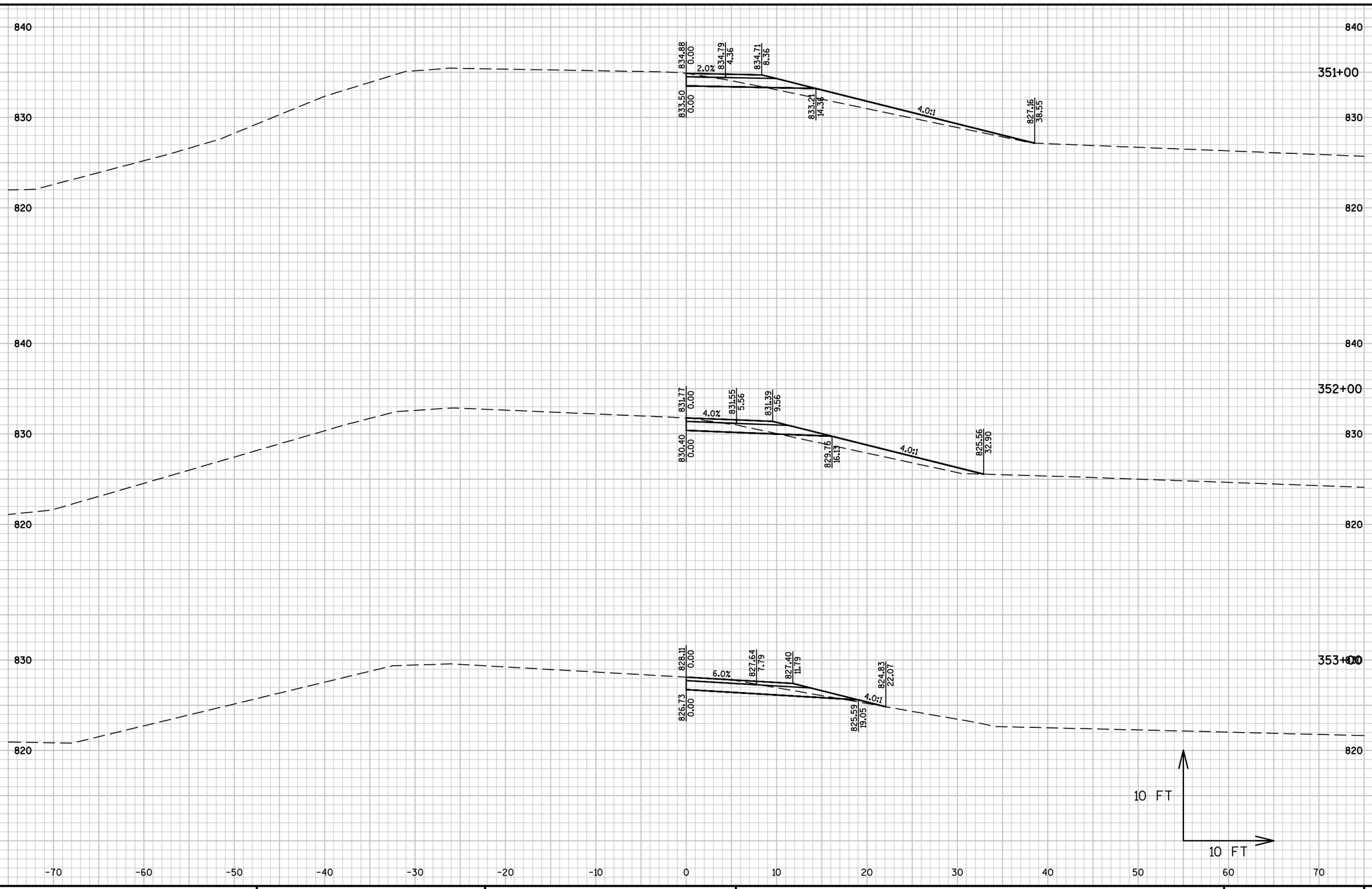
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SB ON RAMP 'ZC' TEMPORARY WIDENING-STAGE 1	SHEET 529	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090120_XS_ZC_TEMP.DWG PLOT DATE : 10/31/2014 8:44 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

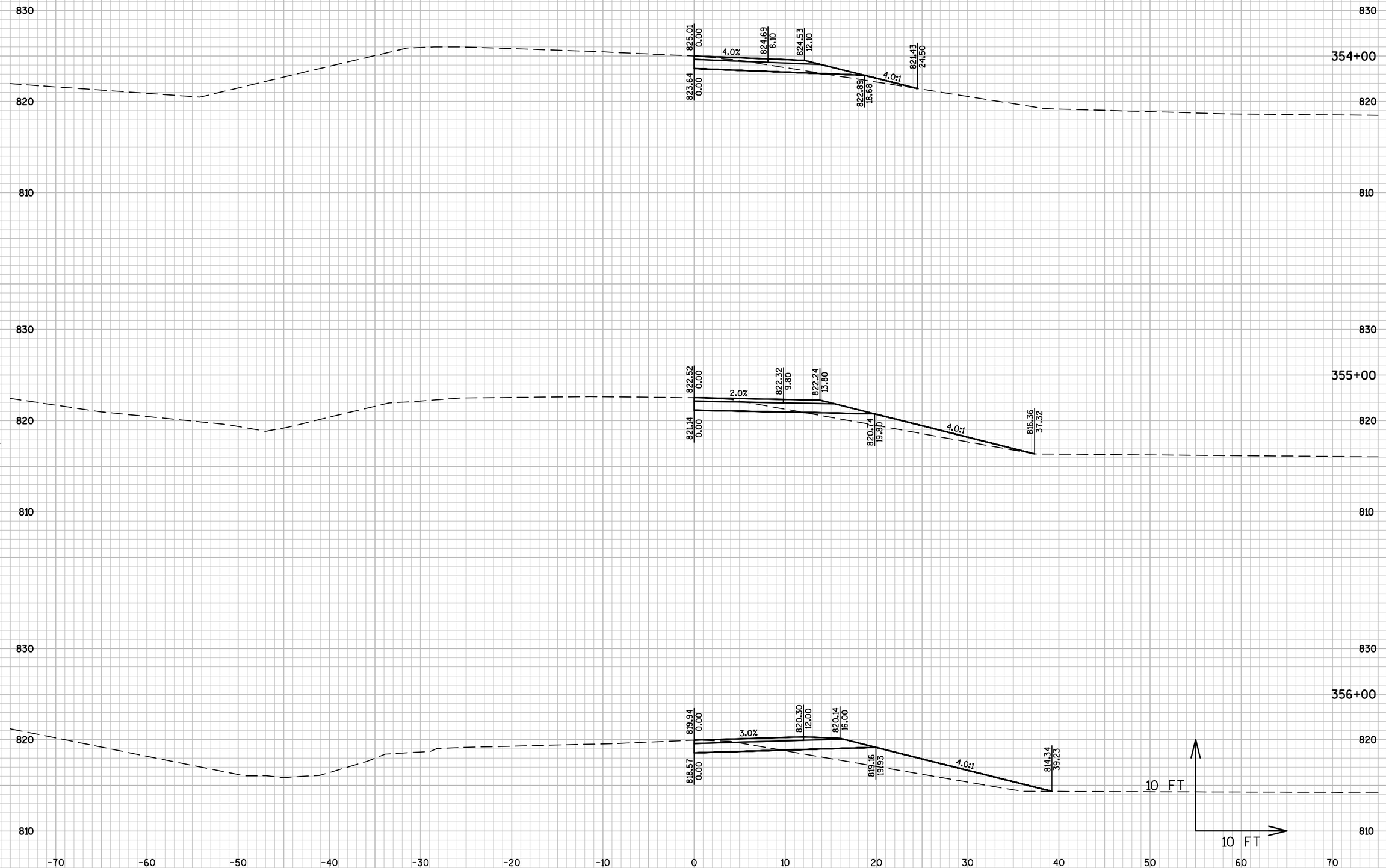


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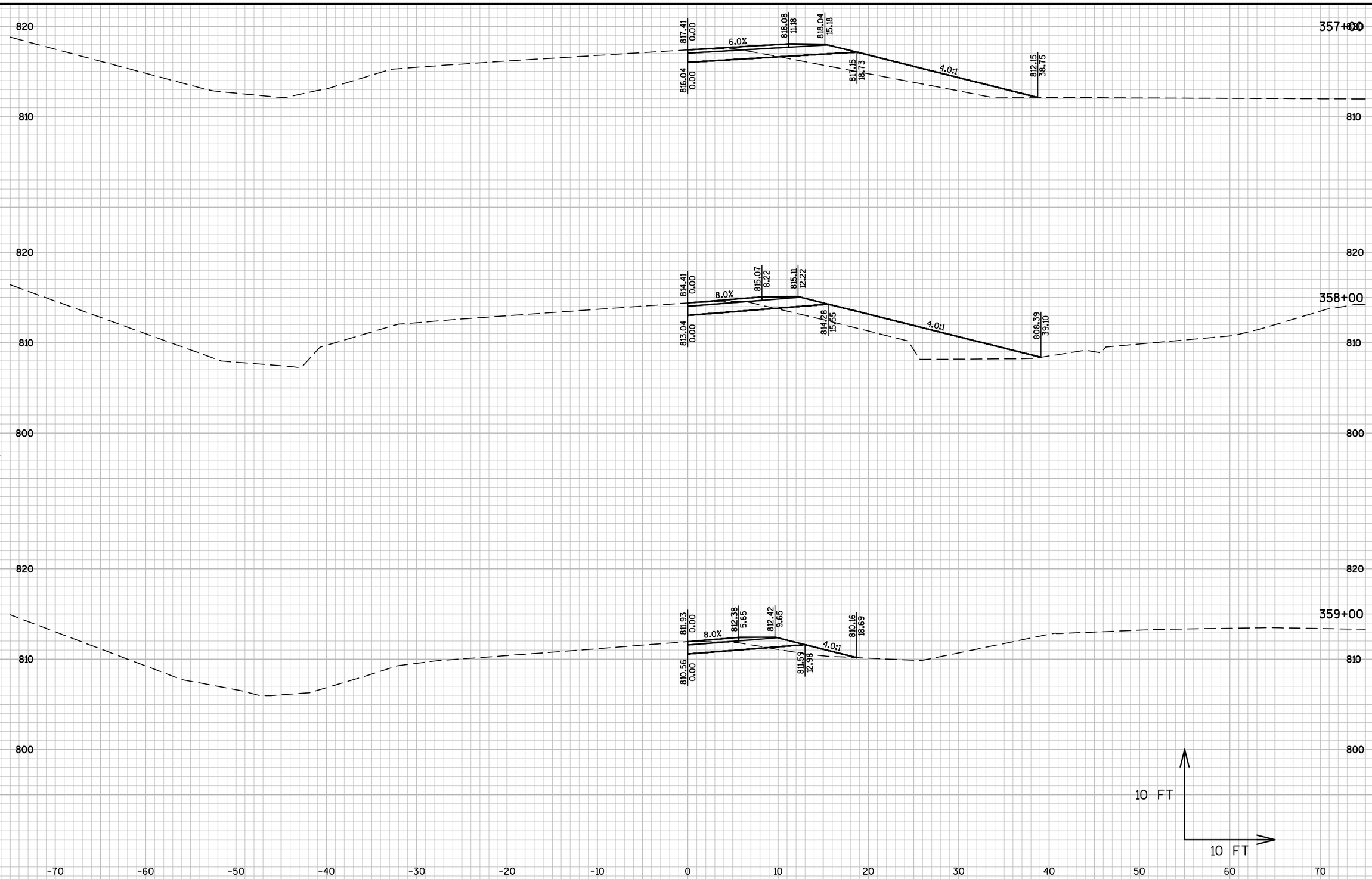
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SB OFF RAMP 'ZD' TEMPORARY WIDENING-STAGE 1	SHEET 530	E

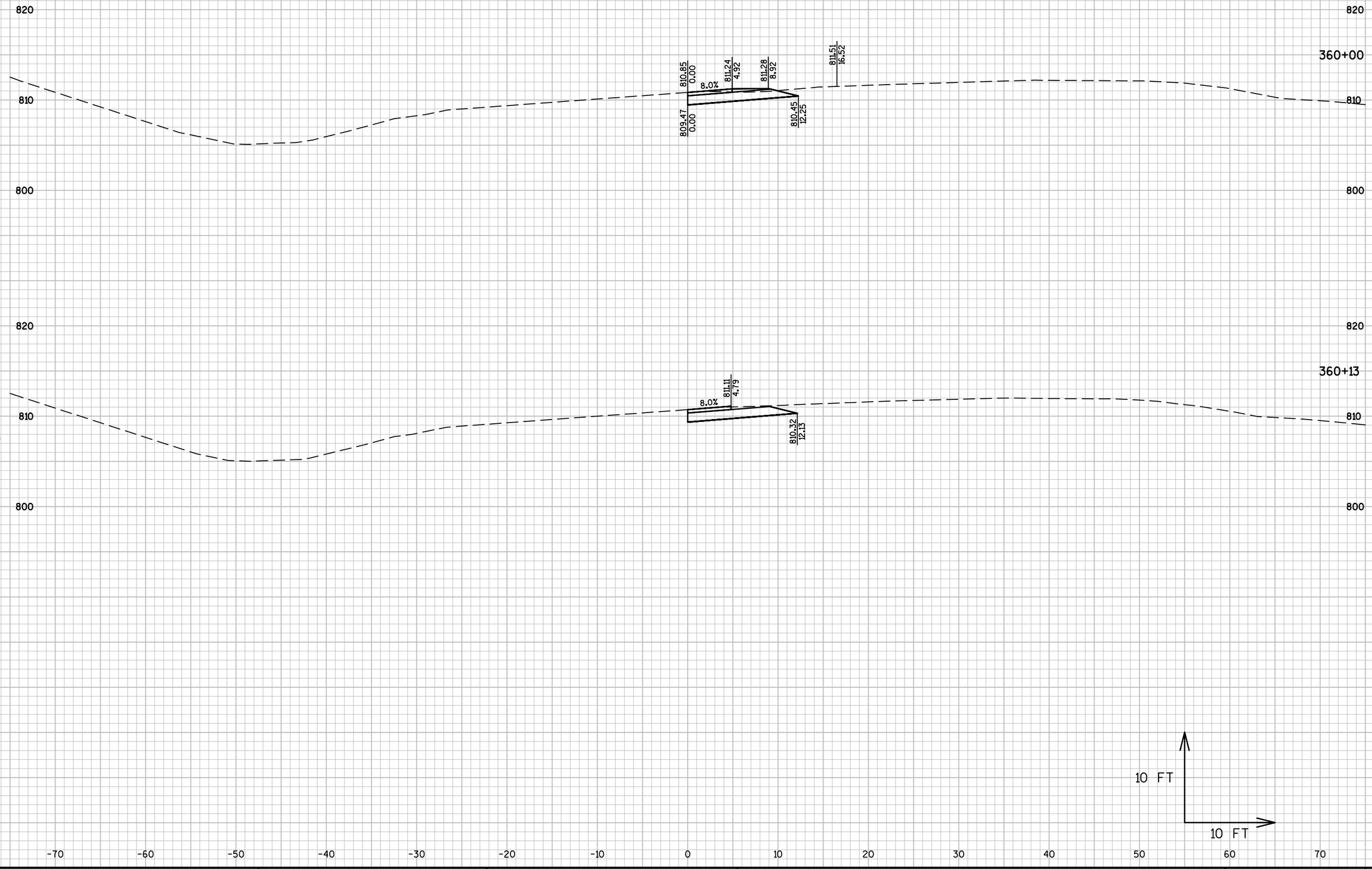
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WISDOT/CADDS SHEET 49



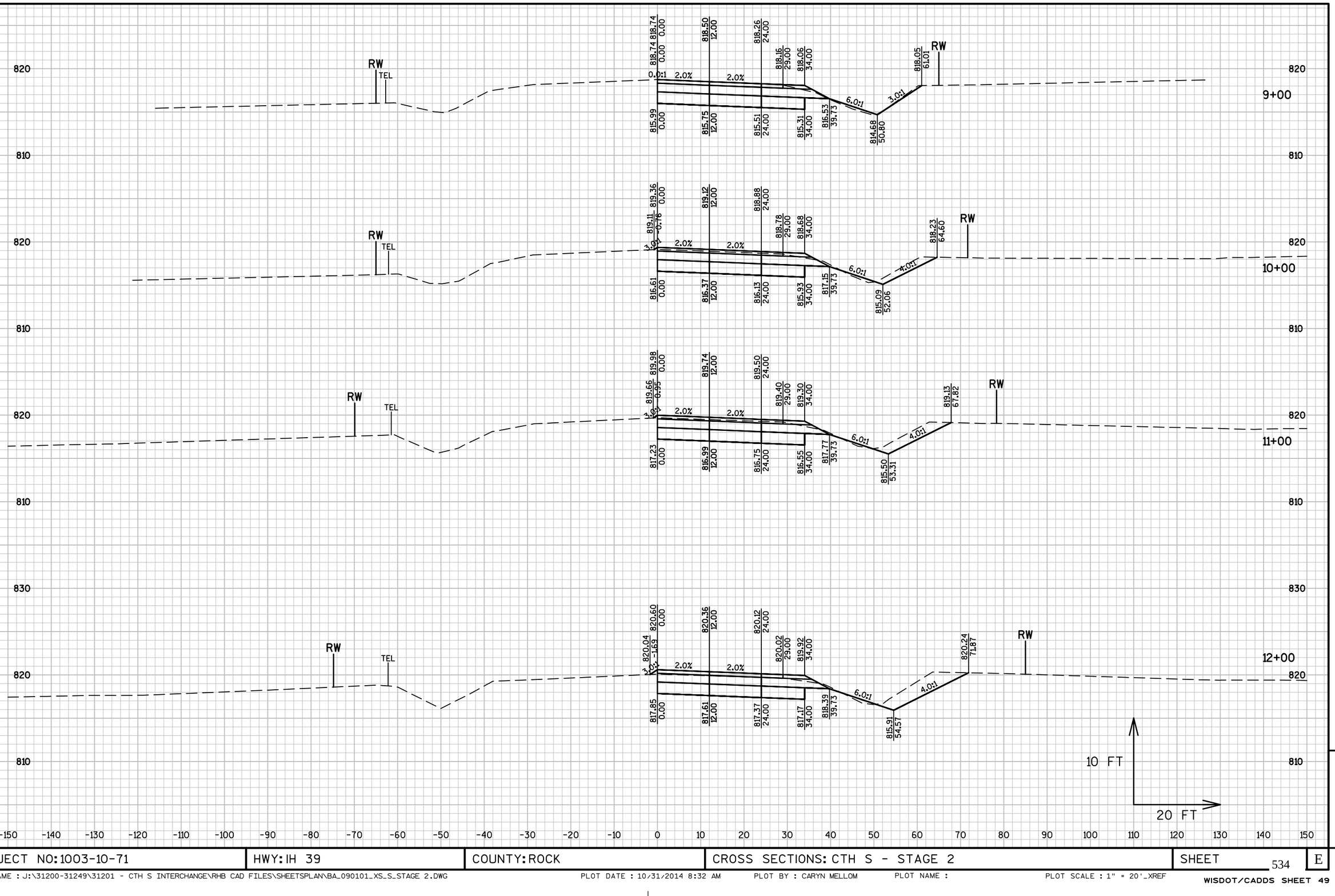
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SB OFF RAMP 'ZD' TEMPORARY WIDENING-STAGE 1	SHEET 532	E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SB OFF RAMP 'ZD' TEMPORARY WIDENING	SHEET 533	E

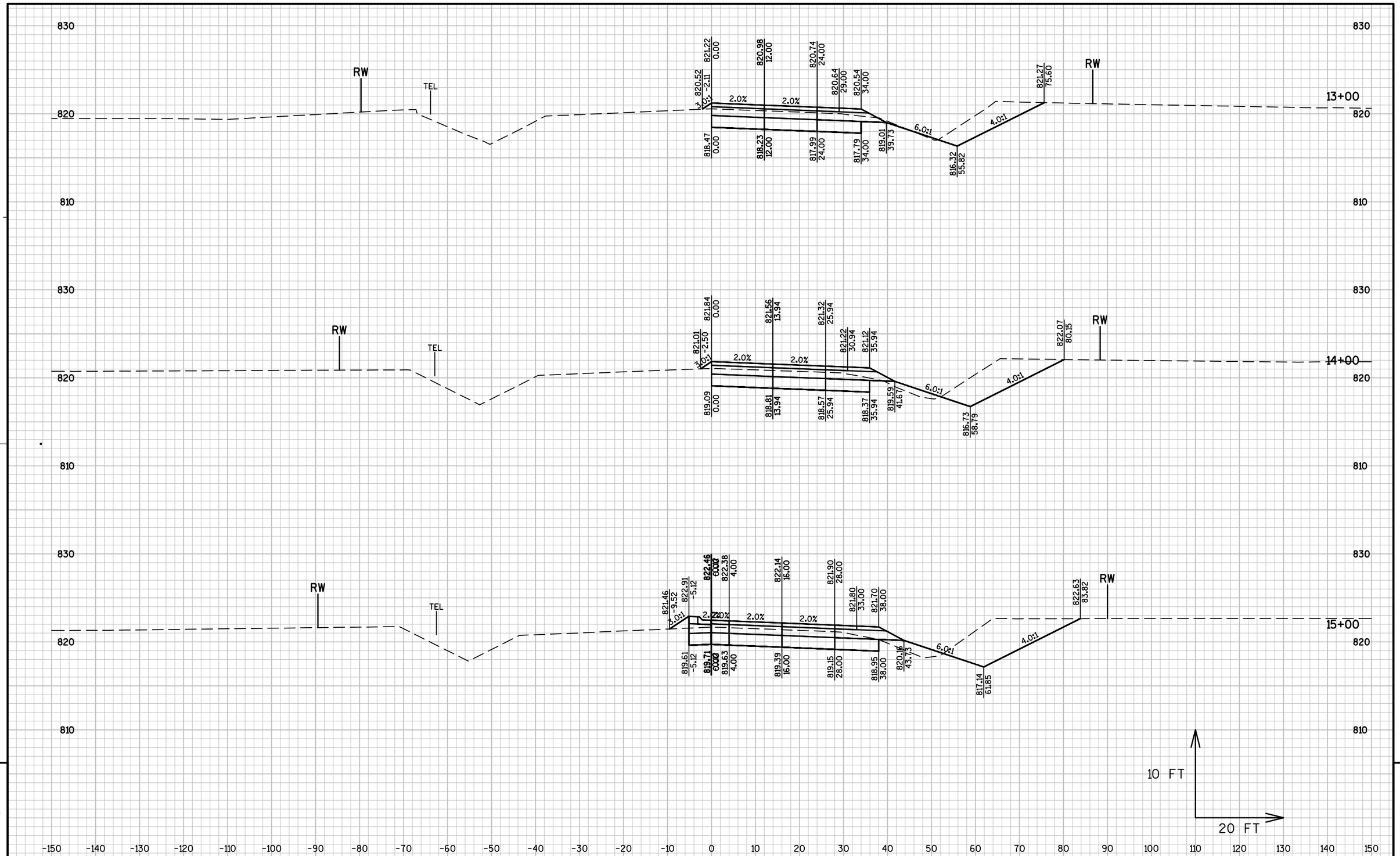


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9

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 2	SHEET 534	E

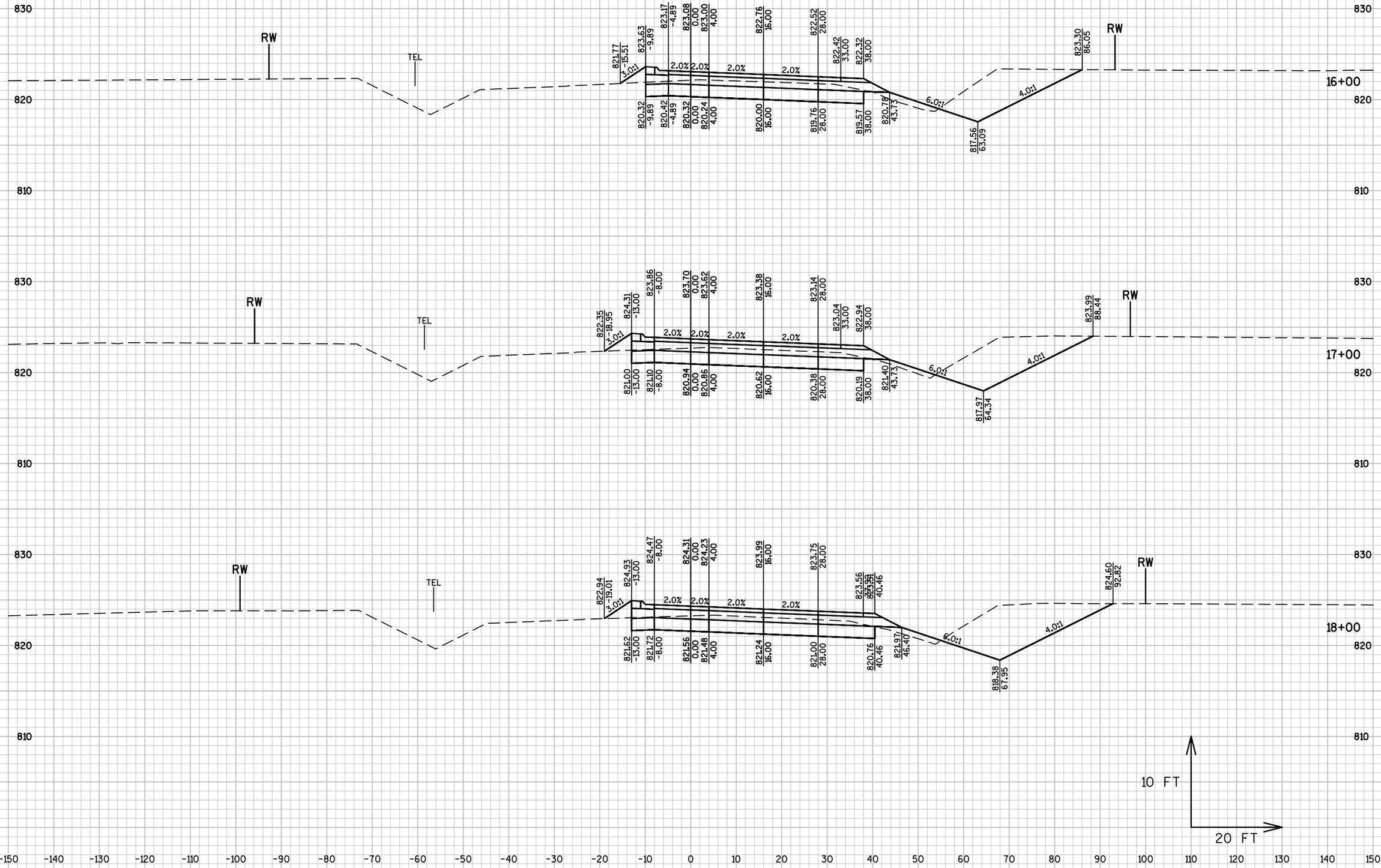
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PLOT DATE : 10/31/2014 8:32 AM
PLOT BY : CARYN MELLOM
PLOT NAME :
PLOT SCALE : 1" = 20'_XREF
WISDOT/CADDS SHEET 49



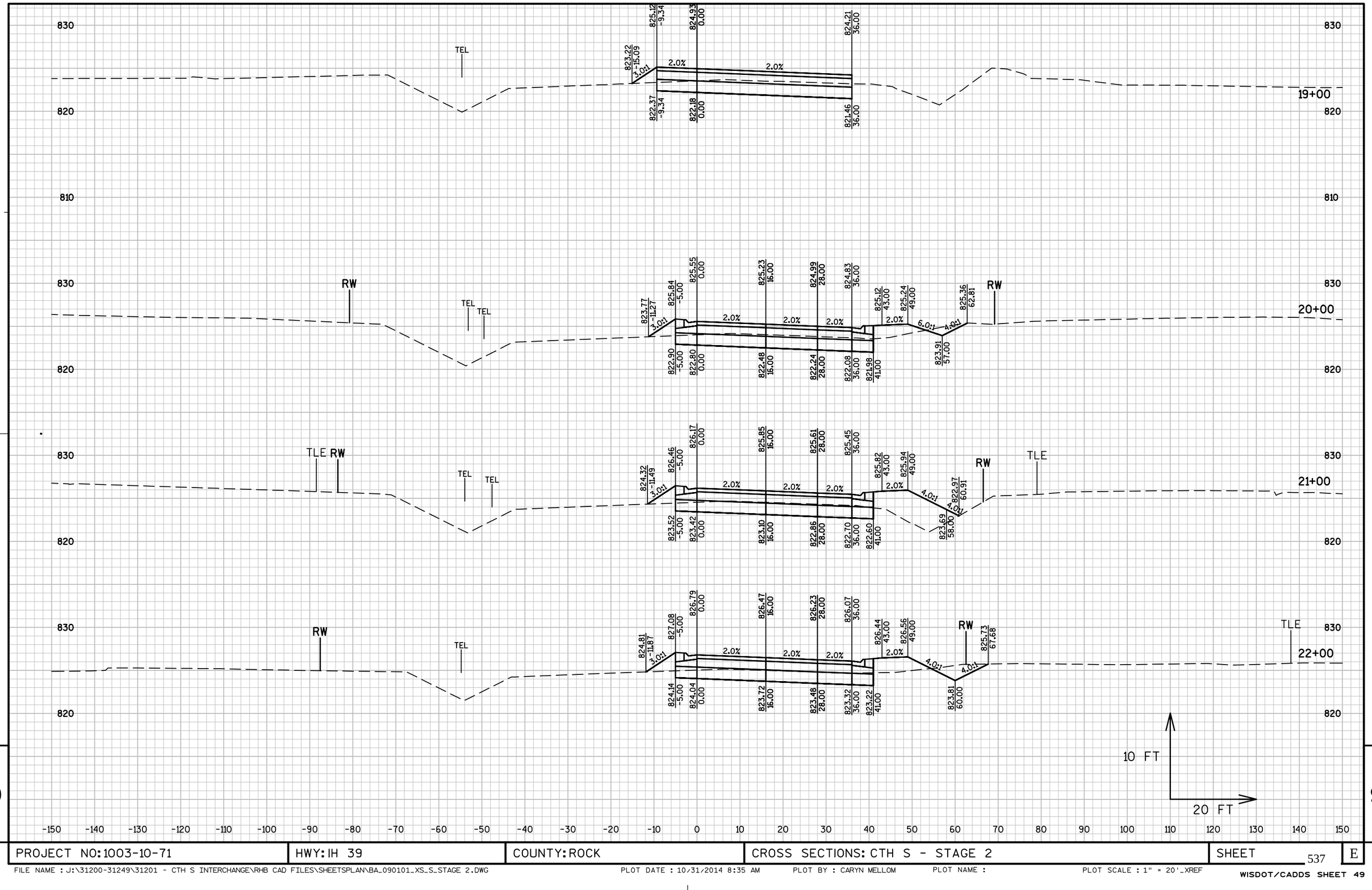
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 2	SHEET 535	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090101_XS_S_STAGE 2.DWG PLOT DATE : 10/31/2014 8:33 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49



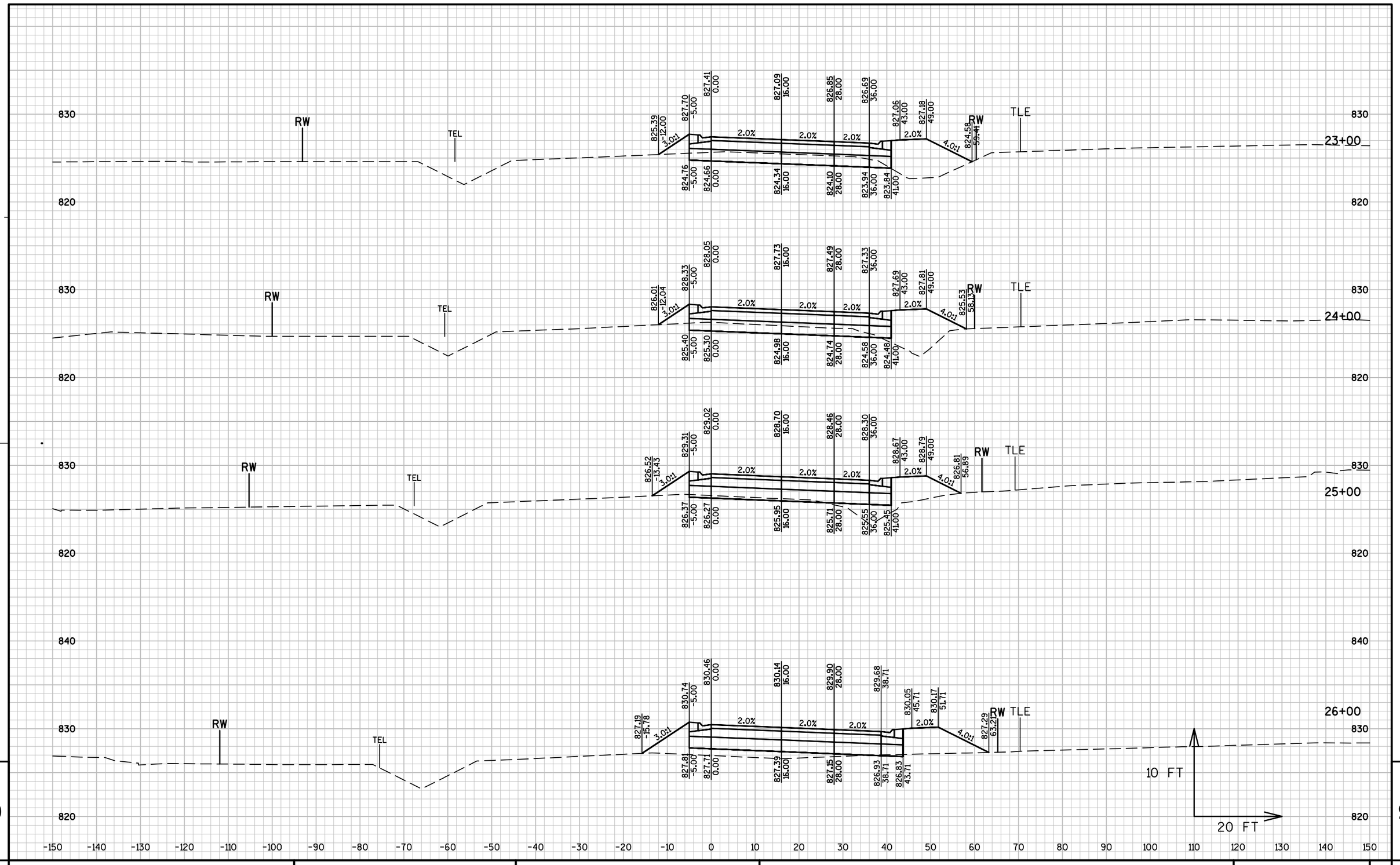
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 2	SHEET 536	E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 2	SHEET 537	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090101_XS_S_STAGE 2.DWG PLOT DATE : 10/31/2014 8:35 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1" = 20'_XREF

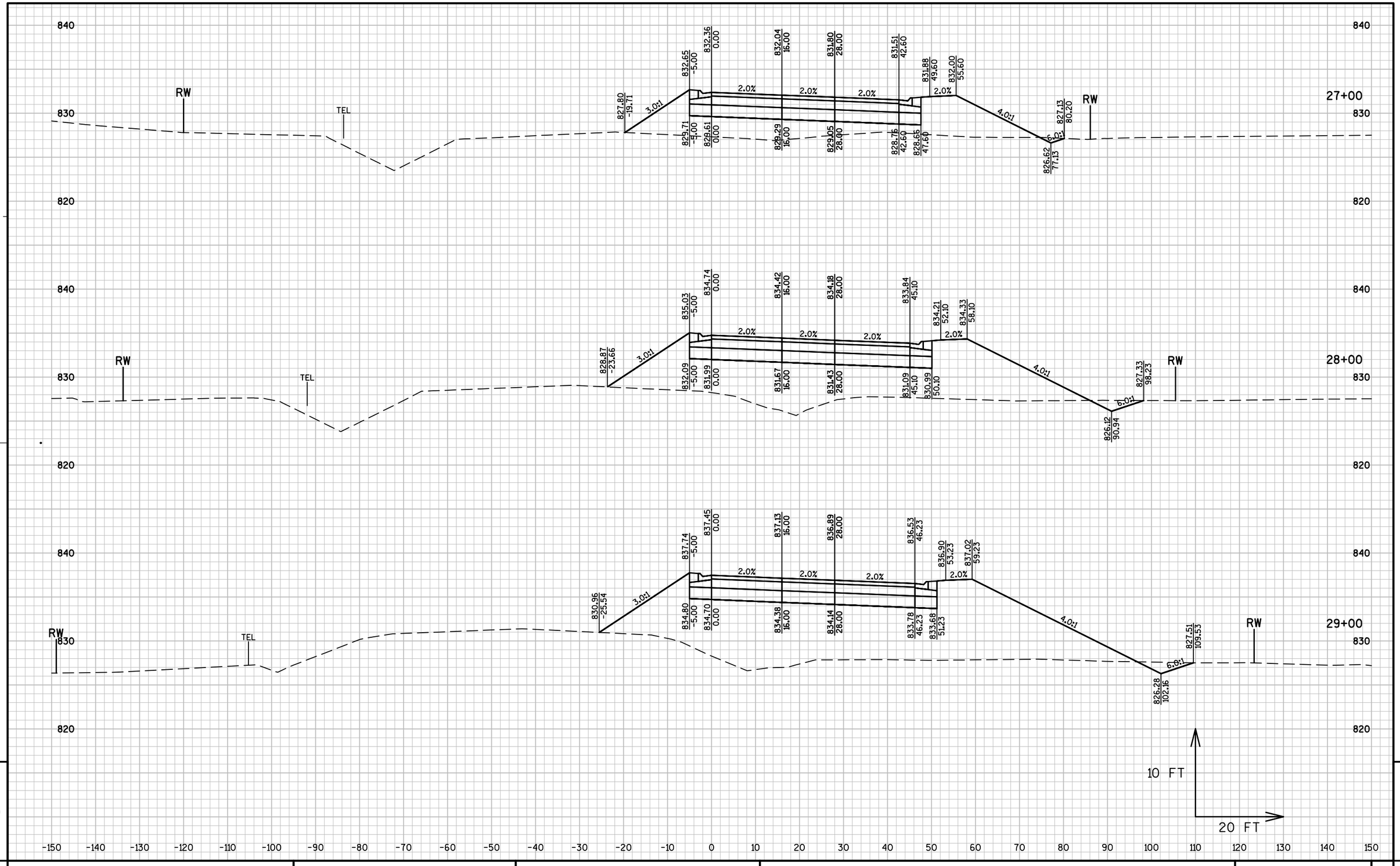
WISDOT/CADDS SHEET 49



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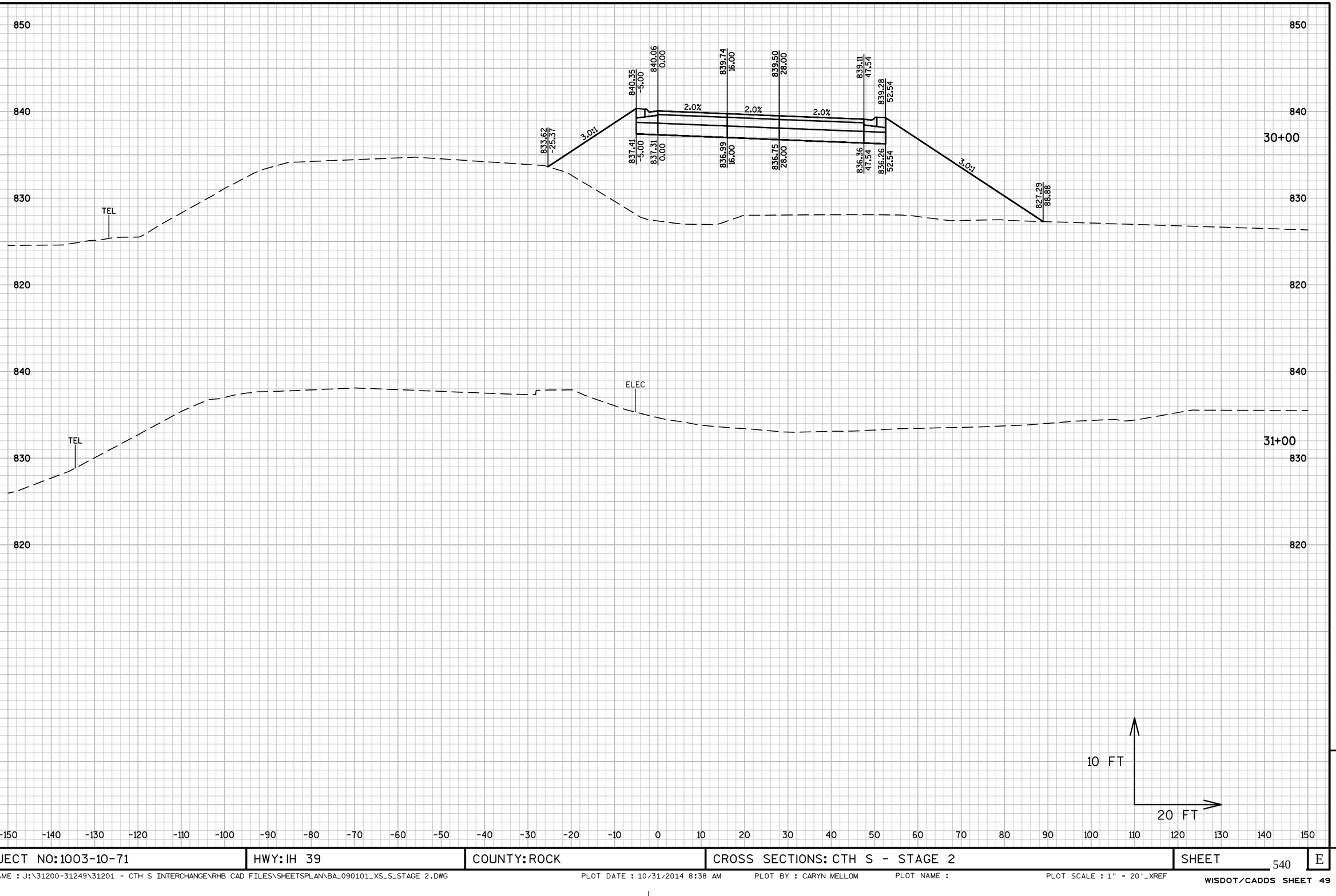
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 2	SHEET 538 E



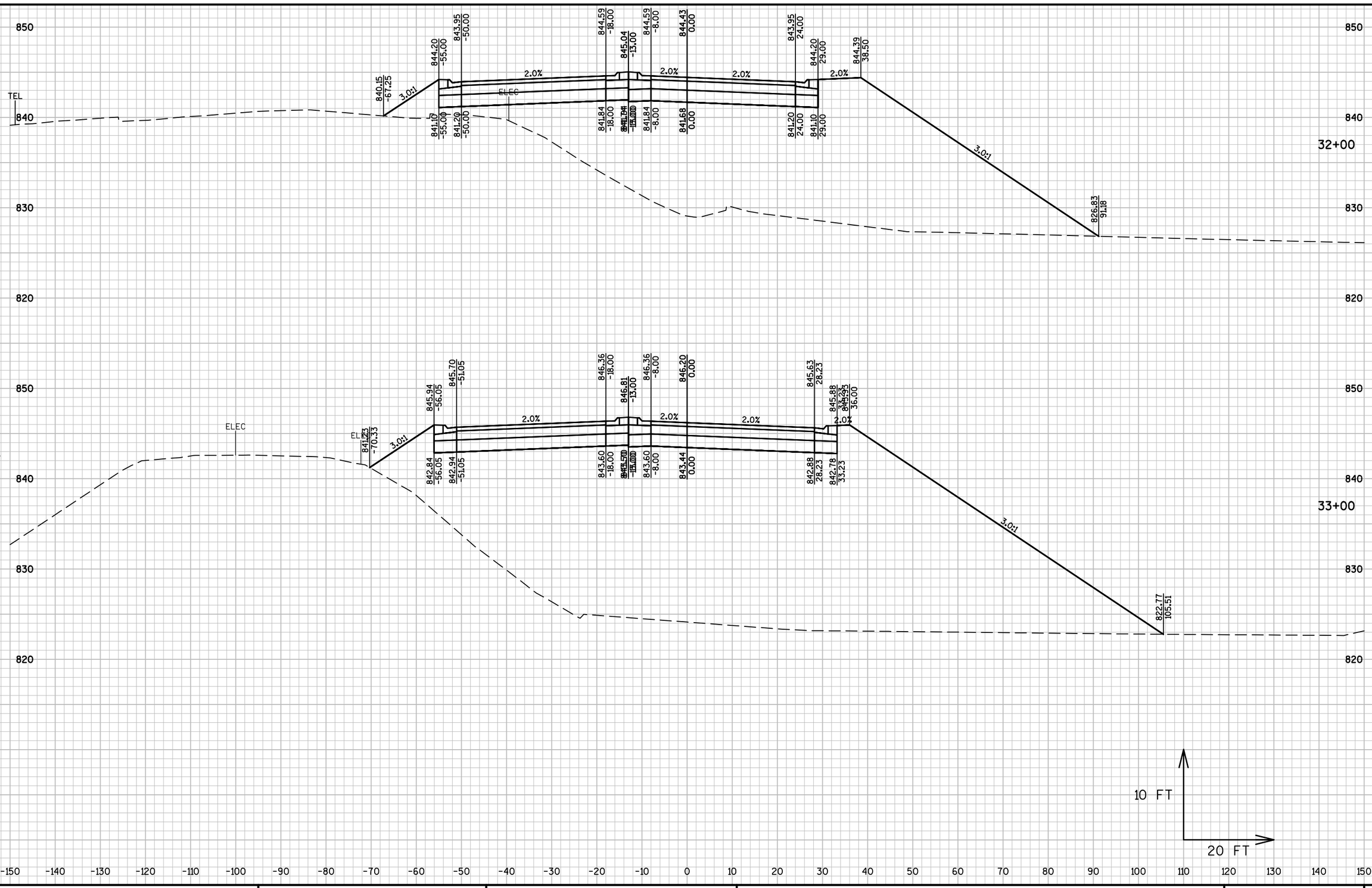
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 2	SHEET 539	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090101_XS_S_STAGE 2.DWG PLOT DATE : 10/31/2014 8:37 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1" = 20'_XREF



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 2	SHEET 540	E

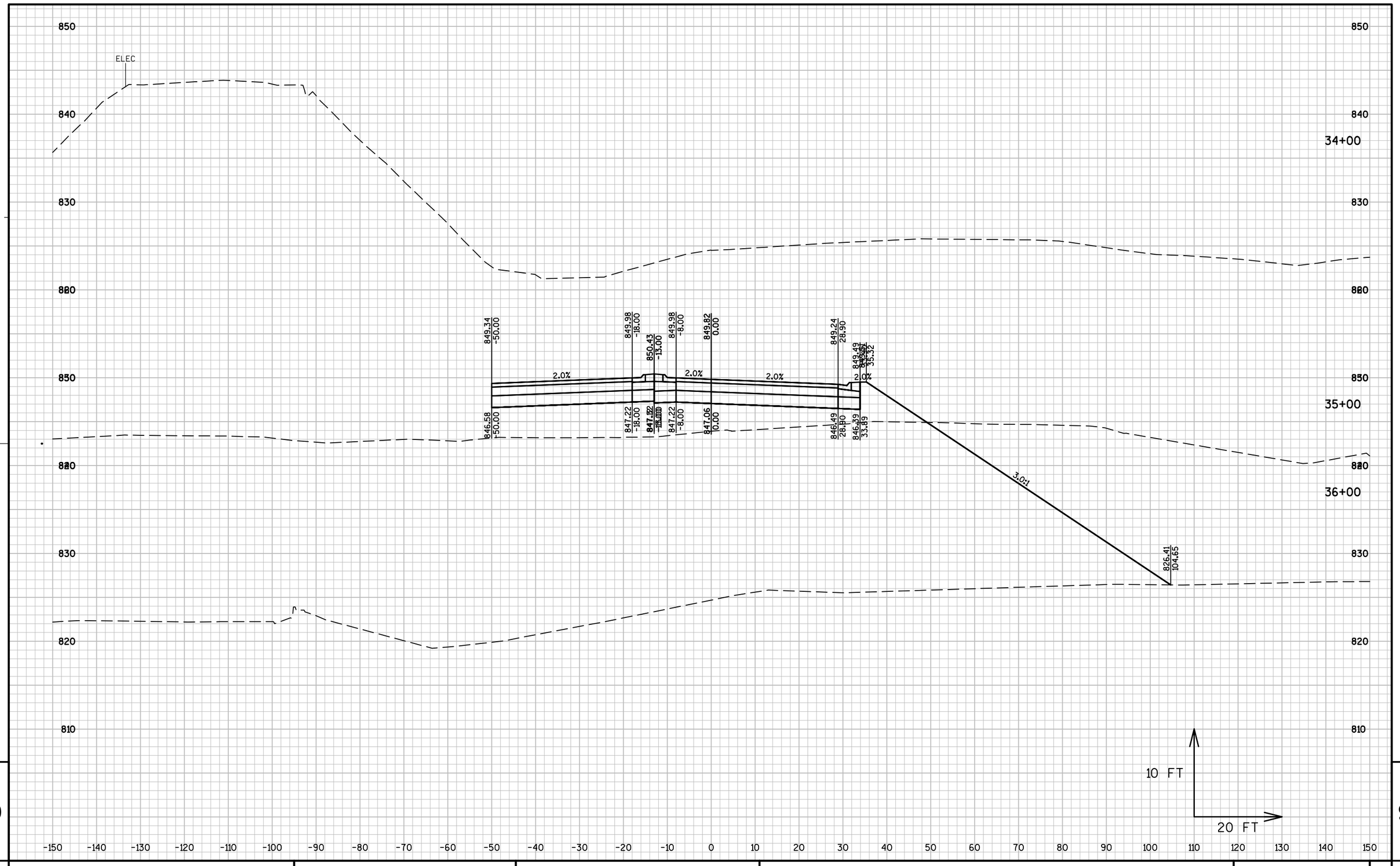
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 2	SHEET 541	E

