EAU

JANUARY 2018

PROJECT ID: WITH: N/A

7322-00-70

COUNTY: JACKSON

28

ORDER OF SHEETS

TOTAL SHEETS = 64

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

CTH D - CTH N

DOUGLAS CREEK BRIDGE B-27-0164

CTH H

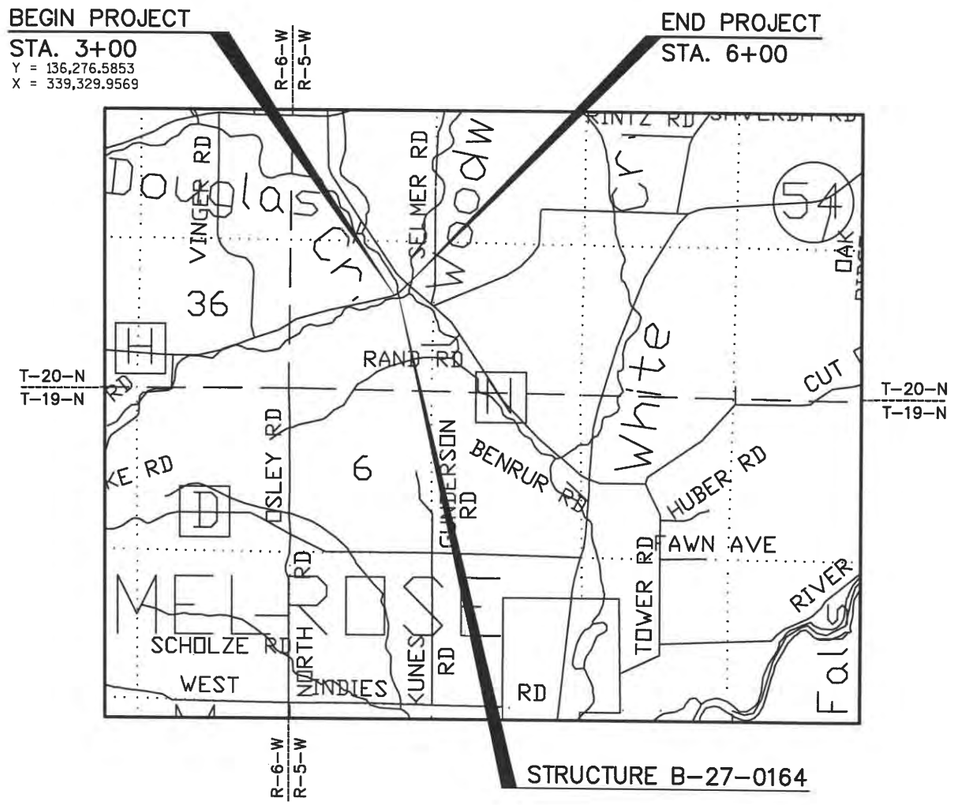
JACKSON COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7322-00-70	WISC 2018059	1

STATE PROJECT NUMBER

7322-00-70

N



LAYOUT

SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.057 MI.

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

DESIGN DESIGNATION

A.A.D.T.	2018	= 195
A.A.D.T.	2038	= 290
D.H.V.	2038	= 27
D.D.		= 60/40
T.		= 10.0% ESTIMATED
DESIGN SPEED		= 40 MPH
ESALS		= 51,100

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- TEMPORARY LIMITED EASEMENT AREA
- PARCEL NUMBER (25) UTILITY NUMBER (40)
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (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

- 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

COUNTY of JACKSON

7-26-17 (Date) Randy L. Anderson (Highway Commissioner)

ORIGINAL PLANS PREPARED BY

JEWELL associates engineers, inc.

Engineers - Architects - Surveyors

WISCONSIN SCOTT WHITSETT E-40829-006 REEDSBURG WIS. PROFESSIONAL ENGINEER

7-26-17 (Date) Scott Whitsett (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor JEWELL ASSOCIATES ENGINEERS, INC.

Designer JEWELL ASSOCIATES ENGINEERS, INC.

Management Consultant KNIGHT E/A, INC.

C.O. Examiner

APPROVED FOR THE DEPARTMENT

DATE: 7/31/17

Management Consultant Signature

E

FILE NAME : R:\PROJECTS\K49030 CTH H BRIDGE, JACKSON CO\SHEETSPLAN\DETAILS\TITLE SHEET.DWG
LAYOUT : TITLE SHEET

PLOT DATE : 7/11/2017
PLOT TIME : 11:58:55 AM

PLOT BY : ECKELBERG, PATRICK

PLOT SCALE : 1" = 1'

WISDOT/CADDS SHEET 10

LIST OF STANDARD ABBREVIATIONS

ABUT	Abutment	INV	Invert	SALV	Salvaged
AC	Acre	IP	Iron Pipe or Pin	SAN S	Sanitary Sewer
AGG	Aggregate	IRS	Iron Rod Set	SEC	Section
AH	Ahead	JT	Joint	SHLDR	Shoulder
<	Angle	JCT	Junction	SHR	Shrinkage
ASPH	Asphaltic	LHF	Left–Hand Forward	SW	Sidewalk
AVG	Average	L	Length of Curve	S	South
ADT	Average Daily Traffic	LIN FT or LF	Linear Foot	SQ	Square
BAD	Base Aggregate Dense	LC	Long Chord of Curve	SF or SQ FT	Square Feet
BK	Back	MH	Manhole	SY or SQ YD	Square Yard
BF	Back Face	MB	Mailbox	STD	Standard
BM	Bench Mark	ML or M/L	Match Line	SDD	Standard Detail Drawings
BR	Bridge	N	North	STH	State Trunk Highways
C or C/L	Center Line	Y	North Grid Coordinate	STA	Station
CC	Center to Center	OD	Outside Diameter	SS	Storm Sewer
CTH	County Trunk Highway	PLE	Permanent Limited Easement	SG	Subgrade
CR	Creek			SE	Superelevation
CR	Crushed	PT	Point	SL or S/L	Survey Line
CY or CU YD	Cubic Yard	PC	Point of Curvature	SV	Septic Vent
CP	Culvert Pipe	PI	Point of Intersection	T	Tangent
C & G	Curb and Gutter	PRC	Point of Reverse Curvature	TEL	Telephone
D	Degree of Curve	PT	Point of Tangency	TEMP	Temporary
DHV	Design Hour Volume	POC	Point On Curve	TI	Temporary Interest
DIA	Diameter	POT	Point on Tangent	TLE	Temporary Limited Easement
E	East	PVC	Polyvinyl Chloride		
X	East Grid Coordinate	PCC	Portland Cement Concrete	t	Ton
ELEC	Electric (al)	LB	Pound	T or TN	Town
EL or ELEV	Elevation	PSI	Pounds Per Square Inch	TRANS	Transition
ESALS	Equivalent Single Axle Loads	PE	Private Entrance	TL or T/L	Transit Line
		R	Radius	T	Trucks (percent of)
EBS	Excavation Below Subgrade	RR	Railroad	TYP	Typical
FF	Face to Face	R	Range	UNCL	Unclassified
FE	Field Entrance	RL or R/L	Reference Line	UG	Underground Cable
F	Fill	RP	Reference Point	USH	United States Highway
FG	Finished Grade	RCCP	Reinforced Concrete Culvert Pipe	VAR	Variable
FL or F/L	Flow Line			V	Velocity or Design Speed
FT	Foot	REQ'D	Required	VERT	Vertical
FTG	Footing	RES	Residence or Residential	VC	Vertical Curve
GN	Grid North	RW	Retaining Wall	VOL	Volume
HT	Height	RT	Right	WM	Water Main
CWT	Hundredweight	RHF	Right–Hand Forward	WV	Water Valve
HYD	Hydrant	R/W	Right–of–Way	W	West
INL	Inlet	R	River	WB	Westbound
ID	Inside Diameter	RD	Road	YD	Yard
		RDWY	Roadway		

	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= 0.75 ACRES

TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.59 ACRES

GENERAL NOTES

COORDINATES AND BEARINGS ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), JACKSON COUNTY.

NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE FIRST BEEN INDICATED FOR REMOVAL BY THE ENGINEER IN THE FIELD.

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

DISTURBED AREAS SHOWN WITHIN THE RIGHT–OF–WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS ARE TO BE FERTILIZED (TYPE B), SEEDED (USE SEED MIX NO. 60), AND MULCHED AS DIRECTED BY THE ENGINEER

WHEN THE QUANTITY OF THE ITEM OF BASE AGGREGATE DENSE OR ASPHALTIC SURFACE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

SILT FENCE, TEMPORARY DITCH CHECKS, AND CULVERT PIPE CHECKS SHALL BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER IN THE FIELD. SILT FENCE SHALL BE PLACED PRIOR TO CONSTRUCTION AND IN PLACE PRIOR TO STRUCTURE REMOVAL.

MULCH ALL MAINLINE SLOPES AS DIRECTED BY THE ENGINEER IN THE FIELD.

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

FILL EXPANSION IS VARIABLE AND IS ESTIMATED AT 25%.

ADJUST DITCH GRADING AS NECESSARY TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

ASPHALTIC SURFACE QUANTITIES WERE CALCULATED USING 115 LB/SY/IN. 3.5–INCHES OF ASPHALTIC SURFACE SHALL BE CONSTRUCTED WITH A 1.75–INCH UPPER LAYER AND 1.75–INCH LOWER LAYER.

TACK COAT QUANTITIES WERE CALCULATED USING A 0.060 GAL/SY APPLICATION RATE.

CURVE DATA IS BASED ON THE ARC DEFINITION.

THE EXACT LOCATION OF PRIVATE ENTRANCES TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

REMOVAL OF ASPHALTIC SURFACES WHERE AN ABUTTING ASPHALTIC SURFACE IS TO REMAIN IN PLACE SHALL REQUIRE A SAWCUT MEETING THE APPROVAL OF THE ENGINEER IN THE FIELD.

INLET & OUTLET ELEVATIONS FOR CULVERT PIPES AS SHOWN ON THE PLAN MAY BE ADJUSTED TO FIT EXISTING FIELD CONDITIONS.

ALL RADII DIMENSIONS ARE MEASURED TO EDGE OF ASPHALT.

THE LOCATION OF ALL PERMANENT SIGNING SHALL BE VERIFIED BY THE ENGINEER IN THE FIELD PRIOR TO PLACEMENT.

ELEVATIONS ON THE PLAN ARE REFERENCED TO CUFFY KNOB GPS STATION (PZD 034556). THE STATION IS A FLANGE–ENCASED CENTER–PUNCHED STAINLESS STEEL ROD DRIVEN TO REFUSAL 11.8 FT DEEP, WITH GREASED SLEEVE AND ALUMINUM JACKSON COUNTY ACCESS COVER, LOCATED WITHIN THE RIGHT–OF–WAY ABOUT LEVEL WITH THE ROAD PAVEMENT. THE STATION IS 17.7 FT EAST OF THE CENTER OF HENRY ROAD, 173.9 FT SOUTH–SOUTHEAST OF A TELEPHONE PEDESTAL ––2100––, 91.9 FT NORTH OF A FIELD ENTRANCE, 6.6 FT WEST OF AN AGRICULTURAL FIELD, 3.3 FT SOUTHWEST OF AN ORANGE 4X4 PLASTIC WITNESS POST, AND 2 FT EAST OF AN ORANGE 4X4 PLASTIC WITNESS POST. STATION CUFFY KNOB GPS IS LOCATED IN THE NORTHWEST QUARTER OF SECTION 30, TOWN 20 NORTH, RANGE 5 WEST, TOWN OF IRVING, JACKSON COUNTY, WI.

WETLANDS ARE PRESENT IN THE PROJECT LIMITS. THE CONTRACTOR SHALL NOT OPERATE EQUIPMENT BEYOND THE SLOPE INTERCEPTS IN THESE AREAS.

CONTACTS

DESIGN CONSULTANT

JEWELL ASSOCIATES ENGINEERS, INC.
310 E. JACKSON ST.
WISCONSIN RAPIDS, WI 54494
ATTN: PATRICK ECKELBERG, P.E.
PHONE: (715) 424-2424
FAX: (715) 424-2421
EMAIL: patrick.eckelberg@jewellassoc.com

DNR LIAISON

STATE OF WISCONSIN
DNR SERVICE CENTER
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601
ATTN: KAREN KALVELAGE
PHONE: (608) 785-9115
EMAIL: karen.kalvelage@wisconsin.gov

JACKSON COUNTY HIGHWAY DEPARTMENT

RANDY ANDERSON, COUNTY HIGHWAY COMMISSIONER
119 HARRISON ST.
BLACK RIVER FALLS, WI 54615
PHONE: (715) 284–0233
EMAIL: randy.anderson@co.jackson.wi.us

UTILITIES

ELECTRIC

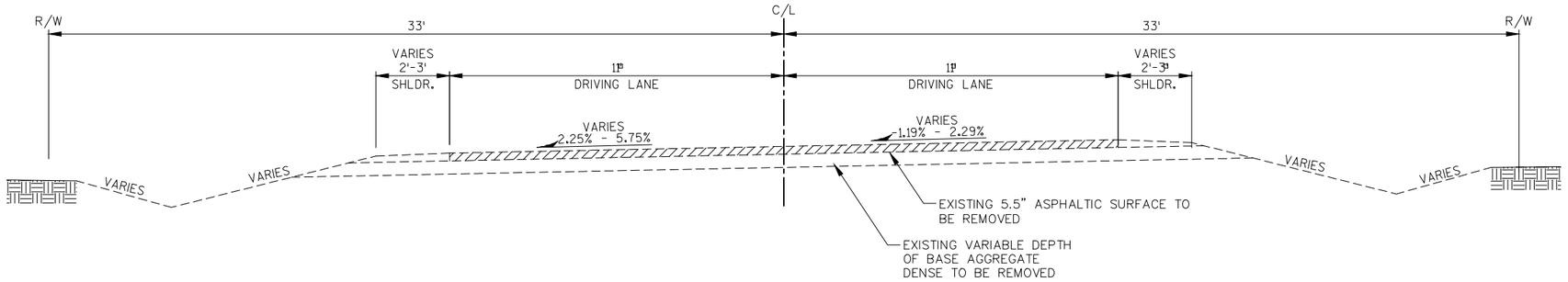
JACKSON ELECTRIC COOP.
ERIC STEIEN
PO BOX 546
BLACK RIVER FALLS, WI 54615
PHONE: (715) 299–5208
EMAIL: esteien@jackelec.com

TELEPHONE

CENTURYLINK
BRIAN STELPLUGH
333 N FRONT ST
LA CROSSE, WI 54601
PHONE: (608) 796–5142
EMAIL: brian.stelplugh@centurylink.com

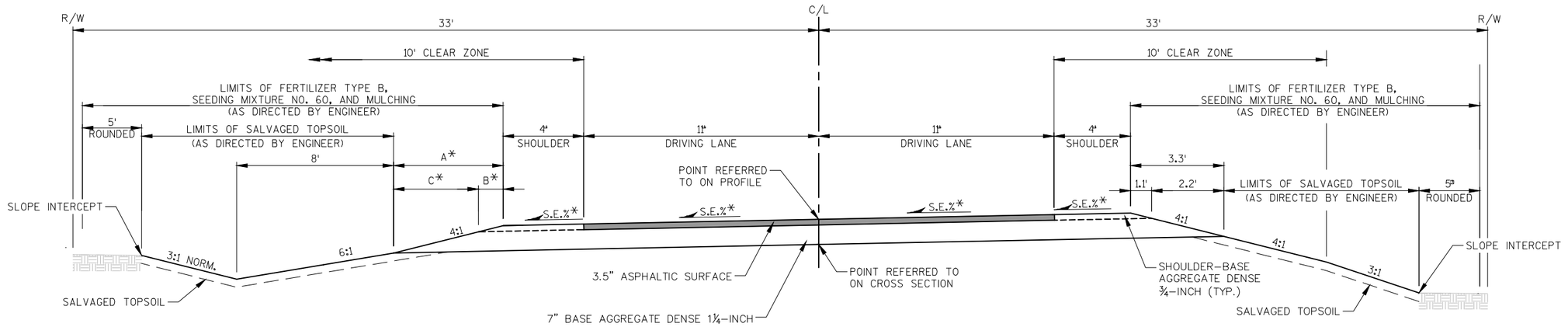
DIGGERS HOTLINE
Dial 811 or (800) 242-8511
www.DiggersHotline.com

* DENOTES UTILITY IS NOT A MEMBER OF DIGGERS HOTLINE



TYPICAL EXISTING SECTION

CTH H
STA. 3+00 – STA. 6+00



SUPERELEVATION TABLE

STATION	LEFT	RIGHT	"A" (FT.)	"B" (FT.)	"C" (FT.)
3+00	MATCH EXISTING	MATCH EXISTING	4.5	1.5	3.0
3+50	3.8	2.3	4.2	1.4	2.8
4+00	2.0	2.0	3.8	1.3	2.5
4+33.17	2.0	2.0	3.8	1.3	2.5
4+77.03	2.0	2.0	3.8	1.3	2.5
5+00	3.4	2.0	4.0	1.3	2.7
5+50	5.7	2.0	4.5	1.5	3.0
6+00	MATCH EXISTING	MATCH EXISTING	4.5	1.5	3.0

CUT

FILL

TYPICAL FINISHED SUPERELEVATED SECTION

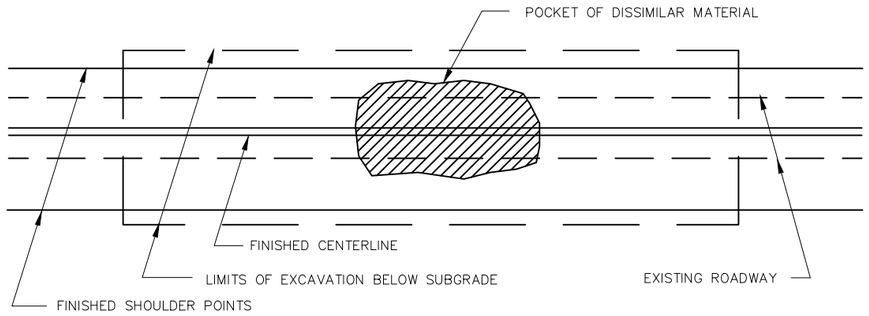
CTH H
STA. 3+00 - STA. 6+00

THE LOW SIDE SHOULDER SLOPE ON SUPERELEVATED SECTIONS EQUALS THE SUPERELEVATION WHEN THE SUPERELEVATION IS GREATER THAN 0.04 FT./FT. IF THE SUPERELEVATION IS LESS THAN OR EQUALS 0.04 FT./FT., THEN THE LOW SIDE SHOULDER SLOPE IS 0.04 FT./FT. THE HIGH SIDE SHOULDER SLOPE ON THE SUPERELEVATED SECTIONS EQUALS THE SUPERELEVATION.

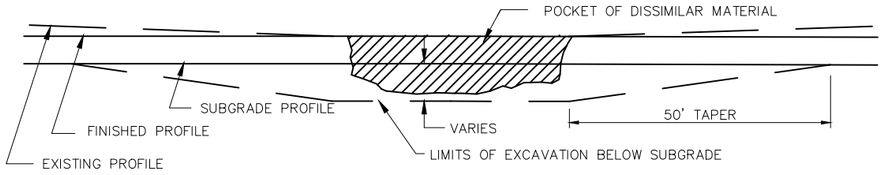
* SEE SUPERELEVATION TABLE

PROJECT NO: 7322-00-70	HWY: CTH H	COUNTY: JACKSON	EXISTING & FINISHED TYPICAL - CTH H	SHEET 3	E

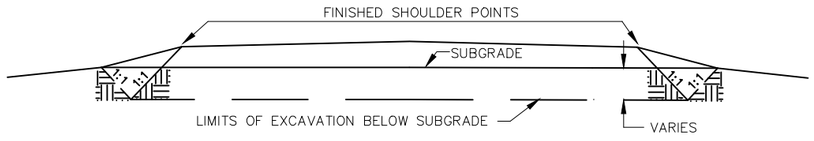
FILE NAME : R:\PROJECTS\K49030 CTH H BRIDGE, JACKSON CO\SHEETSPLAN\TYPICALS\CTH H_EXISTING TYPICAL.DWG
LAYOUT : LAYOUT
PLOT DATE : 7/11/2017
PLOT TIME : 1:30:33 PM
PLOT BY : ECKELBERG, PATRICK
PLOT SCALE : 1" = 1'



PLAN VIEW



PROFILE VIEW

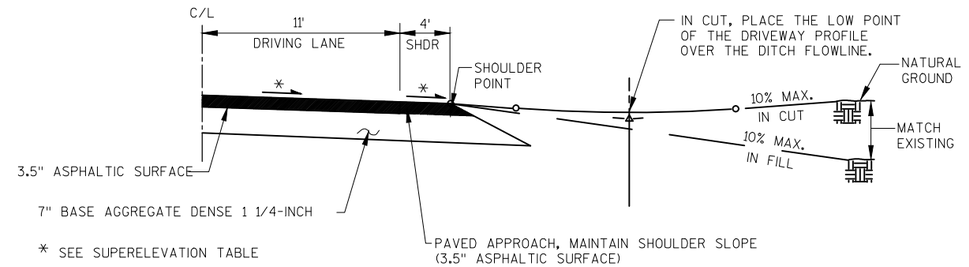


CROSS SECTION VIEW

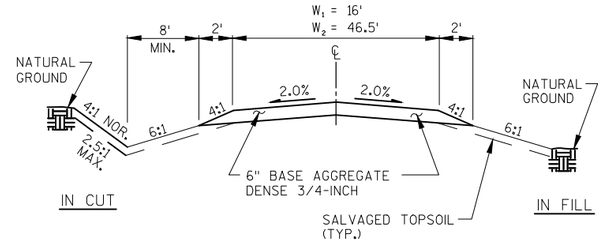
1. EXACT LOCATION OF E.B.S. (EXCAVATION BELOW SUBGRADE) SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. E.B.S. AREA TO BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE ENGINEER. BACKFILL MUST BE HOMOGENEOUS WITH ADJOINING FILL MATERIAL.
3. THE FILL SECTION WITHIN 100' OF THE MOUTH OF THE CUT MUST BE KEPT 2' BELOW SUBGRADE UNTIL E.B.S. IS COMPLETED. LATERAL LIMITS OF EXCAVATION SHALL BE THE SUBGRADE SHOULDER POINTS.

EXCAVATION BELOW SUBGRADE (E.B.S.)

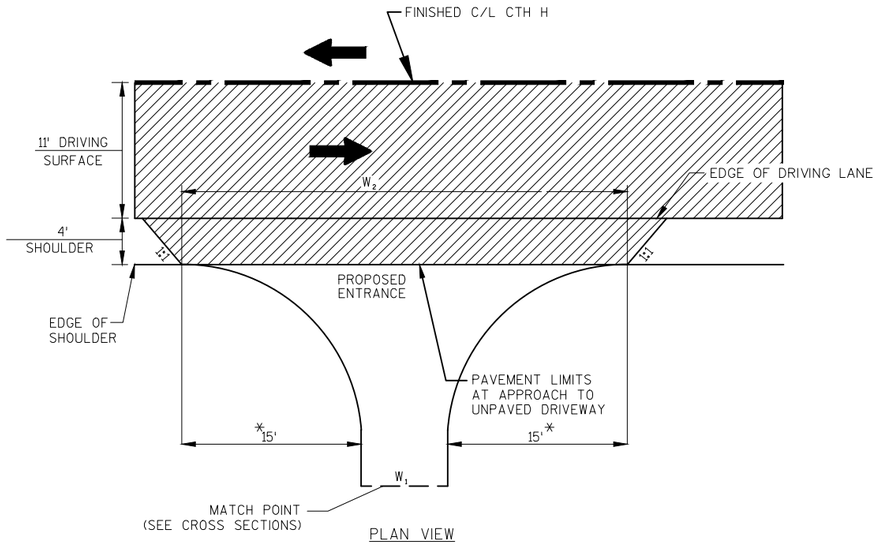
2



TYPICAL P.E. PROFILE



TYPICAL CROSS-SECTION FOR P.E.



PLAN VIEW

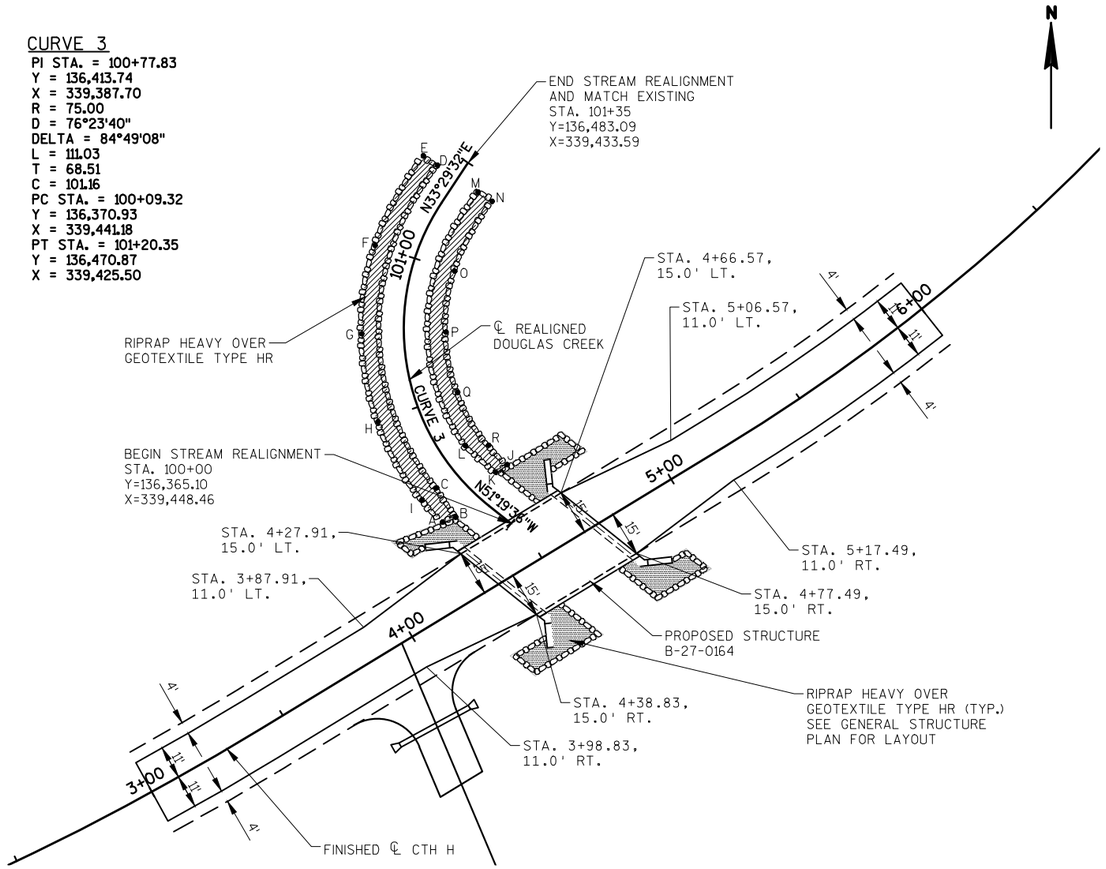
APPROACH AT P.E.

TYPICAL PRIVATE ENTRANCE (P.E.) DETAILS

LIMITS OF ASPHALTIC SURFACE

*RADIUS = 15' W_1 = 16' W_2 = 46.5'

CURVE 3
PI STA. = 100+77.83
Y = 136,413.74
X = 339,387.70
R = 75.00
D = 76°23'40"
DELTA = 84°49'08"
L = 111.03
T = 68.51
C = 101.16
PC STA. = 100+09.32
Y = 136,370.93
X = 339,441.18
PT STA. = 101+20.35
Y = 136,470.87
X = 339,425.50



RIPRAP LAYOUT DETAIL

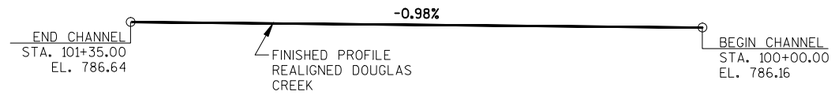
CATEGORY 0010 RIPRAP HEAVY OVER GEOTEXTILE TYPE HR (TYP.)

CATEGORY 0020 RIPRAP HEAVY OVER GEOTEXTILE TYPE HR (TYP.)

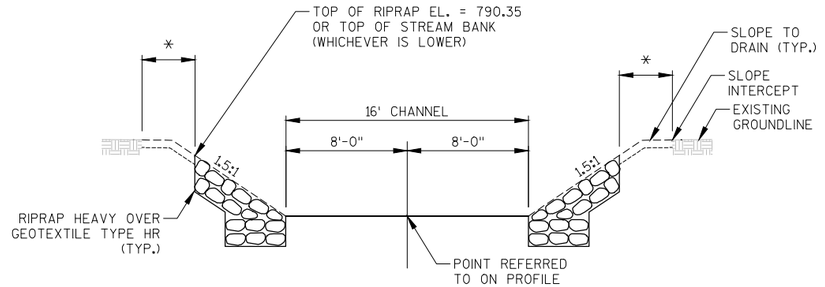
NOTE: SEE STRUCTURE CONSTRUCTION DETAIL SHEET FOR CHANNEL REALIGNMENT LAYOUT

RIPRAP HEAVY LAYOUT

POINT	STATION	OFFSET	POINT	STATION	OFFSET
A	100+18	18.0' LT.	J	100+13	18.0' RT.
B	100+15	10.0' LT.	K	100+15	10.0' RT.
C	100+25	8.0' LT.	L	100+30	8.0' RT.
D	101+30	8.0' LT.	M	101+30	8.0' RT.
E	101+30	13.6' LT.	N	101+30	13.6' RT.
F	101+00	13.8' LT.	O	101+00	13.8' RT.
G	100+75	13.9' LT.	P	100+75	13.9' RT.
H	100+50	14.0' LT.	Q	100+50	14.0' RT.
I	100+25	14.2' LT.	R	100+25	14.2' RT.

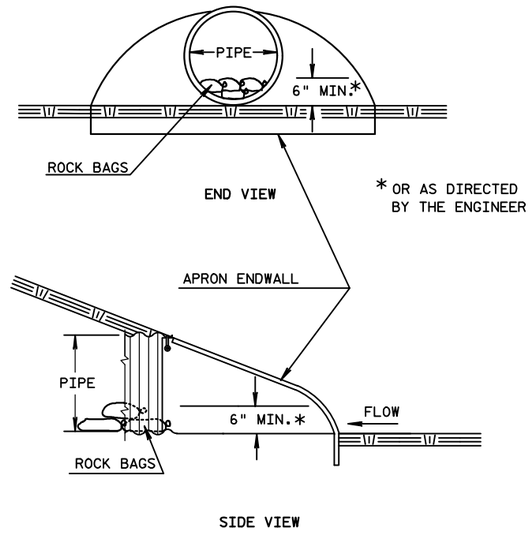


CHANNEL REALIGNMENT - PROFILE GRADE LINE



*LIMITS OF SEEDING MIXTURE NO. 60, FERTILIZER TYPE B AND MULCHING
(SEEDING MIXTURE NO. 60 APPLIED AT 3 LBS/1000 SF)

TYPICAL CHANNEL REALIGNMENT SECTION



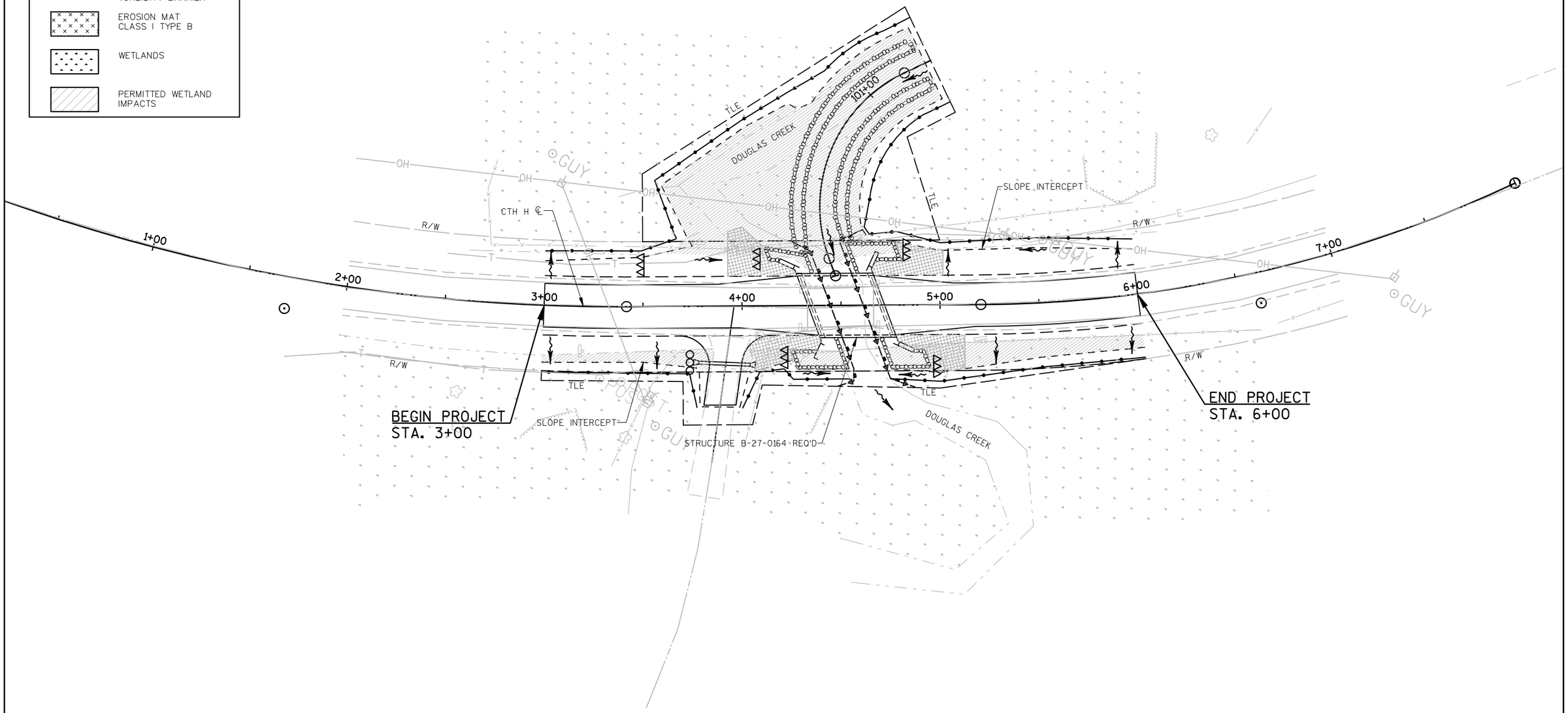
CULVERT PIPE CHECK

PAVEMENT/RIPRAP HEAVY LAYOUT DETAILS

2

LEGEND

- RIPRAP HEAVY OVER GEOTEXTILE TYPE HR
- DIRECTION OF FLOW
- WETLAND BOUNDARY
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECKS
- SILT FENCE
- TURBIDITY BARRIER
- EROSION MAT CLASS I TYPE B
- WETLANDS
- PERMITTED WETLAND IMPACTS



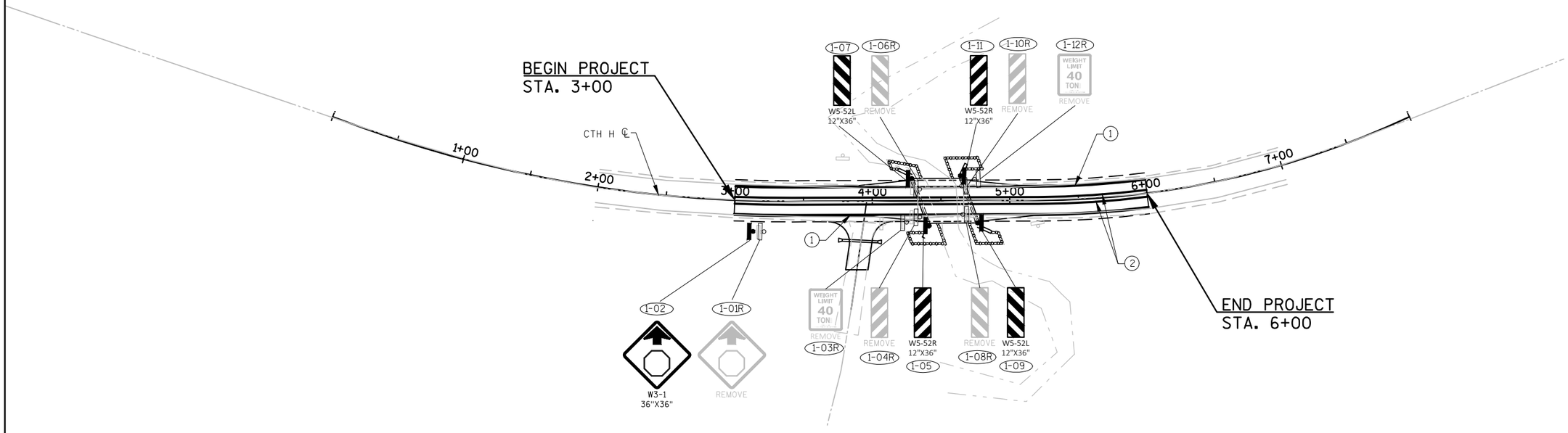
PROJECT NO: 7322-00-70	HWY: CTH H	COUNTY: JACKSON	EROSION CONTROL	SHEET 6	E

FILE NAME : R:\PROJECTS\K49030 CTH H BRIDGE, JACKSON CO\SHEETSPLAN\DETAILS\K49030_EROSION CONTROL.DWG
LAYOUT : LAYOUT1
PLOT DATE : 7/11/2017
PLOT TIME : 11:54:01 AM
PLOT BY : ECKELBERG, PATRICK
PLOT SCALE : 1" = 1'

2

LEGEND

(1)	-	MARKING LINE EPOXY 4-INCH (SOLID, WHITE)
(2)	-	MARKING LINE EPOXY 4-INCH (SOLID, YELLOW)
	-	EXISTING SIGN MOUNTED ON POST(S)
	-	PROPOSED SIGN MOUNTED ON POST(S)
XXX	-	DENOTES SIGN NUMBER
ESTR	-	EXISTING SIGN TO REMAIN



PROJECT NO: 7322-00-70	HWY: CTH H	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 7	E

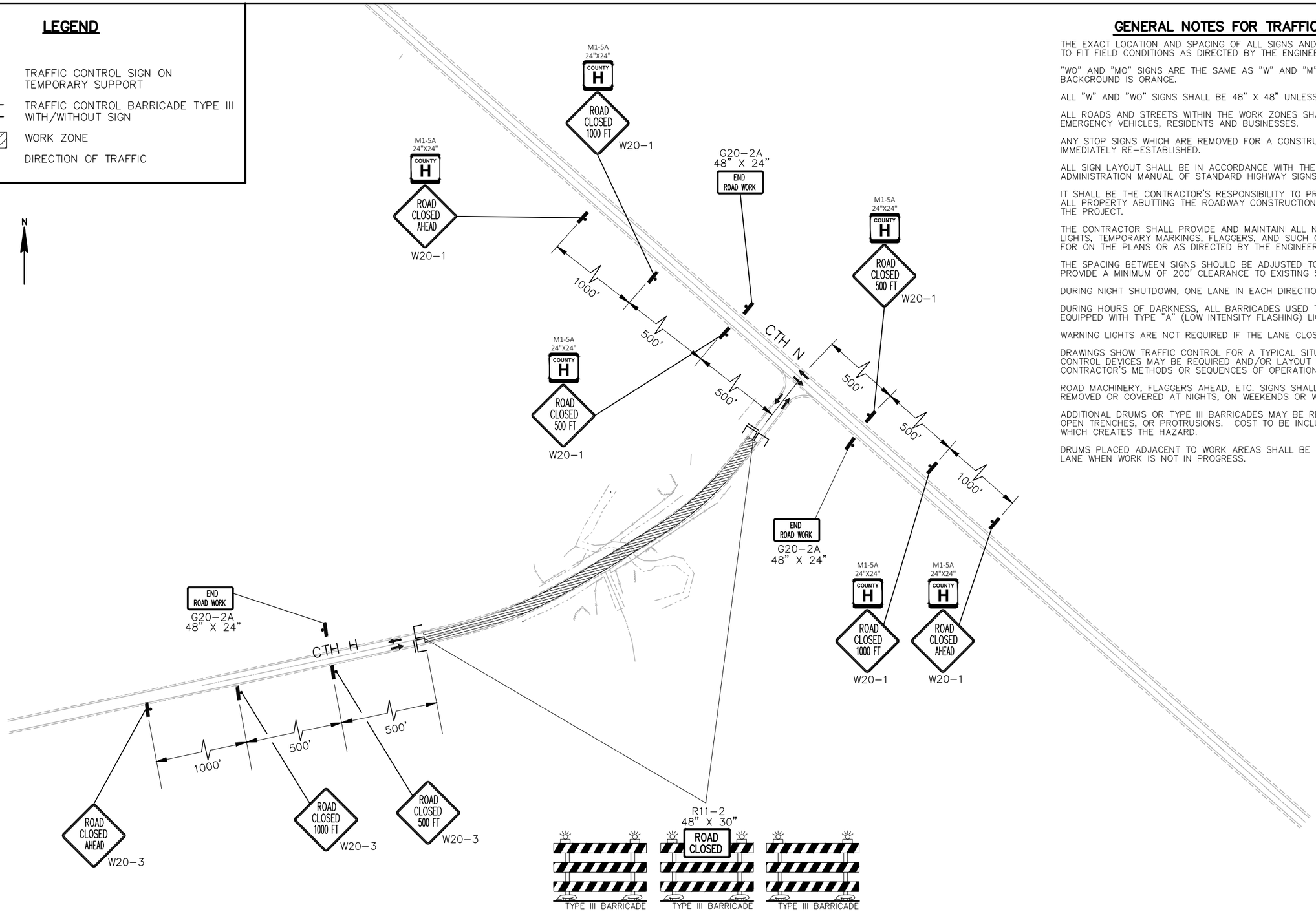
FILE NAME : R:\PROJECTS\K49030 CTH H BRIDGE, JACKSON CO\SHEETSPLAN\DETAILS\PERM. SIGNING.DWG
LAYOUT : LAYOUT1
PLOT DATE : 8/1/2017
PLOT TIME : 9:40:17 AM
PLOT BY : ECKELBERG, PATRICK
PLOT SCALE : 1 IN:80 FT

2

LEGEND

- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADE TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- DIRECTION OF TRAFFIC

N



GENERAL NOTES FOR TRAFFIC CONTROL

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

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

ALL "W" AND "WO" SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED.

