EAU

MARCH 2018

PROJECT ID: 7276-00-72

WITH: N/A

COUNTY: TREMPEALEAU

ORDER OF SHEETS

TOTAL SHEETS = 36

39

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7276-00-72	—	—

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

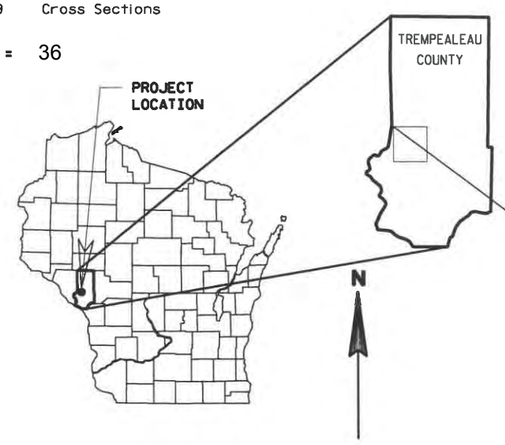
PLAN OF PROPOSED IMPROVEMENT

T ARCADIA, MILL ROAD

TURTON CREEK BRIDGE

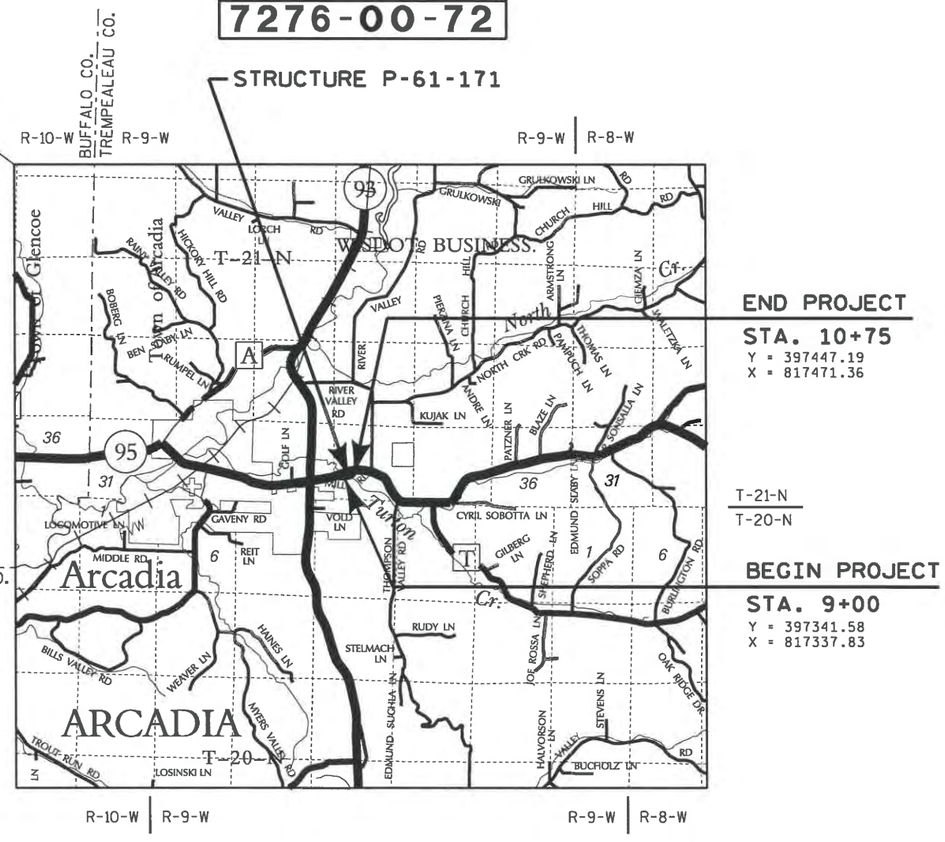
LOC STR

TREMPEALEAU COUNTY



STATE PROJECT NUMBER
7276-00-72

STRUCTURE P-61-171



END PROJECT
STA. 10+75
Y = 397447.19
X = 817471.36

T-21-N
T-20-N

BEGIN PROJECT
STA. 9+00
Y = 397341.58
X = 817337.83

LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.033 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), TREMPEALEAU COUNTY

DESIGN DESIGNATION

A.D.T.	(2018)	=	<100
A.D.T.	(2038)	=	<100
D.H.V.		=	10
D.		=	50/50
T.		=	5%
DESIGN SPEED		=	N/A
ESALS		=	N/A

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE (PL + 58.1)
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- HIGH VOLTAGE (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- OVERHEAD (OH)
- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

ACCEPTED FOR

Town of Arcadia

10/17/17 (Date) — Chairperson

ACCEPTED FOR

County of Trempealeau

10/17/17 (Date) — Highway Commissioner

ORIGINAL PLANS PREPARED BY

AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

WISCONSIN
DANIEL N. SYDOW
E-38363
WI
PROFESSIONAL ENGINEER

DATE 10/19/17

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor: AYRES ASSOCIATES INC

Designer: AYRES ASSOCIATES INC

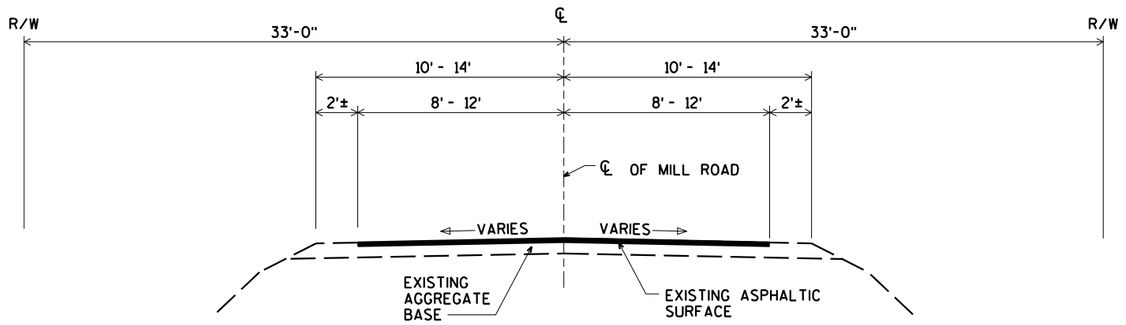
Management Consultant: KNIGHT EA

C.O. Examiner:

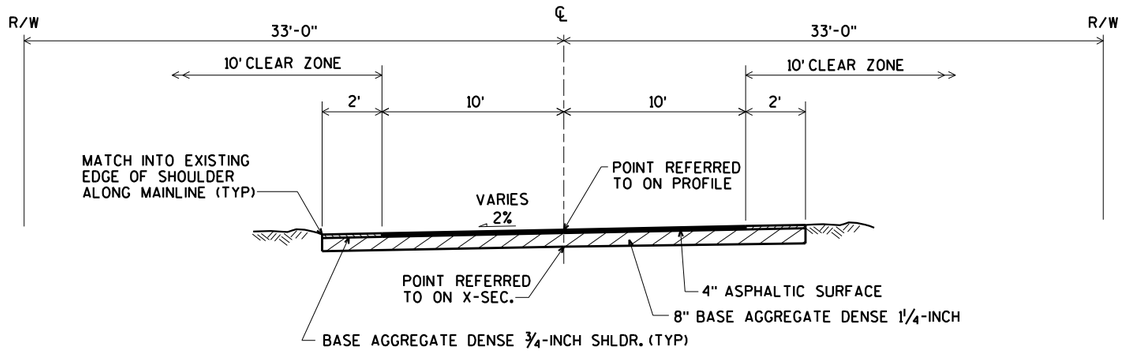
APPROVED FOR THE DEPARTMENT

DATE: 10/20/17 — Management Consultant Signature

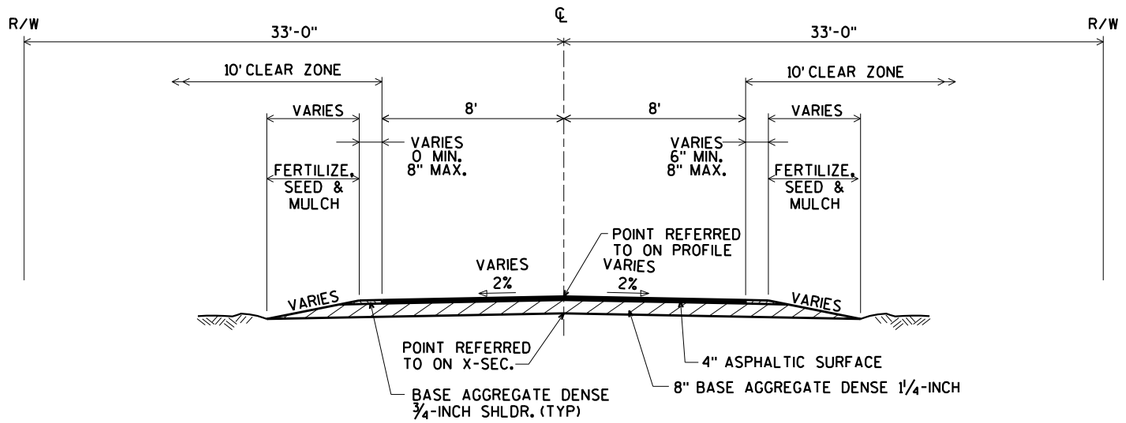
E



TYPICAL EXISTING SECTION



TYPICAL FINISHED SECTION
(SOUTH APPROACH)



TYPICAL FINISHED SECTION
(NORTH APPROACH)

GENERAL NOTES

EROSION CONTROL ITEMS TO BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER.

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

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

THE DEPARTMENT OF TRANSPORTATION WILL FURNISH THE CONTRACTOR WITH A MONUMENT TO BE INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCLUSIVE OF THE ROADBED, SHALL BE FERTILIZED, SEEDED, AND MULCHED AS DIRECTED BY THE ENGINEER.

SEED MIXTURE NO. 20 AND SEEDING TEMPORARY SHALL BE USED IN THE PROJECT AND SHALL BE PLACED AS SHOWN IN THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM (NAVD) 1988, 2012 ADJUSTMENT.

ASPHALTIC SURFACE SHALL BE CONSTRUCTED WITH A 2" UPPER LAYER AND A 2" LOWER LAYER. ASPHALTIC SURFACE SHALL USE 12.5 mm (½ in.) NOMINAL AGGREGATE SIZE.

UTILITIES

RIVERLAND ENERGY COOPERATIVE
P.O. BOX 277
ARCADIA, WI 54612
ATTN: ROB SOSALLA
608-409-7058
rsosalla@riverlandenergy.com

DAIRYLAND POWER COOPERATIVE
3200 EAST AVENUE SOUTH
P.O. BOX 817
LA CROSSE, WI 54602
ATTN: ROB MALY
608-518-2633
rob.maly@dairylandpower.com

ABBREVIATIONS

AC	ACRES
CHIS	CHISELED
℄	CENTERLINE
COR	CORNER
CWT	COUNT
CY	CUBIC YARD
EL	ELEVATION
GAL	GALLON
H	HOUSE
IP	IRON PIPE
LB	POUND
LF	LINEAR FEET
LS	LUMP SUM
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
MON	MONUMENT
NORM	NORMAL
OAL	OVERALL LENGTH
PC	POINT OF CURVATURE
PD	PEDESTAL
PI	POINT OF INTERSECTION
PK	PARKER-KALON
PL	PROPERTY LINE
PLE	PERMANENT LIMITED EASEMENT
PP	POWER POLE
PT	POINT OF TANGENCY
R	RADIUS
REQ'D	REQUIRED
RT	RIGHT
R/W	RIGHT-OF-WAY
SF	SQUARE FEET
SHLDR	SHOULDER
STA	STATION
SY	SQUARE YARD
TLE	TEMPORARY LIMITED EASEMENT
VAR	VARIES
WL	WELL

** DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS

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

WISCONSIN DEPARTMENT OF NATURAL RESOURCES CONTACT:
AMY LESIK
1300 W. CLAIREMONT AVE.
EAU CLAIRE, WI. 54702
715-836-6571
amyl.lesik@wisconsin.gov

DESIGNER
AYRES ASSOCIATES
3433 OAKWOOD HILLS PARKWAY
EAU CLAIRE, WI 54701
ATTN: DANIEL N. SYDOW
715-834-3161
sydowd@AyresAssociates.com

2

CURVE DATA	
P.I.	9+54.39
	Y 397358.54
	X 817389.51
△	= 34°19'51"
D	= 114°35'30"
T	= 15.44'
L	= 29.96'
E	= 2.33'
R	= 50.00'
P.C.	9+38.95
	Y 397353.72
	X 817374.84
P.T.	9+68.90
	Y 397370.79
	X 817398.91
S.E.	N/A

CURVE DATA	
P.I.	10+36.31
	Y 397424.26
	X 817439.95
△	= 16°22'05"
D	= 57°17'45"
T	= 14.38'
L	= 28.57'
E	= 1.03'
R	= 100.00'
P.C.	10+21.93
	Y 397412.85
	X 817431.19
P.T.	10+50.49
	Y 397432.74
	X 817451.56
S.E.	N/A

BM#2 (12" SPK IN PP)
Y 397423.07
X 817202.11

CP #5 (12" NAIL)
Y 397374.41
X 817201.38

TURTON CREEK

BEGIN PROJECT
STA. 9+00.00
Y 397341.58
X 817337.83

CP #4 (12" NAIL)
Y 397331.93
X 817297.92

CP #3 (12" NAIL)
Y 397374.89
X 817382.68

BM#1 (CHIS. SQ. ON WING WALL)
Y 397388.21
X 817392.49

END PROJECT
STA. 10+75.00
Y 397447.19
X 817471.36

CP #1 (12" NAIL)
Y 397619.88
X 817575.37

MILL ROAD (ASPHALT)

PI 8+95.67
Y 397340.23
X 817333.72

9+00

N71°50'02"E

PC 9+38.95

PT 9+68.90

10+00

PC 10+21.93

PI 10+36.31

PT 10+50.49

N37°30'11"E

N53°52'16"E

PI 11+01.62
Y 397462.88
X 817492.86

11+00

℄ OF MILL ROAD

PI 9+54.39

CP #2 (12" NAIL)
Y 397427.96
X 817431.42

EXISTING STRUCTURE
(P-61-171) TO BE REMOVED
(EXISTING DAM TO
REMAIN IN PLACE)

CP #6 (12" NAIL)
Y 397470.82
X 817520.04

ALIGNMENT CONTROLS

PK NAIL
Y 397399.64
X 817184.17

BM#2 (12" SPK IN PP)
Y 397423.07
X 817202.11

PK NAIL
Y 397380.40
X 817178.67

30.54'

48.66'

23.49'

21.35'

PK NAIL
Y 397395.20
X 817206.26

CP #5

MILL ROAD

BLDG

CP #5 (12" NAIL)
STA. 7+55.68, 11' RT.
Y 397374.41
X 817201.38

CP #1

31.28'

35.39'

16.95'

