

ORDER OF SHEETS

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

TOTAL SHEETS = 72



DESIGN DESIGNATION

A.A.D.T. (2013)	= 7,550
A.A.D.T. (2033)	= 10,200
D.H.V. (2033)	= 1,314
D.D.	= 58/42
T.	= 9.3%
DESIGN SPEED	= 55 M.P.H.
ESALS	= 2,073,200

CONVENTIONAL SYMBOLS

PLAN

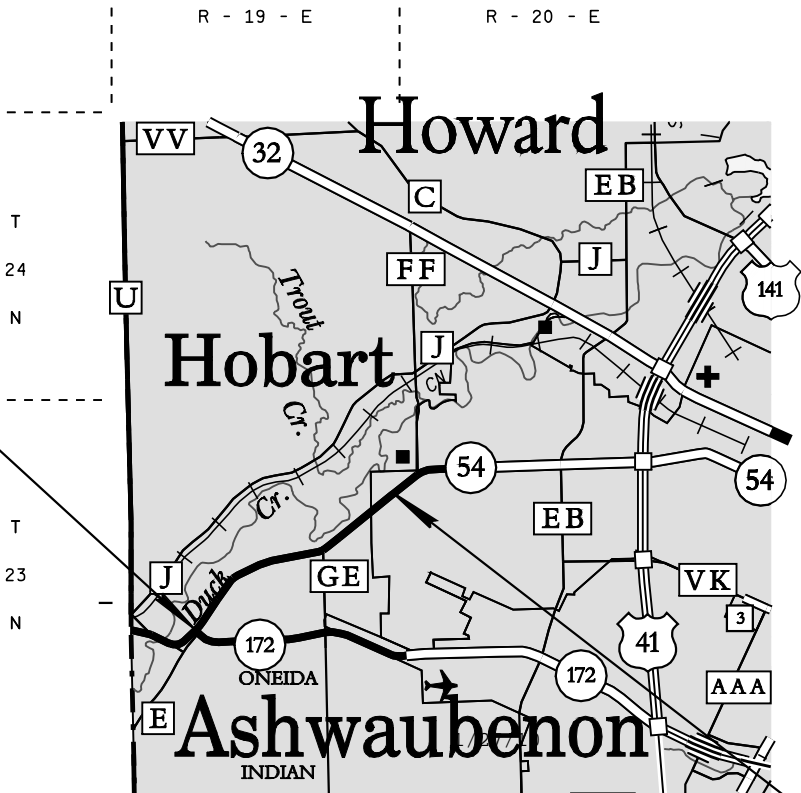
CORPORATE LIMITS	
PROPERTY LINE	
LOT LINE	
LIMITED HIGHWAY EASEMENT	
EXISTING RIGHT OF WAY	
PROPOSED OR NEW R/W LINE	
SLOPE INTERCEPT	
REFERENCE LINE	
EXISTING CULVERT	
PROPOSED CULVERT (Box or Pipe)	
COMBUSTIBLE FLUIDS	
MARSH AREA	
WOODED OR SHRUB AREA	

PROFILE

GRADE LINE	
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	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	

BEGIN PROJECT

STA 955+00
X = 58142.096
Y = 562961.395



END PROJECT

STA 1077+60.88

LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 2.235 MI.

COORDINATES ON THIS PLAN ARE APPROXIMATE
AND ARE FOR VISUAL PURPOSES ONLY.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STH 172 - CITY OF GREEN BAY
STH 172 - PLEASANT LANE
STH 54
BROWN COUNTY

STATE PROJECT NUMBER
9210-09-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9210-09-71	WISC 2013283	1

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	NE REGION
Designer	Q. D. CREAPEAU
Project Manager	A. FULCER
District Examiner	D. J. SEGERSTROM
District Supervisor	
C.O. Examiner	
APPROVED FOR DISTRICT OFFICE	
DATE: 01/30/13	
(Signature)	

UTILITIES

ROBERT MICHAELSON
CENTRAL BROWN COUNTY WATER AUTHORITY
1303 S 8TH ST
P.O. BOX 1090
MANITOWOC, WI 54221-1090
(920) 686-4354
rmichaelson@mpu.org

DENNIS BAER
NORTHEAST TELEPHONE COMPANY LLC
122 S ST AUGUSTINE ST
PULASKI, WI 54162-0860
(920) 822-8895
dennis.baer@nsight.com

LORIBUTRY
WISCONSIN PUBLIC SERVICE CORPORATION - ELECTRICITY
700 N ADAMS ST
P.O. BOX 19001
GREEN BAY, WI 54307-9001
(920) 433-1703
LButry@integrysgruop.com

LORIBUTRY
WISCONSIN PUBLIC SERVICE CORPORATION - GAS/PETROLEUM
700 N ADAMS ST
P.O. BOX 19001
GREEN BAY, WI 54307-9001
(920) 433-1703
LButry@integrysgruop.com

EMERGENCY CONTACT NUMBERS FOR WISCONSIN PUBLIC SERVICE

ELECTRIC 24 HOUR EMERGENCY SERVICE: 1-800-450-7240
GAS 24 HOUR EMERGENCY SERVICE: 1-800-450-7280



Call 811 3 Work Days Before You Dig
or Toll Free (800) 242-8511
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

GENERAL NOTES

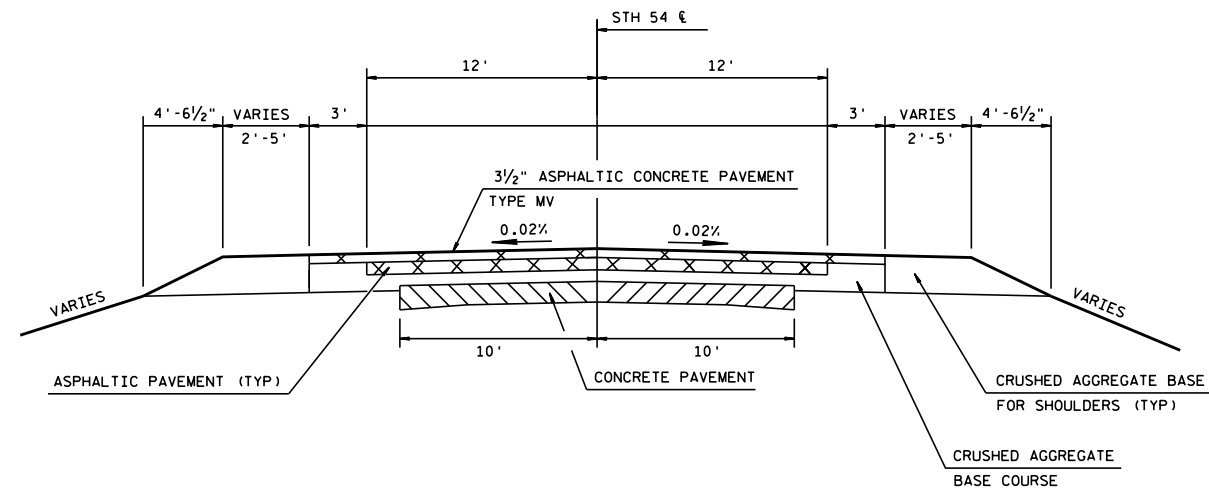
THE LOCATIONS OF EXISTING UTILITY FACILITIES AS SHOWN ON THE
PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY FACILITIES
WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

THE EXACT CONSTRUCTION LIMITS AND LOCATIONS OF ALL ENTRANCES,
SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

COORDINATES ON THIS PLAN ARE FOR VISUAL PURPOSES ONLY AND DO NOT
REFLECT THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS).

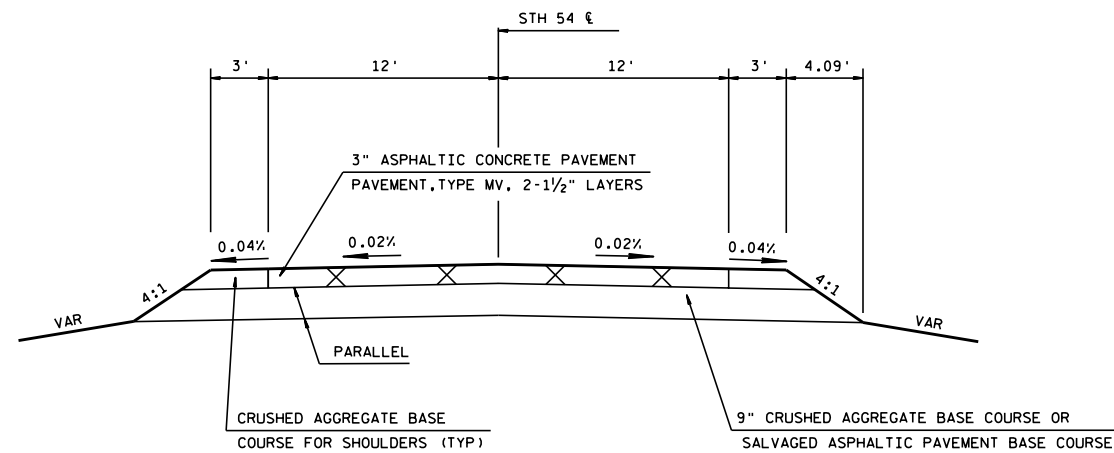
DNR AREA LIAISON

JAMES DOPERALSKI JR
DEPARTMENT OF NATURAL RESOURCES
NORTHEAST REGION
2984 SHAWANO AVE
GREEN BAY, WI 54313
920-662-5119
JAMES.DOPERALSKI@WISCONSIN.GOV



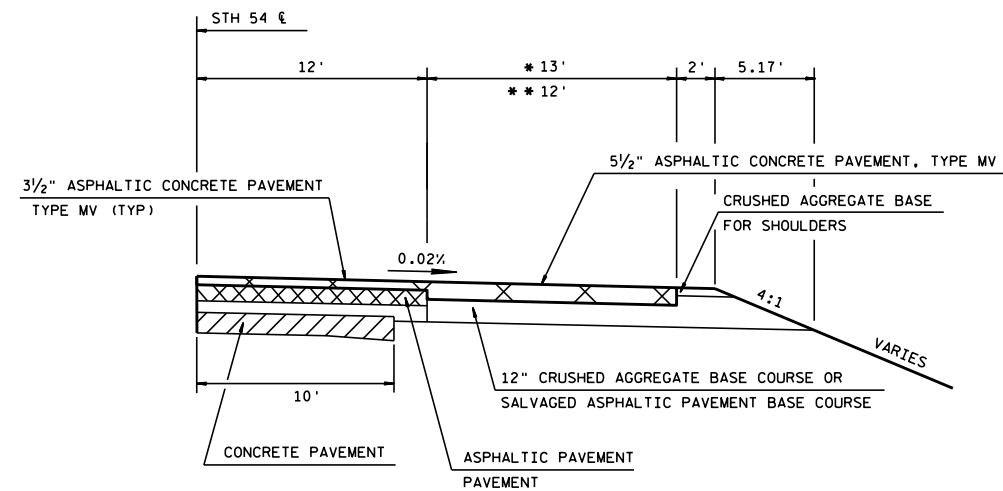
TYPICAL EXISTING CROSS SECTION FOR STH 54

947+60 - 1077+60.88



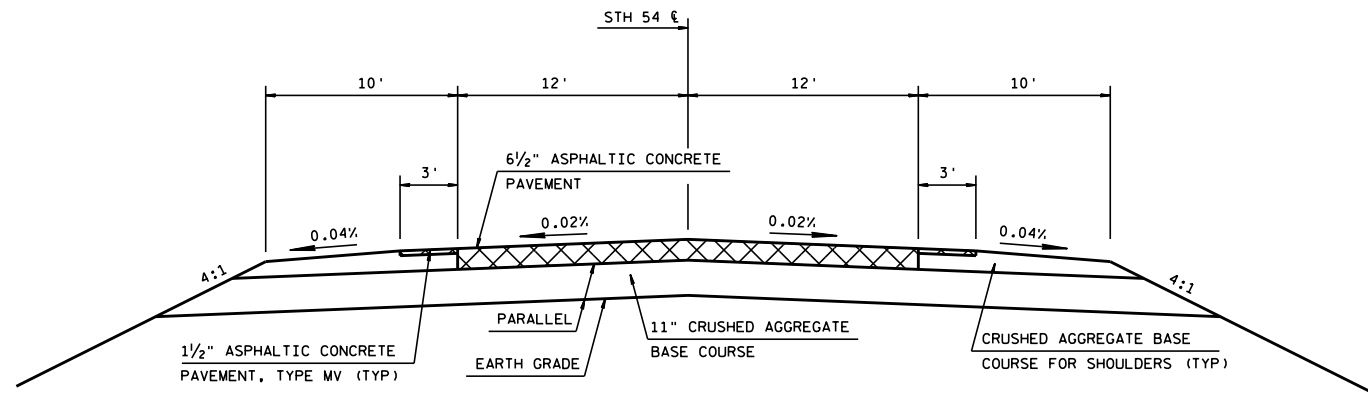
TYPICAL EXISTING CROSS SECTION FOR SIDE ROADS

OVERLAND RD.
BAY RIDGE CT
CTH GE
HAVEN PL

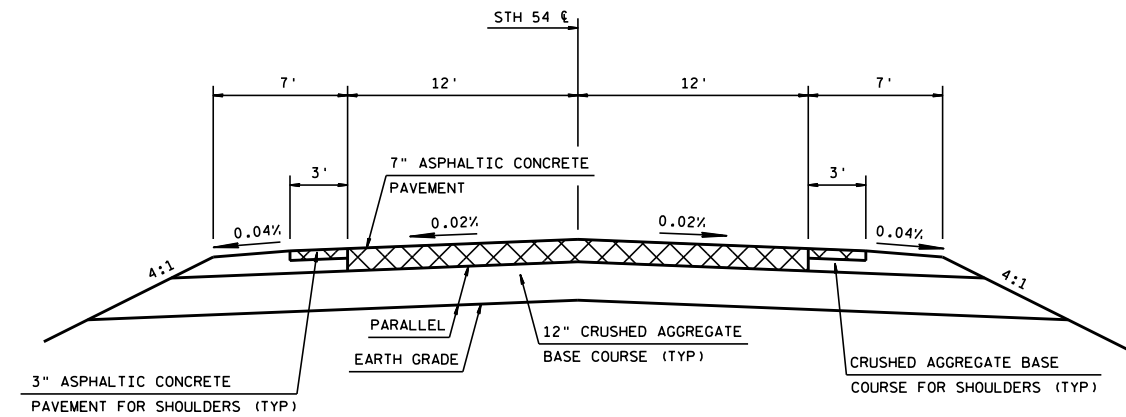


TYPICAL 1/2 EXISTING CROSS SECTION FOR STH 54 BYPASS / RIGHT TURN LANES

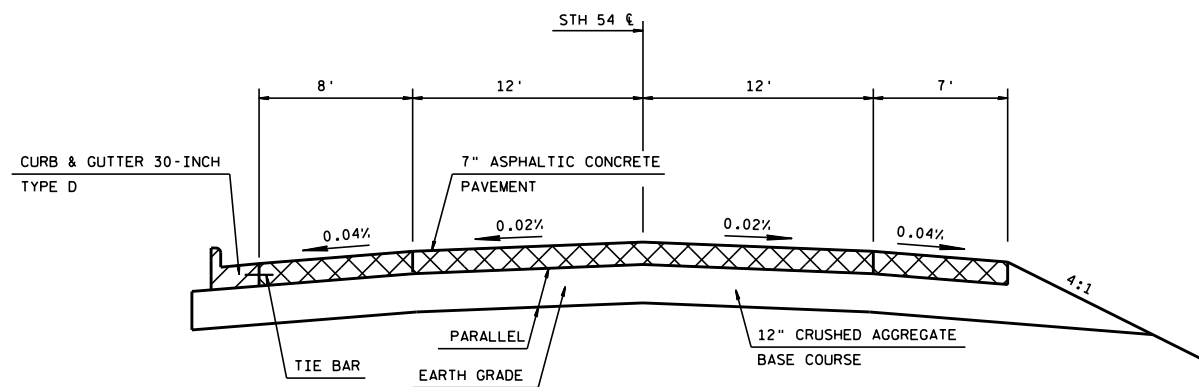
- * 975+70 - 983+47 STH 54,RT (BYPASS LANE)
- * 1027+00 - 1034+22 STH 54,LT (BYPASS LANE)
- ** 979+37 - 984+17 STH 54,LT (RIGHT TURN LANE)
- ** 1027+11 - 1030+00 STH 54,RT (RIGHT TURN LANE)
- ** 1031+22 - 1039+69 STH 54,RT (RIGHT TURN LANE)



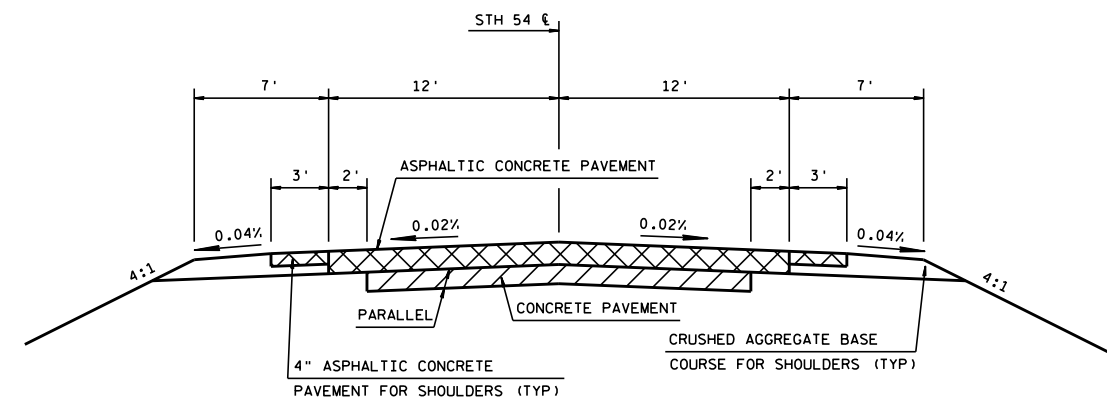
TYPICAL EXISTING CROSS SECTION FOR STH 54
STA 313+50 - STA 349+00



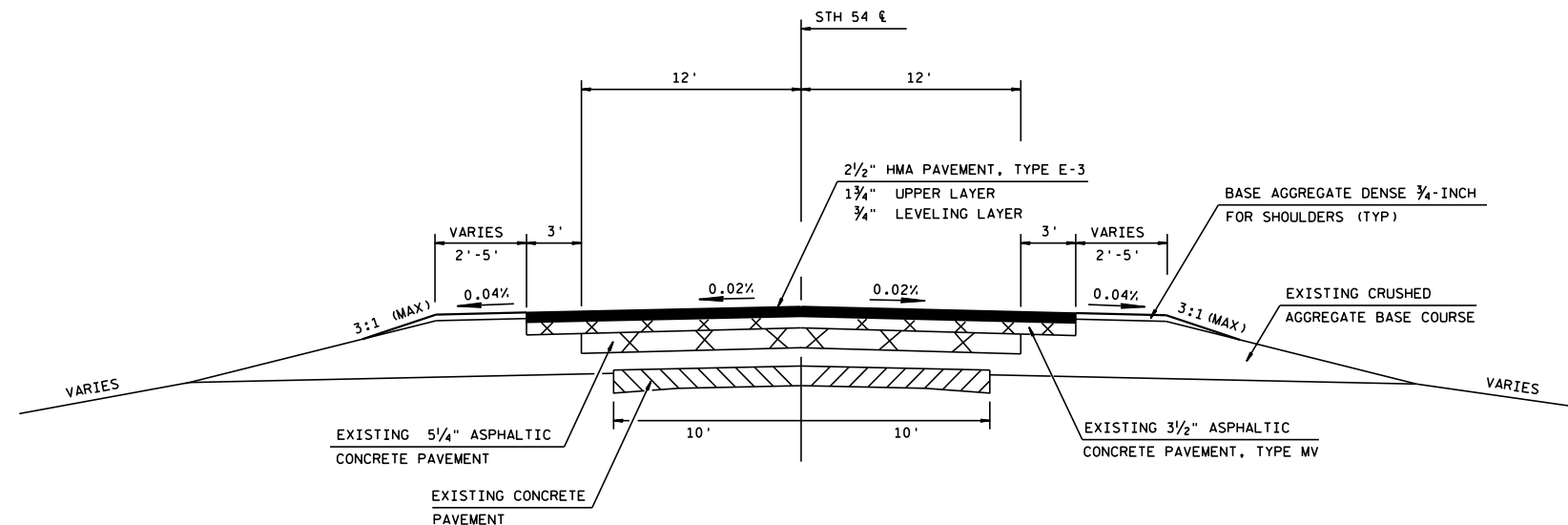
TYPICAL EXISTING CROSS SECTION FOR STH 54
STA 349+00 - STA 63+70
STA 76+90 - STA 79+00



TYPICAL EXISTING CROSS SECTION FOR STH 54
STA 63+70 - STA 76+90 (CURB & GUTTER LT)



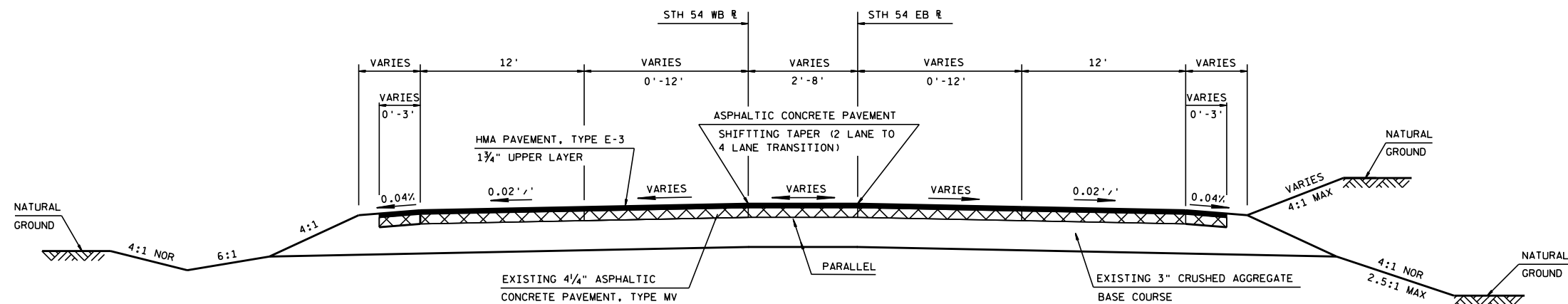
TYPICAL EXISTING CROSS SECTION FOR STH 54
STA 79+00 - STA 98+15
STA 100+13 - STA 104+77
STA 142+42 - STA 165+00



NOTE: MILL EXISTING PAVEMENT 1 1/2" (MIN) AT CENTERLINE
IF 0.02% CANNOT BE MAINTAINED A CROSS SLOPE OF
0.015% (MIN) TO 0.03% (MAX) WITH APPROVAL OF THE
ENGINEER MAY BE AN OPTION.

FINISHED TYPICAL CROSS SECTION FOR STH 54

955+00 - 1077+60.88

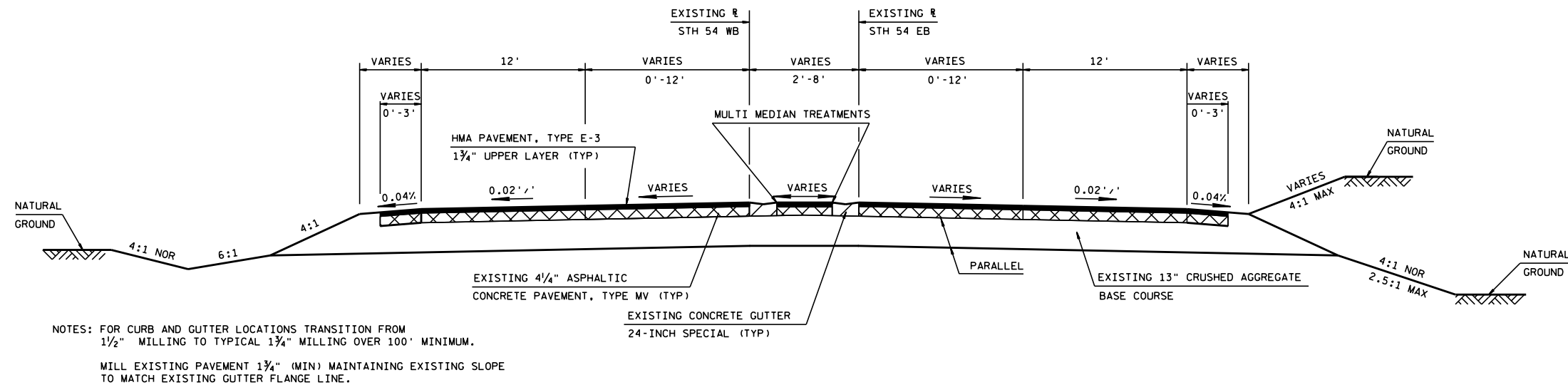


NOTE: MILL EXISTING PAVEMENT 1 1/2" (MIN) AT CENTERLINE
IF 0.02% CANNOT BE MAINTAINED A CROSS SLOPE OF
0.015% (MIN) TO 0.03% (MAX) WITH APPROVAL OF THE
ENGINEER MAY BE AN OPTION.

AT CURB AND GUTTER LOCATIONS TRANSITION FROM 1 1/2"
MILLING TO TYPICAL 1 3/4" MILLING OVER 100' (MIN).

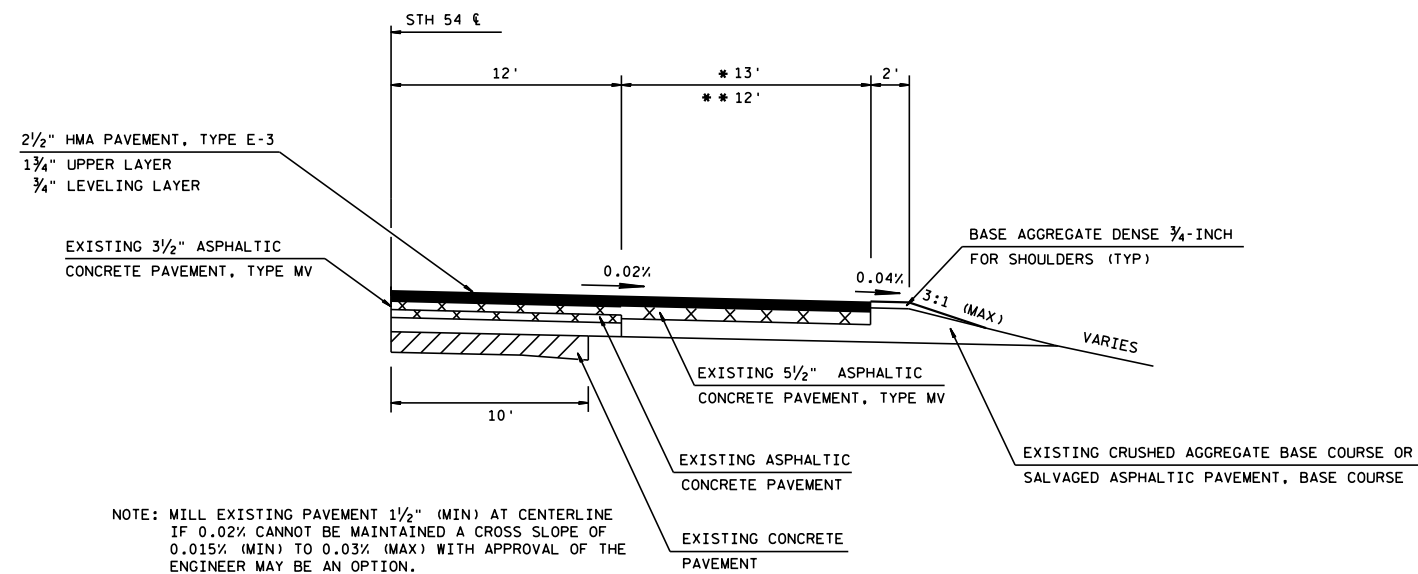
FINISHED TYPICAL CROSS SECTION FOR STH 54

1068+50 - 1073+06



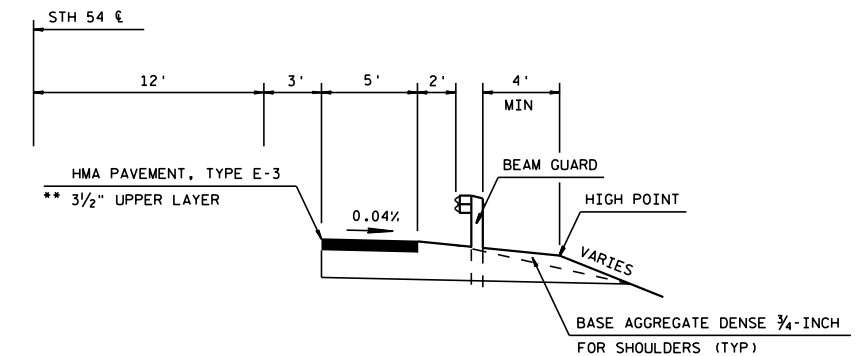
FINISHED TYPICAL CROSS SECTION FOR STH 54

1073+19 - 1077+60.88



1/2 FINISHED TYPICAL CROSS SECTION FOR STH 54 BYPASS / TURN LANES

- * 975+70 - 983+47 STH 54, RT (BYPASS LANE)
- * 1027+00 - 1034+22 STH 54, LT (BYPASS LANE)
- ** 979+37 - 984+17 STH 54, LT (RIGHT TURN LANE)
- ** 1027+11 - 1030+00 STH 54, RT (RIGHT TURN LANE)
- ** 1031+22 - 1039+69 STH 54, RT (RIGHT TURN LANE)



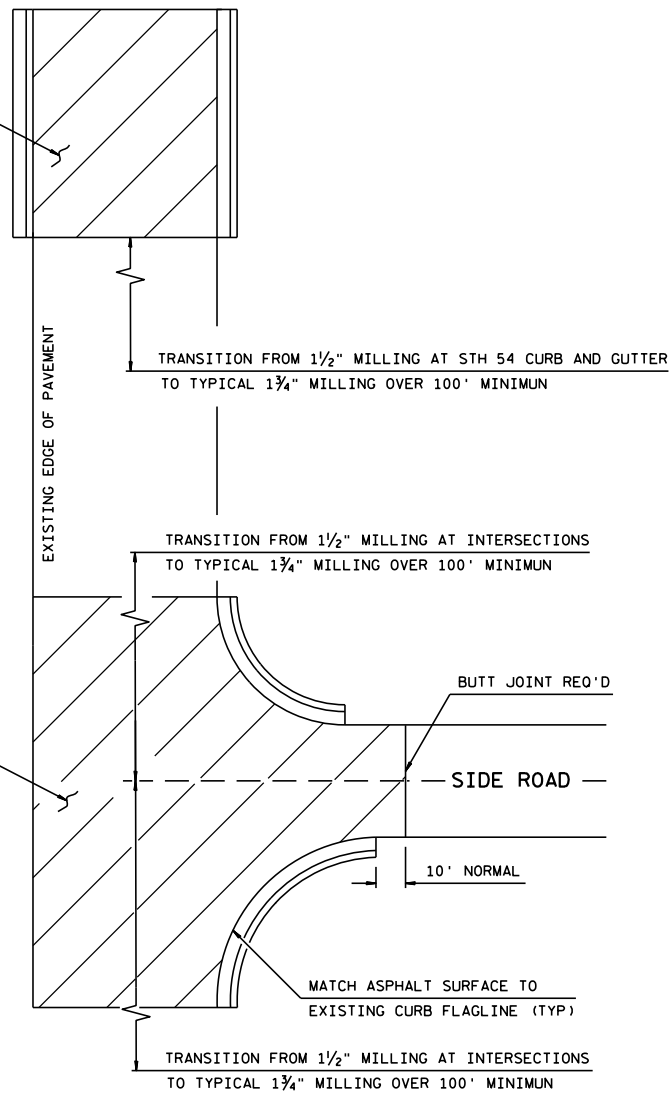
- * MILL EXISTING PAVEMENT 1 1/2" (MIN) AT CENTERLINE
IF 0.02% CANNOT BE MAINTAINED A CROSS SLOPE OF
0.015% (MIN) TO 0.03% (MAX) WITH APPROVAL OF THE
ENGINEER MAY BE AN OPTION.

FINISHED TYPICAL CROSS SECTION FOR STH 54 AT BEAM GUARD

- * 1022+90 - 1028+00 STH 54, LT, EXISTING ASPHALT SHOULDER TO BE MILLED
- * 1023+07 - 1027+11 STH 54, RT, EXISTING ASPHALT SHOULDER TO BE MILLED
- ** 1042+37 - 1045+50 STH 54, LT, EXISTING ASPHALT SHOULDER, REMOVE FULL DEPTH, REPLACE
- ** 1042+23 - 1045+35 STH 54, RT, EXISTING ASPHALT SHOULDER, REMOVE FULL DEPTH, REPLACE

(ALSO SEE "CONSTRUCTION DETAILS AND MISCELLANEOUS QUANTITIES")

- * MILL $1\frac{3}{4}$ " DEPTH TO MATCH EXISTING CROSS SLOPE AND EXISTING CURB AND GUTTER FLANGE LINE
- * PLACE $1\frac{3}{4}$ " UPPER LAYER ONLY THROUGH INTERSECTION



- * MILL $1\frac{3}{4}$ " DEPTH TO MATCH EXISTING CROSS SLOPE AND EXISTING CURB AND GUTTER FLANGE LINE
- * PLACE $1\frac{3}{4}$ " UPPER LAYER ONLY THROUGH INTERSECTION

BUTT JOINT REQ'D

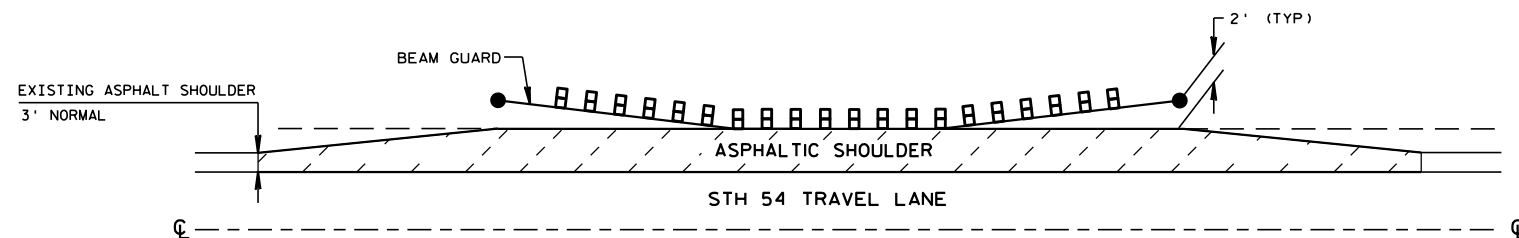
SIDE ROAD

10' NORMAL

MATCH ASPHALT SURFACE TO
EXISTING CURB FLAGLINE (TYP)TRANSITION FROM $1\frac{1}{2}$ " MILLING AT INTERSECTIONS
TO TYPICAL $1\frac{3}{4}$ " MILLING OVER 100' MINIMUM

MILL AND OVERLAY DETAIL AT SIDEROAD INTERSECTIONS AND STH 54 CURB AND GUTTER LOCATIONS

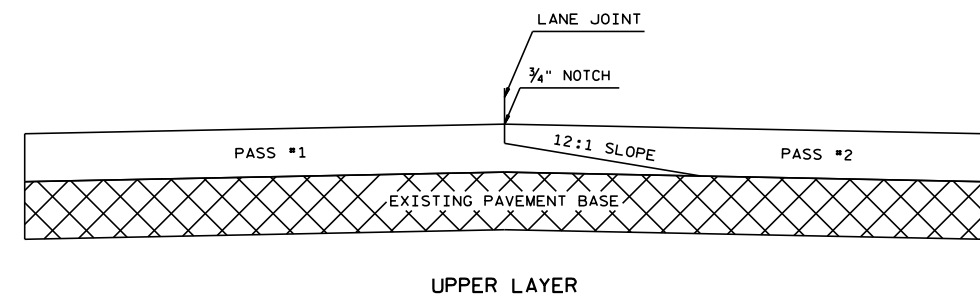
OVERLAND ROAD
BAY RIDGE ROAD
CTH GE
HAVEN PL
STH 54 CURB AND GUTTER LOCATIONS



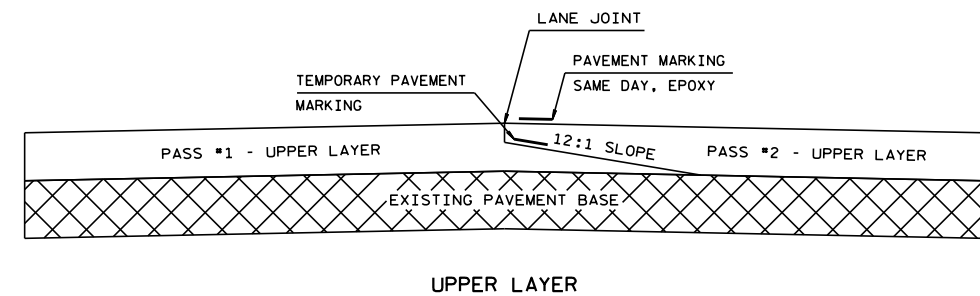
ASPHALTIC SHOULDER DETAIL AT GUARDRAIL

(SEE ALSO: "TYPICAL FINISHED CROSS SECTION" AND "STANDARD DETAIL DRAWINGS")

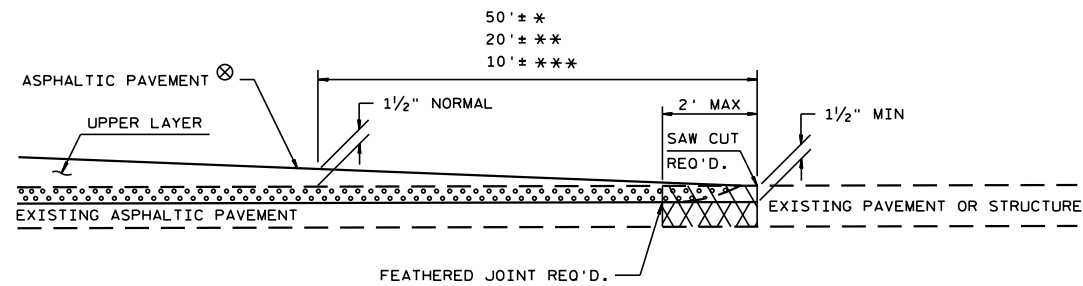
1022+90 - 1028+00 STH 54, LT. (MILL ONLY)
1023+07 - 1027+11 STH 54, RT. (MILL ONLY)
1042+37 - 1045+50 STH 54, LT. (TO BE REMOVED & REPLACED)
1042+23 - 1045+35 STH 54, RT. (TO BE REMOVED & REPLACED)



TYPICAL PAVEMENT CROSS SECTION AT NOTCHED WEDGE LONGITUDINAL JOINT



PAVEMENT MARKING DETAIL FOR TAPERED OVERLAPPING JOINTS IN ASPHALTIC PAVEMENTS

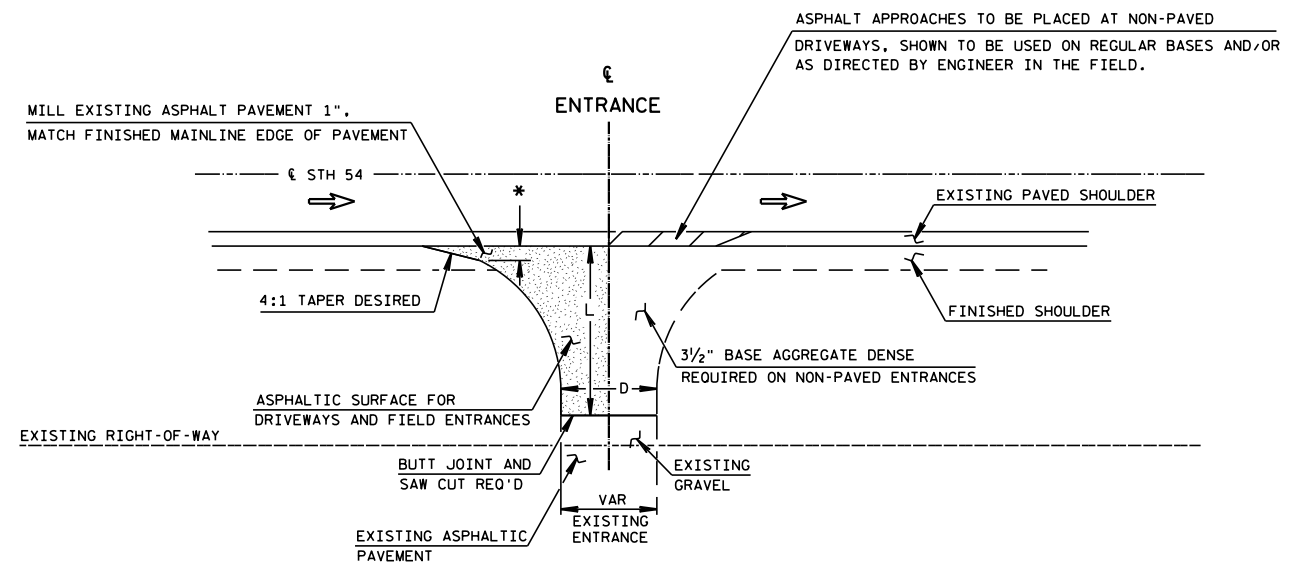


⊗ SEE TYPICAL CROSS SECTION FOR
PAVEMENT TYPE AND THICKNESS
OF INDIVIDUAL COURSES

- REMOVING ASPHALTIC PAVEMENT, MILLING
- REMOVING ASPHALTIC SURFACE, BUTT JOINTS (FULL DEPTH REMOVAL OPTIONAL)
- ASPHALTIC WEDGING (FULL DEPTH REMOVAL OPTION)

BUTT JOINT DETAIL FOR MILLED ASPHALTIC PAVEMENTS

- * MAINLINE
- ** SIDEROADS
- *** PRIVATE ENTRANCES



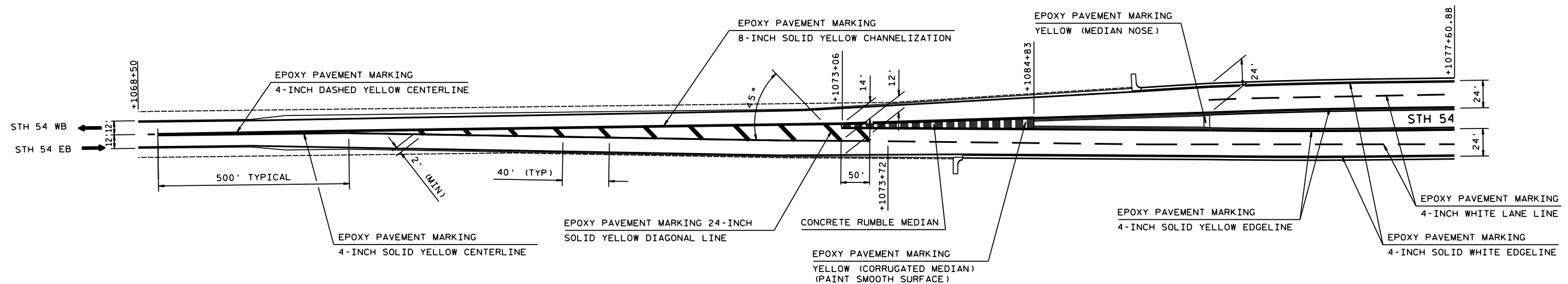
L=VARIABLE, EXACT LENGTH TO BE DETERMINED
IN THE FIELD BY THE ENGINEER.
BLEND BACK ON THE ENTRANCE FAR ENOUGH TO
GET A SMOOTH PROFILE.

* 3' MAX. OR TO EXISTING
SHOULDER WHICH EVER IS LESS.