ALL ROADS AND STREETS WITHIN THE WORK ZONES SHALL BE KEPT ACCESSIBLE FOR EMERGENCY VEHICLES, RESIDENTS AND BUSINESSES.

ANY STOP SIGNS WHICH ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED.

ALL SIGN LAYOUT SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE AND MAINTAIN ACCESS TO ALL PROPERTY ABUTTING THE ROADWAY CONSTRUCTION WORK THROUGHOUT THE LIFE OF THE PROJECT.

THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL NECESSARY BARRICADES, SIGNS, LIGHTS, TEMPORARY MARKINGS, FLAGGERS, AND SUCH OTHER SAFETY DEVICES AS CALLED FOR ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200' CLEARANCE TO EXISTING SIGNS.

DURING NIGHT SHUTDOWN, ONE LANE IN EACH DIRECTION MUST REMAIN OPEN.

DURING HOURS OF DARKNESS, ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH TYPE "A" (LOW INTENSITY FLASHING) LIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON CONTRACTOR'S METHODS OR SEQUENCES OF OPERATION.

ROAD MACHINERY, FLAGGERS AHEAD, ETC. SIGNS SHALL BE USED AS NEEDED AND SHALL BE REMOVED OR COVERED AT NIGHTS, ON WEEKENDS OR WHEN THE ACTIVITY DOES NOT EXIST.

ADDITIONAL DRUMS OR TYPE III BARRICADES MAY BE REQUIRED ADJACENT TO DROP-OFFS, OPEN TRENCHES, OR PROTRUSIONS. COST TO BE INCLUDED WITH OPERATION WHICH CREATES THE HAZARD.

DRUMS PLACED ADJACENT TO WORK AREAS SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

2

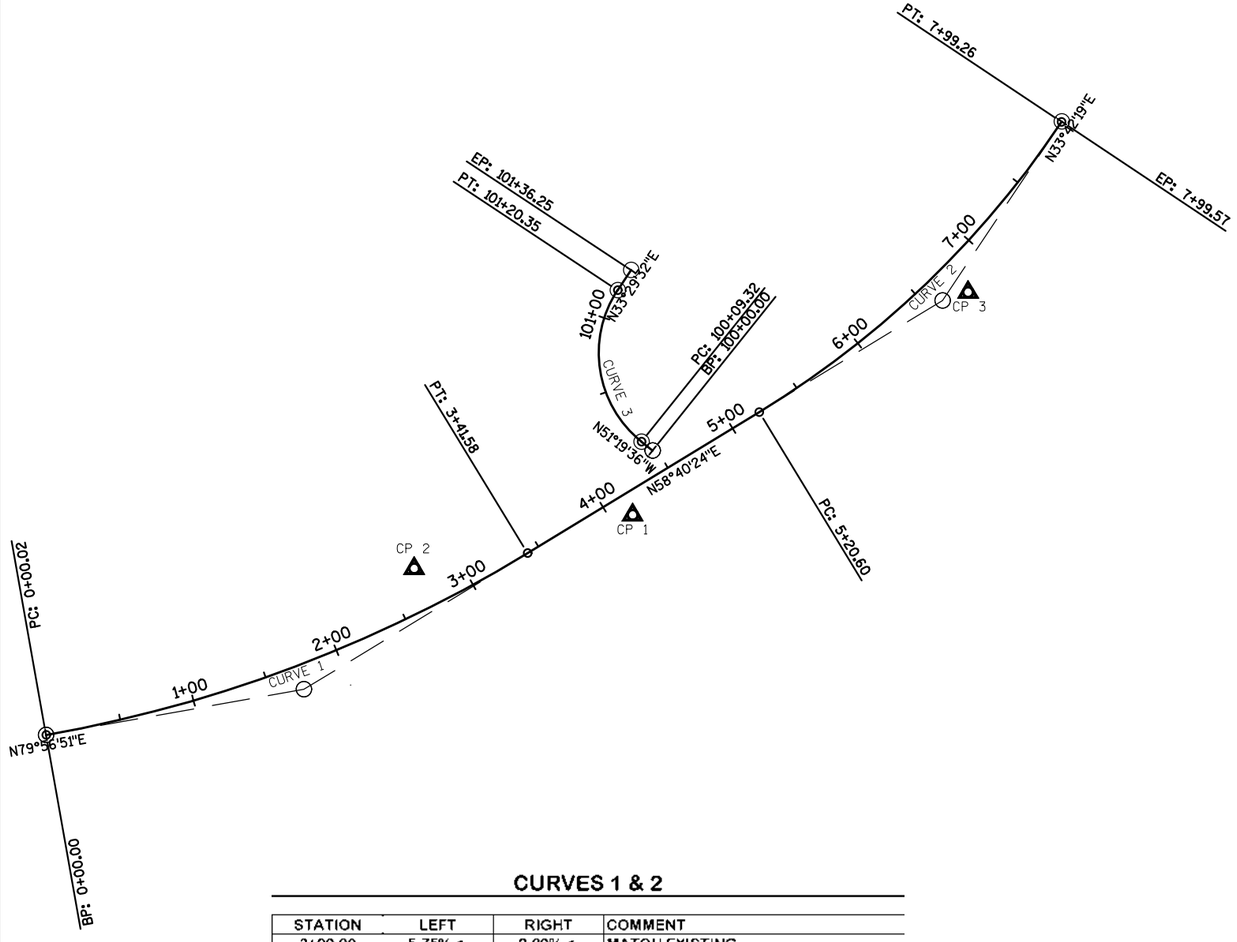
PROJECT NO: 7322-00-70	HWY: CTH H	COUNTY: JACKSON	TRAFFIC CONTROL	SHEET 8	E

FILE NAME : R:\PROJECTS\K49030 CTH H BRIDGE, JACKSON CO\SHEETSPLAN\DETAILS\TRAFFIC CONTROL.DWG
LAYOUT : STAGE 1
PLOT DATE : 10/30/2017
PLOT TIME : 11:15:36 AM
PLOT BY : ECKELBERG, PATRICK
PLOT SCALE : 1" = 1'

CURVE #1
PI STA. = 1+72.79
Y = 136,207.57
X = 339,218.37
R = 919.87
D = 6°13'43"
DELTA = 21°16'27"
L = 341.55
T = 172.77
C = 339.60
PC STA. = 0+00.02
Y = 136,177.41
X = 339,048.25
PT STA. = 3+41.58
Y = 136,297.39
X = 339,365.95

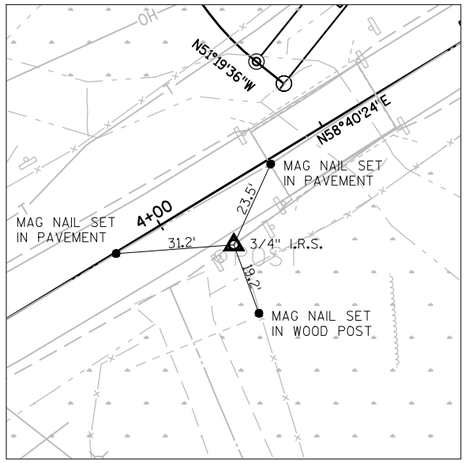
CURVE #2
PI STA. = 6+62.17
Y = 136,464.08
X = 339,639.81
R = 639.46
D = 8°57'36"
DELTA = 24°58'05"
L = 278.66
T = 141.58
C = 276.46
PC STA. = 5+20.60
Y = 136,390.47
X = 339,518.87
PT STA. = 7+99.26
Y = 136,581.85
X = 339,718.37

CURVE #3
PI STA. = 100+77.83
Y = 136,413.74
X = 339,387.70
R = 75.00
D = 76°23'40"
DELTA = 84°49'08"
L = 111.03
T = 68.51
C = 101.16
PC STA. = 100+09.32
Y = 136,370.93
X = 339,441.18
PT STA. = 101+20.35
Y = 136,470.87
X = 339,425.50

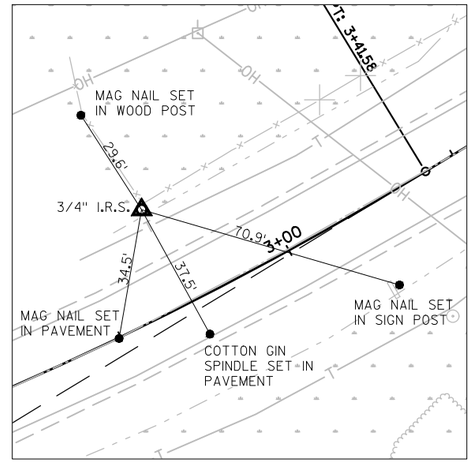


CURVES 1 & 2

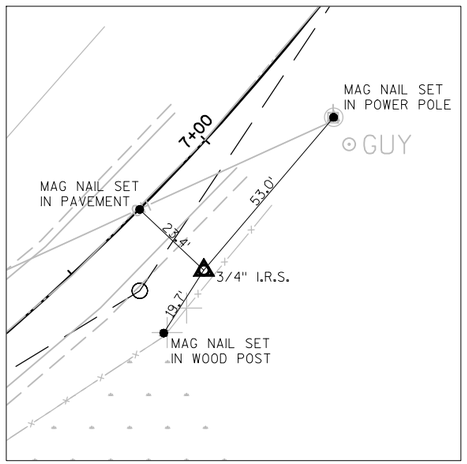
STATION	LEFT	RIGHT	COMMENT
3+00.00	5.75% <--	2.29% <--	MATCH EXISTING
3+41.58	4.16% <--	2.29% <--	PT STATION
3+50.00	3.84% <--	2.29% <--	
3+98.21	2.00% <--	2.00% <--	
4+00.00	2.00% <--	2.00% <--	
4+33.17	2.00% <--	2.00% <--	BEGIN STRUCTURE B-27-0164
4+50.00	2.00% <--	2.00% <--	
4+72.03	2.00% <--	2.00% <--	END STRUCTURE B-27-0164
5+00.00	3.35% <--	2.00% <--	
5+20.60	3.87% <--	2.00% <--	P.C. STATION
5+48.42	5.69% <--	2.00% <--	
5+50.00	5.69% <--	2.00% <--	
5+95.28	5.69% <--	2.00% <--	
6+00.00	5.69% <--	1.77% <--	MATCH EXISTING



TIES TO CP 1
STATION 4+13.83, 14.5' RT.
Y=136,322.54
X=339,435.23



TIES TO CP 2
STATION 2+70.15, 27.7' LT.
Y=136,287.34
X=339,291.04



TIES TO CP 3
STATION 6+75.34, 23.5' RT.
Y=136,469.47
X=339,656.78

CTH H

STATION	Y	X	REMARKS
0+00.00	136,177.41	339,048.23	
0+00.02	136177.41	339048.25	PC STATION
0+50.00	136,187.47	339,097.20	
1+00.00	136,200.17	339,145.56	
1+50.00	136,215.49	339,193.15	
2+00.00	136,233.36	339,239.84	
2+50.00	136,253.75	339,285.48	
3+00.00	136,276.59	339,329.96	BEGIN PROJECT
3+41.00	136,297.39	339,218.37	PT STATION
3+50.00	136,301.77	339,373.14	
4+00.00	136,327.77	339,415.85	
4+33.37	136,345.12	339,444.36	END OF DECK
4+50.00	136,353.76	339,458.57	
4+72.03	136,365.22	339,477.38	END OF DECK
5+00.00	136,379.76	339,501.28	
5+20.60	136,390.47	339,518.87	PC STATION
5+50.00	136,406.33	339,543.63	
6+00.00	136,435.85	339,583.96	END PROJECT
6+50.00	136,468.43	339,621.87	
7+00.00	136,503.88	339,657.12	
7+50.00	136,541.97	339,689.49	
7+99.26	136581.85	339718.37	PT STATION
7+99.57	136,582.11	339,718.54	

DOUGLAS CREEK REALIGNMENT

STATION	Y	X	REMARKS
100+00.00	136,365.10	339,448.46	BEGIN CONSTRUCTION
100+09.32	136,370.93	339,441.18	PC STATION
100+50.00	136,403.52	339,417.68	
101+00.00	136,452.59	339,416.70	
101+20.35	136,470.87	339,425.50	PT STATION
101+35.00	136,483.09	339,433.59	END CONSTRUCTION

FILE NAME : R:\Projects\K49030 CTH H Bridge, Jackson Co\SheetsPlan\Details\Alignment Details.dwg PLOT DATE : 7/11/2017 12:01 PM PLOT BY : ECKELBERG, PATRICK PLOT SCALE : 1" = 1'

7322-00-70

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	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000
0008	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. 4+50	LS	1.000	1.000
0010	204.0110	Removing Asphaltic Surface	SY	630.000	630.000
0012	205.0100	Excavation Common	CY	540.000	540.000
0014	206.1000	Excavation for Structures Bridges (structure) 01. B-27-0164	LS	1.000	1.000
0016	208.0100	Borrow	CY	475.000	475.000
0018	210.1500	Backfill Structure Type A	TON	290.000	290.000
0020	213.0100	Finishing Roadway (project) 01. 7322-00-70	EACH	1.000	1.000
0022	305.0110	Base Aggregate Dense 3/4-Inch	TON	90.000	90.000
0024	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	445.000	445.000
0026	455.0605	Tack Coat	GAL	45.000	45.000
0028	465.0105	Asphaltic Surface	TON	140.000	140.000
0030	502.0100	Concrete Masonry Bridges	CY	151.000	151.000
0032	502.3200	Protective Surface Treatment	SY	160.000	160.000
0034	505.0400	Bar Steel Reinforcement HS Structures	LB	5,040.000	5,040.000
0036	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	17,600.000	17,600.000
0038	513.4061	Railing Tubular Type M (structure) 01. B-27-0164	LF	81.000	81.000
0040	516.0500	Rubberized Membrane Waterproofing	SY	14.000	14.000
0042	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	2.000	2.000
0044	520.3518	Culvert Pipe Class III-B 18-Inch	LF	26.000	26.000
0046	550.2104	Piling CIP Concrete 10 3/4 X 0.25-Inch	LF	990.000	990.000
0048	606.0300	Riprap Heavy	CY	385.000	385.000
0050	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	180.000	180.000
0052	618.0100	Maintenance And Repair of Haul Roads (project) 01. 7322-00-70	EACH	1.000	1.000
0054	619.1000	Mobilization	EACH	1.000	1.000
0056	624.0100	Water	MGAL	9.000	9.000
0058	625.0500	Salvaged Topsoil **P**	SY	1,000.000	1,000.000
0060	627.0200	Mulching **P**	SY	1,800.000	1,800.000
0062	628.1504	Silt Fence	LF	950.000	950.000
0064	628.1520	Silt Fence Maintenance	LF	1,900.000	1,900.000
0066	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0068	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0070	628.2004	Erosion Mat Class I Type B	SY	230.000	230.000
0072	628.6005	Turbidity Barriers	SY	220.000	220.000
0074	628.7504	Temporary Ditch Checks	LF	110.000	110.000

7322-00-70

Line	Item	Item Description	Unit	Total	Qty
0076	628.7555	Culvert Pipe Checks	EACH	4.000	4.000
0078	629.0210	Fertilizer Type B **P**	CWT	1.200	1.200
0080	630.0160	Seeding Mixture No. 60 **P**	LB	35.000	35.000
0082	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000
0084	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	1.000	1.000
0086	637.2230	Signs Type II Reflective F	SF	21.000	21.000
0088	638.2602	Removing Signs Type II	EACH	7.000	7.000
0090	638.3000	Removing Small Sign Supports	EACH	7.000	7.000
0092	642.5001	Field Office Type B	EACH	1.000	1.000
0094	643.0420	Traffic Control Barricades Type III	DAY	402.000	402.000
0096	643.0900	Traffic Control Signs	DAY	1,273.000	1,273.000
0098	643.5000	Traffic Control	EACH	1.000	1.000
0100	645.0111	Geotextile Type DF Schedule A	SY	100.000	100.000
0102	645.0120	Geotextile Type HR	SY	705.000	705.000
0104	646.1020	Marking Line Epoxy 4-Inch	LF	1,200.000	1,200.000
0106	650.4500	Construction Staking Subgrade	LF	265.000	265.000
0108	650.5000	Construction Staking Base	LF	265.000	265.000
0110	650.6500	Construction Staking Structure Layout (structure) 01. B-27-0164	LS	1.000	1.000
0112	650.9910	Construction Staking Supplemental Control (project) 01. 7322-00-70	LS	1.000	1.000
0114	650.9920	Construction Staking Slope Stakes	LF	265.000	265.000
0116	690.0150	Sawing Asphalt	LF	44.000	44.000
0118	715.0502	Incentive Strength Concrete Structures	DOL	906.000	906.000
0120	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,200.000	1,200.000
0122	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	300.000	300.000

ALL BID ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

CLEARING & GRUBBING

STATION - STATION	LOCATION	201.0105 CLEARING (STA)	201.0205 GRUBBING (STA)
4+00 - 5+00	CTH H, LT & RT	1	1
	TOTALS =	1	1

REMOVING SMALL PIPE CULVERTS

STATION	LOCATION	TYPE	203.0100 EACH
3+96	CTH H, RT (P.E.)	18"X31' CPCP	1
		TOTAL =	1

BASE AGGREGATE DENSE

STATION - STATION	LOCATION	305.0110 3/4-INCH (TON)	305.0120 1 1/4-INCH (TON)
3+00 - 4+33	CTH H, LT & RT	29	220
4+72 - 6+00	CTH H, LT & RT	27	210
3+96	CTH H, RT (P.E.)	26	--
--	UNDISTRIBUTED	8	15
	TOTALS =	90	445

REMOVING ASPHALTIC SURFACE

STATION - STATION	LOCATION	204.0110 SY
3+00 - 4+33	CTH H	325
4+72 - 6+00	CTH H	305
	TOTAL =	630

3

3

EARTHWORK SUMMARY

Division	From/To Station	Location	Common Excavation (1) (item # 205.0100) Cut (2)	Salvaged/ Unusable Pavement Material (3)	Available Material (4)	Unexpanded Fill	Expanded Fill (5) Factor 1.25	Mass Ordinate +/- (6)	Waste	Borrow (item #208.0100)	Comment:
1	3+00 - 6+00	CTH H	150	95	55	424	530	-475	0	475	
Division 1 Subtotal			150	95	55	424	530	-475			
2	100+00 - 101+35	DOUGLAS CREEK	390	0	390	144	180	210	210	0	
Division 2 Subtotal			390	0	390	144	180	210		265	
Grand Total			540	95	445	568	710	-265	210	475	See Note 6

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unusable Pavement Material is included in Cut.
3) Salvaged/Unusable Pavement Material
4) Available Material = Cut - Salvaged/Unusable Pavement Material
5) The Mass Ordinate + or - Qty calculated for the Stage. Plus quantity indicates an excess of material within the Stage. Minus indicates a shortage of material within the Stage.
6) Waste material from Douglas Creek realignment excavation shall not be used to balance earthwork for CTH H

ASPHALTIC SURFACE

STATION - STATION	LOCATION	455.0605 TACK COAT (GAL)	465.0105 ASPHALTIC SURFACE (TON)
3+00 - 4+33	CTH H	21	69
4+72 - 6+00	CTH H	20	67
--	UNDISTRIBUTED	4	4
	TOTALS =	45	140

CULVERT PIPE CLASS III-B 18-INCH & APRON ENDWALLS FOR CULVERT PIPE 18-INCH

STATION	LOCATION	520.1018 AEW 18-INCH (EACH)	520.3518 CP CLASS III-B 18-INCH (LF)
3+96	CTH H, RT (P.E.)	2	26
	TOTALS =	2	26

RIPRAP HEAVY & GEOTEXTILE TYPE HR

STATION - STATION	LOCATION	*606.0300 RIPRAP HEAVY (CY)	*645.0120 GEOTEXTILE TYPE HR (SY)
100+13 - 101+30	DOUGLAS CREEK, RT	89	175
100+15 - 101+30	DOUGLAS CREEK, LT	116	230
	TOTALS =	205	405

* MORE LISTED ELSEWHERE

WATER

STATION - STATION	LOCATION	624.0100 (MGAL)
3+00 - 4+33	CTH H	4
4+72 - 6+00	CTH H	4
--	UNDISTRIBUTED	1
	TOTAL =	9

ALL BID ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

3

FINISHING ITEMS

STATION - STATION	LOCATION	**P** 625.0500 SALVAGED TOPSOIL (SY)	**P** 627.0200 MULCHING (SY)	**P** 629.0210 FERTILIZER TYPE B (CWT)	**P** 630.0160 SEEDING MIXTURE NO. 60 (LB)
3+00 - 4+33	CTH H, LT & RT	252	493	0.3	7
4+72 - 6+00	CTH H, LT & RT	228	478	0.3	6
100+18 - 101+35*	DOUGLAS CREEK*	396	577	0.4	16
--	UNDISTRIBUTED	124	252	0.2	6
	TOTALS =	1000	1800	1.2	35

P PAY PLAN QUANTITY
*APPLY SEEDING MIXTURE NO. 60 AT A RATE OF 3 LBS/1000 SF

SILT FENCE

STATION - STATION	LOCATION	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)
3+00 - 4+85	CTH H, LT	250	500
3+00 - 4+54	CTH H, RT	160	320
4+62 - 6+00	CTH H, LT	220	440
4+75 - 6+00	CTH H, RT	130	260
--	UNDISTRIBUTED	190	380
	TOTALS =	950	1900

MOBILIZATION EROSION CONTROL

PROJECT	628.1905 MOBILIZATIONS EROSION CONTROL (EACH)	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL (EACH)
7322-00-70	5	3
TOTALS =	5	3

3

EROSION MAT CLASS I TYPE B

STATION - STATION	LOCATION	628.2004 SY
3+93 - 4+28	CTH H, LT	55
4+04 - 4+39	CTH H, RT	45
4+67 - 5+02	CTH H, LT	47
4+77 - 5+12	CTH H, RT	48
--	UNDISTRIBUTED	35
	TOTAL =	230

TURBIDITY BARRIERS

STATION	LOCATION	628.6005 SY
4+44	CTH H	80
4+61	CTH H	100
--	UNDISTRIBUTED	40
	TOTAL =	220

TEMPORARY DITCH CHECKS

STATION	LOCATION	628.7504 LF
3+50	CTH H, LT	15
4+10	CTH H, LT	15
4+25	CTH H, RT	30
4+80	CTH H, LT	15
4+95	CTH H, RT	15
--	UNDISTRIBUTED	20
	TOTAL =	110

CULVERT PIPE CHECKS

STATION	LOCATION	628.7555 EACH
3+75	CTH H, RT (P.E.)	4
	TOTAL =	4

PERMANENT SIGNING

SIGN NUMBER	STATION	LOCATION	SIGN CODE	DESCRIPTION	SIZE (INCH X INCH)	POSTS WOOD 4X6-INCH 634.0612 12-FT (EACH)	POSTS WOOD 4X6-INCH 634.0616 16-FT (EACH)	637.2230 SIGNS TYPE II REFLECTIVE F (SF)	638.2602 REMOVING SIGNS TYPE II (EACH)	638.3000 REMOVING SMALL SIGN SUPPORTS (EACH)
1-01R	3+20	CTH H, RT	W3-1	STOP AHEAD	--	--	--	--	1	1
1-02	3+20	CTH H, RT	W3-1	STOP AHEAD	36X36	--	1	9.00	--	--
1-03R	4+25	CTH H, RT	R12-1	WEIGHT LIMIT 40 TONS	--	--	--	--	1	1
1-04R	4+31	CTH H, RT	W5-52	BRIDGE HASH MARKS	--	--	--	--	1	1
1-05	4+38	CTH H, RT	W5-52	BRIDGE HASH MARKS	12X36	1	--	3.00	--	--
1-06R	4+31	CTH H, LT	W5-52	BRIDGE HASH MARKS	--	--	--	--	1	1
1-07	4+28	CTH H, LT	W5-52	BRIDGE HASH MARKS	12X36	1	--	3.00	--	--
1-08R	4+67	CTH H, RT	W5-52	BRIDGE HASH MARKS	--	--	--	--	1	1
1-09	4+77	CTH H, RT	W5-52	BRIDGE HASH MARKS	12X36	1	--	3.00	--	--
1-10R	4+67	CTH H, LT	W5-52	BRIDGE HASH MARKS	--	--	--	--	1	1
1-11	4+67	CTH H, LT	W5-52	BRIDGE HASH MARKS	12X36	1	--	3.00	--	--
1-12R	4+77	CTH H, LT	R12-1	WEIGHT LIMIT 40 TONS	--	--	--	--	1	1
				TOTALS =		4	1	21.00	7	7

TRAFFIC CONTROL

LOCATION	643.0420 BARRICADES TYPE III (DAY)	643.0900 SIGNS (DAY)	643.5000 TRAFFIC CONTROL (EACH)
7322-00-70	--	--	1
CTH H	402	335	--
CTH N	--	938	--
TOTALS =	402	1273	1

MARKING LINE EPOXY 4-INCH

STATION - STATION	LOCATION	TYPE	646.1020 LF
3+00 - 6+00	CTH H, C/L	SOLID DOUBLE C/L, YELLOW	600
3+00 - 6+00	CTH H, LT	SOLID EDGELINE, WHITE	300
3+00 - 6+00	CTH H, RT	SOLID EDGELINE, WHITE	300
		TOTAL =	1200

CONSTRUCTION STAKING

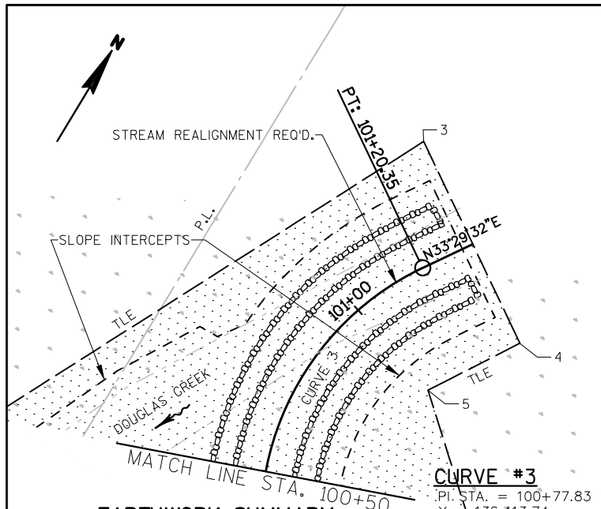
STATION -STATION	LOCATION	650.4500 SUBGRADE (LF)	650.5000 BASE (LF)	650.9910 SUPPLEMENTAL CONTROL [01. 7322-00-70] (LS)	650.9920 SLOPES STAKES (LF)	*650.5500 STRUCTURE LAYOUT 01. B-27-164 (LS)
--	PROJECT	--	--	1	--	1
3+00 - 4+33	CTH H	135	135	--	135	--
4+72 - 6+00	CTH H	130	130	--	130	--
	TOTALS =	265	265	1	265	1

*CATEGORY 0020

SAWING ASPHALT

STATION	LOCATION	690.0150 LF
3+00	CTH H	22
6+00	CTH H	22
	TOTAL =	44

FILE NAME : R:\PROJECTS\K49030 CTH H BRIDGE, JACKSON CO\SHEETSPLAN\DETAILS\MISC.QUANTITIES.DWG
LAYOUT : 2
PLOT DATE : 10/27/2017
PLOT TIME : 10:44:08 AM
PLOT BY : ECKELBERG, PATRICK
PLOT SCALE : 1" = 1'



EARTHWORK SUMMARY

	MAINLINE	CHANNEL REALIGNMENT
EXCAVATION COMMON	150	390
FILL (C.Y.)	424	144
FILL EXPANSION (25%)	530	180
WASTE (C.Y.)	0	210
BORROW (C.Y.)	475	0

TOTAL EXCAVATION COMMON = 540 C.Y.
TOTAL BORROW = 380 C.Y.
TOTAL WASTE = 210 C.Y.

CURVE #3
PI STA. = 100+77.83
Y = 136,413.74
X = 339,387.70
R = 75.00
D = 76°23'40"
DELTA = 84°49'08"
L = 111.03
T = 68.51
C = 101.16
PC STA. = 100+09.32
Y = 136,370.93
X = 339,441.18
PT STA. = 101+20.35
Y = 136,470.87
X = 339,425.50

SCALE, FEET 0 20 40

CURVE #1
PI STA. = 1+72.79
Y = 136,207.57
X = 339,218.37
R = 919.87
D = 6°13'43"
DELTA = 21°16'27"
L = 341.55
T = 172.77
C = 339.60
PC STA. = 0+00.02
Y = 136,177.41
X = 339,048.25
PT STA. = 3+41.58
Y = 136,297.39
X = 339,365.95

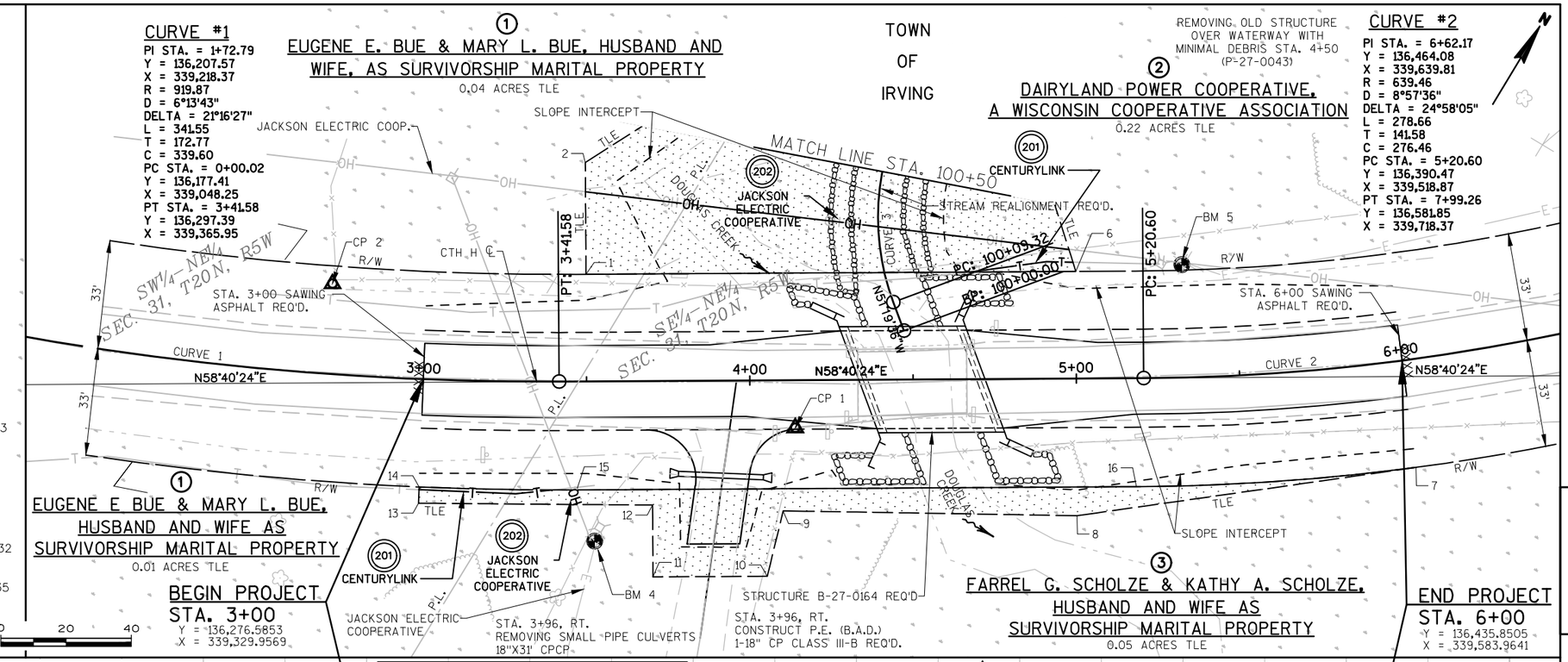
① EUGENE E. BUE & MARY L. BUE, HUSBAND AND WIFE, AS SURVIVORSHIP MARITAL PROPERTY
0.04 ACRES TLE

TOWN OF IRVING

REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 4+50 (P-27-0043)

② DAIRYLAND POWER COOPERATIVE, A WISCONSIN COOPERATIVE ASSOCIATION
0.22 ACRES TLE

CURVE #2
PI STA. = 6+62.17
Y = 136,464.08
X = 339,639.81
R = 639.46
D = 8°57'36"
DELTA = 24°58'05"
L = 278.66
T = 141.58
C = 276.46
PC STA. = 5+20.60
Y = 136,390.47
X = 339,518.87
PT STA. = 7+99.26
Y = 136,581.85
X = 339,718.37



① EUGENE E BUE & MARY L. BUE, HUSBAND AND WIFE AS SURVIVORSHIP MARITAL PROPERTY
0.01 ACRES TLE

BEGIN PROJECT
STA. 3+00
Y = 136,276.5853
X = 339,329.9569

JACKSON ELECTRIC COOPERATIVE

STA. 3+96, RT.
REMOVING SMALL PIPE CULVERTS
18"X31" CPCP

STA. 3+96, RT.
CONSTRUCT P.E. (B.A.D.)
1-18" CP CLASS III-B REQ'D.

③ FARREL G. SCHOLZE & KATHY A. SCHOLZE, HUSBAND AND WIFE AS SURVIVORSHIP MARITAL PROPERTY
0.05 ACRES TLE

END PROJECT
STA. 6+00
Y = 136,435.8505
X = 339,583.9641

NOTE:
EXISTING ℄ OF CTH H BASED ON CENTERLINE OF EXISTING PAVEMENT.

BASIS OF EXISTING RIGHT OF WAY FOR CTH H WAS BASED ON THE CENTERLINE OF EXISTING PAVEMENT AND WIS STATUTE 82.31(2).

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	TLE ACRES
1	EUGENE E. BUE & MARY L. BUE, HUSBAND AND WIFE, AS SURVIVORSHIP MARITAL PROPERTY	TLE	0.05
2	DAIRYLAND POWER COOPERATIVE, A WISCONSIN COOPERATIVE ASSOCIATION	TLE	0.22
3	FARREL G. SCHOLZE & KATHY A. SCHOLZE, HUSBAND AND WIFE, AS SURVIVORSHIP MARITAL PROPERTY	TLE	0.05
201	CENTURYLINK	RELEASE OF RIGHTS	
202	JACKSON ELECTRIC COOPERATIVE	RELEASE OF RIGHTS	

NOTE: OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE COUNTY.