PK NAIL
Y 397646.58
X 817591.65

PK NAIL
Y 397638.58
X 817605.41

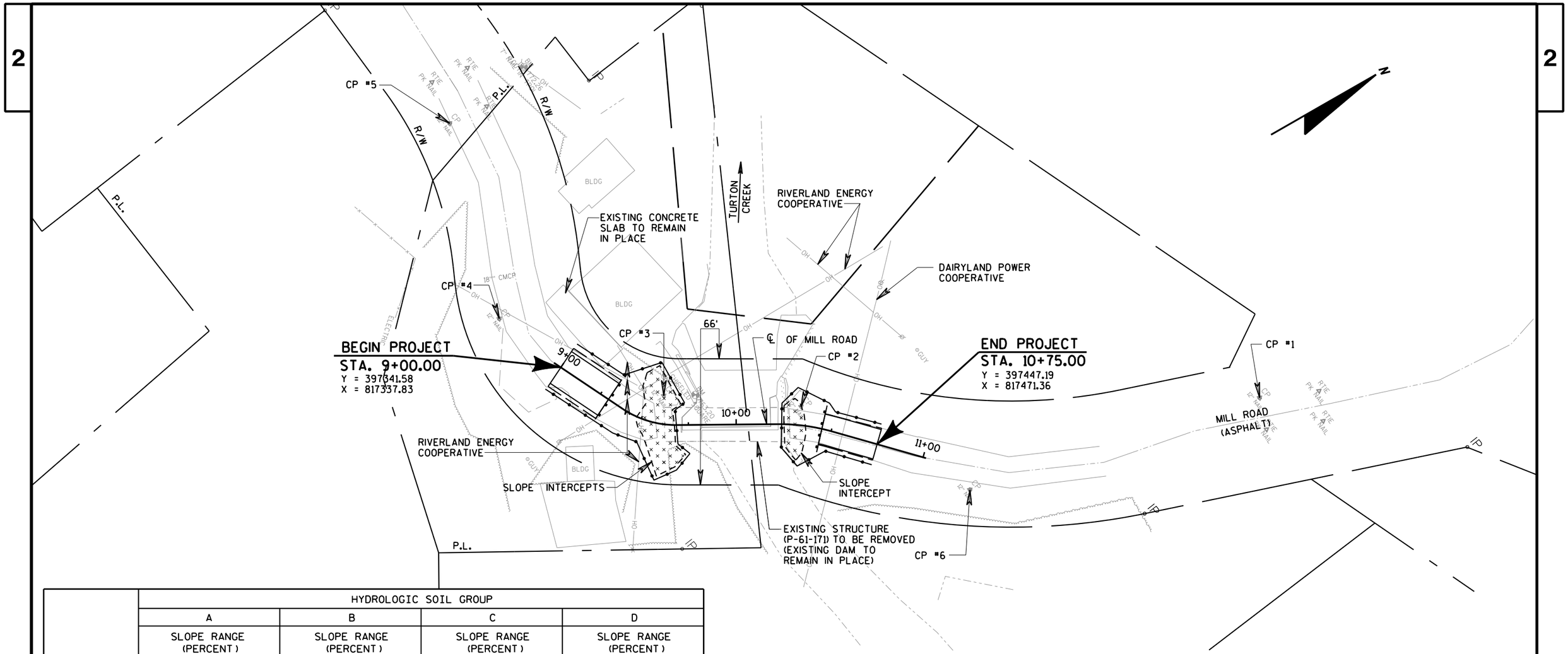
PK NAIL
Y 397612.52
X 817590.64

MILL ROAD

CP #1 (12" NAIL)
STA. 12+82.52, 10' LT.
Y 397619.88
X 817575.37

ALIGNMENT TIES

PROJECT NO: 7276-00-72	HWY: MILL ROAD	COUNTY: TREMPEALEAU	ALIGNMENT CONTROLS AND TIES	SCALE, FEET 0 25 50	SHEET 3	E



	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											

LEGEND

- EROSION MAT CLASS II TYPE C
- TEMPORARY DITCH CHECKS (UNDISTRIBUTED)
- SILT FENCE

TOTAL PROJECT AREA = 0.27 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.05 ACRES

PROJECT NO: 7276-00-72	HWY: MILL ROAD	COUNTY: TREMPEALEAU	EROSION CONTROL	SCALE, FEET 0 25 50	SHEET 4	E

2

N

EXISTING CONCRETE SLAB
TO REMAIN IN PLACE

R/W

18"" CMCP

BEGIN PROJECT
STA 9+00.00

9+00

2'

10'

10'

2'

SLOPE
INTERCEPT

RIVERLAND
ENERGY
COOPERATIVE

EXISTING STRUCTURE
(P-61-171) TO BE REMOVED
(EXISTING DAM TO
REMAIN IN PLACE)

℄ OF MILL ROAD

10+00

RIVERLAND ENERGY
COOPERATIVE

DAIRYLAND POWER
COOPERATIVE

SLOPE
INTERCEPT

MGS GUARDRAIL 3
WITH TERMINAL TYPE 2
END TREATMENTS

END PROJECT
STA 10+75.00

8'

8'

MILL ROAD
(ASPHALT)

11+00

MGS GUARDRAIL 3
WITH TERMINAL TYPE 2
END TREATMENTS

PROPOSED EMBANKMENT
STABILIZATION GRADING
AFTER BRIDGE REMOVAL
(2.5:1 SLOPE)

TURTON
CREEK

RIVERLAND
ENERGY
COOPERATIVE

BLDG

12" NAIL

CP

CHISELED SQUARE

BM 780.20

NOTE:
REMOVING OLD STRUCTURE OVER WATERWAY WITH DEBRIS CAPTURE SYSTEM, STATION 10+00, STRUCTURE P-61-171. SINGLE SPAN PIN-CONNECTED, METAL, HALF-HIP, PRATT PONY TRUSS ON STONE MASONRY ABUTMENTS, 17'-7" CLEAR ROADWAY WIDTH x 66'-0" OAL

EXISTING CAST-IN-PLACE CONCRETE WALLS UNDER AND ADJACENT TO BRIDGE TO REMAIN IN PLACE.

PROJECT NO: 7276-00-72	HWY: MILL ROAD	COUNTY: TREMPEALEAU	ENBANKMENT STABILIZATION GRADING	SCALE, FEET 0 10 20	SHEET 5	E

7276-00-72

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	1.000	1.000
0004	201.0205	Grubbing	STA	1.000	1.000
0006	203.0700.S	Removing Old Structure Over Waterway With Debris Capture System (station) 01. 10+00	LS	1.000	1.000
0008	205.0100	Excavation Common	CY	130.000	130.000
0010	213.0100	Finishing Roadway (project) 01. 7276-00-72	EACH	1.000	1.000
0012	214.0100	Obliterating Old Road	STA	1.000	1.000
0014	305.0110	Base Aggregate Dense 3/4-Inch	TON	5.000	5.000
0016	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	75.000	75.000
0018	455.0605	Tack Coat	GAL	7.000	7.000
0020	465.0105	Asphaltic Surface	TON	30.000	30.000
0022	614.2300	MGS Guardrail 3	LF	50.000	50.000
0024	614.2620	MGS Guardrail Terminal Type 2	EACH	4.000	4.000
0026	618.0100	Maintenance And Repair of Haul Roads (project) 01. 7276-00-72	EACH	1.000	1.000
0028	619.1000	Mobilization	EACH	1.000	1.000
0030	624.0100	Water	MGAL	2.000	2.000
0032	627.0200	Mulching	SY	65.000	65.000
0034	628.1504	Silt Fence	LF	440.000	440.000
0036	628.1520	Silt Fence Maintenance	LF	875.000	875.000
0038	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0040	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0042	628.2027	Erosion Mat Class II Type C	SY	175.000	175.000
0044	628.7504	Temporary Ditch Checks	LF	50.000	50.000
0046	629.0210	Fertilizer Type B	CWT	0.500	0.500
0048	630.0120	Seeding Mixture No. 20	LB	10.000	10.000
0050	630.0200	Seeding Temporary	LB	5.000	5.000
0052	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	8.000	8.000
0054	637.2220	Signs Type II Reflective SH	SF	13.500	13.500
0056	637.2230	Signs Type II Reflective F	SF	12.500	12.500
0058	638.2602	Removing Signs Type II	EACH	17.000	17.000
0060	638.3000	Removing Small Sign Supports	EACH	9.000	9.000
0062	642.5001	Field Office Type B	EACH	1.000	1.000
0064	643.0420	Traffic Control Barricades Type III	DAY	666.000	666.000
0066	643.0705	Traffic Control Warning Lights Type A	DAY	888.000	888.000
0068	643.0900	Traffic Control Signs	DAY	518.000	518.000
0070	643.5000	Traffic Control	EACH	1.000	1.000
0072	650.4500	Construction Staking Subgrade	LF	60.000	60.000
0074	650.5000	Construction Staking Base	LF	60.000	60.000
0076	650.9910	Construction Staking Supplemental Control (project) 01.	LS	1.000	1.000

7276-00-72

Line	Item	Item Description	Unit	Total	Qty
		7276-00-72			
0078	650.9920	Construction Staking Slope Stakes	LF	60.000	60.000
0080	690.0150	Sawing Asphalt	LF	42.000	42.000
0082	999.1000.S	Seismograph	LS	1.000	1.000
0084	999.1500.S	Crack and Damage Survey	LS	1.000	1.000

EARTHWORK SUMMARY (CATEGORY 0010)

DIVISION	STATION TO STATION	LOCATION	**P** 205.0100 EXCAVATION COMMON CUT (1) CY	SALVAGED/ UNUSABLE PAVEMENT MATERIAL (2) CY	AVAILABLE MATERIAL (4) CY	UNEXPANDED FILL (3) CY	EXPANDED FILL (5) CY	MASS ORDINATE ±(6) CY	WASTE CY	**P** 208.0100 BORROW CY	COMMENTS:
1	9+00 TO 9+30	MILL ROAD	26	0	26	0	0	26	26	0	
	SOUTH APPROACH EMBANKMENT	GRADING	63	0	63	0	0	63	63	0	
	NORTH APPROACH EMBANKMENT	GRADING	16	0	16	0	0	16	16	0	
	10+45 TO 10+75	MILL ROAD	25	0	25	0	0	25	25	0	
	GRANDTOTAL		130	0	130	0	0	130	130	0	

TOTAL EXCAVATION COMMON 130 CY **TOTAL WASTE 130 CY**

NOTES:
1) EXCAVATION COMMON IS THE SUM OF THE CUT COLUMN. ITEM NUMBER 205.0100
2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
3) DOES NOT INCLUDE UNUSABLE PAVEMENT EXCAVATION VOLUME.
4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL
5) EXPANDED FILL FACTOR = 1.30
EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR
6) THE MASS ORDINATE ± QTY CALCUTATED FOR THE DIVISION.

203.0700.S REMOVING OLD STRUCTURE OVER WATERWAY WITH DEBRIS CAPTURE SYSTEM STATION 10+00 (CATEGORY 0010)

LOCATION	LS
P-61-171	1

213.0100 FINISHING ROADWAY (CATEGORY 0010)

LOCATION	EACH
PROJECT 7276-00-72	1

CLEARING AND GRUBBING (CATEGORY 0010)

STATION TO STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
SOUTH APPROACH	MILL ROAD	1	1

214.0100 OBLITERATING OLD ROAD (CATEGORY 0010)

STATION TO STATION	LOCATION	STA
Sta. 9+30 to Sta. 9+47	MILL ROAD	0.5
Sta. 10+25 to Sta. 10+45	MILL ROAD	0.5
TOTAL		1

BASE AGGREGATE DENSE (CATEGORY 0010)

STATION TO STATION	LOCATION	305.0110 3/4-INCH TON
Sta. 9+00 to Sta. 9+30	MILL ROAD	3
Sta. 10+45 to Sta. 10+75	MILL ROAD, RT	1
Sta. 10+45 to Sta. 10+75	MILL ROAD, LT	1
TOTALS		5

BASE AGGREGATE DENSE (CATEGORY 0010)

STATION TO STATION	LOCATION	305.0120 1 1/4-INCH TON
Sta. 9+00 to Sta. 9+30	MILL ROAD	38
Sta. 10+45 to Sta. 10+75	MILL ROAD, RT	18
Sta. 10+45 to Sta. 10+75	MILL ROAD, LT	19
TOTALS		75

PAVING QUANTITIES (CATEGORY 0010)

STATION TO STATION	LOCATION	455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON
Sta. 9+00 to Sta. 9+30	MILL ROAD	4	17
Sta. 10+45 to Sta. 10+75	MILL ROAD	3	13
TOTALS		7	30

614.2300 MGS GUARDRAIL 3 (CATEGORY 0010)

STATION TO STATION	LOCATION	LF
Sta. 9+30	MILL ROAD	25
Sta. 10+45	MILL ROAD	25
TOTAL		50

614.2620 MGS GUARDRAIL TERMINAL TYPE 2 (CATEGORY 0010)

STATION TO STATION	LOCATION	EACH
Sta. 9+30	MILL ROAD	2
Sta. 10+45	MILL ROAD	2
TOTAL		4

619.1000 MOBILIZATION

LOCATION	EACH
PROJECT 7276-00-72 (CATEGORY 0010)	1
TOTAL	1

WATER (CATEGORY 0010)

TYPE	LOCATION	624.0100 WATER MGAL
COMPACTION	PROJECT	2

3

MULCHING, FERTILIZER, SEED & TEMPORARY SEED (CATEGORY 0010)

STATION TO STATION	LOCATION	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING NO. 20 LB	630.0200 SEEDING TEMPORARY LB
SOUTH APPROACH EMBANKMENT GRADING		-	0.1	3	-
STA. 10+45 TO STA.10+75	MILL ROAD	50	0.1	2	2
NORTH APPROACH EMBANKMENT GRADING		-	0.1	1	-
Undistributed		15	0.2	4	3
TOTALS		65	0.5	10	5

SILT FENCE & SILT FENCE MAINTENANCE (CATEGORY 0010)

STATION TO STATION	LOCATION	628.1504 LF	628.1520 MAINTENANCE LF
South Approach	MILL ROAD	210	420
North Approach	MILL ROAD	140	280
Undistributed		90	175
TOTALS		440	875

628.2027 EROSION MAT CLASS II TYPE C (CATEGORY 0010)

STATION TO STATION	SY
South Approach Embankment Grading	105
North Approach Embankment Grading	35
Undistributed	35
TOTALS	175

MOBILIZATIONS EROSION CONTROL & EMERGENCY EROSION CONTROL (CATEGORY 0010)

LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
PROJECT 7276-00-72	2	2

628.7504 TEMPORARY DITCH CHECKS (CATEGORY 0010)

LOCATION	LF
UNDISTRIBUTED	50

634.0612 WOOD POSTS 4X6 INCH X 12 FT (CATEGORY 0010)

LOCATION	DESCRIPTION	EACH
@ Intersection of Mill Road & STH 95 South Approach	"Dead End" (W14-1)	1
Sta. 9+30	"End of Road Marker" (W5-56)	3
Sta. 10+45	"End of Road Marker" (W5-56)	3
@ Intersection of Mill Road & STH 95 North Approach	"Dead End" (W14-1)	1
TOTAL		8

637.2220 SIGNS TYPE II REFLECTIVE SH (CATEGORY 0010)

LOCATION	DESCRIPTION	SIZE	SF	EACH	OVERALL SF
Sta. 9+30	"Dead End" (W14-1)	18"X18"	2.25	3	6.75
Sta. 10+45	"Dead End" (W14-1)	18"X18"	2.25	3	6.75
TOTAL					13.5

637.2230 SIGNS TYPE II REFLECTIVE F (CATEGORY 0010)

LOCATION	DESCRIPTION	SIZE	SF	EACH	OVERALL SF
@ Intersection of Mill Road & STH 95 South Approach	"Dead End" (W14-1)	30"X30"	6.25	1	6.25
@ Intersection of Mill Road & STH 95 North Approach	"Dead End" (W14-1)	30"X30"	6.25	1	6.25
TOTAL					12.5

3

REMOVING (CATEGORY 0010)

STATION	LOCATION	DESCRIPTION	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
Sta. 9+58	LT	"Objective Marker" (W5-52L)	1	1
Sta. 9+58		"End of Road Marker" (W5-56)	4	4
Sta. 9+58		"Barricade" (W5-61)	3	-
Sta. 9+58		"Road Closed"	1	-
Sta. 9+58		"Bridge Unsafe Keep Off"	1	-
Sta. 10+28		"End of Road Marker" (W5-56)	4	4
Sta. 10+28		"Barricade" (W5-61)	1	-
Sta. 10+28		"Road Closed"	1	-
Sta. 10+28		"Bridge Unsafe Keep Off"	1	-
TOTAL			17	9

CONSTRUCTION STAKING

CATEGORY	LOCATION		650.4500 SUBGRADE LF	650.5000 BASE LF	650.9910 SUPPLEMENTARY CONTROL LS	650.9920 SLOPE STAKES LF
0010	Sta. 9+00 to Sta. 10+75	MILL ROAD	60	60	1	60
TOTALS			60	60	1	60

690.0150 SAWING ASPHALT (CATEGORY 0010)

STATION	LOCATION	LF
STA.9+00	MILL ROAD	24
STA.10+75	MILL ROAD	18
TOTAL		42

642.5001 FIELD OFFICE TYPE B (CATEGORY 0010)

LOCATION	EACH
PROJECT 7276-00-72 CATEGORY 0010	1
TOTAL	1

643.5000 TRAFFIC CONTROL (CATEGORY 0010)

LOCATION	EACH
PROJECT 7276-00-72 CATEGORY 0010	1
TOTAL	1

999.1000.S SEIMOGRAPH (CATEGORY 0010)

LOCATION	LS
PROJECT 7276-00-72	1

999.1500.S CRACK AND DAMAGE SURVEY (CATEGORY 0010)