D=DRIVEWAY WIDTH
D= VARIES, 20' TYP FOR PE'S, FARM ENTRANCES (16' MIN - 24')MAX)
D= VARIES, 28' TYP COMMERCIAL ENTRANCES

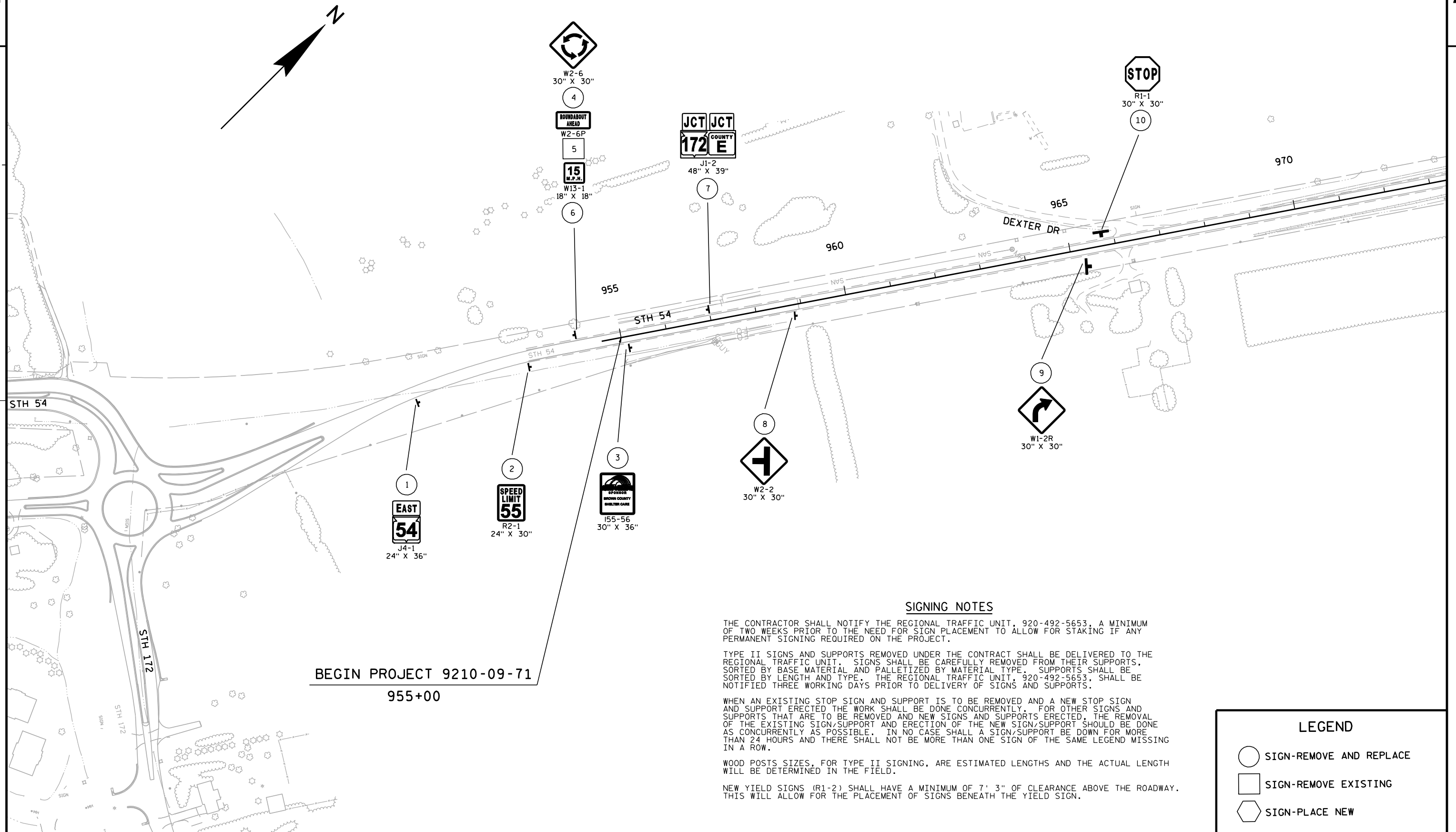
PLAN VIEW

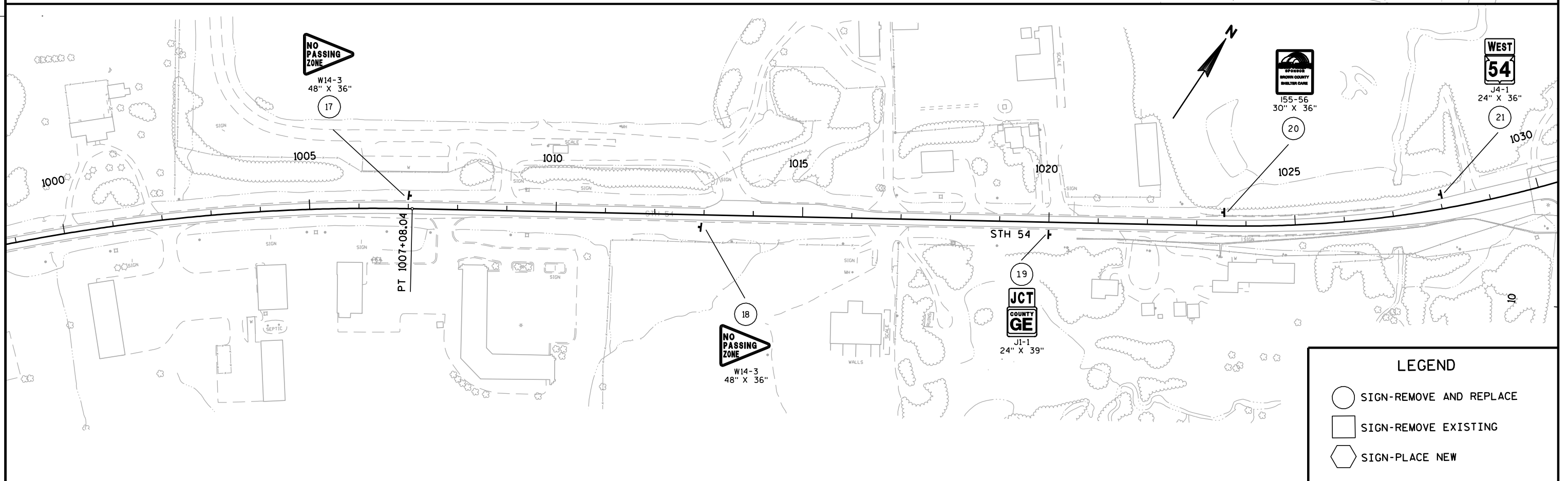
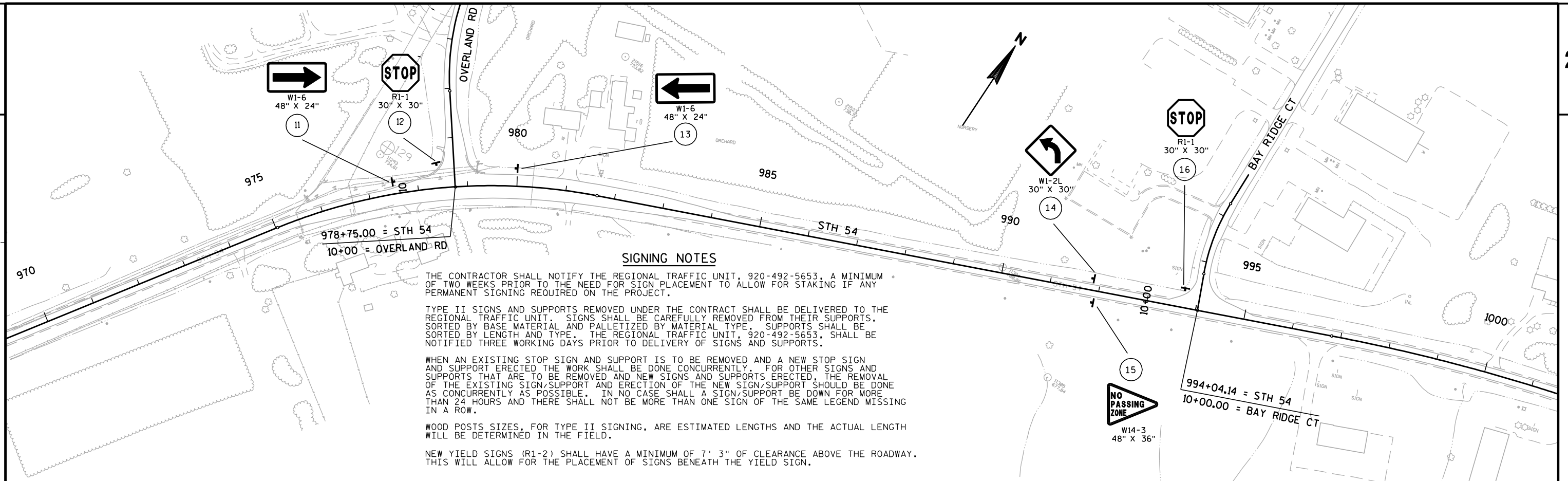
EXISTING RURAL DRIVEWAY DETAIL

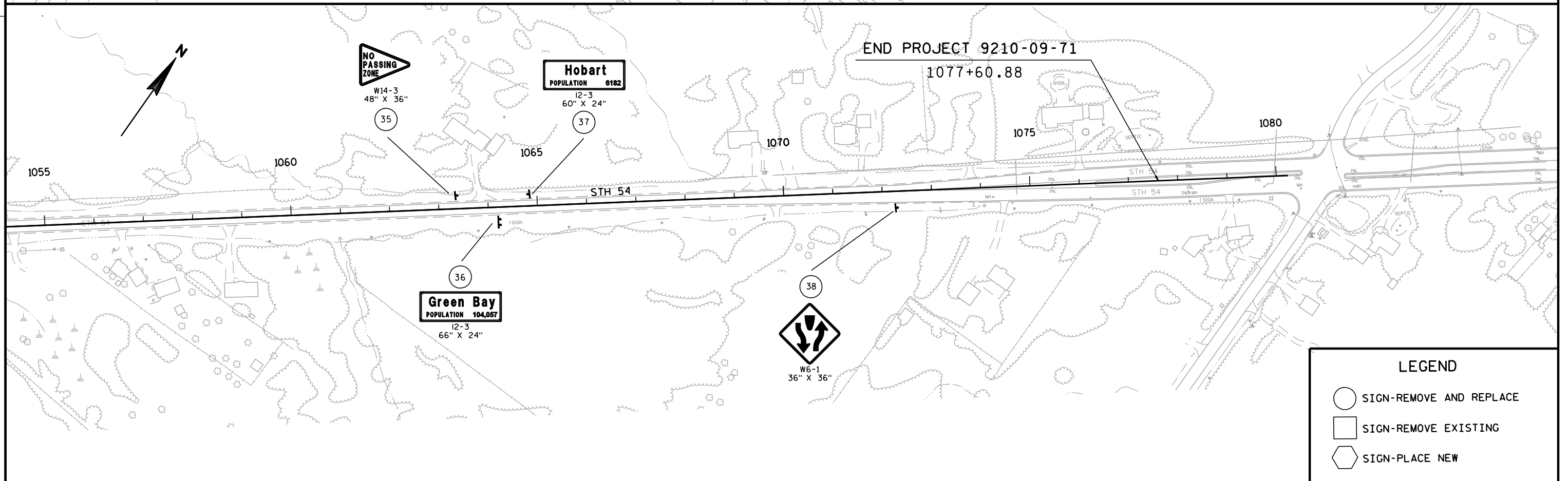
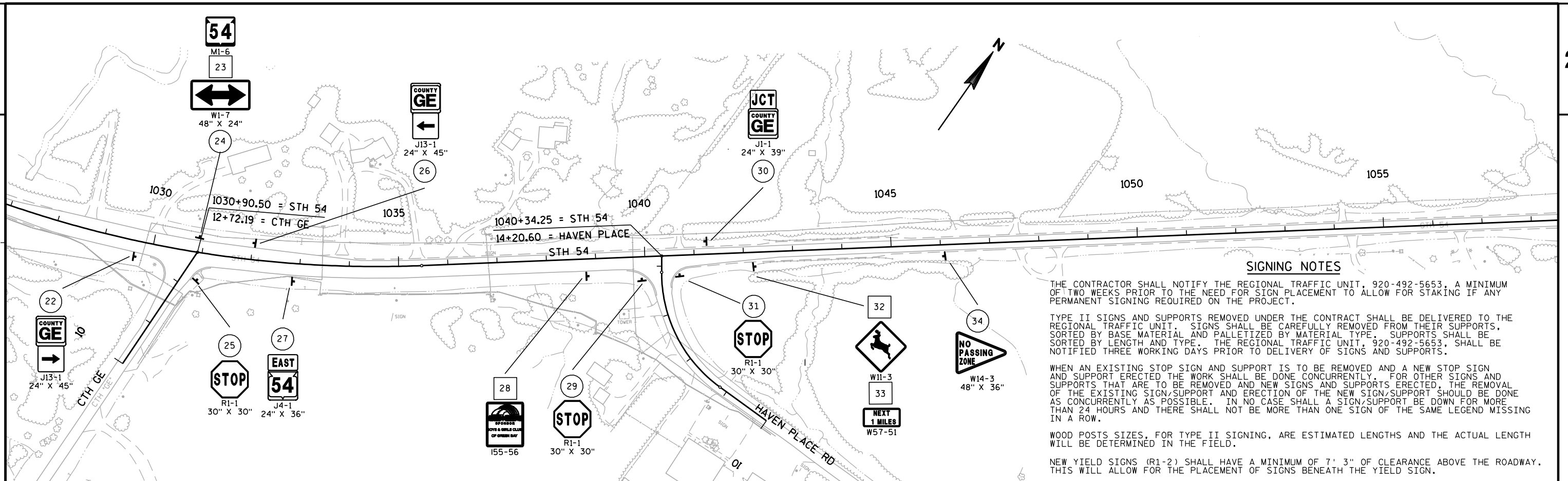


PAVEMENT MARKING DETAIL AT 2-LANE TO 4-LANE TRANSITION

(SEE STANDARD DETAIL DRAWING FOR PAVEMENT MARKING BEYOND SHIFTING TAPER)







GENERAL NOTES:

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

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

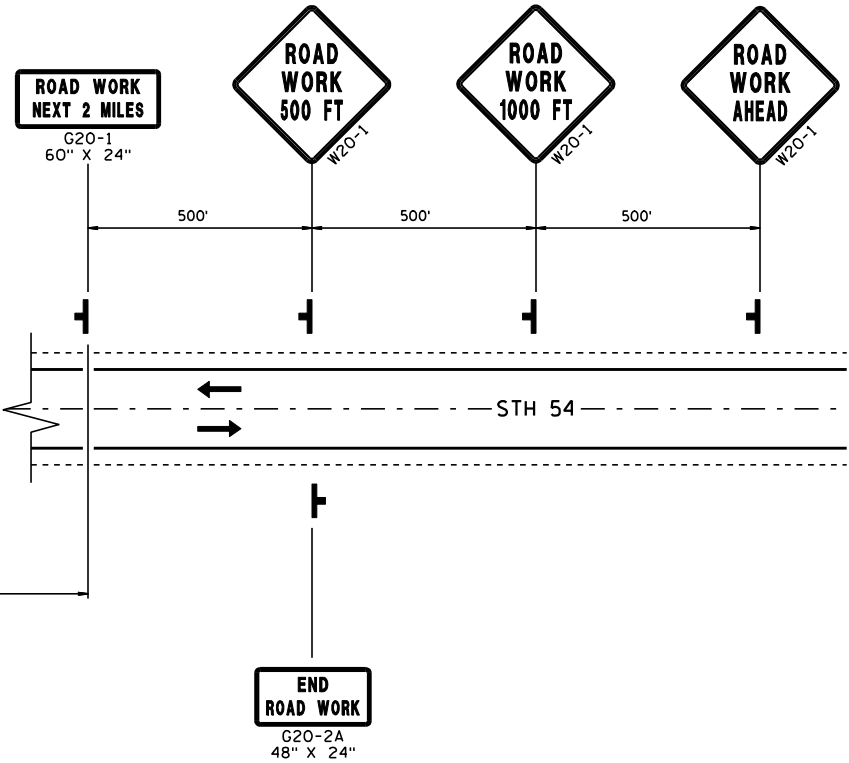
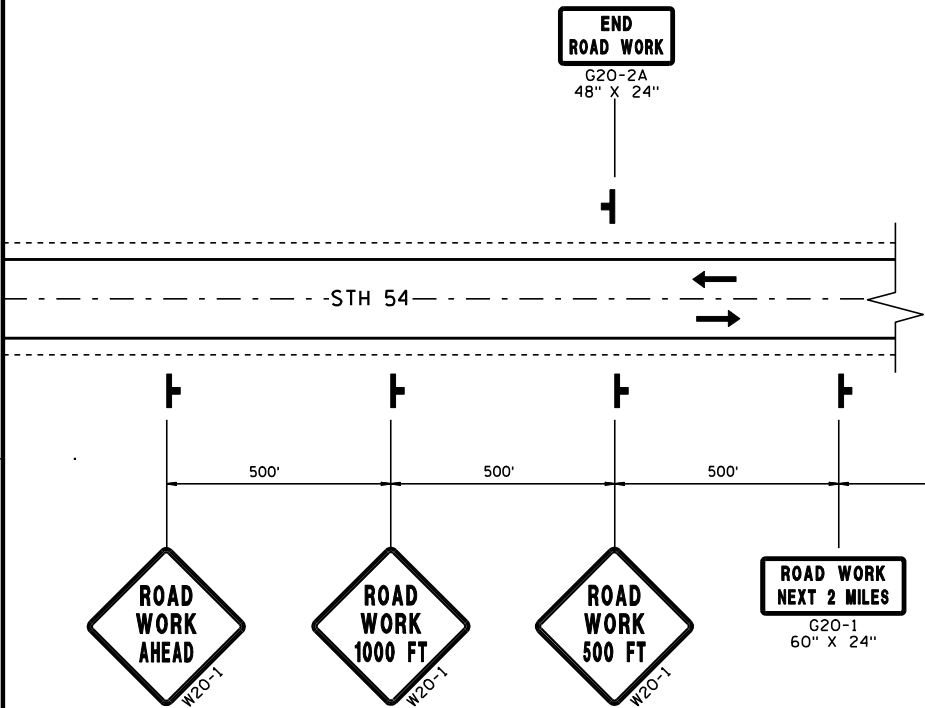
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"W0" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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


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




TRAFFIC CONTROL ADVANCED WARNING DETAIL

SYMBOLS



DIRECTION OF TRAFFIC FLOW

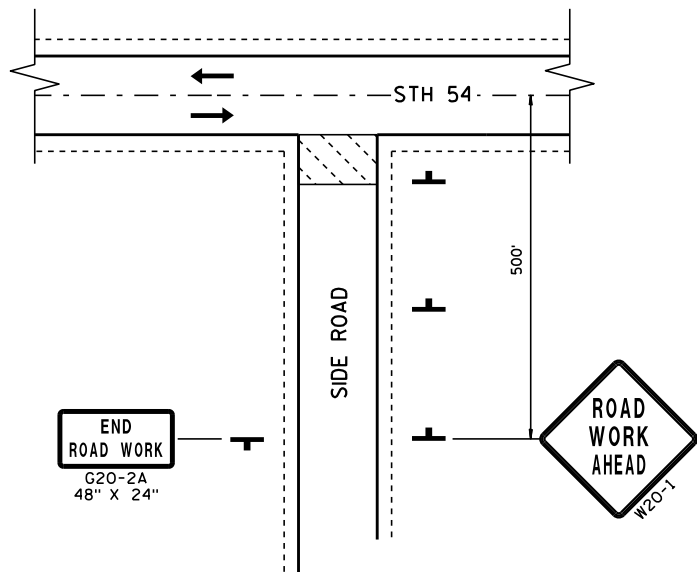


SIGNS ON PORTABLE OR PERMANENT SUPPORT

GENERAL NOTES:

WHEN MAINLINE FLAGGERS CANNOT CONTROL SIDEROAD TRAFFIC, APPROPRIATE SIGNING AND ADDITIONAL FLAGGERS SHALL BE PROVIDED. THE COST SHALL BE INCIDENTAL TO TRAFFIC CONTROL ITEM.

"ROAD WORK AHEAD" (W20-1) SIGNS SHALL BE PLACE 500 FT (MAX.) OR AT THE LAST INTERSECTION, WHICHEVER IS CLOSER.



"FLAGGER" (W20-7A) SIGNS SHALL BE IN USE DURING MILLING AND PAVING OPERATIONS. LOCATIONS TO FIT FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER.



IF WORK OPERATIONS CREATE A BUMP TO THE TRAVEL LANE (S), "BUMP" (W08-1) SIGNS SHALL BE IN USE FOR BOTH DIRECTIONS. LOCATION TO FIT FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER.



"GROOVED PAVEMENT" (W8-52) SIGNS SHALL BE IN USE AT THE BEGINNING OF MILLED SURFACES. LOCATIONS TO FIT FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER.

SYMBOLS



WORK AREA



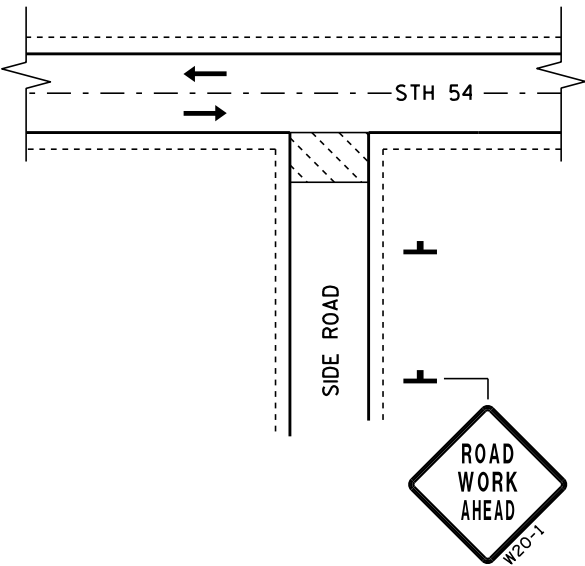
DIRECTION OF TRAFFIC FLOW



SIGNS ON PORTABLE OR PERMANENT SUPPORT

TRAFFIC CONTROL ADVANCED WARNING SIGNS FOR SIDEROAD APPROACHES

STH 172
CTH GE



"GROOVED PAVEMENT" (W8-52) SIGNS SHALL BE IN USE AT THE BEGINNING OF MILLED SURFACES. LOCATIONS TO FIT FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER.



"FLAGGER" (W20-7A) SIGNS SHALL BE IN USE DURING MILLING AND PAVING OPERATIONS. LOCATIONS TO FIT FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER.

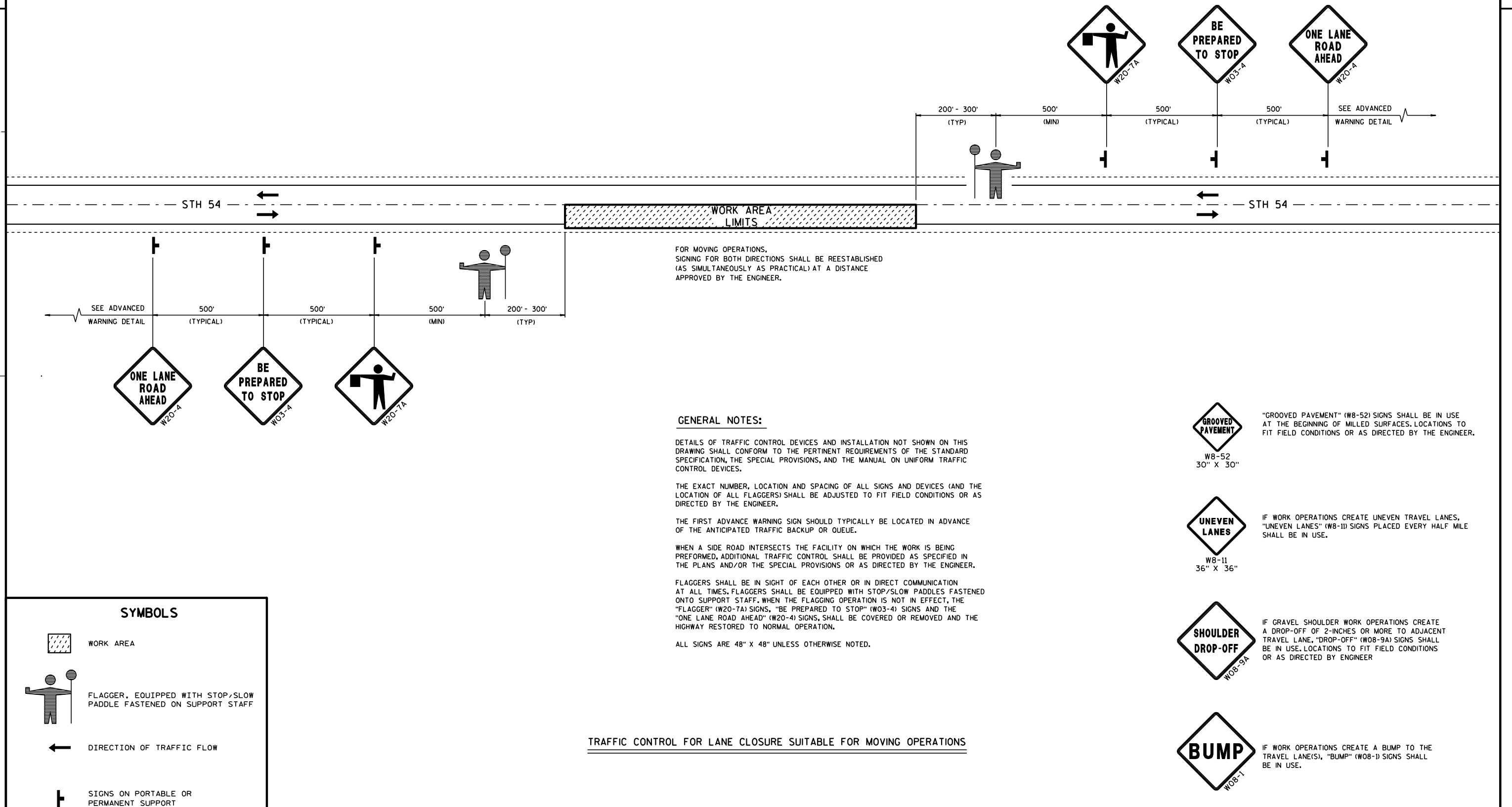
GENERAL NOTES:

WHEN MAINLINE FLAGGERS CANNOT CONTROL SIDEROAD TRAFFIC, APPROPRIATE SIGNING AND ADDITIONAL FLAGGERS SHALL BE PROVIDED. THE COST SHALL BE INCIDENTAL TO TRAFFIC CONTROL ITEM.

"ROAD WORK AHEAD" (W20-1) SIGNS SHALL BE PLACE 500 FT (MAX.) OR AT THE LAST INTERSECTION, WHICHEVER IS CLOSER.

TRAFFIC CONTROL ADVANCED WARNING SIGNS FOR SIDEROAD APPROACHES

DEXTER ROAD
OVERLAND ROAD
BAY RIDGE CT
HAVEN PLACE ROAD



DATE 22MAR13		E S T I M A T E O F Q U A N T I T I E S			
LINE				9210-09-71	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	204.0110	REMOVING ASPHALTIC SURFACE **P**	SY	298.000	298.000
0020	204.0115	REMOVING ASPHALTIC SURFACE BUTT JOINTS **P**	SY	118.000	118.000
0030	204.0120	REMOVING ASPHALTIC SURFACE MILLING **P**	SY	48,785.000	48,785.000
0040	204.0165	REMOVING GUARDRAIL	LF	1,298.000	1,298.000
0050	213.0100	FINISHING ROADWAY (PROJECT) 01. 9210-09-71	EACH	1.000	1.000
0060	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	2,560.000	2,560.000
0070	305.0500	SHAPING SHOULDERS **P**	STA	240.000	240.000
0080	440.4410.S	INCENTIVE IRI RIDE	DOL	9,300.000	9,300.000
0090	455.0105	ASPHALTIC MATERIAL PG58-28	TON	385.000	385.000
0100	455.0605	TACK COAT	GAL	2,370.000	2,370.000
0110	460.1103	HMA PAVEMENT TYPE E-3	TON	6,968.000	6,968.000
0120	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	3,207.000	3,207.000
0130	460.4110.S	REHEATING HMA LONGITUDINAL JOINTS	LF	12,261.000	12,261.000
0140	465.0110	ASPHALTIC SURFACE PATCHING	TON	5.000	5.000
0150	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	212.000	212.000
0160	611.8110	ADJUSTING MANHOLE COVERS	EACH	1.000	1.000
0170	614.0010	BARRIER SYSTEM GRADING SHAPING FINISHING	EACH	8.000	8.000
0180	614.2300	MGS GUARDRAIL 3	LF	900.000	900.000
0190	614.2610	MGS GUARDRAIL TERMINAL EAT	EACH	8.000	8.000
0200	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 9210-09-71	EACH	1.000	1.000
0210	619.1000	MOBILIZATION	EACH	1.000	1.000
0220	624.0100	WATER	MGAL	10.000	10.000
0230	625.0100	TOPSOIL	SY	500.000	500.000
0240	628.1504	SILT FENCE	LF	1,574.000	1,574.000
0250	628.1520	SILT FENCE MAINTENANCE	LF	1,574.000	1,574.000
0260	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	2.000	2.000
0270	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	1.000	1.000
0280	628.2004	EROSION MAT CLASS I TYPE B	SY	500.000	500.000
0290	628.7010	INLET PROTECTION TYPE B	EACH	2.000	2.000
0300	629.0210	FERTILIZER TYPE B	CWT	0.320	0.320
0310	630.0110	SEEDING MIXTURE NO. 10	LB	7.000	7.000
0320	630.0200	SEEDING TEMPORARY	LB	5.000	5.000
0330	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	27.000	27.000
0340	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	6.000	6.000
0350	637.0202	SIGNS REFLECTIVE TYPE II **P**	SF	221.330	221.330
0360	638.2602	REMOVING SIGNS TYPE II **P**	EACH	44.000	44.000
0370	638.3000	REMOVING SMALL SIGN SUPPORTS **P**	EACH	35.000	35.000
0380	642.5201	FIELD OFFICE TYPE C	EACH	1.000	1.000
0390	643.0100	TRAFFIC CONTROL (PROJECT) 01. 9210-09-71	EACH	1.000	1.000
0400	643.0900	TRAFFIC CONTROL SIGNS	DAY	720.000	720.000
0410	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	25,133.000	25,133.000
0420	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	1,003.000	1,003.000
0430	646.0406	PAVEMENT MARKING SAME DAY EPOXY 4-INCH	LF	18,793.000	18,793.000
0440	647.0166	PAVEMENT MARKING ARROWS EPOXY TYPE 2	EACH	2.000	2.000
0450	647.0196	PAVEMENT MARKING ARROWS EPOXY TYPE 5	EACH	2.000	2.000
0460	647.0356	PAVEMENT MARKING WORDS EPOXY	EACH	1.000	1.000
0470	647.0456	PAVEMENT MARKING CURB EPOXY	LF	20.000	20.000
0480	647.0606	PAVEMENT MARKING ISLAND NOSE EPOXY	EACH	2.000	2.000
0490	647.0746	PAVEMENT MARKING DIAGONAL EPOXY 24-INCH	LF	149.000	149.000
0500	647.0856	PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY	SF	332.000	332.000

DATE 22MAR13		E S T I M A T E O F Q U A N T I T I E S			
LINE		9210-09-71			
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0510	648.0100	LOCATING NO-PASSING ZONES	MI	2.330	2.330
0520	649.0200	TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH	LF	57,084.000	57,084.000
0530	650.8000	CONSTRUCTION STAKING RESURFACING REFERENCE	LF	12,261.000	12,261.000
0540	690.0150	SAWING ASPHALT	LF	525.000	525.000
0550	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT \$5.00/HR	HRS	300.000	300.000
0560	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT \$5.00/HR	HRS	600.000	600.000

REMOVING ASPHALTIC SURFACE

STATION	TO	STATION	LOCATION	<u>204.0110</u> SY	REMARKS
1042+37	-	1045+50	STH 54, LT	152	AT BEAM GUARD
1042+23	-	1045+35	STH 54, LT	146	AT BEAM GUARD
TOTAL				298	

REMOVING GUARDRAIL

STATION	TO	STATION	LOCATION	<u>204.0165</u> LF	REMARKS
1023+07	-	1026+85	STH 54, LT	378	REMOVE AND REPLACE
1023+18	-	1026+88	STH 54, RT	370	REMOVE AND REPLACE
1042+41	-	1045+16	STH 54, LT	275	REMOVE AND REPLACE
1042+27	-	1045+02	STH 54, RT	275	REMOVE AND REPLACE
TOTAL				1,298	

REMOVING ASPHALTIC SURFACE BUTT JOINTS

STATION	LOCATION	<u>204.0115</u> SY	REMARKS
955+00	STH 54	7	BEGIN PROJECT
966+40	STH 54, LT	4	DEXTER DR.
978+75	STH 54, LT	10	OVERLAND RD
981+00	STH 54, LT	5	COMMERCIAL ENTRANCE
994+00	STH 54, LT	5	BAY RIDGE CT
996+80	STH 54, LT	7	COMMERCIAL ENTRANCE
1002+00	STH 54, LT	6	COMMERCIAL ENTRANCE
1007+80	STH 54, LT	7	COMMERCIAL ENTRANCE
1009+00	STH 54, LT	5	COMMERCIAL ENTRANCE
1013+65	STH 54, LT	9	COMMERCIAL ENTRANCE
1016+90	STH 54, RT	10	COMMERCIAL ENTRANCE
1030+00	STH 54, LT	3	PRIVATE ENTRANCE
1030+90	STH 54, LT	8	CTH GE
1033+90	STH 54, LT	3	PRIVATE ENTRANCE
1035+40	STH 54, LT	3	PRIVATE ENTRANCE
1040+35	STH 54, LT	7	HAVEN PL
1048+40	STH 54, LT	3	PRIVATE ENTRANCE
1056+50	STH 54, LT	3	PRIVATE ENTRANCE
1071+57	STH 54, LT	3	PRIVATE ENTRANCE
1077+61	STH 54	11	END PROJECT
TOTAL		118	

REMOVING ASPHALTIC SURFACE MILLING

STATION	TO	STATION	LOCATION	<u>204.0120</u> SY
955+00	-	1077+61	STH 54, LT	20,343
955+00	-	1077+61	STH 54, RT	18,636
BYPASS LANES				
975+70	-	983+47	STH 54, RT	911
1027+11	-	1042+77	STH 54, RT	2,088
1027+00	-	1034+22	STH 54, LT	963
RIGHT TURN LANES				
979+37	-	984+17	STH 54, LT	576
1013+00	-	1016+49	STH 54, LT	465
1027+11	-	1030+00	STH 54, RT	326
1031+22	-	1039+69	STH 54, RT	1,126
BEAM GUARDS				
1022+90	-	1028+00	STH 54, LT	226
1023+07	-	1027+11	STH 54, RT	172
SIDE RD'S / DRIVEWAYS				
DEXTER DR			SIDEROAD	178
OVERLAND RD			SIDEROAD	334
BAY RIDGE CT			SIDEROAD	358
CTH GE			SIDEROAD	350
HAVEN PL			SIDEROAD	297
DRIVEWAYS (13)			-	1,434
TOTAL				48,785

SHAPING SHOULDERS

STATION	TO	STATION	LOCATION	<u>305.0500</u> STA
955+00	-	1076+00	STH 54, LT	121
955+00	-	1074+00	STH 54, RT	119
TOTAL				240

BASE AGGREGATE SUMMARY

STATION TO STATION			LOCATION	SHOULDER WIDTH FEET	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	624.0100 WATER MGAL	REMARKS
STH 54, WESTBOUND, SHOULDERS							
955+00	-	966+00	STH 54, LT	5	127	0.51	BEGIN PROJECT
967+28	-	977+40	STH 54, LT	5	117	0.47	
979+36	-	984+17	STH 54, LT	2	22	0.09	
984+17	-	993+44	STH 54, LT	5	107	0.43	
994+18	-	1005+46	STH 54, LT	5	132	0.53	
1005+46	-	1008+30	STH 54, LT	2	13	0.05	
1008+30	-	1013+00	STH 54, LT	5	54	0.22	
1014+13	-	1016+49	STH 54, LT	5	27	0.11	
1016+49	-	1022+32	STH 54, LT	5	67	0.27	
1027+60	-	1029+85	STH 54, LT	2	10	0.04	
1030+23	-	1033+67	STH 54, LT	5	40	0.16	
1034+00	-	1035+25	STH 54, LT	2	6	0.02	
1035+55	-	1041+69	STH 54, LT	5	71	0.28	
1045+94	-	1056+36	STH 54, LT	5	120	0.48	
1056+65	-	1075+75	STH 54, LT	2	8	0.03	END PROJECT
STH 54, EASTBOUND, SHOULDERS							
955+00	-	975+70	STH 54, RT	8	383	1.53	BEGIN PROJECT
975+70	-	983+67	STH 54, RT	2	37	0.15	
983+67	-	1001+67	STH 54, RT	5	208	0.83	
1002+67	-	1007+46	STH 54, RT	2	22	0.09	
1008+13	-	1022+43	STH 54, RT	2	66	0.26	
1027+63	-	1030+00	STH 54, RT	2	11	0.04	
1031+21	-	1039+62	STH 54, RT	2	39	0.16	
1040+86	-	1041+55	STH 54, RT	2	3	0.01	
1045+81	-	1047+53	STH 54, RT	8	32	0.13	
1047+83	-	1048+25	STH 54, RT	8	8	0.03	
1048+59	-	1056+41	STH 54, RT	8	146	0.58	
1056+71	-	1073+95	STH 54, RT	5	200	0.80	END PROJECT
GRAVEL ENTRANCES (22)			STH 54, LT & RT	-	370	1.5	
UNDISTRIBUTED			STH 54, LT & RT	-	114	0.5	BEAMGUARDS

TOTALS 2,560 10

ASPHALTIC SURFACE SUMMARY

STATION TO STATION		LOCATION	465.0120 DRIVEWAYS AND FIELD ENTRANCES TON	455.0605 TACK COAT GAL
981+00	-	STH 54, LT	13	2
996+80	-	STH 54, RT	24	4
1002+00	-	STH 54, RT	27	5
1007+40	-	STH 54, RT	19	3
1009+00	-	STH 54, LT	21	4
1013+65	-	STH 54, LT	21	4
1016+90	-	STH 54, RT	27	5
1030+00	-	STH 54, LT	11	2
1033+90	-	STH 54, LT	9	2
1035+40	-	STH 54, LT	12	2
1048+40	-	STH 54, RT	9	2
1056+50	-	STH 54, RT	9	1
1071+57	-	STH 54, LT	10	2

TOTALS 212 36 *

* ADDITIONAL QUANTITY SHOWN UNDER HMA SUMMARY

ASPHALTIC SURFACE PATCHING

STATION TO STATION		LOCATION	465.0110 TON	REMARKS
UNDISTRIBUTED		STH 54	5	PROJECT LIMITS

TOTAL 5

NOTE: PERFORM REPAIRS TO MILLED SURFACE, BUTT JOINT LOCATIONS, OR ELSEWHERE AS NEEDED PRIOR TO ASPHALTIC PAVEMENT OVERLAY

HMA SUMMARY

				<u>455.0105</u> ASPHALTIC MATERIAL PG58-28	<u>455.0605</u> TACK COAT	<u>460.1103</u> HMA PAVEMENT TYPE E-3	<u>460.4110.S</u> REHEATING HMA LONGITUDINAL JOINTS	
STATION	TO	STATION	LOCATION	TON	GAL	TON	LF	REMARKS
955+00	-	1077+61	STH 54, LT	164	1,010	2,977	12,261	HMA I CATEGORY
955+00	-	1077+61	STH 54, RT	162	1,000	2,949		HMA I CATEGORY
TURN LANES / SHOULDER WIDENING								-
VARIOUS LOCATIONS			STH 54, LT	19	108	316	-	-
VARIOUS LOCATIONS			STH 54, RT	24	150	442	-	-
SIDE ROADS								-
DEXTER DR				1	5	22	-	-
OVERLAND RD.				2	8	35	-	-
BAY RIDGE CT				2	9	39	-	-
CTH GE				2	9	37	-	-
HAVEN PLACE				2	7	32	-	-
BEAM GUARDS			STH 54,LT & RT	7	28	119	-	-
TOTALS				385	2,334 *	6,968	12,261	

* ADDITIONAL QUANTITY SHOWN UNDER ASPHALTIC SURFACE SUMMARY

BEAM GUARD SUMMARY

				<u>614.2300</u> MGS GUARDRAIL 3	<u>614.2610</u> MGS GUARDRAIL TERMINAL EAT	<u>614.0010</u> BARRIER SYSTEM GRADING SHAPING FINISHING
STATION	TO	STATION	LOCATION	LF	EACH	EACH
1023+05	-	1026+87	STH 54, LT	275	2	2
1023+12	-	1026+94	STH 54, RT	275	2	2
1042+37	-	1045+20	STH 54, LT	175	2	2
1042+24	-	1045+06	STH 54, RT	175	2	2
TOTALS				900	8	8

LANDSCAPE SUMMARY FOR GRADING SHAPING, AND FINISHING FOR BARRIER TERMINALS

					TOPSOIL	EROSION MAT	FERTILIZER	SEEDING	SEEDING
						CLASS I	TYPE B	MIXTURE NO.10	TEMPORARY
STATION	TO	STATION	LOCATION	LF	SY	TYPE B	(7LB/1000 SF)	(1.5LB/1000 SF)	(1LB/1000 SF)
						SY	CWT	LB	LB
ENERGY ABSORBING TERMINAL LOCATION									
1023+07	-	1023+57	STH 54, LT	50	22	22	1.4	0.3	0.2
1026+36	-	1026+85	STH 54, LT	50	22	22	1.4	0.3	0.2
1023+18	-	1023+68	STH 54, RT	50	22	22	1.4	0.3	0.2
1026+38	-	1026+88	STH 54, RT	50	22	22	1.4	0.3	0.2
ENERGY ABSORBING TERMINAL LOCATION									
1042+44	-	1042+94	STH 54, LT	50	22	22	1.4	0.3	0.2
1044+69	-	1045+19	STH 54, LT	50	22	22	1.4	0.3	0.2
1042+30	-	1042+80	STH 54, RT	50	22	22	1.4	0.3	0.2
1044+56	-	1045+06	STH 54, RT	50	22	22	1.4	0.3	0.2
TOTALS					176	176	11	2	2

** FOR INFORMATION ONLY

LANDSCAPE SUMMARY

		<u>625.0100</u> TOPSOIL	<u>628.2004</u> EROSION MAT CLASS I TYPE B	<u>629.0210</u> FERTILIZER TYPE B (7LB/1000 SF)	<u>630.0110</u> SEEDING MIXTURE NO.10 (1.5LB/1000 SF)	<u>630.0200</u> SEEDING TEMPORARY (1LB/1000 SF)
STATION TO STATION	LOCATION	SY	SY	CWT	LB	LB
UNDISTRIBUTED	PROJECT	500	500	0.32	7	5
TOTALS		500	500	0.32	7	5

SILT FENCE SUMMARY

STATION TO STATION	LOCATION	<u>628.1504</u> SILT FENCE LF	<u>628.1520</u> SILT FENCE MAINTENANCE LF
ENERGY ABSORBING TERMINAL			
1022+32 - 1023+82	STH 54, LT	150	150
1026+10 - 1027+60	STH 54, LT	150	150
1022+43 - 1023+93	STH 54, RT	150	150
1026+13 - 1027+63	STH 54, RT	150	150
BEAM GUARD			
1041+30 - 1046+17	STH 54, LT	487	487
1041+41 - 1046+28	STH 54, LT	487	487
TOTALS		1,574	1,574

MOBILIZATIONS EROSION CONTROL AND MOBILIZATIONS EMERGENCY EROSION CONTROL

STATION TO STATION	LOCATION	<u>628.1905</u> MOBILIZATIONS EROSION CONTROL EACH	<u>628.1910</u> MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
-	PROJECT	2	1
TOTALS		2	1

ADJUSTING MANHOLE COVERS

STATION	LOCATION	OFFSET	<u>611.8110</u> EACH
1074+25	STH 54	19.5' RT	1
TOTAL			1

INLET PROTECTION TYPE B

STATION	LOCATION	<u>628.7010</u> EACH
1075+45	STH 54 RT & LT	2
TOTAL		2

TRAFFIC CONTROL SIGNS

STATION	LOCATION	APPROX. SERVICE PERIOD DAYS	643.0900 SIGNS		REMARKS
			NO. IN SERVICE	DAYS	
ADVANCE WARNING					
PROJECT LIMITS, EB	STH 54, RT	21	5	105	-
PROJECT LIMITS, WB	STH 54, LT	21	5	105	-
SIDE ROADS					
STH 172	-	21	2	42	ADVANCE WARNING
CTH GE	-	21	2	42	ADVANCE WARNING
SIDE ROADS					
DEXTER ROAD	-	21	1	21	ADVANCE WARNING
OVERLAND ROAD	-	21	1	21	ADVANCE WARNING
BAY RIDGE ROAD	-	21	1	21	ADVANCE WARNING
HAVEN PLACE ROAD	-	21	1	21	ADVANCE WARNING
MOVING OPERATION					
PROJECT LIMITS, EB	STH 54, RT	21	3	63	-
PROJECT LIMITS, WB	STH 54, LT	21	3	63	-
UNDISTRIBUTED	-	6	36	216	PROJECT LIMITS
TOTAL			720		

