SEL APRIL 2016

ORDER OF SHEETS

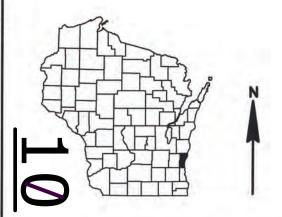
Section No.	1	Title
Section No.	2	Typical Sections and Detail
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat

Plan and Profile Section No. 5

Standard Detail Drawings Sign Plates

Computer Earthwork Data Cross Sections

TOTAL SHEETS = 170



DESIGN	DESIGNATI	ON	CTH V	CTH W SOUTH	CTH W NORTH
A.A.D.T.	2016	=	10,800	3,700	2,000
A.A.D.T.	2036	=	13,800	5,800	2,500
D.H.V.		=	1,614	679	292
D.D.		=	59/41	59/41	59/41
T.		=	5.6%	5.6%	5.6%
DESIGN	SPEED	=	70 MPH	55 MPH	55 MPH
ESALS		=	1,671,700	678,900	321,200
DESIGN	SPEED		70 MPH	55 MPH	1377 371 1

CONVENTIONAL SYMBOLS

PLAN

MARSH AREA

WOODED OR SHRUB AREA

PRPORATE LIMITS	1/1/1/1
ROPERTY LINE	
OT LINE MITED HIGHWAY EASEMENT	<u></u>
ROPOSED OR NEW R/W LINE	
OPE INTERCEPT	
FERENCE LINE	-
STING CULVERT	
ROPOSED CULVERT Box or Pipe)	
MBUSTIBLE FLUIDS	ZWY_

WATER UTILITY PEDESTAL

ORIGINAL GROUND MARSH OR ROCK PROFILE (To be noted as such) SPECIAL DITCH GRADE ELEVATION CULVERT (Profile View) UTILITIES ELECTRIC FIBER OPTIC GAS SANITARY SEWER STORM SEWER

POWER POLE

TELEPHONE POLE

PROFILE GRADE LINE

Y = 407,538.62X = 600,416.54

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

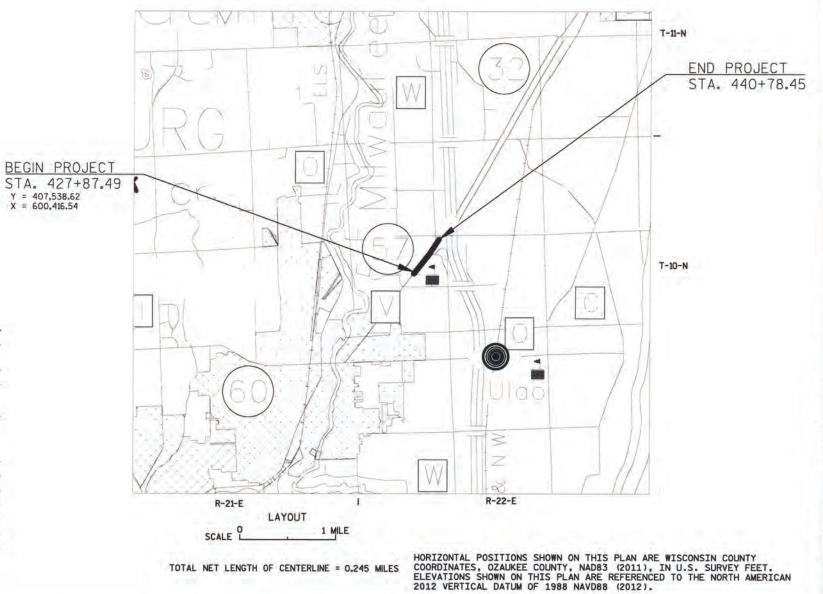
CTH

INTERSECTION OF CTH W

CTH V

OZAUKEE COUNTY

STATE PROJECT NUMBER 2695-10-70



FEDERAL PROJECT STATE PROJECT PROJECT CONTRACT WISC 2016093 2695-10-70

ACCEPTED FOR

OZAUKEE

ORIGINAL PLANS PREPARED BY

GROEF 125 S. 84TH STREET, SUITE 40



STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PREPARED BY

Management Consultant DAAR ENGINEERING, INC

2

GENERAL NOTES

NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS INDICATED FOR REMOVAL

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

ALL HOLES OR OPENINGS BELOW SUBGRADE RESULTING FROM THE ABANDONMENT OR REMOVAL OF EXISTING STRUCTURES OR FROM GRUBBING OF TREES OR STUMPS SHALL BE BACKFILLED WITH GRANULAR BACKFILL. BACKFILL GRANULAR MATERIAL IS INCIDENTAL TO THE REMOVAL ITEM.

ALL RADIUS DIMENSIONS FOR CURB & GUTTER ARE GIVEN TO THE FLANGE. ALL ELEVATIONS ALONG CURB & GUTTER ARE GIVEN TO THE FLANGE. OFFSETS NOTED ARE TO THE FLANGE OR EDGE OF LANE IF NO CURB, UNLESS

THE LOCATION OF KNOWN EXISTING UTILITIES IN THE VICINITY OF THE PROJECT ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITIES IN THE AREA THAT ARE NOT SHOWN.

HMA PAVEMENT. TYPE E-3. WHERE INDICATED ON THE PLANS. SHALL CONSIST OF LAYERS AS FOLLOWS, UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.

4 1/2" OF 25mm HMA PAVEMENT TYPE E-3 PERFORMANCE GRADE 58-28, AS THE LOWER LAYER

2 1/2" OF 12.5mm HMA PAVEMENT TYPE E-3 PERFORMANCE GRADE 58-28, AS THE UPPER LAYER

SILT FENCE SHALL BE INSTALLED IN THE LOCATIONS SHOWN ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

ASPHALT AND CONCRETE DRIVEWAYS SHALL BE SAWCUT AT THE MATCH LINE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK, ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

INLET PROTECTION IS REQUIRED AT ALL INLETS AS PER DETAIL OR AS DIRECTED

SIGNS IN CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE COVERED AS DIRECTED BY THE ENGINEER AND PAID FOR UNDER THE ITEM TRAFFIC CONTROL

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

RE-TOPSOIL OF GRADED AREAS, AS DESIGNATED BY THE ENGINEER, IMMEDIATELY AFTER GRADING IS COMPLETED WITHIN THOSE AREAS. SEED, FERTILIZE, AND EROSION MAT TOP-SOILED AREAS, AS DESIGNATED BY THE ENGINEER, WITHIN FIVE (5) CALENDAR DAYS AFTER PLACEMENT OF TOPSOIL. IF GRADED AREAS ARE LEFT EXPOSED FOR MORE THAN (14) CALENDAR DAYS, SEED THOSE AREAS WITH TEMPORARY SEED.

STOCKPILE EXCESS MATERIAL OR SPOILS ON UPLAND AREAS AWAY FROM WETLANDS, FLOODPLAINS AND WATERWAYS. STOCKPILED SOIL SHALL BE PROTECTED AGAINST EROSION. IF STOCKPILED MATERIAL IS LEFT FOR MORE THAN FOURTEEN (14) CALENDAR DAYS, SEED THE STOCKPILE WITH TEMPORARY SEED.

EROSION CONTROL BMP'S ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTORS ECIP AND BY THE ENGINEER. EROSION CONTROL BMP'S SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE BMP IS NO LONGER

STANDARD ABBREVIATIONS

APRON END WALL AGGREGATE AGG BAD BASE AGGREGATE DENSE BM C&G BENCH MARK CURB AND GUTTER

C/L CONC CENTER OR CONSTRUCTION LINE

CUI VERT PIPE

CP CPCM CULVERT PIPE CORRUGATED METAL CPRC CULVERT PIPE REINFORCED CONCRETE

CPRCHE CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL

CSCP CORRUGATED STEEL CULVERT PIPE CORRUGATED STEEL PIPE ARCH CSD CONCRETE SURFACE DRAIN

CY CLIBIC-YARD DEGREE OF CURVE DELTA DISCHARGE

E0P

FF

EDGE OF PAVEMENT FIELD ENTRANCE

HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE

HMA HOT MIX ASPHALT INV INVERT LENGTH OF CURVE LEFT HAND FORWARD

LT MINIMUM M/L MATCHLINE NB NC NTS NORTHBOUND NORMAL CROWN NOT TO SCALE PAVT **PAVEMENT** PULL BOX

PC PCC POINT-OF-CURVE POINT OF COMPOUND CURVE PE PI PLE PT PRIVATE ENTRANCE POINT OF INTERSECTION
PERMANENT LIMITED EASEMENT POINT OF TANGENT

PVC POINT OF VERTICAL CURVE POINT OF VERTICAL INTERSECTION POINT OF VERTICAL TANGENT PVI PVT RADIUS OF CURVE REFERENCE LINE

R/L R/W RIGHT OF WAY RAD RADIUS RC RCAEW

APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE
REINFORCED CONCRETE HORIZONTAL ELLIPTICAL STORM SEWER
REINFORCED CONCRETE PIPE - STORM SEWER RCHESS RCPSS

REQD RIGHT HAND FORWARD

RHF RO RT RUN OFF LENGTH SALVAGED

SB SDD SIGNAL BASE STANDARD DETAIL DRAWING

SE SF STA SUPER ELEVATION SQUARE FOOT STATION SQUARE YARD TANGENT LENGTH

TOP OF CURB
TEMPORARY LIMITED EASEMENT

AGENCIES

OZALIKEE COUNTY ASSISTANT PUBLIC WORKS DIRECTOR MR. JON EDGREN 410 S. SPRING STREET PORT WASHINGTON, WI 53074 (262) 238-8335 JEDGREN@CO.OZAUKEE.WI.US

DEPT. OF NATURAL RESOURCES

WISCONSIN DEPT. OF NATURAL RESOURCES 2300 N. DR. MARTIN LUTHER KING JR. DR. MII WAUKFF. WI 53212 KRISTINA.BETZOLD@WISCONSIN.GOV

DESIGN CONTACT

GRAEF MR. STEVEN SCHOWALTER HONEY CREEK CORPORATE CENTER 125 S. 84TH STREET, SUITE 401 MILWAUKEE, WI 53212 (414) 266-9246 STEVEN.SCHOWALTER@GRAEF-USA.COM

UTILITIES

AT&T WISCONSIN MR. JAY BULANEK 2005 PEWAUKEE ROAD WAUKESHA, WI 53188 (262) 896-7669 JB5175@ATT.COM

ATC MANAGEMENT INC. MR. CHRIS DAILEY P.O. BOX 47 WAUKESHA, WI 53187-0047 (262) 506-6884 CDAILEY@ATCLLC.COM

TIME WARNER CABLE MR. STEVE STORM 1320 N. MARTIN LUTHER KING JR. DRIVE MILWAUKEE, WI 53212 (414) 908-5785 STEVE.STORM@TWC-CONTRACTOR.COM

WE ENERGIES (ELECTRIC) SEND ALL CORRESPONDENCE TO:
MR. LATROY BRUMFIELD, PROJECT MANAGER 333 W. EVERETT STREET - A299 MILWAUKEE, WI 53203 (414) 221-5617 LATROY.BRUMFIELD@WE-ENERGIES.COM

CONSTRUCTION FIELD CONTACT MR. AL SCHMITT 245 SAND DRIVE WEST BEND, WI 53095 (262) 338-7662 ALAN.SCHMITT@WE-ENERGIES.COM

INDEX OF TYPICAL SECTION AND DETAIL SHEETS

PROJECT OVERVIEW TYPICAL SECTIONS CONSTRUCTION DETAILS PLAN DETAILS PAVEMENT GRADES & STORM SEWER **EROSION CONTROL** TRAFFIC SIGNAL PLAN SIGNING PLAN PAVEMENT MARKING PLAN TRAFFIC CONTROL DETOLIR PLAN

Dial [1] or (800) 242-8511 www.DiggersHotline.com

PROJECT NO: 2695-10-70

HWY: CTH V

COUNTY: OZAUKEE

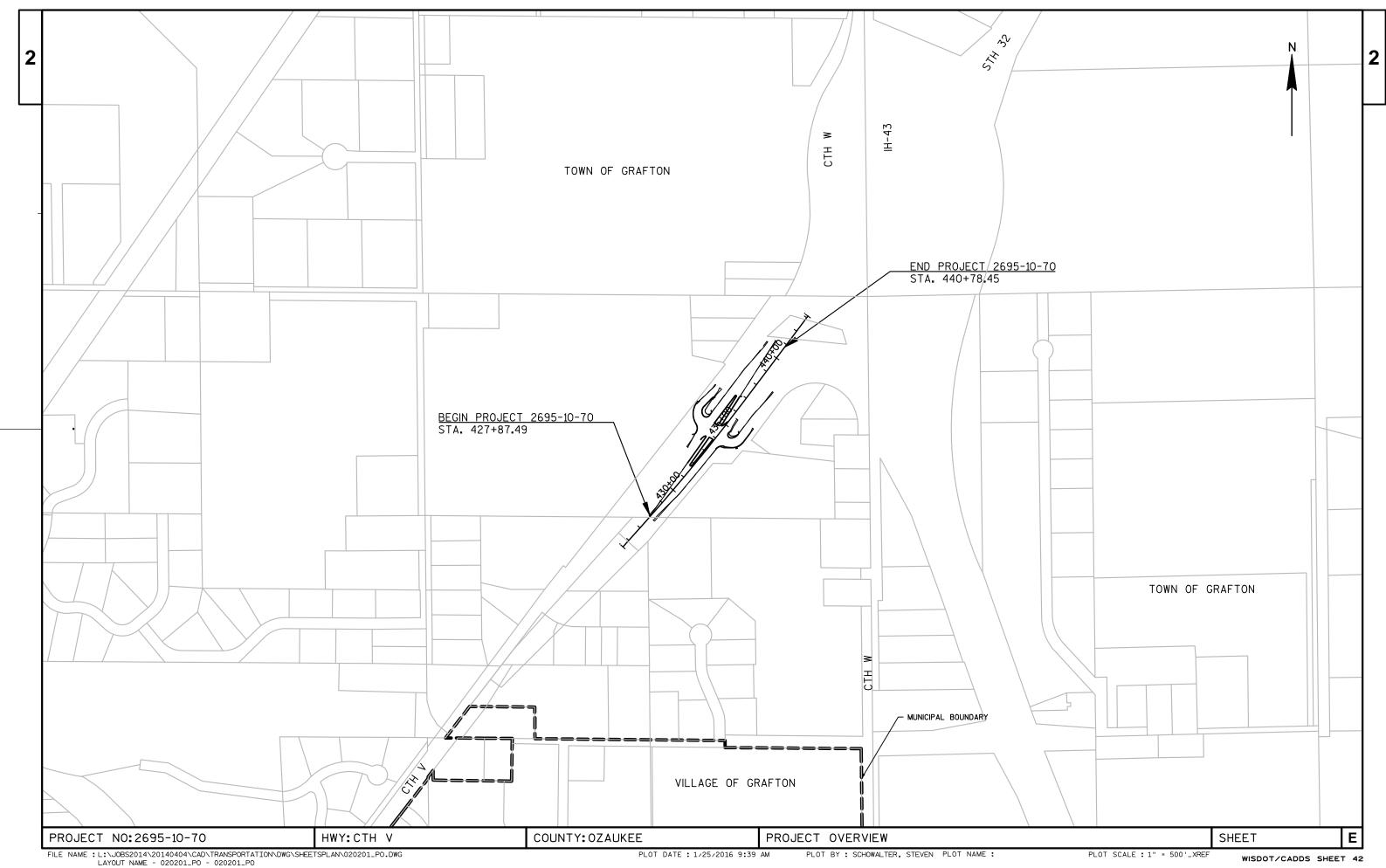
GENERAL NOTES

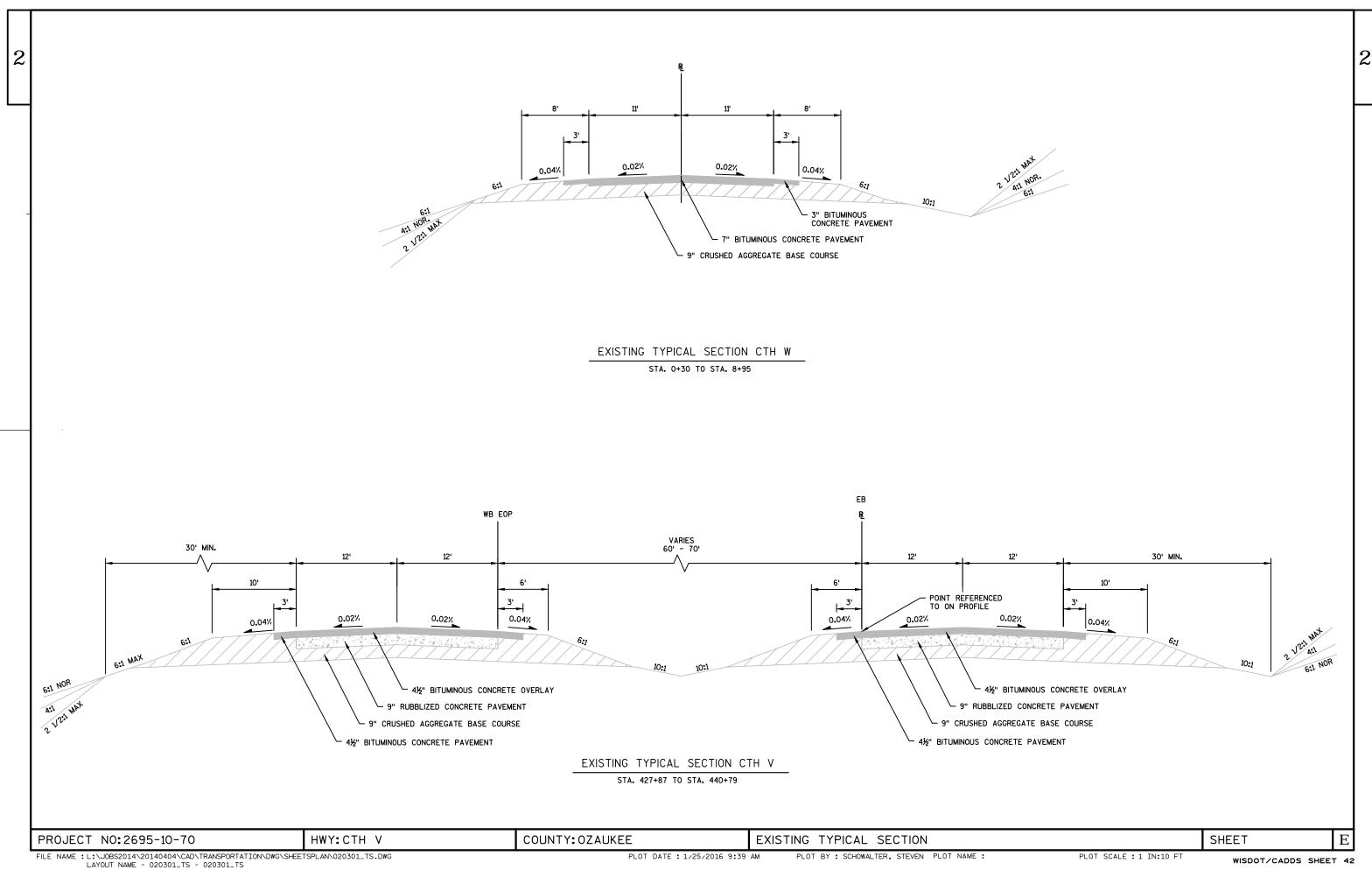
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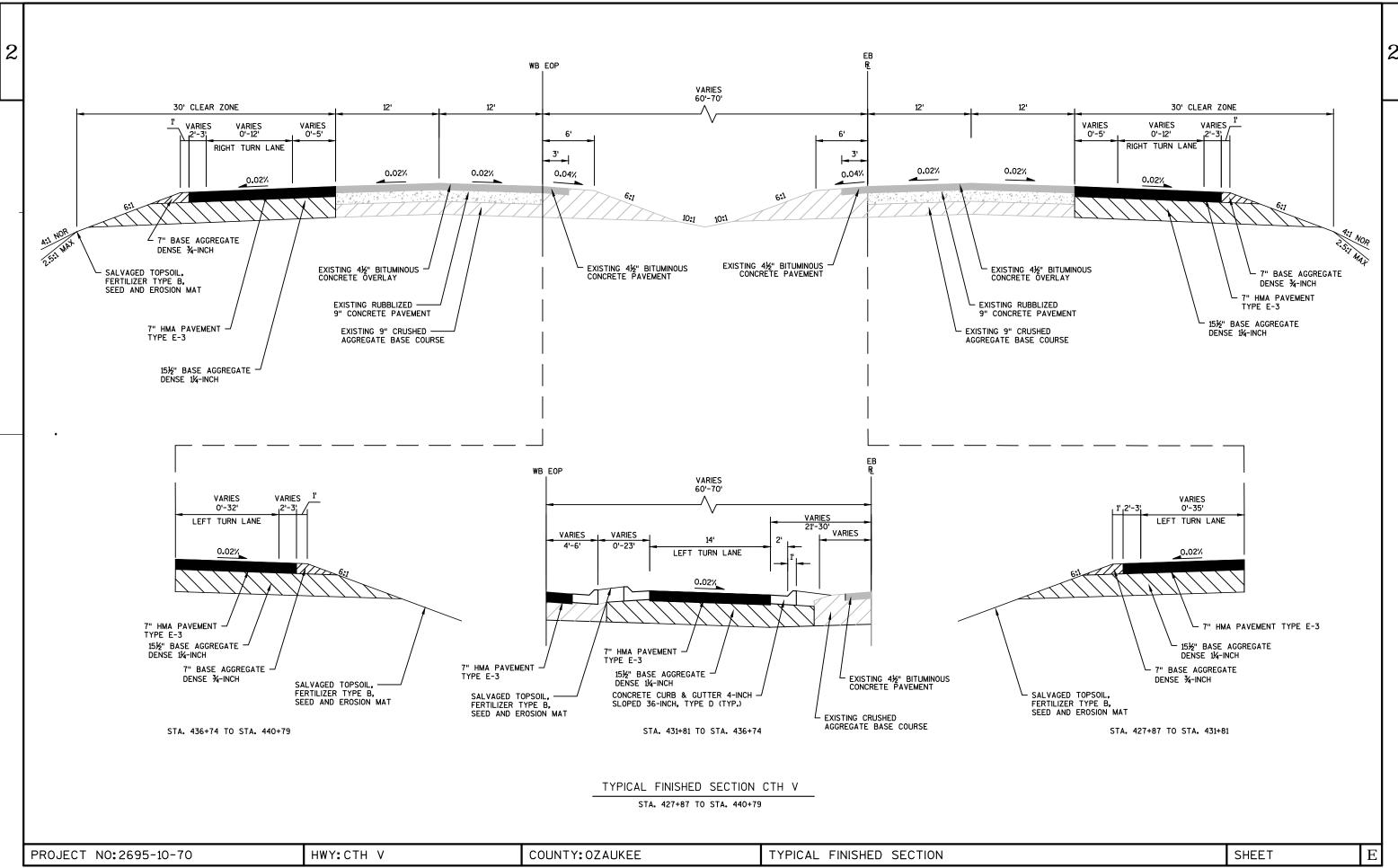
SHEET

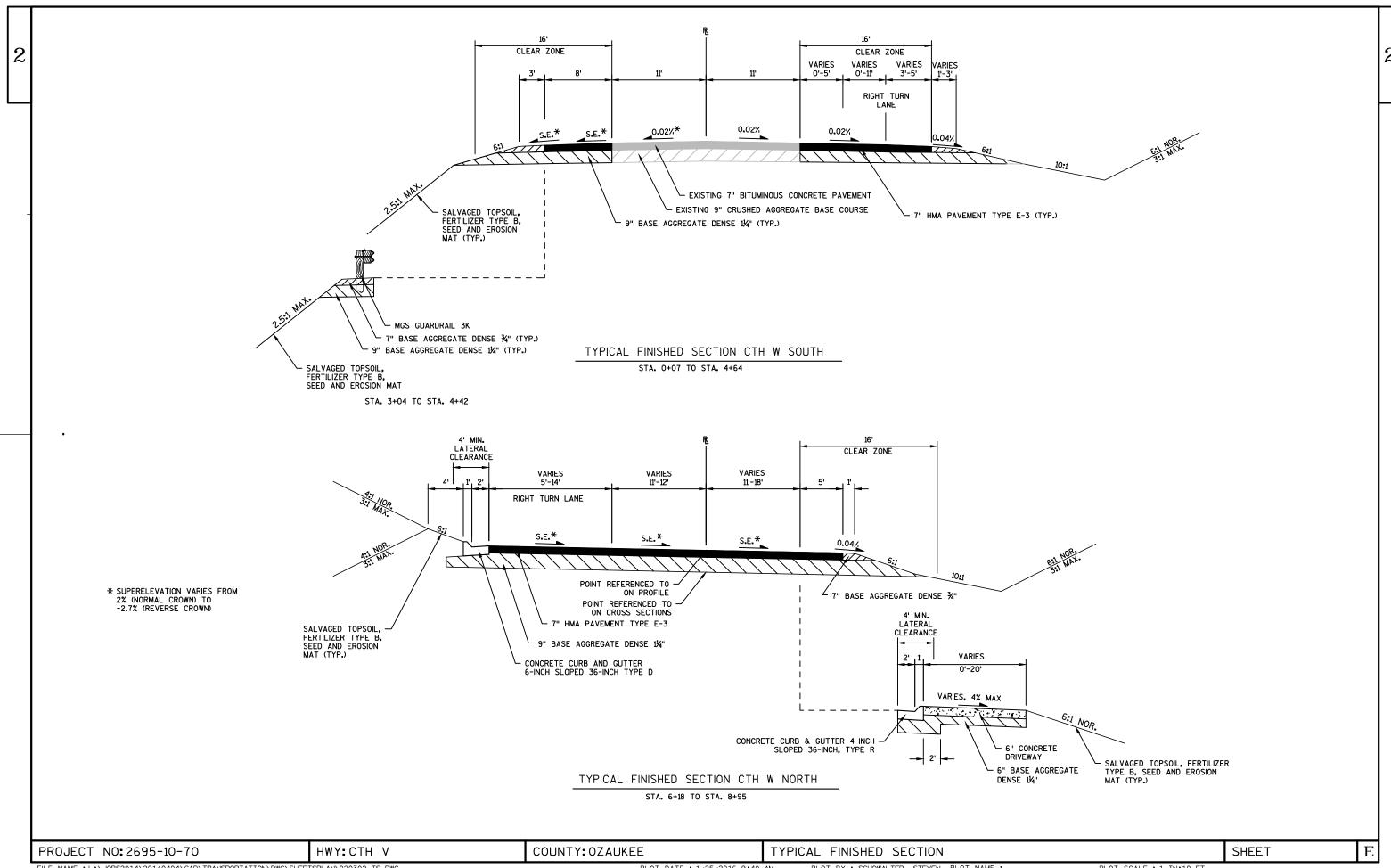
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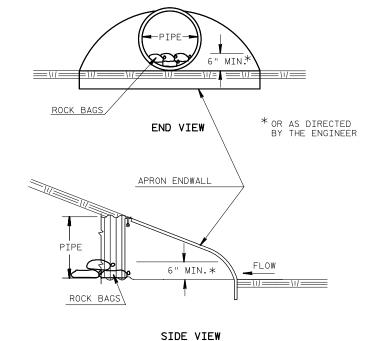




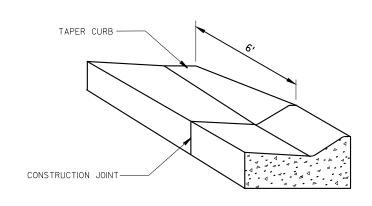




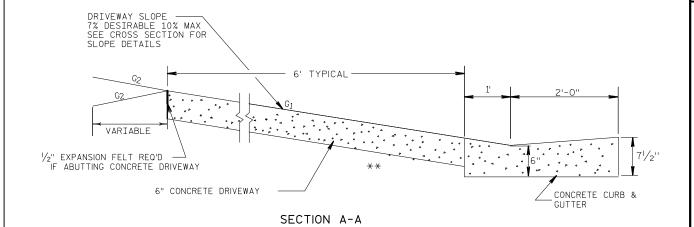




CULVERT PIPE CHECK

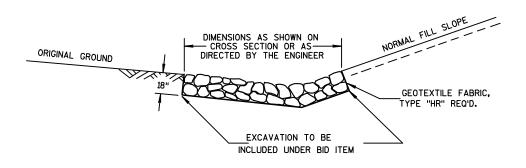


DETAIL OF CURB & GUTTER TERMINI

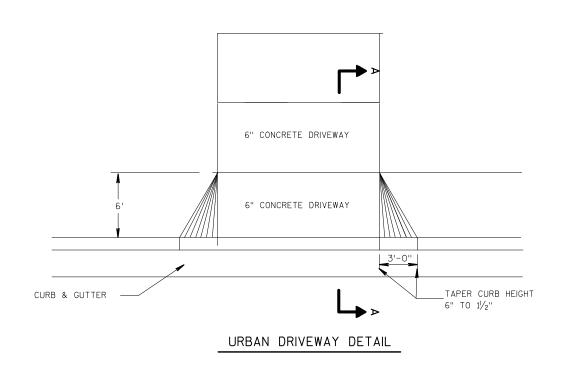


** = 6" BASE AGGREGATE DENSE 1_1/4-INCH REQ'D UNDER CONCRETE DRWY

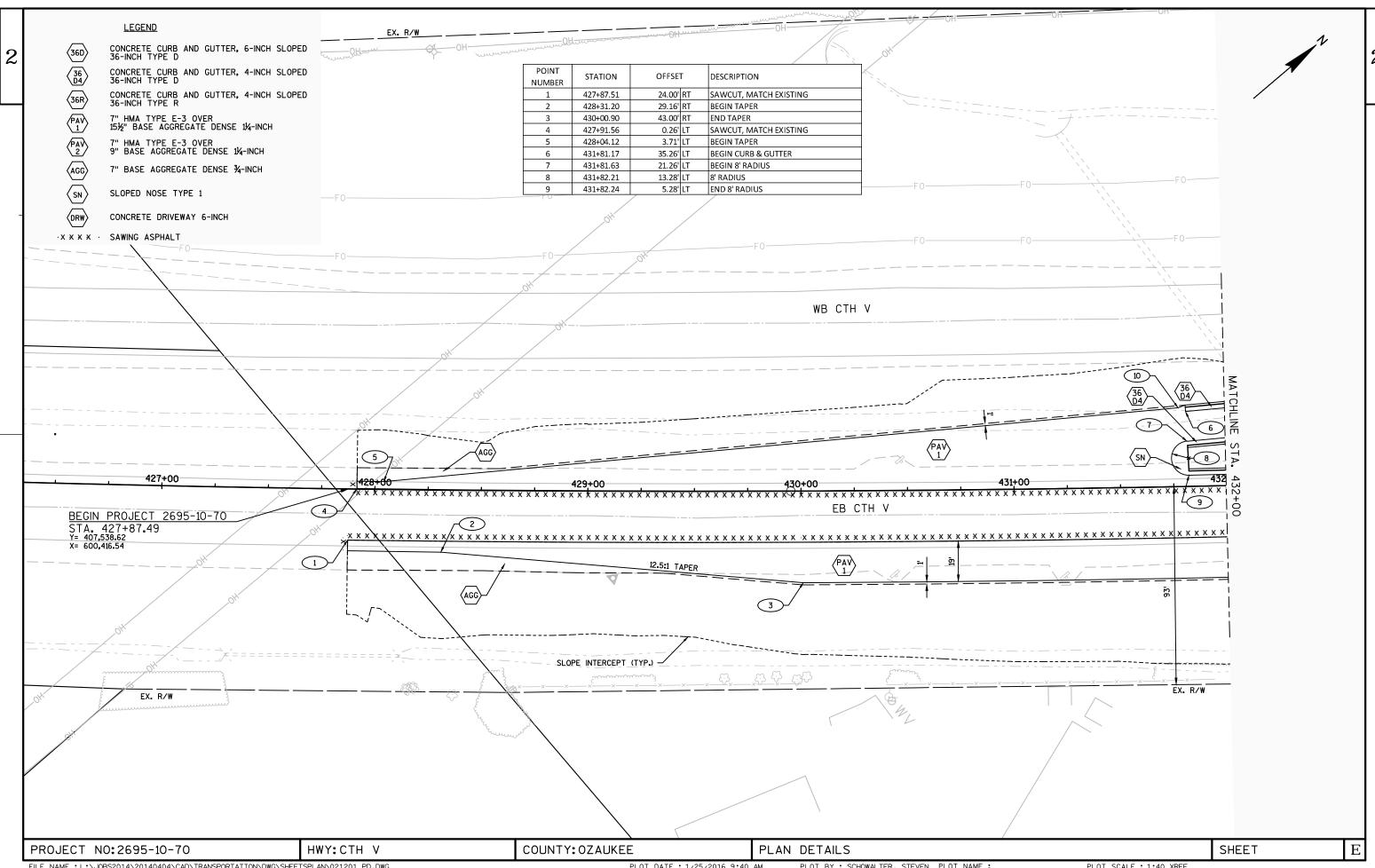
NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 EXTENDED IN FILLS, MAX. 5%

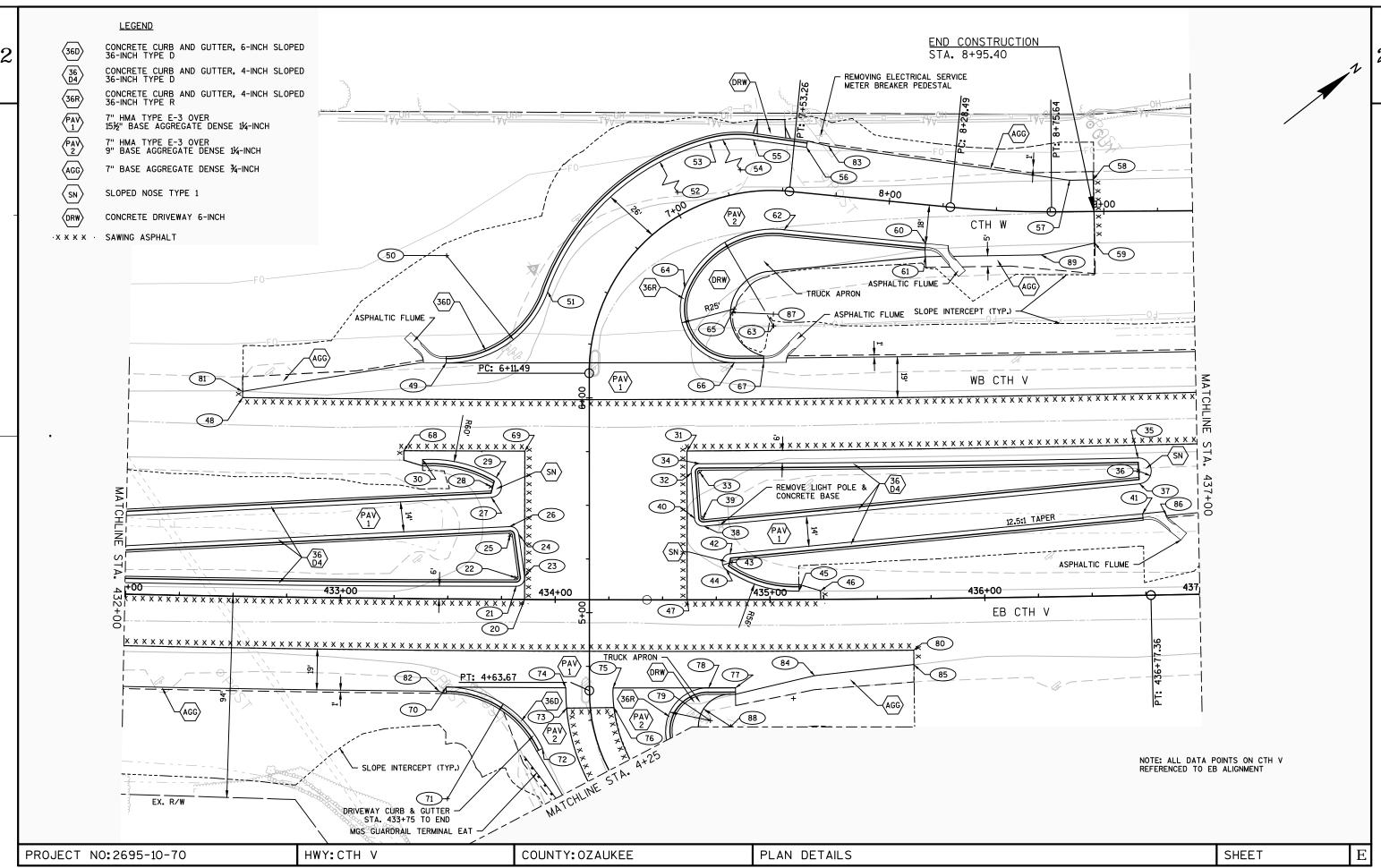


DETAIL FOR MEDIUM RIPRAP IN DITCHES



PROJECT NO:2695-10-70 HWY:CTH V COUNTY:OZAUKEE CONSTRUCTION DETAILS SHEET E





POINT	STATION	OFFSET		DESCRIPTION
NUMBER				
20	433+85.73	0.00'		SAWCUT, MATCH EXISTING
21	433+81.73	6.12'		BEGIN 4' RADIUS
22	433+81.71	10.12'		4' RADIUS
23	433+85.67	10.70'		END 4' RADIUS
24	433+82.78	30.50'		BEGIN 4' RADIUS
25	433+78.81	29.92'		4' RADIUS
26	433+78.59	33.91'		END 4' RADIUS
27	433+69.93	47.45'		BEGIN 5' RADIUS
28	433+69.65	52.44'	LT	5' RADIUS
29	433+72.18	56.76'	LT	END 5' RADIUS, BEGIN 60' RADIUS
30	433+37.67	64.75'	LT	END CURB & GUTTER, END 60' RADIUS
31	434+61.39	69.34'	LT	SAWCUT, MATCH EXISTING
32	434+63.41	59.08'	LT	BEGIN 4' RADIUS
33	434+67.42	59.36	LT	4' RADIUS
34	434+67.40	63.36'	LT	END 4' RADIUS
35	436+72.56	63.93'	LT	BEGIN 6' RADIUS
36	436+72.57	57.93'	LT	6' RADIUS
37	436+73.04	51.95'	LT	END 6' RADIUS
38	434+69.30	34.31'	LT	BEGIN 4' RADIUS
39	434+68.92	38.29'		4' RADIUS
40	434+64.91	38.01'	LT	END 4' RADIUS
41	436+74.13	37.99'		BEGIN CURB & GUTTER
42	434+81.50	21.40'		BEGIN 4' RADIUS
43	434+81.88	17.42'		4' RADIUS
44	434+79.59	14.14'		END 4' RADIUS, BEGIN 56' RADIUS
45	435+13.54	4.02'		END CURB & GUTTER, END 56' RADIUS
46	435+23.55	4.03'		SAWCUT, MATCH EXISTING
47	434+61.41	0.00'		SAWCUT, MATCH EXISTING
48	432+52.92	92.53'		SAWCUT, MATCH EXISTING
49	6+14.20	66.70'		BEGIN CURB & GUTTER, BEGIN 50' RADIUS
49	6+41.03	76.00'		50' RADIUS
51	6+41.11	26.00'		END 50' RADIUS, BEGIN 111' RADIUS
52		26.00 84.66'		111' RADIUS
	7+53.37			
53	7+22.57	26.29'		END 111' RADIUS, BEGIN 50' RADIUS
54	7+22.70	23.71'		50' RADIUS
55	7+38.29	23.99'		END 50' RADIUS
56	7+59.13	21.22'		END CURB & GUTTER
57	8+84.24	14.61'		PAVEMENT PI
58	8+95.09	14.74'		SAWCUT, MATCH EXISTING
59	8+95.69	14.76'		SAWCUT, MATCH EXISTING
60	8+18.68	18.00'		BEGIN CURB & GUTTER
61	8+19.16	24.12'	RT	BEGIN TRUCK APRON
62	7+52.32	18.00'	RT	BEGIN 45' RADIUS
63	7+48.03	62.96'	RT	45' RADIUS
64	6+77.34	28.20'	RT	END 45' RADIUS, BEGIN 25' RADIUS

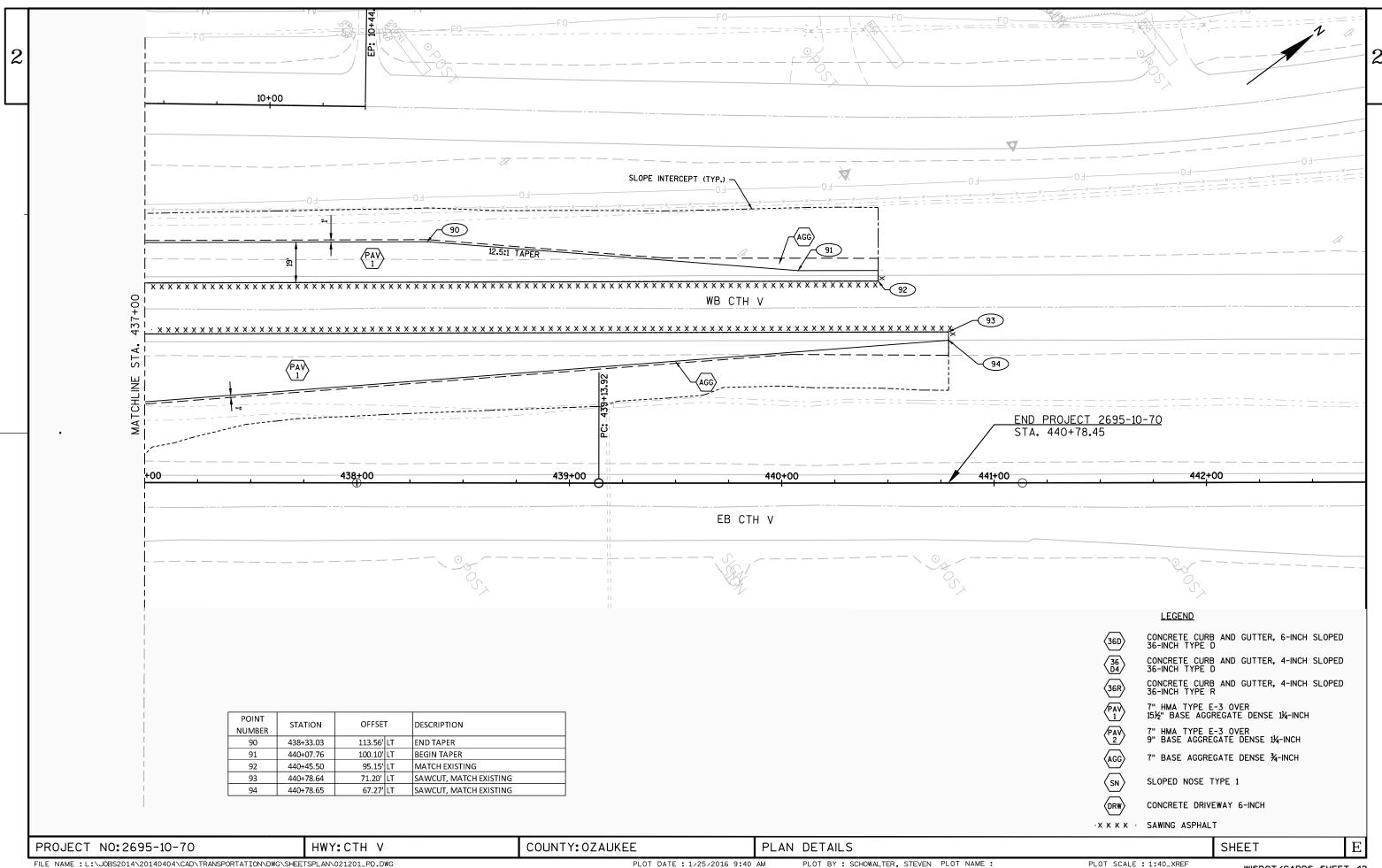
POINT NUMBER	STATION	OFFSE	Т	DESCRIPTION
65	6+99.77	50.31	RT	25' RADIUS
66	6+34.73	66.87'	RT	END 25' RADIUS
67	6+89.45	78.72'	RT	END CURB & GUTTER
68	433+28.81	68.85'	LT	SAWCUT, MATCH EXISTING
69	433+85.47	69.16'	LT	SAWCUT, MATCH EXISTING
70	4+65.38	66.63'	LT	BEGIN CURB & GUTTER, BEGIN 50' RAI
71	4+38.29	74.79'	LT	50' RADIUS
72	4+43.02	25.36'	LT	END 50' RADIUS, END CURB & GUTTER
73	4+56.53	11.00'	LT	SAWCUT, MATCH EXISTING
74	4+65.03	11.00'	LT	PAVEMENT PI
75	4+64.96	11.00'	RT	PAVEMENT PI
76	4+54.55	11.00'	RT	SAWCUT, MATCH EXISTING
77	4+64.97	68.05'	RT	BEGIN CURB & GUTTER
78	4+64.94	55.52'	RT	BEGIN 20' RADIUS
7 9	4+11.39	49.20'	RT	20' RADIUS
80	435+66.69	24.00'	RT	SAWCUT, MATCH EXISTING
81	432+52.91	95.49'	LT	SAWCUT, MATCH EXISITNG
82	433+46.29	43.00'	RT	PAVEMENT PI
83	7+69.20	22.78'	LT	PAVEMENT PI
84	435+20.50	35.51	RT	PAVEMENT PI
85	435+66.65	30.81	RT	SAWCUT, MATCH EXISTING
86	436+85.32	36.86'	LT	PAVEMENT PI
87	7+47.18	57.53'	RT	20' RADIUS
88	3+94.30	58.10'	RT	15' RADIUS
89	8+70.99	20.05'	RT	PAVEMENT PI

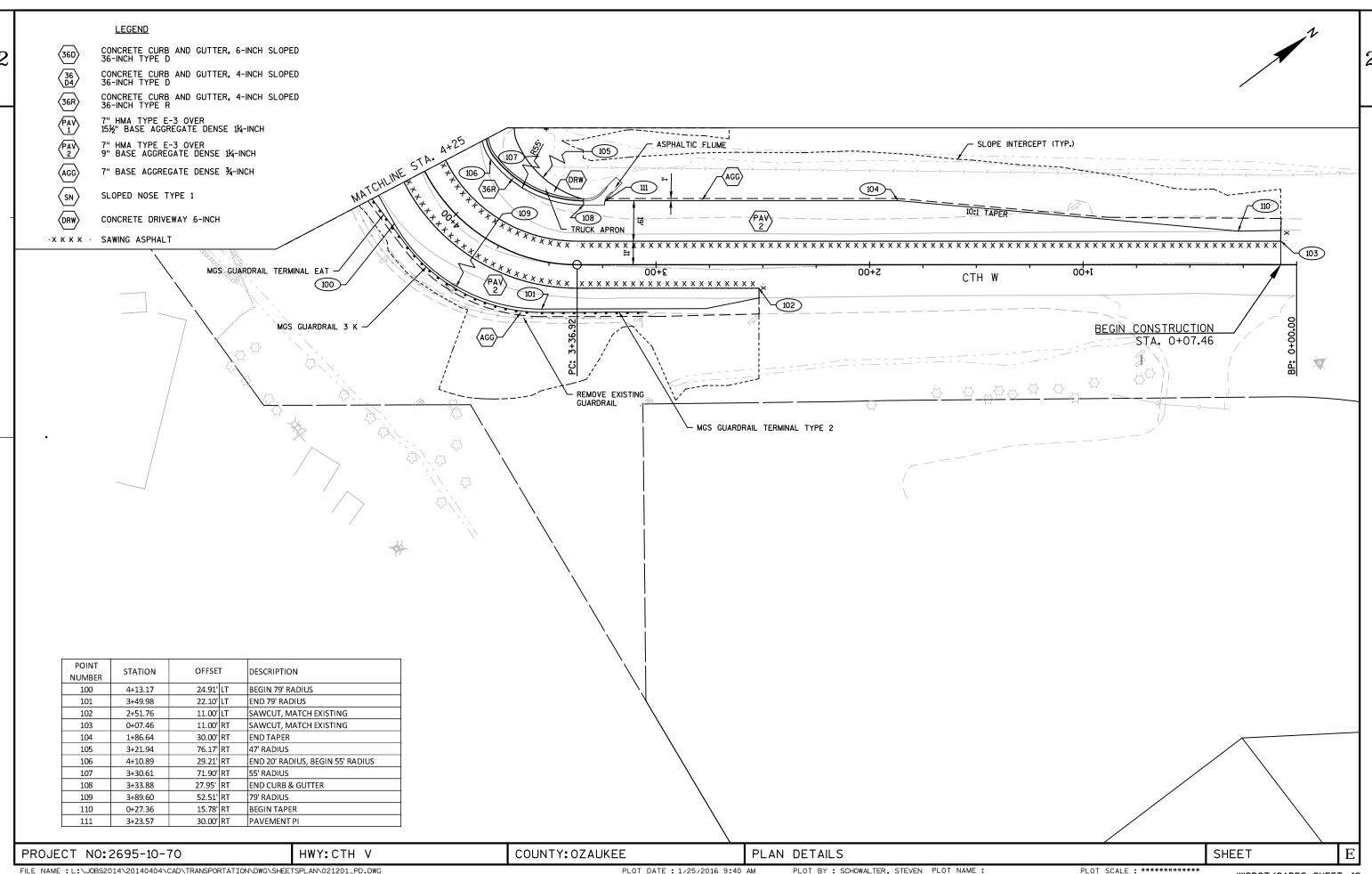
HWY: CTH V COUNTY: OZAUKEE SHEET PROJECT NO: 2695-10-70 PLAN DETAILS

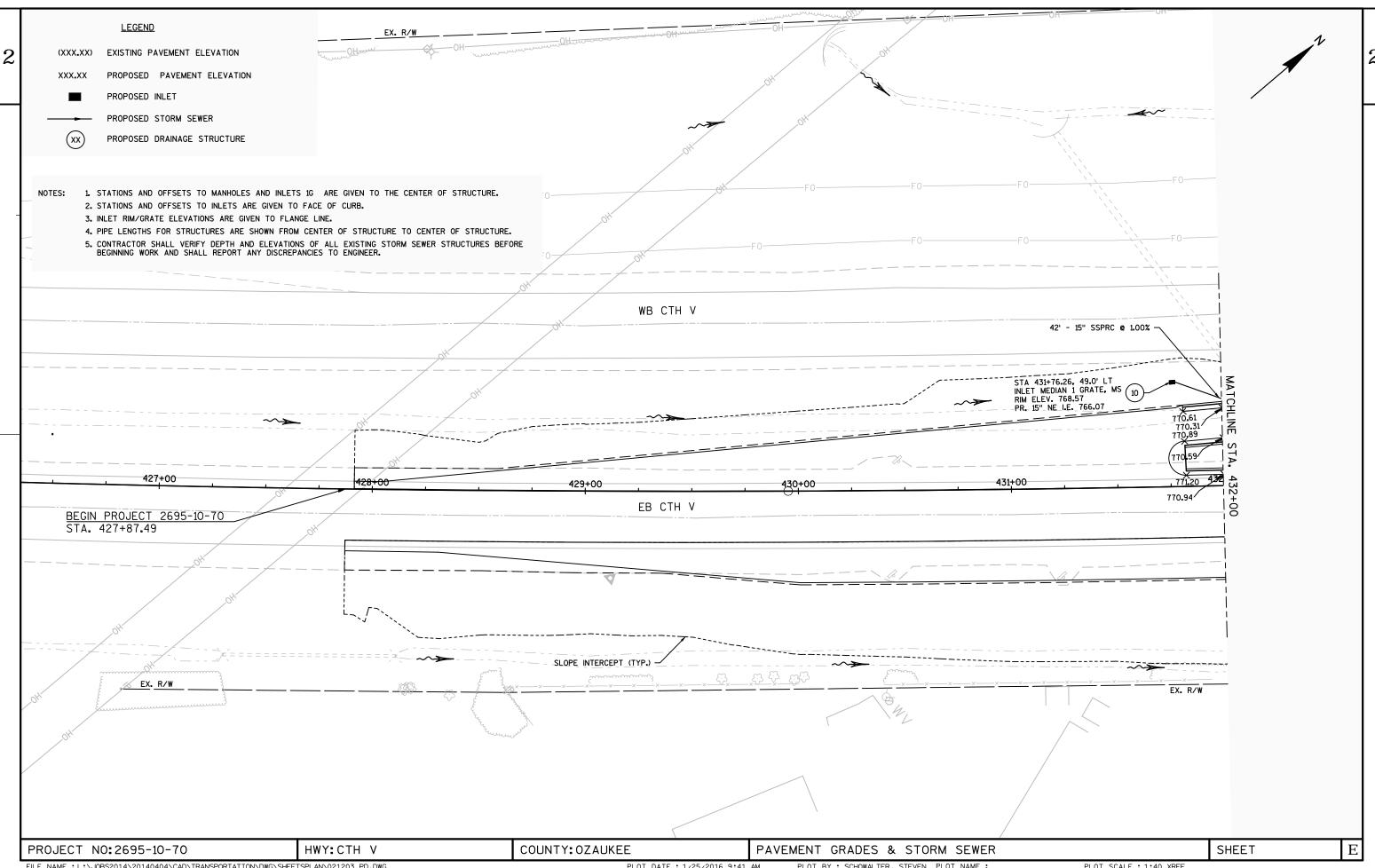
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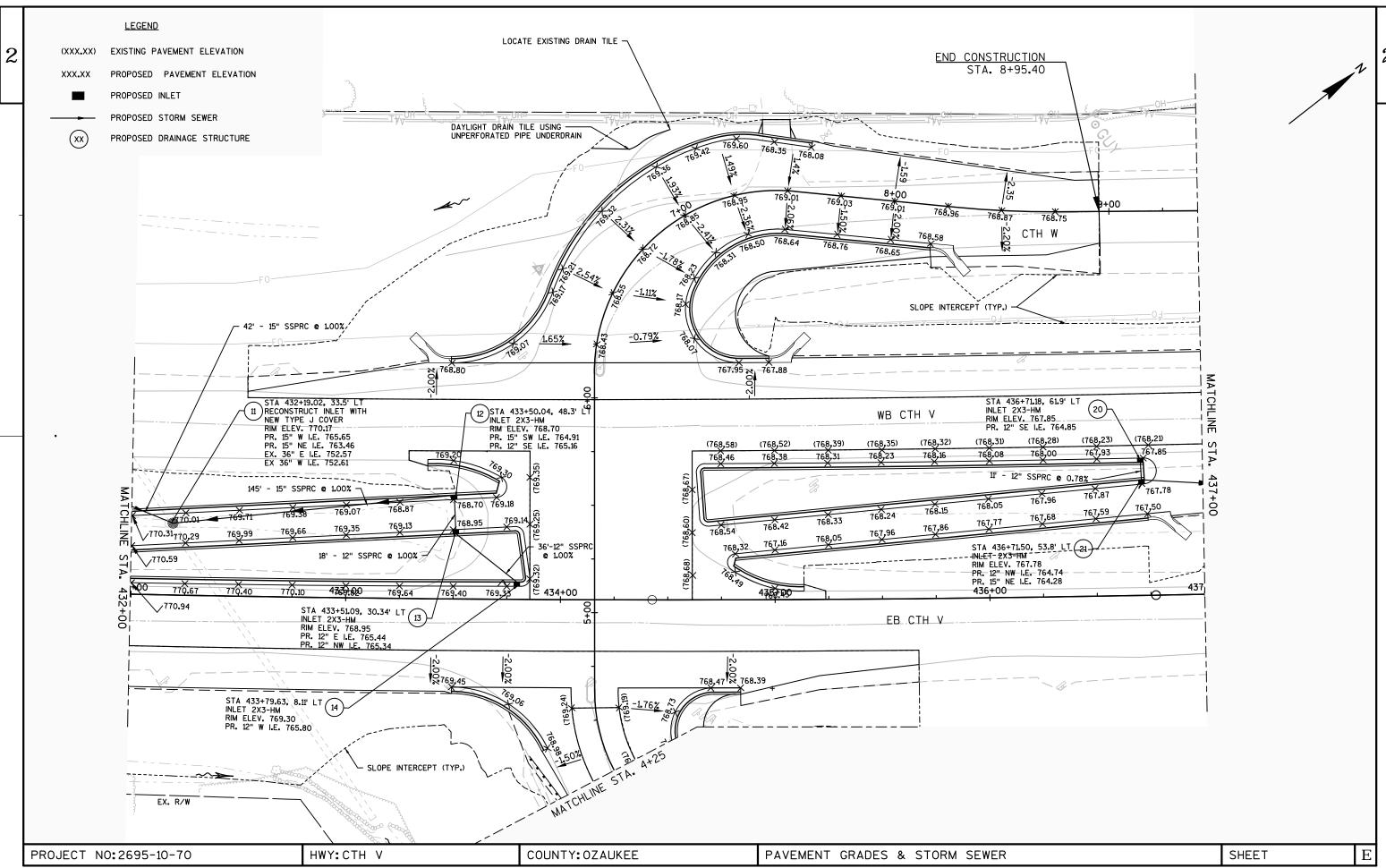
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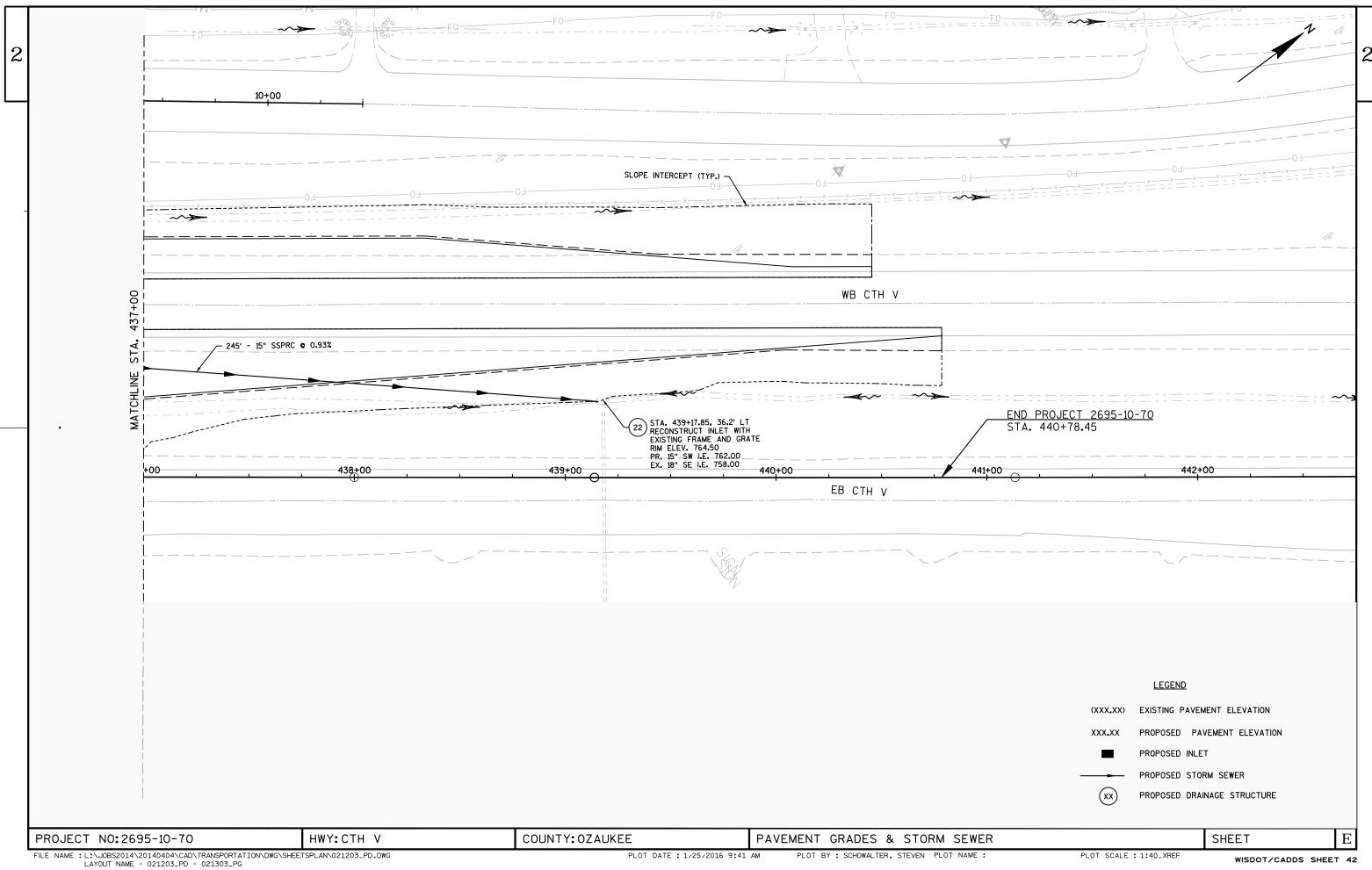
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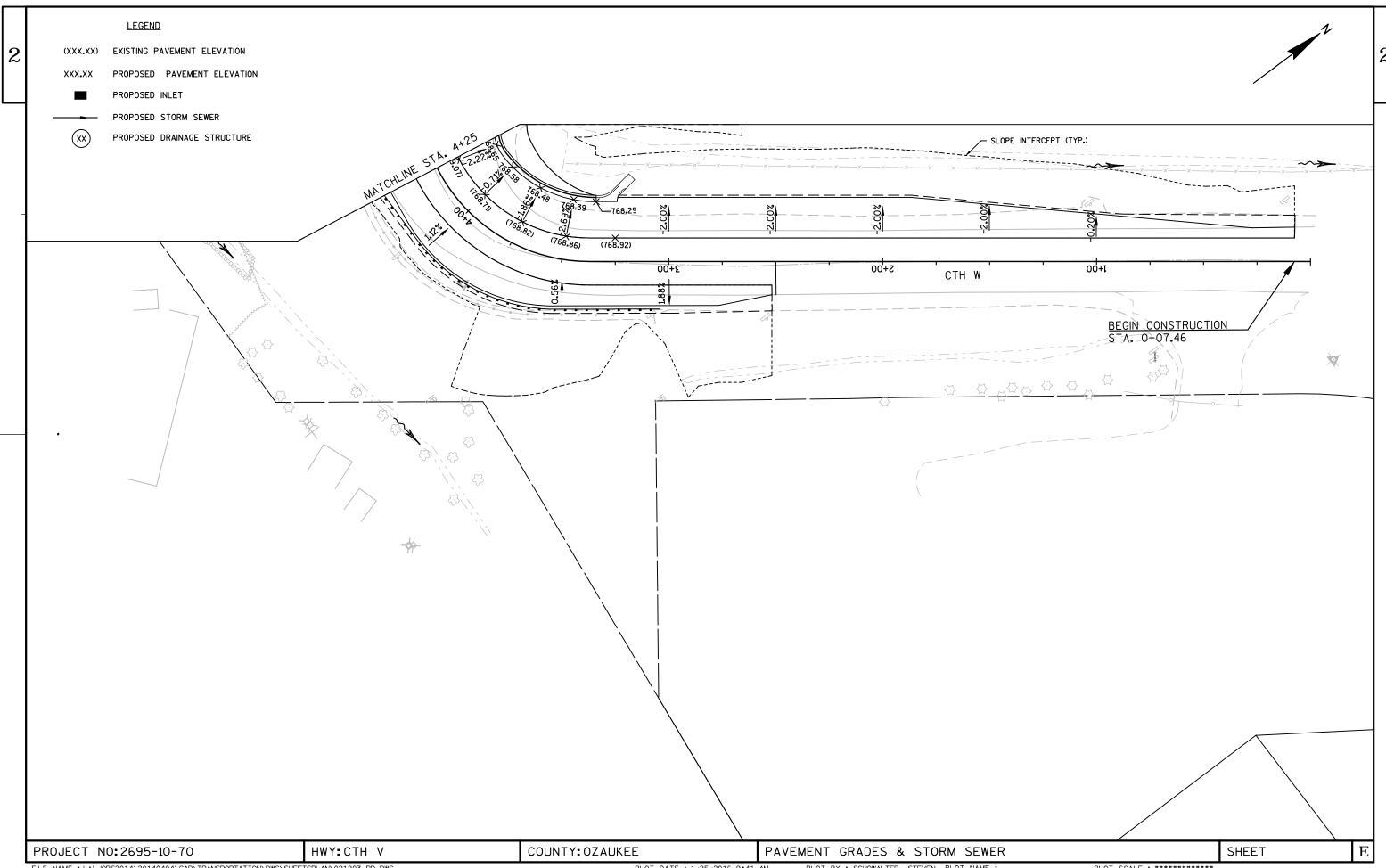