LOCATION	LS
PROJECT 7276-00-72	1

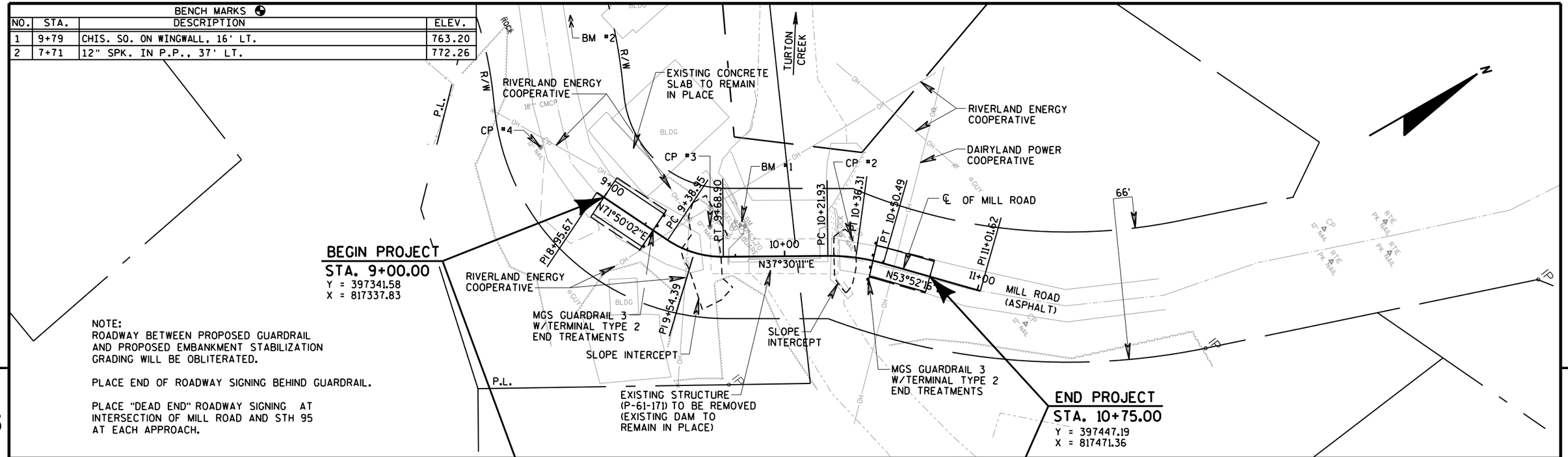
TRAFFIC CONTROL ITEMS (CATEGORY 0010)

PROJECT ID	DURATION DAYS	643.0420 BARRICADES TYPE III NO.	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A NO.	643.0705 WARNING LIGHTS TYPE A DAYS	643.0900 SIGNS NO.	643.0900 SIGNS DAYS
7276-00-72	37	18	666	24	888	14	518

618.0100 MAINTENANCE AND REPAIR OF HAUL ROADS (CATEGORY 0020)

LOCATION	EACH
PROJECT 7276-00-72 CATEGORY 0020	1
TOTAL	1

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
1	9+79	CHIS. SO. ON WINGWALL, 16' LT.	763.20
2	7+71	12" SPK. IN P.P., 37' LT.	772.26



EARTHWORK SUMMARY

STA. 9+00 TO STA. 9+30
EXC. COMMON 26 C.Y.
FILL 0 C.Y.

SOUTH APPROACH EMBANKMENT GRADING
EXC. COMMON 63 C.Y.
SHR. = 30%
WASTE 89 C.Y.

EARTHWORK SUMMARY

STA. 10+45 TO STA. 10+75
EXC. COMMON 25 C.Y.
FILL 0 C.Y.

NORTH APPROACH EMBANKMENT GRADING
EXC. COMMON 16 C.Y.
SHR. = 30%
WASTE 41 C.Y.

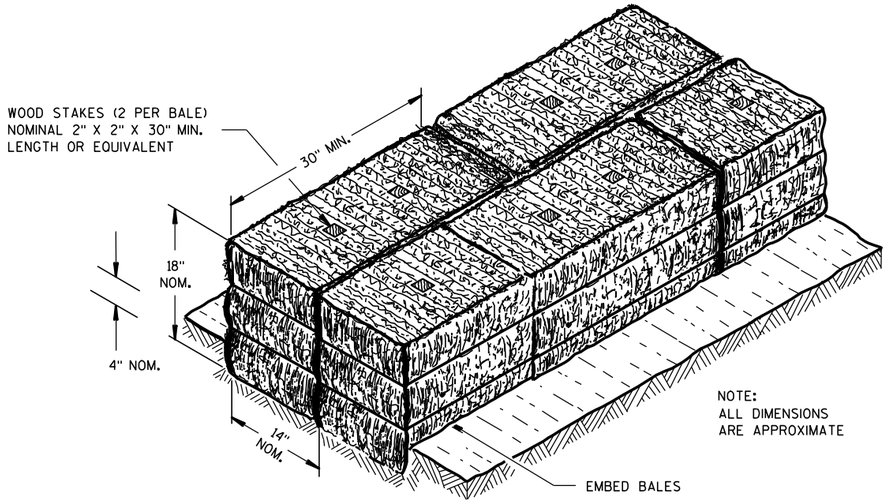
REMOVING OLD STRUCTURE OVER WATERWAY WITH DEBRIS CAPTURE SYSTEM, STA. 10+00. STRUCTURE P-61-171
SINGLE SPAN PIN-CONNECTED, METAL, HALF-HIP, PRATT PONY TRUSS ON STONE MASONRY ABUTMENTS
17'-7" CLEAR ROADWAY x 66'-0" O.A.L.

EXISTING CAST-IN-PLACE CONCRETE WALLS UNDER AND ADJACENT TO BRIDGE TO REMAIN IN PLACE.

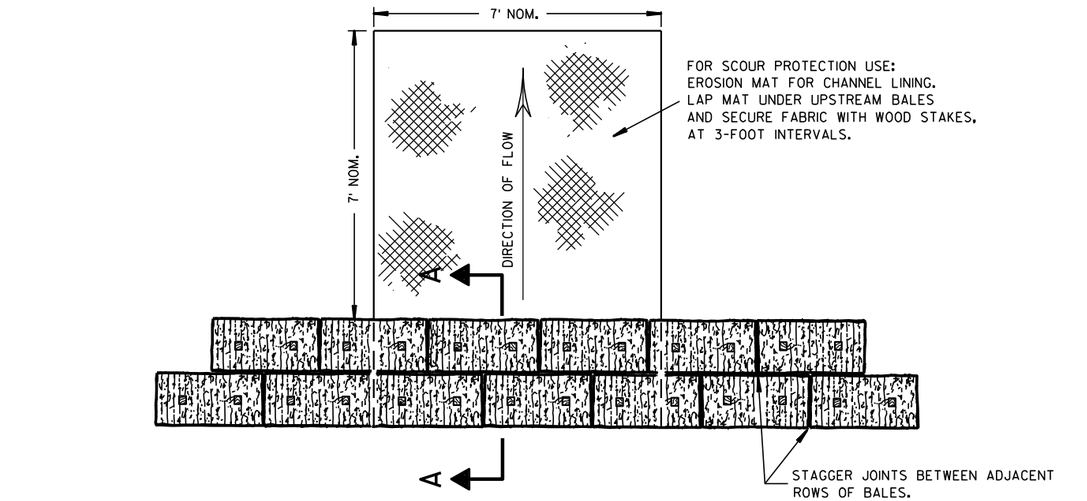
PROJECT NO: 7276-00-72	HWY: MILL ROAD	COUNTY: TREMPEALEAU	PLAN AND PROFILE	SCALE, FEET 0 25 50	SHEET 12	E

Standard Detail Drawing List

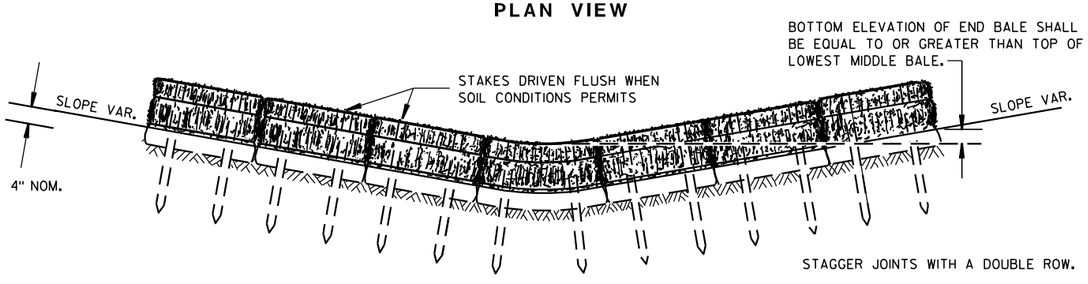
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
14B42-04A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-04B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-04C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B47-02A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C26-03	END-OF-ROADWAY SIGNING



SECTION A-A



PLAN VIEW



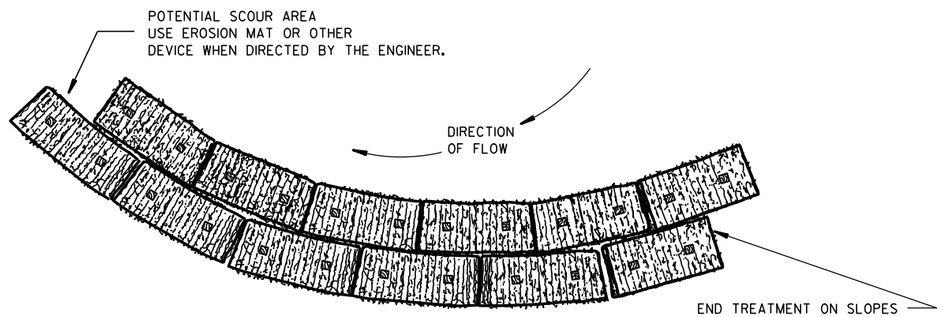
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

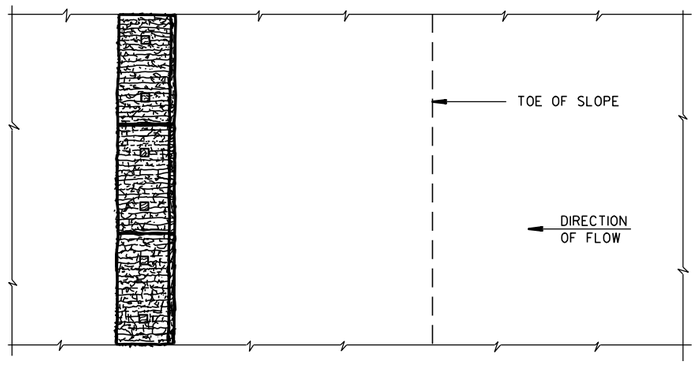
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

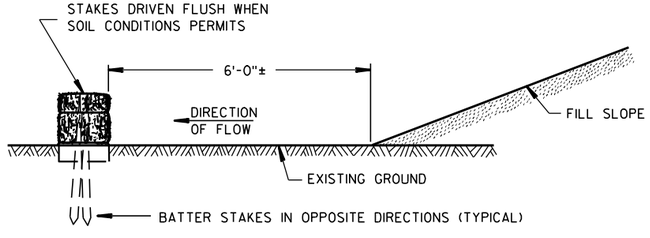


PLAN VIEW

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

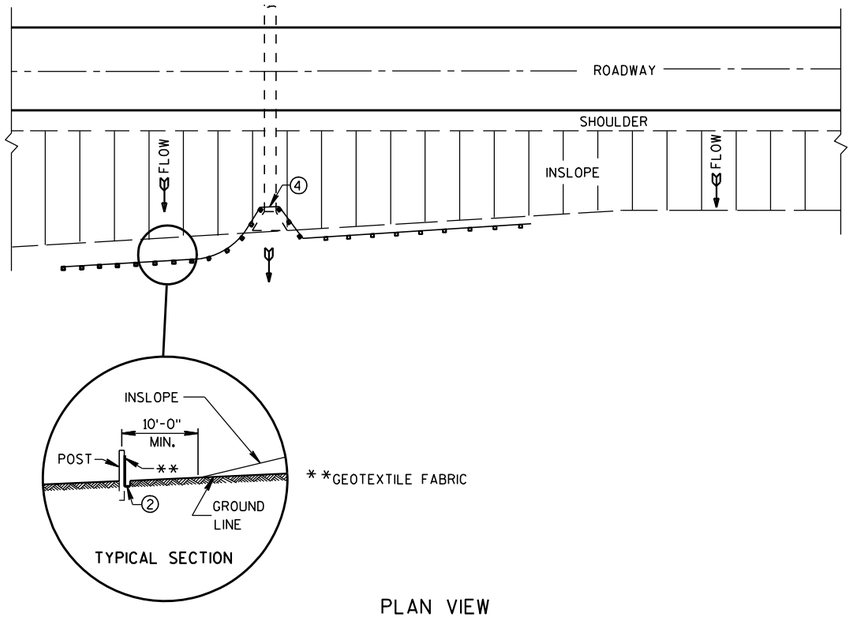
FHWA

6

S.D.D. 8 E 8-3

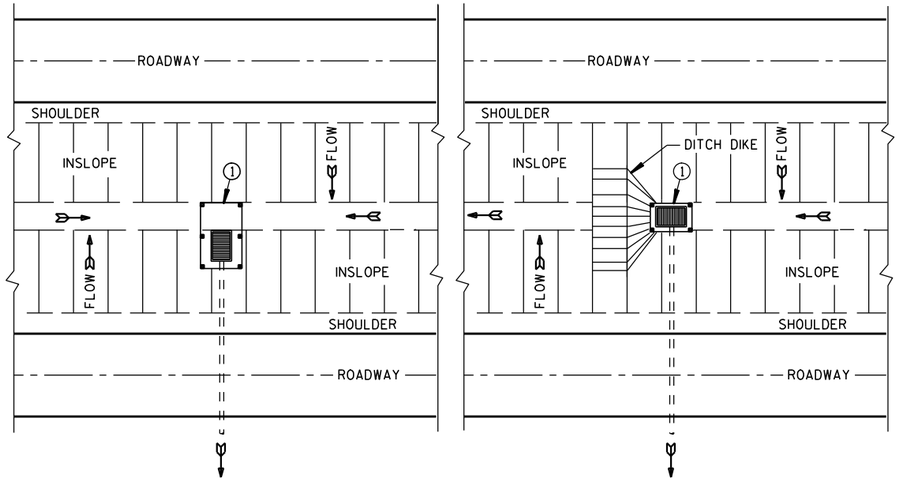
6

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.

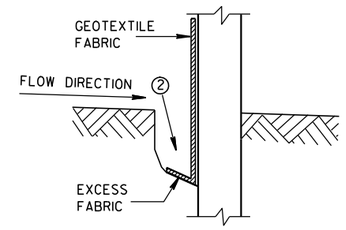
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

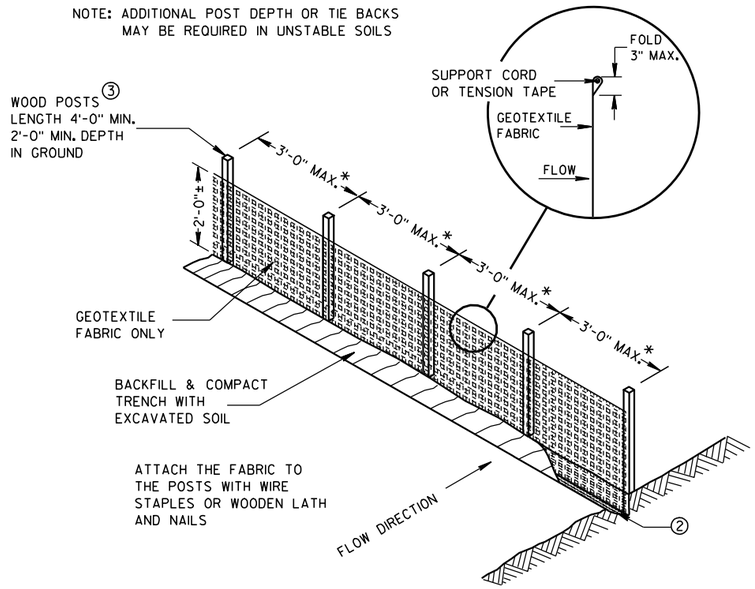
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

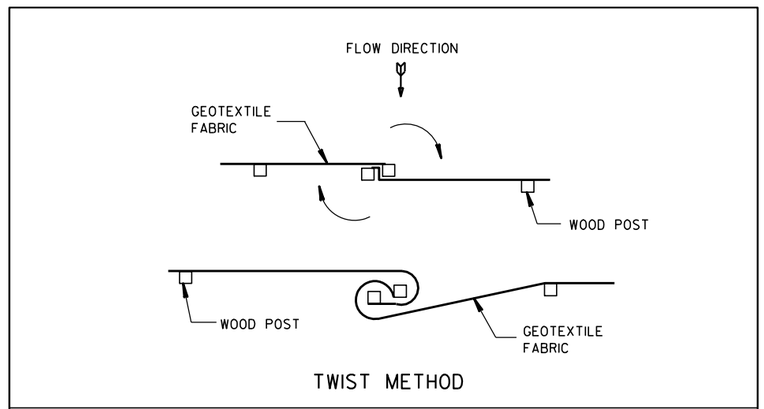
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