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WISDOT/CADDS SHEET 49

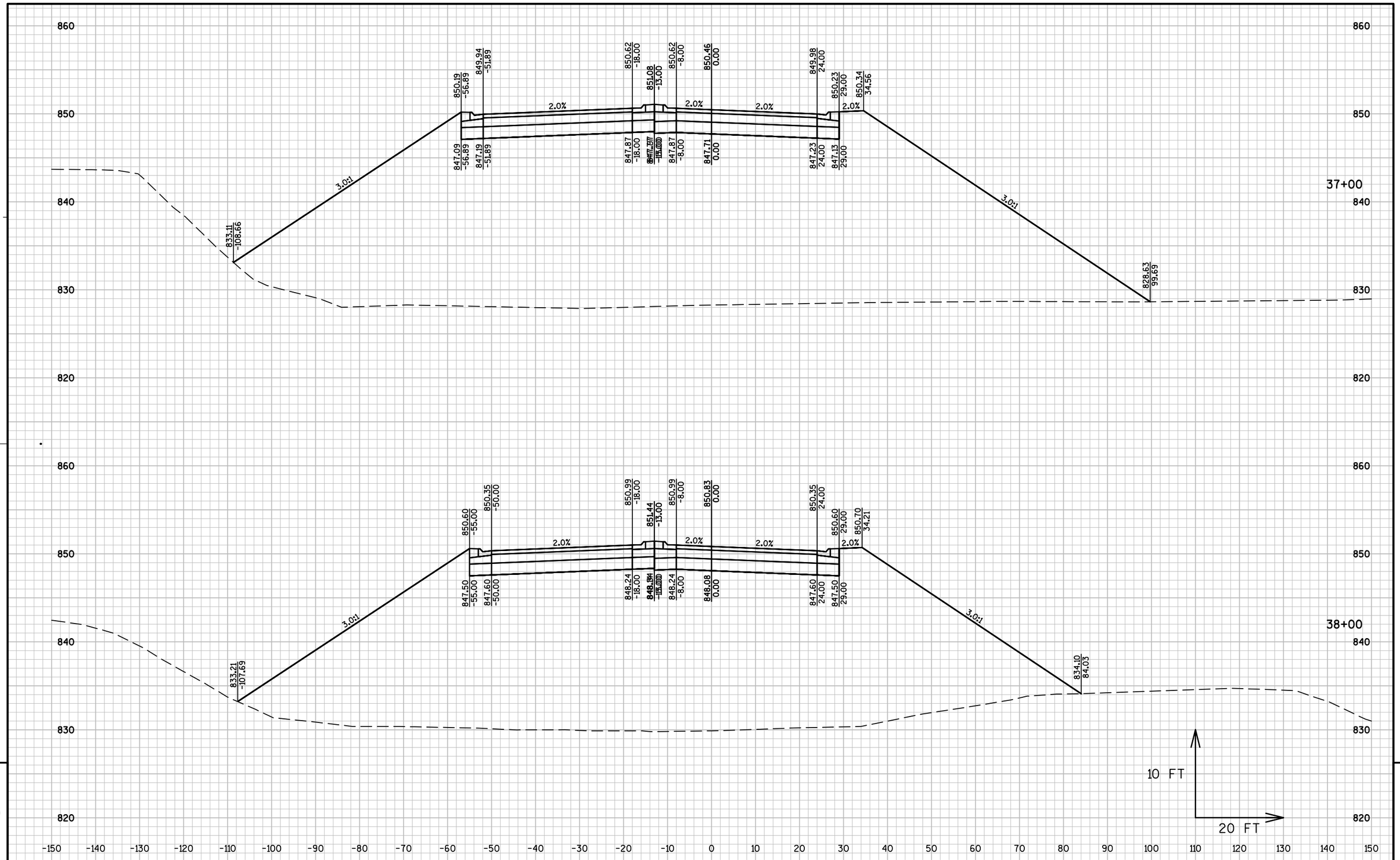


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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 2	SHEET 542	E

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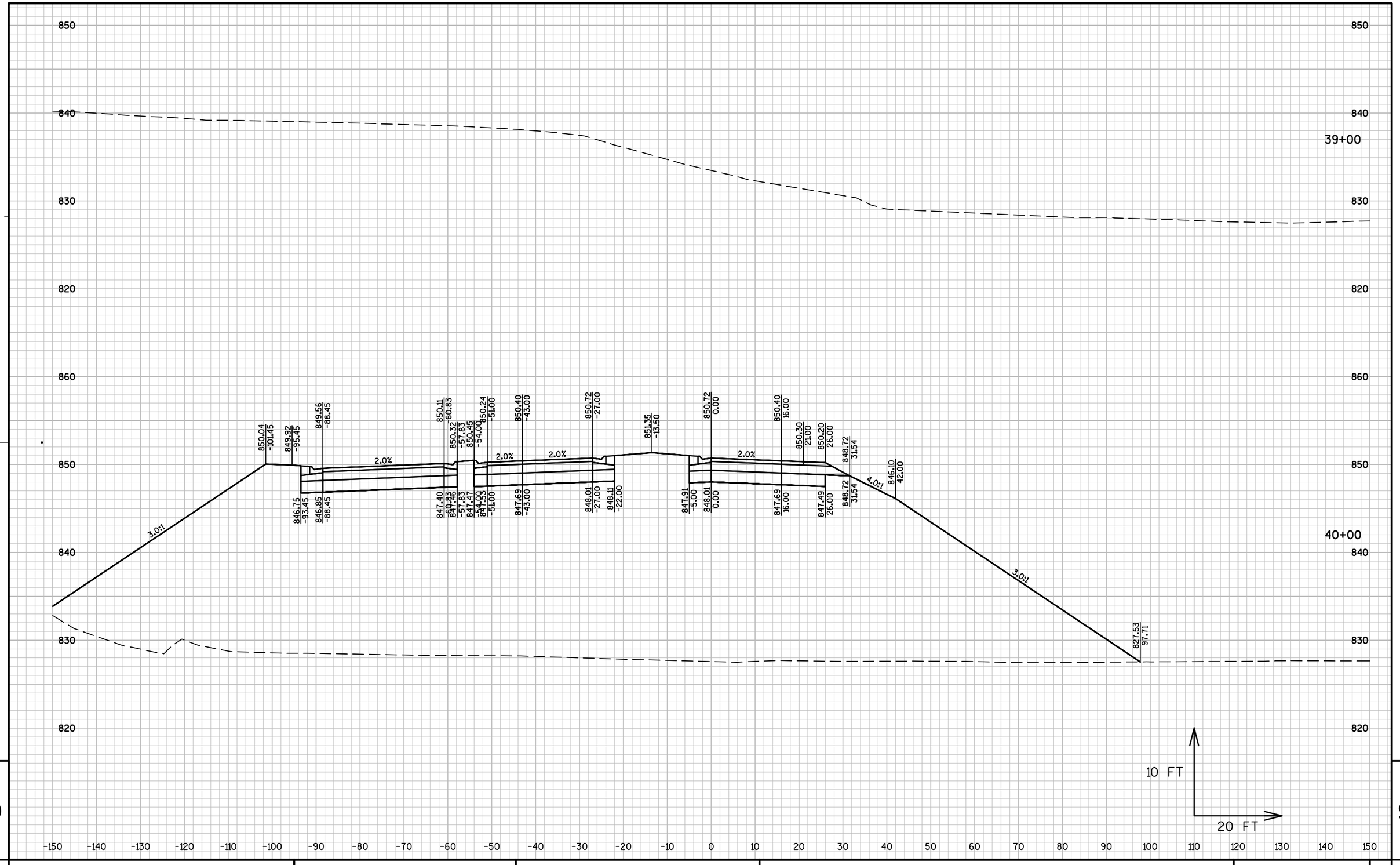
WISDOT/CADDS SHEET 49



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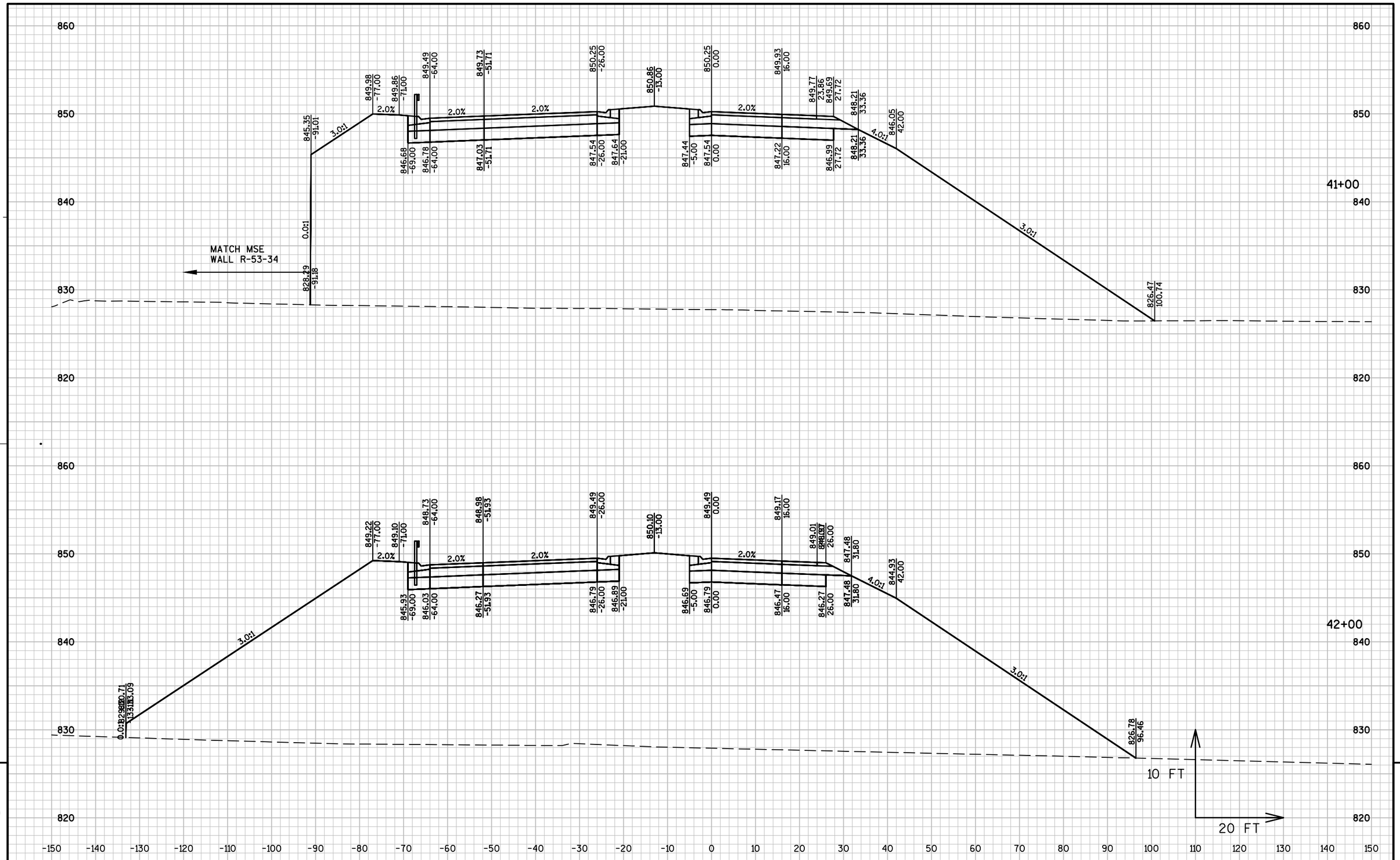
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 2	SHEET 543 E



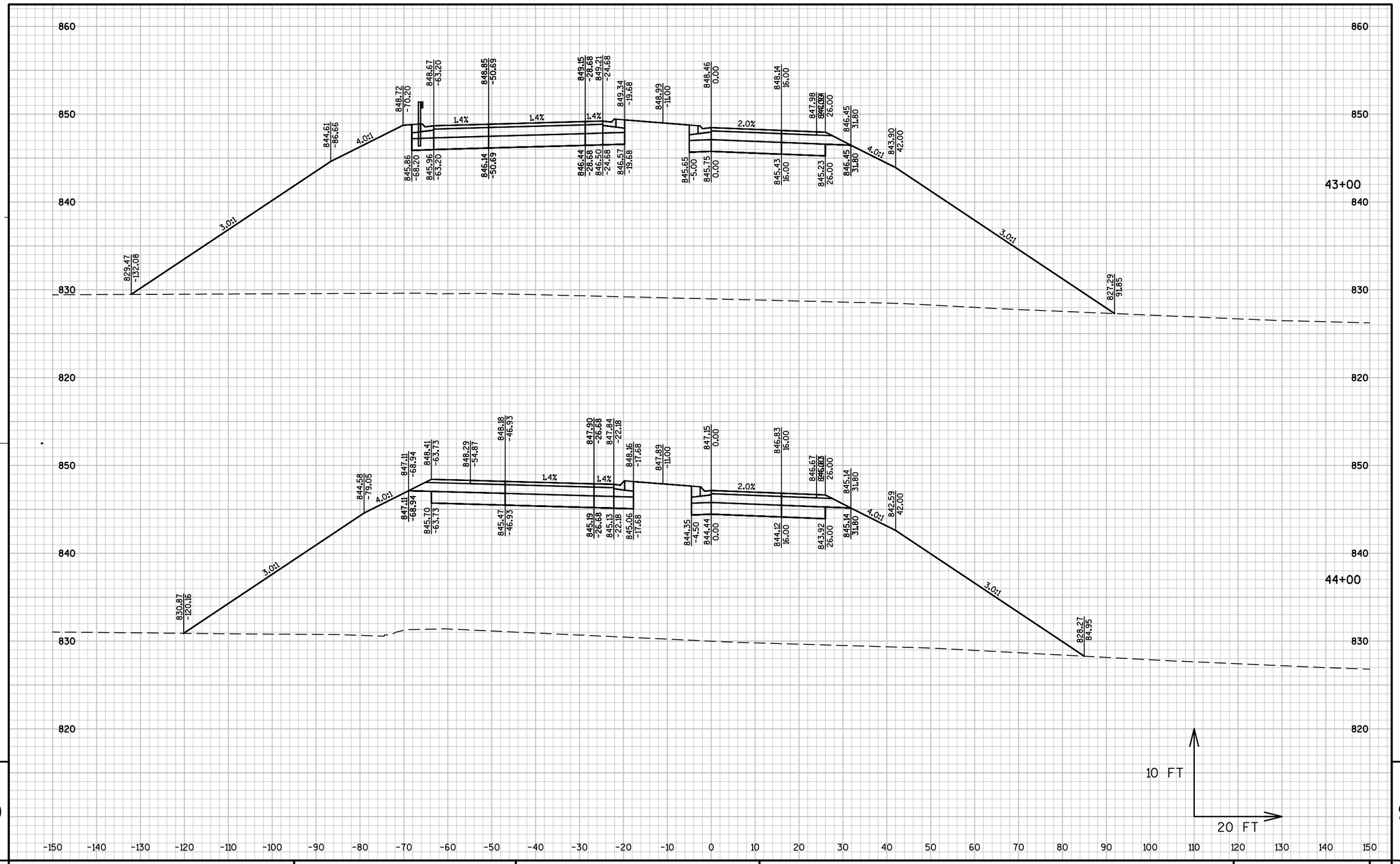
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 2	SHEET 544	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090101_XS_S_STAGE 2.DWG PLOT DATE : 10/31/2014 8:42 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1" = 20'_XREF



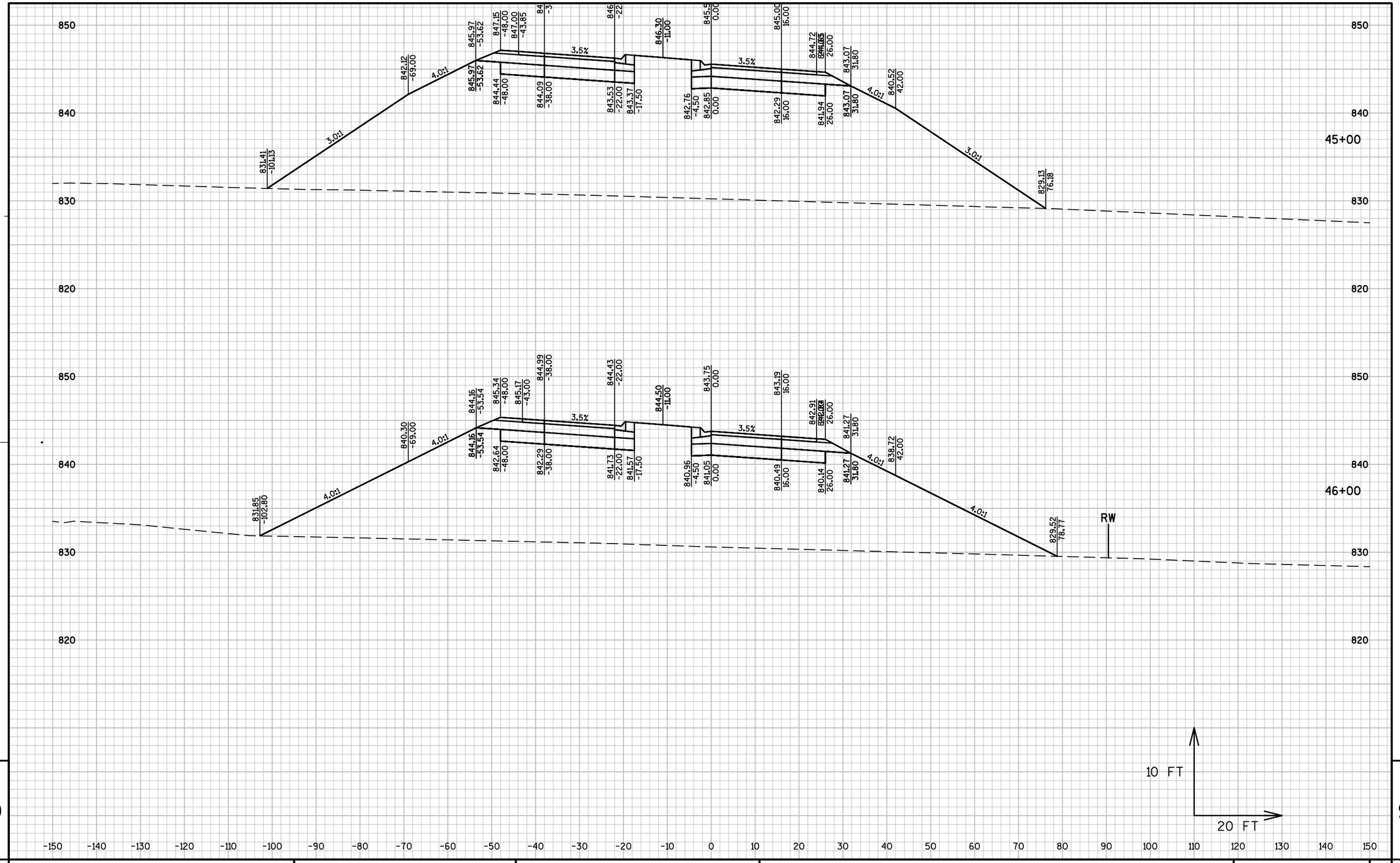
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FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090101_XS_S_STAGE 2.DWG PLOT DATE : 10/31/2014 8:43 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1" = 20'_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 2	SHEET 546 E

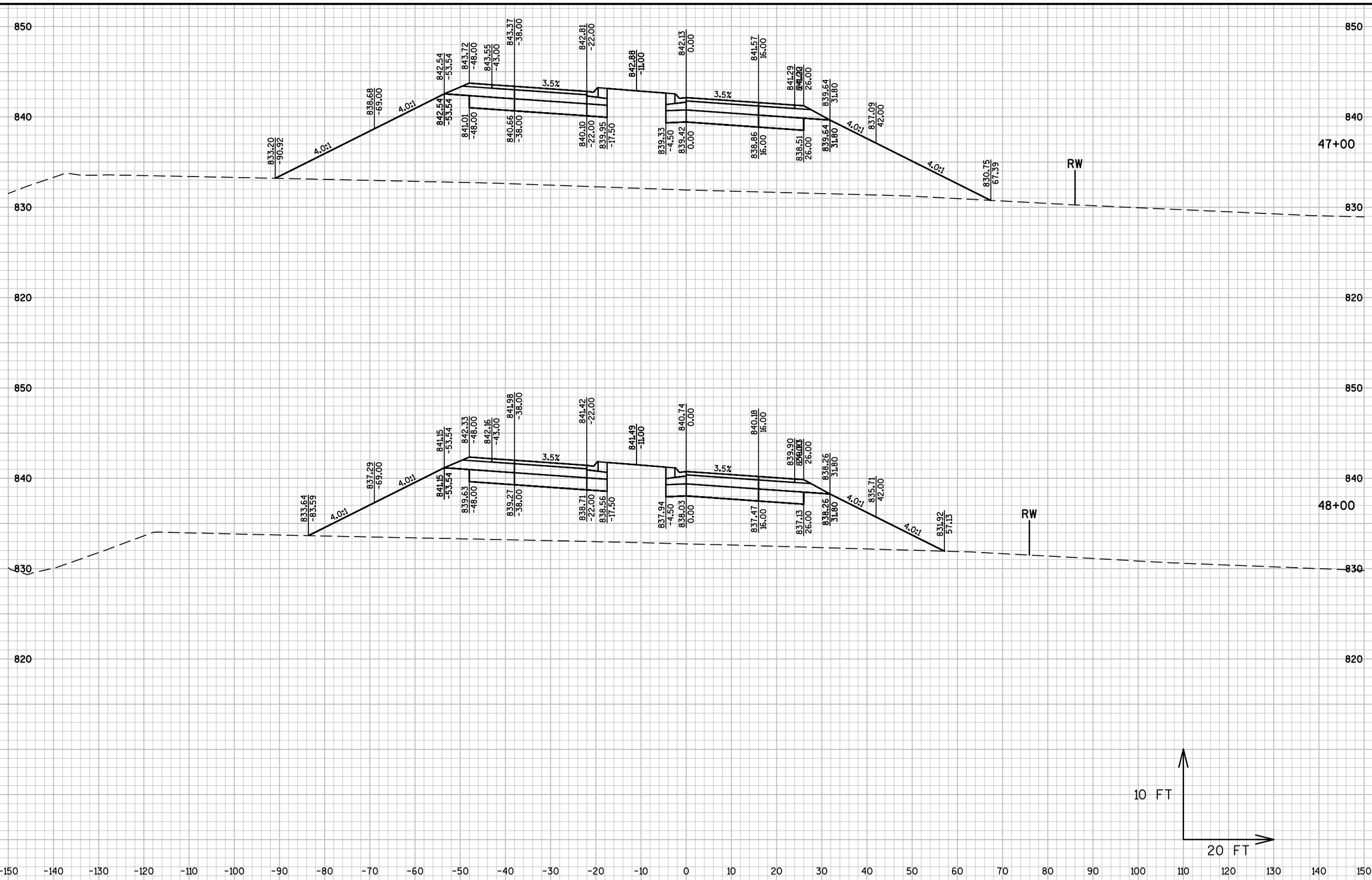
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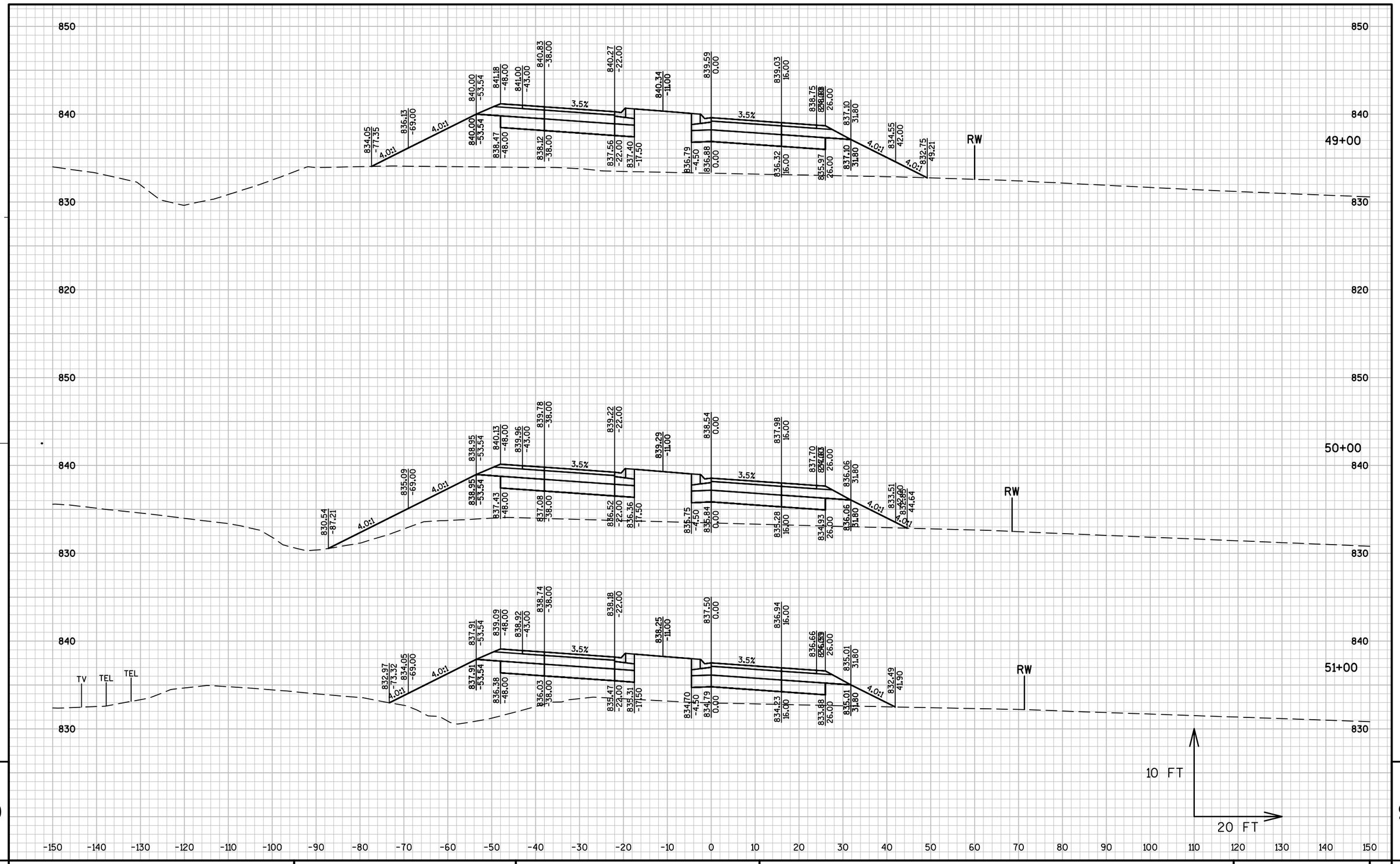
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WISDOT/CADDS SHEET 49

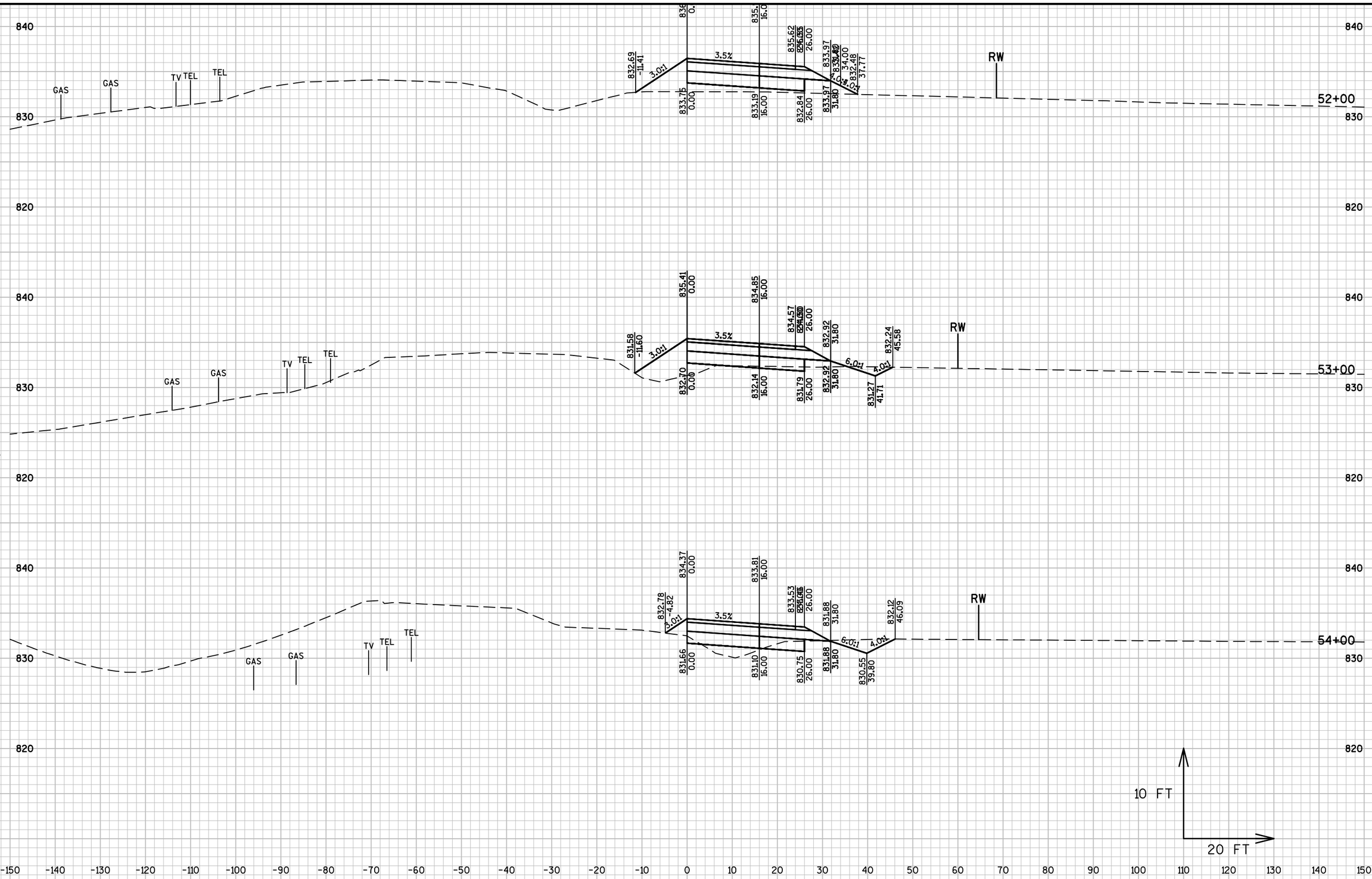


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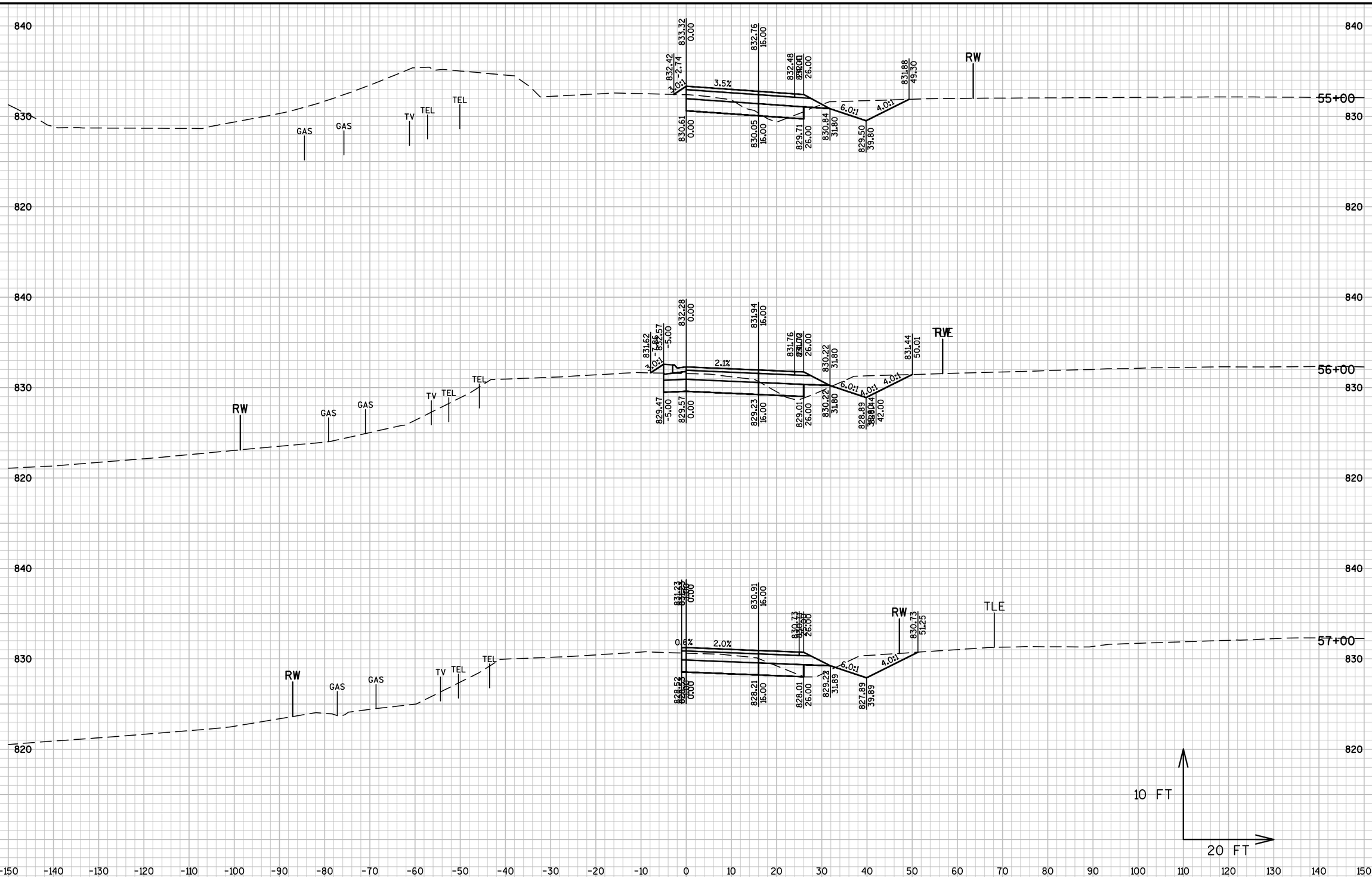


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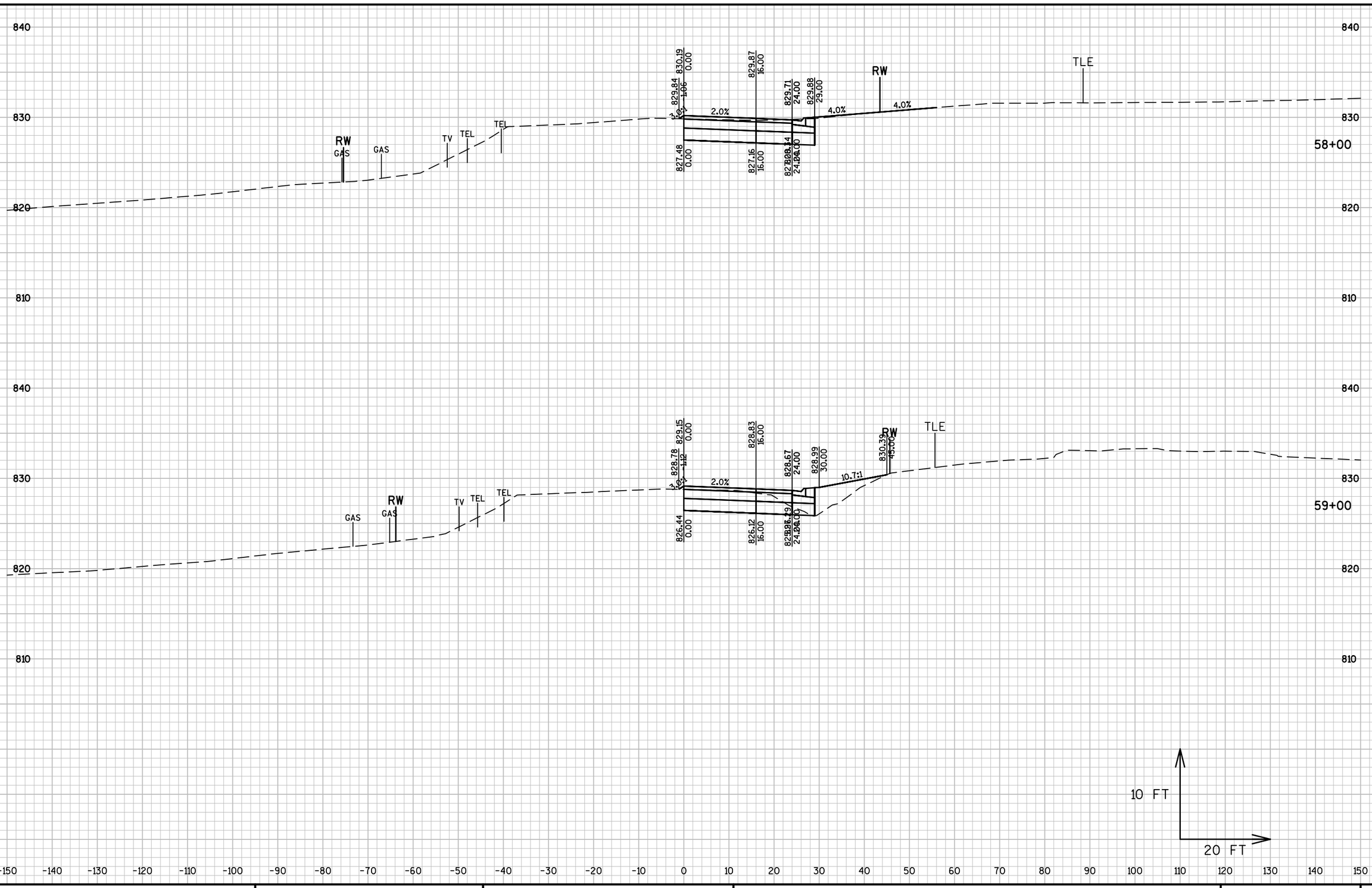
FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090101_XS_S_STAGE 2.DWG PLOT DATE : 10/31/2014 8:47 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1" = 20'_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 2	SHEET 550 E



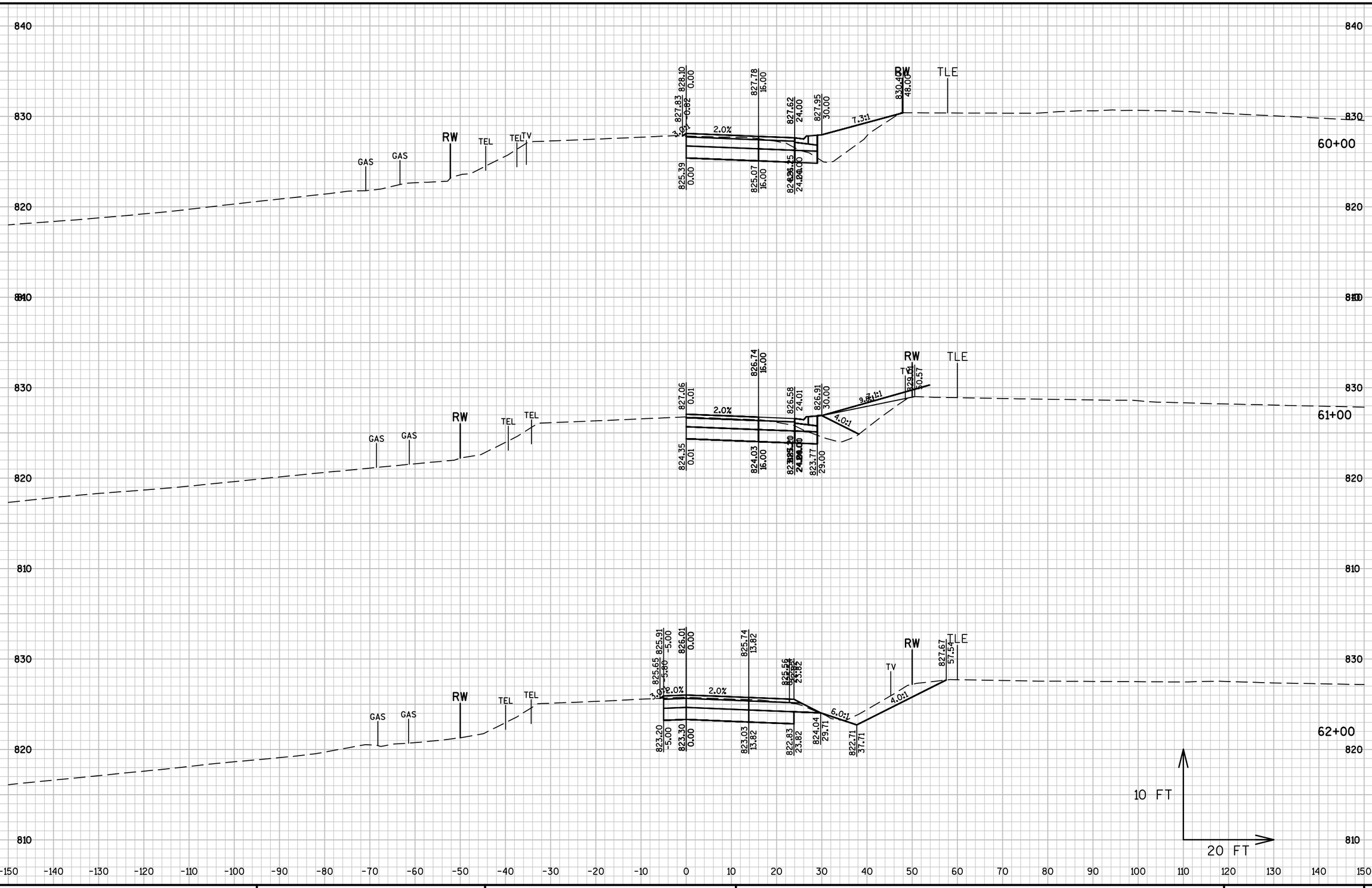
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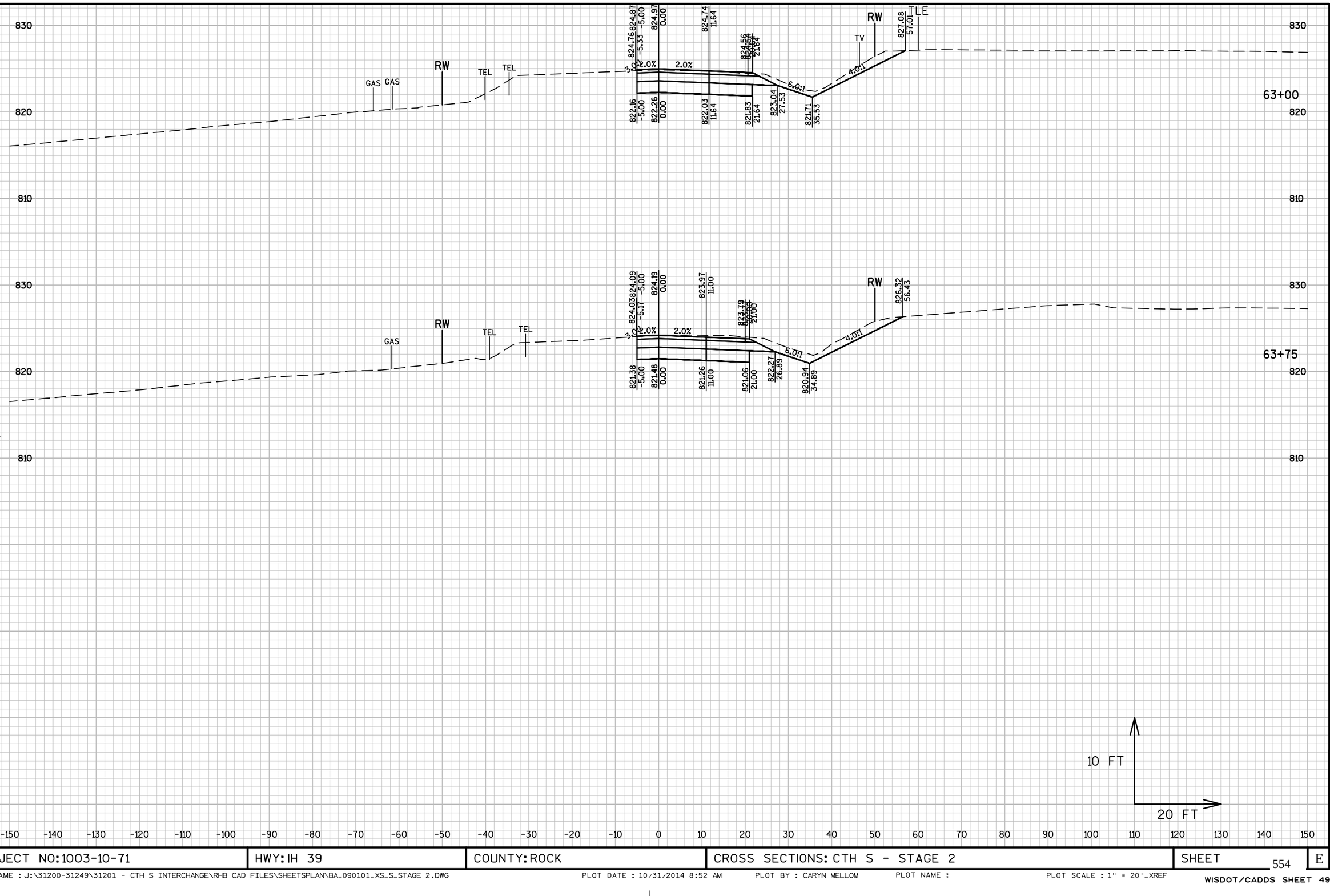
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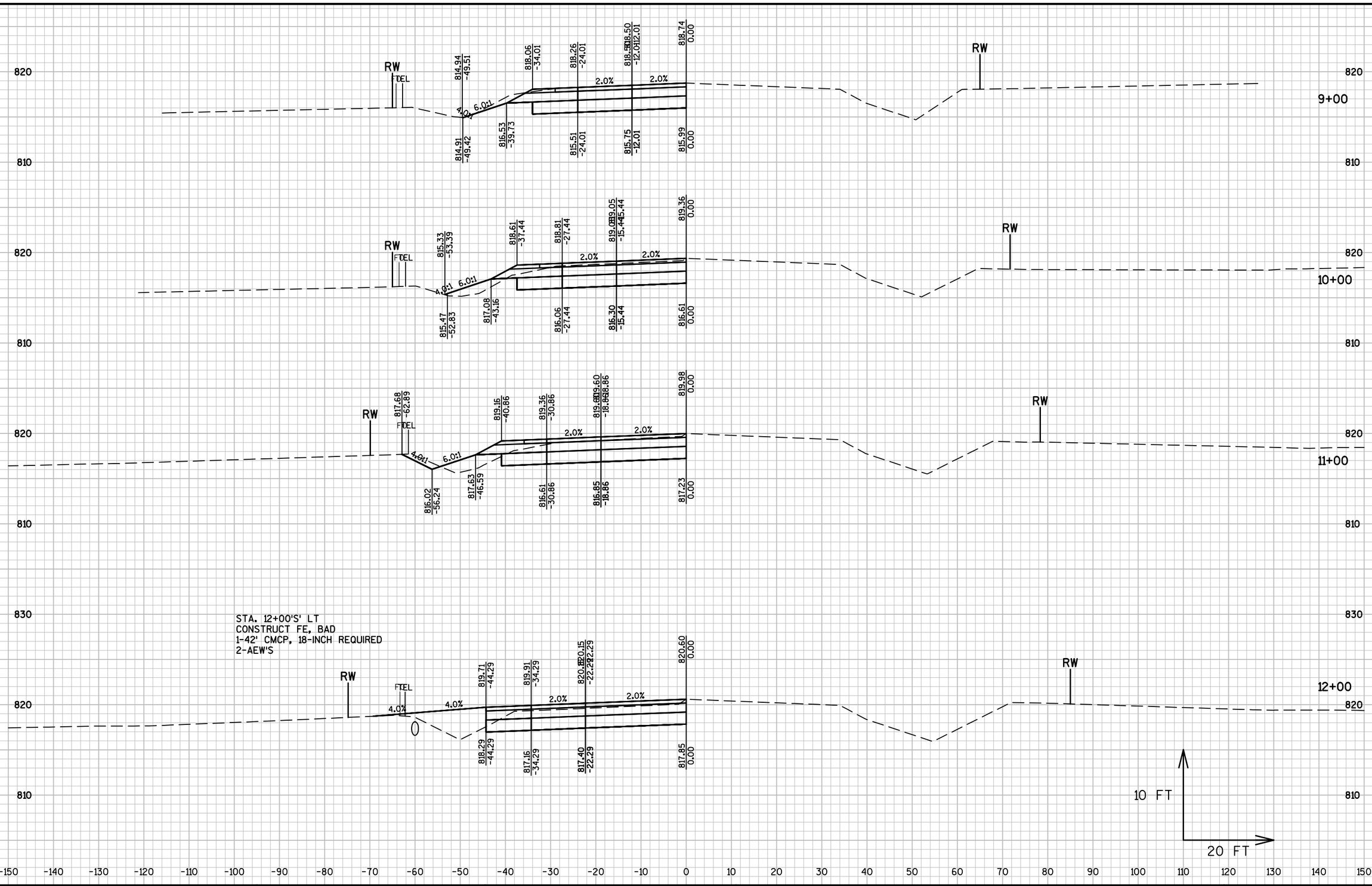
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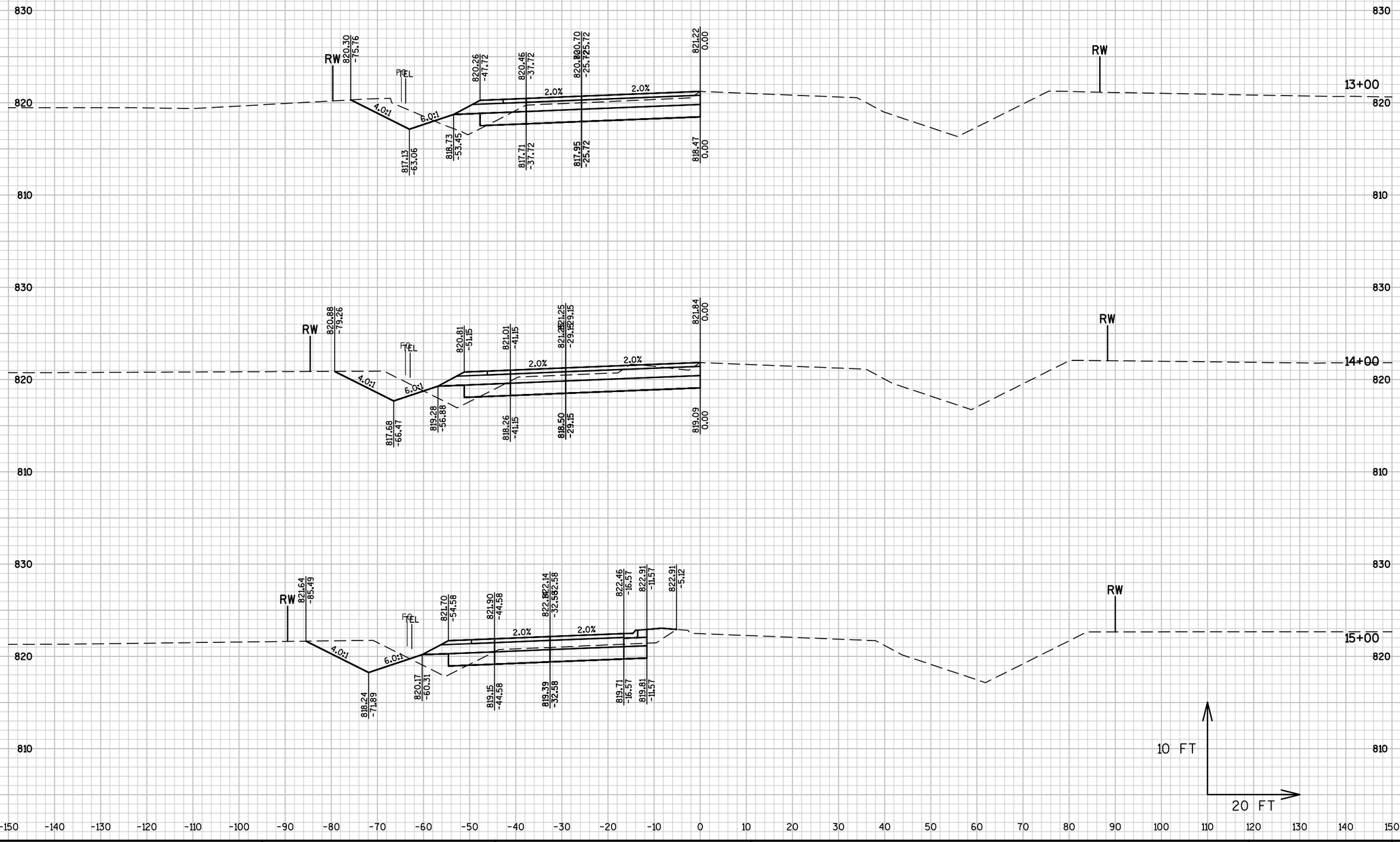
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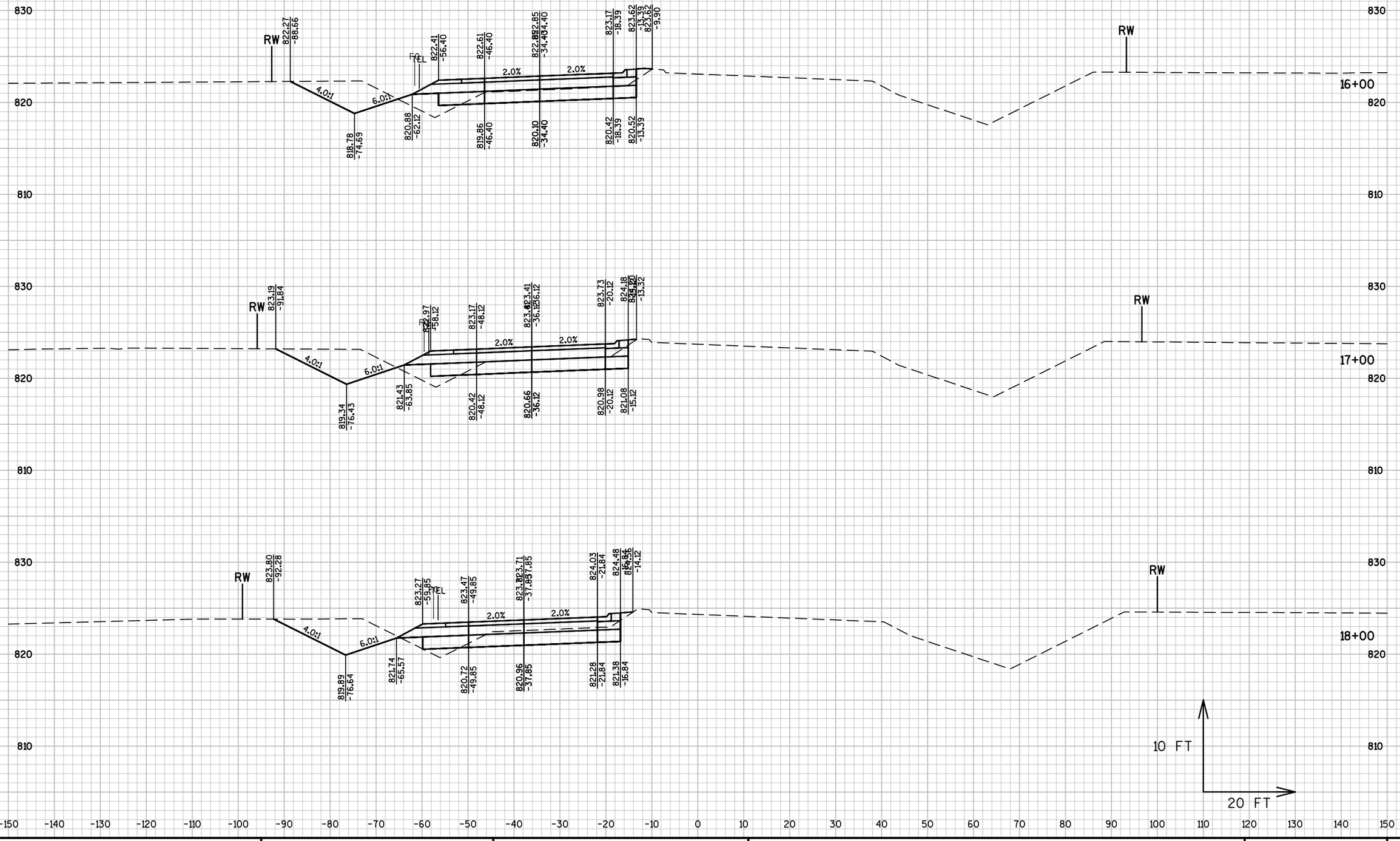
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 3	SHEET 555	E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 3	SHEET 556	E