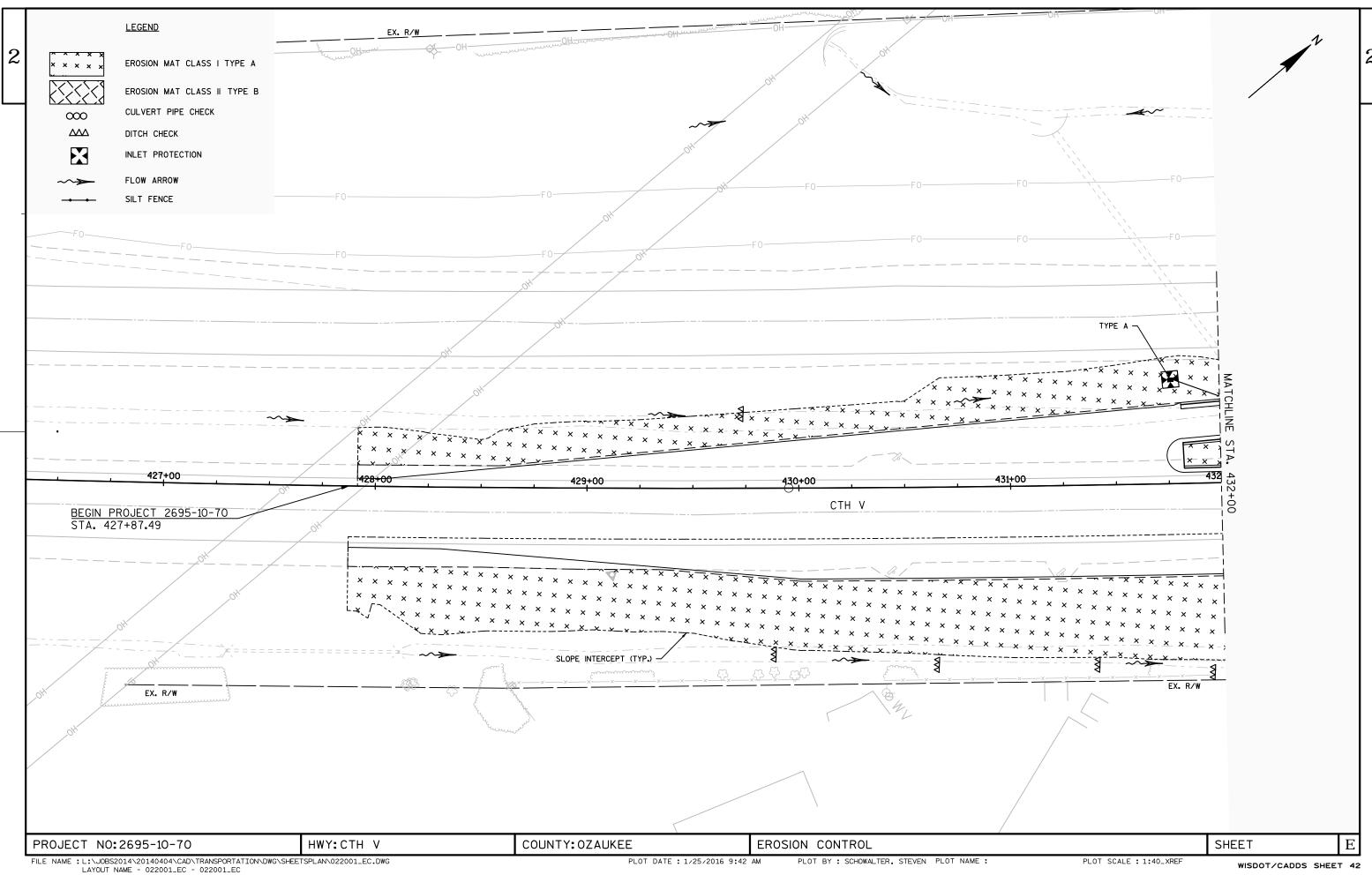


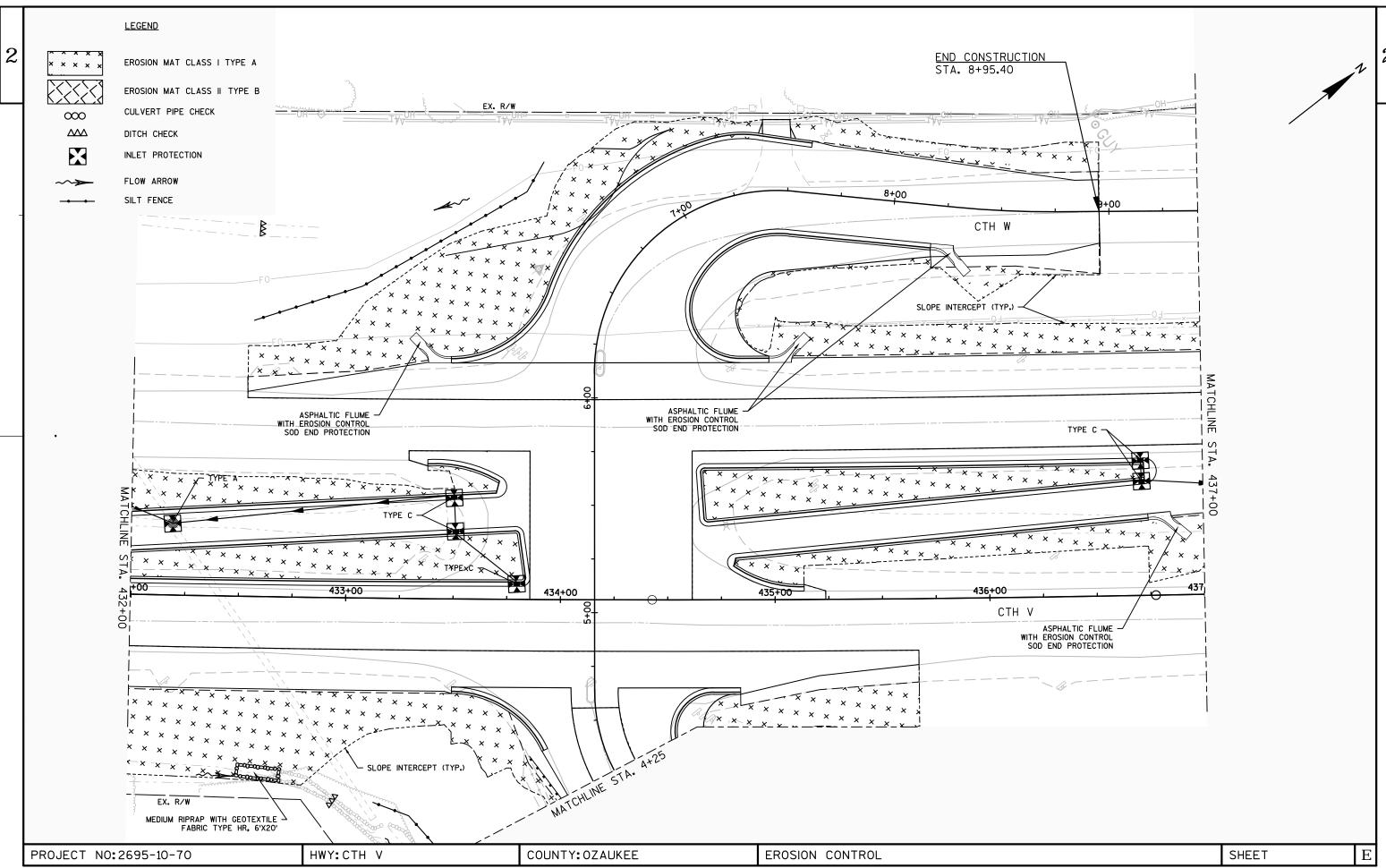


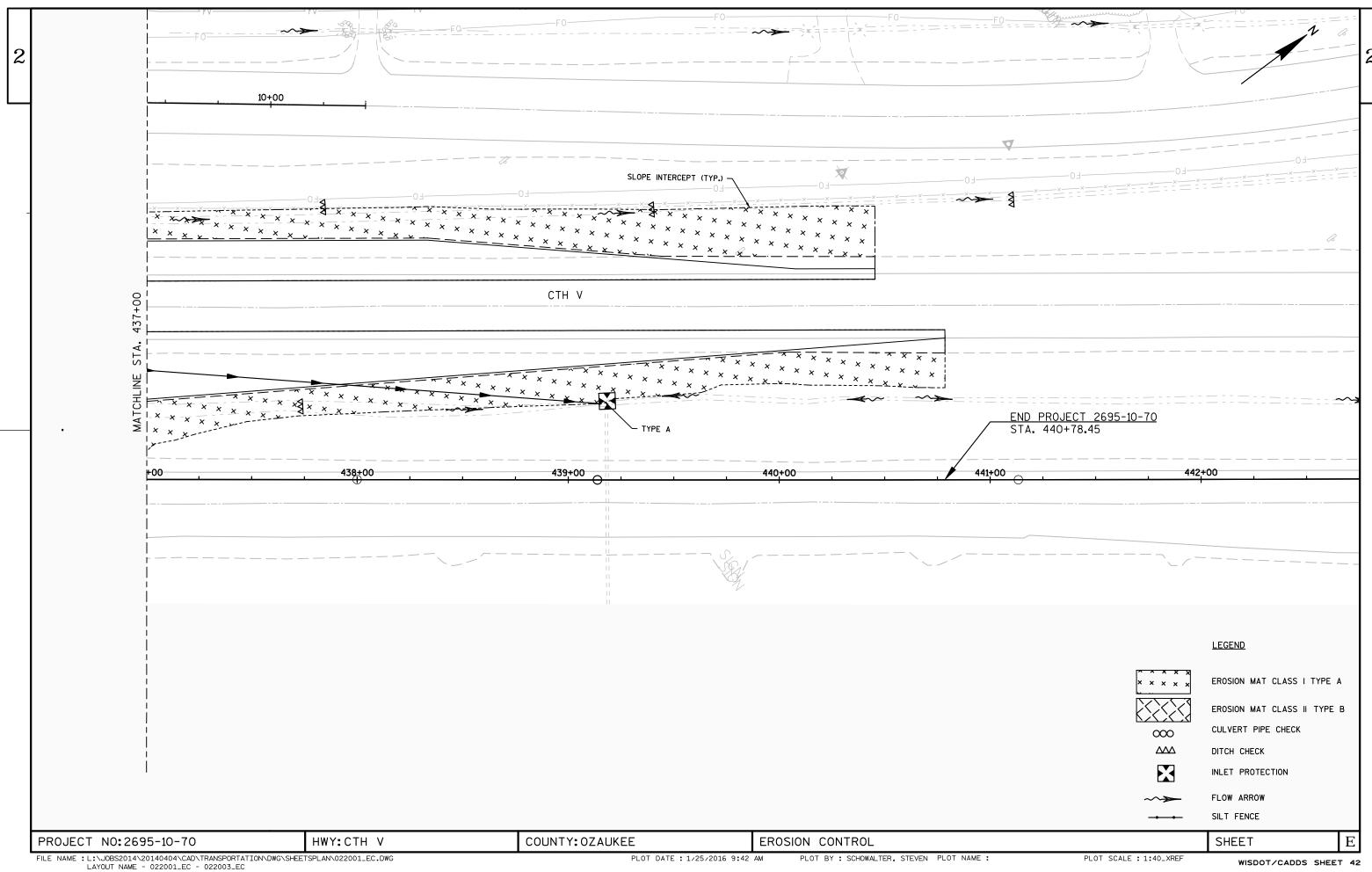


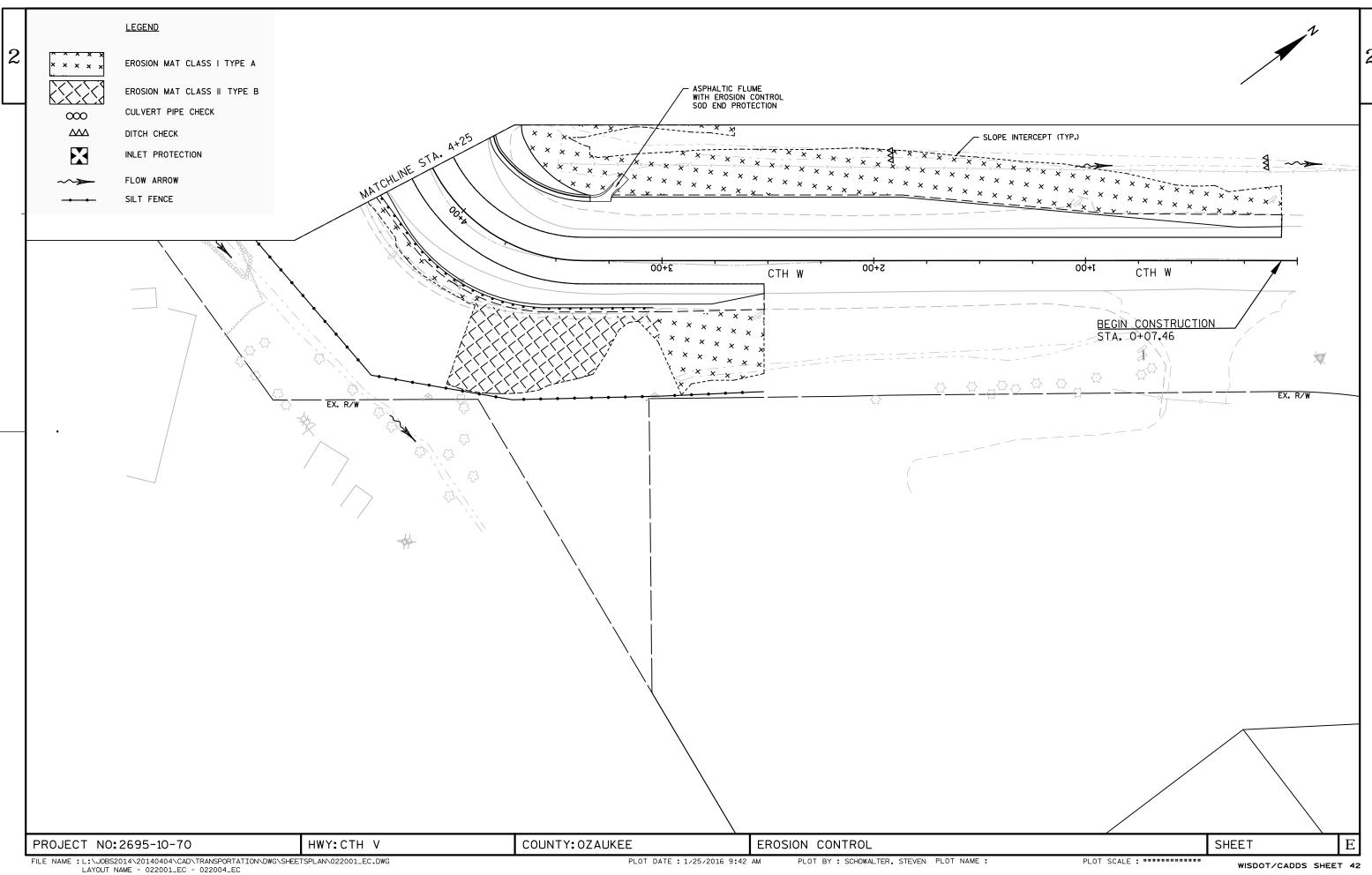


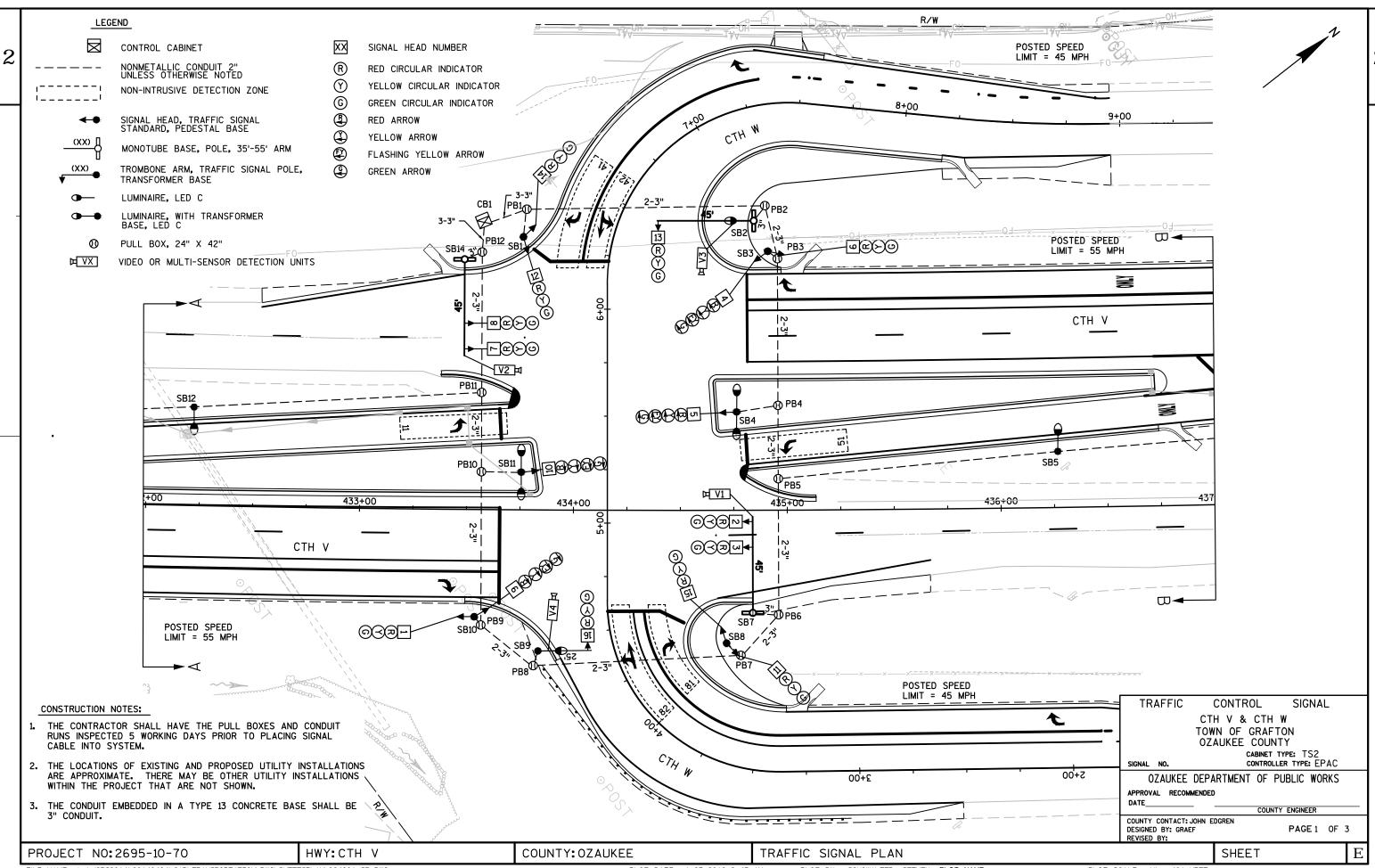


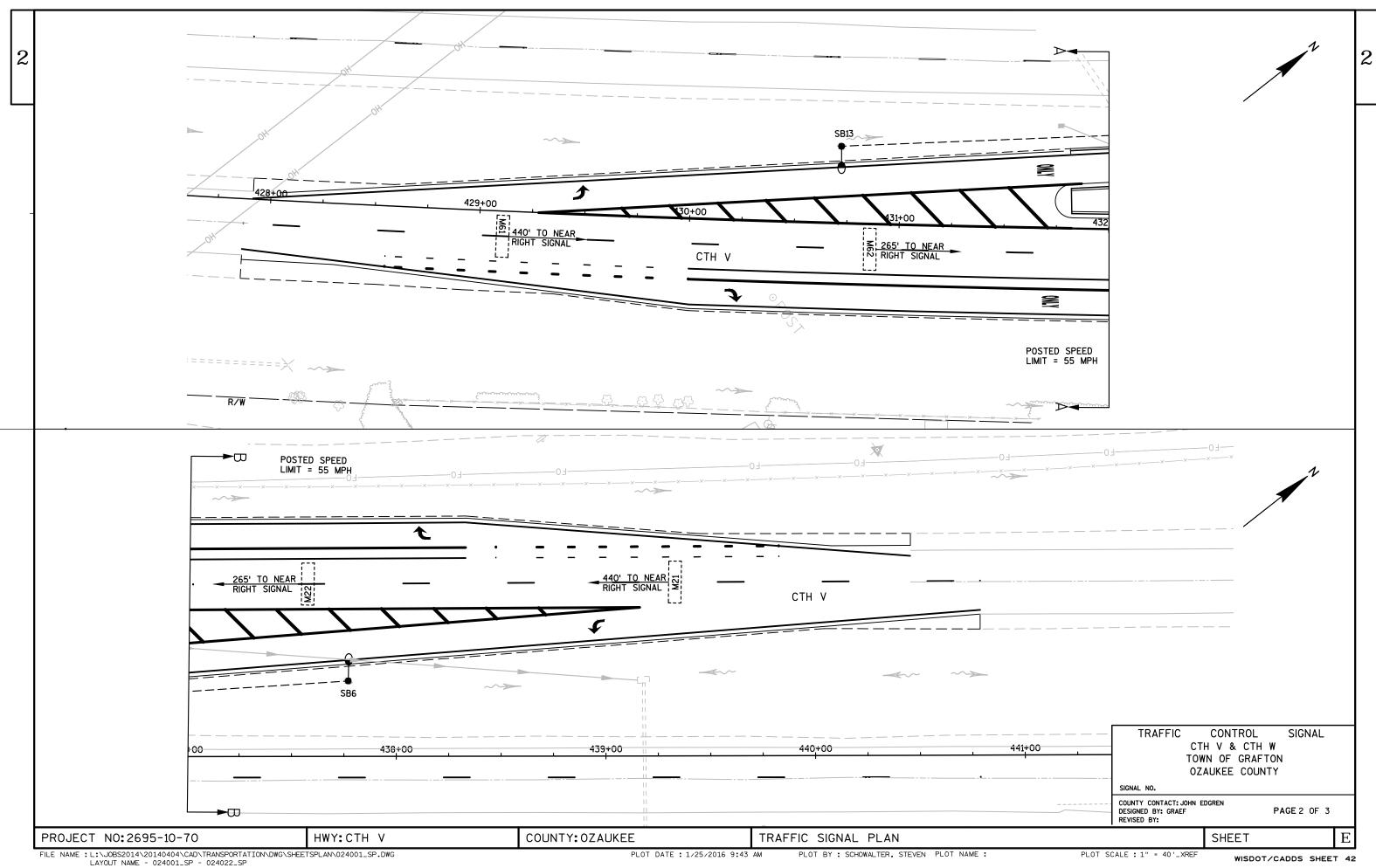


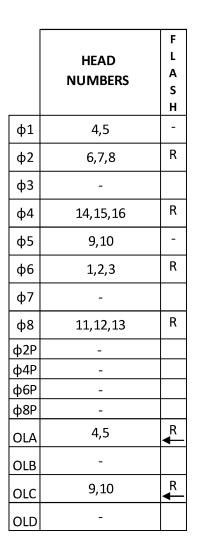


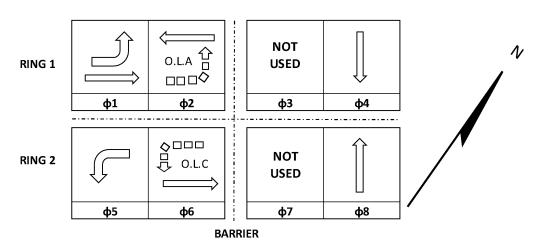












CONTROLLER LOGIC

PHASE	PHASE	DUAL	PHASE	PHASE
NUMBER	LOCKING	ENTRY	RECALL	ACTIVE
1		6		Х
2	Х	6	MIN.	Х
3				
4		8		X
5		2		Х
6	Х	2	MIN.	Х
7				
8		4		Х

TYPE OF INTERCONNECT\COMMUNICATION			
NONE	Х		
CLOSED LOOP			
TWISTED PAIR			
FIBER OPTIC*			
FIBER OPTIC (ETHERNET)			
RADIO			

TYPE OF COORDINATION	
NONE	Х
TBC	
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER	
CONTROLLER NO: S-	
SIGNAL SYSTEM NO: SS-	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	Х
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMF	T
NONE	Х
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

EMERGENCY VEHICLE PREEMPTION SEQUENCE

PIAITIVOPIACI AF	I II CLL FILL	TAIL LIGHT	LUCCITCE
EMRGENCY VEHICLE			
PREEMPTOR	А	В	c
	Ţ	ןר !	!
MOVEMENT	aca&		+ 🕶
PHASE	8+3	6+1	2+5

AFTER PREEMPTION SEQUENCE 6+1 or 2+5, CONTROLLER SHALL RETURN TO PHASES 2+6

AFTER PREEMPTION SEQUENCE 8+3 CONTROLLER SHALL RETURN TO PHASES 4+8

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETCTOR*(S)	11	22	42	61	81			
ASSIGNED PHASE	1	2	4	6	8			
OPERATION MODE	VEH	VEH	VEH	VEH	VEH			
SWITCH	2							
EXTEND		Х	Х	Х	Х			
DELAY			Х		Х			
DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETCTOR*(S)	21	41	51	62	82			
ASSIGNED PHASE	2	4	5	6	8			
OPERATION MODE	VEH	VEH	VEH	VEH	VEH			
SWITCH		·	6					
EXTEND	Х	Х		Х	Х			
DELAY		Х			Х			

19	17	23	21	27	25	31	29	DETECTOR INPUT
								PLAN LOOP DETCTOR*(S)
								ASSIGNED PHASE
								OPERATION MODE
								switch
								EXTEND
								DELAY
20	18	24	22	28	26	32	30	DETECTOR INPUT
								PLAN LOOP DETCTOR*(S)
								ASSIGNED PHASE
								OPERATION MODE
								switch
								EXTEND
								DELAY

TRAFFIC	CONTROL	SIGNAL		
	CTH V & CTH W			
	TOWN OF GRAFTON			
	OZAUKEE COUNTY			
SIGNAL NO.				
COUNTY CONTACT JOHN FORREN				

DESIGNED BY: GRAEF PAGE 3 OF 3 REVISED BY:

PROJECT NO: 2695-10-70 HWY: CTH V COUNTY: OZAUKEE

SEQUENCE OF OPERATIONS

SHEET

PLOT SCALE : ########

ı	PROJECT ID:	2695-10-70	SIGNAL WIRE	BLK-BLACK	RED-RED
ı	INTERSECTION:	CTH V & CTH W	COLOR CODING	WHT-WHITE	BLU-BLUE
ı					

			SIGNAL INDICATION WIRE COLOR									
CB1 TO	AWG14 # OF CONDUCTORS	HEAD NO.	RED	YELLOW	GREEN	<red></red>	<yellow></yellow>	<green></green>	FLASHING <yellow></yellow>	D/WALK	WALK	PED BUTTON
										,		
SB1	12											
		12	RED	ORG	GRN							
		14	RED/BLK	ORG/BLK	GRN/BLK							
SB2	12											
		13	RED	ORG	GRN							
SB3	12											
		4	RED	ORG	GRN	(
		6				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
SB4	12					250	222	6531	5111			
	10	5				RED	ORG	GRN	BLU			
SB7	12	_	250	000	CDN							
		3	RED RED	ORG ORG	GRN GRN							
SB8	12	3	KED	OKG	GKIN							
300	12	11	RED	ORG	GRN							
		15	RED/BLK	ORG/BLK	GRN/BLK							
SB9	12	13	RED/ BER	ORG/ DER	GRIT, DER							
303	12	16	RED	ORG	GRN							
SB10	12			0110	2							
		1	RED	ORG	GRN							
		9				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
SB11	12					-		-				
		10				RED	ORG	GRN	BLU			
SB14	12											
		7	RED	ORG	GRN							
		8	RED	ORG	GRN							

N	O	T	ES:	:
---	---	---	-----	---

- *USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
- *ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
- *RECONNECT THE GROUNDING CONDUCTORS WHENEVER THE CIRCUIT HAS BEEN INTERRUPTED TO ENSURE THE GROUNDING CIRCUIT IS COMPLETE.

EQUIPMENT						
GROUNDING	GROUNDING CONDUCTOR					
10 AWG	GRN XLP					
FROM	ТО					
CB1	SB1					
SB1	SB2					
SB2	SB3					
SB3	SB4					
SB4	SB7					
SB7	SB8					
SB8	SB9					
SB9	SB10					
SB10	SB11					
SB11	SB14					
SB14	CB1					

VIDEO					
CTION					
BLE					
ТО					
V1 (SB7)					
V2 (SB14)					
V3 (SB2)					
V4 (SB9)					

PULL BOX	PULL BOX BONDING					
JUM	JUMPER					
10 AWG	GRN XLP					
FROM	ТО					
PB1	SB1					
PB2	SB2					
PB3	SB2					
PB4	SB3					
PB5	SB3					
PB6	SB6					
PB7	SB7					
PB8	SB8					
PB9	SB9					
PB10	SB10					
PB11	SB10					
PB12	SB13					

LIGHTING UF 10 AWG					
W/ GROUND					
ТО					
SB2					
SB4					
SB5					
SB6					
SB11					
SB12					
SB13					
SB9					

TRAFFIC CONTROL SIGNAL CTH V & CTH W TOWN OF GRAFTON OZAUKEE COUNTY

SIGNAL NO.

COUNTY CONTACT: JOHN EDGREN DESIGNED BY: GRAEF REVISED BY:

PAGE 1 OF 1

PROJECT NO: 2695-10-70 HWY: CTH V COUNTY: OZAUKEE

CABLE ROUTING

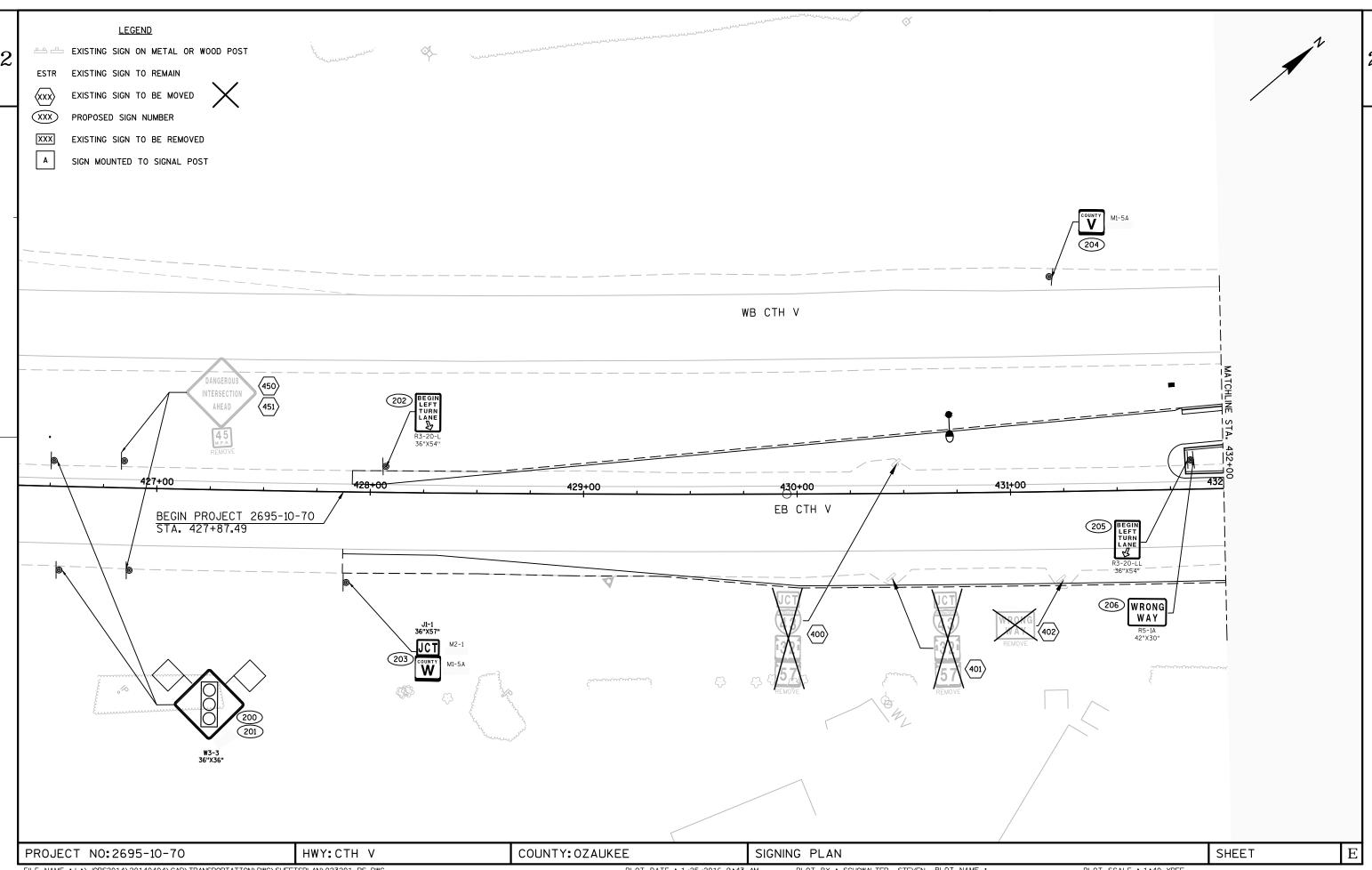
PLOT DATE: 1/25/2016 9:43 AM

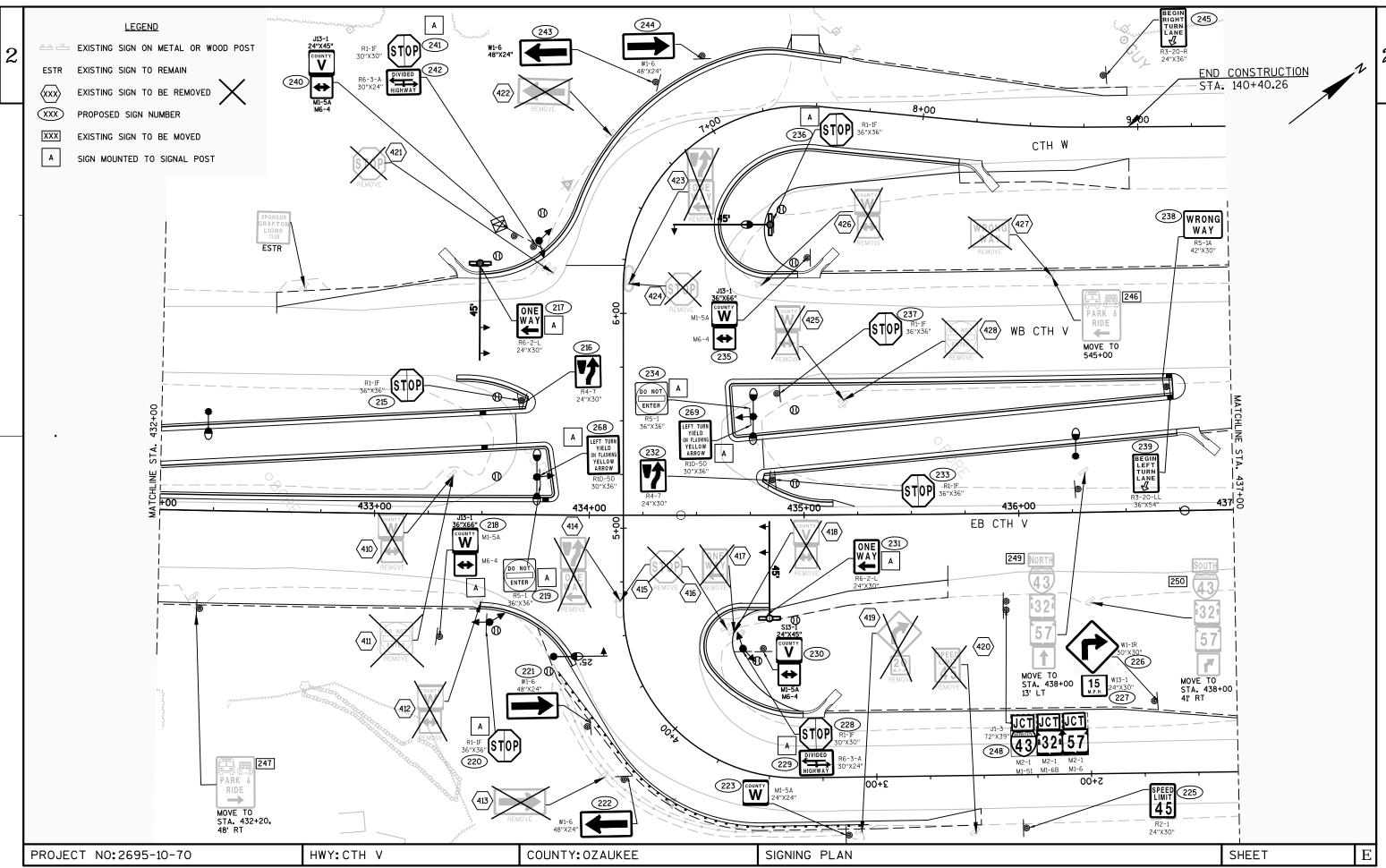
PLOT SCALE : ********

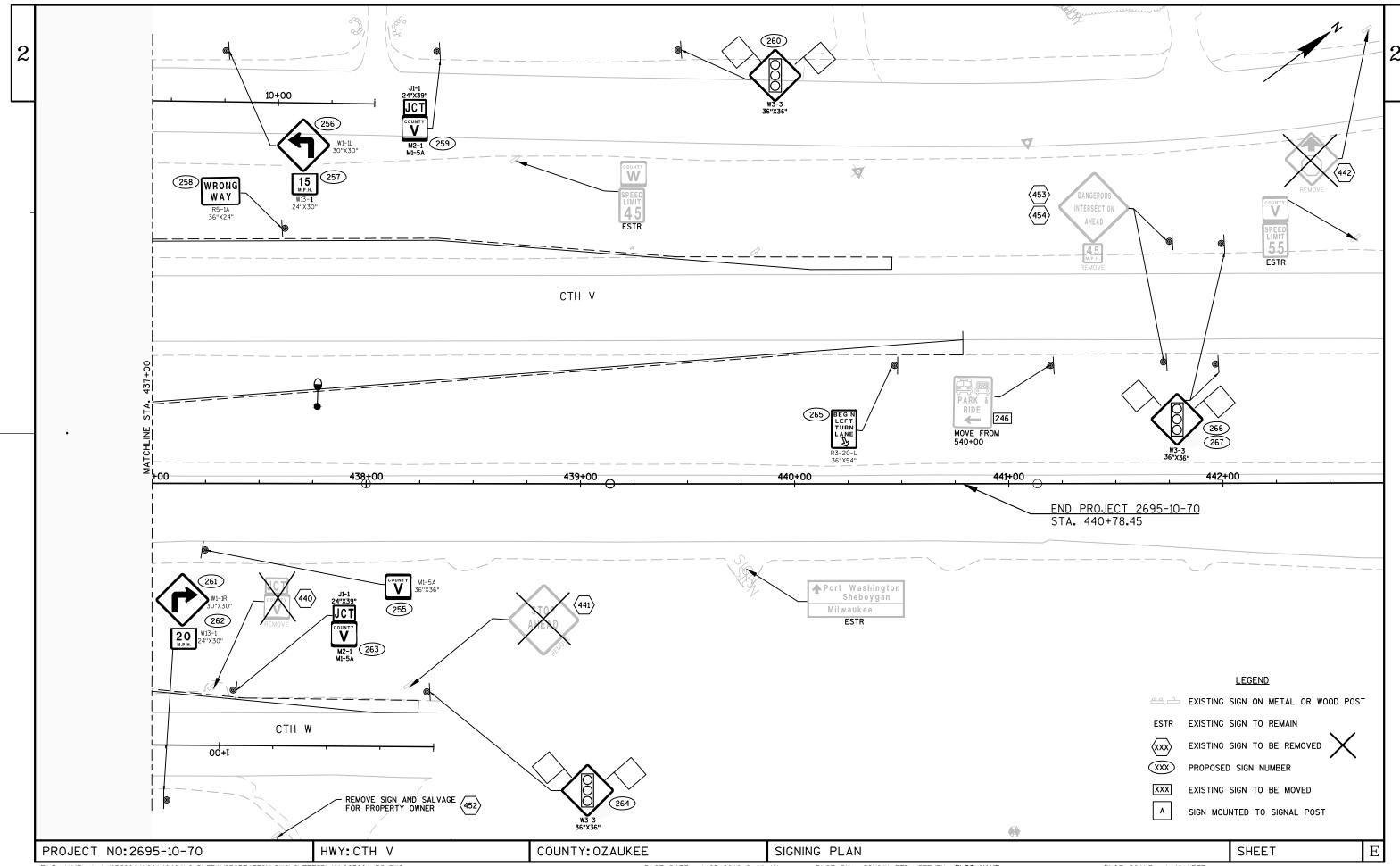
SHEET

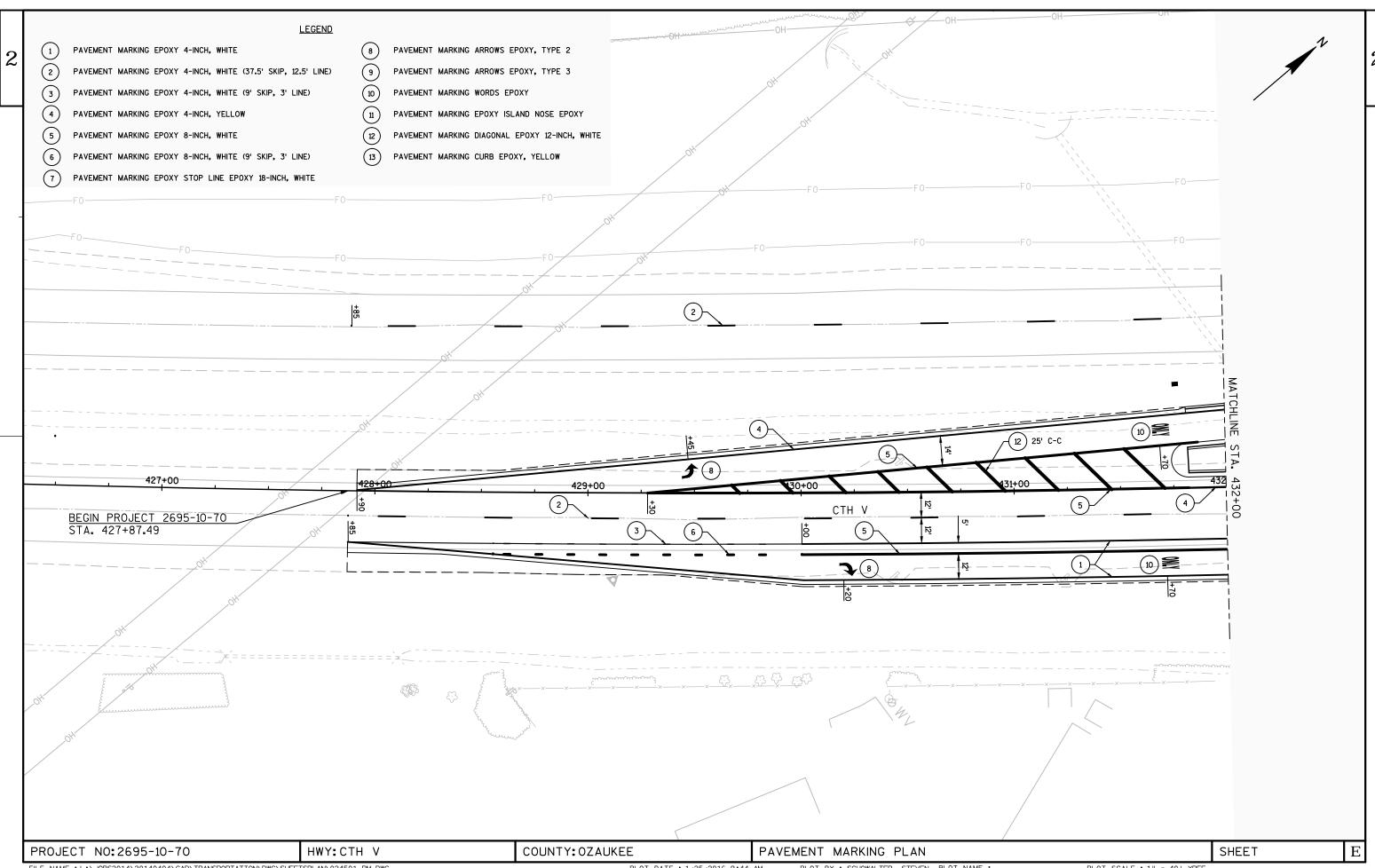
GRN-GREEN

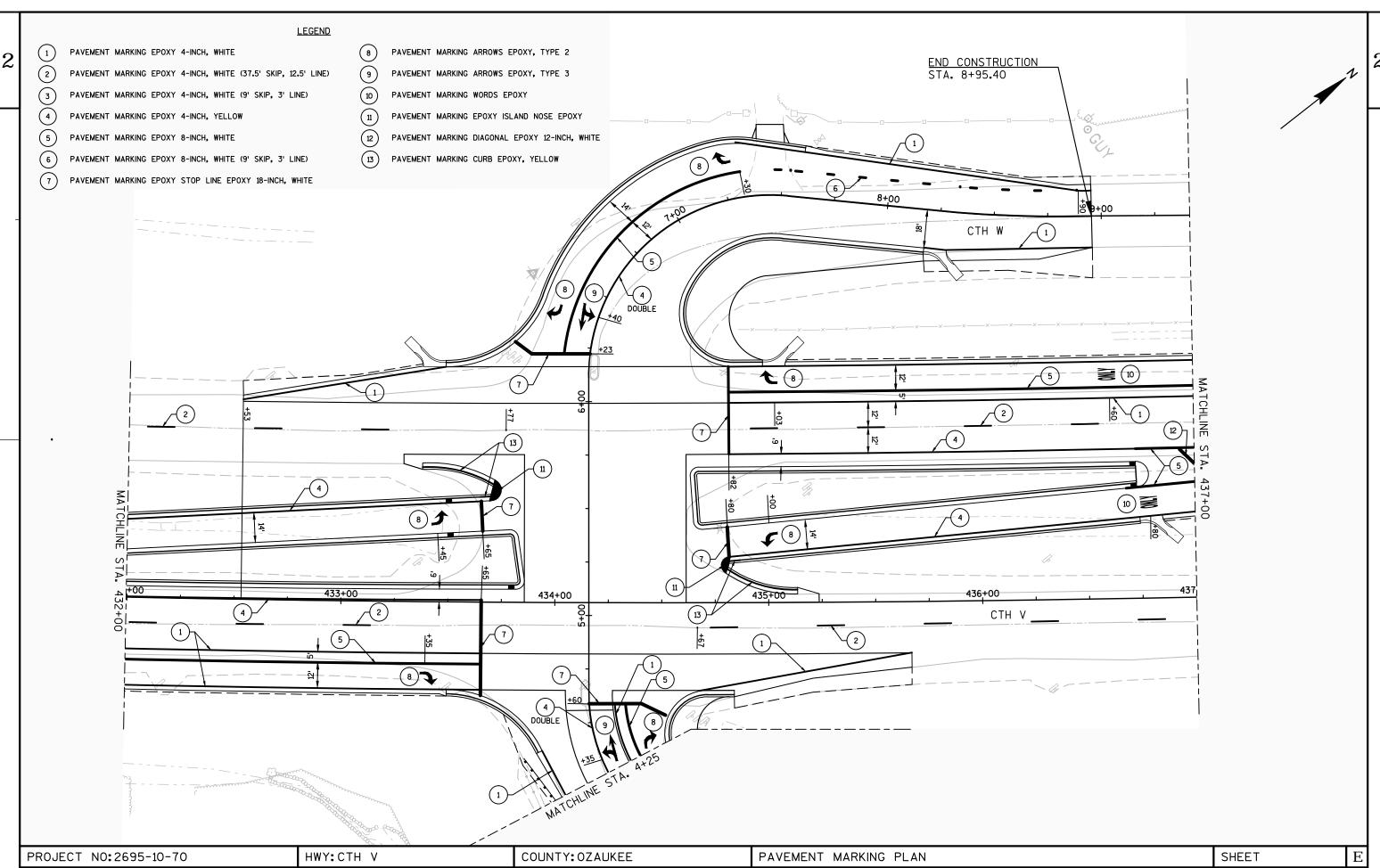
ORG-ORANGE

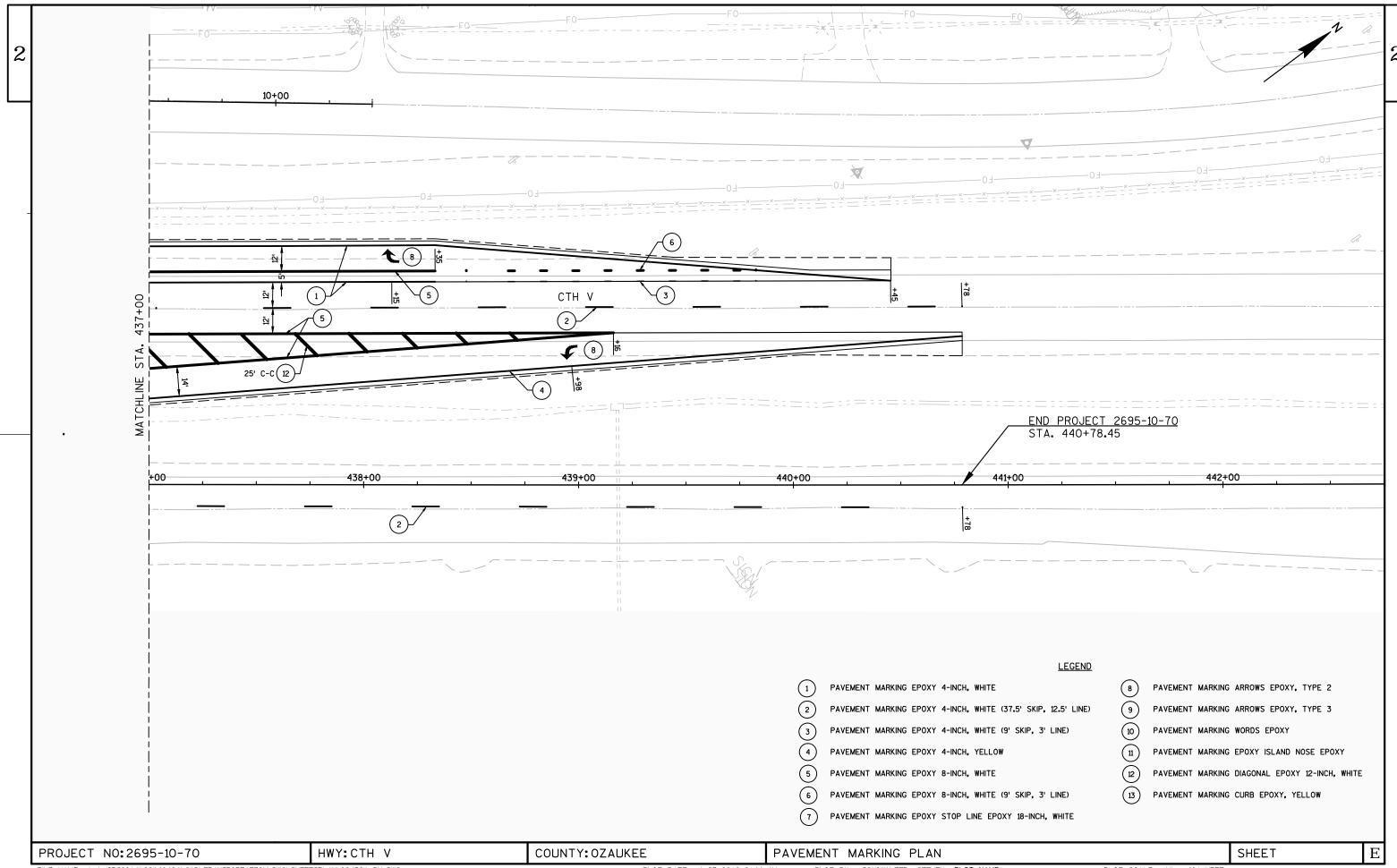


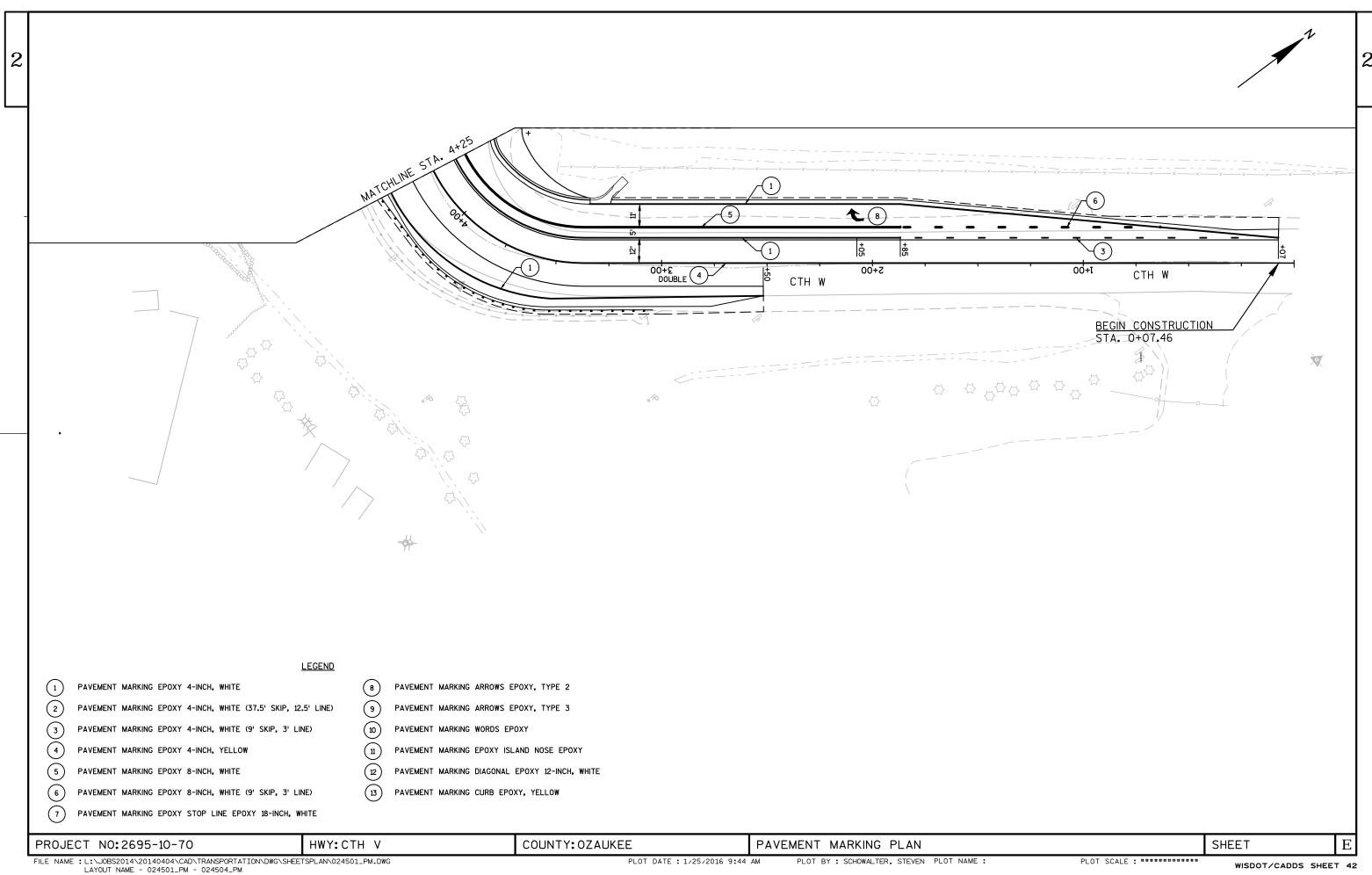


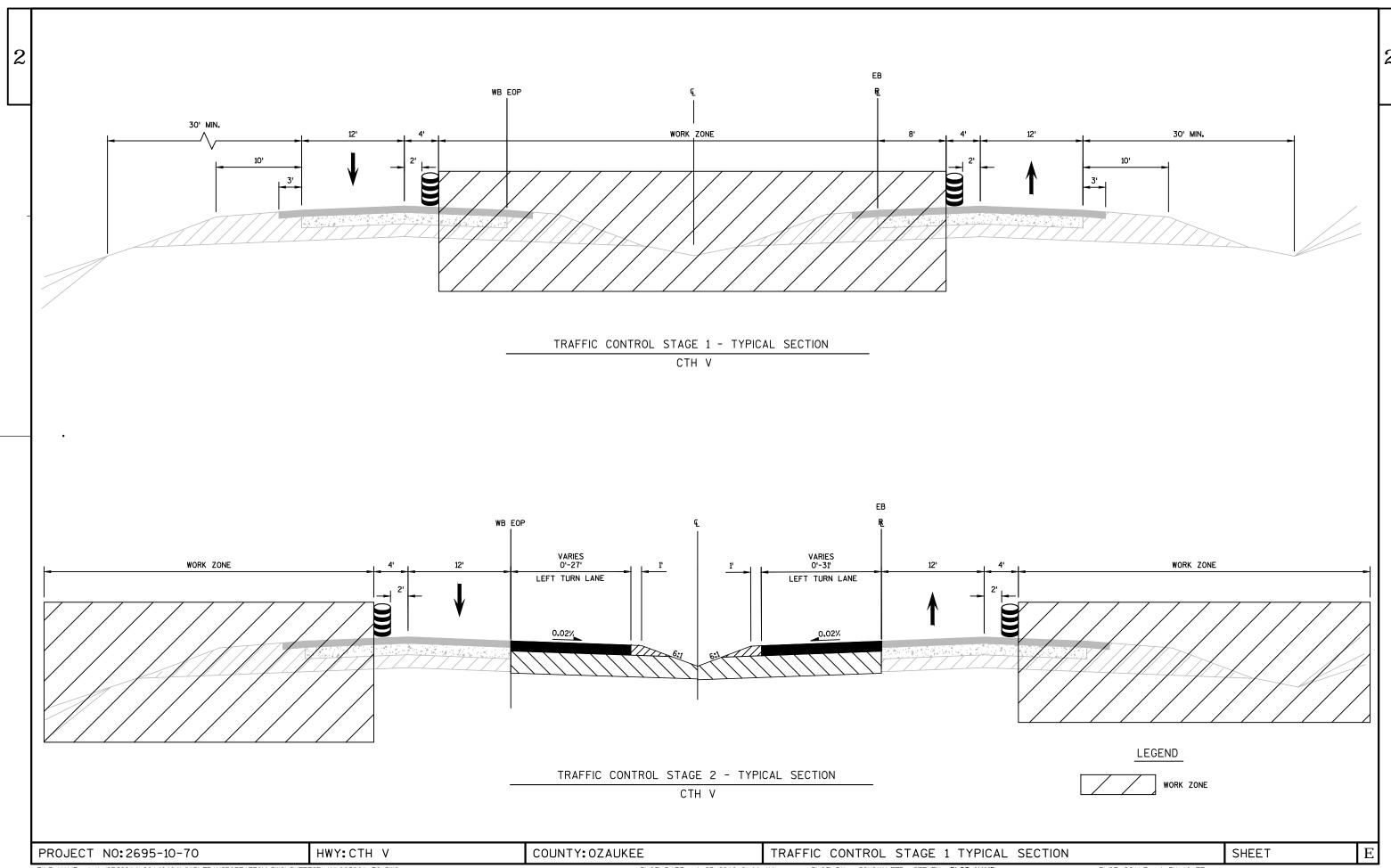




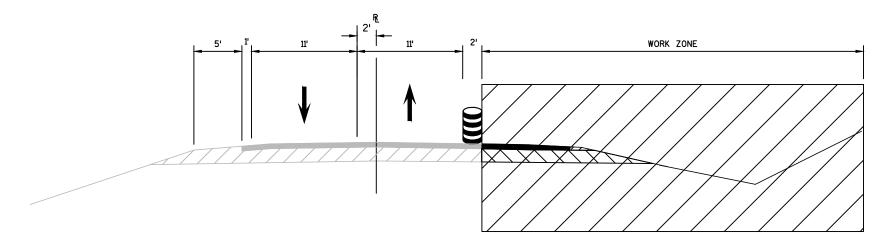




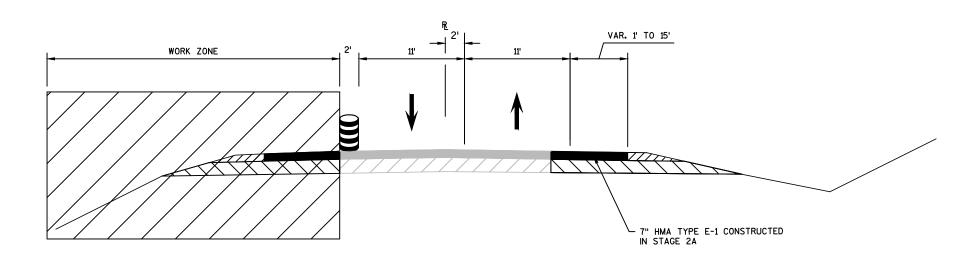




 $oxed{2}$



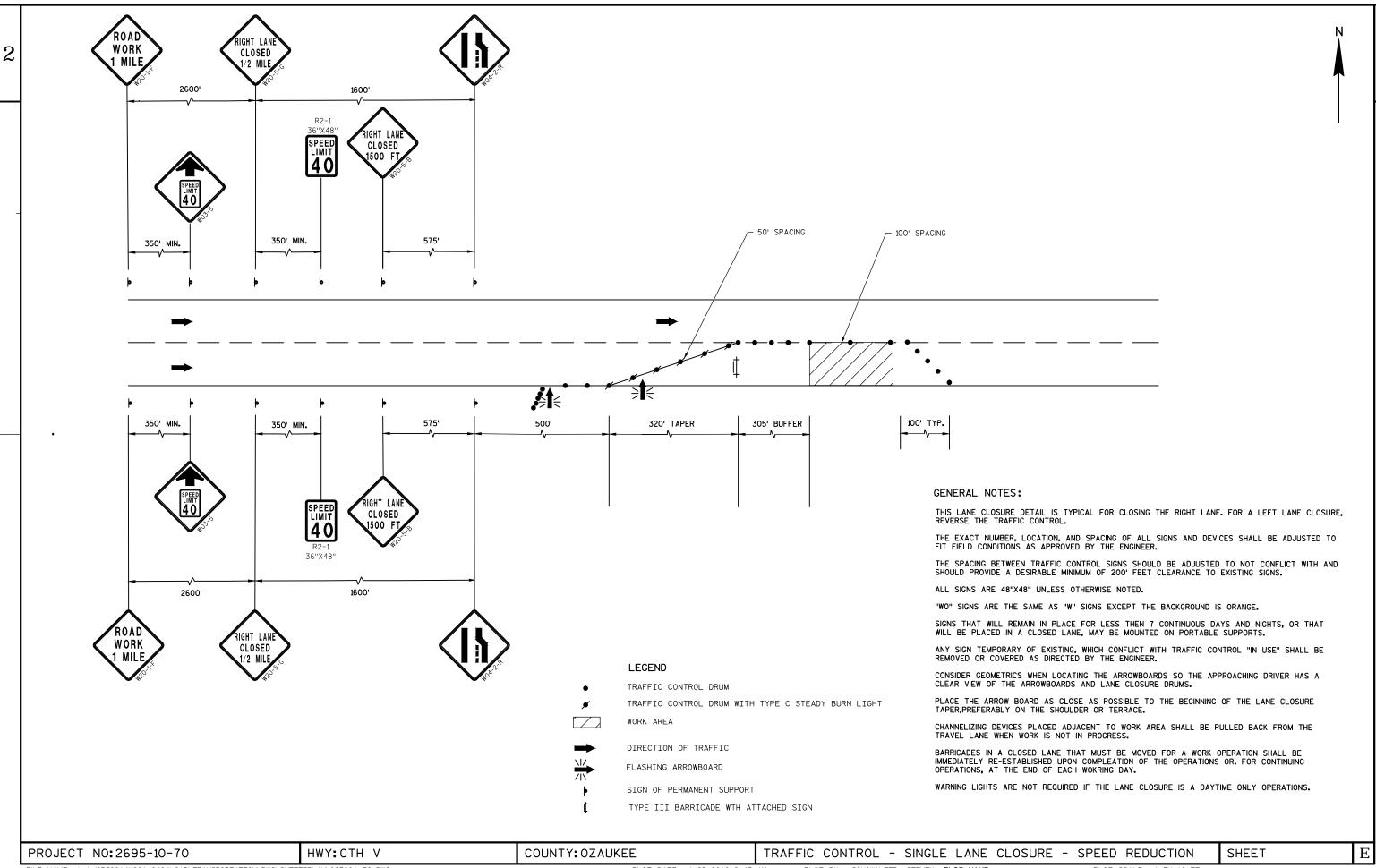
TRAFFIC CONTROL STAGE 2A - TYPICAL SECTION
CTH W SOUTH

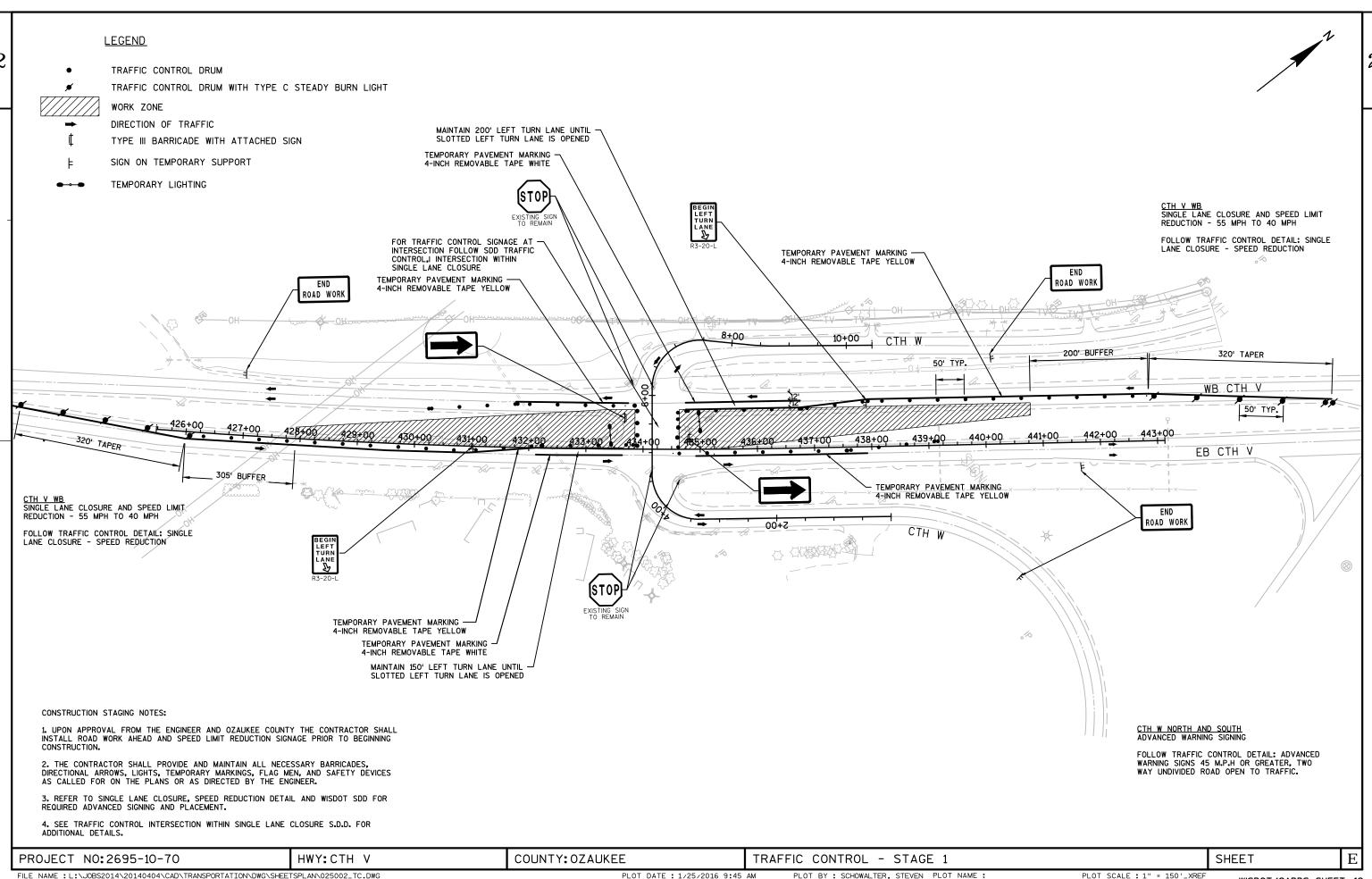


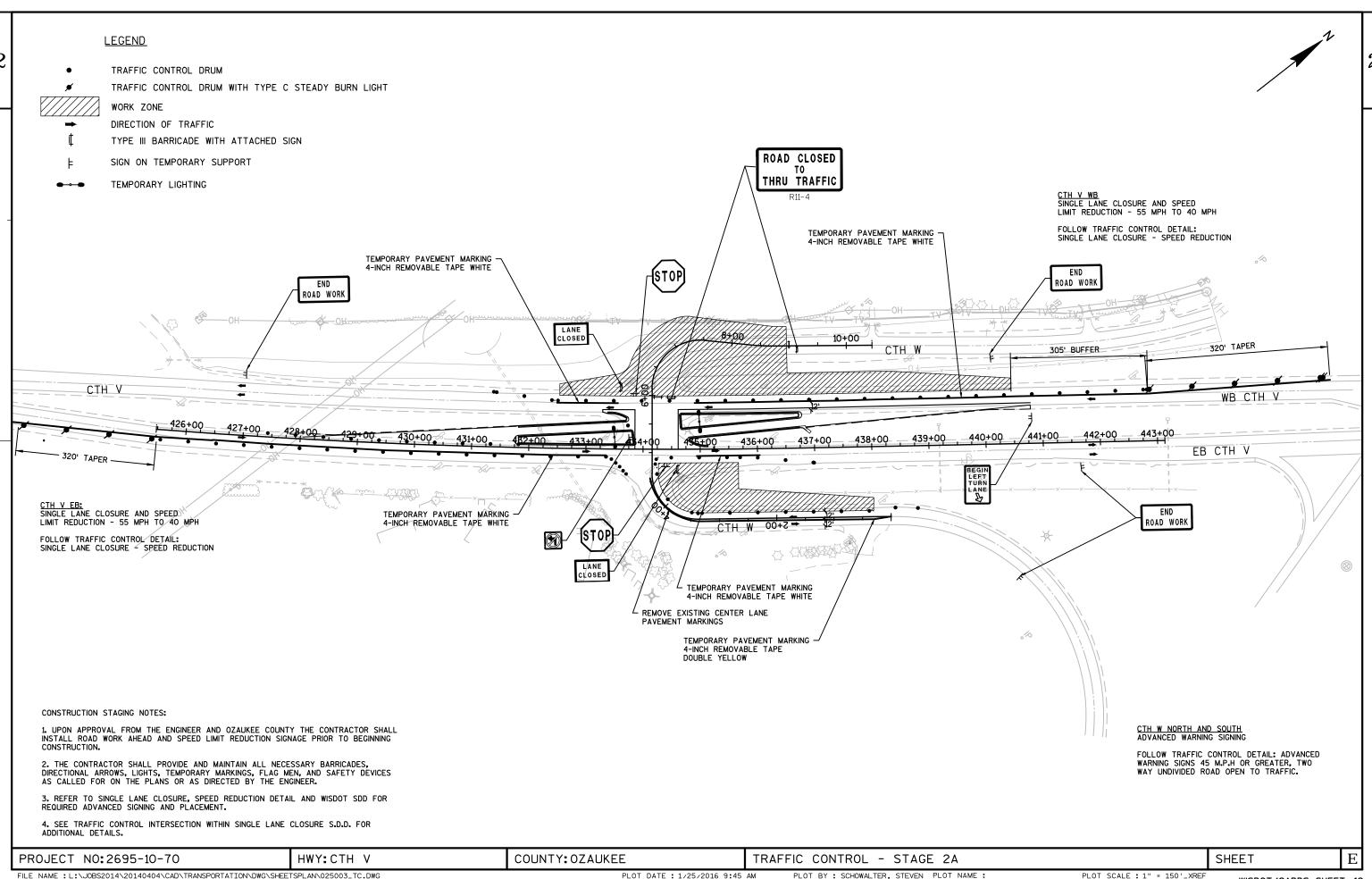
TRAFFIC CONTROL STAGE 2B - TYPICAL SECTION
CTH W SOUTH

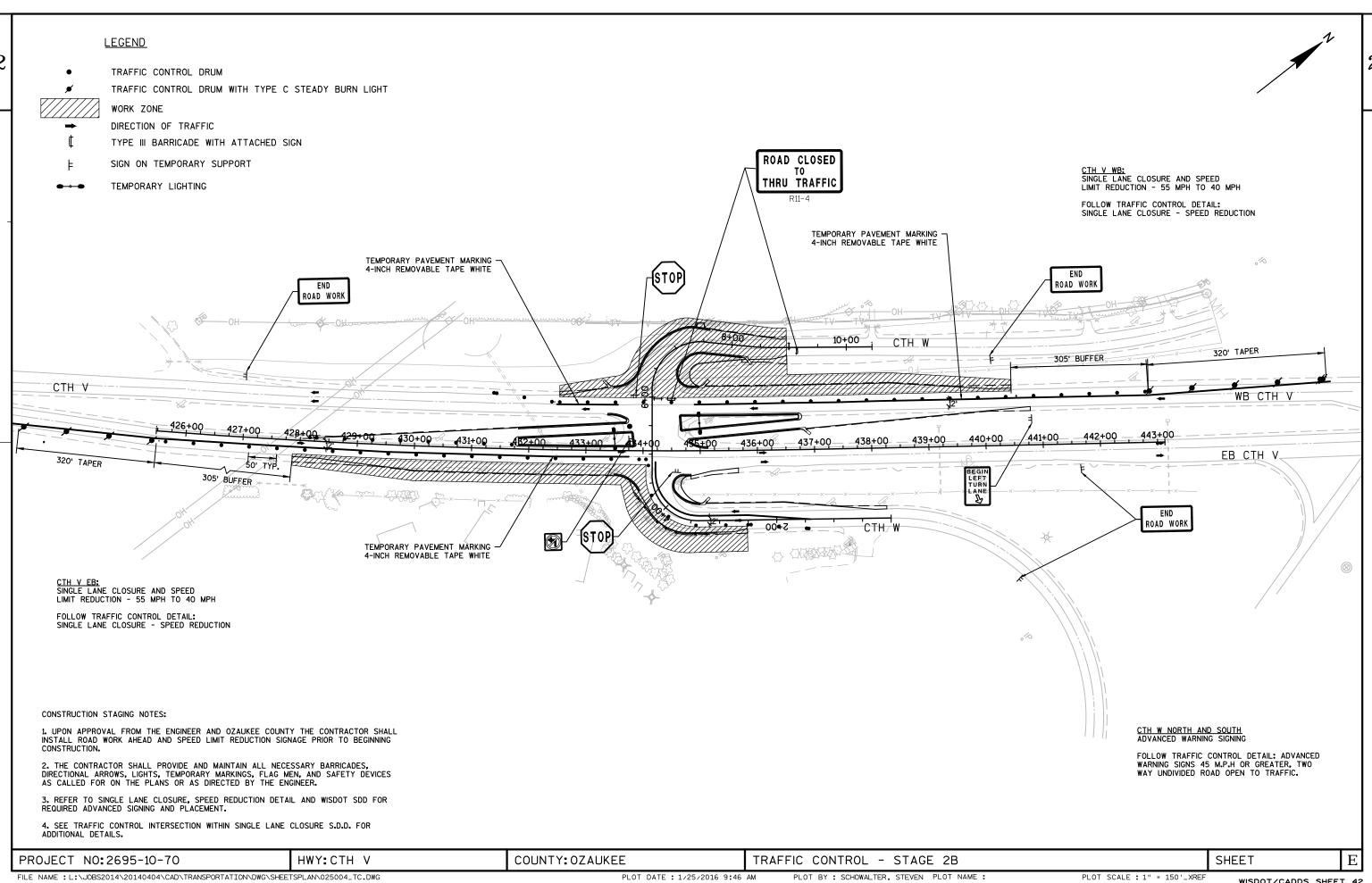
LEGEND WORK ZONE

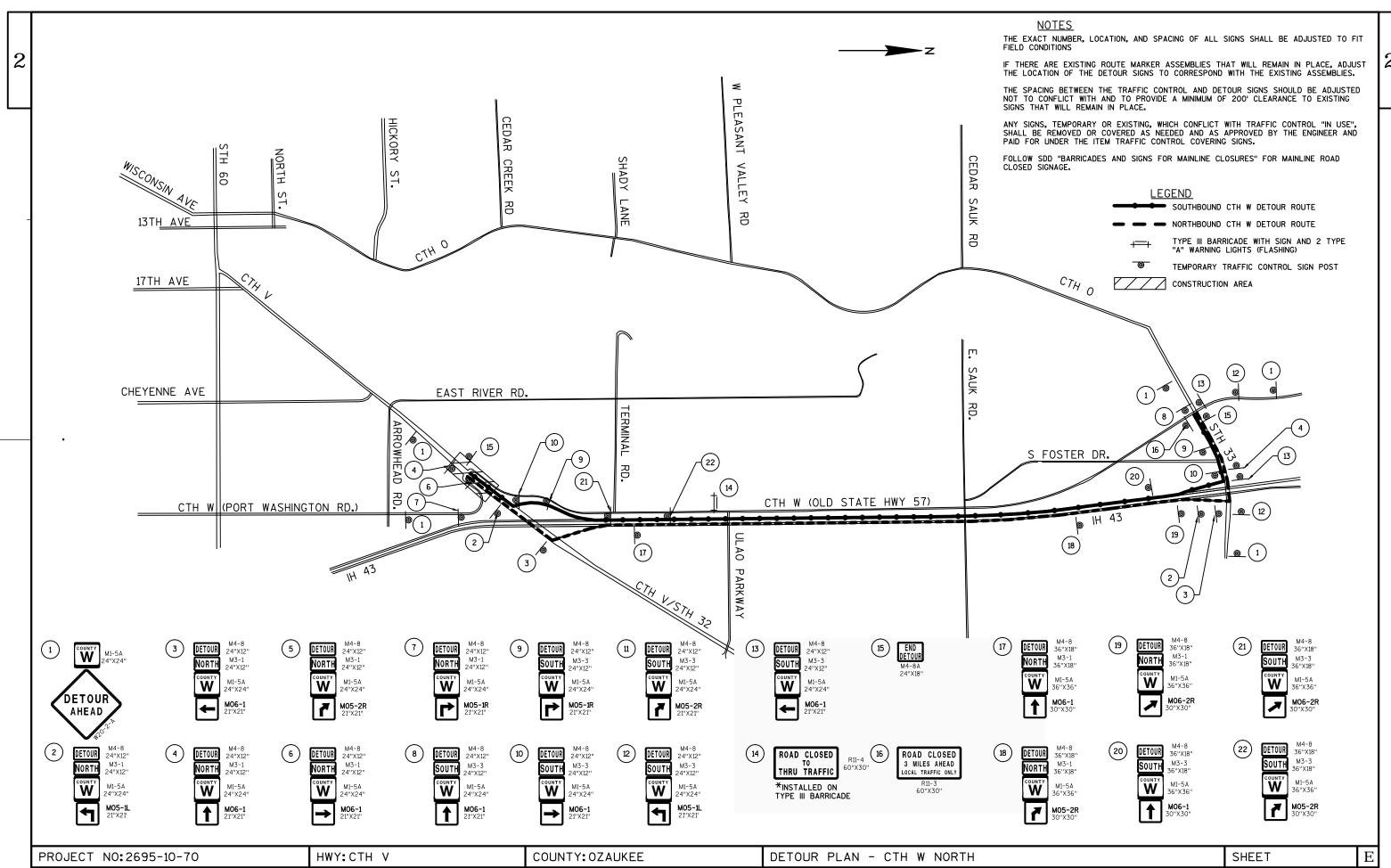
PROJECT NO:2695-10-70 HWY:CTH V COUNTY:OZAUKEE TRAFFIC CONTROL STAGE 2 TYPICAL SECTION SHEET E