TLE LINE TABLE

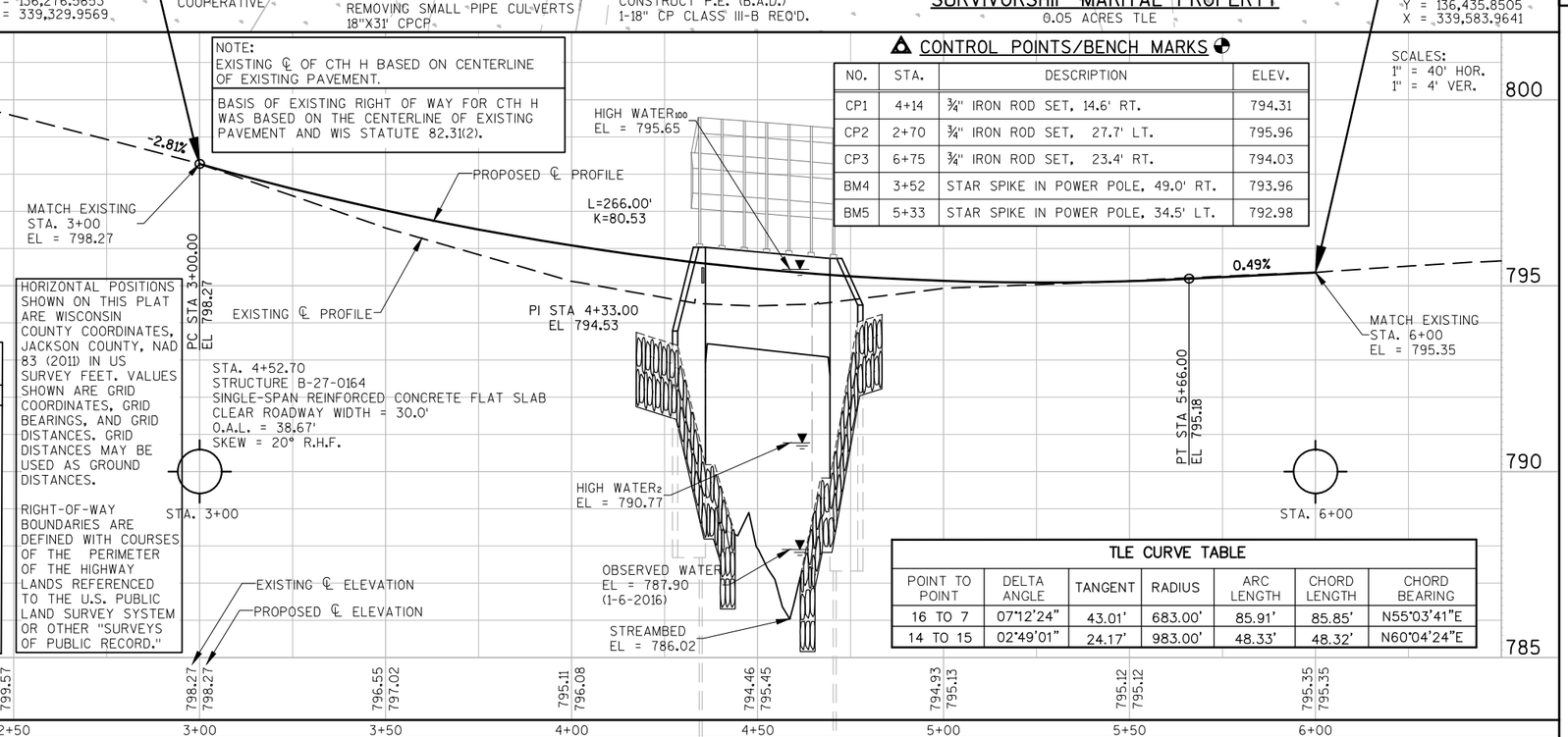
POINT TO POINT	BEARING	DISTANCE
1 TO 2	N31°19'36"W	34.24'
2 TO 3	N26°32'42"E	157.21'
3 TO 4	S56°30'28"E	59.00'
4 TO 5	S31°58'49"W	27.26'
5 TO 6	S48°29'06"E	54.62'
6 TO 1	S58°39'53"W	150.00'
7 TO 8	S50°53'38"W	104.85'
8 TO 9	S59°56'47"W	90.03'
9 TO 10	S17°18'08"E	20.61'
10 TO 11	S58°40'24"W	35.00'
11 TO 12	N31°19'36"W	22.00'
12 TO 13	S59°27'18"W	71.71'
13 TO 14	N28°44'14"W	4.97'
15 TO 16	N58°39'53"E	171.37'

COORDINATE TABLE
TEMPORARY LIMITED EASEMENT (TLE) POINTS

POINT	STA.	OFFSET	Y	X
1	3+50.00	32.76 LT.	136329.75	339356.11
2	3+50.00	67.00 LT.	136359.00	339338.31
3	101+35.00	30.00 LT.	136499.64	339408.57
4	101+35.00	29.00 RT.	136467.08	339457.77
5	101+00.00	28.00 RT.	136443.96	339443.33
6	5+00.00	32.78 LT.	136407.76	339484.23
7	6+00.00	32.99 RT.	136410.01	339604.47
8	5+00.00	42.00 RT.	136343.88	339523.11
9	4+10.00	40.00 RT.	136298.80	339445.19
10	4+05.00	60.00 RT.	136279.11	339451.32
11	3+70.00	60.00 RT.	136260.91	339421.42
12	3+70.00	38.00 RT.	136279.71	339409.98
13	3+00.00	38.00 RT.	136243.27	339348.23
14	3+00.00	33.03 RT.	136247.62	339345.84
15	3+46.83	33.24 RT.	136271.73	339387.72
16	5+18.20	33.22 RT.	136360.85	339534.09

HORIZONTAL POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, JACKSON COUNTY, NAD 83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES. GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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



CONTROL POINTS/BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
CP1	4+14	¾" IRON ROD SET, 14.6' RT.	794.31
CP2	2+70	¾" IRON ROD SET, 27.7' LT.	795.96
CP3	6+75	¾" IRON ROD SET, 23.4' RT.	794.03
BM4	3+52	STAR SPIKE IN POWER POLE, 49.0' RT.	793.96
BM5	5+33	STAR SPIKE IN POWER POLE, 34.5' LT.	792.98

SCALES:
1" = 40' HOR.
1" = 4' VER.

TLE CURVE TABLE

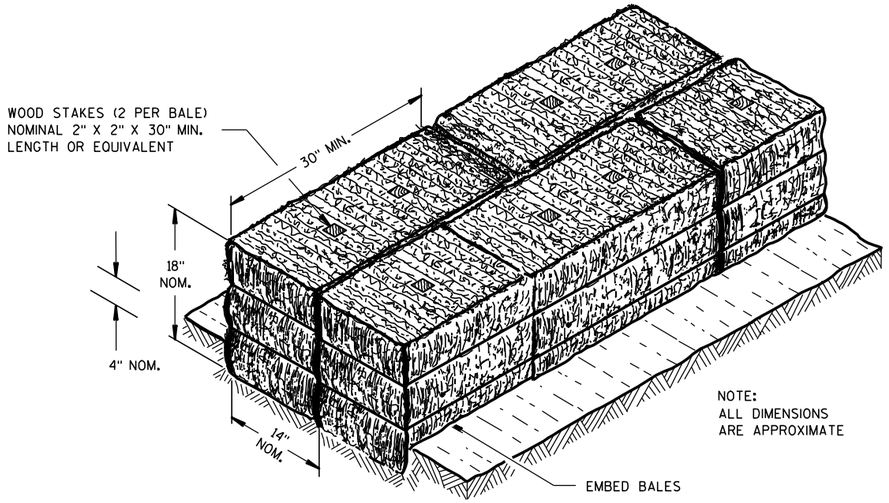
POINT TO POINT	DELTA ANGLE	TANGENT	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING
16 TO 7	07°12'24"	43.01'	683.00'	85.91'	85.85'	N55°03'41"E
14 TO 15	02°49'01"	24.17'	983.00'	48.33'	48.32'	N60°04'24"E

PROJECT NO: 7322-00-70	HWY: CTH H	COUNTY: JACKSON	PLAN AND PROFILE: MAINLINE	MAP DATE:	SHEET 14	E

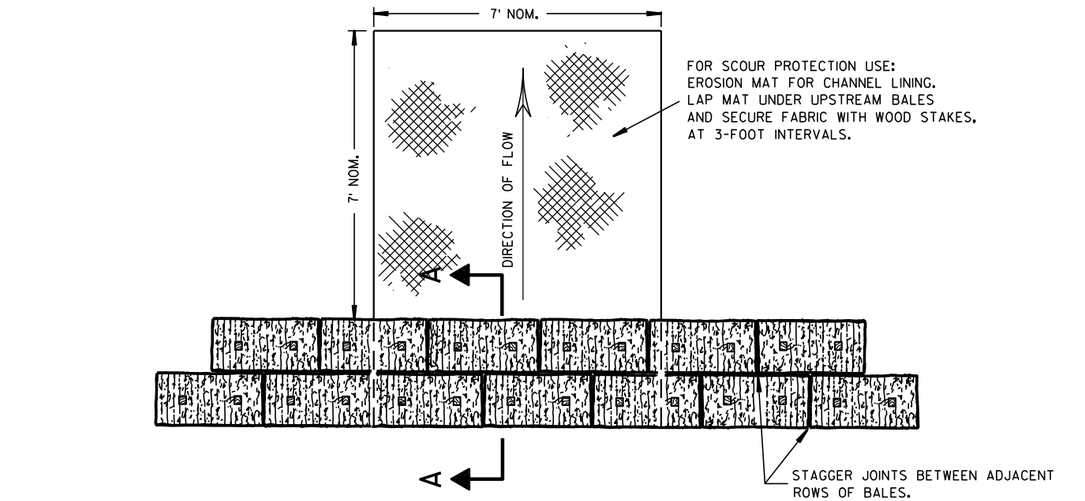
FILE NAME : R:\PROJECTS\K49030 CTH H BRIDGE, JACKSON CO\SHEETSPLAN\PLAN & PROFILE SHEETS\K49030_P&P SHEET.DWG
LAYOUT : LAYOUT1
PLOT DATE : 7/11/2017
PLOT TIME : 1:33:48 PM
PLOT BY : ECKELBERG, PATRICK
PLOT SCALE : "PLOT" SCALE : **********

Standard Detail Drawing List

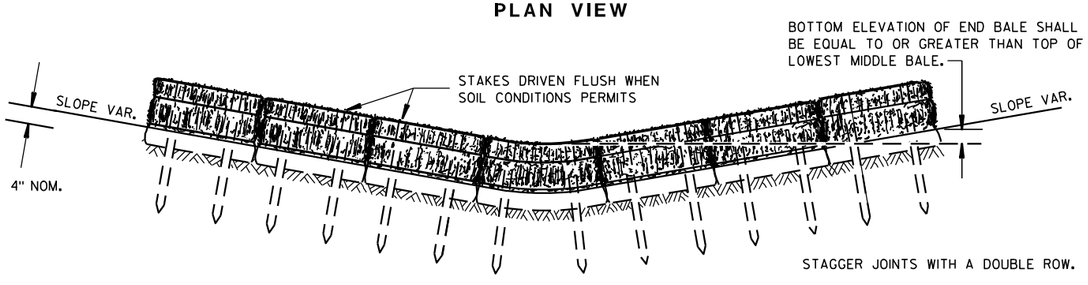
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
12A03-10	NAME PLATE (STRUCTURES)
14B29-01	SAFETY EDGE
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C04-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-17A	LONGITUDINAL MARKING (MAINLINE)
15C12-06	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-04A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY



SECTION A-A



PLAN VIEW



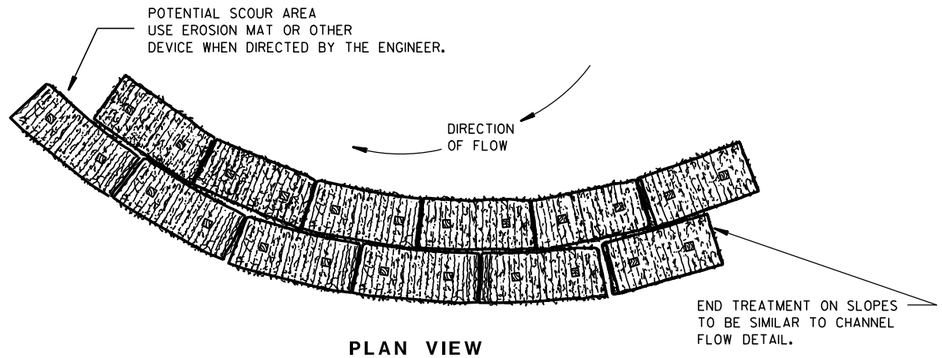
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

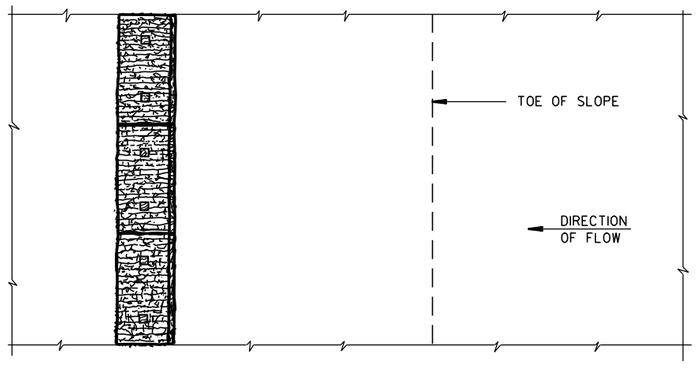
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

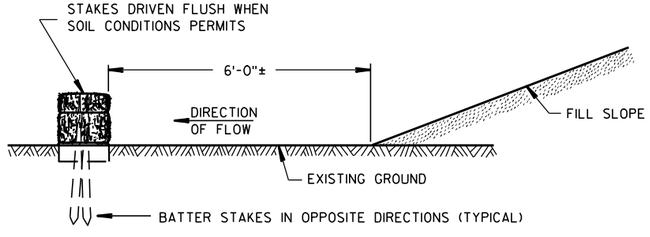


PLAN VIEW

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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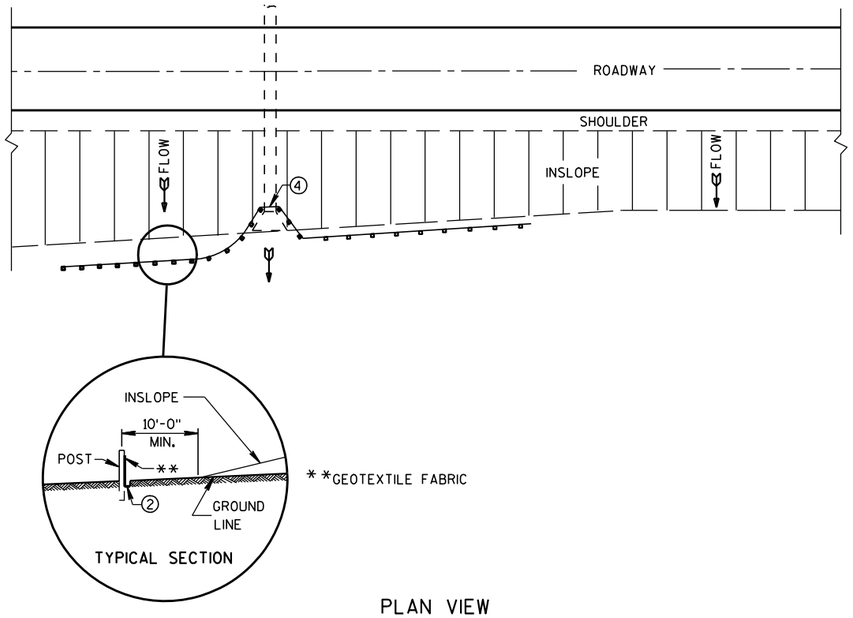
S.D.D. 8 E 8-3

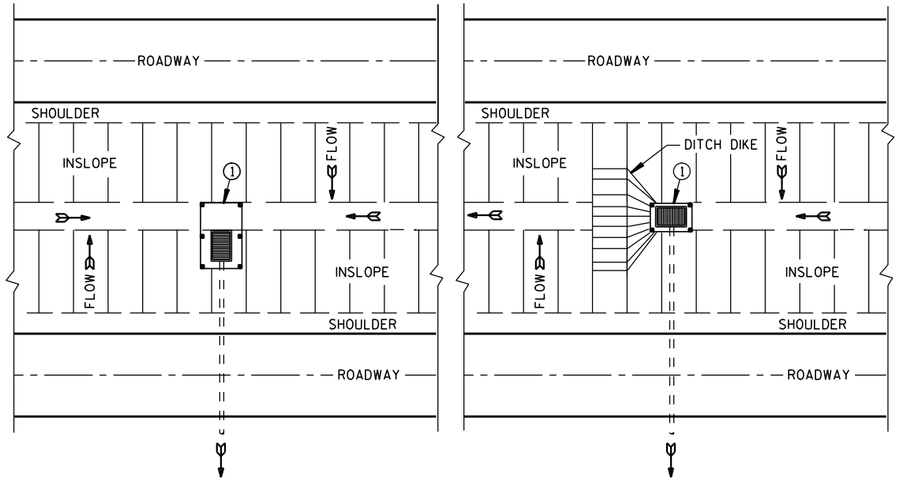
6

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.

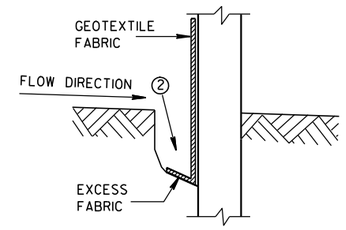
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

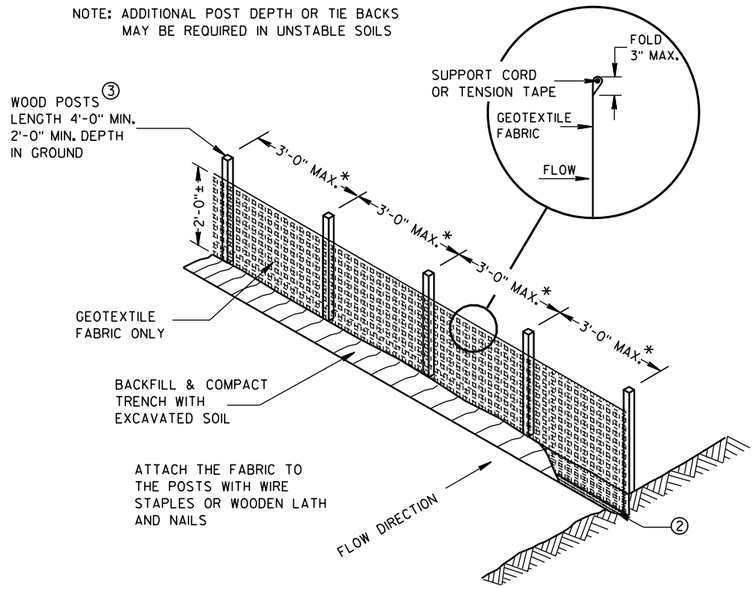
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

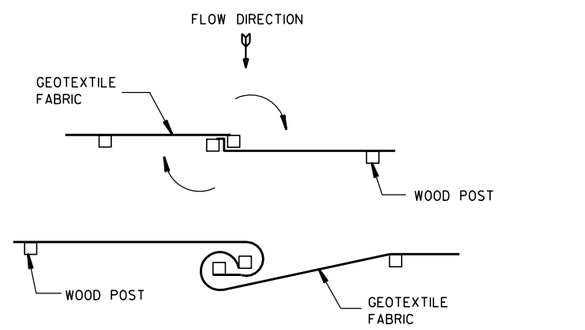
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



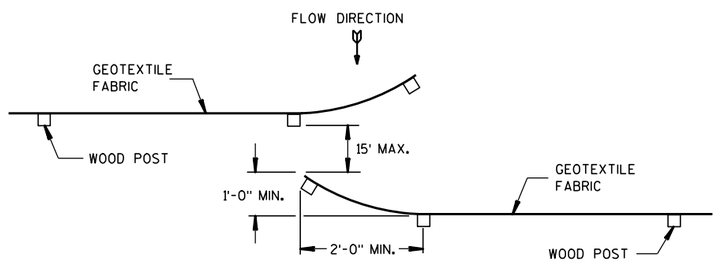
TRENCH DETAIL



SILT FENCE

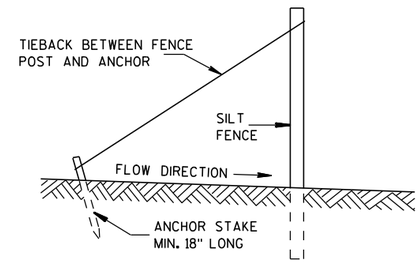


TWIST METHOD



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

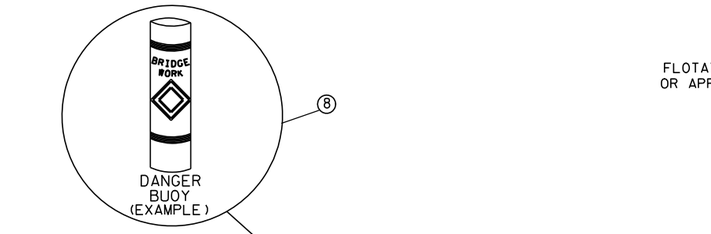
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

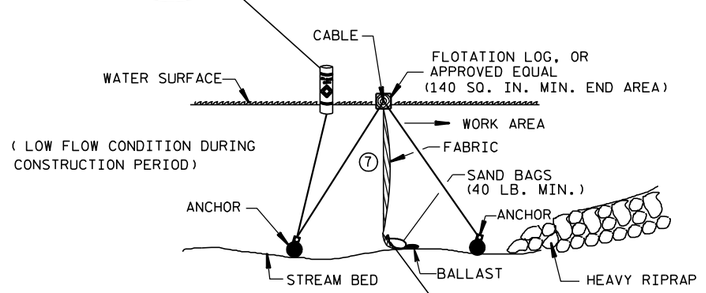
6

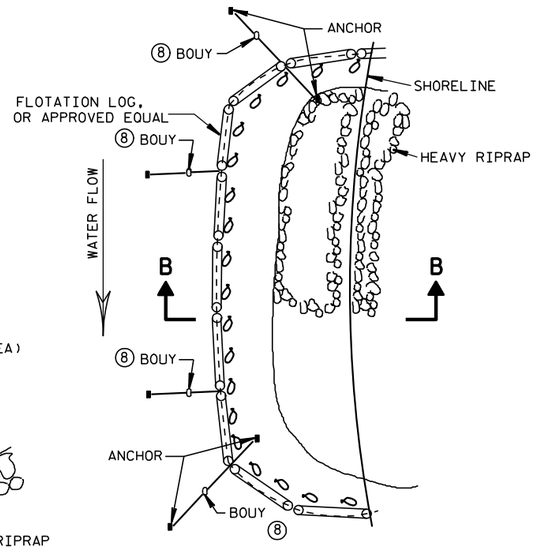
S.D.D. 8 E 9-6

6

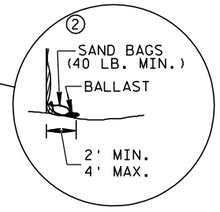
S.D.D. 8 E 9-6



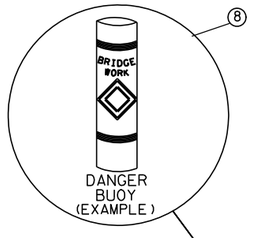


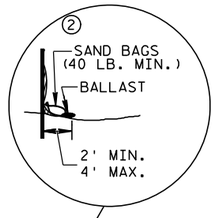


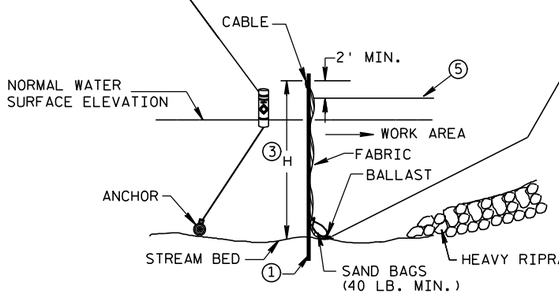
SECTION B-B



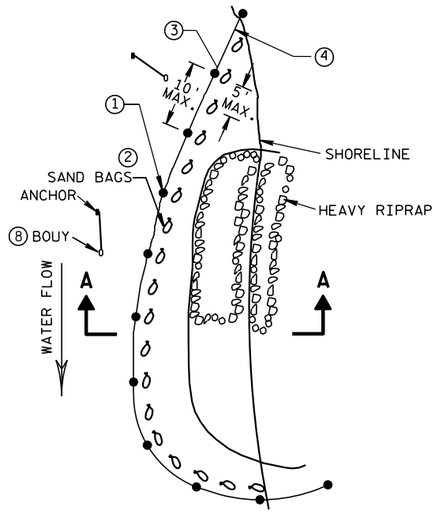
TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6







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 SANDBAGS 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 FT., POST SPACING MAY NEED TO BE DECREASED.

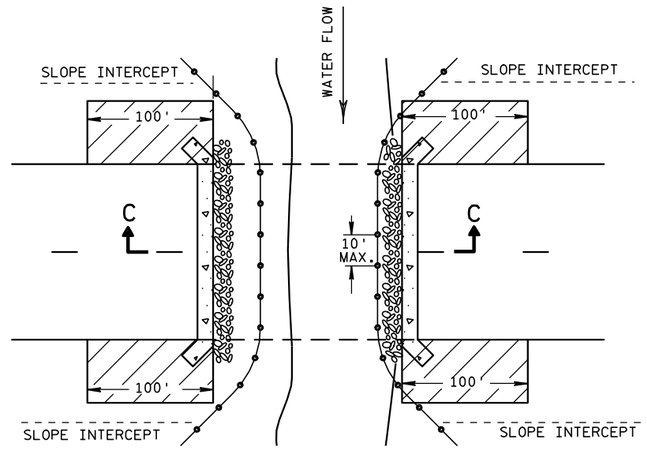
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MIMIMUM BARRIER HEIGHT SHALL BE 2'GREATER THAN EITHER THE 02 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WICHEVER IS GREATER.

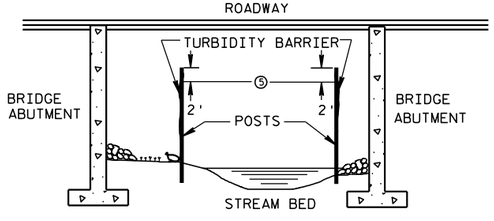
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

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
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 11-2

6

S.D.D. 8 E 11-2

METAL APRON ENDWALLS

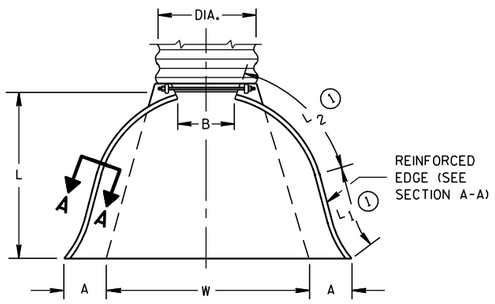
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

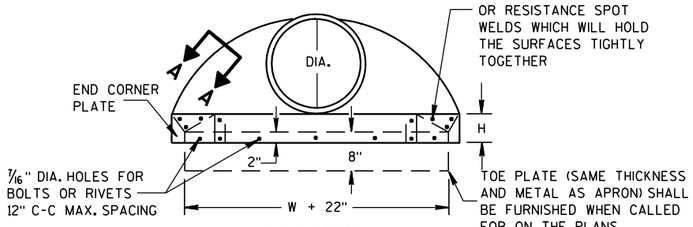
REINFORCED CONCRETE APRON ENDWALLS

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

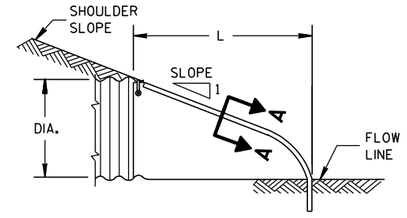
*MINIMUM
**MAXIMUM



PLAN VIEW

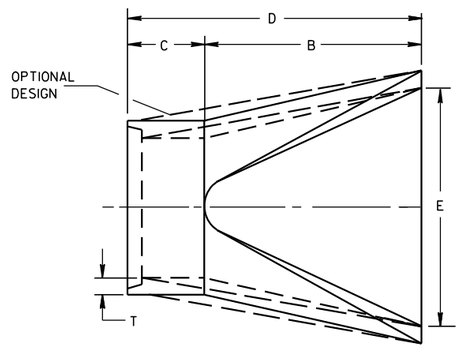


END VIEW

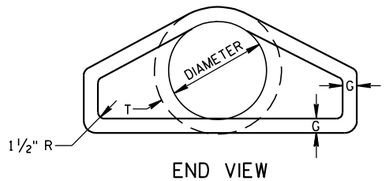


SIDE ELEVATION

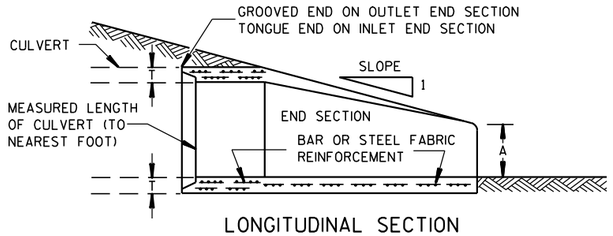
METAL ENDWALLS



PLAN

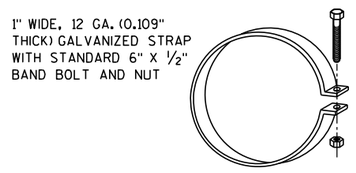


END VIEW



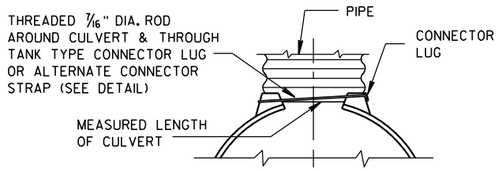
LONGITUDINAL SECTION

CONCRETE ENDWALLS

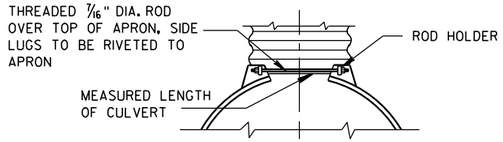


ALTERNATE FOR TYPE 1 CONNECTION

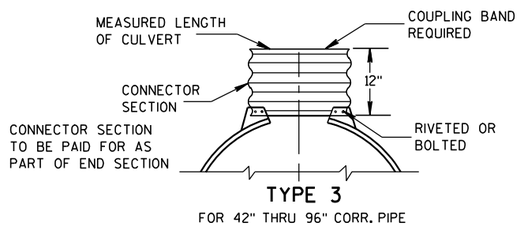
END SECTION CONNECTOR STRAP



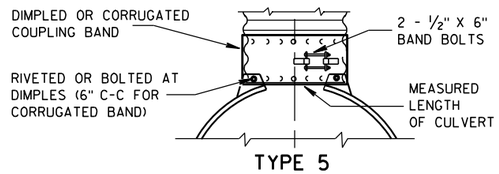
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

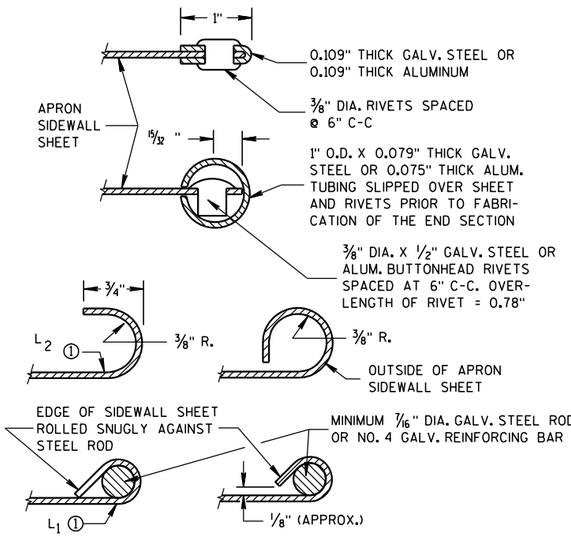
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

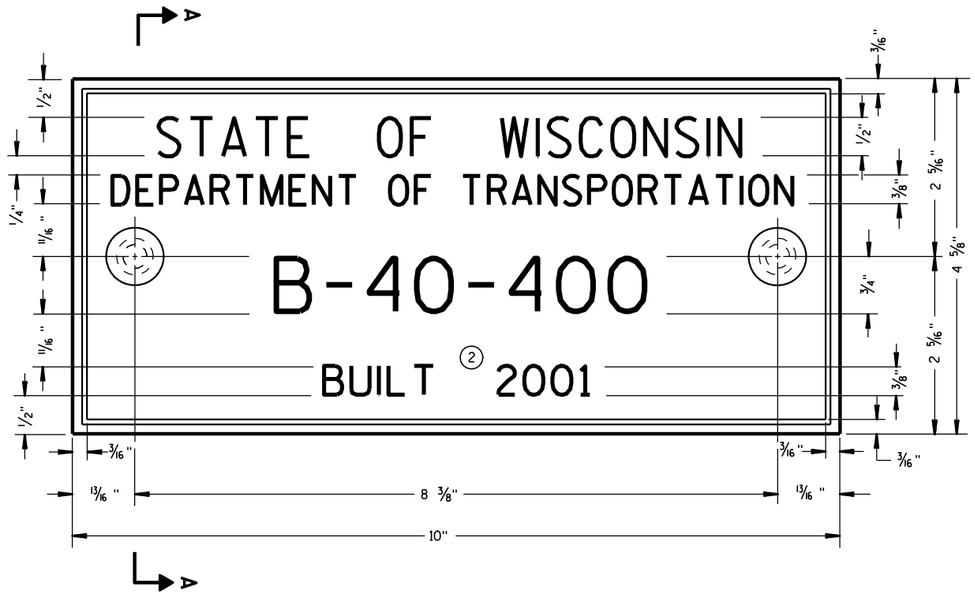
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 8 F 1-11



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION MULTI-UNIT STRUCTURES

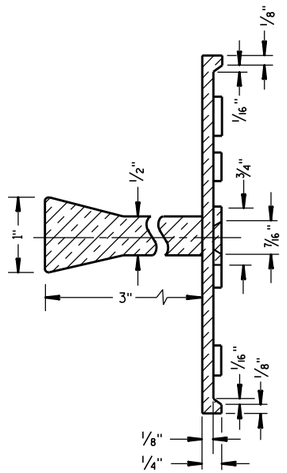
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

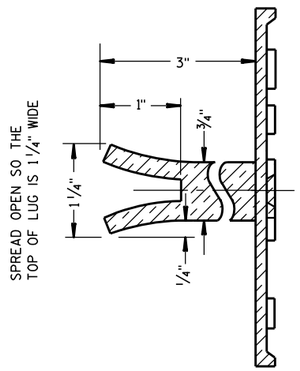
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

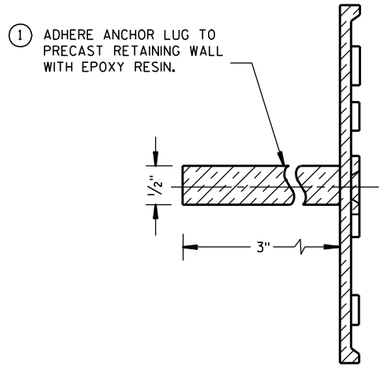
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

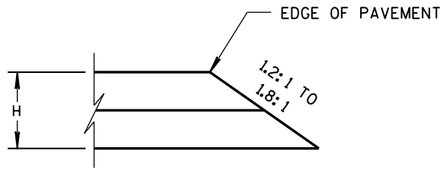
3/26/10 DATE

/S/ Scot Beck CHIEF STRUCTURAL DEVELOPMENT ENGINEER

FHWA

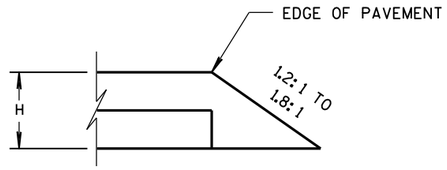
6

S.D.D. 12 A 3-10



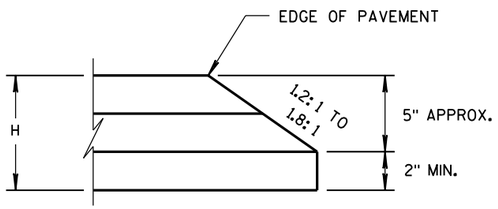
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



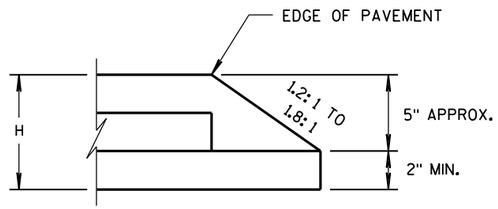
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

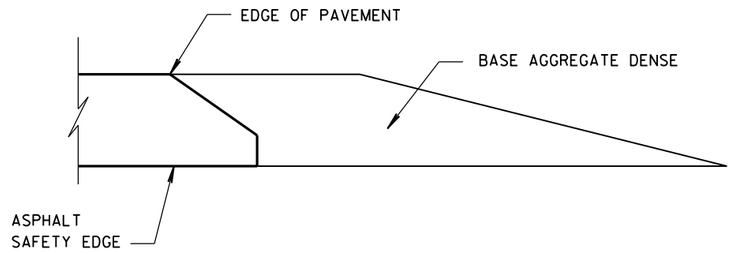
FOR H GREATER THAN 5"



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

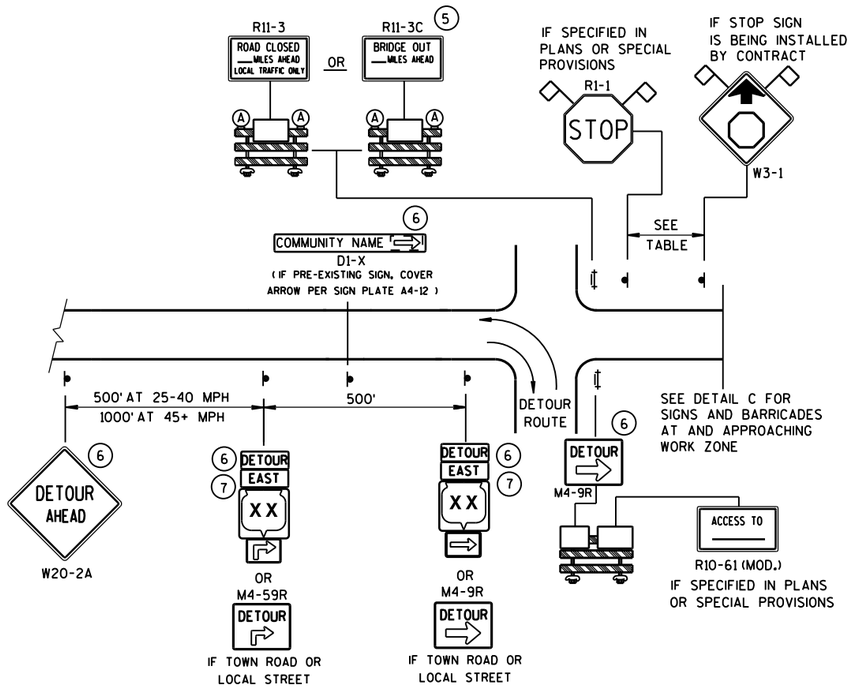
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

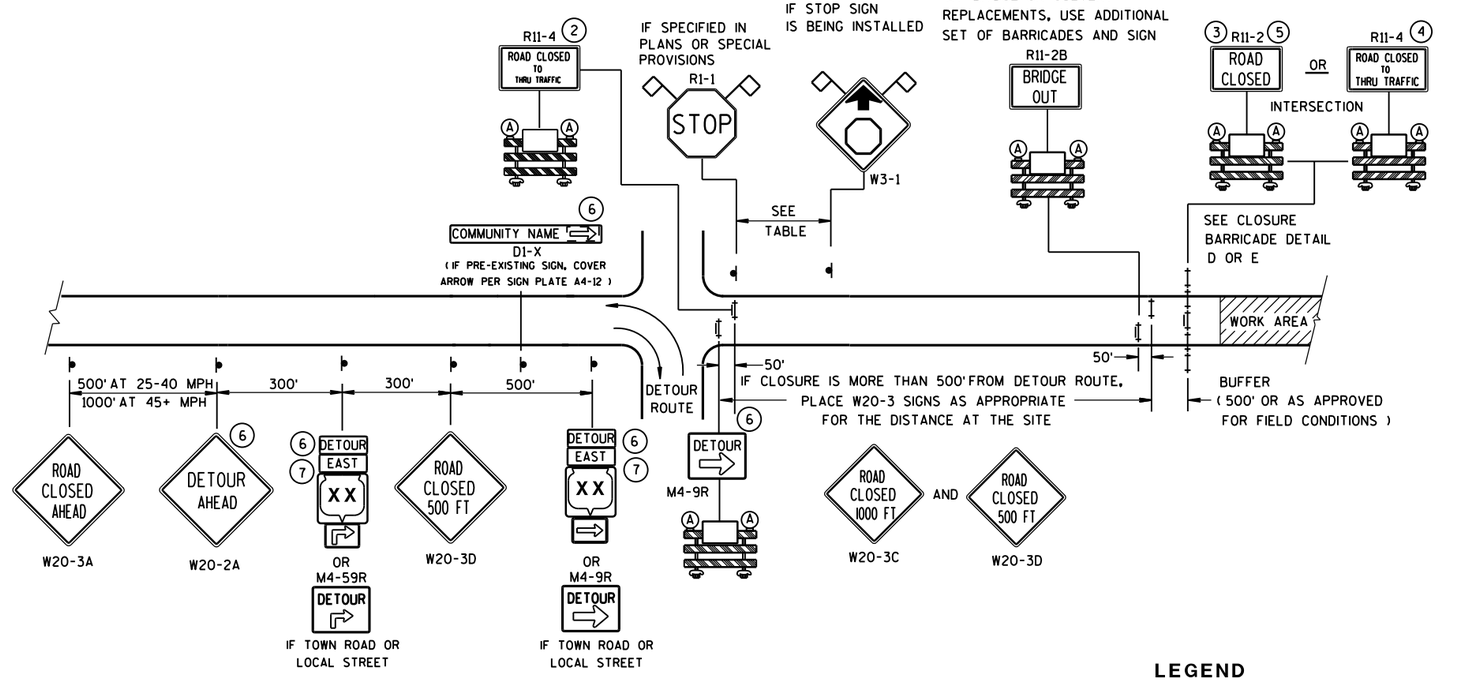
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA



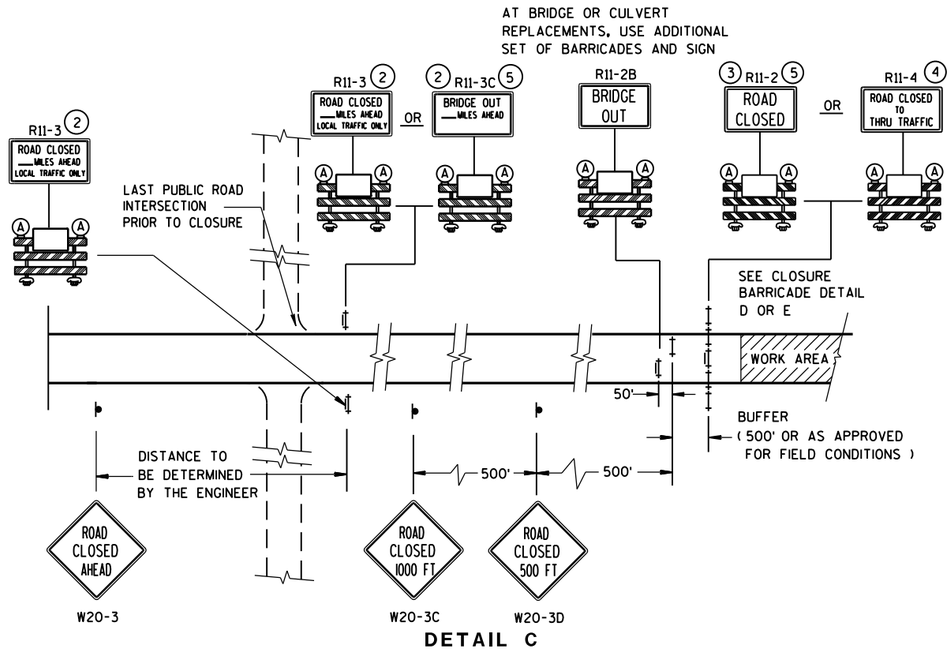
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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)

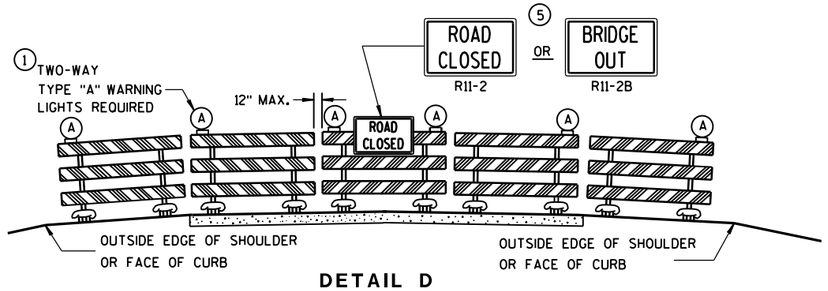
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

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

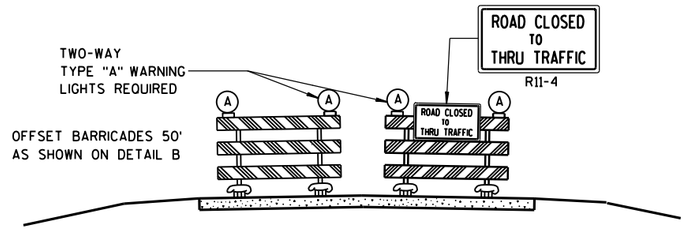
S.D.D. 15 C 2-6a



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

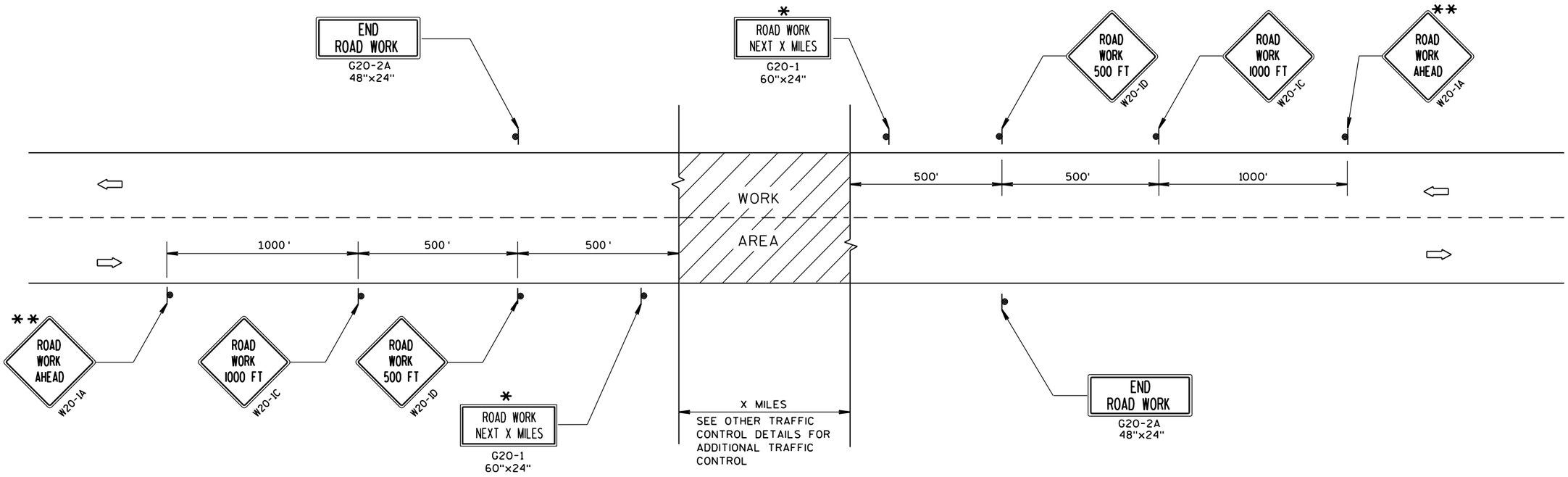
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGI

FHWA

FIC

6

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



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

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

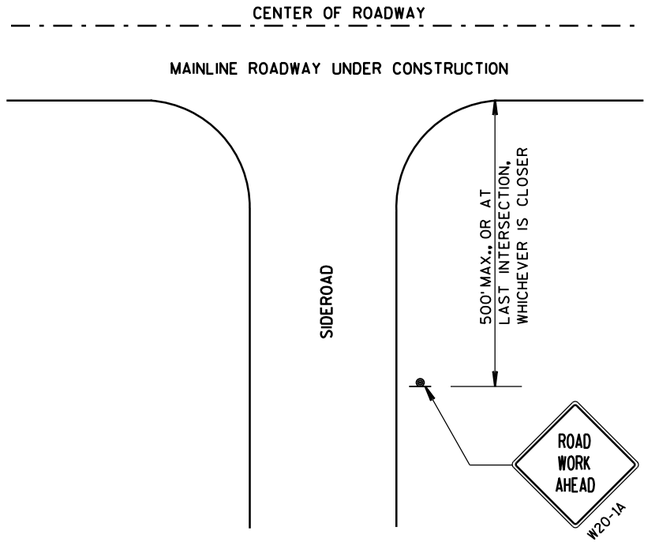
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE SAFETY ENGINEER

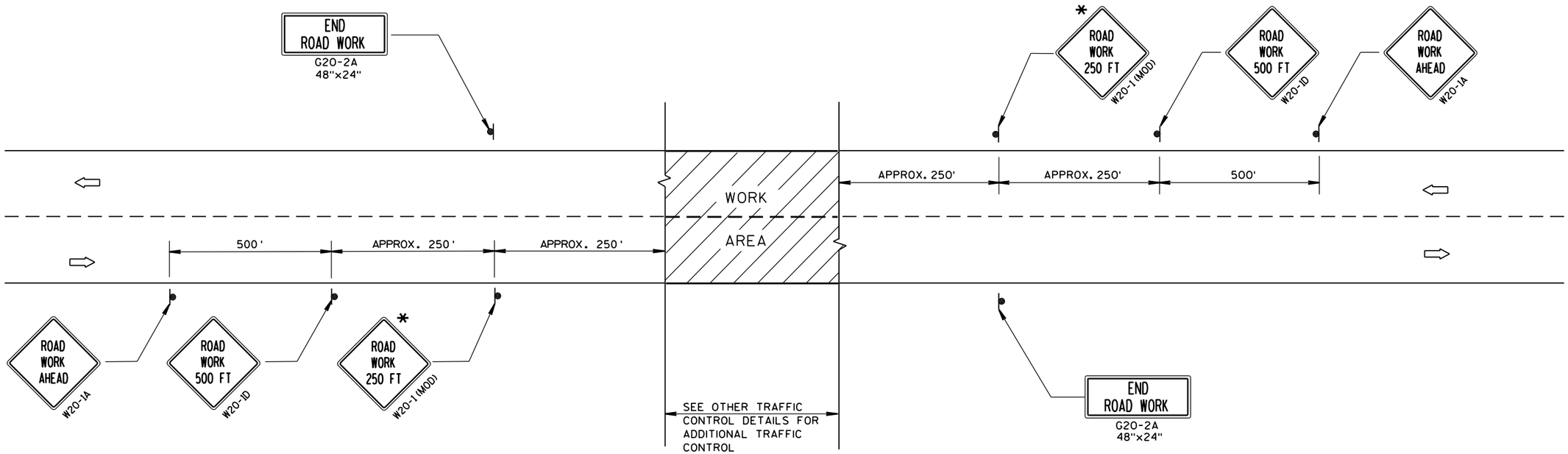
FHWA

6

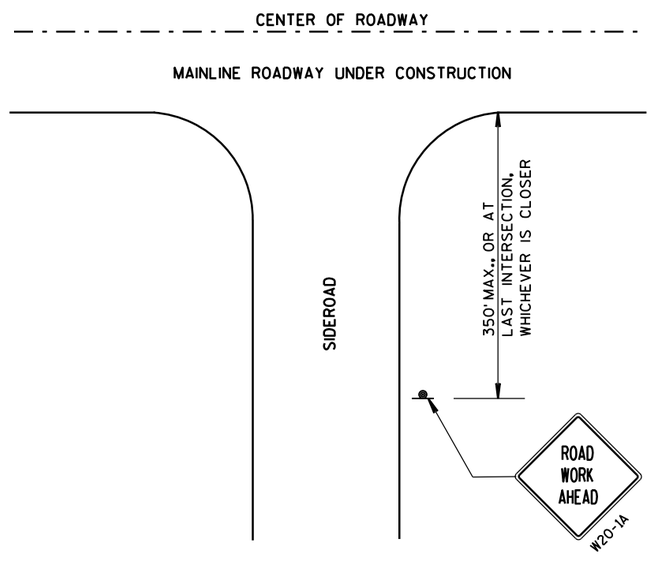
S.D.D. 15 C 4-3

6

S.D.D. 15 C 4-3



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

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

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

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

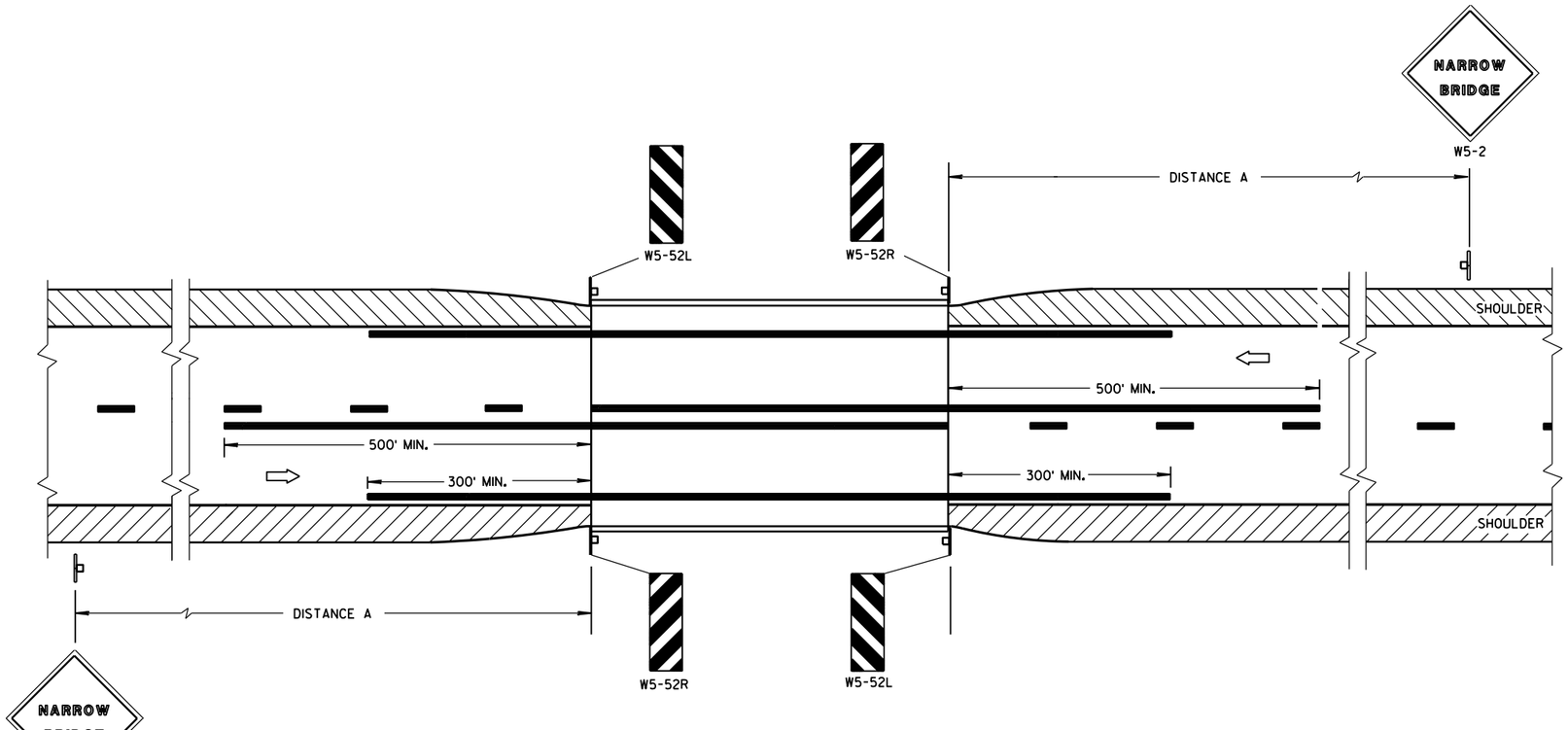
TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 15 C 5-3



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

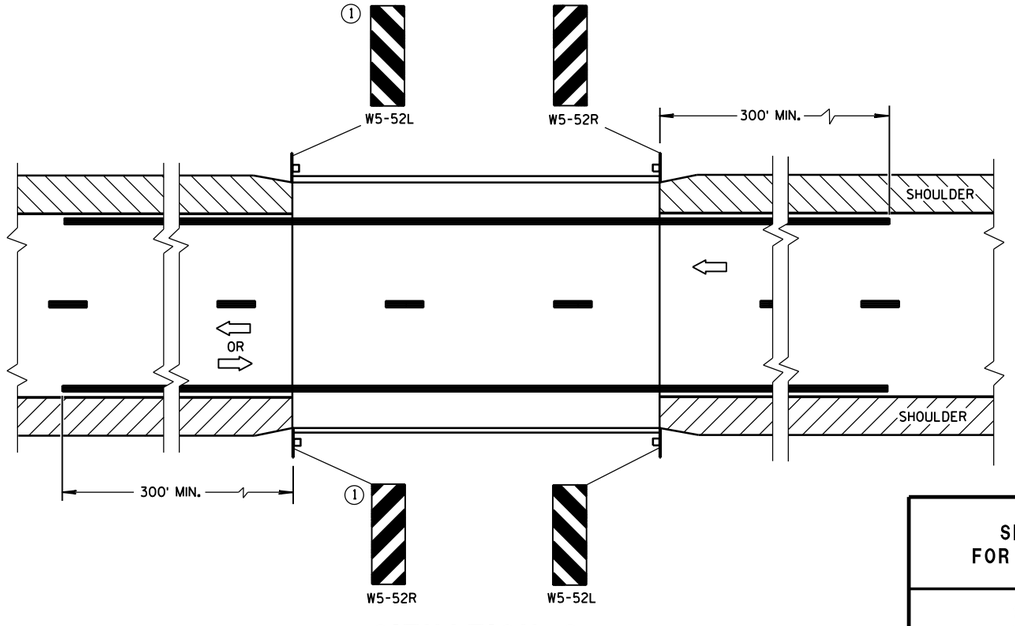
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

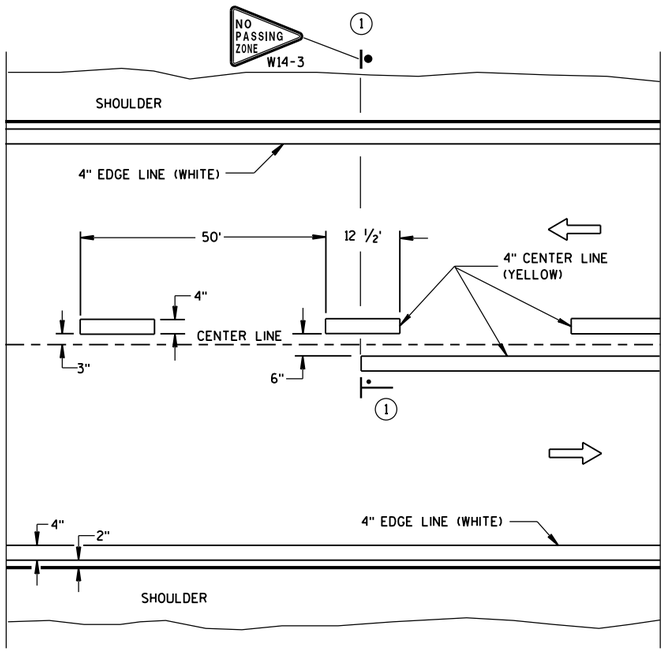
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]EER
FHWA

6

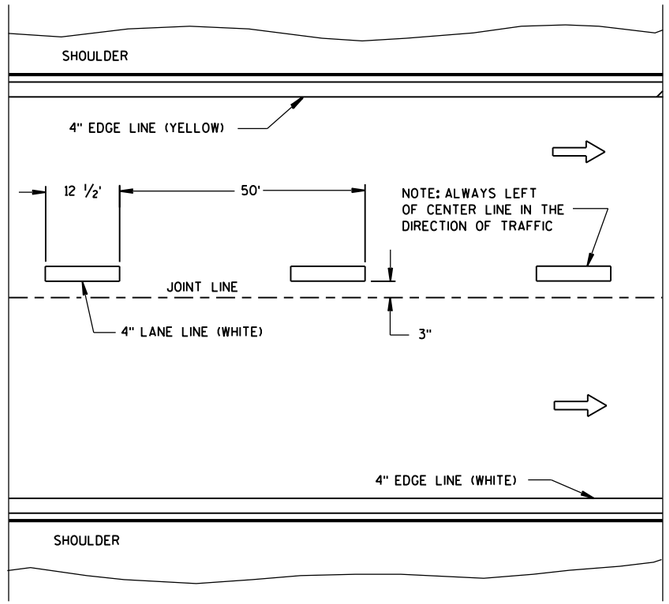
S.D.D. 15 C 6-9

6

S.D.D. 15 C 6-9



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

(1) NO PASSING ZONE W14-3 SIGN SHALL BE LOCATED WITHIN 50 FEET OF THE "T" MARKING.

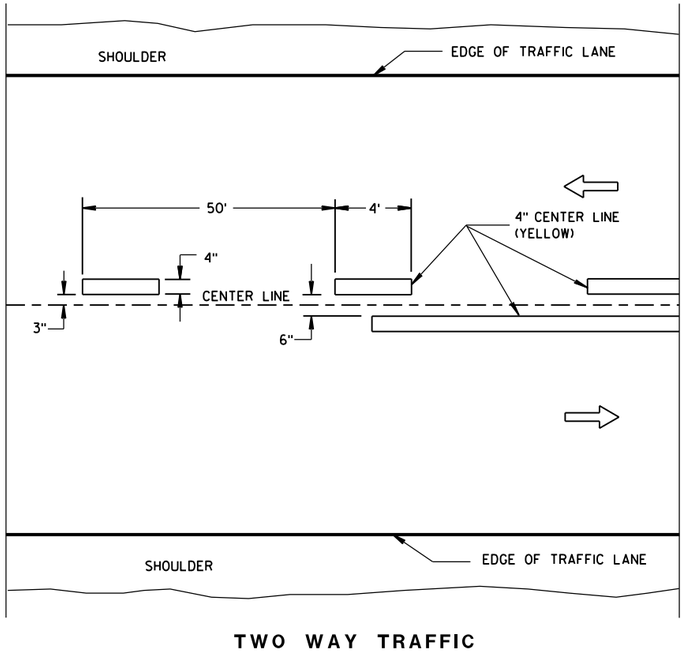
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

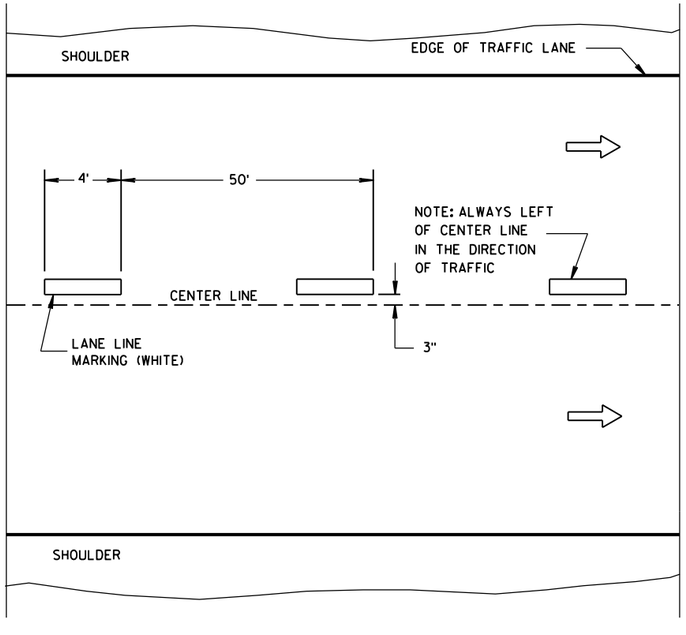
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — /S/ Matthew R. Rauch
DATE — STATE SIGNING AND MAR[illegible]INEER
FHWA

6

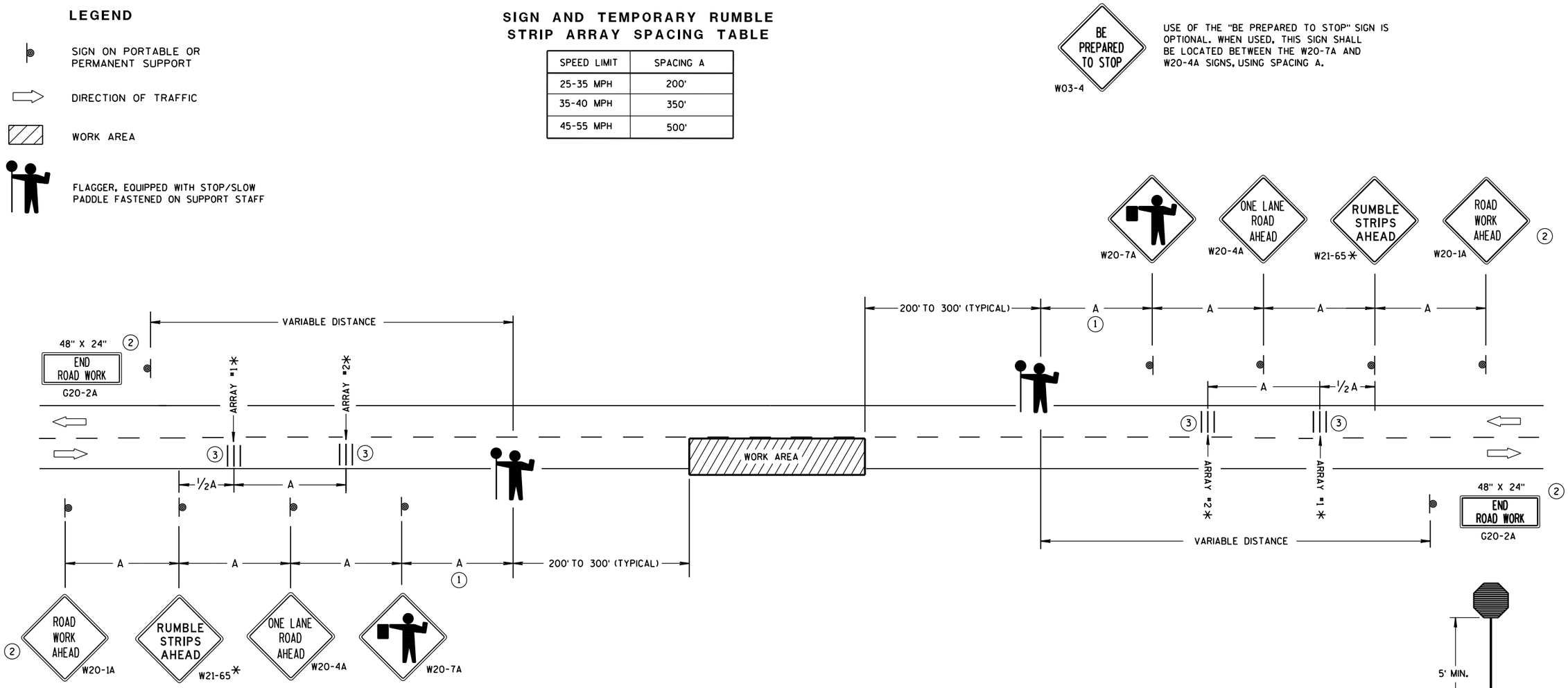
S.D.D. 15 C 8-17a

LEGEND

- SIGN ON PORTABLE OR PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING A
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STOP/SLOW PADDLE ON SUPPORT STAFF

GENERAL NOTES

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

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

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, REMOVE TEMPORARY RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

* UTILIZE TEMPORARY RUMBLE STRIPS WHEN FLAGGING OPERATION IS ANTICIPATED TO BE STATIONARY IN EXCESS OF TWO HOURS.

(1) FOR A MOVING WORK OPERATION, SIGNING AND TEMPORARY RUMBLE STRIPS (IF USED) SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3,500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

(3) EACH TEMPORARY RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

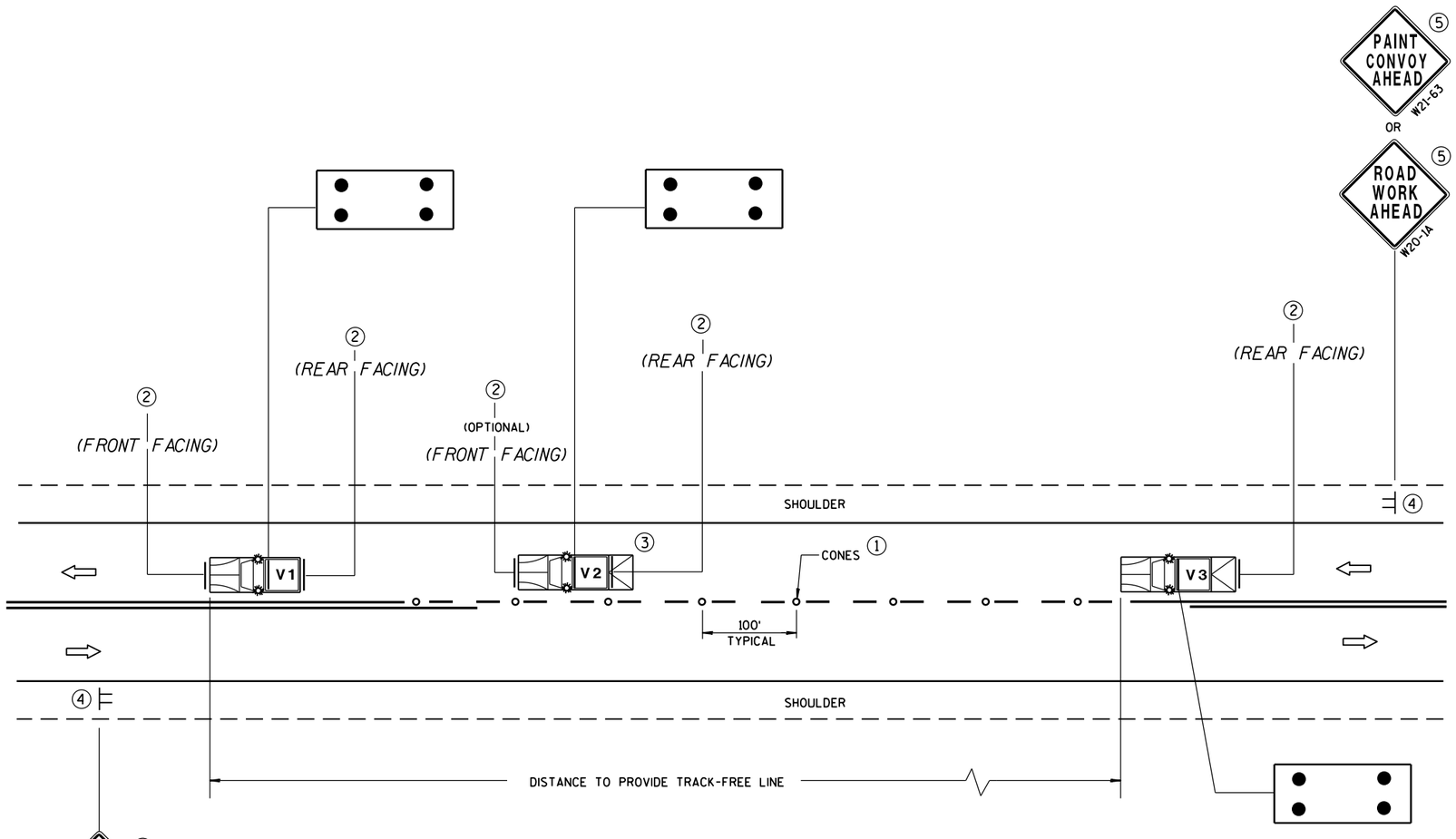
TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENG
FHWA

6

S.D.D. 15 C 12-6



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

(1) CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(5) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1	LEAD VEHICLE
V2	SHADOW VEHICLE
V3	TRAIL VEHICLE WITH TMA
TMA	TRUCK-MOUNTED ATTENUATOR
	SIGN ON TEMPORARY SUPPORT
	DIRECTION OF TRAFFIC
	CONES
	FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING OPERATION
TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
/S/ Peter Amakobe Atepe — STATEWIDE WORK ZON SAFETY ENGINE
FHWA

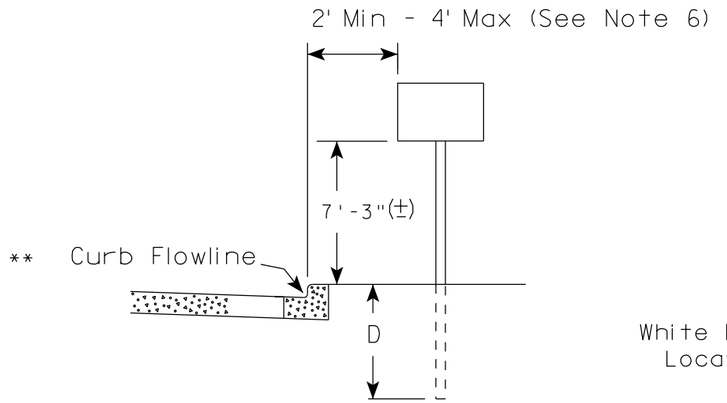
6

S.D.D. 15 C 19-4a

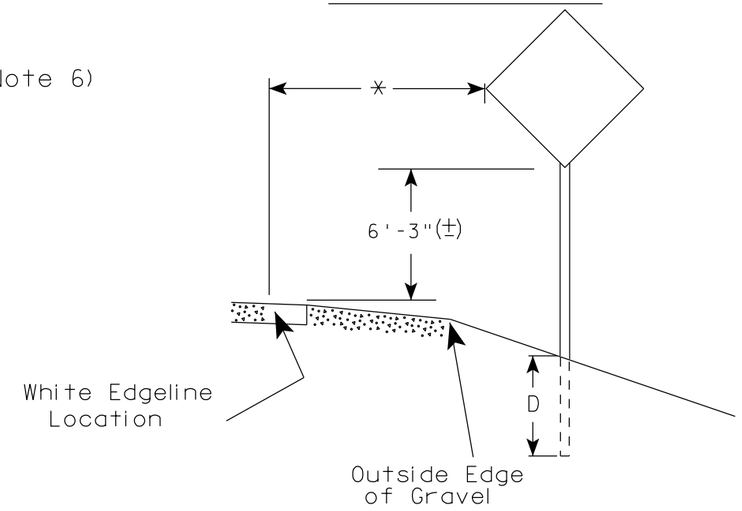
6

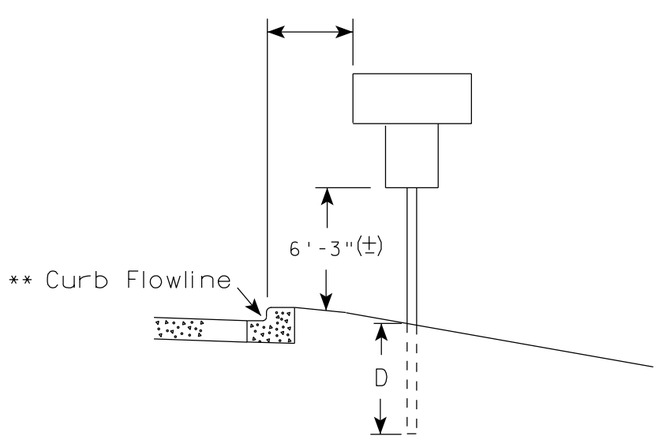
S.D.D. 15 C 19-4a

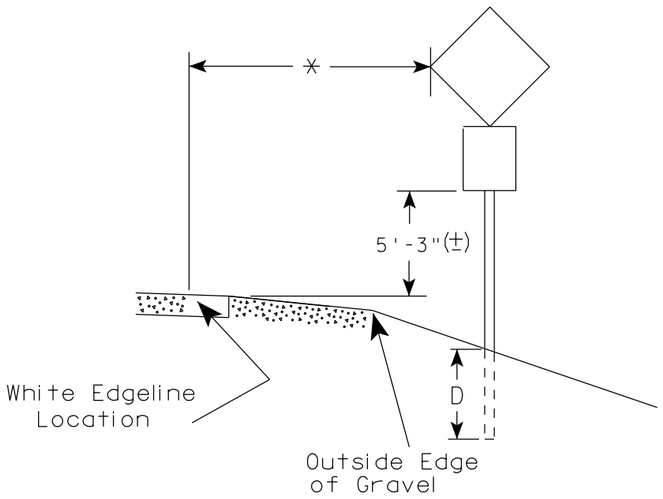
URBAN AREA



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

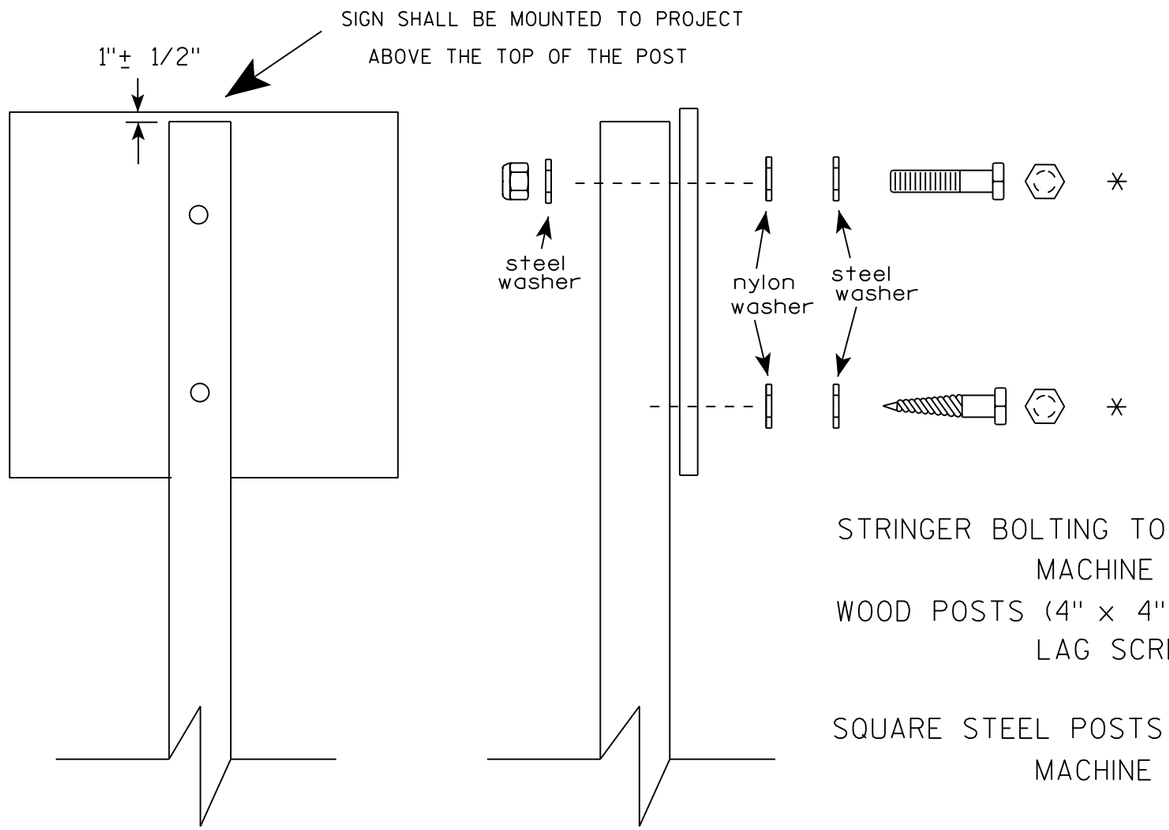
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		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

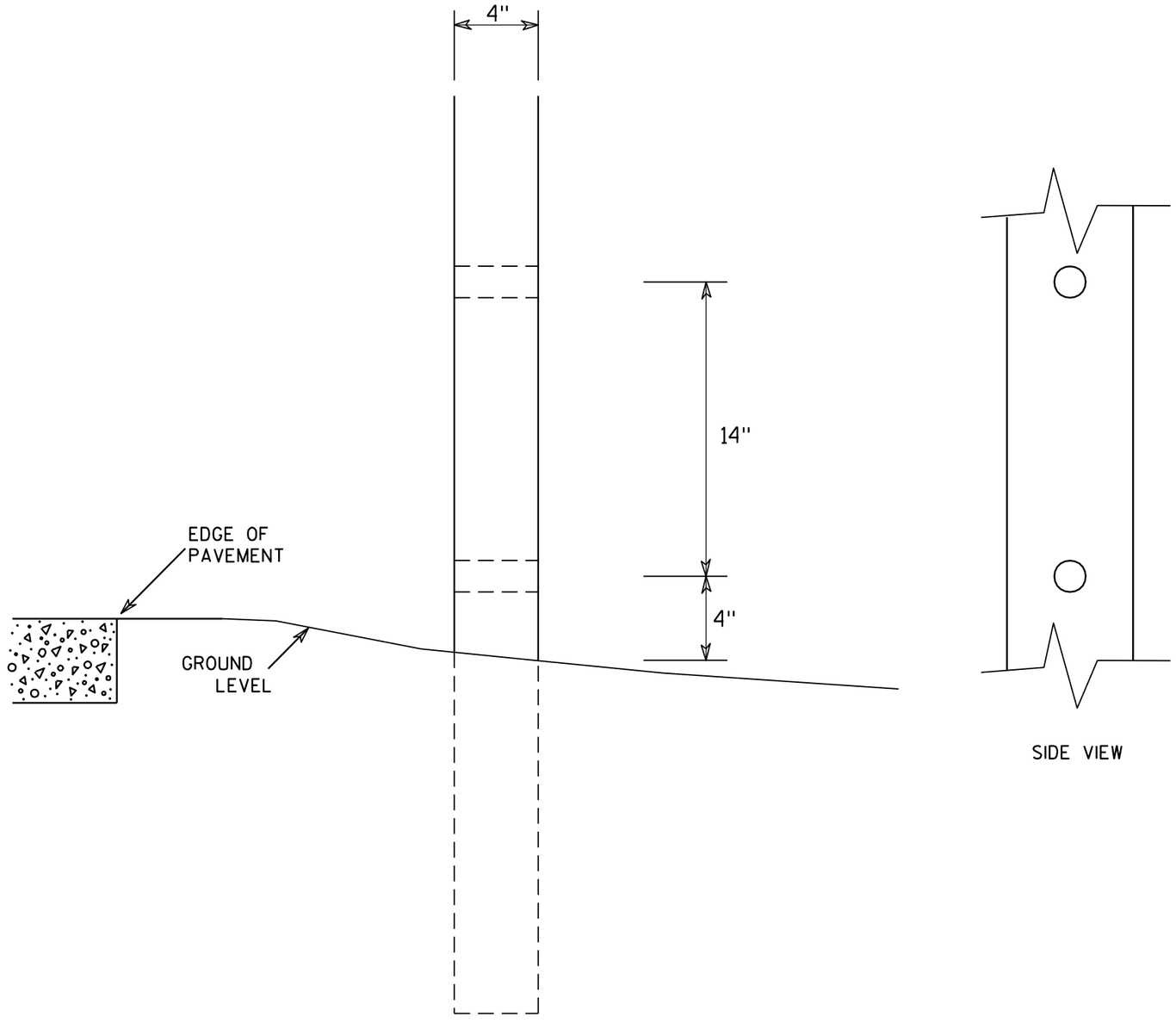
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: SHEET NO: E

FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$



SIDE VIEW

GENERAL NOTES

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

7

7

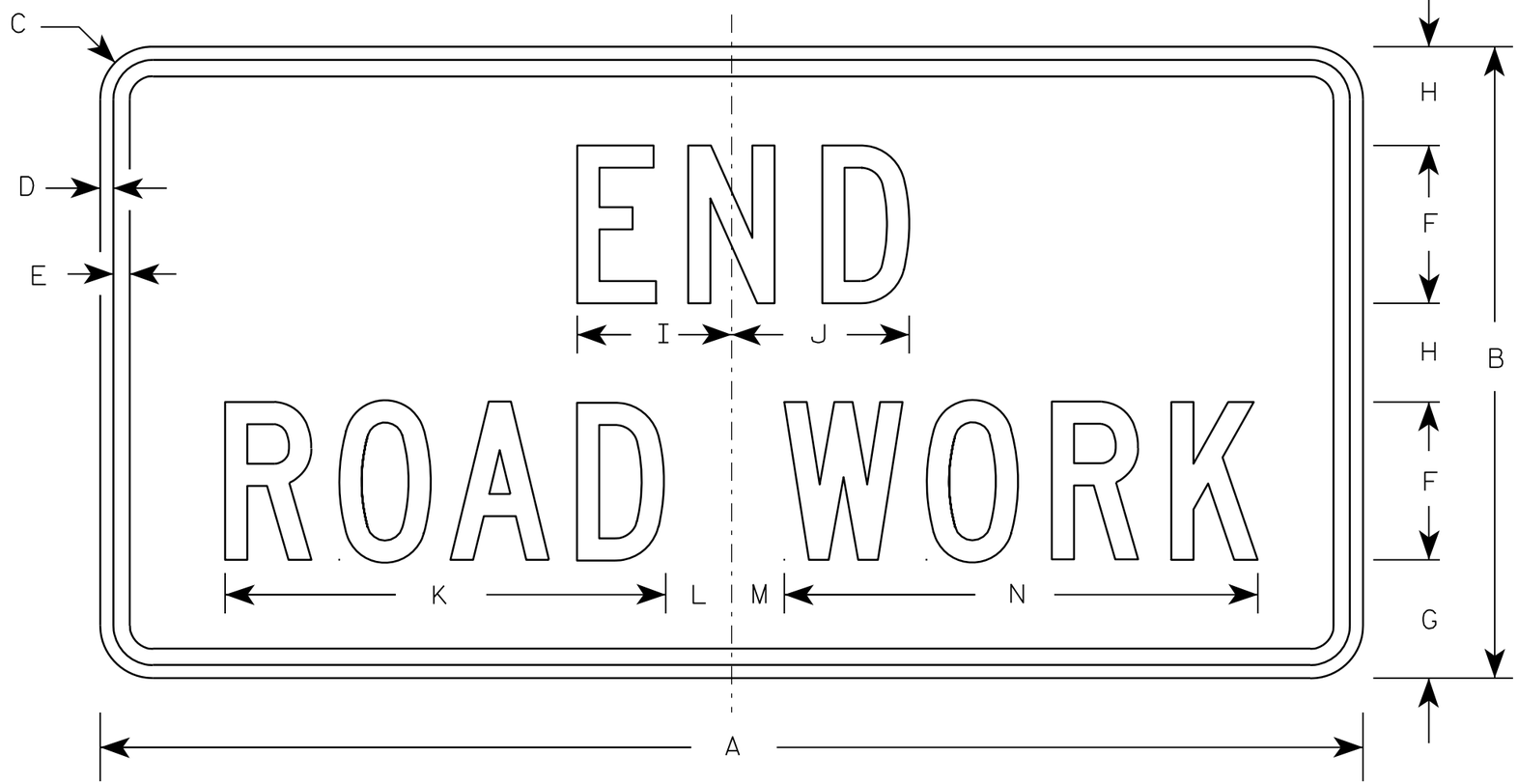
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 32	E



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

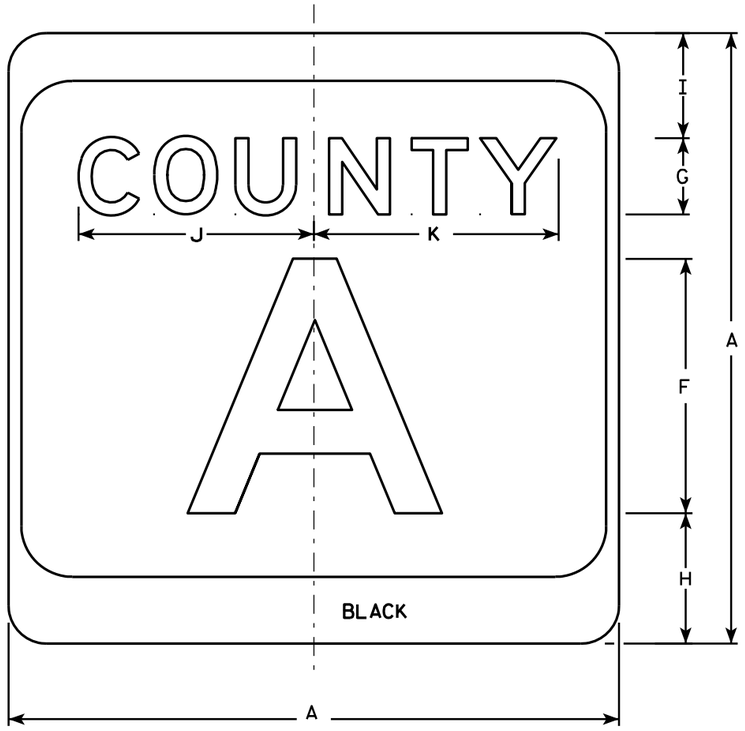
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

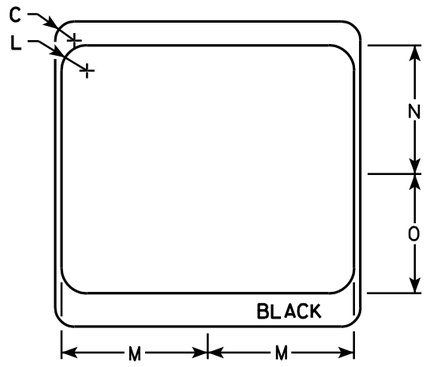
APPROVED Matthew R Rauch
for State Traffic Engineer

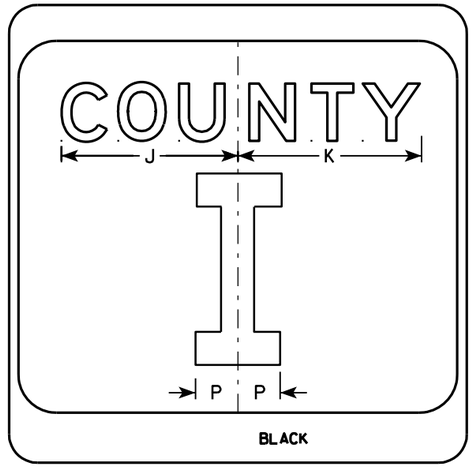
DATE 9/30/09 PLATE NO. G20-2A.8

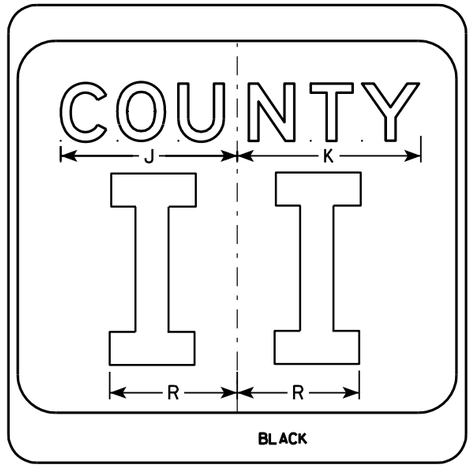
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 33	E



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

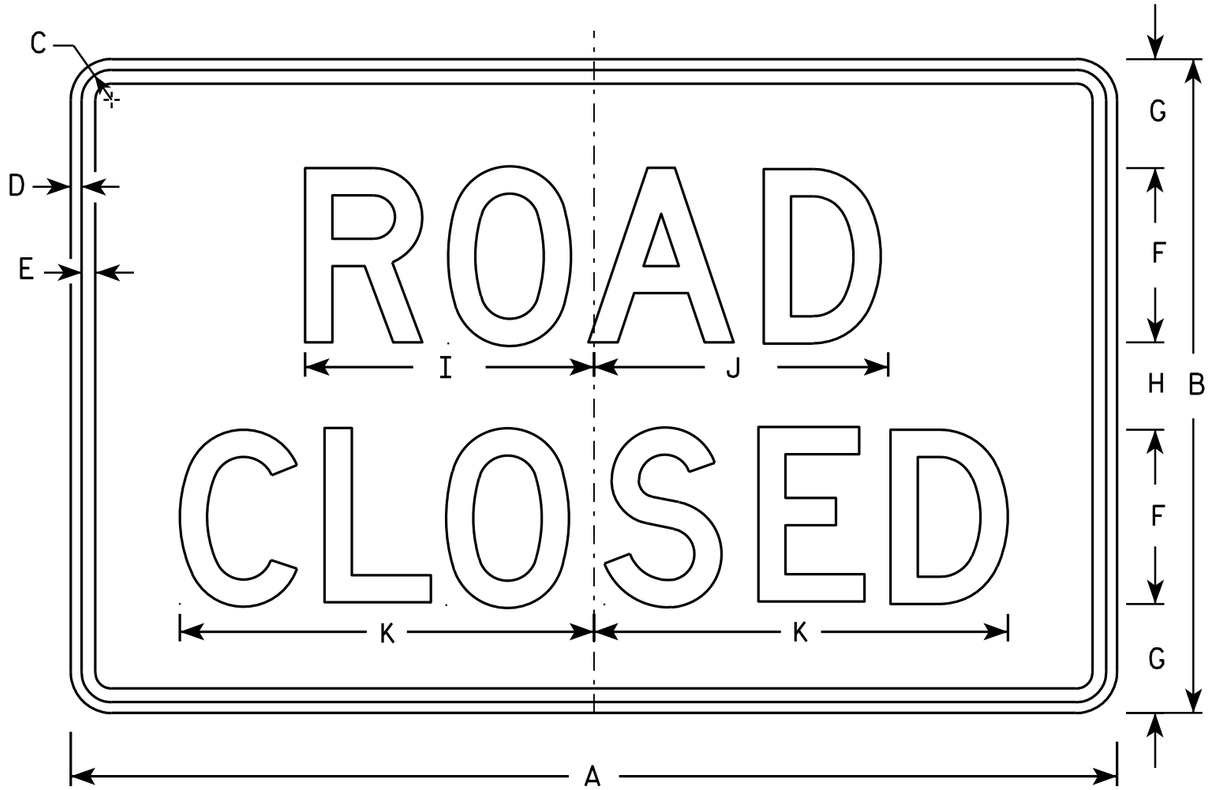
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

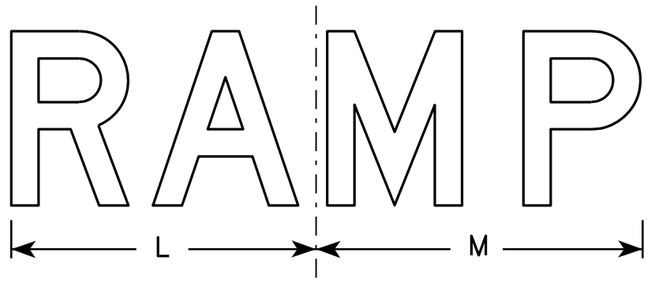
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 34	E



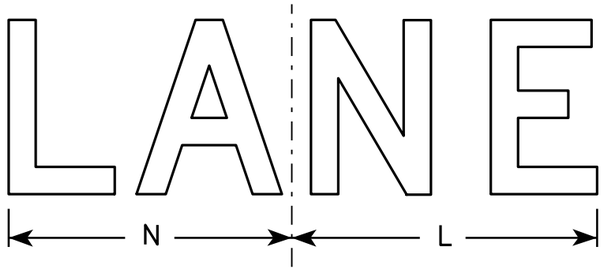
R11-2

NOTES

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



R11-2R



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

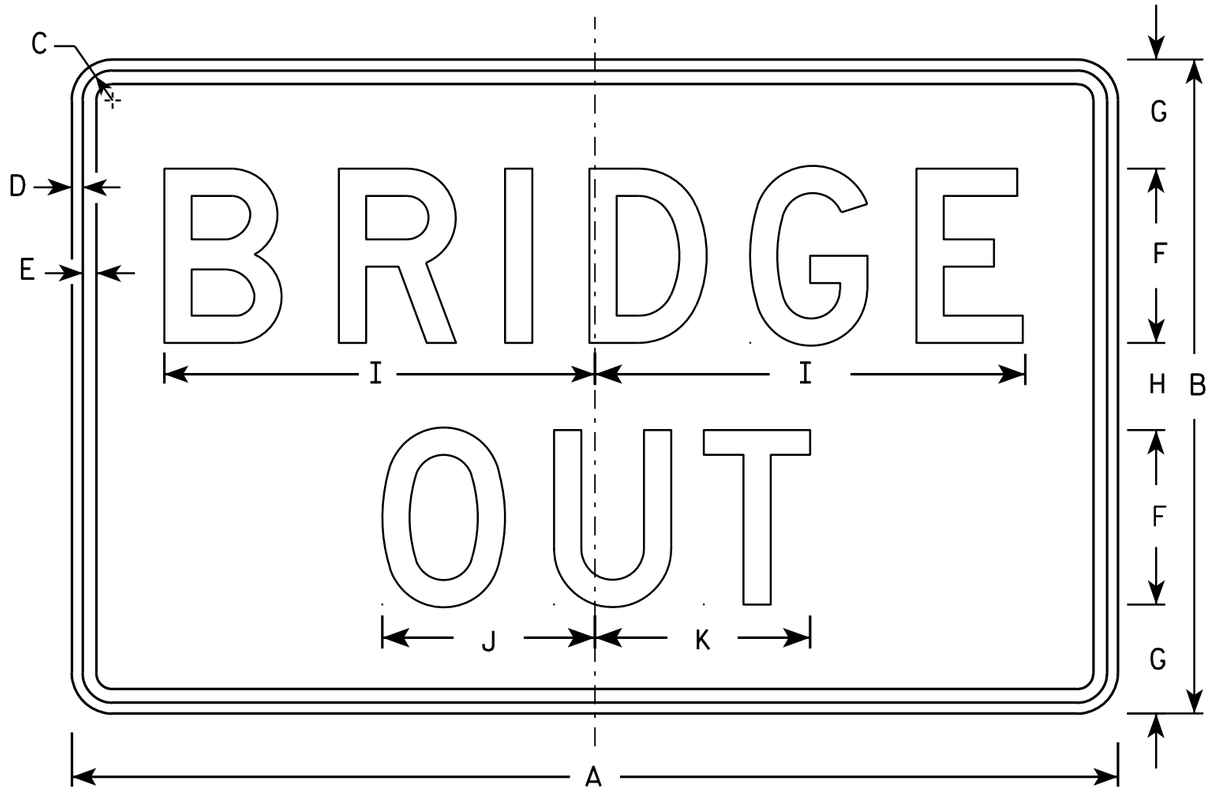
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 35 | E



R11-2B

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0

STANDARD SIGN
R11-2B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2B.2

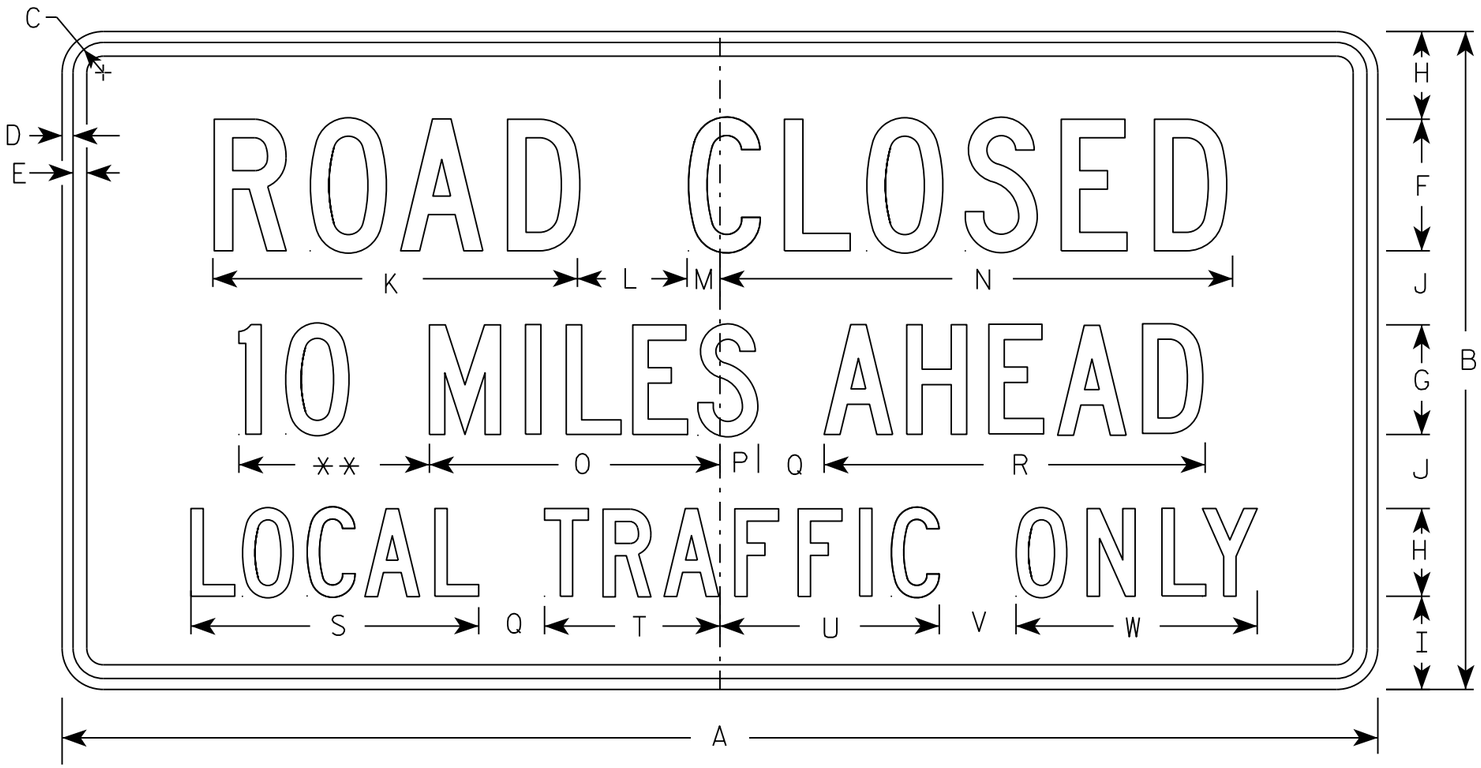
PROJECT NO:

SHEET NO: 36 E

7

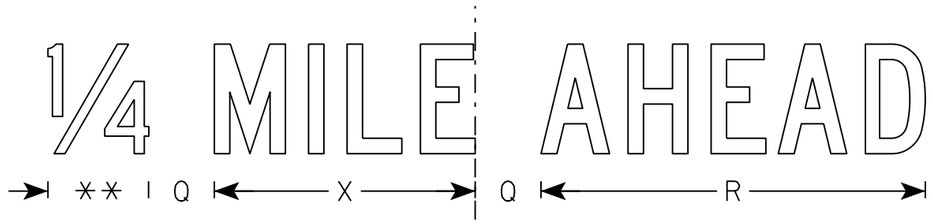
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	11 1/8	3	1 1/8	15 1/4	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4	7 1/8			4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
3																											
4																											
5																											

STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

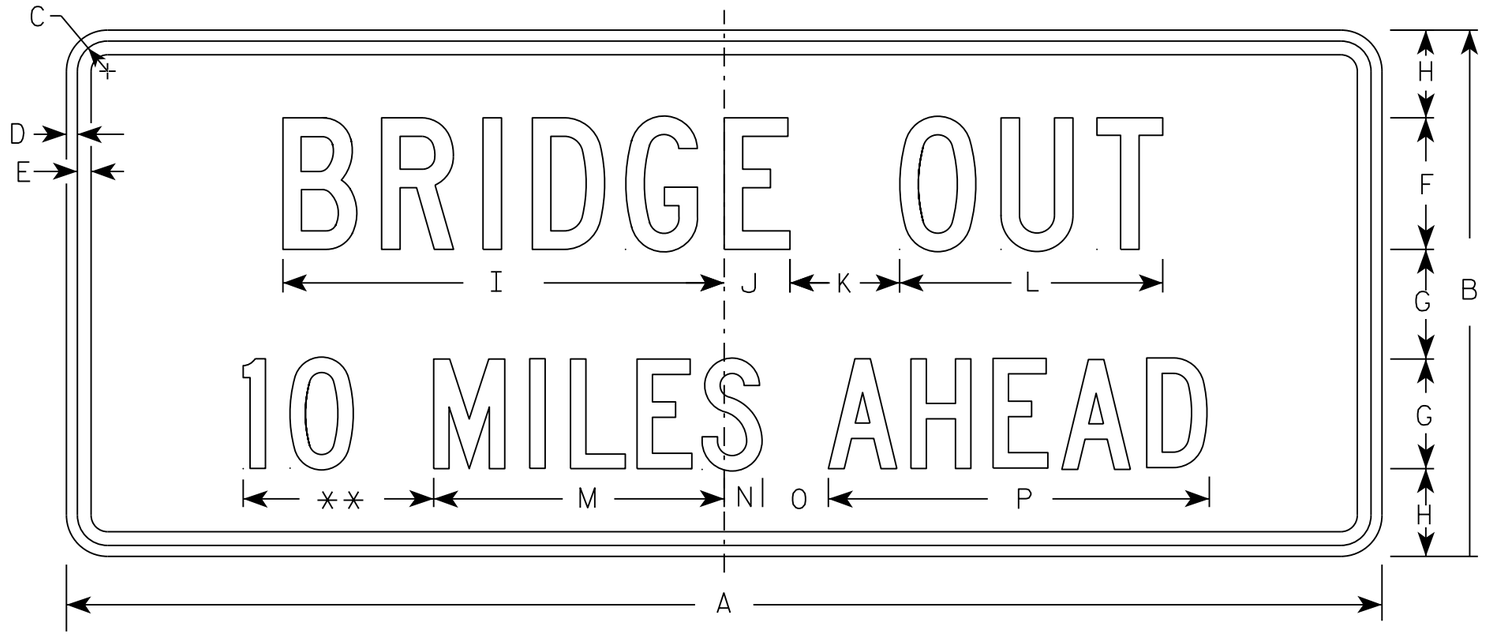
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/17 PLATE NO. R11-3.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 37	E

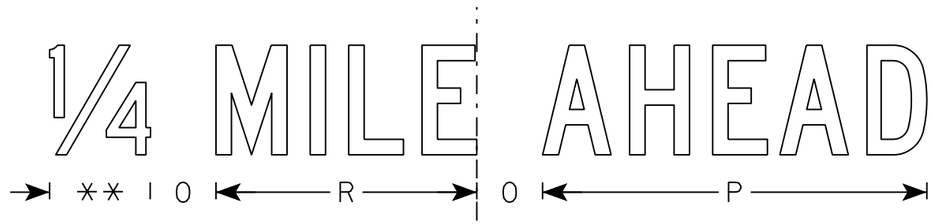
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3C

** See Note 5



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	15	1 3/8	1/2	5/8	4	3	2 1/2	13 1/4	2 1/4	3	8	8	1 1/2	2	10 3/4		7 1/8									3.75
2S	60	24	1 3/8	1/2	5/8	6	5	4	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8		11 7/8									10.0
2M	60	24	1 3/8	1/2	5/8	6	5	4	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8		11 7/8									10.0
3																											
4																											
5																											

STANDARD SIGN
R11-3C

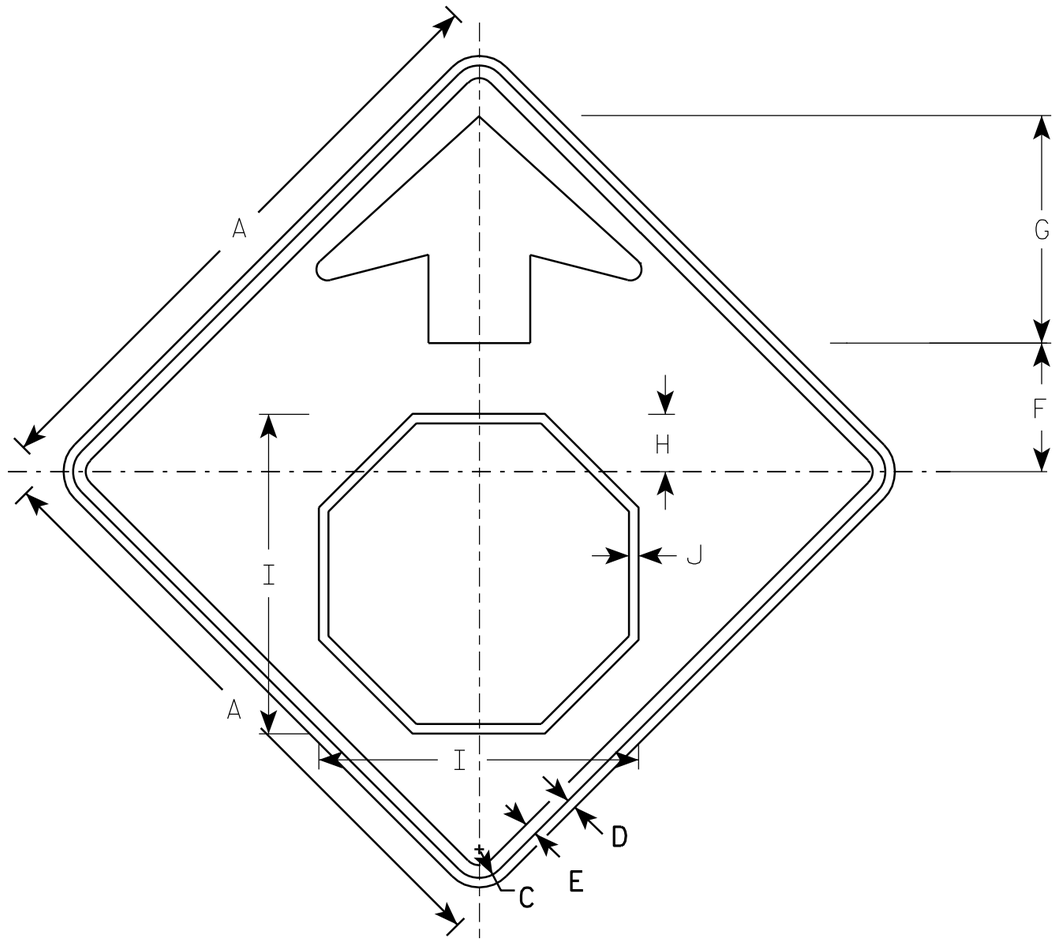
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/28/16 PLATE NO. R11-3C.3

PROJECT NO:

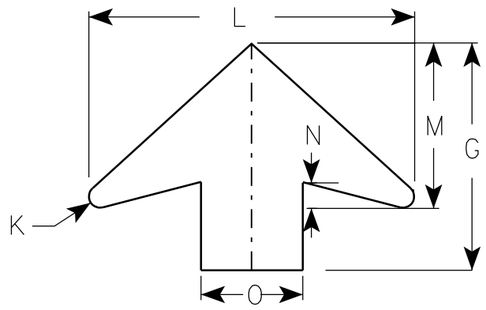
SHEET NO: 38 E



W3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

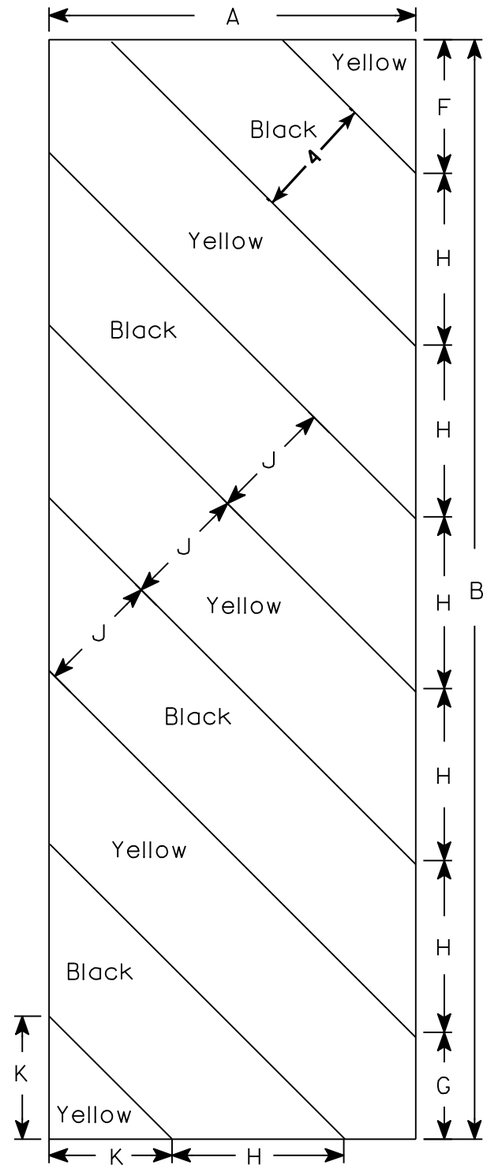
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

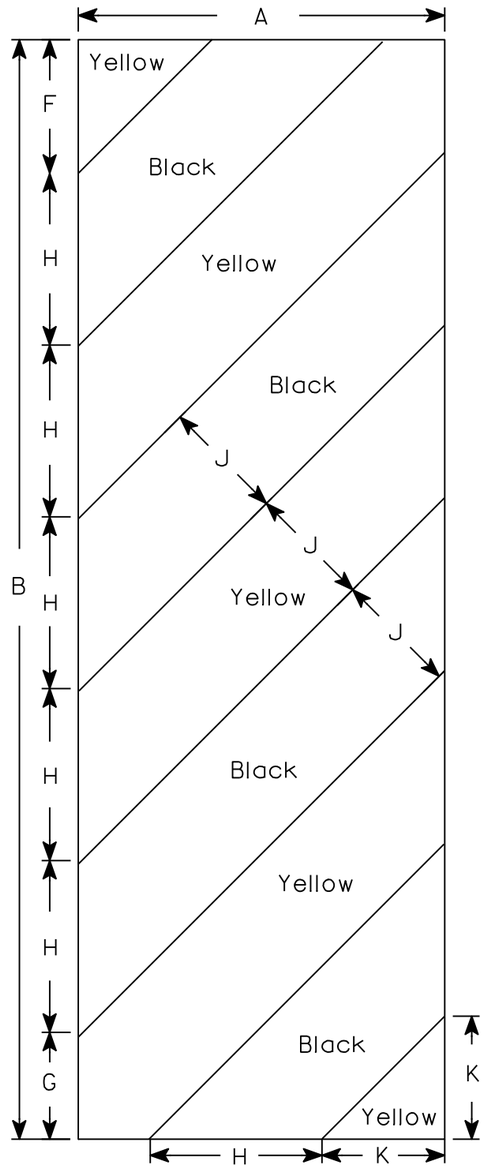
DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

SHEET NO: 39 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

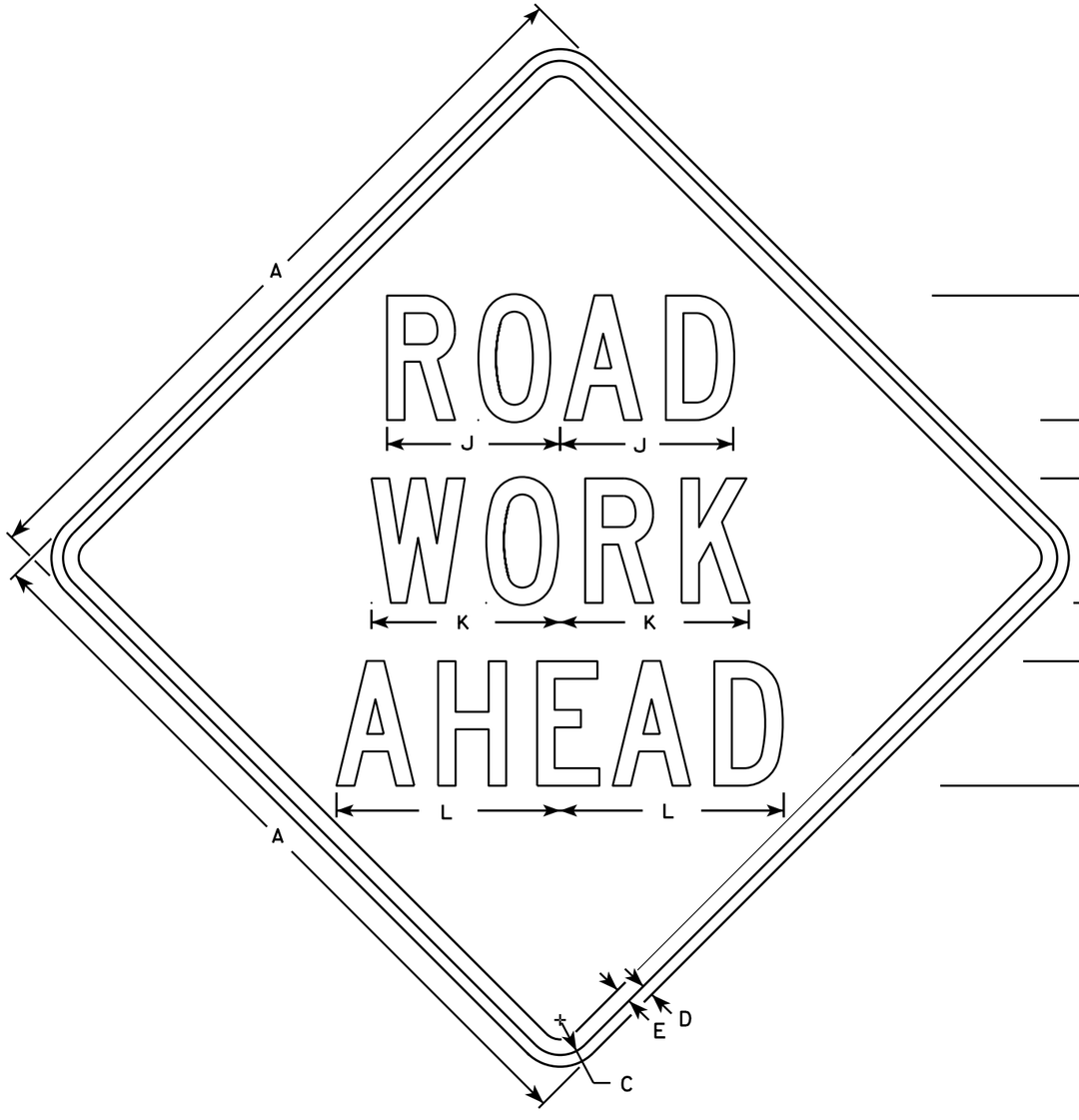
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

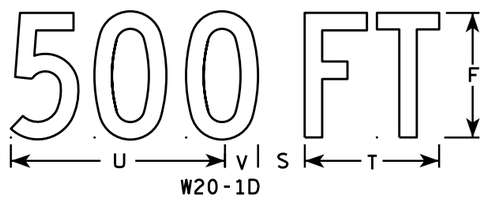
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W5-52.9

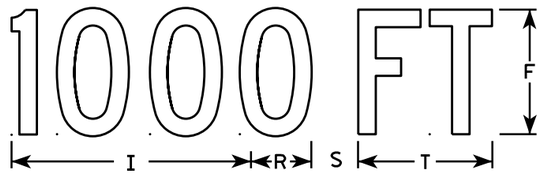
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 40	E



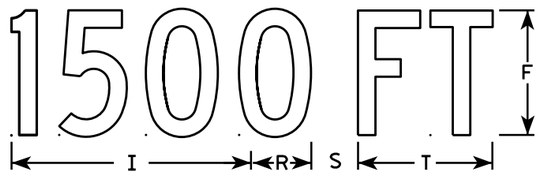
W20-1A



W20-1D



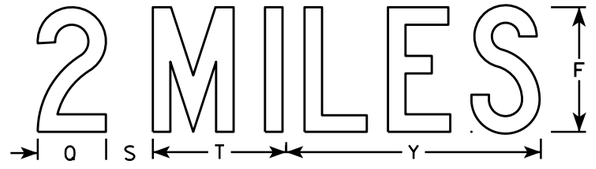
W20-1C



W20-1B

W20-1G

W20-1F



W20-1E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

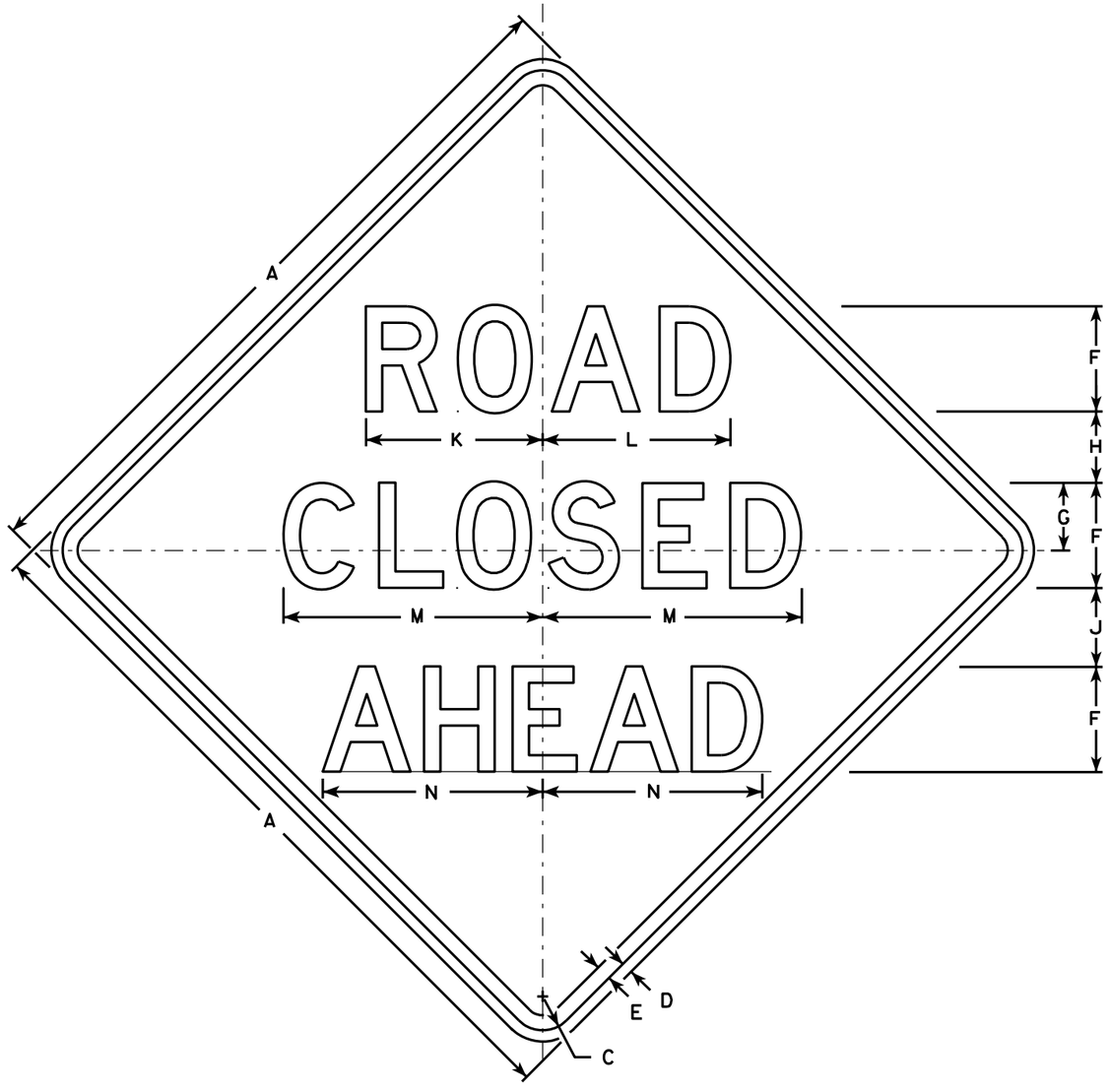
State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

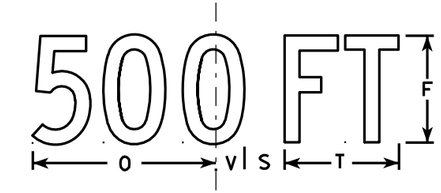
PROJECT NO: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W201.dgn PLOT DATE : 27-MAY-2015 15:58 PLOT BY : mscsja

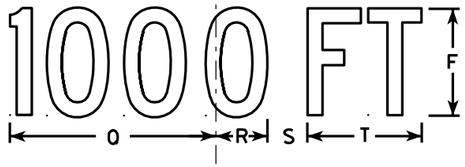
WISDOT/CADDS SHEET 42



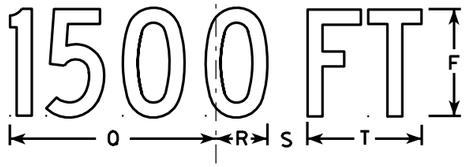
W20-3A



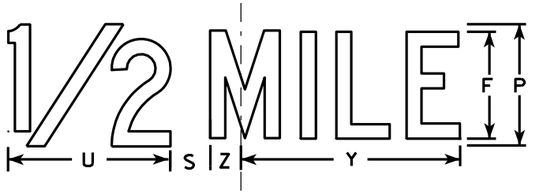
W20-3D



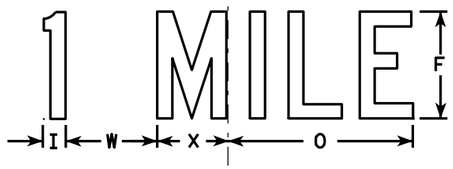
W20-3C



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.