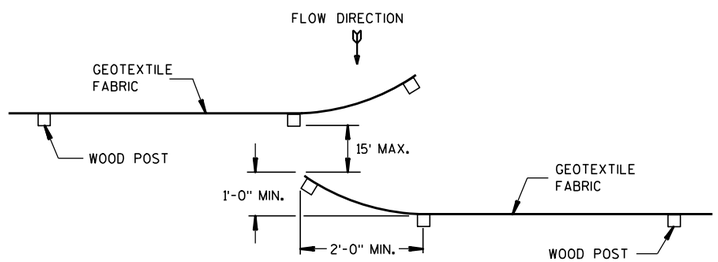
TRENCH DETAIL



SILT FENCE

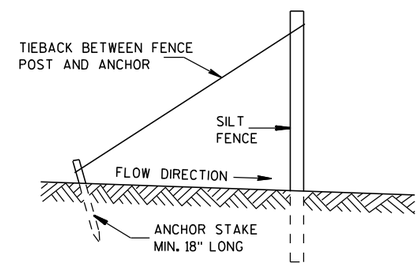


TWIST METHOD



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

6

S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6

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

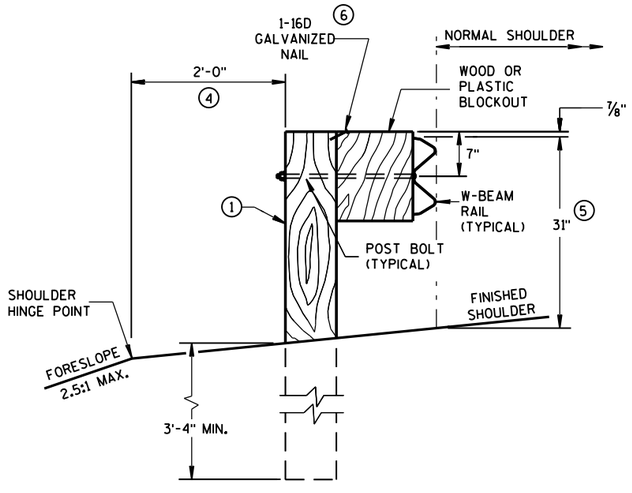
(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½ INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

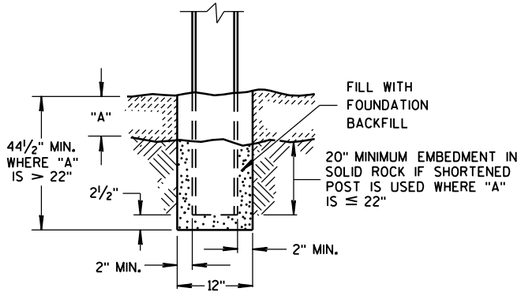
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



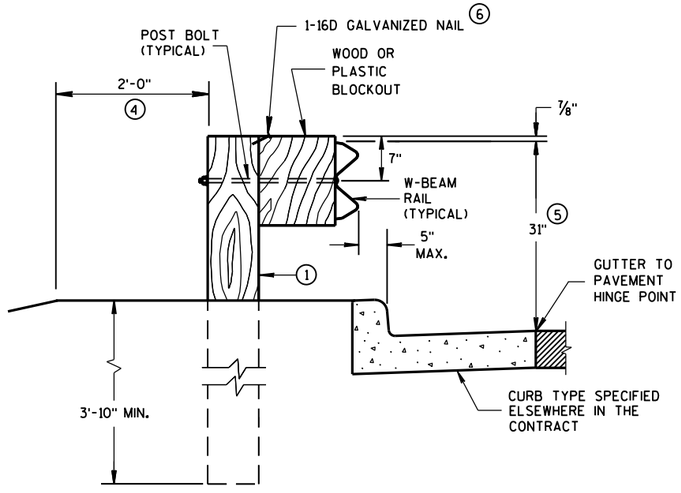
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



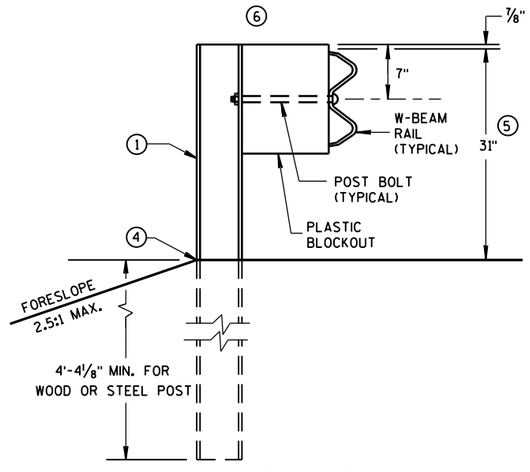
END VIEW

SETTING STEEL OR WOOD POST IN ROCK (3)



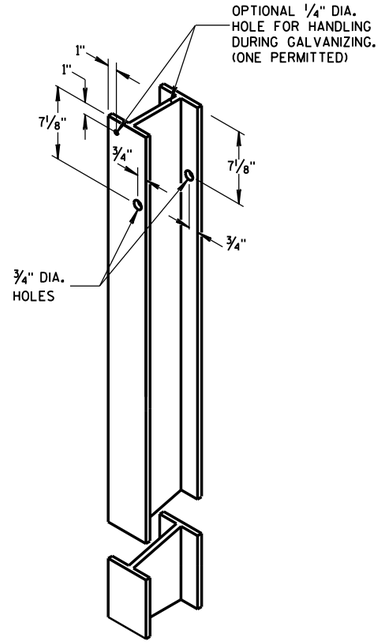
END VIEW

LOCATED ALONG A CURBED ROADWAY

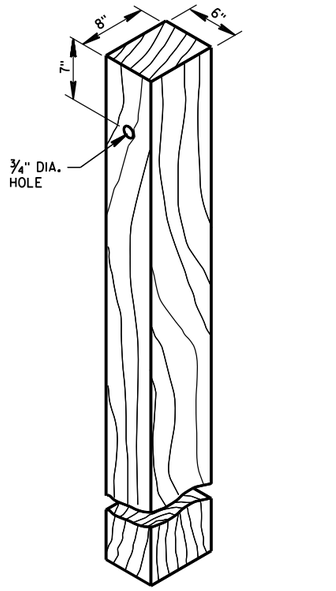


END VIEW

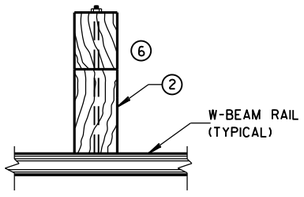
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



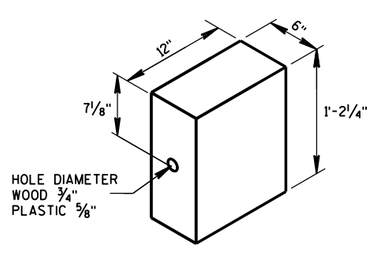
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) (1)



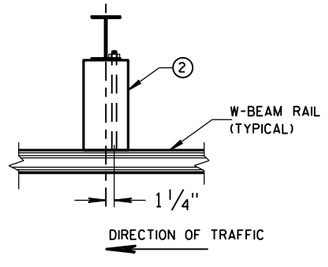
WOOD POST
(6" X 8") NOMINAL (1)



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT (2)



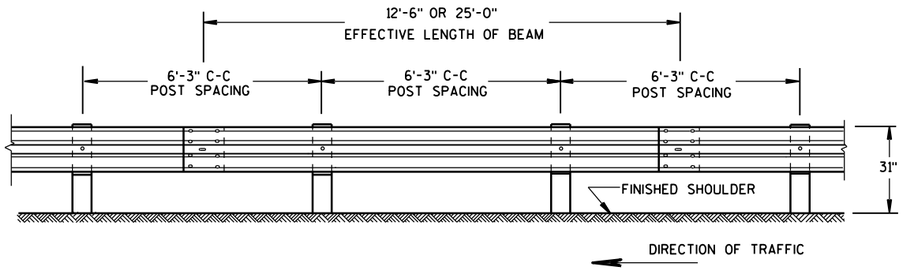
PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

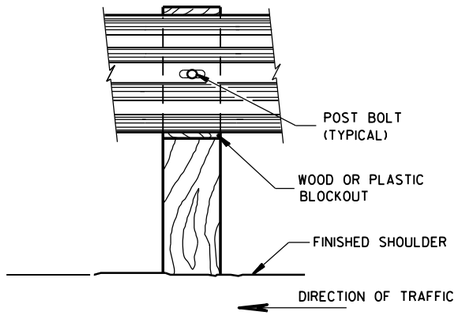
6

S.D.D. 14 B 42-4a



FRONT VIEW

POST SPACING STANDARD INSTALLATION



FRONT VIEW AT WOOD POST

7. PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.

8. DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.

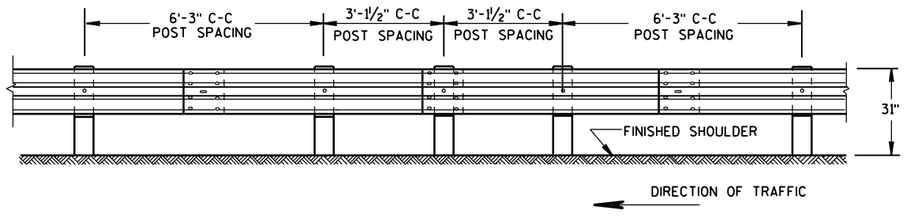
9. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.

10. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.

11. 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

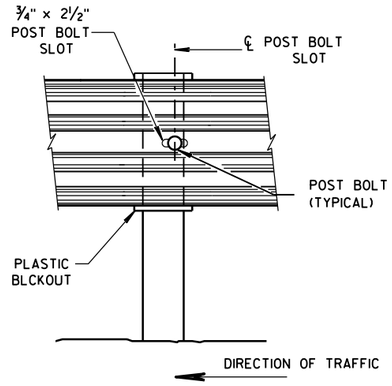
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

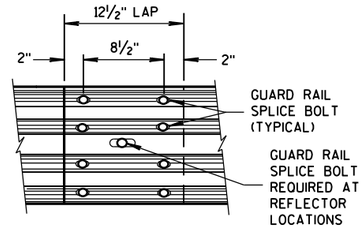


FRONT VIEW

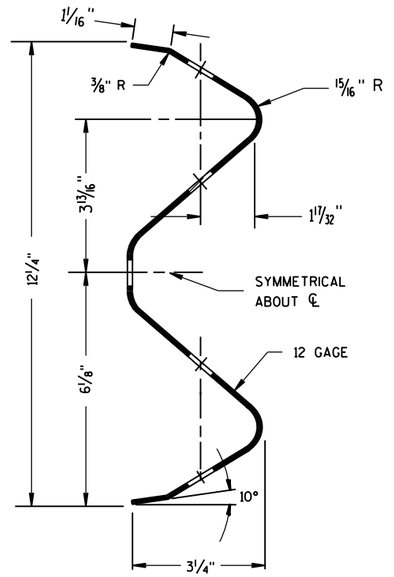
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



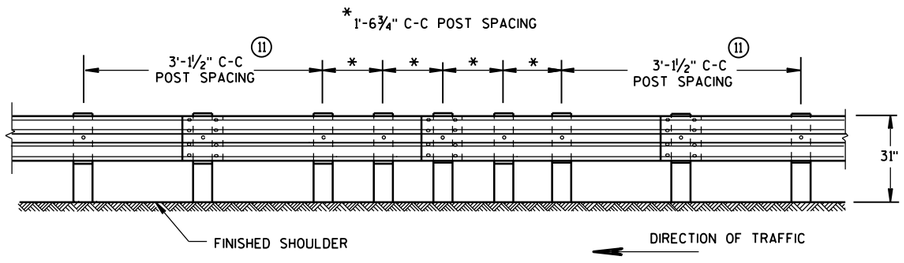
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE

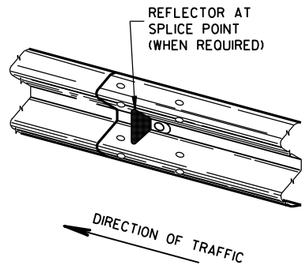


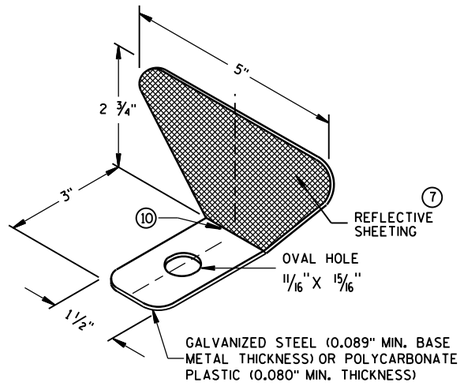
SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)





ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION 7

REFLECTOR SPACING 8

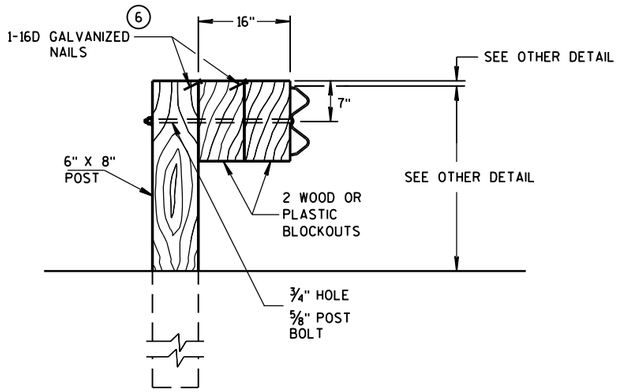
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 9	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2 10	

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

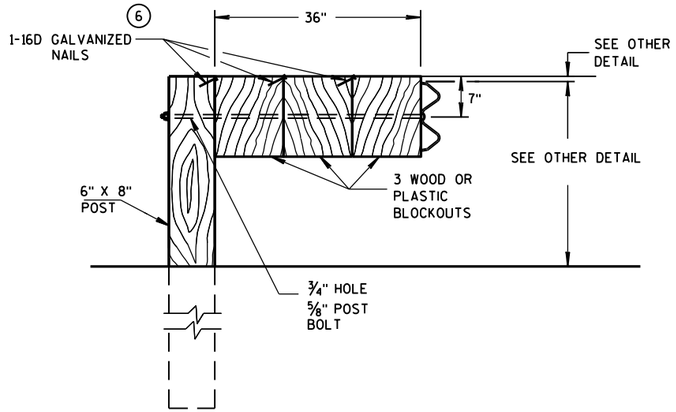
6

S.D.D. 14 B 42-4b



DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

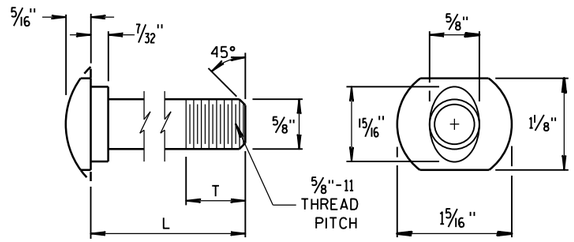


DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

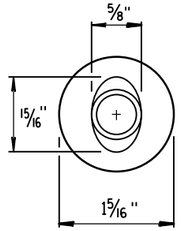
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

NOTE: 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 1/16".
2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

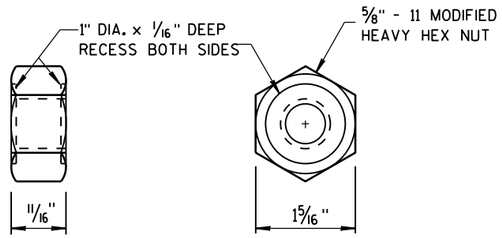


POST BOLT TABLE

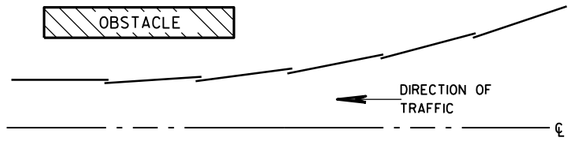
L	T (MIN.)
1¼"	1⅛"
2"	1¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

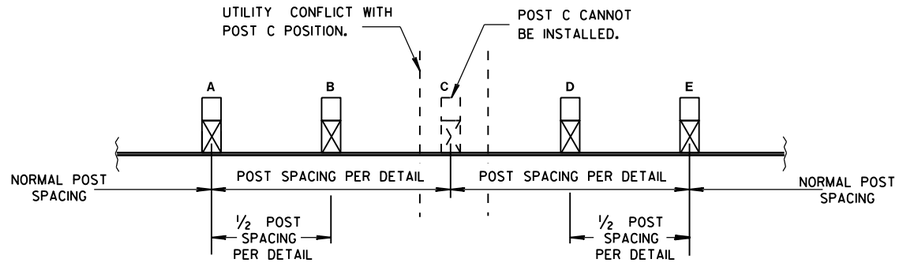


POST BOLT, SPLICE BOLT AND RECESS NUT

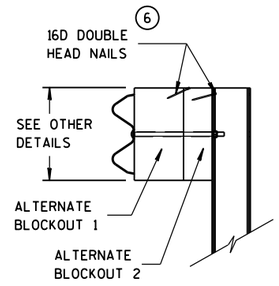


PLAN VIEW

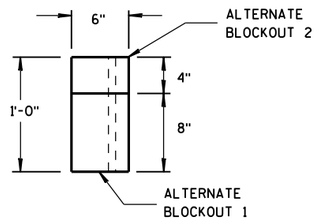
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