- CP#2 CURVE 2 CTH V EB - CURVE 1 CTH V EB - CURVE 2 PI STA = 431+13.02 PI STA = 441+13.40 Y = 408576.88 X = 601240.51 DELTA = 0°16'23" Y = 407776.94CURVE 7 3 The X = 600638.34 DELTA = 5°32'22" D = 0°29'25" $D = 0^{\circ}04'06''$ T = 199.47' L = 398.95' R = 83742.47' CURVE 6 T = 565.22' Y= 408,144.21 X= 600,661.88 L = 1129.56' R = 11683.14' PC STA = 425+47.80 PT STA = 436+77.36 PC STA = 439+13.92 PT STA = 443+12.87 Pl: 7+05.17 CP#1 CTH W - CURVE 5 CTH W - CURVE 6 CURVE 5 PI STA = 4+18.01 Y = 407945.27 PI STA = 7+05.17 Y = 408144.21 X = 600661.88 147.82' N51° 55' 36"W X = 600915.84 DELTA = 95°33'49" D = 67°24'24" T = 93.68' DELTA = 90°46'42" D = 71°37'11" T = 81.09' Øţ\$0 L = 126.75' L = 141.77' R = 80.00' PC STA = 3+36.92 PT STA = 4+63.67 R = 85.00' PC STA = 6+11.49 PT STA = 7+53.26 CTH W - CURVE 7 PI STA = 8+52.09 Y = 408283.51 Y = 408283.51 X = 600794.75 DELTA = 5°56'13" D = 12°35'33" T = 23.59' L = 47.15' R = 455.00' CURVE 1 PC STA = 8+28.49 PT STA = 8+75.64 BEGIN PROJECT 2695-10-70 STA. 427+87.49 Y= 407,538.62 X= 600,416.54

PROJECT NO: 2695-10-70 HWY: CTH V

FILE NAME: L:\JOBS2014\20140404\CAD\TRANSPORTATION\DWG\SHEETSPLAN\027201_AD.DWG

LAYOUT NAME - 027201_AD - 027201_AD

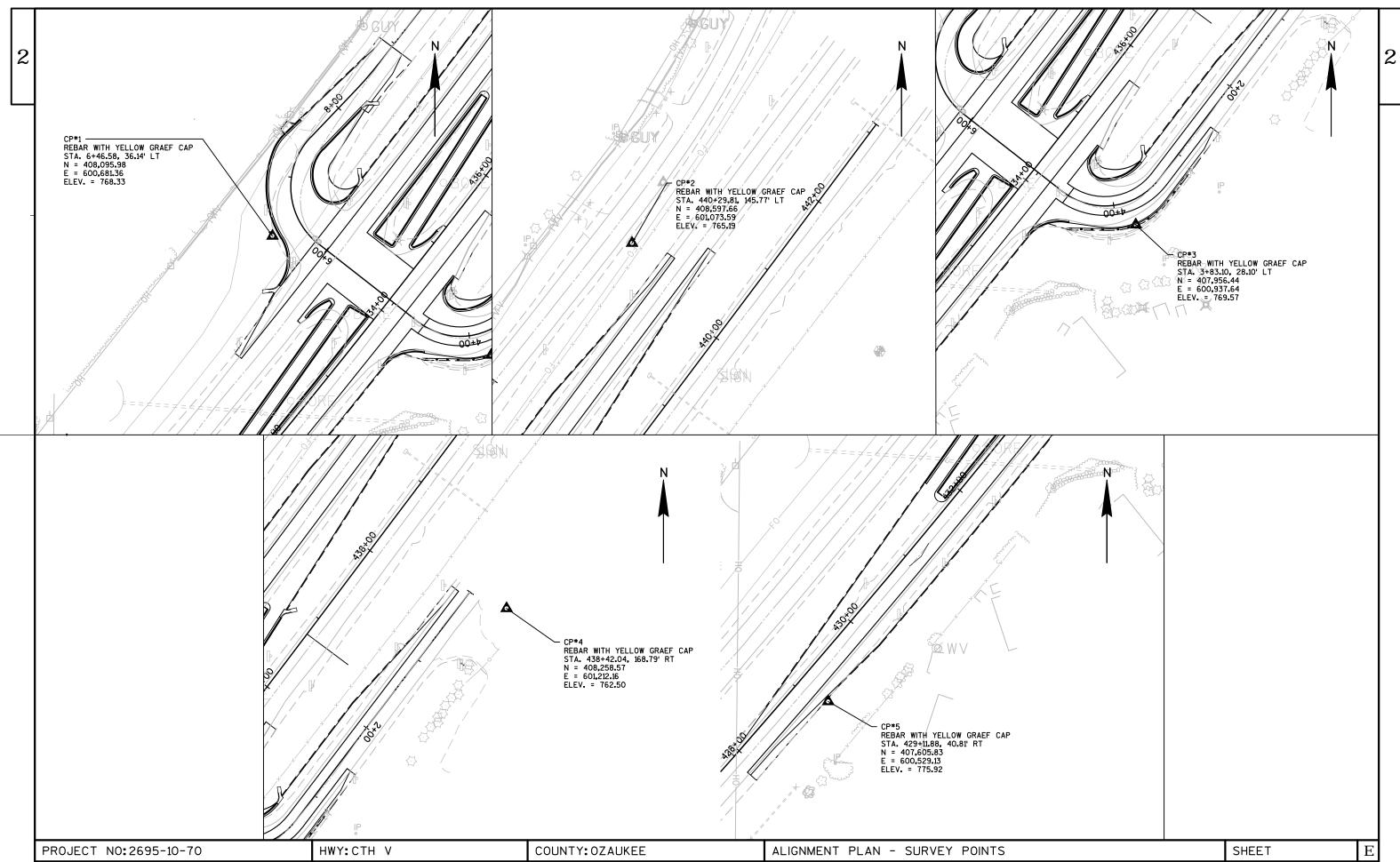
PLOT DATE : 1/25/2016 9:46 AM

COUNTY: OZAUKEE

PLOT BY: SCHOWALTER, STEVEN PLOT NAME:

ALIGNMENT PLAN

SHEET



DATE 26	JAN16	E S	TIMAT	E OF QUAN	T I T I E S 2695-10-70
LI NE NUMBER	ITEM	ITEM DESCRIPTION	UNI T	TOTAL	QUANTI TY
0010	204. 0130	Removing Curb	LF	59. 000	59. 000
0020	204. 0155	Removing Concrete Sidewalk	SY	10.000	10.000
0030	204. 0165 204. 0170	Removing Guardrail	LF LF	162. 000 845. 000	162. 000 845. 000
0040 0050	204. 0170	Removing Fence Removing Concrete Bases	EACH	1. 000	1. 000
0060	205. 0100	Excavation Common	CY	5, 267. 000	5, 267. 000
0070	208. 0100	Borrow	CY	118. 000	118. 000
0800	213. 0100	Finishing Roadway (project) 01. 2695-10-70	EACH	1. 000	1. 000
0090	305. 0110	Base Aggregate Dense 3/4-Inch	TON	590. 000	590. 000
0100	305. 0120	Base Aggregate Dense 1 1/4-Inch	TON	8, 053. 000	8, 053. 000
0110	311. 0110	Breaker Run	TON	400.000	400. 000
0120	416. 0160	Concrete Dri veway 6-Inch	SY	286. 000	286. 000
0130	455. 0105 455. 0605	Asphaltic Material PG58-28 Tack Coat	TON GAL	196. 000 818. 000	196. 000 818. 000
0140 0150	460. 1103	HMA Pavement Type E-3	TON	3, 287. 000	3, 287. 000
		institutione Type L-3		5, 207. 000	3, 207. 000
0160	460. 2000	Incentive Density HMA Pavement	DOL	2, 110. 000	2, 110. 000
0170	465. 0315	Asphaltic Flumes	SY	49. 000	49. 000
0180	601. 0553	Concrete Curb & Gutter 4-Inch Sloped	LF	718. 000	718. 000
0190	601. 0557	36-Inch Type D Concrete Curb & Gutter 6-Inch Sloped	LF	268. 000	268. 000
0170	001.0007	36-Inch Type D	Lr'	200.000	∠00. 000
0200	601. 0580	Concrete Curb & Gutter 4-Inch Sloped	LF	274. 000	274. 000
- -		36-Inch Type R			
0210	606. 0200	Riprap Medium	CY	7. 000	7. 000
0220	608. 0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	65. 000	65. 000
0230	608. 0315	Storm Sewer Pipe Reinforced Concrete	LF	432. 000	432. 000
3200	500.0010	Class III 15-Inch		102.000	102.000
0240	611. 0430	Reconstructing Inlets	EACH	2. 000	2.000
0250	611. 0530	Manhole Covers Type J	EACH	1. 000	1. 000
00/0	/11 0/07	Into Course Time III	FACU	F 000	F 000
0260	611. 0627	Inlet Covers Type HM	EACH	5. 000	5. 000
0270 0280	611. 0642 611. 3230	Inlet Covers Type MS Inlets 2x3-FT	EACH EACH	1. 000 5. 000	1. 000 5. 000
0280	611. 3230	Inlets 2x3-F1 Inlets Median 1 Grate	EACH	1. 000	1. 000
0300	612. 0104	Pipe Underdrain 4-Inch	LF	50. 000	50. 000
		·			
0310	612. 0106	Pipe Underdrain 6-Inch	LF	50. 000	50. 000
0320	612. 0108	Pipe Underdrain 8-Inch	LF	50.000	50. 000
0330	612. 0700	Drain Tile Exploration	LF	100.000	100.000
0340	614. 2330	MGS Guardrail 3 K MGS Guardrail Terminal EAT	LF EACH	125. 000 1. 000	125. 000 1. 000
0350	614. 2610	WOO GUALULALL LELINITIAL EAT	EACH	1.000	1.000
0360	614. 2620	MGS Guardrail Terminal Type 2	EACH	1. 000	1. 000
0370	616. 0100	Fence Woven Wire (height) 01. 4-FT	LF	759. 000	759. 000
0380	619. 1000	Mobilization	EACH	1. 000	1. 000
0390	620. 0300	Concrete Median Sloped Nose	SF	199. 000	199. 000
0400	624. 0100	Water	MGAL	109. 000	109. 000
0410	625. 0500	Sal vaged Topsoi I	SY	8, 076. 000	8, 076. 000
0420	628. 1104	Erosi on Balles	EACH	40. 000	40. 000
0430	628. 1504	Silt Fence	LF	584.000	584.000
0440	628. 1520	Silt Fence Maintenance	LF	584. 000	584. 000
0450	628. 1905	Mobilizations Erosion Control	EACH	2. 000	2. 000
0460	620 1010	Mobilizations Emorgancy Eracian Control	EVCH	4 000	4 000
0460 0470	628. 1910 628. 2002	Mobilizations Emergency Erosion Control Erosion Mat Class I Type A	EACH SY	4. 000 9, 741. 000	4. 000 9, 741. 000
0470	628. 2023	Erosion Mat Class II Type B	SY	355. 000	355. 000
0490	628. 7005	Inlet Protection Type A	EACH	3. 000	3. 000
-		31 -			

DATE 26	JAN16	EST	IMAT	E OF QUAN	T I T I E S 2695-10-70
NUMBER		ITEM DESCRIPTION	UNIT	TOTAL	QUANTI TY
0500	628. 7015	Inlet Protection Type C	EACH	5. 000	5. 000
0510 0520	628. 7504 628. 7555	Temporary Ditch Checks Culvert Pipe Checks	LF EACH	325. 000 13. 000	325. 000 13. 000
0530	628. 7570	Rock Bags	EACH	40.000	40. 000
0540 0550	629. 0210 630. 0140	Fertilizer Type B Seeding Mixture No. 40	CWT LB	7. 000 182. 000	7. 000 182. 000
0560 0570	630. 0200 631. 1100	Seeding Temporary Sod Erosion Control	LB SY	409. 000 41. 000	409. 000 41. 000
0580	634. 0614	Posts Wood 4x6-Inch X 14-FT	EACH	15. 000	15. 000
0590 0600	634. 0616 634. 0618	Posts Wood 4x6-Inch X 16-FT Posts Wood 4x6-Inch X 18-FT	EACH EACH	16. 000 2. 000	16. 000 2. 000
0610 0620	637. 0620 637. 2210	Sign Flags Permanent Type II Signs Type II Reflective H	EACH SF	12. 000 286. 700	12. 000 286. 700
0630	637. 2215	Signs Type II Reflective H Folding	SF	49. 900	49. 900
0640	637. 2230	Signs Type II Reflective F	SF	119. 900	119. 900
0650	638. 2102	Moving Signs Type II	EACH	4. 000	4. 000
0660	638. 2602	Removing Signs Type II	EACH	49. 000	49. 000
0670 0680	638. 3000 638. 4000	Removing Small Sign Supports Moving Small Sign Supports	EACH EACH	25. 000 4. 000	25. 000 4. 000
0690	642. 5001	Field Office Type B	EACH	1. 000	1. 000
0700	643. 0200	Traffic Control Surveillance and Maintenance (project) 01. 2695-10-70	DAY	98. 000	98. 000
0710	442 0200		DAY	7 010 000	7 010 000
0710 0720	643. 0300 643. 0420	Traffic Control Drums Traffic Control Barricades Type III	DAY DAY	7, 812. 000 312. 000	7, 812. 000 312. 000
0730	643. 0705	Traffic Control Warning Lights Type A	DAY	624.000	624. 000
0740 0750	643. 0715 643. 0800	Traffic Control Warning Lights Type C Traffic Control Arrow Boards	DAY DAY	2, 728. 000 392. 000	2, 728. 000 392. 000
0760 0770	643. 0900 643. 0920	Traffic Control Signs Traffic Control Covering Signs Type II	DAY EACH	3, 610. 000 1. 000	3, 610. 000 1. 000
0780	643. 2000	Traffic Control Detour (project) 01.	EACH	1. 000	1. 000
0790	643. 3000	2695-10-70 Traffic Control Detour Signs	DAY	1, 980. 000	1, 980. 000
0800	645. 0120	Geotextile Fabric Type HR	SY	17. 000	17. 000
0810	646. 0106	Pavement Marking Epoxy 4-Inch	LF	6, 308. 000	6, 308. 000
0820	646. 0126	Pavement Marking Epoxy 8-Inch	LF	2, 199. 000	2, 199. 000
0830	646. 0600	Removing Pavement Markings	LF EACH	630. 000 12. 000	630.000
0840 0850	647. 0166 647. 0176	Pavement Marking Arrows Epoxy Type 2 Pavement Marking Arrows Epoxy Type 3	EACH EACH	12. 000 2. 000	12. 000 2. 000
0860 0870	647. 0356 647. 0456	Pavement Marking Words Epoxy Pavement Marking Curb Epoxy	EACH LF	4. 000 80. 000	4. 000 80. 000
0880	647. 0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	188. 000	188. 000
0890 0900	647. 0606 647. 0726	Pavement Marking Island Nose Epoxy Pavement Marking Diagonal Epoxy 12-Inch	EACH LF	2. 000 248. 000	2. 000 248. 000
0910	649. 0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	9, 502. 000	9, 502. 000
0920	652. 0225	Conduit Rigid Nonmetallic Schedule 40	LF	643. 000	643.000
0930	652. 0235	2-Inch Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	651. 000	651. 000
0940	652. 0615	Conduit Special 3-Inch	LF	736. 000	736. 000
0950	653. 0140	Pull Boxes Steel 24x42-Inch	EACH	12. 000	12. 000
0960	654. 0101	Concrete Bases Type 1	EACH	4. 000	4. 000
0970	654. 0102 654. 0105	Concrete Bases Type 2 Concrete Bases Type 5	EACH EACH	3. 000 4. 000	3. 000 4. 000
0980	004. 0105	Concrete bases Type 5	EAUT	4. 000	4.000

INE	LTEM	LTEM DESCRIPTION	LIMIT	TOTAL	2695-10-70	
JMBER 990	654. 0113	ITEM DESCRIPTION Concrete Bases Type 13	UNI T EACH	TOTAL 3. 000	QUANTI TY 3. 000	
990 000	654. 0217	Concrete Control Cabinet Bases Type 9	EACH	1. 000	1. 000	
500	034. 0217	Special	LACII	1.000	1.000	
10	655. 0230	Cable Traffic Signal 5-14 AWG	LF	493. 000	493. 000	
020	655. 0240	Cable Traffic Signal 7-14 AWG	LF	88.000	88. 000	
030	655. 0260	Cable Traffic Signal 12-14 AWG	LF	2, 132. 000	2, 132. 000	
040	655. 0315	Cable Type UF 2-10 AWG	LF	1, 355. 000	1, 355. 000	
050	655. 0515	Electrical Wire Traffic Signals 10 AWG	LF	1, 482. 000	1, 482. 000	
060	655. 0610	Electrical Wire Lighting 12 AWG	LF	1, 179. 000	1, 179. 000	
070	656. 0200	Electrical Service Meter Breaker	LS	1. 000	1. 000	
		Pedestal (location) 01. CTH V & CTH W				
	/F/ 0000	Si gnal		4 000	4 000	
080	656. 0200	Electrical Service Meter Breaker	LS	1. 000	1. 000	
		Pedestal (location) 02. CTH V & CTH W				
200	/ 57 0400	Lighting	EACH	4 000	4 000	
090	657. 0100	Pedestal Bases	EACH	4.000	4. 000	
100	657. 0255	Transformer Bases Breakaway 11 1/2-Inch	EACH	7. 000	7. 000	
		Bolt Circle				
110	657. 0310	Pol es Type 3	EACH	1. 000	1. 000	
120	657. 0315	Pol es Type 4	EACH	2. 000	2. 000	
130	657. 0322	Poles Type 5-Alumi num	EACH	4. 000	4. 000	
140	657. 0420	Traffic Signal Standards Aluminum 13-FT	EACH	2. 000	2. 000	
150	657. 0425	Traffic Signal Standards Aluminum 15-FT	EACH	2.000	2. 000	
160	657. 0595	Trombone Arms 25-FT	EACH	1.000	1. 000	
170	657. 0609	Luminaire Arms Single Member 4-Inch	EACH	5. 000	5. 000	
180	657. 0610	Clamp 6-FT Luminaire Arms Single Member 4 1/2-Inch	EACH	4.000	4. 000	
100	037.0010	Clamp 6-FT	LACII	4.000	4.000	
190	658. 0110	Traffic Signal Face 3-12 Inch Vertical	EACH	12.000	12. 000	
200	658. 0115	Traffic Signal Face 4-12 Inch Vertical	EACH	4. 000	4. 000	
210	658. 0215	Backplates Signal Face 3 Section 12-Inch	EACH	12. 000	12. 000	
220	658. 0220			4. 000	4. 000	
230	658. 0600	Led Modules 12-Inch Red Ball	EACH	12. 000	12. 000	
240	658. 0605	Led Modules 12-Inch Yellow Ball	EACH	12. 000	12. 000	
250	658. 0610	Led Modules 12-Inch Green Ball	EACH	12. 000	12. 000	
260	658. 0615	Led Modules 12-Inch Red Arrow	EACH	4. 000	4. 000	
270 270	658. 0620	Led Modules 12-Inch Yellow Arrow	EACH	8. 000	8. 000	
280	658. 0625	Led Modules 12-Inch Green Arrow	EACH	4. 000	4. 000	
290	658. 5069	Signal Mounting Hardware (location) 01.	LS	1. 000	1. 000	
-		CTH V & CTH W Intersection	-			
300	659. 1125	Luminaires Utility LED C	EACH	10. 000	10. 000	
040	(00 61=5			0.001.000	0.004.000	
310	690. 0150	Sawing Asphalt	LF	3, 821. 000	3, 821. 000	
320	ASP. 1TOA	On-the-Job Training Apprentice at \$5.	HRS	500.000	500.000	
220	ACD 1700	00/HR	LIDC	EEO 000	EEO 000	
330	ASP. 1TOG	On-the-Job Training Graduate at \$5.00/HR	HRS	550.000	550.000	
340	SPV. 0060	Special 01. Monotube Poles Type 12	EACH	2.000	2.000	
350	SPV. 0060	Special 02. Monotube Poles Type 13	EACH	1. 000	1. 000	
360	SPV. 0060	Special 03. Monotube Arms 45-FT	EACH	3. 000	3. 000	
370	SPV. 0060	Special 04. Luminaire Arm Steel 12-FT	EACH	1. 000	1. 000	
380	SPV. 0060	Special 05. Traffic Signal Controller &	EACH	1. 000	1. 000	
		Cabinet (CTH V & CTH W)				
390	SPV. 0060	Special O6. Removing Electrical Service	EACH	1.000	1. 000	
		Meter Breaker Pedestal				
400	SPV. 0060	Special 07. Removing Light Poles, Arms	EACH	1. 000	1. 000	
		and Lumi nai res				

DATE 26	JAN16		ESTIMATE	OF QUAN	
LINE					2695-10-70
NUMBER	ITEM	ITEM DESCRIPTION	UNI T	TOTAL	QUANTI TY
1410	SPV. 0105	Special 01. Video & Multi-sensor Detection System	LS	1. 000	1. 000
1420	SPV. 0105	Special 02. Construction Staking (Project 2695-10-70)	LS	1. 000	1. 000
1430	SPV. 0105	Special 03. Temporary Lighting	LS	1.000	1. 000
1440	SPV. 0120	Special 01. Water for Seeded Areas	MGAL	226.000	226. 000

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			REMOVING CURB					RE	MOVING GUAR	DRAIL			\top			NTITIES ARE CA OTHERWISE NOT	
	STATION	STAT	ION LOCATION	204.0 LF			STATION	STAT	ION	LOCATION	204.0165 LF	5			REMOVING C	CONCRETE BASES	
	6+10	- 4+7 - 6+2		30 29)	PR	3+19 OJECT TOTAL	- 4+3	18	36' LT	162 162			STREET	STATION	LOCATION	204.0195 EACH
	PROJECT TOTAL			59										CTH V	434+77 ROJECT TOTAL	35' LT	1
	REMOVING CONCRETE SIDEWALK 204.0155 STATION STATION LOCATION SY					REMOVING FENCE 204.0170									FINISHI	ING ROADWAY	
	4+57 6+10	STAT - 4+7 - 6+2	70 LT	5 5		STREET CTH V CTH W	\$TATIO 434+8 0+75	5 -	\$TATION 440+50 3+55	132 ' 42 '	' LT	LF 565 280		PROJE	PROJECT ECT 2695-10-70		
	PROJECT TOTAL			10		PRO	JECT TOTAL					845		PROJECT	TOTAL	1	
E#	ARTHWORK SUMMARY		,	 .	,		1	, 	, 		, 	1 		-			
	Division		From/To Station	Location	Common Excavation (1)	(item # 205.0100) CY	Salvaged/ Unusable Pavement Material (4)	Available Material (5)	Reduced EBS in Fill (6)	Unexpanded Fill	Expanded Fill (7)	Mass Ordinate +/- (8)	Waste	Borrow (9)		Comment:	
					Cut (2)	EBS Excavation (3)			Factor 0.90		Factor			(item #208.0100 CY	')		
ı 🗕	TAGE 1									`							

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100

Total Common Exc

2) Salvaged/Unsuable Pavement Material is included in Cut.

Mainline

Sideroad

Mainline

Sideroad

3) EBS Excavation to be backfilled with Breaker Run. See quantities elsewhere for Item number 311.0110

1380

1380

1216

1696

2912

644

131

775

0

5067

200

200

5267

- 4) Salvaged/Unusable Pavement Material (Asphalt pavement)
- 5) Available Material = (Cut + EBS Excavation) Salvaged/Unusuable Pavement Material
- 6) EBS in Fill Reduction factor = 0.9.

428+00 to 440+79 Mainline

433+00 to 440+79

428+00 to 433+00

0+30 to 8+95

3+00 to 4+50

7) Expanded Fill. Factor = 1.11

Depending on selections:

Expanded Fill = Unexpanded Fill * Fill Factor

8) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

131

131

192

290

121

542

1249

1249

1024

1598

2622

644

654

200

4725

180

180

446

446

130

376

506

620

75

695

0

1647

496

144

417

561

689

772

1829

753

880

1181

2061

-45

-73

-118

200

2896

9) Borrow Excavation Subtotal = Sum (Borrow) - Sum (Waste)

Ε PROJECT NO: 2695-10-70 HWY: CTH V COUNTY: OZAUKEE MISCELLANEOUS QUANTITIES SHEET

753

753

880

1181

2061

200

3014

Earthwork from STA. 433+00 to STA. 440+79

Earthwork from STA. 6+00 to STA. 8+95

Continues to Stage 2B)

Continues to Stage 2B)

45

73

118

0

118

STAGE 1 SUBTOTAL

STAGE 2A SUBTOTAL

STAGE 2B SUBTOTAL

CATEGORY 0010 SUBTOTAL

UNDISTRIBUTED

STAGE 2A

CTH V

CTH W

STAGE 2B

CTH V

CTH W

	STAGE	STREET	STATION	то	STATION	305.01 TON						UNLLSS	OTHERWISE	140120
	STAGE 1	стн у	427+87		432+00	72			CO	NCRETE DRI	VEWAY		416.0160	
		CTH V	432+00	-		3							CONCRETE	
		CTH V	437+00 0+07			72 0							DRIVEWAY 6-INCH	
		CTH W	6+11			0		STAGE	STREET	STATION	то	STATION	SY	
STA	GE 1 TOTAL					147	_	STAGE 2A	CTH W	427+87		432+00		
	STAGE 2A									432+00			22	
		CTH V	427+87 432+00		432+00 437+00	86 65				437+00		440+79		
		CTH V	437+00		148.2	61				0+07 6+11			40	
		CTH W	0+07			50						SUBTOTAL	62	
	ACE OA TOTAL	CTH W	6+11		8+95	0 262		STAGE 2B	CTH W	427+87		432+00		
51	AGE 2A TOTAL	_				262		OTAGE ED	VIII. II	432+00		437+00		
	STAGE 2B	CTH V	427+87		432+00	90				437+00		440+79		
		CTH V	432+00			38				0+07 6+11			224	
		CTH V	437+00			0				0.11		0133	224	
		CTH W	0+07 6+11			53				ST	AGE 2B	SUBTOTAL	224	
STA	GE 2B TOTAL		0.11		0133	181	_				PRO.I	ECT TOTAL	286	
=					PROJECT TOT	TAL 590					PROG	EUT TOTAL	200	
		BASE	E AGGREGATE I	DENSE 1-	-1/4 INCH									
						305.0120			ASPHAI	LTIC PAVEM		455.0105	460.1103	455.0605
	STAGE	STREET	STATION	TO	STATION	TON						ASPHALTIC	HMA	TACK COAT
	STAGE 1											MATERIAL	PAVEMENT	
		CTH V	427+87	1.2	432+00	875						PG58-28	TYPE E-3	
	9	CTH V	432+00		437+00	1,549	GE	STREET	STATION	TO STAT	TION	TON	TON	GAL
		CTH V	437+00 0+07		440+79 4+25	713 0								
		CTH W	6+11	- 1	8+95	0	GE 1	CTH V	427+87	- 432		22	373	93
S	TAGE 1 TOTAL					3,137		CTH V CTH V	432+00 437+00	- 437 - 440		27 18	450 305	112 76
	STAGE 2A							CTH W	0+07	- 4+		0	0	0
		CTH V	427+87	•	432+00	1,725		CTH W	6+11	- 8+		0	0	0
		CTH V	432+00 437+00		437+00 440+79	527 394								
		CTH W	0+07		4+25	950			STAGE	1 SUBTOTAL		67	1,128	281
<u> </u>		CTH W	6+11		8+95	0								
S	TAGE 2A TOTA	AL				3,596	E 2A	CTH V	427+87	- 432		0	0	0
	STAGE 2B		407.07			200		CTH V	432+00	- 437		27	446	111
		CTH V	427+87 432+00		432+00 437+00	696 459		CTH V CTH W	437+00 0+07	- 440 - 4+		13 16	222 269	55 67
		CTH V	437+00		440+79	0		CTH W	6+11	- 8+		36	595	148
		CTH W	0+07	-	4+25	165		- · · · · ·		J .	-			:
S	TAGE 2B TOTA	AL W	6+11	•	8+95	1,320			STAGE 2	A SUBTOTAL	-	92	1,532	381
-				Р	ROJECT TOTAL	8,053	E 2B	CTH V CTH V	427+87 432+00	- 432 - 437		17 14	284 241	71 60
								CTH V	432+00	- 437 - 440		0	0	0
								CTH W	0+07	- 4+		6	102	25
			BREAKE	R RUN				CTH W	6+11	- 8+		0	0	0
	STREE	T STATI	ION TO	STATIO	311.0 ON TON				STAGE 2	B SUBTOTAL	<u> </u>	37	627	156
														
		TRIBUTED			400)		PROJECT TOTALS				196	3,287	818

ASPHALTIC FLUMES

STREET	STATION	LOCATION	465.0315 SY
SINEEL	STATION	LUCATION	ð í
стн V	433+42	111' LT	10
CTH V	435+00	111' LT	10
CTH V	436+80	33' LT	10
CTH W	3+30	29' RT	9
CTH W	8+24	18' RT	10

RIPRAP & GEOTEXTILE FABRIC

					606.0200	645.0120
						GEOTEXTILE
					RIPRAP MEDIUM	FABRIC TYPE HR
STREET	STATION	TO	STATION	LOCATION	CY	SY
CTH V	432+62	•	432+82	RT	7	17
PROJECT TOTAL					7	17

CONCRETE CURB & GUTTER

					601.0553 4-INCH SLOPED 36-INCH TYPE D	601.0557 6-INCH SLOPED 36-INCH TYPE D	601.0580 4-INCH SLOPED 36-INCH TYPE R
STAGE	STREET	STATION	то	STATION	LF	LF	LF
STAGE 1	CTH V	427+87		432+00	55		
	CTH V	432+00		437+00	663		
	CTH V	437+00		440+79			
	CTH W	0+07		4+25			
	CTH W	6+11		8+95	••		
			STAGE	SUBTOTAL	718	0	0
STAGE 2A	CTH V	427+87		432+00			
	CTH V	432+00		437+00			45
	CTH V	437+00		440+79			
	CTH W	0+07		4+25		••	49
	CTH W	6+11		8+95		214	180
		- 10	STAGE	SUBTOTAL	. 0	214	274
STAGE 2B	CTH V	427+87		432+00	1-64		1,000
	CTH V	432+00		437+00		54	
	CTH V	437+00		440+79	1.00	• •	
	CTH W	0+07		4+25	1.4.		
	CTH W	6+11	•	8+95	••	••	
			STAGE	SUBTOTAL	. 0	54	0
			PROJ	ECT TOTAL	718	268	274

STORM SEWER PIPE REINFORCED CONCRETE

					608.0312 CLASS III 12-INCH	608.0315 CLASS III 15-INCH
STREET	STATION	то	STATION	OFFSET	LF	LF
CTH V	431+81	-	432+18	LT		42
	432+18	-	433+50	LT		145
	433+50	-	433+51	LT	18	
	433+51	-	433+80	LT	36	
	436+71	-	436+72	LT	11	
	436+72	-	439+18	LT		245
				TOTAL	65	432

STORM SEWER STRUCTURES

				611.0430 RECONSTRUCTING INLETS	611.0530 Manhole Covers Type J	TYPE HM	611.0642 INLET COVERS TYPE MS	611.3230 INLETS 2x3-FT	611.3901 INLETS MEDIAN 1 GRATE
STREET	STATION	OFFSET	STRUCTURE	EACH	EACH	EACH	EACH	EACH	EACH
CTH V	431+81.17	50.1' LT	10	••	• •		1		1
CTH V	432+18.15	38.7' LT	11	1	1				
CTH V	433+50.10	47.0' LT	12	**		1		1	
CTH V	433+51.05	30.6' LT	13			1	••	1	
CTH V	433+79.91	7.2' LT	14			1		1	
CTH V	436+71.00	63.0' LT	20	**		1		1	
CTH V	436+71.53	52.2' LT	21			1		1	
CTH V	439+17.85	36.2' LT	22	1					
		TOTAL		2	1	5	1	5	1

PROJECT NO: 2695-10-70

HWY: CTH V

COUNTY: OZAUKEE

MISCELLANEOUS QUANTITIES

PLOT SCALE : ########

WISDOT/CADDS SHEET 42

SHEET

ALL QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED PIPE UNDERDRAIN 612.0104 612.0106 612.0108 612.0700 4-INCH 6-INCH 8-INCH DRAIN TILE EXPLORATION MOBILIZATION STREET STATION TO STATION LF LF LF 619.1000 CTH V UNDISTRIBUTED 50 50 50 100 LOCATION EACH PROJECT TOTAL 50 50 50 100 PROJECT 2695-10-70 PROJECT TOTAL CONCRETE MEDIAN SLOPED NOSE 620.0300 STREET SF MGS GUARDRAIL 199 CTH V 614.2330 614.2610 614.2620 MGS MGS GUARDRAIL MGS GUARDRAIL PROJECT TOTAL 199 GUARDRAIL TERMINAL TERMINAL 3K EAT TYPE 2 TO STATION LOCATION STREET STATION LF EACH EACH 25' LT 125 CTH V 3+04 4+42 1 1 PROJECT TOTAL 125 MOBILIZATIONS EROSION CONTROL 628.1905 LOCATION EACH PROJECT 2695-10-70 2 PROJECT TOTAL FENCE WOVEN WIRE (4 FT) 616.0100 STREET STATION LOCATION STATION LF CTH V 435+11 440+50 132' LT 539 MOBILIZATIONS EMERGENCY EROSION CONTROL CTH V 0+75 2+95 42' RT 220 628.1910 PROJECT TOTAL 759 LOCATION **EACH** PROJECT 2695-10-70 PROJECT TOTAL Ε PROJECT NO: 2695-10-70 HWY: CTH V COUNTY: OZAUKEE MISCELLANEOUS QUANTITIES SHEET PLOT BY: SCHOWALTER, STEVEN PLOT NAME: PLOT SCALE : ########

1	
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1	

SIG	N.						634.0614 POSTS WOOD 4X6-INCH X 14 FT	634.0616 POSTS WOOD 4X6-INCH X 16 FT	634.0618 POSTS WOOD 4X6-INCH X 18 FT	637.0620 SIGN FLAGS PERMANENT TYPE II	637.2210 SIGNS TYPE II REFLECTIVE H	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING	637.2230 SIGNS TYPE II REFLECTIVE F	638.2102 MOVING SIGNS TYPE II	638.4000 MOVING SMALL SIGN SUPPORTS	
NO.	LOCATION	STATION	OFFSET	SIGN CODE	MESSAGE	SIZE	EACH	EACH	EACH	EACH	SF	SF	SF	EACH	EACH	REMARKS
200		426+55	12' LT	W3-3		36 x 36	1.6.0	1	••	2	••	••	9.0			
201	CTH V	426+55	39' RT	W3-3		36 x 36		1	••	2	•••	••	9.0	••		
202		428+07	12' LT	R3-20-L	BEGIN LEFT TURN LANE	36 x 54		1			13.5	••	•••			
203		427+89	43' RT	J1-1	JCT, CTH W	36 x 57		1	••	••	14.3	••				
204		431+20	101' LT	M1-5A	CTH V	24 x 24	1				4.0					
205		431+85	14' LT	R3-20-LL	BEGIN LEFT TURN LANE	36 x 54			1		13.5					
206		431+85	14' LT	R5-1A	WRONG WAY	42 x 30	••			••	8.8					SAME POST AS 205
215		433+68	53' LT	R1-1F	STOP	36 x 36		1		•••	F.0	7.5				CAME DOOT 40 015
216 217		433+68 433+48	53' LT	R4-7 R6-2-L	ONE WAY	24 x 30 24 x 30					5.0					SAME POST AS 215
218		433+30	57' LT	J13-1	CTH W, DOUBLE ARROW	36 x 66			- :		16.5					MOUNT ON SIGNAL POST
219		433+73	18' LT	R5-1	DO NOT ENTER	36 x 36					9.0					MOUNT ON SIGNAL POST
220		433+54	50' RT	R1-1F	STOP	36 x 36						7.5				MOUNT ON SIGNAL POST
221		4+22	32' LT	W1-6	5.0	48 x 24		1					8.0			
222		4+00	33' LT	W1-6		48 x 24	1						8.0			
223		3+13	27' LT	M1-5A	CTH W	24 x 24	1				4.0					
225		2+31	25' LT	R2-1	SPEED LIMIT 45	24 x 30	1				5.0					
226	CTH W	1+70	34' RT	W1-1R		30 x 30		1					6.3			
227	CTH W	1+70	34' RT	W13-1	15 MPH	24 x 30			••				5.0			SAME POST AS 226
228	CTH V	434+72	62' RT	R1-1F	STOP	30 x 30		••		••	••	6.2				MOUNT ON SIGNAL POST
229	CTH V	434+72	62' RT	R6-3-A	DIVIDED HIGHWAY	30 x 24		•••			5.0					MOUNT ON SIGNAL POST
230		434+81	62' RT	J13-1	CTH V, DOUBLE ARROW	24 x 45	1				7.5					
231		434+84	45' RT	R6-2-L	ONE WAY	24 x 30					5.0					MOUNT ON SIGNAL POST
232		434+85	16' LT	R4-7		24 x 30	•••	1	••	••	5.0	••		••		
233		434+85	16' LT	R1-1F	STOP	36 x 36	**		••	••		7.5		•••		SAME POST AS 232
234		434+76	46' LT	R5-1	DO NOT ENTER	36 x 36			••	•••	9.0	••	•••	•••		MOUNT ON SIGNAL POST
235		435+02	120' LT	J13-1	CTH W, DOUBLE ARROW	36 x 66		- 1	••		16.5					HOUSE OF STORE 2007
236		434+90	124' LT	R1-1F	STOP	36 x 36						7.5				MOUNT ON SIGNAL POST
237		434+88 436+70	57' LT 58' LT	R1-1F R5-1A	STOP WRONG WAY	36 x 36 42 x 30	1	1	••		8.8	7.5			•	
239		436+70	58' LT	R3-20-LL	BEGIN LEFT TURN LANE	36 x 54					13.5					SAME POST AS 238
240		6+27	53' LT	\$13-1	CTH V, DOUBLE ARROW	24 x 45	1				7.5					SAME POST AS 230
241		6+25	43' LT	R1-1F	STOP	30 x 30						6.2				MOUNT ON SIGNAL POST
242		6+25	43' LT	R6-3-A	DIVIDED HIGHWAY	30 x 24					5.0		-			MOUNT ON SIGNAL POST
243		6+92	34' LT	W1-6		48 x 24	1						8.0			
244	CTH W	7+09	34' LT	W1-6		48 x 24	1						8.0			
245	CTH W	8+84	24' LT	R3-20-R	BEGIN RIGHT TURN LANE	24 x 36	1				6.0					
246	CTH V	540+00	40' LT		PARK & RIDE					•••				1	1	MOVE TO 545+00
247	CTH V	432+20	48' RT		PARK & RIDE		•••	••	••	•••		••	•••	4	1	MOVE TO 432+20, 48' RT
248		435+94	41' RT	J1-3	JCT, 143, STH 32, STH 57	108 x 57	2				42.8			••		
249		436+31	48' LT	••	N 143, STH 32, STH 57		•••	•••	**	•••	•••	••	•••	1	1	MOVE TO STA. 438+00, 13' LT
250		436+33	42' RT		S 143, STH 32, STH 57				••		•••	••	•••	1	1	MOVE TO STA. 438+00, 41' RT
255		437+25	31' RT	M1-5A	CTH V	36 x 36			1		9.0					
256		9+76	24' LT	W1-1L	45 959	30 x 30			••	••		••	6.3	••		SAME POST AS 255
257		9+77	24' LT	W13-1	15 MPH	24 x 30				- ••		••	5.0			SAME POST AS 255
258		437+62	119' LT	R5-1A	WRONG WAY	36 x 24				•••	6.0	••	•••			
259 260		10+74 439+46	25' LT 203' LT	J1-1 W3-3	JCT, CTH V	24 x 39 36 x 36		1		2	6.5		9.0		•	
261		1+24	26' LT	W1-1R		30 x 30		1		2			6.3			
262		1+24	26' LT	W13-1	20 MPH	24 x 30							5.0			SAME POST AS 261
263		0+94	26' RT	J1-1	JCT, CTH V	24 x 39					6.5					VALUE I VOI NO LUI
264		0+03	26' RT	W3-3		36 x 36		1		2			9.0			
265		440+47	55' LT	R3-20-LL	BEGIN LEFT TURN LANE	36 x 54		1			13.5					
266		442+00	112' LT	W3-3		36 x 36		1		2			9.0			
267		442+00	56' LT	W3-3		36 x 36		1		2			9.0			
268		433+75	18' LT	R10-50	LT YIELD ON FLASHING	30 x 36			•••		7.5				•••	MOUNT ON SIGNAL POST
269		434+75	46' LT	R10-50	LT YIELD ON FLASHING	30 x 36	1.	•••		••	7.5		•••		•••	MOUNT ON SIGNAL POST
					PROJECT TOTAL		15	16	2	12	286.7	49.9	119.9	4	4	

HWY: CTH V

PROJECT NO: 2695-10-70

COUNTY: OZAUKEE

MISCELLANEOUS QUANTITIES

SHEET

				TYPE II															
					REMO	38.2602 DVING SIGNS TYPE II	638.3000 REMOVING SM. SIGN SUPPOR				FTFI	OFFICE TYPE B					TIES ARE ERWISE NO	CATEGORY)TED	0010
EMOVAL NO.	LOCATION		MESSAGE	STATION	OFFSET	EACH	EACH	REMA	RKS		FIELD								
400	CTH V	JCT 14	3, STH 32, STH 57	430+47	14' LT	4	1				LOCATIO		12.5001 EACH	т	RAFFIC	CONTROL CO	OVERING SIG	NS TYPE II	
401	CTH V	JCT 14	3, STH 32, STH 57	430+45	40' RT	4	1											643.0920)
402 410	CTH V	CTU	WRONG WAY W, DOUBLE ARROW	431+24 433+36	42' RT 18' LT	1	1				ROJECT 2695		1	STRI	EET	STATION	LOCATION	EACH	
411	CTH V		DO NOT ENTER	433+36	18' LT	2		SAME SUPPO	RT AS 410		PRO	DJECT TOTAL	1			440.00	4001.15	-	
412	CTH V		W, DOUBLE ARROW	433+50	41' LT	2	1	OANE OUT TO	11 AG 410					СТН	V	442+63	133' LT	1	
413	CTH W			4+05	39' LT	1	1							PRO	DJECT TO	OTAL		1	
414	CTH V		ONE WAY	434+15	40' RT	2	1												
415	CTH V		STOP	434+15	40' RT	1	••	SAME SUPPO	RT AS 414										
416	CTH V		STOP	434+64	53' RT	1	1						TRAF	IC CONTROL	DETOUR				
417 418	CTH V	СТИ	ONE WAY V, DOUBLE ARROW	434+67 434+67	55' RT 55' RT	1 2	- 1	SAME SUPPO	DT AC 417				mari	10 CONTINCE					
419	CTH W	VIII	20 MPH	3+07	26' LT	2	1	SAME SUFFU	ni A3 41/							343.2000		3000	
420	CTH W	SPE	ED LINIT 45 MPH	2+54	27' LT	1	1									FIC CONTRO			
421	CTH V		STOP	433+83	113' LT	1	1					DDO IFOT	OTREET	DAVO		DETOUR		SIGNS	
422	CTH W			6+68	30' LT	1	1					PROJECT	STREET	DAYS		EACH	EACH	DAYS	
423	CTH V		ONE WAY	434+18	108' LT	2	1				2	695-10-70	CTH W	18		1	110	1980	
424	CTH V		STOP	434+18	108' LT	1		SAME SUPPO	RT AS 423				24 10E 10E						
425 426	CTH V		W, DOUBLE ARROW W, DOUBLE ARROW	435+19 434+80	54' LT 107' LT	2	1					P	ROJECT TOTAL			1		1980	
426	CTH V	CIH	WRONG WAY	434+80	110' LT	1	1												
428	CTH V	1	DO NOT ENTER	435+19	54' LT	1		SAME SUPPO	RT AS 425										
440	CTH W		JCT, CTH V	1+03	27' RT	2	1							No BANGETTE:					
441	CTH W		STOP AHEAD	0+11	28' RT	1	1						REMOVI	NG PAVEMENT	MARKING	āS			
442	CTH V		OP SIGN AHEAD	442+69	211' LT	1	1									646	3.0600		
450	CTH V		INT AHEAD, 45 MPH	436+17	110' LT	2	- 1					LOCAT	ION	STAGE			LF		
451	CTH V		INT AHEAD, 45 MPH	435+19	54' LT 27' RT	2	1					CTH		STAGE			530		
450	CTH W		PRIVATE SIGN INT AHEAD, 45 MPH	1+03 0+11	28' RT	2	1					СТН		UNDISTRI			100		
452	CTH W	DMCD '		0.11															
452 453 454	CTH W		INT AHEAD, 45 MPH	442+69 PROJE	211' LT	49	25	TRAFFIC	CONTROL			PROJECT TO	FAL			(630		
453					CT TOTALS 643 TRAFFI	49 3.0200 C CONTROL	6	43.0300 TRAFFIC	643.0420 TRAFFIC CONTRO	TRAFFIC		643.0715 TRAFFIC CONTROL	643.0 TRAFFIC C	ONTROL	643.09 TRAFF	900 FIC	630		
453					640 TRAFFI SURVEILLANCE	49 3.0200 C CONTROL	6 .	43.0300	643.0420	TRAFFIC WARNING		643.0715	643.0	ONTROL		900 FIC ROL	630		
453		DNGR :	STREET	PROJE	640 TRAFFI SURVEILLANCE	49 3.0200 C CONTROL AND MAINTE 2695-10-7	ENANCE 0	43.0300 RAFFIC CONTROL DRUMS	643.0420 TRAFFIC CONTRO BARRICADES TYPE III EACH DAYS	TRAFFIC WARNING	CONTROL G LIGHTS	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH DAYS	643.0 TRAFFIC C	ONTROL ARDS DAYS E	TRAFF CONTR SIGN	900 FIC ROL NS	630		
453		DNGR :	INT AHEAD, 45 MPH	PROJE	64: TRAFFI SURVEILLANCE PROJECT	49 3.0200 C CONTROL AND MAINTE 2695-10-7	ENANCE 0 S EACH	43.0300 TRAFFIC CONTROL DRUMS	643.0420 TRAFFIC CONTRO BARRICADES TYPE III	TRAFFIC WARNING	CONTROL G LIGHTS PE A	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C	643.0 TRAFFIC C ARROW BC	ONTROL ARDS DAYS E	TRAFF CONTR SIGN ACH	900 FIC ROL NS	630		
453		STAGE STAGE 1	STREET CTH V	DAYS 46 52	64: TRAFFI SURVEILLANCE PROJECT	3.0200 C CONTROL AND MAINTE 2695-10-7	ENANCE 0 S EACH 76 83	43.0300 PAFFIC CONTROL DRUMS DAYS 3,496	643.0420 TRAFFIC CONTRO BARRICADES TYPE III EACH DAYS 0 0	EACH 0 12	CONTROL G LIGHTS PE A DAYS	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH DAYS 22 1,012	643.0 TRAFFIC C ARROW BC	ONTROL ARDS DAYS E	TRAFF CONTR SIGN ACH 31	900 FIC ROL NS DAYS	630		
453		STAGE STAGE 1	STREET CTH V CTH V	DAYS 46 52	64: TRAFFI SURVEILLANCE PROJECT	49 3.0200 C CONTROL AND MAINTE 2695-10-7 DAY 46 52	ENANCE 0 S EACH 76 83	43.0300 PAFFIC CONTROL DRUMS DAYS 3,496 4,316	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH DAYS 0 0 0 6 312	EACH 0 12	CONTROL G LIGHTS PE A DAYS 0 624	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH DAYS 22 1,012 33 1,716	643.0 TRAFFIC C ARROW BC	DAYS E	TRAFF CONTR SIGN ACH 31	900 FIC ROL NS DAYS 1,426 2,184	630		
453		STAGE STAGE 1	STREET CTH V CTH V	DAYS 46 52	64: TRAFFI SURVEILLANCE PROJECT EACH 1	49 3.0200 C CONTROL AND MAINTE 2695-10-7 DAY 46 52	ENANCE 0 S EACH 76 83	43.0300 FRAFFIC CONTROL DRUMS DAYS 3,496 4,316 7,812	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH DAYS 0 0 0 6 312 312 KING 647.0176	EACH 0 12	CONTROL G LIGHTS PE A DAYS 0 624	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH DAYS 22 1,012 33 1,716 2,728	643.0 TRAFFIC C ARROW BC EACH 4 4 4 647.0606 ISLAND NOSE	DAYS E 184 208 392 647.072 DIAGONA	TRAFF CONTR SIGN ACH 31 42	900 FIC ROL NS DAYS 1,426 2,184	630		
453		STAGE STAGE 1	STREET CTH V CTH V	DAYS 46 52	646 EPOXY 4-INCH	49 3.0200 C CONTROL AND MAINTE 2695-10-7 DAY 46 52 98 3.0106 EPOXY 4-INCH	646.0126 EPOXY 8-	A3.0300 RAFFIC CONTROL DRUMS DAYS 3,496 4,316 7,812 PAVEMENT MAR 647.0166 ARROWS EPOXY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH DAYS 0 0 0 6 312 312 KING 647.0176 ARROWS WEPOXY TYPE	EACH 0 12	CONTROL GLIGHTS DE A DAYS 0 624 624	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH DAYS 22 1,012 33 1,716 2,728 647.0566 STOP LINE	643.0 TRAFFIC C ARROW BC EACH 4 4 4 647.0606 ISLAND NOSE	DAYS E 184 208 392 647.072 DIAGONA	TRAFF CONTR SIGN ACH 31 42	900 FIC ROL NS DAYS 1,426 2,184	630		
453		STAGE STAGE 1 STAGE 2 STREET	STREET CTH V CTH V PROJECT TOTA LOCATI 427+87	DAYS 46 52 AL	646 EPOXY 4-INCH WHITE LF	49 3.0200 C CONTROL AND MAINTE 2695-10-7 DAY 46 52 98 3.0106 EPOXY 4-INCH YELLOW LF	646.0126 EPOXY 8-INCH WHITE	A3.0300 PRAFFIC CONTROL DRUMS DAYS 3,496 4,316 7,812 PAVEMENT MAR 647.0166 ARROWS EPOXY TYPE 2	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH DAYS 0 0 0 6 312 312 KING 647.0176 ARROWS W EPOXY TYPE 3	EACH 647.0356 ORDS EPOXY EACH	CONTROL G LIGHTS PE A DAYS 0 624 624 647.0456 CURB EPOXY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH DAYS 22 1,012 33 1,716 2,728 647.0566 STOP LINE EPOXY 18-INCH LF	643.0 TRAFFIC C ARROW BC EACH 4 4 4 647.0606 ISLAND NOSE EPOXY YELLO EACH	DAYS E 184 208 392 647.072 DIAGONA W EPOXY 12-: LF	TRAFF CONTR SIGN ACH 31 42	900 FIC ROL NS DAYS 1,426 2,184	630		
453		STAGE STAGE 1 STAGE 2	STREET CTH V CTH V PROJECT TOTA	DAYS 46 52 AL	646 EACH 1 1 646 EPOXY 4-INCH WHITE LF	49 3.0200 C CONTROL AND MAINTE 2695-10-7 DAY 46 52 98 3.0106 EPOXY 4-INCH YELLOW LF	646.0126 EPOXY 8-INCH WHITE	43.0300 RAFFIC CONTROL DRUMS DAYS 3,496 4,316 7,812 PAVEMENT MAR 647.0166 ARROWS EPOXY TYPE 2 EACH	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH DAYS 0 0 0 6 312 312 KING 647.0176 ARROWS W EPOXY TYPE 3 EACH	EACH 647.0356 ORDS EPOXY	CONTROL GLIGHTS PE A DAYS 0 624 624 647.0456 CURB EPOXY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH DAYS 22 1,012 33 1,716 2,728 647.0566 STOP LINE EPOXY 18-INCH LF	643.0 TRAFFIC C ARROW BC EACH 4 4 4 647.0606 ISLAND NOSE EPOXY YELLO EACH	DAYS E 184 208 392 647.072 DIAGONA W EPOXY 12-:	TRAFF CONTR SIGN ACH 31 42	900 FIC ROL NS DAYS 1,426 2,184	630		
453		STAGE STAGE 1 STAGE 2 STREET CTH V CTH V	STREET CTH V CTH V PROJECT TOTA LOCATI 427+87 432+00	DAYS 46 52 AL 0N 432+00 437+00	646 EPOXY 4-INCH WHITE LF	49 3.0200 C CONTROL AND MAINTE 2695-10-7 DAY 46 52 98 3.0106 EPOXY 4-INCH YELLOW LF 427 807	646.0126 EPOXY 8-INCH WHITE	A3.0300 TRAFFIC CONTROL DRUMS DAYS 3,496 4,316 7,812 PAVEMENT MAR 647.0166 ARROWS EPOXY TYPE 2 EACH	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH DAYS 0 0 6 312 312 KING 647.0176 ARROWS W EPOXY TYPE 3 EACH 1	EACH 647.0356 ORDS EPOXY EACH 2 2	CONTROL SIGHTS PE A DAYS 0 624 624 647.0456 CURB EPOXY LF 80	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH DAYS 22 1,012 33 1,716 2,728 647.0566 STOP LINE EPOXY 18-INCH LF	643.0 TRAFFIC C ARROW BC EACH 4 4 4 647.0606 ISLAND NOSE EPOXY YELLO EACH	DAYS E 184 208 392 647.072 DIAGONA W EPOXY 12-: LF	TRAFF CONTR SIGN ACH 31 42	900 FIC ROL NS DAYS 1,426 2,184	630		
453		STAGE STAGE 1 STAGE 2 STREET CTH V CTH V CTH V	STREET CTH V CTH V PROJECT TOTA 427+87 - 432+00 - 437+00 -	DAYS 46 52 AL 0N 432+00 437+00 440+79	646 TRAFFI SURVEILLANCE PROJECT EACH 1 1 646 EPOXY 4-INCH WHITE LF 842 1,203 681	49 3.0200 C CONTROL AND MAINTE 2695-10-7 DAY 46 52 98 3.0106 EPOXY 4-INCH YELLOW LF 427 807 380	646.0126 EPOXY 8- INCH WHITE LF	43.0300 RAFFIC CONTROL DRUMS DAYS 3,496 4,316 7,812 PAVEMENT MAR 647.0166 ARROWS EPOXY TYPE 2 EACH 2 5 2	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH DAYS 0 0 0 6 312 312 KING 647.0176 ARROWS W EPOXY TYPE 3 EACH 1	TRAFFIC WARNING TYP EACH 0 12 647.0356 ORDS EPOXY EACH 2 2	CONTROL G LIGHTS PE A DAYS 0 624 624 647.0456 CURB EPOXY LF 80	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH DAYS 22 1,012 33 1,716 2,728 647.0566 STOP LINE EPOXY 18-INCH LF	643.0 TRAFFIC CARROW BC EACH 4 4 4 647.0606 ISLAND NOSE EPOXY YELLO EACH 2	DAYS E 184 208 392 647.072 DIAGONA W EPOXY 12-: LF 145 10 93	TRAFF CONTR SIGN ACH 31 42	900 FIC ROL NS DAYS 1,426 2,184	630		
453		STAGE STAGE 1 STAGE 2 STREET CTH V CTH V CTH V CTH V	STREET CTH V CTH V PROJECT TOTA 427+87 - 432+00 - 437+00 - 0+07 -	DAYS 46 52 AL ON 432+00 437+00 440+79 4+25 8+95	646 TRAFFI SURVEILLANCE PROJECT EACH 1 1 646 EPOXY 4-INCH WHITE LF 842 1,203 681 781 247	49 3.0200 C CONTROL AND MAINTE 2695-10-7 DAY 46 52 98 3.0106 EPOXY 4-INCH YELLOW LF 427 807 380 394 546	646.0126 EPOXY 8-INCH WHITE LF 741 468 593 243 154	43.0300 RAFFIC CONTROL DRUMS DAYS 3,496 4,316 7,812 PAVEMENT MAR 647.0166 ARROWS EPOXY TYPE 2 EACH 2 5 2 1 2	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH DAYS 0 0 0 6 312 312 KING 647.0176 ARROWS W EPOXY TYPE 3 EACH 1 1	TRAFFIC WARNING TYP EACH 0 12 647.0356 ORDS EPOXY EACH 2 2	CONTROL GLIGHTS PE A DAYS 0 624 624 647.0456 CURB EPOXY LF 80	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH DAYS 22 1,012 33 1,716 2,728 647.0566 STOP LINE EPOXY 18-INCH LF 151 37	643.0 TRAFFIC C ARROW BC EACH 4 4 4 647.0606 ISLAND NOSE EPOXY YELLO EACH 2	DAYS E 184 208 392 647.072 DIAGONA W EPOXY 12-3 LF 145 10 93	TRAFF CONTR SIGN ACH 31 42	900 FIC ROL NS DAYS 1,426 2,184	630		
453		STAGE STAGE 1 STAGE 2 STREET CTH V CTH V CTH V CTH V	STREET CTH V CTH V PROJECT TOTA 427+87 - 432+00 - 437+00 - 0+07 -	DAYS 46 52 AL 0N 432+00 437+00 440+79 4+25 8+95 SUBTO	646 TRAFFI SURVEILLANCE PROJECT EACH 1 1 1 646 EPOXY 4-INCH WHITE LF 842 1,203 681 781 247 TAL 3,754	49 3.0200 C CONTROL AND MAINTE 2695-10-7 DAY 46 52 98 3.0106 EPOXY 4-INCH YELLOW LF 427 807 380 394 546 2,554	646.0126 EPOXY 8- INCH WHITE LF 741 468 593 243 154 2,199	43.0300 RAFFIC CONTROL DRUMS DAYS 3,496 4,316 7,812 PAVEMENT MAR 647.0166 ARROWS EPOXY TYPE 2 EACH 2 5 2 1 2 12	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH DAYS 0 0 0 6 312 312 KING 647.0176 ARROWS W EPOXY TYPE 3 EACH 1 1 1	TRAFFIC WARNING TYP EACH 0 12 647.0356 ORDS EPOXY EACH 2 2 4	CONTROL CALIGHTS DE A DAYS 0 624 624 647.0456 CURB EPOXY LF 80 80	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH DAYS 22 1,012 33 1,716 2,728 647.0566 STOP LINE EPOXY 18-INCH LF 151 37 188	643.0 TRAFFIC C ARROW BC EACH 4 4 4 647.0606 ISLAND NOSE EPOXY YELLO EACH 2 2	DAYS E 184 208 392 647.072 DIAGONA W EPOXY 12-: LF 145 10 93 248	TRAFF CONTR SIGN ACH 31 42	900 FIC ROL NS DAYS 1,426 2,184	630		
453 454		STAGE STAGE 1 STAGE 2 STREET CTH V CTH V CTH V CTH W CTH W	STREET CTH V CTH V PROJECT TOTA 427+87 - 432+00 - 437+00 - 0+07 -	DAYS 46 52 AL ON 432+00 437+00 440+79 4+25 8+95 SUBTO PROJECT TO	646 TRAFFI SURVEILLANCE PROJECT EACH 1 1 1 646 EPOXY 4-INCH WHITE LF 842 1,203 681 781 247 TAL 3,754	49 3.0200 C CONTROL AND MAINTE 2695-10-7 DAY 46 52 98 3.0106 EPOXY 4-INCH YELLOW LF 427 807 380 394 546 2,554	646.0126 EPOXY 8-INCH WHITE LF 741 468 593 243 154	#3.0300 RAFFIC CONTROL DRUMS DAYS 3,496 4,316 7,812 PAVEMENT MAR 647.0166 ARROWS EPOXY TYPE 2 EACH 2 5 2 1 2 12 12	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH DAYS 0 0 0 6 312 312 KING 647.0176 ARROWS W EPOXY TYPE 3 EACH 1 1 2 2	TRAFFIC WARNING TYP EACH 0 12 647.0356 ORDS EPOXY EACH 2 2	CONTROL S LIGHTS DE A DAYS 0 624 624 624 CURB EPOXY LF 80 80 80	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH DAYS 22 1,012 33 1,716 2,728 647.0566 STOP LINE EPOXY 18-INCH LF 151 37 188 188	643.0 TRAFFIC C ARROW BC EACH 4 4 4 647.0606 ISLAND NOSE EPOXY YELLO EACH 2	DAYS E 184 208 392 647.072 DIAGONA W EPOXY 12-3 LF 145 10 93	TRAFF CONTR SIGN ACH 31 42	900 FIC ROL NS DAYS 1,426 2,184	630 SHE		