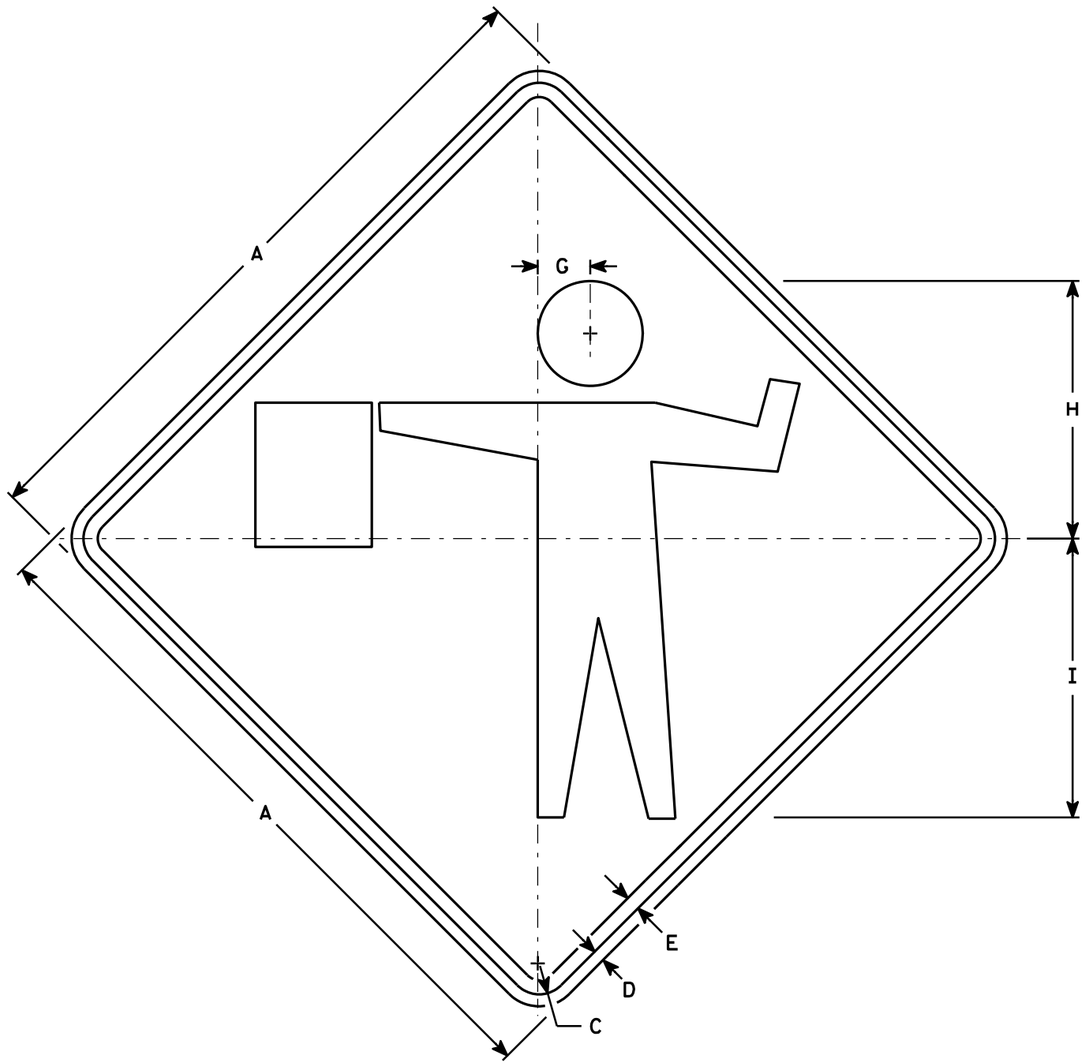
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	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: 42 | E



W20-7A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4		2 3/4	13 1/2	14 5/8																		9.00
2S	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
2M	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
3	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
4	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
5	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00

STANDARD SIGN
W20-7A

WISCONSIN DEPT OF TRANSPORTATION

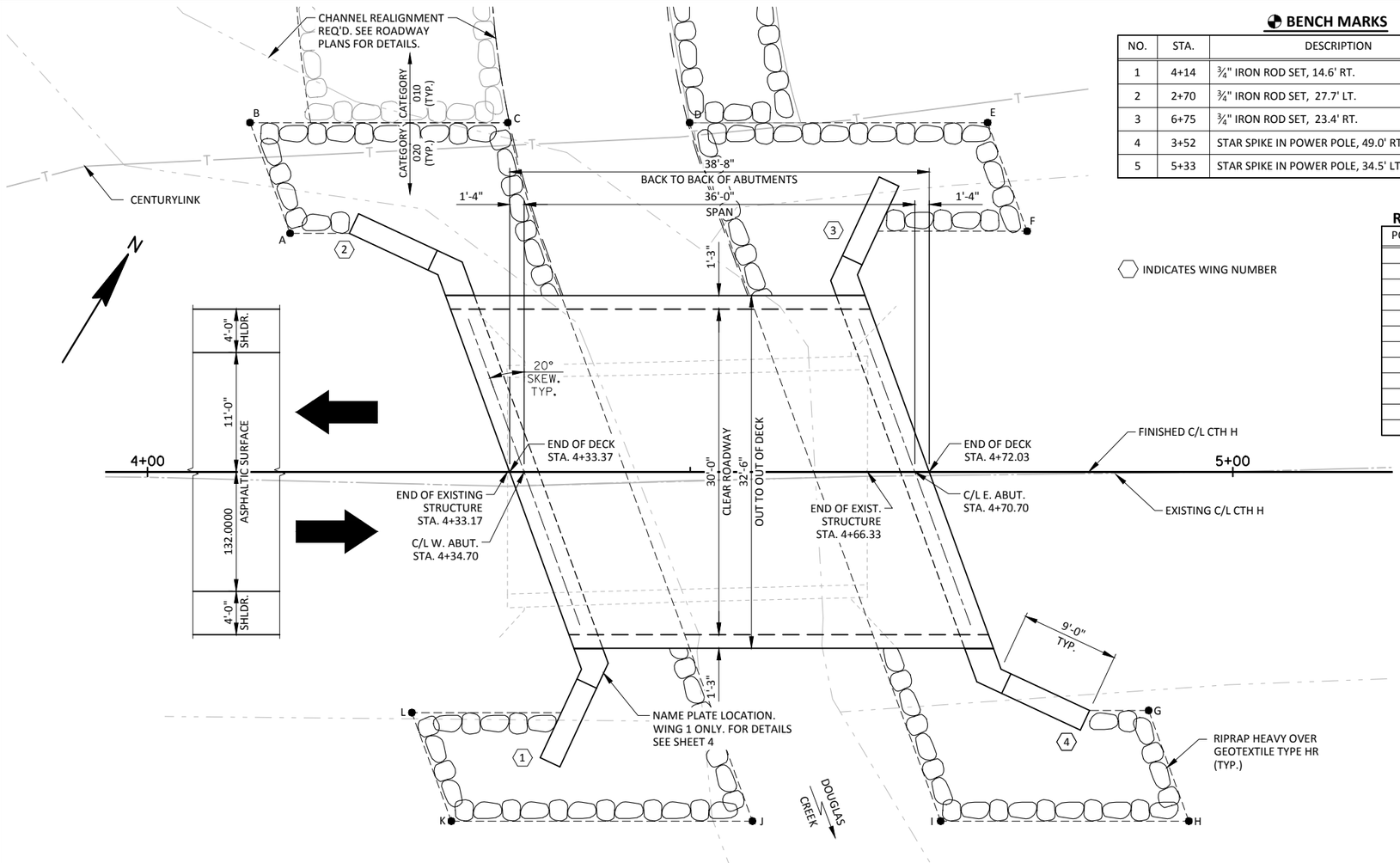
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-7A.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 43 | E

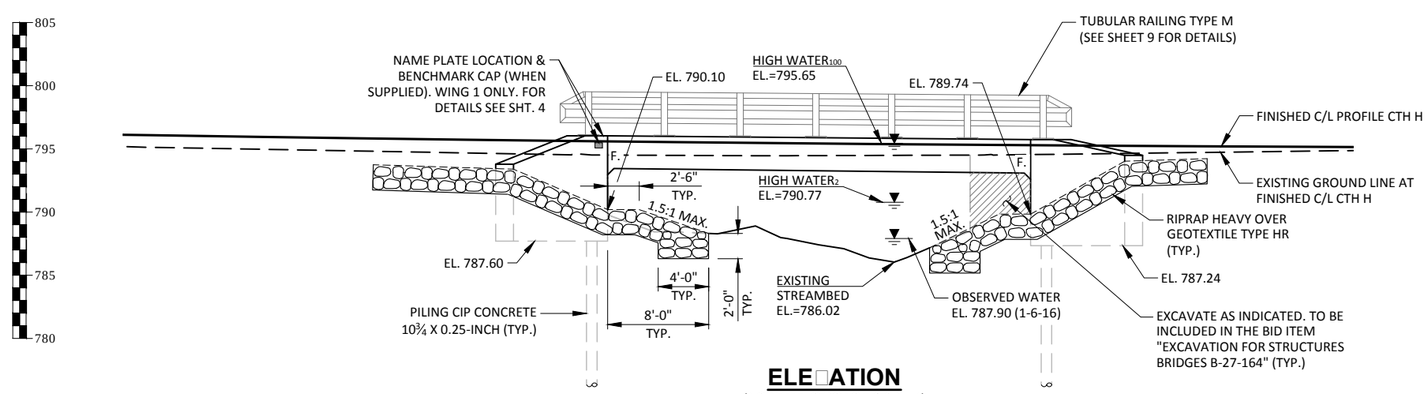
7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W207A.DGN PLOT DATE : 18-MAR-2011 13:14 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 7.945391:1.000000 WISDOT/CADDS SHEET 42



PLAN B-27-164

(SINGLE-SPAN REINFORCED CONCRETE FLAT SLAB)



ELEVATION

(NORMAL TO DOUGLAS CREEK)

BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
1	4+14	¾" IRON ROD SET, 14.6' RT.	794.31
2	2+70	¾" IRON ROD SET, 27.7' LT.	795.96
3	6+75	¾" IRON ROD SET, 23.4' RT.	794.03
4	3+52	STAR SPIKE IN POWER POLE, 49.0' RT.	793.96
5	5+33	STAR SPIKE IN POWER POLE, 34.5' LT.	792.98

RIPRAP HEAVY LAYOUT

POINT	STATION	OFFSET
A	4+13	22' LT.
B	4+09	32' LT.
C	4+33	32' LT.
D	4+50	32' LT.
E	4+77	32' LT.
F	4+81	22' LT.
G	4+92	22' RT.
H	4+96	32' RT.
I	4+73	32' RT.
J	4+56	32' RT.
K	4+28	32' RT.
L	4+24	22' RT.

STATE PROJECT NUMBER

7322-00-70

DESIGN DATA

LIVE LOAD:

DESIGN LOADING — HL-93
INVENTORY RATING FACTOR — RF=1.28
OPERATING RATING FACTOR — RF=1.67
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) — 250 KIPS

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 P.S.F.

MATERIAL PROPERTIES:

CONCRETE MASONRY, SLAB — f'c = 4,000 P.S.I.
ALL OTHER — f'c = 3,500 P.S.I.
HIGH-STRENGTH BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.

FOUNDATION DATA

ABUTMENTS AND PIER TO BE SUPPORTED ON PILING CIP CONCRETE 10¾ X 0.25-INCH DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 110 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATE 65 FT PILE LENGTHS AT EAST ABUTMENT AND 60 FT PILE LENGTHS AT WEST ABUTMENT.

**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

TRAFFIC DATA

A.D.T. (2018) — 195
A.D.T. (2038) — 290
DESIGN SPEED — 40 M.P.H.

HYDRAULIC DATA

100 YEAR FREQUENCY
DRAINAGE AREA — 9.1 SQ. MI.
Q_{100} TOTAL — 1,410 C.F.S.
THROUGH STRUCTURE — 1,393 C.F.S.
OVERTOPPING ROADWAY — 17 C.F.S.
VELOCITY - THROUGH STRUCTURE — 9.0 F.P.S.
WATERWAY AREA - THROUGH STRUCTURE — 154.3 SQ. FT.
HIGH WATER$_{100}$ ELEVATION — 795.65
SCOUR CRITICAL CODE — 5

DESIGN ROADWAY OVERFLOW
ROADWAY OVERTOPPING FREQUENCY — 83 YRS.
$Q_{OVERTOPPING}$ — 1,360 C.F.S.
OVERTOPPING ELEVATION — 795.49

EROSION CONTROL
Q_2 — 275 C.F.S.
HIGH WATER$_2$ ELEVATION — 790.77

LIST OF DRAWINGS

WISCONSIN PROFESSIONAL ENGINEER
PATRICK T. BOLAND
E-36303
SPRING GREEN, WIS.
Patrick Boland 10-30-17

NO.	DATE	REVISION	BY

JEWELL associates engineers, inc.
Engineers - Surveyors - Architects
560 SUNRISE DRIVE
SPRING GREEN, WI 53588
PHONE: (608) 588-7484
FAX: (608) 588-9322

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 11/01/17
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-27-164

CTH H OVER DOUGLAS CREEK

COUNTY: JACKSON — TOWN, ~~CITY/ VILLAGE~~: IRVING
DESIGN SPEC.: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
RBH	PTB	DJT	PTB

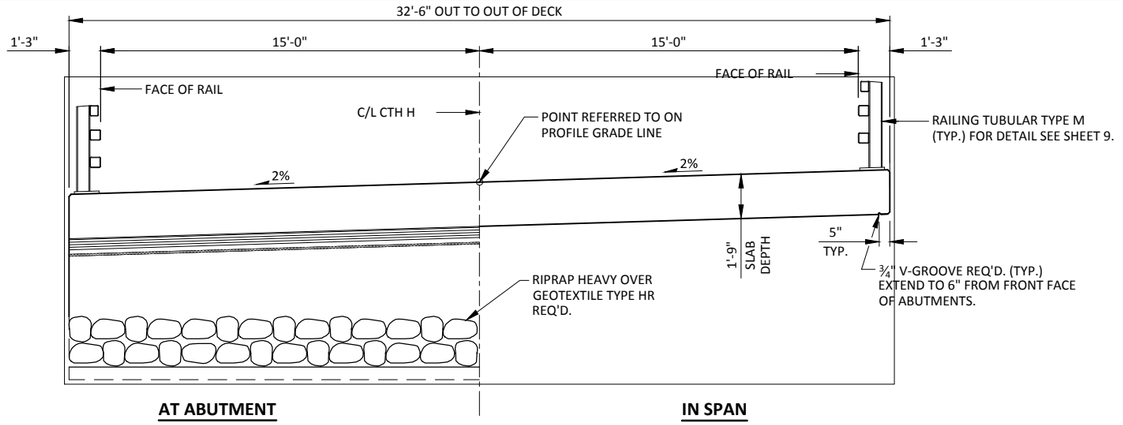
GENERAL PLAN

SHEET 1 OF 9

DESIGN CONSULTANT
PATRICK BOLAND, PE
(608) 588-7484

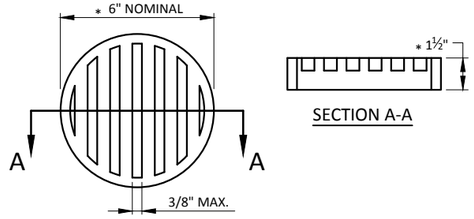
BRIDGE OFFICE CONTACT
WILLIAM DREHER, PE
(608) 266-8489

FILE NAME : R:\PROJECTS\K49030 CTH H BRIDGE, JACKSON CO\STRUCTURE\CAD FILES\FINALS\01 GENERAL PLAN.DWG
LAYOUT : LAYOUT1
PLOT DATE : 2/29/2016
PLOT TIME : 10:57:59 AM
PLOT BY : BOLAND, PATRICK
PLOT SCALE : 1" = 1'



PROPOSED CROSS-SECTION THROUGH ROADWAY

(LOOKING EAST)



RODENT SCREEN

NOTES:

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

ORIENT SCREEN SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SCREEN SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SCREEN TO THE EXPOSED ENDS OF THE PIPE UNDERDRAIN. THE SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

STATE PROJECT NUMBER

7322-00-70

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICA VERTICAL DATUM OF 1988 (NAVD 88).

JOINT FILLER SHALL CONFORM TO A.A.S.H.T.O. DESIGNATION MI53, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M213.

THE SLOPE OF FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH RIPRAP HEAVY AND GEOTEXTILE TYPE HR TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS, OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

AT THE BACK FACE OF ABUTMENTS, ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE TYPE A. SEE THIS SHEET FOR DETAIL.

APPLY PROTECTIVE SURFACE TREATMENT TO THE TOP OF THE DECK, THE SIDES OF THE DECK AND EXTERIOR 12" OF THE UNDERSIDE OF THE DECK (CONCRETE MATERIAL ONLY).

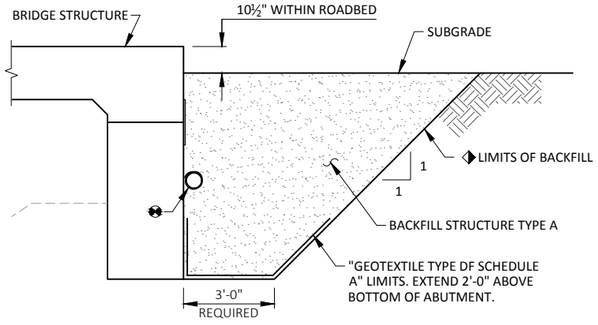
THE EXISTING STRUCTURE (P-27-0043) IS A SINGLE SPAN CONCRETE DECK GIRDER STRUCTURE SUPPORTED ON CONCRETE ABUTMENTS. THE STRUCTURE HAS A 19.7' CLEAR ROADWAY WIDTH AND A 33.3' OVERALL LENGTH AND SHALL BE REMOVED.

ALL STATIONS AND ELEVATIONS SHOWN ARE IN FEET.

THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE UNLESS AN ALTERNATIVE METHOD IS APPROVED BY THE ENGINEER IN THE FIELD.

THE FIRST OR FIRST TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE.

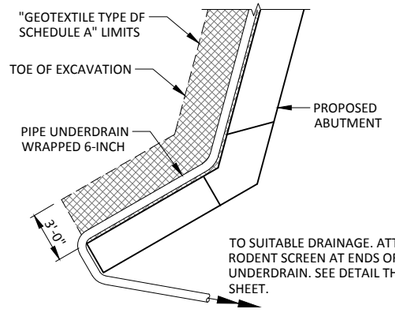


BACKFILL STRUCTURE DETAIL

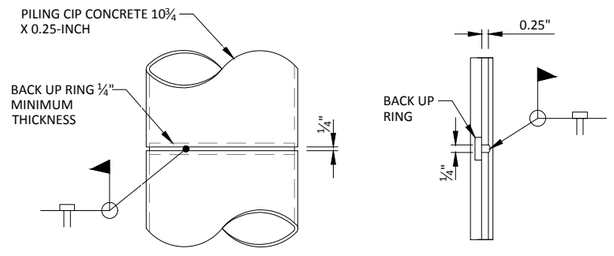
(TYPICAL AT BOTH ABUTMENTS)

◆ BACKFILL STRUCTURE TYPE A PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO THE BID ITEM "EXCAVATION FOR STRUCTURES B-27-164". LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

● PIPE UNDERDRAIN WRAPPED 6-INCH, SLOPED 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SCREEN AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON THIS SHEET. RODENT SCREEN TO BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH."



PIPE UNDERDRAIN DETAIL



CAST-IN-PLACE 'PIPE PILE'

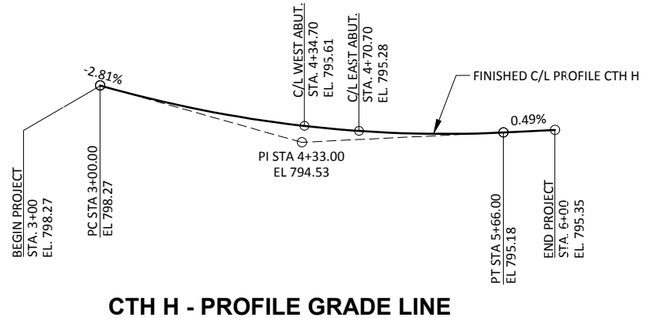
C.I.P. PILE WELD DETAIL

NOTES:

CAST-IN-PLACE PILE SHELL MATERIAL SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATION.

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	W. ABUT.	SUPER	E. ABUT.	TOTALS
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 4+50	LS	--	--	--	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-27-164	LS	--	--	--	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	145	--	145	290
502.0100	CONCRETE MASONRY BRIDGES	CY	32	87	32	151
502.3200	PROTECTIVE SURFACE TREATMENT	SY	--	160	--	160
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	2,520	--	2,520	5,040
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,380	14,830	1,390	17,600
513.4061	RAILING TUBULAR TYPE M B-27-164	LF	--	81	--	81
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	7	--	7	14
550.2104	PILING CIP CONCRETE 10¾ X 0.25-INCH	LF	475	--	515	990
606.0300	RIPRAP HEAVY	CY	90	--	90	180
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	90	--	90	180
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	50	--	50	100
645.0120	GEOTEXTILE TYPE HR	SY	150	--	150	300
	NON-BID ITEMS					
	FILLER	SIZE				½" & ¾"



CTH H - PROFILE GRADE LINE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-27-164

DRAWN BY DJT | PLANS CK'D. PTB

CROSS SECTION AND QUANTITIES

SHEET 2 OF 9

8

8

FILE NAME : R:\PROJECTS\K49030 CTH H BRIDGE, JACKSON CO\STRUCTURE\CAD FILES\FINALS\02 CROSS SECTION AND QUANTITIES.DWG
LAYOUT : LAYOUT1

PLOT DATE : 2/26/2016
PLOT TIME : 11:47:15 AM

PLOT BY : ECKELBERG, PATRICK

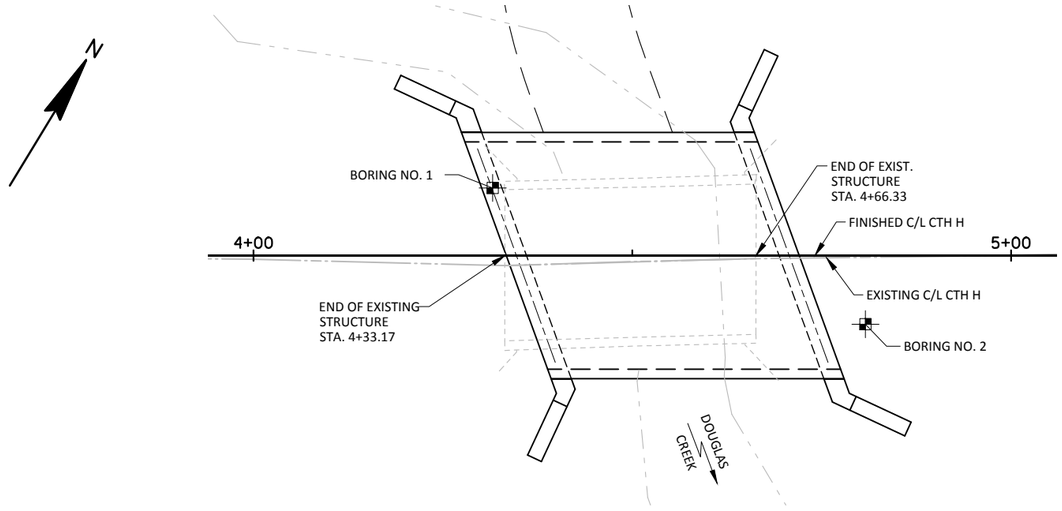
PLOT SCALE : 1" = 1'

STATE PROJECT NUMBER

7322-00-70

MATERIAL SYMBOLS

Asphalt · Topsoil · Peat
Concrete · Fill · Gravel
Sand · Clay · Silt
Boulders or Cobbles · Limestone · Bedrock (unknown)
Shale · Sandstone · Igneous/ meta



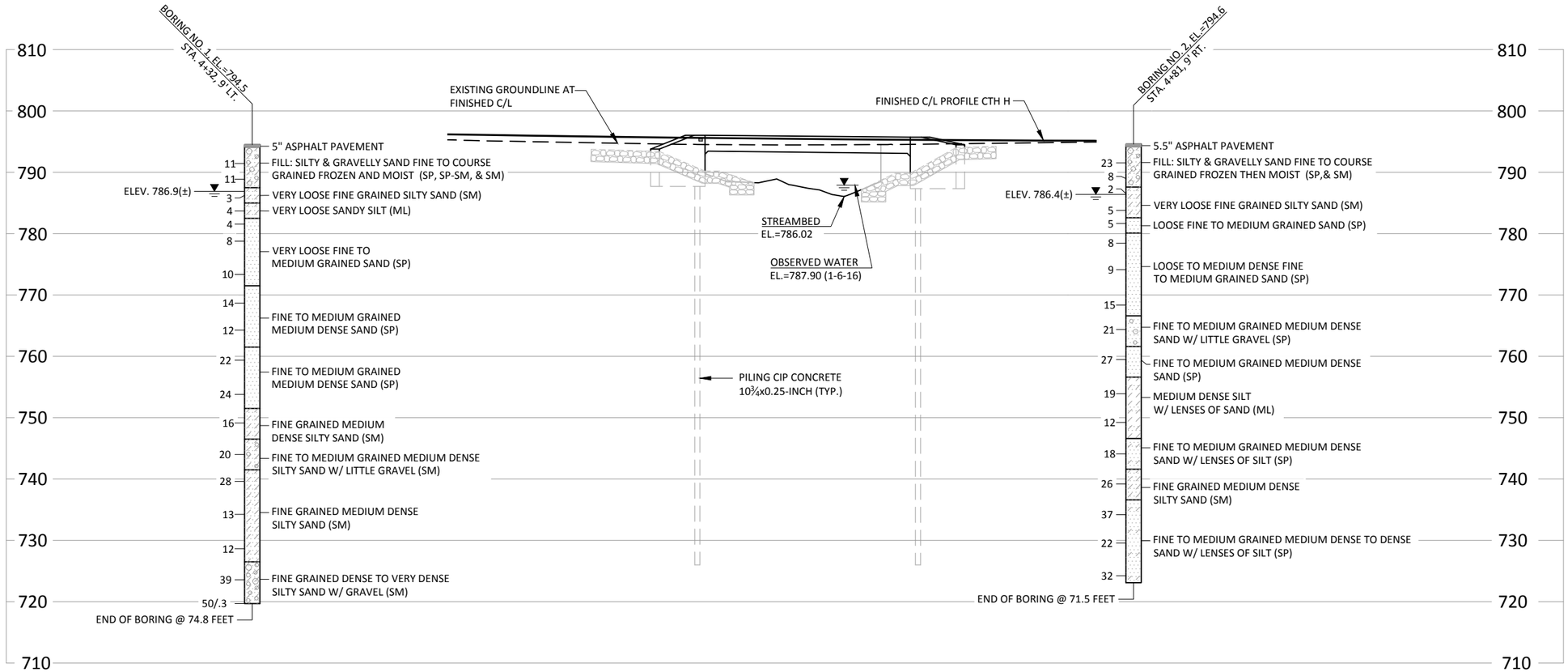
PLAN B-27-164

SOIL BORINGS

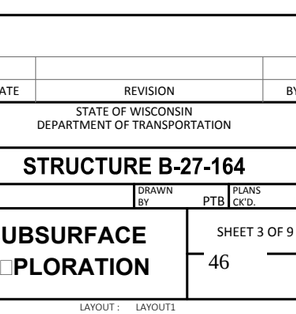
BORING NUMBER	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	01/15/16	136,351.7	339,438.3
2	01/15/16	136,362.1	339,489.7

BORINGS & REPORT COMPLETED BY: AMERICAN ENGINEERING TESTING, INC.
4203 SCHOFIELD AVENUE, SUITE 1
SCHOFIELD, WI 54476

ABUTMENTS TO BE SUPPORTED ON PILING CIP CONCRETE 10¾ X 0.25-INCH DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 110 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATE 60 FT PILE LENGTH AT WEST ABUTMENT AND 65 FT PILE LENGTH AT EAST ABUTMENT.



LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE SPECIFIED, THE SPT 'N' VALUE IS BASED ON AASHTO T-206 STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATIONS

AT TIME OF DRILLING
END OF DRILLING
AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COURSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-27-164

DRAWN BY PTB | PLANS CK'D. RBH

SUBSURFACE EXPLORATION

SHEET 3 OF 9

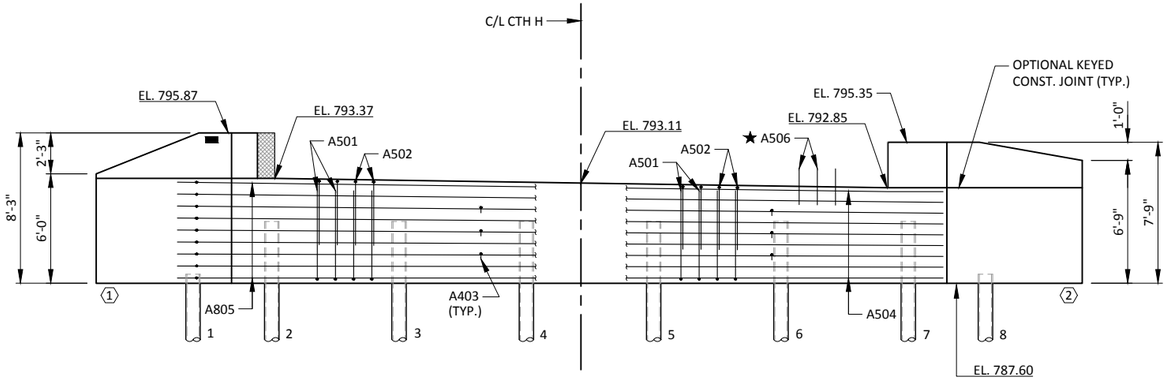
46

8

8

STATE PROJECT NUMBER

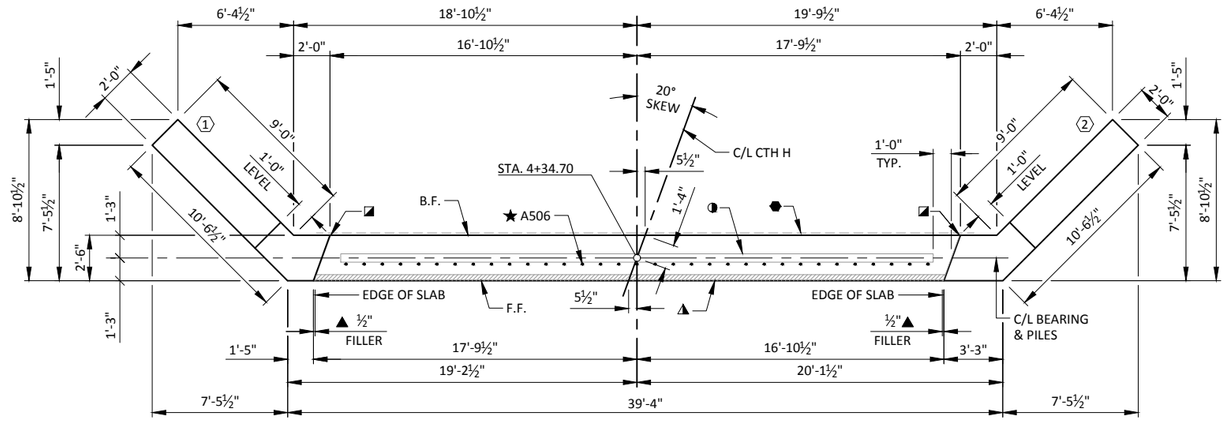
7322-00-70



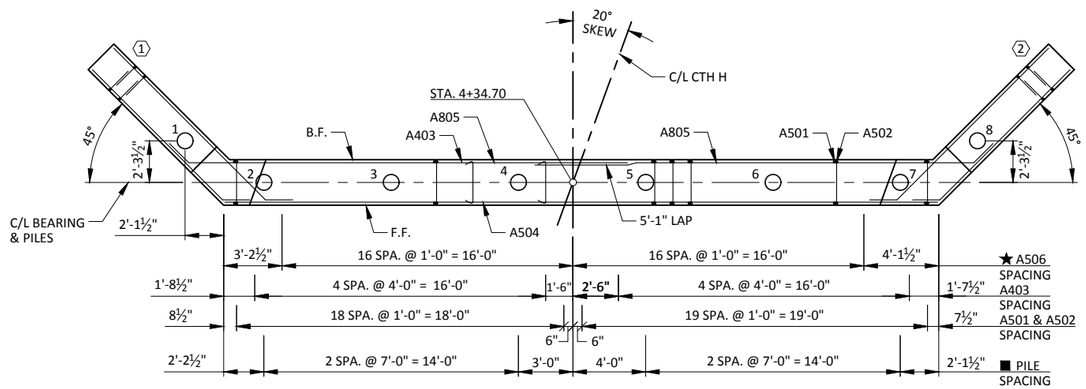
BACK FACE BAR STEEL REINF. **FRONT FACE BAR STEEL REINF.**

ELEVATION

(WEST ABUTMENT LOOKING WEST)



PLAN



LAYOUT

NOTES

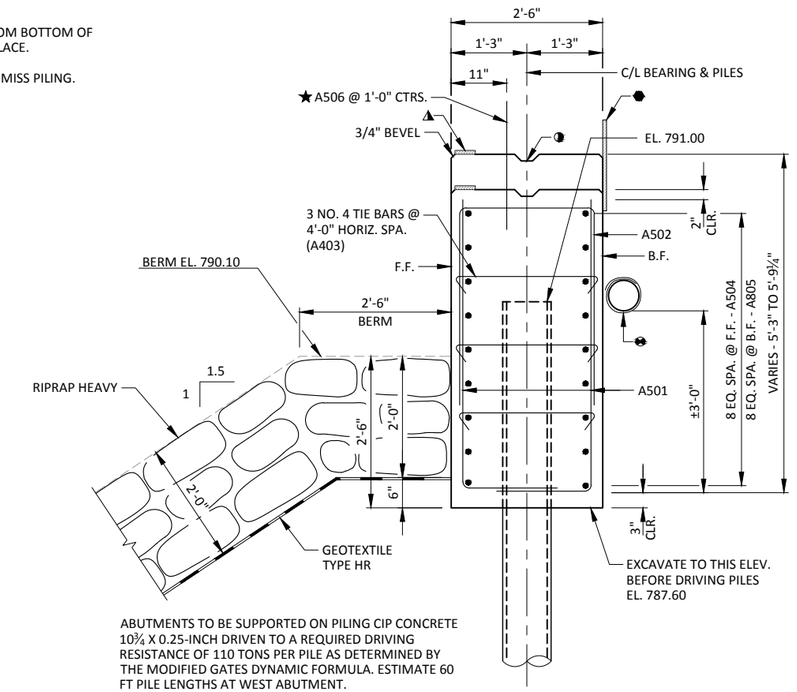
SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE SHEET 5 FOR BILL OF BARS.

DO NOT PLACE FILL HIGHER THAN 3 FEET FROM BOTTOM OF ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.

ADJUST REINFORCEMENT AS NECESSARY TO MISS PILING.

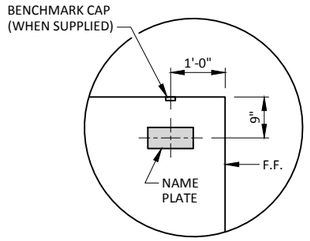
F.F. - FRONT FACE

B.F. - BACK FACE



ABUTMENTS TO BE SUPPORTED ON PILING CIP CONCRETE 10¾ X 0.25-INCH DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 110 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATE 60 FT PILE LENGTHS AT WEST ABUTMENT.

TYPICAL SECTION THROUGH ABUTMENT BODY



NAME PLATE AND BENCHMARK CAP DETAIL

LEGEND

- ◐ KEYED CONSTRUCTION JOINT FORMED BY SURFACED & BEVELED 2x6.
- ◪ VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING EXTEND FROM 9" BELOW BRIDGE SEAT TO 1" BELOW TOP OF WINGS.
- ⬣ 18" RUBBERIZED MEMBRANE WATERPROOFING. (HORIZONTAL)
- ▲ ½" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINUOS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE)
- ◭ ¾" x 4" PREFORMED FILLER, EXTEND FULL LENGTH OF ABUTMENTS BETWEEN EDGES OF SLAB.
- ★ A506 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE IT HAS TAKEN ITS INITIAL SET. EMBED BAR 1'-0".
- ■ PILE SPACING MEASURED AT BASE OF ABUTMENT BODY.
- ⬬ PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPED 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SCREEN AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SHEET 2. RODENT SCREEN TO BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH."

