WIS

PROJECT ID: 6355-00-74

WITH: N/A

COUNTY: ADAMS

FEBRUARY 2022

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 = 230



35

N

DESIGN DESIGNATION

A.A.D.T. (2022)	=	1841
A.A.D.T. (2042)	=	2025
D.H.V. (2042)	=	219
D.D.	=	60/40
T.	=	6%
DESIGN SPEED	=	55 MPH
ESALS	=	260,000

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	300'E&W	ELECTRIC	E
EXISTING CULVERT		FIBER OPTIC	FO
PROPOSED CULVERT (Box or Pipe)		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
		STORM SEWER	SS
		TELEPHONE	T
MARSH AREA		WATER	W
		UTILITY PEDESTAL	
		POWER POLE	
WOODED OR SHRUB AREA		TELEPHONE POLE	

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

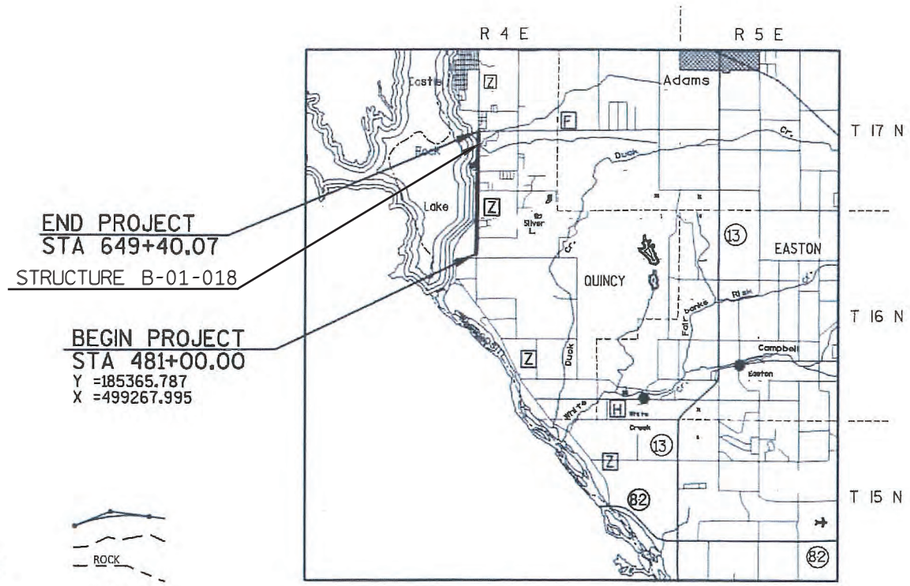
CTH H - CTH F

EDGEWOOD AVENUE TO CTH F

CTH Z

ADAMS COUNTY

STATE PROJECT NUMBER
6355-00-74



END PROJECT
STA 649+40.07
STRUCTURE B-01-018

BEGIN PROJECT
STA 481+00.00
Y =185365.787
X =499267.995

LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 3.189

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), ADAMS COUNTY, NAD83 (1991), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (1991).

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6355-00-74	WISC 2022183	1

ACCEPTED FOR

COUNTY of ADAMS

10/21/21 Patrick Kirkland.
DATE:

ORIGINAL PLANS PREPARED BY:

SEH
WISCONSIN
CHRISTOPHER J. BLUM
E-33157
MADISON, WI
PROFESSIONAL ENGINEER

10-25-21

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	SEH
Designer	SEH
Project Manager	JASON SCHAEFFER
Regional Supervisor	DAN ERVA

APPROVED FOR THE DEPARTMENT

DATE: 10/26/2021 (Signature)

E

STANDARD ABBREVIATIONS

ABUT	ABUTMENT
AC	ACRE
AGG	AGGREGATE
AECPRC	APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE
ASPH	ASPHALTIC
AVG	AVERAGE
ADT	AVERAGE DAILY TRAFFIC
BF	BACK FACE
BM	BENCH MARK
BR	BRIDGE
CE	COMMERCIAL ENTRANCE
CL OR C/L OR ℄	CENTER LINE CENTRAL ANGLE OR DELTA
CONC	CONCRETE
CPRC	CULVERT PIPE REINFORCED CONCRETE
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
CR	CREEK
CSACP	CORRUGATED STEEL ARCH CULVERT PIPE
CSCP	CORRUGATED STEEL CULVERT PIPE
CY	CUBIC YARD
C & G	CURB AND GUTTER
D	DEGREE OF CURVE
DHV	DESIGN HOUR VOLUME
DISCH	DISCHARGE
DG	DITCH GRADE
DWY	DRIVEWAY
X	EAST GRID COORDINATE
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
EOR	END POINT OF RADIUS
EL	ELEVATION
ENT	ENTRANCE
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC	EXCAVATION
EBS	EXCAVATION BELOW SUBGRADE
EXIST	EXISTING
FC	FACE OF CURB
FF	FACE TO FACE
FERT	FERTILIZE
FE	FIELD ENTRANCE
FL	FLOW LINE
FO	FIBER OPTIC
CWT	HUNDREDWEIGHT
HYD	HYDRANT
ID	INSIDE DIAMETER
INV	INVERT
IP	IRON PIPE ON PIN
LHF	LEFT-HAND FORWARD
L	LENGTH OF CURVE
LF	LINEAR FOOT
LC	LONG CHORD OF CURVE
LS	LUMP SUM
MH	MANHOLE
MOR	MID POINT OF RADIUS
NC	NORMAL CROWN
NO	NUMBER
OBLIT	OBLITERATE
PAVT	PAVEMENT
PE	PRIVATE ENTRANCE
PVRC	POINT OF VERTICAL REVERSE CURVE
QOR	QUARTER POINT OF RADIUS
R	RADIUS
REQ'D	REQUIRED
RES	RESIDENCE OR RESIDENTIAL
RHF	RIGHT-HAND FORWARD
R/W	RIGHT-OF-WAY
R	RIVER
RDWY	ROADWAY
R/L OR ℞	REFERENCE LINE
SALV	SALVAGED
SAN	SANITARY SEWER
SF	SQUARE FEET
SY	SQUARE YARD
SDD	STANDARD DETAIL DRAWINGS
SDLT	SPECIAL DITCH LEFT
SDRT	SPECIAL DITCH RIGHT
STA	STATION
SS	STORM SEWER
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
SE	SUPERELEVATION RATE
TC	TOP OF CURB
T OR TN	TOWN
T	TRUCKS (PERCENT OF)
TYP	TYPICAL
VAR	VARIABLE
VC	VERTICAL CURVE
Y	NORTH GRID COORDINATE
YD	YARD

GENERAL NOTES

1. ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NGVD29. FOUND STANDARD DISK IN CONCRETE POST SET FLUSH WITH THE GROUND, STAMPED ET 19 GT 1959 868, 7.5 MILES SOUTH OF DELLWOOD AT THE LINCOLN TOWN HALL, T16N, R5E, NEAR THE SE CORNER OF SECTION 7, 124 FT NORTH AND 31 FEET WEST AND 0.7' LOWER THEN CROSS ROAD, ELEV 867.53.

2. WHEN THE QUANTITY OF BASE AGGREGATE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

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

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

5. THE EXACT LOCATION OF THE EROSION CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD.

6. DO NOT USE FERTILIZER WITHIN 20 FEET OF NAVIGABLE WATERWAYS OR WETLANDS.

7. DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, ARE TO BE 4-INCH TOPSOILED, FERTILIZED, AND SEEDED AND MULCHED.

8. THE LOCATION OF ALL DRIVEWAYS WILL BE DETERMINED BY THE ENGINEER.

9. ALL CURB AND GUTTER RADII, PAVEMENT DIMENSIONS AND STATIONS ARE SHOWN TO THE EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.

10. ALL SIDE ROAD EARTHWORK QUANTITIES ARE INCLUDED IN MAINLINE EARTHWORK QUANTITIES.

11. A VERTICAL SAWCUT SHALL BE MADE THROUGH EXISTING DRIVEWAYS AND PAVEMENTS AT REMOVAL LIMITS.

12. TOP OF CASTING ELEVATIONS SHOWN FOR INLETS REFER TO THE CASTING ELEVATION AT THE FLOWLINE OF GRATE.

13. ALL STORM SEWER INVERTS, ELEVATIONS, PIPE LENGTHS, AND GRADES ARE COMPUTED CENTER-TO-CENTER OF STRUCTURES.

14. EXISTING PIPE CULVERT SIZES SHOWN ARE APPROXIMATE AND THE CONTRACTOR SHALL BASE ITS BID ON ACTUAL FIELD CONDITIONS.

15. HMA PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYER THICKNESSES:

TOTAL PAVEMENT DEPTH (INCH)	LAYER DEPTH (INCH)	HMA PAVEMENT ITEM
4.5	UPPER: 2.0"	4 LT 58-28 S
	LOWER: 2.5"	3 LT 58-28 S
5.0	UPPER: 2.0"	4 LT 58-28 S
	LOWER: 3.0"	3 LT 58-28 S

ORDER OF SECTION 2 SHEETS

WRITTEN MATERIAL
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
CURB RAMP DETAILS
EROSION CONTROL
STORM SEWER
PERMANENT SIGNING
TRAFFIC CONTROL
DETOUR SIGNING
CONTROL TIES

DESIGN CONTACT

SEH INC.
6808 ODANA RD, SUITE 200
MADISON, WI 53719
TELEPHONE: 608.620.6192
ATTENTION: CHRIS BLUM
EMAIL: cblum@sehinc.com

WDNR CONTACT

WDNR - WI RAPIDS
473 GRIFFITH DR
WISCONSIN RAPIDS, WI 54494
TELEPHONE: 715.213.9064
ATTENTION: BRAD BETTHAUSER
EMAIL: bradley.betthauser@wisconsin.gov

OTHER CONTACTS

MARQUETTE ADAMS TELEPHONE
113 N OXFORD STREET
OXFORD, WI 53952
ATTENTION: TIM SPATH
TELEPHONE: 608.586.4111

UTILITY CONTACTS

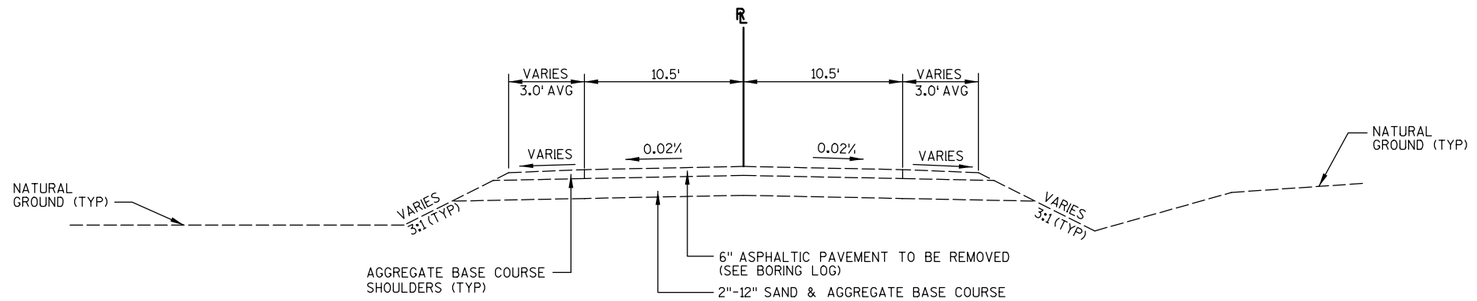
ADAMS-COLUMBIA ELECTRIC COOP
401 EAST LAKE ST
PO BOX 70
FRIENDSHIP, WI 53934
TELEPHONE: 800.831.8629
ATTENTION: JOSH BERGER
EMAIL: jberger@acecwi.com

FRONTIER COMMUNICATIONS
118 DIVISION ST
PLYMOUTH, WI 53073
TELEPHONE: 920.583.3275
ATTENTION: RUSS RYAN
EMAIL: russell.w.ryan@ftr.com

FRONTIER COMMUNICATIONS CONSULTANT
MIDSTATES CONSULTING
ATTENTION: DAVID KAMKE
TELEPHONE: 715.393.7028
EMAIL: dkamke@mscon.com

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

2



TYPICAL EXISTING SECTION

STA 481+00.00 TO STA 649+40.07

BORING LOG

CORE NUMBER	STATION	LOCATION	ASPHALT DEPTH IN INCHES	UNDERLAYING MATERIAL
ST-09	489+49.86	RT	6	4" BASE
ST-10	513+31.50	LT	6	4" BASE
ST-11	580+48.66	LT	6	5" BASE
ST-12	628+85.43	RT	6	10" BASE
ST-13	637+68.99	RT	6	12" BASE

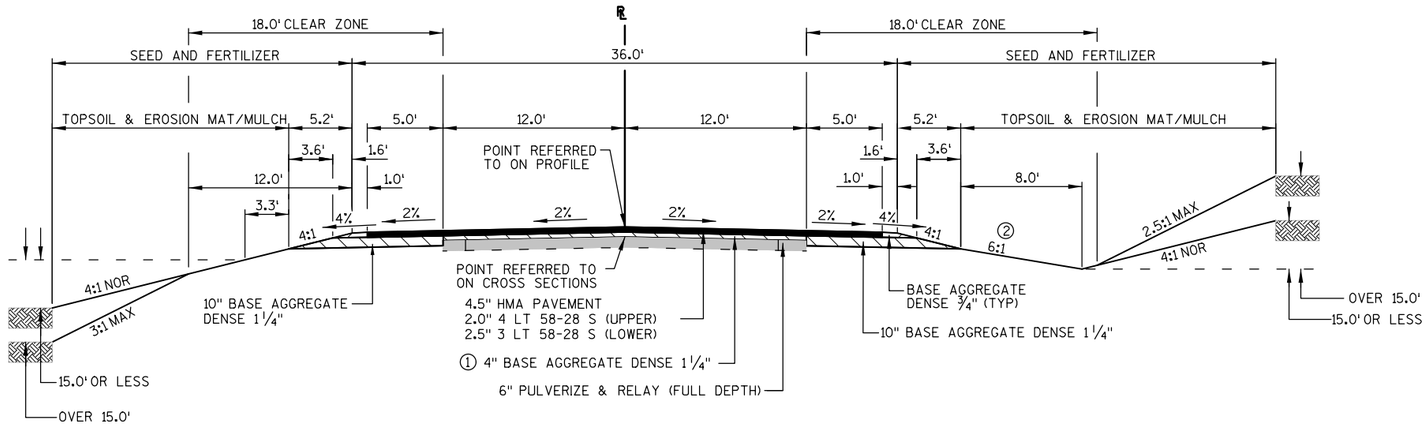
PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	TYPICAL SECTIONS	SCALE, FEET 0 NTS	SHEET 3	E

2

NOTES:

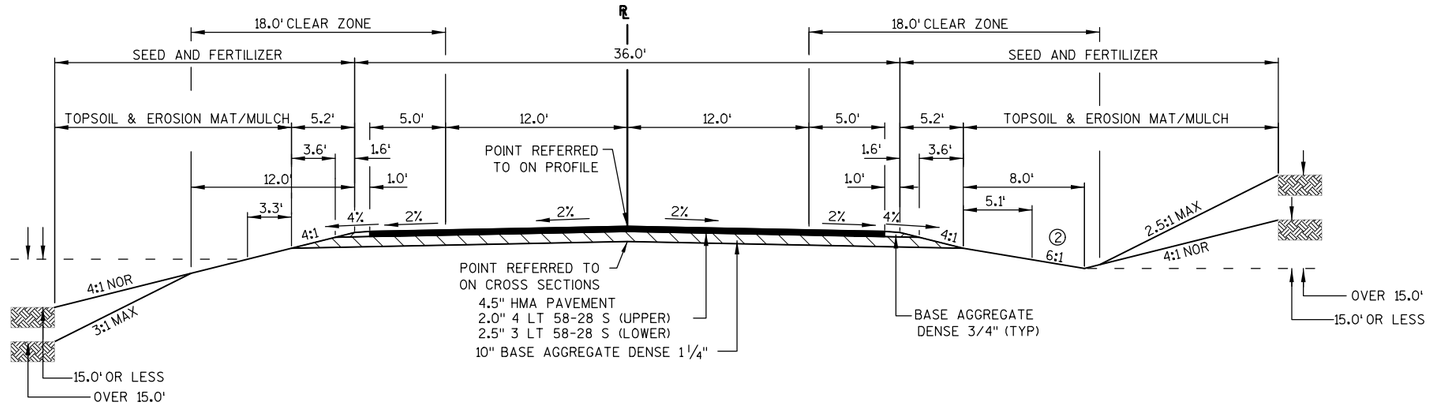
① PLACE 4" BASE AGGREGATE DENSE 1¼" ON TOP OF EXISTING ASPHALTIC PAVEMENT TO THE LIMITS SHOWN, PRIOR TO PULVERIZING AND RELAY OPERATIONS TO OBTAIN A CONSISTENT "MIXED" BASE MATERIAL.

② SLOPES VARIES FROM 6:1 TO 4:1 AT SPECIAL DITCH LOCATIONS. REFER TO CROSS SECTIONS FOR SLOPES AND DITCH WIDTHS.



TYPICAL FINISHED RECONDITION SECTION

STA 508+00.00 TO STA 530+50.00
STA 534+00.00 TO STA 547+00.00
STA 555+50.00 TO STA 581+00.00
STA 594+00.00 TO STA 599+66.48



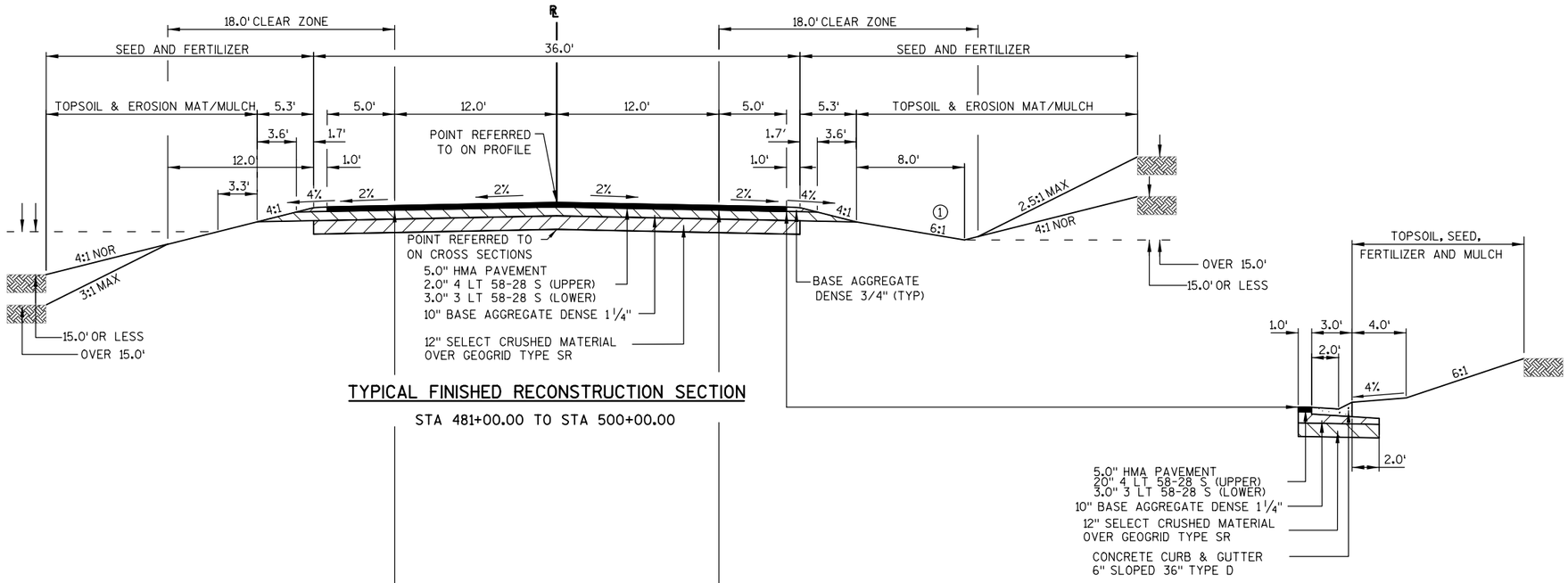
TYPICAL FINISHED RECONSTRUCTION SECTION

STA 500+00.00 TO STA 508+00.00
STA 530+50.00 TO STA 534+00.00
STA 547+00.00 TO STA 555+50.00
STA 581+00.00 TO STA 594+00.00
STA 647+00.00 TO STA 649+40.07

PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	TYPICAL SECTIONS	SCALE, FEET 0 NTS	SHEET 4	E

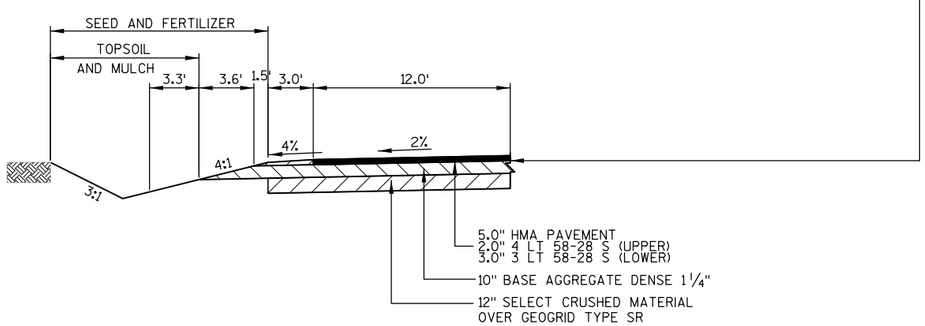
NOTES:

① SLOPES VARIES FROM 6:1 TO 4:1 AT SPECIAL DITCH LOCATIONS. REFER TO CROSS SECTIONS FOR SLOPES AND DITCH WIDTHS.



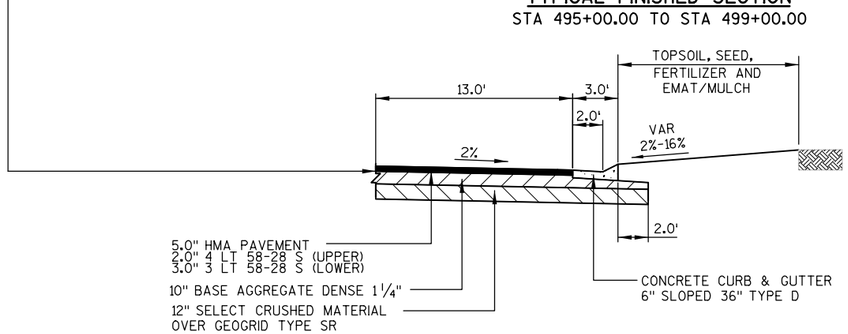
TYPICAL FINISHED RECONSTRUCTION SECTION

STA 481+00.00 TO STA 500+00.00



TYPICAL FINISHED RIGHT TURN LANE SECTION

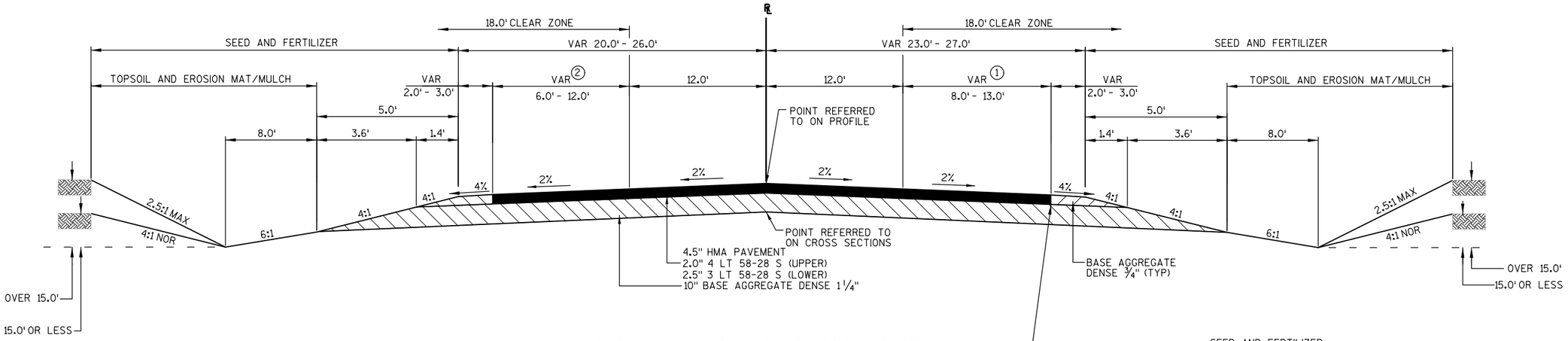
STA 495+96.38 TO STA 499+72.45



TYPICAL FINISHED BYPASS SECTION

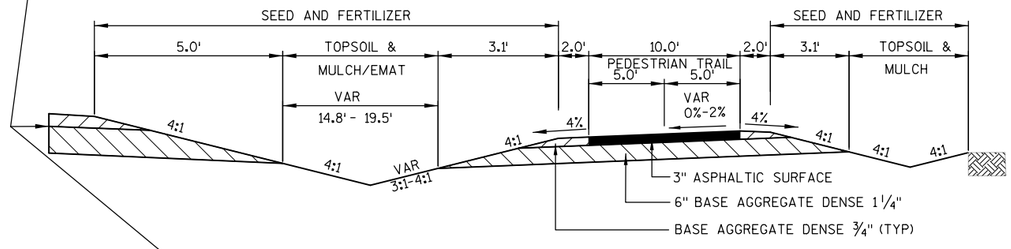
STA 494+31.44 TO STA 500+42.52

PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	TYPICAL SECTIONS	SCALE, FEET 0 NTS	SHEET 5	E



TYPICAL FINISHED RECONSTRUCTION SECTION

STA 599+66.48 TO STA 605+58.62



TYPICAL FINISHED SECTION

STA 601+00.00 TO STA 604+50.00

NOTES:

① CONSTRUCT 13.0' WIDE MODIFIED BYPASS LANE FROM STA 599+14.44 TO STA 605+58.60 RIGHT.

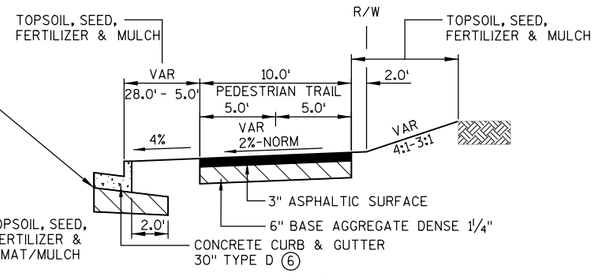
② CONSTRUCT 12.0' WIDE RIGHT TURN LANE FROM STA 602+85.07 TO STA 604+85.07 LEFT.

③ SEE PAVEMENT MARKING MISCELLANEOUS QUANTITIES FOR LOCATIONS OF DESIGNATED BIKE LANES.

④ CONSTRUCT 8' WIDE PARKING LANE FROM STA 638+04.00 TO STA 647+00.00 RIGHT.

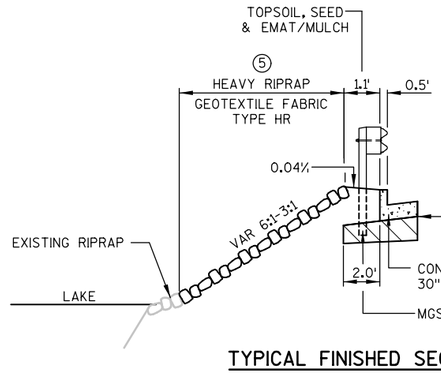
⑤ OMIT TOPSOIL, SEED AND FERTLIZER WHERE HEAVY RIPRAP IS USED FROM STA 621+35.00 TO STA 625+00.00.

⑥ BEGIN CONCRETE CURB AND GUTTER 30" TYPE D STA 604+62.00 RT.



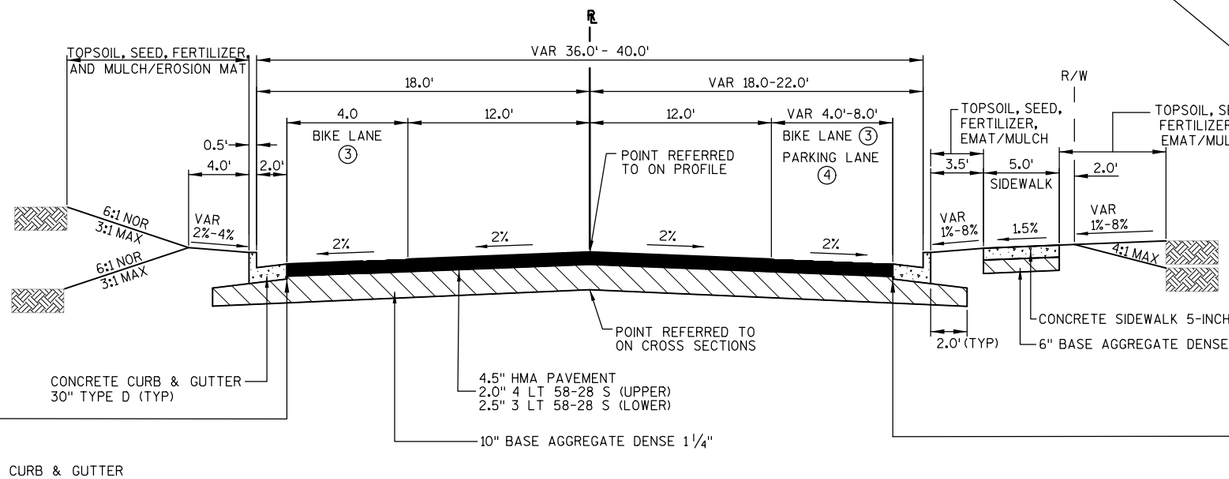
TYPICAL FINISHED SECTION

STA 604+50.00 TO STA 605+75.00



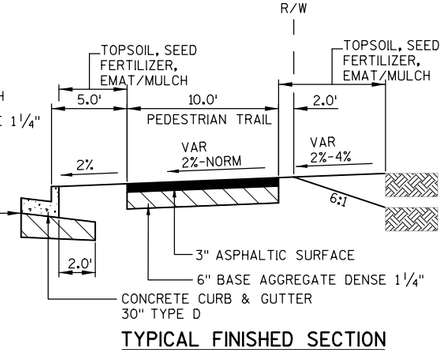
TYPICAL FINISHED SECTION

STA 618+50.00 TO STA 626+00.00



TYPICAL FINISHED RECONSTRUCTION SECTION

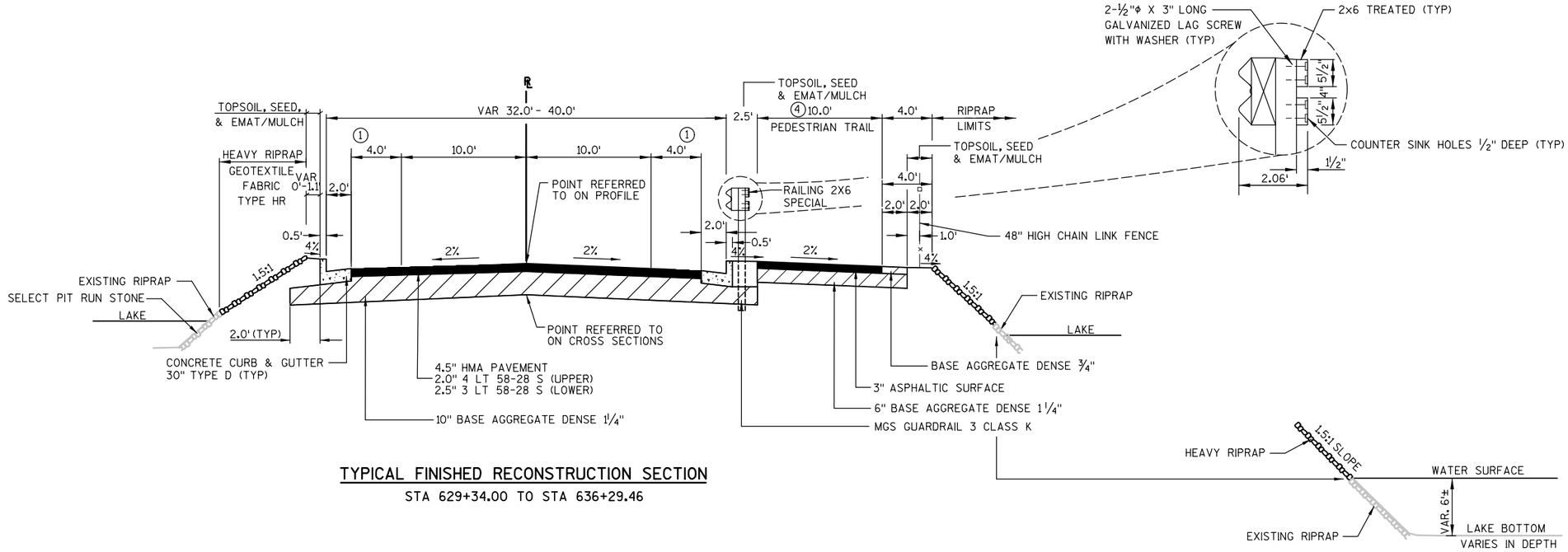
STA 605+58.62 TO STA 629+34.00
STA 638+04.00 TO STA 647+00.00



TYPICAL FINISHED SECTION

STA 638+04.00 TO STA 646+50.00

PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	TYPICAL SECTIONS	SCALE, FEET NTS	SHEET 6	E

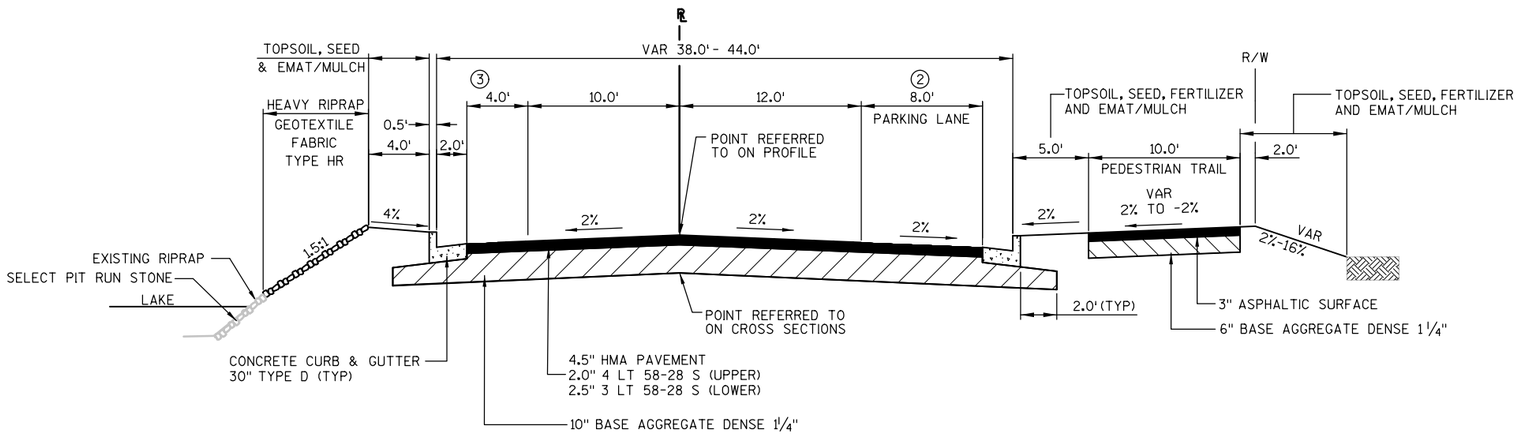


TYPICAL FINISHED RECONSTRUCTION SECTION

STA 629+34.00 TO STA 636+29.46

TYPICAL FINISHED CAUSEWAY RIPRAP SECTION

STA 629+75 TO STA 634+25 LT
STA 634+90 TO STA 638+00 LT
STA 629+75 TO STA 634+25 RT
STA 634+90 TO STA 636+00 RT



TYPICAL FINISHED RECONSTRUCTION SECTION

STA 636+29.46 TO STA 638+04.00

NOTES:

① WIDTH VARIES FROM 4.0' TO 8.0' FROM STA 635+93.37 TO STA 636+29.46 RIGHT.

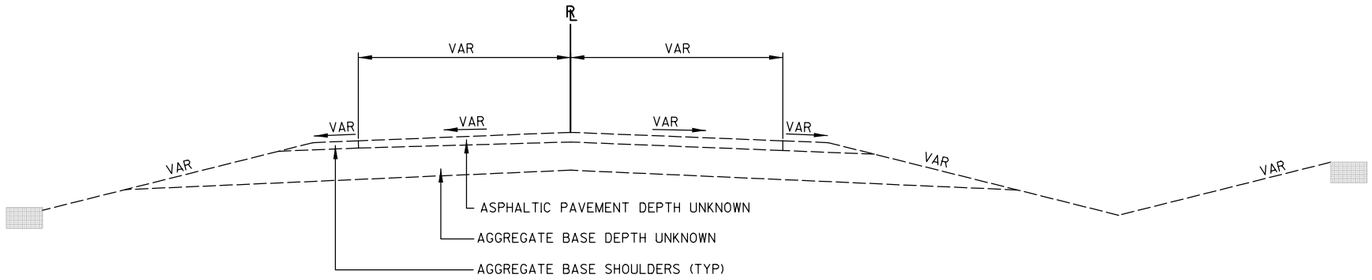
② CONSTRUCT 8' WIDE PARKING LANE FROM STA 635+93.37 TO STA 638+04.00 RIGHT.

③ WIDTH VARIES FROM 4.0' TO 8.0' FROM STA 638+04.00 TO STA 638+16.00 RIGHT.

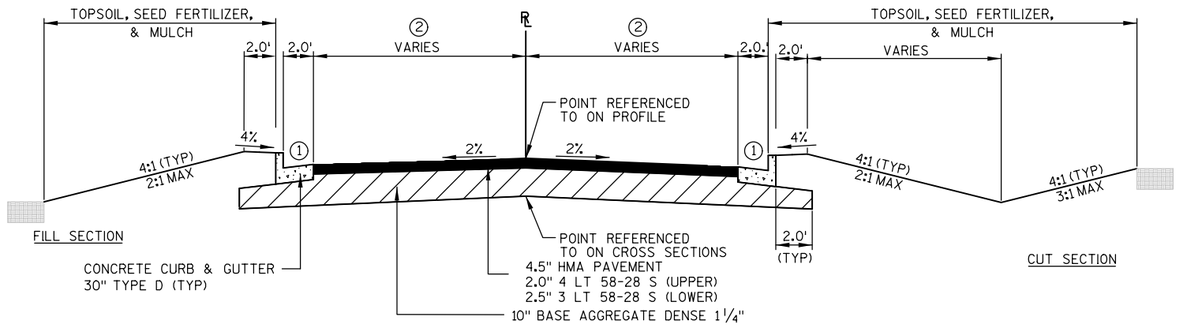
④ TRANSITION PEDESTRIAN TRAIL WIDTH FROM 10.0' TO 5.5' TO MATCH EXISTING WALKWAY FROM:
STA 633+96.40 TO STA 634+40.13
STA 634+71.10 TO STA 635+17.37

PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	TYPICAL SECTIONS	SCALE, FEET 0 NTS	SHEET 7	E

2

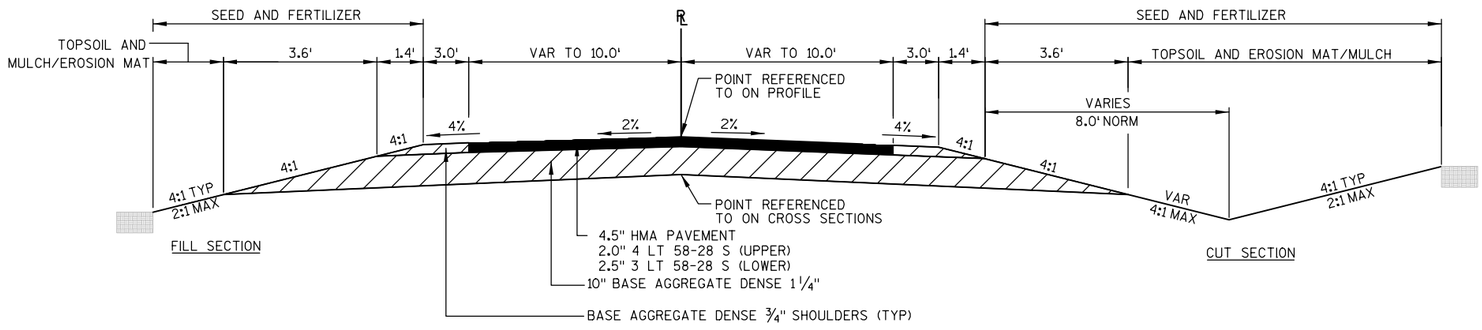


TYPICAL EXISTING SIDEROAD SECTION



TYPICAL FINISHED SIDEROAD SECTION

STA 114+41.96 TO STA 114+82.00 (PARK EXIT)
STA 124+38.12 TO STA 124+76.00 (PARK ENTRANCE)
STA 130+20.00 TO STA 130+74.88 (DUCK CREEK DRIVE)



TYPICAL FINISHED SIDEROAD SECTION

STA 63+50.00 TO STA 64+82.00 (EDGEWOOD AVENUE)
STA 65+82.00 TO STA 66+50.00 (EDGEWOOD AVENUE)
STA 68+90.00 TO STA 69+82.00 (LAKES EDGE LANE)
STA 75+18.00 TO STA 76+50.00 (EAGLE DRIVE)
STA 80+18.00 TO STA 81+30.00 (EAGLE COURT)
STA 85+18.00 TO STA 86+35.00 (EAGLE AVENUE)
STA 105+18.00 TO STA 106+50.00 (DYKE DRIVE)
STA 110+18.00 TO STA 111+65.00 (LAKEVIEW DRIVE)
STA 113+75.00 TO STA 114+41.96 (PARK EXIT)
STA 120+22.00 TO STA 121+50.00 (DYKE AVENUE)
STA 123+50.00 TO STA 124+38.12 (PARK ENTRANCE)
STA 130+74.88 TO STA 131+50.00 (DUCK CREEK DRIVE)

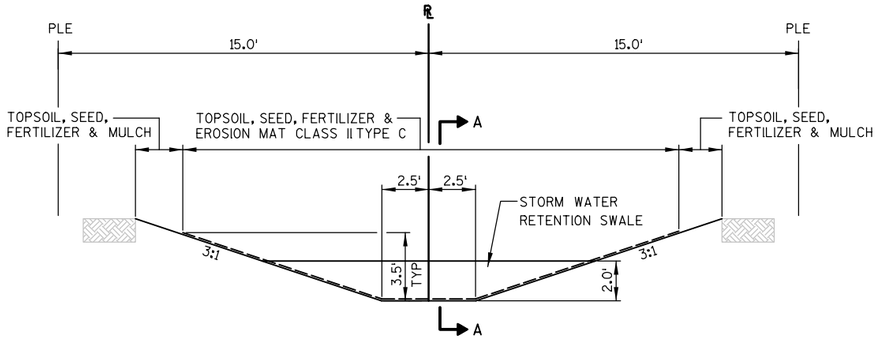
NOTES:

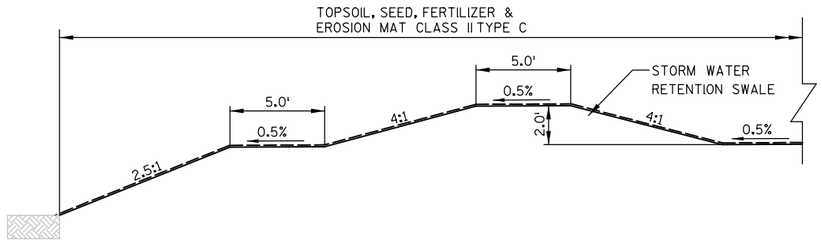
① USE CONCRETE CURB & GUTTER 6" SLOPED 36" TYPE D ON PARK EXIT AND PARK ENTRANCE.

② REFER TO STANDARD DETAIL DRAWINGS AND INTERSECTION DETAIL SHEETS FOR WIDTHS.

PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	TYPICAL SECTIONS	SCALE, FEET 0 NTS	SHEET 8	E

2



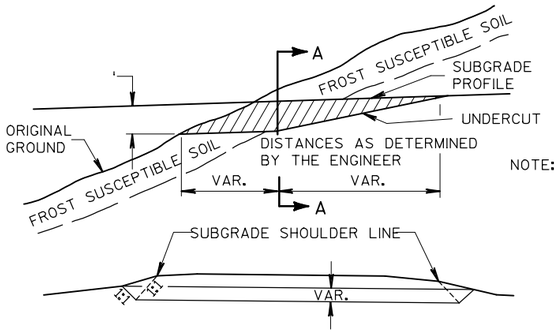


SECTION A-A

TYPICAL FINISHED DITCH SECTION

STA 88+94.00 TO STA 89+64.64 (OUTFALL 1)
STA 93+94.00 TO STA 94+66.14 (OUTFALL 2)
STA 98+97.00 TO STA 99+60.24 (OUTFALL 3)

PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	TYPICAL SECTIONS	SHEET 9	E



SECTION A-A

CROSS SECTION SHOWING UNDERCUT

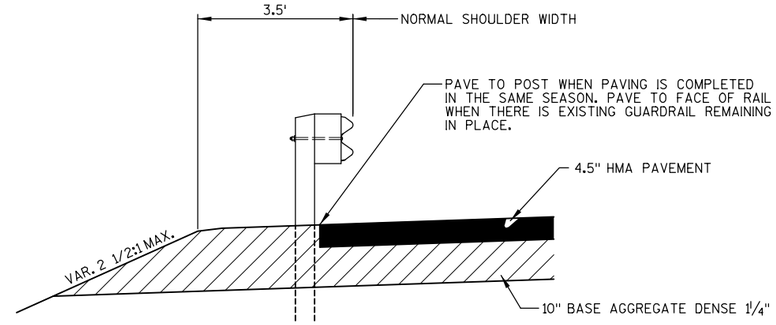
DETAIL FOR EXCAVATION BELOW SUBGRADE AT CUTS

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

E.B.S. AREA TO BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE ENGINEER

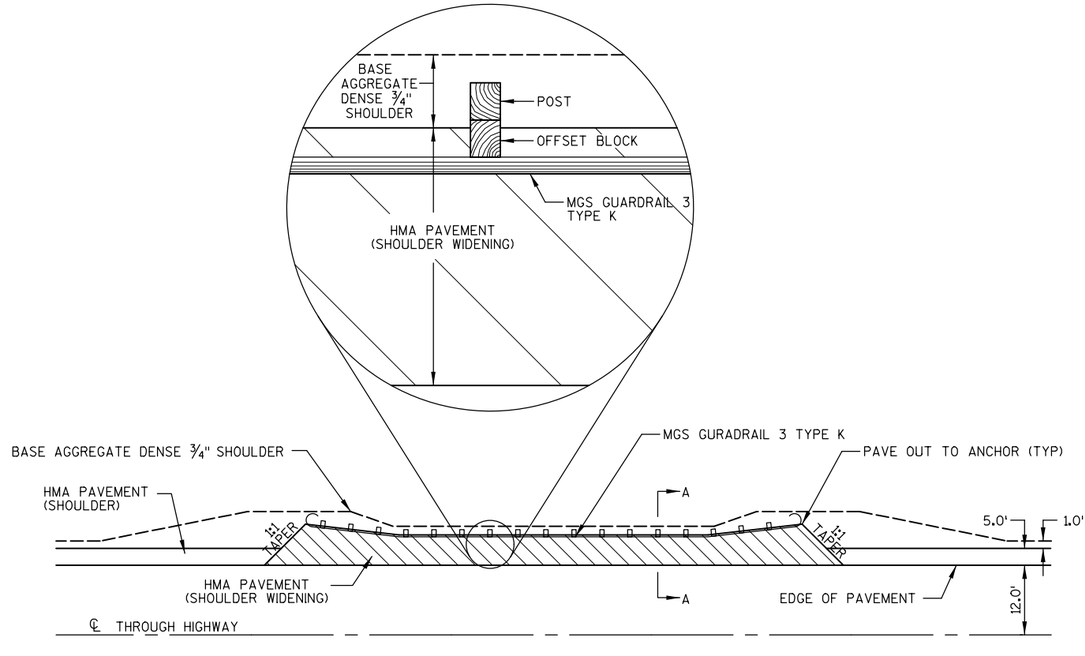
BACKFILL MUST BE HOMOGENEOUS WITH ADJOINING FILL MATERIAL.

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



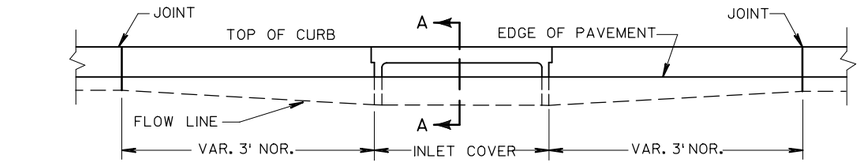
SECTION A-A

SHOULDER DETAIL AT BEAM GUARD

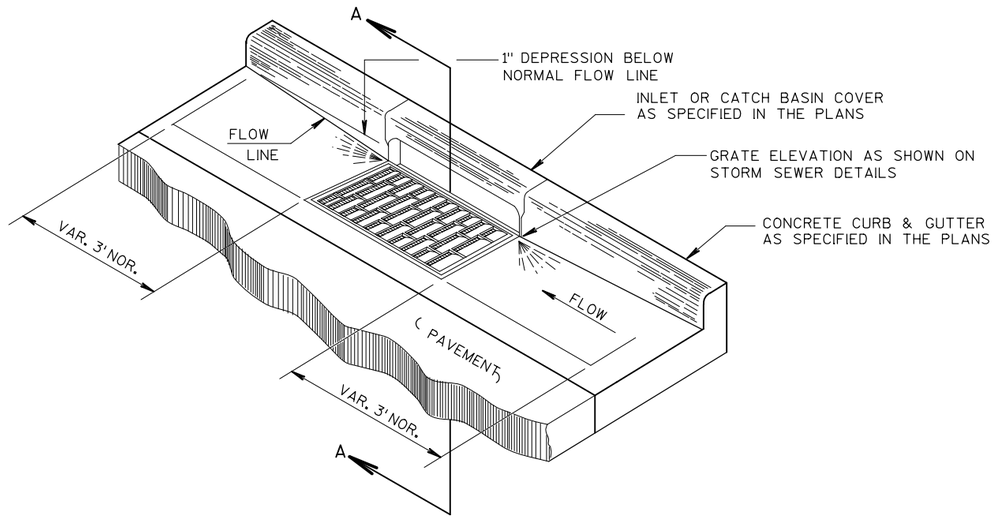


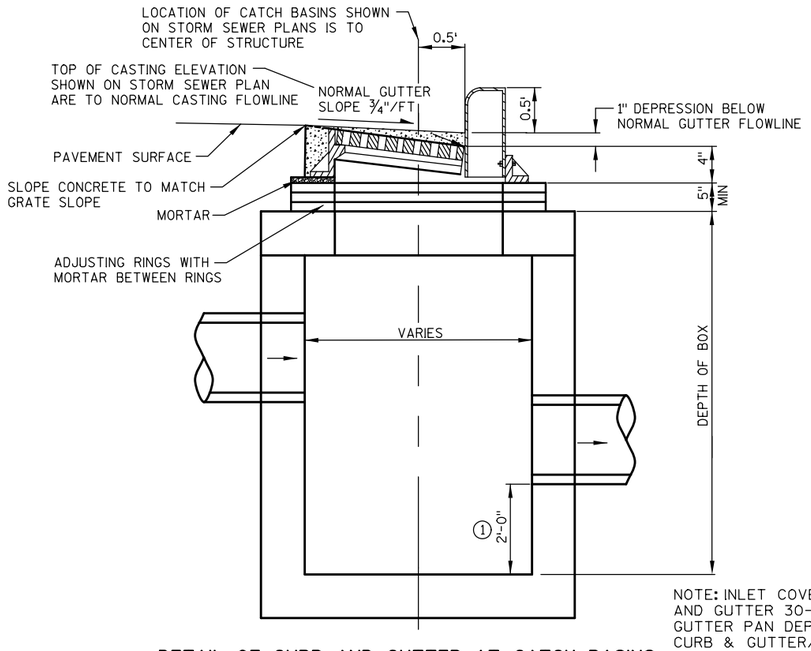
ASPHALTIC PAVING ALONG BEAM GUARD

2



ELEVATION





① OMIT 2'-0" SUMP FOR INLETS

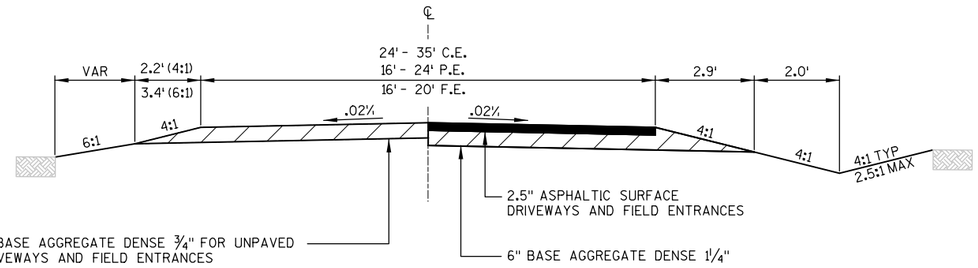
NOTE: INLET COVER TYPE H AND CONCRETE CURB AND GUTTER 30-INCH SHOWN FOR DETAIL ONLY. GUTTER PAN DEPRESSION IS SIMILAR FOR OTHER CURB & GUTTER/INLET COVER COMBINATIONS.

DETAIL OF CURB AND GUTTER AT CATCH BASINS

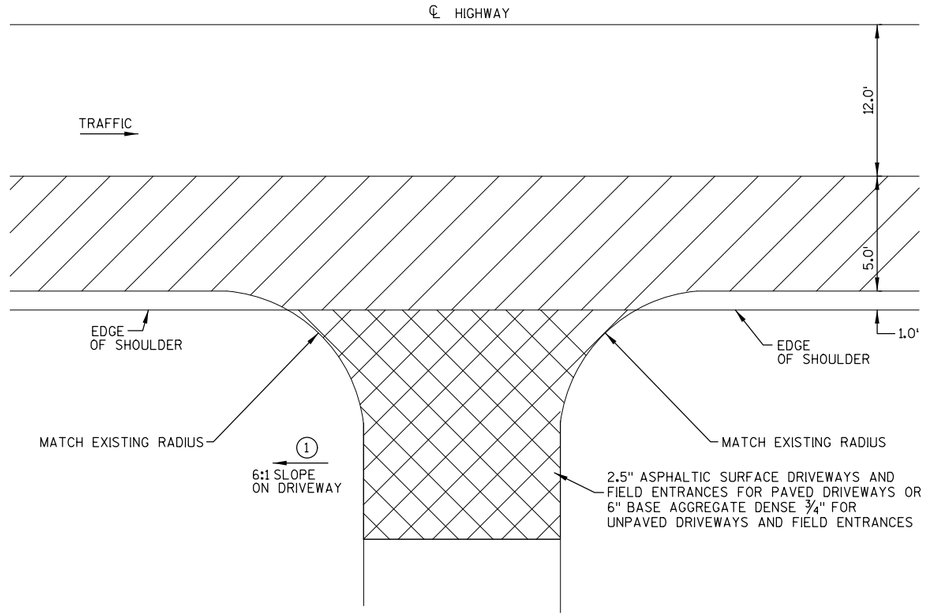
2

NOTES:

(1) 6:1 SLOPES REQ'D WITHIN MAINLINE CLEAR ZONE IN FILL SECTIONS.

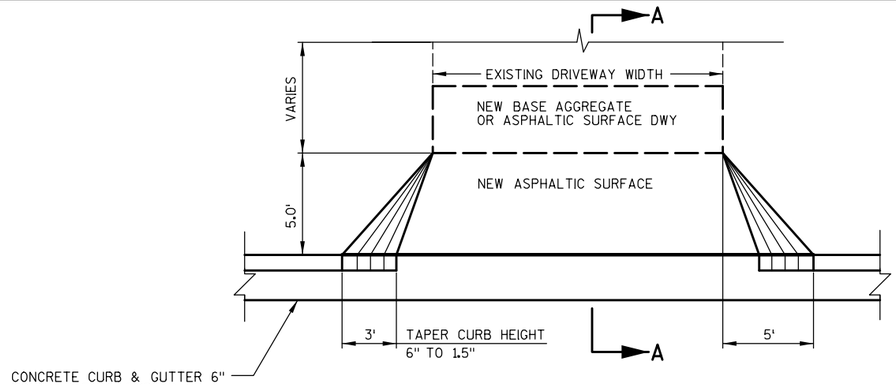


TYPICAL SECTION FOR PRIVATE ENTRANCES



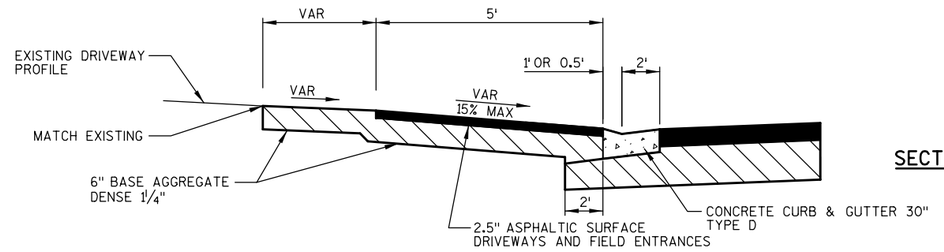
PLAN VIEW

PRIVATE ENTRANCE DETAIL

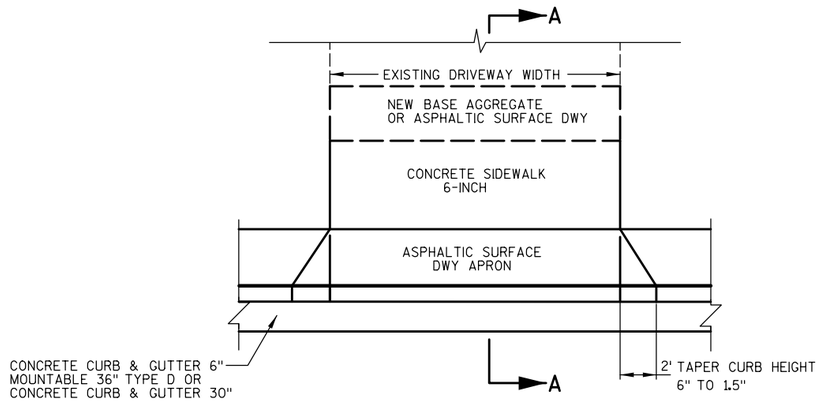


PRIVATE/COMMERCIAL ENTRANCE AT CURB AND GUTTER LOCATIONS

TYPE 1

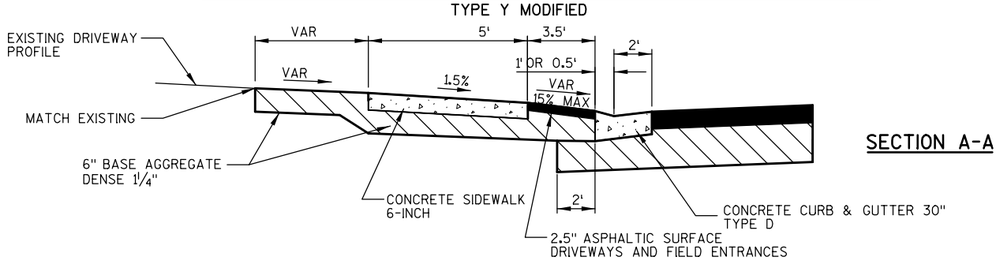


SECTION A-A

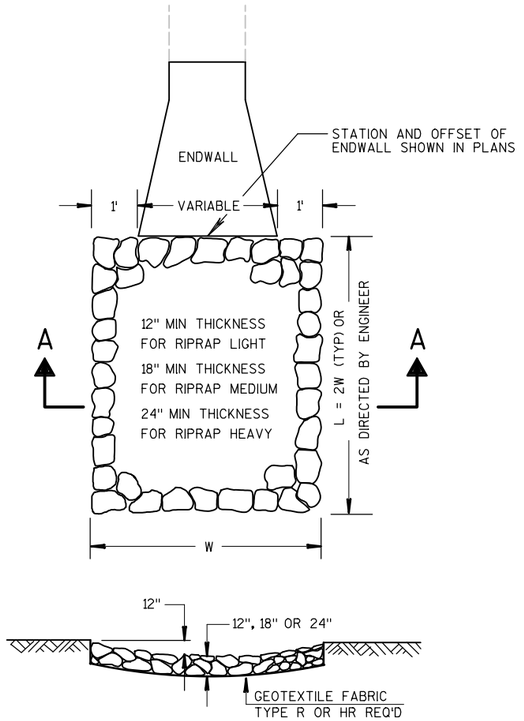


PRIVATE/COMMERCIAL ENTRANCE AT CURB AND GUTTER LOCATIONS

TYPE Y MODIFIED

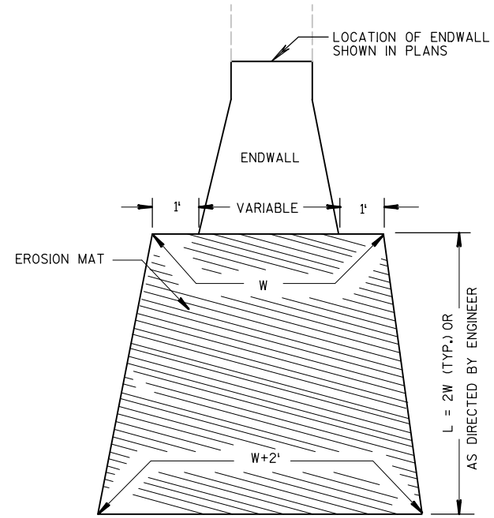


SECTION A-A



SECTION A-A

RIPRAP TREATMENT AT CULVERTS



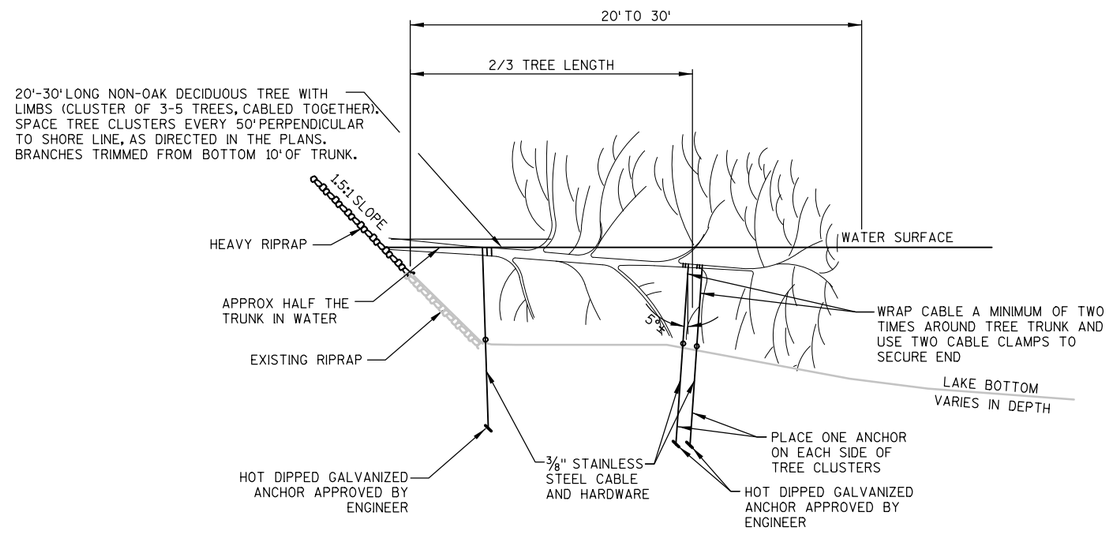
EROSION MAT TREATMENT AT CULVERTS

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											

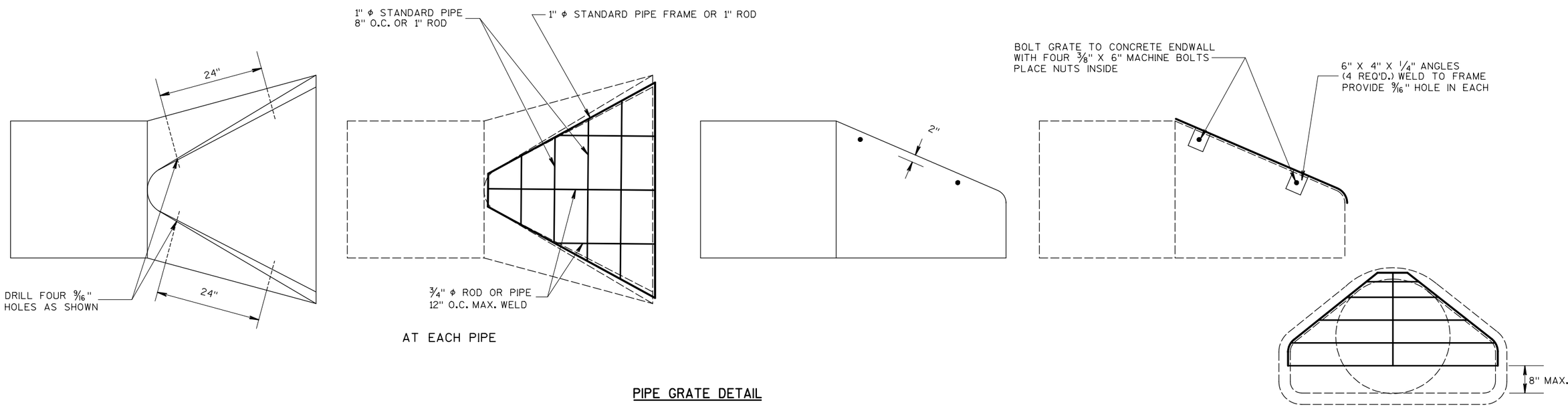
TOTAL PROJECT AREA = 34.69 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 31.66 ACRES

2



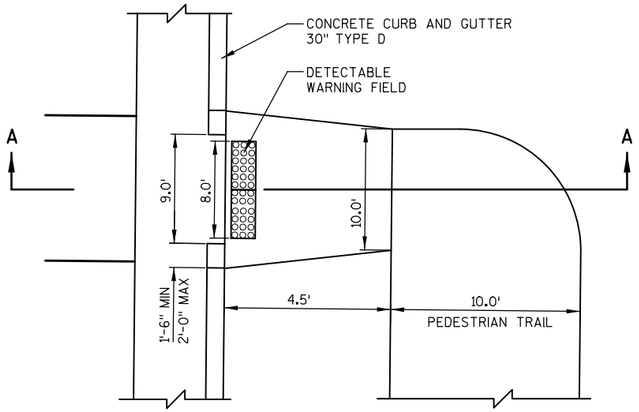
FISH HABITAT STRUCTURE DETAIL

STA 632+65 RT
STA 633+15 RT
STA 633+65 RT

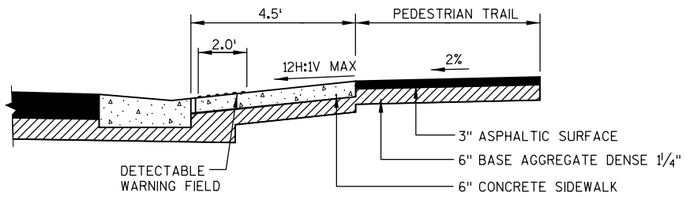


PIPE GRATE DETAIL

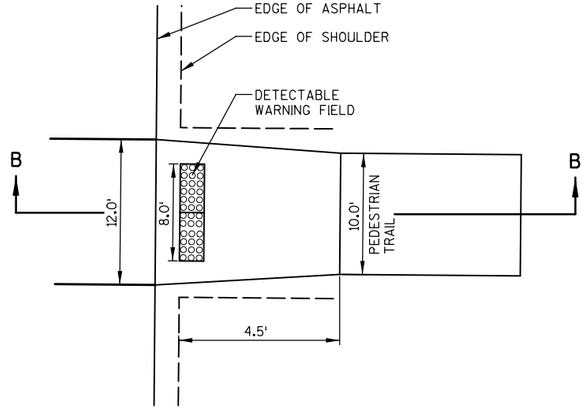
PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	CONSTRUCTION DETAILS	SHEET 14	E



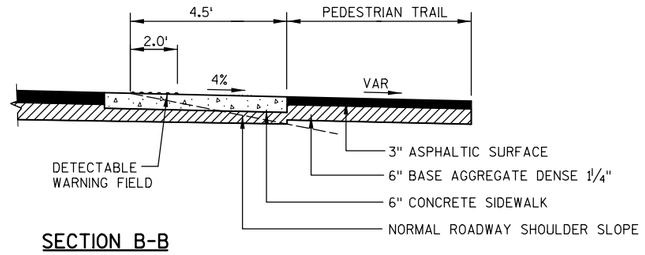
PLAN VIEW



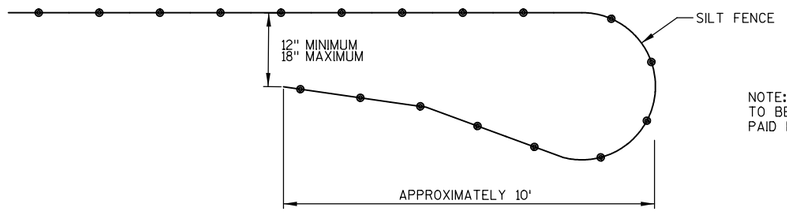
SECTION A-A



PLAN VIEW



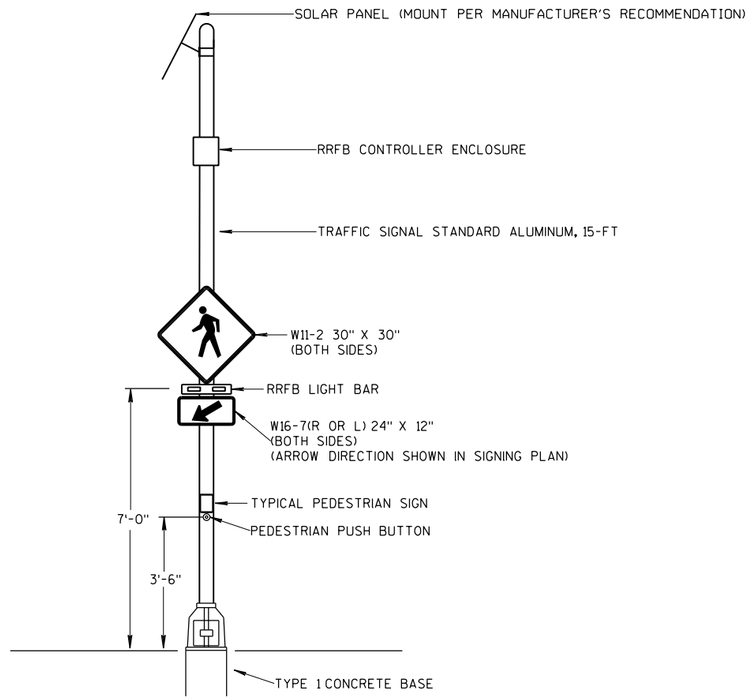
SECTION B-B



NOTE:
TO BE MEASURED AND
PAID FOR AS SILT FENCE.

TURTLE TURN-AROUND DETAIL

STA 618+51 LT
STA 629+98 LT
STA 629+03 RT
STA 630+16 RT



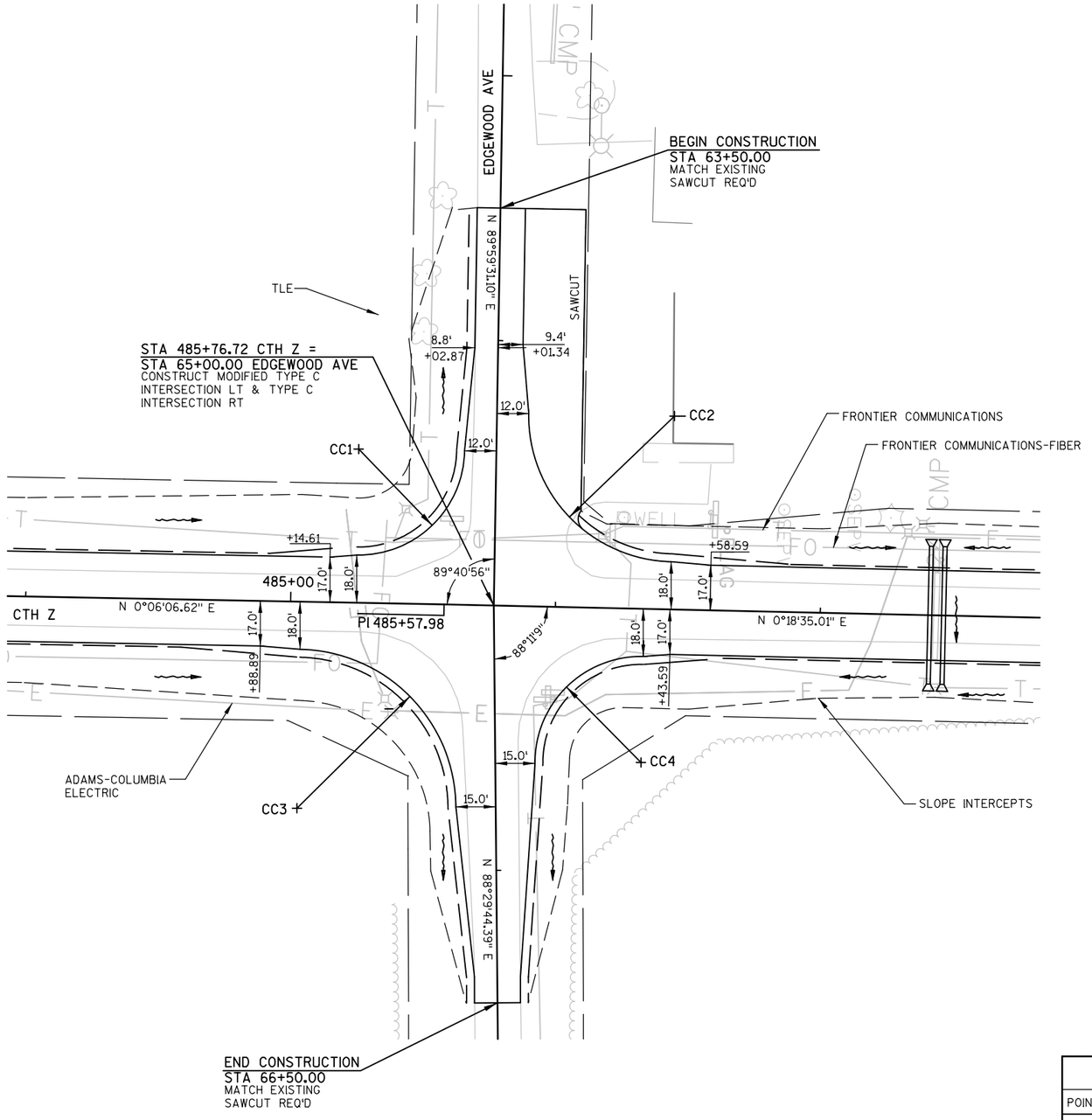
RRFB FRONT ELEVATION

CTH Z & PARK ENTRANCE

PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	RECTANGULAR RAPID FLASHING BEACON (RRFB) DETAIL	SHEET 16	E

2

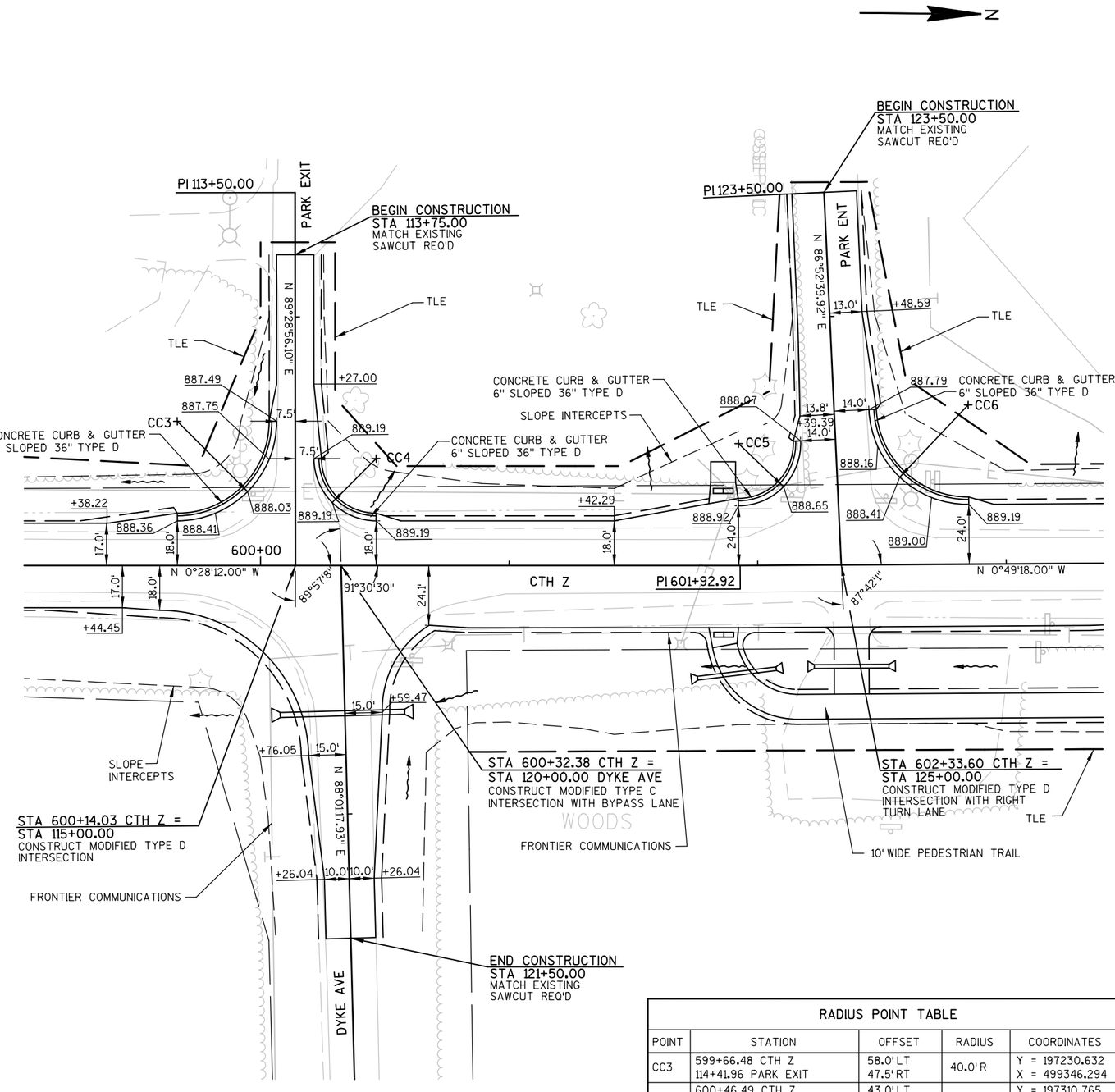
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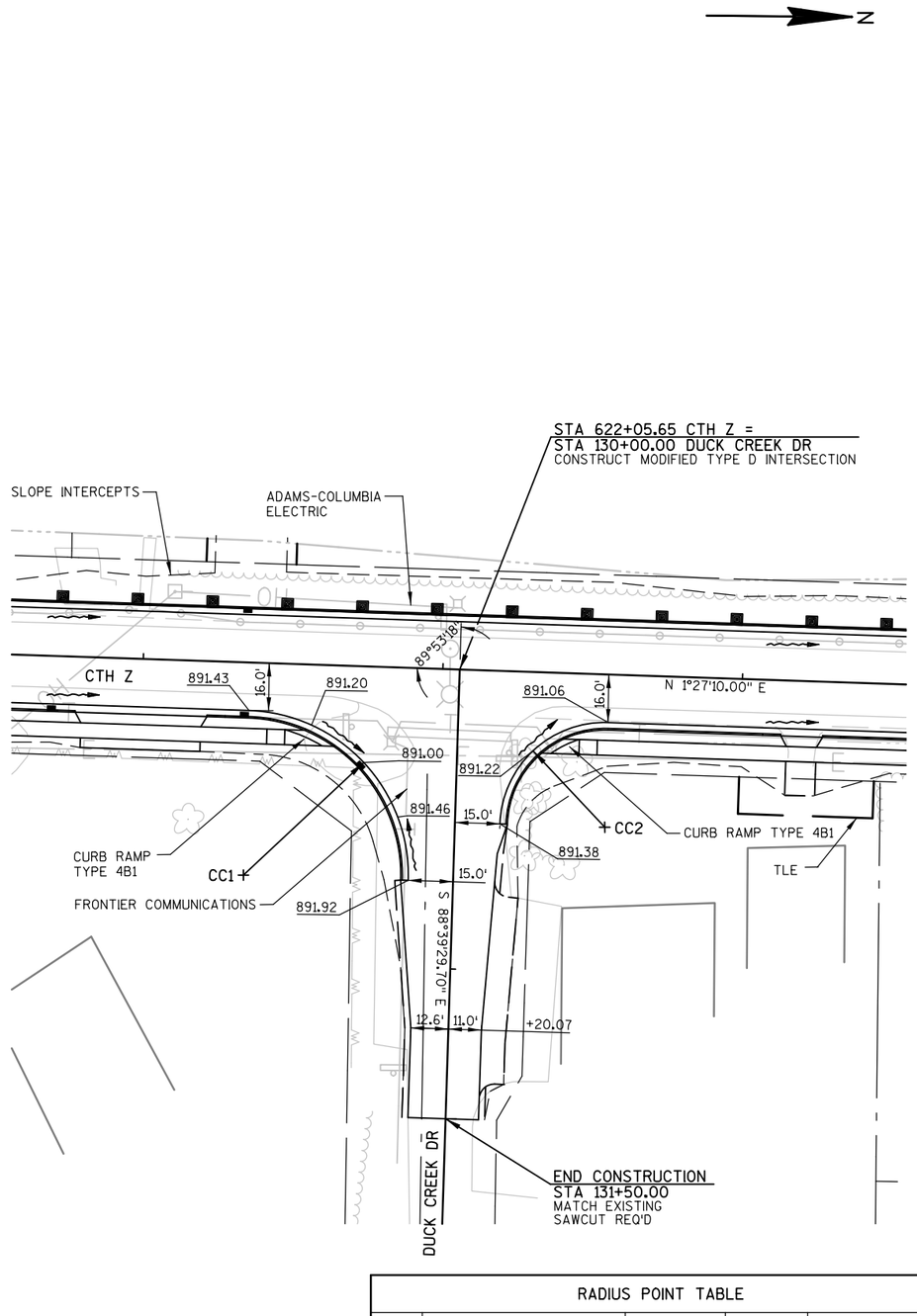


RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	485+24.61 CTH Z 64+41.84 EDGEWOOD AVE	58.0' LT 52.0' RT	40.0' R	Y = 185790.499 X = 499210.750
CC2	486+43.32 CTH Z 64+27.37 EDGEWOOD AVE	73.0' LT 67.0' LT	55.0' R	Y = 185909.497 X = 499196.271
CC3	485+03.88 CTH Z 65+75.86 EDGEWOOD AVE	78.0' RT 75.0' RT	60.0' R	Y = 185769.527 X = 499346.715
CC4	486+33.59 CTH Z 65+59.78 EDGEWOOD AVE	58.0' RT 55.0' LT	40.0' R	Y = 185899.060 X = 499327.221

PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	INTERSECTION DETAILS	SCALE, FEET 0 25 50	SHEET 17	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\idcthz03.dgn PLOT TIME : 1:28:47 PM PLOT DATE : 9/13/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



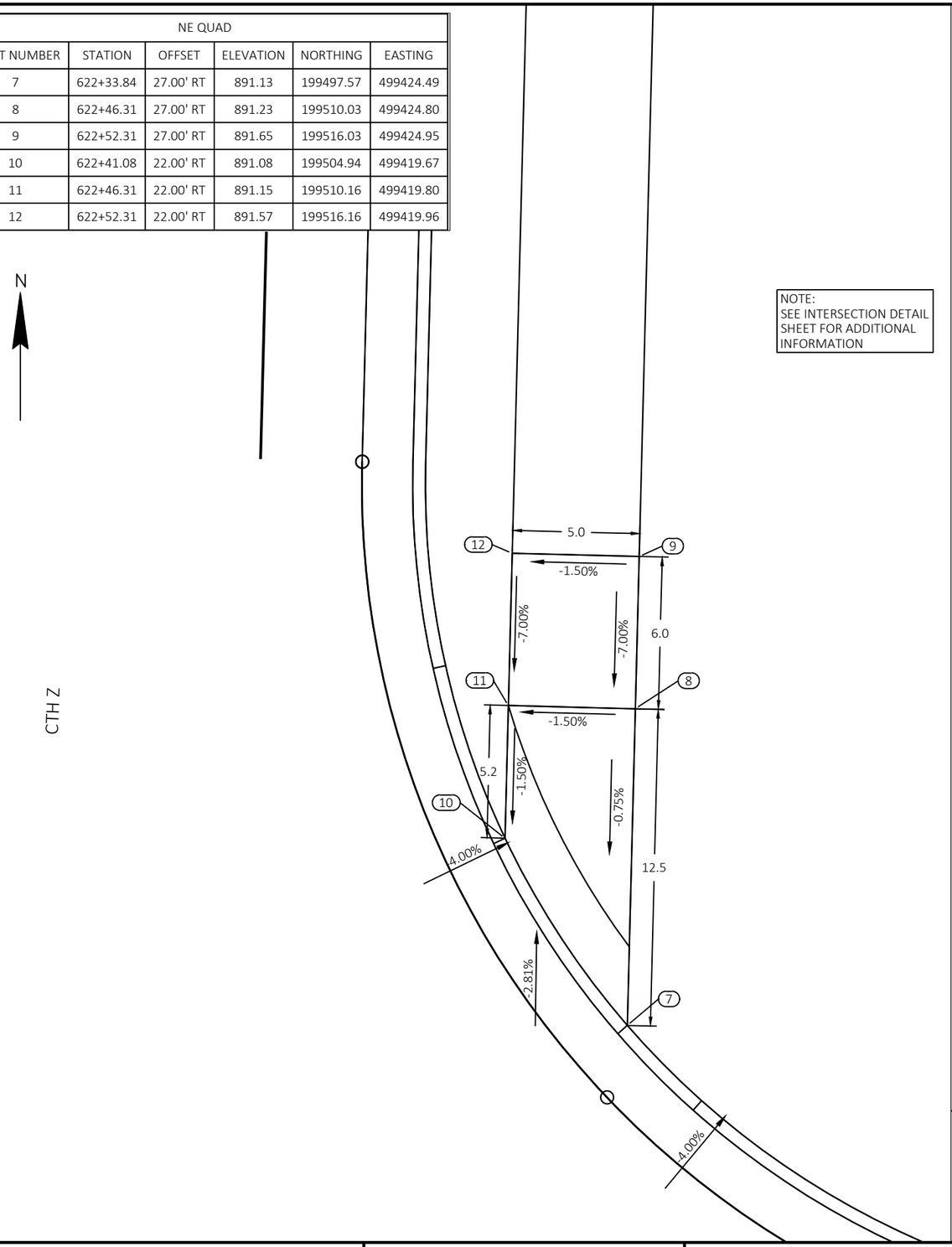


RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC3	599+66.48 CTH Z 114+41.96 PARK EXIT	58.0' LT 47.5' RT	40.0' R	Y = 197230.632 X = 499346.294
CC4	600+46.49 CTH Z 114+57.02 PARK EXIT	43.0' LT 32.5' LT	25.0' R	Y = 197310.765 X = 499360.637
CC5	601+92.30 CTH Z 124+49.39 PARK ENT	49.0' LT 39.0' RT	25.0' R	Y = 197456.520 X = 499353.441
CC6	602+85.07 CTH Z 124+38.12 PARK ENT	64.0' LT 54.0' LT	40.0' R	Y = 197548.767 X = 499337.119

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	621+35.80 CTH Z 130+70.87 DUCK CREEK DR	71.0' RT 70.0' RT	55.0' R	Y=199398.440 X=499465.994
CC2	622+55.76 CTH Z 130+51.10 DUCK CREEK DR	51.0' RT 50.0' LT	35.0' R	Y=199518.870 X=499449.033

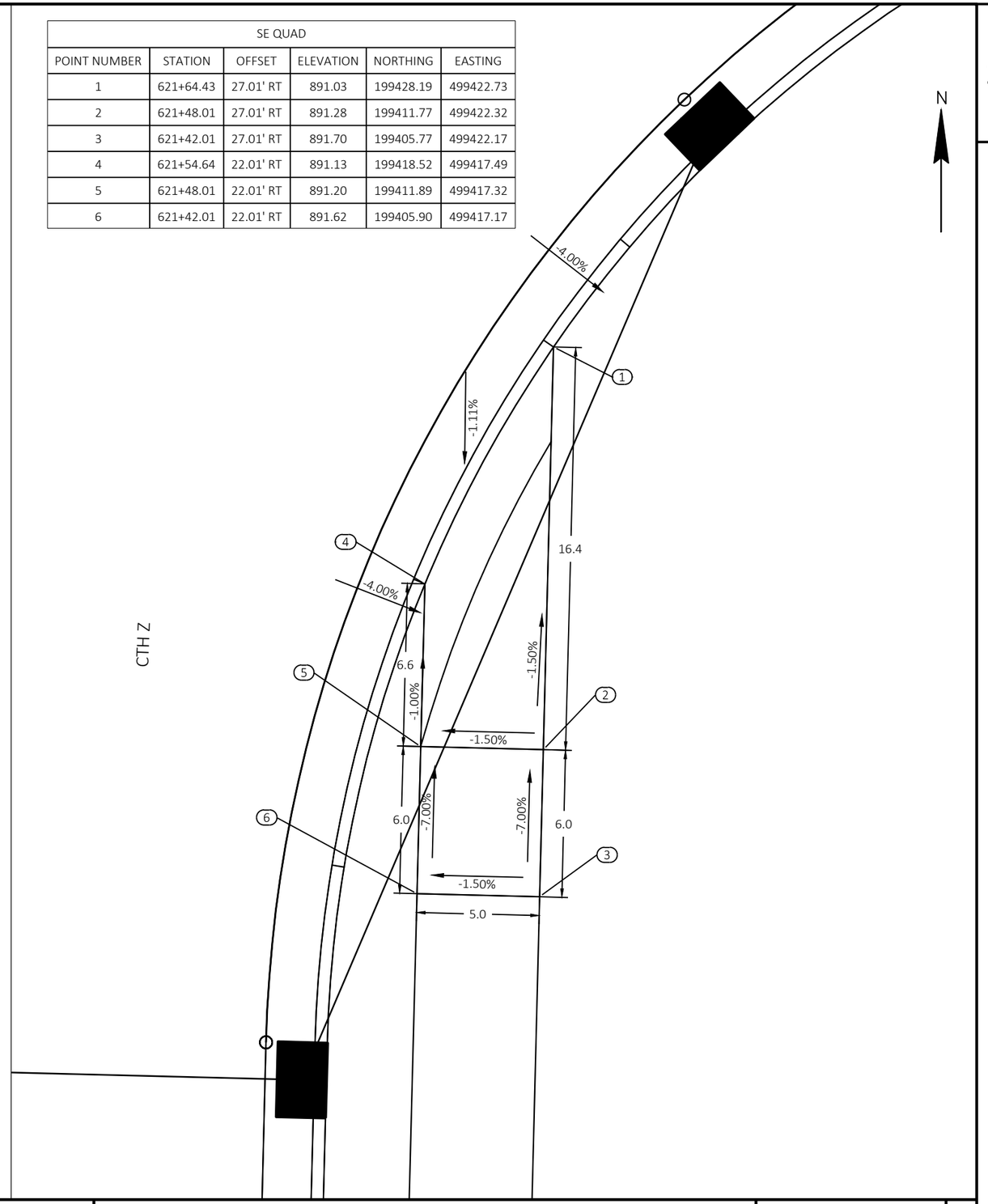
PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	INTERSECTION DETAILS	SCALE, FEET 0 25 50	SHEET 18	E

NE QUAD					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
7	622+33.84	27.00' RT	891.13	199497.57	499424.49
8	622+46.31	27.00' RT	891.23	199510.03	499424.80
9	622+52.31	27.00' RT	891.65	199516.03	499424.95
10	622+41.08	22.00' RT	891.08	199504.94	499419.67
11	622+46.31	22.00' RT	891.15	199510.16	499419.80
12	622+52.31	22.00' RT	891.57	199516.16	499419.96

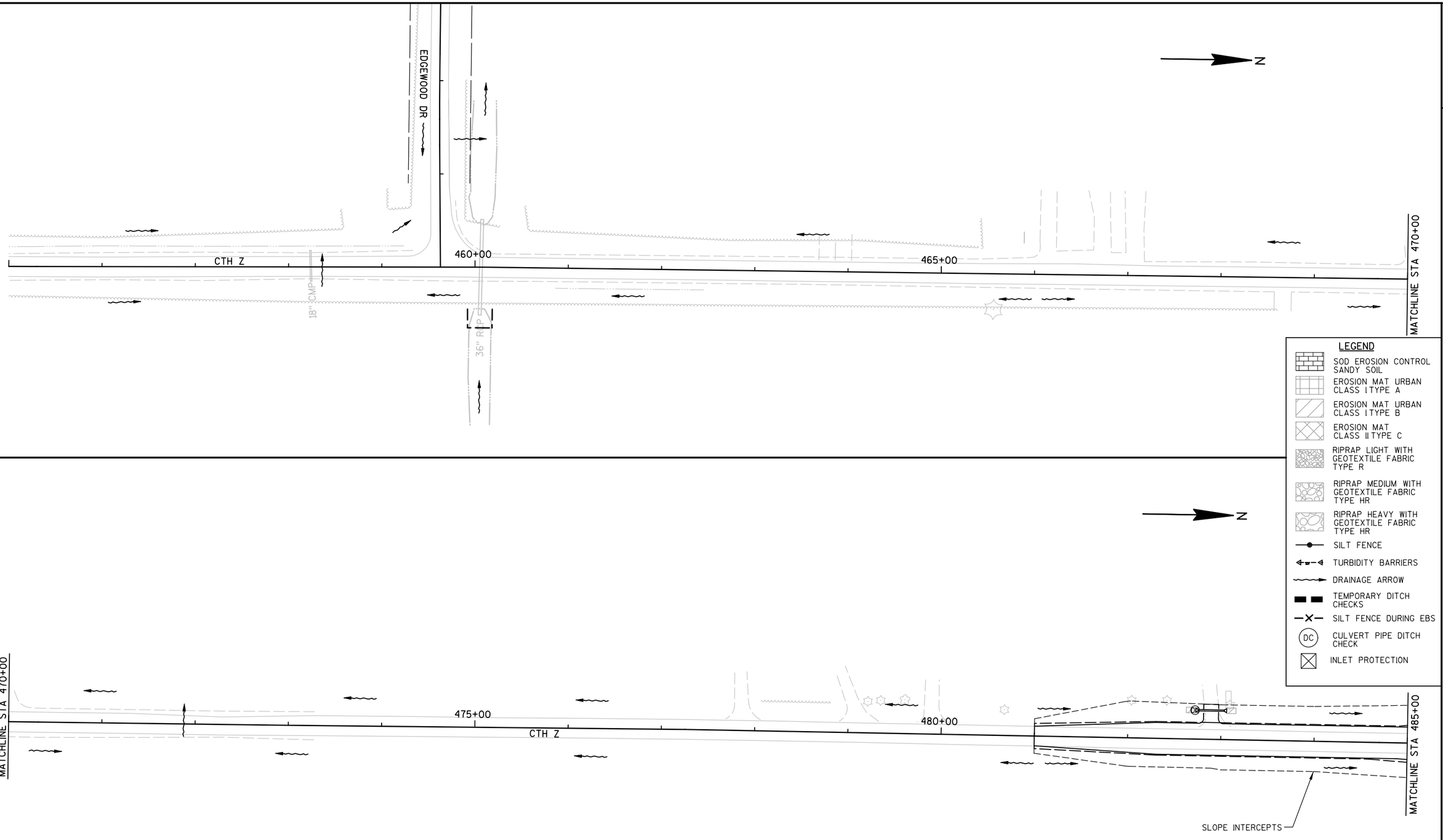


NOTE:
SEE INTERSECTION DETAIL SHEET FOR ADDITIONAL INFORMATION

SE QUAD					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	621+64.43	27.01' RT	891.03	199428.19	499422.73
2	621+48.01	27.01' RT	891.28	199411.77	499422.32
3	621+42.01	27.01' RT	891.70	199405.77	499422.17
4	621+54.64	22.01' RT	891.13	199418.52	499417.49
5	621+48.01	22.01' RT	891.20	199411.89	499417.32
6	621+42.01	22.01' RT	891.62	199405.90	499417.17

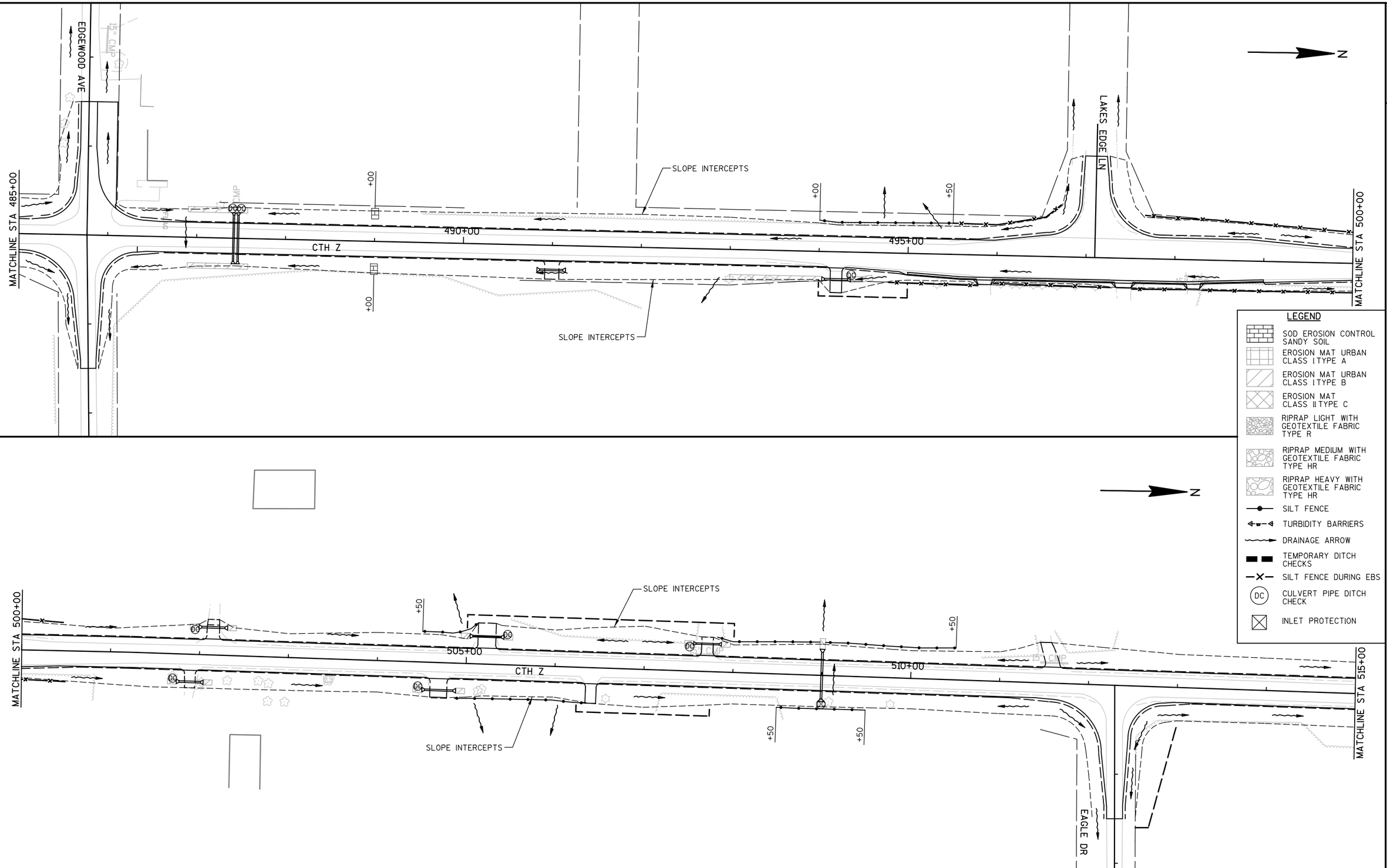


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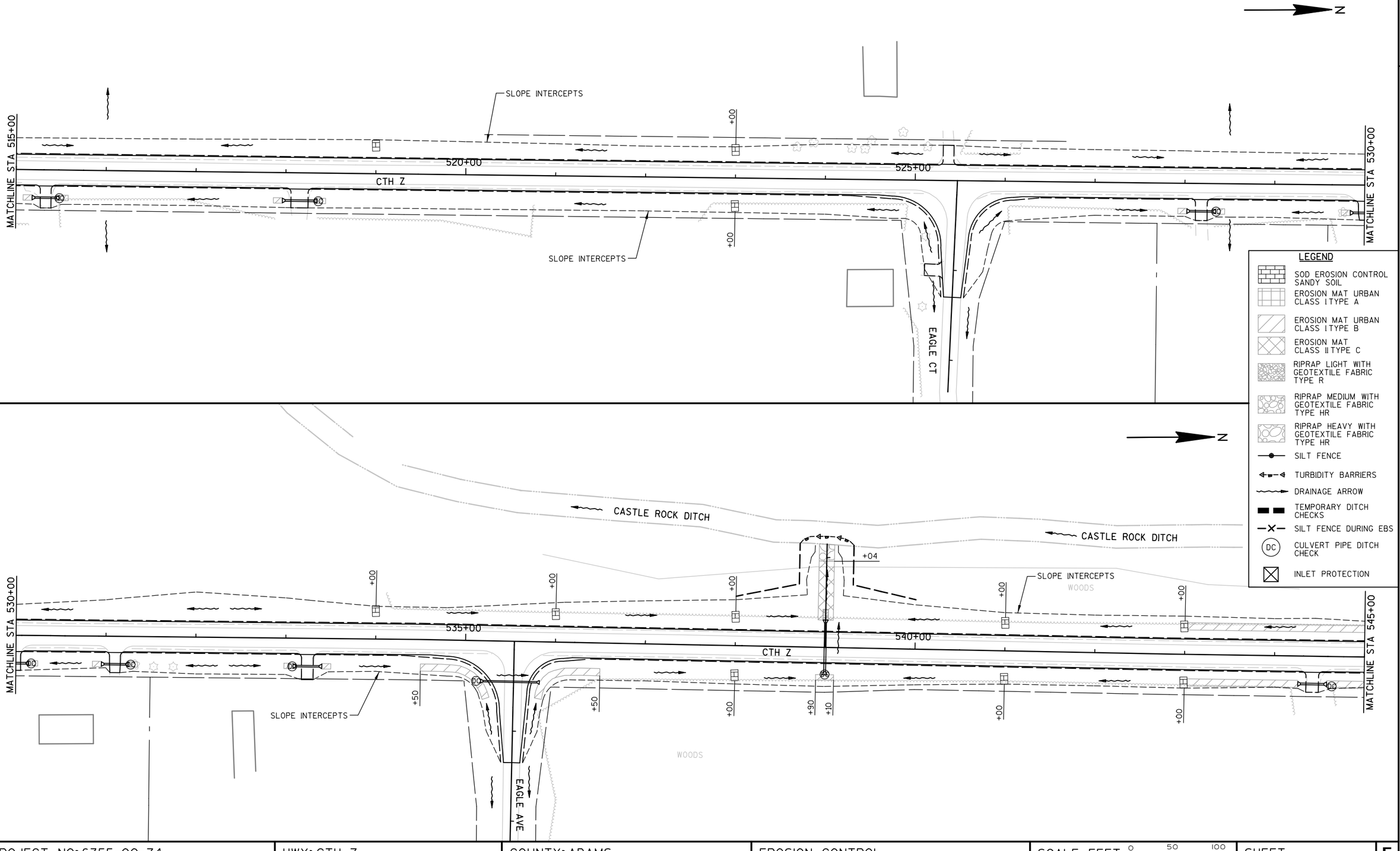
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PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	EROSION CONTROL	SCALE, FEET 0 50 100	SHEET 20	E

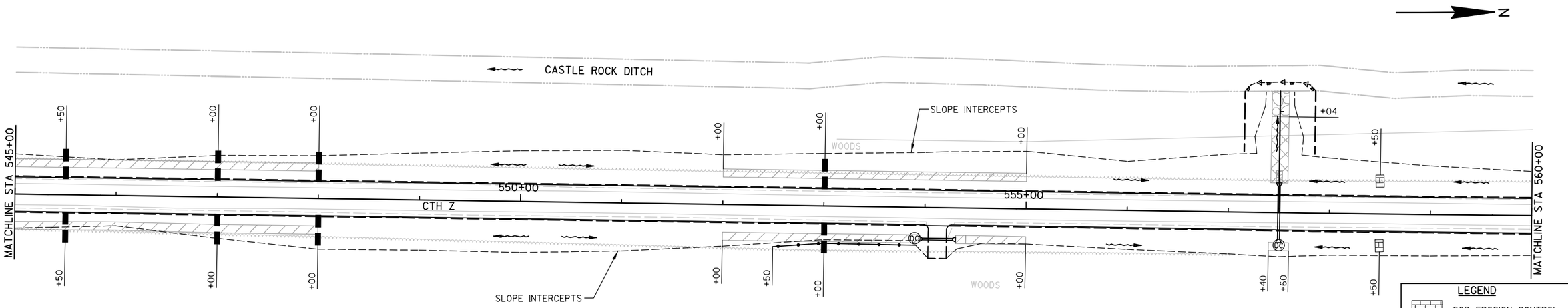


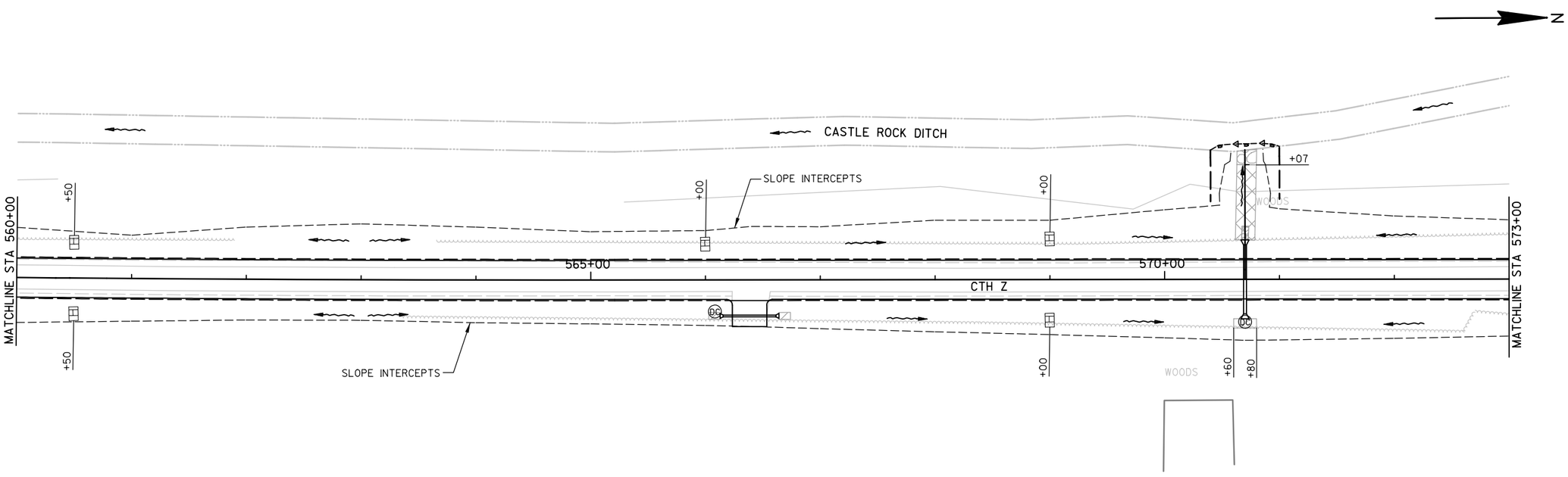
PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	EROSION CONTROL	SCALE, FEET 0 50 100	SHEET 21	E

2



PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	EROSION CONTROL	SCALE, FEET 0 50 100	SHEET 22	E



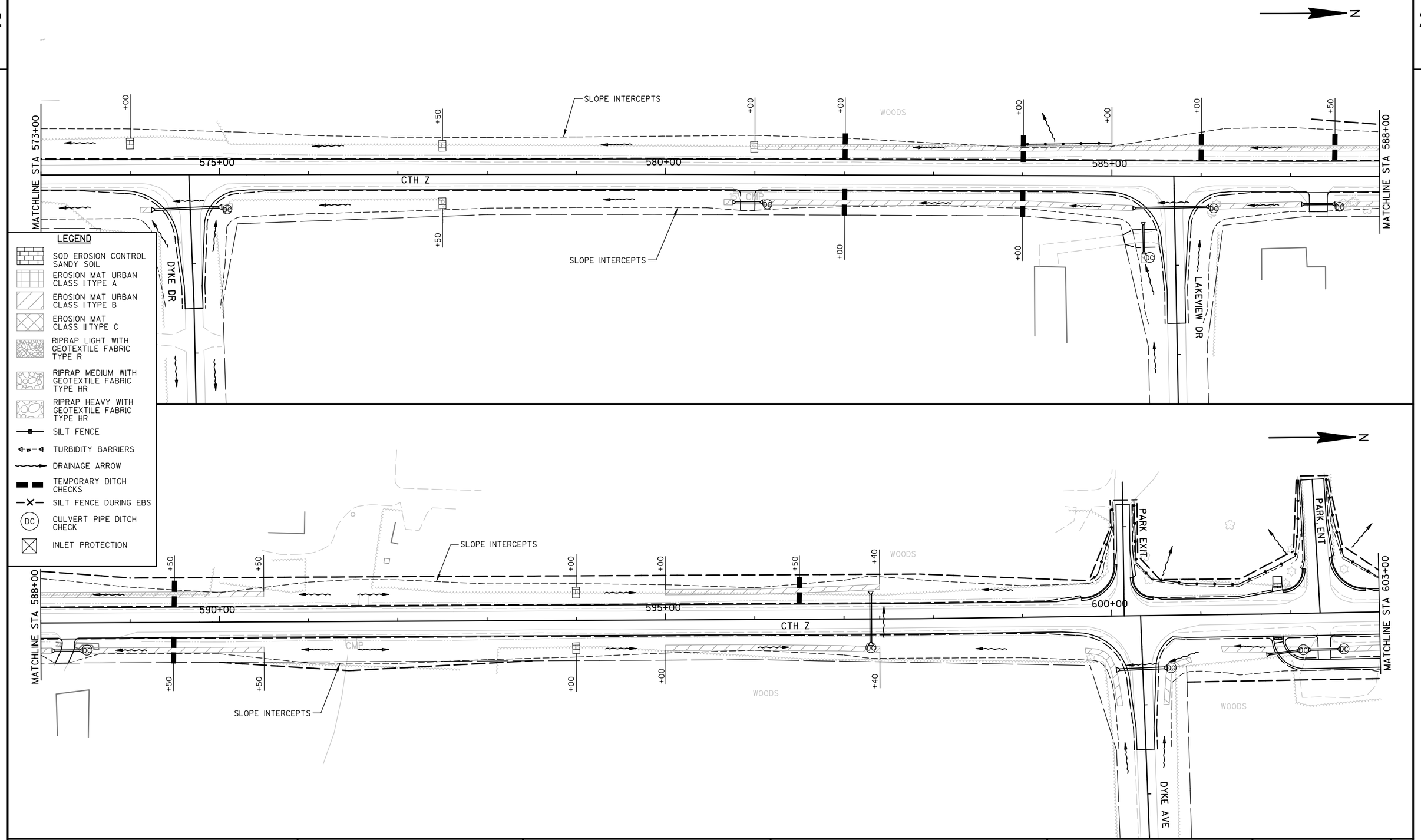


LEGEND

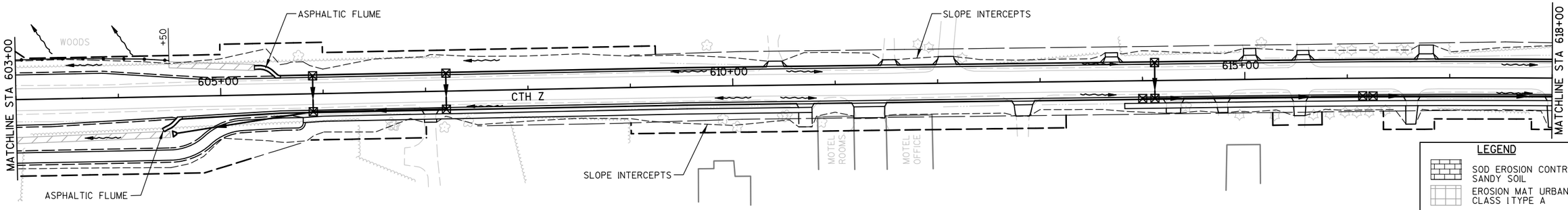
- SOD EROSION CONTROL SANDY SOIL
- EROSION MAT URBAN CLASS I TYPE A
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE C
- RIPRAP LIGHT WITH GEOTEXTILE FABRIC TYPE R
- RIPRAP MEDIUM WITH GEOTEXTILE FABRIC TYPE R
- RIPRAP HEAVY WITH GEOTEXTILE FABRIC TYPE HR
- SILT FENCE
- TURBIDITY BARRIERS
- DRAINAGE ARROW
- TEMPORARY DITCH CHECKS
- SILT FENCE DURING EBS
- DC — CULVERT PIPE DITCH CHECK
- INLET PROTECTION

PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	EROSION CONTROL	SCALE, FEET 0 50 100	SHEET 23	E

2

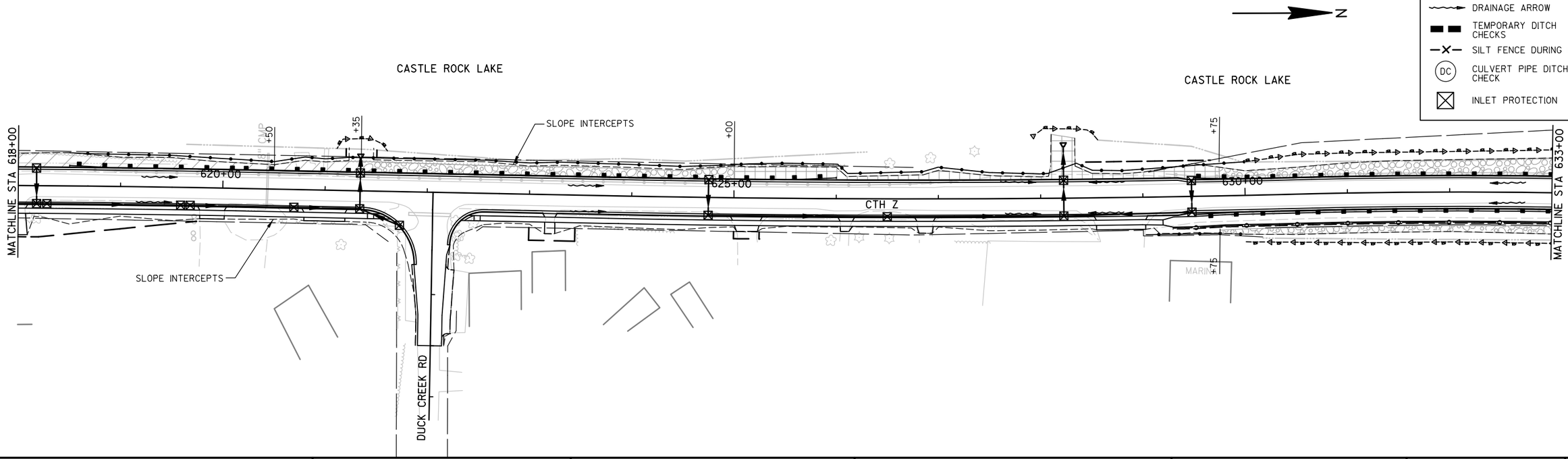


PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	EROSION CONTROL	SCALE, FEET 0 50 100	SHEET 24	E



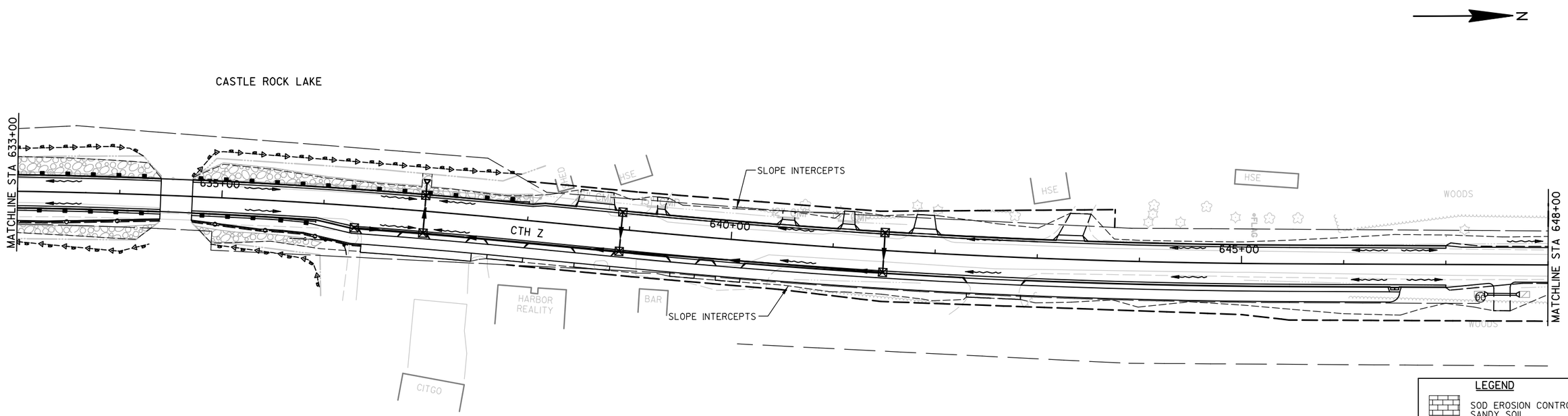
LEGEND

- SOD EROSION CONTROL SANDY SOIL
- EROSION MAT URBAN CLASS I TYPE A
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE C
- RIPRAP LIGHT WITH GEOTEXTILE FABRIC TYPE R
- RIPRAP MEDIUM WITH GEOTEXTILE FABRIC TYPE HR
- RIPRAP HEAVY WITH GEOTEXTILE FABRIC TYPE HR
- SILT FENCE
- TURBIDITY BARRIERS
- DRAINAGE ARROW
- TEMPORARY DITCH CHECKS
- SILT FENCE DURING EBS
- DC CULVERT PIPE DITCH CHECK
- INLET PROTECTION



PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	EROSION CONTROL	SCALE, FEET 0 50 100	SHEET 25	E

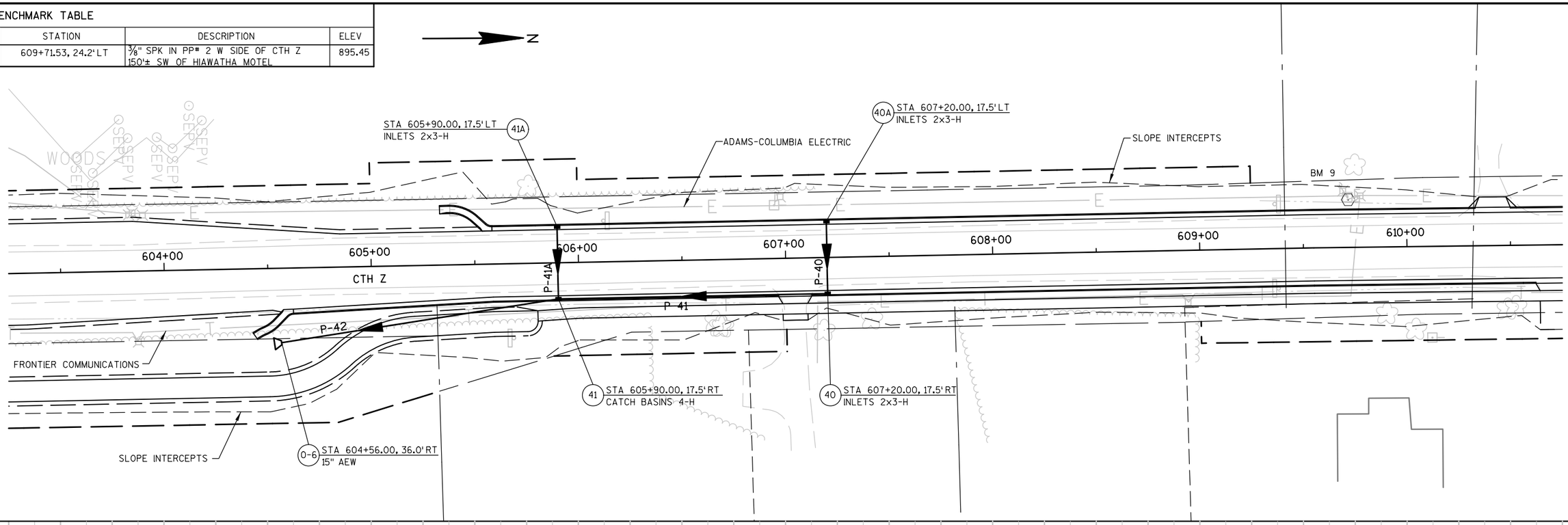
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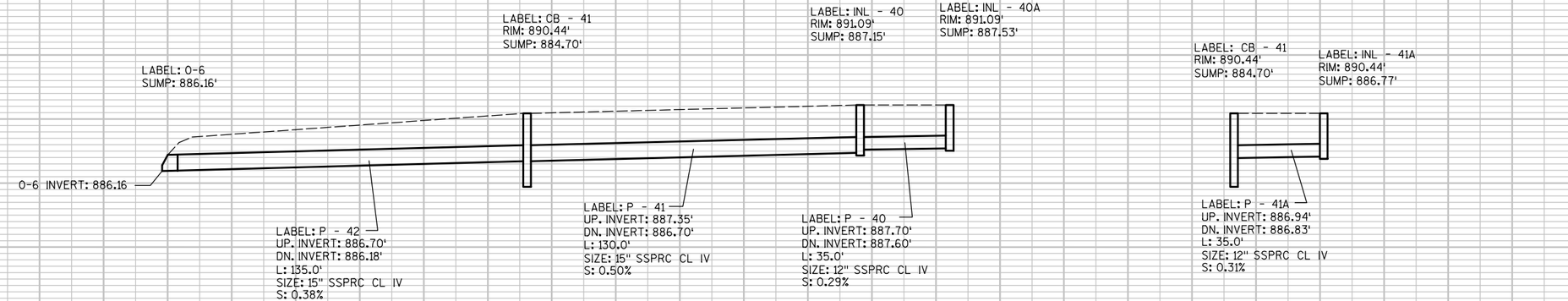

N
CASTLE ROCK LAKE
MATCHLINE STA 633+00
635+00
CTH Z
640+00
645+00
SLOPE INTERCEPTS
SLOPE INTERCEPTS
MATCHLINE STA 648+00
HSE
HSE
HSE
WOODS
WOODS
HARBOR REALITY
BAR
CITGO
CMP
CMP
CMP

2

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
35	609+71.53, 24.2'LT	⅜" SPK IN PP# 2 W SIDE OF CTH Z 150'± SW OF HIAWATHA MOTEL	895.45



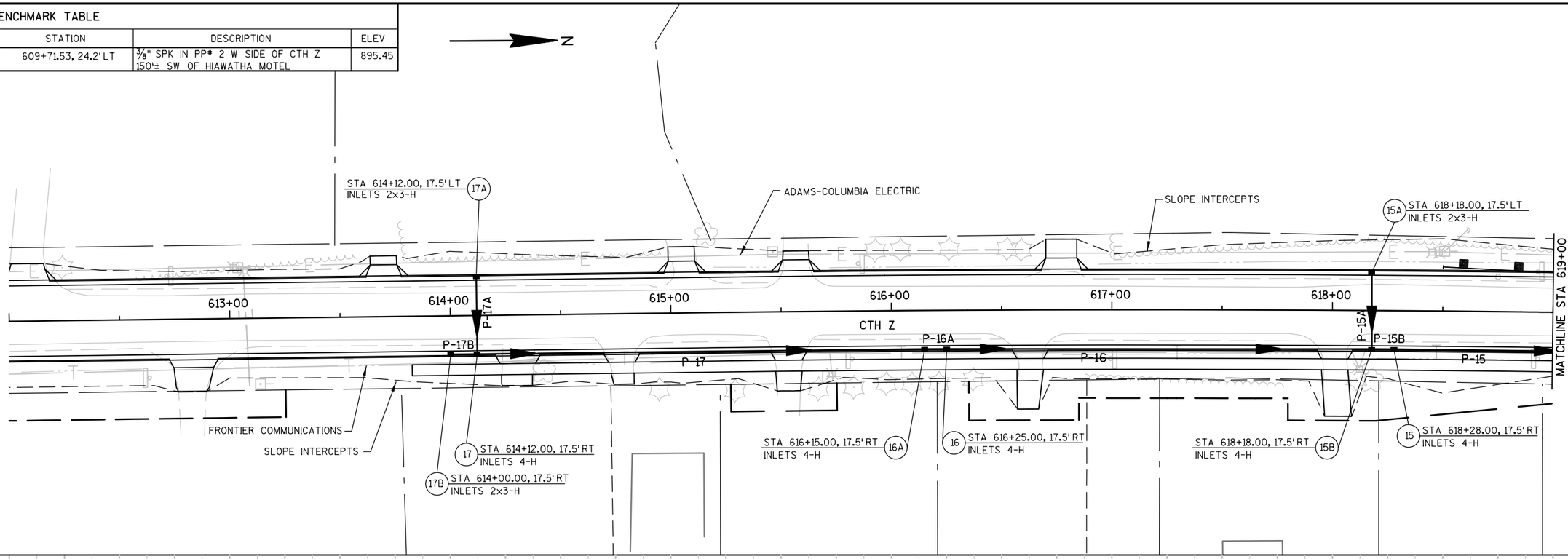


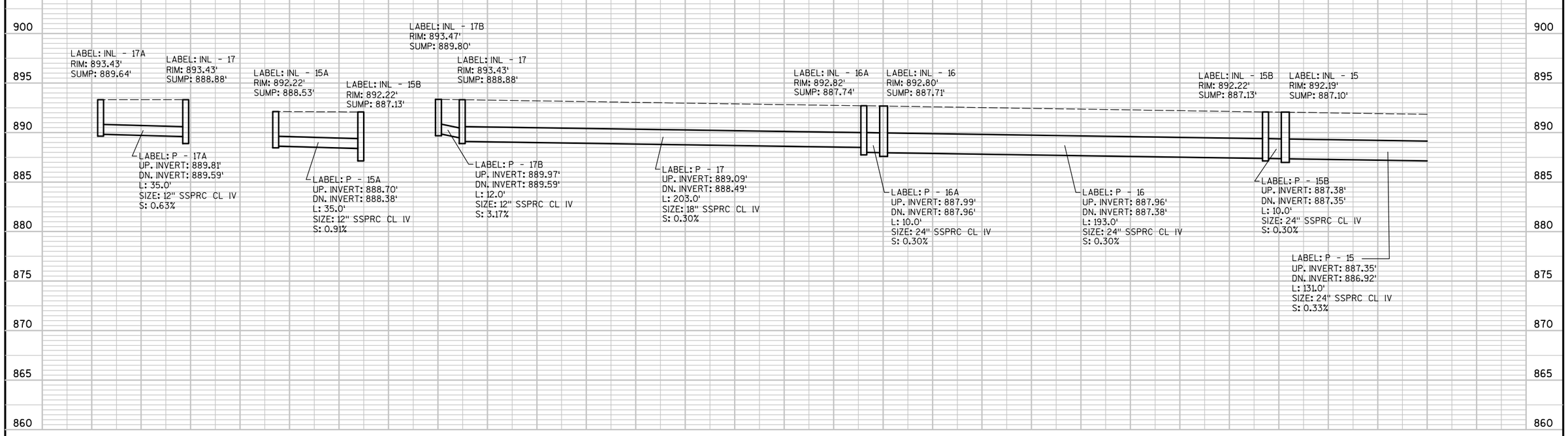
PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	STORM SEWER	SCALE, FEET 0 25 50	SHEET 27	E

2

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
35	609+71.53, 24.2' LT	3/8" SPK IN PP# 2 W SIDE OF CTH Z 150'± SW OF HIAWATHA MOTEL	895.45