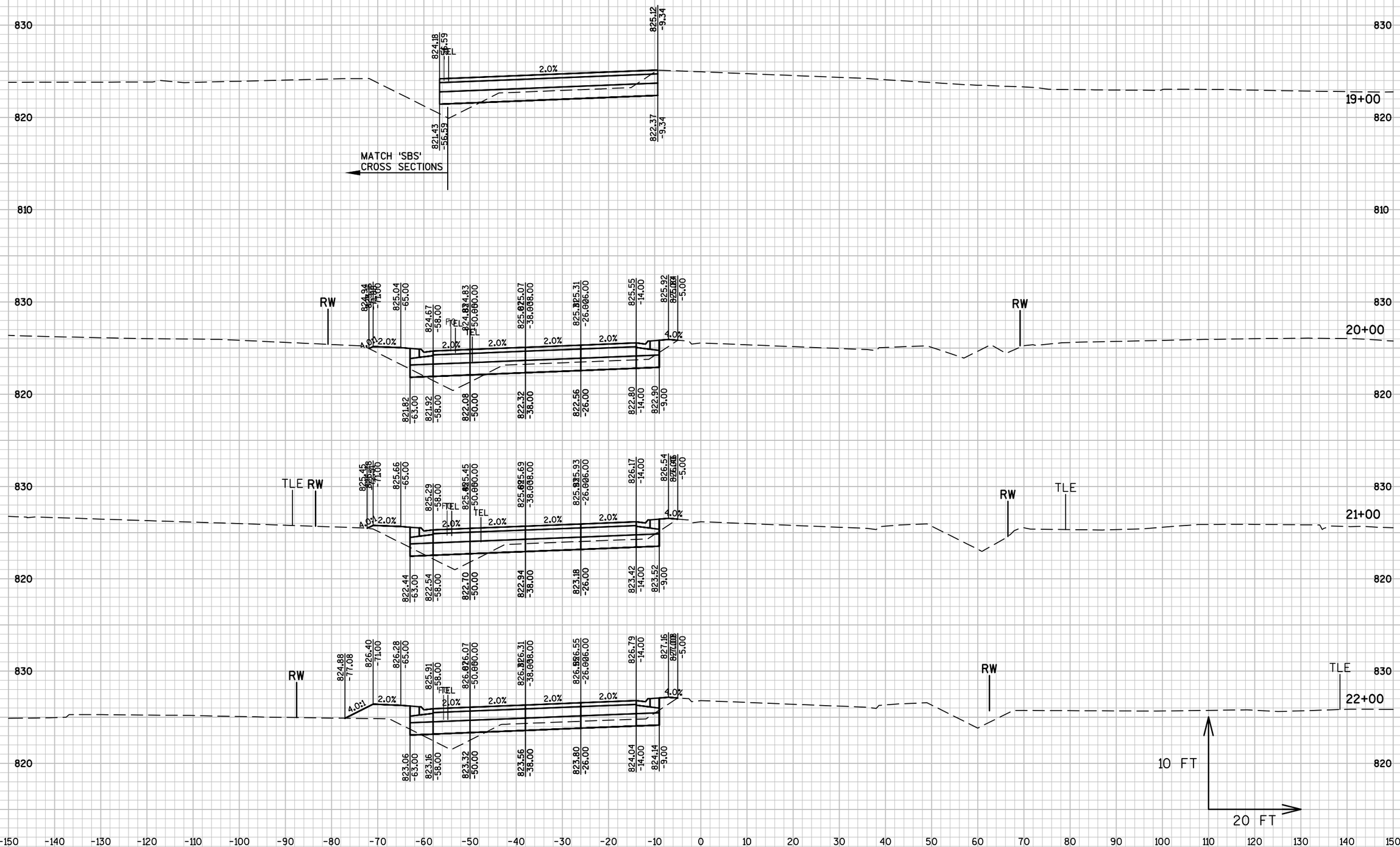


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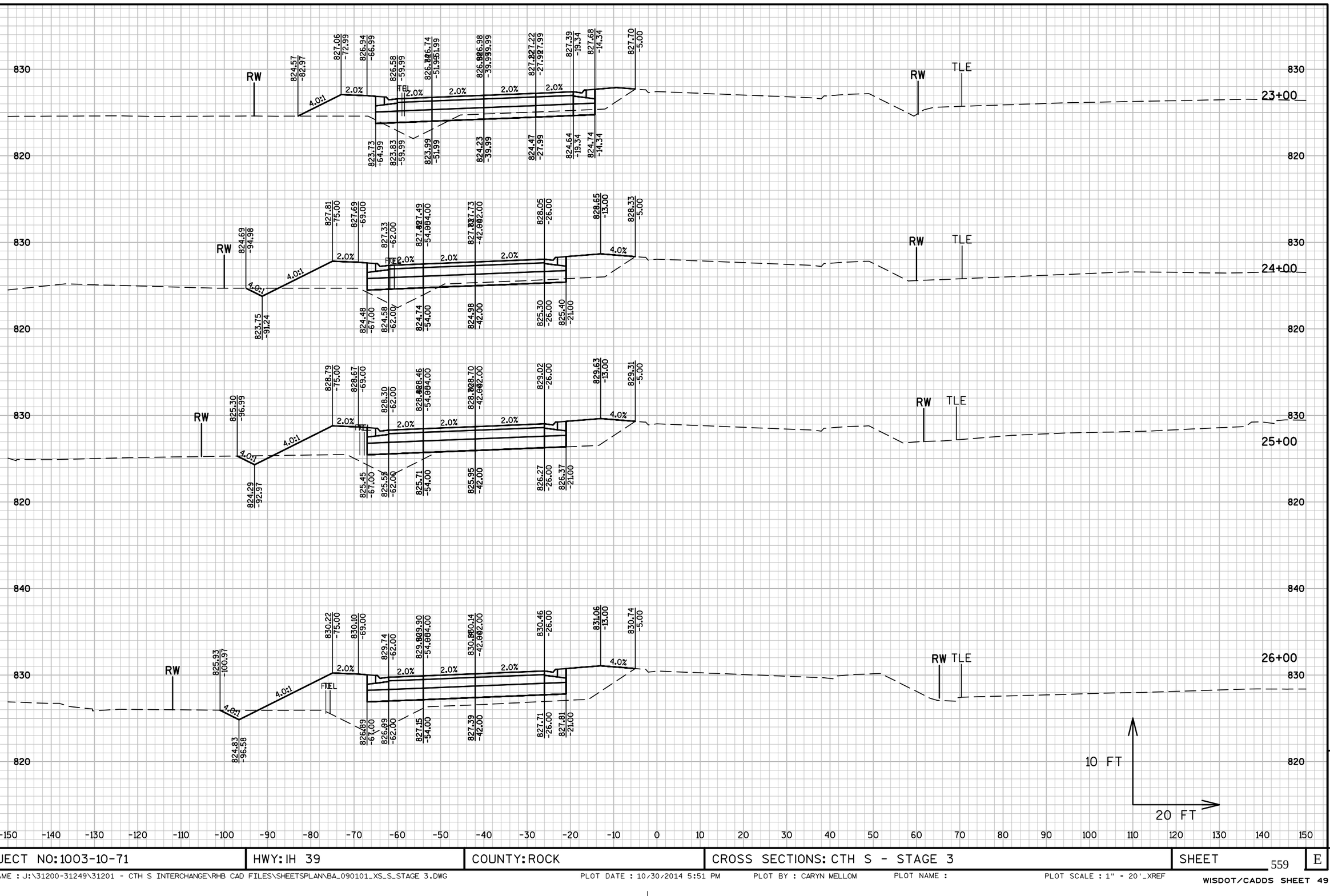
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 3	SHEET 557	E

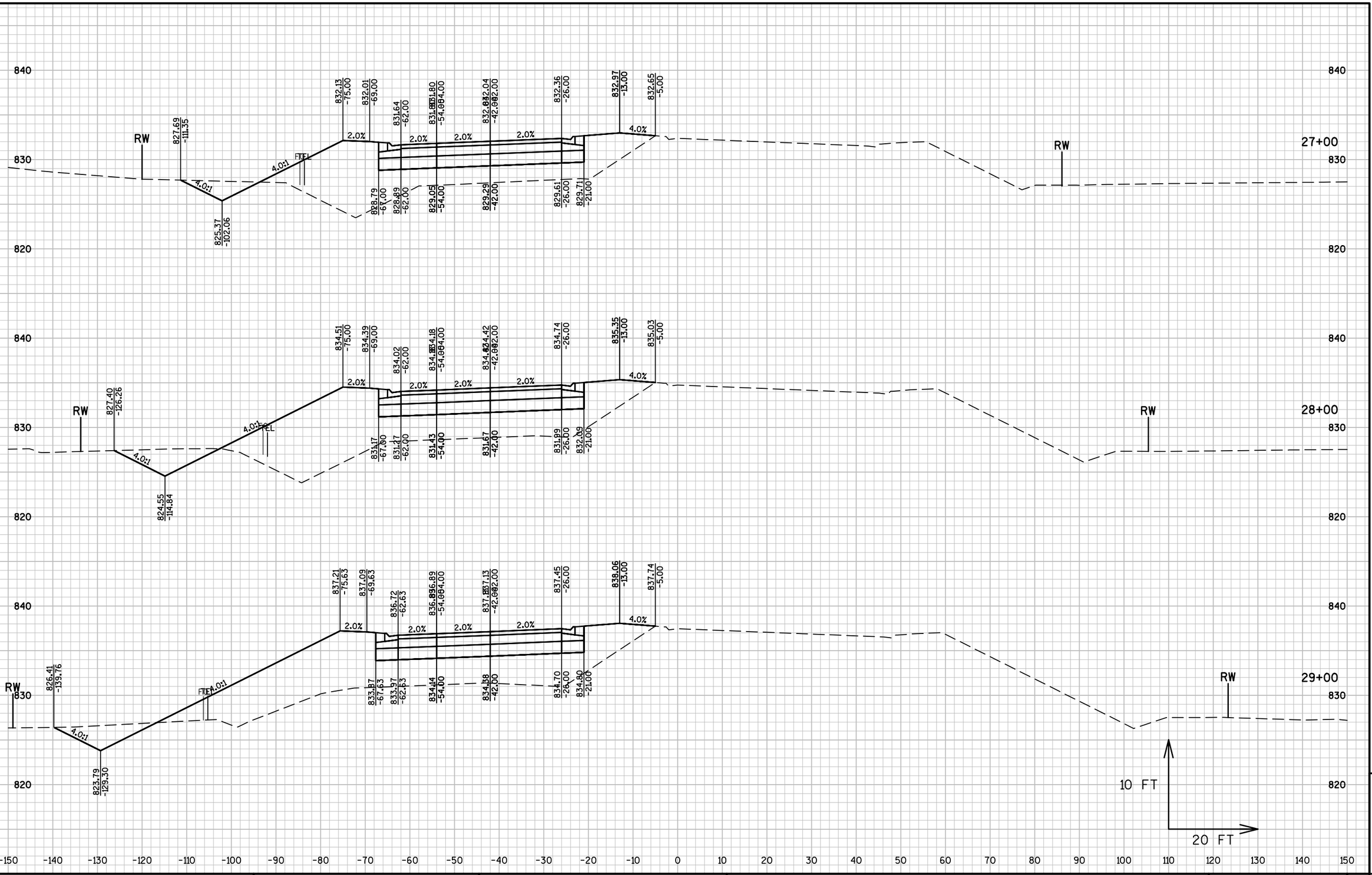
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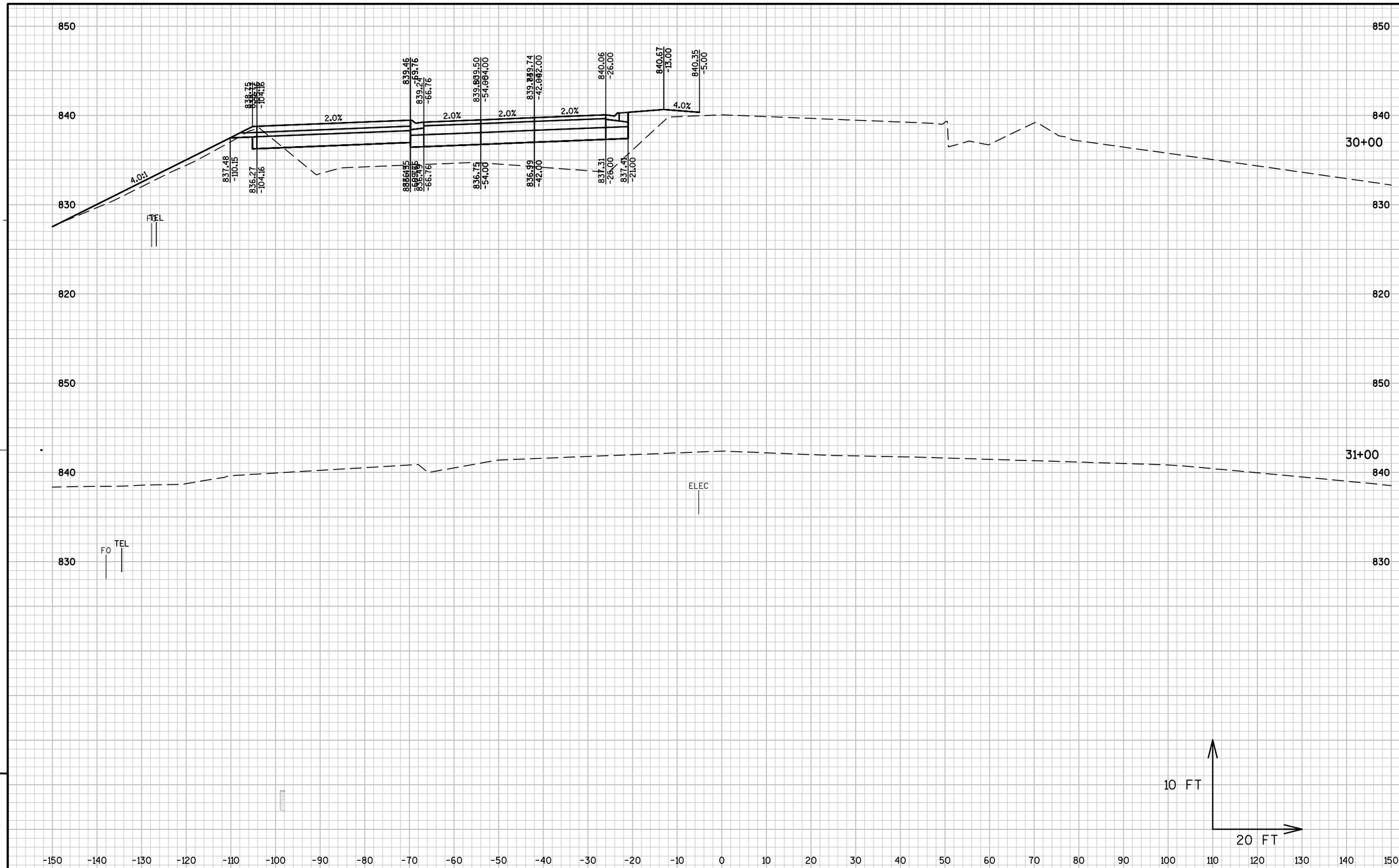
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 3	SHEET 558	E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 3	SHEET 559	E

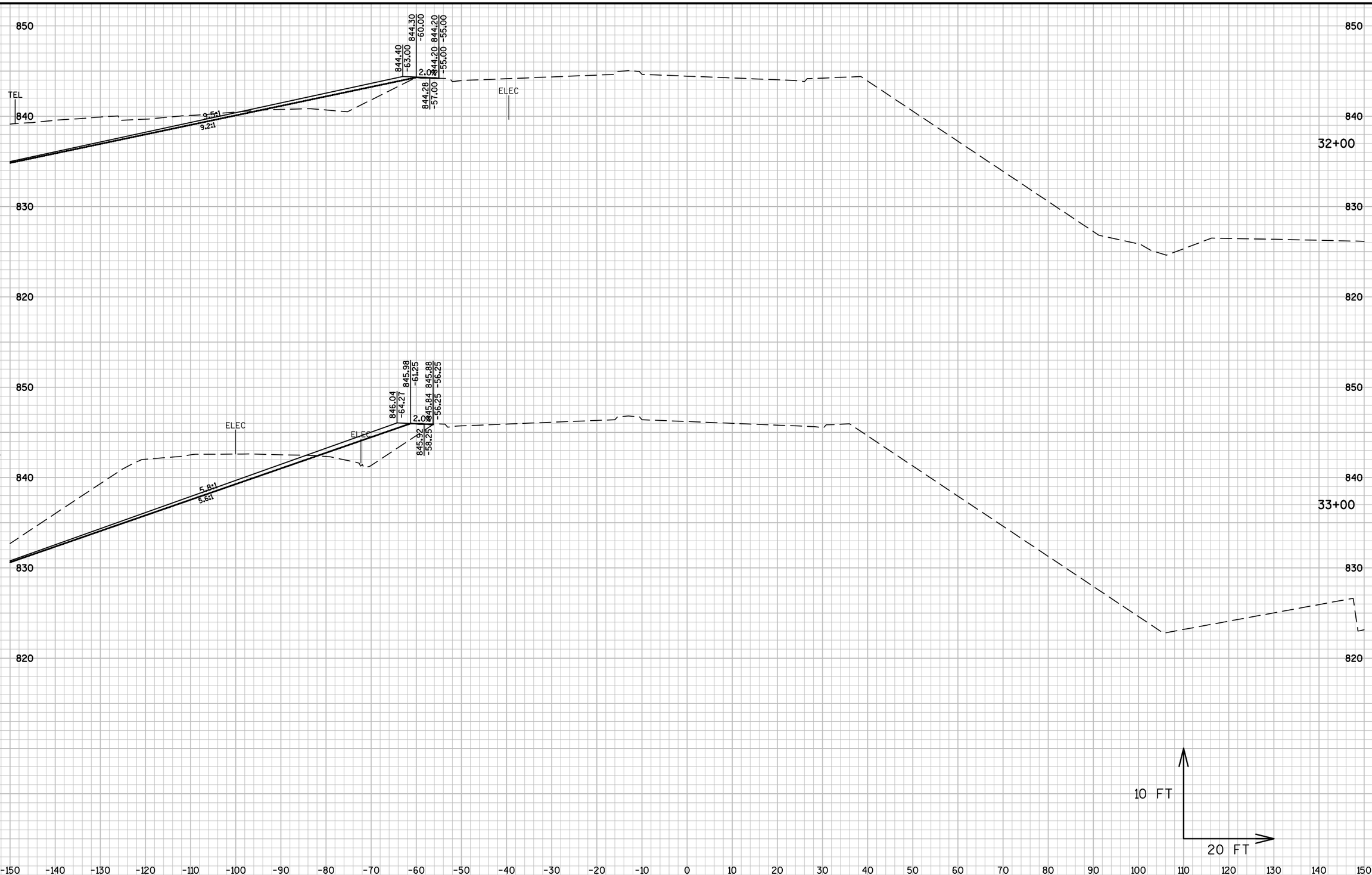


PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 3	SHEET 560 E

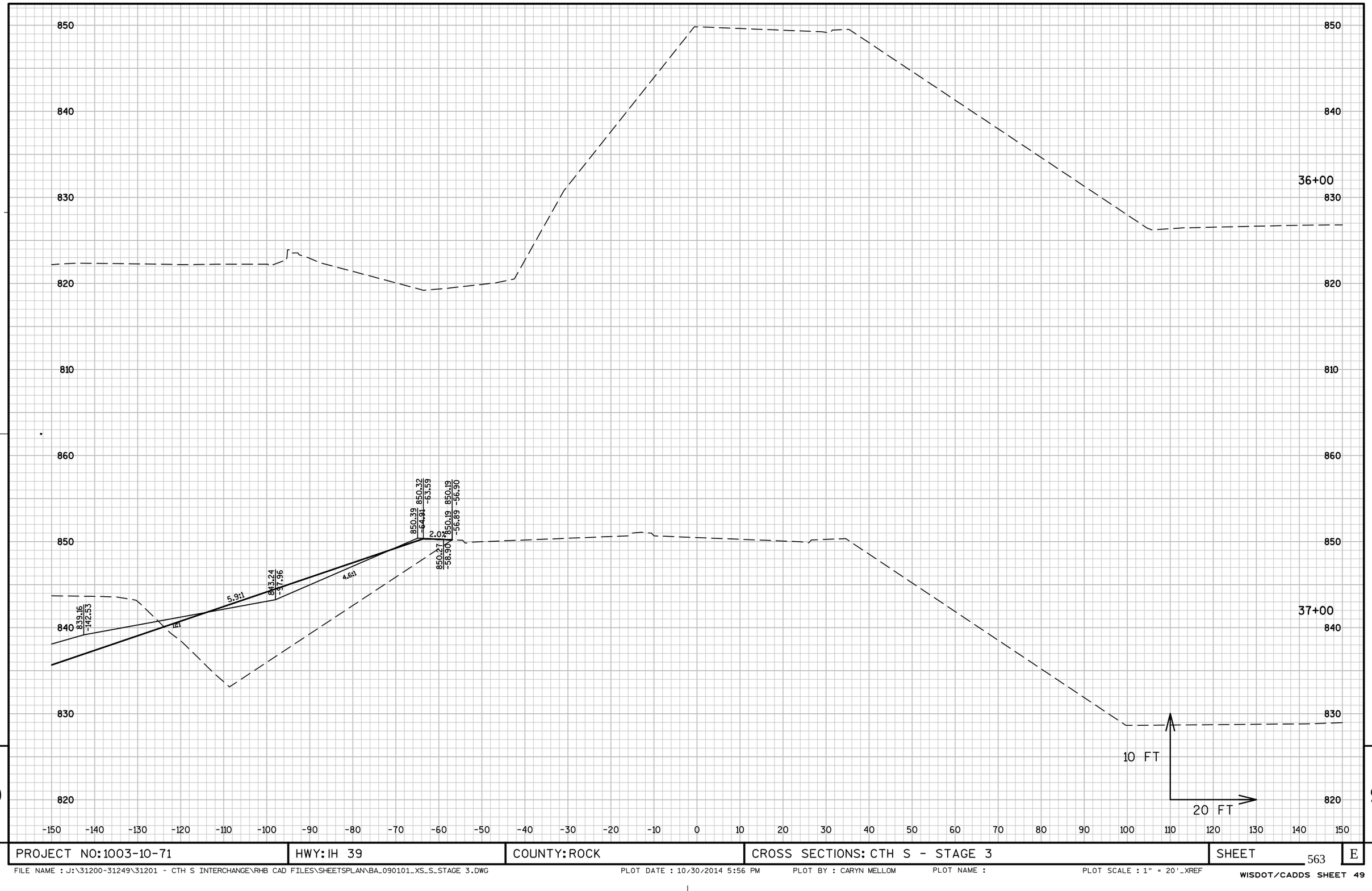


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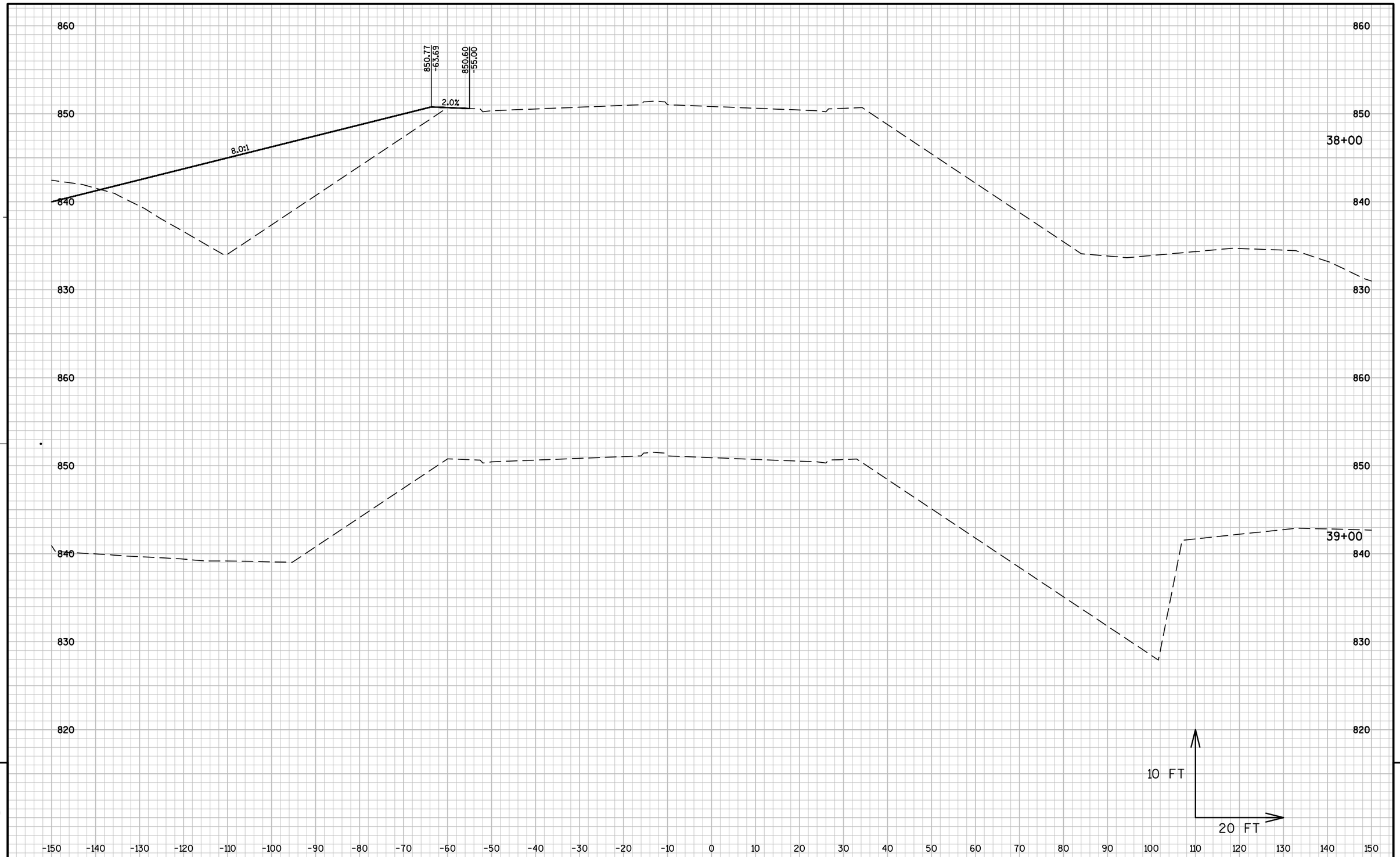
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 3	SHEET 562	E



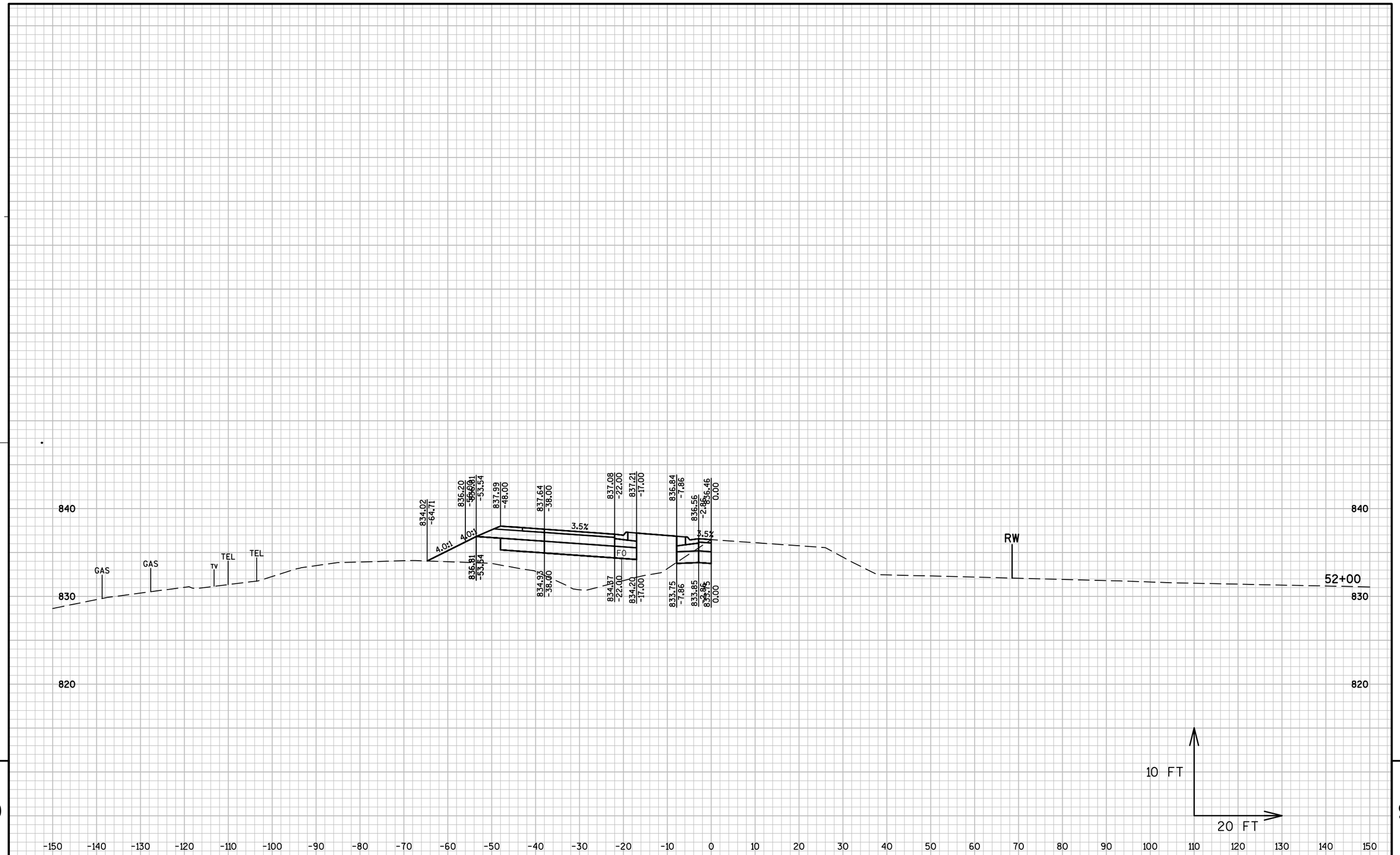
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 3	SHEET 564	E

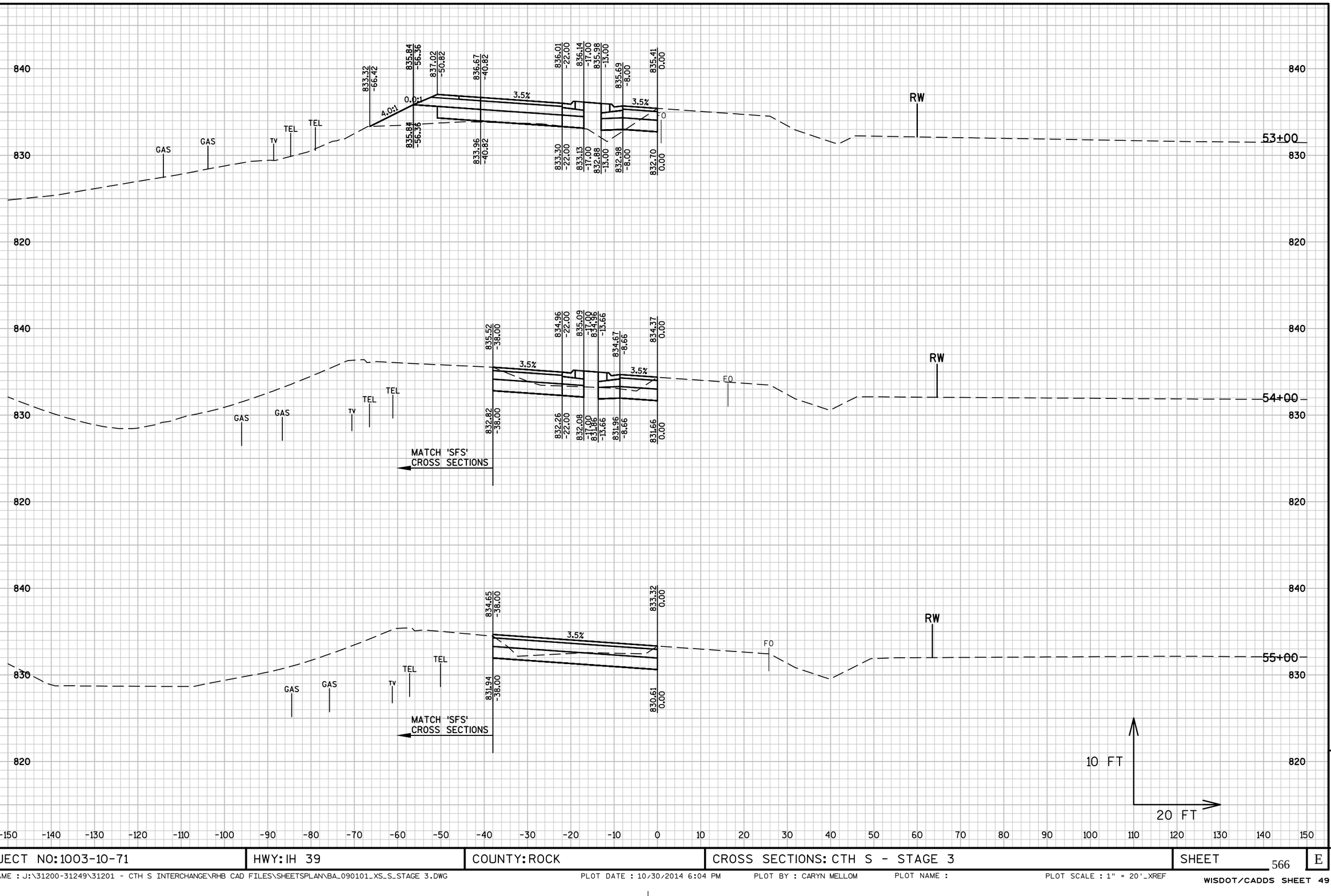
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WISDOT/CADDS SHEET 49



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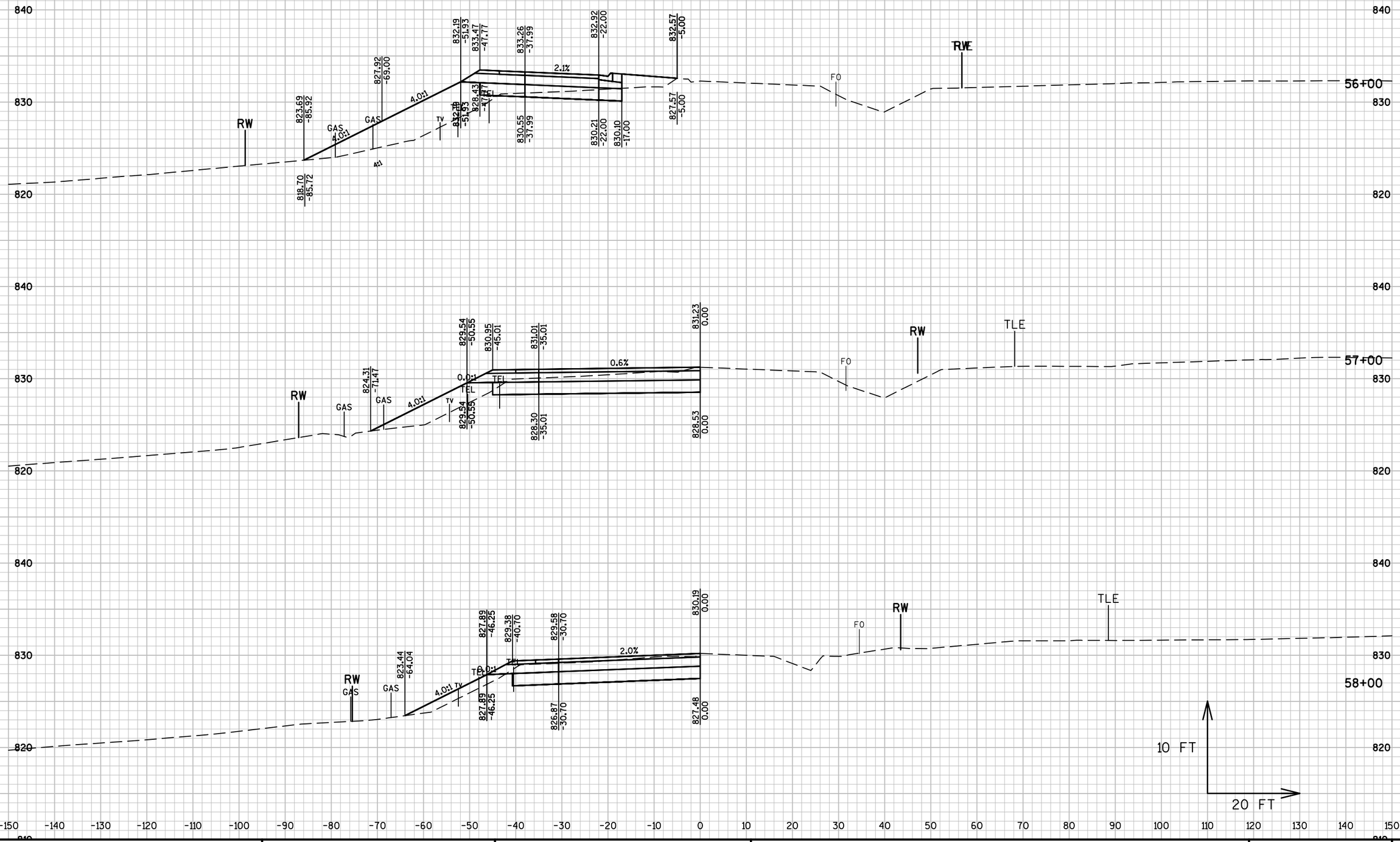
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 3	SHEET 566	E

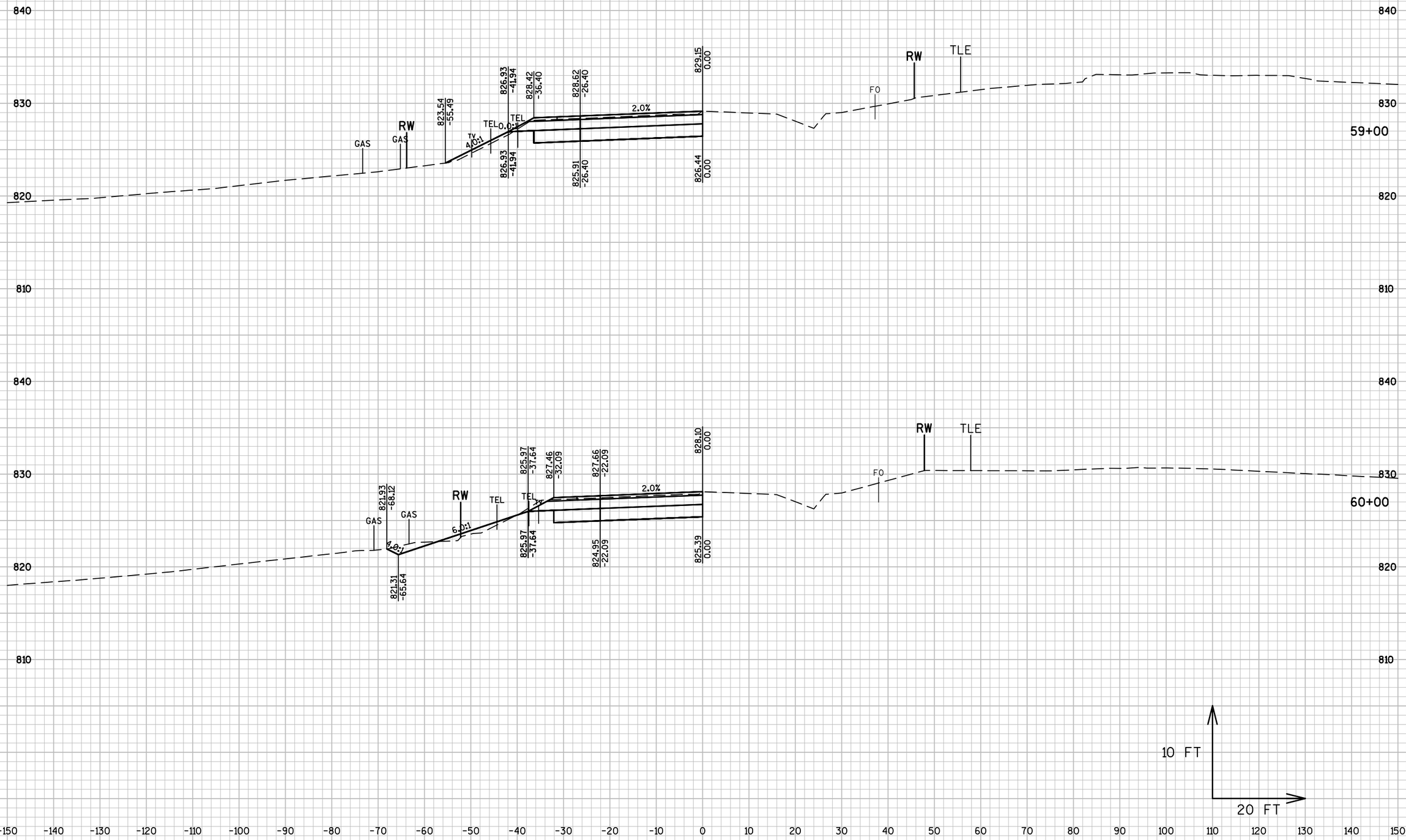
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WISDOT/CADDS SHEET 49