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-27-164

DRAWN BY: RBH | PLANS CK'D.: PTB

WEST ABUTMENT

SHEET 4 OF 9

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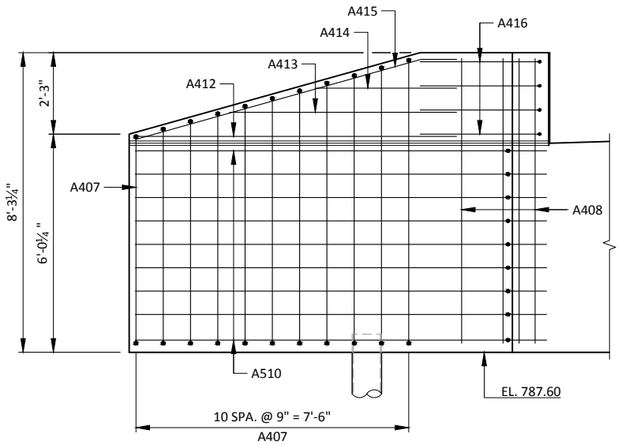
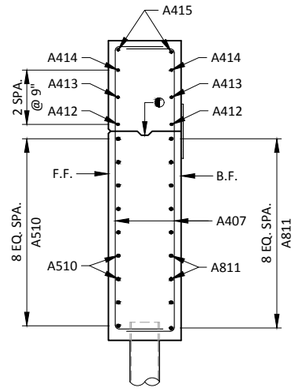
8

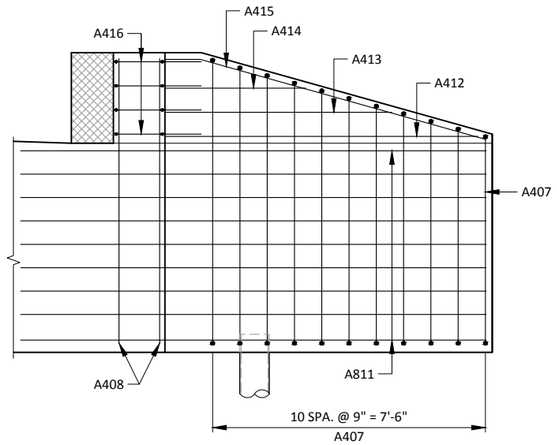
8



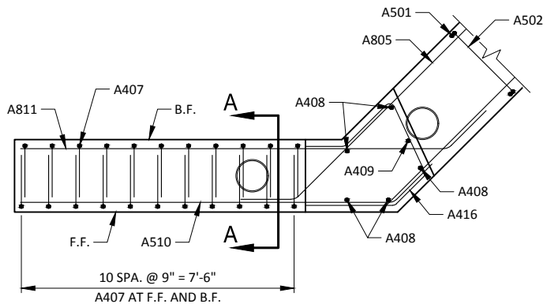
F.F. ELE□ATION - WING 1



SECTION A-A



B.F. ELE□ATION - WING 1



PLAN □IEW - WING 1

LEGEND

◐ OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY SURFACED & BEVELED 2x6. ¾" V-GROOVE AT FRONT FACE OF WING WALL AND HORIZONTAL 18" RUBBERIZED MEMBRANE WATERPROOFING AT BACK FACE IF CONSTRUCTION JOINT IS USED. COST IS INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY BRIDGES".

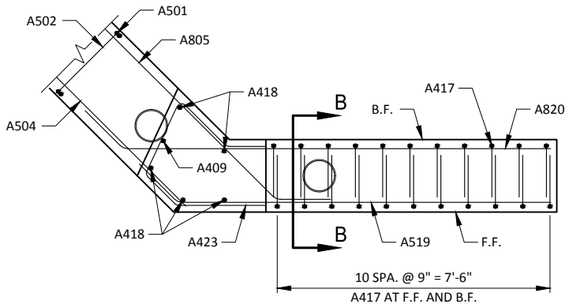
NOTES

SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE THIS SHEET FOR BILL OF BARS.

ADJUST REINFORCEMENT AS NECESSARY TO MISS PILING.

F.F. - FRONT FACE

B.F. - BACK FACE



PLAN □IEW - WING 2

STATE PROJECT NUMBER

7322-00-70

BILL OF BARS
WEST ABUTMENT

1□380 LB □COATED□
2□□20 LB □UNCOATED□

BAR MARK	NO. REQ'D.	LENGTH	BENT	COAT	BAR SERIES	LOCATION
A501	78	6-4	X			BODY - VERT. - F.F & B.F.
A502	39	8-5	X			BODY - VERT. - TOP
A403	30	2-8	X			TIE BARS
A504	9	39-2				BODY - HORIZ. - F.F.
A805	18	25-9	X			BODY - HORIZ. - B.F.
A506	33	2-0		X		BODY - VERT. - DOWELS
A407	22	9-2	X	X	✳	WING 1 - VERT. - F.F. & B.F.
A408	5	7-10		X		WING 1 - VERT.
A409	2	3-4		X		WING1 & 2 - VERT. - TOP
A510	9	11-8	X	X		WING 1 - HORIZ. - F.F.
A811	9	13-3	X	X		WING 1 - HORIZ. - B.F.
A412	2	8-10		X		WING 1 - HORIZ. - F.F. & B.F. - TOP
A413	2	6-3		X		WING 1 - HORIZ. - F.F. & B.F. - TOP
A414	2	3-11		X		WING 1 - HORIZ. - F.F. & B.F. - TOP
A415	2	9-3	X	X		WING 1 - HORIZ. - F.F. & B.F. - TOP
A416	4	8-8	X	X		WING 1 - HORIZ. - TOP
A417	22	9-3	X	X	✳	WING 2 - VERT. - F.F. & B.F.
A418	5	7-3		X		WING 2 - VERT.
A519	9	11-8	X	X		WING 2 - HORIZ. - F.F.
A820	9	13-3	X	X		WING 2 - HORIZ. - B.F.
A421	4	8-10		X		WING 2 - HORIZ. - TOP
A422	2	7-6		X		WING 2 - HORIZ. - TOP
A423	2	8-11	X	X		WING 2 - HORIZ. - TOP
A424	4	8-8	X	X		WING 2 HORIZ. - TOP

NOTES: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

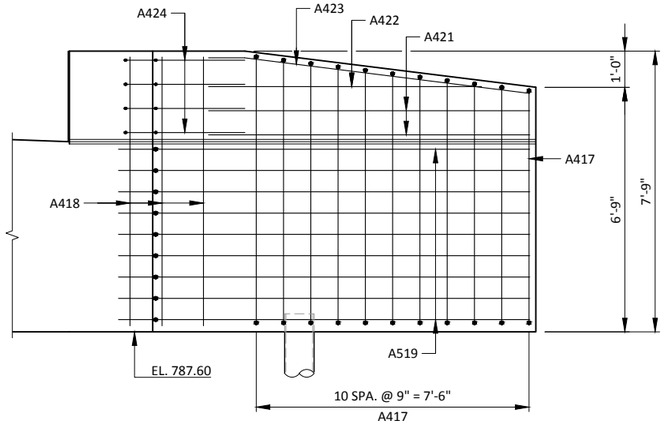
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

✳ LENGTH SHOWN IS AN AVERAGE LENGTH ONLY. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

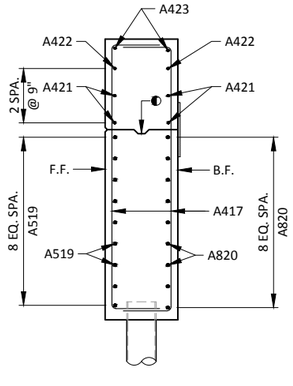
BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
A407	2 SERIES OF 11	10-3 TO 8-1
A417	2 SERIES OF 11	9-8 TO 8-10

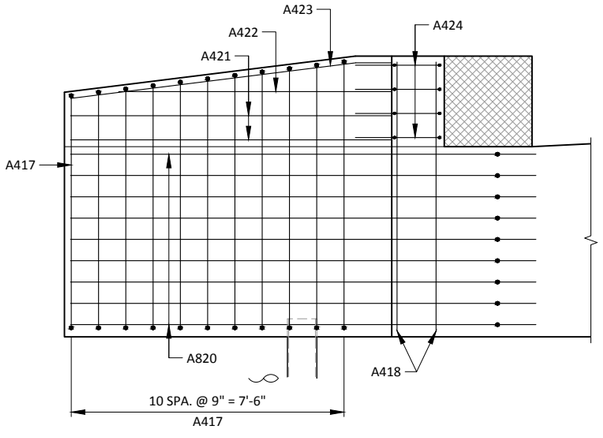
BUNDLE AND TAG EACH SERIES SEPARATELY.



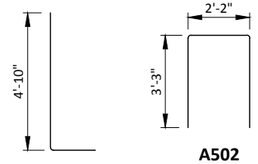
F.F. ELE□ATION - WING 2



SECTION B-B

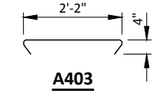


B.F. ELE□ATION - WING 2



A501

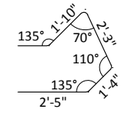
A502



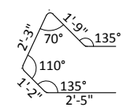
A403

A407, A417

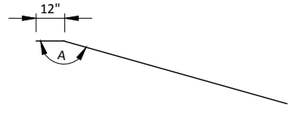
A805, A510, A811, A519, A820



A416



A424



A415 & A423

MARK	'A'
A415	164°17'
A423	172°52'

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-27-164

DRAWN BY: RBH | PLANS CK'D.: PTB

WEST ABUTMENT DETAILS

SHEET 5 OF 9

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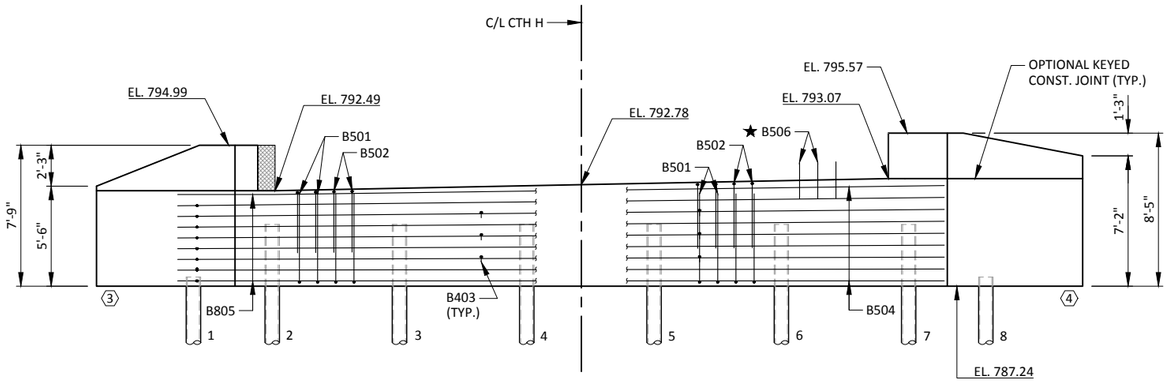
STATE PROJECT NUMBER

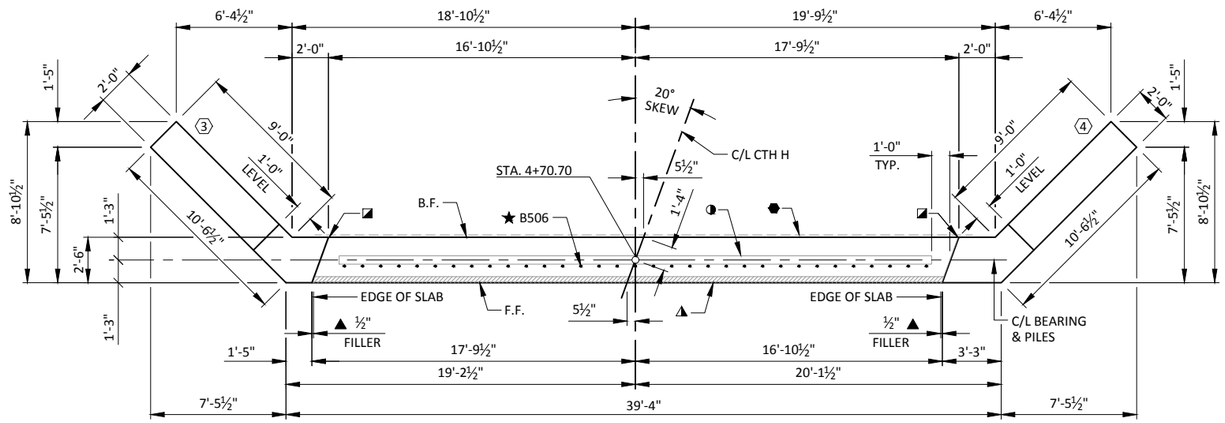
7322-00-70



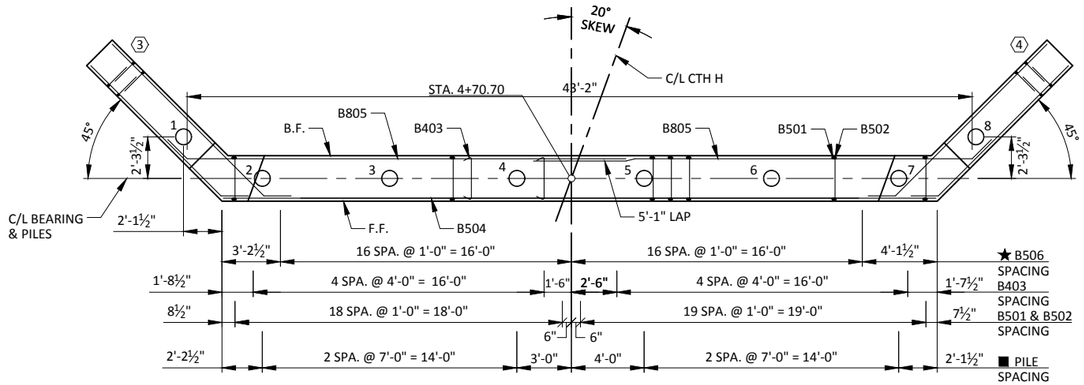
BACK FACE BAR STEEL REINF. **FRONT FACE BAR STEEL REINF.**

ELEVATION

(EAST ABUTMENT LOOKING EAST)



PLAN



LAYOUT

NOTES

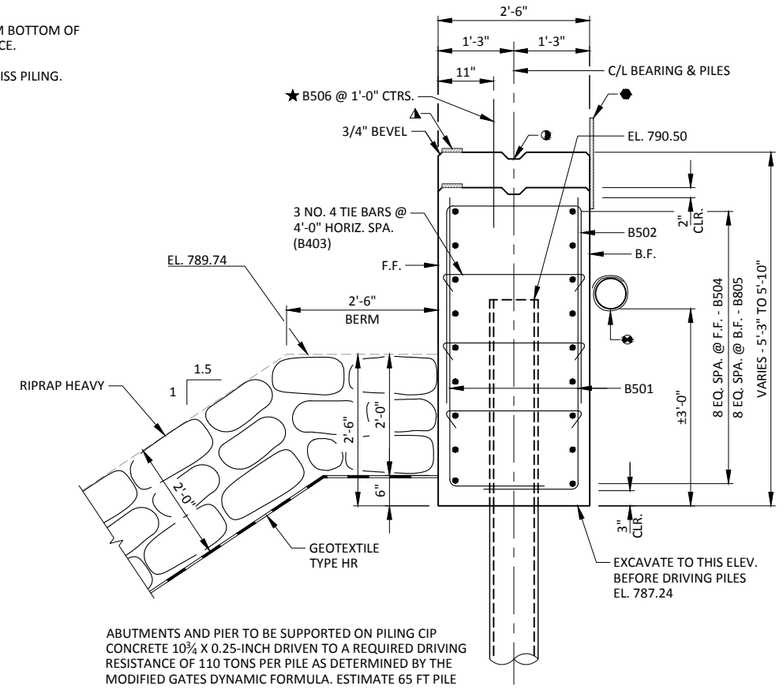
SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE SHEET 7 FOR BILL OF BARS.

DO NOT PLACE FILL HIGHER THAN 3 FEET FROM BOTTOM OF ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.

ADJUST REINFORCEMENT AS NECESSARY TO MISS PILING.

F.F. - FRONT FACE

B.F. - BACK FACE



ABUTMENTS AND PIER TO BE SUPPORTED ON PILING CIP CONCRETE 10¾ X 0.25-INCH DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 110 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATE 65 FT PILE LENGTHS AT EAST ABUTMENT.

TYPICAL SECTION THROUGH ABUTMENT BODY

LEGEND

- ◐ KEYED CONSTRUCTION JOINT FORMED BY SURFACED & BEVELED 2x6.
- ◪ VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING EXTEND FROM 9" BELOW BRIDGE SEAT TO 1" BELOW TOP OF WINGS.
- ⬣ 18" RUBBERIZED MEMBRANE WATERPROOFING. (HORIZONTAL)
- ▲ ½" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINUOS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE)
- ◭ ¾" x 4" PREFORMED FILLER, EXTEND FULL LENGTH OF ABUTMENTS BETWEEN EDGES OF SLAB.
- ★ B506 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE IT HAS TAKEN ITS INITIAL SET. EMBED BAR 1'-0".
- ■ PILE SPACING MEASURED AT BASE OF ABUTMENT BODY.
- PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPED 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SCREEN AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SHEET 2. RODENT SCREEN TO BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH."

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-27-164

DRAWN BY RBH | PLANS CK'D. PTB

EAST ABUTMENT

SHEET 6 OF 9

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8

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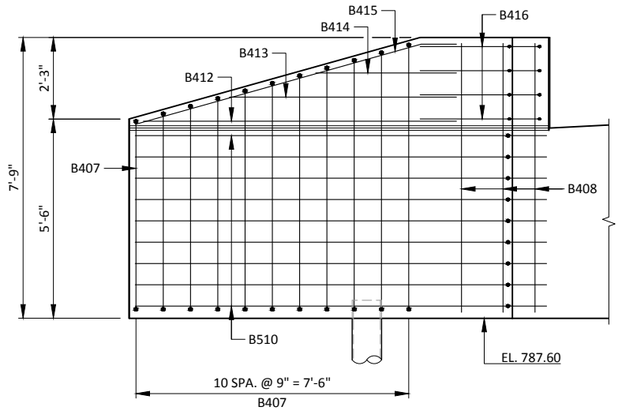
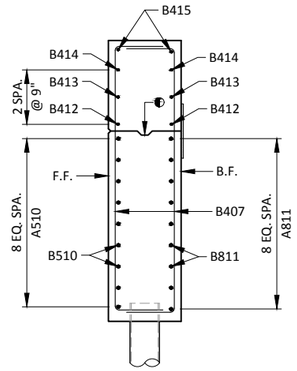
STATE PROJECT NUMBER

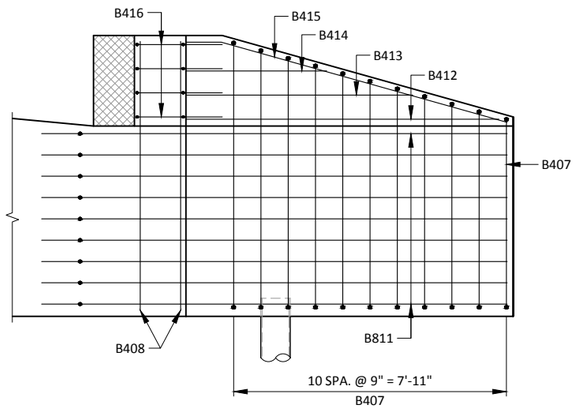
7322-00-70



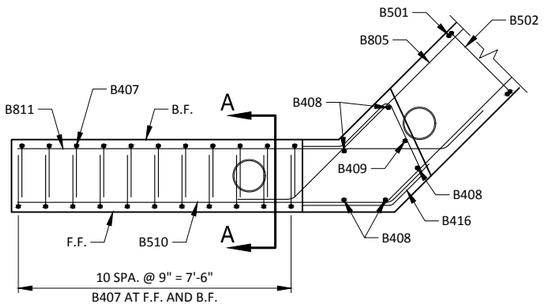
F.F. ELE□ATION - WING 3



SECTION A-A



B.F. ELE□ATION - WING 3



PLAN □IEW - WING 3

LEGEND

◐ OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY SURFACED & BEVELED 2x6. ¾" V-GROOVE AT FRONT FACE OF WING WALL AND HORIZONTAL 18" RUBBERIZED MEMBRANE WATERPROOFING AT BACK FACE IF CONSTRUCTION JOINT IS USED. COST IS INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY BRIDGES".

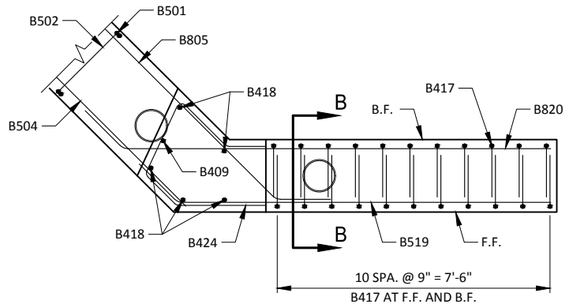
NOTES

SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE THIS SHEET FOR BILL OF BARS.

ADJUST REINFORCEMENT AS NECESSARY TO MISS PILING.

F.F. - FRONT FACE

B.F. - BACK FACE



PLAN □IEW - WING 4

BILL OF BARS
EAST ABUTMENT

1□3□0 LB □COATED□
2□□20 LB □UNCOATED□

BAR MARK	NO. REQ'D.	LENGTH	BENT	COAT	BAR SERIES	LOCATION
B501	78	6-4	X			BODY - VERT. - F.F & B.F.
B502	39	8-5	X			BODY - VERT. - TOP
B403	30	2-8	X			TIE BARS
B504	9	39-2				BODY - HORIZ. - F.F.
B805	18	25-9	X			BODY - HORIZ. - B.F.
B506	33	2-0		X		BODY - VERT. - DOWELS
B407	22	9-2	X	X	⚹	WING 3 - VERT. - F.F. & B.F.
B408	5	7-4		X		WING 3 - VERT.
B409	2	3-4		X		WING 3 & 4 - VERT. - TOP
B510	9	11-8	X	X		WING 3 - HORIZ. - F.F.
B811	9	13-3	X	X		WING 3 - HORIZ. - B.F.
B412	2	8-10		X		WING 3 - HORIZ. - F.F. & B.F. - TOP
B413	2	3-11		X		WING 3 - HORIZ. - F.F. & B.F. - TOP
B414	2	9-3		X		WING 3 - HORIZ. - F.F. & B.F. - TOP
B415	2	6-3		X		WING 3 - HORIZ. - F.F. & B.F. - TOP
B416	2	8-8	X	X		WING 3 - HORIZ. - TOP
B417	22	9-11	X	X	⚹	WING 4 - VERT. - F.F. & B.F.
B418	5	8-0		X		WING 4 - VERT.
B519	9	11-8		X		WING 4 - HORIZ. - F.F.
B820	9	13-3	X	X		WING 4 - HORIZ. - B.F.
B421	4	8-10		X		WING 4 - HORIZ. - TOP
B422	2	6-3		X		WING 4 - HORIZ. - TOP
B423	2	8-11	X	X		WING 4 HORIZ. - TOP
B424	4	8-8	X	X		WING 4 HORIZ. - TOP

NOTES: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

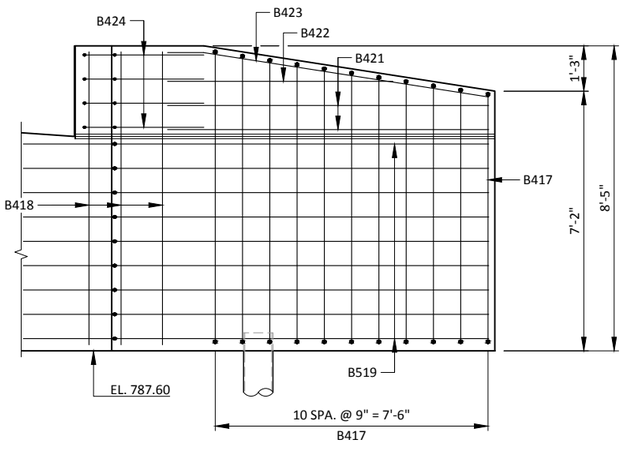
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

⚹ LENGTH SHOWN IS AN AVERAGE LENGTH ONLY. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

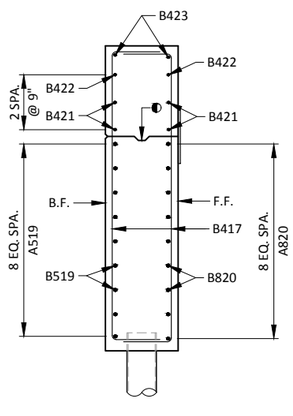
BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
B407	2 SERIES OF 11	10-3 TO 8-1
B417	2 SERIES OF 11	10-4 TO 9-6

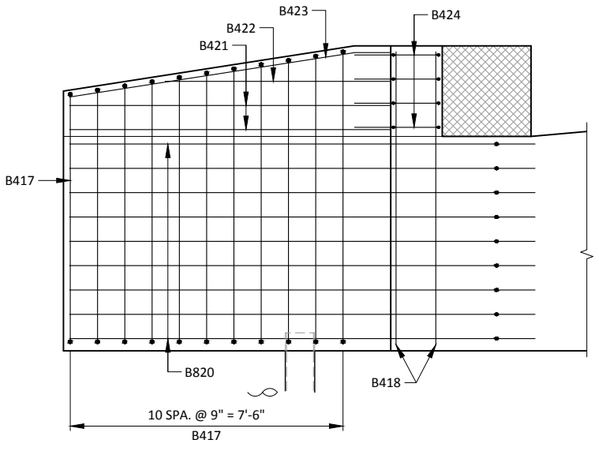
BUNDLE AND TAG EACH SERIES SEPARATELY.



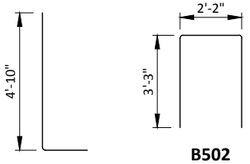
F.F. ELE□ATION - WING 4



SECTION B-B

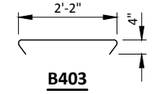


B.F. ELE□ATION - WING 4



B501

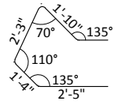
B502



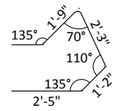
B403

B407, B417

B805, B510, B811, B519, B820



B416



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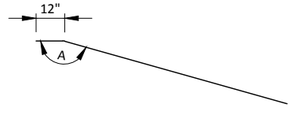

MARK	'A'
A415	164°17'
A423	171°07'

B415 & B423

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-27-164

DRAWN BY RBH | PLANS CK'D. PTB

EAST ABUTMENT DETAILS

SHEET 7 OF 9

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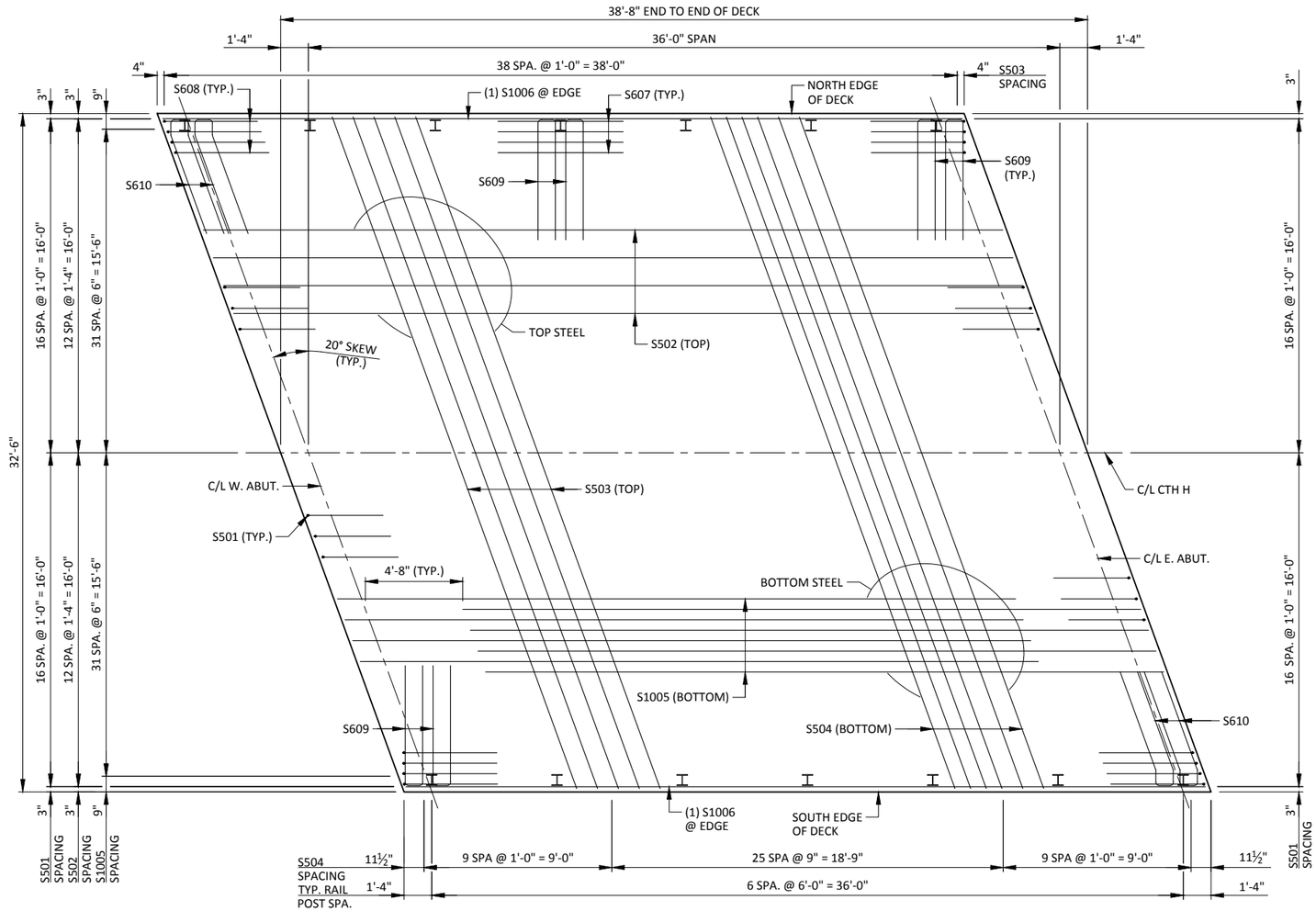
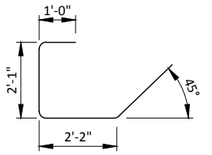
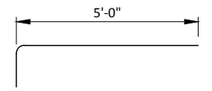


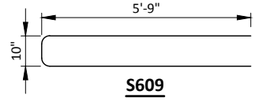
PLAN



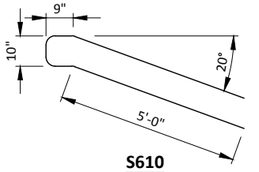
S501



S608



S609



S610

LEGEND

- ⬣ 18" RUBBERIZED MEMBRANE WATERPROOFING. (HORIZONTAL)
- ▲ ¾" x 4" PREFORMED FILLER, EXTEND FULL LENGTH OF ABUTMENTS BETWEEN EDGES OF SLAB.
- ✳ DIMENSION IS NORMAL TO THE C/L OF SUBSTRUCTURE UNITS.
- ✳✳ SEE SHEET 4 FOR PLACEMENT OF A506 BARS, SEE SHEET 6 FOR PLACEMENT OF B506 BARS.

BILL OF BARS SUPERSTRUCTURE

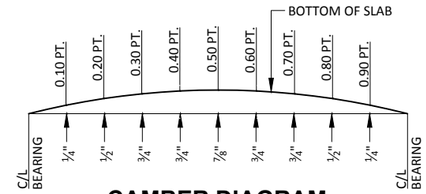
14□830 LB □COATED□

BAR MARK	NO. REQ'D.	LENGTH	BENT	COAT	LOCATION
S501	66	7-6	X	X	END OF DECK
S502	25	38-3		X	SLAB - TOP - LONGIT.
S503	45	34-2		X	SLAB - TOP - TRANS.
S504	44	34-2		X	SLAB - BOTTOM - TRANS.
S1005	63	32-6		X	SLAB - BOTTOM - LONGIT.
S1006	2	38-3		X	SLAB - BOTTOM - LONGIT. - EDGES
S607	40	6-0		X	RAIL POSTS - INTERIOR
S608	16	6-0	X	X	RAIL POSTS - ENDS
S609	24	12-0	X	X	RAIL POSTS - INTERIOR
S610	4	12-0	X	X	RAIL POSTS - CORNERS

NOTES: THE FIRST DIGIT OF A THREE DIGIT BAR MARK AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

SOME BARS HAVE BEEN OMITTED FOR CLARITY.



CAMBER DIAGRAM

CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPAN AS SHOWN TO PROVIDE FOR THEORETICAL DEADLOAD DEFLECTION AND FUTURE PLASTIC FLOW. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB OR CENTER LINE FOLLOW THIS PROCEDURE:

TOP OF SLAB ELEVATION AT FINAL GRADE
-SLAB THICKNESS
+CAMBER
+FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (COMPUTED BY CONTRACTOR)
=TOP OF SLAB FALSEWORK ELEVATION.

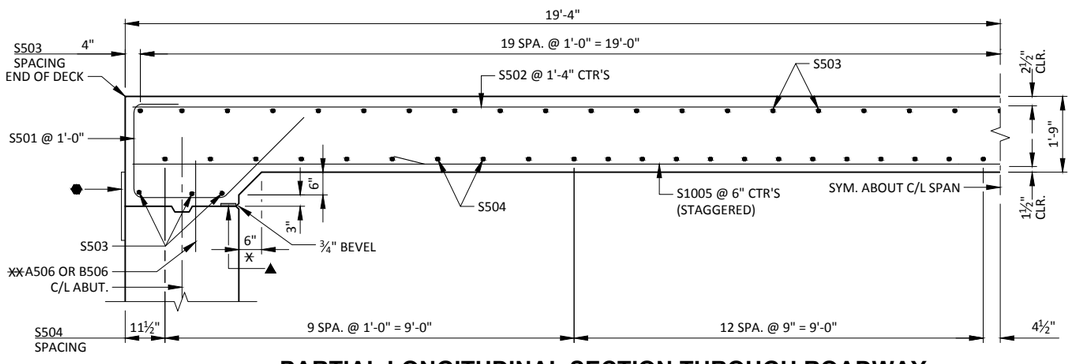
SUR□EY TOP OF DECK ELE□ATIONS

	W. ABUT.	0.50 PT.	E. ABUT.
NOTH EDGE OF DECK			
CENTER LINE			
SOUTH EDGE OF DECK			

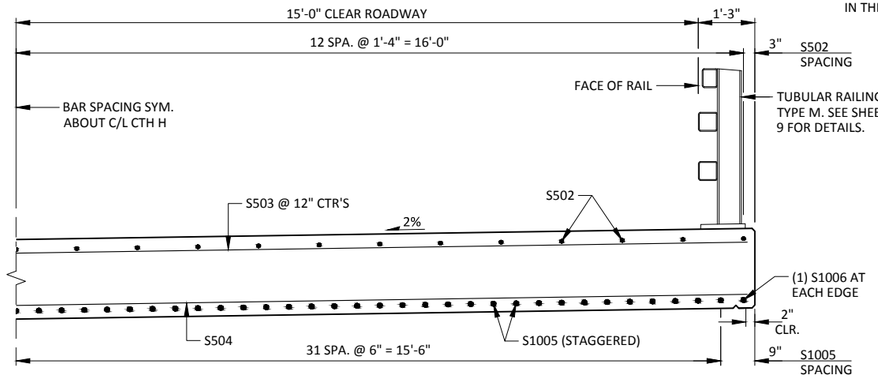
PRIOR TO RELEASING SLAB FASLEWORK, TAKE TOP OF DECK ELEVATIONS AT THE C/L OF THE ABUTMENTS AND AT 0.50 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG THE EDGE OF DECK AND CENTER LINE. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

TOP OF DECK ELE□ATIONS

	C/L W. ABUT.	0.10 PNT.	0.20 PNT.	0.30 PNT.	0.40 PNT.	0.50 PNT.	0.60 PNT.	0.70 PNT.	0.80 PNT.	0.90 PNT.	C/L E. ABUT.
N. EDGE	795.35	795.31	795.26	795.22	795.19	795.15	795.12	795.08	795.05	795.02	794.99
C/L	795.61	795.57	795.53	795.49	795.46	795.42	795.39	795.36	795.33	795.30	795.28
S. EDGE	795.87	795.84	795.80	795.77	795.73	795.70	795.67	795.64	795.62	795.59	795.57



PARTIAL LONGITUDINAL SECTION THROUGH ROADWAY



PARTIAL CROSS SECTION THROUGH ROADWAY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-27-164

DRAWN BY RBH | PLANS CK'D. PTB

SUPERSTRUCTURE

SHEET 8 OF 9

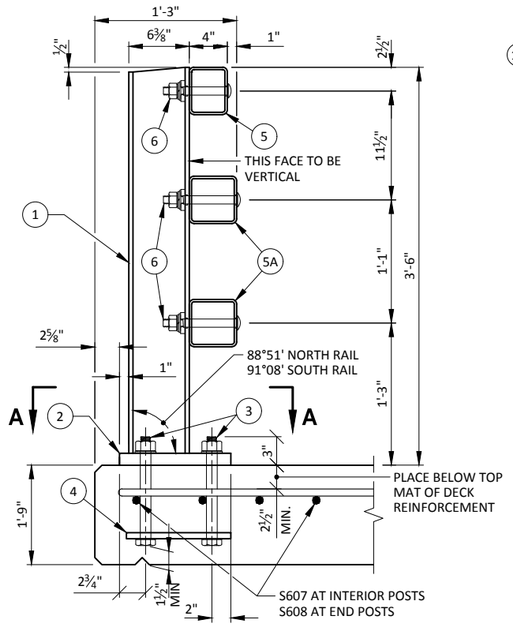
51

STATE PROJECT NUMBER

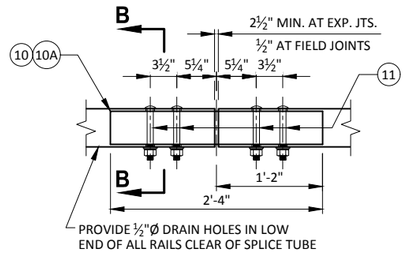
7322-00-70

8

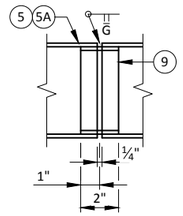
8



SECTION THROUGH RAILING ON DECK

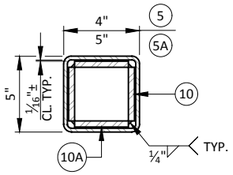


FIELD ERECTION JOINT DETAIL

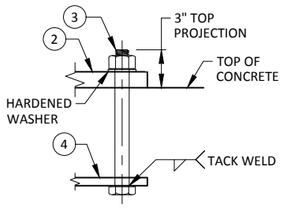


SHOP RAIL SPLICE DETAIL

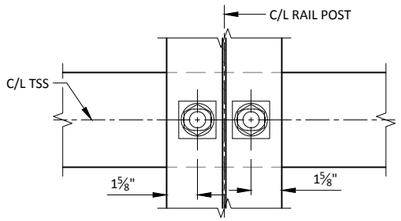
(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



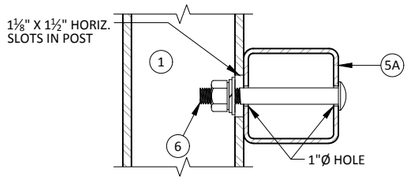
SECTION B-B



ANCHOR BOLTS



SECTION THROUGH POST WEB

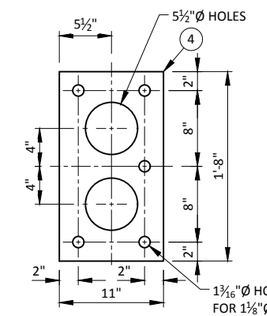


SECTION THROUGH RAIL

NOTE: CONNECTIONS AT LOWER RAILS SHOWN. CONNECTIONS AT TOP RAIL SIMILAR.