ALL QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

TEMPORARY PAVEMENT MARKINGS

649.0400 REMOVABLE TAPE 4-INCH

9,502

		4-1N	СП
		YELLOW	WHITE
STAGE	STREET	LF	LF
STAGE 1	CTH V	2,765	350
STAGE 2A	CTH V	920	2,436
STAGE 2B	CTH V	666	2,365
SUB	TOTAL	4,351	5,151

SAWING PAVEMENT

STREET	LOCATION	то	LOCATION	690.0150 Sawing Asphalt Lf
CTH V	427+87		432+00	834
CTH V	432+00	-	437+00	1603
CTH V	437+00	-	440+79	738
CTH W	0+07	-	4+25	607
CTH W	6+11	•	8+95	39

PROJECT TOTAL

3821

EROSION CONTROL

					624.0100 WATER	628.1104 EROSION BALES	628.1504 SILT FENCE	628.1520 Silt Fence Maintenance	628.2002 EROSION MAT CLASS I TYPE A	628.2023 EROSION MAT CLASS II Type B	628.7005 INLET Protection Type A	628.7015 INLET PROTECTION Type C	628.7504 TEMPORARY DITCH CHECKS	628.7555 Culvert Pipe Checks	628.7570 ROCK BAGS	631.1100 SOD EROSION CONTROL
_	STREET	STATION	TO	STATION	MGAL	EACH	ĹF	LF	SY	SY	EACH	EACH	LF	EACH	EACH	SY
-																
	CTH V	427+87	-	432+00	18				2,279		1		80			
•	CTH V	432+00	-	437+00	38		45	45	2,090		1	5	20			16
	CTH V	437+00	-	440+79	14				1,334		1		80			
	CTH W	0+07	-	4+25	7		265	265	1,185	284			40			5
	CTH W	6+11	-	8+95	10		157	157	905	1			40	10		11
		UNDISTRIBUTE	ED		22	40	117	117	1,948	71			65	3	40	8
_		PROJECT TOT	ΓAL		109	40	584	584	9,741	355	3	5	325	13	40	41

LANDSCAPING

				625.0500 Salvaged Topsoil	629.0210 FERTILIZER TYPE B	630.0140 SEEDING Mixture No. 40	630.0200 SEEDING TEMPORARY	SPV.0120.01 WATER FOR SEEDED AREAS
STREET	STATION	ТО	STATION	SY	CWT	LB	LB	MGAL
CTH V	427+87	-	432+00	2,279	1	41	92	51
CTH V	432+00	-	437+00	2,090	1	38	85	47
CTH V	437+00	-	440+79	1,334	1	24	54	30
CTH W	0+07	-	4+25	1,468	1	26	59	33
CTH W	6+11	-	8+95	905	1	16	37	20
	UNDISTRIBUTE	ED			2	37	82	45
	PROJECT TO	ΓAL		8,076	7	182	409	226

PROJECT NO: 2695-10-70 HWY: CTH V COUNTY: OZAUKEE MISCELLANEOUS QUANTITIES SHEET

PROJECT TOTAL

		652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	652.0615 CONDUIT SPECIAL 3-INCH
FROM	то	L.F.	L.F.	L.F.
CB1	PB1	122	51	
PB1	PB2		232	
PB2	PB3		40	
PB3	PB4			138
PB4	PB5		68	
PB5	PB6		20	128
PB6	PB7		52	
PB7	PB8		17	194
PB8	PB9		62	
PB9	PB10			144
PB10	PB11		74	2.2
PB11	PB12		2.2	132
PB12	CB1	177	42	
PB1	SB1	13		
PB2	SB2		9	
PB3	SB3	6		
PB4	SB4	20		
PB5	SB5	131		
SB5	SB6	151		
PB6	SB7	**	12	
PB7	SB8	9		
PB8	SB9	7		
PB9	SB10	5		
PB10	SB11	16		
PB11	SB12	135		
SB12	SB13	150		
PB12	SB14		9	••
	TOTALS	643	651	736

PULL BOXES STEEL 24X42-INCH

PULL BOX NO.	STATION	OFFSET	653.0140 PULL BOXES STEEL 24X42-INCH EACH
PB1	433+77.4	140.5 LT	1
PB2	434+90.1	142.4 LT	1
PB3	434+95.8	117.6 LT	1
PB4	434+95.8	48.9 LT	1
PB5	434+95.9	14.7 LT	1
PB6	434+95.8	48.9 RT	1
PB7	434+78.2	67.8 RT	1
PB8	433+81.6	72.9 RT	1
PB9	433+57.1	54.0 RT	1
PB10	433+56.9	17.7 LT	1
PB11	433+56.7	54.7 LT	1
PB12	433+56.5	120.4 LT	1
		TOTALS	12

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

CONCRETE BASES TYPE 1
CONCRETE BASES TYPE 2
CONCRETE BASES TYPE 5
CONCRETE BASES TYPE 13
CONCRETE CONTROL CABINET BASE TYPE 9 SPECIAL

			654.0101 CONCRETE BASES	654.0102 CONCRETE BASES	654.0105 CONCRETE BASES	654.0113 CONCRETE BASES	654.0217 CONCRETE CONTROL CABINET BASE
BASE			TYPE 1	TYPE 2	TYPE 5	TYPE 13	TYPE 9 SPECIAL
NO.	STATION	OFFSET	EACH	EACH	EACH	EACH	EACH
CB1	433+57.4	134.3 LT					1
SB1	433+75.9	127.6 LT	1				
SB2	434+84.7	135.3 LT				1	••
SB3	434+91.3	121.1 LT	1				
SB4	434+76.4	46.0 LT		1	* • •		
SB5	436+26.9	26.2 LT			1		
SB6	437+77.1	36.0 LT			1		••
SB7	434+83.8	48.0 RT				1	
SB8	434+71.5	62.1 RT	1				
SB9	433+83.8	66.0 RT		1			••
SB10	433+54.0	50.2 RT	1				
SB11	433+75.5	17.7 LT		1			
SB12	432+21.8	46.2 LT	A. F		1		
SB13	430+71.5	36.8 LT			1		
SB14	433+48.2	116.9 LT				1	
		TOTALS	4	3	4	3	1

FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

PROJECT NO: 2695-10-70

HWY: CTH V

COUNTY: OZAUKEE

MISCELLANEOUS QUANTITIES

SHEET

FILE NAME :L:\JOBS2014\201404\CAD\TRANSPORTATION\DWG\SHEETSPLAN\030201_MQ.DWG LAYOUT NAME - 030201_MQ - 030208_MQ

PLOT DATE : 1/25/2016 9:47 AM

PLOT BY: SCHOWALTER, STEVEN PLOT NAME:

CABLE TRAFFIC SIGNAL 5-14 AWG CABLE TRAFFIC SIGNAL 7-14 AWG CABLE TRAFFIC SIGNAL 12-14 AWG

FROM	то	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.
124	1.646			7.2
CB1	SB1	155	• • •	50
SB1	HEAD 12	19		
SB1	HEAD 14	19		
CB1	SB2	14.5	**	163
SB2	HEAD 13	75	**	
CB1	SB3	• •	•••	191
SB2	HEAD 4		22	••
SB2	HEAD 6	21	**	4.4
CB1	SB4		••	277
SB3	HEAD 5		22	4.
CB1	SB7	**	••	379
SB6	HEAD 2	69		
SB6	HEAD 3	57		
CB1	SB8	19-3-1		373
SB7	HEAD 11	19		4.1
SB7	HEAD 15	19		
CB1	SB9	-9-4		268
SB8	HEAD 16	50		
CB1	SB10		4.4	229
SB9	HEAD 1	21	0.000	
SB9	HEAD 9		22	
CB1	SB11			162
SB10	HEAD 10	22	22	
CB1	SB14		**	40
SB13	HEAD 7	68		1.2
SB13	HEAD 8	56		**
	TOTALS	493	88	2,132

CABLE TYPE UF 2-10 AWG ELECTRICAL WIRE LIGHTING 12 AWG

		655.0315 CABLE TYPE UF 2-10 AWG (W/ GROUND) L.F.	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.
CB1	SB2	163	1.
SB2	LUMIN	107	126
SB2	SB4	148	
SB4	LUMIN		234
SB4	SB5	205	
SB5	LUMIN		117
SB5	SB6	159	
SB6	LUMIN	125	117
CB1	SB11	162	
SB11	LUMIN	- 44	234
SB11	SB12	208	
SB12	LUMIN		117
SB12	SB13	158	4.2
SB13	LUMIN		117
SB11	SB9	152	
SB9	LUMIN	**	117
	TOTALS	1355	1179

ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG

FROM	то	655.0515
FRUM	10	L.F.
CB1	SB1	50
SB1	SB2	153
SB2	SB3	60
SB3	SB4	148
SB4	SB7	156
SB7	SB8	67
SB8	SB9	133
SB9	SB10	63
SB10	SB11	113
SB11	SB14	154
SB14	CB1	40
PB1	SB1	23
PB2	SB2	19
PB3	SB3	16
PB4	SB4	30
PB5	SB4	70
PB6	SB7	22
PB7	SB8	19
PB8	SB9	17
PB9	SB10	15
PB10	SB11	26
PB11	SB11	69
PB12	SB14	19
-	TOTAL	1482

ELECTRICAL SERVICE METER BREAKER PEDESTAL

	656.0200.01 ELECTRICAL SERVICE METER BREAKER	656.0200.02 ELECTRICAL SERVICE METER BREAKER					
BASE NO.	PEDESTAL Signal L.S.	PEDESTAL Lighting L.S.					
CB1	1	1					
TOTAL	1	1					

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

SIGNAL MOUNTING HARDWARE

	658.5069.01		
LOCATION	L.S.		
CTH V & CTH W	1		
TOTAL	1		

Ε PROJECT NO: 2695-10-70 HWY: CTH V COUNTY: OZAUKEE MISCELLANEOUS QUANTITIES SHEET

PEDESTAL BASES
TRANSFORMER BASES BREAKAWAY 11 1/2 INCH BOLT CIRCLE
POLES TYPE 3
POLES TYPE 4
POLES TYPE 5 ALUMINUM
TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT
TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT
TROMBONE ARMS 25-FT
LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT
LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FT
MONOTUBE POLES TYPE 12
MONOTUBE POLES TYPE 13
MONOTUBE ARMS 45-FT
LUMINAIRE ARM STEEL 12-FT
LUMINAIRES UTILITY LED C

									657.0610	657.0609					
		657.0255				657.0420	657.0425		LUMINAIRE	LUMINAIRE					
		TRANSFORMER			657.0322	TRAFFIC SIGNAL	TRAFFIC SIGNAL		ARMS SINGLE	ARMS SINGLE					659.1125
	657.0100	BASES BREAKAWAY	657.0310	657.0315	POLES	STANDARDS	STANDARDS	657.0595	MEMBER	MEMBER	SPV.0060.01	SPV.0060.02	SPV.0060.03	SPV.0060.04	LUMINAIRES
	PEDESTAL	11 1/2 INCH	POLES	POLES	TYPE 5	ALUMINUM	ALUMINUM	TROMBONE	4 1/2-INCH CLAMP	4-INCH CLAMP	MONOTUBE POLES	MONOTUBE POLES	MONOTUBE	LUMINAIRE ARM	UTILITY
SIGNAL	BASES	BOLT CIRCLE	TYPE 3	TYPE 4	ALUMINUM	13-FT	15-FT	ARMS 25-FT	6-FT	6-FT	TYPE 12	TYPE 13	ARMS 45-FT	STEEL 12-FT	LED C
BASE NO.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
SB1	1	••				1	**			••	••				
SB2												1	1	1	1
SB3	1			UP.M			1								.
SB4		1		1						2	••				2
SB5		1			1				1						1
SB6		1			1				1						1
SB7		1									1		1		
SB8	1					1									
SB9		1	1					1		1					1
SB10	1						1								
SB11		1		1						2					2
SB12		1			1			• •	1			••			1
SB13		1			1				1						1
SB14				1							1		1		
TOTALS	4	7	1	2	4	2	2	1	4	5	2	1	3	1	10

PROJECT NO:2695-10-70 HWY:CTH V COUNTY:OZAUKEE MISCELLANEOUS QUANTITIES SHEET E

TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL TRAFFIC SIGNAL FACE 4-12 INCH VERTICAL BACKPLATES SIGNAL FACE 3 SECTION 12-INCH BACKPLATES SIGNAL FACE 4 SECTION 12-INCH LED MODULES 12-INCH RED BALL LED MODULES 12-INCH YELLOW BALL LED MODULES 12-INCH GREEN BALL LED MODULES 12-INCH RED ARROW LED MODULES 12-INCH YELLOW ARROW

LED MODULES 12-INCH GREEN ARROW

SB11

SB8

SB1

SB2

SB1

SB8 SB9

TOTALS

- -

12

- -

- -

4

10

11

12

13

15

16

ALL QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

TRAFFIC SIGNAL CONTROLLER AND CABINET (CTH V & CTH W)

	SPV.0060.05
BASE NO.	EACH
CB1	1
TOTAL	1

658.0110 658.0215 658.0220 658.0600 658.0605 658.0615 658.0115 658.0610 658.0620 658.0625 TRAFFIC SIGNAL TRAFFIC SIGNAL **BACKPLATES** BACKPLATES LED MODULES LED MODULES LED MODULES LED MODULES LED MODULES FACE 3-12 INCH FACE 4-12 INCH SIGNAL FACE SIGNAL FACE 12-INCH 12-INCH 12-INCH 12-INCH 12-INCH 12-INCH VERTICAL 3 SECTION 12-INCH 4 SECTION 12-INCH RED ARROW SIGNAL SIGNAL VERTICAL RED BALL YELLOW BALL GREEN BALL YELLOW ARROW GREEN ARROW HEAD NO. BASE NO. **EACH** EACH EACH EACH **EACH** EACH **EACH** SB10 - ---SB7 _ _ - -- -- -SB7 SB3 -1 - -1 --- -1 2 SB4 - -2 1 SB3 **SB14** 1 - -1 ----- ---SB14 SB10

--

12

12

12

1

- -

- -

4

- -

12

REMOVING ELECTRICAL SERVICE METER BREAKER PEDESTAL

STREET	STATION	LOCATION	SPV.0060.06 EACH
стн w	7+65	27' LT	1
	PROJECT TOTAL		1

REMOVING LIGHT POLES, ARMS AND LUMINARIES

			SPV.0060.07
STREET	STATION	LOCATION	EACH
стн V	434+77	35' LT	1
	PROJECT TOTAL		1

VIDEO & MULTI-SENSOR DETECTION SYSTEM

SPV.0105.01 LOCATION L.S. CTH V & CTH W 1 TOTAL

DETECTION NUMBER / TYPE INSTALLATION V1 / MULTI-SENSOR 6' EXTENSION BRACKET ON ARM 6' EXTENSION BRACKET ON ARM V2 / MULTI-SENSOR SB14 V3 / VIDEO ONLY SB2 ON LUMINAIRE ARM V4 / VIDEO ONLY SB9 ON LUMINAIRE ARM

CONSTRUCTION STAKING

SPV.0105.02 STREET LS PROJECT 2695-10-70 1 PROJECT TOTAL

TEMPORARY LIGHTING

SPV.0105.03 **TEMPORARY** LIGHTING INTERSECTION LS CTH V & CTH W 1 PROJECT TOTAL

PROJECT NO: 2695-10-70

HWY: CTH V

COUNTY: OZAUKEE

2

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4

MISCELLANEOUS QUANTITIES

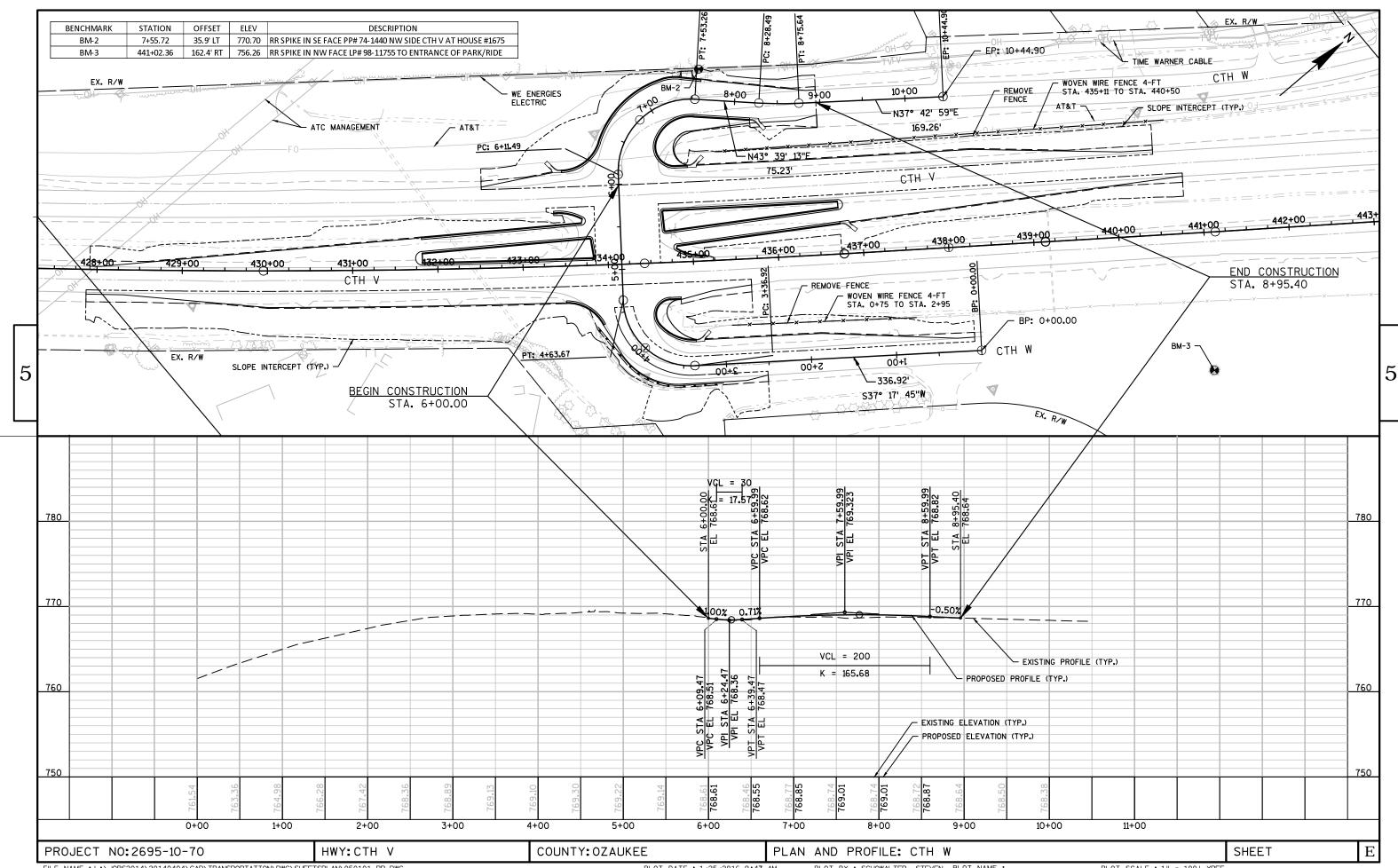
SHEET PLOT SCALE : ########

WISDOT/CADDS SHEET 42

FILE NAME : L:\JOBS2014\20140404\CAD\TRANSPORTATION\DWG\SHEETSPLAN\030201_MQ.DWG LAYOUT NAME - 030201_MQ - 030211_MQ

PLOT DATE: 1/25/2016 9:47 AM

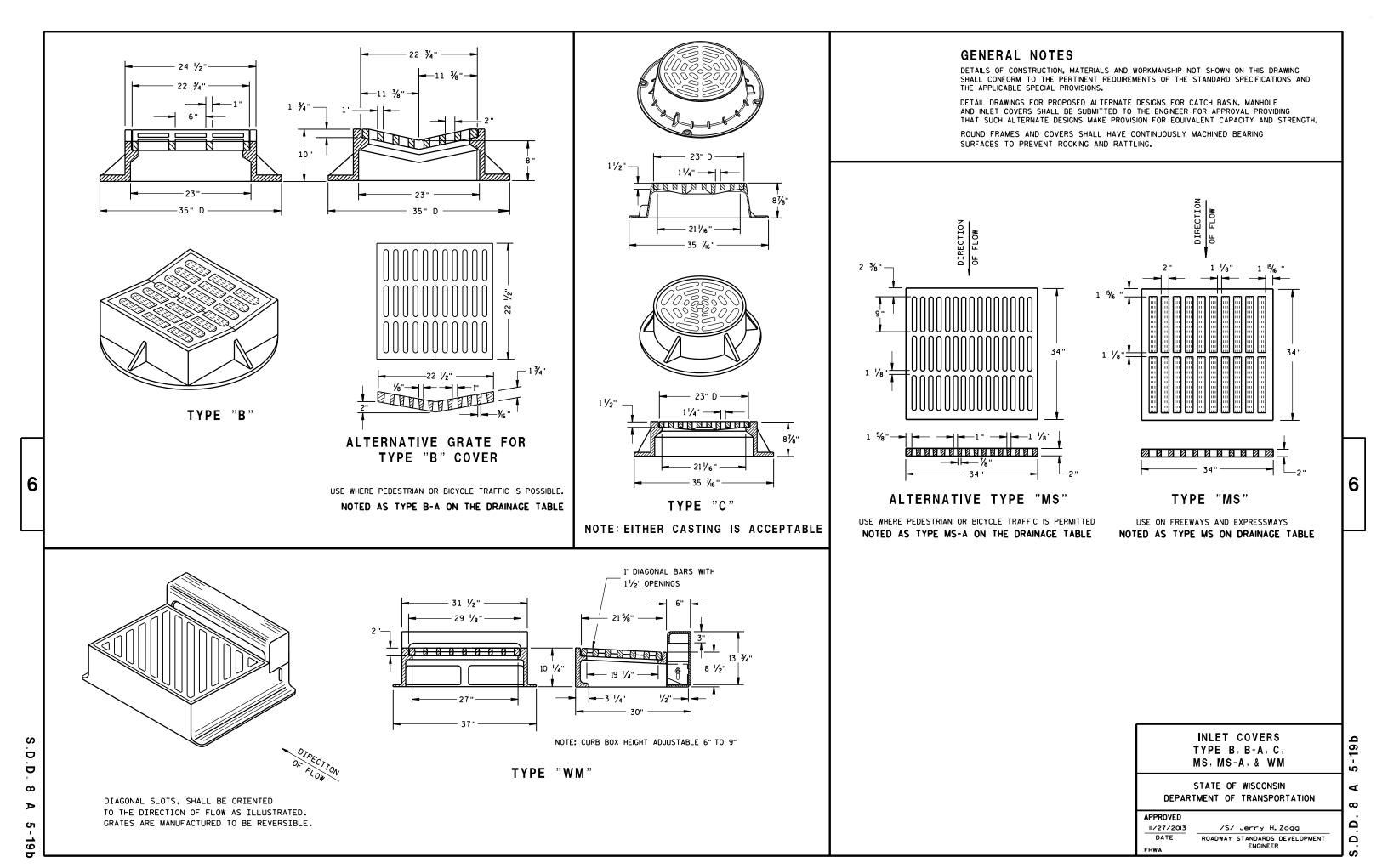
PLOT BY: SCHOWALTER, STEVEN PLOT NAME:



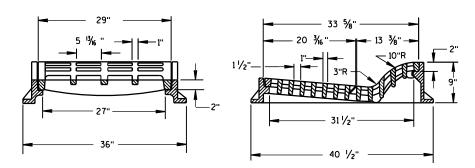
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Standard Detail Drawing List

08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08C07-01	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-01	INLETS MEDIAN 1 AND 2 GRATE
08D01-18	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09B02-09	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09006-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C12-06A	CONCRETE BASE TYPE 13
09C12-06B	CONCRETE BASE TYPE 13
09C13-02	CONCRETE BASE TYPE 10 & TYPE 13 EXTENSION
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SI GNAL CONTROL CABINET
09E01-14B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E01-14B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY BOTT)
09E01-14D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-14G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E08-07C	TYPE 12 POLE 35' -55' MONOTUBE ARM
09E08-07D	TYPE 13 POLE 35' -55' MONOTBE ARM
09E08-07E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
11B02-02	CONCRETE MEDIAN NOSE
14B42-03A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-02A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B47-02A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15B01-08A	FENCE WOVEN WIRE
15B01-08B	FENCE WOVEN WIRE
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRI CADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-02	BARRI CADES AND SIGNS FOR SI DEROAD CLOSURES
.=	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C04-02 15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C18-03	MEDIAN ISLAND MARKING
15C29-03A	BICYCLE LANE MARKING
15C29-03B	BICYCLE LANE MARKING
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D12-05A	TRAFFIC CONTROL, LANE CLOSURE
15D21-03	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D27-02	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY



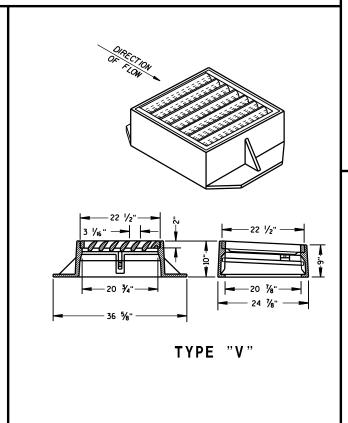
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TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

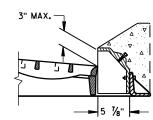
25 ½" 23 ½" 23 ½" 23 ½" 23 ½" 23 ½" 23 ½" 23 ½" 23 ½" 25 ½" 23 ½" 25 ½" 25 ½" 26 ½" 27 ½" 28 ½" 28 ½" 29 ½" 20 ½"



GENERAL NOTES

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

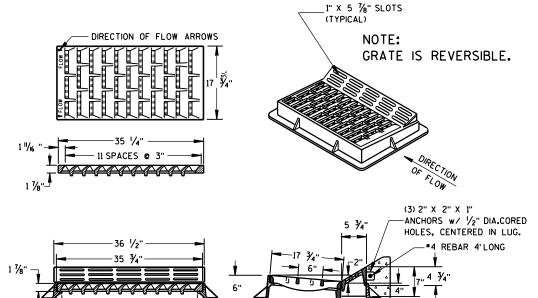
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

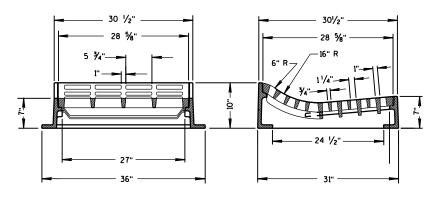
NOIE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE



TYPE "HM"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



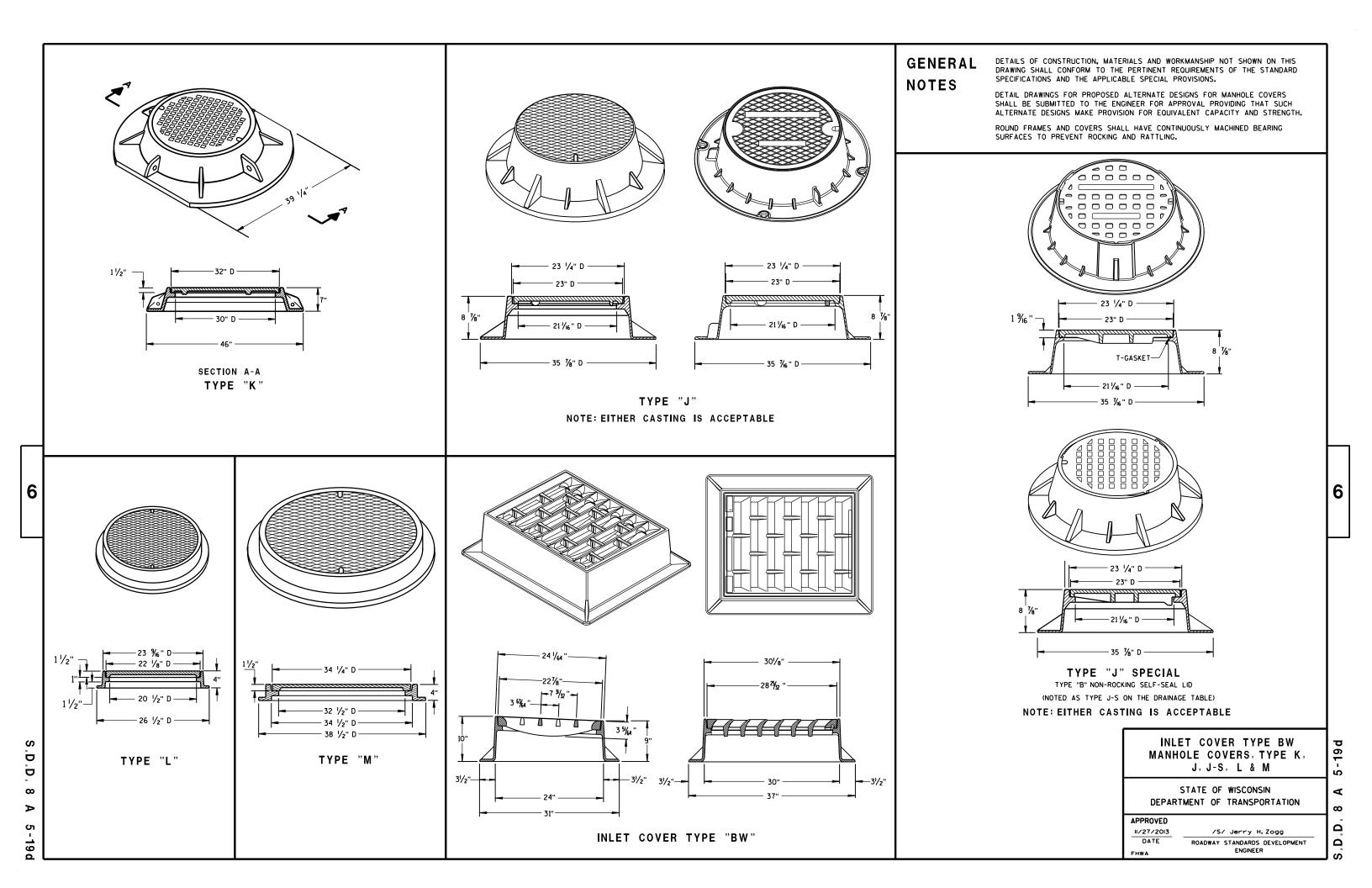
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

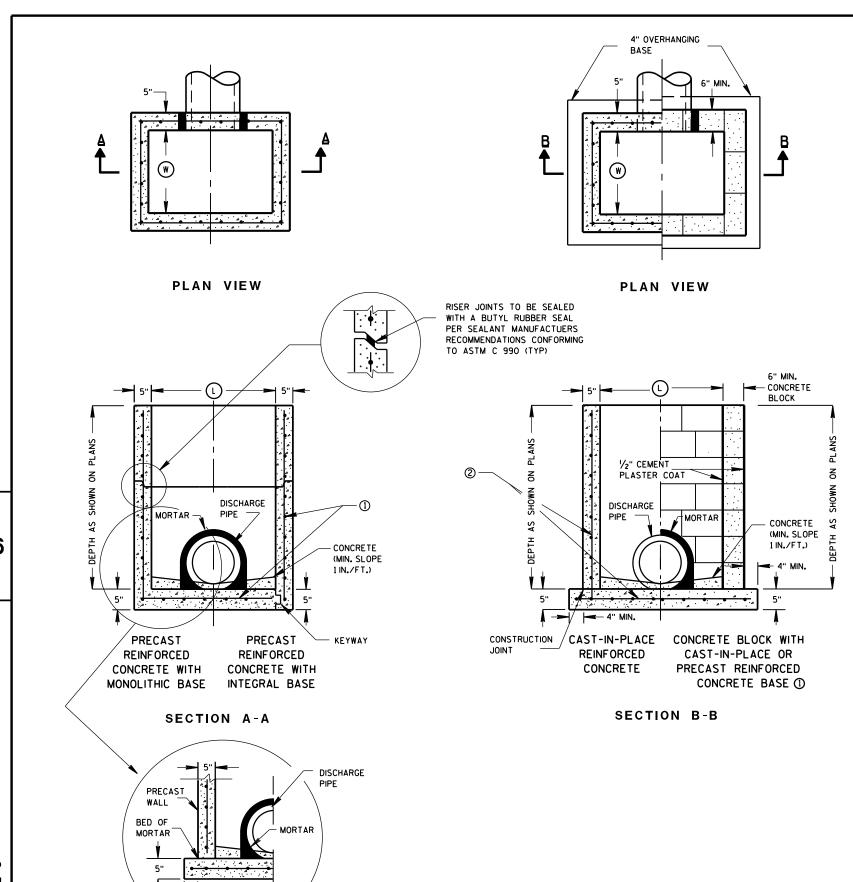
APPROVED

II/27/2013
DATE / /S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

A 5-19

D.D. 8





GENERAL NOTES

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

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

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

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

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

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

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

- 4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
- 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
- OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

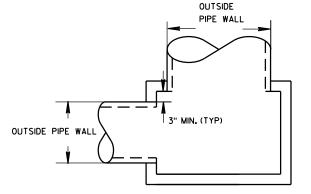
- 1) FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.
- (2) CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

	INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	s	т	v	WM
		WIDTH (W) (FT)	LENGTH (L) (FT)									
	2X2-FT	2	2	X	х				Х		х	
ſ	2X2.5-FT	2	2.5			Х			Х	Х	Х	Х
[2X3-FT	2	3					Х				
	2.5X3-FT	2.5	3				Х					

PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER							
INLET SIZE	WIDTH (IN)	LENGTH (IN)						
2X2-FT	12	12						
2X2.5-FT	12	18						
2X3-FT	12	24						
2.5X3-FT	18	24						



DETAIL "A"

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

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED 6/5/2012 DATE

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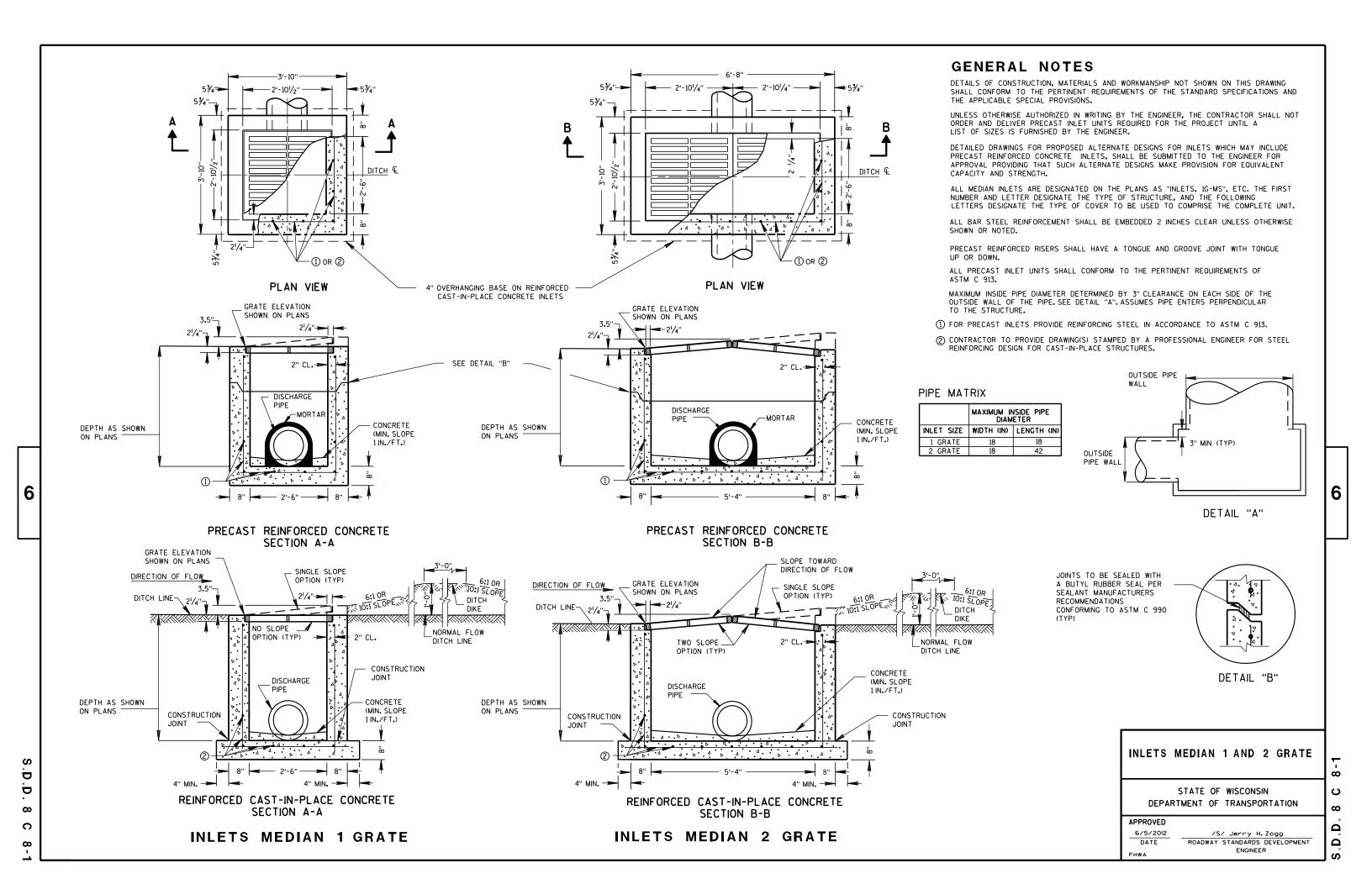
/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT

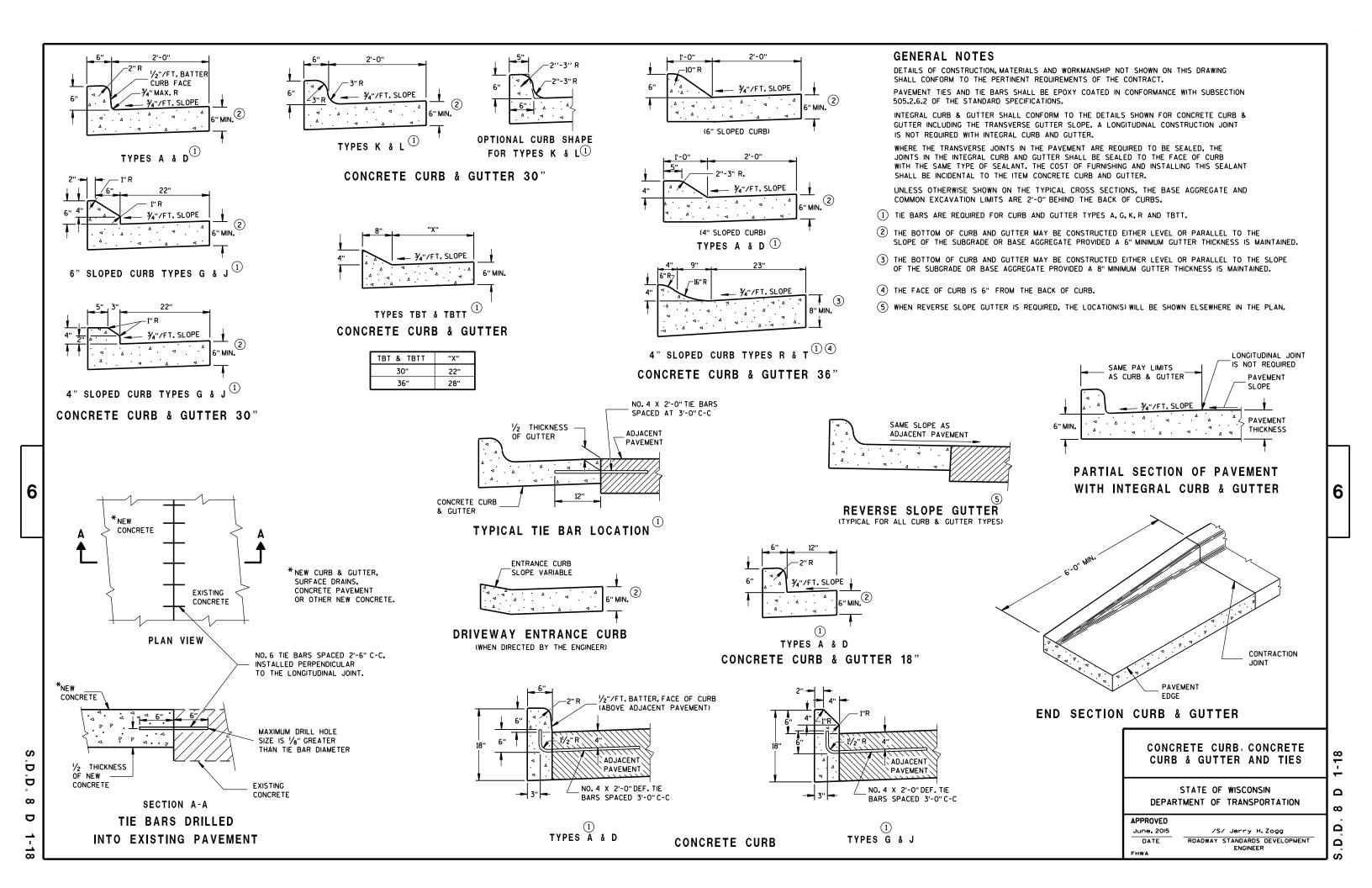
ENGINEER

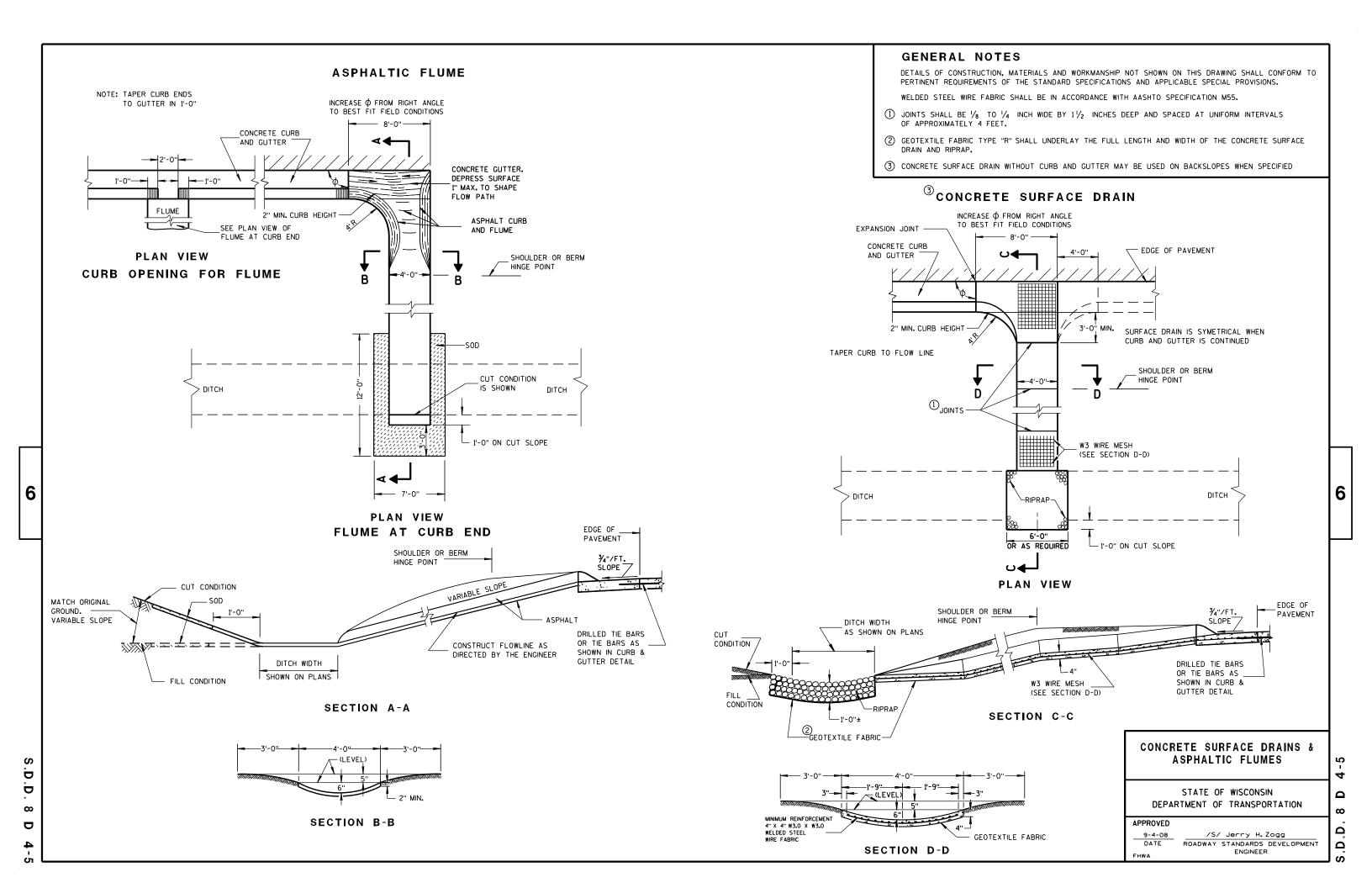
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

SEPARATE PRECAST REINFORCED

CONCRETE BASE OPTION







GENERAL NOTES

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

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.



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 /S/ Beth Connestro
CHIEF ROADWAY DEVELOPMENT ENGINEER

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TYPICAL APPLICATION OF SILT FENCE

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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.

- \bigcirc 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 11/8" X 11/8" OF OAK OR HICKORY.
- 4) SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- (5) CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 /S/ Beth Cannestra

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

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INLET PROTECTION, TYPE A

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 1) FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- (2) FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- (3) FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE, THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION TYPE A, B, C, AND D

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

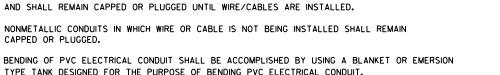
10/16/02

/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER 6

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TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES

SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REIN-STALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY

GENERAL NOTES

AND 36 INCHES MAXIMUM.

OF THE ENGINEER.

CAPPED OR PLUGGED.

MINIMUM AND 36 INCHES MAXIMUM.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

BOTTOM OF ¼" HOLE PVC CONDUIT-CONDUIT TRENCH FOR DRAINAGE NO. 2 COARSE AGGREGATE FILL 1'-0" DIA. OR SQUARE →

NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

BOTTOM OF

CONDUIT TRENCH

NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT

1'-0" DIA. OR SQUARE ──➤

METALLIC CONDUIT-

1" DIA. X 6"

NIPPLE

NO. 2 COARSE

AGGREGATE FILL

ARROW MARK SHALL BE INSCRIBED IN PAVEMENT SURFACE 1/4" TO 3/8"

DEEP AT EACH LOCATION WHERE CONDUITS ARE PLACED UNDER

PLAN VIEW

ARROW MARK

CONDUIT

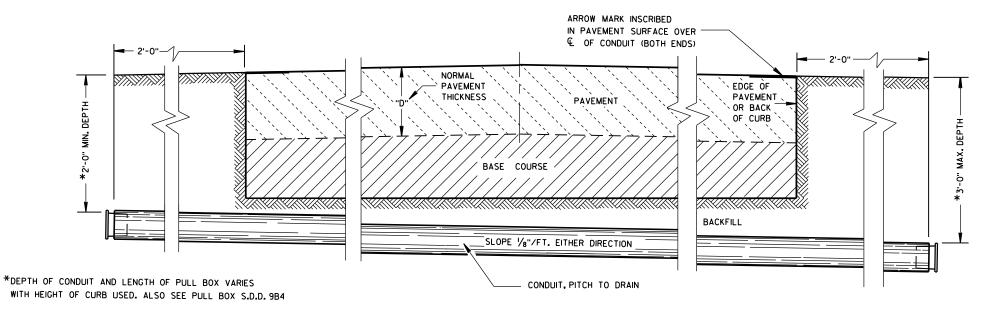
THE PAVEMENT

EDGE OF

PAVEMENT OR BACK

OF CURB

DRAIN SUMP FOR PVC CONDUIT



SIDE ELEVATION DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

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APPROVED /S/ Ahmet Demirbilek June. 2015 DATE STATE ELECTRICAL ENGINEER

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FHWA

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	Α	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	В	24	30	36	24	30	36	36	42	48
WALL THICKNESS	С	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	Ε	14 1/2	14 1/2	14 1/2	20 ½	20 ½	20 ½	26 ½	26 ½	26 ½
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 ½	14 1/2	20 ½	20 ½	20 ½
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 ½	23 ½	23 ½
	WEIGHT IN POUNDS *									
FRAME AND COVER		60	60	60	110	110	110	155	155	155

- * THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.
- NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

6" MAX. **EXTENSION** TOP OF ORIGINAL CORRUGATED PIPE (3) BOLTS, NUTS & LOCKWASHERS REQUIRED

ELECTRIC

FINAL GRADE

ALL METALLIC CONDUIT

AND THREADED

CUT OPENINGS

THE FIELD

2" PVC PIPE CAP ON BOTH ENDS

WITH 7, 8 1/4" HOLES DRILLED

IN EACH END.

PULL BOX

AS REQUIRED IN

ENDS SHALL BE REAMED

ALL CONDUIT PITCHED

4 TO 8 BRICKS

EQUALLY SPACED

TO DRAIN TO PULL BOXES

2" DRAIN DUCT TO

DITCH OR SEWER

WHEN SPECIFIED

CORRUGATED PIPE EXTENDER

HEAVY DUTY FRAME -

6" MIN.

(TYP.)

AND COVER

WHEN A PULL BOX IS INSTALLED IN CRUSHED

AGGREGATE SHOULDERS, PLACE IT 2-3

2-3 INCHES OF CRUSHED AGGREGATE

NO. 2 COARSE

(SEE SECTION 501

OF THE STANDARD

WIRE AND/OR CABLE.

INSTALL END BELLS (U.L. LISTED FOR

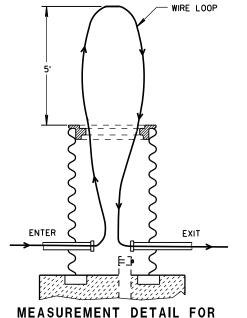
CONDUIT BEFORE INSTALLATION OF

ELECTRICAL USE) ON ALL NONMETALLIC

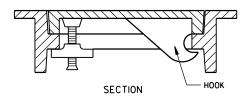
SPECIFICATIONS)

AGGREGATE

INCHES BELOW GRADE AND COVER IT WITH

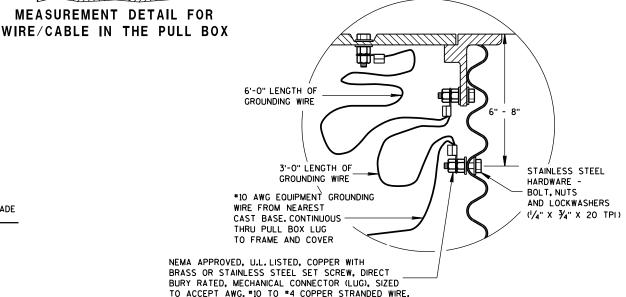


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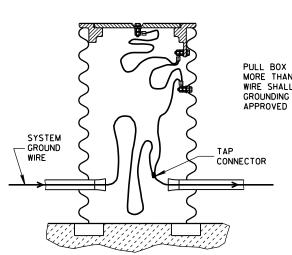


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

PULL BOX

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2014 /S/ Ahmet Demirbilek DATE STATE ELECTRICAL ENGINEER FHWA

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED. SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

TRAFFIC LOADS.

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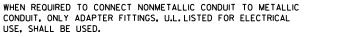
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IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL. THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE.
BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1FOOT OR LESS. A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL

BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE

(GROUND ROD) FOR TYPE 1. TYPE 2. TYPE 5. AND TYPE 6 BASES.

GENERAL NOTES (CONTINUED)

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE

OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A LINCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD, ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

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

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

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

- 1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.
- (2) (4) 1" DIA. X 3'-6" ANCHOR RODS.
- (3) (4) 1" DIA. X 5'-0" ANCHOR RODS.
- (4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.
- (5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.
- (6) (4) 1" DIA. X 3'-6" ANCHOR RODS.
- (7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.
- (8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

FORMING DETAIL

1'-8"

a)

- FORM

FORMING SHALL BE

CONCRETE HAS SET

REMOVED AFTER

FORM DEPTH SHALL BE

GRADE ON THE LOWER

SIDE OF BASE

4" MAX.

CONDUIT WITHIN

6" DIA.

ANCHOR RODS SHALL BE

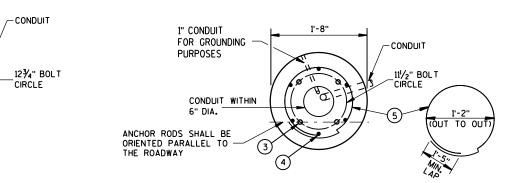
ORIENTED PARALLEL TO

1" CHAMFER ALL AROUND

FORM ALL EXPOSED

CONCRETE, PROVIDE

NO MORE THAN 6" BELOW



QUANTITY

REQUIREMENTS

ARDS OF CONCRETE

APPROX. CUBIC

LBS. OF HOOP

LBS. OF VERTICAL

BAR STEEL

BAR STEEL

CONCRETE BASE TYPE

0.57

23

60

0.40

NONE

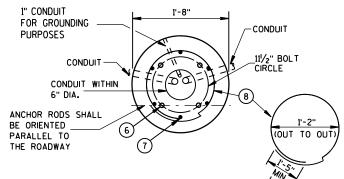
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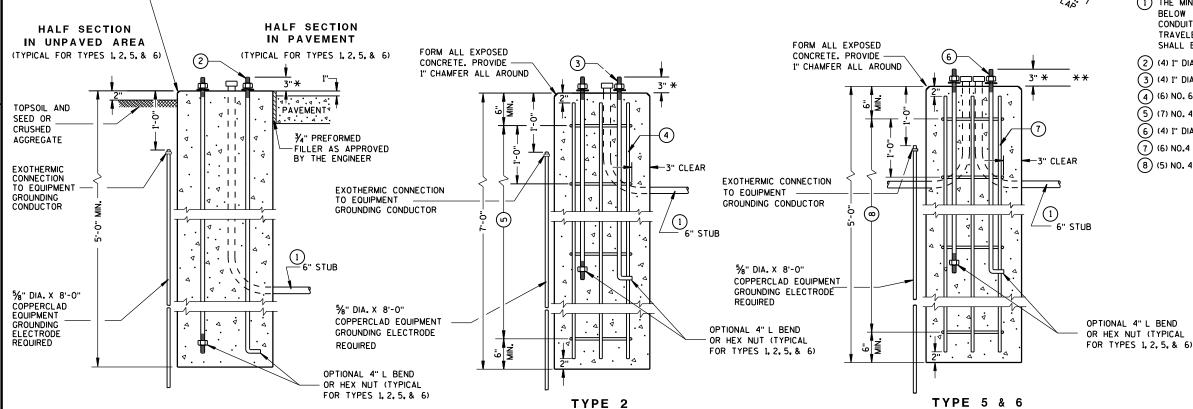
5 & 6

0.40

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CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 31/4" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 41/2" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED Sept. 2014 /S/ Ahmet Demirbilek STATE ELECTRICAL ENGINEER

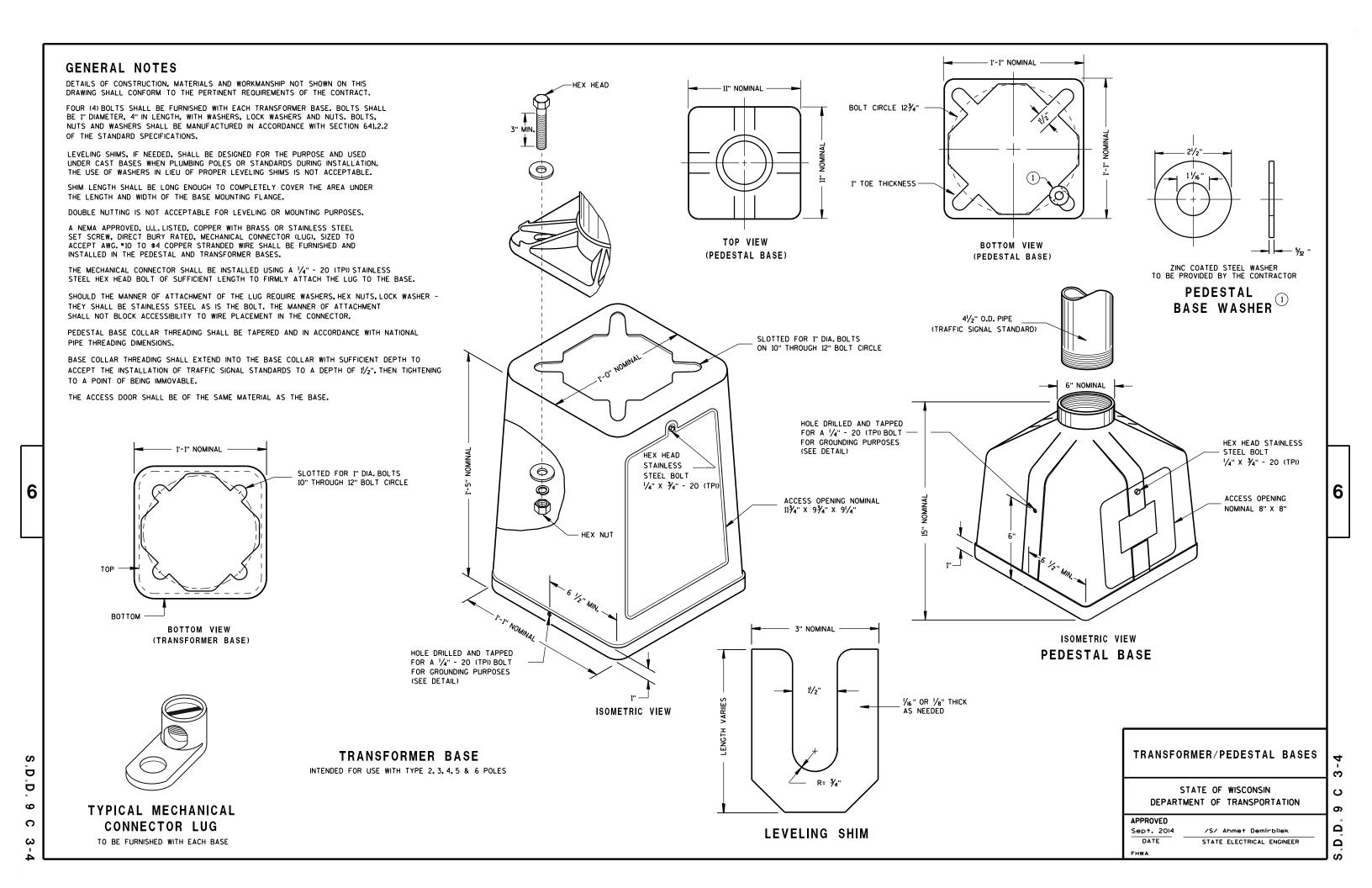
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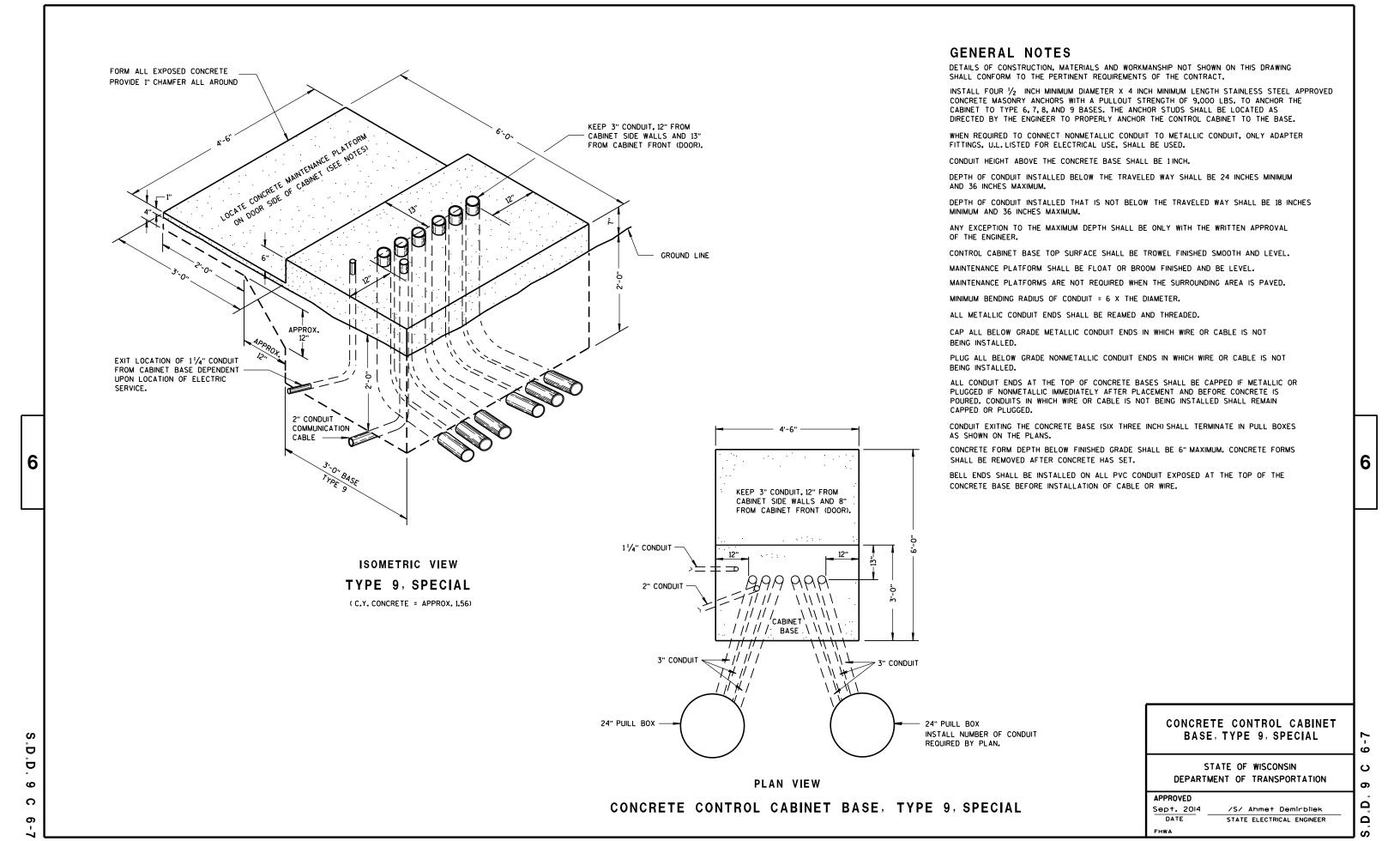
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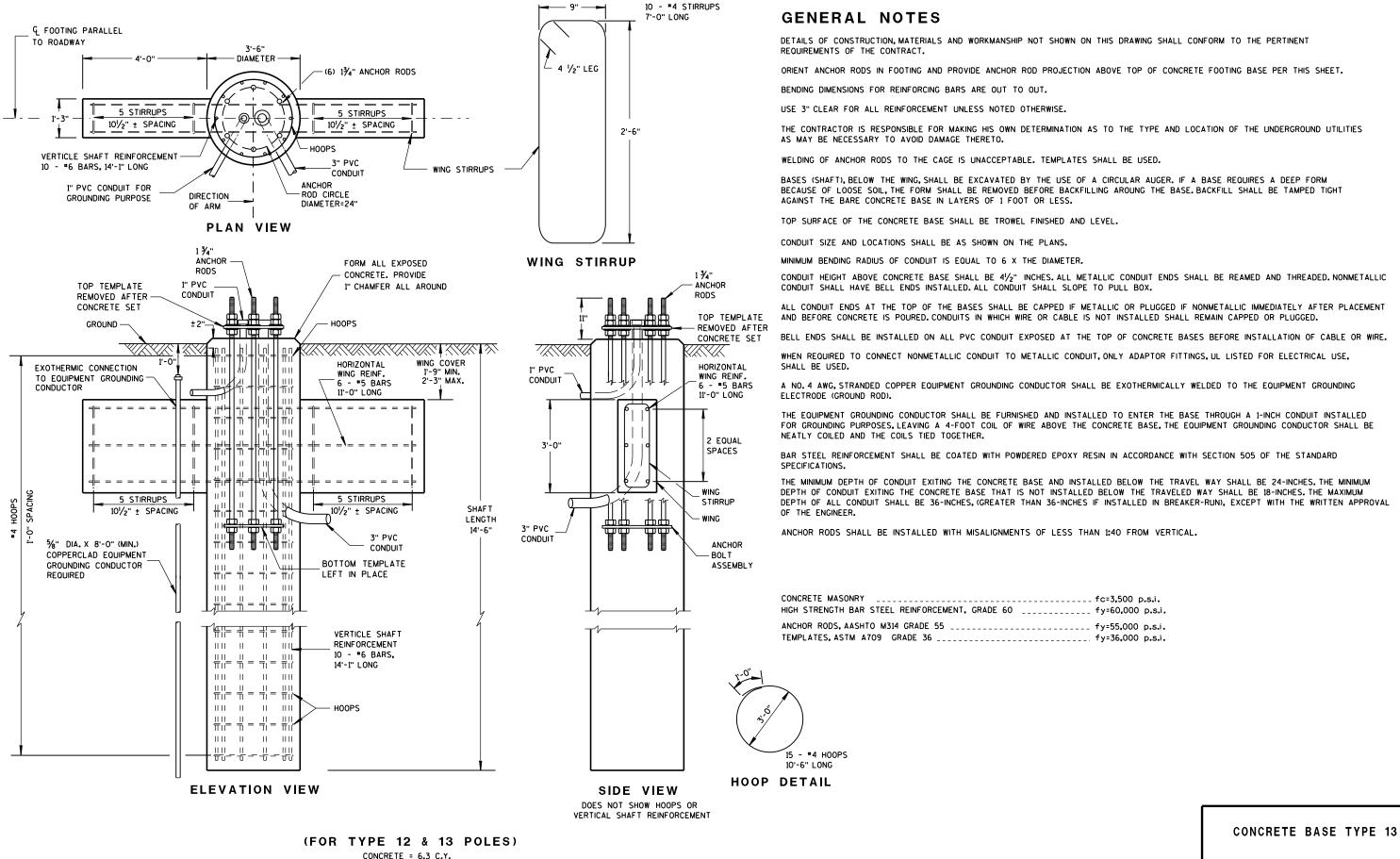
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H.S. REINFORCEMENT = 433 LBS.

SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.

TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.

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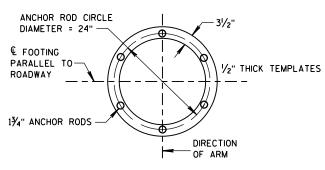
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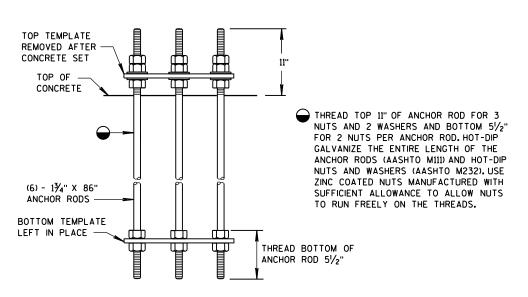
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

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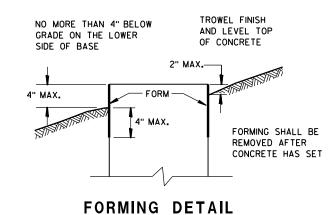


TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 13 ANCHOR ASSEMBLY



CONCRETE BASE TYPE 13

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED Feb. 2015 /S/ Ahmet Demirbilek DATE STATE ELECTRICAL ENGINEER FHWA

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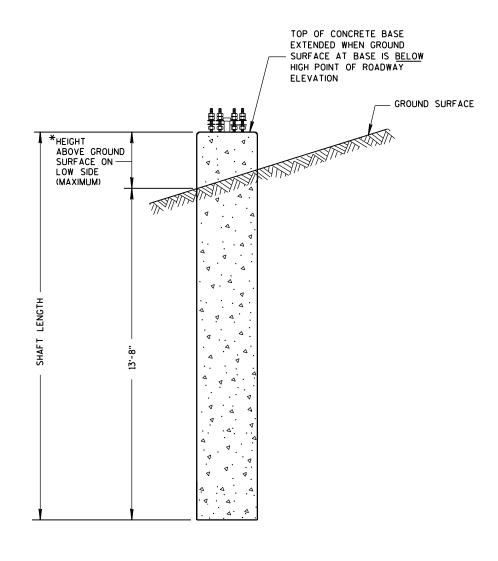
REINFORCEMENT AND CONCRETE QUANTITIES ADJUSTED FOR EXTENDED TYPE 10 CONCRETE BASE

HEIGHT INCREASE REQUIRED	* HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAXIMUM)	SHAFT LENGTH	LENGTH OF *6 VERTICAL REINF.	NO. OF #4 HOOPS	C.Y. OF CONCRETE	LBS.OF HOOP BAR STEEL	LBS. OF VERTICAL BAR STEEL
>0" TO 6"	10"	14'-6"	14'-1"	16	2.6	78	127
>6" TO 1'-0"	1'-4"	15'-0"	14'-7"	16	2.7	78	131
>1'-0" TO 1'-6"	1'-10"	15'-6"	15'-1"	17	2.8	83	136
>1'-6" TO 2'-0"	2'-4"	16'-0"	15'-7"	17	2.9	83	141

REINFORCEMENT AND CONCRETE QUANTITIES ADJUSTED FOR EXTENDED TYPE 13 CONCRETE BASE

HEIGHT INCREASE REQUIRED	* HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAXIMUM)	SHAFT LENGTH	LENGTH OF *6 VERTICAL REINF.	NO.OF #4 HOOPS	C.Y. OF CONCRETE	LBS. OF H.S. BAR STEEL
>0" TO 6"	10"	15'-0"	14'-7"	16	6.5	447
>6" TO 1'-0"	1'-4"	15'-6"	15'-1"	16	6.6	454
>1'-0" TO 1'-6"	1'-10"	16'-0"	15'-7"	17	6.8	469
>1'-6" TO 2'-0"	2'-4"	16'-6"	16'-1"	17	7.0	476

TOP OF CONCRETE BASE EXTENDED WHEN GROUND SURFACE AT BASE IS BELOW



CONCRETE BASE TYPE 10 (EXTENDED)

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HIGH POINT OF ROADWAY ELEVATION GROUND SURFACE *HEIGHT ABOVE GROUND SURFACE ON-LOW SIDE (MAXIMUM) 1'-9" MIN. & & FOOTING TYPE 10 & TYPE 13 EXTENSION

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

CONCRETE BASE

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APPROVED 11-26-2013 /S/ Ahmet Demirbilek DATE STATE ELECTRICAL ENGINEER FHWA

CONCRETE BASE TYPE 13 (EXTENDED)

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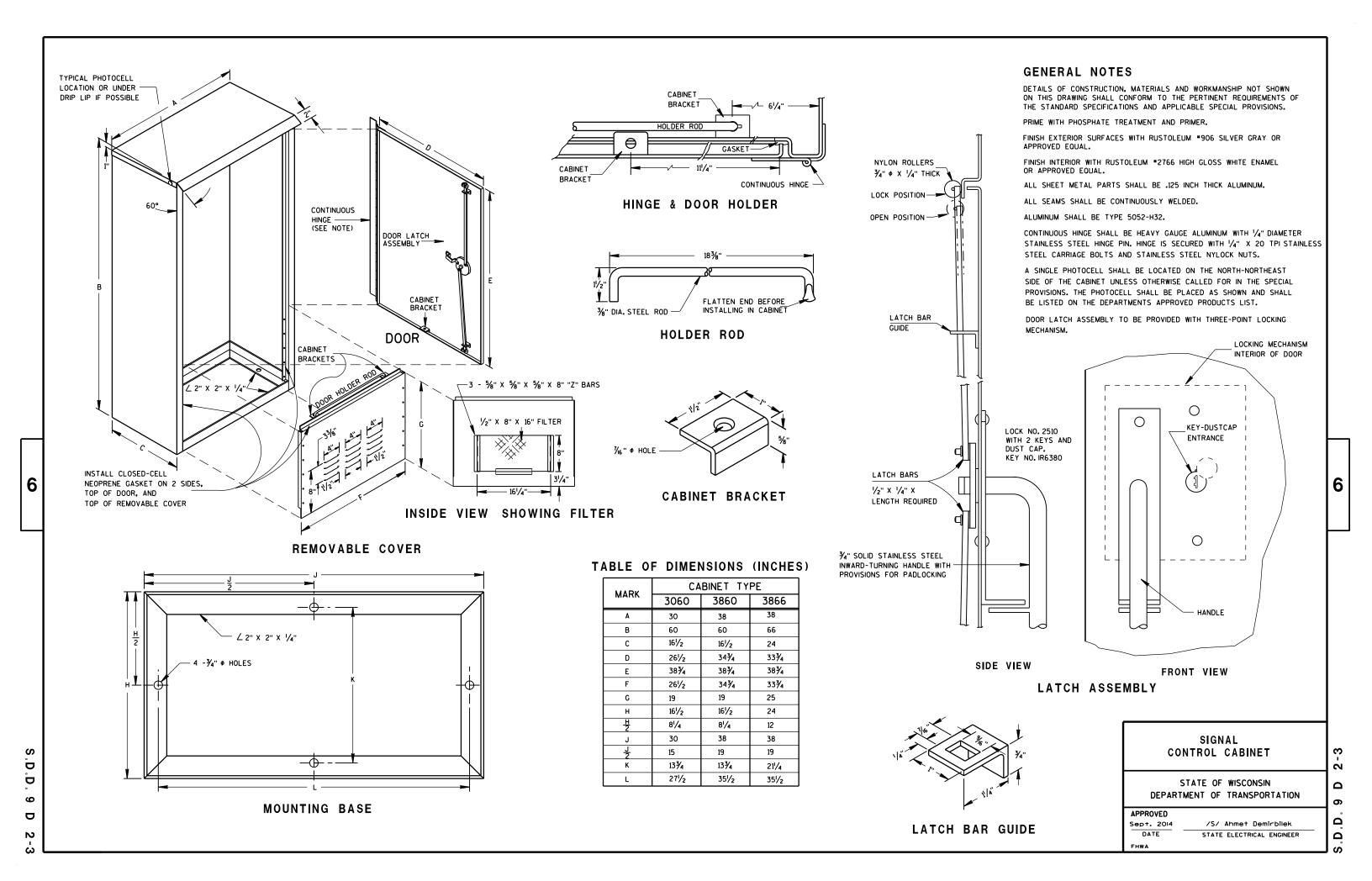
/S/ Ahmet Demirbilek

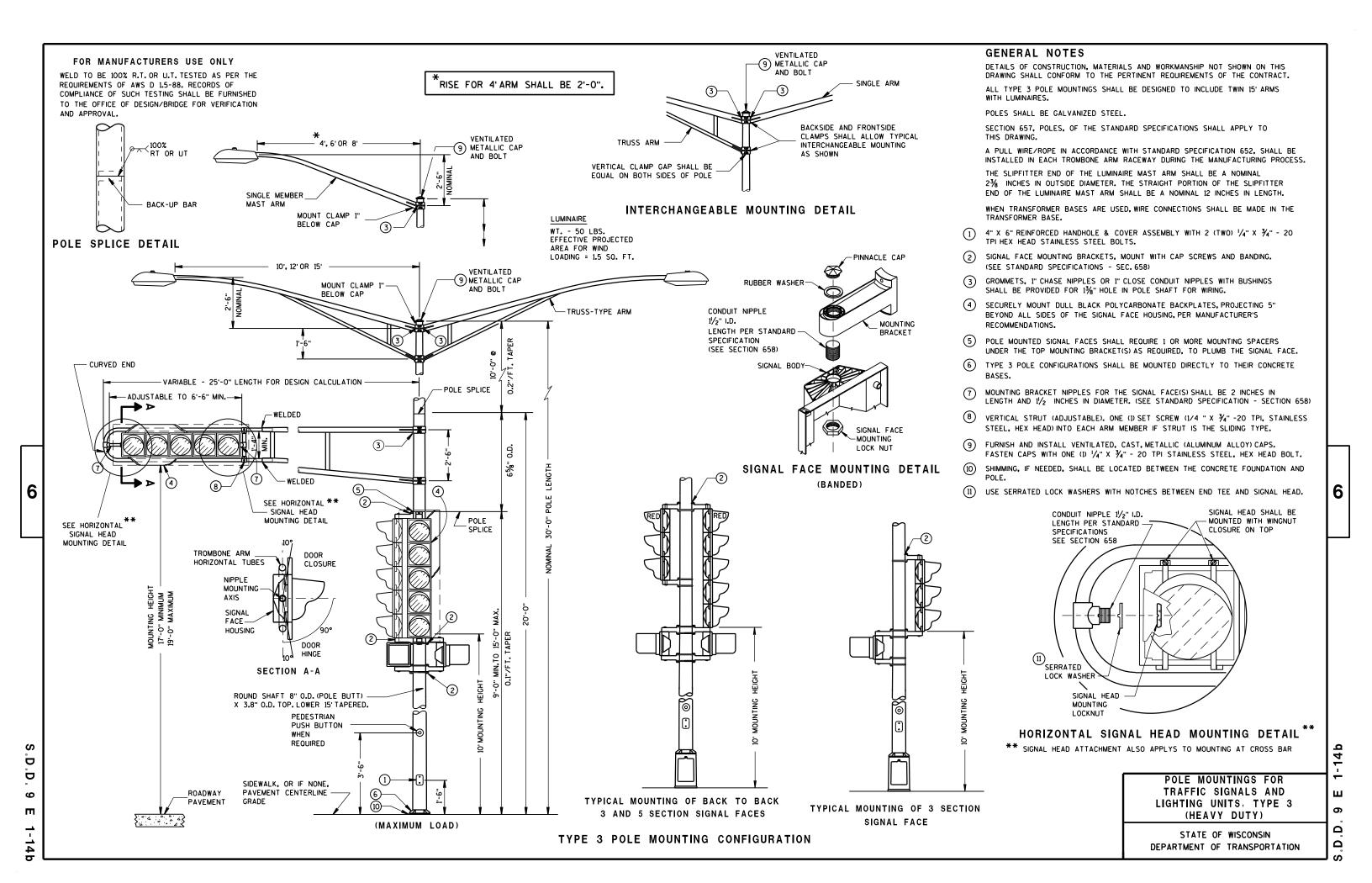
STATE ELECTRICAL ENGINEER

Sept. 2014

DATE

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GENERAL NOTES

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

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL WITH A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

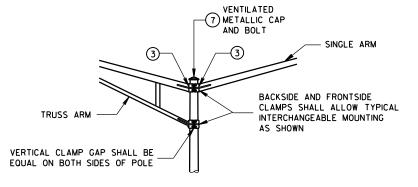
SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2% INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

- 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) 1/4" X 3/4" 20 TPI HEX HEAD STAINLESS STEEL BOLTS.
- (2) SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS SEC. 658).
- GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1%" HOLE IN POLE SHAFT FOR WIRING.
- 4 SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.
- (5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.
- (6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
- FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS.

 FASTEN CAPS WITH ONE (1) 1/4" x 3/4" 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
- 8 SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.



INTERCHANGEABLE MOUNTING DETAIL

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY.

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD

2% INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER

WHEN TRANSFORMER BASES ARE USED, WIRE CONEECTIONS SHALL BE MADE IN THE

- 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) 1/4" X 3/4" 20
- GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS
- FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
- SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION

POLE MONTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)

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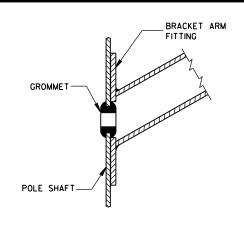
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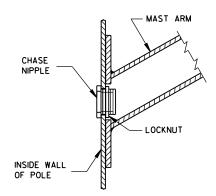
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STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION



TYPICAL APPLICATION OF **GROMMET IN POLE SHAFT**



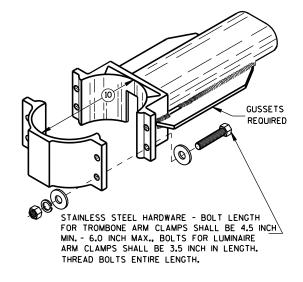
TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

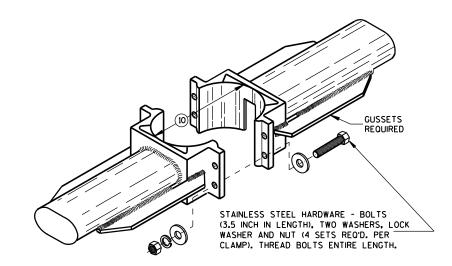
CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

- (10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.
- INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)
- (12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.
- (13) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

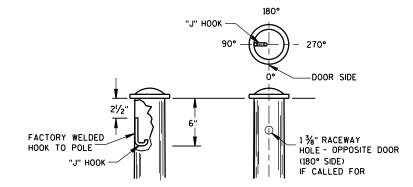
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



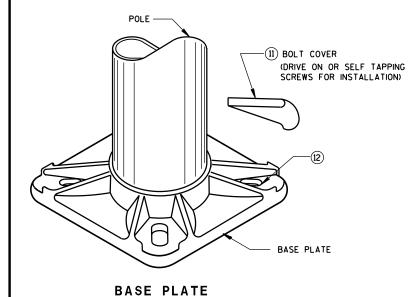
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP

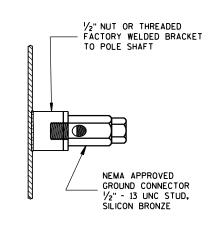


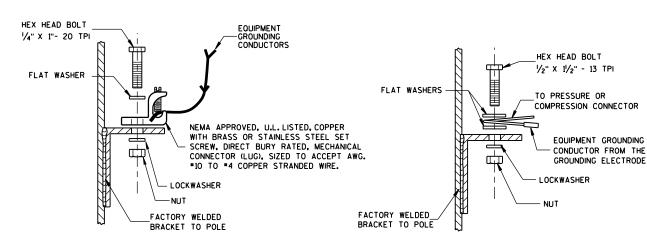
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS



TYPICAL "J" HOOK LOCATION







TYPICAL GROUNDING CONNECTIONS NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTINGS

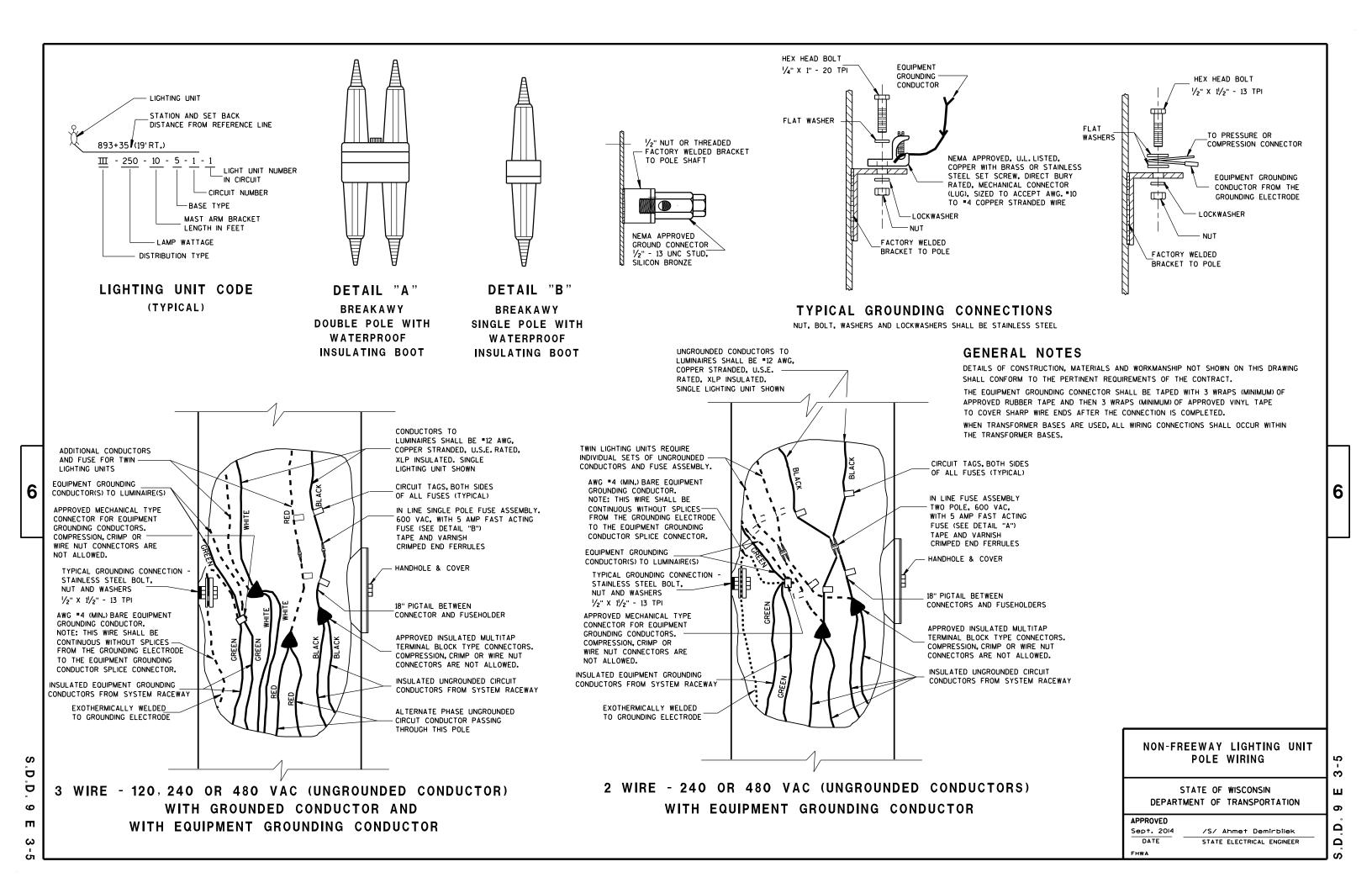
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

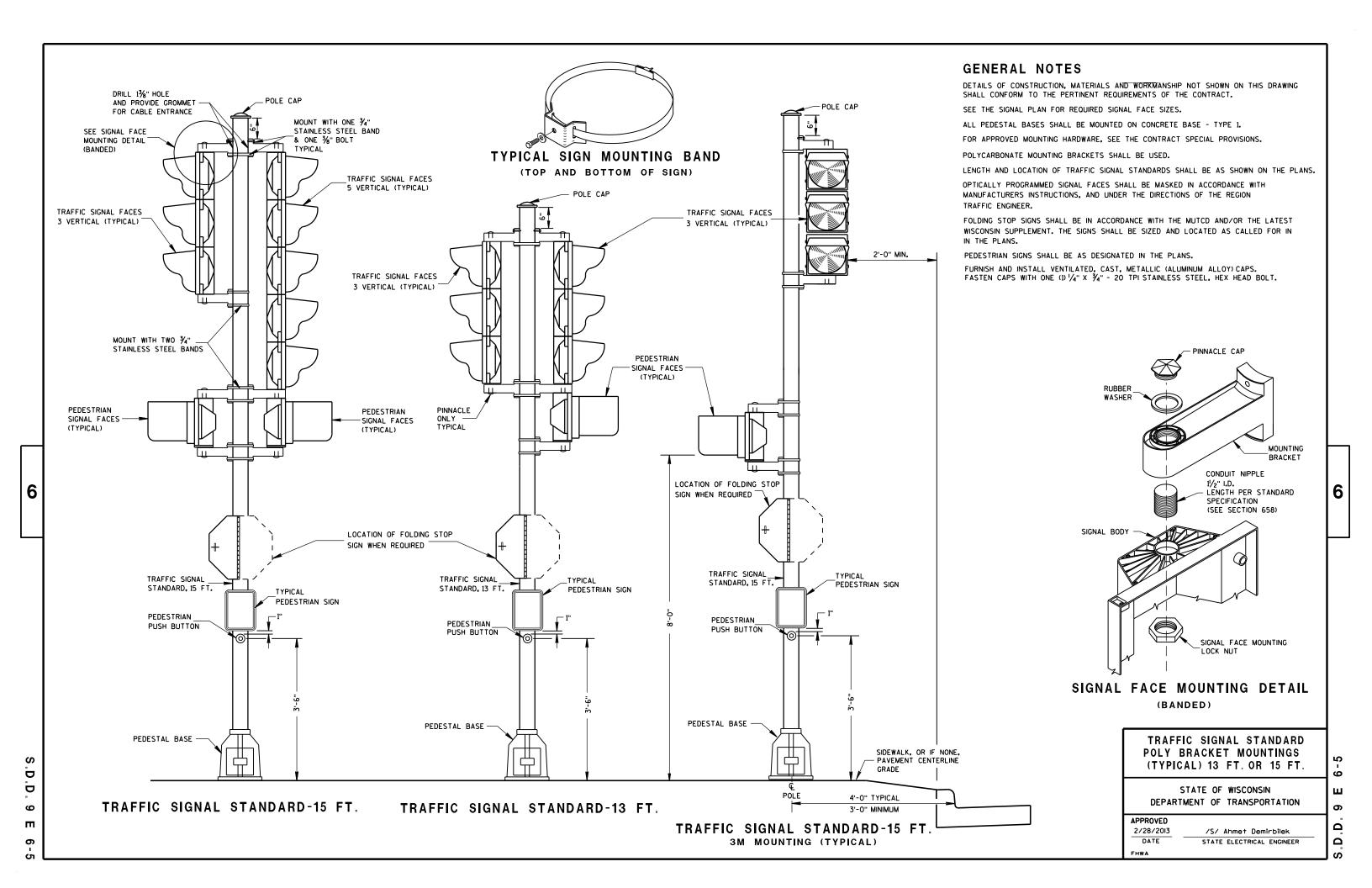
APPROVED	
Feb. 2015	/S/ Ahmet Demirbilek
DATE	STATE ELECTRICAL ENGINEER
FHWA	

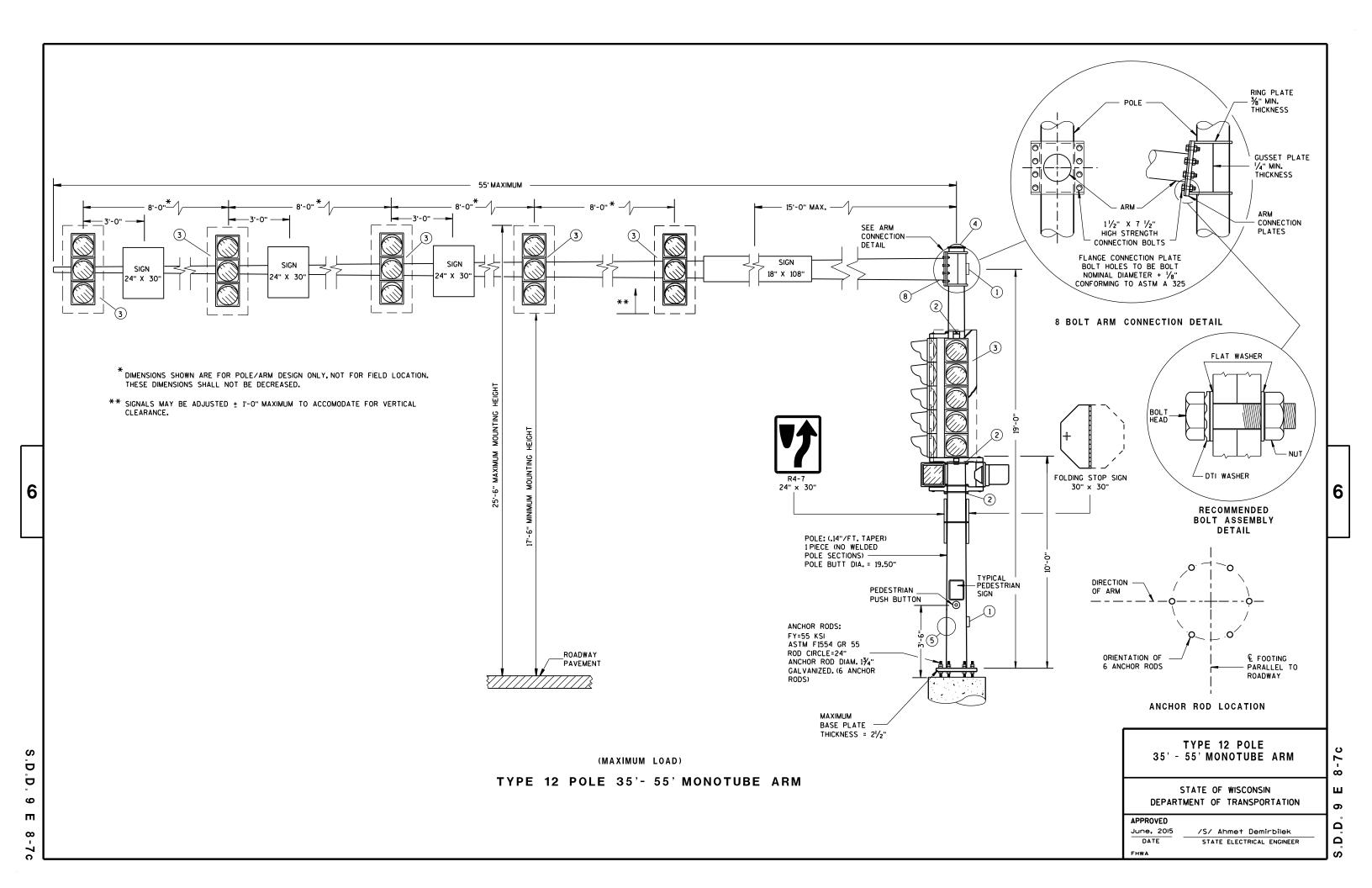
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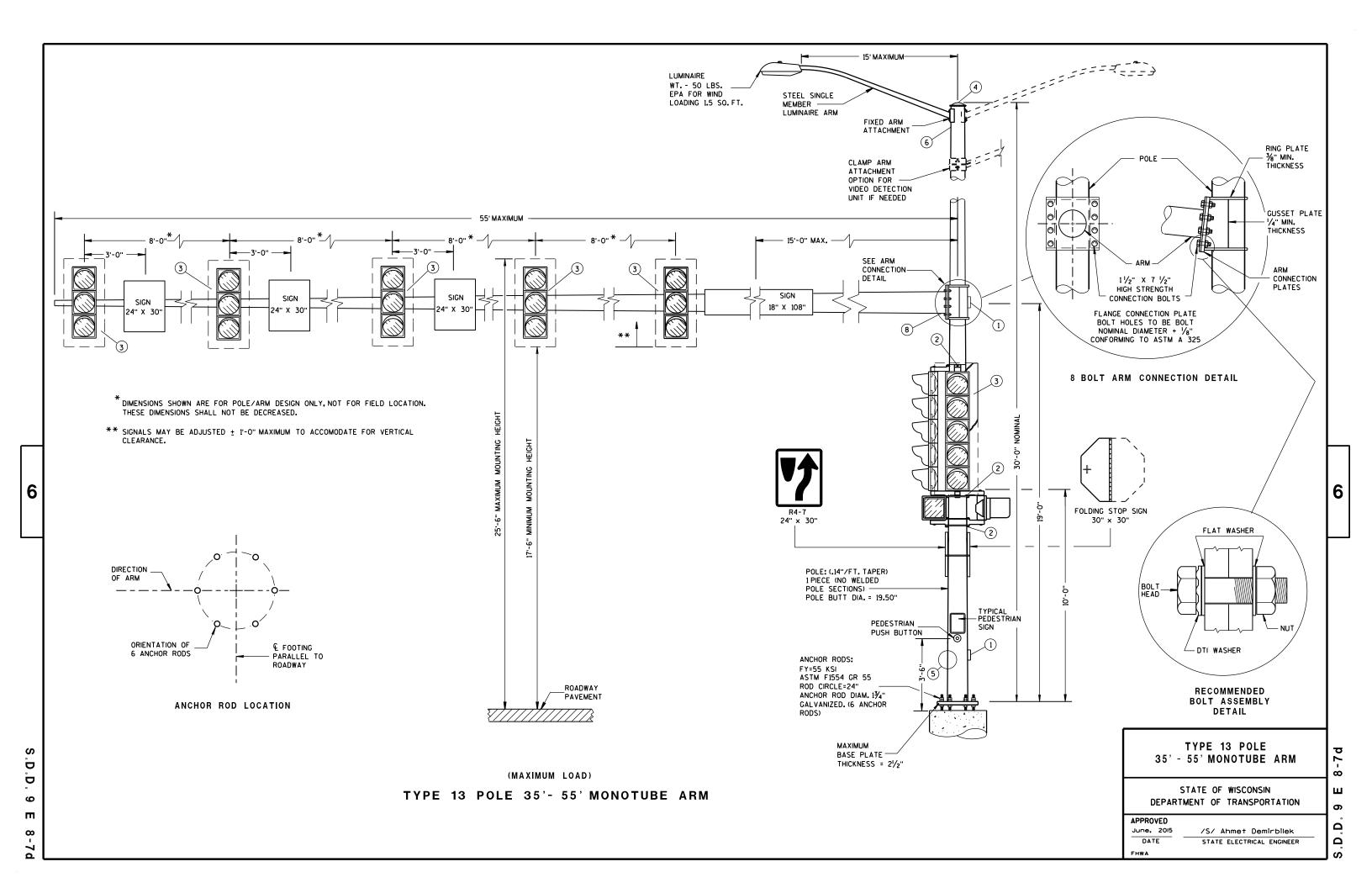
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POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO 2013 6TH EDITION AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY I FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL 1/2" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING, THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

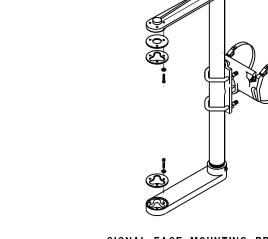
SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

- 1 DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO 1/4" x 3/4" 20 TPI STAINLESS STEEL HEX HEAD BOLTS.
- 2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).
- SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.
- (4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.
- (5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR 1/4" X 3/4" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.
- (6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.
- (7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

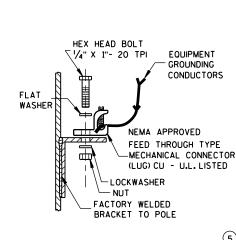
MOUNTING HEIGHT SHALL BE 6'-O" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED 1/2" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.



SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANUFACTURER'S RECOMMENDATION)

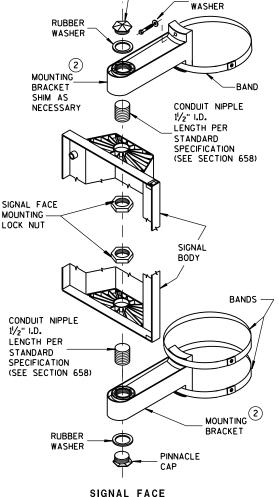


6'-0"

STRUCTURAL IDENTIFICATION

PLAQUE PLACEMENT

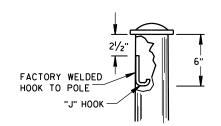
TYPICAL GROUNDING CONNECTIONS NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



PINNACI F CAP

BOLT AND

VERTICAL MOUNTING DETAIL



"J" HOOK WIRE SUPPORT

GENERAL NOTES AND HARDWARE **DETAILS FOR TYPE 9, 10, 12 & 13**

> STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

DATE STATE ELECTRICAL ENGINEER FHWA

POLES WITH MONOTUBE ARMS

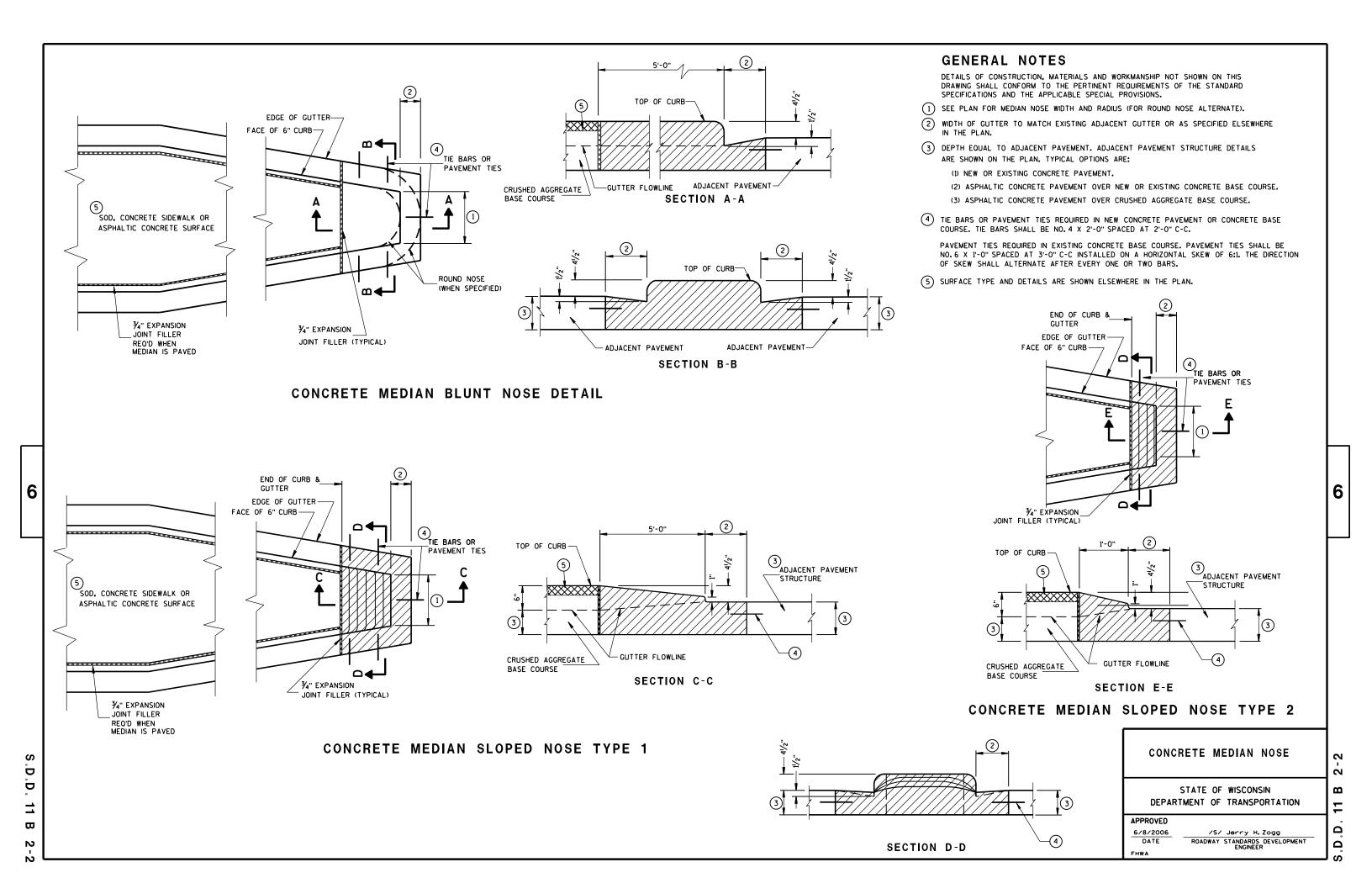
/S/ Ahmet Demirbliek

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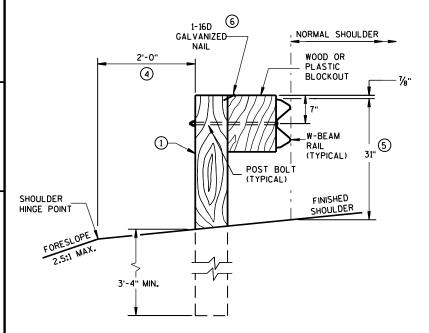
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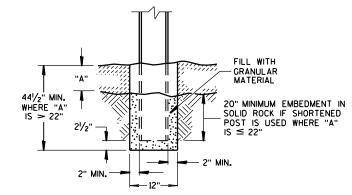
GENERAL NOTES

- (1) WOOD OR STEEL POSTS (W6X9 OR W6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- 2 USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.
- (3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 21/2 INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.
- (4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).
- (5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 273/4" TO 32".
- (6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



END VIEW

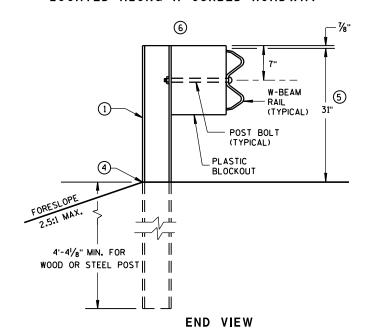
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



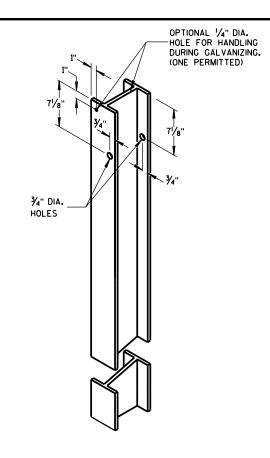
SETTING STEEL OR WOOD POST IN ROCK $^{\scriptsize{\textcircled{3}}}$



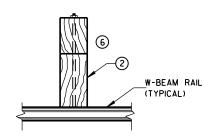
END VIEW
LOCATED ALONG A CURBED ROADWAY



MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



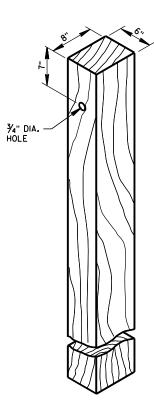
STEEL POST & HOLE PUNCHING DETAIL (w6X9)



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM



WOOD POST (6" X 8") NOMINAL $^{\scriptsize \textcircled{1}}$



WOOD OR PLASTIC BLOCKOUT

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

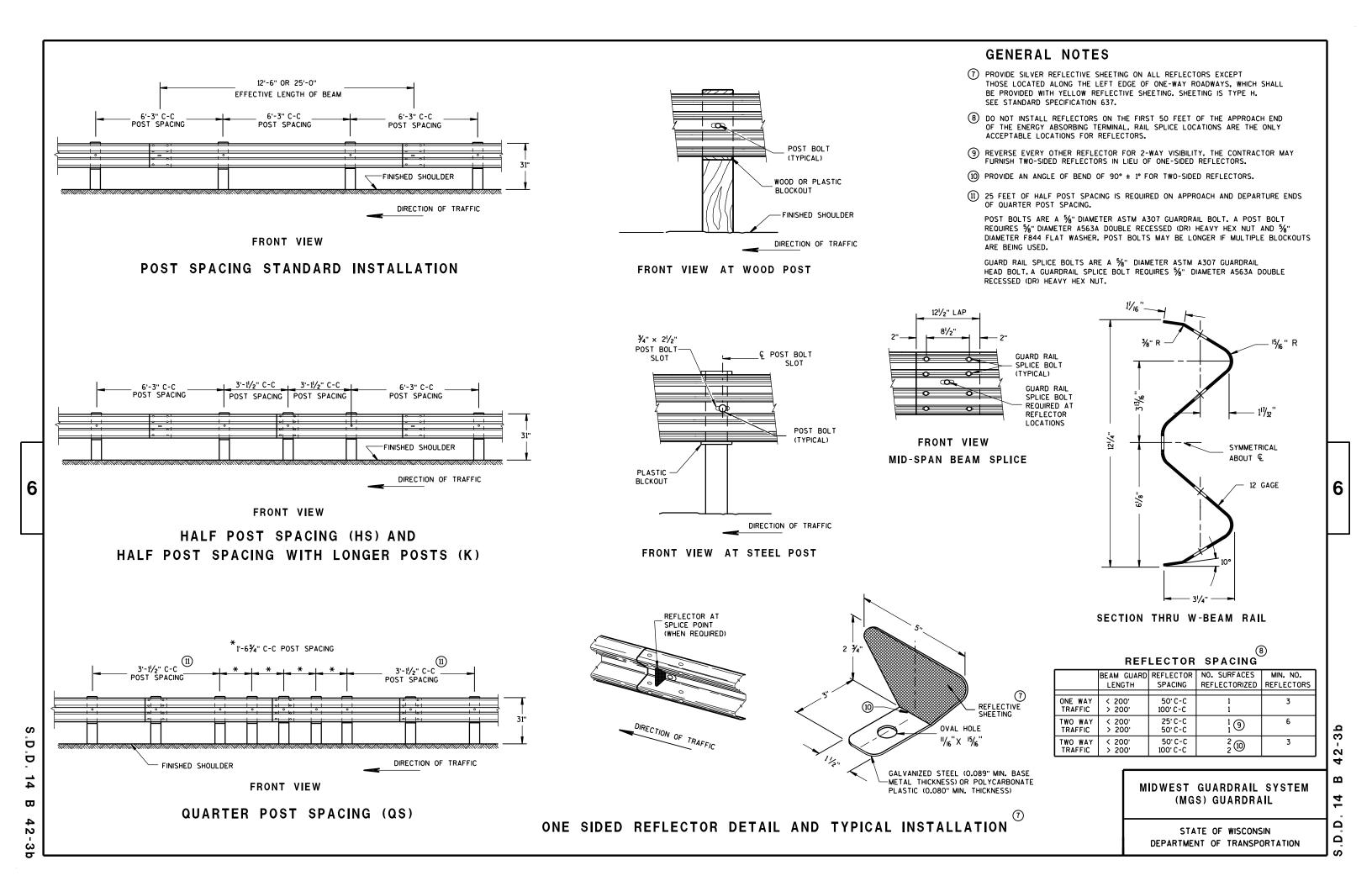
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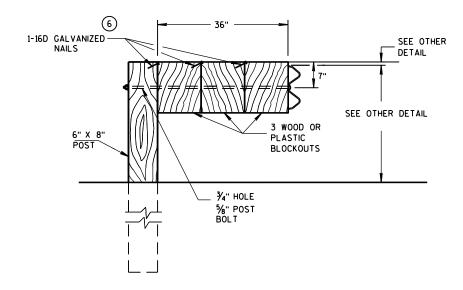
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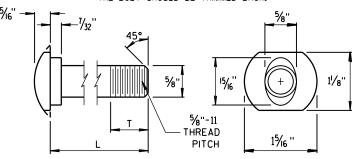


DETAIL FOR 36" BLOCKOUT DEPTH

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

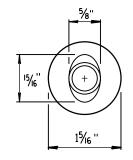
> DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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

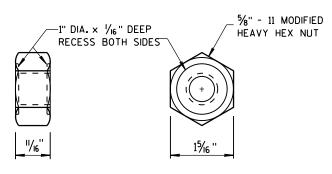


POST BOLT TABLE

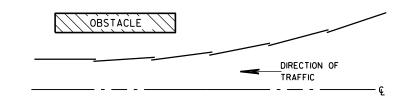
11/8"
437
13/4"
4"
41/16"
4"
41/16"
4"



ALTERNATE BOLT HEAD

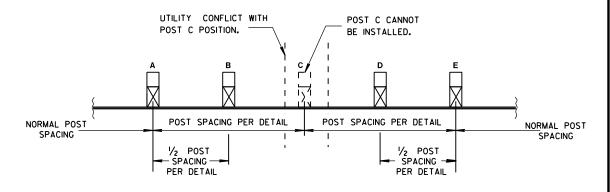


POST BOLT AND RECESS NUT



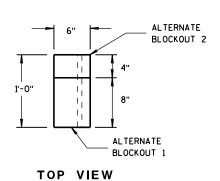
PLAN VIEW

BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION





SIDE VIEW

ALTERNATE WOOD **BLOCKOUT DETAIL**

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

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

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SECTION A-A SECTION B-B

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PLAN VIEW

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.			
1	WOOD BREAKAWAY POST			
2	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1AND 2			
3	WOOD CRT			
4	WOOD BLOCKOUT			
(5)	PIPE SLEEVE			
6	BEARING PLATE			
7	BCT CABLE ASSEMBLY			
8	ANCHOR CABLE BOX			
9	GROUND STRUT			
10	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.			
(11)	STANDARD W-BEAM RAIL.MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.			
12	END SECTION EAT			
(3)	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS			
14)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)			

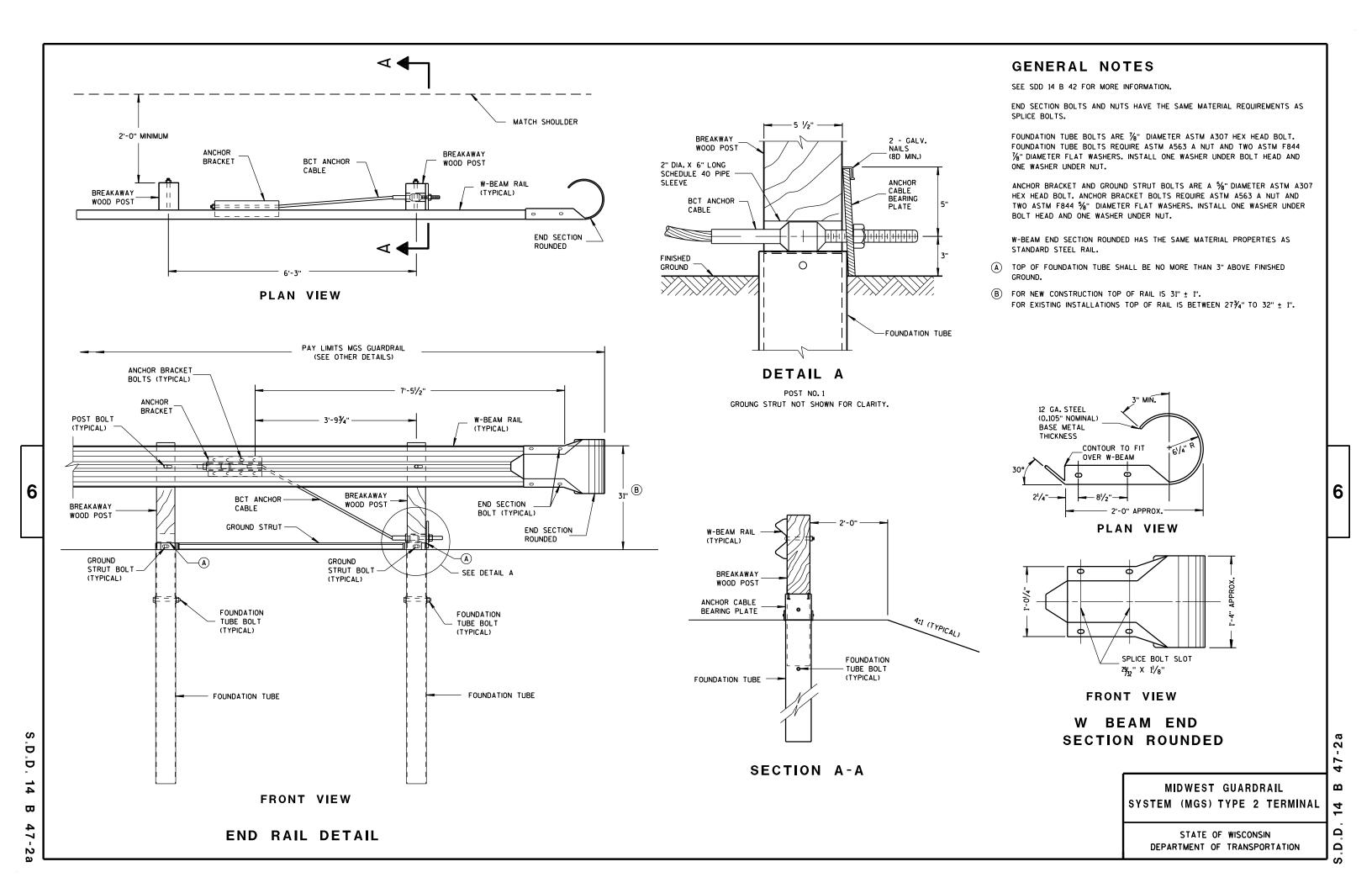


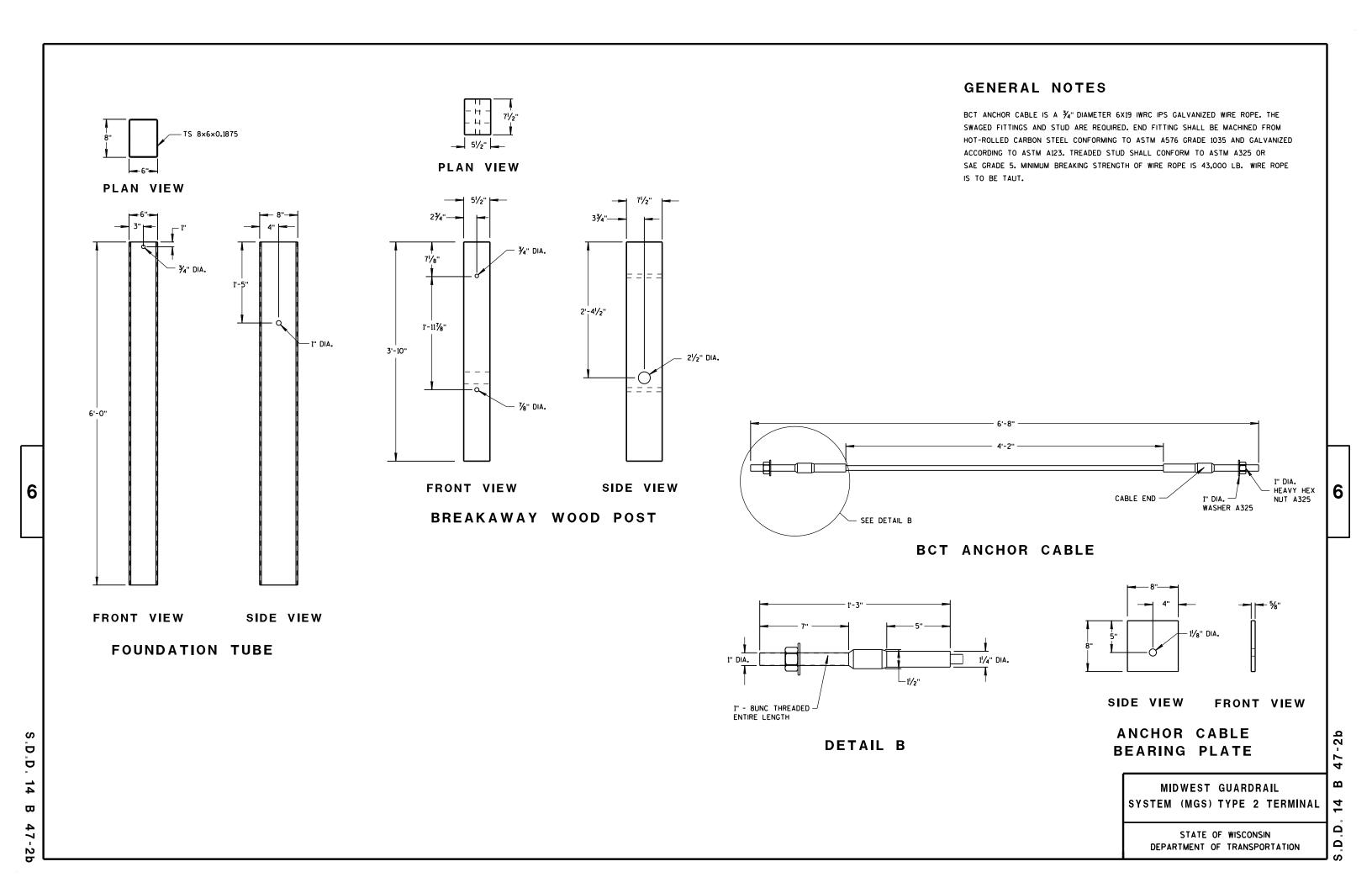
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

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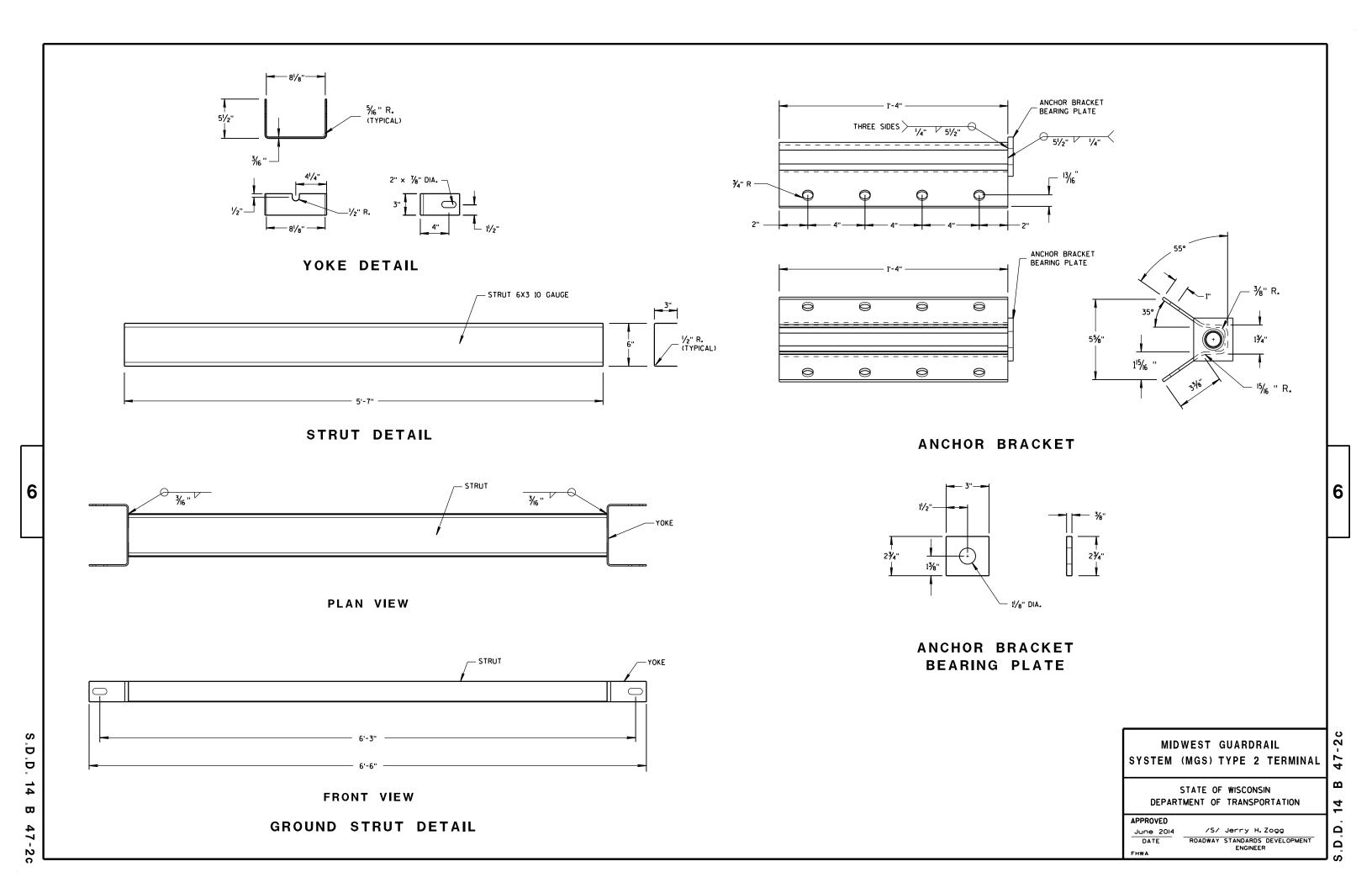
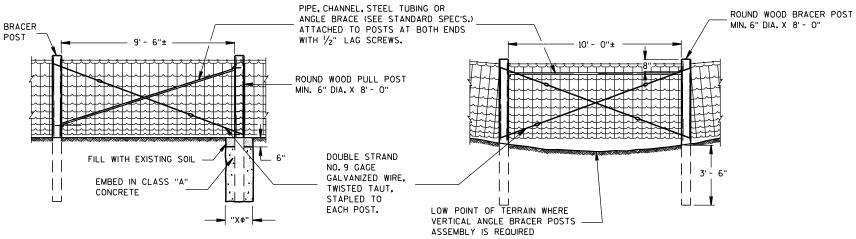
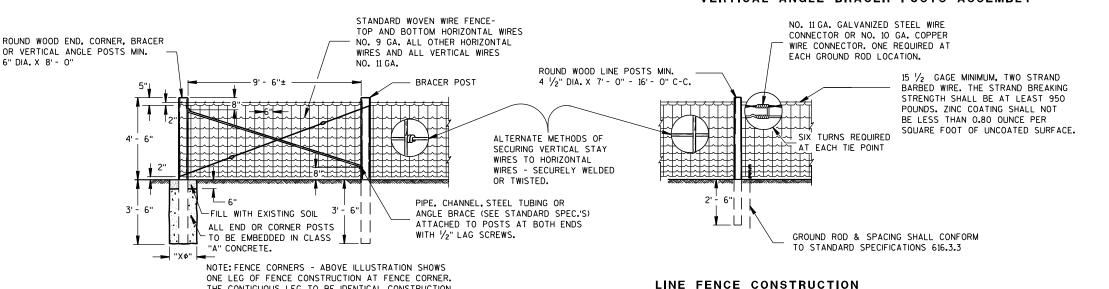


ILLUSTRATION SHOWS POSITION OF STANDARD STEEL BRACE, DOUBLE STRAND GALVANIZED WIRE, AND THE POST TO BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM LEFT TO RIGHT. THE BRACES SHALL BE POSITIONED ON THE OPPOSITE DIAGONALS AND THE OPPOSITE POST SHALL BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM RIGHT TO LEFT.



PULL OR STRETCHER POSTS ASSEMBLY

VERTICAL ANGLE BRACER POSTS ASSEMBLY



END OR CORNER POSTS ASSEMBLY

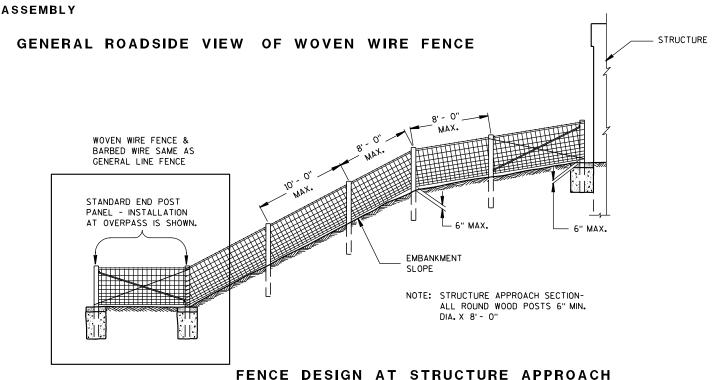
STANDARD END POST

PANEL - INSTALLATION AT UNDERPASS IS SHOWN.

ALTERNATE FENCE DESIGN

AT STRUCTURE

THE CONTIGUOUS LEG TO BE IDENTICAL CONSTRUCTION.



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FENCE WOVEN WIRE

GENERAL NOTES

TO PULL-OUT.

"X ϕ " = DIAMETER OF THE POST PLUS 12".

FENCE STAPLES SHOULD NEVER BE DRIVEN VER-

TICALLY INTO WOOD POSTS (WITH BOTH LEGS

PARALLEL WITH THE WOOD GRAIN). DOING SO

CAN SEPARATE THE GRAIN AND SIGNIFICANTLY

REDUCE THE HOLDING POWER. ROTATING THE

THE GRAIN AND PROVIDES MORE RESISTANCE

DO NOT STAPLE WIRE TIGHT TO THE LINE

PANSION AND CONTRACTION. STAPLE AR-

DRIVEN TIGHT TO POSTS. ALL STAPLES SHALL BE 2" X 9 GAGE AND SHALL BE MAN-

RANGEMENT SHALL BE THE SAME FOR ALL

OTHER POSTS EXCEPT THAT THEY SHALL BE

LIFACTURED FROM GALVANIZED WIRE OR HOT

DIP GALVANIZED AFTER FORMING. STAPLES

FENCE SHALL BE LOCATED 3'-0" INSIDE THE RIGHT OF WAY LINE UNLESS

OTHERWISE INDICATED ON THE PLANS.

SHALL HAVE SLASH-CUT POINTS.

POSTS. ALLOW MOVEMENT OF WIRE FOR EX-

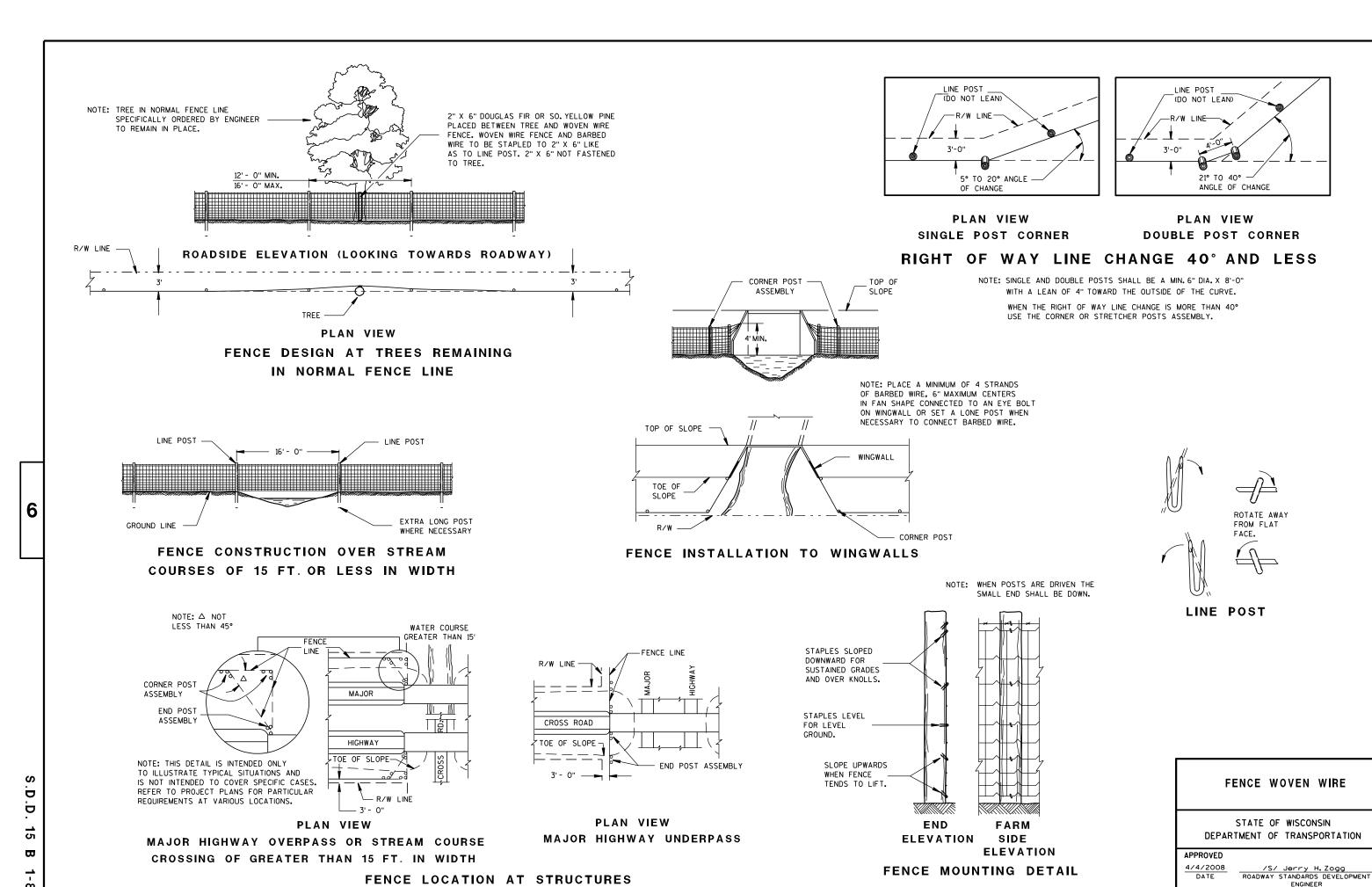
STAPLES SLIGHTLY OFF VERTICAL STRADDLES

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

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S.D.D. 15 B 1-8b



BRIDGE ROAD 1)TWO-WAY **CLOSED** TYPE "A" WARNING LIGHTS REQUIRED OUTSIDE EDGE OF SHOULDER OUTSIDE EDGE OF SHOULDER OR FACE OF CURB OR FACE OF CURB **DETAIL D**

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



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

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.) MO5-1 AND MO6-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.) D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS. R1-1 SHALL BE 36" X 36".