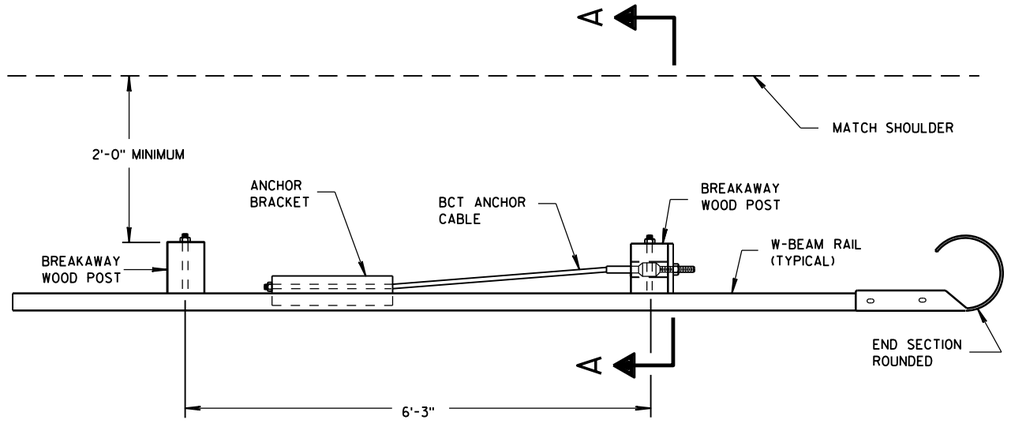
ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

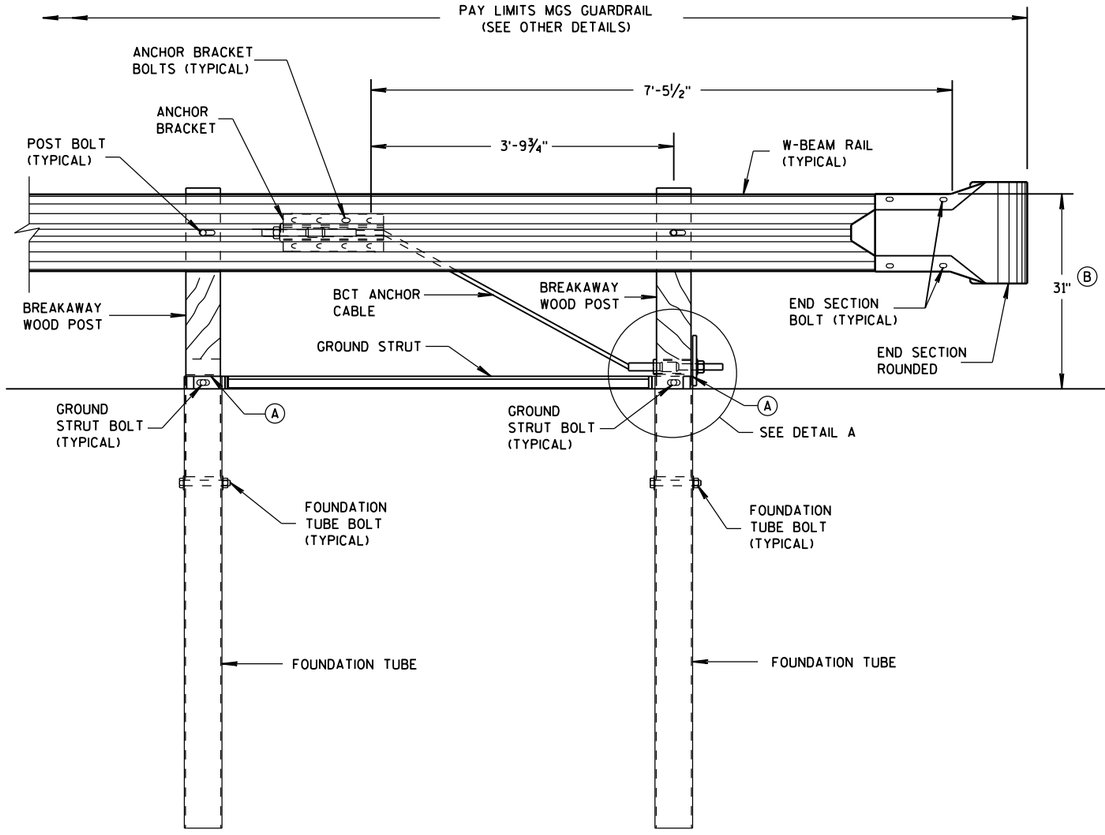
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6
S.D.D. 14 B 42-4c

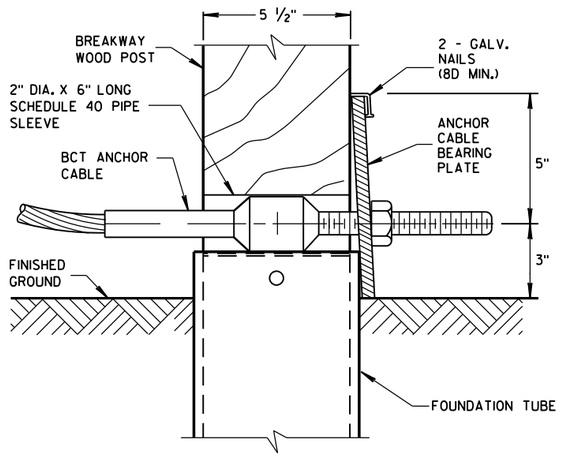


PLAN VIEW



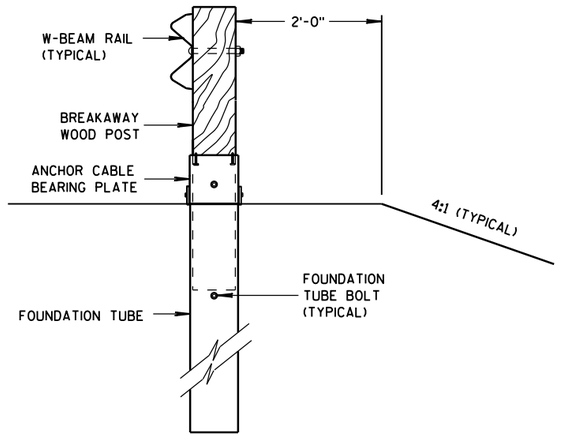
FRONT VIEW

END RAIL DETAIL



DETAIL A

POST NO. 1
GROUNG STRUT NOT SHOWN FOR CLARITY.



SECTION A-A

GENERAL NOTES

SEE SDD 14 B 42 FOR MORE INFORMATION.

END SECTION BOLTS AND NUTS HAVE THE SAME MATERIAL REQUIREMENTS AS SPLICE BOLTS.

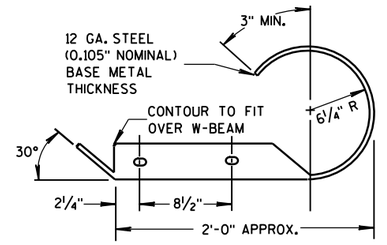
FOUNDATION TUBE BOLTS ARE ⅞" DIAMETER ASTM A307 HEX HEAD BOLT. FOUNDATION TUBE BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅞" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

ANCHOR BRACKET AND GROUND STRUT BOLTS ARE A ⅝" DIAMETER ASTM A307 HEX HEAD BOLT. ANCHOR BRACKET BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅝" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

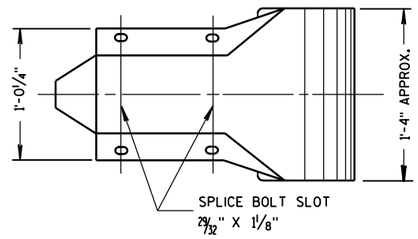
W-BEAM END SECTION ROUNDED HAS THE SAME MATERIAL PROPERTIES AS STANDARD STEEL RAIL.

(A) TOP OF FOUNDATION TUBE SHALL BE NO MORE THAN 3" ABOVE FINISHED GROUND.

(B) FOR NEW CONSTRUCTION TOP OF RAIL IS 31" ± 1".
FOR EXISTING INSTALLATIONS TOP OF RAIL IS BETWEEN 27¾" TO 32" ± 1".



PLAN VIEW



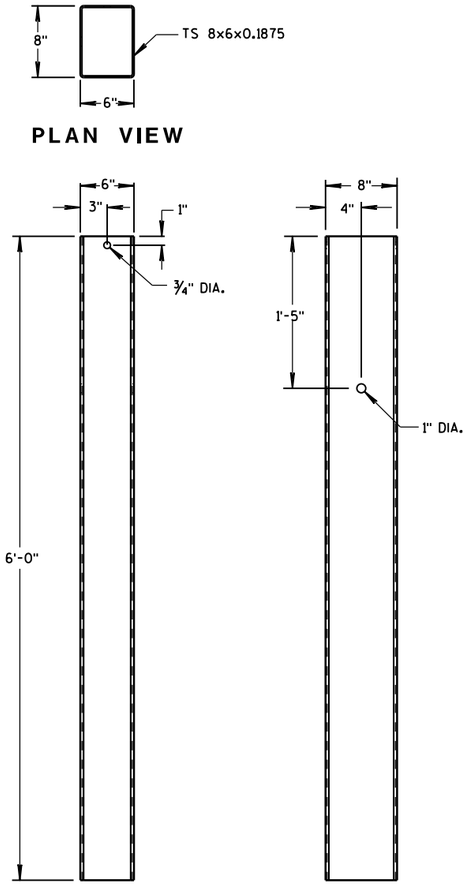
FRONT VIEW

W BEAM END SECTION ROUNDED

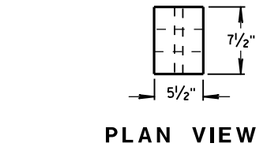
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

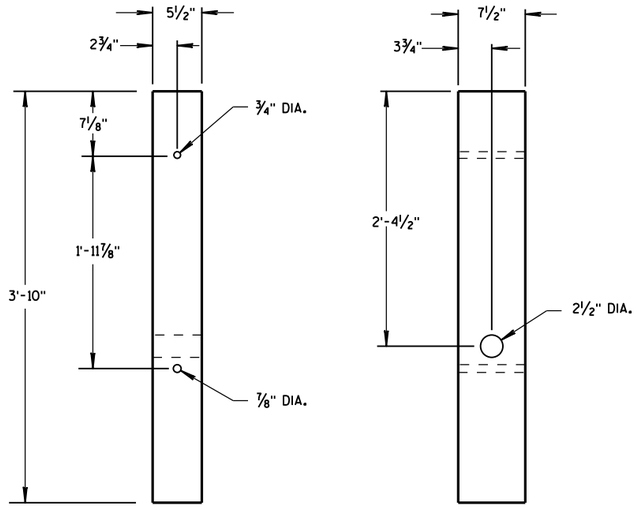
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6
S.D.D. 14 B 47-2a



FOUNDATION TUBE



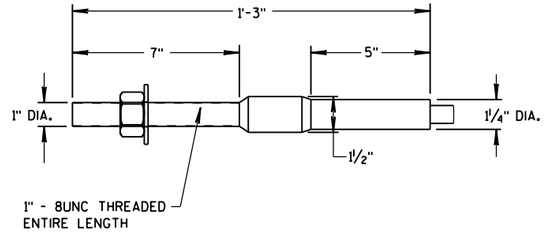


BREAKAWAY WOOD POST

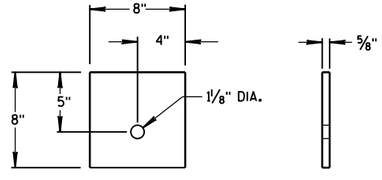
GENERAL NOTES

BCT ANCHOR CABLE IS A ¾" DIAMETER 6X19 IWRC IPS GALVANIZED WIRE ROPE. THE SWAGED FITTINGS AND STUD ARE REQUIRED. END FITTING SHALL BE MACHINED FROM HOT-ROLLED CARBON STEEL CONFORMING TO ASTM A576 GRADE 1035 AND GALVANIZED ACCORDING TO ASTM A123. TREADED STUD SHALL CONFORM TO ASTM A325 OR SAE GRADE 5. MINIMUM BREAKING STRENGTH OF WIRE ROPE IS 43,000 LB. WIRE ROPE IS TO BE TAUT.

BCT ANCHOR CABLE



DETAIL B



ANCHOR CABLE
BEARING PLATE

MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

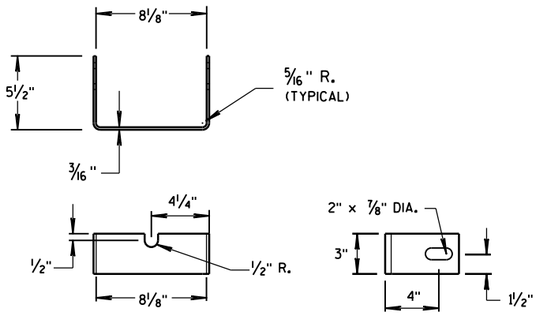
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