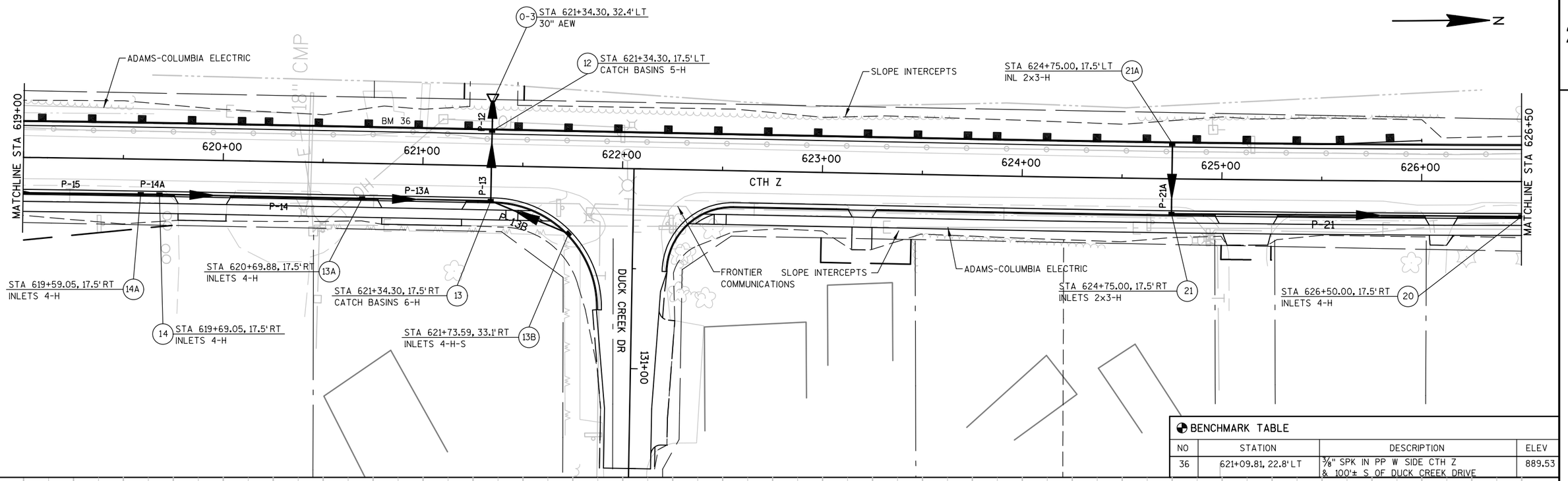




PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	STORM SEWER	SCALE, FEET 0 25 50	SHEET 28	E

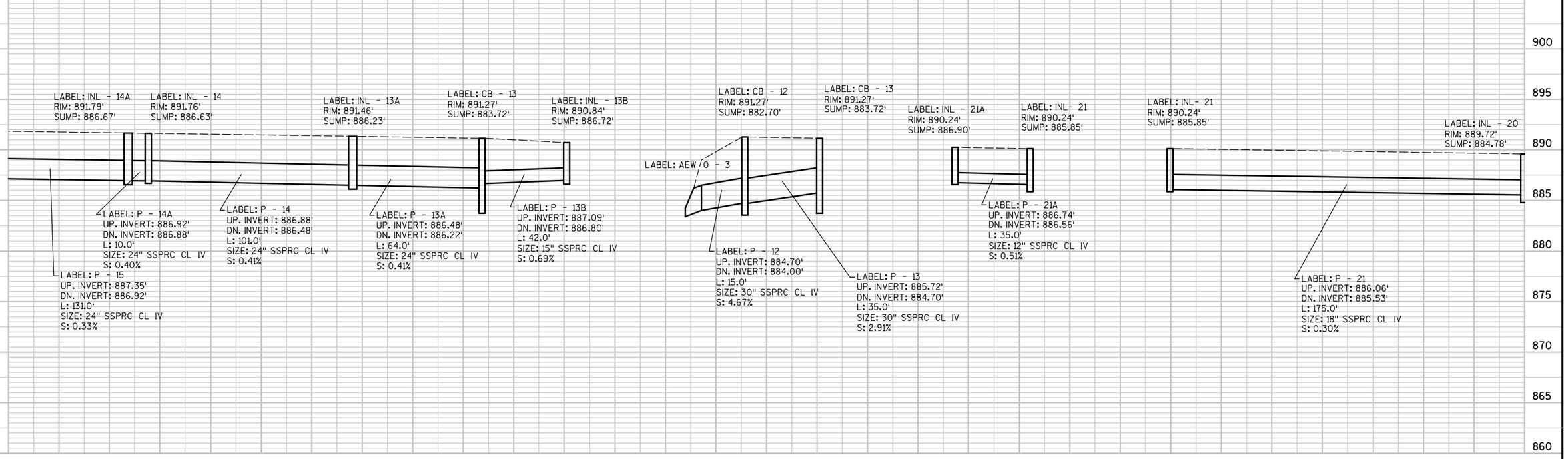
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WISDOT/CADDS SHEET 40



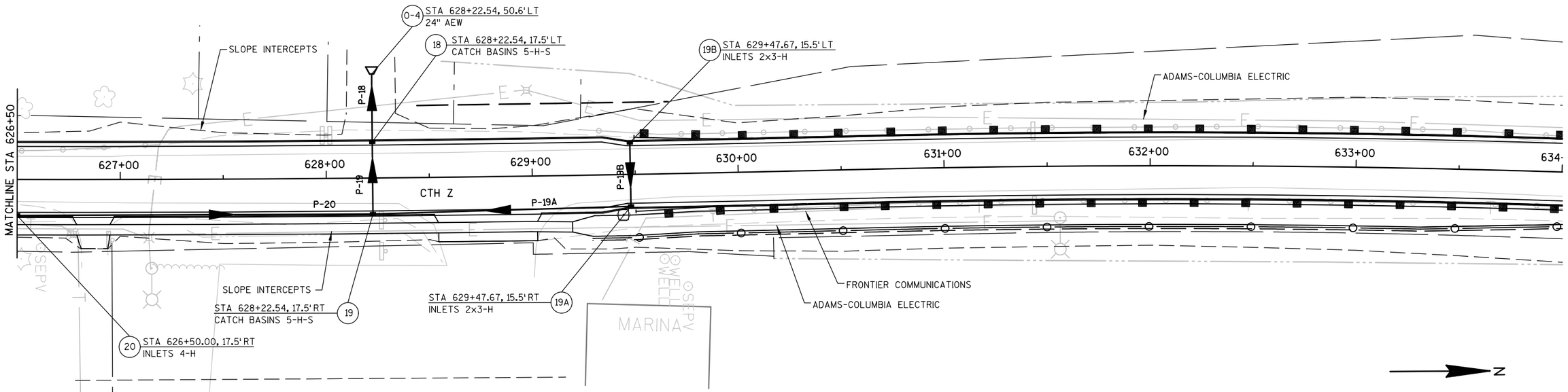
BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
36	621+09.81, 22.8'LT	3/8" SPK IN PP W SIDE CTH Z & 100'± S OF DUCK CREEK DRIVE	889.53



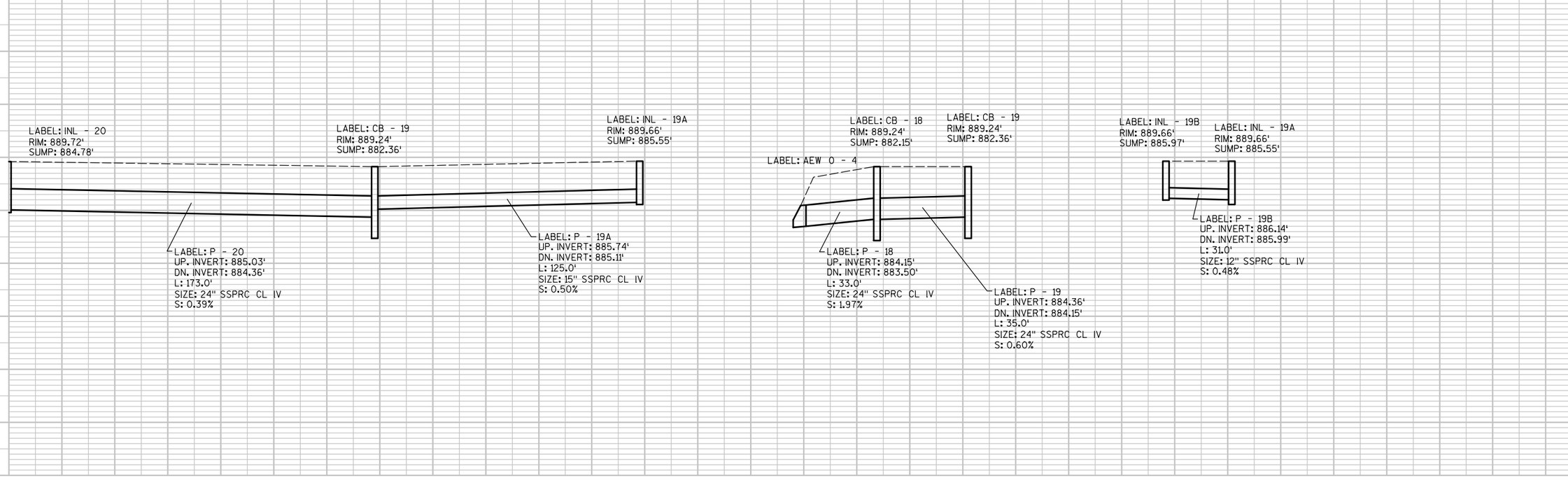
PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	STORM SEWER	SCALE, FEET 0 25 50	SHEET 29	E

2



BENCHMARK TABLE

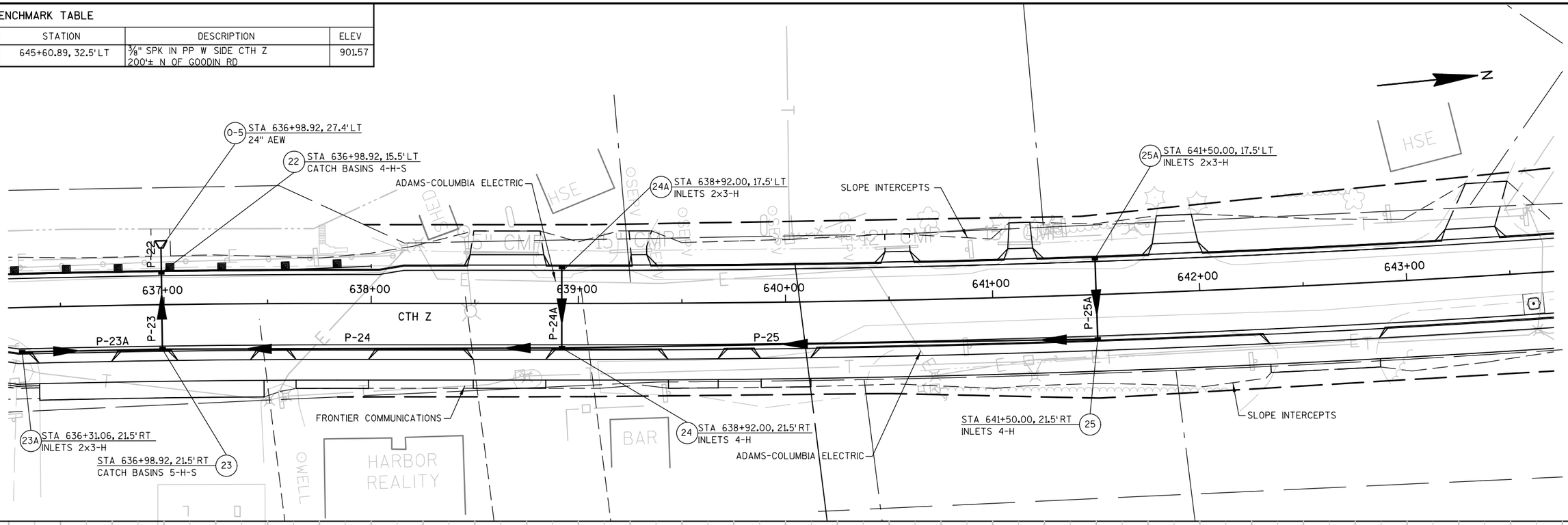
NO	STATION	DESCRIPTION	ELEV
36	621+09.81, 22.8' LT	3/8" SPK IN PP W SIDE CTH Z & 100'± S OF DUCK CREEK DRIVE	889.53

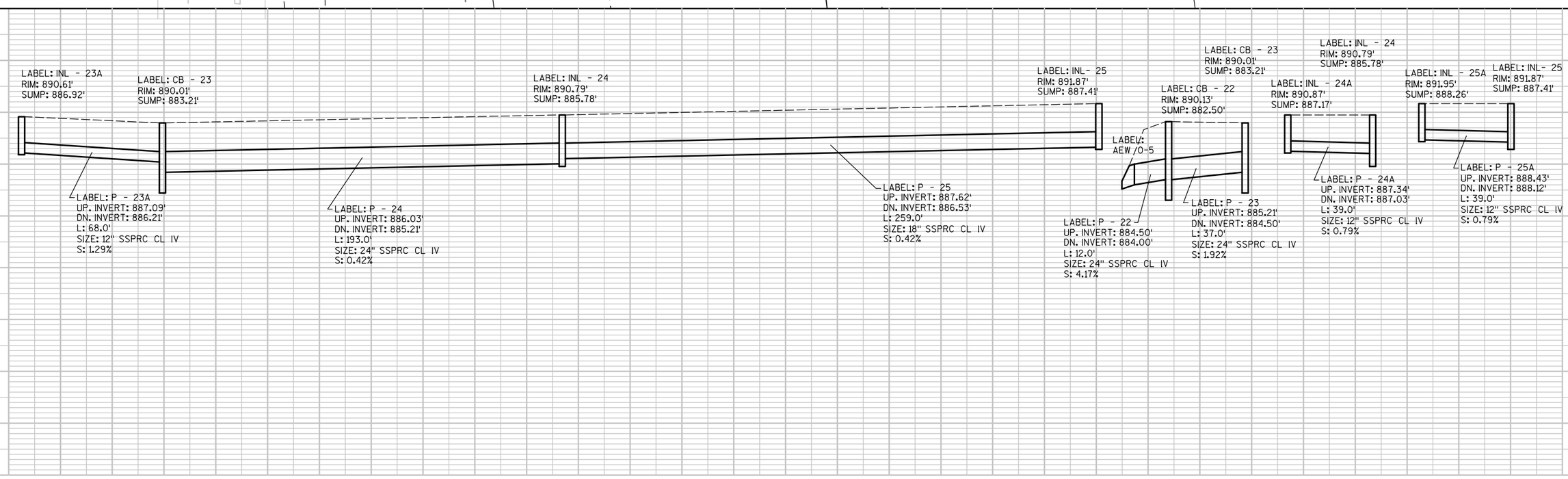


PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	STORM SEWER	SCALE, FEET 0 25 50	SHEET 30	E

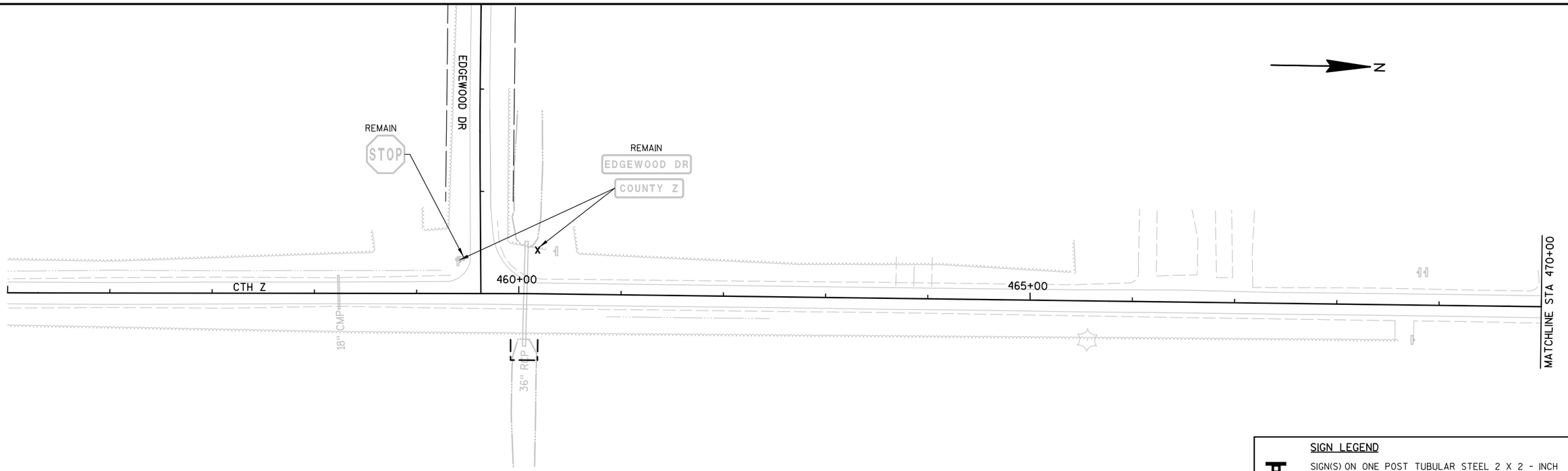
BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
38	645+60.89, 32.5' LT	3/8" SPK IN PP W SIDE CTH Z 200'± N OF GOODIN RD	901.57





PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	STORM SEWER	SCALE, FEET 0 25 50	SHEET 31	E

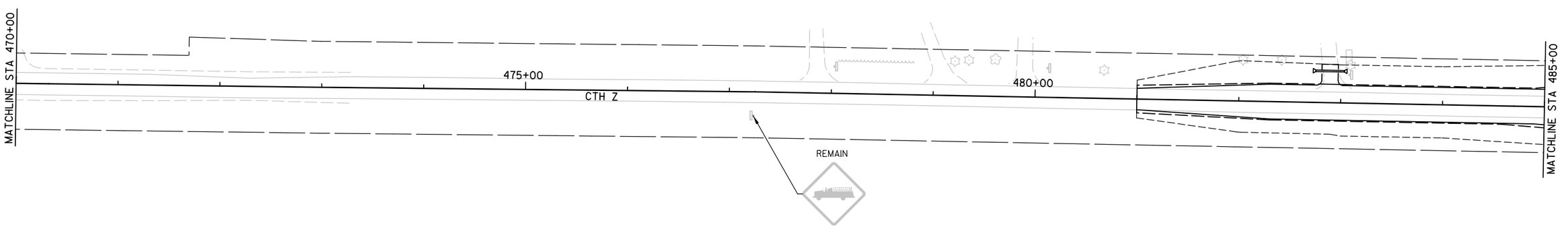


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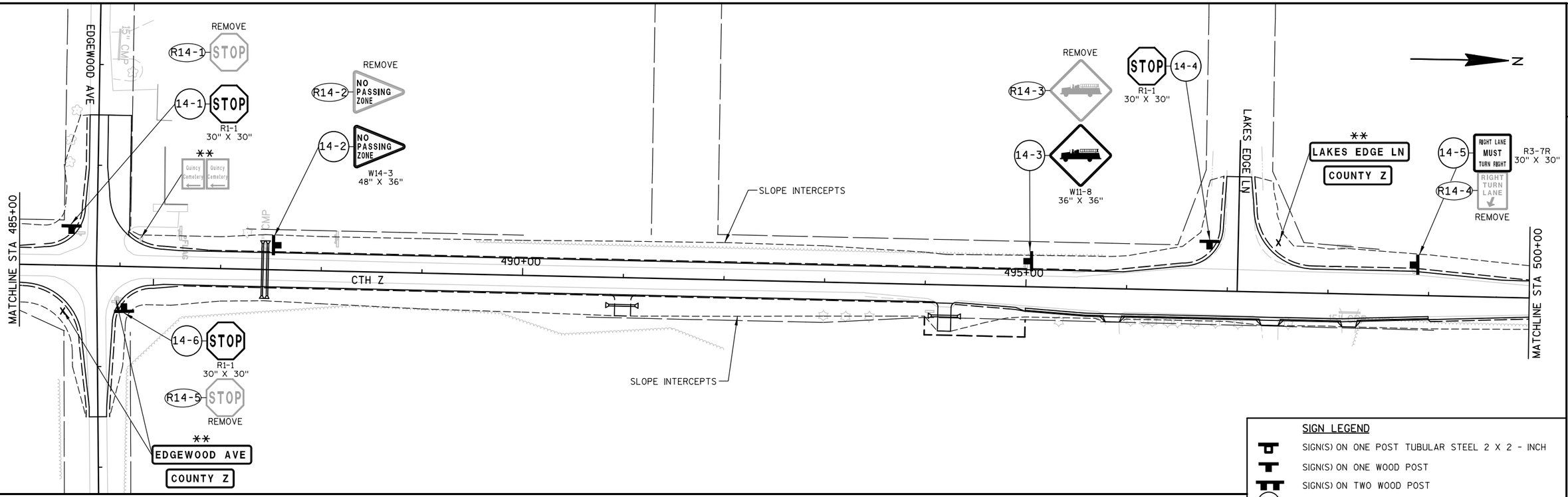
SIGN LEGEND

- SIGN(S) ON ONE POST TUBULAR STEEL 2 X 2 - INCH
- SIGN(S) ON ONE WOOD POST
- SIGN(S) ON TWO WOOD POST
- (000) SIGN GROUP NUMBER (INSTALL/MOVE)
- (000) SIGN GROUP NUMBER (REMOVE)
- ** SIGN(S) AND POST(S) INSTALLED BY ADAMS COUNTY

NOTES: FINAL LOCATIONS OF W14-3 "NO PASSING ZONE" SIGNS TO BE DETERMINED AFTER LOCATING NO PASSING ZONES IS COMPLETE.



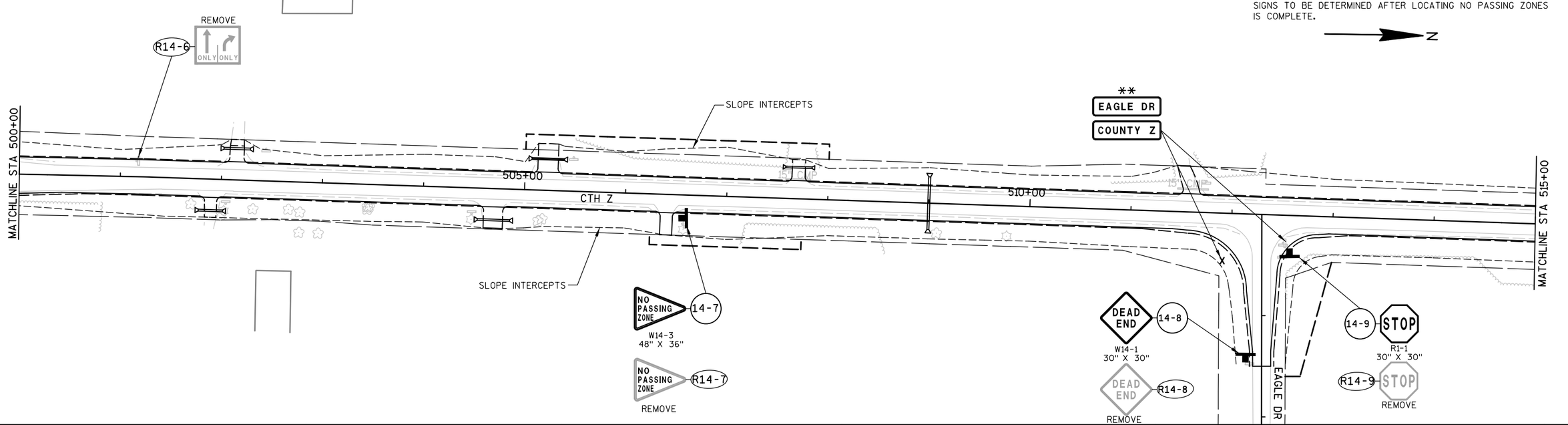
PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	PERMANENT SIGNING	SCALE, FEET 0 50 100	SHEET 32	E



SIGN LEGEND

- SIGN(S) ON ONE POST TUBULAR STEEL 2 X 2 - INCH
- SIGN(S) ON ONE WOOD POST
- SIGN(S) ON TWO WOOD POST
- 000 SIGN GROUP NUMBER (INSTALL/MOVE)
- (000) SIGN GROUP NUMBER (REMOVE)
- ** SIGN(S) AND POST(S) INSTALLED BY ADAMS COUNTY

NOTES: FINAL LOCATIONS OF W14-3 "NO PASSING ZONE" SIGNS TO BE DETERMINED AFTER LOCATING NO PASSING ZONES IS COMPLETE.



PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	PERMANENT SIGNING	SCALE, FEET 0 50 100	SHEET 33	E

2

N

MATCHLINE STA 515+00

520+00

525+00

MATCHLINE STA 530+00

CTH Z

SLOPE INTERCEPTS

SLOPE INTERCEPTS

** EAGLE CT
COUNTY Z

EAGLE CT

15-1 STOP
R1-1
30" X 30"

R15-1 STOP
REMOVE

REMOVE
NO PASSING ZONE R15-2

NO PASSING ZONE 15-2
W14-3
48" X 36"

N

CASTLE ROCK DITCH

** S EAGLE AV
COUNTY Z

MATCHLINE STA 530+00

535+00

540+00

MATCHLINE STA 545+00

CTH Z

SLOPE INTERCEPTS
WOODS

SLOPE INTERCEPTS

MOVE
SPEED ZONE AHEAD 15-3

15-4 STOP
R1-1
30" X 30"

R15-3 STOP
REMOVE

SPEED LIMIT 25
TO REMAIN

EAGLE AVE

WOODS

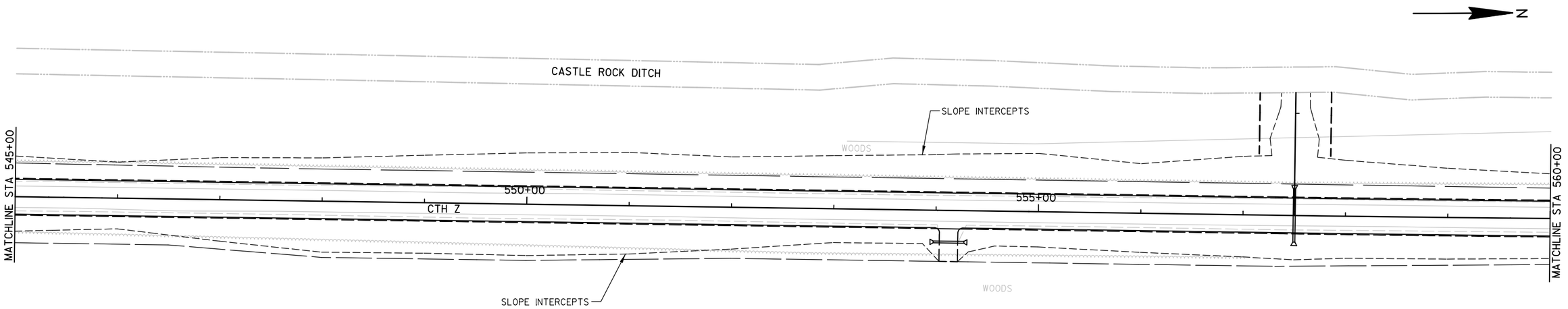
MOVE
15-5
Castle Rock Lake Motel

SIGN LEGEND

- SIGN(S) ON ONE POST TUBULAR STEEL 2 X 2 - INCH
- SIGN(S) ON ONE WOOD POST
- SIGN(S) ON TWO WOOD POST
- (000) SIGN GROUP NUMBER (INSTALL/MOVE)
- (000) SIGN GROUP NUMBER (REMOVE)
- ** SIGN(S) AND POST(S) INSTALLED BY ADAMS COUNTY

NOTES: FINAL LOCATIONS OF W14-3 "NO PASSING ZONE" SIGNS TO BE DETERMINED AFTER LOCATING NO PASSING ZONES IS COMPLETE.

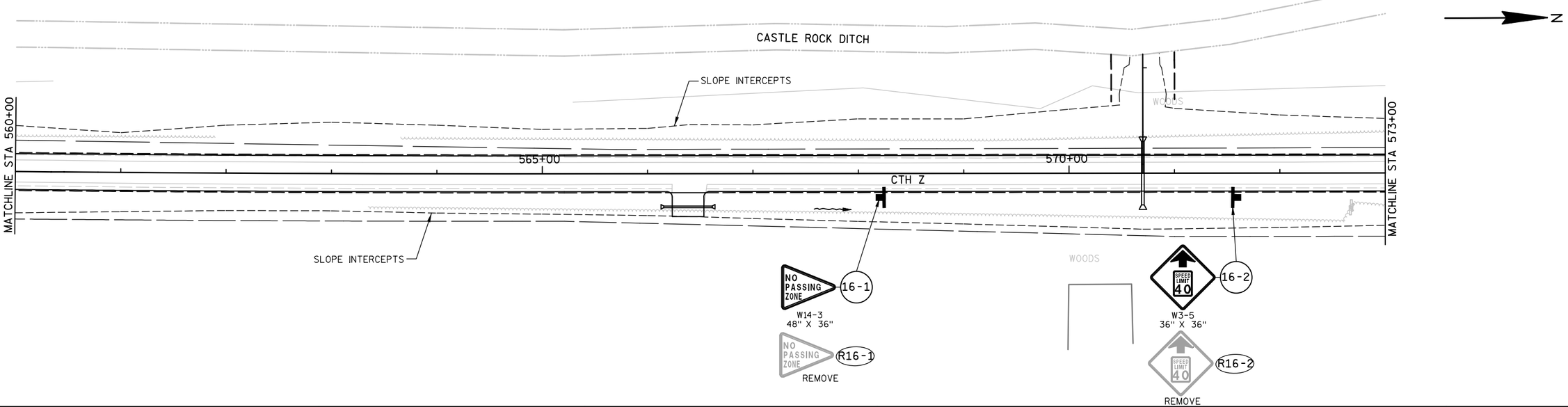
PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	PERMANENT SIGNING	SCALE, FEET 0 50 100	SHEET 34	E



SIGN LEGEND

- SIGN(S) ON ONE POST TUBULAR STEEL 2 X 2 - INCH
- SIGN(S) ON ONE WOOD POST
- SIGN(S) ON TWO WOOD POST
- (000) SIGN GROUP NUMBER (INSTALL/MOVE)
- (000) SIGN GROUP NUMBER (REMOVE)
- ** SIGN(S) AND POST(S) INSTALLED BY ADAMS COUNTY

NOTES: FINAL LOCATIONS OF W14-3 "NO PASSING ZONE" SIGNS TO BE DETERMINED AFTER LOCATING NO PASSING ZONES IS COMPLETE.



PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	PERMANENT SIGNING	SCALE, FEET 0 50 100	SHEET 35	E

2

REMOVE
SPEED LIMIT 55 R17-1

SPEED LIMIT 55 17-1
R2-1
24" X 30"

MOVE
17-2

**
DYKE DR
COUNTY Z

REMOVE
NO PASSING ZONE R17-2

NO PASSING ZONE 17-3
W14-3
48" X 36"

N

SLOPE INTERCEPTS

WOODS

MATCHLINE STA 573+00

575+00

580+00

585+00

MATCHLINE STA 588+00

CTH Z

DYKE DR

17-4 STOP
R1-1
30" X 30"

17-5 SPEED LIMIT 40
R2-1
24" X 30"

R17-3 STOP
REMOVE

R17-4 SPEED LIMIT 40
REMOVE

SLOPE INTERCEPTS

REMOVE
R17-5

**
LAKEVIEW DR

LAKEVIEW DR

17-6 STOP
R1-1
30" X 30"

R17-6 STOP
REMOVE

17-7 SPEED LIMIT 25
W3-5
36" X 36"

NOTES: FINAL LOCATIONS OF W14-3 "NO PASSING ZONE" SIGNS TO BE DETERMINED AFTER LOCATING NO PASSING ZONES IS COMPLETE.

SIGN LEGEND

- SIGN(S) ON ONE POST TUBULAR STEEL 2 X 2 - INCH
- SIGN(S) ON ONE WOOD POST
- SIGN(S) ON TWO WOOD POST
- (000) SIGN GROUP NUMBER (INSTALL/MOVE)
- (000) SIGN GROUP NUMBER (REMOVE)
- ** SIGN(S) AND POST(S) INSTALLED BY ADAMS COUNTY
- ● TYPE 1 CONCRETE BASE
- PUSH BUTTON
- RECTANGULAR RAPID FLASHING BEACON (RRFB)

SPEED LIMIT 40 R17-7
REMOVE

SPEED LIMIT 40 17-8
R2-1
24" X 30"

REMOVE
SPEED LIMIT 25 R17-8

SPEED LIMIT 25 17-9
R2-1
24" X 30"

SLOPE INTERCEPTS

WOODS

590+00

595+00

600+00

MATCHLINE STA 588+00

MATCHLINE STA 603+00

CTH Z

CMP

REMOVE
SPEED LIMIT 25 R17-12

17-15 SPEED LIMIT 25
R2-1
24" X 30"

R17-13 SPEED LIMIT 25
REMOVE

WOODS
SLOPE INTERCEPTS

R1-1
30" X 30"
STOP 17-11
Buckle up **

REMOVE
STOP R17-9
Buckle up

DO NOT ENTER R17-10
REMOVE

17-12 R5-1
30" X 30"
DO NOT ENTER
EXIT ONLY **

DO NOT ENTER R17-11
REMOVE
**

N

PARK EXIT

W11-2
30" X 30"
17-14

W16-7 (L)
24" X 12"

PARK ENT

DO NOT ENTER 17-10
R5-1
30" X 30"

W11-2
30" X 30"
17-13

W16-7 (R)
24" X 12"

**
DYKE AVE
COUNTY Z

R1-1
30" X 30"
STOP 17-16
**
REMOVE

STOP R17-14

**
ENTRANCE ONLY

17-18
W11-2
30" X 30"

17-19

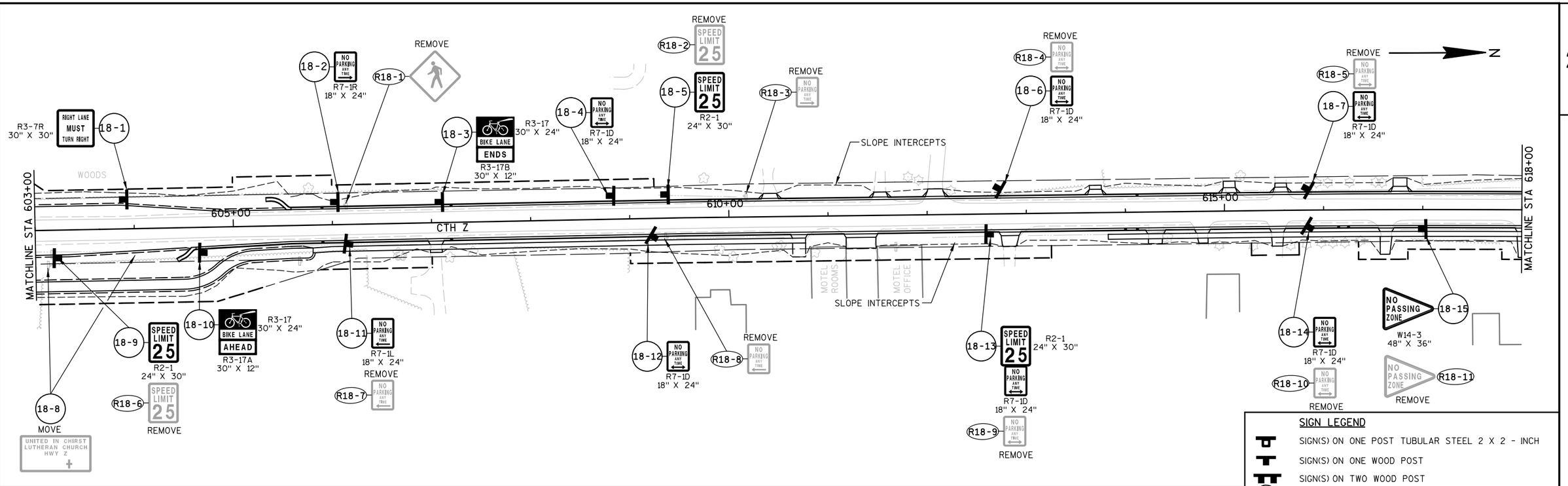
17-17
W11-2
30" X 30"
W16-7L
24" X 12"

W16-7R
24" X 12"
MOVE
Castle Rock County Park

DYKE AVE

PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	PERMANENT SIGNING	SCALE, FEET 0 50 100	SHEET 36	E

2



PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	PERMANENT SIGNING	SCALE, FEET 0 50 100	SHEET 37	E

2

CASTLE ROCK LAKE

N

MATCHLINE STA 633+00

635+00

640+00

645+00

MATCHLINE STA 648+00

CTH Z

SLOPE INTERCEPTS

SLOPE INTERCEPTS

REMOVE

19-1 R19-1 W5-52L 12" X 36"

19-2 R19-2 W5-52R 12" X 36" NO FISHING FROM BRIDGE **

19-3 NO PARKING ANY TIME R7-1D 18" X 24"

19-4 R19-3 NO PARKING ANY TIME R7-1D 18" X 24"

19-5 SPEED LIMIT 25 NO PARKING ANY TIME R19-4 R2-1 24" X 30" R7-1D 18" X 24"

19-6 STOP R1-1 30" X 30"

** Goodin Rd PRIVATE DRIVE

19-7 NO PARKING ANY TIME R7-1D 18" X 24" R19-5

19-8 NO PARKING ANY TIME R7-1L 18" X 24"

R19-6

19-9 W5-52R 12" X 36" R19-7

19-10 W5-52L 12" X 36" R19-8

19-11 NO PARKING ANY TIME R7-1D 18" X 24" R19-9 NO PARKING HERE TO CORNER

19-12 YIELD R1-2 36" X 26"

19-13 NO PARKING ANY TIME R7-1R 18" X 24" R19-10

19-14 SPEED LIMIT 25 R2-1 24" X 30" R19-11

19-15 JCT COUNTY F NO PARKING ANY TIME J13-1 24" X 45" R19-12

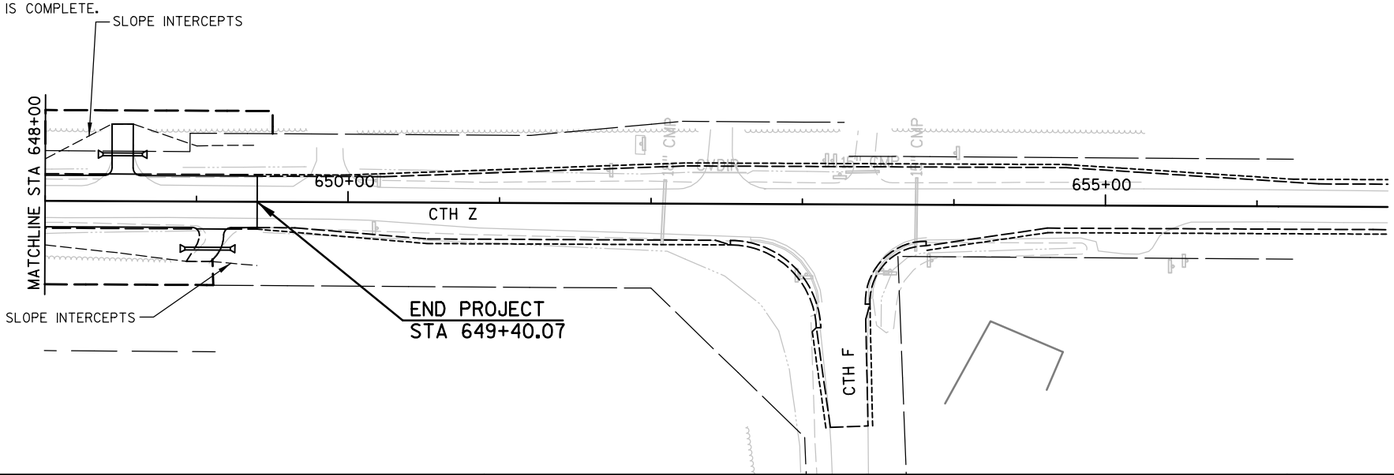
19-16 NO PASSING ZONE W14-3 48" X 36" R19-13

HSE WOODS HARBOR REALITY BAR CITGO KLEANS CREEK SMALL BOAT ACCESS

SIGN LEGEND

- SIGN(S) ON ONE POST TUBULAR STEEL 2 X 2 - INCH
- SIGN(S) ON ONE WOOD POST
- SIGN(S) ON TWO WOOD POST
- (000) SIGN GROUP NUMBER (INSTALL/MOVE)
- (000) SIGN GROUP NUMBER (REMOVE)
- ** SIGN(S) AND POST(S) INSTALLED BY ADAMS COUNTY

NOTES: FINAL LOCATIONS OF W14-3 "NO PASSING ZONE" SIGNS TO BE DETERMINED AFTER LOCATING NO PASSING ZONES IS COMPLETE.



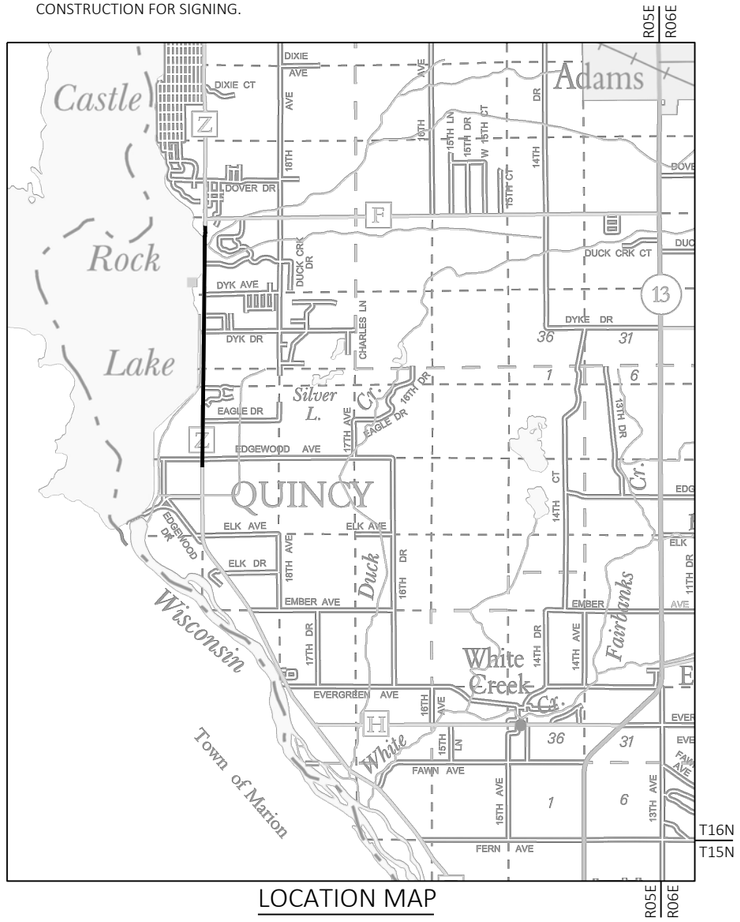
PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	PERMANENT SIGNING	SCALE, FEET 0 50 100	SHEET 38	E

LEGEND

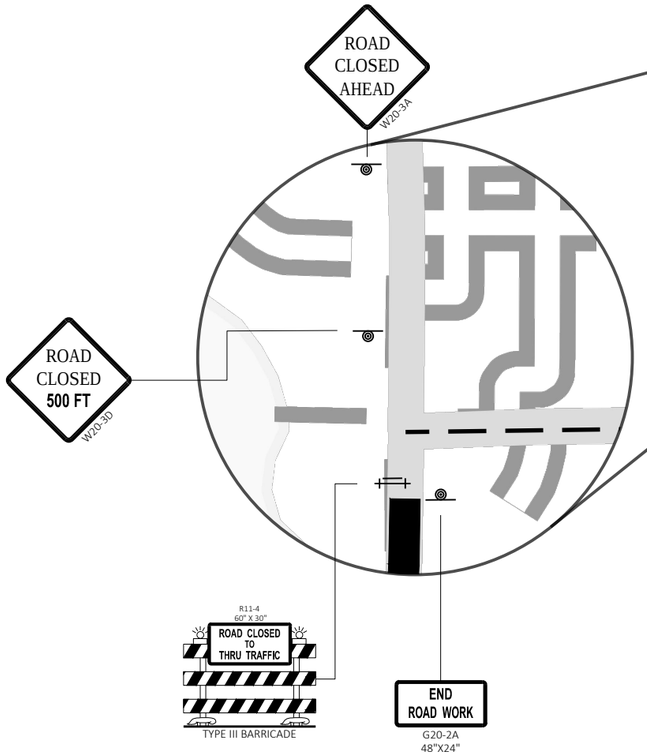
- DETOUR ROUTE
- CONSTRUCTION ZONE / ROAD CLOSED
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- OR — SIGN ON WOOD POST(S)
- SIDE ROAD CLOSURE SEE SDD 15C03-05, DETAIL 4
- SIGN ON TYPE III BARRICADE
- TYPE 'A' LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)

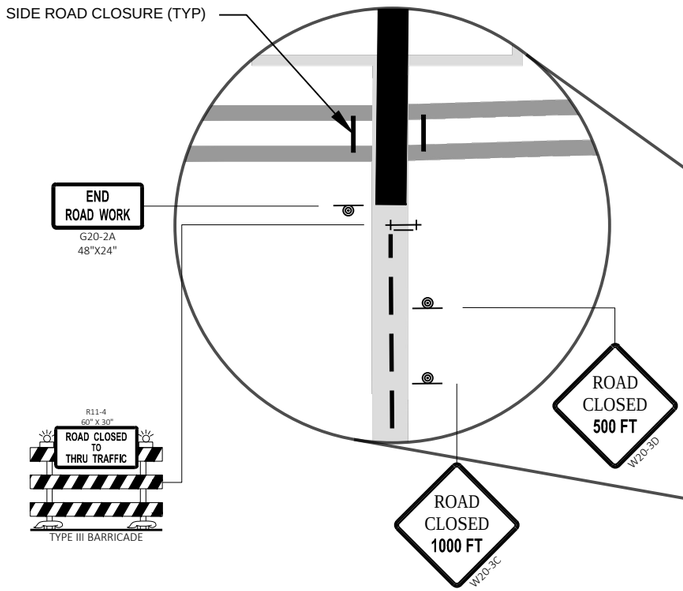
NOTES

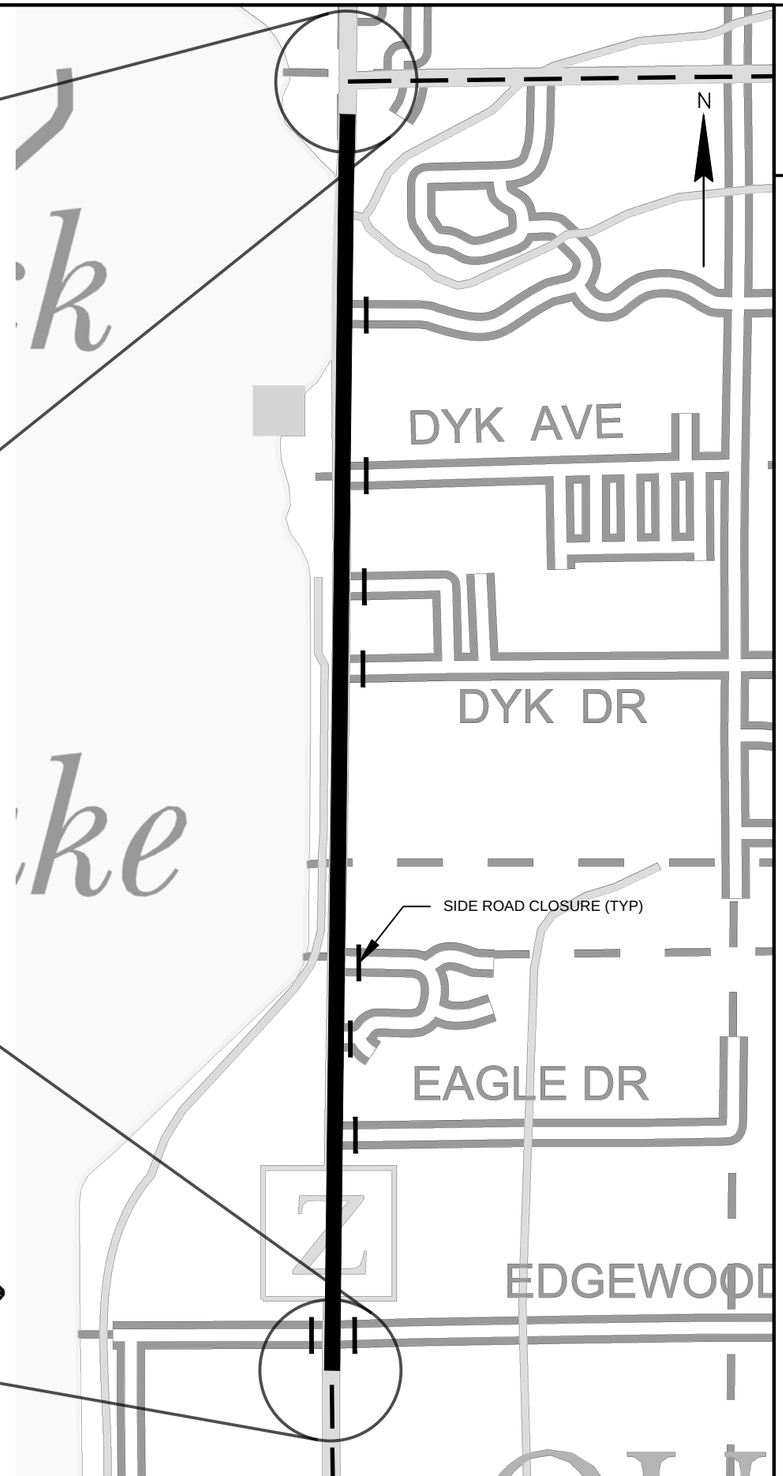
1. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
3. "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
4. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
5. CONTRACTOR TO COORDINATE WITH HIGHWAY DEPARTMENT PRIOR TO CONSTRUCTION FOR SIGNING.



LOCATION MAP







PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	TRAFFIC CONTROL	SHEET 39	E

LEGEND

- DETOUR ROUTE
- CONSTRUCTION ZONE
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- OR — SIGN ON WOOD POST(S)
- SIDE ROAD CLOSURE DETAIL
- SIGN ON TYPE III BARRICADE
- TYPE 'A' LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)

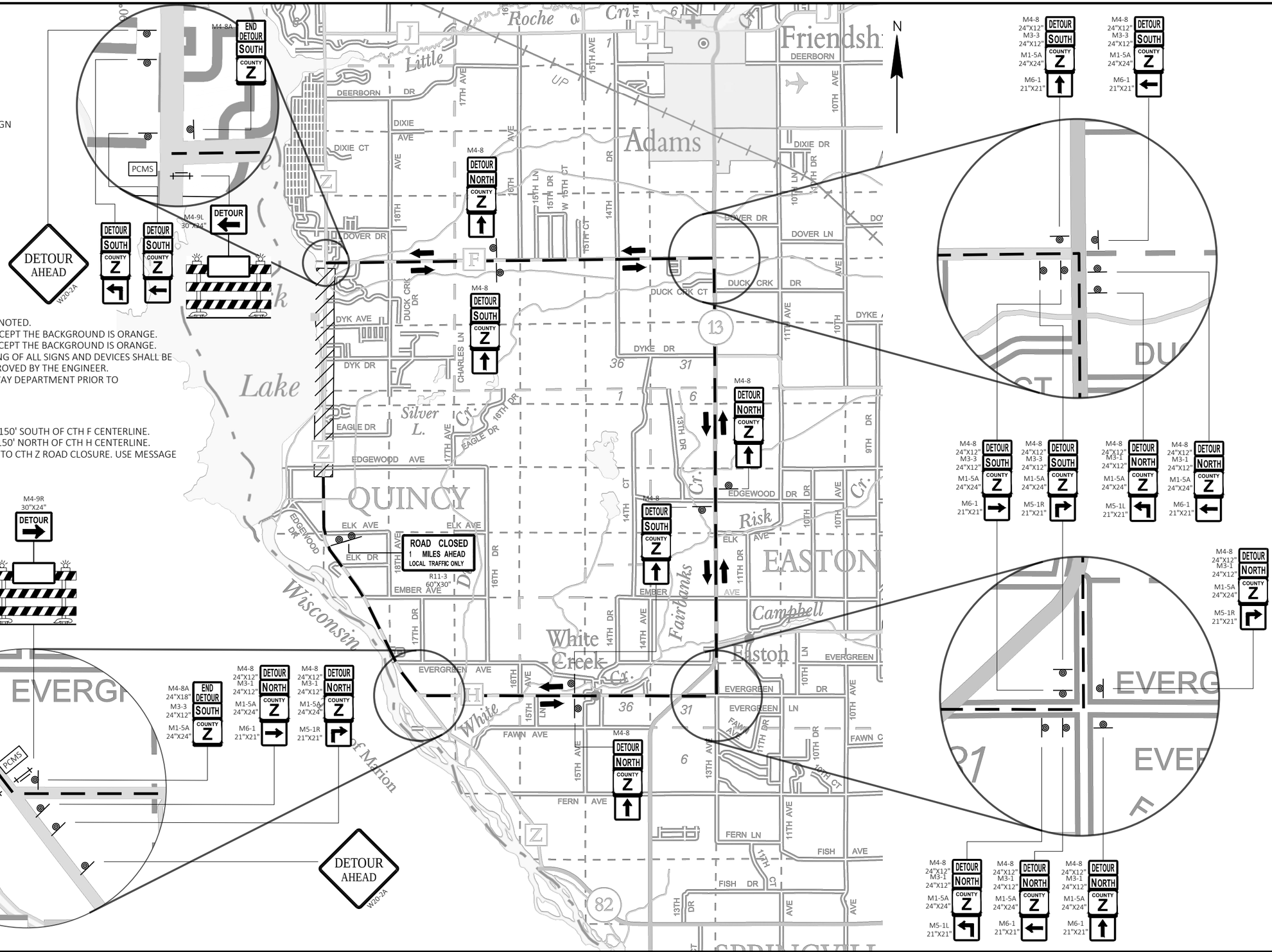
NOTES

1. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
3. "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
4. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
5. CONTRACTOR TO COORDINATE WITH HIGHWAY DEPARTMENT PRIOR TO CONSTRUCTION FOR SIGNING.

PCMS NOTES

1. PLACE NB PCMS ON COUNTY RIGHT OF WAY 150' SOUTH OF CTH F CENTERLINE.
2. PLACE SB PCMS ON COUNTY RIGHT OF WAY 150' NORTH OF CTH H CENTERLINE.
3. PLACE PCMS SIGNS 7 CALENDAR DAYS PRIOR TO CTH Z ROAD CLOSURE. USE MESSAGE AS FOLLOWS:

CTH Z TO CLOSE	(DAY) (MON) (DATE)
FRAME 1	FRAME 2



PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	DETOUR ROUTE	SHEET 40	E

△
CP 27
STA 501+83.46, 16.69' RT
Y=187448.937
X=499294.946
1/4" REBAR 4'± E OF E EOB
& S EOG PE TO FIRE #2572

△
CP 28
STA 512+30.87, 20.50' RT
Y=188496.132
X=499316.076
PK NAIL 10'± E OF E EOB
& ℄ EAGLE DR TO E

△
CP 29
STA 525+49.72, 21.20' RT
Y=189814.771
X=499339.511
MAG NAIL 10'± E OF E EOB
& ℄ EAGLE CT TO E

△
CP 30
STA 535+53.86
Y=190818.607
X=499356.368
MAG NAIL 10'± E OF E EOB
& ℄ EAGLE AVE TO E

△
CP 31
STA 550+42.56, 17.03' RT
Y=192307.102
X=499385.871
1/4" REBAR 6'± E OF E EOB
& 10'± W OF TEL PED #1717

△
CP 32
STA 574+67.27, 15.01' RT
Y=194731.871
X=499411.541
PK NAIL 4'± E OF E EOB
& ℄ DYK AVE TO E

△
CP 33
STA 585+69.37, 17.49' RT
Y=195833.858
X=499421.495
MAG NAIL 6'± E OF E EOB
& ℄ LAKE VIEW DR TO E

△
CP 34
STA 600+32.53, 19.28' RT
Y=197297.312
X=499423.029
PK NAIL 6'± E OF E EOB
& ℄ DYK AVE TO E

△
CP 35
STA 610+83.77, 16.57' RT
Y=198348.429
X=499407.167
1/4" REBAR 6'± E OF E EOG
& S LINE GREEN CABINS PUSHED
W HIAWATHA MOTEL

△
CP 36
STA 622+04.08, 18.07' RT
Y=199468.052
X=499414.804
PK NAIL 6'± E OF E EOB
& ℄ DUCK DREEK DR TO E

△
CP 37
STA 629+43.91, 19.55' RT
Y=200208.478
X=499424.364
1/4" REBAR 6'± E OF E EOB
& 12'± S OF WHITE PLASTIC
POST ⊗ S END BEAM GUARD

△
CP 38
STA 637+58.78, 21.83' RT
Y=201020.044
X=499451.938
PK NAIL 10'± E OF E EOB &
25'± W OF HARBOR REALTY SIGN

△
CP 39
STA 643+60.55, 14.81' RT
Y=201621.479
X=499491.197
1/4" REBAR 4'± E OF E EOB
& 10'N OF MAIL BOXES

△
CP 40
STA 652+91.62, 26.77' RT
Y=202552.732
X=499514.832
PK NAIL 12'± E OF E EOB
& ℄ "F" TO E

PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	CONTROL TIES	SHEET 41	E

6355-00-74

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	37.000	37.000
0004	201.0120	Clearing	ID	194.000	194.000
0006	201.0205	Grubbing	STA	37.000	37.000
0008	201.0220	Grubbing	ID	194.000	194.000
0010	203.0100	Removing Small Pipe Culverts	EACH	13.000	13.000
0012	204.0120	Removing Asphaltic Surface Milling	SY	114.000	114.000
0014	204.0165	Removing Guardrail	LF	2,411.000	2,411.000
0016	204.9165.S	Removing (item description) 01. Concrete Steps	SF	65.000	65.000
0018	205.0100	Excavation Common	CY	47,871.000	47,871.000
0020	213.0100	Finishing Roadway (project) 01. 6355-00-74	EACH	1.000	1.000
0022	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,711.000	2,711.000
0024	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	44,897.000	44,897.000
0026	312.0110	Select Crushed Material	TON	5,257.000	5,257.000
0028	325.0100	Pulverize and Relay	SY	17,777.000	17,777.000
0030	374.1020.S	QMP Pulverize and Relay Compaction	SY	17,777.000	17,777.000
0032	455.0605	Tack Coat	GAL	4,666.000	4,666.000
0034	460.2000	Incentive Density HMA Pavement	DOL	10,870.000	10,870.000
0036	460.5223	HMA Pavement 3 LT 58-28 S	TON	9,539.500	9,539.500
0038	460.5224	HMA Pavement 4 LT 58-28 S	TON	7,460.500	7,460.500
0040	465.0105	Asphaltic Surface	TON	429.000	429.000
0042	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	163.000	163.000
0044	465.0315	Asphaltic Flumes	SY	22.000	22.000
0046	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	10,974.000	10,974.000
0048	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	7,166.000	7,166.000
0050	521.1018	Apron Endwalls for Culvert Pipe Steel 18-Inch	EACH	6.000	6.000
0052	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	12.000	12.000
0054	521.1030	Apron Endwalls for Culvert Pipe Steel 30-Inch	EACH	6.000	6.000
0056	521.1221	Apron Endwalls for Pipe Arch Steel 21x15-Inch	EACH	46.000	46.000
0058	521.1228	Apron Endwalls for Pipe Arch Steel 28x20-Inch	EACH	2.000	2.000
0060	521.3118	Culvert Pipe Corrugated Steel 18-Inch	LF	186.000	186.000
0062	521.3124	Culvert Pipe Corrugated Steel 24-Inch	LF	308.000	308.000
0064	521.3130	Culvert Pipe Corrugated Steel 30-Inch	LF	60.000	60.000
0066	521.3721	Pipe Arch Corrugated Steel 21x15-Inch	LF	780.000	780.000
0068	521.3728	Pipe Arch Corrugated Steel 28x20-Inch	LF	50.000	50.000
0070	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	1.000	1.000
0072	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	2.000	2.000
0074	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	1.000	1.000
0076	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	8,334.000	8,334.000
0078	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	591.000	591.000
0080	602.0410	Concrete Sidewalk 5-Inch	SF	8,285.000	8,285.000
0082	602.0415	Concrete Sidewalk 6-Inch	SF	1,701.000	1,701.000
0084	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	48.000	48.000
0086	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	43.000	43.000
0088	606.0100	Riprap Light	CY	10.000	10.000
0090	606.0200	Riprap Medium	CY	67.000	67.000
0092	606.0300	Riprap Heavy	CY	1,700.000	1,700.000
0094	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	364.000	364.000
0096	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	432.000	432.000
0098	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	637.000	637.000

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Line	Item	Item Description	Unit	Total	Qty
0100	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	1,002.000	1,002.000
0102	608.0430	Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	LF	50.000	50.000
0104	611.0624	Inlet Covers Type H	EACH	27.000	27.000
0106	611.0639	Inlet Covers Type H-S	EACH	5.000	5.000
0108	611.1004	Catch Basins 4-FT Diameter	EACH	2.000	2.000
0110	611.1005	Catch Basins 5-FT Diameter	EACH	4.000	4.000
0112	611.1006	Catch Basins 6-FT Diameter	EACH	1.000	1.000
0114	611.3004	Inlets 4-FT Diameter	EACH	12.000	12.000
0116	611.3230	Inlets 2x3-FT	EACH	13.000	13.000
0118	611.9800.S	Pipe Grates	EACH	3.000	3.000
0120	614.0950	Replacing Guardrail Posts and Blocks	EACH	12.000	12.000
0122	614.0951	Replacing Guardrail Rail and Hardware	LF	64.000	64.000
0124	614.2330	MGS Guardrail 3 K	LF	1,872.000	1,872.000
0126	614.2610	MGS Guardrail Terminal EAT	EACH	6.000	6.000
0128	616.0204	Fence Chain Link 4-FT	LF	685.000	685.000
0130	618.0100	Maintenance And Repair of Haul Roads (project) 01. 6355-00-74	EACH	1.000	1.000
0132	619.1000	Mobilization	EACH	1.000	1.000
0134	624.0100	Water	MGAL	636.000	636.000
0136	625.0100	Topsoil	SY	4,881.000	4,881.000
0138	627.0200	Mulching	SY	95,892.000	95,892.000
0140	628.1104	Erosion Bales	EACH	200.000	200.000
0142	628.1504	Silt Fence	LF	3,846.000	3,846.000
0144	628.1520	Silt Fence Maintenance	LF	3,846.000	3,846.000
0146	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0148	628.1910	Mobilizations Emergency Erosion Control	EACH	6.000	6.000
0150	628.2006	Erosion Mat Urban Class I Type A	SY	613.000	613.000
0152	628.2008	Erosion Mat Urban Class I Type B	SY	5,223.000	5,223.000
0154	628.2027	Erosion Mat Class II Type C	SY	475.000	475.000
0156	628.6005	Turbidity Barriers	SY	1,340.000	1,340.000
0158	628.7005	Inlet Protection Type A	EACH	32.000	32.000
0160	628.7015	Inlet Protection Type C	EACH	32.000	32.000
0162	628.7020	Inlet Protection Type D	EACH	5.000	5.000
0164	628.7504	Temporary Ditch Checks	LF	340.000	340.000
0166	628.7555	Culvert Pipe Checks	EACH	74.000	74.000
0168	629.0210	Fertilizer Type B	CWT	51.000	51.000
0170	630.0120	Seeding Mixture No. 20	LB	2,167.000	2,167.000
0172	630.0140	Seeding Mixture No. 40	LB	255.000	255.000
0174	630.0200	Seeding Temporary	LB	2,549.000	2,549.000
0176	630.0500	Seed Water	MGAL	2,154.000	2,154.000
0178	631.0300	Sod Water	MGAL	6.000	6.000
0180	631.1200	Sod Erosion Control Sandy Soil	SY	260.000	260.000
0182	633.5200	Markers Culvert End	EACH	18.000	18.000
0184	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	20.000	20.000
0186	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	54.000	54.000
0188	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	6.000	6.000
0190	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	1.000	1.000
0192	637.2210	Signs Type II Reflective H	SF	331.750	331.750
0194	637.2230	Signs Type II Reflective F	SF	102.750	102.750
0196	638.2102	Moving Signs Type II	EACH	6.000	6.000

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Line	Item	Item Description	Unit	Total	Qty
0198	638.2602	Removing Signs Type II	EACH	74.000	74.000
0200	638.3000	Removing Small Sign Supports	EACH	64.000	64.000
0202	642.5201	Field Office Type C	EACH	1.000	1.000
0204	643.0300	Traffic Control Drums	DAY	200.000	200.000
0206	643.0420	Traffic Control Barricades Type III	DAY	455.000	455.000
0208	643.0705	Traffic Control Warning Lights Type A	DAY	910.000	910.000
0210	643.0900	Traffic Control Signs	DAY	10,075.000	10,075.000
0212	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0214	643.5000	Traffic Control	EACH	1.000	1.000
0216	645.0120	Geotextile Type HR	SY	2,861.000	2,861.000
0218	645.0130	Geotextile Type R	SY	45.000	45.000
0220	645.0220	Geogrid Type SR	SY	7,600.000	7,600.000
0222	646.1020	Marking Line Epoxy 4-Inch	LF	70,502.000	70,502.000
0224	646.3020	Marking Line Epoxy 8-Inch	LF	290.000	290.000
0226	646.5020	Marking Arrow Epoxy	EACH	15.000	15.000
0228	646.5120	Marking Word Epoxy	EACH	1.000	1.000
0230	646.5220	Marking Symbol Epoxy	EACH	20.000	20.000
0232	646.6120	Marking Stop Line Epoxy 18-Inch	LF	68.000	68.000
0234	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	100.000	100.000
0236	648.0100	Locating No-Passing Zones	MI	1.790	1.790
0238	650.4000	Construction Staking Storm Sewer	EACH	36.000	36.000
0240	650.4500	Construction Staking Subgrade	LF	1,900.000	1,900.000
0242	650.5000	Construction Staking Base	LF	18,261.000	18,261.000
0244	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	8,925.000	8,925.000
0246	650.6000	Construction Staking Pipe Culverts	EACH	37.000	37.000
0248	650.9000	Construction Staking Curb Ramps	EACH	5.000	5.000
0250	650.9910	Construction Staking Supplemental Control (project) 01. 6355-00-74	LS	1.000	1.000
0252	650.9920	Construction Staking Slope Stakes	LF	18,261.000	18,261.000
0254	654.0101	Concrete Bases Type 1	EACH	2.000	2.000
0256	690.0150	Sawing Asphalt	LF	2,962.000	2,962.000
0258	690.0250	Sawing Concrete	LF	3,329.000	3,329.000
0260	740.0440	Incentive IRI Ride	DOL	6,380.000	6,380.000
0262	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,260.000	1,260.000
0264	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	2,000.000	2,000.000
0266	SPV.0030	Special 01. Fertilizer For Lawn Type Turf	CWT	7.000	7.000
0268	SPV.0060	Special 01. Fish Habitat Structure	EACH	3.000	3.000
0270	SPV.0060	Special 02. Furnish and Install Solar Powered RRFB System (601+81, RT)	EACH	1.000	1.000
0272	SPV.0060	Special 03. Furnish and Install Solar Powered RRFB System (601+92, LT)	EACH	1.000	1.000
0274	SPV.0180	Special 01. Preparing Topsoil For Lawn Type Turf	SY	8,205.000	8,205.000

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CLEARING AND GRUBBING

STATION	-	STATION	LOCATION	201.0105 CLEARING (STA)	201.0120 CLEARING (ID)	201.0205 GRUBBING (STA)	201.0220 GRUBBING (ID)
505+00	-	508+00	LT	3	-	3	-
507+00	-	508+00	RT	1	-	1	-
587+00	-	607+00	LT	20	-	20	-
601+00	-	607+00	RT	6	-	6	-
609+90			RT	-	28	-	28
610+50			RT	-	40	-	40
610+55			RT	-	36	-	36
616+00	-	619+00	RT	3	-	3	-
618+05			RT	-	24	-	24
621+00	-	621+50	LT	1	-	1	-
646+00			RT	-	24	-	24
647+55			RT	-	24	-	24
EAGLE DR							
75+80			LT	-	18	-	18
PARK EXIT							
114+00	-	115+00	RT	1	-	1	-
PARK ENTRANCE							
123+00	-	125+00	RT	2	-	2	-
			PROJECT TOTALS	**37**	**194**	**37**	**194**

REMOVING SMALL PIPE CULVERTS

STATION	OFFSET	DESCRIPTION	203.0100 (EACH)	REMARKS
487+44	-	24" CPCS	1	
498+20	RT	15" CPCS	1	
507+70	LT	15" CPCS	1	
511+55	LT	15" CPCS	1	
580+92	RT	15" CPCS	1	
591+47	RT	15" CPCS	1	
614+30	RT	12" CPCS	1	
620+43	-	18" CPCS	1	NOT ON TOPO
638+65	LT	15" CPCS	1	
639+25	LT	15" CPCS	1	
640+55	LT	12" CPCS	1	
641+14	LT	15" CPCS	1	
DUCK CREEK DR	-			
131+22	-	36" CPCS	1	
		PROJECT TOTALS	**13**	

REMOVING CONCRETE STEPS

STATION	LOCATION	204.9165.S (SF)	REMARKS
621+00	LT	65	
	PROJECT TOTALS	**65**	

REMOVING GUARDRAIL

STATION	-	STATION	LOCATION	204.0165 (LF)
618+64	-	620+97	LT	233
621+02	-	627+19	LT	616
629+21	-	638+12	LT	891
629+57	-	636+30	RT	671
			PROJECT TOTALS	2411

BASE AGGREGATE ITEMS

STATION	-	STATION	LOCATION	*305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON)	*305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (TCN)	312.0110 SELECT CRUSHED MATERIAL (TON)	645.0220 GEOGRID TYPE SR (SY)	**624.0100 WATER (MGAL)
481+00	-	486+50		64	1547	1355	2000	16
486+50	-	500+00		158	4393	3903	5600	46
500+00	-	508+00		80	2110	-	-	22
508+00	-	530+50		224	3102	-	-	33
530+50	-	534+00		35	923	-	-	10
534+00	-	547+00		129	1792	-	-	19
547+00	-	555+50		85	2242	-	-	23
555+50	-	581+00		254	3516	-	-	38
581+00	-	594+00		129	3429	-	-	36
594+00	-	599+66.48		56	783	-	-	8
599+66.48	-	647+00		471	13806	-	-	143
647+00	-	649+40.07		24	520	-	-	5
EDGEWOOD AVE								
63+50	-	64+82		18	472	-	-	5
65+82	-	66+50		38	428	-	-	5
LAKES EDGE LN								
68+86	-	69+76		50	427	-	-	5
EAGLE DR								
75+18	-	76+50		38	371	-	-	4
EAGLE CT								
80+18	-	81+30		31	366	-	-	4
EAGLE AVE								
85+18	-	86+35		35	408	-	-	4
DYKE DR								
105+18	-	106+50		38	434	-	-	5
LAKEVIEW DR								
110+18	-	111+65		37	453	-	-	5
PARK EXIT								
113+75	-	114+82		30	252	-	-	3
DYKE AVE								
120+22	-	121+50		47	441	-	-	5
PARK ENTRANCE								
123+50	-	124+76		61	480	-	-	5
DUCK CREEK DR								
130+20	-	131+50		24	381	-	-	4
			UNDISTRIBUTED	-	-	-	-	113
			PROJECT TOTALS	2155	43077	5257	7600	565

*ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLANS

** WATER CONVERSION IS 1 MGAL/100 TON OF BASE AGGREGATE DENSE MATERIAL. USE WATER FOR BASE COMPACTION

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DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1) CUT (2)	205.0100 COMMON EXCAVATION (1) EBS EXCAVATION (3)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	REDUCED EBS IN FILL (6) FACTOR 0.80	EXPANDED EBS BACKFILL (7) FACTOR 1.30	UNEXPANDED FILL	EXPANDED FILL (8) FACTOR 1.30	MASS ORDINATE +/- (9)	208.0100 BORROW	COMMENT
DIVISION 1													
	481+00 - 485+04	CTH Z	500	710	157	343	568	923	80	-635	977		
	485+04 - 496+00	CTH Z (Incl. Edgewood Ave)	2,264	400	426	1,838	320	520	614	382	1,456		
	496+00 - 508+00	CTH Z (Incl. Lakes Edge Ln)	3,477	1,690	467	3,010	1,352	2,197	396	-1,243	4,253		
	508+00 - 530+50	CTH Z (Incl. Eagle Dr & Eagle Ct)	2,162		1,000	1,162			1,577	2,050	-888		
	530+50 - 534+00	CTH Z	1,549		136	1,413			330	429	984		
	534+00 - 581+00	CTH Z (Incl. Eagle Ave, Outfalls 1,2,3 & Dyke Dr)	14,818		1,711	13,107			1,277	1,660	11,447		
	581+00 - 593+00	CTH Z (Incl. Lakeview Dr)	4,456		467	3,989			662	860	3,129		
	593+00 - 599+66	CTH Z	1,134		252	882			444	577	305		
	599+66 - 601+92	CTH Z (Incl. Park Exit & Dyke Ave)	401		88	313			252	328	-15		
	601+92 - 604+50	CTH Z (Incl. Park Entr)	334		100	234			306	398	-165		
	604+50 - 612+80	CTH Z	3,173		323	2,850			161	209	2,641		
	612+80 - 623+00	CTH Z (Incl. Duck Creek Dr)	3,700		397	3,303			269	349	2,953		
	623+00 - 628+00	CTH Z	1,764		194	1,570			167	217	1,353		
	628+00 - 637+00	CTH Z	1,601		350	1,251			979	1,273	-22		
	637+00 - 649+40	CTH Z	3,738		482	3,256			344	448	2,809		
DIVISION 1 SUBTOTAL			45,071	2,800	6,550	38,521	2,240	3,640	7,859	7,304	31,217		
GRAND TOTAL			45,071	2,800	6,550	38,521	2,240	3,640	7,859	7,304	31,217	0	
TOTAL COMMON EXC			47,871										

NOTES:

(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 BORROW OR CUT AS WELL.

(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL

(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL

(6) REDUCED EBS IN FILL - EXCAVATED EBS MATERIAL IS USUABLE IN FILLS OUTSIDE THE 1:1 SLOPE. EBS IN FILL REDUCTION FACTOR = 0.80

(7) EXPANDED EBS BACKFILL - THIS IS TO BE FILLED WITH BORROW OR CUT MATERIAL. EBS BACKFILL FACTOR = 1.30.

(8) EXPANDED FILL FACTOR = 1.3

DEPENDING ON SELECTIONS: **EXPANDED FILL = (UNEXPANDED FILL - REDUCED EBS) * FILL FACTOR**

(9) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

ASPHALTIC PAVEMENT ITEMS

STATION	-	STATION	LAYER THICKNESS (IN)	325.0100 PULVERIZE AND RELAY (SY)	**624.0100 WATER (MGAL)	455.0605 TACK COAT (GAL)	460.5223 HMA PAVEMENT 3 LT 58-28 S (TON)	460.5224 HMA PAVEMENT 4 LT 58-28 S (TON)
481+00	-	486+50	3.00	-	-	101	340	-
481+00	-	486+50	2.00	-	-	101	-	227
486+50	-	500+00	3.00	-	-	-	962	-
486+50	-	500+00	2.00	-	-	286	-	642
500+00	-	508+00	2.50	-	-	-	423	-
500+00	-	508+00	2.00	-	-	151	-	338
508+00	-	530+50	2.50	6000	24	425	1190	-
508+00	-	530+50	2.00	-		425	-	952
530+50	-	534+00	2.50	-	-	-	185	-
530+50	-	534+00	2.00	-	-	66	-	148
534+00	-	547+00	2.50	3467	14	246	688	-
534+00	-	547+00	2.00	-		246	-	550
547+00	-	555+50	2.50	-	-	-	450	-
547+00	-	555+50	2.00	-	-	161	-	360
555+50	-	581+00	2.50	6800	27	482	1349	-
555+50	-	581+00	2.00	-		482	-	1079
581+00	-	594+00	2.50	-	-	-	688	-
581+00	-	594+00	2.00	-	-	246	-	550
594+00	-	599+66.48	2.50	1511	6	107	301	-
594+00	-	599+66.48	2.00	-	-	107	-	241
599+66.48	-	647+00	2.50	-	-	-	2012	-
599+66.48	-	647+00	2.00	-	-	719	-	1610
647+00	-	649+40.07	2.50	-	-	-	131	-
647+00	-	649+40.07	2.00	-	-	47	-	105
EDGEWOOD AVE								
63+50	-	64+82	2.50	-	-	-	95	-
63+50	-	64+82	2.00	-	-	-	-	76
65+82	-	66+50	2.50	-	-	-	70	-
65+82	-	66+50	2.00	-	-	25	-	56
LAKES EDGE LN								
68+86	-	69+76	2.50	-	-	-	58	-
68+86	-	69+76	2.00	-	-	21	-	46
EAGLE DR								
75+18	-	76+50	2.50	-	-	-	69	-
75+18	-	76+50	2.00	-	-	25	-	56
EAGLE CT								
80+18	-	81+30	2.50	-	-	-	68	-
80+18	-	81+30	2.00	-	-	24	-	55
EAGLE AVE								
85+18	-	86+35	2.50	-	-	-	68	-
85+18	-	86+35	2.00	-	-	24	-	55
DYKE DR								
105+18	-	106+50	2.50	-	-	-	72	-
105+18	-	106+50	2.00	-	-	26	-	58
LAKEVIEW DR								
110+18	-	111+65	2.50	-	-	-	77	-
110+18	-	111+65	2.00	-	-	28	-	62
PARK EXIT								
113+75	-	114+82	2.50	-	-	-	33	-
113+75	-	114+82	2.00	-	-	12	-	27
DYKE AVE								
120+22	-	121+50	2.50	-	-	-	65	-
120+22	-	121+50	2.00	-	-	23	-	52
PARK ENTRANCE								
123+50	-	124+76	2.50	-	-	-	61	-
123+50	-	124+76	2.00	-	-	22	-	49
DUCK CREEK DR								
130+20	-	131+50	2.50	-	-	-	72	-
130+20	-	131+50	2.00	-	-	26	-	58
PROJECT TOTALS				17777	71	4652	9527	7448

ASPHALTIC FLUMES

STATION - STATION	OFFSET	465.0315 (SY)
604+43 - 604+62	RT	10
605+33 - 605+59	LT	12
PROJECT TOTALS		22

ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL

STATION	-	STATION	465.0475 (LF)
481+00	-	483+79	279
487+79	-	495+09	731
499+09	-	510+30	1120
514+30	-	523+46	916
527+46	-	533+54	608
537+54	-	572+66	3512
PROJECT TOTALS			7166

ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL

STATION	-	STATION	LOCATION	465.0425 (LF)	COMMENTS
481+00	-	484+04	RT	243	TYPE 1
481+00	-	482+54	LT	123	TYPE 1
483+27	-	484+62	LT	108	TYPE 1
486+94	-	490+62	RT	108	TYPE 1
487+43	-	495+46	LT	642	TYPE 1
491+38	-	493+83	RT	196	TYPE 1
499+72		501+78	LT	164	TYPE 1
502+26	-	504+30	RT	163	TYPE 1
505+09	-	506+05	RT	77	TYPE 1
505+62	-	507+34	LT	138	TYPE 1
506+77	-	510+57	RT	304	TYPE 1
511+97	-	525+01	LT	1043	TYPE 1
513+46	-	514+97	RT	121	TYPE 1
515+69	-	517+76	RT	166	TYPE 1
518+55	-	523+75	RT	416	TYPE 1
525+73	-	575+30	LT	3966	TYPE 1
526+70	-	527+82	RT	90	TYPE 1
528+55	-	529+63	RT	86	TYPE 1
531+46	-	532+88	RT	114	TYPE 1
536+69	-	544+05	RT	589	TYPE 1
544+79	-	553+74	RT	715	TYPE 1
554+52	-	565+93	RT	914	TYPE 1
566+83	-	572+94	RT	489	TYPE 1
PROJECT TOTALS				10974	

ASPHALTIC SURFACE AND DRIVEWAY ITEMS

STATION	-	STATION	LOCATION	LAYER THICKNESS (IN)	465.0105 ASPHALTIC SURFACE (TON)	*305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON)	*305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (TON)	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES (TON)
601+87, LT			PEDESTRIAN PATH	3.00	2	-	3	-
601+00	-	605+75	PEDESTRIAN PATH	3.00	93	77	189	-
629+25	-	634+40	PEDESTRIAN PATH	3.00	111	84	226	-
634+70	-	646+50	PEDESTRIAN PATH	3.00	223	29	454	-
DRIVEWAYS AND FIELD ENTRANCES								
482+90			LT		-	12	-	-
491+00			RT		-	14	-	-
494+20			RT	2.50	-	-	14	6
495+85			RT	2.50	-	-	4	1
497+45			RT	2.50	-	-	4	2
498+20			RT	2.50	-	-	4	1
501+90			RT		-	9	-	-
502+15			LT		-	12	-	-
504+70			RT		-	16	-	-
505+20			LT		-	22	-	-
506+40			RT	2.50	-	-	11	4
507+70			LT		-	11	-	-
511+55			LT		-	17	-	-
515+30			RT		-	6	-	-
518+15			RT		-	16	-	-
525+35			LT		-	10	-	-
528+20			RT		-	12	-	-
530+00			RT	2.50	-	-	10	4
531+10			RT	2.50	-	-	11	4
533+25			RT		-	14	-	-
544+45			RT		-	12	-	-
554+15			RT		-	22	-	-
566+40			RT	2.50	-	-	27	11
580+92			RT		-	15	-	-
587+30			RT	2.50	-	-	17	7
588+30			RT	2.50	-	-	15	6
602+40			RT	2.50	-	-	15	6
607+05			RT	2.50	-	-	1	1
610+40			LT	2.50	-	-	3	1
610+70			RT	2.50	-	-	7	1
611+35			RT	2.50	-	-	12	2
611+50			LT	2.50	-	-	3	1
612+10			LT	2.50	-	-	5	2
612+80			RT	2.50	-	-	14	1
613+70			LT	2.50	-	-	5	2
614+30			RT	2.50	-	-	3	1
614+80			RT	2.50	-	-	4	2
615+05			LT	2.50	-	-	3	1
615+55			LT	2.50	-	-	5	2
615+55			RT	2.50	-	-	6	2
616+62			RT	2.50	-	-	10	4
616+80			LT	2.50	-	-	7	3
618+00			RT	2.50	-	-	11	5
619+90			RT	2.50	-	-	3	1
621+00			RT	2.50	-	-	5	2
623+20			RT	2.50	-	-	4	1
625+15			RT	2.50	-	-	5	1
626+10			RT	2.50	-	-	2	1
626+85			RT	2.50	-	-	4	1
628+80			RT	2.50	-	-	14	6
636+57			RT	2.50	-	-	25	11
637+24			RT	2.50	-	-	25	11
637+81			RT	2.50	-	-	11	5
638+65			LT	2.50	-	-	15	3
638+66			RT	2.50	-	-	11	5
639+25			LT	2.50	-	-	4	1
639+55			RT	2.50	-	-	8	4
640+00			RT	2.50	-	-	8	4
640+55			LT	2.50	-	-	4	1
641+14			LT	2.50	-	-	8	3
641+81			LT	2.50	-	-	15	6
642+60			RT	2.50	-	-	8	4
643+35			LT	2.50	-	-	18	1
647+55			RT		-	15	-	-
648+50			LT	2.50	-	-	18	8
649+10			RT		-	15	-	-
EAGLE CT								
81+00			RT		-	16	-	-
LAKEVIEW DR								
111+66			RT		-	30	-	-
DUCK CREEK DR								
131+00			LT		-	20	-	-
UNDISTRIBUTED					-	51	132	-
PROJECT TOTALS					429	556	1450	163

CULVERT ITEMS

INLET STATION	INLET OFFSET	INLET ELEV. (FT)	OUTLET STATION	OUTLET OFFSET	OUTLET ELEV. (FT)	SLOPE (%)	PIPE THICKNESS (IN)	521.3118 CULVERT PIPE CORRUGATED STEEL 18-INCH (LF)	521.3124 CULVERT PIPE CORRUGATED STEEL 24-INCH (LF)	521.3130 CULVERT PIPE CORRUGATED STEEL 30-INCH (LF)	521.3721 CULVERT PIPE ARCH CORRUGATED STEEL 21x15-INCH (LF)	521.3728 CULVERT PIPE ARCH CORRUGATED STEEL 28x20-INCH (LF)	521.1018 APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH (EACH)	521.1024 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH (EACH)	521.1030 APRON ENDWALLS FOR CULVERT PIPE STEEL 30-INCH (EACH)	521.1221 APRON ENDWALLS FOR PIPE ARCH STEEL 21x15-INCH (EACH)	521.1228 APRON ENDWALLS FOR PIPE ARCH STEEL 28x20-INCH (EACH)	*633.5200 MARKERS CULVERT END (EACH)	650.6000 CONSTRUCTION STAKING PIPE CULVERTS (EACH)
482+75	31.0' LT	866.71	483+03	31.0' LT	866.64	0.25%	0.064	-	-	-	28	-	-	-	-	2	-	-	1
487+41	26.0' LT	866.25	487+41	26.0' RT	866.00	0.48%	0.064	-	-	-	52	-	-	-	-	2	-	2	1
487+47	26.0' LT	866.25	487+47	26.0' RT	866.00	0.48%	0.064	-	-	-	52	-	-	-	-	2	-	2	1
491+12	27.6' RT	867.03	490+86	27.6' RT	866.97	0.23%	0.064	-	-	-	26	-	-	-	-	2	-	-	1
494+33	31.0' RT	867.67	494+07	31.0' RT	867.60	0.27%	0.064	-	-	-	26	-	-	-	-	2	-	-	1
501+78	31.0' RT	870.24	502+02	31.0' RT	870.16	0.33%	0.064	-	-	-	24	-	-	-	-	2	-	-	1
502+02	31.0' LT	870.20	502+28	31.0' LT	870.12	0.31%	0.064	-	-	-	26	-	-	-	-	2	-	-	1
504+54	31.0' RT	869.85	504+86	31.0' RT	869.75	0.31%	0.064	-	-	-	32	-	-	-	-	2	-	-	1
505+39	31.0' LT	869.90	505+06	31.0' LT	869.80	0.25%	0.064	-	-	-	40	-	-	-	-	2	-	-	1
507+57	31.0' LT	870.67	507+83	31.0' LT	870.59	0.27%	0.064	-	-	-	30	-	-	-	-	2	-	-	1
509+00	26.0' RT	869.20	509+00	26.0' LT	868.80	0.83%	0.064	-	48	-	-	-	-	2	-	-	-	2	1
515+45	31.0' RT	869.53	515+21	31.0' RT	869.47	0.25%	0.064	-	-	-	24	-	-	-	-	2	-	-	1
518+31	31.0' RT	869.90	517+99	31.0' RT	869.82	0.25%	0.064	-	-	-	32	-	-	-	-	2	-	-	1
528+31	31.0' RT	871.73	528+06	31.0' RT	871.67	0.25%	0.064	-	-	-	26	-	-	-	-	2	-	-	1
530+11	31.0' RT	872.37	529+87	31.0' RT	872.30	0.31%	0.064	-	-	-	24	-	-	-	-	2	-	-	1
531+22	31.0' RT	873.14	530+98	31.0' RT	873.08	0.25%	0.064	-	-	-	24	-	-	-	-	2	-	-	1
533+11	31.0' RT	873.28	533+37	31.0' RT	873.20	0.31%	0.064	-	-	-	26	-	-	-	-	2	-	-	1
539+00	27.0' RT	870.27	539+00	27.0' RT	870.00	0.50%	0.064	-	54	-	-	-	-	2	-	-	-	2	1
544+55	31.0' RT	873.53	544+39	31.0' RT	873.35	0.70%	0.064	-	-	-	26	-	-	-	-	2	-	-	1
553+98	31.0' RT	875.92	554+28	31.0' RT	875.72	0.67%	0.064	-	-	-	30	-	-	-	-	2	-	-	1
557+50	26.0' RT	874.40	557+50	26.0' LT	874.10	0.60%	0.064	-	50	-	-	-	-	2	-	-	-	2	1
566+15	31.4' RT	875.94	566+61	31.4' RT	875.86	0.17%	0.064	46	-	-	-	-	2	-	-	-	-	-	1
570+70	30.0' RT	874.40	570+70	30.0' LT	874.20	0.33%	0.079	-	-	60	-	-	-	-	2	-	-	2	1
581+06	31.0' RT	877.74	580+78	31.0' RT	877.60	0.50%	0.064	-	-	-	28	-	-	-	-	2	-	-	1
587+47	31.0' RT	883.80	587+15	31.0' RT	883.50	0.94%	0.064	-	-	-	32	-	-	-	2	-	-	-	1
588+43	31.0' RT	884.80	588+15	31.0' RT	884.56	0.86%	0.064	-	-	-	28	-	-	-	2	-	-	-	1
597+30	26.4' RT	883.60	597+30	27.8' LT	883.20	0.71%	0.064	-	56	-	-	-	-	2	-	-	-	2	1
602+07	41.6' RT	885.48	601+76	45.3' RT	885.32	0.57%	0.064	-	28	-	-	-	-	2	-	-	-	-	1
602+53	40.8' RT	885.62	602+23	40.8' RT	885.46	0.53%	0.064	30	-	-	-	-	2	-	-	-	-	-	1
647+41	29.0' RT	892.90	647+69	29.0' RT	892.81	0.32%	0.064	-	-	-	28	-	-	-	-	2	-	-	1
648+38	31.0' LT	892.67	648+64	31.0' LT	892.58	0.35%	0.064	-	-	-	26	-	-	-	-	2	-	-	1
648+92	31.0' RT	892.44	649+22	31.0' RT	892.34	0.33%	0.064	-	-	-	30	-	-	-	-	2	-	-	1
EAGLE AVE																			
85+45		871.57			871.27	0.50%	0.064	-	-	-	60	-	-	-	-	2	-	-	1
DYKE DR																			
105+37		875.90			875.60	0.42%	0.064	-	72	-	-	-	-	2	-	-	-	-	1
LAKEVIEW DR																			
110+35		881.20			880.55	0.81%	0.064	80	-	-	-	-	2	-	-	-	-	-	1
110+66	RT	880.80			880.65	0.50%	0.064	30											1
DYKE AVE																			
120+59	RT	884.80			884.55	0.50%	0.064	-	-	-	-	50	-	-	-	-	2	-	1
PROJECT TOTALS								186	308	60	780	50	6	12	6	46	2	14	37

*ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLANS

CONCRETE CURB & GUTTER

STATION	-	STATION	LOCATION	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D (LF)	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D (LF)	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB &GUTTER (LF)	REMARKS
495+00	-	499+00	RT	-	400	400	
604+62	-	621+36	RT	1674	-	1674	
605+59	-	634+40	LT	2881	-	2881	
622+56	-	634+40	RT	1184	-	1184	
634+70		647+00	LT	1230	-	1230	
634+70	-	64700	RT	1230	-	1230	
PARK EXT			LT	-	60	60	SW QUADRANT
			LT	-	36	36	NW QUADRANT
PARK ENTRANCE			LT	-	37	37	SW QUADRANT
			LT	-	58	58	NW QUADRANT
DUCK CREEK DR			RT	83	-	83	SE QUADRANT
			RT	52	-	52	NW QUADRANT
PROJECT TOTALS				8,334	591	8,925	

CONCRETE SIDEWALK

STATION - STATION	LOCATION	602.0410 CONCRETE SIDEWALK 5-INCH (SF)	602.0415 CONCRETE SIDEWALK 6-INCH (SF)	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW (SF)	602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW (SF)	*305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (TON)	650.9000 CONSTRUCTION STAKING CURB RAMPS (EACH)
605+80 - 610+77	SIDEWALK, RT	2359	-	-	-	87	-
613+82 - 621+42	SIDEWALK, RT	3152	-	-	-	117	-
622+52 - 629+19	SIDEWALK, RT	2774	-	-	-	103	-
607+05	DRIVEWAY, RT	-	60	-	-	2	-
610+70	DRIVEWAY, RT	-	65	-	-	2	-
614+30	DRIVEWAY, RT	-	80	-	-	3	-
614+80	DRIVEWAY, RT	-	60	-	-	2	-
615+55	DRIVEWAY, RT	-	60	-	-	2	-
616+62	DRIVEWAY, RT	-	60	-	-	2	-
618+00	DRIVEWAY, RT	-	60	-	-	2	-
619+90	DRIVEWAY, RT	-	120	-	-	4	-
621+00	DRIVEWAY, RT	-	200	-	-	7	-
623+20	DRIVEWAY, RT	-	50	-	-	2	-
625+15	DRIVEWAY, RT	-	135	-	-	5	-
626+10	DRIVEWAY, RT	-	60	-	-	2	-
626+85	DRIVEWAY, RT	-	80	-	-	3	-
628+80	DRIVEWAY, RT	-	240	-	-	9	-
601+00	CURB RAMP, LT	-	72	16	-	3	1
601+00	CURB RAMP, RT	-	81	16	-	3	1
621+50	CURB RAMP, RT	-	90	-	24	3	1
622+35	CURB RAMP, RT	-	76	-	19	3	1
646+50	CURB RAMP, RT	-	52	16	-	2	1
	PROJECT TOTALS	**8,285**	**1,701**	**48**	**43**	**370**	**5**

*ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLANS

EROSION CONTROL ITEMS

STATION	LOCATION	628.1104 EROSION BALES (EACH)	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)	628.2006 EROSION MAT URBAN CLASS I TYPE A (SY)	628.2008 EROSION MAT URBAN CLASS I TYPE B (SY)	628.2027 EROSION MAT CLASS II TYPE C (SY)	628.6005 TURBIDITY BARRIER (SY)	628.7504 TEMPORARY DITCH CHECKS (LF)	628.7555 CULVERT PIPE CHECKS (EACH)	631.0300 SOD WATER (MGAL)	631.1200 SOD EROSION CONTROL SANDY SOIL (SY)
481+00 - 485+00	LT & RT	-	-	-	-	13	-	-	-	-	-	-
485+00 - 496+00	LT & RT	-	150	150	-	96	32	-	-	3	0.4	16
496+00 - 511+00	LT & RT	-	692	692	-	75	-	-	-	8	-	-
511+00 - 526+00	LT & RT	-	-	-	-	27	-	-	-	2	0.5	24
526+00 - 534+00	LT & RT	-	-	-	-	53	-	-	-	4	0.2	8
534+00 - 573+00	LT & RT	-	142	142	-	1573	348	113	128	15	2.5	112
573+00 - 601+00	LT & RT	-	100	100	-	1495	-	-	144	6	1.1	48
601+00 - 604+50	LT & RT	-	-	-	-	195	-	-	-	2	-	-
604+50 - 612+50	LT & RT	-	-	-	-	56	-	-	-	2	-	-
612+50 - 618+00	LT & RT	-	-	-	-	389	-	-	-	-	-	-
618+00 - 634+50	LT & RT	-	1328	1328	490	-	-	964	-	-	-	-
634+50 - 641+70	LT & RT	-	65	65	-	55		-	-	-	-	-
641+70 - 649+40.07	LT & RT	-	-	-	-	40		-	-	3	-	-
DYKE DR 105+00 - 106+50	LT & RT	-	-	-	-	-	-	-	-	4	-	-
LAKEVIEW DR 111+12 - 111+67	LT & RT	-	-	-	-	13	-	-	-	6	-	-
PARK EXIT / ENTRANCE	LT & RT	-	728	728	-	-	-	-	-	-	-	-
DYKE AVE 120+35 - 121+00	LT & RT	-	-	-	-	100	-	-	-	4	-	-
	UNDISTRIBUTED	200	641	641	123	1045	95	263	68	15	1.4	52
	PROJECT TOTALS	**200**	**3846**	**3846**	**613**	**5223**	**475**	**1340**	**340**	**74**	**6.0**	**260**

INLET PROTECTION

STATION	LOCATION	628.7005 INLET PROTECTION TYPE A (EACH)	628.7015 INLET PROTECTION TYPE C (EACH)	628.7020 INLET PROTECTION TYPE D (EACH)
605+90.00	17.5' LT	1	1	-
605+90.00	17.5' RT	1	1	-
607+20.00	17.5' LT	1	1	-
607+20.00	17.5' RT	1	1	-
614+00.00	17.5' RT	1	1	-
614+12.00	17.5' RT	1	1	-
614+12.00	17.5' LT	1	1	-
616+15.00	17.5' RT	1	1	-
616+25.00	17.5' RT	1	1	-
618+18.00	17.5' RT	1	1	-
618+18.00	17.5' LT	1	1	-
618+28.00	17.5' RT	1	1	-
619+59.05	17.5' RT	1	1	-
619+69.05	17.5' RT	1	1	-
620+69.88	17.5' RT	1	1	-
621+34.30	17.5' LT	1	1	-
621+34.30	17.5' RT	1	1	-
621+73.59	33.1' RT	1	1	1
624+75.00	17.5' RT	1	1	-
624+75.00	17.5' LT	1	1	-
626+50.00	17.5' RT	1	1	-
628+22.54	17.5' LT	1	1	1
628+22.54	17.5' RT	1	1	1
629+47.67	15.5' LT	1	1	-
629+47.67	15.5' RT	1	1	-
636+31.06	21.5' RT	1	1	-
636+98.92	15.5' LT	1	1	1
636+98.92	21.5' RT	1	1	1
638+92.00	21.5' RT	1	1	-
638+92.00	17.5' LT	1	1	-
641+50.00	21.5' RT	1	1	-
641+50.00	17.5' LT	1	1	-
	PROJECT TOTALS	32	32	5

RIPRAP ITEMS

STATION	LOCATION	606.0100 RIPRAP LIGHT (CY)	606.0200 RIPRAP MEDIUM (CY)	606.0300 RIPRAP HEAVY (CY)	645.0130 GEOTEXTILE FABRIC TYPE R (SY)	645.0120 GEOTEXTILE FABRIC TYPE HR (SY)
539+00	LT	3	18	-	12	44
557+50	LT	3	24	-	12	57
570+70	LT	3	12	-	12	33
621+35 - 625+00	LT	-	-	243	-	448
629+75 - 638+00	LT	-	-	750	-	1180
629+75 - 636+00	RT	-	-	314	-	527
	UNDISTRIBUTED	2	13	392	9	572
	PROJECT TOTALS	**10**	**67**	**1700**	**45**	**2861**

STORM SEWER - PIPES

FROM	-	TO	PIPE NAME	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0415 15-INCH LF	608.0418 18-INCH LF	608.0424 24-INCH LF	608.0430 30-INCH LF	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1024 24-INCH EACH	522.1030 30-INCH EACH	611.9800.S PIPE GRATES EACH	*633.5200 MARKERS CULVERT END (EACH)	UPSTREAM INVERT ELEVATION	DOWNSTREAM INVERT ELEVATION	SLOPE %
MH - 41		O - 6	P-42	-	135	-	-	-	1	-	-	-	1	886.70	886.16	0.38
INL - 41A		MH - 41	P-41A	35		-	-	-	-	-	-	-	-	886.94	886.83	0.31
INL - 40		MH - 41	P-41	-	130	-	-	-	-	-	-	-	-	887.35	886.70	0.50
INL - 40A		INL - 40	P-40	35	-	-	-	-	-	-	-	-	-	887.70	887.60	0.29
INL - 17B		INL - 17	P17-B	12	-	-	-	-	-	-	-	-	-	889.97	889.59	3.17
INL - 17A		INL - 17	P-17A	35	-	-	-	-	-	-	-	-	-	889.81	889.59	0.63
INL - 17		INL - 16A	P-17	-	-	203	-	-	-	-	-	-	-	889.09	888.49	0.30
INL - 16A		INL - 16	P-16A	-	-	-	10	-	-	-	-	-	-	887.99	887.96	0.30
INL - 16		INL - 15B	P-16	-	-	-	193	-	-	-	-	-	-	887.96	887.38	0.30
INL - 15A		INL - 15B	P-15A	35	-	-	-	-	-	-	-	-	-	888.70	888.38	0.91
INL - 15B		INL - 15	P-15B	-	-	-	10	-	-	-	-	-	-	887.38	887.35	0.30
INL - 15		INL - 14A	P-15	-	-	-	131	-	-	-	-	-	-	887.35	886.92	0.33
INL - 14A		INL - 14	P-14A	-	-	-	10	-	-	-	-	-	-	886.92	886.88	0.40
INL - 14		INL - 13A	P-14	-	-	-	101	-	-	-	-	-	-	886.88	886.48	0.41
INL - 13A		CB - 13	P-13A	-	-	-	64	-	-	-	-	-	-	886.48	886.22	0.41
CB - 13		CB - 12	P-13	-	-	-	-	35	-	-	-	-	-	885.72	884.70	2.91
INL - 13B		CB - 13	P-13B	-	42	-	-	-	-	-	-	-	-	887.09	886.80	0.69
CB - 12		O - 3	P-12	-	-	-	-	15	-	-	1	1	1	884.70	884.00	4.67
INL - 21A		INL - 21	P-21A	35	-	-	-	-	-	-	-	-	-	886.74	886.56	0.51
INL - 21		INL - 20	P-21	-	-	175	-	-	-	-	-	-	-	886.06	885.53	0.30
INL - 20		CB - 19	P-20	-	-	-	173	-	-	-	-	-	-	885.03	884.36	0.39
CB - 19		CB - 18	P-19	-	-	-	35	-	-	-	-	-	-	884.36	884.15	0.60
CB - 18		O - 4	P-18	-	-	-	33	-	-	1	-	1	1	884.15	883.50	1.97
INL - 19A		CB - 19	P-19A	-	125	-	-	-	-	-	-	-	-	885.74	885.11	0.50
INL - 19B		INL - 19A	P-19B	31	-	-	-	-	-	-	-	-	-	886.14	885.99	0.48
INL - 23A		CB - 23	P-23A	68	-	-	-	-	-	-	-	-	-	887.09	886.21	1.29
CB - 23		CB - 22	P-23	-	-	-	37	-	-	-	-	-	-	885.21	884.50	1.92
CB - 22		O - 5	P-22	-	-	-	12	-	-	1	-	1	1	884.50	884.00	4.17
INL - 24		CB - 23	P-24		-	-	193	-	-	-	-	-	-	886.03	885.21	0.42
INL - 24A		MH - 24	P-24A	39	-	-	-	-	-	-	-	-	-	887.34	887.03	0.79
INL - 25		MH - 24	P-25		-	259	-	-	-	-	-	-	-	887.62	886.53	0.42
INL - 25A		INL - 25	P-25A	39	-	-	-	-	-	-	-	-	-	888.43	888.12	0.79
		PROJECT TOTALS		**364**	**432**	**637**	**1002**	**50**	**0** **1**	**2**	**1**	**0** **3**	**4**			

*ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLANS

GUARDRAIL ITEMS

STATION	-	STATION	LOCATION	614.2330 MGS GUARDRAIL 3 K (LF)	614.2610 MGS GUARDRAIL TERMINAL EAT (EACH)
618+50	-	626+00	LT	644	2
629+50	-	634+39	RT	439	1
629+50	-	634+39	LT	441	1
634+71	-	635+93	RT	72	1
634+71	-	638+00	LT	276	1
			PROJECT TOTALS	**1,872**	**6**

FINISHING ITEMS

STATION	LOCATION	625.0100 TOPSOIL (SY)	627.0200 MULCHING (SY)	629.0210 FERTILIZER TYPE B (CWT)	630.0120 SEEDING MIXTURE NO. 20 (LB)	630.0140 SEEDING MIXTURE NO. 40 (LB)	630.0200 SEEDING TEMPORARY (LB)	630.0500 SEED WATER (MGAL)	SPV.0030.01 FERTILIZER FOR LAWN TYPE TURF CWT	SPV.0180.01 PREPARING TOPSOIL FOR LAWN TYPE TURF SY
481+00 - 485+00	LT	611	850	0.4	17	-	17	19	-	-
481+00 - 485+00	RT	611	850	0.4	17	-	17	19	-	-
485+00 - 496+00	LT	1620	1950	1.2	53	-	53	44	-	-
485+00 - 496+00	RT	1420	1700	1.1	46	-	46	38	-	-
494+20 - 499+00	RT	520	700	-	-	13	19	16	0.4	520
496+00 - 511+00	LT	2970	400	0.3	11	-	11	9	-	-
496+00 - 511+00	RT	2405	2900	1.8	78	-	78	65	-	-
511+00 - 526+00	LT	2885	3350	2.1	90	-	90	75	-	-
511+00 - 526+00	RT	2885	3350	2.1	90	-	90	75	-	-
526+00 - 534+00	LT	1630	1900	1.2	51	-	51	43	-	-
526+00 - 534+00	RT	1765	2000	1.3	54	-	54	45	-	-
534+00 - 573+00	LT	13400	14500	9.1	392	-	392	326	-	-
534+00 - 573+00	RT	9310	10400	6.6	281	-	281	234	-	-
573+00 - 599+66.5	LT	6475	7250	4.6	196	-	196	163	-	-
573+00 - 599+66.5	RT	6110	6900	4.3	186	-	186	155	-	-
599+66.5 - 601+00	LT	165	200	0.1	5	-	5	4	-	-
599+66.5 - 601+00	RT	140	200	0.1	5	-	5	4	-	-
600+14 - 618+50	LT	2165	2700	-	-	49	73	61	1.7	2165
601+00 - 603+00	RT	325	380	0.2	10	-	10	9	-	-
603+00 - 606+00	RT	460	600	0.4	16	-	16	13	-	-
606+00 - 612+50	RT	805	1000	-	-	18	27	22	0.6	805
618+50 - 622+05.7	LT	1190	1300	0.8	35	-	35	29	-	-
612+50 - 622+05.7	RT	975	1300	-	-	23	35	29	0.8	975
622+05.7 - 634+50	LT	270	400	0.3	11	-	11	9	-	-
622+05.7 - 634+50	RT	1140	1500	-	-	27	41	34	0.9	1140
626+00 - 629+50	LT	635	900	-	-	16	24	20	0.6	635
634+50 - 641+70	LT	535	800	-	-	14	22	18	0.5	535
634+50 - 641+70	RT	575	900	-	-	16	24	20	0.6	575
641+70 - 649+40	LT	855	2000	-	-	36	54	45	1.3	855
641+70 - 649+40.07	RT	1150	1500	0.9	41	-	41	34	-	-
EDGEWOOD AVE 63+50 - 66+50	LT & RT	570	740	0.4	15		15	17		
LAKES EDGE LN 68+90 - 69+82	LT & RT	450	515	0.3	12		12	12		
EAGLE DR 75+18 - 76+50	LT & RT	355	400	0.2	10		10	9		
EAGLE COURT 80+18 - 81+30	LT & RT	400	440	0.3	11		11	10		
EAGLE AVE 85+18 - 86+35	LT & RT	300	325	0.2	8		8	7		
DYKE DR 105+18 - 106+50	LT & RT	650	730	0.4	18		18	16		
LAKEVIEW DR 110+18 - 111+65	LT & RT	750	810	0.5	20		20	18		
PARK EXIT 113+75 - 114+82	LT & RT	200	285	0.1	5		5	6		
DYKE AVE 120+22 - 121+50	LT & RT	400	460	0.3	11		11	10		
PARK ENTRANCE 123+50 - 124+76	LT & RT	200	260	0.1	5		5	6		
DUCK CREEK DR 130+20 - 131+50	LT & RT	200	265	0.1	5		5	6		
UNDISTRIBUTED		976	15982	8	361	42	425	359		
PROJECT TOTALS		**4881**	**95892**	**51**	**2167**	**255**	**2549**	**2154**	**7**	**8205**

FENCING ITEMS

STATION	-	STATION	LOCATION	616.0204 FENCE CHAIN LINK 4-FT (LF)
629+19	-	634+40	RT	523
634+71	-	636+30	RT	162
			PROJECT TOTALS	**685**

STORM SEWER - STRUCTURES

STRUCTURE	STATION	OFFSET*	611.1004 CATCH BASINS 4-FT (EACH)	611.1005 CATCH BASINS 5-FT (EACH)	611.1006 CATCH BASINS 6-FT (EACH)	611.3004 INLETS 4-FT (EACH)	611.3230 INLETS 2x3-FT (EACH)	611.0624 INLET COVERS TYPE H (EACH)	611.0639 INLET COVERS TYPE H-S (EACH)	650.4000 CONSTRUCTION STAKING STORM SEWER (EACH)	RIM ELEV	SUMP** ELEV	STRUCTURE*** DEPTH FEET
INL - 41A	605+90.00	17.5' LT	-	-	-	-	1	1	-	1	890.44	886.77	2.84
CB - 41	605+90.00	17.5' RT	1	-	-	-	-	1	-	1	890.44	884.70	4.91
INL - 40A	607+20.00	17.5' LT	-	-	-	-	1	1	-	1	891.09	887.53	2.73
INL - 40	607+20.00	17.5' RT	-	-	-	-	1	1	-	1	891.09	887.15	3.11
INL - 17B	614+00.00	17.5' RT	-	-	-	-	1	1	-	1	893.47	889.80	2.84
INL - 17A	614+12.00	17.5' LT	-	-	-	-	1	1	-	1	893.43	889.64	2.96
INL - 17	614+12.00	17.5' RT	-	-	-	1	-	1	-	1	893.43	888.88	3.72
INL - 16A	616+15.00	17.5' RT	-	-	-	1	-	1	-	1	892.82	887.74	4.25
INL - 16	616+25.00	17.5' RT	-	-	-	1	-	1	-	1	892.80	887.71	4.26
INL - 15B	618+18.00	17.5' RT	-	-	-	1	-	1	-	1	892.22	887.13	4.26
INL - 15A	618+18.00	17.5' LT	-	-	-	-	1	1	-	1	892.22	888.53	2.86
INL - 15	618+28.00	17.5' RT	-	-	-	1	-	1	-	1	892.19	887.10	4.26
INL - 14A	619+59.05	17.5' RT	-	-	-	1	-	1	-	1	891.79	886.67	4.29
INL - 14	619+69.05	17.5' RT	-	-	-	1	-	1	-	1	891.76	886.63	4.30
INL - 13A	620+69.88	17.5' RT	-	-	-	1	-	1	-	1	891.46	886.23	4.40
CB - 13	621+34.30	17.5' RT	-	-	1	-	-	1	-	1	891.27	883.72	6.72
INL - 13B	621+73.59	33.1' RT	-	-	-	1	-	-	1	1	890.84	886.72	3.29
CB - 12	621+34.30	17.5' LT	-	1	-	-	-	1	-	1	891.27	882.70	7.74
INL - 21A	624+75.00	17.5' LT	-	-	-	-	1	1	-	1	890.24	886.90	2.51
INL- 21	624+75.00	17.5' RT	-	-	-	-	1	1	-	1	890.24	885.85	3.56
INL- 20	626+50.00	17.5' RT	-	-	-	1	-	1	-	1	889.72	884.78	4.11
CB - 19	628+22.54	17.5' RT	-	1	-	-	-	-	1	1	889.24	882.36	6.05
CB - 18	628+22.54	17.5' LT	-	1	-	-	-	-	1	1	889.24	882.15	6.26
INL - 19B	629+47.67	15.5' LT	-	-	-	-	1	1	-	1	889.66	885.97	2.86
INL - 19A	629+47.67	15.5' RT	-	-	-	-	1	1	-	1	889.66	885.55	3.28
INL - 23A	636+31.06	21.5' RT	-	-	-	-	1	1	-	1	890.61	886.92	2.86
CB - 23	636+98.92	21.5' RT	-	1	-	-	-	-	1	1	890.01	883.21	5.97
CB - 22	636+98.92	15.5' LT	1	-	-	-	-	-	1	1	890.13	882.50	6.80
INL - 24A	638+92.00	17.5' LT	-	-	-	-	1	1	-	1	890.87	887.17	2.87
INL - 24	638+92.00	21.5' RT	-	-	-	1	-	1	-	1	890.79	885.78	4.18
INL - 25A	641+50.00	17.5' LT	-	-	-	-	1	1	-	1	891.95	888.26	2.86
INL- 25	641+50.00	21.5' RT	-	-	-	1	-	1	-	1	891.87	887.41	3.63
O - 3	621+34.30	32.4' LT	-	-	-	-	-	-	-	1	884.00		
O - 4	628+22.54	50.6' LT	-	-	-	-	-	-	-	1	883.50		
O - 5	636+98.92	27.4' LT	-	-	-	-	-	-	-	1	884.00		
O - 6	604+56.00	36.0' RT	-	-	-	-	-	-	-	1	886.16		
	PROJECT TOTALS		2	0	4	0	1	12	13	0	27	0	5	0	36			

* STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

** FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE

*** DEPTH = RIM ELEVATION - COVER HEIGHT - 6-INCH ADJUSTMENT HEIGHT - BOTTOM OF STRUCTURE ELEVATION

MOBILIZATION

LOCATION	619.1000 (EACH)
CTH Z	1
PROJECT TOTALS	1

EROSION CONTROL MOBILIZATION

LOCATION	628.1905 MOBILIZATION EROSION CONTROL (EACH)	628.1910 EMERGENCY MOBILIZATIONS EROSION CONTROL (EACH)
CTH Z	4	4
UNDISTRIBUTED	2	2
PROJECT TOTALS	**6**	**6**

FIELD OFFICE TYPE C

LOCATION	642.5201 (EACH)
CTH Z	1
PROJECT TOTALS	1

REMOVING SIGNS

SIGN GROUP NUMBER	SIGN MESSAGE	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
C.T.H.Z			
R14-1	STOP	1	1
R14-2	NO PASSING ZONE	1	1
R14-3	FIRE TRUCK SYMBOL	1	1
R14-4	RIGHT TURN LANE	1	1
R14-5	STOP	1	1
R14-6	ONLY ARROWS	1	1
R14-7	NO PASSING ZONE	1	1
R14-8	DEAD END	1	1
R14-9	STOP	1	1
R15-1	STOP	1	1
R15-2	NO PASSING ZONE	1	1
R15-3	STOP	1	1
R16-1	NO PASSING ZONE	1	1
R16-2	SPEED LIMIT AHEAD SYMBOL	1	1
R17-1	SPEED LIMIT 55	1	1
R17-2	NO PASSING ZONE	1	1
R17-3	STOP	1	1
R17-4	SPEED LIMIT 40	1	1
R17-5	PEDESTRIAN SYMBOL	1	1
R17-6	STOP	1	1
R17-7	SPEED LIMIT 40	1	1
R17-8	SPEED LIMIT 25	1	1
R17-9	STOP	1	1
R17-10	DO NOT ENTER	1	
R17-11	DO NOT ENTER	1	1
R17-12	SPEED LIMIT AHEAD SYMBOL	1	1
R17-13	SPEED LIMIT 25	1	1
R17-14	STOP	1	1
R18-1	PEDESTRIAN SYMBOL	1	1
R18-2	SPEED LIMIT 25	1	1
R18-3	NO PARKING ANY TIME W/ RIGHT ARROW	1	1
R18-4	NO PARKING ANY TIME W/ DOUBLE ARROW	1	1
R18-5	NO PARKING ANY TIME W/ DOUBLE ARROW	1	1
R18-6	SPEED LIMIT 25	1	1
R18-7	NO PARKING ANY TIME W/ LEFT ARROW	1	1
R18-8	NO PARKING ANY TIME W/ LEFT ARROW	1	1
R18-9	NO PARKING ANY TIME W/ DOUBLE ARROW	1	1
R18-10	NO PARKING ANY TIME W/ DOUBLE ARROW	1	1
R18-11	NO PASSING ZONE	1	1
R18-12	SPEED LIMIT 25	1	1
R18-13	NO PARKING ANY TIME W/ DOUBLE ARROW	1	1
R18-14	SPEED LIMIT 25	1	1
	NO PARKING ANY TIME W/ DOUBLE ARROW	1	
R18-15	NO PASSING ZONE	1	1
R18-16	NO PARKING ANY TIME W/ DOUBLE ARROW	1	1
R18-17	SPEED LIMIT 25	1	1
R18-18	NO PARKING ANY TIME W/ DOUBLE ARROW	1	1
R18-19	SPEED LIMIT AHEAD SYMBOL	1	1
R18-20	STOP	1	1
R18-21	SPEED LIMIT 25	1	1
	NO PARKING ANY TIME W/ DOUBLE ARROW	1	
R18-22	15 M.P.H.	1	1
	NO OUTLET	1	
R18-23	NO PARKING ANY TIME W/ DOUBLE ARROW	1	1
R18-24	NO PARKING ANY TIME W/ DOUBLE ARROW	1	1
	SUBTOTAL	55	51

REMOVING SIGNS

SIGN GROUP NUMBER	SIGN MESSAGE	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
R19-1	CLEARANCE STRIPPER	1	1
R19-2	NO PARKING ANY TIME W/ DOUBLE ARROW	1	1
	CLEARANCE STRIPPER	1	
R19-3	NO PARKING ANY TIME W/ DOUBLE ARROW	1	1
R19-4	SPEED LIMIT 25	1	1
	NO PARKING ANY TIME W/ DOUBLE ARROW	1	
R19-5	NO PARKING ANY TIME W/ DOUBLE ARROW	1	1
R19-6	NO PARKING ANY TIME W/ DOUBLE ARROW	1	1
R19-7	NO PARKING ANY TIME W/ DOUBLE ARROW	1	1
	CLEARANCE STRIPPER	1	
R19-8	CLEARANCE STRIPPER	1	1
R19-9	NO PARKING HERE TO CORNER W/ LEFT ARROW	1	1
R19-10	SPEED LIMIT 25	1	1
	NO PARKING ANY TIME W/ DOUBLE ARROW	1	
R19-11	NO PARKING ANY TIME W/ DOUBLE ARROW	1	1
R19-12	JCT	1	1
	COUNTY F	1	
	NO PARKING ANY TIME W/ DOUBLE ARROW	1	
R19-13	NO PASSING ZONE	1	1
	SUBTOTAL	19	13
	ITEM TOTAL	74	64

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TRAFFIC CONTROL

LOCATION	DAYS	643.0300 DRUMS DAYS	BARRICADES TYPE III EACH	643.0420 BARRICADES TYPE III DAYS	WARNING LIGHTS TYPE A EACH	643.0705 WARNING LIGHTS TYPE A DAYS	SIGNS PCMS EACH	643.1050 SIGNS PCMS DAYS	SIGNS EACH	643.0900 SIGNS DAYS
ADVANCED WARNING	7	-	-	-	-	-	2	14	8	56
CTH Z CLOSURE	85	-	2	170	4	340	-	-	8	680
CTH Z DETOUR	85		3	255	6	510	-	-	107	9095
UNDISTRIBUTED	-	200	-	30	1	60	0	-	-	244
PROJECT TOTALS		**200**		**455**		**910**		**14**		**10075**

SIGNING ITEMS

SIGN GROUP NUMBER	SIGN CODE	SIGN MESSAGE	SIGN SIZE W X H (INCHES)	634.0612 POST WOOD 4X6-INCH X 12-FT EACH	634.0614 POST WOOD 4X6-INCH X 14-FT EACH	634.0616 POST WOOD 4X6-INCH X 16-FT EACH	634.0814 POST TUBULAR STEEL 2X2-INCH X 14-FT EACH	637.2230 SIGNS TYPE II REFLECTIVE TYPE F SF	637.2210 SIGNS TYPE II REFLECTIVE TYPE H SF	638.2102 MOVING SIGNS TYPE II EACH
C.T.H.Z										
14-1	R1-1	STOP	30 X 30		1				5.18	
14-2	W14-3	NO PASSING ZONE	48 X 36		1			6.00		
14-3	W11-8	FIRE TRUCK SYMBOL	36 X 36		1			9.00		
14-4	R1-1	STOP	30 X 30		1				5.18	
14-5	R3-7R	RIGHT LANE MUST TURN RIGHT	30 X 30		1				6.25	
14-6	R1-1	STOP	30 X 30		1				5.18	
14-7	W14-3	NO PASSING ZONE	48 X 36		1			6.00		
14-8	W14-1	DEAD END	30 X 30		1			6.25		
14-9	R1-1	STOP	30 X 30		1				5.18	
15-1	R1-1	STOP	30 X 30		1				5.18	
15-2	W14-3	NO PASSING ZONE	48 X 36		1			6.00		
15-3		SPEED ZONE AHEAD		1						1
15-4	R1-1	STOP	30 X 30		1				5.18	
15-5		CASTLE ROCK LAKE MOTEL				1				1
16-1	W14-3	NO PASSING ZONE	48 X 36		1			6.00		
16-2	W3-5	SPEED LIMIT AHEAD SYMBOL	36 X 36		1			9.00		
17-1	R2-1	SPEED LIMIT 55	24 X 30		1				5.00	
17-2		DUMP HOURS		1						1
17-3	W14-3	NO PASSING ZONE	48 X 36		1			6.00		
17-4	R1-1	STOP	30 X 30		1				5.18	
17-5	R2-1	SPEED LIMIT 40	24 X 30		1				5.00	
17-6	R1-1	STOP	30 X 30		1				5.18	
17-7	W3-5	SPEED LIMIT AHEAD SYMBOL	36 X 36		1			9.00		
17-8	R2-1	SPEED LIMIT 40	24 X 30		1				5.00	
17-9	R2-1	SPEED LIMIT 25	24 X 30		1				5.00	
17-10	R5-1	DO NOT ENTER	30 X 30		1				6.26	
17-11	R1-1	STOP	30 X 30		1				5.18	
17-12	R5-1	DO NOT ENTER	30 X 30		1				6.26	
17-13	W11-2	PEDESTRIAN SYMBOL	30 X 30						5.00	
	W16-7R	DIAGONAL ARROW	24 X 12						2.00	
17-14	W11-2	PEDESTRIAN SYMBOL	30 X 30						5.00	
	W16-7L	DIAGONAL ARROW	24 X 12						2.00	
17-15	R2-1	SPEED LIMIT 25	24 X 30		1				5.00	
17-16	R1-1	STOP	30 X 30		1				5.18	
17-17	W11-2	PEDESTRIAN SYMBOL	30 X 30						5.00	
	W16-7L	DIAGONAL ARROW	24 X 12						2.00	
17-18	W11-2	PEDESTRIAN SYMBOL	30 X 30						5.00	
	W16-7R	DIAGONAL ARROW	24 X 12						2.00	
17-19		CASTLE ROCK COUNTY PARK			2					2
		SUBTOTAL		2	29	1	0	63.25	123.57	5

SIGNING ITEMS

SIGN GROUP NUMBER	SIGN CODE	SIGN MESSAGE	SIGN SIZE W X H (INCHES)	634.0612 POST WOOD 4X6-INCH X 12-FT EACH	634.0614 POST WOOD 4X6-INCH X 14-FT EACH	634.0616 POST WOOD 4X6-INCH X 16-FT EACH	634.0814 POST TUBULAR STEEL 2X2-INCH X 14-FT EACH	637.2230 SIGNS TYPE II REFLECTIVE TYPE F SF	637.2210 SIGNS TYPE II REFLECTIVE TYPE H SF	638.2102 MOVING SIGNS TYPE II EACH
18-1	R3-7R	RIGHT LANE MUST TURN RIGHT	30 X 30		1				6.25	
18-2	R7-1R	NO PARKING ANY TIME W/ RIGHT ARROW	18 X 24						3.00	
18-3	R3-17	BIKE LANE	30 X 24		1				5.00	
	R3-17B	ENDS	30 X 12						2.50	
18-4	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24	1					3.00	
18-5	R2-1	SPEED LIMIT 25	24 X 30		1				5.00	
18-6	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24	1					3.00	
18-7	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24	1					3.00	
18-8		LUTHERAN CHURCH		1						1
18-9	R2-1	SPEED LIMIT 25	24 X 30		1				5.00	
18-10	R3-17	BIKE LANE	30 X 24		1				5.00	
	R3-17A	AHEAD	30 X 12						2.50	
18-11	R7-1L	NO PARKING ANY TIME W/ LEFT ARROW	18 X 24	1					3.00	
18-12	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24	1					3.00	
18-13	R2-1	SPEED LIMIT 25	24 X 30			1			5.00	
	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24						3.00	
18-14	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24	1					3.00	
18-15	W14-3	NO PASSING ZONE	48 X 36		1				6.00	
18-16	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24						3.00	
18-17	R2-1	SPEED LIMIT 25	24 X 30		1				5.00	
18-18	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24						3.00	
18-19	R2-1	SPEED LIMIT 25	24 X 30			1			5.00	
	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24						3.00	
18-20	R1-1	STOP	30 X 30		1				5.18	
18-21	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24	1					3.00	
18-22	R1-1	STOP	30 X 30		1				5.18	
18-23	W14-3	NO PASSING ZONE	48 X 36		1			6.00		
18-24	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24	1					3.00	
18-25	R7-1R	NO PARKING ANYTIME W/ RIGHT ARROW	18 X 24						3.00	
18-26	R2-1	SPEED LIMIT 25	24 X 30		1				5.00	
18-27	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24	1					3.00	
18-28	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24	1					3.00	
18-29	R7-1R	NO PARKING ANY TIME W/ RIGHT ARROW	18 X 24	1					3.00	
18-30	W3-5	SPEED LIMIT AHEAD SYMBOL	36 X 36		1			9.00		
18-31	R1-1	STOP	30 X 30		1				5.18	
18-32	R7-1L	NO PARKING ANY TIME W/ LEFT ARROW	18 X 24	1					3.00	
18-33	R2-1	SPEED LIMIT 25	24 X 30			1			5.00	
	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24						3.00	
18-34	W14-1	DEAD END	30 X 30		1			6.25		
18-35	W14-1	DEAD END	30 X 30		1			6.25		
18-36	R3-17	BIKE LANE	30 X 24			1			5.00	
	R3-17B	ENDS	30 X 12						2.50	
	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24						3.00	
18-37	R3-17	BIKE LANE	30 X 24		1				5.00	
	R3-17A	AHEAD	30 X 12						2.50	
18-38	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24				1		3.00	
19-1	W5-52L	CLEARANCE STRIPPER	12 X 36		1			3.00		
19-2	W5-52R	CLEARANCE STRIPPER	12 X 36		1			3.00		
19-3	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24		1				3.00	
19-4	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24	1					3.00	
19-5	R2-1	SPEED LIMIT 25	24 X 30			1			5.00	
	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24						3.00	
19-6	R1-1	STOP	30 X 30		1				5.18	
19-7	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24	1					3.00	
19-8	R7-1L	NO PARKING ANY TIME W/ LEFT ARROW	18 X 24						3.00	
19-9	W5-52R	CLEARANCE STRIPPER	12 X 36		1			3.00		
19-10	W5-52L	CLEARANCE STRIPPER	12 X 36		1			3.00		
19-11	R7-1D	NO PARKING ANY TIME W/ DOUBLE ARROW	18 X 24	1					3.00	
19-12	R1-2	YIELD	30 X 26	1					2.71	
19-13	R7-1R	NO PARKING ANY TIME W/ RIGHT ARROW	18 X 24	1					3.00	
19-14	R2-1	SPEED LIMIT 25	24 X 30		1				5.00	
19-15	J13-1	JCT COUNTY F	24 X 45		1				7.50	
		NO PARKING ANY TIME W/ DOUBLE ARROW								
19-16	W14-3	NO PASSING ZONE	48 X 36		1				6.00	
		SUBTOTAL		18	25	5	1	39.5	208.18	1
ITEM TOTALS		ITEM TOTAL		20	54	6	1	102.75	331.75	6

PAVEMENT MARKING

STATION - STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH EDGELINE WHITE (LF)	646.1020 MARKING LINE EPOXY 4-INCH CENTERLINE YELLOW (LF)	646.1020 MARKING LINE EPOXY 4-INCH 12.5' SKIPS YELLOW (LF)	646.3020 MARKING LINE EPOXY 8-INCH EDGELINE WHITE (LF)	646.5020 MARKING ARROW EPOXY TYPE 2 (EACH)	646.5020 MARKING ARROW EPOXY BIKE LANE (EACH)	646.5120 WORD EPOXY (EACH)	646.5220 SYMBOL BIKE LANE EPOXY (EACH)	646.6120 STOP LINE EPOXY 18-INCH (LF)	646.7420 CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (LF)	COMMENTS
481+00 - 599+67	-	-	11867	2967	-	-	-	-	-	-	-	PASSING ZONE
481+00 - 599+67	LT & RT	23734	11867	2967	-	-	-	-	-	-	-	EDGELINES
600+45 - 649+40	-	-	9790	-	-	-	-	-	-	-	-	DOUBLE YELLOW
600+45 - 638+00	LT & RT	7310	-	-	-	-	14	-	14	-	-	EDGELINES
495+00 - 499+00	RT	-	-	-	100	-	-	-	1	-	-	BIKE SHARED LANE
497+85 - 498+85	LT	-	-	-	100	-	-	-	-	-	-	
601+86	LT & RT										100	
602+95 - 603+85	LT	-	-	-	90	1	-	1	1	-	-	BIKE SHARED LANE
638+00 - 649+40	LT & RT	-	-	-	-	-	-	-	4	-	-	BIKE LANE
PARK EXIT		-	-	-	-	-	-	-	-	32	-	
DUCK CREEK DR		-	-	-	-	-	-	-	-	36	-	
	PROJECT TOTALS	31044	33524	5934	**290**	**1**	**14**	**1**	**20**	**68**	**100**	
			70502									