- (1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT
- THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- 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.
- "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

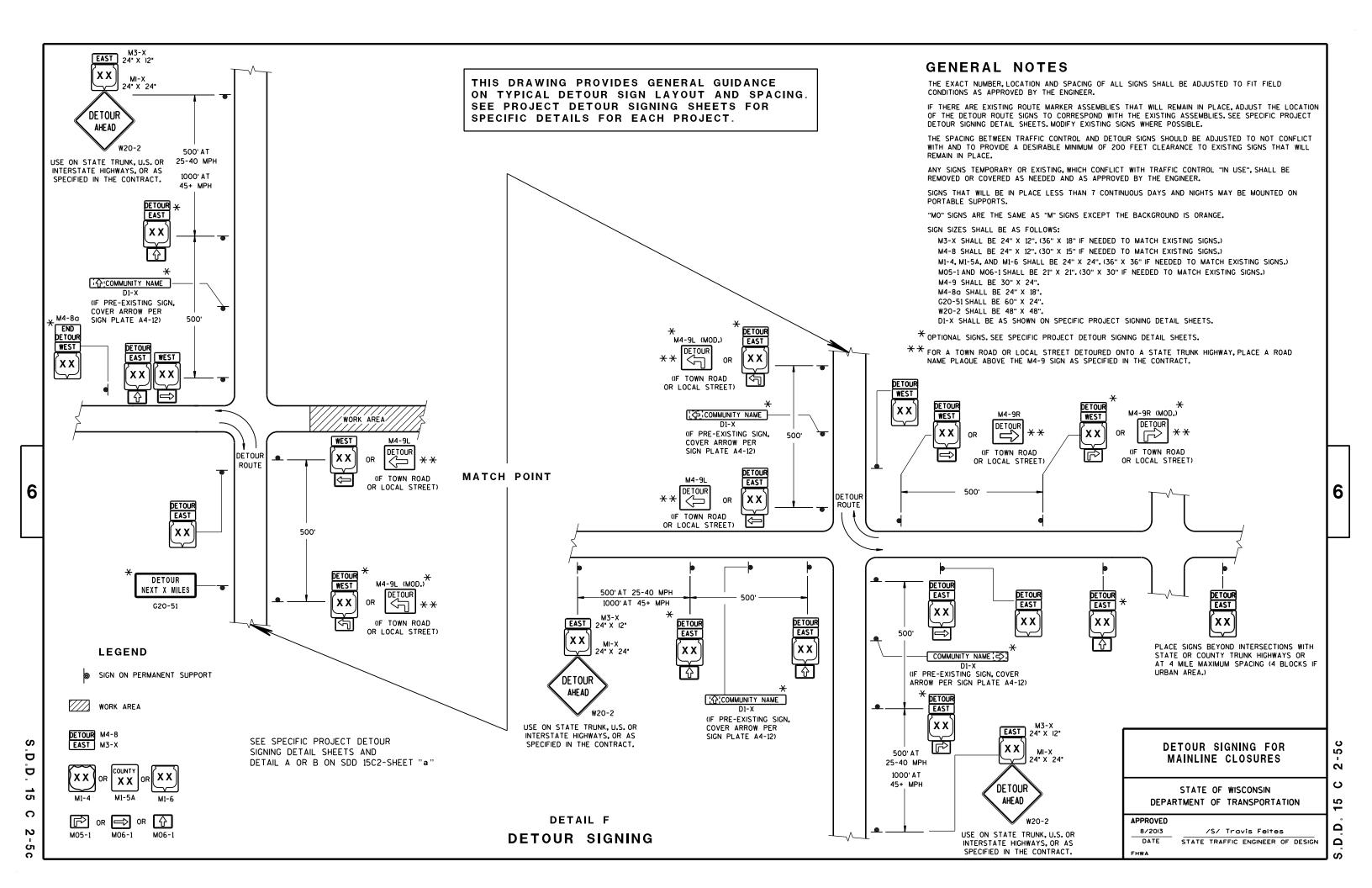
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN

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GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
RI1-2 SHALL BE 48" X 30".
RI1-4 AND RI1-3 SHALL BE 60" X 30".

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

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

SIGN ON PERMANENT SUPPORT

TYPE III BARRICADE

TYPE III BARRICADE WITH
ATTACHED SIGN

(A) TYPE "A" WARNING LIGHT (FLASHING)

//// w

WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 /S/ Travis Feltes

DATE STATE TRAFFIC ENGINEER OF DESIGN

S.D.D. 15 C 3-2

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

6

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C

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

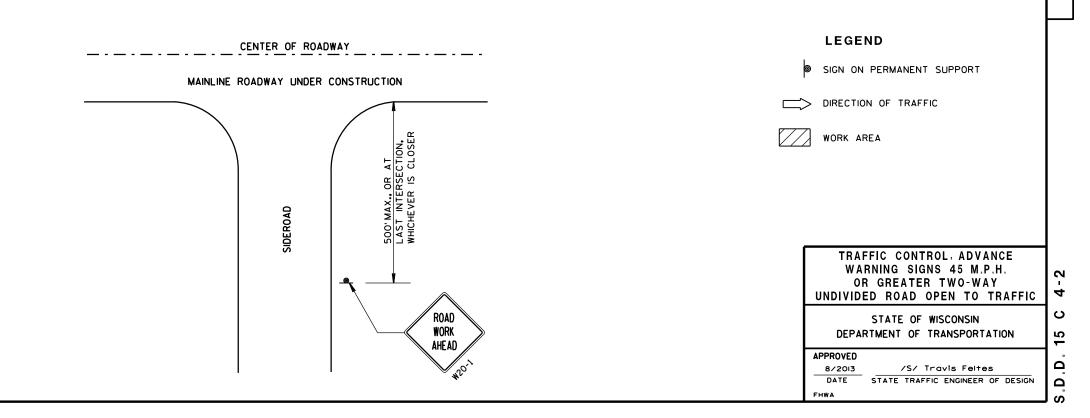
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

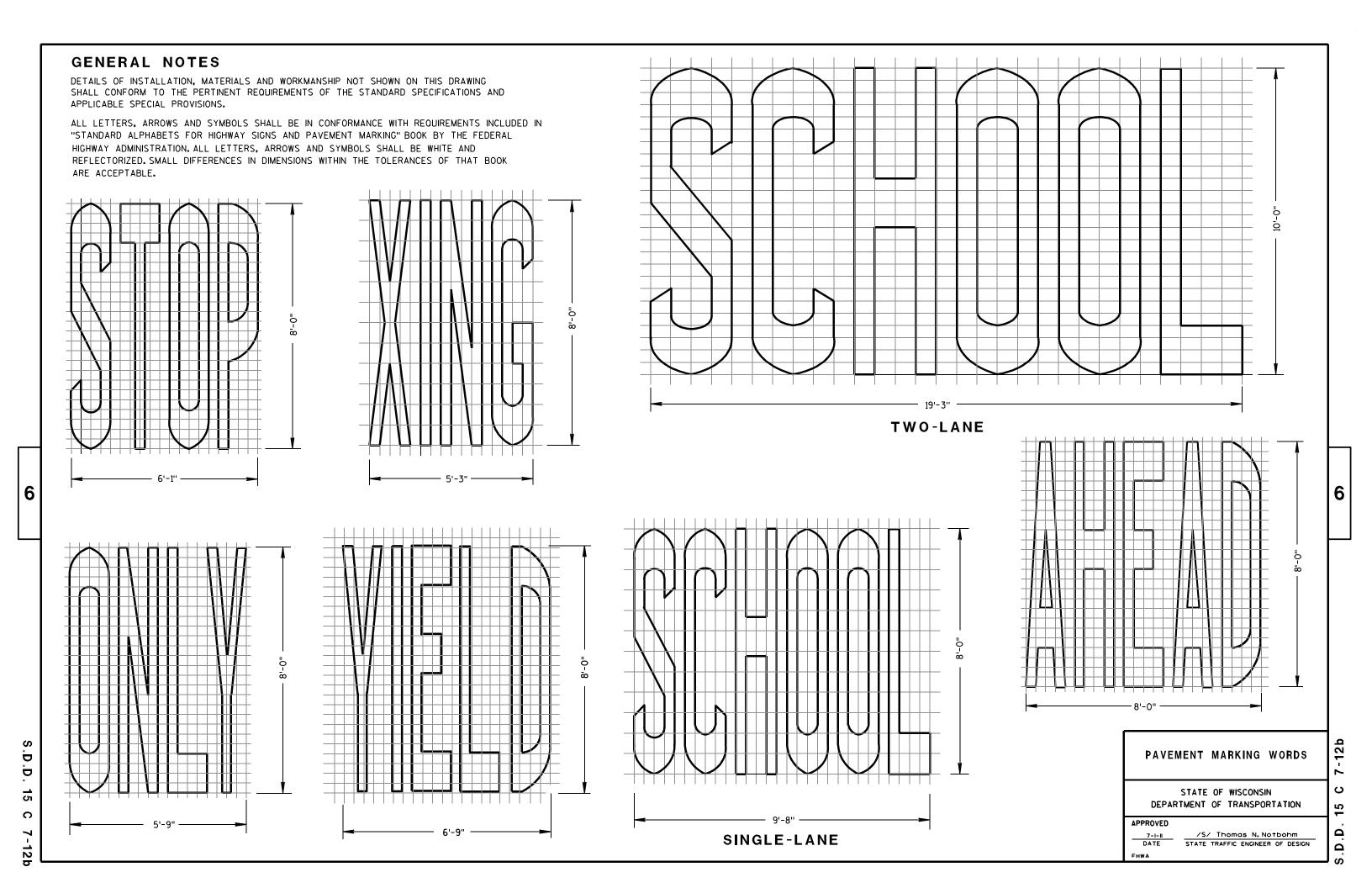
ALL SIGNS ARE 48"×48" UNLESS OTHERWISE NOTED.

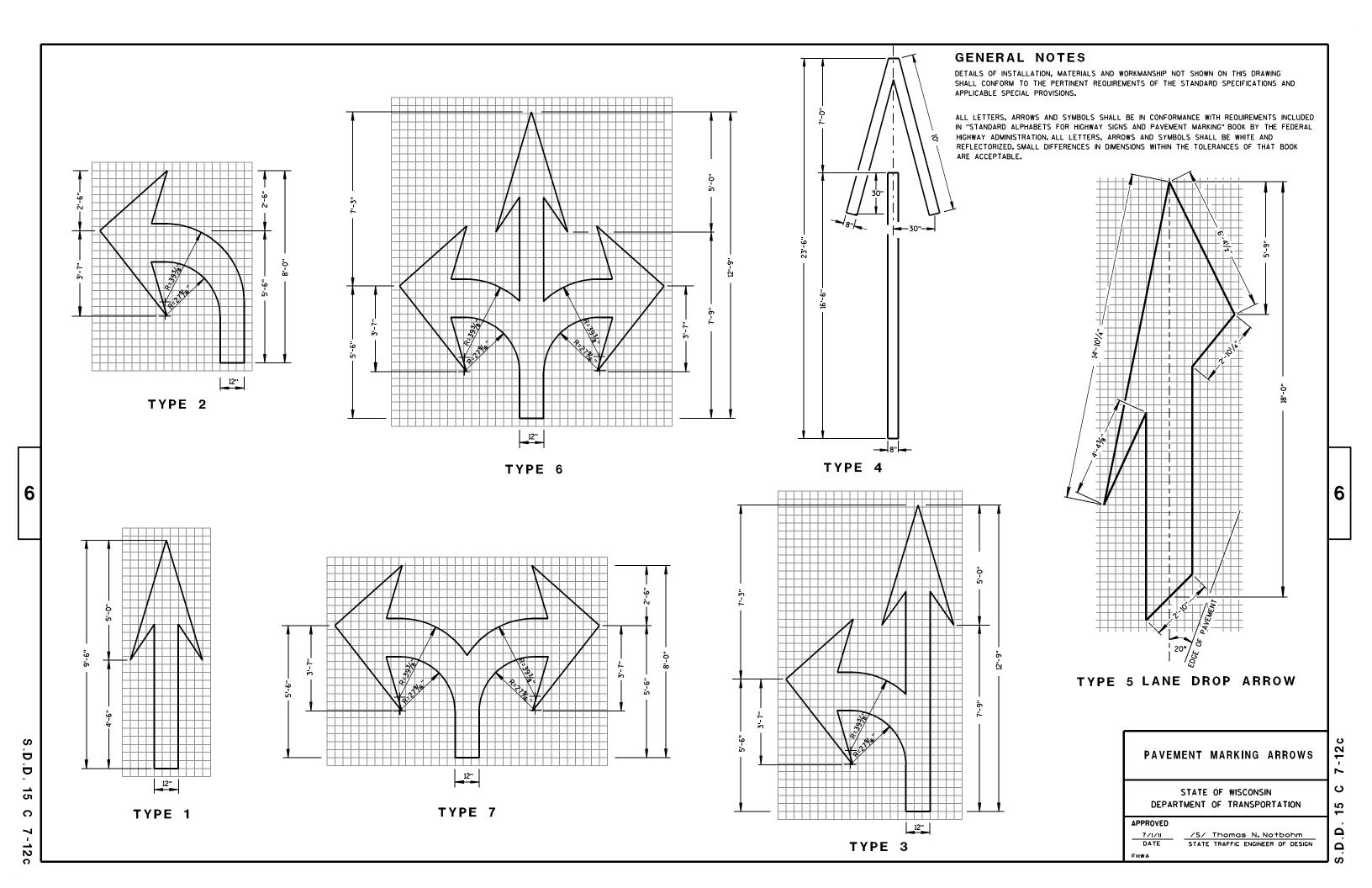
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.
- * PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

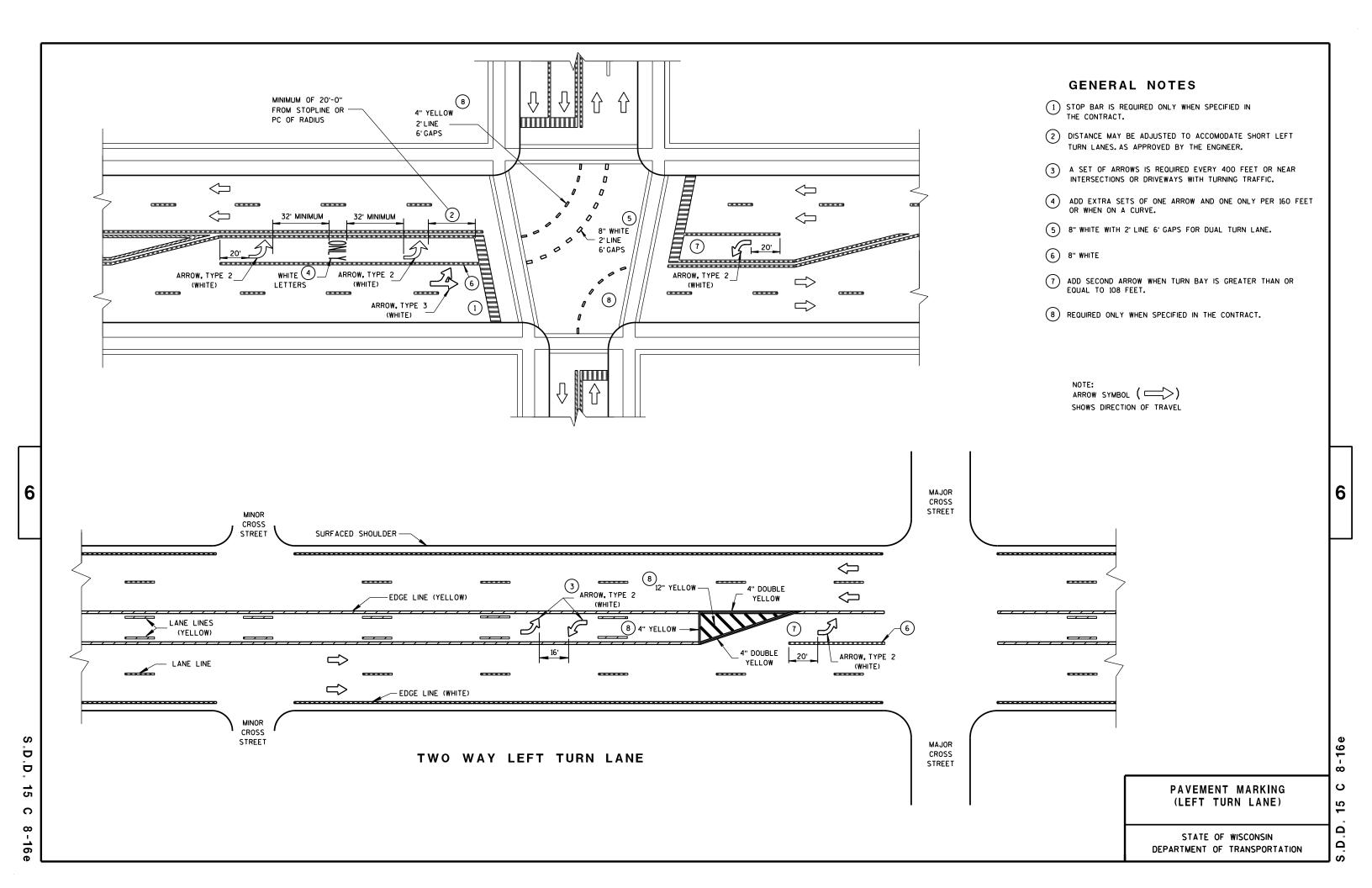


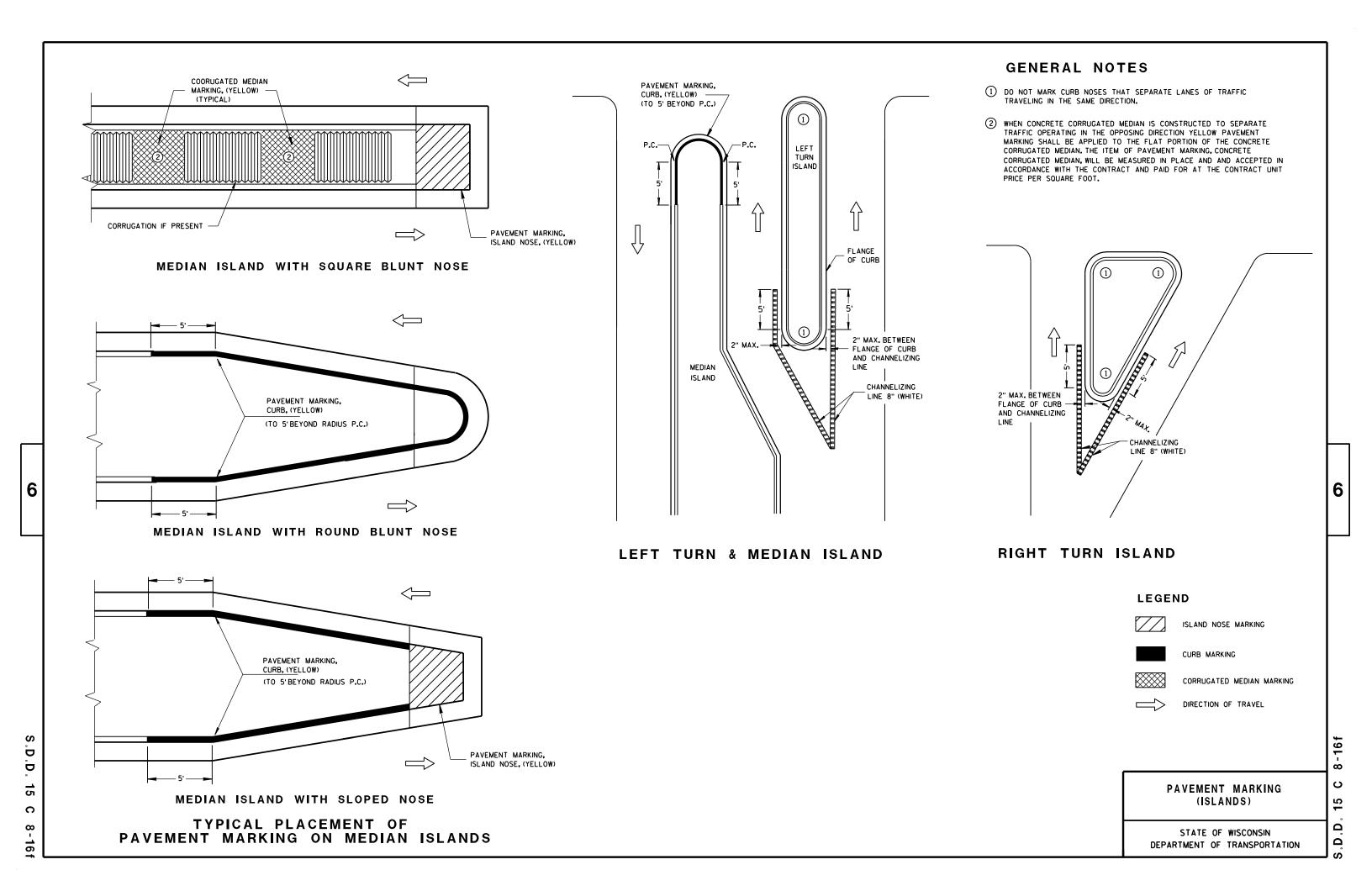




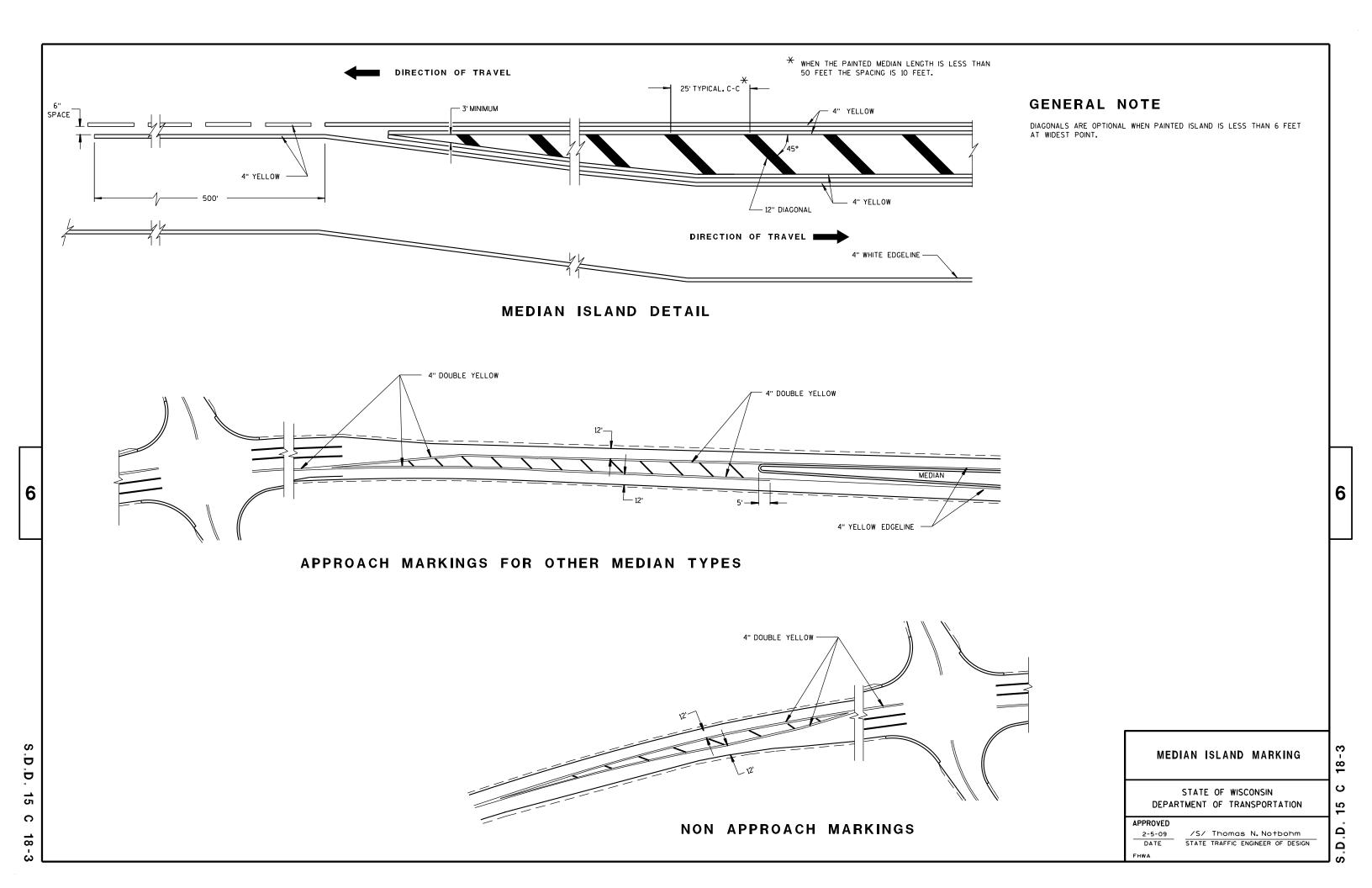


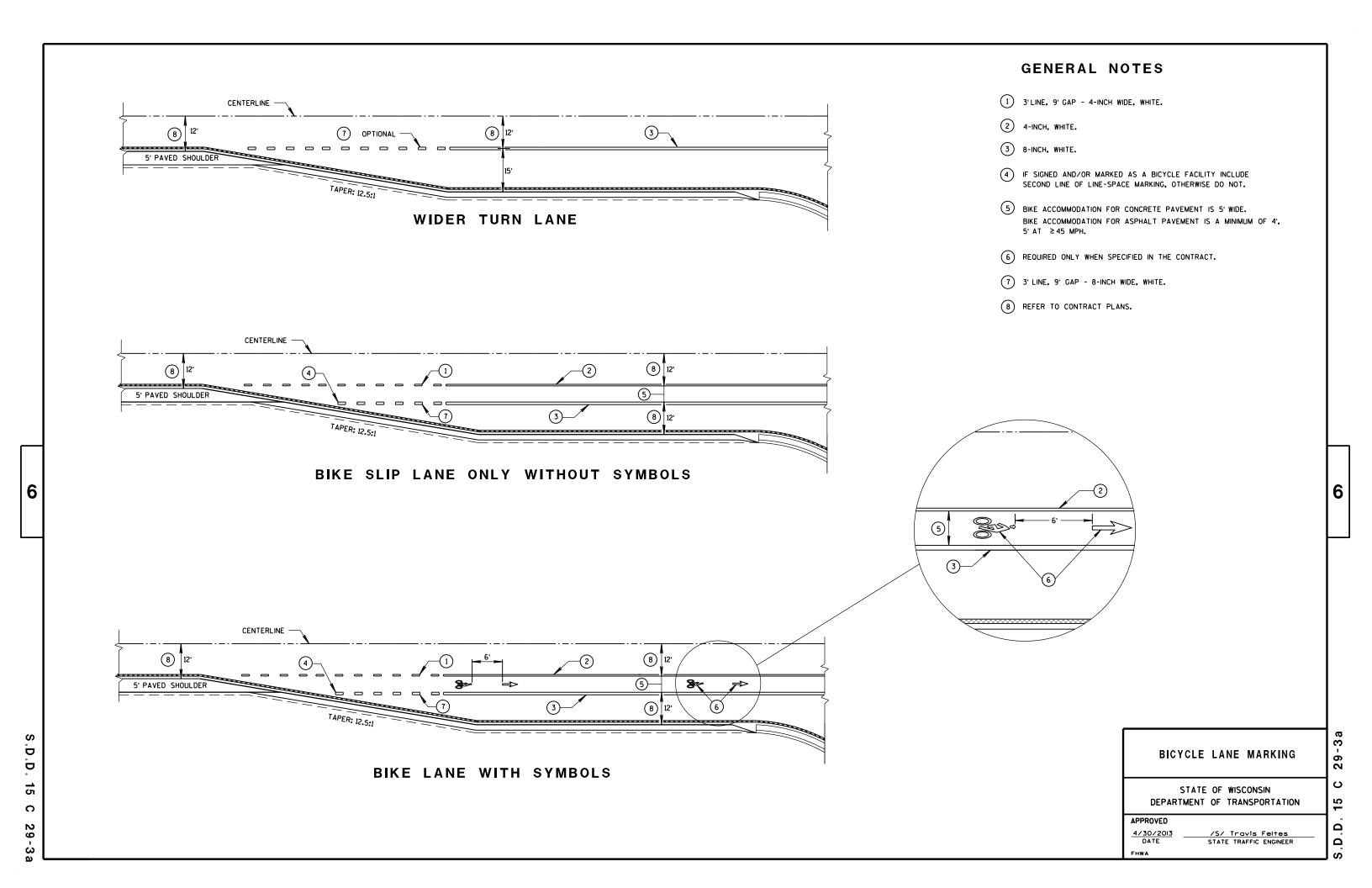




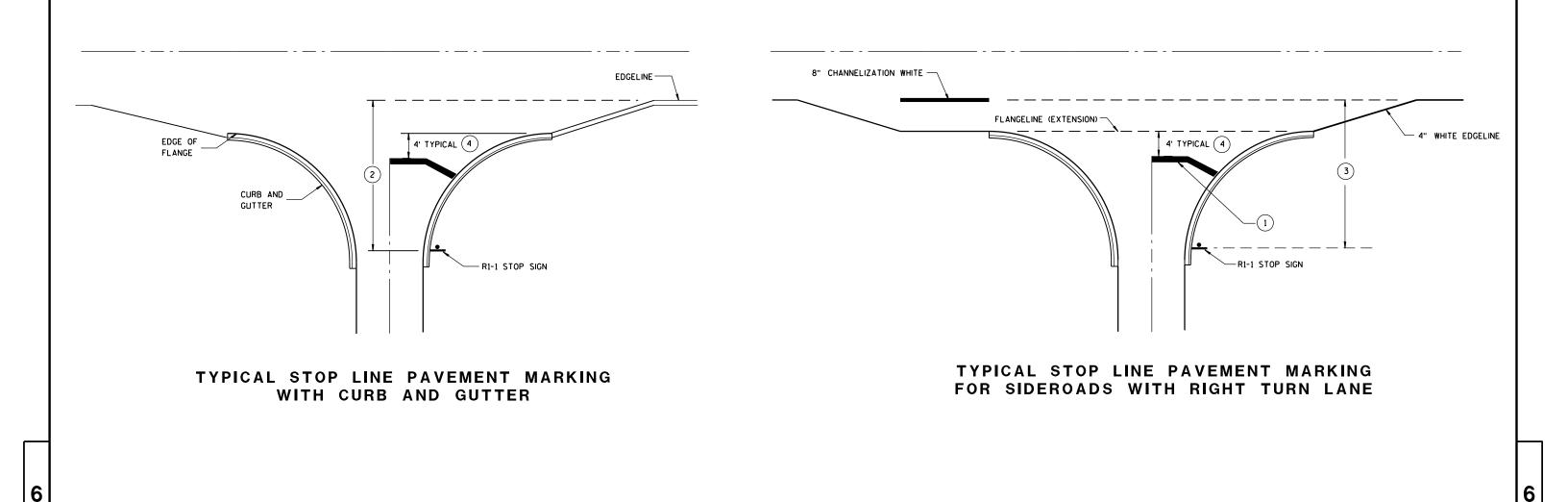


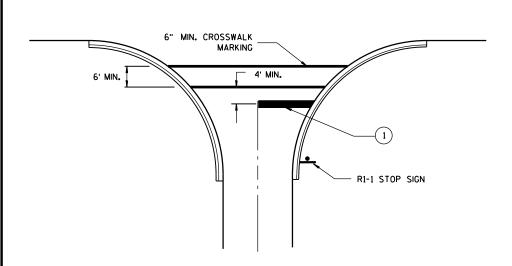




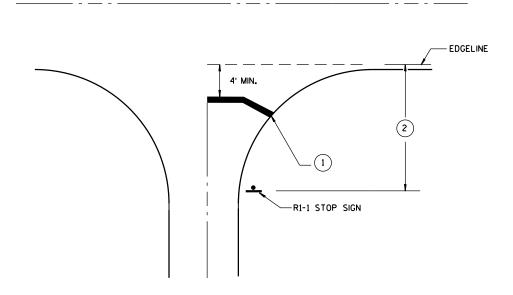


GENERAL NOTES 5 5' TYPICAL. 1 3'LINE, 9' GAP - 4-INCH WIDE, WHITE. 2 4-INCH, WHITE. 6) REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT. 3 8-INCH, WHITE. 7) 3' LINE, 9' GAP - 8-INCH WIDE, WHITE. 4) IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE (8) REFER TO CONTRACT PLANS. SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT. STOP BAR IF APPLICABLE TAPER: 12.5:1 6 6 BIKE LANE - 4-LANE DIVIDED WITH RIGHT TURN LANE D BICYCLE LANE MARKING Ď 15 STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION C 4 LANE DIVIDED WITH ISLAND 4 LANE DIVIDED WITHOUT ISLAND APPROVED Ω 4/30/2013 DATE /S/ Travis Feltes STATE TRAFFIC ENGINEER ۵ FHWA





TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

- 1 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- 2 IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.
- (3) IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
- MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

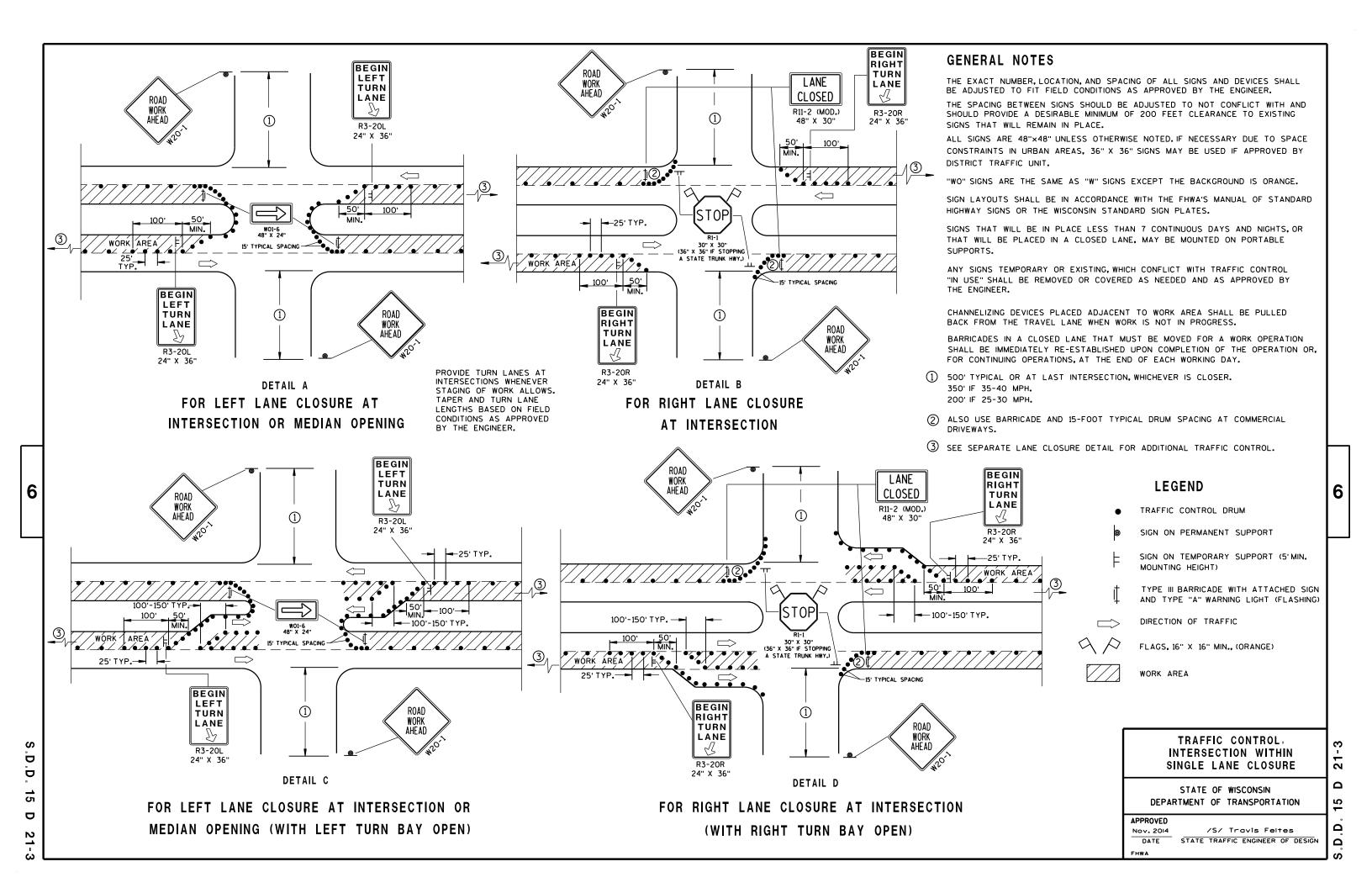
APPROVED	
4/30/2013	/S/ Travis Feltes
DATE	STATE TRAFFIC ENGINEER
FHWA	

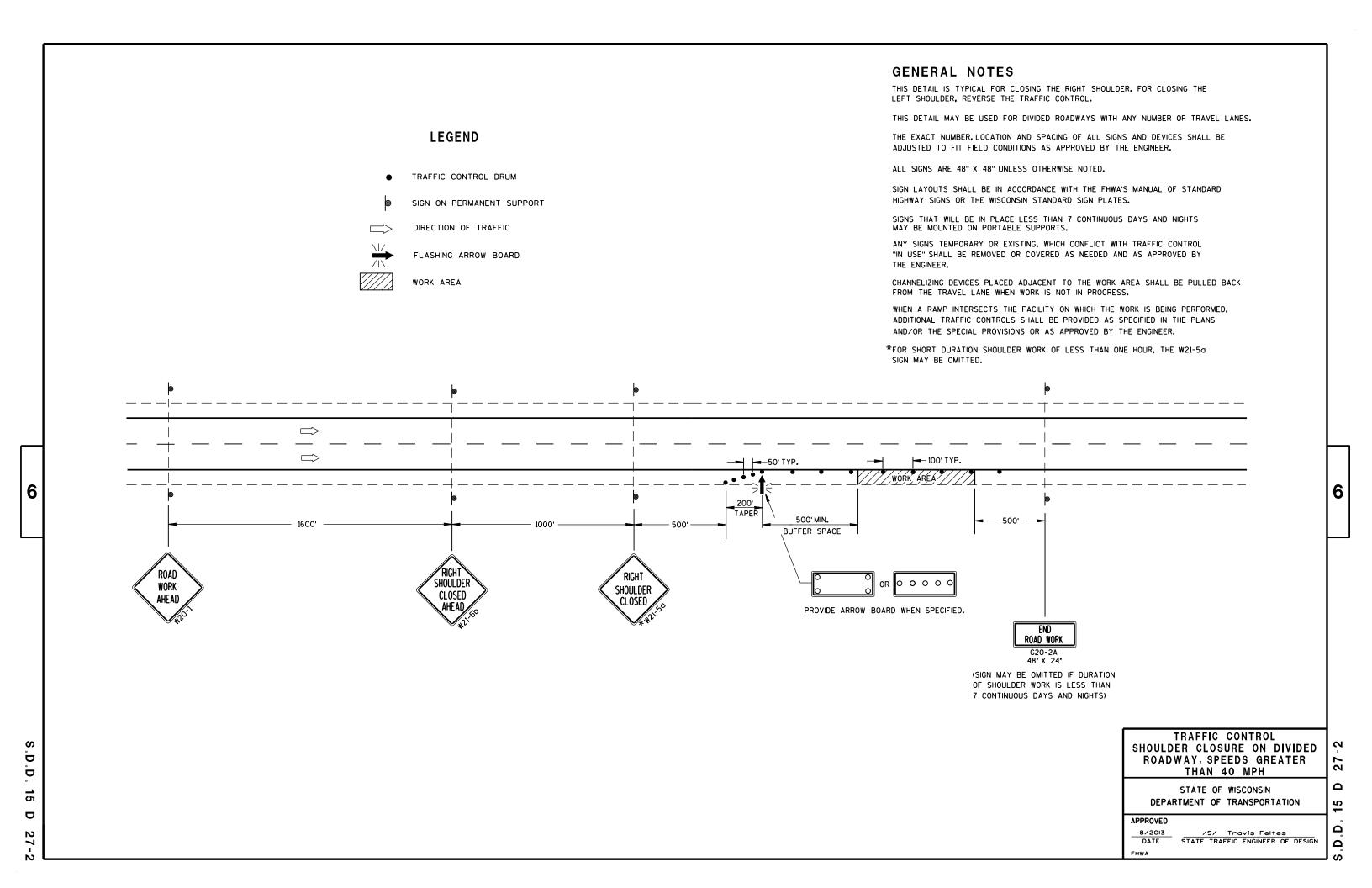
.D.D. 15 C 33-1

S.D.D.

33

GENERAL NOTES LEGEND THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER. 4 OR MORE DAYS AND NIGHTS. TYPE III BARRICADE WITH ATTACHED SIGN THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING OPERATION. SIGN ON PERMENENT SUPPORT IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET. LEFT LANE. TRAFFIC CONTROL DRUM ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST FLASHING ARROW BOARD "WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE. MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" TYPE "A" WARNING LIGHT (FLASHING) THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS. * X -X REMOVING PAVEMENT MARKING CROSSOVER MANEUVER. CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS * THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL. DIRECTION OF TRAFFIC 1500 FEET IN FRONT OF DRUMS. FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS. THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS. 6 6 WORK CLOSED CLOSED I MILE 1500 F XX м.Р.н 36"×36' IF NEEDED. USE ONLY TYPE III BARRICADE IF DESIGN SPEED IS TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE SPACED EVERY 1/4 MILE. 10 MPH BELOW 4-INCH EDGELINE (WHITE ON RIGHT, YELLOW ON LEFT) POSTED SPEED. 100' \Rightarrow \Rightarrow \Rightarrow WORK AREA 50' 350' 500' MIN. - 800' DESIRABLE 575 TAPER 500 50 MPH - 600' 55 MPH - 660' 2600' 1600' 1000' 65 MPH - 780' TRAFFIC CONTROL, 2 D LANE CLOSURE 5 DRUMS SPACED @ 10' INTERVALS AS 2 Ö NEEDED IN FRONT OF ARROW BOARD 15 Ω STATE OF WISCONSIN ADVANCED WARNING AREA TRANSITION AREA BUFFER SPACE DEPARTMENT OF TRANSPORTATION D **APPROVED** /S/ Travis Feltes N Feb. 2015 STATE TRAFFIC ENGINEER OF DESIGN Ω FHWA

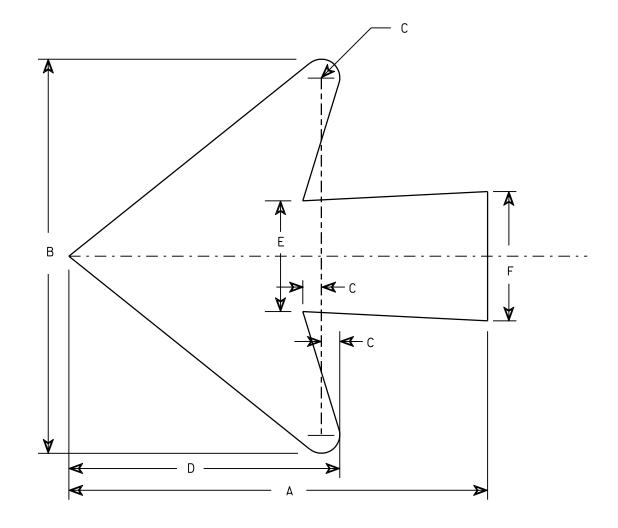






Lower Case Copy Size	Right or Left	A * 2 Town	* 3 Town	В	С	D	E	F
3¾ Series C	7	11	18	6	3/8	45/8	17/8	21/8

* Indicates Ahead and Tilt for 2 & 3 Town applications.



Lower Case Copy Size	Right or Left	A * 2 Town	* 3 Town	В	С	D	E	F
4½ Series D&E	81/2	11	18	8	3/8	51/2	21/4	25/8
6 Series D&E	12	18	24	10¾	1/2	73/8	31/4	31/2
8 Series E	151/2	24	30	141/4	3/4	9¾	41/4	41/2

* Indicates Ahead and Tilt for 2 & 3 Town applications.

STANDARD ARROWS FOR D1 GUIDE SIGNS

WISCONSIN DEPT OF TRANSPORTATION

Chester J Spane

For State Traffic Engineer

DATE 8/10/92 PLATE NO. A1-2.3

PROJECT NO: 2695-10-70

CTH V

RACINE

SIGN DETAILS

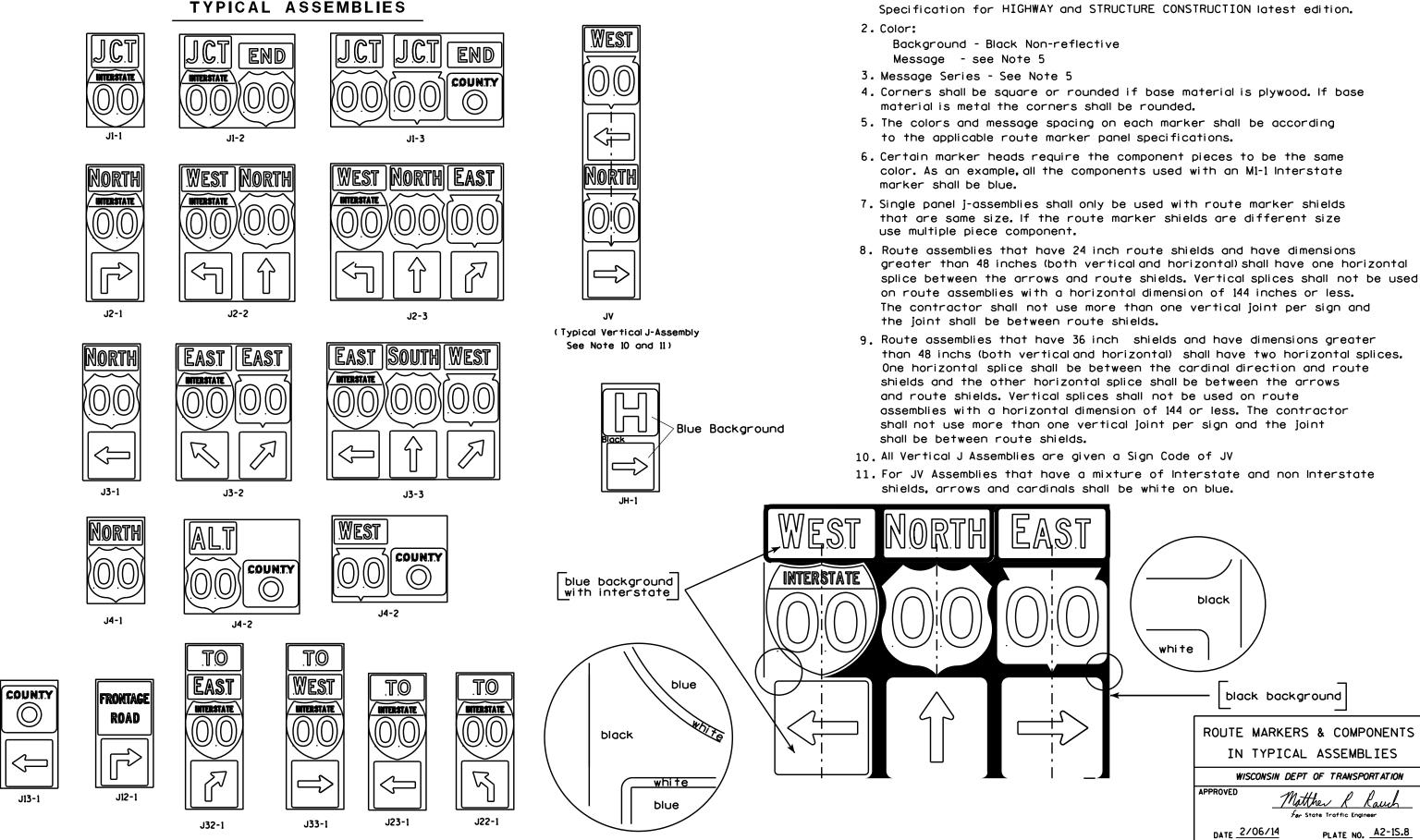
SHEET NO:

FILE NAME : C:\Users\Projects\tr_stdplate\A12.DGN

PLOT DATE: 28-SEP-2005 07:11

PLOT BY : DOTDZK

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.



PROJECT NO:

2695-10-70

CTH V

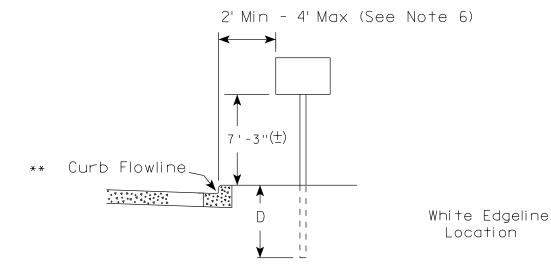
RACINE

SIGN DETAILS

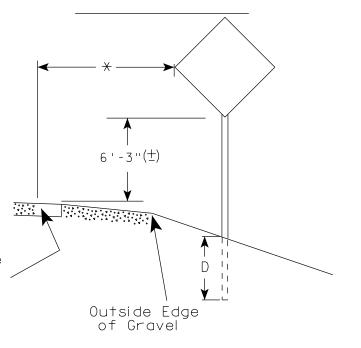
PLOT BY: mscsja

SHEET NO:

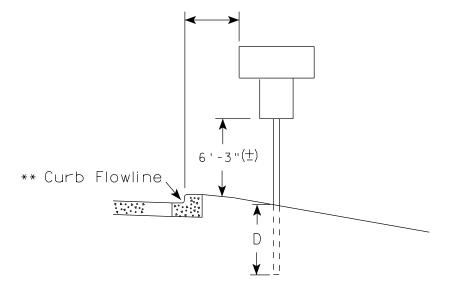
URBAN ARFA



RURAL AREA (See Note 2)



2' Min - 4' Max (See Note 6)



5'-3"(生) D^{-1} Outside Edae of Gravel

White Edgeline Location

** 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.

HWY:

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

GENERAL NOTES

- 1. Signs wider than 4 feet, 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 $7'-3''(\pm)$ or 6'-3" (±) depending upon existence of a sub-sign.
- 4. Minimum mounting height for J assemblies (A2-1S) is $7'-3''(\pm)$ or $6'-3''(\pm)$ per urban or rural detail respectively.
- 5. Minimum mounting height for signs mounted on traffic signal poles is $5' - 3'' (\pm)$.
- 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'' (\pm) or as directd by the Engineer.
- 9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (\pm) . 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'' (\pm).

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

for State Traffic Engineer

DATE 11/12/14

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43.DGN

PROJECT NO:

2695-10-70

CTH V

RACINE COUNTY:

SIGN DETAILS

PLOT BY: mscsja

PLOT DATE: 12-NOV-2014 14:03

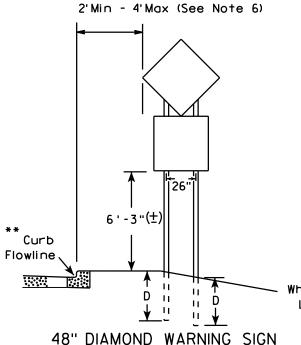
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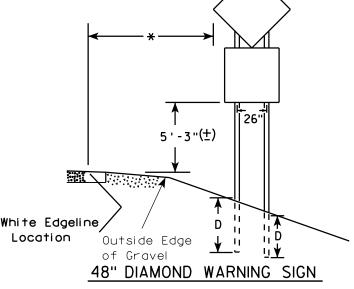
SHEET NO: PLOT SCALE: 99.237937:1.000000

GENERAL NOTES

- 1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
- 2. See tables below for required number of posts.
- 3. For expressways and freeways. mounting height is 7'-3'' (±) or 6'-3'' (±) depending upon existence of sub-sign.
- 4. The (±) tolerance for mounting height is 3 inches.
- 5. Minimum mounting height for J assemblies (A2-1S) is 7'-3'' (±) or 6'-3'' (±) per urban or rural detail respectively.
- 6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
- 7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
- 8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8). Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).
- * 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.
- ** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.
- *** See A4-3 sign plate for signs 4' or less in width or less than 20 S.F. in area.

URBAN AREA RURAL AREA (See Note 3) 2' Min - 4' Max (See Note 6) ₩E# FF# 6'-3"(±) 6'-3"(±) 7'-3"(±) ** Curb ********\ Flowline D **7000** White Edgeline D 11 White Edgeline, Location





Outside Edge

of Gravel

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)			SIGN SHAPE OTHER THAN (THREE POSTS REQUIR			
L E			L E			
Greater than 48" Less than 60"	12		Greater than 120" less than 168"	12"		
60" to 120"	L/5		1000 11101			

Location

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)						
L	E					
168" and greater	12"					

POST EMBEDMENT DEPTH

Outside Edae

of Gravel

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS WISCONSIN DEPT OF TRANSPORTATION APPROVED

Matther For State Traffic Engineer

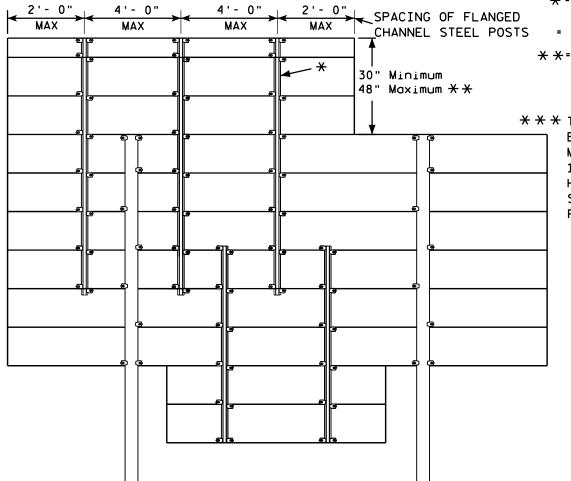
PLATE NO. A4-4.13 DATE 11/12/14

CTH V 2695-10-70 RACINE SIGN DETAILS PROJECT NO: HWY: COUNTY: SHEET NO:

* * *

PLOT BY: mscsja





*=2.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH

CHANNEL STEEL POSTS = 60.000 PSI (GRADE 60) GALVANIZED

SIGN BRIDGE MOUNTED SIGN

4'- 0" > 2'- 0" SPACING OF FLANGED

* *= FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

* * THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 16 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 16 FT,

STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

1/₄ →

NOT TO SCALE

CHANNEL STEEL POSTS **∠ ×** 30" Minimum 48" Maximum X X FLANGE CHANNEL DETAIL

9'- 0"

MAX * * *

MAX *** MAX *** SPACING OF ALUMINUM SIGN SUPPORTS 5" X 3.5" X 3.7 LBS./ft.

3'- 0"

9'- 0"

GENERAL NOTES

- 1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
- 2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:

PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS PANEL LENGTH 9'- 0" - 12'- 0" = 3 CHANNELS PANEL LENGTH 13'- 0" OR MORE = 4 CHANNELS

If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.

CTH V

3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.

3'- 0"

MAX * * *

2'- 0"

MAX

- 4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
- 5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)
- 6. Structural steel sign supports shall extend to the top of the main signs, as shown on the above details.

ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

WISCONSIN DEPT OF TRANSPORTATION

For State Traffic Engineer

DATE 12/05/13

PLATE NO. A4-6.12 SHEET NO:

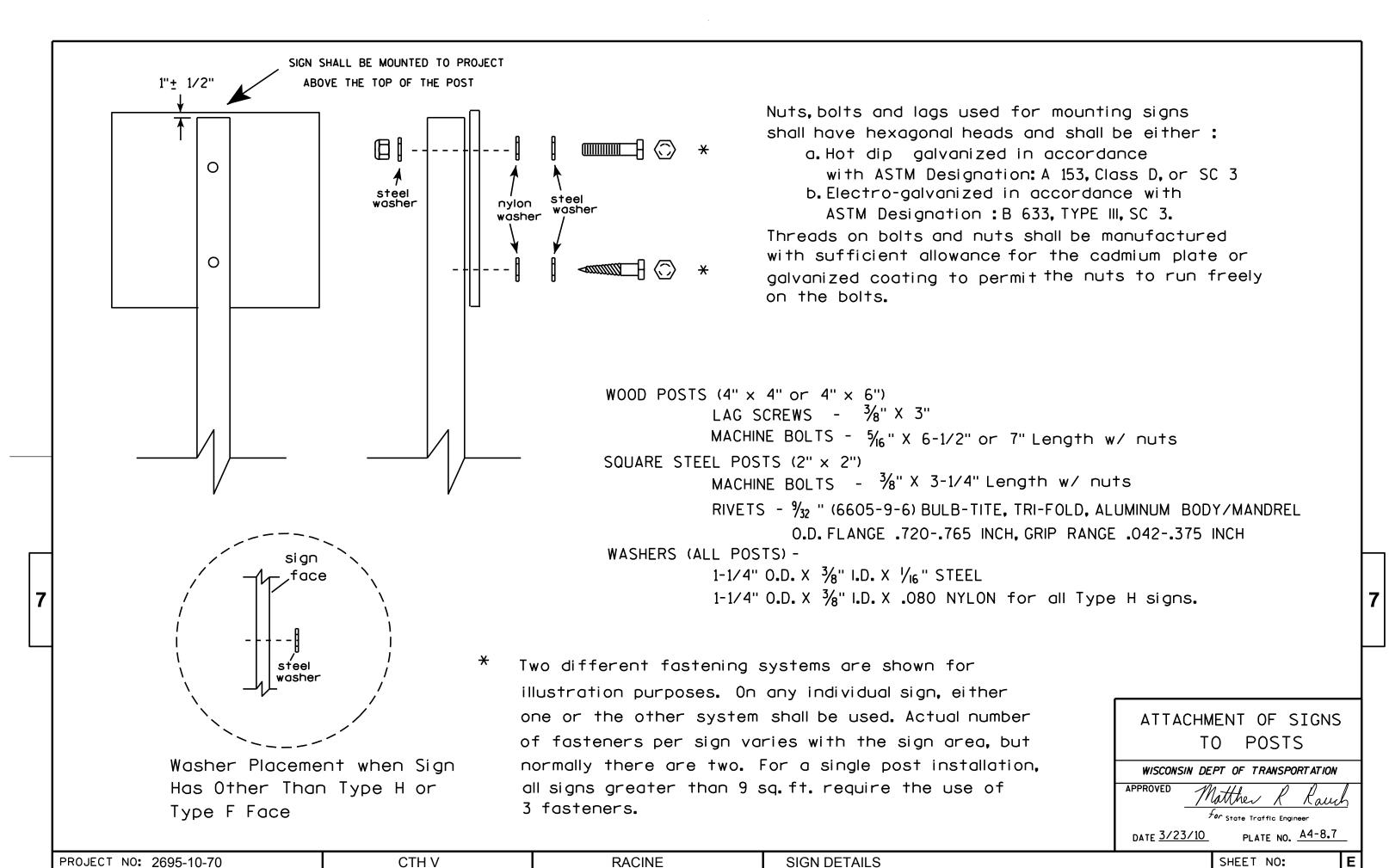
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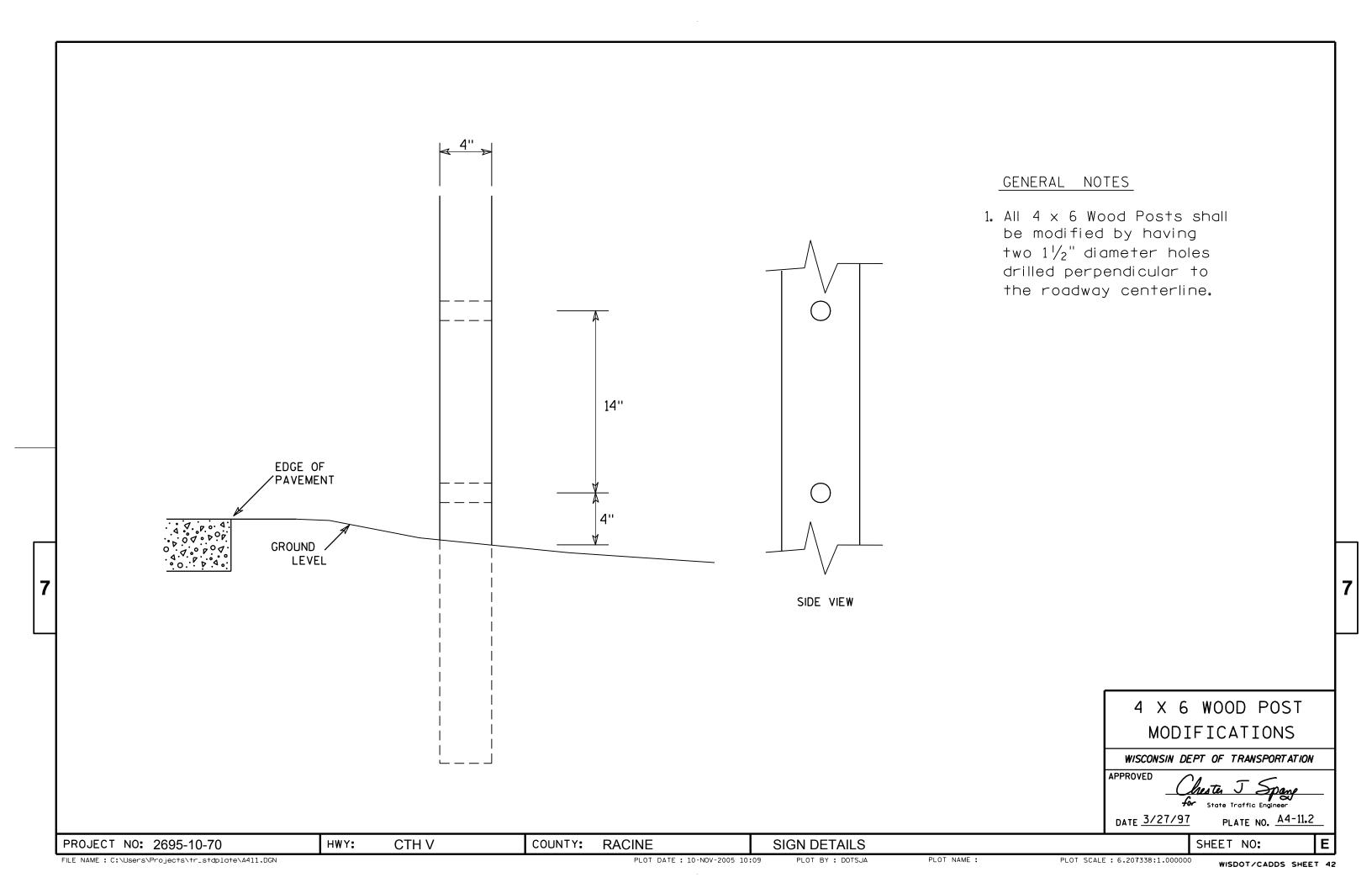
SIGN DETAILS PLOT BY: mscsja

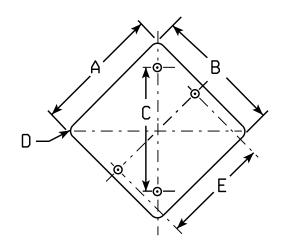
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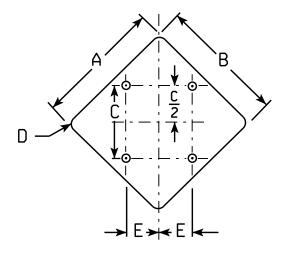
PROJECT NO:

2695-10-70

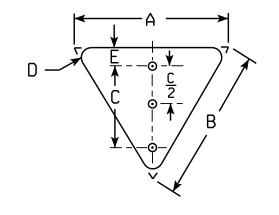


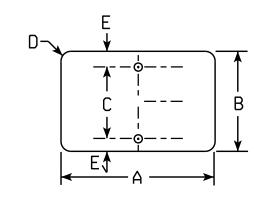






3





5

1	

Α	В	С	D	Ε	Area Sq. Ft.		Mounting Holes
18	18	18	11/2	14	2.25	.080	2
24	24	24	11/2	20	4.0	.080	2
30	30	30	1 1/8	22	6.25	.080	2
36	36	36	21/4	26	9.0	.100	2

TYPE

TYPE 2									
Α	В	С	Ε	Area Sq. Ft.	THICK NESS	Mounting Holes			
24	24	20	2	3.31	.080	2			
30	30	24	3	5.18	.100	2			
36	36	28	4	7.46	.125	2			
48	48	36	6	13.25	.125	7			

TYPE 3								
Α	В	С	D	Е	Area Sq. Ft.	THICK NESS	Mounting Holes	
48	48	26	3	13	16.0	.125	4	

TYPE 4									
Α	В	С	D	Ε	Area Sq. Ft.	THICK NESS	Mounting Holes		
18	18	14	1	2	1.95	.080	2		
36	36	24	2	2	3.9	.100	2		
48	48	32	3	3	7.0	.125	2		

	TYPE 5									
Α	В	С	D	Ε	Area Sq. Ft.	THICK NESS	Mounting Holes			
8	8	6	11/2	1	0.44	.080	2			
12	12	9	11/2	11/2	1.00	.080	2			
18	18	14	11/2	2	2.25	.080	2			
21	15	11	1 1/2	2	2.19	.080	2			
21	21	17	11/2	2	3.06	.080	2			
24	12	8	11/2	2	2.0	.080	2			
24	18	14	1 1/2	2	3.0	.080	2			
24	24	20	11/2	2	4.0	.080	2			
30	12	8	11/2	2	2.5	.080	2			
30	15	11	1 1/2	2	3.13	.080	2			
30	18	14	1 1/2	2	3.75	.080	2			
30	21	17	1 1/2	2	4.37	.080	2			
30	24	20	1 1/2	2	5.0	.080	2			

	TYPE 5 CONT'D.									
A	В	С	D	Ε	Area Sq. Ft.	THICK NESS	Mounting Holes			
30	30	22	1 1/8	4	6.25	.080	2			
36	12	8	11/2	2	3.0	.100	2			
36	18	14	11/2	2	4.5	.100	2			
36	24	20	11/2	2	6.0	.100	2			
36	36	26	21/4	5	9.0	.100	2			
40	18	14	11/2	2	5.00	.100	2			
42	21	17	1 1/8	2	6.125	.125	2			
42	30	22	1 1/8	4	8.75	.125	2			
48	48	32	3	8	16.0	.125	4			

NOTES

1. All sign blanks shall have $\frac{1}{6}$ " Diameter mounting hole.

> STANDARD LAYOUT OF ALUMINUM SIGN BLANKS SHEET 1 OF 3

> > WISCONSIN DEPT OF TRANSPORTATION

APPROVED

For State Traffic Engineer

DATE 10/13/14

PLATE NO. <u>A5-3.22</u>

2695-10-70 PROJECT NO: FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A53.DGN

CTH V HWY:

COUNTY:

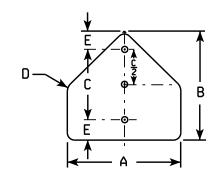
RACINE

PLOT DATE: 13-OCT-2014 16:09

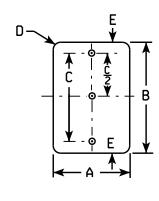
SIGN DETAILS

PLOT BY: mscsja

PLOT NAME :

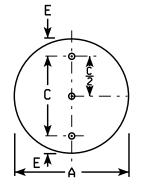


	TYPE 6									
Α	В	С	٥	Ε	Area Sq. Ft	THICK NESS	Mounting Holes			
30	30		13//8		4.68	.080	2			
36	36	26	15/8	5	6.75	.100	2			
48	48	32	1 1/8	8	12.0	.125	3			



7

TYPE 7									
Α	В	С	D	Ε	Area Sq. Ft.	NESS	Holes		
12	18	15	1 1/2	1 1/2	1.5	.080	2		
12	24	20	1 1/2	2	2.0	.080	2		
12	36	24	1 1/2	6	3.0	.100	2		
12	48	32	1 1/2	8	4.0	.125	3		
15	21	18	1 1/2	1 1/2	2.19	.080	2		
18	24	20	1 ½	2	3.0	.080	2		
18	36	24	1 1/2	6	4.5	.100	2		
18	54	36	21/2	9	6.75	.080	3		
21	60	40	1 1/2	10	8.75	.080	3		
21	72	52	1 ½	10	10.5	.080	3		
24	30	22	1 1/2	4	5.0	.080	2		
24	36	24	1 1/2	6	6.0	.100	2		
24	39	27	1 1/2	6	6.5	.080	3		
24	45	32	1 1/8	6	7 . 5	.080	3		
24	48	32	1 1/8	8	8.0	.125	3		
24	57	37	1 %	10	9.5	.080	3		
36	48	32	1 7/8	8	12.0	.125	3		
30	36	24	1 %	6	7.5	.100	2		
36	54	36	2 1/4	σ	12.75	.100	3		
36	57	37	1 %	10	14.25	.100	3		
48	39	27	1 1/8	10	13.0	.125	3		
48	45	32	1 1/8	10	14.0	.125	3		
48	57	37	3	6	19.0	.125	3		



	TYPE 8								
Α	В	С	Ε	Area Sq.Ft.	THICK NESS	Mounting Holes			
30		24	3	4.91	.080	2			
36		26	5	7.07	.100	2			
48	_	32	8	12.5	.125	3			

1. All sign blanks shall have $\frac{1}{16}$ " Diameter mounting holes.

TYPE 9									
A B C D E Area THICK Mountin									
48	24	20	1 %	2	8.0	.125	2		

STANDARD LAYOUT OF ALUMINUM SIGN BLANKS

SHEET 2 OF 3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

DATE 10/13/14

PLATE NO. <u>A5-3.22</u> SHEET NO:

2695-10-70 PROJECT NO: FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A53.DGN

CTH V HWY:

COUNTY:

RACINE

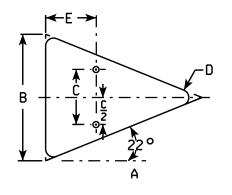
PLOT DATE: 13-0CT-2014 16:11

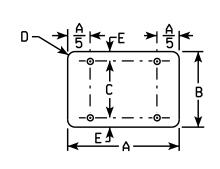
SIGN DETAILS

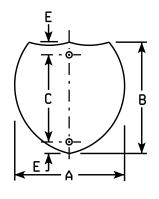
PLOT BY: mscsja

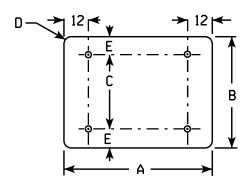
PLOT NAME :

PLOT SCALE: 1.945842:1.000000









10

11

12

13

TYPE 10					NOT)
Α	В	С	D	E	Area Sq.Ft.	THICK NESS	Mounting Holes
48	36	14	21/4	16	6.0	.125	2

TYPE 11									
Α	В	С	D	Е	Area Sq. Ft.	THICK NESS	Mounting Holes		
48	48	32	3		16.0				

CTH V

HWY:

Т	YPE	Ξ 1	2	(NOTE 2)		
Α	В	C	Е	Area Sq. Ft.	THICK NESS	Mounting Holes
24	24	18	3	3.13	.080	2
30	24	18	3	3.91	.080	2
36	36	28	4	7.03	.100	2
45	36	28	4	8.79	.125	2

	TYPE 13									
Α	В	С	D	Ε	Area Sq. Ft.	THICK NESS	Mounting Holes			
48	60	40	3	10	20.0	.125	4			
48	24	20	1 1/8	2	8.0	.125	4			
48	30	22	1 1/8	4	10.0	.125	4			
54	18	14	1 1/2	2	6.75	.125	4			
60	12	8	11/2	2	5.0	.125	4			
60	24	20	1 1/8	2	10.0	.125	4			
60	30	22	1 1/8	4	12.5	.125	4			

RACINE

COUNTY:

NOTES

- 1. Dimension A on type *10 is measured to the theoretical intersections of the edges.
- 2. Shape of type #12 shall conform to FHWA standard for Interstate route markers.