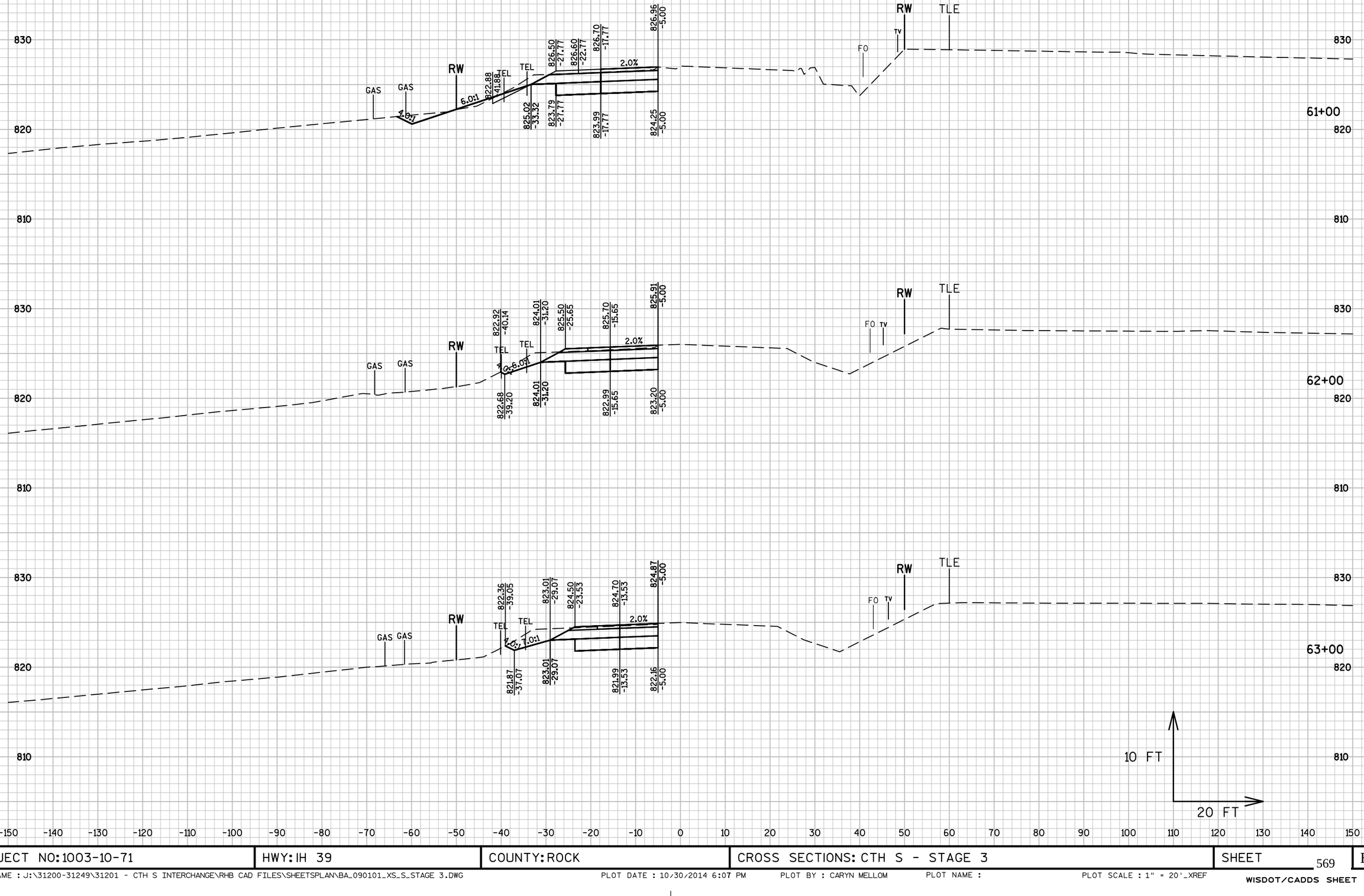
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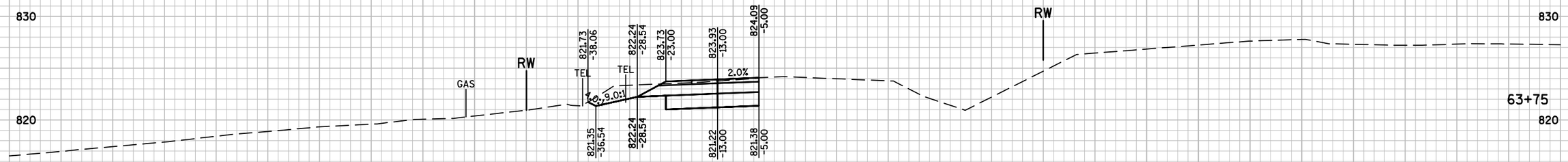
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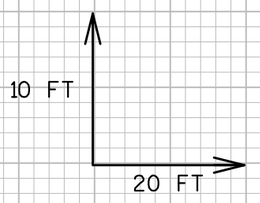


PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 3	SHEET 568	E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 3	SHEET 569	E



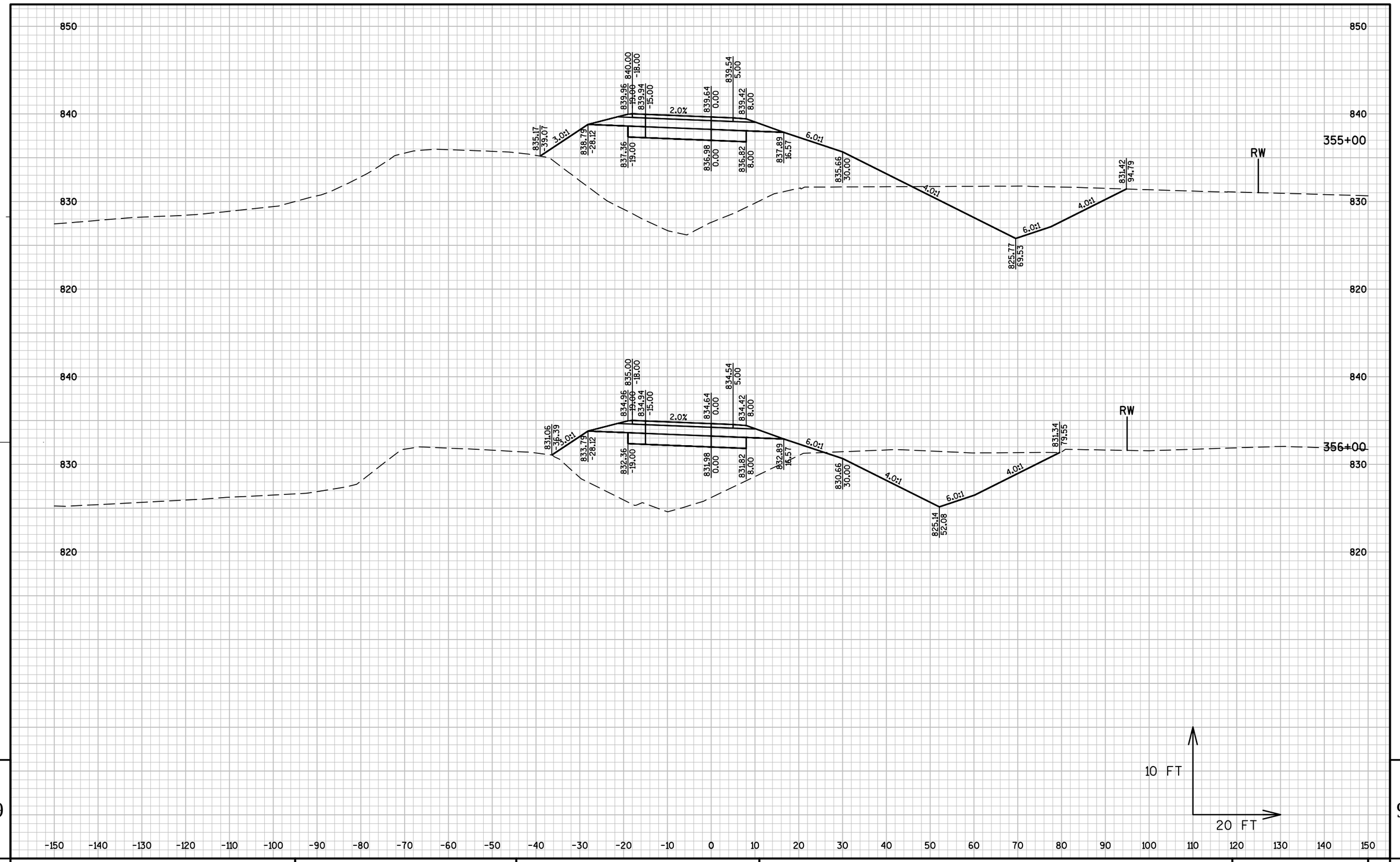


-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9 9

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: CTH S - STAGE 3	SHEET 570	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090101_XS_S_STAGE 3.DWG PLOT DATE : 10/30/2014 6:08 PM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1" = 20'_XREF

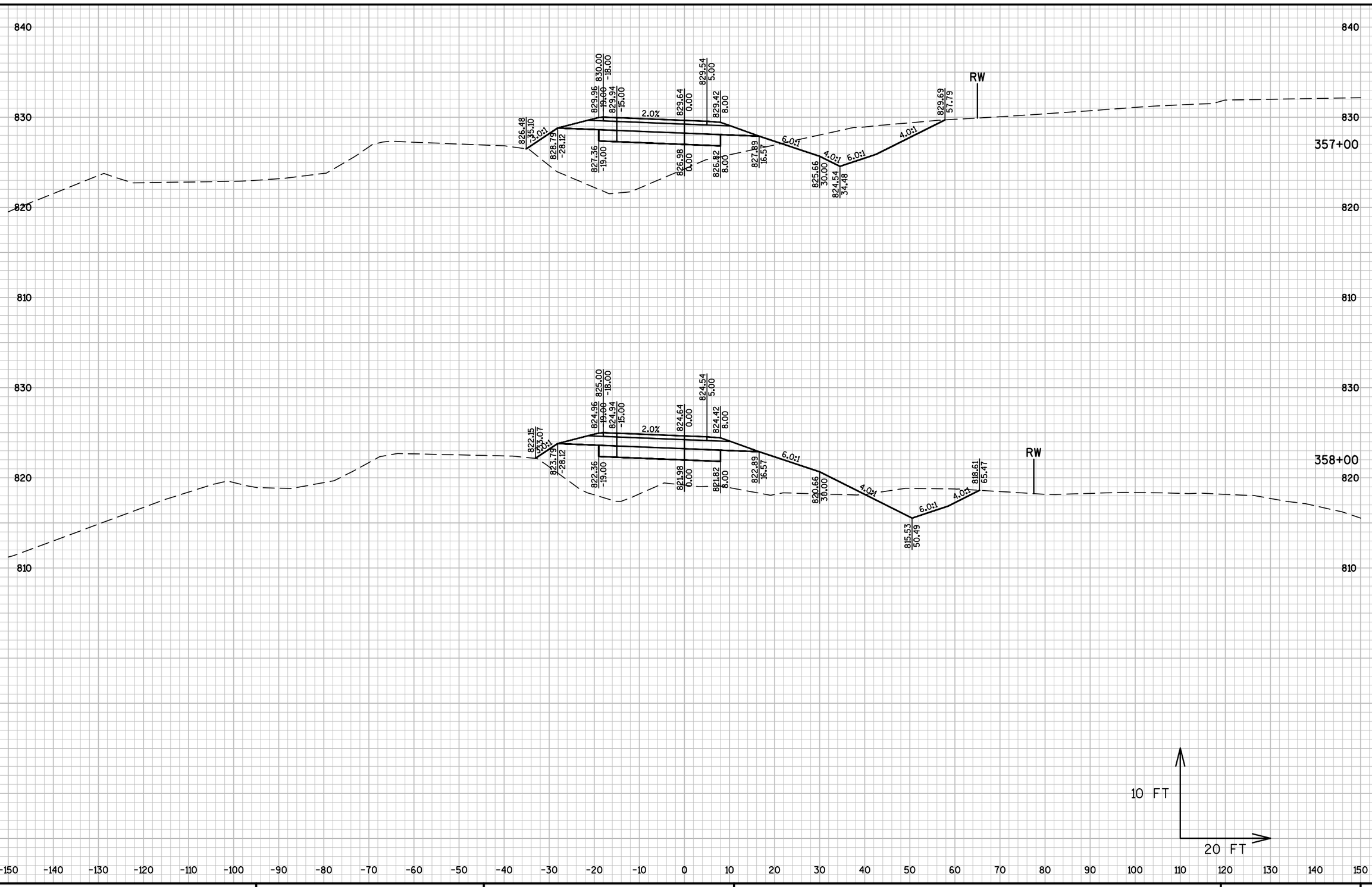


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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: NB ON RAMP 'ZA' - STAGE 2	SHEET 571	E

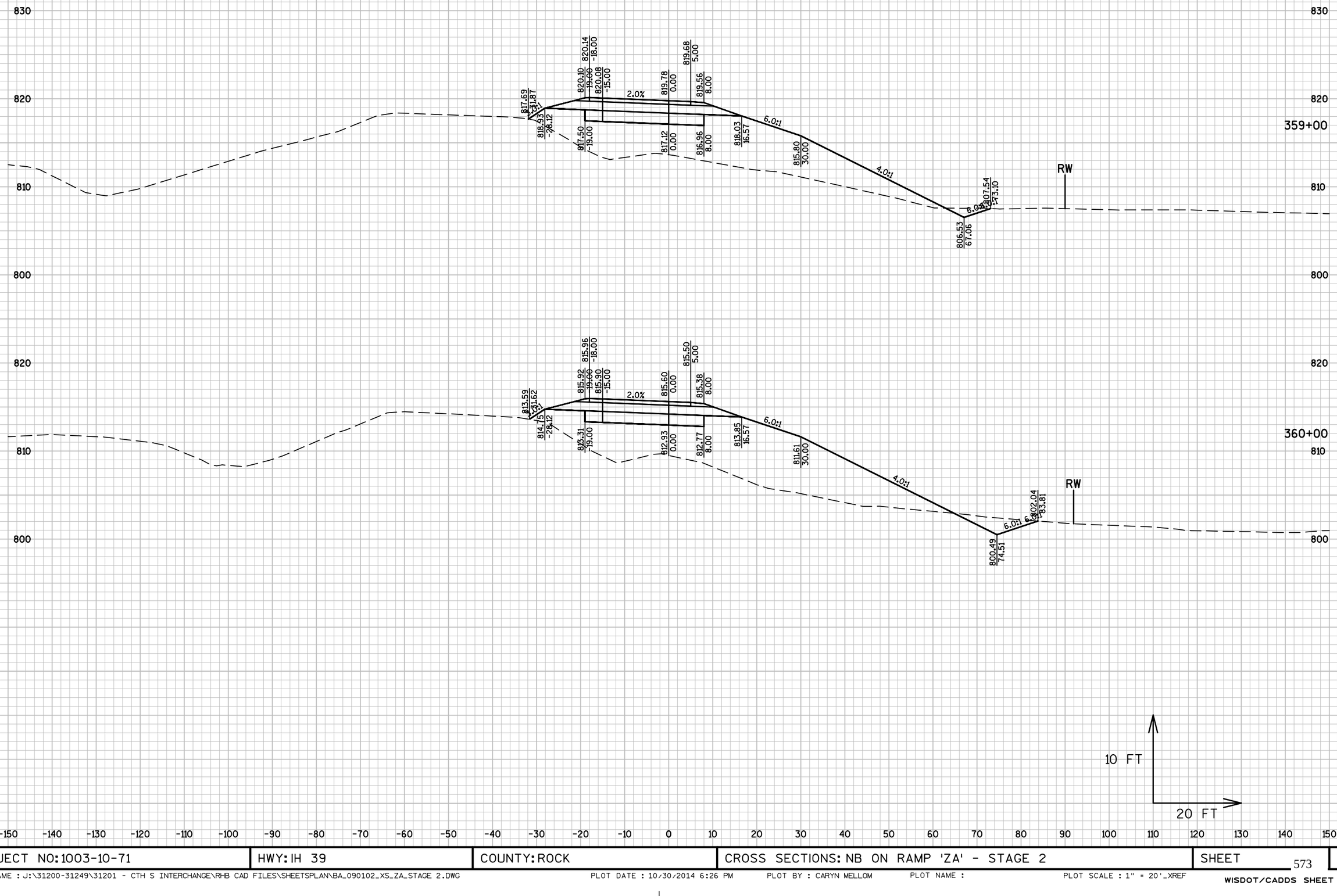
FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090102_XS_ZA_STAGE 2.DWG PLOT DATE : 10/30/2014 6:26 PM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:20



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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: NB ON RAMP 'ZA' - STAGE 2	SHEET 572	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090102_XS_ZA_STAGE 2.DWG PLOT DATE : 10/30/2014 6:26 PM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:20

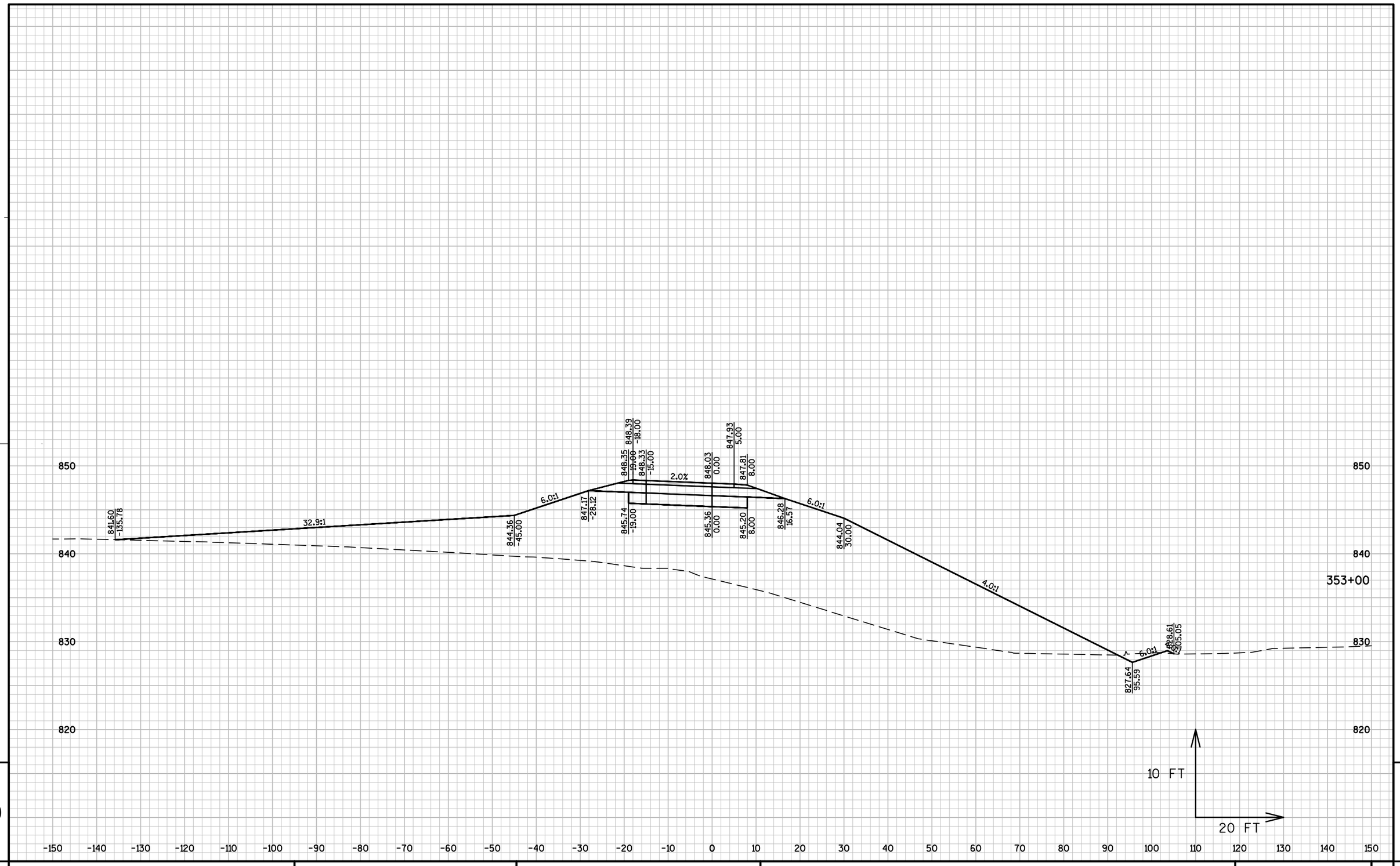


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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: NB ON RAMP 'ZA' - STAGE 2	SHEET 573	E

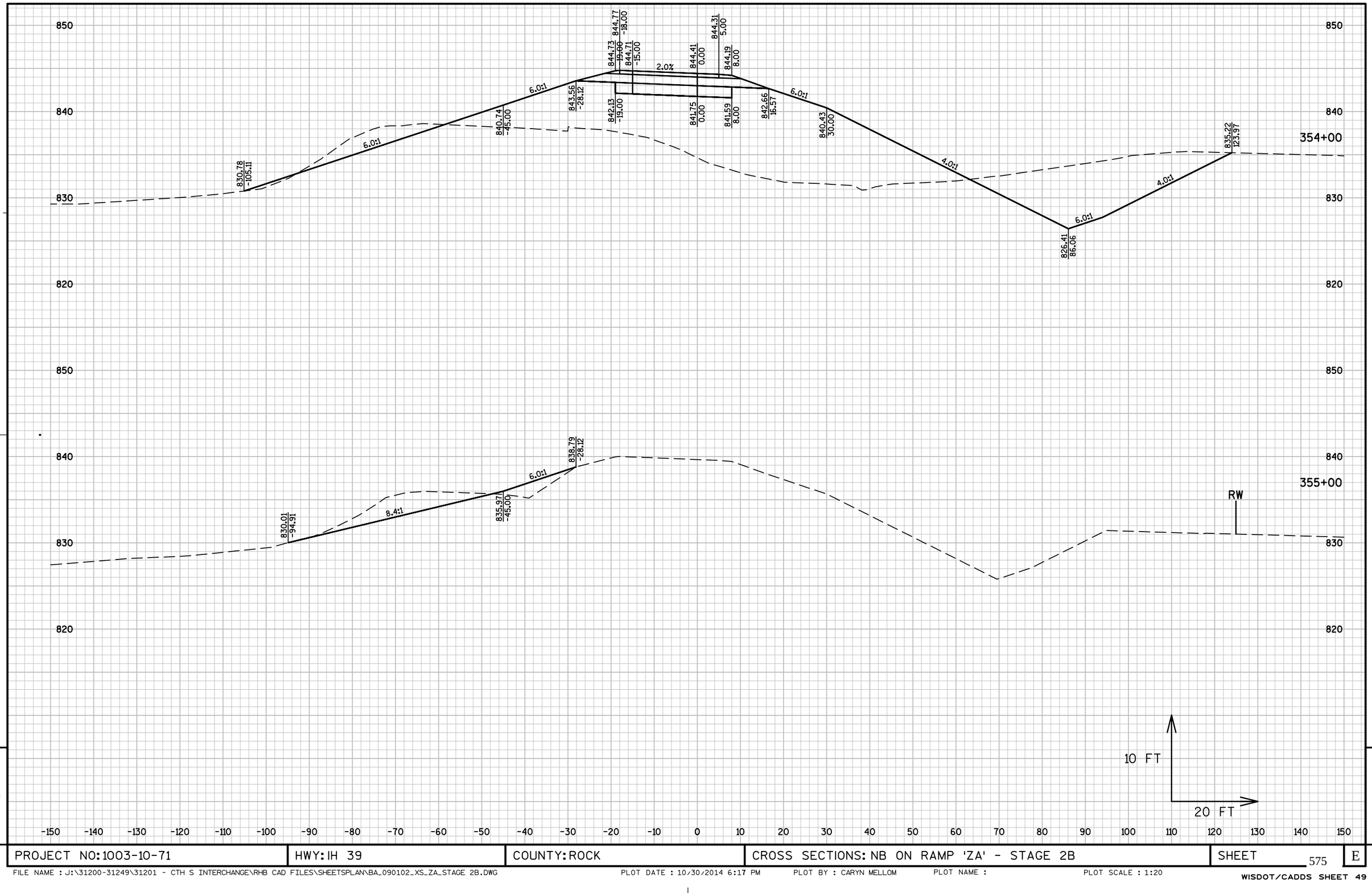
FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090102_XS_ZA_STAGE 2.DWG PLOT DATE : 10/30/2014 6:26 PM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49



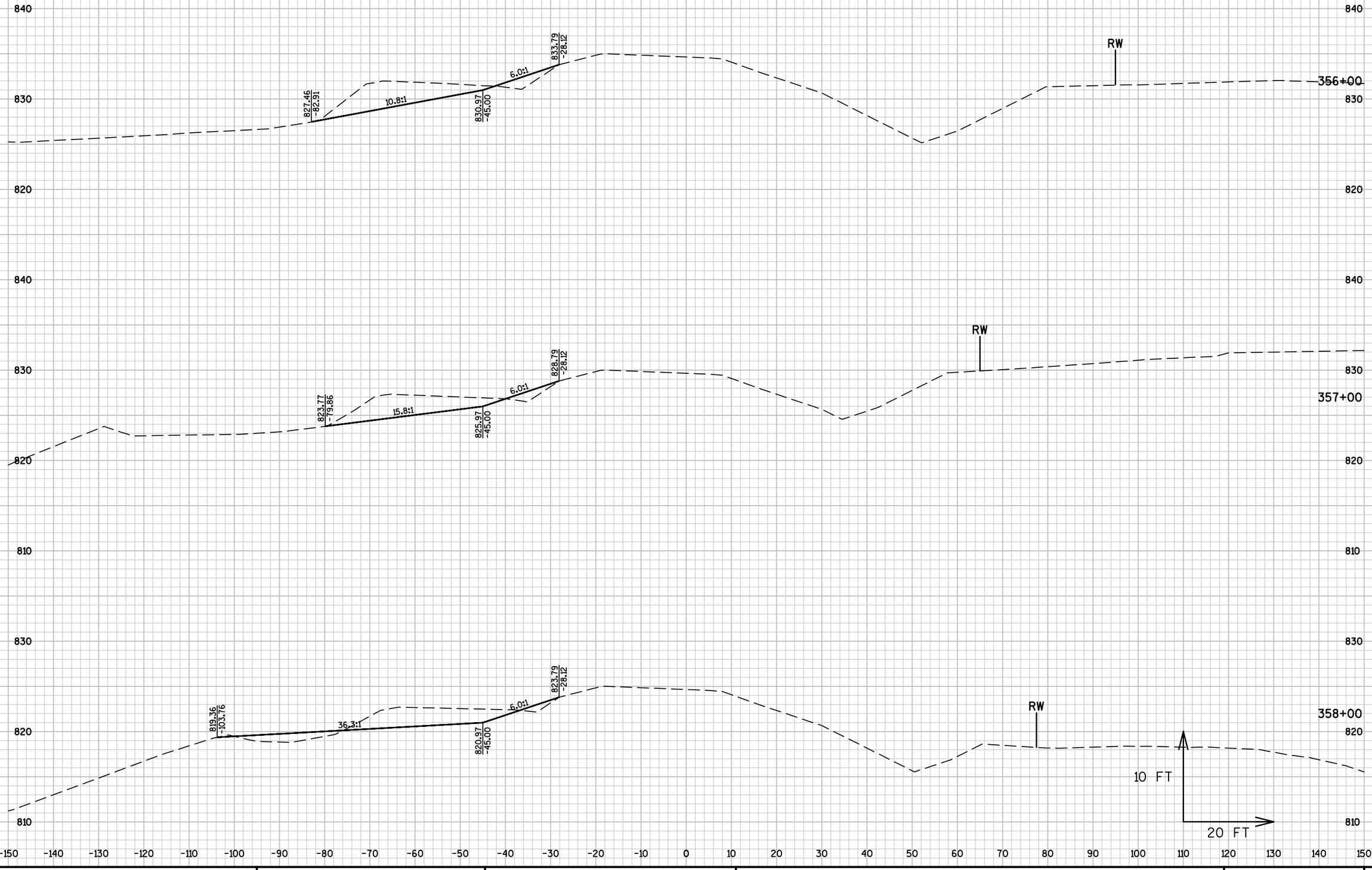
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: NB ON RAMP 'ZA' - STAGE 2B	SHEET 574 E

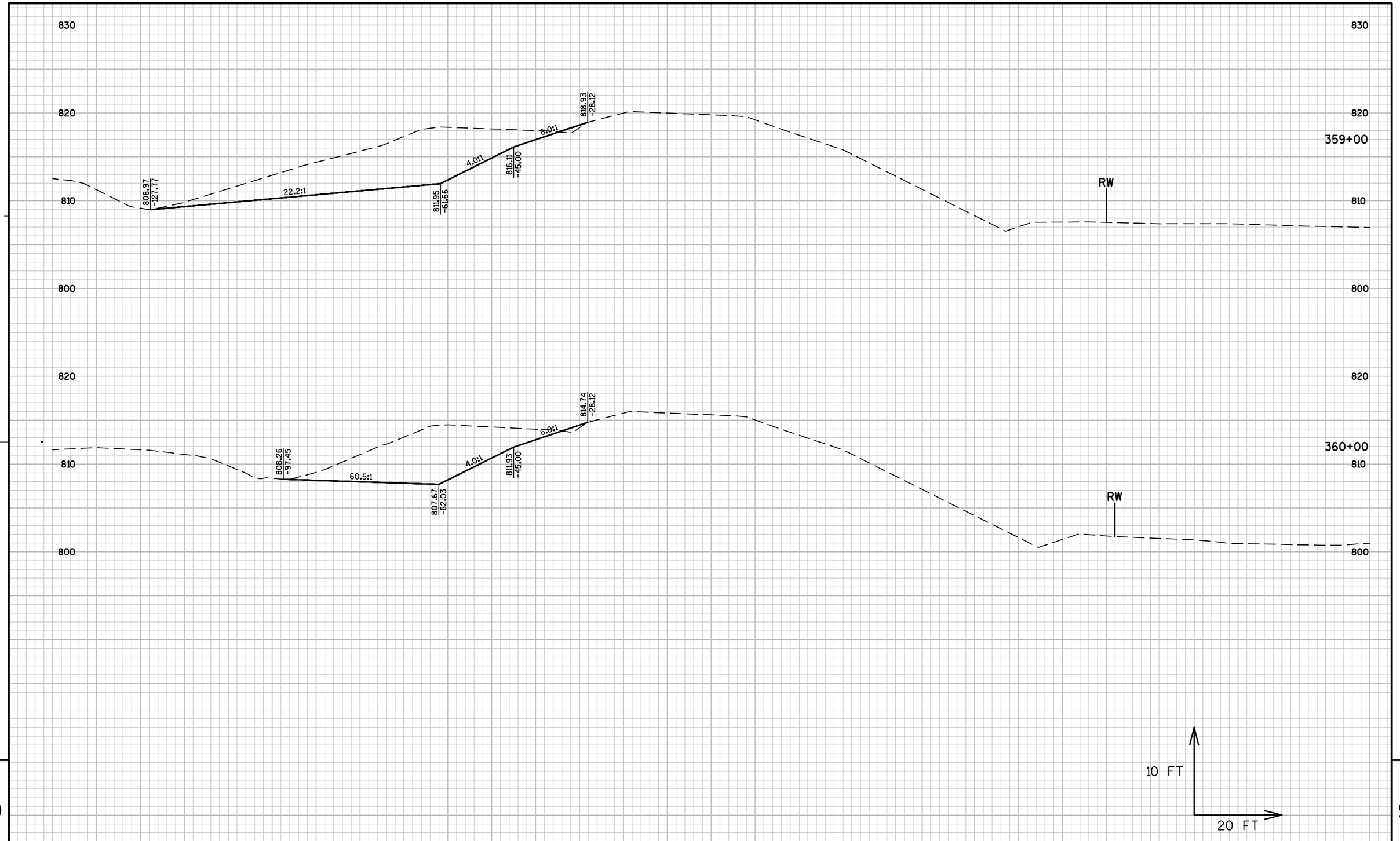


PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: NB ON RAMP 'ZA' - STAGE 2B	SHEET 575	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090102_XS_ZA_STAGE 2B.DWG
PLOT DATE : 10/30/2014 6:17 PM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:20
WISDOT/CADDS SHEET 49



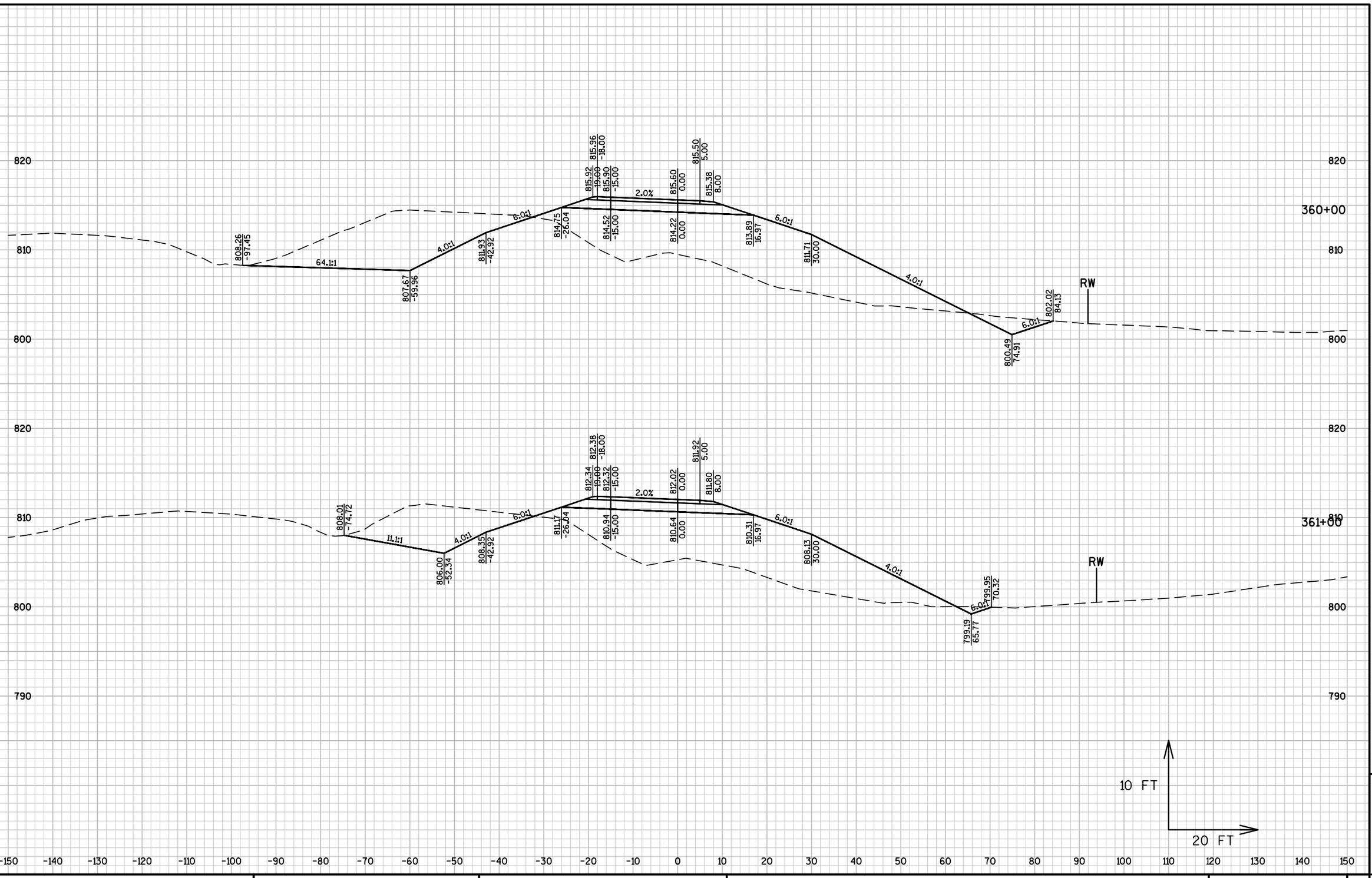
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: NB ON RAMP 'ZA' - STAGE 2B	SHEET 577	E

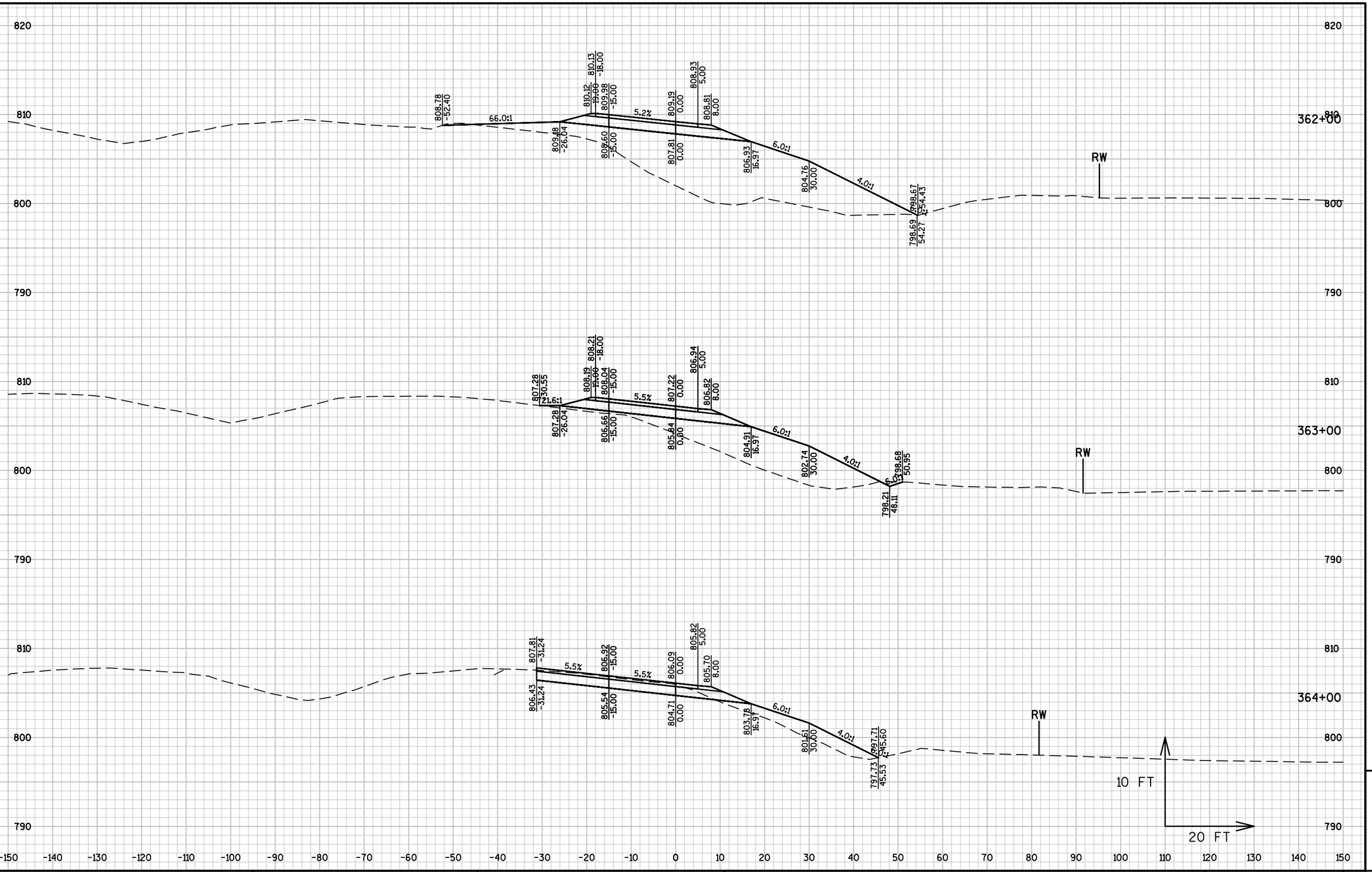
FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090102_XS_ZA_STAGE 2B.DWG PLOT DATE : 10/30/2014 6:18 PM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49

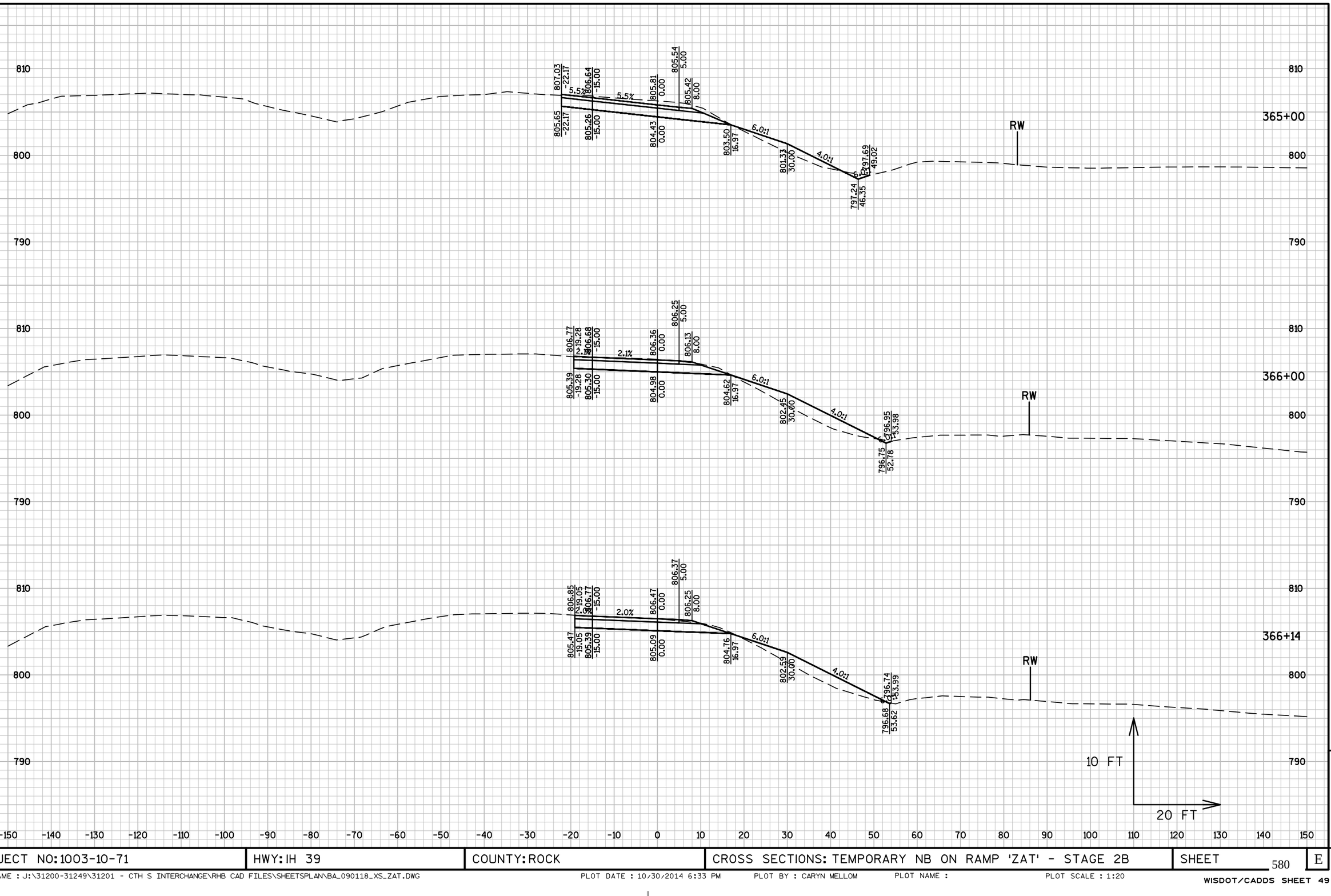


PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: TEMPORARY NB ON RAMP 'ZAT' - STAGE 2B	SHEET 578 E

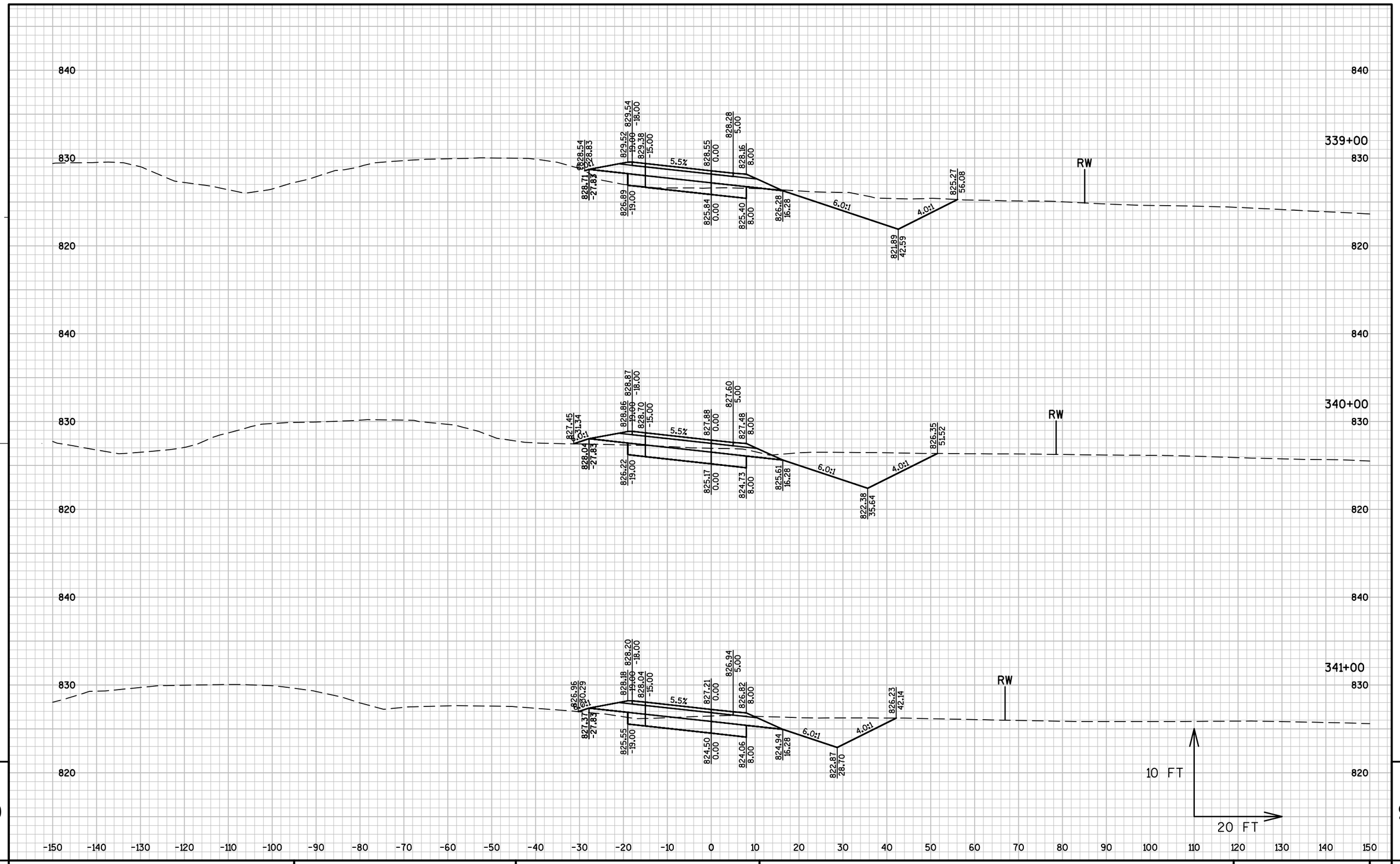
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: TEMPORARY NB ON RAMP 'ZAT' - STAGE 2B	SHEET 579 E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: TEMPORARY NB ON RAMP 'ZAT' - STAGE 2B	SHEET 580	E