LOCATING NO-PASSING ZONES

LOCATION	648.0100 (MI)
CTH Z	1.79
PROJECT TOTALS	1.79

CONCRETE BASES

BASE LOCATION	STATION	OFFSET	654.0101 CONCRETE BASES TYPE 1 (EACH)
EAST	601+81.1	34.5' RT	1
WEST	601+92.3	34.6' LT	1
		PROJECT TOTALS	**2**

CONSTRUCTION STAKING

STATION	-	STATION	650.4500 SUBGRADE (LF)	650.5000 BASE (LF)	650.9920 SLOPE STAKES (LF)
481+00	-	486+50	550	550	550
486+50	-	500+00	1350	1350	1350
500+00	-	508+00	-	800	800
508+00	-	530+50	-	2250	2250
530+50	-	534+00	-	350	350
534+00	-	547+00	-	1300	1300
547+00	-	555+50	-	850	850
555+50	-	581+00	-	2550	2550
581+00	-	594+00	-	1300	1300
594+00	-	599+66	-	566	566
599+66	-	647+00	-	4734	4734
647+00	-	649+40	-	240	240
EDGEWOOD AVE					
63+50	-	64+82	-	132	132
65+82	-	66+50	-	68	68
LAKES EDGE LN					
68+86	-	69+76	-	90	90
EAGLE DR					
75+18	-	76+50	-	132	132
EAGLE CT					
80+18	-	81+30	-	112	112
EAGLE AVE					
85+18	-	86+35	-	117	117
DYKE DR					
105+18	-	106+50	-	132	132
LAKEVIEW DR					
110+18	-	111+65	-	147	147
PARK EXIT					
113+75	-	114+82	-	107	107
DYKE AVE					
120+22	-	121+50	-	128	128
PARK ENTRANCE					
123+50	-	124+76	-	126	126
DUCK CREEK DR					
130+20	-	131+50	-	130	130
		PROJECT TOTALS	1900	18261	18261

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL

CATEGORY	PROJECT	650.9910 LS
0010	6355-00-74	1
PROJECT TOTALS		1

SAWING PAVEMENT

PROJECT NUMBER	CATEGORY	STAGE	STATION	LOCATION	*690.0150 SAWING ASPHALT (LF)	690.0250 SAWING CONCRETE (LF)	REMARKS
1007-10-86	1000	1	77+70'NN' - 79+56'NN'	RT	202	-	PARKING AREA
			79+15'NN' - 81+85'NN'	LT	393	-	PARKING AREA
			85+75'NN' - 87+80'NN'	RT	405	-	PARKING AREA
			107+12'EF' - 112+40'EF'	LT	451	-	PARKING AREA
			89+85'NN' - 90+65'NN'	RT	83	-	DRIVEWAY
			90+95'NN' - 91+41'NN'	RT	50	-	DRIVEWAY
				STAGE SUBTOTALS	1584	0	
		2A	75+00 'NN'	CTH N	30	-	TRANSVERSE
			86+57'NN'	CTH N	38	-	TRANSVERSE
			92+63'NN' - 97+70'NN'	CTH N	500	-	LONGITUDINAL
			6+25'TCC' - 6+91'TCC'	EXIST SB ENTRANCE RAMP	-	66	
			9+30'TCC'	EXIST SB ENTRANCE RAMP	-	36	
			104+60'TCD' - 105+15'TCD'	EXIST SB EXIT RAMP	-	56	
			103+28'NN'	CTH N	44	-	TRANSVERSE
			103+40'TCA' - 104+20'TCA'	EXIST NB ENTRANCE RAMP	-	80	
			96+00'TCB' - 96+68'TCB'	EXIST NB EXIT RAMP	-	68	
			110+60 'NN' - 111+70 'NN'	LT	151	-	PARKING AREA
			123+55 'R'	RINDEN RD	23	-	TRANSVERSE
			130+75 'R'	RINDEN RD	22	-	TRANSVERSE
			123+62 'R' - 124+00 'R'	RT	38	-	DRIVEWAY
			125+81 'NN' - 125+93 'NN'	RT	12	-	DRIVEWAY
			130+50 'NN'	CTH N	23	-	TRANSVERSE
			872+00 'XSB' - 880+80 'XSB'	SB ENTRANCE RAMP	-	882	LONGITUDINAL
			901+57 'XSB' - 908+78 'XSB'	SB EXIT RAMP	-	721	LONGITUDINAL
			875+90 'XNB' - 881+32 'XNB'	NB EXIT RAMP	-	540	LONGITUDINAL
			905+97 'XNB' - 914+77 'XNB'	NB ENTRANCE RAMP	-	880	LONGITUDINAL
				STAGE SUBTOTALS	881	3,329	
		2B	97+59'NN' - 99+08'NN'	CTH N	157	-	LONGITUDINAL
			102+85'NN' - 103+30'NN'	CTH N	46	-	LONGITUDINAL
				STAGE SUBTOTALS	203	0	
		2C	83+97'NN'	CTH N	28	-	TRANSVERSE
			89+05 'NN' - 89+46 'NN'	LT	40	-	DRIVEWAY
			90+63 'NN' - 91+34 'NN'	LT	70	-	DRIVEWAY
			92+36 'NN' - 93+58 'NN'	LT	156	-	PARKING AREA
				STAGE SUBTOTALS	294	0	
				PROJECT TOTALS	**2,962**	**3,329**	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

FISH HABITAT STRUCTURE

SPV.0060.01

STATION	LOCATION	(EACH)
632+65	RT	1
633+15	RT	1
633+65	RT	1
	PROJECT TOTALS	**3**

RECTANGULAR RAPID FLASHING BEACON (RRFB) SYSTEM

LOCATION	SPV.0060.02 FURNISH AND INSTALL SOLAR POWERED RRFB SYSTEM (601+81, RT) EACH	SPV.0060.03 FURNISH AND INSTALL SOLAR POWERED RRFB SYSTEM (601+92, LT) EACH
CTH Z	1	1
	1	**1**

FLORENCE G. CLARK

JOSEPH D. PARTIPILO

RICHARD J. UPHOFF, & MARION L. UPHOFF

WAYNE J. BRIENEN & PHYLLIS M. BRIENEN

KEITH R. HICKEY

BETTY C. KLEIN

STA 482+90 LT
CONST AGG PE
1-21" X 15" X 28' CSACP REQ'D
2-21" X 15" STEEL AEW'S REQ'D

N

EXISTING R/W

PI 477+24.81
Δ = 0°28'28" LT

FRONTIER COMMUNICATIONS

SLOPE INTERCEPTS

N 0°14'23.90" W

475+00

N 0°22'22.14" W

CTH Z

480+00

N 0°06'06.62" E

MATCHLINE STA 485+00

PI 472+98.94
Δ = 0°7'57" RT

EXISTING R/W

ADAMS-COLUMBIA ELECTRIC

FRONTIER COMMUNICATIONS-FIBER

FRANK A. MRZENA

BEGIN PROJECT
STA 481+00.00
Y=185365.787
X=499267.995
MATCH EXISTING
SAWCUT REQUIRED

PVI STA 481+00.00
PVT EL 869.86

FINISHED ℄ PROFILE

200' VC
K = 1014.93

-0.20%

SDRT -0.38%

SDLT -0.26%

EXISTING ℄ PROFILE

PVC STA 483+40.00
PVC EL 869.39

PVI STA 484+40.00
PVI EL 869.19

EXISTING ℄ ELEVATIONS

FINISHED ℄ ELEVATIONS

880	875	870	865	860	855	850	845

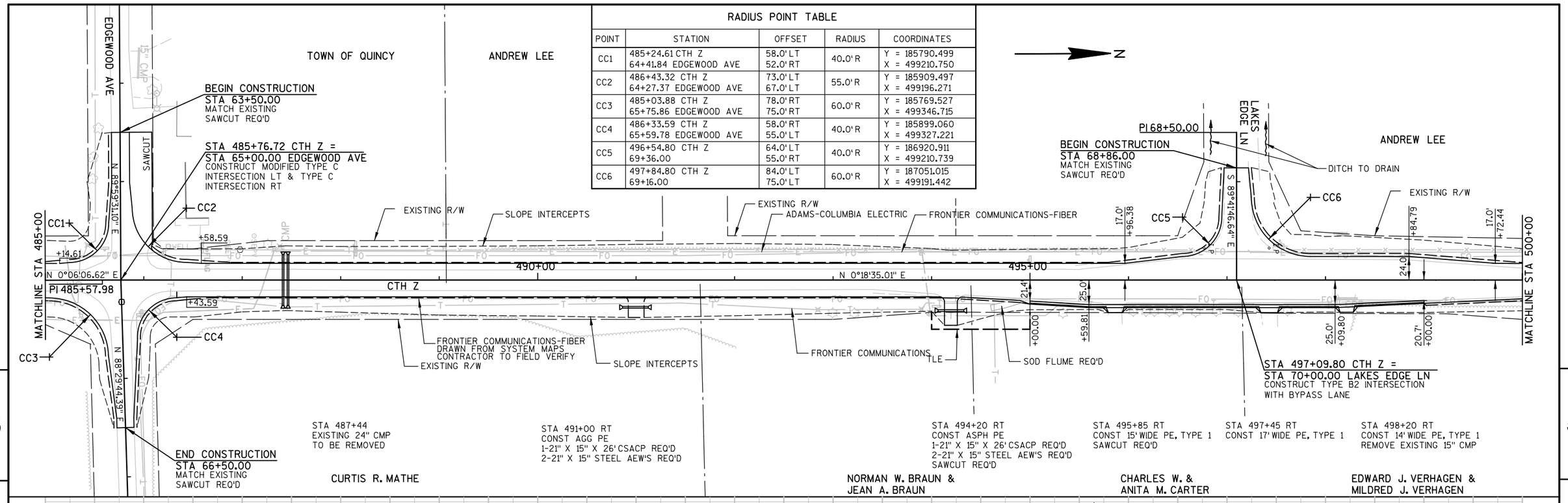
470+00	471+00	472+00	473+00	474+00	475+00	476+00	477+00	478+00	479+00	480+00	481+00	482+00	483+00	484+00	485+00
868.44	868.27	868.17	868.18	868.21	868.28	868.41	868.64	868.77	868.76	868.69	868.56	868.50	868.52	868.64	868.85	869.09	869.37	869.60	869.79	869.86	869.86 / 869.86	869.71 / 869.76	869.48 / 869.66	869.28 / 869.56	869.09 / 869.47	868.85 / 869.37	868.60 / 869.29	868.54 / 869.23	868.54 / 869.20

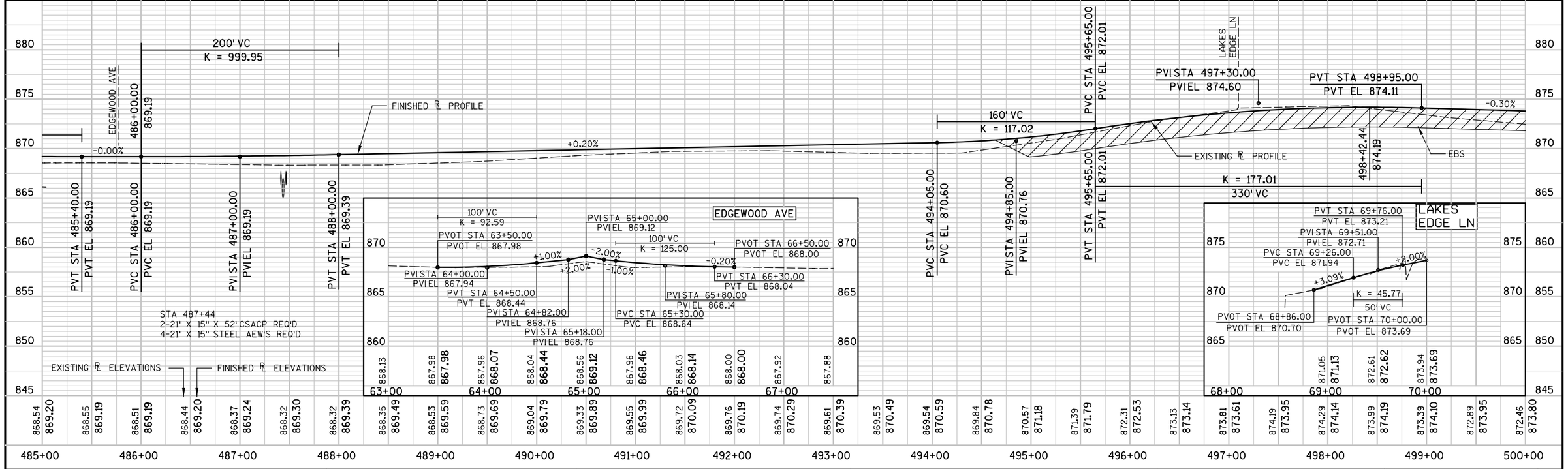
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5

PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	PLAN & PROFILE	SCALE, FEET 0 50 100	SHEET 57	E

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	485+24.61 CTH Z 64+41.84 EDGEWOOD AVE	58.0' LT 52.0' RT	40.0' R	Y = 185790.499 X = 499210.750
CC2	486+43.32 CTH Z 64+27.37 EDGEWOOD AVE	73.0' LT 67.0' LT	55.0' R	Y = 185909.497 X = 499196.271
CC3	485+03.88 CTH Z 65+75.86 EDGEWOOD AVE	78.0' RT 75.0' RT	60.0' R	Y = 185769.527 X = 499346.715
CC4	486+33.59 CTH Z 65+59.78 EDGEWOOD AVE	58.0' RT 55.0' LT	40.0' R	Y = 185899.060 X = 499327.221
CC5	496+54.80 CTH Z 69+36.00	64.0' LT 55.0' RT	40.0' R	Y = 186920.911 X = 499210.739
CC6	497+84.80 CTH Z 69+16.00	84.0' LT 75.0' LT	60.0' R	Y = 187051.015 X = 499191.442





PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	PLAN & PROFILE	SCALE, FEET 0 50 100	SHEET 58	E

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	511+57.06 CTH Z 75+75.58 EAGLE DRIVE	78.0' RT 75.0' RT	60.0' R	Y = 188421.336 X = 499372.307
CC2	512+86.47 CTH Z 75+59.86 EAGLE DRIVE	58.0' RT 55.0' LT	40.0' R	Y = 188551.072 X = 499354.539

BENCHMARK TABLE			
NO	STATION	DESCRIPTION	ELEV
27	512+08.74, 30.0' LT	3/8" SPK IN PP* R2748 W SIDE CTH Z & EAGLE DRIVE 50'± N OF FIRE #2551	871.58

RONALD A. TAYLOR

RAYMOND J. COLLINS & PAMELA J. KOEPKE

ZACHARY J. FENSKE

STA 502+15 LT
CONST AGG PE
1-21" X 15" X 26' CSACP REQ'D
2-21" X 15" STEEL AEW'S REQ'D

STA 505+20 LT
CONST AGG PE
1-21" X 15" X 40' CSACP REQ'D
2-21" X 15" STEEL AEW'S REQ'D

STA 507+70 LT
CONST AGG PE
REMOVE EXISTING 15" CMP
1-21" X 15" X 30' CSACP REQ'D
2-21" X 15" STEEL AEW'S REQ'D

N

PI 501+22.83
Δ = 0°37'53" LT

MATCHLINE STA 500+00

N 0°18'35.01" E

+42.51

EXISTING R/W

FRONTIER COMMUNICATIONS-FIBER
DRAWN FROM SYSTEM MAPS
CONTRACTOR TO FIELD VERIFY

EXISTING R/W

TLE

SLOPE INTERCEPTS

505+00

N 0°56'28.21" E

CTH Z

FRONTIER COMMUNICATIONS-FIBER

ADAMS-COLUMBIA ELECTRIC

510+00

SLOPE INTERCEPTS

FRONTIER COMMUNICATIONS

PI 510+93.19
Δ = 0°2'47" LT

STA 511+55 LT
CONST AGG PE
REMOVE EXISTING 15" CMP

STA 512+29.53 CTH Z =
STA 75+00.00 EAGLE DR
CONSTRUCT TYPE C INTERSECTION

EXISTING HIGHWAY EASEMENT

BM 27

N 0°59'15.76" E

MATCHLINE STA 515+00

+41.49

+96.46

CC1

CC2

N 89°05'05.40" E

TLE

EXISTING R/W

END CONSTRUCTION
STA 76+50.00
MATCH EXISTING
SAWCUT REQ'D

EAGLE DR

DITCH TO DRAIN

DITCH TO DRAIN

STA 501+90 RT
CONST AGG PE
1-21" X 15" X 24' CSACP REQ'D
2-21" X 15" STEEL AEW'S REQ'D

STA 504+70 RT
CONST AGG PE
1-21" X 15" X 32' CSACP REQ'D
2-21" X 15" STEEL AEW'S REQ'D

STA 506+40 RT
CONST ASPH PE
SAWCUT REQ'D

THOMAS C. MORGAN

CHARLES D. SCHNOLIS & JULIE A. SCHNOLIS

THOMAS C. MORGAN

JEFFREY A. STATEMA & CHRISTINA R. STATEMA

KATHY A. GIBAS

150' VC
K = 135.32

PVC STA 505+35.00
PVC EL 873.15

PVI STA 506+85.00
PVI EL 874.37

PVT STA 508+35.00
PVT EL 873.26

100' VC
K = 137.04

504+15.18
872.63

506+92.12
873.79

-0.30%

+0.81%

-0.74%

-0.01%

-0.22%

EBS

EXISTING ℄ PROFILE

FINISHED ℄ PROFILE

℄ EAGLE DR

PVC STA 503+75.00
PVC EL 872.68

PVI STA 504+50.00
PVI EL 872.46

PVT STA 505+25.00
PVT EL 873.07

PVC STA 508+40.00
PVC EL 873.23

PVI STA 508+90.00
PVI EL 872.86

PVT STA 509+40.00
PVT EL 872.85

PVC STA 513+15.00
PVC EL 872.82

PVI STA 513+65.00
PVI EL 872.82

PVT STA 514+15.00
PVT EL 872.71

PVC STA 514+50.00
PVC EL 872.63

K = 193.60
300' VC

K = 480.92
100' VC

SDRT +0.30%

SDLT +0.30%

STA 509+00
1-24" X 48' CSCP REQ'D
2-24" STEEL AEW'S REQ'D

EXISTING ℄ ELEVATIONS

FINISHED ℄ ELEVATIONS

EAGLE DR

100' VC
K = 113.23

-2.00%

-1.30%

-0.42%

PVOT STA 75+00.00
PVOT EL 872.83

PVI STA 75+18.00
PVI EL 872.47

PVC STA 75+35.00
PVC EL 872.25

PVI STA 75+85.00
PVI EL 871.60

PVOT STA 76+50.00
PVOT EL 871.33

PVT STA 76+35.00
PVT EL 871.39

| | | | |

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	524+74.44 CTH Z 80+75.41 EAGLE CT	73.0' RT 70.0' RT	55.0' R	Y = 189738.611 X = 499390.000
CC2	526+09.69 CTH Z 80+65.83 EAGLE CT	68.0' RT 65.0' LT	50.0' R	Y = 189873.923 X = 499387.331

WISCONSIN RIVER POWER COMPANY

HAROLD R. FELDMAN

N

STA 525+35 LT
CONST AGG PE

STA 525+46.96 CTH Z =
STA 80+00.00 EAGLE CT
CONSTRUCT TYPE C INTERSECTION

WISCONSIN RIVER POWER COMPANY

EXISTING HIGHWAY EASEMENT

FRONTIER COMMUNICATIONS-FIBER

SLOPE INTERCEPTS

ADAMS-COLUMBIA ELECTRIC

EXISTING HIGHWAY EASEMENT

MATCHLINE STA 515+00

520+00

CTH Z

525+00

N 0°59'15.76" E

N 0°54'09.94" E

MATCHLINE STA 530+00

+59.45

+19.68

CC1

CC2

EXISTING R/W

FRONTIER COMMUNICATIONS

FRONTIER COMMUNICATIONS-FIBER
DRAWN FROM SYSTEM MAPS
CONTRACTOR TO FIELD VERIFY

SLOPE INTERCEPTS

EXISTING R/W

STA 515+30 RT
CONST AGG PE
1-21" X 15" X 24' CSACP REQ'D
2-21" X 15" STEEL AEW'S REQ'D

STA 518+15 RT
CONST AGG PE
1-21" X 15" X 32' CSACP REQ'D
2-21" X 15" STEEL AEW'S REQ'D

STA 81+00 RT
CONST AGG PE

S 87°04'15.65" E

PI 527+60.39
Δ = 0°50'6" RT

MELVA K SEBBY,
PEGGY S. FIGGINS, &
KARL S. WILLIAMS

UROS VUJATOVIC &
ANNA VUJATOVIC

MICHAEL T.
KOSINSKI &
KAREN M.
KOSINSKI

5

5

JEFFREY A. STATEMA &
CHRISTINA R. STATEMA

KARL R. BECKER

NIKOLA GABRIC &
MILA GABRIC

EAGLE CT

END CONSTRUCTION
STA 81+30.00
MATCH EXISTING
SAWCUT REQ'D

STA 528+20 RT
CONST AGG PE
1-21" X 15" X 26' CSACP REQ'D
2-21" X 15" STEEL AEW'S REQ'D

STA 530+00 RT
CONST ASPH PE
1-21" X 15" X 24' CSACP REQ'D
2-21" X 15" STEEL AEW'S REQ'D
SAWCUT REQ'D

200' VC
K = 410.13

515+38.68
872.54

PVISTA 515+50.00
PVIEL 872.42

PVT STA 516+50.00
PVT EL 872.69

PVC STA 518+50.00
PVC EL 873.23

PVISTA 519+00.00
PVIEL 873.37

PVT STA 519+50.00
PVT EL 873.35

519+40.66
873.35

+0.27%

-0.03%

SDLT +0.13%

SDRT +0.13%

K = 334.02
100' VC

200' VC
K = 209.20

521+52.85
873.30

PVC STA 521+47.00
PVC EL 873.30

PVISTA 522+47.00
PVIEL 873.27

PVT STA 523+47.00
PVT EL 874.20

PVC STA 524+20.00
PVC EL 874.88

PVISTA 525+25.00
PVIEL 875.85

+0.93%

FINISHED ℄ PROFILE

EXISTING ℄ PROFILE

℄ EAGLE CT

525+59.66
875.52

K = 150.48
210' VC

PVT STA 526+30.00
PVT EL 875.36

-0.47%

PVC STA 527+13.00
PVC EL 874.97

300' VC
K = 240.95

528+25.63
874.71

PVISTA 528+63.00
PVIEL 874.27

-2.00%

-0.20%

PVOT STA 81+30.00
PVOT EL 874.94

PVISTA 80+18.00
PVIEL 875.16

PVOT STA 80+00.00
PVOT EL 875.52

EAGLE CT

EXISTING ℄ ELEVATIONS

FINISHED ℄ ELEVATIONS

| | | | |

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	534+79.17 CTH Z 85+78.15 EAGLE AVENUE	78.0' RT 75.0' RT	60.0' R	Y = 190742.513 X = 499411.522
CC2	536+09.20 CTH Z 85+57.88 EAGLE AVENUE	58.0' RT 55.0' LT	40.0' R	Y = 190873.012 X = 499394.764

N

WISCONSIN RIVER POWER COMPANY

EXISTING HIGHWAY EASEMENT

EXISTING R/W

SLOPE INTERCEPTS

MATCHLINE STA 530+00

N 0°54'09.94" E

PI 534+48.40
Δ = 0°31'20" RT

535+00

CTH Z

STA 535+54.32 CTH Z =
STA 85+00.00 EAGLE AVE
CONSTRUCT TYPE C INTERSECTION

PI 88+85.00

OUTFALL 1

CASTLE ROCK DITCH

S 88°34'29.94" E

TLE

EXISTING PLE

EXISTING PLE

ADAMS-COLUMBIA ELECTRIC

WOODS

FRONTIER COMMUNICATIONS-FIBER

540+00

N 1°25'30.06" E

N 1°09'16.00" E

MATCHLINE STA 545+00

+60.83

+19.21

EXISTING R/W

CC1

CC2

SLOPE INTERCEPTS

EXISTING R/W

FRONTIER COMMUNICATIONS

FRONTIER COMMUNICATIONS-FIBER
DRAWN FROM SYSTEM MAPS
CONTRACTOR TO FIELD VERIFY

PI 542+83.64
Δ = 0°16'14" LT

MICHAEL T. KOSINSKI & KAREN M. KOSINSKI

STA 531+10 RT
CONST ASPH PE
1-21" X 15" X 24' CSACP REQ'D
2-21" X 15" STEEL AEW'S REQ'D
SAWCUT REQ'D

HAROLD O. MATHE & VIVIAN S.. MATHE

STA 533+25 RT
CONST AGG PE
1-21" X 15" X 26' CSACP REQ'D
2-21" X 15" STEEL AEW'S REQ'D

S 88°27'33.74" E

END CONSTRUCTION
STA 86+35.00
MATCH EXSITNG
SAWCUT REQ'D

EAGLE AVE

STANLEY NOWAK & ROSE NOWAK

WOODS

STA 544+45 RT
CONST AGG PE
1-21" X 15" X 26' CSACP REQ'D
2-21" X 15" STEEL AEW'S REQ'D

PVT STA 534+00.00
PVT EL 875.82

PVISTA 532+25.00
PVIEL 877.09

PVC STA 530+50.00
PVC EL 875.72

150' VC
K = 246.51

+0.78%

-0.72%

EXISTING ℄ PROFILE

SDRT -1.54%

PVC STA 534+25.00
PVC EL 875.64

PVISTA 535+00.00
PVIEL 875.10

532+31.51
876.43

PVT STA 530+13.00
PVT EL 875.44

K = 233.42
350' VC

℄ EAGLE AVE

PVT STA 535+75.00
PVT EL 875.01

-0.11%

SDLT -0.50%
SDRT -0.30%

PVC STA 537+25.00
PVC EL 874.85

PVISTA 538+00.00
PVIEL 874.76

SDLT -0.87%

PVT STA 538+75.00
PVT EL 874.76

150' VC
K = 1323.53

538+75.00
874.76

FINISHED ℄ PROFILE

+0.00%

SDLT +0.87%

SDRT +0.50%
SDLT +0.50%

150' VC
K = 212.88

PVC STA 541+31.00
PVC EL 874.76

PVISTA 542+06.00
PVIEL 874.76

PVT STA 542+81.00
PVT EL 875.29

+0.70%

PVC STA 544+75.00
PVC EL 876.66

100' VC
K = 63.72

-2.00%

-1.62%

PVOT STA 85+00.00
PVOT EL 875.05

PVISTA 85+18.00
PVIEL 874.69

PVC STA 85+35.00
PVC EL 874.41

PVISTA 85+85.00
PVIEL 873.61

PVOT STA 86+35.00
PVOT EL 873.58

EAGLE AVE

STA 85+45
1-21" X 15" X 60' CSACP REQ'D
2-21" X 15" STEEL AEW'S REQ'D

STA 539+00
1-24" X 54' CSCP REQ'D
2-24" STEEL AEW'S REQ'D

PVISTA 88+94.00
PVIEL 869.65

OUTFALL 1

PVISTA 89+07.00
PVIEL 871.72

PVISTA 89+12.00
PVIEL 871.74

+0.50%

+39.44%

PVOT STA 89+64.64
PVOT EL 870.00

PVISTA 89+20.00
PVIEL 869.78

PVISTA 88+99.00
PVIEL 869.67

PVOT STA 88+85.00
PVOT EL 866.10

EXISTING ℄ ELEVATIONS

FINISHED ℄ ELEVATIONS

| | | | |

WISCONSIN RIVER POWER COMPANY

CURVE DATA
DELTA =0°54'16.00" (LT)
D =0°06'52.53"
T =394.65
L =789.28
E =1.56
R =50000.00
DB =N 1°09'16.00" E
DA =N 0°15'00.00" E
PC STA 557+31.66
PC Y =192996.409
PC X =499382.731
PI STA 561+26.31
PI Y =193390.975
PI X =499390.682
PT STA 565+20.94
PT Y =193785.618
PT X =499392.404
SE = NC

N

EXISTING HIGHWAY EASEMENT
EXISTING R/W
SLOPE INTERCEPTS
FRONTIER COMMUNICATIONS-FIBER
CASTLE ROCK DITCH
OUTFALL 2
PI 93+79.73
TLE
EXISTING PLE
ADAMS-COLUMBIA ELECTRIC
EXISTING PLE
S 88°51'55" E
PC 557+31.66
MATCHLINE STA 545+00
550+00
N 1°09'16.00" E
CTH Z
555+00
MATCHLINE STA 560+00
EXISTING R/W
SLOPE INTERCEPTS
WOODS
FRONTIER COMMUNICATIONS
FRONTIER COMMUNICATIONS-FIBER
DRAWN FROM SYSTEM MAPS
CONTRACTOR TO FIELD VERIFY

STA 554+15 RT
CONST AGG PE
1-21" X 15" X 30' CSACP REQ'D
2-21" X 15" STEEL AEW'S REQ'D

PLUM CREEK LAND COMPANY

200' VC
K = 182.98
+1.80%
PVI STA 545+75.00
PVI EL 877.36
PVC STA 547+25.00
PVC EL 880.06
PVT STA 546+75.00
PVT EL 879.16
PVI STA 550+00.00
PVI EL 885.00
550+22.37
882.73
EXISTING ℄ PROFILE
FINISHED ℄ PROFILE
K = 165.42
550' VC
EXISTING ℄ ELEVATIONS
FINISHED ℄ ELEVATIONS
PVT STA 552+75.00
PVT EL 880.80
-1.53%
PVC STA 553+50.00
PVC EL 879.65
200' VC
K = 124.00
PVI STA 554+50.00
PVI EL 878.13
555+39.37
878.21
PVT STA 555+50.00
PVT EL 878.21
SDRT -0.30%
SDLT -0.30%
SDLT -0.65%
SDLT +0.81%
SDRT +0.46%
PVC STA 559+13.00
PVC EL 878.52
560+00.00
878.70
+0.09%
STA 557+50
1-24" X 50' CSCP REQ'D
2-24" STEEL AEW'S REQ'D

OUTFALL 2
PVI STA 93+94.00
PVI EL 873.64
PVI STA 94+07.00
PVI EL 875.70
PVI STA 94+12.00
PVI EL 875.73
+0.50%
PVOT STA 94+66.14
PVOT EL 874.00
PVI STA 94+20.00
PVI EL 873.77
PVI STA 93+99.00
PVI EL 873.66
PVOT STA 93+80.00
PVOT EL 867.90
+41.09%
878.28 873.92
880.44 873.92
877.78
94+00
95+00

876.18	876.58	877.28	878.05	879.11	880.24	881.42	882.61	883.19	883.71	883.83	883.92	883.59	883.26	882.18	881.10	879.86	878.64	878.05	877.52	877.49	877.48	877.57	877.66	877.73	877.78	877.78	877.78	877.83	877.90	878.05
876.85	877.34	877.96	878.73	879.61	880.49	881.23	881.83	882.28	882.57	882.71	882.71	882.55	882.24	881.78	881.16	880.42	879.65	878.99	878.53	878.27	878.21	878.26	878.30	878.34	878.38	878.43	878.47	878.51	878.57	878.70

545+00 546+00 547+00 548+00 549+00 550+00 551+00 552+00 553+00 554+00 555+00 556+00 557+00 558+00 559+00 560+00

PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	PLAN & PROFILE	SCALE, FEET 0 50 100	SHEET 62	E

CURVE DATA
DELTA =0°54'16.00" (LT)
D =0°06'52.53"
T =394.65
L =789.28
E =1.56
R =50000.00
DB =N 1°09'16.00" E
DA =N 0°15'00.00" E
PC STA 557+31.66
PC Y =192996.409
PC X =499382.731
PI STA 561+26.31
PI Y =193390.975
PI X =499390.682
PT STA 565+20.94
PT Y =193785.618
PT X =499392.404
SE = NC

N

WISCONSIN RIVER POWER COMPANY

OUTFALL 3

CASTLE ROCK DITCH

PI 98+87.00

89°45'00.00"

TLE

EXISTING PLE

EXISTING PLE

ADAMS-COLUMBIA ELECTRIC

SLOPE INTERCEPTS

EXISTING HIGHWAY EASEMENT

FRONTIER COMMUNICATIONS-FIBER

EXISTING R/W

PT 565+20.94

MATCHLINE STA 560+00

565+00

570+00

N 0°15'00.00" E

MATCHLINE STA 573+00

CTH Z

PI 561+26.31

SLOPE INTERCEPTS

EXISTING R/W

WOODS

FRONTIER COMMUNICATIONS

FRONTIER COMMUNICATIONS-FIBER
DRAWN FROM SYSTEM MAPS
CONTRACTOR TO FIELD VERIFY

STA 566+40
CONST ASPH PE
1-18" X 46' CSCP REQ'D
2-18" STEEL AEW'S REQ'D
SAWCUT REQ'D

PLUM CREEK LAND COMPANY

DAVID J. BOSSERT &
CECILIA K. BOSSERT

200' VC
K = 390.04

PVC STA 561+55.00
PVC EL 879.46

PVISTA 562+55.00
PVIEL 880.06

PVT STA 563+55.00
PVT EL 879.86

100' VC
K = 371.06

565+24.41
879.59

FINISHED ℄ PROFILE

+0.60%

-0.20%

+0.07%

SDLT +0.46%

SDRT -0.30%

SDLT -0.30%

SDLT -0.30%

SDRT -0.30%

SDLT -0.59%

SDLT +0.68%

SDRT +0.30%

EXISTING ℄ PROFILE

PVISTA 560+13.00
PVIEL 878.61

PVT STA 561+13.00
PVT EL 879.21

563+04.81
879.91

K = 250.32
200' VC

PVC STA 564+50.00
PVC EL 879.67

PVISTA 565+00.00
PVIEL 879.57

PVT STA 565+50.00
PVT EL 879.60

STA 570+70
1-30" X 60' CSCP REQ'D
2-30" STEEL AEW'S REQ'D

OUTFALL 3
PVISTA 98+97.00
PVIEL 873.78
PVISTA 99+10.00
PVIEL 875.85
PVISTA 99+15.00
PVIEL 875.87
+0.50 %
PVOT STA 99+60.24
PVOT EL 874.10
PVISTA 99+23.00
PVIEL 873.91
+39.80 %
PVISTA 99+02.00
PVIEL 873.80
PVOT STA 98+87.00
PVOT EL 869.80
878.82 873.79
880.28 874.05
879.44
99+00
100+00

EXISTING ℄ ELEVATIONS

FINISHED ℄ ELEVATIONS

878.05 878.70 | 878.24 878.88 | 878.52 879.13 | 878.77 879.43 | 878.96 879.69 | 879.12 879.85 | 879.21 879.91 | 879.19 879.87 | 879.02 879.77 | 878.94 879.67 | 878.95 879.60 | 879.00 879.60 | 879.06 879.64 | 879.09 879.67 | 879.07 879.70 | 879.08 879.74 | 879.09 879.77 | 879.15 879.81 | 879.23 879.84 | 879.33 879.88 | 879.42 879.91 | 879.45 879.95 | 879.43 879.98 | 879.46 880.02 | 879.52 880.05 | 879.55 880.08 | 879.57 880.12

885 880 875 870 865 860 855 850

560+00 561+00 562+00 563+00 564+00 565+00 566+00 567+00 568+00 569+00 570+00 571+00 572+00 573+00

PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	PLAN & PROFILE	SCALE, FEET 0 50 100	SHEET 63	E

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	573+93.68 CTH Z 105+75.19 DYKE DRIVE	78.0' RT 75.0' RT	60.0' R	Y = 194658.014 X = 499474.220
CC2	575+23.01 CTH Z 105+60.16 DYKE DRIVE	58.0' RT 55.0' LT	40.0' R	Y = 194787.428 X = 499454.786
CC3	584+96.23 CTH Z 110+76.31 LAKEVIEW DRIVE	78.0' RT 75.0' RT	60.0' R	Y = 195760.176 X = 499481.360
CC4	586+25.80 CTH Z 110+59.29 LAKEVIEW DRIVE	58.0' RT 55.0' LT	40.0' R	Y = 195889.926 X = 499462.518

BENCHMARK TABLE			
NO	STATION	DESCRIPTION	ELEV
33	587+36.47, 30.5' LT	3/8" SPK IN PP W SIDE CTH Z 75'± W OF FIRE #2424	888.72

WISCONSIN RIVER POWER COMPANY

N

STA 574+65.75 CTH Z =
STA 105+00.00 DYKE DR
CONSTRUCT TYPE C INTERSECTION

STA 585+69.47 CTH Z =
STA 110+00.00 LAKEVIEW DR
CONSTRUCT TYPE C INTERSECTION

MATCHLINE STA 573+00

MATCHLINE STA 588+00

FRONTIER COMMUNICATIONS-FIBER

SLOPE INTERCEPTS

EXISITNG R/W

PI 579+86.49
Δ = 0°15'42" RT

EXISTING HIGHWAY EASEMENT

ADAMS-COLUMBIA ELECTRIC

TLE

BM 33

575+00

580+00

585+00

N 0°15'00.00" E

CTH Z

N 0°30'42.00" E

+78.70

+33.00

+81.22

+35.81

CC1

CC2

CC3

CC4

FRONTIER COMMUNICATIONS

FRONTIER COMMUNICATIONS -FIBER

ADAMS-COLUMBIA ELECTRIC

N 88°03'18.36" E

DYKE DR

END CONSTRUCTION
STA 106+50.00
MATCH EXISTING
SAWCUT REQ'D

PI 106+44.15

PETER J. KOPITZKE

EXISITNG R/W

SLOPE INTERCEPTS

15" CMP

STA 580+92 RT
CONST AGG PE
REMOVE EXISTING 15" CMP
1-21" X 15" X 28' CSACP REQ'D
2-21" X 15" STEEL AEW'S REQ'D

JON P. TRZESNIAK & SHARON E. TRZESNIAK

ROBERT J. TRZESNIAK, CHERI A. NACHREINER, & JON P. TRZESNIAK

STA 110+66 RT
CONST AGG PE
1-18" X 30' CSCP REQ'D
2-18" STEEL AEW'S REQ'D

ADAMS-COLUMBIA ELECTRIC

END CONSTRUCTION
STA 111+65.00
MATCH EXISTING
SAWCUT REQ'D

N 89°15'57.51" E

LAKEVIEW DR

FRONTIER COMMUNICATIONS

EDWIN J. JONES & STEVEN G. JONES

STA 587+30 RT
CONST ASPH PE
1-21" X 15" X 32' CSCP REQ'D
2-21" X 15" STEEL AEW'S REQ'D
SAWCUT REQ'D

PI 587+14.46

EXISITNG R/W

WOODS

℄ DYKE DRIVE

PROPOSED ℄ PROFILE

+0.07%

+0.07%

+0.07%

150' VC
K = 156.72

+1.03%

SDRT +0.63%

SDRT +0.80%

SDRT +2.47%

SDRT +0.30%

SDLT +0.30%

SDRT +0.30%

SDLT +0.30%

PVC STA 580+75.00
PVC EL 880.65

PVI STA 581+50.00
PVIEL 880.71

PVT STA 582+25.00
PVT EL 881.47

EXISTING ℄ PROFILE

℄ LAKEVIEW DR

DYKE DR

100' VC
K = 76.84

PVOT STA 105+00.00
PVOT EL 880.23

PVOT STA 106+50.00
PVOT EL 879.41

-2.00%

-0.84%

PVI STA 105+18.00
PVIEL 879.87

PVI STA 106+00.00
PVIEL 879.18

PVC STA 105+50.00
PVC EL 879.60

STA 105+37
1-24" X 72' CSACP REQ'D
2-24" STEEL AEW'S REQ'D

-2.00%

-0.06%

PVOT STA 111+65.00
PVOT EL 884.55

PVI STA 110+18.00
PVIEL 884.64

PVOT STA 110+00.00
PVOT EL 885.00

LAKEVIEW DR

STA 110+35
1-18" X 80' CSACP REQ'D
2-18" STEEL AEW'S REQ'D

	879.47	880.23	879.30	879.60	879.35	879.34	879.41	879.41
EXISTING ℄ ELEVATIONS	105+00			106+00				107+00
FINISHED ℄ ELEVATIONS								

	885.73	885.00	885.14	884.62	884.90	884.59	884.62	884.56	884.63
EXISTING ℄ ELEVATIONS	110+00				111+00				112+00
FINISHED ℄ ELEVATIONS									

| | | | | | | | | |

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	599+59.41 CTH Z 120+76.05 DYKE AVE	78.0' RT 75.0' RT	60.0' R	Y = 197224.674 X = 499482.347
CC2	600+88.93 CTH Z 120+59.47 DYKE AVE	58.0' RT 55.0' LT	40.0' R	Y = 197354.024 X = 499461.285
CC3	602+16.13 CTH Z 120+31.69 DYKE AVE	27.0' RT 181.2' LT	25.0' R	Y = 197394.847 X = 499429.949

N

ADAMS COUNTY

PARK EXIT

PARK ENT

BEGIN CONSTRUCTION
STA 123+50.00
MATCH EXISTING
SAWCUT REQ'D

PI 123+50.00

PI 113+50.00

STA 602+33.60 CTH Z =
STA 125+00.00
CONSTRUCT MODIFIED TYPE D
INTERSECTION WITH RIGHT
TURN LANE (SEE INTERSECTION
DETAIL)

FUTURE TRAIL
BY OTHERS

TLE

N 86°52'39.92" E

BEGIN CONSTRUCTION
STA 113+75.00
MATCH EXISTING
SAWCUT REQ'D

N 38°28'56.10" E

SLOPE INTERCEPTS

TLE

EXISTING R/W

ADAMS-COLUMBIA ELECTRIC

WOODS

MATCHLINE STA 588+00

590+00

595+00

600+00

+38.22

+56.49

+42.29

N 0°01'32.00" E

CTH Z

N 0°28'12.00" W

N 0°49'18.00" W

MATCHLINE STA 603+00

CMP

REMOVE BLOCK RETAINING WALLS

FRONTIER COMMUNICATIONS

TLE

SLOPE INTERCEPTS

WOODS

EXISTING R/W

PI 597+85.33
Δ= 0°29'45" LT

+44.45

CC1

CC3

CC2

PI 601+92.92
Δ= 0°21'06" RT

DYKE AVE

N 88°01'21.33" E

10.2'

WOODS

TLE

10' WIDE
PEDESTRIAN TRAIL

STA 602+40 RT
CONST ASPH PE
1-18" X 30' CSCP REQ'D
2-18" STEEL AEW'S REQ'D

DEBBIE CASSIDY,
GINA COHEN,
SANDY STREIT,
BONNIE KEATING,
GEORGE FALK,
BRENDA
HOFSTEDTER,
KATHY JACKSON,
TOM FALK &
LESLIE FALK

STA 588+30 RT
CONST ASPH PE
1-21" X 15" X 28' CSCP REQ'D
2-21" X 15" STEEL AEW'S REQ'D
SAWCUT REQ'D

STA 591+47 RT
REMOVE EXISTING CMP

JOINT SCHOOL DISTRICT NO. 1,
TOWNS OF EASTON, QUINCY, SPRINGVILLE, AND ADAMS

STA 600+14.03 CTH Z =
STA 115+00.00
CONSTRUCT MODIFIED TYPE D
INTERSECTION (SEE INTERSECTION
DETAIL)

END CONSTRUCTION
STA 121+50.00
MATCH EXISTING
SAWCUT REQ'D

STA 601+00 RT
1-18" X 28' CSCP REQ'D
2-18" STEEL AEW'S REQ'D

STA 600+32.38 CTH Z =
STA 120+00.00 DYKE AVE
CONSTRUCT MODIFIED TYPE C
INTERSECTION WITH BYPASS LANE

5

5

PVC STA 590+68.00
PVC EL 890.12

PVI STA 592+43.00
PVI EL 891.92

PVT STA 594+18.00
PVT EL 890.12

592+42.69
891.02

+1.03%

-1.03%

SDRT -0.42%
SDLT -0.42 %

300' VC
K = 225.59

FINISHED ℄ PROFILE

597+29.29
888.11

℄ DYKE AVE

+0.30%

SDRT +0.60%

EXISTING ℄ PROFILE

PVC STA 594+97.00
PVC EL 889.30

PVI STA 596+47.00
PVI EL 887.76

SDRT -1.42%
SDLT -1.75%

SDLT +1.36%
SDRT +0.30%

PVT STA 597+97.00
PVT EL 888.21

K = 170.25
350' VC

PARK OUT

PVI STA 114+82.00
PVI EL 888.50

50' VC
K = 33.19

+2.15%

+2.00%

PVOT STA 113+75.00
PVOT EL 886.58

PVI STA 114+00.00
PVI EL 886.74

PVT STA 114+25.00
PVT EL 887.28

PVOT STA 115+00.00
PVOT EL 888.86

PARK IN

PVI STA 124+75.99
PVI EL 889.04

100' VC
K = 36.87

+2.59%

+2.00%

PVOT STA 125+00.00
PVOT EL 889.52

PVT STA 124+50.00
PVT EL 888.37

PVI STA 124+00.00
PVI EL 887.07

PVOT STA 123+50.00
PVOT EL 887.13

STA 597+30
1-24" X 56' CSCP REQ'D
2-24" STEEL AEW'S REQ'D

EXISTING ℄ ELEVATIONS

FINISHED ℄ ELEVATIONS

100' VC
K = 68.76

-2.00%

-1.29%

PVOT STA 120+00.00
PVOT EL 888.92

PVI STA 120+21.97
PVI EL 888.48

PVC STA 120+50.00
PVC EL 888.12

PVI STA 121+00.00
PVI EL 887.47

PVOT STA 121+50.00
PVOT EL 887.55

STA 120+59
1-28" X 20" X 50' CSCP REQ'D
2-28" X 20" STEEL AEW'S REQ'D

DYKE AVENUE

114+00	115+00	124+00	125+00	120+00	121+00	122+00
886.42	886.74 886.83	887.04 887.81	888.86	887.13 887.13	887.07 887.41	887.56 888.37	888.64 889.52	888.03 888.92	887.61 888.12	887.54 887.65	887.55 887.55	887.63	887.79

887.73 887.37	887.74 887.89	887.81 888.40	888.23 888.91	888.66 889.43	889.72 889.94	890.78 890.42	891.85 890.77	891.65 890.97	891.30 891.02	890.75 890.92	890.13 890.68	889.63 890.29	889.13 889.79	888.60 889.27	888.10 888.82	887.81 888.48	887.61 888.25	887.52 888.13	887.50 888.12	887.55 888.22	887.66 888.37	887.85 888.52	887.95 888.67	888.00 888.82	888.05 888.97	888.04 889.12	888.26 889.27	888.48 889.42	888.72 889.57	888.95 889.72

588+00 589+00 590+00 591+00 592+00 593+00 594+00 595+00 596+00 597+00 598+00 599+00 600+00 601+00 602+00 603+00

PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	PLAN & PROFILE	SCALE, FEET 0 50 100	SHEET 65	E

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	604+50.01 CTH Z	2.0' RT	50.0' R	Y=197714.635 X=499400.747
CC2	605+22.78 CTH Z	84.5' RT	50.0' R	Y=197788.584 X=499482.181

CURVE DATA
DELTA =1°51'30.00" (RT)
D =0°22'55.10"
T =243.28
L =486.51
E =1.97
R =15000.00
DB =N 0°24'20.00" W
DA =N 1°27'10.00" E
PC STA 615+26.80
PC Y =198791.330
PC X =499387.458
PI STA 617+70.08
PI Y =199034.600
PI X =499385.736
PT STA 620+13.31
PT Y =199277.798
PT X =499391.904
SE = NC

N

WAYNE L. KOTLOWSKI & DIANE M. KOTLOWSKI
WAYNE L. KOTLOWSKI
ERIC J. FELTES
LESLIE E. SCHUETZ & REVA E. SCHUETZ
DENNIS J. PETERS & SUSAN M. PETERS
ADAMS-COLUMBIA ELECTRIC
ADAMS COUNTY
ADAMS COUNTY
CHRISTOPHER K. DICKERT & CONSTANCE A DICKERT
IRENA NIKLAS SZCSEPANSKA
SANDRA L. KEMPF
DAVE R. BERGEMANN & JULIE A. BERGEMANN
JEFFREY M. SCACCIA & AMELIA M. SCACCIA
JEFF SCACCIA, AMELIA SCACCIA & MICHAEL A. CALIENDO

STA 610+40 LT
CONST 13' WIDE AGG PE, TYPE 1

STA 611+50 LT
CONST 12' WIDE AGG PE, TYPE 1

STA 612+10 LT
CONST 16' WIDE ASPH PE, TYPE 1
SAWCUT REQ'D

STA 613+70 LT
CONST 12' WIDE ASPH PE, TYPE 1
SAWCUT REQ'D

STA 615+05 LT
CONST 12' WIDE AGG PE, TYPE 1

STA 615+55 LT
CONST 12' WIDE ASPH PE, TYPE 1
SAWCUT REQ'D

STA 616+80 LT
CONST 14' WIDE ASPH PE, TYPE 1
SAWCUT REQ'D

STA 607+05 RT
CONST 12' WIDE AGG PE, TYPE Y MOD.

STA 610+70 RT
CONST 13' WIDE AGG PE, TYPE Y MOD.

STA 611+35 RT
CONST 30' WIDE AGG CE, TYPE 1

STA 612+80 RT
CONST 18' WIDE AGG PE, TYPE 1

STA 614+30 RT
CONST 16' WIDE AGG PE, TYPE Y MOD.
REMOVE EXISTING 12" CMP

STA 614+80 RT
CONST 12' WIDE ASPH PE, TYPE Y MOD.
SAWCUT REQ'D

STA 615+55 RT
CONST 12' WIDE ASPH PE, TYPE Y MOD.

STA 616+62 RT
CONST 12' WIDE ASPH PE, TYPE Y MOD.
SAWCUT REQ'D

STA 618+00 RT
CONST 12' WIDE ASPH PE, TYPE Y MOD.
SAWCUT REQ'D

MATCHLINE STA 603+00
MATCHLINE STA 618+00
PI 609+55.09
Δ = 0°24'58" RT
PI 617+70.08
PC 615+26.80
605+00
610+00
615+00
CC1
CC2
+85.07
+58.60
+62.00
+58.62
+33.60
N 0°49'18.00" W
N 0°24'20.00" W
CTH Z
SLOPE INTERCEPTS
EXISTING R/W
TLE
FRONTIER COMMUNICATIONS
10' WIDE PEDESTRIAN TRAIL
ASPHALTIC FLUME REQ'D
MOTEL ROOMS
MOTEL OFFICE
WOODS
BRUSH
BRUSH
BRUSH
BRUSH
BRUSH

PVC STA 603+50.00
PVC EL 889.87
PVI STA 604+00.00
PVI EL 890.02
PVT STA 604+50.00
PVT EL 890.27
PVC STA 607+36.00
PVC EL 891.70
PVI STA 607+86.00
PVI EL 891.95
PVT STA 608+36.00
PVT EL 893.15
PVC STA 609+25.00
PVC EL 895.30
PVI STA 610+00.00
PVI EL 897.10
PVT STA 610+75.00
PVT EL 896.39
610+32.55
896.59
PVC STA 612+50.00
PVC EL 894.73
PVI STA 613+00.00
PVI EL 894.25
PVT STA 613+50.00
PVT EL 894.10

100' VC
K = 500.33
100' VC
K = 52.45
K = 44.69
150' VC
100' VC
K = 153.85
+0.30%
+0.50%
+2.41%
-0.95%
-0.30%
EXISTING ℄ PROFILE
FINISHED ℄ PROFILE
EXISTING ℄ ELEVATIONS
FINISHED ℄ ELEVATIONS

| | | | |

CURVE DATA
DELTA =1°51'30.00" (RT)
D =0°22'55.10"
T =243.28
L =486.51
E =1.97
R =15000.00
DB =N 0°24'20.00" W
DA =N 1°27'10.00" E
PC STA 615+26.80
PC Y =198791.330
PC X =499387.458
PI STA 617+70.08
PI Y =199034.600
PI X =499385.736
PT STA 620+13.31
PT Y =199277.798
PT X =499391.904
SE = NC

CURVE DATA
DELTA =2°30'06.00" (LT)
D =0°22'55.10"
T =327.52
L =654.93
E =3.58
R =15000.00
DB =N 1°27'10.00" E
DA =N 1°02'56.00" W
PC STA 623+77.92
PC Y =199642.287
PC X =499401.147
PI STA 627+05.44
PI Y =199969.701
PI X =499409.451
PT STA 630+32.85
PT Y =200297.166
PT X =499403.456
SE = NC

CURVE DATA
DELTA =6°51'36.00" (RT)
D =0°57'17.75"
T =359.62
L =718.38
E =10.77
R =6000.00
DB =N 1°02'56.00" W
DA =N 5°48'40.00" E
PC STA 630+65.34
PC Y =200329.651
PC X =499402.861
PI STA 634+24.96
PI Y =200689.209
PI X =499396.278
PT STA 637+83.72
PT Y =201046.980
PT X =499432.689
SE = NC

N

ADAMS COUNTY

STA 622+05.65 CTH Z =
STA 130+00.00 DUCK CREEK DR
CONSTRUCT MODIFIED TYPE D INTERSECTION
(SEE INTERSETION DETAIL)

MATCHLINE STA 618+00

REMOVE CONC STEPS

ADAMS-COLUMBIA ELECTRIC

TLE

EXISTING R/W

PC 623+77.92

MGS GUARDRAIL TYPE K REQ'D 2-MGS EAT REQ'D

SLOPE INTERCEPTS

620+00

625+00

N 1°27'10.00" E

EXISTING PLE

LEE B. BEDORE

CASTLE ROCK LAKE

SAMUEL KIMBROUGH, RANDOLPH R. RURUP & CHRISTINE F. RURUP, JOHN T. HAUGH

RANDOLPH R. RURUP
CHRISTINE F. RURUP

PT 630+32.85

630+00

MGS GUARDRAIL TYPE K REQ'D 1-MGS EAT REQ'D

MATCHLINE STA 633+00

CTH Z

5' CONCRETE SIDEWALK

LIANA DIAMBRI REVOCABLE TRUST

PT 620+13.31

STA 619+90 RT
CONST 24' WIDE AGG PE
TYPE Y MOD.

STA 620+43
EXISTING 18" CMP
TO BE REMOVED

STA 621+00 RT
CONST 40' WIDE AGG PE
TYPE Y MOD.

ZM GROUP LLC

DUCK CREEK DR

S 88°59'29.10" E

STA 623+20 RT
CONST 10' WIDE AGG PE
TYPE Y MOD.

SAWCUT REQ'D

STA 131+00 LT
CONST 62' WIDE AGG PE

END CONSTRUCTION
STA 131+50.00
MATCH EXISTING
SAWCUT REQ'D

MILTON DAHL & JOAN E. DAHL

FRONTIER COMMUNICATIONS

SUNSET ENTERPRIZES

LAMPRECHT ROAD

PAUL J. SMITH & MICHELLE L. LANTER SMITH

STA 625+15 RT
CONST 27' WIDE AGG PE TYPE Y MOD.

ED LUSZCZAK

ELDA E. PETERSON

STA 626+10 RT
CONST 12' WIDE AGG PE
TYPE Y MOD.

VAN THIEL ROAD

PI 627+05.44

STA 626+85 RT
CONST 16' WIDE AGG PE TYPE Y MOD.

CYNTHIA A. KLEIN

SLOPE INTERCEPTS

EXISTING HIGHWAY EASEMENT

STA 628+80 RT
CONST 48' WIDE ASPH CE
TYPE Y
SAWCUT REQ'D

PC 630+65.34

10' WIDE PEDESTRIAN TRAIL

MGS GUARDRAIL TYPE K REQ'D 1-MGS EAT REQ'D

CHAINLINK FENCE REQ'D

LEGEND
LOG FISH STICKS

R DUCK CREEK DR

EXISTING ℄ PROFILE

-0.30%

+0.37%

+1.73%

50' VC
K = 75.14

628+22.54
889.72

FINISHED ℄ PROFILE

PVC STA 628+00.00
PVC EL 889.75
PVI STA 628+25.00
PVI EL 889.67
PVT STA 628+50.00
PVT EL 889.77

PVC STA 631+54.00
PVC EL 890.88

PVI STA 632+04.00
PVI EL 891.06

PVT STA 632+54.00
PVT EL 891.92

DUCK CREEK DR

PVC STA 130+70.00
PVC EL 892.20

40' VC
K = 16.82

PVI STA 131+00.00
PVI EL 893.06

PVT STA 131+30.00
PVT EL 893.52

+1.52%

PVOT STA 131+50.00
PVOT EL 893.82

-2.00%

+2.88%

K = 44.17
60' VC

PVT STA 130+60.00
PVT EL 891.91

+0.50%

PVOT STA 130+00.00
PVOT EL 891.53

PVI STA 130+16.00
PVI EL 891.21

PVI STA 130+40.00
PVI EL 891.33

PVC STA 130+20.00
PVC EL 891.23

STA 130+22
EXISTING 36" CMP
TO BE REMOVED

EXISTING ℄ ELEVATIONS

FINISHED ℄ ELEVATIONS

130+00	131+00	132+00
892.02	891.53	892.31	891.65	893.06	892.96	893.82	893.82	894.55

618+00	619+00	620+00	621+00	622+00	623+00	624+00	625+00	626+00	627+00	628+00	629+00	630+00	631+00	632+00	633+00
893.95	892.75	893.58	892.60	893.12	892.45	892.81	892.30	892.74	892.15	892.67	892.00	892.49	891.85	892.26	891.70	892.04	891.55	891.85	891.40	891.73	891.25	891.61	891.10	891.60	890.95	891.61	890.80	891.59	890.65	891.57	890.50	891.56	890.35	891.52	890.20	891.46	890.05	891.16	889.90	890.83	889.75	890.51	889.77	890.37	889.95	890.24	890.13	890.20	890.31	890.27	890.50	890.45	890.68	890.74	890.86	891.32	891.19	891.89	891.86	892.66	892.72

PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	PLAN & PROFILE	SCALE, FEET 0 50 100	SHEET 67	E

LEGEND
LOG FISH STICKS

CURVE DATA
DELTA =6°51'36.00" (RT)
D =0°57'17.75"
T =359.62
L =718.38
E =10.77
R =6000.00
DB =N 1°02'56.00" W
DA =N 5°48'40.00" E
PC STA 630+65.34
PC Y =200329.651
PC X =499402.861
PI STA 634+24.96
PI Y =200689.209
PI X =499396.278
PT STA 637+83.72
PT Y =201046.980
PT X =499432.689
SE = NC

CURVE DATA
DELTA =5°14'44.00" (LT)
D =0°49'06.64"
T =320.66
L =640.87
E =7.34
R =7000.00
DB =N 5°48'40.00" E
DA =N 0°33'56.00" E
PC STA 639+06.18
PC Y =201168.814
PC X =499445.088
PI STA 642+26.84
PI Y =201487.823
PI X =499477.554
PT STA 645+47.05
PT Y =201808.464
PT X =499480.720
SE = NC

N

EXISTING R/W
ADAMS-COLUMBIA ELECTRIC
PI 634+24.96
TRANSITION PEDESTRIAN TRAIL TO MATCH AT EXISTING WALKWAY
MGS GUARDRAIL TYPE K REQ'D 1-MGS EAT REQ'D
SLOPE INTERCEPTS
WOOD DECK
ROBERT W. SONNENSON
SANDRA M. SONNENSON
STA 638+65 LT
CONST 35' WIDE AGG PE, TYPE 1
REMOVE EXISTING 15" CMP
STA 639+25 LT
CONST 7.5' WIDE AGG PE, TYPE 1
REMOVE EXISTING 15" CMP
MICHAEL P U'REN & NANCY L. U'REN
STA 640+55 LT
CONST 12' WIDE AGG PE, TYPE 1
REMOVE EXISTING 12" CMP
STA 641+14 LT
CONST 12' WIDE ASPH PE, TYPE 1
REMOVE EXISTING 15" CMP
SAWCUT REQ'D
TLE
JESSE C. PITTSLEY & ROSEMARY CHRISTENSER, A/K/A ROSEMARY PITTSLEY
STA 641+81 LT
CONST 22' WIDE ASPH PE, TYPE 1
SAWCUT REQ'D
STA 643+35 LT
CONST 24' WIDE AGG PE, TYPE 1
ERICA MARTIN
MARY P. BYRON
MATCHLINE STA 633+00
635+00
640+00
645+00
MATCHLINE STA 648+00
+00.00
N 0°33'56.00" E
+31.78
+40.13
+71.10
+39.04
+61.26
+83.12
+28.88
+93.37
+29.46
+04.00
+16.00
CTH Z
N 5°48'40.00" E
PC 639+06.18
PT 645+47.05
HSE
WOODS
EXISTING HIGHWAY EASEMENT
CHAINLINK FENCE REQ'D
EXISTING STRUCTURE B-1-18 TO REMAIN (SEE STRUCTURE PLANS)
KLEIN CREEK
MGS GUARDRAIL TYPE K REQ'D 1-MGS EAT REQ'D
10' WIDE PEDESTRIAN TRAIL
CHAINLINK FENCE REQ'D
PT 637+83.72
HARBOR REALITY
BAR
EXISTING R/W
TLE
SLOPE INTERCEPTS
PI 642+26.84
FRONTIER COMMUNICATIONS
FRONTIER COMMUNICATIONS -FIBER
10' WIDE PEDESTRIAN TRAIL
MARY P. BYRON
WISCONSIN RIVER POWER COMPANY
STA 636+57 RT
CONST 35' WIDE ASPH CE, TYPE 1
SAWCUT REQ'D
STA 637+24 RT
CONST 35' WIDE ASPH CE, TYPE 1
SAWCUT REQ'D
STA 637+81 RT
CONST 35' WIDE ASPH CE, TYPE 1
SAWCUT REQ'D
STA 638+66 RT
CONST 35' WIDE (SHARED) ASPH CE, TYPE 1
SAWCUT REQ'D
M&S ADVENTURES II LLC
STA 639+60 RT
CONST 24' WIDE AGG CE, TYPE 1
STA 640+00 RT
CONST 24' WIDE AGG CE, TYPE 1
WISCONSIN RIVER POWER COMPANY
STA 642+60 RT
CONST 53' WIDE AGG CE, TYPE 1
CYNTHIA A. KLEIN
STA 647+55 RT
CONST 16' WIDE AGG FE
1-21" X 15" X 28' CSACP REQ'D
2-21" X 15" AEW'S REQ'D

PVC STA 633+50.00
PVC EL 893.58
PVI STA 634+55.00
PVI EL 895.40
PVT STA 635+60.00
PVT EL 892.82
110' VC
K = 38.27
+1.73%
-2.45%
634+36.81
894.33
K = 50.20
210' VC
PVC STA 636+05.00
PVC EL 891.72
PVI STA 636+60.00
PVI EL 890.37
636+98.92
890.57
PVT STA 637+15.00
PVT EL 890.60
EXISTING ℄ PROFILE
FINISHED ℄ PROFILE
+0.42%
100' VC
K = 55.88
PVC STA 641+50.00
PVC EL 892.43
PVI STA 642+00.00
PVI EL 892.64
PVT STA 642+50.00
PVT EL 893.74
PVC STA 642+75.00
PVC EL 894.30
+2.21%
PVI STA 643+25.00
PVI EL 895.40
K = 52.38
100' VC
PVT STA 643+75.00
PVT EL 895.55
+0.30%
PVC STA 646+08.00
PVC EL 896.25
PVI STA 646+58.00
PVI EL 896.40
646+50.90
896.31
K = 142.84
100' VC
PVT STA 647+08.00
PVT EL 896.20
-0.40%
EXISTING ℄ ELEVATIONS
FINISHED ℄ ELEVATIONS

892.66	892.72	633+00
893.43	893.58	
893.96	894.20	634+00
894.32	894.32	
893.81	893.94	635+00
892.95	893.06	
892.10	891.84	636+00
891.59	890.88	
891.21	890.57	637+00
891.32	890.75	
891.59	890.96	638+00
891.92	891.17	
892.26	891.38	639+00
892.61	891.59	
892.91	891.80	640+00
893.19	892.01	
893.47	892.22	641+00
893.77	892.43	
894.28	892.86	642+00
895.00	893.74	
895.80	894.79	643+00
896.44	895.42	
896.50	895.63	644+00
896.45	895.78	
896.32	895.93	645+00
896.21	896.08	
896.13	896.23	646+00
896.02	896.31	
895.90	896.23	647+00
895.65	896.03	
895.35	895.83	648+00

PROJECT NO: 6355-00-74	HWY: CTH Z	COUNTY: ADAMS	PLAN & PROFILE	SCALE, FEET 0 50 100	SHEET 68	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\ppcthz37.dgn PLOT TIME : 7:52:01 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

WISDOT/CADDS SHEET 40

MARY P. BYRON

STA 648+50 LT
CONST 16' WIDE ASPH PE
1-21" X 15" X 26' CSACP REQ'D
2-21" X 15" STEEL AEW'S REQ'D
SAWCUT REQ'D

TLE
SLOPE INTERCEPTS
EXISTING R/W
FRONTIER COMMUNICATIONS

MATCHLINE STA 648+00

650+00
N 0°33'56.00" E
655+00
CTH Z

SLOPE INTERCEPTS
EXISTING R/W
TLE
ADAMS-COLUMBIA ELECTRIC

END PROJECT
STA 649+40.07
Y=202201.466
X=499484.599
MATCH EXISTING
SAWCUT REQUIRED

PI 656+86.39

CTH F

STA 649+10 RT
CONST 16' WIDE AGG PE
1-21" X 15" X 30' CSACP REQ'D
2-21" X 15" STEEL AEW'S REQ'D

MARY P. BYRON

CYNTHIA A. KLEIN

N

5

5

905
900
895
890
885
880
875
870

FINISHED ℄ PROFILE
-0.40%
-0.40%
+0.30%
EXISTING ℄ PROFILE

PVI STA 652+70.86
PVI EL 893.95
PVOT STA 656+70.86
PVOT EL 895.15

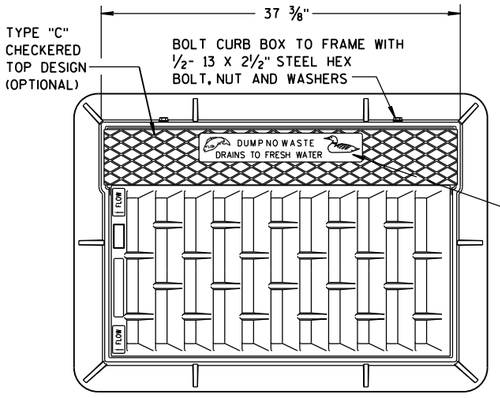
EXISTING ℄ ELEVATIONS
FINISHED ℄ ELEVATIONS

| | | |

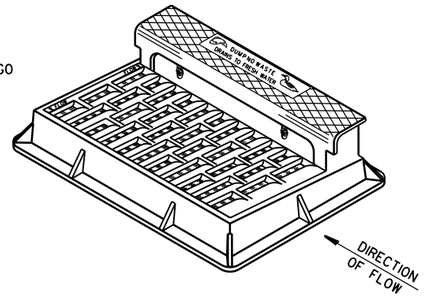
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A08-02	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D18-02	DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y
08E05-02	SODDED BACKSLOPE FLUME AND INTERCEPTING EMBANKMENT
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E11-02	TURBIDITY BARRIER
08E15-01	CULVERT PIPE CHECK
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
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
13A10-02A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15B03-15A	FENCE CHAIN LINK
15B03-15B	FENCE CHAIN LINK
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES
15C07-15A	PAVEMENT MARKING SYMBOLS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C07-15E	PAVEMENT MARKING FOR BIKE LANES
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C29-07A	BICYCLE LANE MARKING
15C29-07B	PAVEMENT MARKING FOR SHARED LANE 35 MPH OR LESS
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15D45-03	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL

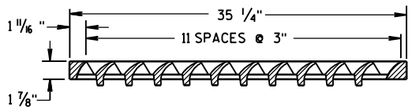
6

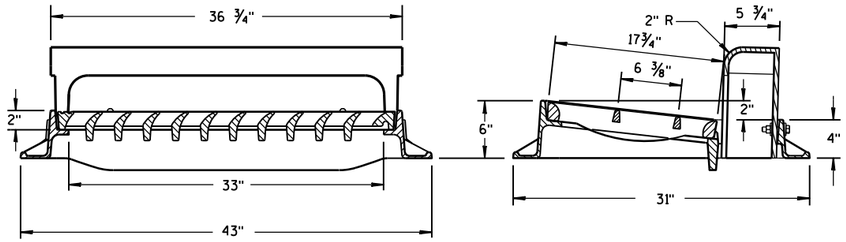


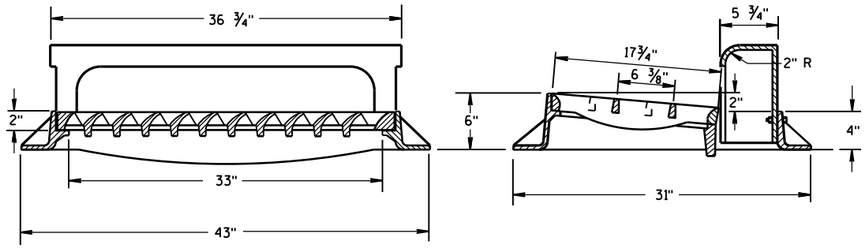
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

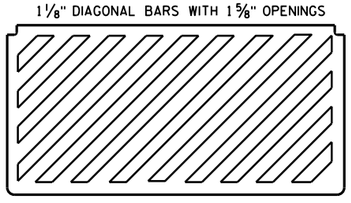






TYPE "H"

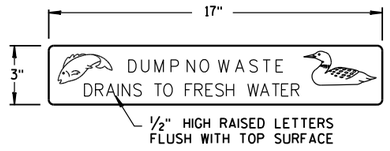
NOTE: EITHER CASTING IS ACCEPTABLE



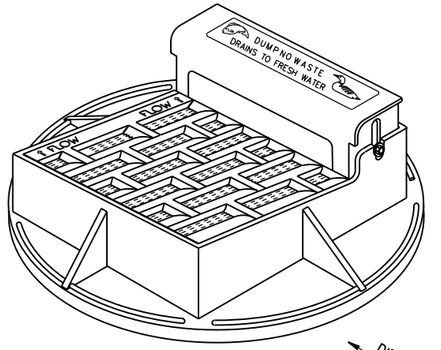
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

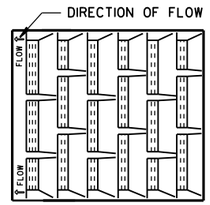
NOTE:
GRATE IS REVERSIBLE.

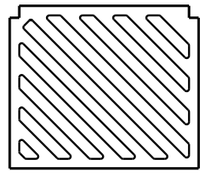
GENERAL NOTES

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.

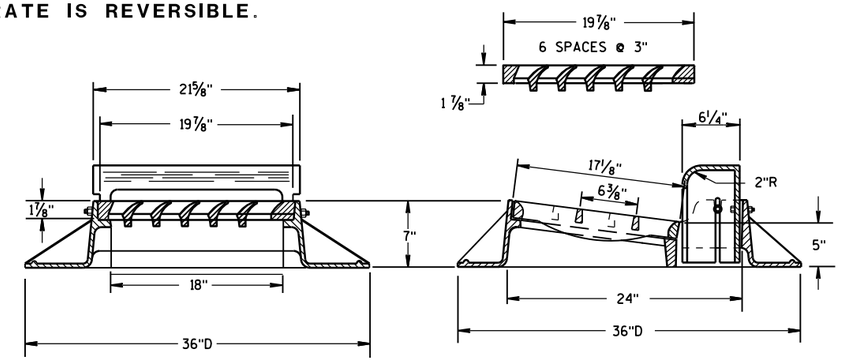




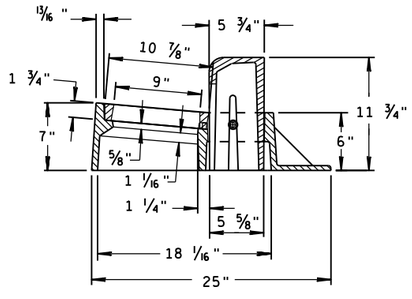
SPECIAL GRATE FOR TYPE "A" COVER

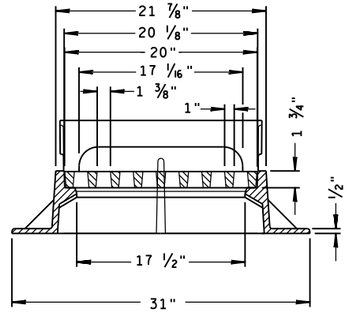
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)

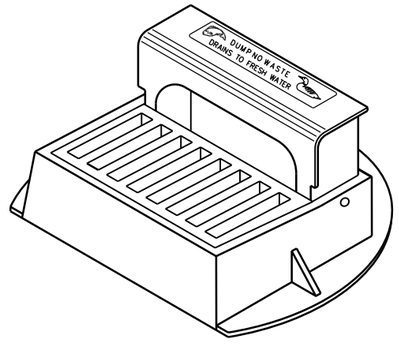


TYPE "A"





TYPE "Z"



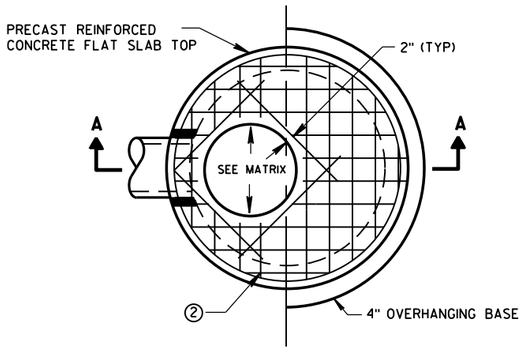
INLET COVERS
TYPE A, H, A-S, H-S & Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

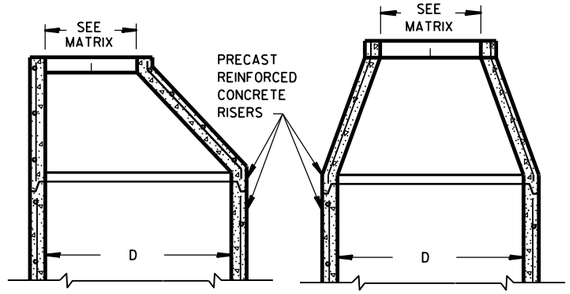
APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 8 A 5-19a

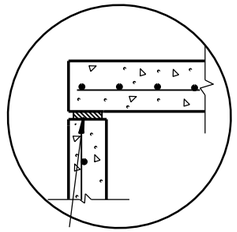


PLAN VIEW CIRCULAR OPENING

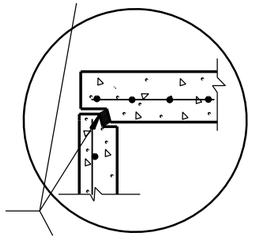


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

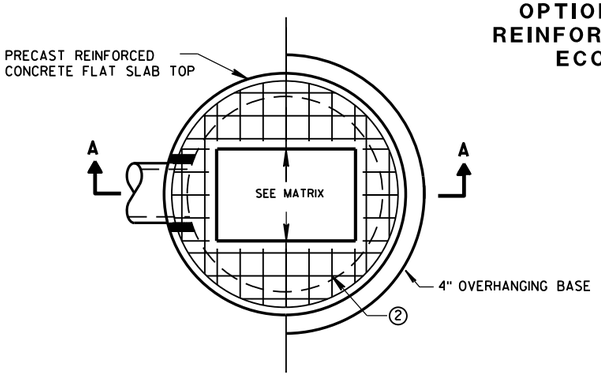
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



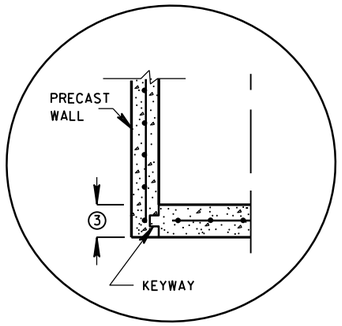
TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT

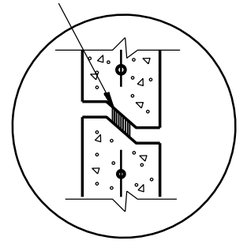


PLAN VIEW RECTANGULAR OPENING



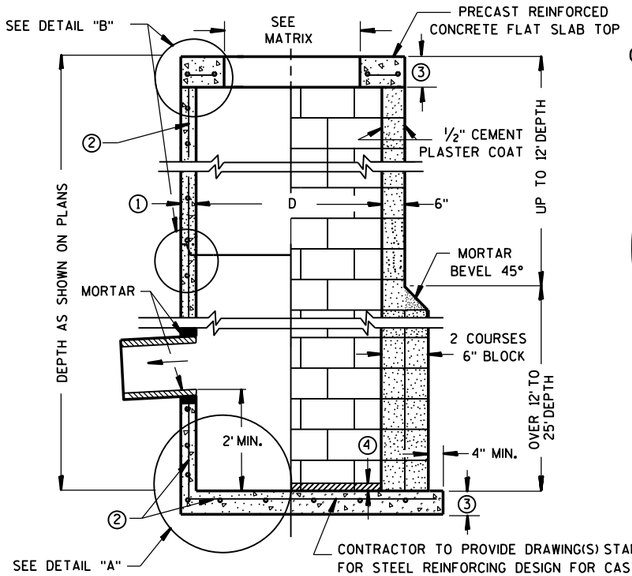
PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



RISER WITH TONGUE AND GROOVE JOINT

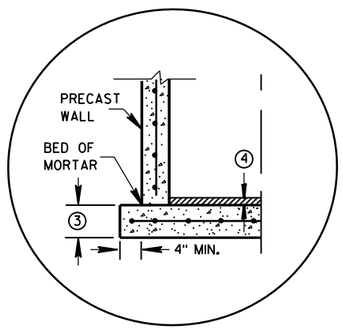
DETAIL "B"



SECTION A-A

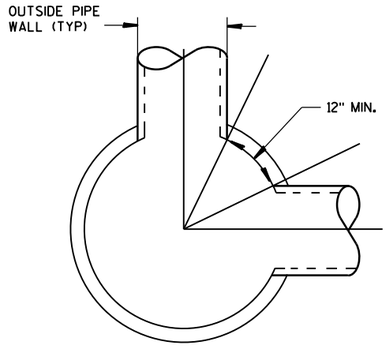
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

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 INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

④ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER OPENING MATRIX

CATCH BASIN SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT)											
3-FT	2X2	X	X					X		X		
	2 DIA.				X							X
4-FT-6-FT	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3					X						

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

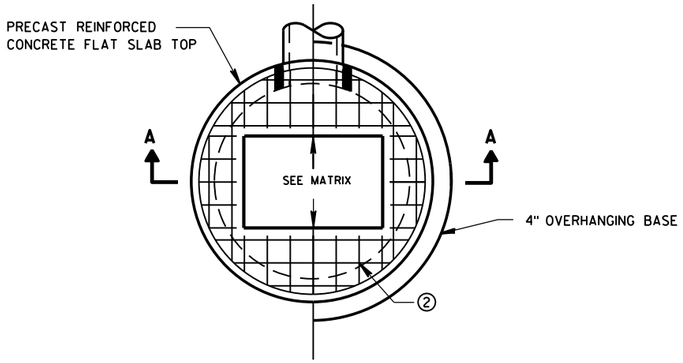
CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

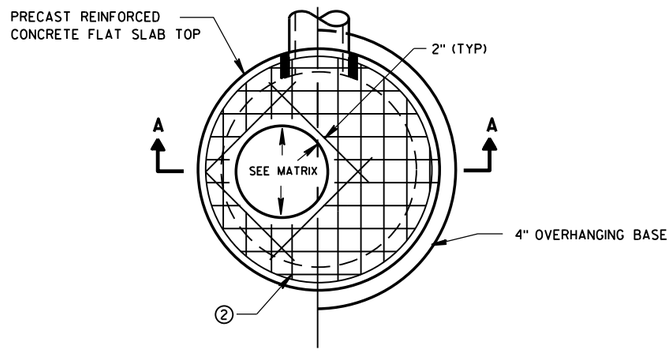
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FHWA

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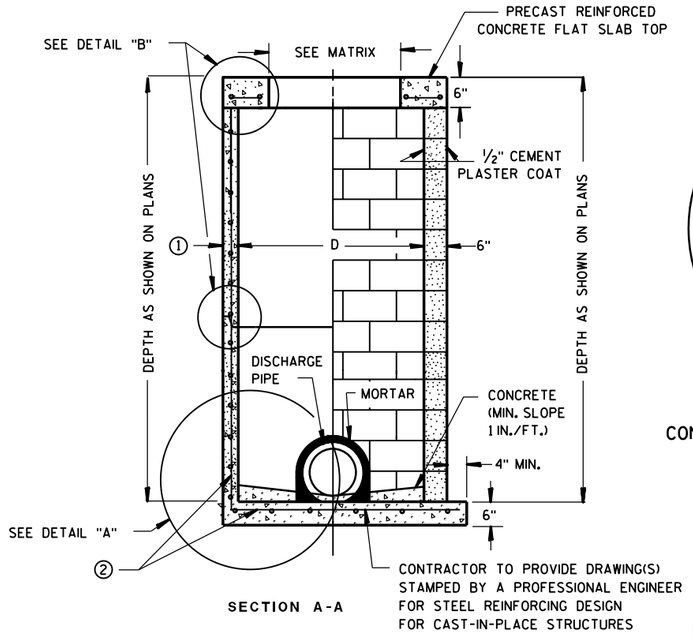
6



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

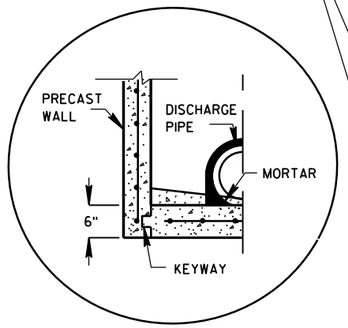


SECTION A-A

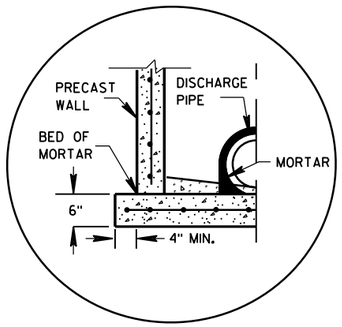
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

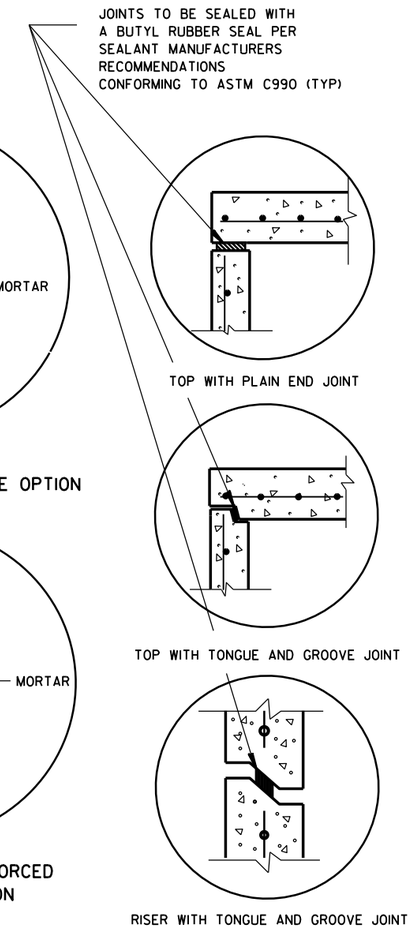


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "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.

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 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 FOUNDATION 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.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

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.

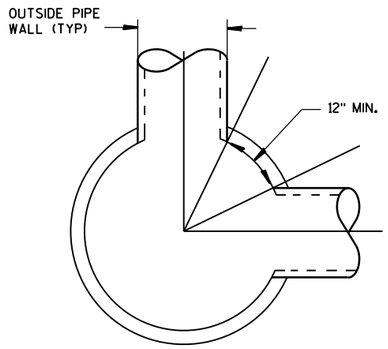
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

PIPE MATRIX

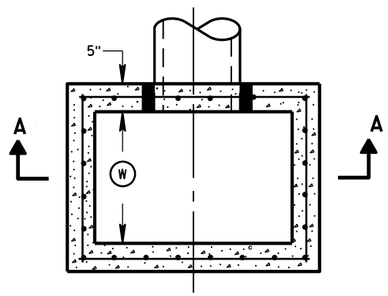
INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

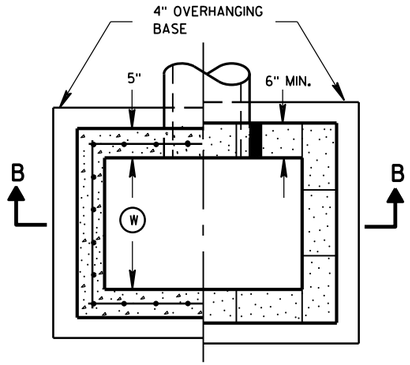
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — /S/ Rodney Taylor
DATE — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA

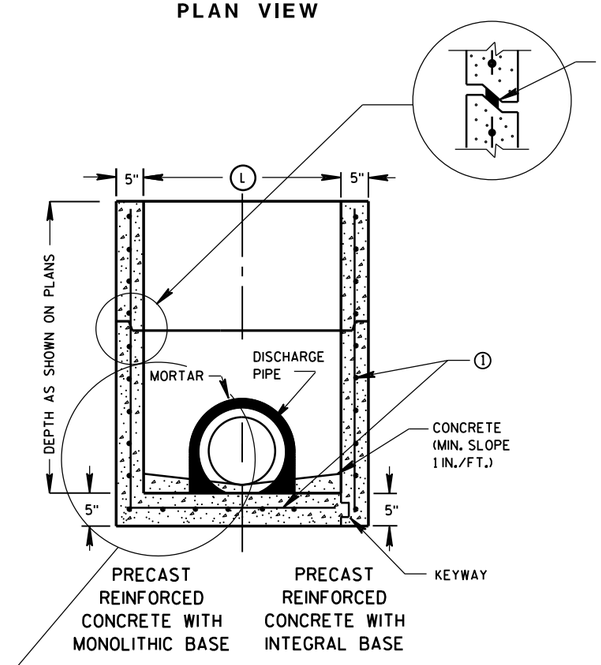
INLETS 3-FT AND 4-FT DIAMETER



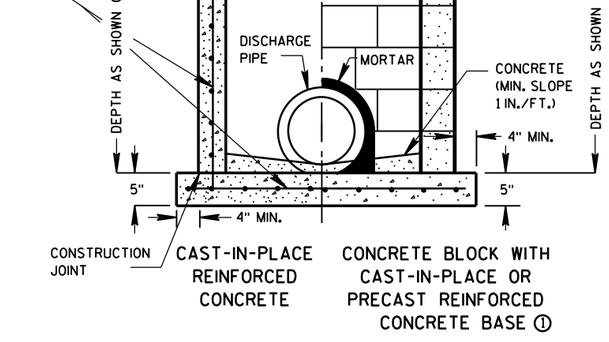
PLAN VIEW



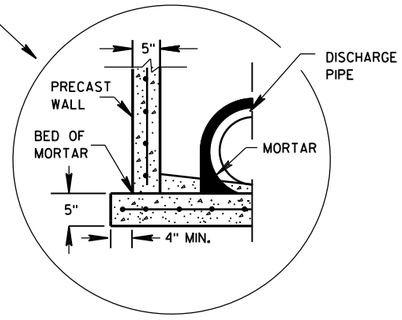
PLAN VIEW



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 FOUNDATION 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.

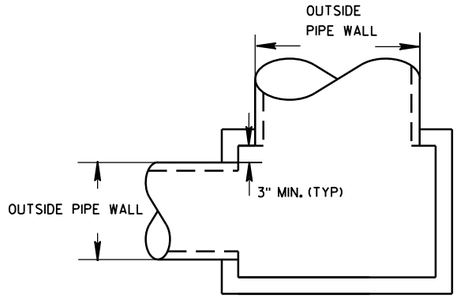
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

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



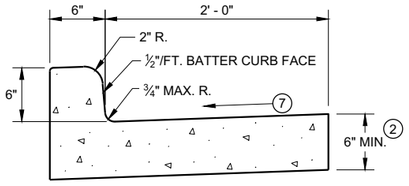
DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

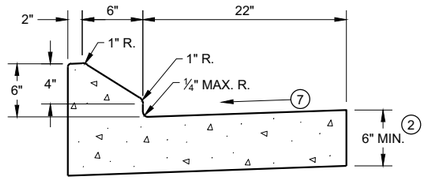
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D IT UNIT SUPERVIS
FHWA

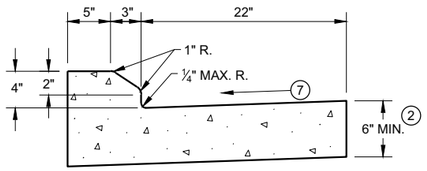
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT



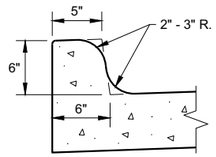
TYPES A (1) & D



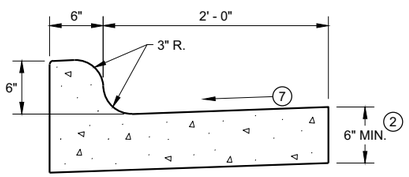
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

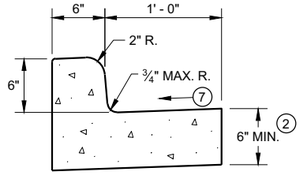


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



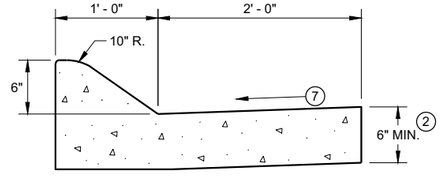
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

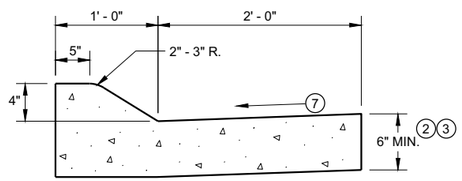


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

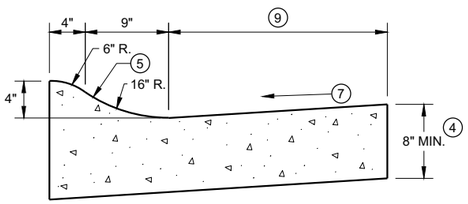


6" SLOPED CURB TYPES A (1) & D



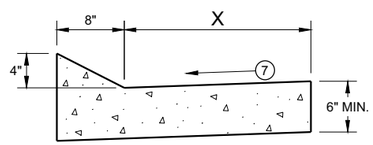
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

TBT & TBTT	X
30"	22"
36"	28"

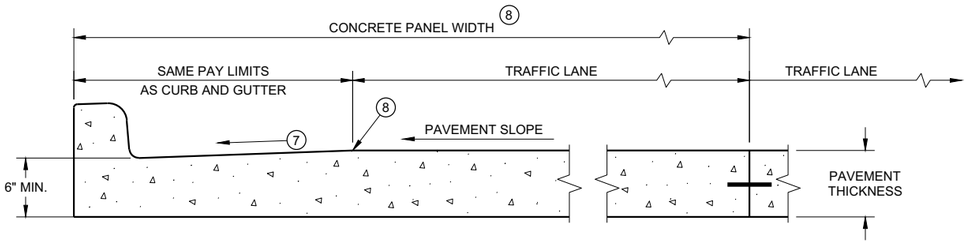


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

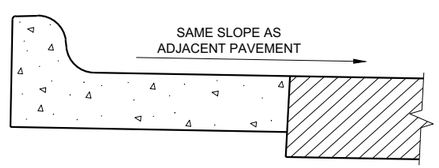
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION 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 AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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 GUTTERS TYPES A, G, K, R, AND TBTT.

(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) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) 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.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

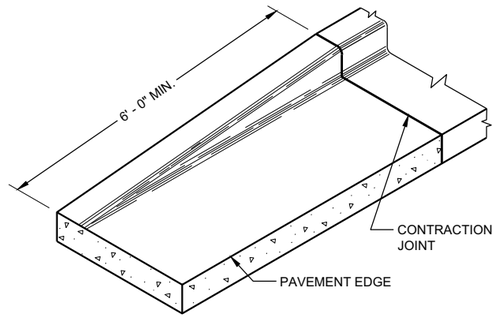
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

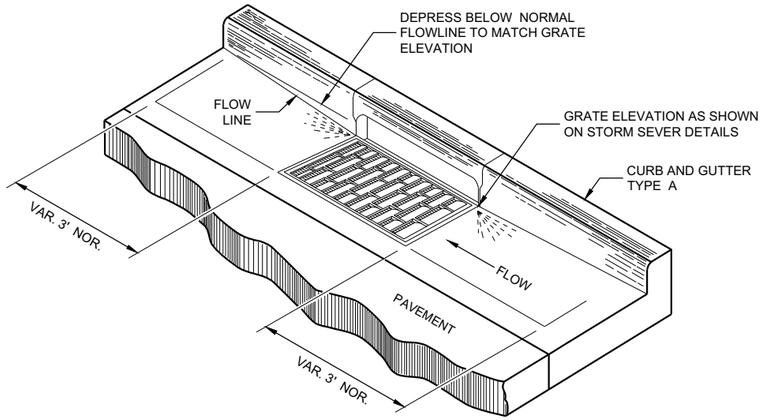
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 08D01 - 22a



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS
(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

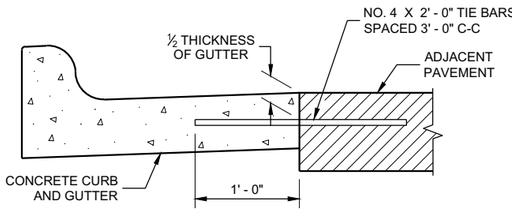
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

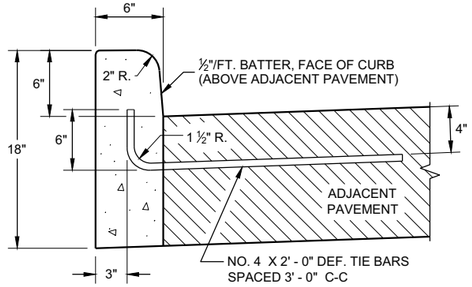
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(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.

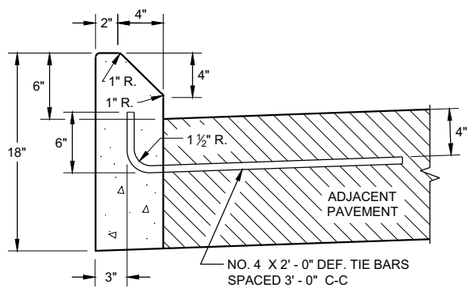
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

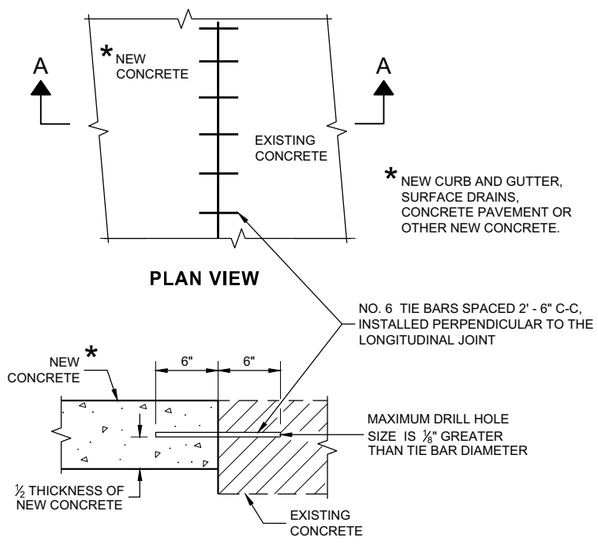


TYPES A (1) & D



TYPES G (1) & J

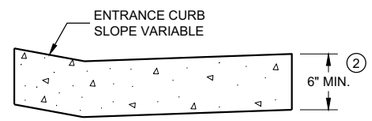
CONCRETE CURB



PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

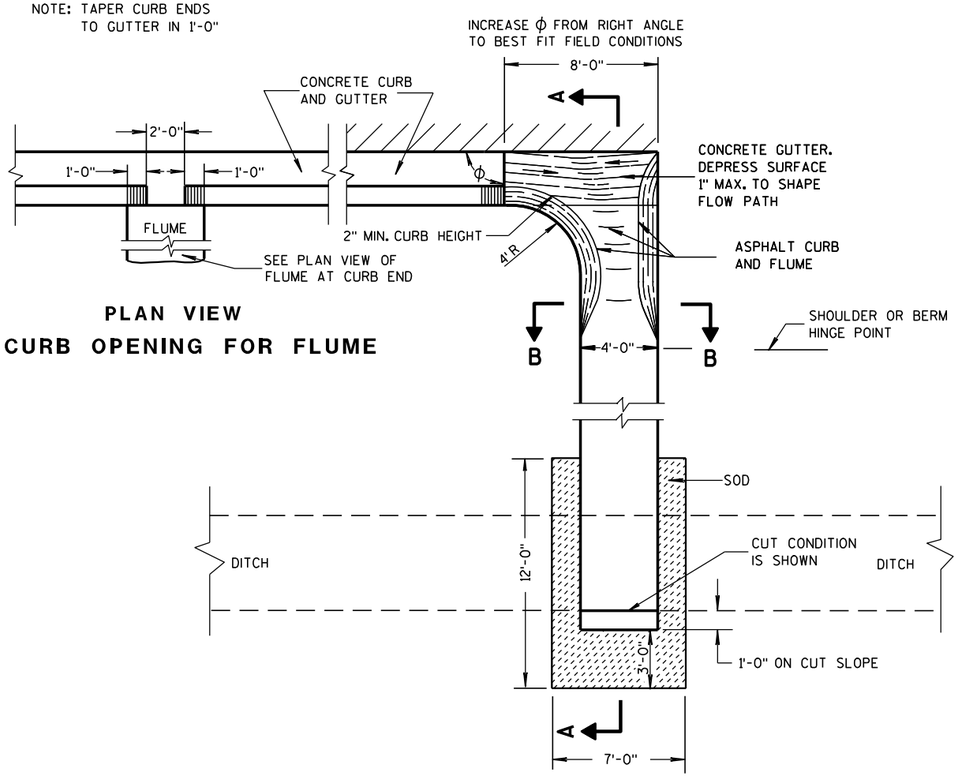
APPROVED
February 2021 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

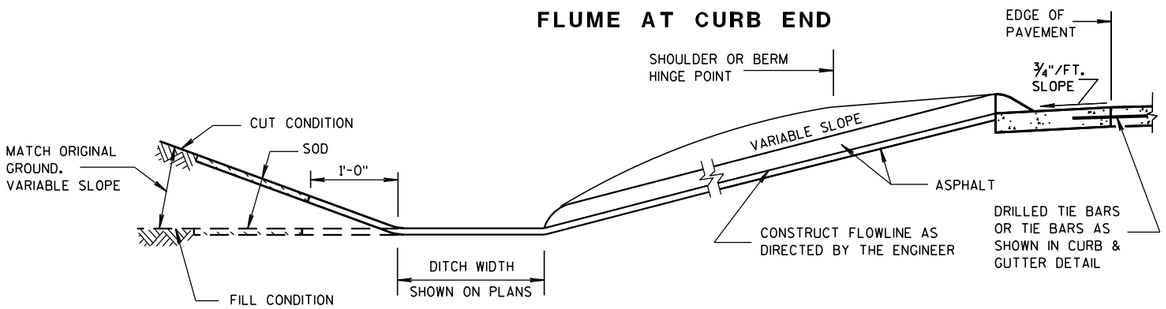
SDD08D01 - 22b

ASPHALTIC FLUME

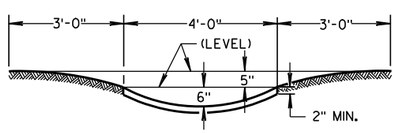


PLAN VIEW
CURB OPENING FOR FLUME

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.

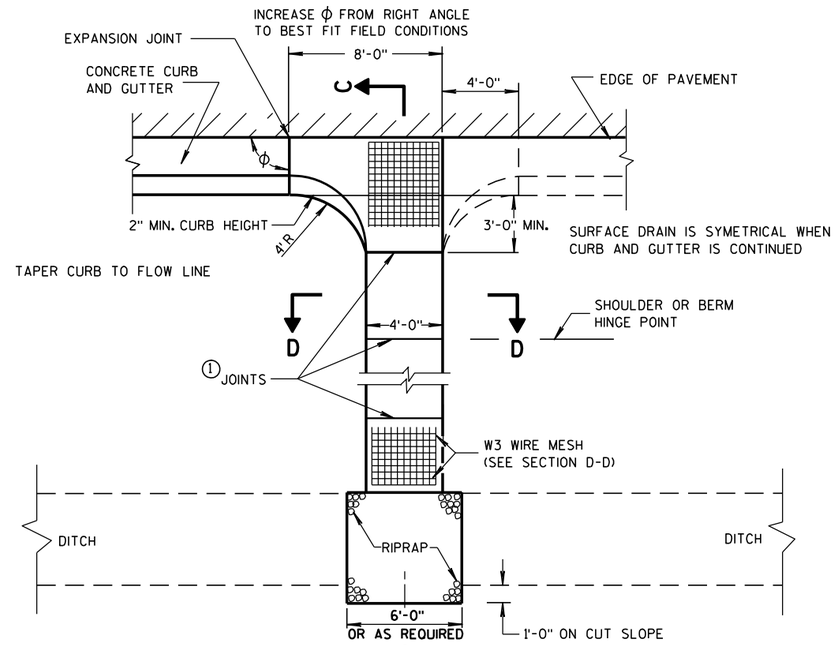
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE ⅛ TO ¼ INCH WIDE BY 1½ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

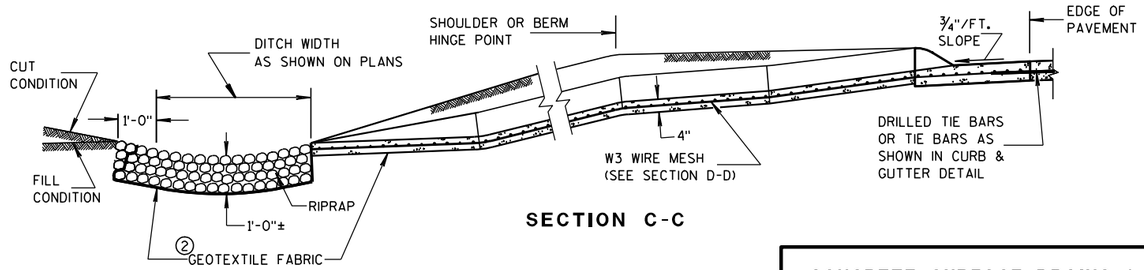
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

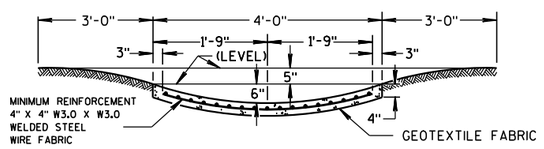
③ CONCRETE SURFACE DRAIN



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. Zogg
ROADWAY STANDARDS ENGINEER
77
MENT

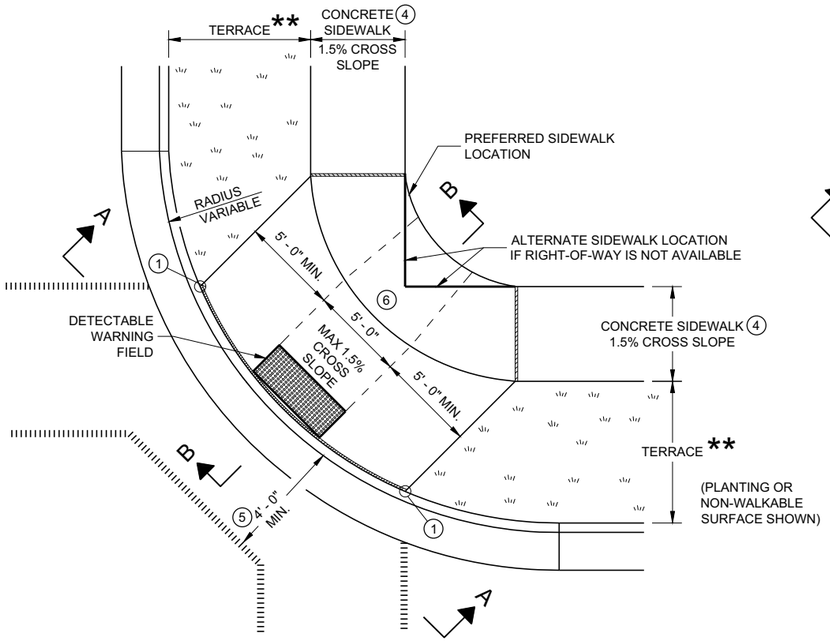
FHWA

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S.D.D. 8 D 4-5

6

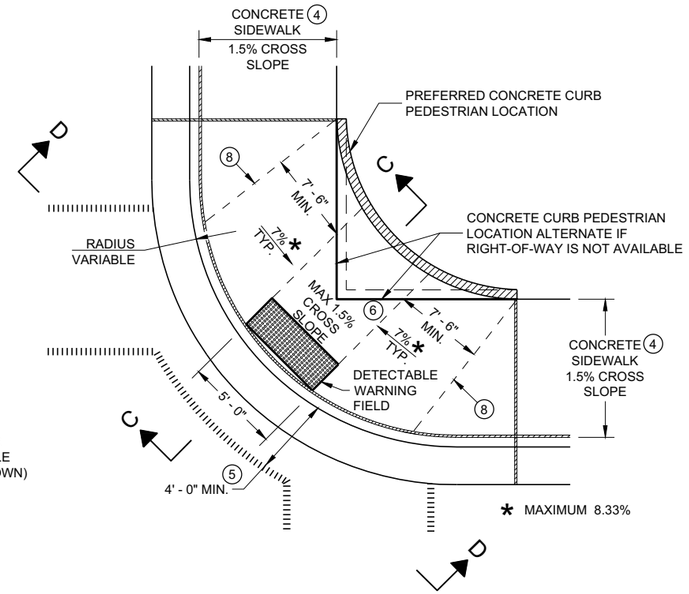
S.D.D. 8 D 4-5



PLAN VIEW

CURB RAMP TYPE 1

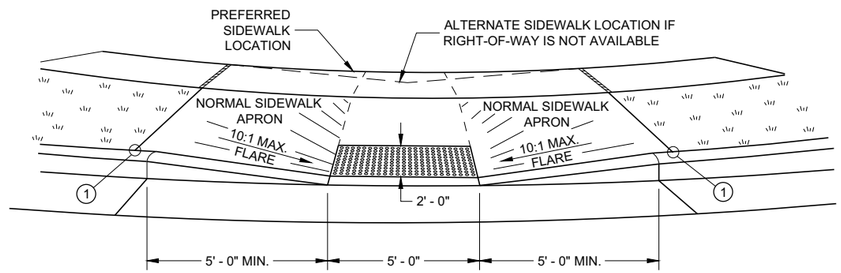
(CENTER OF CORNER RADIUS)



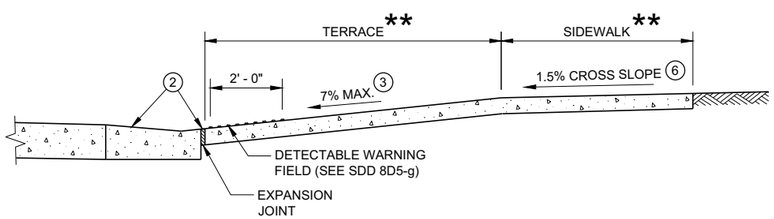
PLAN VIEW

CURB RAMP TYPE 1 - A

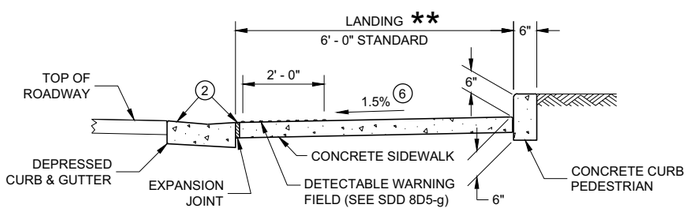
(NO TERRACE)



VIEW A - A FOR TYPE 1

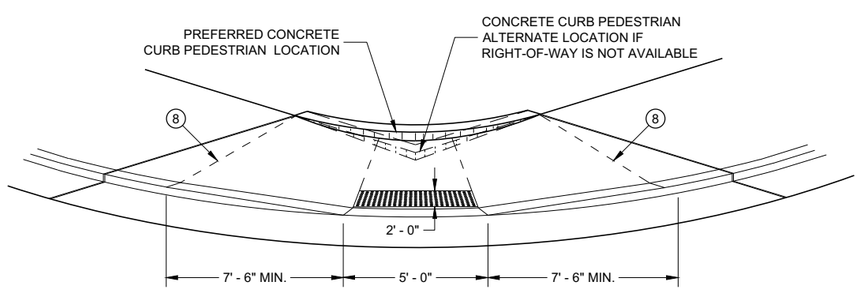


SECTION B - B FOR TYPE 1



SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FILED SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

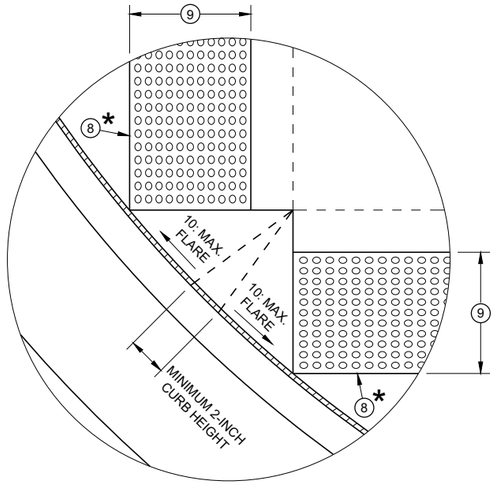
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 1 AND 1-A

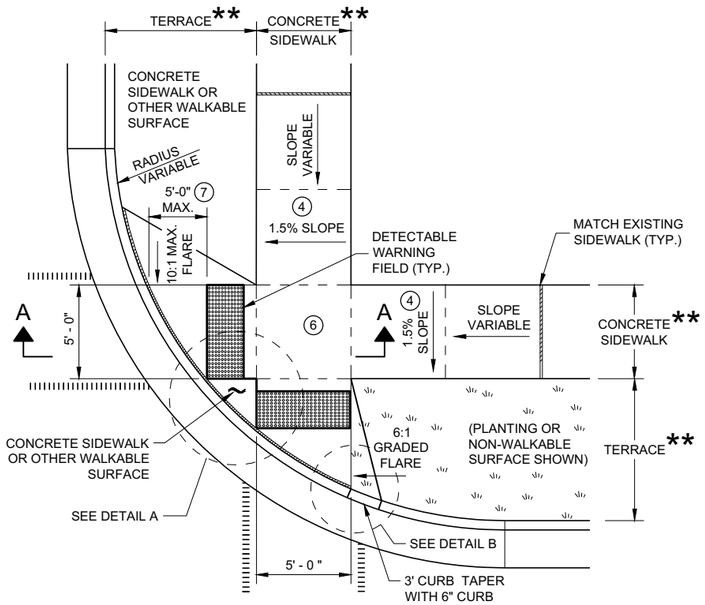
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 08D05 - 20a



DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

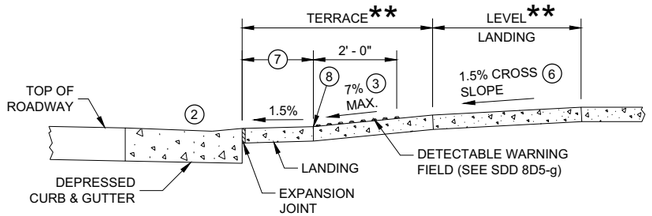
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

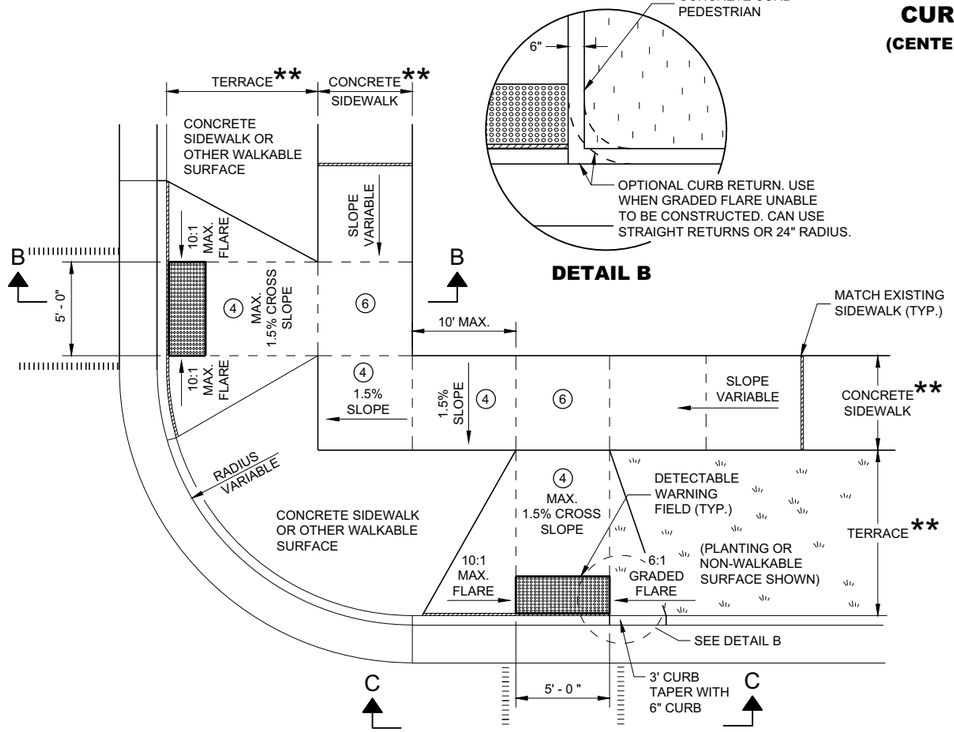
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



SECTION A - A FOR TYPE 2

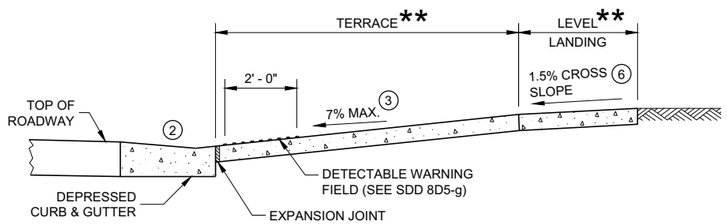
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS



DETAIL B

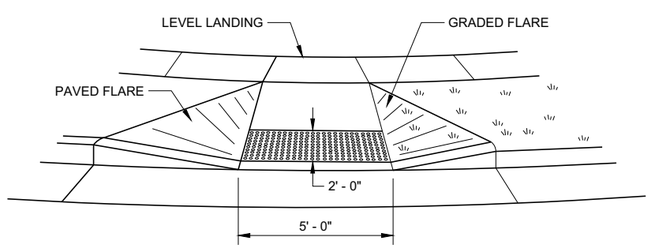
PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



SECTION B - B FOR TYPE 3

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)



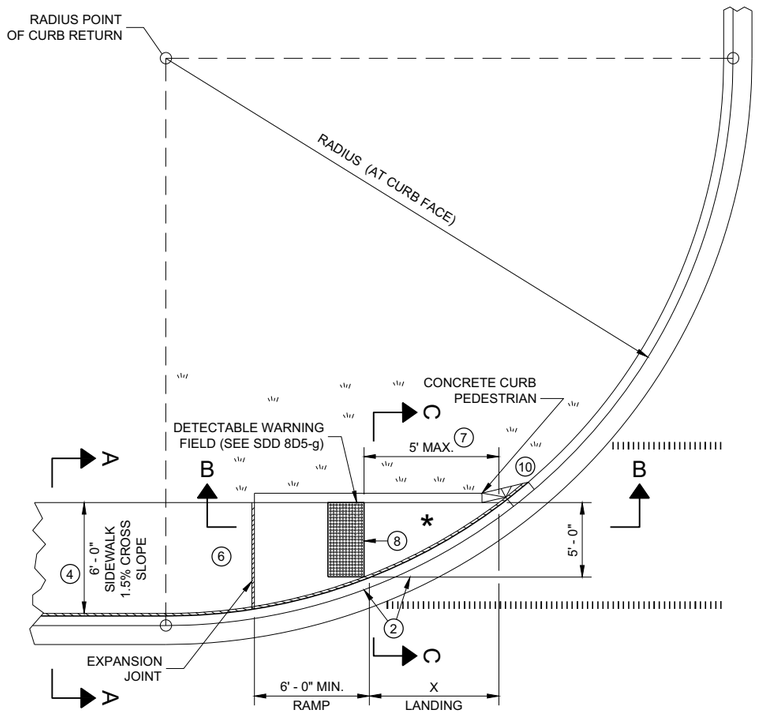
VIEW C - C FOR TYPE 3

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 08D05 - 20b

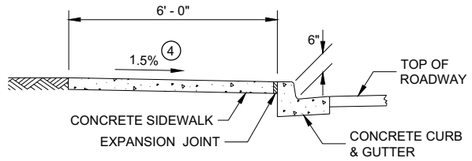


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

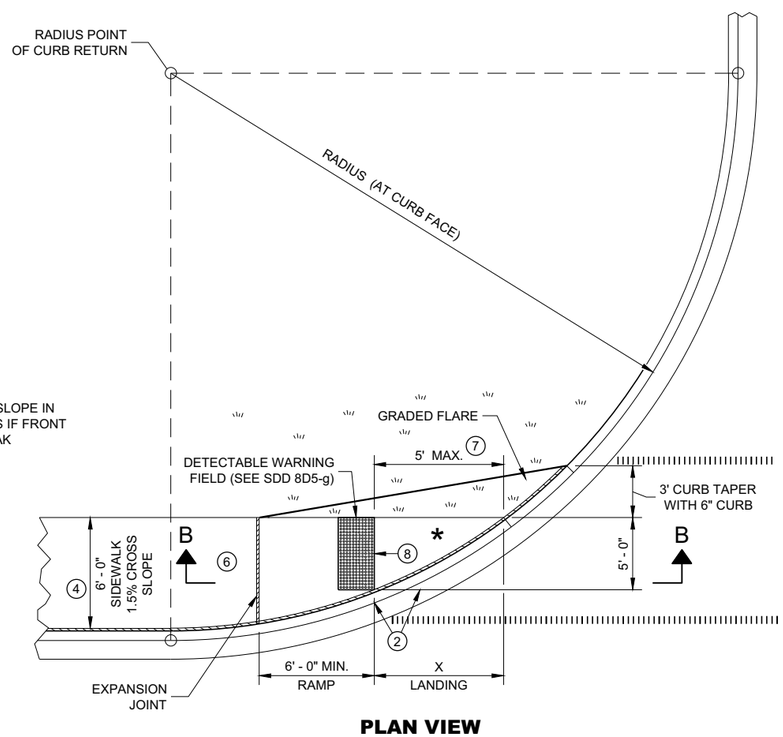
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

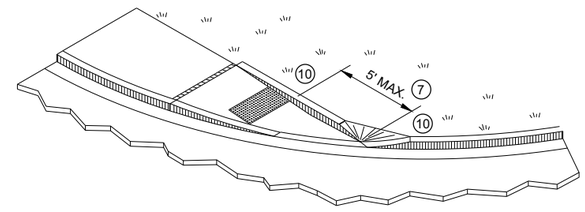
PAVEMENT MARKING CROSSWALK (WHITE)



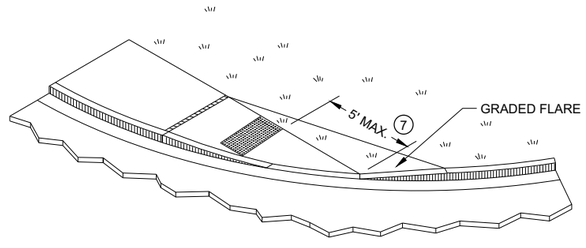
PLAN VIEW

CURB RAMP TYPE 4A1

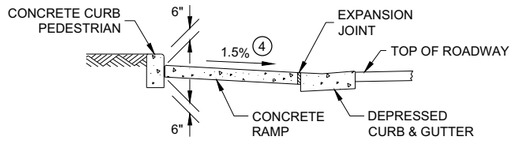
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK



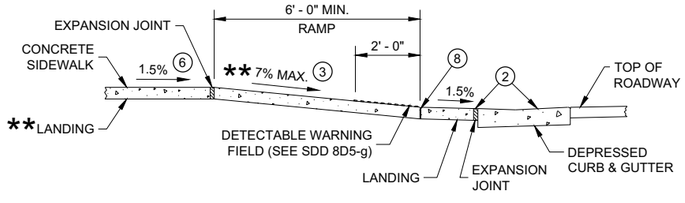
ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1



SECTION C - C FOR TYPE 4A



SECTION B - B FOR TYPE 4A AND TYPE 4A1

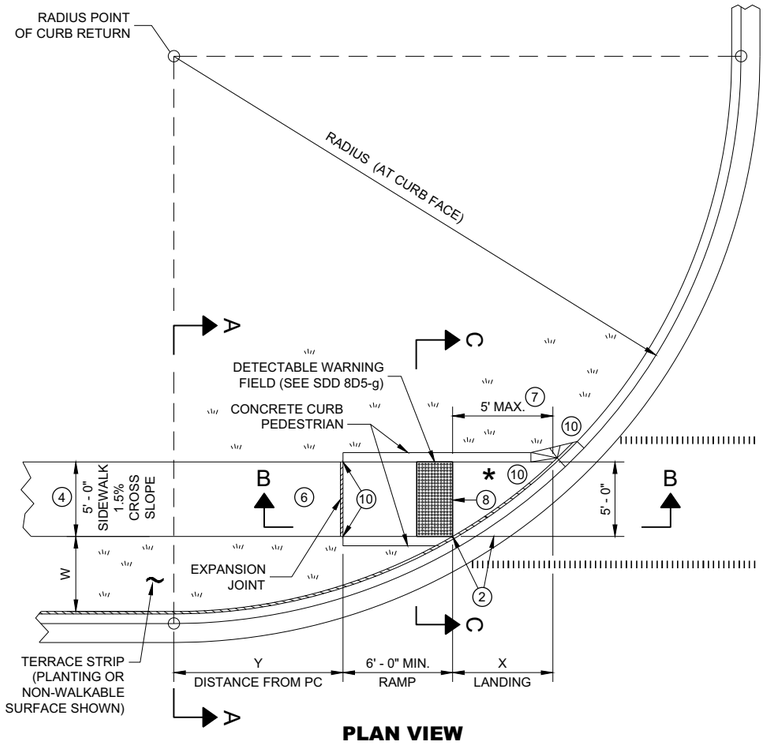
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

CURB RAMPS TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 08D05 - 20c



PLAN VIEW

CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 ¼"	0' - 5"	2' - 1"	1' - 4 ½"	1' - 5"	2' - 1"	0' - 10"	2' - 7 ½"	0' - 3 ¼"	3' - 0 ¼"						
15 FEET	4' - 6 ¾"	2' - 1 ¾"	3' - 9"	3' - 5 ¾"	3' - 1 ¼"	4' - 6"	2' - 6 ¾"	5' - 4 ½"	2' - 1"	6' - 1"	1' - 8"	6' - 8 ½"	1' - 3 ¼"	7' - 2 ½"	0' - 10 ¾"	7' - 7 ¼"
20 FEET	5' - 9 ¾"	3' - 6 ½"	4' - 11 ½"	5' - 1 ¾"	4' - 3 ¼"	6' - 5 ½"	3' - 8 ¾"	7' - 7"	3' - 3"	8' - 6 ½"	2' - 10"	9' - 4 ½"	2' - 5 ½"	10' - 1 ¼"	2' - 1 ¼"	10' - 9"
30 FEET			6' - 9 ¼"	7' - 11 ¼"	6' - 0 ¼"	9' - 8"	5' - 5"	11' - 1 ¾"	4' - 10 ¾"	12' - 5 ¾"	4' - 5 ½"	13' - 7 ¾"	4' - 0 ¾"	14' - 8 ½"	3' - 8 ½"	15' - 8 ¼"
40 FEET									6' - 1 ¾"	15' - 8 ½"	5' - 8"	17' - 2"	5' - 3"	18' - 5 ¾"	4' - 10 ¾"	19' - 8 ¼"
50 FEET															5' - 10 ¼"	23' - 2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

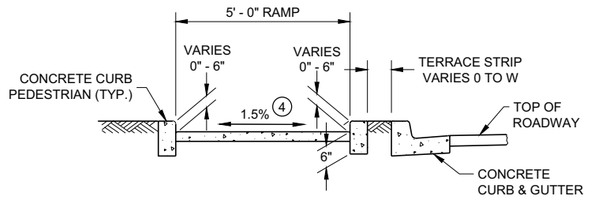
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

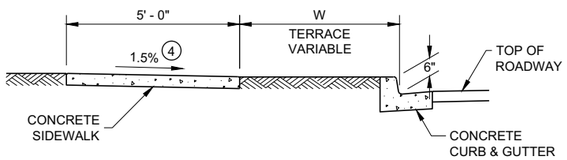
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

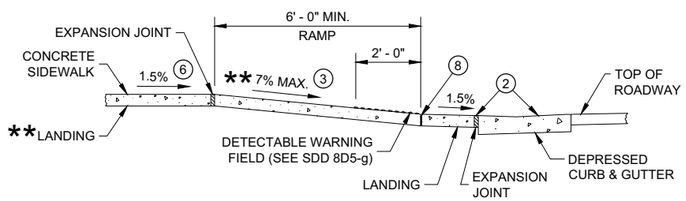
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



SECTION C - C FOR TYPE 4B



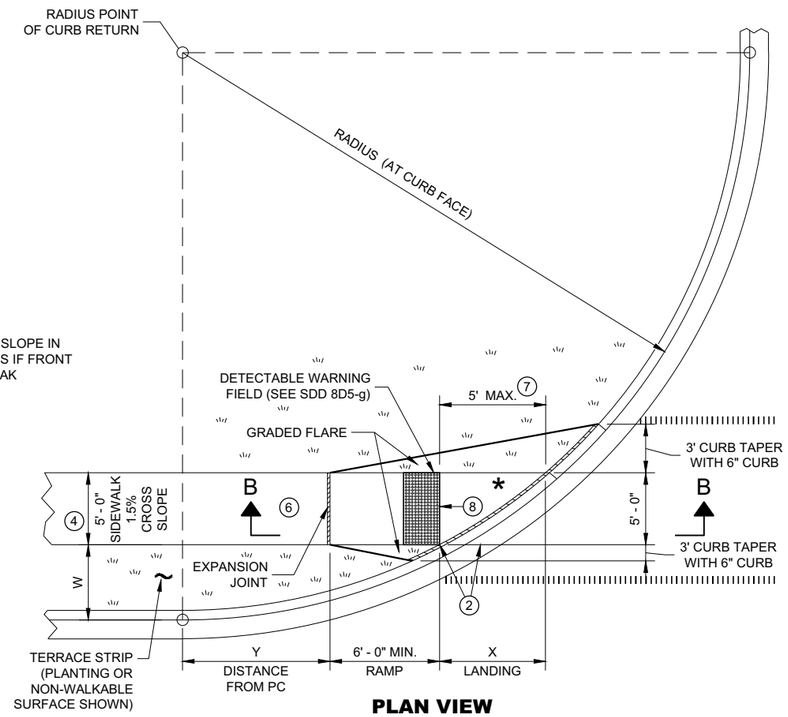
SECTION A - A FOR TYPE 4B



** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

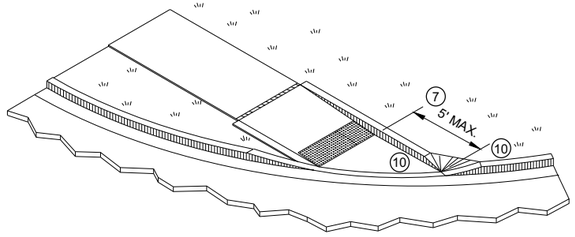
SECTION B - B FOR TYPE 4B AND TYPE 4B1

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

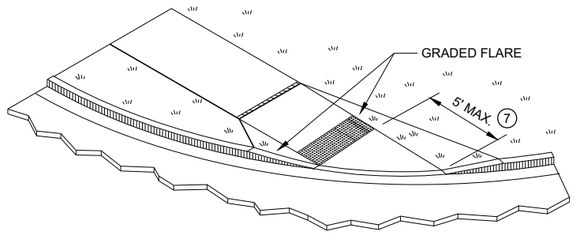


PLAN VIEW

CURB RAMP TYPE 4B1



ISOMETRIC VIEW FOR TYPE 4B



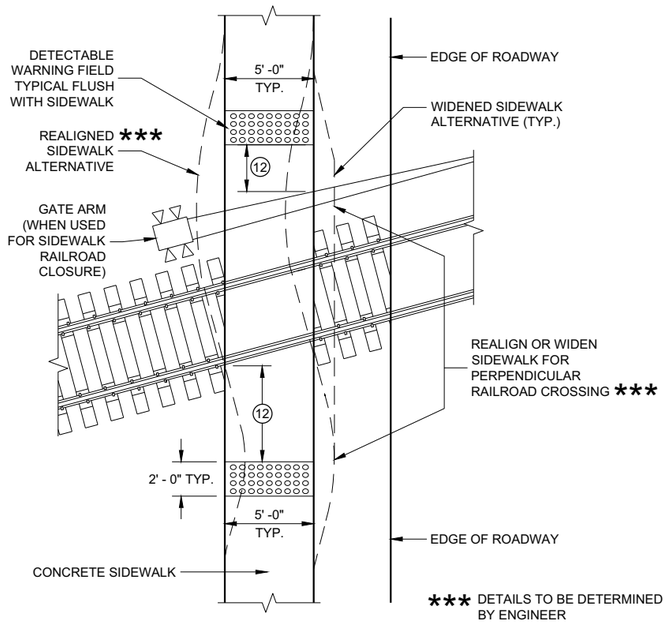
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

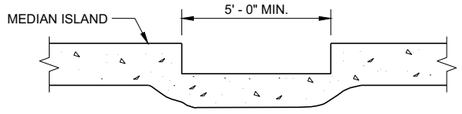
6

SDD 08D05 - 20d

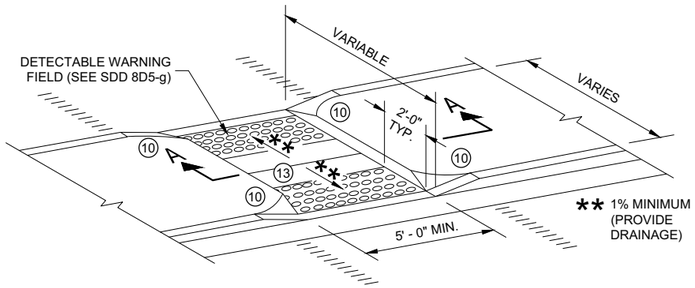


CURB RAMP TYPE 8

DETECTABLE WARNINGS AT RAILROAD CROSSING



SECTION A - A FOR TYPE 5



CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

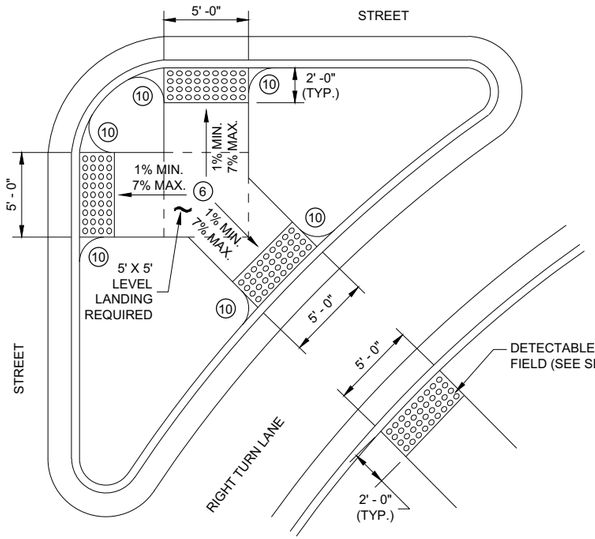
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

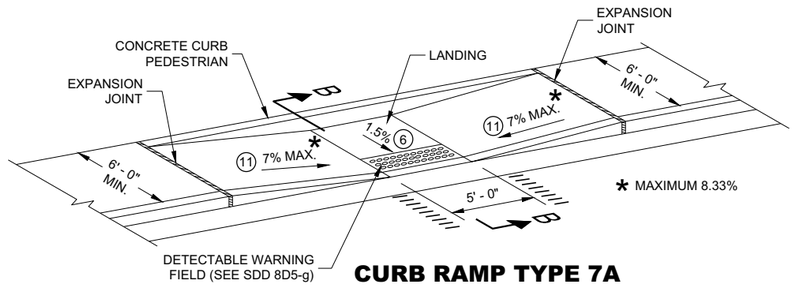
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

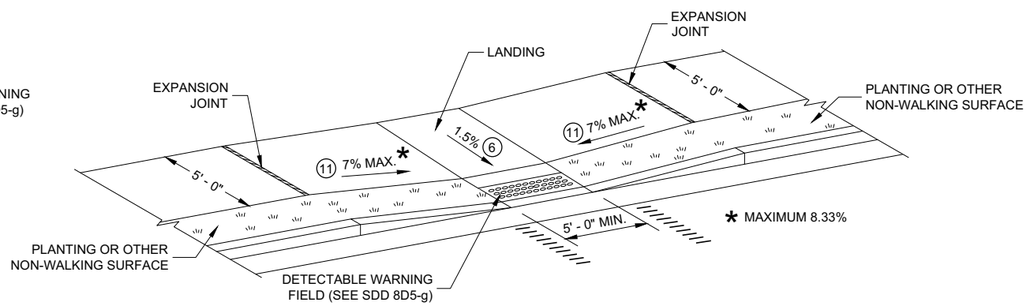
DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



CURB RAMP TYPE 7A

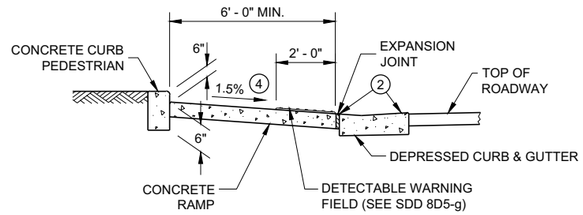
MID BLOCK CROSSING



CURB RAMP TYPE 7B

MID BLOCK CROSSING

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.