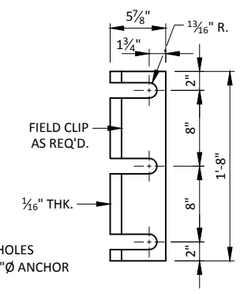
TYPICAL RAIL TO POST CONNECTIONS

SECTION A-A

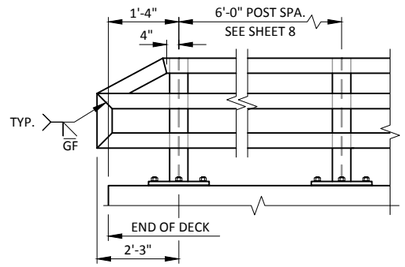


ANCHOR PLATE

AT RAIL TO DECK CONNECTION



POST SHIM DETAIL



PART ELEVATION OF RAILING

LEGEND

1. W6x25 WITH 11/8" x 11/2" HORIZ. SLOTS ON EACH SIDE OF POST FOR BOLT NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.
2. PLATE 11/4"x113/4"x1'-8" WITH 15/16"x15/8" SLOTTED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN. SLOTS PARALLEL TO SHORT SIDE OF PLATE.
3. ASTM A449 - 11/8" DIA. ANCHOR BOLTS WITH NUT AND HARDENED WASHER (ALL GALVANIZED). 5 REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 2. CHAMFER TOP OF BOLTS BEFORE THREADING. AT POSTS ON CONCRETE SLAB SUPERSTRUCTURES WHERE THE SLAB THICKNESS IS > 16" USE 1'-3" LONG. USE 103/4" LONG AT ALL OTHER LOCATIONS.
4. 5/8"x11"x1'-8" ANCHOR PLATE (GALVANIZED) WITH 13/16" DIA. HOLES FOR ANCHOR BOLTS NO. 3
5. TSS 5x4x1/4 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
5A. TSS 5x5x1/4 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
6. 7/8" DIA. A325 SLOTTED ROUND HEAD BOLT WITH NUT, 3/16"x15/8"x15/8" WASHER, AND LOCK WASHER (2 REQ'D. AT EACH RAIL TO POST LOCATION).

GENERAL NOTES

1. BID ITEM SHALL BE "RAILING TUBULAR TYPE M B-27-164" WHICH INCLUDES ALL ITEMS SHOWN.
2. RAIL POST AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50. HOLLOW RAILING STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B OR C WITH A CERTIFIED FY=50 KSI. ANCHOR PLATES AND SPLICE TUBE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 36.
3. THE NUT SECURING THE POST BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/8 TURN.
4. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF THREE (3) POSTS WITHOUT SPLICES WHERE POSSIBLE.
5. ENDS OF TUBE SECTIONS SHALL BE SAWED. GRIND SMOOTH EXPOSED EDGES. ALL CUT ENDS SHALL BE TRUE AND SMOOTH.
6. WELD IS THE SAME ON BOTH FLANGES. FLANGE WELD DOES NOT REQUIRE MAGNETIC PARTICLE TESTING.
7. FILL BOLT SLOT OPENINGS IN POST SHIMS AND PLATE NO. 2 AND CAULK AROUND PERIMETER OF PLATE NO. 2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.
8. POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.
9. ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS & STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY S.S.P.C. SPECIFICATIONS.
10. THIS RAILING MEETS NCHRP REPORT 350 EVALUATION CRITERIA FOR TEST LEVEL 4 (TL-4).

STATE PROJECT NUMBER

7322-00-70

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-27-164

DRAWN BY RBH | PLANS CK'D. PTB

TUBULAR RAILING TYPE M

SHEET 9 OF 9

52

FILE NAME : R:\PROJECTS\K49030 CTH H BRIDGE, JACKSON CO\STRUCTURE\CAD FILES\FINALS\08 TUBULAR RAILING TYPE M.DWG
PLOT DATE : 6/2/2017 9:32:27 AM
PLOT BY : BOLAND, PATRICK
PLOT SCALE : 1 IN:1 FT
LAYOUT : LAYOUT1

CTH H EARTHWORK

STATION	CUT (SF)	FILL (SF)	DISTANCE (FT)	CUT (CY)	FILL (CY)	FILL EXP. 1.25 (CY)	MASS ORDINATE (CY)
3+00	25.68	9.47					
			50	33.3	26.9	33.6	-0.3
3+50	10.27	19.59					
			50	16.0	104.1	130.1	-114.4
4+00	7.03	92.80					
			33	4.3	152.4	190.5	-300.6
4+33	0.01	156.58					
STRUCTURE B-27-0164							
4+72	3.6	99.86					
			28	10.5	66.0	82.5	-72.0
5+00	16.66	27.41					
			50	43.3	37.0	46.3	-75.0
5+50	30.08	12.59					
			50	51.5	21.9	27.3	-50.9
6+00	25.53	11.04					
			TOTALS =	158.9	408.3	510.3	-351.5

STREAM EARTHWORK

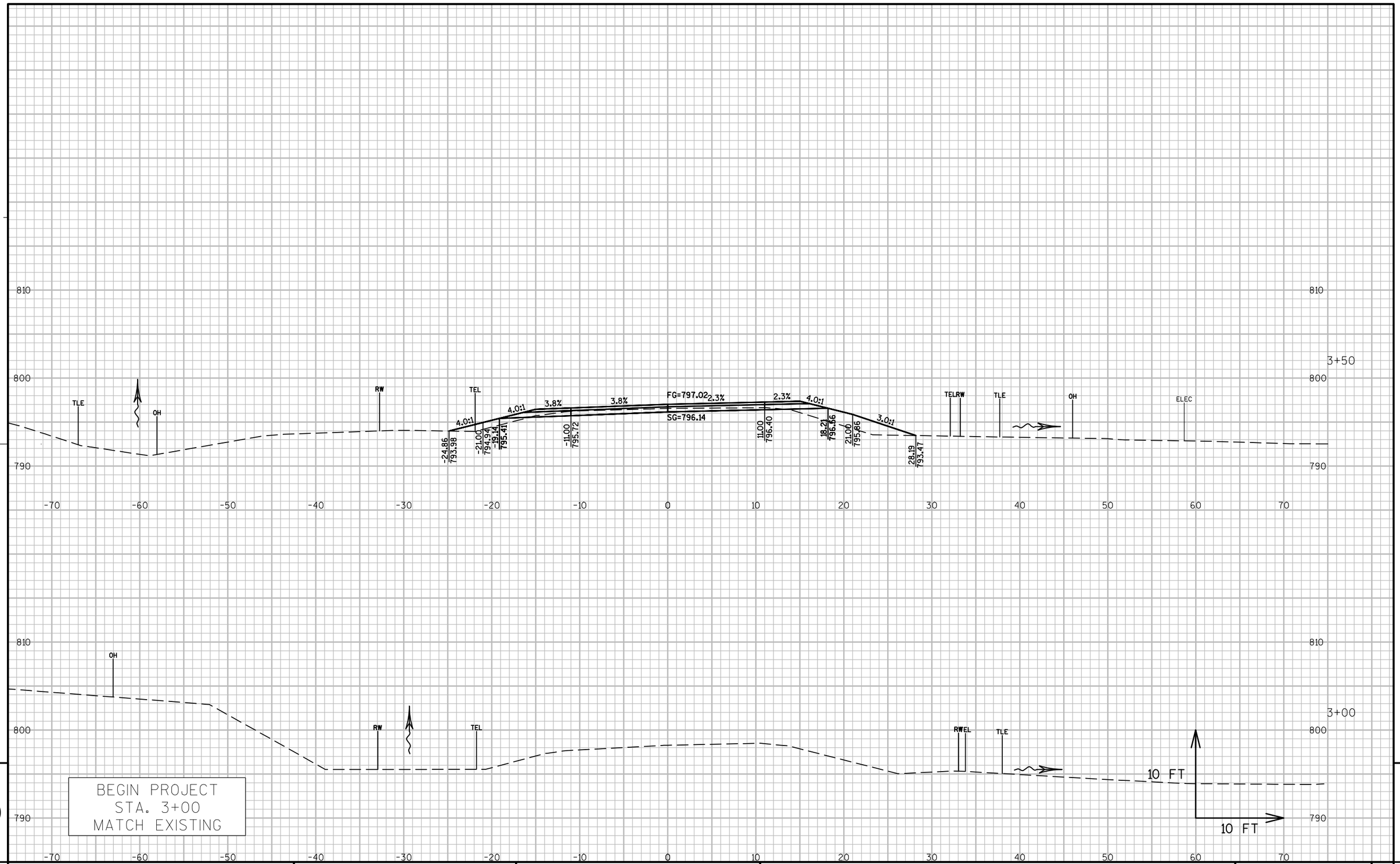
STATION	CUT (SF)	FILL (SF)	DISTANCE (FT)	CUT (CY)	FILL (CY)	FILL EXP. 1.25 (CY)	MASS ORDINATE (CY)
100+00	41.23	0					
			25	74.7	24.3	30.4	44.3
100+25	120.09	52.59					
			25	121.4	47.5	59.4	106.3
100+50	142.24	49.99					
			25	96.2	43.3	54.1	148.4
100+75	65.53	43.57					
			25	47.9	21.2	26.4	169.8
101+00	37.95	2.12					
			25	31.3	1.2	1.5	199.6
101+25	29.65	0.49					
			10	8.6	0.1	0.1	208.1
101+35	16.73	0.09					
			TOTALS =	380.1	137.6	172.0	208.1

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
3) EBS Excavation to be backfilled with Select Borrow. EBS is not used to balance Earthwork.
4) Salvaged/Unusable Pavement Material
5) Available Material = Cut - Salvaged/Unusable Pavement Material
6) Marsh Excavation - to be backfilled with Select Borrow Material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well. Item number 205.0500
7) Rock Excavation item number 205.0200
8) Reduced Marsh in Fill - Excavated Marsh material is usuable in Fills outside the 1:1 slope. Marsh in Fill Reduction factor = 0.6
9) Reduced EBS in Fill - Excavated EBS material is usuable in Fills outside the 1:1 slope. EBS in Fill Reduction factor = 0.8
10) Expanded Marsh Backfill - This is to be filled with Select Borrow material. Marsh Backfill Factor = 1.5. Item number 208.11
11) Expanded EBS Backfill - This is to be filled with Select Borrow material. EBS Backfill Factor = 1.3. Item number 208.11
12) Expanded Rock - Factor = 1.1.
13) Expanded Fill. Factor = 1.25
Depending on selections: **Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor**
Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced EBS) * Fill Factor
Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh) * Fill Factor
Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor) * Fill Factor
14) The Mass Ordinate + or - Qty calculated for the Stage. Plus quantity indicates an excess of material within the Stage. Minus indicates a shortage of material within the Stage.
15) Waste material from Douglas Creek realignment excavation shall not be used to balance earthwork for CTH H

9

9

PROJECT NO: 7220-00-70	HWY: CTH H	COUNTY: JACKSON	EARTHWORK	SHEET 53	E

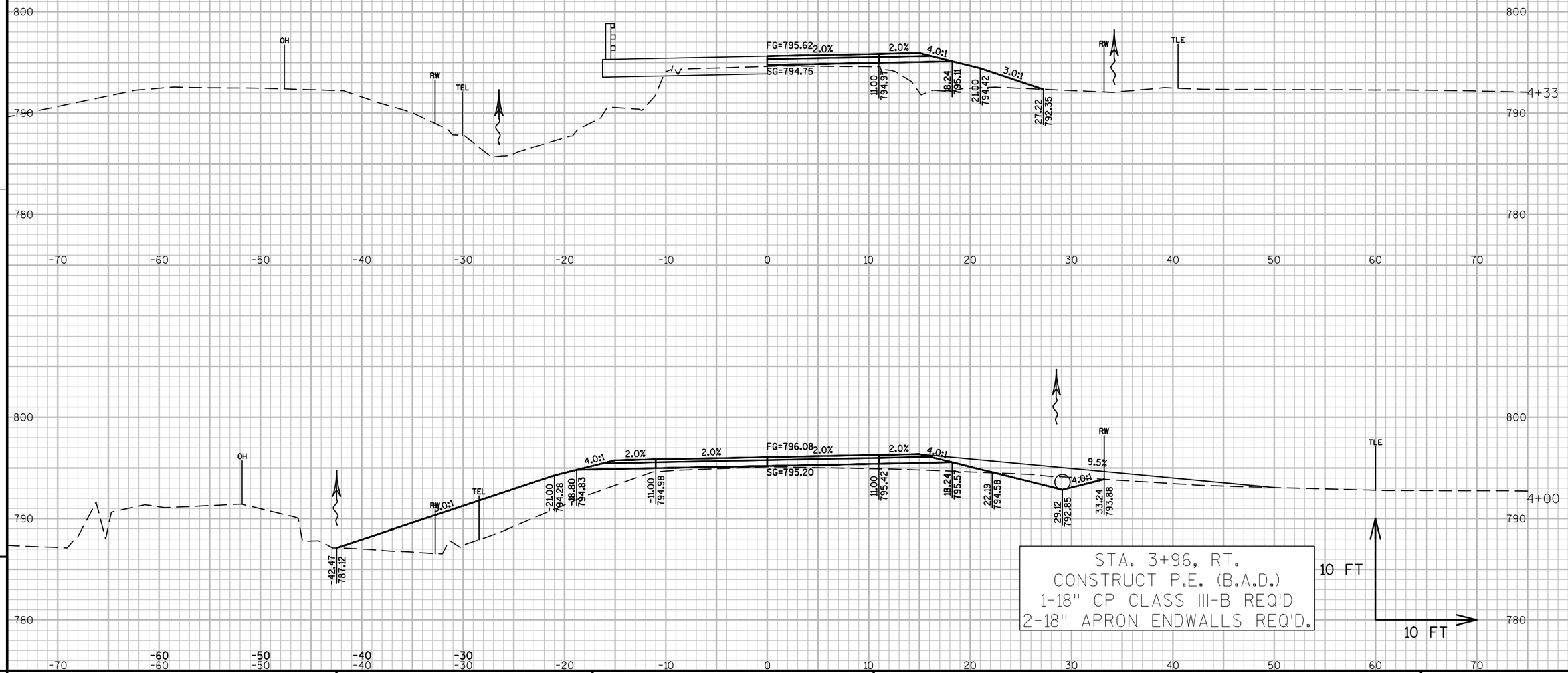


PROJECT NO: 7220-00-70	HWY: CTH H	COUNTY: JACKSON	CROSS SECTIONS: CTH H	SHEET 54	E

FILE NAME : R:\PROJECTS\K49030 CTH H BRIDGE, JACKSON CO\DESIGN\CORRIDORS\CRDR_H_DOUGLAS CR BR.DWG PLOT DATE : 7/12/2017 8:21 AM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

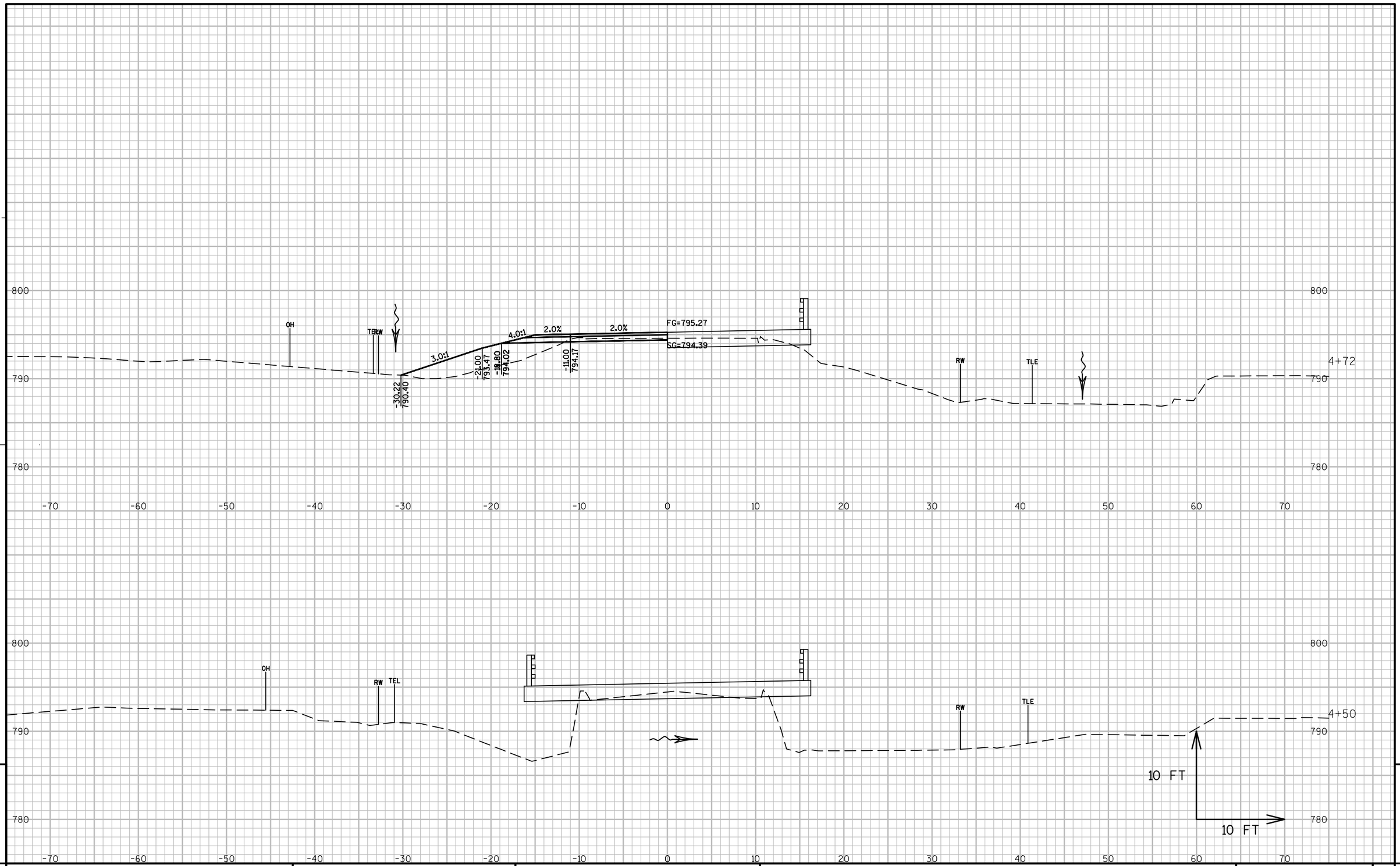
STRUCTURE B-27-0164
REQ'D.



9

9

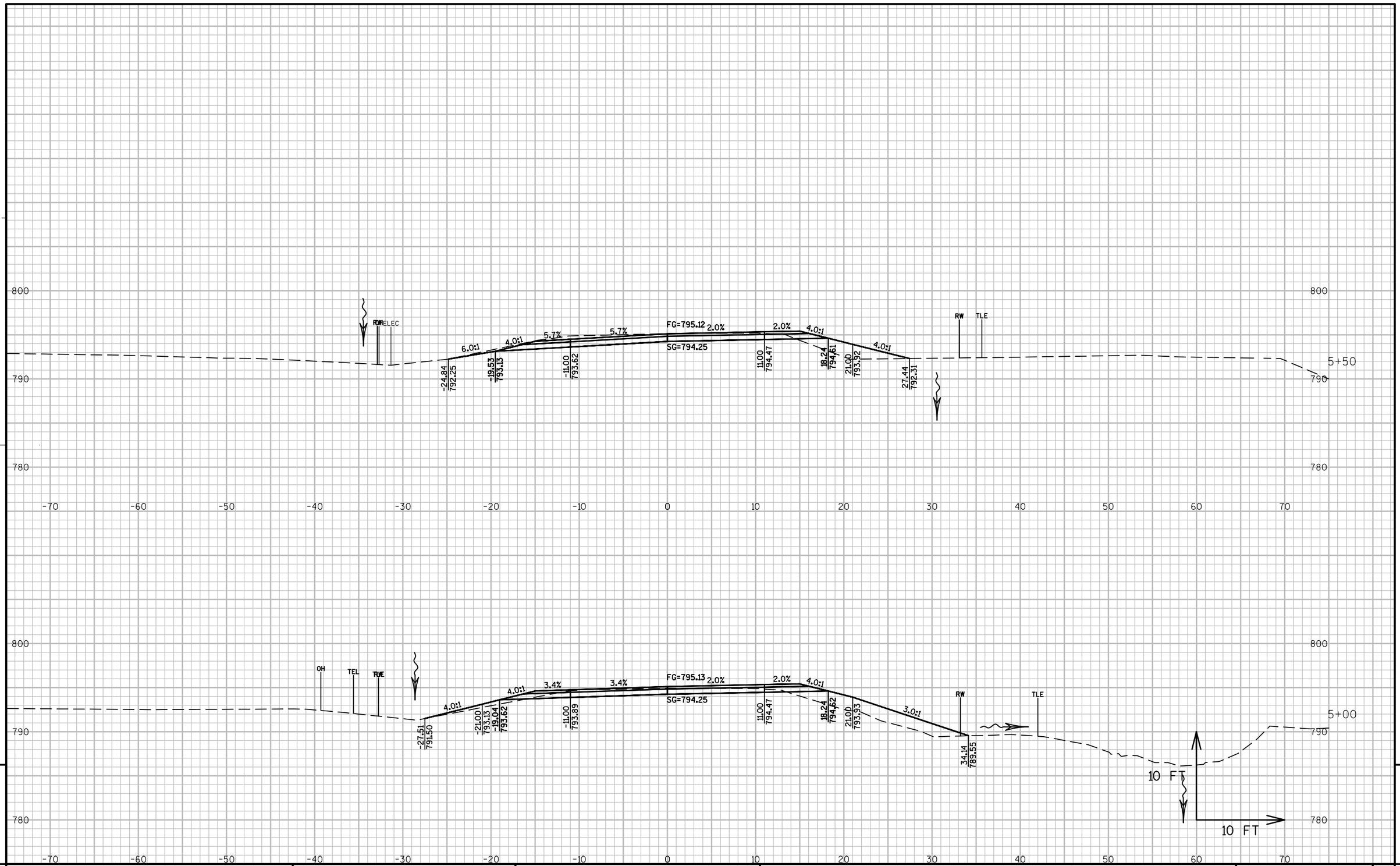
PROJECT NO: 7220-00-70	HWY: CTH H	COUNTY: JACKSON	CROSS SECTIONS: CTH H	SHEET 55	E



PROJECT NO: 7220-00-70	HWY: CTH H	COUNTY: JACKSON	CROSS SECTIONS: CTH H	SHEET 56	E

FILE NAME : R:\PROJECTS\K49030 CTH H BRIDGE, JACKSON CO\DESIGN\CORRIDORS\CRDR_H_DOUGLAS CR BR.DWG PLOT DATE : 7/12/2017 8:23 AM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 7220-00-70	HWY: CTH H	COUNTY: JACKSON	CROSS SECTIONS: CTH H	SHEET 57	E

FILE NAME : R:\PROJECTS\K49030 CTH H BRIDGE, JACKSON CO\DESIGN\CORRIDORS\CRDR_H_DOUGLAS CR BR.DWG PLOT DATE : 7/12/2017 8:23 AM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

END PROJECT
STA. 6+00
MATCH EXISTING

ELEC
RW
OH
RWE

800
790
780

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

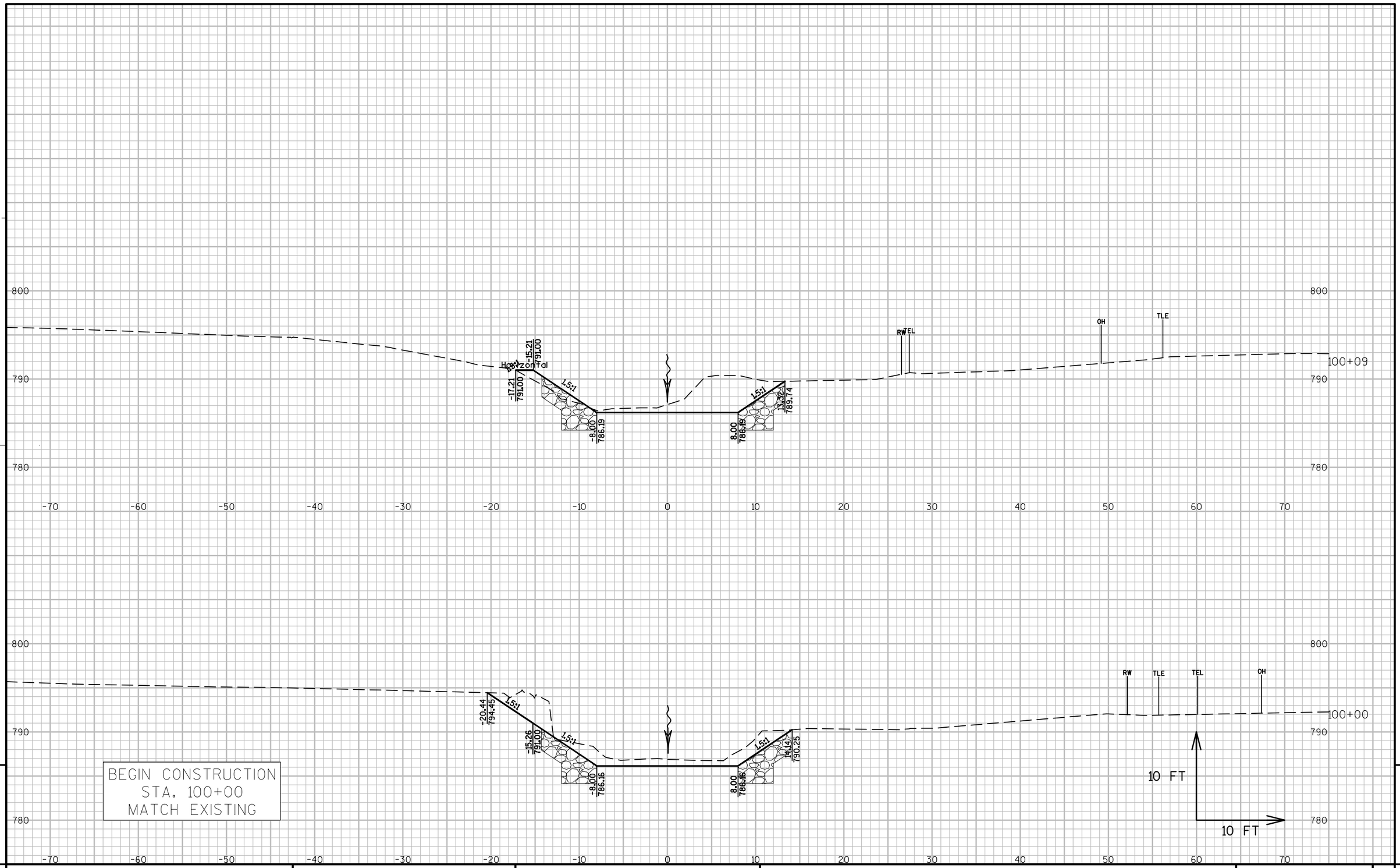
6+00

10 FT
10 FT

9

PROJECT NO: 7220-00-70	HWY: CTH H	COUNTY: JACKSON	CROSS SECTIONS: CTH H	SHEET 58	E

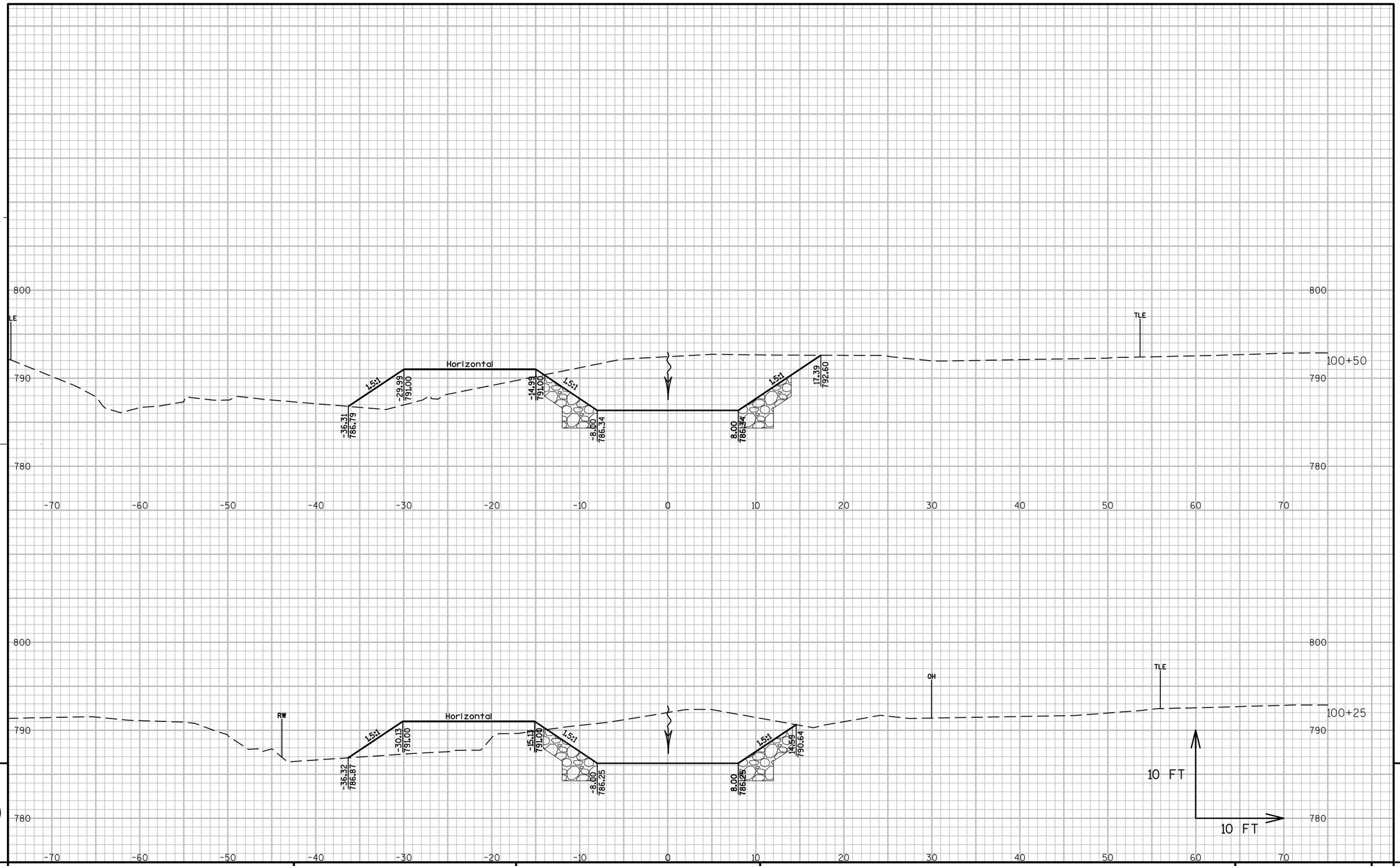
FILE NAME : R:\PROJECTS\K49030 CTH H BRIDGE, JACKSON CO\DESIGN\CORRIDORS\CRDR_H_DOUGLAS CR BR.DWG PLOT DATE : 7/12/2017 8:23 AM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:10 FT



PROJECT NO: 7220-00-70	HWY: CTH H	COUNTY: JACKSON	CROSS SECTIONS: DOUGLAS CREEK	SHEET 59	E

FILE NAME : R:\PROJECTS\K49030 CTH H BRIDGE, JACKSON CO\DESIGN\CORRIDORS\CRDR_H_DOUGLAS CR BR.DWG PLOT DATE : 7/12/2017 8:24 AM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:10 FT

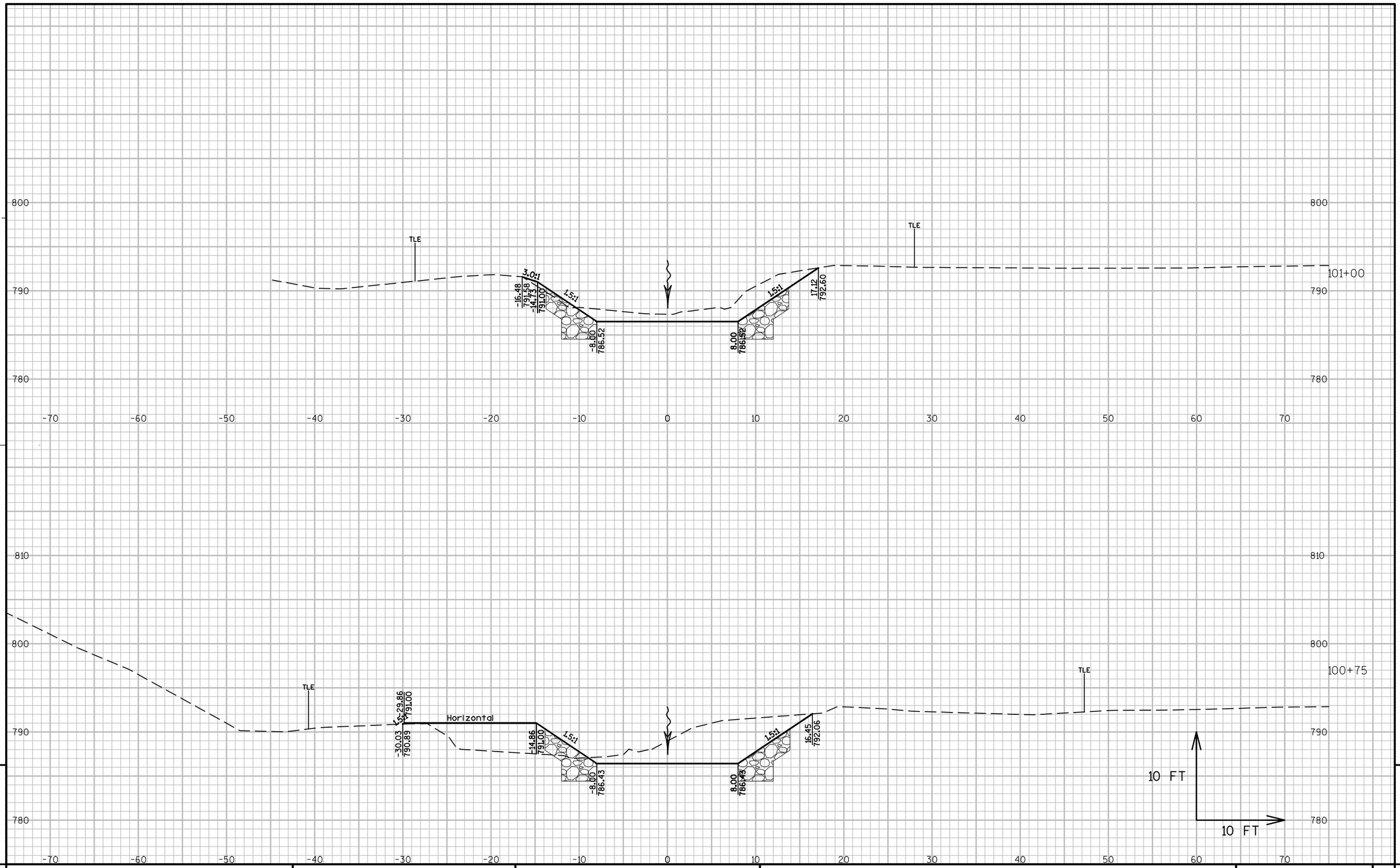
WISDOT/CADDS SHEET 49



PROJECT NO: 7220-00-70	HWY: CTH H	COUNTY: JACKSON	CROSS SECTIONS: DOUGLAS CREEK	SHEET 60	E

FILE NAME : R:\PROJECTS\K49030 CTH H BRIDGE, JACKSON CO\DESIGN\CORRIDORS\CRDR_H_DOUGLAS CR BR.DWG PLOT DATE : 7/12/2017 8:26 AM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

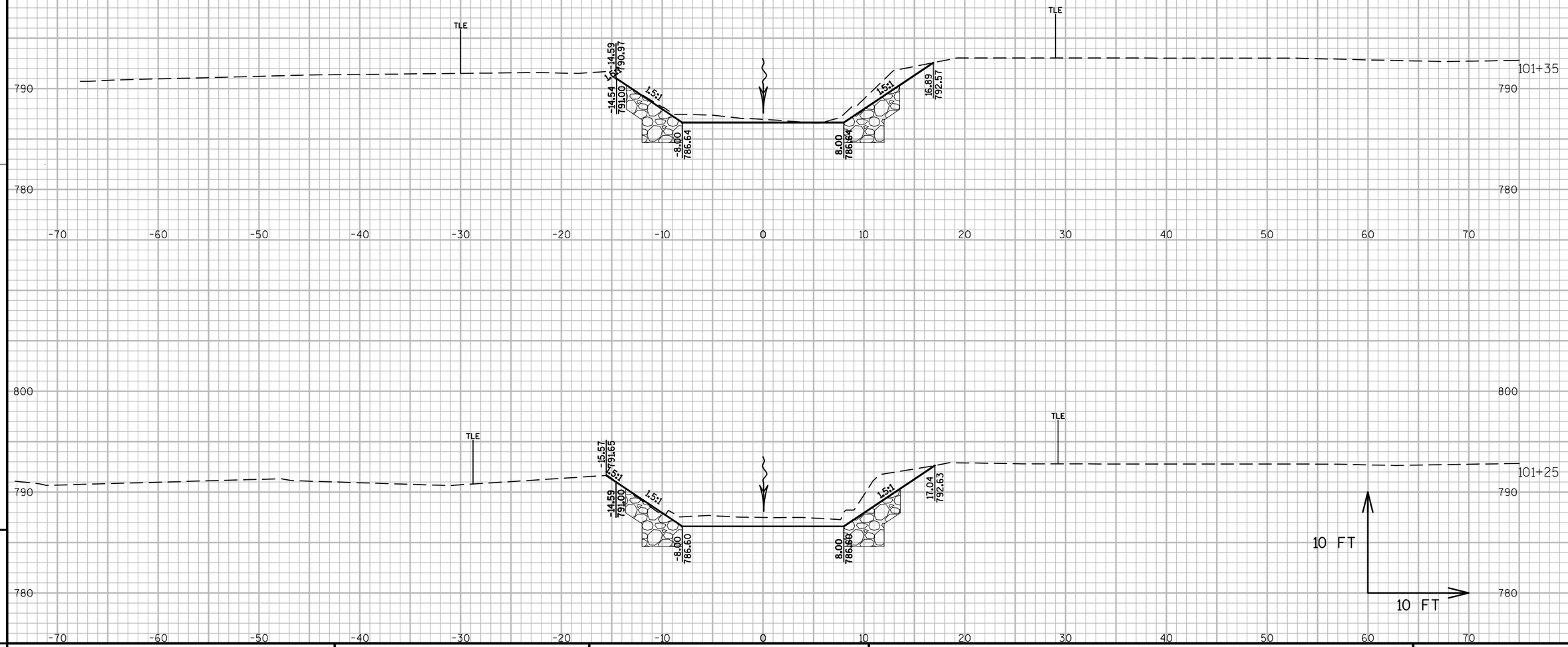


PROJECT NO: 7220-00-70	HWY: CTH H	COUNTY: JACKSON	CROSS SECTIONS: DOUGLAS CREEK	SHEET 61	E

FILE NAME : R:\PROJECTS\K49030 CTH H BRIDGE, JACKSON CO\DESIGN\CORRIDORS\CRDR_H_DOUGLAS CR BR.DWG PLOT DATE : 7/12/2017 8:26 AM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

END CONSTRUCTION
STA. 101+35
MATCH EXISTING



PROJECT NO: 7220-00-70	HWY: CTH H	COUNTY: JACKSON	CROSS SECTIONS: DOUGLAS CREEK	SHEET 62	E

Notes

Wisconsin Department of Transportation

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