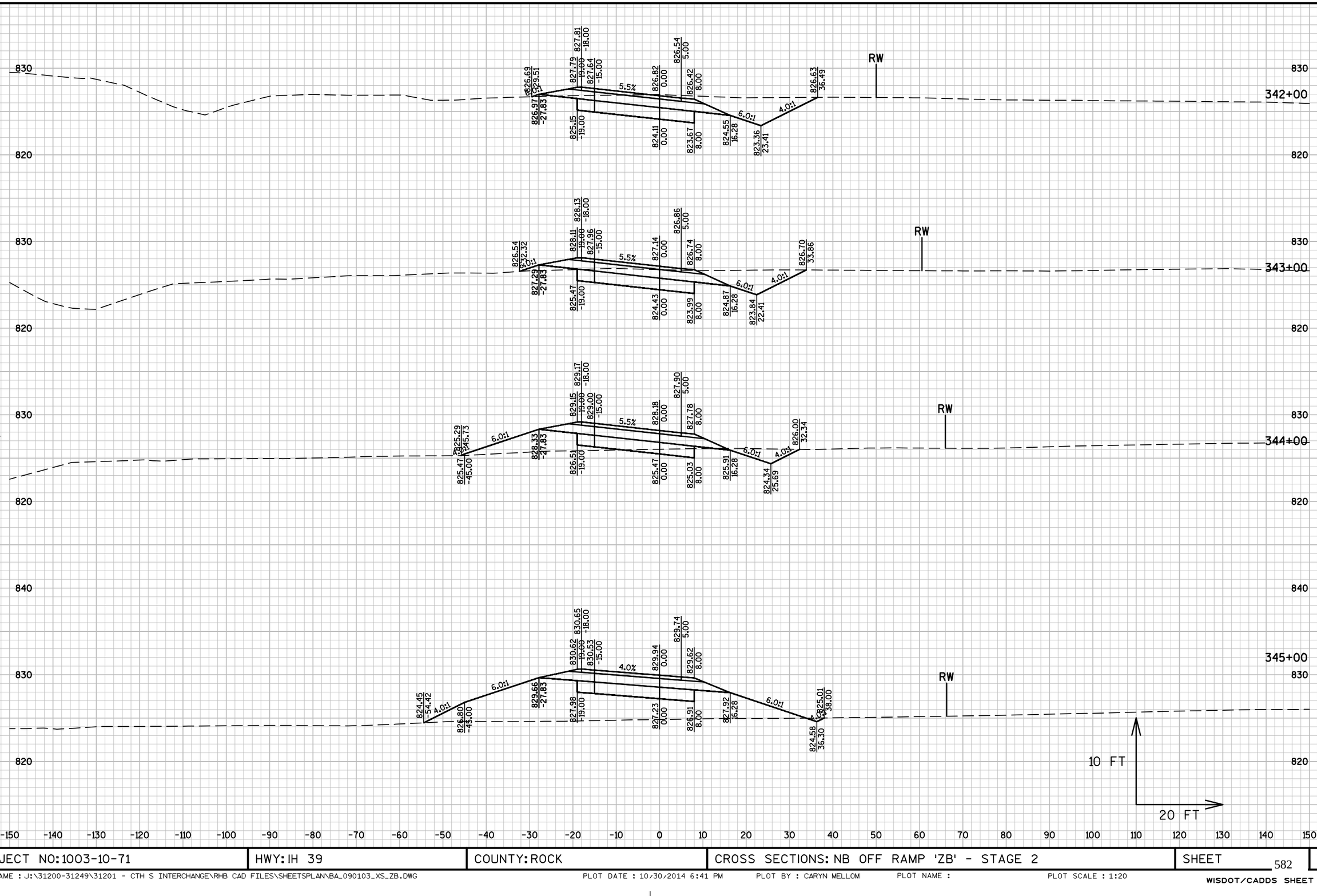


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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: NB OFF RAMP 'ZB' - STAGE 2	SHEET 581 E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090103_XS_ZB.DWG PLOT DATE : 10/30/2014 6:41 PM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:20

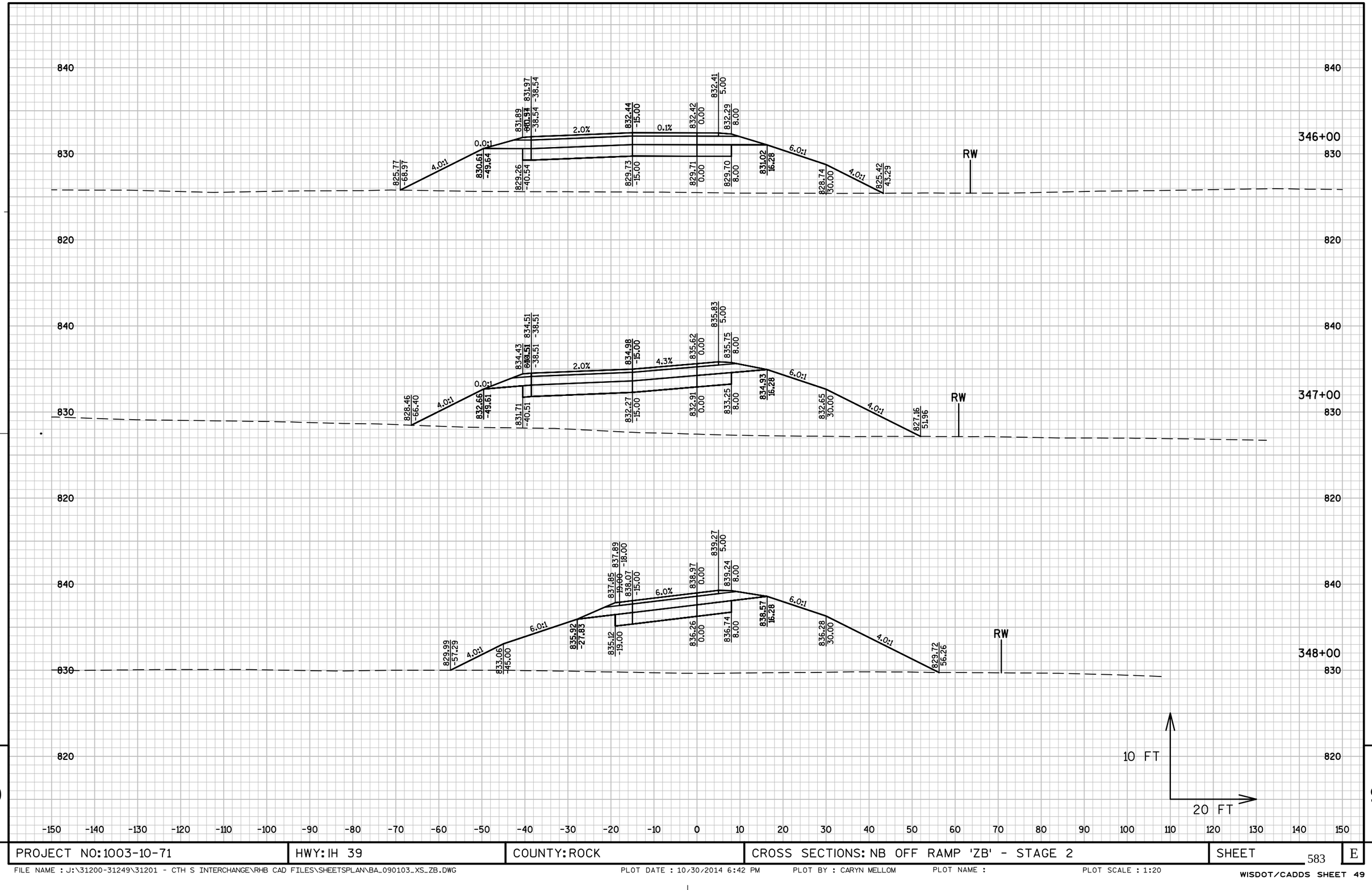
WISDOT/CADDS SHEET 49



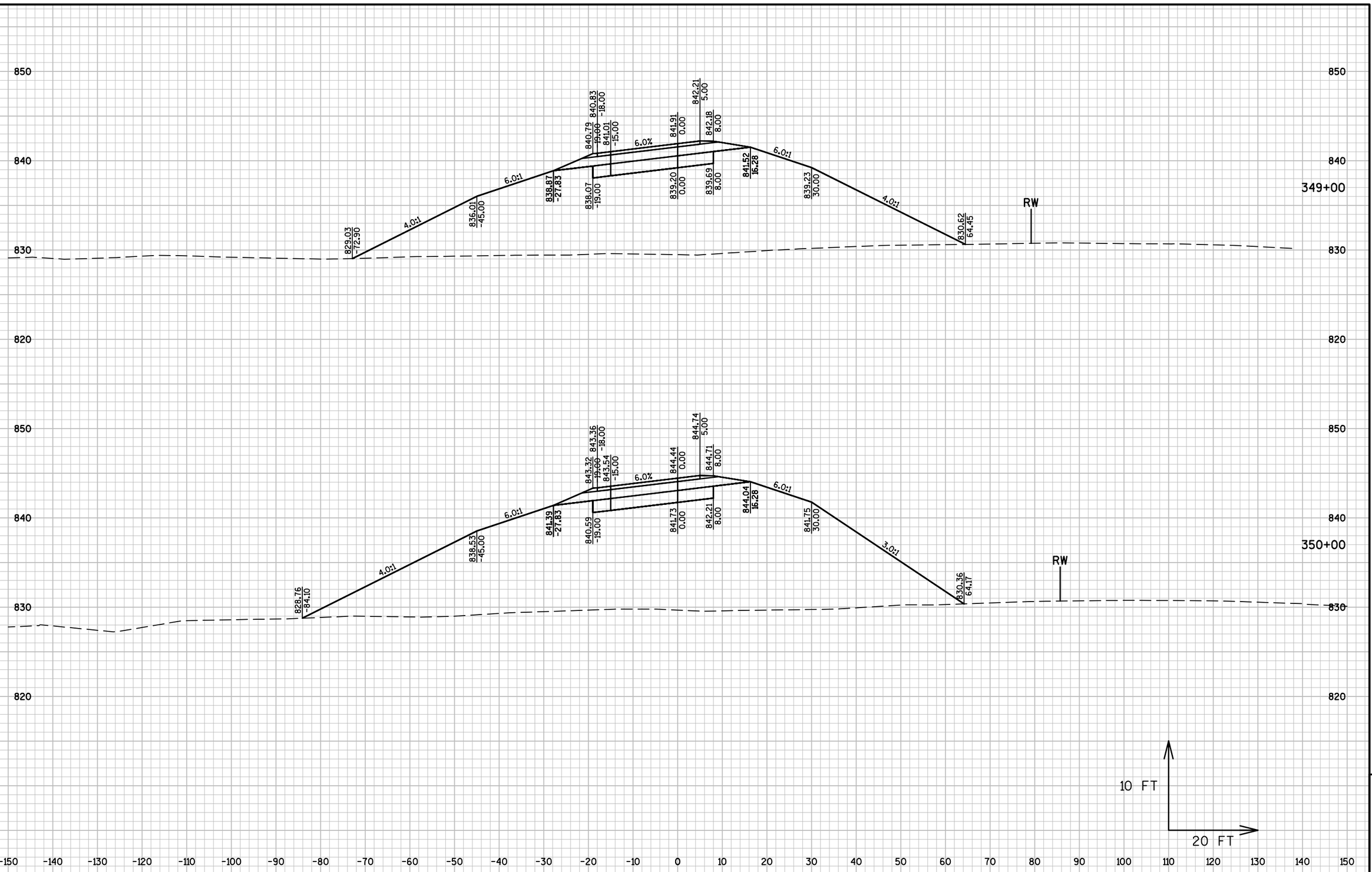
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: NB OFF RAMP 'ZB' - STAGE 2	SHEET 582	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090103_XS_ZB.DWG PLOT DATE : 10/30/2014 6:41 PM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:20

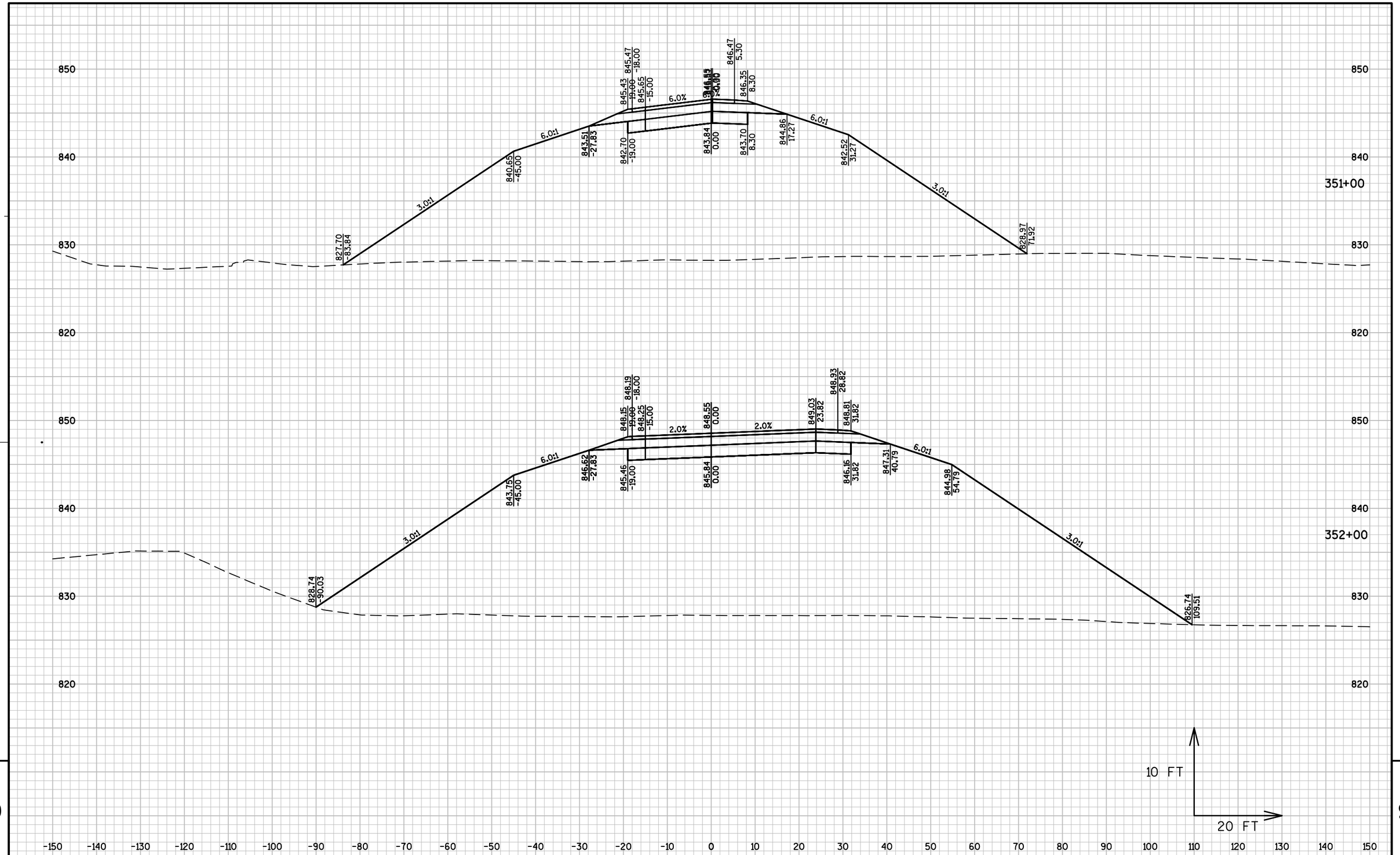
WISDOT/CADDS SHEET 49



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: NB OFF RAMP 'ZB' - STAGE 2	SHEET 583 E

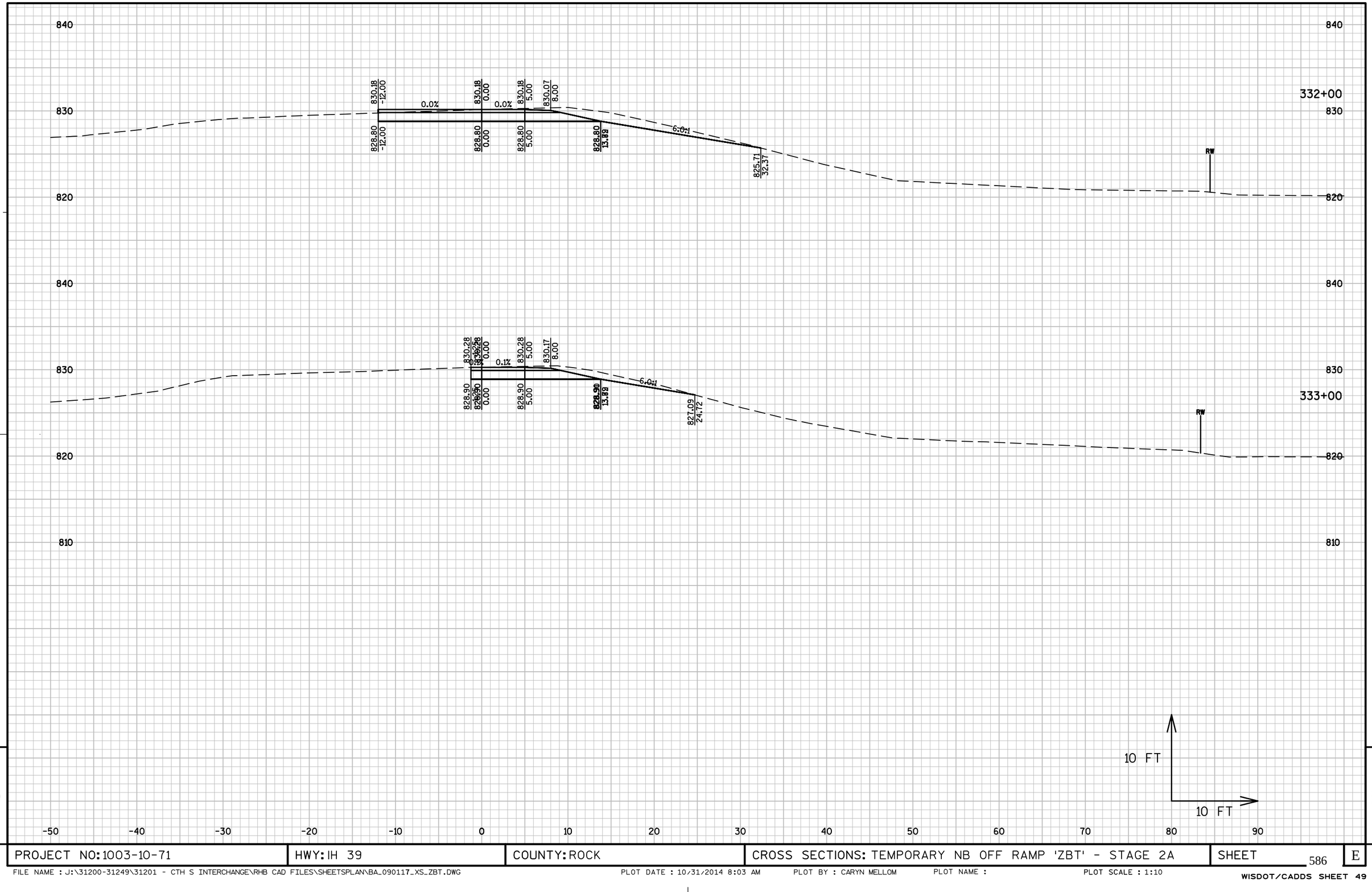


PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: NB OFF RAMP 'ZB' - STAGE 2	SHEET 584	E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: NB OFF RAMP 'ZB' - STAGE 2	SHEET 585	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090103_XS_ZB.DWG PLOT DATE : 10/30/2014 6:42 PM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:20

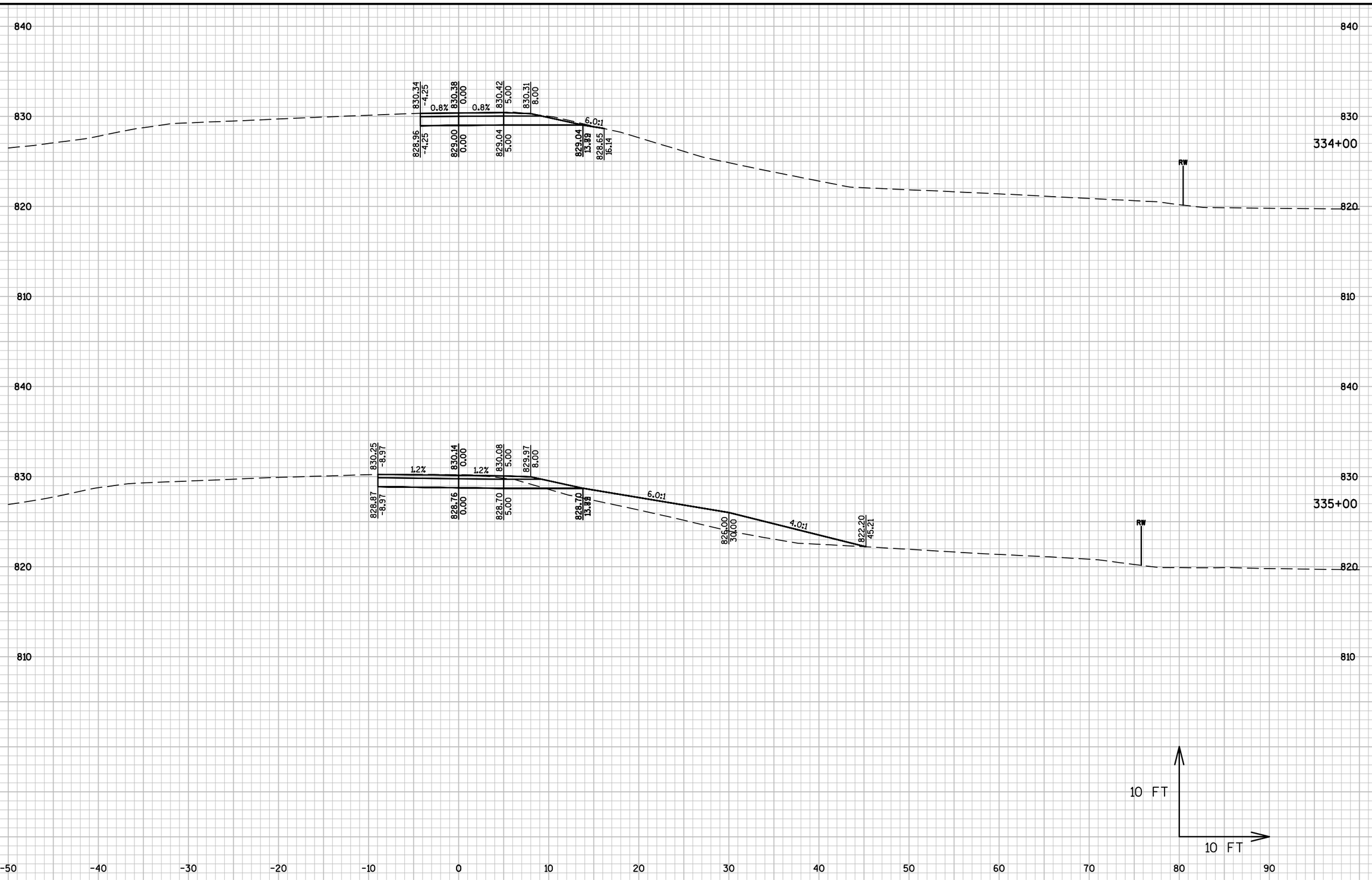


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9

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: TEMPORARY NB OFF RAMP 'ZBT' - STAGE 2A	SHEET 586	E

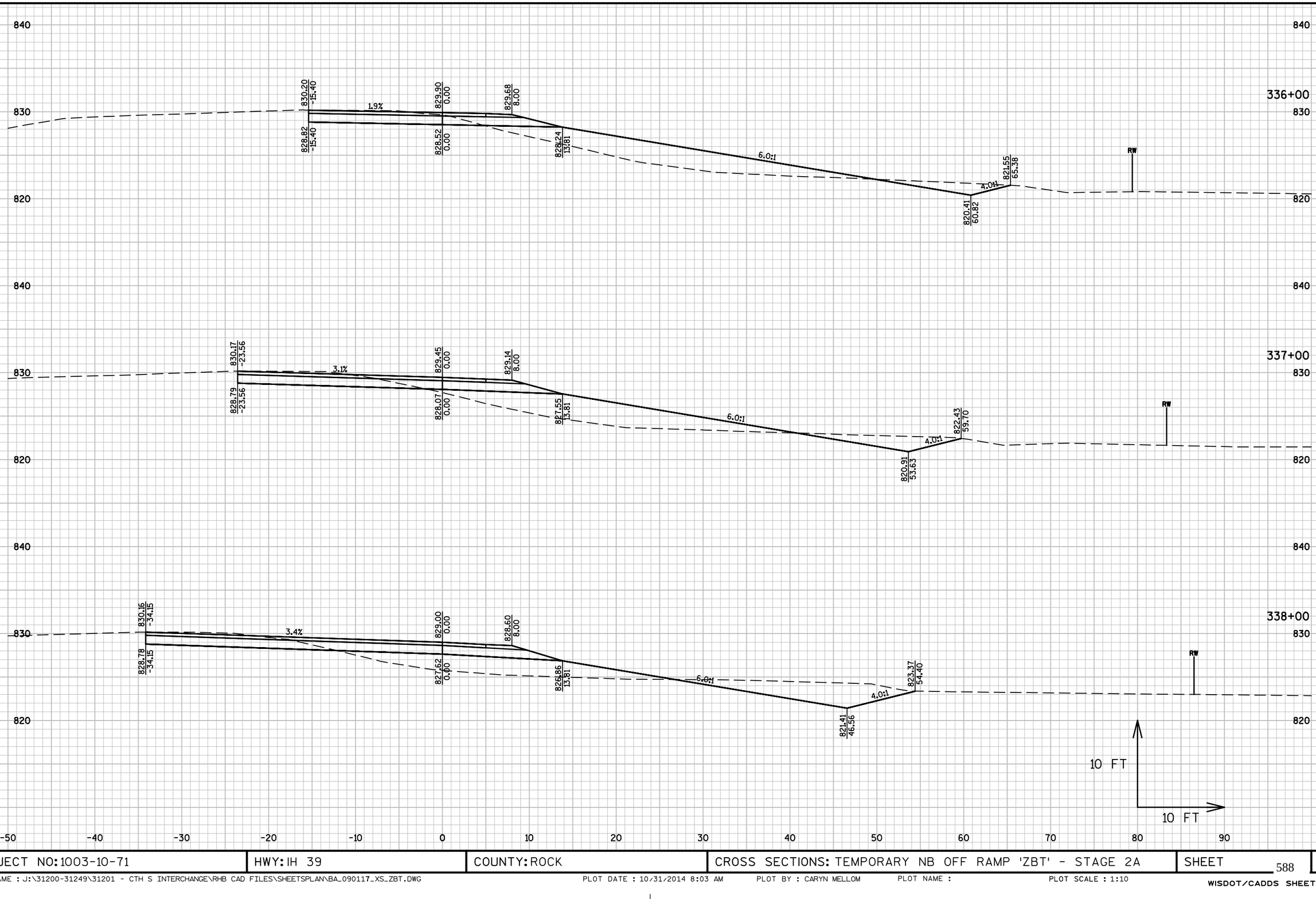
FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090117_XS_ZBT.DWG PLOT DATE : 10/31/2014 8:03 AM PLOT BY : CARYN MELLOM PLOT NAME : PLOT SCALE : 1:10



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: TEMPORARY NB OFF RAMP 'ZBT' - STAGE 2A	SHEET 587	E

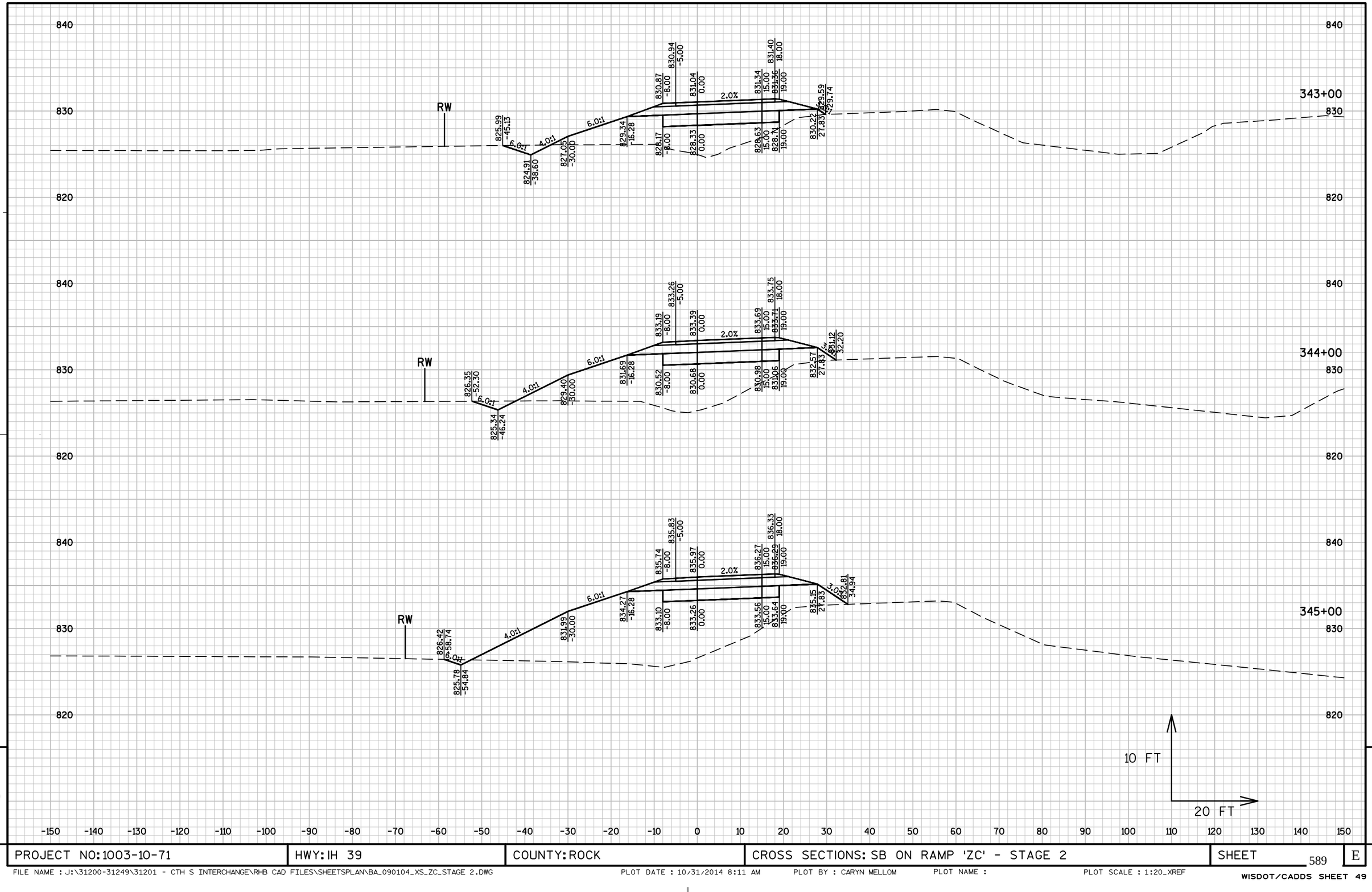
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WISDOT/CADDS SHEET 49

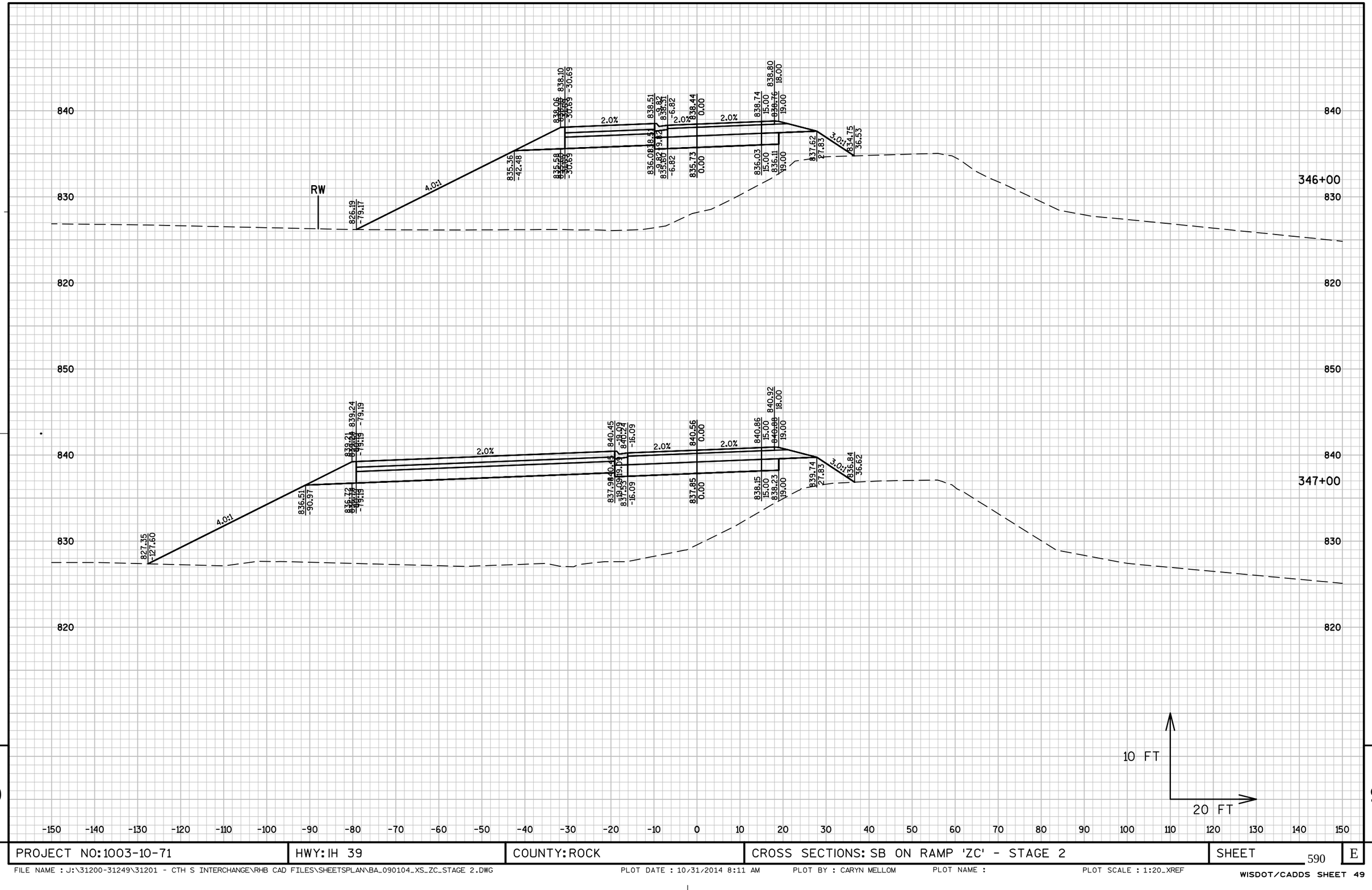


PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: TEMPORARY NB OFF RAMP 'ZBT' - STAGE 2A	SHEET 588	E

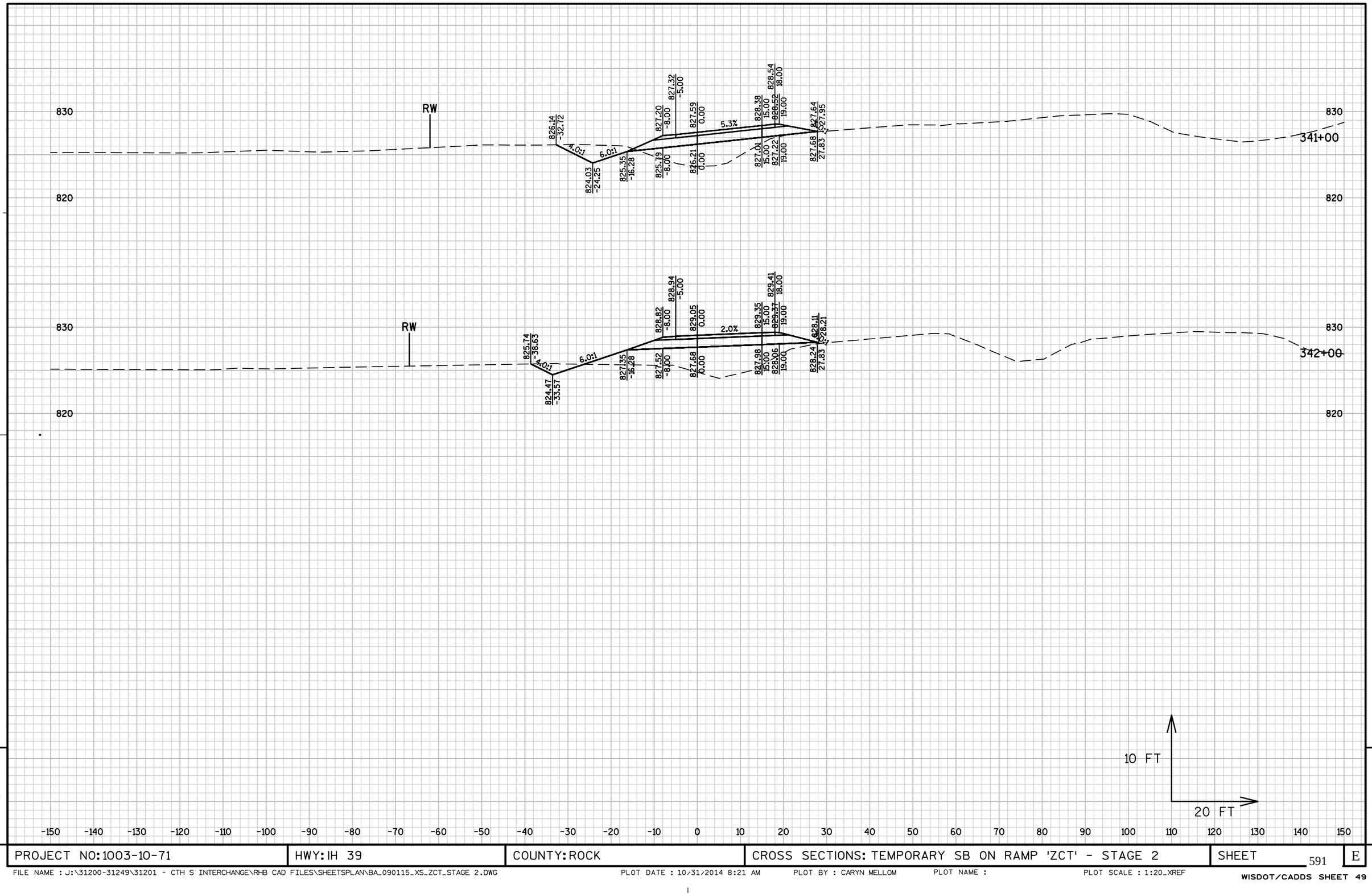
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WISDOT/CADDS SHEET 49



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SB ON RAMP 'ZC' - STAGE 2	SHEET 589 E

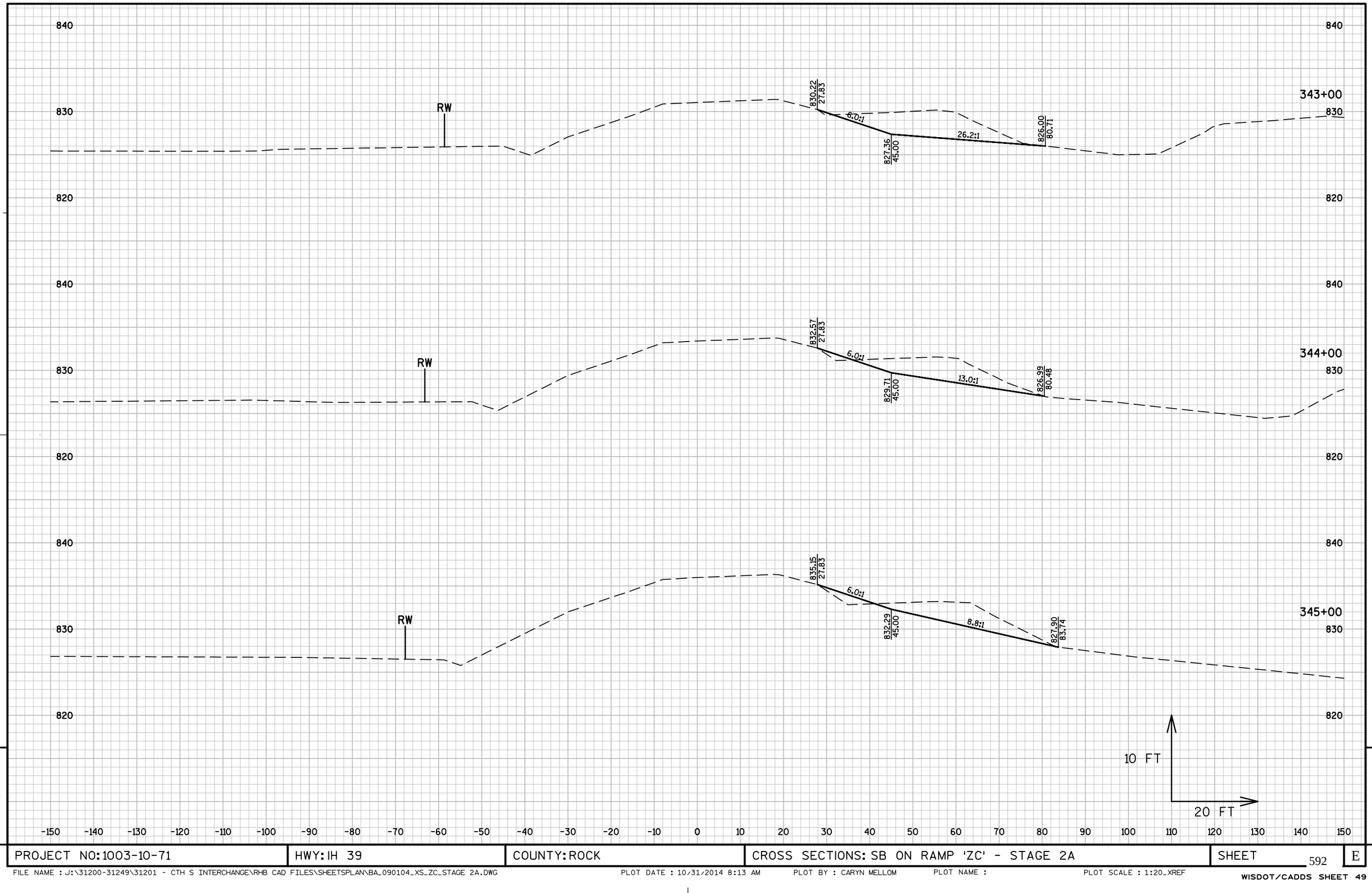


PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SB ON RAMP 'ZC' - STAGE 2	SHEET 590 E

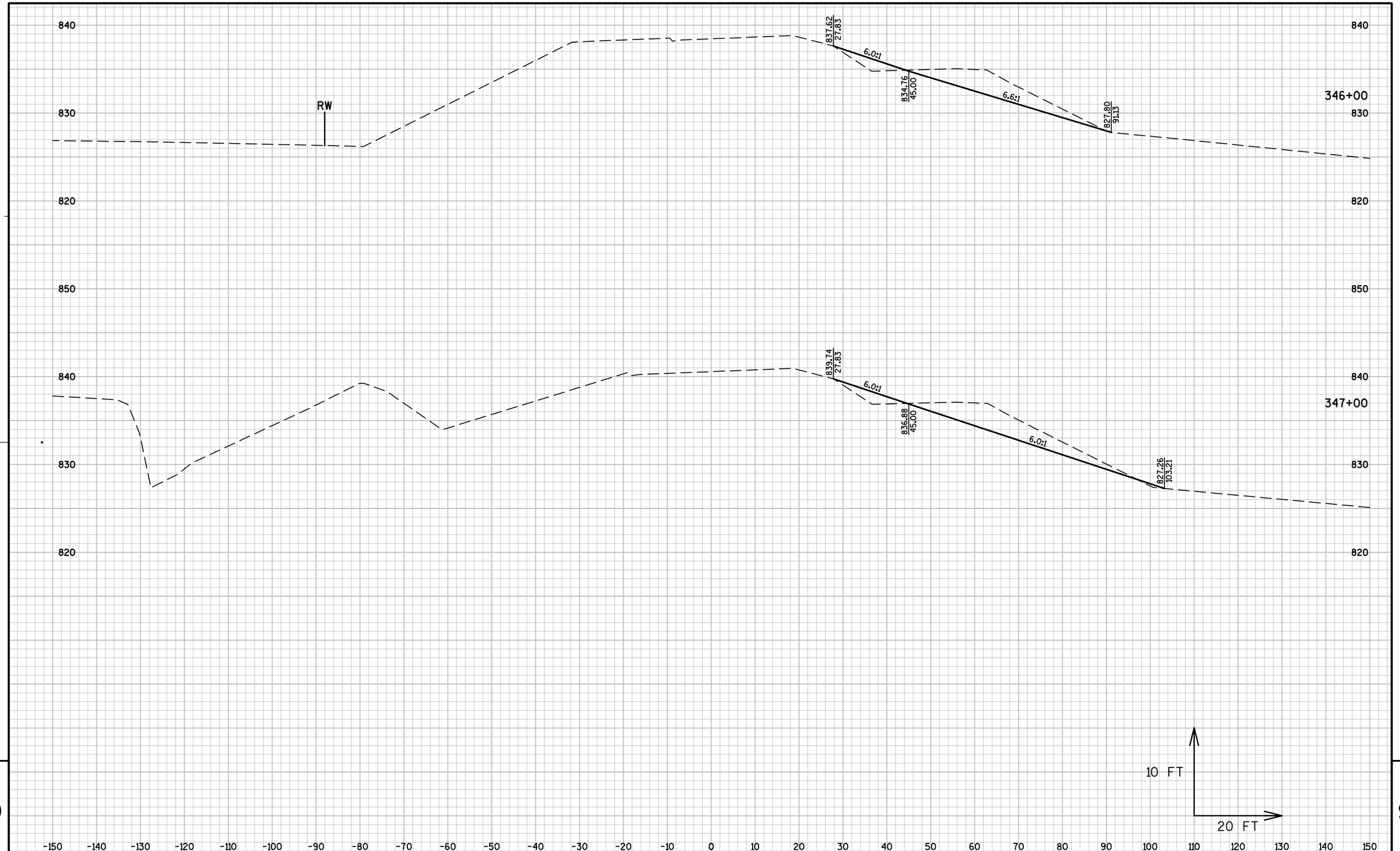


PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: TEMPORARY SB ON RAMP 'ZCT' - STAGE 2	SHEET 591	E

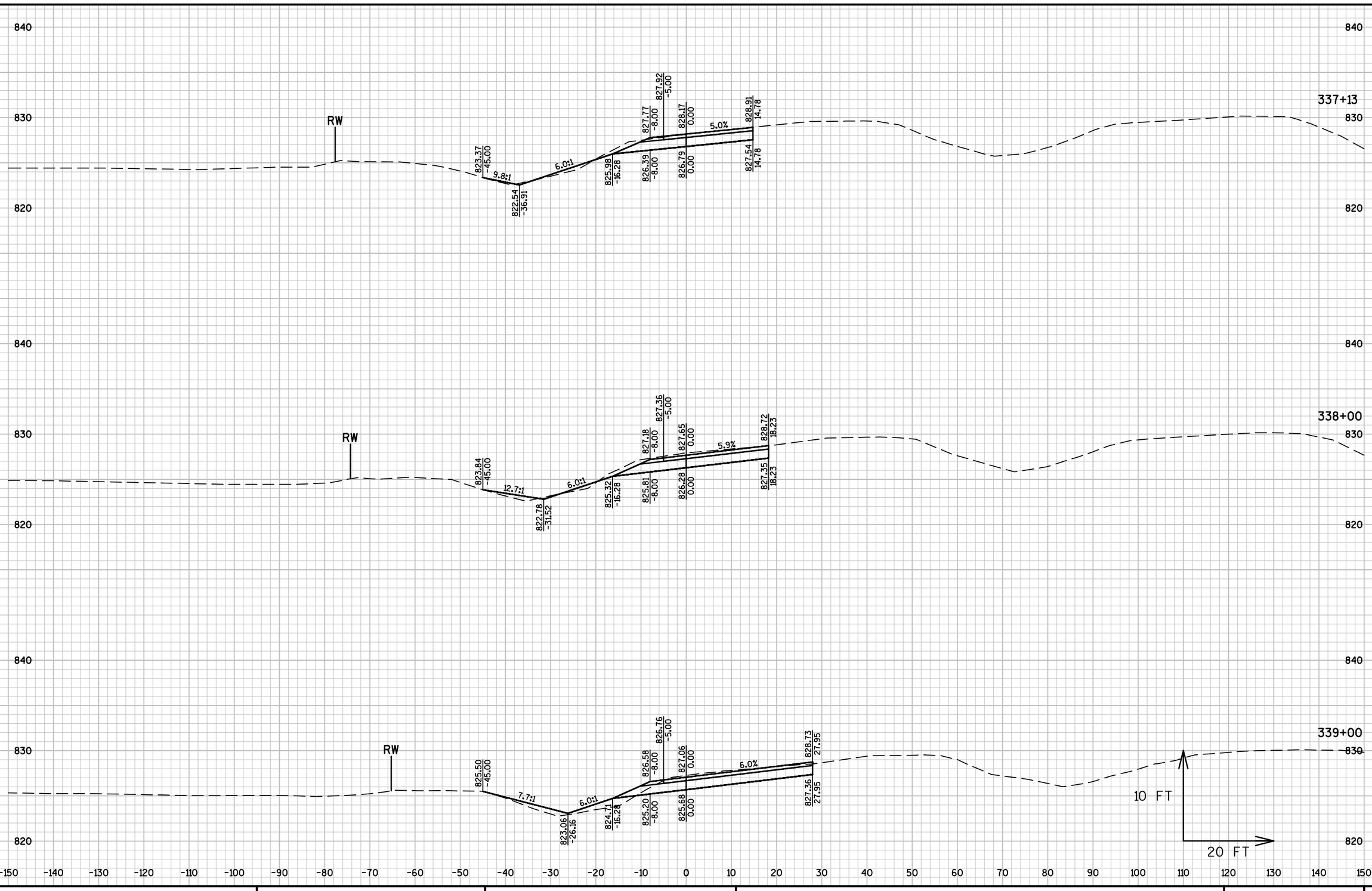
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WISDOT/CADDS SHEET 49