SECTION B - B FOR TYPE 7A

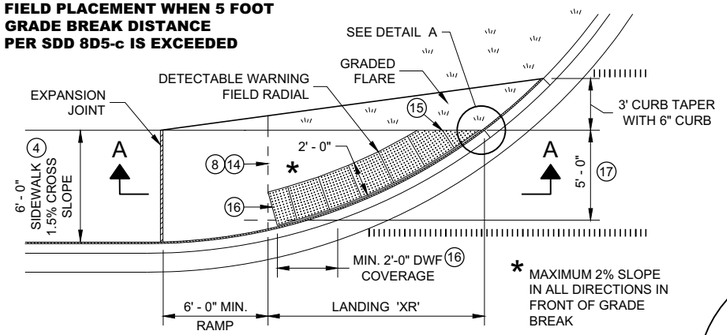
CURB RAMPS TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D05 - 20e

SDD 08D05 - 20e

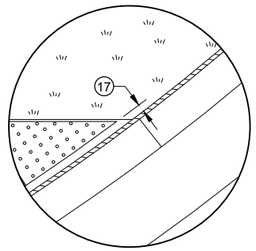
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



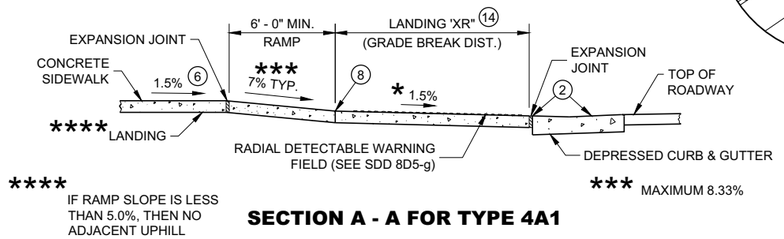
PLAN VIEW

CURB RAMP TYPE 4A1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL A

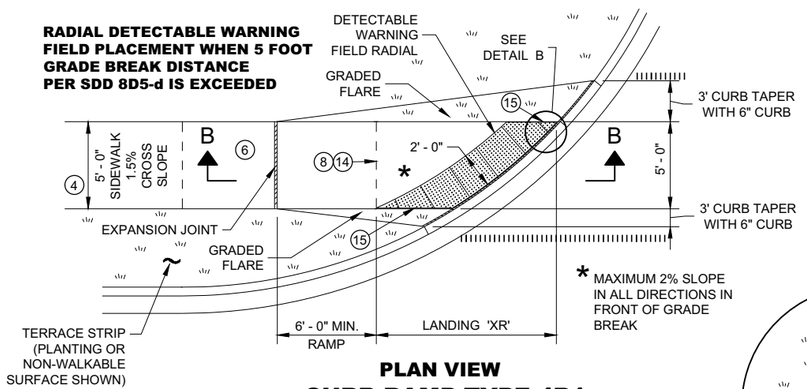


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1

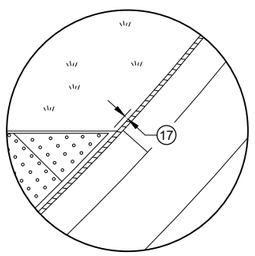
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



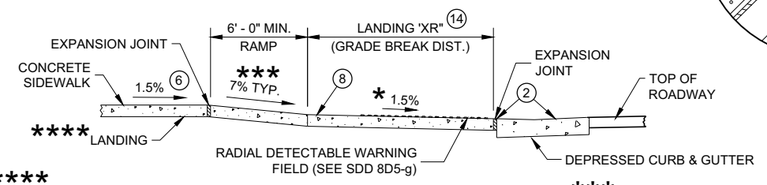
PLAN VIEW

CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION B - B FOR TYPE 4B1

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

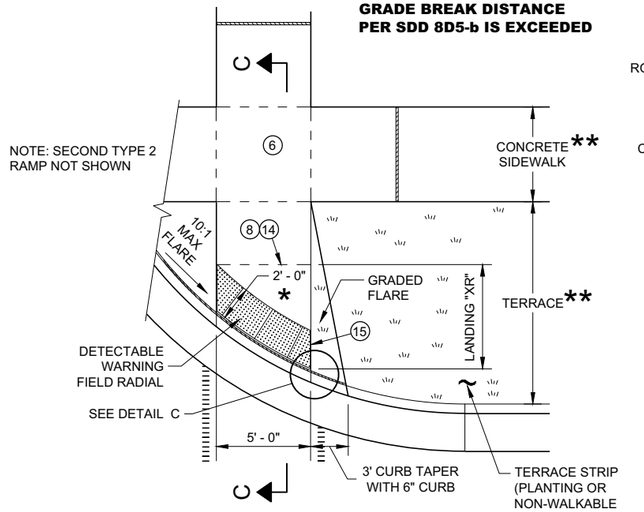
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

(17) A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

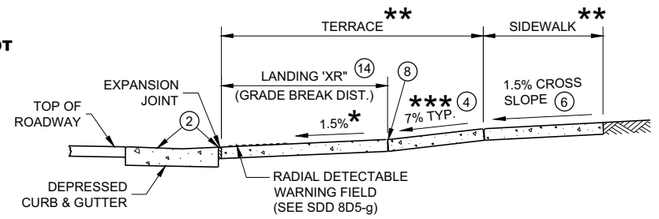


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

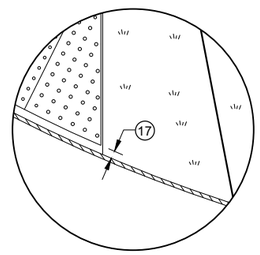


SECTION C - C FOR TYPE 2

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



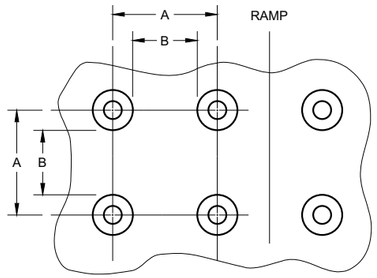
DETAIL C

CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS

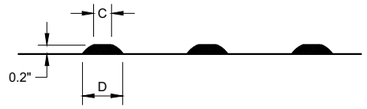
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

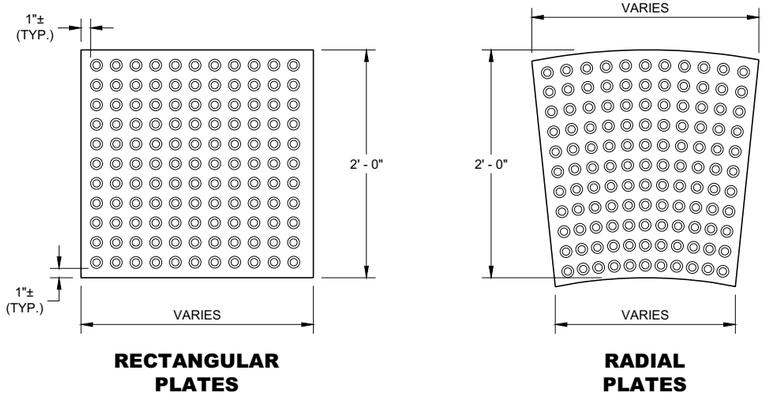


PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

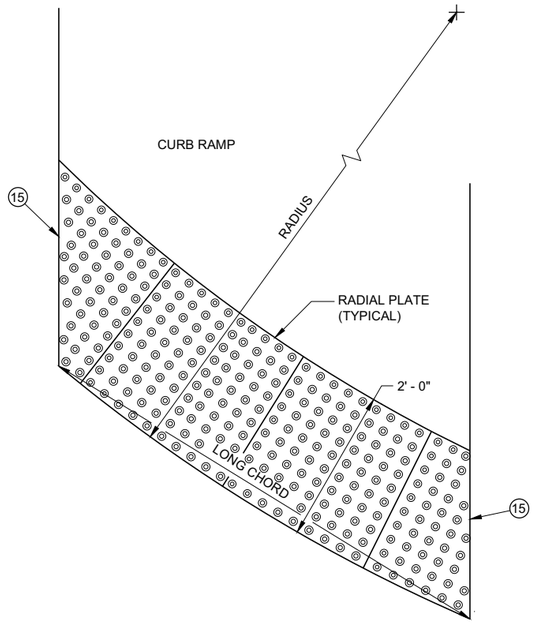
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

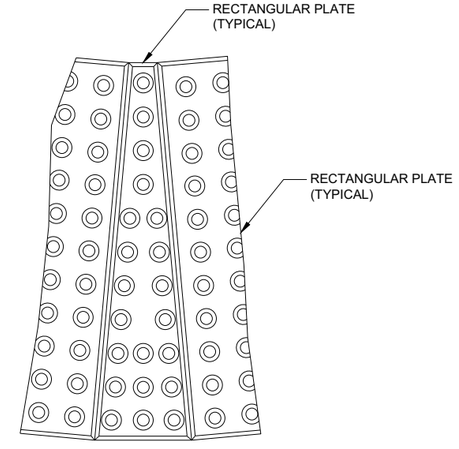
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE UNIT SUPERVISOR

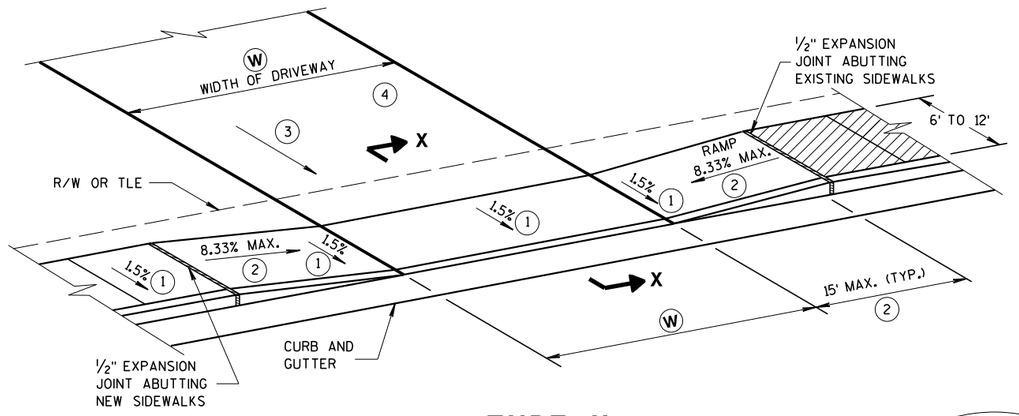
FHWA

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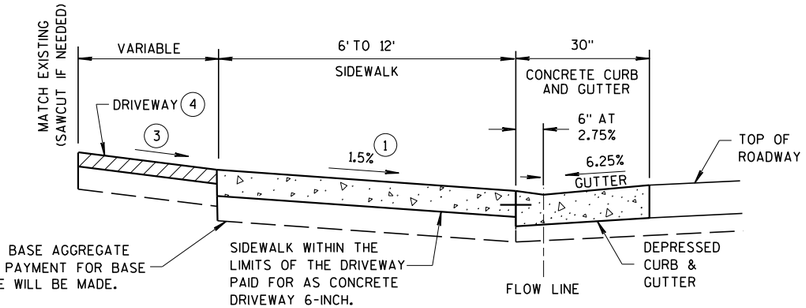
SDD 08D05 - 20g

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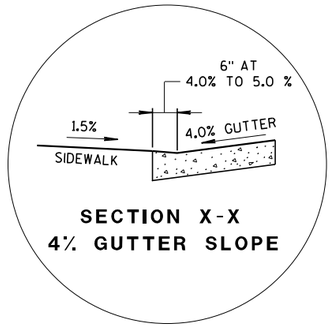
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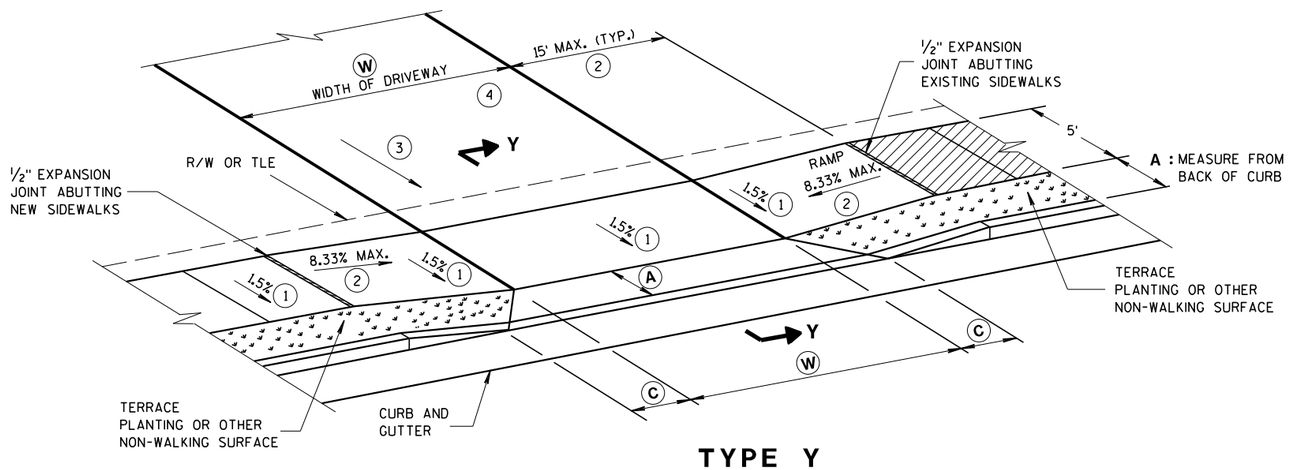
TYPE X
SIDEWALK ABUTS CURB & GUTTER
TERRACE VARIES 0 TO 3 FEET



SECTION X-X



SECTION X-X
4% GUTTER SLOPE



TYPE Y
SIDEWALK WITH NARROWER TERRACE
TERRACE VARIES 4 TO 6 FEET

W
12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE) 16' MIN. - 35' MAX. COMMERCIAL (CE)

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

(W) IS SHOWN ON PLAN AND PROFILE SHEETS.

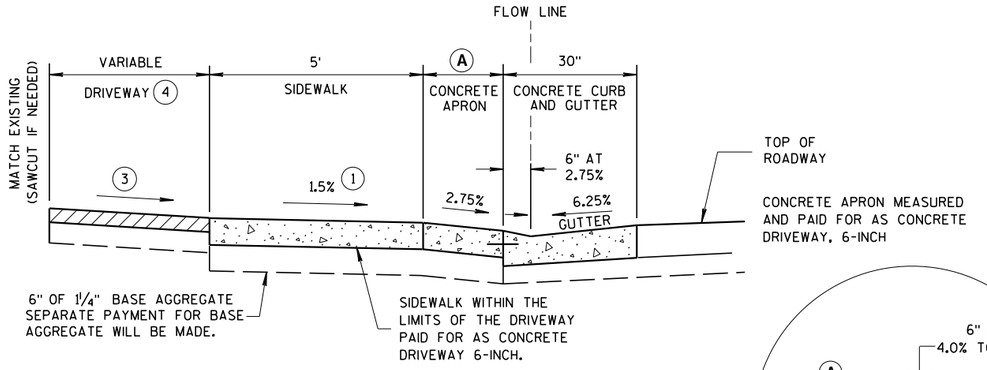
OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

(1) CONSTRUCTION TOLERANCE OF 0.5% ± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

(2) THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

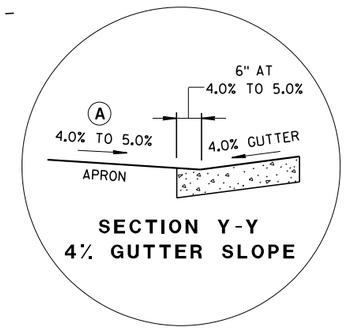
(3) DRIVEWAY SLOPES: DESIRABLE MAXIMUM
- 10.5% UP AWAY FROM SIDEWALK (SAG)
- 8.5% DOWN AWAY FROM SIDEWALK (CREST)
- ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

(4) DRIVEWAY TYPES
- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES)



NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS

SECTION Y-Y



SECTION Y-Y
4% GUTTER SLOPE

DRIVEWAY DETAIL
WITH CONCRETE CURB & GUTTER
(URBAN AND SUBURBAN)

TABLE Y

A FEET	C FEET
3.5'	2.0'
4.5'	3.0'
5.5'	3.5'

NOT TO SCALE

DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

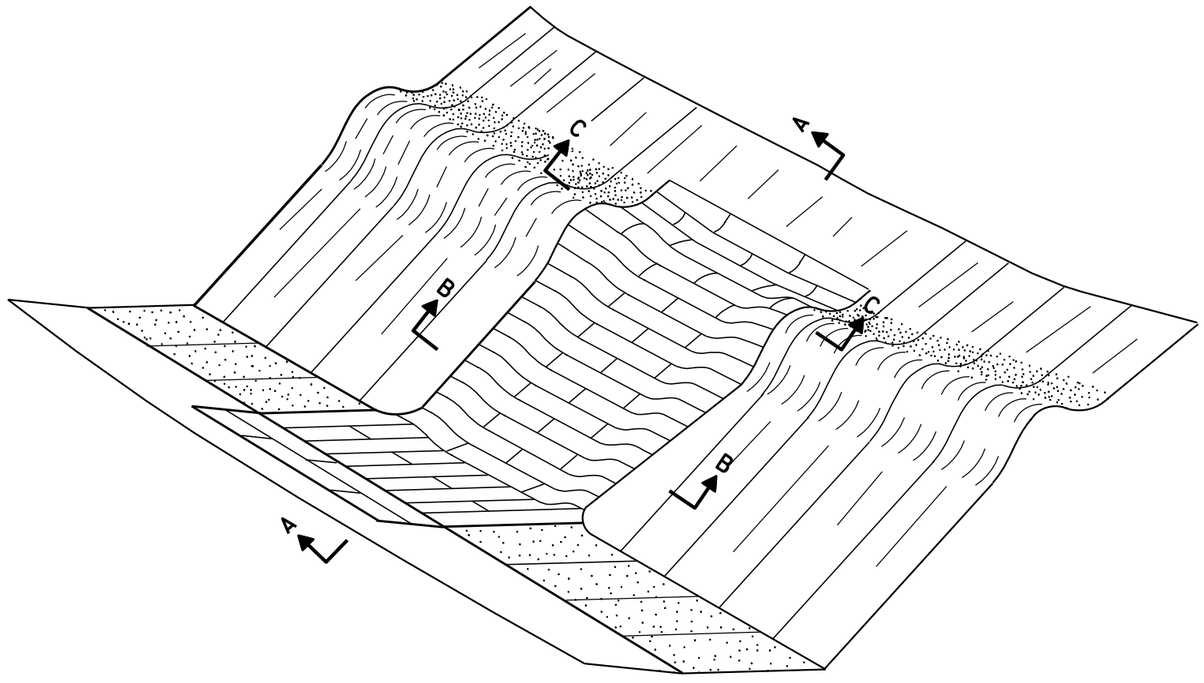
APPROVED
March 2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS 85 UNIT SUPERVISOR
FHWA

6

S.D.D. 8 D 18-2

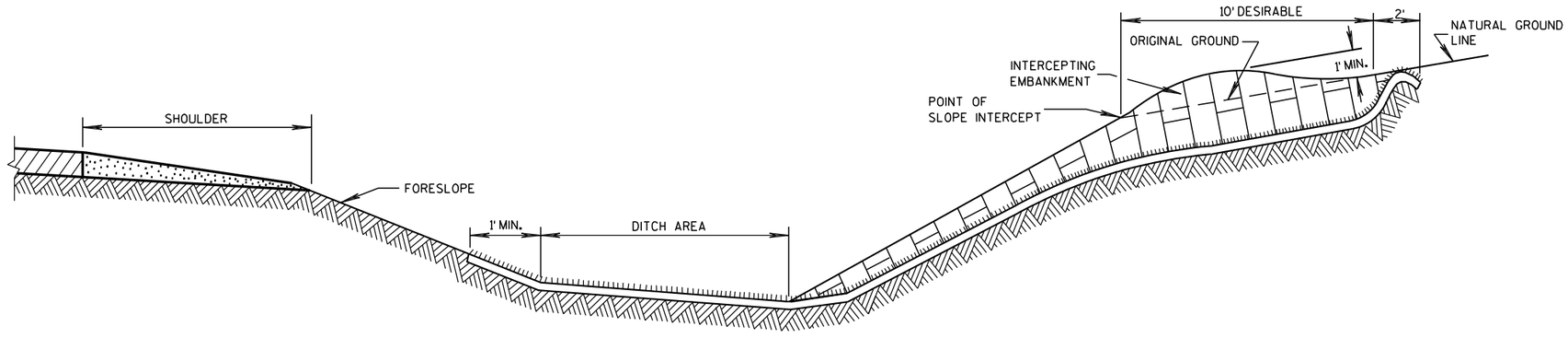
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S.D.D. 8 D 18-2

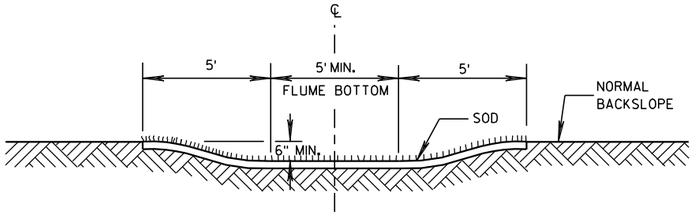


PERSPECTIVE

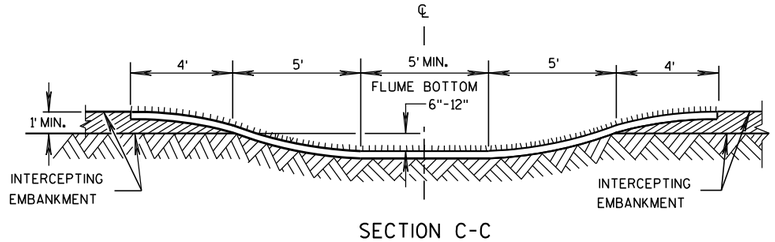
BACKSLIDE WITH FLUME AND INTERCEPTING EMBANKMENT



SECTION A-A



SECTION B-B



SECTION C-C

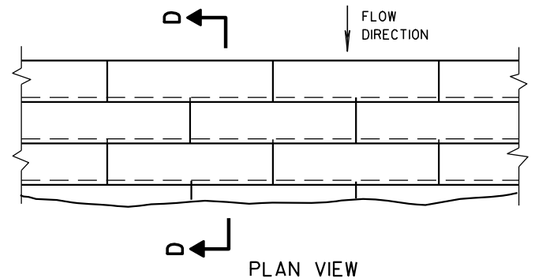
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

GRADING AND SHAPING INTERCEPTING EMBANKMENT WILL BE MEASURED AND PAID FOR IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTION 205, "ROADWAY AND DRAINAGE EXCAVATION".

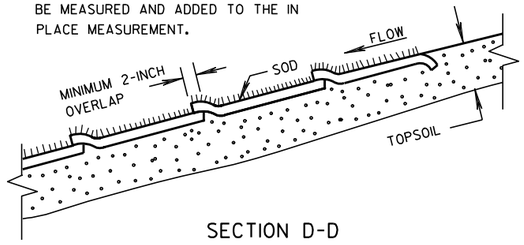
SOD STRIPS SHALL BE LAID TRANSVERSELY TO THE DIRECTION OF THE WATER FLOW.

DIMENSIONS SHALL BE ADJUSTED TO FIT SITE CONDITIONS AS DIRECTED BY THE ENGINEER.



PLAN VIEW

NOTE:
SOD SHALL BE LAID AS SHOWN ON THE PLAN VIEW, AND AS DIRECTED BY THE ENGINEER. THE SOD OVERLAP WILL BE MEASURED AND ADDED TO THE IN PLACE MEASUREMENT.



SECTION D-D

DETAIL FOR OVERLAP OF SOD STRIPS

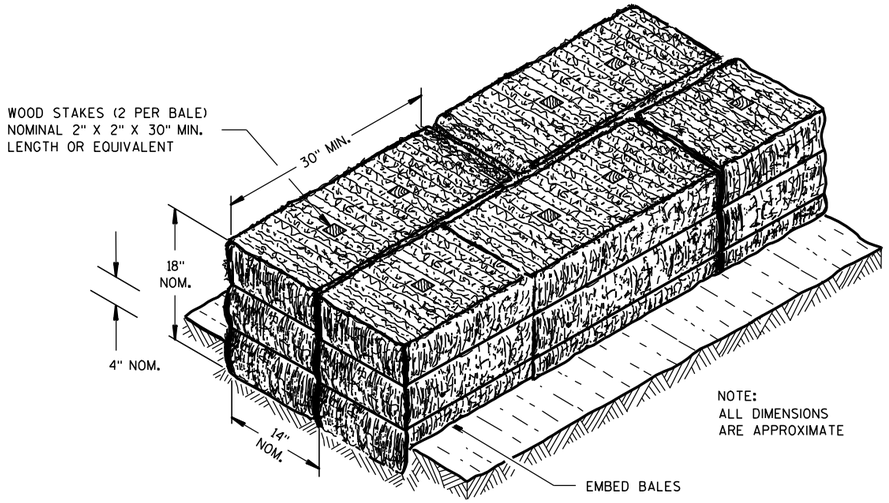
SODDED BACKSLOPE FLUME AND INTERCEPTING EMBANKMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

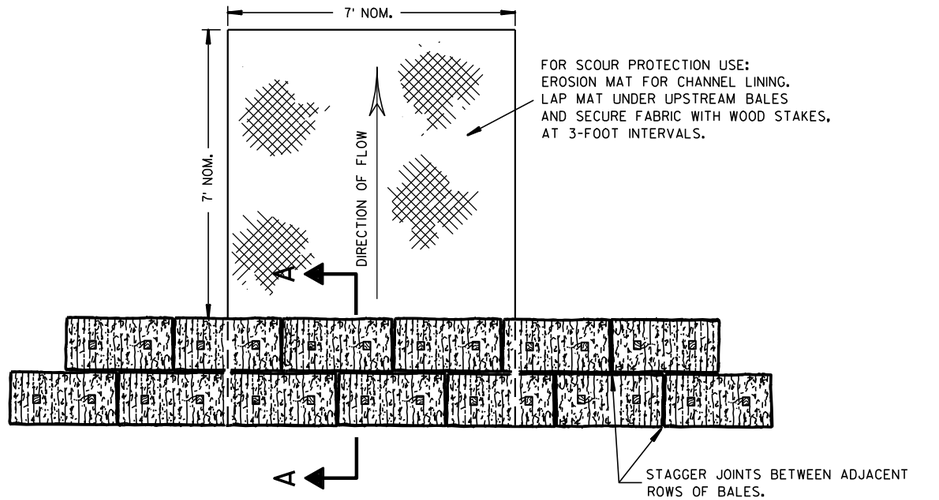
APPROVED
10/24/95 — DATE
/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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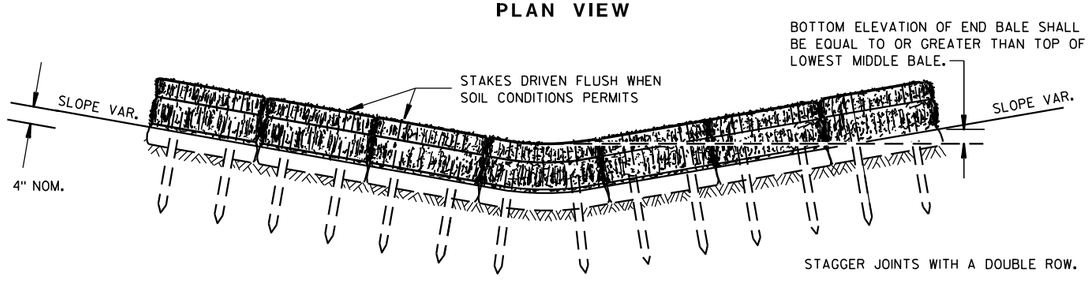
S.D.D. 8 E 5-2



SECTION A-A



PLAN VIEW



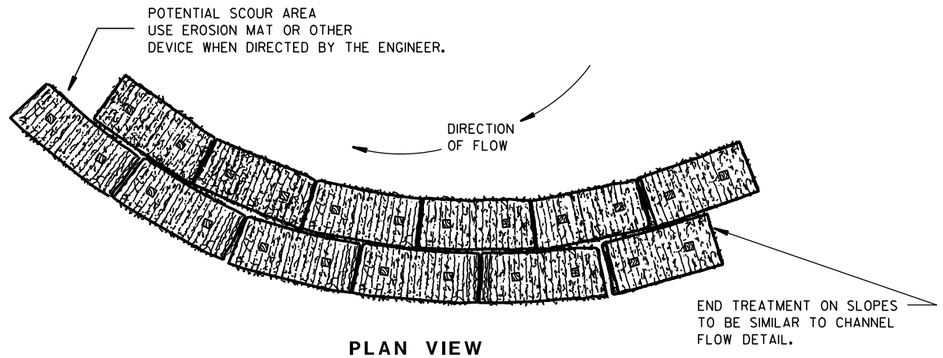
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

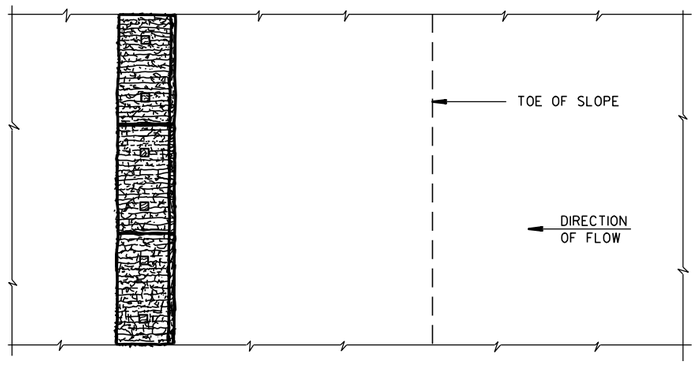
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

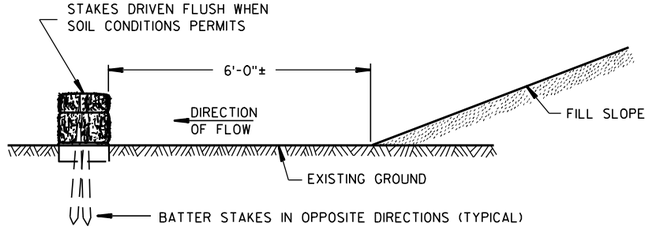


PLAN VIEW

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

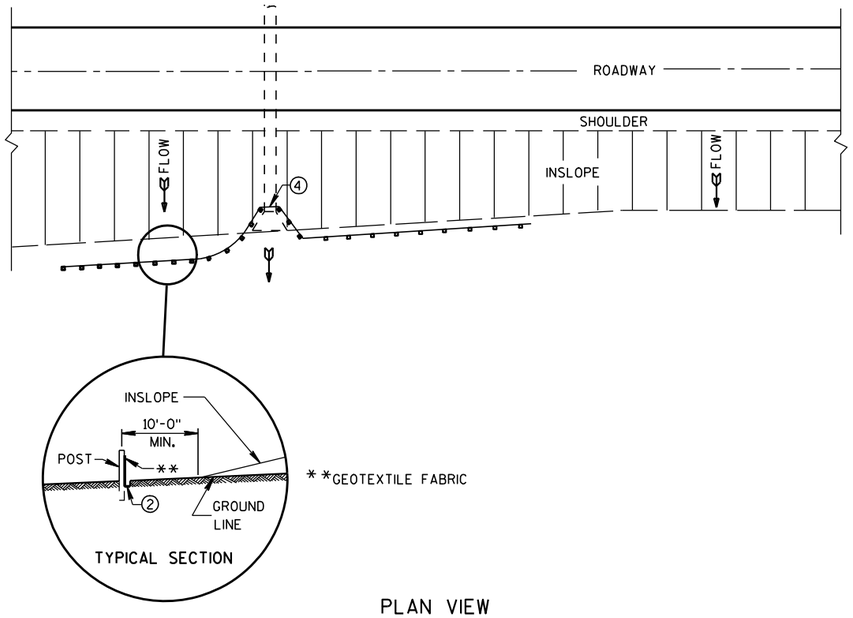
APPROVED

6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

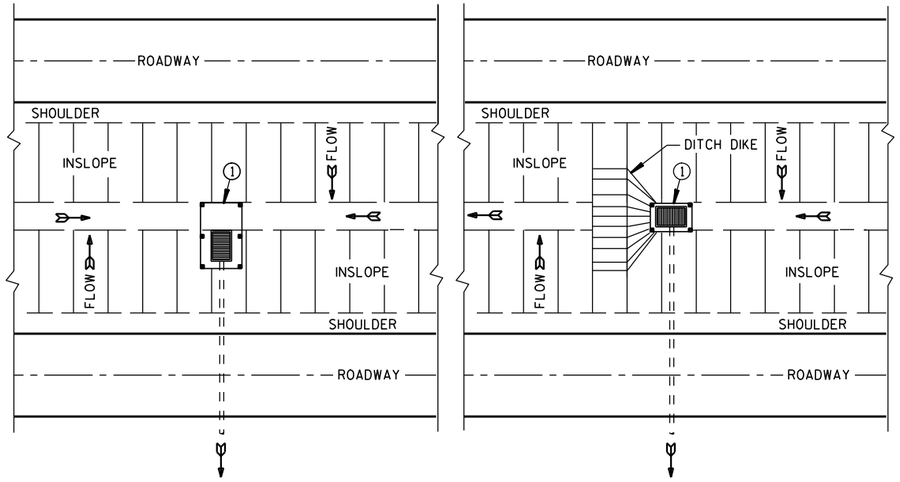
FHWA

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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



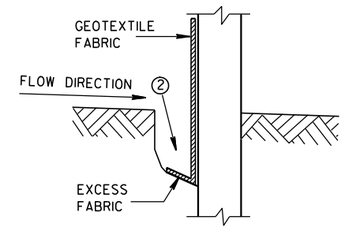
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

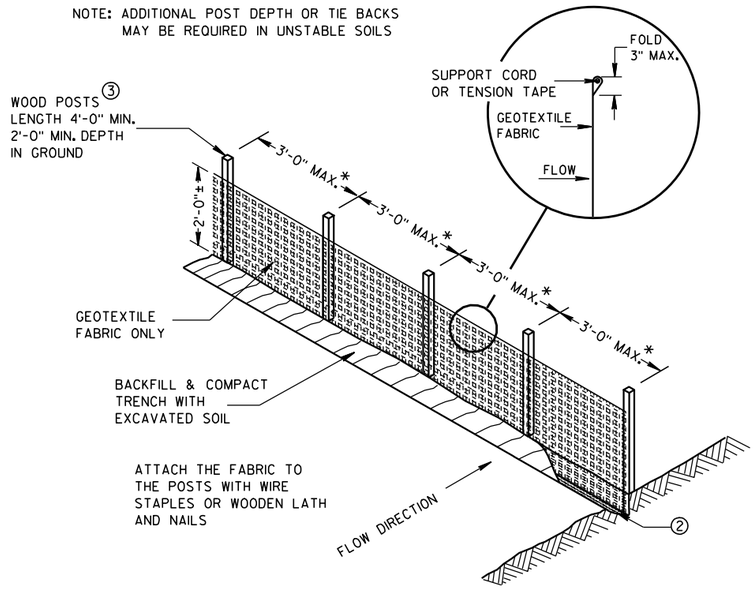
GENERAL NOTES

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.

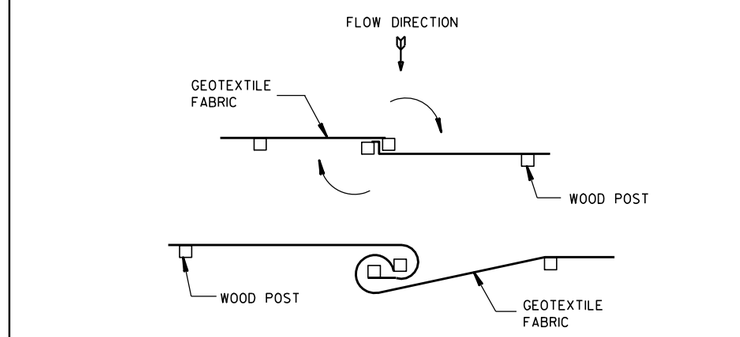


TRENCH DETAIL

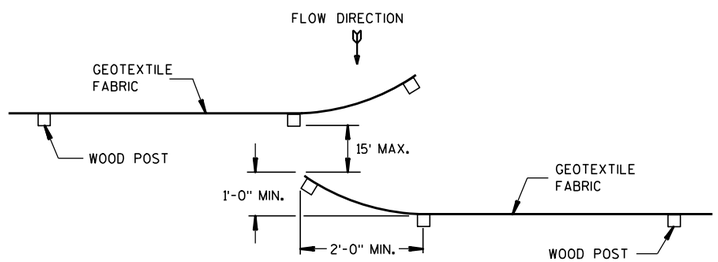


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

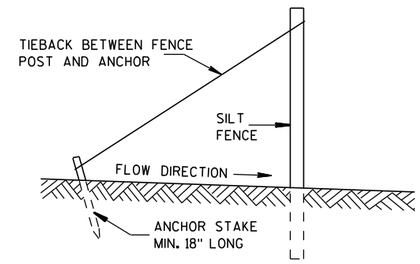


TWIST METHOD



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

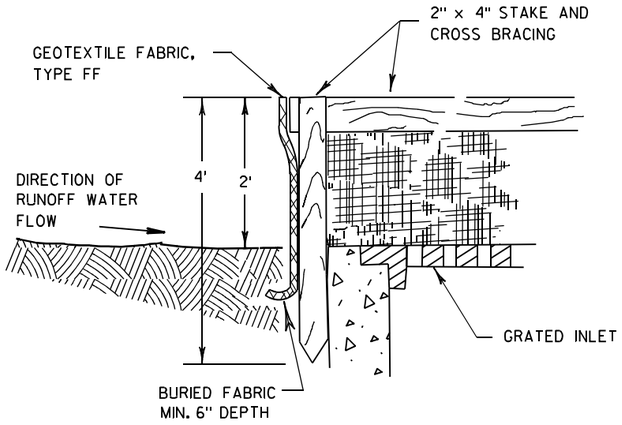
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

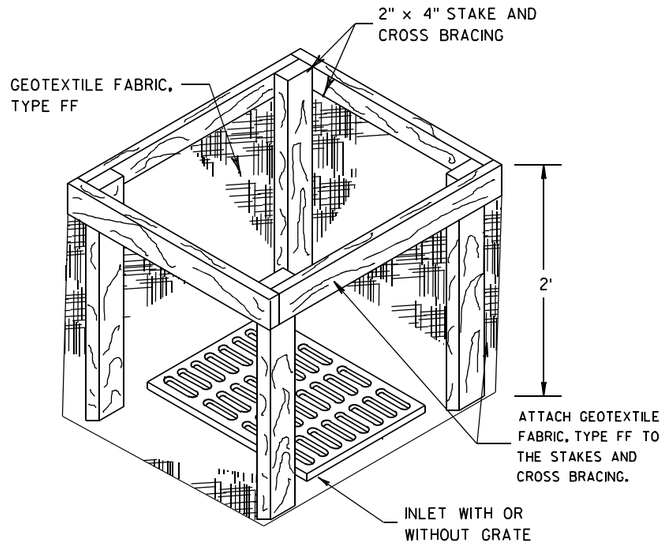
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S.D.D. 8 E 9-6

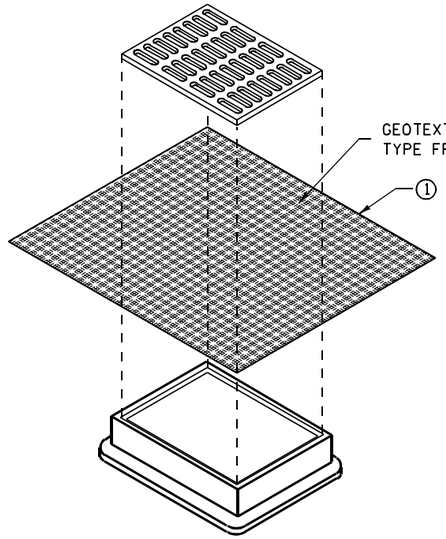
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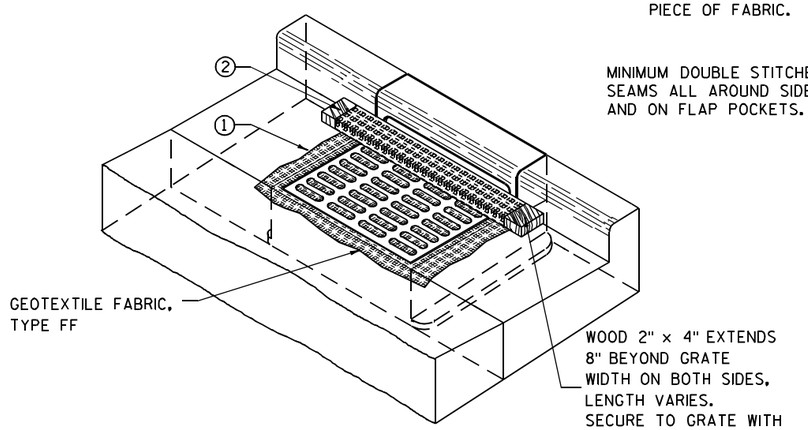


INLET PROTECTION, TYPE A

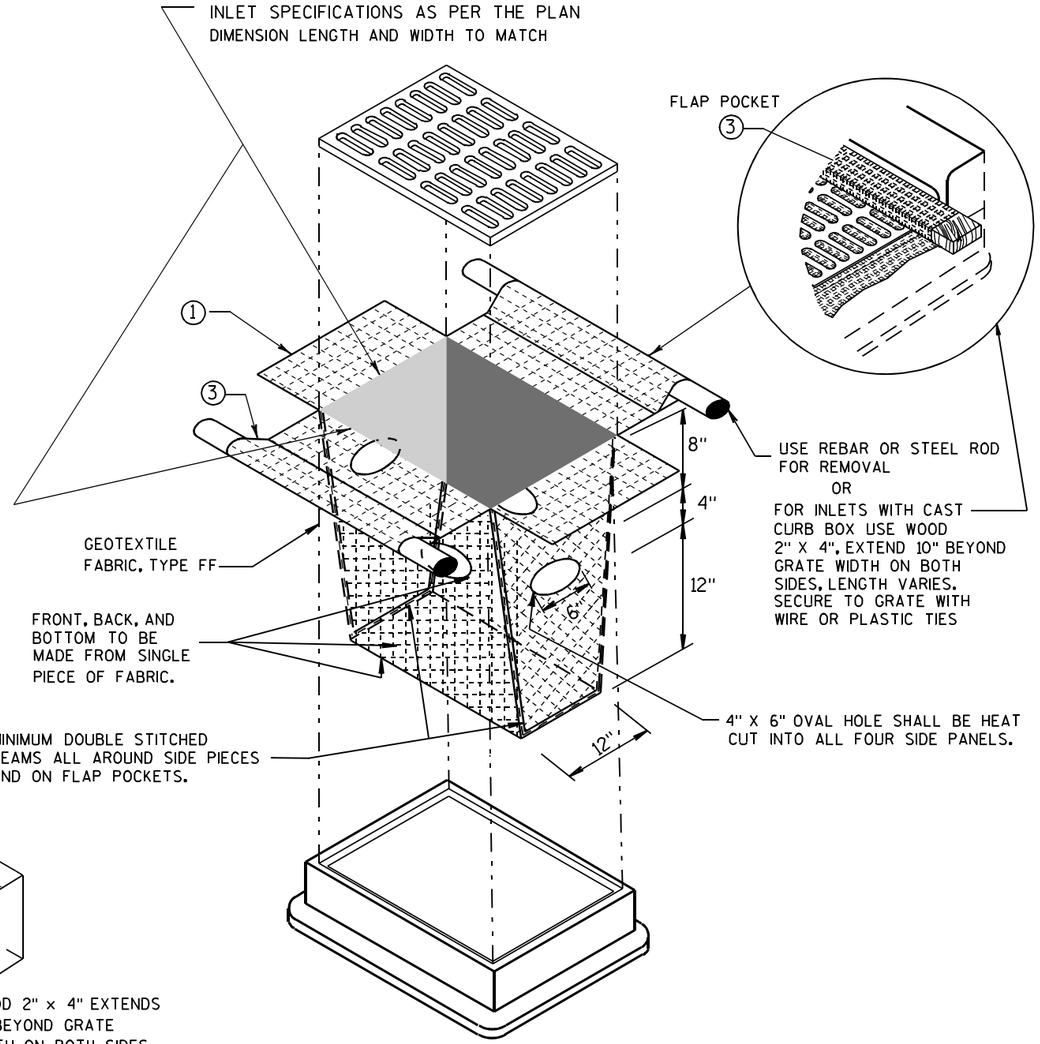


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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

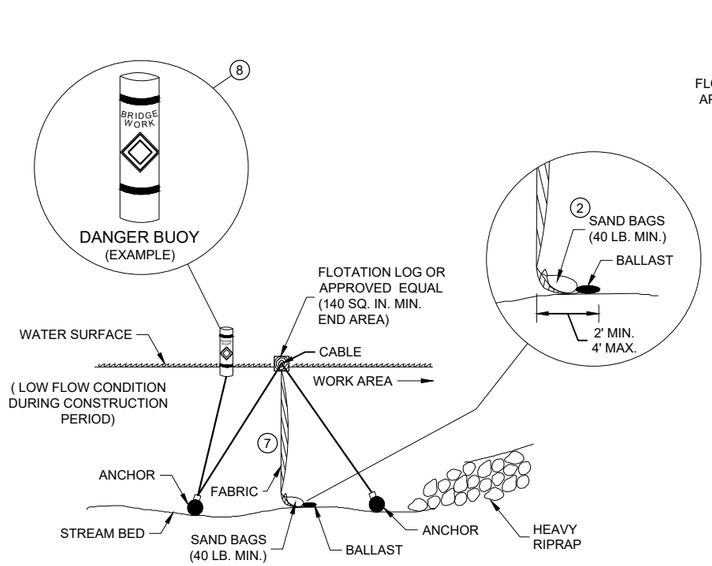
FHWA

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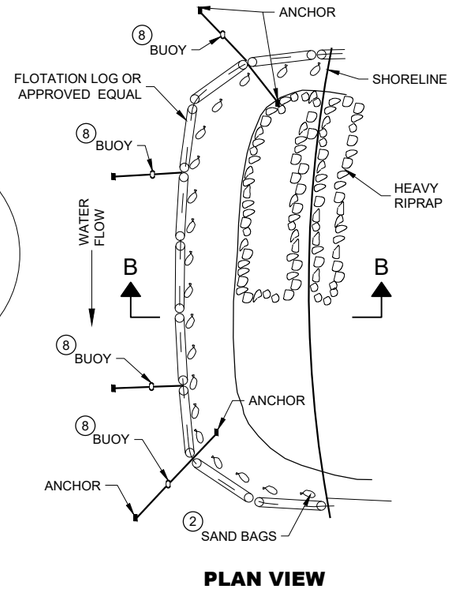
S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2

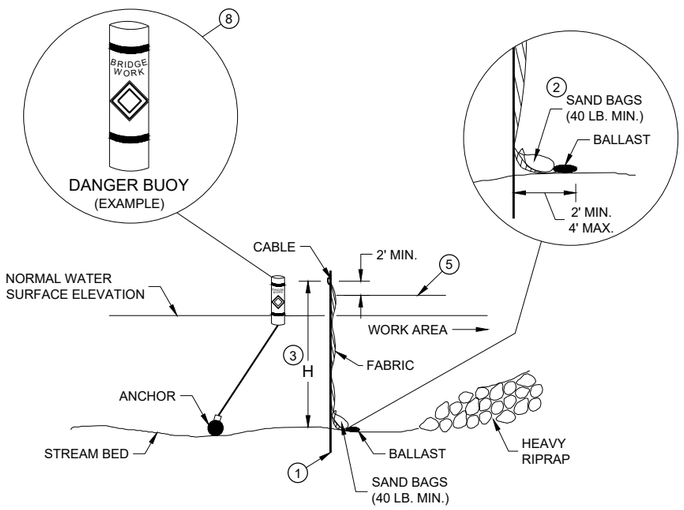


SECTION B - B

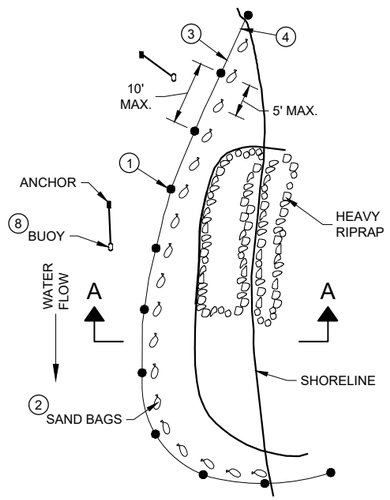


PLAN VIEW

TURBIDITY BARRIER - FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A - A



PLAN VIEW

TURBIDITY BARRIER - STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT 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.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

(1) DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.

(2) SAND BAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.

(3) WHEN BARRIER HEIGHT "H" EXCEEDS 8 FEET, POST SPACING MAY NEED TO BE DECREASED.

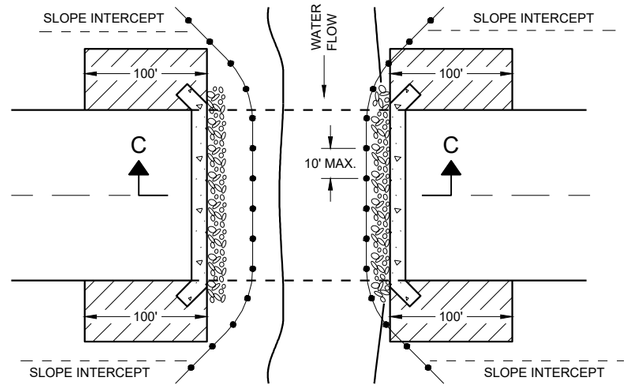
(4) IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

(5) ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE Q2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.

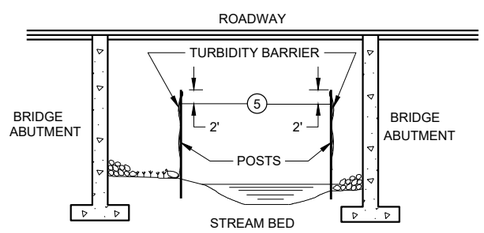
(6) FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BEDROCK PREVENTS THE INSTALLATION OF POSTS.

(7) ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.

(8) USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C - C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/4/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

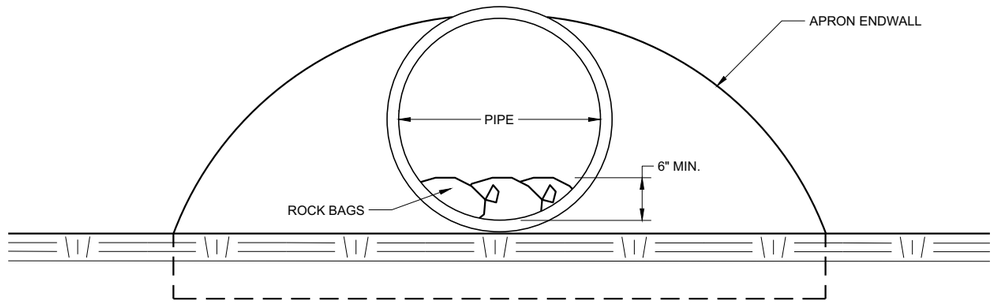
FHWA

6

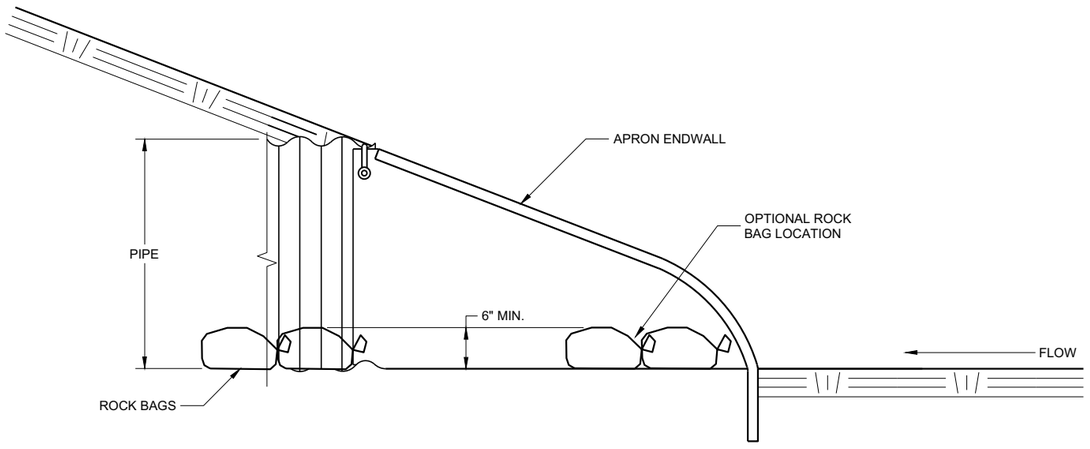
SDD 08E11 - 02

6

SDD 08E11 - 02



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Daniel Schave EROSION CONTROL ENGI
FHWA	

6

SDD 08E15 - 01

METAL APRON ENDWALLS

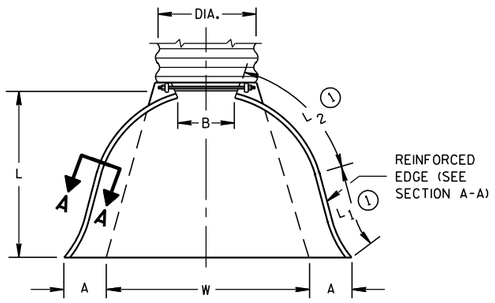
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

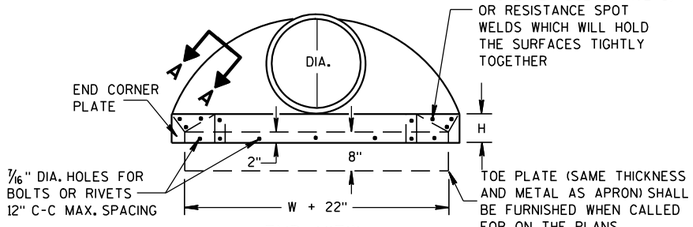
REINFORCED CONCRETE APRON ENDWALLS

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

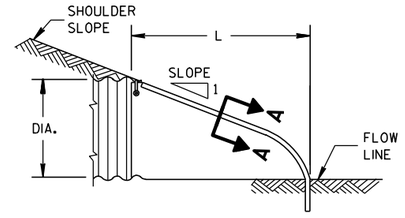
* MINIMUM
** MAXIMUM



PLAN VIEW

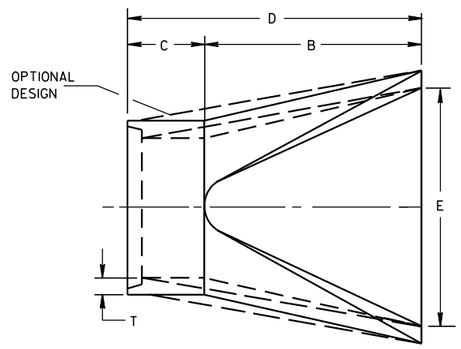


END VIEW

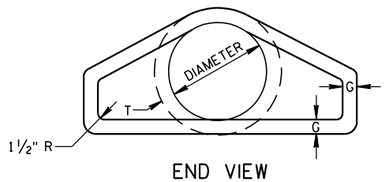


SIDE ELEVATION

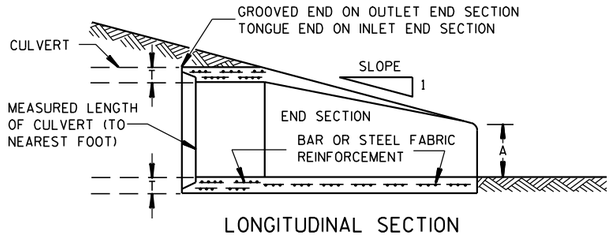
METAL ENDWALLS



PLAN

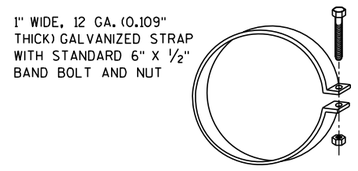


END VIEW



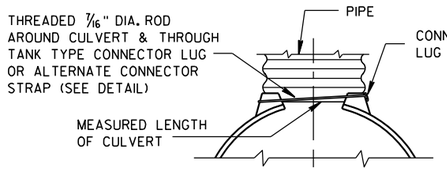
LONGITUDINAL SECTION

CONCRETE ENDWALLS

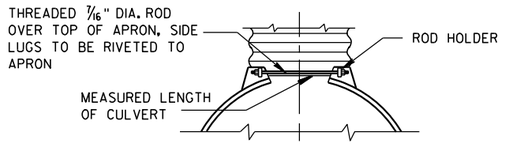


ALTERNATE FOR TYPE 1 CONNECTION

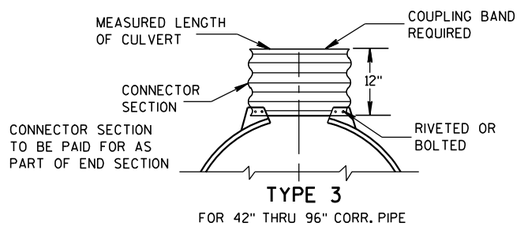
END SECTION CONNECTOR STRAP



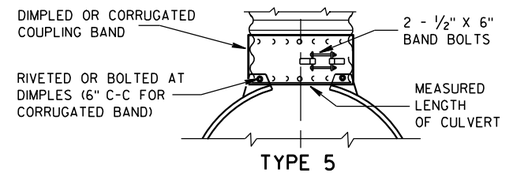
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

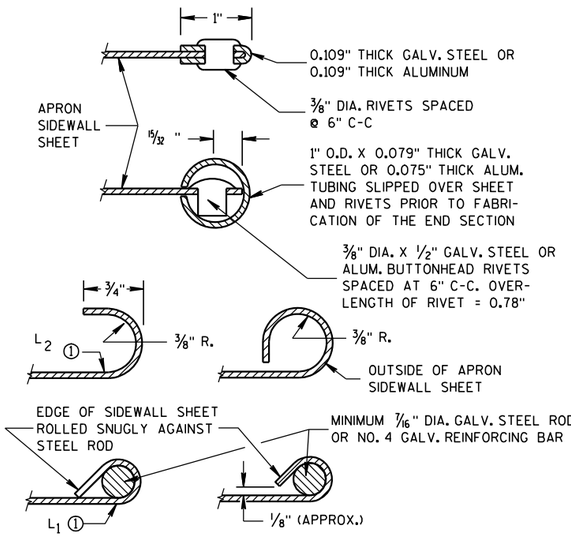
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

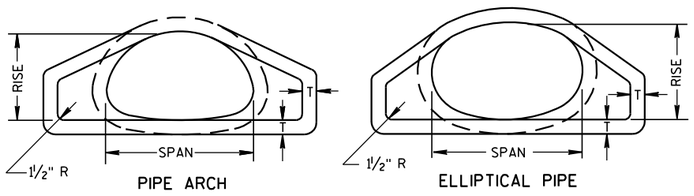
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

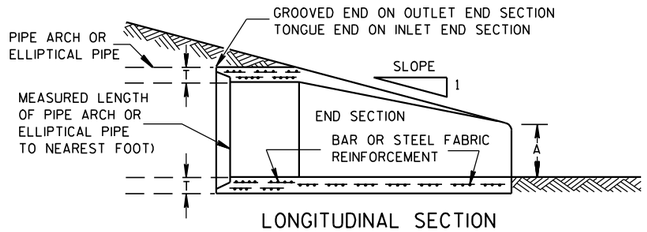
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

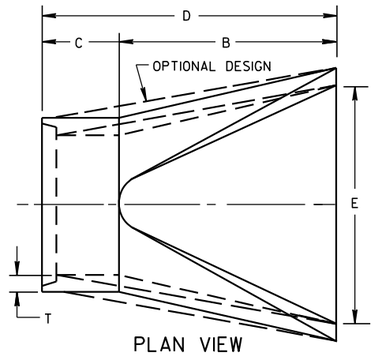
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S.D.D. 8 F 1-11



END VIEW

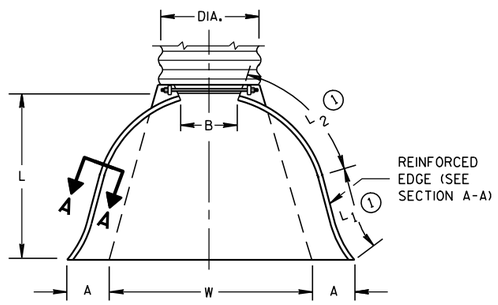


LONGITUDINAL SECTION

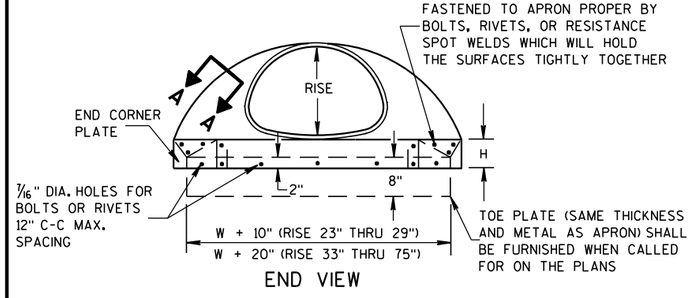


PLAN VIEW

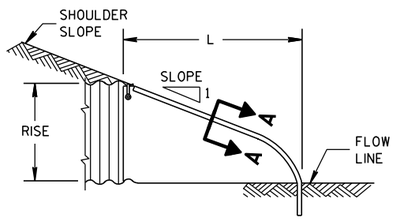
CONCRETE ENDWALLS



PLAN VIEW

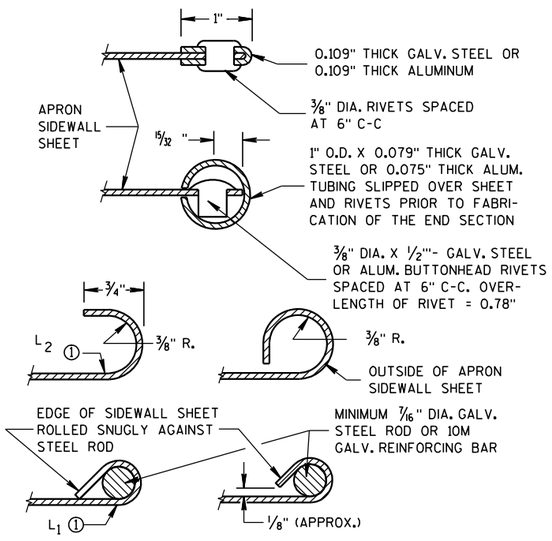


END VIEW



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

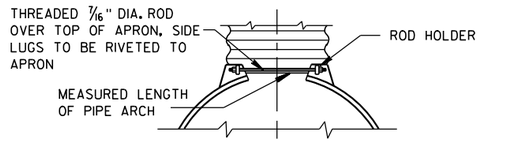
REINFORCED CONCRETE PIPE ARCH

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

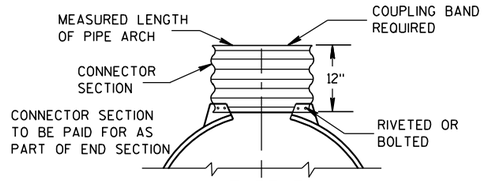
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



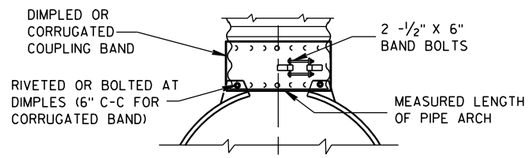
TYPE 2

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

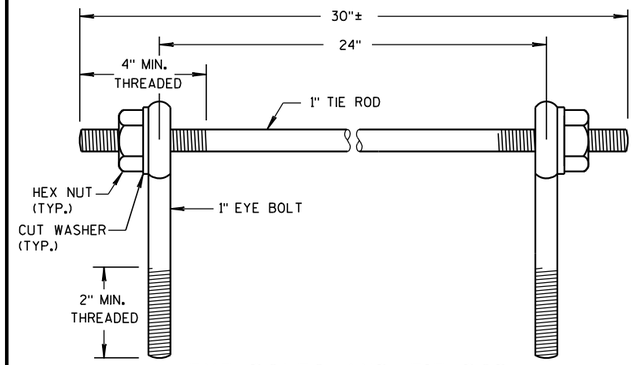
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

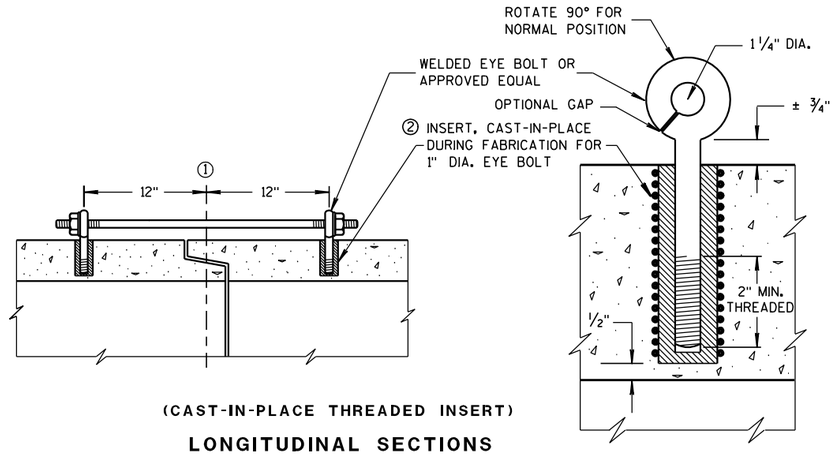
11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA



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.

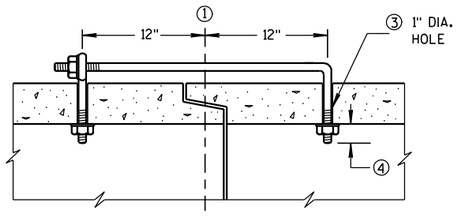
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

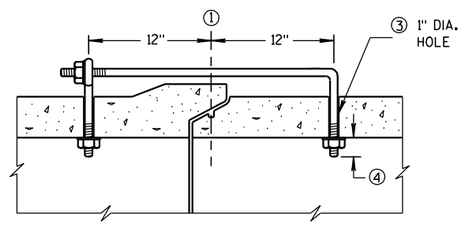
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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)

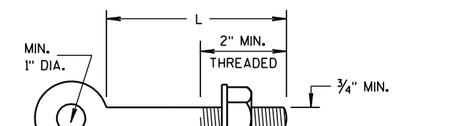


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

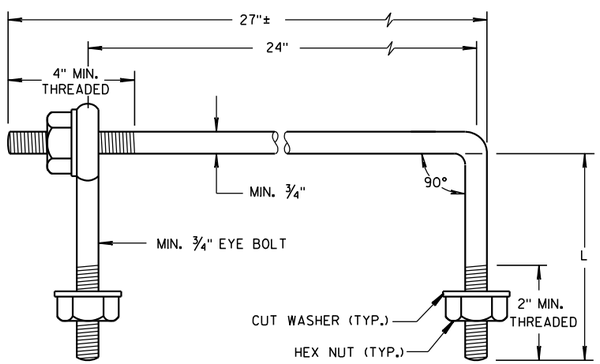
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



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

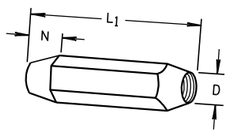
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

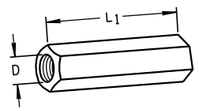
ADJUSTABLE TIE ROD TABLE

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



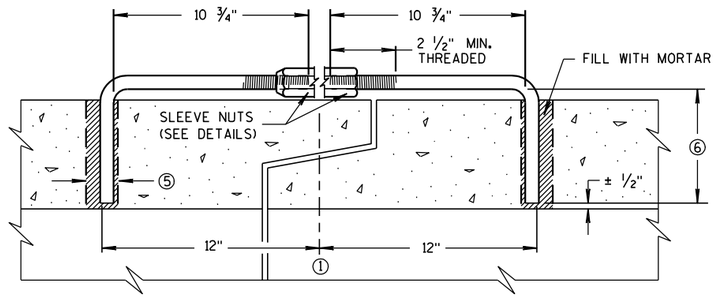
TAPERED



PLAIN

RIGHT AND LEFT THREADS

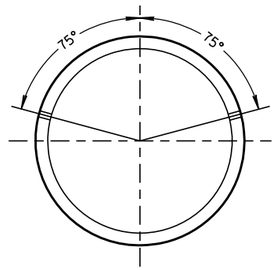
SLEEVE NUTS



LONGITUDINAL SECTION

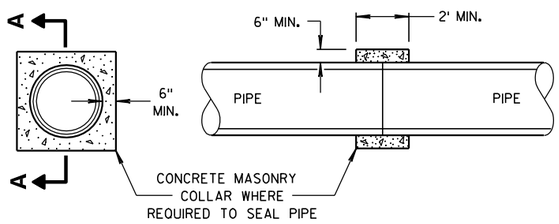
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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
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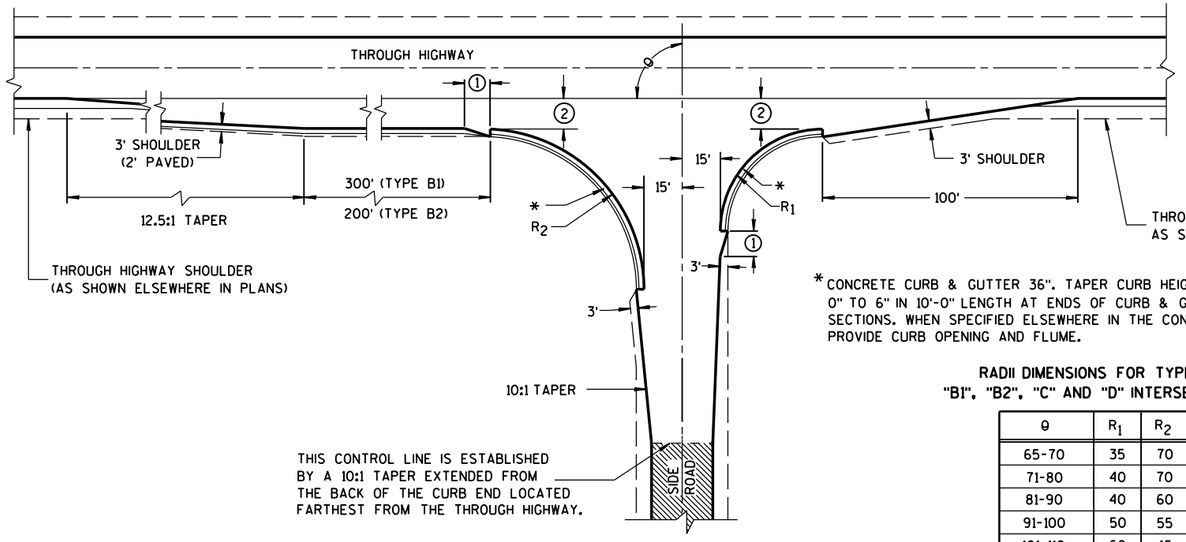
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS 94 ENGINEER
'MENT
FHWA

6

S.D.D. 8 F 4-7

6

S.D.D. 8 F 4-7

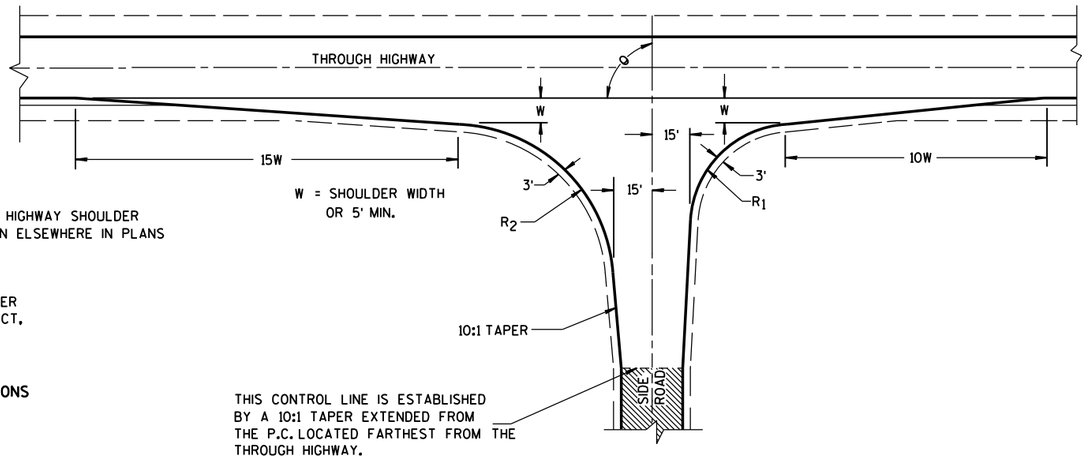


TYPE "B1" AND "B2"

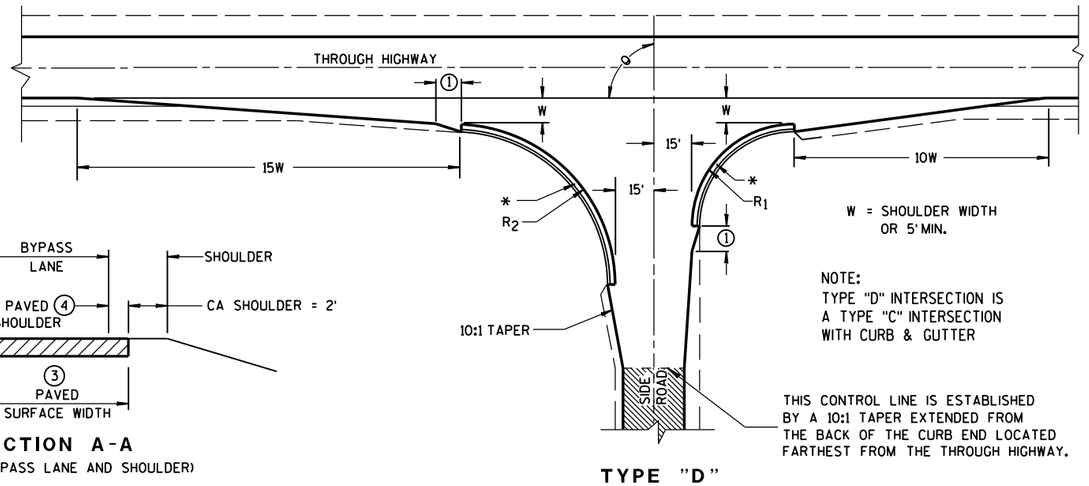
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45



TYPE "C"



TYPE "D"

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING PAVED SURFACE

BYPASS LANE

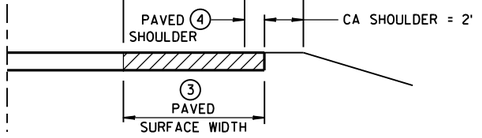
(1) 10-FT TYPICAL.

(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

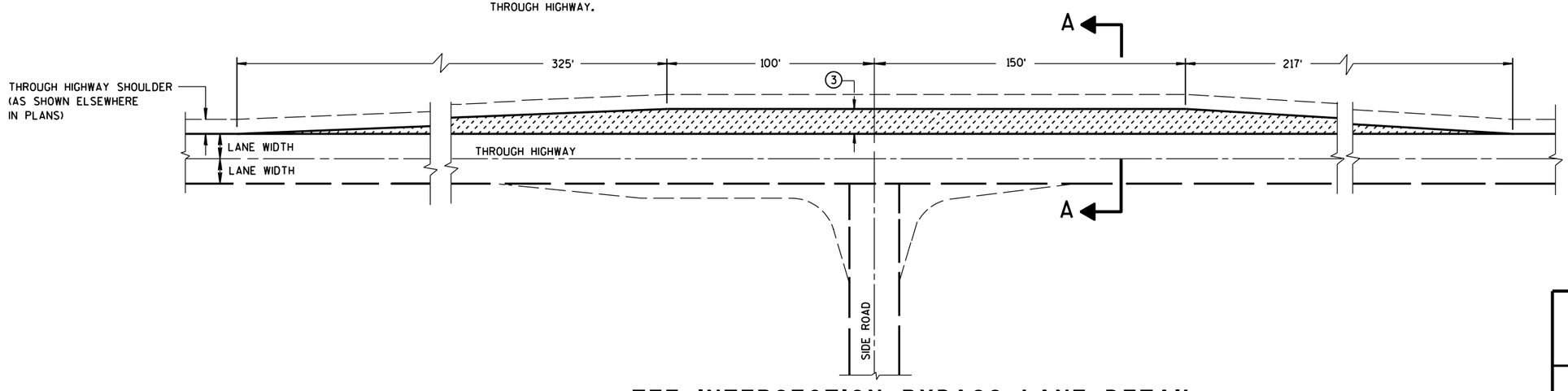
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.

(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



TEE INTERSECTION BYPASS LANE DETAIL

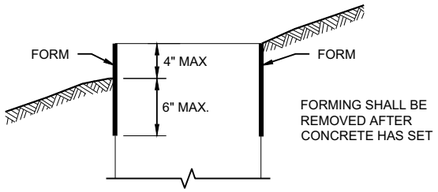
AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

S.D.D. 9 A 1-13a

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWINGSHALL 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 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 A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X 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 NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC 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 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES 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.

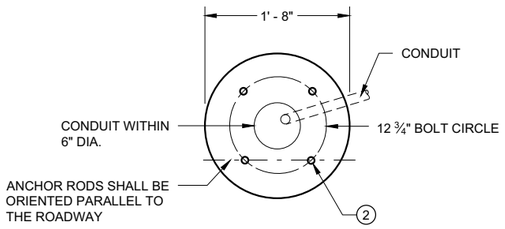
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

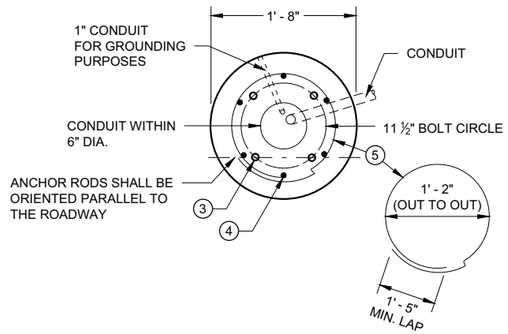
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

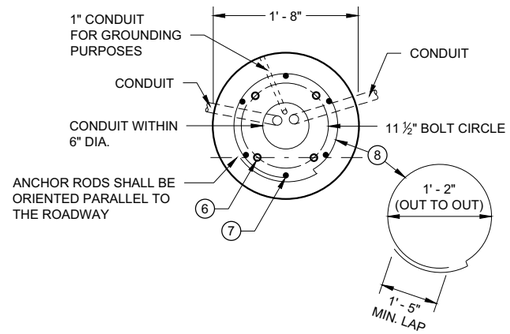
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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 OF 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 STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

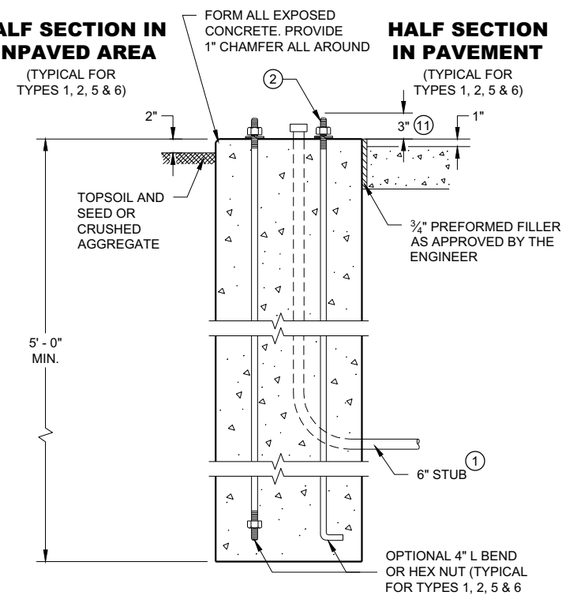
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

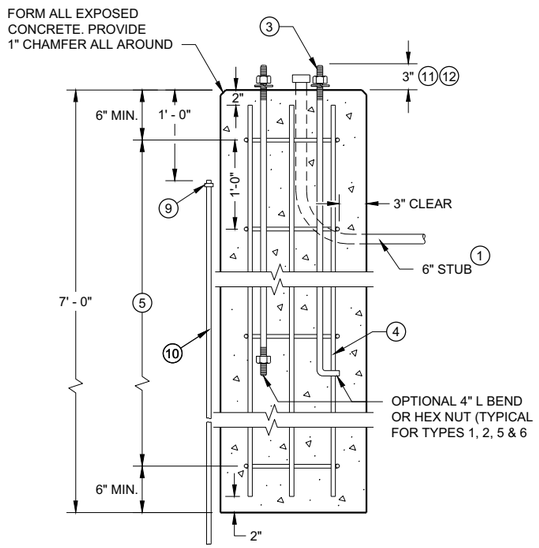
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

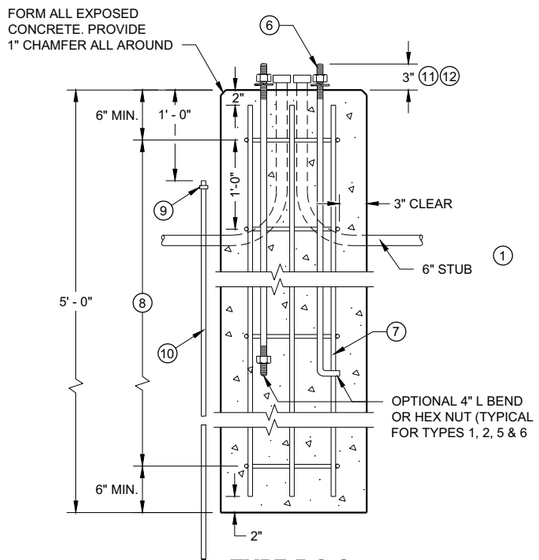
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

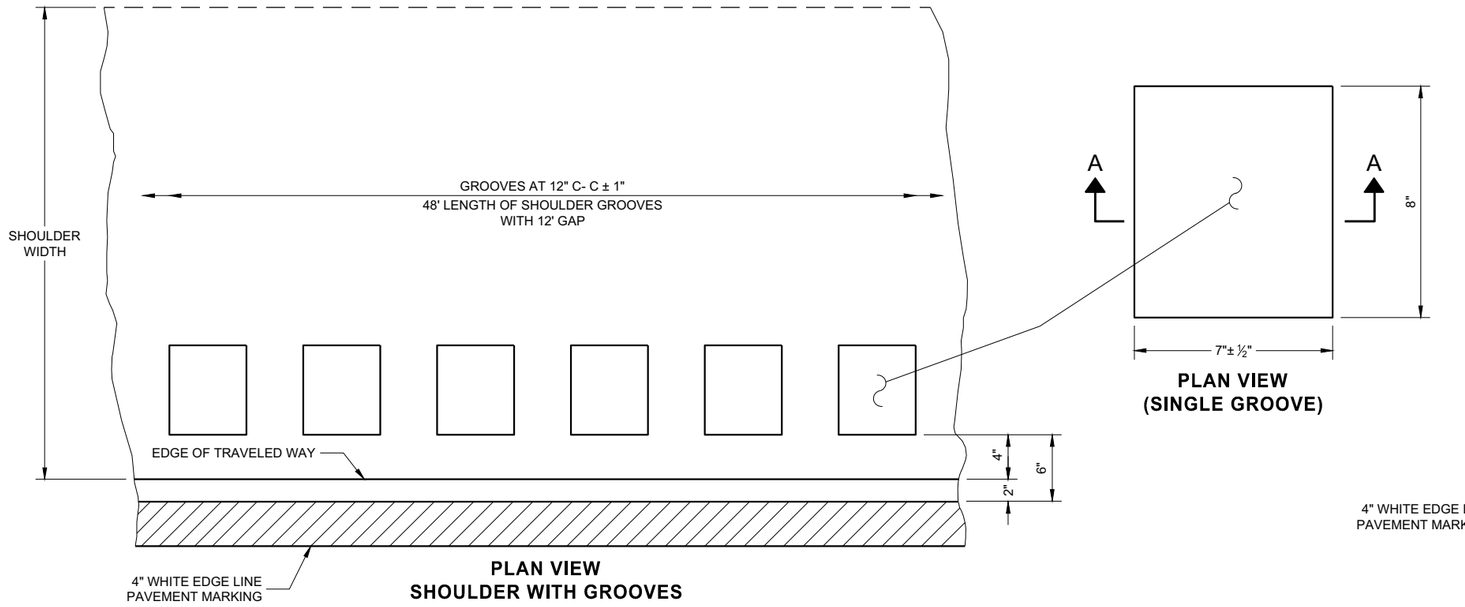
CONCRETE BASES

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 96

FHWA



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

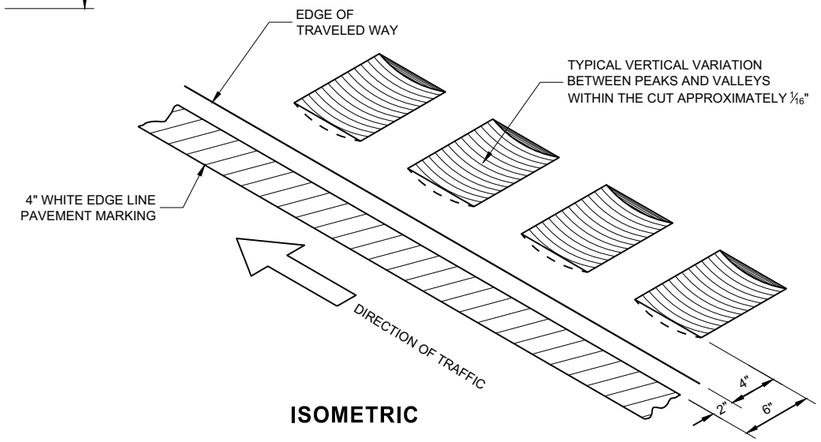
PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

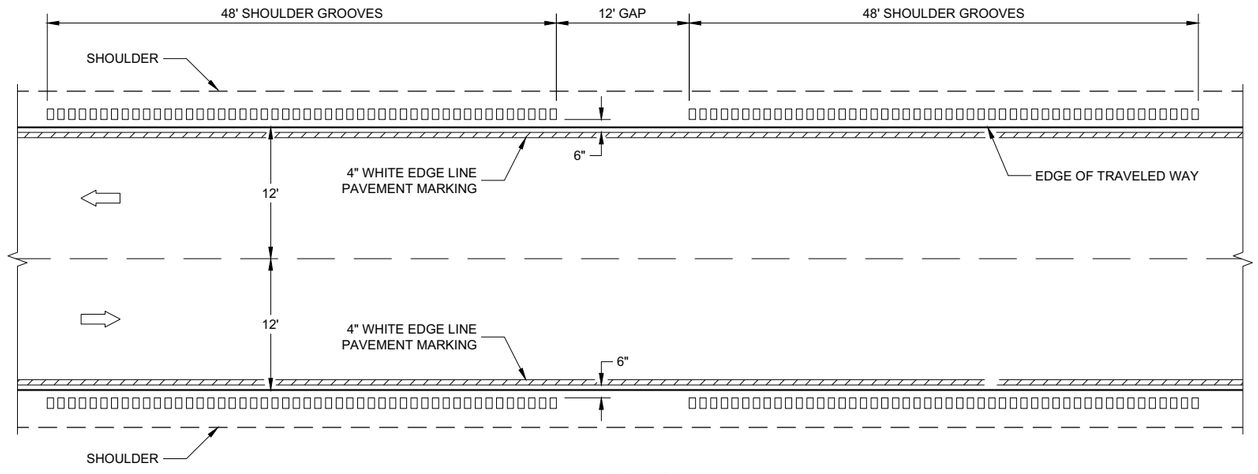
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

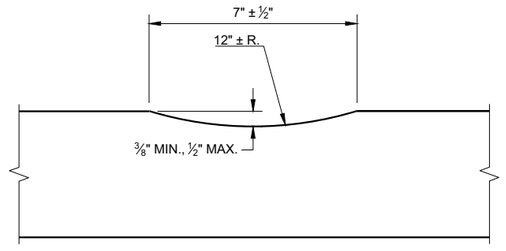
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



ISOMETRIC



TYPE 1
2 - LANE SHOULDER RUMBLE STRIP



SECTION A - A

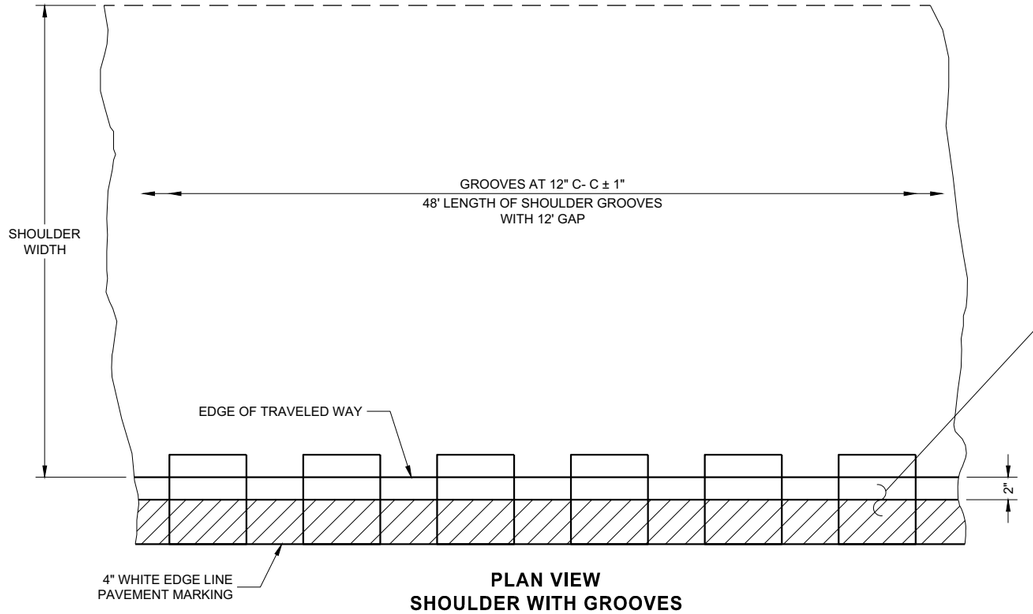
2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

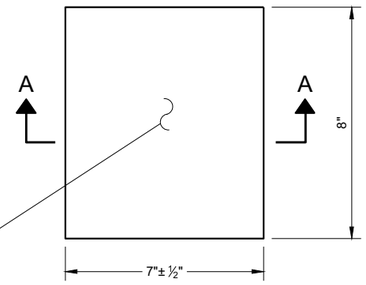
SDD 13A10 - 02a

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SDD 13A10 - 02a



PLAN VIEW
SHOULDER WITH GROOVES



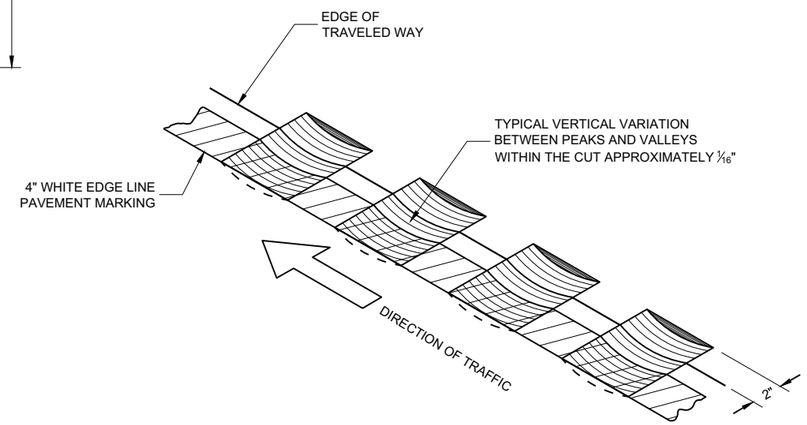
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

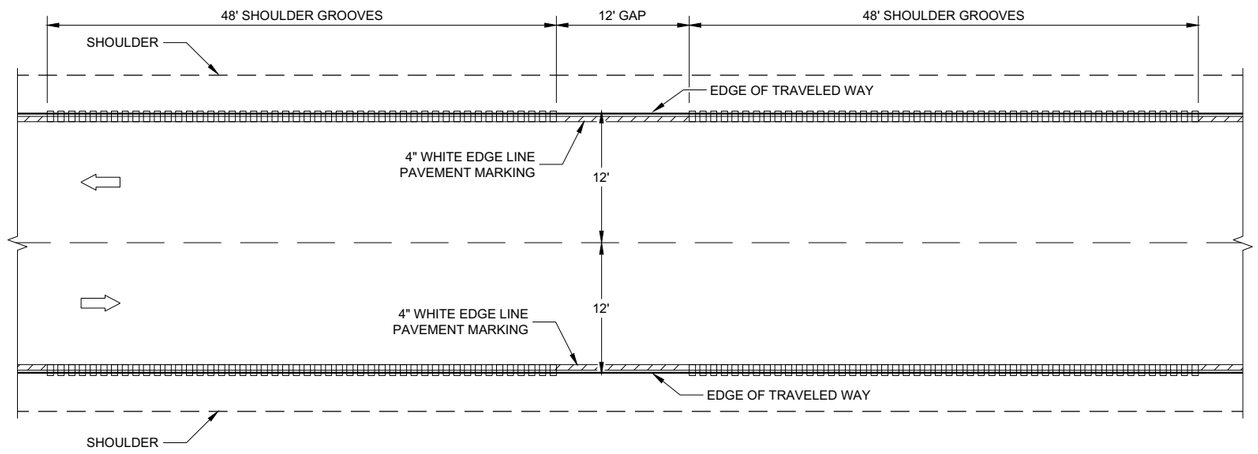
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

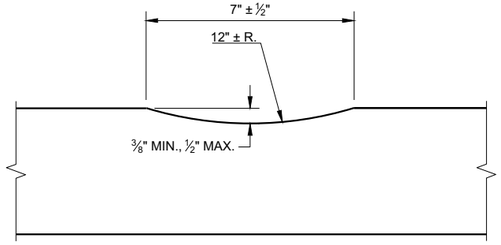


ISOMETRIC

PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP



TYPE 2
2 - LANE SHOULDER RUMBLE STRIP



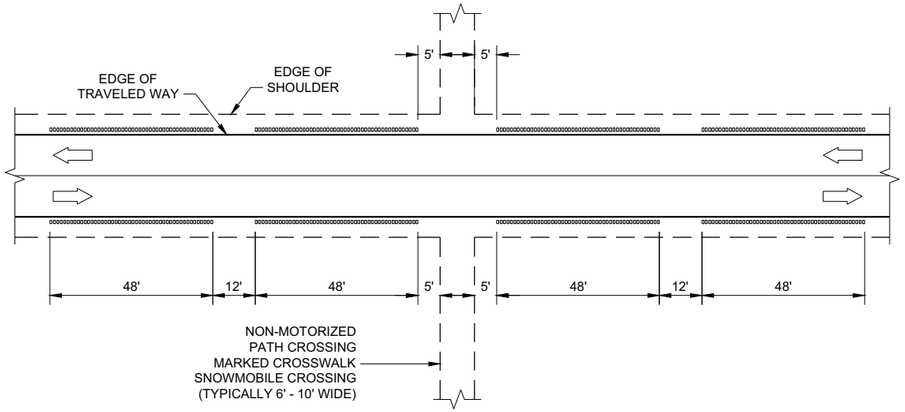
SECTION A - A

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

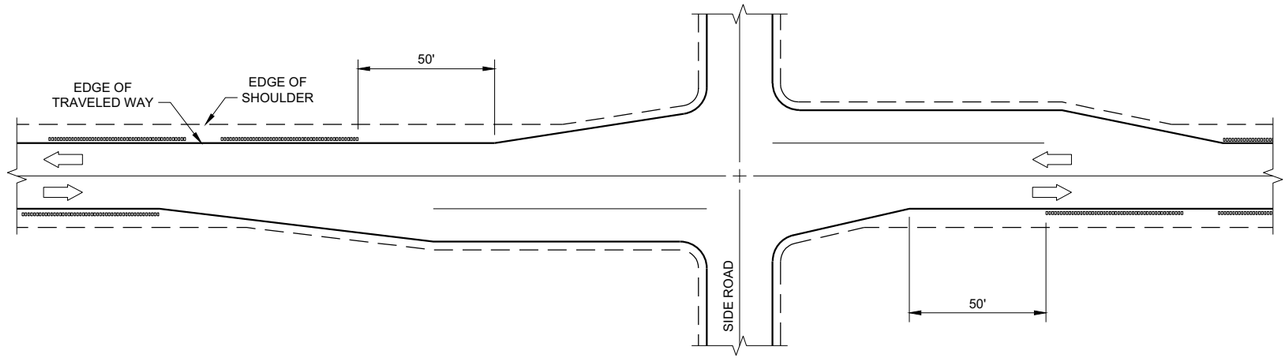
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 13A10 - 02b

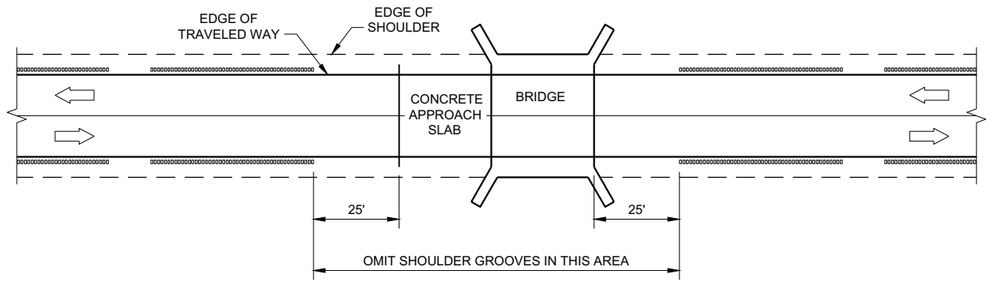
SDD 13A10 - 02b



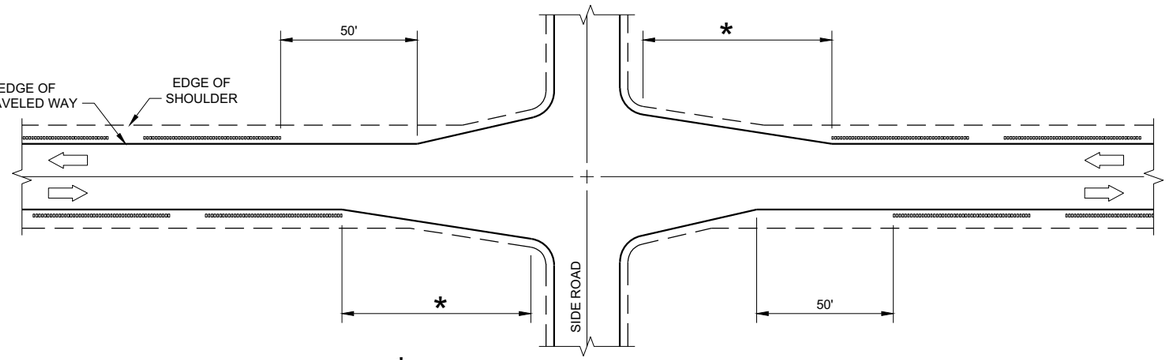
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



SHOULDER GROOVES AT RIGHT TURN LANE

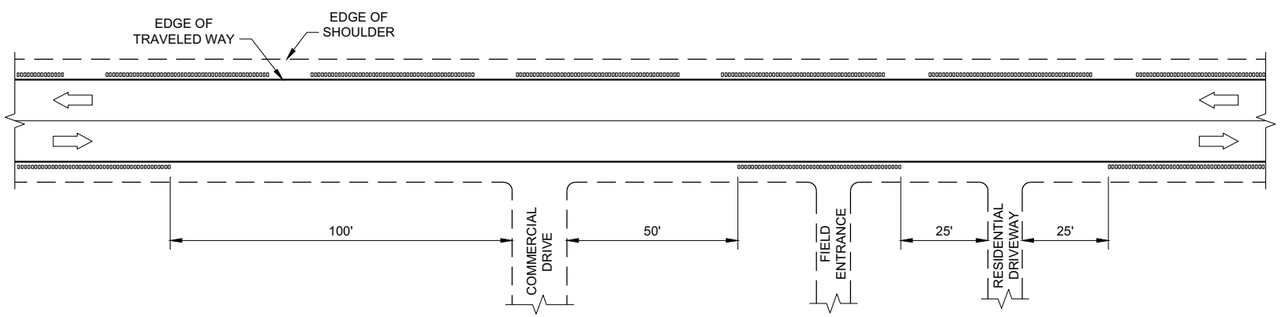


SHOULDER GROOVES AT BRIDGES



* GREATER OF 100' OR APPROACH TAPER LENGTH

SHOULDER GROOVES AT INTERSECTIONS WITH APPROACH TAPER



SHOULDER GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

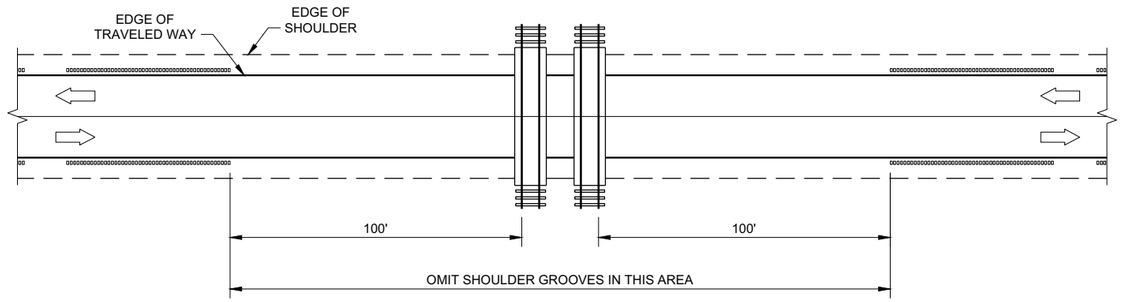
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

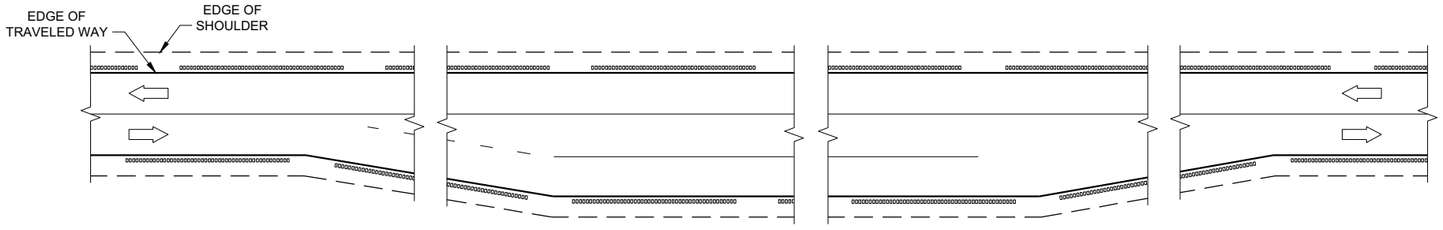
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

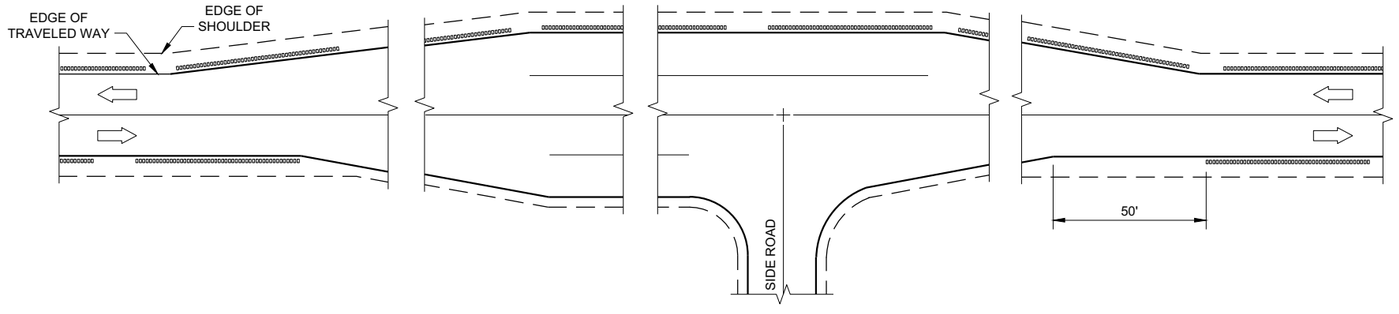
SDD 13A10 - 02c



SHOULDER GROOVES AT RAILROADS



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

6

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SDD 13A10 - 02d

SDD13A10 - 02d

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

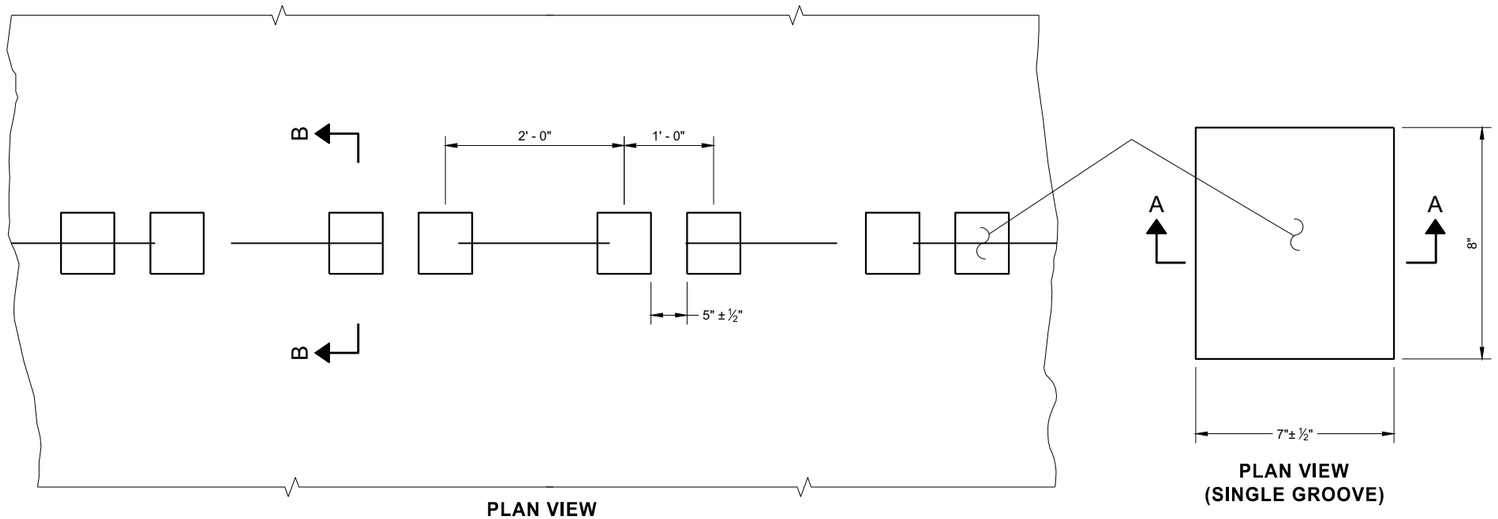
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

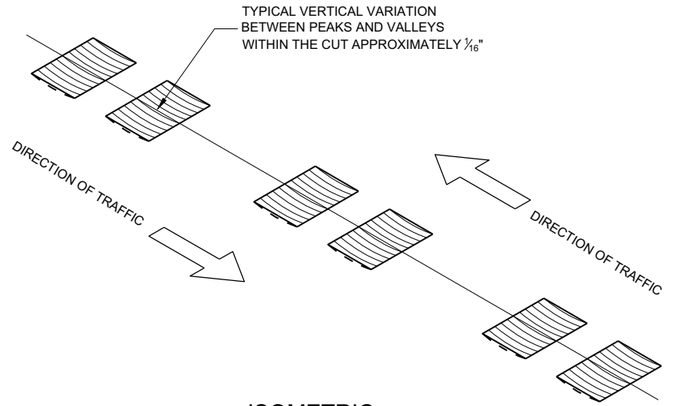
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTERLINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

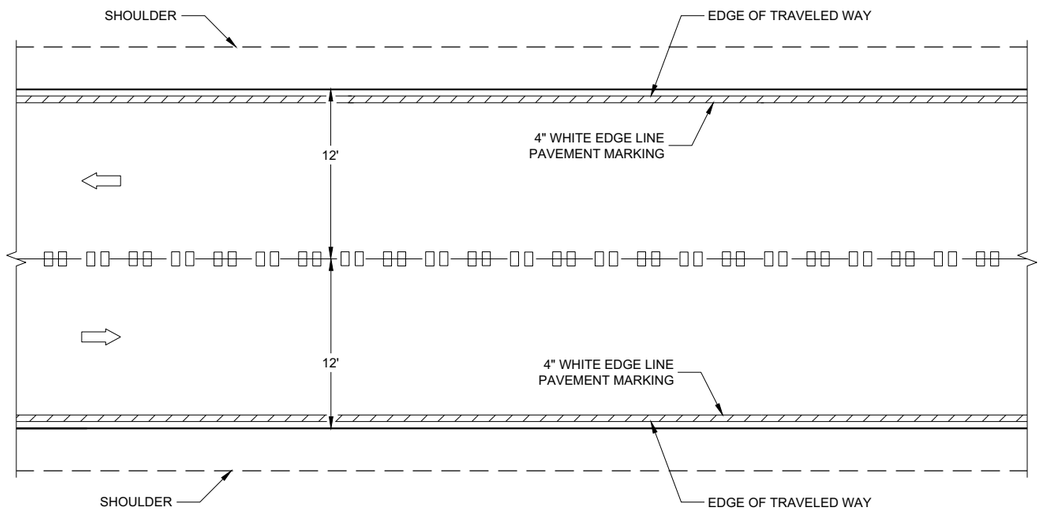
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

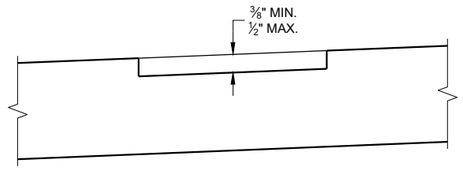
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



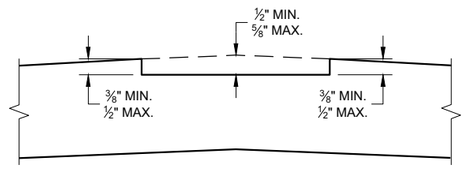
ISOMETRIC



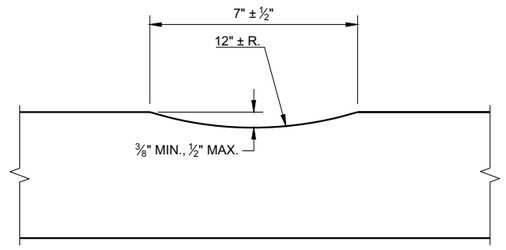
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



SECTION A - A

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

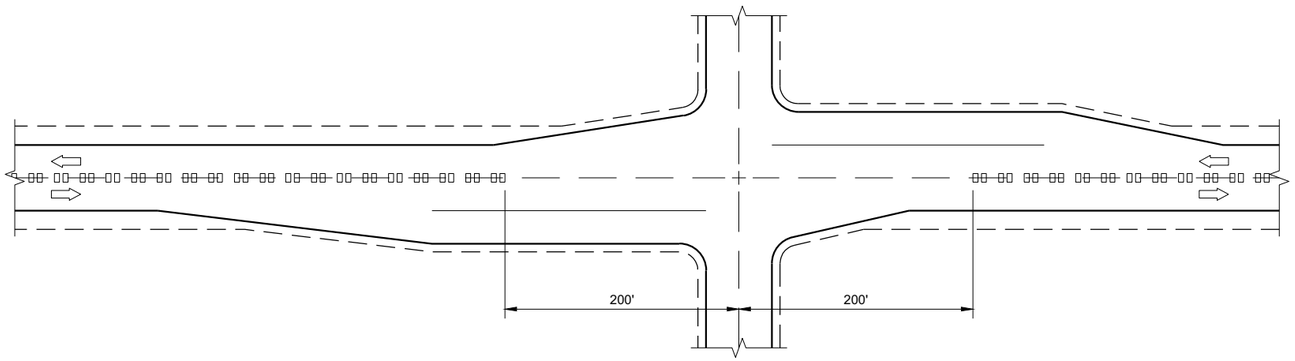
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

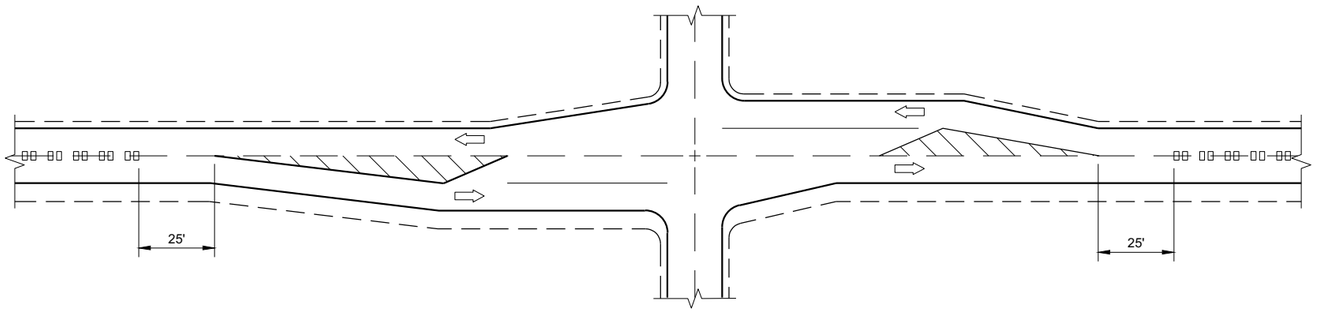
SDD 13A11 - 03a

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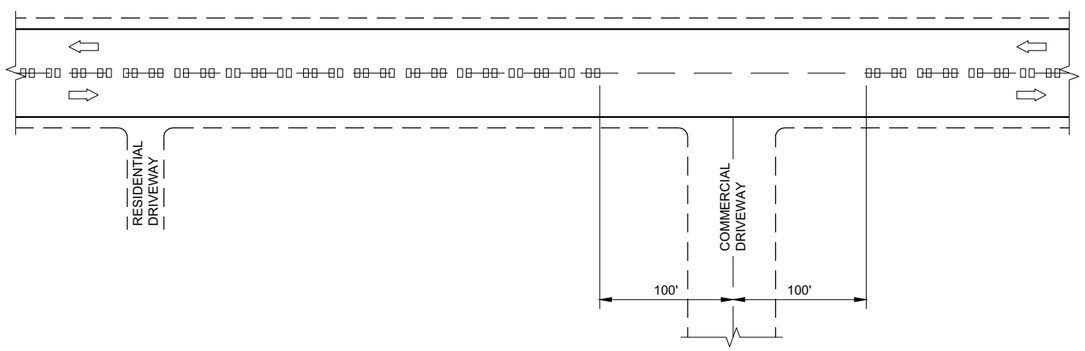
SDD 13A11 - 03a



CENTERLINE GROOVES AT INTERSECTIONS



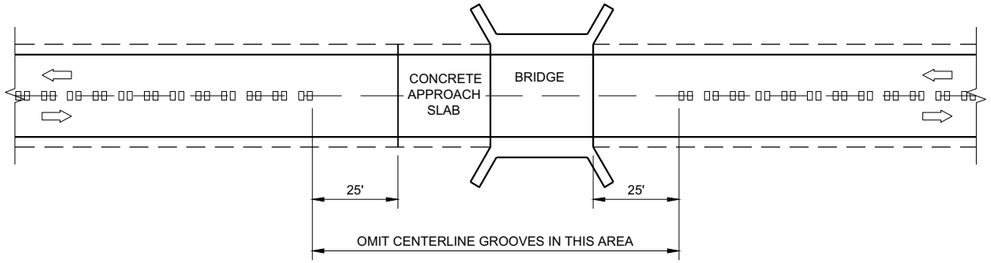
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



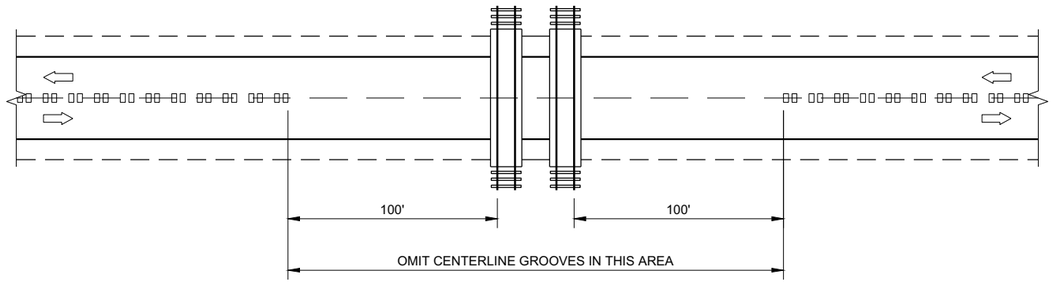
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING

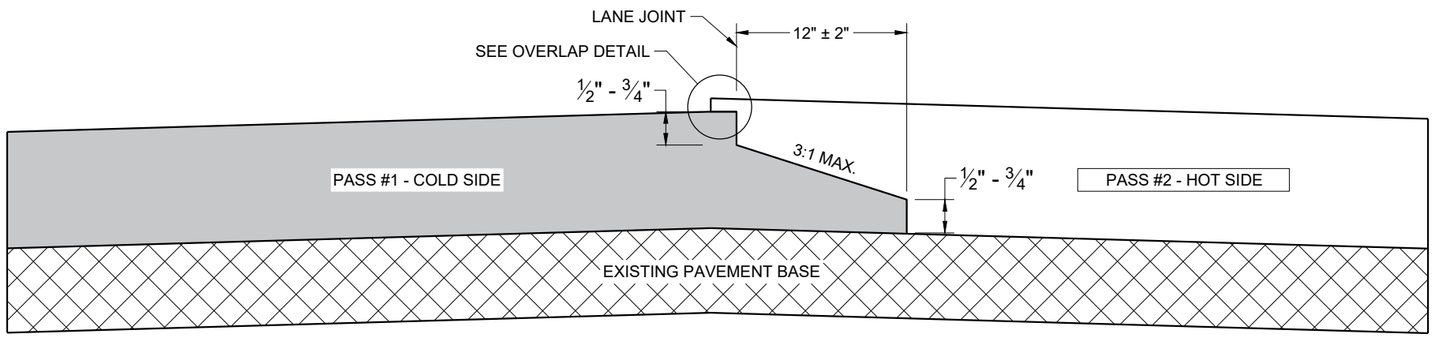
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE

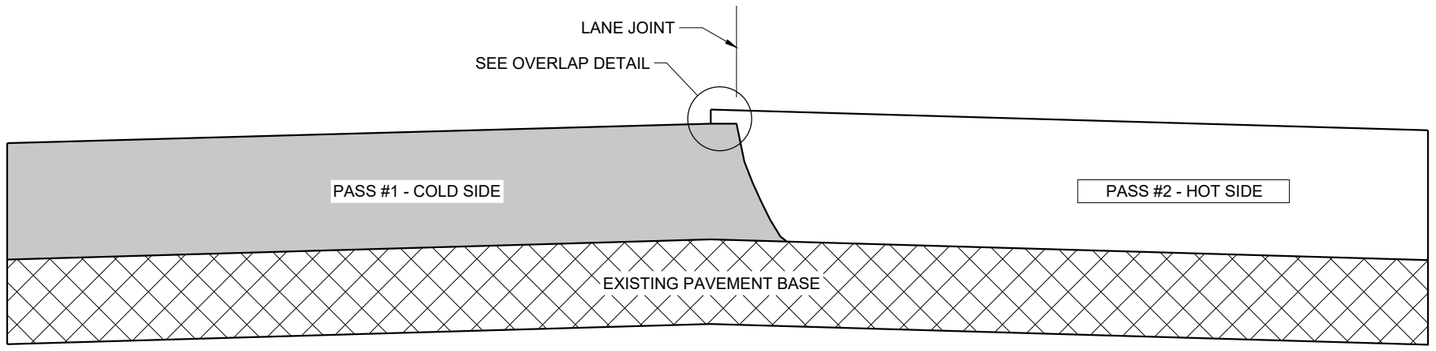
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

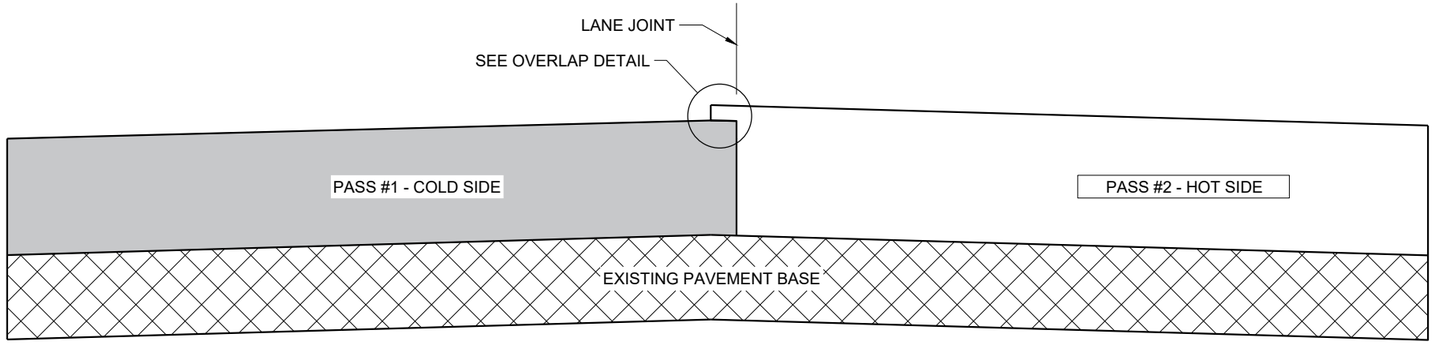
6
SDD 13A11 - 03b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

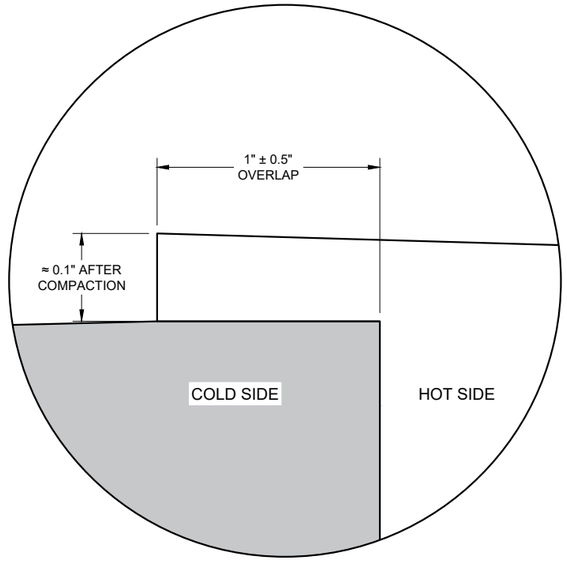
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

6

6

SDD 13C19 - 03

SDD 13C19 - 03

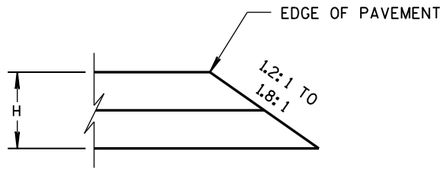
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

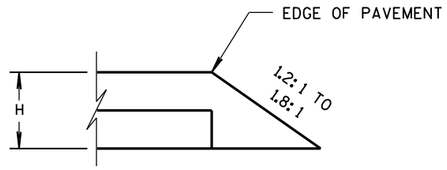
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



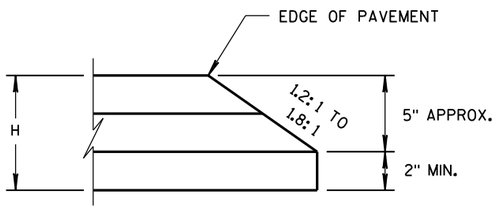
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



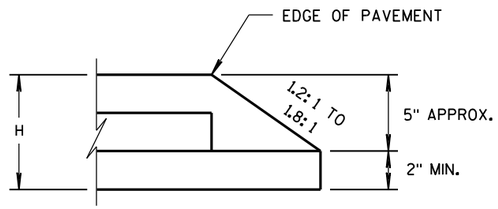
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

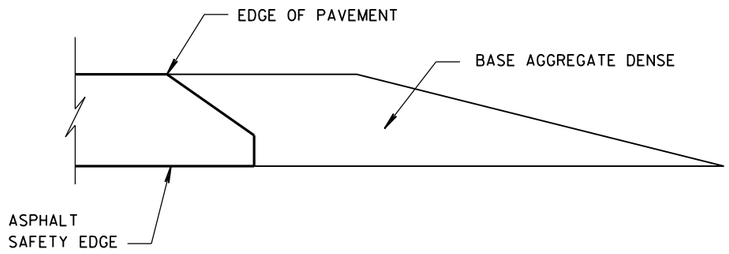
FOR H GREATER THAN 5"



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

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

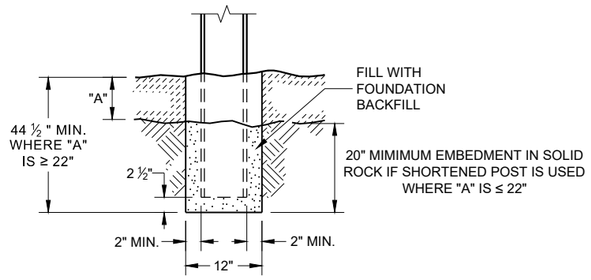
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL 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).