STANDARD LAYOUT OF ALUMINUM SIGN BLANKS

SHEET 3 OF 3
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matther R Rauch

DATE 9/24/14

PLATE NO. A5.3.22

SHEET NO:

PROJECT NO: 2695-10-70

FILE NAME: C:\CAEFiles\Projects\tr_stdplate\A53.DGN

PLOT DATE: 13-0CT-2014 16:13

PLOT NAME :

SIGN DETAILS

PLOT BY: mscsja

PLOT SCALE: 1.945842:1.000000

- 1. Sign is Type II See Note 6 reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

Background - Top Red - Bottom Blue (See Note 6) Message - White - See Note 6

- 3. Message Series See note 5
- 4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
- 5. M1-1 Numerals D Interstate - C

M1-1A - All copy - C

6. Permanent Signs

Message - Type H Reflective

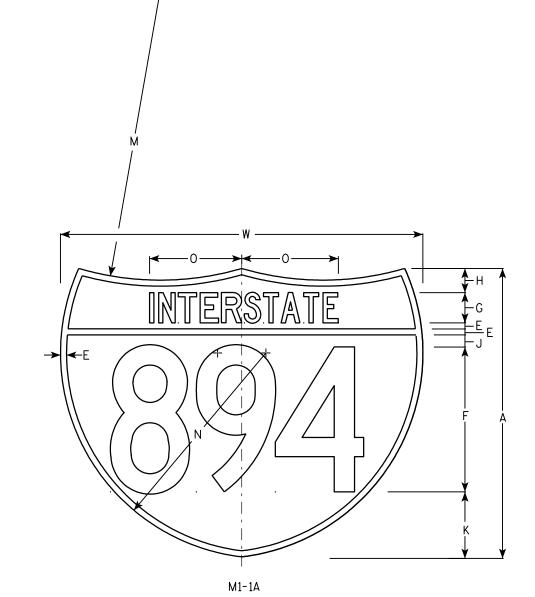
Detour or other temporary signs

Background - Reflective Message - Reflective

M1-1

HWY:

CTH V



Metric equivalent for these signs are:

SIZE	M1 - 1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 mm

	1 300		x 301	<i>J</i> 1111111		J00 i	IIIII V I	123 11111	<u>'</u>																				
																										M1 - 1	M1-1A		M1-1A
SIZE	Α	В	С	D	Ε	F	G	Н	I	J	K	L	М	N	0	Р	a	R	S	T	U	٧	W	X	Υ	Area sq. ft.	Area sq. ft.	Area m2	Area m2
1																													
2	24				1/2	12	2 ½	2		1	5 ½	15	24	17	7 1/8								30			3.13	3.91	. 36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 ¾								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 ½	11 ¾								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	. 81	1.05

COUNTY: RACINE

INTERSTATE ROUTE MARKER M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

SHEET NO:

APPROVED

For State Traffic Engineer DATE 08/23/05

FILE NAME : C:\Users\Projects\tr_stdplate\M11.DGN

PROJECT NO: 2695-10-70

PLOT DATE: 13-0CT-2005 14:49

PLOT NAME :

SIGN DETAILS

PLOT BY : DITJPH

PLOT SCALE : 7.947778:1.000000

- Sign is Type II see Note 7 reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

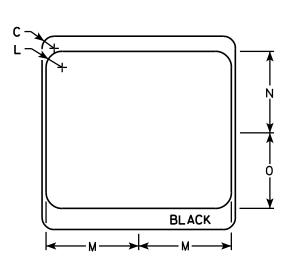
Background - White & Black - See Note 7 Message - Black

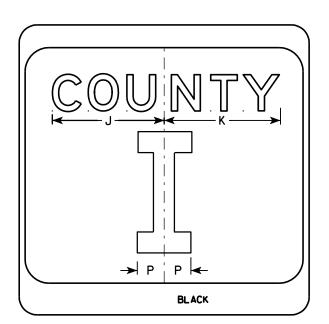
- 3. Message Series see Note 5
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Message Series E for 1 letter.

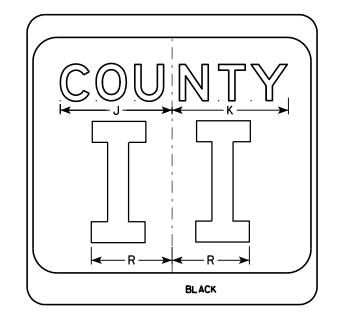
 Message Series D for 2 letters unless
 message is too big then Series C.

 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 O R S T U V W X Y Z 1																									1 4
3 36 2 1/4 16 4 7 5/8 5 5/8 12 1/4 12 1/8 3 17 1/8 15 1/4 14 3 3/8 10 </th <th>SIZE A B</th> <th>3 C D</th> <th>E</th> <th>F</th> <th>G</th> <th>Н</th> <th>I</th> <th>J</th> <th>K</th> <th>١</th> <th>M</th> <th>N</th> <th>0</th> <th>P</th> <th>0</th> <th>R</th> <th>S</th> <th>T</th> <th>U</th> <th>٧</th> <th>W</th> <th>X</th> <th>Y</th> <th>Z</th> <th>Area sq. ft</th>	SIZE A B	3 C D	E	F	G	Н	I	J	K	١	M	N	0	P	0	R	S	T	U	٧	W	X	Y	Z	Area sq. ft
3 36 2 1/4 16 4 7 5/8 5 5/8 12 1/4 12 1/8 3 17 1/8 15 1/4 14 3 3/8 10 </td <td>1</td> <td></td>	1																								
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	2 24	1 1/2		10	3	5 1/8	4 1/8	9 1/4	9 %	2	11 1/2	10 1/8	9 3/8	2 1/4		6 %									4.0
	3 36	2 1/4		16	4	7 %	5 %	12 1/4	12 1/8	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	4 36	2 1/4		16	4	7 %	5 %	12 1/4	12 1/8	3	17 1/8	15 1/4	14	3 %		10									9.0
0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	5 36	2 1/4		16	4	7 %	5 %	12 1/4	12 1/8	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

Forstate Traffic Engineer

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

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\M15A.DGN

BLACK

M1-5A

PLOT DATE : 29-SEP-2011 11:25

PLOT BY: mscsja

PLOT NAME :

PLOT SCALE: 5.959043:1.000000



- 1. All Signs Type II Type H
 - Background See note 5 Message - See note 5
- 3. Message Series C

2. Color:

- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. M3-1 thru M3-4 Background - White Message - Black
 - MB3-1 thru MB3-4 Background Blue

Message - White

MK3-1 thru MK3-4 Background - Green

Message - White

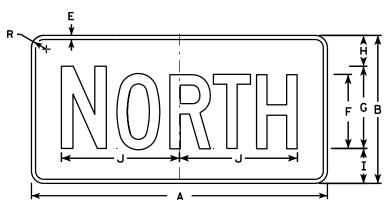
MM3-1 thru MM3-4 Background - White

Message - Green

MN3-1 thru MN3-4 Background - Brown

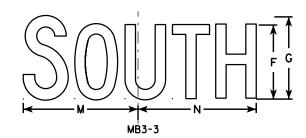
Message - White

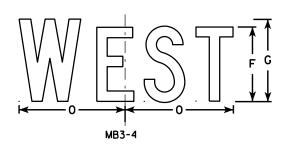
6. Note the first letter of each direction is larger than the remainder of the message.



MB3-1

MB3-2





					M3-4 MK3-4 MM3-4 MM3-4 MN3-4	<u>S</u>		F G	
SIZE	A	В	С	D	Е	F	G	Н	ĺ
1									ĺ
			. 17	7,	7,	_	_	- 17	I

M3-1 MK3-1 MM3-1

MN3-1

M3-2 MK3-2 MM3-2

M3-3 MK3-3 MM3-3

SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	Т	U	V	W	Х	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 1/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
PRO	JECT	NO:	2695	-10-70)		Н١	WY:	C	TH V			Cou	NTY:	RAC	INE				SIGN I	DETAI	LS					

STANDARD SIGNS M3-1 thur M3-4 **SERIES**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

DATE 6/30/14 PLATE NO. M3-1.13

SHEET NO:

SIGN DETAILS PLOT BY: mscsja

- 1. Signs are Type II See Note 4 reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

Background - See note 4 Message - See note 4

- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. M5-1 and M5-2 Background White Type H Reflective Message Black
 - MB5-1 and MB5-2 Background Blue
 - Message White Type H Reflective MG5-1 and MG5-2 Background Green
 - MK5-1 and MK5-2 Background Green
 - Message White Type H Reflective
- MM5-1 and MM5-2 Background White Type H Reflective Message Green
- MN5-1 and MN5-2 Background Brown

Message - White - Type H Reflective

Message - White - Type H Reflective

- M05-1 and M05-2 Background Orange Type F Reflective Message Black
- MP5-1 and MP5-2 Background White Type H Reflective Message Blue
- MR5-1 and MR5-2 Background Brown
- Message Yellow Type H Reflective 5. M5-1R same as M5-1L except arrow points right.
- 6. M5-2R same as M5-2L except arrow tilts right.

M5-2L

MK5-2L

MM5-2L

MO5-2L

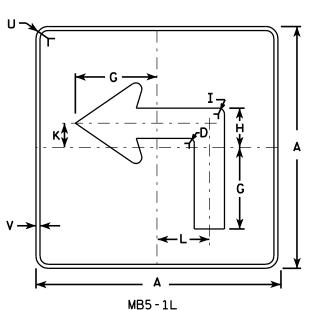
MP5-2L

MR5-2L

M5-1L MK5-1L MM5-1L

MO5 - 1L MP5 - 1L

MR5-1L

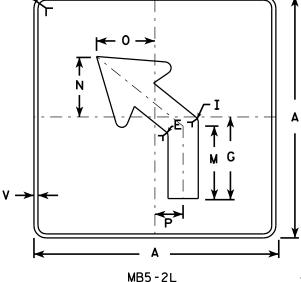


MG5-1L

MN5-1L

HWY:

CTH V



MG5-2L

MN5-2L

R T V V V S S

SIZE	Α	В	С	D	E	F	G	Н	I	7	K	L	М	N	0	Р	0	R	S	Т	U	>	W	X	Y	Z	Areo sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 %	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7 /8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		₹4	3 3/4	4 1/4	1 1/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7 /8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 1/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7 /8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		₹4	3 3/4	4 1/4	1 1/8	1/2					6.25

COUNTY: RACINE

STANDARD SIGN M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

For State Traffic Engineer

9/13 PLATE NO. M5-1.12

DATE 7/29/13 PLATE NO. SHEET NO:

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M51.DGN

PROJECT NO: 2695-10-70

PLOT DATE: 29-JUL-2013 13:34

PLOT BY: mscj9

SIGN DETAILS

PLOT NAME :

PLOT SCALE: 11.908552:1.000000

- 1. Signs are Type II Type H except as Shown
- 2. Color:

Background - See note 4 Message - See note 4

- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. M6-1 and M6-2 Background White

Message - Black

MB6-1 and MB6-2 Background - Blue

Message - White

MG6-1 and MG6-2 Background - Green

Message - White

MK6-1 and MK6-2 Background - Green

Message - White

MM6-1 and MM6-2 Background - White

Message - Green

MN6-1 and MN6-2 Background - Brown

Message - White

M06-1 and M06-2 Background - Orange - Type F Reflective

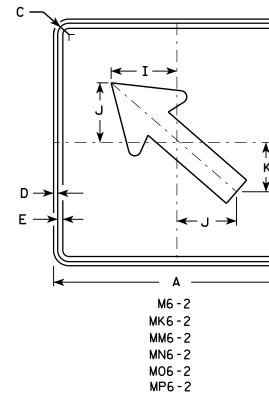
Message - Black

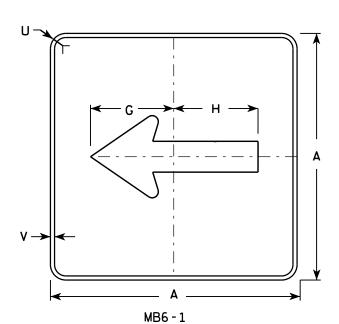
MP6-1 and MP6-2 Background - White

Message - Blue

MR6-1 and MR6-2 Background - Brown

Message - Yellow





M6 - 1

MK6-1

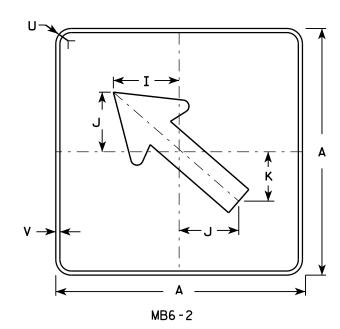
MM6 - 1

MN6-1

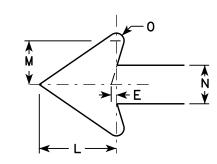
MO6-1

MP6-1

MR6-1



MR6-2



SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	Т	U	٧	W	Х	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 ⁵ %	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 ¾	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3∕4						1 %	1/2					6.25
4	30		1 3/8	1/2	5/8		10 ¾	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 %	1/2					6.25
5	30		1 3/8	1/2	5/8		10 ¾	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 1/8	1/2					6.25
PRO	JECT	NO:	2695	5-10-70)		н۷	WY:	C	TH V			cou	NTY:	RAC	INE			- (SIGN I	DETAIL	_S					

STANDARD SIGN M6-1 & M6-2**SERIES**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

For State Traffic Engineer

DATE 7/03/14 PLATE NO. M6-1.14

SHEET NO:

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M61.DGN

PLOT DATE: 03-JUL-2014 14:28

PLOT NAME :

PLOT BY: mscsja

PLOT SCALE: 11.675051:1.000000

- 1. Signs are Type II Type H except as Shown
- 2. Color:

Background - See Note 4 Message - See Note 4

- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. M6-4 and M6-6 Background White

Message - Black

MB6-6 Background - Blue

Message - White

MK6-4 and MK6-6 Background - Green

Message - White

and MM6-6 Background - White MM6-4

Message - Green

MN6-4 and MN6-6 Background - Brown

Message - White

and M06-6 Background - Orange - Type F Reflective

Message - Black

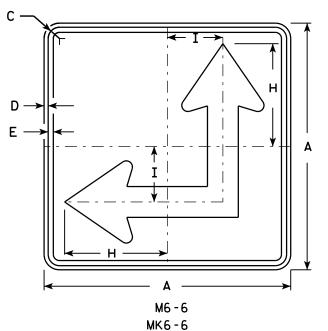
MP6-4 and MP6-6 Background - White

Message - Blue

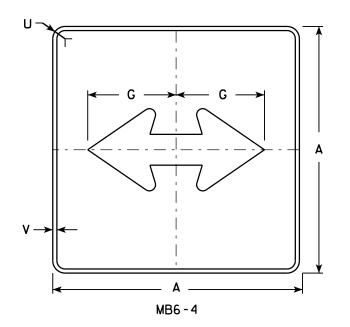
MR6-4 and MR6-6 Background - Brown

Message - Yellow

5. M6-6R same as M6-6L except arrow points ahead and right.







M6 - 4

MK6-4

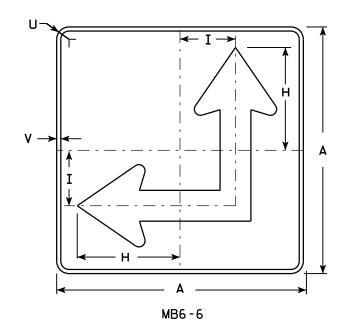
MM6 - 4

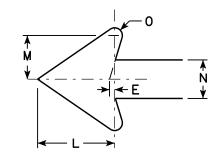
MN6 - 4

M06 - 4

MP6-4

MR6-4





SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	T	U	٧	W	Х	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 %	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 1/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 1/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 1/8	1/2					6.25
PRO.	JECT	NO:	2695	-10-70)		Н\	WY:	C	TH V			cou	NTY:	RAC	INE				SIGN E	DETAIL	_S					

STANDARD SIGN M6-4 & M6-6 **SERIES**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

PLATE NO. M6-4.9 DATE 7/03/14

SHEET NO:

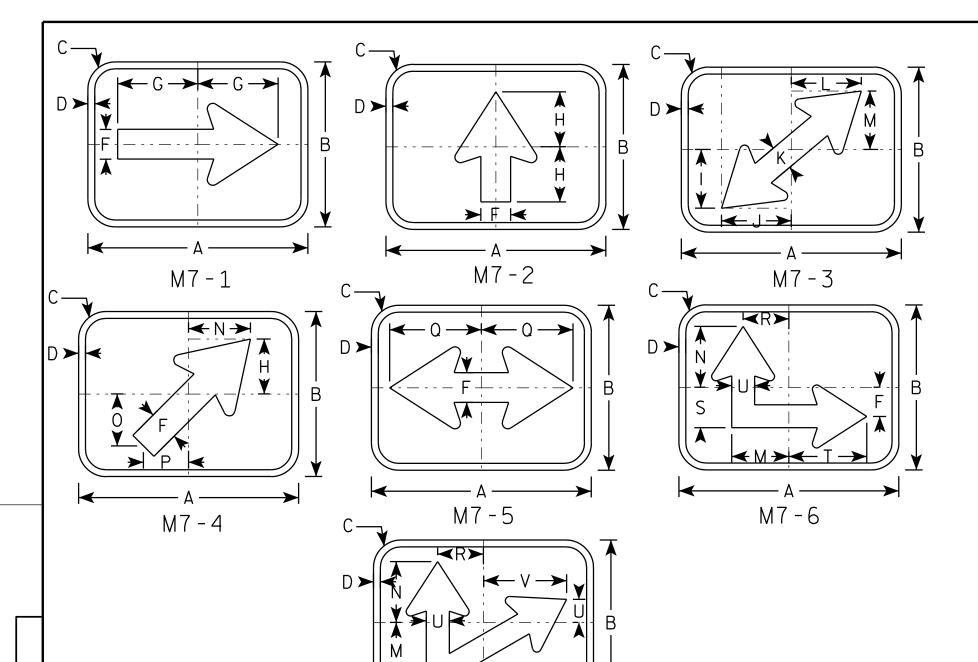
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M64.DGN

PLOT DATE: 03-JUL-2014 14:56

PLOT NAME :

PLOT BY: mscsja

PLOT SCALE: 11.675051:1.000000



M7 - 7

CTH V

HWY:

NOTES

- 1. Sign is Type II Type H Reflective reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

Background - Green Message -White

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	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	T	U	V	₩	Х	Y	Z	Area sq. ft.
1																											
2	12	9	11/2	3/8		1 5/8	4 3/8	3	3 1/4	3 ¾	1 3/8	3 %	3 1/8	3 3/8	2 1/8	2 1/2	5	2 1/2	2 1/4	4 1/4	1 1/4	4 1/2					.75
3																											
4																											
5																											
						1						1					ı	1				1		1		l	·

COUNTY: RACINE

STANDARD SIGN M7 SERIES

WISCONSIN DEPT OF TRANSPORTATION

DATE 05/04/10 PLATE NO. M7-1.1

SHEET NO:

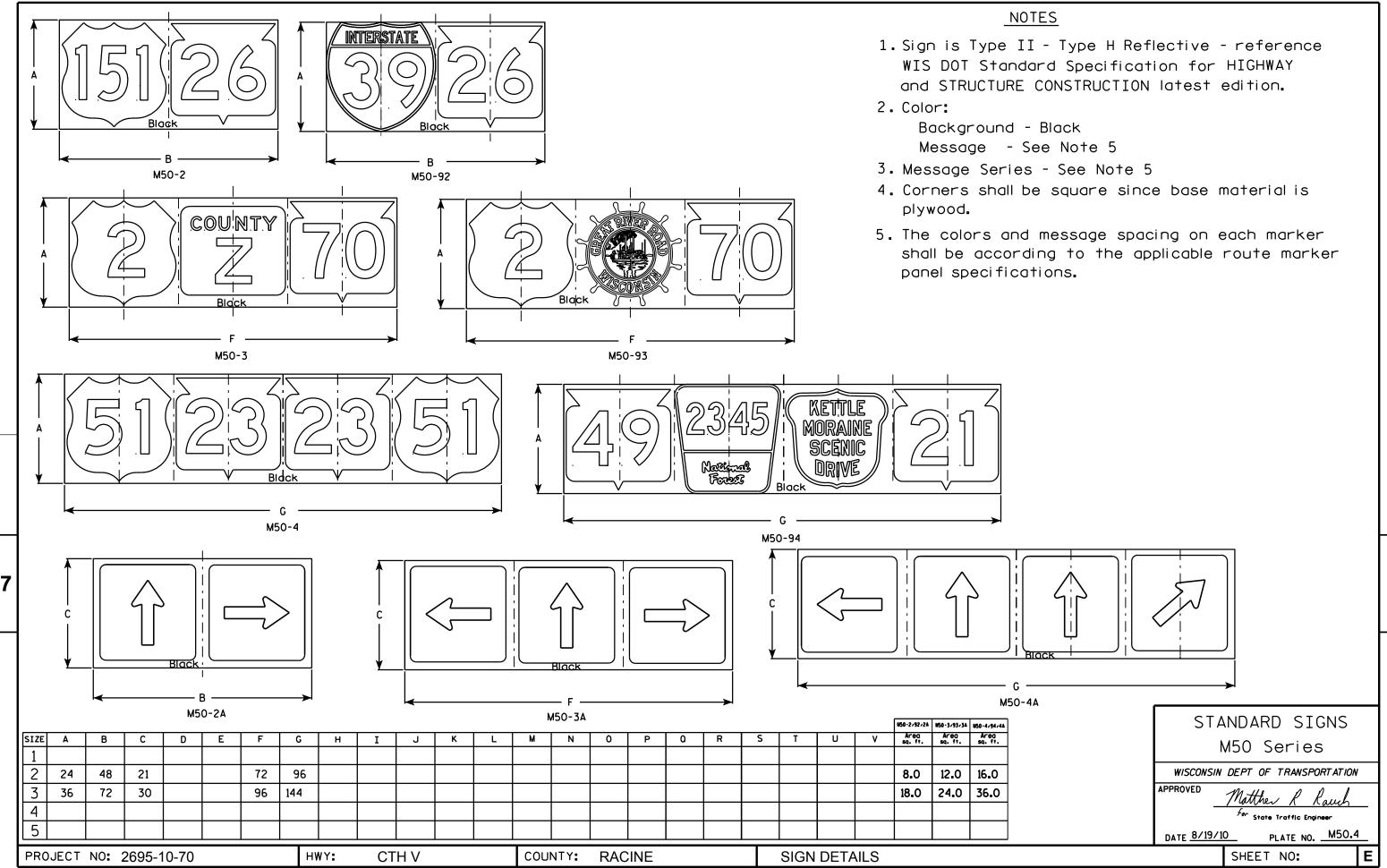
PLOT DATE: 28-MAY-2010 08:14

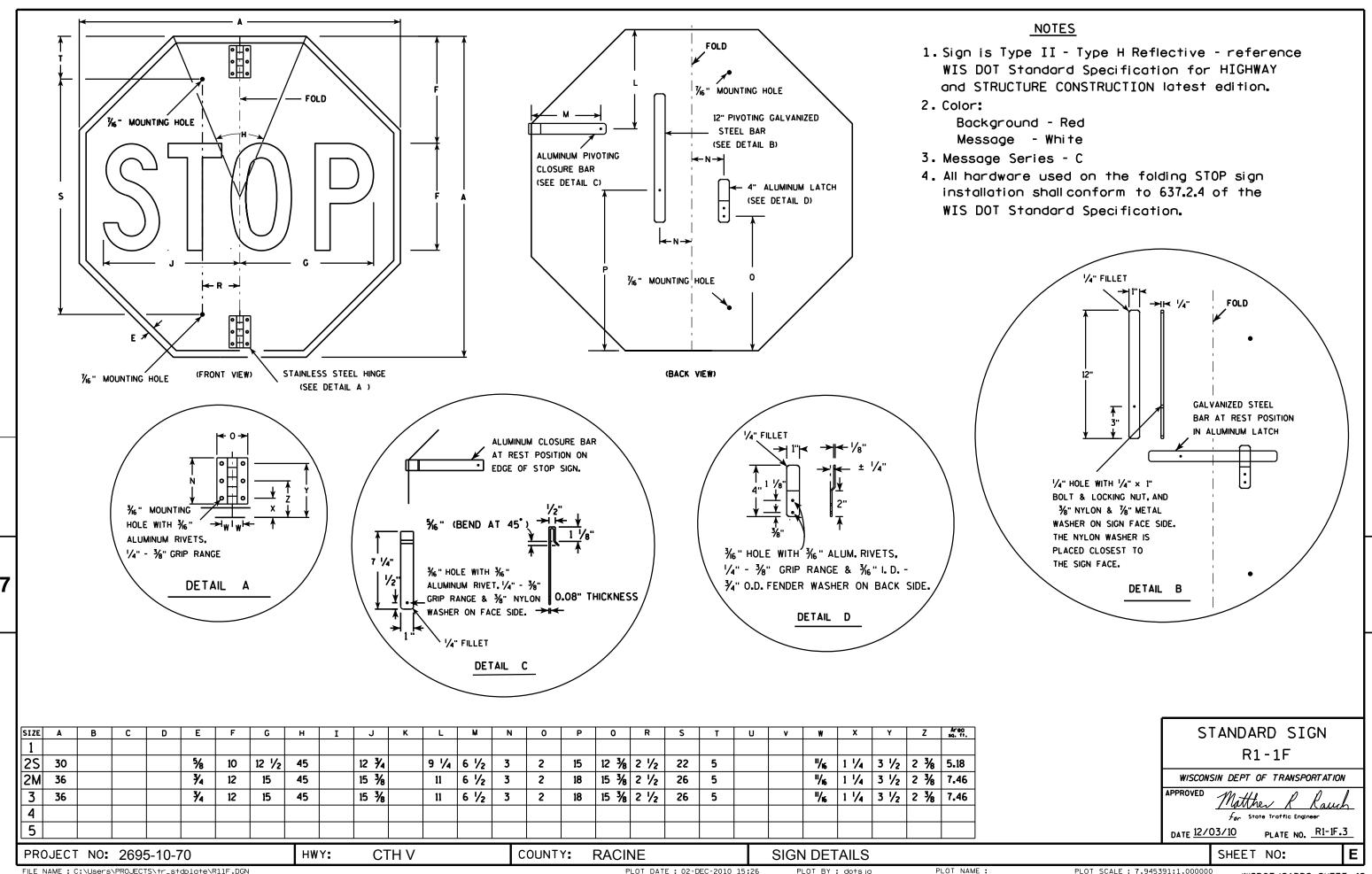
PLOT NAME :

SIGN DETAILS

PLOT SCALE: 5.237442:1.000000

PROJECT NO: 2695-10-70





- 1. Sign is Type II Type H Reflective reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

Background - White Message - See note 5

- 3. Message Series C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. The border strip and word message are reflectorized red.

A		
c t	G	
	+ F +	
E		
D		
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		
R1-2		

CTH V

HWY:

SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	P	0	R	S	Т	U	V	W	Х	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	⅓	4	3 %																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 %																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 %																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 %																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 1/8	7 1/4																	10.83
6																											
7	18	15 ½	1	3/8	2 1/2	1 1/2	3 %	5/8	2 3/8	2 1/4																	0.97

COUNTY:

STANDARD SIGN R1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

For State Traffic Engineer PLATE NO. R1-2.12

DATE 10/13/14

SHEET NO:

PROJECT NO: FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN

2695-10-70

PLOT DATE: 13-OCT-2014 15:12

RACINE

PLOT NAME :

SIGN DETAILS

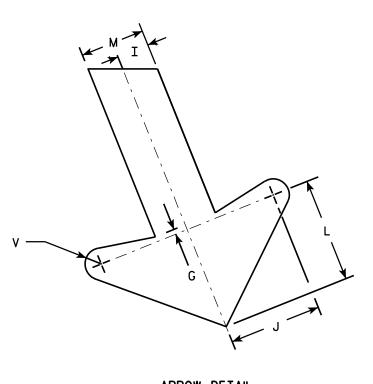
PLOT BY: mscsja

PLOT SCALE: 5.837526:1.000000

- 1. Sign is Type II Type H Reflective reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

Background - White Message - Black

- 3. Message Series E
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	В	С	D	E	F	G	Н	I	J	К	L	М	N	0	Р	0	R	S	Т	U	٧	W	Х	Y	Z	Areq sq. ft
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 1/8	2 %	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 1/8	2 %	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 %	3	2 1/4	10 %	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

COUNTY: RACINE

R3-20L

HWY:

CTH V

М

М

0

STANDARD SIGN R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED For State Traffic Engineer

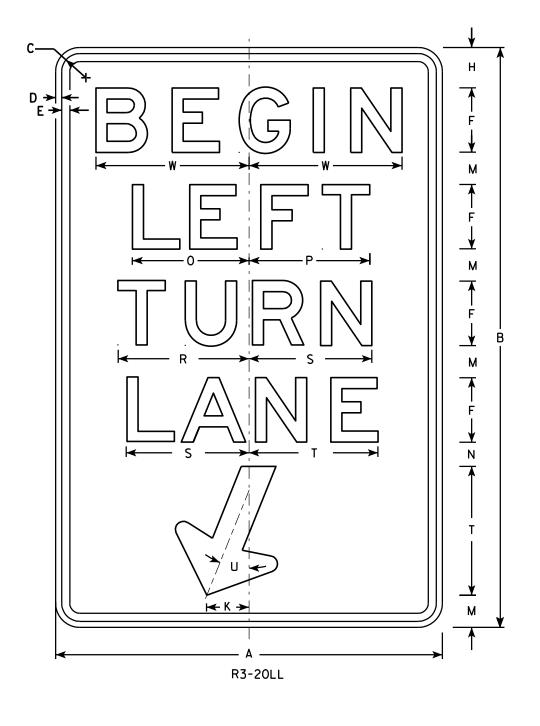
DATE 10/18/10 PLATE NO. R3-20L.7

PLOT NAME:

SHEET NO:

PROJECT NO: 2695-10-70

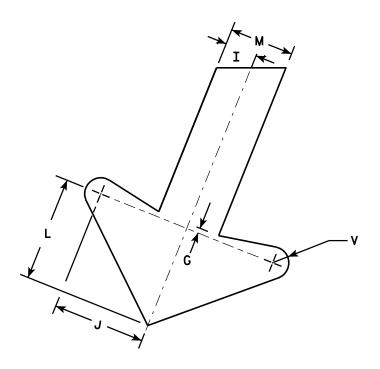
SIGN DETAILS



- 1. Sign is Type II Type H Reflective reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

Background - White Message - Black

- 3. Message Series E
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

PLOT NAME :

SIZE	Α	В	С	D	Ε	F	G	Н	I	J	К	L	М	N	0	Р	0	R	S	T	U	٧	W	Х	Y	Z	Area sq. ft.
1																											
25	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 1/8	2 %	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 %	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 1/8	2 %	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 %	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 1/8	3	2 1/4	10 %	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

COUNTY: RACINE

STANDARD SIGN R3-20LL

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew & Rauch

For State Traffic Engineer

DATE 10/18/10

PLATE NO. R3-20LL.1

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R320LL.DGN

HWY:

CTH V

PROJECT NO: 2695-10-70

PLOT DATE: 15-0CT-2010 14:38

PLOT BY : dotsja

SIGN DETAILS

PLOT SCALE: 5.959043:1.000000

R3-20R

CTH V

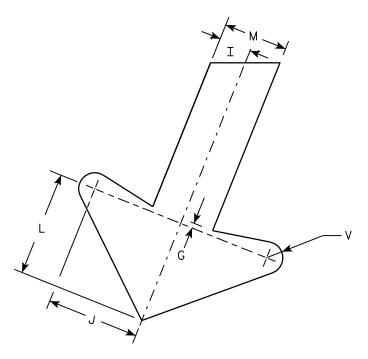
HWY:

NOTES

- 1. Sign is Type II Type H Reflective reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

Background - White Message - Black

- 3. Message Series E
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	Q	R	S	Т	U	٧	W	Х	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 1/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 1/8	2 %	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 %	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 1/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

COUNTY: RACINE

STANDARD SIGN R3-20R

SHEET NO:

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R

For State Traffic Engineer

DATE 10/18/10

PLATE NO. <u>R3-20R.</u>6

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R320R.DGN

PROJECT NO: 2695-10-70

PLOT DATE: 15-OCT-2010 14:59

PLOT BY : dotsja

SIGN DETAILS

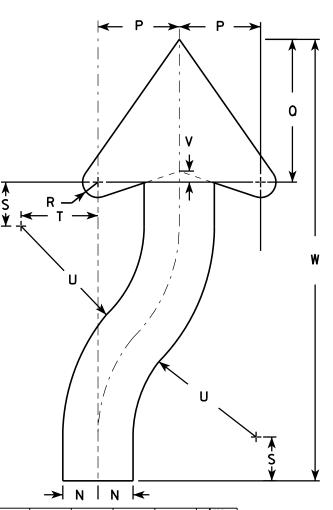
PLOT NAME :

PLOT SCALE: 5.959043:1.000000

- 1. Sign is Type II Type H Reflective reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
- 2. Color:

Background - White Message - Black

- 3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
- 4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

																								14 1	14 1-		
SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	T	U	٧	W	Х	Y	Z	Area sq. ft.
1	18	24	1 1/8	3∕8	1/2	3 %	4 3/4	5 ½	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 ½	6 1/8	5/8	1 %	3 1/4	6 3/4	1/2	20 ¾				3.0
2S	24	30	1 1/8	3∕8	1/2	4 1/2	6 1/4	7 3/8	1 %	3	8	4	12 1/2	2	30	4 %	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 %	3	8	4	12 1/2	2	30	4 %	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 1/8	4 1/2	12	6	18 3/4	3	45	6 %	12 1/4	1 1/4	3 3/4	6 %	13 1/2	1	40 ¾				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 1/8	4 1/2	12	6	18 3/4	3	45	6 %	12 1/4	1 1/4	3 3/4	6 %	13 1/2	1	40 ¾				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 %	5	8 3/4	18	1 1/4	50 1/4				20.0

COUNTY: RACINE

R4-7

STANDARD SIGN R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

For State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

SHEET NO:

PROJECT NO: 2695-10-70

D→

HWY:

CTH V

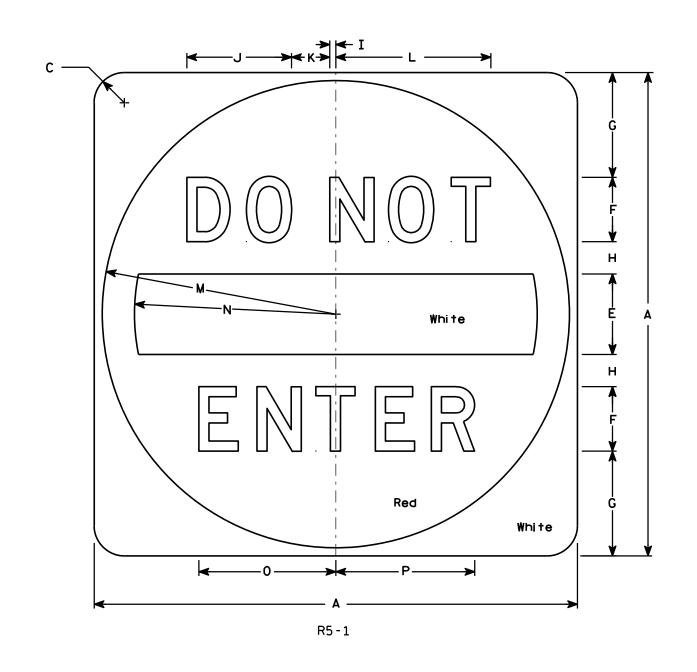
PLOT NAME :

SIGN DETAILS

- 1. Sign is Type II Type H Reflective reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

Background - See detail Message - White - Type H Reflective

- 3. Message Series D
- 4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors shall be rounded.



SIZE	Α	В	С	D	E	F	G	Н	I	C	K	L	М	N	0	Ъ	0	R	S	Т	U	V	W	Х	Y	Z	Area sq. ft.
1																											
2S	30		1 1/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 %	14 1/2	12 1/2	8 1/2	8 %											6.26
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 %	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 %	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 %	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 %	14 1/2	23 1/2	20	12 3/4	12 1/8											16.0
PRO	PROJECT NO: 2695-10-70 HWY: CTH V								COUN	TY:	RACI	NE			S	IGN D	ETAIL	S									

STANDARD SIGN R5-1

WISCONSIN DEPT OF TRANSPORTATION

for State Traffic Engineer PLATE NO. R5-1.15

DATE 12/17/10

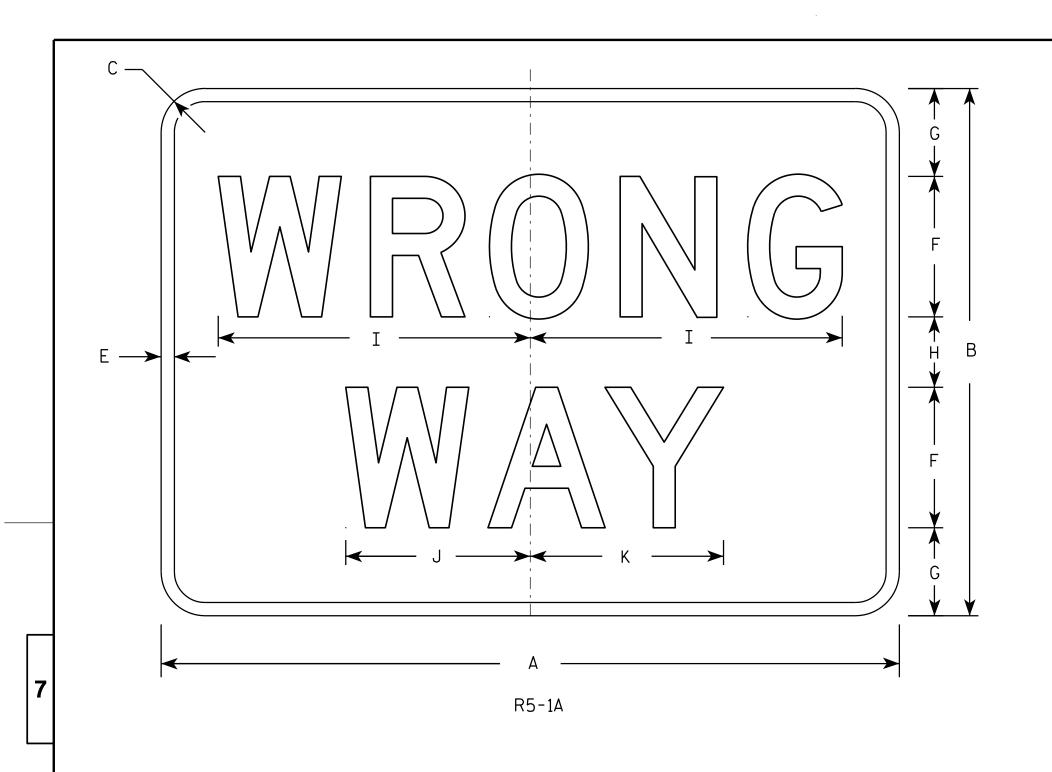
SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R51.DGN

PLOT DATE: 17-DEC-2010 12:11

PLOT NAME :

PLOT SCALE: 5.959043:1.000000



- 1. Sign is Type II Type H Reflective reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

Background - Red Message - White

- 3. Message Series D
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

6 1/2 6 1/8 30 1 1/2 1/2 5 3 2 11 3.75 18 25 4 1/2 13 1/4 7 7/8 8 1/4 36 5⁄8 3 24 6 6.00 17 3/4 10 1/2 42 30 2 1/2 3/4 5 8.75 3 42 30 2 1/2 3/4 8 5 4 17 3/4 10 1/2 8.75 3/4 17 3/4 10 1/2 42 30 2 1/2 8 5 8.75 17 3/4 10 1/2 42 2 1/2 8.75

COUNTY:

RACINE

STANDARD SIGN R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matther R Rawl for State Traffic Engineer

DATE 12/17/10

/17/10 PLATE NO. R5-1A.2

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R51A.DGN

PROJECT NO: 2695-10-70

HWY:

CTH V

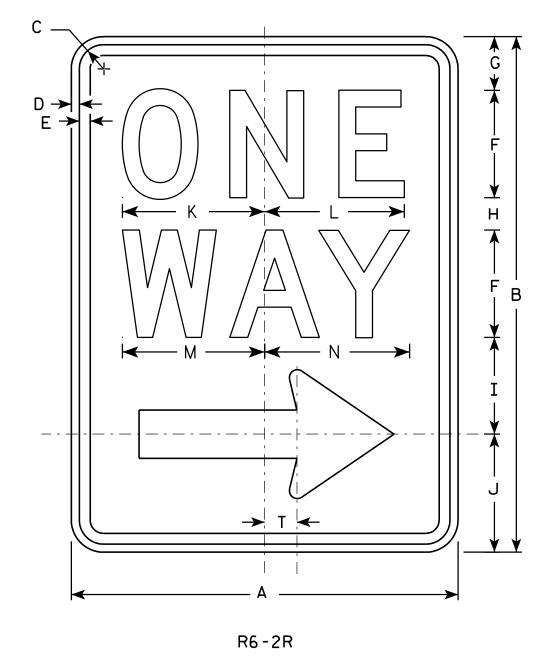
PLOT DATE: 17-DEC-2010 12:42

PLOT BY : dotsjo

SIGN DETAILS

PLOT NAME :

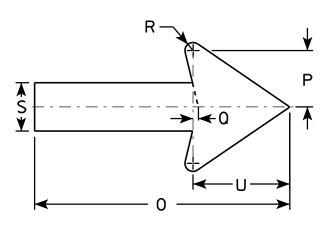
PLOT SCALE: 5.462457:1.000000



- 1. Sign is Type II Type H Reflective reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

Background - White Message - Black

- 3. Message Series D
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. R6-2L same as R6-2R except arrow points to the left.



SIZE	Α	В	C	D	E	F	G	Ι	I	J	K	L	М	N	0	Р	0	R	S	T	U	٧	W	X	Y	Z
1	18	24	1 1/8	3⁄8	1/2	5	2 1/2	1 1/2	4 1/2	5 ½	6 ⁵ %	6 1/2	6 %	6 3/4	11 %	2 5%	1/4	3/8	2 1/4	1 1/2	4 1/2					
25	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 ½	7	8 1/8	8 1/8	8 1/2	8 %	16	3 ½	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 %	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 1/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 %	1/2	3/4	4 3/4	3	9					1
4	36	48	1 1/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 ¾	13 1/4	13 1/2	24	5 %	1/2	3/4	4 3/4	3	9					
5																										

STANDARD SIGN R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

For State Traffic Engineer

DATE 11/2/10

PLATE NO. R6-2.8

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R62.DGN

HWY: CTH V COUNTY: RACINE

PLOT DATE: 02-NOV-2010 15:25

SIGN DETAILS PLOT BY: ditjph

PLOT NAME :

PLOT SCALE: 4.469282:1.000000

WISDOT/CADDS SHEET 42

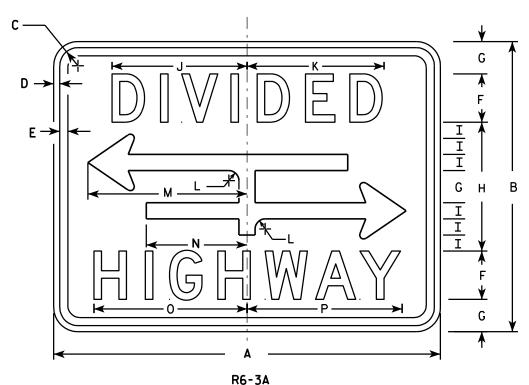
PROJECT NO: 2695-10-70

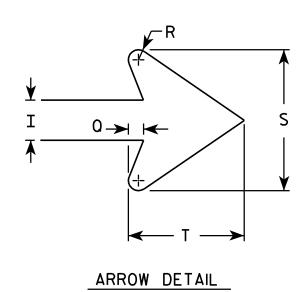


- 1. Sign is Type II Type H Reflective reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

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.





			D	-	-	G	H	Ι	J	K	L	M	N	0	P	0	R	S	T	U	٧	W	X	Y	Z	Area sq. ft.
24	18	11/8	3/8	3/8	3	2	8	1	8 3/8	8 1/2	5/8	9 %	6 1/4	9 1/2	9 %	3/8	1/4	3 1/2	2 3/4							3.0
30	24	11/8	3/8	1/2	4	2 %	10 ¾	1 3/8	10 1/2	10 %	7 ⁄8	12 1/2	7 1/8	12 1/4	12 3/8	1/2	3∕8	4 5/8	3 %							5.0
30	24	11/8	3/8	1/2	4	2 %	10 ¾	1 3/8	10 1/2	10 %	7 /8	12 1/2	7 1/8	12 1/4	12 3/8	1/2	3∕8	4 5/8	3 %							5.0
ECT	NO. 1	260E 1	0.70				•	СТ	ш./					DAC					SICNI	DETAI	1.0					
3	30 30	30 24 30 24	30 24 1½ 30 24 1½ 80 24 1½	30 24 1½ ¾ 30 24 1½ ¾ 80 34 1½	10 24 1½ 3/8 ½ 10 24 1½ 3/8 ½	30 24 1 ½ 3/8 ½ 4 40 24 1 ½ 3/8 ½ 4 40 24 1 ½ 3/8 ½ 4	30 24 1 ½ 3/8 ½ 4 2 5/8 30 24 1 ½ 3/8 ½ 4 2 5/8	30 24 1 ½ ¾ ½ 4 2 ½ 10 ¾ 30 24 1 ½ ¾ ½ 4 2 ½ 10 ¾ 36 ½ 4 2 ½ 10 ¾	30 24 1 ½ ¾ ½ 4 2 ½ 10 ¾ 1 ¾ 30 24 1 ½ ¾ ½ 4 2 ½ 10 ¾ 1 ¾ 4 1 ½ ½ 4 2 ½ 10 ¾ 1 ¾	30 24 1 ½ 3/8 ½ 4 2 5/8 10 3/4 1 3/8 10 ½ 30 24 1 ½ 3/8 ½ 4 2 5/8 10 3/4 1 3/8 10 ½	360 24 1 ½8 3/8 ½2 4 2 5/8 10 3/4 1 3/8 10 ½2 10 5/8 360 24 1 ½8 3/8 ½2 4 2 5/8 10 3/4 1 3/8 10 ½2 10 5/8 4 2 5/8 10 3/4 1 3/8 10 ½2 10 5/8	360 24 1 ½8 3/8 ½ 4 2 5/8 10 3/4 1 3/8 10 ½ 10 5/8 ½ 360 24 1 ½8 3/8 ½ 4 2 5/8 10 3/4 1 3/8 10 ½ 10 5/8 ½	30 24 1 ½ 3/8 ½ 4 2 ½ 10 ¾ 1 ¾ 1 ¾ 10 ½ 10 ½ 10 ½ 10 ½ 10 ½ 10 ½ 12 ½ 30 24 1 ½ 3/8 ½ 4 2 ½ 10 ¾ 1 ¾ 10 ½ 10 ½ 10 ½ 10 ½ 12 ½	360 24 1 ½ 3/8 ½ 4 2 ½ 10 ¾ 1 ¾ 10 ½ 10 ½ 10 ½ 10 ½ 10 ½ 10 ½ 10 ½ 12 ½ 7 ½ 360 24 1 ½ 3/8 ½ 4 2 ½ 10 ¾ 1 ¾ 10 ½ 10 ½ 10 ½ 10 ½ 12 ½ 7 ½ 4 2 ½ 10 ¾ 1 ¾ 1 ¾ 10 ½ 10 ½ 10 ½ 12 ½ 7 ½	30 24 1 ½ 3/8 ½ 4 2 ½ 10 ¾ 1 ¾ 10 ½ 10 ½ 10 ½ 10 ½ 12 ½ 7 ¾ 12 ½ 30 24 1 ½ 3/8 ½ 4 2 ½ 10 ¾ 1 ¾ 10 ½ 10 ½ 10 ½ 10 ½ 12 ½ 7 ½ 12 ½ 4 2 ½ 10 ¾ 1 ¾ 1 ¾ 10 ½ 10 ½ 10 ½ 10 ½ 12 ½ 7 ½ 12 ½	30 24 1 ½8 ¾8 ½ 4 2 ½8 10 ¾4 1 ¾8 10 ½ 10 ½8 ¾8 12 ½ 7 ¾8 12 ¼4 12 ¾8 30 24 1 ½8 ¾8 ½ 4 2 ½8 10 ¾4 1 ¾8 10 ½ 10 ½8 ¾8 12 ½ 7 ¾8 12 ¼4 12 ¾8 4 2 ½8 10 ¾4 1 ¾8 10 ½ 10 ½8 ¾8 12 ½ 7 ¾8 12 ¼4 12 ¾8	360 24 1 ½8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 12 1/2 7 3/8 12 1/4 12 3/8 1/2 360 24 1 ½8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 3/8 12 1/2 7 3/8 12 1/4 12 3/8 1/2	360 24 1 ½8 3/8 ½ 4 2 5/8 10 3/4 1 3/8 10 ½ 10 5/8 ½ 7 ½8 12 ½ 7 ½8 12 ½ 12 3/8 ½ 3/8 360 24 1 ½8 3/8 ½ 4 2 5/8 10 3/4 1 3/8 10 ½ 10 5/8 ½ 12 ½ 7 ½8 12 ½ 7 ½8 12 ½ 3/8 4 1 ½8 1 ½8 1 ½8 1 ½8 10 ½ 10 5/8 ½ 12 ½ 7 ½8 12 ½ 12 ½ 3/8 5 1 ½8 1 ½8 1 ½8 1 ½8 10 ½ 10 5/8 ½ 12 ½ 7 ½8 12 ½ 1 ½ 12 3/8 ½ 3/8	360 24 1 1/8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 7/8 12 1/2 7 7/8 12 1/4 12 3/8 1/2 3/8 4 5/8 300 24 1 1/8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 7/8 12 1/2 7 7/8 12 1/4 12 3/8 1/2 3/8 4 5/8	360 24 1 1/8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 7/8 12 1/2 7 7/8 12 1/4 12 3/8 1/2 3/8 4 5/8 3 5/8 300 24 1 1/8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 7/8 12 1/2 7 7/8 12 1/4 12 3/8 1/2 3/8 4 5/8 3 5/8 300 24 1 1/8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 7/8 12 1/2 7 7/8 12 1/4 12 3/8 1/2 3/8 4 5/8 3 5/8 300 24 1 1/8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 7/8 12 1/2 7 7/8 12 1/4 12 3/8 1/2 3/8 4 5/8 3 5/8 30 24 1 1/8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 7/8 12 1/2 7 7/8 12 1/4 12 3/8 1/2 3/8 4 5/8 3 5/8	30 24 1 1/8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 7/8 12 1/2 7 7/8 12 1/4 12 3/8 1/2 3/8 4 5/8 3 5/8 30 24 1 1/8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 7/8 12 1/2 7 7/8 12 1/4 12 3/8 1/2 3/8 4 5/8 3 5/8	30 24 1 1/8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 12 1/2 7 3/8 12 1/4 12 3/8 1/2 3/8 4 5/8 3 5/8 30 24 1 1/8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 3/8 12 1/2 7 3/8 12 1/4 12 3/8 1/2 3/8 4 5/8 3 5/8	30 24 1 1/8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 7/8 12 1/2 7 7/8 12 1/4 12 3/8 1/2 3/8 4 5/8 3 5/8 30 24 1 1/8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 7/8 12 1/2 7 7/8 12 1/4 12 3/8 1/2 3/8 4 5/8 3 5/8	30 24 1 1/8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 7/8 12 1/2 7 7/8 12 1/4 12 3/8 1/2 3/8 4 5/8 3 5/8 30 24 1 1/8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 7/8 12 1/2 7 7/8 12 1/4 12 3/8 1/2 3/8 4 5/8 3 5/8	30 24 1 1/8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 7/8 12 1/2 7 7/8 12 1/4 12 3/8 1/2 3/8 4 5/8 3 5/8 30 24 1 1/8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 7/8 12 1/2 7 7/8 12 1/4 12 3/8 1/2 3/8 4 5/8 3 5/8	30 24 1 1/8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 7/8 12 1/2 7 7/8 12 1/4 12 3/8 1/2 3/8 4 5/8 3 5/8 30 24 1 1/8 3/8 1/2 4 2 5/8 10 3/4 1 3/8 10 1/2 10 5/8 7/8 12 1/2 7 7/8 12 1/4 12 3/8 1/2 3/8 4 5/8 3 5/8

STANDARD SIGN R6-3 & R6-3A

WISCONSIN DEPT OF TRANSPORTATION

SHEET NO:

APPROVED

DATE 3/31/2011

for State Traffic Engineer PLATE NO. R6-3.5

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R63.DGN

R6-3

PLOT DATE: 31-MAR-2011 09:08

5.959043:1.000000

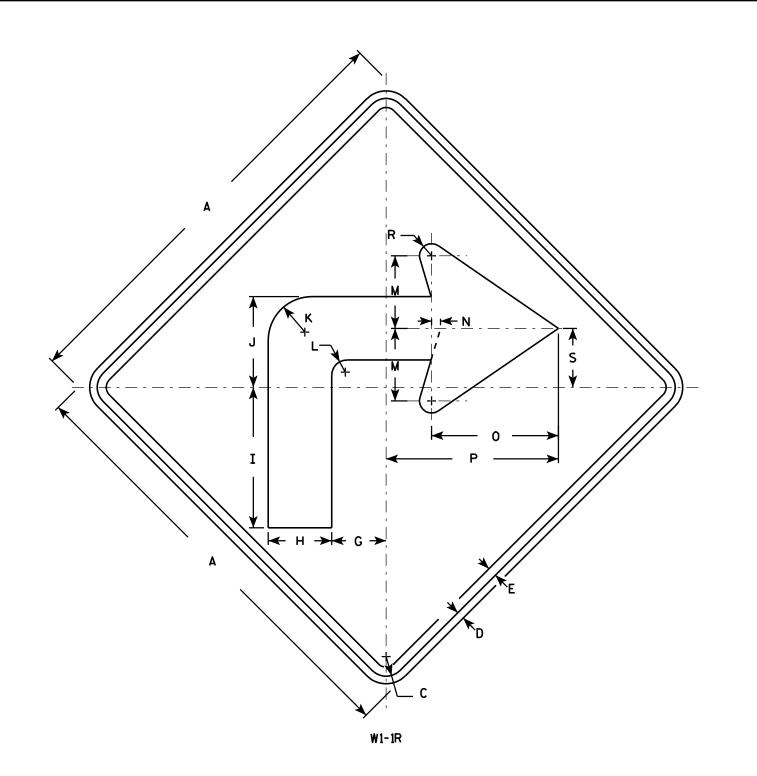
WISDOT/CADDS SHEET 42

NOTES

- 1. Sign is Type II Type F Reflective reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

Background - Yellow Message - Black

- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. W1-1L is the same as W1-1R except the arrow is reversed along the vertical centerline.



SIZE	Α	В	С	D	E	F	G	Н	I	J	К	L	M	N	0	Р	0	R	S	T	U	٧	₩	×	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		3	3 1/2	7 3/4	5	2 1/2	1 / ₈	4	1/2	7	9 1/2		5/8	3 1/4								4.0
25	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 %	7 1/2	3 %	1 1/4	6	3/4	10 1/2	14 1/4		1	4 %								9.0
2M	36		1 %	5/8	3/4		4 1/2	5 1/4	11 %	7 1/2	3 %	1 1/4	6	3/4	10 1/2	14 1/4		1	4 %								9.0
3	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 %	7 1/2	3 %	1 1/4	6	3/4	10 1/2	14 1/4		1	4 1/8								9.0
4	48		2 1/4	3/4	1		6	7	15 1/2	10	4 1/8	1 %	8	1	14	19		1 1/4	6 1/2								16.0
5	48		2 1/4	3/4	1		6	7	15 1/2	10	4 1/8	1 %	8	1	14	19		1 1/4	6 1/2								16.0

COUNTY: RACINE

STANDARD SIGN W1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matth

for State Traffic Engineer

DATE <u>5/15/12</u>

PLATE NO. W1-1.11
SHEET NO:

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W11.DGN

PROJECT NO: 2695-10-70

HWY:

CTH V

PLOT DATE: 15-MAY-2012 13:47

PLOT NAME :

SIGN DETAILS

PLOT SCALE: 7.939035:1.000000

WISDOT/CADDS SHEET 42

NOTES

- 1. Sign is Type II Type F Reflective reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

Background - Yellow Message - Black

3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

c	—
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	<u>¥</u> в
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
W1-6	

SIZE	Α	E	В	С	D	E	F	G	Н	I	J	K	L	M	N	0	Р	0	R	S	Т	U	٧	W	X	Y	Z	Area sq. ft.
1	36	1	8	1 1/8	3/8	3/8		9	10	¾	5 %	4 3/4	2 3/8	14 %	29 1/4													4.5
2S	48	2	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	2	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	3	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 ¾													12.5
4	60	3	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 ¾													12.5
5	96	4	18	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78	·												32.0

COUNTY: RACINE

STANDARD SIGN W1 - 6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

 \mathcal{F}_{or} State Traffic Engineer DATE 6/7/10 PLATE NO. W1-6.8

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W16.DGN

PROJECT NO: 2695-10-70

HWY:

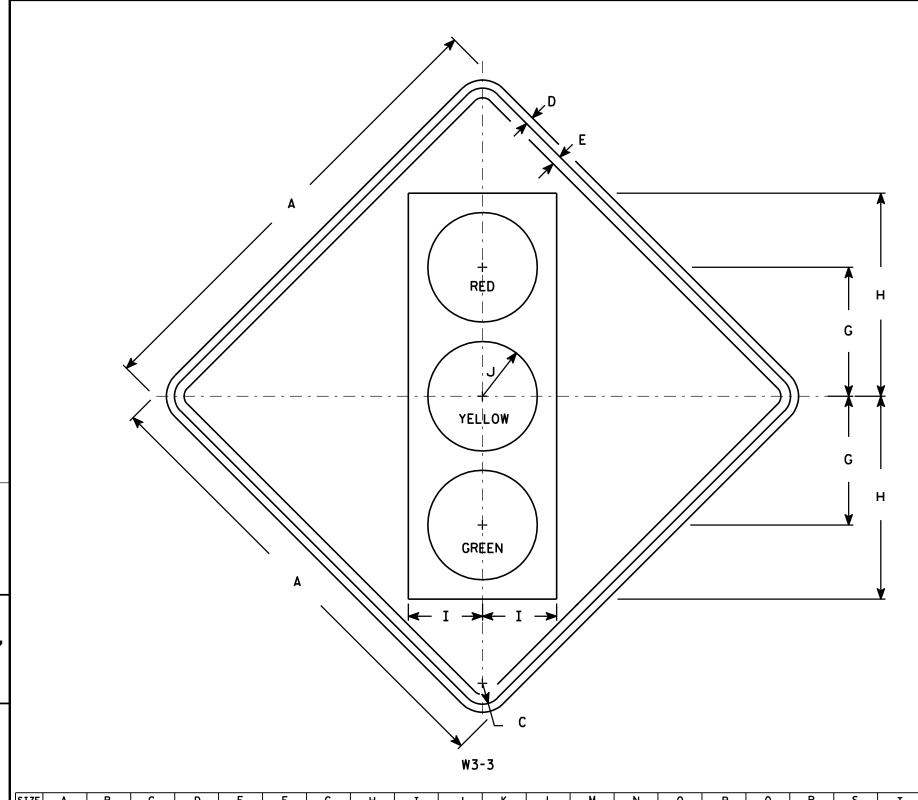
CTH V

PLOT DATE: 07-JUN-2010 10:37

PLOT NAME :

SIGN DETAILS

PLOT SCALE: 5.959043:1.000000



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 - See Note 4

- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. Symbol and border are non-reflective black. Top circle - Type H Reflectorized Red Center circle - Same as background Bottom circle - Type H Reflectorized Green

SIZE Α 1 3/8 1/2 13 3/4 5 5⁄8 8 3/4 3 3/4 30 6.25 25 1 % 5/8 15 3/4 5 3/4 4 1/4 3/4 9.0 36 2M 1 % 5/8 3/4 15 3/4 5 3/4 4 1/4 36 9.0 3 36 1 % 5/8 15 3/4 5 3/4 4 1/4 9.0 20 7 1/2 5 4 3/4 12 1/2 48 2 1/4 16.0 12 1/2 5 20 7 1/2 5 2 1/4 16.0 48

COUNTY:

RACINE

STANDARD SIGN W3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

SHEET NO:

FILE NAME: C:\Users\PROJECTS\tr_stdplate\W33.DGN PLOT D

CTH V

HWY:

PROJECT NO: 2695-10-70

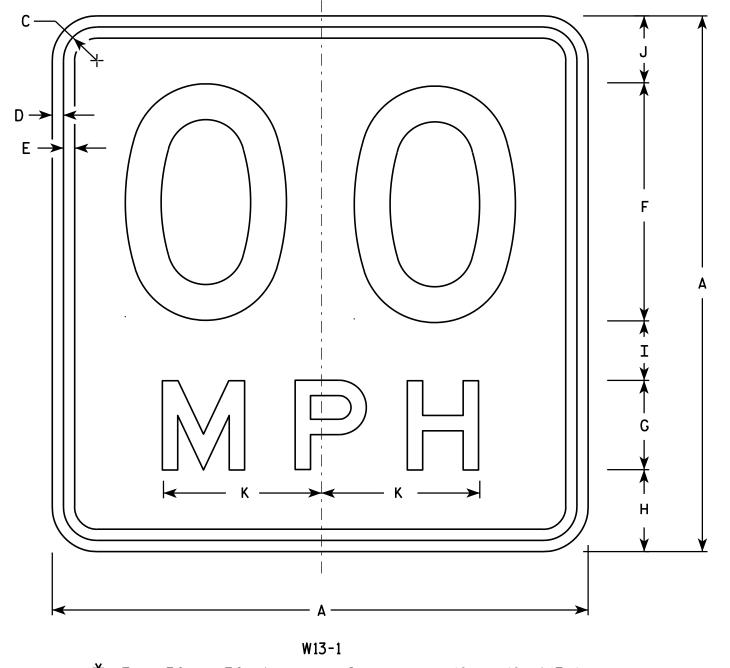
PLOT DATE : 07-JUN-2010 13:07

SIGN DETAILS

PLOT NAME :

PLOT SCALE: 7.448805:1.000000

WISDOT/CADDS SHEET 42



 \star For 30" \times 30" Warning Signs, use 18" \times 18" W13-1 signs. For 36" \times 36" Warning Signs, use 24" \times 24" W13-1 signs.