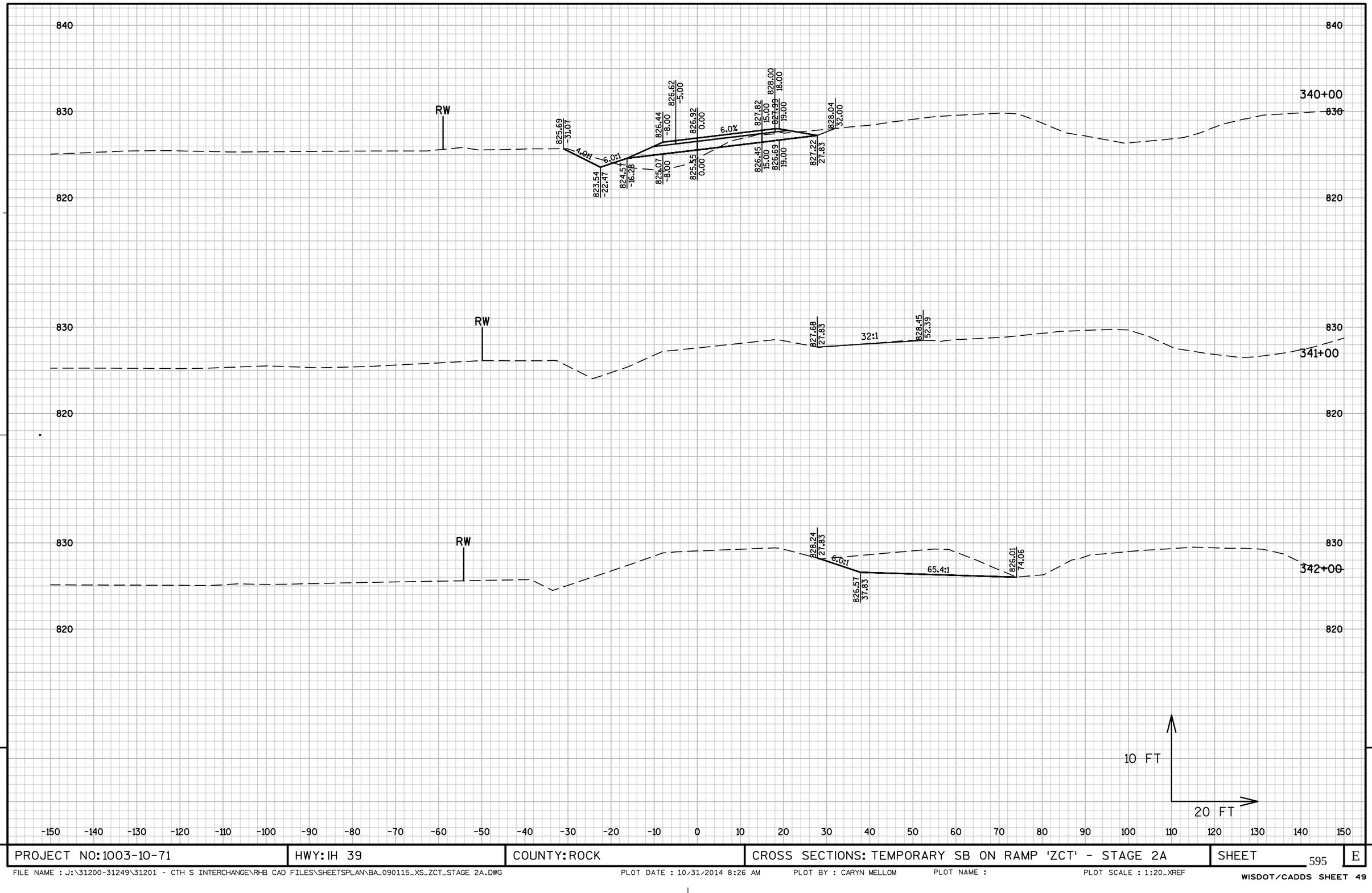
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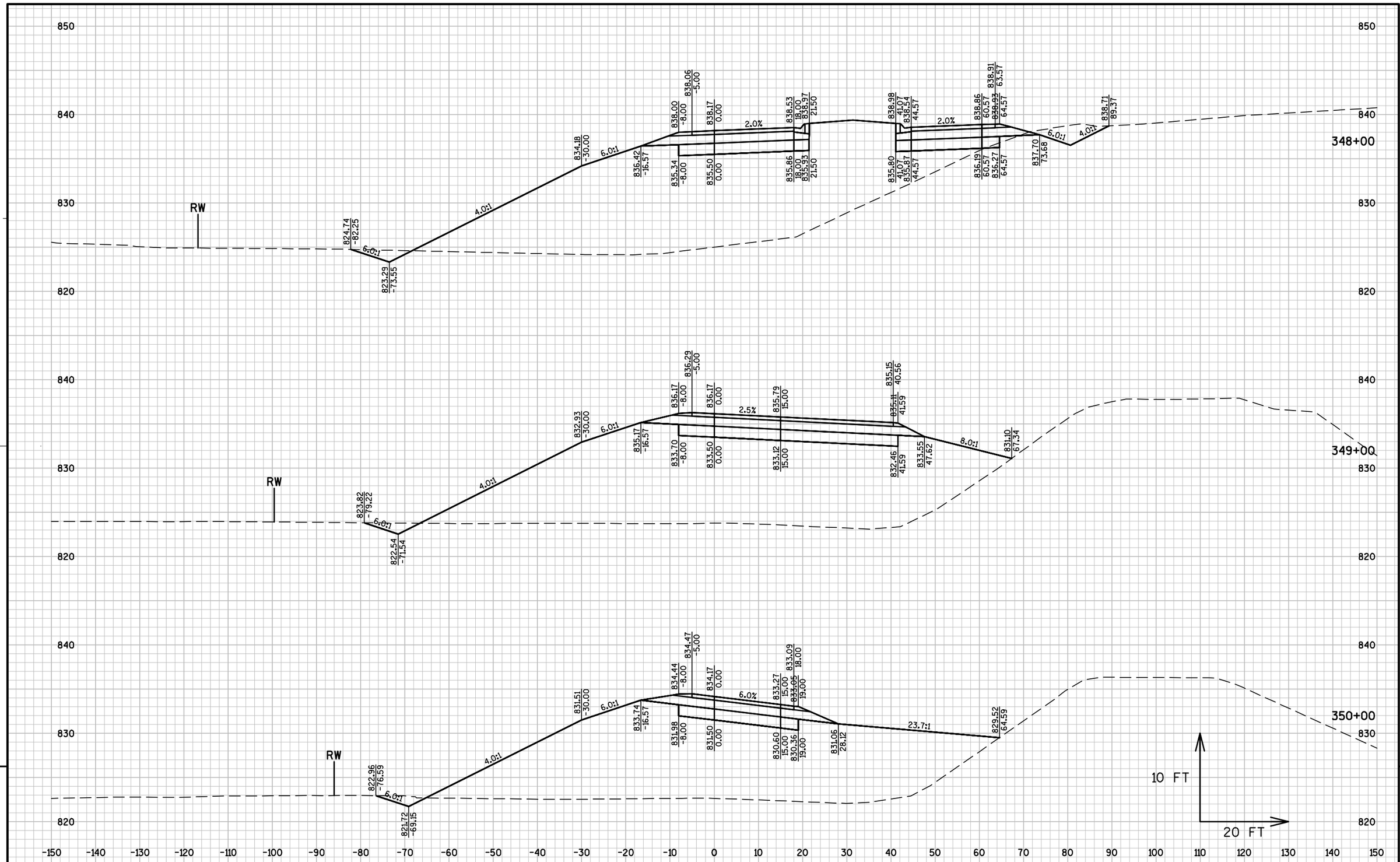
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: TEMPORARY SB ON RAMP 'ZCT' - STAGE 2A	SHEET 594	E



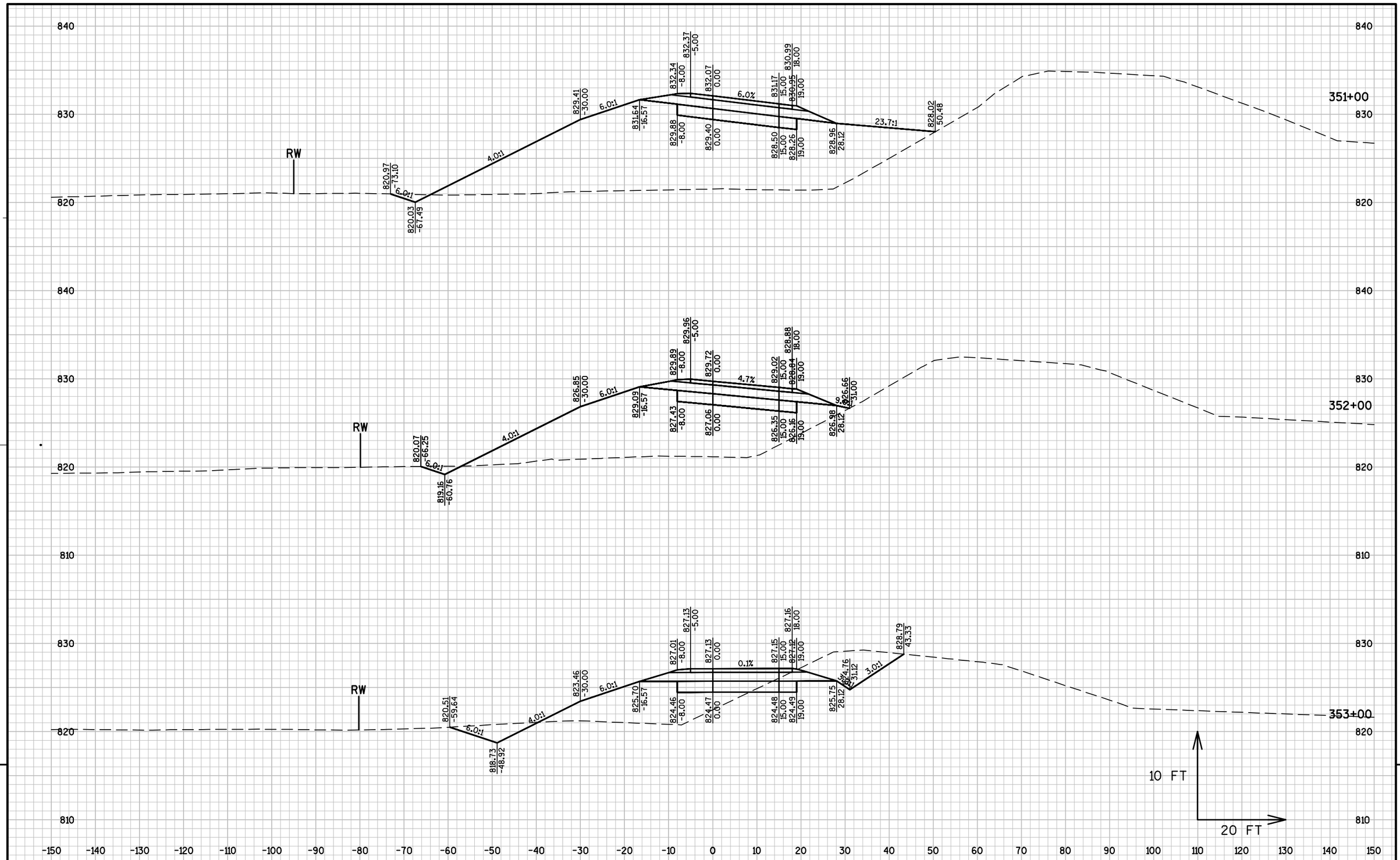
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: TEMPORARY SB ON RAMP 'ZCT' - STAGE 2A	SHEET 595	E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SB OFF RAMP 'ZD' - STAGE 2	SHEET	E

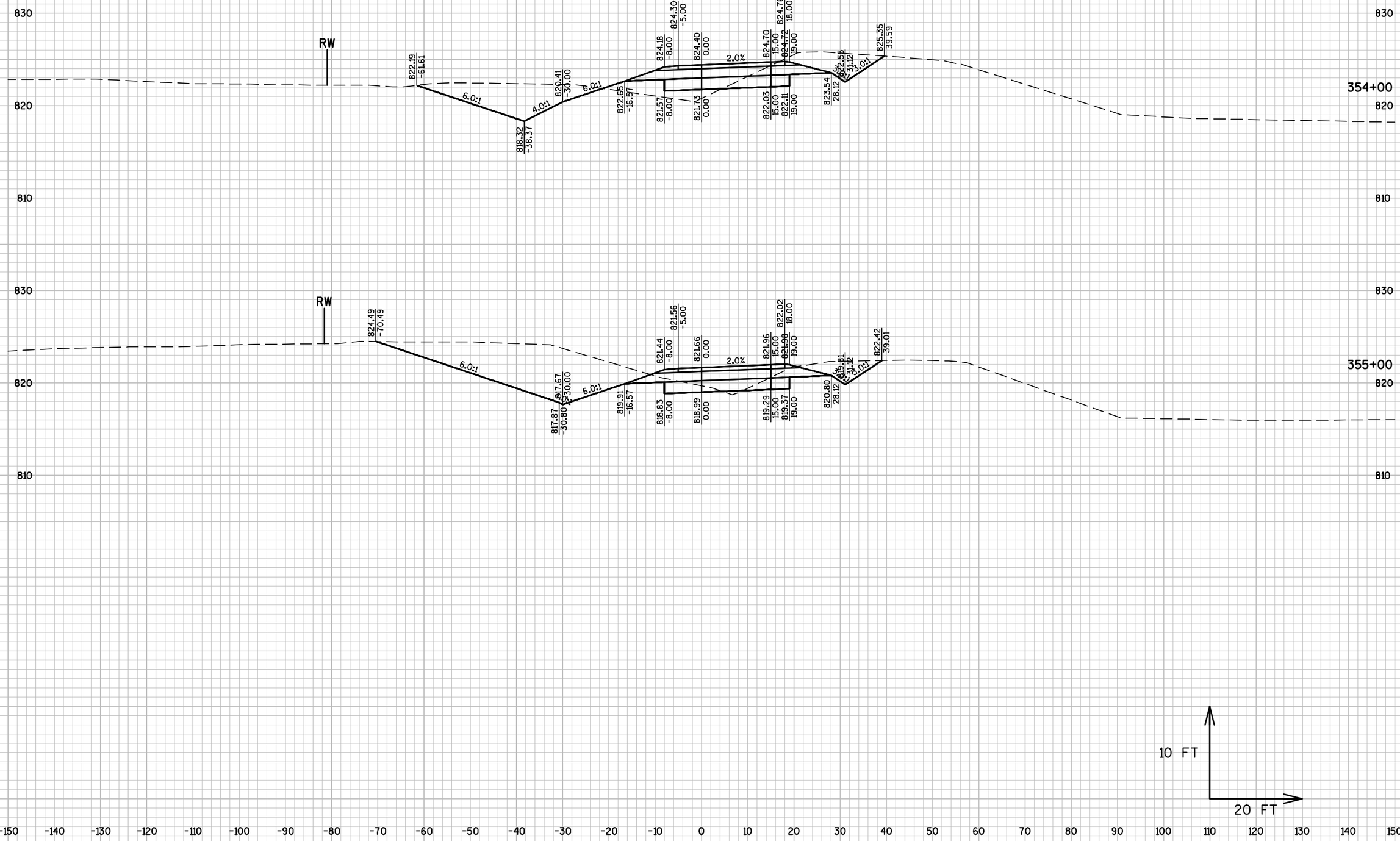
FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090105_XS_ZD_STAGE 2.DWG PLOT DATE : 10/31/2014 7:27 AM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SB OFF RAMP 'ZD' - STAGE 2	SHEET E

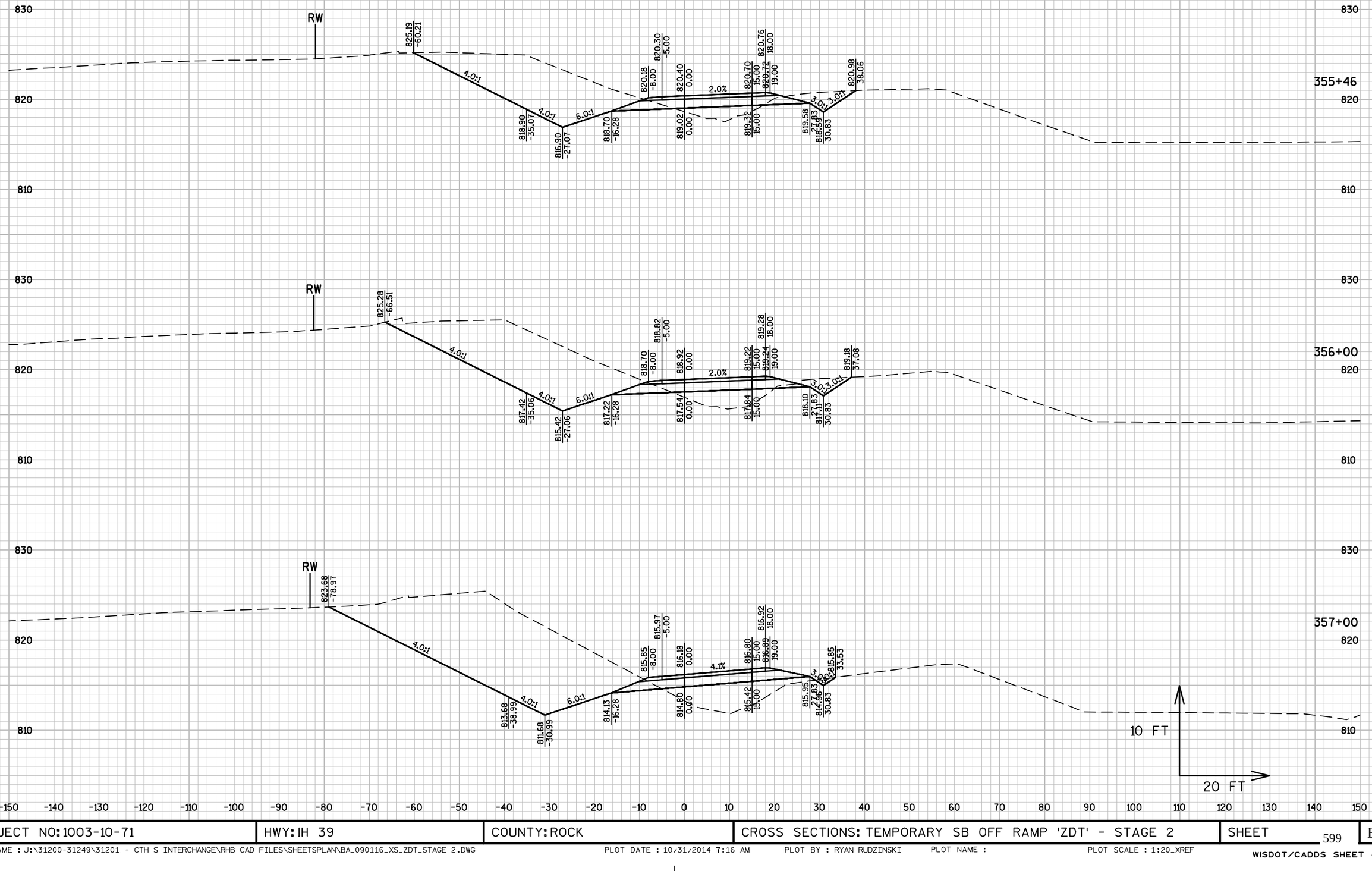
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WISDOT/CADDS SHEET 49



9

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SB OFF RAMP 'ZD' - STAGE 2	SHEET	E

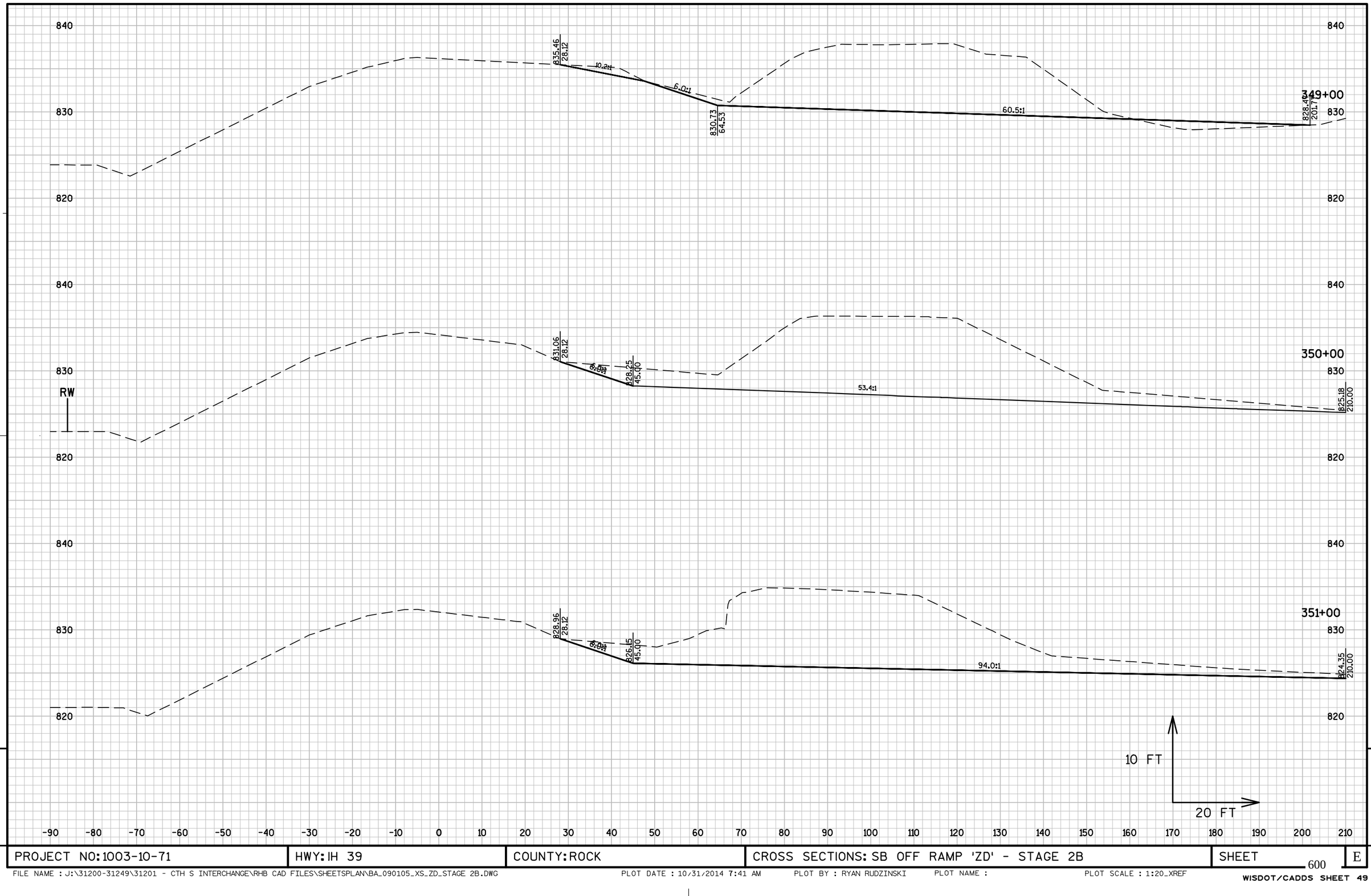
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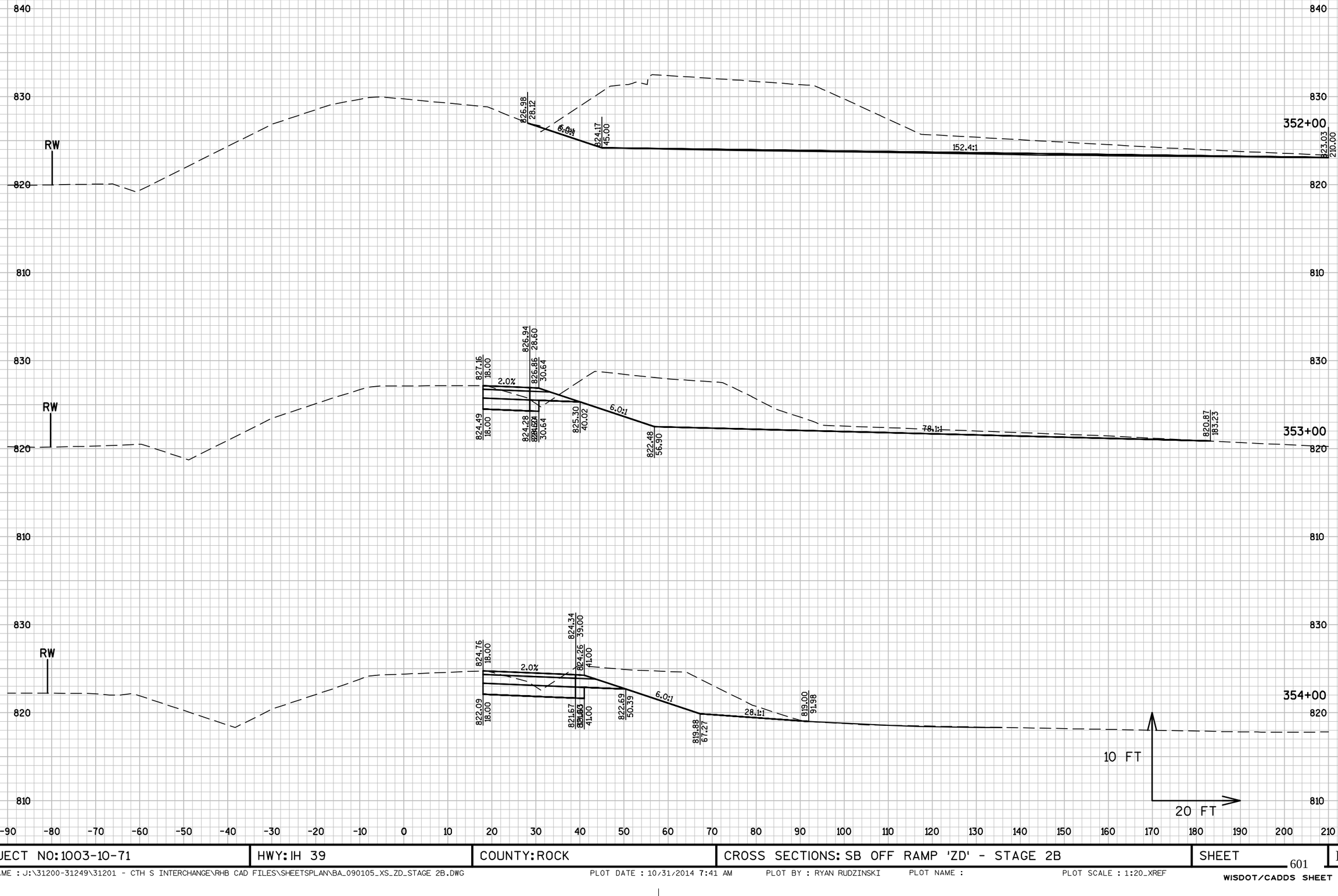
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: TEMPORARY SB OFF RAMP 'ZDT' - STAGE 2	SHEET 599 E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090116_XS_ZDT_STAGE 2.DWG PLOT DATE : 10/31/2014 7:16 AM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



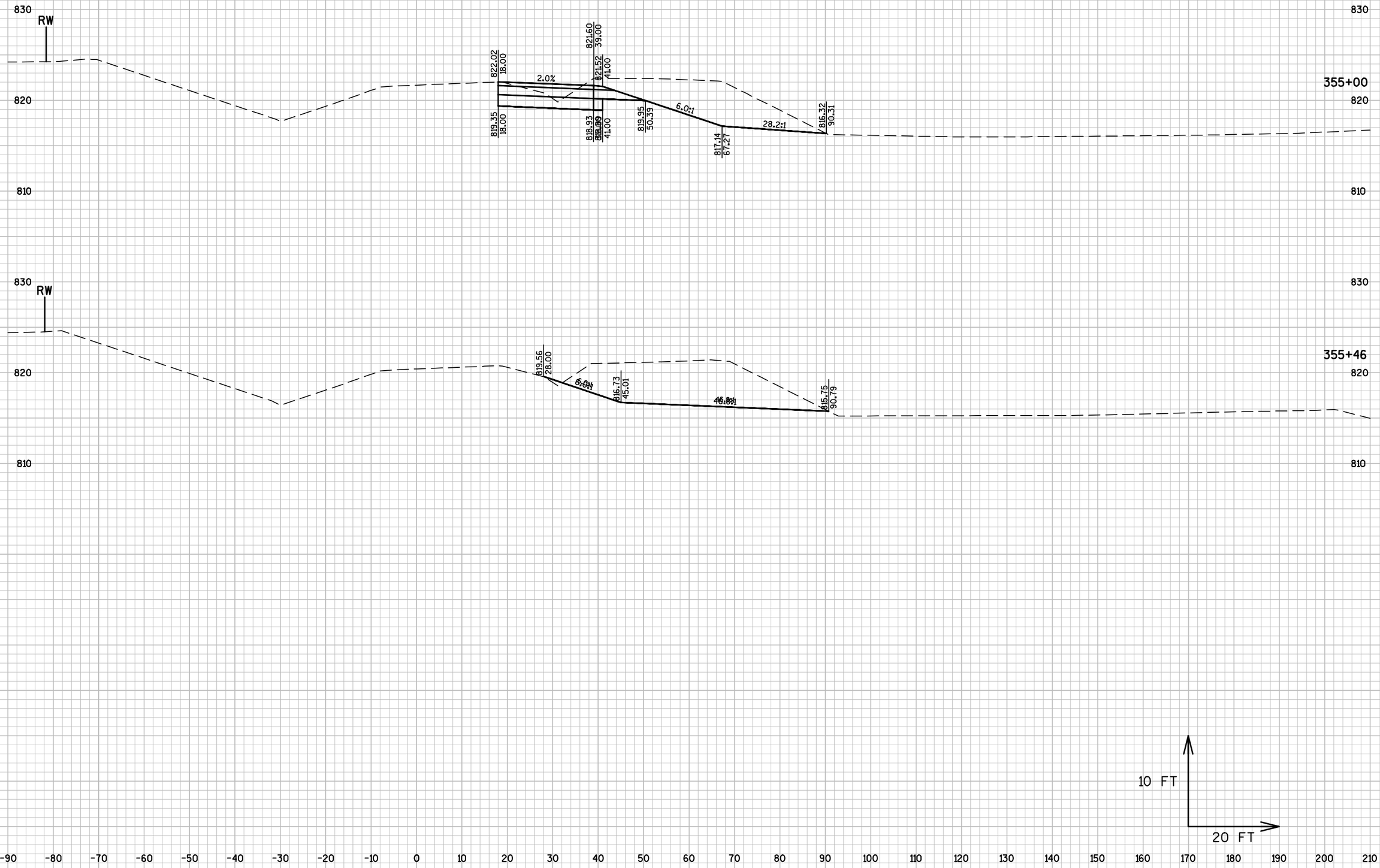
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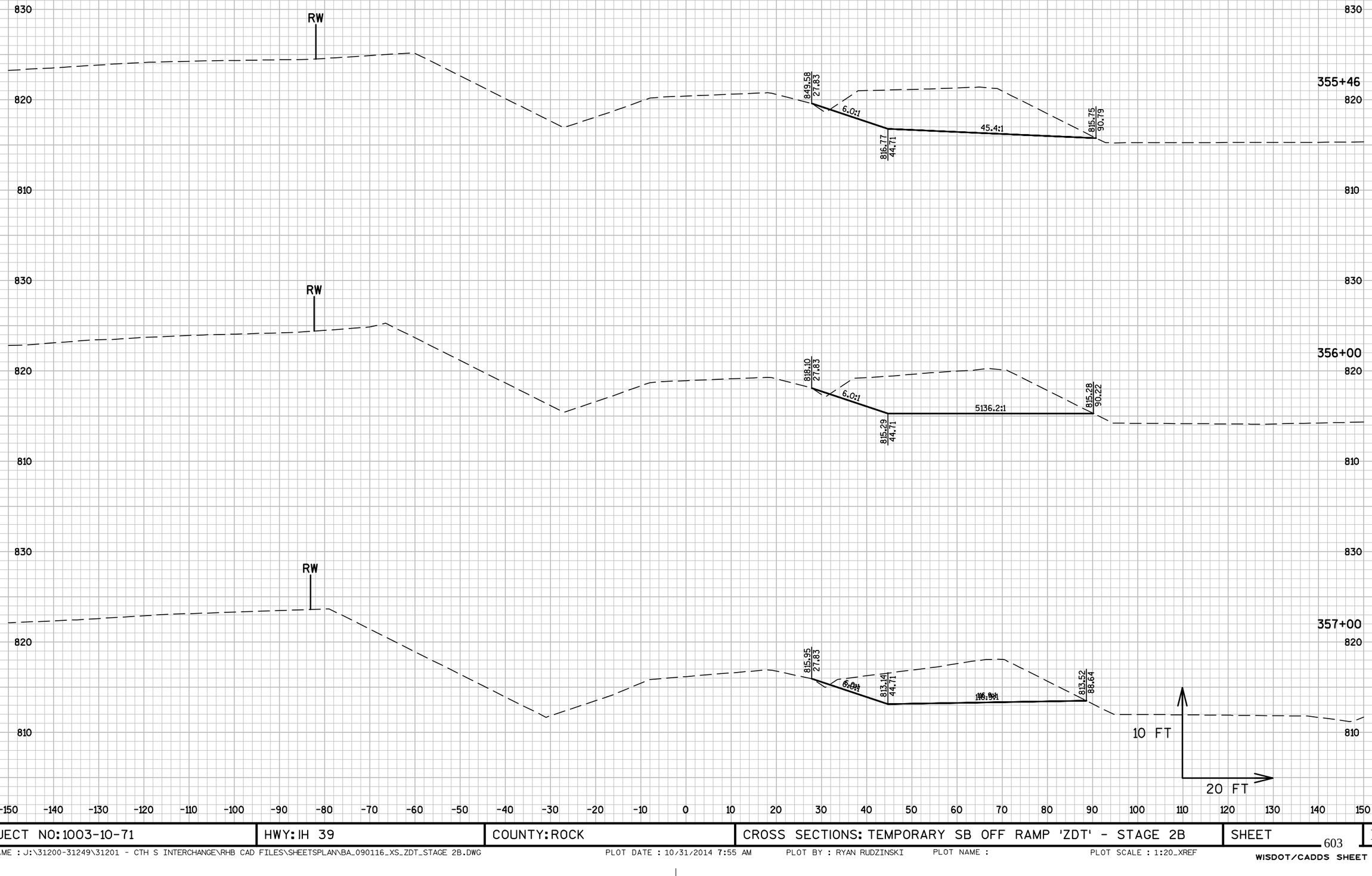
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SB OFF RAMP 'ZD' - STAGE 2B	SHEET E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090105_XS_ZD_STAGE 2B.DWG PLOT DATE : 10/31/2014 7:41 AM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:20_XREF

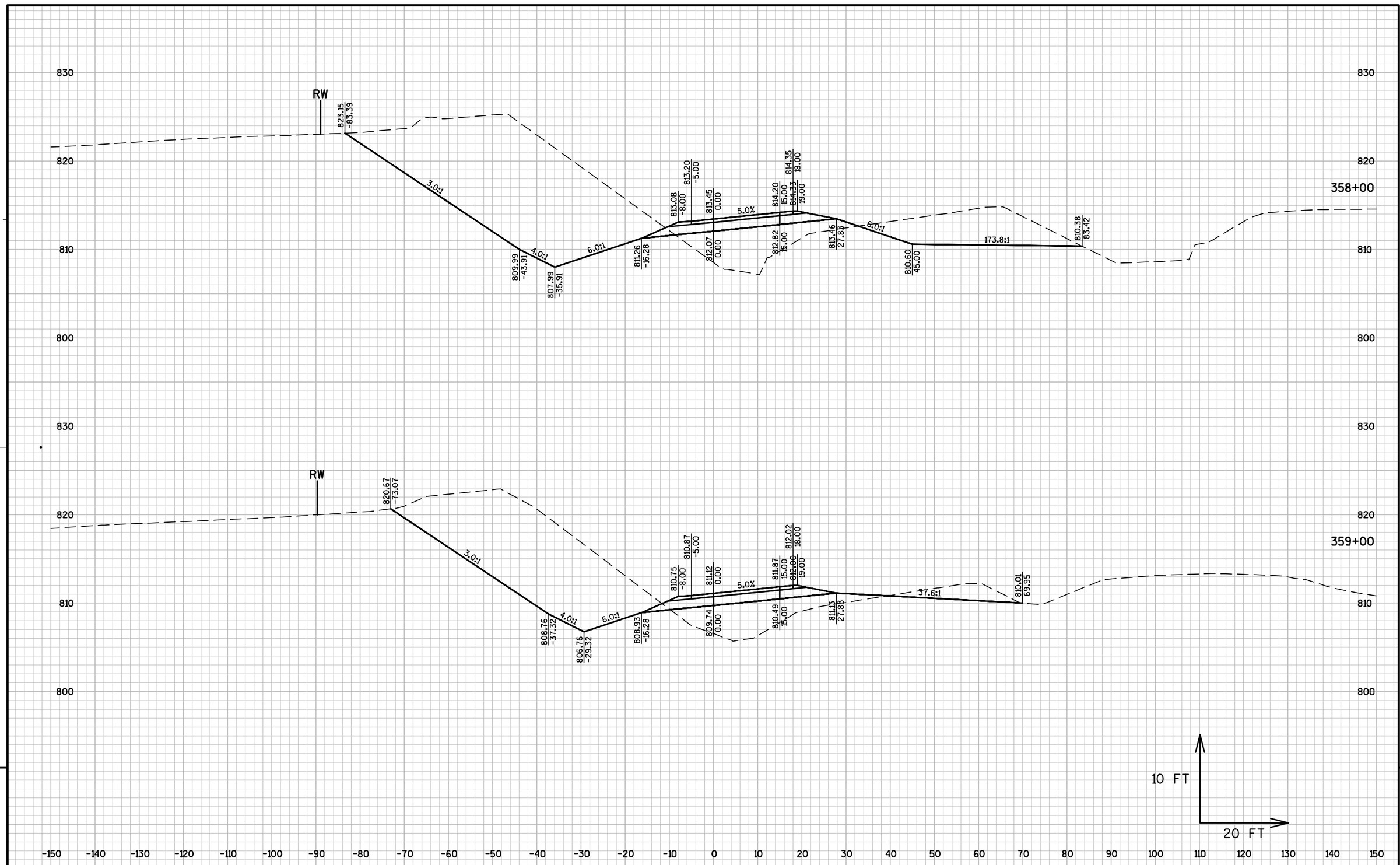
WISDOT/CADDS SHEET 49



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SB OFF RAMP 'ZD' - STAGE 2B	SHEET 602	E

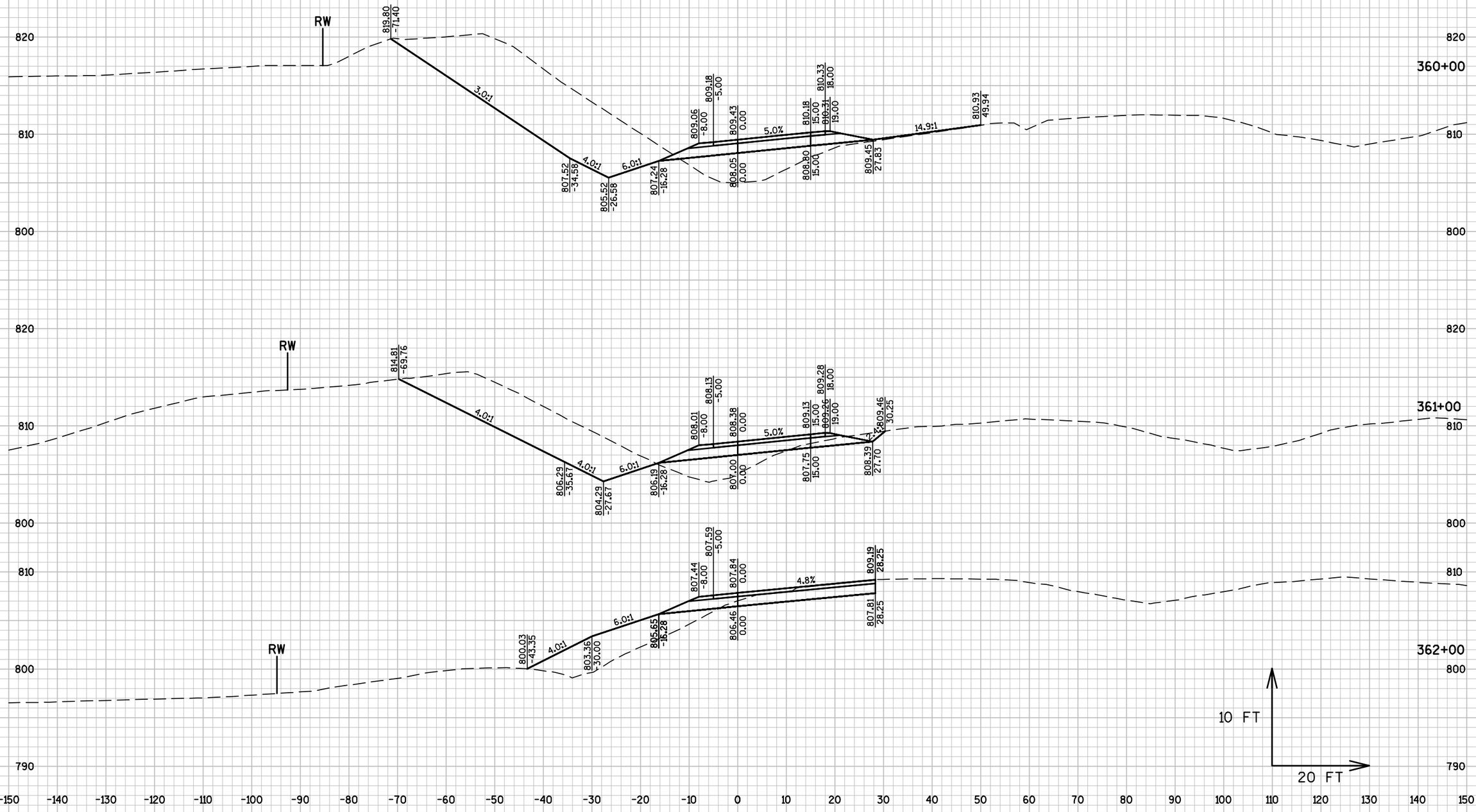


PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: TEMPORARY SB OFF RAMP 'ZDT' - STAGE 2B	SHEET 603	E



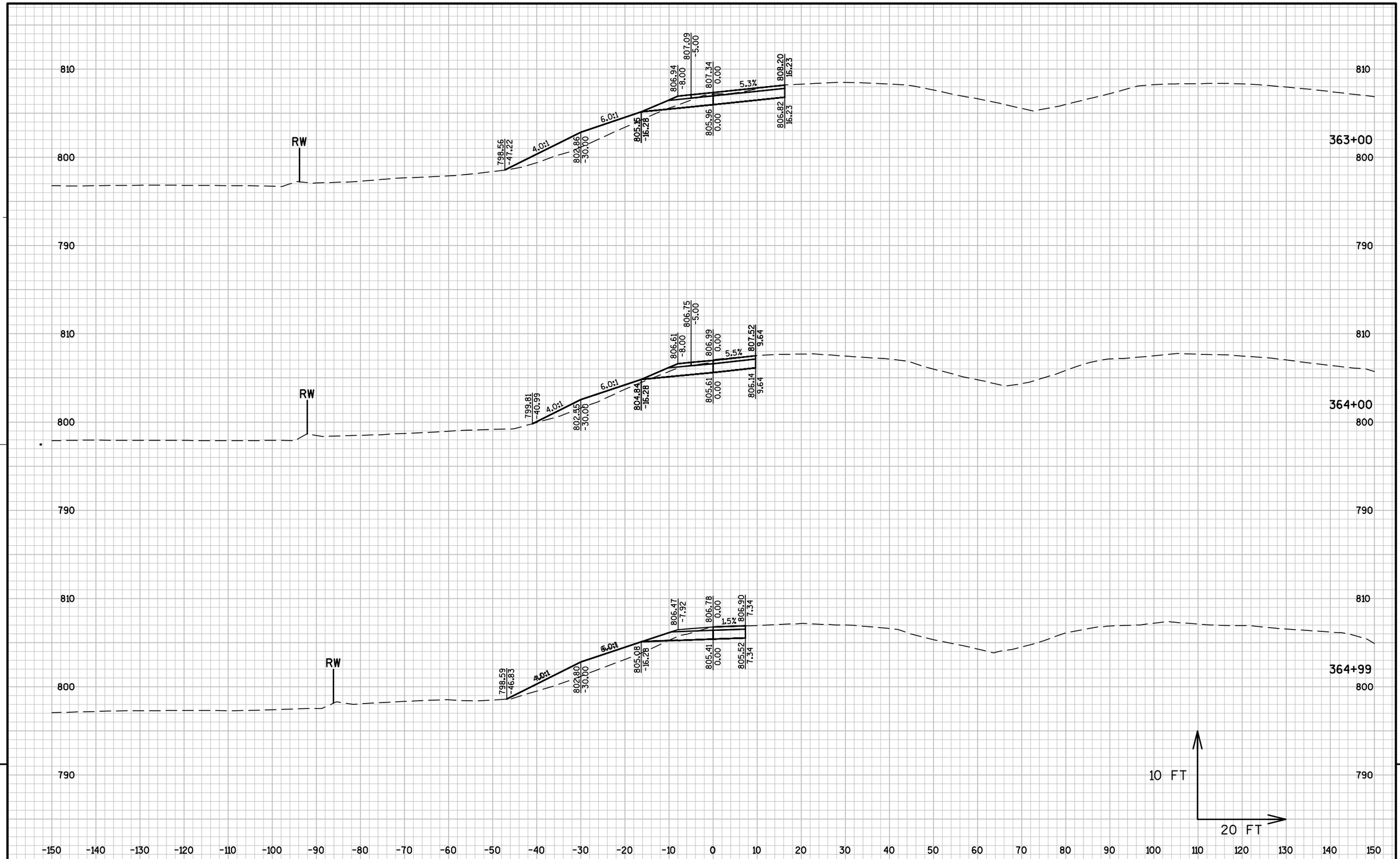
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FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090116_XS_ZDT_STAGE 2B.DWG PLOT DATE : 10/31/2014 7:55 AM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