ERECTION & REMOVAL OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	W X H	637.0202 SIGNS REFLECTIVE TYPE II S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
1	STH 54, E. OF STH 172	J4-1	24" X 36"	6.00	1		1	1	EAST STH 54, SEE PLAN SHEET
2	"	R2-1	24" X 30"	5.00	1		1	1	55 MPH
3	"	I55-56	30" X 36"	7.50	1		1	1	BROWN COUNTY CARE SHELTER
4	"	W2-6	30" X 30"	6.25	1		1	1	
5	"	W2-6P					1		
6	"	W13-1	18" X 18"	2.25			1		15 MPH - FLUORESCENT REFLECTIVE SHEETING
7	"	J1-2	48" X 39"	13.00		1	1	1	JCT STH 172, JCT CTH E, SEE PLAN SHEET
8	"	W2-2	30" X 30"	6.25	1		1	1	FLUORESCENT REFLECTIVE SHEETING
9	"	R1-1	30" X 30"	6.25	1		1	1	FLUORESCENT REFLECTIVE SHEETING
10	DEXTER DR	R1-1	30" X 30"	5.18	1		1	1	
11	STH 54, W. OF OVERLAND RD	W1-6	48" X 24"	8.00	1		1	1	FLUORESCENT REFLECTIVE SHEETING
12	OVERLAND RD	R1-1	30" X 30"	5.18	1		1	1	
13	STH 54, E. OF OVERLAND RD	W1-6	48" X 24"	8.00	1		1	1	FLUORESCENT REFLECTIVE SHEETING
14	STH 54, W. OF BAY RIDGE CT	W1-2L	30" X 30"	6.25	1		1	1	FLUORESCENT REFLECTIVE SHEETING
15	"	W14-3	48" X 36"	6.00	1		1	1	FLUORESCENT REFLECTIVE SHEETING
16	BAY RIDGE CT	R1-1	30" X 30"	5.18	1		1	1	
17	STH 54, E. OF BAY RIDGE CT	W14-3	48" X 36"	6.00	1		1	1	FLUORESCENT REFLECTIVE SHEETING
18	"	W14-3	48" X 36"	6.00	1		1	1	FLUORESCENT REFLECTIVE SHEETING
19	"	J1-1	24" X 39"	6.50		1	2	1	JCT CTH GE, SEE PLAN SHEET
20	"	I55-56	30" X 36"	7.50	1		1	1	BROWN COUNTY CARE SHELTER
21	"	J4-1	24" X 36"	6.00	1		2	1	WEST STH 54
22	"	J13-1	24" X 45"	7.50		1	2	1	CTH GE, SEE PLAN SHEET
23	STH 54, AT CTH GE	M1-6					1		
24	"	W1-7	48" X 24"	8.00	1		1	1	FLUORESCENT REFLECTIVE SHEETING
25	CTH GE	R1-1	30" X 30"	5.18	1		1	1	
26	STH 54, E. OF CTH GE	J13-1	24" X 45"	7.50		1	2	1	CTH GE, SEE PLAN SHEET
27	"	J4-1	24" X 36"	6.00	1		2	1	EAST STH 54, SEE PLAN SHEET
28	"	I55-56					1	1	
29	HAVEN PLACE RD	R1-1	30" X 30"	5.18	1		1	1	
30	"	R1-1	30" X 30"	5.18	1		1	1	
31	STH 54, E. OF HAVEN PLACE RD	J1-1	24" X 39"	6.50		1	2	1	JCT CTH GE, SEE PLAN SHEET
32	"	W11-3					1	1	
33	"	W57-51					1		
34	"	W14-3	48" X 36"	6.00	1		1	1	FLUORESCENT REFLECTIVE SHEETING
35	"	W14-3	48" X 36"	6.00	1		1	1	FLUORESCENT REFLECTIVE SHEETING
36	"	I2-3	66" X 24"	11.00	2		1	2	GREEN BAY, SEE SIGN DETAIL SHEET
37	"	I2-3	60" X 24"	10.00	1		1	1	HOBART, SEE SIGN DETAIL SHEET
38	"	W6-1	36" X 36"	9.00		1	1	1	
PROJECT TOTALS				221.33	27	6	44	35	

PAVEMENT MARKING 4-INCH AND 8-INCH SUMMARY

				646.0406 SAME DAY 4-INCH EPOXY YELLOW CENTERLINE SOLID DASHED LF LF		646.0106 EPOXY 4-INCH WHITE EDGE LINE SOLID DASHED LF LF		649.0200 TEMPORARY REFLECTIVE PAINT 4-INCH YELLOW CENTERLINE SOLID DASHED LF LF		646.0126 EPOXY 8-INCH WHITE LF	
STATION	TO	STATION	LOCATION								REMARKS
EASTBOUND, CENTERLINE											
955+00	-	994+74	STH 54, RT	3,974	-	-	-	11,922	-	-	BEGIN PROJECT
994+74	-	1010+58	STH 54, RT	-	396	-	-	-	1,188	-	
1010+58	-	1043+42	STH 54, RT	3,284	-	-	-	9,852	-	-	
1043+42	-	1068+50	STH 54, RT	-	627	-	-	-	1,881	-	
1068+50	-	1080+50	STH 54, RT	1,200	-	-	-	2,733	-	-	END PROJECT
WESTBOUND, CENTERLINE											
955+00	-	994+74	STH 54, LT	3,974	-	-	-	11,922	-	-	BEGIN PROJECT
994+74	-	1010+58	STH 54, LT	-	396	-	-	-	1,188	-	
1010+58	-	1015+38	STH 54, LT	480	-	-	-	1,440	-	-	
1015+98	-	1024+96	STH 54, LT	-	225	-	-	-	726	-	
1024+96	-	1050+94	STH 54, LT	2,598	-	-	-	7,794	-	-	
1050+94	-	1068+50	STH 54, LT	-	439	-	-	-	1,317	-	END PROJECT
1068+50	-	1080+50	STH 54, LT	1,200	-	-	-	2,733	-	-	
WESTBOUND, LT											
955+00	-	977+89	STH 54, LT	-	-	2,289	-	-	-	-	BEGIN PROJECT
979+36	-	993+44	STH 54, LT	-	-	1,408	-	-	-	-	
995+18	-	1080+50	STH 54, LT	-	-	8,532	-	-	-	-	
EASTBOUND, RT											
955+00	-	1030+00	STH 54, RT	-	-	7,500	-	-	-	-	END PROJECT
1031+20	-	1039+69	STH 54, RT	-	-	840	-	-	-	-	
1040+86	-	1080+50	STH 54, RT	-	-	3,964	-	-	-	-	
STH 54, BYPASS LANES											
977+36	-	981+00	STH 54, RT	-	-	-	91	-	273	-	OVERLAND RD
1029+50	-	1032+64	STH 54, LT	-	-	-	79	-	-	-	CTH GE
1031+15	-	1037+36	STH 54, RT	-	-	-	155	-	465	-	CTH GE - HAVEN PL
STH 54, DIVIDED 4 LANE											
1073+55	-	1080+50	STH 54, RT	-	-	-	175	-	-	-	EASTBOUND
1076+50	-	1080+50	STH 54, LT	-	-	-	100	-	-	-	WESTBOUND
STH 54, TURN LANES											
979+35	-	982+85	STH 54, LT	-	-	-	-		-	350	OVERLAND RD
1014+16	-	1015+66	STH 54, LT	-	-	-	-	450	-	150	COMM. ENTRANCE
1028+00	-	1030+00	STH 54, RT	-	-	-	-	600	-	200	CTH GE
1037+69	-	1039+69	STH 54, RT	-	-	-	-	600	-	200	HAVEN PL
1079+47	-	1080+50	STH 54, RT	-	-	-	-	-	-	103	PLEASNT LANE
SUB-TOTALS				16,710	2,083	24,533	600	50,046	7,038		
TOTALS				18,793		25,133		57,084		1,003	

PAVEMENT MARKING MISCELLANEOUS SUMMARY

STATION TO STATION			LOCATION	647.0166 PAVEMENT MARKING ARROWS EPOXY TYPE 2 EACH	647.0196 PAVEMENT MARKING ARROWS EPOXY TYPE 5 EACH	647.0356 WORDS EPOXY "ONLY" EACH	647.0456 CURB EPOXY YELLOW LF	647.0606 ISLAND NOSE EPOXY EACH	647.0746 DIAGONAL EPOXY 24-INCH YELLOW LF	647.0856 CONCRETE CORRUGATED MEDIAN EPOXY SF	REMARKS
STH 54											
1037+69	-	1039+69	STH 54, RT	2	-	1	-	-	-	-	HAVEN PL TURN LANE
1069+42	-	1073+55	STH 54, RT	-	-	-	-	-	149	-	
1073+05	-	1074+73	STH 54	-	-	-	-	-	-	332	
1075+70	-	1078+70	STH 54, LT	-	2	-	-	-	-	-	WESTBOUND
1076+33			STH 54	-	-	-	-	1	-	-	
1076+38	-	1076+43	STH 54, LT & RT	-	-	-	10	-	-	-	
1080+40	-	1080+45	STH 54, LT & RT	-	-	-	10	-	-	-	
1080+50			STH 54	-	-	-	-	1	-	-	
TOTALS				2	2	1	20	2	149	332	

LOCATING NO-PASSING ZONES

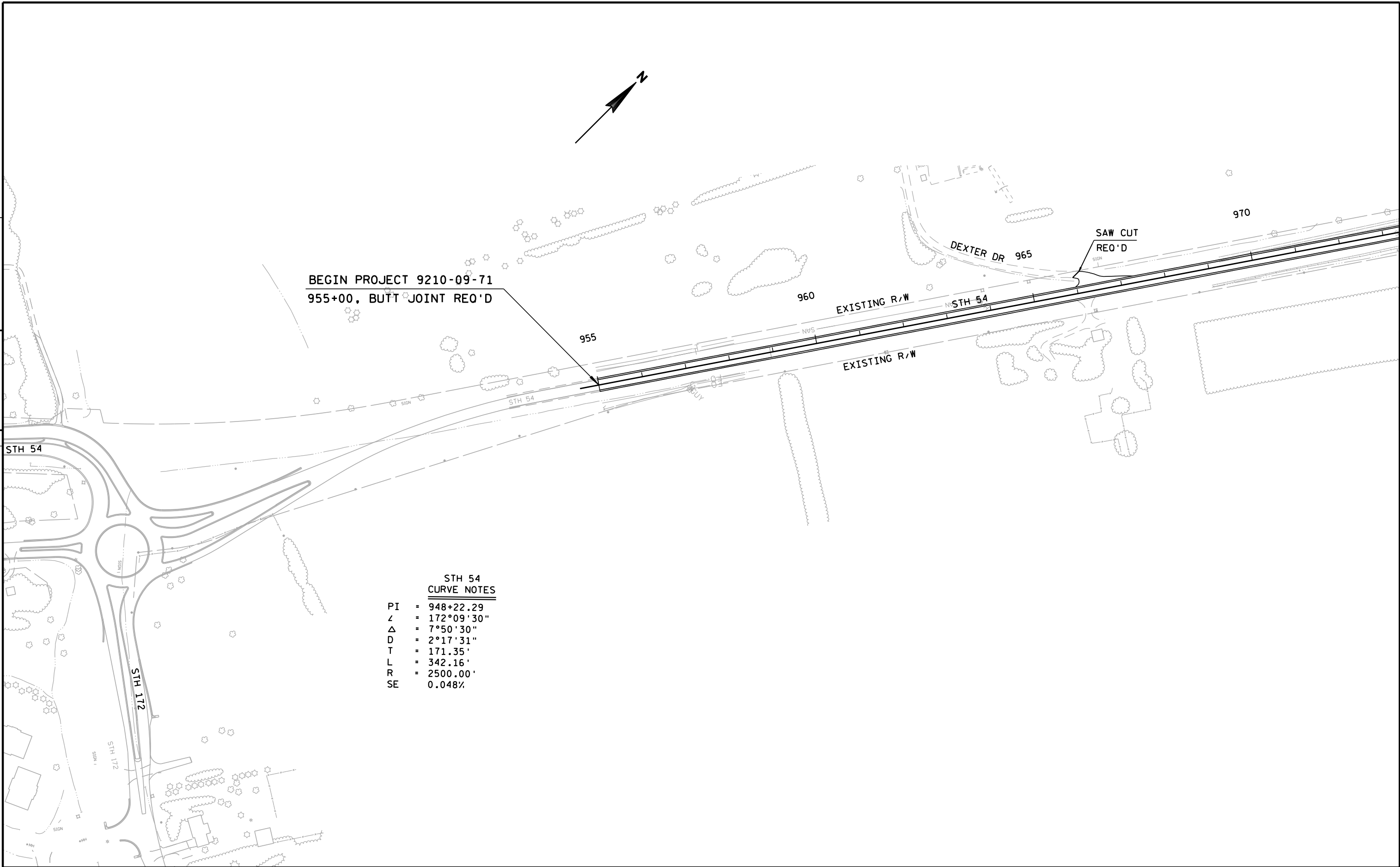
STATION TO STATION			LOCATION	648.0100 MI
PROJECT			STH 54	2.33
TOTAL				2.33

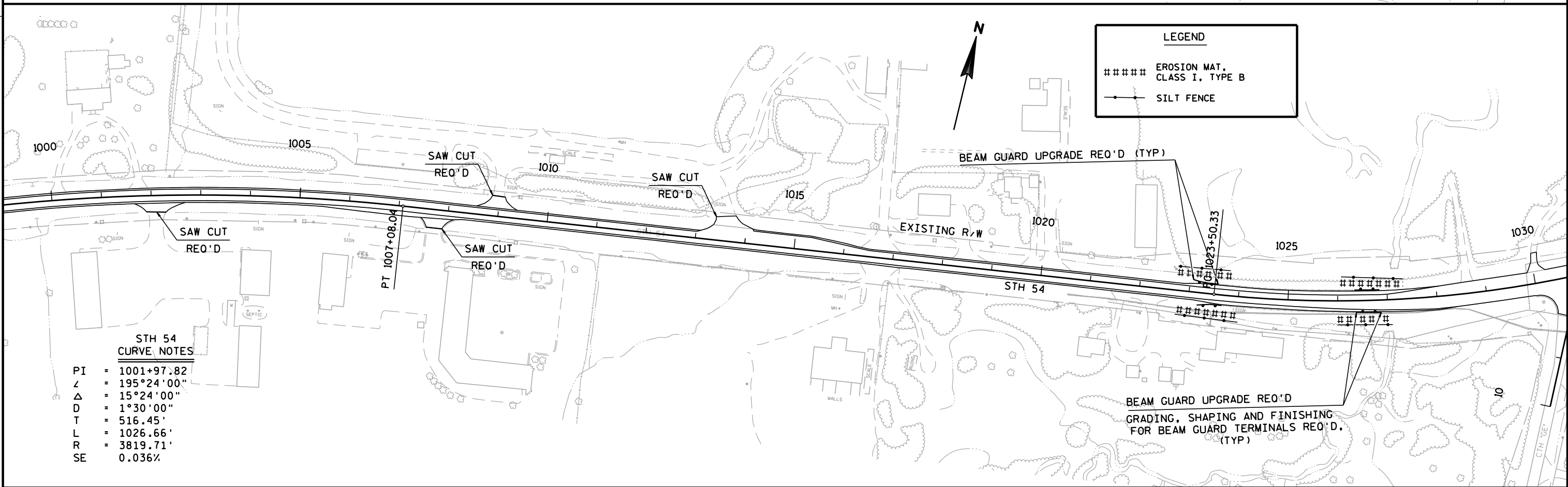
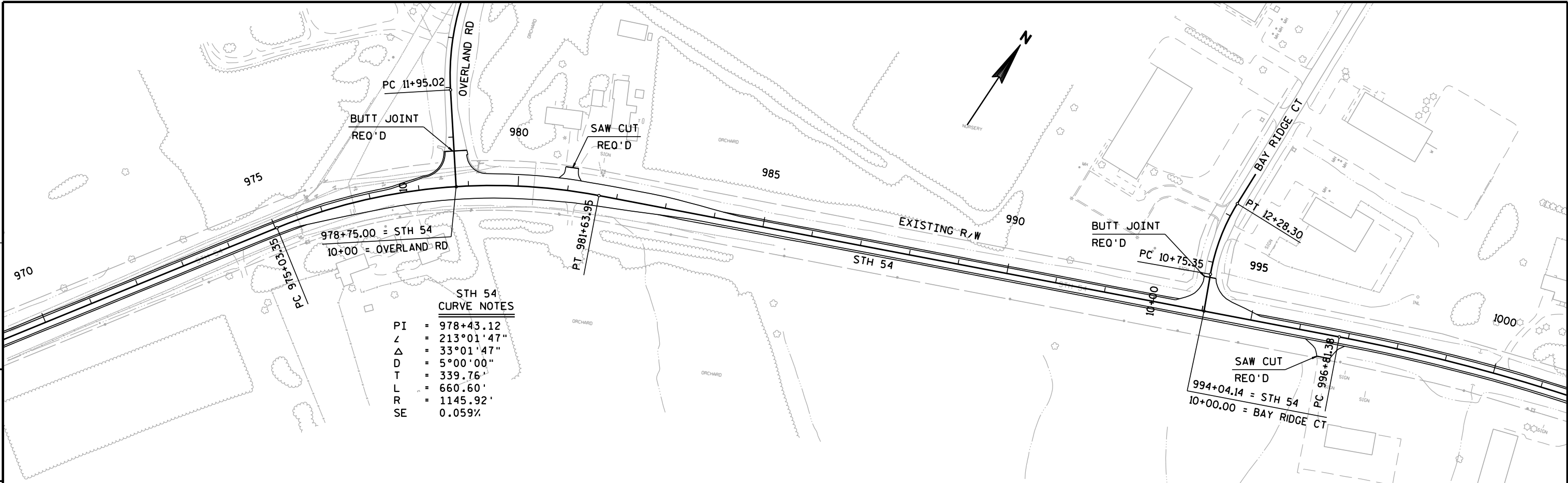
CONSTRUCTION STAKING RESURFACING REFERENCE

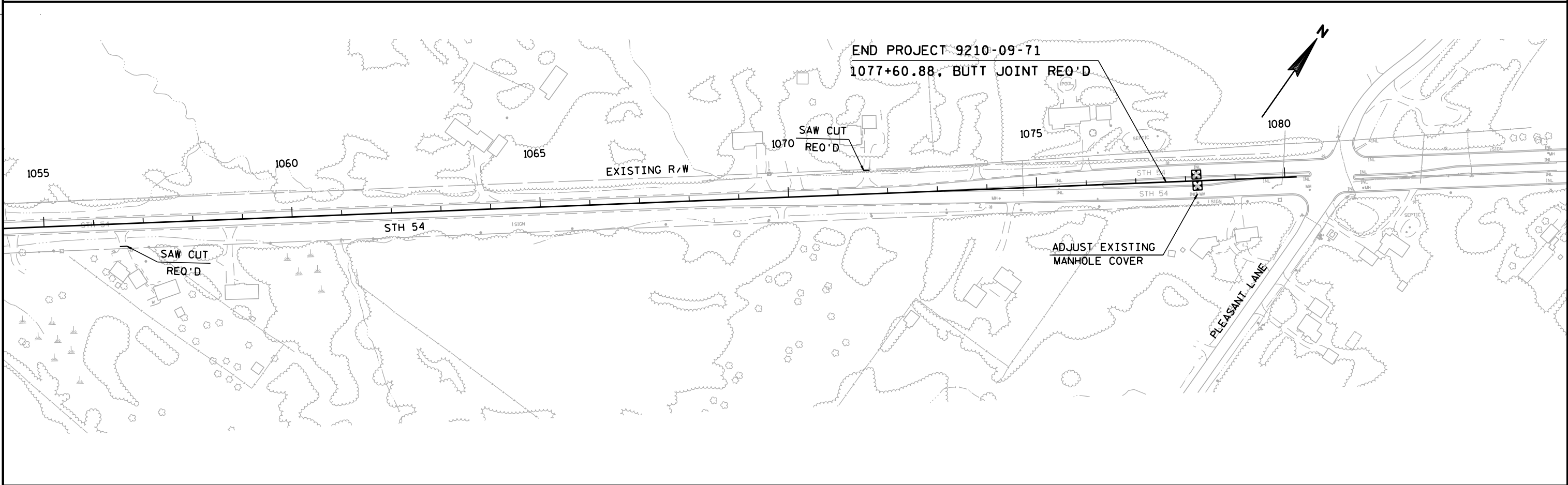
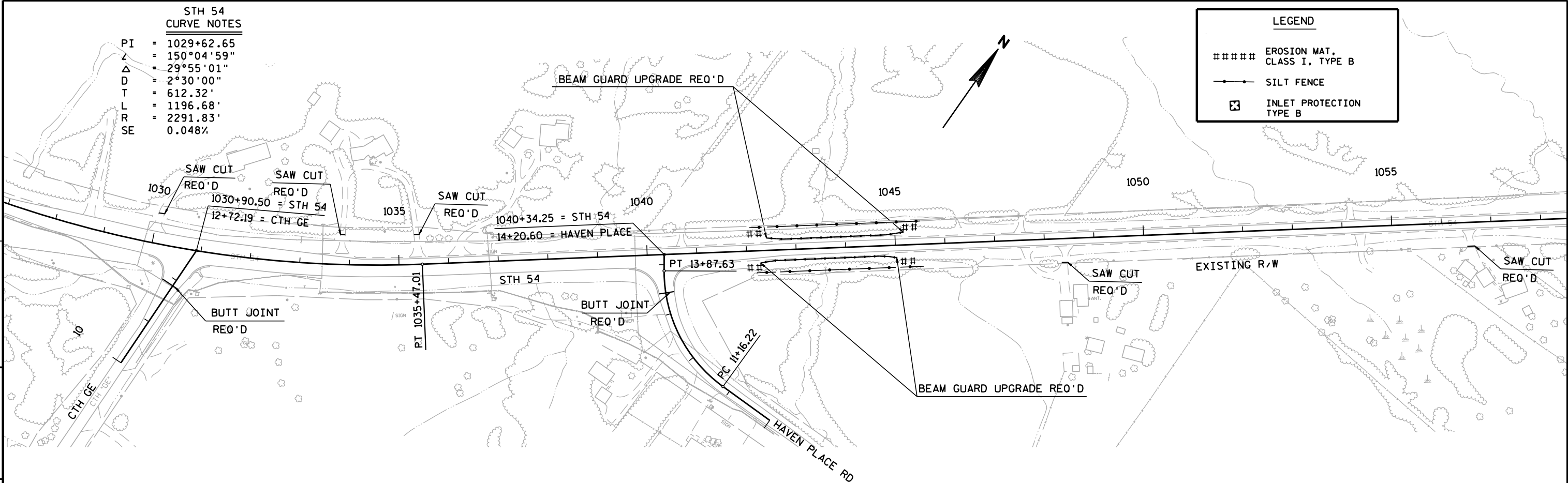
STATION TO STATION			LOCATION	650.8000 LF	REMARKS
955+00	-	1077+61	STH 54	12,261	PROJECT LIMITS
TOTAL				12,261	

SAWING ASPHALT

STATION	LOCATION	690.0150 LF	REMARKS
955+00	STH 54	30	BEGIN PROJECT
966+40	STH 54, LT	20	DEXTER DR
978+75	STH 54, LT	44	OVERLAND DR
981+00	STH 54, LT	24	COMMERCIAL ENTRANCE
994+00	STH 54, LT	24	BAY RIDGE CT
996+80	STH 54, RT	30	COMMERCIAL ENTRANCE
1002+00	STH 54, RT	28	COMMERCIAL ENTRANCE
1007+45	STH 54, LT	30	COMMERCIAL ENTRANCE
1009+00	STH 54, LT	21	COMMERCIAL ENTRANCE
1013+65	STH 54, LT	40	COMMERCIAL ENTRANCE
1016+90	STH 54, RT	45	COMMERCIAL ENTRANCE
1030+00	STH 54, LT	12	PRIVATE ENTRANCE
1030+90	STH 54, RT	38	CTH GE
1033+90	STH 54, LT	12	PRIVATE ENTRANCE
1035+40	STH 54, LT	12	PRIVATE ENTRANCE
1040+35	STH 54, RT	30	HAVEN PL
1048+40	STH 54, RT	12	PRIVATE ENTRANCE
1056+50	STH 54, RT	15	PRIVATE ENTRANCE
1071+57	STH 54, LT	12	PRIVATE ENTRANCE
1077+61	STH 54	46	END PROJECT
TOTAL		525	





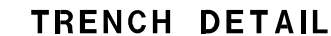


Standard Detail Drawing List

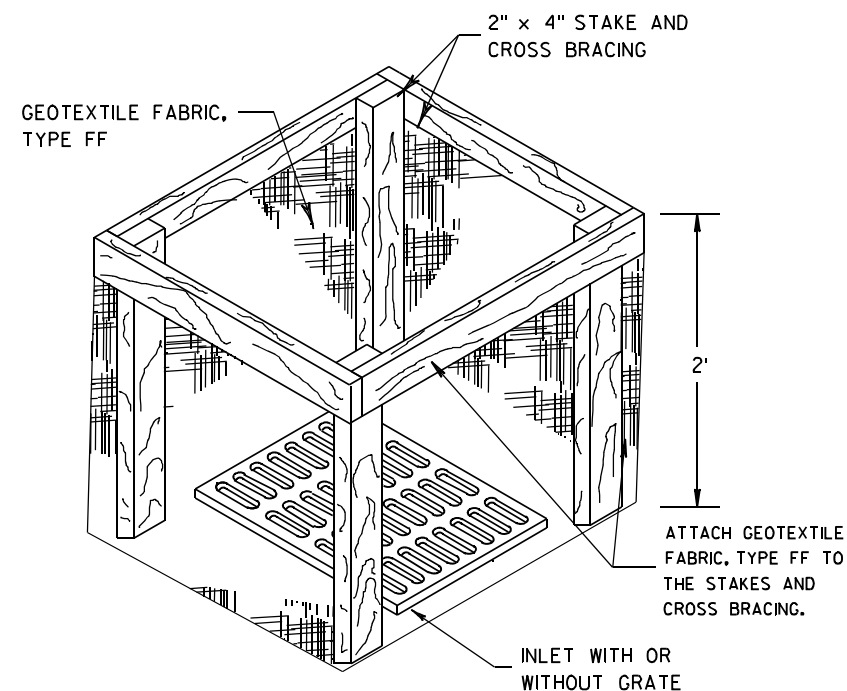
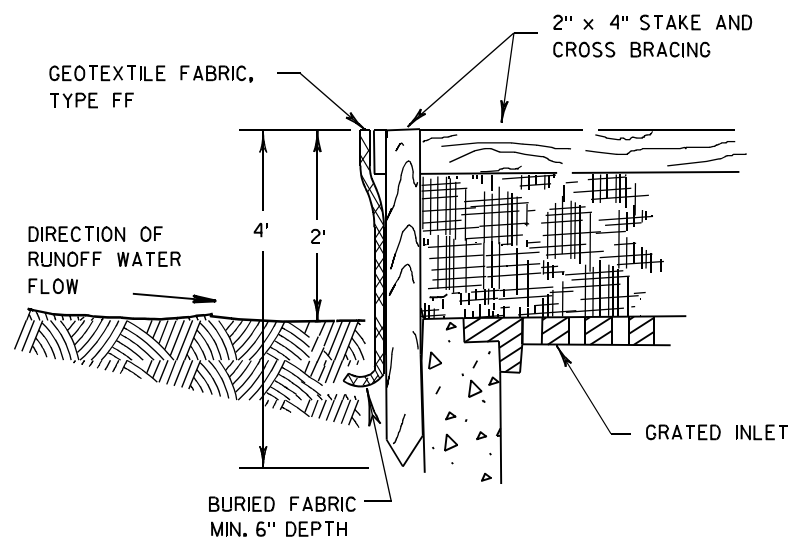
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
14B42-02A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-01A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-15A	PAVEMENT MARKING (MAINLINE)
15C08-15B	PAVEMENT MARKING (INTERSECTIONS)
15C08-15F	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
15C12-03	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)



- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1½" X 1½" 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.



SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-29-05 _____ DATE	/S/ Beth Canestra _____ CHIEF ROADWAY DEVELOPMENT ENGINEER



INLET PROTECTION, TYPE A

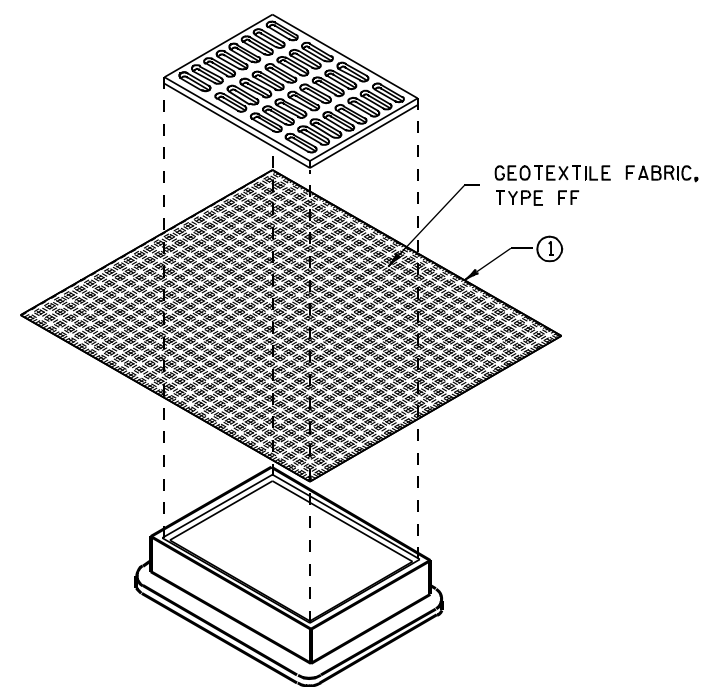
GENERAL NOTES

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 SUBSTITUTED.

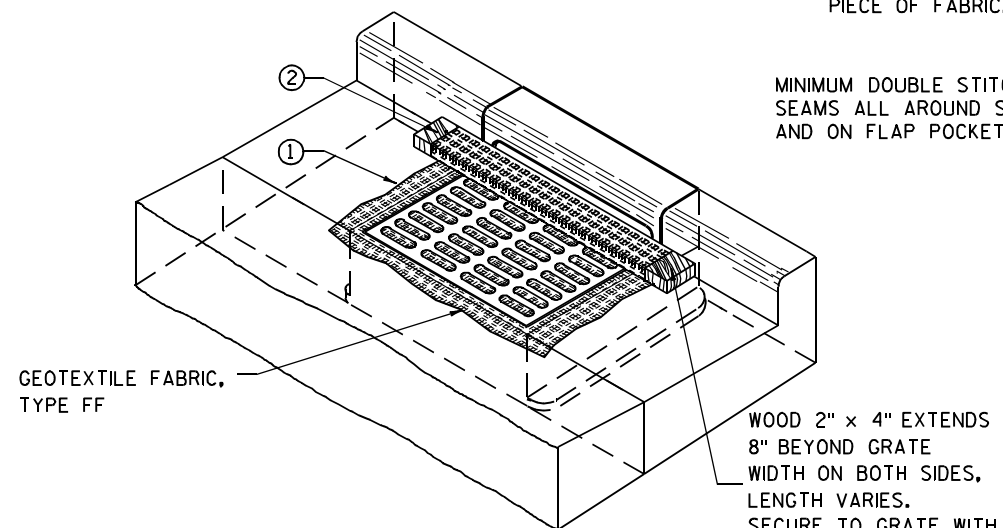
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

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



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



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.

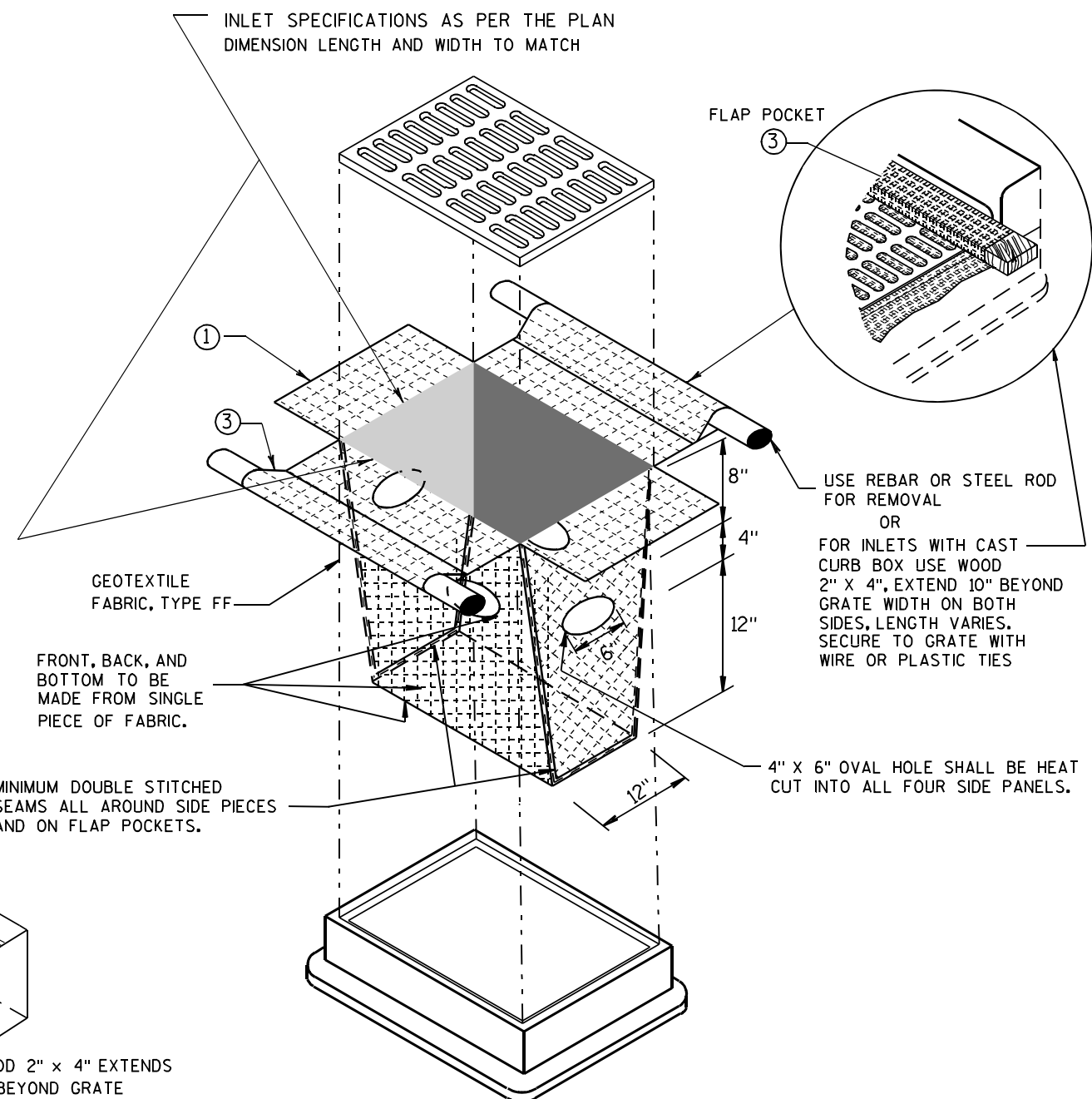
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

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 D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

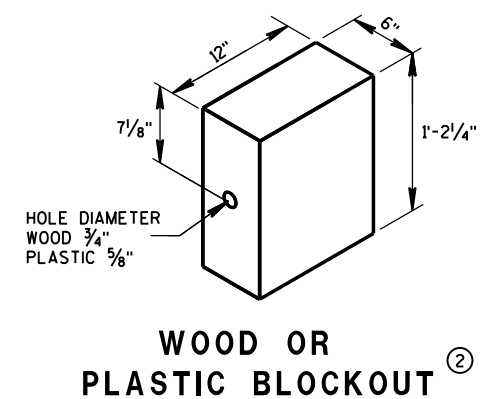
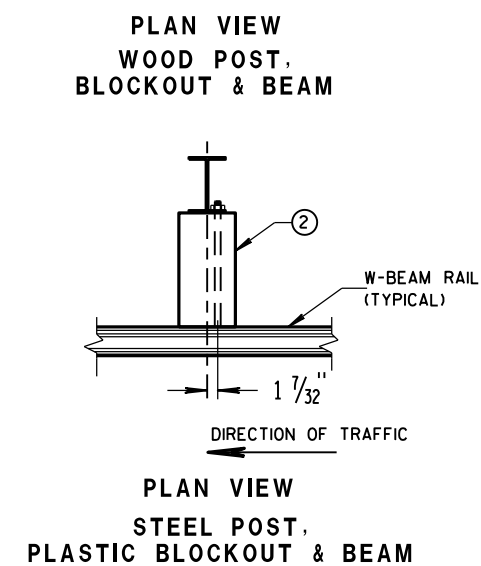
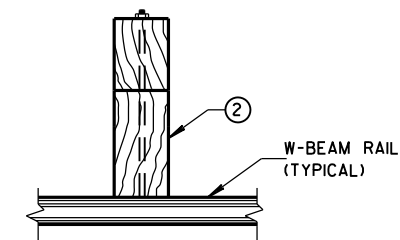
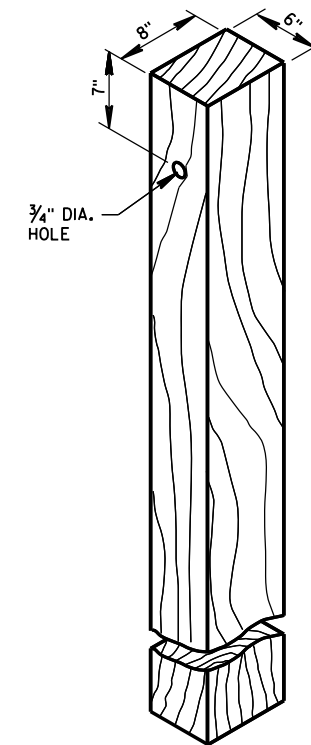
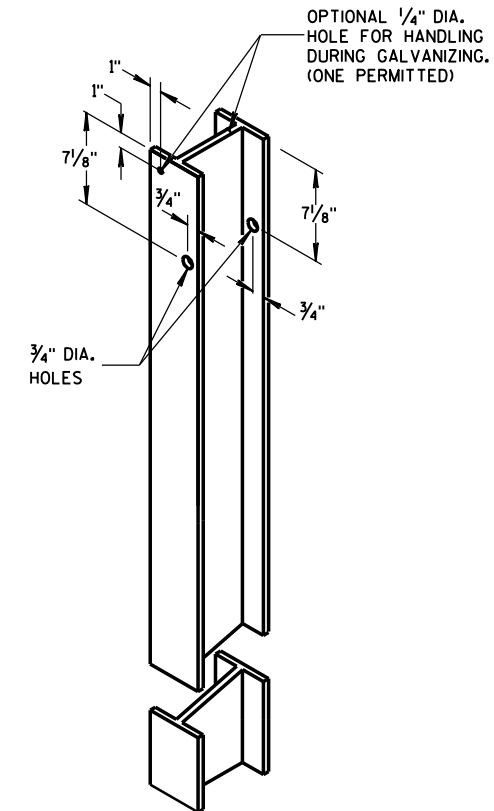
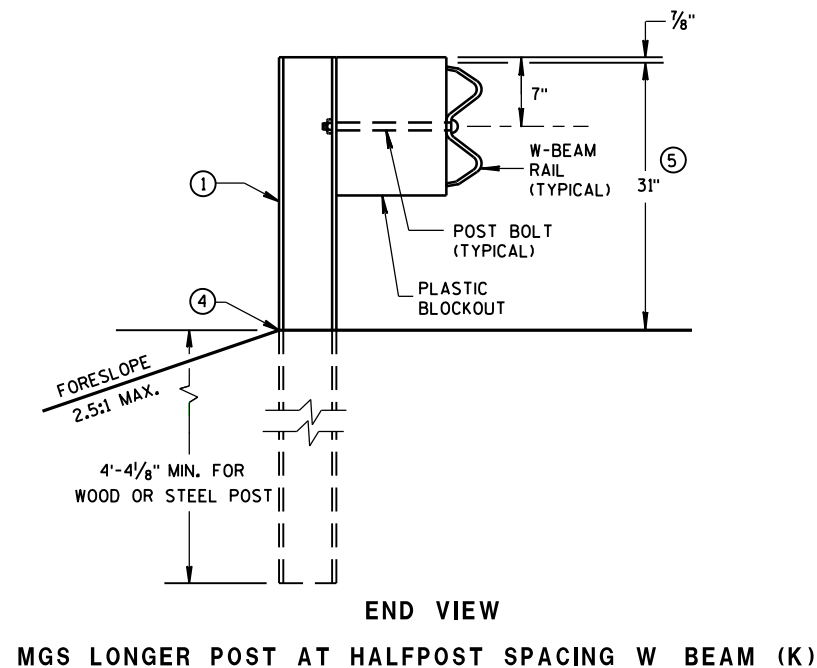
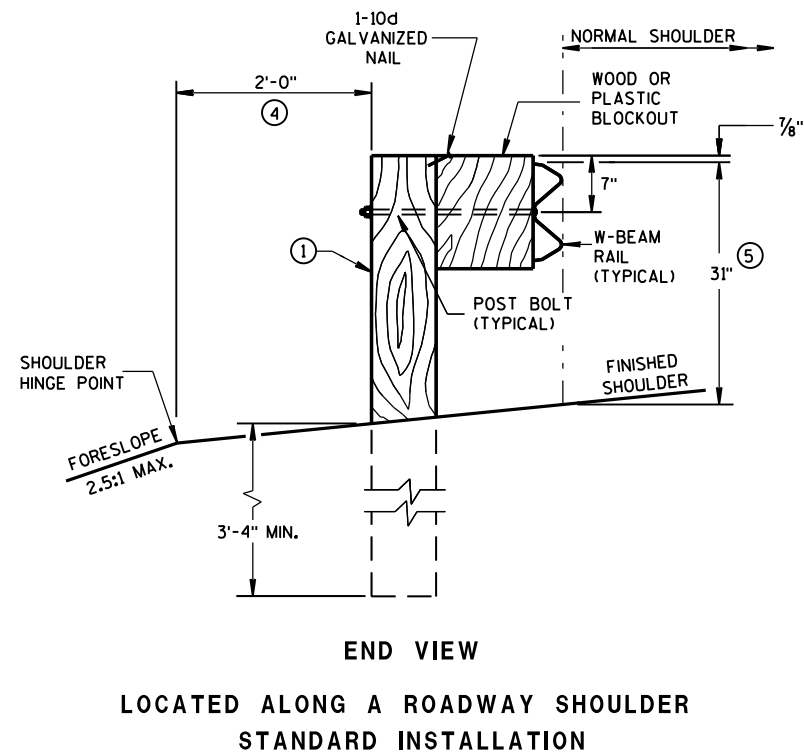
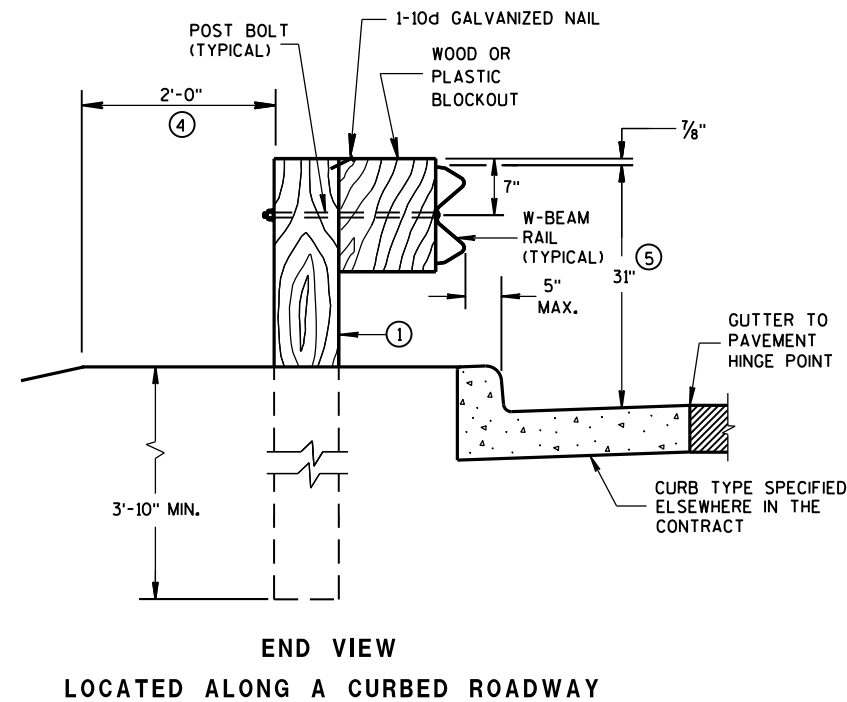
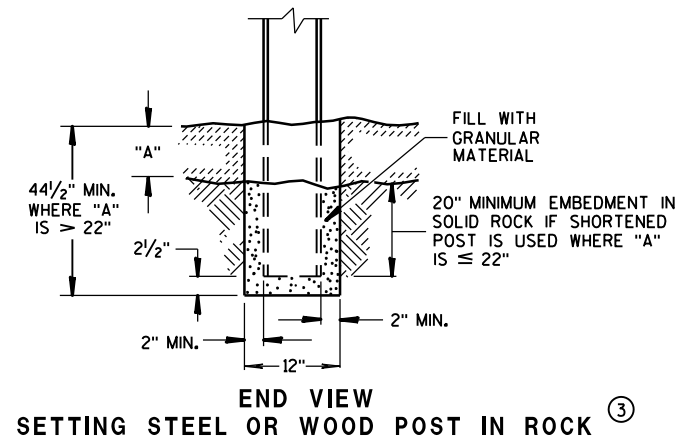
**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Cannestra
DATE
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER

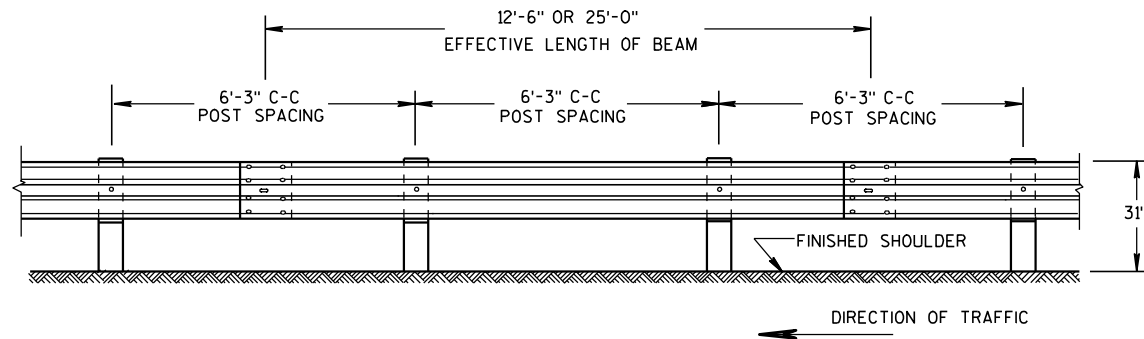
S.D.D. 14 B 42-2a

- S.D.D. 14 B 42-2a**



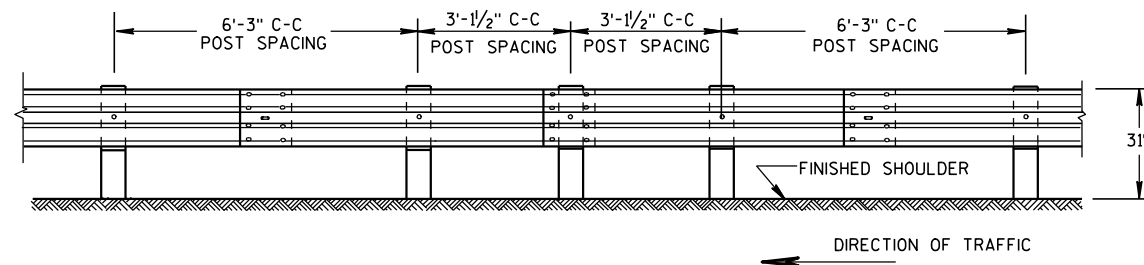
**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