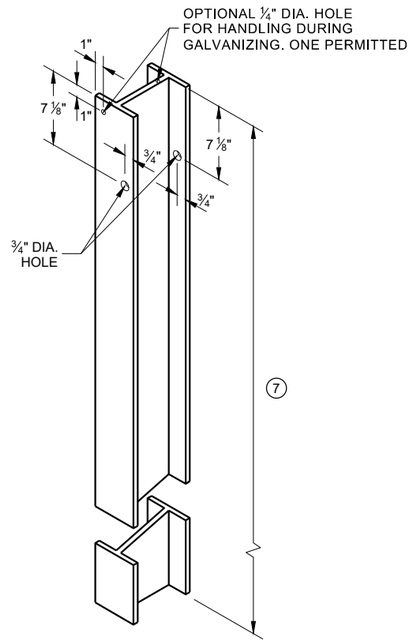
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

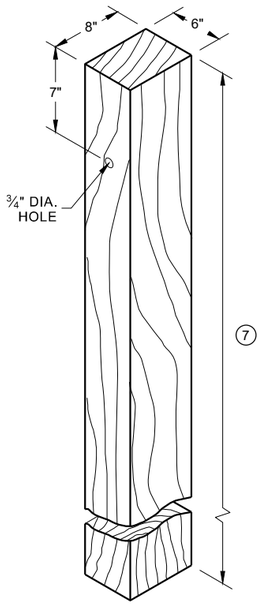
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



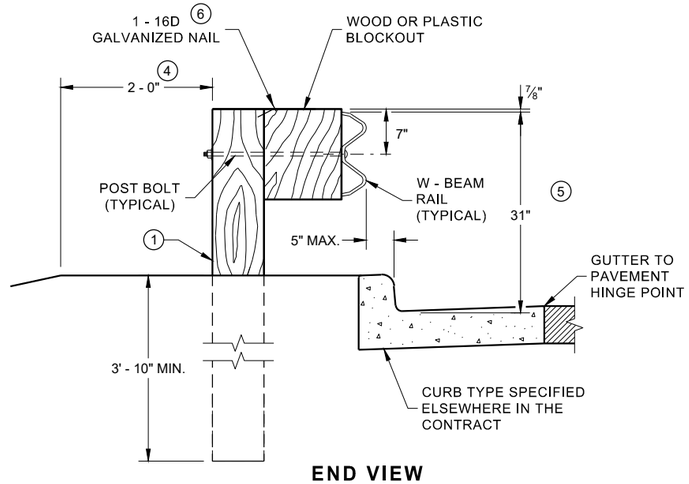
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



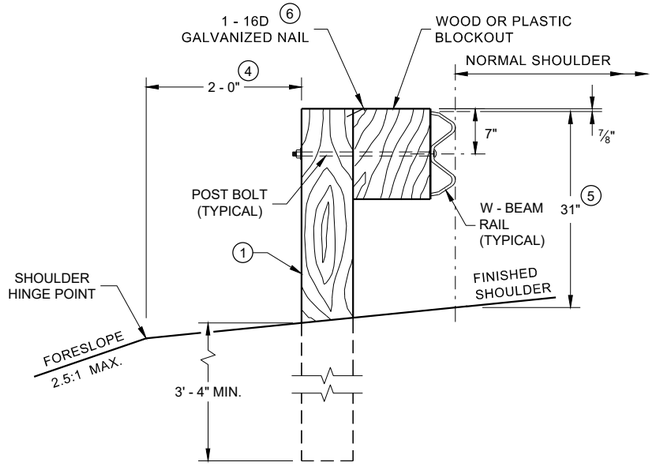
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



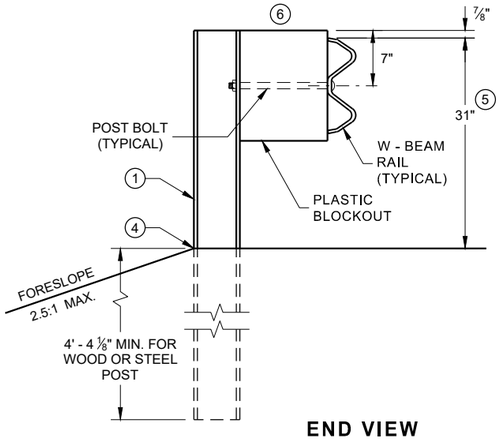
WOOD POST (6" X 8") NOMINAL (1)



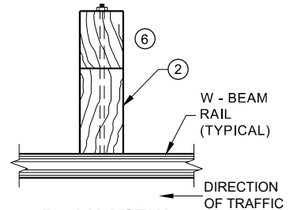
END VIEW
LOCATED ALONG A CURBED ROADWAY



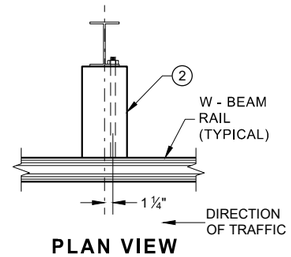
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



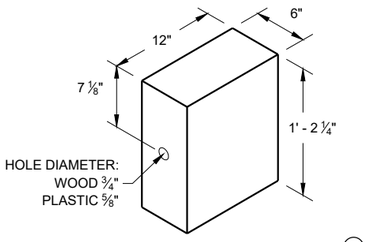
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

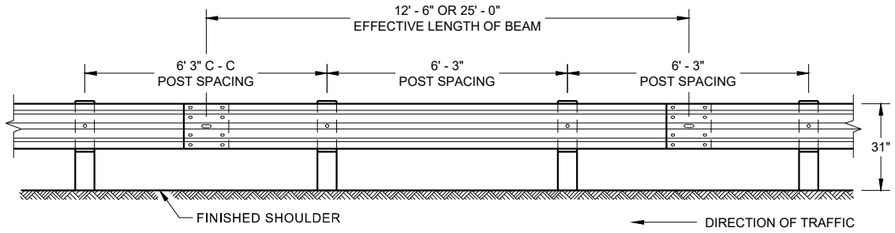
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

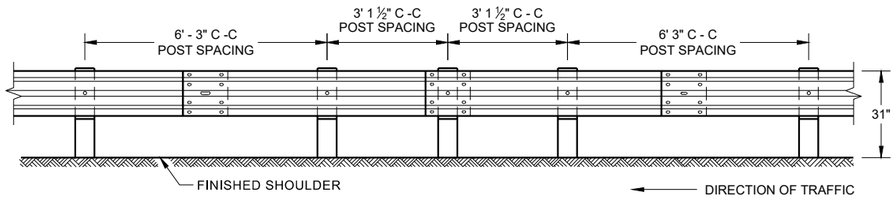
SDD 14B42 - 07a

6

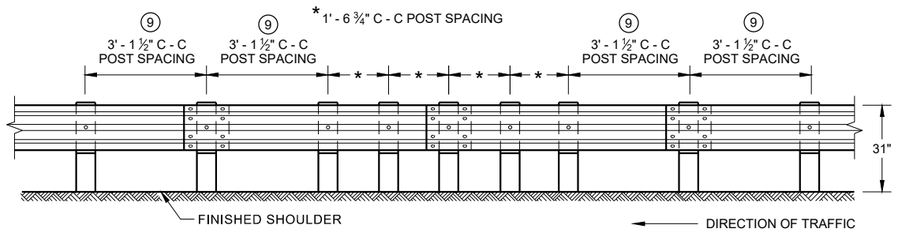
SDD 14B42 - 07a



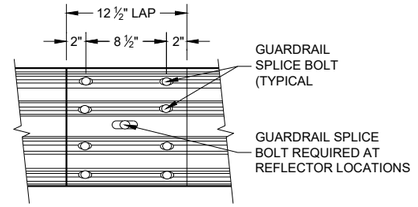
FRONT VIEW
POST SPACING STANDARD INSTALLATION



FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

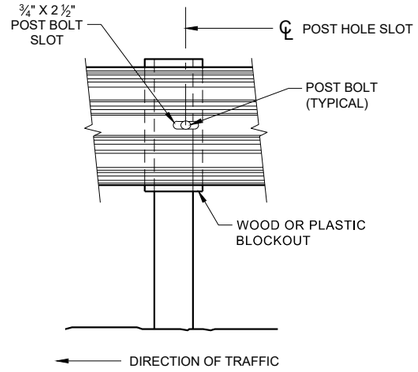
GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

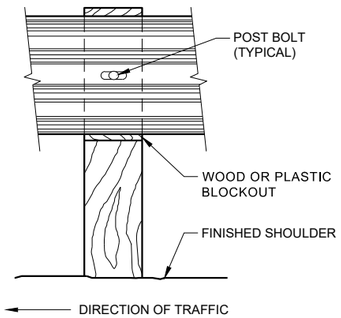
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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.

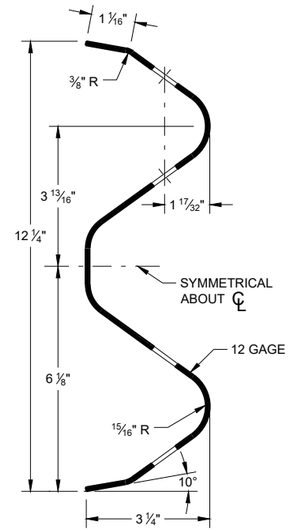
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



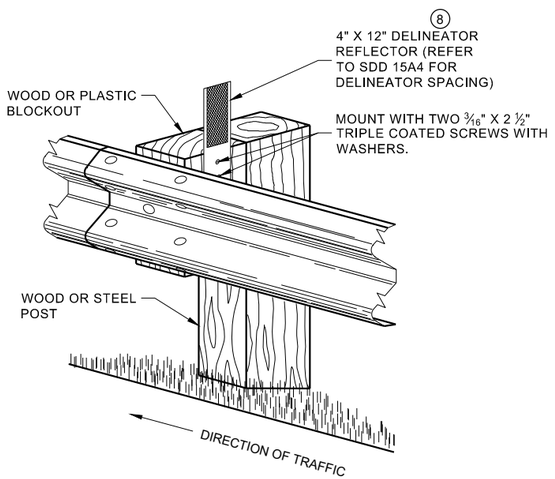
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



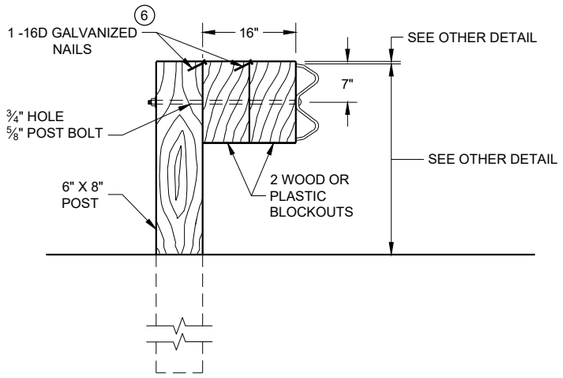
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07b
SDD 14B42 - 07b

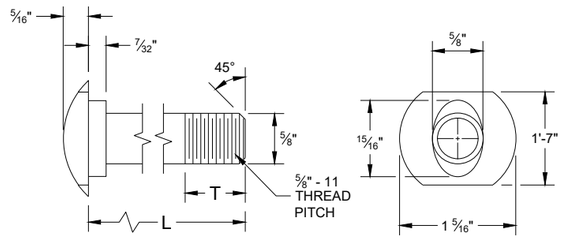


DETAIL FOR 16" BLOCKOUT DEPTH

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.

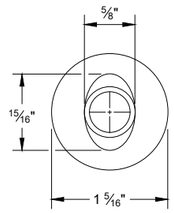
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3⁄16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

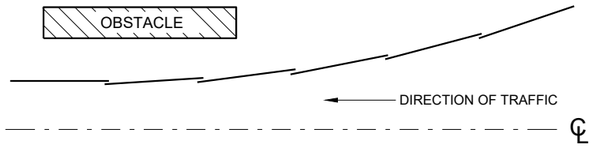


POST BOLT TABLE

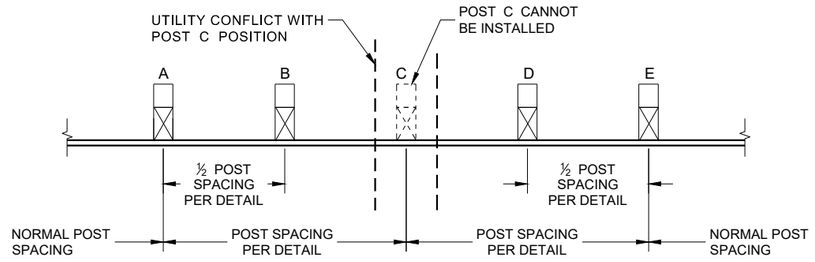
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



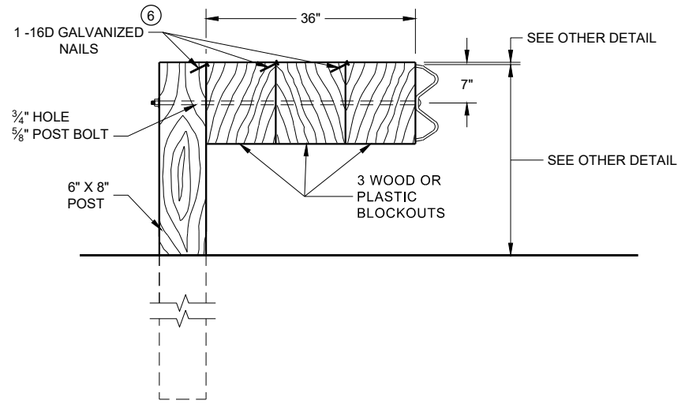
ALTERNATE BOLT HEAD



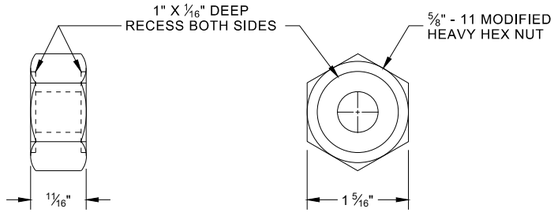
PLAN VIEW
BEAM LAPPING DETAIL



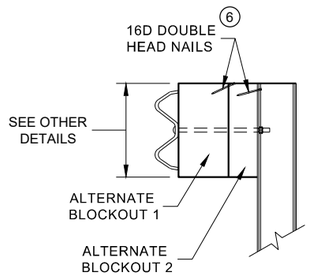
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



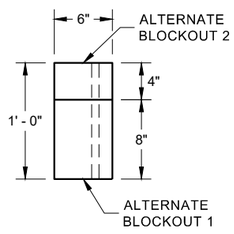
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

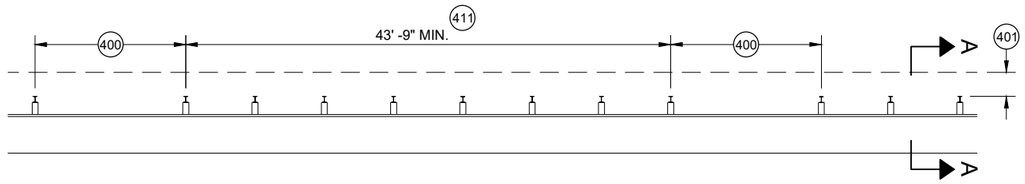
ALTERNATE WOOD BLOCKOUT DETAIL

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.

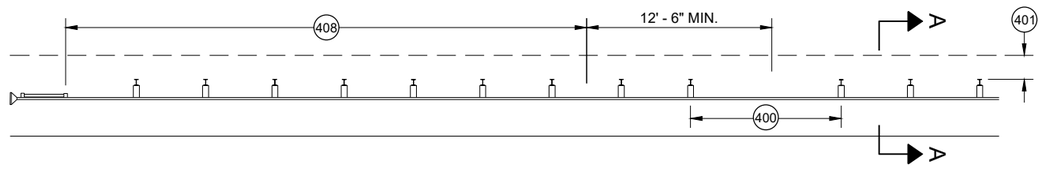
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(6) WHEN USING STEEL POST AD 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.

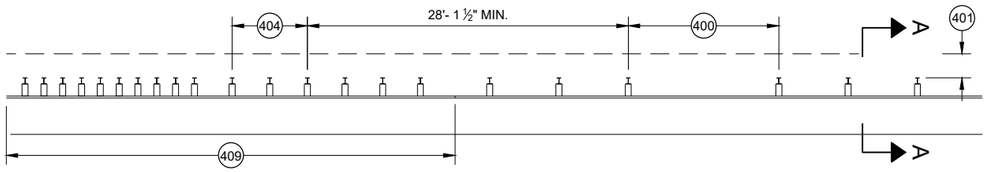
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL



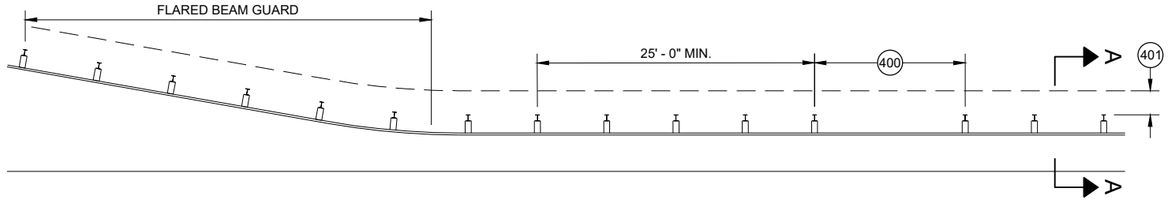
MISSING POST IN MGS GUARDRAIL



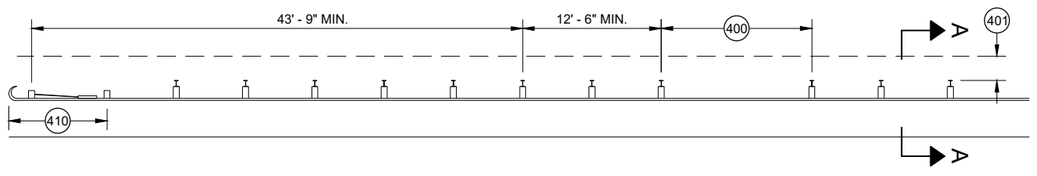
MISSING POST IN MGS GUARDRAIL NEAR EAT



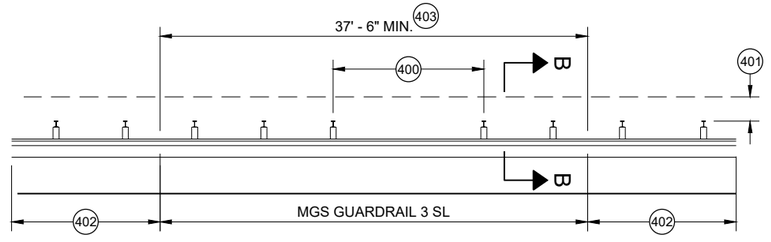
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

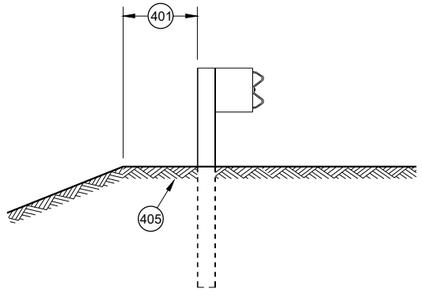


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

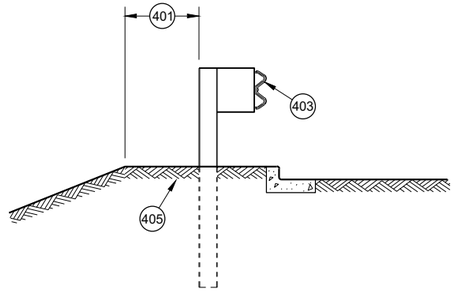


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(400) MAX SPAN 12' - 6"
(401) 2' MIN.
(402) MGS GUARDRAIL 3
(403) NESTING BEAM GUARD
(404) ASYMMETRIC TRANSITION
(405) SOIL WELL DRAINED AND COMPACTED
(406) SEE OTHER DRAWINGS IN THIS SDD
(407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
(408) SEE SDD 14B44
(409) SEE SDD 14B45
(410) SEE SDD 14B47
(411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

6

SDD 14B42 - 07d

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 MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

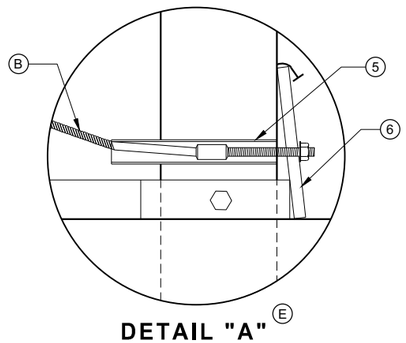
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

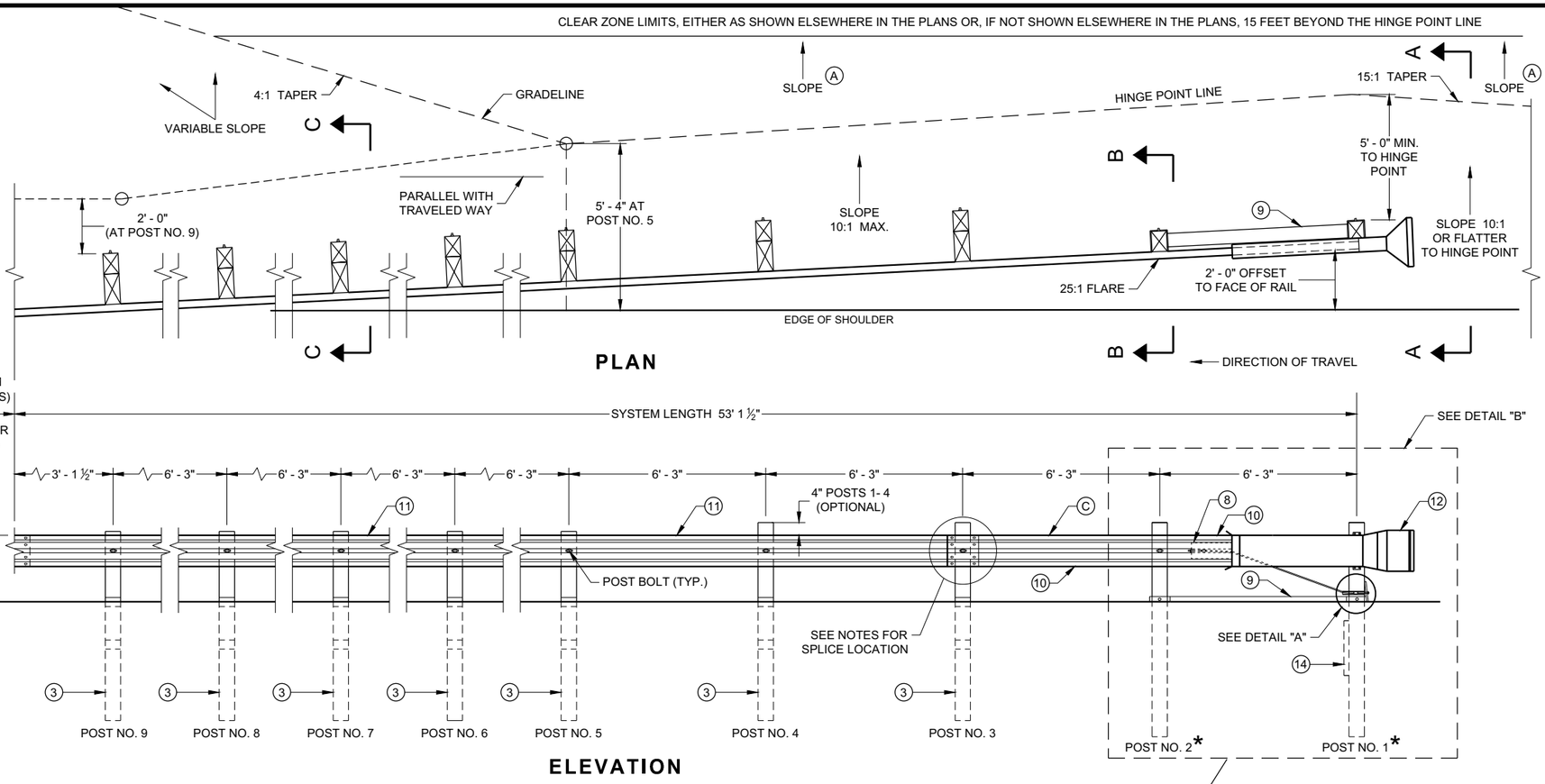
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

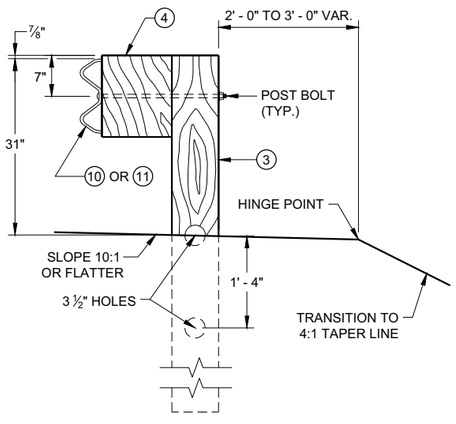
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

THE CENTER OF THE UPPER 3 ½" 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. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.

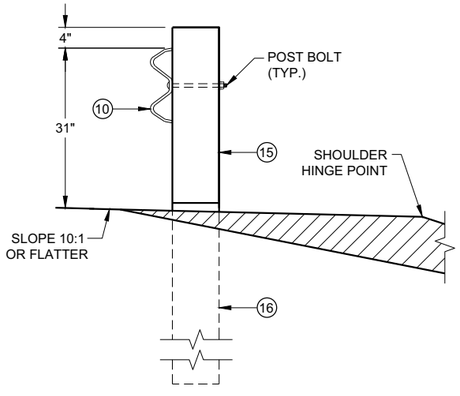


DETAIL "A" (E)

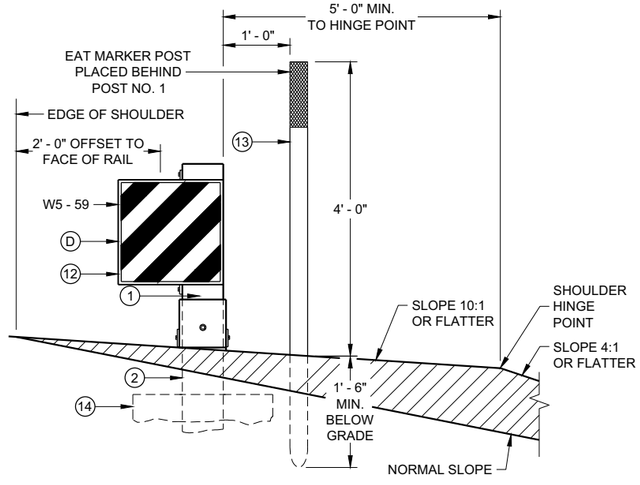




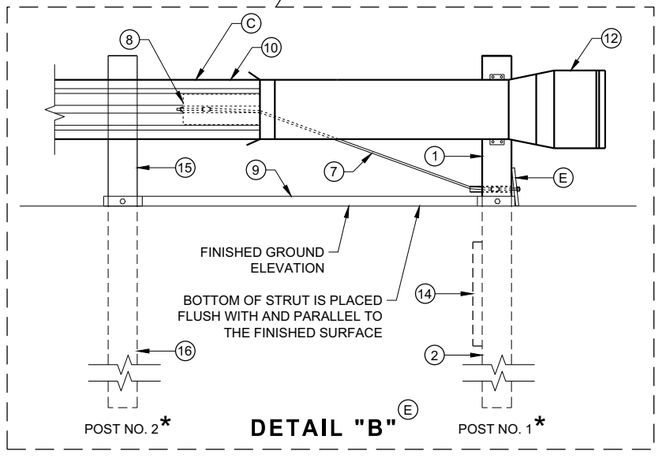
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

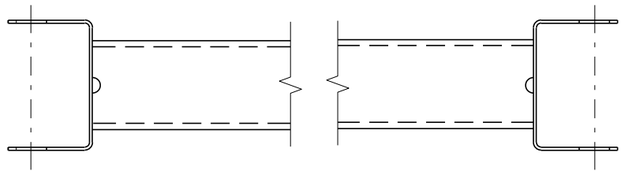
SDD 14B44 - 04a

6

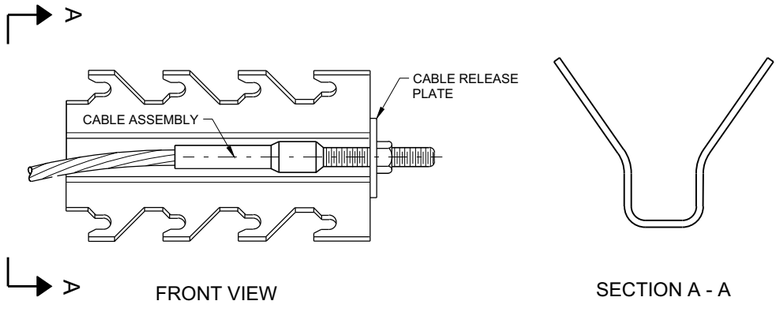
6

BILL OF MATERIALS

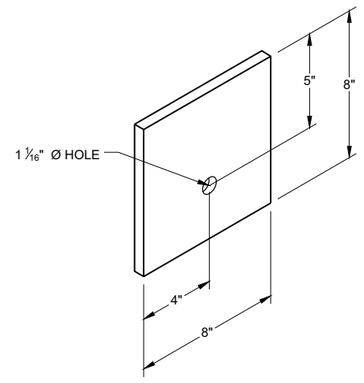
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
1	UPPER POST NO. 1 6" X 6" TUBE
2	LOWER POST NO. 1
3	WOOD CRT
4	WOOD BLOCKOUT
5	PIPE SLEEVE
6	BEARING PLATE
7	BCT CABLE ASSEMBLY
8	ANCHOR CABLE BOX
9	GROUND STRUT
10	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
11	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
12	IMPACT HEAD
13	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
14	SOIL PLATE
15	UPPER POST NO. 2
16	LOWER POST NO. 2



GENERIC GROUND STRUT (9) (E)



GENERIC ANCHOR CABLE BOX (9) (E)



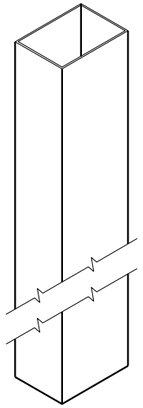
BEARING PLATE (6) (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

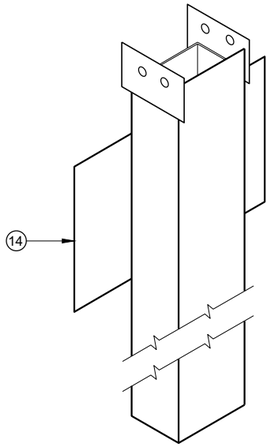
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

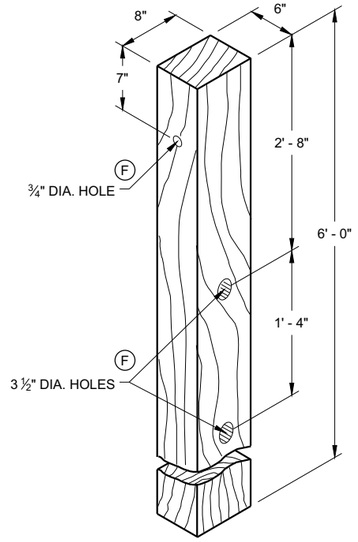
SDD 14B44 - 04b



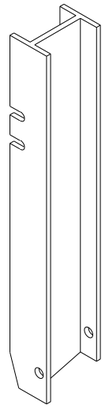
UPPER POST NO. 1 (1) (E)



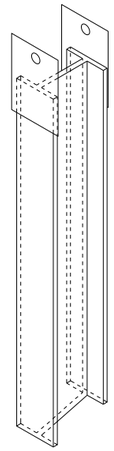
LOWER POST NO. 1 (2) (E)



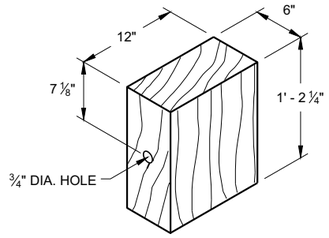
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



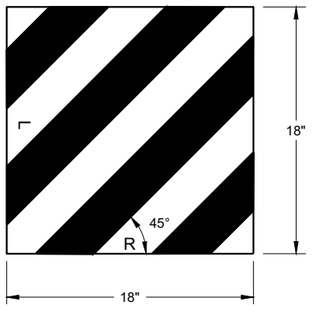
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

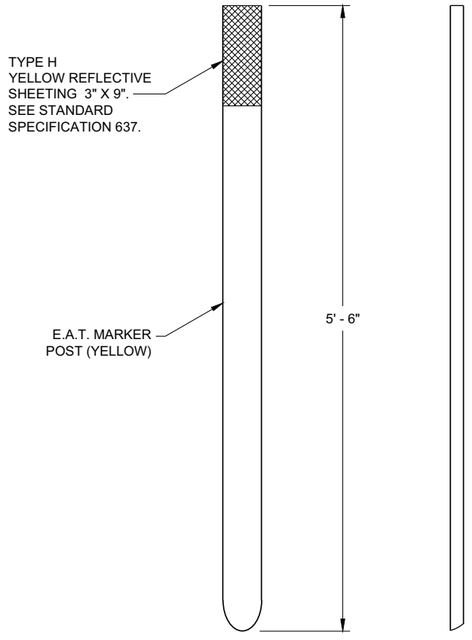


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



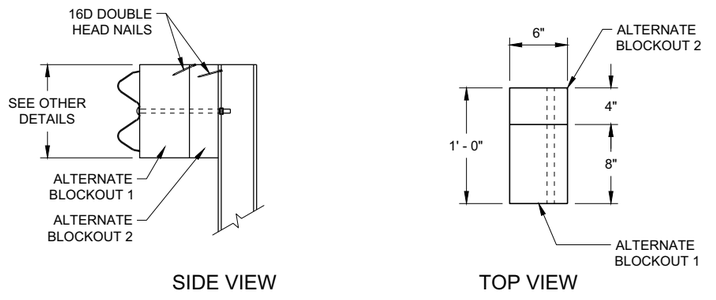
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

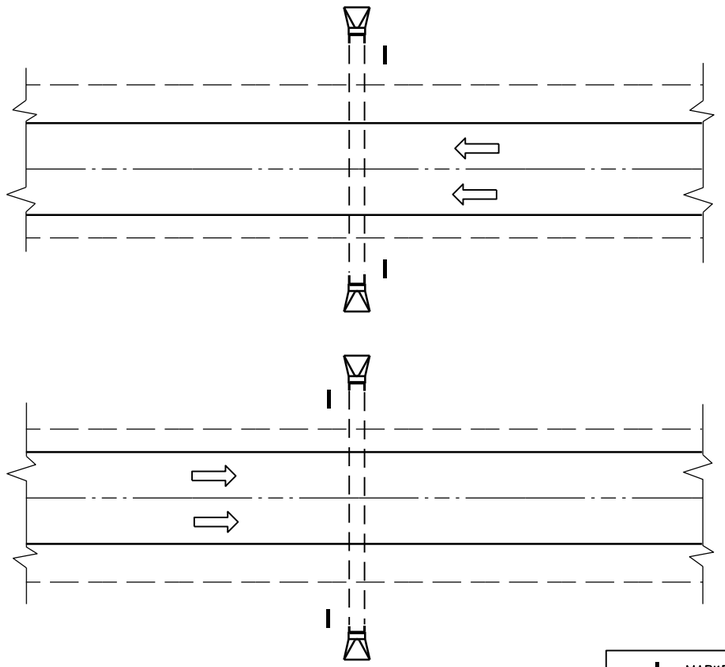
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

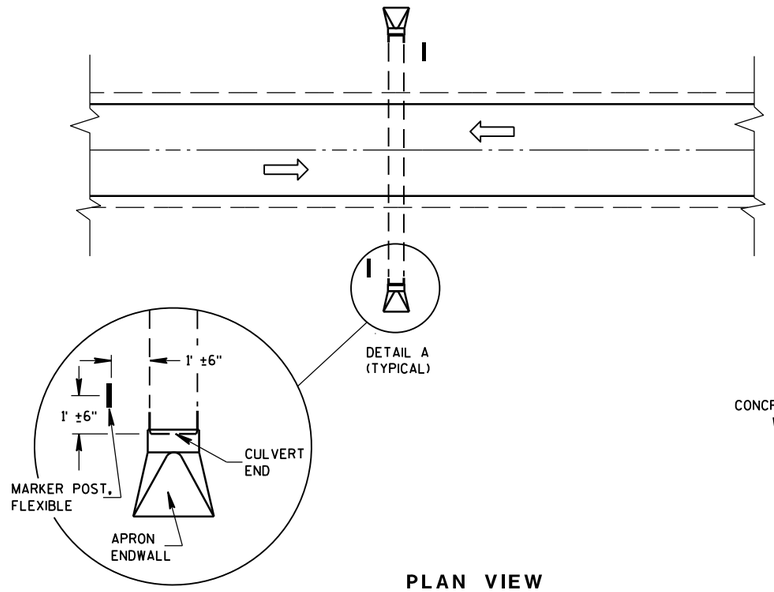
6

SDD 14B44 - 04c



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

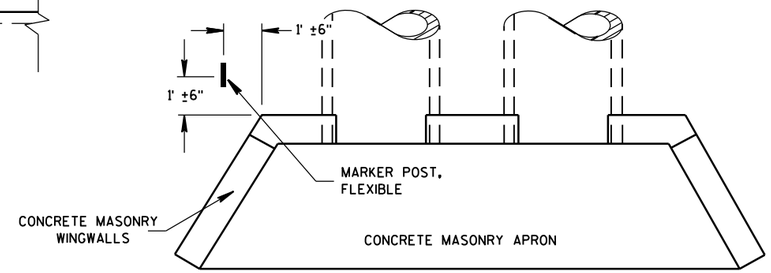
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

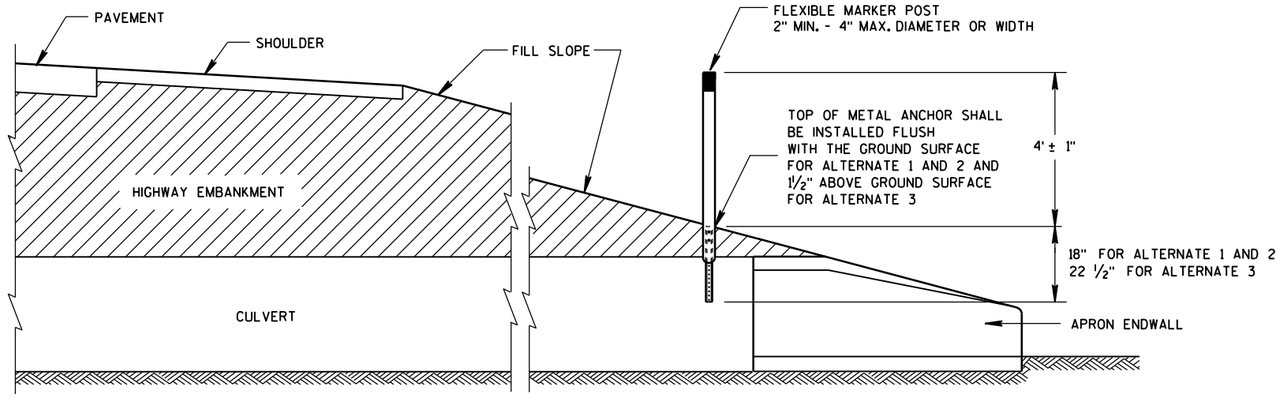
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

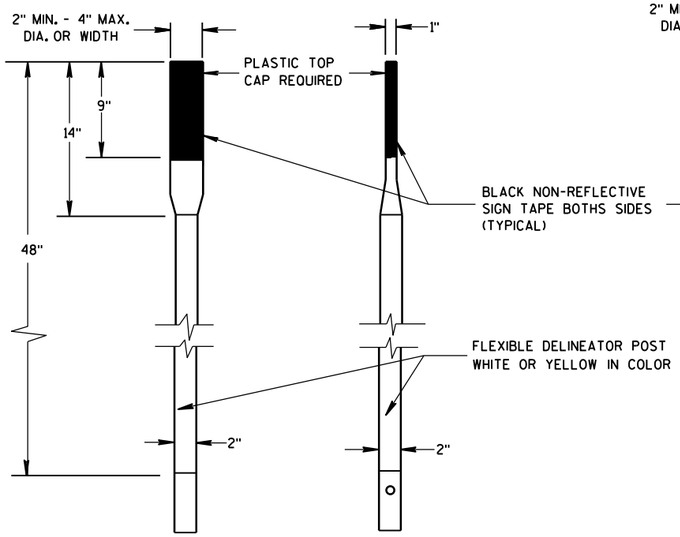
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

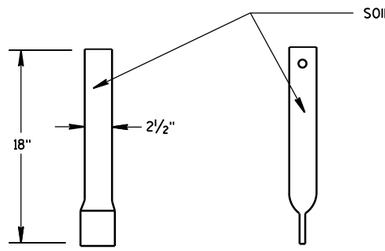
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S.D.D. 15 A 3-2a

6

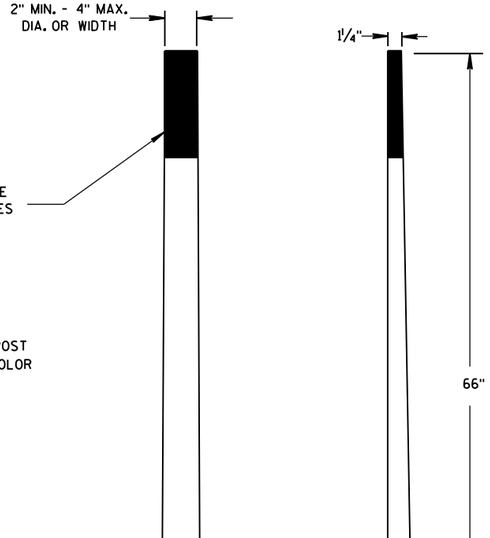
S.D.D. 15 A 3-2a





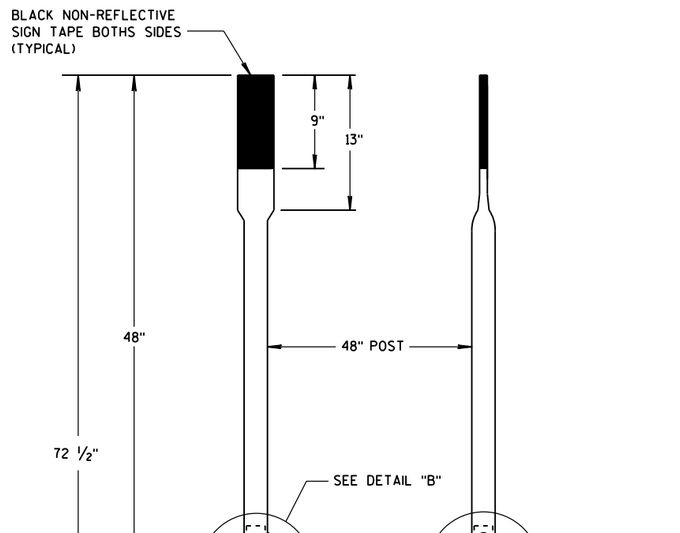
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

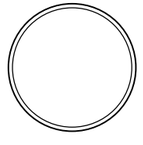
ALTERNATE 2



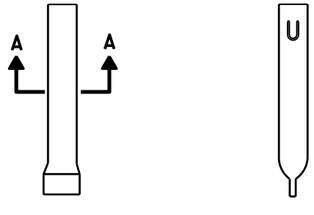
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

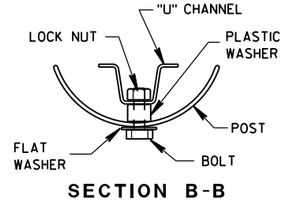


SECTION A-A

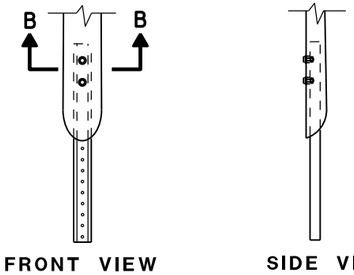


FRONT VIEW SIDE VIEW

ALTERNATE 1

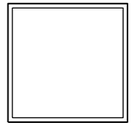


SECTION B-B

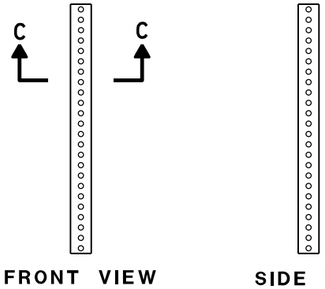


FRONT VIEW SIDE VIEW

ALTERNATE 2



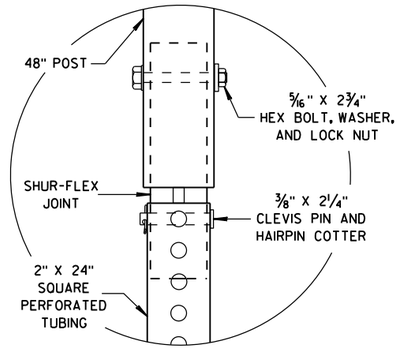
SECTION C-C



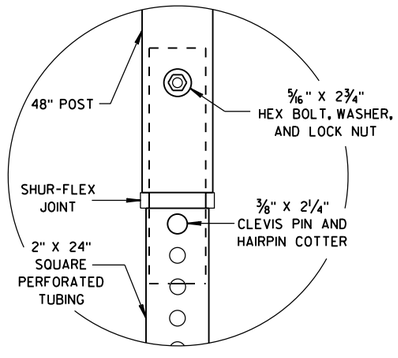
FRONT VIEW SIDE VIEW

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

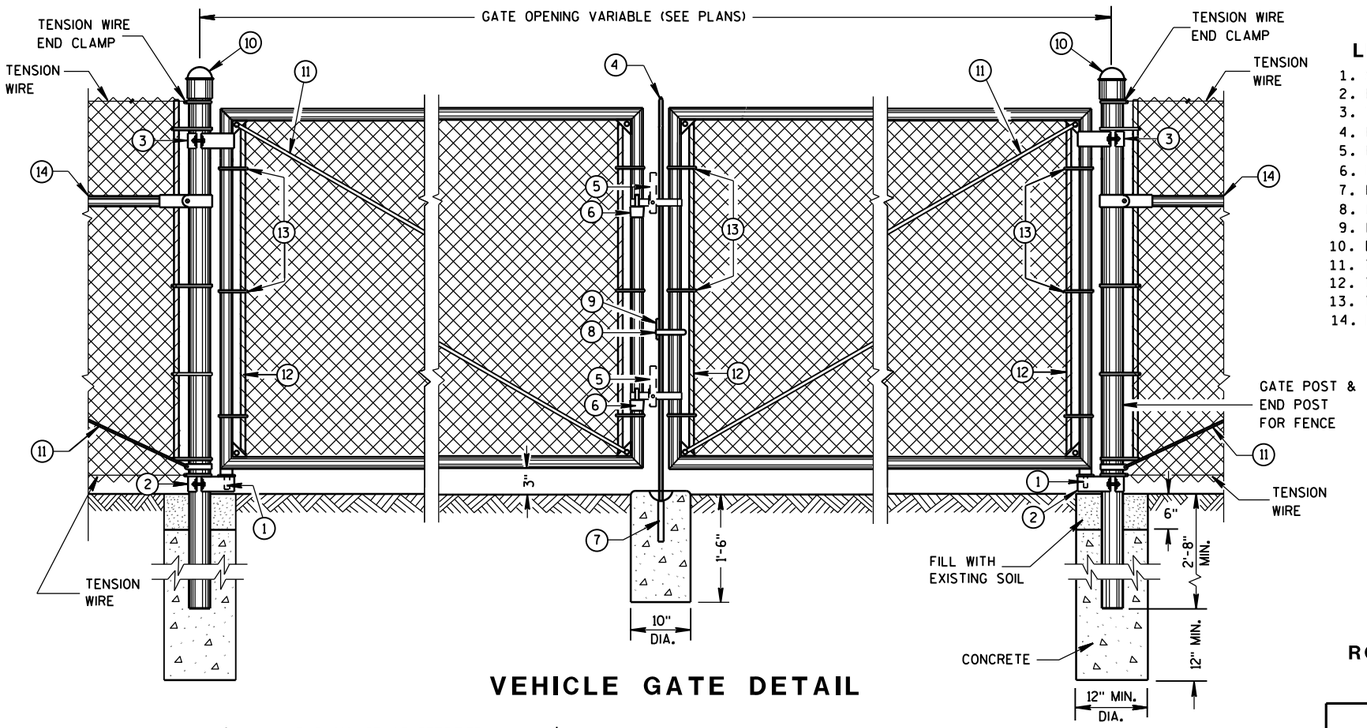
FHWA

6

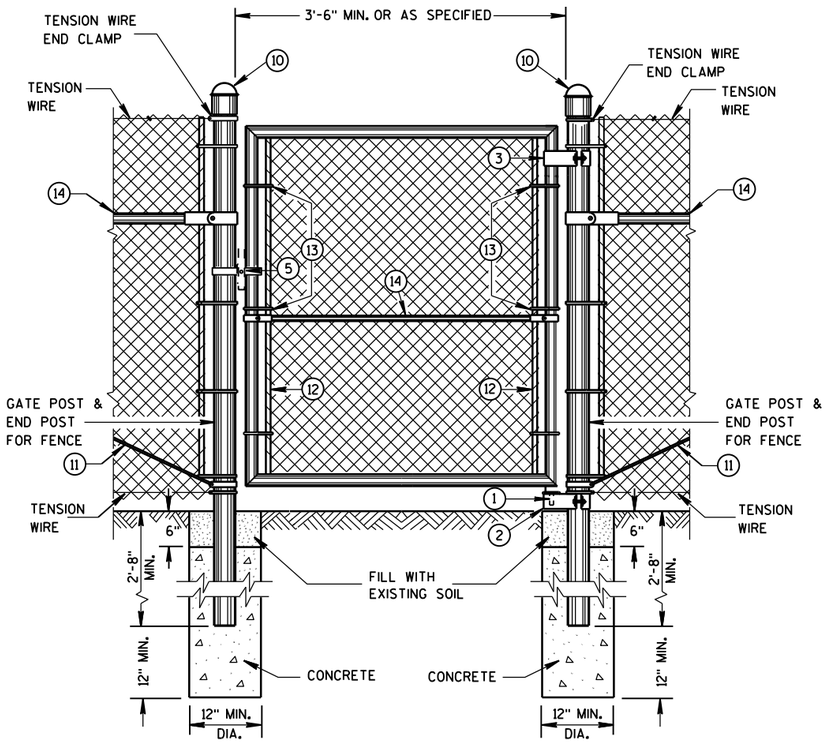
S.D.D. 15 A 3-2b

6

S.D.D. 15 A 3-2b



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.

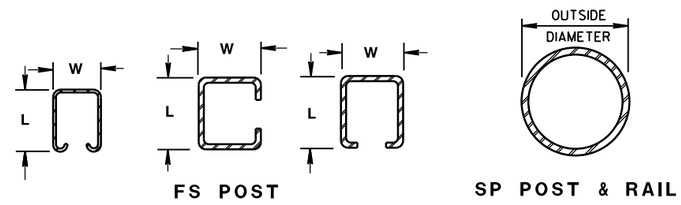
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

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.

USE TYPE 2, CLASS 3, MARCELLED/CRIMPED, TENSION WIRE PER ASTM A 817.



CROSS SECTIONS OF POSTS AND RAILS

ROLLED-FORMED STEEL FENCE POST (2.0 OZ./SQ. FT. COATING)

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

ROUND STEEL FENCE POST (1.8 OZ./SQ. FT. COATING)

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

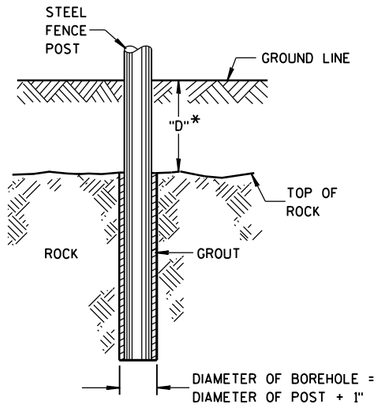
** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

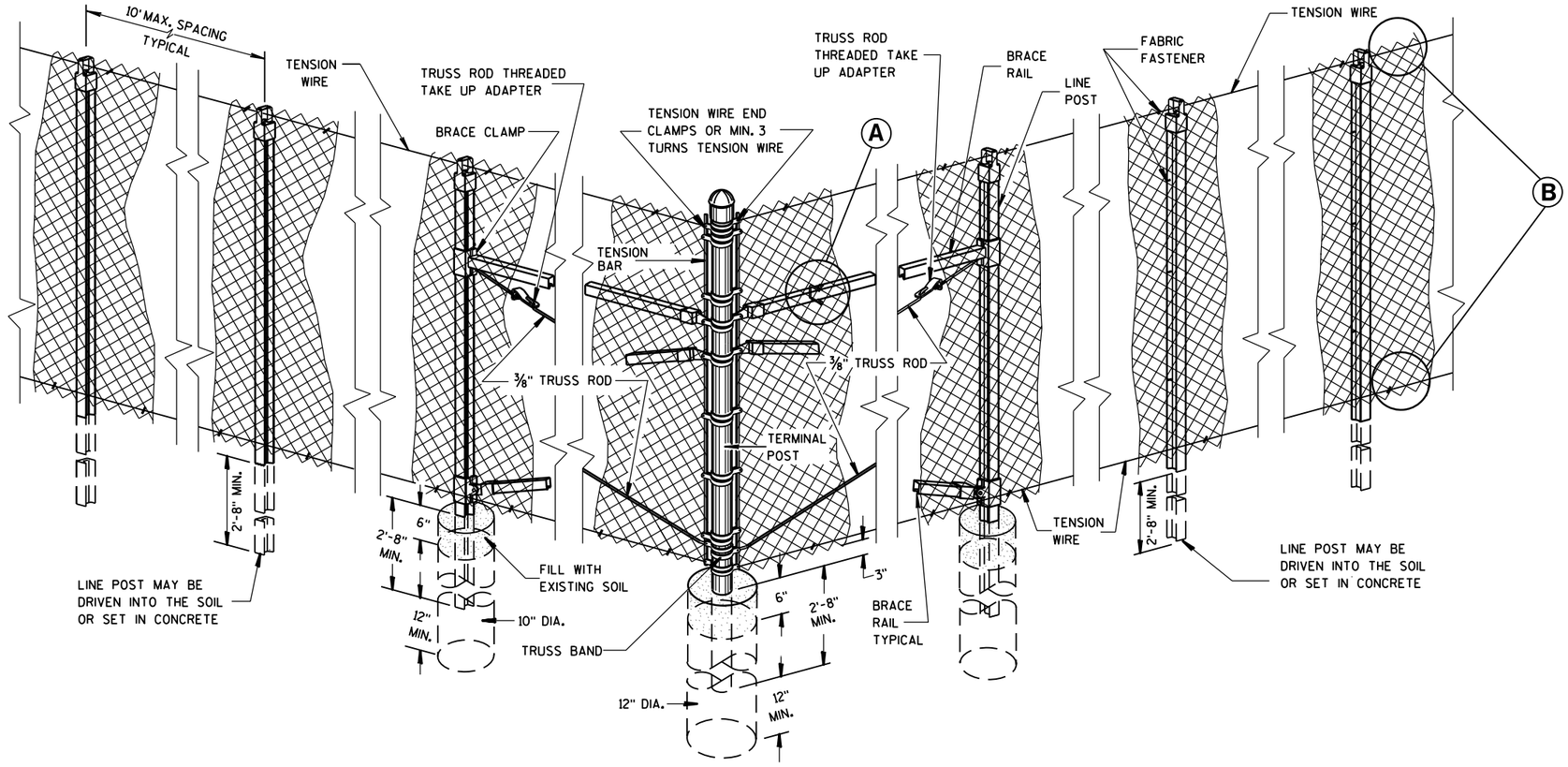
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S.D.D. 15 B 3-15a

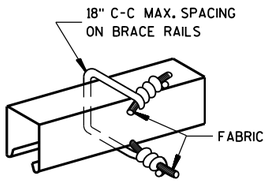


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



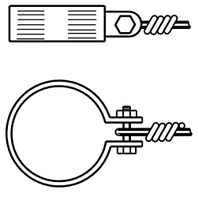
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



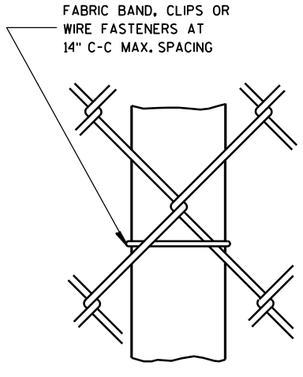
BRACE RAIL

FABRIC FASTENER

Ⓐ



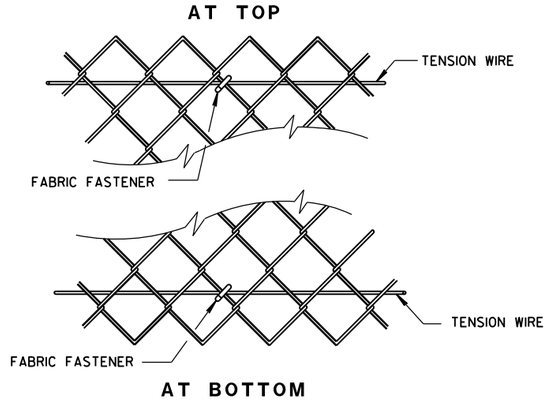
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

Ⓑ

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

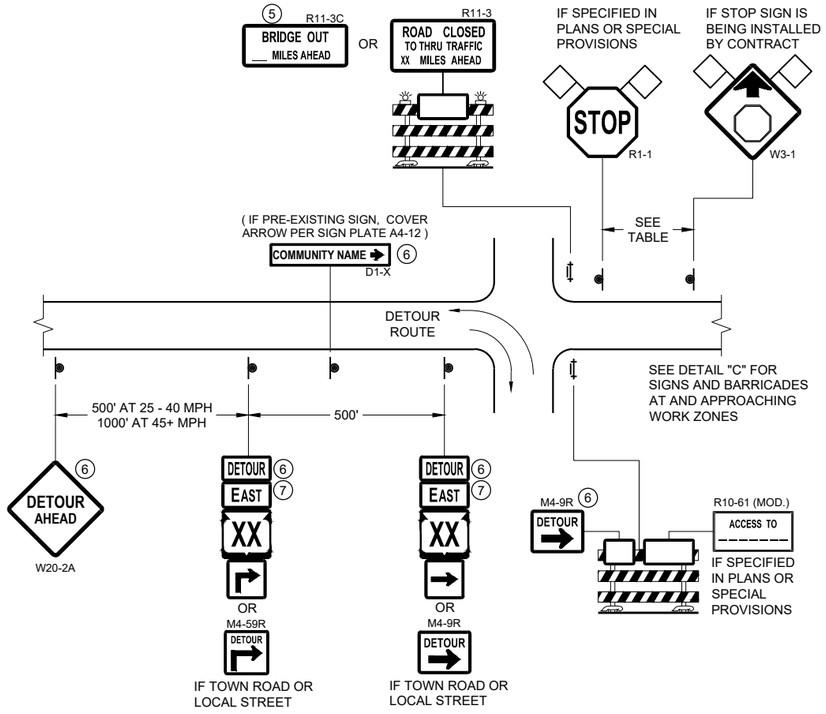
APPROVED
FEB. 2015 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 15 B 3-15b

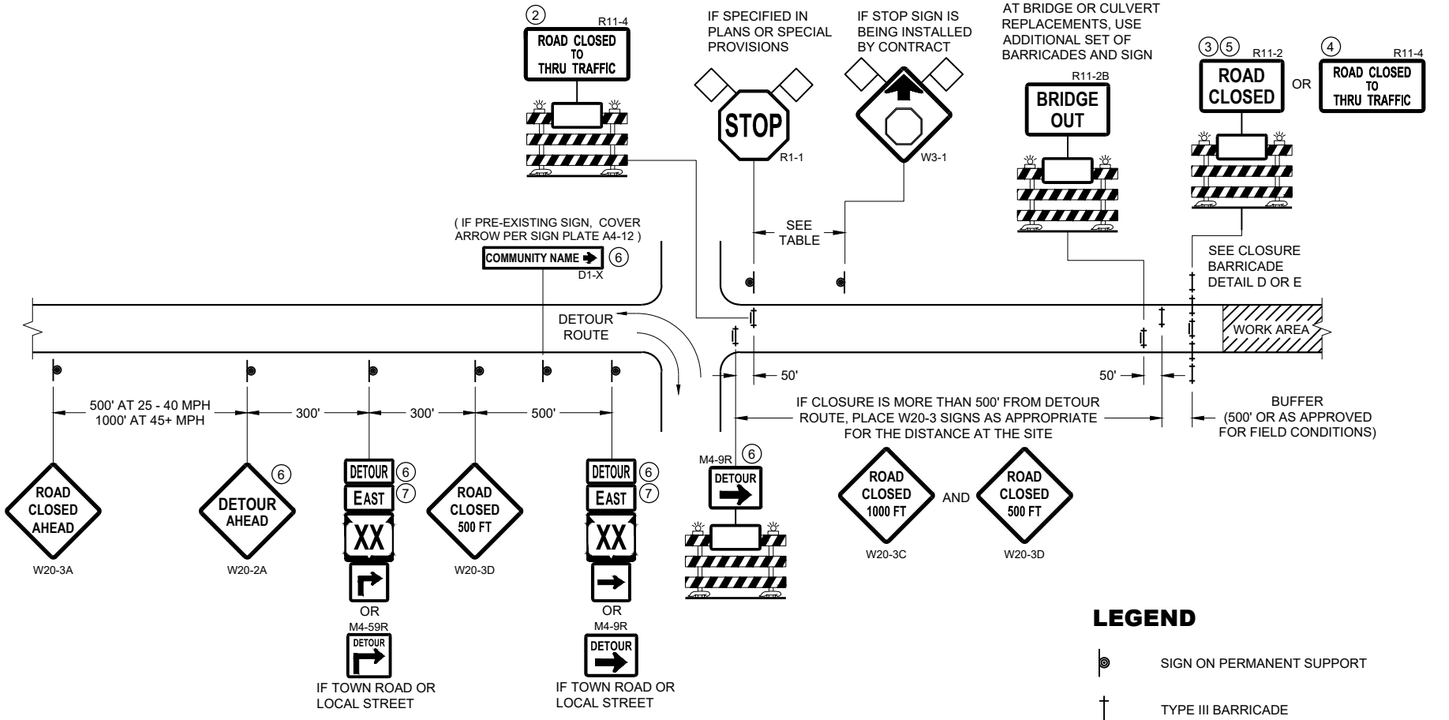
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S.D.D. 15 B 3-15b



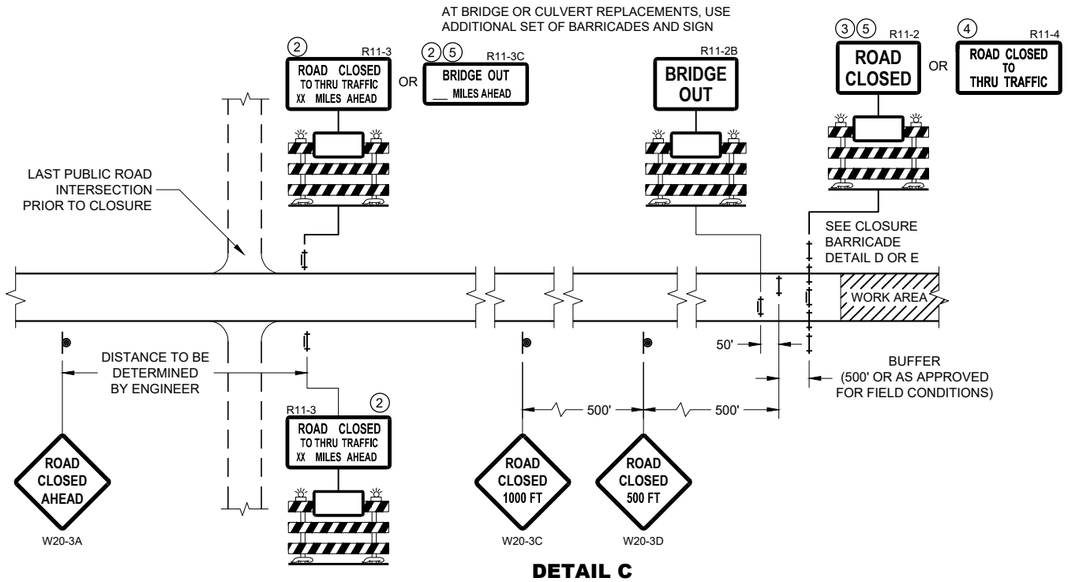
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO 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
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

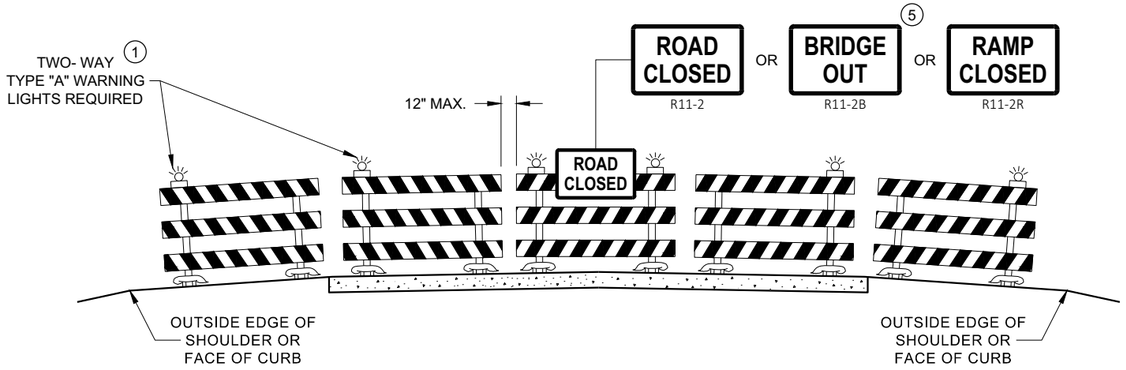
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

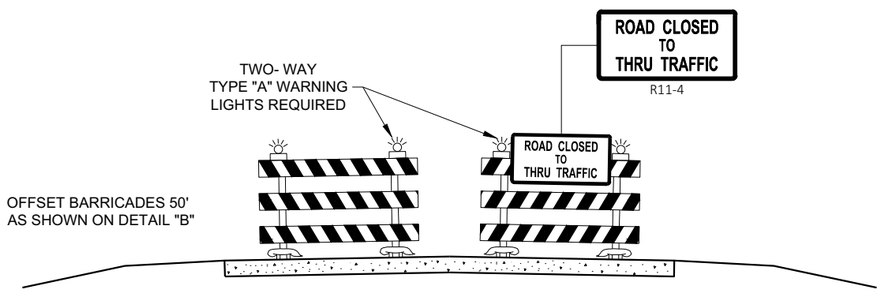
6

SDD 15C02 - 08a

SDD 15C02 - 08a



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 THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL 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 SHALL, 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" (36" X 18" 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)
- MO5 - 1 AND MO6 - 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 AN 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 ROAD 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 VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15C02 - 08b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1 OR M06 - 1

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.

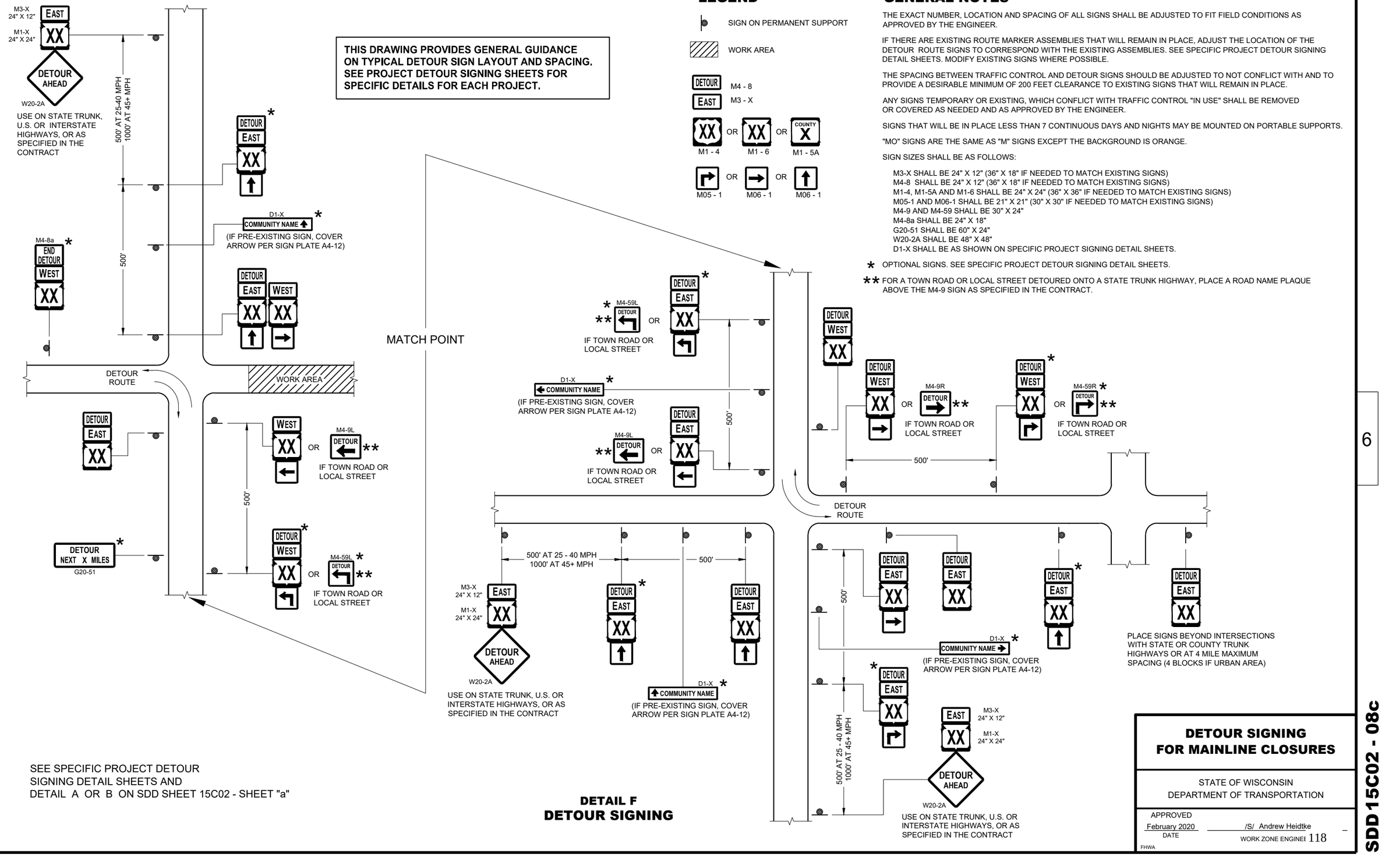
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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" (36" X 18" 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 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A 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.



SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

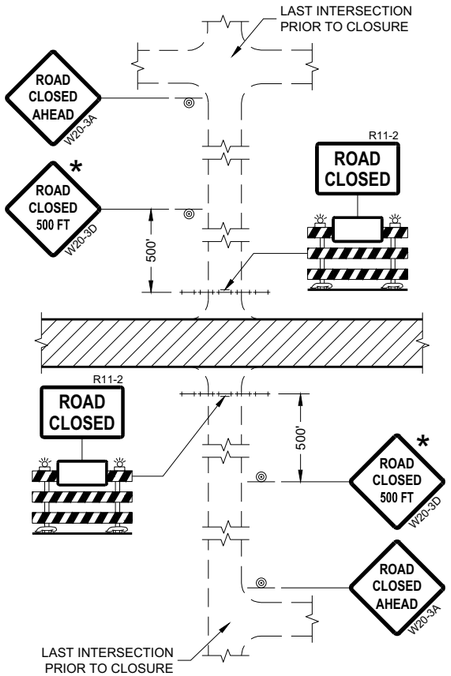
APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

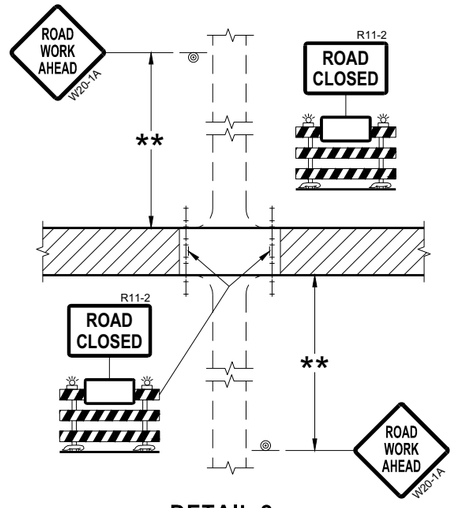
FHWA

SDD 15C02 - 08c

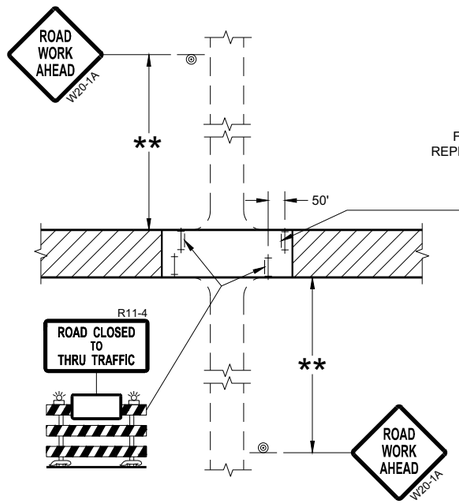
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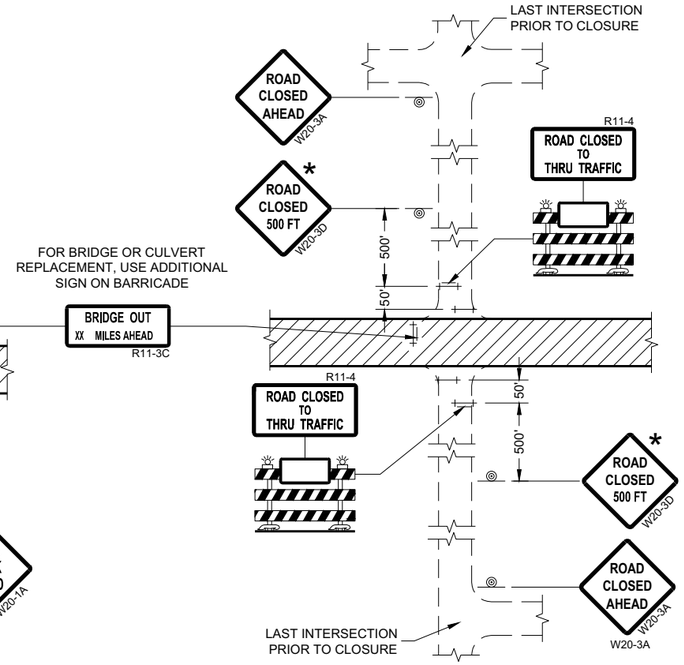
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

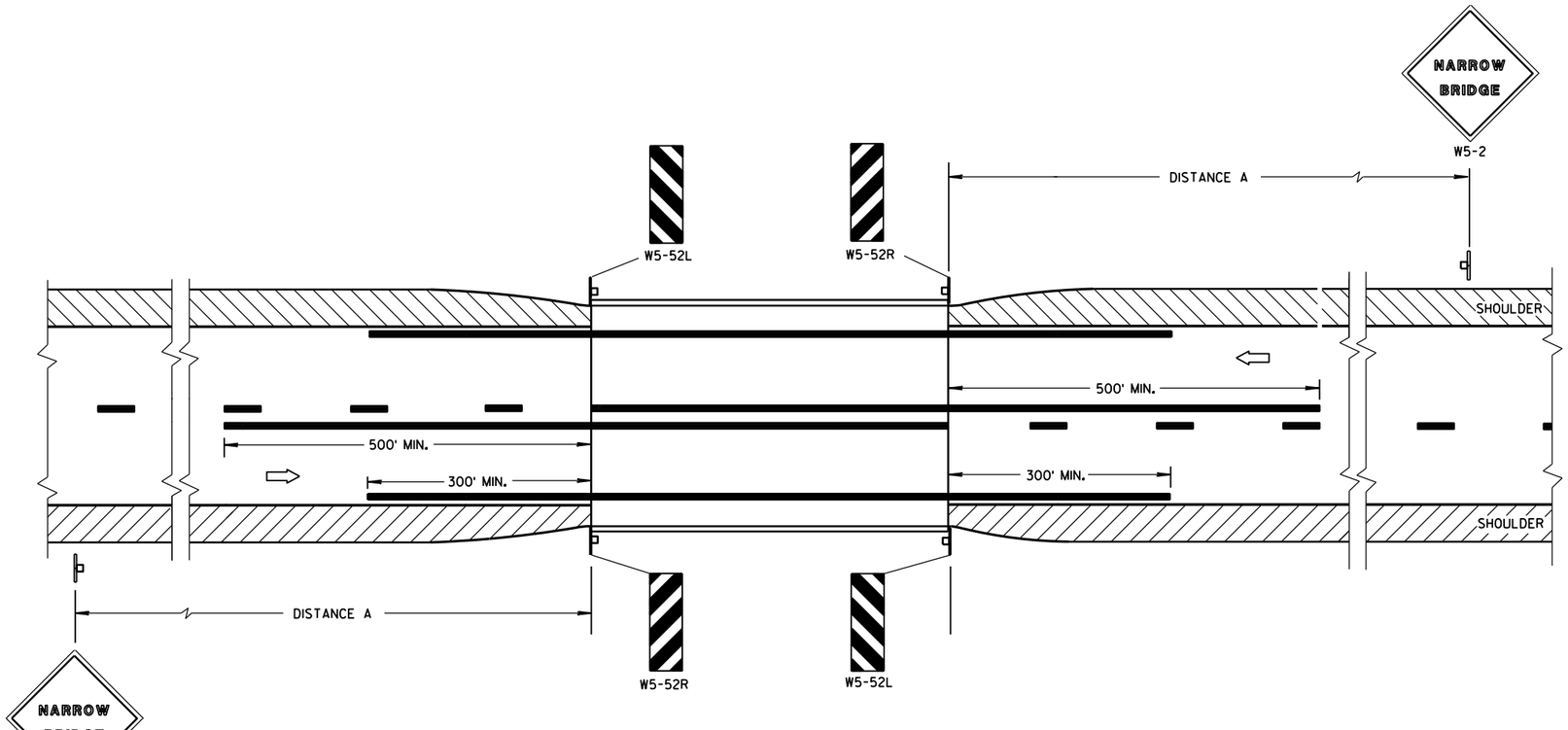
APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C03 - 05



SITUATION 1

WARRANTING CRITERIA:
BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET.

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	750'

GENERAL NOTES

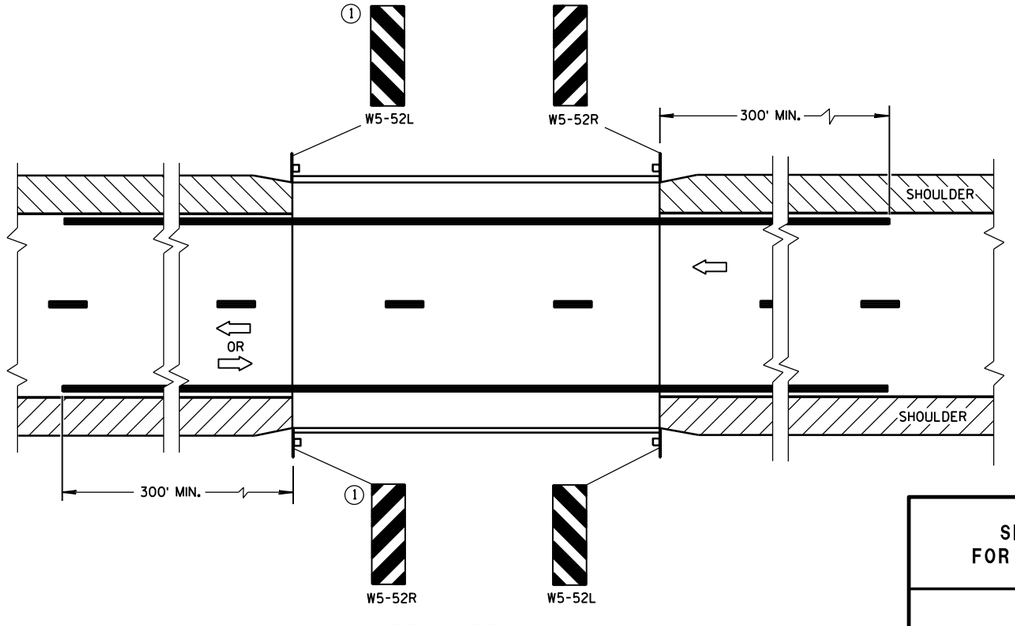
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

LOCATE W5-52 SIGN POST(S) BEHIND GUARDRAIL WHEN PRESENT.

PLACE THE EDGE OF THE W5-52 SIGN IN LINE WITH FACE OF CURB OR PARAPET.

(1) OMIT ON ONE-WAY TRAVELLED WAYS.

⇨ DIRECTION OF TRAFFIC



SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE SHOULDER WIDTH IS LESS THAN 6 FEET.

SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

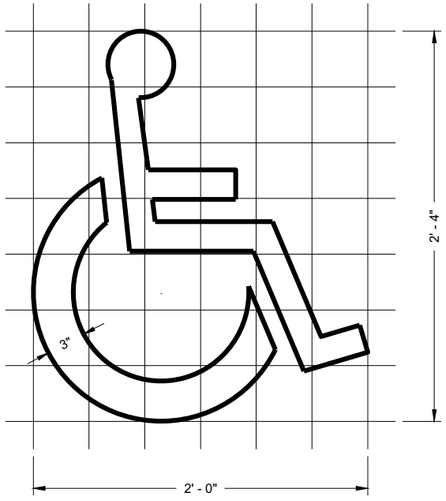
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR ...IEER
FHWA

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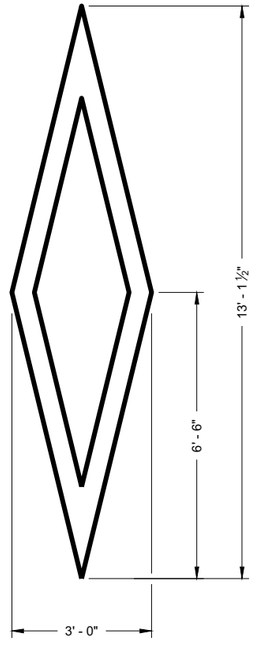
S.D.D. 15 C 6-9

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.



HANDICAP SYMBOL



PREFERENTIAL LANE SYMBOL

6

6

SDD 15C07 - 15a

SDD 15C07 - 15a

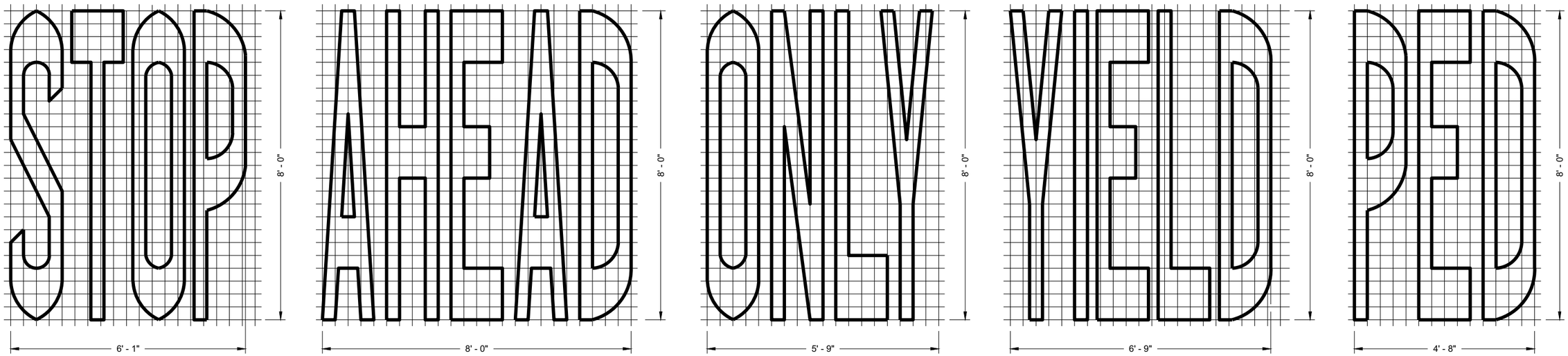
PAVEMENT MARKING SYMBOLS

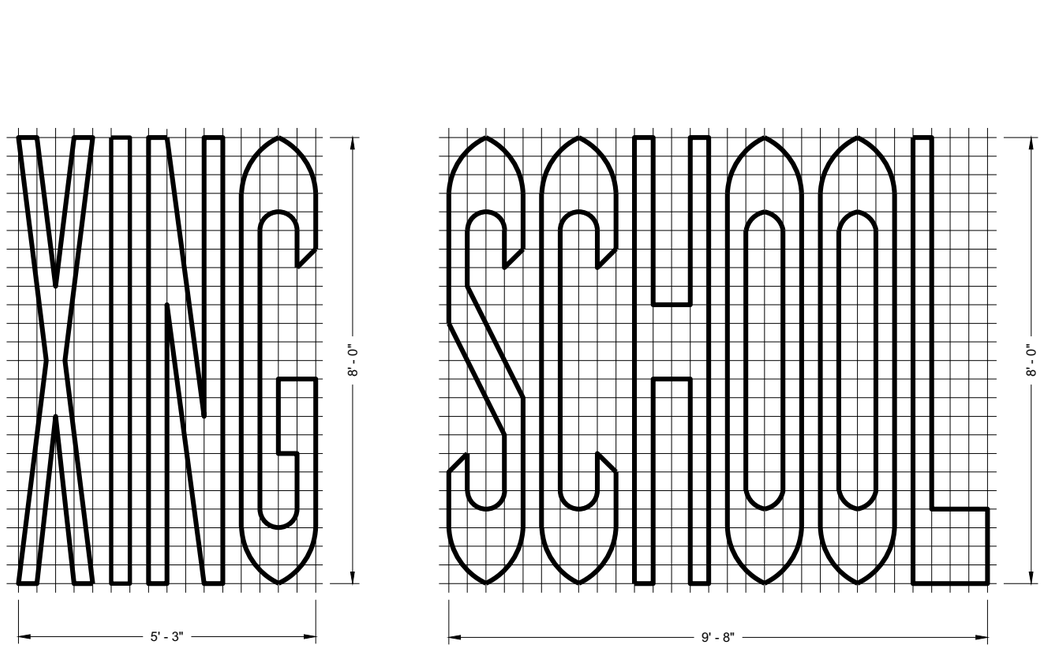
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

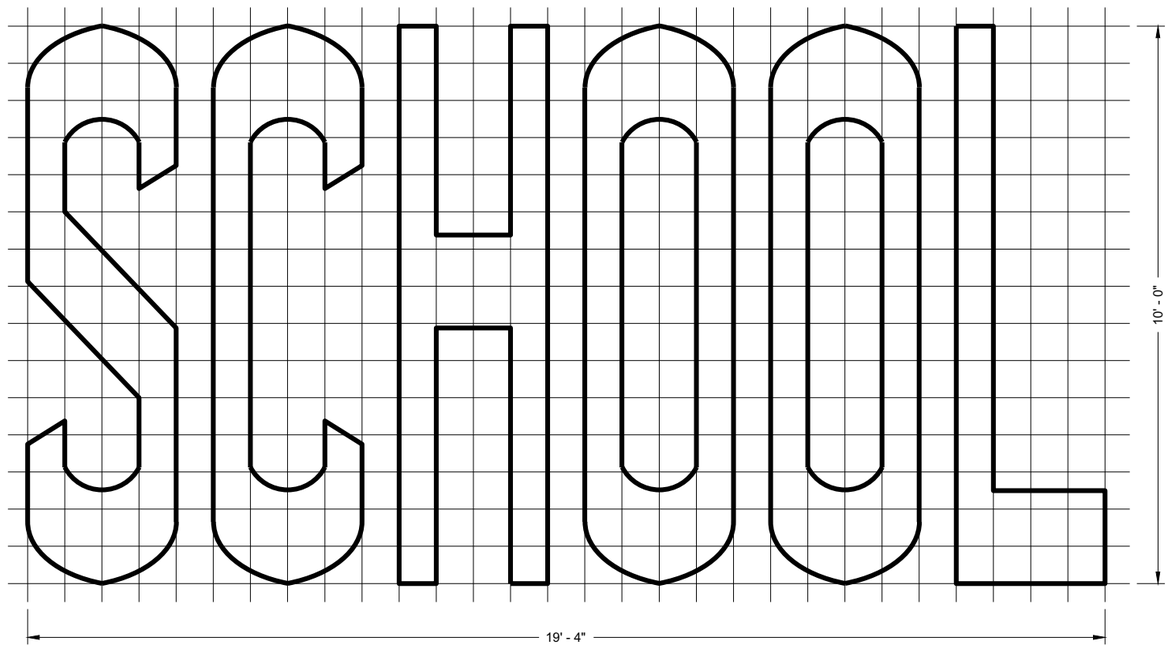
/S/ Matthew Rauch
STATE SIGNING AND MAR ENGINEER

FHWA





SINGLE LANE



TWO - LANE

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.

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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November 2019
DATE

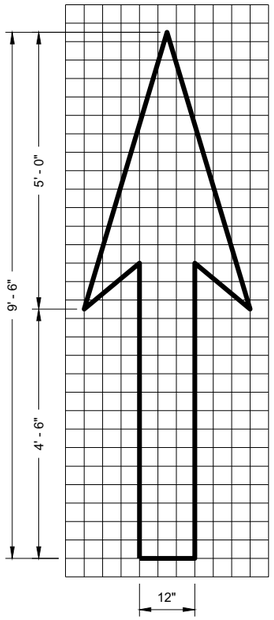
/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

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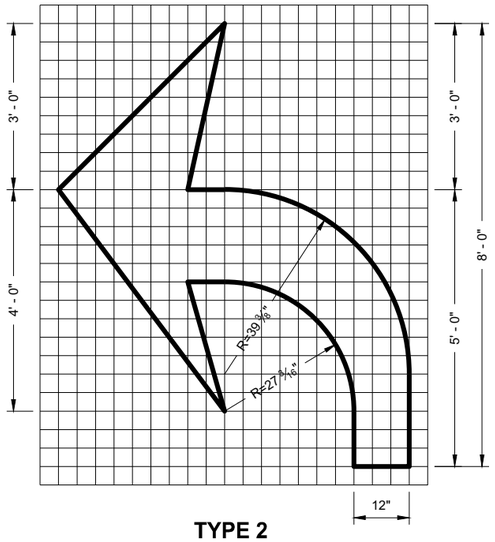
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SDD 15C07 - 15b

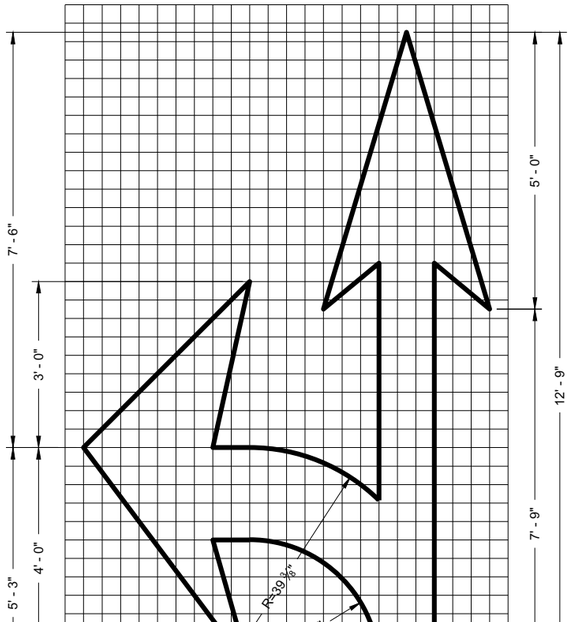
SDD 15C07 - 15b



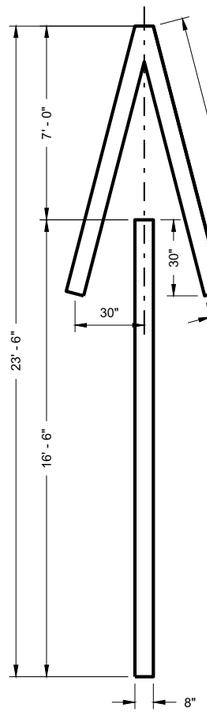
TYPE 1



TYPE 2



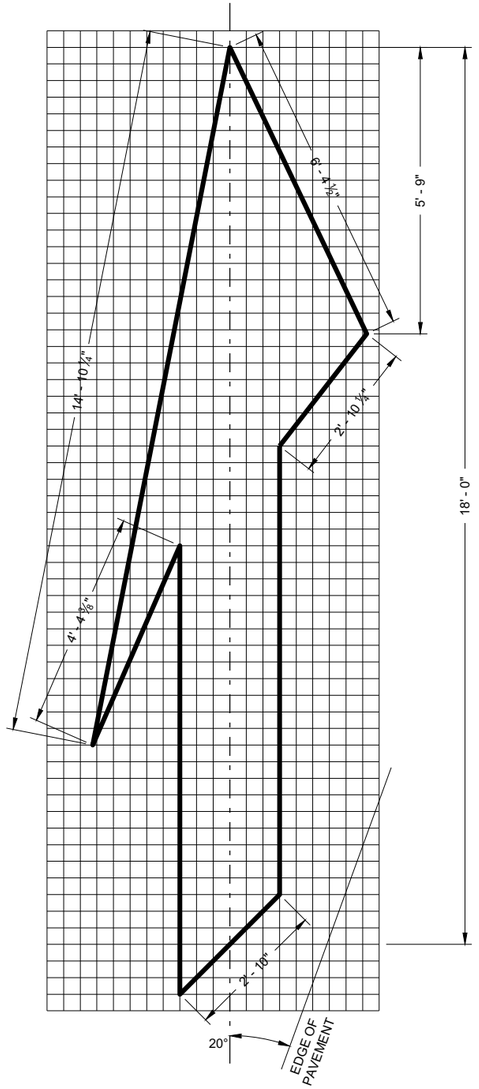
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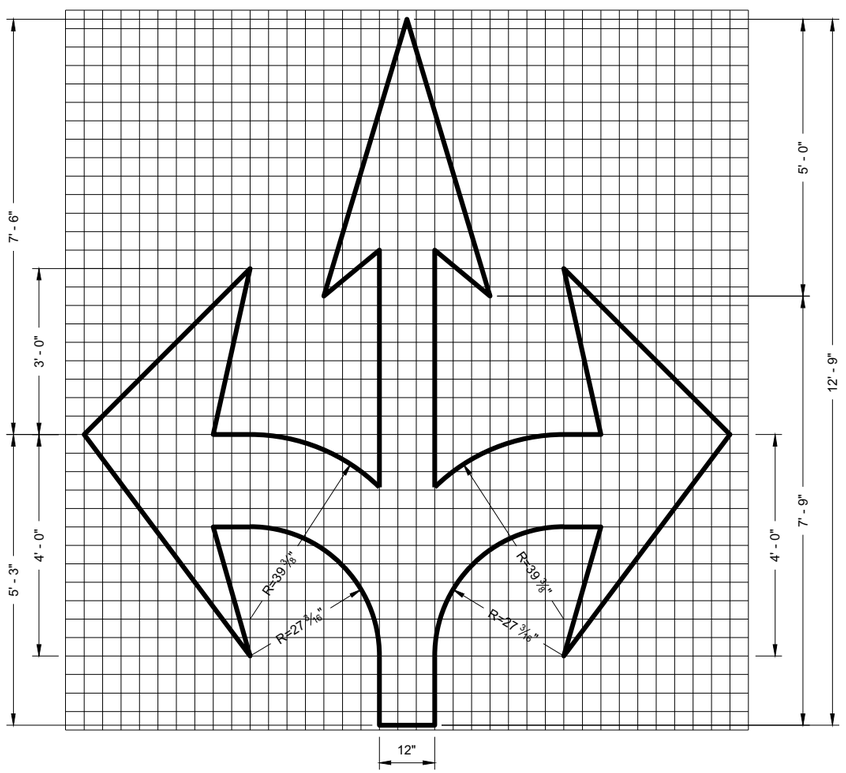
TYPE 4

GENERAL NOTES

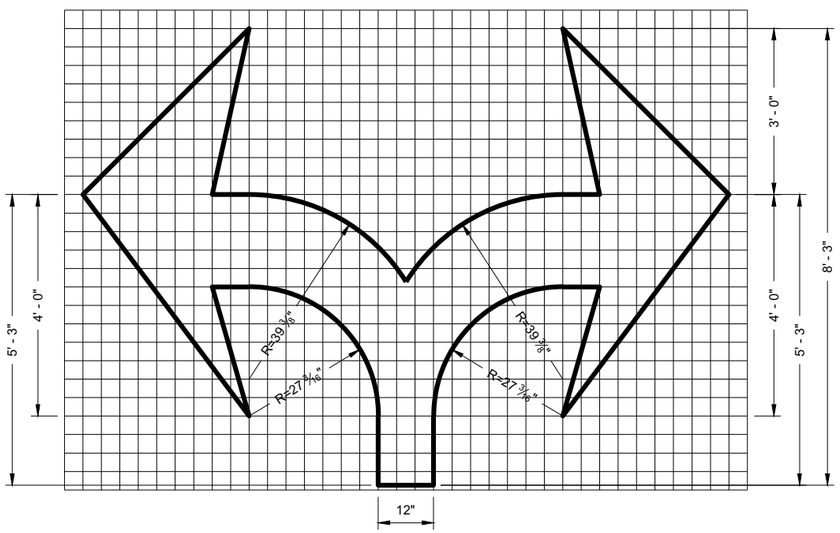
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

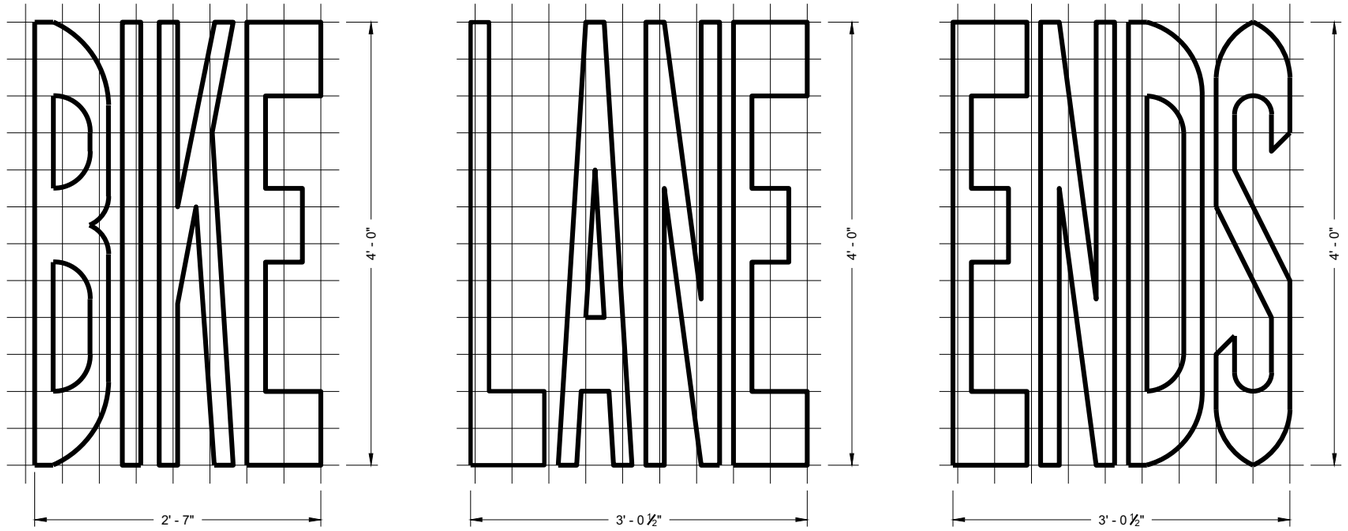
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SDD 15C07 - 15c

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SDD 15C07 - 15c

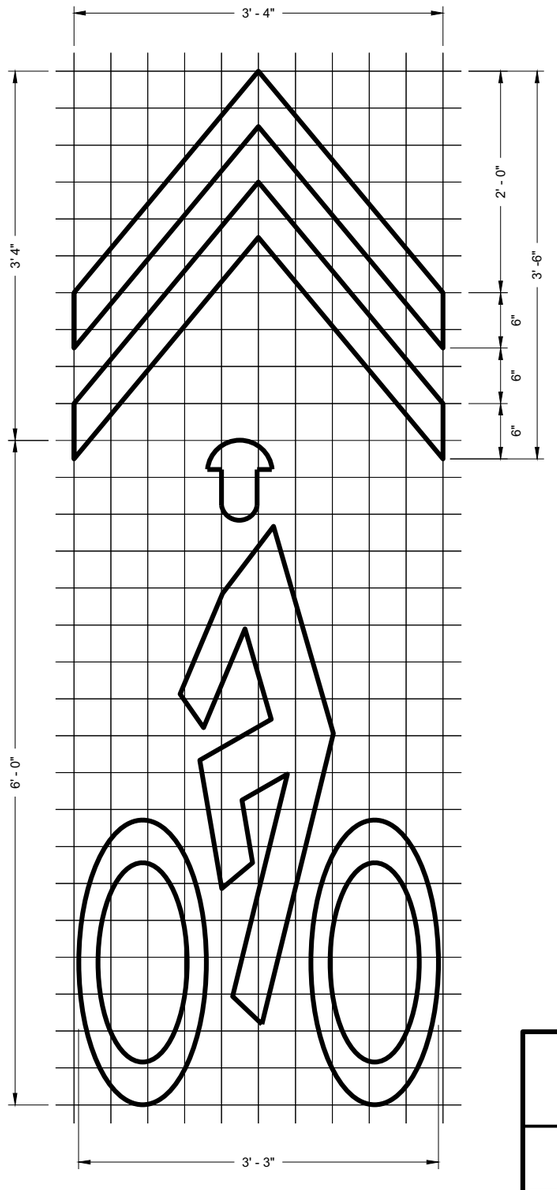
SDD 15C7-e Pavement Marking For Bike Lanes

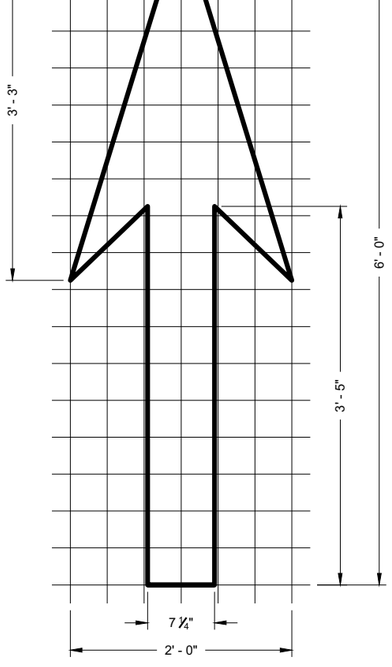


BIKE LANE WORDS

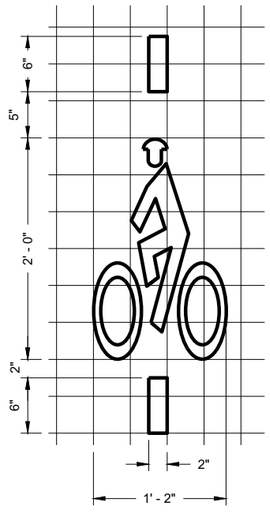
GENERAL NOTES

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.

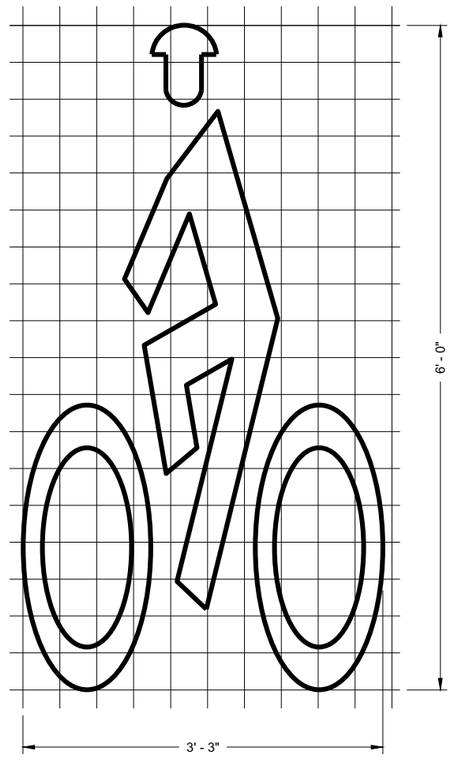




BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING



BIKE LANE SYMBOL

BIKE LANE SYMBOL FOR SHARED LANE

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

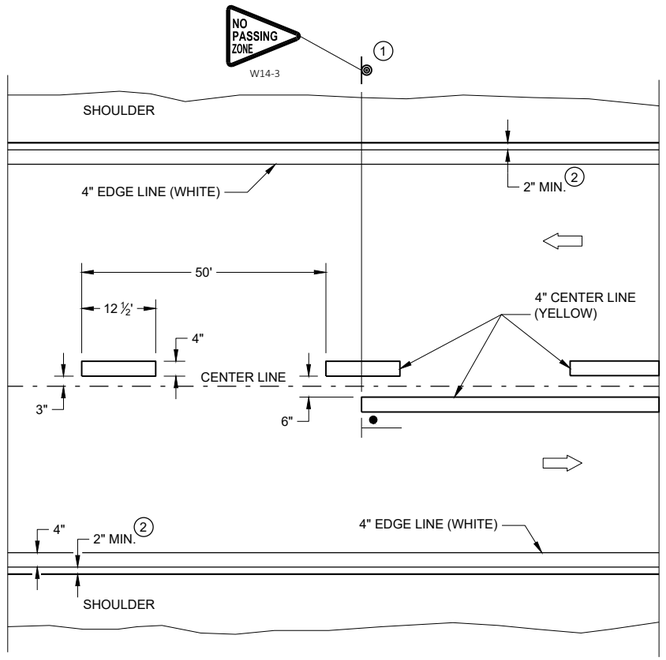
APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

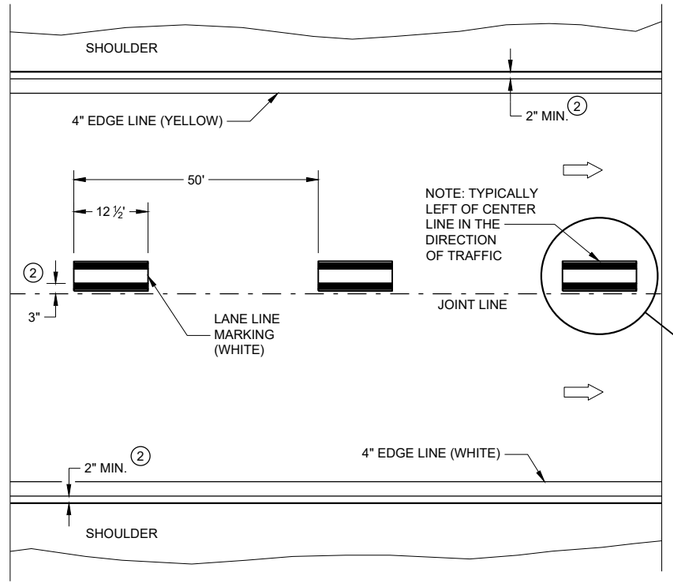
FHWA

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SDD 15C07 - 15e

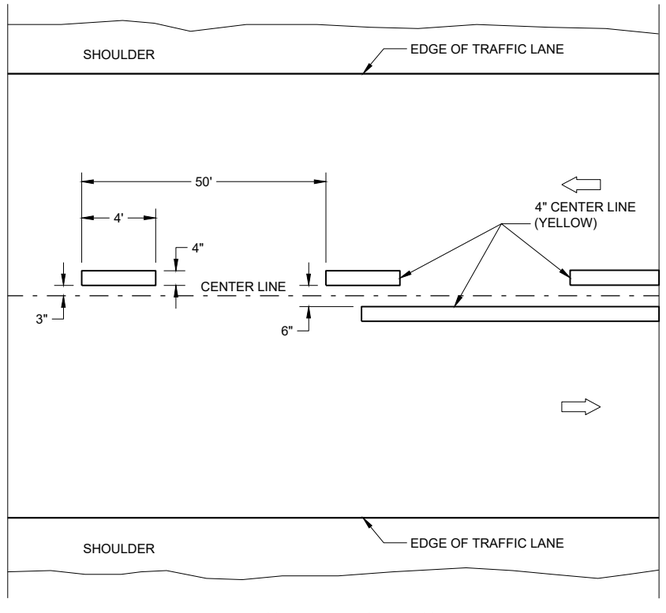


TWO WAY TRAFFIC

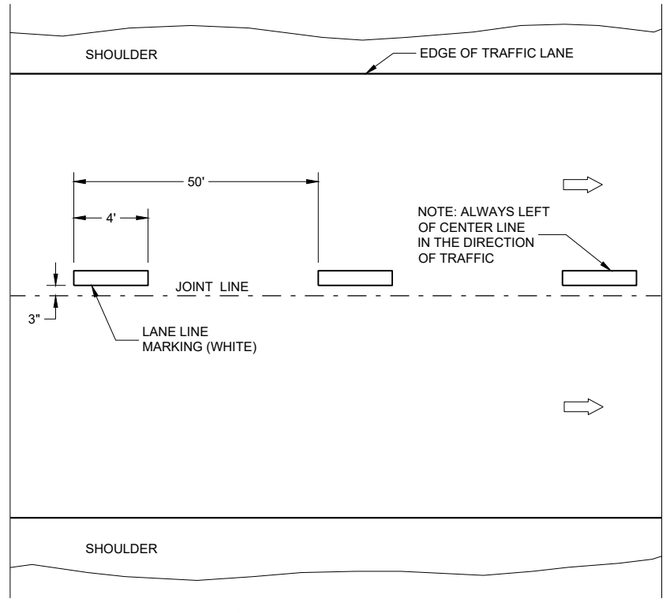


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

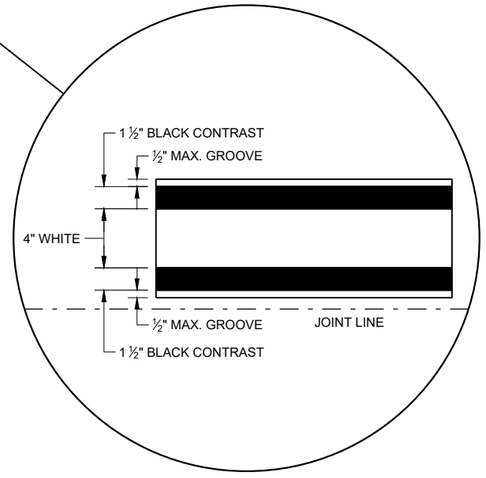
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Matthew Rauch
STATEWIDE SIGNING AND M ENGINEER

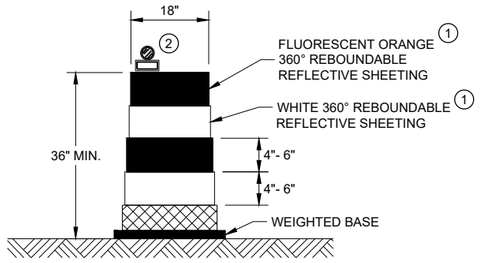
FHWA

SDD 15C08 - 20a

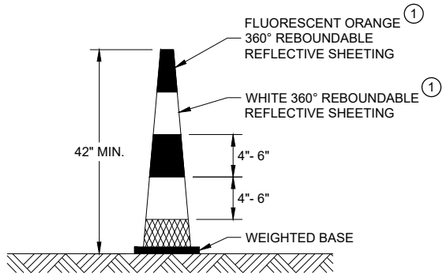
SDD 15C08 - 20a

GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

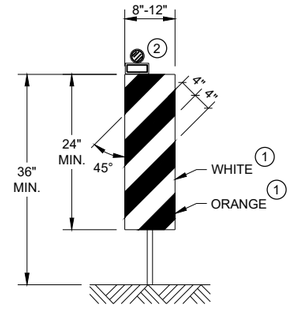


DRUM



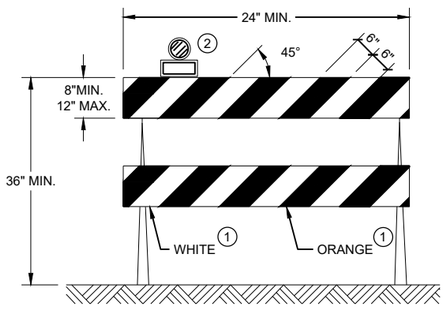
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



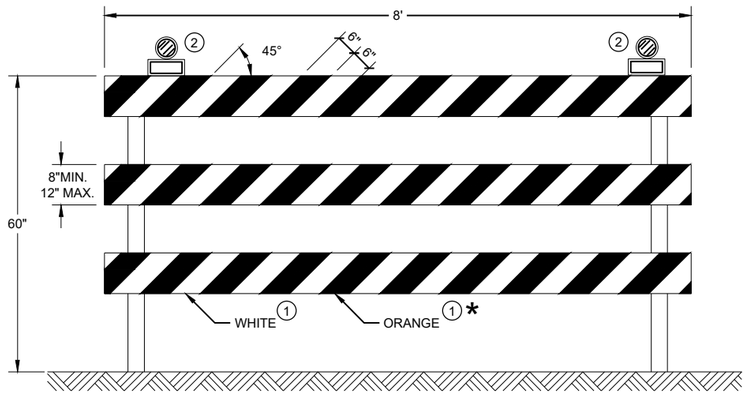
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

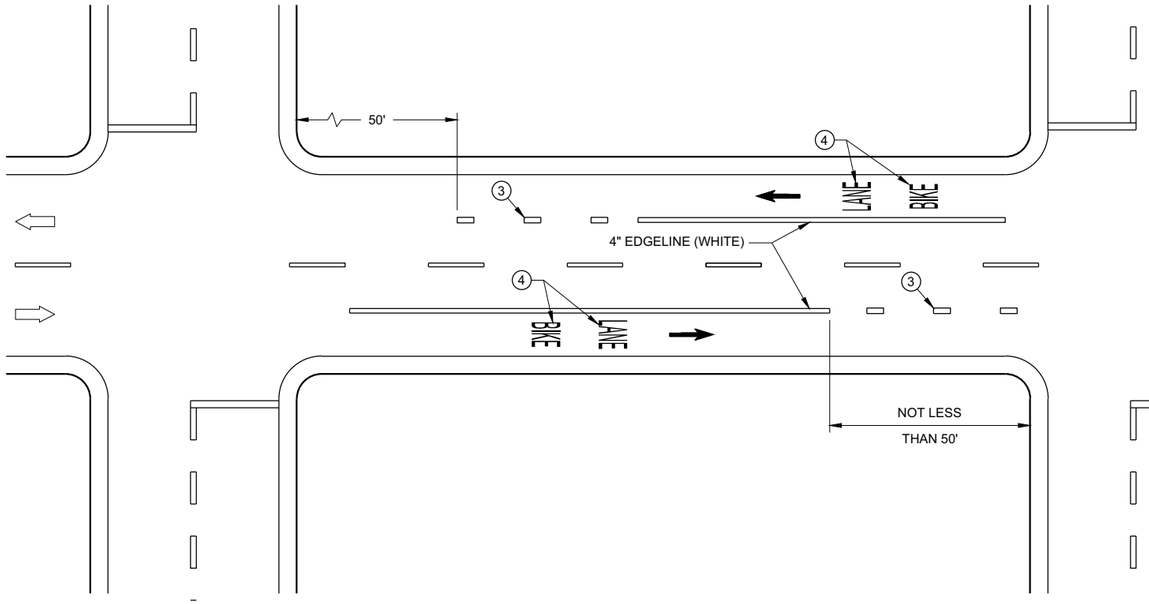
FHWA

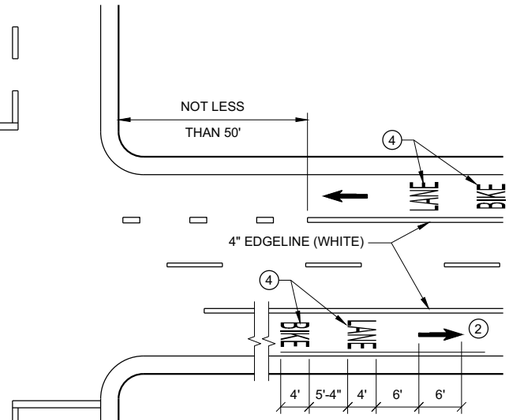
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SDD15C11 - 09b

6

SDD15C11 - 09b



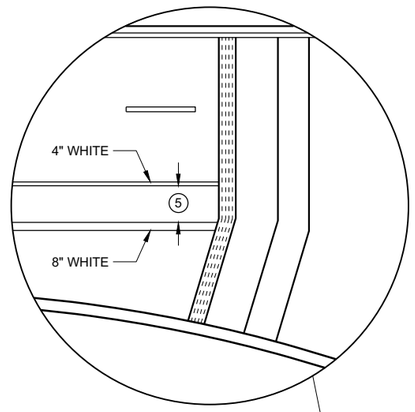


GENERAL NOTES

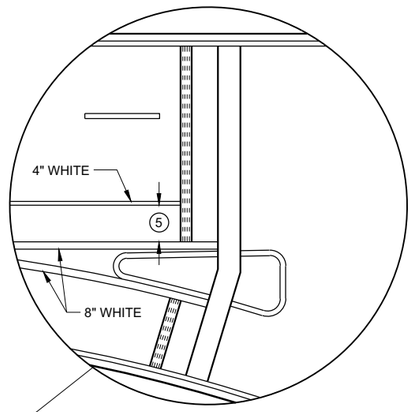
1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. MINIMUM OF ONE PER BLOCK. MAXIMUM OF 250 FEET.
3. DOTTED LINES (3' LINE, 9' GAP) SHOULD BE USED 50 FEET TO 200 FEET IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. BIKE SYMBOLS OR WORDS MAY BE USED.
5. BIKE ACCOMMODATION IS TYPICAL 5 FEET WIDE AND MINIMUM OF 4 FEET FROM A LONGITUDINAL JOINT. USE 5 FEET AT ≥ 45 MPH.
6. OMIT THESE MARKINGS FOR WIDER TURN LANE APPLICATIONS (MINIMUM OF 15 FOOT WIDE TURN LANE).
7. REFER TO CONTRACT PLANS FOR LANE WIDTH.

DIRECTION OF TRAVEL

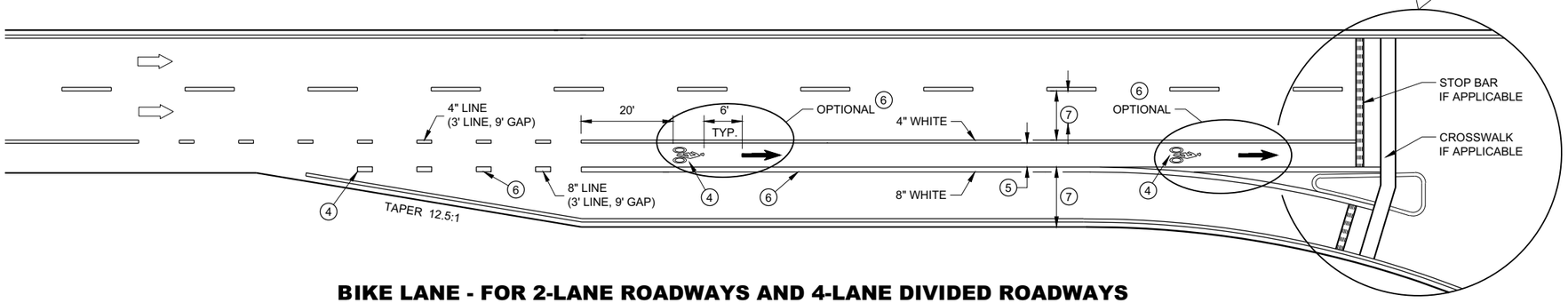
DESIGNATED BIKE LANE - NO PARKING



4 LANE DIVIDED WITHOUT ISLAND



4 LANE DIVIDED WITH ISLAND



BIKE LANE - FOR 2-LANE ROADWAYS AND 4-LANE DIVIDED ROADWAYS
(4-LANE DIVIDED WITH RIGHT TURN LANE SHOWN)

BIKE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

6

SDD 15C29 - 07a

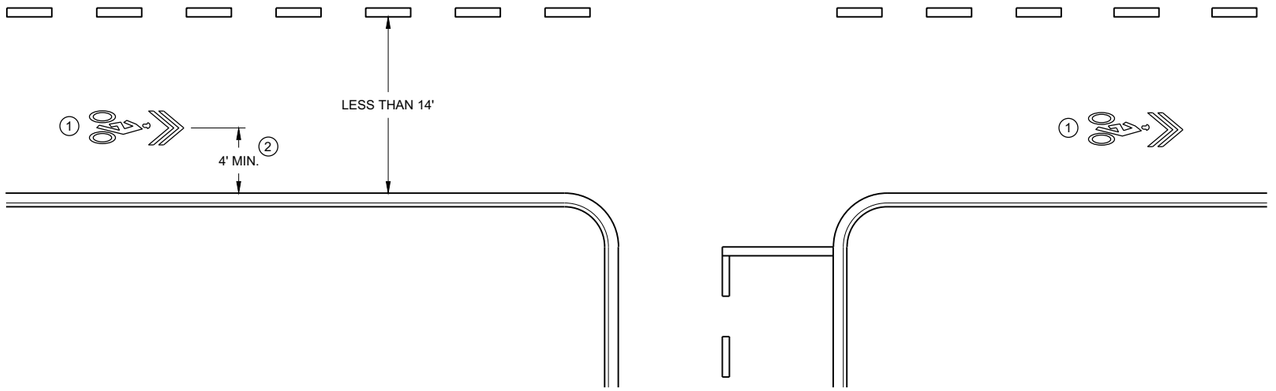
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SDD 15C29 - 07a

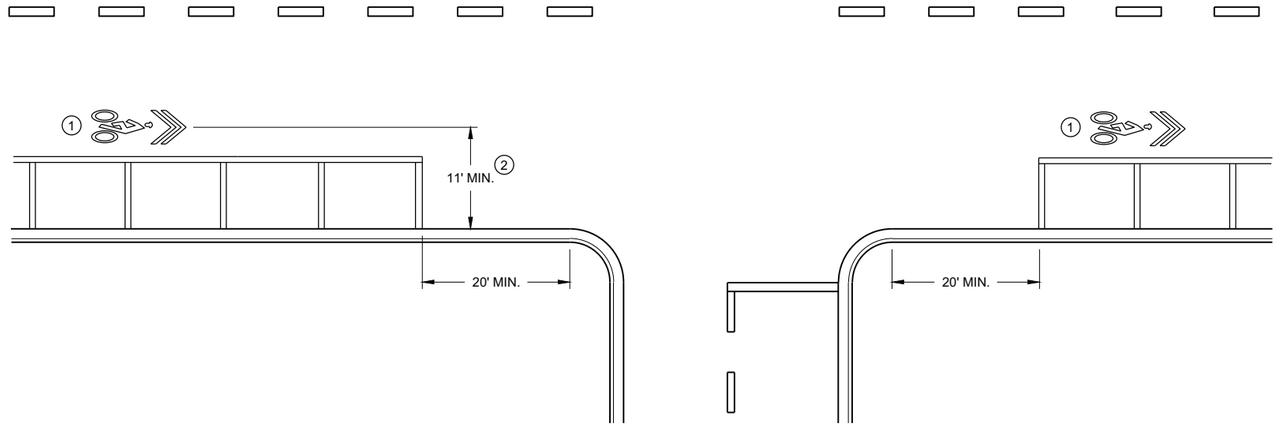
GENERAL NOTES

(1) MINIMUM OF ONE PER BLOCK, MAXIMUM OF 250 FEET.

(2) OR TO EDGE OF PAVEMENT WITHOUT CURB.