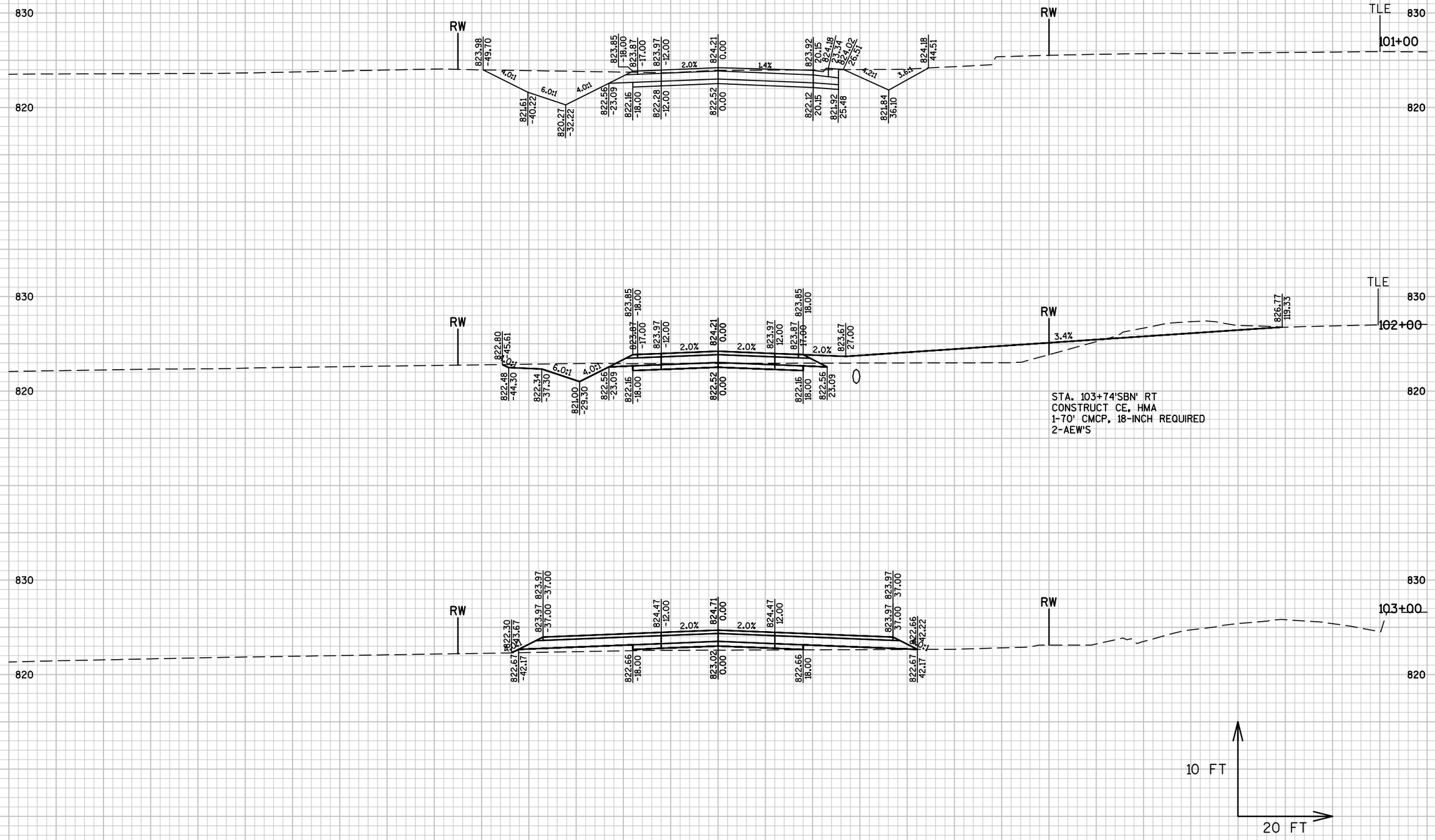
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: TEMPORARY SB OFF RAMP 'ZDT' - STAGE 2B	SHEET	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090116_XS_ZDT_STAGE 2B.DWG PLOT DATE : 10/31/2014 7:56 AM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:20_XREF

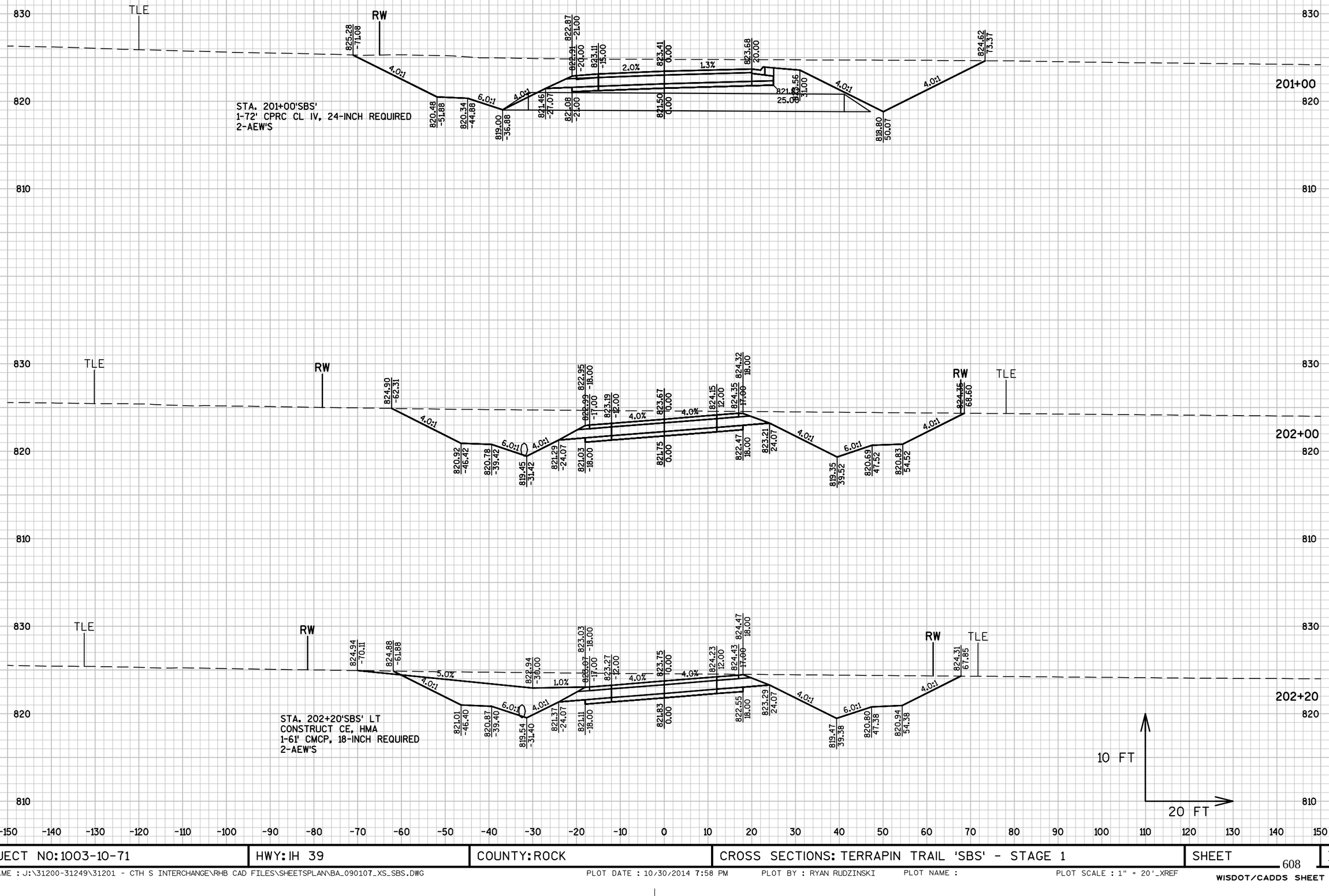


PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: TEMPORARY SB OFF RAMP 'ZDT' - STAGE 2B	SHEET 606	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090116_XS_ZDT_STAGE 2B.DWG PLOT DATE : 10/31/2014 7:56 AM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: TORTOISE LANE 'SBN' - STAGE 1	SHEET 607	E

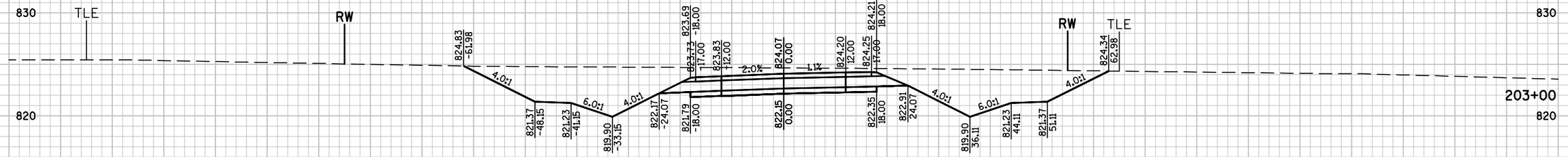


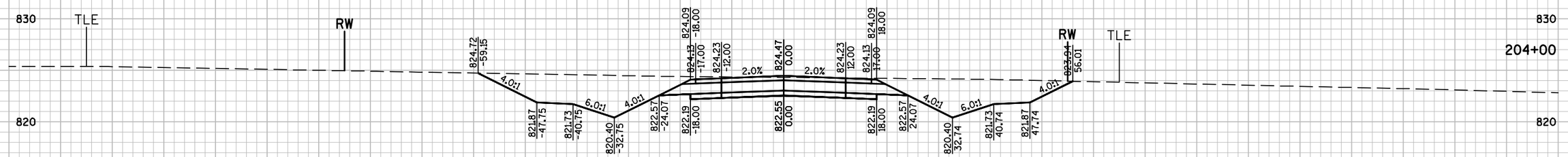
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: TERRAPIN TRAIL 'SBS' - STAGE 1	SHEET 608	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090107_XS_SBS.DWG PLOT DATE : 10/30/2014 7:58 PM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49

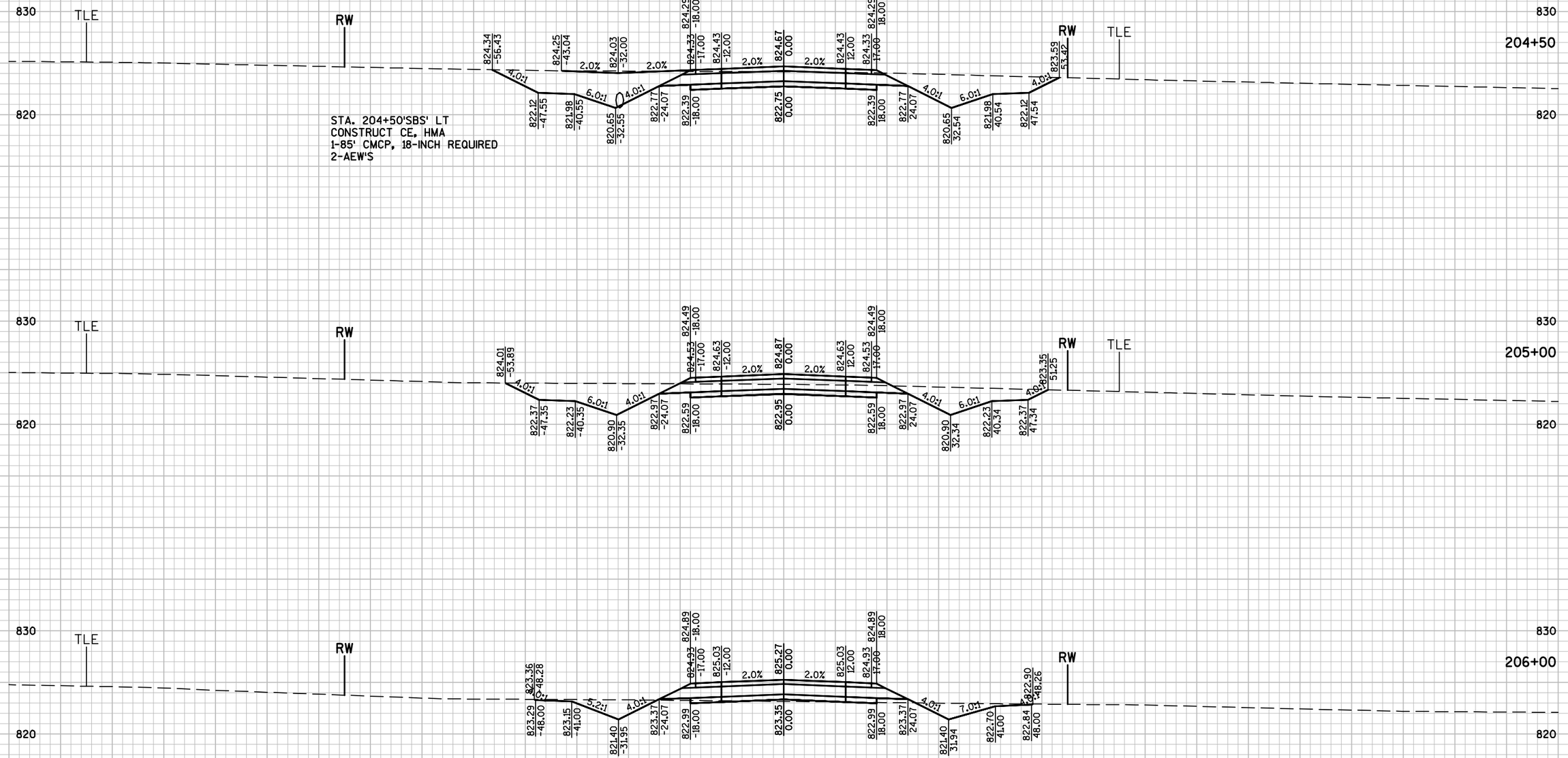




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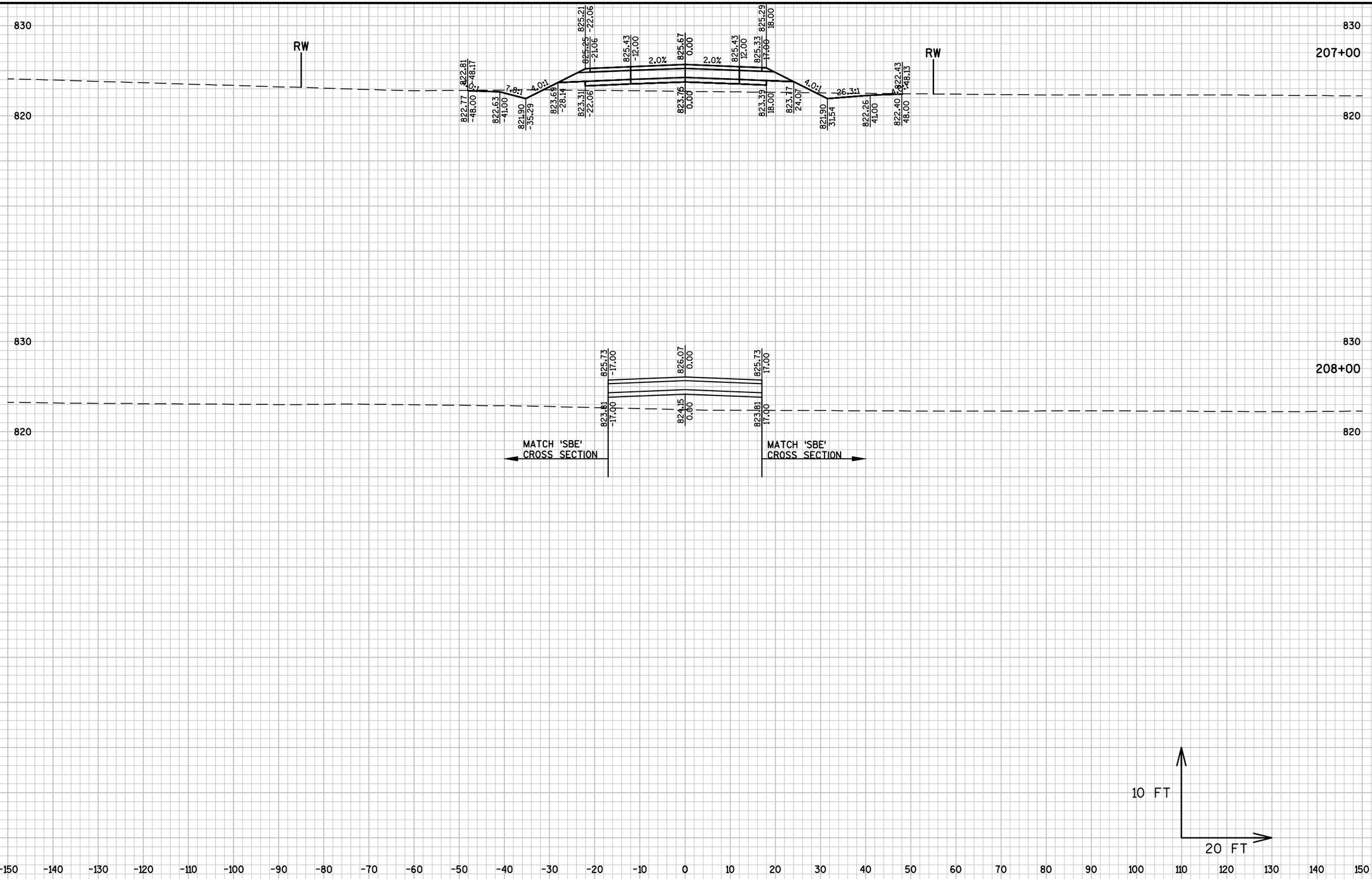
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: TERRAPIN TRAIL 'SBS' - STAGE 1	SHEET 609	E



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: TERRAPIN TRAIL 'SBS' - STAGE 1	SHEET 610	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090107_XS_SBS.DWG PLOT DATE : 10/30/2014 7:59 PM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1" = 20'_XREF
WISDOT/CADDS SHEET 49

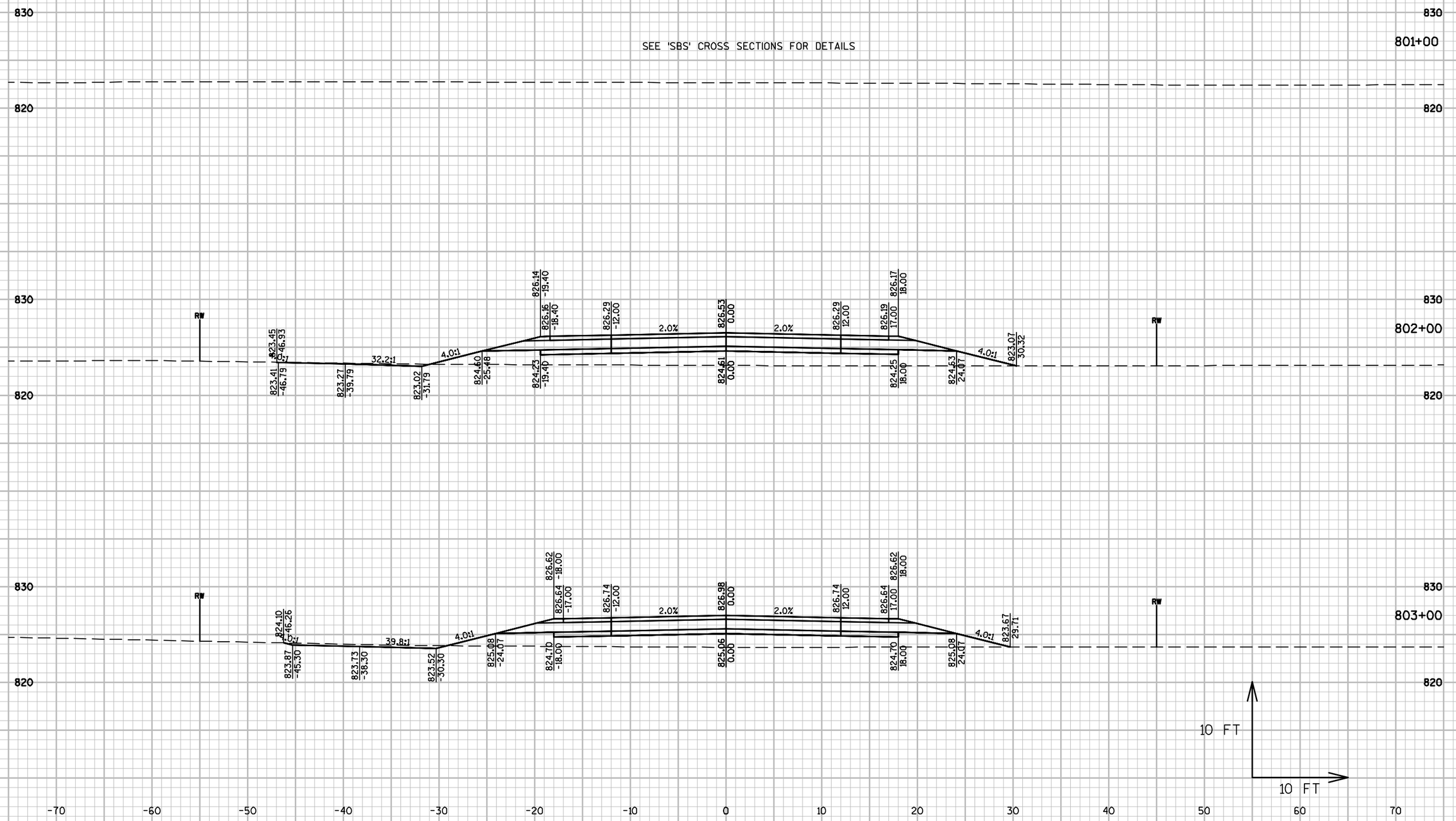


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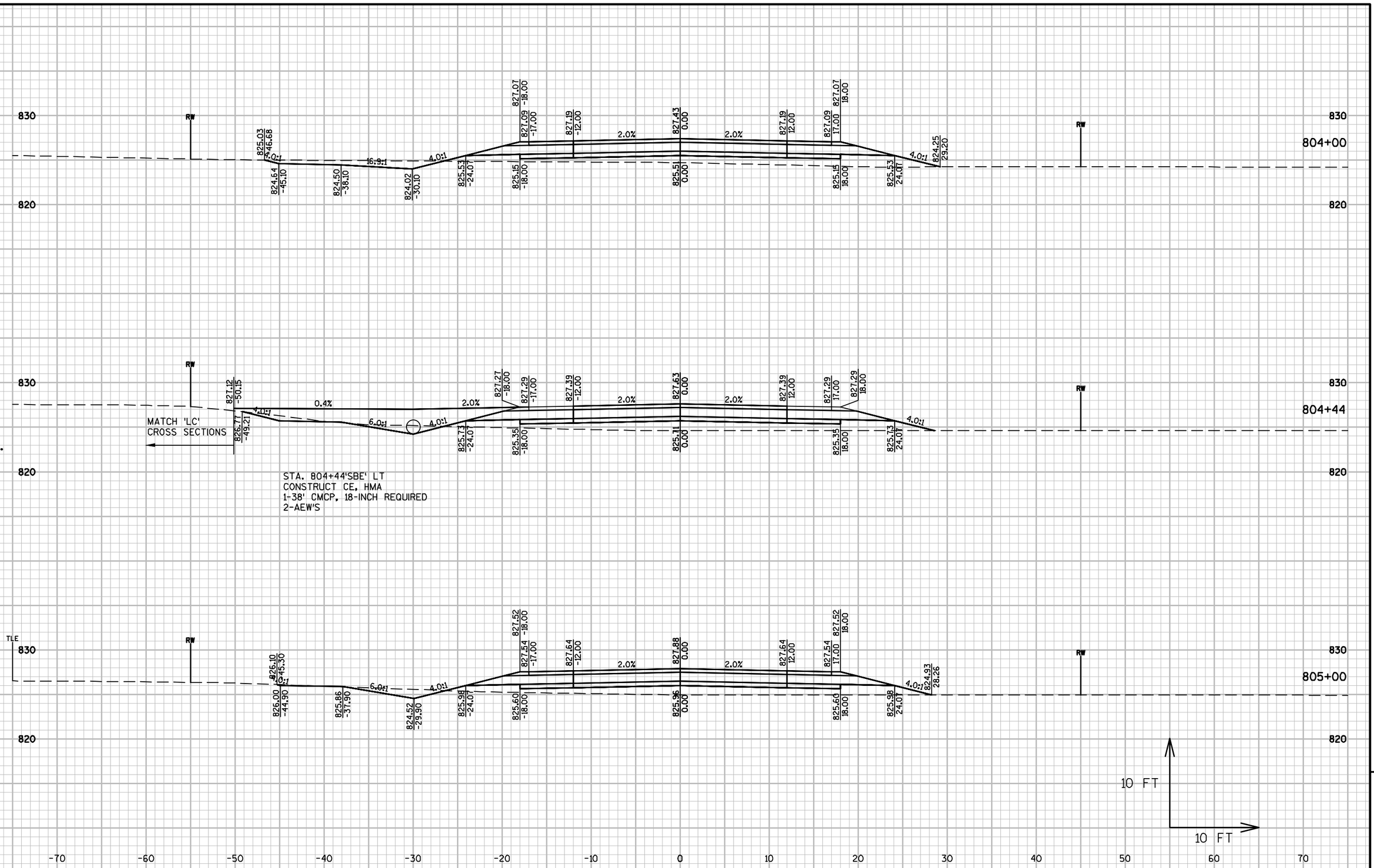
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: TERRAPIN TRAIL 'SBS' - STAGE 1	SHEET 611	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090107_XS_SBS.DWG PLOT DATE : 10/30/2014 7:59 PM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1" = 20'_XREF
WISDOT/CADDS SHEET 49

SEE 'SBS' CROSS SECTIONS FOR DETAILS

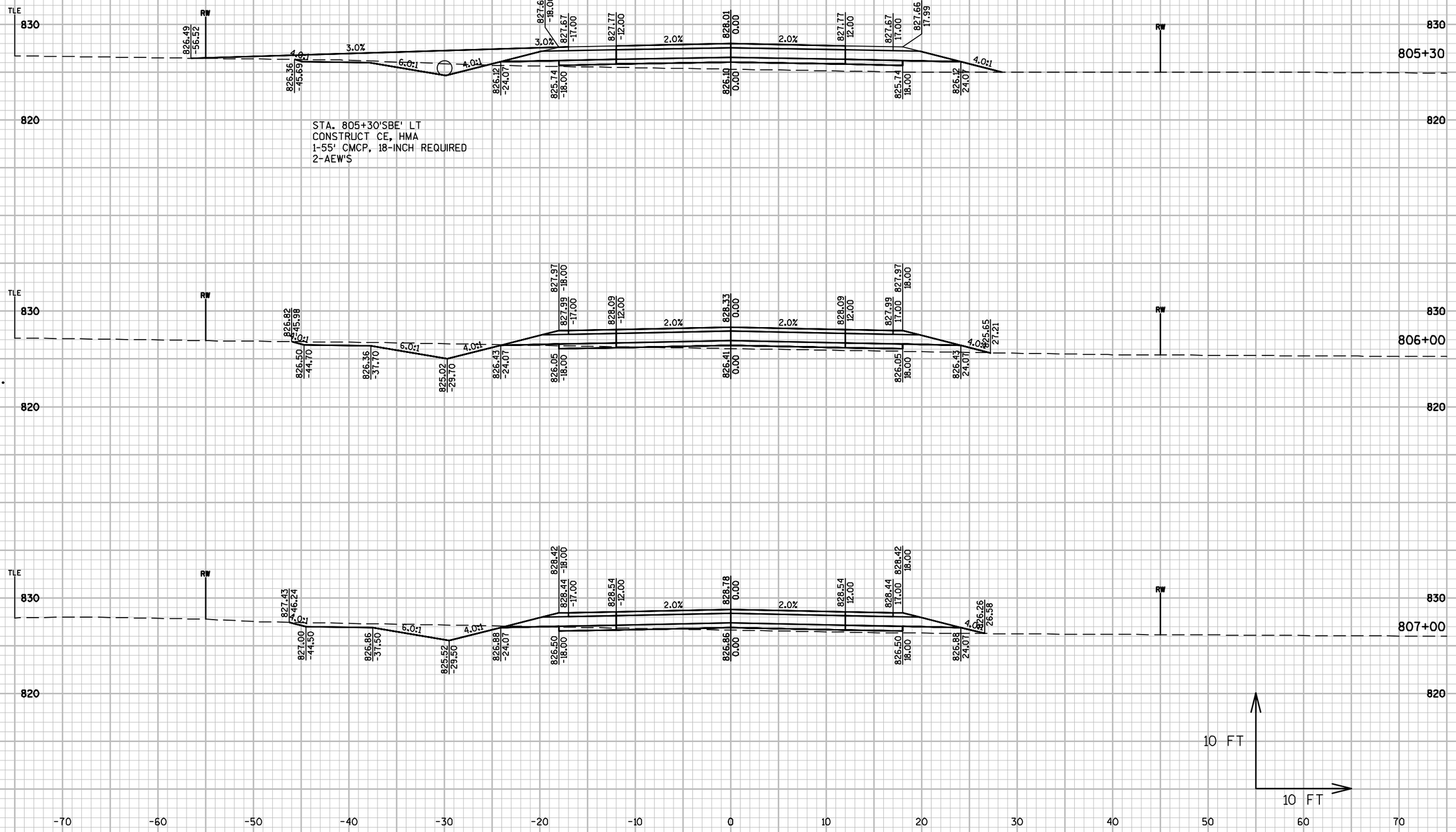


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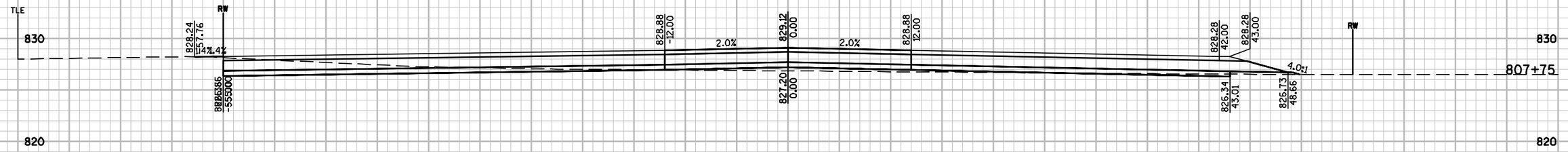
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FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090111_XS_SBE.DWG PLOT DATE : 10/30/2014 8:09 PM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



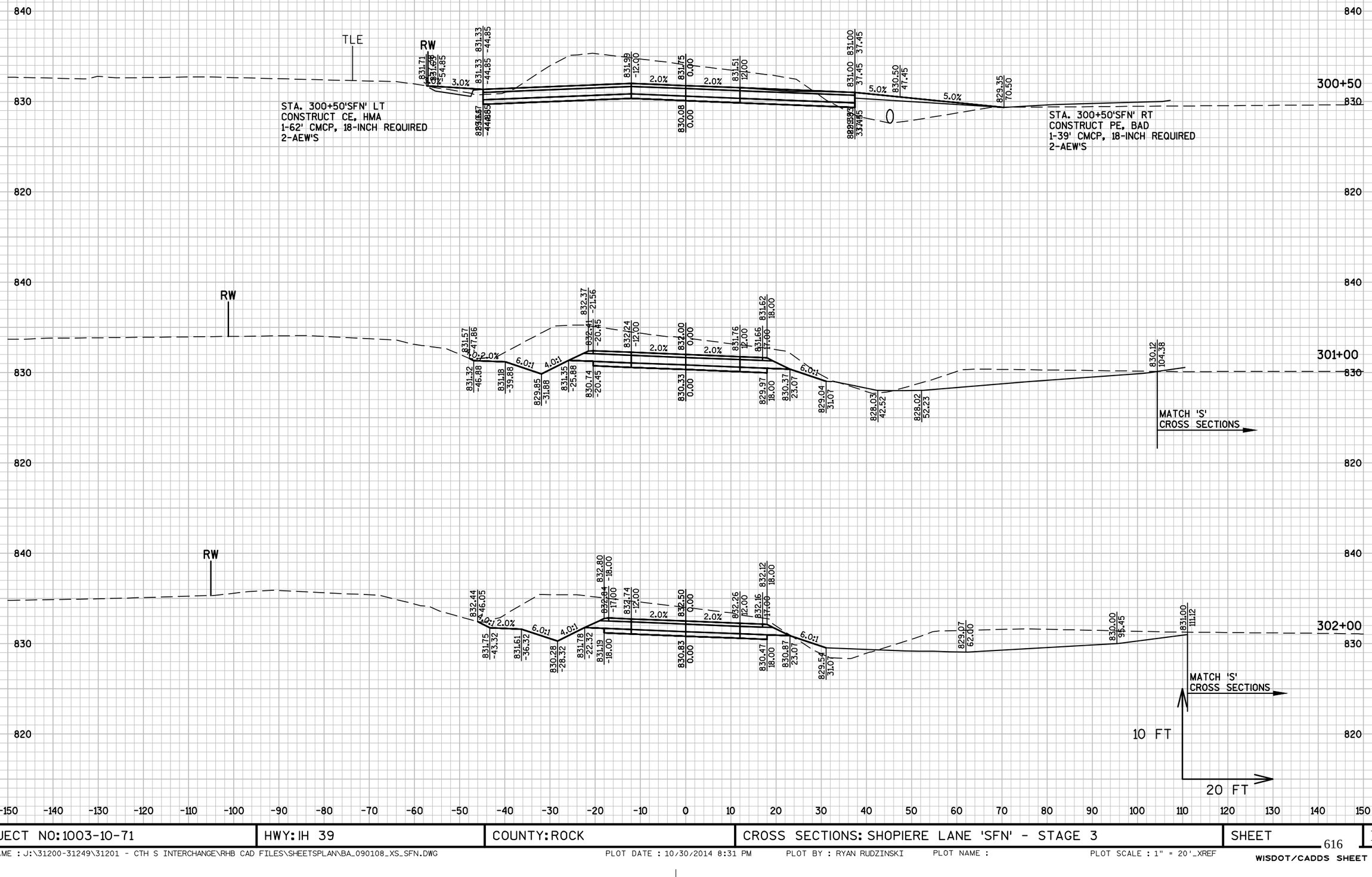
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WISDOT/CADDS SHEET 49



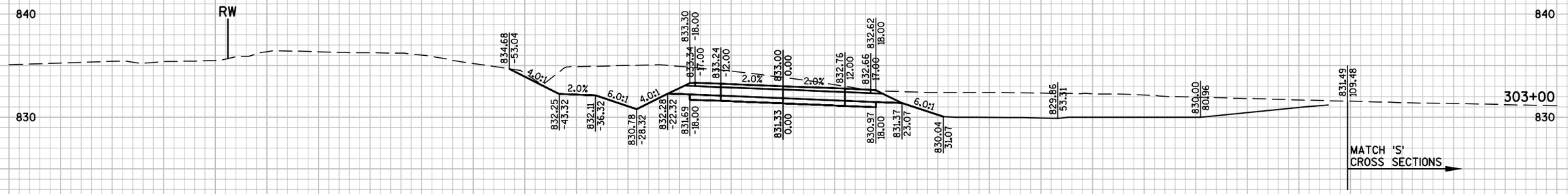
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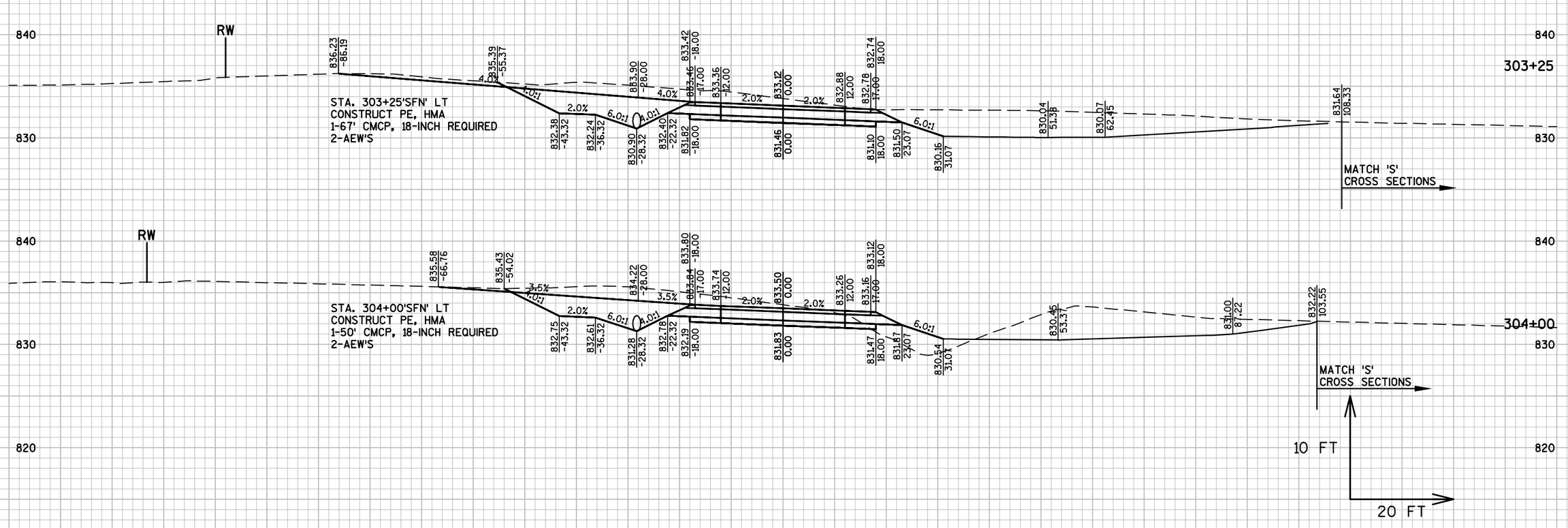
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WISDOT/CADDS SHEET 49



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SHOPIERE LANE 'SFN' - STAGE 3	SHEET	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090108_XS_SFN.DWG PLOT DATE : 10/30/2014 8:31 PM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1" = 20'_XREF

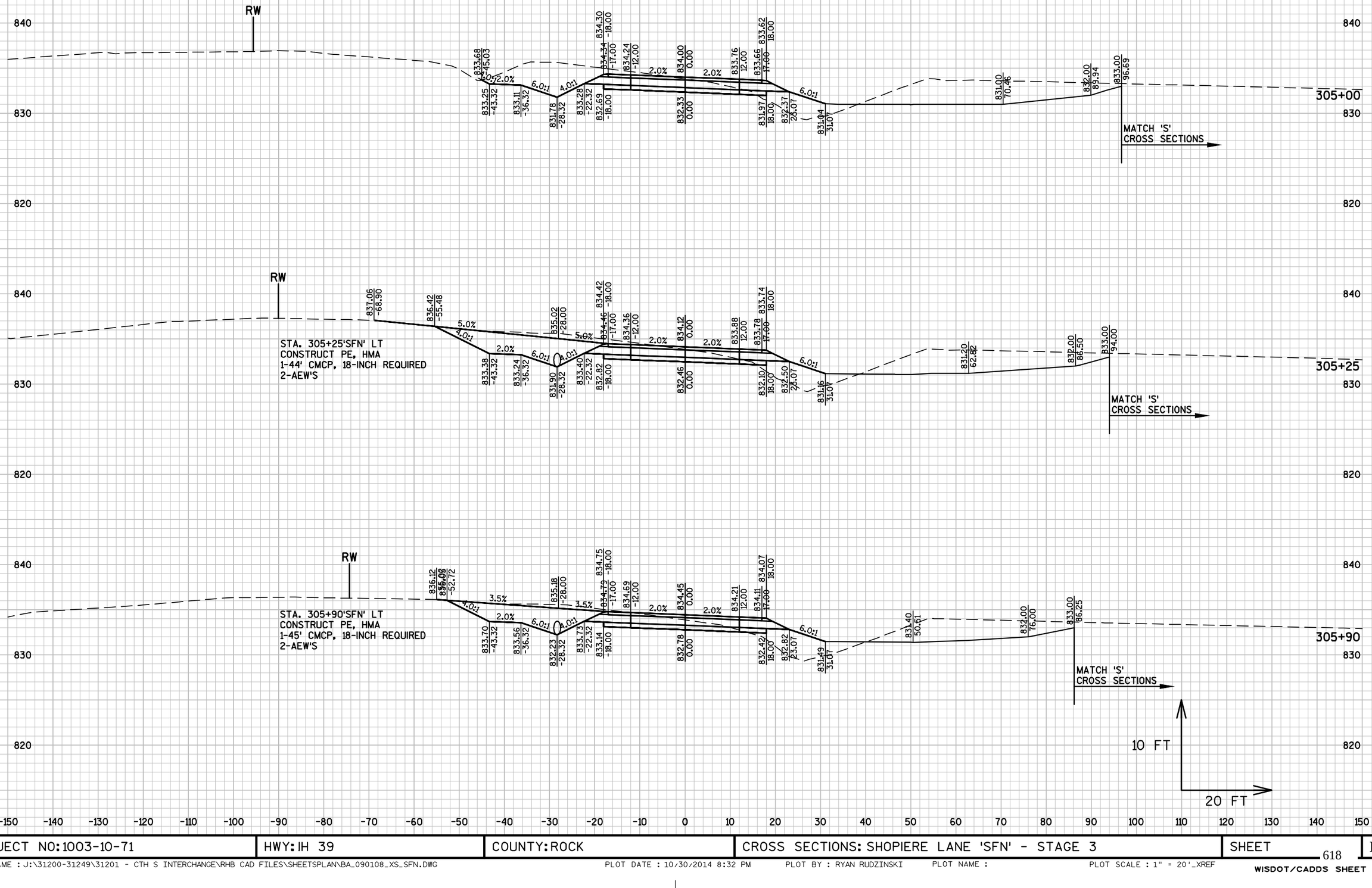




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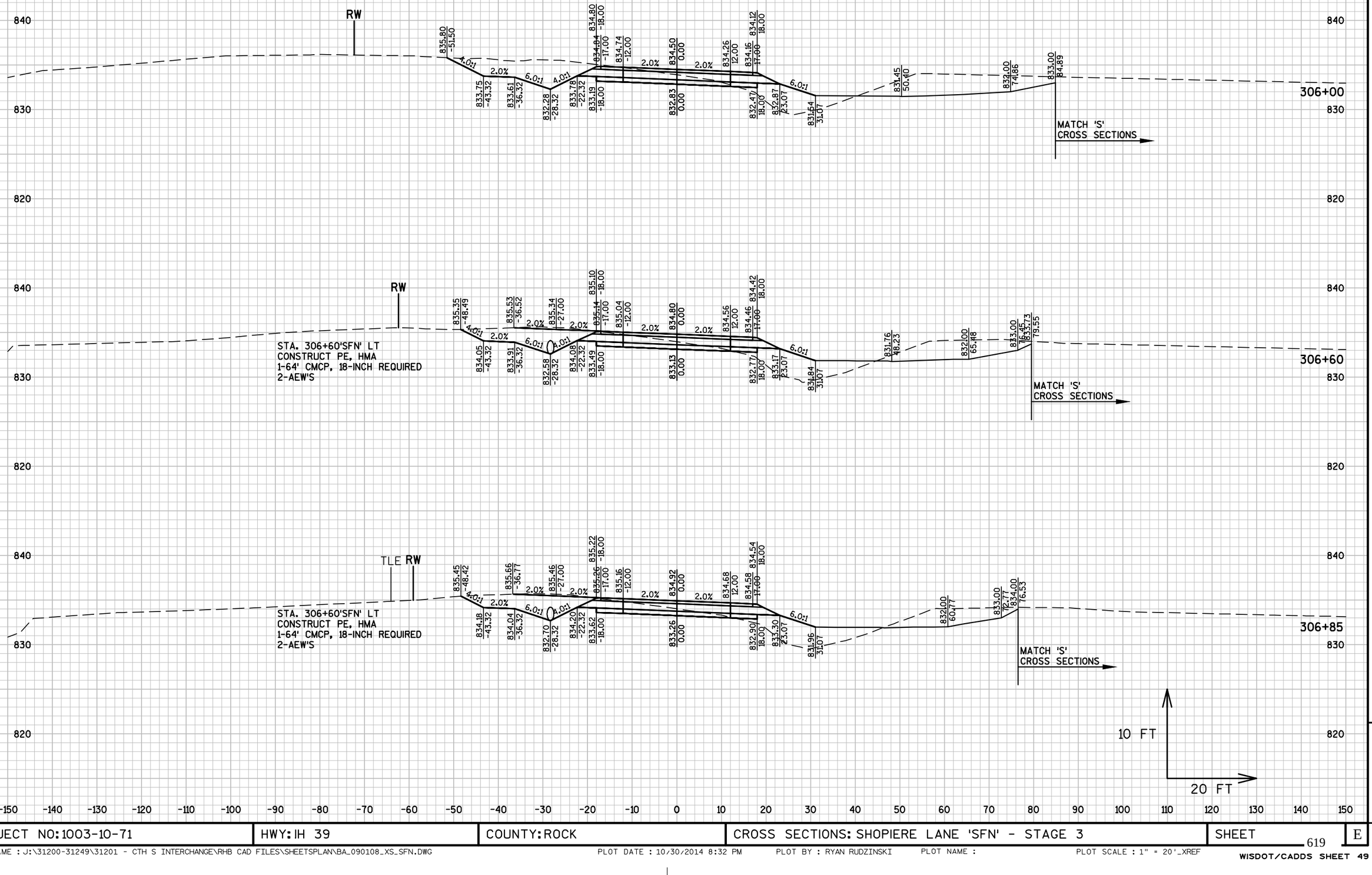
PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SHOPIERE LANE 'SFN' - STAGE 3	SHEET 617	E



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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SHOPIERE LANE 'SFN' - STAGE 3	SHEET 618	E

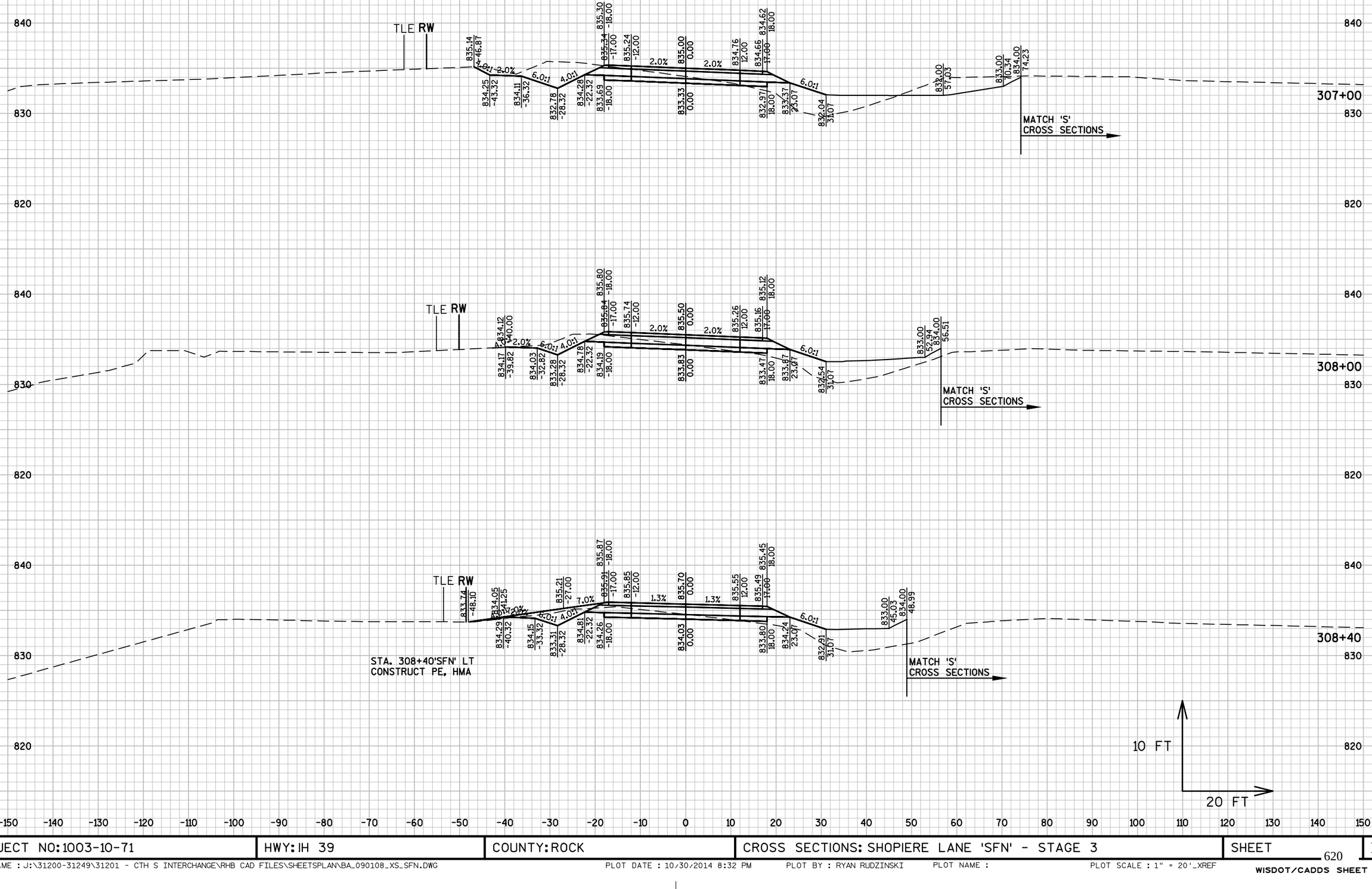


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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SHOPIERE LANE 'SFN' - STAGE 3	SHEET	E