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

PLOT NAME :

- 3. Message Series See Note 6
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
- 6. Line 1 is Series D Line 2 is Series E

SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Ρ	0	R	S	T	U	v	W	X	Y	Z	Area sq. 11.
1	18		1 1/8	3∕8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2S	18		1 1/8	3⁄8	3/8	8	3	2 3/4	2	2 1/4	5																2.25
* 2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
3	24		1 1/8	3∕8	1/2	10	4	4	2 3/4	3 1/4	6 %																4.00
4	36		1 %	5/8	3/4	16	6	5 1/2	4	4 1/2	10 %																9.00
5	36		1 %	5/8	3/4	16	6	5 1/2	4	4 1/2	10 %																9.00
PROJEC	CT NO	26	95-10-	-70			HW	Y:	CT	ΗV			COU	NTY:	RAC	CINE				SIGN	N DET	AILS					

STANDARD SIGN W13-1

WISCONSIN DEPT OF TRANSPORTATION

Matther

APPROVED /

For State Traffic Engineer

V12 PLATE NO. <u>W13-1.16</u>

DATE <u>5/31/12</u>

SHEET NO:

FILE NAME: C:\CAEFiles\Projects\tr_stdplate\W131.DGN

PLOT DATE: 31-MAY-2012 10:57

PLOT BY: mscsj

PLOT SCALE: 3.225232:1.000000

CTH V - STAGE 1

		AREA (SF)			Incremental Vo	l (CY) (Unadjusted)		Cumulative V	ol (CY)	
STATION	Distance	Cut	Salvaged/Unusable Pavement Material	Fill	Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.11	Mass Ordinate
428+00.00		24	0	1	0	0	0	0	0	0
428+50.00	50	27	0	0	48	0	1	48	1	47
429+00.00	50	26	0	4	49	0	4	97	5	92
429+50.00	50	24	0	8	46	0	11	143	18	125
430+00.00	50	24	0	10	44	0	16	187	36	151
430+50.00	50	24	0	10	45	0	18	231	56	175
431+00.00	50	26	0	13	47	0	21	278	80	199
431+50.00	50	29	0	11	52	0	22	330	104	226
432+00.00	50	18	0	32	44	0	39	374	148	226
432+50.00	50	19	0	26	34	0	53	408	207	201
433+00.00	50	33	0	22	48	0	45	456	256	199
433+50.00	50	82	0	9	106	0	29	562	289	273
434+00.00	50	0	0	0	76	0	9	638	299	339
434+50.00	50	0	0	0	0	0	0	638	299	339
435+00.00	50	53	0	21	49	0	20	687	321	366
435+50.00	50	22	0	28	69	0	46	756	371	385
436+00.00	50	23	0	20	42	0	44	798	420	377
436+50.00	50	30	0	13	49	0	30	847	454	393
437+00.00	50	44	0	0	68	0	12	915	467	448
437+50.00	50	37	0	0	74	0	0	990	467	523
438+00.00	50	33	0	2	65	0	2	1055	469	586
438+50.00	50	32	0	4	61	0	5	1116	475	641
439+00.00	50	30	0	7	57	0	10	1173	486	687
439+50.00	50	29	0	1	54	0	8	1227	495	733
440+00.00	50	31	0	0	56	0	1	1283	496	787
440+44.00	44	34	0	0	53	0	0	1336	496	841
440+79.00	35	33	0	0	44	0	0	1380	496	884

1380

0

446

Column totals

9

PROJECT NO:2695-10-70 HWY:CTH V COUNTY:OZAUKEE CROSS SECTIONS: EARTHWORK DATA SHEET **E**

9

CTH V - STAGE 2A

		AREA (SF)			Incremental Vo	l (CY) (Unadjusted)		Cumulative V	ol (CY)	
STATION	Distance	Cut	Salvaged/Unusable Pavement Material		Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill	Cut 1.00 Note 1	Expanded Fill 1.11	Mass Ordinate Note 8
433+00.00	0	72	0	10	0	0	0	0	0	0
433+50.00	50	63	0	7	125	0	16	125	18	107
434+00.00	50	73	0	0	125	0	7	250	25	225
434+50.00	50	64	0	0	127	0	0	377	25	352
435+00.00	50	84	0	0	137	0	0	514	26	488
435+50.00	50	71	0	4	143	0	5	657	31	626
436+00.00	50	35	0	0	98	0	4	755	35	720
436+50.00	50	32	0	0	62	0	0	817	35	782
437+00.00	50	27	0	3	55	0	3	872	38	834
437+50.00	50	25	0	6	48	0	8	920	47	873
438+00.00	50	26	0	7	48	0	12	968	60	908
438+50.00	50	26	0	8	48	0	14	1016	75	941
439+00.00	50	25	0	8	47	0	15	1063	92	971
439+50.00	50	24	0	7	46	0	14	1109	107	1001
440+00.00	50	26	0	7	47	0	13	1156	122	1034
440+44.00	44	26	0	10	43	0	14	1198	137	1061
440+79.00	35	0	0	0	17	0	6	1216	144	1071
				Column totals	1216	0	130			

CTH W

- STAGE 2A

		AREA (SF)			Incremental Vo	l (CY) (Unadjusted)		Cumulative V	ol (CY)	
STATION	Distance	Cut	Salvaged/Unusable Pavement Material	Fill	Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.11	Mass Ordinate
0+30.00		19	0	0	0	0	0	0	0	0
0+50.00	20	17	0	0	13	0	0	13	0	13
1+00.00	50	17	0	4	31	0	4	45	4	40
1+50.00	50	18	0	11	32	0	14	77	20	57
2+00.00	50	18	0	20	33	0	28	110	51	59
2+50.00	50	17	0	22	32	0	38	142	93	48
3+00.00	50	54	0	28	66	0	46	207	145	63
3+50.00	50	59	0	43	105	0	66	312	218	94
4+00.00	50	69	0	20	119	0	59	431	283	148
4+50.00	50	106	0	0	162	0	19	594	304	290
6+00.00		536	0	0	0	0	0	594	304	290
6+25.00	25	171	0	12	328	0	6	921	310	611
6+50.00	25	130	0	5	139	0	8	1061	319	741
6+75.00	25	131	0	25	121	0	14	1181	335	847
7+00.00	25	64	0	51	90	0	35	1272	374	898
7+26.00	26	47	0	12	53	0	30	1325	407	918
7+53.00	27	60	0	2	53	0	7	1378	415	963
8+00.00	47	51	0	0	97	0	2	1475	417	1058
8+52.00	52	63	0	0	110	0	0	1585	417	1168
8+76.00	24	71	0	0	60	0	0	1645	417	1228
8+95.00	19	73	0	0	51	0	0	1696	417	1279
				Column totals	1696	0	376			

9

COUNTY: OZAUKEE SHEET PROJECT NO:2695-10-70 HWY: CTH V CROSS SECTIONS: EARTHWORK DATA Ε

9

CTH V - STAGE 2B

		AREA (SF)			Incremental Vo	l (CY) (Unadjusted)		Cumulative V	ol (CY)	
STATION	Distance	Cut	Salvaged/Unusable Pavement Material	Fill	Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.11	Mass Ordinate Note 8
428+00.00		33	0	1	0	0	0	0	0	0
428+50.00	50	34	0	13	62	0	13	62	15	47
429+00.00	50	34	0	11	63	0	23	125	40	85
429+50.00	50	34	0	12	63	0	21	189	64	125
430+00.00	50	34	0	35	63	0	43	251	112	140
430+50.00	50	31	0	39	60	0	69	312	188	123
431+00.00	50	29	0	58	56	0	90	367	288	80
431+50.00	50	31	0	58	55	0	107	423	407	16
432+00.00	50	33	0	58	59	0	107	482	526	-44
432+50.00	50	35	0	45	63	0	95	545	632	-87
433+00.00	50	72	0	10	99	0	51	644	689	-44
		1	Co	lumn totals	644	0	620			

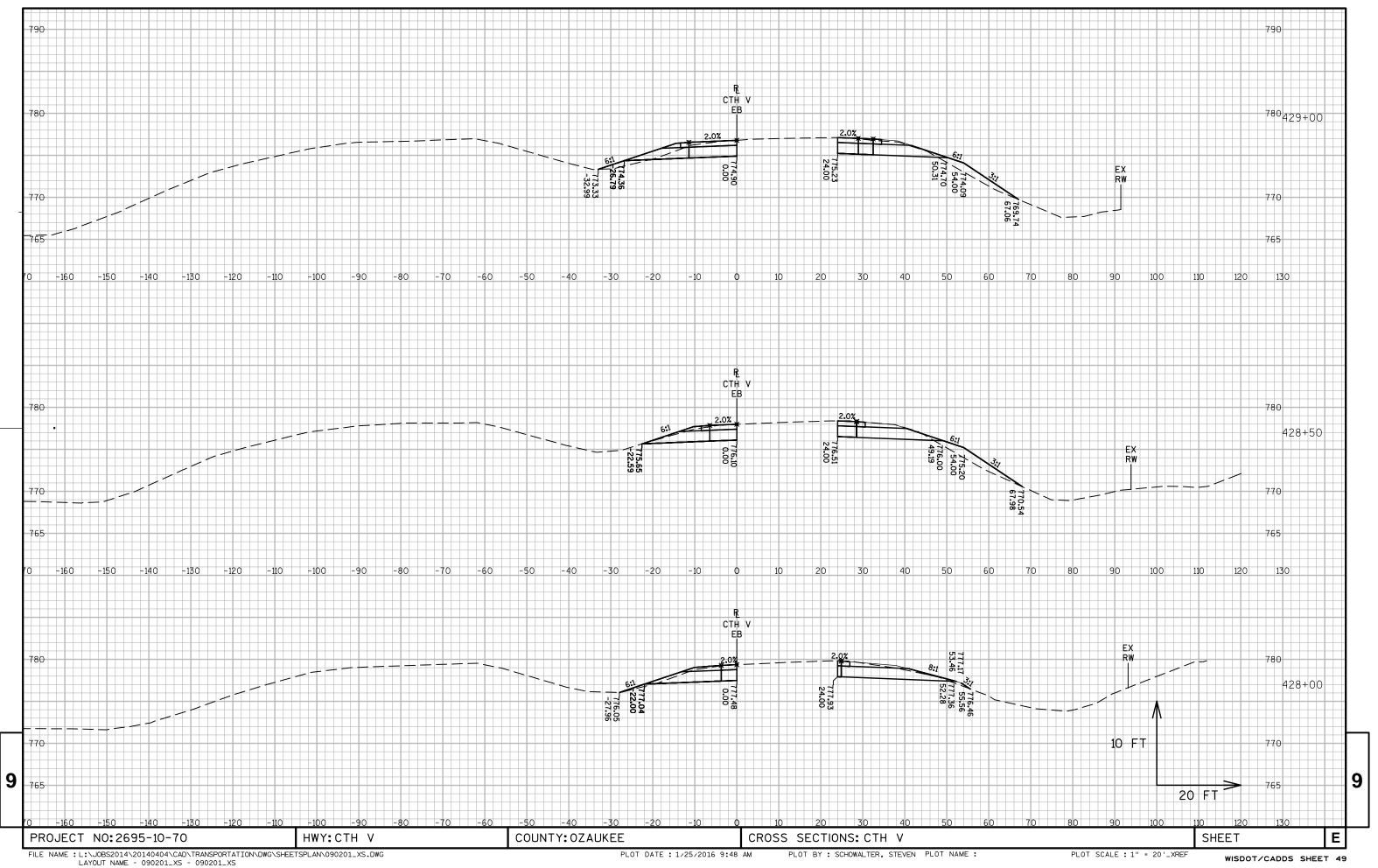
CTH W - STAGE 2B

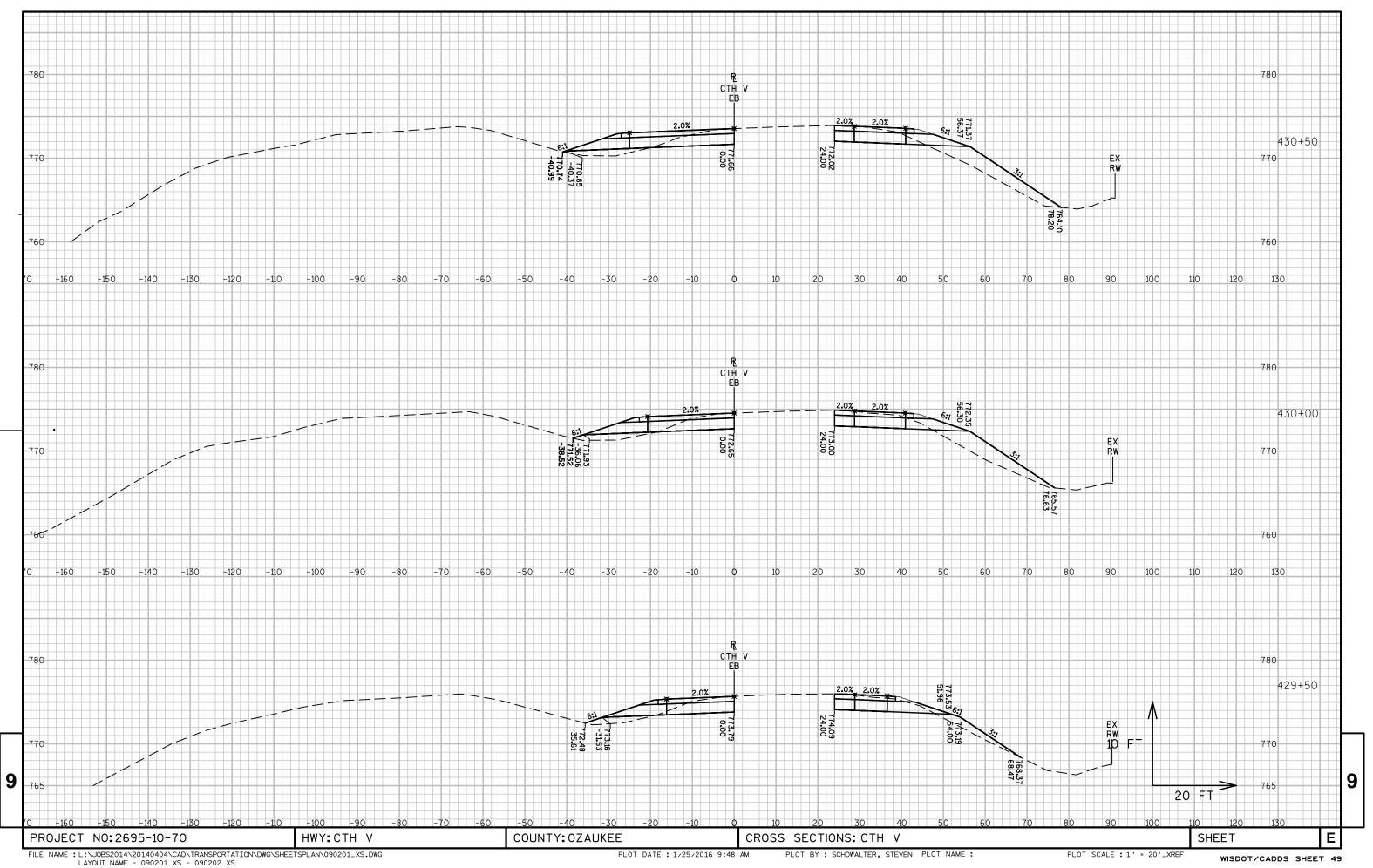
		AREA (SF)			Incremental Vo	(CY) (Unadjusted)		Cumulative V	ol (CY)	
STATION	Distance	Cut	Salvaged/Unusable Pavement Material	Fill	Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.11	Mass Ordinate
3+00.00	0	17	0	5	0	0	0	0	0	0
3+50.00	50	17	0	28	31	0	30	31	34	-2
4+00.00	50	28	0	0	41	0	26	73	63	10
4+50.00	50	35	0	20	58	0	18	131	83	48
			Co	lumn totals	131	0	75			

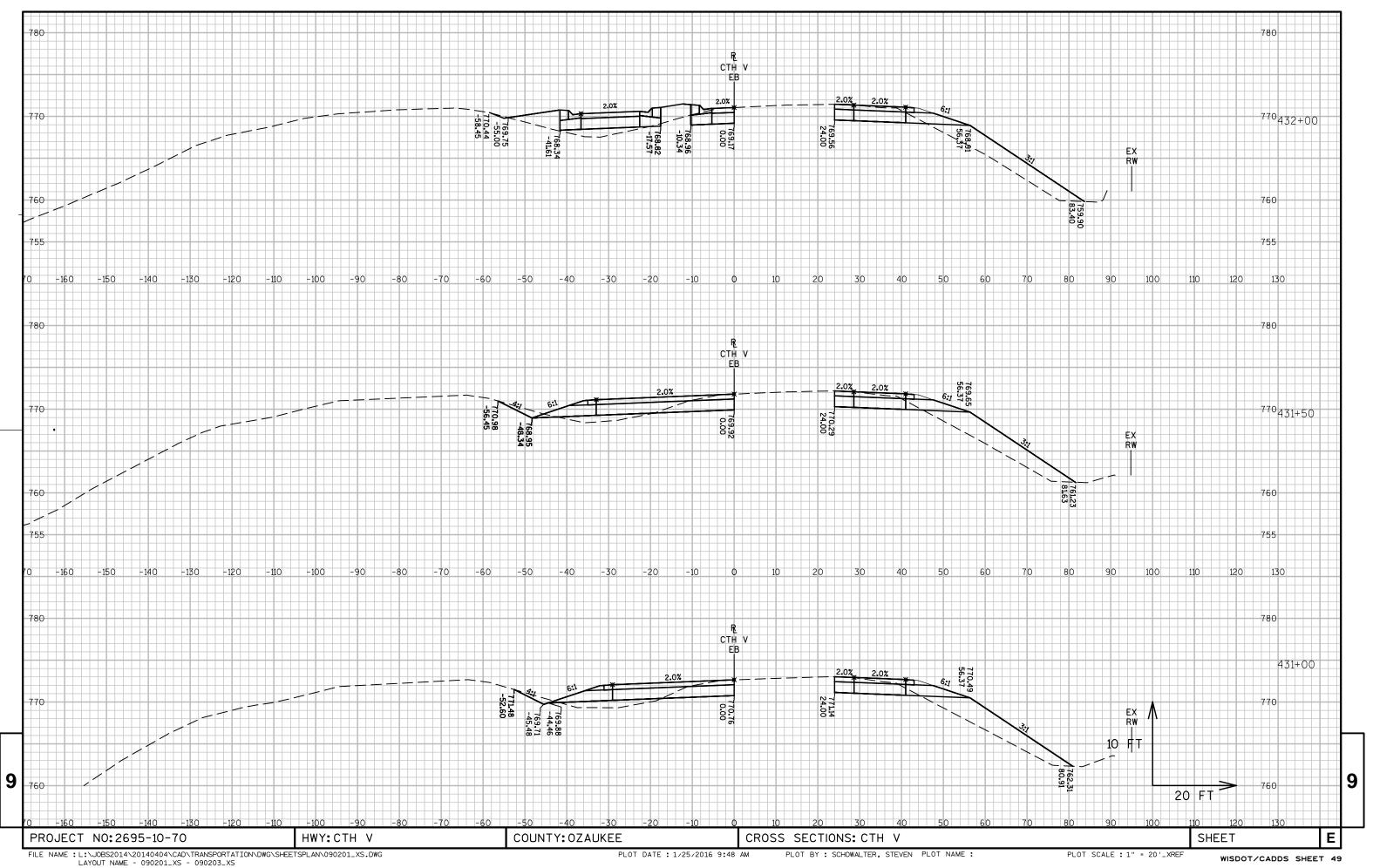
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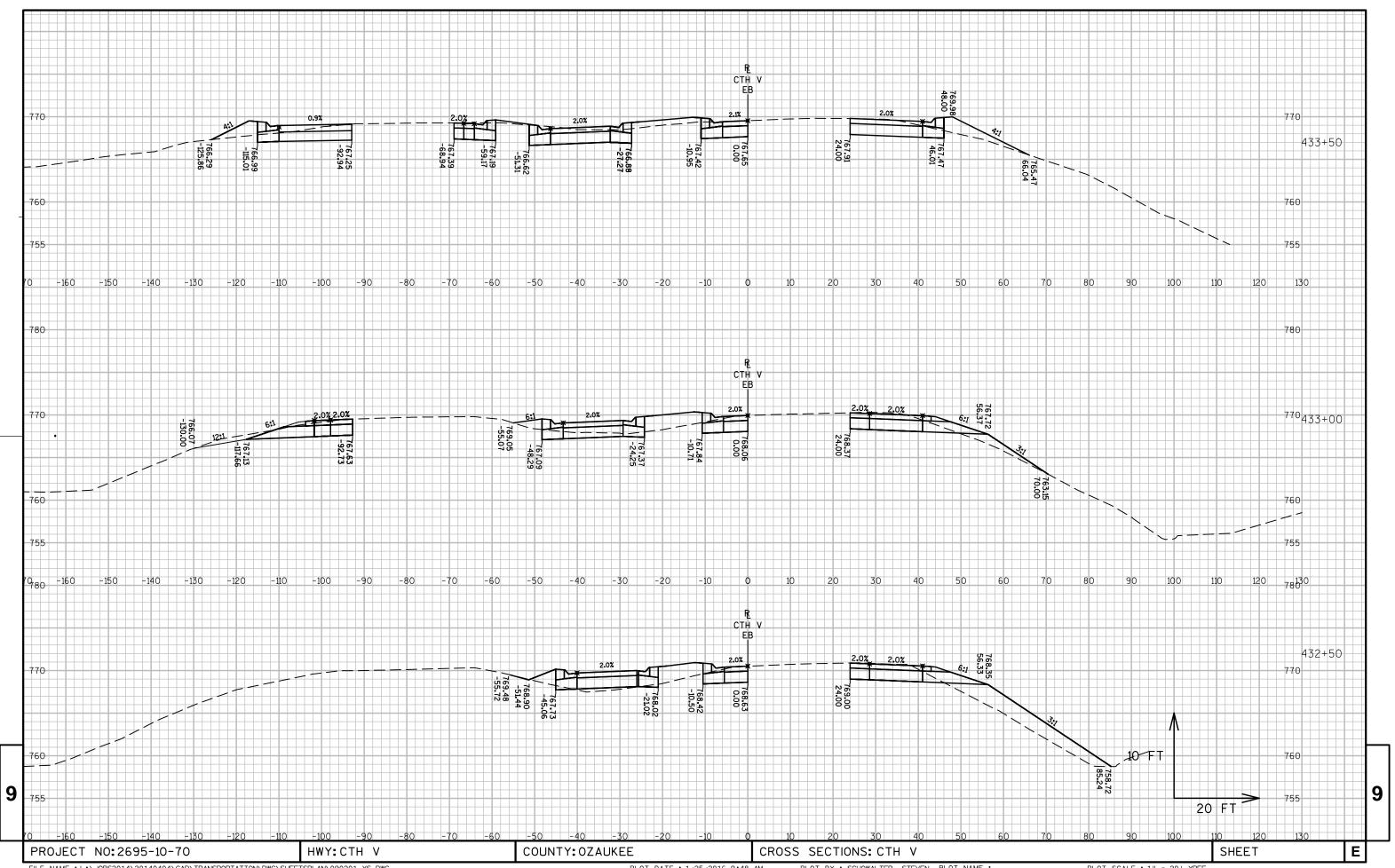
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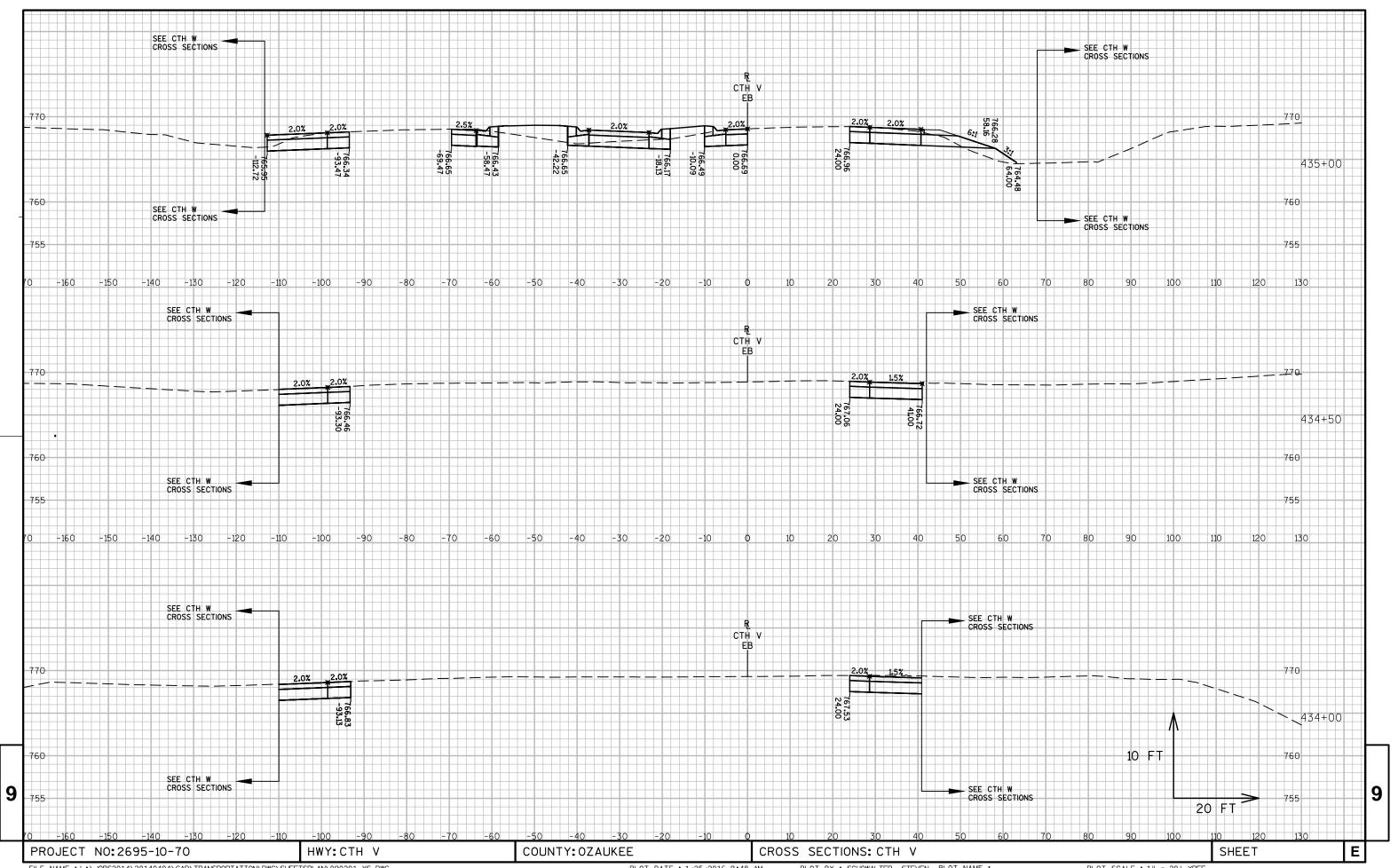
PROJECT NO:2695-10-70 HWY:CTH V COUNTY:OZAUKEE CROSS SECTIONS: EARTHWORK DATA SHEET **E**

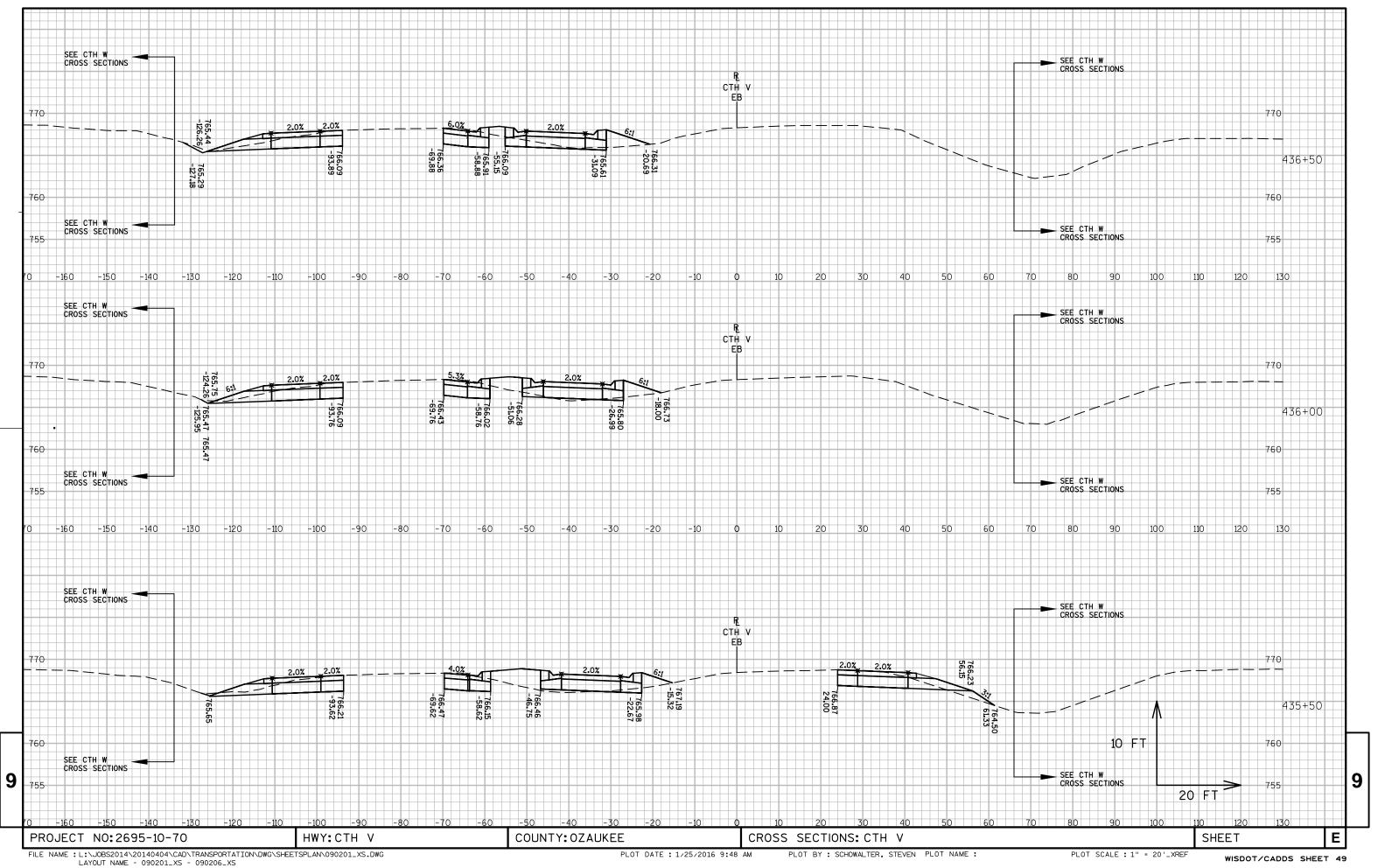


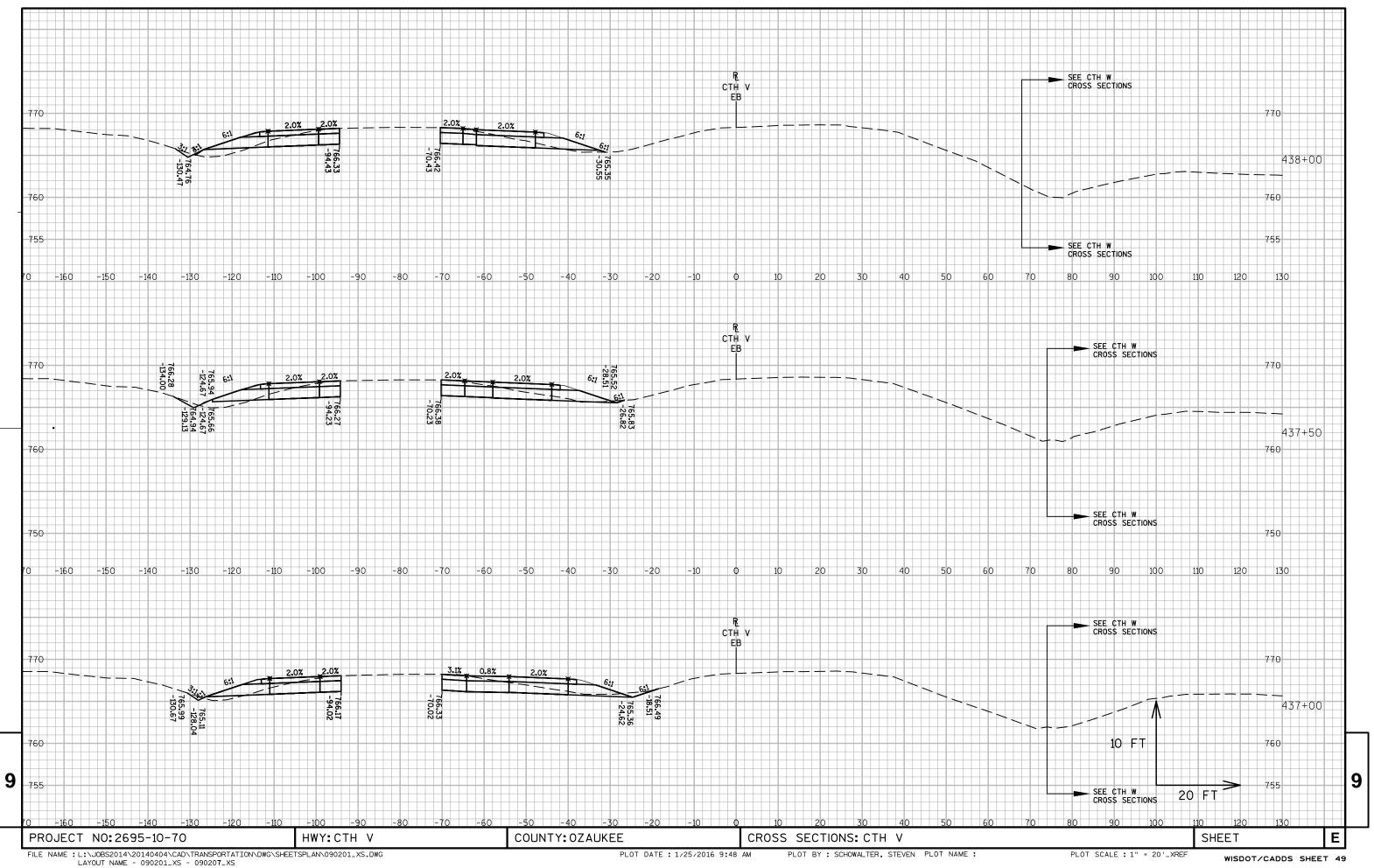


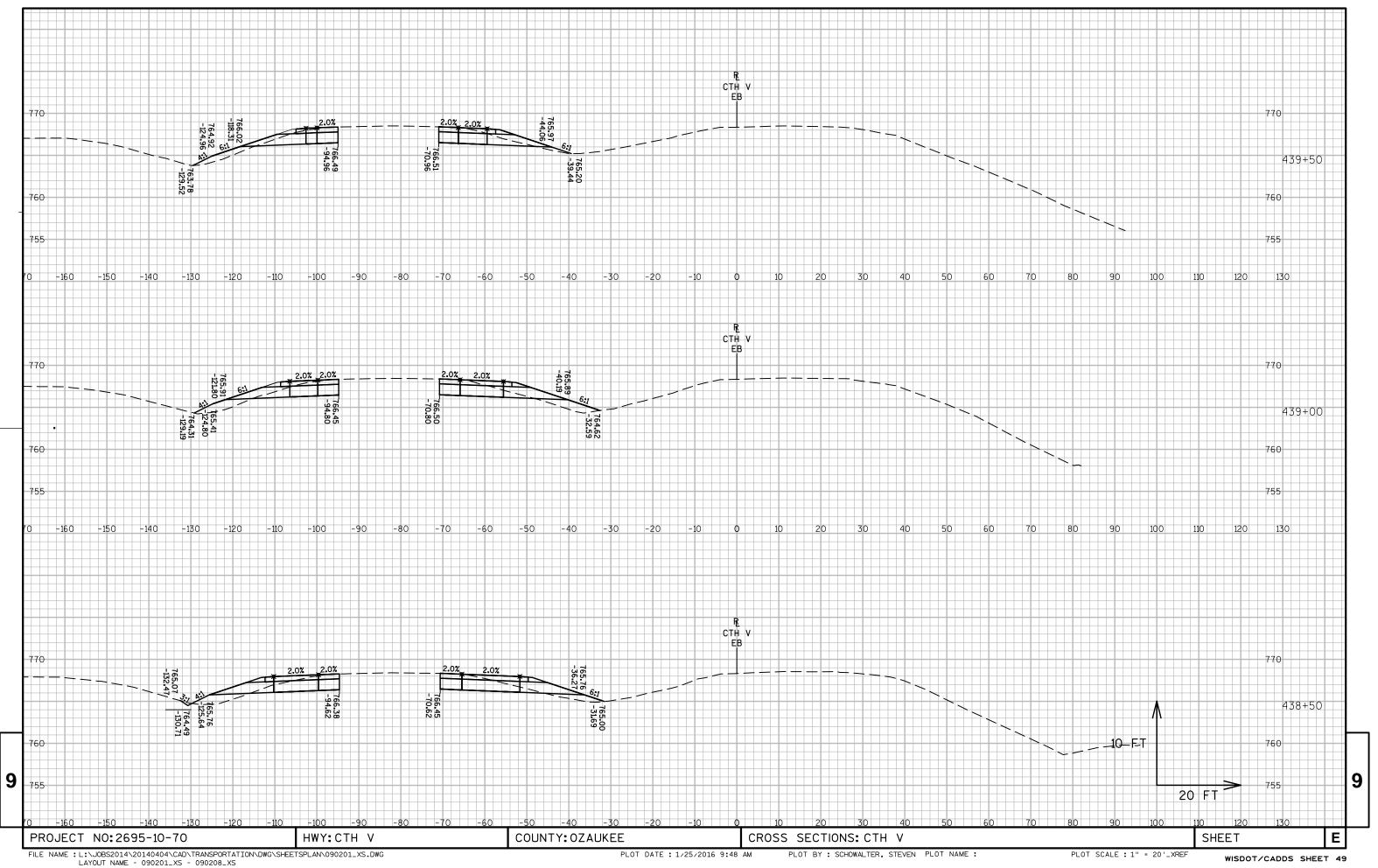


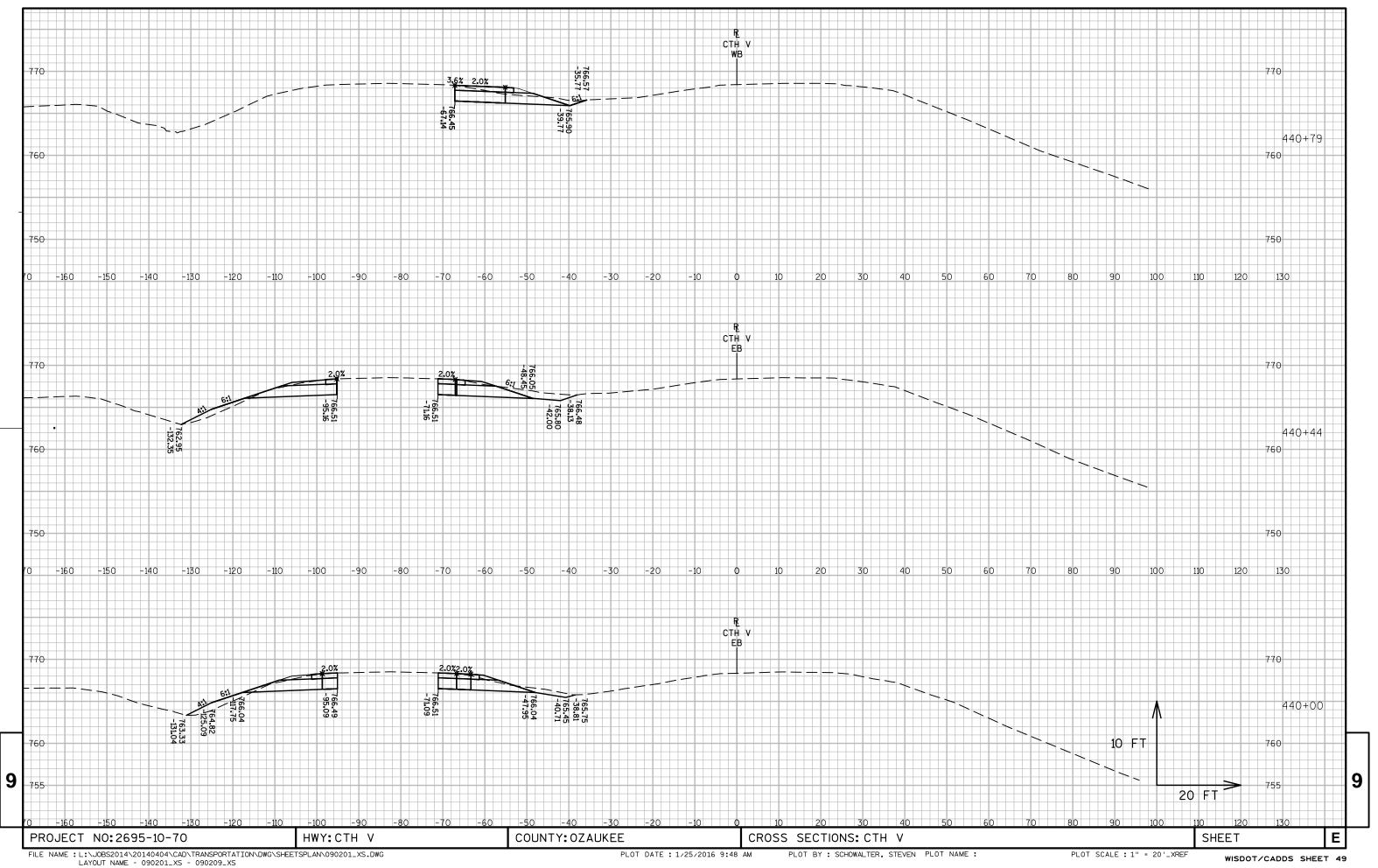


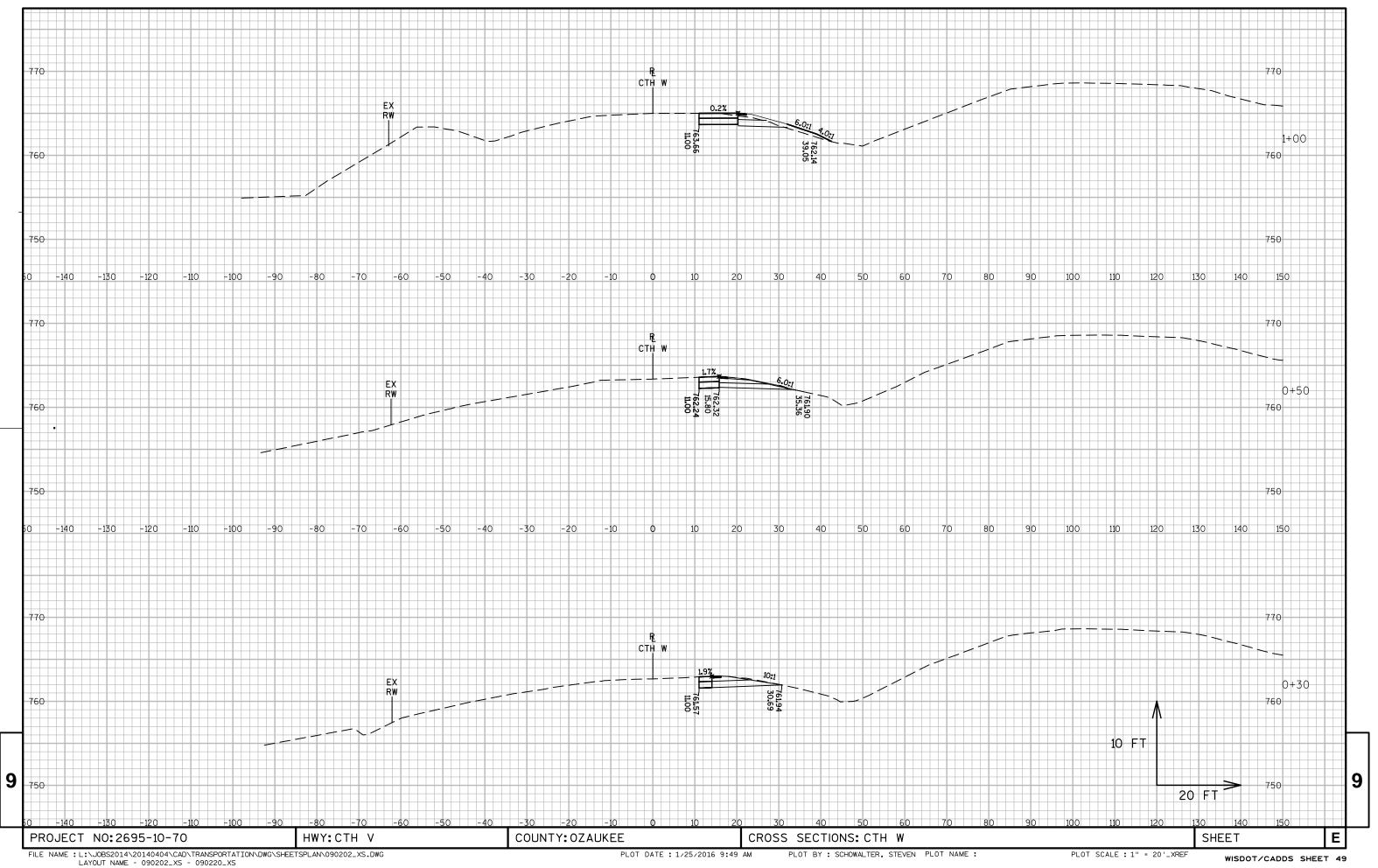


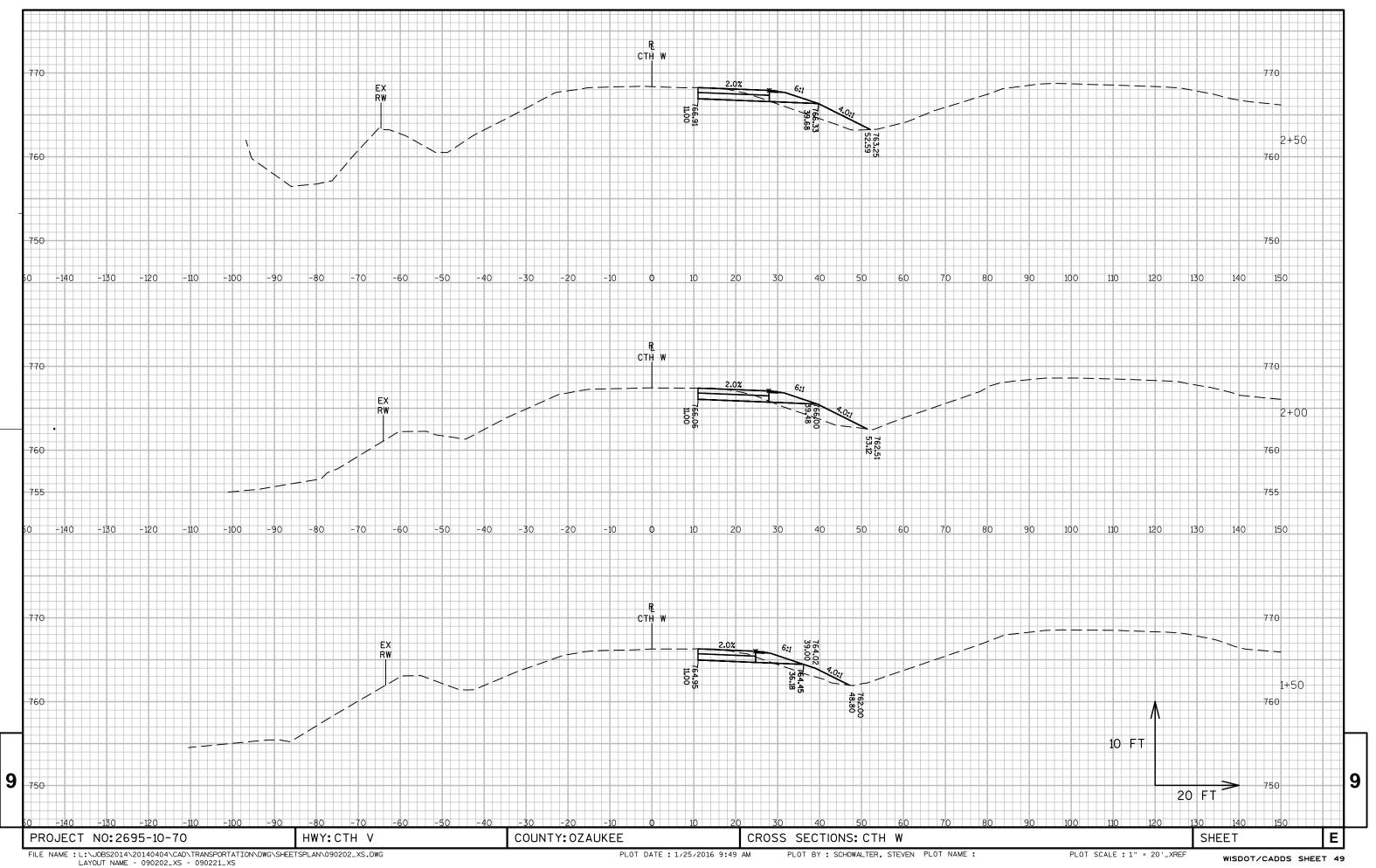


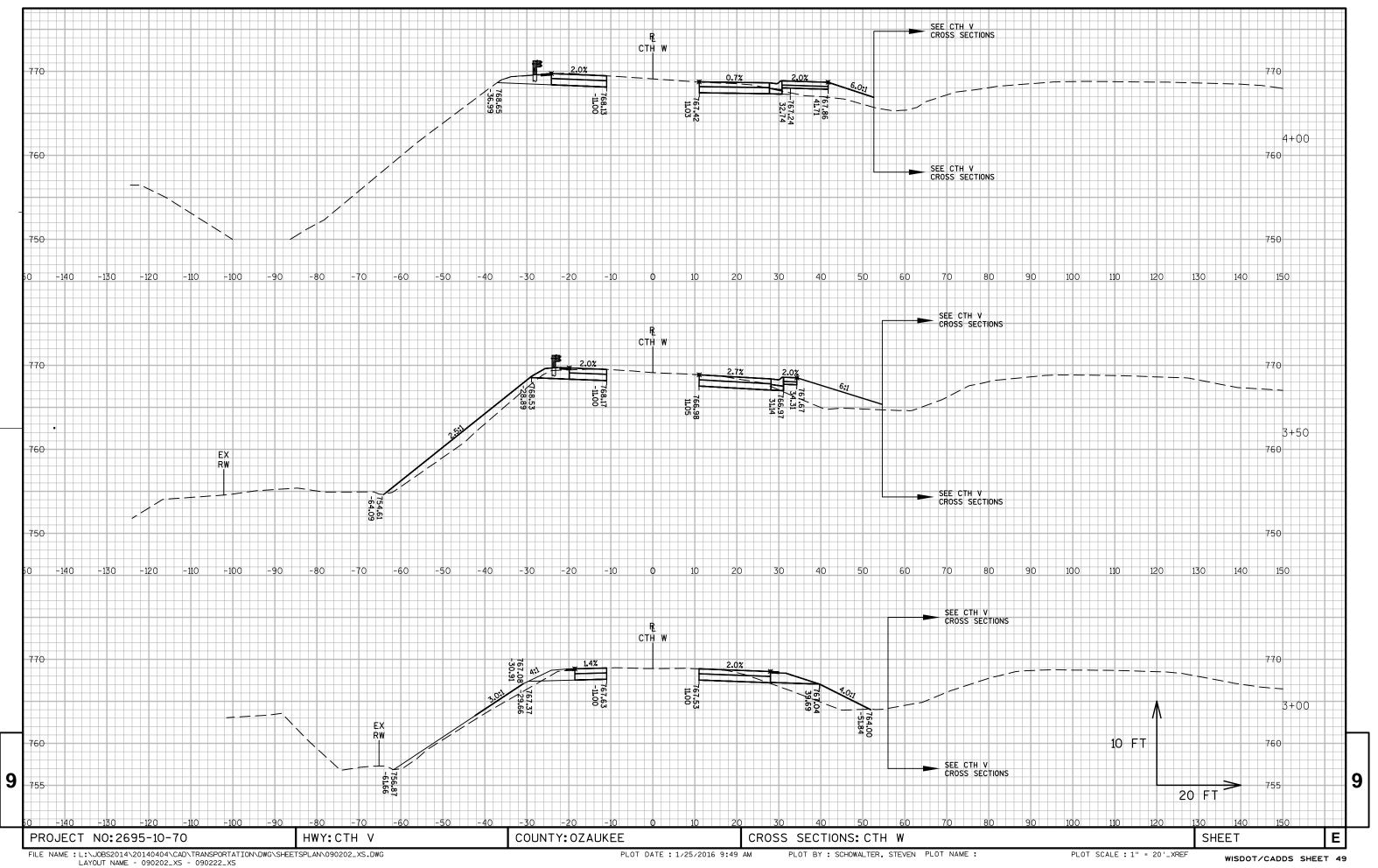


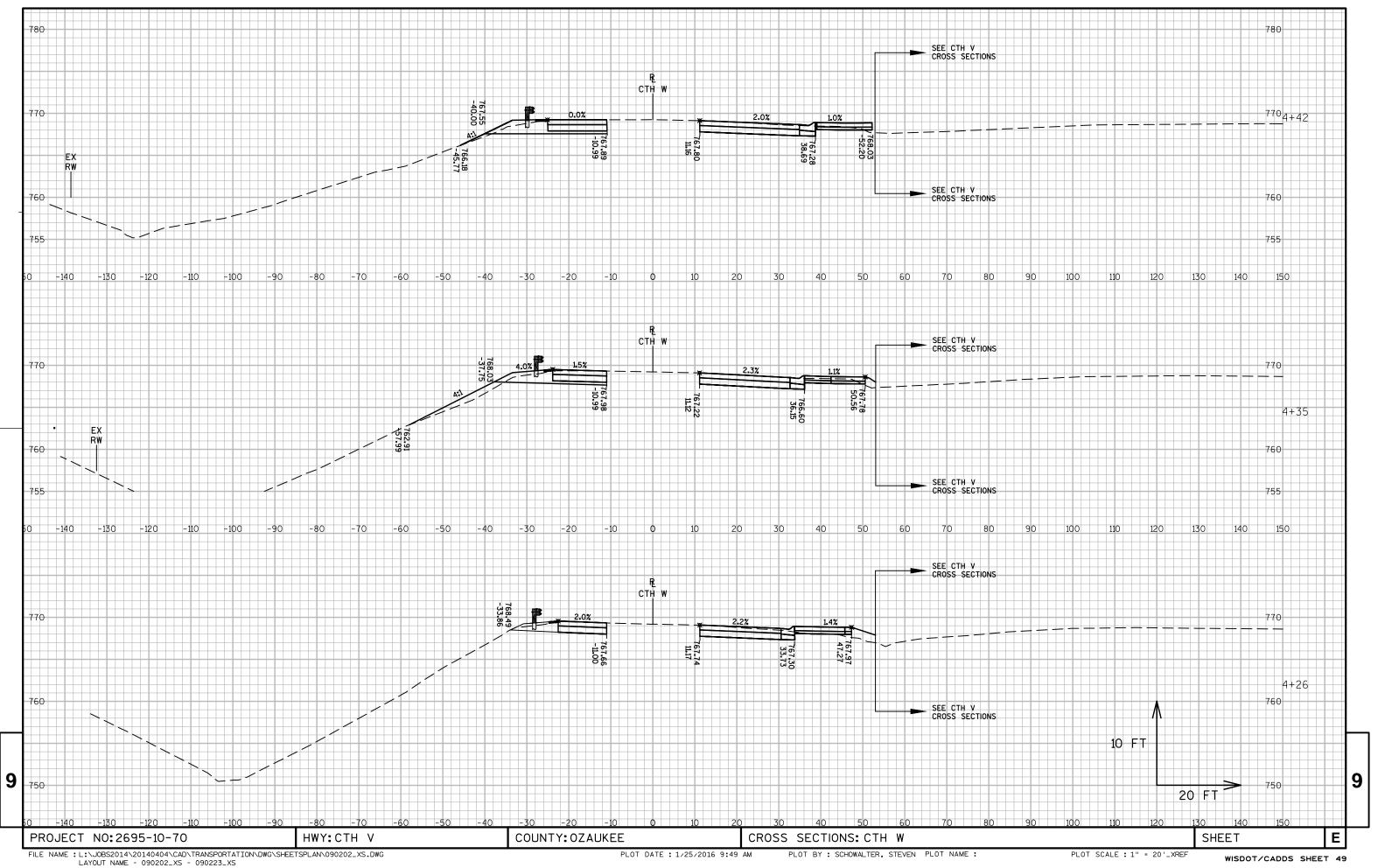


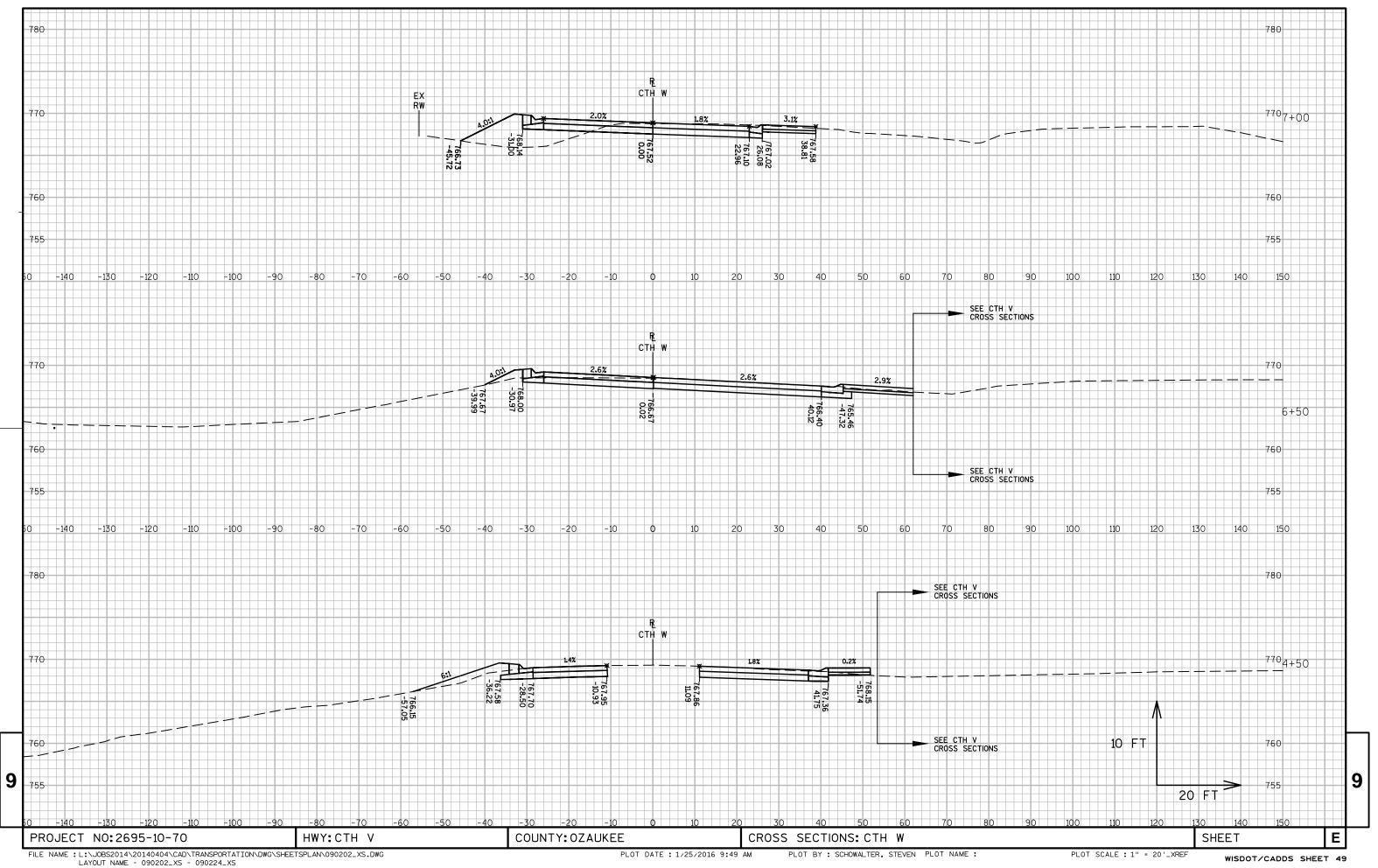


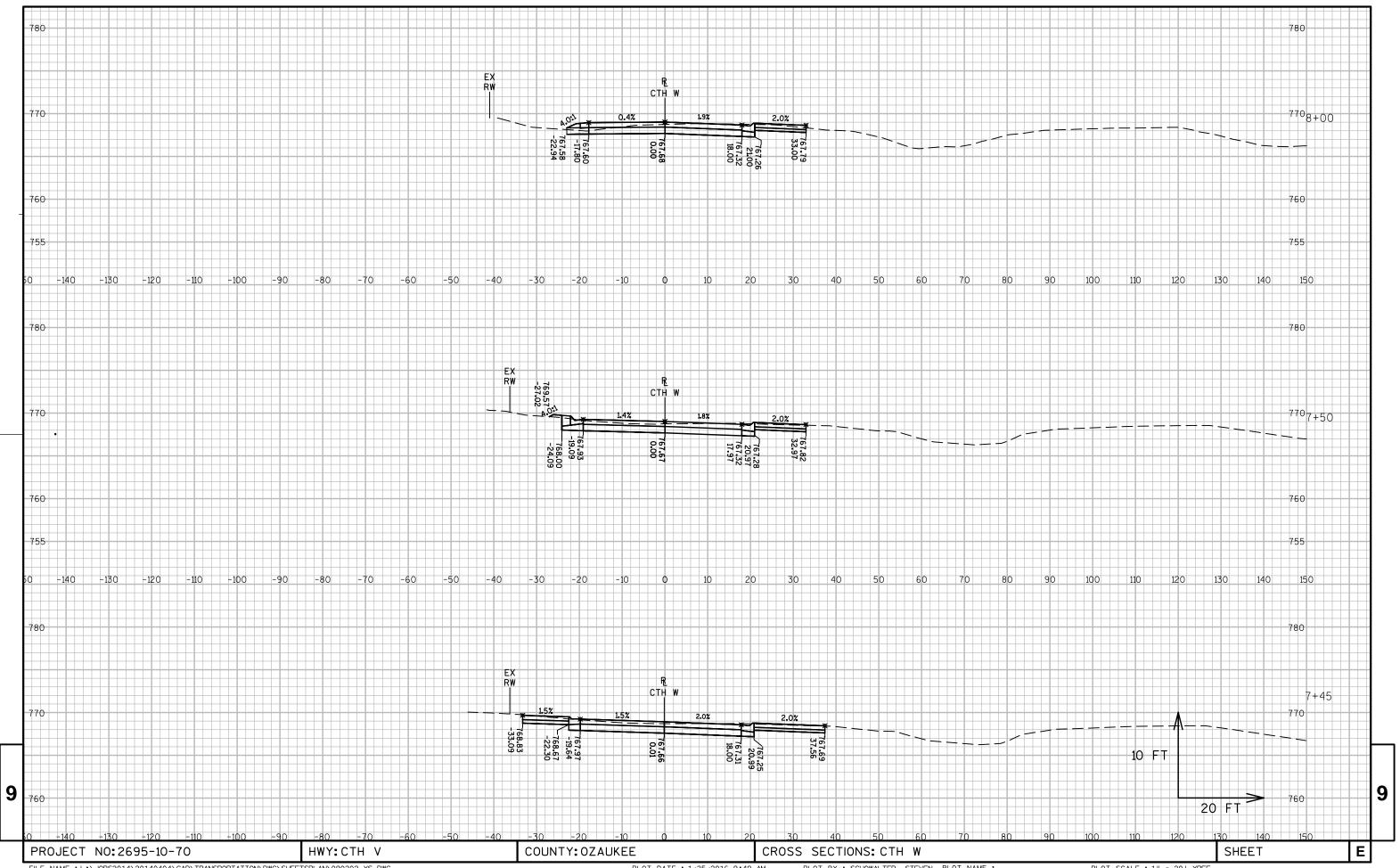


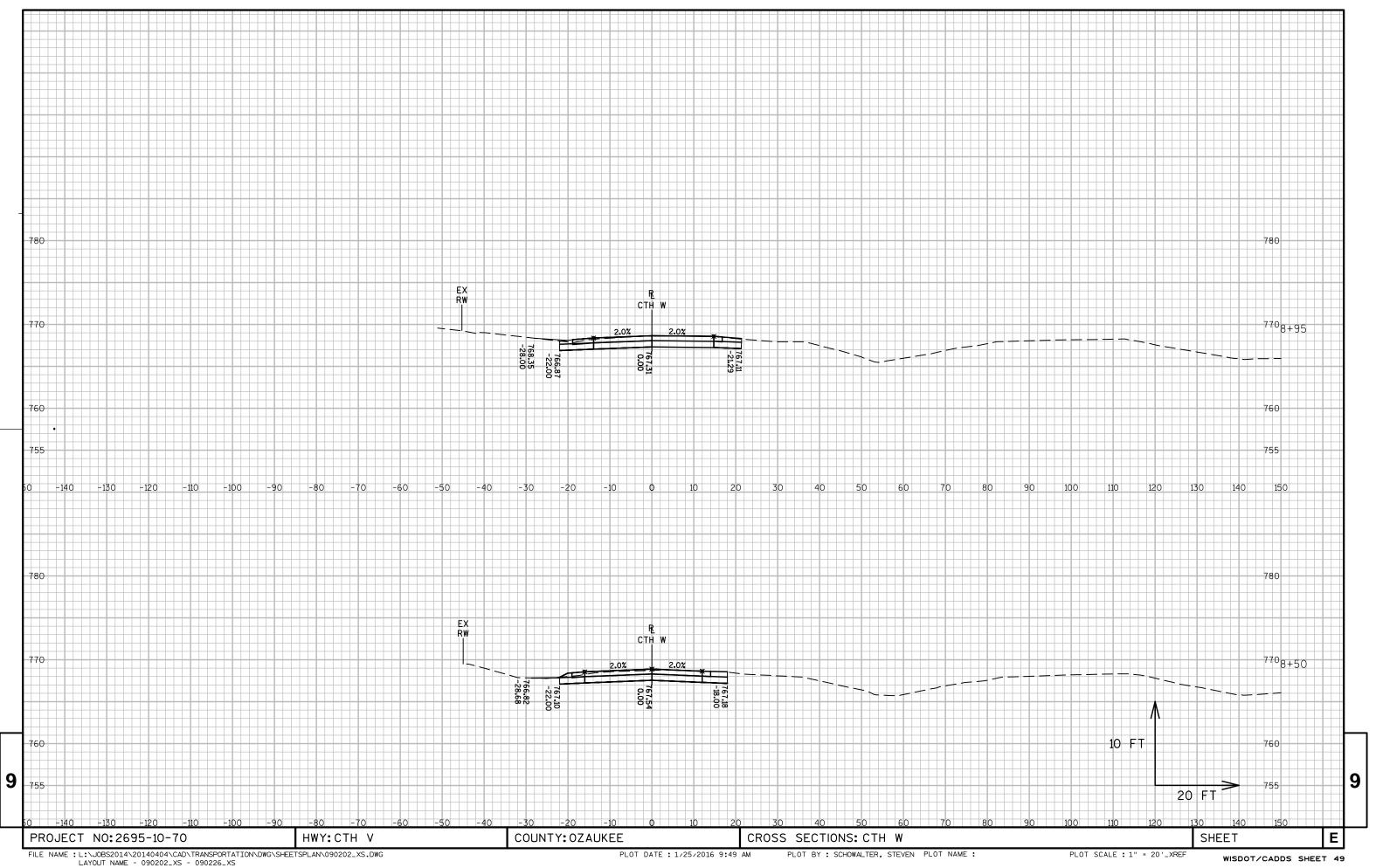












Notes



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