WITHOUT PARKING



WITH PARKING

PAVEMENT MARKING FOR SHARED LANE 35 MPH OR LESS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2020
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

6

SDD 15C29 - 07b

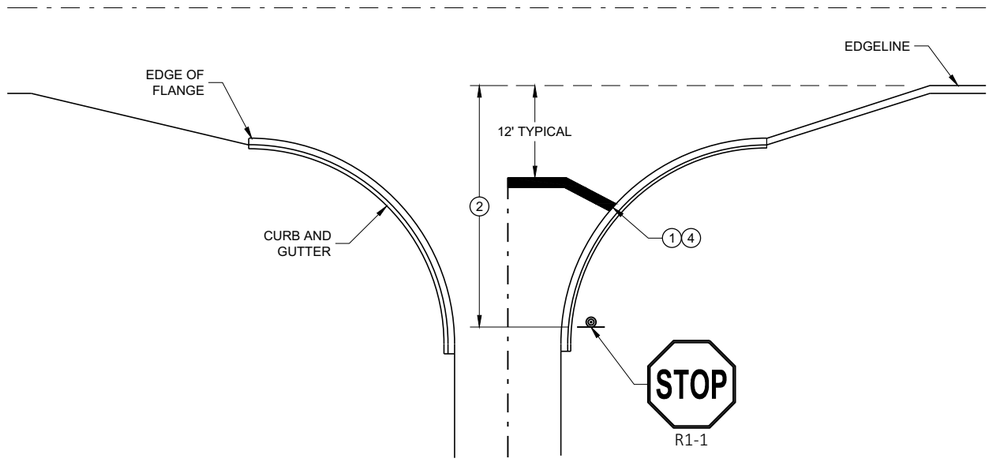
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SDD 15C29 - 07b

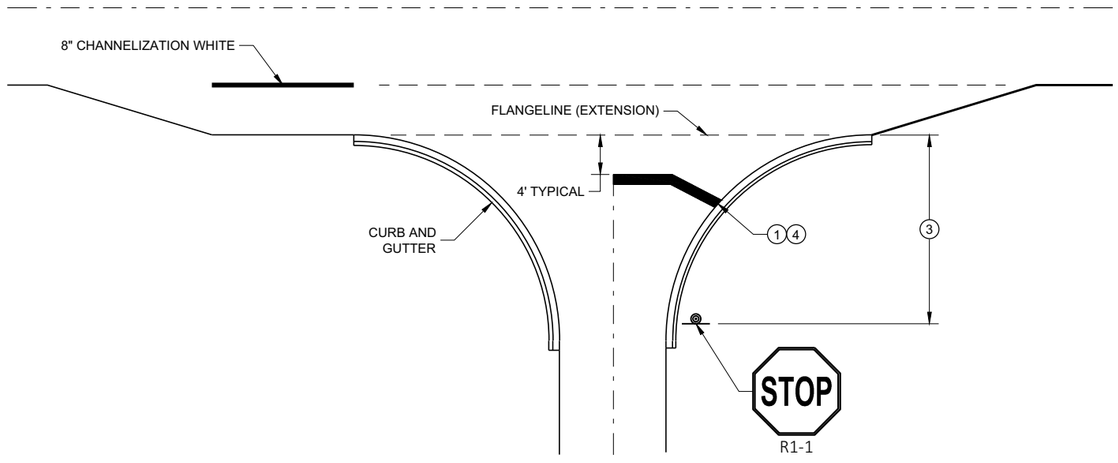
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

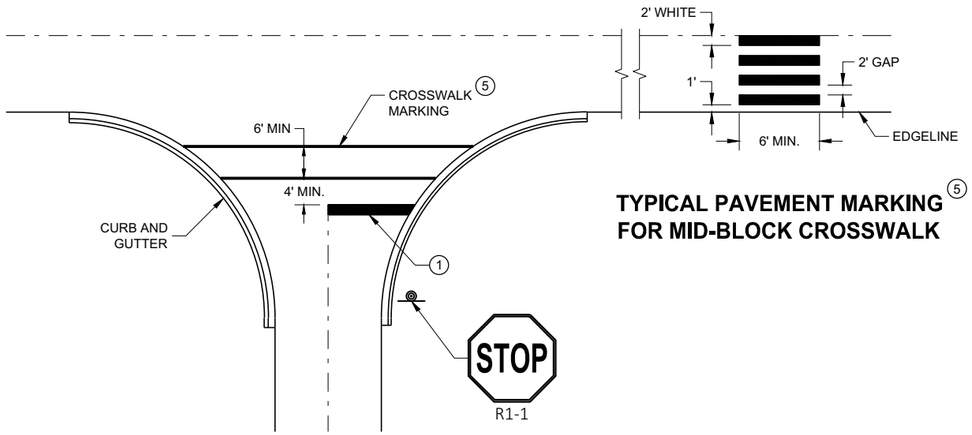
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

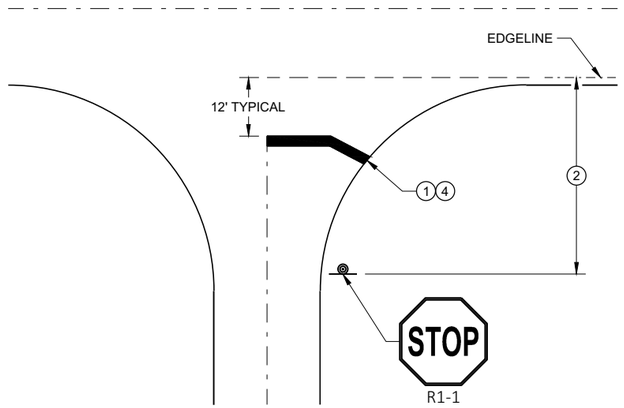


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

6

SDD 15C33 - 04

6

SDD 15C33 - 04

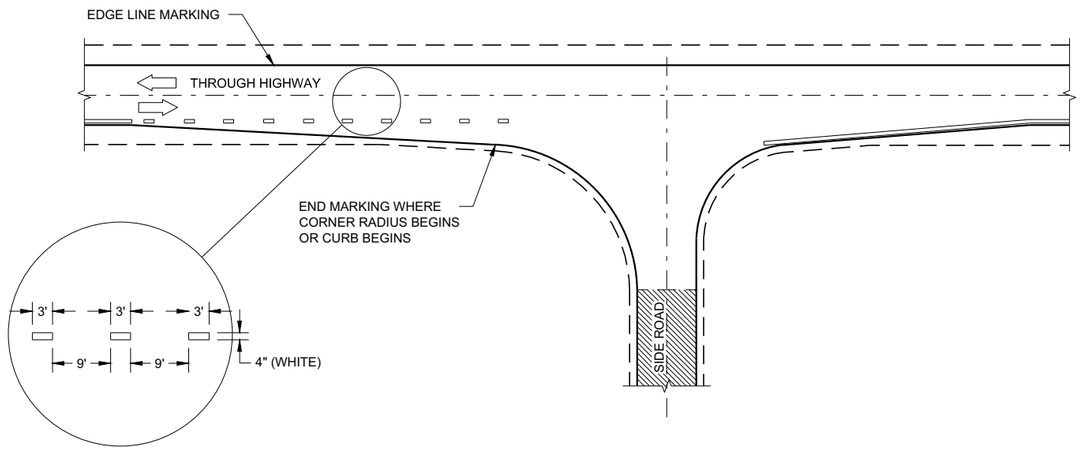
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

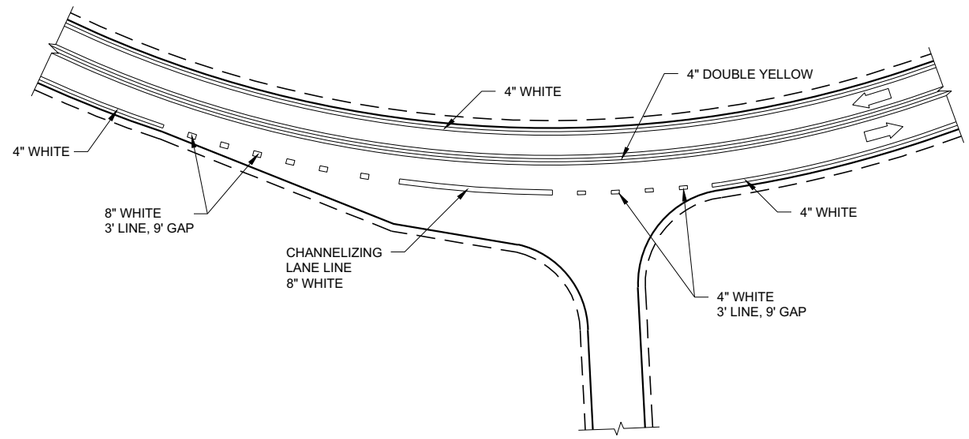
1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

LEGEND

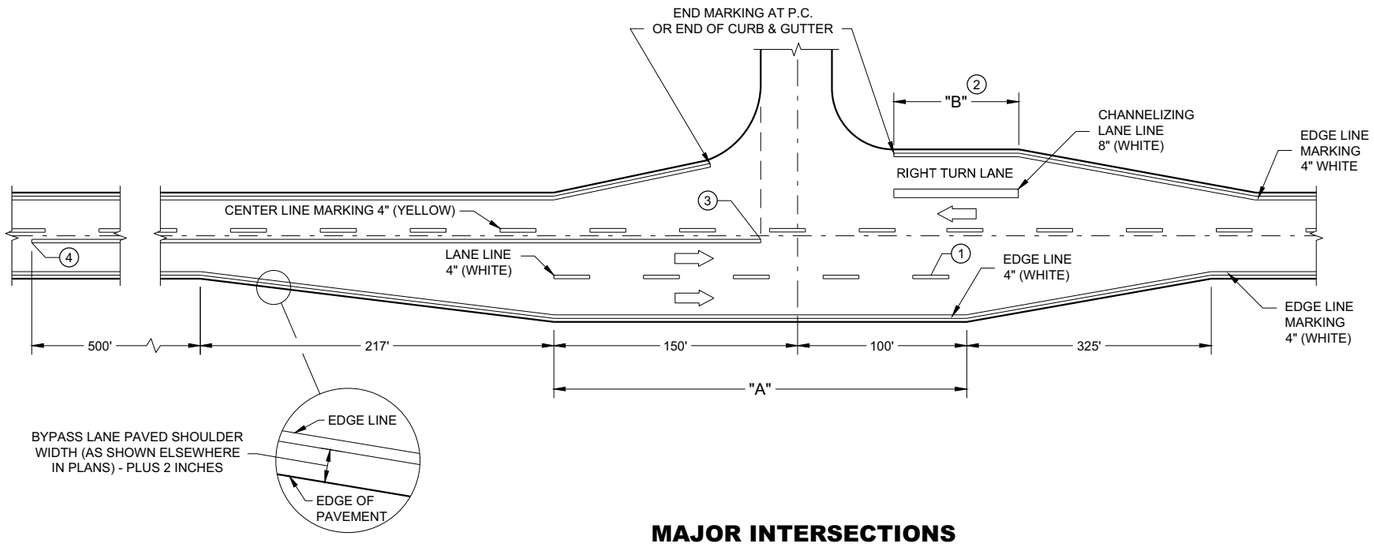
DIRECTION OF TRAVEL



MINOR INTERSECTION



INTERSECTION ON OUTSIDE OF CURVE



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35 - 04a

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

(1) PLACE SIGNS 350' IN ADVANCE OF CHIP SEALED OR LOOSE GRAVEL SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

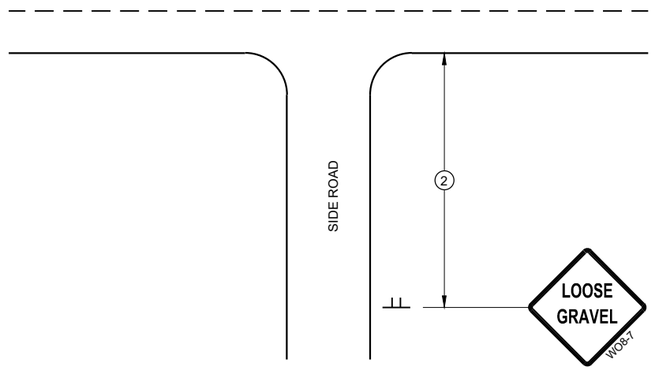
(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

(3) ADD WO8-1 OR WO8-2 SIGN WHEN THE CONDITION IS PRESENT.

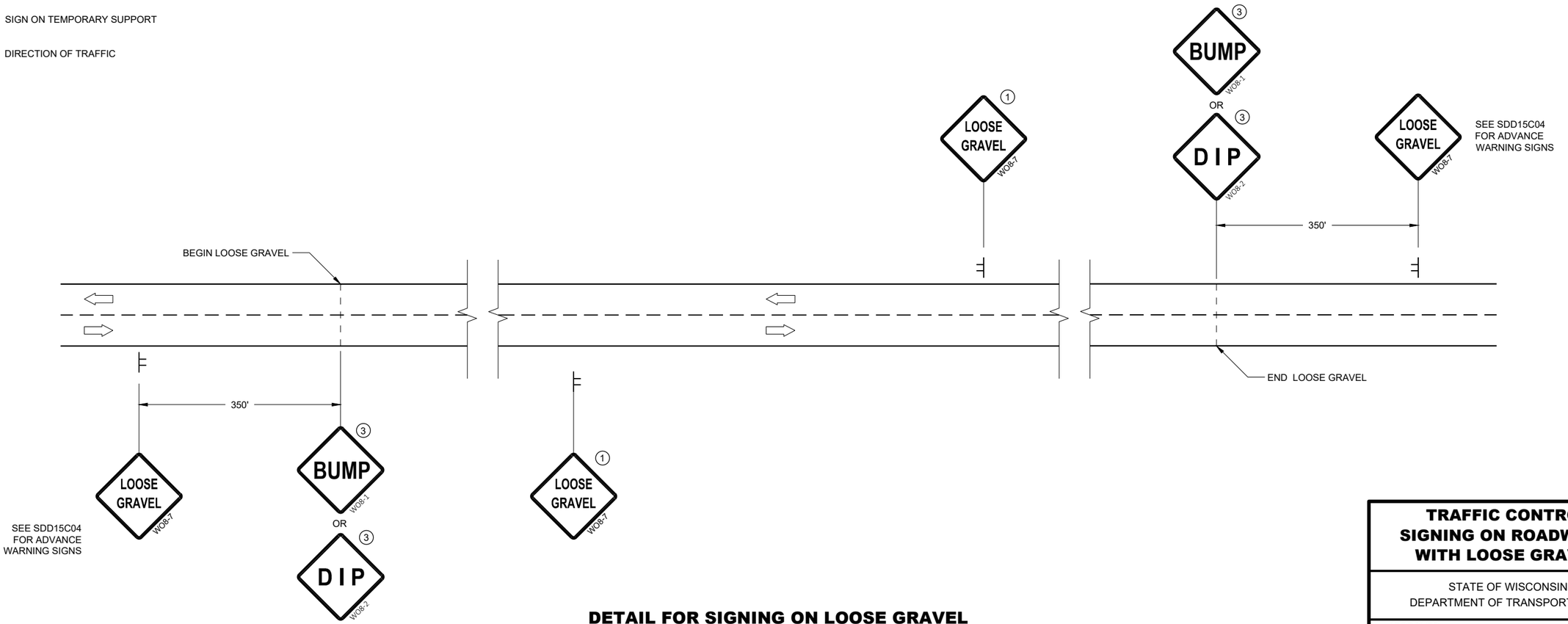
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON LOOSE GRAVEL OR CHIP SEALED SURFACES

TRAFFIC CONTROL SIGNING ON ROADWAYS WITH LOOSE GRAVEL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

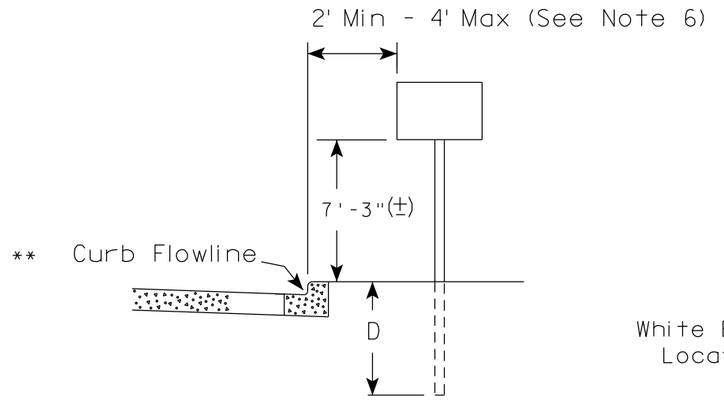
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

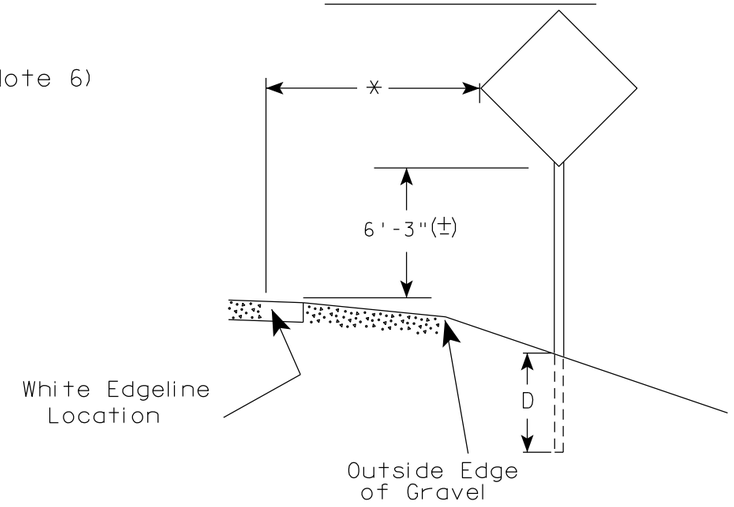
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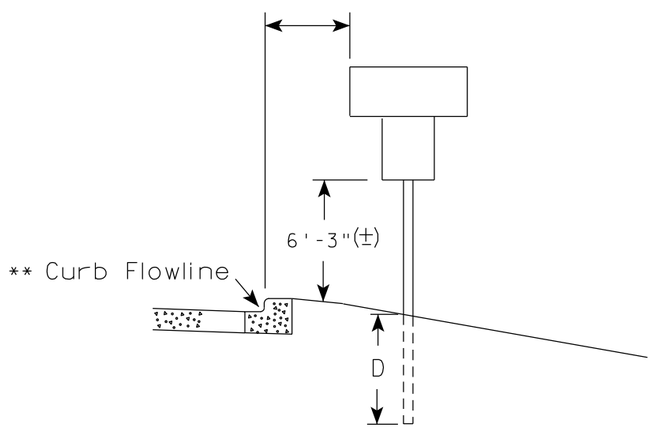
SDD 15D45 - 03

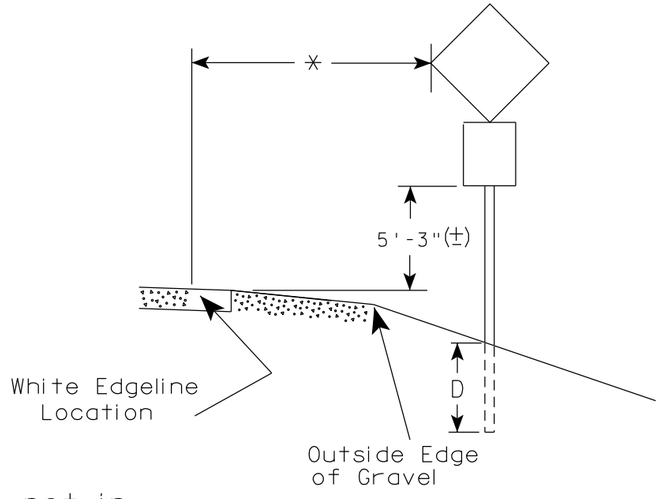
URBAN AREA



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 or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) 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" (±).
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 signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

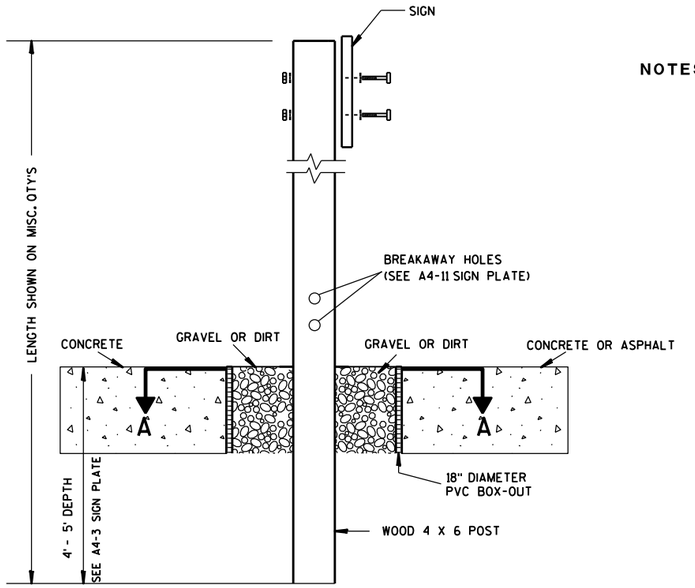
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

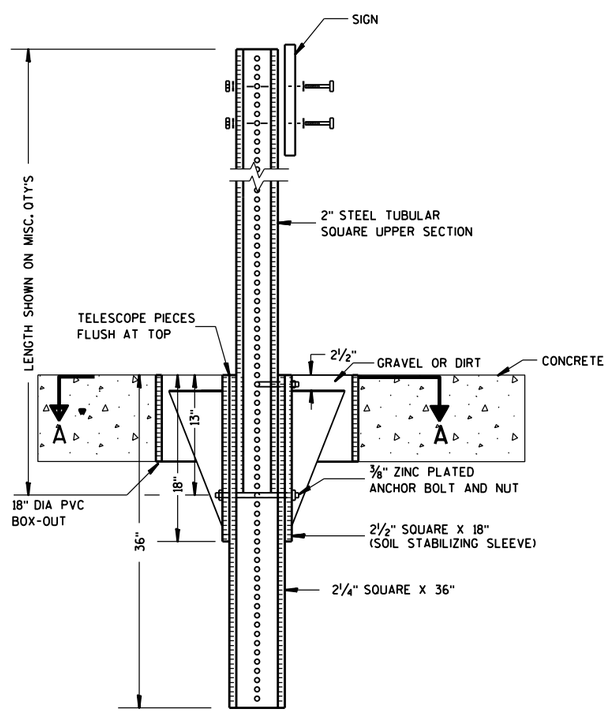
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 132	E



ELEVATION VIEW

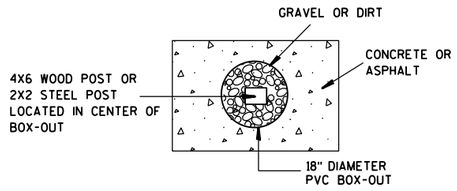
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

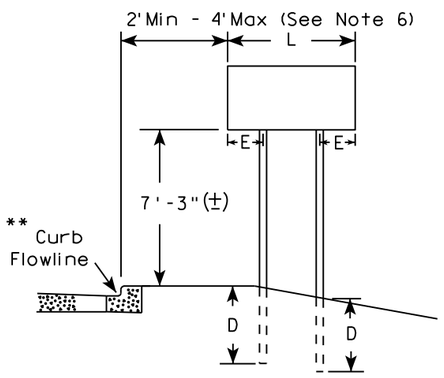
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

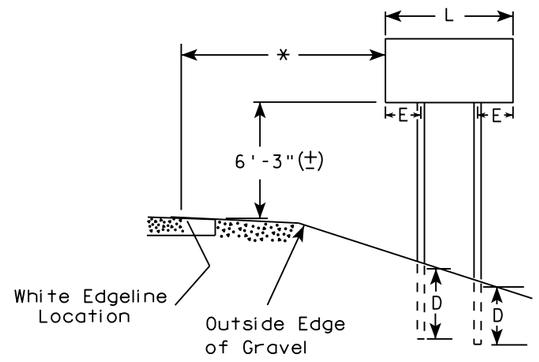
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

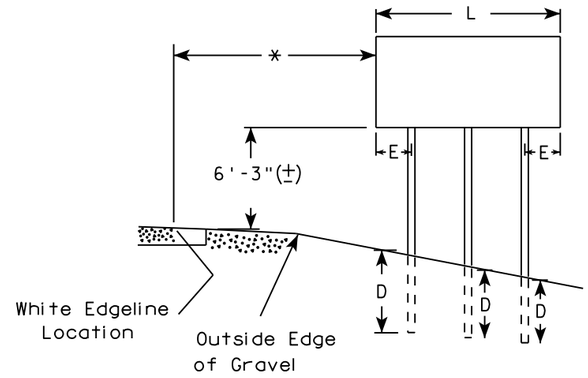
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

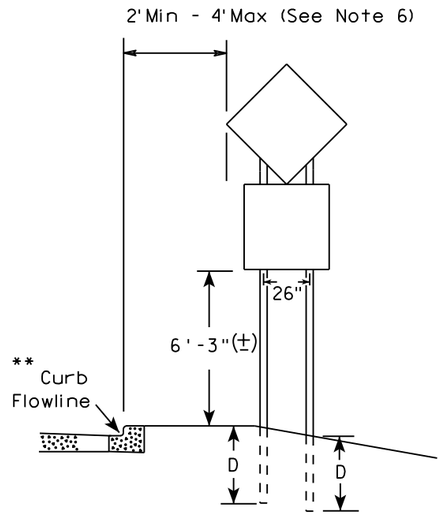
URBAN AREA



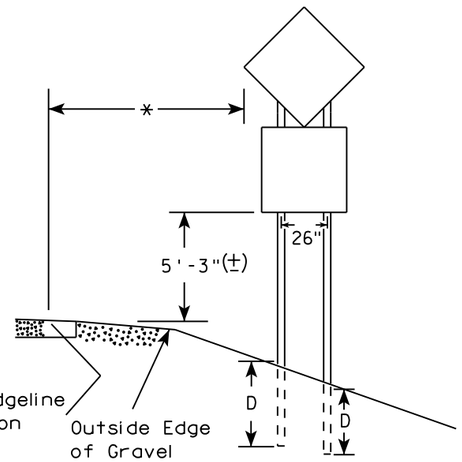
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)		
	L	E
***	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

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. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

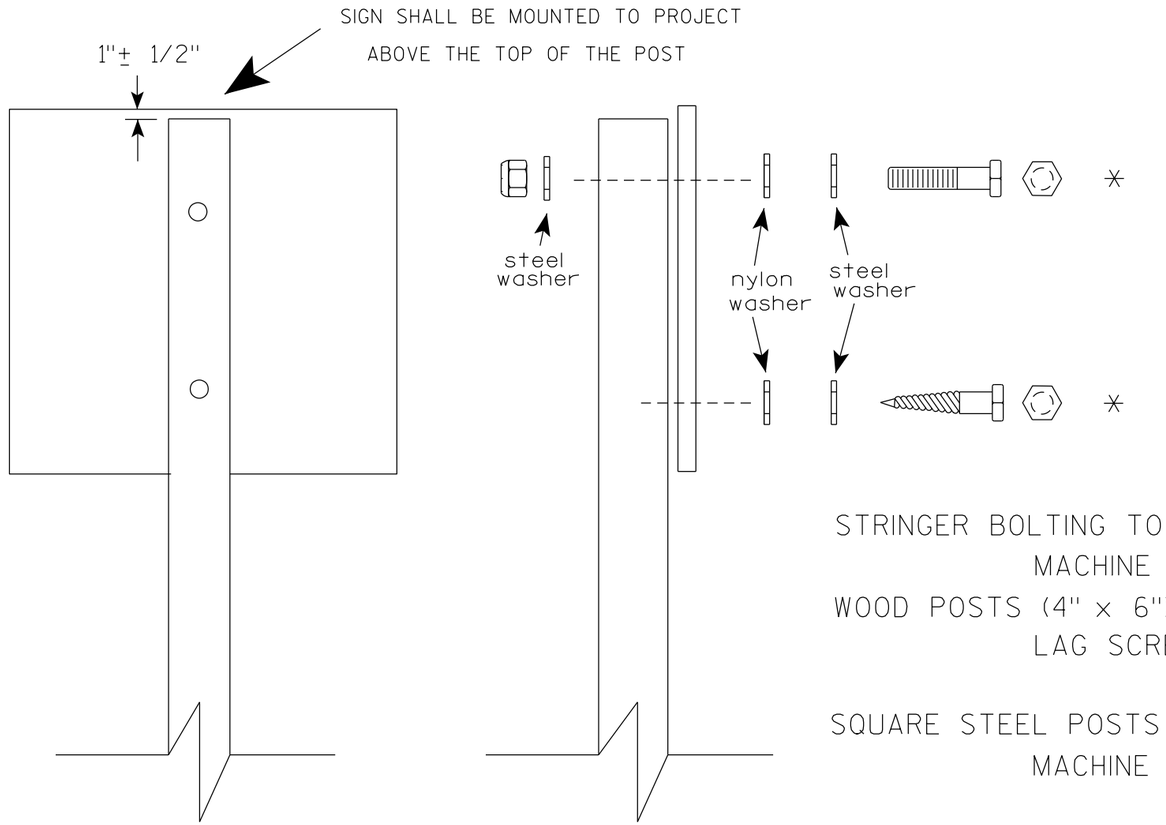
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 134	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.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

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

* 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 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

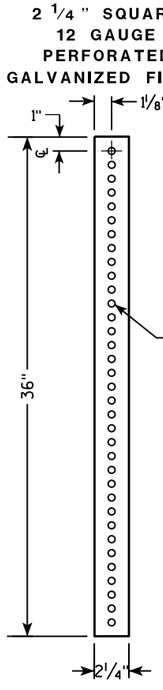
SHEET NO: 135 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 01-APRIL-2020 PLOT BY : dotc4c

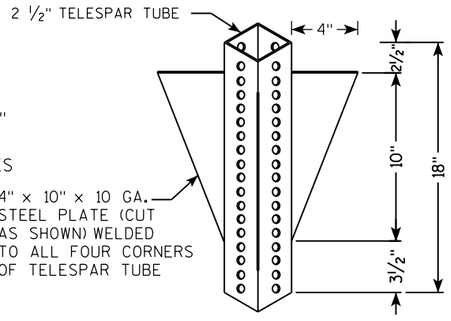
WISDOT/CADDS SHEET 42

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

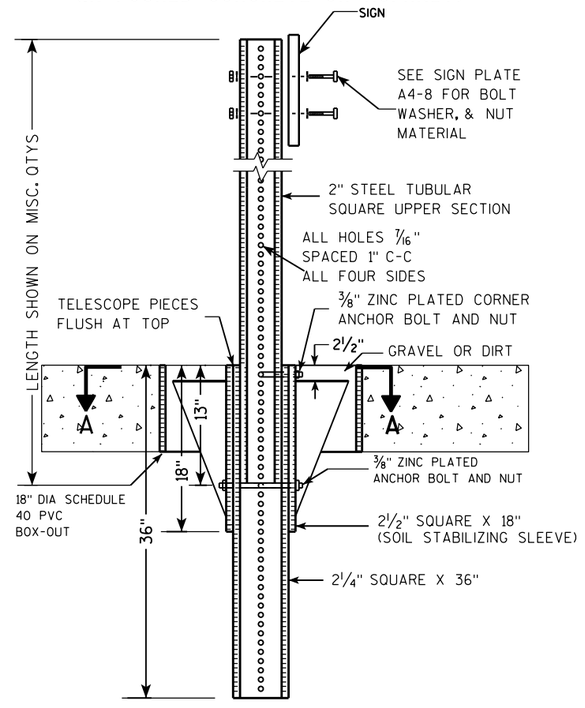
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



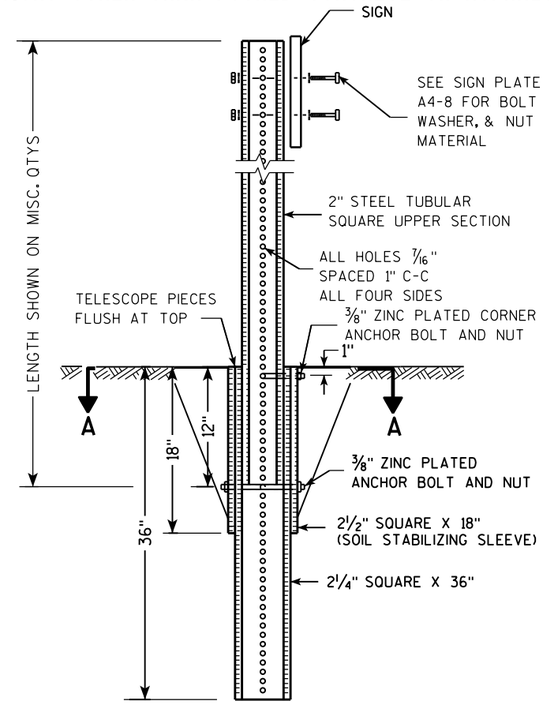
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

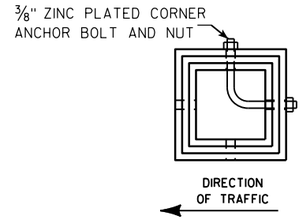


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





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

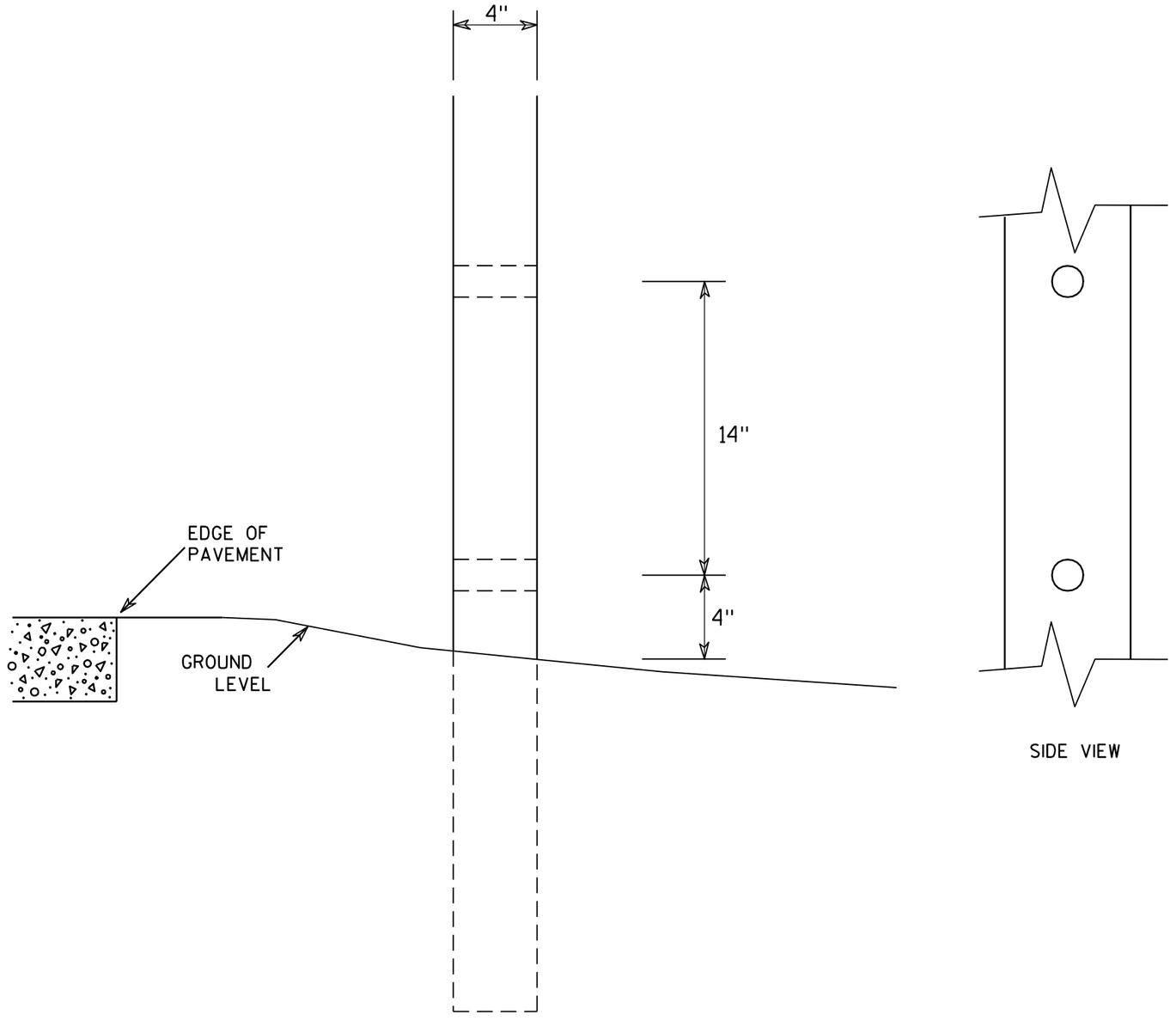
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000
WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

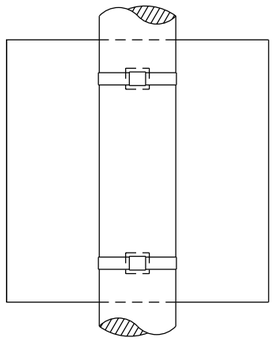
APPROVED Chester J Spang for State Traffic Engineer

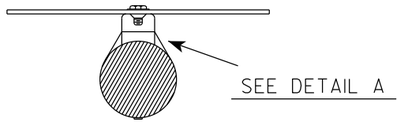
DATE 3/27/97 PLATE NO. A4-11.2

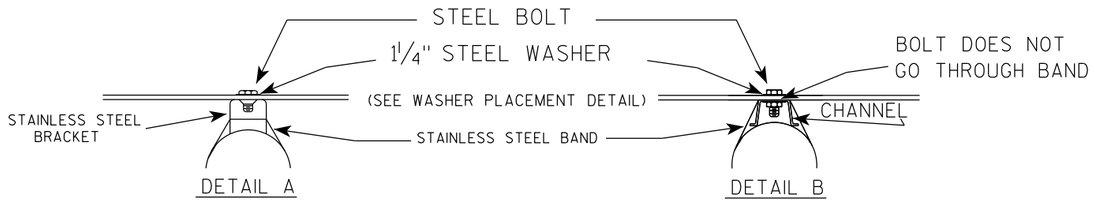
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 137	E

BANDING

SINGLE SIGN



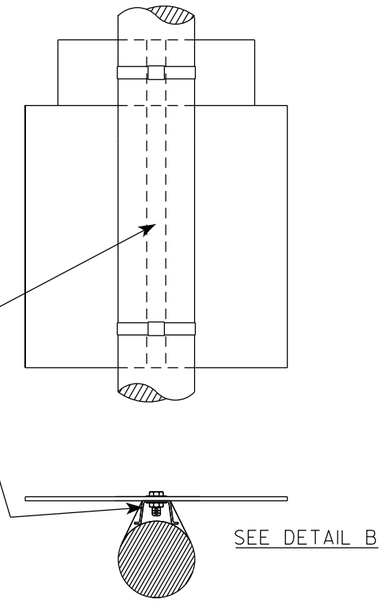




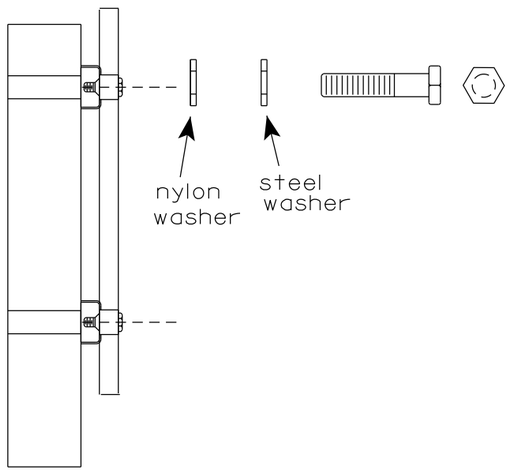
GENERAL NOTES

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.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

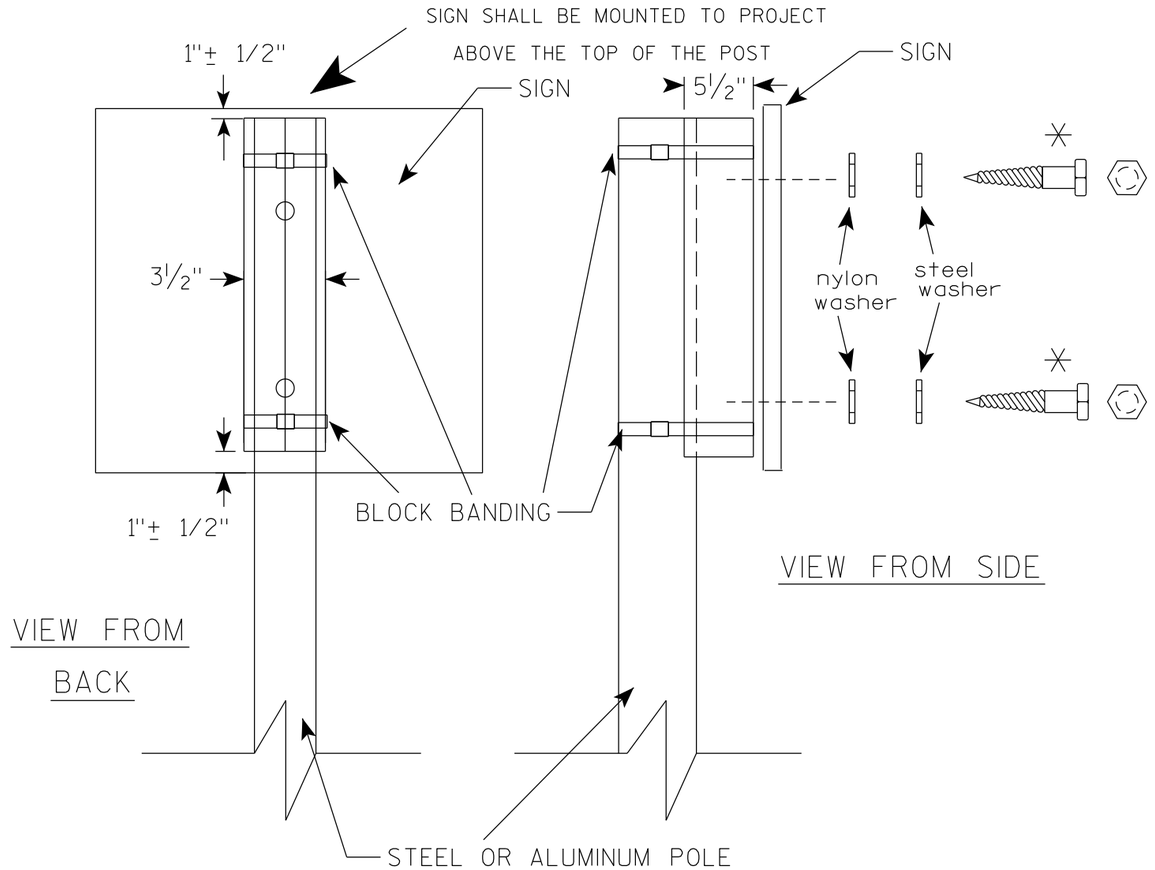
DATE 6/10/19 PLATE NO. A5-9.4

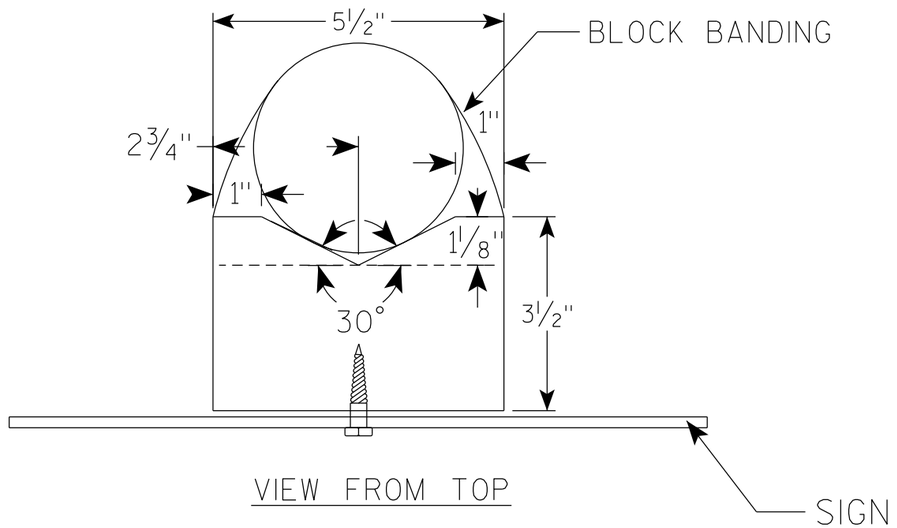
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 138	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





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
   b. 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

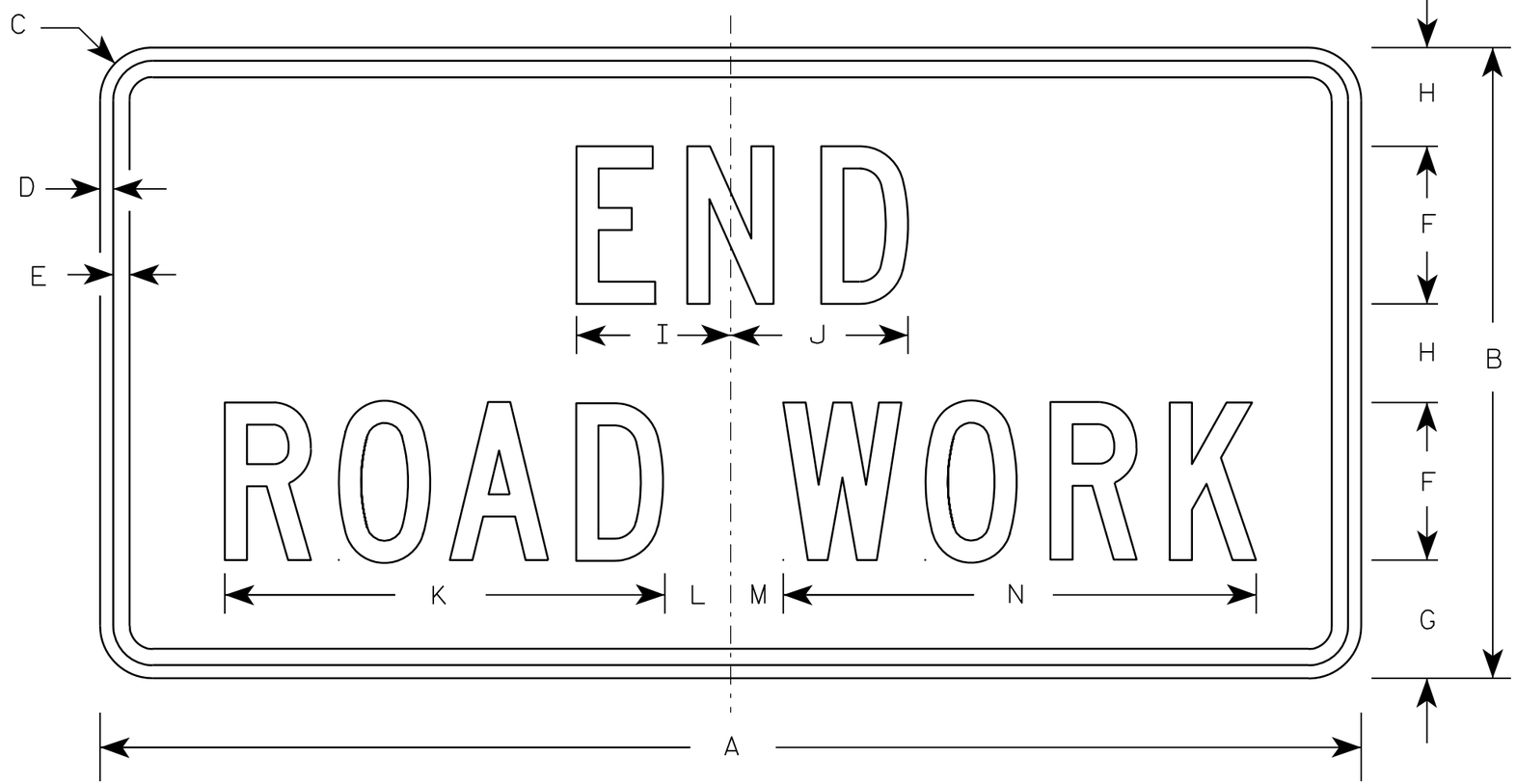
DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO: | SHEET NO: 139 | E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A510.dgn PLOT DATE : 10-JUN 2019 4:15 PLOT BY : mscj9h

WISDOT/CADDS SHEET 42

7 7



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

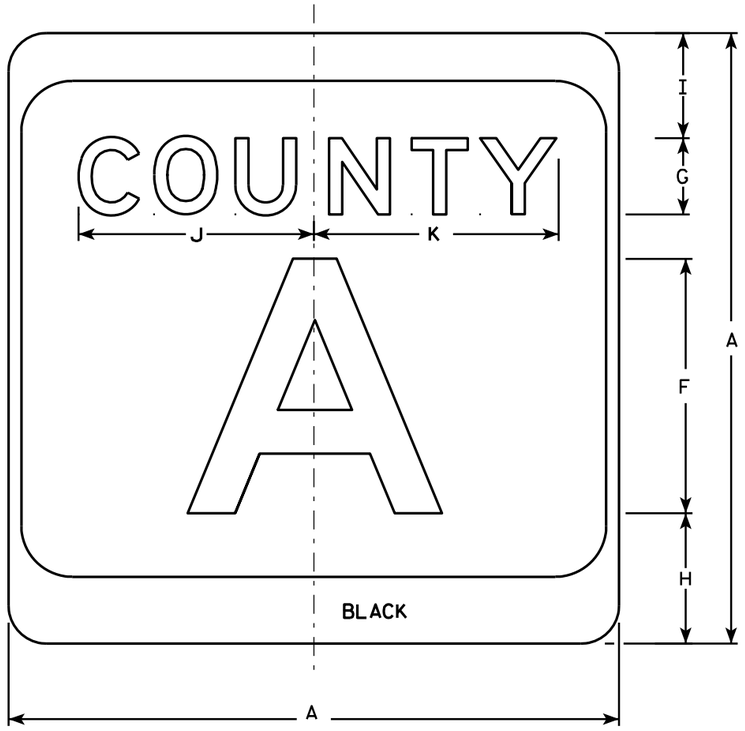
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

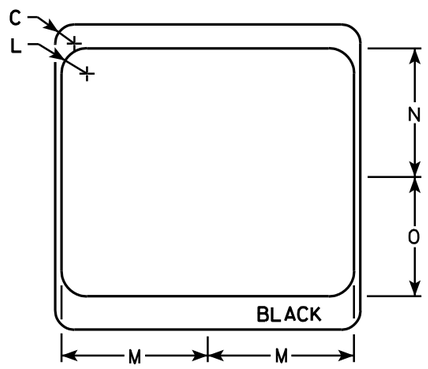
APPROVED Matthew R Rauch
for State Traffic Engineer

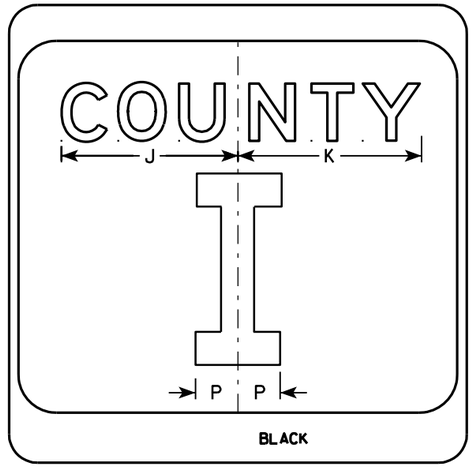
DATE 9/30/09 PLATE NO. G20-2A.8

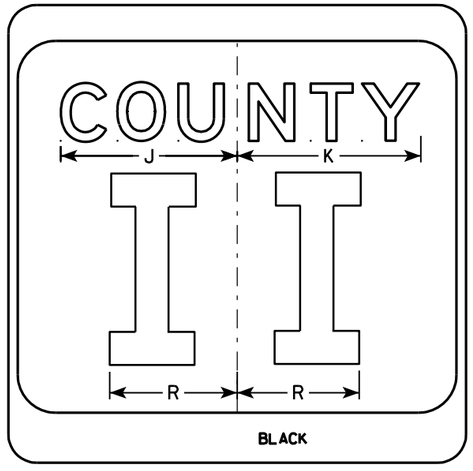
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 140	E



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

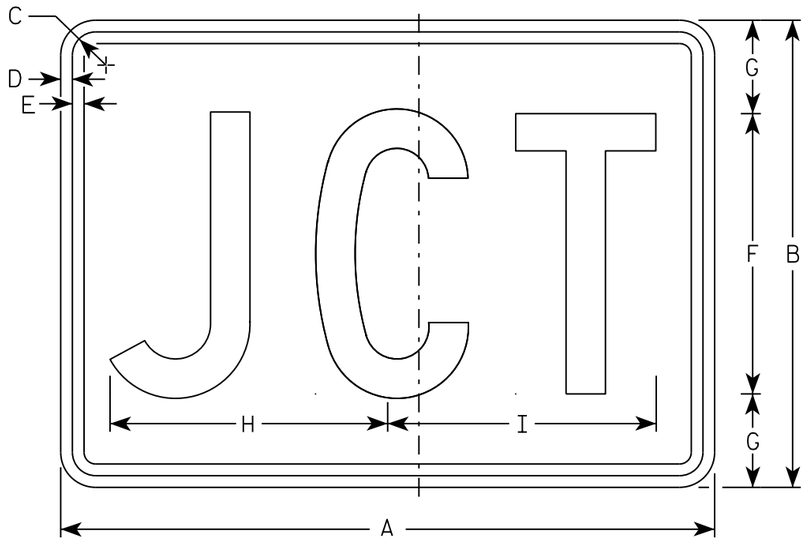
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

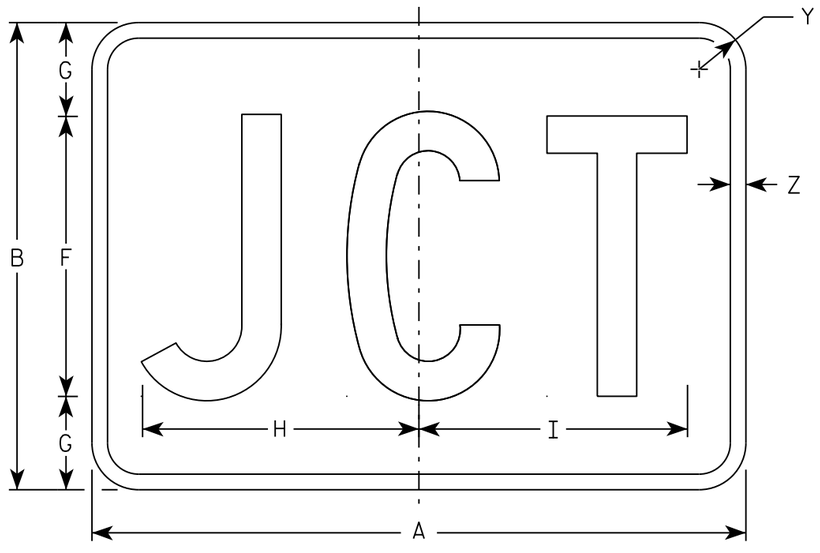
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 141	E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is 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. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 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	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN
M2-1

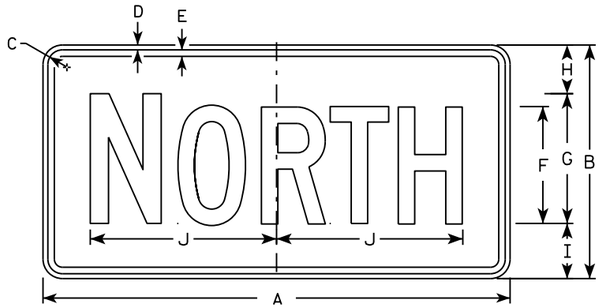
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

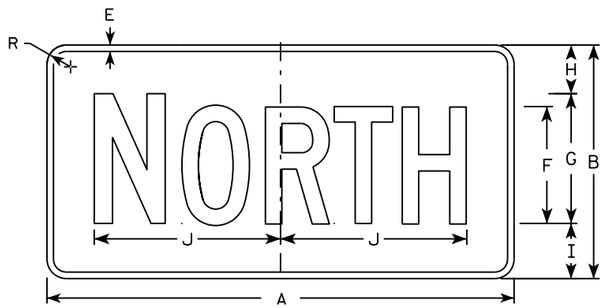
DATE 10/15/15 PLATE 142 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



M3-1
MM3-1
MP3-1



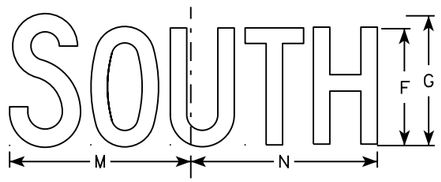
MB3-1
MK3-1
MN3-1



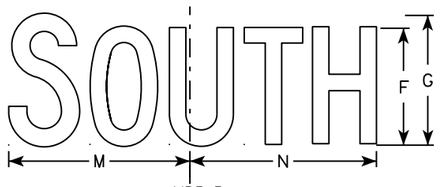
M3-2
MM3-2
MP3-2



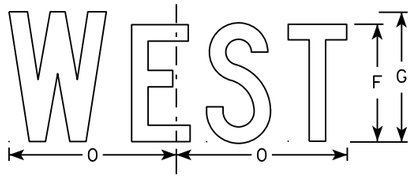
MB3-2
MK3-2
MN3-2



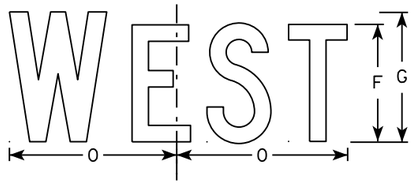
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

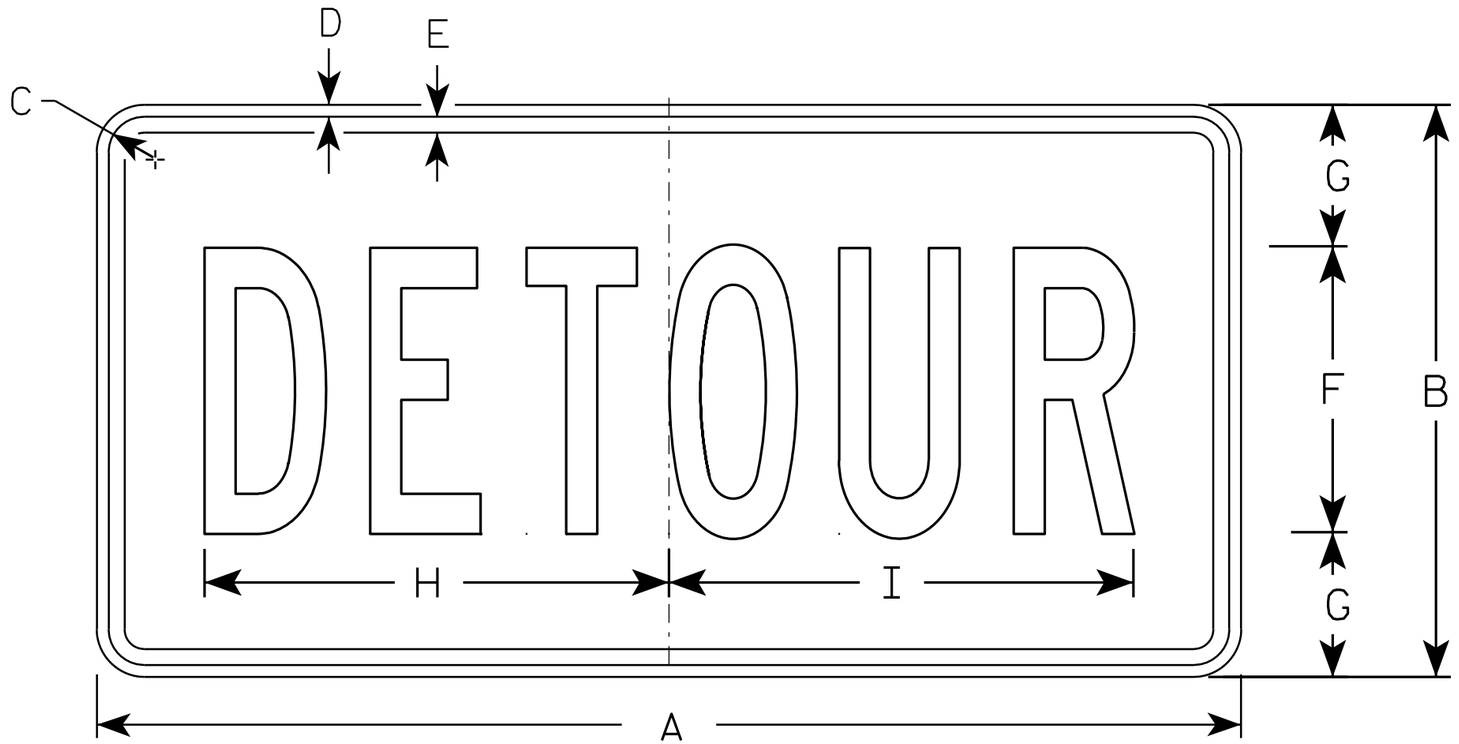
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



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																											

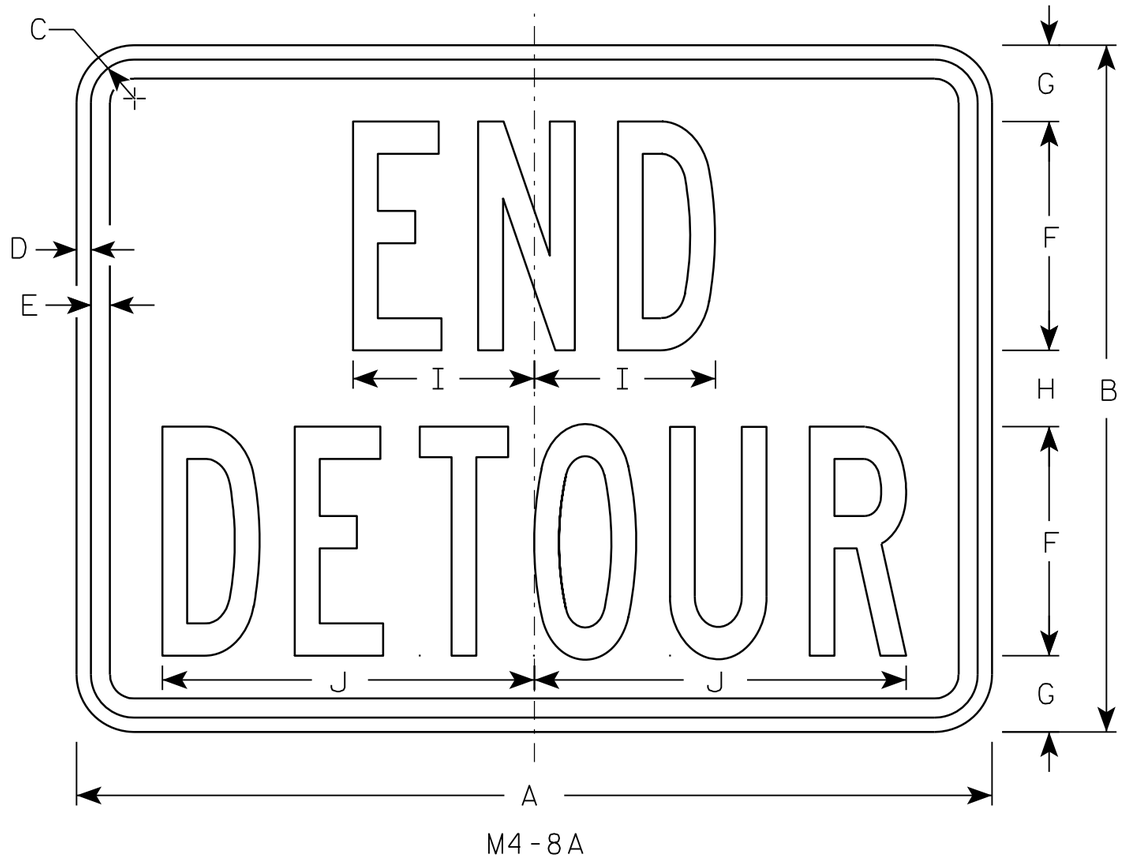
STANDARD SIGN
M4-8

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: 144	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																											

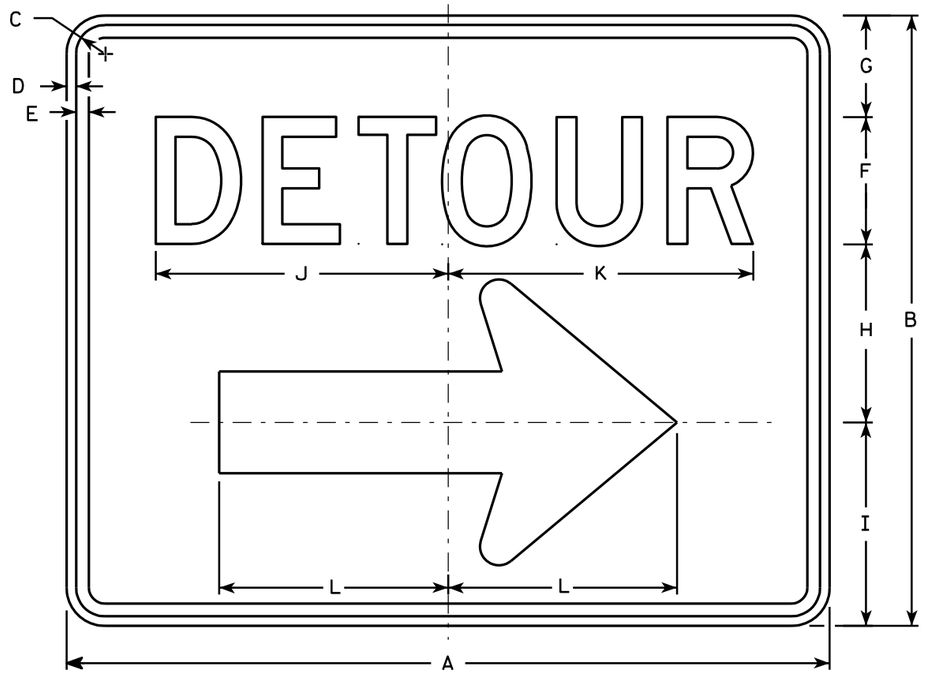
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

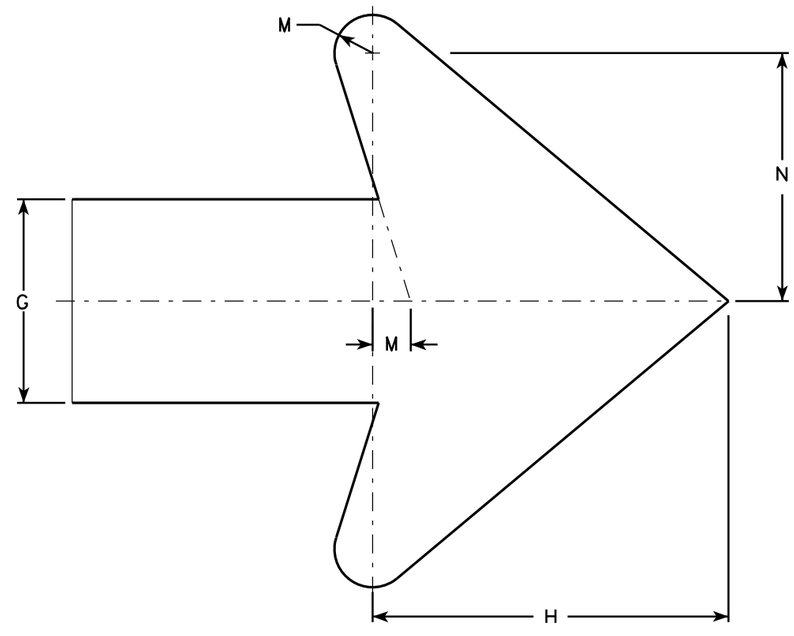
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 145	E



M4-9R

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 - 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. M4-9L is the same as M4-9R except the arrow 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																											
2	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

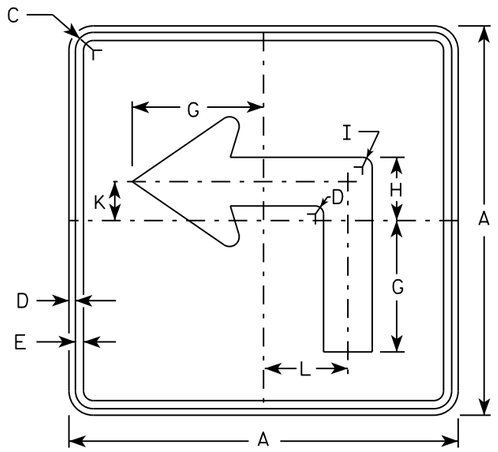
STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

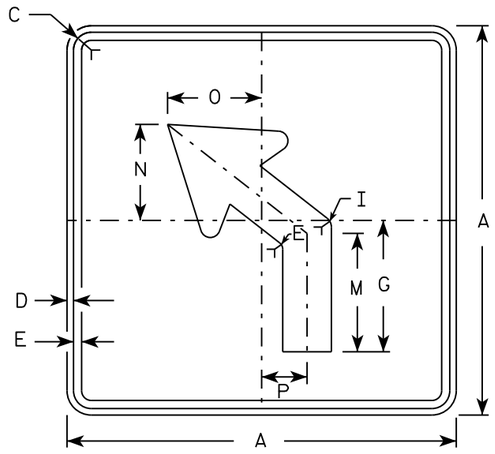
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-9R.4

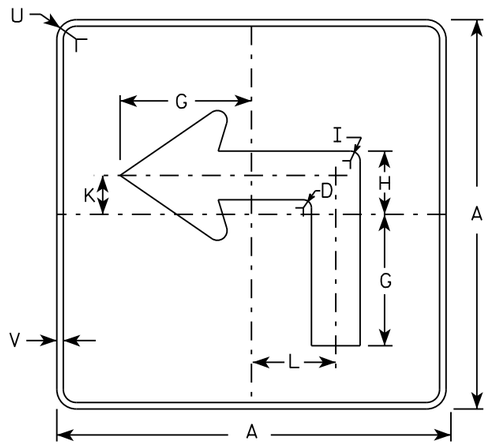
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 146 | E



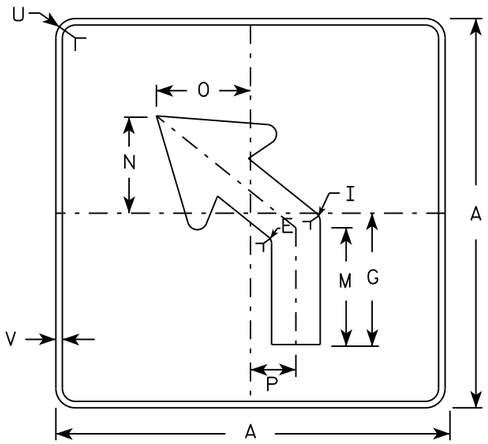
M5-1L
MM5-1L
MO5-1L
MP5-1L



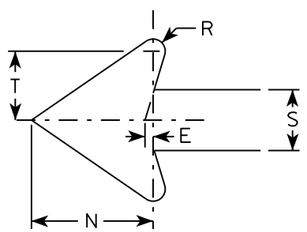
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective 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. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   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
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 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

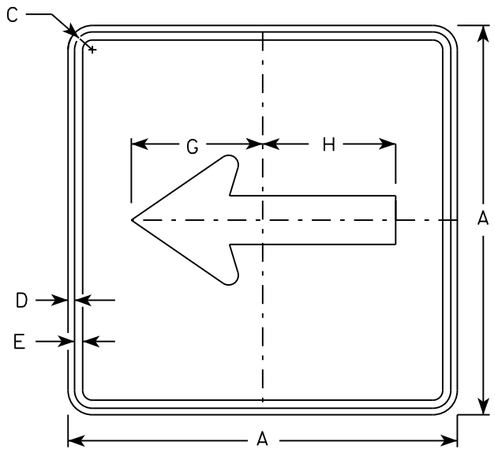
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

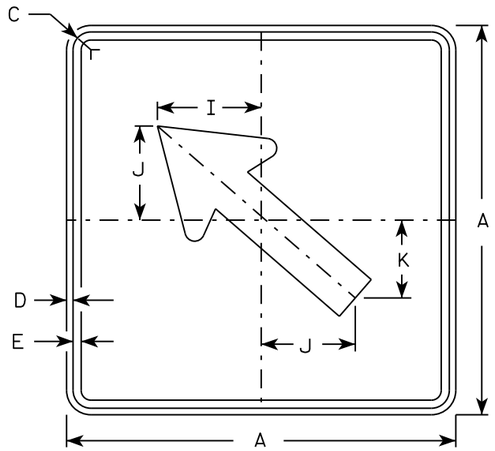
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



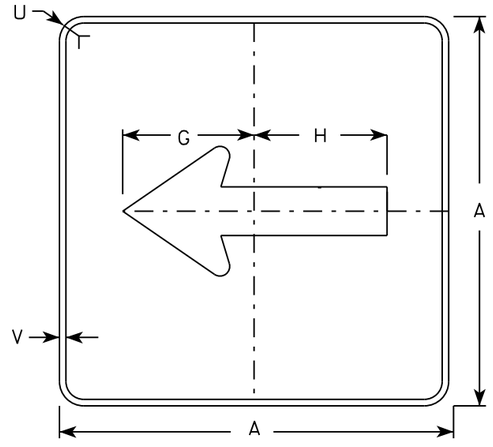
M6-1
MM6-1
MO6-1
MP6-1



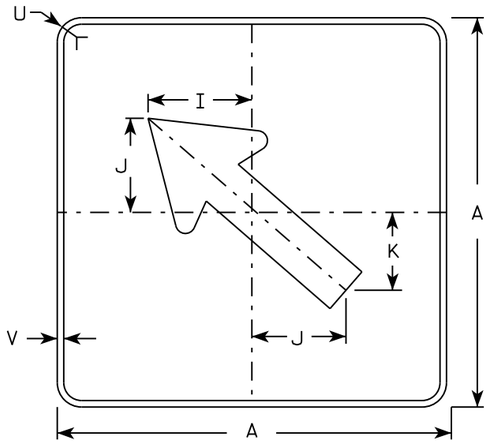
M6-2
MM6-2
MO6-2
MP6-2

NOTES

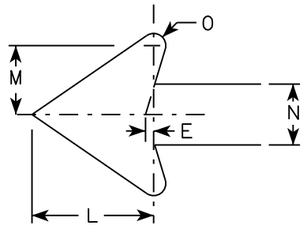
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   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
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



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

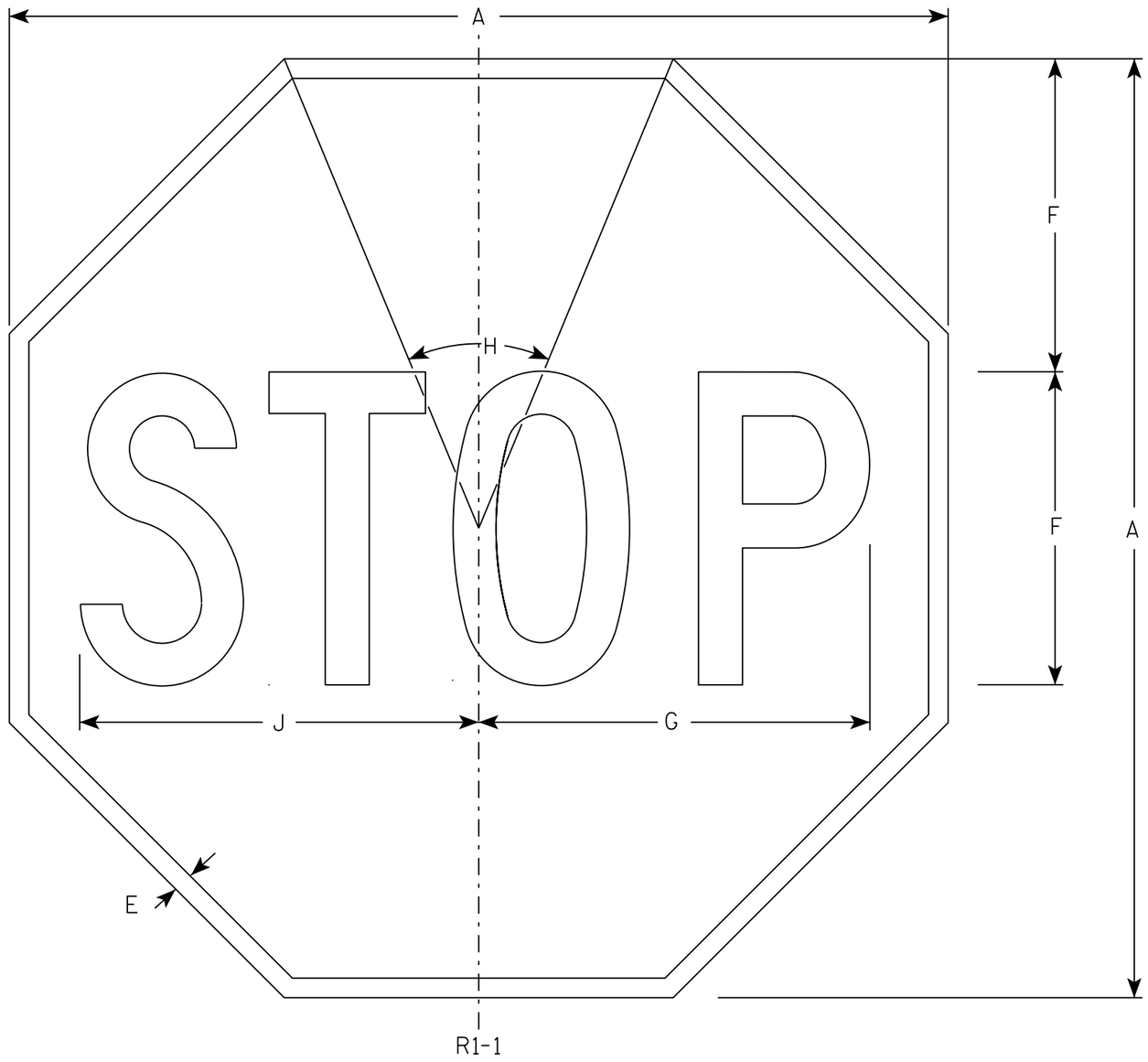
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 148 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



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	30				5/8	10	12 1/2	45°		12 3/4																	5.18
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

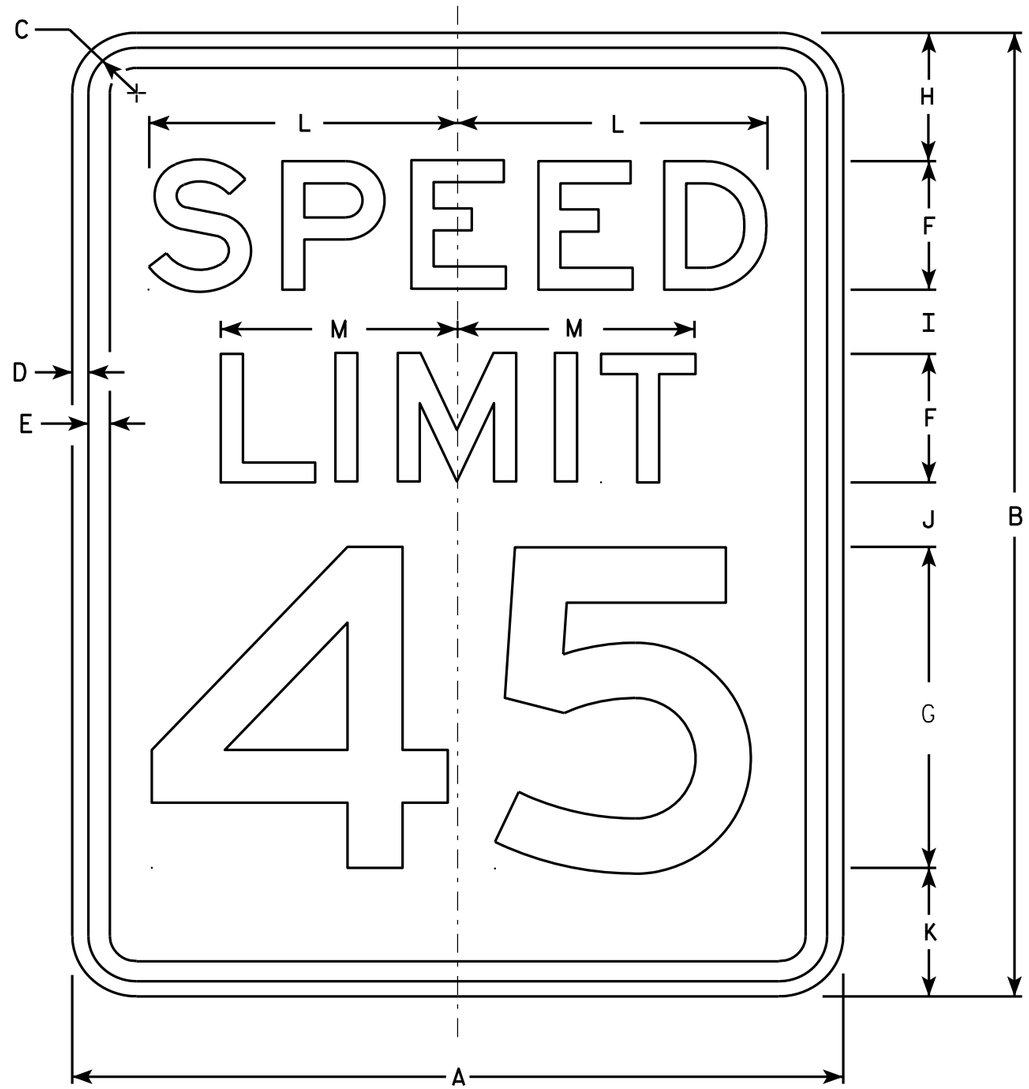
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 149	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

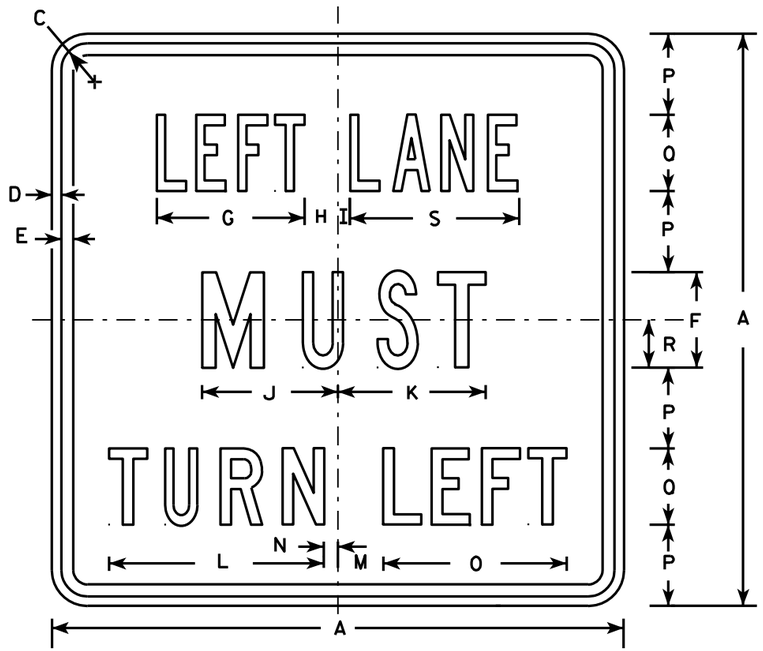
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

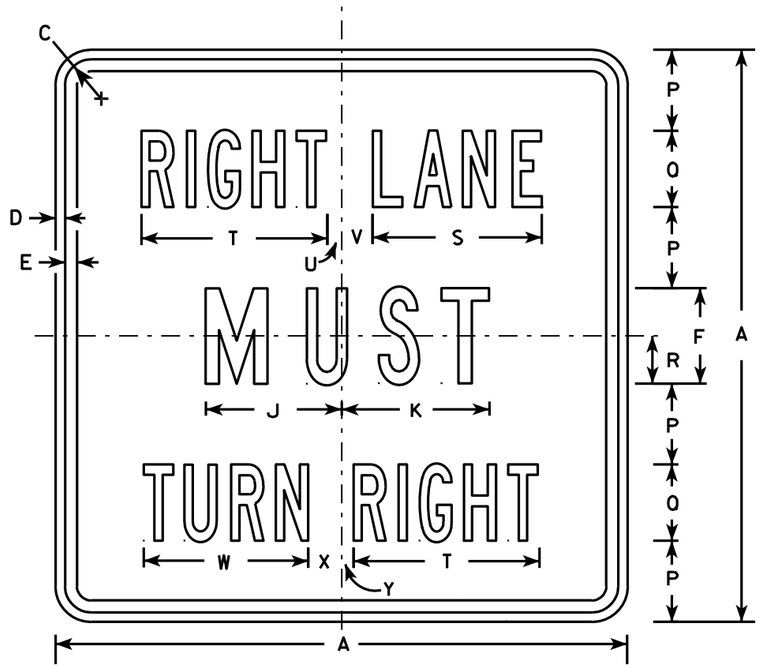
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 150 | 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

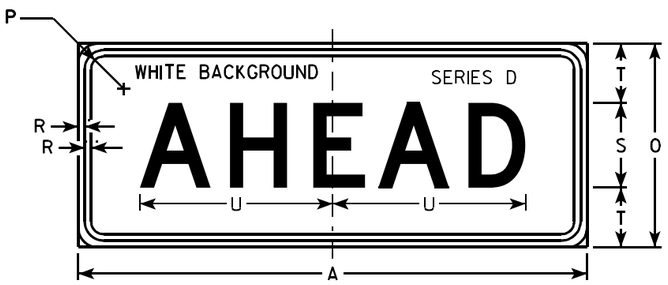
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 151 | E



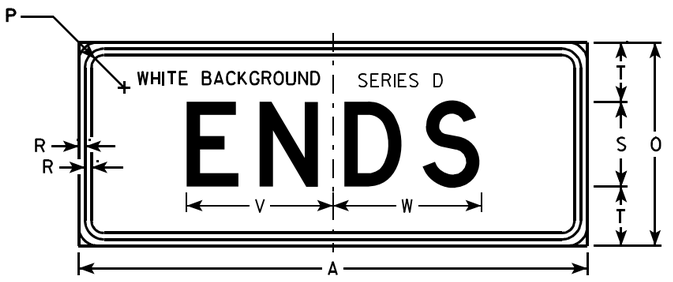
R3-17

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - AS SHOWN
   Message - BLACK
3. Message Series - C or as noted on the Signs.
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.



R3-17ap



R3-17bp

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	R3-17 Area sq. ft.	R3-17ap Area sq. ft.	R3-17bp Area sq. ft.
1																													
2S	30	24	1 1/8	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/8	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5
2M	30	24	1 1/8	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/8	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5
3																													
4																													
5																													

STANDARD SIGN
R3-17 & R3-17a&bp

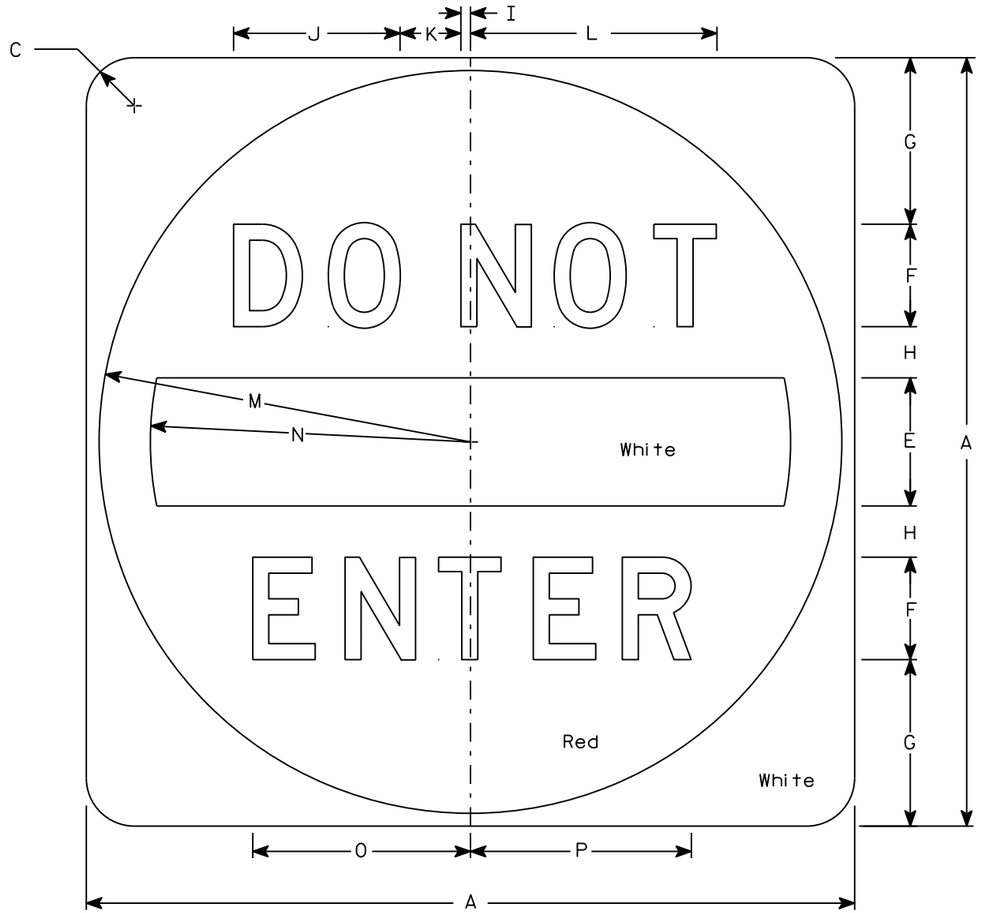
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/12/2011 PLATE NO. R3-17.2

PROJECT NO:

SHEET NO: 152 E



R5-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See detail
   Message - White
3. Message Series - D

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											6.25
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

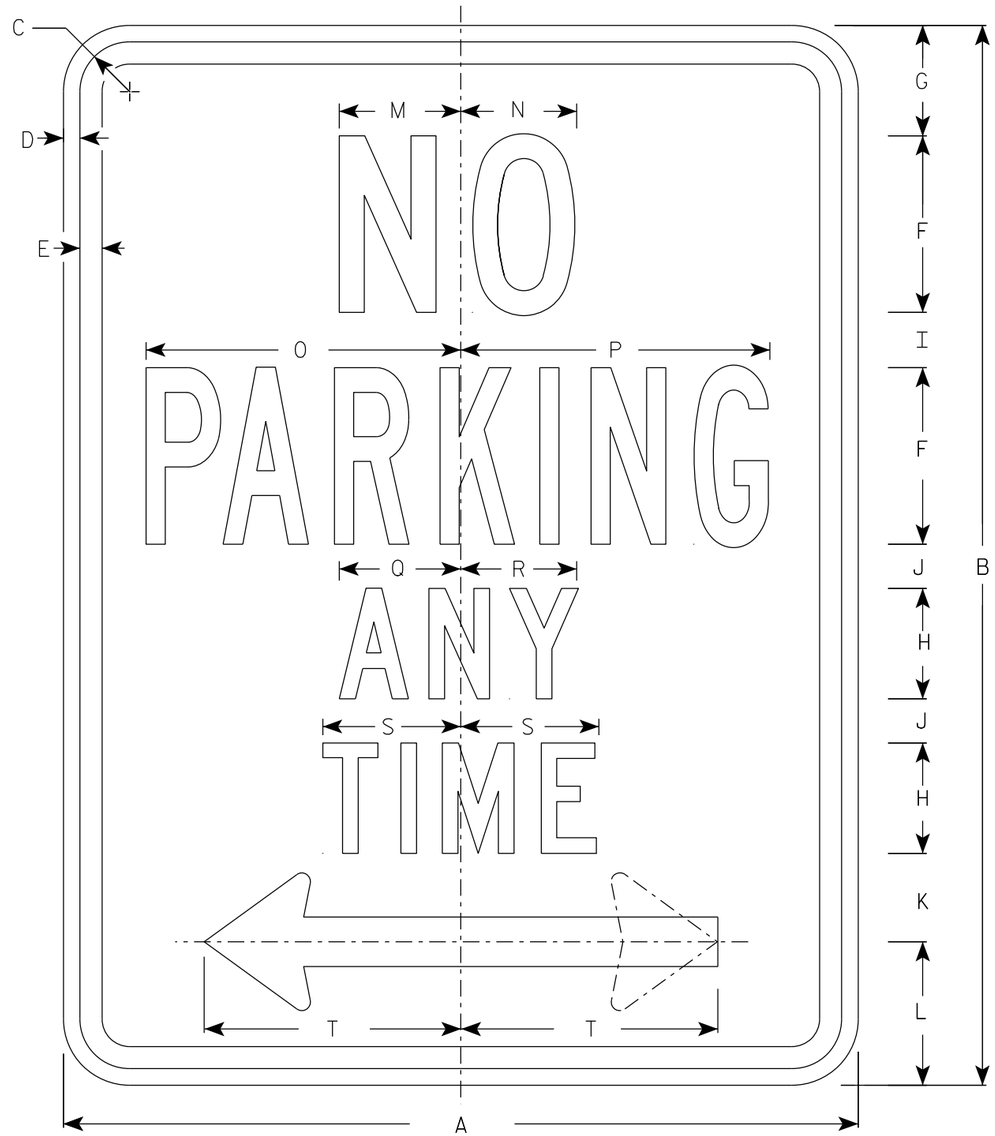
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

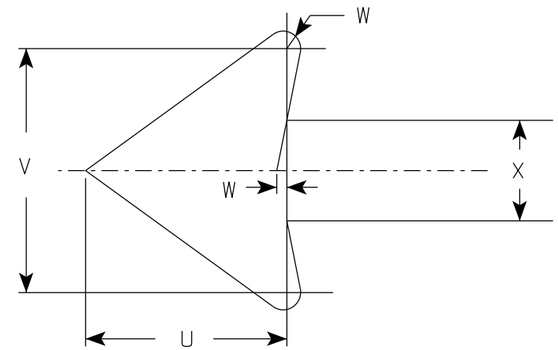
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 153 | E



R7-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Lines 1, 3 and 4 are series C, line 2 is series B.
5. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



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	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

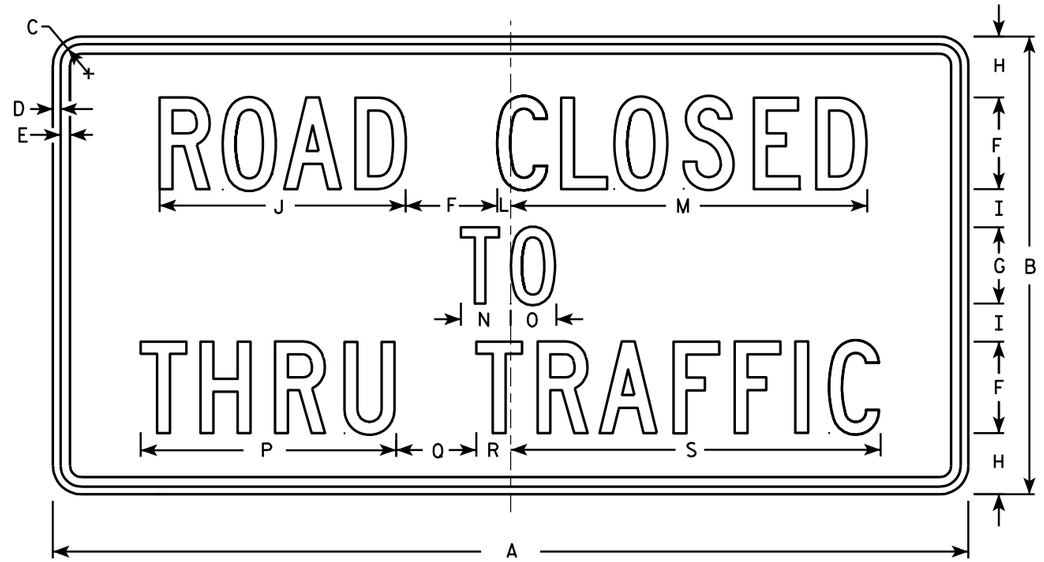
STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2021 PLATE NO. R7-1.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 154 E



R11-4

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	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

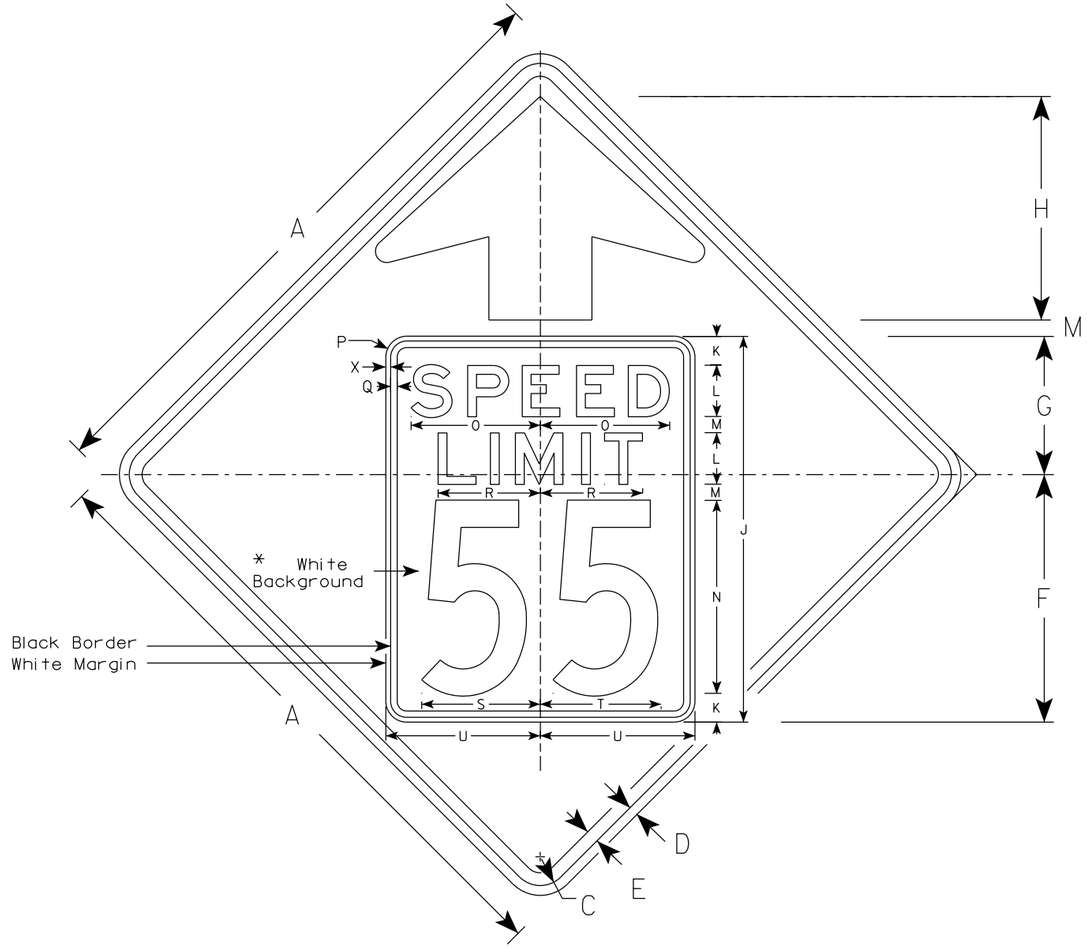
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 155 | E

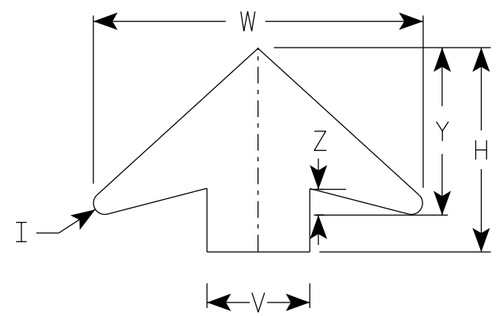


W3-5

NOTES

1. Sign is Type II - See Note 2 for Sheeting Type
2. Color: *
   Background - Yellow* (Type F Reflective)
   Message - Black
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background with black message (Type SH Reflective)



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	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2M	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
3	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W3-5

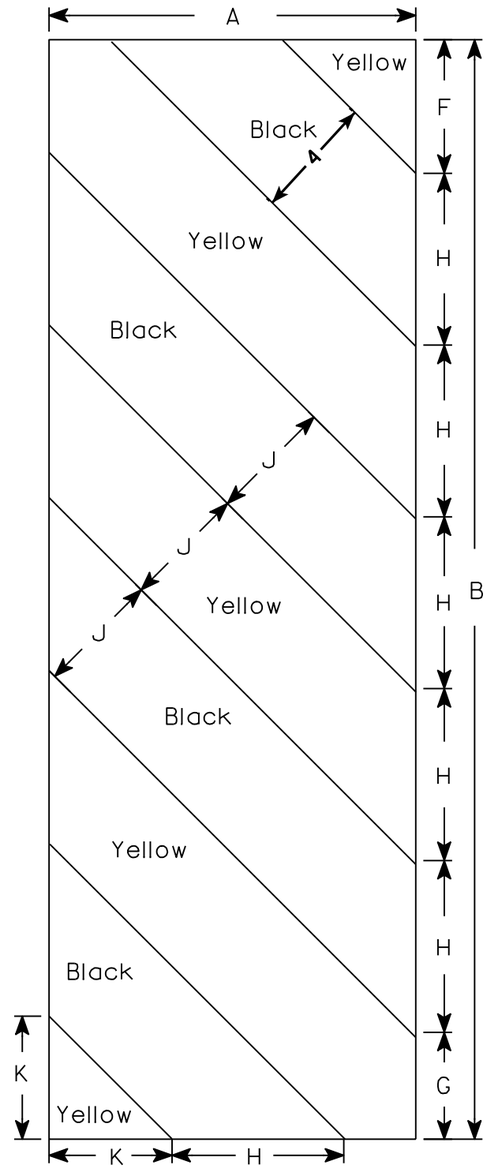
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew L Rauch
for State Traffic Engineer

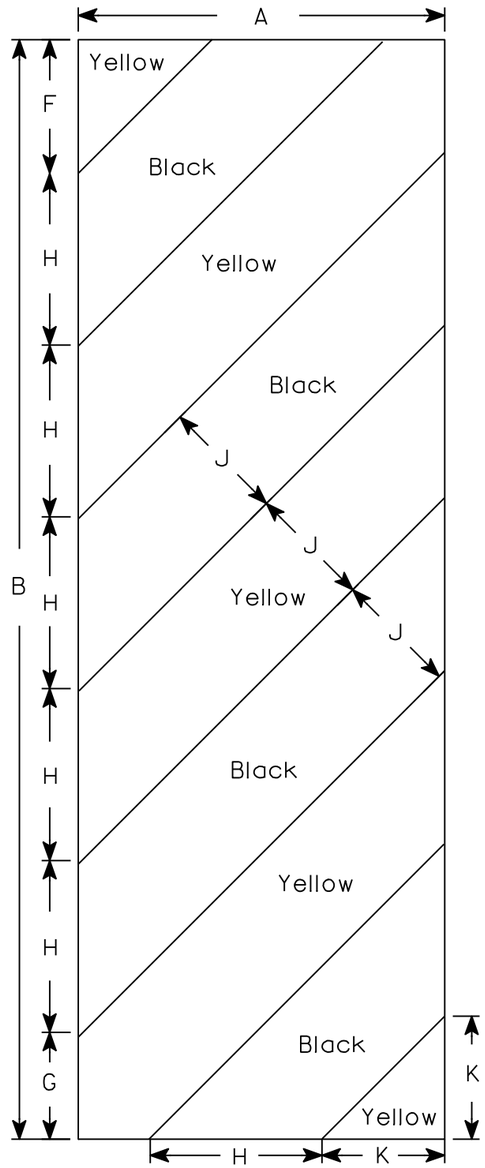
DATE 7/27/2020 PLATE NO. W3-5.6

PROJECT NO:

SHEET NO: 156 E



W5-52L



W5-52R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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. Alternate colors of stripes as shown.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W5-52.9

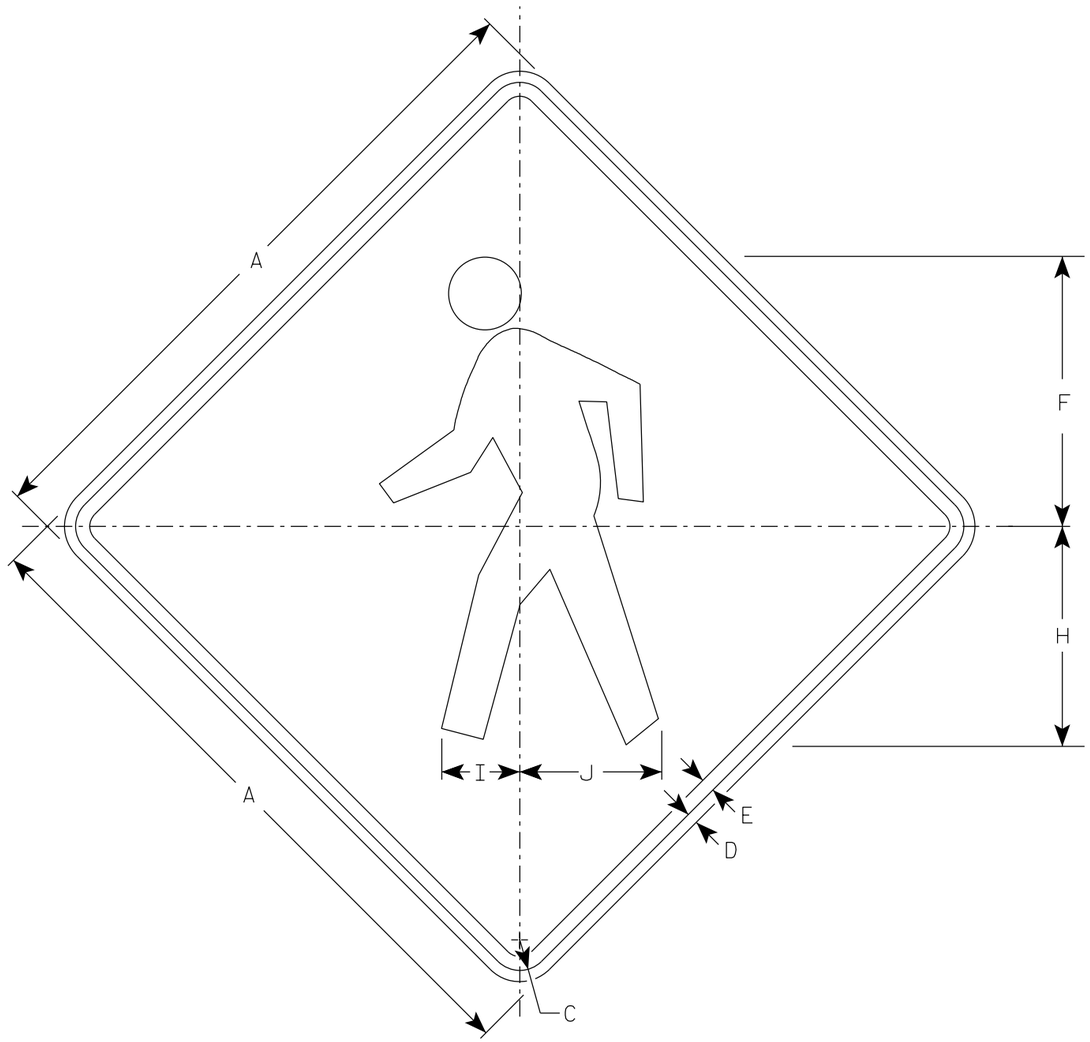
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 157 | E

7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W552.DGN PLOT DATE : 29-MAY-2012 13:03 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 4.961899:1.000000

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black



W11-2

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	24		1 1/8	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

STANDARD SIGN

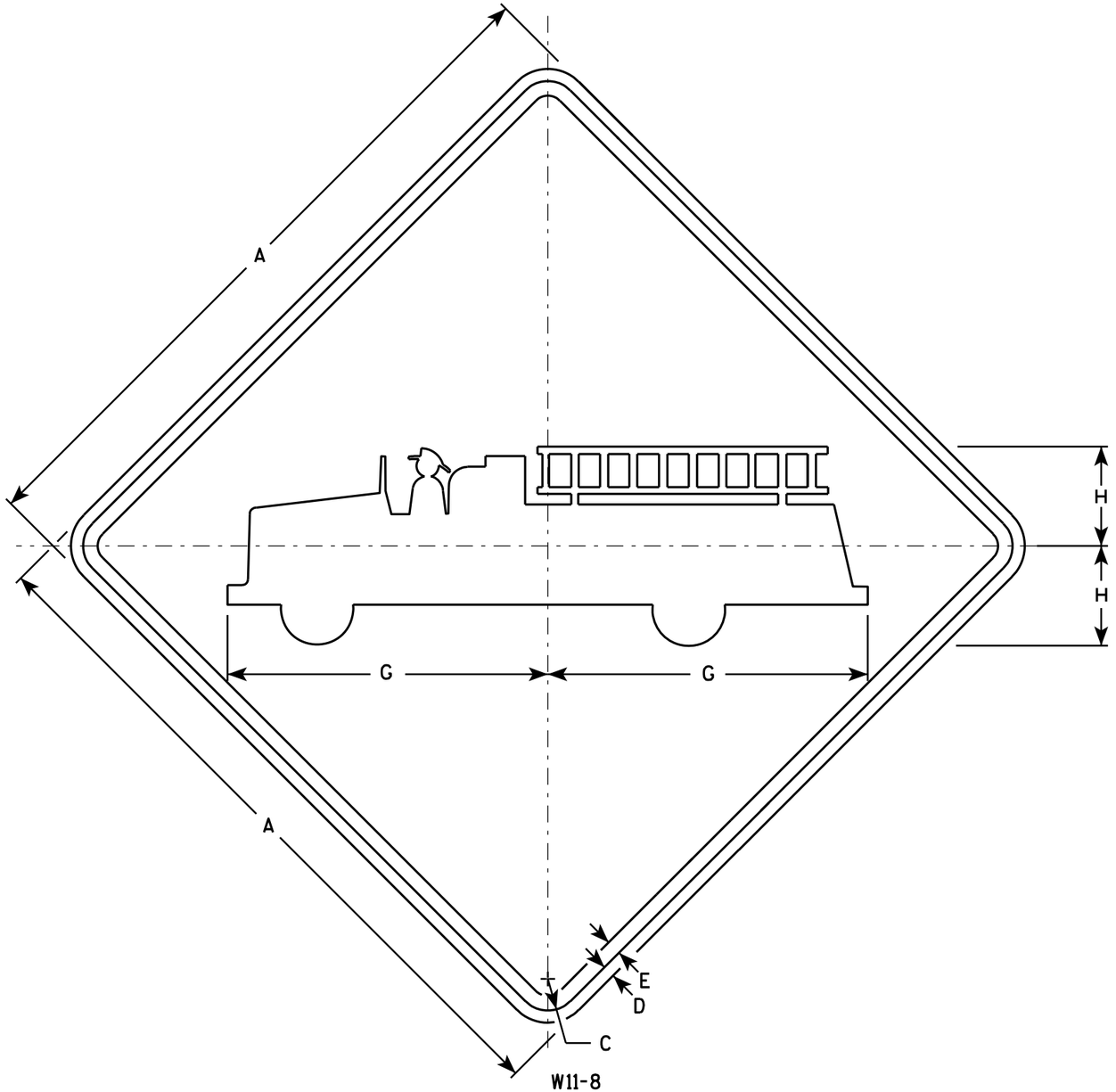
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/8/2020 PLATE NO. W11-2.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 158 | E



W11-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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.

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		11	3 3/8																			4.0
2S	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
2M	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
3	36		1 5/8	5/8	3/4		16 1/2	5 1/4																			9.0
4	48		2 1/4	3/4	1		22	7																			16.0
5																											

STANDARD SIGN
W11-8

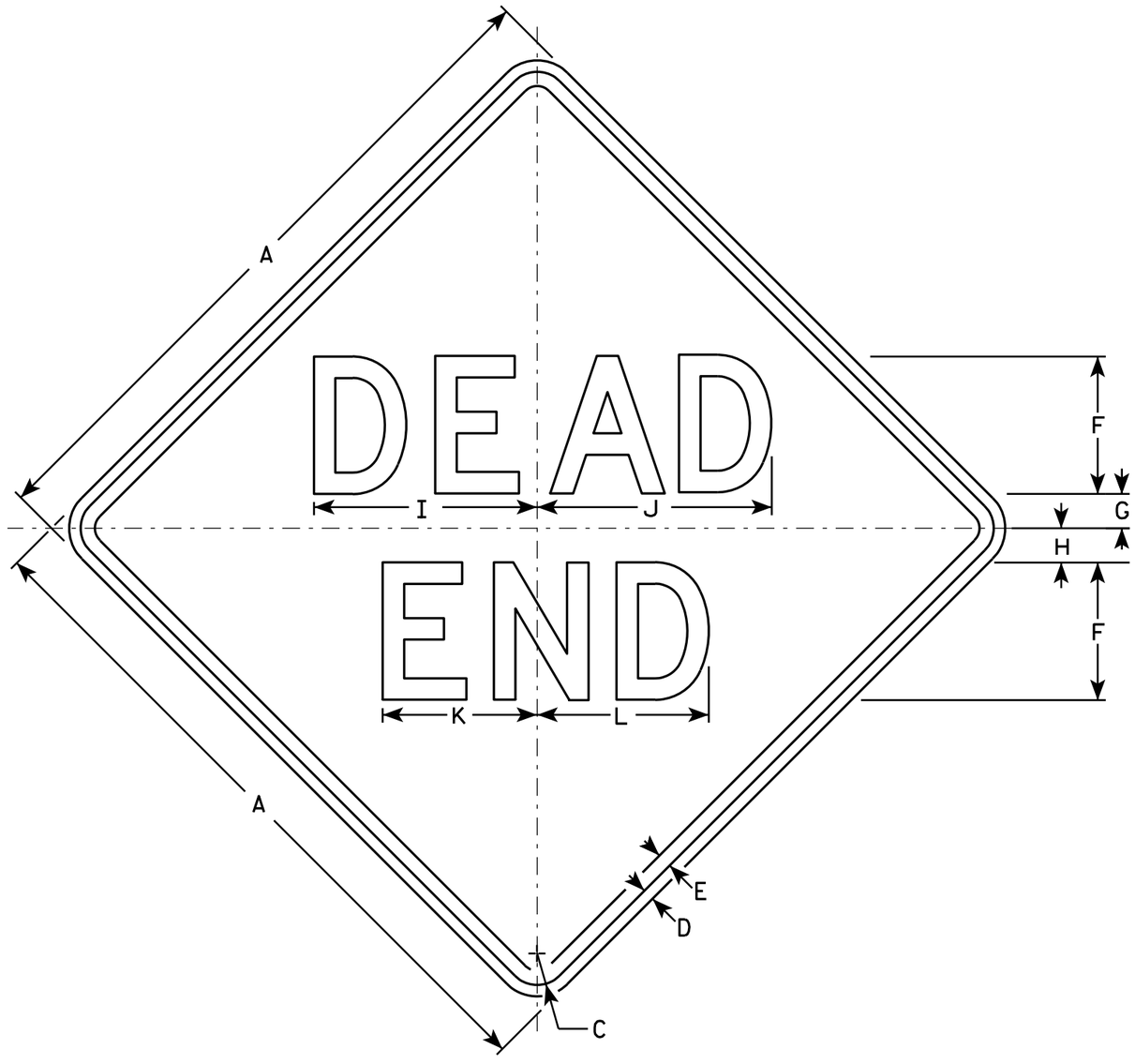
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W11-8.7

PROJECT NO:

SHEET NO: 159 E



W14-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	5	1	2	8 1/4	8 5/8	5 5/8	6 1/4															4.0
2S	30		1 3/8	1/2	5/8	6	1 1/2	2 1/2	9 3/4	10 1/4	6 3/4	7 1/2															6.25
2M	30		1 3/8	1/2	5/8	6	1 1/2	2 1/2	9 3/4	10 1/4	6 3/4	7 1/2															6.25
3	36		1 5/8	5/8	3/4	7	2	3	11 3/8	12	7 7/8	8 3/4															9.0
4																											
5																											

STANDARD SIGN
W14-1

WISCONSIN DEPT OF TRANSPORTATION

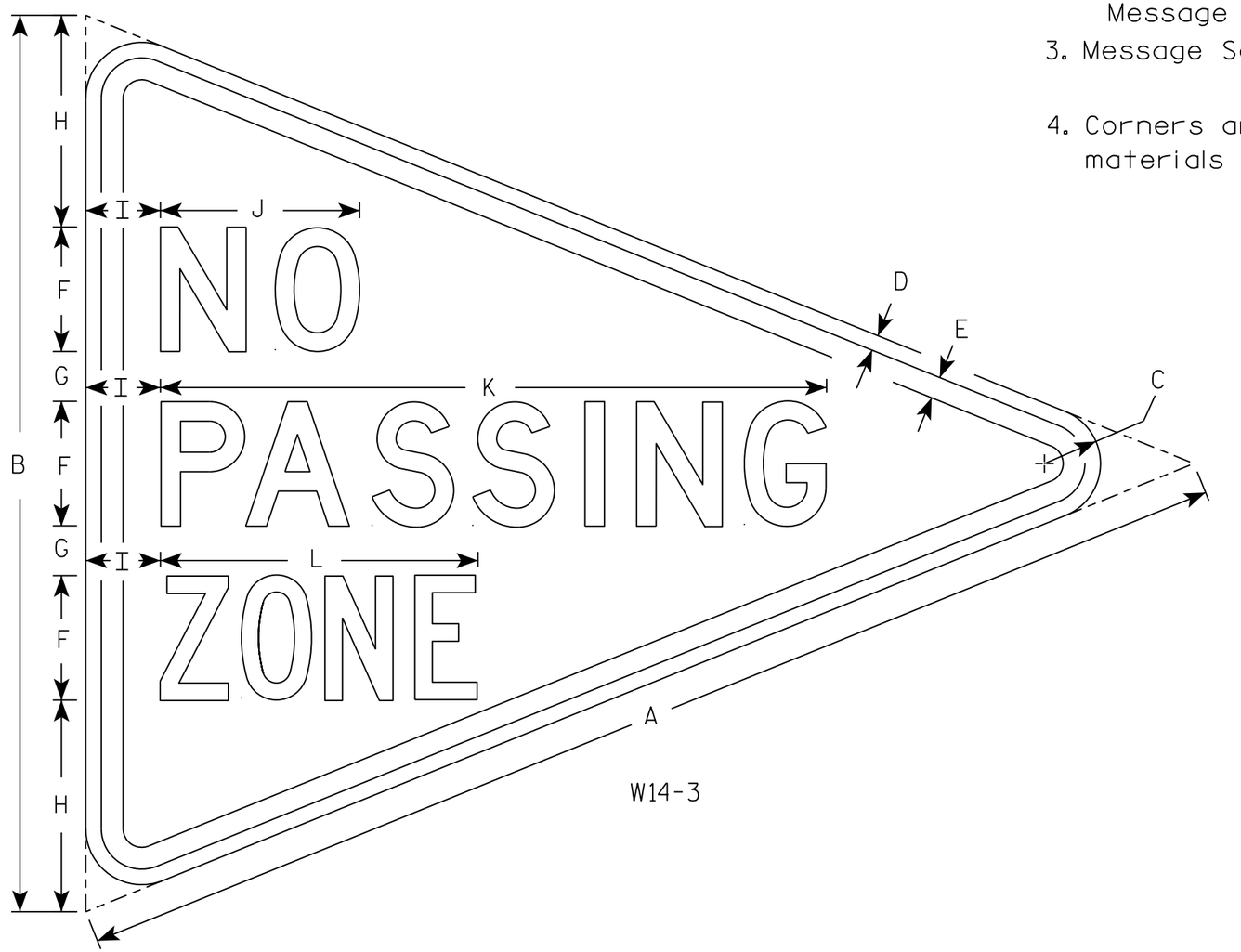
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W14-1.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 160	E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - Lines 1 and 2 are Series D.
   Line 3 is series C.
4. Corners and borders shall be rounded on all base materials for this sign.



W14-3

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	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															5.56
2M																											
3																											
4																											
5																											

STANDARD SIGN
W14-3

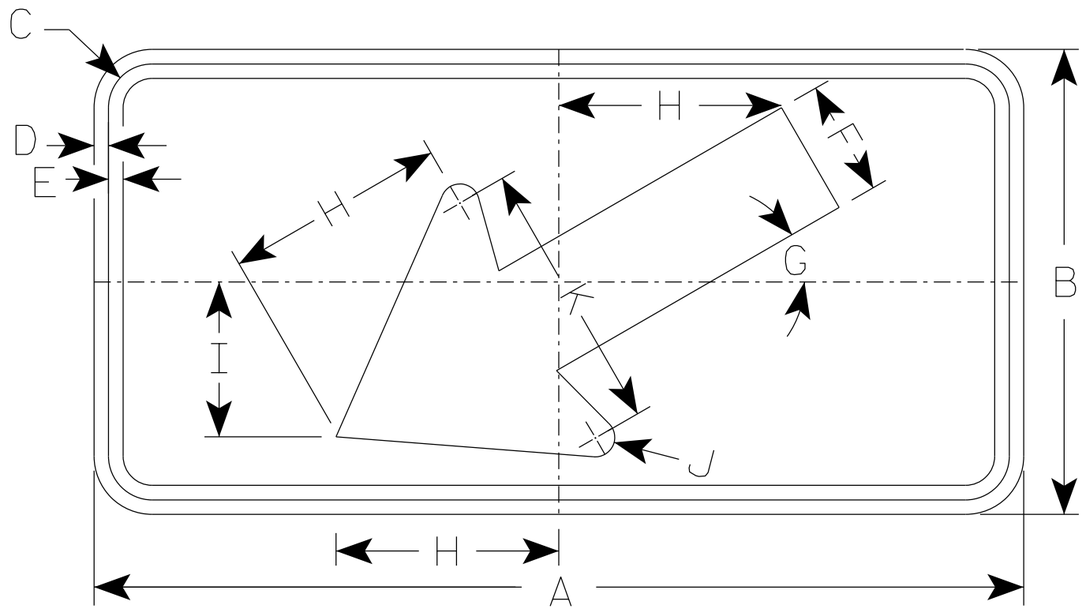
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W14-3.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 161 | E

7



W16-7L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W16-7R is the same as W16-7L except the arrow is reversed along the vertical centerline.

* For 36" x 36" Warning Signs, use 30" x 18" W16-7L signs.
* For 48" x 48" Warning Signs, use 48" x 24" W16-7L signs.