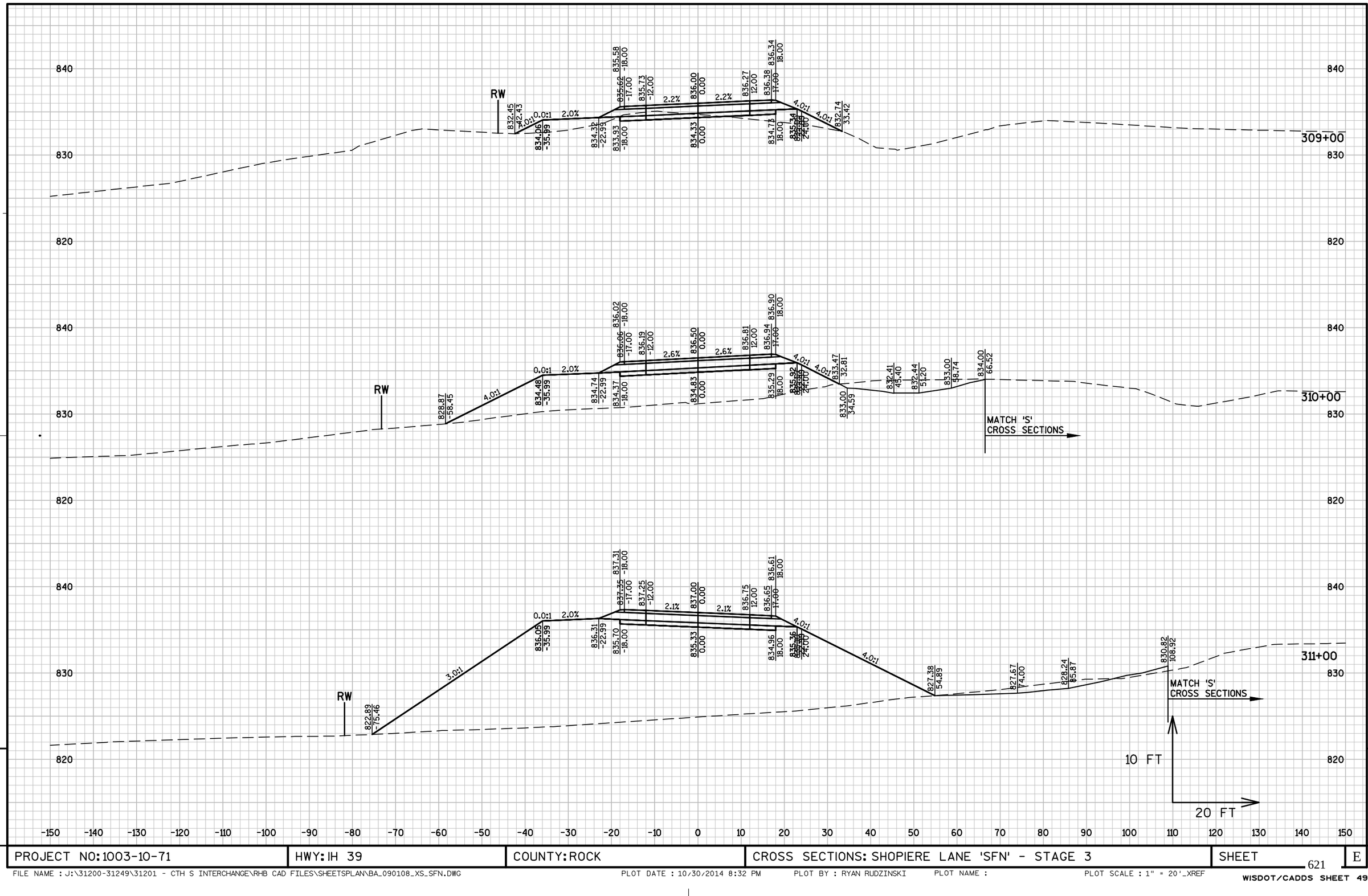
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WISDOT/CADDS SHEET 49



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SHOPIERE LANE 'SFN' - STAGE 3	SHEET	E

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WISDOT/CADDS SHEET 49

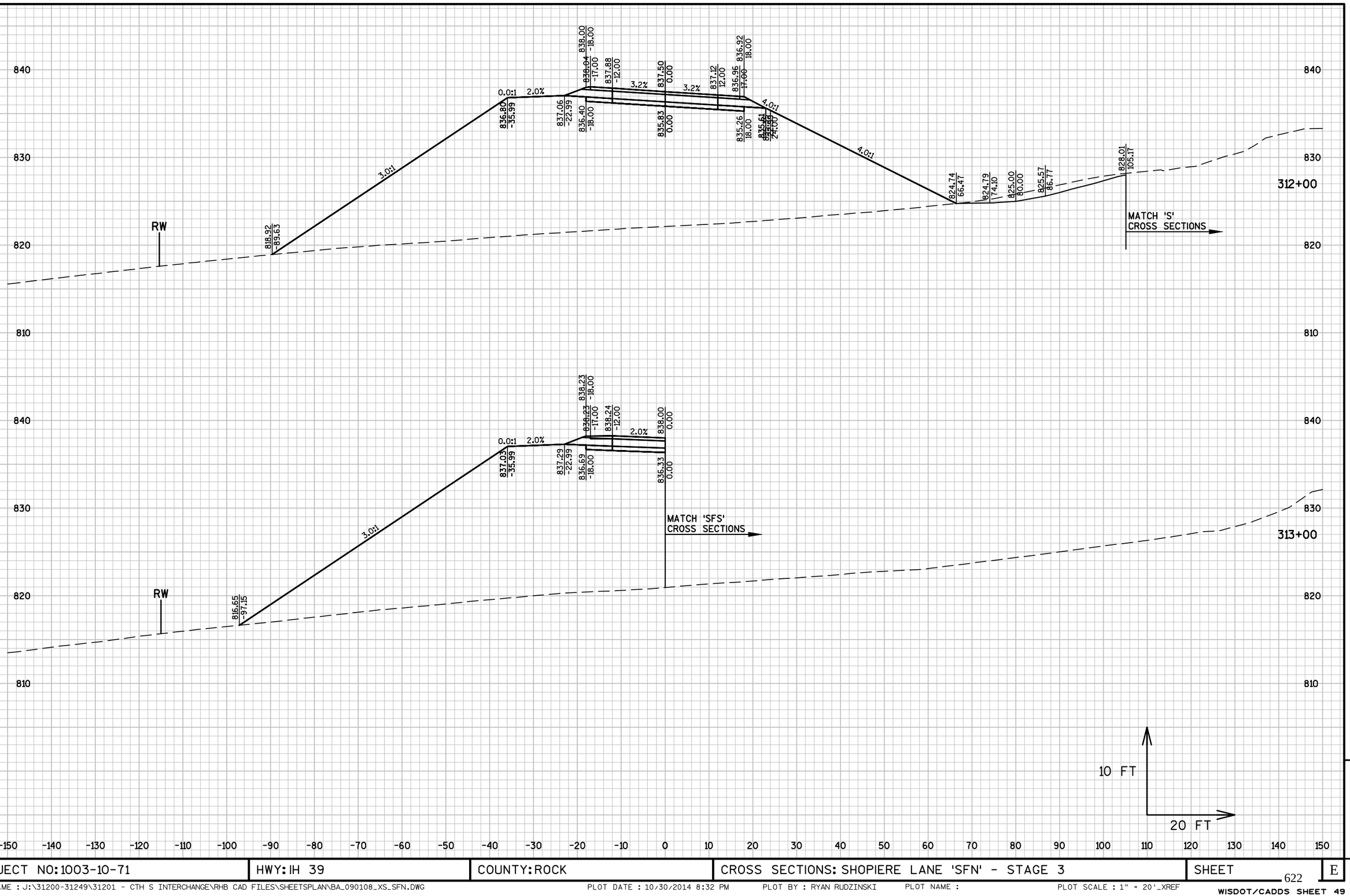


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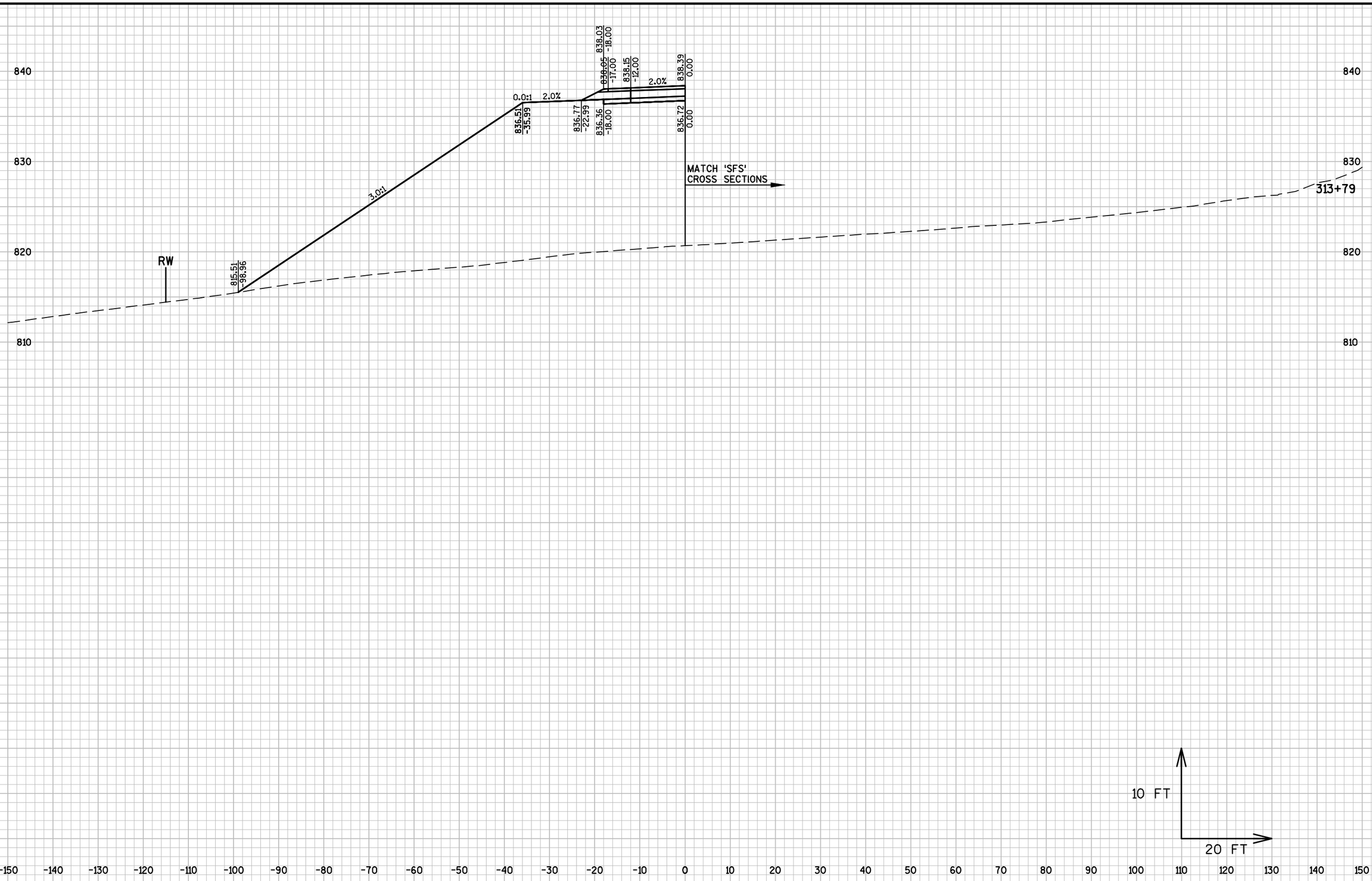
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WISDOT/CADDS SHEET 49



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SHOPIERE LANE 'SFN' - STAGE 3	SHEET	E

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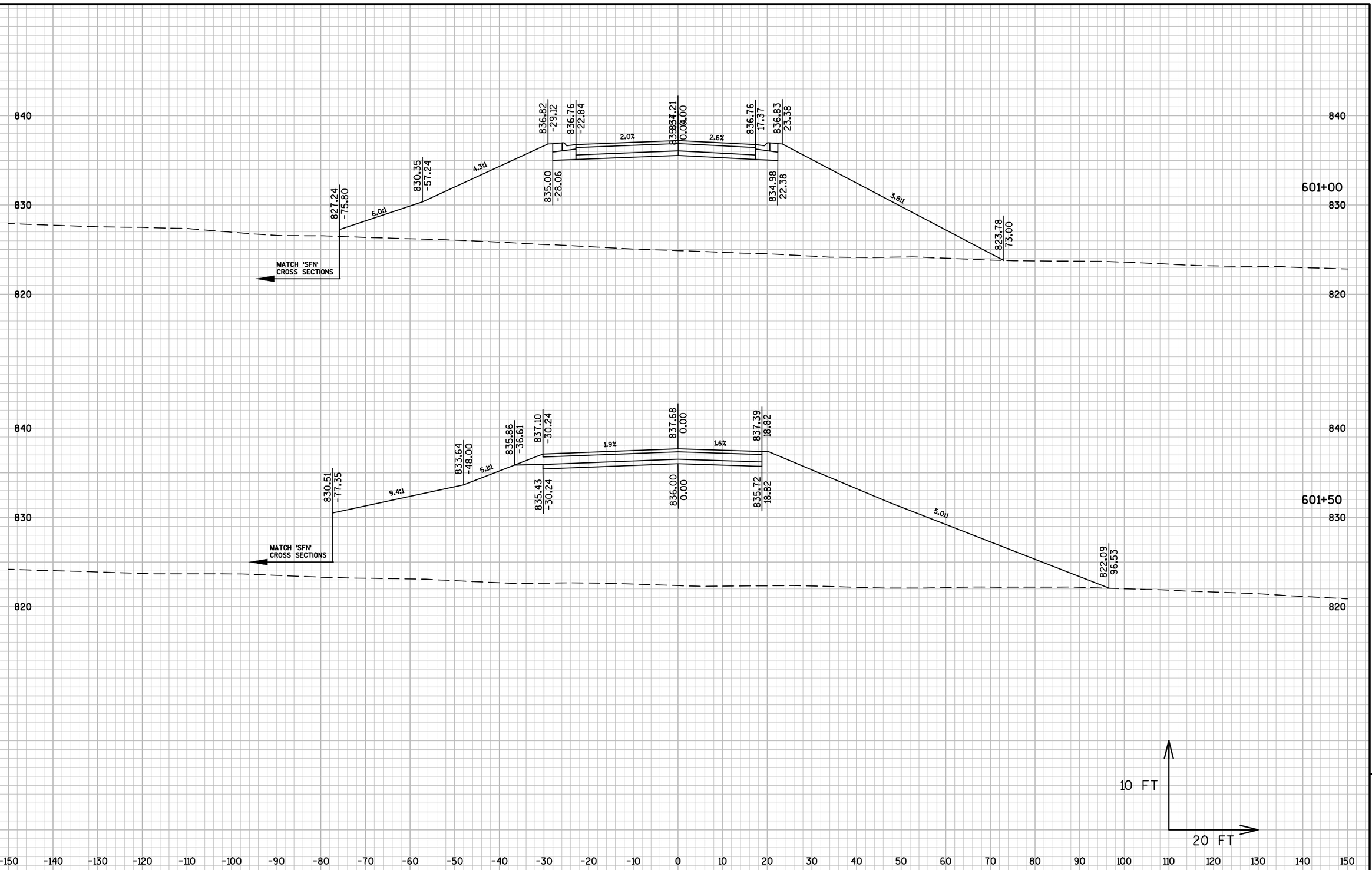


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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: SHOPIERE LANE 'SFN' - STAGE 3	SHEET	E

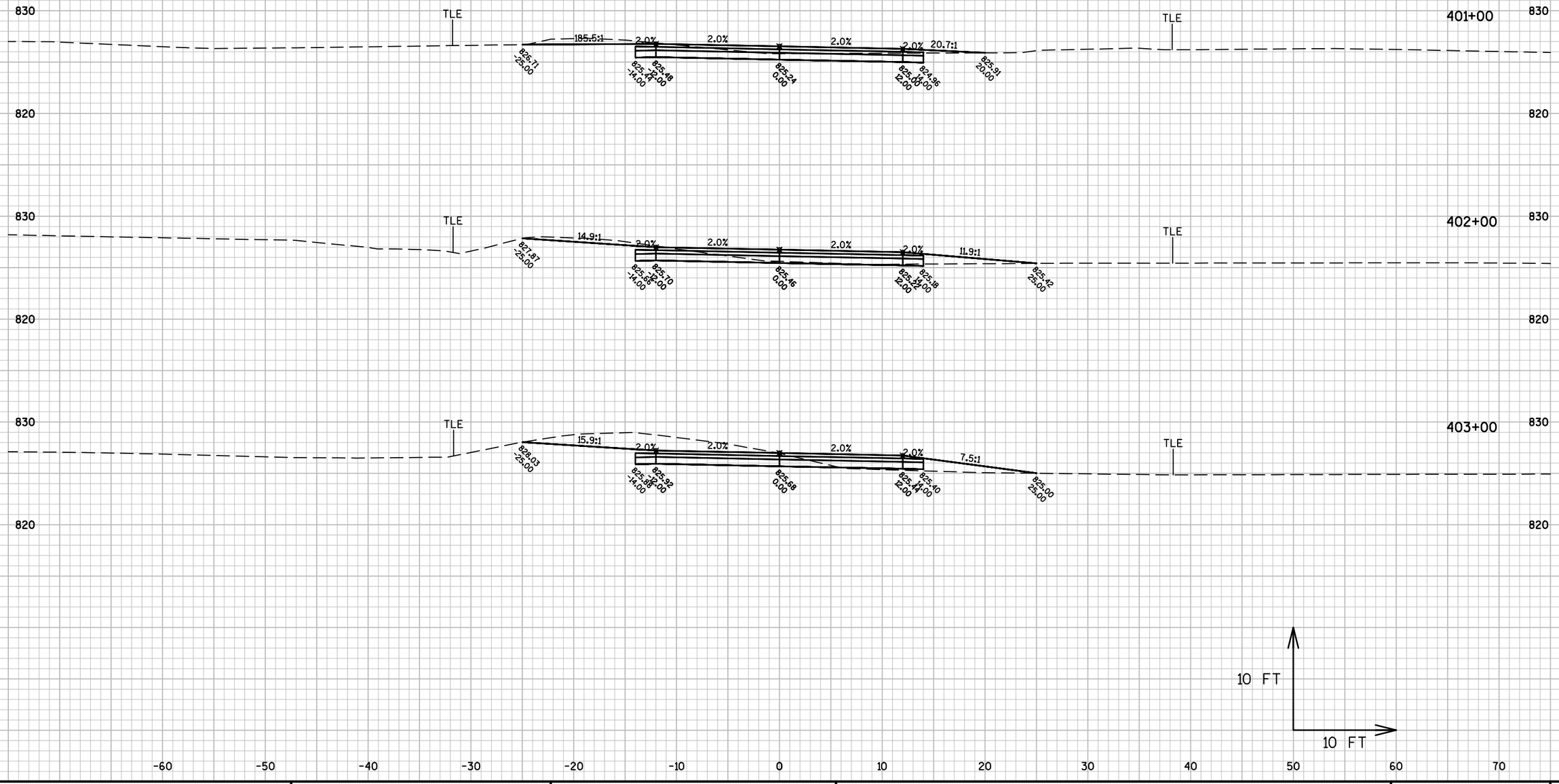
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WISDOT/CADDS SHEET 49



PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: FRONTAGE ROAD 'SFS'	SHEET 624	E

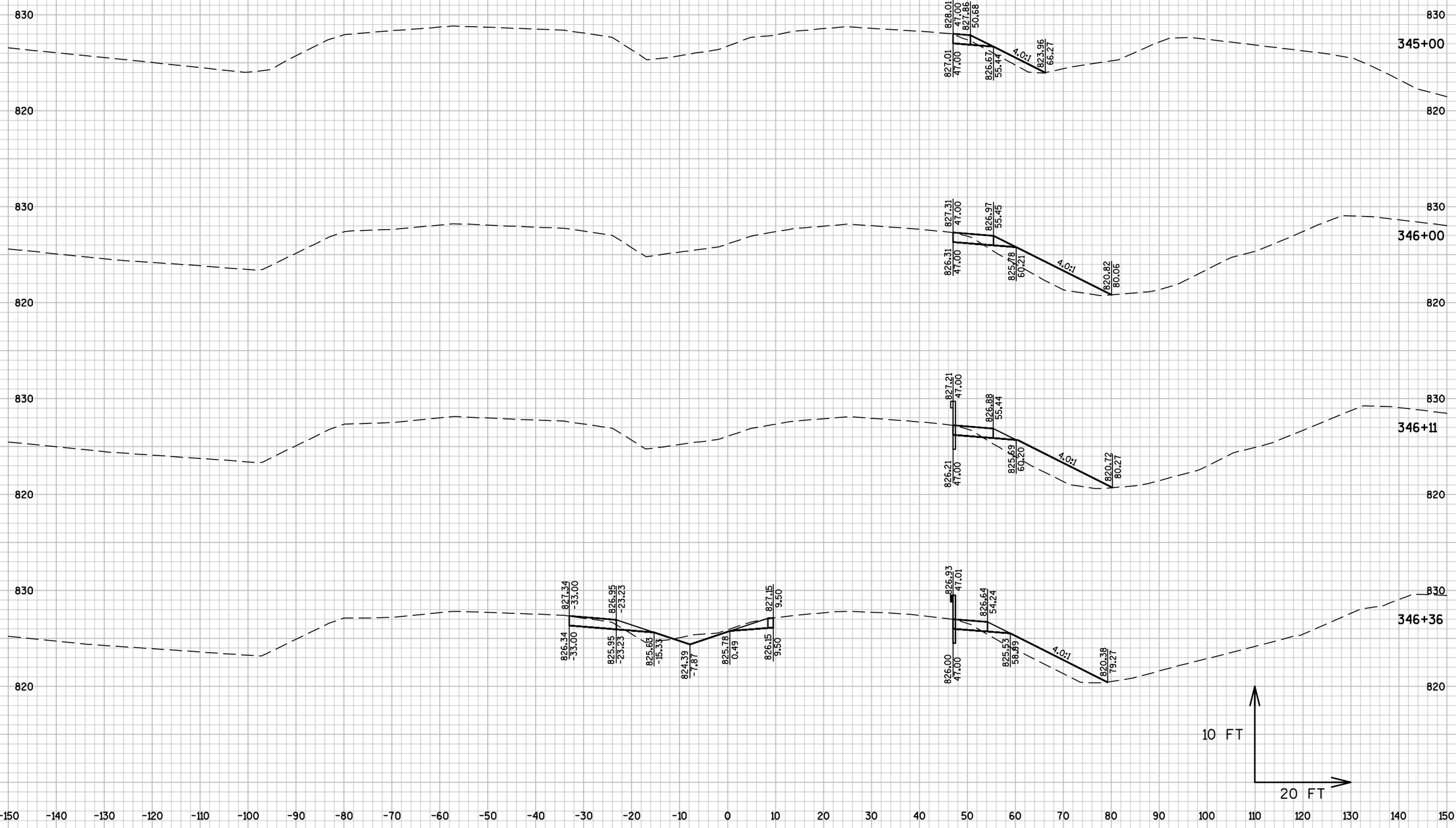
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: DRIVEWAY 'LC' - STAGE 1	SHEET 625	E

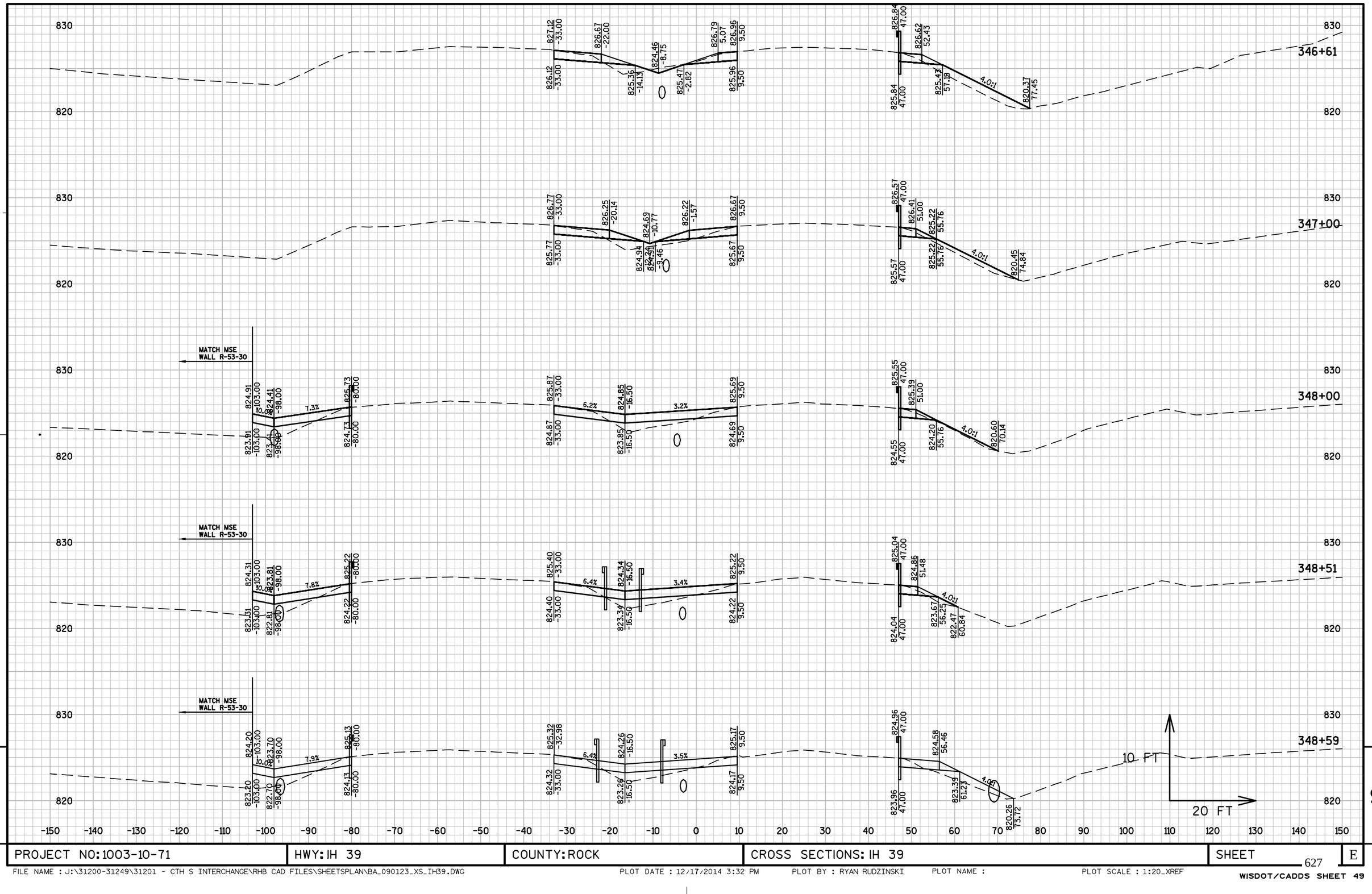


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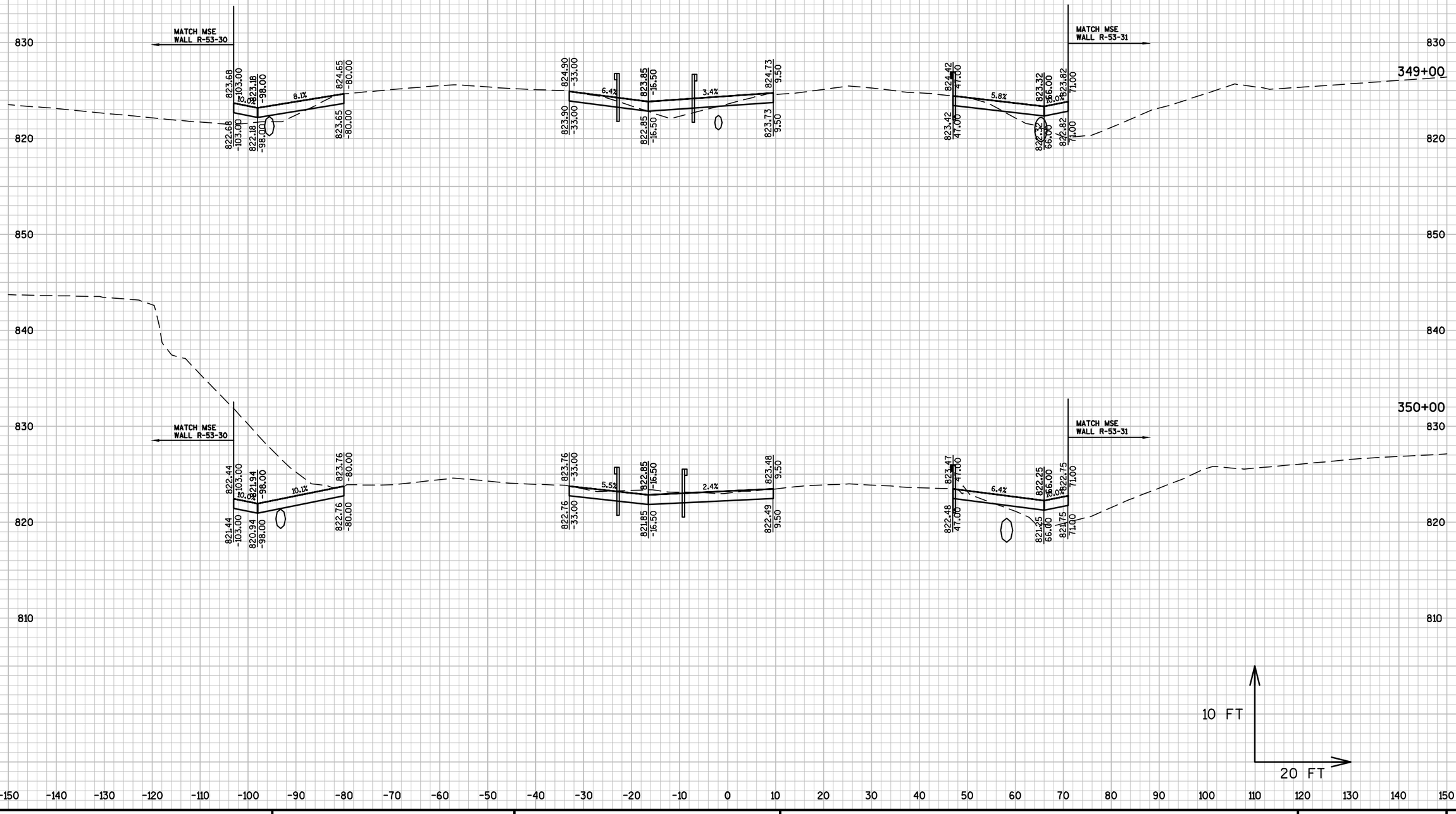
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FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090123_XS_IH39.DWG PLOT DATE : 12/17/2014 3:31 PM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:20_XREF



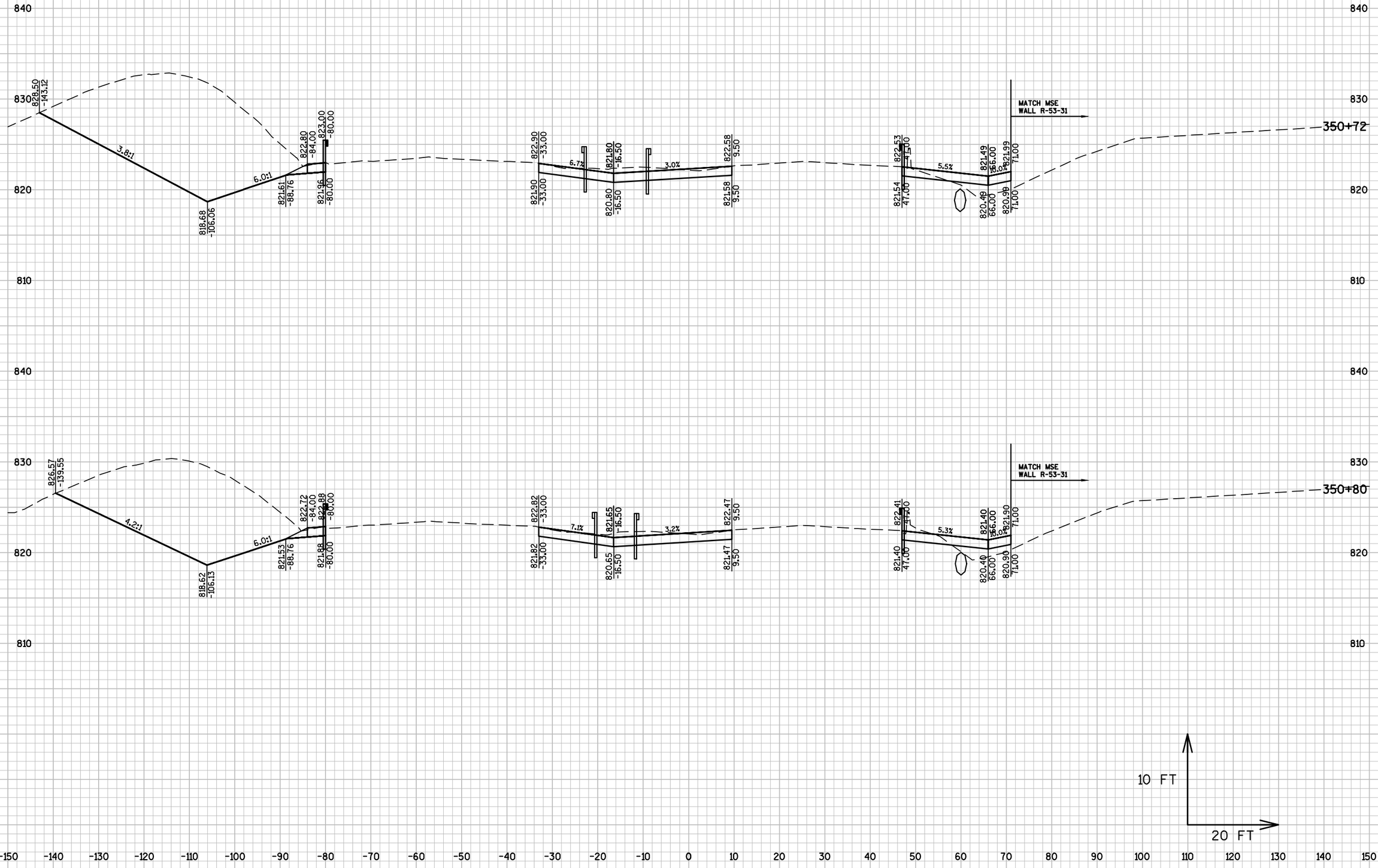
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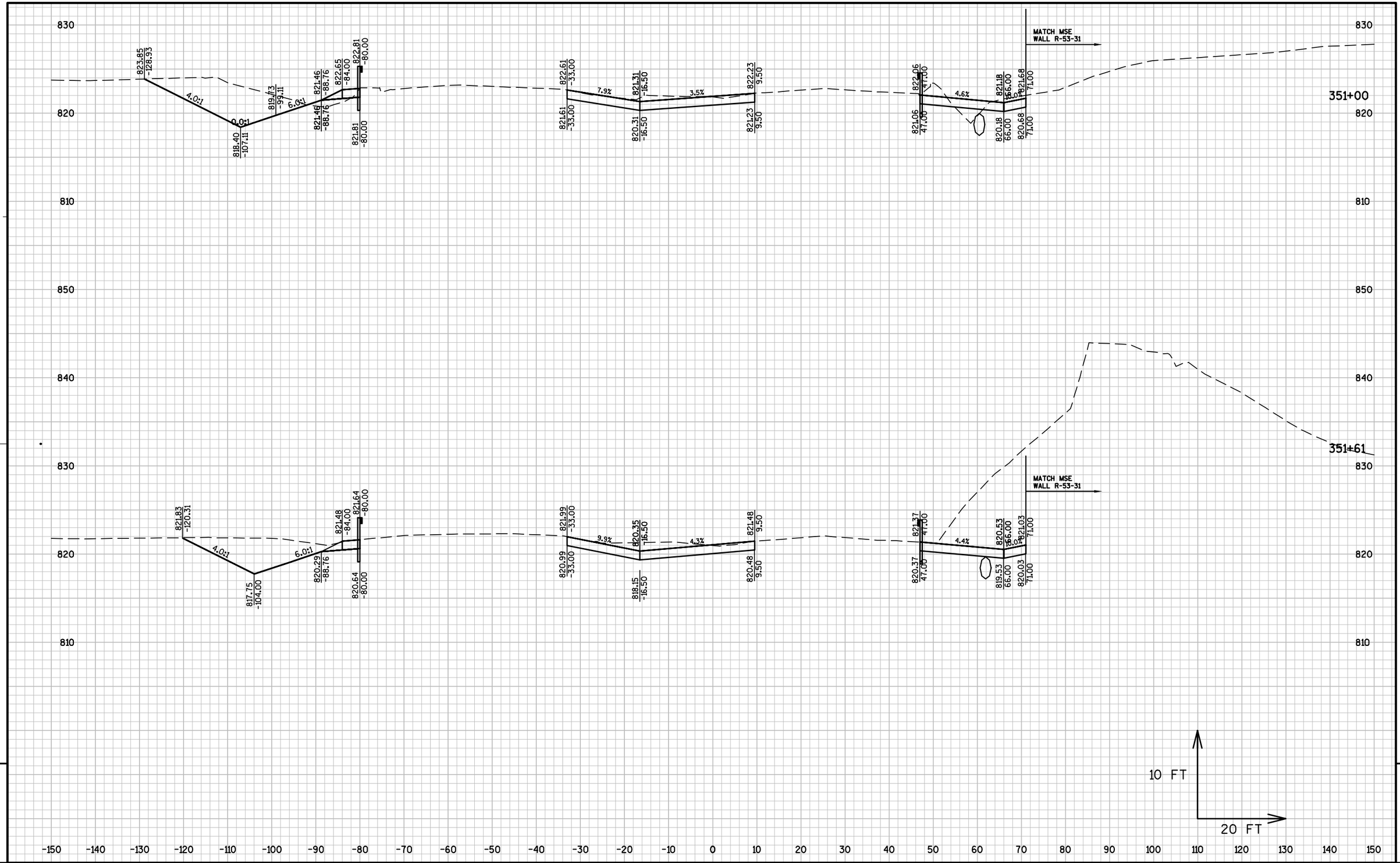
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: IH 39	SHEET	E

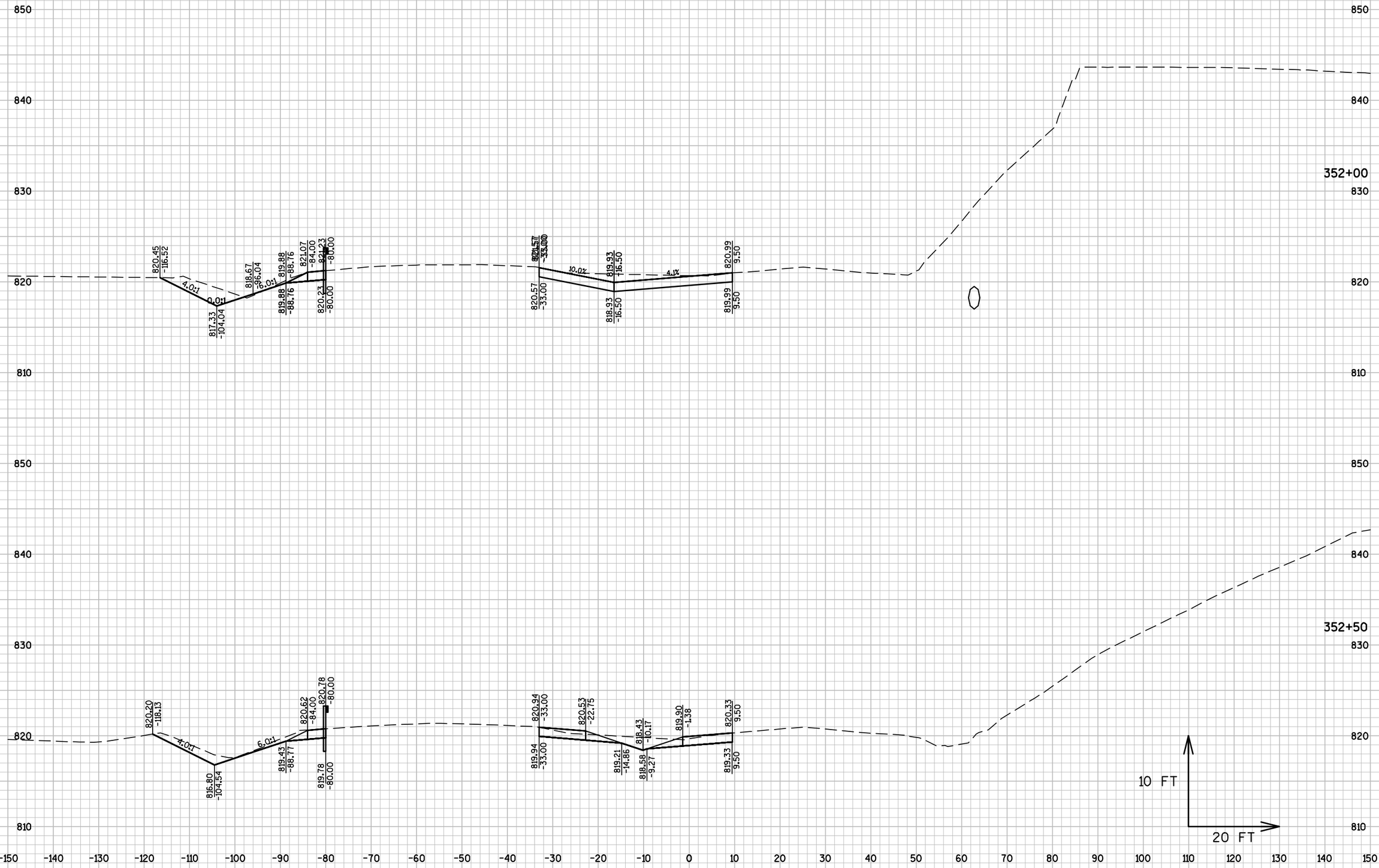
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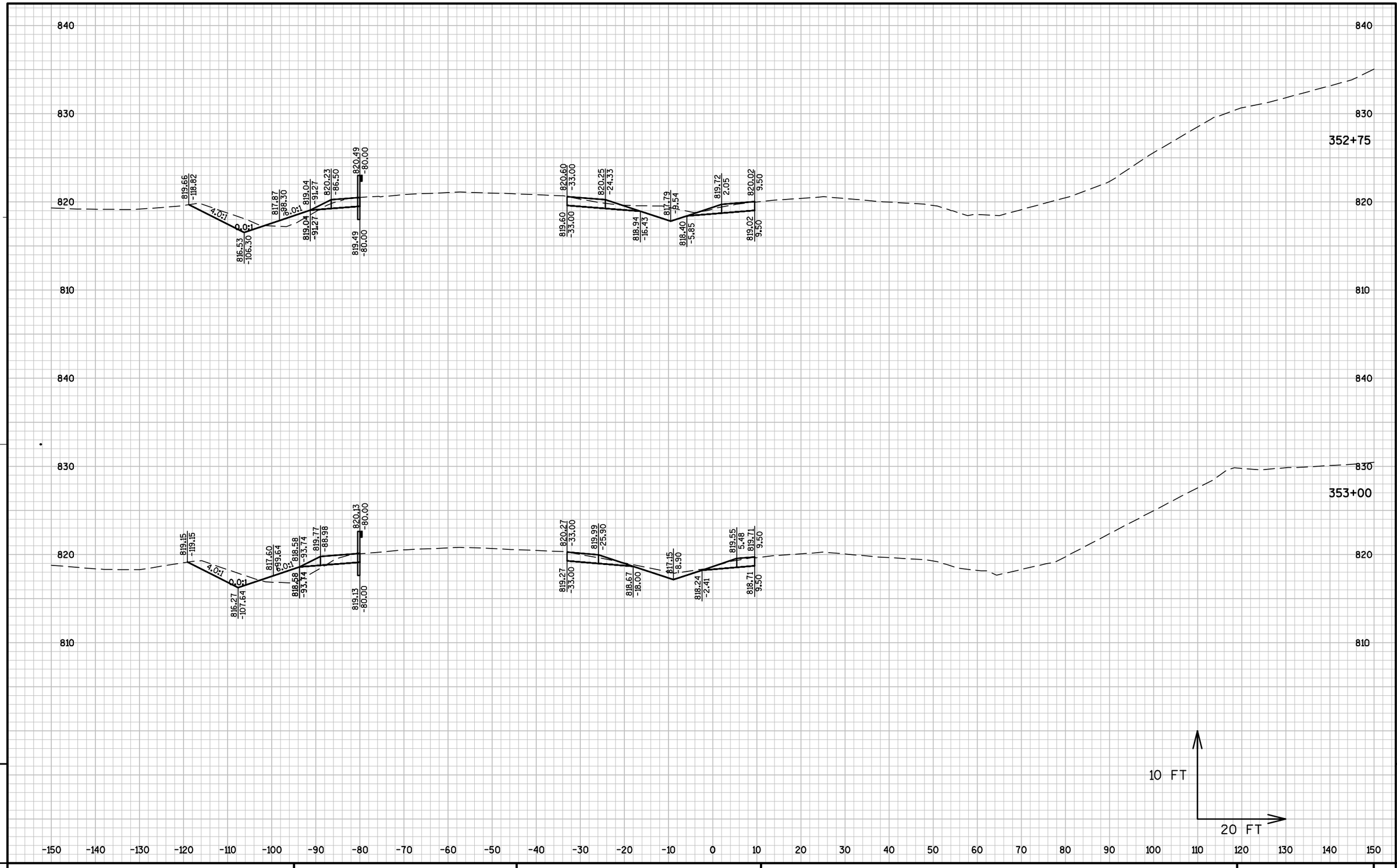
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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: IH 39	SHEET 631	E

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WISDOT/CADDS SHEET 49

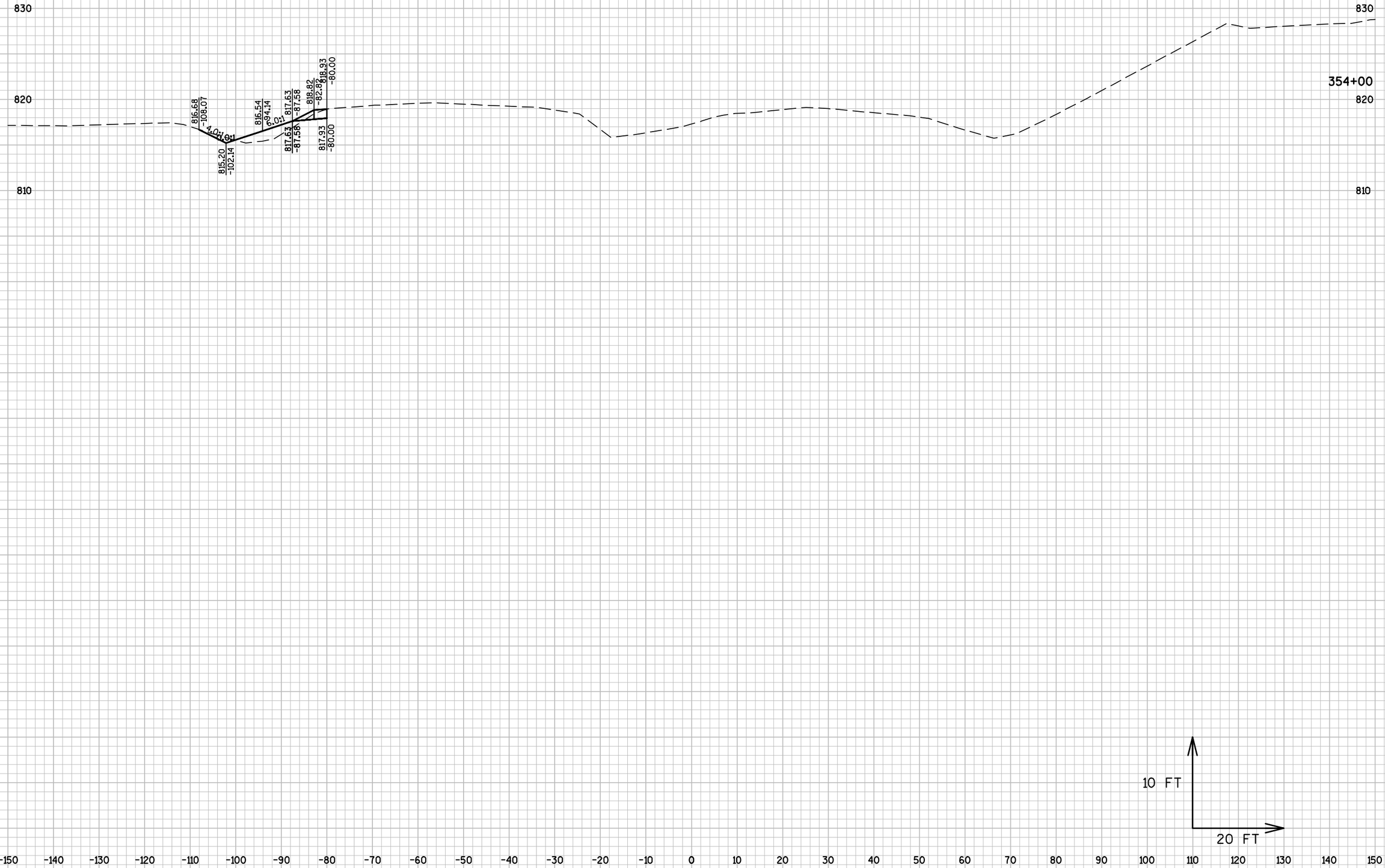


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9

PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: IH 39	SHEET	E

FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090123_XS_IH39.DWG PLOT DATE : 12/17/2014 3:33 PM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:20_XREF



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PROJECT NO: 1003-10-71	HWY: IH 39	COUNTY: ROCK	CROSS SECTIONS: IH 39	SHEET	E

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FILE NAME : J:\31200-31249\31201 - CTH S INTERCHANGE\RHB CAD FILES\SHEETSPLAN\BA_090123_XS_IH39.DWG PLOT DATE : 12/17/2014 3:33 PM PLOT BY : RYAN RUDZINSKI PLOT NAME : PLOT SCALE : 1:20_XREF

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