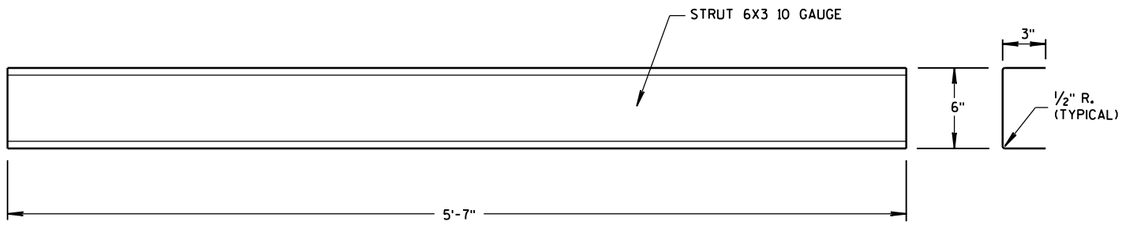
S.D.D. 14 B 47-2b

6

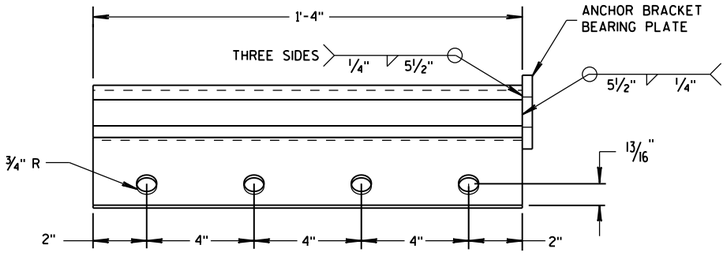
S.D.D. 14 B 47-2b

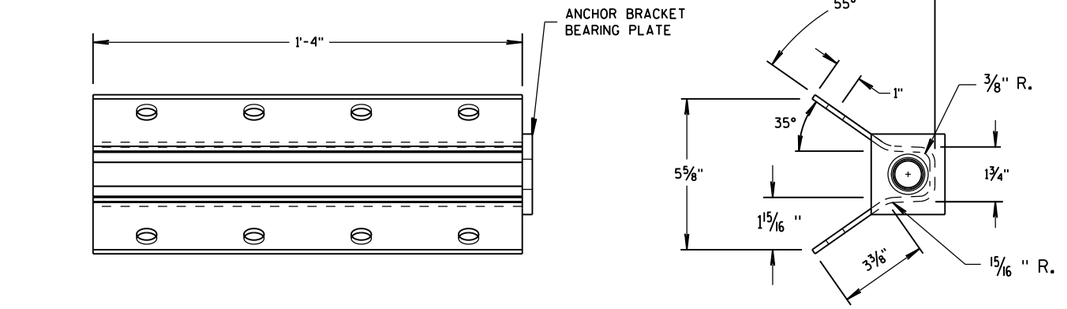


YOKE DETAIL

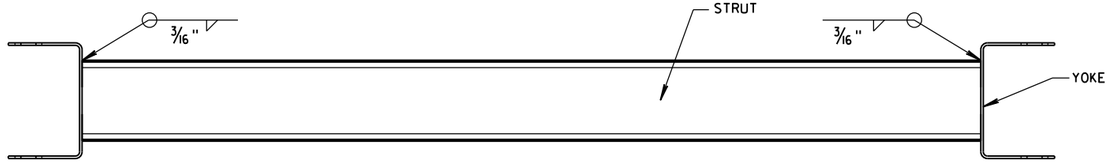


STRUT DETAIL

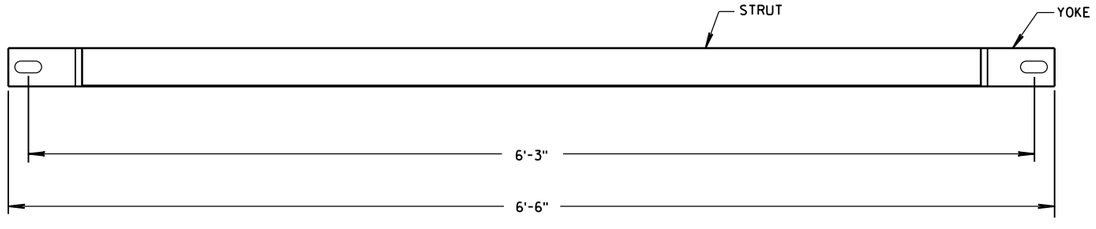




ANCHOR BRACKET

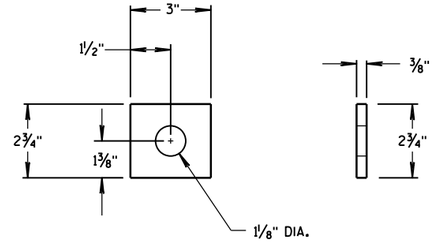


PLAN VIEW



FRONT VIEW

GROUND STRUT DETAIL



ANCHOR BRACKET BEARING PLATE

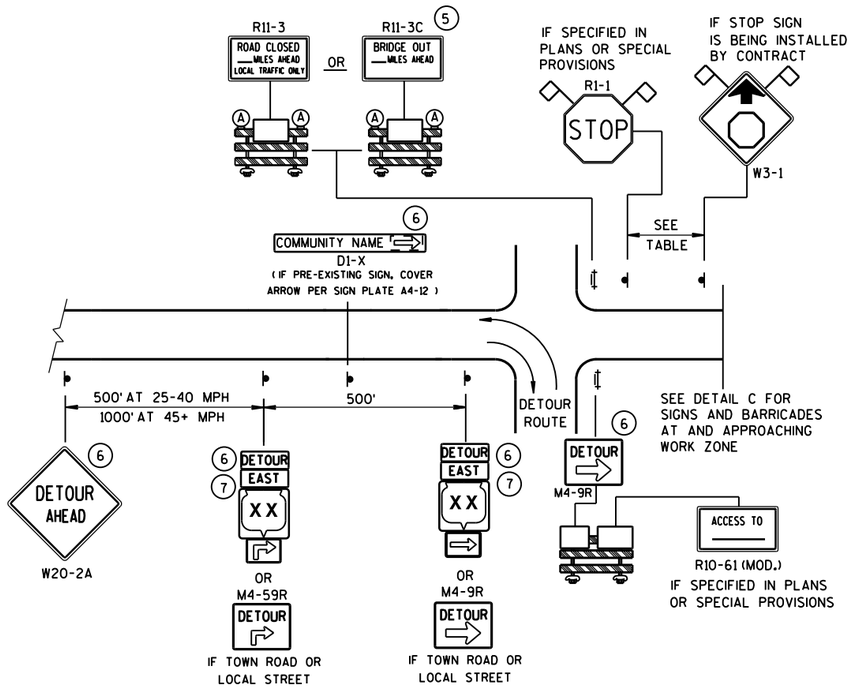
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

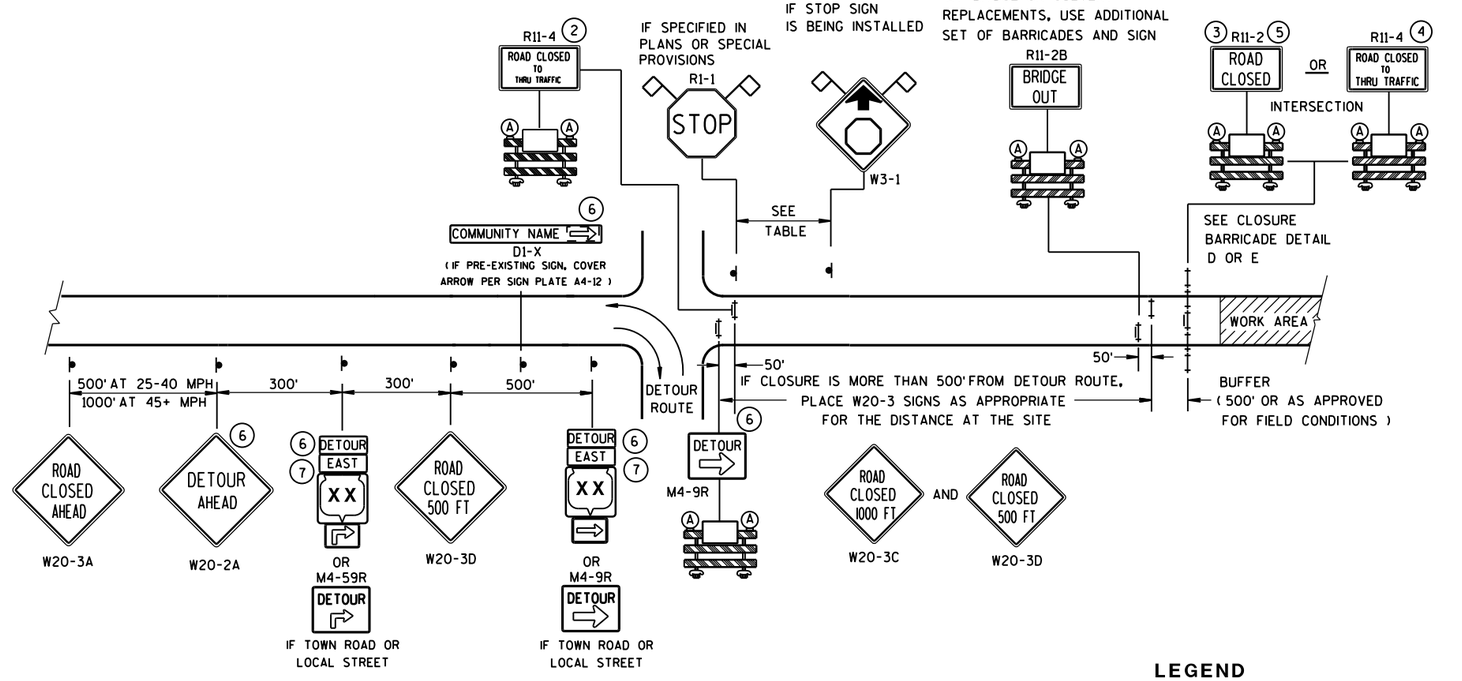
6

S.D.D. 14 B 47-2c



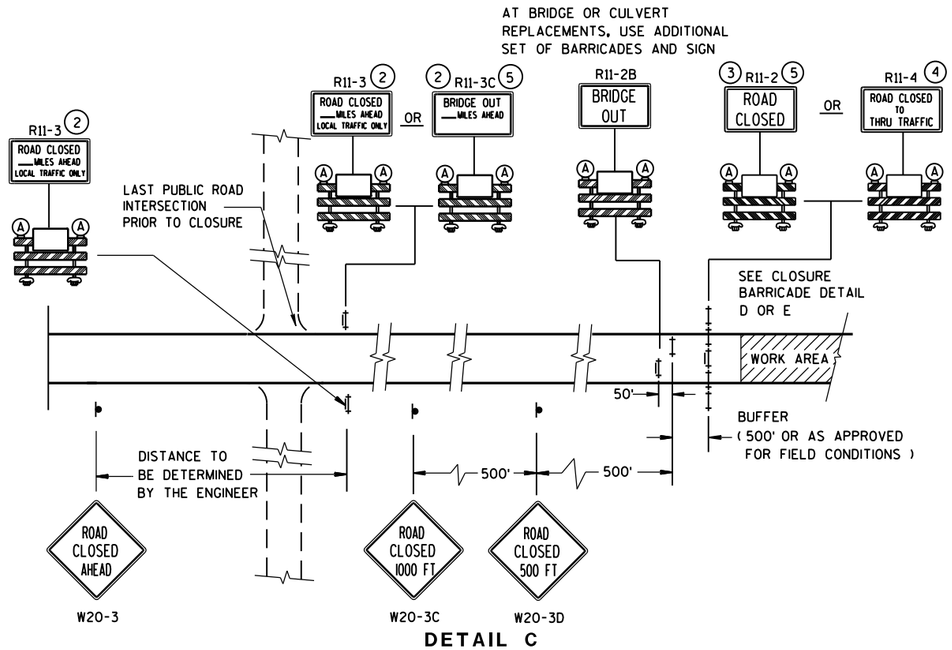
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "**b**" FOR GENERAL NOTES AND FOOTNOTES (1) THROUGH (7)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

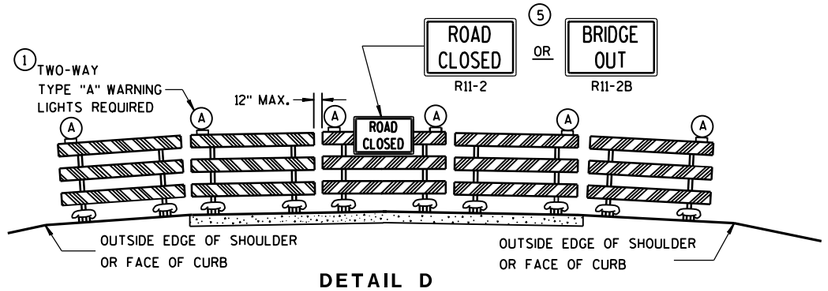
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

S.D.D. 15 C 2-6a

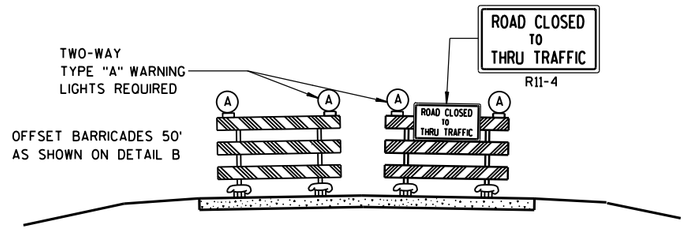
S.D.D. 15 C 2-6a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" FOR LEGEND

GENERAL NOTES

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

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

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

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGI

FHWA

FIC

6

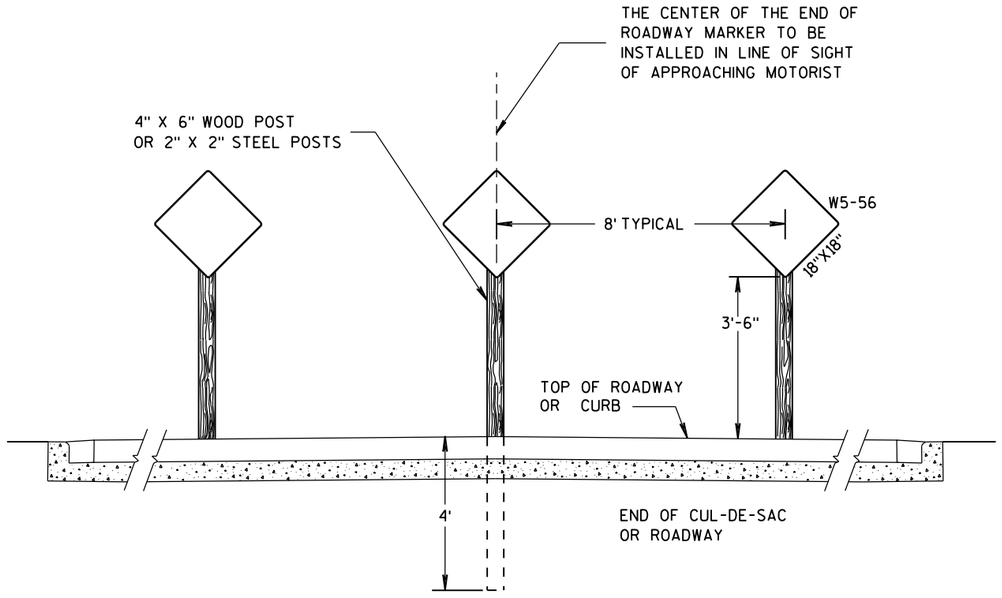
S.D.D. 15 C 2-6b

GENERAL NOTES

SIGN LOCATIONS SHOWN ARE TYPICAL PLACEMENT AND MAY BE ADJUSTED BY THE ENGINEER AS FIELD CONDITIONS DICTATE.

THE MINIMUM NUMBER OF END-OF-ROADWAY SIGNS ARE THREE (AS SHOWN). ADDITIONAL END-OF-ROADWAY SIGNS MAY BE INSTALLED AS FIELD CONDITIONS DICTATE. (SEE SIGNING PLAN).

WHEN BEAMGUARD IS REQUIRED, PLACE END-OF-ROADWAY SIGNING BEHIND BEAMGUARD.



TYPICAL SIGN INSTALLATION

END-OF-ROADWAY SIGNING

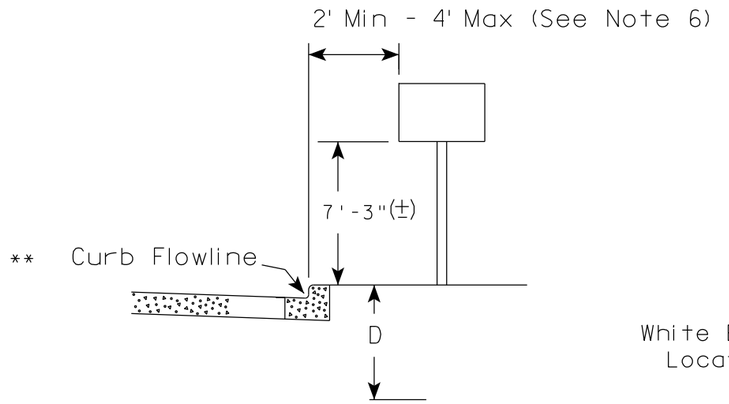
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARK
EER
FHWA

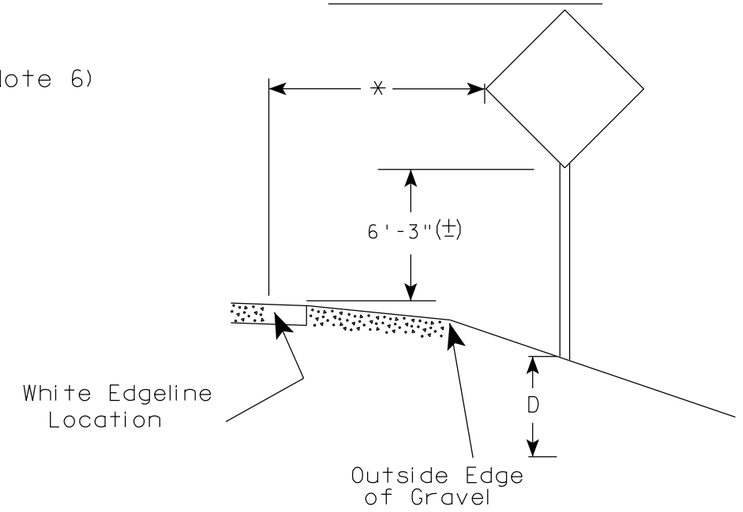
6

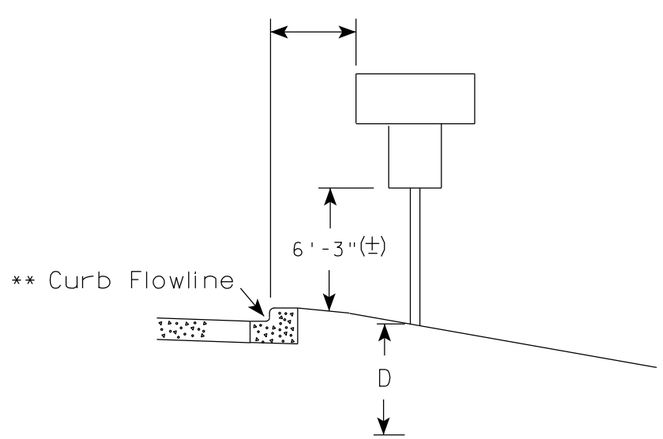
S.D.D. 15 C 26-3

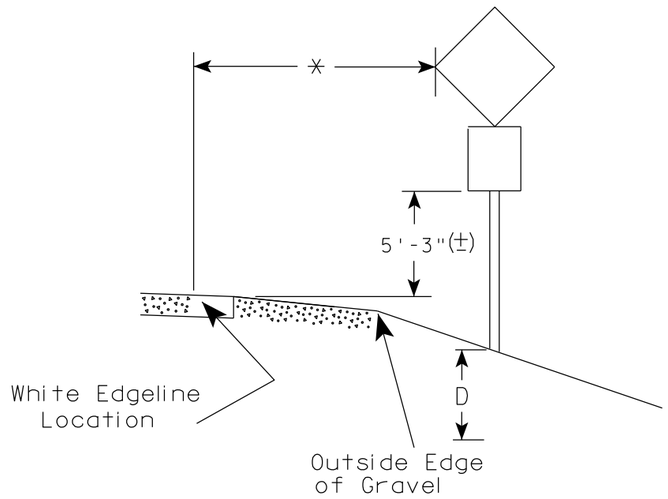
URBAN AREA



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.