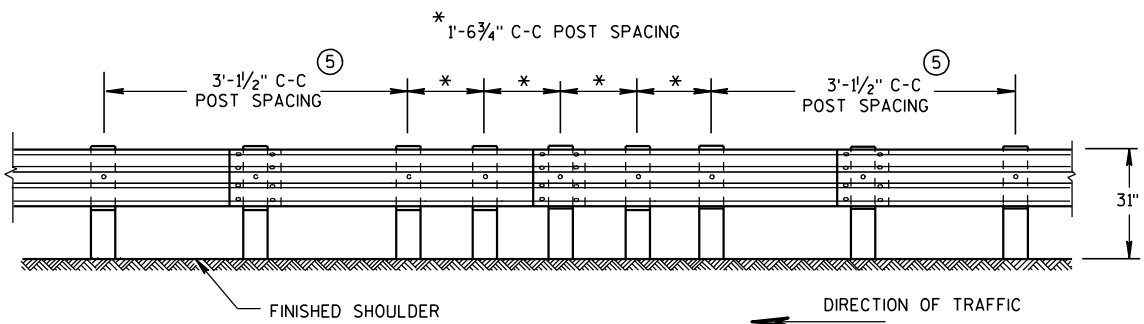
FRONT VIEW

POST SPACING STANDARD INSTALLATION



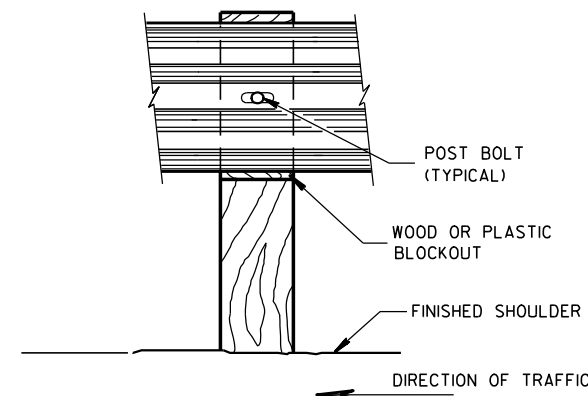
FRONT VIEW

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

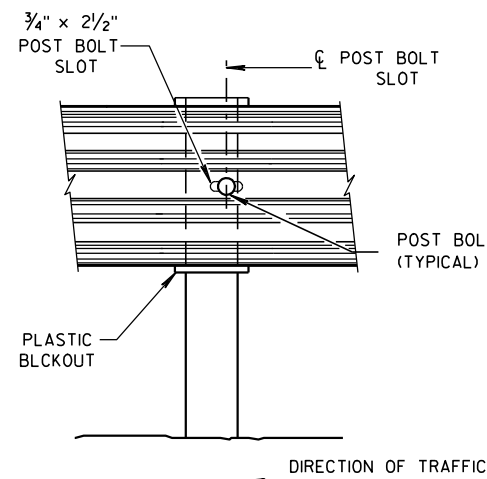


FRONT VIEW

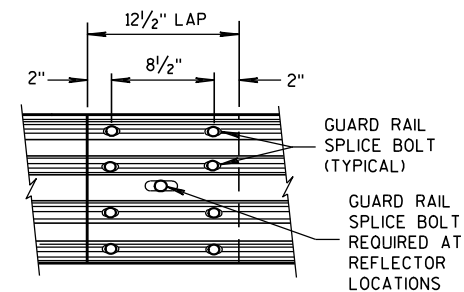
QUARTER POST SPACING (QS)



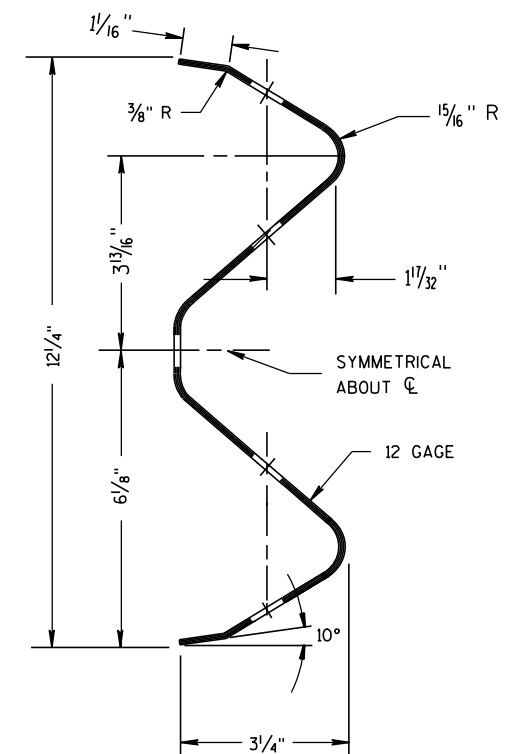
FRONT VIEW AT WOOD POST



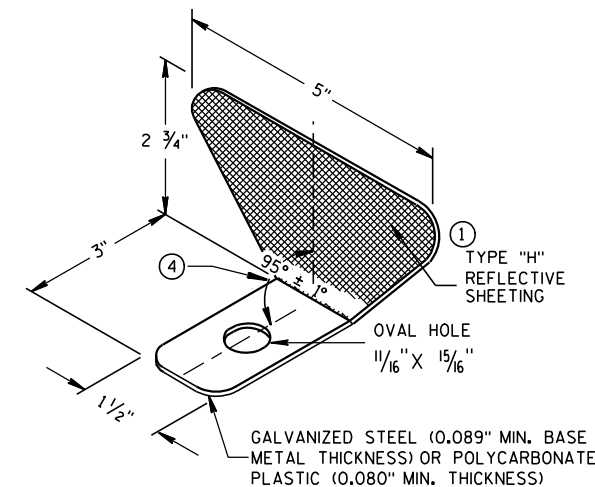
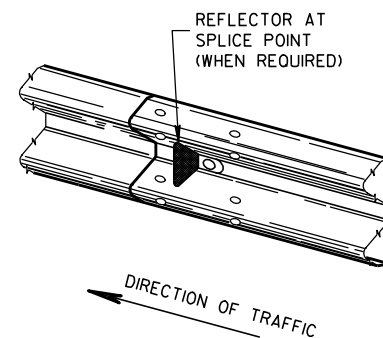
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

GENERAL NOTES

- 1 PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
- 2 DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.
- 3 REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
- 4 PROVIDE AN ANGLE OF BEND OF $90^\circ \pm 1^\circ$ FOR TWO-SIDED REFLECTORS.
- 5 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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

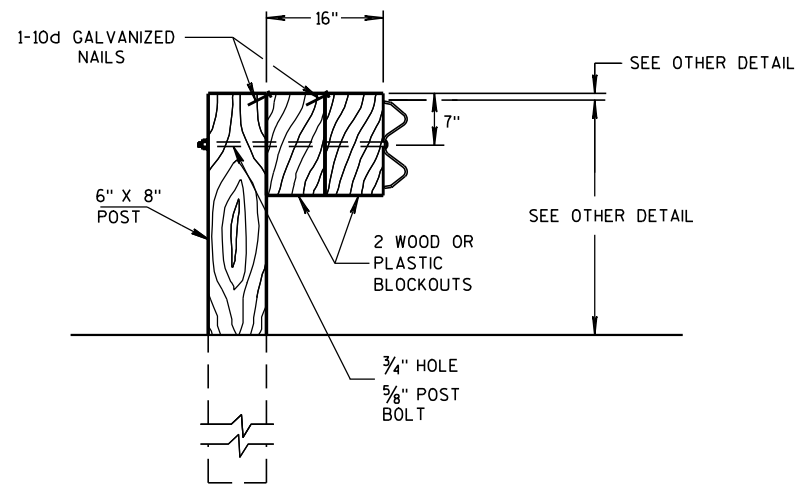
GUARD RAIL SPLICE BOLTS ARE A $\frac{5}{8}$ " DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES $\frac{5}{8}$ " DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

REFLECTOR SPACING

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

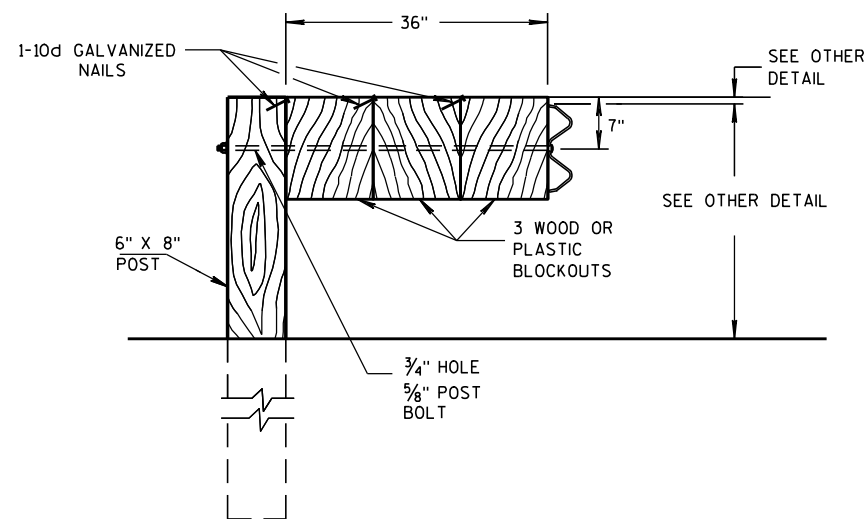
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL FOR 16" BLOCKOUT DEPTH

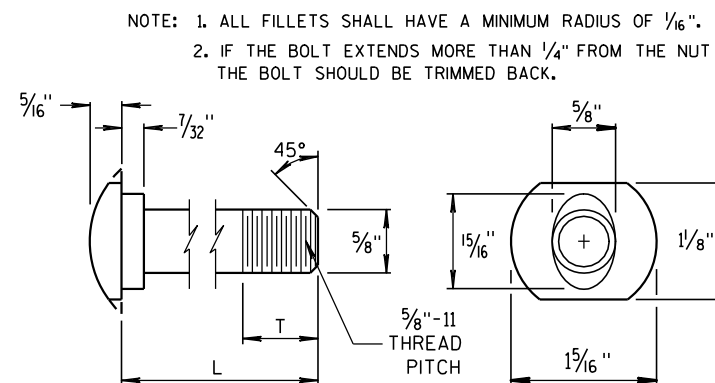
IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.



DETAIL FOR 36" BLOCKOUT DEPTH

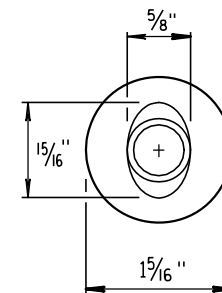
NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

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

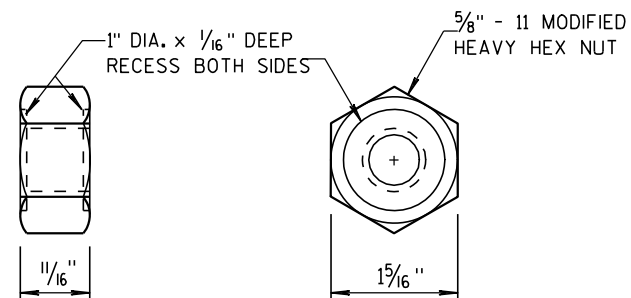


POST BOLT TABLE

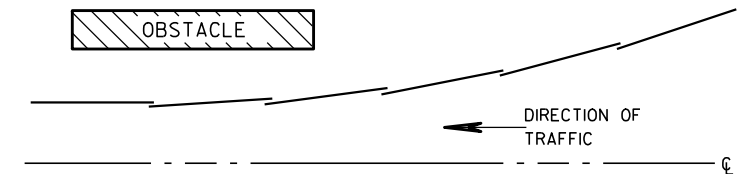
L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



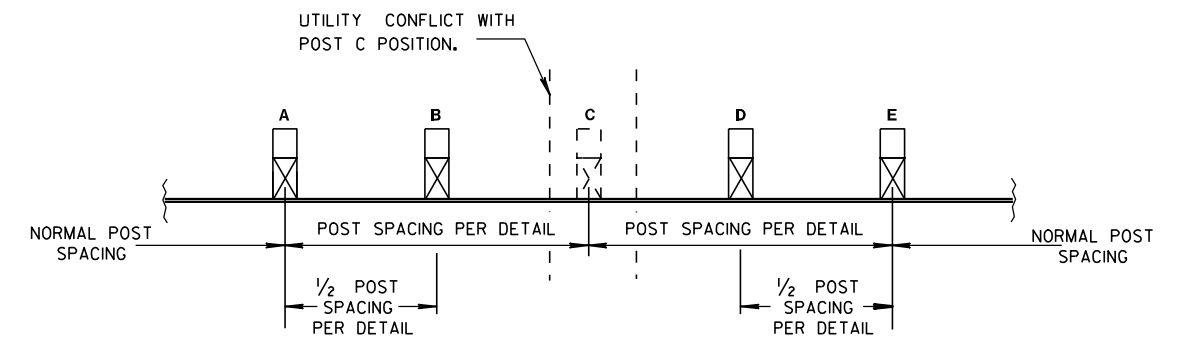
ALTERNATE BOLT HEAD



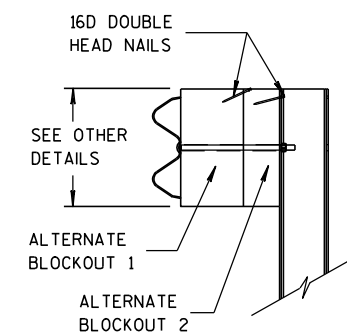
POST BOLT
AND RECESS NUT



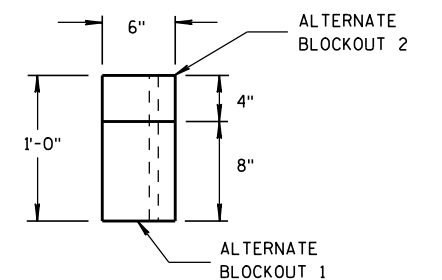
PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS
UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/15/2011
DATE

FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

GENERAL NOTES

- (A) THE SLOPE IN THE AREA BOUNDED BY THE EXTENDED VEHICLE RUNOUT PATH (EVRP), THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.
- (B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.
- (C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.
- (D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.
- (E) SHEETING IS ATTACHED TO 0.040 ALUMINUM SHEET AND ATTACHED TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER OF E.A.T.
- (F) 1/2" DIAMETER X 3" LONG LAG BOLT AND WASHER.
- (H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.
- (I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

SEE SDD 14B42 FOR MORE INFORMATION.

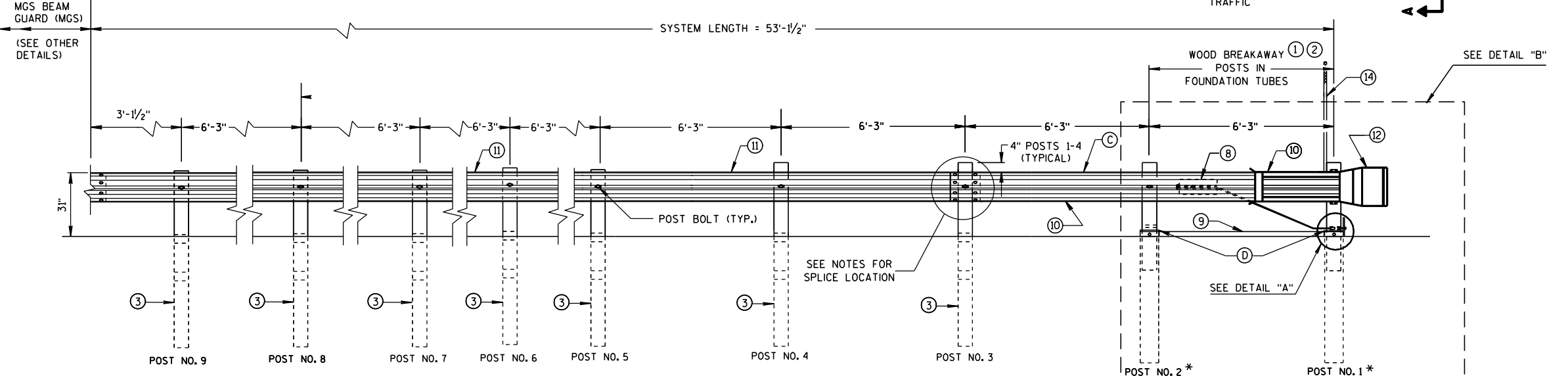
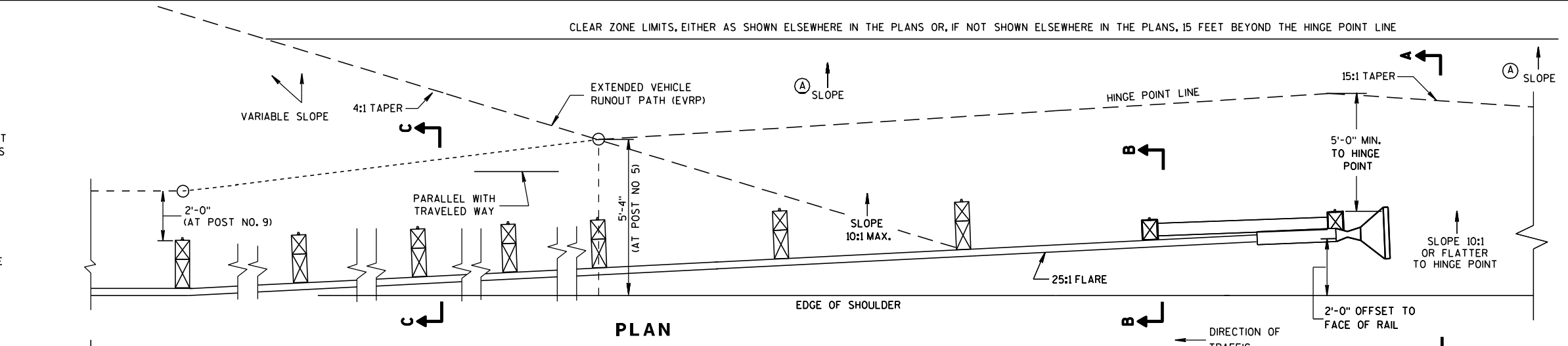
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

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

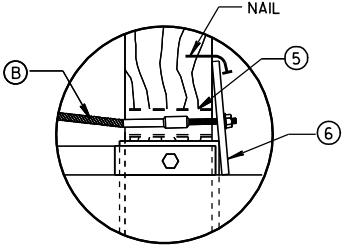
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

PATTERN AND COLORS ON REFLECTIVE SHEETING TYPE H ARE TO CONFORM TO OM3-L OR OM3-R OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

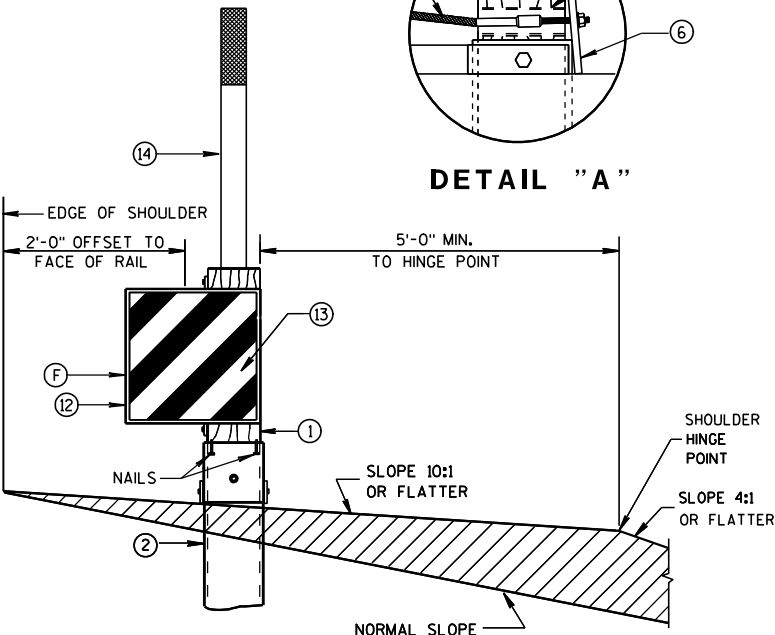
THE CENTER OF THE UPPER 3/2" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE ($\pm \frac{3}{4}$ ")



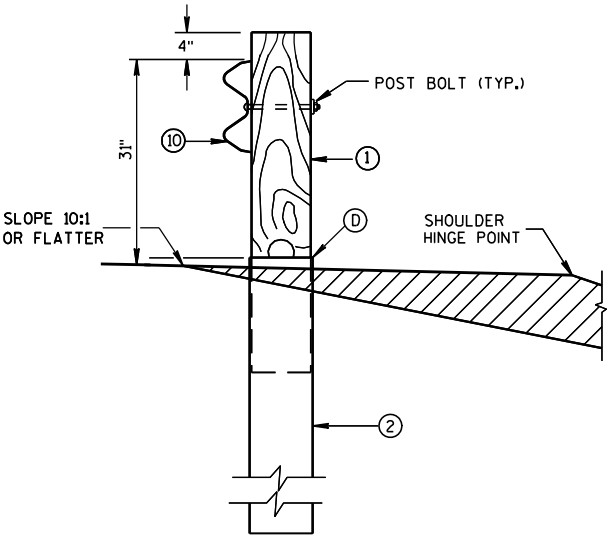
ELEVATION



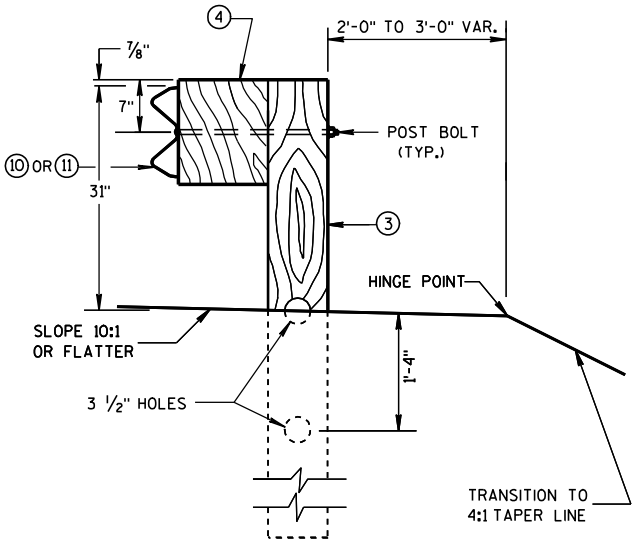
DETAIL "A"



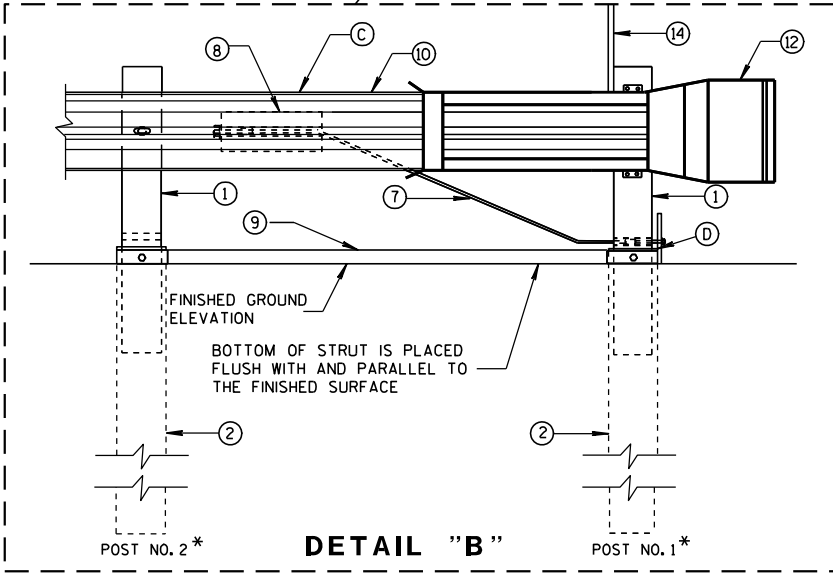
SECTION A-A
TYPICAL AT POST NO. 1*



SECTION B-B
TYPICAL AT POST NO. 2*



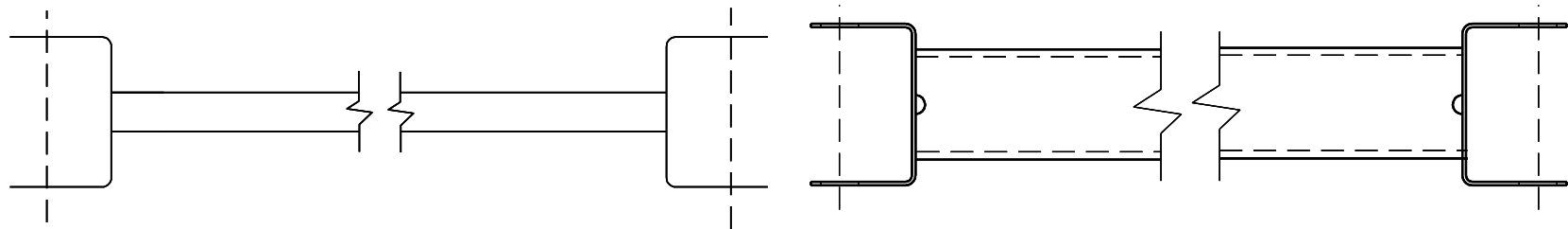
SECTION C-C
TYPICAL AT POST NOS. 3-9



DETAIL "B"

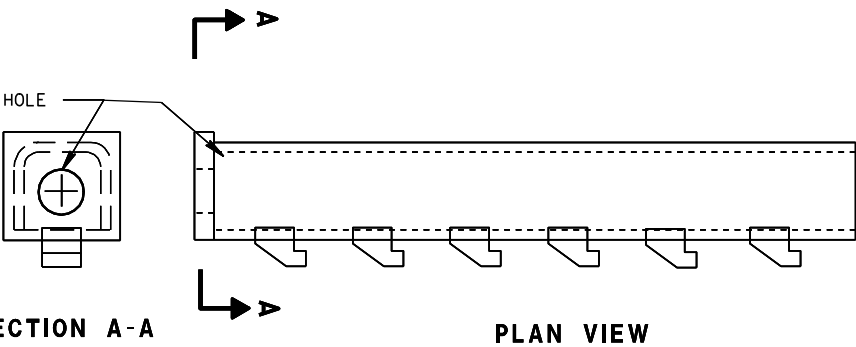
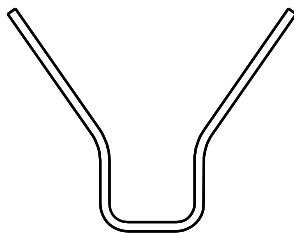
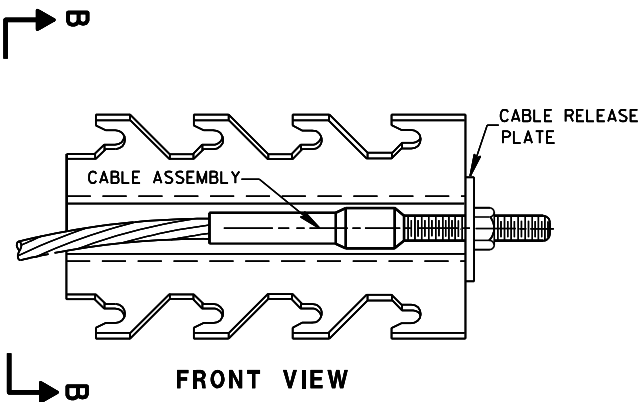
MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



9 H

GENERIC GROUND STRUT

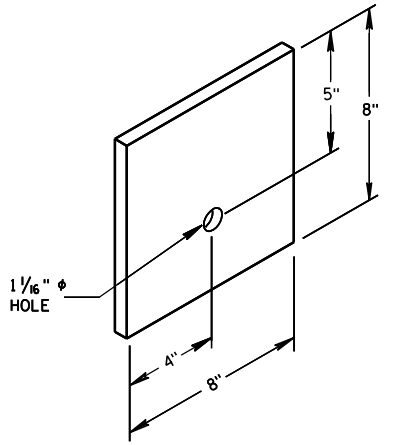


8 H

GENERIC ANCHOR CABLE BOX

BILL OF MATERIALS

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

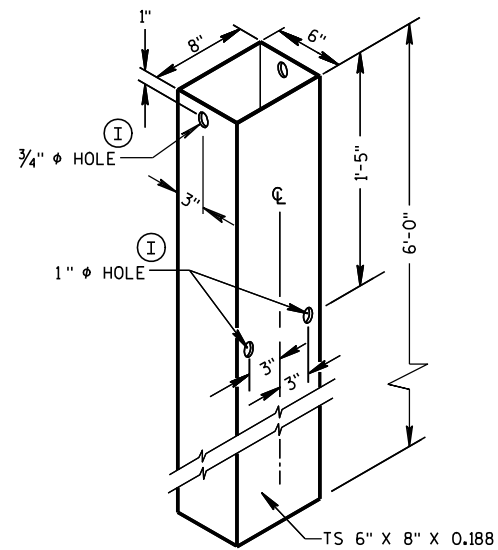


6

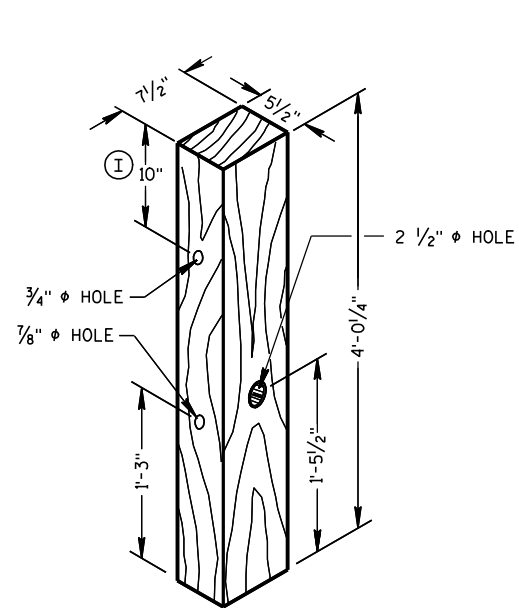
BEARING PLATE

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

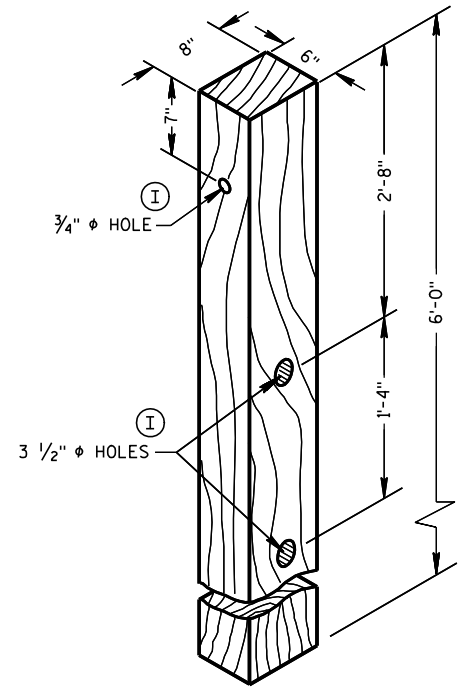
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



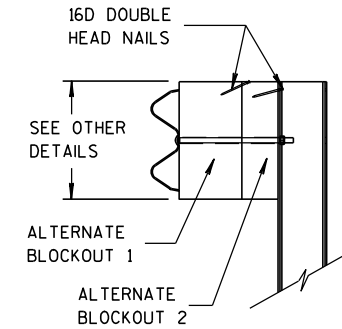
FOUNDATION TUBE ②



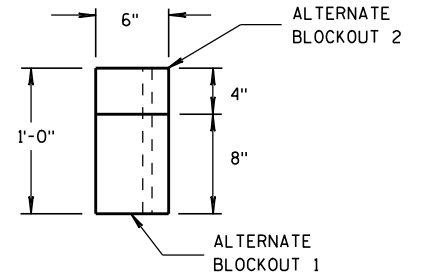
WOOD BREAKAWAY POST ①



WOOD CRT POST ③

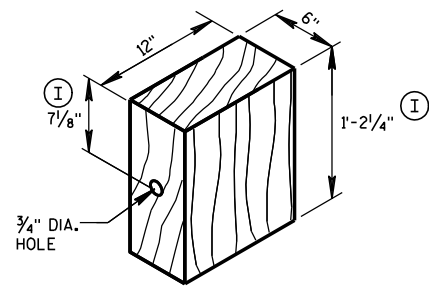


SIDE VIEW



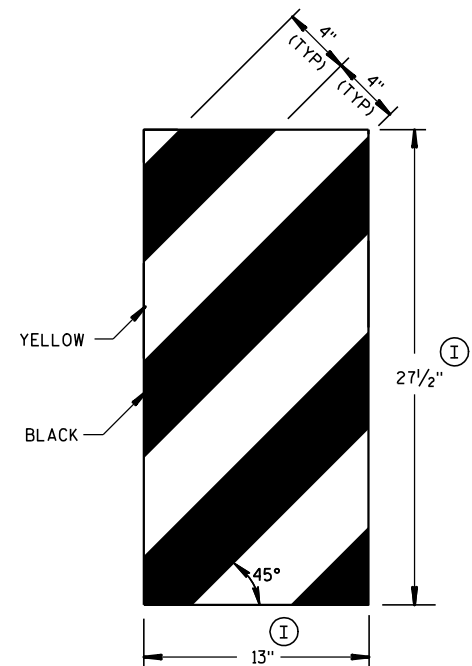
TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

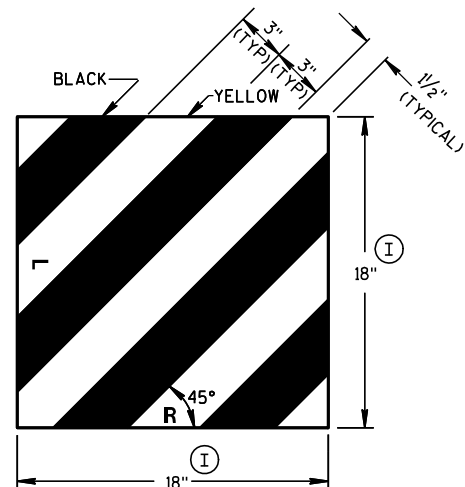


WOOD BLOCKOUT ④

YELLOW REFLECTIVE TAPE
3" X 9" TYPE H
REFLECTIVE SHEETING



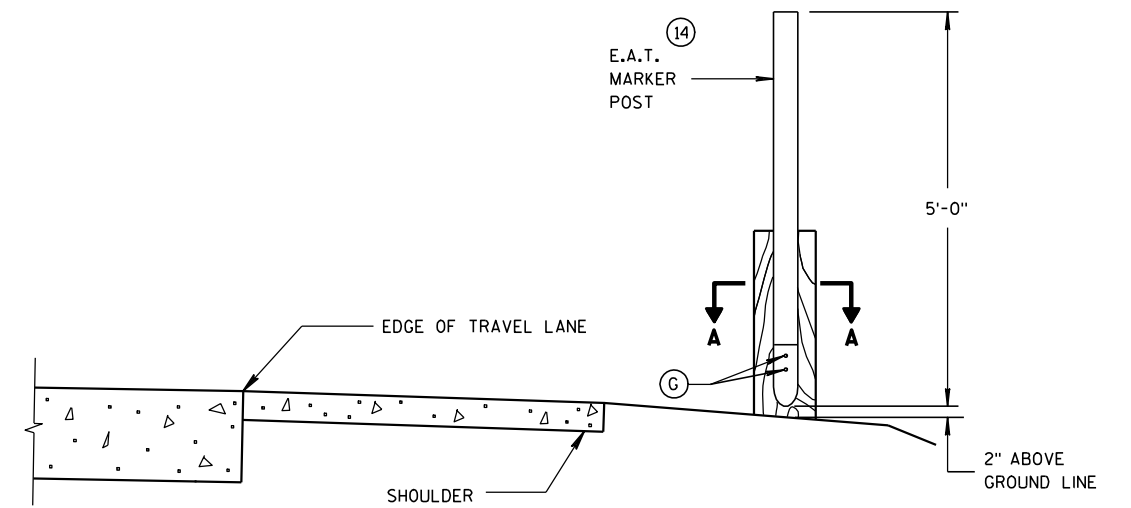
GENERIC REFLECTIVE SHEETING ⑬ ④



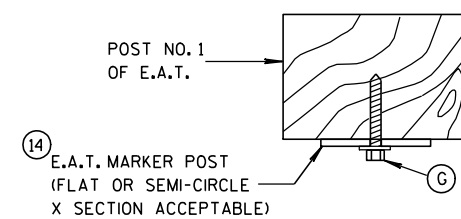
FRONT VIEW

SIDE VIEW

E.A.T. MARKER POST ⑭



TYPICAL INSTALLATION OF E.A.T.
MARKER POST BACKSIDE OF POST NO. 1
(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

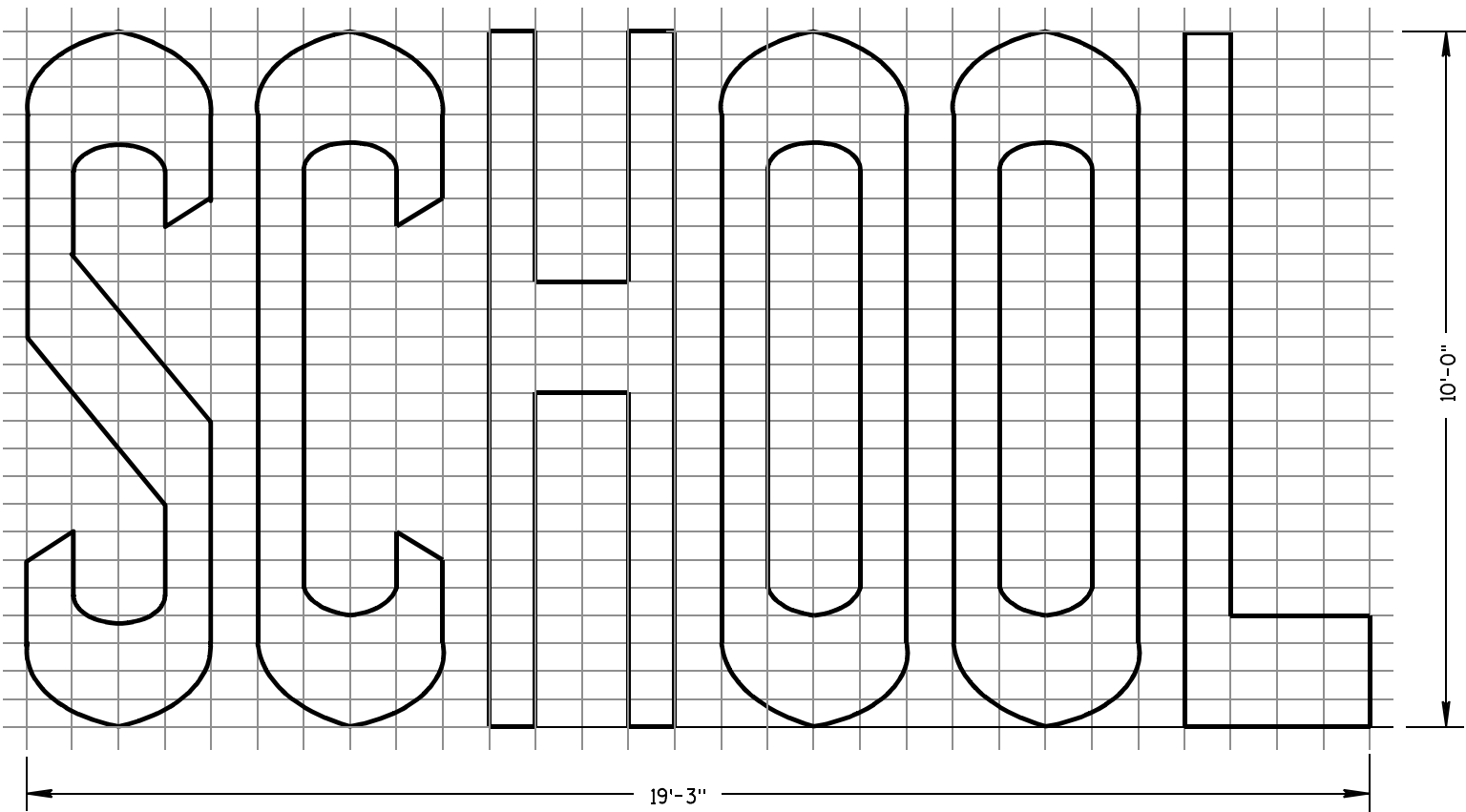
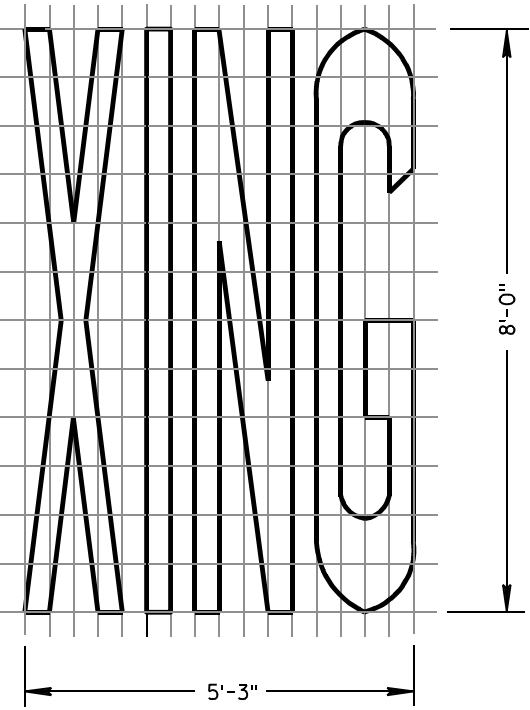
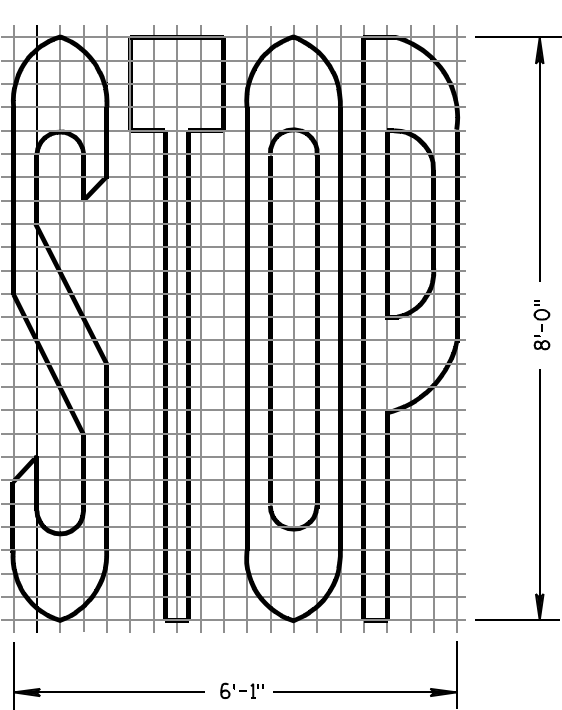
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/2011 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