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	12	1 1/8	3/8	3/8	3	30°	5 3/4	4	1/2	7																2.0
* 2M	30	18	1 1/8	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
* 3	30	18	1 1/8	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
* 4	48	24	1 3/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
5																											

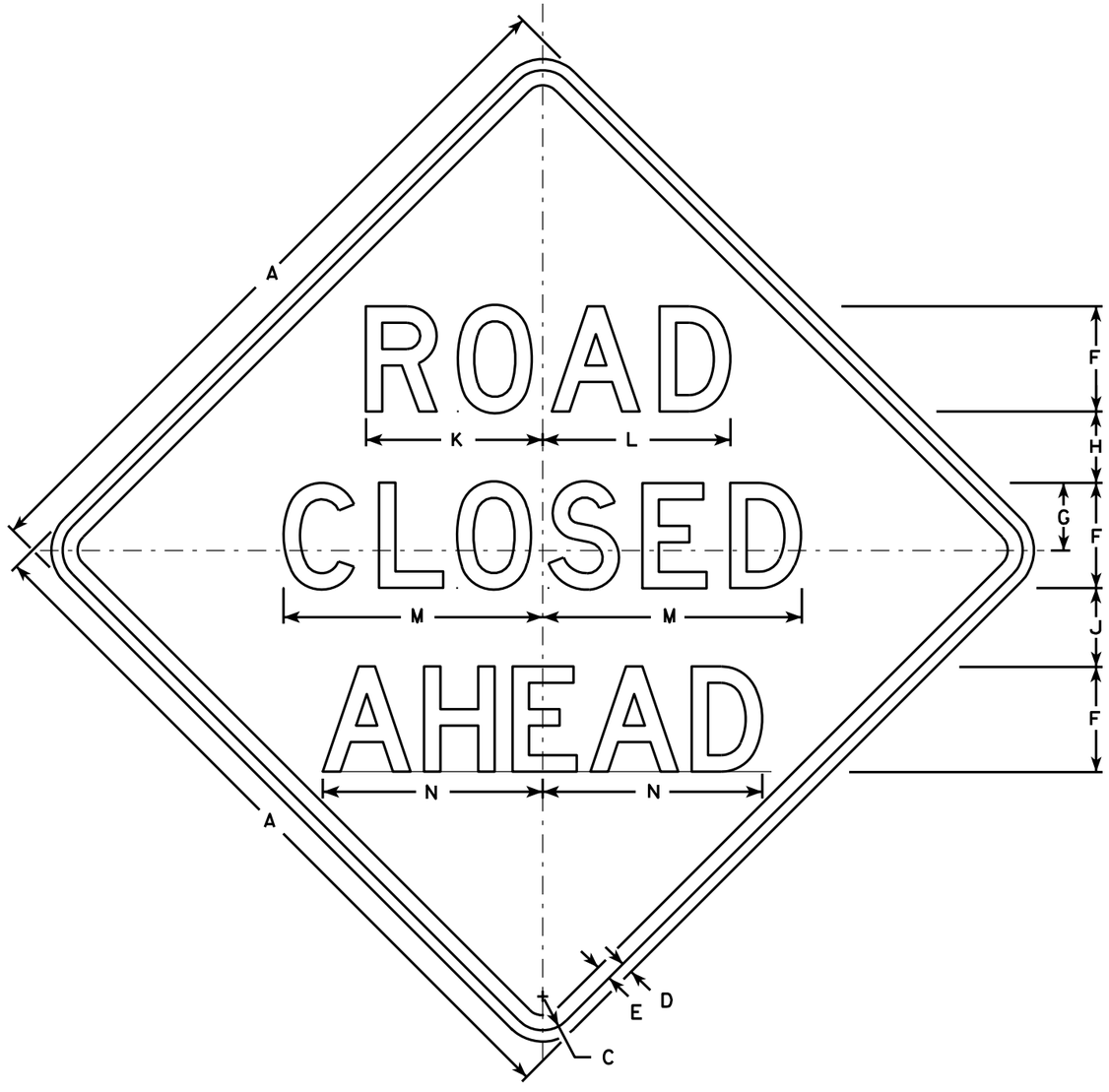
STANDARD SIGN
W16-7

WISCONSIN DEPT OF TRANSPORTATION

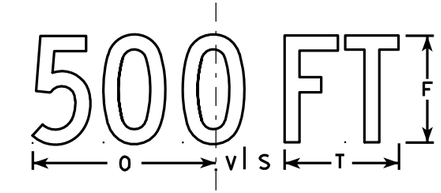
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/2021 PLATE NO. W16-7.8

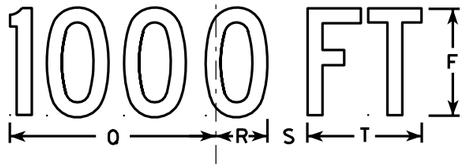
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 162	E



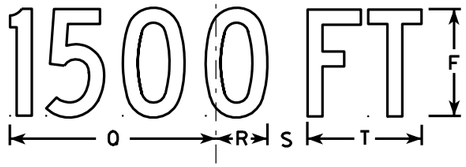
W20-3A



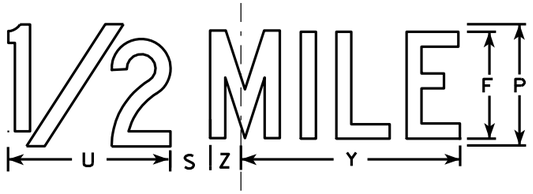
W20-3D



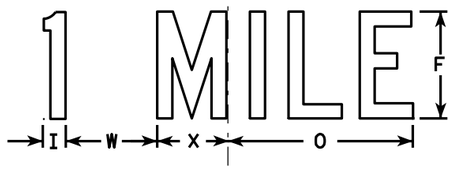
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

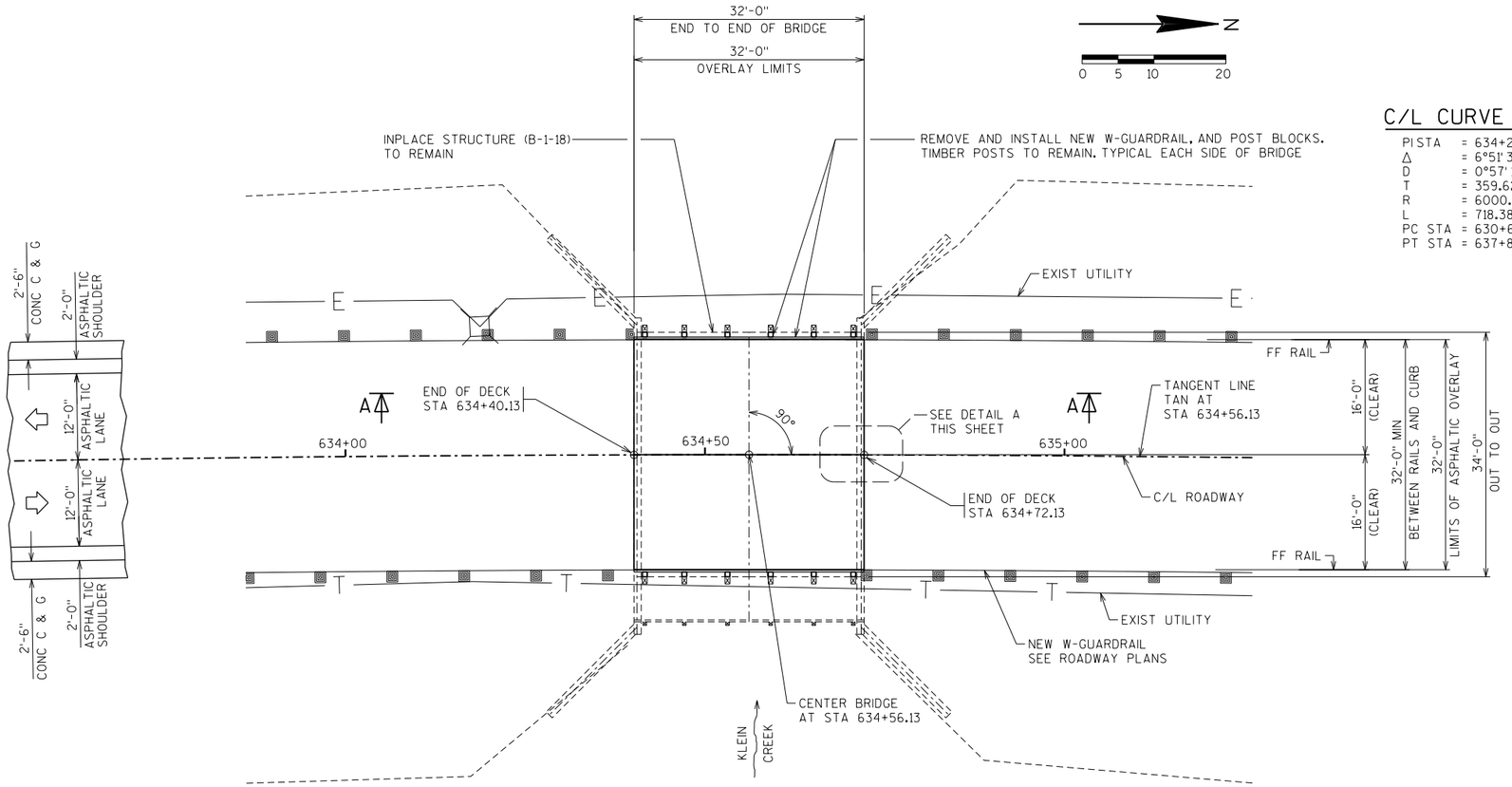
DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 163 | E

7

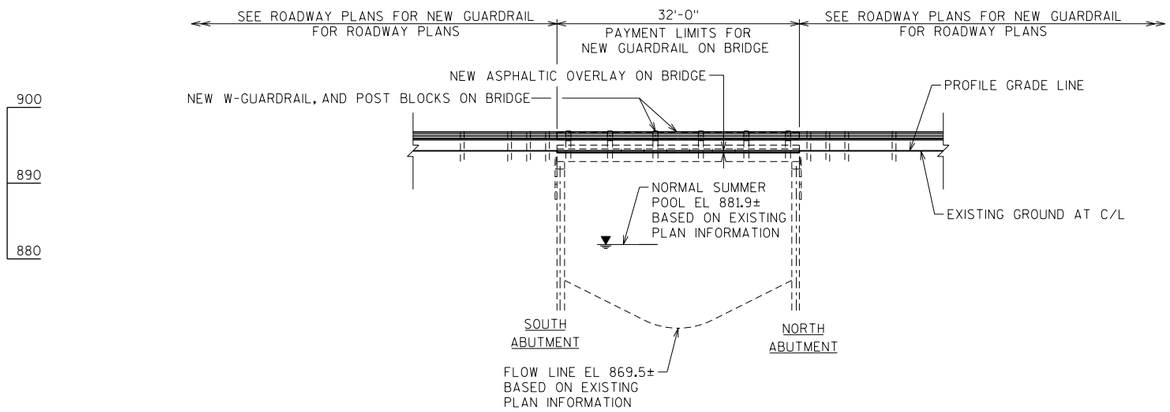
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WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER
6355-00-74



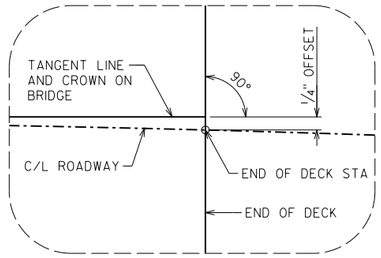
PLAN

ASPHALT OVERLAY - SINGLE-SPAN TIMBER DECK FLAT SLAB BRIDGE



ELEVATION SECTION A-A

LOOKING WEST



DETAIL A

NORTH END SHOWN, SOUTH END SIMILAR
BY OPPOSITE HAND

C/L CURVE DATA

PI STA	=	634+24.96
Δ	=	6°51'36.00" (RT)
D	=	0°57'17.75"
T	=	359.62'
R	=	6000.00'
L	=	718.38'
PC STA	=	630+65.34
PT STA	=	637+83.72

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS20
INVENTORY RATING= HS19
OPERATING RATING= HS25
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 150 KIPS

TRAFFIC DATA

ADT (2022)	=	1841
ADT (2042)	=	2025
DHV	=	219
DD	=	60/40 %
T	=	6 %
DESIGN SPEED	=	55 MPH

LIST OF DRAWINGS

1 GENERAL PLAN
2 CROSS SECTION AND QUANTITIES
3 RAILING DETAILS

WISCONSIN
CHRISTOPHER J. BLUM
E-33157
MADISON
WI
PROFESSIONAL ENGINEER

8/27/2021

SEH CONTACT: CHRIS BLUM, PE, 608.620.6192
WISDOT BRIDGE OFFICE CONTACT: AARON BONK, PE, 608.261.0261

NO.	DATE	REVISION	BY

SEH
SHORT ELLIOTT HENDRICKSON INC.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 11/12/21
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-1-18

CTH Z OVER KLEIN CREEK

COUNTY	TOWN ~~/CITY/VILLAGE~~
ADAMS	QUINCY

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
NCK		DLF	CJB

GENERAL PLAN

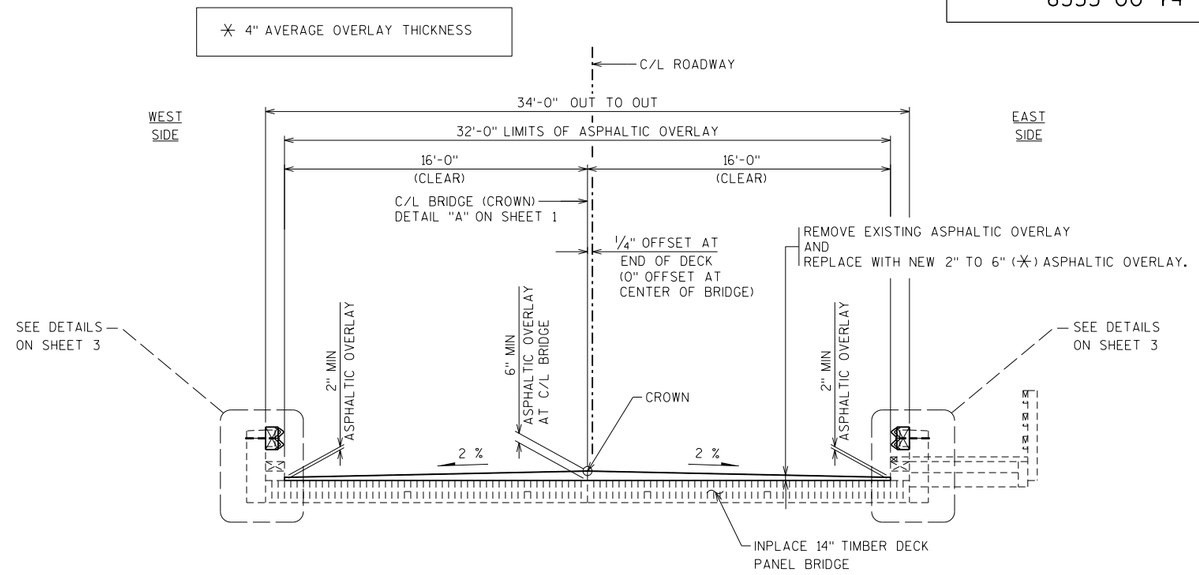
SHEET 1 OF 3
164

PLOT DATE: 8/27/2021 PLOT TIME: 8:35:02 AM
FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\20-Struct\bridge\b010801.dgn

8

8

STATE PROJECT NUMBER
6355-00-74



CROSS SECTION THRU BRIDGE

(LOOKING NORTH)

TOTAL ESTIMATED QUANTITIES - B-1-18

	BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
	204.0120	REMOVING ASPHALTIC SURFACE MILLING	SY	114
	455.0605	TACK COAT	GAL	14
	460.5223	HMA PAVEMENT 3 LT 58-28 S	TON	12.5
	460.5224	HMA PAVEMENT 4 LT 58-28 S	TON	12.5
(2)	614.0950	REPLACING GUARDRAIL POST AND BLOCKS	EACH	12
(1)	614.0951	REPLACING GUARDRAIL AND HARDWARE	LF	64

(1) INCLUDES REFLECTORS.

(2) ONLY PERTAINS TO REPLACING GUARDRAIL BLOCKS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

STATIONING MAY VARY BASED ON EXACT LOCATION OF BRIDGE TO PROPOSED ALIGNMENT.

INPLACE STRUCTURE B-1-18 TO REMAIN. EXISTING STRUCTURE IS A SINGLE SPAN TIMBER DECK FLAT SLAB BRIDGE 32'LONG BY 34'OVERALL WIDTH.

REFER TO ROADWAY DRAWINGS FOR EXISTING UTILITY LOCATIONS. CONTRACTOR TO VERIFY EXISTING UTILITY LOCATIONS.

ANY EXCAVATION REQUIRED TO COMPLETE THE OVERLAY AT THE ABUTMENTS TO BE CONSIDER INCIDENTAL TO BID ITEM "HMA PAVEMENT 3 LT 58-28 S".

EXISTING ASPHALTIC OVERLAY SHALL BE REMOVED FROM THE ENTIRE BRIDGE DECK UNDER THE BID ITEM "REMOVING ASPHALTIC SURFACE MILLING". THE CONTRACTOR SHALL DETERMINE THE THICKNESS OF THE ASPHALTIC SURFACE PRIOR TO MILLING. THE CONCTRACTOR SHALL USE CARE DURING REMOVAL OPERATIONS SUCH THAT THE TIMBER DECK AND HARDWARE SHALL REMAIN INTACT. CONTRACTOR TO VERIFY COMPLETENESS OF REMOVALS WITH THE FIELD ENGINEER.

PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM OVERLAY THICKNESS OF 2" PLACED ABOVE THE DECK SURFACE. EXPECTED AVERAGE OVERLAY THICKNES IS 4". IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN 1/2", CONTACT THE STRUCTURES DESIGN SECTION.

THE ASPHALT OVERLAY SHALL BE APPLIED IN TWO LIFTS, WITH THE LOWER LIFT BEING 3 LT 58-28 S AND THE UPPER LIFT BEING 4 LT 58-28 S. TACK COAT SHALL BE APPLIED TO THE TIMBER DECK SURFACE BEFORE THE LOWER LIFT IS PLACED AND ALSO APPLIED BETWEEN THE LOWER LAYER AND UPPER LAYER.

SEE ROADWAY PLAN FOR TRAFFIC CONTROL. COORDINATE THESE STRUCTURE PLANS WITH THE ROADWAY TRAFFIC CONTROL.

THE PLAN QUANTITY FOR THE BID ITEMS "HMA PAVEMENT 3 LT 58-28 S" AND "HMA PAVEMENT 4 LT 58-28 S" IS BASED ON THE AVERAGE OVERLAY THICKNESS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-1-18

DRAWN BY DLF | PLANS CK'D. CJB

CROSS SECTION AND QUANTITIES

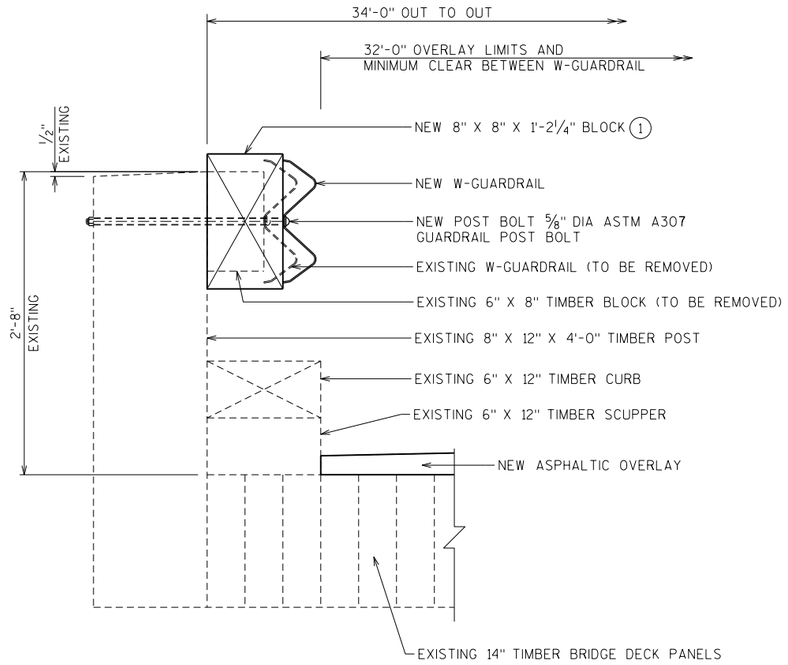
SHEET 2 OF 3

165

8

8

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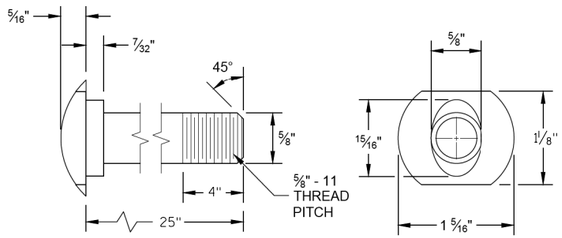


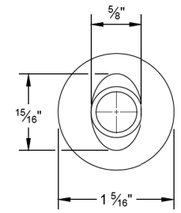
TYPICAL GUARDRAIL ATTACHMENT ON BRIDGE

(FROM SHEET 2)

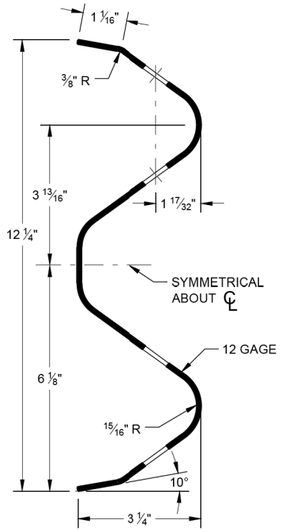
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3/16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

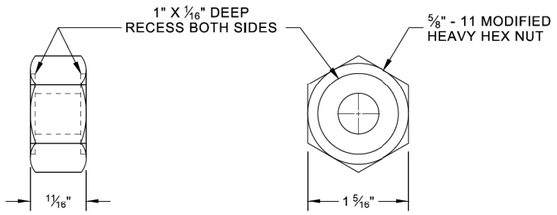




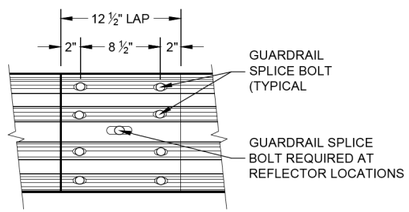
ALTERNATE BOLT HEAD



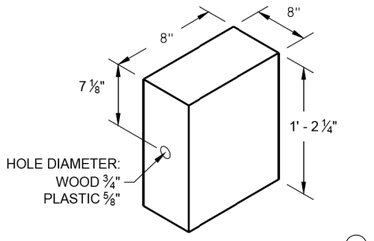
SECTION THRU W-BEAM RAIL



POST BOLT, SPLICE BOLT AND RECESS NUT



FRONT VIEW
MID-SPAN BEAM SPLICE



WOOD OR PLASTIC BLOCKOUT (1)

NOTES

SEE GENERAL NOTES ON SHEET 2.

SEE WISCONSIN STANDARD DETAILS:
SDD 14B42-07a, SDD 14B42-07b, SDD 14B42-07c, & SDD 14B42-07d
FOR ADDITIONAL INFORMATION FOR MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL .

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.

(1) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS.
DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-1-18

DRAWN BY DLF | PLANS CK'D. CJB

RAILING DETAILS

SHEET 3 OF 3
166

8

8

PLOT DATE: 8/27/2021 PLOT TIME: 8:35:06 AM
FILE NAME : X:\AE\A\ADAMC\5731N\5-final-dsgn\5i-drawings\20-Struct\bridge\b0108dl.dgn

CTH Z (includes sideroads) EXP Fact=30%

STATION	END AREA CUT (S.F.)	END AREA FILL (S.F.)	VOLUME CUT (C.Y.)	VOLUME FILL (C.Y.)	CUMULATIVE VOLUME CUT (C.Y.)	CUMULATIVE VOLUME FILL (C.Y.)	MASS HAUL (C.Y.)
481+00	34.3	3.9					
482+00	36.0	4.8	130.3	21.0	130	21	109
482+90	43.3	1.9	132.2	14.6	262	36	227
483+00	39.5	2.1	15.3	1.0	278	37	241
484+00	25.3	8.5	120.0	25.4	398	62	336
485+04	27.6	8.2	101.7	41.7	499	104	396
EDGEWOOD AVENUE			357.0	23.4	856	127	729
486+51	46.4	4.1	202.3	43.9	1059	171	888
487+00	39.9	18.0	77.9	25.9	1137	197	940
487+44	30.1	41.6	57.0	63.1	1194	260	934
488+00	28.9	28.4	61.2	94.4	1255	354	901
489+00	33.7	24.0	115.9	126.2	1371	480	890
490+00	45.8	16.3	147.2	97.1	1518	577	941
491+00	65.3	7.6	205.7	57.6	1724	635	1089
492+00	64.6	9.0	240.6	40.0	1964	675	1289
493+00	43.8	17.4	200.7	63.6	2165	739	1426
494+00	26.2	20.4	129.6	91.0	2295	830	1465
494+20	36.8	14.7	23.3	16.9	2318	847	1471
495+00	60.7	6.5	144.5	40.9	2462	887	1575
495+85	95.9	0.4	246.5	14.1	2709	902	1807
496+00	101.1	0.7	54.7	0.4	2764	902	1862
496+55	127.2	0.0	231.7	0.9	2995	903	2092
NEW ROAD			211.0	0.0	3206	903	2303
497+45	174.4	0.0	503.6	0.0	3710	903	2807
497+85	165.4	0.0	250.4	0.0	3960	903	3057
498+00	158.8	0.0	91.2	0.0	4052	903	3149
498+20	171.8	0.0	122.4	0.0	4174	903	3271
499+00	94.8	4.8	394.8	9.2	4569	912	3657
500+00	39.7	8.5	249.0	32.1	4818	944	3874
501+00	18.5	17.6	107.8	62.9	4926	1007	3918
501+90	67.1	0.0	142.7	38.1	5068	1045	4023
502+00	74.8	0.0	26.3	0.0	5094	1045	4049
502+15	75.7	0.0	41.8	0.0	5136	1045	4091
503+00	34.3	13.0	173.1	26.6	5309	1072	4238
504+00	21.5	23.4	103.3	87.6	5413	1159	4253
504+70	21.4	14.8	55.6	64.4	5468	1224	4245
505+00	19.8	30.3	22.9	32.6	5491	1256	4235
505+20	24.0	16.7	16.2	22.6	5507	1279	4228
506+00	45.9	17.6	103.6	66.1	5611	1345	4266
506+40	97.5	5.8	106.2	22.5	5717	1368	4350
507+00	137.4	0.7	261.0	9.4	5978	1377	4601
507+70	44.1	6.7	235.3	12.5	6214	1389	4824
508+00	5.3	31.4	27.4	27.5	6241	1417	4824
509+00	2.6	61.7	14.6	224.1	6256	1641	4614
510+00	5.0	39.3	14.1	243.1	6270	1884	4385
511+00	9.7	29.0	27.2	164.4	6297	2049	4248
511+57	13.1	9.1	24.1	52.3	6321	2101	4220
EAGLE DRIVE			154.0	0.0	6475	2101	4374
512+87	35.2	7.9	116.3	53.2	6591	2154	4437
513+00	32.5	8.6	16.3	5.2	6608	2159	4448
514+00	22.6	16.8	102.0	61.1	6710	2220	4489
515+00	17.3	24.3	73.9	98.9	6783	2319	4464
515+30	22.4	14.7	22.1	28.2	6806	2348	4458
516+00	20.6	22.6	55.7	62.9	6861	2410	4451
517+00	21.2	24.0	77.4	112.2	6939	2523	4416
518+00	34.0	12.0	102.2	86.7	7041	2609	4432
518+15	35.4	11.6	19.3	8.5	7060	2618	4442
519+00	28.2	16.8	100.1	58.1	7160	2676	4484
520+00	23.9	17.6	96.5	82.8	7257	2759	4498
521+00	21.1	16.8	83.3	82.8	7340	2842	4499
522+00	18.9	17.1	74.1	81.6	7414	2923	4491
523+00	18.9	18.1	70.0	84.7	7484	3008	4476
524+00	36.3	10.7	102.2	69.3	7586	3077	4509
524+74	55.2	4.8	125.4	27.6	7712	3105	4607
EAGLE COURT			115.0	5.2	7827	3110	4717
525+35	63.8	0.0	134.4	7.0	7961	3117	4844

CTH Z (includes sideroads) CONT'D EXP Fact=30%

STATION	END AREA CUT (S.F.)	END AREA FILL (S.F.)	VOLUME CUT (C.Y.)	VOLUME FILL (C.Y.)	CUMULATIVE VOLUME CUT (C.Y.)	CUMULATIVE VOLUME FILL (C.Y.)	MASS HAUL (C.Y.)
526+10	36.7	12.0	139.6	21.7	8101	3139	4962
527+00	17.2	23.5	89.8	76.9	8191	3216	4975
528+00	18.5	17.5	66.1	98.7	8257	3314	4942
528+20	19.0	12.7	13.9	14.5	8271	3329	4942
529+00	18.0	18.8	54.8	60.7	8325	3390	4936
530+00	23.7	13.3	77.2	77.3	8403	3467	4936
531+00	47.2	7.8	131.3	50.8	8534	3518	5016
531+10	70.2	3.6	21.7	2.7	8556	3520	5035
532+00	165.3	0.2	392.5	8.2	8948	3529	5420
533+00	103.5	0.6	497.8	1.9	9446	3531	5915
533+25	72.1	2.6	81.3	1.9	9527	3533	5995
534+00	16.4	17.1	122.9	35.6	9650	3568	6082
534+79	16.2	27.0	47.7	83.9	9698	3652	6046
EAGLE AVENUE			159.0	0.0	9857	3652	6205
536+09	49.1	13.3	157.2	126.1	10014	3778	6236
537+00	68.3	11.5	197.8	54.3	10212	3832	6380
538+00	79.7	13.3	274.1	59.7	10486	3892	6594
OUTFALL 1			328.0	0.0	10814	3892	6922
539+00	113.3	18.0	357.4	75.4	11171	3967	7204
540+00	51.9	19.0	305.9	89.1	11477	4057	7421
541+00	26.1	17.8	144.4	88.6	11622	4145	7477
542+00	27.2	14.8	98.7	78.5	11720	4224	7497
543+00	39.4	8.2	123.3	55.4	11844	4279	7565
544+00	25.6	8.5	120.4	40.2	11964	4319	7645
544+45	29.2	1.6	45.7	10.9	12010	4330	7680
545+00	16.9	13.4	47.0	19.9	12057	4350	7707
546+00	8.6	15.2	47.2	68.9	12104	4419	7685
547+00	64.1	1.4	134.6	40.0	12239	4459	7780
548+00	155.3	0.0	406.3	3.4	12645	4462	8183
549+00	204.0	0.0	665.4	0.0	13310	4462	8848
550+00	234.6	0.0	812.2	0.0	14123	4462	9660
551+00	220.4	0.0	842.6	0.0	14965	4462	10503
552+00	144.5	0.0	675.7	0.0	15641	4462	11179
553+00	56.8	0.4	372.8	1.0	16014	4463	11551
554+00	47.5	2.5	193.1	7.0	16207	4470	11737
554+15	52.9	1.5	27.9	1.4	16235	4472	11763
555+00	63.9	10.2	183.9	23.9	16419	4496	11923
556+00	40.3	8.8	193.0	45.7	16612	4541	12070
557+00	120.0	5.5	296.9	34.4	16908	4576	12333
OUTFALL 2			323.0	0.0	17231	4576	12656
557+50	153.4	4.3	253.1	11.8	17485	4587	12897
558+00	117.4	4.1	250.7	10.1	17735	4598	13138
559+00	69.1	3.8	345.4	19.0	18081	4617	13464
560+00	43.7	2.8	208.9	15.9	18290	4633	13657
561+00	25.5	3.1	128.1	14.2	18418	4647	13771
562+00	22.1	8.7	88.1	28.4	18506	4675	13831
563+00	32.8	10.4	101.7	46.0	18607	4721	13886
564+00	32.7	9.9	121.3	48.9	18729	4770	13959
565+00	35.6	6.5	126.5	39.5	18855	4809	14046
566+00	42.5	4.8	144.6	27.2	19000	4837	14163
566+40	52.4	4.2	70.3	8.7	19070	4845	14225
567+00	62.1	3.7	127.2	11.4	19197	4857	14341
568+00	81.9	2.4	266.7	14.7	19464	4871	14593
569+00	96.5	0.9	330.4	7.9	19794	4879	14915
570+00	175.9	0.0	504.4	2.2	20299	4882	15417
OUTFALL 3			292.0	6.5	20591	4888	15703
570+70	217.9	0.0	510.5	0.0	21101	4888	16213
571+00	193.3	0.0	228.4	0.0	21330	4888	16442
572+00	148.8	0.0	633.5	0.0	21963	4888	17075
573+00	117.9	0.0	493.9	0.0	22457	4888	17569
573+94	88.8	5.7	359.8	12.9	22817	4901	17916
DYKE DRIVE			262.0	0.0	23079	4901	18178
575+23	83.1	2.1	410.7	24.2	23490	4925	18565
576+00	62.0	10.2	206.9	22.8	23697	4948	18749
577+00	47.8	12.2	203.3	53.9	23900	5002	18898

CTH Z (includes sideroads) CONT'D — EXP Fact=30%

STATION	END AREA CUT (S.F.)	END AREA FILL (S.F.)	VOLUME CUT (C.Y.)	VOLUME FILL (C.Y.)	CUMULATIVE VOLUME CUT (C.Y.)	CUMULATIVE VOLUME FILL (C.Y.)	MASS HAUL (C.Y.)
578+00	31.4	14.8	146.7	65.0	24047	5067	18980
579+00	32.1	12.1	117.6	64.8	24164	5132	19033
580+00	38.2	10.3	130.2	53.9	24294	5186	19109
580+92	53.5	7.7	156.2	39.9	24451	5225	19225
581+00	65.5	7.4	17.6	2.9	24468	5228	19240
582+00	29.7	17.0	176.3	58.7	24645	5287	19357
583+00	6.4	48.0	66.9	156.5	24711	5444	19268
584+00	5.7	73.3	22.4	292.0	24734	5736	18998
584+96	61.6	3.3	119.6	177.0	24853	5913	18941
LAKEVIEW DRIVE			377.0	7.8	25230	5920	19310
586+26	196.5	0.0	621.4	10.3	25852	5931	19921
587+00	180.8	0.0	517.0	0.0	26369	5931	20438
587+30	176.9	0.0	198.7	0.0	26568	5931	20637
588+00	103.5	2.9	363.5	4.9	26931	5936	20995
588+30	86.7	1.7	105.7	3.3	27037	5939	21098
589+00	38.0	6.7	161.6	14.2	27198	5953	21245
590+00	20.8	20.6	108.9	65.7	27307	6019	21288
591+00	167.5	0.0	348.7	49.6	27656	6068	21588
591+50	231.3	0.0	369.3	0.0	28025	6068	21957
591+63	227.4	0.0	110.4	0.0	28136	6068	22067
592+00	185.4	0.0	282.8	0.0	28418	6068	22350
593+00	87.8	8.3	505.9	20.0	28924	6088	22836
594+00	58.8	13.0	271.5	51.3	29196	6140	23056
595+00	29.0	14.1	162.6	65.2	29358	6205	23154
596+00	13.2	22.5	78.1	88.1	29437	6293	23144
597+00	45.0	20.4	107.8	103.3	29544	6396	23148
597+30	67.3	19.6	62.4	28.9	29607	6425	23182
598+00	49.0	19.9	150.8	66.6	29758	6492	23266
599+00	49.9	18.3	183.1	92.0	29941	6584	23357
599+66	46.5	33.4	117.8	82.1	30059	6666	23393
PARK EXIT			59.0	24.7	30118	6691	23427
DYKE AVENUE			177.0	0.0	30295	6691	23604
600+47	19.2	29.3	98.6	122.3	30393	6813	23580
600+89	7.6	16.8	20.8	46.6	30414	6859	23554
601+42	9.3	18.2	16.6	44.7	30430	6904	23526
601+92	22.2	56.1	29.2	89.4	30460	6994	23466
PARK ENTRANCE			80.0	28.6	30540	7022	23518
602+40	35.2	14.3	51.0	81.4	30591	7103	23487
602+85	28.9	45.7	53.4	65.0	30644	7168	23476
603+00	19.9	26.5	13.6	26.1	30658	7195	23463
603+50	16.4	39.9	33.6	79.9	30691	7274	23417
604+00	23.2	23.9	36.7	76.8	30728	7351	23377
604+50	47.5	9.8	65.5	40.6	30793	7392	23402
605+00	119.9	2.1	155.0	14.3	30948	7406	23542
605+50	259.2	0.7	351.0	3.4	31299	7410	23890
606+00	137.0	0.1	366.9	1.0	31666	7411	24256
606+50	101.1	8.9	220.5	10.8	31887	7421	24465
607+00	103.0	9.4	189.0	22.0	32076	7443	24632
607+05	98.8	10.4	18.7	2.4	32094	7446	24649
607+50	76.7	19.3	146.3	32.2	32241	7478	24763
608+00	77.6	11.5	142.9	37.1	32384	7515	24869
608+50	80.9	7.3	146.8	22.6	32530	7538	24993
609+00	76.8	5.8	146.0	15.8	32676	7553	25123
609+15	79.3	0.2	43.4	2.2	32720	7556	25164
609+50	64.7	5.7	93.3	5.0	32813	7561	25252
610+00	78.7	3.3	132.8	10.8	32946	7571	25374
610+40	99.5	0.0	132.0	3.2	33078	7575	25503
610+70	94.9	5.6	108.0	4.0	33186	7579	25607
611+00	92.2	5.2	103.9	7.8	33290	7586	25703
611+35	102.1	4.3	125.9	8.0	33416	7594	25821
611+50	100.3	0.0	56.2	1.6	33472	7596	25876
612+00	98.0	0.8	183.6	1.0	33655	7597	26059
612+10	96.0	1.9	35.9	0.7	33691	7598	26094
612+80	116.1	0.2	274.9	3.5	33966	7601	26365
613+00	103.2	0.0	81.2	0.1	34048	7601	26446
613+50	95.2	0.9	183.7	1.1	34231	7602	26629

CTH Z (includes sideroads) CONT'D — EXP Fact=30%

STATION	END AREA CUT (S.F.)	END AREA FILL (S.F.)	VOLUME CUT (C.Y.)	CUMULATIVE VOLUME FILL (C.Y.)	CUMULATIVE VOLUME CUT (C.Y.)	CUMULATIVE VOLUME FILL (C.Y.)	MASS HAUL (C.Y.)
614+00	84.2	2.9	166.1	4.6	34397	7607	26791
614+30	96.7	1.2	100.5	3.0	34498	7610	26888
614+80	98.7	0.6	180.9	2.2	34679	7612	27067
615+00	85.7	2.4	68.3	1.4	34747	7613	27134
615+05	92.4	1.9	16.4	0.5	34763	7614	27150
615+55	113.0	0.0	189.3	2.3	34953	7616	27337
616+00	95.5	1.1	173.8	1.2	35127	7617	27509
616+62	129.5	0.1	258.3	1.8	35385	7619	27766
616+80	110.5	0.0	80.0	0.0	35465	7619	27846
617+00	101.0	0.3	78.3	0.1	35543	7619	27924
617+50	101.7	3.5	187.7	4.6	35731	7624	28107
618+00	147.3	7.7	230.6	13.5	35961	7637	28324
618+50	96.6	12.7	225.8	24.6	36187	7662	28525
619+00	67.0	12.0	151.5	29.7	36339	7692	28647
619+50	55.2	22.0	113.1	40.9	36452	7733	28719
619+90	69.8	5.4	92.6	26.4	36544	7759	28785
620+00	68.9	5.5	25.7	2.6	36570	7762	28808
620+50	73.1	2.7	131.5	9.9	36702	7772	28930
620+80	76.7	16.2	83.2	13.7	36785	7785	29000
621+00	75.2	6.4	56.3	10.9	36841	7796	29045
621+36	72.9	17.5	98.7	20.7	36940	7817	29123
DUCK CREEK DRIVE			313.0	0.0	37253	7817	29436
622+56	65.0	16.2	306.4	97.4	37559	7914	29645
623+00	65.7	17.8	106.5	36.0	37666	7950	29716
623+20	79.5	17.4	53.8	16.9	37720	7967	29752
623+50	68.9	16.2	82.4	24.3	37802	7991	29811
624+00	74.5	13.5	132.8	35.8	37935	8027	29908
624+50	81.0	10.8	144.0	29.3	38079	8056	30022
625+00	88.3	16.5	156.8	32.9	38236	8089	30146
625+15	98.6	14.4	51.9	11.2	38287	8100	30187
625+50	93.5	12.2	124.5	22.4	38412	8123	30289
626+00	98.7	0.6	178.0	15.4	38590	8138	30452
626+10	111.3	0.1	38.9	0.2	38629	8138	30490
626+85	126.4	1.3	330.1	2.5	38959	8141	30818
627+00	120.4	0.0	68.6	0.5	39028	8141	30886
627+50	107.5	6.7	211.0	8.1	39239	8149	31089
628+00	98.8	8.2	191.0	17.9	39430	8167	31262
628+50	86.3	7.9	171.4	19.4	39601	8187	31414
628+80	86.1	5.6	95.8	9.8	39697	8197	31500
629+00	76.9	8.0	60.4	6.5	39757	8203	31554
629+50	41.4	28.2	109.5	43.6	39867	8247	31620
630+00	35.7	22.3	71.4	60.8	39938	8307	31631
630+50	32.8	30.0	63.4	63.0	40001	8370	31631
631+00	32.8	34.6	60.7	77.8	40062	8448	31614
631+50	36.2	36.3	63.9	85.3	40126	8533	31593
632+00	46.0	31.4	76.1	81.5	40202	8615	31587
632+50	43.3	33.5	82.7	78.1	40285	8693	31592
633+00	40.0	37.0	77.1	84.9	40362	8778	31584
633+50	36.8	42.3	71.1	95.5	40433	8873	31560
634+00	32.3	57.5	64.0	120.1	40497	8994	31504
635+00	35.6	49.5	125.7	257.6	40623	9251	31372
635+50	36.0	32.1	66.3	98.2	40689	9349	31340
636+00	50.8	14.6	80.4	56.2	40769	9406	31364
636+58	80.5	3.6	141.0	25.4	40911	9431	31480
637+00	73.6	5.6	119.9	9.3	41030	9440	31590
637+76	80.3	1.8	216.6	13.5	41247	9454	31793
638+00	87.4	1.7	74.5	2.0	41322	9456	31866
638+65	109.5	0.0	237.0	2.7	41559	9458	32100
639+00	99.5	3.8	135.5	3.2	41694	9462	32232
639+25	116.1	0.0	99.8	2.3	41794	9464	32330
639+50	98.3	4.2	99.3	2.5	41893	9467	32427
640+00	100.8	4.6	184.4	10.6	42077	9477	32600
640+55	118.2	0.0	223.1	6.1	42300	9483	32817
641+00	108.8	6.9	189.2	7.5	42490	9491	32999
641+14	127.2	5.9	61.2	4.3	42551	9495	33056
641+50	115.8	8.2	162.0	12.2	42713	9507	33206
641+89	144.1	0.2	187.7	7.9	42901	9515	33385

CTH Z (includes sideroads) CONT'D EXP Fact=30%

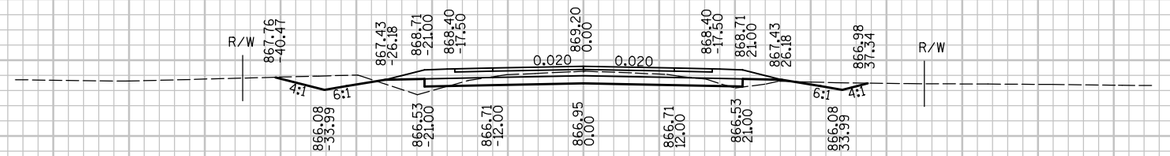
STATION	END AREA CUT (S.F.)	END AREA FILL (S.F.)	VOLUME CUT (C.Y.)	VOLUME FILL (C.Y.)	CUMULATIVE VOLUME CUT (C.Y.)	CUMULATIVE VOLUME FILL (C.Y.)	MASS HAUL (C.Y.)
642+00	139.5	0.6	57.8	0.2	42958	9515	33443
642+60	111.4	4.2	278.8	6.9	43237	9522	33715
643+00	94.6	6.7	152.6	10.5	43390	9533	33857
643+35	137.3	0.9	150.3	6.4	43540	9539	34001
643+75	110.5	0.6	183.6	1.5	43724	9541	34183
644+00	112.6	1.4	103.3	1.3	43827	9542	34285
644+50	106.4	1.7	202.8	3.8	44030	9546	34484
645+00	86.3	5.2	178.4	8.4	44208	9554	34654
645+50	66.0	4.6	141.1	11.8	44349	9566	34783
646+00	47.8	14.1	105.4	22.4	44454	9588	34866
646+50	33.3	27.0	75.1	49.4	44530	9638	34892
647+00	25.3	39.6	54.3	80.2	44584	9718	34866
647+55	23.0	14.6	49.2	71.8	44633	9790	34843
648+00	20.4	28.9	36.2	47.1	44669	9837	34832
648+50	40.9	5.7	56.8	41.6	44726	9878	34848
649+00	78.3	0.5	110.4	7.5	44836	9886	34950
649+10	86.9	2.1	30.6	0.6	44867	9886	34980
649+40	96.6	0.0	101.9	1.5	44969	9888	35081

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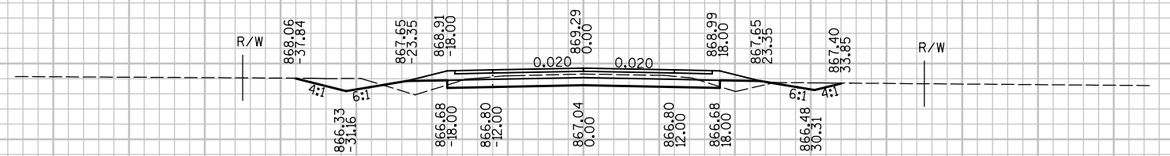
9

PROJECT NO:6355-00-74 | HWY:CTH Z | COUNTY:ADAMS | EARTHWORK TABULATIONS | SHEET 169 | E

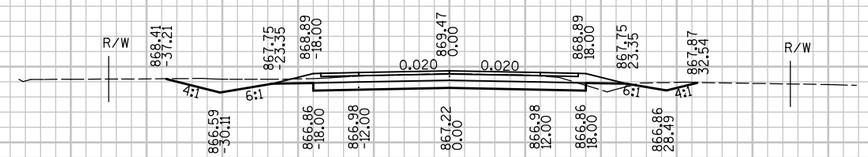
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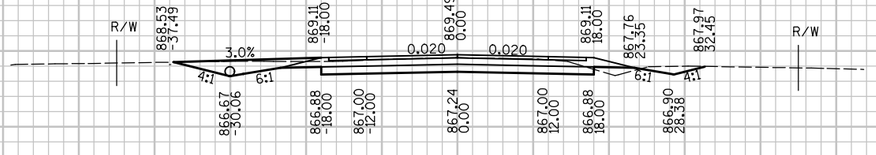
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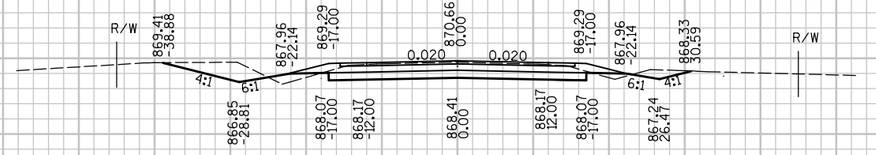
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483+00



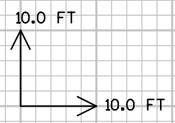
PE LT
482+90



482+00



481+00



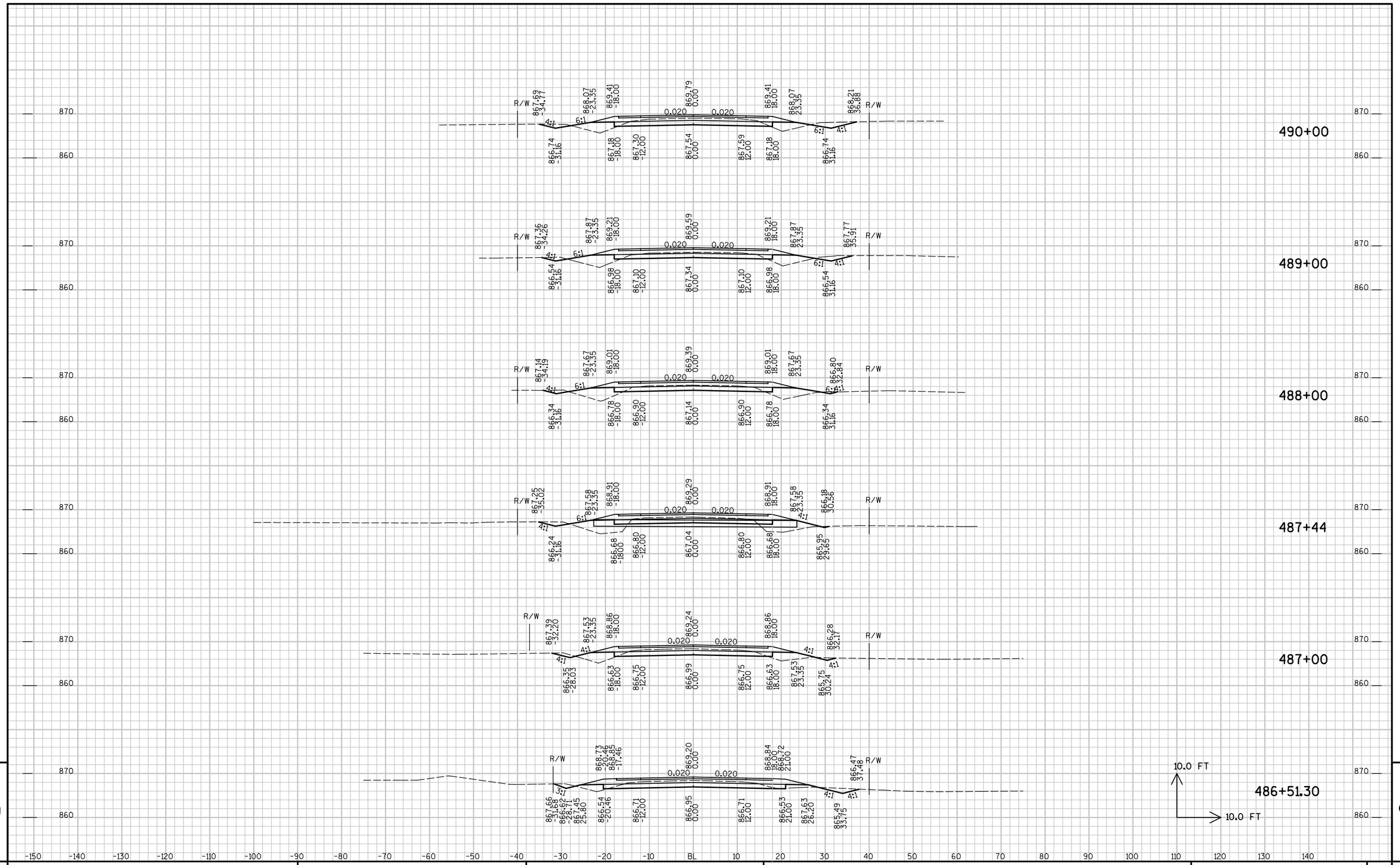
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9

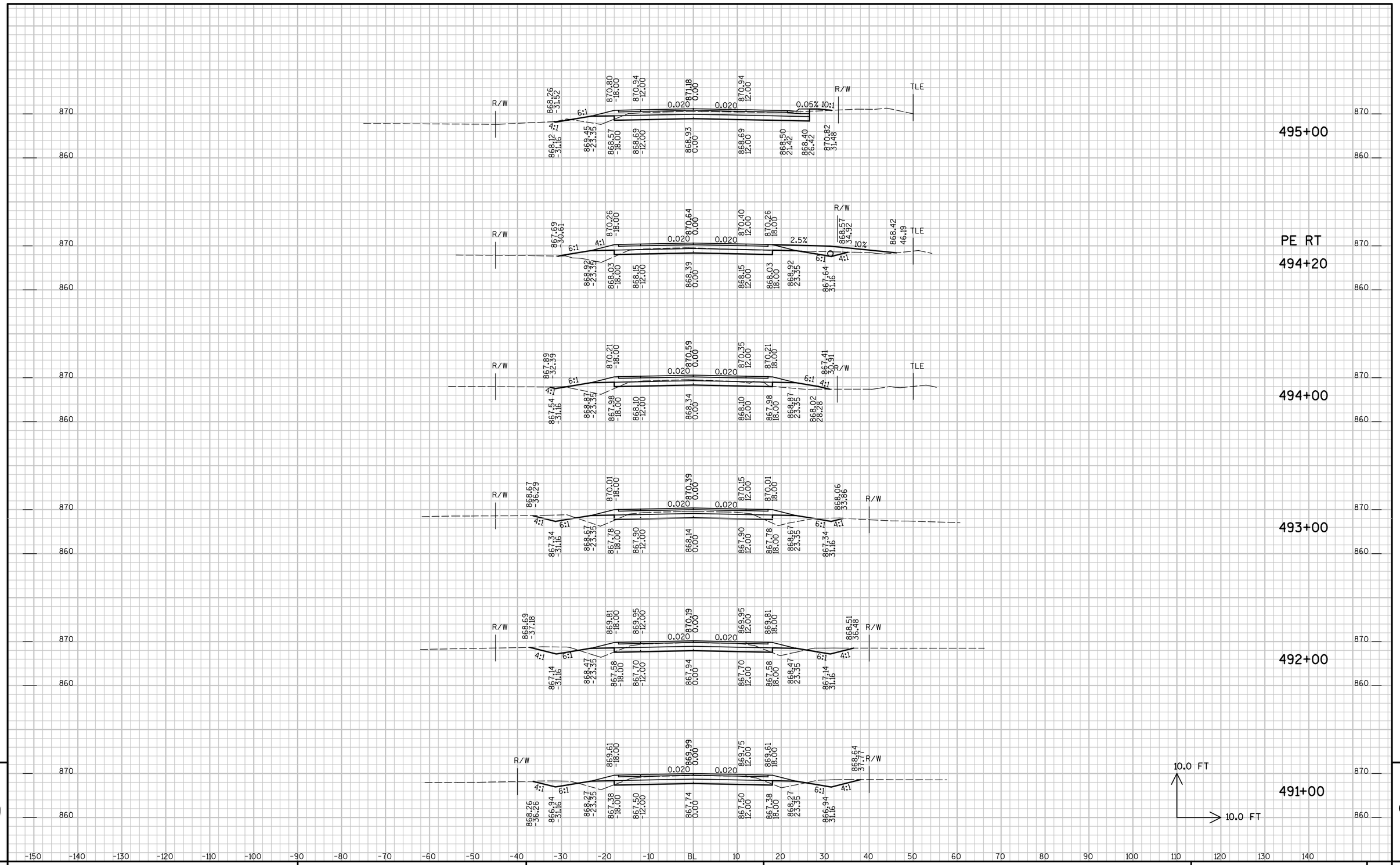
PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 170	E

FILE NAME : X:±AE±A±ADAMC±157311±5-final-dsgn±51-drawings±CAD±cad±XBCTHZ301-500.dgn PLOT TIME : 7:52:43 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



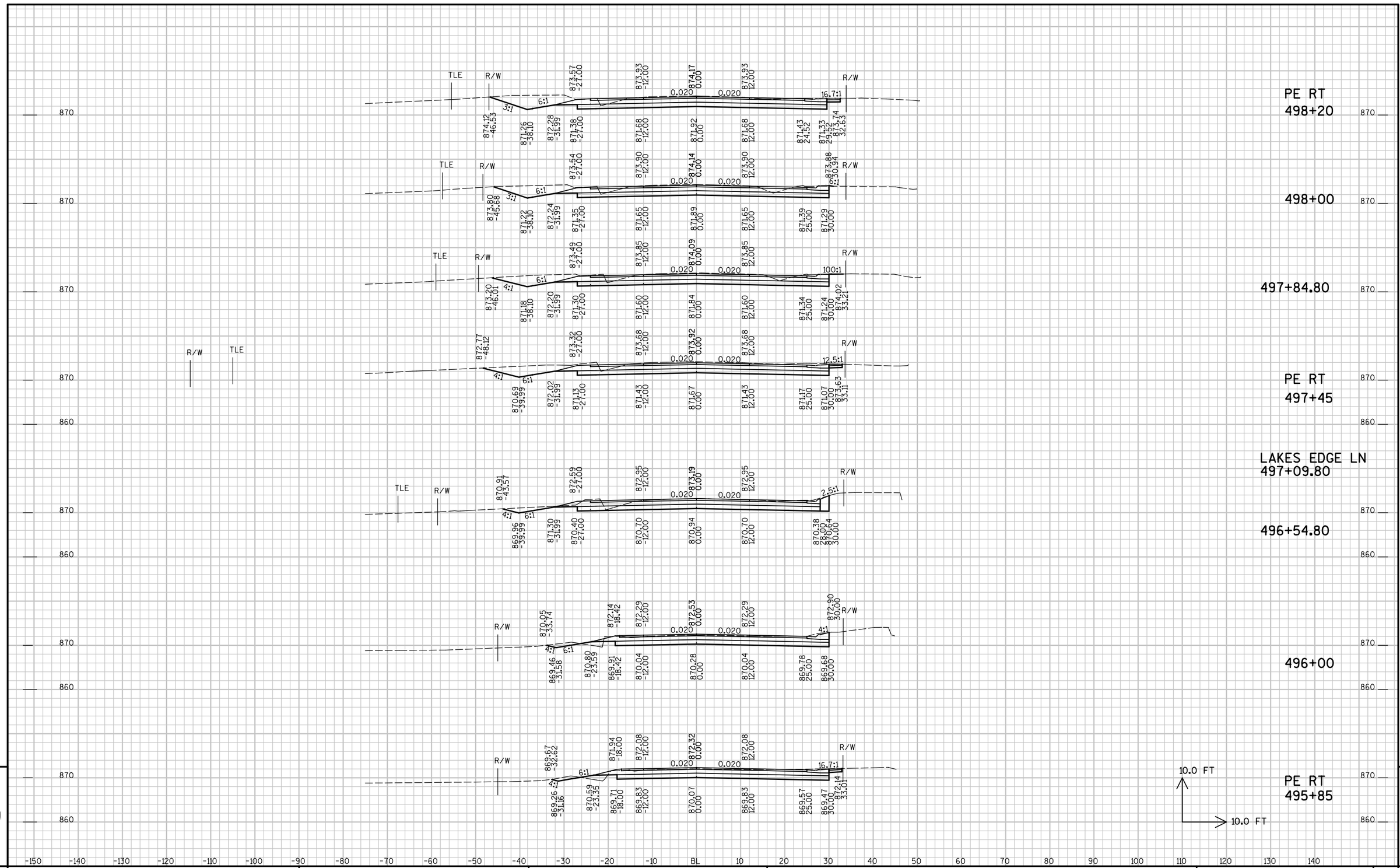
PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 171	E

FILE NAME : X:±AE±A±ADAMC±157311±5-final-dsgn±51-drawings±CAD±cad±XBCTHZ301-500.dgn PLOT TIME : 7:52:43 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



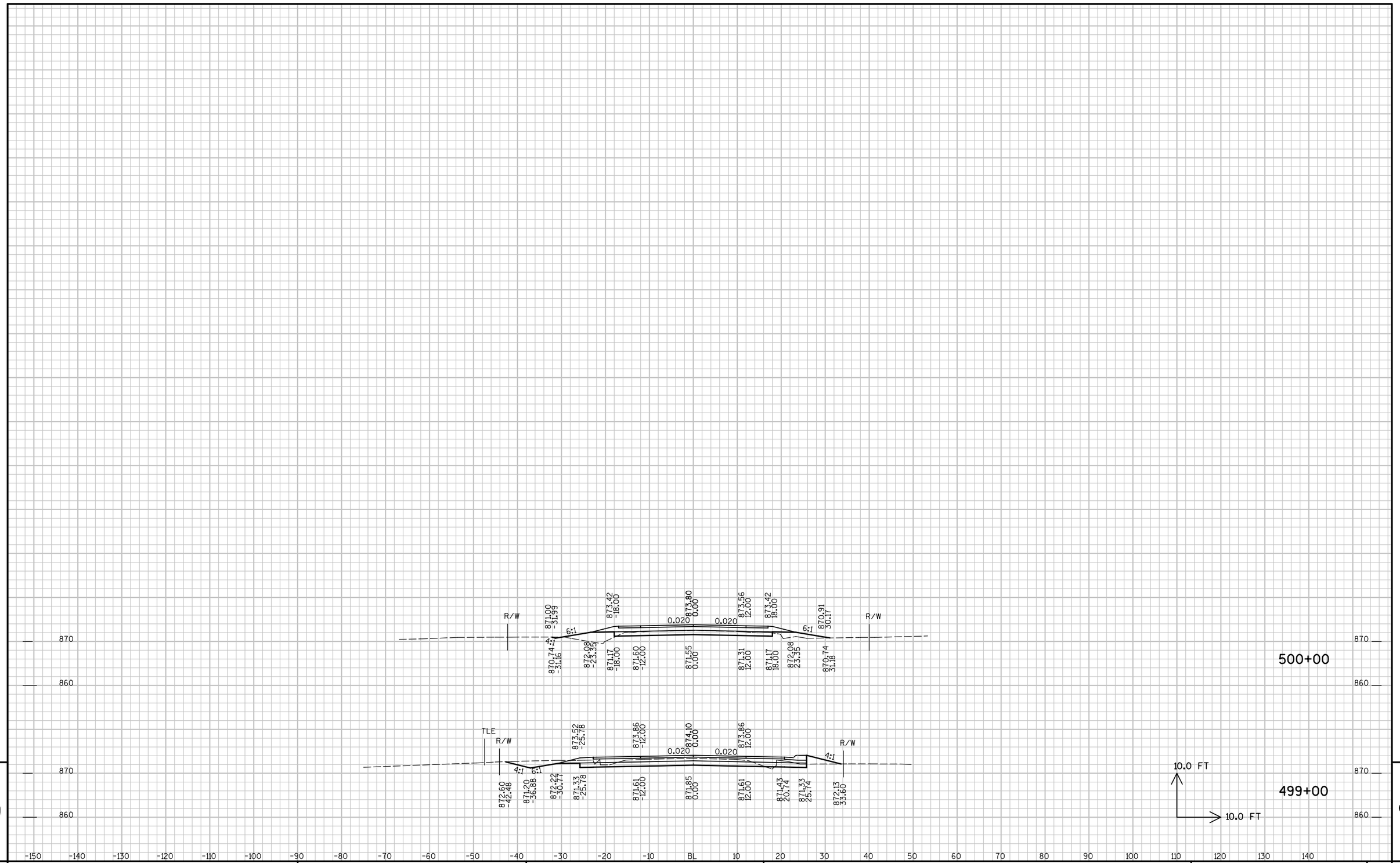
PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 172	E

FILE NAME : X:±AE±A±ADAMC±157311±5-final-dsgn±51-drawings±CAD±cad±XBCTHZ301-500.dgn PLOT TIME : 7:52:44 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 173

FILE NAME : X:±AE±A±ADAMC±157311±5-final-dsgn±51-drawings±CAD±cad±XBCTHZ301-500.dgn PLOT TIME : 7:52:44 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

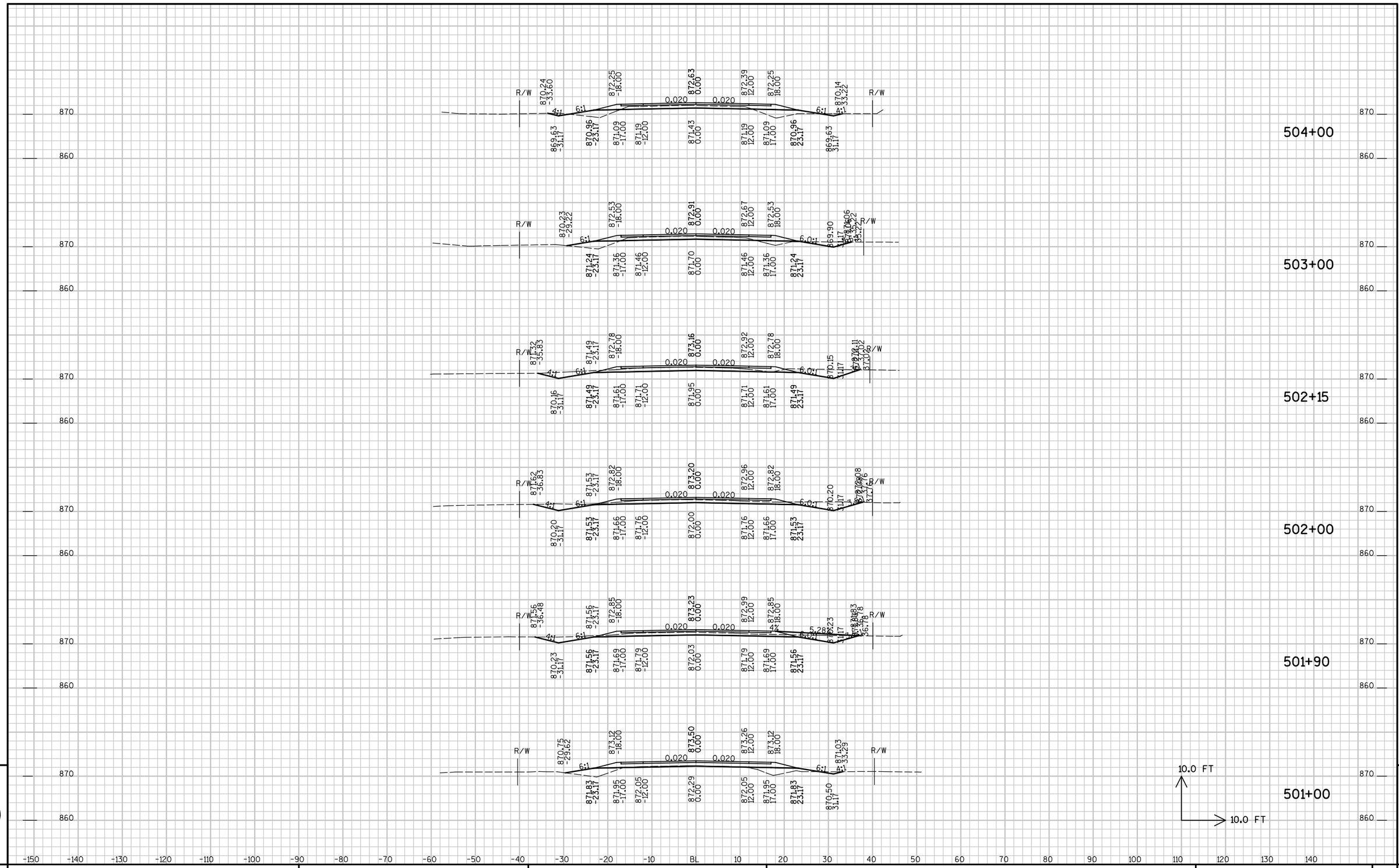


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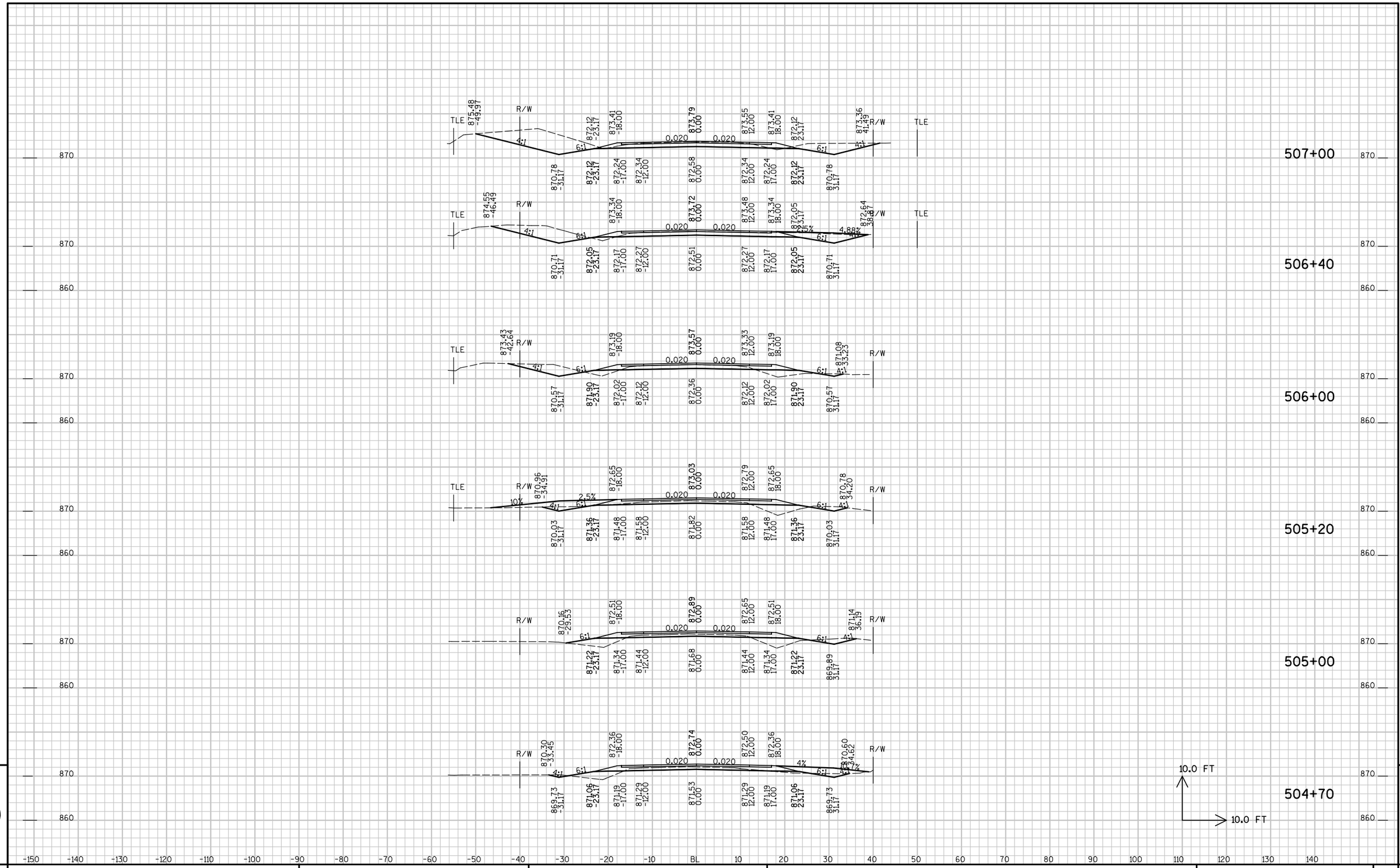
PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 174	E

FILE NAME : X:±AE±A±ADAMC±157311±5-final-dsgn±51-drawings±CAD±cad±XBCTHZ301-500.dgn PLOT TIME : 7:52:45 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 175	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:04 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



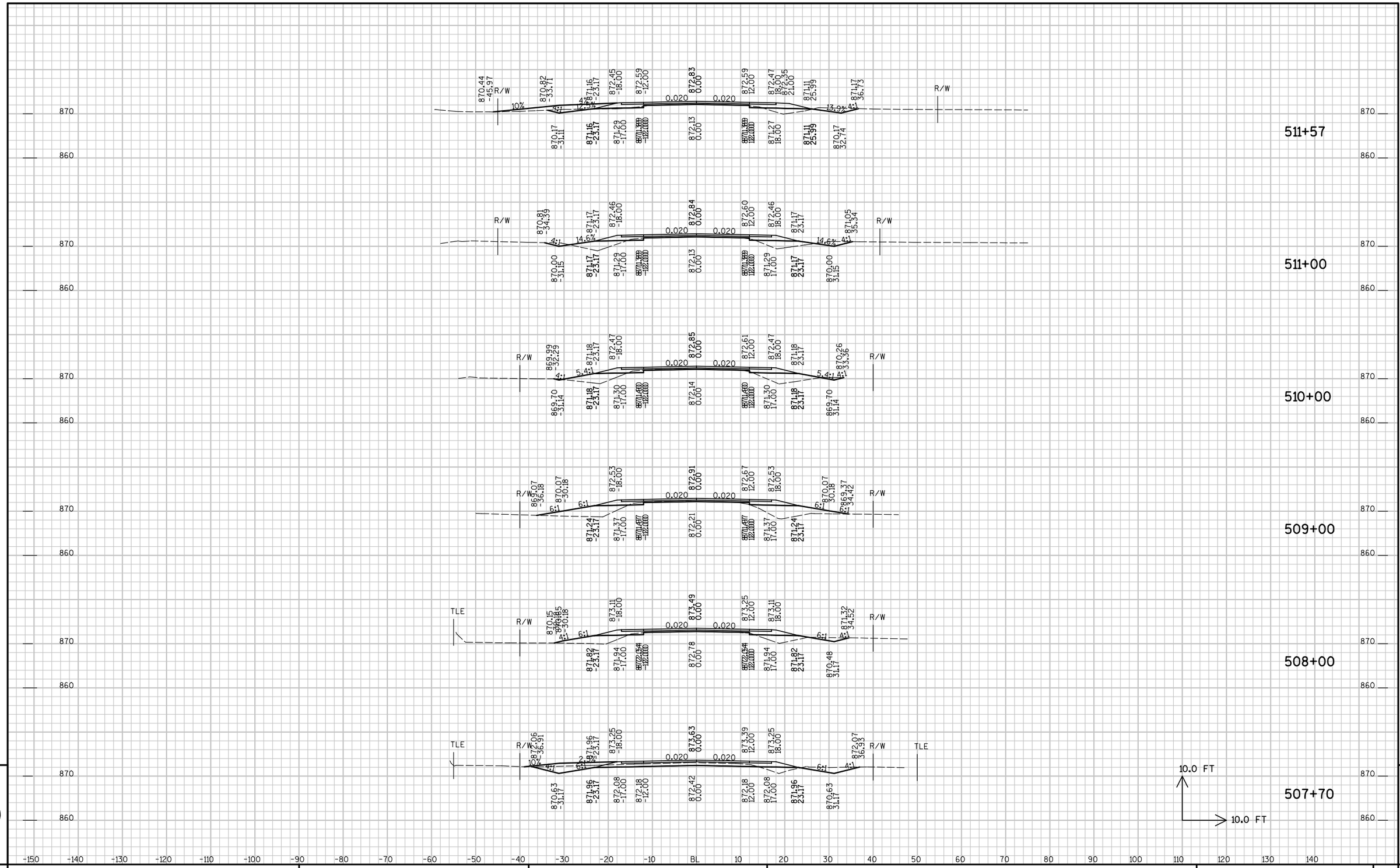
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PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO:

E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TLEME : $TLEME$ PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

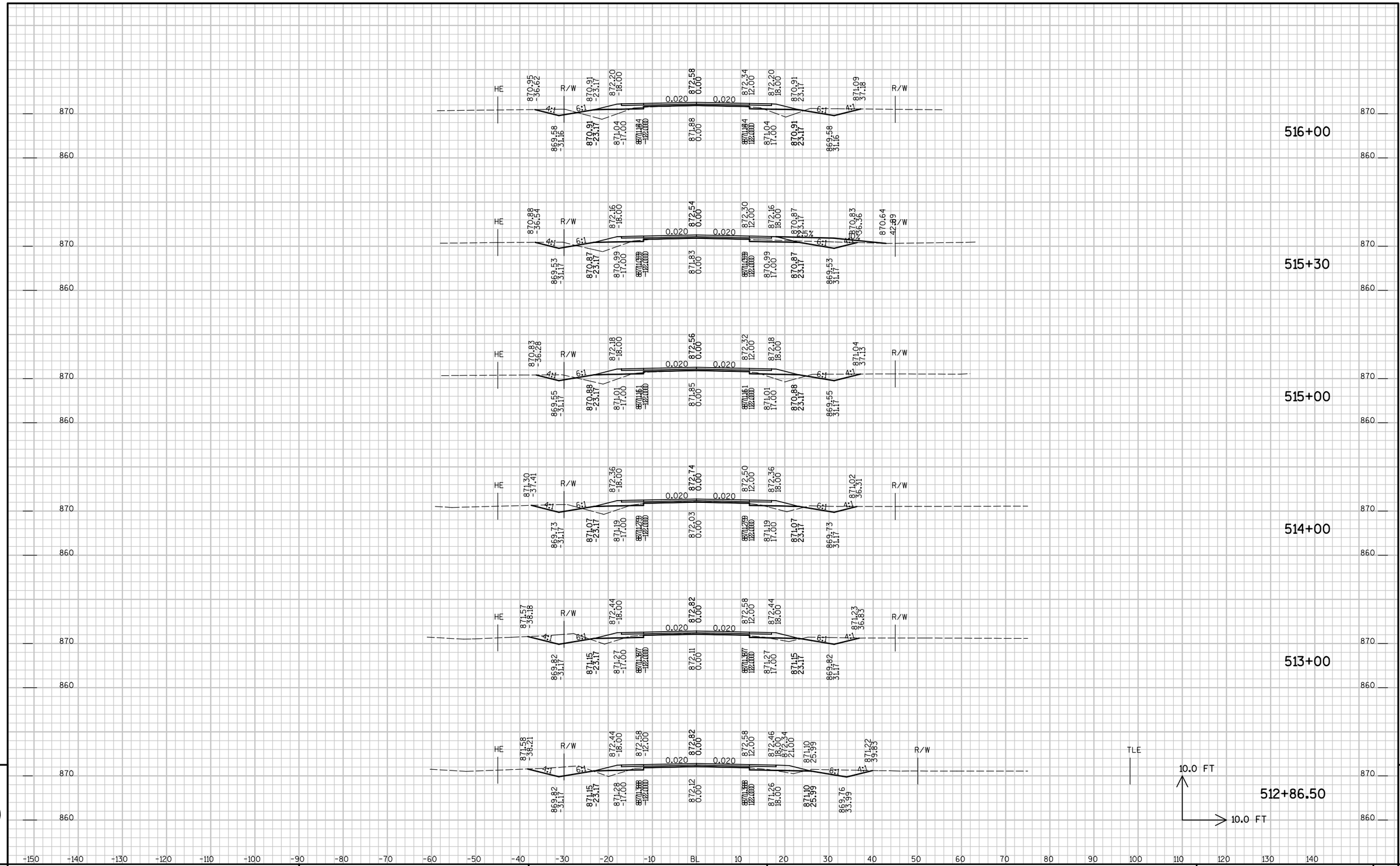


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PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 177	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:05 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

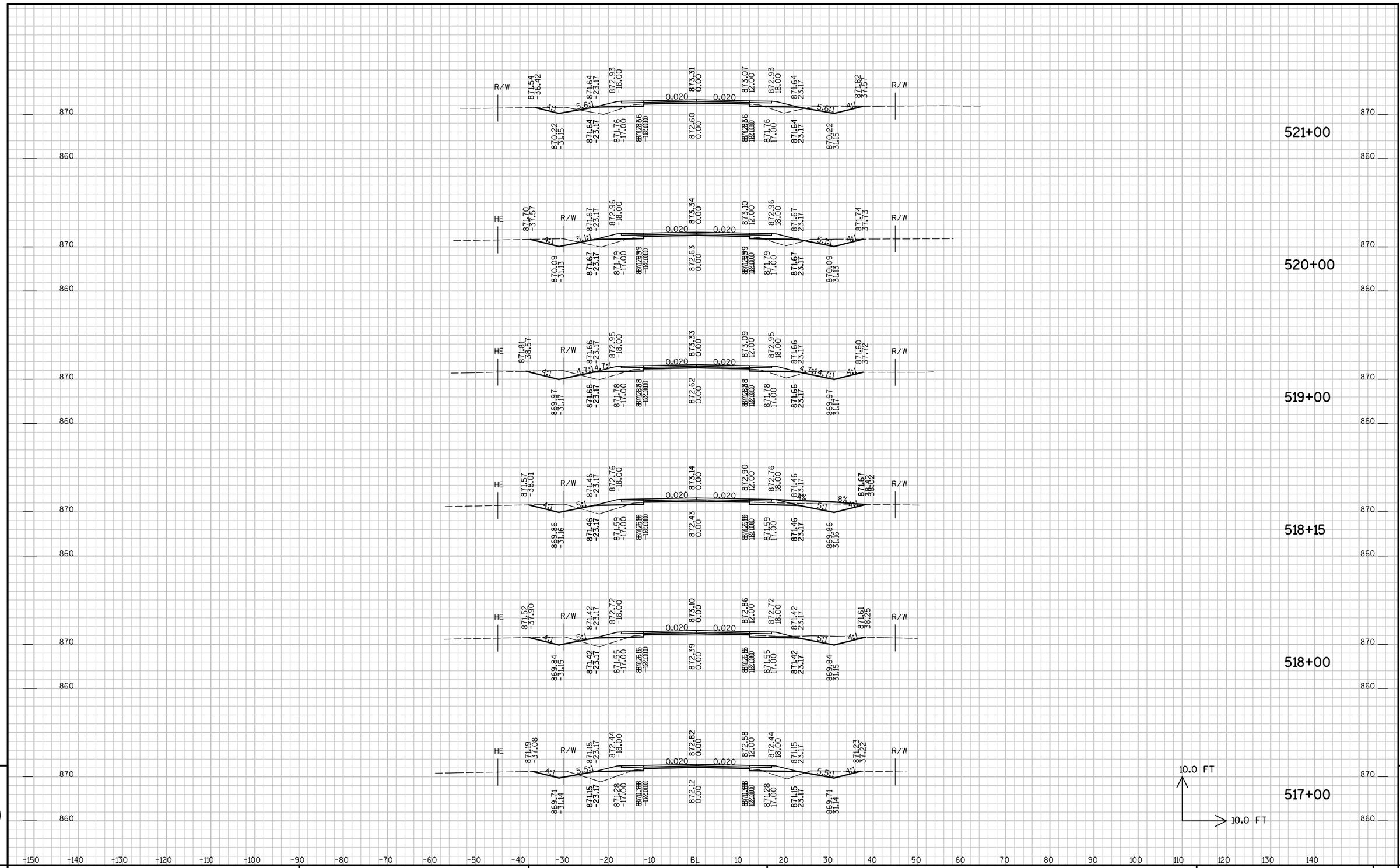


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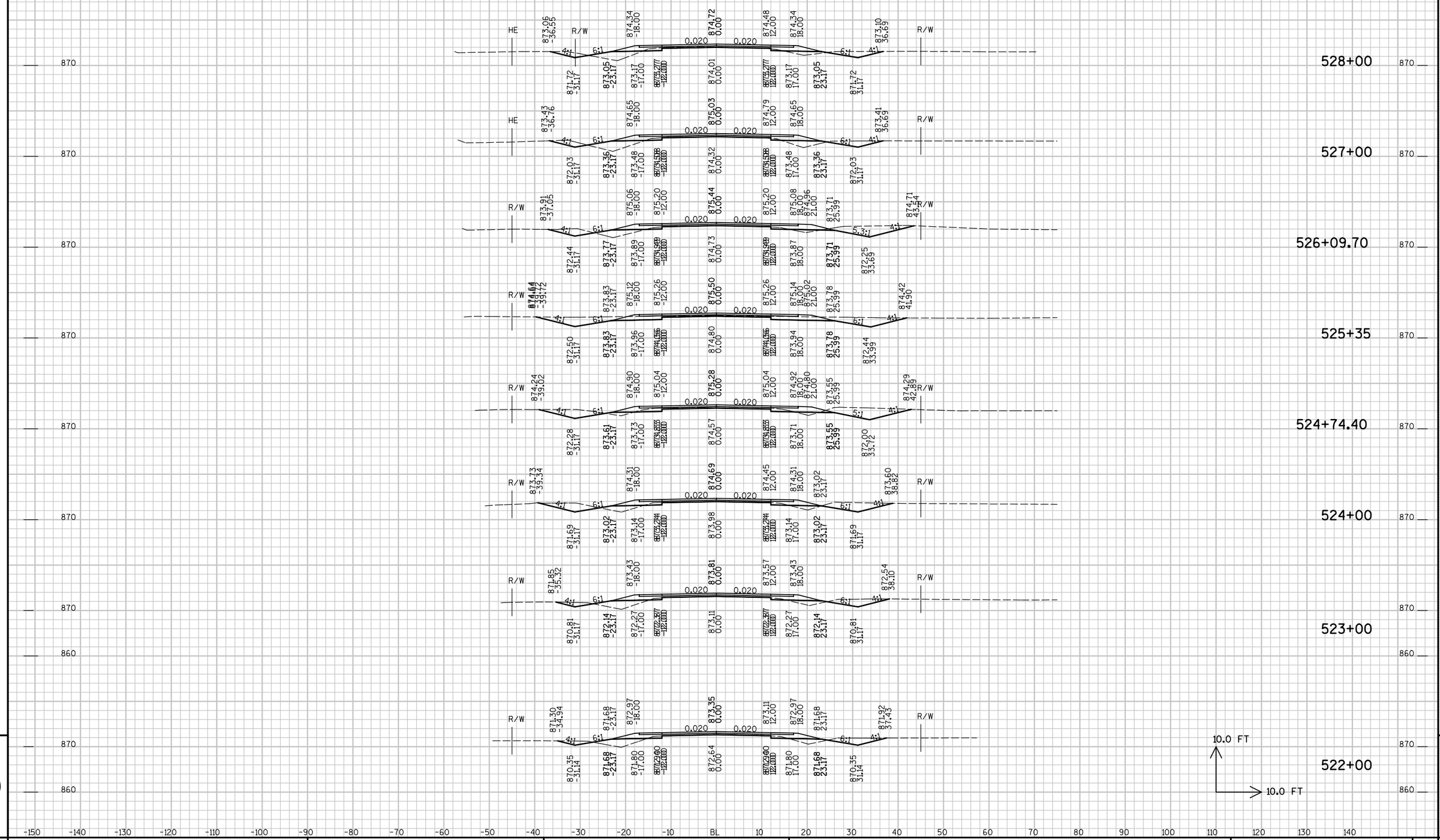
PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 178	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:05 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 179 E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:06 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

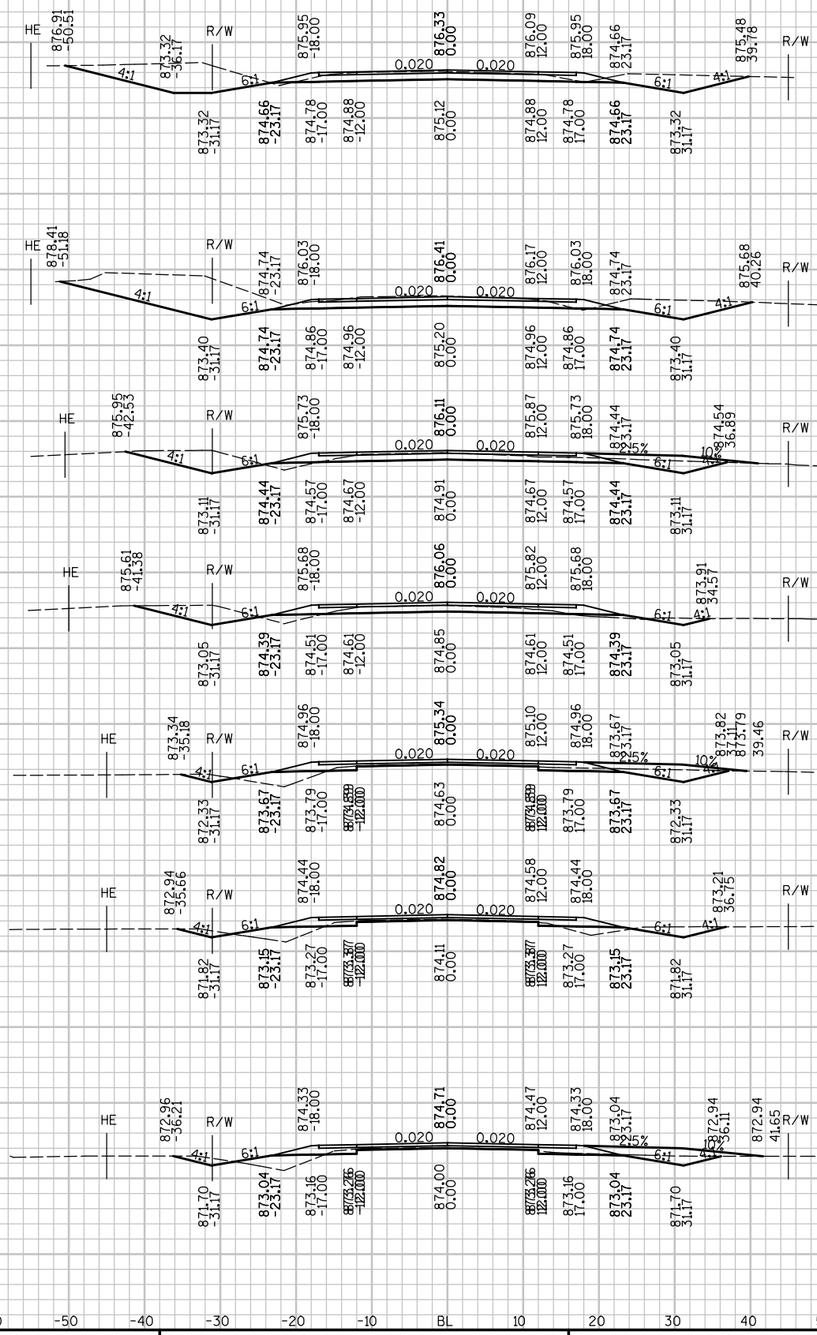


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PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 180	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:07 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

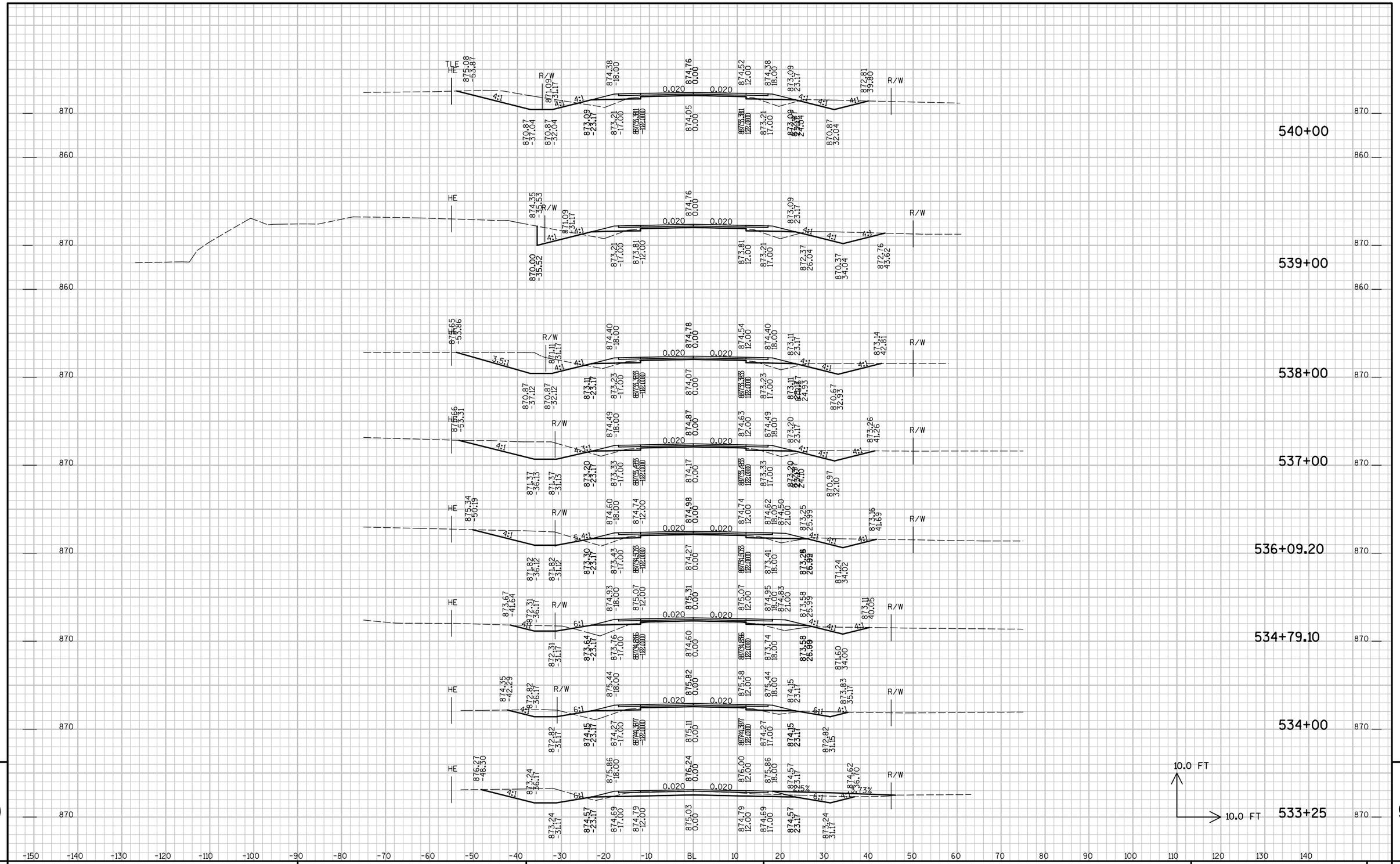
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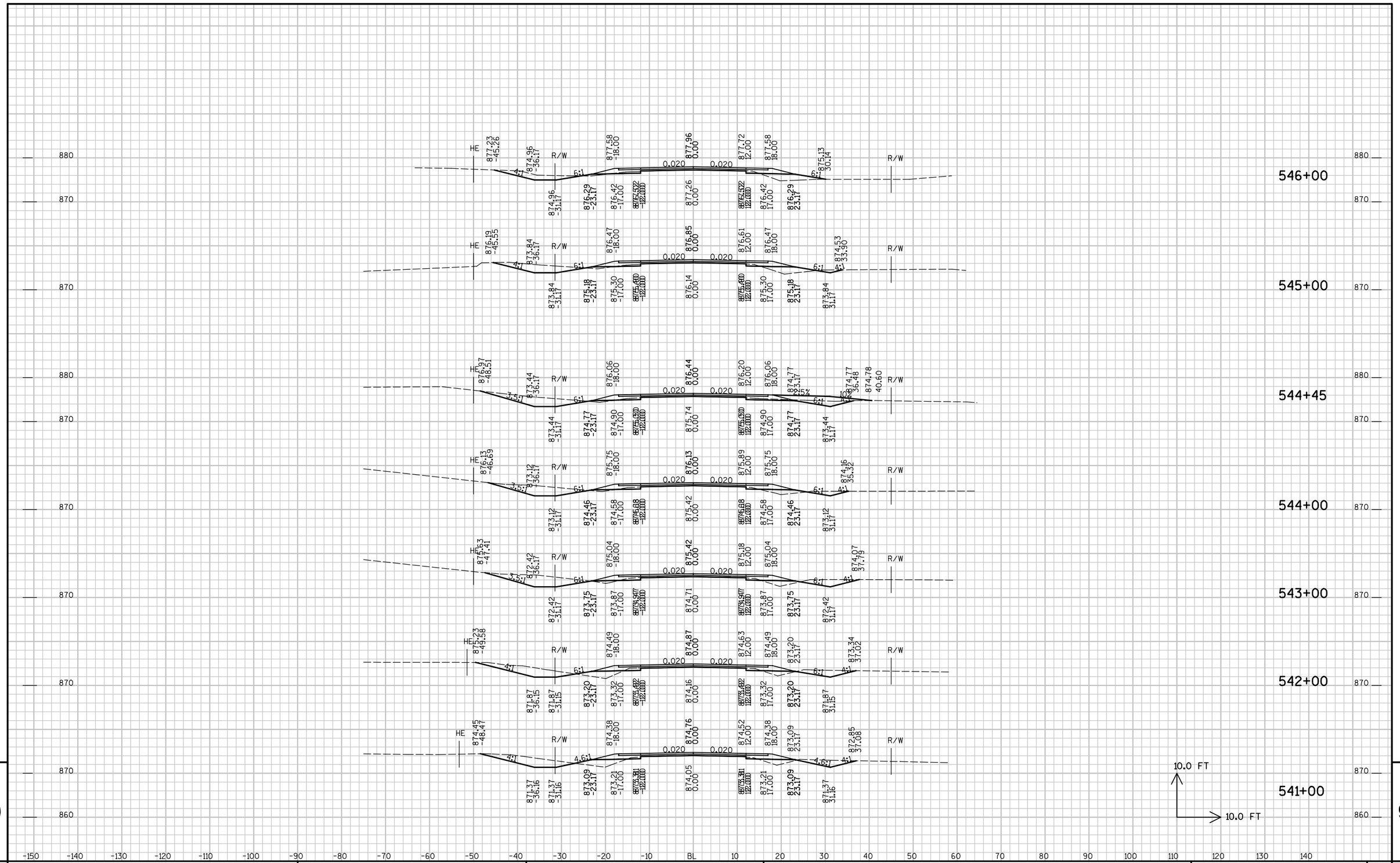
PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 181	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:07 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 182

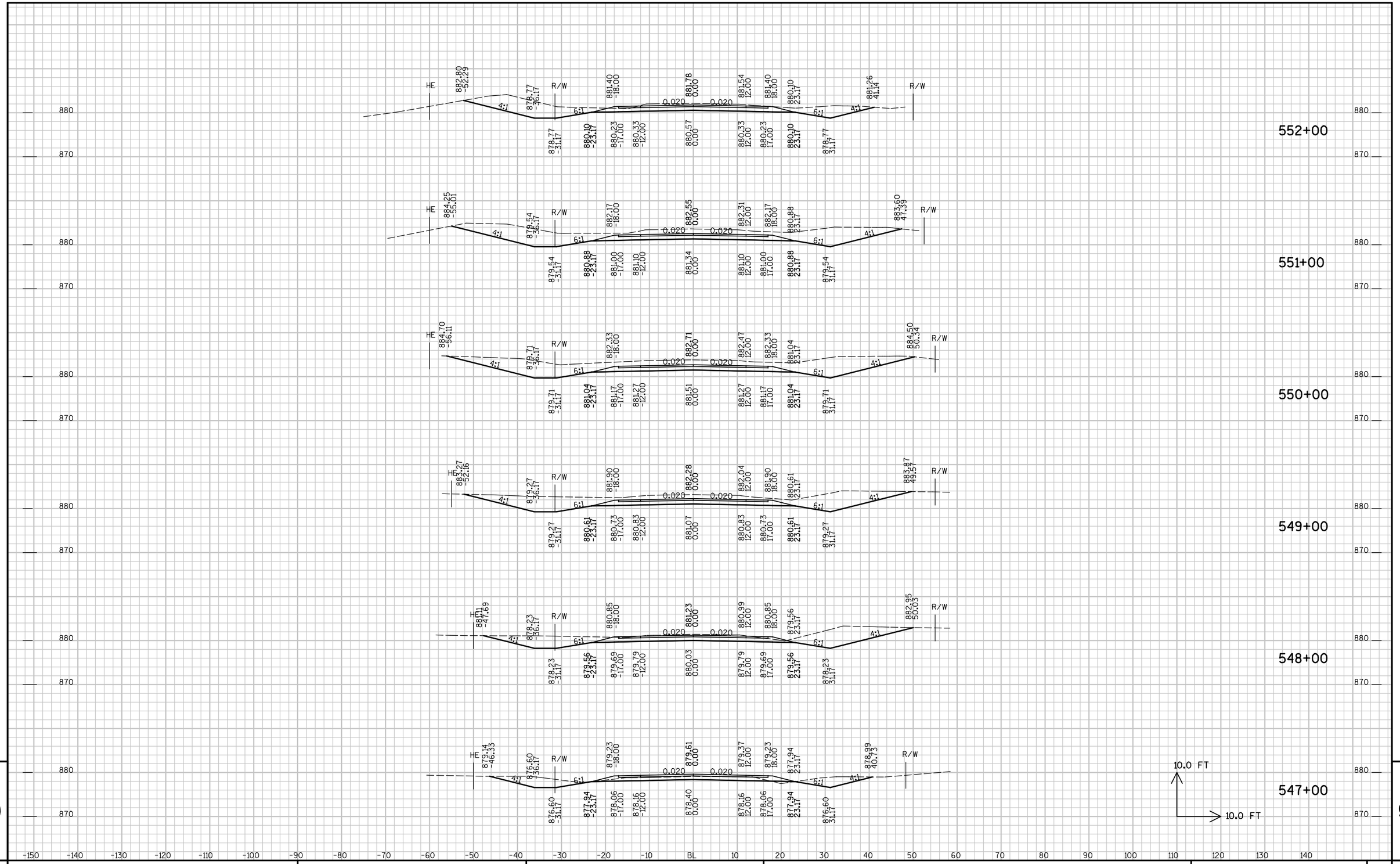
FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:08 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



9

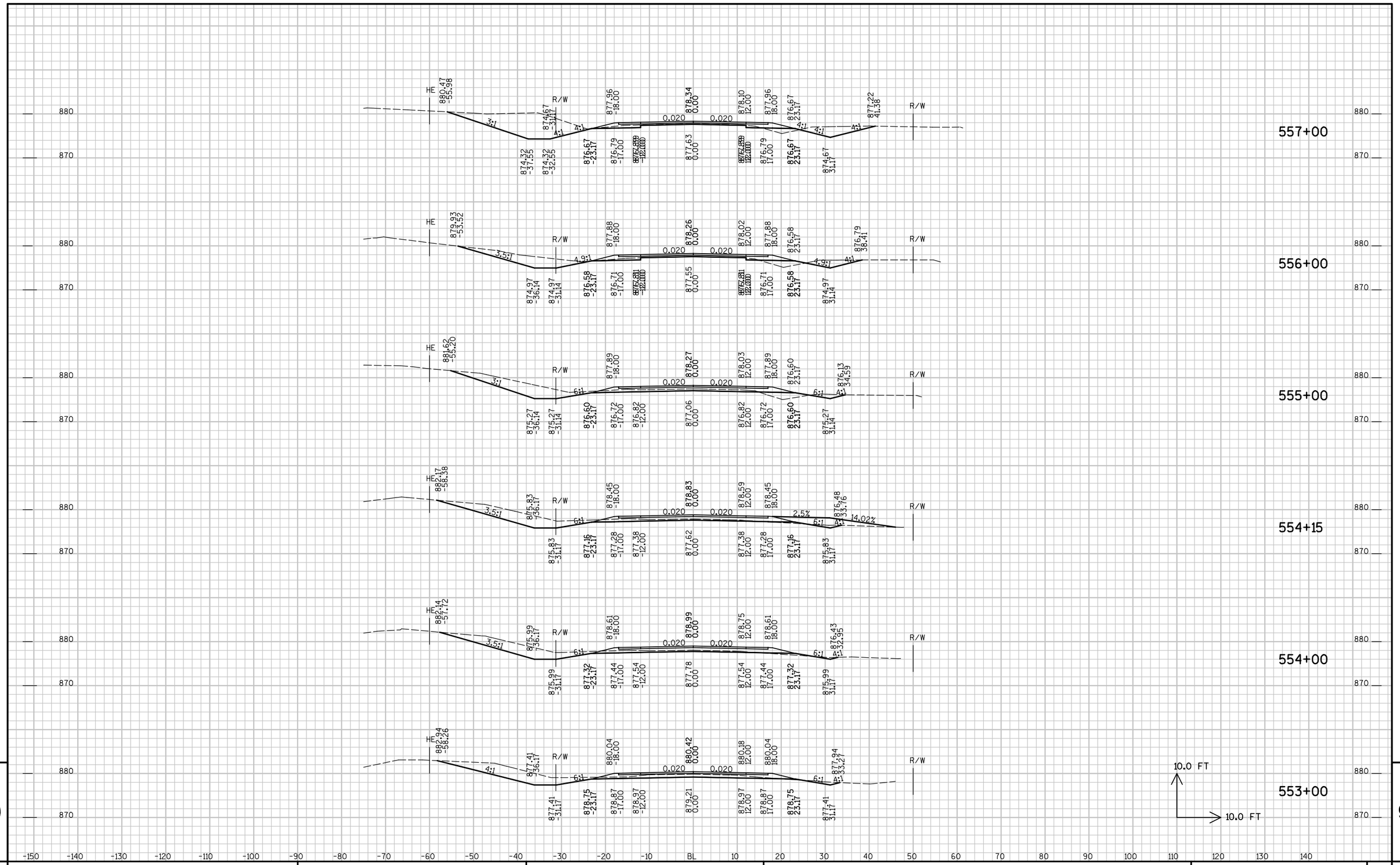
PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 183	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:09 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 184	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:10 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

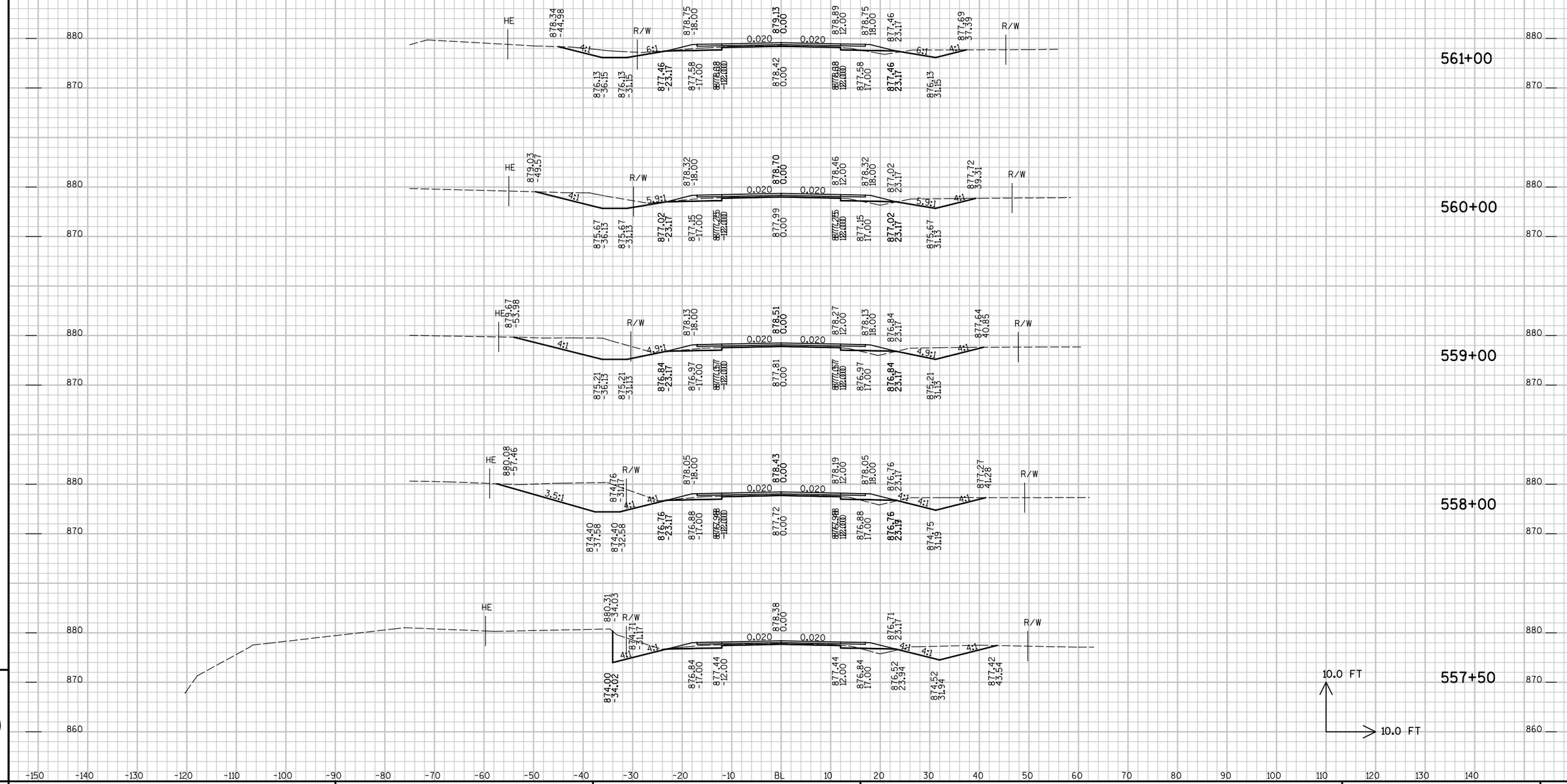


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PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 185	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:10 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



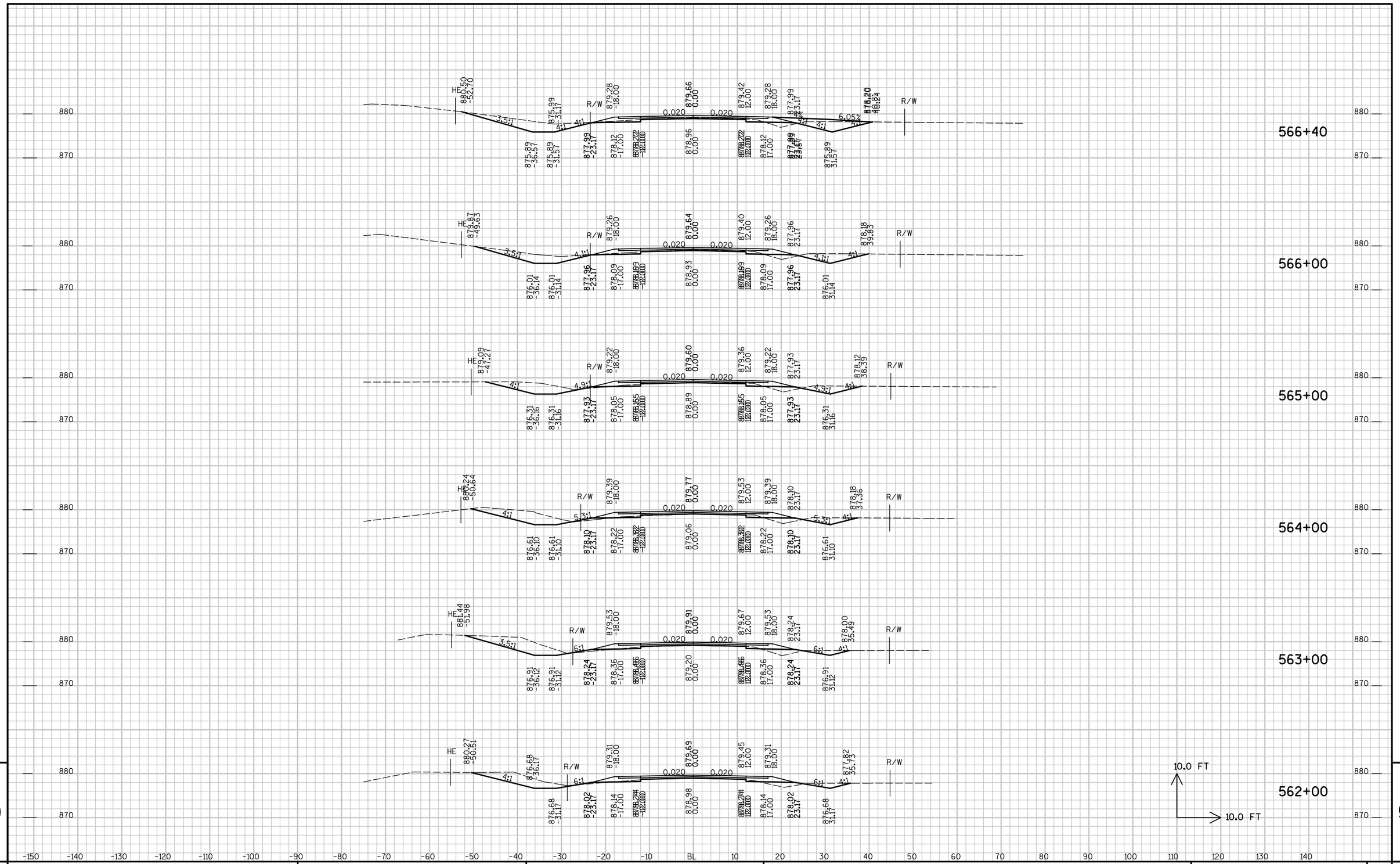
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PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO:

E

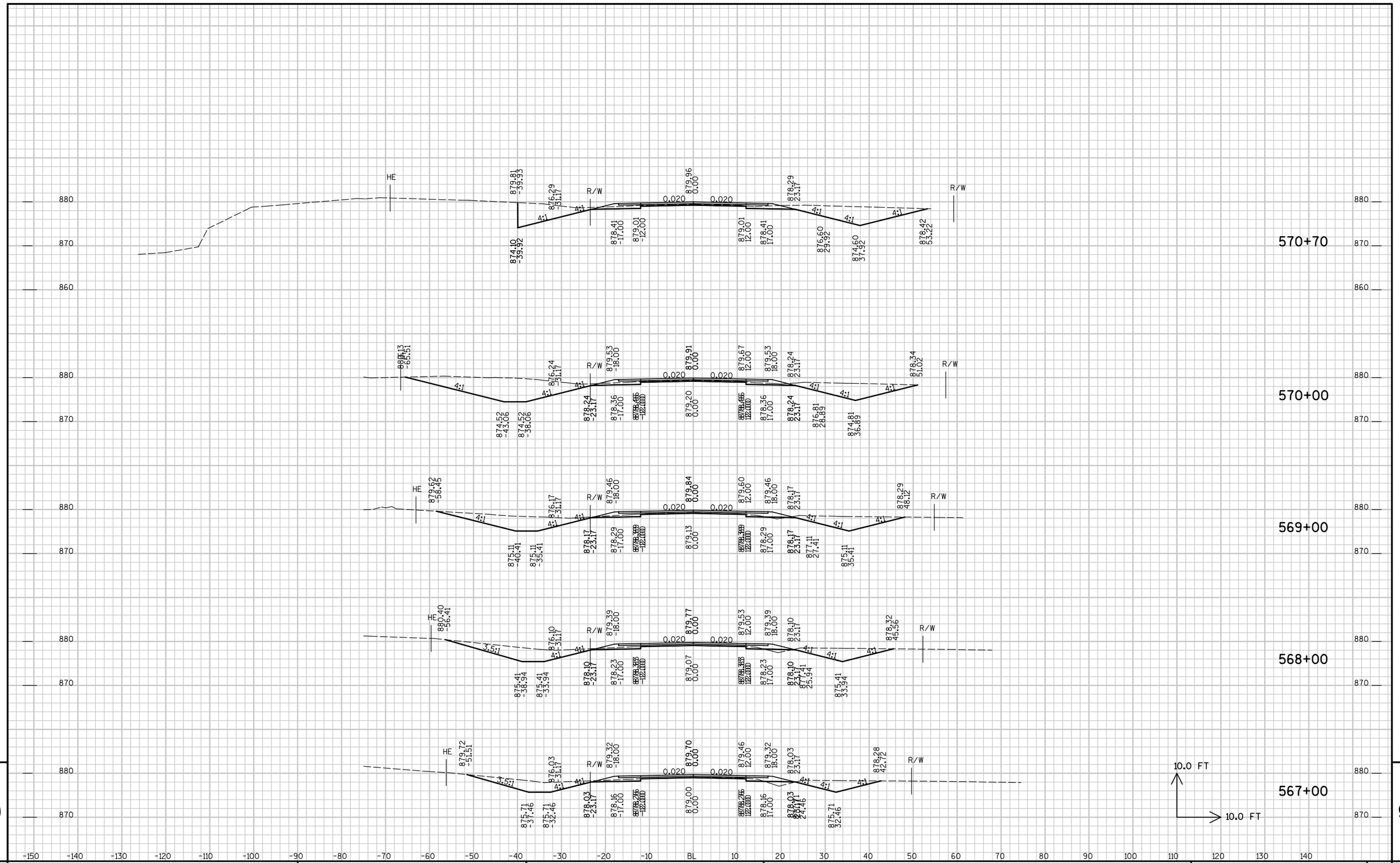
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FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:11 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO:

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:11 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

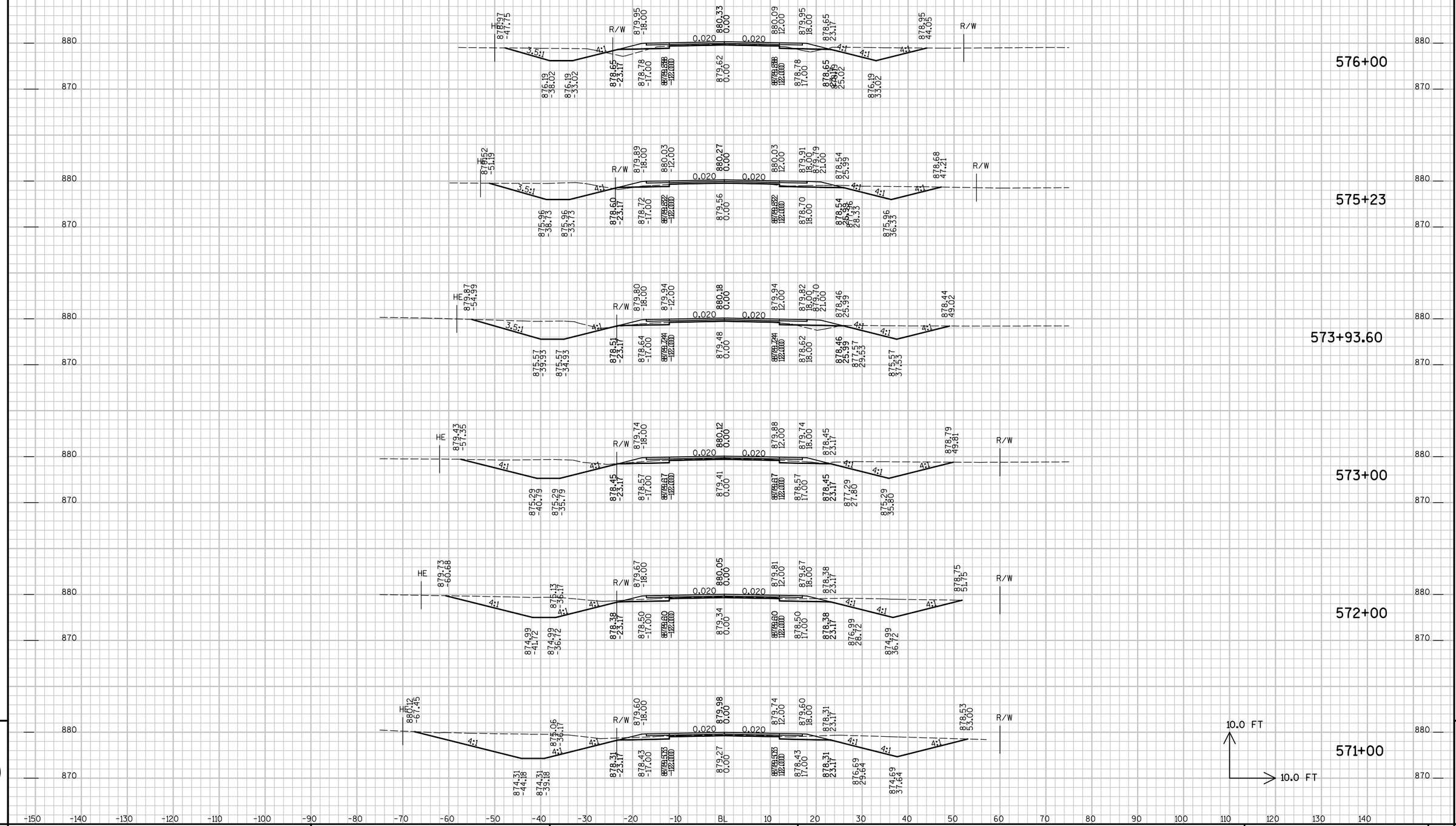


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PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 188	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:12 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

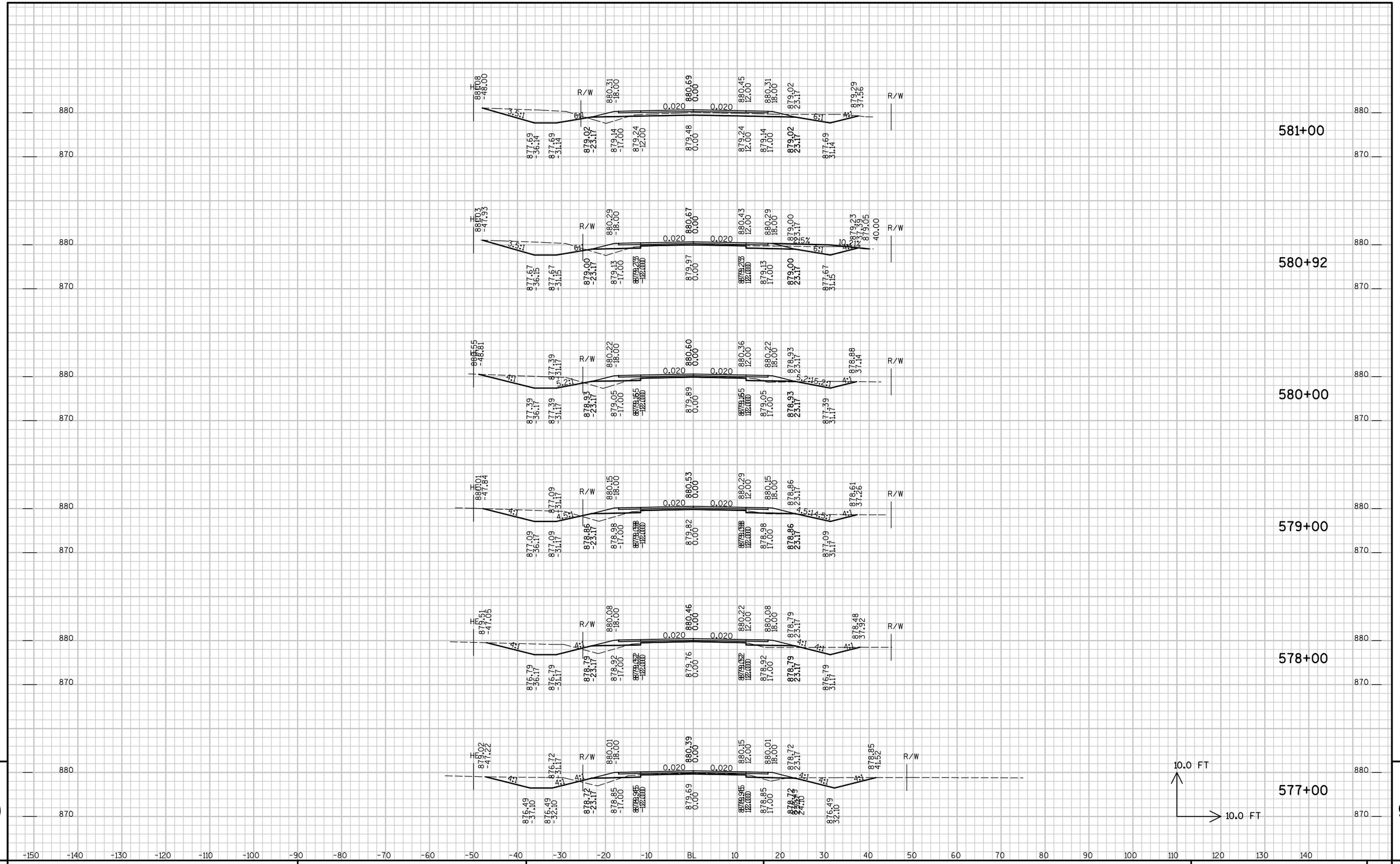


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PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 189	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:13 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

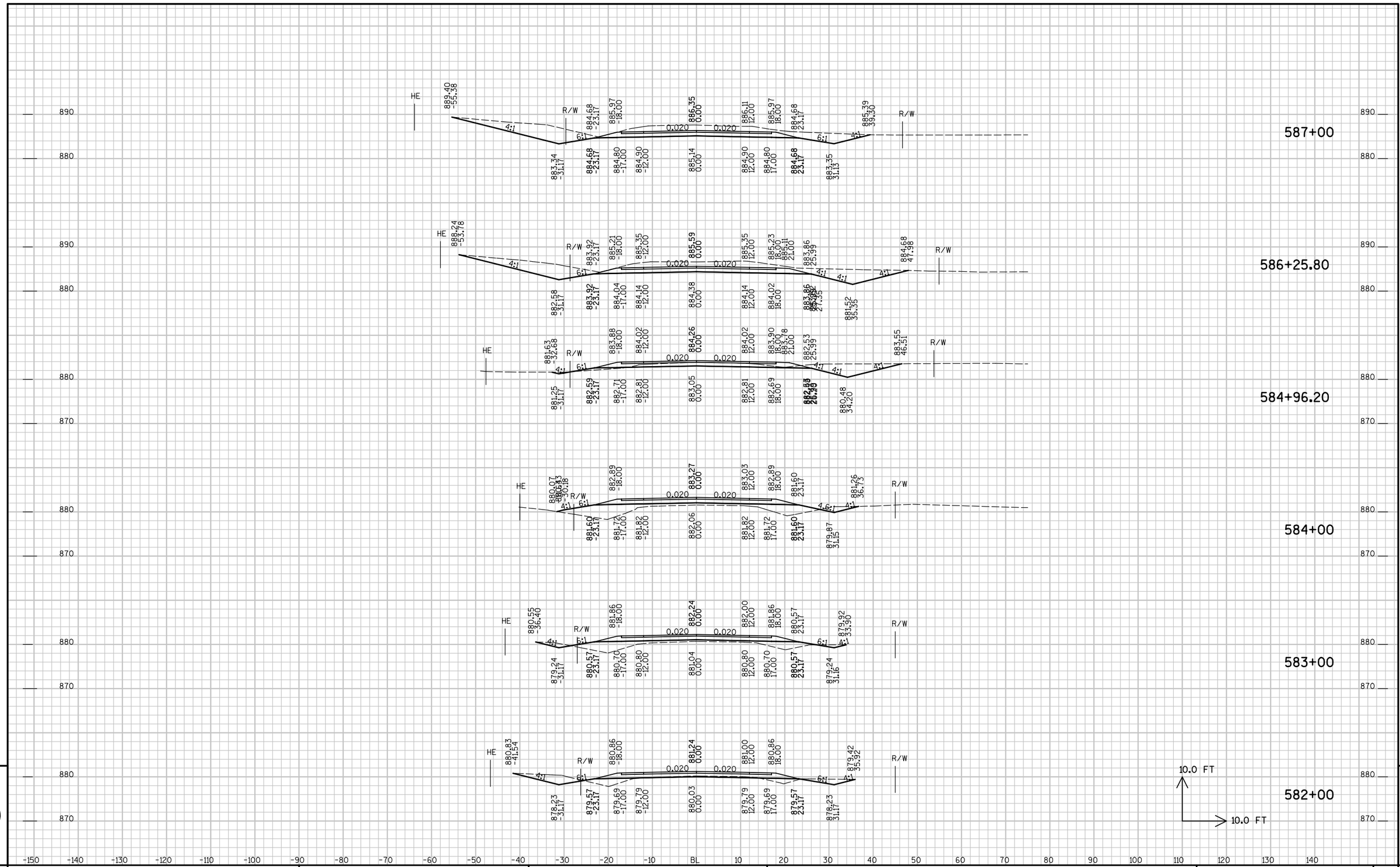


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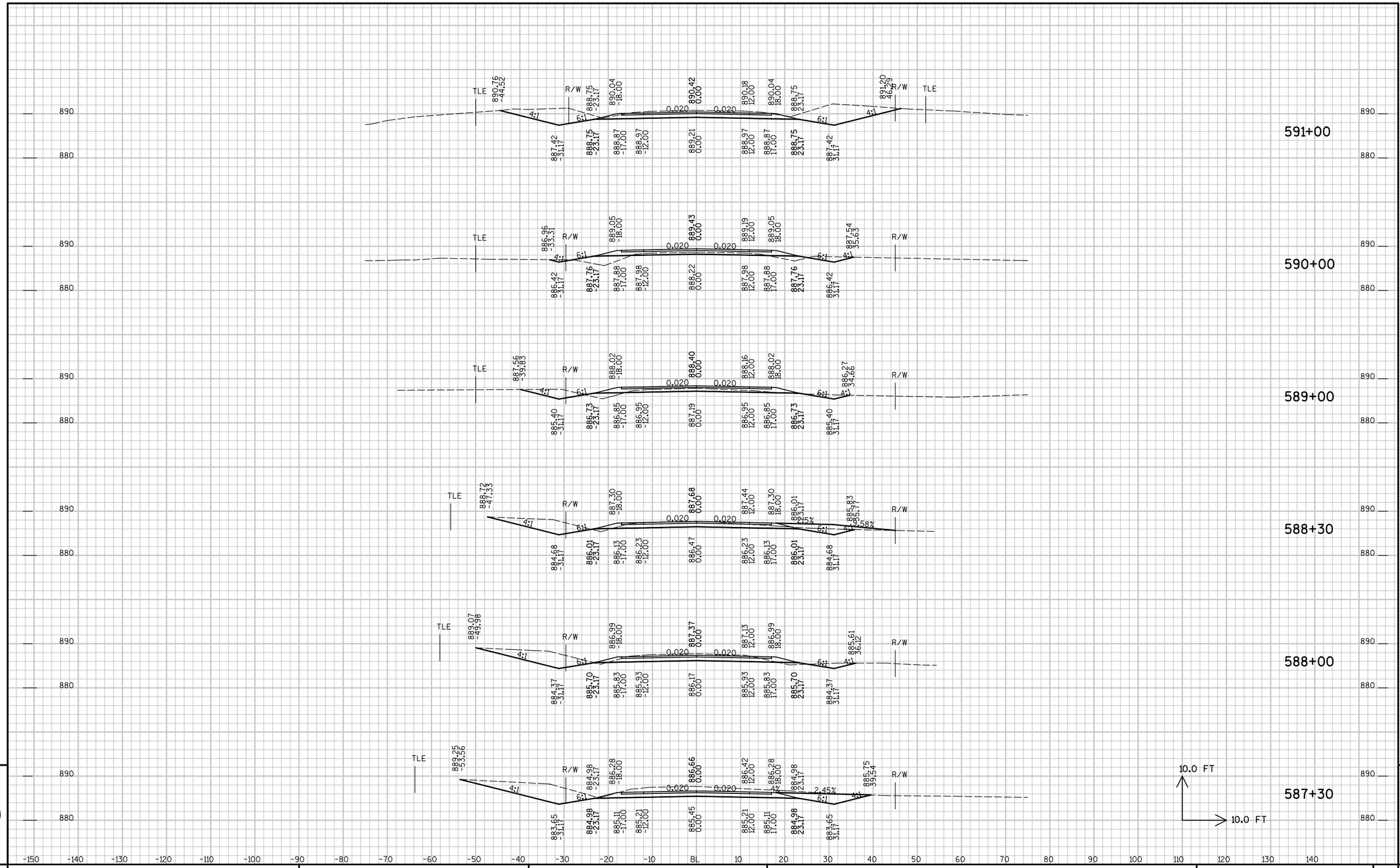
PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 190	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:13 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 191	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:14 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



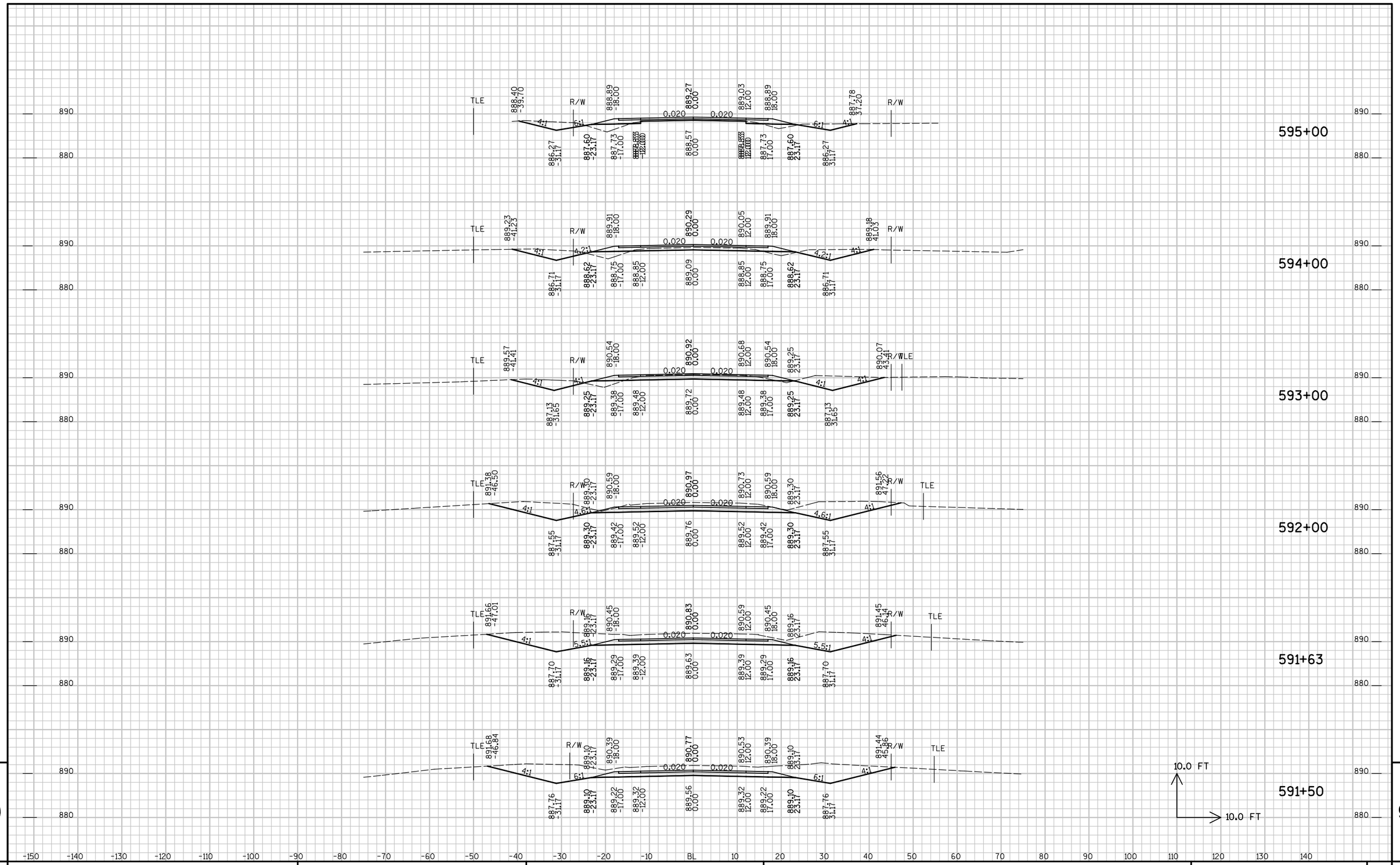
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PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO:

E

9

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:15 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



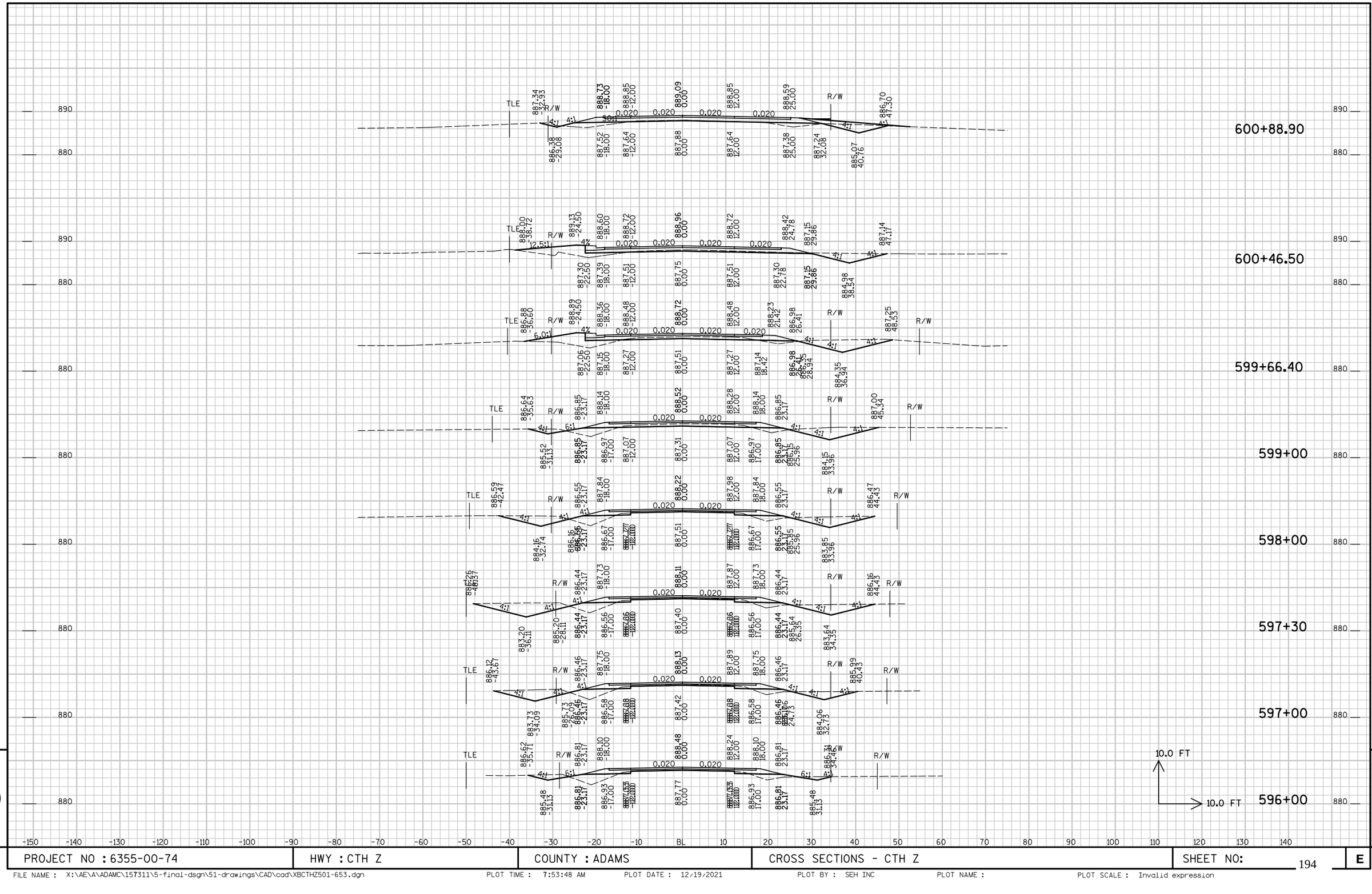
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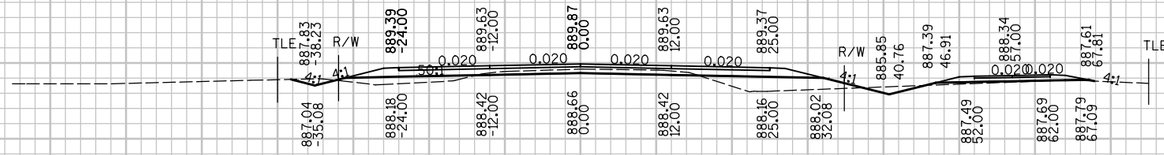
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PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO:

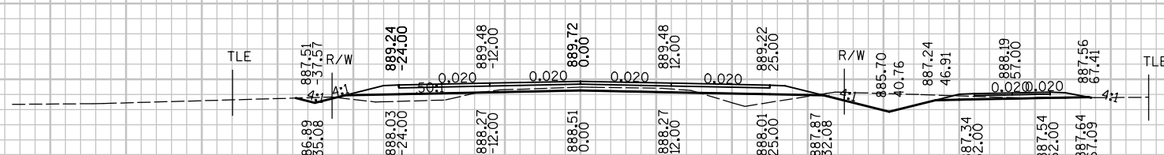
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FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:15 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression


600+88.90
600+46.50
599+66.40
599+00
598+00
597+30
597+00
596+00
TLE
R/W
0.020
4:1
6:1
10.0 FT
10.0 FT



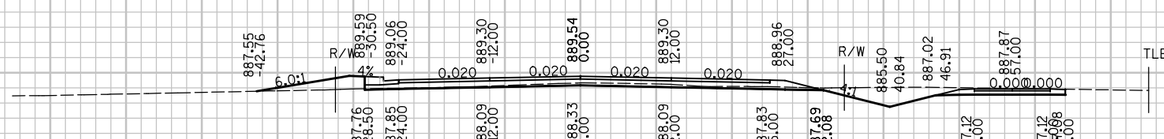
603+50



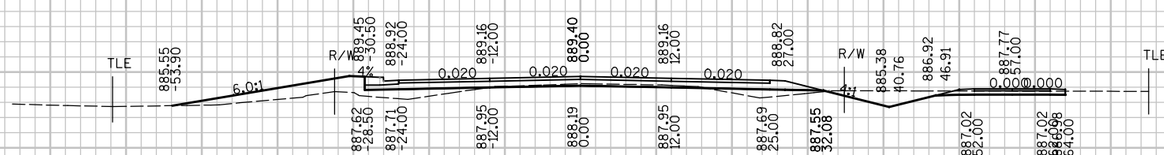
603+00



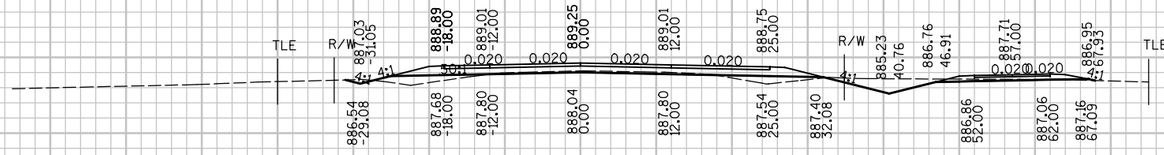
602+85.10



602+40



601+92.30



601+42.30

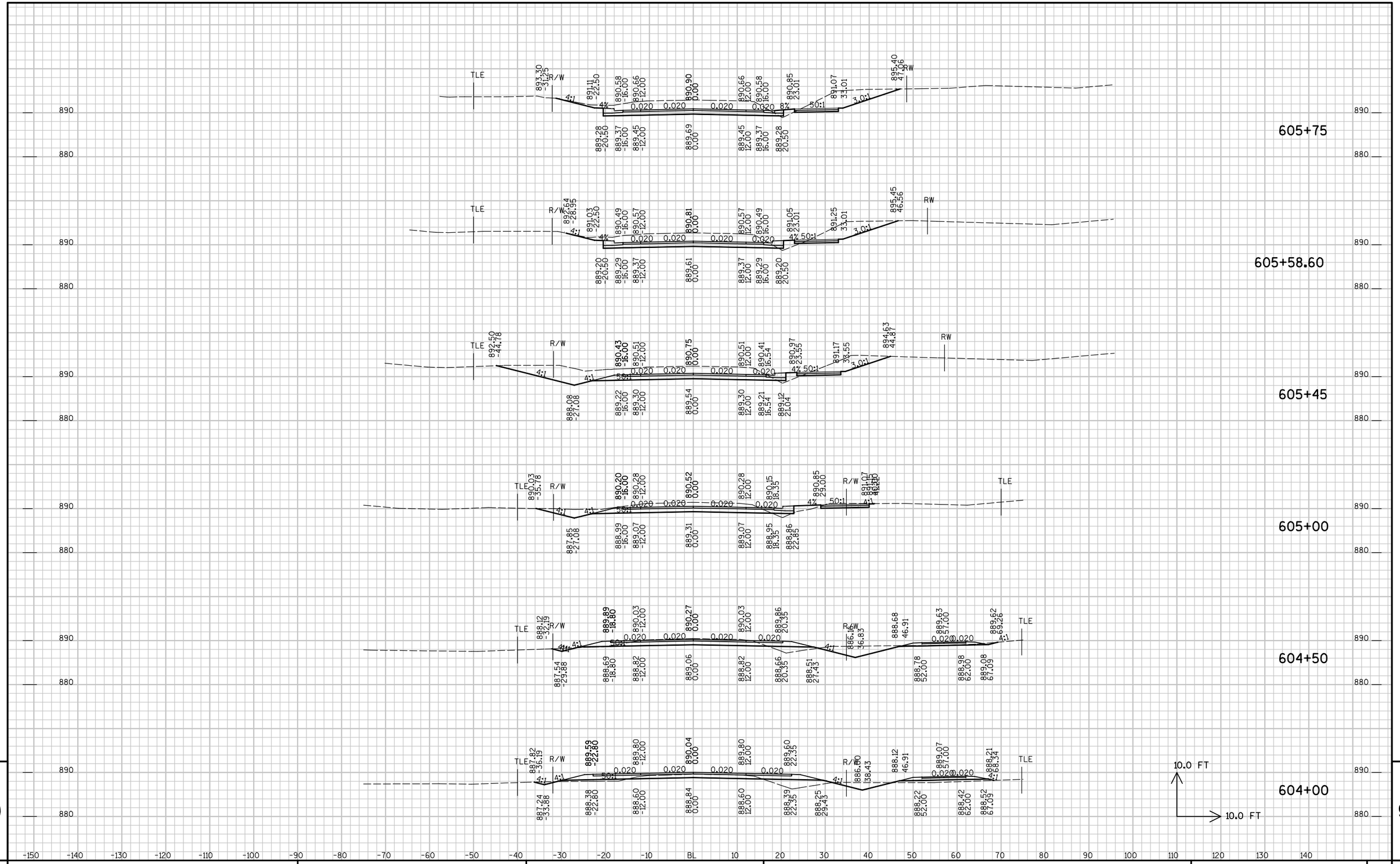
10.0 FT
10.0 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 BL 10 20 30 40 50 60 70 80 90 100 110 120 130 140

9 9

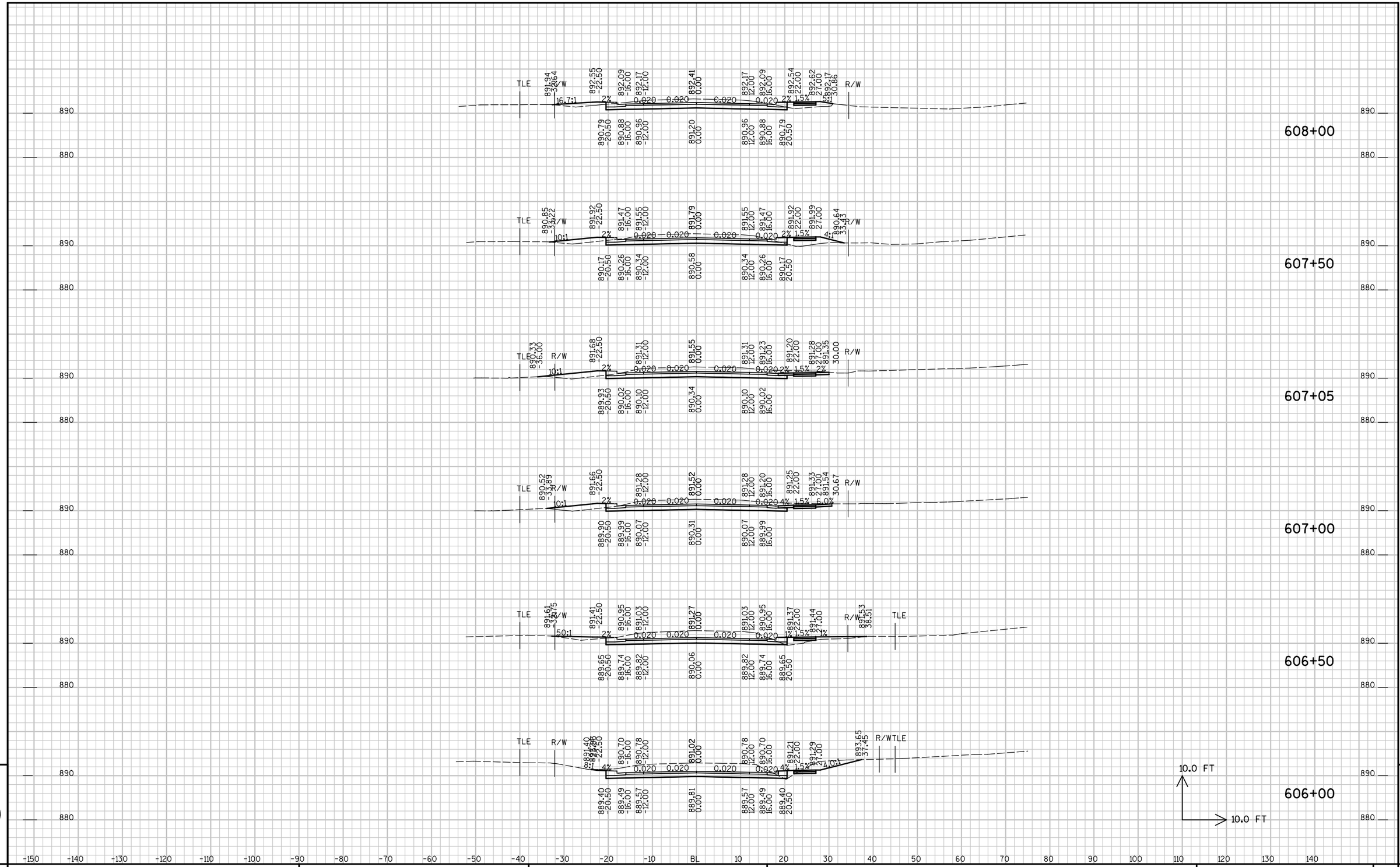
PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO:	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:49 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 196	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:49 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



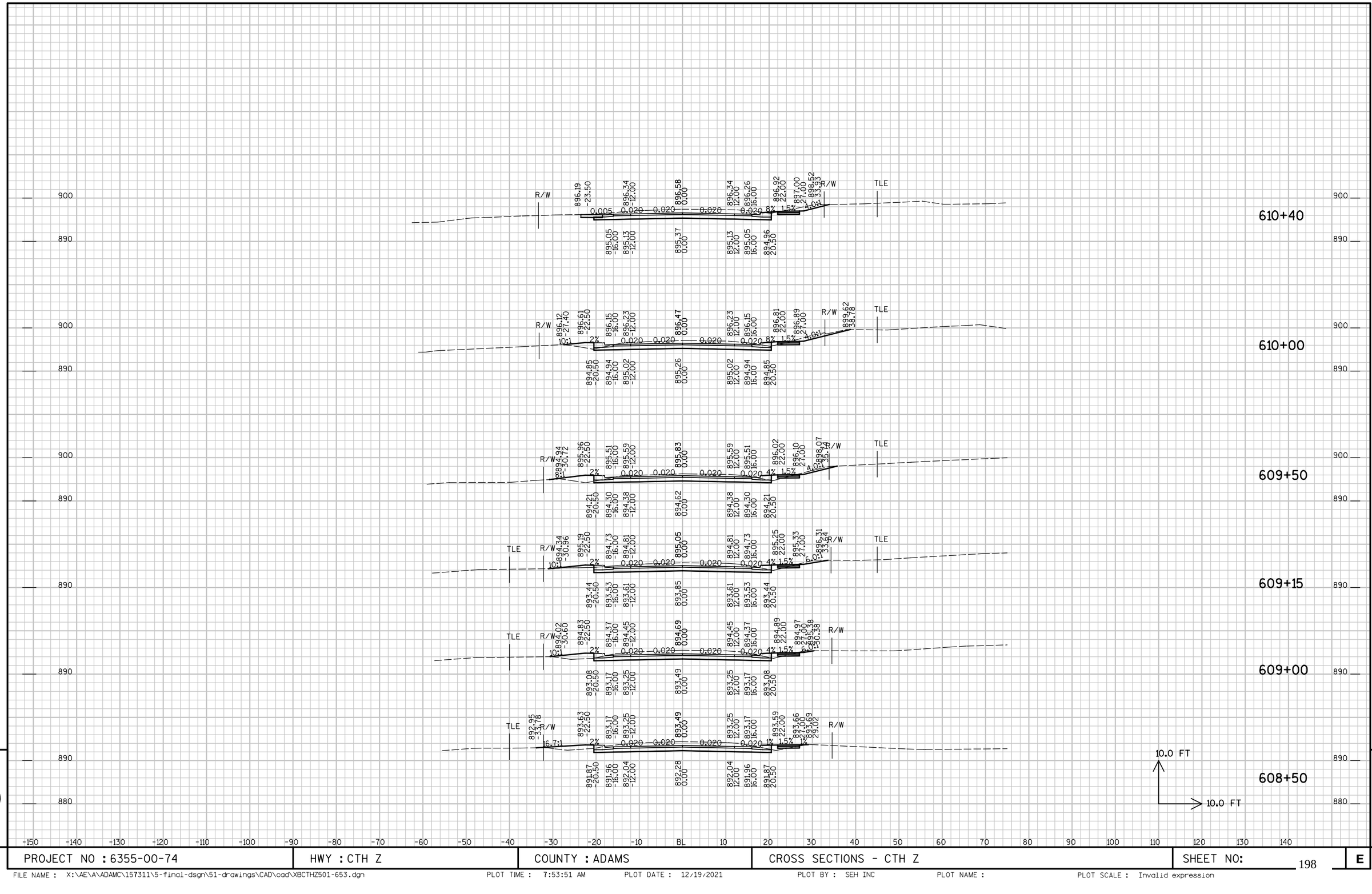
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PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO:

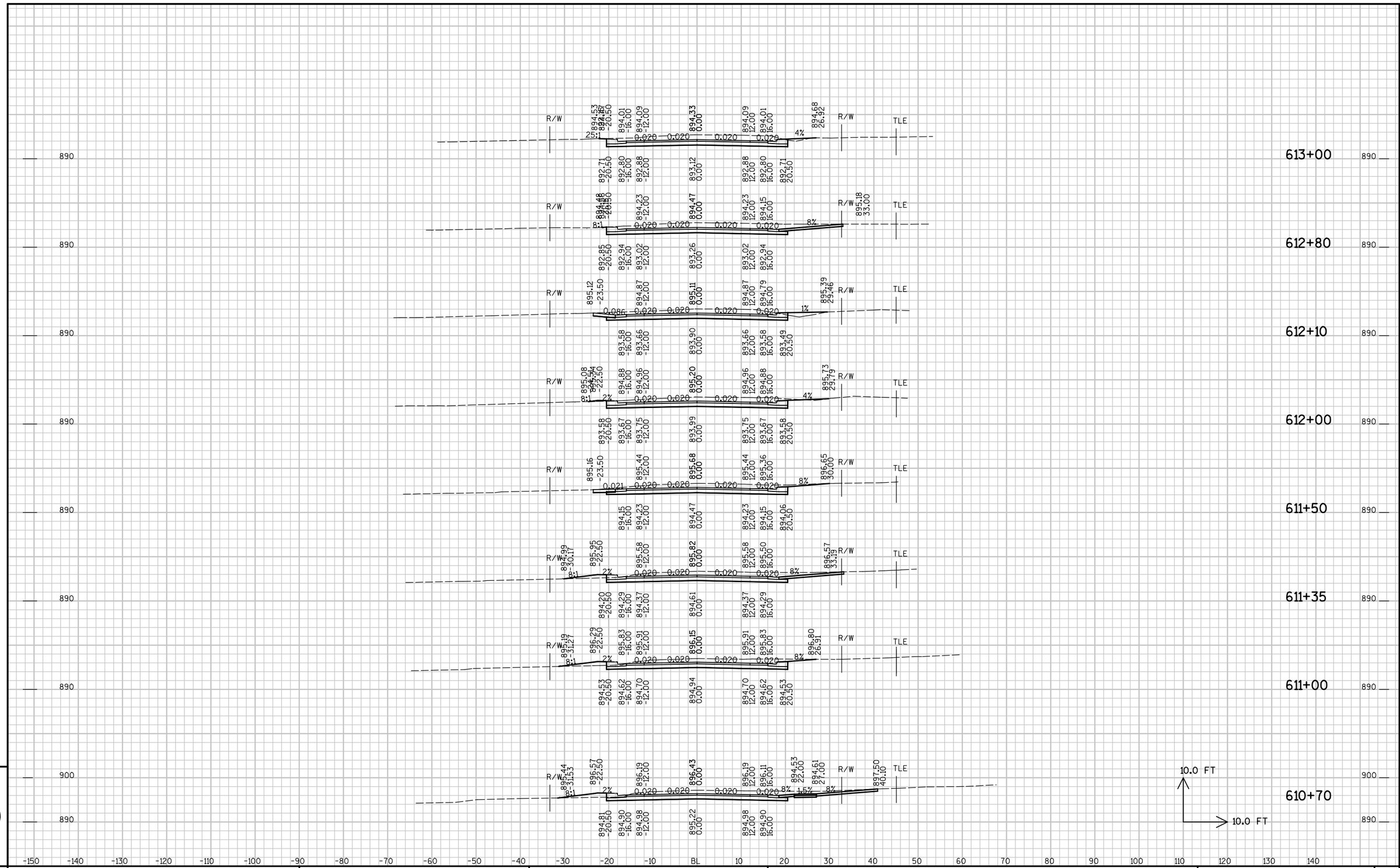
E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:50 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



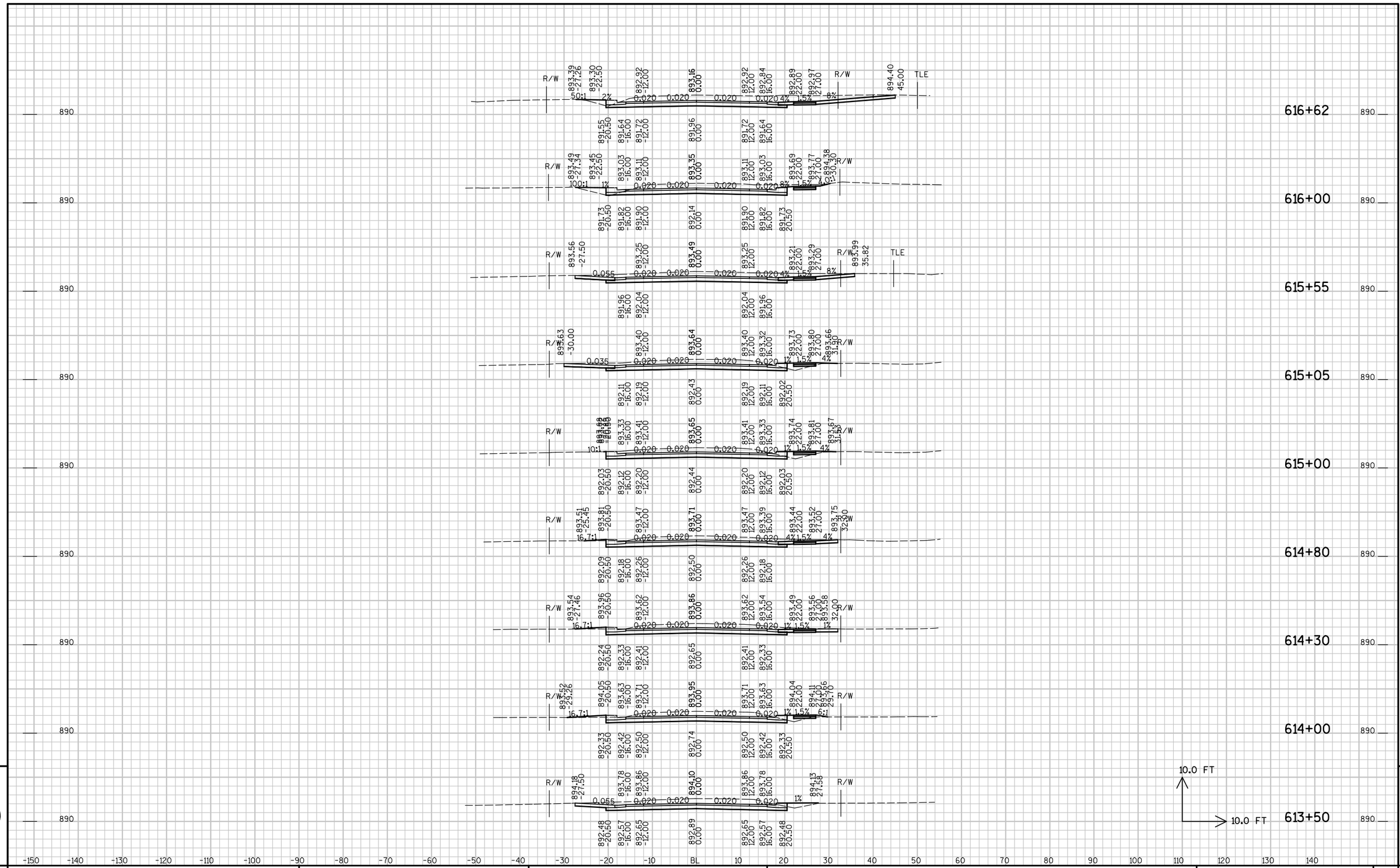
PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 198 E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:51 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



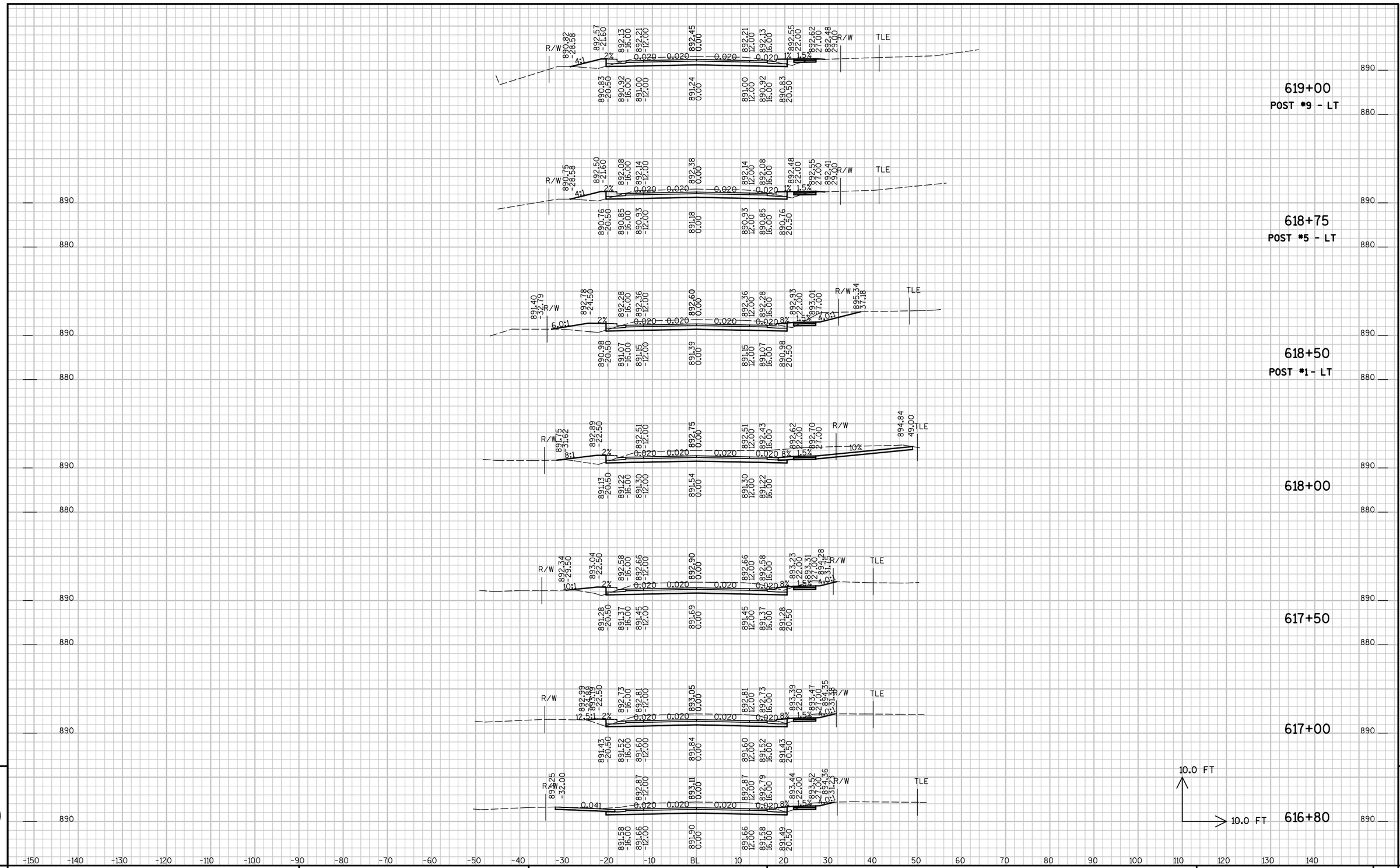
PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 199	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:51 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 200	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:52 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

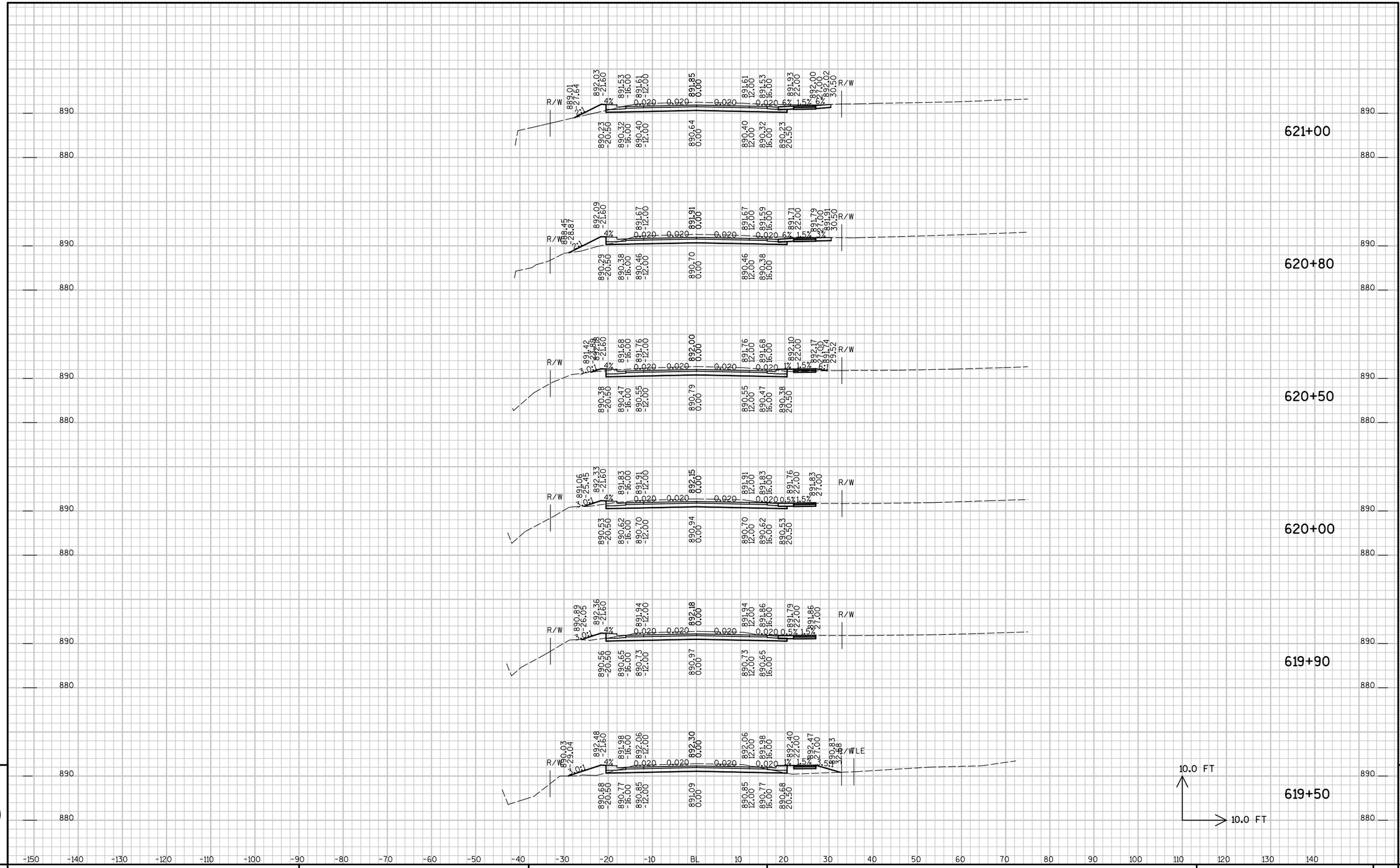


9

PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 201	E

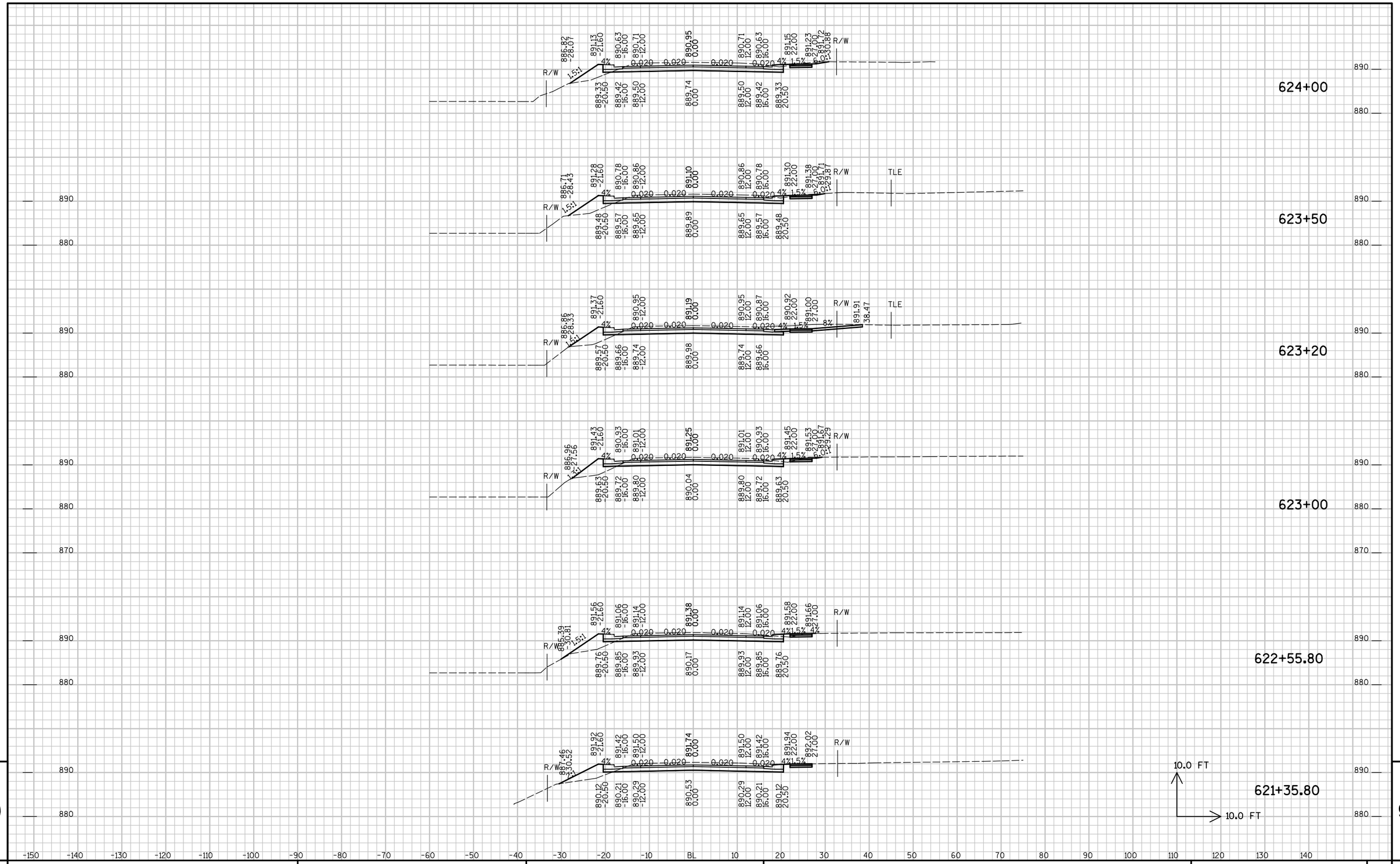
FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:53 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

9



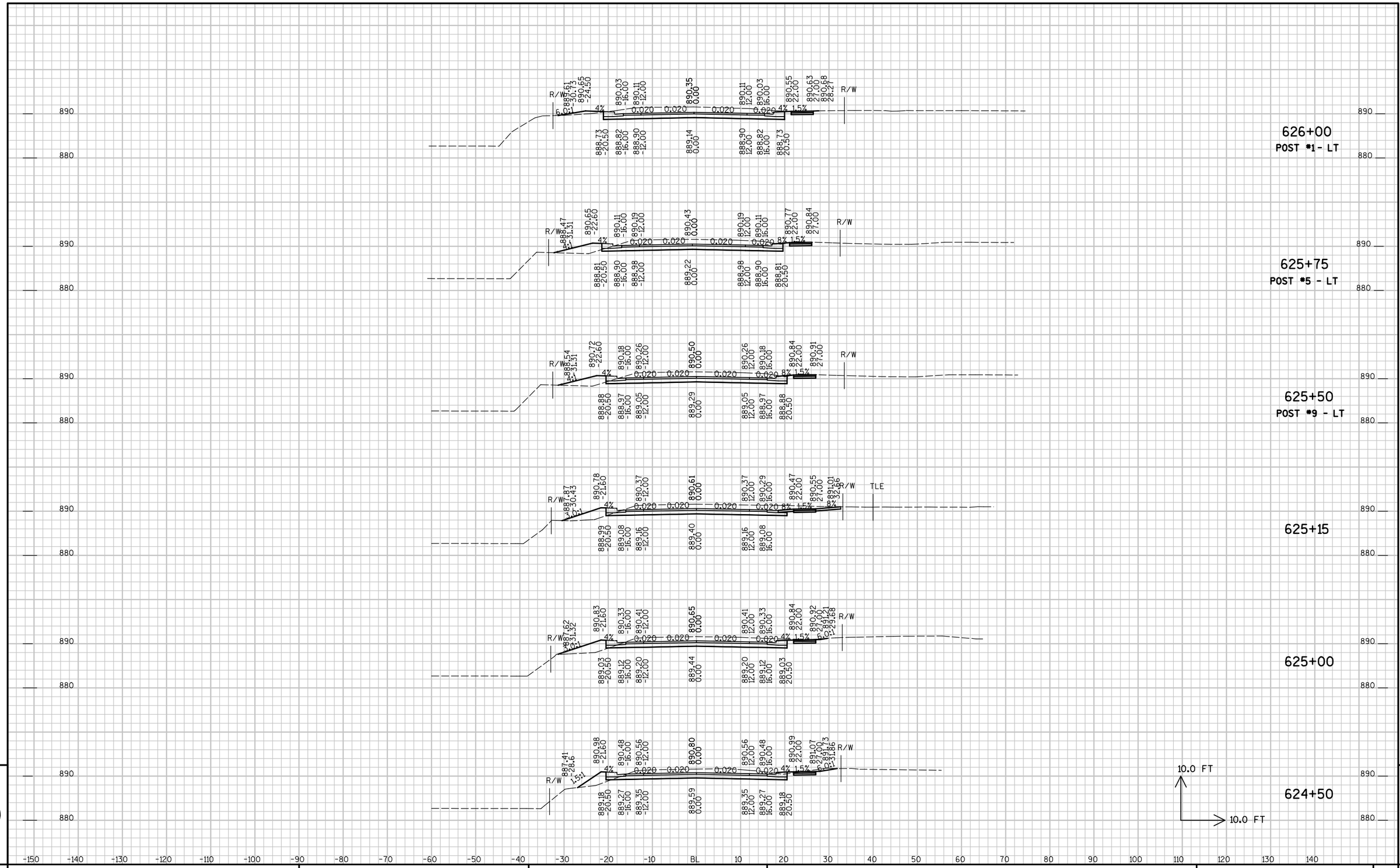
PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 202	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:53 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



9

PROJECT NO : 6355-00-74 | HWY : CTH Z | COUNTY : ADAMS | CROSS SECTIONS - CTH Z | SHEET NO: 203 | E

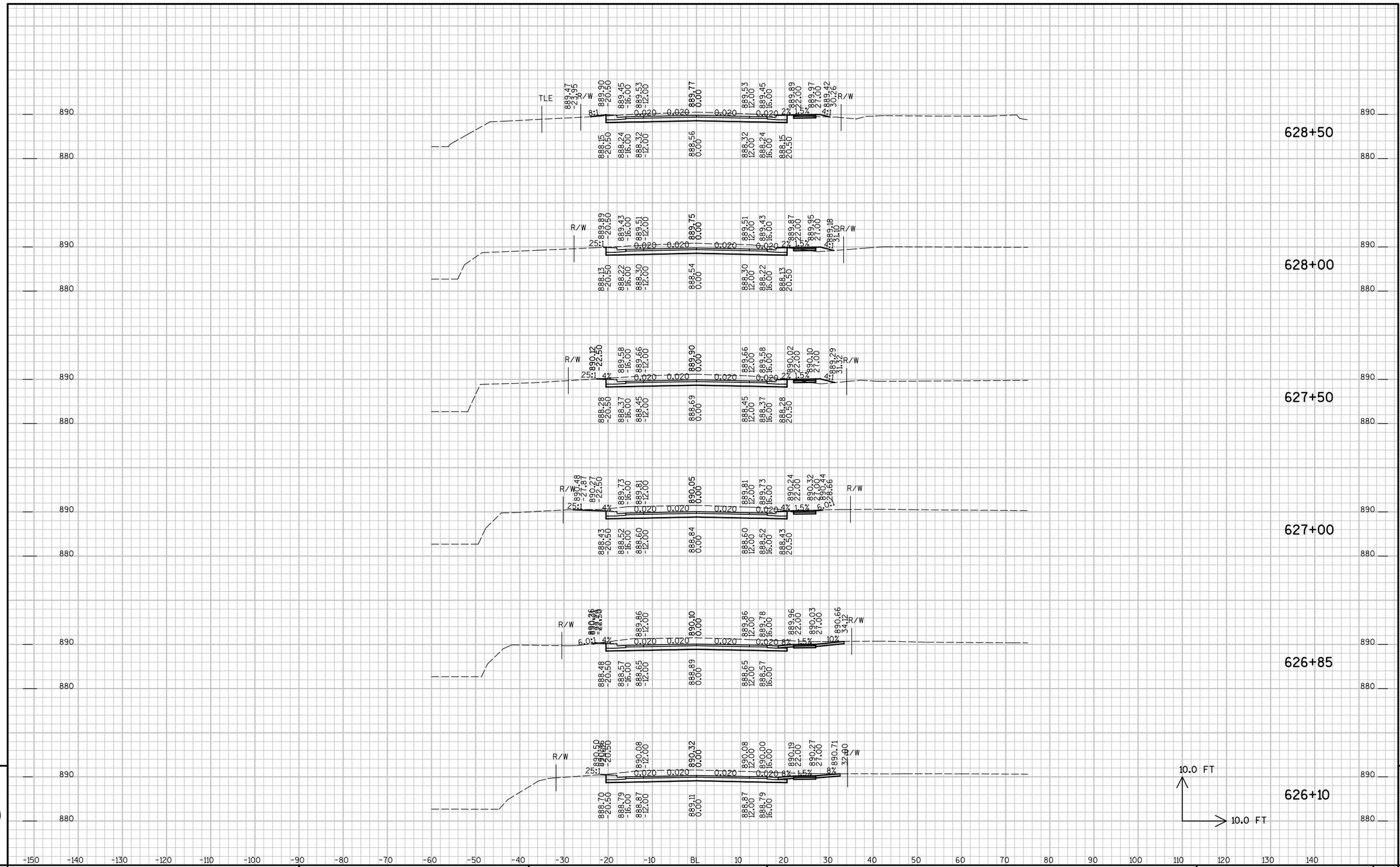


9

9

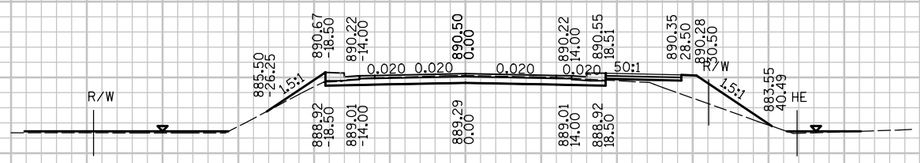
PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 204	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:54 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 205	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:55 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

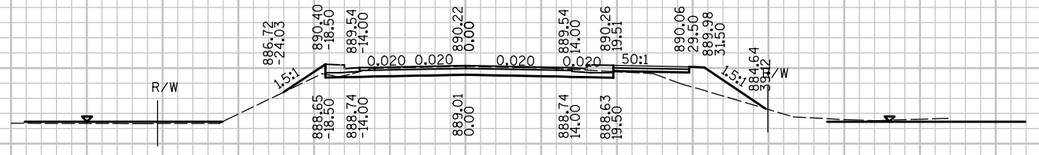


630+50



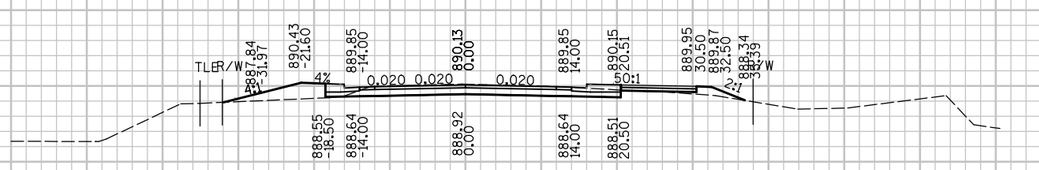
630+00

POST #9 - LT
POST #9 - RT



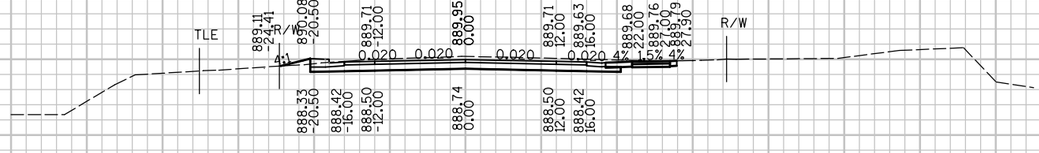
629+75

POST #5 - LT
POST #5 - RT

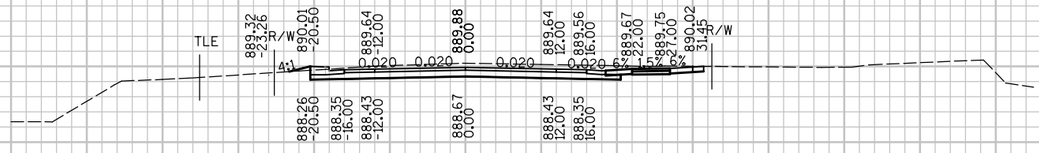


629+50

POST #1 - LT
POST #1 - RT



629+00



628+80

10.0 FT
10.0 FT

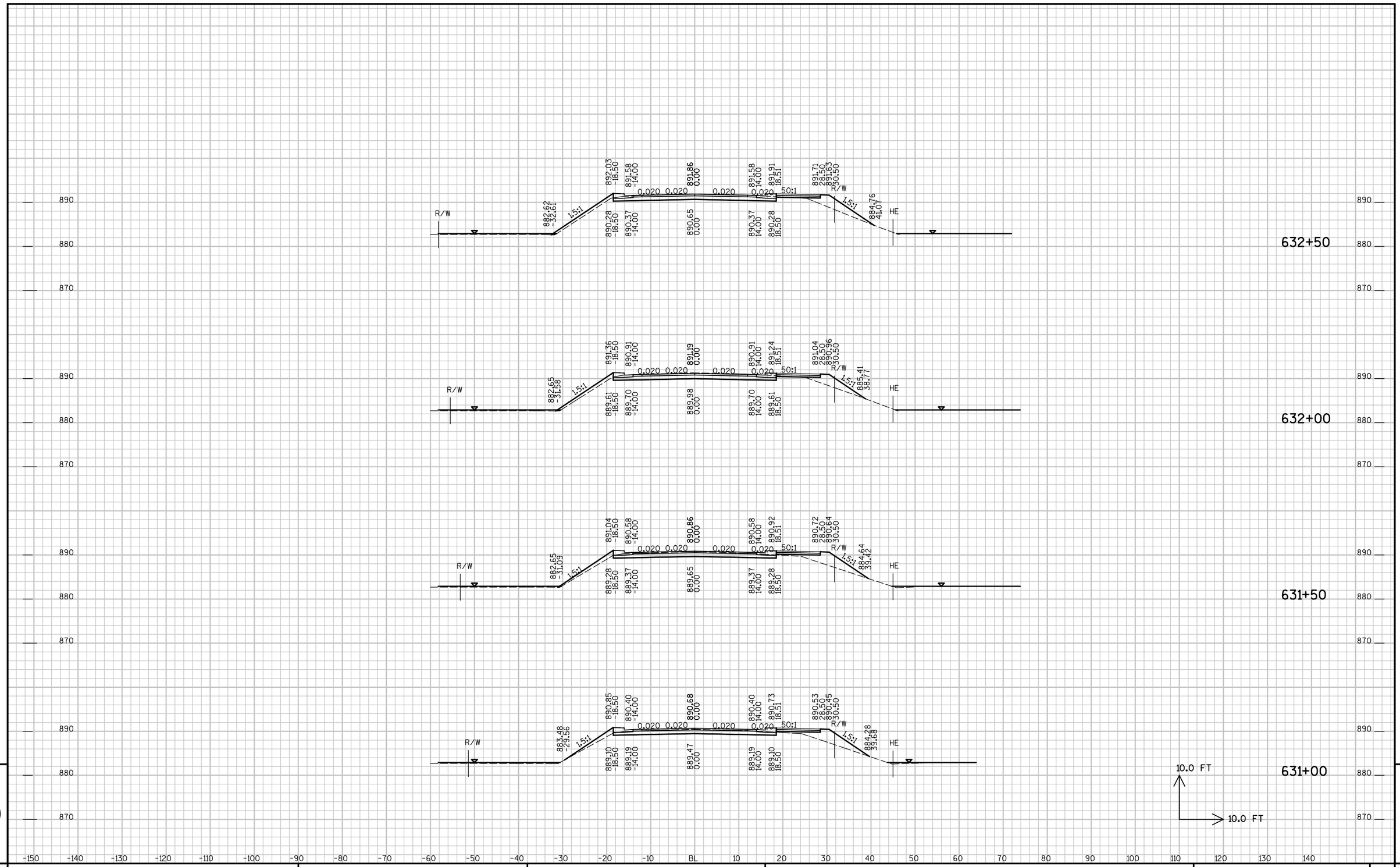
-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 BL 10 20 30 40 50 60 70 80 90 100 110 120 130 140

9

9

PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 206	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:56 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

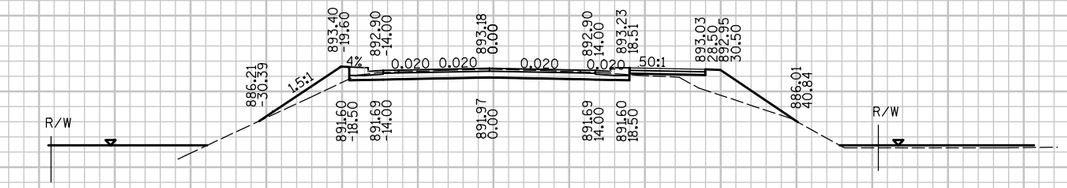


9

9

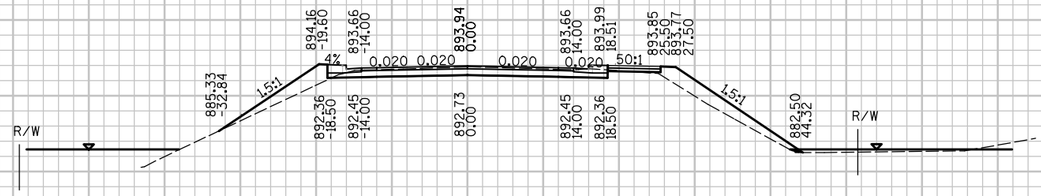
PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 207	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:56 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

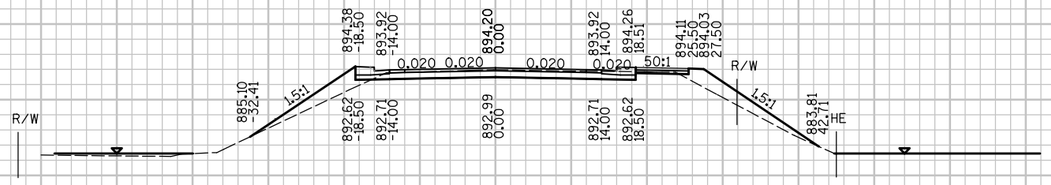


635+43

POST #9 - RT



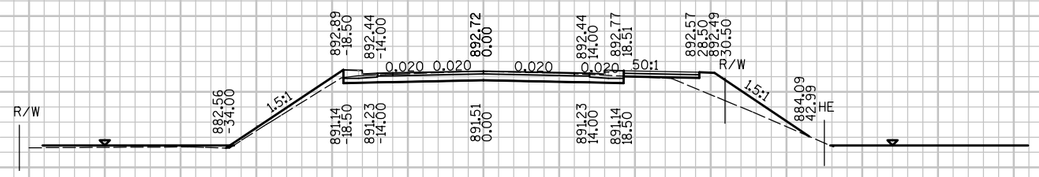
635+00



634+00



633+50



633+00

10.0 FT

10.0 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 BL 10 20 30 40 50 60 70 80 90 100 110 120 130 140

890 880 870

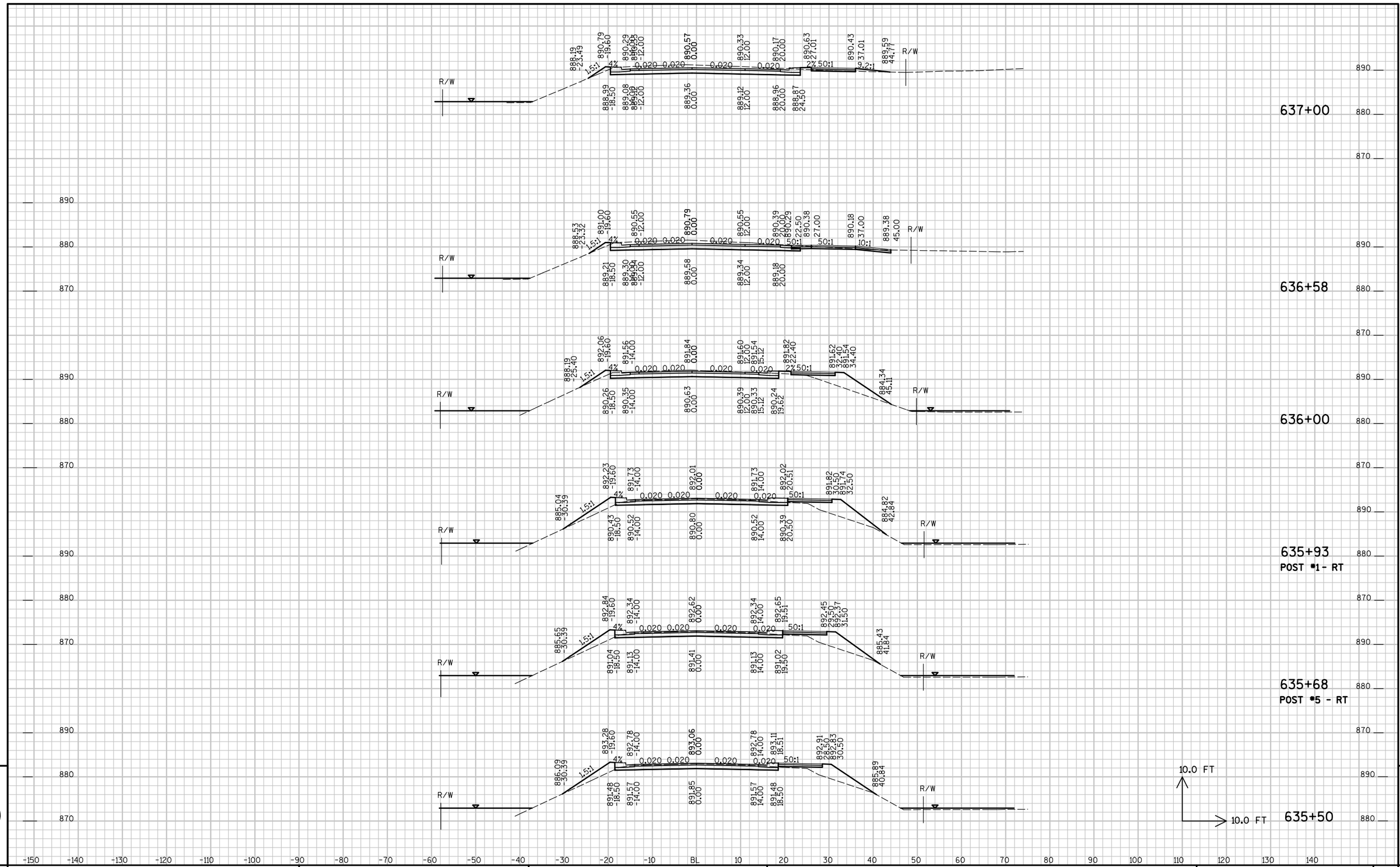
9

9

PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO:

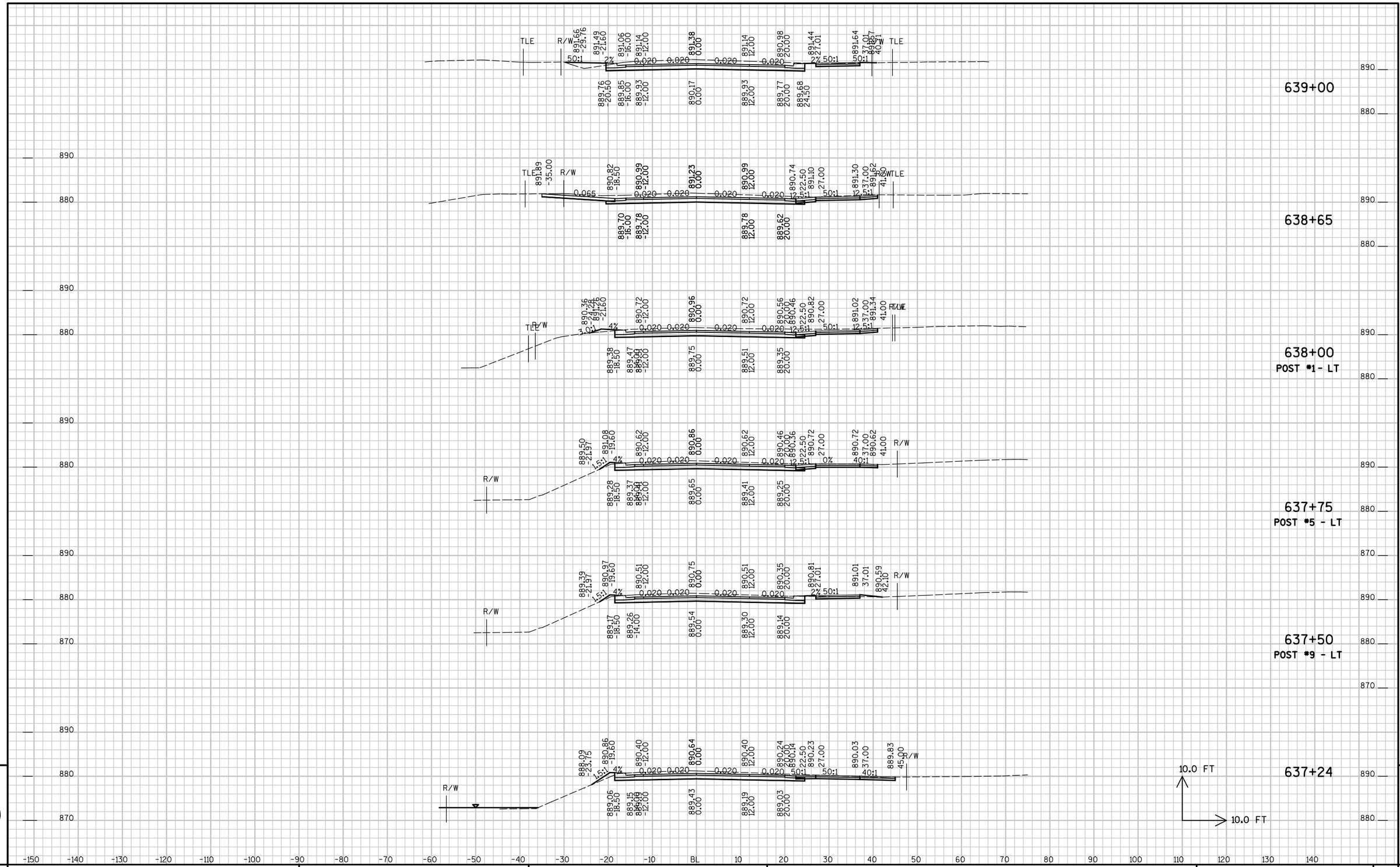
E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:57 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 209	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:58 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

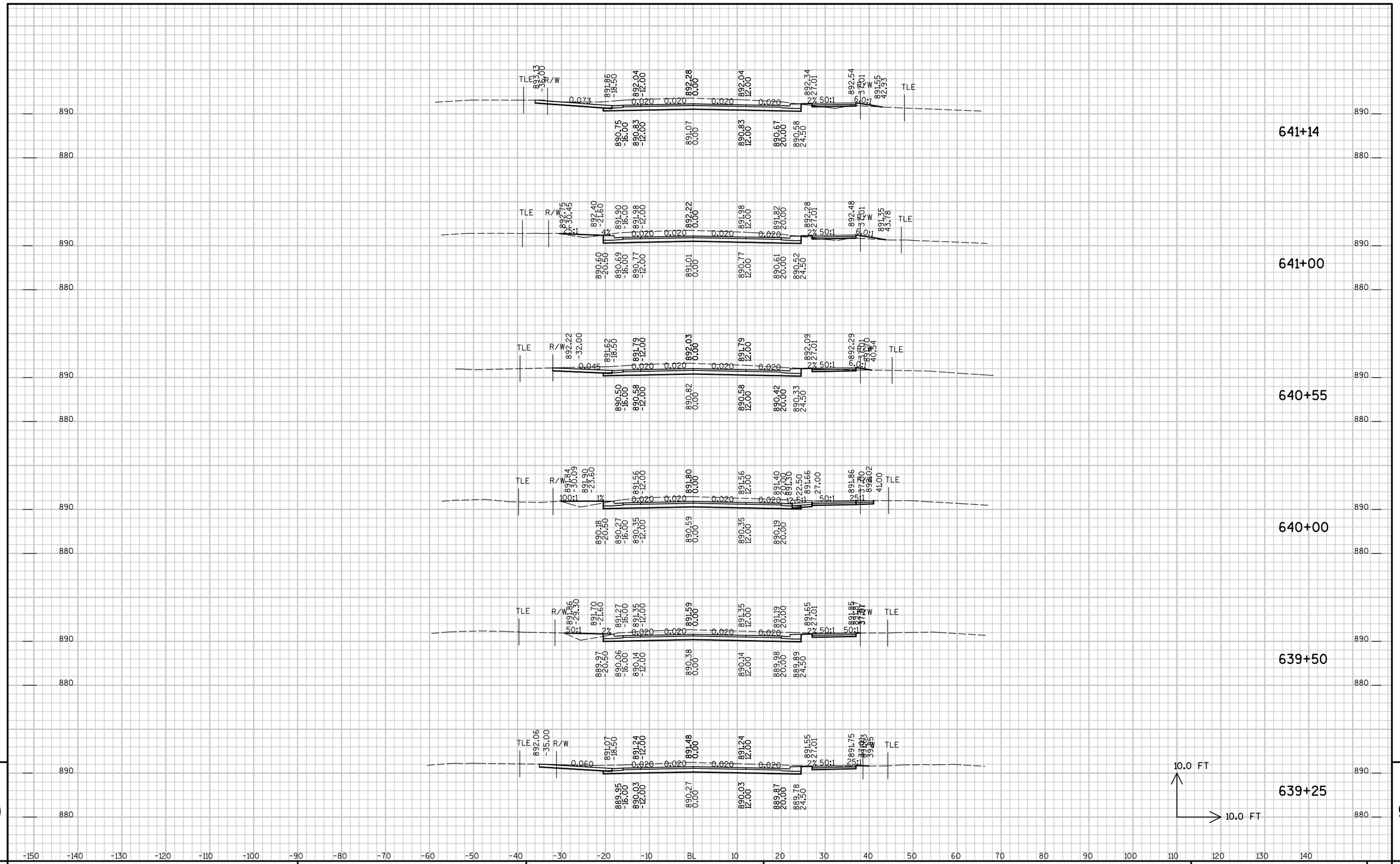


9

PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 210	E

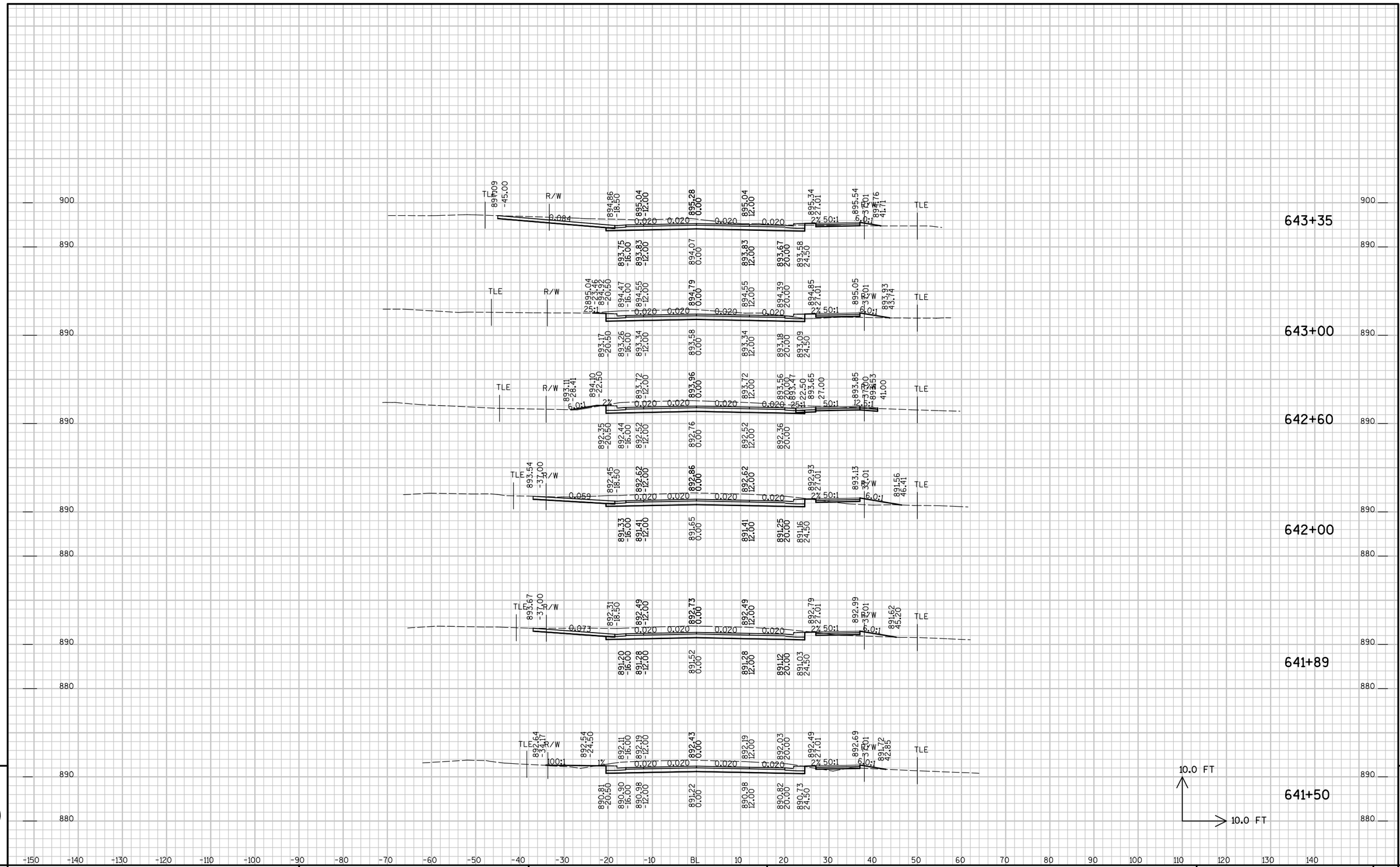
FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:58 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

9



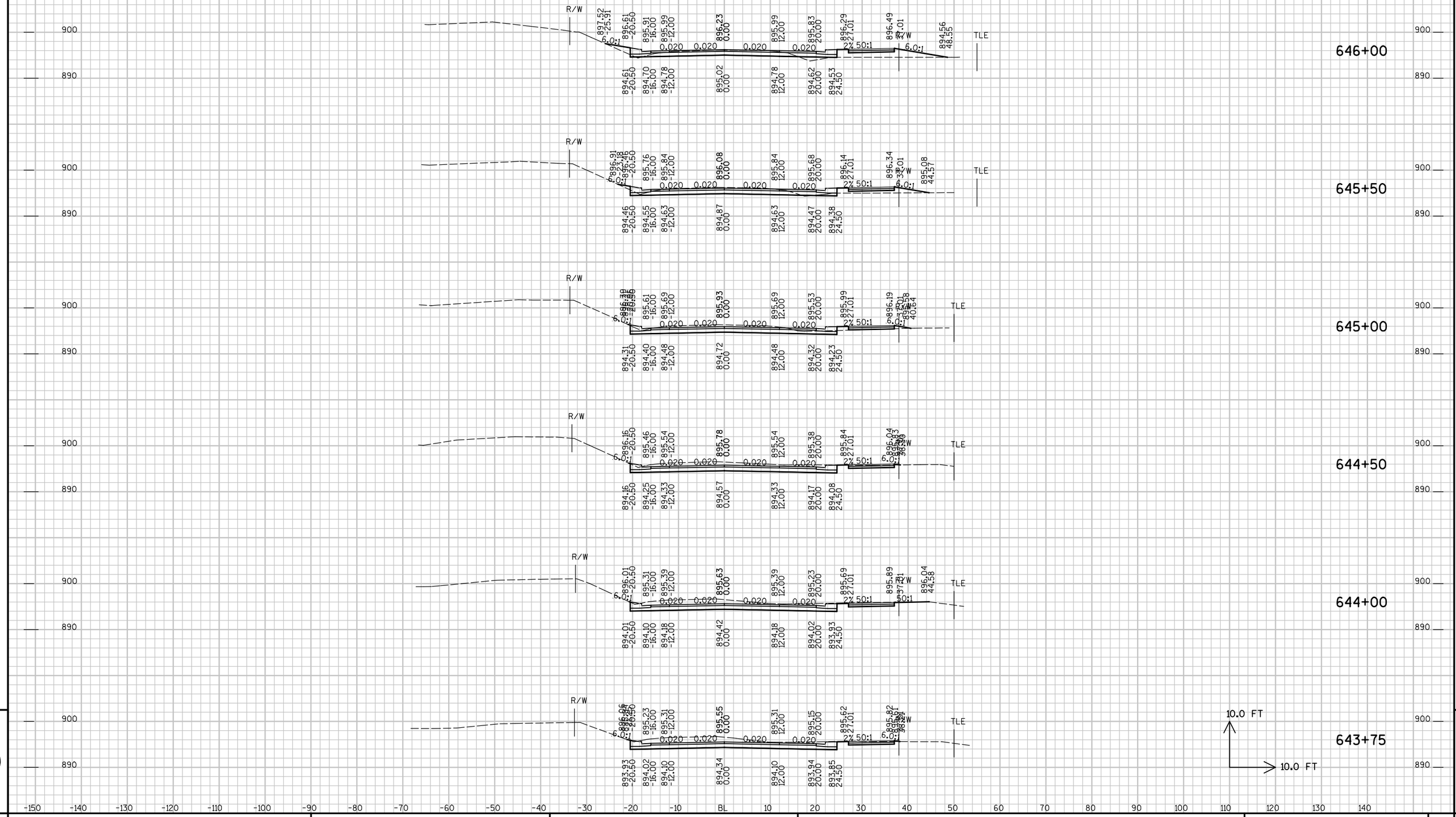
PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 211	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:53:59 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



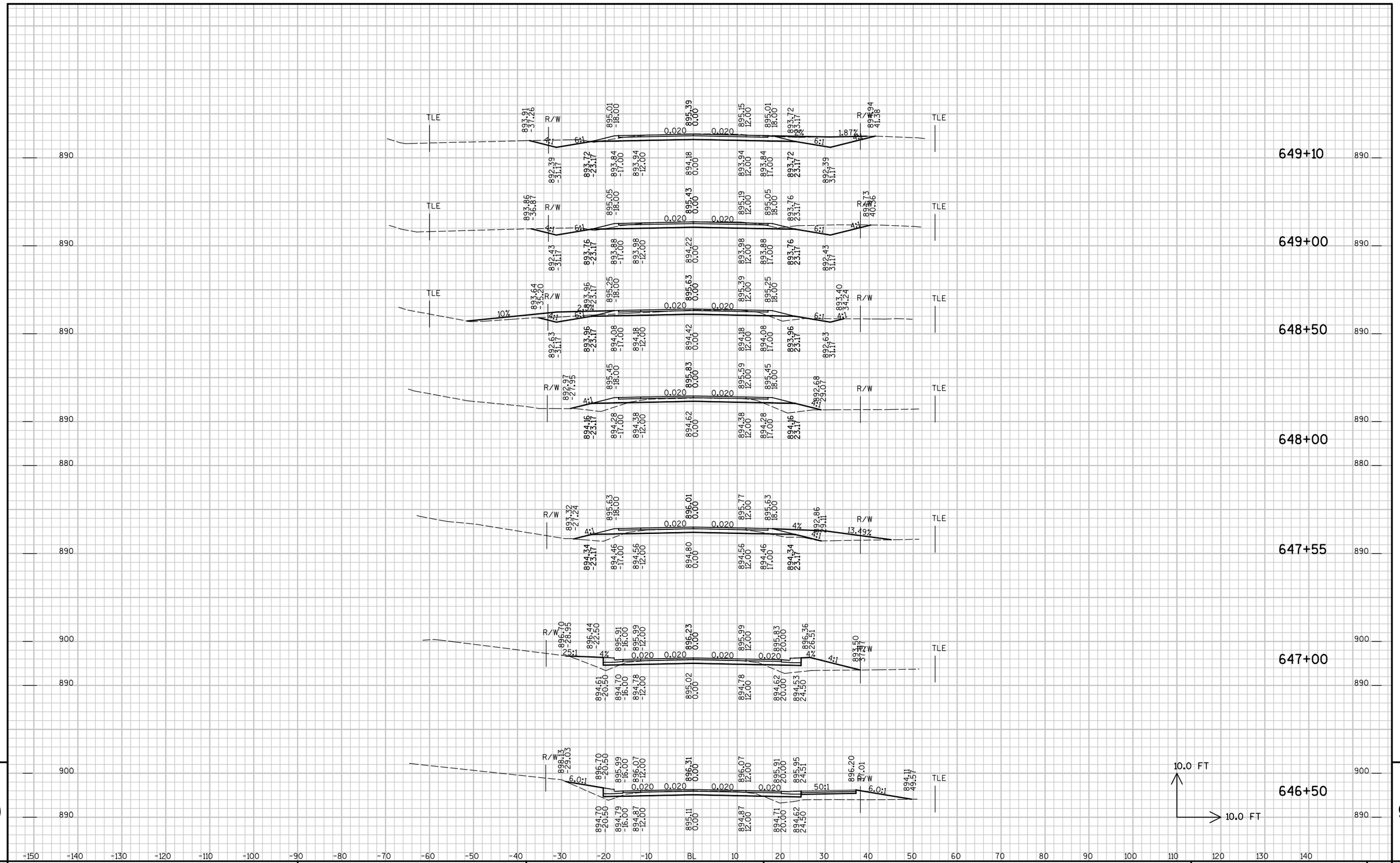
PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 212	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TLEME : $TLEME$ PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



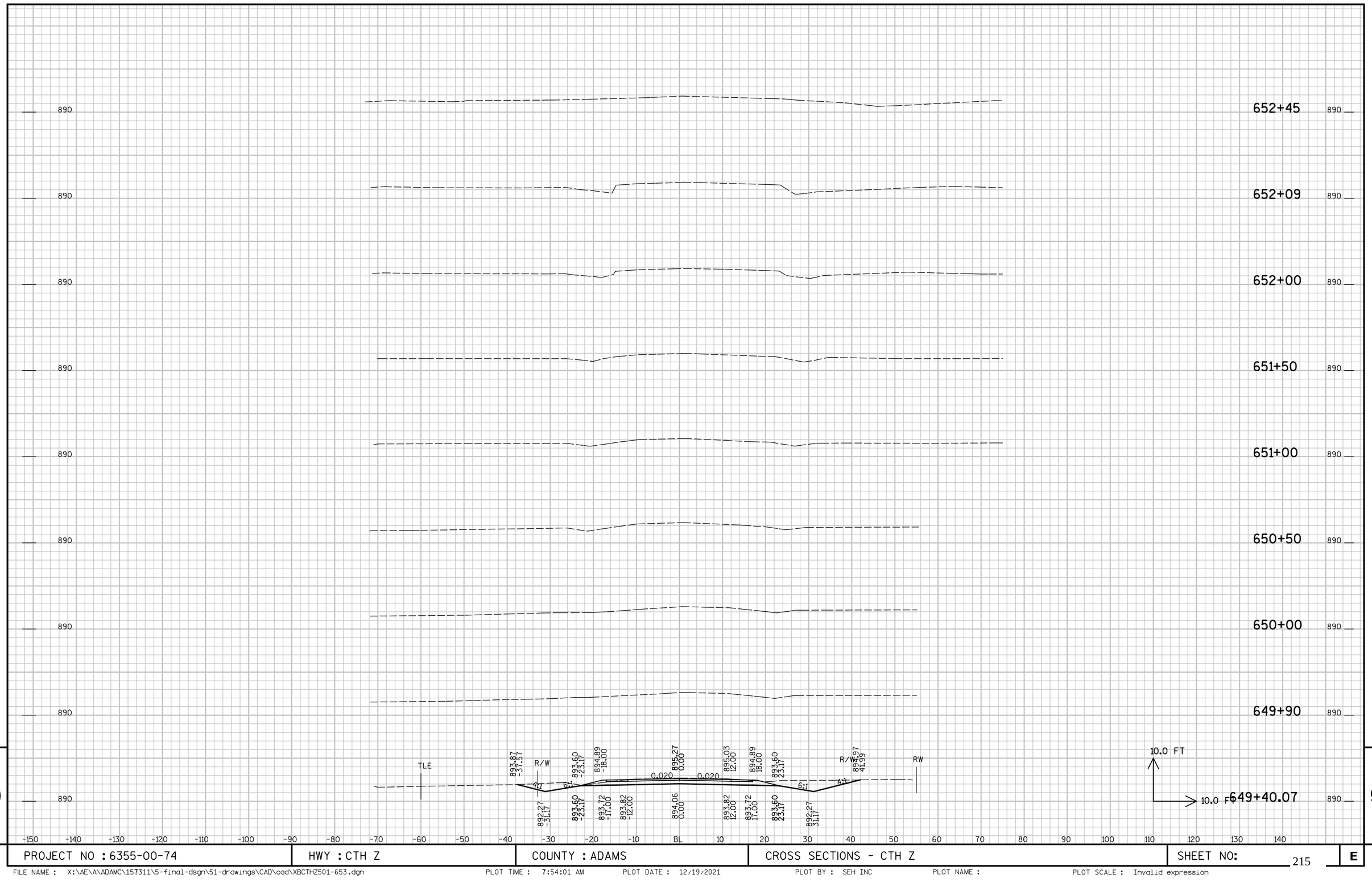
PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 213	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:54:00 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 214 E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:54:01 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



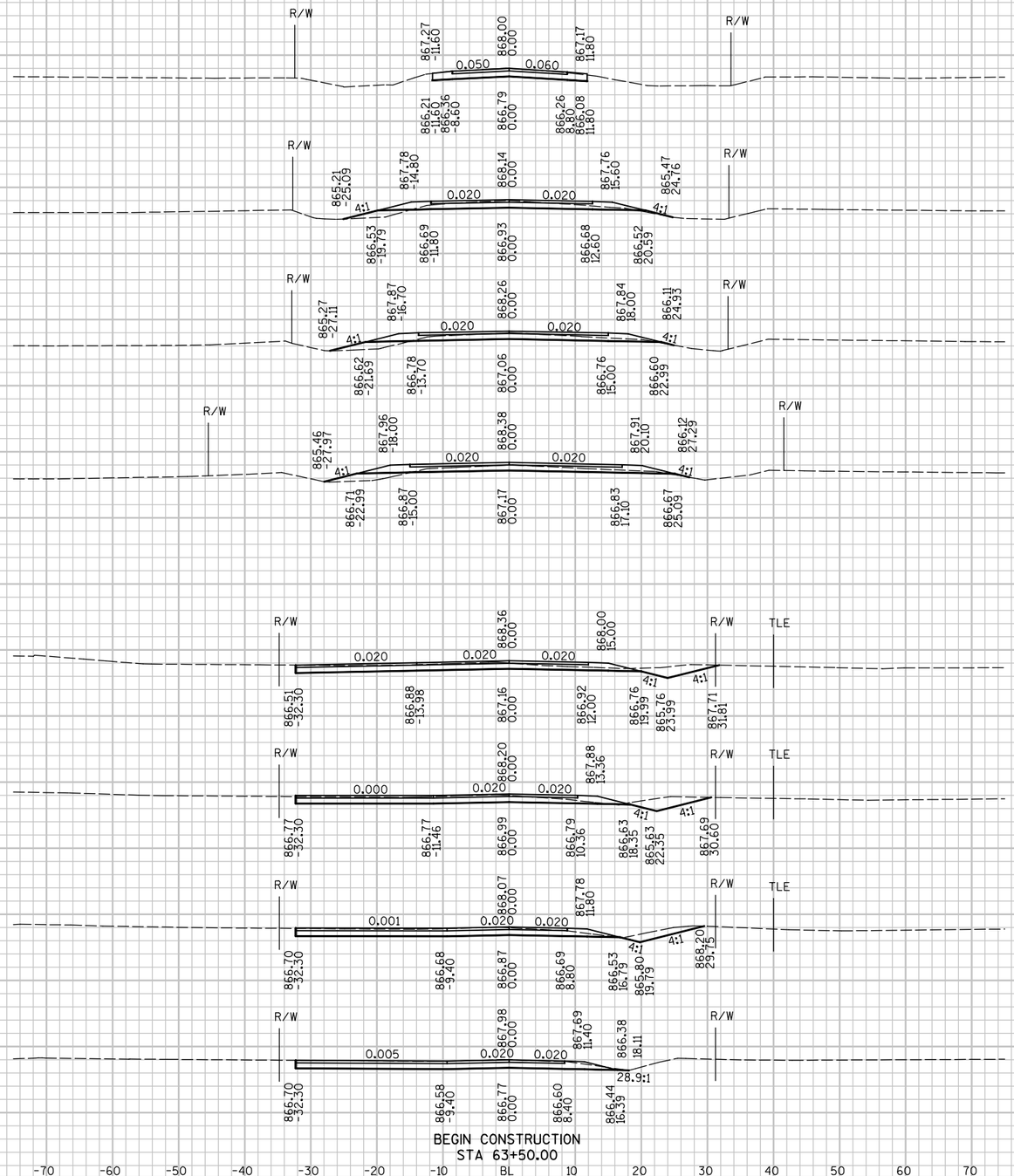
9

PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 215	E

9

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBCTHZ501-653.dgn PLOT TIME : 7:54:01 AM PLOT DATE : 12/19/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

END CONSTRUCTION
STA 66+50.00



66+50

66+00

65+76

65+60

CTH Z LT & RT

PE LT
64+42

PE LT
64+22

PE LT
64+00

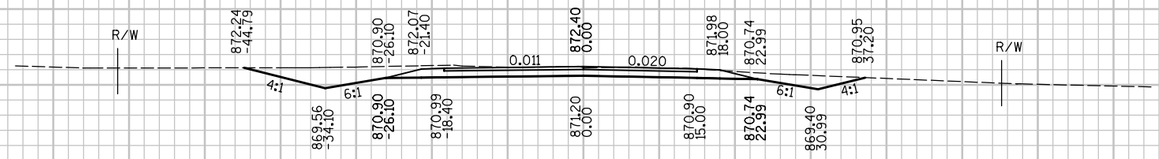
PE LT
63+50

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 BL 10 20 30 40 50 60 70 80 90 100 110 120 130 140

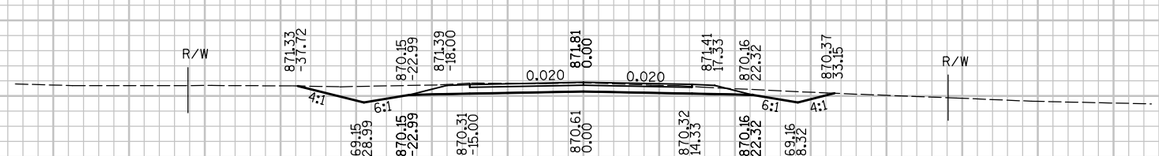
PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - EDGEWOOD AVENUE	SHEET NO: 216	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XB10edgewoodavenue.dgn PLOT TIME : 3:06:39 PM PLOT DATE : 9/28/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

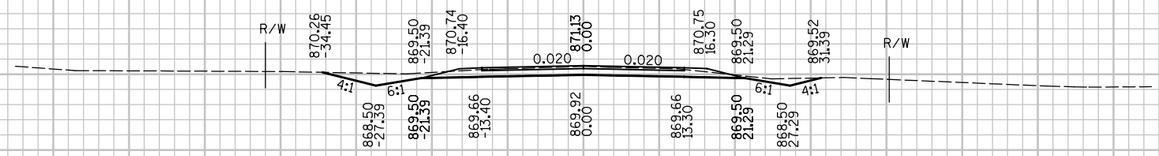
END CONSTRUCTION
STA 70+00.00



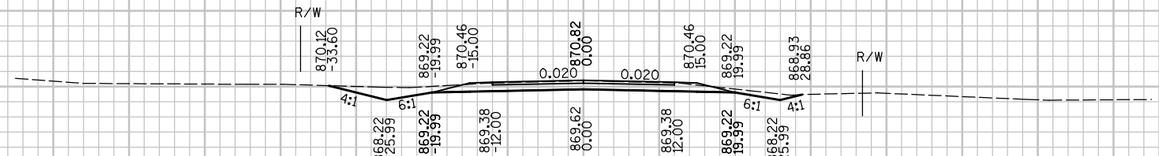
69+42



69+22



69+00



68+90

10.0 FT
10.0 FT

BEGIN CONSTRUCTION
STA 68+86.00

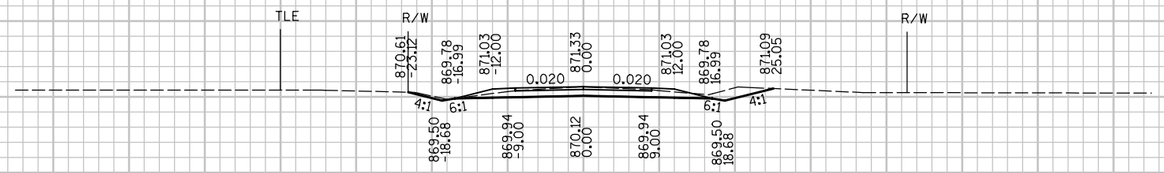
870
860
-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 BL 10 20 30 40 50 60 70 80 90 100 110 120 130 140

9

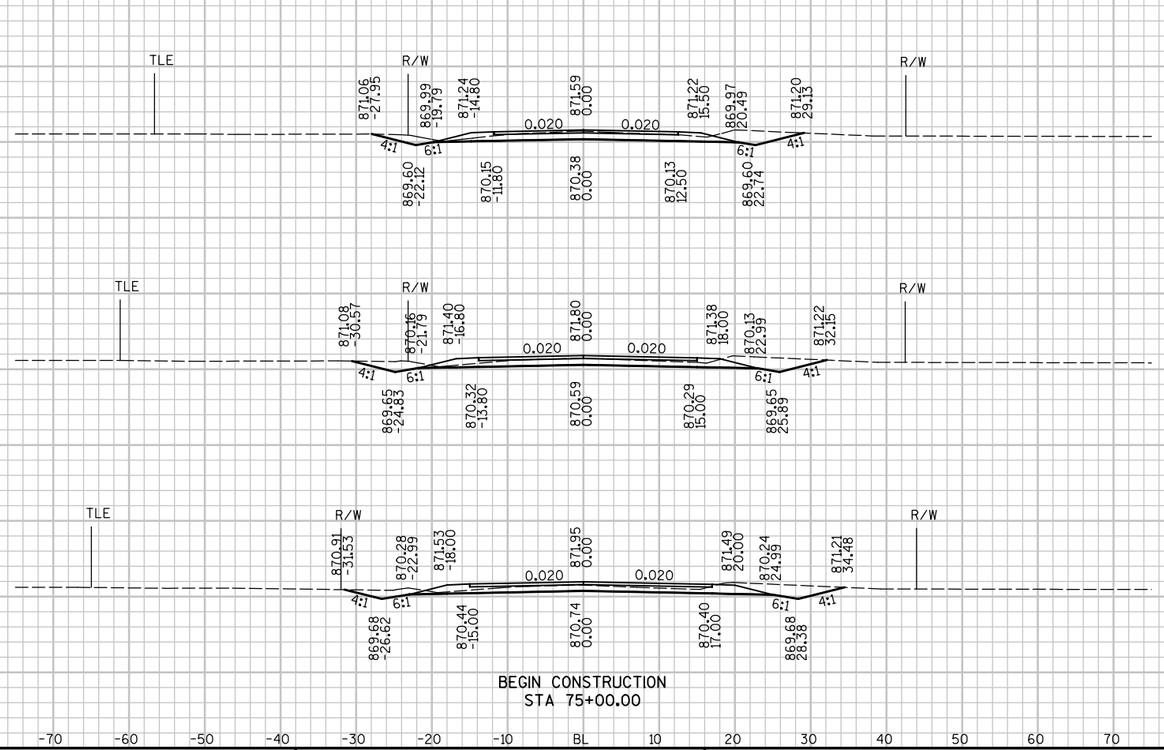
PROJECT NO : 6355-00-74 | HWY : CTH Z | COUNTY : ADAMS | CROSS SECTIONS - LAKES EDGE LN | SHEET NO: 217 | E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XB11newroad.dgn PLOT TIME : 3:06:41 PM PLOT DATE : 9/28/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

END CONSTRUCTION
STA 76+50.00



76+50



76+00

75+75

75+60

10.0 FT
10.0 FT

BEGIN CONSTRUCTION
STA 75+00.00

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 BL 10 20 30 40 50 60 70 80 90 100 110 120 130 140

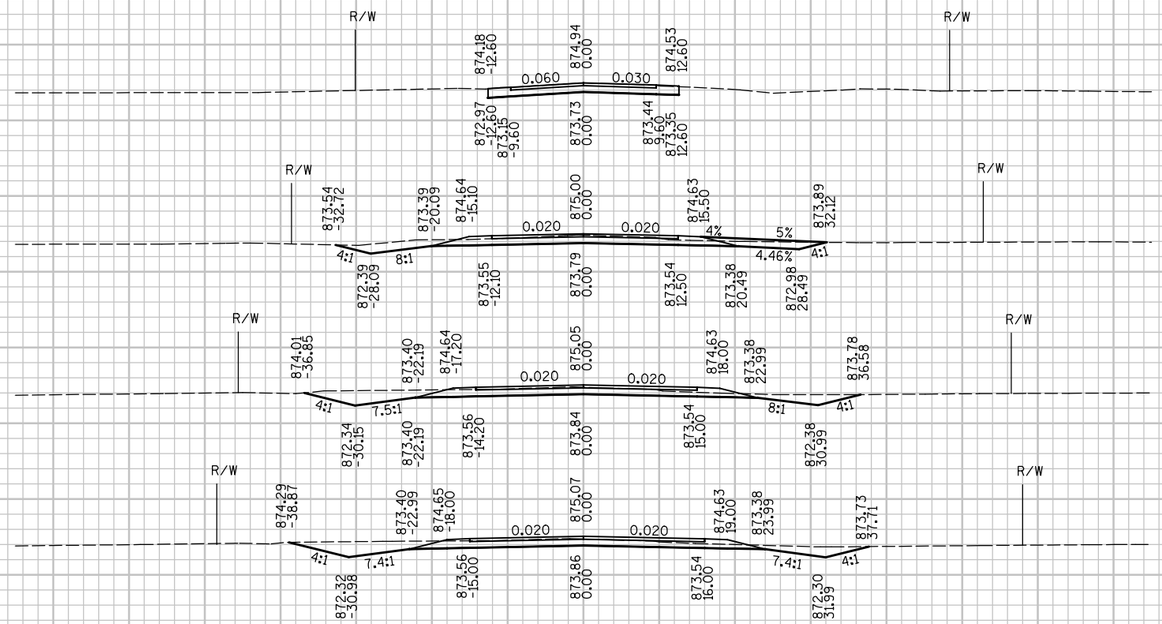
9

9

PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - EAGLE DRIVE	SHEET NO: 218	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XB12eagledrive.dgn PLOT TIME : 3:06:42 PM PLOT DATE : 9/28/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

END CONSTRUCTION
STA 81+30.00



BEGIN CONSTRUCTION
STA 80+00.00

81+30

PE RT
81+00

80+75

80+65

870

10.0 FT
10.0 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 BL 10 20 30 40 50 60 70 80 90 100 110 120 130 140

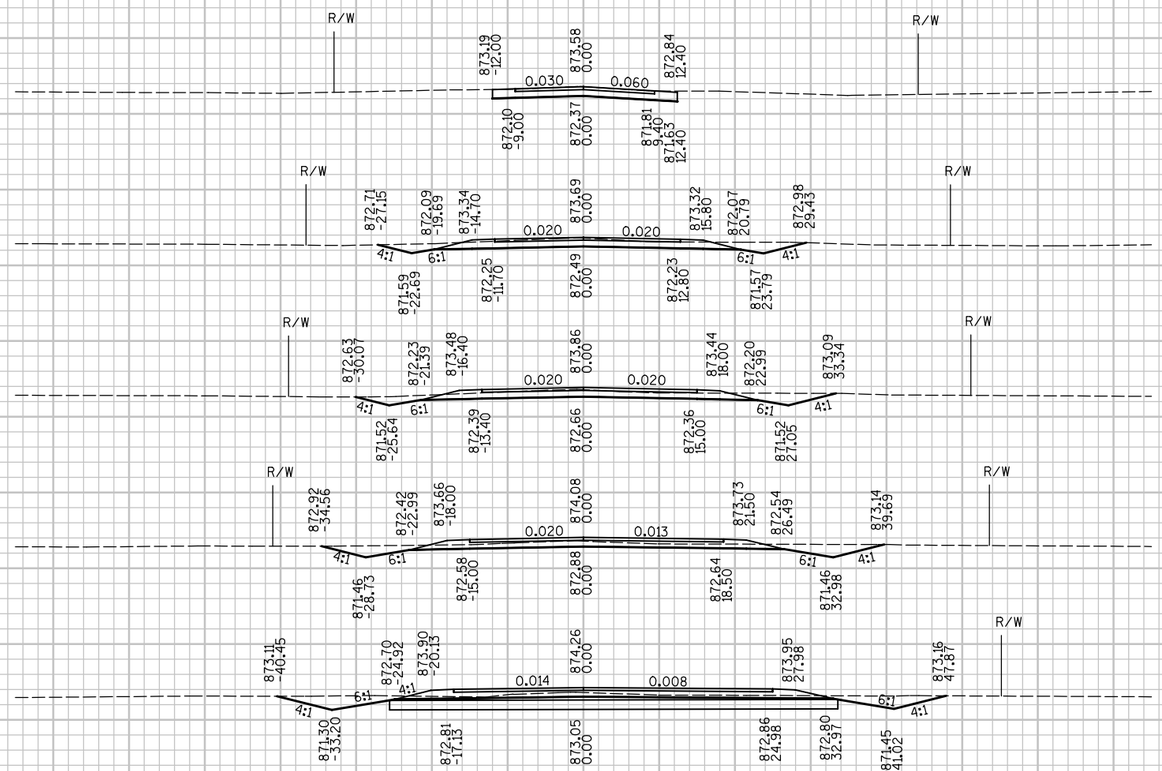
9

9

PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - EAGLE COURT	SHEET NO:	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XB13eaglecourt.dgn PLOT TIME : 3:06:43 PM PLOT DATE : 9/28/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

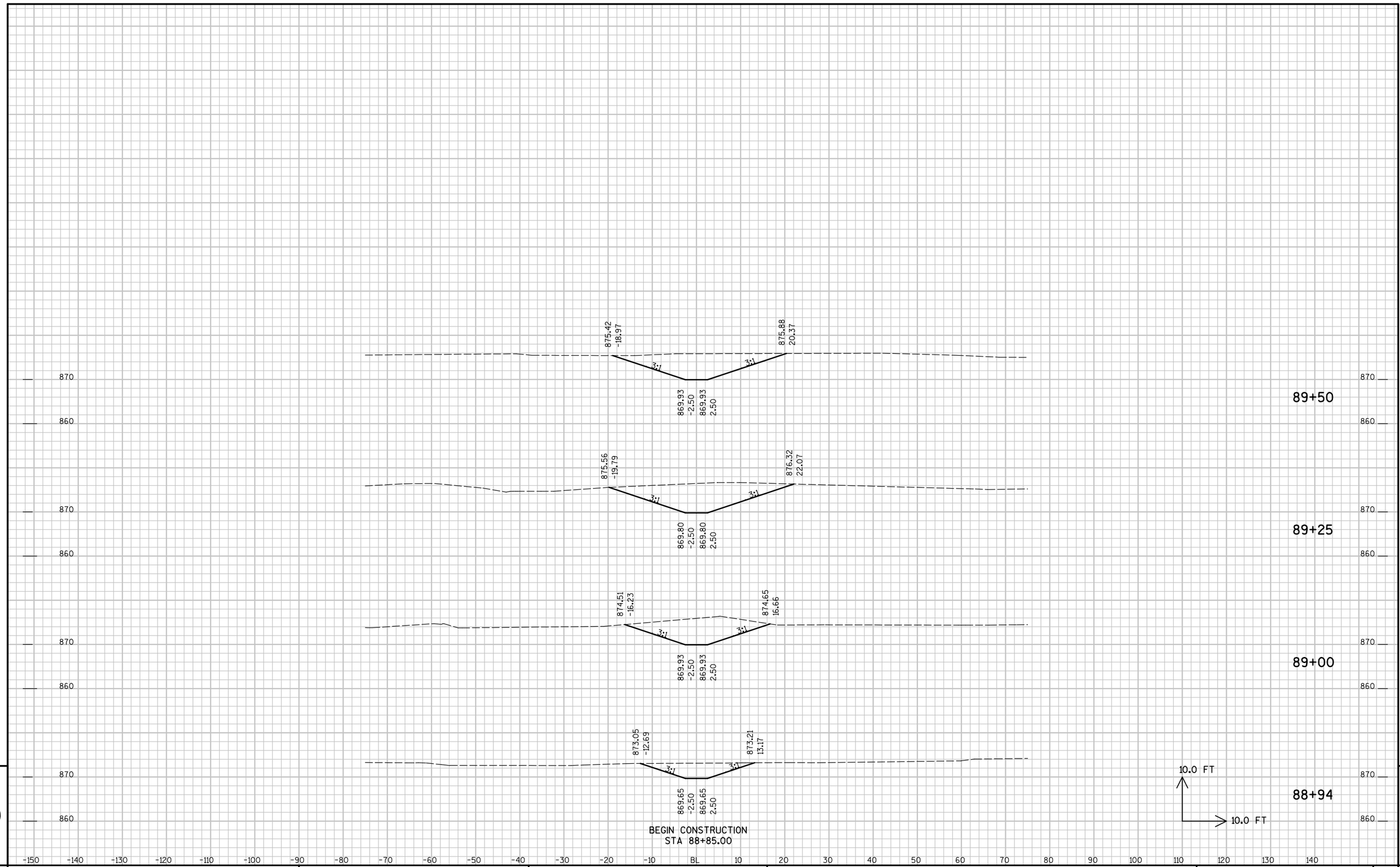
END CONSTRUCTION
STA 86+35.00



9

9

PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - EAGLE AVENUE	SHEET NO: 220	E

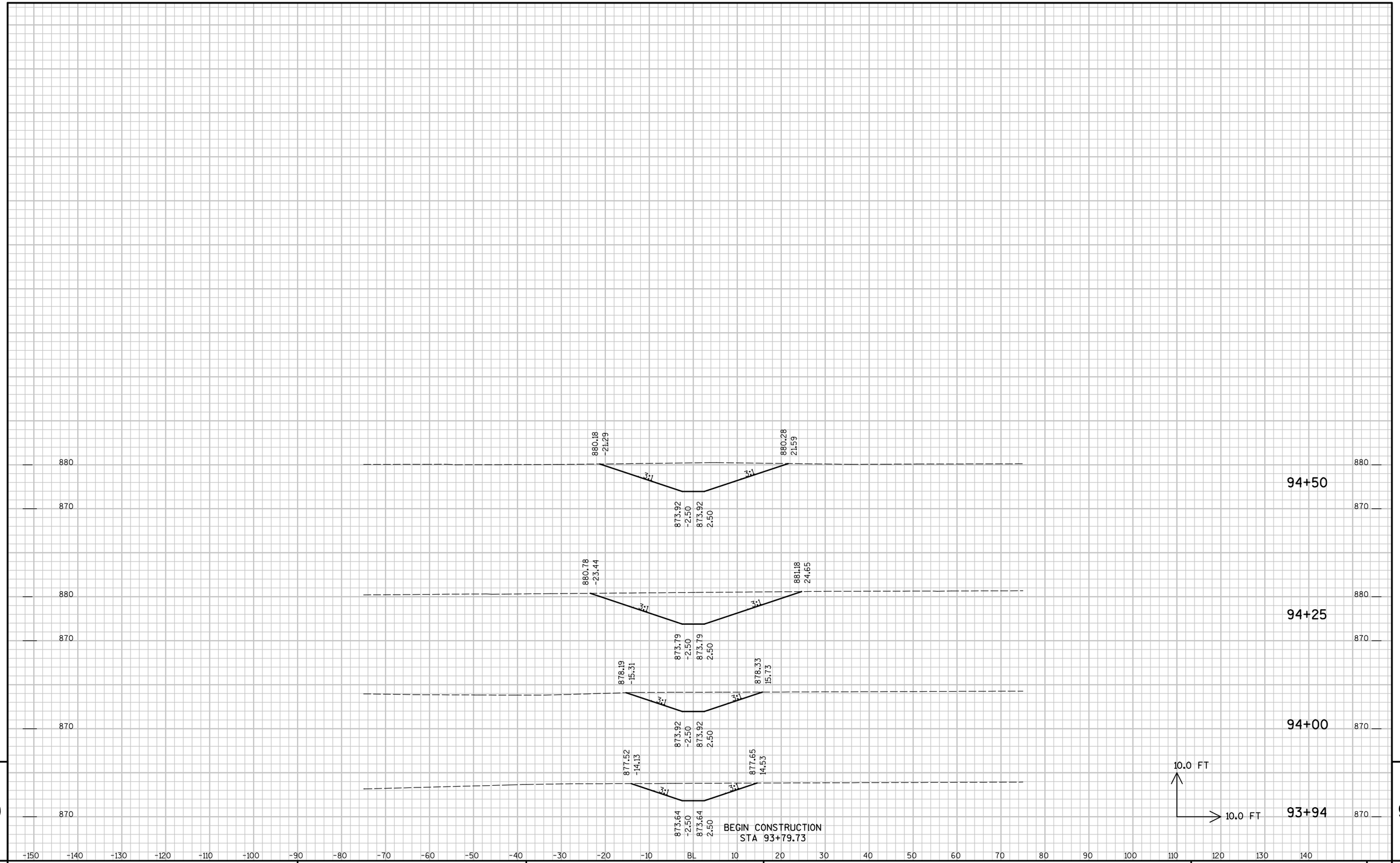


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PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 221	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBOUTFALL1.dgn PLOT TIME : 3:06:44 PM PLOT DATE : 9/28/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

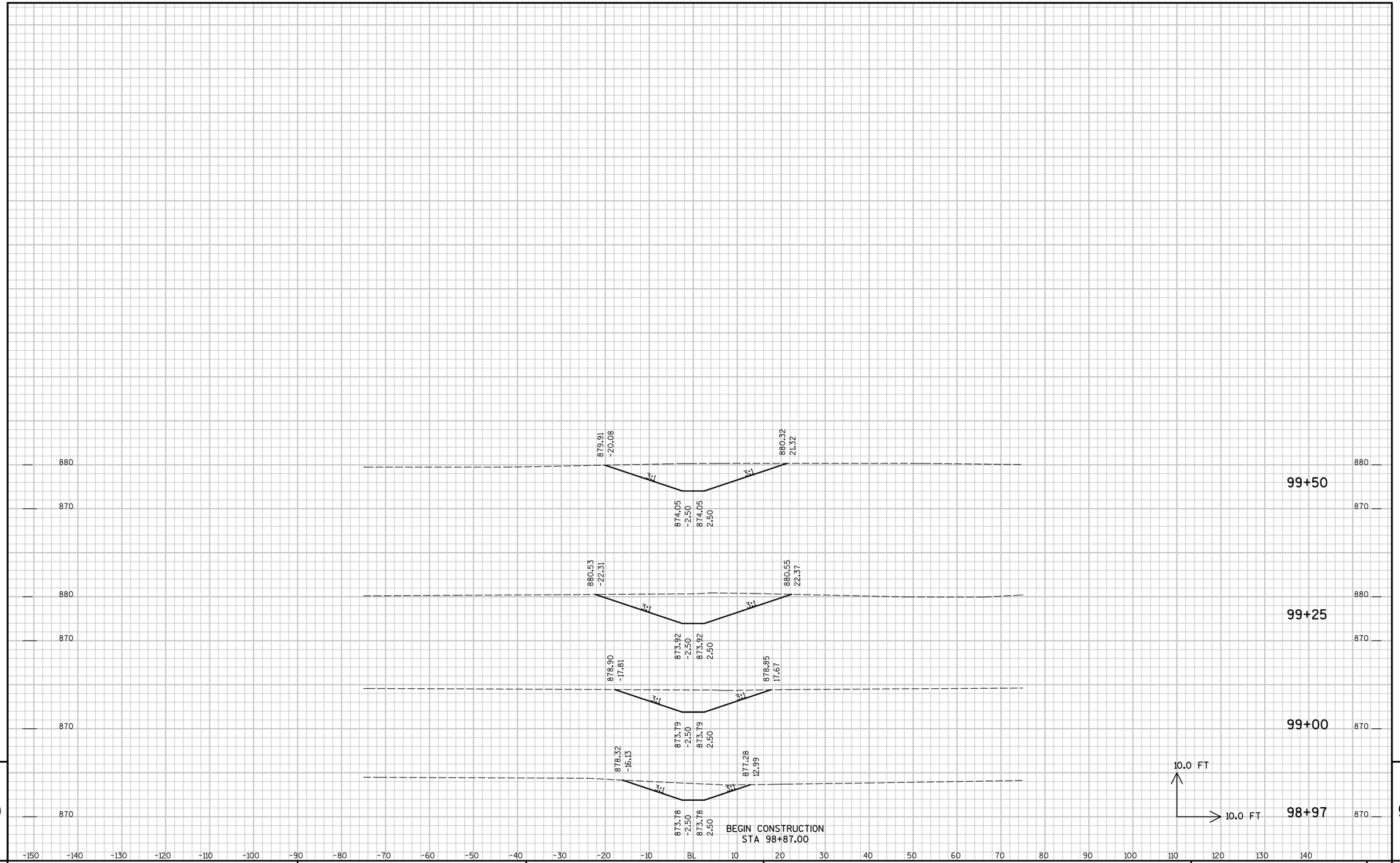


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PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 222	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBOUTFALL2.dgn PLOT TIME : 3:06:45 PM PLOT DATE : 9/28/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



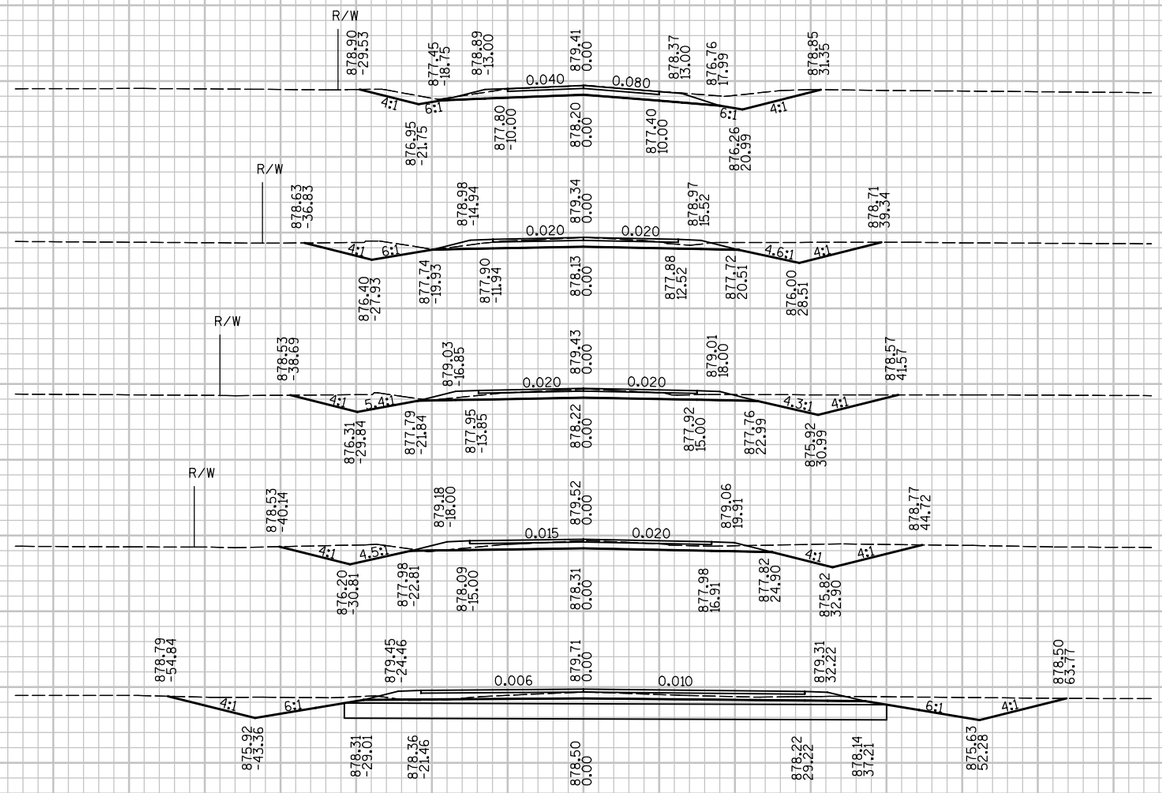
9

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PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - CTH Z	SHEET NO: 223	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XBOUTFALL3.dgn PLOT TIME : 3:06:45 PM PLOT DATE : 9/28/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

END CONSTRUCTION
STA 106+50.00



BEGIN CONSTRUCTION
STA 105+00.00

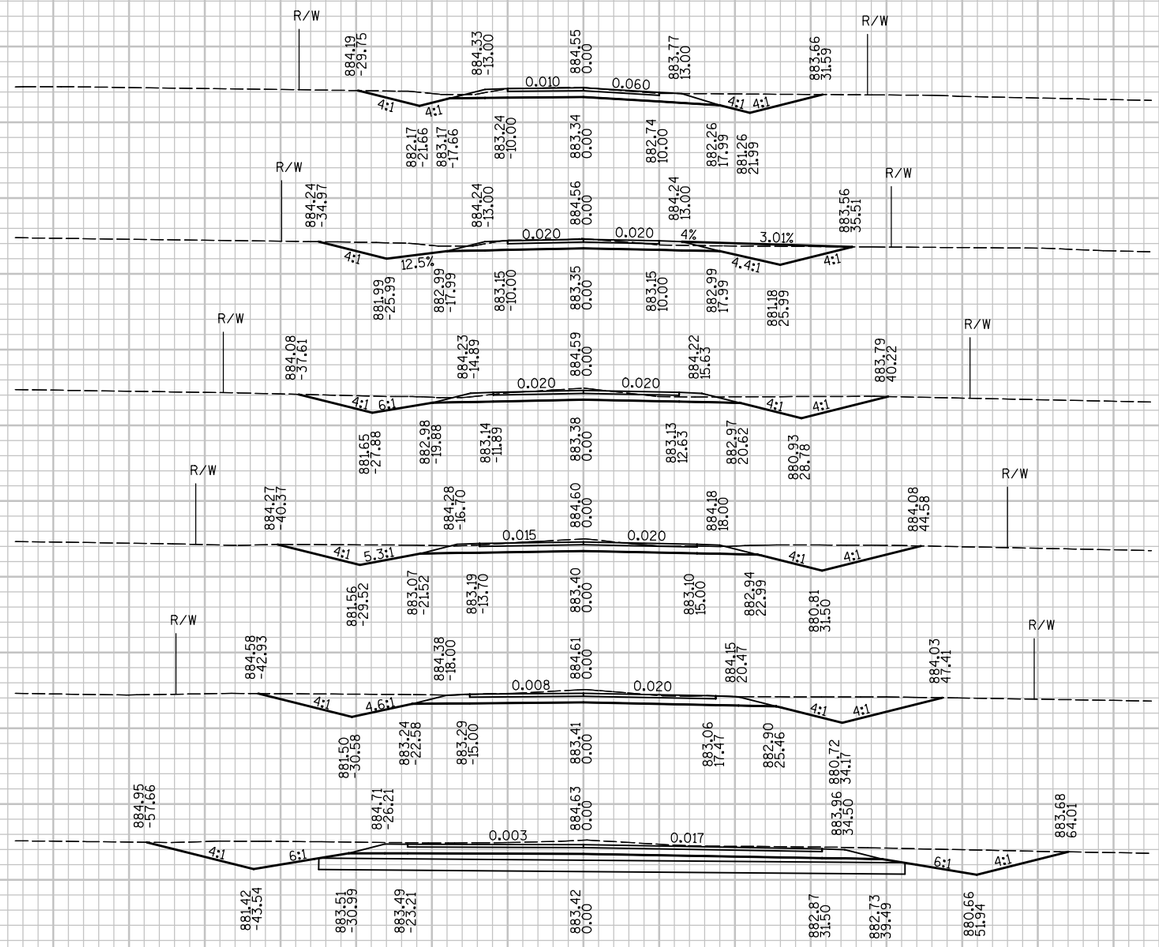
10.0 FT
10.0 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 BL 10 20 30 40 50 60 70 80 90 100 110 120 130 140

PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - DYKE DRIVE	SHEET NO: 224 E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XB15dykedrive.dgn PLOT TIME : 3:06:46 PM PLOT DATE : 9/28/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

END CONSTRUCTION
STA 111+65.00



BEGIN CONSTRUCTION
STA 110+00.00

111+65

111+50

PE RT
111+00

110+76.30

110+59.30

110+35

880

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 BL 10 20 30 40 50 60 70 80 90 100 110 120 130 140

10.0 FT
10.0 FT

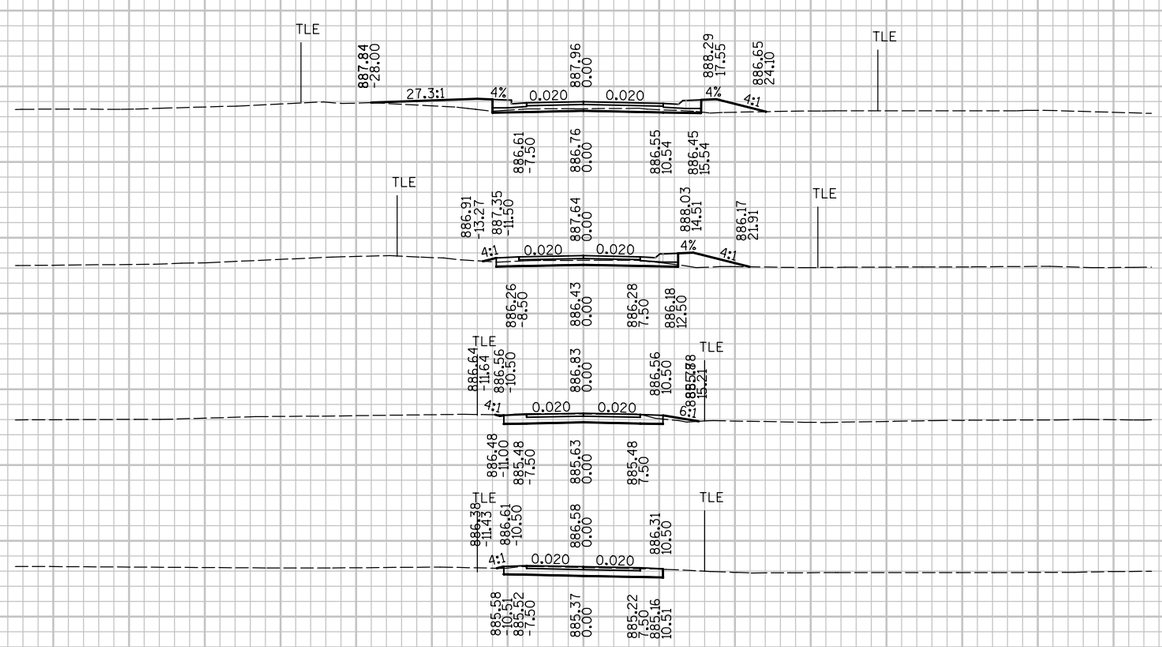
9

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PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - LAKEVIEW DRIVE	SHEET NO: 225	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XB161akeviewdrive.dgn PLOT TIME : 3:06:46 PM PLOT DATE : 9/28/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

END CONSTRUCTION
STA 115+00.00



BEGIN CONSTRUCTION
STA 113+75.00

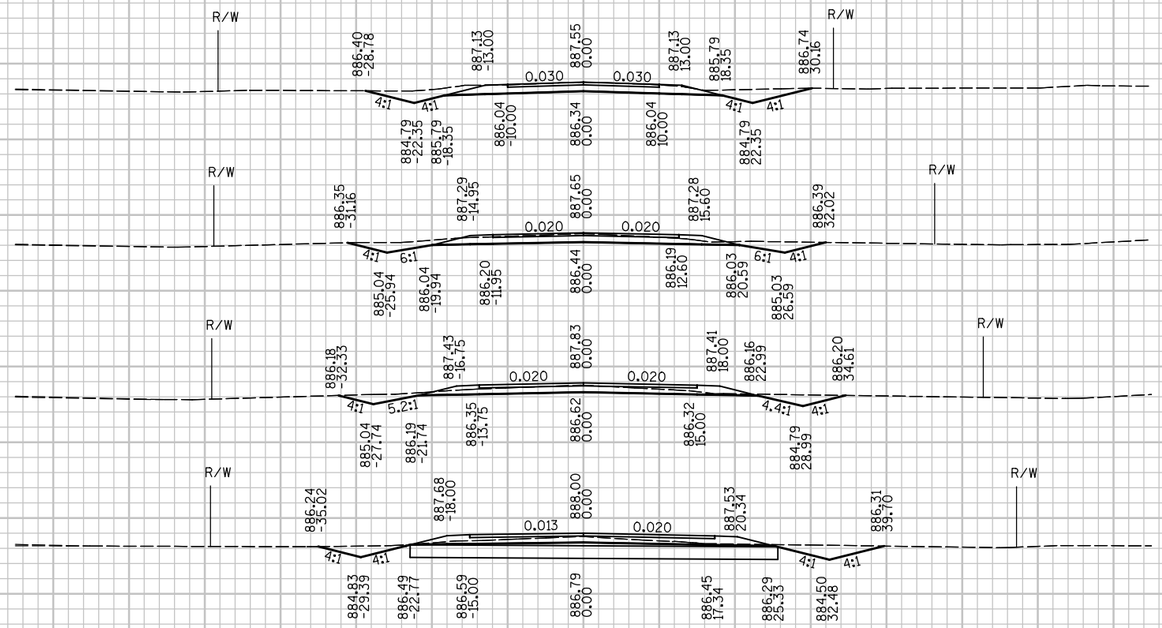
-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 BL 10 20 30 40 50 60 70 80 90 100 110 120 130 140

9 9

PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - PARK EXIT	SHEET NO: 226	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XB17parkexit.dgn PLOT TIME : 3:06:48 PM PLOT DATE : 9/28/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

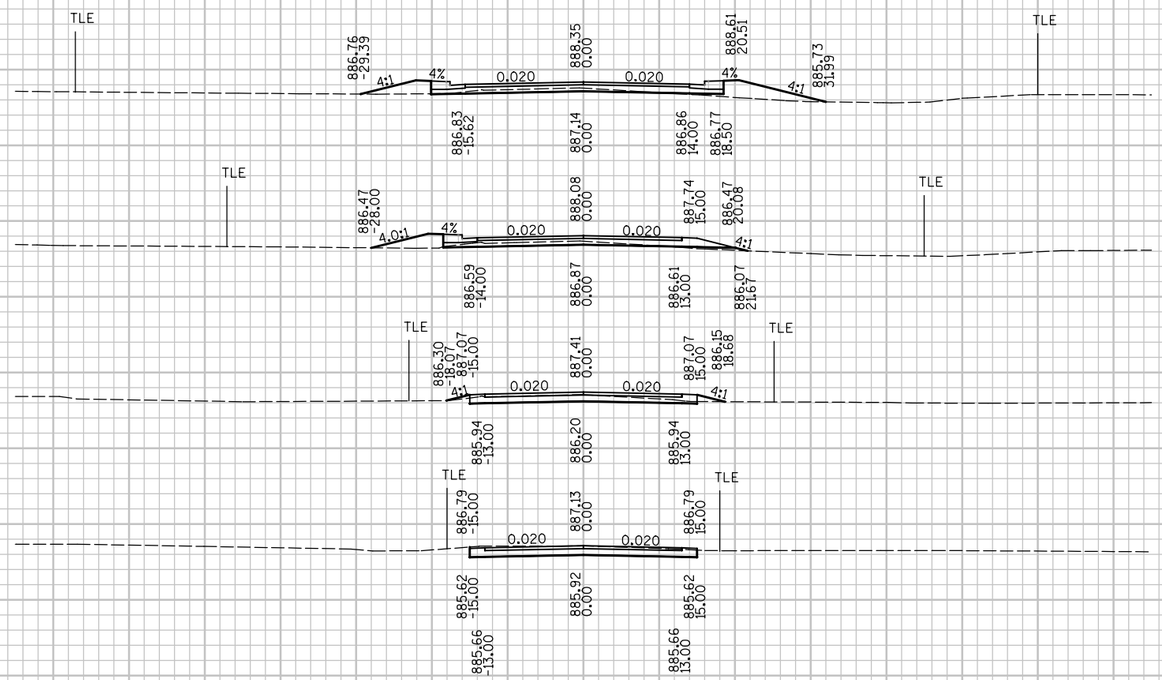
END CONSTRUCTION
STA 121+50.00



PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - DYKE AVENUE	SHEET NO: 227	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XB18dykeavenue.dgn PLOT TIME : 3:06:48 PM PLOT DATE : 9/28/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

END CONSTRUCTION
STA 125+00.00



BEGIN CONSTRUCTION
STA 123+50.00

880

124+49.39

124+38.11

124+00

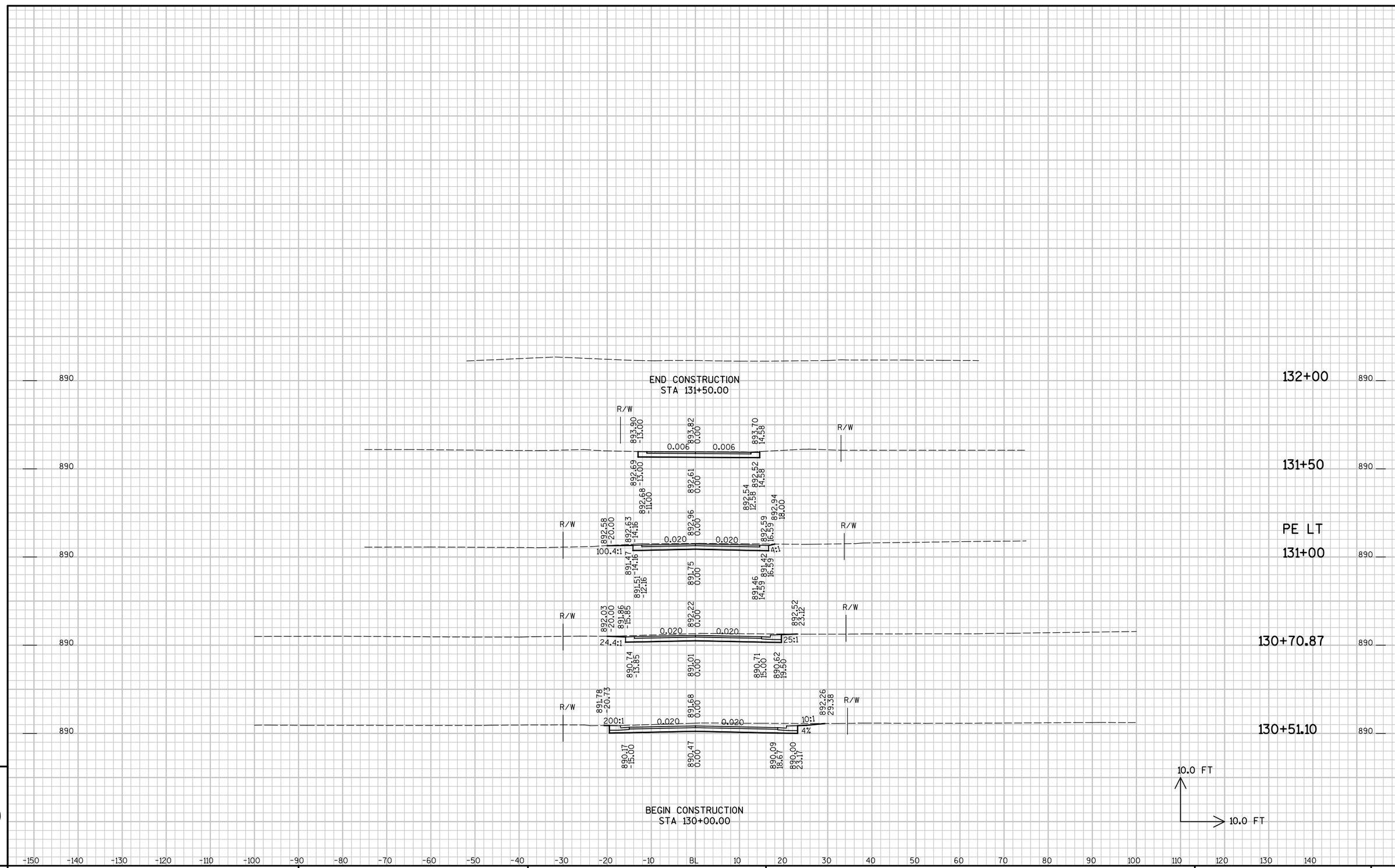
123+50

10.0 FT
10.0 FT

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 BL 10 20 30 40 50 60 70 80 90 100 110 120 130 140

PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - PARK ENTRANCE	SHEET NO: 228	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XB19parkentrance.dgn PLOT TIME : 3:06:49 PM PLOT DATE : 9/28/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression



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PROJECT NO : 6355-00-74	HWY : CTH Z	COUNTY : ADAMS	CROSS SECTIONS - DUCK CREEK DRIVE	SHEET NO: 229	E

FILE NAME : X:\AE\A\ADAMC\157311\5-final-dsgn\51-drawings\CAD\cad\XB20duckcreekdrive.dgn PLOT TIME : 3:06:49 PM PLOT DATE : 9/28/2021 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

Wisconsin Department of Transportation

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