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

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

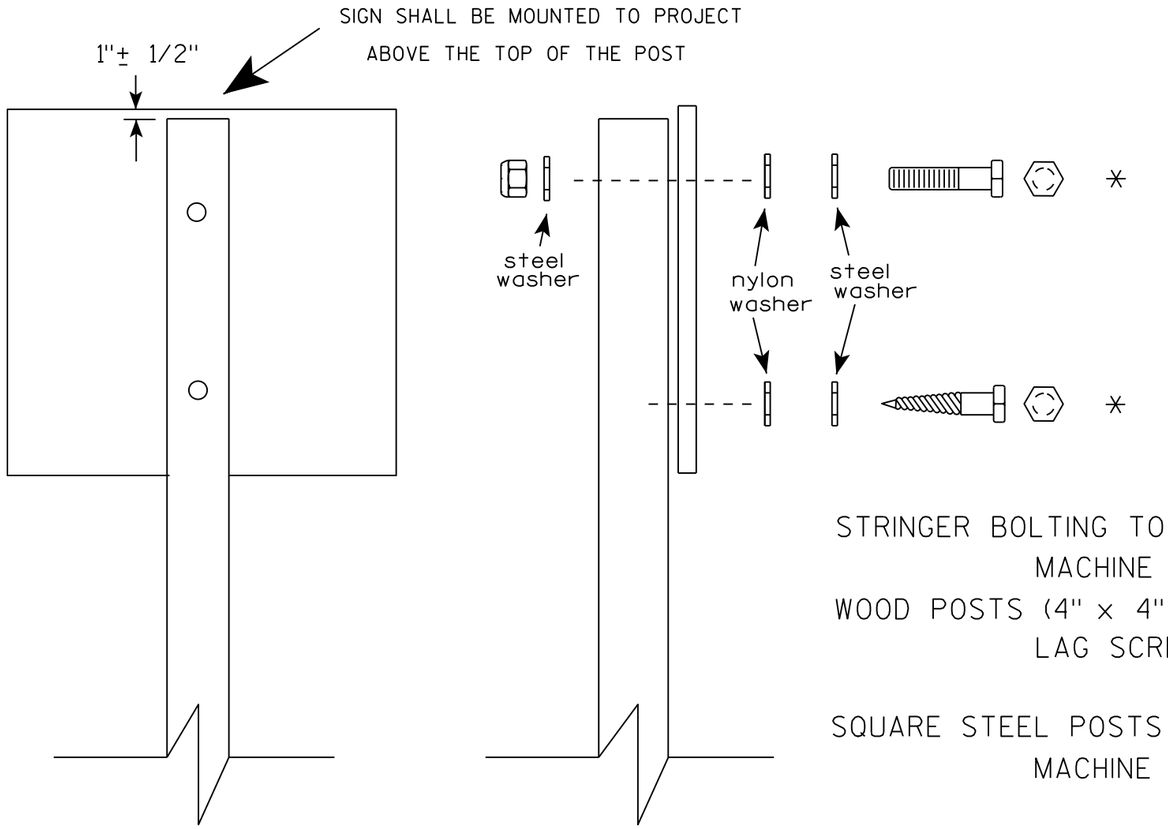
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

PROJECT NO: 7276-00-72	HWY: MILL ROAD	COUNTY: TREMPEALEAU		SHEET NO:	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

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 4" or 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.

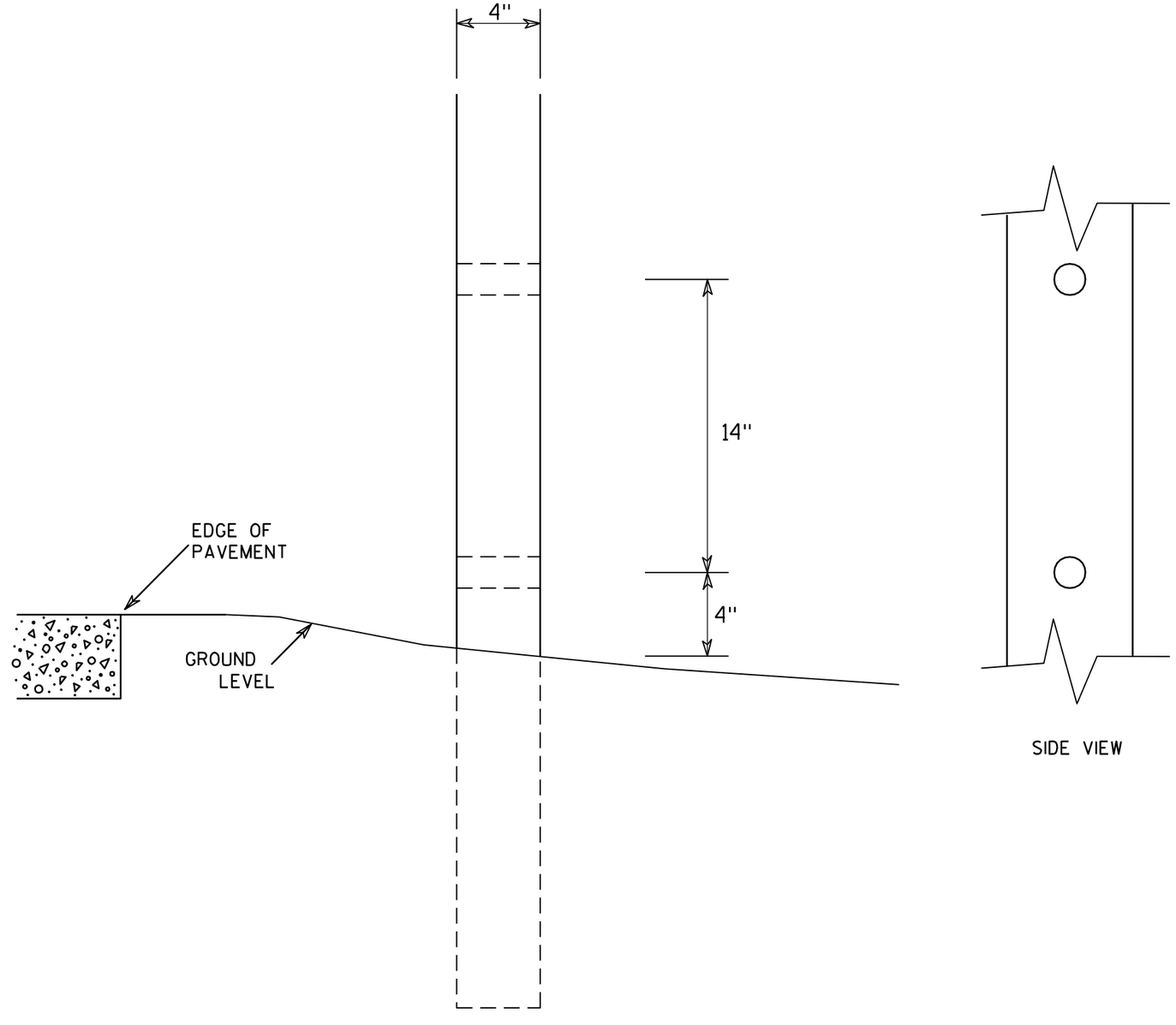
ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/11/16 PLATE NO A4-8.8

PROJECT NO: 7276-00-72	HWY: MILL ROAD	COUNTY: TREMPEALEAU		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

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

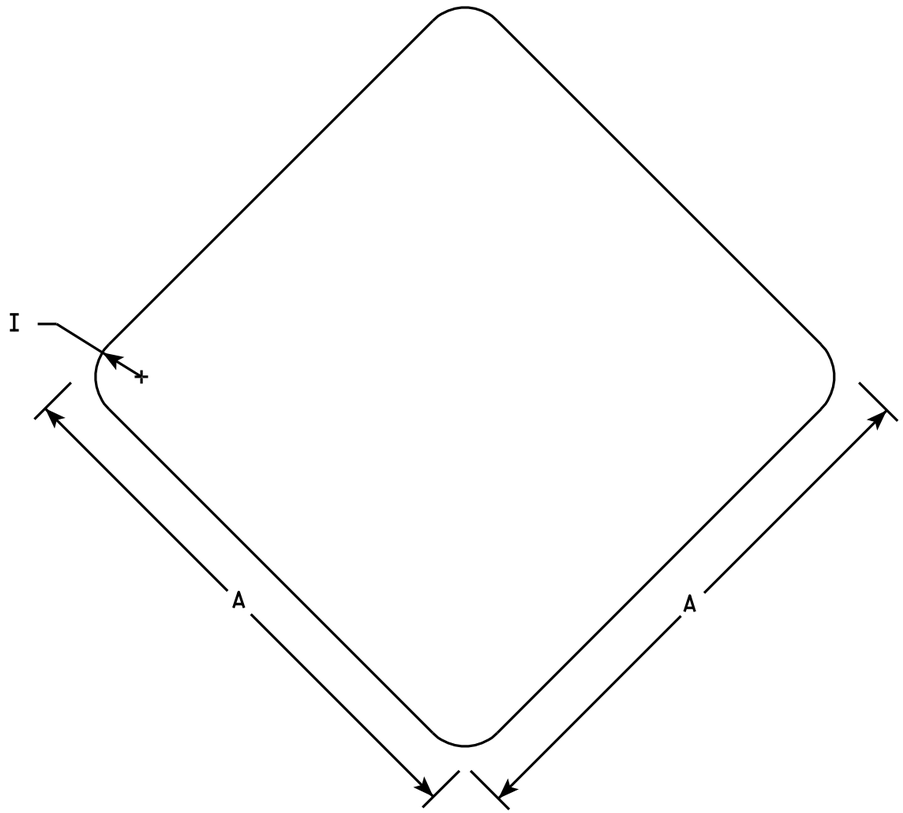
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

PROJECT NO: 7276-00-72	HWY: MILL ROAD	COUNTY: TREMPEALEAU		SHEET NO: 27	E



W5-56

NOTES

1. Sign is Type II - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

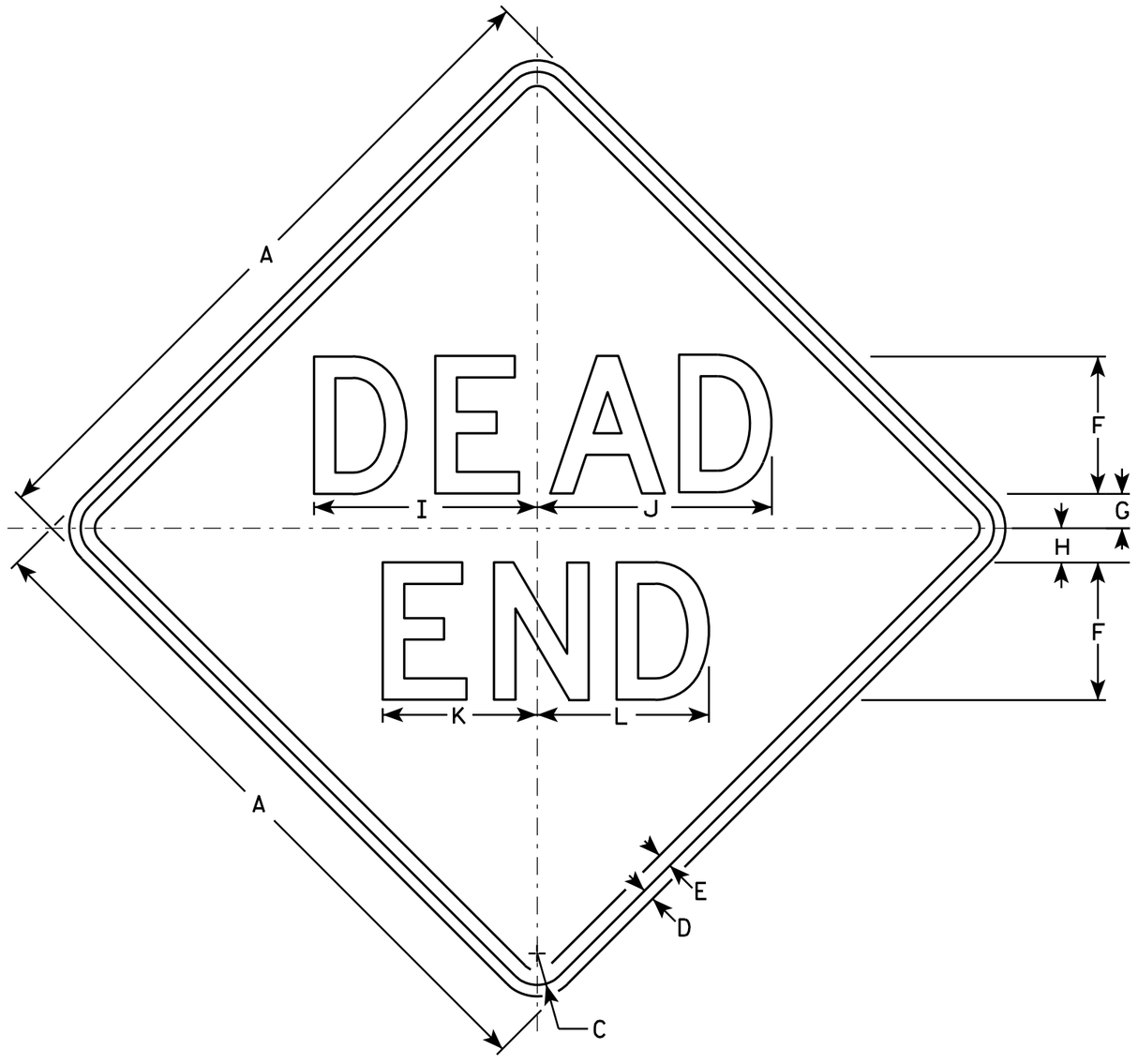
STANDARD SIGN
W5-56

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. W5-56.6

PROJECT NO: 7276-00-72	HWY: MILL ROAD	COUNTY: TREMPEALEAU		SHEET NO: 28	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: 7276-00-72 | HWY: MILL ROAD | COUNTY: TREMPEALEAU | SHEET NO: 29 | E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W141.DGN PLOT DATE : 13-MAR-2013 13:30 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.202372:1.000000
WISDOT/CADDS SHEET 42