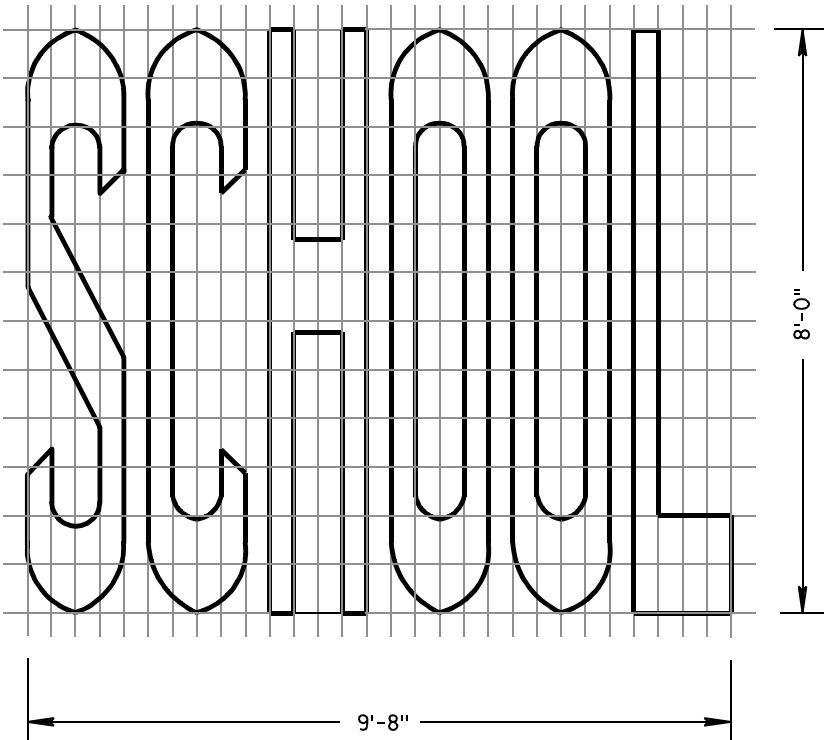
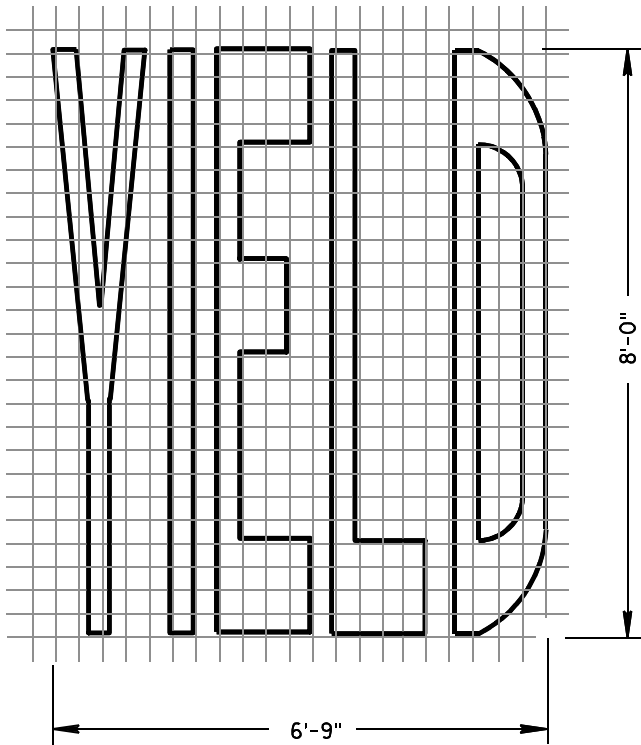
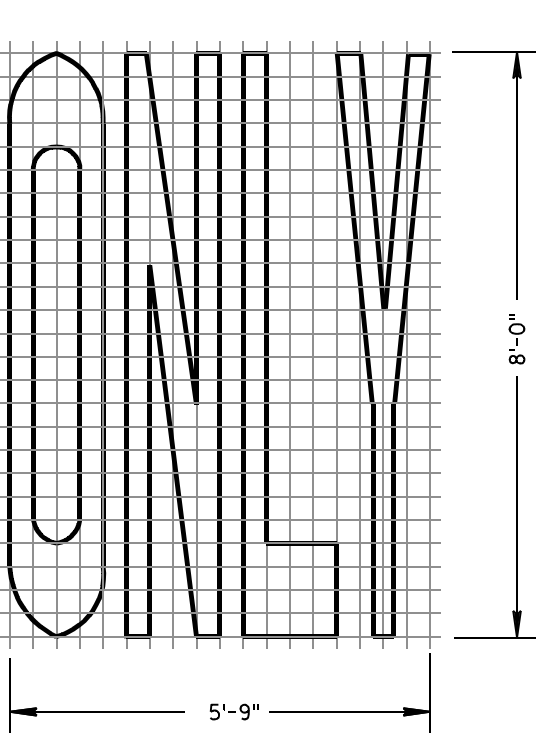
GENERAL NOTES

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

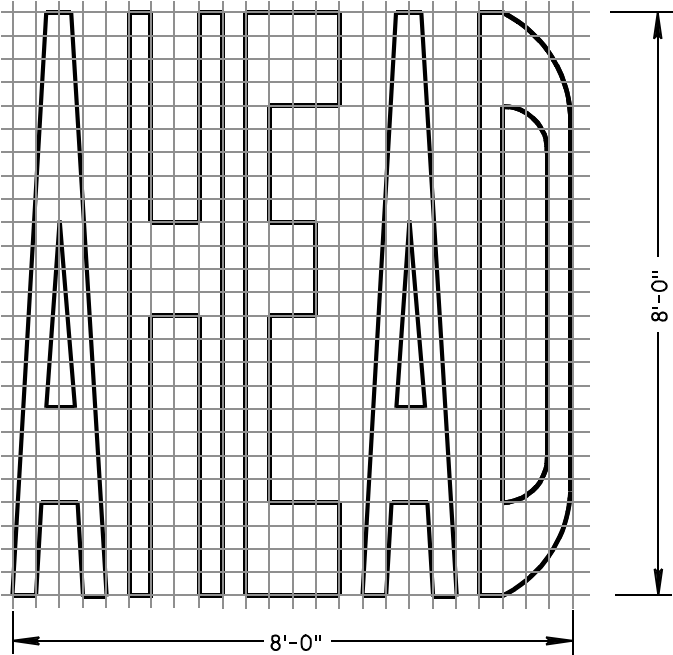
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



TWO-LANE



SINGLE-LANE



PAVEMENT MARKING WORDS

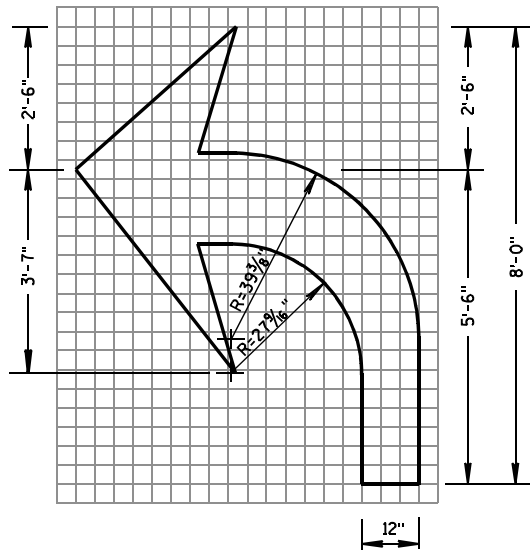
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

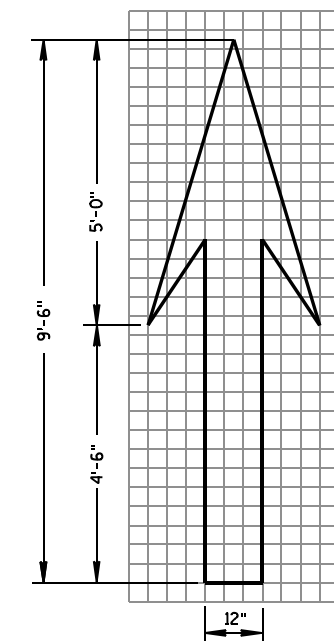
7-1-11
DATE

/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER OF DESIGN

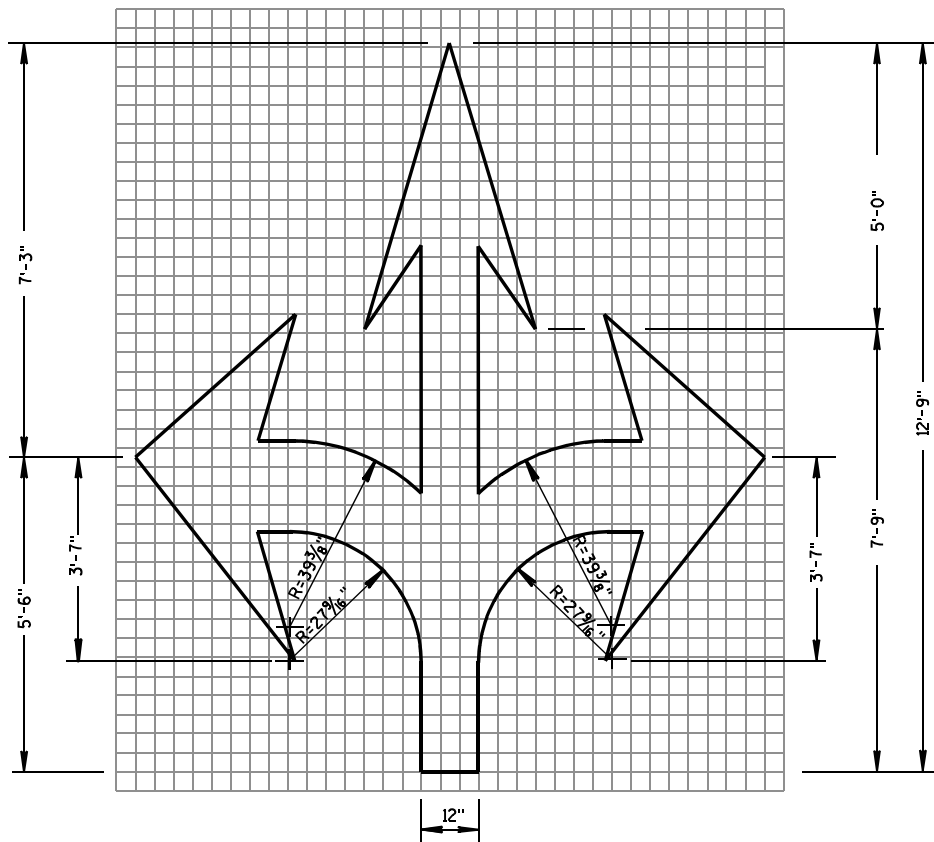
FHWA



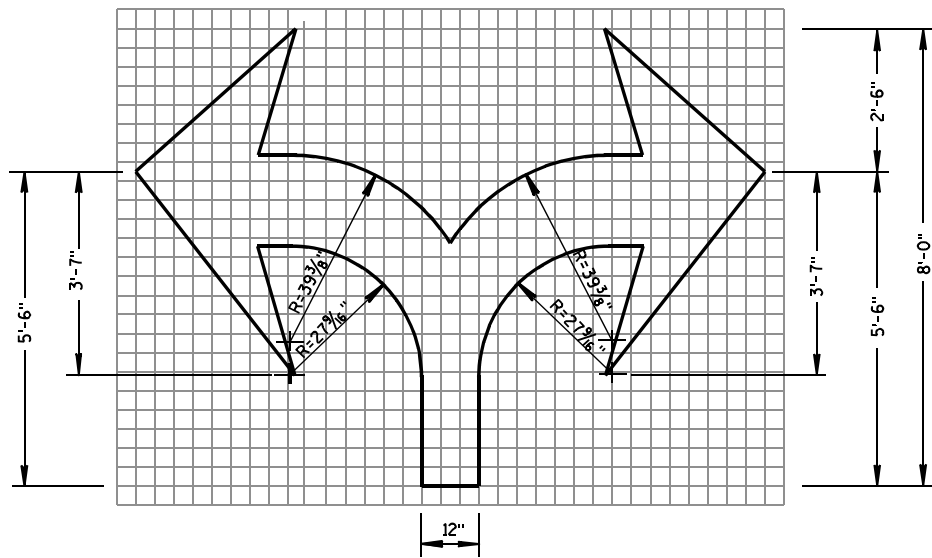
TYPE 2



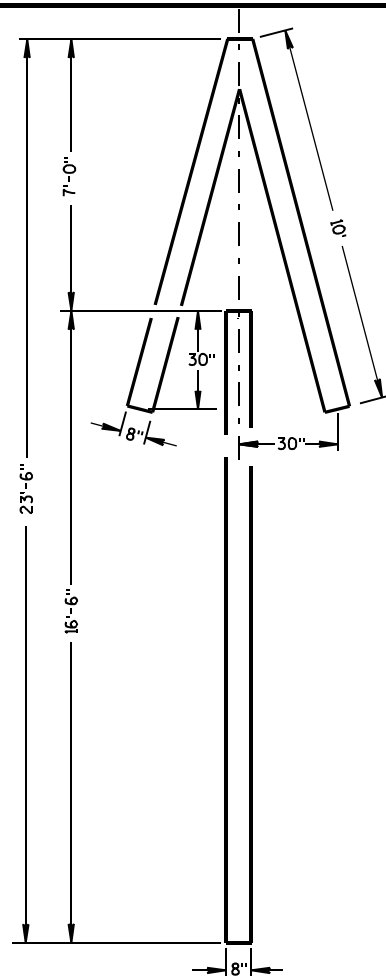
TYPE 1



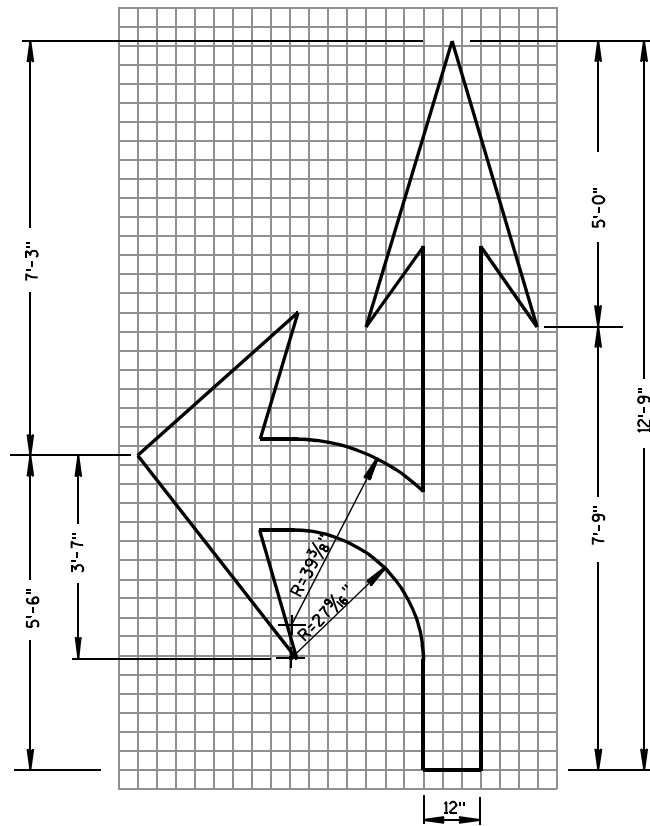
TYPE 6



TYPE 7



TYPE 4

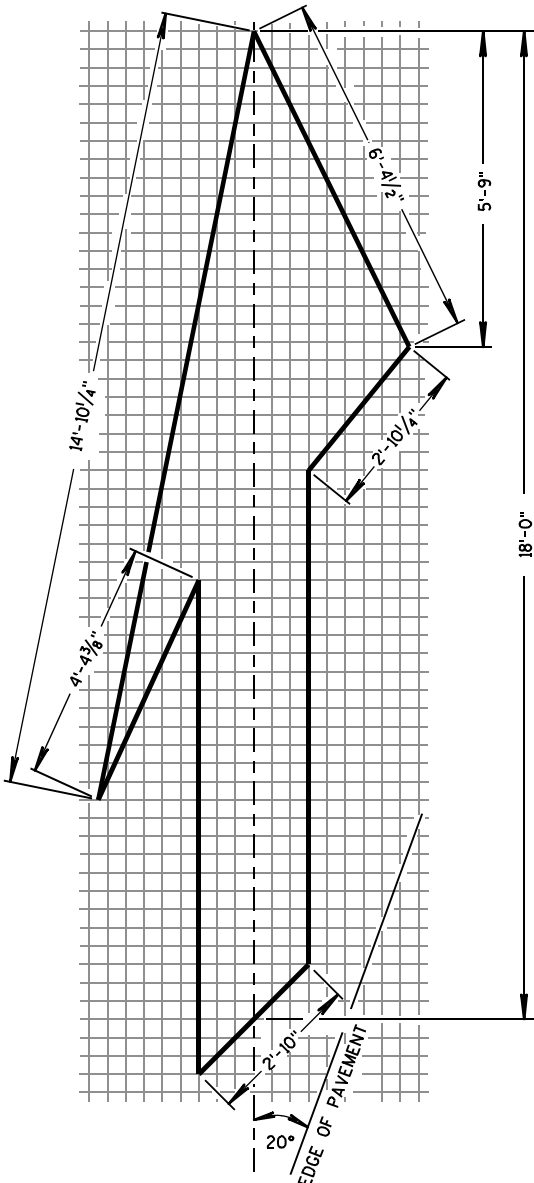


TYPE 3

GENERAL NOTES

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

ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



TYPE 5 LANE DROP ARROW

PAVEMENT MARKING ARROWS

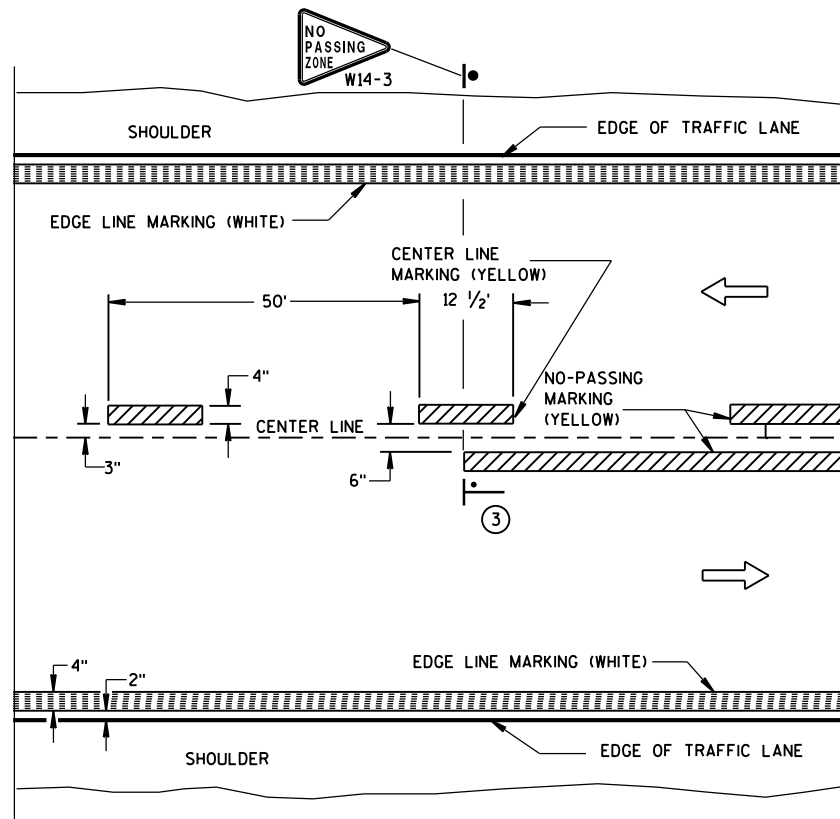
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

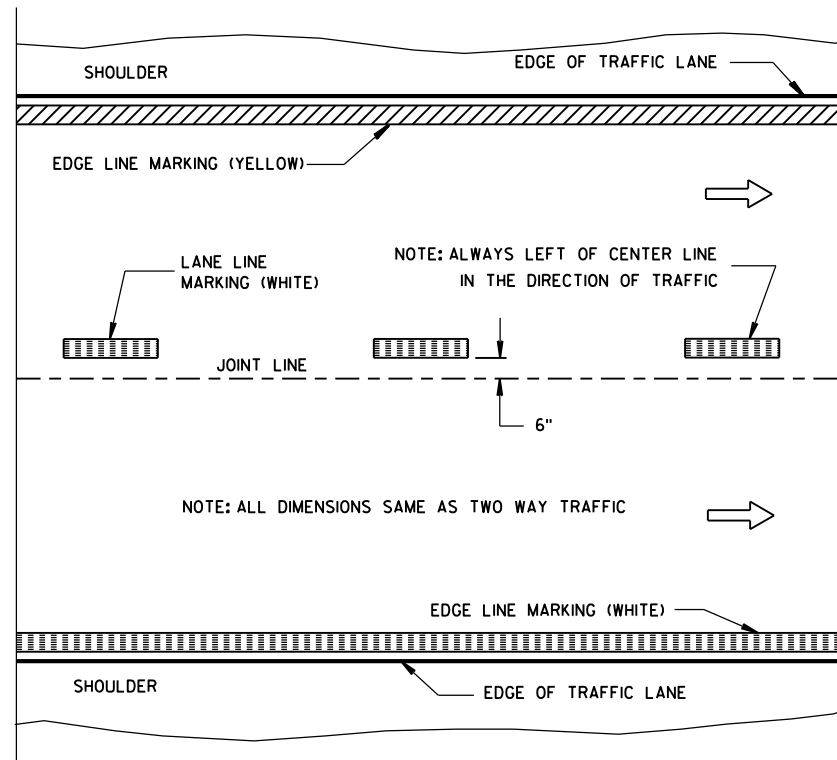
7/1/11
DATE

/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER OF DESIGN

FHWA

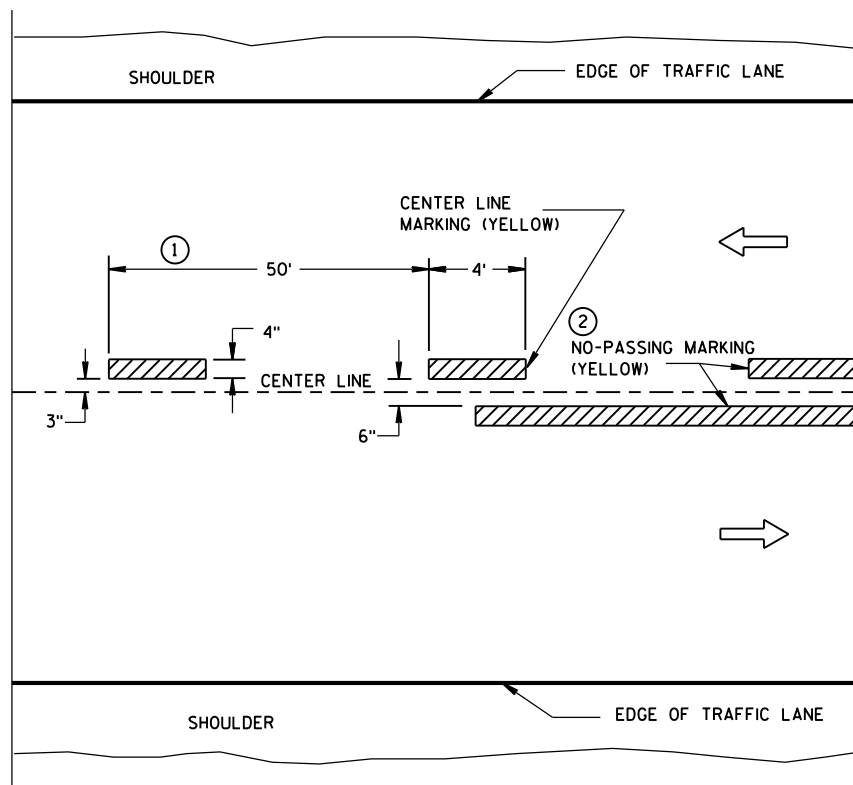


TWO WAY TRAFFIC

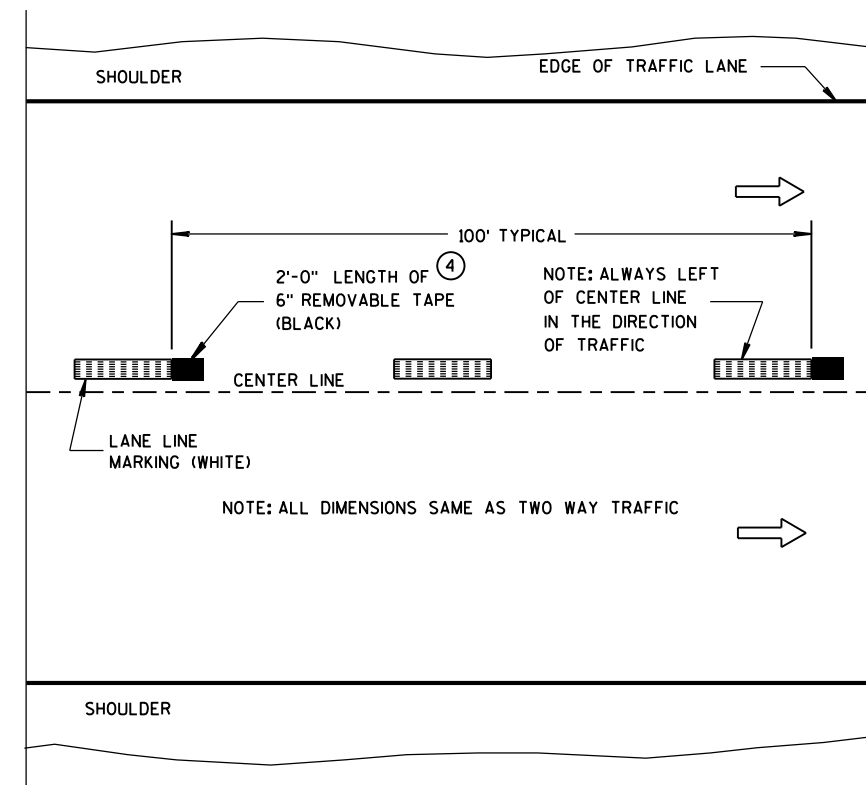


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

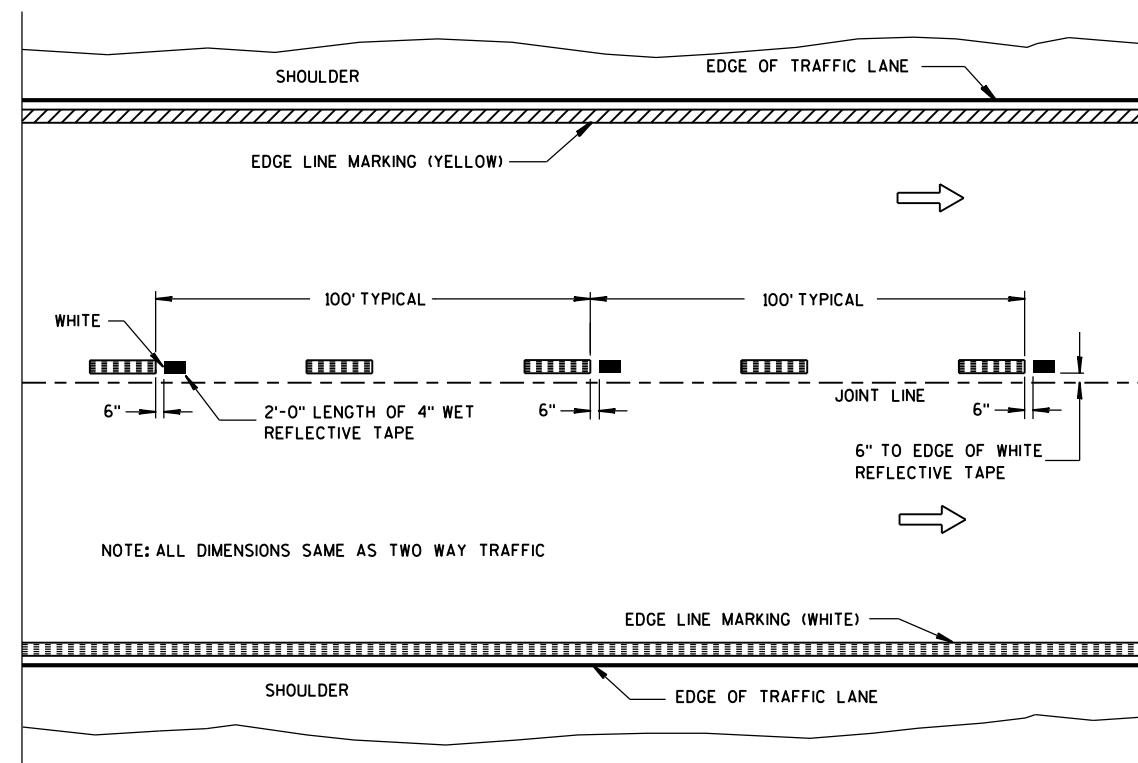
GENERAL NOTES

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

- ① HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- ③ NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
- ④ CONCRETE ONLY.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

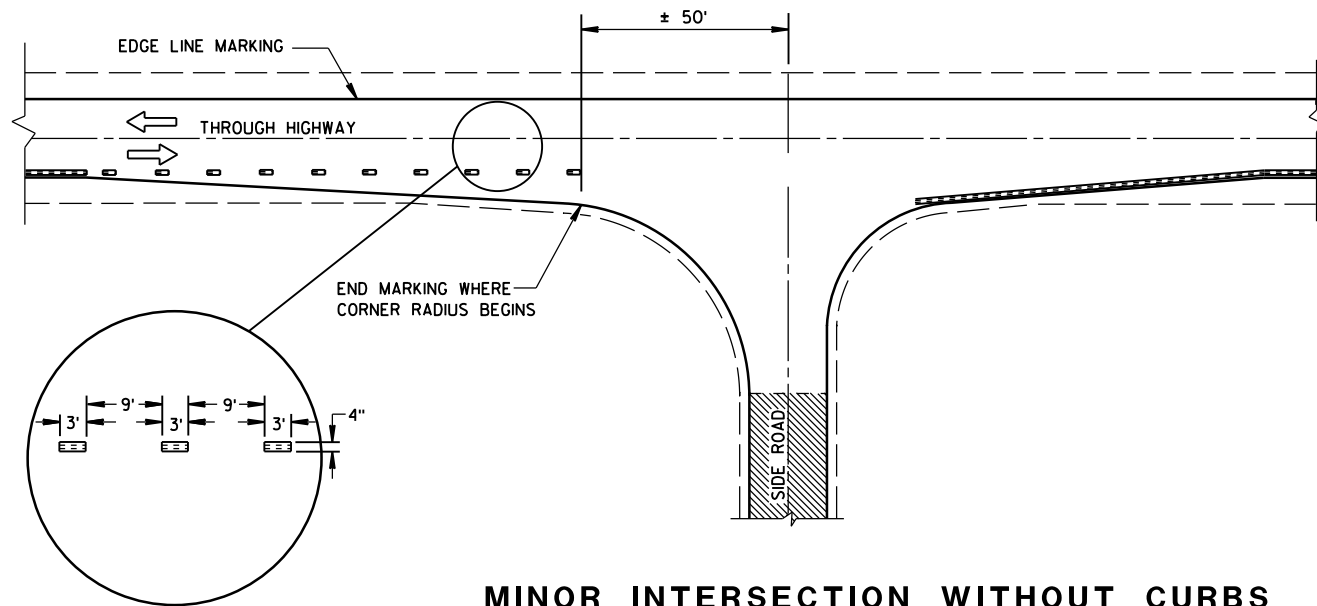
LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

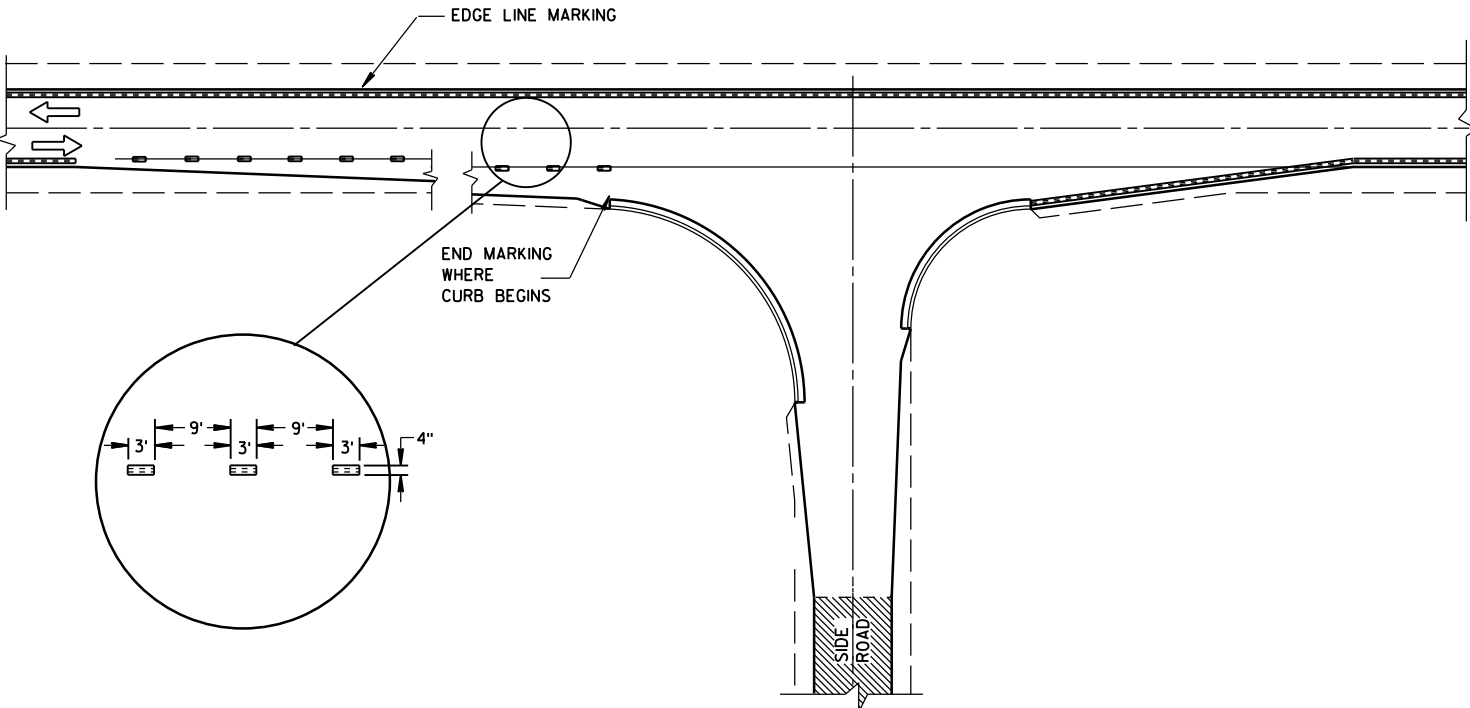
APPROVED
10-1-2012 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



MINOR INTERSECTION WITHOUT CURBS

⑦

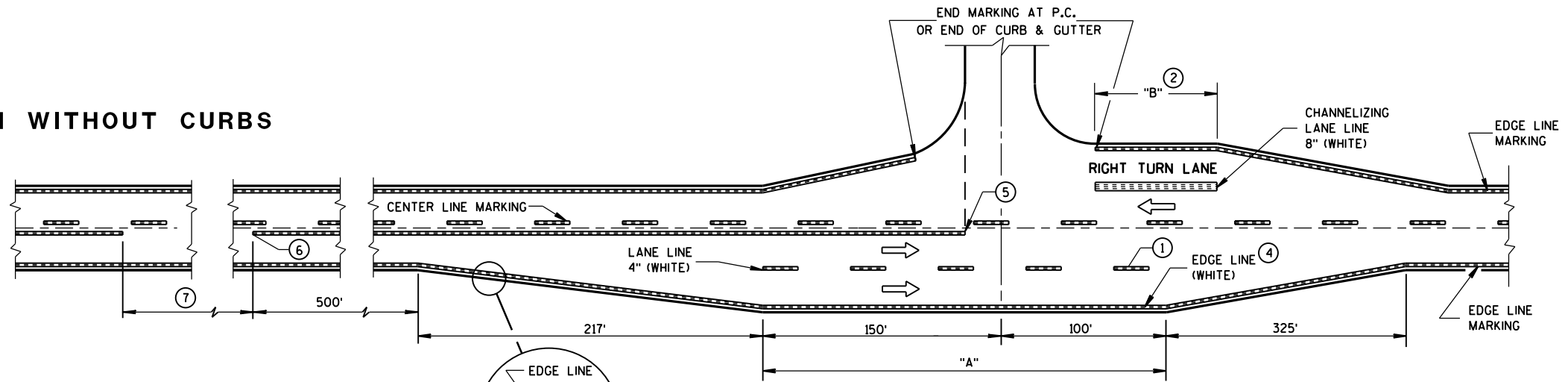
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



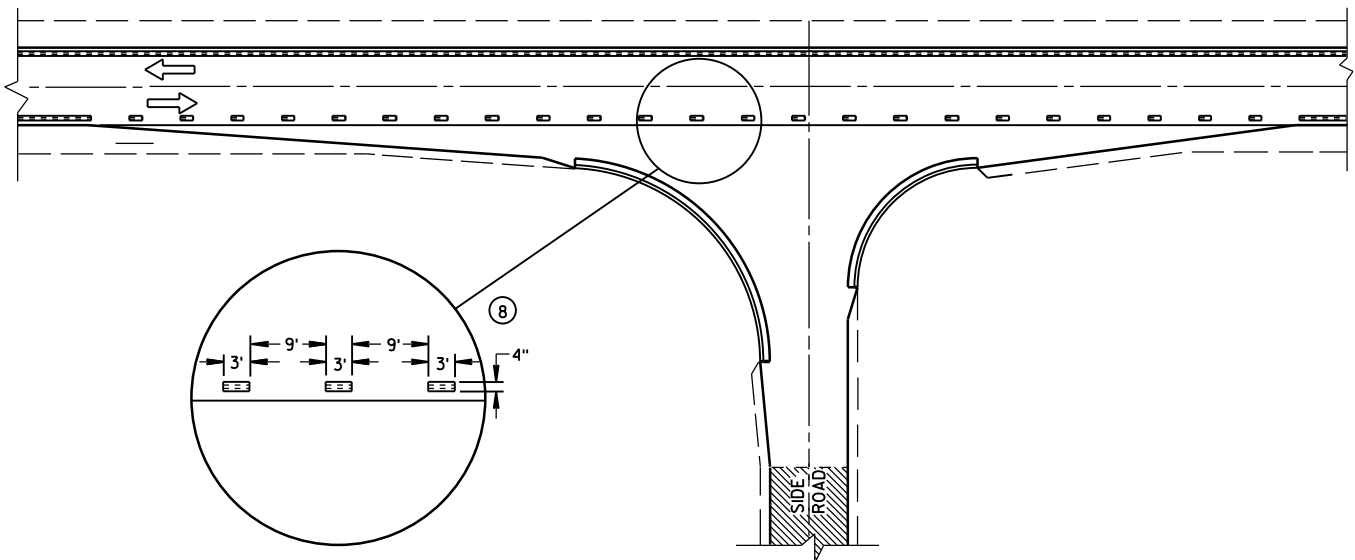
MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)

GENERAL NOTES

- EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
 - ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
 - ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
 - ④ THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.
 - ⑤ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.
 - ⑥ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
 - ⑦ IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.
 - ⑧ 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

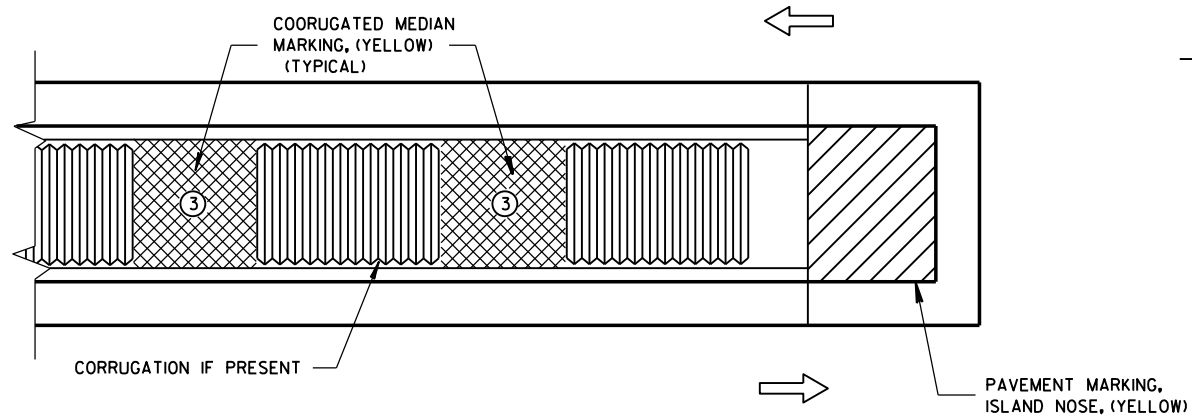


MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)

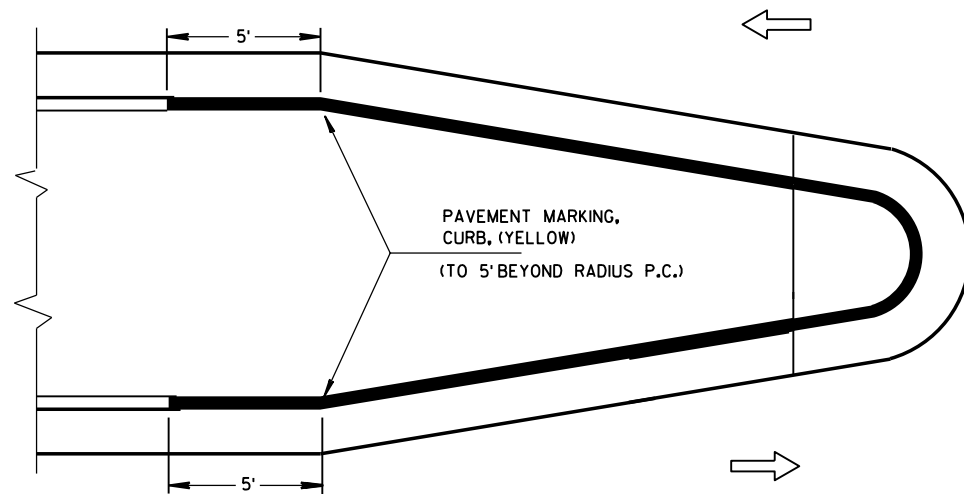


MINOR INTERSECTION WITH CURBS
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

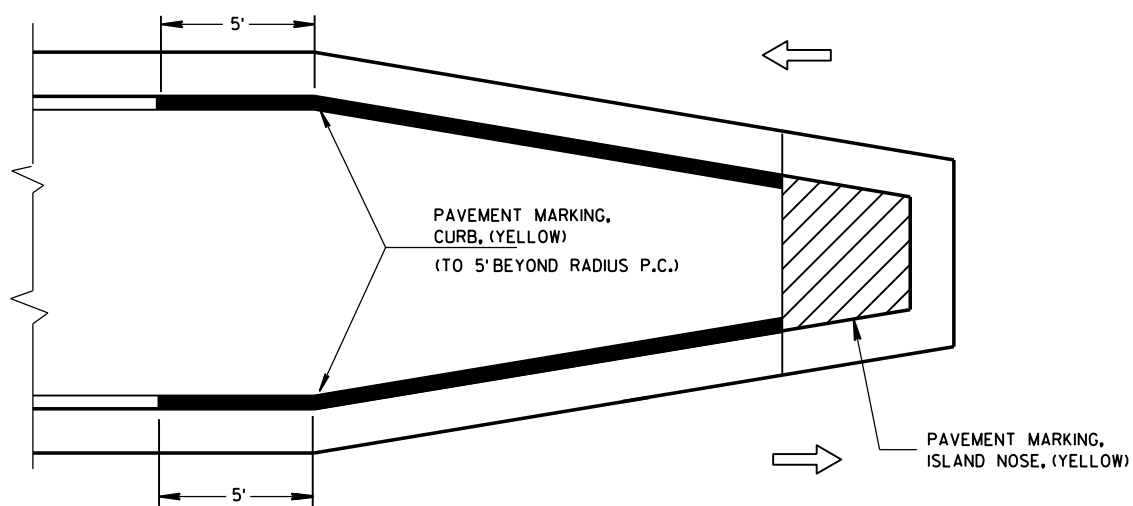
PAVEMENT MARKING (INTERSECTIONS)
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

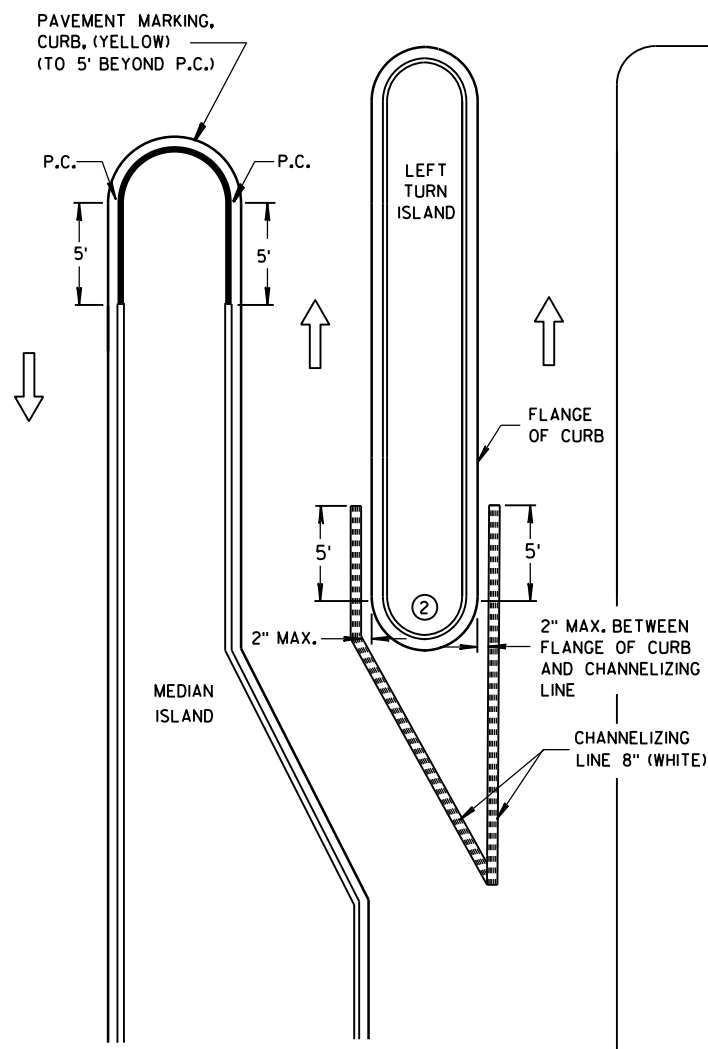


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

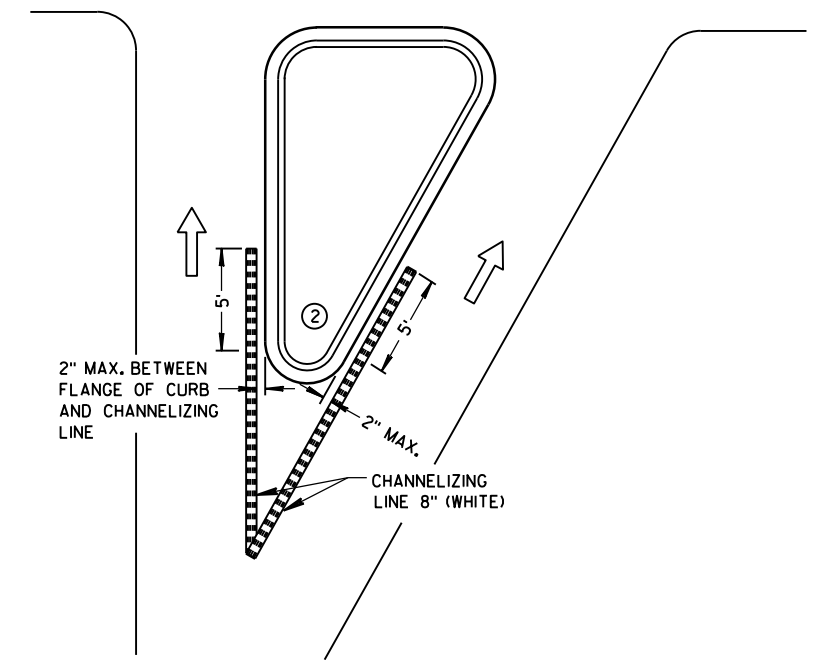
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

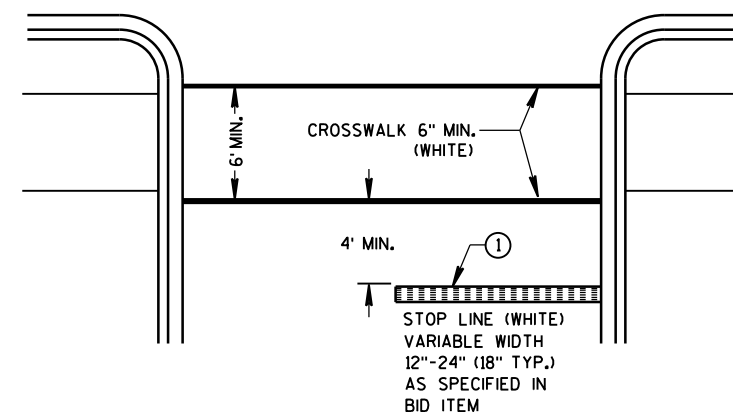
- ① STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
- ② DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
- ③ WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL




STOP LINE AND CROSSWALK


PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)


STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TWO-LANE ROADWAY

SYMBOLS

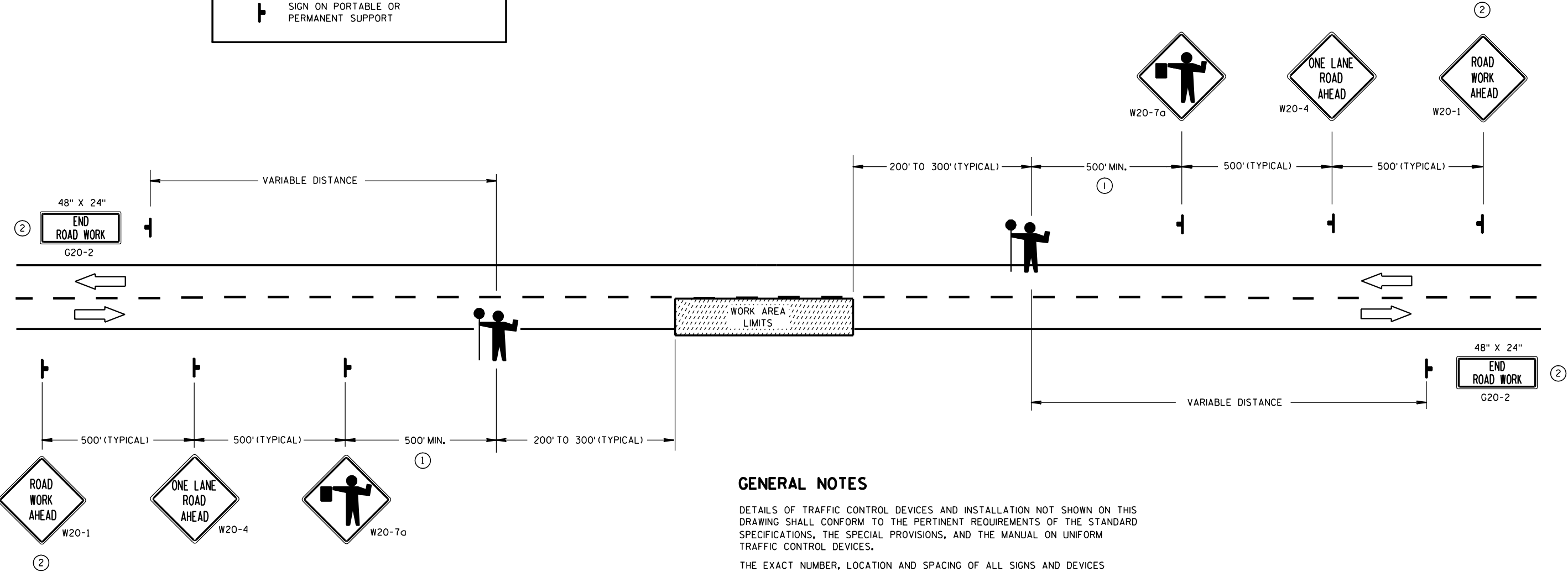
WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN ON PORTABLE OR PERMANENT SUPPORT



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



GENERAL NOTES

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

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

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

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

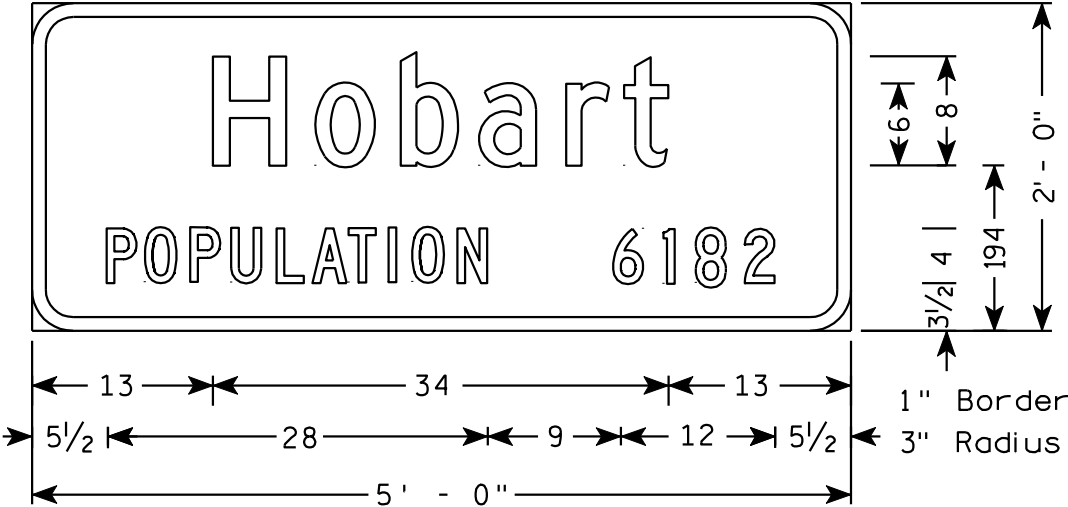
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

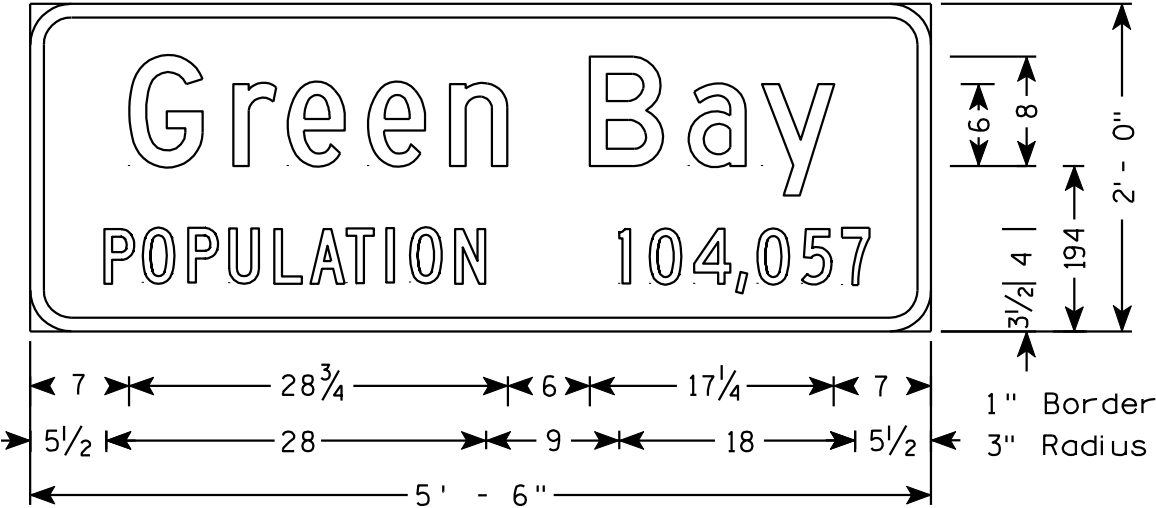
TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

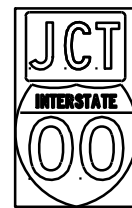
APPROVED
9/5/06 /S/ Thomas N. Notbohm
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



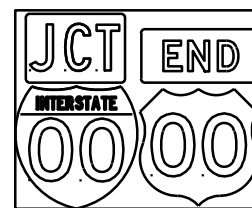
- NOTES
1. All Signs Type II- Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
 2. Color:
Background - Green
Message - White
 3. Message Series - C except as noted



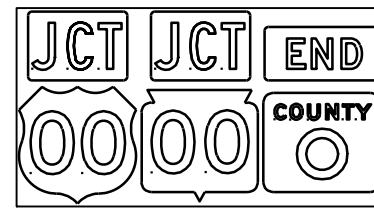
TYPICAL ASSEMBLIES



J1-1



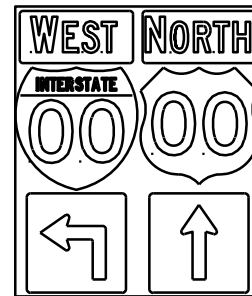
J1-2



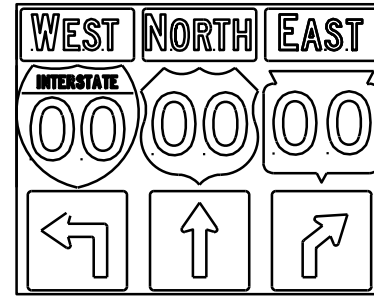
J1-3



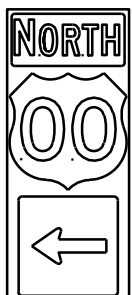
J2-1



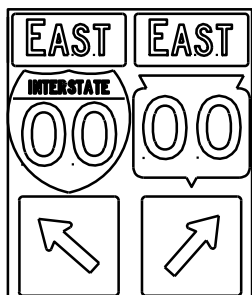
J2-2



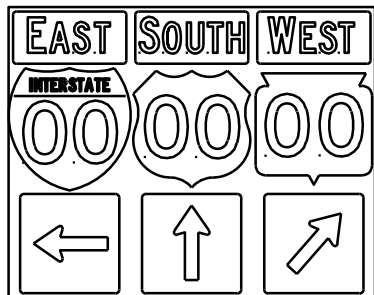
J2-3



J3-1



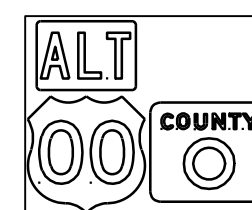
J3-2



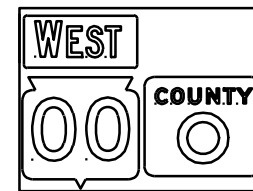
J3-3



J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



J23-1



J22-1

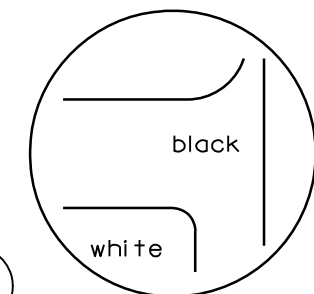
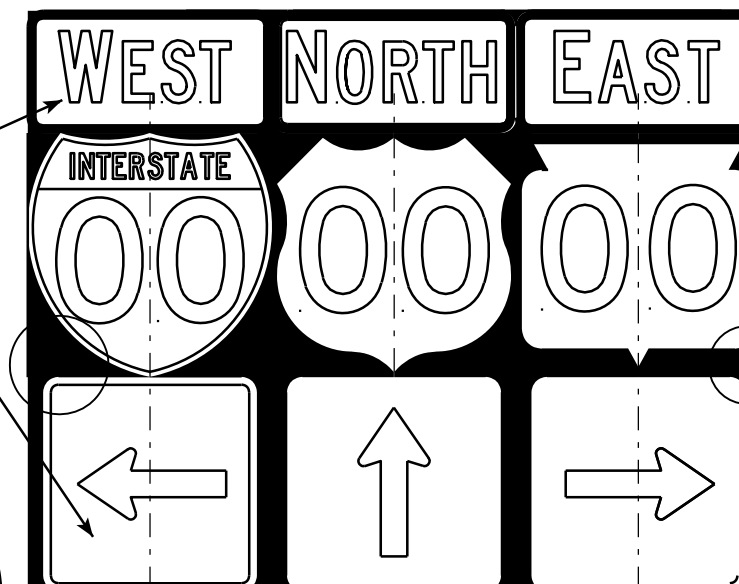
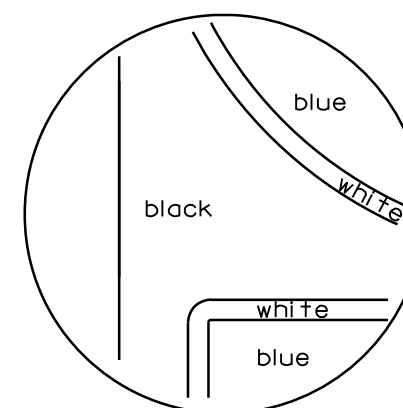


JV

NOTES

- Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Black Non-reflective
Message - see Note 5
- Message Series - See Note 5
- Corners shall be square since base material is plywood.
- The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
- Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
- Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
- Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
- Route assemblies that have 36 inch shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.

[blue background with interstate]



[black background]

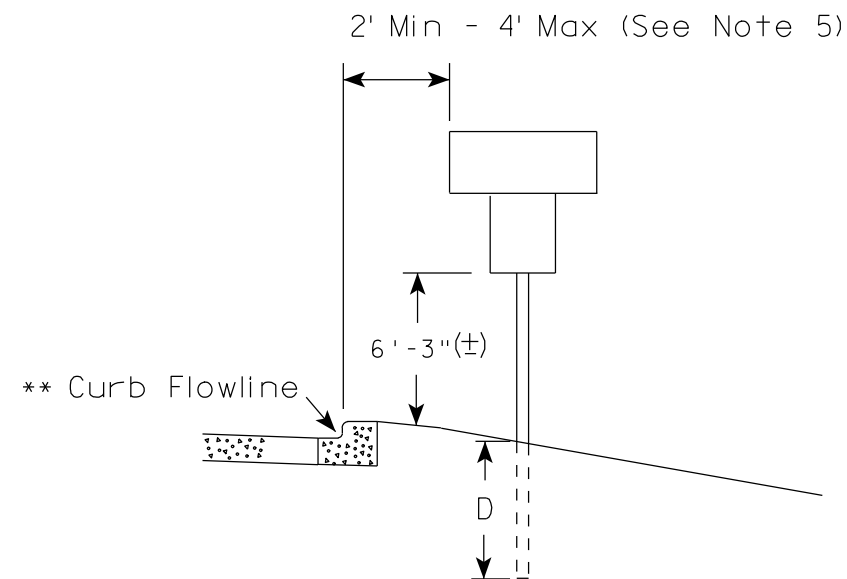
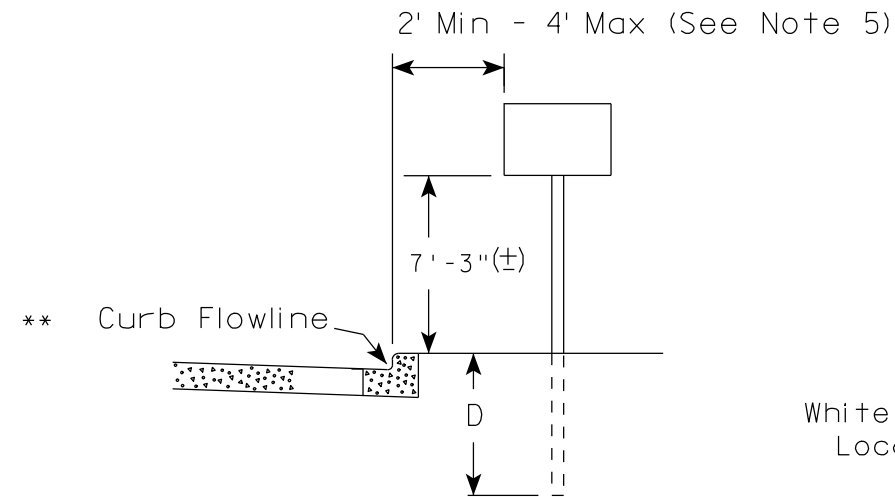
ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 10/21/09	PLATE NO. A2-1S.6

PROJECT NO:

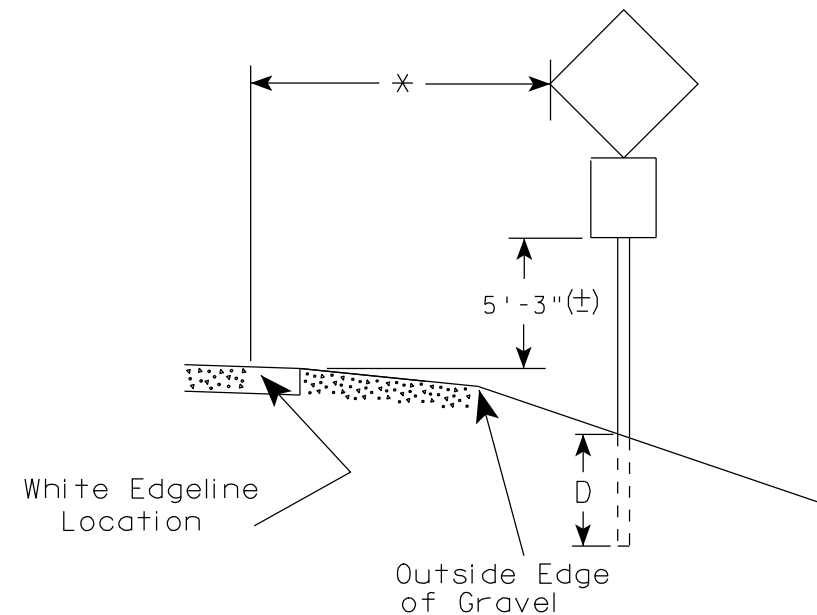
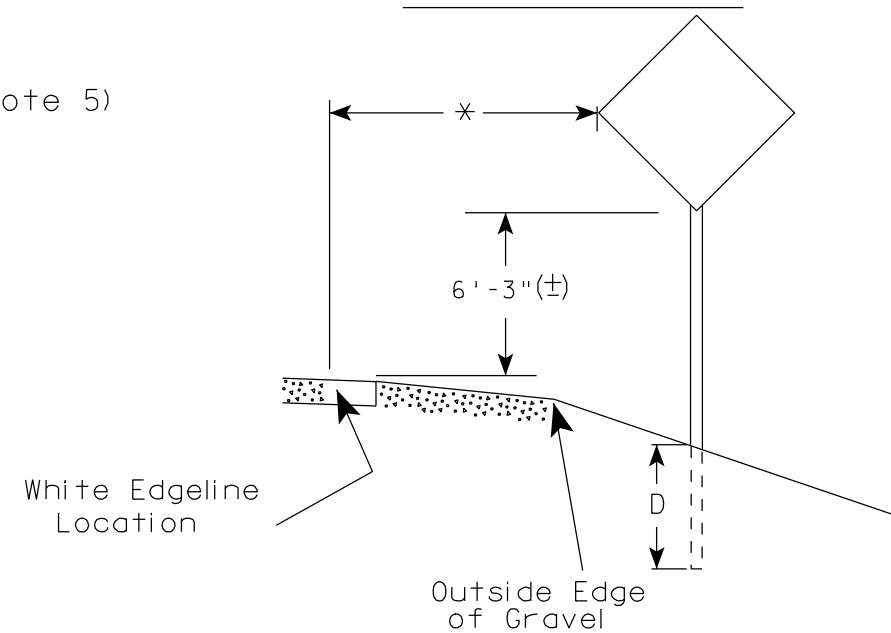
SHEET NO:

E

URBAN AREA



RURAL AREA (See Note 2)



GENERAL NOTES

1. Signs wider than 4 feet or larger than 20 sq. ft. shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'-3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

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

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

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

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 9/21/2011 PLATE NO. A4-3.16

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

GENERAL NOTES

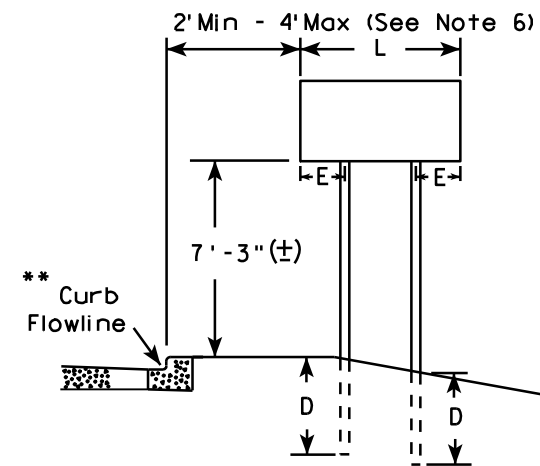
- For multiple post installations, individual post spacing shall be greater than 3'-6".
- See tables below for required number of posts.
- For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
- The (±) tolerance for mounting height is 3 inches.
- Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
- Offset distance shall be consistent with existing signs or consistent throughout length of project.
- Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
- 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) & End of Road Markers (W5-56 & W5-56A) 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.

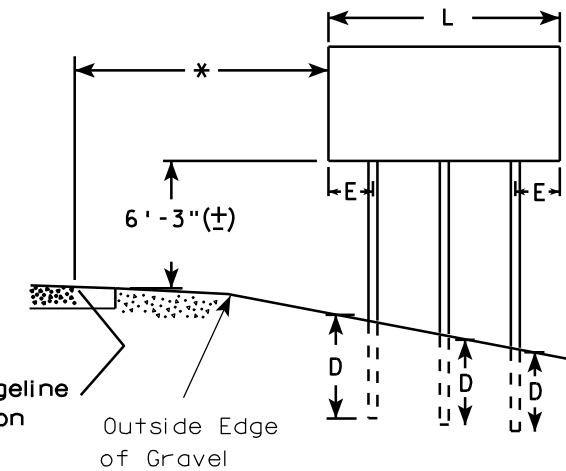
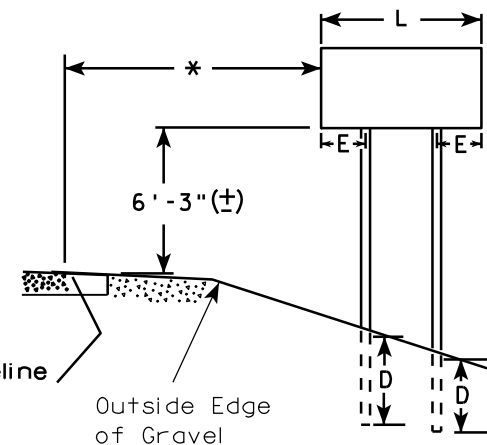
** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs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

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

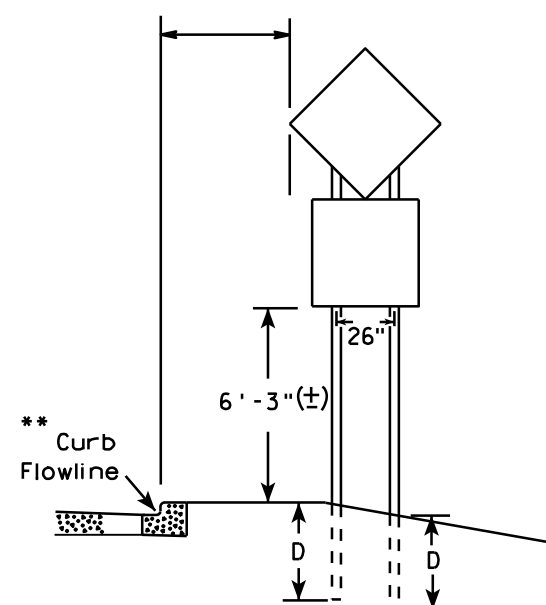
URBAN AREA



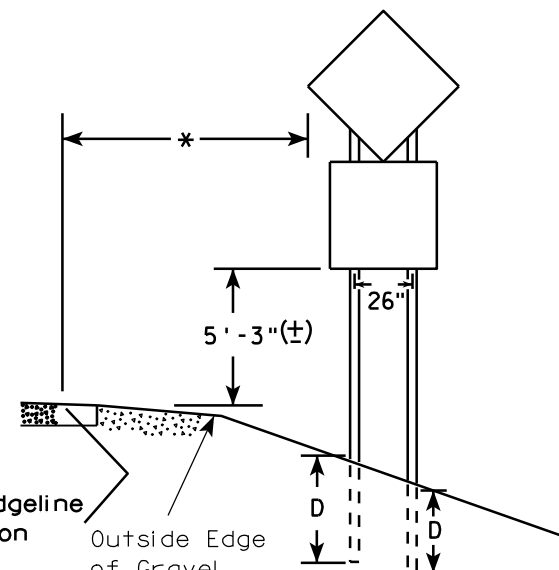
RURAL AREA (See Note 3)



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



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

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

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 9/21/2011 PLATE NO. A4-4.11

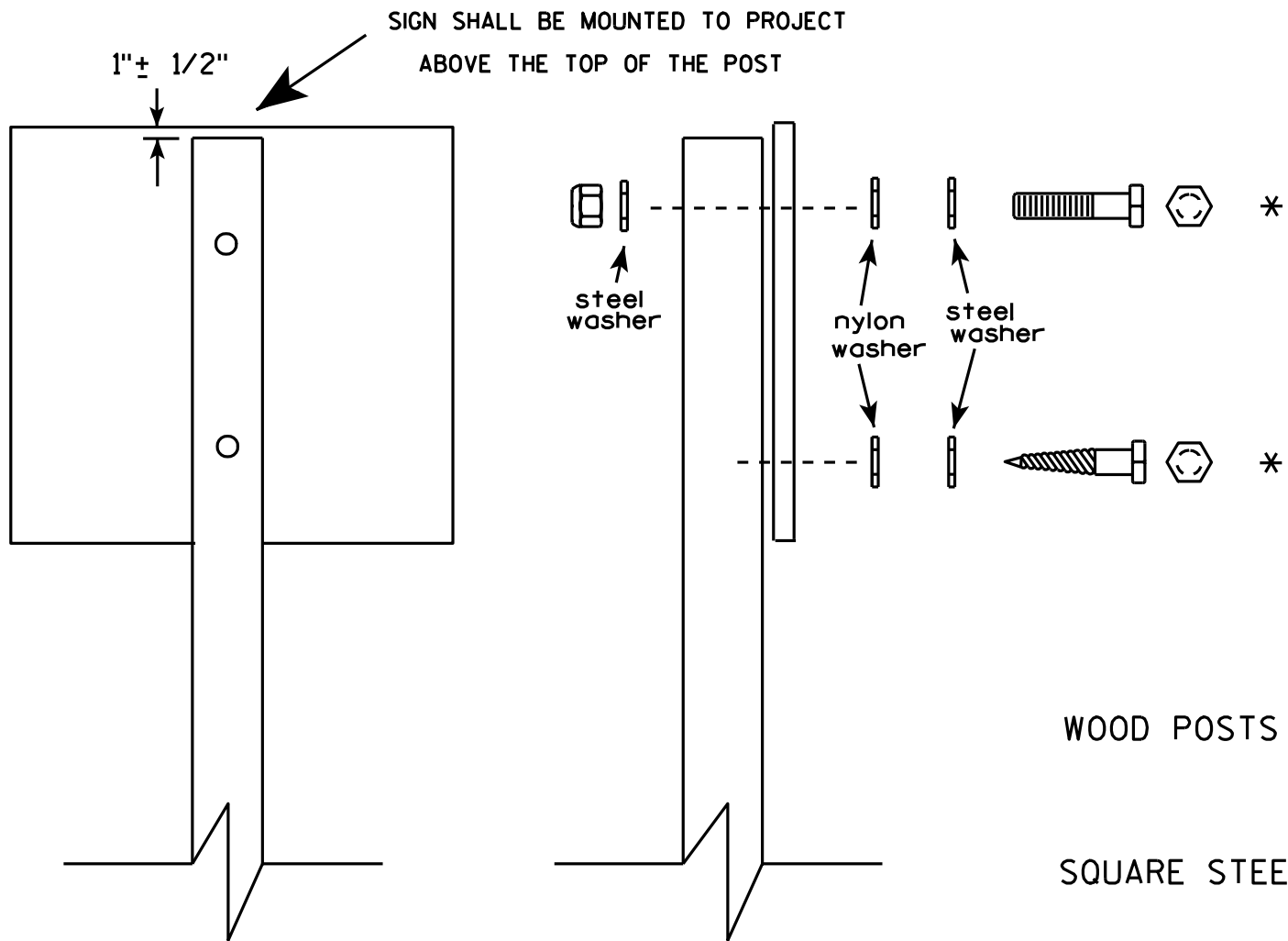
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

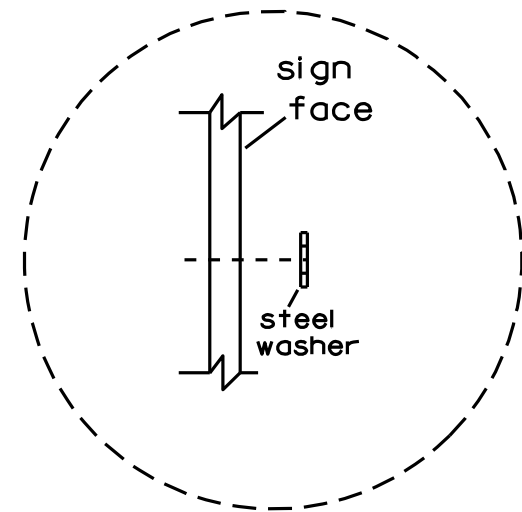


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

- WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
- RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



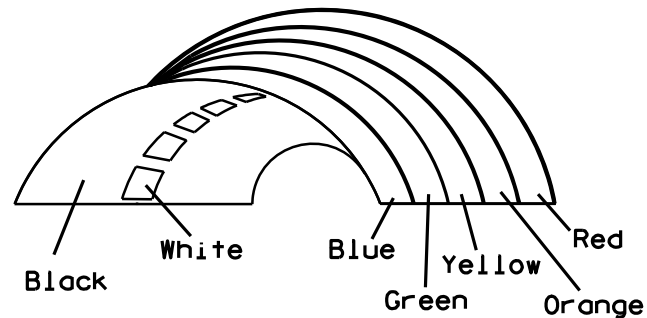
Washer Placement when Sign Has Other Than Type H or Type F Face

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/23/10	PLATE NO. A4-8.7



Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
 - Background - White
 - Message - (See Note 5)
- 3. Message Series - (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. Border - Blue
 - Line 1- Red
 - Line 2 - Black
 - Line 3-5 - Blue
- 6. Line 1- Dutch 8011L
 - Line 2 - Series E
 - Line 3-5 - Series C
- 7. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	36	1 1/2	1/2	5/8	3	2	3 1/2	2 7/8	1	8	2 1/8	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2							7.5
3																											
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

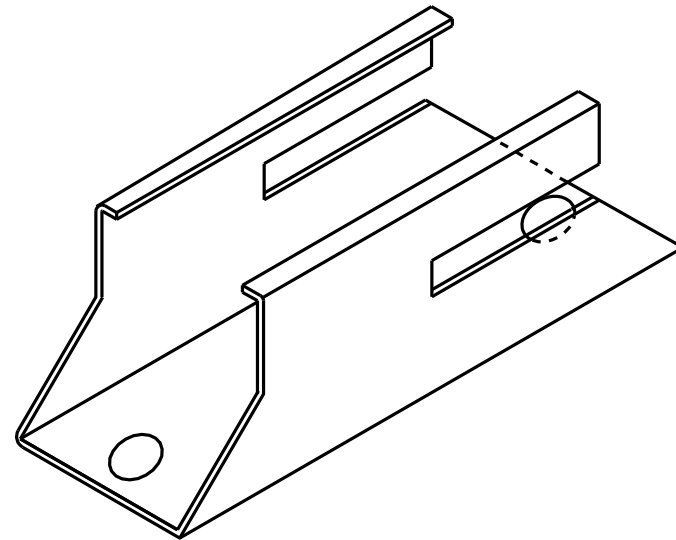
STANDARD SIGN
I55-56

WISCONSIN DEPT OF TRANSPORTATION

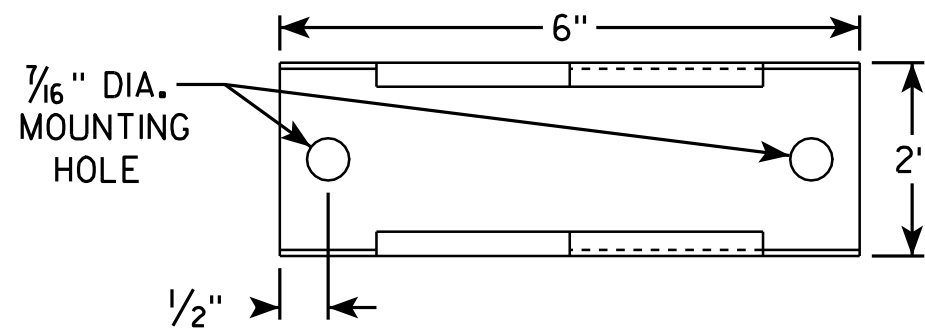
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 4/27/11 PLATE NO. I55-56.3

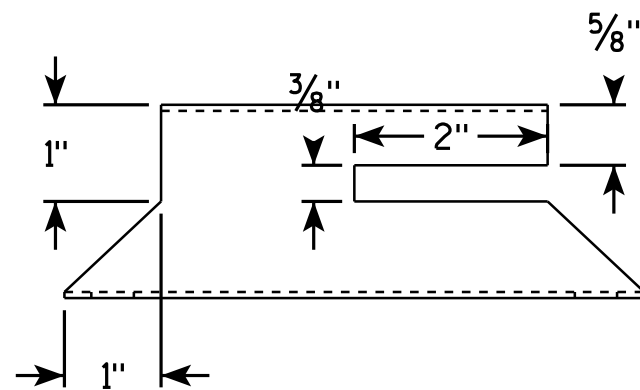
ISOMETRIC VIEW



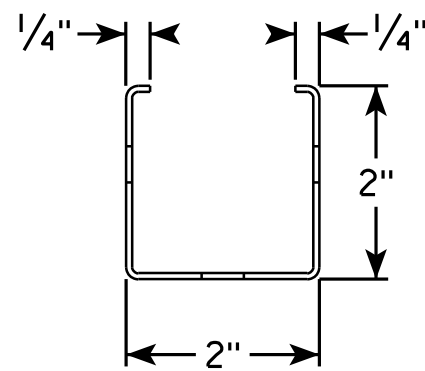
TOP VIEW



SIDE VIEW



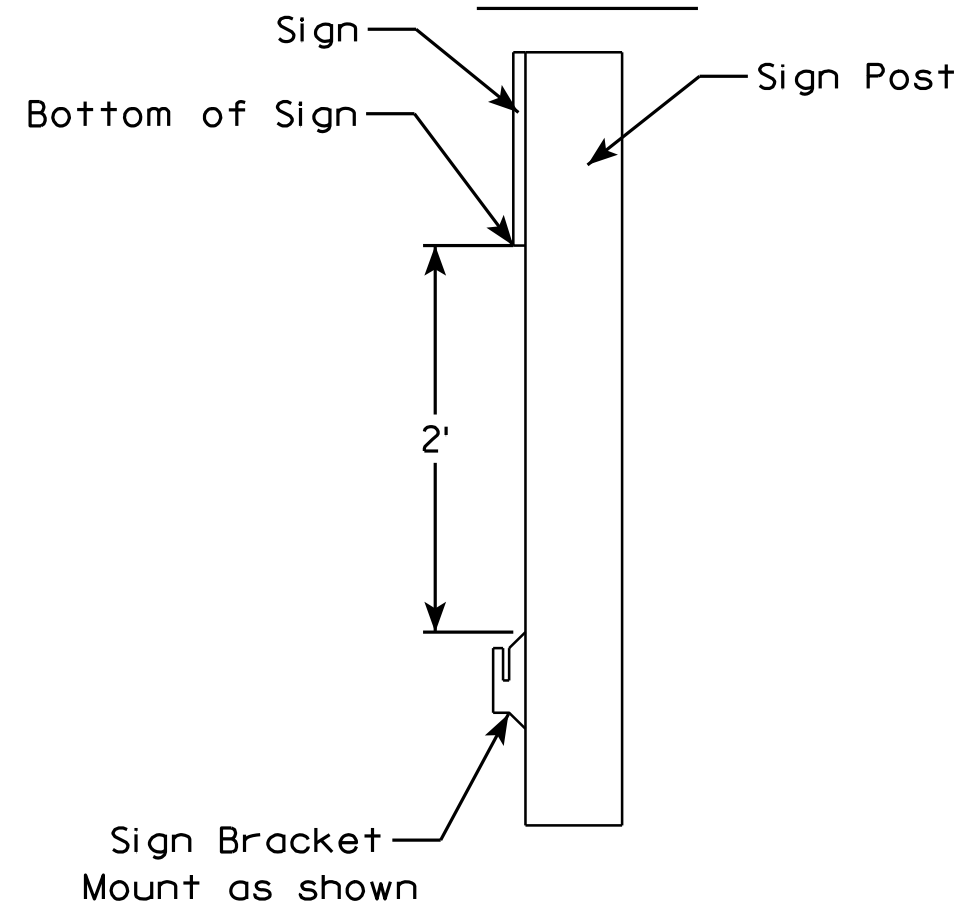
END VIEW



NOTES

1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

SIDE VIEW



ROLLUP SIGN BRACKET
I55-56B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/5/10 PLATE NO. I55-56B.1

PROJECT NO:

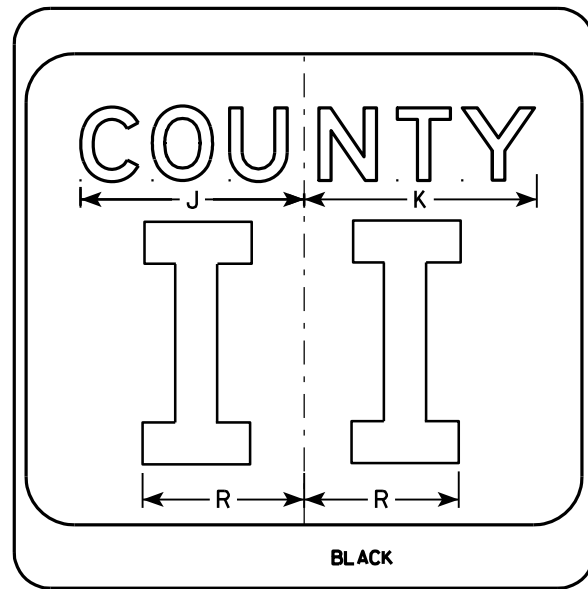
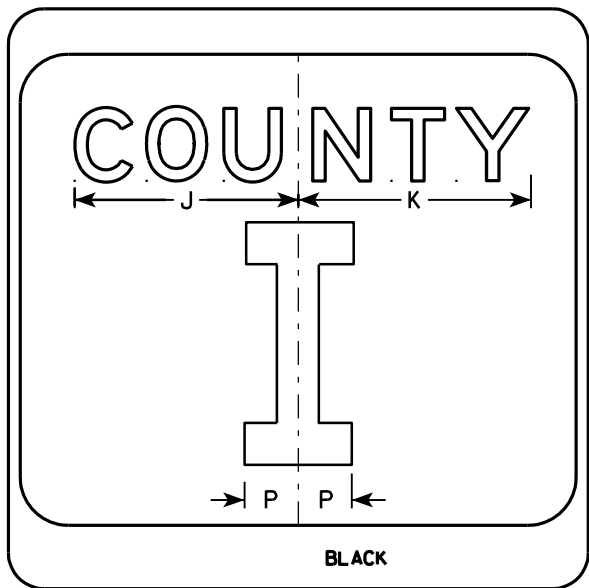
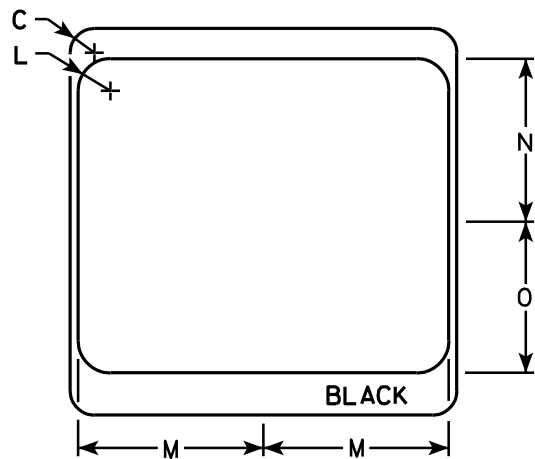
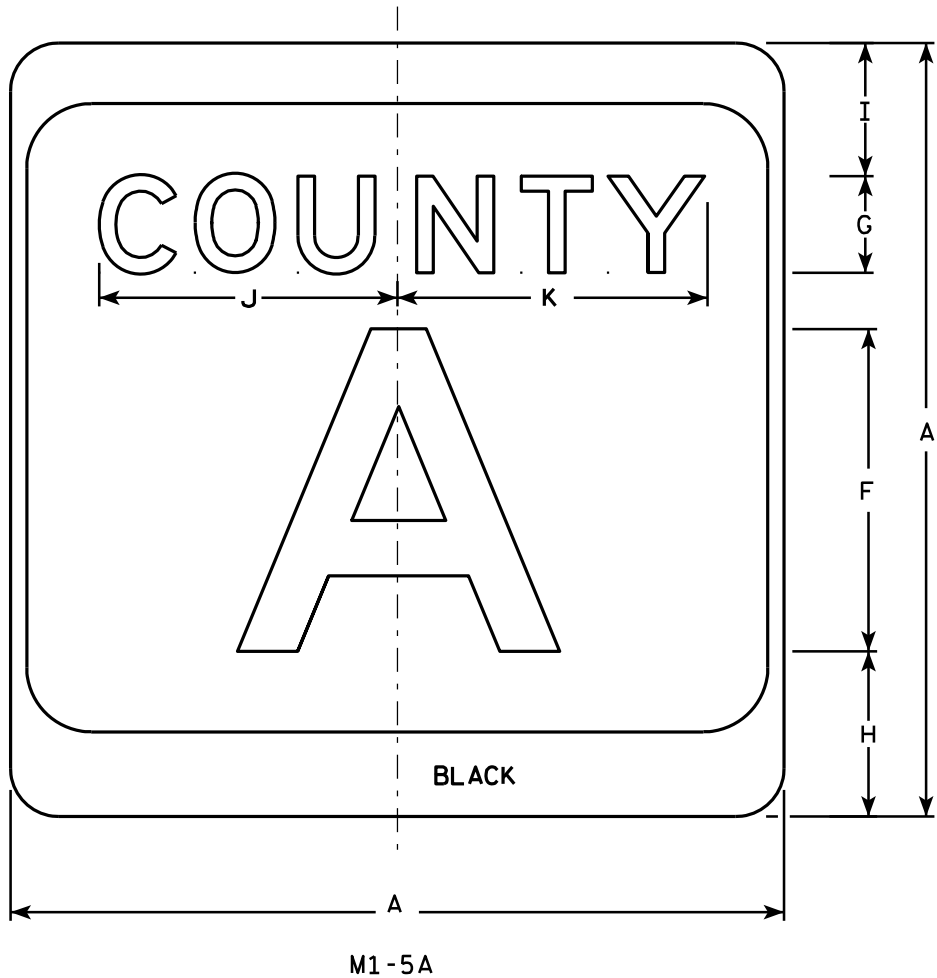
HWY:

COUNTY:

SHEET NO:

E

7



NOTES

- Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - White & Black - See Note 7
Message - Black
- Message Series - see Note 5
- 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.
- 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.
- Substitute appropriate letters & optically center to achieve proper balance.
- Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective

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

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

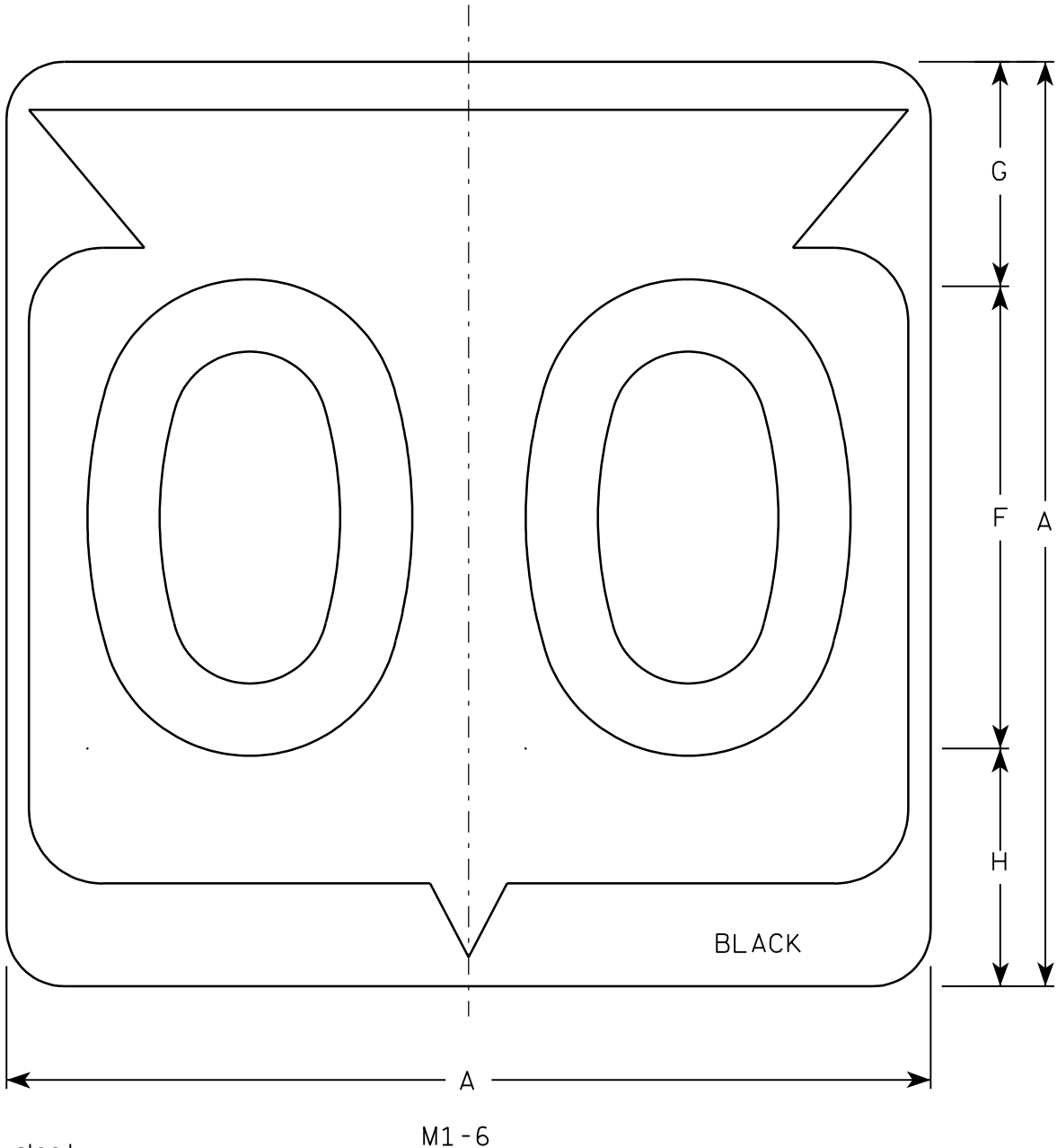
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
For State Traffic Engineer

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

7



Metric equivalent
for this sign is:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

FILE NAME : C:\Users\Projects\tr_stdp\late\M16.DGN

PLOT DATE : 13-OCT-2005 14:55

PLOT BY : DITJPH

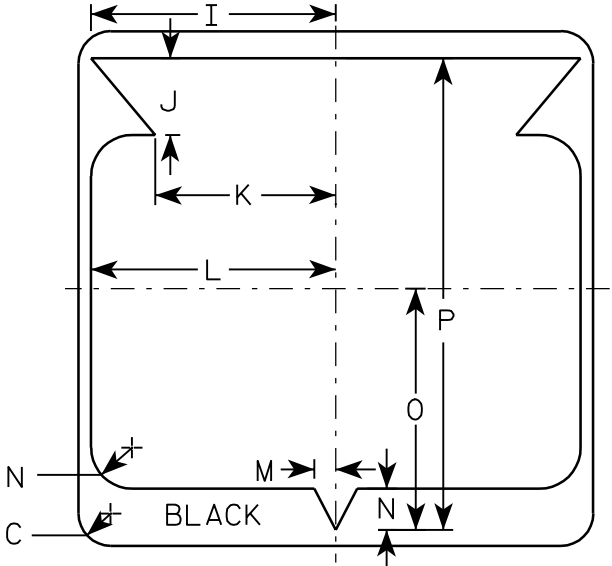
PLOT NAME :

PLOT SCALE : 6.715871:1.000000

WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - See Note 6 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 6
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. Substitute appropriate Series numerals and
adjust spacing as per plate A10-1.
6. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective



STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

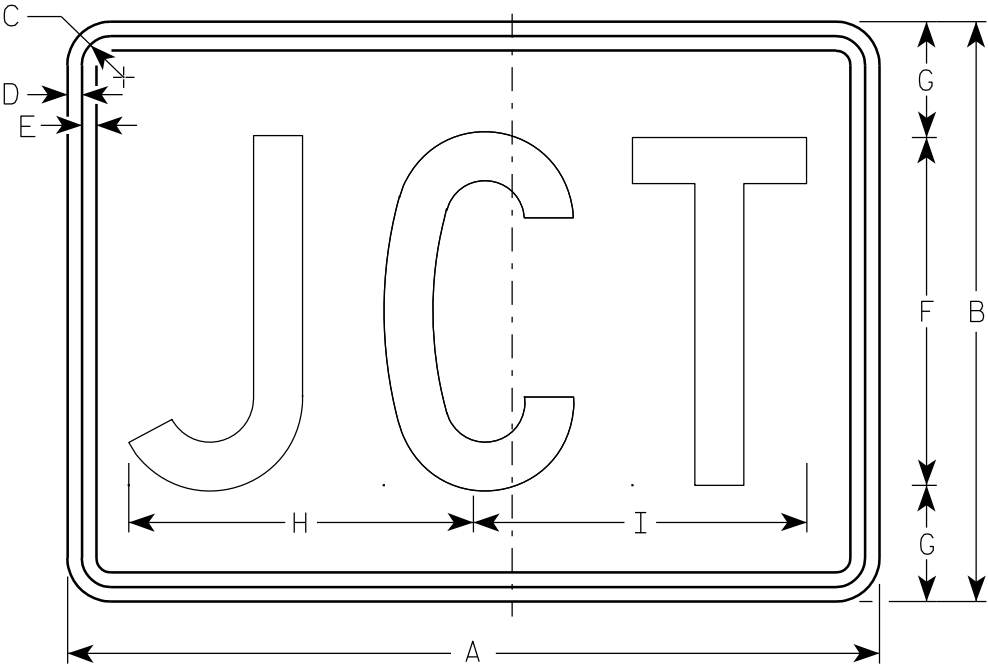
APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/20/02

PLATE NO. M1-6.9

7



M2-1
MK2-1
MM2-1
MR2-1

Metric equivalent
for this sign is:

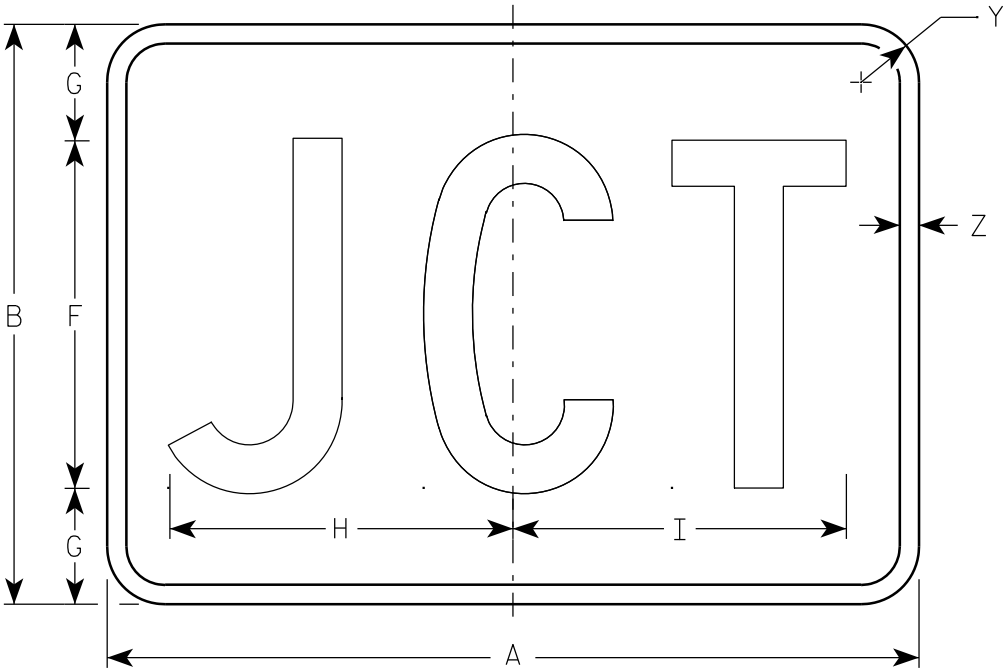
SIZE	
1	
2	525 mm X 375 mm
3	750 mm X 525 mm
4	750 mm X 525 mm
5	750 mm X 525 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20	0.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20

PROJECT NO:				HWY:				COUNTY:								SHEET NO:				E
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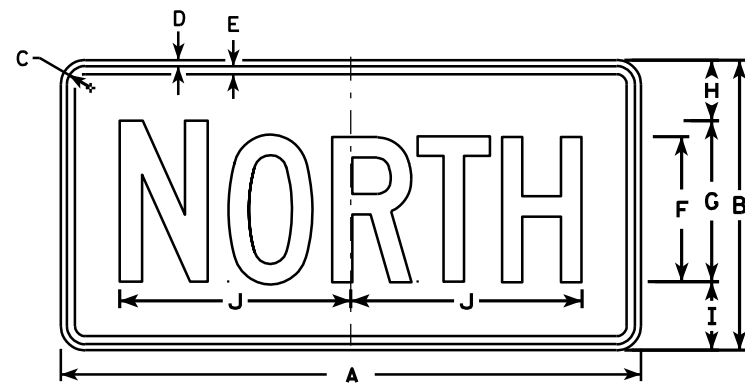
NOTES

1. Sign is Type II - See Note 5 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - See note 5
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
5. M2-1 Background - White - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB2-1 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG2-1 Background - Green
Message - White - Type H Reflective
MK2-1 Background - Green
Message - White - Type H Reflective
MM2-1 Background - White - Type H Reflective
Message - Green
MN2-1 Background - Brown
Message - White - Type H Reflective
MR2-1 Background - Brown
Message - Yellow - Type H Reflective



MB2-1
MG2-1
MN2-1

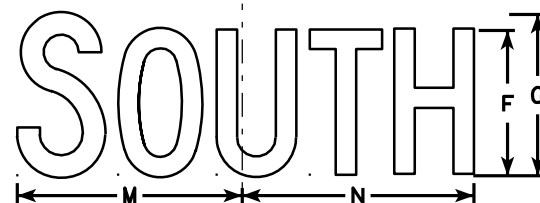
7



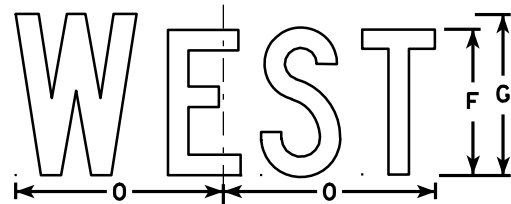
M3-1
MK3-1
M03-1



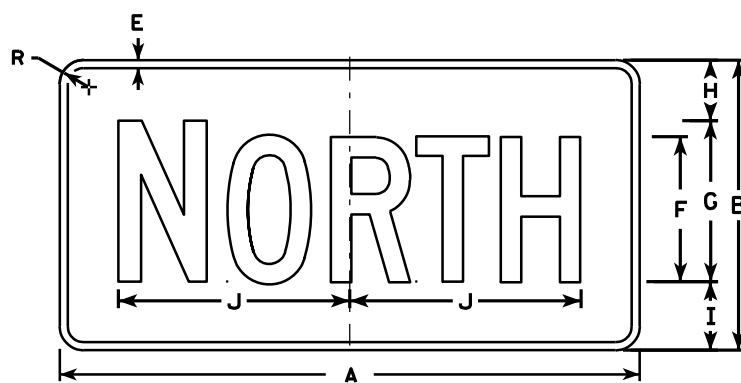
M3-2
MK3-2
M03-2



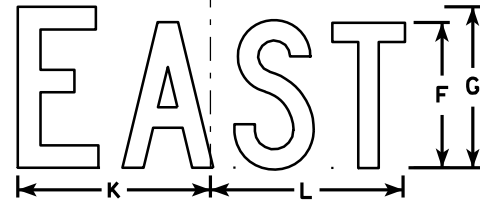
M3-3
MK3-3
M03-3



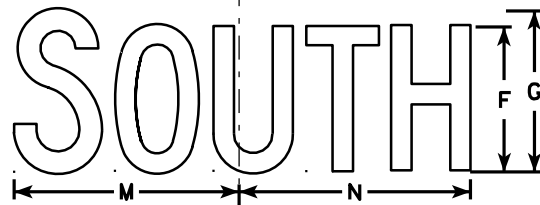
M3-4
MK3-4
M03-4



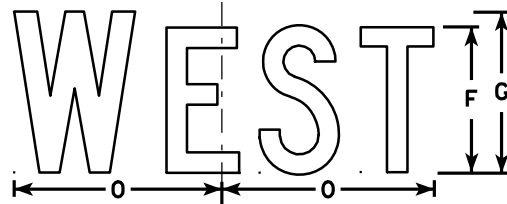
MB3-1
MG3-1
MM3-1
MN3-1



MB3-2
MG3-2
MM3-2
MN3-2



MB3-3
MG3-3
MM3-3
MN3-3



MB3-4
MG3-4
MM3-4
MN3-4

NOTES

1. All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - See note 5
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White - Type H Reflective (Detour or temporary signs - Reflective)
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White - Type H Reflective (Detour or temporary signs - Reflective)
MG3-1 thru MG3-4 Background - Green
Message - White - Type H Reflective
MK3-1 thru MK3-4 Background - Green
Message - White - Type H Reflective
MM3-1 thru MM3-4 Background - White - Type H Reflective
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White - Type H Reflective
M03-1 thru M03-4 Background - Orange - Reflective
Message - Black
6. Note the first letter of each direction is larger than the remainder of the message.

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

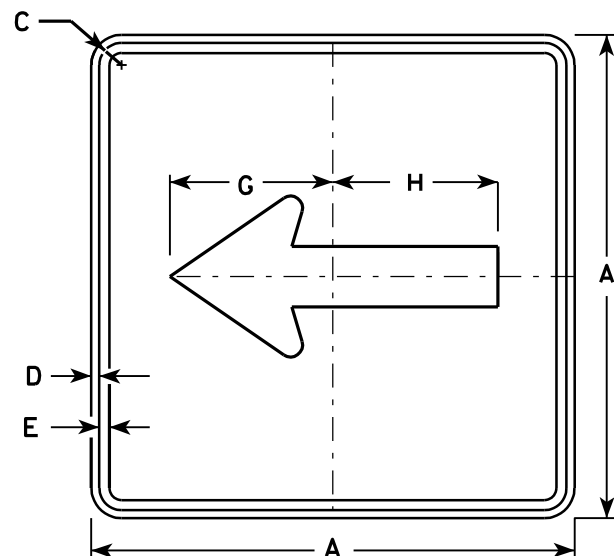
PROJECT NO: HWY: COUNTY: SHEET NO: E

STANDARD SIGNS
M3-1 thru M3-4
SERIES

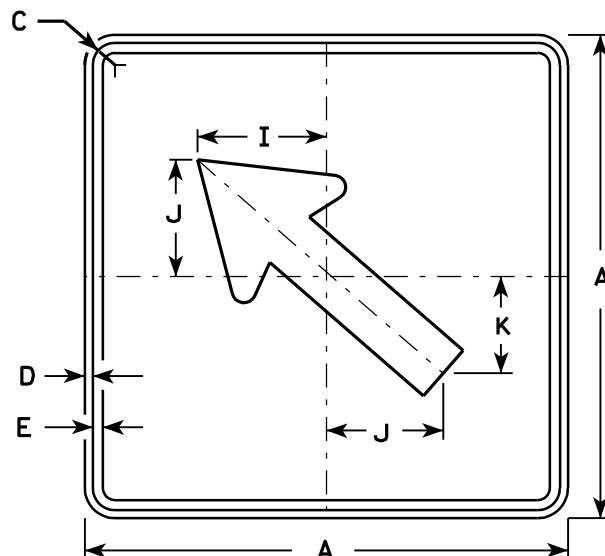
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

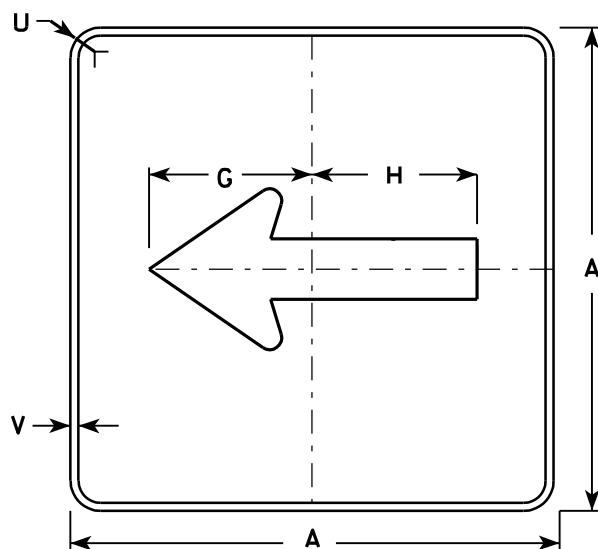
DATE 11/10/10 PLATE NO. M3-1.12



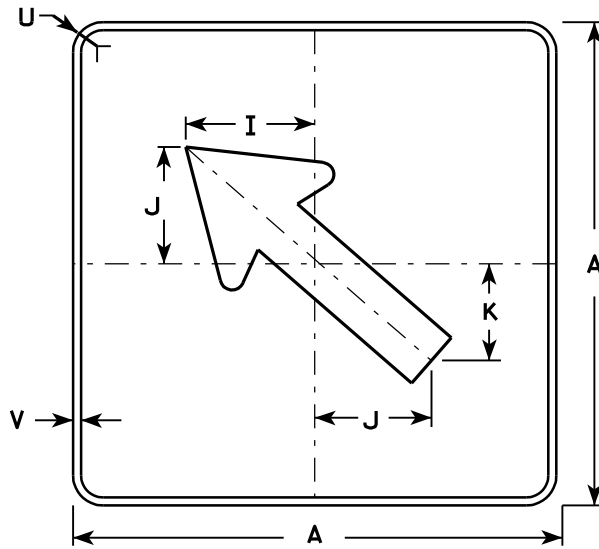
M6-1
MK6-1
MM6-1
MO6-1
MR6-1



M6-2
MK6-2
MM6-2
MO6-2
MR6-2



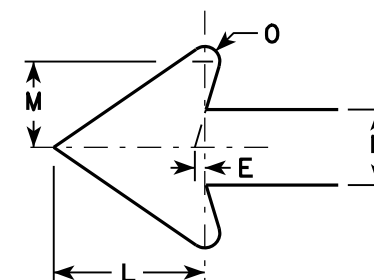
MB6-1
MG6-1
MN6-1



MB6-2
MG6-2
MN6-2

NOTES

- Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - See note 4
Message - See note 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.
- M6-1 and M6-2 Background - White - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG6-1 and MG6-2 Background - Green
Message - White - Type H Reflective
MK6-1 and MK6-2 Background - Green
Message - White - Type H Reflective
MM6-1 and MM6-2 Background - White - Type H Reflective
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White - Type H Reflective
MO6-1 and MO6-2 Background - Orange - Reflective
Message - Black
MR6-1 and MR6-2 Background - Brown
Message - Yellow - Type H Reflective



Metric equivalent
for this sign is:

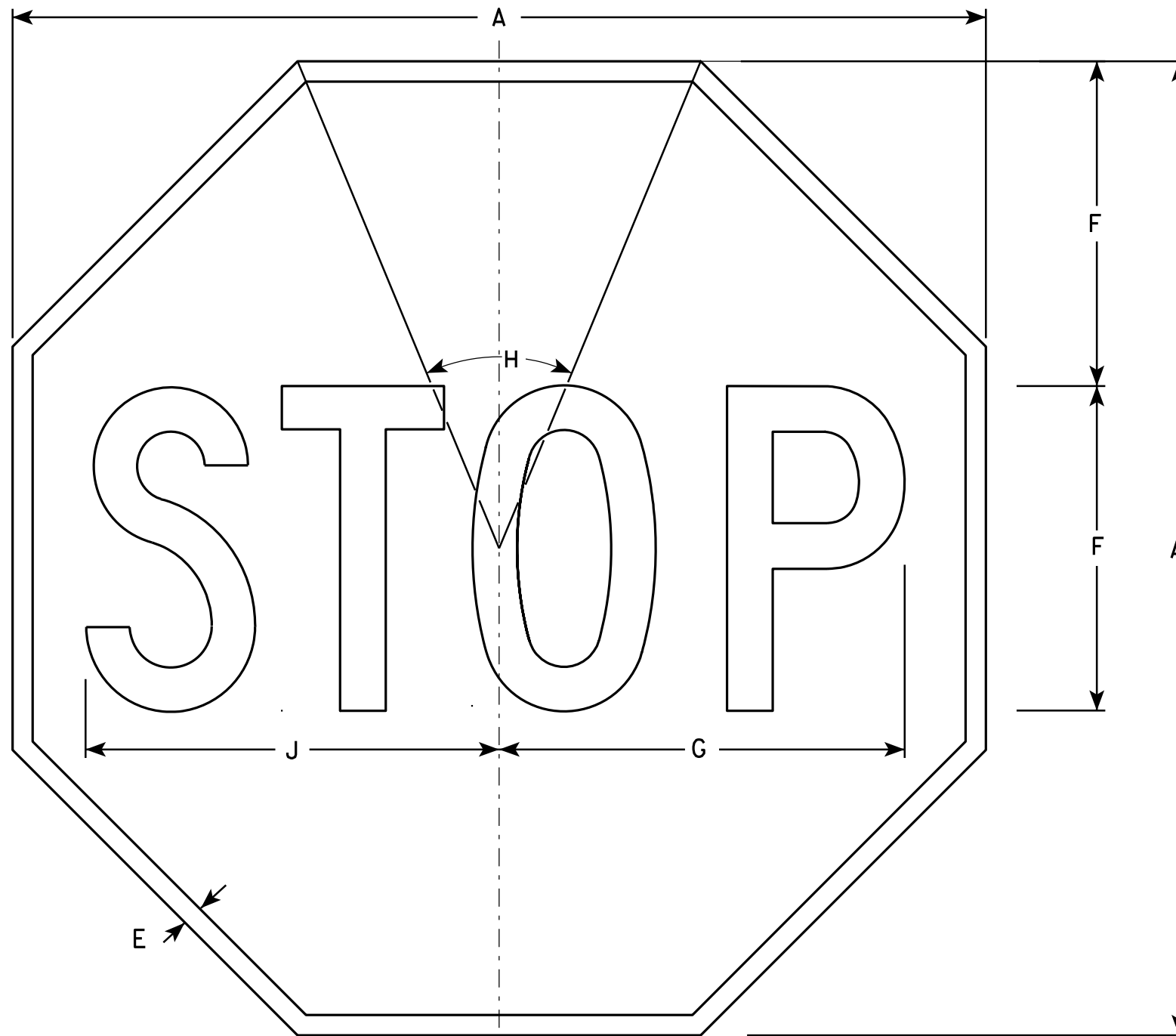
SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56

PROJECT NO: HWY: COUNTY: SHEET NO: E

STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 3/16/10 PLATE NO. M6-1.12



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Red
Message - White
3. Message Series - C

R1-1

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

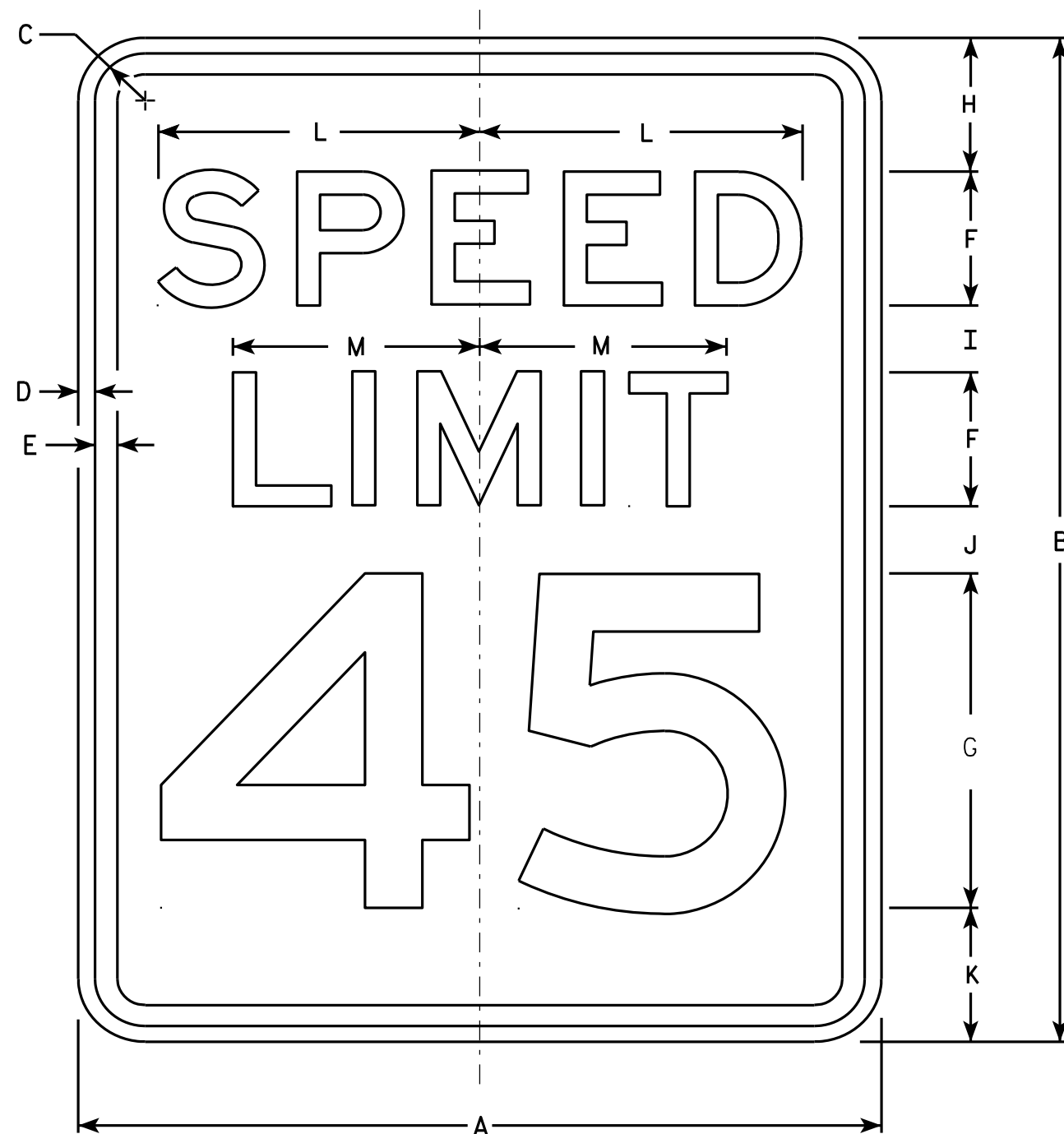
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

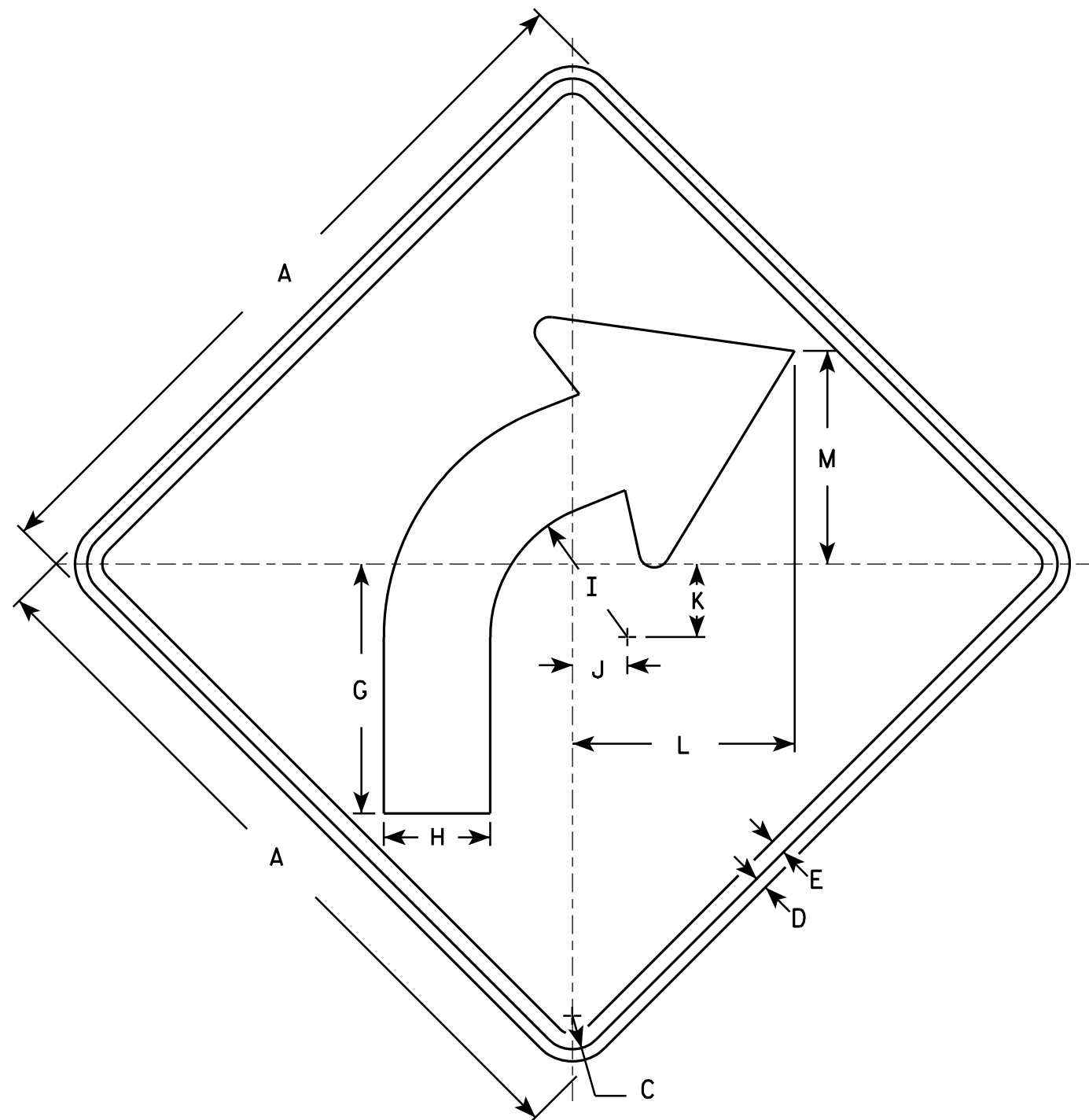
STANDARD SIGN R2-1

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 5/26/10 PLATE NO. R2-1.13

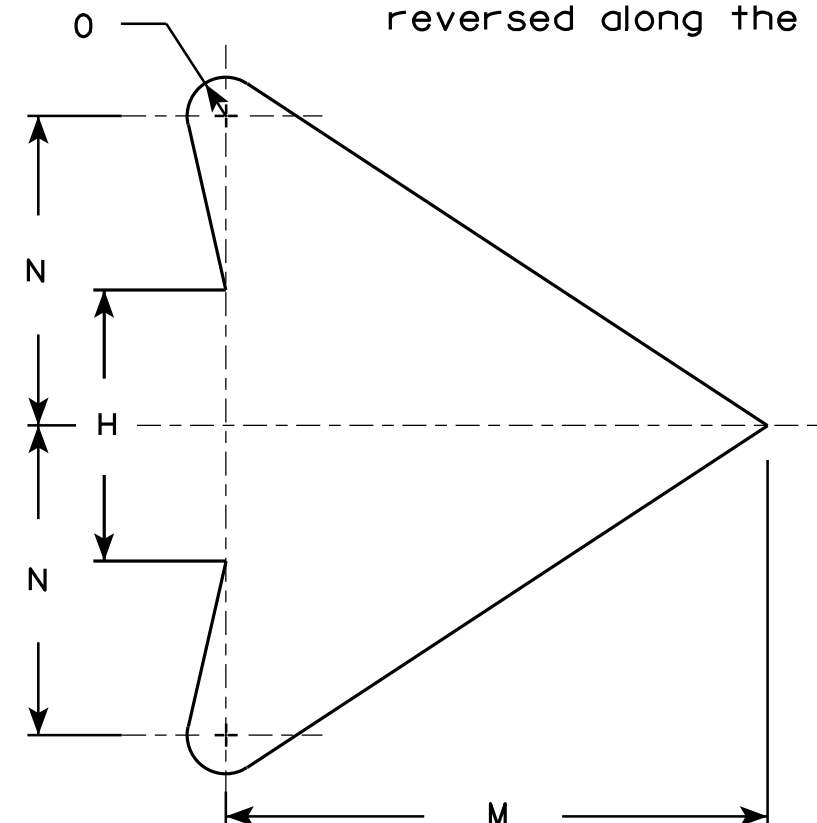
PROJECT NO: HWY: COUNTY: SHEET NO: E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



W1-2R



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

STANDARD SIGN W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

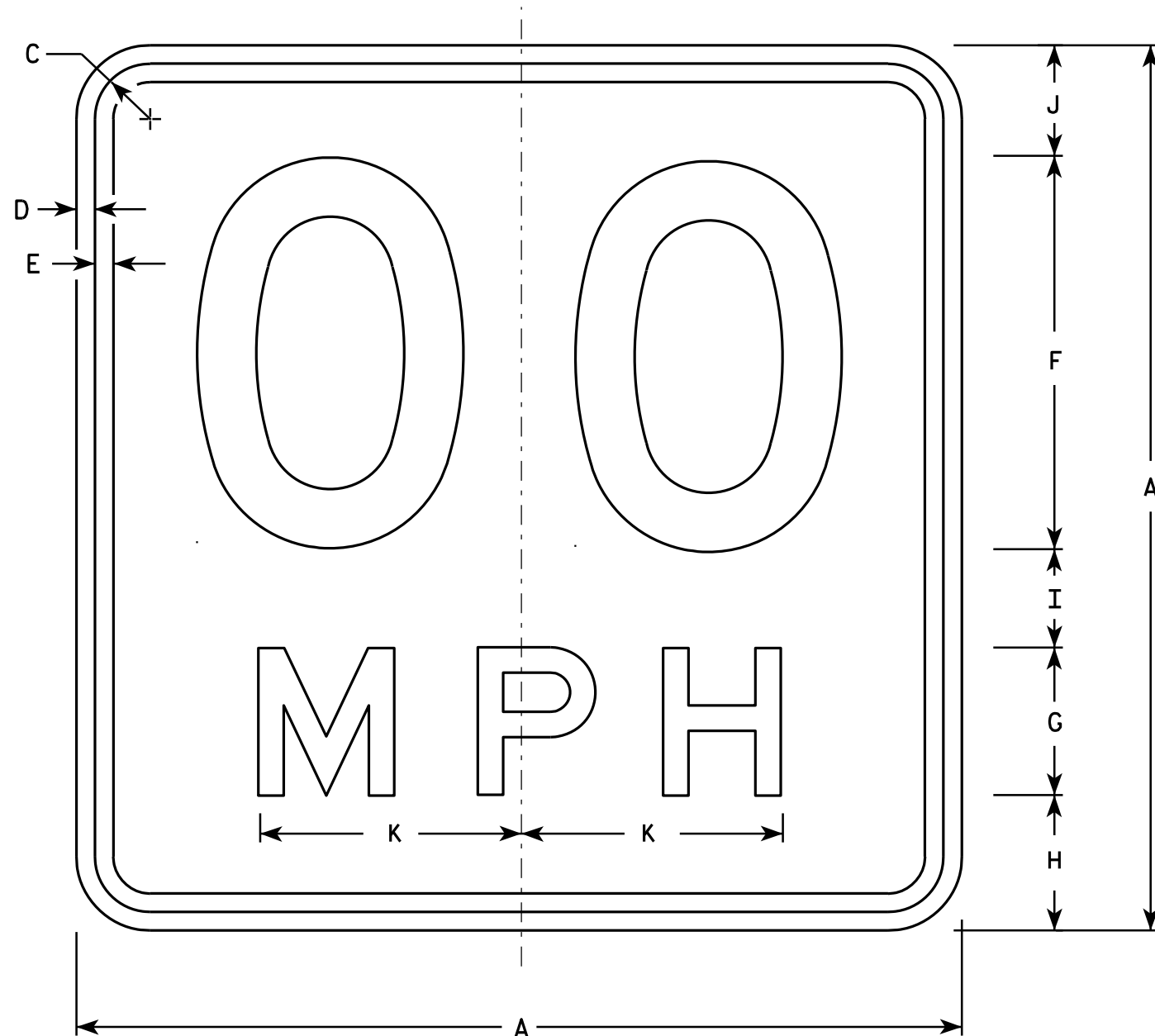
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. 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

W13-1

- * For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	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 3/8																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 5/8																4.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN

W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO:

HWY:

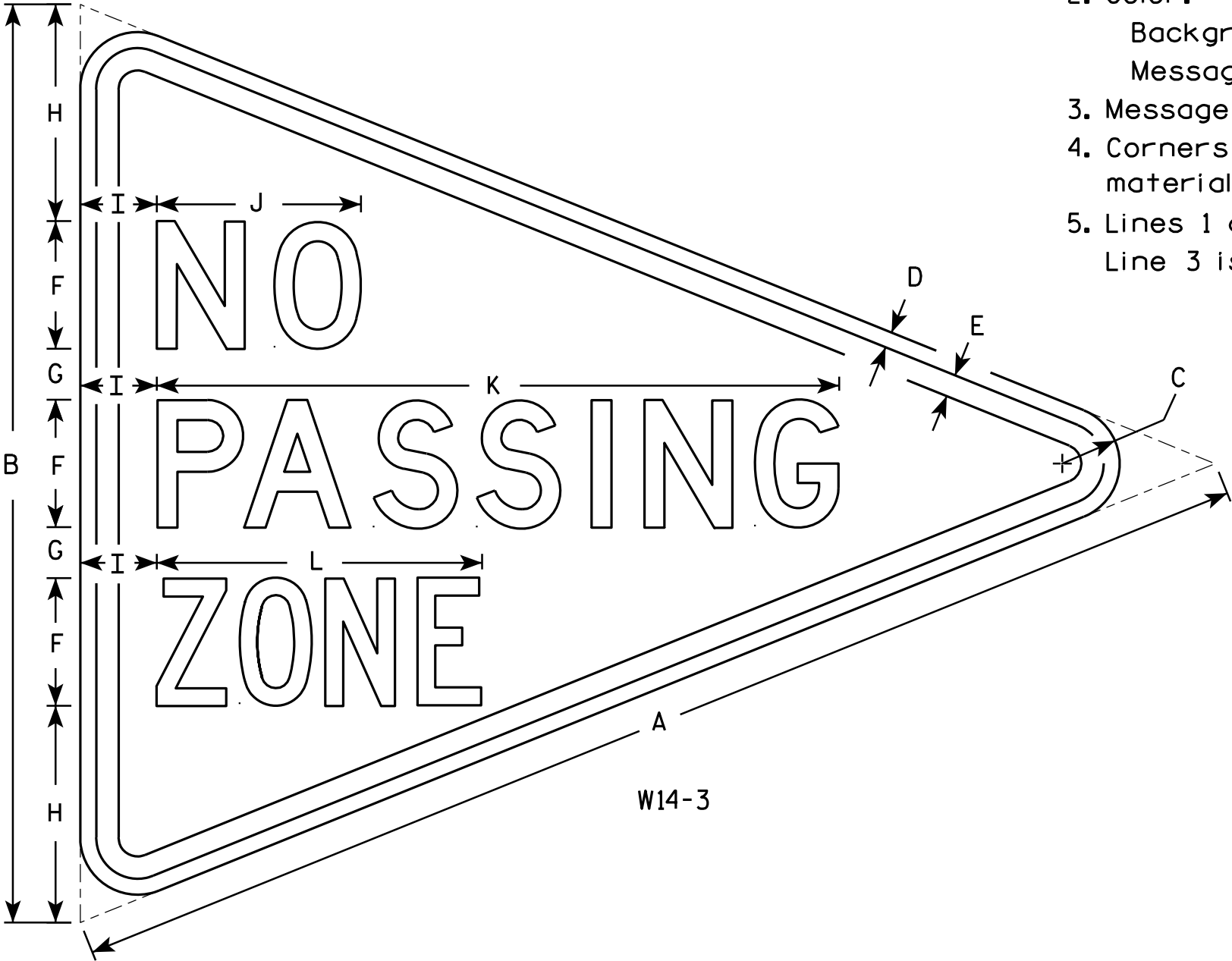
COUNTY:

SHEET NO:

E

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Yellow
Message - Black
- 3. Message Series - See note 5
- 4. Corners and borders shall be rounded on all base materials for this sign.
- 5. Lines 1 and 2 are Series D.
Line 3 is series C.



W14-3

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7
4																											
5																											

STANDARD SIGN
W14-3

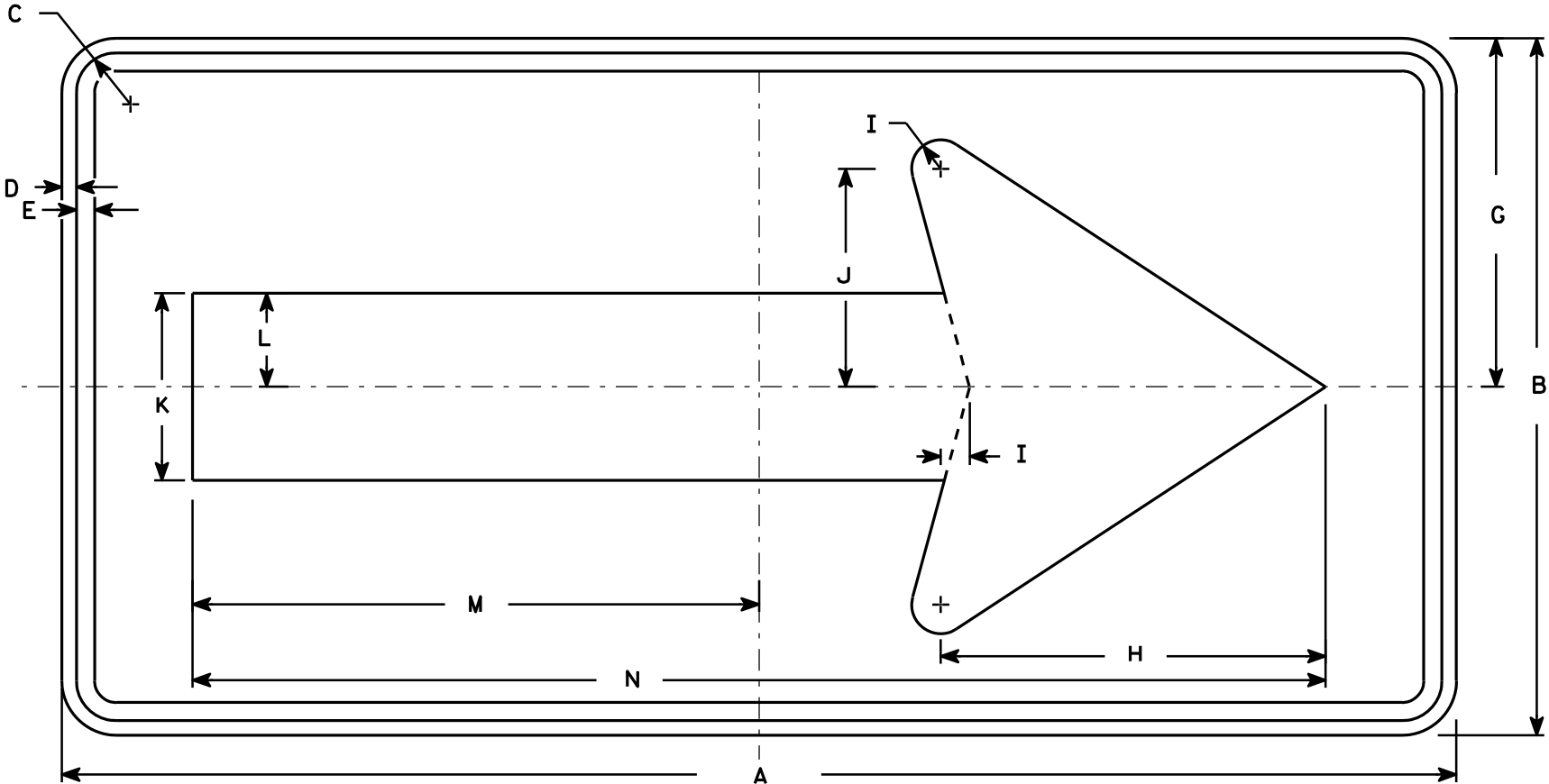
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 6/7/10 PLATE NO. W14-3.9

NOTES

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



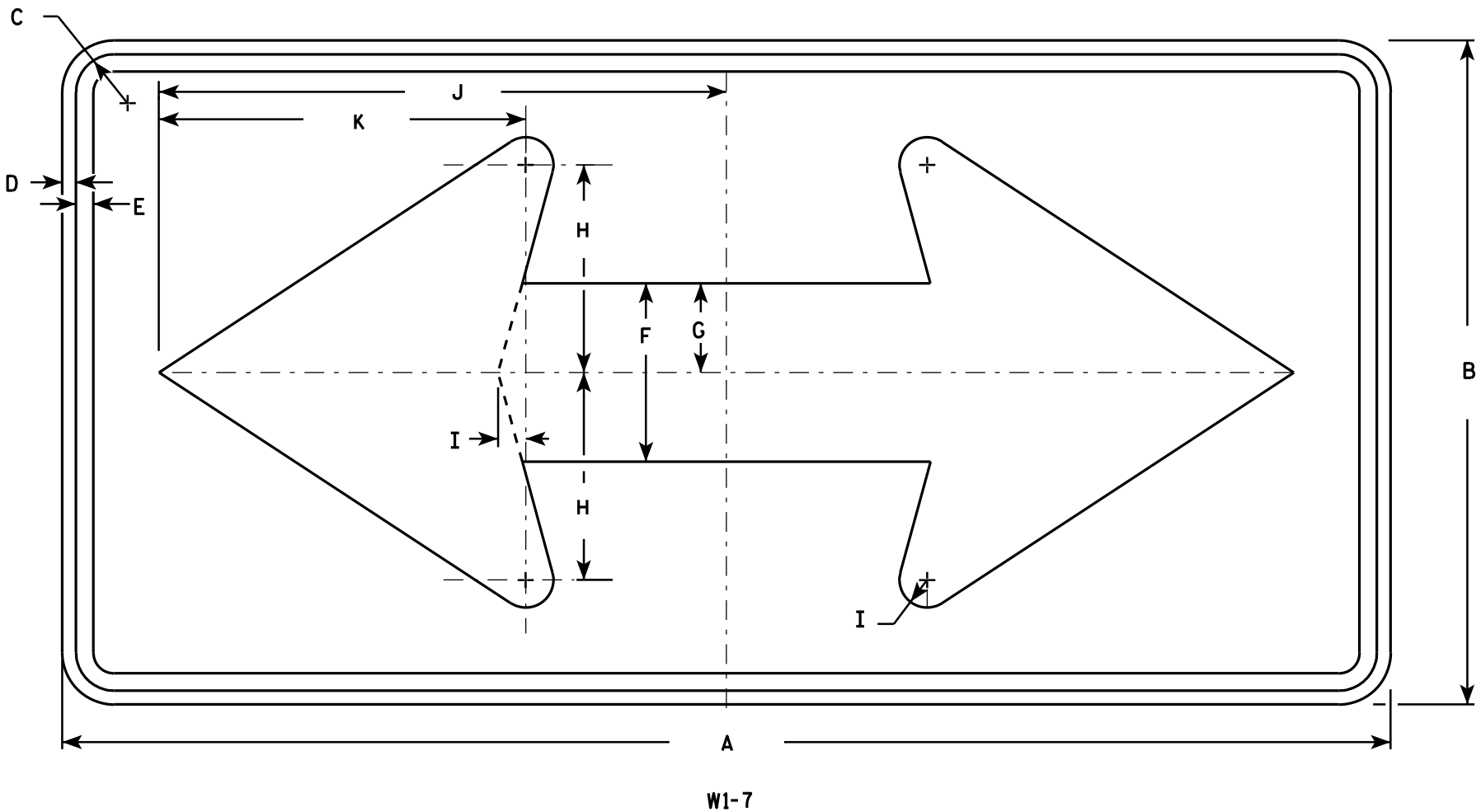
W1-6

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/7/10 PLATE NO. W1-6.8



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

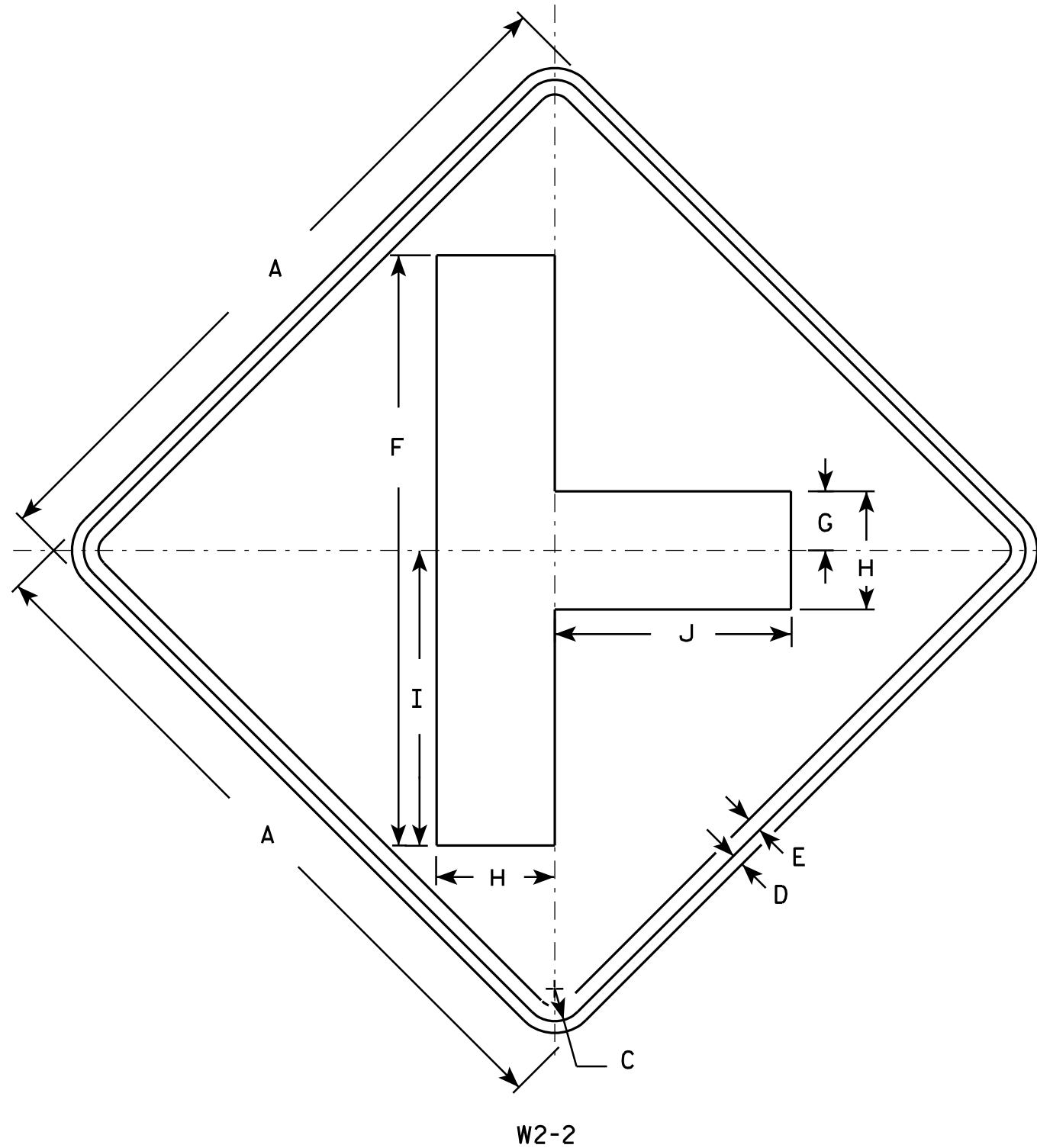
STANDARD SIGN

W1 - 7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	20	2	4	10	8																	4.0
2S	30		1 3/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
2M	30		1 3/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
3	36		1 5/8	5/8	3/4	30	3	6	15	12																	9.0
4	48		2 1/4	3/4	1	40	4	8	20	16																	16.0
5																											

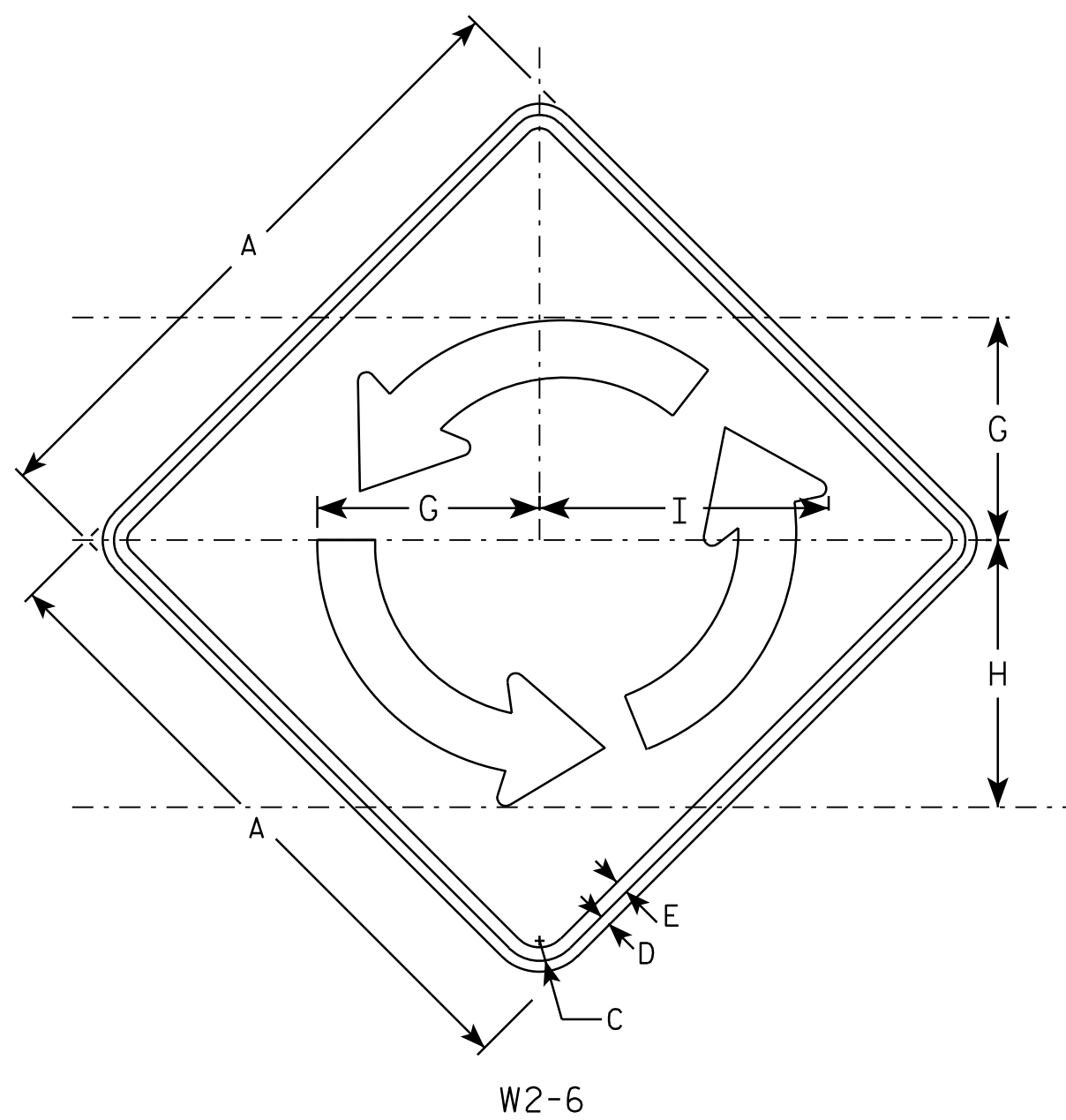
STANDARD SIGN W2-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-2.6

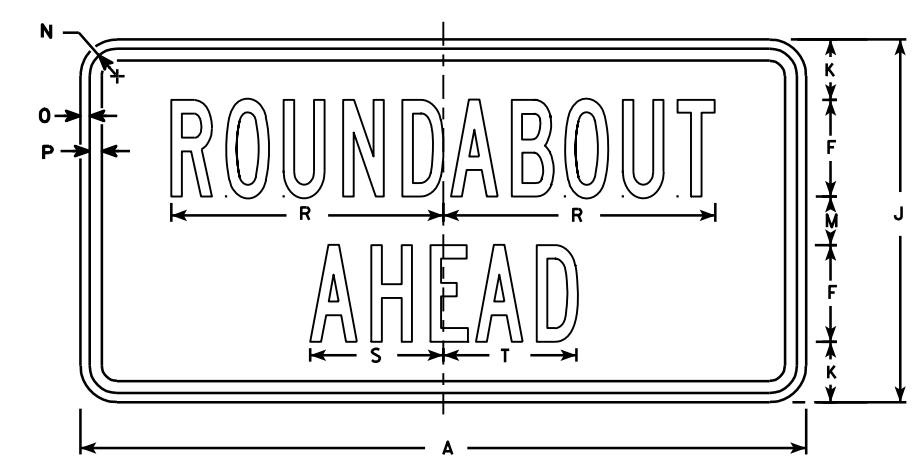
PROJECT NO: HWY: COUNTY: SHEET NO: E



W2-6

NOTES

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



W2-6P

																								W2-6	W2-6P	
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	Area sq. ft.	Area sq. ft.
1																										
2S	30		1 3⁄8	½	5⁄8	4	10 3⁄8	12 ½	13 ½	15	2 ½		2	1 ⅛	3⁄8	½		11 ¼	5 ½	5 ½					6.25	3.12
2M	30		1 3⁄8	½	5⁄8	4	10 3⁄8	12 ½	13 ½	15	2 ½		2	1 ⅛	3⁄8	½		11 ¼	5 ½	5 ½					6.25	3.12
3	36		1 5⁄8	5⁄8	¾	5	12 ½	15	16 ¼	18	2 5⁄8		2 ¾	1 ⅛	3⁄8	½		14	7	6 ¾					9.00	4.50
4	48		2 ¼	¾	1	6	16 5⁄8	20	16 ¼	24	4 3⁄8		3 5⁄8	1 3⁄8	½	5⁄8		17	8 ¼	8 ¼					16.0	8.0
5																										

STANDARD SIGN

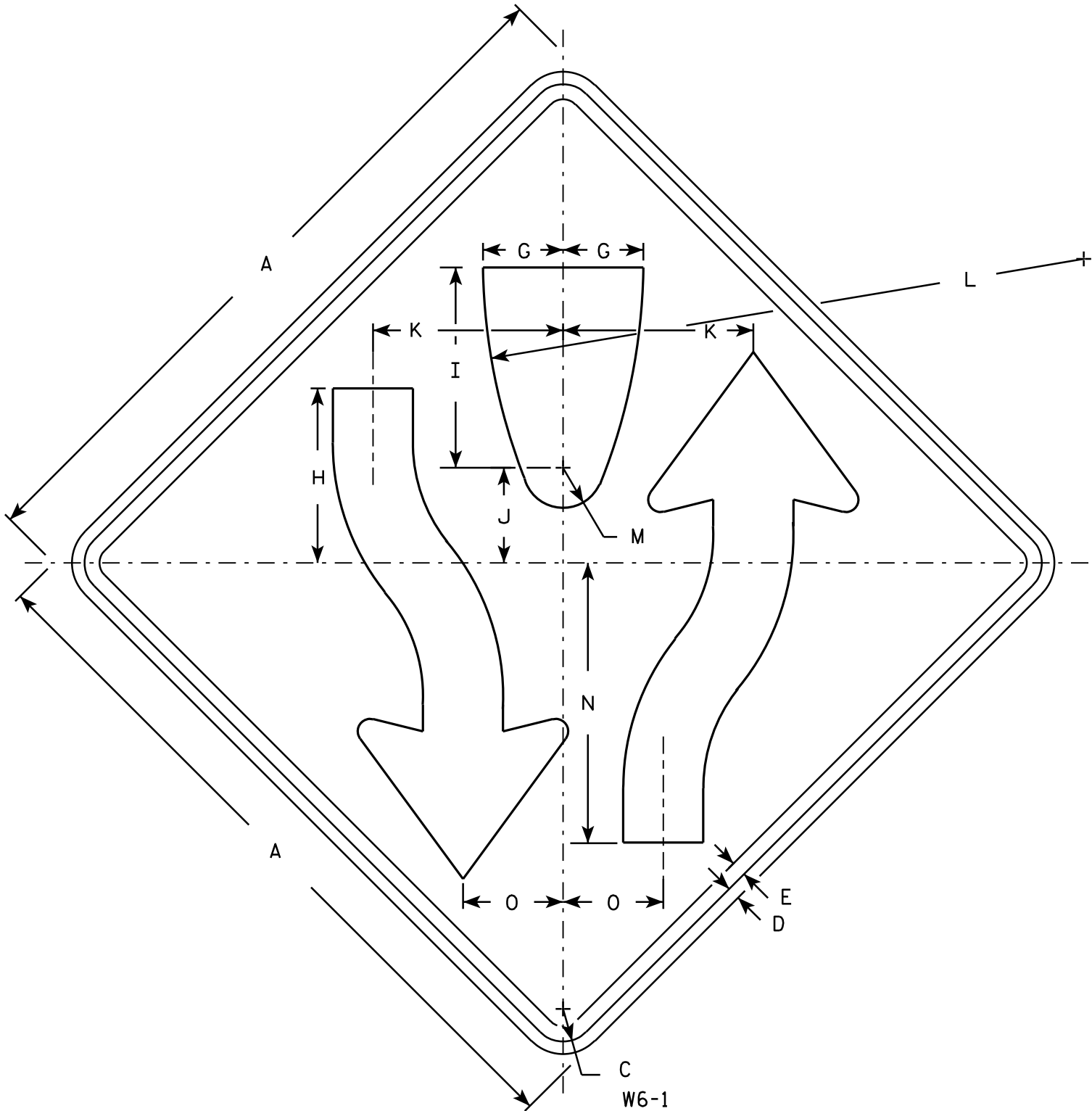
W2-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*

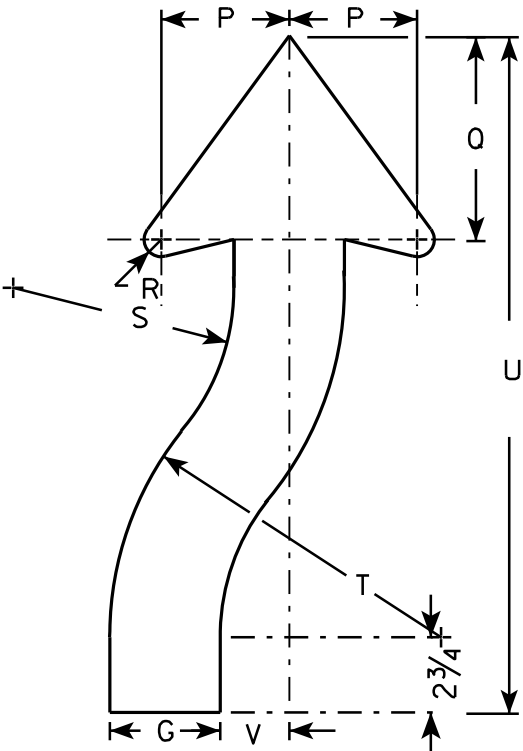
for State Traffic Engineer

DATE 6/29/12 PLATE NO. W2-6.5



NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Yellow
Message - Black
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. W6-2 same as W6-1 but is rotated 180° when mounted.



ARROW DETAIL

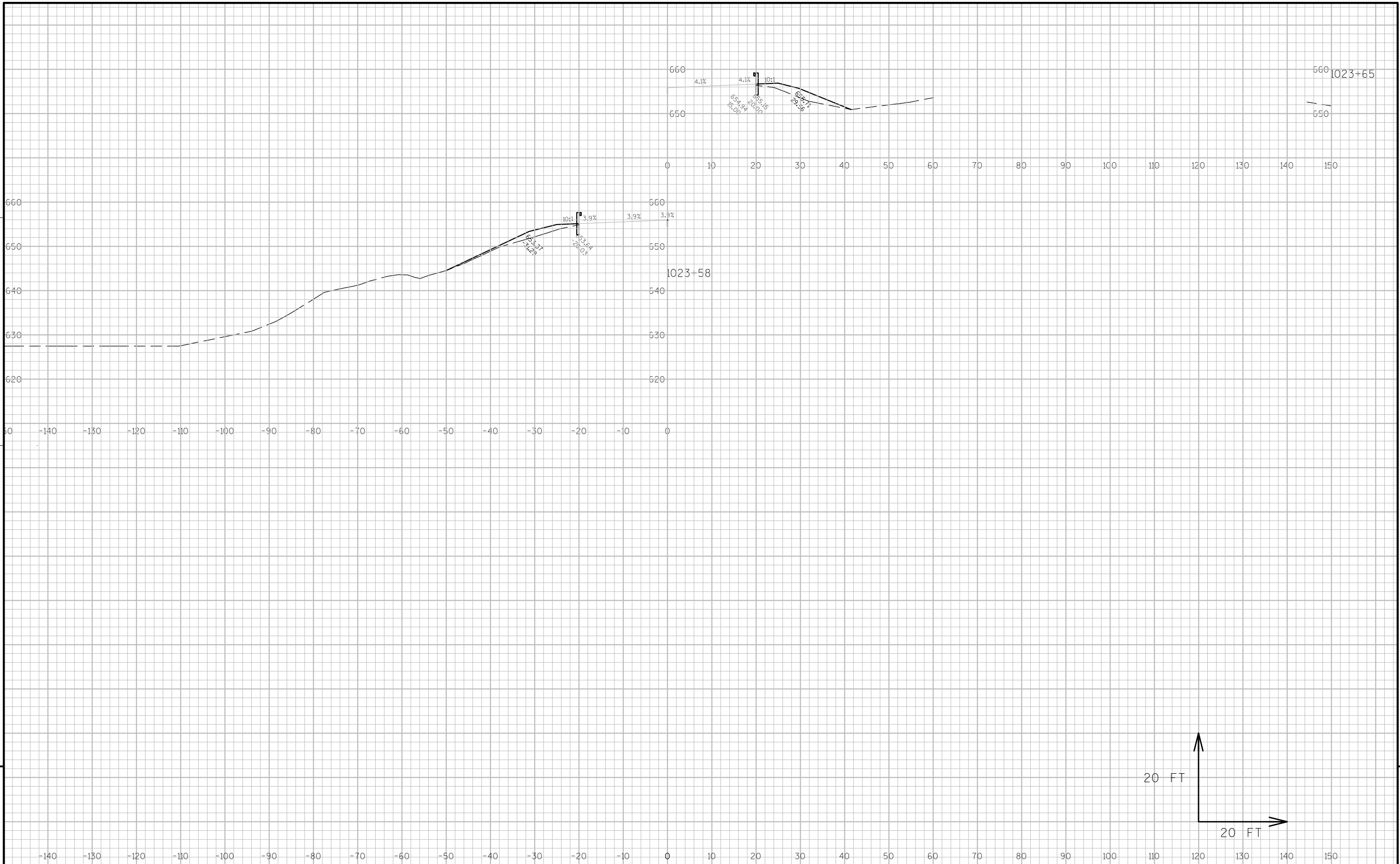
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3⁄8	1⁄2	5⁄8		3 1⁄4	8	8 1⁄4	4 1⁄8	7 7⁄8	25	1 3⁄4	11 5⁄8	4 1⁄8	3 7⁄8	6 3⁄4	5⁄8	6 5⁄8	9 7⁄8	21 5⁄8	2					6.25
2S	36		1 5⁄8	5⁄8	3⁄4		4	8 3⁄4	10	4 3⁄4	9 1⁄2	30	2	14	5	4 5⁄8	7 3⁄8	7⁄8	8	12	24 1⁄2	2 1⁄2					9.0
2M	36		1 5⁄8	5⁄8	3⁄4		4	8 3⁄4	10	4 3⁄4	9 1⁄2	30	2	14	5	4 5⁄8	7 3⁄8	7⁄8	8	12	24 1⁄2	2 1⁄2					9.0
3																											
4	48		2 1⁄4	3⁄4	1		5 3⁄8	11 5⁄8	13 3⁄8	6 3⁄8	12 5⁄8	40	2 5⁄8	18 5⁄8	6 5⁄8	6 1⁄4	9 7⁄8	1 1⁄4	10 5⁄8	16	32 5⁄8	3 3⁄8					16.0
5	48		2 1⁄4	3⁄4	1		5 3⁄8	11 5⁄8	13 3⁄8	6 3⁄8	12 5⁄8	40	2 5⁄8	18 5⁄8	6 5⁄8	6 1⁄4	9 7⁄8	1 1⁄4	10 5⁄8	16	32 5⁄8	3 3⁄8					16.0

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 3/22/11 PLATE NO. W6-1.13



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PROJECT NO: 9210-09-71

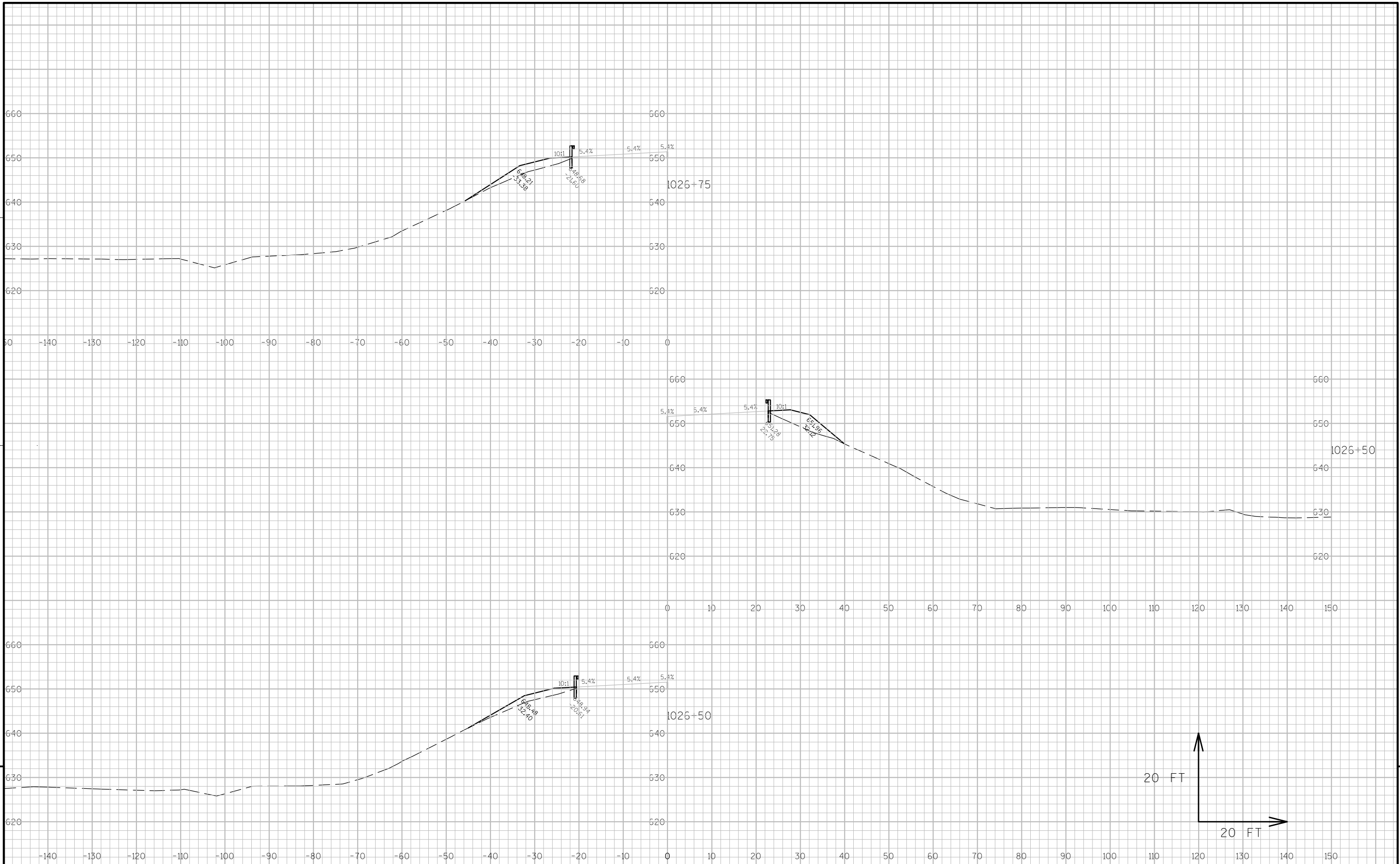
HWY: STH 54

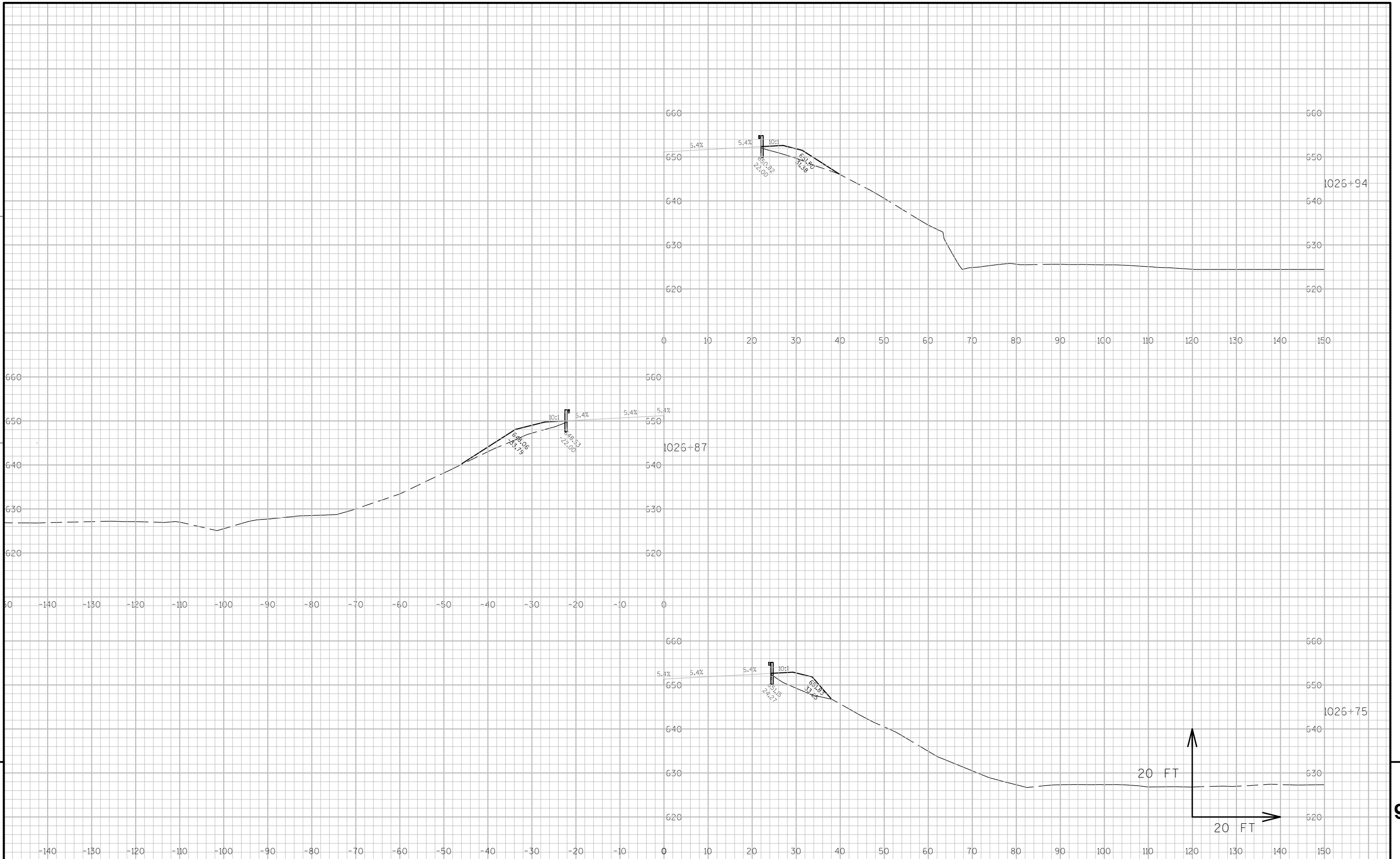
COUNTY: BROWN

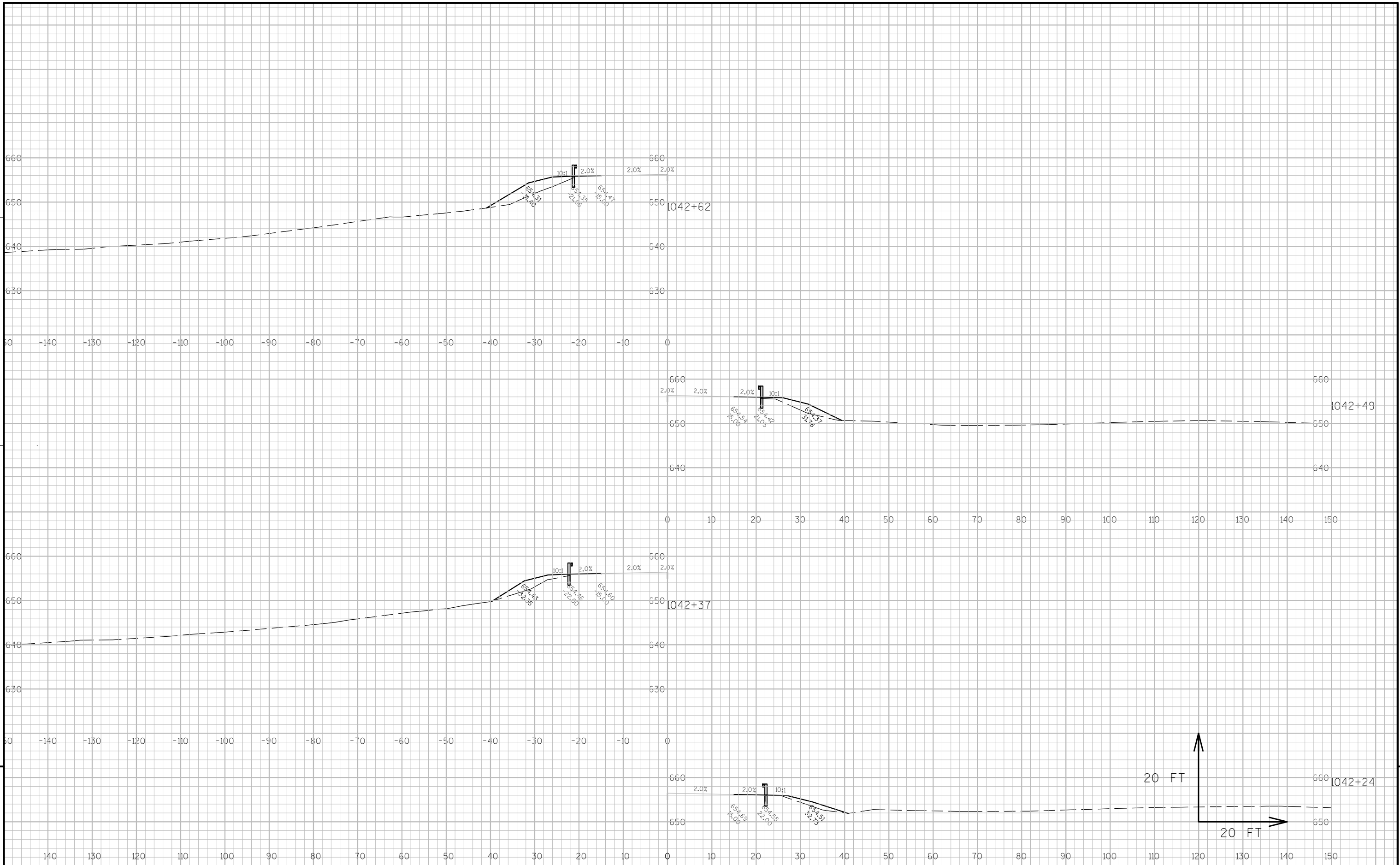
CROSS SECTIONS: BEAM GUARD

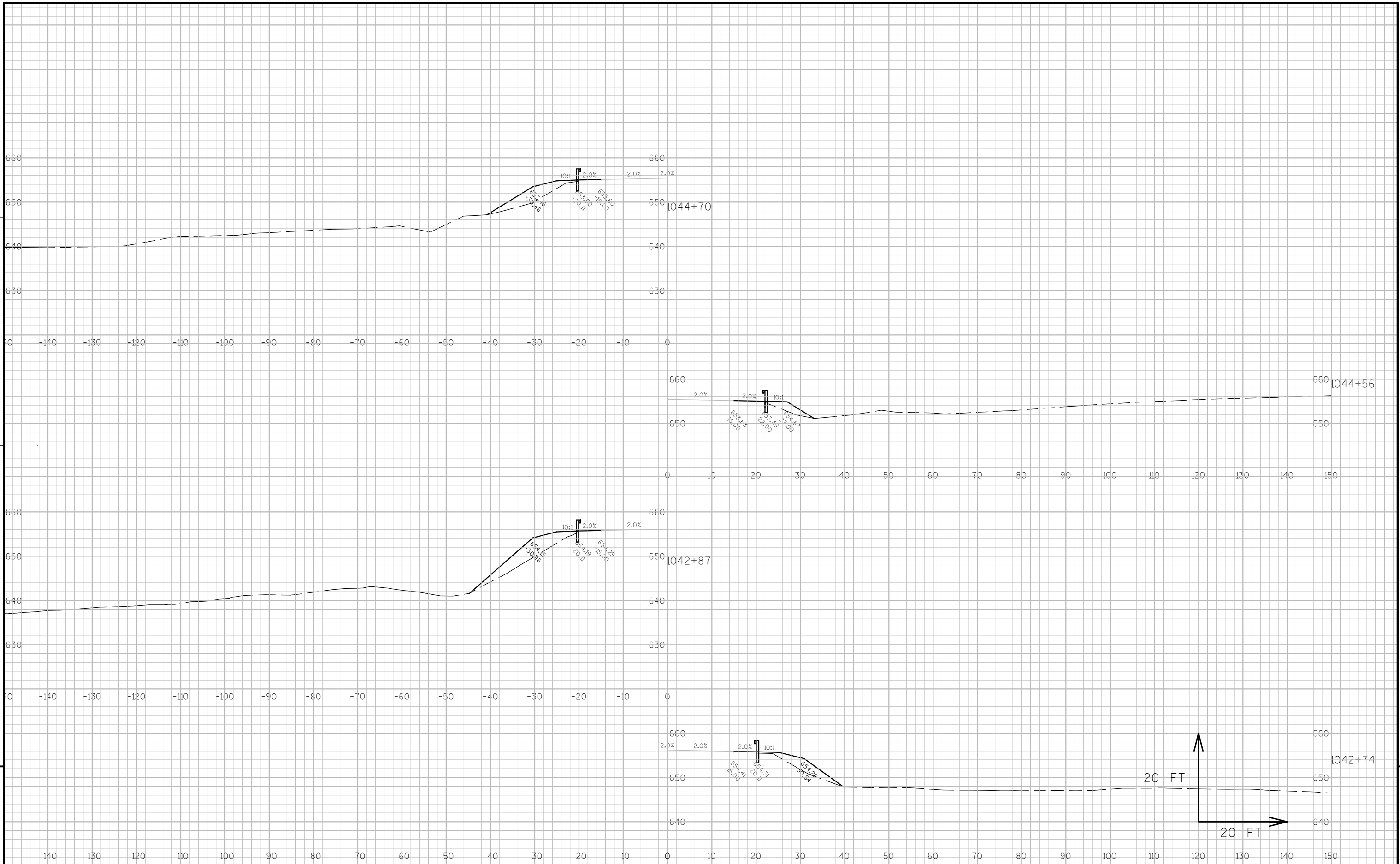
SHEET

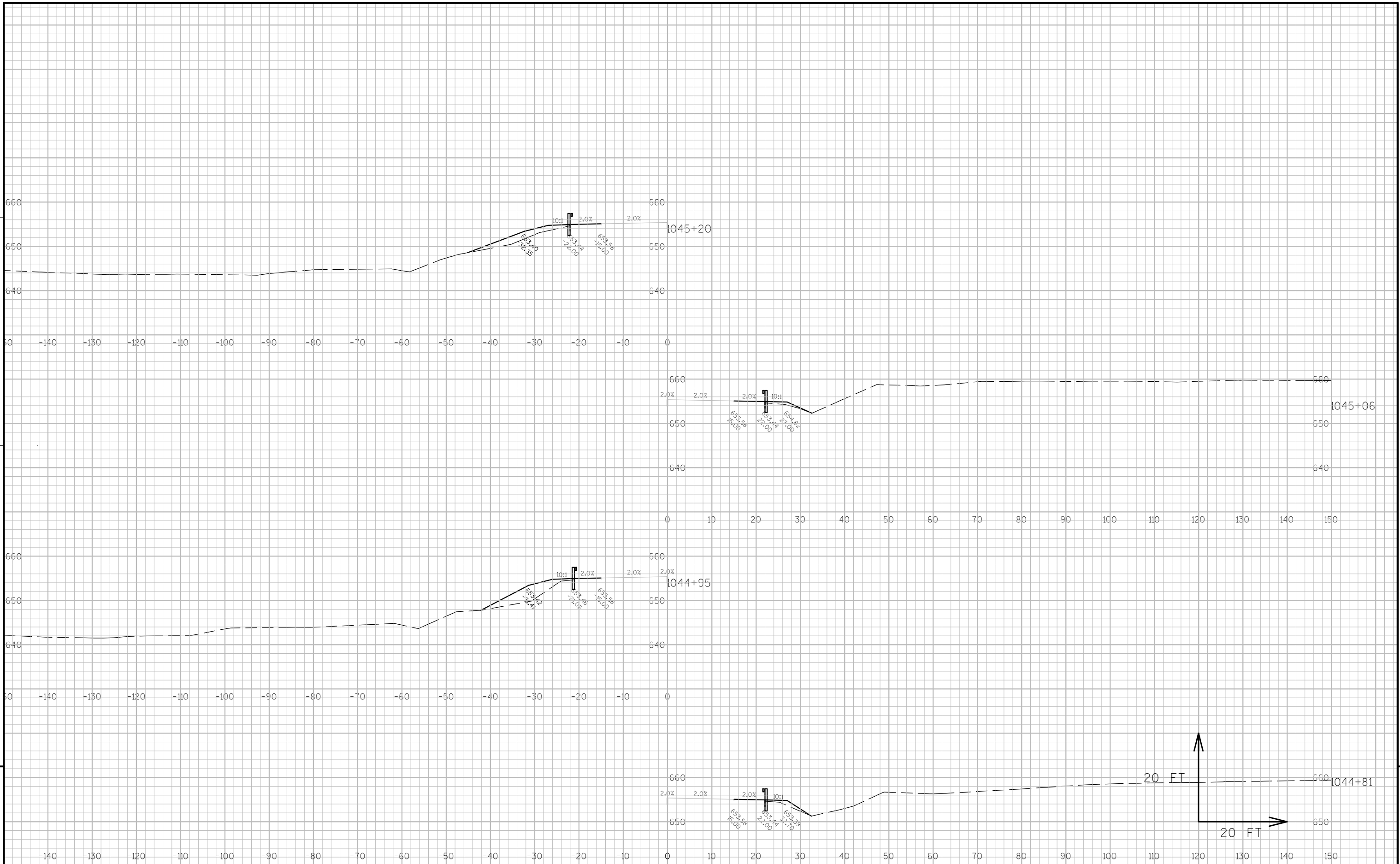
E





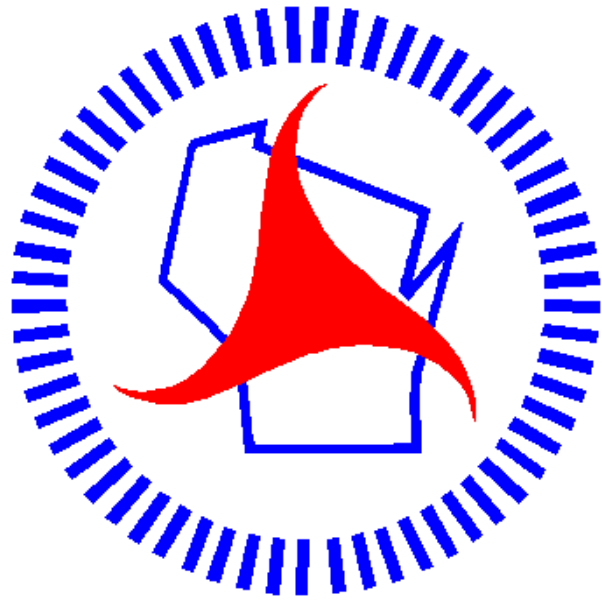






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Wisconsin Department of Transportation

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<http://www.dot.wisconsin.gov>