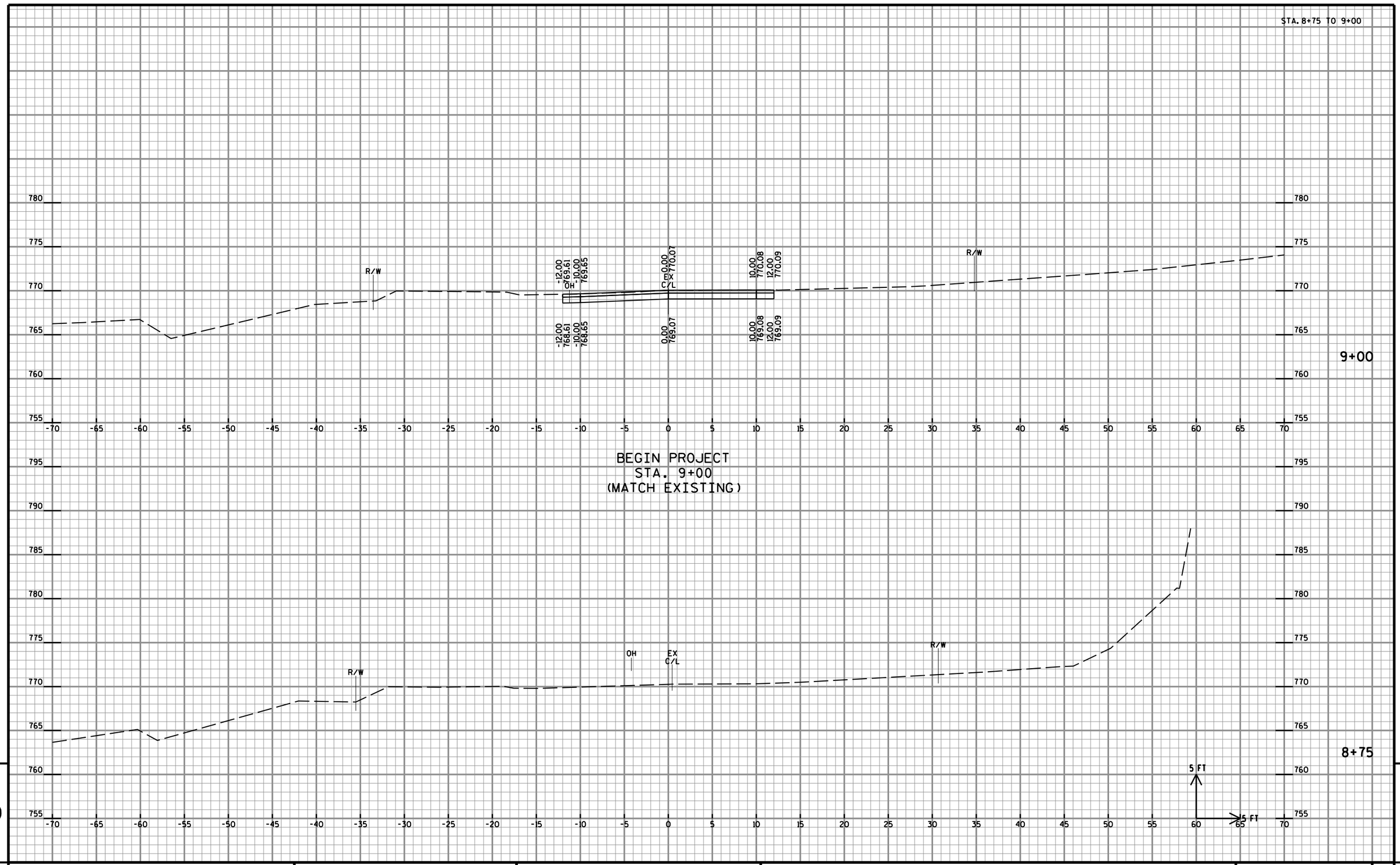
EARTHWORK SUMMARY (CATEGORY 0010)

		AREA			INCREMENTAL VOLUME			CUMULATIVE VOLUME		
DIVISION	STATION	CUT SF	SALVAGED/ UNUSABLE PAVEMENT MATERIAL SF	FILL SF	CUT (1) CY	SALVAGED/ UNUSABLE PAVEMENT MATERIAL (2) CY	FILL (3) CY	CUT (1) 1.00 CY	EXPANDED FILL (4) 1.30 CY	MASS ORDINATE ±(5) CY
1										
MILL ROAD	9+00	24	0	0						
	9+25	23	0	0	22	0	0	22	0	22
	9+30	23	0	0	4	0	0	26	0	26
	South Approacn									
	Embankment Grading	1,703	0	7	63	0	0	89	0	89
	STRUCTURE (P-61-171)									
	North Approacn									
	Embankment Grading	440	0	0	16	0	0	16	0	16
	10+45	21	0	0	4	0	0	20	0	20
	10+50	21	0	0	21	0	0	41	0	41
	10+75	24	0	0						
TOTALS					130	0	0			130

205.0100 EXCAVATION COMMON = SAY 130 **WASTE = SAY 130**

NOTES:
1) EXCAVATION COMMON IS THE SUM OF THE CUT COLUMN. ITEM NUMBER 205.0100
2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
3) DOES NOT INCLUDE UNUSABLE PAVEMENT EXCAVATION VOLUME.
4) EXPANDED FILL FACTOR = 1.30 EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR
5) THE MASS ORDINATE ± QTY CALCULATED FOR THE DIVISION.

STA. 8+75 TO 9+00



9

9

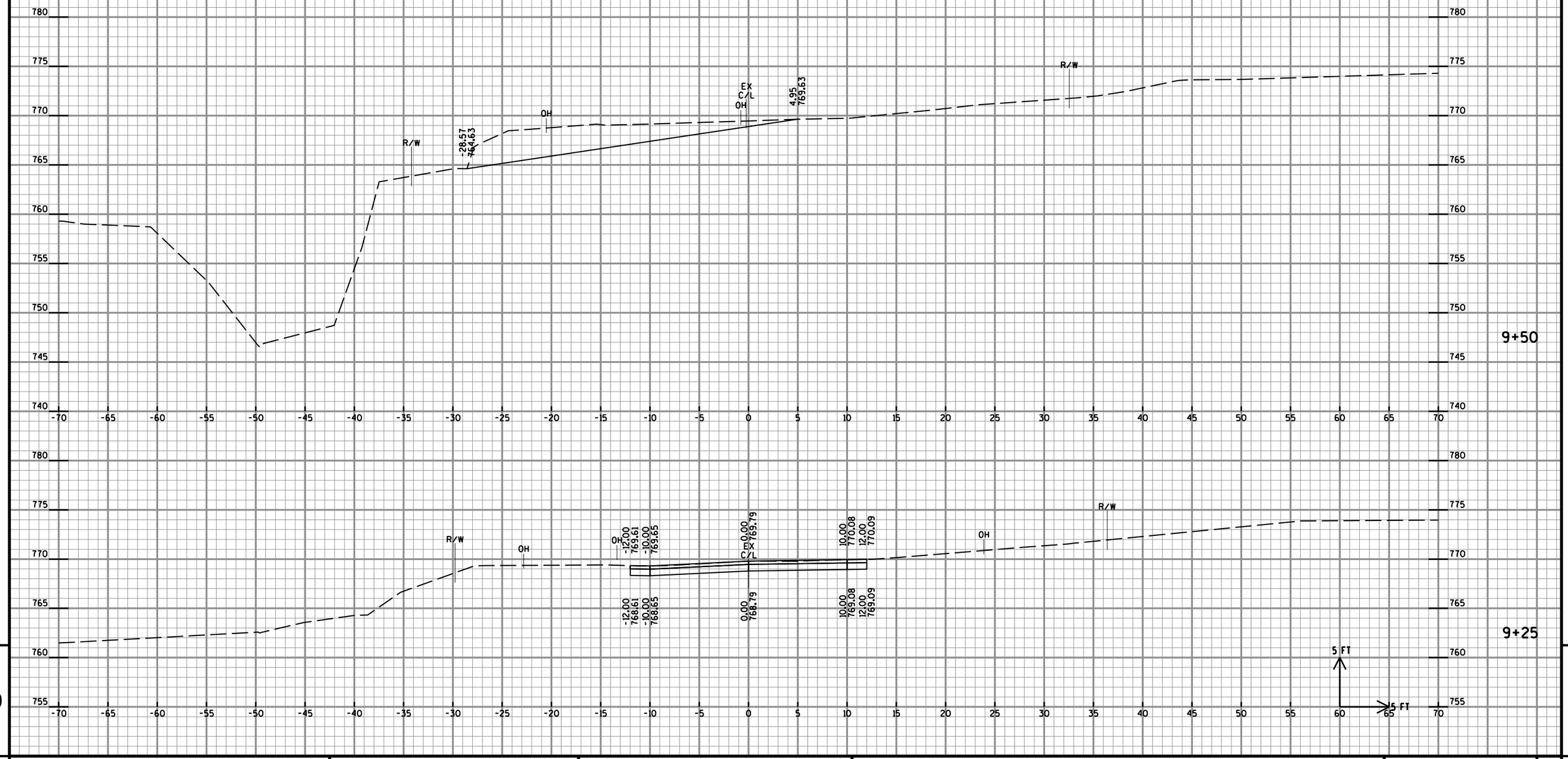
PROJECT NO: 7276-00-72	HWY: MILL ROAD	COUNTY: TREMPEALEAU	CROSS SECTIONS	SHEET	E

FILE NAME : U:\42-0997.00 - Trempealeau Co, Tn Arcadia, Mill Road\Inroads\420997_xs rev.dgn PLOT DATE : 10/19/2017 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:10

WISDOT/CADDS SHEET 21

STA. 9+25 TO 9+50

REMOVE STRUCTURE P-61-171



9

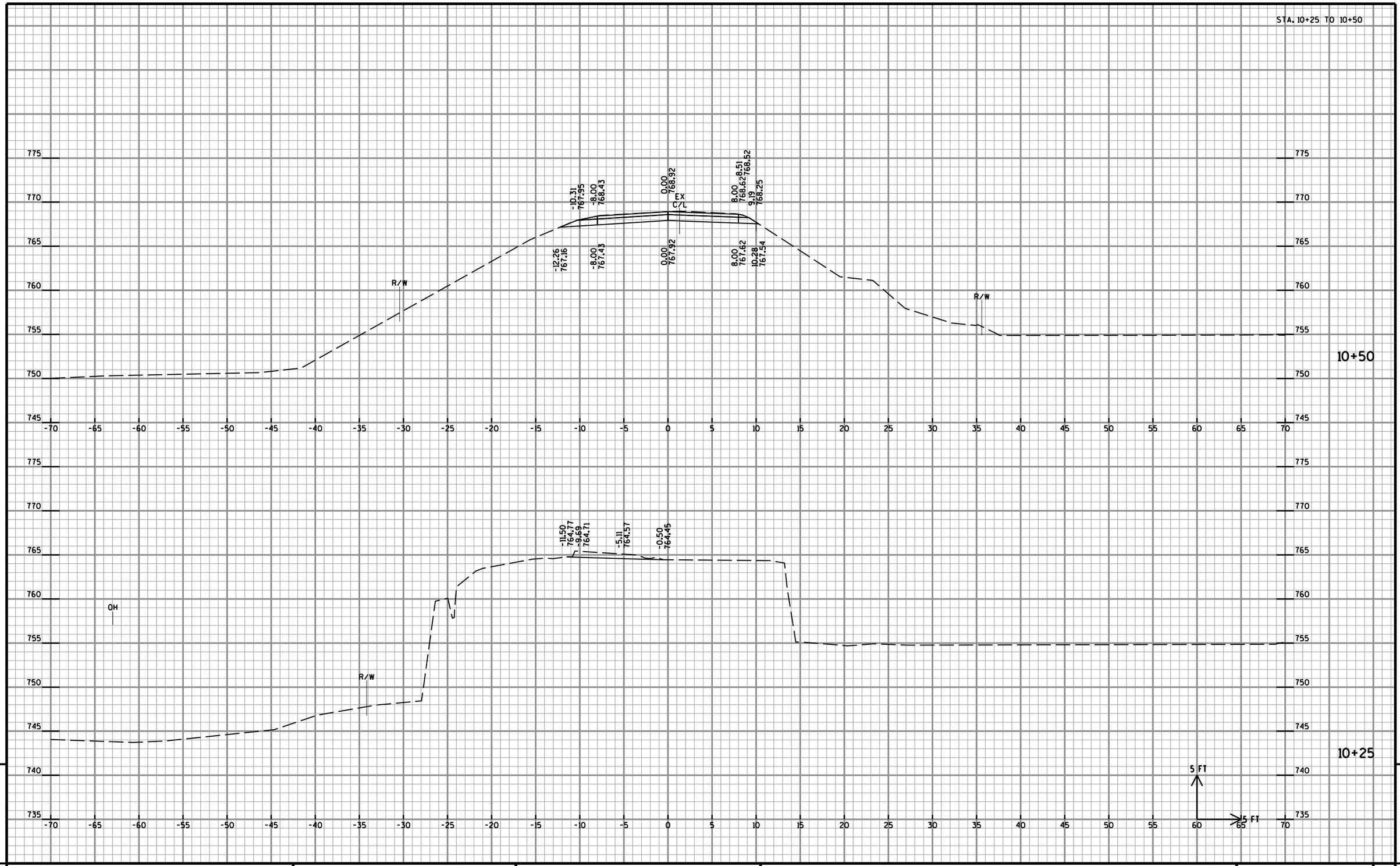
9

PROJECT NO: 7276-00-72	HWY: MILL ROAD	COUNTY: TREMPEALEAU	CROSS SECTIONS	SHEET	E

FILE NAME : U:\42-0997.00 - Trempealeau Co, Tn Arcadia, Mill Road\Inroads\420997_xs rev.dgn PLOT DATE : 10/19/2017 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:10

WISDOT/CADDS SHEET 21

STA. 10+25 TO 10+50



9

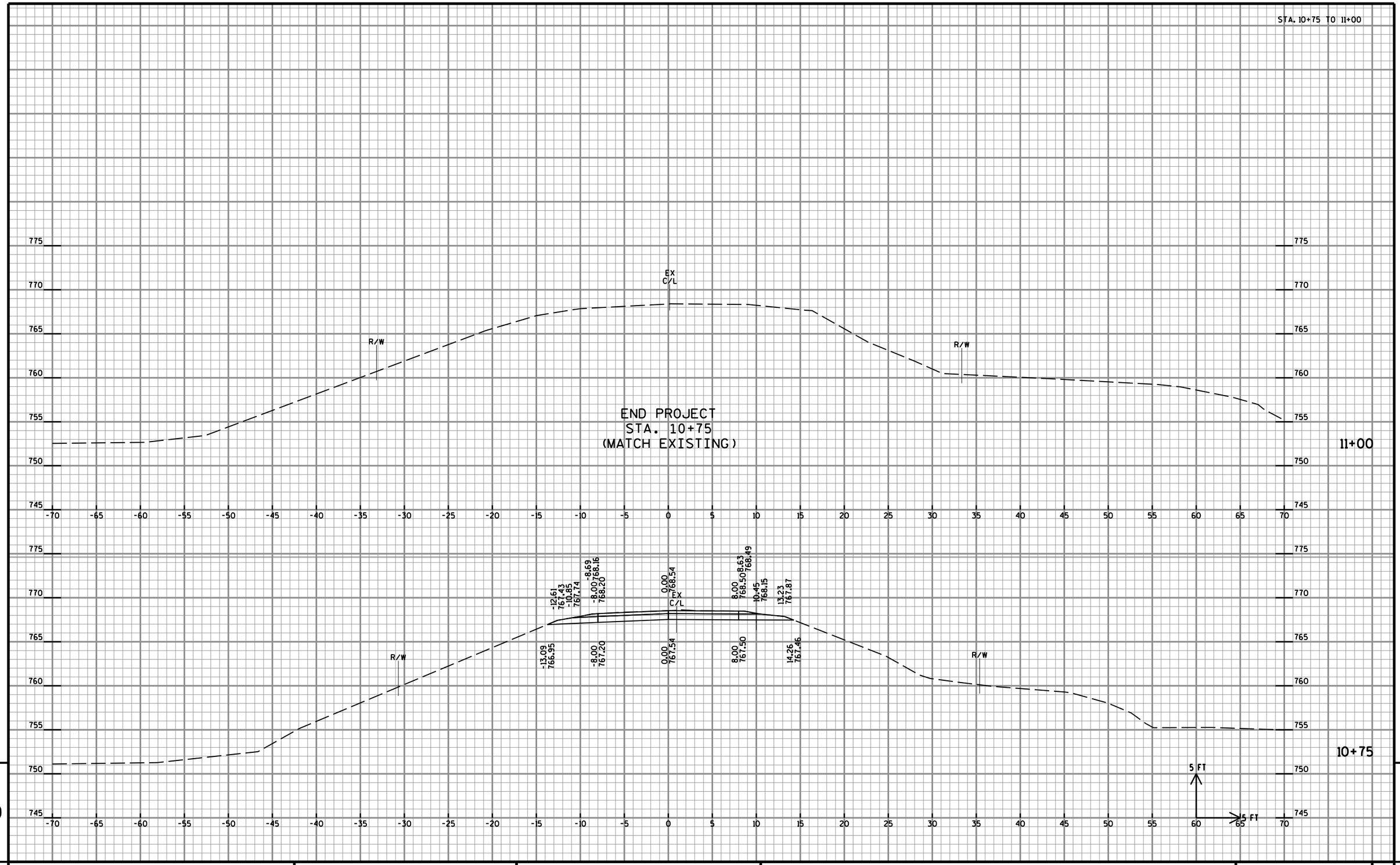
9

PROJECT NO: 7276-00-72	HWY: MILL ROAD	COUNTY: TREMPEALEAU	CROSS SECTIONS	SHEET	E

FILE NAME : U:\42-0997.00 - Trempealeau Co, Tn Arcadia, Mill Road\Inroads\420997_xs rev.dgn PLOT DATE : 10/19/2017 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:10

WISDOT/CADDS SHEET 21

STA. 10+75 TO 11+00



9

9

PROJECT NO: 7276-00-72	HWY: MILL ROAD	COUNTY: TREMPEALEAU	CROSS SECTIONS	SHEET	E

FILE NAME : U:\42-0997.00 - Trempealeau Co, Tn Arcadia, Mill Road\Inroads\420997_xs rev.dgn PLOT DATE : 10/19/2017 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:10

WISDOT/CADDS SHEET 21

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov