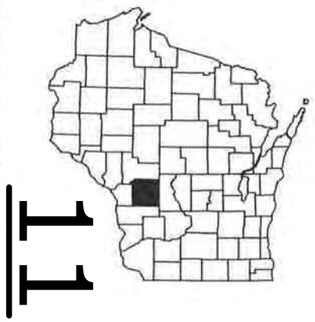
LAX MARCH 2022

PROJECT ID: 7117-00-71
WITH: N/A

COUNTY: MONROE

ORDER OF SHEETS

TOTAL SHEETS = 144



N

DESIGN DESIGNATION 7117-00-01

A A D T	2022	=	7820
A A D T	2042	=	11620
D H V		=	1350
D D		=	59/41
T		=	44 4
DESIGN SPEED		=	35 MPH
ESALS		=	13 000,000

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 (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (SS 35)
- CULVERT (Profile View)

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

VILLAGE OF OAKDALE, CTH PP

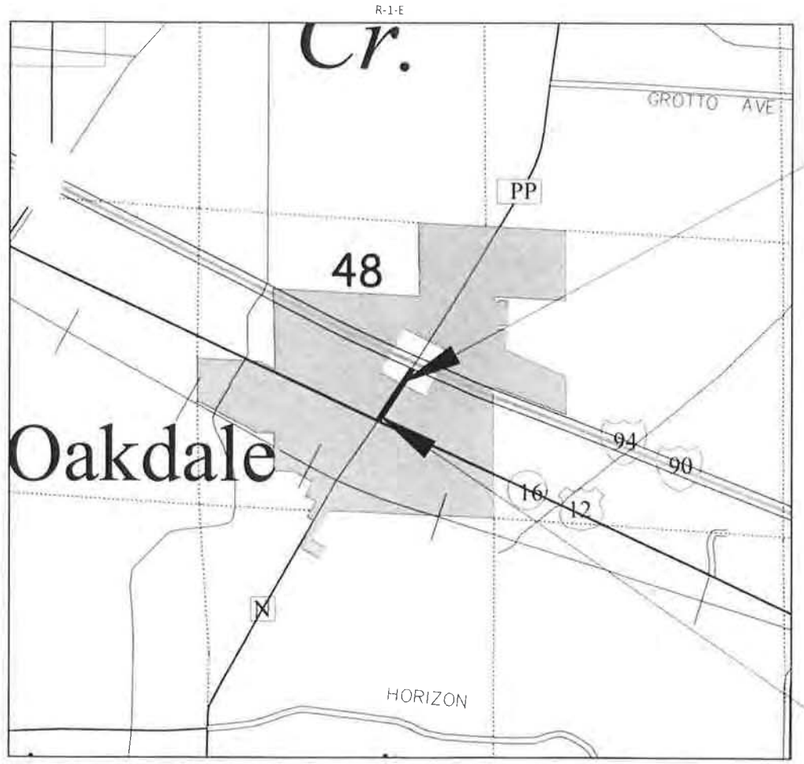
IH 90/94 TO US 12/16

CTH PP

MONROE COUNTY

STATE PROJECT NUMBER
7117-00-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7117-00-71	WISC 2022235	1



END PROJECT
STA 18+71.50

BEGIN PROJECT
STA 10+97.45
Y = 385,511.97
X = 739,864 77

LAYOUT
SCALE 0 0.5 MI

TOTAL NET LENGTH OF CENTERLINE = 0.147 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), MONROE COUNTY NAD83 (2011), IN U S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18

ACCEPTED FOR
COUNTY of MONROE
10/26/2021 (Date) (Highway Commissioner)

ORIGINAL PLANS PREPARED BY
JEWELL associates engineers, inc.
Engineers - Architects - Surveyors

WISCONSIN
PATRICK A. ECKELBERG
E-38776
WISCONSIN RAPIDS, WIS.
PROFESSIONAL ENGINEER

DATE 10/13/2021 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	JEWELL ASSOCIATES ENGINEERS, INC
Designer	JEWELL ASSOCIATES ENGINEERS, INC
Project Manager	ALEIGHA BURG, P.E.
Regional Examiner	SW REGION
Regional Supervisor	JOHN STOLZMAN, P.E.

APPROVED FOR THE DEPARTMENT

DATE _____ Aleigha Burg, P.E. Digitally signed by Aleigha Burg, P.E. Date: 2021.10.29 10:01:43-05'00' (Signature)

E

GENERAL NOTES

COORDINATES AND BEARINGS ARE ORIENTATED TO THE WISCONSIN COUNTY COORDINATE SYSTEM MONROE COUNTY NAD 83 (2011). ALL PLAN DISTANCES ARE GROUND LENGTH.

ELEVATIONS ON THIS PLAN ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

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

EROSION CONTROL ITEMS IN THE MISC. QUAN. ARE SUGGESTED. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD. MAINTAIN EROSION CONTROL ITEMS UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY. PROTECT WETLANDS AND OTHER WATERWAYS THAT ARE PRESENT WITHIN THE PROJECT LIMITS.

ALL RADII DIMENSIONS ON THE PLAN FOR CURB & GUTTER ARE TO THE FLANGE OF THE CURB & GUTTER, UNLESS OTHERWISE NOTED ON THE PLANS.

CURB & GUTTER GRADES ARE GIVEN ON THE FLANGE LINE FOR CONCRETE CURB & GUTTER.

CURB & GUTTER JOINT SPACING SHALL MATCH THE ABUTTING PAVEMENT JOINTS (WHERE APPLICABLE) UNLESS OTHERWISE DESIGNATED BY THE ENGINEER.

EXPANSION JOINTS SHALL BE CONSTRUCTED AT ALL RADII POINTS IN THE CURB & GUTTER.

MISCELLANEOUS REMOVAL ITEMS REQUIRING RESTORATION OF CONCRETE OR ASPHALTIC CONCRETE DRIVEWAYS, SIDEWALKS, OR SIDE STREETS SHALL BE REMOVED TO AN EXISTING JOINT OR SAWED AS DETERMINED BY THE ENGINEER IN THE FIELD, OR AS SHOWN ON THE PLANS.

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

ASPHALTIC SURFACE QUANTITIES WERE CALCULATED USING 112 LB/SY/IN.

3.5 INCHES OF ASPHALTIC SURFACE SHALL BE CONSTRUCTED WITH A 1.75-INCH LOWER LAYER AND A 1.75-INCH UPPER LAYER.

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

APPLY TACK COAT AT A RATE OF 0.06 GAL/SY.

THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, OR PASSING LANE.

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, ALL SIGNS RELATING TO THIS OPERATION SHALL BE COVERED OR REMOVED AND FACILITY RESTORED TO NORMAL OPERATIONS.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES WITH A CALL TO "DIGGERS HOTLINE" AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

IF THERE ARE CONFLICTS WITH SIGNS, THE CONTRACTOR WILL WORK AROUND THE UTILITY FACILITIES.

CONTACTS

WISDOT PROJECT MANAGER

STATE OF WISCONSIN
SOUTHWEST REGION OFFICE
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601
ATTN: ALEIGHA BURG
PH: (608) 789-7894
E-MAIL: ALEIGHA.BURG@DOT.WI.GOV

DESIGN CONSULTANT:

JEWELL ASSOCIATES ENGINEERS, INC.
560 SUNRISE DRIVE
SPRING GREEN, WI 53588-9304
ATTN: FRED GRUBER, P.E.
PH: (608) 588-7484
CELL: (608) 341-8194
E-MAIL: FRED.GRUBER@JEWELLASSOC.COM

WDNR LIAISON:

STATE OF WISCONSIN
WDNR SOUTHWEST REGION SERVICE CENTER
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601
ATTN: KAREN KALVELAGE
PH: (608) 785-9115
E-MAIL: KAREN.KALVELAGE@WISCONSIN.GOV

UTILITIES

COMMUNICATION LINES

CENTURYLINK
100 S. CINCINNATI AVE, SUITE 1200
TULSA, OK 74103
ATTN: KENDALL WILLIAMS-ZETINA
PH: (918) 547-0547
E-MAIL: KENDALL.ZETINA@CENTURYLINK.COM

CHARTER COMMUNICATIONS
1228 12TH AVE S
ONALASKA, WI 54650
ATTN: PERRY MCCLELLAN
PH: (608) 317-6213
E-MAIL: PERRY.MCCLELLAN@CHARTER.COM

LYNXX NETWORKS
127 US HWY 12 &16
CAMP DOUGLAS, WI 54618
ATTN: BEN GRILLEY
PH: (608) 427-4036
E-MAIL: BEN.GRILLEY@GETLYNXX.COM

GAS

ALLIANT ENERGY
528 INDUSTRIAL DR
TOMAH, WI 54660
ATTN: PATRICK MCINTYRE
PH: (608) 844-9605
E-MAIL: PATRICKMCINTYRE@ALLIANTENERGY.COM

ELECTRICITY

OAKDALE ELECTRIC COOP
PO BOX 40
OAKDALE, WI 54649
ATTN: MATT RIGGS
PH: (608) 372-8828
E-MAIL: MRIGGS@OAKDALEREC.COM

WATER / SANITARY SEWER

VILLAGE OF OAKDALE
1230 SOUTH BOULEVARD
BARABOO, WI 53913
ATTN: GREGG BORUCKI
PH: (608) 963-0288
E-MAIL: GBORUCKI@MSA-PS.COM

LIST OF STANDARD ABBREVIATIONS

ABUT	Abutment
AC	Acre
AGG	Aggregate
AH	Ahead
<	Angle
ASPH	Asphaltic
AVG	Average
ADT	Average Daily Traffic
BAD	Base Aggregate Dense
BK	Back
BF	Back Face
BM	Bench Mark
BR	Bridge
C or C/L	Center Line
CC	Center to Center
C.E.	Commercial Entrance
CTH	County Trunk Highway
CR	Creek
CR	Crushed
CY or CU YD	Cubic Yard
CP	Culvert Pipe
C & G	Curb and Gutter
D	Degree of Curve
DHV	Design Hour Volume
DIA	Diameter
E	East
X	East Grid Coordinate
ELEC	Electric (al)
EL or ELEV	Elevation
ESALS	Equivalent Single Axle Loads
EBS	Excavation Below Subgrade
FF	Face to Face
F.E.	Field Entrance
F	Fill
FG	Finished Grade
FL or F/L	Flow Line
FT	Foot
FTG	Footing
GN	Grid North
HT	Height
CWT	Hundredweight
HYD	Hydrant
INL	Inlet
ID	Inside Diameter
INV	Invert
IP	Iron Pipe or Pin
IRS	Iron Rod Set
JT	Joint
JCT	Junction
LHF	Left-Hand Forward
L	Length of Curve
LIN FT or LF	Linear Foot
LC	Long Chord of Curve
MH	Manhole
MB	Mailbox
ML or M/L	Match Line
N	North
Y	North Grid Coordinate
OD	Outside Diameter
PLE	Permanent Limited Easement
PT	Point
PC	Point of Curvature
PI	Point of Intersection
PRC	Point of Reverse Curvature
PT	Point of Tangency
POC	Point On Curve
POT	Point on Tangent
PVC	Polyvinyl Chloride
PCC	Portland Cement Concrete
LB	Pound
PSI	Pounds Per Square Inch
P.E.	Private Entrance
R	Radius
RR	Railroad
R	Range
RL or R/L	Reference Line
RP	Reference Point
RCCP	Reinforced Concrete Culvert Pipe
REQD	Required
RES	Residence or Residential
RW	Retaining Wall
RT	Right
RHF	Right-Hand Forward
R/W	Right-of-Way
RD	Road
R	River
RDWY	Roadway
SALV	Salvaged
SAN S	Sanitary Sewer
SEC	Section
SHLDR	Shoulder
SHR	Shrinkage
SW	Sidewalk
S	South
SQ	Square
SF or SQ FT	Square Feet
SY or SQ YD	Square Yard
STD	Standard
SDD	Standard Detail Drawings
STH	State Trunk Highways
STA	Station
SS	Storm Sewer
SG	Subgrade
SE	Superelevation
SL or S/L	Survey Line
SV	Septic Vent
T	Tangent
TEL	Telephone
TEMP	Temporary
TI	Temporary Interest
TLE	Temporary Limited Easement
t	Ton
T or TN	Town
TRANS	Transition
TL or T/L	Transit Line
T	Trucks (percent of)
TYP	Typical
UNCL	Unclassified
UG	Underground Cable
USH	United States Highway
VAR	Variable
V	Velocity or Design Speed
VERT	Vertical
VC	Vertical Curve
VOL	Volume
WM	Water Main
WV	Water Valve
W	West
WB	Westbound
YD	Yard

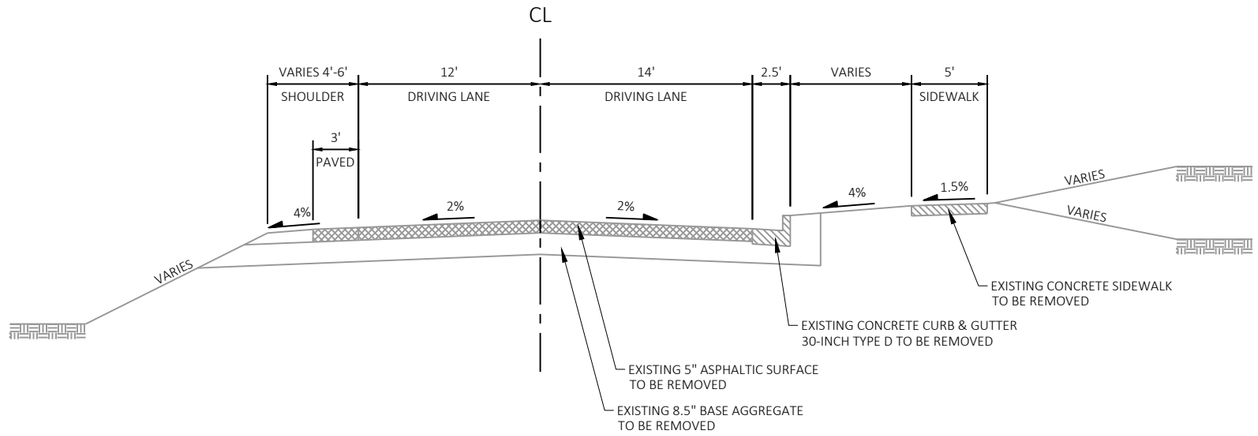
ORDER OF DETAIL SHEETS

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

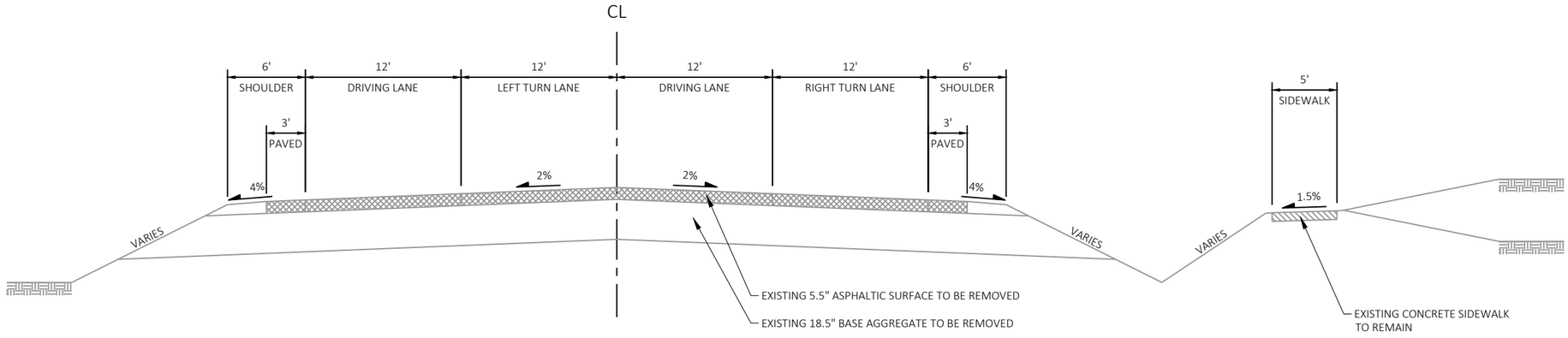
TOTAL PROJECT AREA = 2.44 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 1.87 ACRES

2



EXISTING TYPICAL SECTION

CTH PP
STA 10+21.21 - STA 14+95.47



EXISTING TYPICAL SECTION

CTH PP
STA 14+95.47 - STA 18+71.50

PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 3	E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\SHEETSPLAN\TYPICALS\W11617_TYPICAL SECTIONS.DWG
LAYOUT NAME - Existing Typical Sections 1

PLOT DATE : 10/13/2021 8:39 AM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:10 FT

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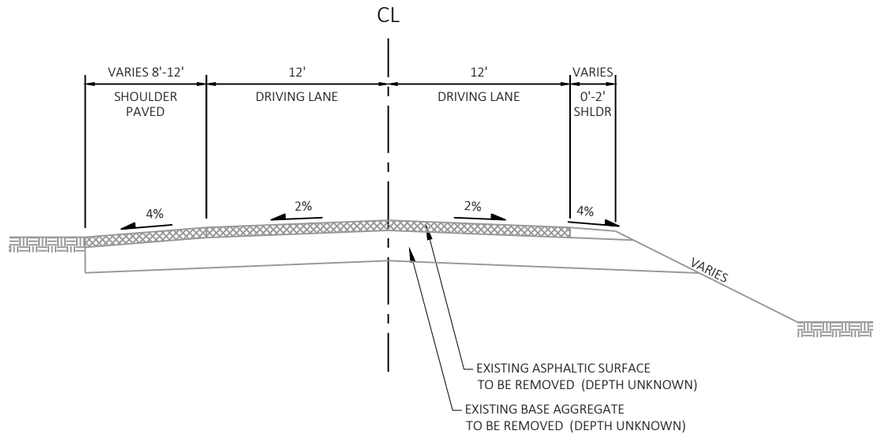
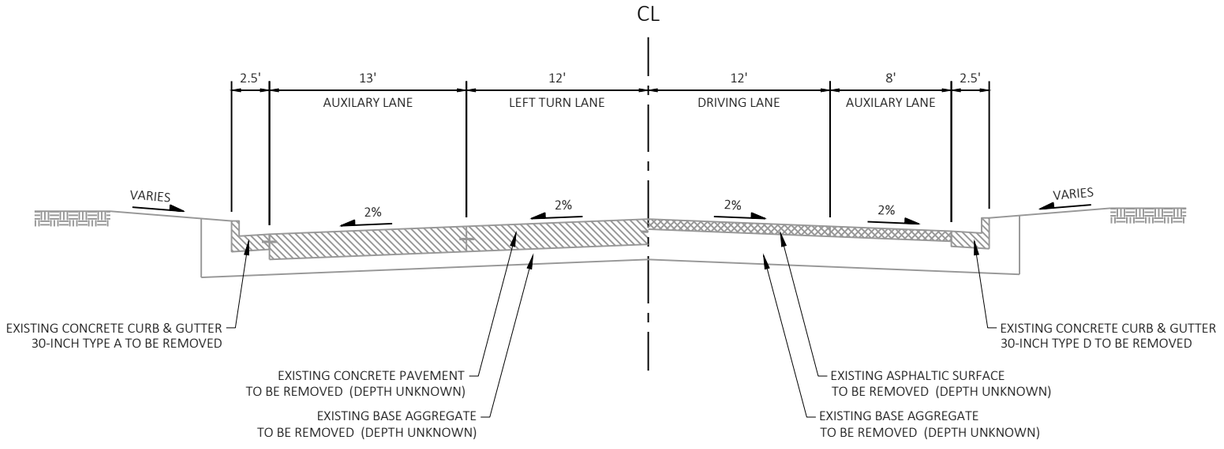


EXISTING TYPICAL SECTION

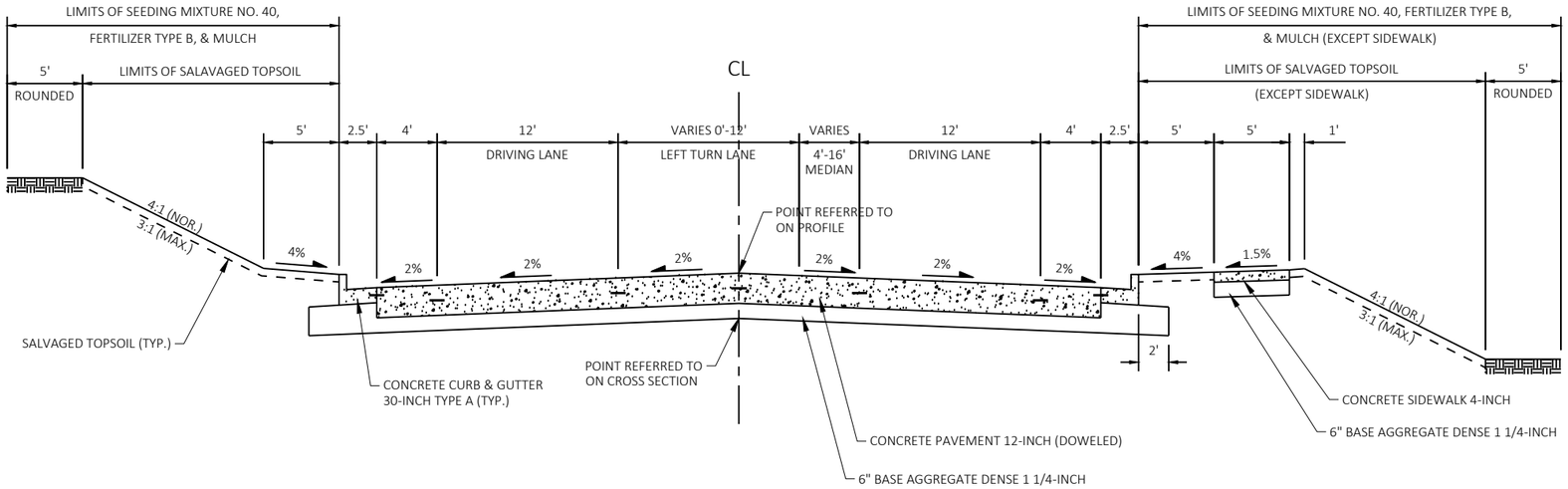
WEST COUGAR DR
STA 60"C"+35.00 - STA 61"C"+00.80



EXISTING TYPICAL SECTION

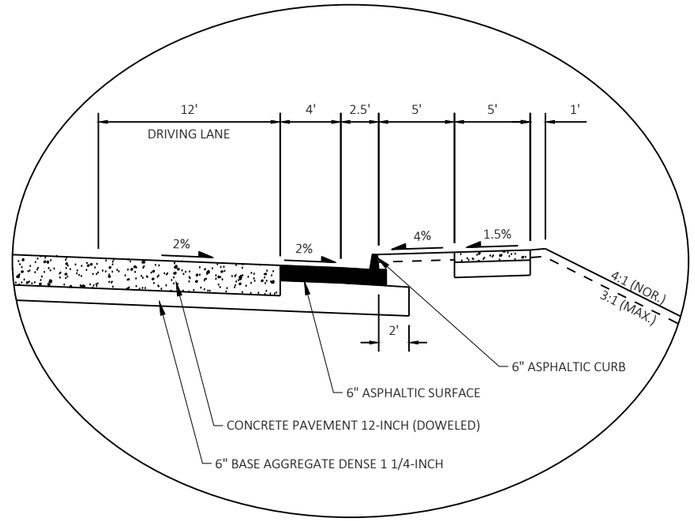
EAST COUGAR DR
STA 50"B"+21.88 - STA 50"B"+81.17 (CONCRETE)
STA 50"B"+81.17 - STA 51"B"+50.00 (ASPHALT)

PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 4	E



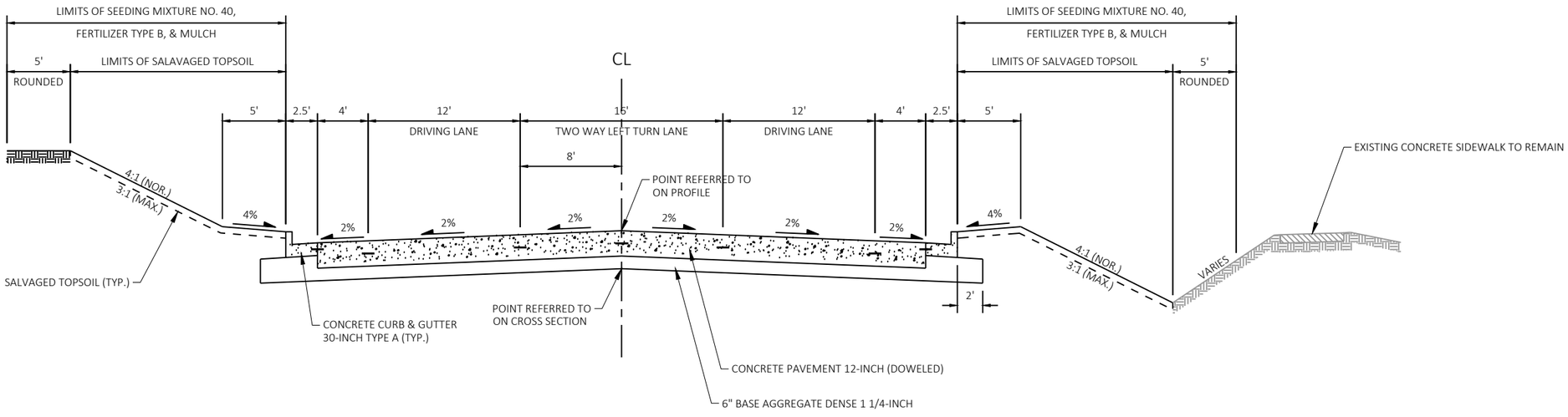
FINISHED TYPICAL SECTION

CTH PP
STA 10+97.45 - STA 14+95.47



ASPHALTIC CURB

CTH PP
STA 10+97.45 - STA 11+36.00, RT

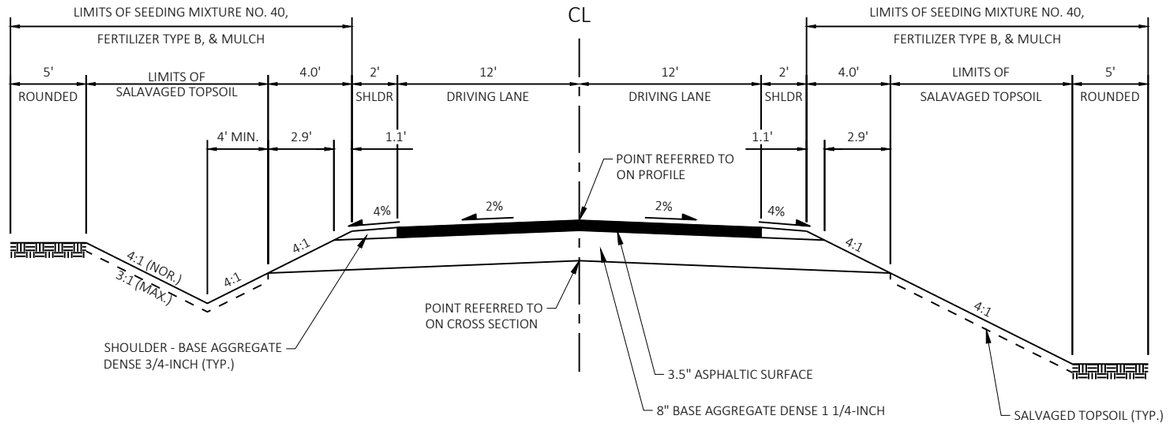


FINISHED TYPICAL SECTION

CTH PP
STA 14+95.47 - STA 18+71.50

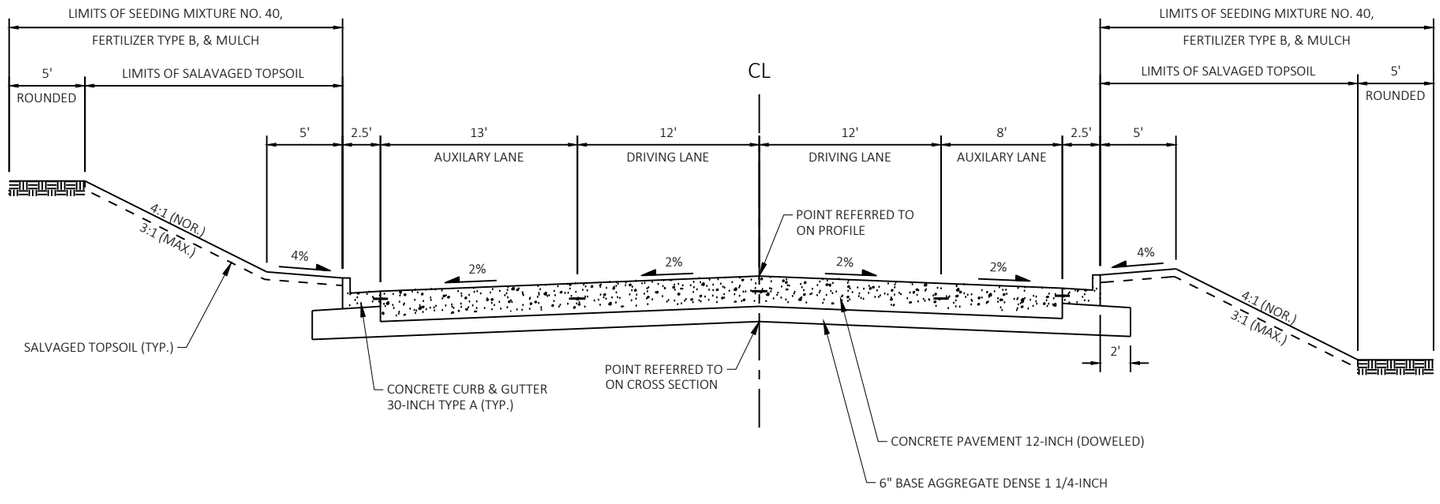
PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 5	E

2



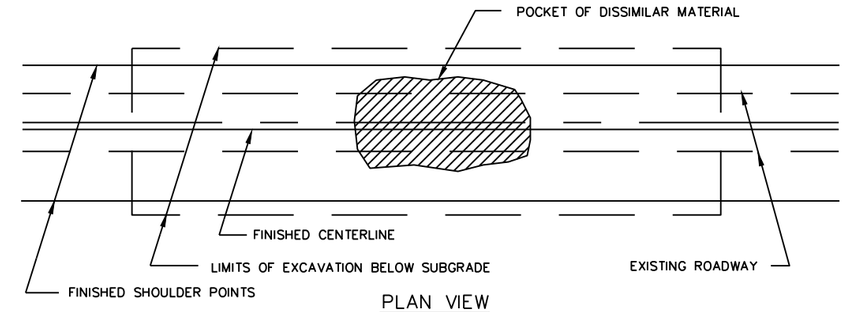
FINISHED TYPICAL SECTION

WEST COUGAR DR
STA. 60"C"+35.00 - STA. 60"C"+70.38

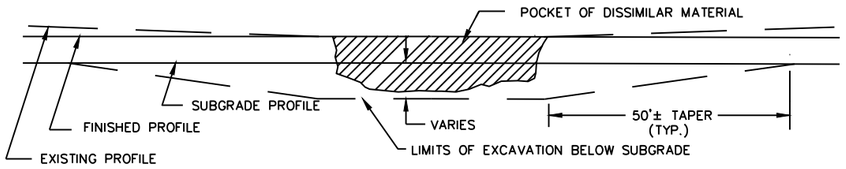


FINISHED TYPICAL SECTION

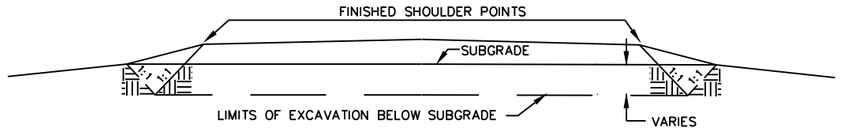
EAST COUGAR DR
STA. 50"B"+82.24 - STA. 51"B"+50.00



PLAN VIEW



PROFILE VIEW



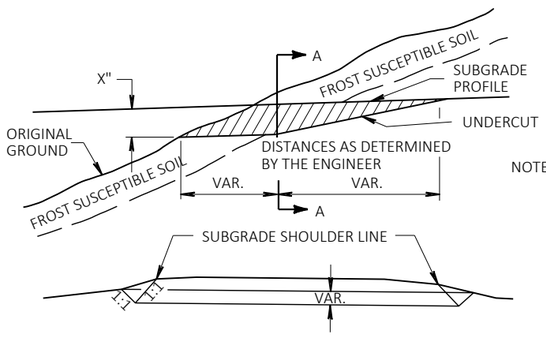
CROSS SECTION VIEW

1. EXACT LOCATION OF E.B.S. (EXCAVATION BELOW SUBGRADE) SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

2. E.B.S. AREA TO BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE ENGINEER. BACKFILL MUST BE HOMOGENEOUS WITH ADJOINING FILL MATERIAL.

3. THE FILL SECTION WITHIN 100' OF THE MOUTH OF THE CUT MUST BE KEPT 2' BELOW SUBGRADE UNTIL E.B.S. IS COMPLETED. LATERAL LIMITS OF EXCAVATION SHALL BE THE SUBGRADE SHOULDER POINTS.

EXCAVATION BELOW SUBGRADE (E.B.S.)



SECTION A-A

CROSS SECTION SHOWING UNDERCUT

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

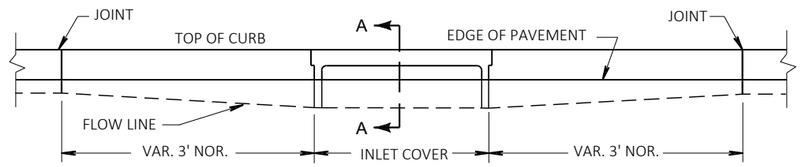
E.B.S. AREA TO BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE ENGINEER

BACKFILL MUST BE HOMOGENEOUS WITH ADJOINING FILL MATERIAL.

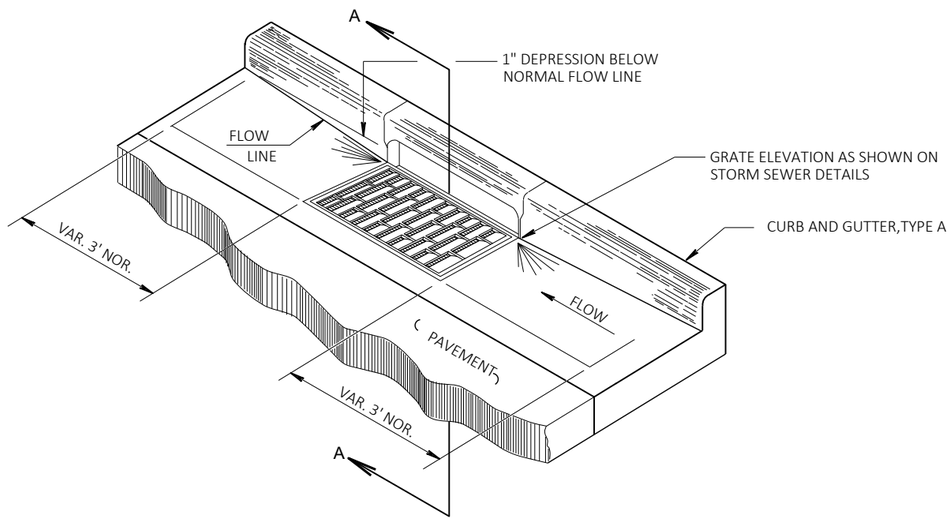
THE FILL SECTION WITHIN 100' OF THE MOUTH OF THE CUT MUST BE KEPT 2' BELOW SUBGRADE UNTIL E.B.S. IS COMPLETED.

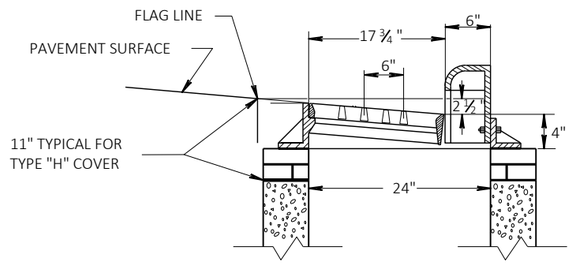
DETAIL FOR EXCAVATION BELOW SUBGRADE AT CUTS

2



ELEVATION

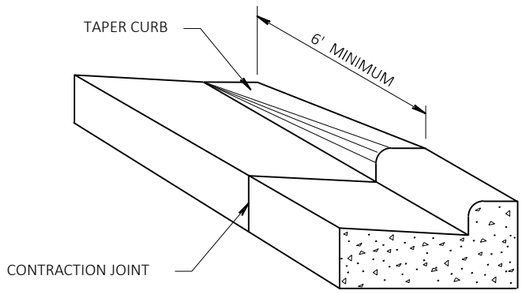




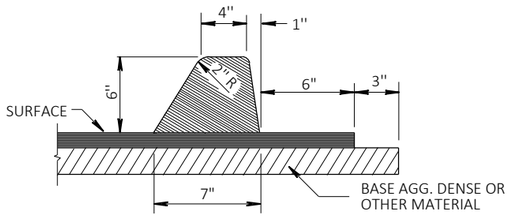
SECTION A-A

DETAIL OF CURB AND GUTTER AT INLETS

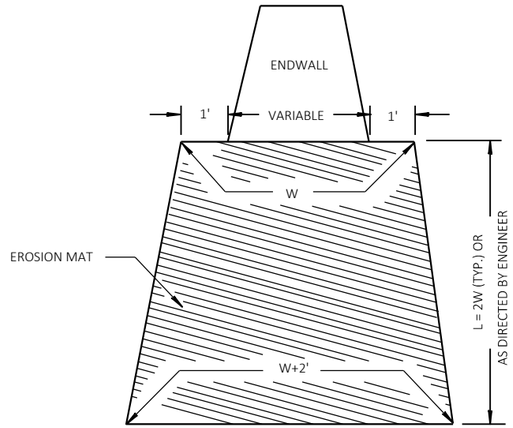
(2X3-FT INLET & TYPE H INLET COVER SHOWN)



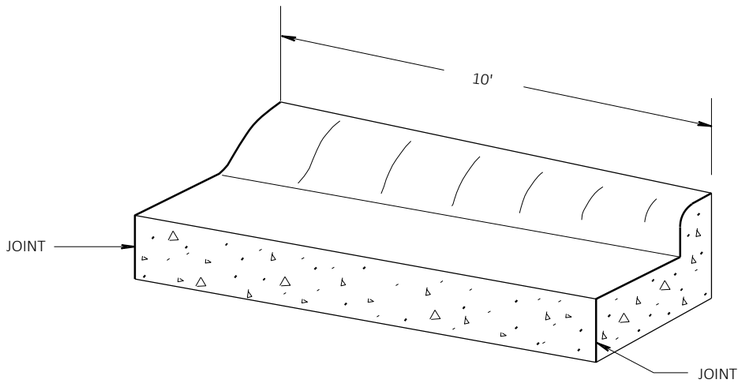
DETAIL OF CURB & GUTTER TERMINI



ASPHALTIC CURB DETAIL

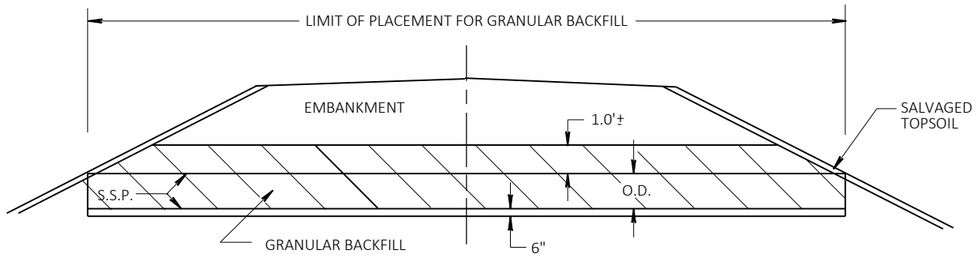


EROSION MAT TREATMENT AT CULVERTS



TRANSITION DETAIL

36" TYPE "A" CURB & GUTTER TO 30" TYPE "A" CURB & GUTTER
(TO BE MEASURED & PAID FOR AS 30" CONC. C&G)

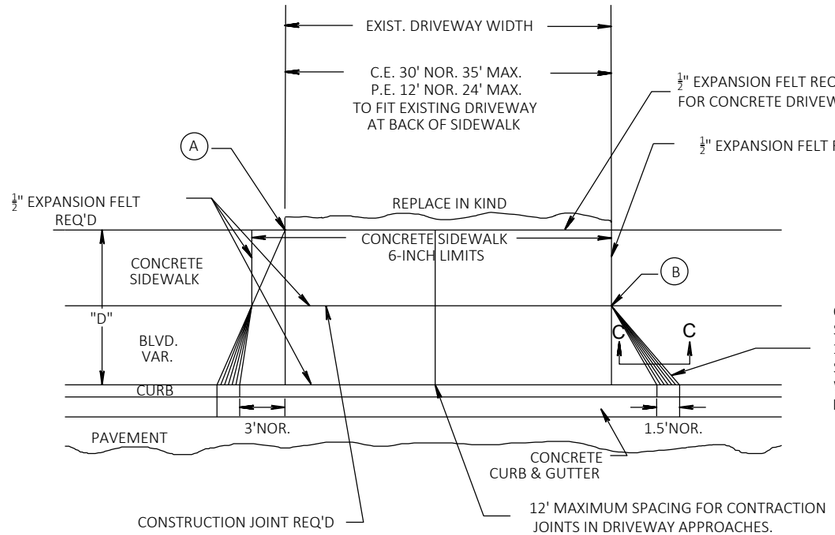


STORM SEWER BACKFILL DETAIL

PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	CONSTRUCTION DETAILS	SHEET 8	E

2

DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER

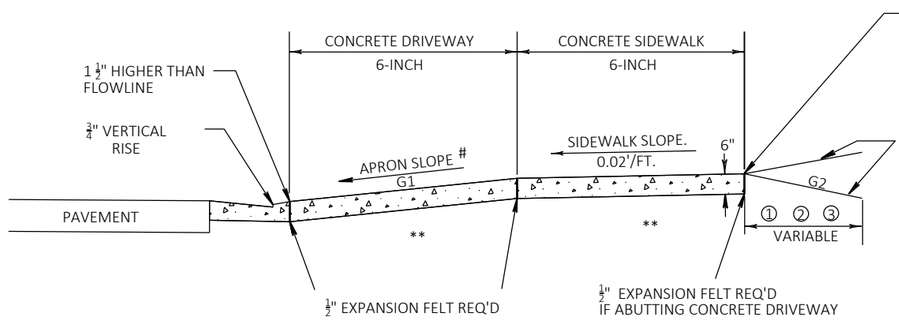


CONCRETE IN THE 1.5' TAPER AREA SHALL BE TAPERED TO A DEPTH OF 11-INCHES AND THE EXPANSION FELT SHALL MATCH THIS DEPTH. THIS WORK AND MATERIAL WILL BE INCIDENTAL TO THE BID ITEM.

PLAN VIEW

(A) WHEN "D" IS 13' OR LESS, ALIGN TAPER WITH BACK OF SIDEWALK

(B) WHEN "D" IS GREATER THAN 13', ALIGN TAPER WITH FRONT OF SIDEWALK



TYPICAL SIDEWALK SECTION

① — 6" CONCRETE DRIVEWAY

② — 6" BASE AGG. DENSE 1 1/4-INCH

③ — 4" BASE AGG. DENSE 1 1/4-INCH BASE WITH 2" ASPHALTIC SURFACE

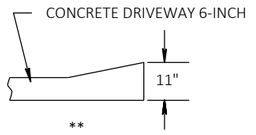
** = 6" BASE AGG. DENSE 1 1/4-INCH REQ'D UNDER CONCRETE DRWY

\#

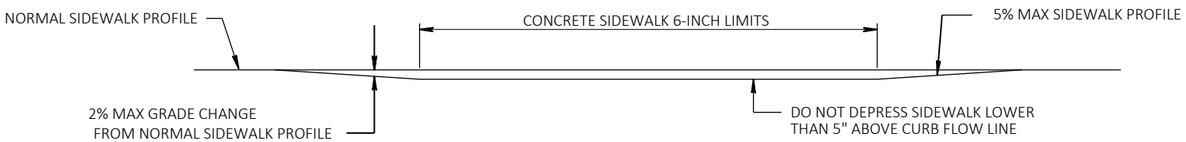
TERRACE WIDTH	APRON SLOPE (G1)		
	MIN %	DESIRABLE %	MAX %
3 FT	7.0	8.5	9.0
4 FT	5.0	7.0	9.0
5 FT	4.0	7.0	9.0
6 FT	4.0	7.0	9.0
7 FT	3.5	7.0	9.0
8 FT	3.0	7.0	9.0

NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%

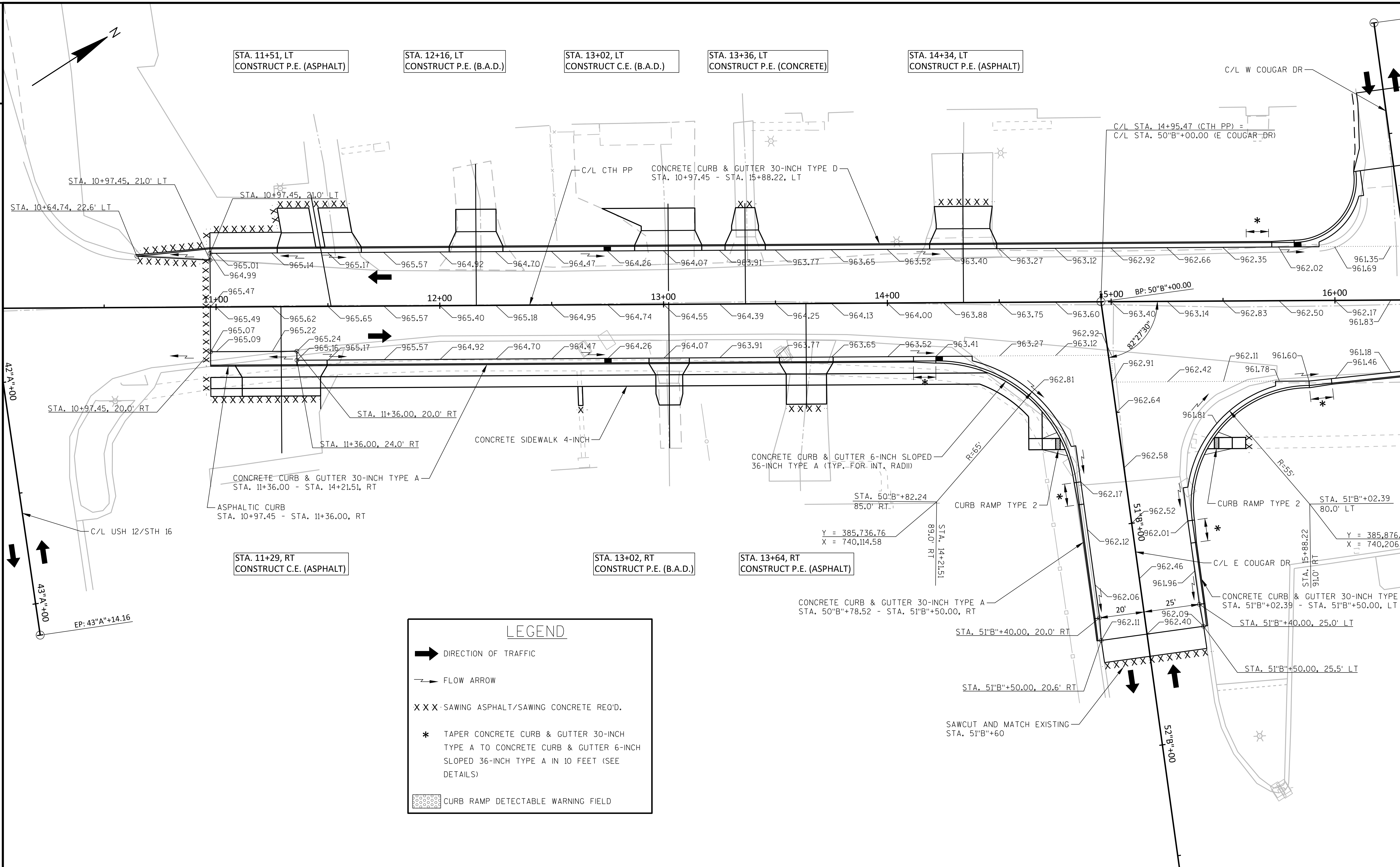
DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE



SECTION C-C



DEPRESSED SIDEWALK PROFILE DETAIL



2
STA. 11+51, LT
CONSTRUCT P.E. (ASPHALT)
STA. 12+16, LT
CONSTRUCT P.E. (B.A.D.)
STA. 13+02, LT
CONSTRUCT C.E. (B.A.D.)
STA. 13+36, LT
CONSTRUCT P.E. (CONCRETE)
STA. 14+34, LT
CONSTRUCT P.E. (ASPHALT)
C/L W COUGAR DR
C/L STA. 14+95.47 (CTH PP) =
C/L STA. 50"B"+00.00 (E COUGAR DR)
C/L CTH PP
CONCRETE CURB & GUTTER 30-INCH TYPE D
STA. 10+97.45 - STA. 15+88.22, LT
STA. 10+97.45, 21.0' LT
STA. 10+97.45, 21.0' LT
STA. 10+64.74, 22.6' LT
11+00
12+00
13+00
14+00
15+00
BP: 50"B"+00.00
16+00
STA. 10+97.45, 20.0' RT
STA. 11+36.00, 20.0' RT
STA. 11+36.00, 24.0' RT
CONCRETE SIDEWALK 4-INCH
CONCRETE CURB & GUTTER 30-INCH TYPE A
STA. 11+36.00 - STA. 14+21.51, RT
ASPHALTIC CURB
STA. 10+97.45 - STA. 11+36.00, RT
C/L USH 12/STH 16
42"A"+00
43"A"+00
EP: 43"A"+14.16
CONCRETE CURB & GUTTER 6-INCH SLOPED
36-INCH TYPE A (TYP. FOR INT. RADII)
R=65'
R=55'
82°27'30"
STA. 50"B"+82.24
85.0' RT
STA. 14+21.51
89.0' RT
Y = 385,736.76
X = 740,114.58
CURB RAMP TYPE 2
CURB RAMP TYPE 2
STA. 51"B"+02.39
80.0' LT
Y = 385,876.03
X = 740,206.22
51"B"+00
C/L E COUGAR DR
STA. 15+88.22
91.0' RT
CONCRETE CURB & GUTTER 30-INCH TYPE A
STA. 50"B"+78.52 - STA. 51"B"+50.00, RT
CONCRETE CURB & GUTTER 30-INCH TYPE A
STA. 51"B"+02.39 - STA. 51"B"+50.00, LT
20'
25'
STA. 51"B"+40.00, 20.0' RT
STA. 51"B"+40.00, 25.0' LT
STA. 51"B"+50.00, 20.6' RT
STA. 51"B"+50.00, 25.5' LT
SAWCUT AND MATCH EXISTING
STA. 51"B"+60
52"B"+00
STA. 11+29, RT
CONSTRUCT C.E. (ASPHALT)
STA. 13+02, RT
CONSTRUCT P.E. (B.A.D.)
STA. 13+64, RT
CONSTRUCT P.E. (ASPHALT)
LEGEND
DIRECTION OF TRAFFIC
FLOW ARROW
XXX SAWING ASPHALT/SAWING CONCRETE REQ'D.
* TAPER CONCRETE CURB & GUTTER 30-INCH TYPE A TO CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A IN 10 FEET (SEE DETAILS)
CURB RAMP DETECTABLE WARNING FIELD

PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	PAVEMENT LAYOUT & INTERSECTION DETAILS	SHEET 10	E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\SHEETSPLAN\DETAILS\W11617_PAVEMENT INTERSECTION LAYOUT.DWG
LAYOUT NAME - 1
PLOT DATE : 10/13/2021 8:39 AM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

STA. 17+31, LT
CONSTRUCT P.E. (ASPHALT)

BP: 60"C"+00.00
SAWCUT AND MATCH EXISTING
STA. 60"C"+30
C/L W COUGAR DR
2'
12'
12'
6'
30'
STA. 15+81.92
54.0' LT
Y = 385,948.97
X = 740,080.75
STA. 60"C"+64.69
45.0' RT
R=30'
959.44
15'
959.47
15'
959.96
961.24
960.70
961.24
960.40
961.93
962.35
961.69
961.05
960.84
960.66
960.66
960.57
960.55
960.59
960.71
960.89
961.10
961.08
962.02
61"C"+00
82°35'17"
STA. 16+72.68
54.0' LT
Y = 386,025.38
X = 740,129.73
STA. 60"C"+76.40
45.0' LT
R=30'
CONCRETE SURFACE DRAIN AND
ASPHALTIC FLUME REQ'D.
STA. 17+50, LT
CONCRETE CURB & GUTTER 30-INCH TYPE D
STA. 16+72.68 - STA. 18+81.50, LT
C/L CTH PP
CONCRETE SURFACE DRAIN AND
ASPHALTIC FLUME REQ'D.
STA. 18+65.50, LT
STA. 18+71.50, 26.0' LT
SAWCUT AND MATCH EXISTING
STA. 18+71.50
STA. 18+41.50, 24.0' LT
CONCRETE CURB & GUTTER 6-INCH SLOPED
36-INCH TYPE A (TYP. FOR INT. RADII)
PI STA. 18+61.04
15+00
BP: 50"B"+00.00
16+00
17+00
18+00
19+00
20+00
BP: 40"D"+00.00
EP: 61"C"+25.00
962.50
962.17
961.83
961.53
961.30
961.14
961.05
961.03
961.07
961.19
961.37
961.59
961.61
960.75
960.66
960.57
960.55
960.59
960.71
960.89
961.11
961.17
960.93
961.60
961.78
961.18
961.46
STA. 16+88.12, 24.0' RT
STA. 17+08.22, 24.0' RT
STA. 18+61.04, 24.0' RT
STA. 18+71.50, 24.1' RT
CONCRETE CURB & GUTTER 30-INCH TYPE A
STA. 15+88.22 - STA. 18+71.50, RT
CONCRETE SURFACE DRAIN AND
ASPHALTIC FLUME REQ'D.
STA. 17+46, RT
CONCRETE SIDEWALK 4-INCH
C/L STA. 16+34.32 (CTH PP) =
C/L STA.61"C"+25.00 (W COUGAR DR)
51"B"+00
52"B"+00
41"D"+00
EP: 41"D"+82.57
C/L E COUGAR DR

LEGEND

- DIRECTION OF TRAFFIC
- FLOW ARROW
- XXX SAWING ASPHALT/SAWING CONCRETE REQ'D.
- * TAPER CONCRETE CURB & GUTTER 30-INCH TYPE A TO CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A IN 10 FEET (SEE DETAILS)
- CURB RAMP DETECTABLE WARNING FIELD

2

PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	PAVEMENT LAYOUT & INTERSECTION DETAILS	SHEET 11	E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\SHEETSPLAN\DETAILS\W11617_PAVEMENT INTERSECTION LAYOUT.DWG
LAYOUT NAME - 2
PLOT DATE : 10/13/2021 8:39 AM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:40 FT

CTH PP

E COUGAR DR

LEGEND

XXXXXXX SAWING ASPHALT / SAWING CONCRETE

CURB RAMP DETECTABLE WARNING FIELD YELLOW

DIRECTION OF FLOW

962.81

1 963.21

2 963.08

3 963.00

4 962.91

5 962.41

6 962.32

7 962.42

8 962.98

9 963.08

962.49

962.17

1.5 %

60'

1.7 %

7.0 %

0.2 %

5'

961.81

1 961.77

2 961.80

3 961.85

4 961.61

5 961.50

6 961.37

7 961.54

961.91

962.01

1.5 %

2.6 %

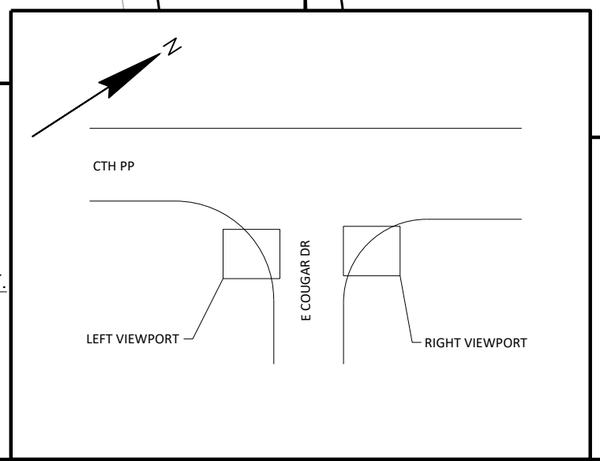
5'

SIGN

CURB RAMP LAYOUT TABLE

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	50"B"+46.47	39.08' RT	963.21	385,791.94	740,105.05
2	50"B"+56.19	40.37' RT	963.08	385,786.66	740,113.30
3	50"B"+61.15	41.02' RT	963.00	385,783.96	740,117.51
4	50"B"+61.93	35.07' RT	962.91	385,789.01	740,120.75
5	50"B"+62.98	27.14' RT	962.41	385,795.74	740,125.07
6	50"B"+63.28	24.90' RT	962.32	385,797.65	740,126.28
7	50"B"+58.03	26.49' RT	962.42	385,798.42	740,120.86
8	50"B"+56.98	34.42' RT	962.98	385,791.71	740,116.54
9	50"B"+45.02	32.83' RT	963.08	385,798.22	740,106.38

STA. 50"B"+60.50, RT.
(CURB RAMP TYPE 2 REQ'D.)

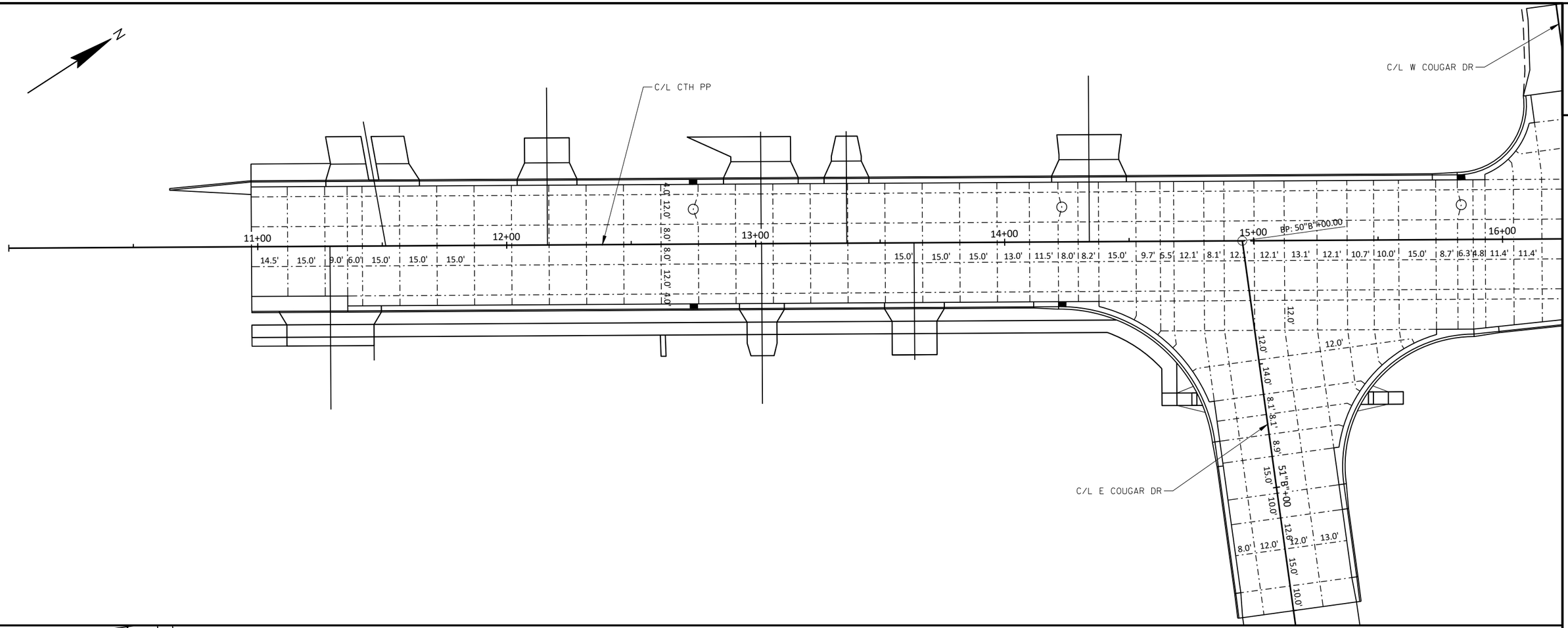


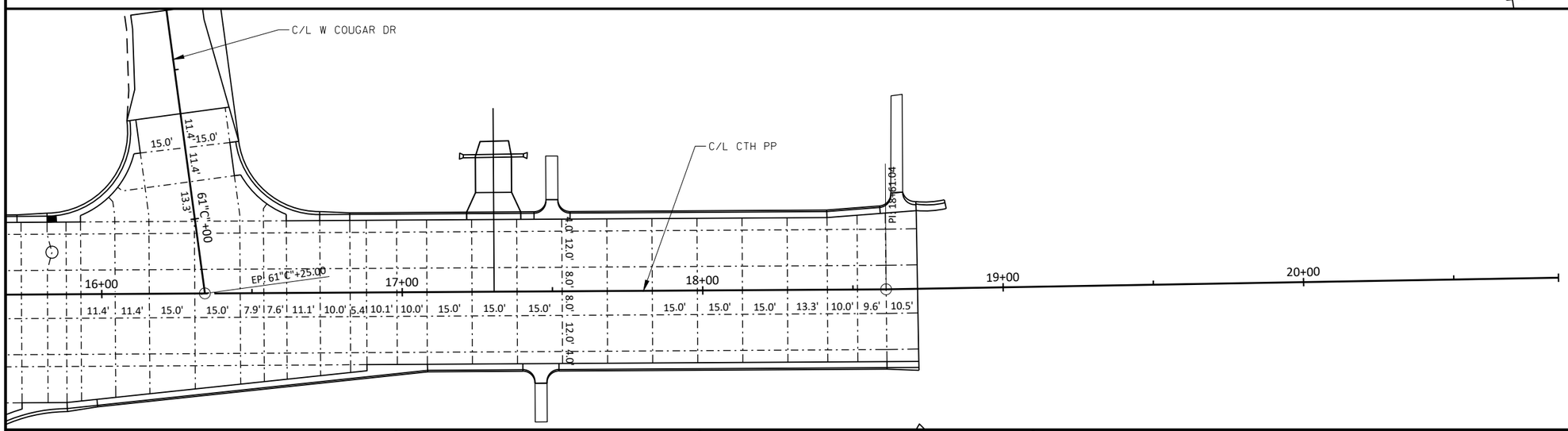
STA. 50"B"+69.55, LT.
(CURB RAMP TYPE 2 REQ'D.)

CURB RAMP LAYOUT TABLE

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	50"B"+67.07	41.83' LT	961.77	385,856.46	740,158.04
2	50"B"+71.65	38.08' LT	961.80	385,851.13	740,160.57
3	50"B"+72.03	41.18' LT	961.85	385,853.76	740,162.25
4	50"B"+73.08	49.11' LT	961.61	385,860.50	740,166.57
5	50"B"+73.86	55.05' LT	961.50	385,865.55	740,169.81
6	50"B"+68.91	55.71' LT	961.37	385,868.25	740,165.60
7	50"B"+68.12	49.76' LT	961.54	385,863.20	740,162.36

PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	CURB RAMP DETAILS	SHEET 12	E





PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	PAVEMENT JOINT LAYOUT DETAILS	SHEET 13	E

HAZ-MAT SITE 1

USH 12/STH 16/EAST BADGER DR

41"A"+00

42"A"+00

43"A"+00

EP: 43"A"+14.16

CTH PP/N OAKWOOD ST

11+00

12+00

13+00

14+00

15+00

BP: 50"B"+00.00

16+00

EP: 61"C"+25.00

17+00

61"C"+00

WEST COUGAR DR

EAST COUGAR DR

51"B"+00

TLE

R/W-FEE

EX. R/W

LEGEND

- EROSION MAT CLASS II TYPE B
- MULCH
- SILT FENCE
- SLOPE INTERCEPT
- ASPH — ASPHALTIC FLUME
- INLET PROTECTION TYPE A AND C
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

INLET PROTECTION TYPE C REQ'D AT EXISTING INLETS
STA. 52"B"+27, LT
STA. 53"B"+73, LT & RT

I-90 EB RAMP

Pl: 18+61.04

BP: 40"D"+00.00

17+00

18+00

19+00

20+00

41"D"+00

41"D"+82.57

PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	EROSION CONTROL	SHEET 14	E

DIANA J. MCCANN

CARL L. CHASE

RONALD NICKS

EDWARD J. RAPP REVOCABLE TRUST

JAN K. MARTINOVICH

BARRY G. DAVIS

SHAWN R. JOHNSON

WEST COUGAR DR

EAST COUGAR DR

CTH PP/N OAKWOOD ST

I-1 STA. 12+75.00, 25.5' LT. INLET 2X3 H

MH-1 STA. 12+75.00, 14.0' LT. MANHOLE 4 FT J

MH-2 STA. 14+23.00, 14.0' LT. MANHOLE 4 FT J

MH-3 STA. 15+83.50, 14.0' LT. MANHOLE 4 FT J

I-4 STA. 15+83.50, 25.5' LT. INLET 2X3 H

I-2 STA. 12+75.00, 25.5' RT. INLET 2X3 H

I-3 STA. 14+23.00, 25.5' RT. INLET 2X3 H

EW-1 STA. 15+89.15, 46.0' RT. AEW RC 18-INCH

OAKDALE ELEC. COOP

CENTURYLINK

VILLAGE OF OAKDALE

CHARTER

ALLIANT

INSULATION BOARD POLYSTYRENE 3-INCH, 4'X8' (TYP.)

REMOVING INLETS

REMOVING STORM SEWER 12-INCH

61"C"+00

BP: 50"B"+00.00

EP: 61"C"+25.00

51"B"+00

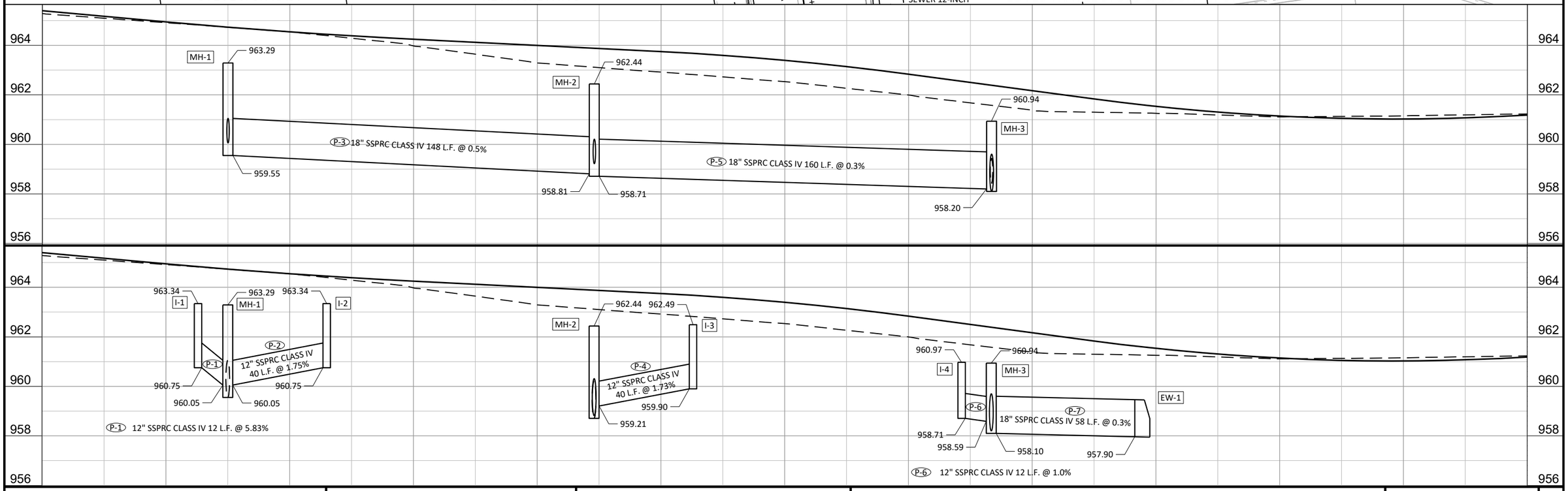
12+00 13+00 14+00 15+00 16+00 17+00 18+00

DANDELION DUST THRIFT & LIQUIDATION LLC

STEVE J. SR KAST

KEVIN J. EWING

LOVES TRAVEL STOPS & COUNTRY STORES INC

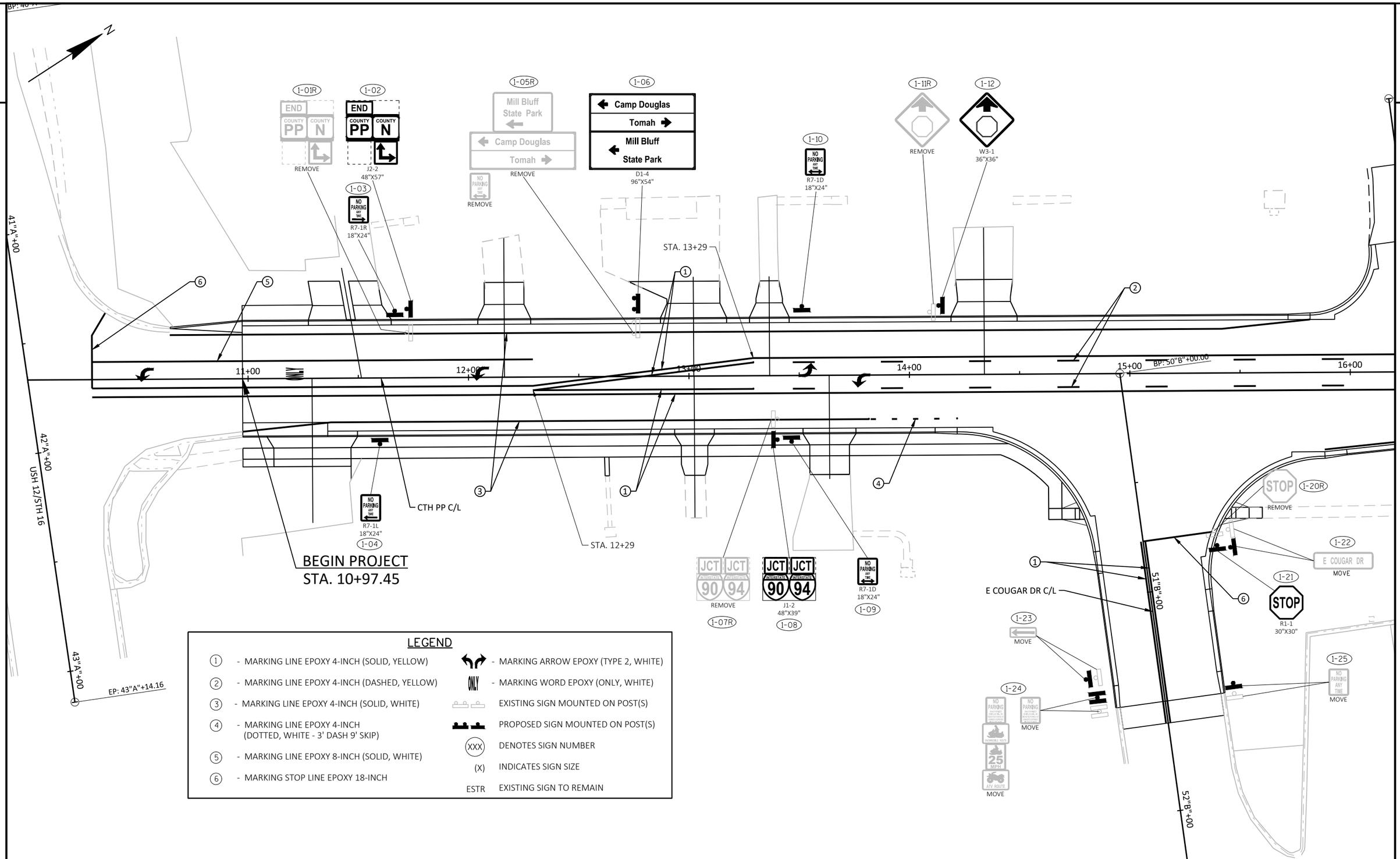


PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	STORM SEWER	SHEET 15	E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\SHEETSPLAN\DETAILS\W11617_STORM SEWER.DWG
LAYOUT NAME - 1

PLOT DATE : 12/16/2021 4:32 PM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41



LEGEND

(1)	- MARKING LINE EPOXY 4-INCH (SOLID, YELLOW)		- MARKING ARROW EPOXY (TYPE 2, WHITE)
(2)	- MARKING LINE EPOXY 4-INCH (DASHED, YELLOW)	ONLY	- MARKING WORD EPOXY (ONLY, WHITE)
(3)	- MARKING LINE EPOXY 4-INCH (SOLID, WHITE)		EXISTING SIGN MOUNTED ON POST(S)
(4)	- MARKING LINE EPOXY 4-INCH (DOTTED, WHITE - 3' DASH 9' SKIP)		PROPOSED SIGN MOUNTED ON POST(S)
(5)	- MARKING LINE EPOXY 8-INCH (SOLID, WHITE)	(XXX)	DENOTES SIGN NUMBER
(6)	- MARKING STOP LINE EPOXY 18-INCH	(X)	INDICATES SIGN SIZE
		ESTR	EXISTING SIGN TO REMAIN

PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 16	E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\SHEETSPLAN\DETAILS\W11617_PAVEMENT MARKING PERMANENT SIGNING.DWG
LAYOUT NAME - 1

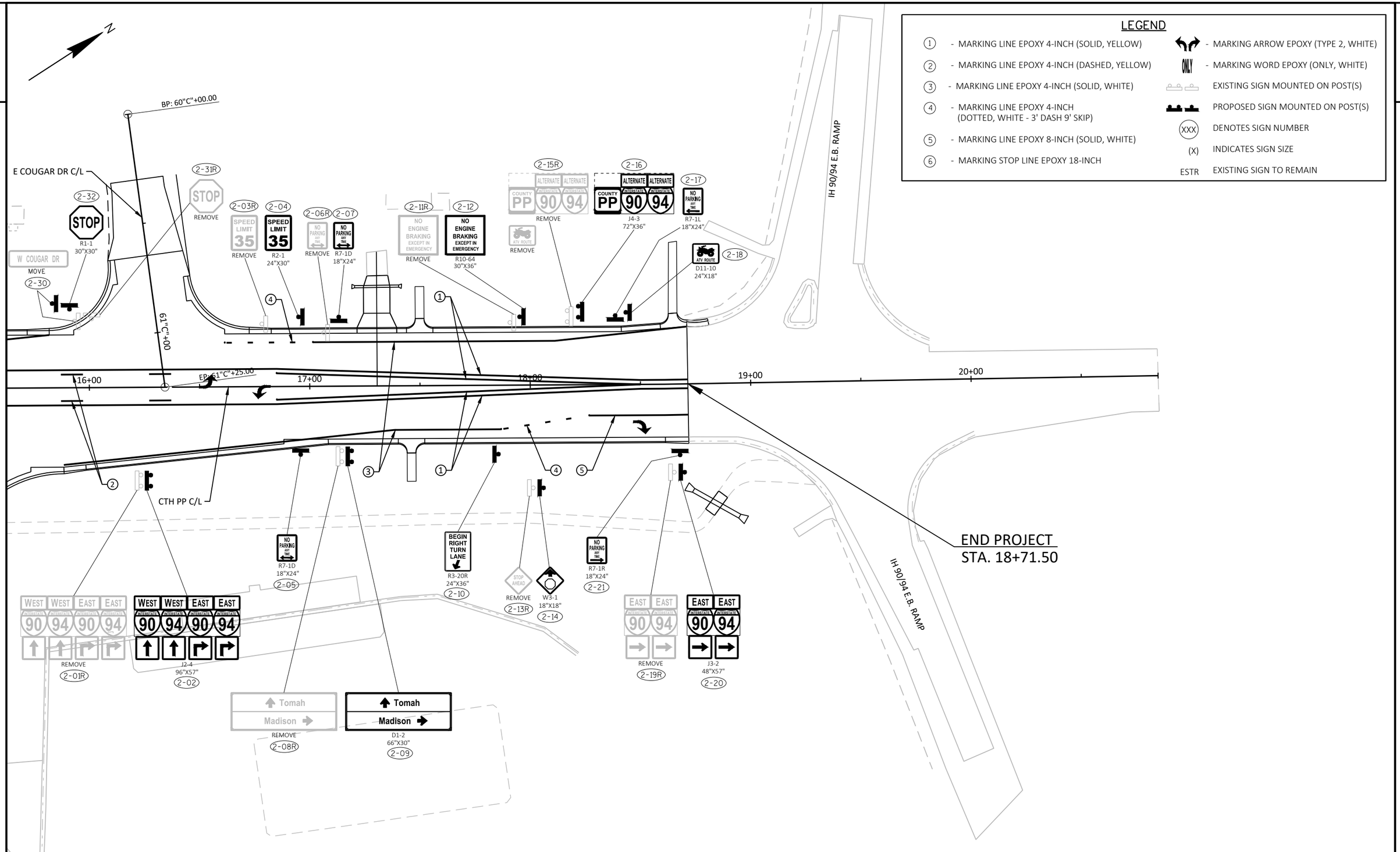
PLOT DATE : 10/13/2021 8:40 AM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

(1) - MARKING LINE EPOXY 4-INCH (SOLID, YELLOW)	- MARKING ARROW EPOXY (TYPE 2, WHITE)
(2) - MARKING LINE EPOXY 4-INCH (DASHED, YELLOW)	ONLY - MARKING WORD EPOXY (ONLY, WHITE)
(3) - MARKING LINE EPOXY 4-INCH (SOLID, WHITE)	EXISTING SIGN MOUNTED ON POST(S)
(4) - MARKING LINE EPOXY 4-INCH (DOTTED, WHITE - 3' DASH 9' SKIP)	PROPOSED SIGN MOUNTED ON POST(S)
(5) - MARKING LINE EPOXY 8-INCH (SOLID, WHITE)	(XXX) DENOTES SIGN NUMBER
(6) - MARKING STOP LINE EPOXY 18-INCH	(X) INDICATES SIGN SIZE
	ESTR EXISTING SIGN TO REMAIN



PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 17	E

GENERAL NOTES FOR TRAFFIC CONTROL

CTH PP WILL REMAIN OPEN TO TRAFFIC DURING CONSTRUCTION.

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

"WO" SIGNS ARE THE SAME AS "W" SIGNS, EXCEPT THE BACKGROUND IS ORANGE.
ALL "W" AND "WO" SIGNS SHALL BE 48" x 48" UNLESS OTHERWISE NOTED.

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

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

LAYOUT IS NOT TO SCALE.

ALL SIGN LAYOUT SHALL BE IN ACCORDANCE WITH THE WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO AVOID CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200' CLEARANCE TO EXISTING SIGNS.

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

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

DURING NIGHT SHUTDOWN, ONE LANE IN EACH DIRECTION MUST REMAIN OPEN ON A HARD SURFACE.

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

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

ADDITIONAL DRUMS OR TYPE III BARRICADES MAY BE REQUIRED ADJACENT TO DROP-OFFS, OPEN TRENCHES, OR PROTRUSIONS (INCLUDING MANHOLE COVERS AND VALVES). COST TO BE INCLUDED WITH THE OPERATION WHICH CREATES THE HAZARD.

PORTABLE CHANGEABLE MESSAGE BOARD TO BE PLACED TWO WEEKS PRIOR TO CONSTRUCTION STARTING.
PCMS MESSAGE TO INCLUDE:

FIRST FRAME	SECOND FRAME	THIRD FRAME
ROAD	BEGINS	EXPECT
WORK	XX XX XX	DELAYS

STAGE 1 CONSTRUCTION

STAGE 1 A

TRAFFIC
1. TRAFFIC IN NORMAL PATTERN ON EXISTING CTH PP WITH TEMPORARY LANE AND SHOULDER CLOSURE DURING DAYTIME OPERATIONS ONLY

2. TEMPORARY LANE CLOSURES DURING DAYTIME OPERATIONS ONLY WILL BE ALLOWED FOR PAVING OPERATIONS.

CONSTRUCT
1. WIDEN AND PAVE SHOULDER FROM STA 11+64 TO STA 15+93 AND PAVE SHOULDER FROM STA 16+72 TO STA 18+71.

STAGE 1B, 1C, AND 1D

TRAFFIC

1. TWO WAY TRAFFIC WILL TRAVEL ON EXISTING SOUTHBOUND LANE AND WIDENED PAVEMENT.

2. TEMPORARY LANE CLOSURES DURING DAYTIME OPERATIONS ONLY WILL BE ALLOWED FOR STORM SEWER CONSTRUCTION AND PAVING OPERATIONS.

3. SIDEWALK WILL BE CLOSED TO PEDESTRIANS DURING CONSTRUCTION OF STAGES 1B, 1C, AND 1D.

CONSTRUCT

1. NORTHBOUND LANE DURING STAGE 1B, E COUGAR DR NORTHEAST QUADRANT DURING STAGE 1C, AND E COUGAR DR SOUTHEAST QUADRANT DURING STAGE 1D.

2. STORMSEWER: ALL INLETS AND PIPES EAST OF THE CTH PP CENTERLINE.

3. TEMPORARY ASPHALT NORTHBOUND LANE PROFILE TRANSITION FROM STA 13+00 TO STA 17+00.

4. PLACE ALL EROSION CONTROL DEVICES, FINISHING ITEMS, AND PERMANENT SIGNING ITEMS THAT PERTAIN TO STAGE 1 CONSTRUCTION.

NOTE: PRIOR TO COMPLETION OF STAGE 1 AND SWITCHING TRAFFIC TO STAGE 2, ALL TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKING MUST BE IN PLACE.

STAGE 2 CONSTRUCTION

STAGE 2A, 2B, AND 2C

TRAFFIC

1. TWO WAY TRAFFIC WILL TRAVEL ON NEWLY CONSTRUCTED NORTHBOUND LANE AND SHOULDER AND EXISTING PAVEMENT.

2. TEMPORARY LANE CLOSURES DURING DAYTIME OPERATIONS ONLY WILL BE ALLOWED FOR STORM SEWER CONSTRUCTION AND PAVING OPERATIONS.

CONSTRUCT

1. SOUTHBOUND LANE DURING STAGE 2A, W COUGAR DR SOUTHWEST QUADRANT DURING STAGE 2B, AND W COUGAR DR NORTHWEST QUADRANT DURING STAGE 2C.

2. STORM SEWER: ALL INLETS AND PIPES WEST OF THE CTH PP CENTERLINE.

3. PLACE ALL EROSION CONTROL DEVICES, FINISHING ITEMS, AND PERMANENT SIGNING ITEMS THAT PERTAIN TO STAGE 2 CONSTRUCTION.

NOTE: PRIOR TO COMPLETION OF STAGE 2 AND SWITCHING TRAFFIC TO STAGE 3, ALL TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKING MUST BE IN PLACE.

STAGE 3 CONSTRUCTION

STAGE 3A, 3B, 3C

TRAFFIC

1. TWO WAY TRAFFIC WILL TRAVEL ON NEWLY CONSTRUCTED NORTHBOUND AND SOUTHBOUND LANES AND SHOULDERS.

2. TEMPORARY LANE CLOSURES DURING DAYTIME OPERATIONS ONLY WILL BE ALLOWED FOR PAVING AND PAVEMENT MARKING OPERATIONS.

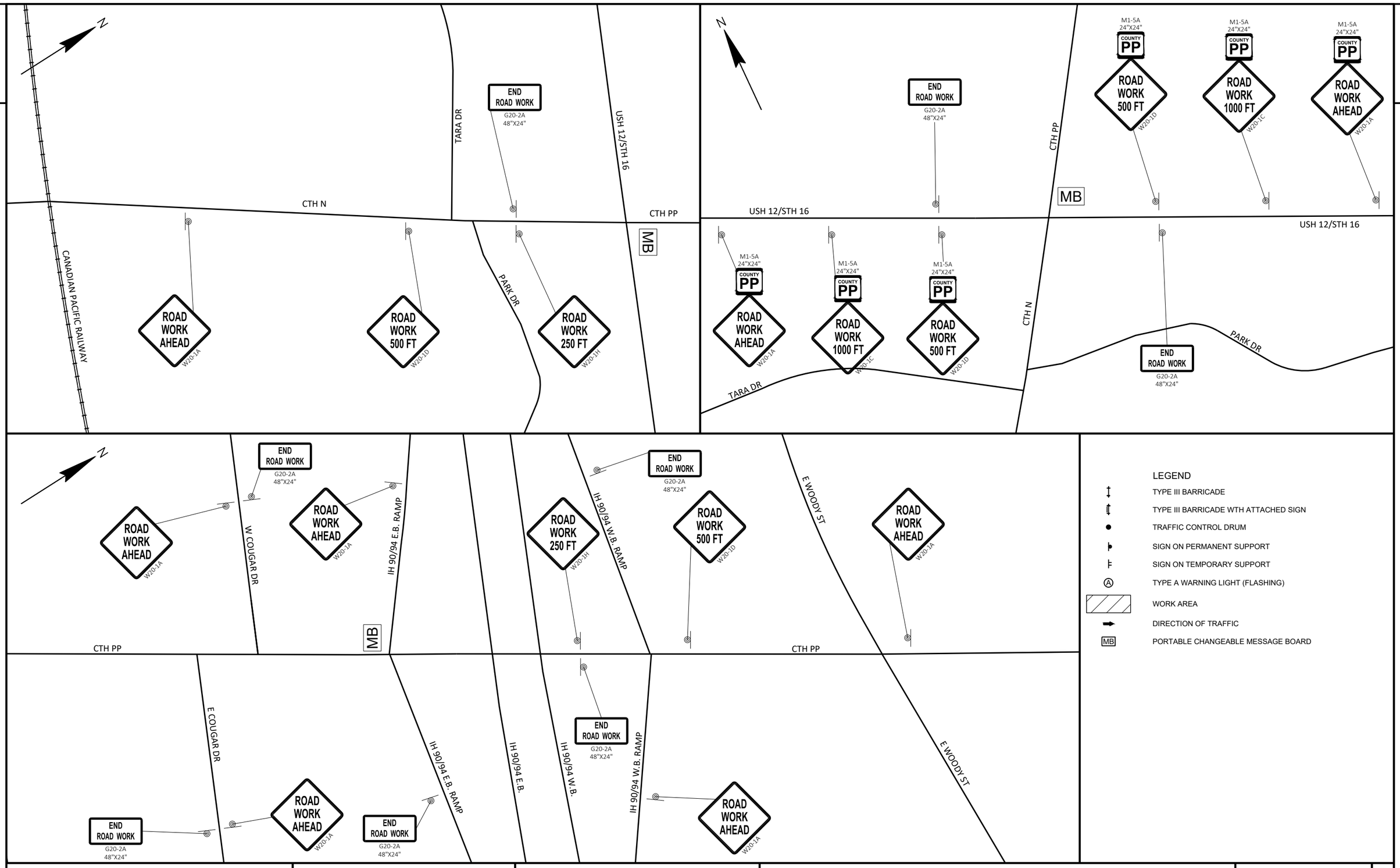
CONSTRUCT

1. TWO WAY LEFT TURN LANE, LEFT TURN LANE, AND MEDIAN TRANSITION.

2. PLACE ALL PAVEMENT MARKING.

SWITCH TRAFFIC TO NORMAL DRIVING PATTERN.

2

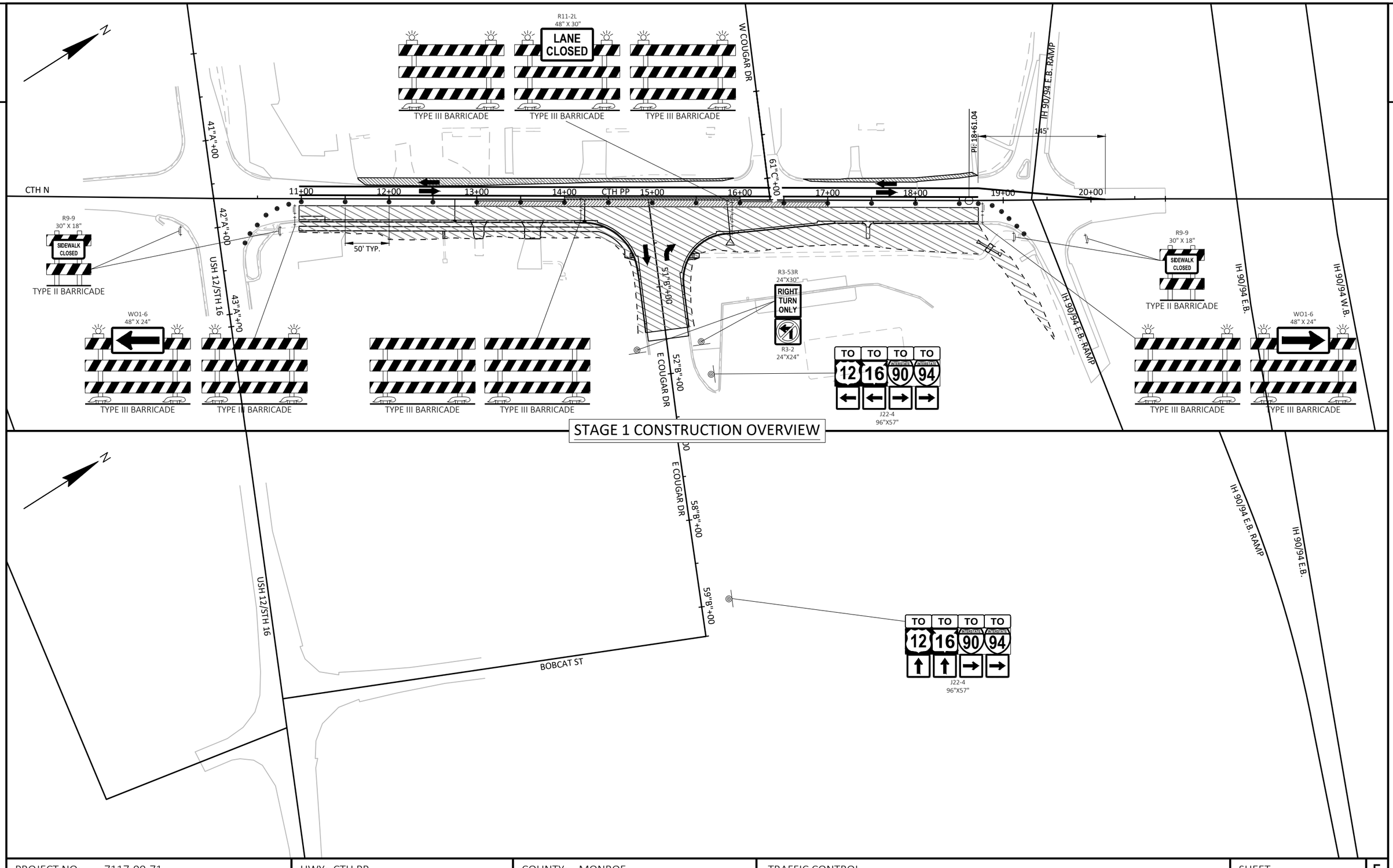


LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE A WARNING LIGHT (FLASHING)
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	TRAFFIC CONTROL	SHEET 19	E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\SHEETSPLAN\DETAILS\W11617_TRAFFIC CONTROL STAGING.DWG
LAYOUT NAME - AdvWarn
PLOT DATE : 12/16/2021 4:34 PM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:200 FT



PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	TRAFFIC CONTROL	SHEET 20 E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\SHEETSPLAN\DETAILS\W11617_TRAFFIC CONTROL STAGING.DWG
LAYOUT NAME - Stage 1-1

PLOT DATE : 12/16/2021 4:34 PM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

USH 12/STH 16

41"A"+00

SHOULDER WIDENING AND PAVING

W COUGAR DR

61"C"+00

PI: 18+61.04

IH 90/94 E.B. RAMP

11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00

CTH N

CTH PP

42"A"+00

43"A"+00

51"B"+00

52"B"+00

E COUGAR DR

IH 90/94 E.B. RAMP

IH 90/94 E.B.

IH 90/94 W.B.

STAGE 1A CONSTRUCTION

N

R11-2L
48" X 30"
LANE CLOSED

TYPE III BARRICADE

TYPE III BARRICADE

TYPE III BARRICADE

TEMPORARY MARKING LINE 4-INCH PAINT STA. 10+97 - STA. 18+71
REMOVABLE TAPE STA. 18+71 - STA. 20+16
(DOUBLE YELLOW, SOLID)

TEMPORARY MARKING LINE PAINT 4-INCH (WHITE, SOLID)

145'

R9-9
30" X 18"
SIDEWALK CLOSED

TYPE II BARRICADE

50' TYP.

R3-53R
24"X30"
RIGHT TURN ONLY

R3-2
24"X24"

TO 12 TO 16 TO WISCONSIN 90 TO WISCONSIN 94

J22-4
96"X57"

WO1-6
48" X 24"

TYPE III BARRICADE

TYPE III BARRICADE

TYPE III BARRICADE

TYPE III BARRICADE

R9-9
30" X 18"
SIDEWALK CLOSED

TYPE II BARRICADE

WO1-6
48" X 24"

TYPE III BARRICADE

TYPE III BARRICADE

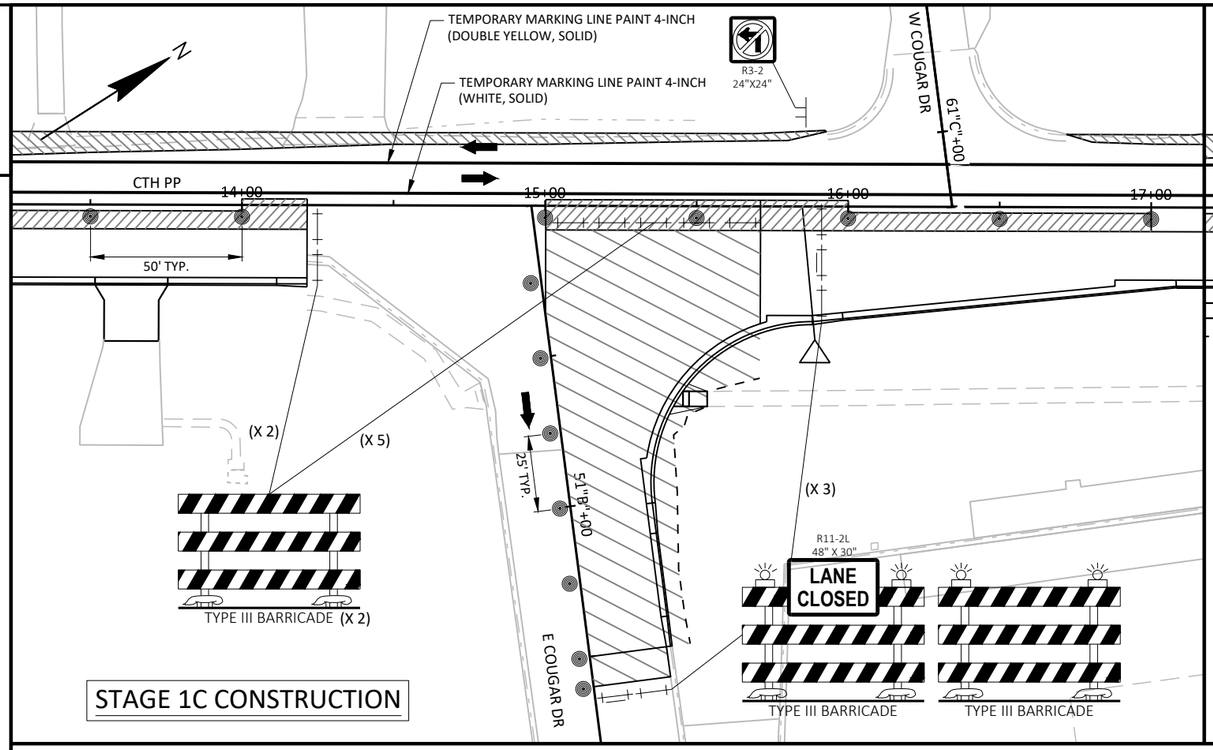
STAGE 1B CONSTRUCTION

PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	TRAFFIC CONTROL	SHEET 21	E

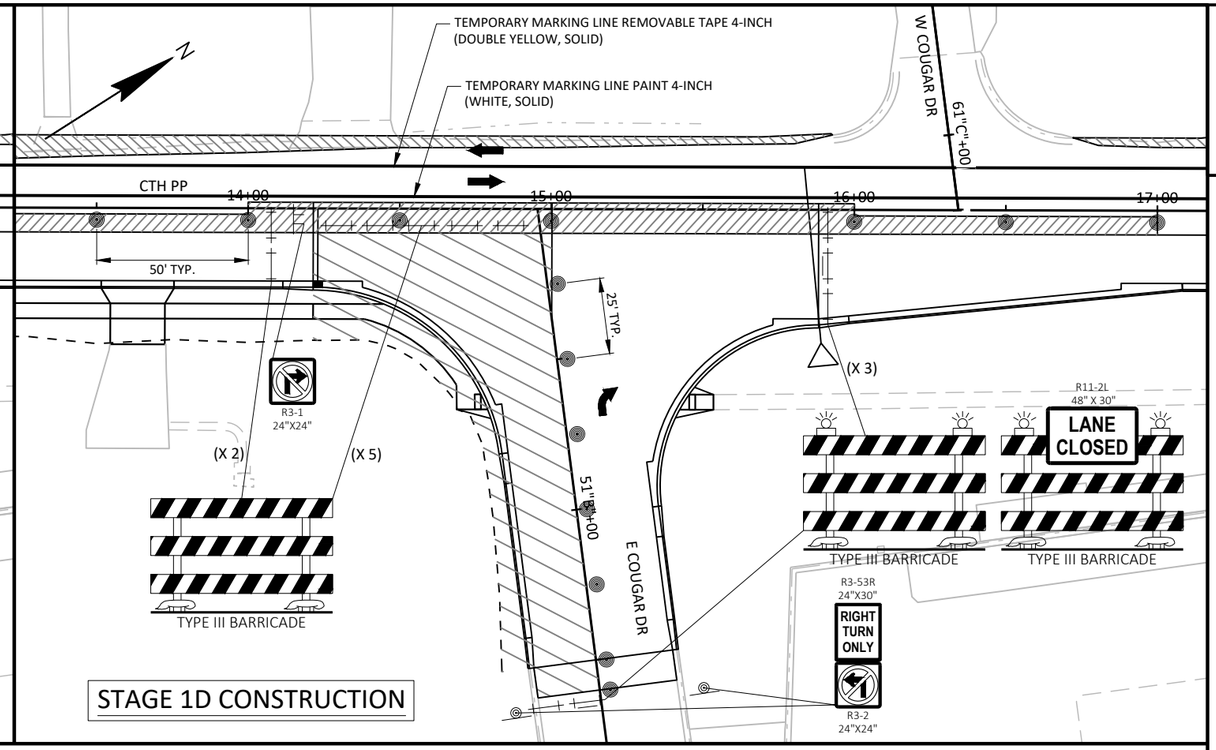
FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\SHEETSPLAN\DETAILS\W11617_TRAFFIC CONTROL STAGING.DWG
LAYOUT NAME - Stage 1-2

PLOT DATE : 12/16/2021 4:34 PM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:100 FT

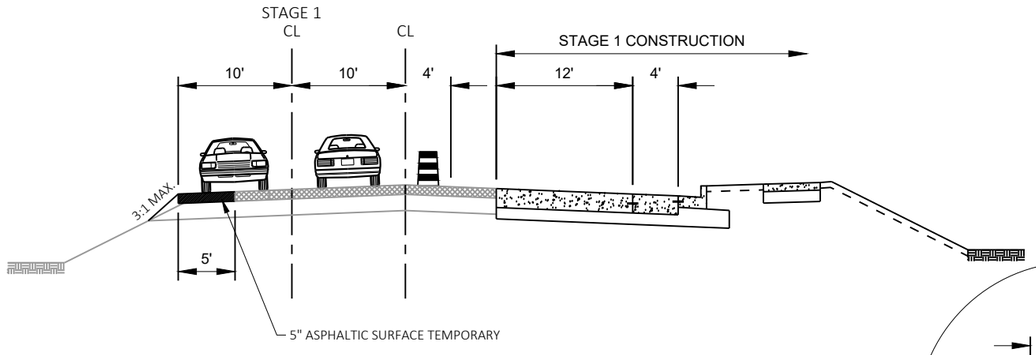
WISDOT/CADDS SHEET 44



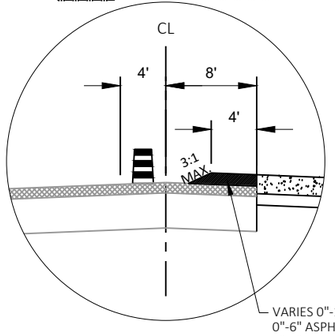
STAGE 1C CONSTRUCTION



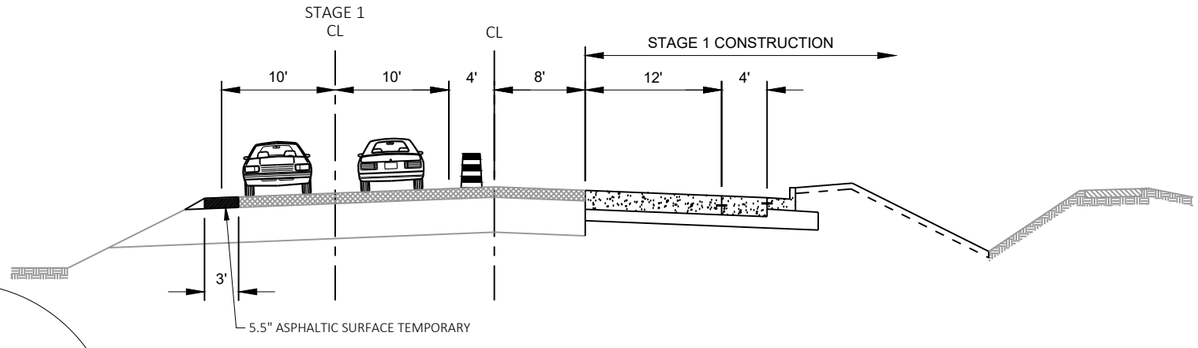
STAGE 1D CONSTRUCTION



STAGE 1 TYPICAL SECTION
CTH PP
STA 10+21.21 - STA 14+95.47

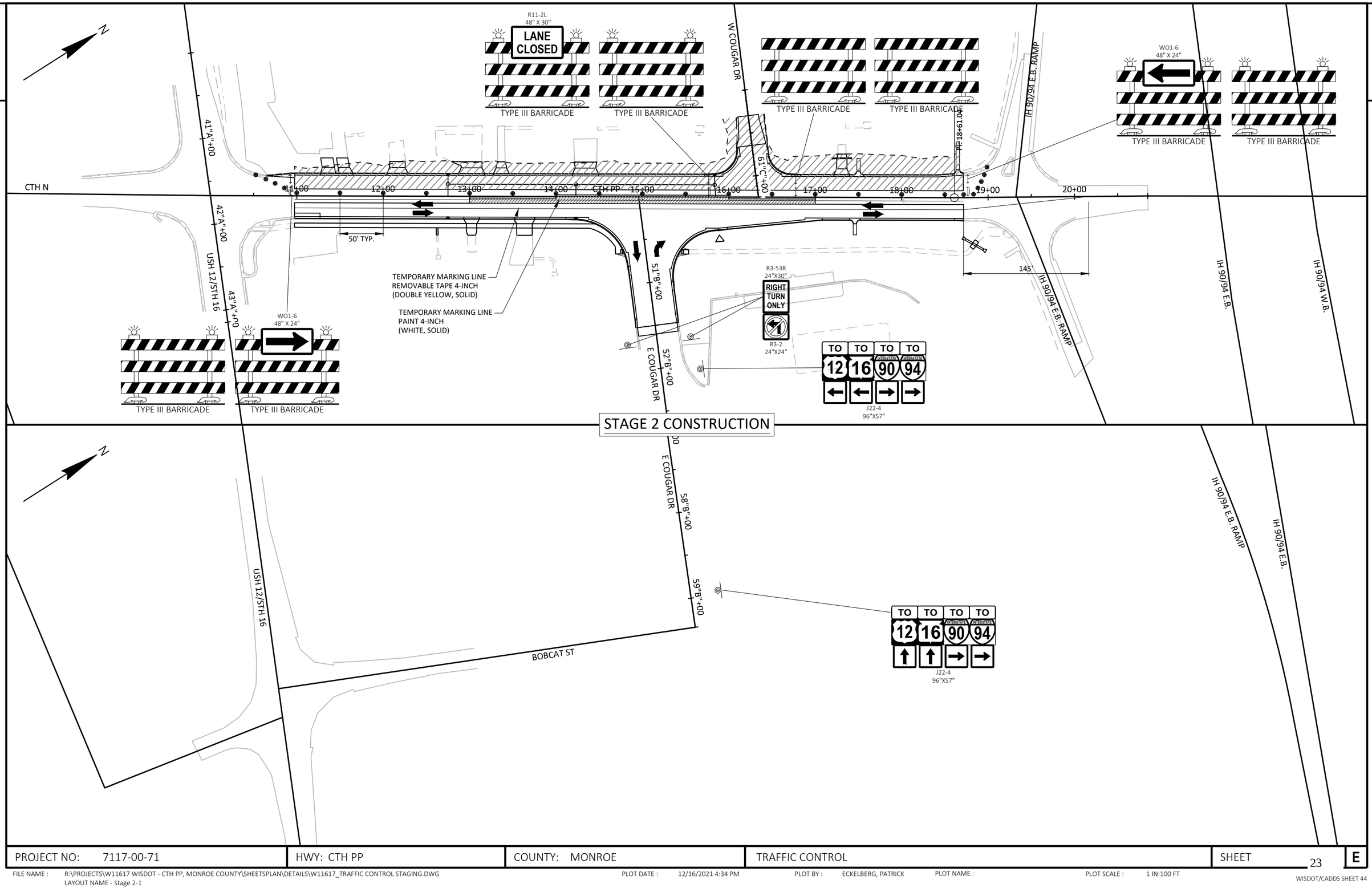


STAGE 1 TYPICAL SECTION
CTH PP
STA 13+00 - STA 17+00

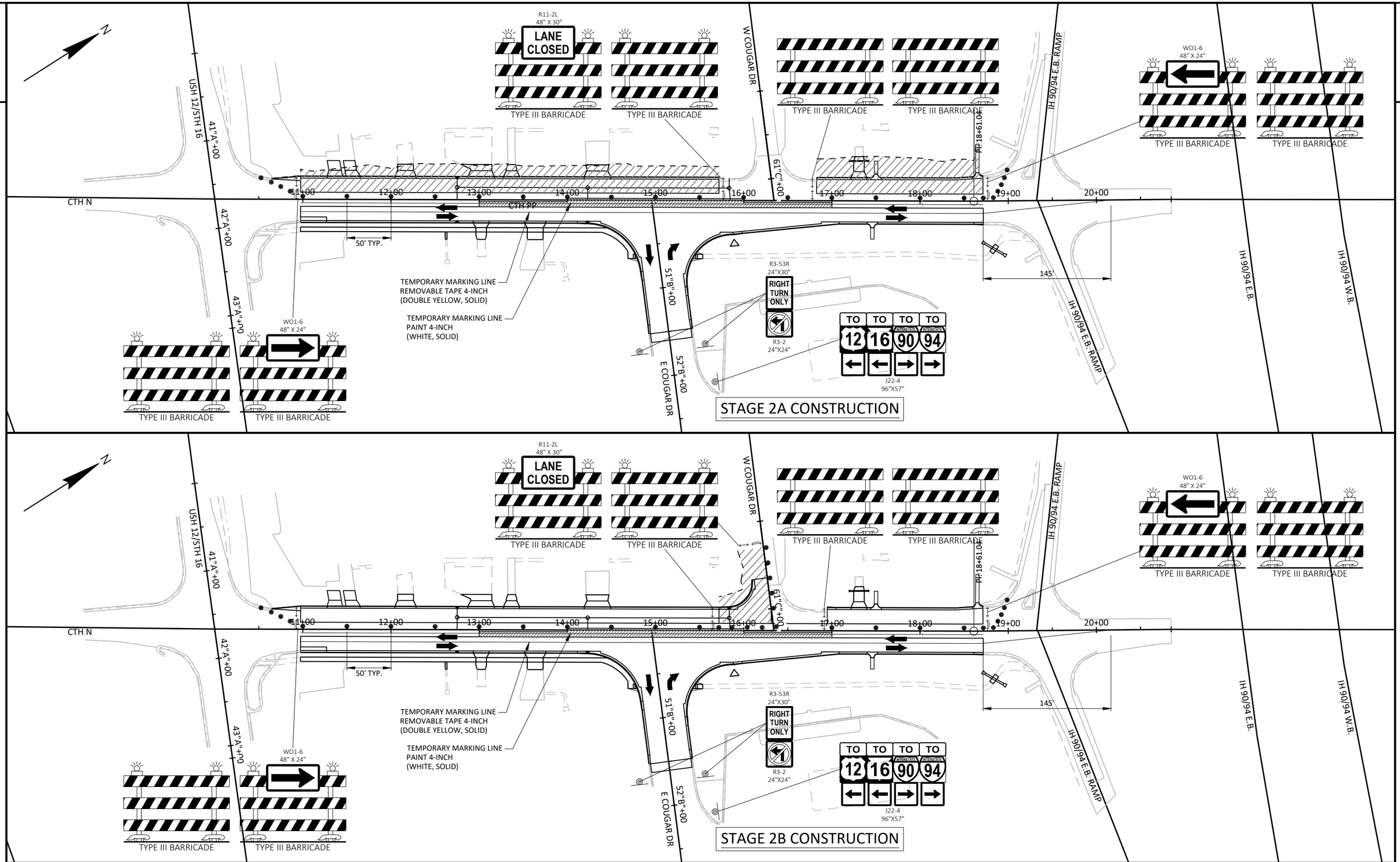


STAGE 1 TYPICAL SECTION
CTH PP
STA 14+95.47 - STA 18+71.50

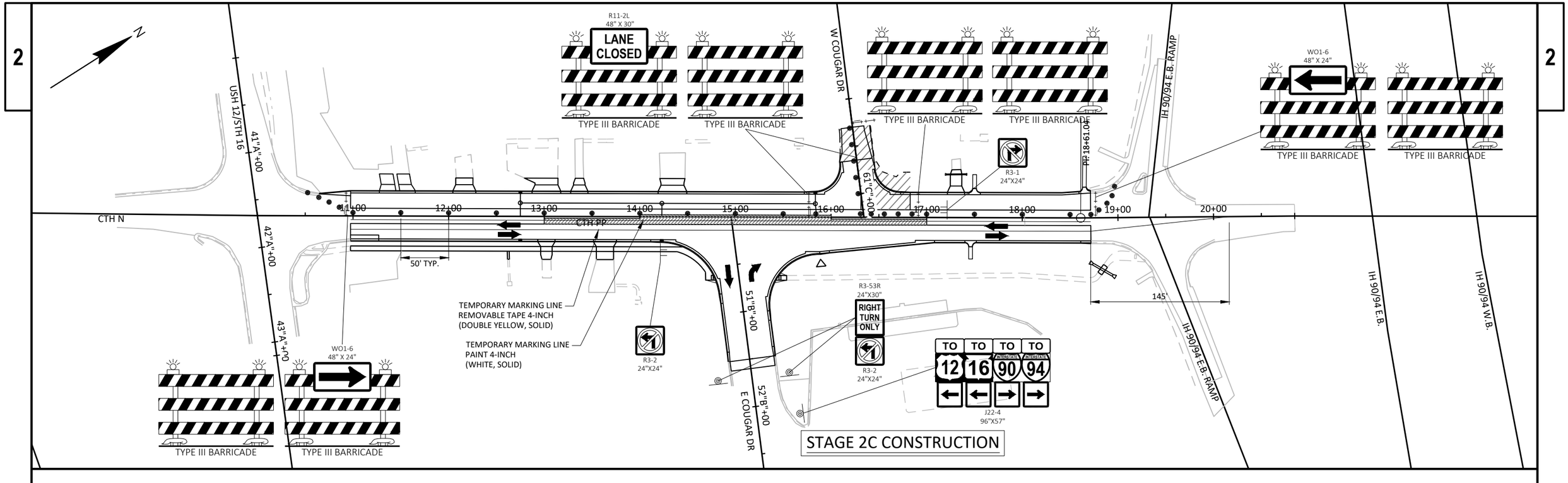
PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	TRAFFIC CONTROL	SHEET 22	E



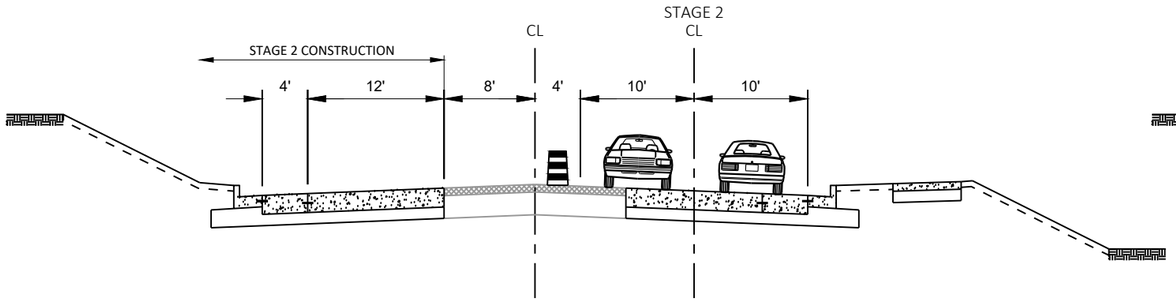
PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	TRAFFIC CONTROL	SHEET 23	E



PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	TRAFFIC CONTROL	SHEET 24	E

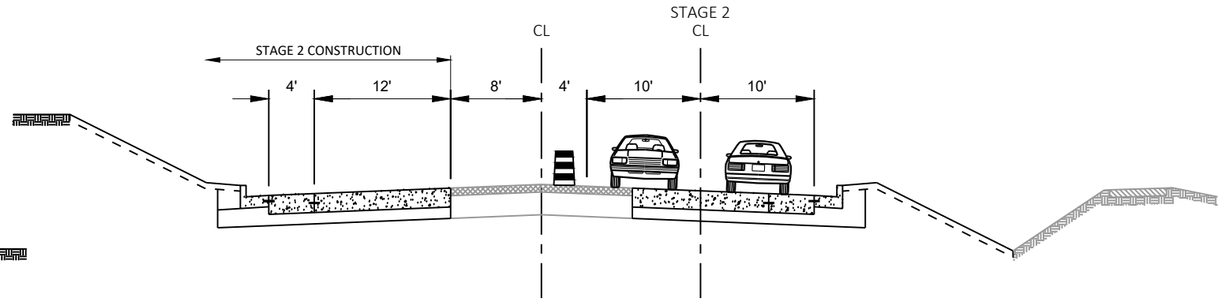


STAGE 2 CONSTRUCTION



STAGE 2 TYPICAL SECTION
CTH PP
STA 10+21.21 - STA 14+95.47

STAGE 2 CONSTRUCTION



STAGE 2 TYPICAL SECTION
CTH PP
STA 14+95.47 - STA 18+71.50

PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	TRAFFIC CONTROL	SHEET 25	E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\SHEETSPLAN\DETAILS\W11617_TRAFFIC CONTROL STAGING.DWG
LAYOUT NAME - Stage 2-3
PLOT DATE : 12/16/2021 4:34 PM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH
(YELLOW, SOLID)

W COUGAR DR

IH 90/94 E.B. RAMP

PP 18+61.04

145'

WO1-6
48" X 24"

TYPE III BARRICADE

TYPE III BARRICADE

41"A"+00

CTH N

11+00

12+00

13+00

14+00

CTH PP

15+00

16+00

61"C"+00

17+00

18+00

19+00

20+00

42"A"+00

50' TYP.

USH 12/STH 16

43"A"+00

WO1-6
48" X 24"

TYPE III BARRICADE

TYPE III BARRICADE

51"B"+00

R3-53R
24"X30"

RIGHT
TURN
ONLY

R3-2
24"X24"

52"B"+00

E COUGAR DR

TO 12 | TO 16 | TO 90 INTERSTATE | TO 94 INTERSTATE

J22-4
96"X57"

IH 90/94 E.B. RAMP

IH 90/94 E.B.

IH 90/94 W.B.

STAGE 3 CONSTRUCTION

N

USH 12/STH 16

58"B"+00

59"B"+00

BOBCAT ST

IH 90/94 E.B. RAMP

IH 90/94 E.B.

TO 12 | TO 16 | TO 90 INTERSTATE | TO 94 INTERSTATE

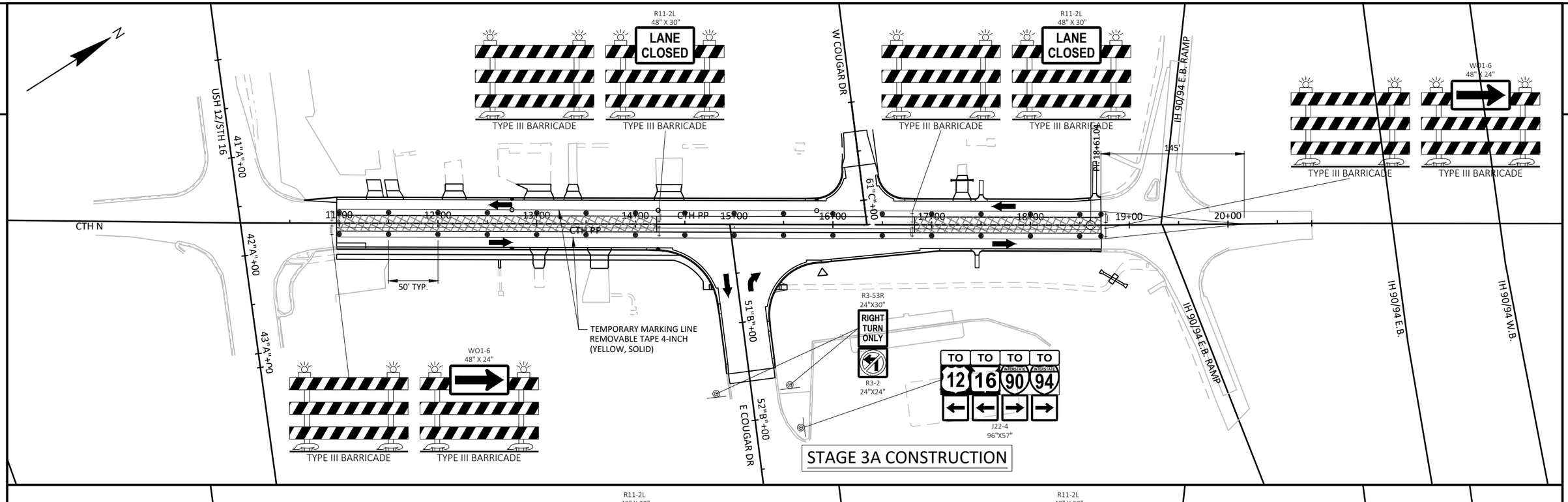
J22-4
96"X57"

PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	TRAFFIC CONTROL	SHEET 26	E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\SHEETSPLAN\DETAILS\W11617_TRAFFIC CONTROL STAGING.DWG
LAYOUT NAME - Stage 3-1

PLOT DATE : 12/16/2021 4:34 PM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:100 FT

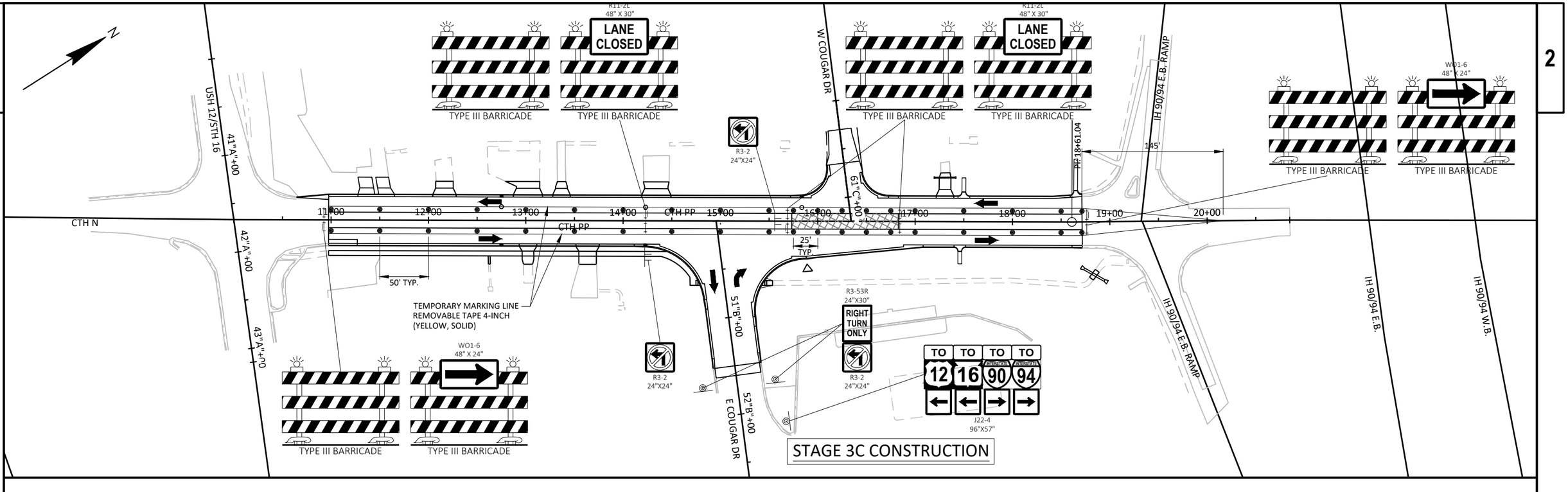
WISDOT/CADDS SHEET 44

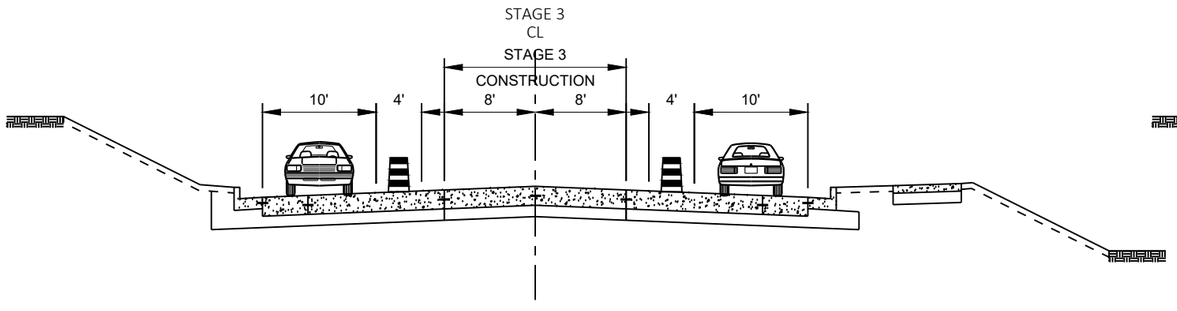


PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	TRAFFIC CONTROL	SHEET 27	E

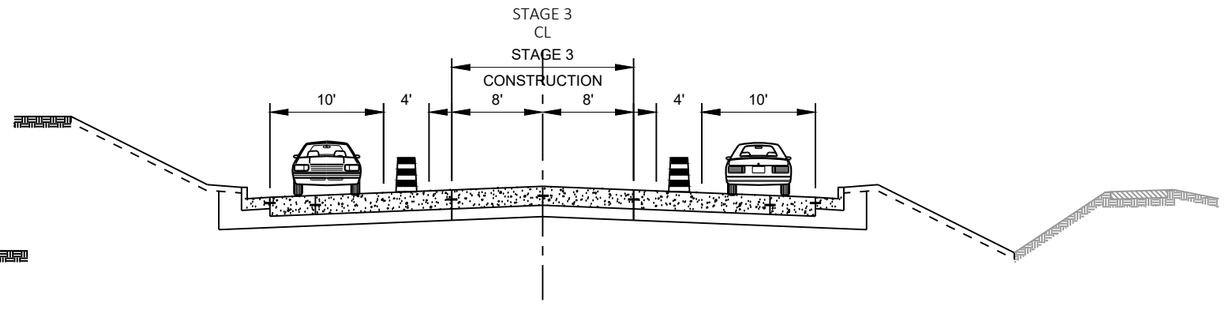
FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\SHEETSPLAN\DETAILS\W11617_TRAFFIC CONTROL STAGING.DWG
LAYOUT NAME - Stage 3-2

PLOT DATE : 12/16/2021 4:34 PM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:100 FT



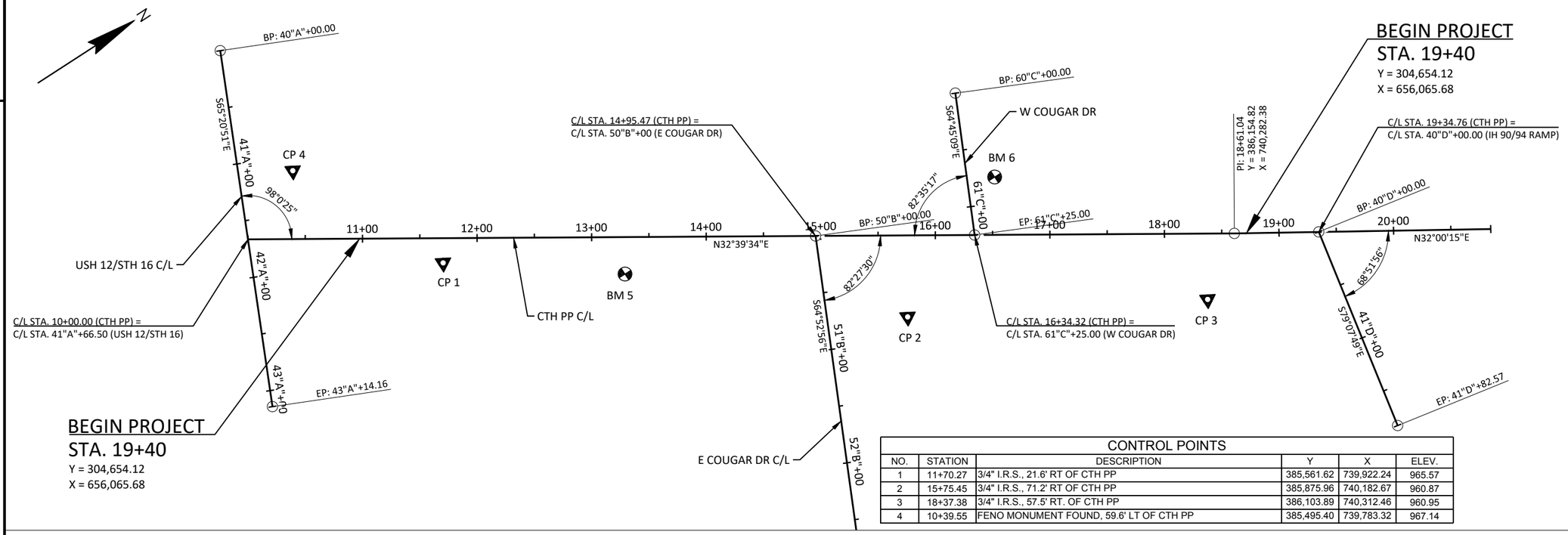


STAGE 3 TYPICAL SECTION
CTH PP
STA 10+21.21 - STA 14+95.47



STAGE 3 TYPICAL SECTION
CTH PP
STA 14+95.47 - STA 18+71.50

PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	TRAFFIC CONTROL	SHEET 28	E



CONTROL POINTS					
NO.	STATION	DESCRIPTION	Y	X	ELEV.
1	11+70.27	3/4" I.R.S., 21.6' RT OF CTH PP	385,561.62	739,922.24	965.57
2	15+75.45	3/4" I.R.S., 71.2' RT OF CTH PP	385,875.96	740,182.67	960.87
3	18+37.38	3/4" I.R.S., 57.5' RT. OF CTH PP	386,103.89	740,312.46	960.95
4	10+39.55	FENO MONUMENT FOUND, 59.6' LT OF CTH PP	385,495.40	739,783.32	967.14

CTH PP

STATION	Y	X	REMARKS
10+00.00	385,429.92	739,812.18	C/L - C/L USH 12
10+50.00	385,472.02	739,839.16	
10+97.45	385,511.97	739,864.77	BEGIN PROJECT
11+00.00	385,514.11	739,866.15	
11+50.00	385,556.20	739,893.13	
12+00.00	385,598.30	739,920.11	
12+50.00	385,640.39	739,947.09	
13+00.00	385,682.49	739,974.08	
13+50.00	385,724.58	740,001.06	
14+00.00	385,766.68	740,028.04	
14+50.00	385,808.77	740,055.02	
14+95.47	385,847.05	740,079.56	C/L C/L E COUGAR DR
15+00.00	385,850.87	740,082.00	
15+50.00	385,892.96	740,108.99	
16+00.00	385,935.06	740,135.97	
16+34.32	385,963.95	740,154.49	C/L - C/L W COUGAR DR
16+50.00	385,977.15	740,162.95	
17+00.00	386,019.25	740,189.93	
17+50.00	386,061.34	740,216.92	
18+00.00	386,103.44	740,243.90	
18+50.00	386,145.53	740,270.88	
18+61.04	386,154.82	740,276.84	P.I. STATION
18+71.50	386,163.69	740,282.38	END PROJECT
19+00.00	386,187.86	740,297.49	

USH 12/STH 16

STATION	Y	X	REMARKS
40"A"+00.00	385499.37	739660.86	
40"A"+50.00	385478.51	739706.30	
41"A"+00.00	385457.66	739751.75	
41"A"+50.00	385436.80	739797.19	
41"A"+66.50	385,429.92	739,812.18	C/L - C/L CTH PP
42"A"+00.00	385415.95	739842.63	
42"A"+50.00	385395.09	739888.08	
43"A"+00.00	385374.23	739933.52	
43"A"+14.16	385368.33	739946.38	

IH 90/94 RAMP

STATION	Y	X	REMARKS
40"B"+00.00	386,217.40	740,315.80	C/L - C/L CTH PP
40"B"+50.00	386,207.97	740,364.90	
41"B"+00.00	386,198.54	740,414.01	
41"B+50.00	386,189.11	740,463.11	
41"B"+82.57	386,182.97	740,495.10	

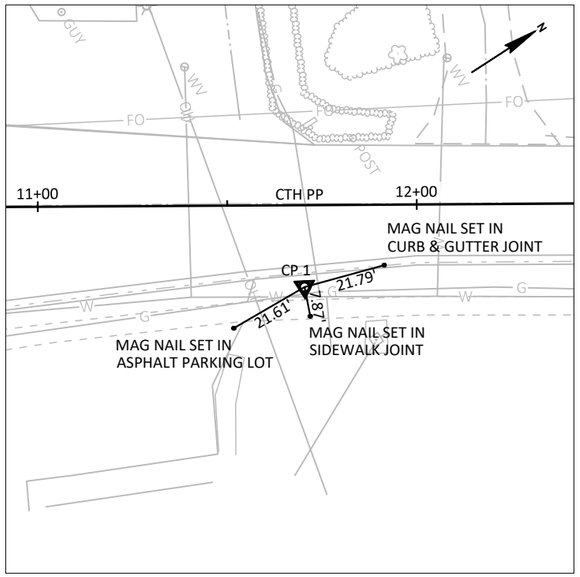
EAST COUGAR DRIVE

STATION	Y	X	REMARKS
50"B"+00.00	385,847.05	740,079.56	C/L - C/L CTH PP
50"B"+24.21	385,836.78	740,101.48	BEGIN CONSTRUCTION
50"B"+50.00	385,825.83	740,124.83	
51"B"+00.00	385,804.61	740,170.10	
51"B"+50.00	385,783.38	740,215.38	
51"B"+60.00	385,779.14	740,224.43	END CONSTRUCTION
52"B"+00.00	385,762.16	740,260.65	

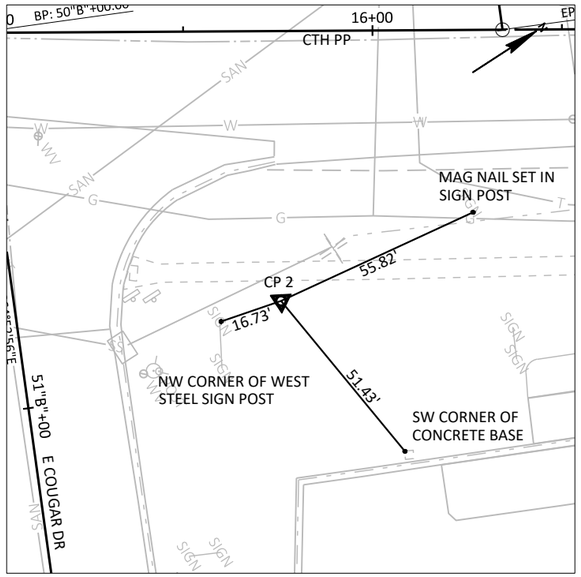
WEST COUGAR DRIVE

STATION	Y	X	REMARKS
60"C"+00.00	386,017.27	740,041.43	
60"C"+30.00	386,004.47	740,068.57	BEGIN CONSTRUCTION
60"C"+50.00	385,995.94	740,086.65	
61"C"+00.00	385,974.62	740,131.88	
61"C"+00.80	385,974.28	740,132.60	END CONSTRUCTION
61"C"+25.00	385,963.95	740,154.49	C/L - C/L CTH PP

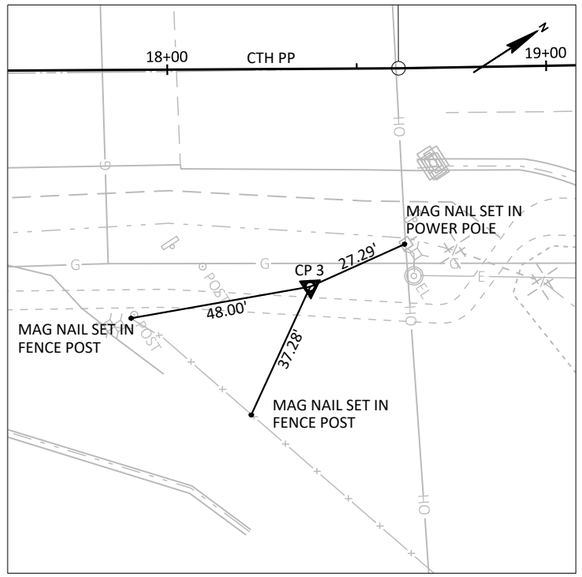
2



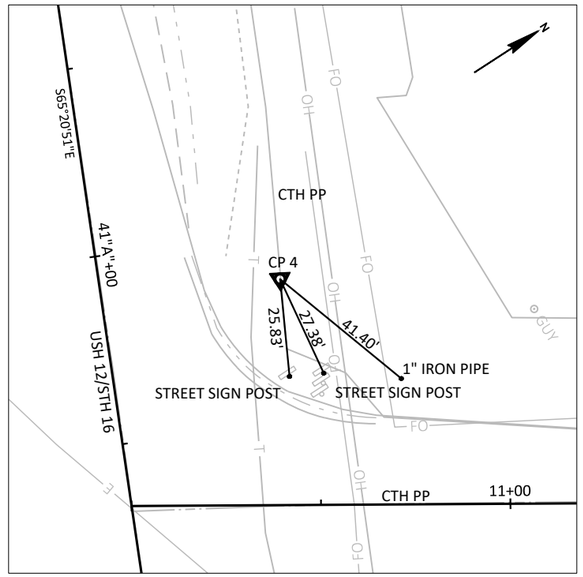
TIES TO CP #1
STATION 11+70.27, 21.6' RT.
Y = 385,561.62
X = 739,922.24



TIES TO CP #2
STATION 15+75.45, 71.2' RT.
Y = 385,875.96
X = 740,182.67



TIES TO CP #3
STATION 18+37.38, 57.5' RT.
Y = 386,103.89
X = 740,312.46



TIES TO CP #4
STATION 10+39.55, 59.6' LT.
Y = 385,495.40
X = 739,783.32

PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	ALIGNMENT DETAILS	SHEET 30	E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\SHEETSPLAN\DETAILS\W11617_ALIGNMENT DETAILS.DWG
LAYOUT NAME - 2

PLOT DATE : 10/13/2021 8:41 AM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:40 FT

Estimate Of Quantities

7117-00-71

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	2.000	2.000
0004	201.0205	Grubbing	STA	2.000	2.000
0006	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000
0008	204.0100	Removing Concrete Pavement	SY	480.000	480.000
0010	204.0110	Removing Asphaltic Surface	SY	50.000	50.000
0012	204.0150	Removing Curb & Gutter	LF	712.000	712.000
0014	204.0155	Removing Concrete Sidewalk	SY	240.000	240.000
0016	204.0220	Removing Inlets	EACH	6.000	6.000
0018	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	360.000	360.000
0020	205.0100	Excavation Common	CY	3,000.000	3,000.000
0022	213.0100	Finishing Roadway (project) 01. 7117-00-71	EACH	1.000	1.000
0024	305.0110	Base Aggregate Dense 3/4-Inch	TON	20.000	20.000
0026	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	2,300.000	2,300.000
0028	415.0120	Concrete Pavement 12-Inch	SY	4,565.000	4,565.000
0030	415.1120	Concrete Pavement HES 12-Inch	SY	675.000	675.000
0032	415.4100	Concrete Pavement Joint Filling	SY	5,730.000	5,730.000
0034	416.0160	Concrete Driveway 6-Inch	SY	150.000	150.000
0036	416.0620	Drilled Dowel Bars	EACH	45.000	45.000
0038	416.1010	Concrete Surface Drains	CY	3.000	3.000
0040	455.0605	Tack Coat	GAL	18.000	18.000
0042	465.0105	Asphaltic Surface	TON	55.000	55.000
0044	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	10.000	10.000
0046	465.0125	Asphaltic Surface Temporary	TON	240.000	240.000
0048	465.0310	Asphaltic Curb	LF	72.000	72.000
0050	465.0315	Asphaltic Flumes	SY	26.000	26.000
0052	521.1012	Apron Endwalls for Culvert Pipe Steel 12-Inch	EACH	2.000	2.000
0054	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	2.000	2.000
0056	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	1.000	1.000
0058	530.0112	Culvert Pipe Corrugated Polyethylene 12-Inch	LF	20.000	20.000
0060	530.0124	Culvert Pipe Corrugated Polyethylene 24-Inch	LF	24.000	24.000
0062	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	1,382.000	1,382.000
0064	601.0555	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	LF	270.000	270.000
0066	602.0405	Concrete Sidewalk 4-Inch	SF	1,860.000	1,860.000
0068	602.0415	Concrete Sidewalk 6-Inch	SF	325.000	325.000
0070	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	20.000	20.000
0072	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	104.000	104.000
0074	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	368.000	368.000
0076	611.0530	Manhole Covers Type J	EACH	3.000	3.000
0078	611.0624	Inlet Covers Type H	EACH	4.000	4.000
0080	611.2004	Manholes 4-FT Diameter	EACH	3.000	3.000
0082	611.3230	Inlets 2x3-FT	EACH	4.000	4.000
0084	611.8110	Adjusting Manhole Covers	EACH	2.000	2.000
0086	612.0902.S	Insulation Board Polystyrene (inch) 01. 3-Inch	SY	20.000	20.000
0088	618.0100	Maintenance And Repair of Haul Roads (project) 01. 7117-00-71	EACH	1.000	1.000
0090	619.1000	Mobilization	EACH	1.000	1.000
0092	624.0100	Water	MGAL	35.000	35.000
0094	625.0500	Salvaged Topsoil	SY	3,000.000	3,000.000
0096	627.0200	Mulching	SY	4,100.000	4,100.000
0098	628.1504	Silt Fence	LF	600.000	600.000

7117-00-71

Line	Item	Item Description	Unit	Total	Qty
0100	628.1520	Silt Fence Maintenance	LF	1,200.000	1,200.000
0102	628.1905	Mobilizations Erosion Control	EACH	8.000	8.000
0104	628.1910	Mobilizations Emergency Erosion Control	EACH	5.000	5.000
0106	628.2023	Erosion Mat Class II Type B	SY	50.000	50.000
0108	628.7005	Inlet Protection Type A	EACH	6.000	6.000
0110	628.7015	Inlet Protection Type C	EACH	10.000	10.000
0112	628.7504	Temporary Ditch Checks	LF	60.000	60.000
0114	628.7555	Culvert Pipe Checks	EACH	10.000	10.000
0116	629.0210	Fertilizer Type B	CWT	3.000	3.000
0118	630.0140	Seeding Mixture No. 40	LB	75.000	75.000
0120	633.5200	Markers Culvert End	EACH	1.000	1.000
0122	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	2.000	2.000
0124	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	11.000	11.000
0126	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	8.000	8.000
0128	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	6.000	6.000
0130	637.2210	Signs Type II Reflective H	SF	212.610	212.610
0132	637.2230	Signs Type II Reflective F	SF	11.250	11.250
0134	638.2102	Moving Signs Type II	EACH	8.000	8.000
0136	638.2602	Removing Signs Type II	EACH	14.000	14.000
0138	638.3000	Removing Small Sign Supports	EACH	18.000	18.000
0140	638.4000	Moving Small Sign Supports	EACH	5.000	5.000
0142	642.5001	Field Office Type B	EACH	1.000	1.000
0144	643.0300	Traffic Control Drums	DAY	5,610.000	5,610.000
0146	643.0410	Traffic Control Barricades Type II	DAY	204.000	204.000
0148	643.0420	Traffic Control Barricades Type III	DAY	1,836.000	1,836.000
0150	643.0705	Traffic Control Warning Lights Type A	DAY	2,754.000	2,754.000
0152	643.0900	Traffic Control Signs	DAY	5,913.000	5,913.000
0154	643.1050	Traffic Control Signs PCMS	DAY	28.000	28.000
0156	643.5000	Traffic Control	EACH	1.000	1.000
0158	646.1020	Marking Line Epoxy 4-Inch	LF	3,760.000	3,760.000
0160	646.3020	Marking Line Epoxy 8-Inch	LF	245.000	245.000
0162	646.5020	Marking Arrow Epoxy	EACH	7.000	7.000
0164	646.5120	Marking Word Epoxy	EACH	1.000	1.000
0166	646.6120	Marking Stop Line Epoxy 18-Inch	LF	67.000	67.000
0168	649.0105	Temporary Marking Line Paint 4-Inch	LF	3,100.000	3,100.000
0170	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	3,970.000	3,970.000
0172	650.4000	Construction Staking Storm Sewer	EACH	8.000	8.000
0174	650.4500	Construction Staking Subgrade	LF	972.000	972.000
0176	650.5000	Construction Staking Base	LF	35.000	35.000
0178	650.7000	Construction Staking Concrete Pavement	LF	937.000	937.000
0180	650.9000	Construction Staking Curb Ramps	EACH	2.000	2.000
0182	650.9910	Construction Staking Supplemental Control (project) 01. 7117-00-71	LS	1.000	1.000
0184	650.9920	Construction Staking Slope Stakes	LF	972.000	972.000
0186	690.0150	Sawing Asphalt	LF	380.000	380.000
0188	690.0250	Sawing Concrete	LF	100.000	100.000
0190	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	1,575.000	1,575.000
0192	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,200.000	1,200.000
0194	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	600.000	600.000
0196	SPV.0060	Special 01. Adjusting Water Valve Boxes	EACH	8.000	8.000

CLEARING AND GRUBBING

STATION - STATION	LOCATION	STAGE	201.0105 CLEARING (STA)	201.0205 GRUBBING (STA)
15+00 - 16+00	CTH PP, LT	1	1	1
17+00 - 18+00	CTH PP, LT	1	1	1
		TOTALS =	2	2

REMOVING SMALL PIPE CULVERTS

STATION	LOCATION	TYPE	STAGE	203.0100 (EACH)
18+86	CTH PP, RT	24" X 20' CPCP	1	1
			TOTAL =	1

REMOVING PAVEMENT

STATION - STATION	LOCATION	STAGE	204.0100 (SY)
10+97 - 11+57	CTH PP, RT	1	35
50"B"+22 - 50"B"+81	E COUGAR DR	1	435
13+37	CTH PP, LT (P.E.)	2	10
		TOTAL =	480

REMOVING ASPHALTIC SURFACE

STATION - STATION	LOCATION	STAGE	204.0110 (SY)
51"B"+50 - 51"B"+60	E COUGAR DR	1	50
		TOTAL =	50

REMOVING CURB & GUTTER

STATION - STATION	LOCATION	STAGE	204.0150 (LF)
10+97 - 14+29	CTH PP, RT	1	332
18+65 - 18+71	CTH PP, RT	1	6
50"B"+08 - 51"B"+50	E COUGAR DR, RT	1	163
50"B"+43 - 51"B"+50	E COUGAR DR, LT	1	135
60"C"+47 - 61"C"+08	W COUGAR DR, LT	2	44
60"C"+47 - 60"C"+98	W COUGAR DR, RT	2	32
		TOTAL =	712

REMOVING CONCRETE SIDEWALK

STATION - STATION	LOCATION	STAGE	204.0155 (SY)
10+97 - 14+79	CTH PP, RT	1	223
18+84	CTH PP, RT	1	5
50"B"+70	E COUGAR DR, LT	1	12
		TOTAL =	240

REMOVING INLETS

STATION	LOCATION	STAGE	204.0220 (EACH)
12+65	CTH PP, 19.4' RT	1	1
12+75	CTH PP, 15.8' RT	1	1
13+54	CTH PP, 22.8' RT	1	1
18+70	CTH PP, 25.2' RT	1	1
50"B"+71	E COUGAR DR, 23.0' RT	1	1
50"B"+88	E COUGAR DR, 26.8' LT	1	1
		TOTAL =	6

REMOVING STORM SEWER 01. 12-INCH

STATION - STATION	LOCATION	STAGE	204.0245 (LF)
12+65 - 12+75	CTH PP, RT	1	11
12+75 - 13+54	CTH PP, RT	1	79
13+54 - 50"B"+71	CTH PP, RT	1	140
18+86	CTH PP, RT	1	17
50"B"+71 - 50"B"+88	E COUGAR DR	1	52
50"B"+88 - 15+89	CTH PP, RT	1	61
		TOTAL =	360

EARTHWORK SUMMARY

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1) CUT (2)	205.0100 COMMON EXCAVATION (1) EBS EXCAVATION	SALVAGED/ UNUSABLE PAVEMENT MATERIAL (3)	AVAILABLE MATERIAL (4)	205.0500 MARSH EXCAVATION	205.0200 ROCK EXCAVATION	REDUCED MARSH IN FILL FACTOR 0.60	REDUCED EBS IN FILL FACTOR 0.80	EXPANDED MARSH BACKFILL FACTOR 1.50	EXPANDED EBS BACKFILL FACTOR 1.30	EXPANDED ROCK FACTOR 1.10	UNEXPANDED FILL	EXPANDED FILL (5) FACTOR 1.25	MASS ORDINATE +/- (6)	WASTE (7)	208.0100 BORROW	COMMENT
STAGE 1																			
	10+97 - 18+72	CTH PP	1,100	0	160	940	0	0	0	0	0	0	0	164	205	735	205	0	
	50"B"+24 - 51"B"+60	E COUGAR DR	515	0	195	320	0	0	0	0	0	0	0	12	15	305	15	0	
	40"D"+50 - 41"D"+58	IH 90/94 RAMP	90	0	0	90	0	0	0	0	0	0	0	0	0	90	0	0	
STAGE 1 SUBTOTAL			1,705	0	355	1,350	0	0	0	0	0	0	0	176	220	1,130	220	0	
STAGE 2																			
	10+97 - 18+72	CTH PP	660	0	195	465	0	0	0	0	0	0	0	280	350	115	350	0	
	60"C"+30 - 61"C"+01	W COUGAR DR	85	0	20	65	0	0	0	0	0	0	0	8	10	55	10	0	
STAGE 2 SUBTOTAL			745	0	215	530	0	0	0	0	0	0	0	288	360	170	360	0	
STAGE 3																			
	10+97 - 18+72	CTH PP	550	0	210	340	0	0	0	0	0	0	0	0	0	340	0	0	
STAGE 3 SUBTOTAL			550	0	210	340	0	0	0	0	0	0	0	0	0	340	0	0	
GRAND TOTAL			3,000	0	780	2,220	0	0	0	0	0	0	0	464	580	1,640	580	0	
TOTAL COMMON EXC			3,000																

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(3) SALVAGED/UNUSABLE PAVEMENT MATERIAL
(4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(5) EXPANDED FILL FACTOR = 1.25 EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR
(6) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(7) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

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BASE AGGREGATE DENSE 3/4-INCH

STATION - STATION	LOCATION	STAGE	305.0110 (TON)
13+02	CTH PP, RT (P.E.)	1	5
60"C"+30 - 60"C"+65	W COUGAR DR, RT	2	2
12+16	CTH PP, LT (P.E.)	2	5
13+02	CTH PP, LT (C.E.)	2	8
		TOTAL =	20

BASE AGGREGATE DENSE 1 1/4-INCH

STATION - STATION	LOCATION	STAGE	305.0120 (TON)
10+97 - 18+72	CTH PP, RT	1	845
10+97 - 14+22	CTH PP, RT (S.W.)	1	75
15+43 - 15+54	CTH PP, RT (S.W.)	1	2
18+79 - 18+89	CTH PP, RT (S.W.)	1	2
51"B"+02 - 51"B"+50	E COUGAR DR	1	95
11+29	CTH PP, RT (C.E.)	1	15
13+02	CTH PP, RT (P.E.)	1	4
13+64	CTH PP, RT (P.E.)	1	12
10+97 - 18+72	CTH PP, LT	2	655
60"C"+30 - 60"C"+65	W COUGAR DR	2	64
11+46	CTH PP, LT (P.E.)	2	18
12+16	CTH PP, LT (P.E.)	2	7
13+02	CTH PP, LT (C.E.)	2	9
13+36	CTH PP, LT (P.E.)	2	8
14+34	CTH PP, LT (P.E.)	2	16
17+31	CTH PP, LT (P.E.)	2	13
10+97 - 18+72	CTH PP	3	460
		TOTAL =	2300

CONCRETE PAVEMENT 12-INCH, CONCRETE PAVEMENT HES 12-INCH & CONCRETE PAVEMENT JOINT FILLING

STATION - STATION	LOCATION	STAGE	415.0120 12-INCH (SY)	415.1120 HES 12-INCH (SY)	415.4100 JOINT FILLING (SY)
10+97 - 18+72	CTH PP, RT	1	1830	--	2320
10+92 - 11+57	CTH PP, RT	1	--	92	--
12+77 - 13+22	CTH PP, RT	1	--	80	--
13+37 - 13+82	CTH PP, RT	1	--	80	--
51"B"+02 - 51"B"+50	E COUGAR DR	2	240	--	265
10+97 - 18+72	CTH PP, LT	2	1120	--	1770
11+27 - 11+72	CTH PP, LT	2	--	80	--
12+02 - 12+32	CTH PP, LT	2	--	53	--
12+77 - 13+52	CTH PP, LT	2	--	134	--
14+10 - 14+53	CTH PP, LT	2	--	76	--
17+08 - 17+53	CTH PP, LT	2	--	80	--
10+97 - 18+72	CTH PP	3	1375	--	1375
		TOTALS =	4565	675	5730

CONCRETE DRIVEWAY 6-INCH

STATION	LOCATION	STAGE	416.0160 (SY)
11+29	CTH PP, RT (C.E.)	1	21
13+02	CTH PP, RT (P.E.)	1	8
13+64	CTH PP, RT (P.E.)	1	12
11+46	CTH PP, LT (P.E.)	2	23
12+16	CTH PP, LT (P.E.)	2	15
13+02	CTH PP, LT (C.E.)	2	20
13+36	CTH PP, LT (P.E.)	2	20
14+34	CTH PP, LT (P.E.)	2	20
17+31	CTH PP, LT (P.E.)	2	11
		TOTAL =	150

CONCRETE SURFACE DRAINS

STATION	LOCATION	STAGE	416.1010 (CY)
17+46	CTH PP, RT	1	1
17+50	CTH PP, LT	2	1
18+65.50	CTH PP, LT	2	1
		TOTAL =	3

DRILLED DOWEL BARS

STATION	LOCATION	STAGE	416.062 (EACH)
18+71.50	CTH PP, RT	1	14
18+71.50	CTH PP, LT	2	17
18+71.50	CTH PP	3	14
		TOTAL =	45

ASPHALTIC CURB

STATION - STATION	LOCATION	STAGE	465.0310 (LF)
10+97 - 11+36	CTH PP, RT	1	39
10+65 - 10+97	CTH PP, LT	2	33
		TOTAL =	72

ASPHALTIC FLUMES

STATION	LOCATION	STAGE	465.0315 (SY)
17+46	CTH PP, RT	1	6
17+50	CTH PP, LT	2	6
18+66	CTH PP, LT	2	14
		TOTAL =	26

ASPHALTIC SURFACE

STATION - STATION	LOCATION	STAGE	455.0605 TACK COAT (GAL)	465.0105 ASPHALTIC SURFACE (TON)	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES (TON)	465.0125 ASPHALTIC SURFACE TEMPORARY (TON)
10+97 - 11+36	CTH PP, RT	1	4	10	--	--
51"B"+50 - 51"B"+60	E COUGAR DR	1	6	18	--	--
11+29	CTH PP, RT (C.E.)	1	--	--	2	--
13+64	CTH PP, RT (P.E.)	1	--	--	2	--
11+64 - 15+93	CTH PP, LT	1	--	--	--	94
16+72 - 18+71	CTH PP, LT	1	--	--	--	29
10+65 - 10+97	CTH PP, LT	2	1	3	--	--
60"C"+30 - 60"C"+65	W COUGAR DR	2	7	24	--	--
11+46	CTH PP, LT (P.E.)	2	--	--	2	--
14+34	CTH PP, LT (P.E.)	2	--	--	2	--
17+31	CTH PP, LT (P.E.)	2	--	--	2	--
13+00 - 17+00	CTH PP, RT	2	--	--	--	117
		TOTALS =	18	55	10	240

CULVERT PIPE

STATION	LOCATION	STAGE	521.1012 AEW FOR CP STEEL 12-INCH (EACH)	521.1024 AEW FOR CP STEEL 24-INCH (EACH)	530.0112 CULVERT PIPE CORRUGATED POLYETHYLENE 12-INCH (LF)	530.0124 CULVERT PIPE CORRUGATED POLYETHYLENE 24-INCH (LF)
17+31	CTH PP, LT (P.E.)	2	2	--	20	--
18+84	CTH PP, RT	1	--	2	--	24
		TOTALS =	2	2	20	24

CONCRETE CURB & GUTTER TYPE A

STATION - STATION	LOCATION	STAGE	601.0409 30-INCH (LF)	601.0555 6-INCH SLOPED 36-INCH (LF)
11+36.00 - 14+21.51	CTH PP, RT	1	286	--
10+97.45 - 15+81.92	CTH PP, LT	2	484	--
15+88.22 - 18+71.50	CTH PP, RT	1	284	--
16+72.68 - 18+81.50	CTH PP, LT	2	209	--
50"B"+14.09 - 50"B"+80.24	E COUGAR DR, RT	1	--	91
50"B"+47.86 - 51"B"+02.39	E COUGAR DR, LT	1	--	90
50"B"+80.24 - 51"B"+50.00	E COUGAR DR, RT	1	71	--
51"B"+02.39 - 51"B"+50.00	E COUGAR DR, LT	1	48	--
60"C"+64.69 - 60"C"+94.44	W COUGAR DR, RT	2	--	48
60"C"+76.40 - 61"C"+06.15	W COUGAR DR, LT	2	--	41
		TOTALS =	1382	270

3

CONCRETE SIDEWALK

STATION - STATION	LOCATION	STAGE	602.0405 4-INCH (SF)	602.0415 6-INCH (SF)
10+97.45 - 11+11.50	CTH PP, RT	1	70	--
11+11.50 - 11+46.50	CTH PP, RT	1	--	175
11+46.50 - 12+96.35	CTH PP, RT	1	766	--
12+96.35 - 13+08.35	CTH PP, RT	1	--	60
13+08.35 - 13+54.60	CTH PP, RT	1	230	--
13+54.60 - 13+72.60	CTH PP, RT	1	--	90
13+72.60 - 14+79.09	CTH PP, RT	1	665	--
15+42.62 - 15+59.74	CTH PP, RT	1	79	--
18+78.56 - 18+88.64	CTH PP, RT	1	50	--
		TOTALS =	1860	325

CURB RAMP DETECTABLE WARNING FIELD YELLOW

STATION	LOCATION	STAGE	602.0505 (SF)
50"B"+60.50	E COUGAR DR, RT	1	10
50"B"+69.55	E COUGAR DR, LT	1	10
		TOTAL =	20

STORM SEWER PIPES

PIPE NUMBER	FROM STRUCTURE	TO STRUCTURE	INLET ELEV	DISCHARGE ELEV	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 608.0412 12-INCH (LF)	608.0418 18-INCH (LF)	% SLOPE
P-1	I-1	MH-1	960.75	960.05	12	--	5.83
P-2	I-2	MH-1	960.75	960.05	40	--	1.75
P-3	MH-1	MH-2	959.55	958.81	--	148	0.50
P-4	I-3	MH-2	959.90	959.21	40	--	1.73
P-5	MH-2	MH-3	958.71	958.20	--	160	0.30
P-6	I-4	MH-3	958.71	958.59	12	--	1.00
P-7	MH-3	EW-1	958.10	957.90	--	60	0.30
				TOTALS =	104	368	

STORM SEWER - STRUCTURES

STRUCTURE NUMBER	STATION	LOCATION	611.2004 MANHOLE 4-FT DIAMETER (EACH)	611.3230 INLETS 2X3-FT (EACH)	611.0530 MANHOLE COVERS TYPE J (EACH)	611.0624 INLET COVERS TYPE H (EACH)	522.1018 AEW REINFORCED CONCRETE 18-INCH (EACH)	RIM/GRATE ELEV (FT)	TOP OF STRUCTURE ELEV (FT)	STRUCTURE DEPTH (FT)
I-1	12+75.00	CTH PP, 25.5' LT	--	1	--	1	--	964.26	963.34	2.59
I-2	12+75.00	CTH PP, 25.5' RT	--	1	--	1	--	964.26	963.34	2.59
I-3	14+23.00	CTH PP, 25.5' RT	--	1	--	1	--	963.41	962.49	2.59
I-4	15+83.50	CTH PP, 25.5' LT	--	1	--	1	--	961.89	960.97	2.26
MH-1	12+75.00	CTH PP, 14.0' LT	1	--	1	--	--	964.46	963.29	3.74
MH-2	14+23.00	CTH PP, 14.0' LT	1	--	1	--	--	963.61	962.44	3.73
MH-3	15+83.50	CTH PP, 14.0' LT	1	--	1	--	--	962.11	960.94	2.84
EW-1	15+89.15	CTH PP, 46.0' RT	--	--	--	--	1	957.90	--	--
		TOTALS =	3	4	3	4	1			

INSULATION BOARD POLYSTYRENE 01. 3-INCH

STATION - STATION	LOCATION	STAGE	612.0902.S (SY)
12+21 - 12+29	CTH PP, RT	1	4
14+06 - 14+14	CTH PP, LT	2	4
14+19 - 14+27	CTH PP, RT	1	4
14+71 - 14+79	CTH PP, LT	2	4
15+85 - 15+89	CTH PP, RT	1	4
		TOTAL =	20

WATER

STATION - STATION	LOCATION	STAGE	624.0100 (MGAL)
10+97 - 18+72	CTH PP, RT	1	13.0
10+97 - 18+89	CTH PP, RT (S.W.)	1	1.2
51"B"+02 - 51"B"+50	E COUGAR DR	1	1.4
--	DRIVEWAYS, RT	1	0.5
10+97 - 18+72	CTH PP, LT	2	9.9
60"C"+30 - 60"C"+65	W COUGAR DR	2	1.0
--	DRIVEWAYS, LT	2	1.1
10+97 - 18+72	CTH PP	3	6.9
		TOTAL =	35

FINISHING ITEMS

STATION - STATION	LOCATION	STAGE	625.0500 SALVAGED TOPSOIL (SY)	627.0200 MULCHING (SY)	629.0210 FERTILIZER TYPE B (CWT)	630.0140 SEEDING MIXTURE NO. 40 (LB)
10+97 - 14+69	CTH PP, RT	1	378	555	0.4	10
10+97 - 16+09	CTH PP, LT	2	544	758	0.5	14
15+54 - 19+59	CTH PP, RT	1	1080	1428	0.9	26
16+46 - 18+71	CTH PP, LT	2	464	580	0.4	10
50"B"+62 - 51"B"+50	E COUGAR DR, LT & RT	1	113	210	0.1	4
60"C"+30 - 60"C"+94	W COUGAR DR, LT & RT	2	32	75	0.1	1
--	UNDISTRIBUTED	--	389	494	0.6	10
		TOTALS =	3000	4100	3	75

MOBILIZATIONS EROSION CONTROL AND MOBILIZATIONS EMERGENCY EROSION CONTROL

STATION - STATION	LOCATION	STAGE	628.1905 MOB E.C. (EACH)	628.1910 MOB EMERG E.C. (EACH)
10+97 - 18+71	CTH PP	1	3	2
10+97 - 18+71	CTH PP	2	3	2
10+97 - 18+71	CTH PP	3	2	1
		TOTALS =	8	5

EROSION MAT CLASS II TYPE B

STATION	LOCATION	STAGE	628.2023 (SY)
15+89	CTH PP, RT	1	6
17+42	CTH PP, LT	2	4
17+46	CTH PP, RT	1	8
17+50	CTH PP, LT	2	8
18+66	CTH PP, LT	2	8
18+97	CTH PP, RT	1	8
--	UNDISTRIBUTED	--	8
		TOTAL =	50

3

SILT FENCE & SILT FENCE MAINTENANCE

STATION - STATION	LOCATION	STAGE	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)
11+50 - 13+50	CTH PP, LT	2	120	240
12+00 - 14+65	CTH PP, RT	1	250	500
16+50 - 17+00	CTH PP, LT	2	60	120
18+00 - 18+65	CTH PP, LT	2	65	130
--	UNDISTRIBUTED	--	105	210
		TOTALS =	600	1200

INLET PROTECTION TYPE A AND TYPE C

STRUCTURE NUMBER	STATION	LOCATION	STAGE	628.7005 TYPE A (EACH)	628.7015 TYPE C (EACH)
I-1	12+75	CTH PP, LT	2	1	1
I-2	12+75	CTH PP, RT	1	1	1
I-3	14+23	CTH PP, RT	1	1	1
I-4	15+84	CTH PP, LT	2	1	1
--	52"B"+27	E COUGAR DR, RT	1	--	1
--	53"B"+73	E COUGAR DR, LT	1	--	1
--	53"B"+73	E COUGAR DR, RT	1	--	1
--	--	UNDISTRIBUTED	--	2	3
			TOTALS =	6	10

TEMPORARY DITCH CHECKS

STATION	LOCATION	STAGE	628.7504 (LF)
17+10	CTH PP, LT	2	10
17+25	CTH PP, RT	1	10
18+00	CTH PP, LT	2	10
18+50	CTH PP, RT	1	10
19+60	CTH PP, RT	1	10
--	UNDISTRIBUTED	--	10
		TOTAL =	60

CULVERT PIPE CHECKS

STATION	LOCATION	STAGE	628.7555 (EACH)
17+20	CTH PP, LT	2	2
18+70	CTH PP, RT	1	5
--	UNDISTRIBUTED	--	3
		TOTAL =	10

MARKERS CULVERT END

STATION	LOCATION	STAGE	633.5200 (EACH)
15+89	CTH PP, RT	1	1
		TOTAL =	1

TRAFFIC CONTROL - ADVANCED WARNING

STATION - STATION	LOCATION	643.0300 TRAFFIC CONTROL DRUMS (DAYS)	643.0410 TRAFFIC CONTROL BARRICADES TYPE II (DAYS)	643.0420 TRAFFIC CONTROL BARRICADES TYPE III (DAYS)	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A (DAYS)	643.0900 TRAFFIC CONTROL SIGNS (DAYS)	643.1050 TRAFFIC CONTROL SIGNS PCMS (DAYS)	COMMENT
--	CTH N, N.B.	--	--	--	--	124	--	(1) W20-1A
--	CTH N, N.B.	--	--	--	--	124	--	(1) W20-1D
--	CTH N, N.B.	--	--	--	--	124	--	(1) W20-1H
--	CTH N, S.B.	--	--	--	--	124	--	(1) G20-2A
--	USH 12, E.B.	--	--	--	--	248	--	(1 EA) M1-5A, W20-1A
--	USH 12, E.B.	--	--	--	--	248	--	(1 EA) M1-5A, W20-1C
--	USH 12, E.B.	--	--	--	--	248	--	(1 EA) M1-5A, W20-1D
--	USH 12, W.B.	--	--	--	--	124	--	(1) G20-2A
--	USH 12, E.B.	--	--	--	--	124	--	(1) G20-2A
--	USH 12, W.B.	--	--	--	--	248	--	(1 EA) M1-5A, W20-1D
--	USH 12, W.B.	--	--	--	--	248	--	(1 EA) M1-5A, W20-1C
--	USH 12, W.B.	--	--	--	--	248	--	(1 EA) M1-5A, W20-1A
--	E COUGAR DR, W.B.	--	--	--	--	124	--	(1) W20-1A
--	E COUGAR DR, E.B.	--	--	--	--	124	--	(1) G20-2A
--	W COUGAR DR, E.B.	--	--	--	--	124	--	(1) W20-1A
--	W COUGAR DR, W.B.	--	--	--	--	124	--	(1) G20-2A
--	IH 90/94 E.B. EXIT RAMP	--	--	--	--	124	--	(1) W20-1A
--	IH 90/94 E.B. ENTR RAMP	--	--	--	--	124	--	(1) G20-2A
--	IH 90/94 W.B. EXIT RAMP	--	--	--	--	124	--	(1) W20-1A
--	IH 90/94 W.B. ENTR RAMP	--	--	--	--	124	--	(1) G20-2A
--	CTH PP, N.B.	--	--	--	--	--	14	PLACE TWO WEEKS PRIOR TO CONSTRUCTION
--	CTH PP, S.B.	--	--	--	--	--	14	PLACE TWO WEEKS PRIOR TO CONSTRUCTION
--	CTH PP, N.B.	--	--	--	--	124	--	(1) G20-2A
--	CTH PP, S.B.	--	--	--	--	124	--	(1) W20-1H
--	CTH PP, S.B.	--	--	--	--	124	--	(1) W20-1D
--	CTH PP, S.B.	--	--	--	--	124	--	(1) W20-1A
	SUBTOTALS =	0	0	0	0	3720	28	

3

3

TRAFFIC CONTROL - STAGE 1

STATION - STATION	LOCATION	643.0300 TRAFFIC CONTROL DRUMS (DAYS)	643.0410 TRAFFIC CONTROL BARRICADES TYPE II (DAYS)	643.0420 TRAFFIC CONTROL BARRICADES TYPE III (DAYS)	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A (DAYS)	643.0900 TRAFFIC CONTROL SIGNS (DAYS)	643.1050 TRAFFIC CONTROL SIGNS PCMS (DAYS)	COMMENT
--	CTH N, N.B.	--	51	--	--	51	--	(1) R9-9
10+75	CTH PP, RT	--	51	--	--	51	--	(1) R9-9
19+15	CTH PP, RT	--	51	--	--	51	--	(1) R9-9
19+90	CTH PP, RT	--	51	--	--	51	--	(1) R9-9
10+35 - 10+95	CTH PP, RT	306	--	--	--	--	--	
10+95	CTH PP, RT	--	--	102	204	51	--	(1) WO1-6
10+95 - 18+75	CTH PP, RT	867	--	--	--	--	--	
14+20	CTH PP, RT	--	--	102	--	--	--	
14+30	CTH PP, RT	--	--	--	--	51	--	(1) R3-1; STAGE 1D ONLY
15+75	CTH PP, LT	--	--	--	--	51	--	(1) R3-1; STAGE 1C ONLY
15+95	CTH PP, RT	--	--	153	306	51	--	(1) R11-2L
18+75 - 19+25	CTH PP, RT	255	--	--	--	--	--	
18+75	CTH PP, RT	--	--	102	204	51	--	(1) WO1-6
50"B"+10	E COUGAR DR	--	--	255	--	--	--	
50"B"+25 - 51"B"+60	E COUGAR DR	357	--	--	--	--	--	
51"B"+70	E COUGAR DR, LT & RT	--	--	--	--	204	--	(2 EA) R3-52R, R3-2
51"B"+70	E COUGAR DR	--	--	102	204	51	--	(1) R11-2L
52"B"+15	E COUGAR DR, LT	--	--	--	--	51	--	(1) J22-4: M4-5, M1-4, M6-1; M4-5, M1-6, M6-1; M4-5, M1-1, M6-1; M4-5, M1-1, M6-1
58"B"+95	E COUGAR DR, LT	--	--	--	--	51	--	(1) J22-4: M4-5, M1-4, M6-1; M4-5, M1-6, M6-1; M4-5, M1-1, M6-1; M4-5, M1-1, M6-1
	SUBTOTALS =	1785	204	816	918	816	0	

TRAFFIC CONTROL - STAGE 2

STATION - STATION	LOCATION	643.0300 TRAFFIC CONTROL DRUMS (DAYS)	643.0410 TRAFFIC CONTROL BARRICADES TYPE II (DAYS)	643.0420 TRAFFIC CONTROL BARRICADES TYPE III (DAYS)	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A (DAYS)	643.0900 TRAFFIC CONTROL SIGNS (DAYS)	643.1050 TRAFFIC CONTROL SIGNS PCMS (DAYS)	COMMENT
10+50 - 10+95	CTH PP, LT	204	--	--	--	--	--	
10+95	CTH PP, LT	--	--	102	204	51	--	(1) WO1-6
10+95 - 18+75	CTH PP, LT	867	--	--	--	--	--	
15+75	CTH PP, LT	--	--	102	204	51	--	(1) R11-2L
14+25	CTH PP, RT	--	--	--	--	51	--	(1) R3-2; STAGE 2C ONLY
16+80	CTH PP, LT	--	--	102	--	--	--	
17+05	CTH PP, LT	--	--	--	--	51	--	(1) R3-1; STAGE 2C ONLY
18+75 - 19+20	CTH PP, LT	255	--	--	--	--	--	
18+75	CTH PP, LT	--	--	102	204	51	--	(1) WO1-6
51"B"+70	E COUGAR DR, LT & RT	--	--	--	--	204	--	(2 EA) R3-52R, R3-2
52"B"+15	E COUGAR DR, LT	--	--	--	--	51	--	(1) J22-4: M4-5, M1-4, M6-1; M4-5, M1-6, M6-1; M4-5, M1-1, M6-1; M4-5, M1-1, M6-1
58"B"+95	E COUGAR DR, LT	--	--	--	--	51	--	(1) J22-4: M4-5, M1-4, M6-1; M4-5, M1-6, M6-1; M4-5, M1-1, M6-1; M4-5, M1-1, M6-1
60"C"+25	W COUGAR DR	--	--	102	204	51	--	(1) R11-2L
60"C"+30 - 61"C"20	W COUGAR DR	459	--	--	--	--	--	
	SUBTOTALS =	1785	0	510	816	612	0	

3

TRAFFIC CONTROL - STAGE 3

STATION - STATION	LOCATION	643.0300 TRAFFIC CONTROL DRUMS (DAYS)	643.0410 TRAFFIC CONTROL BARRICADES TYPE II (DAYS)	643.0420 TRAFFIC CONTROL BARRICADES TYPE III (DAYS)	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A (DAYS)	643.0900 TRAFFIC CONTROL SIGNS (DAYS)	643.1050 TRAFFIC CONTROL SIGNS PCMS (DAYS)	COMMENT
10+95	CTH PP	--	--	102	204	51	--	(1) WO1-6
10+95 - 18+75	CTH PP, LT & RT	2040	--	--	--	--	--	
14+25	CTH PP	--	--	102	204	51	--	(1) R11-2L
16+80	CTH PP	--	--	102	204	51	--	(1) R11-2L
15+75	CTH PP	--	--	102	204	51	--	(1) R11-2L; STAGE 3B ONLY
15+75	CTH PP, LT	--	--	--	--	51	--	(1) R3-2; STAGE 3B ONLY
15+80	CTH PP	--	--	--	--	51	--	(1) R3-2; STAGE 3B ONLY
14+25	CTH PP, RT	--	--	--	--	51	--	(1) R3-2; STAGE 3C ONLY
15+70	CTH PP	--	--	--	--	51	--	(1) R3-2; STAGE 3C ONLY
18+75	CTH PP	--	--	102	204	51	--	(1) WO1-6
51"B"+70	E COUGAR DR, LT & RT	--	--	--	--	204	--	(2 EA) R3-52R, R3-2
52"B"+15	E COUGAR DR, LT	--	--	--	--	51	--	(1) J22-4: M4-5, M1-4, M6-1; M4-5, M1-6, M6-1; M4-5, M1-1, M6-1; M4-5, M1-1, M6-1
58"B"+95	E COUGAR DR, LT	--	--	--	--	51	--	(1) J22-4: M4-5, M1-4, M6-1; M4-5, M1-6, M6-1; M4-5, M1-1, M6-1; M4-5, M1-1, M6-1
	SUBTOTALS =	2040	0	510	1020	765	0	
	GRAND TOTALS =	5610	204	1836	2754	5913	28	

PERMANENT SIGNING

SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIGN DESCRIPTION	ORDER LINES	SIGN SIZE W X H (IN)	SIGNS TYPE II REFLECTIVE 637.2210 H (SF)	SIGNS TYPE II REFLECTIVE 637.2230 F (SF)	POSTS WOOD 4X6-INCH 634.0612 12-FT (EACH)	POSTS WOOD 4X6-INCH 634.0614 14-FT (EACH)	POSTS WOOD 4X6-INCH 634.0616 16-FT (EACH)	POSTS WOOD 4X6-INCH 634.0618 18-FT (EACH)	638.2102 MOVING SIGNS TYPE II (EACH)	638.2602 REMOVING SIGNS TYPE II (EACH)	638.3000 REMOVING SMALL SIGN SUPPORTS (EACH)	638.4000 MOVING SMALL SIGN SUPPORTS (EACH)
1-01R	11+72	CTH PP, LT	J2-2	M4-4, M1-5A; M1-5A, M6-6	END, PP; N, DOUBLE ARROW	--	--	--	--	--	--	--	--	1	1	--
1-02	11+72	CTH PP, LT	J2-2	M4-4, M1-5A; M1-5A, M6-6	END, PP; N, DOUBLE ARROW	48 X 57	19.00	--	--	--	--	1	--	--	--	--
1-03	11+70	CTH PP, LT	R7-1R	NO PARKING ANY TIME	-->	18 X 24	3.00	--	--	1	--	--	--	--	--	--
1-04	11+60	CTH PP, RT	R7-1L	NO PARKING ANY TIME	<--	18 X 24	3.00	--	--	1	--	--	--	--	--	--
1-05R	12+75	CTH PP, LT	D7-53	STATE PARK	MILL BLUFF	--	--	--	--	--	--	--	--	1	2	--
			D1-2	DESTINATION DIRECTION	<-- CAMP DOUGLAS, TOMAH -->	--	--	--	--	--	--	--	--	--	--	--
			R7-1D	NO PARKING ANY TIME	<-->	--	--	--	--	--	--	--	--	--	--	--
1-06	12+75	CTH PP, LT	D1-4	DESTINATION DIRECTION	<-- CAMP DOUGLAS, TOMAH -->	96 X 54	36.00	--	--	--	--	2	--	--	--	--
					<-- MILL BLUFF STATE PARK,	--	--	--	--	--	--	--	--	--	--	--
1-07R	13+40	CTH PP, RT	J1-2	M2-1, M1-1; M2-1, M1-1	JCT, 90; JCT, 94	--	--	--	--	--	--	--	--	1	1	--
1-08	13+40	CTH PP, RT	J1-2	M2-1, M1-1; M2-1, M1-1	JCT, 90; JCT, 94	48 X 39	13.00	--	--	--	1	--	--	--	--	--
1-09	13+45	CTH PP, RT	R7-1D	NO PARKING ANY TIME	<-->	18 X 24	3.00	--	--	1	--	--	--	--	--	--
1-10	13+55	CTH PP, LT	R7-1D	NO PARKING ANY TIME	<-->	18 X 24	3.00	--	--	1	--	--	--	--	--	--
1-11R	14+10	CTH PP, LT	W3-1	STOP AHEAD		--	--	--	--	--	--	--	--	1	1	--
1-12	14+10	CTH PP, LT	W3-1	STOP AHEAD		36 X 36	--	9.00	--	--	1	--	--	--	--	--
1-20R	50"B"+75	E COUGAR DR, LT	R1-1	STOP		--	--	--	--	--	--	--	--	1	1	--
1-21	50"B"+80	E COUGAR DR, LT	R1-1	STOP		30 X 30	5.18	--	--	1	--	--	--	--	--	--
1-22	50"B"+80	E COUGAR DR, LT	--	STREET SIGN	E COUGAR DR	--	--	--	--	--	--	--	1	--	--	1
1-23	51"B"+50	E COUGAR DR, RT	--	TRAIL ARROW	<--	--	--	--	--	--	--	--	1	--	--	1
1-24	51"B"+50	E COUGAR DR, RT	--	NO PARKING		--	--	--	--	--	--	--	1	--	--	1
			D11-6	SNOWMOBILE ROUTE		--	--	--	--	--	--	--	1	--	--	--
			--	SNOWMOBILE SPEED LIMIT	25 MPH	--	--	--	--	--	--	--	1	--	--	--
			D11-10	ATV ROUTE		--	--	--	--	--	--	--	1	--	--	--
1-25	51"B"+50	E COUGAR DR, LT	R1-1	NO PARKING ANY TIME		--	--	--	--	--	--	--	1	--	--	1
2-01R	16+25	CTH PP, RT	J2-4	M3-4, M1-1, M6-1; M3-4, M1-1, M6-1	WEST, 90, ↑; WEST, 94, ↑	--	--	--	--	--	--	--	--	1	2	--
				M3-2, M1-1, M5-1R; M3-2, M1-1, M5-1R	EAST, 90, ↱; EAST, 94, ↱	--	--	--	--	--	--	--	--	--	--	--
2-02	16+25	CTH PP, RT	J2-4	M3-4, M1-1, M6-1; M3-4, M1-1, M6-1	WEST, 90, ↑; WEST, 94, ↑	96 X 57	38.00	--	--	--	--	2	--	--	--	--
				M3-2, M1-1, M5-1R; M3-2, M1-1, M5-1R	EAST, 90, ↱; EAST, 94, ↱	--	--	--	--	--	--	--	--	--	--	--
2-03R	16+78	CTH PP, LT	R2-1	SPEED LIMIT	35	--	--	--	--	--	--	--	--	1	1	--
2-04	16+90	CTH PP, LT	R2-1	SPEED LIMIT	35	24 X 30	5.00	--	--	1	--	--	--	--	--	--
2-05	16+95	CTH PP, RT	R7-1D	NO PARKING ANY TIME	<-->	18 X 24	3.00	--	--	1	--	--	--	--	--	--
2-06R	17+06	CTH PP, LT	R7-1D	NO PARKING ANY TIME	<-->	--	--	--	--	--	--	--	--	1	1	--
2-07	17+10	CTH PP, LT	R7-1D	NO PARKING ANY TIME	<-->	18 X 24	3.00	--	--	1	--	--	--	--	--	--
2-08R	17+14	CTH PP, RT	D1-2	DESTINATION DIRECTION	↑ TOMAH, MADISON -->	--	--	--	--	--	--	--	--	1	2	--
2-09	17+15	CTH PP, RT	D1-2	DESTINATION DIRECTION	↑ TOMAH, MADISON -->	66 X 30	13.75	--	--	--	2	--	--	--	--	--
2-10	17+87	CTH PP, RT	R3-20R	BEGIN RIGHT TURN LANE		24 X 36	6.00	--	--	--	1	--	--	--	--	--
2-11R	17+91	CTH PP, LT	R10-64	NO ENGINE BRAKING		--	--	--	--	--	--	--	--	1	1	--
2-12	17+91	CTH PP, LT	R10-64	NO ENGINE BRAKING		30 X 36	7.50	--	--	--	1	--	--	--	--	--
2-13R	18+01	CTH PP, RT	W3-1	STOP AHEAD		--	--	--	--	--	--	--	--	1	1	--
2-14	18+01	CTH PP, RT	W3-1	STOP AHEAD		18 X 18	--	2.25	1	--	--	--	--	--	--	--
2-15R	18+17	CTH PP, LT	J4-3	M1-5A; M4-1, M1-1; M4-1, M1-1	PP; ALTERNATE, 90; ALTERNATE, 94	--	--	--	--	--	--	--	--	1	2	--
2-16	18+17	CTH PP, LT	J4-3	M1-5A; M4-1, M1-1; M4-1, M1-1	PP; ALTERNATE, 90; ALTERNATE, 94	72 X 36	18.00	--	--	--	2	--	--	--	--	--
2-17	18+40	CTH PP, LT	R7-1L	NO PARKING ANY TIME	<--	18 X 24	3.00	--	--	1	--	--	--	--	--	--
2-18	18+45	CTH PP, LT	D11-10	ATV ROUTE		24 X 18	3.00	--	1	--	--	--	--	--	--	--
2-19R	18+65	CTH PP, RT	J3-2	M3-2, M1-1, M6-1; M3-2, M1-1, M6-1	EAST, 90, -->; EAST, 94, -->	--	--	--	--	--	--	--	--	1	1	--
2-20	18+65	CTH PP, RT	J3-2	M3-2, M1-1, M6-1; M3-2, M1-1, M6-1	EAST, 90, -->; EAST, 94, -->	48 X 57	19.00	--	--	--	--	1	--	--	--	--
2-21	18+70	CTH PP, RT	R7-1R	NO PARKING ANY TIME	-->	18 X 24	3.00	--	--	1	--	--	--	--	--	--
2-30	60"C"+85	W COUGAR DR, RT	--	STREET SIGN	W COUGAR DR	--	--	--	--	--	--	--	1	--	--	1
2-31R	60"C"+90	W COUGAR DR, RT	R1-1	STOP		--	--	--	--	--	--	--	--	1	1	--
2-32	60"C"+85	W COUGAR DR, RT	R1-1	STOP		30 X 30	5.18	--	--	1	--	--	--	--	--	--
					TOTALS =		212.61	11.25	2	11	8	6	8	14	18	5

TRAFFIC CONTROL

STATION - STATION	LOCATION	643.5000 (EACH)
10+97 - 18+71	CTH PP	1
	TOTAL =	1

MARKING LINE EPOXY

STATION - STATION	LOCATION	646.1020 4-INCH YELLOW SOLID (LF)	646.1020 4-INCH YELLOW DASHED (LF)	646.1020 4-INCH WHITE SOLID (LF)	646.1020 4-INCH WHITE DOTTED (LF)	646.3020 8-INCH SOLID WHITE (LF)	646.6120 STOP LINE 18-INCH (LF)
10+29	CTH PP, LT	--	--	--	--	--	36
10+29 - 12+29	CTH PP, LT	--	--	--	--	200	--
10+29 - 12+29	CTH PP, C/L	400	--	--	--	--	--
10+65 - 15+82	CTH PP, LT	--	--	519	--	--	--
10+97 - 13+82	CTH PP, RT	--	--	284	--	--	--
12+29 - 13+29	CTH PP, C/L	400	--	--	--	--	--
13+29 - 16+85	CTH PP, TWLTL	712	178	--	--	--	--
13+82 - 14+22	CTH PP, RT	--	--	--	10	--	--
15+88 - 17+87	CTH PP, RT	--	--	199	--	--	--
16+62 - 17+02	CTH PP, LT	--	--	--	10	--	--
16+85 - 18+50	CTH PP, TWLTL	660	--	--	--	--	--
17+02 - 18+71	CTH PP, LT	--	--	170	--	--	--
17+87 - 18+27	CTH PP, RT	--	--	--	10	--	--
18+27 - 18+71	CTH PP, RT	--	--	--	--	45	--
18+50 - 18+71	CTH PP, C/L	42	--	--	--	--	--
50"B"+77	E COUGAR DR, LT	--	--	--	--	--	31
50"B"+77 - 51"B"+60	E COUGAR DR, C/L	166	--	--	--	--	--
	SUBTOTALS =	2380	178	1172	30	245	67
	TOTALS =	3760				245	67

MARKING ARROW EPOXY & MARKING WORD EPOXY

STATION - STATION	LOCATION	646.5020 ARROW TYPE 2 (EACH)	646.5120 WORD ONLY (EACH)
12+49 - 12+57	CTH PP, LT	1	--
12+89 - 12+97	CTH PP, LT	--	1
12+01 - 12+09	CTH PP, LT	1	--
13+50 - 13+58	CTH PP, TWLTL	1	--
13+74 - 13+82	CTH PP, TWLTL	1	--
16+50 - 16+58	CTH PP, TWLTL	1	--
16+74 - 16+82	CTH PP, TWLTL	1	--
18+47 - 18+55	CTH PP, RT	1	--
	TOTALS =	7	1

TEMPORARY MARKING LINE 4-INCH

STATION - STATION	LOCATION	STAGE	TYPE	649.0105 PAINT (LF)	649.0150 REMOVABLE TAPE (LF)
10+97 - 18+71	CTH PP, LT	1	SOLID DOUBLE YELLOW	1550	--
18+71 - 20+16	CTH PP, LT	1	SOLID DOUBLE YELLOW	--	290
10+97 - 18+71	CTH PP, LT	1	SOLID WHITE	775	--
10+97 - 18+71	CTH PP, RT	2	SOLID WHITE	775	--
10+97 - 20+16	CTH PP, RT	2	SOLID DOUBLE YELLOW	--	1840
10+97 - 20+16	CTH PP, LT	3	SOLID YELLOW	--	920
10+97 - 20+16	CTH PP, RT	3	SOLID YELLOW	--	920
	TOTALS =			3100	3970

CONSTRUCTION STAKING

STATION - STATION	LOCATION	650.4000 STORM SEWER (EACH)	650.4500 SUBGRADE (LF)	650.5000 BASE (LF)	650.7000 CONCRETE PAVEMENT (LF)	650.9000 CURB RAMPS (EACH)	650.9910 SUPPLEMENTAL CONTROL (LS)	950.9920 SLOPE STAKES (LF)
--	PROJECT 7117-00-71	--	--	--	--	--	1	--
10+97 - 18+72	CTH PP	--	775	--	775	--	--	775
12+75	CTH PP, LT	1	--	--	--	--	--	--
12+75	CTH PP, LT	1	--	--	--	--	--	--
12+75	CTH PP, RT	1	--	--	--	--	--	--
14+23	CTH PP, LT	1	--	--	--	--	--	--
14+23	CTH PP, RT	1	--	--	--	--	--	--
15+83.50	CTH PP, LT	1	--	--	--	--	--	--
15+83.50	CTH PP, LT	1	--	--	--	--	--	--
15+89.15	CTH PP, RT	1	--	--	--	--	--	--
50"B"+24 - 51"B"+50	E COUGAR DR	--	126	--	126	--	--	126
60"C"+30 - 61"C"+01	W COUAGR DR	--	71	--	--	--	--	71
60"C"+30 - 60"C"+65	W COUAGR DR	--	--	35	--	--	--	--
60"C"+65 - 61"C"+01	W COUAGR DR	--	--	--	36	--	--	--
50"B"+60.50	E COUGAR DR, RT	--	--	--	--	1	--	--
50"B"+69.55	E COUGAR DR, LT	--	--	--	--	1	--	--
	TOTALS =	8	972	35	937	2	1	972

SAWING PAVEMENT

STATION	LOCATION	690.015 SAWING ASPHALT (LF)	690.025 SAWING CONCRETE (LF)
10+65 - 10+97	CTH PP, LT	32	--
10+65 - 11+32	CTH PP, LT	51	--
10+97	CTH PP	48	3
11+29	CTH PP, RT (C.E.)	54	--
11+46	CTH PP, LT (P.E.)	28	--
12+63	CTH PP, RT	--	2
13+36	CTH PP, LT (P.E.)	--	9
13+64	CTH PP, RT (P.E.)	18	--
14+34	CTH PP, LT (P.E.)	26	--
15+60	CTH PP, RT	--	5
17+31	CTH PP, LT (P.E.)	9	--
18+72	CTH PP	--	54
18+72 - 18+82	CTH PP, LT	--	13
18+79	CTH PP, RT	--	5
18+89	CTH PP, RT	--	5
51"B"+50	E COUGAR DR, LT	--	2
51"B"+50	E COUGAR DR, RT	--	2
51"B"+60	E COUGAR DR	46	--
60"C"+30	W COUGAR DR	30	--
60"C"+30 - 60"C"+68	W COUGAR DR, LT	38	--
	TOTALS =	380	100

CATEGORY 0020

ADJUSTING MANHOLE COVERS

NON-PARTICIPATING BID ITEM

STATION	LOCATION	STAGE	611.8110 (EACH)
16+07	CTH PP, LT	2	1
50"B"+57	E COUGAR DR, RT	1	1
	TOTAL =		2

ADJUSTING WATER VALVE BOXES

NON-PARTICIPATING BID ITEM

STATION	LOCATION	STAGE	SPV.0060.01 (EACH)
11+39	CTH PP, LT	2	1
12+64	CTH PP, LT	2	1
12+79	CTH PP, RT	1	1
13+26	CTH PP, RT	1	1
13+29	CTH PP, RT	1	1
15+12	CTH PP, RT	1	1
16+53	CTH PP, RT	1	1
16+56	CTH PP, RT	1	1
	TOTAL =		8

9

9

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\SHEETSPLAN\DETAILS\W11617_MISC QTYS.DWG
LAYOUT NAME - 08
PLOT DATE : 10/26/2021 8:51 AM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1" = 1'
WISDOT/CADDS SHEET 42

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	PROPERTY LINE	PL.
ACCESS RIGHTS	AR	RECORDED AS	(100')
ACRES	AC.	REFERENCE LINE	R/L.
AND OTHERS	ET.AL.	RELEASE OF RIGHTS	ROR
BARN	B.	REMAINING	REM.
CENTERLINE	C/L	RIGHT-OF-WAY	R/W
CERTIFIED SURVEY MAP	CSM	SECTION	SEC.
CORNER	COR.	SHEO	S.
CONVEYANCE OF RIGHTS	CR	STATION	STA.
DOCUMENT	DOC.	TEMPORARY LIMITED EASEMENT	TLE
EASEMENT	EASE.	VOLUME	V.
GARAGE	G.		
HIGHWAY EASEMENT	H.E.		
HOUSE	H.		
HOUSE TRAILER	H.T.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	P.		
PERMANENT LIMITED EASEMENT	PLE		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	DELTA
LENGTH OF CURVE	L
TANGENT	TAN

CONVENTIONAL UTILITY SYMBOLS

WATER	—W—	SANITARY SEWER	—SAN—
GAS	—G—	STORM SEWER	—SS—
TELEPHONE	—T—		
OVERHEAD TRANSMISSION LINES	—OH—		NON COMPENSABLE / COMPENSABLE
		POWER POLE	○ / ●
ELECTRIC	—E—	TELEPHONE POLE	⌀ / ⌀
CABLE TELEVISION	—TV—	TELEPHONE PEDESTAL	⋈ / ⋈
FIBER OPTIC	—FO—	ELECTRIC TOWER	⊠

CONVENTIONAL SYMBOLS

FOUND SURVEY MONUMENT (WITH POINT NUMBER)	○1040	PROPOSED R/W LINE	
R/W MONUMENT	○ ● (SET)	EXISTING H.E. LINE	
R/W STANDARD	△ ▲ (SET)	PROPERTY LINE	
SIGN	SIGN	LOT & TIE LINES	
SECTION CORNER MONUMENT		SLOPE INTERCEPTS	
SECTION CORNER SYMBOL		CORPORATE LIMITS	
FEE (HATCH VARIES)		NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY ACQUISITION)	
PERMANENT LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
R/W BOUNDARY POINT	RWB20	SECTION LINE	
PARCEL NUMBER	(8)	QUARTER LINE	
UTILITY PARCEL NUMBER	(92)	SIXTEENTH LINE	
SIGN NUMBER (OFF PREMISE)	21-	EXISTING CENTERLINE	
BUILDING		PROPOSED REFERENCE LINE	
		PARALLEL OFFSET	
		ENCROACHMENT	TYPE
		HIGHWAY EASEMENT	

NOTES

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

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 MONUMENTS (TYPICALLY ¾ X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE MONROE COUNTY HIGHWAY DEPARTMENT.

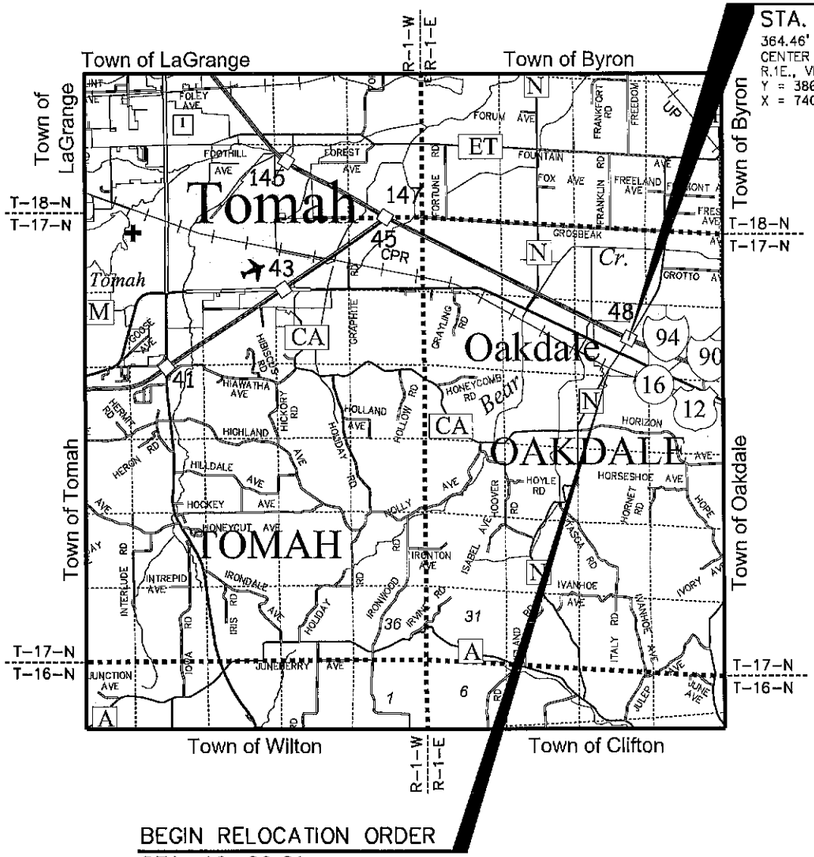
ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

THIS PLAT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSE ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES AND ACCESS RIGHTS.



END RELOCATION ORDER

STA. 17+90.48

364.46' SOUTH AND 995.67' EAST OF THE CENTER QUARTER CORNER OF SECTION 9, T.17N., R.1E., VILLAGE OF OAKDALE, MONROE COUNTY, WI
Y = 386,095.42
X = 740,238.76

BEGIN RELOCATION ORDER

STA. 10+69.81

971.18' SOUTH AND 606.76' EAST OF THE CENTER QUARTER CORNER OF SECTION 9, T.17N., R.1E., VILLAGE OF OAKDALE, MONROE COUNTY, WI
Y = 385,488.70
X = 739,849.86

N

LAYOUT

SCALE 0 — 2 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.138 MI.

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
7117-00-01		
FEDERAL PROJECT NUMBER	4.01	3

PLAT OF RIGHT-OF-WAY REQUIRED FOR

VILLAGE OF OAKDALE, CTH PP

(IH90/94 TO USH 12/16)

CTH PP — MONROE COUNTY

CONSTRUCTION PROJECT NUMBER

7117-00-71

RECEIVED

SEP 24 2021

MONROE COUNTY CLERK

JEWELL
associates engineers, inc.
Engineers - Architects - Surveyors

560 SUNRISE DRIVE
SPRING GREEN, WI 53588
PHONE : 608.588.7484
FAX : 608.588.9322

I HEREBY CERTIFY THAT THIS PLAT WAS MADE FOR MONROE COUNTY, WISCONSIN AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

WISCONSIN FREDERICK G. GRUBER S-2282 SPRING GREEN WIS. LAND SURVEYOR

Frederick G. Gruber 9/23/21

REVISION DATE

APPROVED FOR MONROE COUNTY

DATE 09/24/21 (NAME/TITLE)

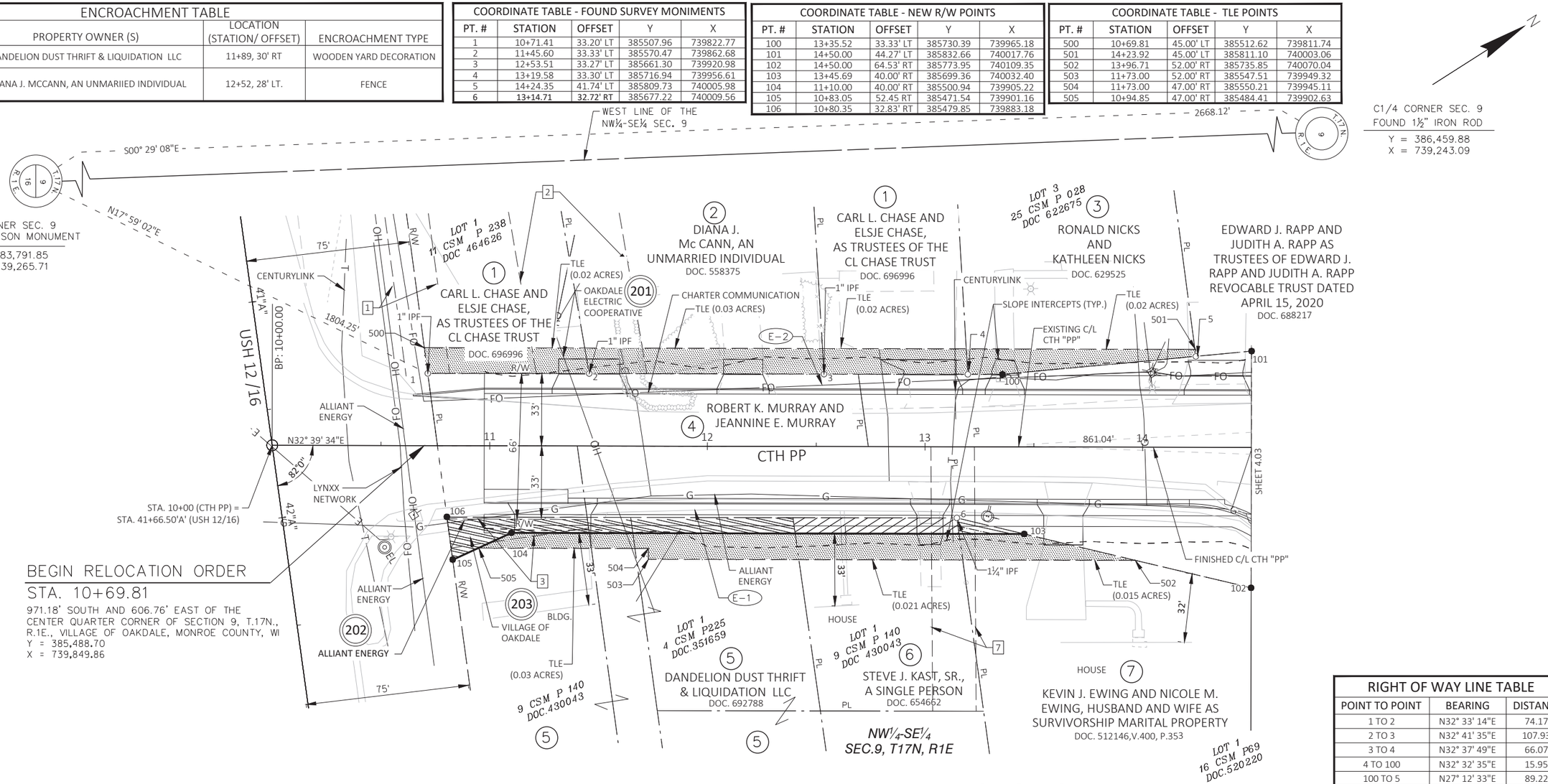
E

ENCROACHMENT TABLE			
ENCROACHMENT	PROPERTY OWNER (S)	LOCATION (STATION/ OFFSET)	ENCROACHMENT TYPE
E-1	DANDELION DUST THRIFT & LIQUIDATION LLC	11+89, 30' RT	WOODEN YARD DECORATION
E-2	DAIANA J. MCCANN, AN UNMARIIED INDIVIDUAL	12+52, 28' LT.	FENCE

COORDINATE TABLE - FOUND SURVEY MONIMENTS				
PT. #	STATION	OFFSET	Y	X
1	10+71.41	33.20' LT	385507.96	739822.77
2	11+45.60	33.33' LT	385570.47	739862.68
3	12+53.51	33.27' LT	385661.30	739920.98
4	13+19.58	33.30' LT	385716.94	739956.61
5	14+24.35	41.74' LT	385809.73	740005.98
6	13+14.71	32.72' RT	385677.22	740009.56

COORDINATE TABLE - NEW R/W POINTS				
PT. #	STATION	OFFSET	Y	X
100	13+35.52	33.33' LT	385730.39	739965.18
101	14+50.00	44.27' LT	385832.66	740017.76
102	14+50.00	64.53' RT	385773.95	740109.35
103	13+45.69	40.00' RT	385699.36	740032.40
104	11+10.00	40.00' RT	385500.94	739905.22
105	10+83.05	52.45 RT	385471.54	739901.16
106	10+80.35	32.83' RT	385479.85	739883.18

COORDINATE TABLE - TLE POINTS				
PT. #	STATION	OFFSET	Y	X
500	10+69.81	45.00' LT	385512.62	739811.74
501	14+23.92	45.00' LT	385811.10	740003.06
502	13+96.71	52.00' RT	385735.85	740070.04
503	11+73.00	52.00' RT	385547.51	739949.32
504	11+73.00	47.00' RT	385550.21	739945.11
505	10+94.85	47.00' RT	385484.41	739902.63



SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES REQ.
1	CARL L. CHASE AND ELSJE CHASE, AS TRUSTEES OF THE CL CHASE TRUST	TLE	-	-	-	0.04
2	DIANA J. MCCANN, AN UNMARRIED INDIVIDUAL	TLE	-	-	-	0.03
3	RONALD NICKS AND KATHLEEN NICKS	TLE	-	-	-	0.02
4	ROBERT K. MURRAY AND JEANNINE E. MURRAY	FEE	-	0.15	0.15	-
5	DANDELION DUST THRIFT & LIQUIDATION LLC	FEE, TLE	0.03	-	0.03	0.03
6	STEVE J. KAST, SR., A SINGLE PERSON	FEE, TLE	0.013	-	0.013	0.021
7	KEVIN J. EWING AND NICOLE M. EWING, HUSBAND AND WIFE AS SURVIVORSHIP MARITAL PROPERTY	FEE,TLE	0.002	-	0.002	0.015
201	OAKDALE ELECTRIC COOPERATIVE	TEMP. CONSTR. EASEMENT				
202	ALLIANT ENERGY	RELEASE OF RIGHTS				
203	VILLAGE OF OAKDALE	TEMP. CONSTR. EASEMENT, RELEASE OF RIGHTS				

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

EASEMENT TABLE				
EASEMENT NUMBER	OWNER	RECORDING INFORMATION	LOCATED IN R/W PARCEL #	REMARKS
1	OAKDALE SANITARY DISTRICT	DOC.#323805	1	20' WIDE SANITARY EASEMENT
2	OAKDALE ELECTRIC COOPERATIVE	DOC.#200908	1 & 2	50' WIDE MAXIMUM EASEMENT
3	VILLAGE OF OAKDALE	DOC.#644365	5	557.3 SQ. FT./ 0.01 ACRE EASEMENT
4	OAKDALE ELECTRIC COOPERATIVE	DOC.# 200912	ALL	BLANKET EASEMENT
5	NORTH-WEST TELEPHONE COMPANY	DOC.# 330454	ALL	BLANKET EASEMENT
7	NORTH-WEST TELEPHONE COMPANY	DOC. # 336624	6 & 7	20' WIDE EASEMENT

RIGHT OF WAY LINE TABLE		
POINT TO POINT	BEARING	DISTANCE
1 TO 2	N32° 33' 14"E	74.17'
2 TO 3	N32° 41' 35"E	107.93'
3 TO 4	N32° 37' 49"E	66.07'
4 TO 100	N32° 32' 35"E	15.95'
100 TO 5	N27° 12' 33"E	89.22'
5 TO 101	N27° 12' 33"E	25.78'
101 TO 102	S57° 20' 26"E	108.79'
102 TO 103	S45° 53' 38"W	107.16'
103 TO 104	S32° 39' 34"W	235.68'
104 TO 105	S07°51'56"W	29.68'
105 TO 106	N65°12'07"W	19.81'
106 TO 1	N65°02'43"W	66.62'

NOTE: EXISTING C/L OF CTH PP BASED ON CENTERLINE OF EXISTING PAVEMENT.

EXISTING RIGHT-OF-WAY FOR CTH PP BASED ON THE CENTERLINE OF EXISTING PAVEMENT, WIS. STATUTE 82.31(2)., AND CSM 464626, CSM 622675, CSM 430043, CSM 351659, CSM 520220, CSM 590141, AND CSM 449164.

REVISION DATE

DATE

SCALE, FEET 0 25 50

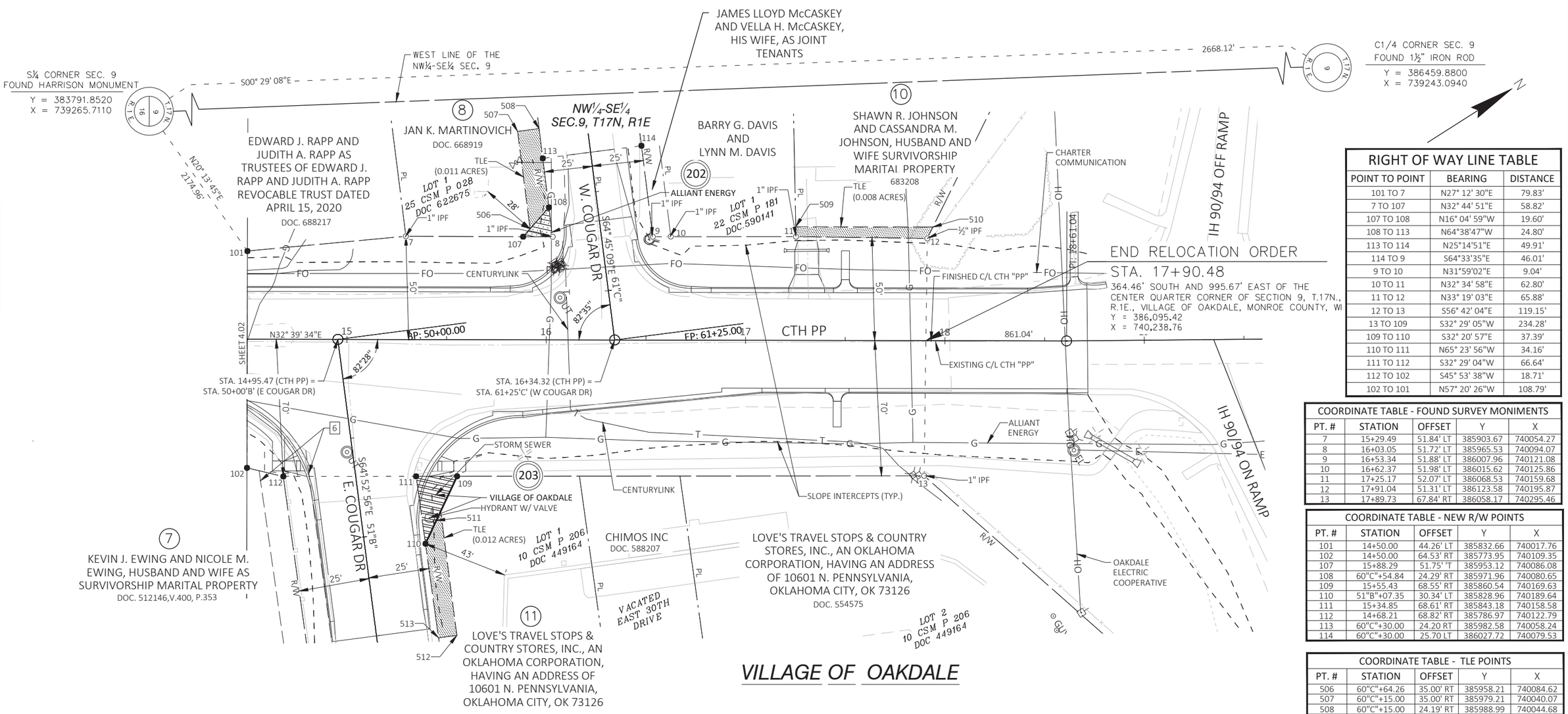
GRID FACTOR N/A

HWY: CTH PP | STATE R/W PROJECT NUMBER 7117-00-01 | PLAT SHEET 4.02

COUNTY: MONROE | CONSTRUCTION PROJECT NUMBER 7117-00-71 | PS&E SHEET _____ E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : _____ PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 75



RIGHT OF WAY LINE TABLE

POINT TO POINT	BEARING	DISTANCE
101 TO 7	N27° 12' 30"E	79.83'
7 TO 107	N32° 44' 51"E	58.82'
107 TO 108	N16° 04' 59"W	19.60'
108 TO 113	N64°38'47"W	24.80'
113 TO 114	N25°14'51"E	49.91'
114 TO 9	S64°33'35"E	46.01'
9 TO 10	N31°59'02"E	9.04'
10 TO 11	N32° 34' 58"E	62.80'
11 TO 12	N33° 19' 03"E	65.88'
12 TO 13	S56° 42' 04"E	119.15'
13 TO 109	S32° 29' 05"W	234.28'
109 TO 110	S32° 20' 57"E	37.39'
110 TO 111	N65° 23' 56"W	34.16'
111 TO 112	S32° 29' 04"W	66.64'
112 TO 102	S45° 53' 38"W	18.71'
102 TO 101	N57° 20' 26"W	108.79'

COORDINATE TABLE - FOUND SURVEY MONIMENTS

PT. #	STATION	OFFSET	Y	X
7	15+29.49	51.84' LT	385903.67	740054.27
8	16+03.05	51.72' LT	385965.53	740094.07
9	16+53.34	51.88' LT	386007.96	740121.08
10	16+62.37	51.98' LT	386015.62	740125.86
11	17+25.17	52.07' LT	386068.53	740159.68
12	17+91.04	51.31' LT	386123.58	740195.87
13	17+89.73	67.84' RT	386058.17	740295.46

COORDINATE TABLE - NEW R/W POINTS

PT. #	STATION	OFFSET	Y	X
101	14+50.00	44.26' LT	385832.66	740017.76
102	14+50.00	64.53' RT	385773.95	740109.35
107	15+88.29	51.75' "T	385953.12	740086.08
108	60"C"+54.84	24.29' RT	385971.96	740080.65
109	15+55.43	68.55' RT	385860.54	740169.63
110	51"B"+07.35	30.34' LT	385828.96	740189.64
111	15+34.85	68.61' RT	385843.18	740158.58
112	14+68.21	68.82' RT	385786.97	740122.79
113	60"C"+30.00	24.20 RT	385982.58	740058.24
114	60"C"+30.00	25.70 LT	386027.72	740079.53

COORDINATE TABLE - TLE POINTS

PT. #	STATION	OFFSET	Y	X
506	60"C"+64.26	35.00' RT	385958.21	740084.62
507	60"C"+15.00	35.00' RT	385979.21	740040.07
508	60"C"+15.00	24.19' RT	385988.99	740044.68
509	17+25.06	57.00' LT	386071.08	740155.46
510	17+93.84	57.00' LT	386129.01	740192.58
511	50"B"+92.20	40.00' LT	385844.13	740180.03
512	51"B"+55.00	40.00' LT	385817.48	740236.88
513	51"B"+55.00	30.77' LT	385809.12	740232.97

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES REQ.	PLE ACRES REQ.
8	JAN K. MARTINOVICH	FEE, PLE,TLE	-	0.02	0.02	0.011	0.003
10	SHAWN R. JOHNSON AND CASSANDRA M. JOHNSON, HUSBAND AND WIFE SURVIVORSHIP MARITAL PROPERTY	TLE	-	-	-	0.008	-
11	LOVE'S TRAVEL STOPS & COUNTRY STORES, INC., AN OKLAHOMA CORPORATION, HAVING AN ADDRESS OF 10601 N. PENNSYLVANIA, OKLAHOMA CITY, OK 73126	FEE, TLE	0.04	-	0.04	0.012	-
202	ALLIANT ENERGY	RELEASE OF RIGHTS					
203	VILLAGE OF OAKDALE	RELEASE OF RIGHTS					

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

EASEMENT TABLE

EASEMENT NUMBER	OWNER	RECORDING INFORMATION	LOCATED IN R/W PARCEL #	REMARKS
4	OAKDALE ELECTRIC COOPERATIVE	DOC.# 200912	ALL	BLANKET EASEMENT
5	NORTH-WEST TELEPHONE COMPANY	DOC.# 330454	ALL	BLANKET EASEMENT
6	NORTH-WEST TELEPHONE COMPANY	DOC. #330436, V.76,P.351	4	20' WIDE TELEPHONE EASEMENT

NOTE: EXISTING C/L OF CTH PP BASED ON CENTERLINE OF EXISTING PAVEMENT.

EXISTING RIGHT-OF-WAY FOR CTH PP BASED ON THE CENTERLINE OF EXISTING PAVEMENT, WIS. STATUTE 82.31(2)., AND CSM 464626, CSM 622675, CSM 430043, CSM 351659, CSM 520220, CSM 590141, AND CSM 449164.

REVISION DATE

DATE

SCALE. FEET 0 25 50

GRID FACTOR N/A

HWY: CTH PP

COUNTY: MONROE

STATE R/W PROJECT NUMBER 7117-00-01

CONSTRUCTION PROJECT NUMBER 7117-00-71

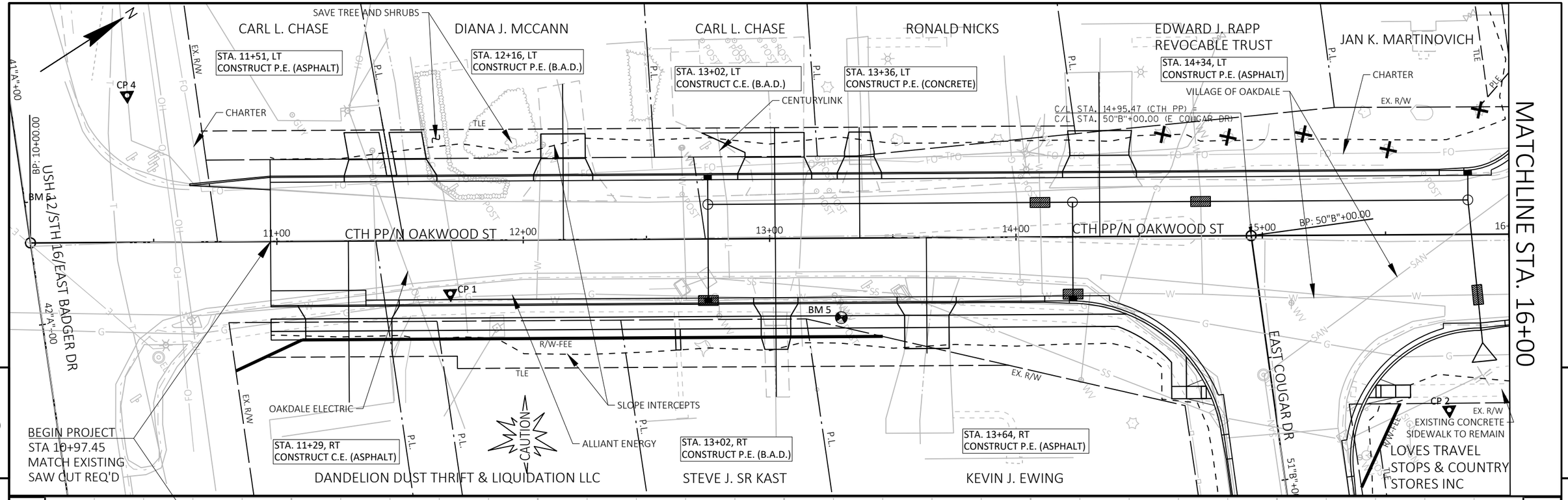
PLAT SHEET 4.03

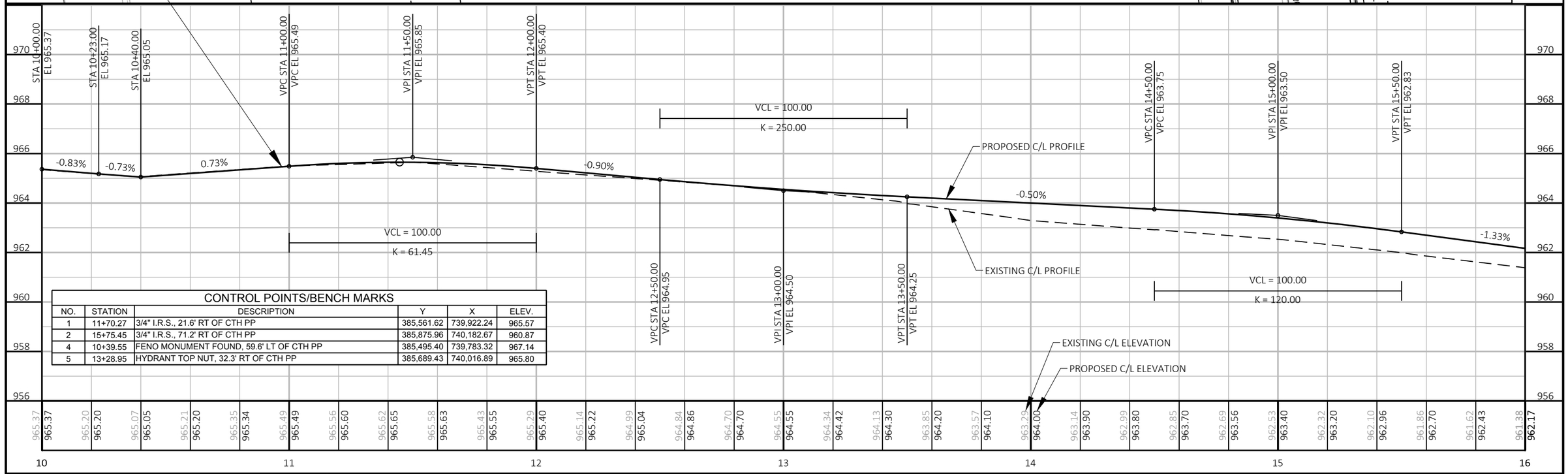
PS&E SHEET _____ E

FILE NAME : $$....designfile....$$

PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : _____PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 75





CONTROL POINTS/BENCH MARKS					
NO.	STATION	DESCRIPTION	Y	X	ELEV.
1	11+70.27	3/4" I.R.S., 21.6' RT OF CTH PP	385,561.62	739,922.24	965.57
2	15+75.45	3/4" I.R.S., 71.2' RT OF CTH PP	385,875.96	740,182.67	960.87
4	10+39.55	FENO MONUMENT FOUND, 59.6' LT OF CTH PP	385,495.40	739,783.32	967.14
5	13+28.95	HYDRANT TOP NUT, 32.3' RT OF CTH PP	385,689.43	740,016.89	965.80

965.37	965.20	965.07	965.05	965.21	965.20	965.35	965.34	965.49	965.49	965.56	965.60	965.62	965.65	965.58	965.63	965.43	965.55	965.29	965.40	965.14	965.22	964.99	965.04	964.84	964.86	964.70	964.70	964.55	964.55	964.34	964.42	964.13	964.30	963.85	964.20	963.57	964.10	963.29	964.00	963.14	963.90	962.99	963.80	962.85	963.70	962.69	963.56	962.53	963.40	962.32	963.20	962.10	962.96	961.86	962.70	961.62	962.43	961.38	962.17
10								11										12										13										14										15										16									

PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	PLAN AND PROFILE: CTH PP	SHEET 44	E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\SHEETSPLAN\PLAN & PROFILE SHEETS\W11617_PLANPROFILE.DWG
LAYOUT NAME - 1
PLOT DATE : 10/13/2021 8:44 AM
PLOT BY : ECKELBERG, PATRICK
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

CONTROL POINTS/BENCH MARKS					
NO.	STATION	DESCRIPTION	Y	X	ELEV.
3	18+37.38	3/4" I.R.S., 57.5' RT OF CTH PP	386,103.89	740,312.46	960.95
6	16+52.13	HYDRANT TOP NUT, 50.5' LT OF CTH PP	386,006.20	740,121.57	960.63

MATCHLINE STA. 16+00

WEST COUGAR DR

BARRY G. DAVIS

SHAWN R. JOHNSON

STA. 17+31, LT
CONSTRUCT P.E. (ASPHALT)
(1) 12-INCH CPCP REQ'D.

STATE OF WISCONSIN
(DEPARTMENT OF TRANSPORTATION)

I-90 EB RAMP

CHARTER

BM 6

EX. R/W

TLE

P.I. 18+61.01

EP: 20+84.85

61"C"+00

EP: 61"C"+25.00

17+00

18+00

19+00

CTH PP/N OAKWOOD ST

20+00

C/L STA. 16+34.32 (CTH PP) =
C/L STA.61"C"+25.00 (W COUGAR DR)

CP 3

STA. 18+84, RT.
(1) 24-INCH CPCP REQ'D.
2 APRON ENDWALLS STEEL REQ'D.

EX. R/W

VILLAGE OF OAKDALE

CENTURYLINK

SLOPE INTERCEPTS

ALLIANT ENERGY

WISDOT

OAKDALE ELECTRIC

EXISTING CONCRETE SIDEWALK
TO REMAIN

CAUTION

LOVES TRAVEL STOPS &
COUNTRY STORES INC

STATE OF WISCONSIN
(DEPARTMENT OF TRANSPORTATION)

I-90 EB RAMP

END PROJECT
STA 18+71.50
MATCH EXISTING
SAW CUT REQ'D

5

5

VCL = 200.00

K = 90.82

VPC STA 20+05.00
VPC EL 962.93

VPI STA 20+30.00
VPI EL 963.15

VPT STA 20+55.00
VPT EL 963.27

STA 20+81.80
EL 963.40

PROPOSED C/L PROFILE

0.87%

0.48%

EXISTING C/L PROFILE

VPC STA 16+25.00
VPC EL 961.83

VPI STA 17+25.00
VPI EL 960.50

VPT STA 18+25.00
VPT EL 961.37

VCL = 50.00

K = 129.45

EXISTING C/L ELEVATION

PROPOSED C/L ELEVATION

968 966 964 962 960 958 956 954

16	17	18	19	20	21	22
961.38 / 962.17	961.31 / 961.90	961.27 / 961.65	961.24 / 961.43	961.17 / 961.27	961.11 / 961.14	961.13 / 961.06
961.14 / 961.03	961.17 / 961.04	961.20 / 961.09	961.23 / 961.19	961.30 / 961.33	961.38 / 961.50	961.50 / 961.67
961.69 / 961.85	961.88 / 962.02	962.08 / 962.19	962.28 / 962.37	962.48 / 962.54	962.67 / 962.72	962.86 / 962.89
963.05 / 963.05	963.19 / 963.19	963.29 / 963.29	963.39 / 963.39			

PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	PLAN AND PROFILE: CTH PP	SHEET 45	E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\SHEETSPLAN\PLAN & PROFILE SHEETS\W11617_PLANPROFILE.DWG
LAYOUT NAME - 2

PLOT DATE : 10/13/2021 8:44 AM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:40 FT

CONTROL POINTS/BENCH MARKS					
NO.	STATION	DESCRIPTION	Y	X	ELEV.
2	15+75.45	3/4" I.R.S., 71.2' RT OF CTH PP	385,875.96	740,182.67	960.87

JAN K. MARTINOVICH

LOVES TRAVEL STOPS & COUNTRY STORES INC

CHARTER

P.L.

C/L STA. 14+95.47 (CTH PP) =
C/L STA. 50"B"+00.00 (E COUGAR DR)

EX. R/W

CP 2

EXISTING CONCRETE SIDEWALK TO REMAIN

R/W-FEE

TLE

EX. R/W

BP: 50"B"+00.00

15+00

51"B"+00

EAST COUGAR DR

52"B"+00

53"B"+00

EDWARD J. RAPP
REVOCABLE TRUST

CTH PP/N OAKWOOD ST

14+00

EX. R/W

VILLAGE OF OAKDALE

EX. R/W

P.L.

RONALD NICKS

ALLIANT ENERGY

CAUTION

KEVIN J. EWING

SLOPE INTERCEPTS

P.L.

BEGIN CONSTRUCTION
STA 50"B"+24.21

END CONSTRUCTION
STA 50"B"+60
MATCH EXISTING
SAW CUT REQ'D

STA 50"B"+00.00
EL 963.44

STA 50"B"+36.30
EL 962.67

STA 51"B"+50.00
EL 962.40

PROPOSED C/L PROFILE

-2.14%

-0.24%

EXISTING C/L PROFILE

EXISTING C/L ELEVATION

PROPOSED C/L ELEVATION

968
966
964
962
960
958
956
954

962.57 963.44 | 962.22 963.02 | 962.44 962.66 | 962.56 962.61 | 962.54 962.57 | 962.50 962.52 | 962.46 962.47 | 962.42 962.42 | 962.38 962.22

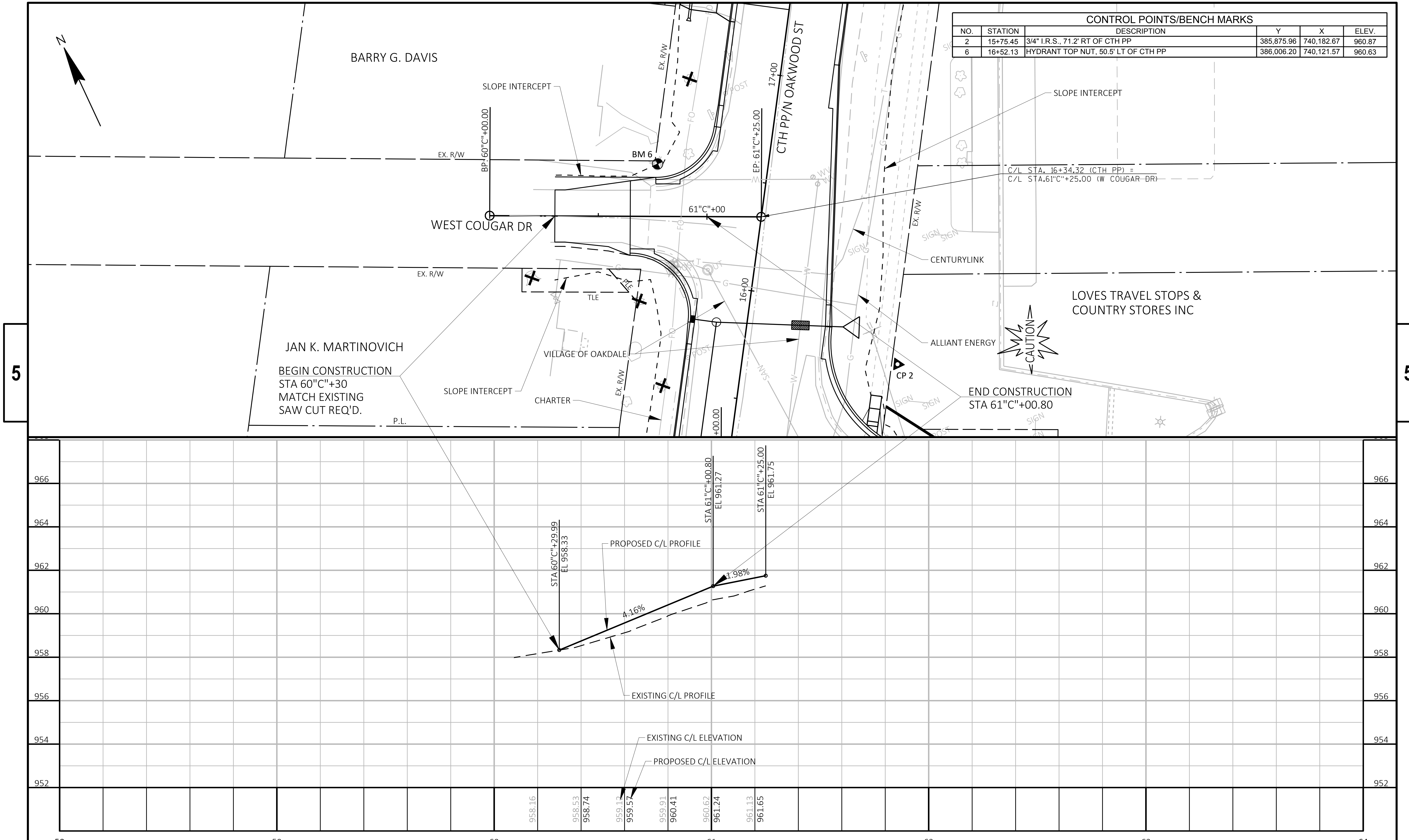
48 49 50 51 52 53 54

PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	PLAN AND PROFILE: EAST COUGAR DRIVE ("B" LINE)	SHEET 46	E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\SHEETSPLAN\PLAN & PROFILE SHEETS\W11617_PLANPROFILE.DWG
LAYOUT NAME - 4

PLOT DATE : 10/13/2021 8:44 AM PLOT BY : ECKELBERG, PATRICK PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44



N
BARRY G. DAVIS
SLOPE INTERCEPT
EX. R/W
BP: 60"C"+00.00
BM 6
EP: 61"C"+25.00
CTH PP/N OAKWOOD ST
17+00
16+00
61"C"+00
WEST COUGAR DR
C/L STA. 16+34.32 (CTH PP) =
C/L STA.61"C"+25.00 (W COUGAR DR)
CENTURYLINK
LOVES TRAVEL STOPS &
COUNTRY STORES INC
ALLIANT ENERGY
CAUTION
CP 2
TLE
JAN K. MARTINOVICH
BEGIN CONSTRUCTION
STA 60"C"+30
MATCH EXISTING
SAW CUT REQ'D.
VILLAGE OF OAKDALE
CHARTER
END CONSTRUCTION
STA 61"C"+00.80
P.L.
SIGN
POST
5
STA 60"C"+29.99
EL 958.33
STA 61"C"+00.80
EL 961.27
STA 61"C"+25.00
EL 961.75
PROPOSED C/L PROFILE
4.16%
1.98%
EXISTING C/L PROFILE
EXISTING C/L ELEVATION
PROPOSED C/L ELEVATION
966
964
962
960
958
956
954
952
958.16
958.53
958.74
959.12
959.57
959.91
960.41
960.62
961.24
961.13
961.65
58
59
60
61
62
63
64

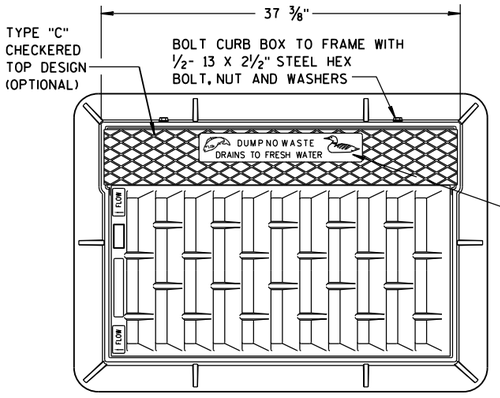
CONTROL POINTS/BENCH MARKS

NO.	STATION	DESCRIPTION	Y	X	ELEV.
2	15+75.45	3/4" I.R.S., 71.2' RT OF CTH PP	385,875.96	740,182.67	960.87
6	16+52.13	HYDRANT TOP NUT, 50.5' LT OF CTH PP	386,006.20	740,121.57	960.63

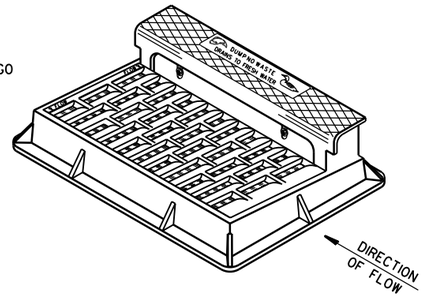
PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	PLAN AND PROFILE: WEST COUGAR DRIVE ("C" LINE)	SHEET 47	E

Standard Detail Drawing List

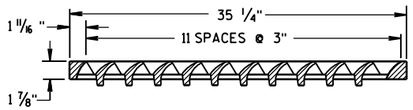
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-09	URBAN DOWELED CONCRETE PAVEMENT
13C18-07A	CONCRETE PAVEMENT JOINTING
13C18-07B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-07C	CONCRETE PAVEMENT JOINT TYPES
13C18-07D	CONCRETE PAVEMENT JOINT TYPES AT UTILITY FIXTURES
13C18-07F	CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20B	PAVEMENT MARKING (TURN LANES)
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15D30-06A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-06B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-06C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

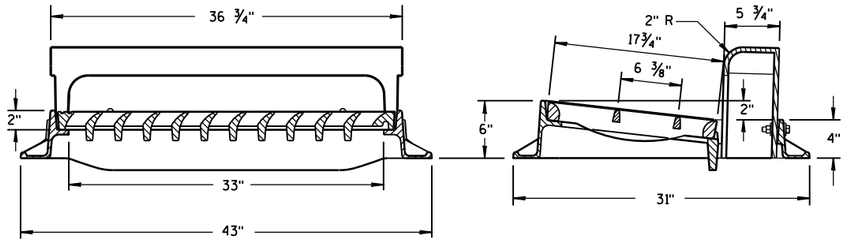


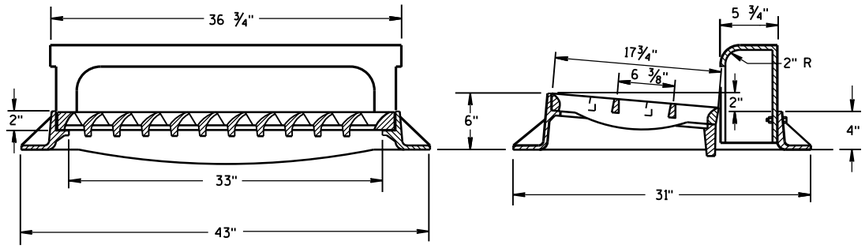
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

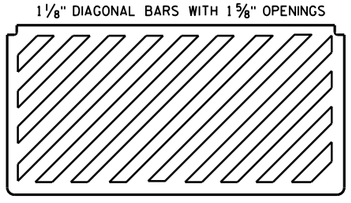






TYPE "H"

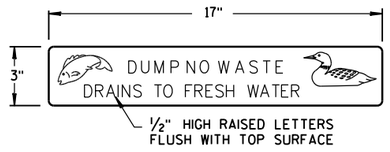
NOTE: EITHER CASTING IS ACCEPTABLE



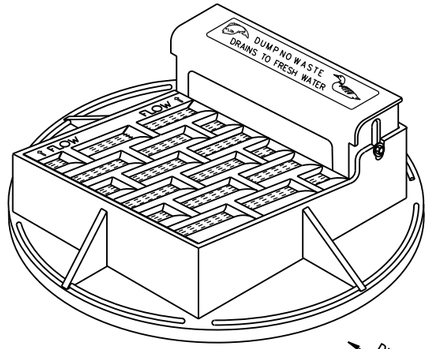
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

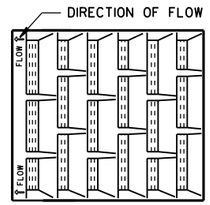
NOTE:
GRATE IS REVERSIBLE.

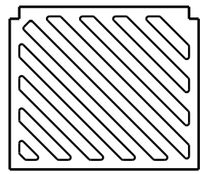
GENERAL NOTES

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

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

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

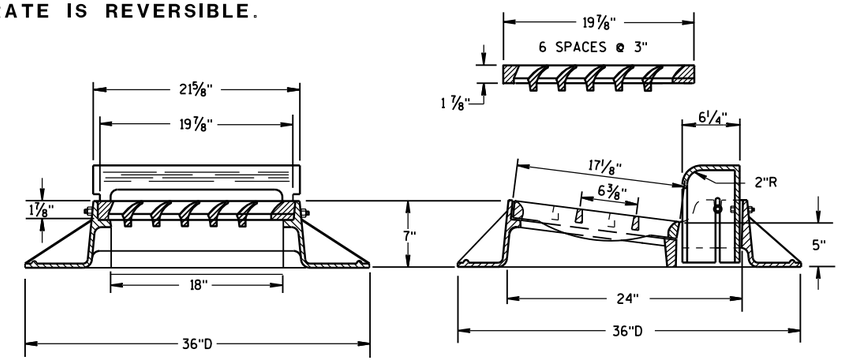




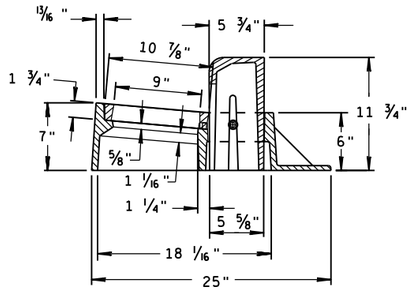
SPECIAL GRATE FOR TYPE "A" COVER

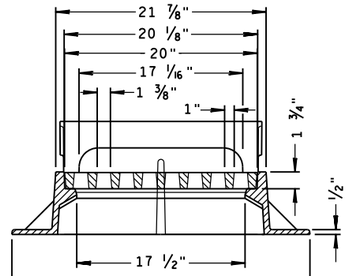
(MEASURES 19 3/4" X 17" X 1 7/8")

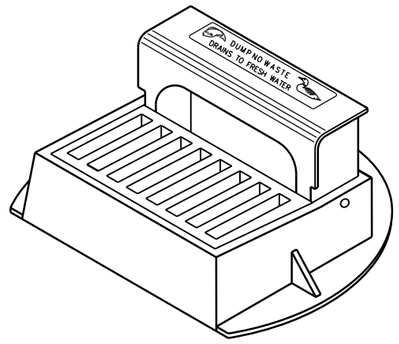
(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "A"







TYPE "Z"

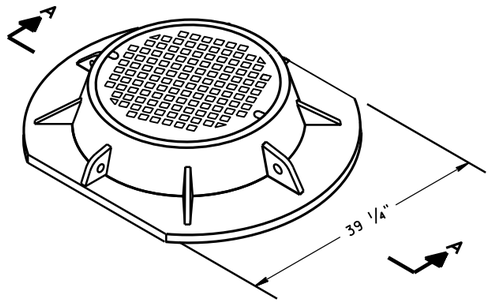
INLET COVERS
TYPE A, H, A-S, H-S & Z

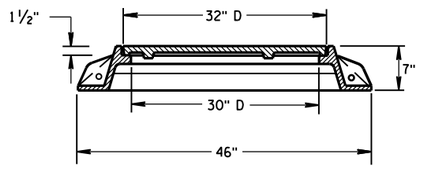
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

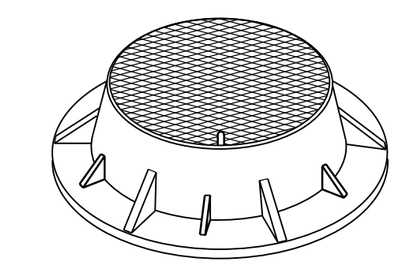
6

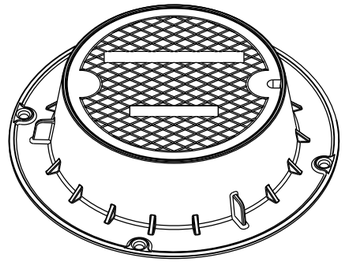
S.D.D. 8 A 5-19a

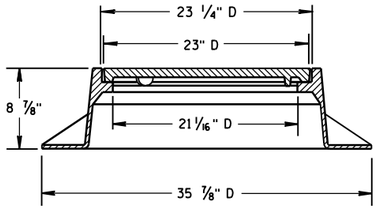


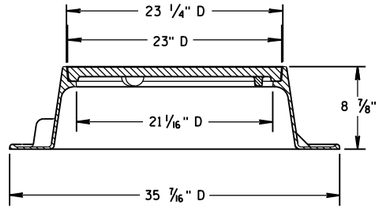


SECTION A-A
TYPE "K"









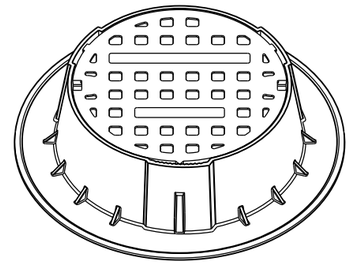
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

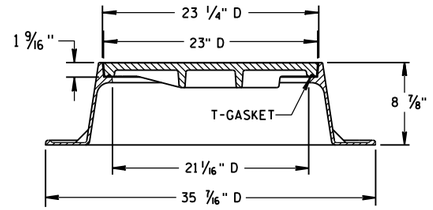
GENERAL NOTES

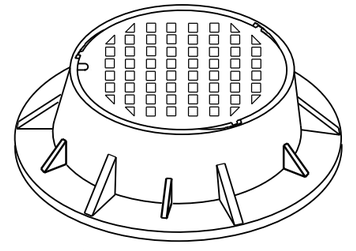
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

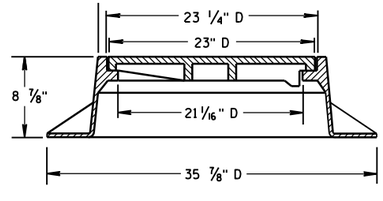
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

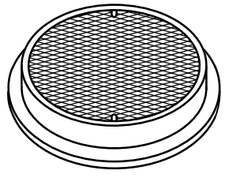


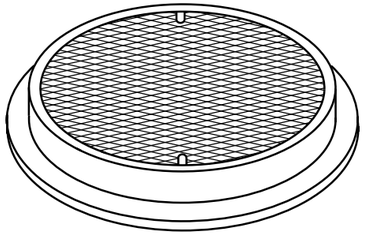


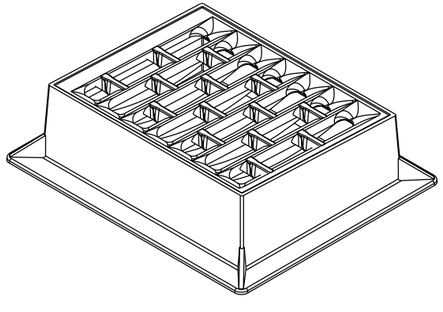


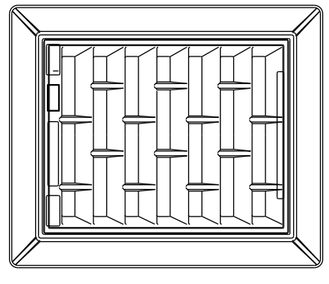


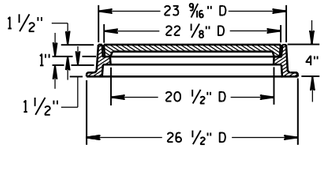
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



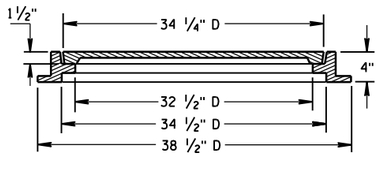




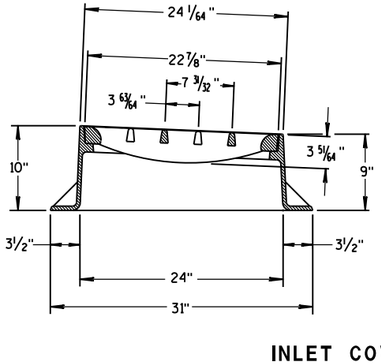


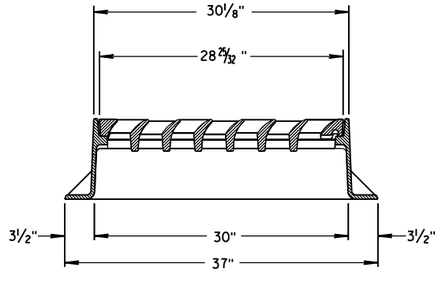


TYPE "L"



TYPE "M"





INLET COVER TYPE "BW"

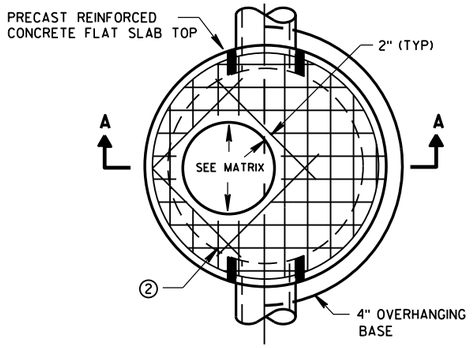
INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

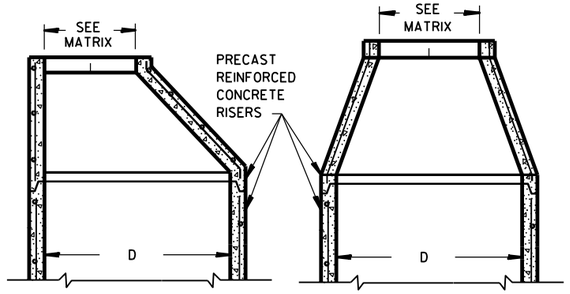
APPROVED
11/27/2013
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

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

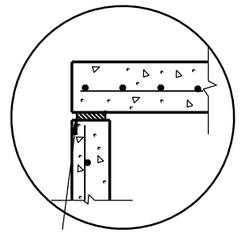


PLAN VIEW CIRCULAR OPENING

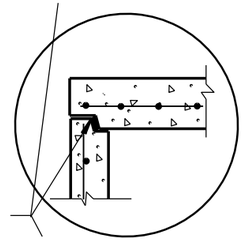


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

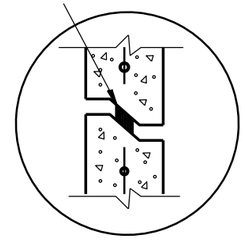


TOP WITH PLAIN END JOINT



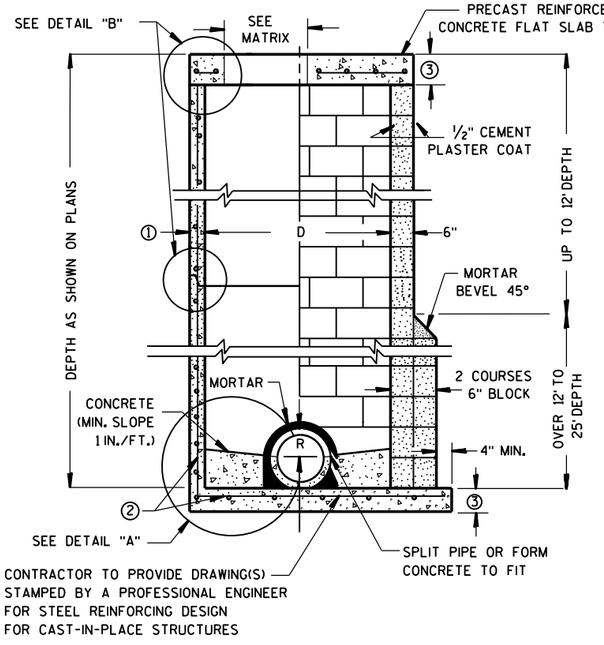
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



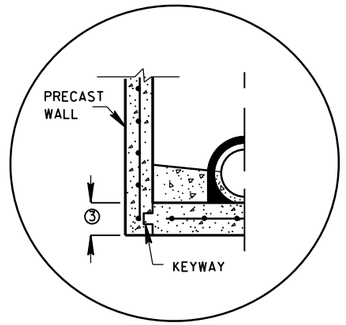
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

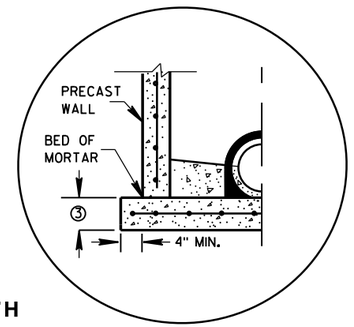


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

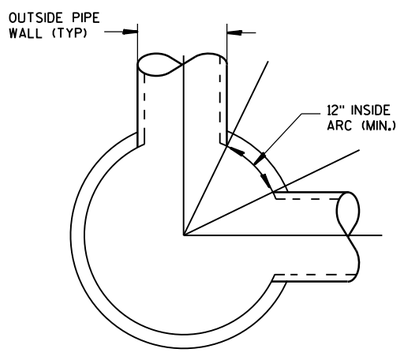


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

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

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

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

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

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

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

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

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

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

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

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

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

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

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

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

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

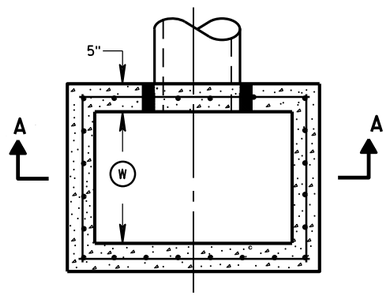
APPROVED

Sept., 2016
DATE

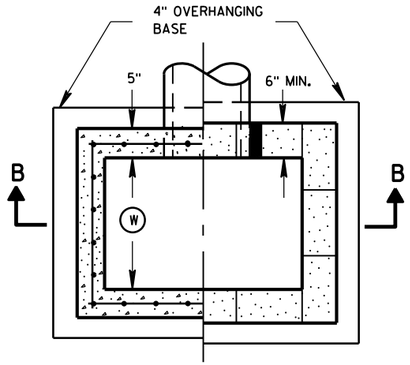
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERV

FHWA

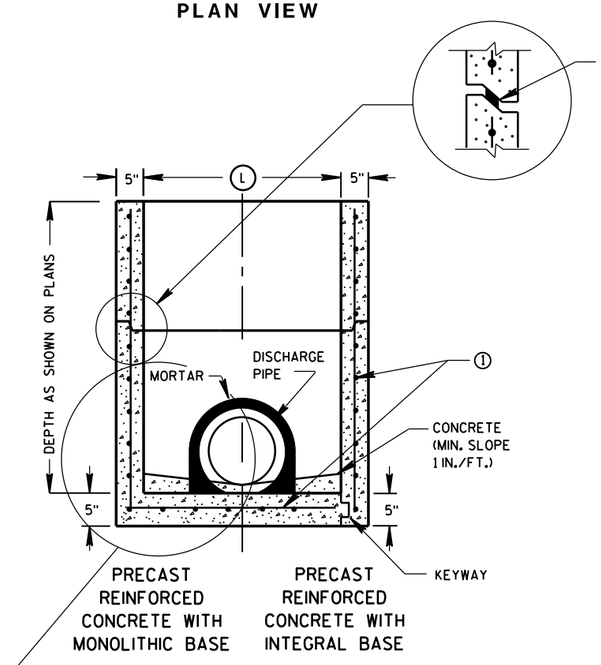
6
S.D.D. 8 B 9-2



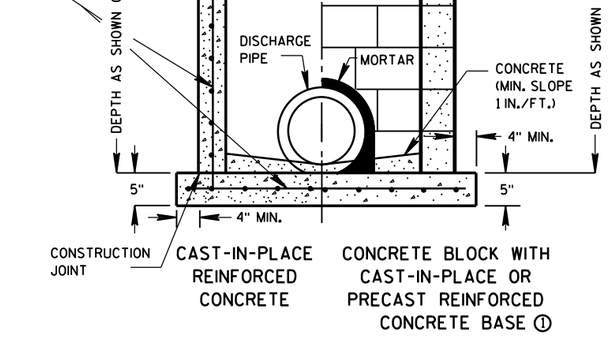
PLAN VIEW



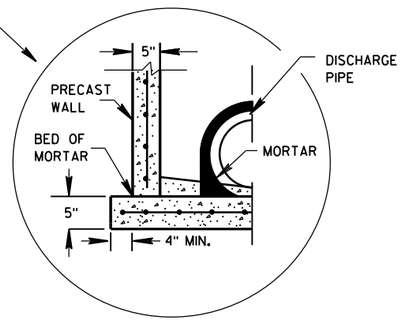
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

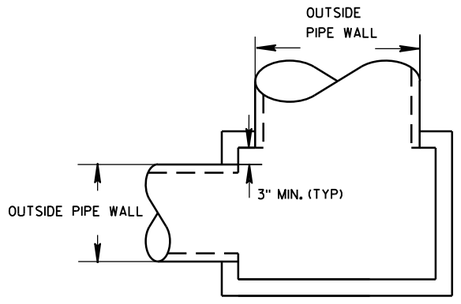
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

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



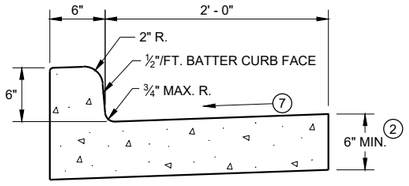
DETAIL "A"

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

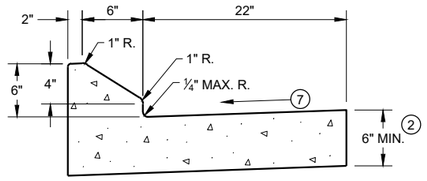
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

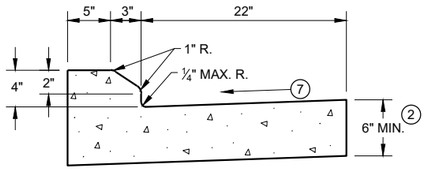
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT



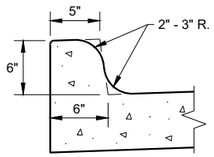
TYPES A (1) & D



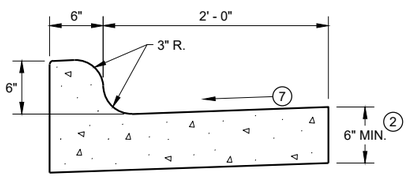
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

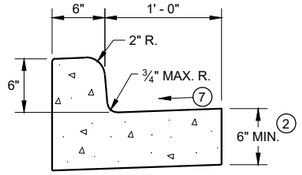


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



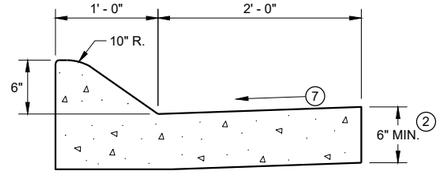
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

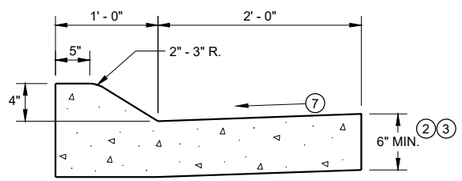


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

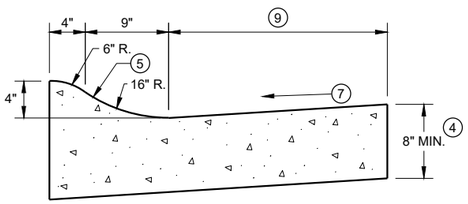


6" SLOPED CURB TYPES A (1) & D



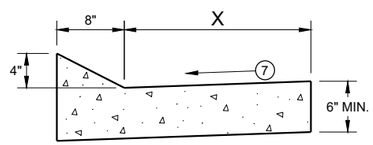
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

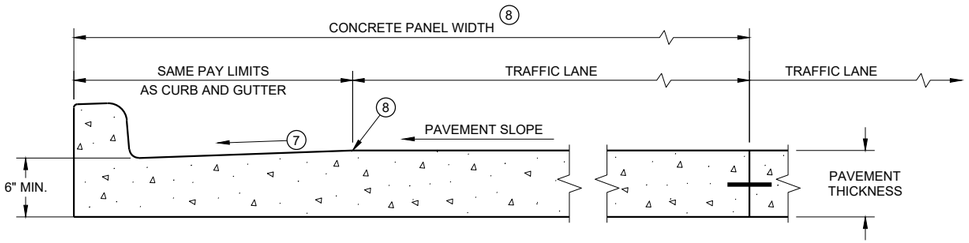


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

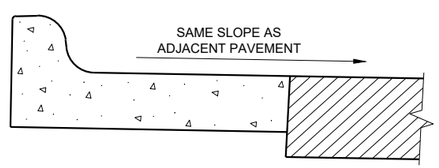
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

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

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

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

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

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

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

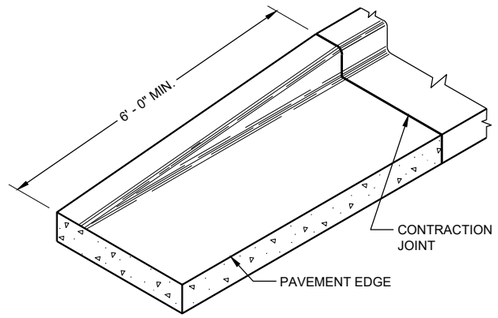
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

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

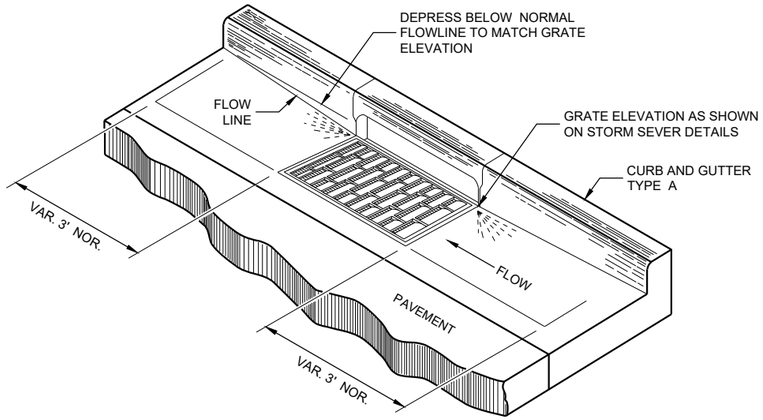
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D01 - 22a



END SECTIONCURB AND GUTTER



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

GENERAL NOTES

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

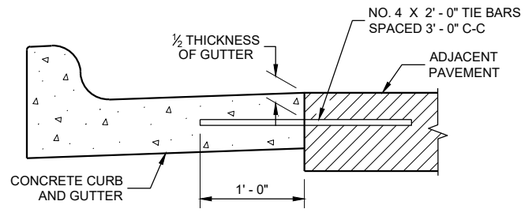
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

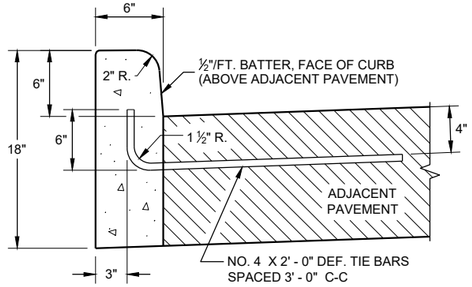
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

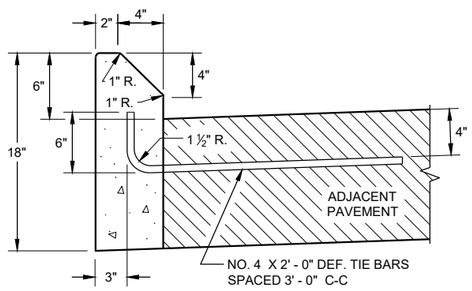
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

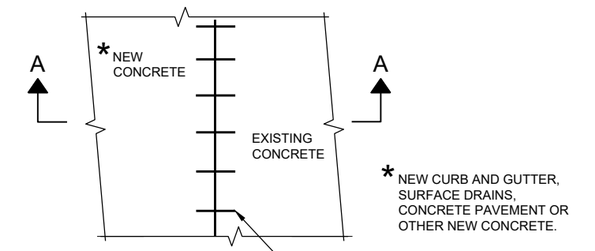


TYPES A (1) & D

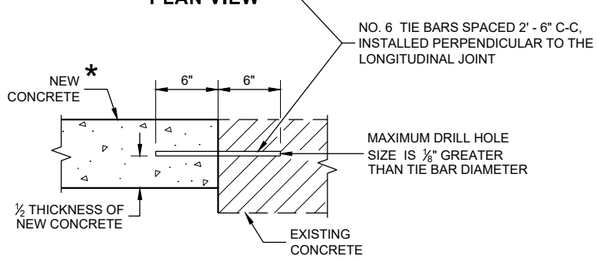


TYPES G (1) & J

CONCRETE CURB

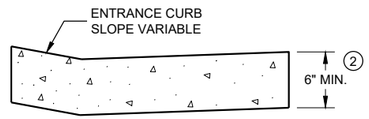


PLAN VIEW



SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



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

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

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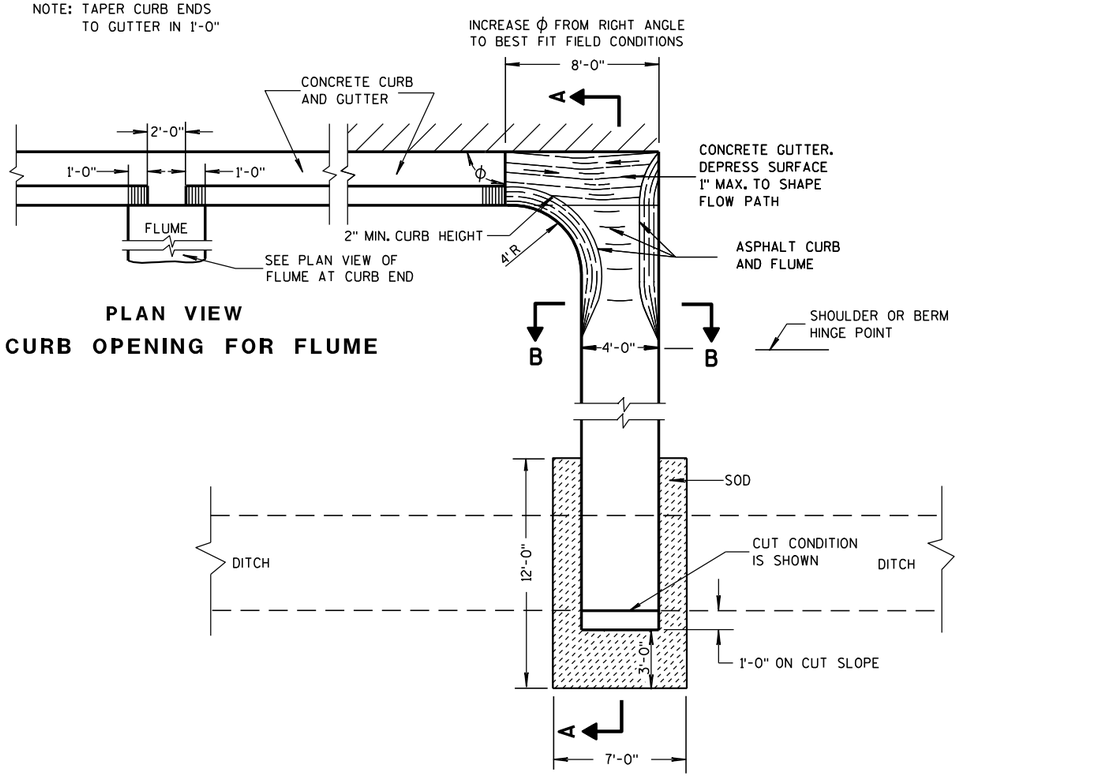
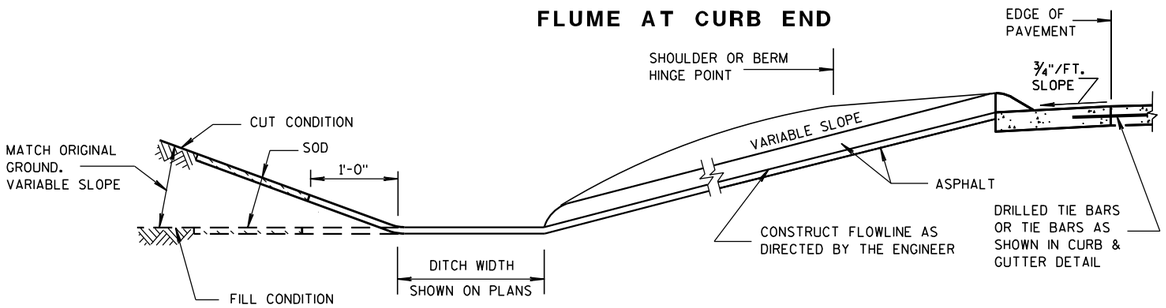
SDD08D01 - 22b

ASPHALTIC FLUME

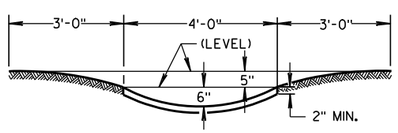


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

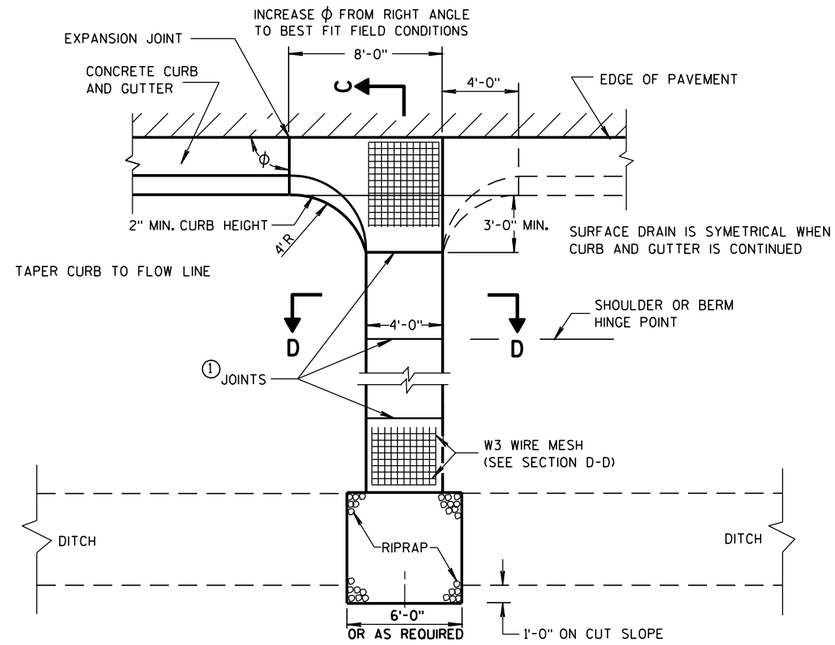
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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

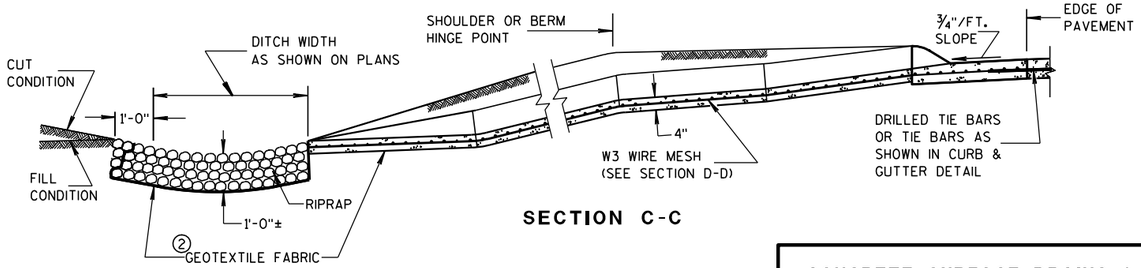
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

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

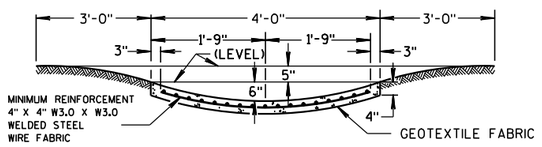
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

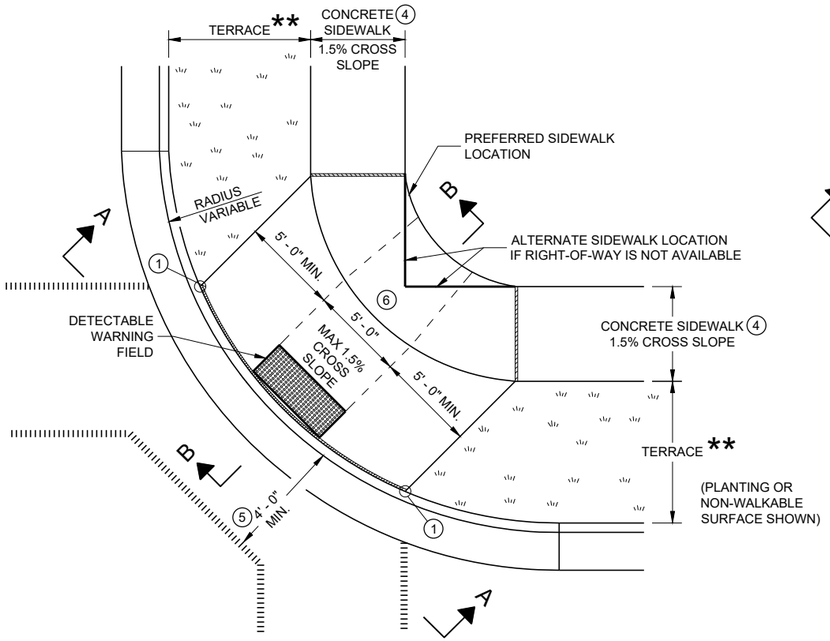
APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
55 MENT
FHWA

6

S.D.D. 8 D 4-5

6

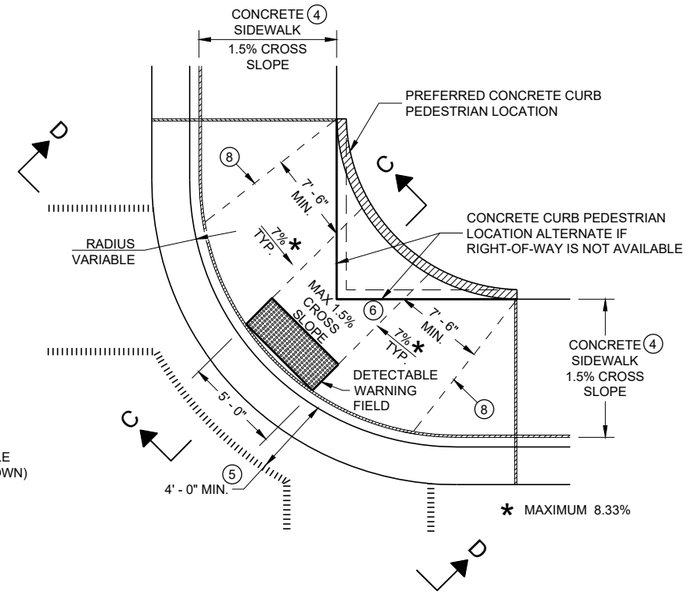
S.D.D. 8 D 4-5



PLAN VIEW

CURB RAMP TYPE 1

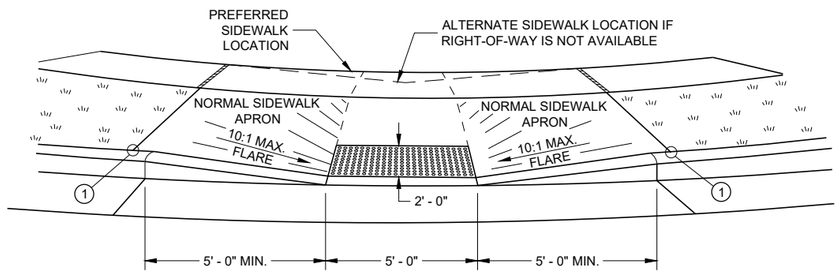
(CENTER OF CORNER RADIUS)



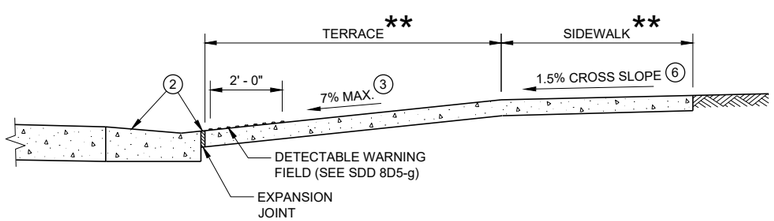
PLAN VIEW

CURB RAMP TYPE 1 - A

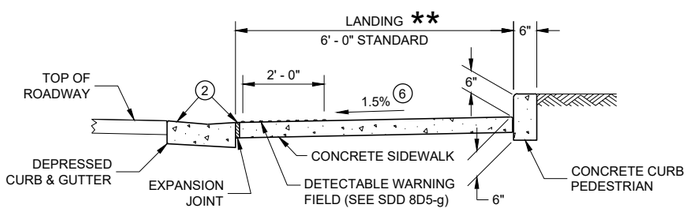
(NO TERRACE)



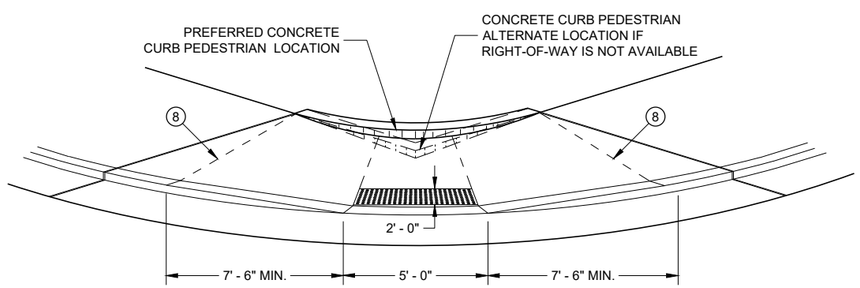
VIEW A - A FOR TYPE 1



SECTION B - B FOR TYPE 1



SECTION C - C FOR TYPE 1 - A



VIEW D - D FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

LEGEND

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

CURB RAMPS
TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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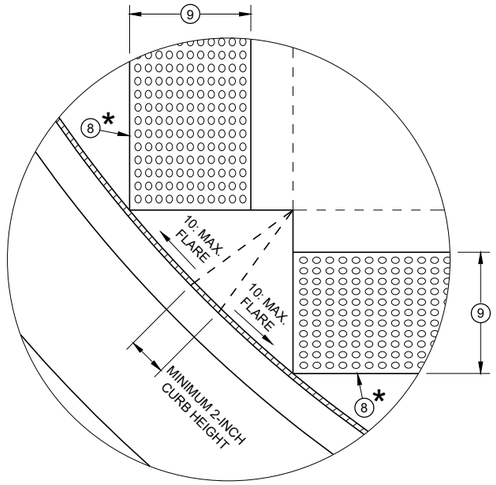
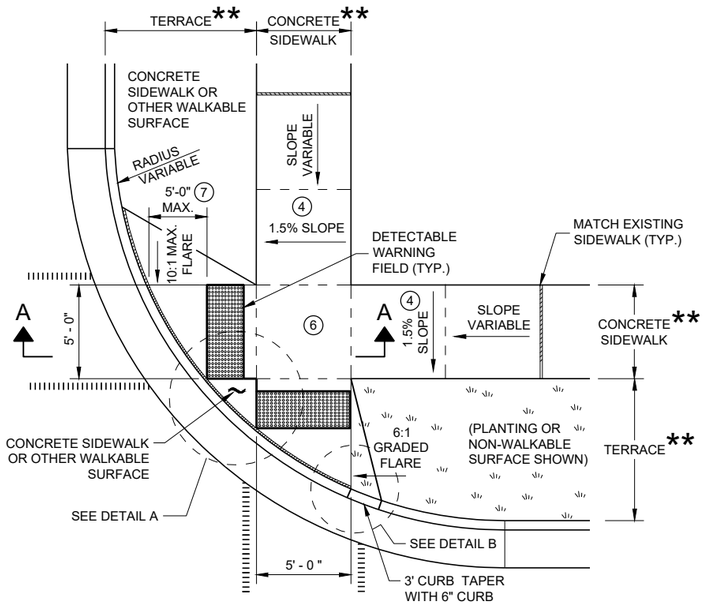
SDD 08D05 - 20a



DETAIL A



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

GENERAL NOTES

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

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

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

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

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

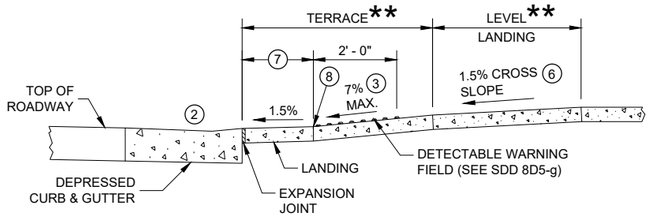
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

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

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

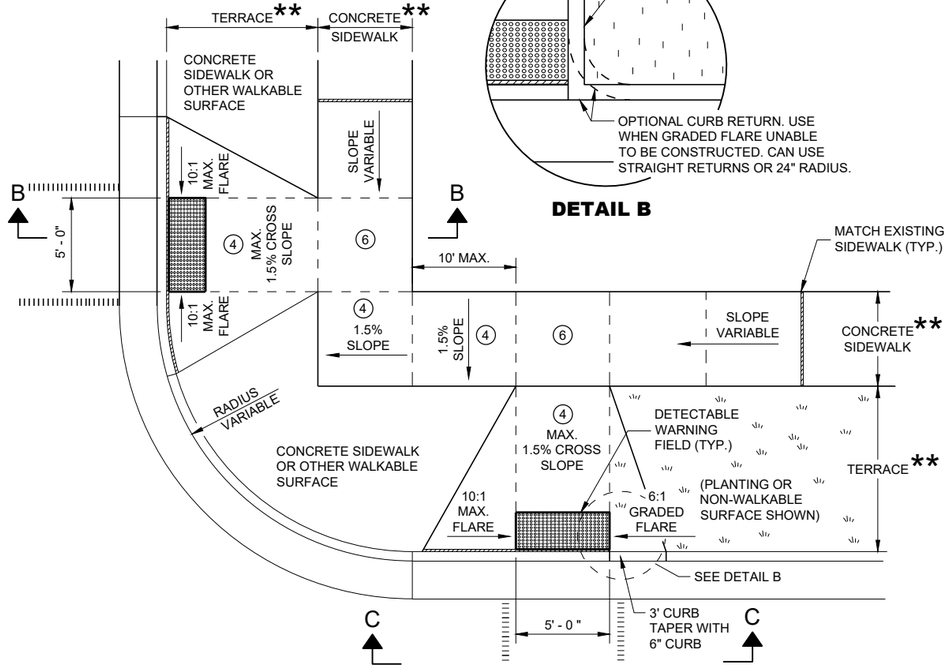
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



SECTION A - A FOR TYPE 2

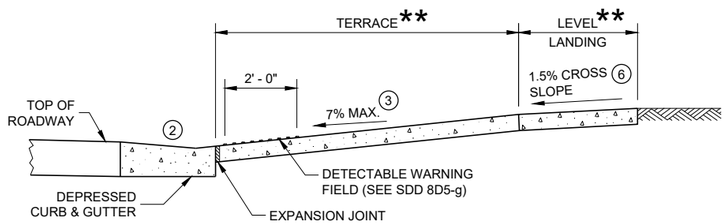
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS



DETAIL B

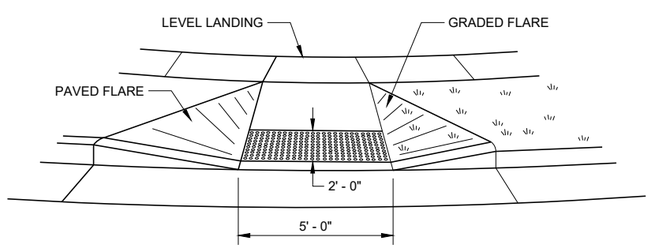
PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



SECTION B - B FOR TYPE 3

LEGEND

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



VIEW C - C FOR TYPE 3

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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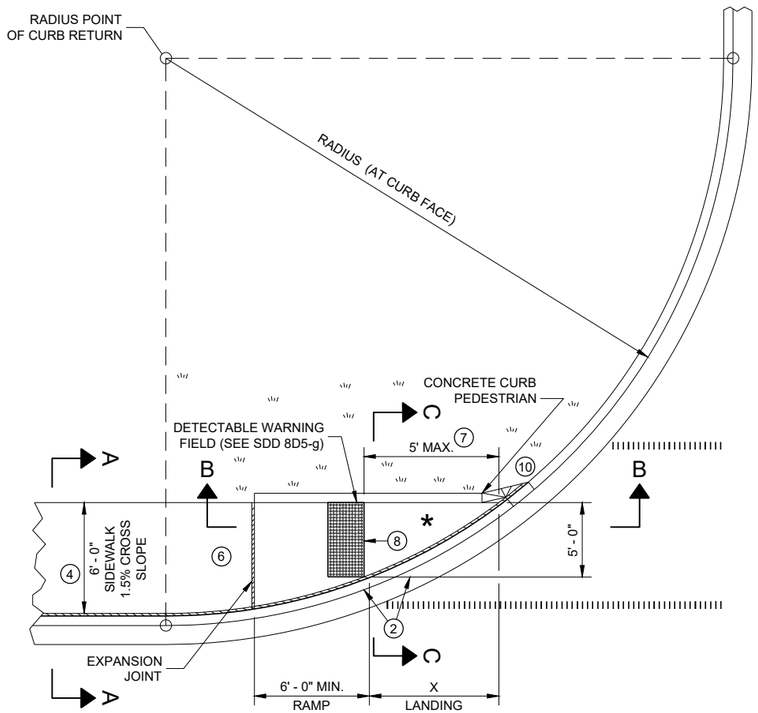
SDD 08D05 - 20b

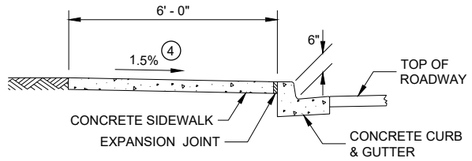


PLAN VIEW

CURB RAMP TYPE 4A

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

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

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

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

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

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

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

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

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

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

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

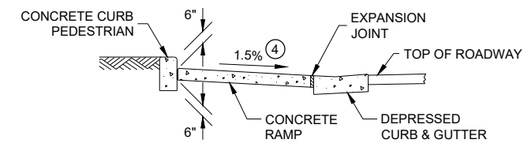
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

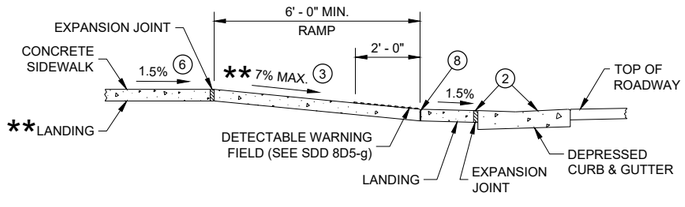
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



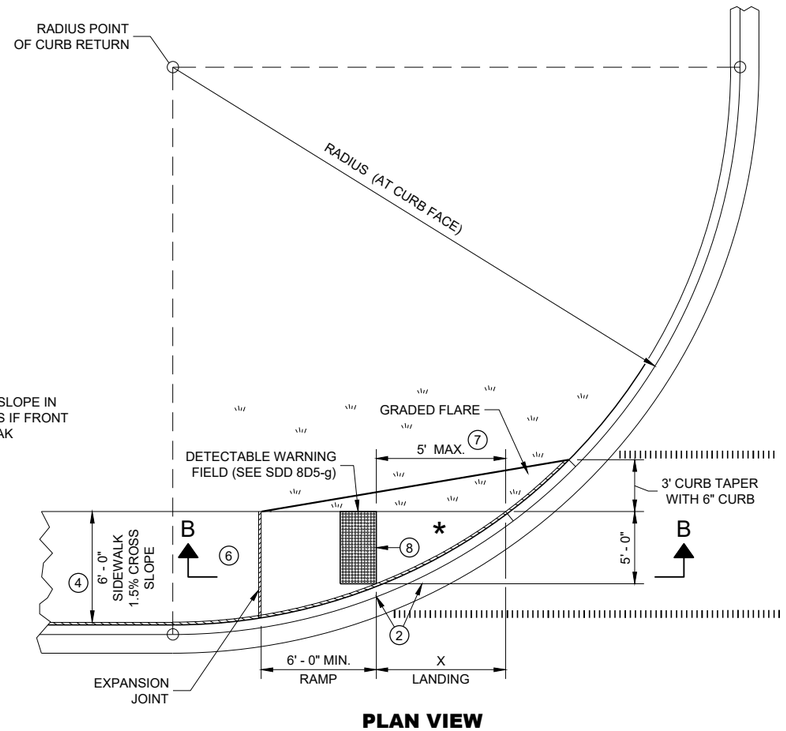
SECTION C - C FOR TYPE 4A



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

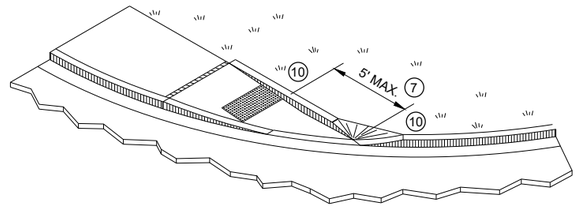
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

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

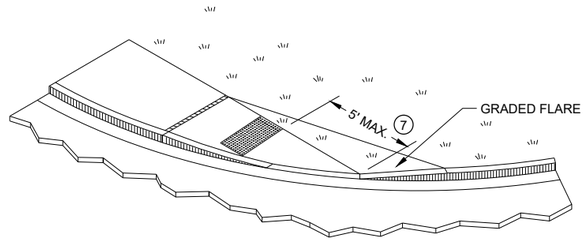


PLAN VIEW

CURB RAMP TYPE 4A1



ISOMETRIC VIEW FOR TYPE 4A



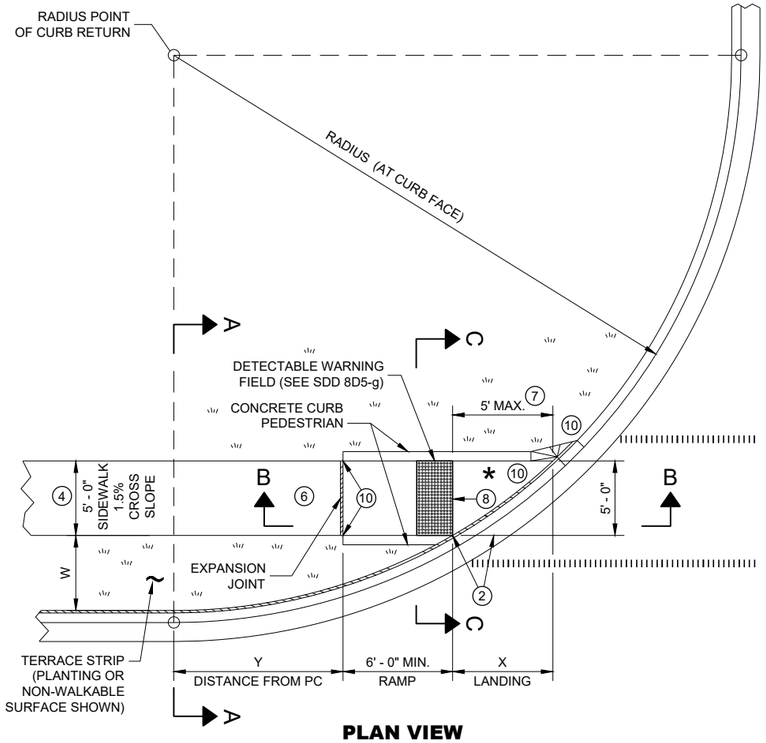
ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20c

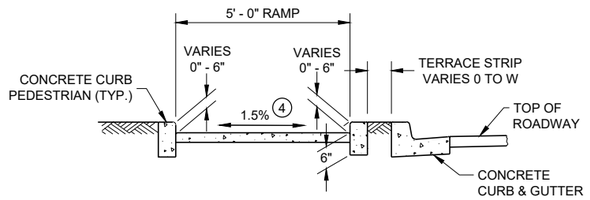


PLAN VIEW

CURB RAMP TYPE 4B

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

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



SECTION C - C FOR TYPE 4B

LEGEND

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

GENERAL NOTES

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

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

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

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

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

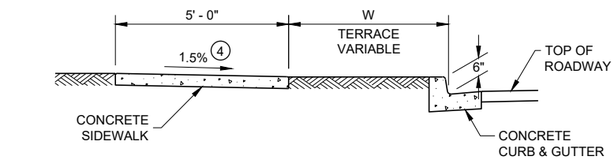
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

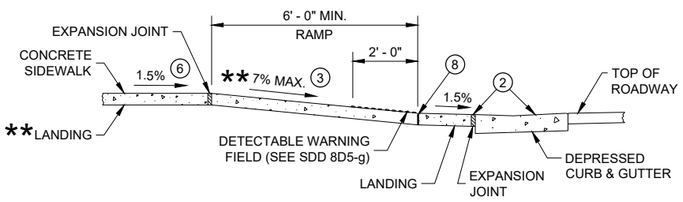
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

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

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



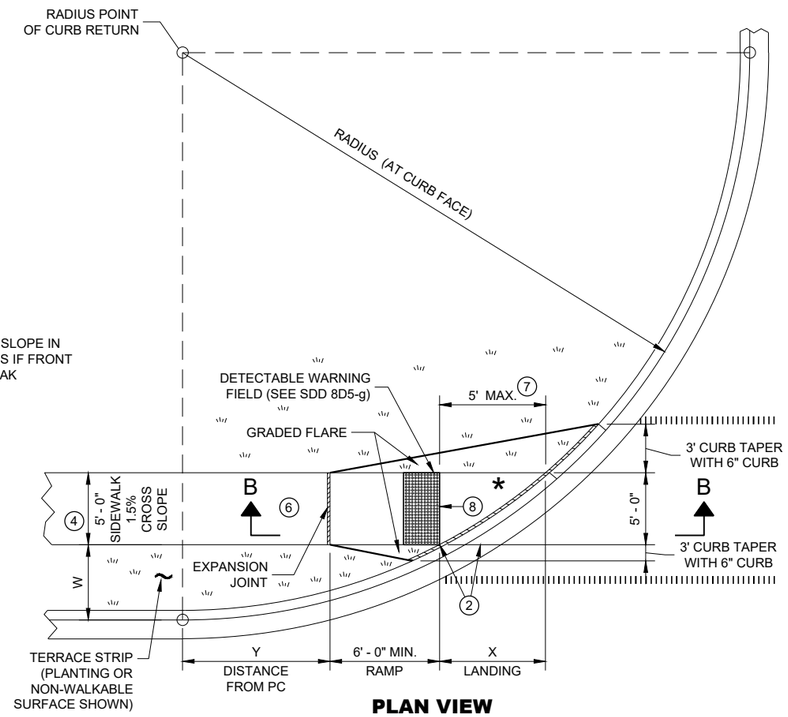
SECTION A - A FOR TYPE 4B



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

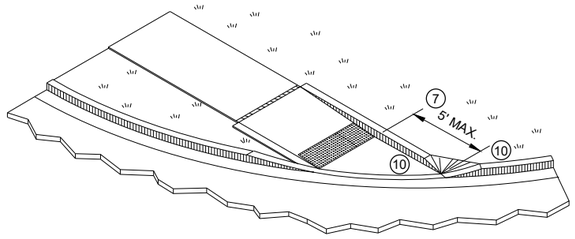
SECTION B - B FOR TYPE 4B AND TYPE 4B1

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

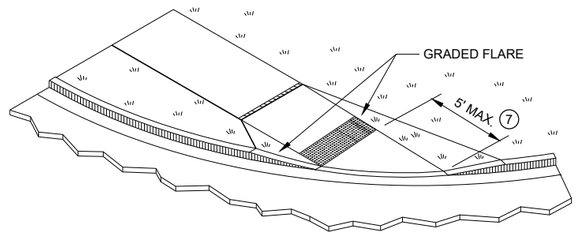


PLAN VIEW

CURB RAMP TYPE 4B1



ISOMETRIC VIEW FOR TYPE 4B



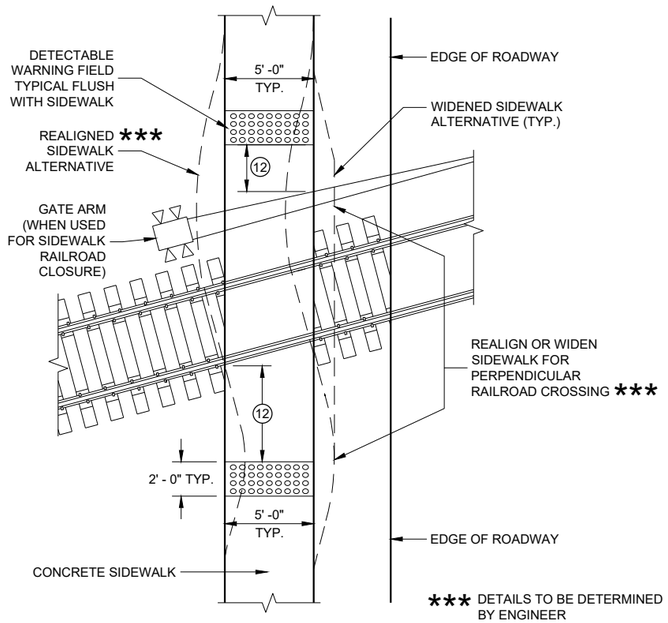
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

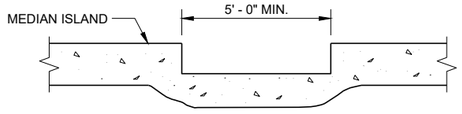
6

SDD 08D05 - 20d

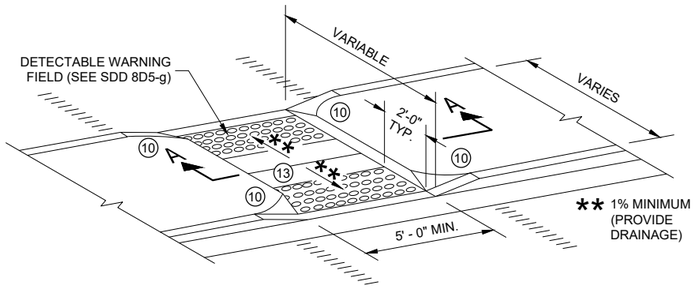


CURB RAMP TYPE 8

DETECTABLE WARNINGS AT RAILROAD CROSSING



SECTION A - A FOR TYPE 5



CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

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

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

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ½ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

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

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

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

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

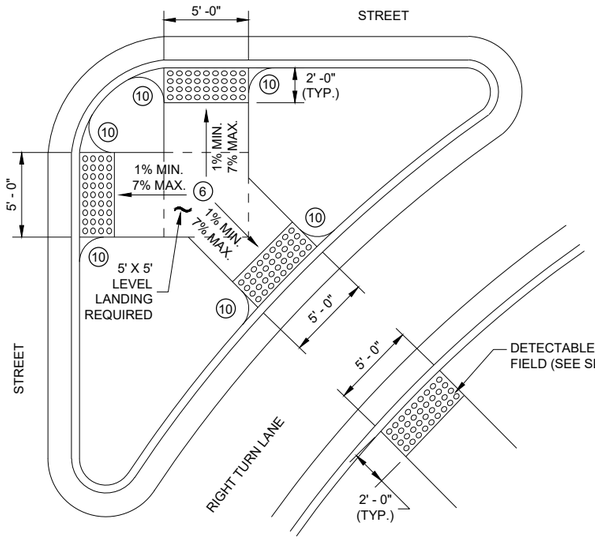
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

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

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

LEGEND

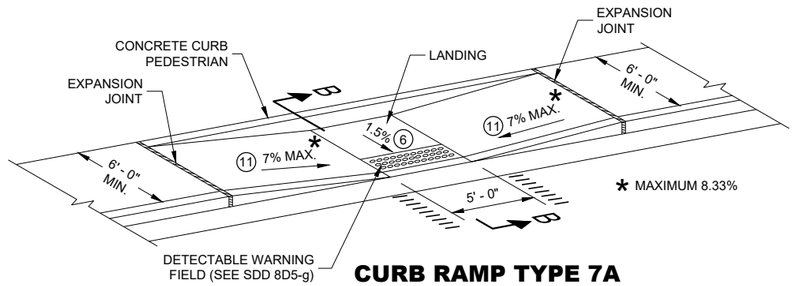
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

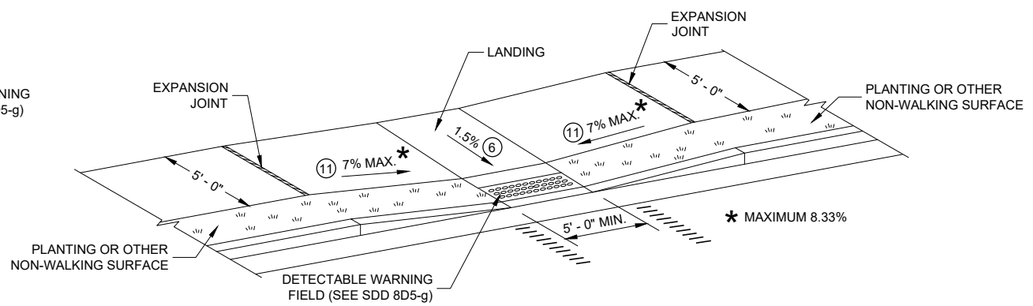
DETECTABLE WARNING AT ISLANDS

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



CURB RAMP TYPE 7A

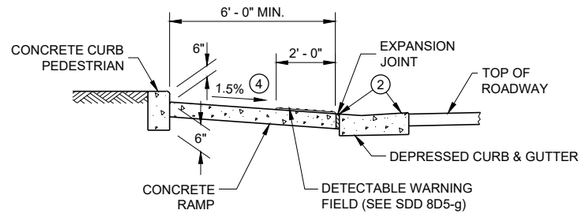
MID BLOCK CROSSING



CURB RAMP TYPE 7B

MID BLOCK CROSSING

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

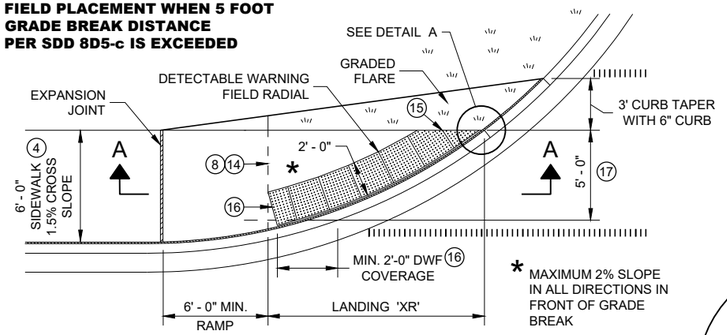


SECTION B - B FOR TYPE 7A

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

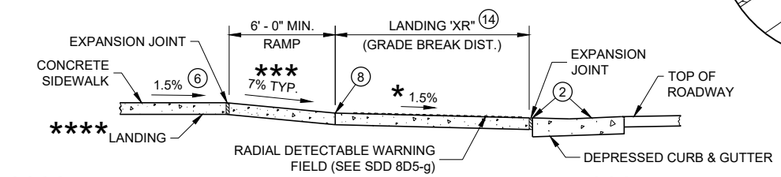
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



PLAN VIEW

CURB RAMP TYPE 4A1

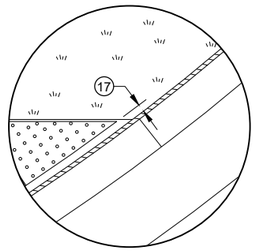
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



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

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1



DETAIL A

LEGEND

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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

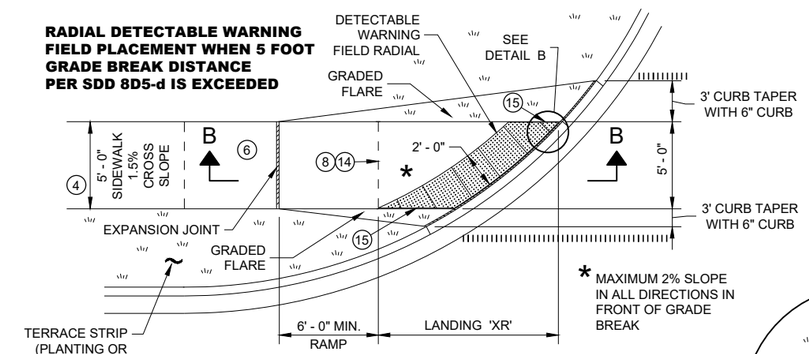
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

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

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

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

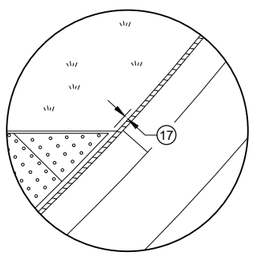
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



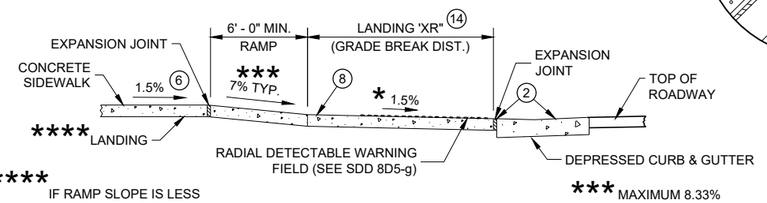
PLAN VIEW

CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B

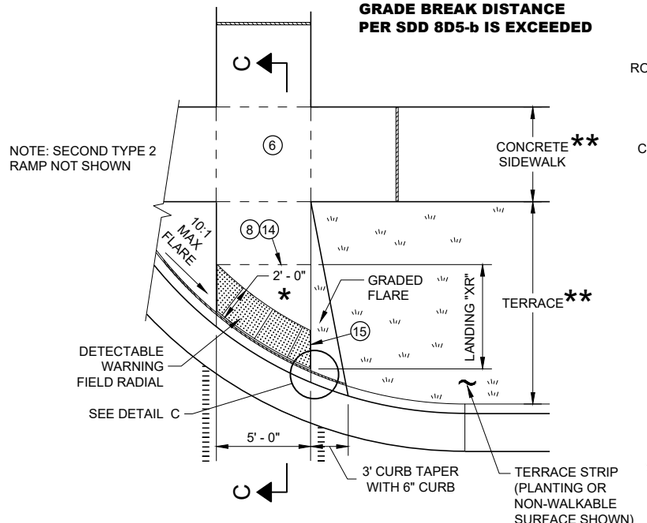


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION B - B FOR TYPE 4B1

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

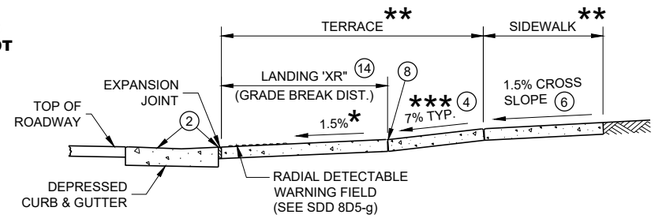


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

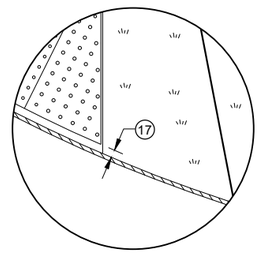


SECTION C - C FOR TYPE 2

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

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



DETAIL C

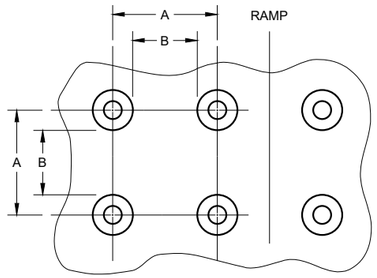
CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

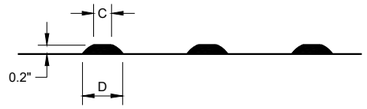
SDD 08D05 - 20f

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

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

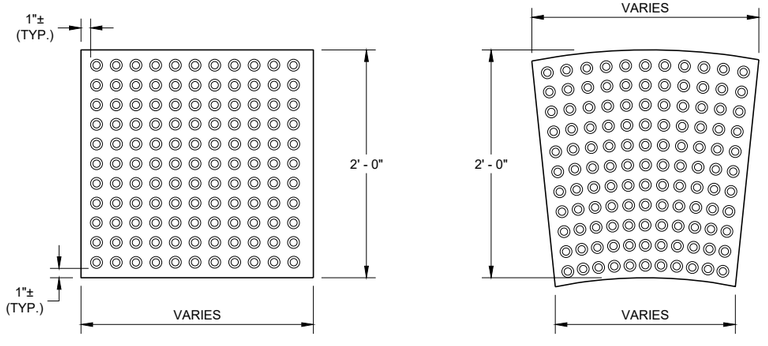


PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)

GENERAL NOTES

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

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

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

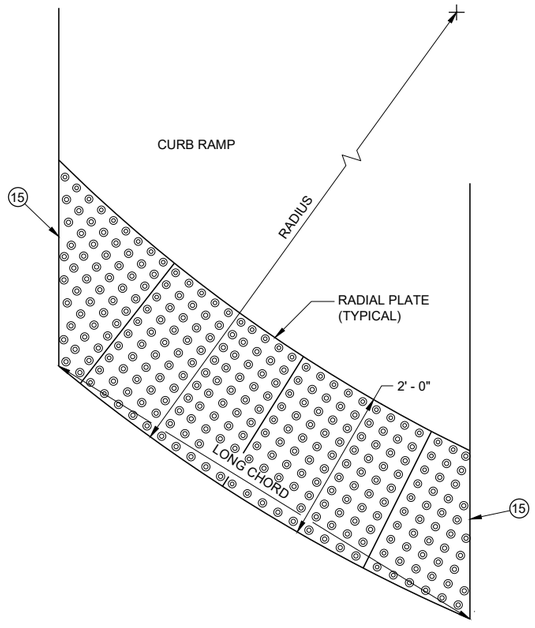
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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

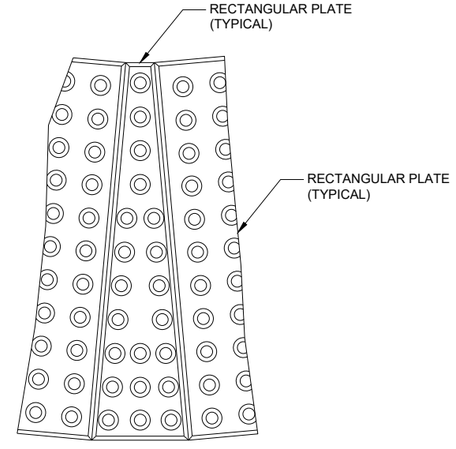
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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

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



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

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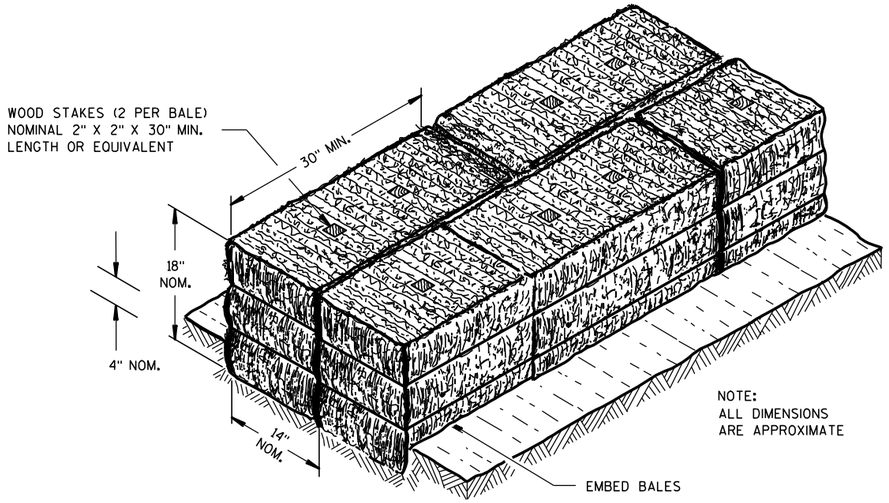
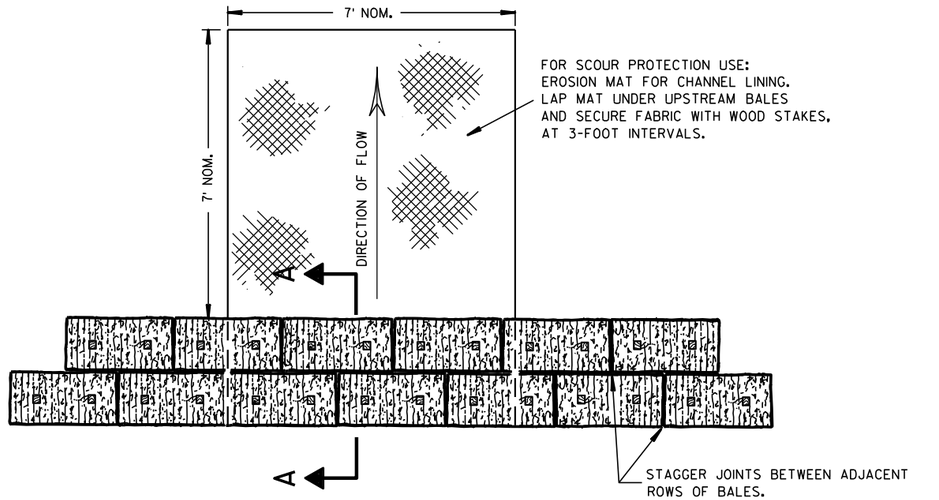
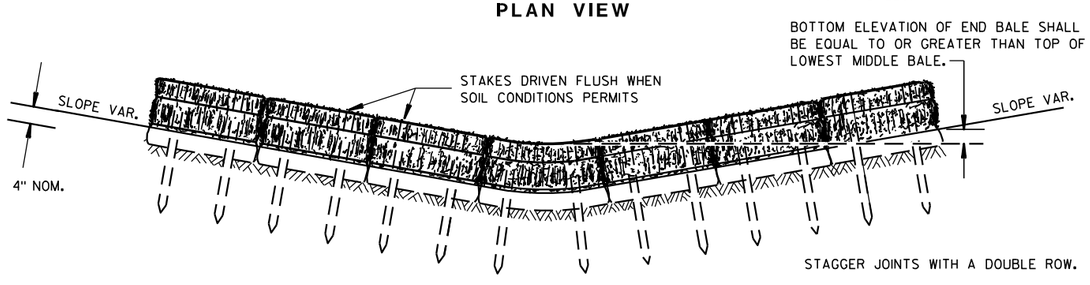
SDD 08D05 - 20g



SECTION A-A



PLAN VIEW



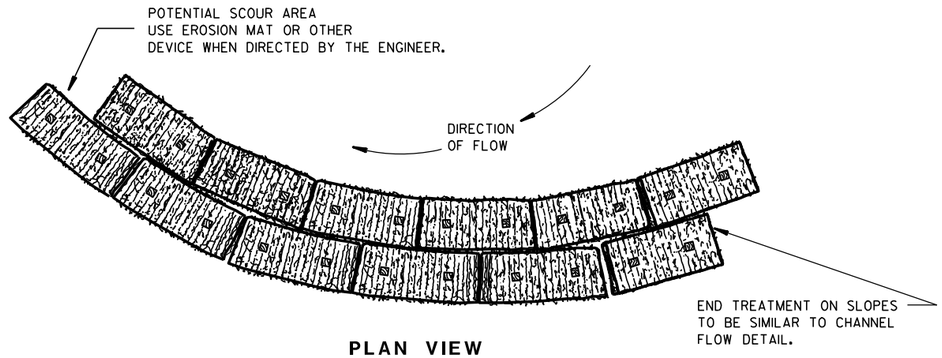
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

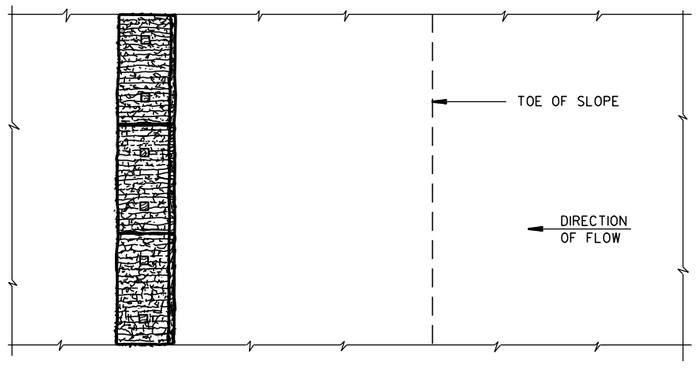
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

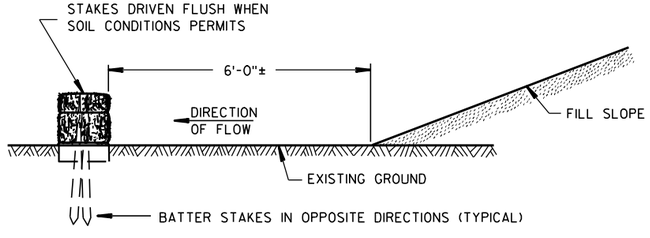


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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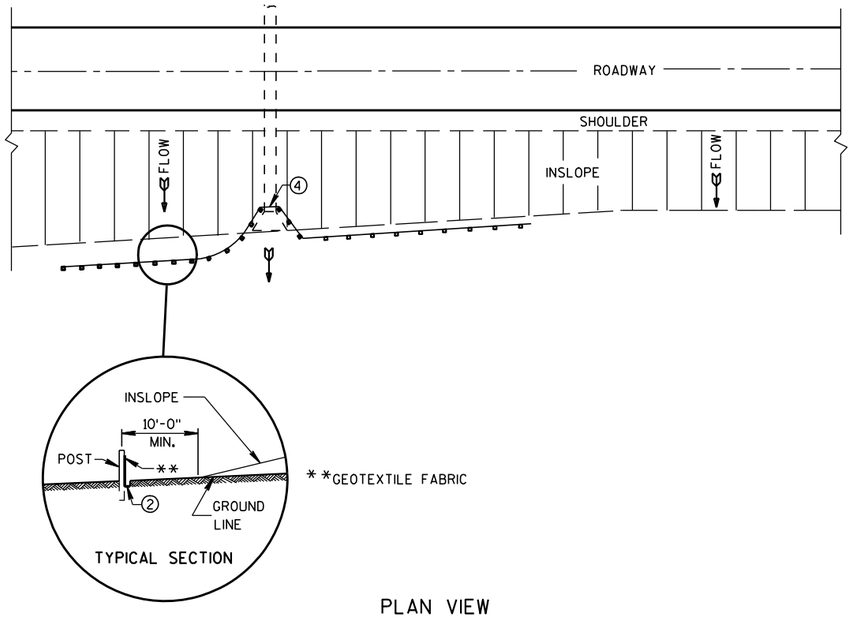
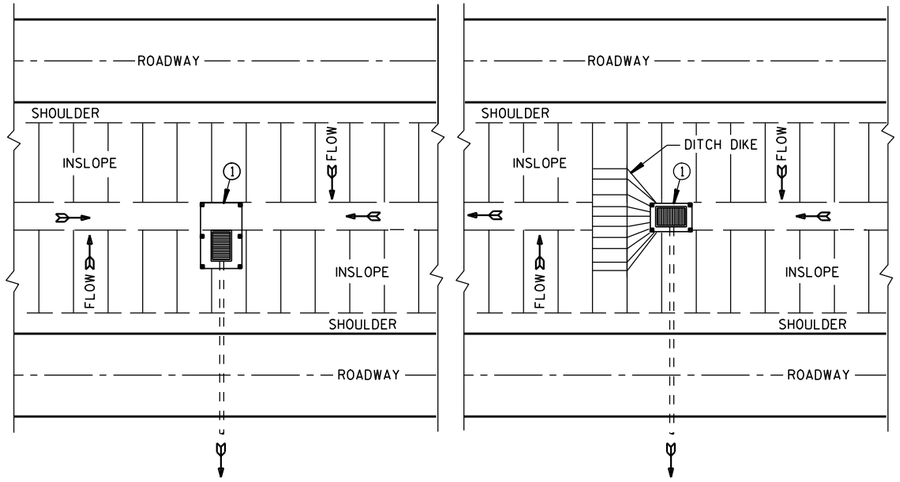
S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



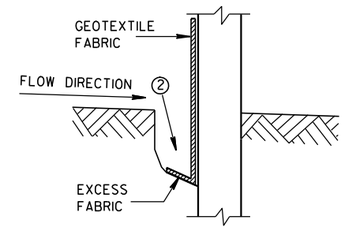
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

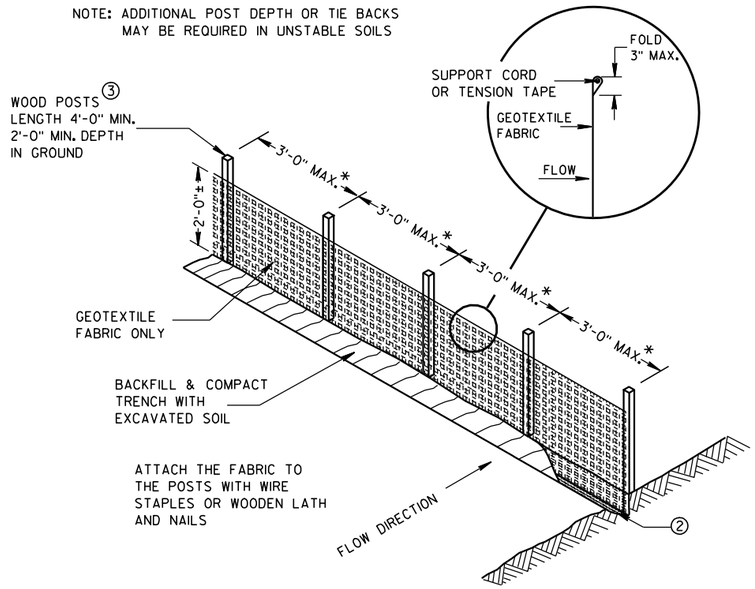
GENERAL NOTES

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

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

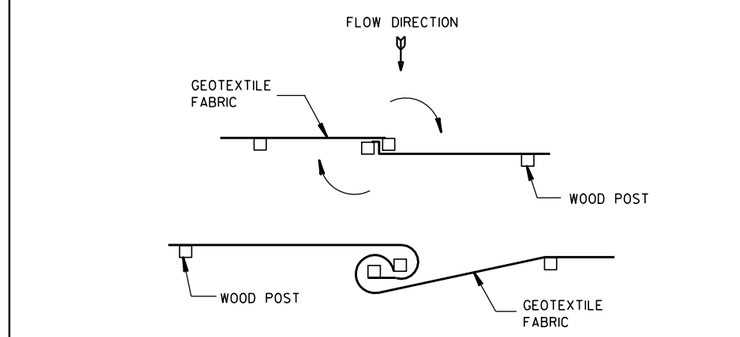


TRENCH DETAIL

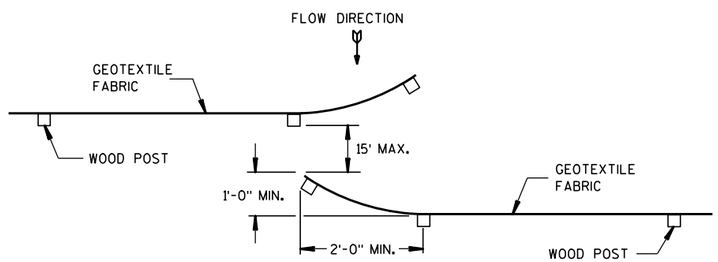


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

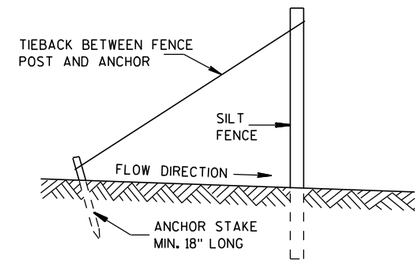


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

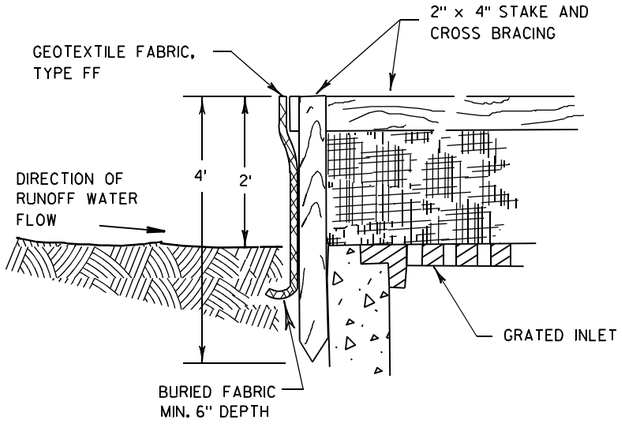
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

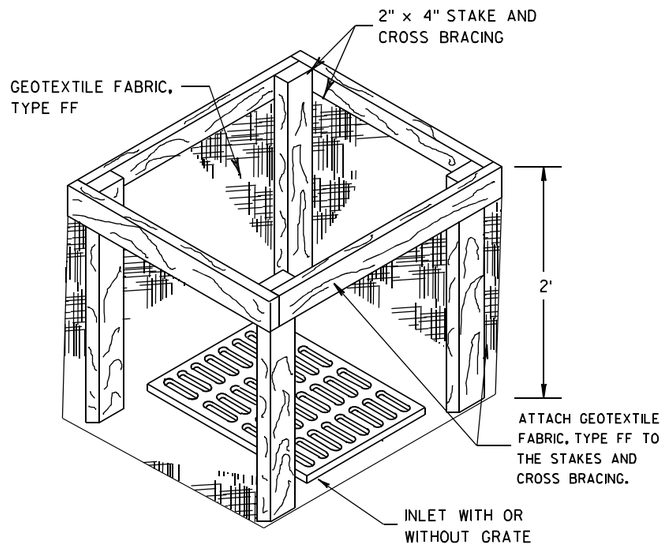
6

S.D.D. 8 E 9-6

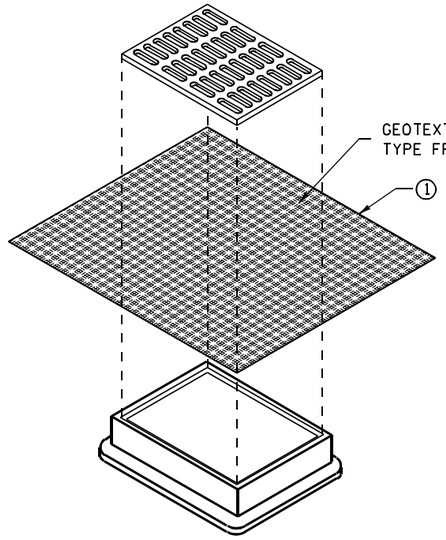
6

S.D.D. 8 E 9-6



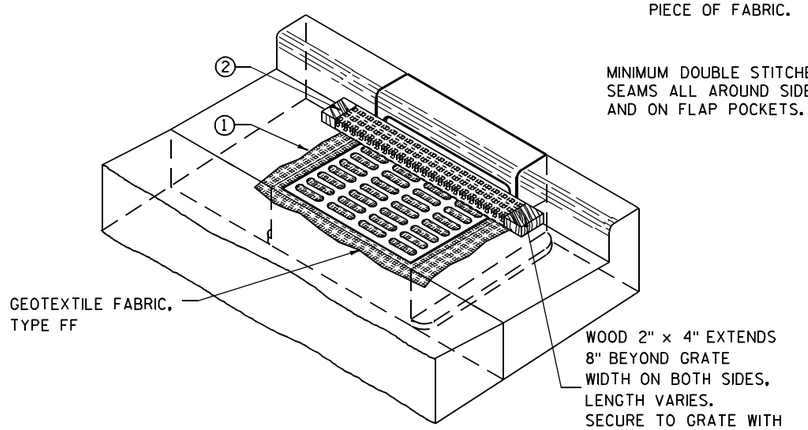


INLET PROTECTION, TYPE A

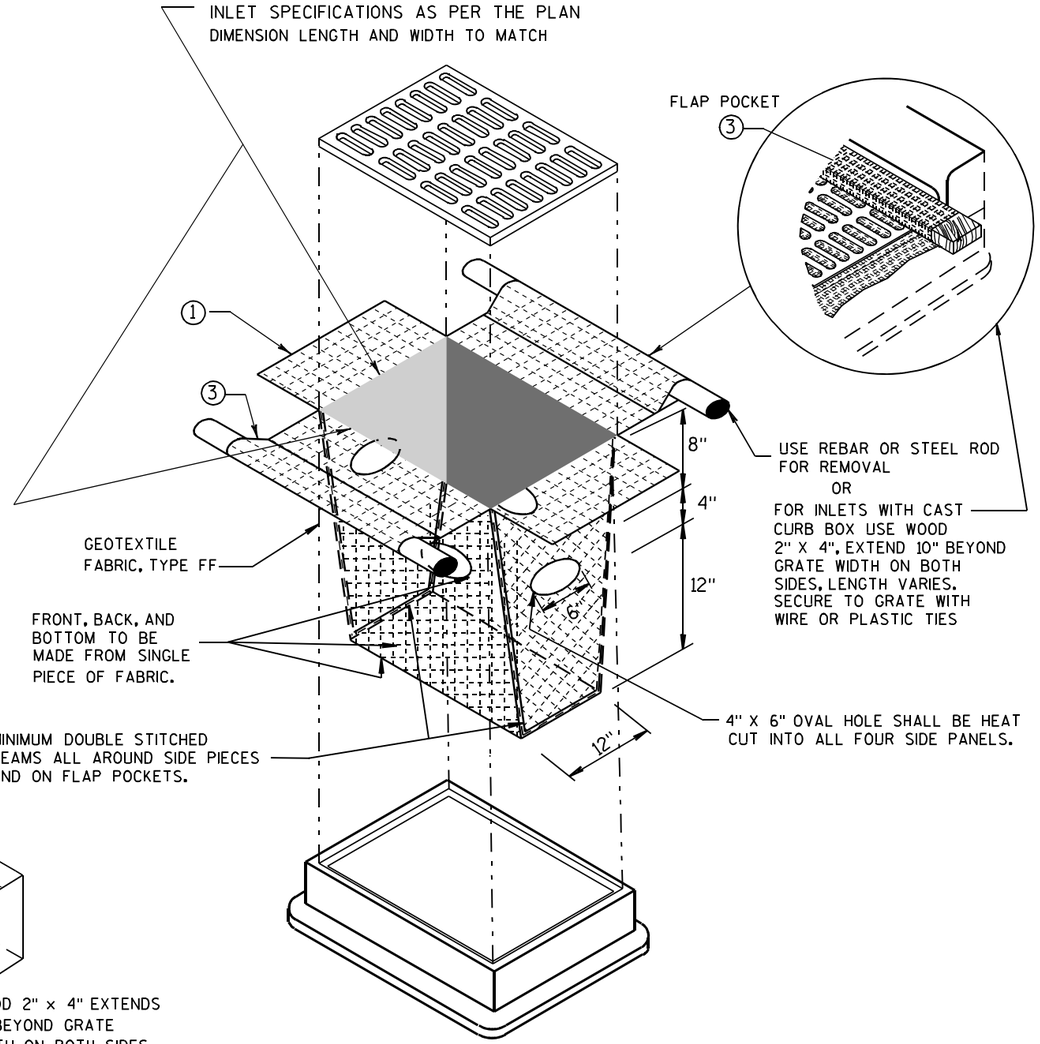


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

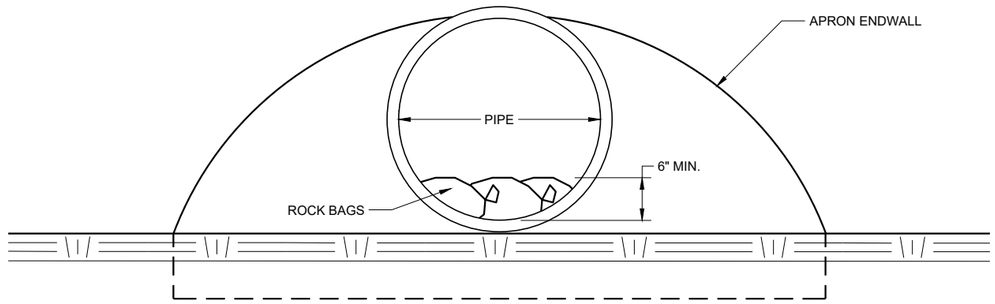
APPROVED

10/16/02
DATE

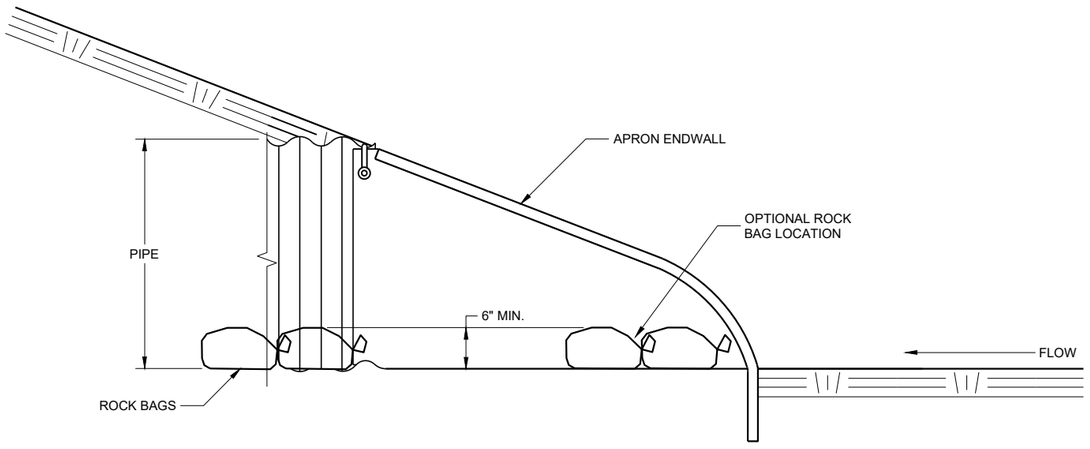
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6
S.D.D. 8 E 10-2



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 — DATE
/S/ Daniel Schave — EROSION CONTROL ENGI
FHWA

6

SDD 08E15 - 01

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SDD 08E15 - 01

METAL APRON ENDWALLS

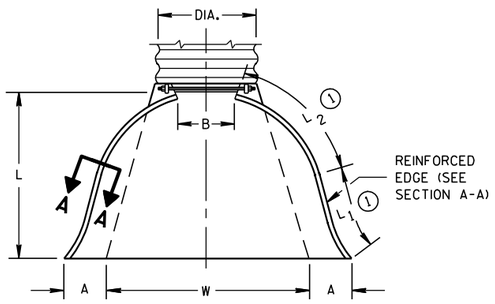
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

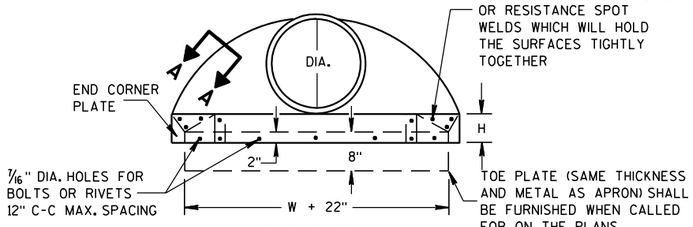
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

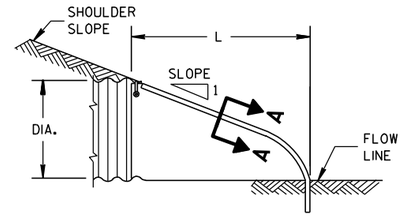
*MINIMUM
**MAXIMUM



PLAN VIEW

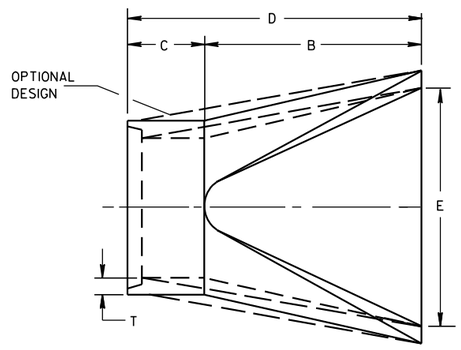


END VIEW

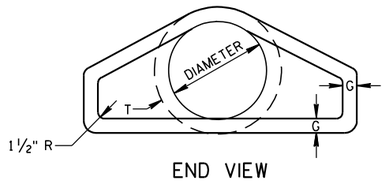


SIDE ELEVATION

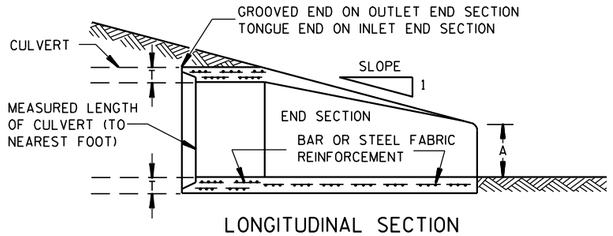
METAL ENDWALLS



PLAN

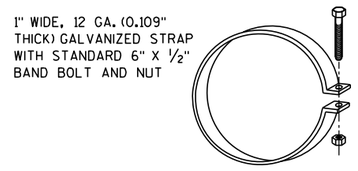


END VIEW



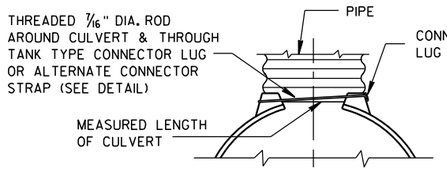
LONGITUDINAL SECTION

CONCRETE ENDWALLS

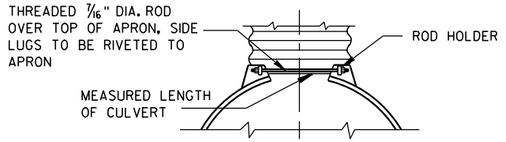


ALTERNATE FOR TYPE 1 CONNECTION

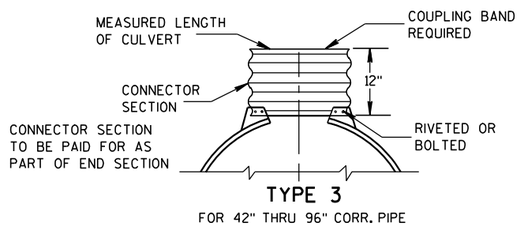
END SECTION CONNECTOR STRAP



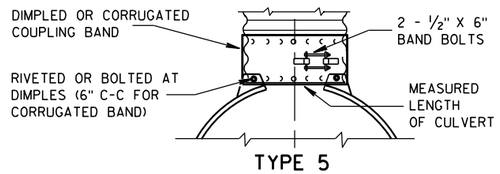
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

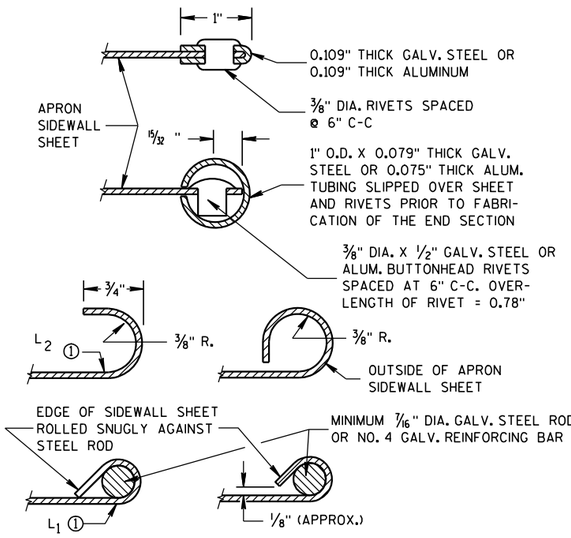
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

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

APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOP 67 NEER
FHWA

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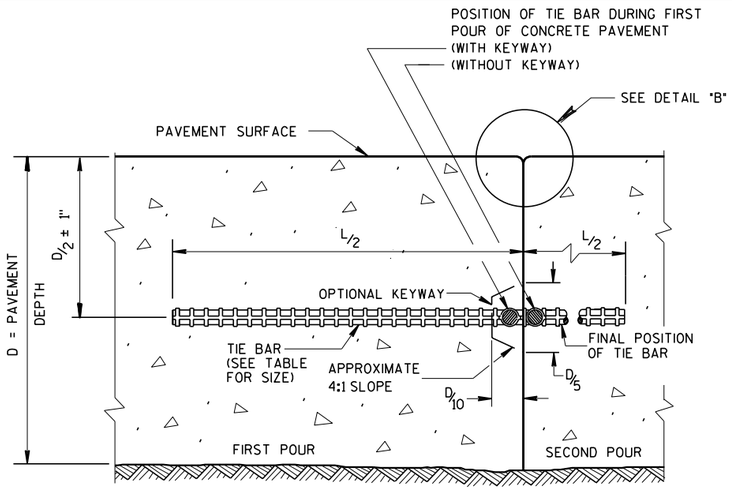
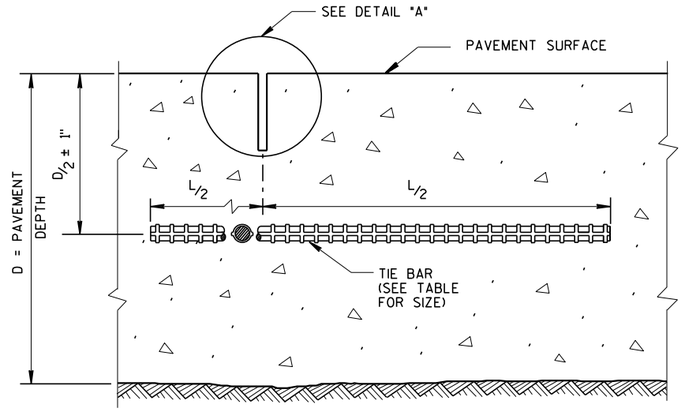
S.D.D. 8 F 1-11



CONSTRUCTION JOINT



SAWED JOINT

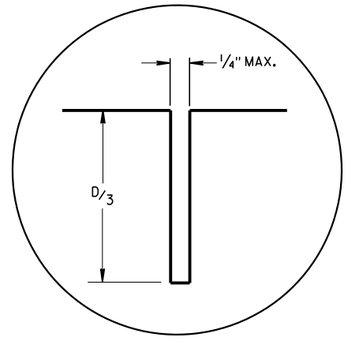
GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

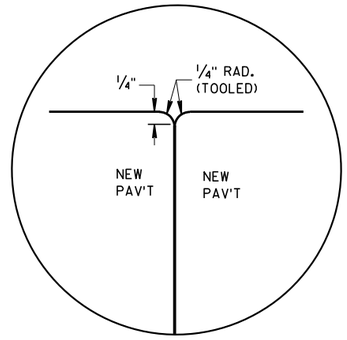
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

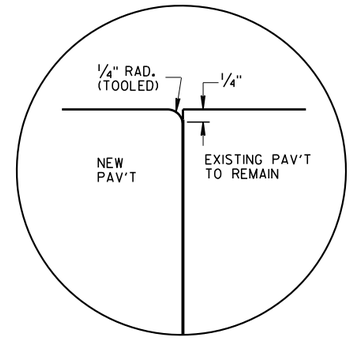
(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



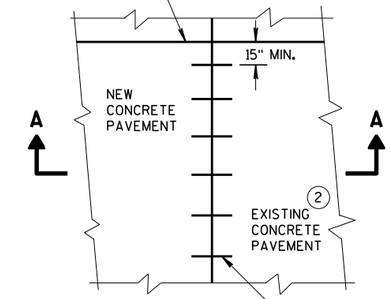
DETAIL "A"



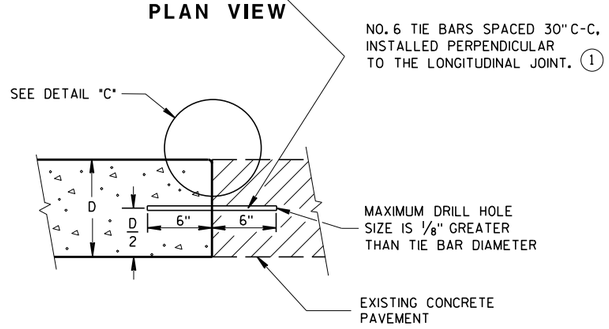
DETAIL "B"



DETAIL "C"



PLAN VIEW



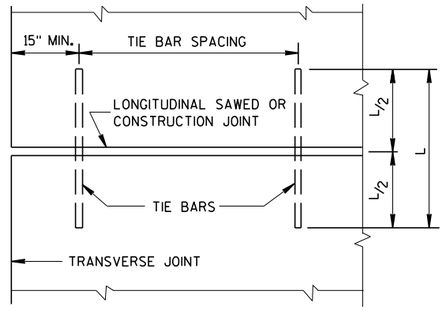
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp — PAVEMENT SUPE
FHWA

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S.D.D. 13 C 1-19

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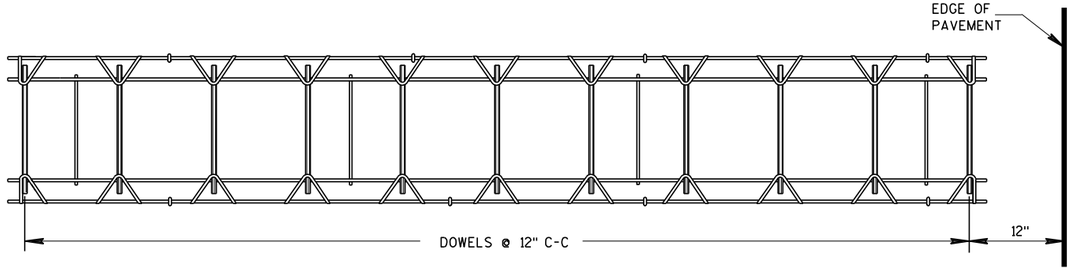
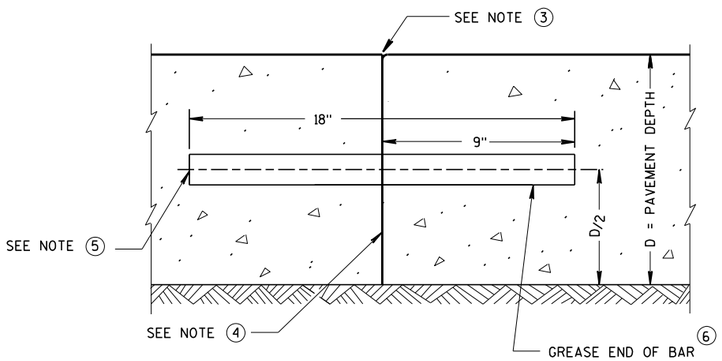
S.D.D. 13 C 1-19



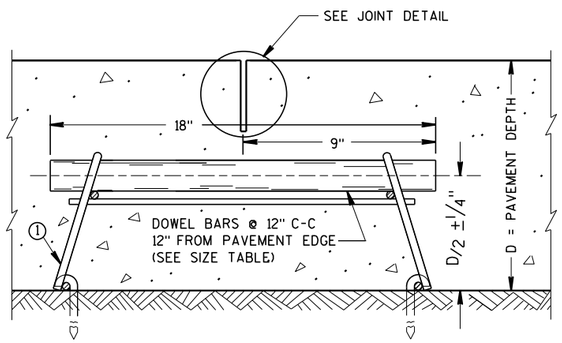
PLAN VIEW

SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



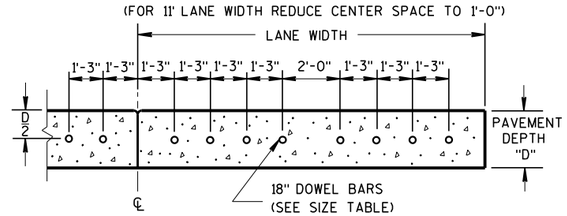
TRANSVERSE CONSTRUCTION JOINT



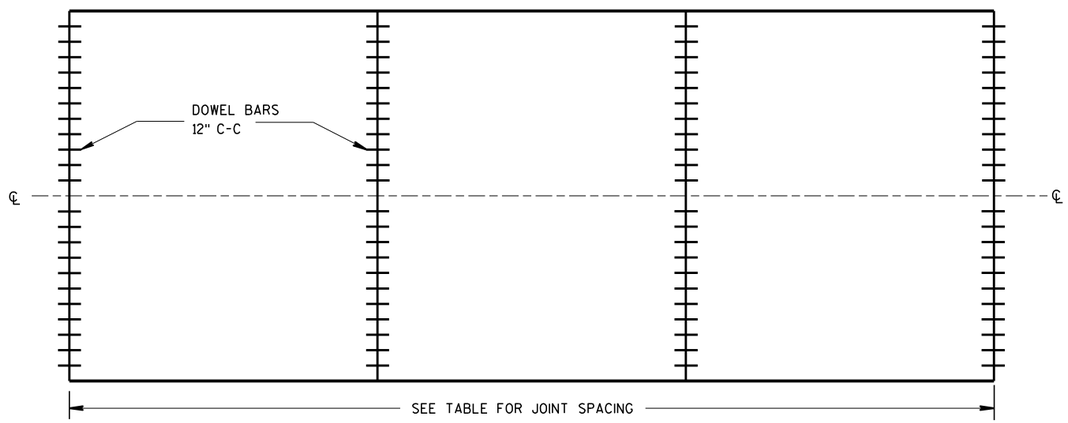
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

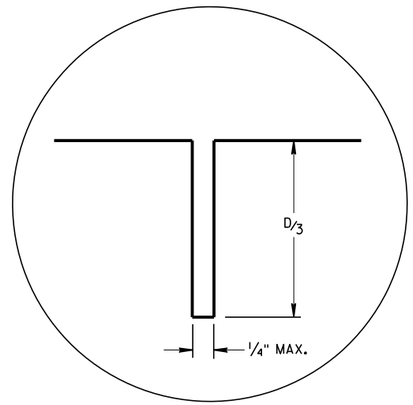
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



JOINT DETAIL

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUP

FHWA

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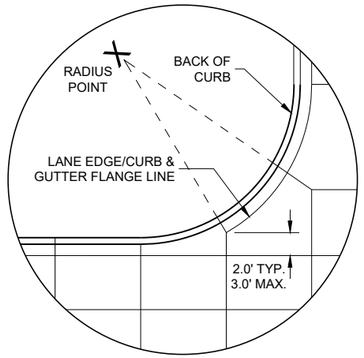
S.D.D. 13 C 13-9



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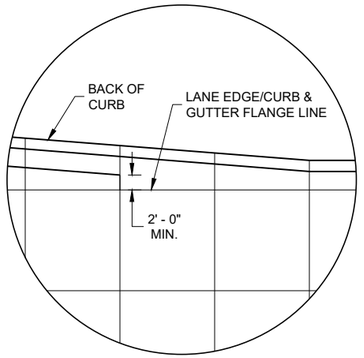
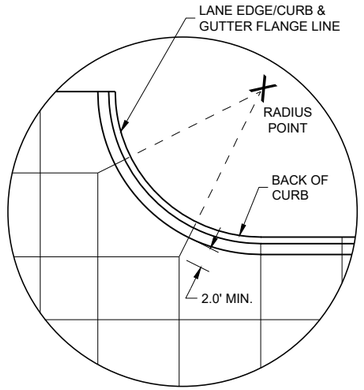


DETAIL "B"



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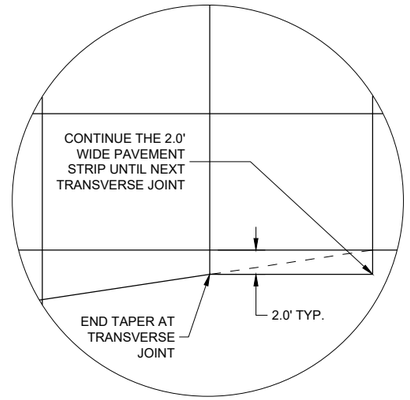


DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

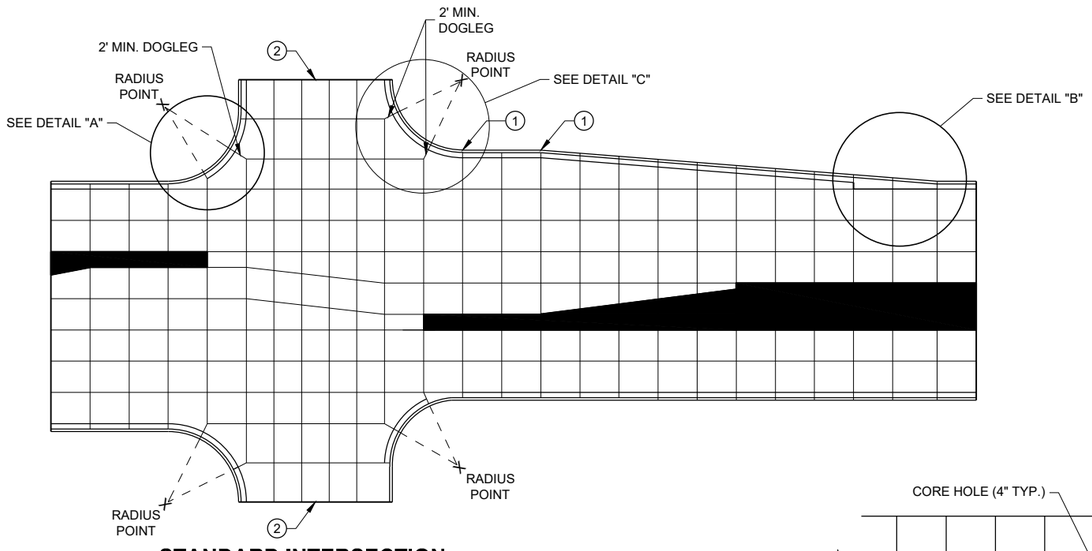
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.

(2) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITHEDGE OF RADIUS.

(3) THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.

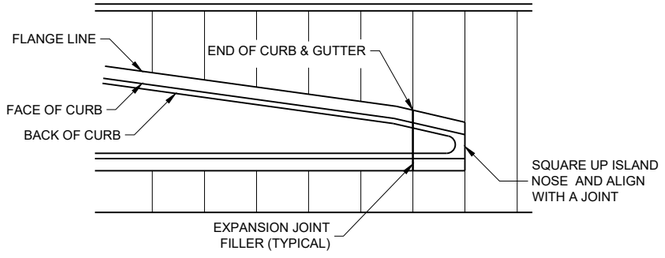


STANDARD INTERSECTION

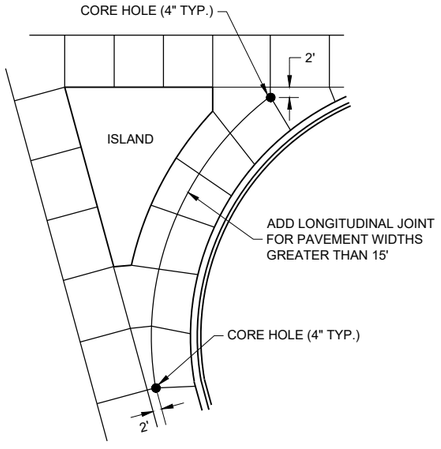
PAVEMENT DEPTH AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'

SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

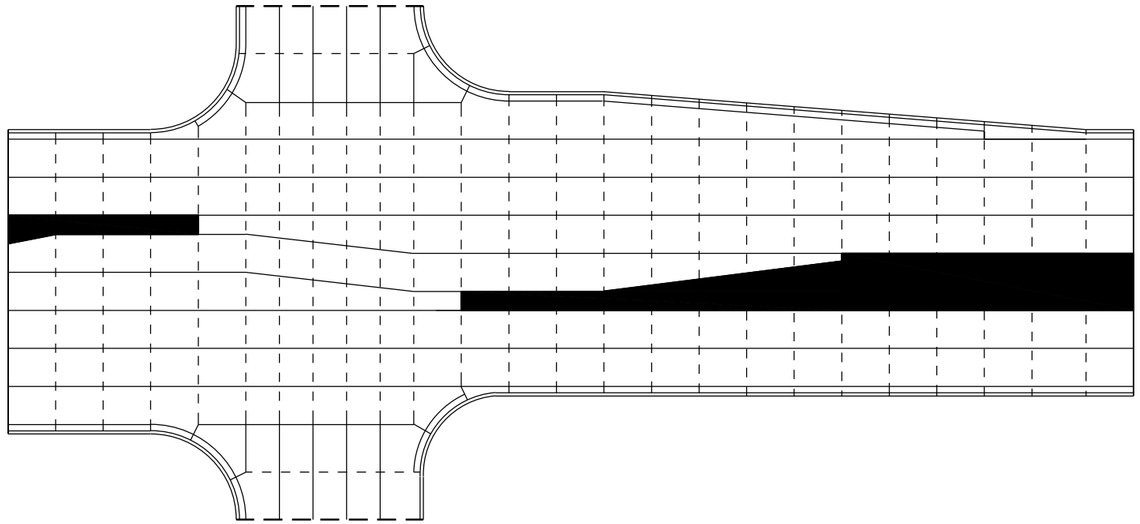
SDD 13C18 - 07a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

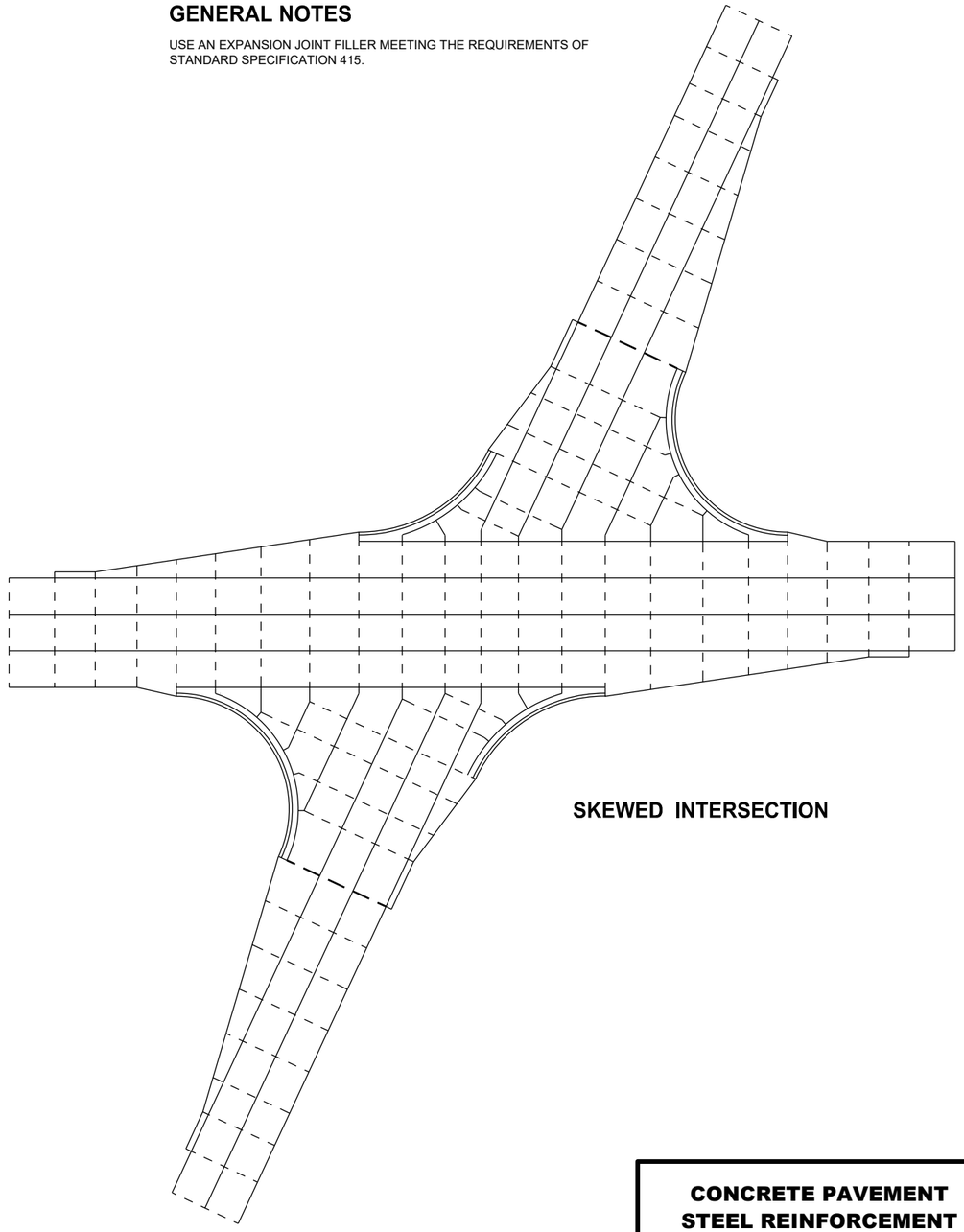
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

6

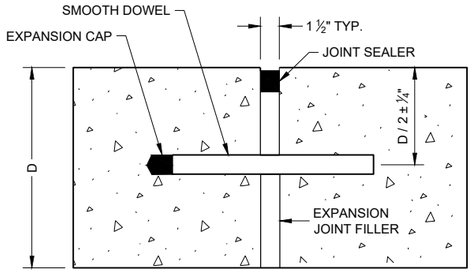
SDD 13C18 - 07b

CONCRETE PAVEMENT
STEEL REINFORCEMENT

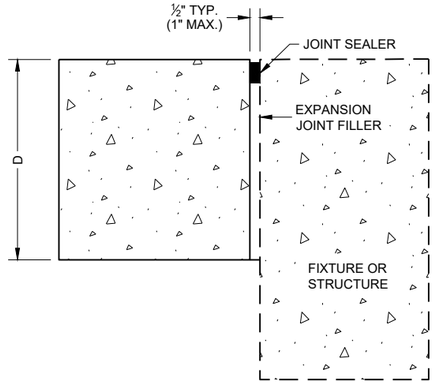
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 07b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

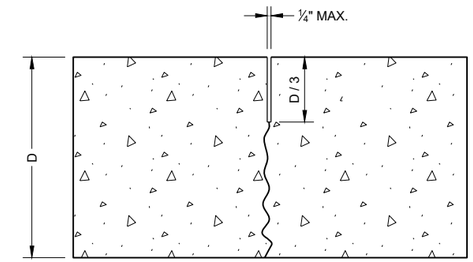
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

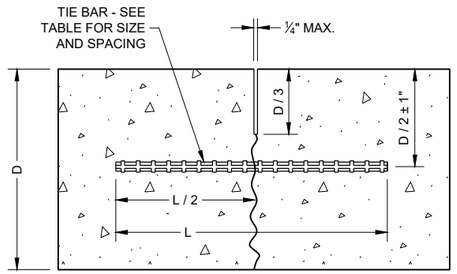
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

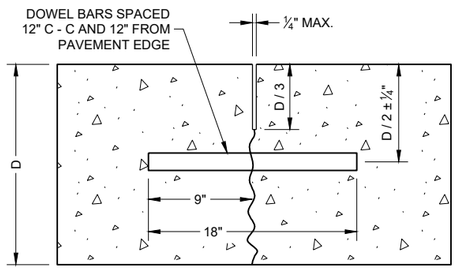
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



UNDOWELED TRANSVERSE

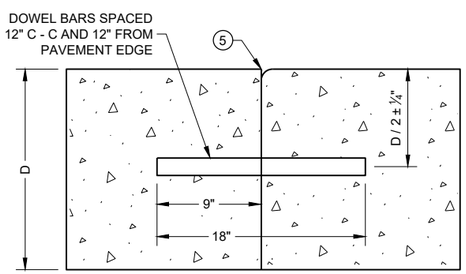


TIED LONGITUDINAL

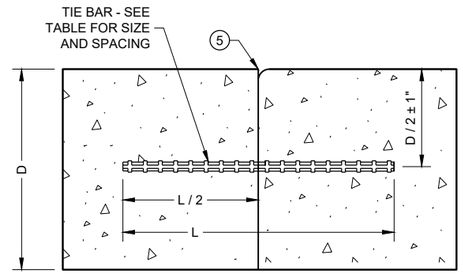


DOWELED TRANSVERSE

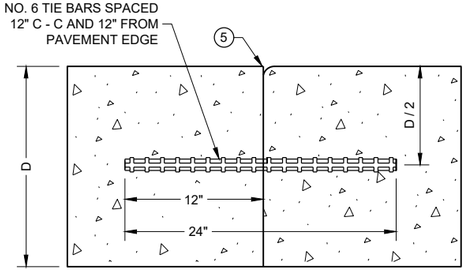
CONTRACTION JOINTS (2)



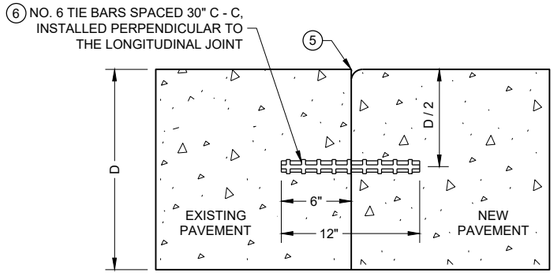
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

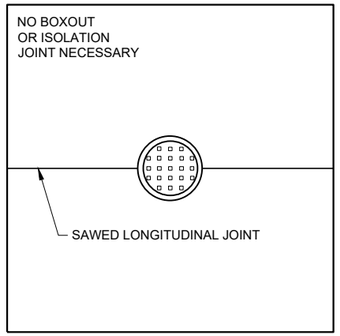
CONSTRUCTION JOINTS (4)

CONCRETE PAVEMENT JOINT TYPES

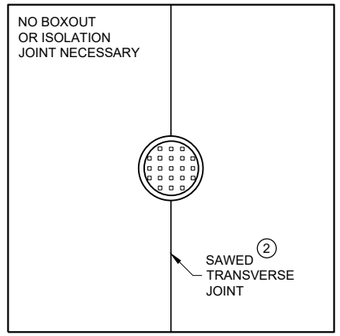
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

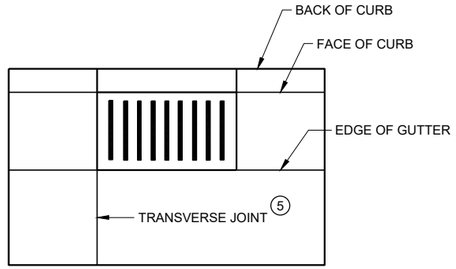
SDD 13C18 - 07c



MANHOLE WITH LONGITUDINAL JOINT



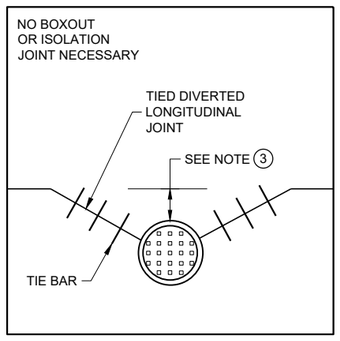
MANHOLE WITH TRANSVERSE JOINT



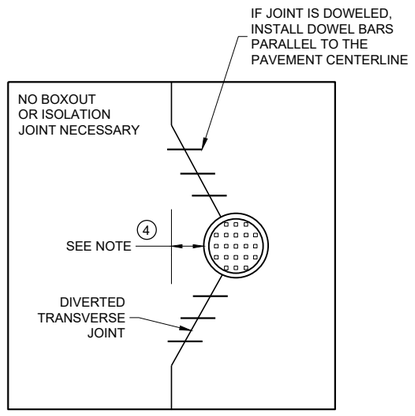
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

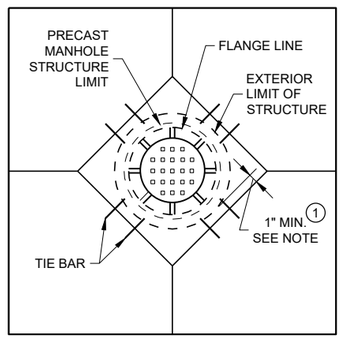
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

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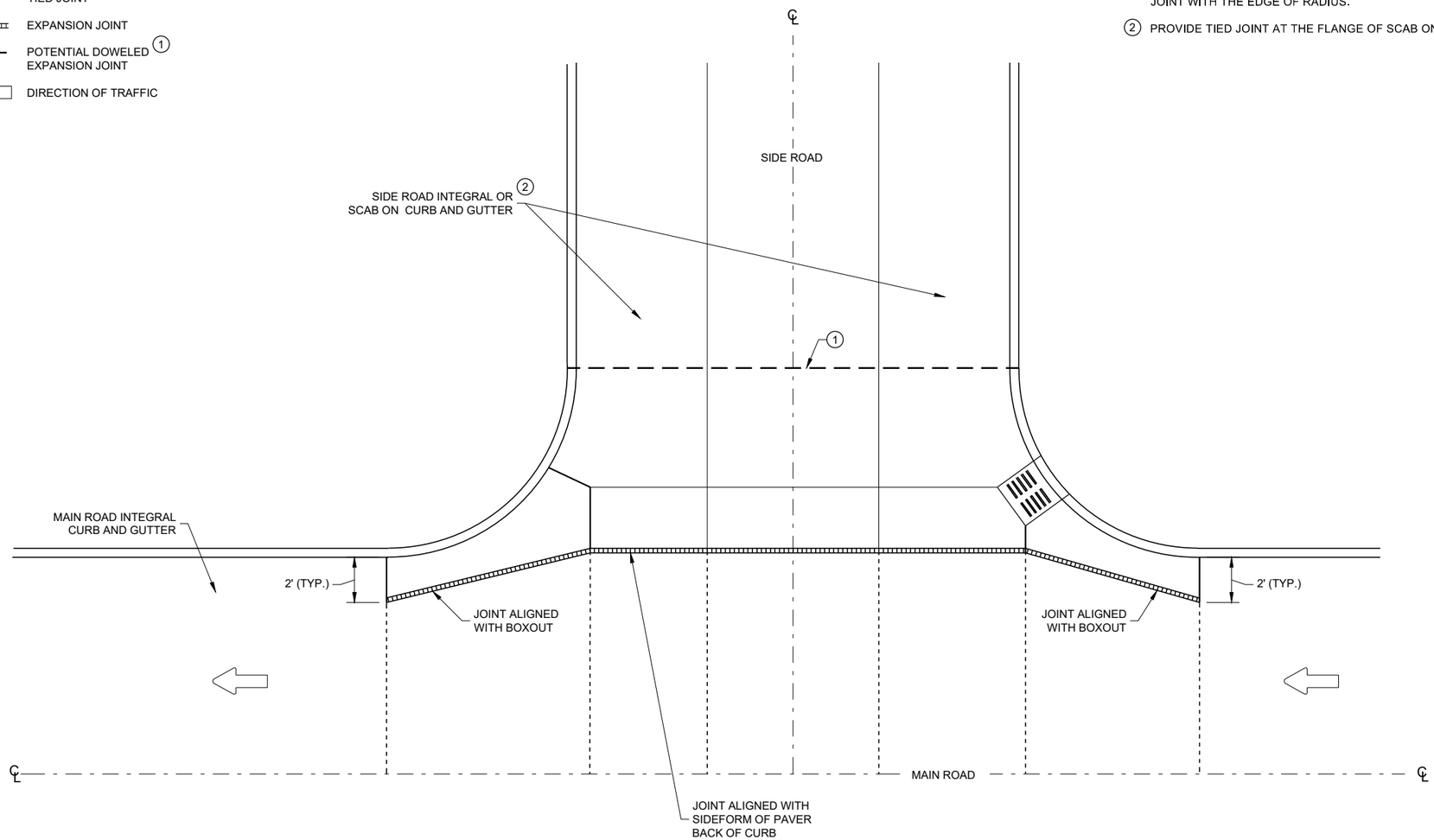
SDD 13C18 - 07d

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT (1)
- DIRECTION OF TRAFFIC



GENERAL NOTES

(1) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH THE EDGE OF RADIUS.

(2) PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USE.

INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 — DATE
/S/ Peter Kemp P.E. — ROADWAY STANDARDS DEVE ENGINEER
FHWA

6

SDD 13C18 - 07f

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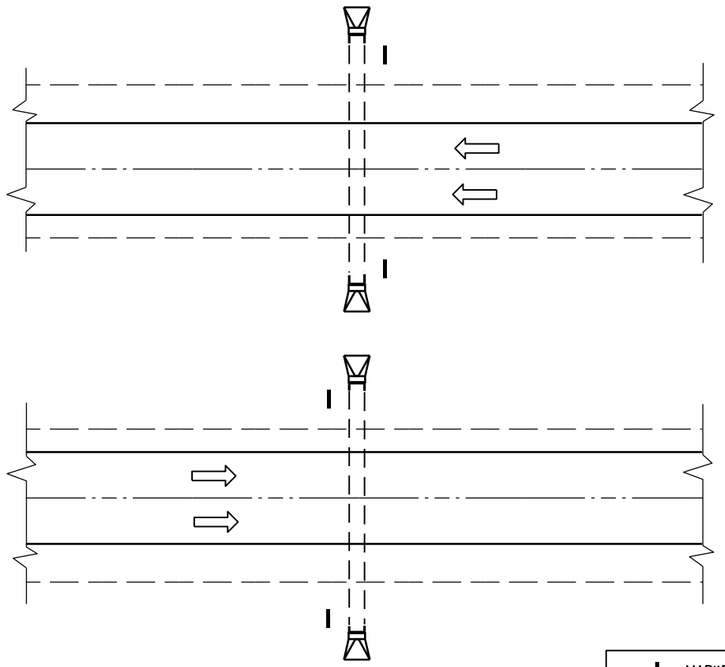
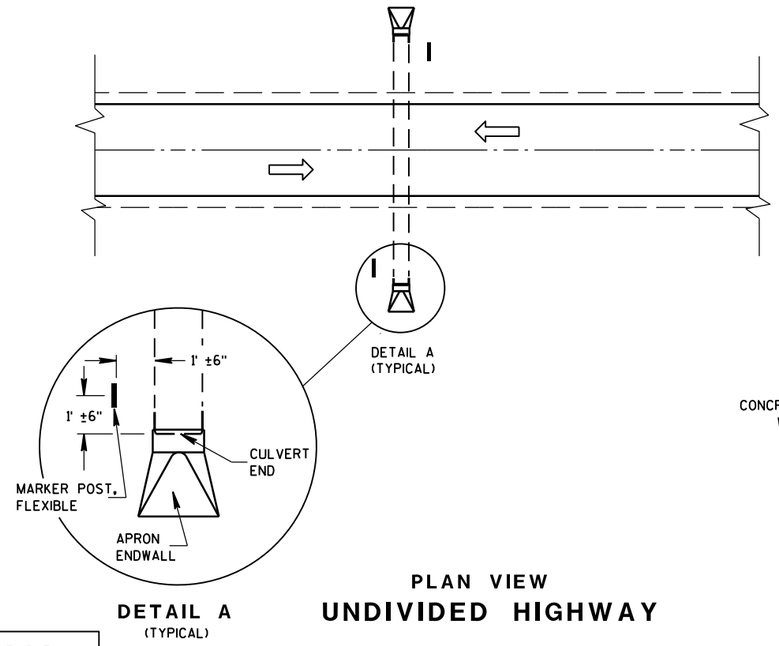
SDD 13C18 - 07f



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

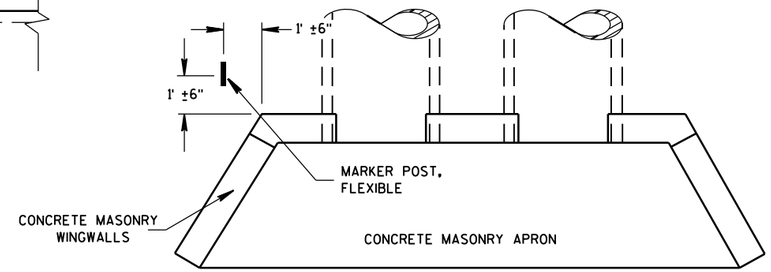
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

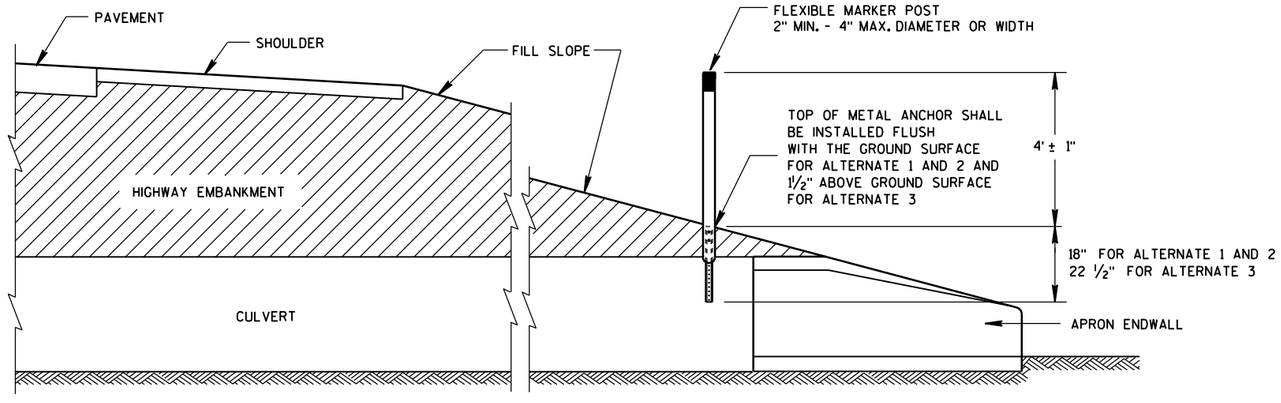
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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

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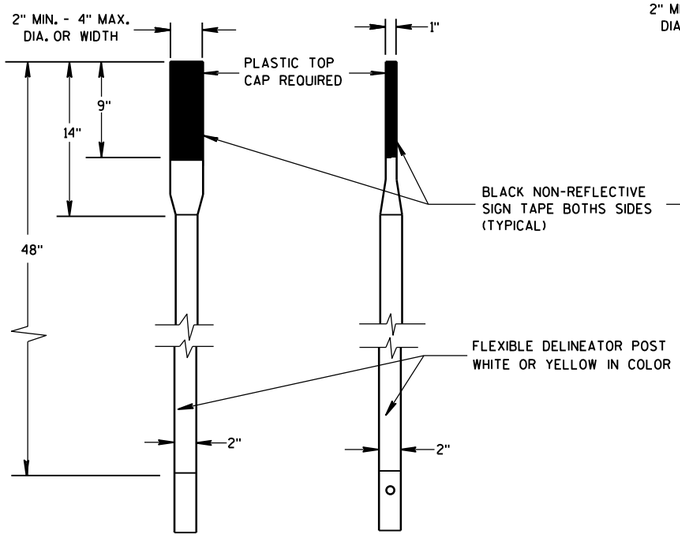
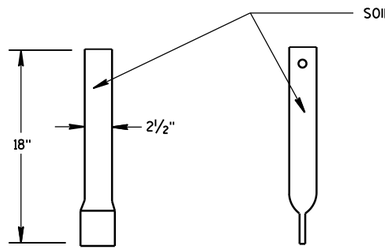
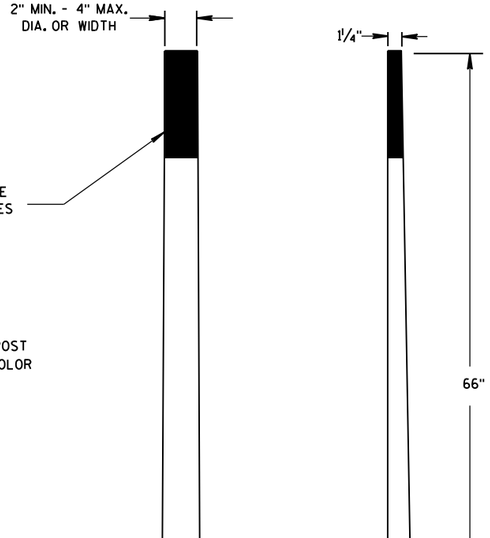
S.D.D. 15 A 3-2a





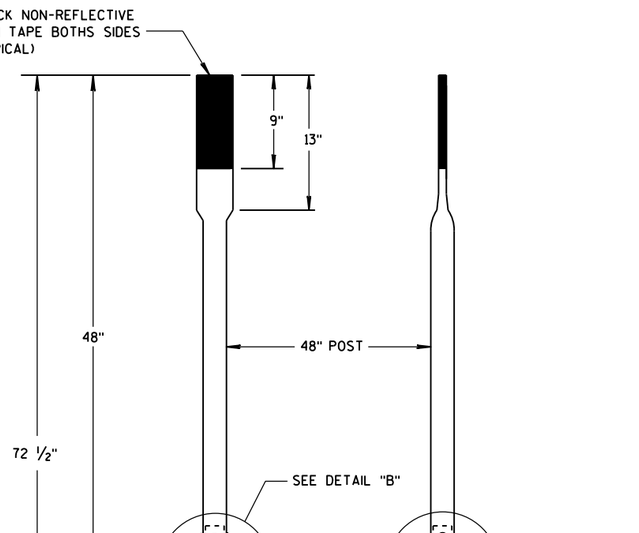
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

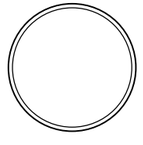
ALTERNATE 2



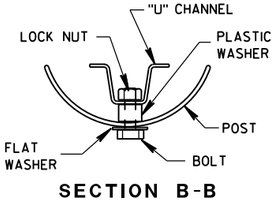
FRONT VIEW SIDE VIEW

ALTERNATE 3

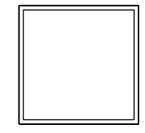
FLEXIBLE MARKER POSTS



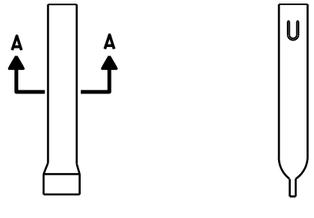
SECTION A-A



SECTION B-B

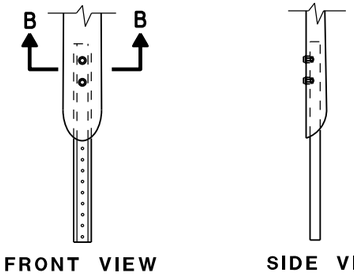


SECTION C-C



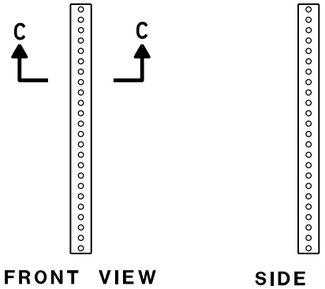
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

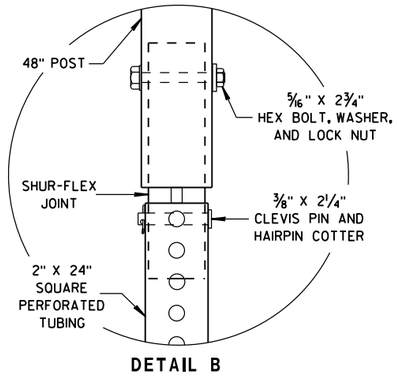
ALTERNATE 2



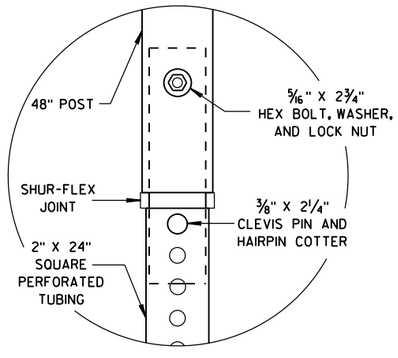
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6
S.D.D. 15 A 3-2b

GENERAL NOTES

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

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

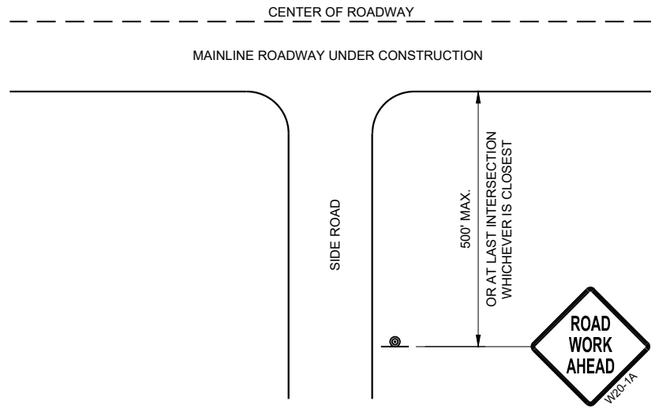
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

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

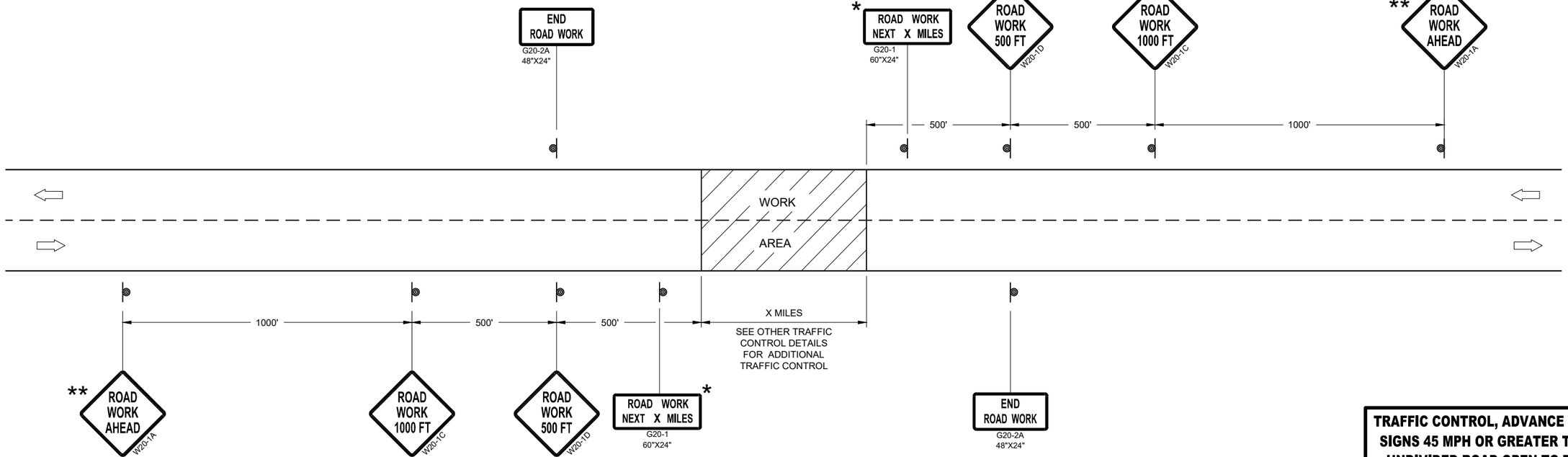
** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

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



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C04 - 05

GENERAL NOTES

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

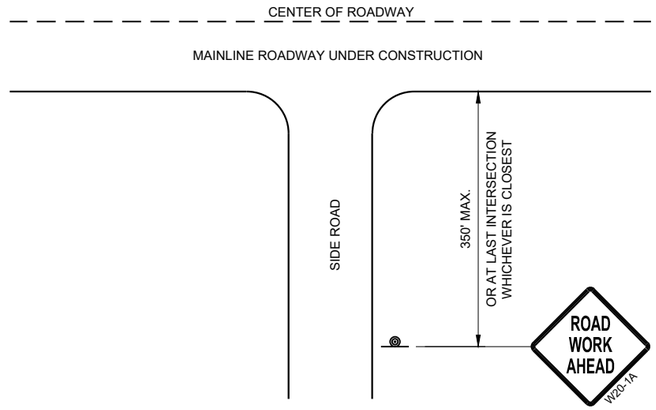
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

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

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

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



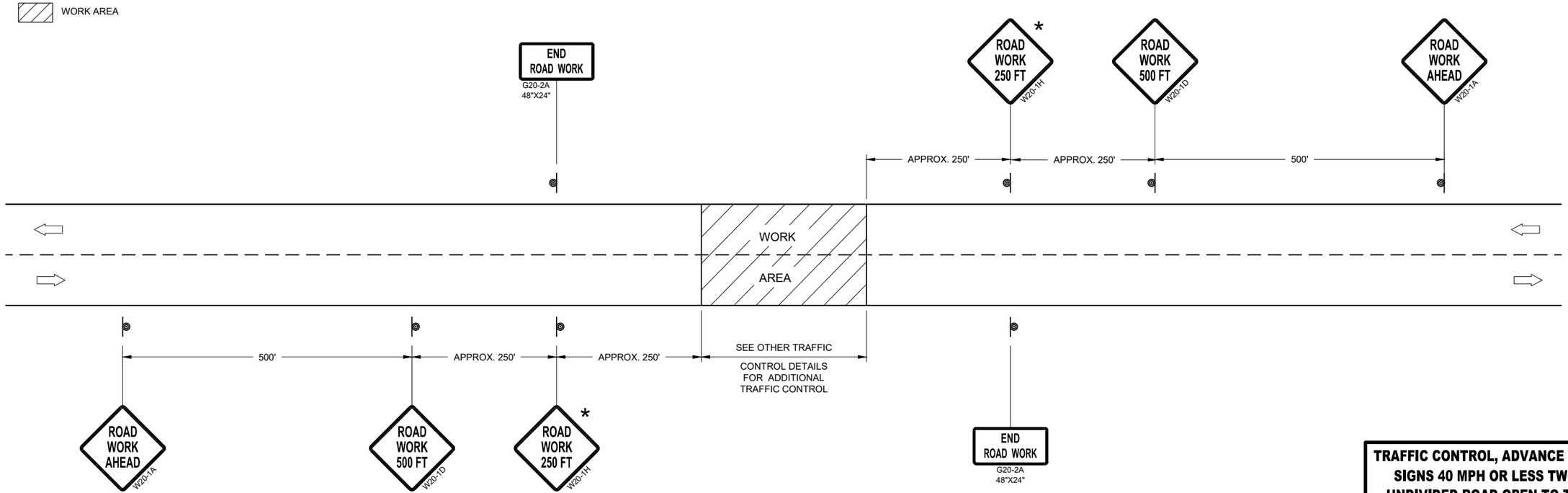
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

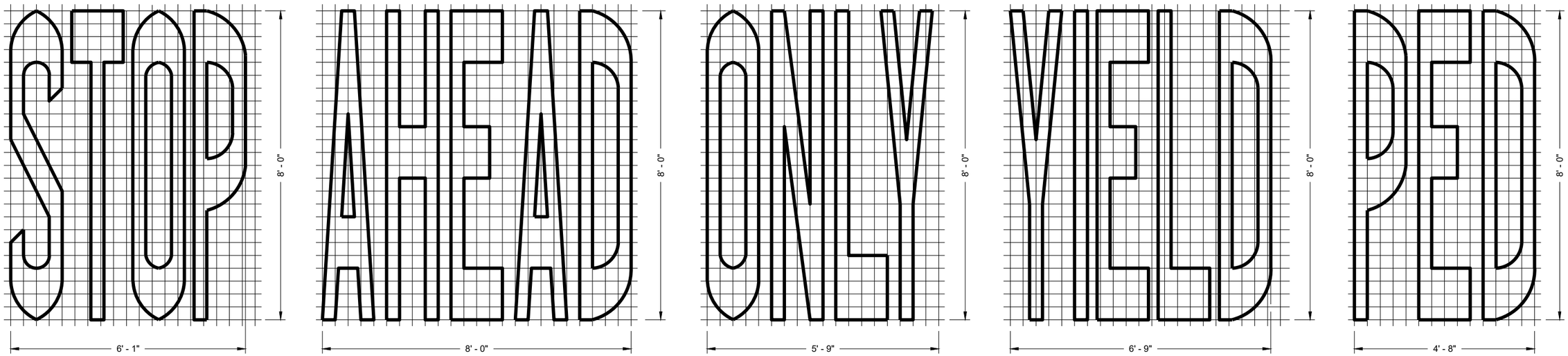
APPROVED
July 2018
DATE

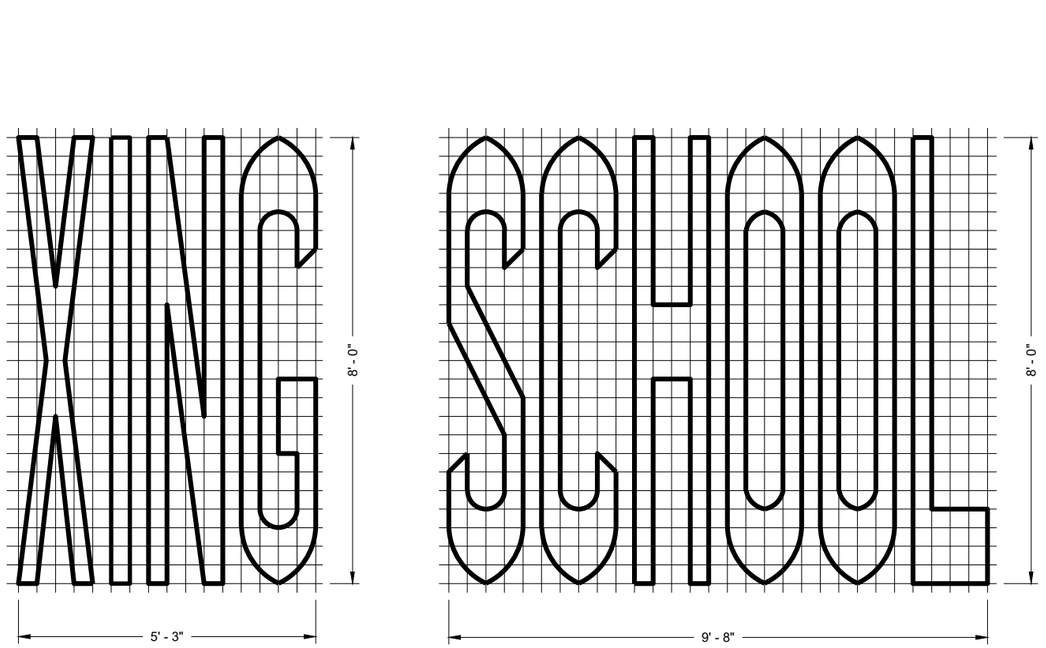
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

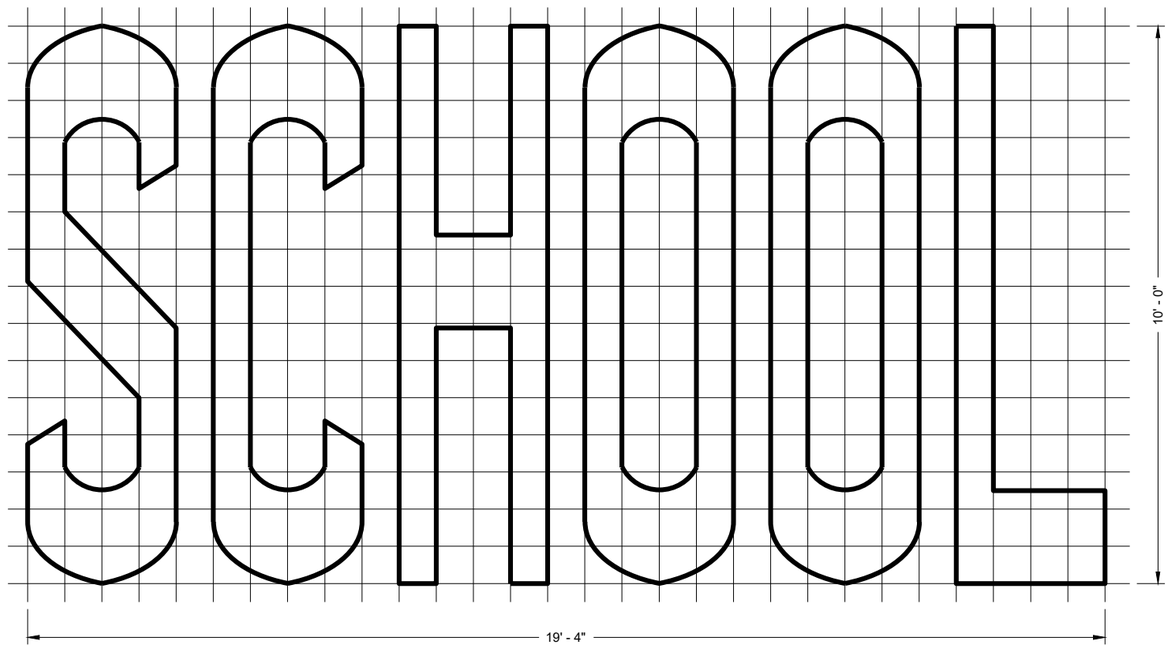
6

SDD 15C05 - 05





SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

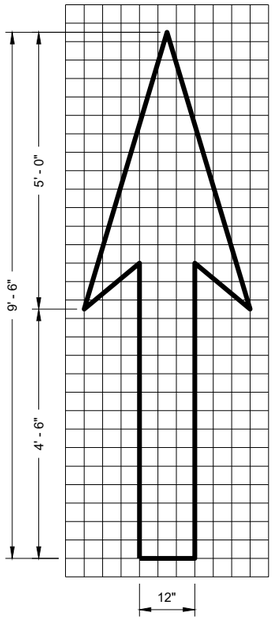
6

SDD 15C07 - 15b

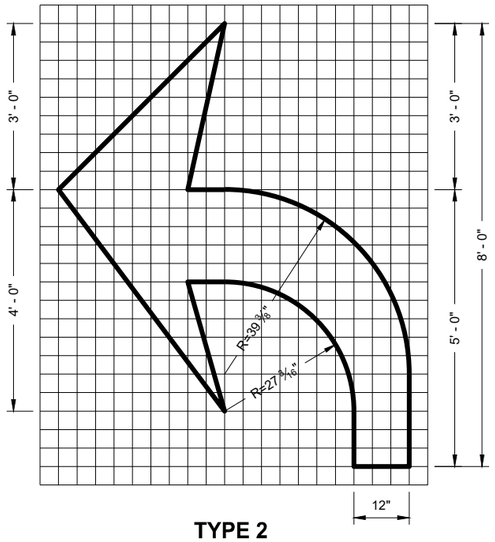
SDD 15C07 - 15b

GENERAL NOTES

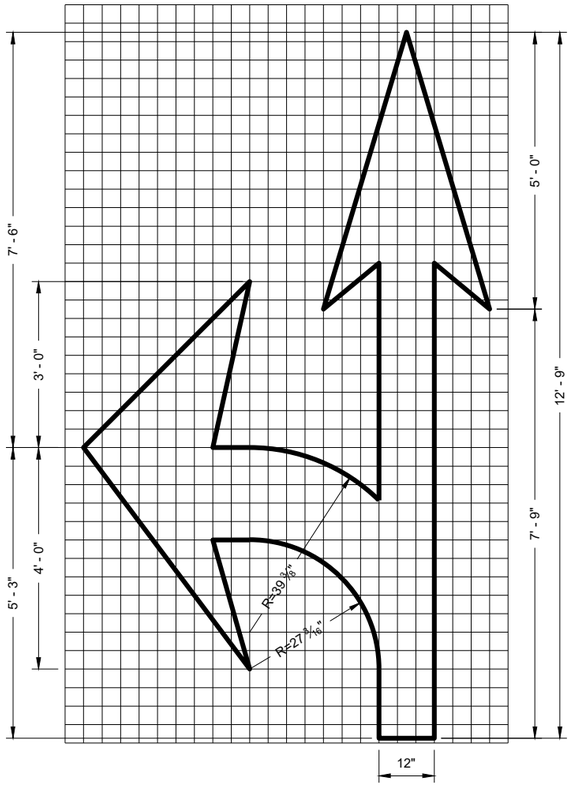
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



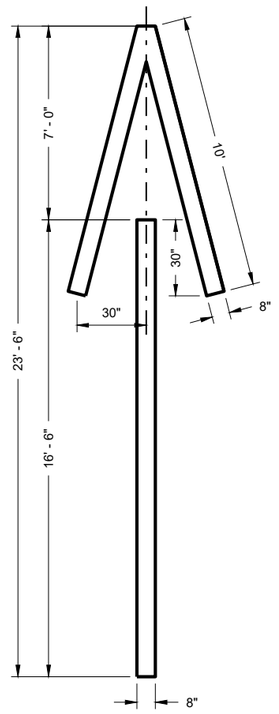
TYPE 1



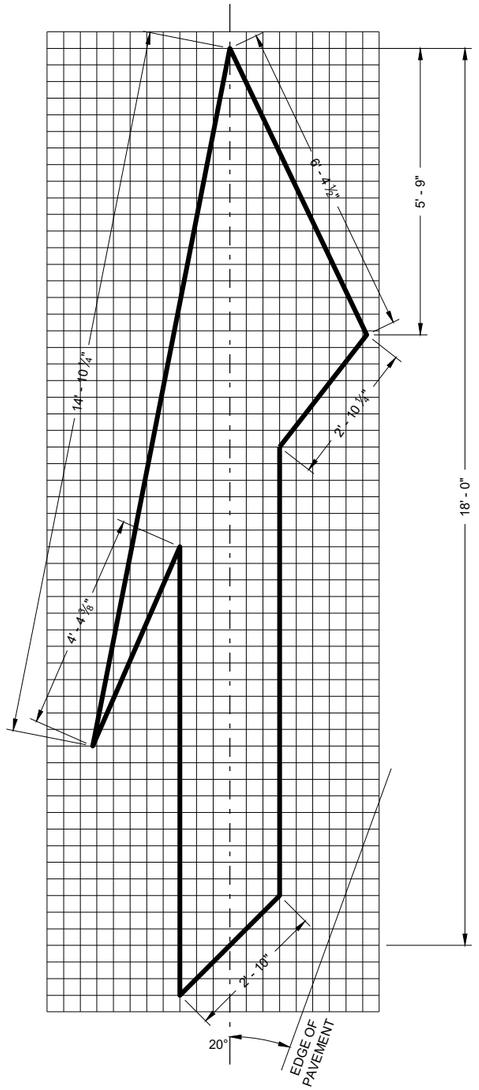
TYPE 2



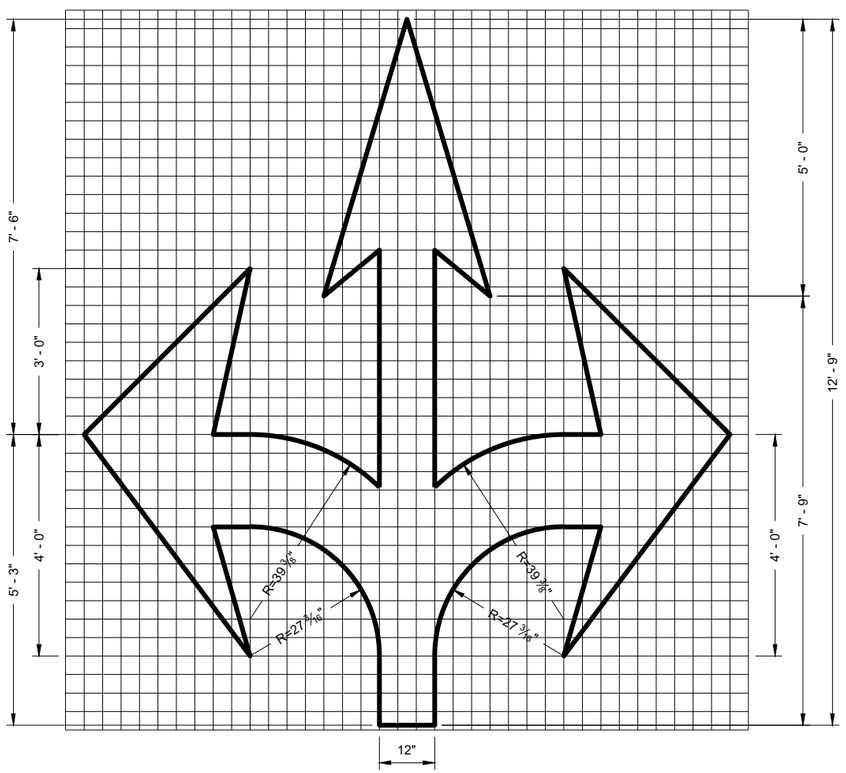
TYPE 3



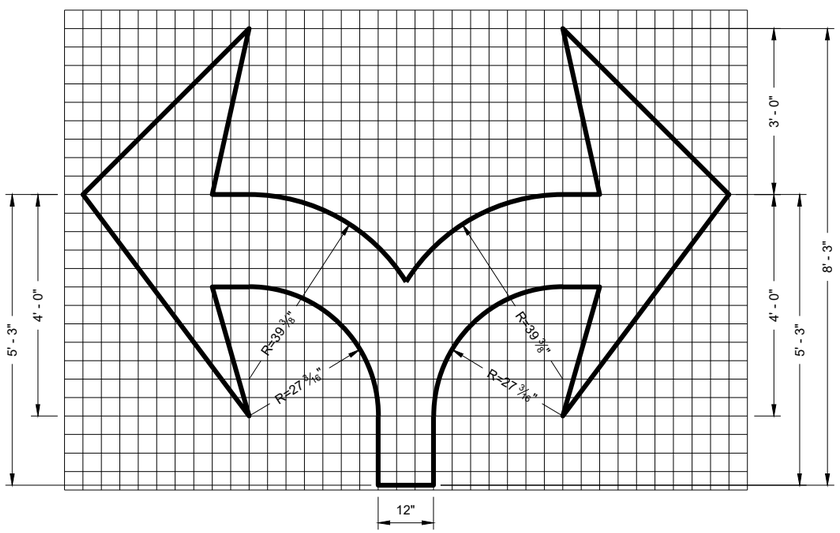
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

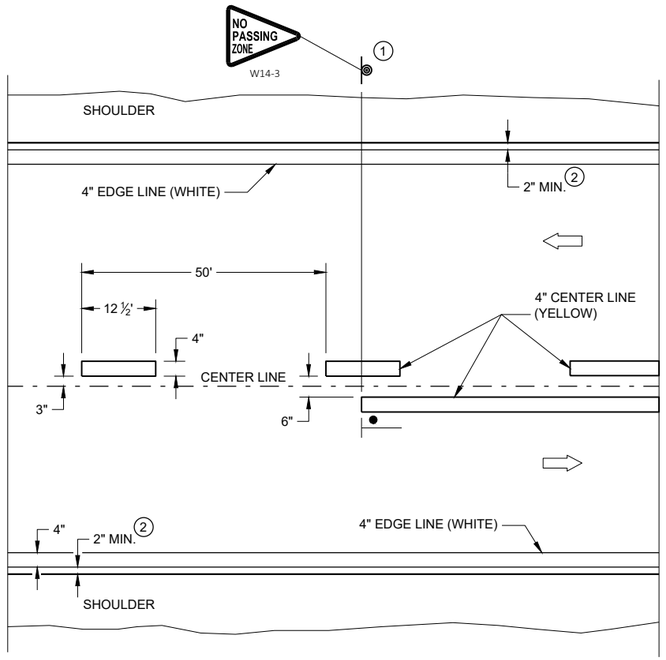
FHWA

6

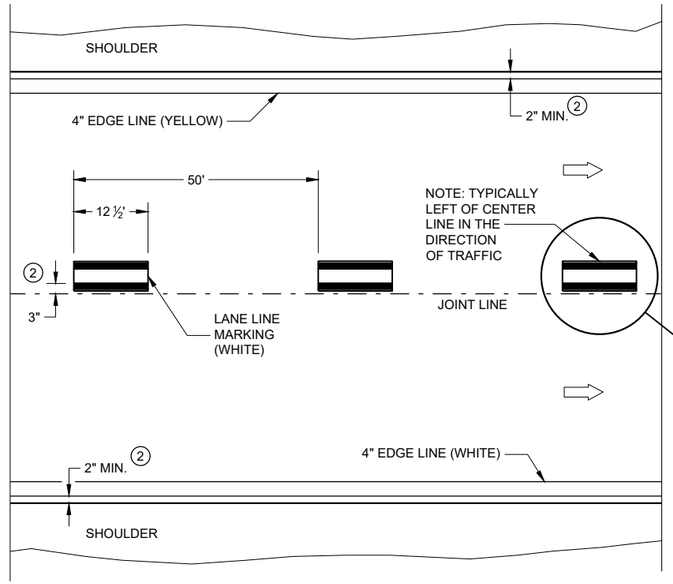
SDD 15C07 - 15c

6

SDD 15C07 - 15c

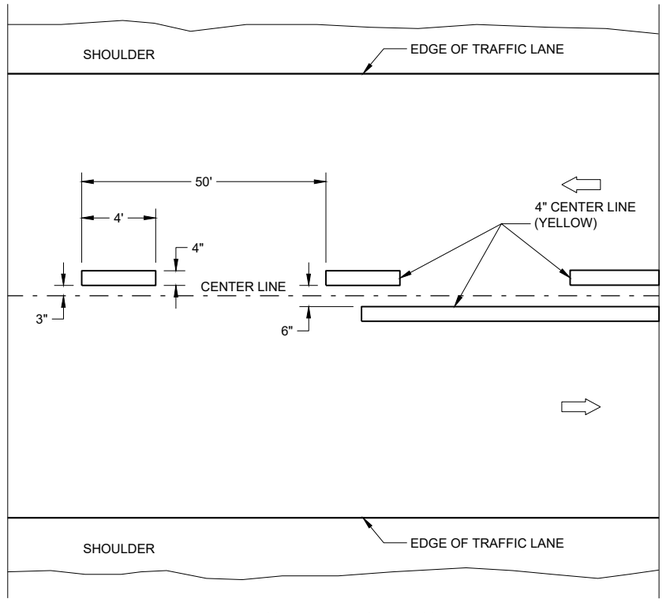


TWO WAY TRAFFIC

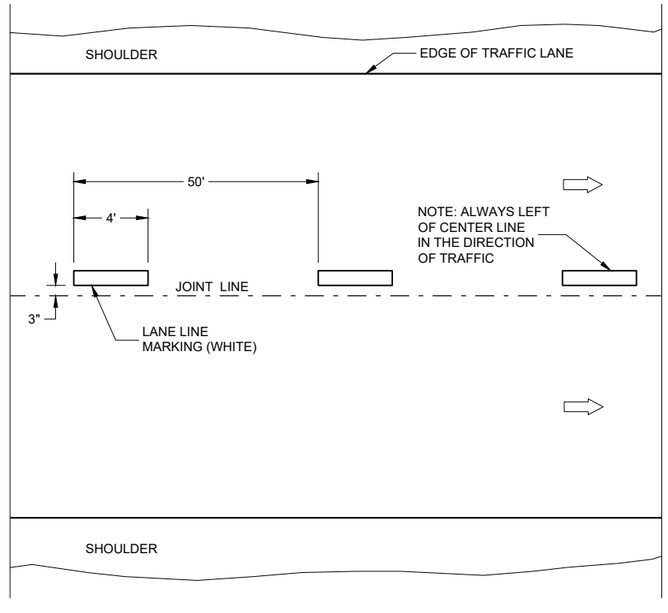


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

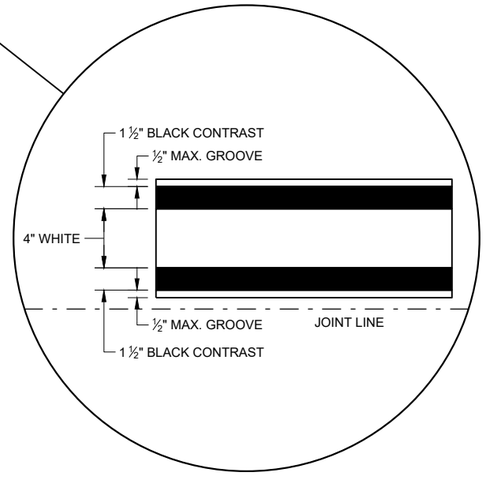
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

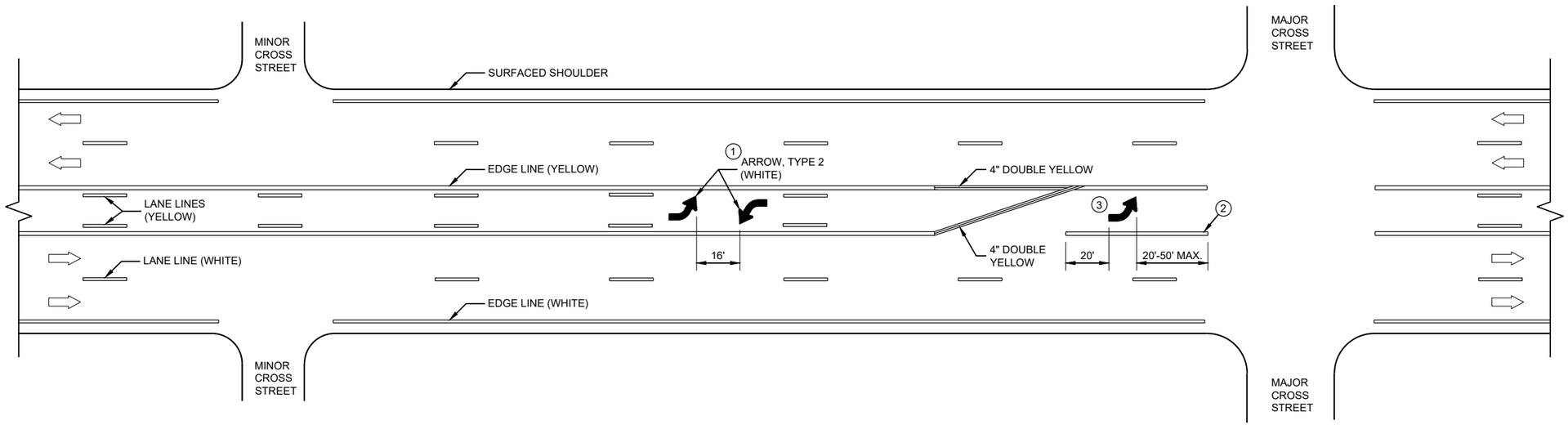
SDD 15C08 - 20a

SDD 15C08 - 20a

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

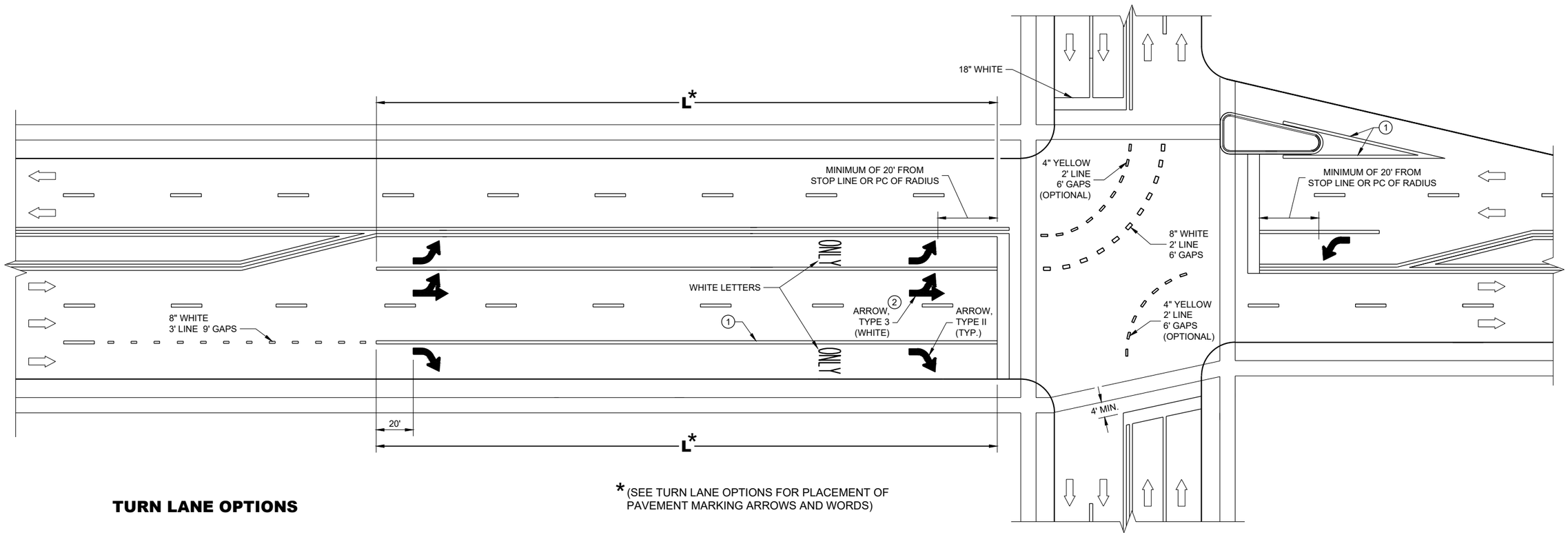
SDD 15C08 - 20b

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

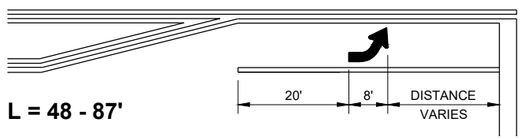
SDD 15C08 - 20b



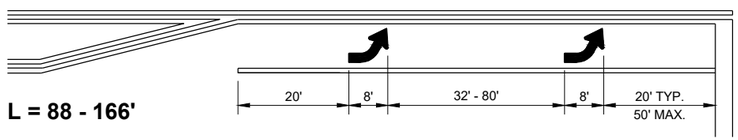
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

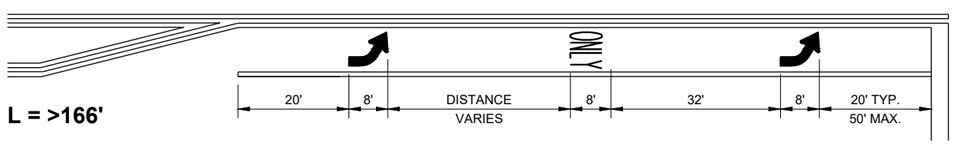
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. 8" WHITE
2. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08 - 20c

LEGEND

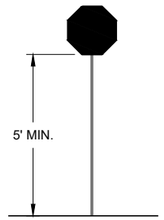
SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

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



STOP/SLOW PADDLE ON SUPPORT STAFF

GENERAL NOTES

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

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

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

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND 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.

FLAGGING

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

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' 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.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

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

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FOR THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

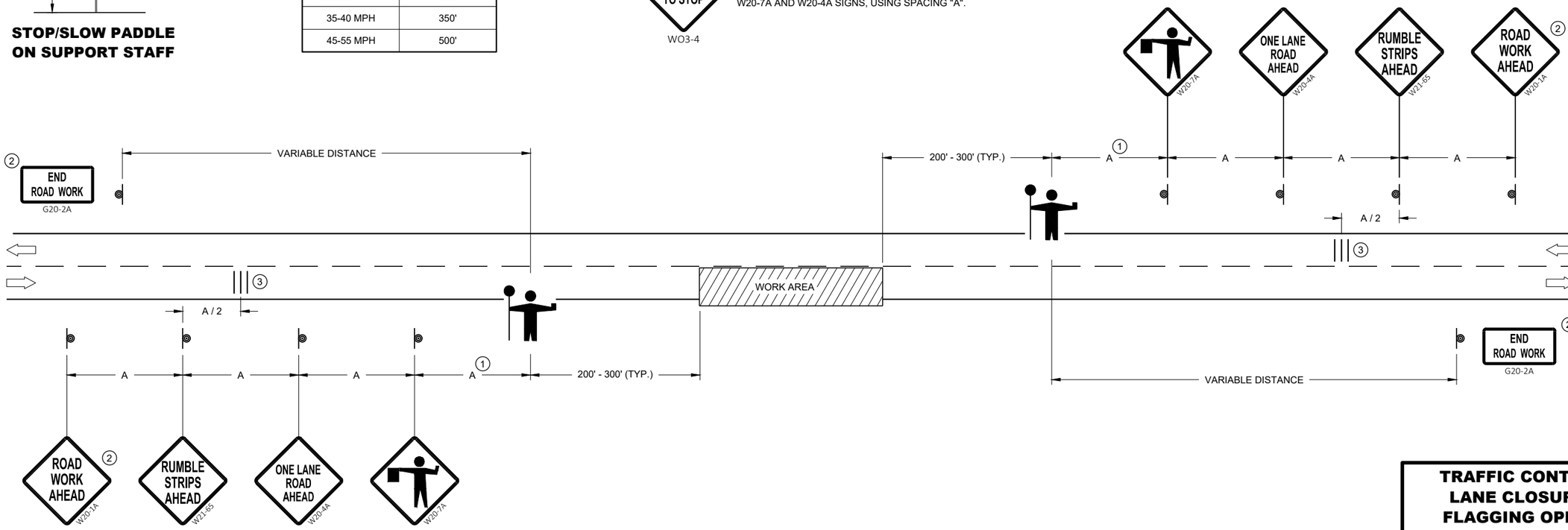
DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

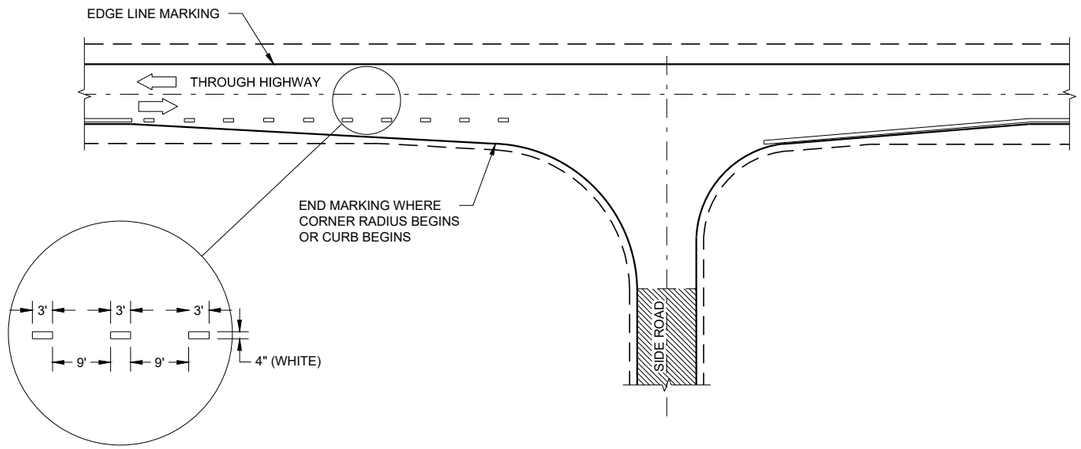
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

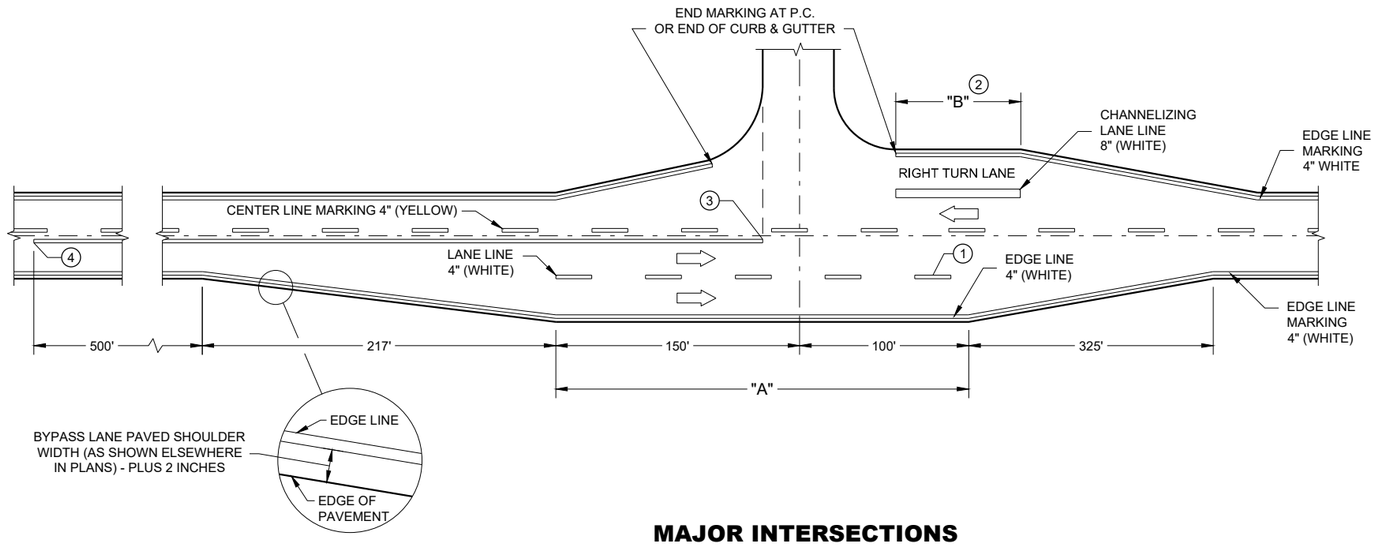
6

SDD 15C12 - 07

SDD 15C12 - 07



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

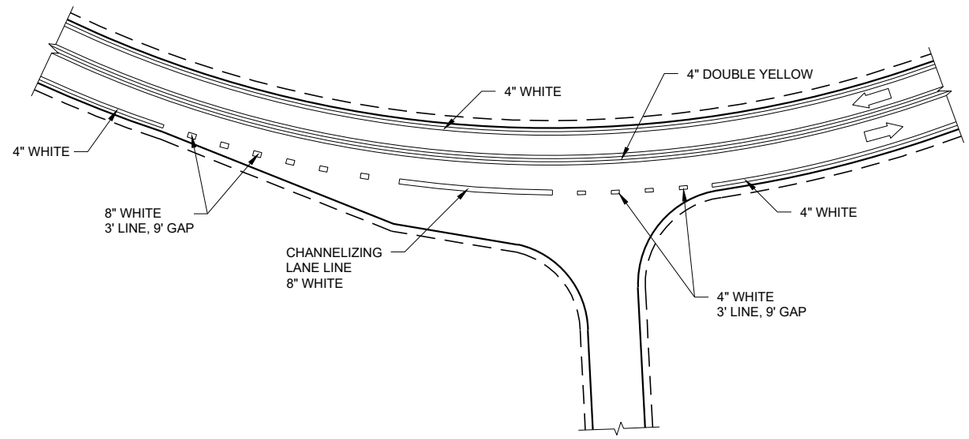
GENERAL NOTES

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

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

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

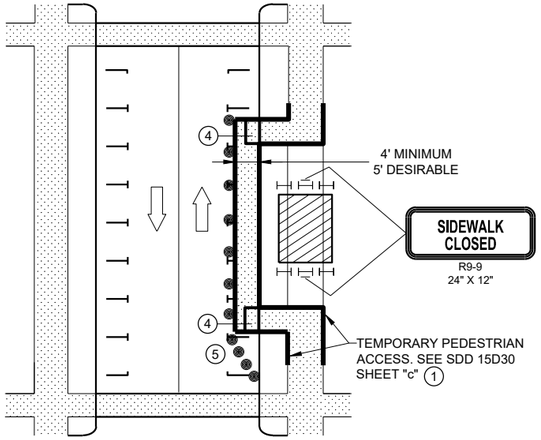
6

SDD 15C35 - 04a

6

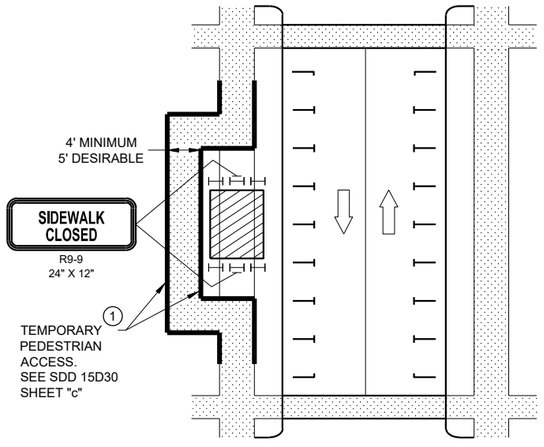
SDD 15C35 - 04a

NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

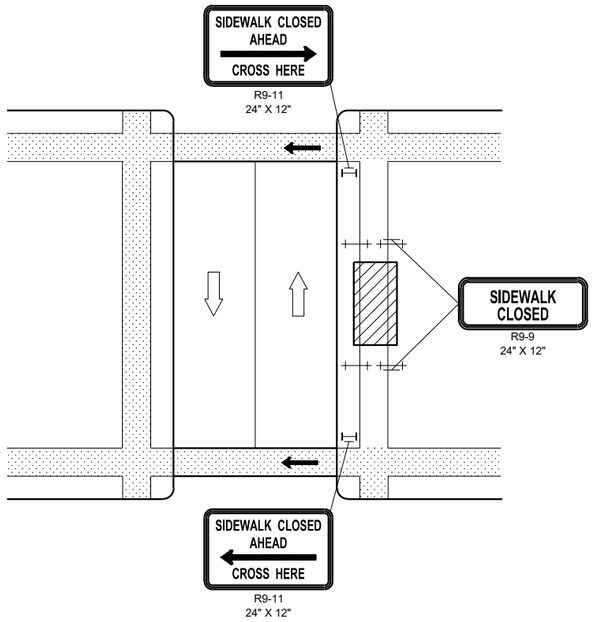


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

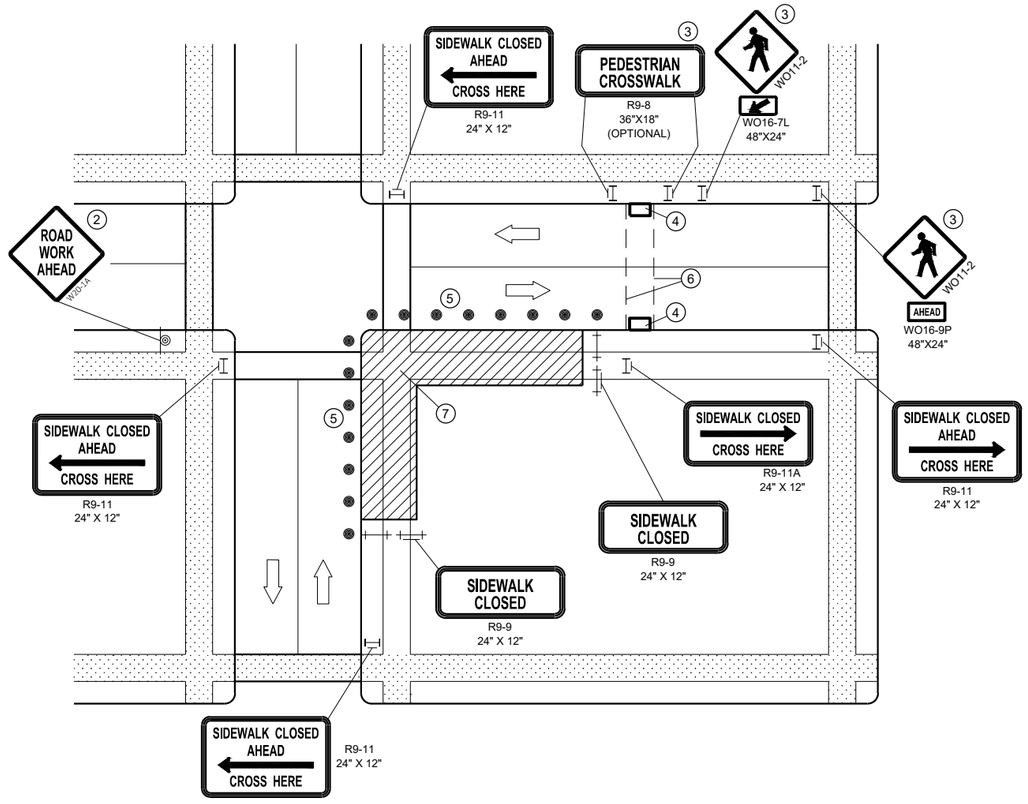
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

"WO" SIGN IS THE SAME AS "W" SIGN, EXCEPT THE BACKGROUND IS ORANGE.

FOR NIGHTIME CLOSURE, USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEK LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

1. IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE
2. "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.
3. IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND WO11-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.
4. TEMPORARY CURB RAMPS. SEE SDD 15D30 SHEET "b'.
5. DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.
6. TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.
7. LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

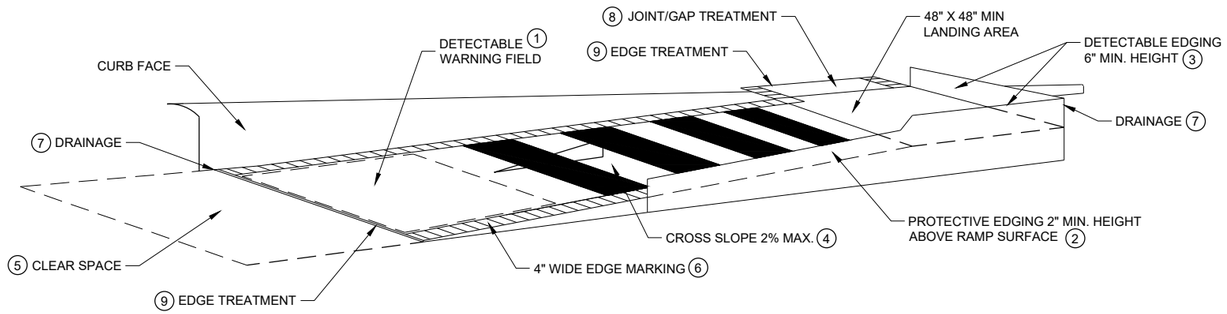
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW INTENSITY FLASHING)
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

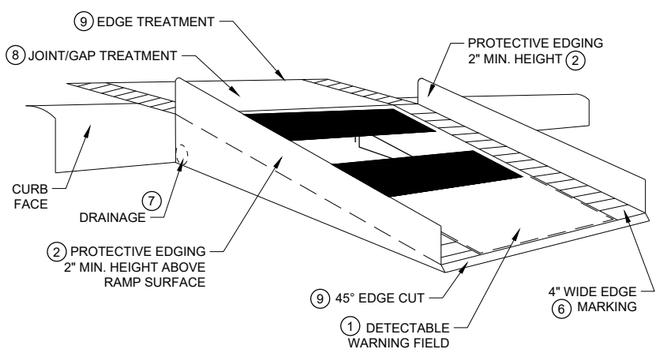
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

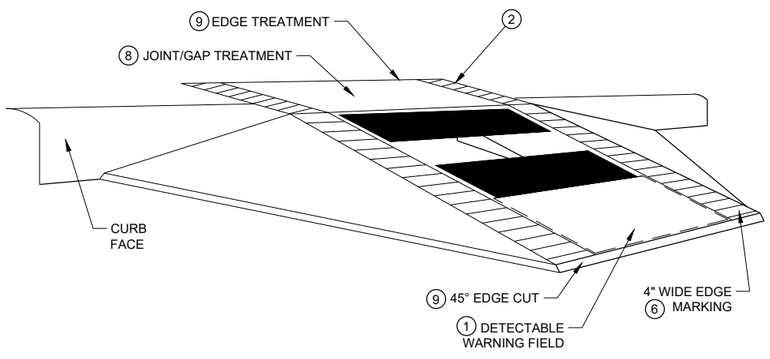
SDD 15D30 - 06a
SDD15D30 - 06a



TEMPORARY CURB RAMP PARALLEL TO CURB



WITH PROTECTIVE EDGE



WITH SIDE APRON

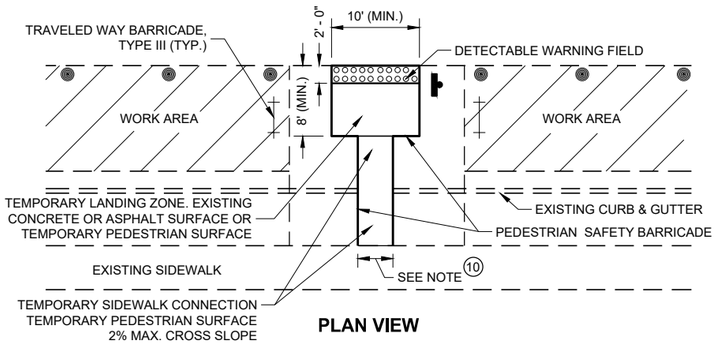
TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

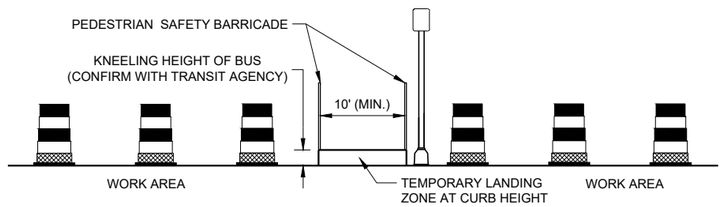
NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

1. CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 08D05, SHEET "e".
2. PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
3. DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.
5. CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
6. THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.
7. DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
8. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.
9. CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES SHALL BE VERTICAL UP TO ¼" HIGH AND BEVELED AT 1:2 BETWEEN ¼" AND ½".
10. 5" WIDE MIN. WITH PEDESTRIAN SAFETY BARRICADE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY BARRICADE.



PLAN VIEW



PROFILE VIEW

TEMPORARY BUS STOP PAD

LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- WORK AREA

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

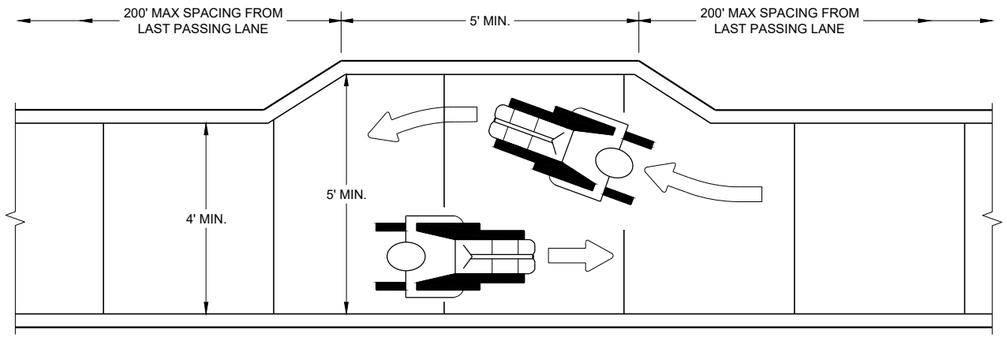
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

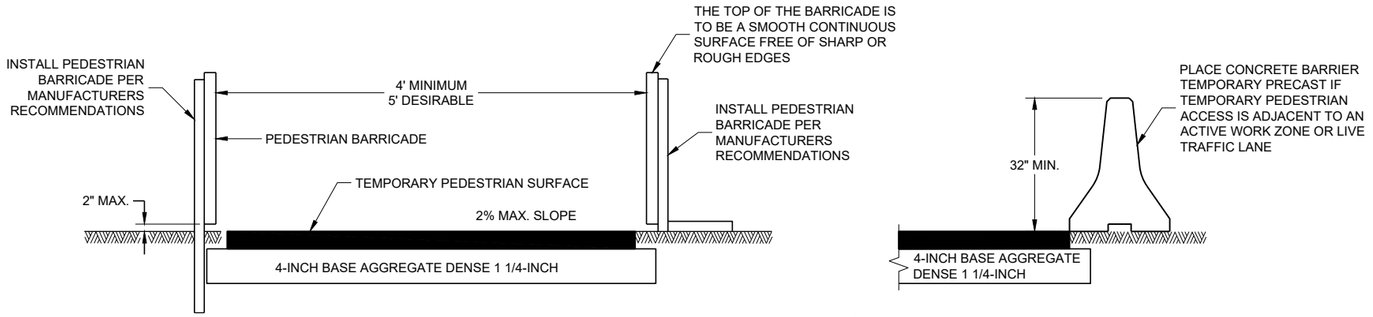
SDD 15D30 - 06b

6

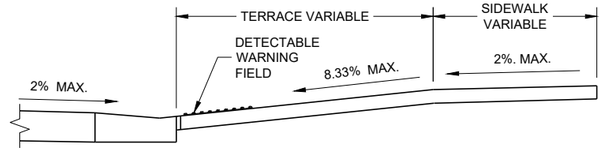
SDD 15D30 - 06b



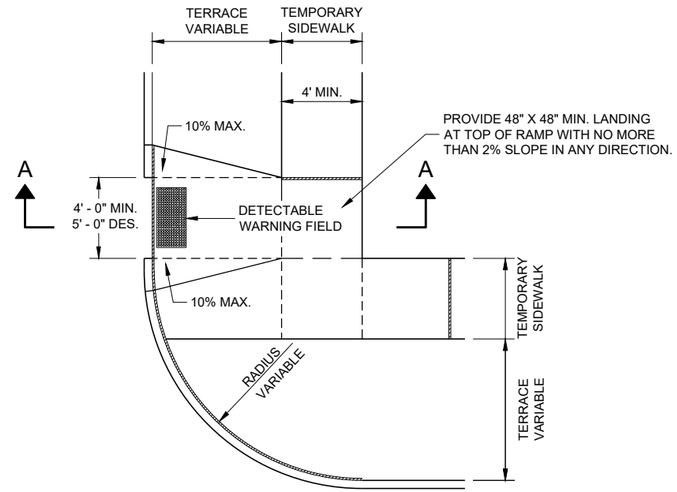
NARROW SIDEWALK PASSING DETAIL



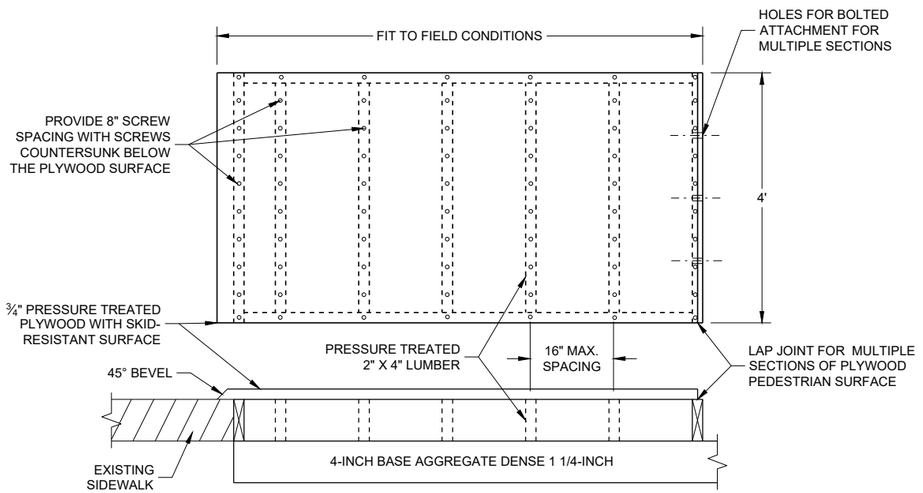
TEMPORARY PEDESTRIAN ACCESS



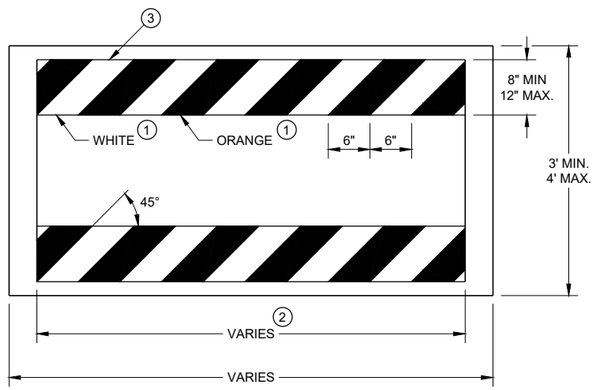
SECTION A - A



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



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



TEMPORARY PEDESTRIAN BARRICADE *

GENERAL NOTES

BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
3. PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

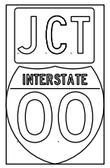
FHWA

SDD 15D30 - 06c

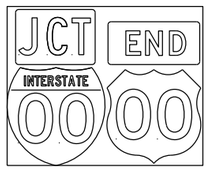
6

SDD 15D30 - 06c

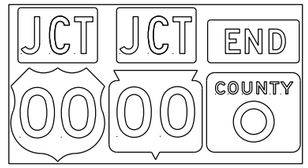
TYPICAL ASSEMBLIES



J1-1



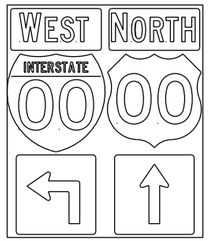
J1-2



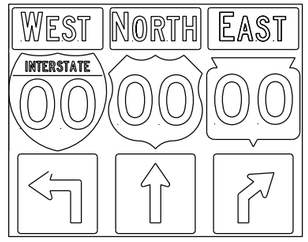
J1-3

JR1-1

J2-1

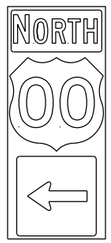


J2-2

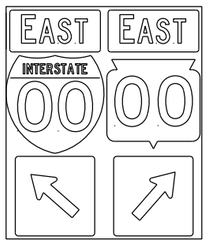


J2-3

JV
(Typical Vertical J-Assembly
See Note 10 and 11)



J3-1



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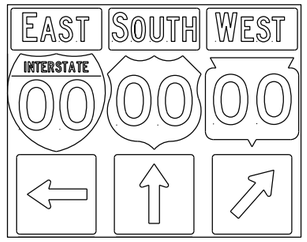
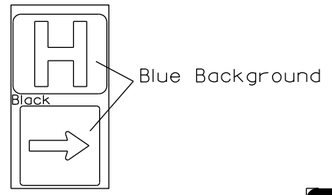
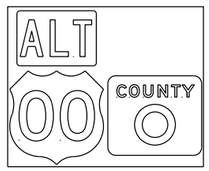


J3-3



JH-1

J4-1



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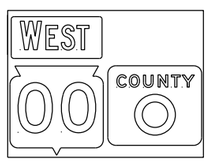
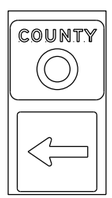


J4-2

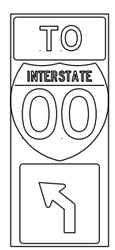
J12-1



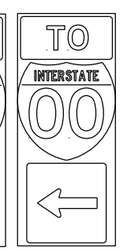
J13-1

J32-1

J33-1



J22-1

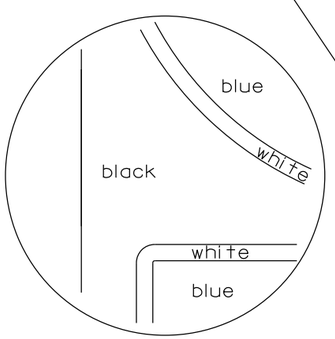


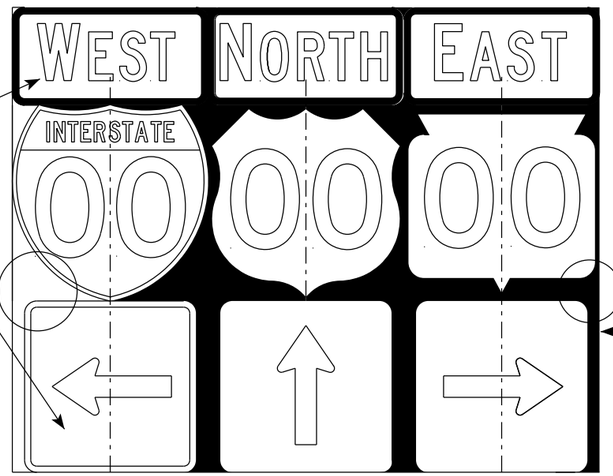
J23-1

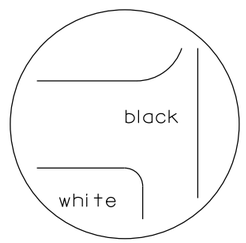
JR13-1

JR23-1

JR99-1







black background

NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. 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.
7. 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.
8. 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.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (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.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/21 PLATE NO. A2-1S.9

PROJECT NO:

SHEET NO: 89 **E**

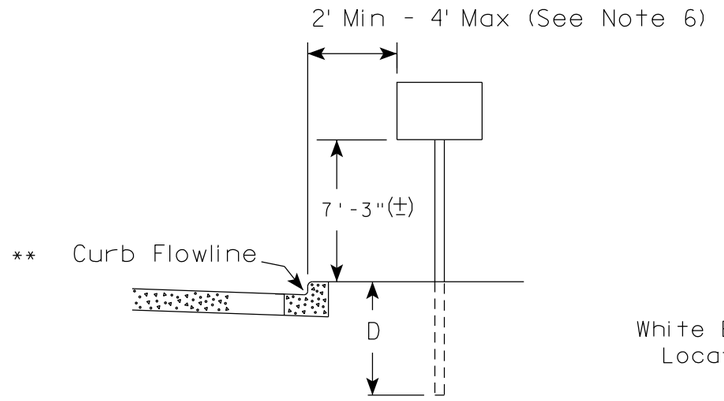
FILE NAME : C:\CAEfiles\Projects\tr_stdplate_A21S.dgn PLOT DATE : 18-MAR 2021 1:37 PLOT BY : mscj9h PLOT NAME :

WISDOT/CADDS SHEET 42

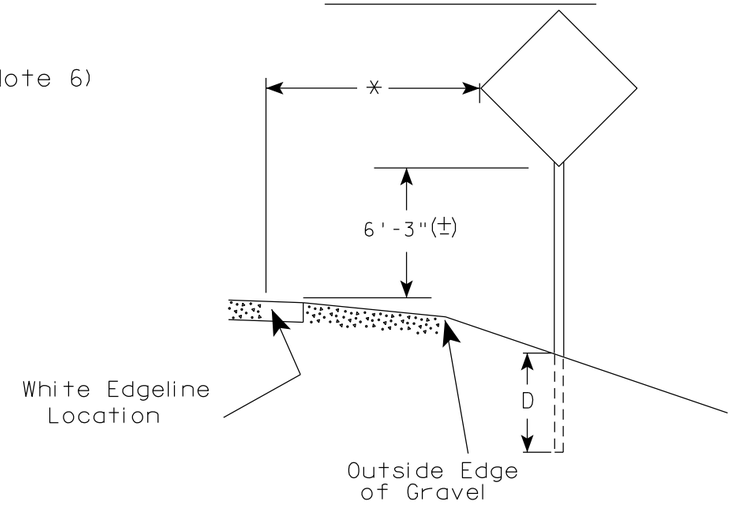
7

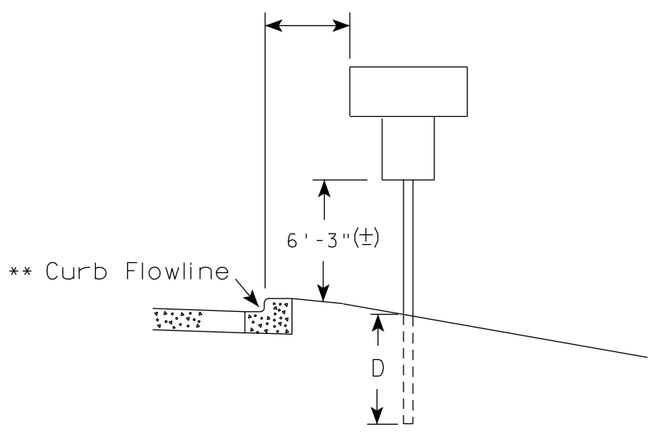
7

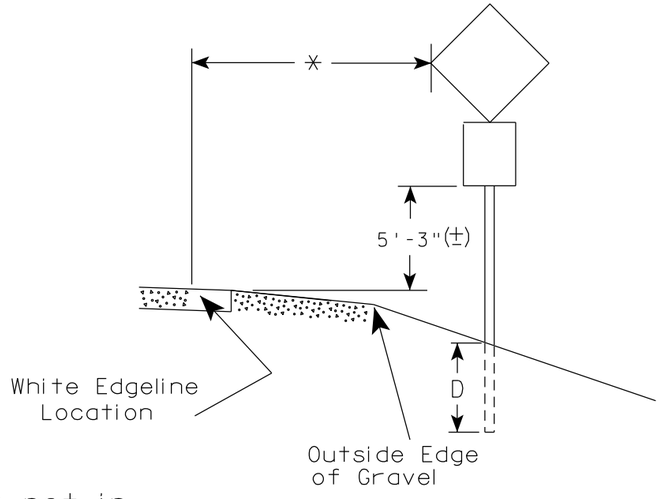
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

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

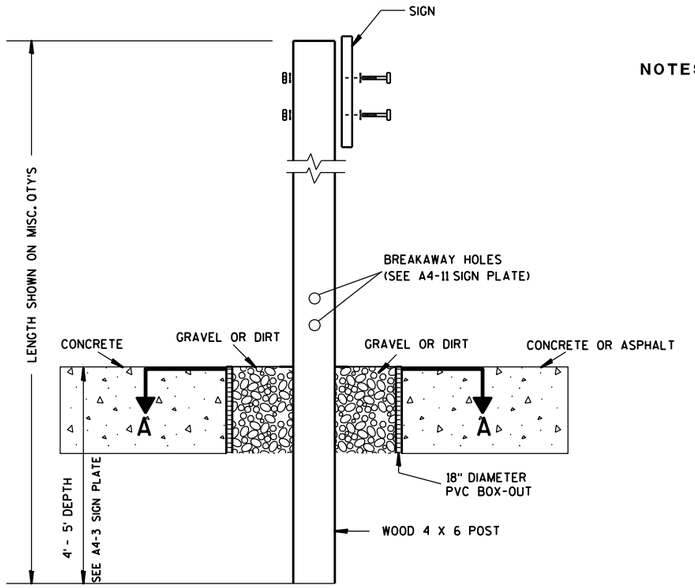
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

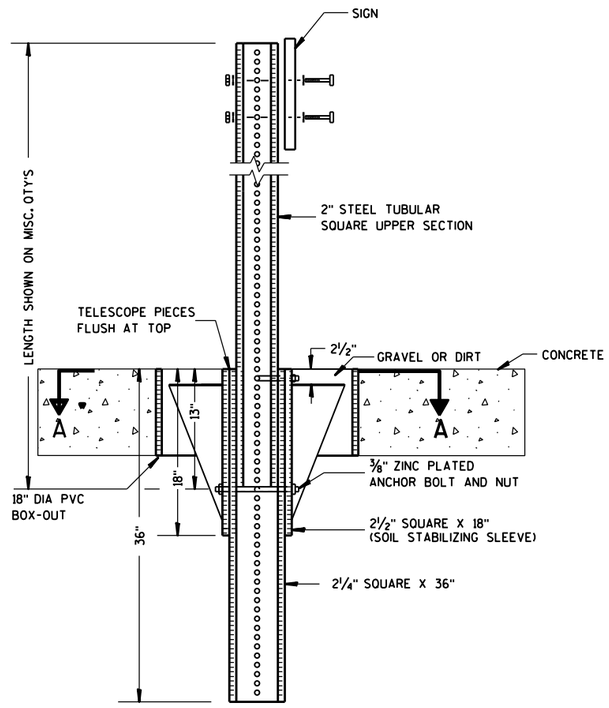
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 90	E



ELEVATION VIEW

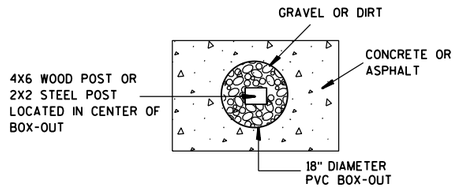
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

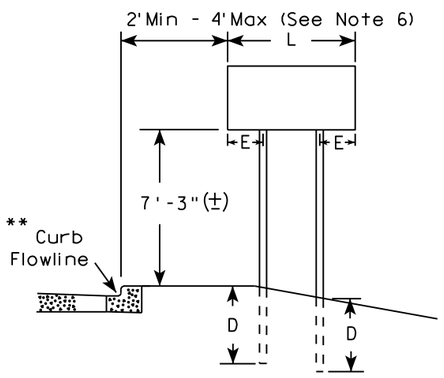
APPROVED Matthew R Rauch
for State Traffic Engineer

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

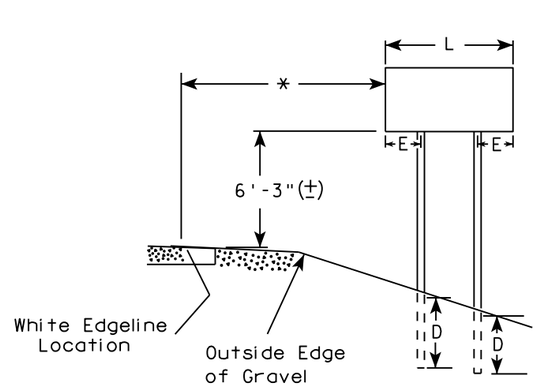
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

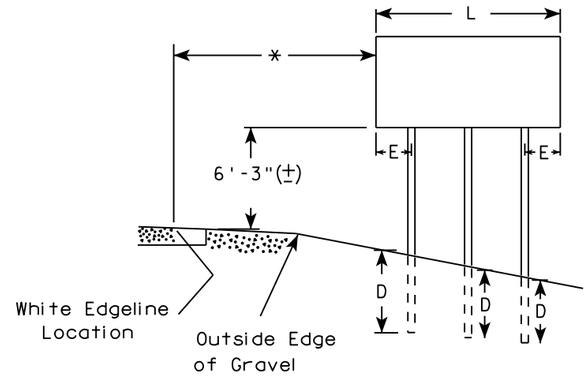
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

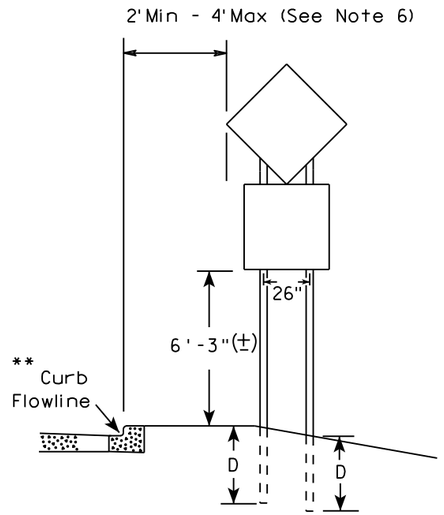
URBAN AREA



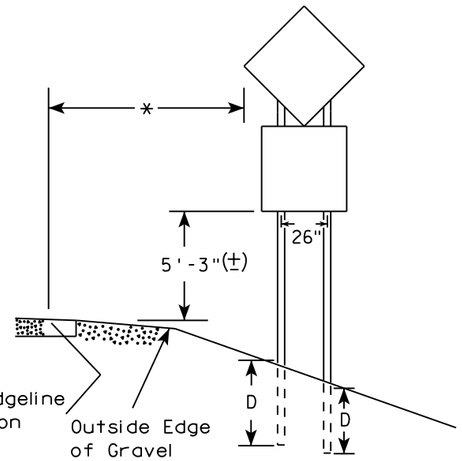
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

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

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

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

POST EMBEDMENT DEPTH

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

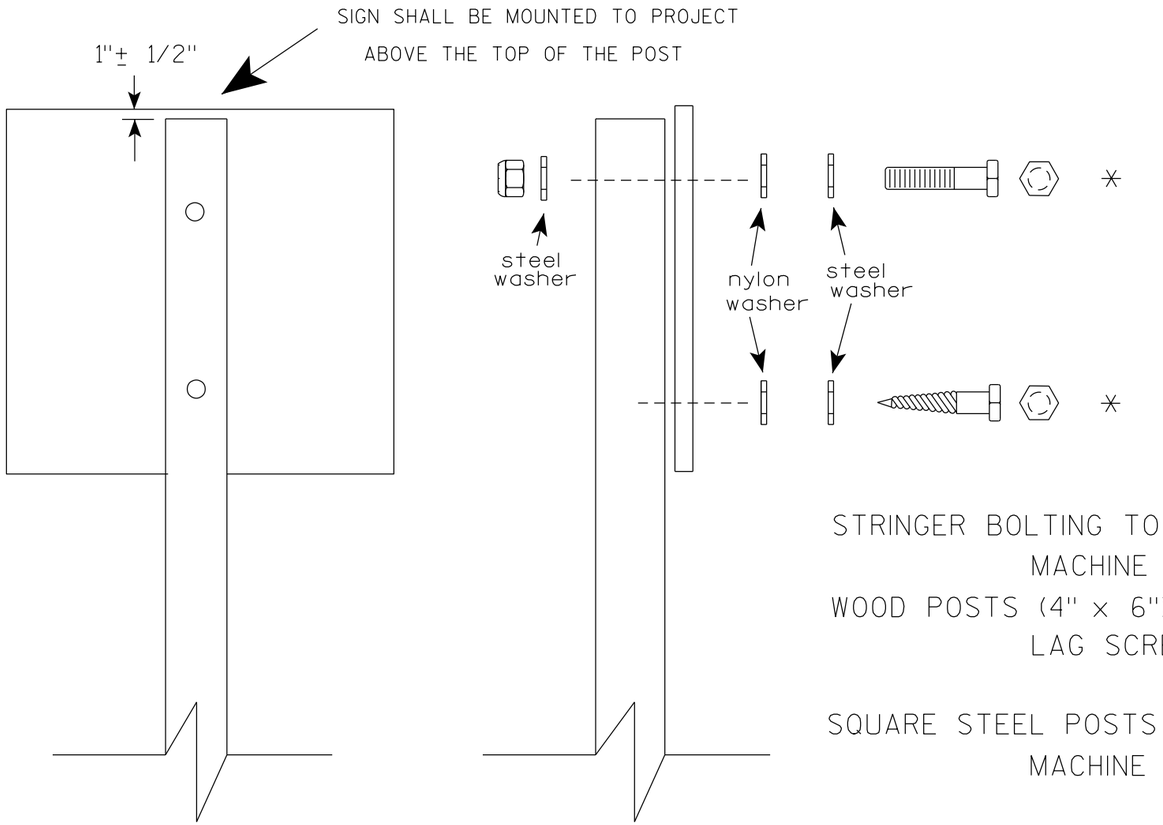
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 92	E



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

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

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

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

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

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

WOOD POSTS (4" x 6")

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

SQUARE STEEL POSTS (2" x 2")

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

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS TO POSTS

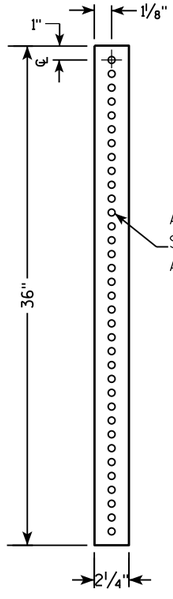
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

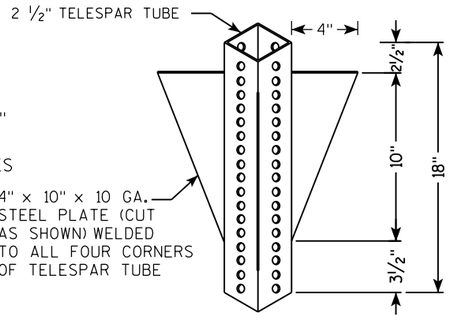
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

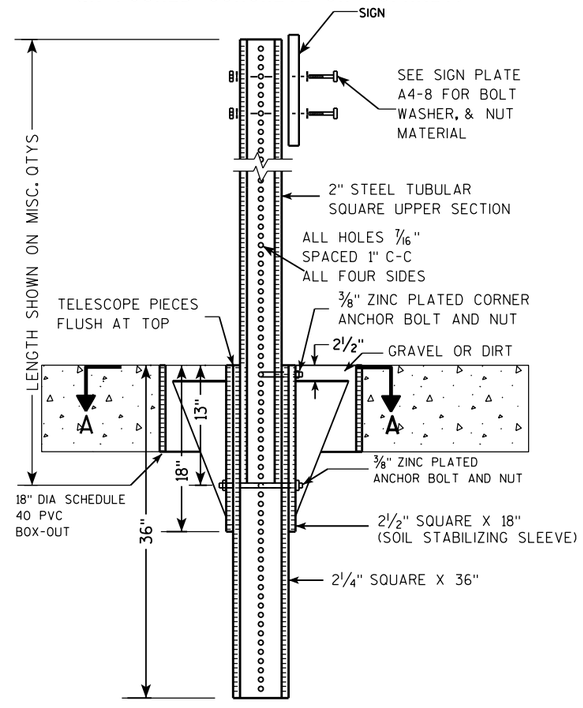
2 ¼ " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



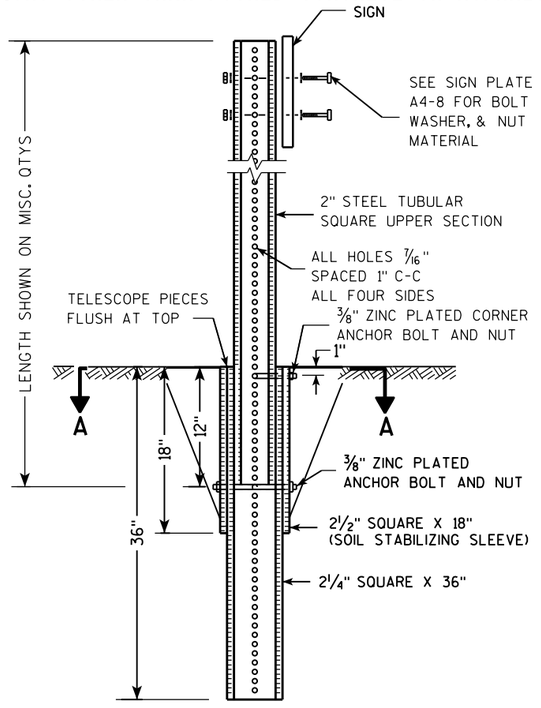
2 ½ " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

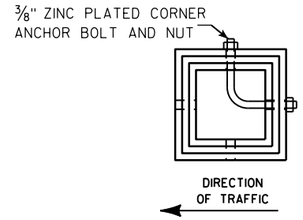


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

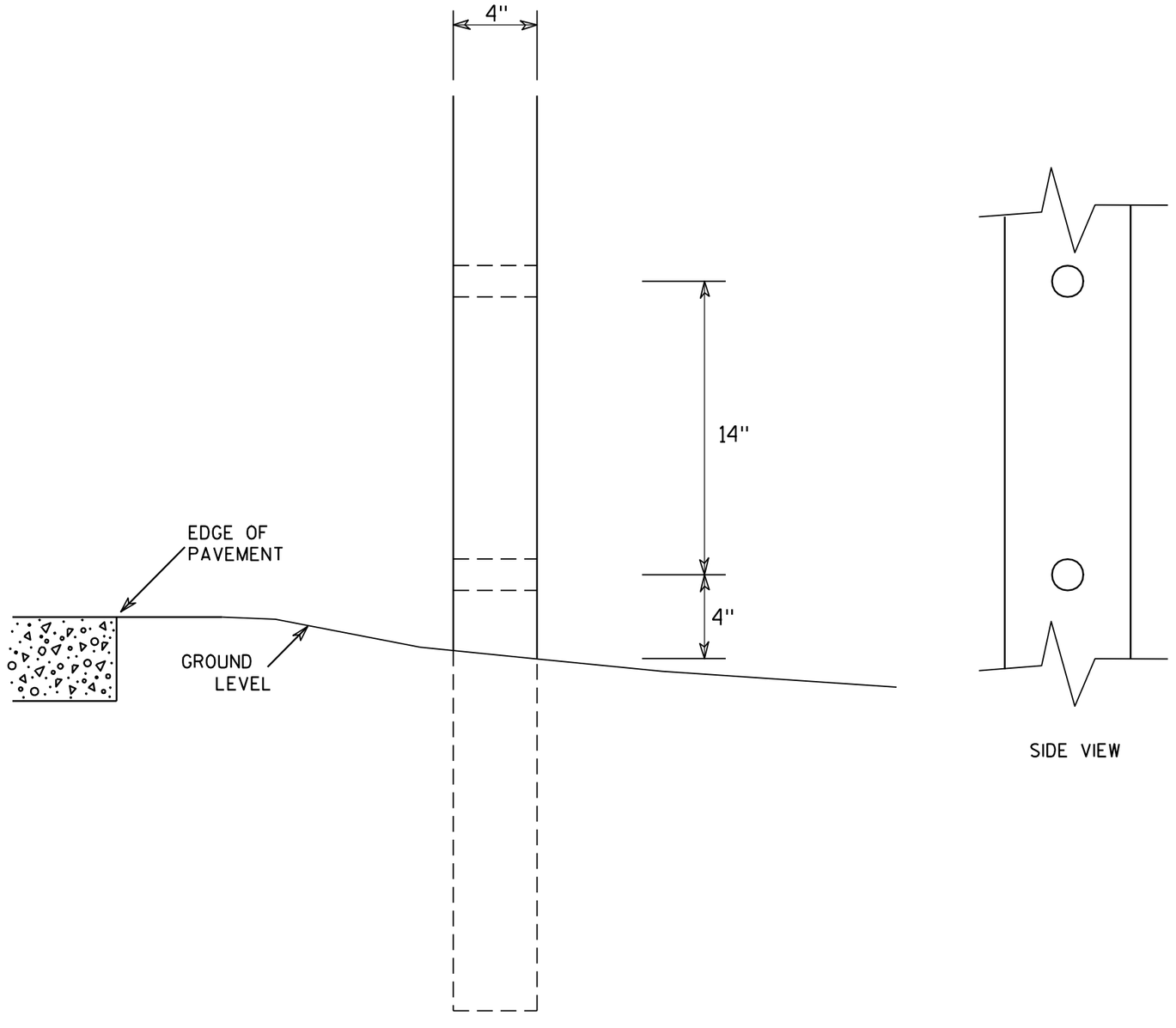
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 94 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

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

7

7

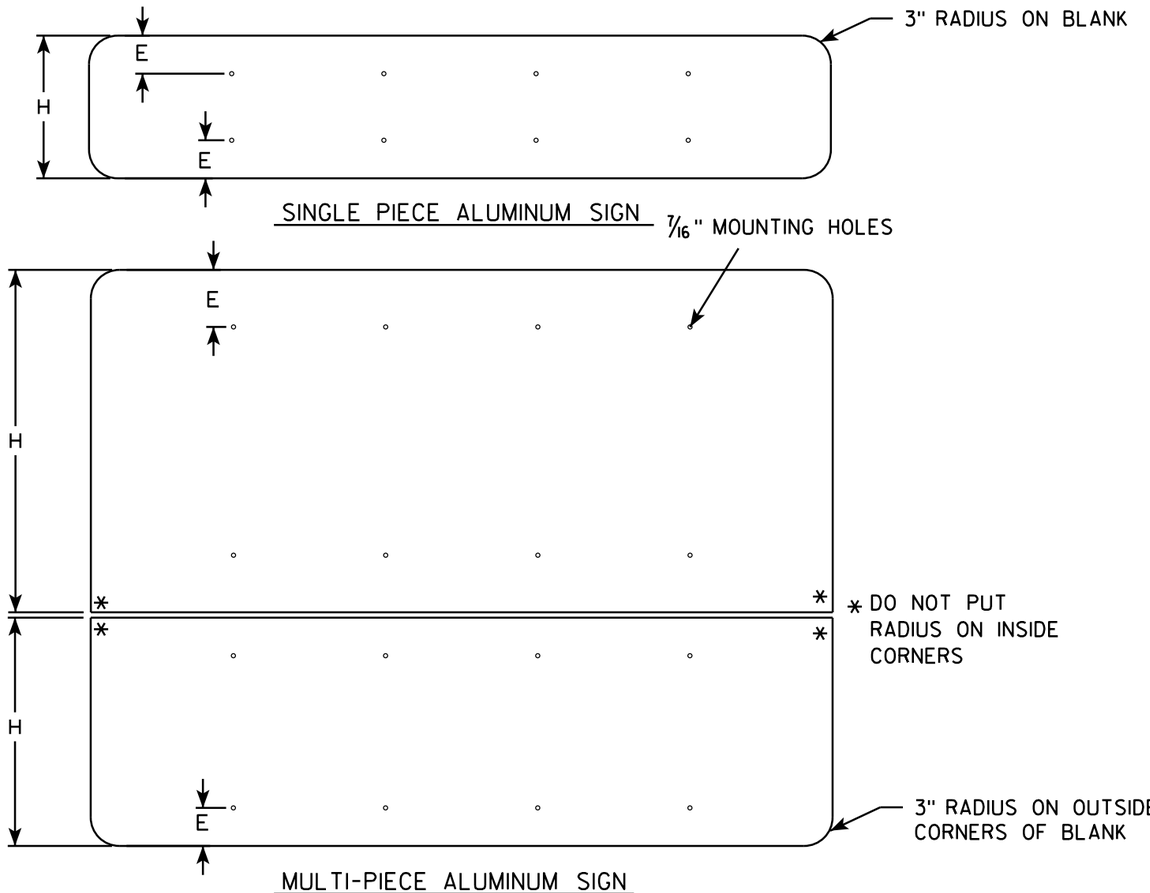
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

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

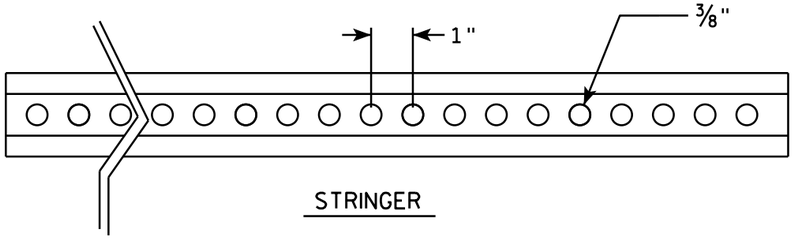
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 95	E



GENERAL NOTES

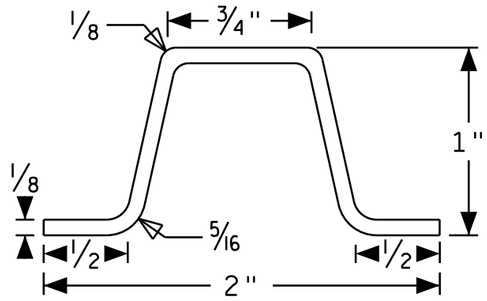
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"

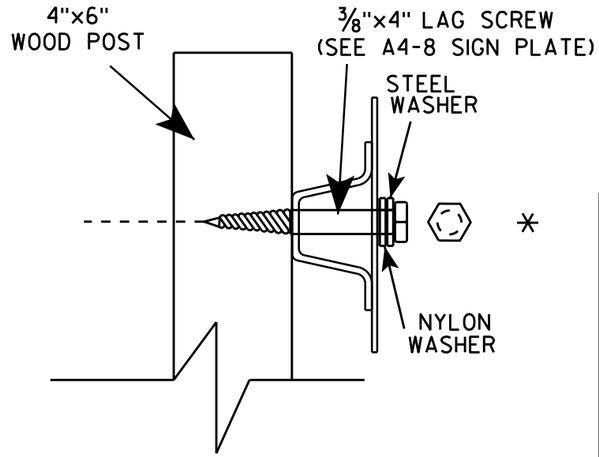


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

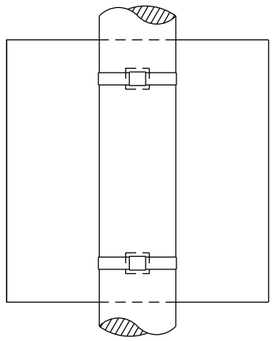
DATE 4/26/16 PLATE NO A4-18.1

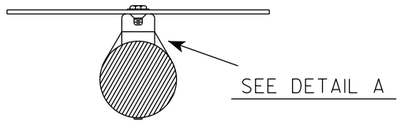
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

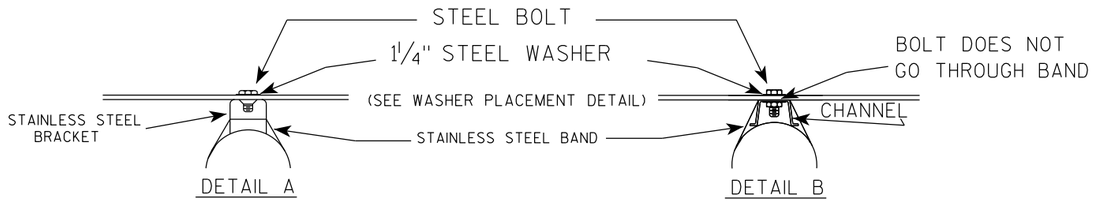
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

BANDING

SINGLE SIGN



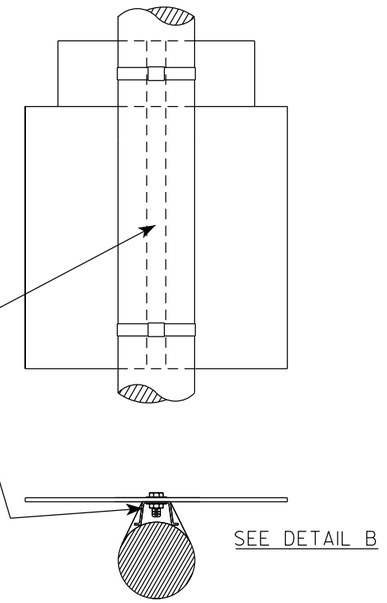




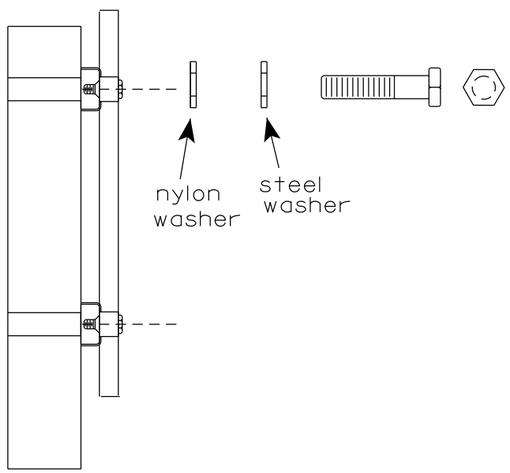
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



WASHER PLACEMENT



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

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

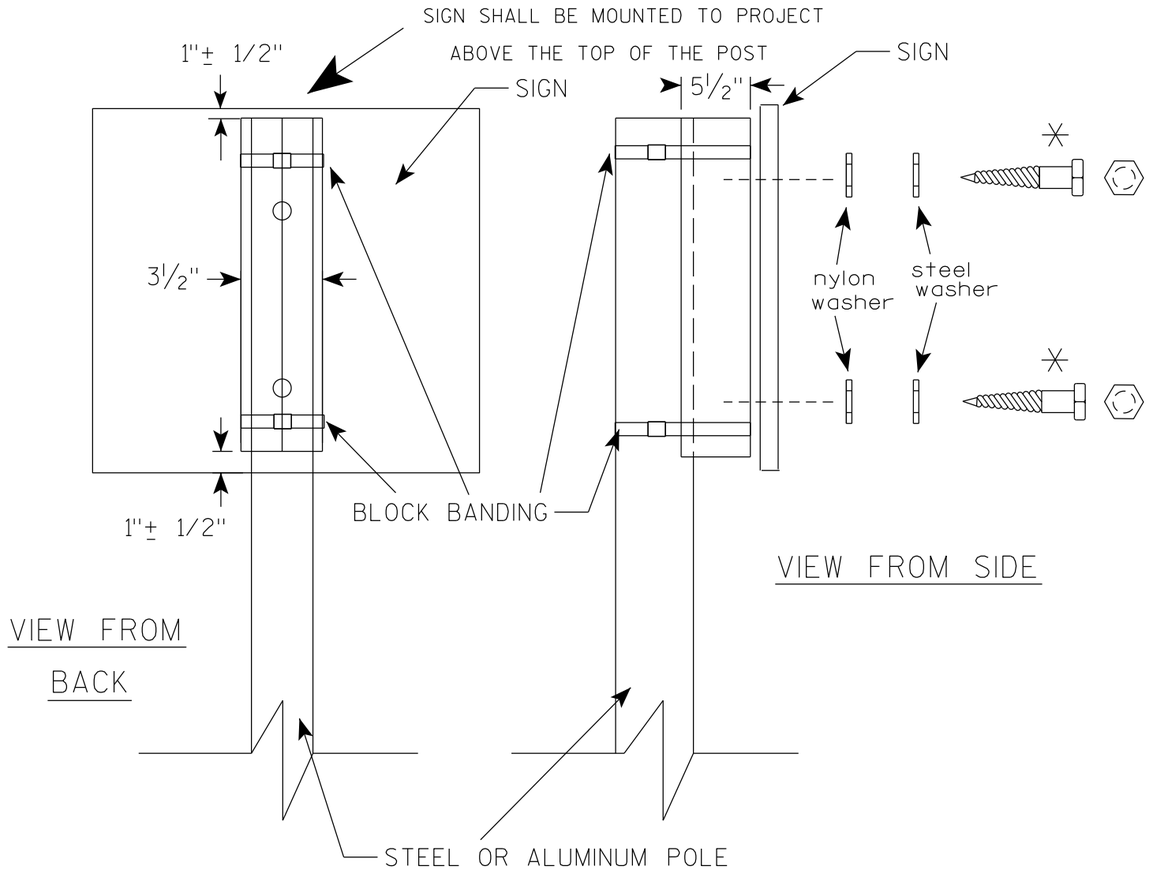
DATE 6/10/19 PLATE NO. A5-9.4

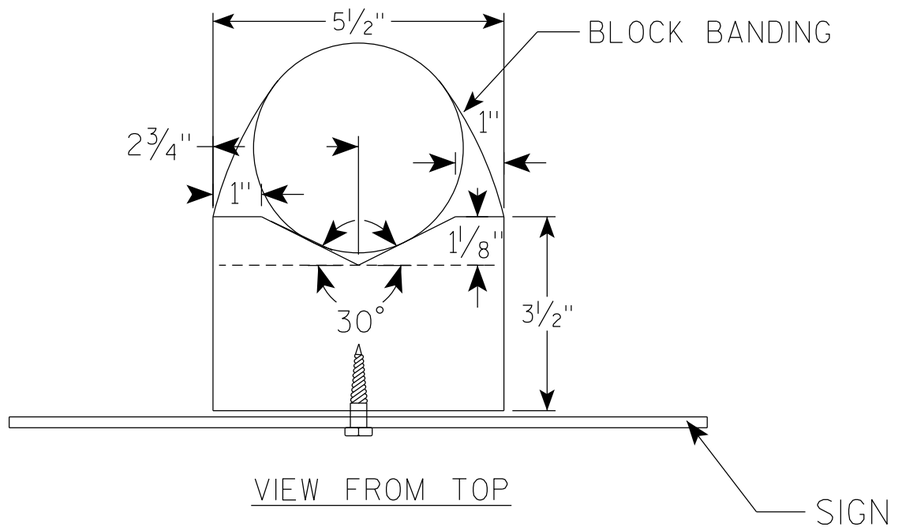
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 97	E

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

7

7





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

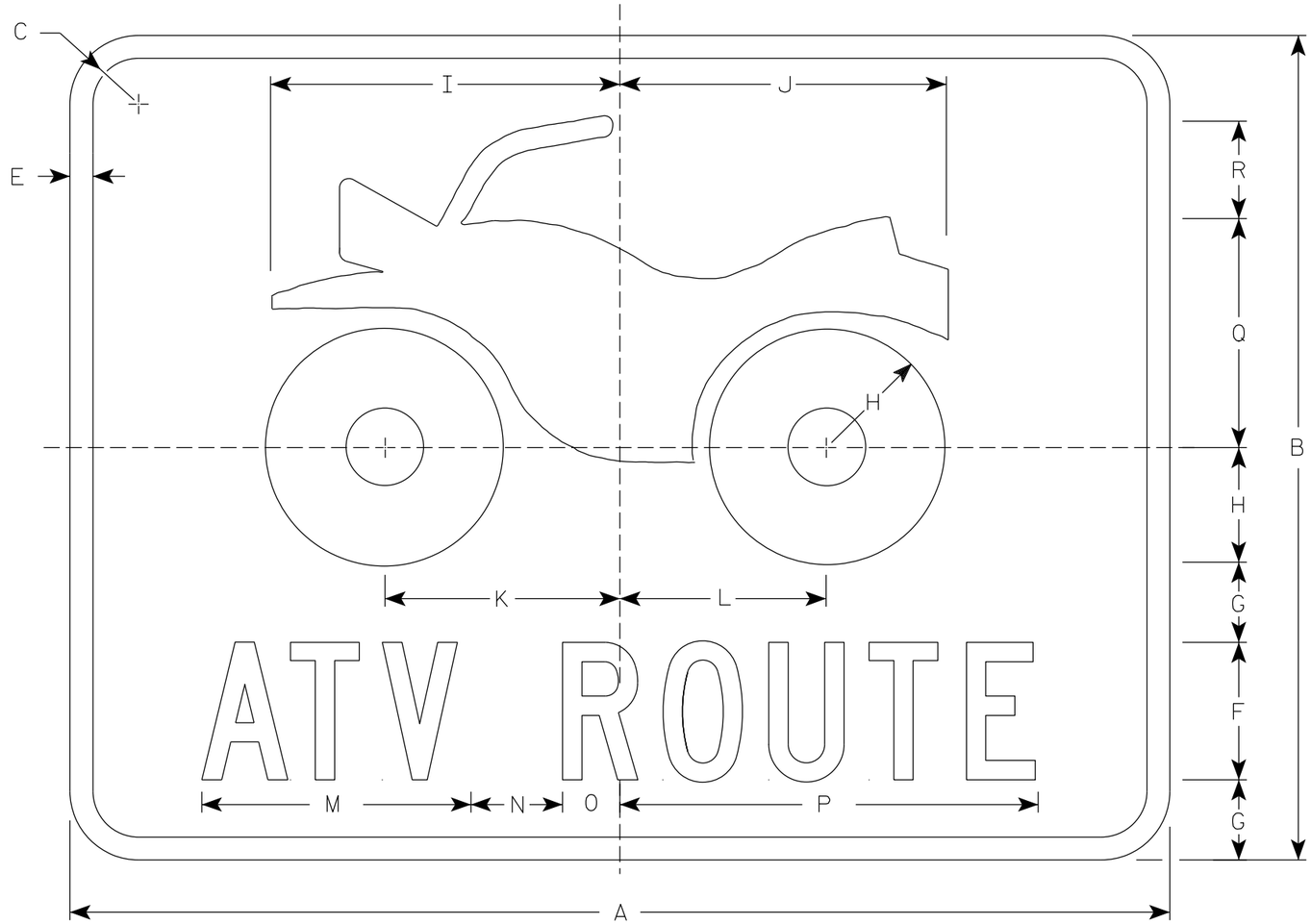
BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO: | SHEET NO: 98 | E



D11-10

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8		1/2	3	1 3/4	2 1/2	7 5/8	7 1/8	5 1/8	5 1/2	5 7/8	2	1 1/4	9 1/8	5	2 1/8									3.0
3																											
4																											
5																											

STANDARD SIGN
D11-10

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

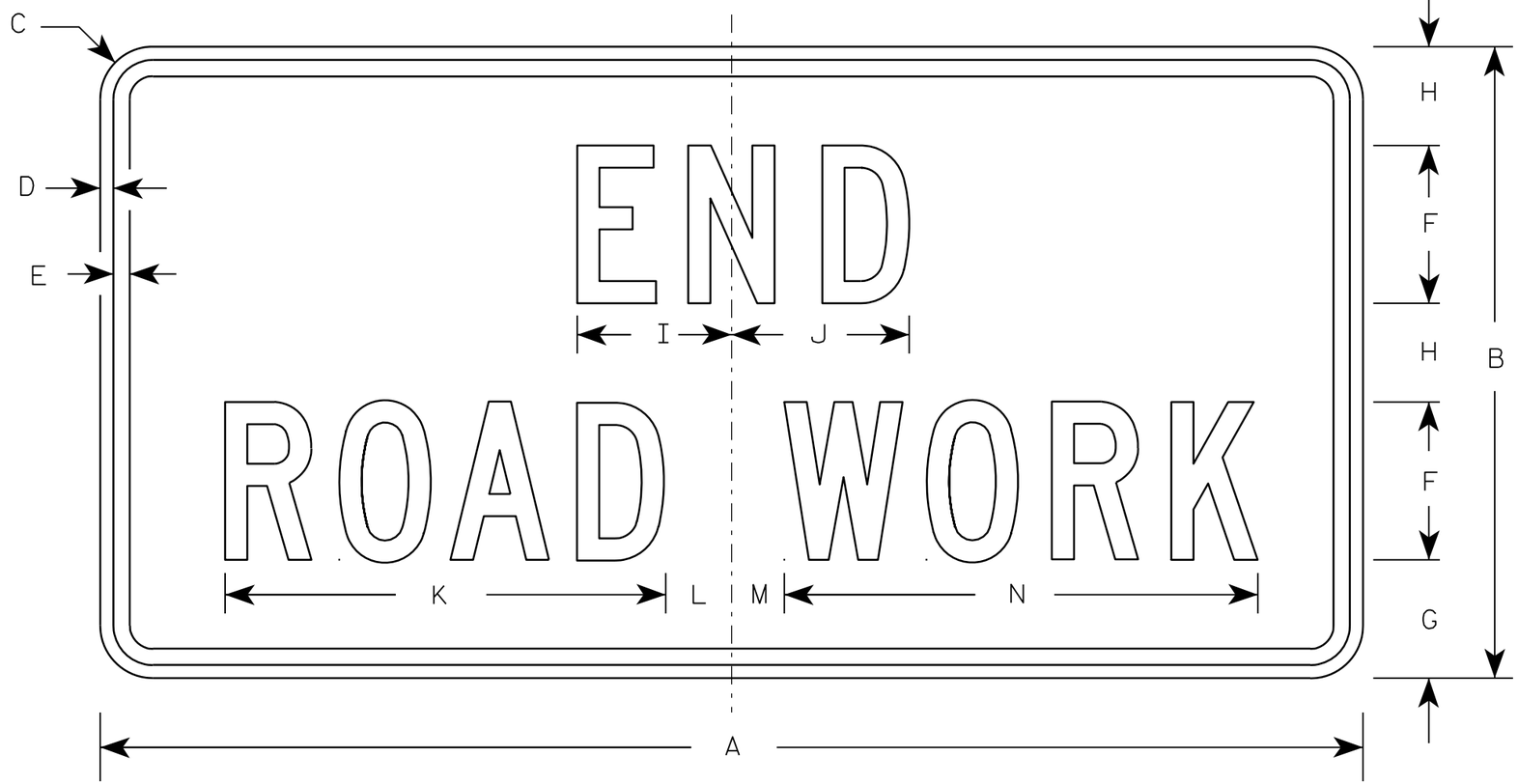
DATE 3/25/19 PLATE NO. D11-10.5

PROJECT NO:

SHEET NO: 99 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\D1110.DGN PLOT DATE : 25-MAR-2019 PLOT BY : dotc4c

WISDOT/CADDS SHEET 42



G20-2A

NOTES

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

Metric equivalent for this sign is:

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

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

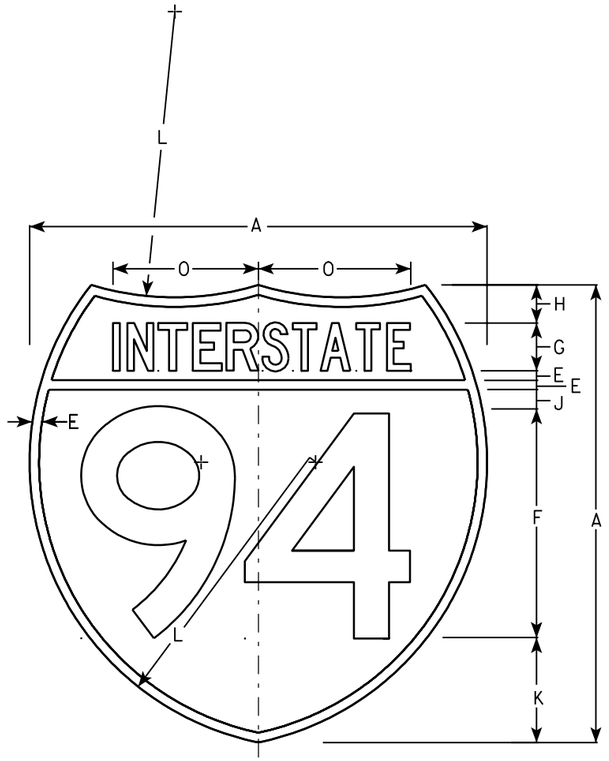
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

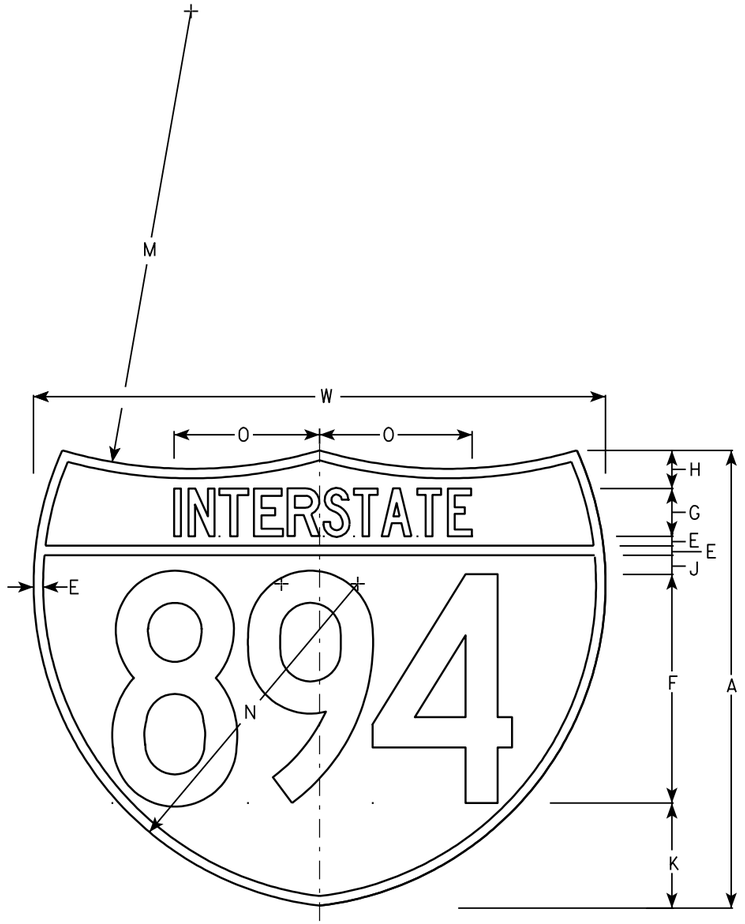
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 100	E



M1-1



M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

Metric equivalent for these signs are:

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

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	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

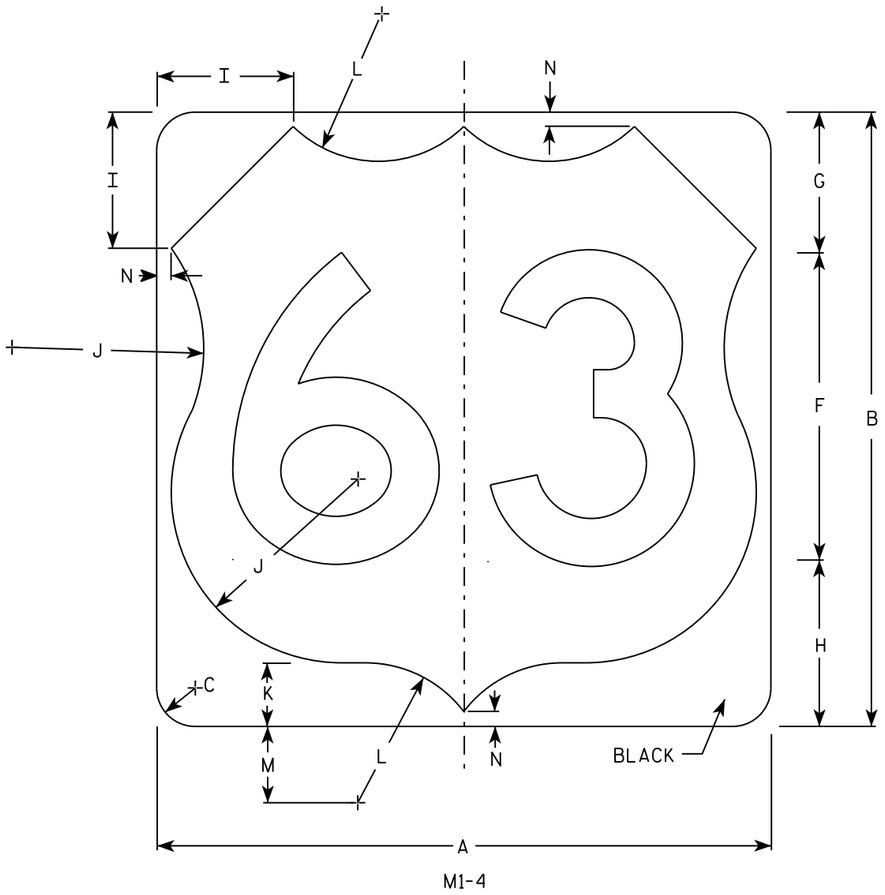
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

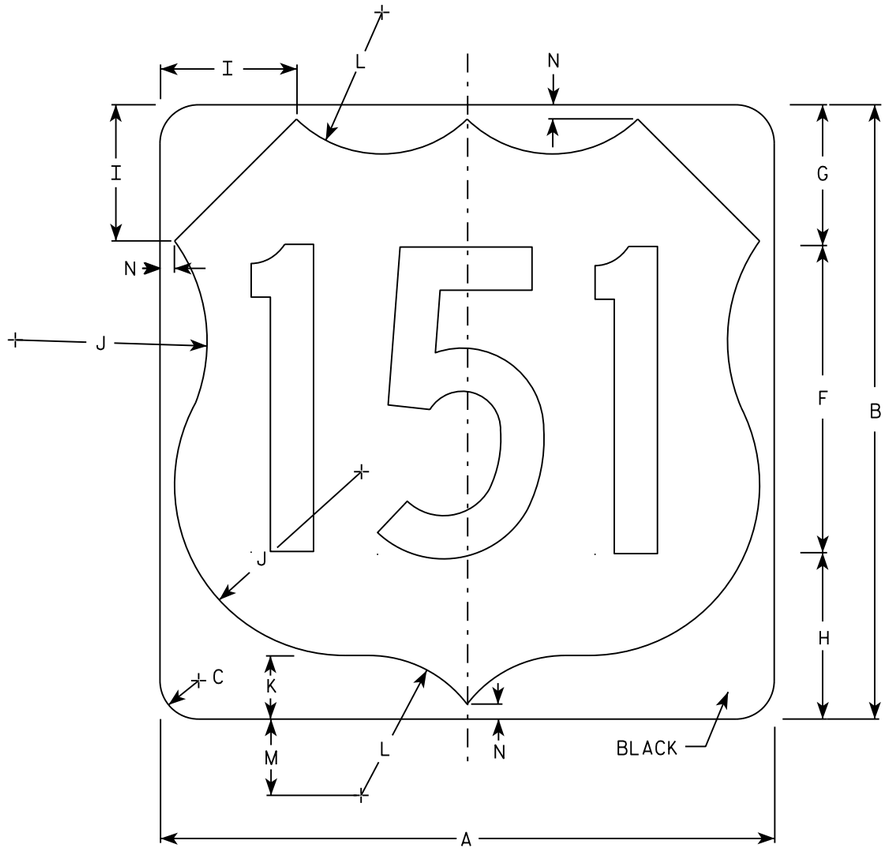
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 101	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs 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.



M1-4



M1-4

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	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0

USH MARKER
M1-4 FOR ASSEMBLIES

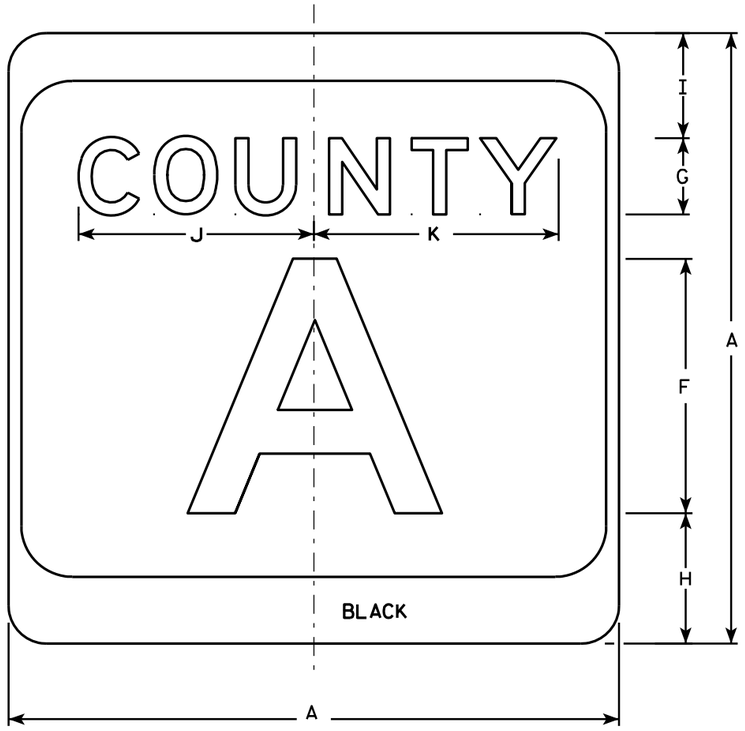
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

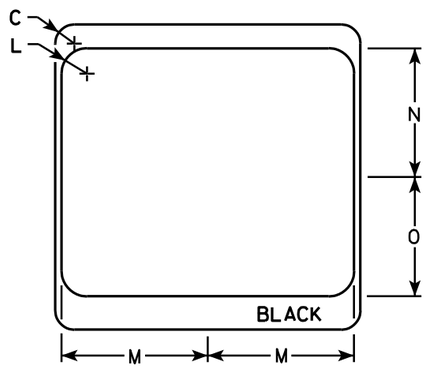
DATE 3/16/18 PLATE NO. M1-4.10

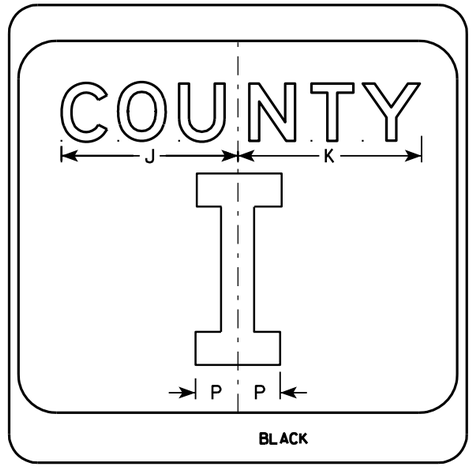
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 102 | E

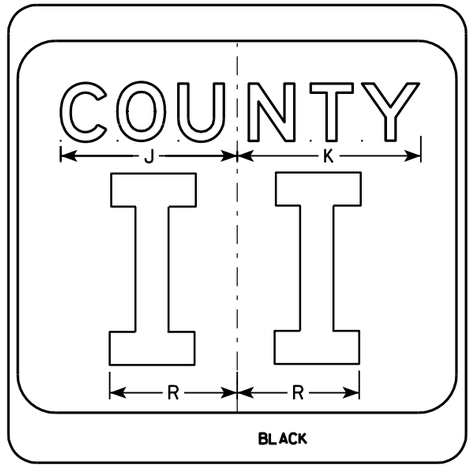
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M14.DGN PLOT DATE : 16-MAR-2018 14:06 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 5.918903:1.000000
WISDOT/CADDS SHEET 42



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

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

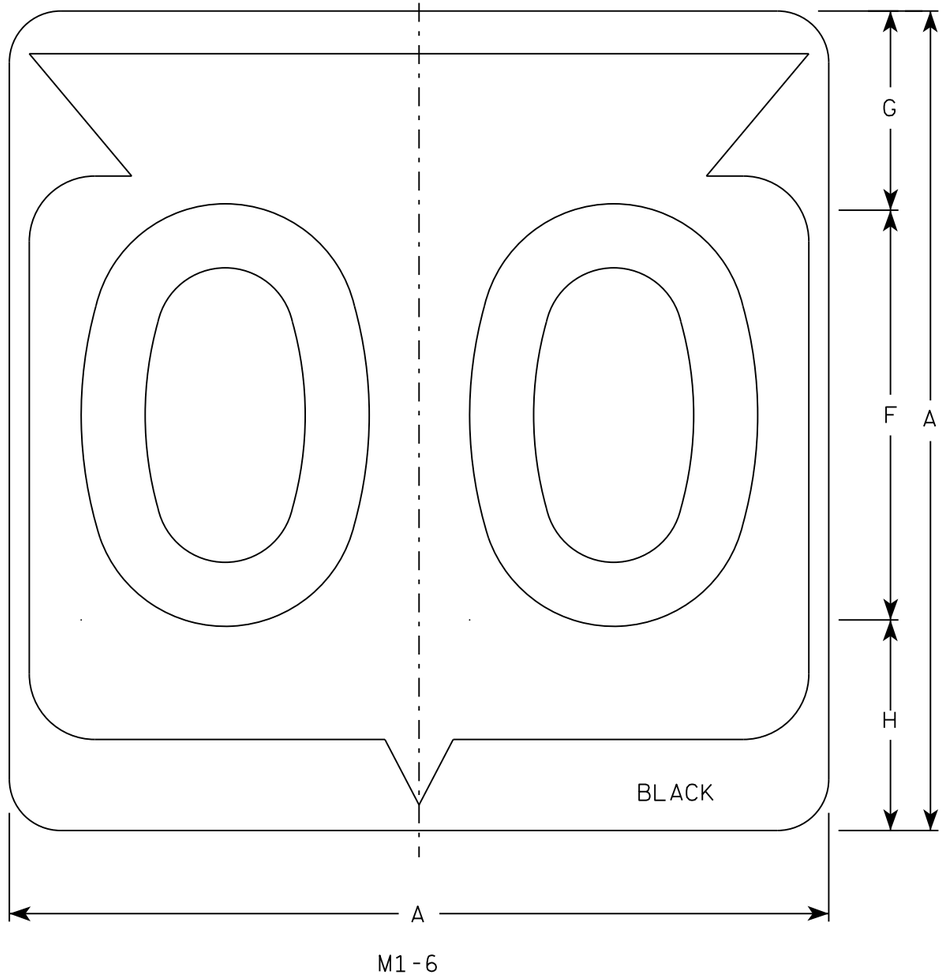
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

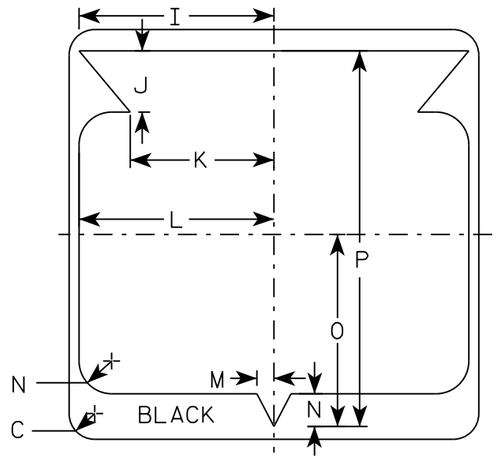
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 103	E



M1-6

NOTES

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



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
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
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
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
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

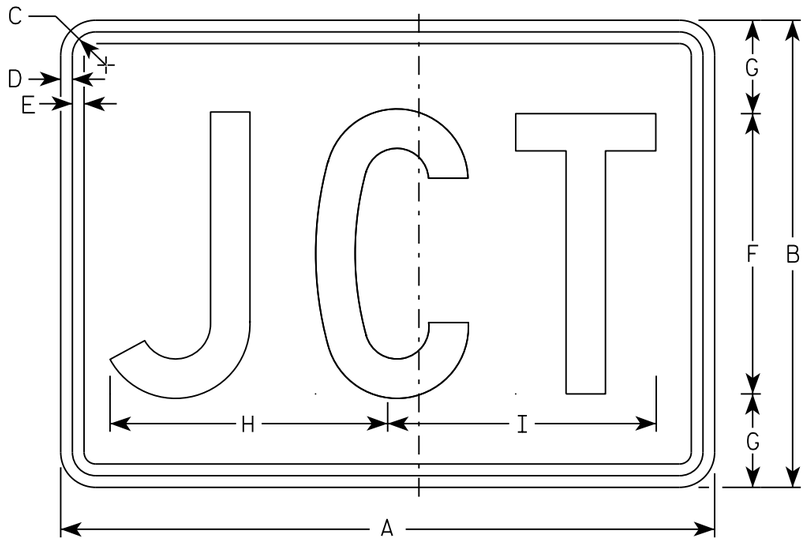
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

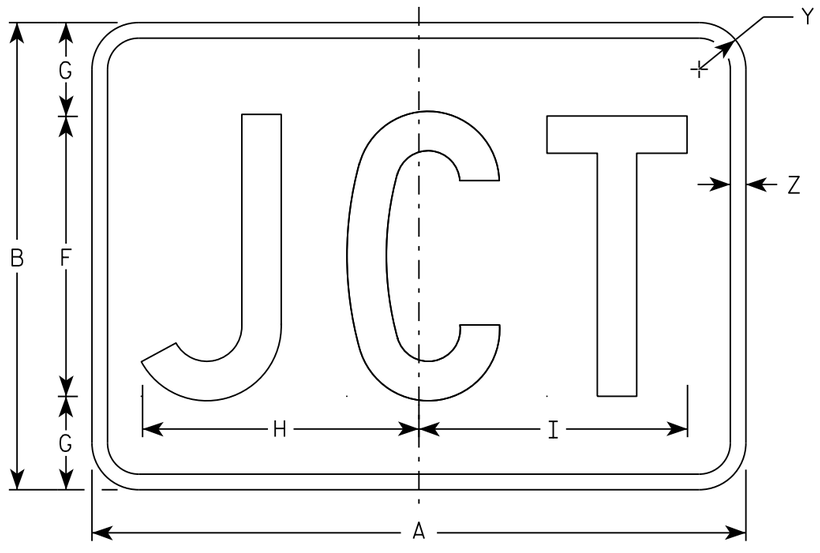
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 104 | E



M2-1
MM2-1
MP2-1



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

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

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

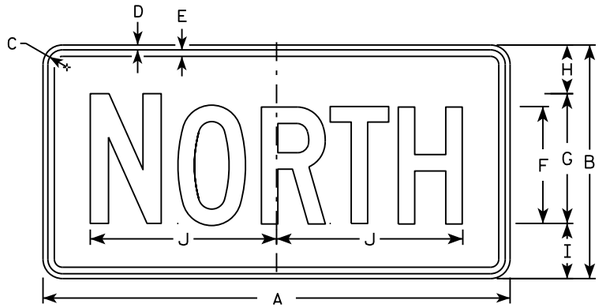
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

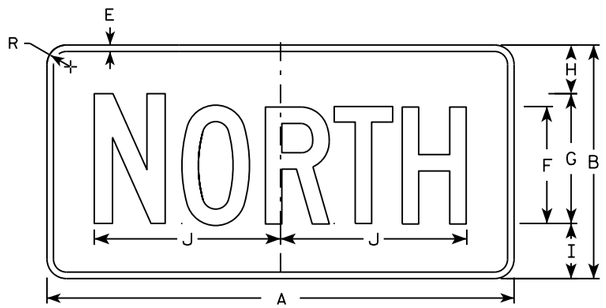
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 105 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



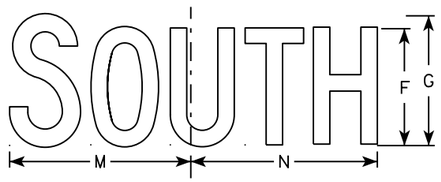
M3-1
MM3-1
MP3-1



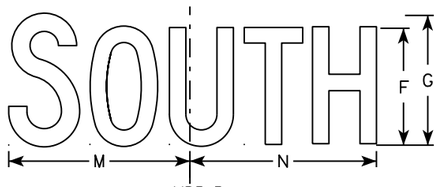
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

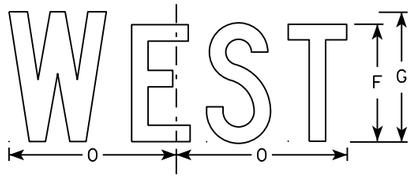
MB3-2
MK3-2
MN3-2



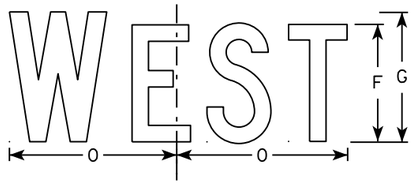
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

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

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

STANDARD SIGNS
M3-1 thur M3-4
SERIES

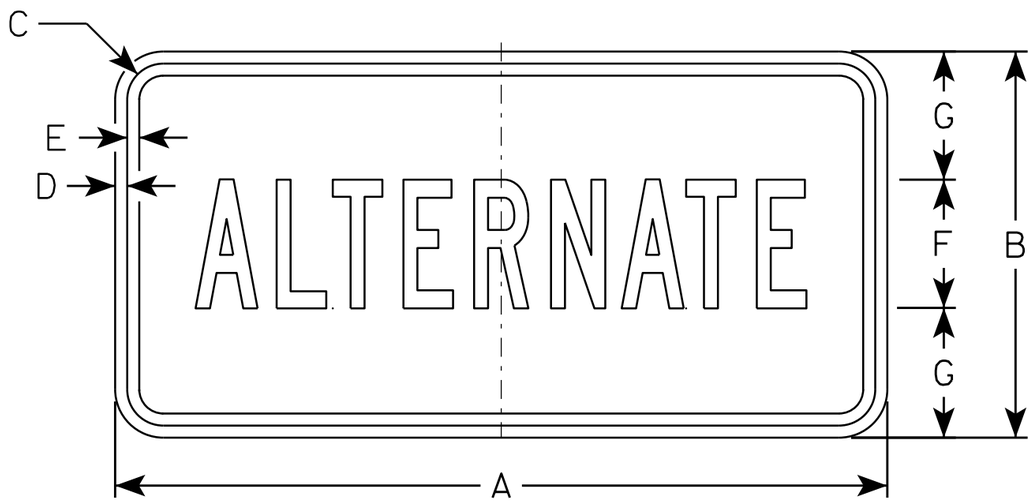
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

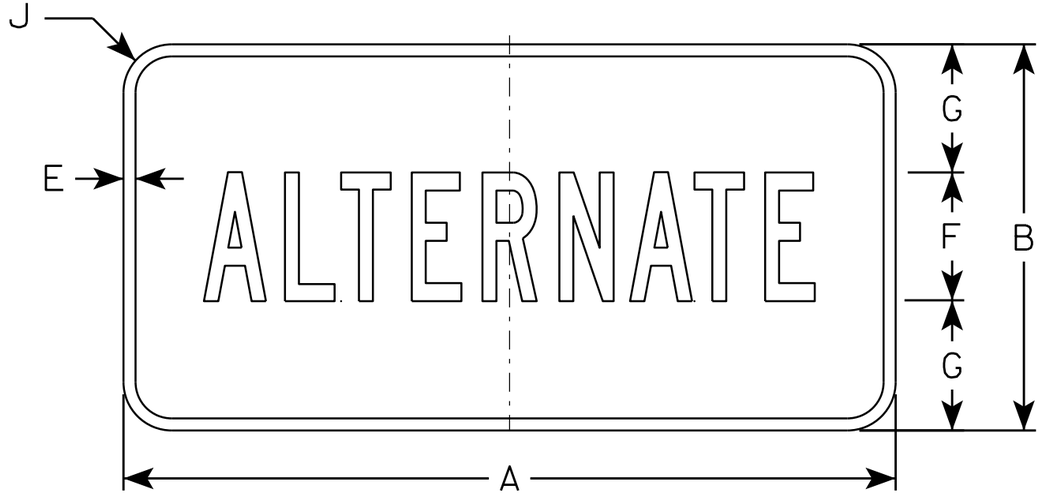
DATE 10/15/15 PLATE NO M3-1.14

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

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



M4-1
M04-1



MB4-1

NOTES

1. Sign is Type II - Type H except as Shown
2. Color:
   Background - See Note 5
   Message - See note 5
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.
5. M4-1 Background - White
   Message - Black

   MB4-1 Background - Blue
   Message - White

   M04-1 Background - Orange - Type F
   Message - Black

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	4	4	9 3/4	9 1/2	1 1/2																	2.00
3	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5
4	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5
5	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5

STANDARD SIGN
M4-1

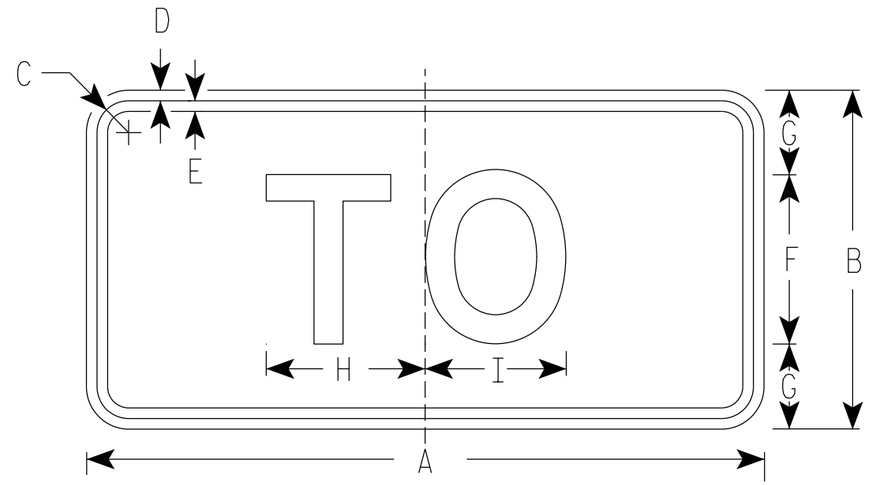
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

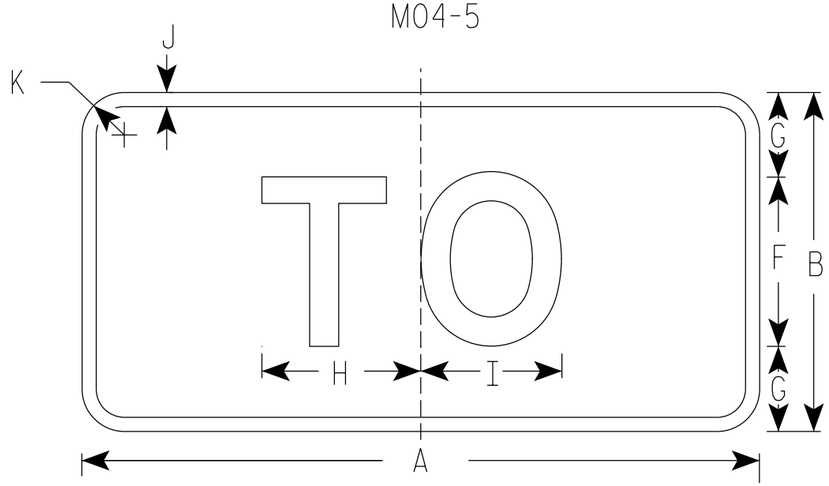
DATE 6/30/14 PLATE 14-1.8

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M41.DGN PLOT DATE : 30-JUN-2014 15:38 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 4.708937:1.000000 WISDOT/CADDS SHEET 42



M4-5
MM4-5
MP4-5
M04-5



MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
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. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

   M04-5 Background - Orange Type F Reflective
   Message - Black

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

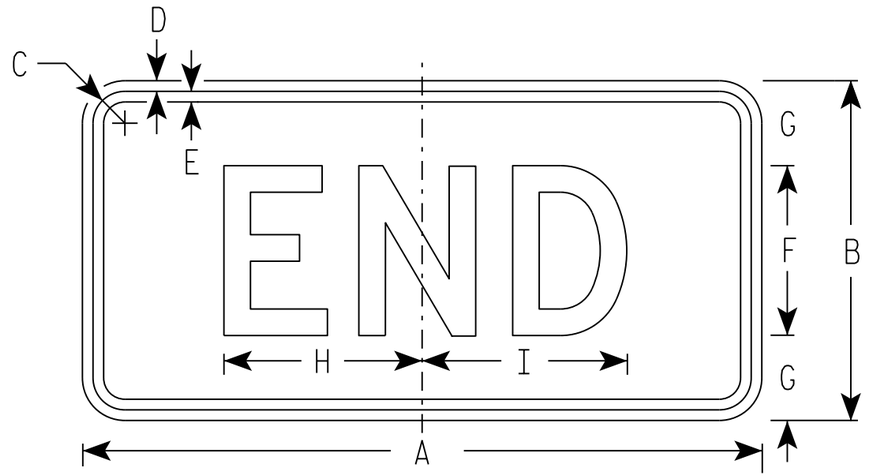
STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

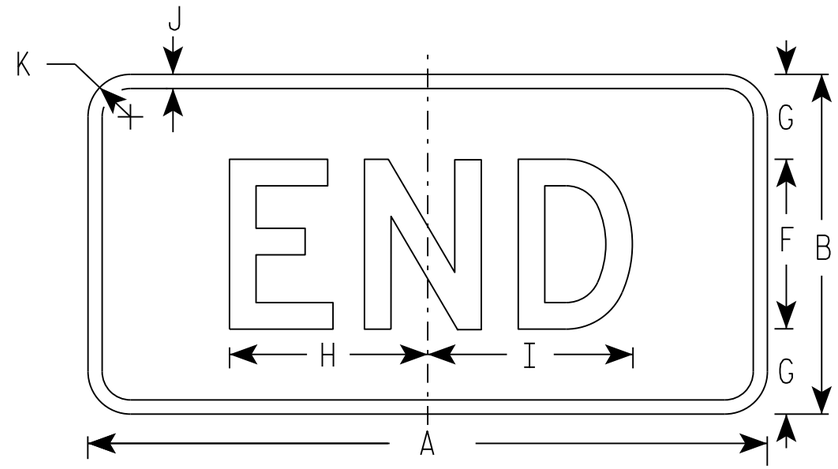
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/7/19 PLATE NO. M4-5.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 108 | E



M4-6
MM4-6
MP4-6



MB4-6
MK4-6
MN4-6
MR4-6

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-6 Background - White
   Message - Black

   MB4-6 Background - Blue
   Message - White

   MK4-6 Background - Green
   Message - White

   MM4-6 Background - White
   Message - Green

   MN4-6 Background - Brown
   Message - White

   MP4-6 Background - White
   Message - Blue

   MR4-6 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	7	7 1/4	1/2	1 1/2																2.00
3	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5
4	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5
5	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5

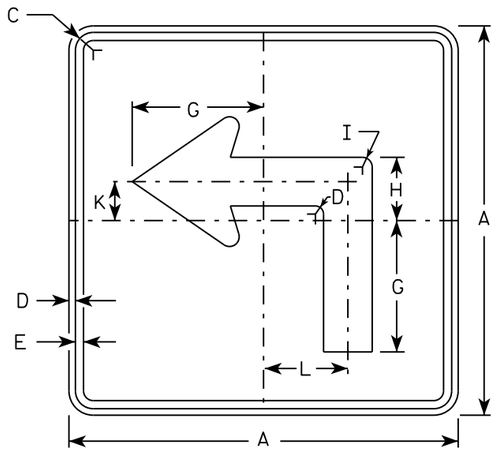
STANDARD SIGN
M4-6

WISCONSIN DEPT OF TRANSPORTATION

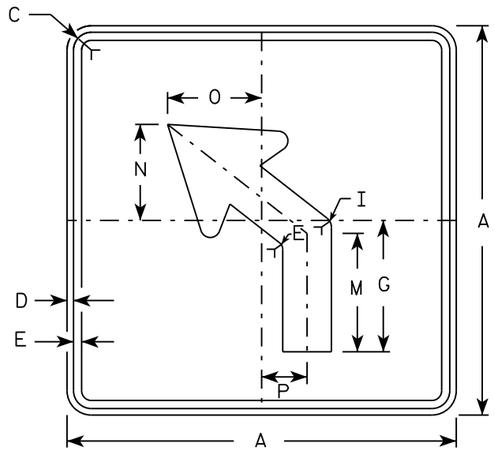
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 109 '14-7.9

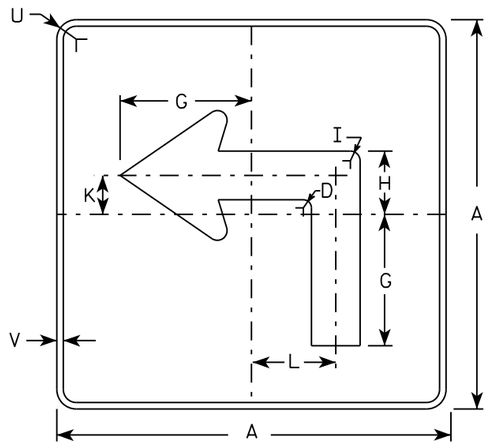
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



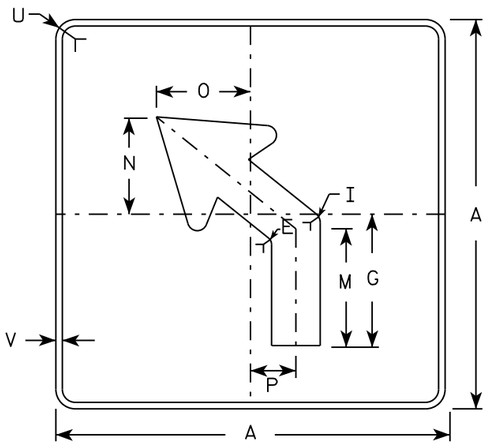
M5-1L
MM5-1L
MO5-1L
MP5-1L



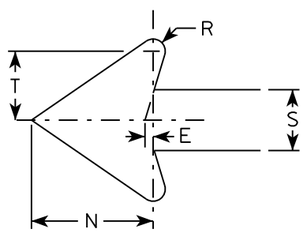
M5-2L
MM5-2L
MO5-2L
MP5-2L



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



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



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

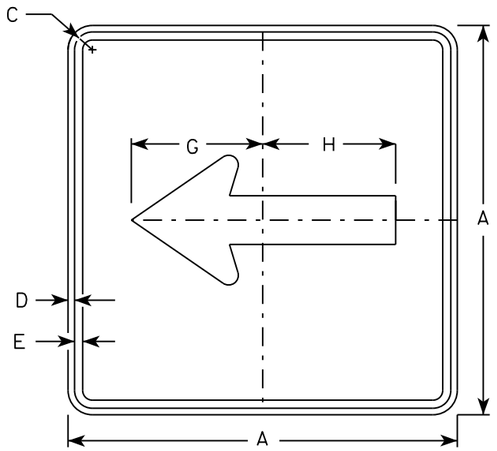
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

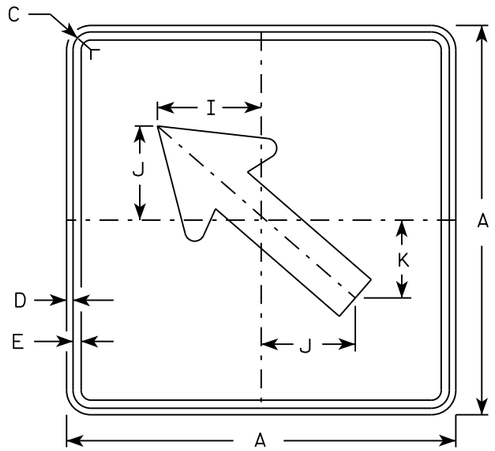
APPROVED Matthew R Rauch
for State Traffic Engineer

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

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



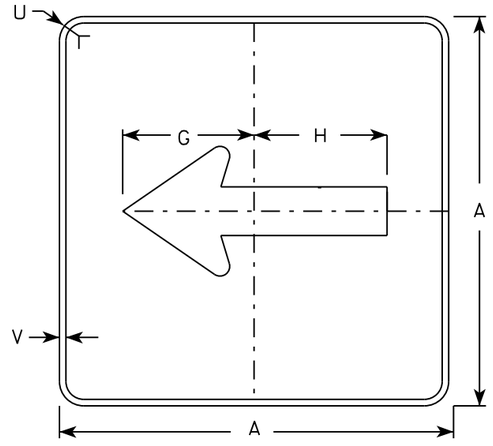
M6-1
MM6-1
MO6-1
MP6-1



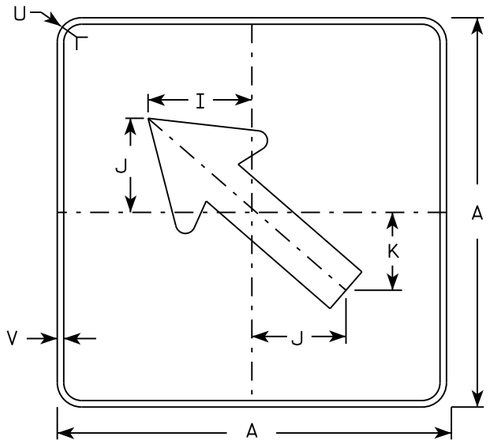
M6-2
MM6-2
MO6-2
MP6-2

NOTES

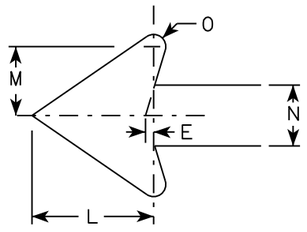
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



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



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

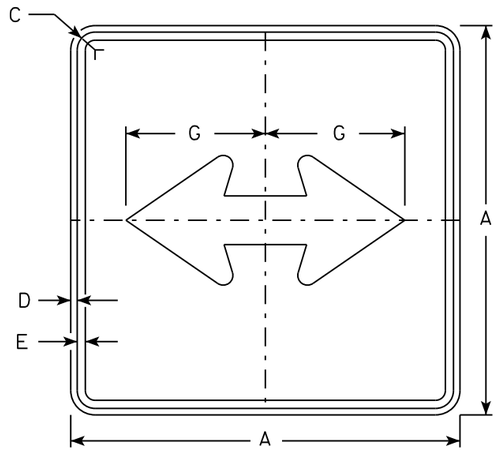
STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

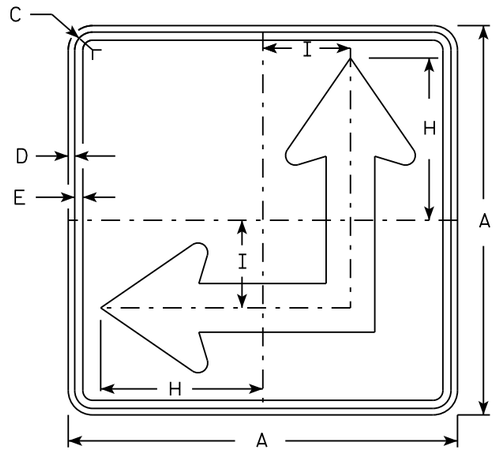
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 111 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



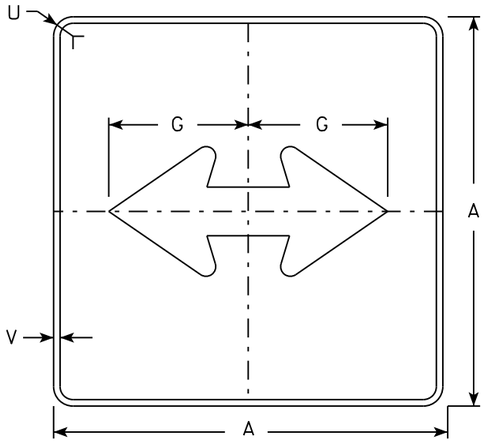
M6-4
MM6-4
MO6-4
MP6-4



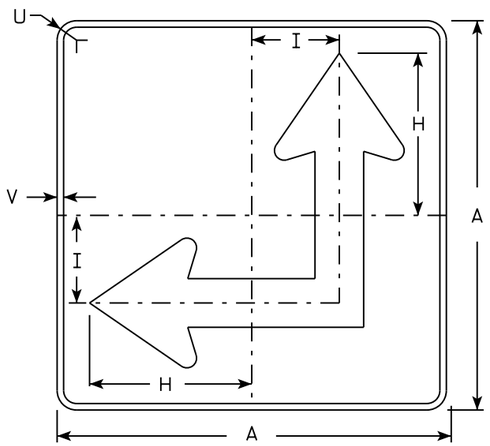
M6-6
MM6-6
MO6-6
MP6-6

NOTES

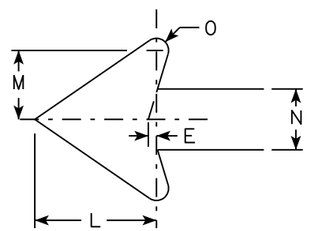
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6



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																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

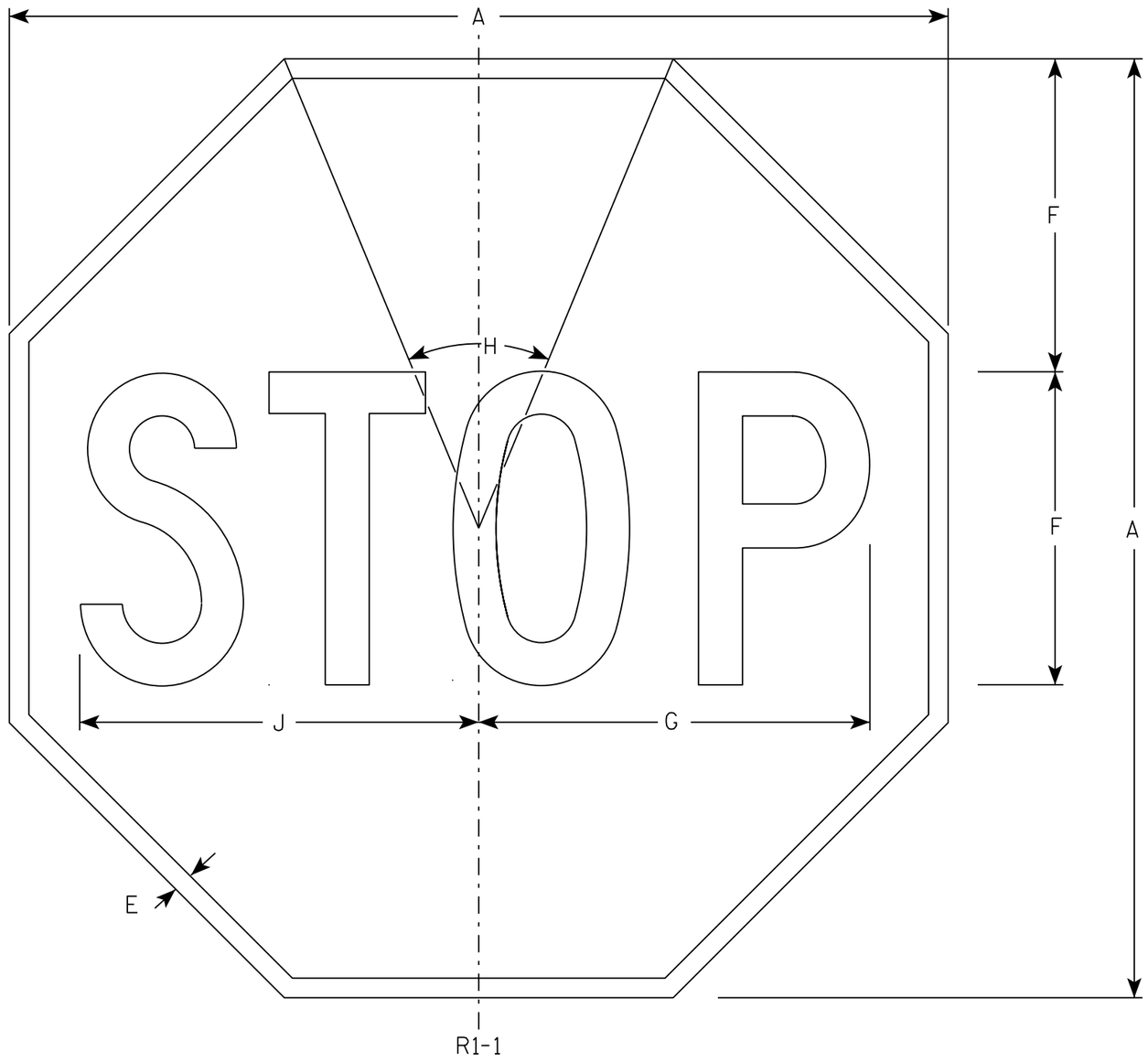
STANDARD SIGN
M6-4 & M6-6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 112 M6-4.10

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



NOTES

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

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

STANDARD SIGN

R1-1

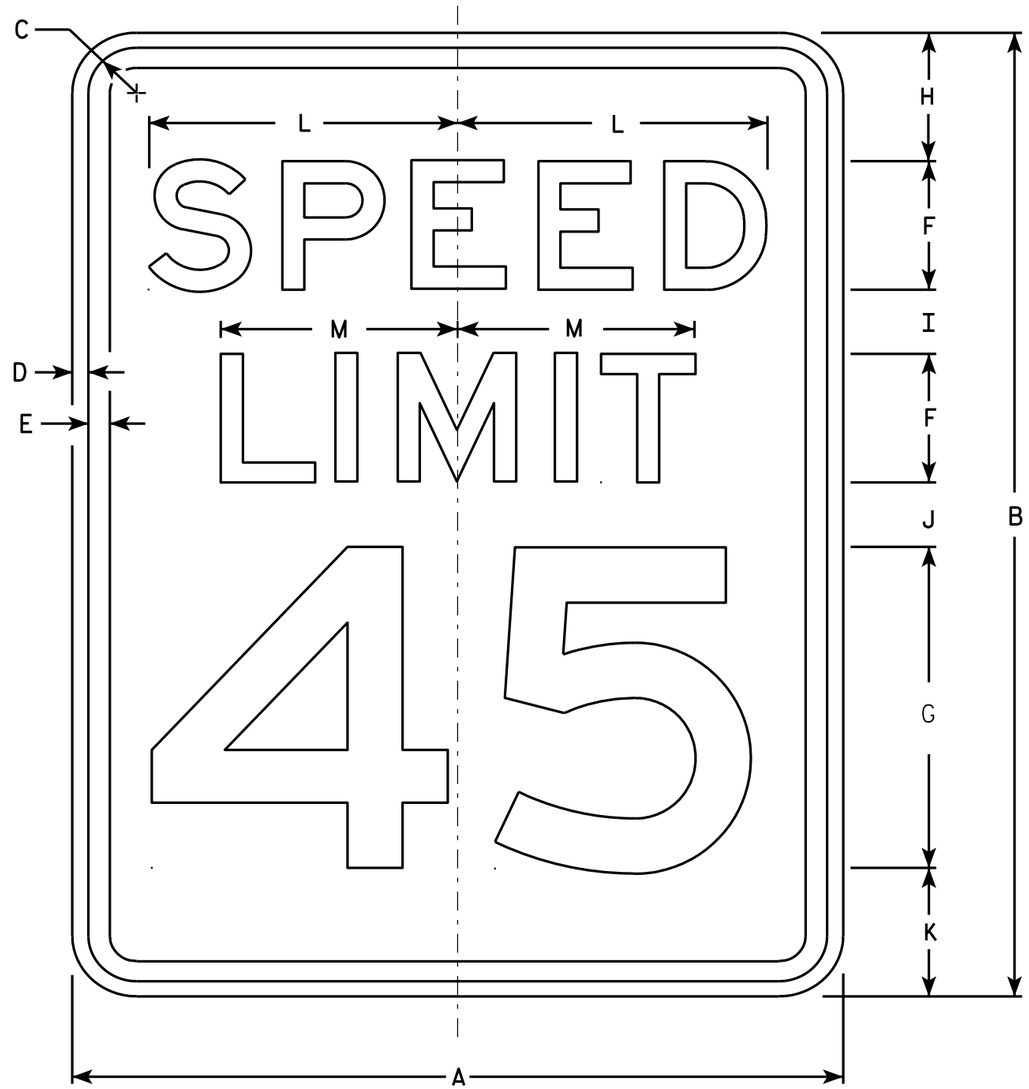
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 113	E



R2-1

NOTES

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

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

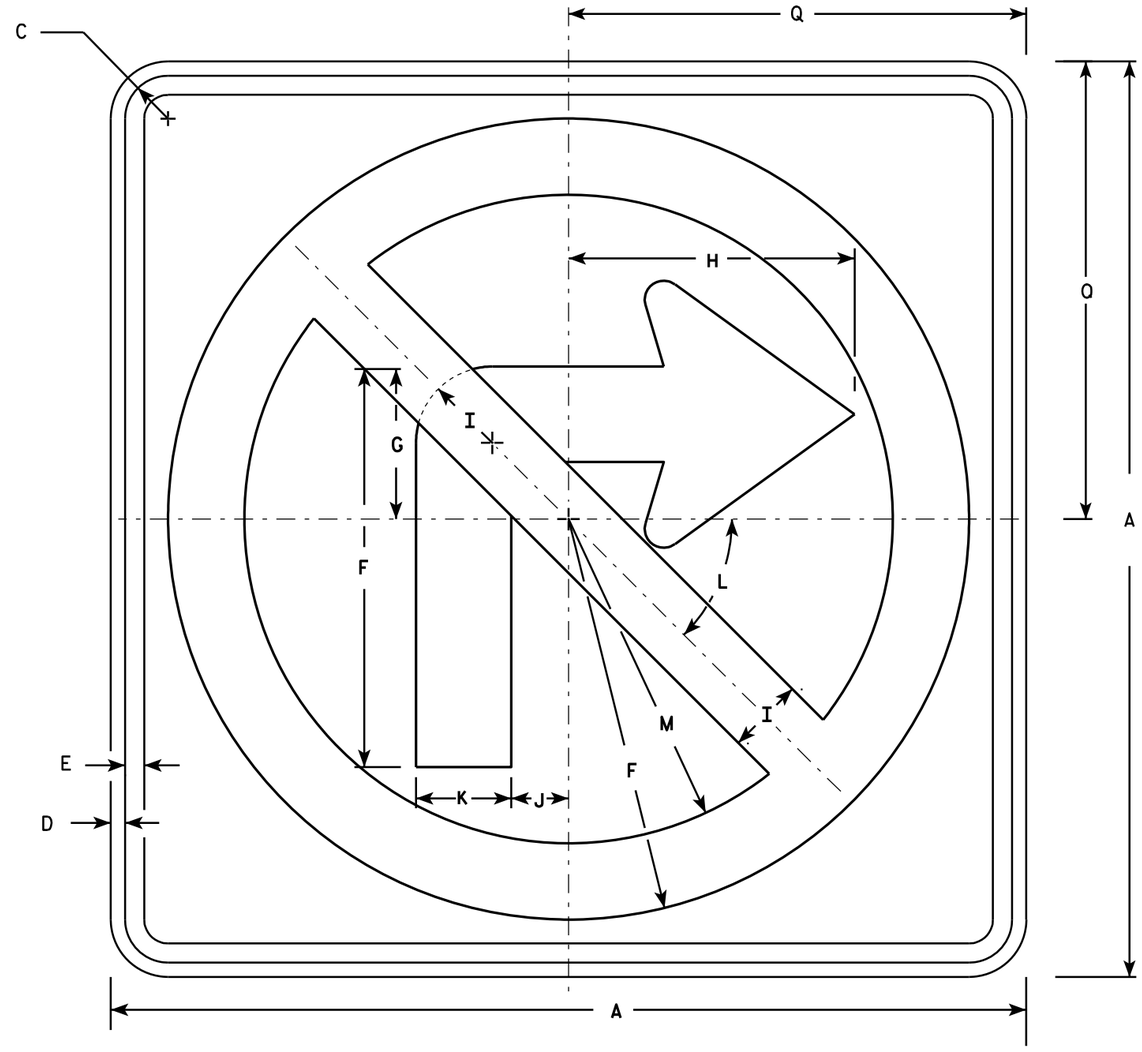
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

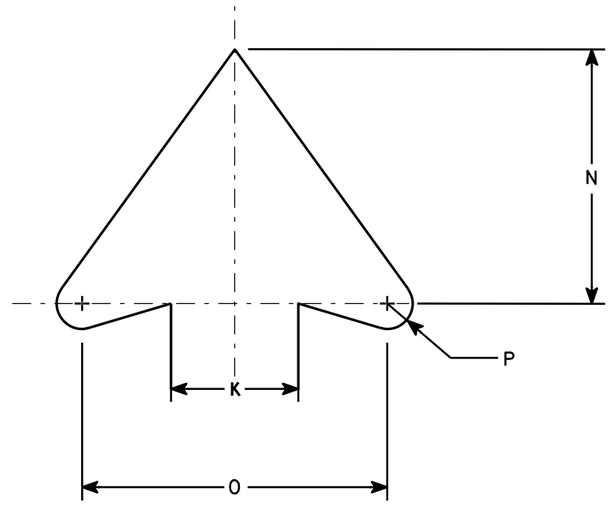
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 114 | E



R3-1

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 - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



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	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

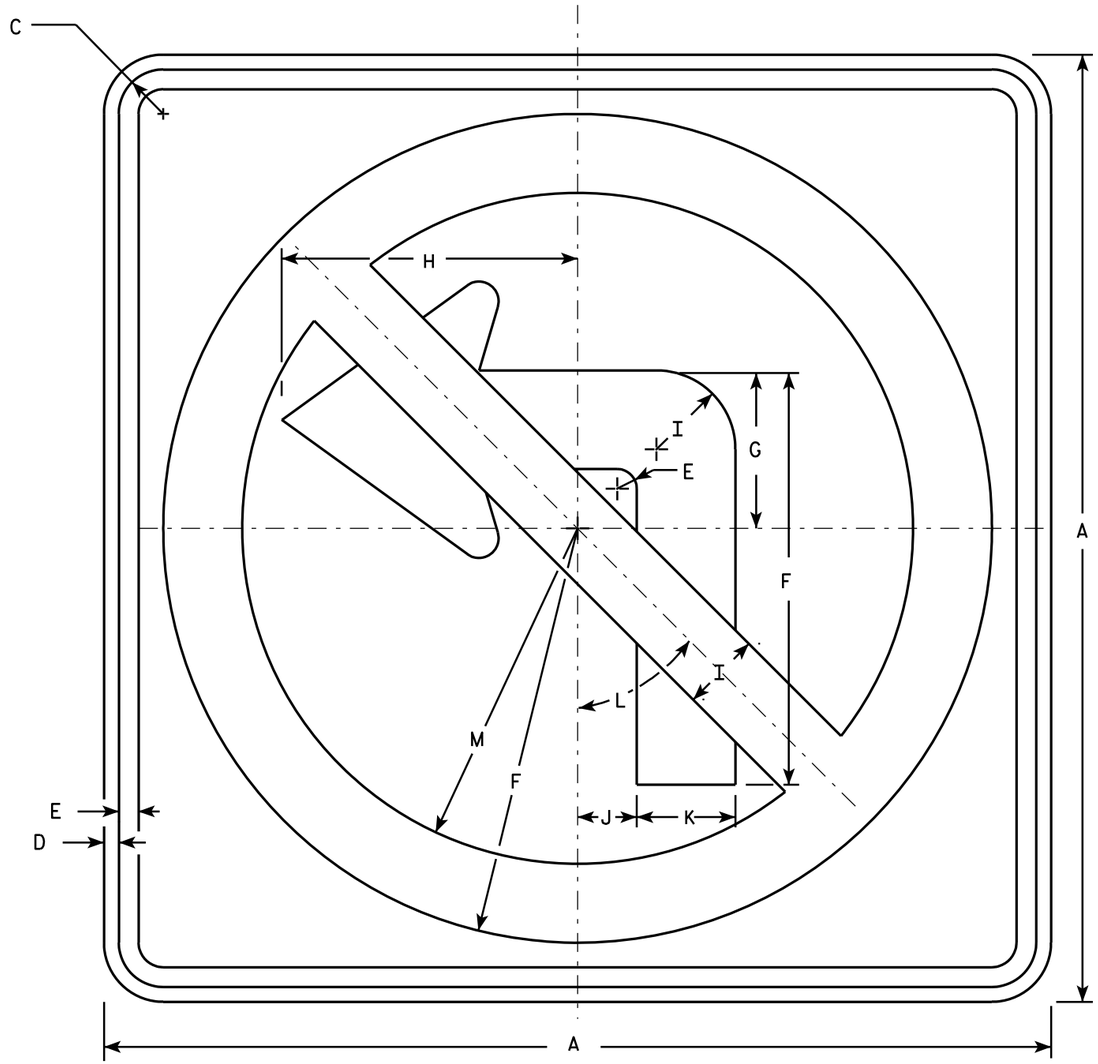
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

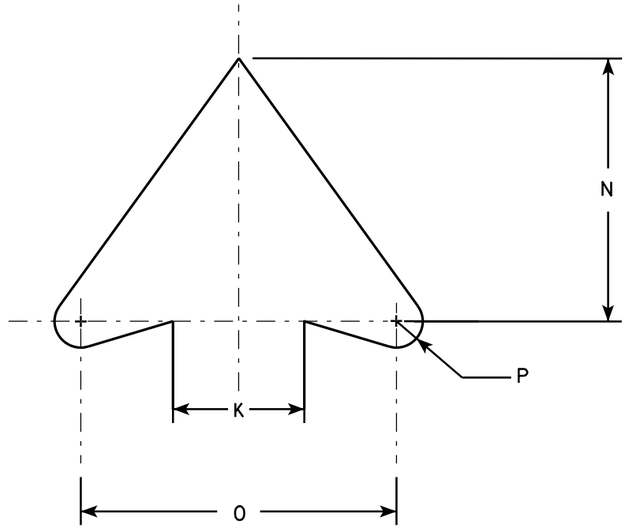
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 115	E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



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	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

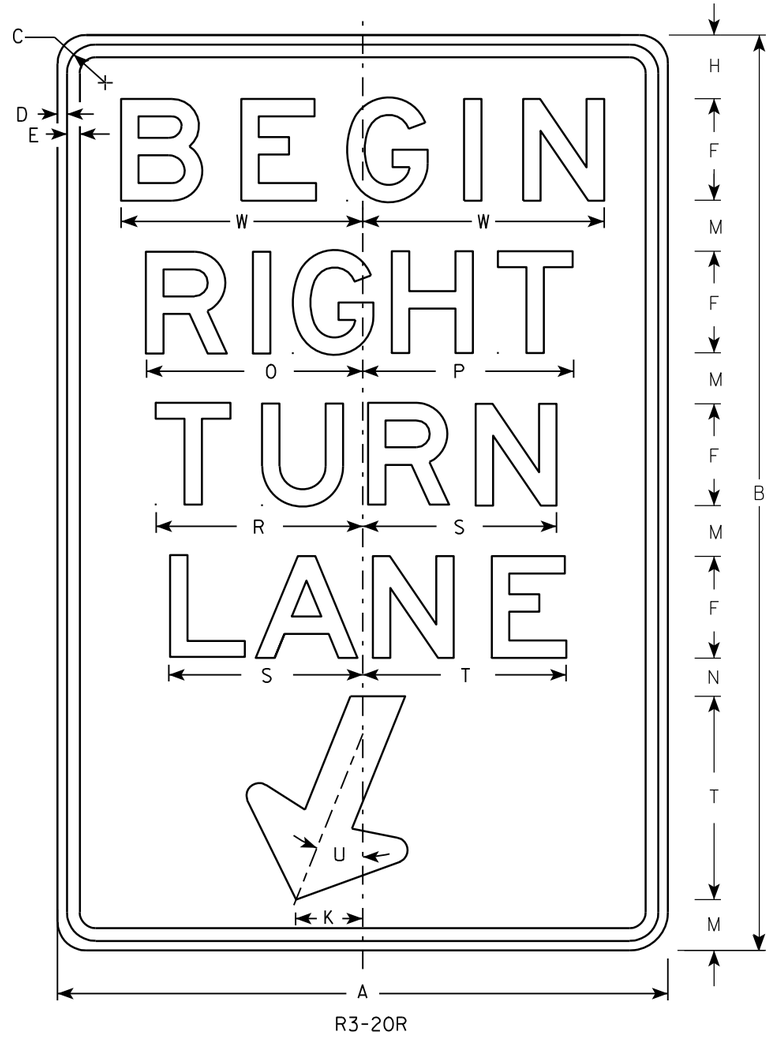
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

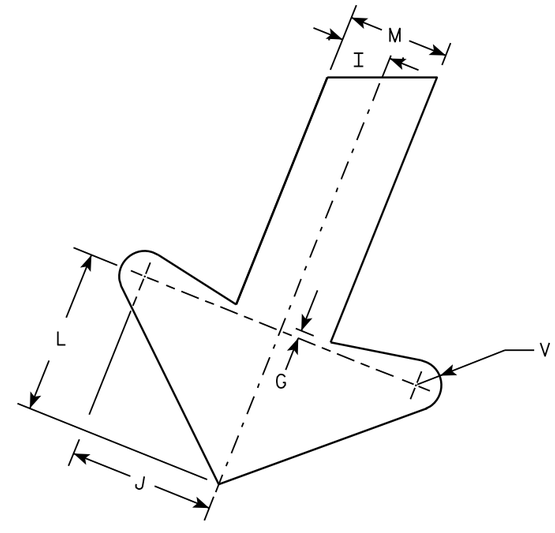
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 116	E



R3-20R

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

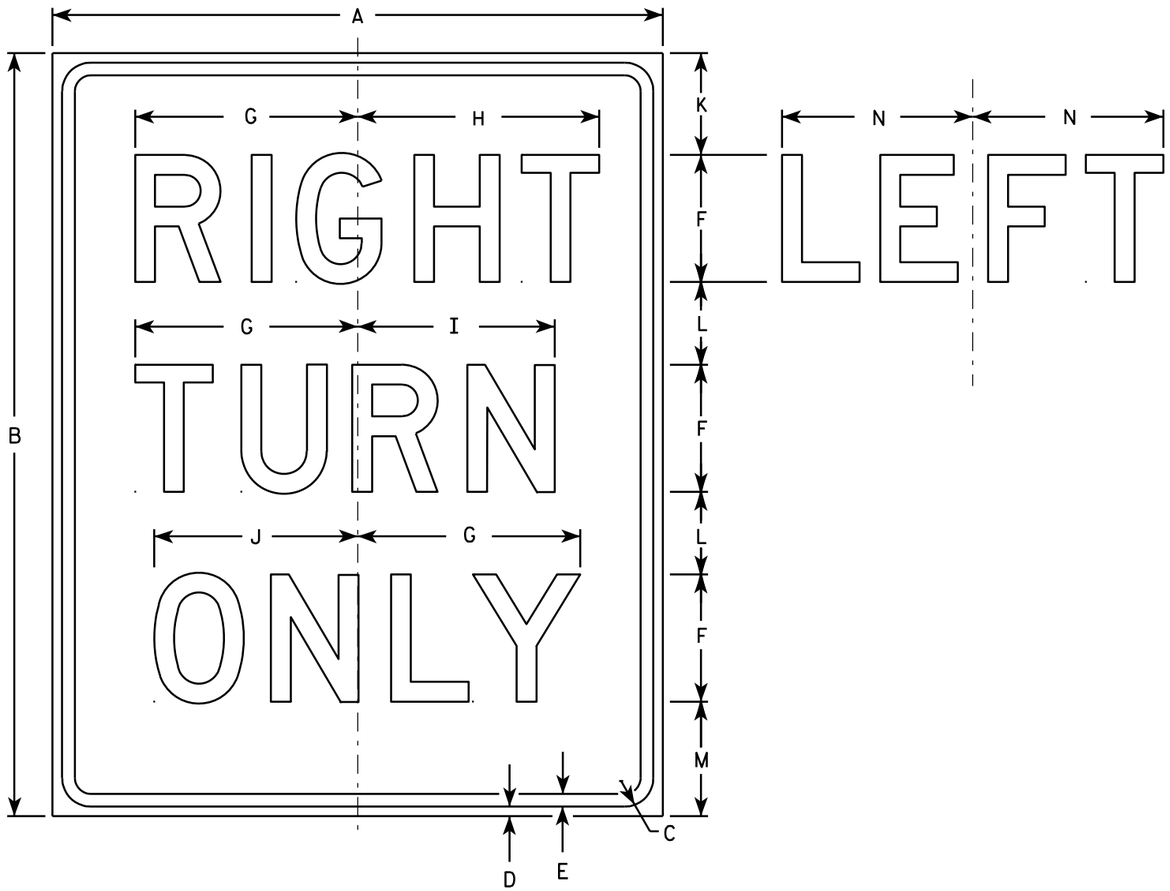
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 117 | E



R3-53R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R3-53L same as R3-53R except LEFT is substituted for RIGHT.

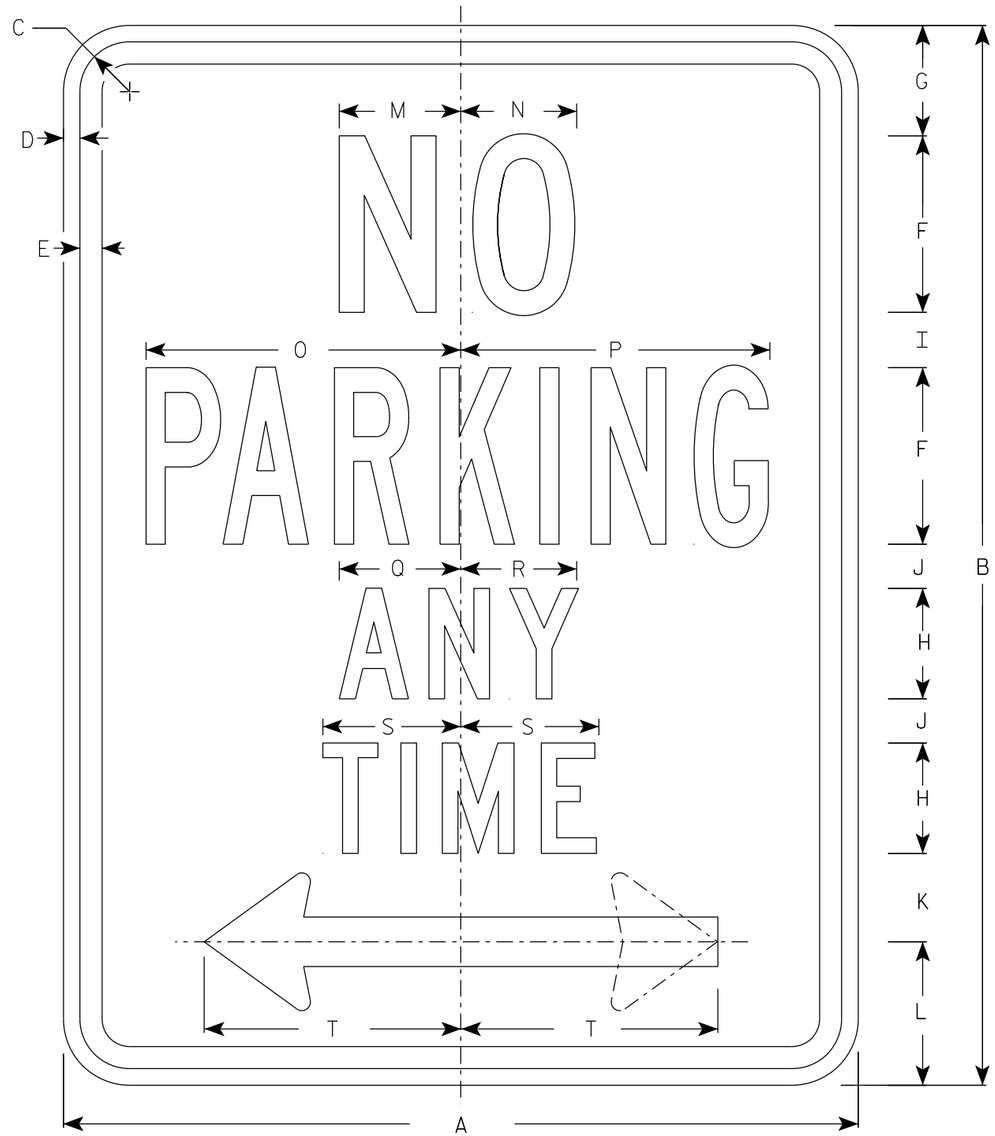
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	30	1 1/8	3/8	1/2	5	8 3/4	9 1/2	7 3/4	8	4	3 1/4	4 1/2	7 1/2													5.0
2M	24	30	1 1/8	3/8	1/2	5	8 3/4	9 1/2	7 3/4	8	4	3 1/4	4 1/2	7 1/2													5.0
3	24	30	1 1/8	3/8	1/2	5	8 3/4	9 1/2	7 3/4	8	4	3 1/4	4 1/2	7 1/2													5.0
4																											
5																											

STANDARD SIGN
R3-53

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/24/2011 PLATE NO. R3-53.8

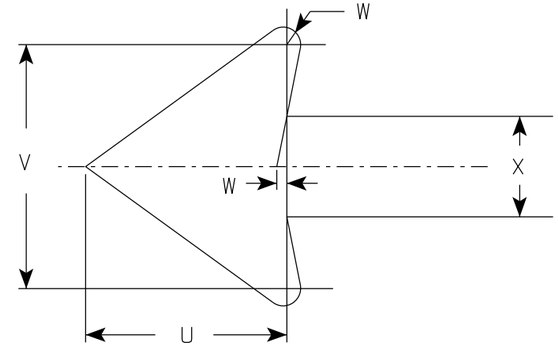
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 118 | E



R7-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Lines 1, 3 and 4 are series C, line 2 is series B.
5. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

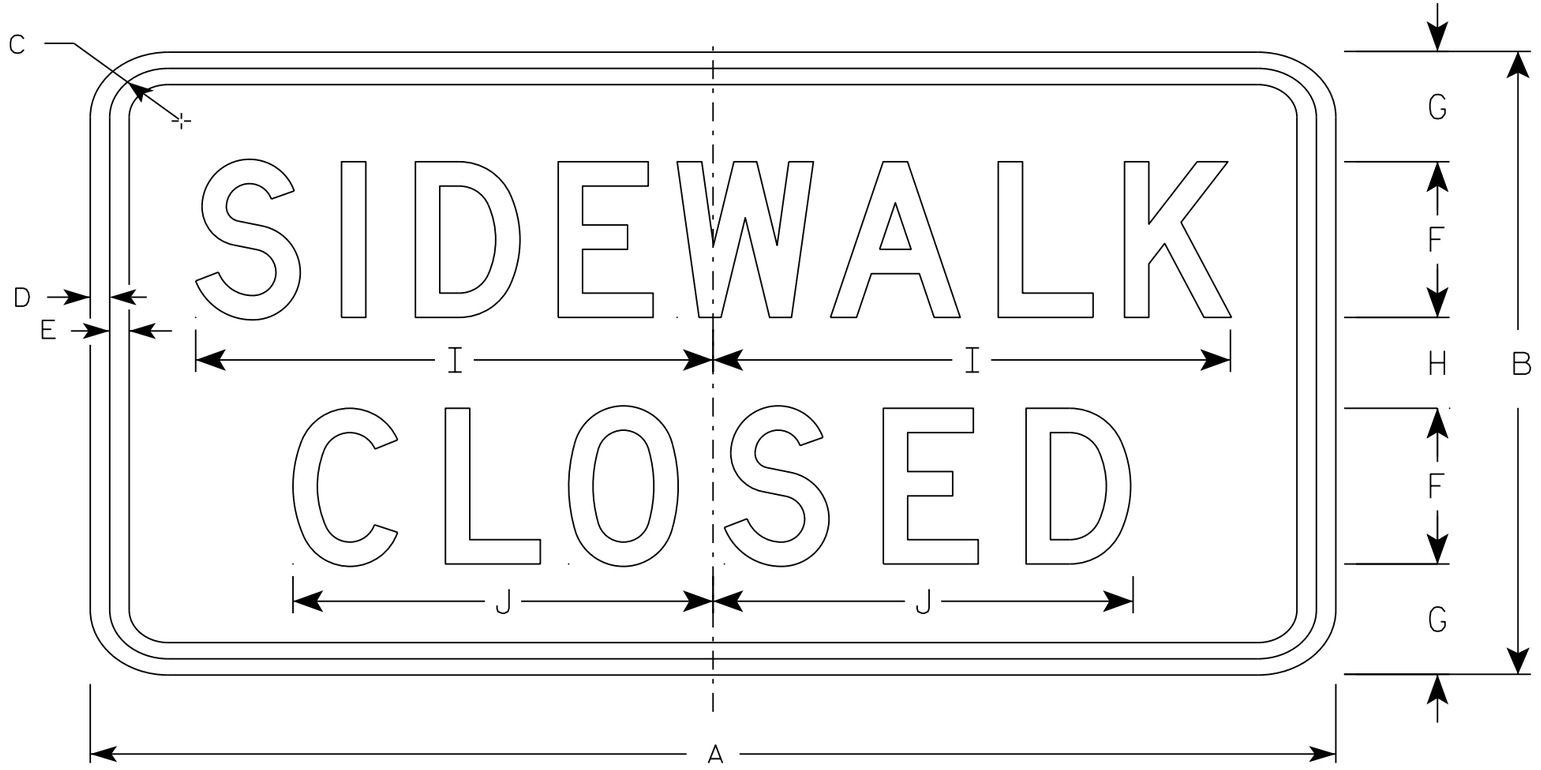
STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2021 PLATE NO. R7-1.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 119 E



R9-9

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

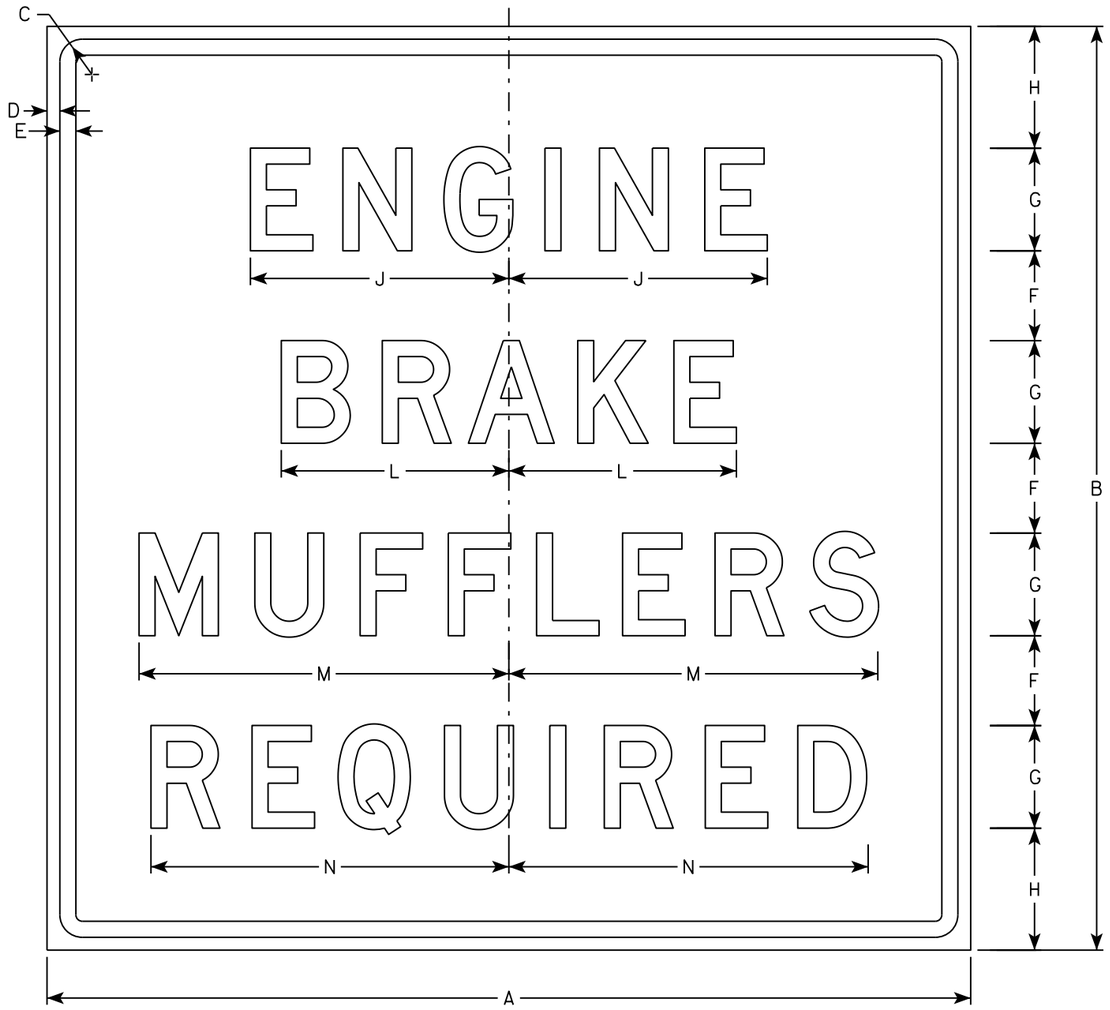
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE 120 R9-9.6

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



R10-64

NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D See note 5
4. Corners shall be rounded when base material is metal

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	36	1 3/8	1/2	5/8	3 1/2	4	4 3/4	2	10 1/8	3 1/2	8 7/8	14 3/8	14													9.0
2S	36	36	1 3/8	1/2	5/8	3 1/2	4	4 3/4	2	10 1/8	3 1/2	8 7/8	14 3/8	14													9.0
2M	36	36	1 3/8	1/2	5/8	3 1/2	4	4 3/4	2	10 1/8	3 1/2	8 7/8	14 3/8	14													9.0
3	42	42	1 3/8	1/2	5/8	4	5	5	3	12 5/8	4	11 1/8	18	17 3/8													12.25
4																											
5																											

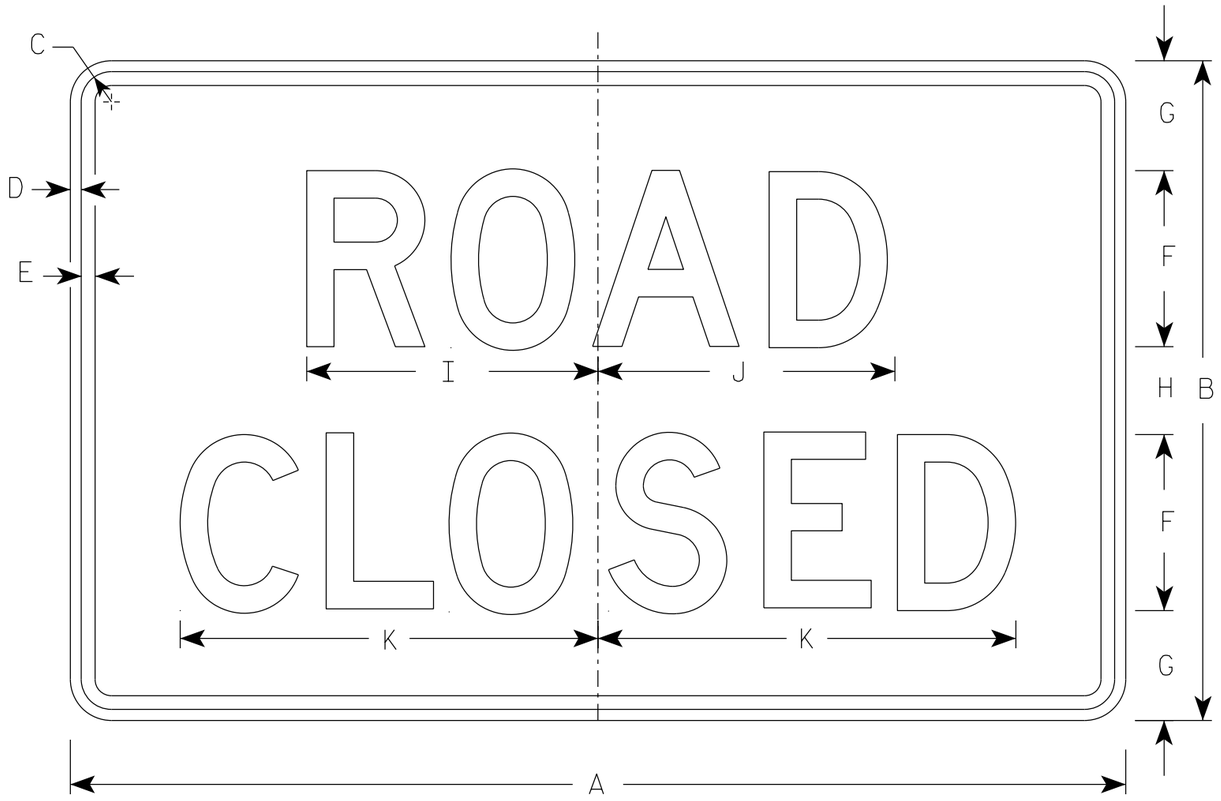
STANDARD SIGN
R10-64

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/3/18 PLATE NO. R10-64.8

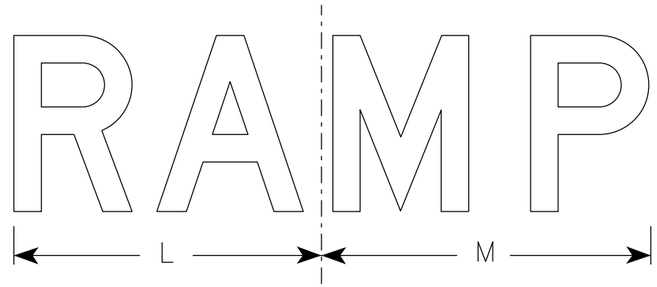
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 121 | E



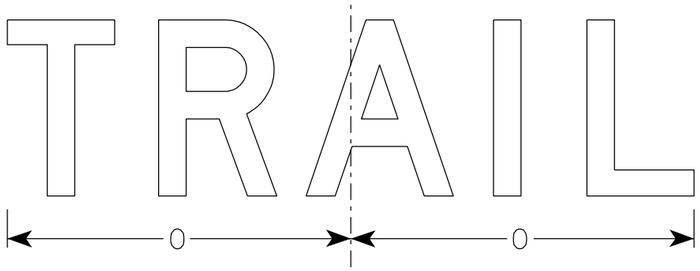
R11-2

NOTES

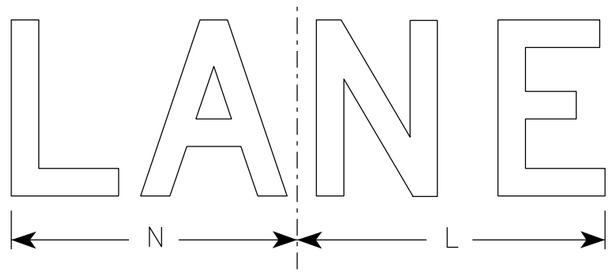
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the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



R11-2R



R11-2T



R11-2L

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

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

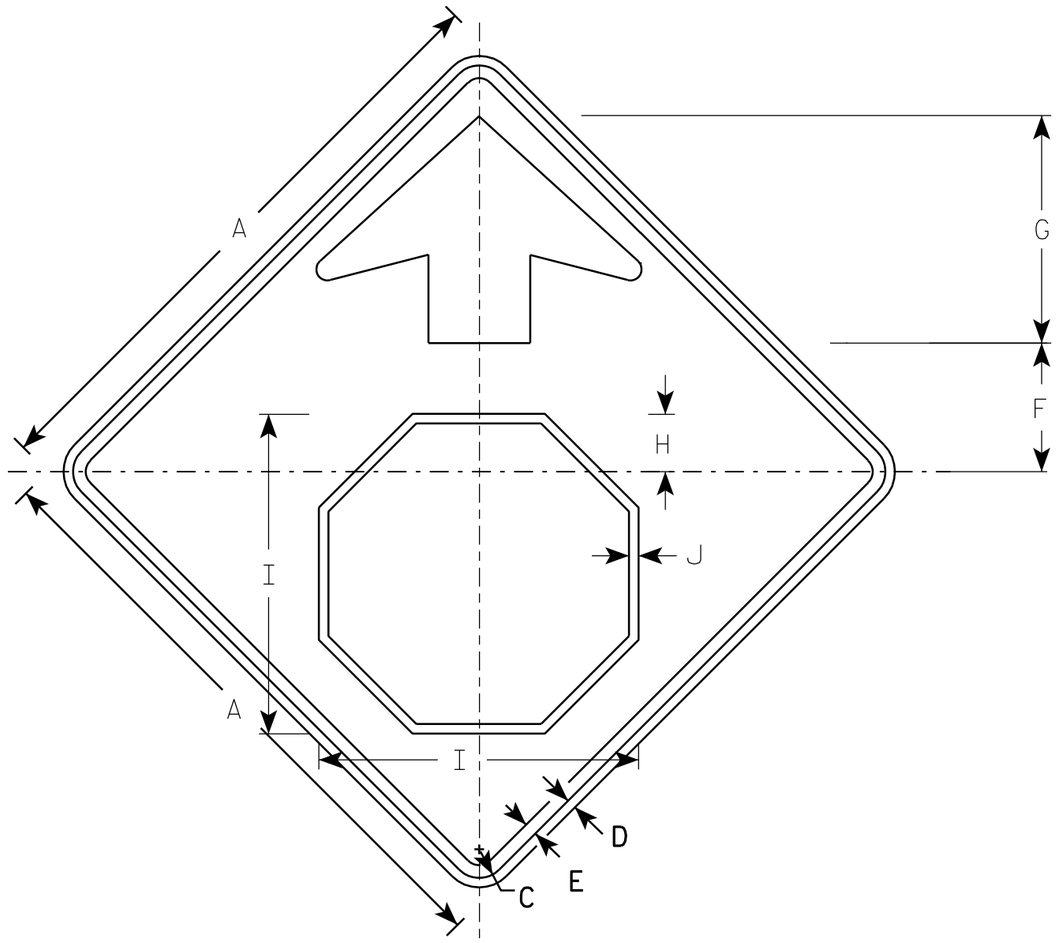
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

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

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112.dgn PLOT DATE : 29-MAR 2021 8:15 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

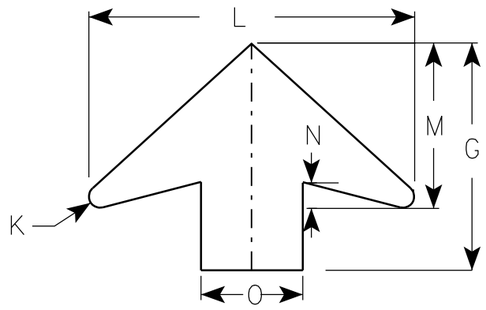
7



W3-1

NOTES

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



ARROW DETAIL

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

STANDARD SIGN
W3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

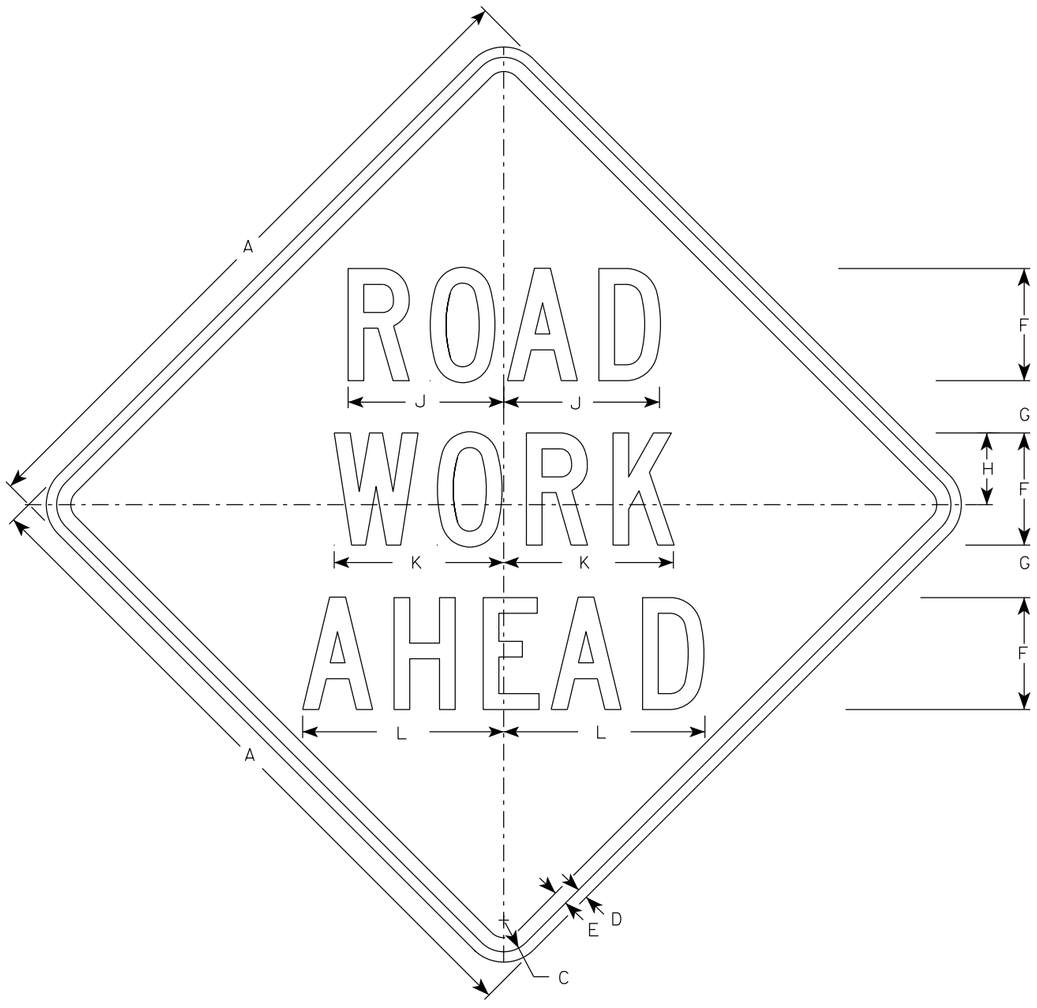
DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

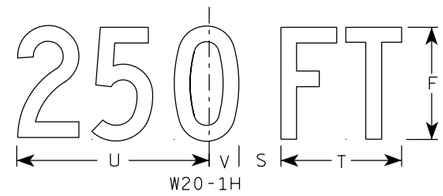
SHEET NO: 123 E

NOTES

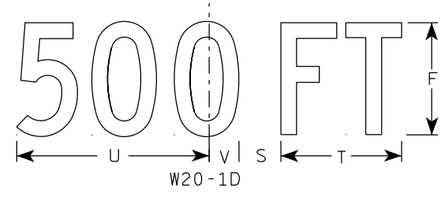
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1A

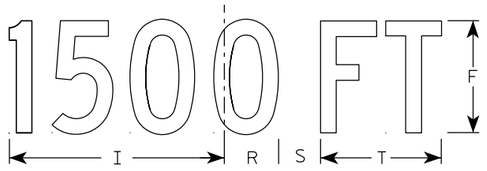


W20-1H

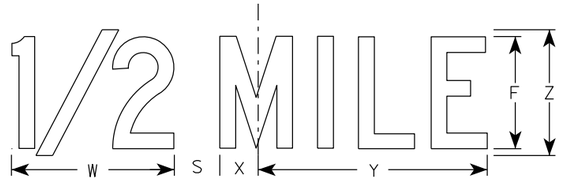


W20-1D

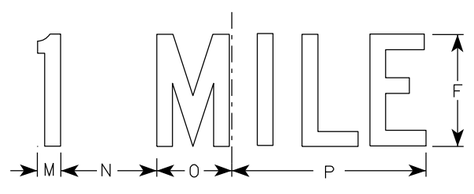
W20-1C



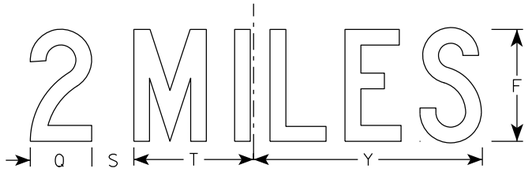
W20-1B



W20-1G



W20-1F



W20-1E

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

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

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2020 PLATE NO. W20-1.11

PROJECT NO:

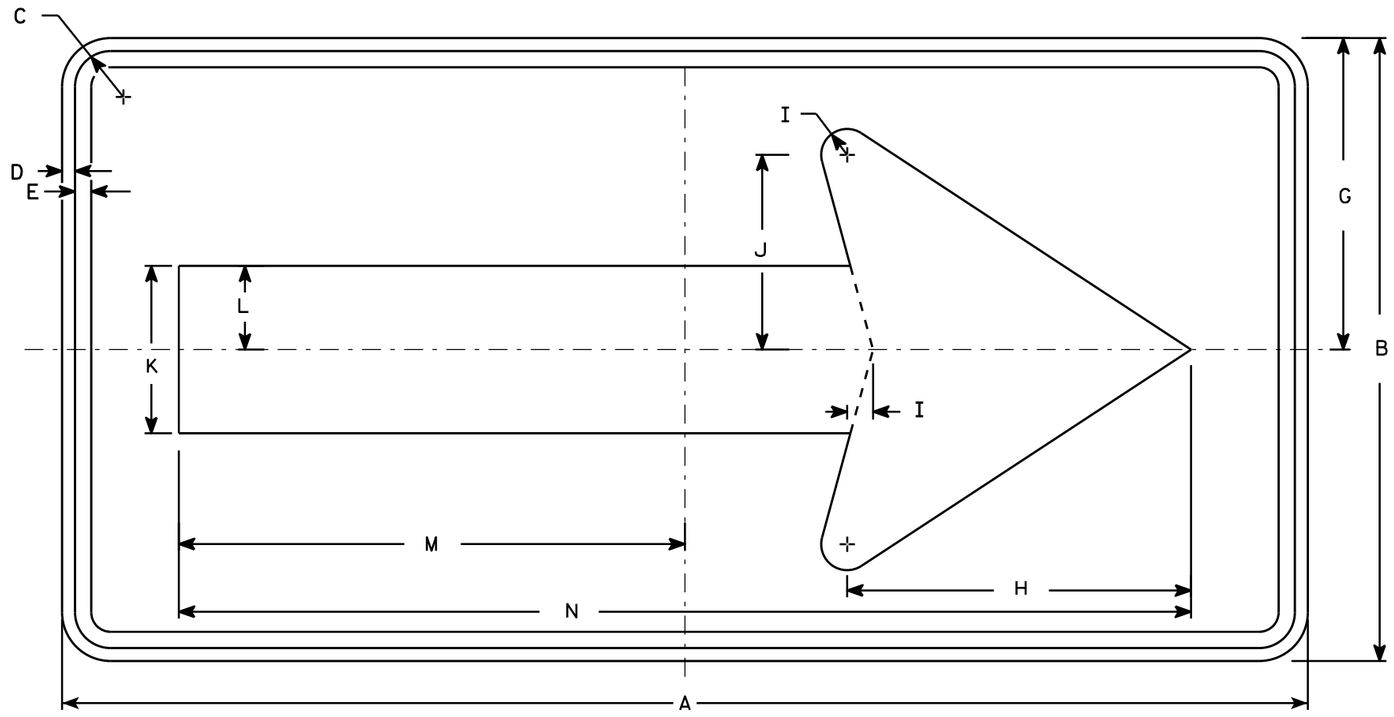
SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 25-MARCH-2020 PLOT BY : dotc4c

WISDOT/CADDS SHEET 42

7

7



W01-6

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
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	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

STANDARD SIGN
W01-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

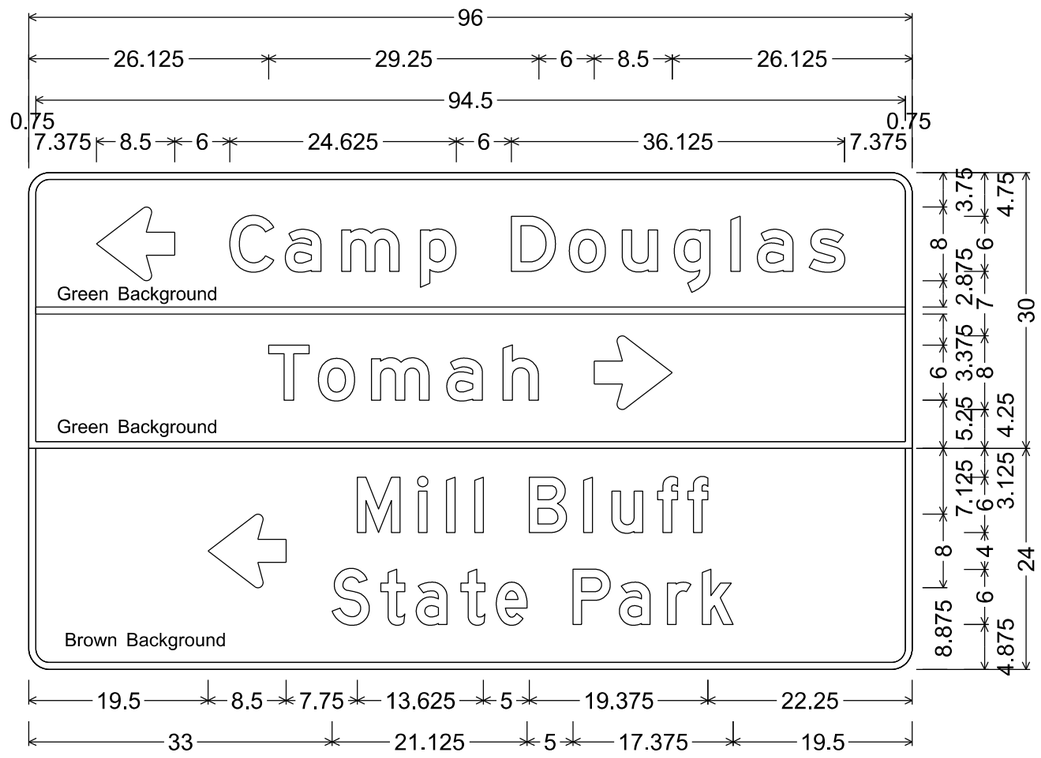
DATE 11/18/13 PLATE W01-6.1

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

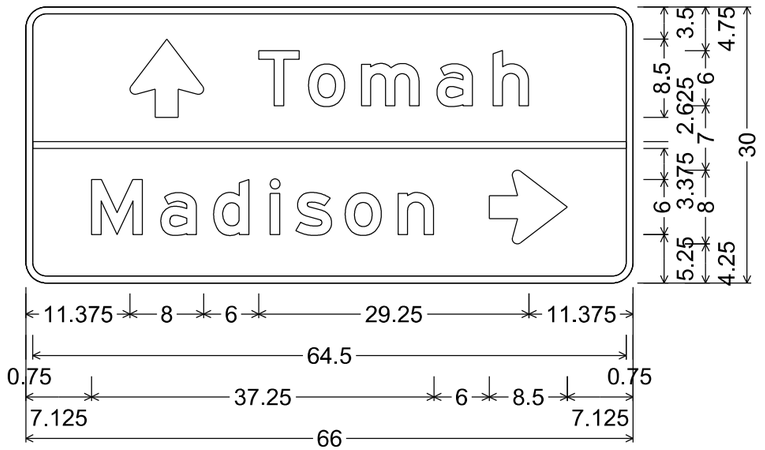
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green except as noted.
   Message - White
3. Message Series - E except as noted.



2.250" Radius, 0.750" Border
"Camp", E; "Douglas", E
2.250" Radius, 0.750" Border, White on, Brown;
"Mill", D; "Bluff", D; "State", D; "Park", D



D1-2; 2.250" Radius, 0.750" Border

7

7

EARTHWORK - CTH PP STAGE 1

STATION	CUT (SF)	FILL (SF)	DISTANCE (FT)	CUT (CY)	FILL (CY)	FILL EXP. 1.25 (CY)	MASS ORDINATE (CY)
10+97	43.57	0.04					
			2.55	4.1	0.0	0.0	4.1
11+00	43.56	0.02					
			50	80.4	0.1	0.1	84.5
11+50	43.31	0.06					
			50	77.7	3.0	3.8	158.3
12+00	40.58	3.23					
			50	68.7	8.7	10.9	216.1
12+50	33.57	6.18					
			50	60.4	11.9	14.8	261.7
13+00	31.68	6.62					
			50	56.3	10.8	13.5	304.5
13+50	29.12	5.06					
			50	50.8	9.7	12.1	343.1
14+00	25.69	5.42					
			50	50.2	10.9	13.6	379.7
14+50	28.5	6.3					
			50	45.8	10.9	13.6	411.8
15+00	20.91	5.46					
			50	56.5	11.4	14.3	454.0
15+50	40.06	6.88					
			50	66.7	18.3	22.9	497.8
16+00	32.02	12.92					
			50	67.5	20.8	25.9	539.4
16+50	40.93	9.49					
			50	82.4	12.9	16.2	605.6
17+00	48.02	4.47					
			50	92.5	92.0	115.0	583.2
17+50	51.9	3.01					
			50	101.6	102.5	128.1	556.6
18+00	57.82	6.36					
			50	101.4	11.1	13.8	644.2
18+50	51.68	5.6					
			21.5	40.8	3.7	4.6	680.4
18+72	50.85	3.63					
			TOTALS =	1104	339	423	6725

EARTHWORK - CTH PP STAGE 2

STATION	CUT (SF)	FILL (SF)	DISTANCE (FT)	CUT (CY)	FILL (CY)	FILL EXP. 1.25 (CY)	MASS ORDINATE (CY)
10+97	30.73	0.13					
			2.55	2.9	0.0	0.0	2.9
11+00	30.71	0.1					
			50	55.4	1.2	1.5	56.8
11+50	29.15	1.23					
			50	49.2	3.0	3.8	102.2
12+00	24.01	2.04					
			50	46.6	4.6	5.7	143.1
12+50	26.34	2.9					
			50	48.8	5.0	6.3	185.6
13+00	26.36	2.52					
			50	42.6	7.1	8.9	219.3
13+50	19.64	5.16					
			50	26.9	15.0	18.7	227.5
14+00	9.37	11					
			50	18.2	20.7	25.9	219.8
14+50	10.3	11.35					
			50	19.4	23.9	29.9	209.3
15+00	10.67	14.51					
			50	23.4	26.5	33.1	199.7
15+50	14.65	14.07					
			50	27.9	31.8	39.8	187.8
16+00	15.45	20.32					
			50	37.9	37.5	46.9	178.8
16+50	25.5	20.21					
			50	51.2	37.3	46.6	183.4
17+00	29.83	20.08					
			50	63.8	92.0	115.0	132.1
17+50	39.04	14.93					
			50	68.6	102.5	128.1	72.6
18+00	35.05	14.04					
			50	56.3	28.3	35.3	93.6
18+50	25.77	16.48					
			21.5	22.3	10.2	12.8	103.2
18+72	30.28	9.18					
			TOTALS =	662	447	558	2518

EARTHWORK - CTH PP STAGE 3

STATION	CUT (SF)	FILL (SF)	DISTANCE (FT)	CUT (CY)	FILL (CY)	FILL EXP. 1.25 (CY)	MASS ORDINATE (CY)
10+97	24.45	0					
			2.55	2.3	0.0	0.0	2.3
11+00	24.38	0					
			50	45.1	0.0	0.0	47.4
11+50	24.29	0					
			50	42.9	0.0	0.0	90.2
12+00	21.99	0					
			50	41.2	0.0	0.0	131.4
12+50	22.48	0					
			50	42.3	0.0	0.0	173.7
13+00	23.24	0					
			50	39.6	0.0	0.0	213.3
13+50	19.53	0					
			50	29.5	0.0	0.0	242.9
14+00	12.37	0					
			50	21.6	0.0	0.0	264.4
14+50	10.92	0					
			50	19.9	0.0	0.0	284.4
15+00	10.61	0					
			50	20.3	0.0	0.0	304.7
15+50	11.3	0					
			50	21.5	0.0	0.0	326.1
16+00	11.888	0					
			50	29.1	0.0	0.0	355.2
16+50	19.53	0					
			50	40.3	0.0	0.0	395.5
17+00	24.01	0					
			50	46.6	92.0	115.0	327.1
17+50	26.33	0					
			50	47.7	102.5	128.1	246.7
18+00	25.15	0					
			50	42.6	0.0	0.0	289.3
18+50	20.82	0					
			21.5	16.8	0.0	0.0	306.0
18+72	21.34	0					
			TOTALS =	549	195	243	4001

EARTHWORK - EAST COUGAR DRIVE ("B" LINE)

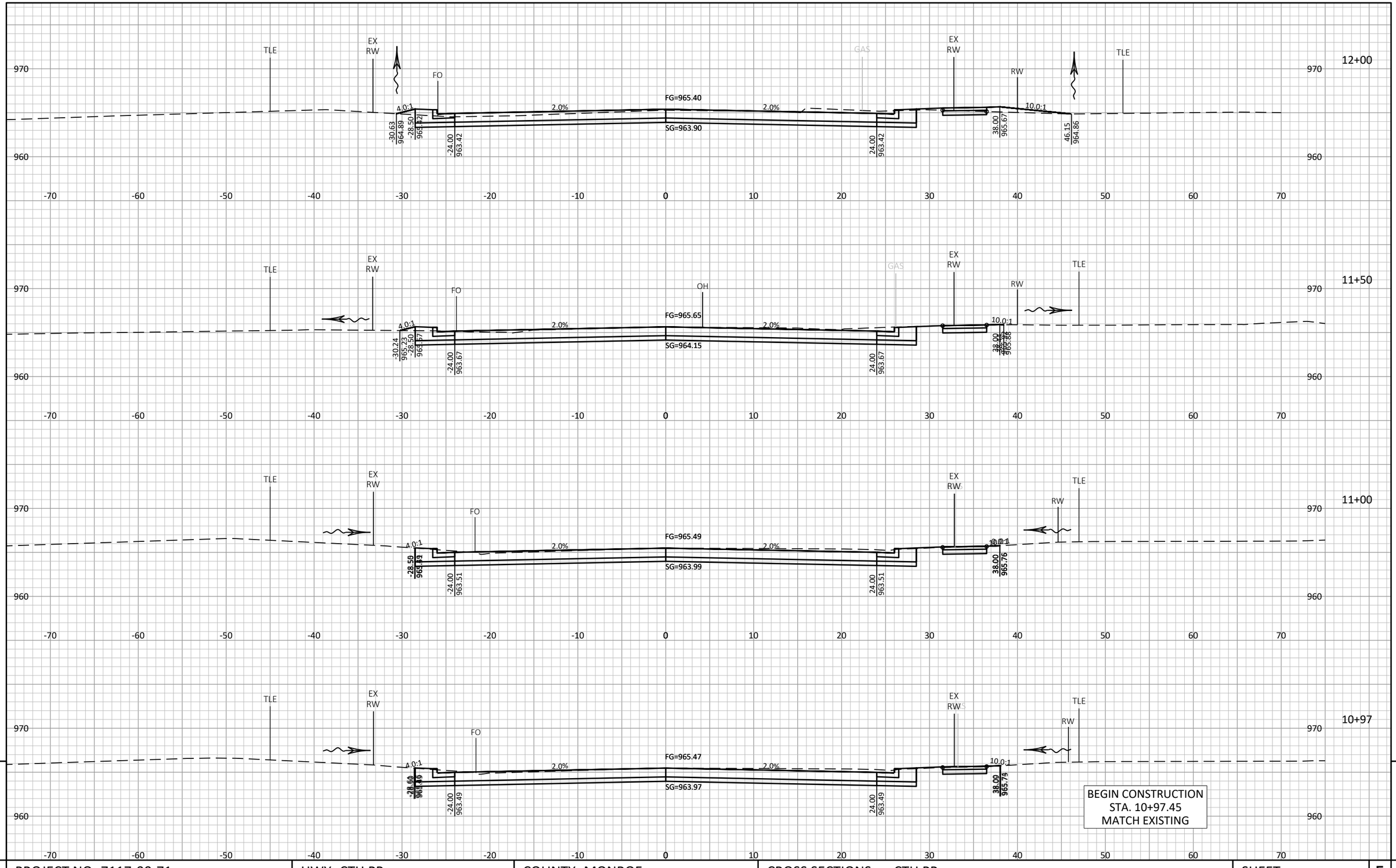
STATION	CUT (SF)	FILL (SF)	DISTANCE (FT)	CUT (CY)	FILL (CY)	FILL EXP. 1.25 (CY)	MASS ORDINATE (CY)
50+24	112.04	4.96					
			26	123.6	4.2	5.2	118.3
50+50	144.66	3.76					
			50	217.1	3.9	4.9	330.6
51+00	89.82	0.48					
			50	173.9	0.4	0.6	503.9
51+50	97.96	0					
			TOTALS =	515	9	11	953

EARTHWORK - WEST COUGAR DRIVE ("C" LINE)

STATION	CUT (SF)	FILL (SF)	DISTANCE (FT)	CUT (CY)	FILL (CY)	FILL EXP. 1.25 (CY)	MASS ORDINATE (CY)
60+30	0	0					
			20	9.6	0.0	0.0	9.6
60+50	25.96	0					
			50	73.1	7.8	9.7	73.0
61+00	53.03	8.42					
			1	2.0	0.3	0.4	74.6
61+01	54.15	7.7					
			TOTALS =	85	8	10	157

EARTHWORK - IH 90/94 RAMP ("D" LINE)

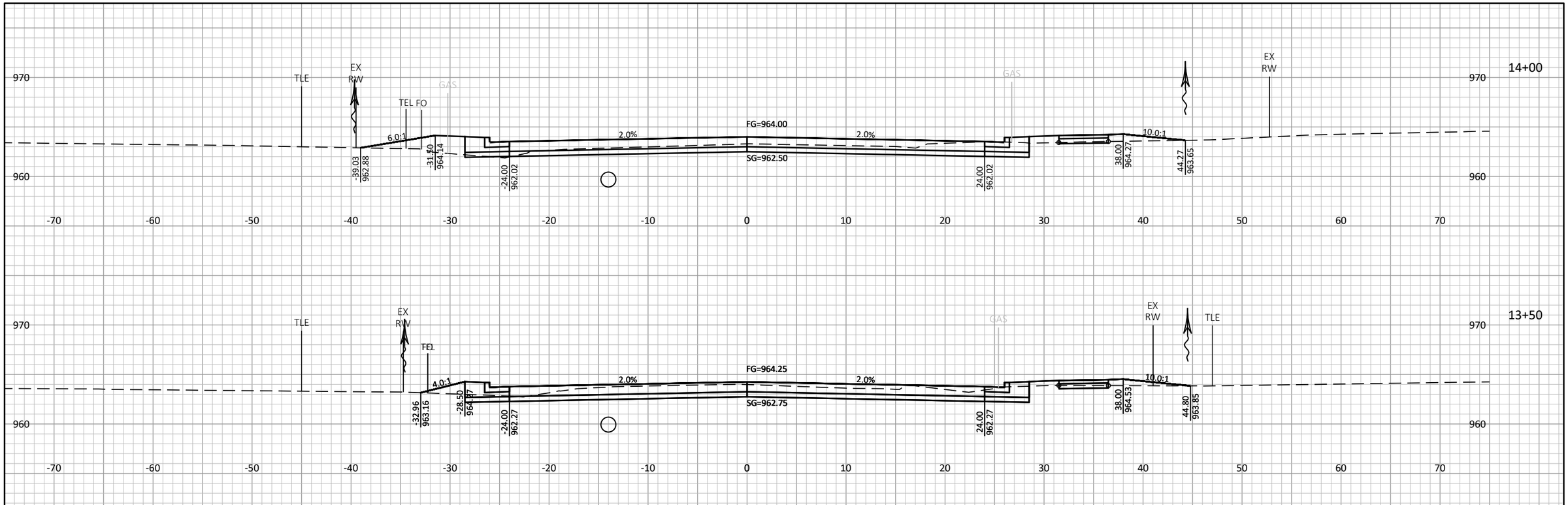
STATION	CUT (SF)	FILL (SF)	DISTANCE (FT)	CUT (CY)	FILL (CY)	FILL EXP. 1.25 (CY)	MASS ORDINATE (CY)
40+50	65.17	0					
			50	73.4	0.1	0.1	73.3
41+00	14.09	0.08					
			50	13.5	0.1	0.1	86.7
41+50	0.52	0					
			8	0.1	0.0	0.0	86.8
41+58	0	0					
			TOTALS =	87	0	0	247



BEGIN CONSTRUCTION
STA. 10+97.45
MATCH EXISTING

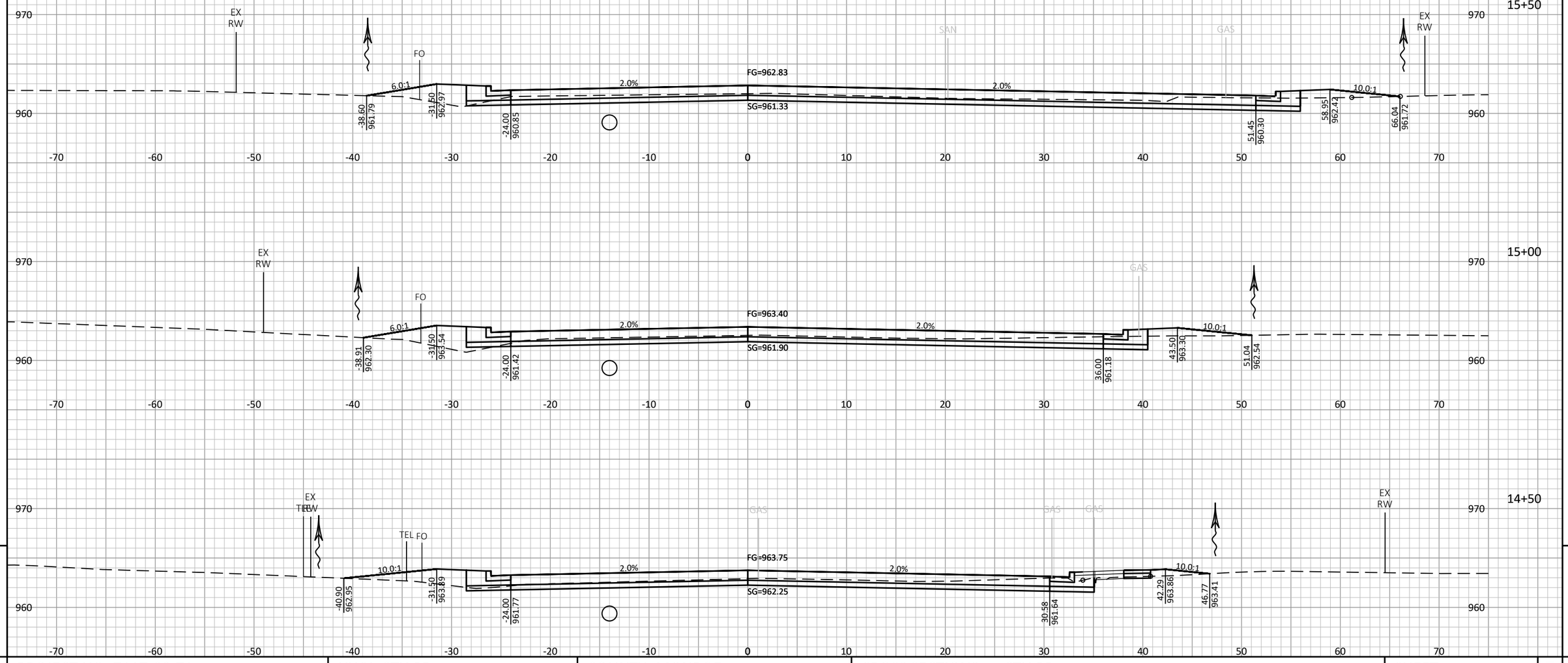
PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	CROSS SECTIONS: CTH PP	SHEET 128	E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\DESIGN\CORRIDORS\W11617_CRDR.DWG PLOT DATE : 10/13/2021 8:45:10 AM PLOT BY : ECKELBERG, PATRICK PLOT SCALE : 1" = 1' LAYOUT : 1



9 9

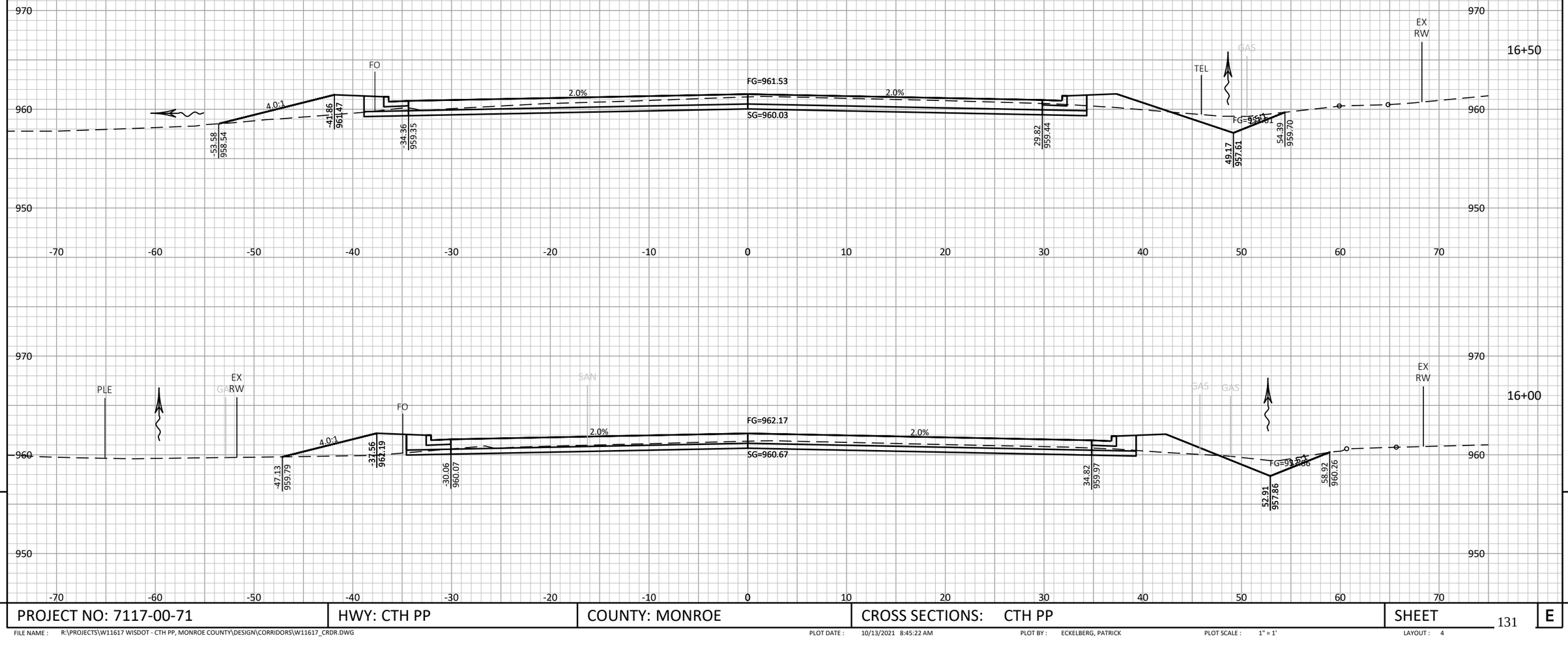
PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	CROSS SECTIONS: CTH PP	SHEET 129	E



9

9

PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	CROSS SECTIONS: CTH PP	SHEET 130	E

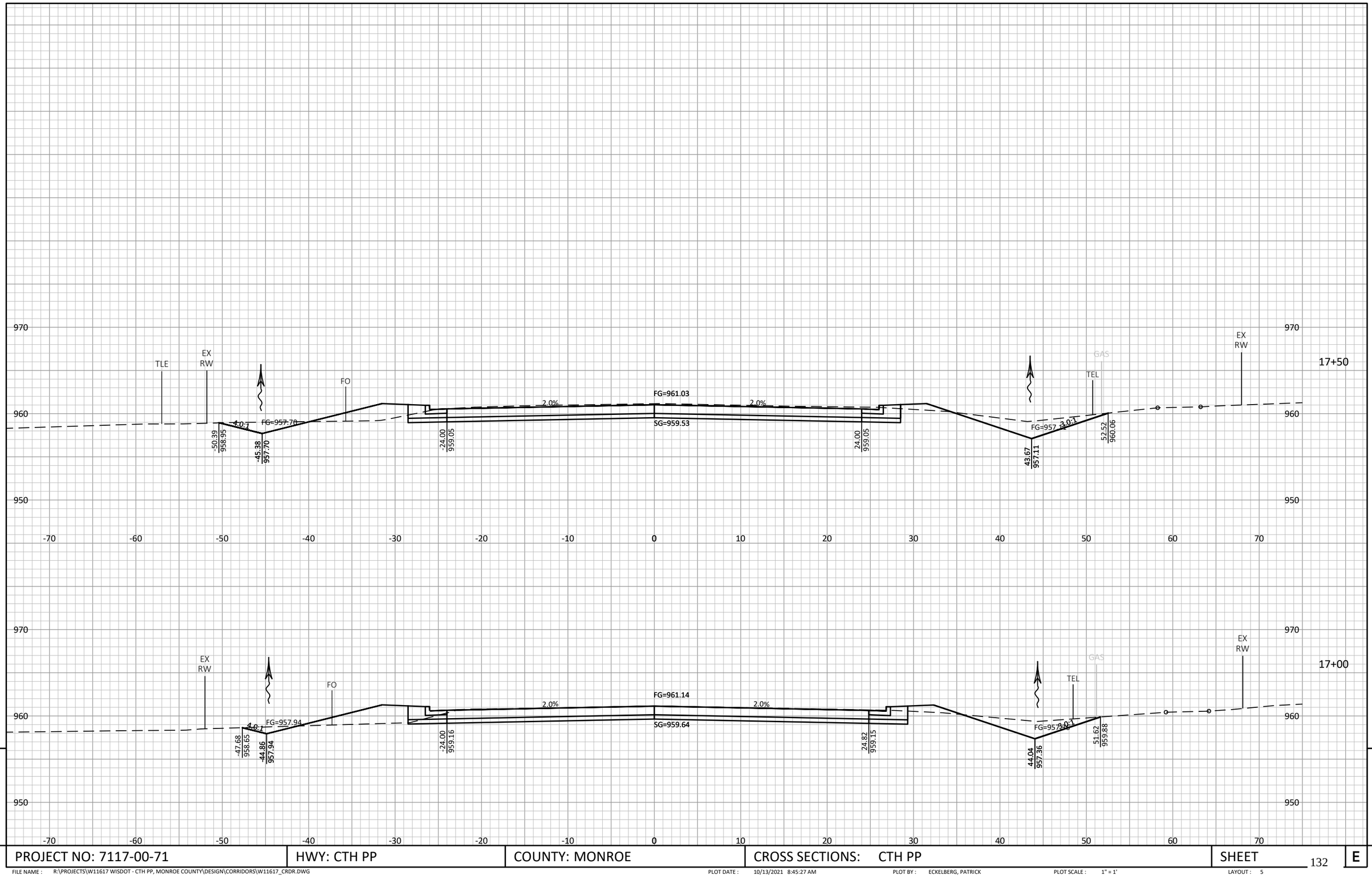


9

9

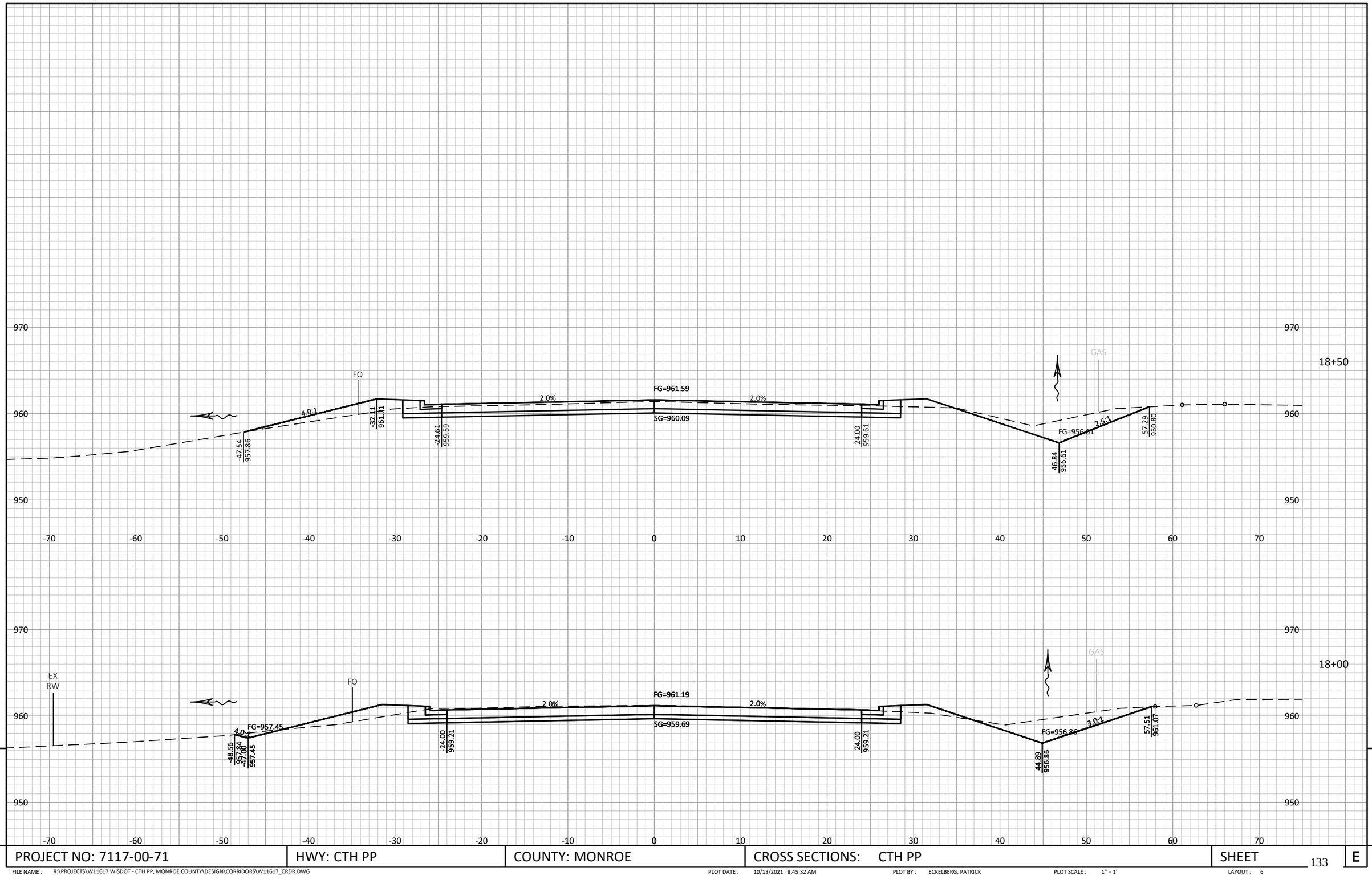
PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	CROSS SECTIONS: CTH PP	SHEET	E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\DESIGN\CORRIDORS\W11617_CRDR.DWG PLOT DATE : 10/13/2021 8:45:22 AM PLOT BY : ECKELBERG, PATRICK PLOT SCALE : 1" = 1' LAYOUT : 4



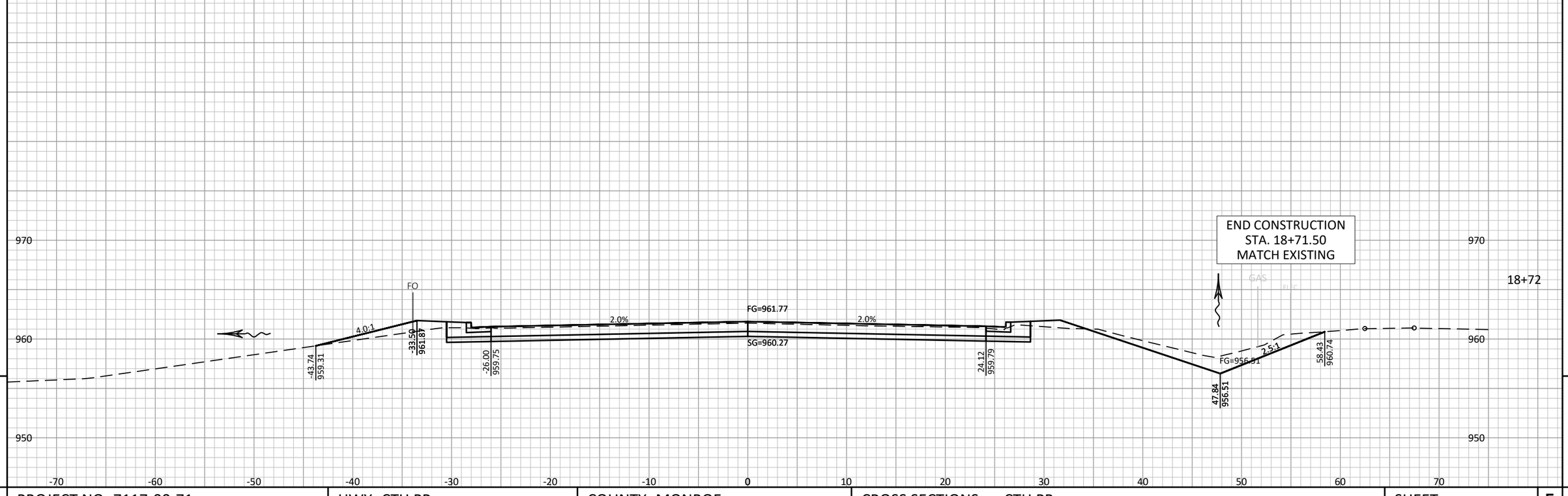
PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	CROSS SECTIONS: CTH PP	SHEET	E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\DESIGN\CORRIDORS\W11617_CRDR.DWG PLOT DATE : 10/13/2021 8:45:27 AM PLOT BY : ECKELBERG, PATRICK PLOT SCALE : 1" = 1' LAYOUT : 5



PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	CROSS SECTIONS: CTH PP	SHEET	E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\DESIGN\CORRIDORS\W11617_CRDR.DWG PLOT DATE : 10/13/2021 8:45:32 AM PLOT BY : ECKELBERG, PATRICK PLOT SCALE : 1" = 1' LAYOUT : 6



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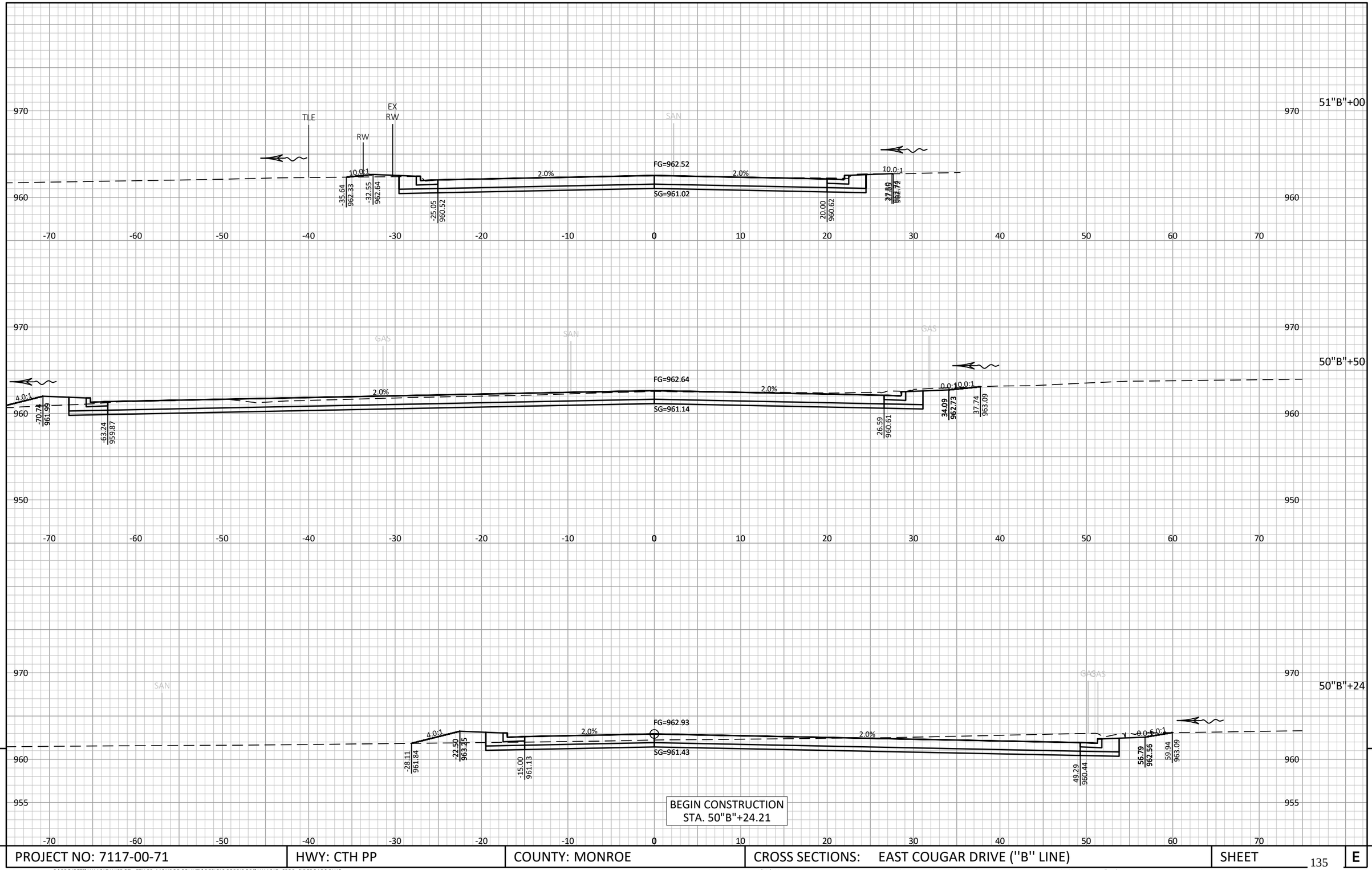
PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	CROSS SECTIONS: CTH PP	SHEET 134	E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\DESIGN\CORRIDORS\W11617_CRDR.DWG PLOT DATE : 10/13/2021 8:45:37 AM PLOT BY : ECKELBERG, PATRICK PLOT SCALE : 1" = 1' LAYOUT : 7



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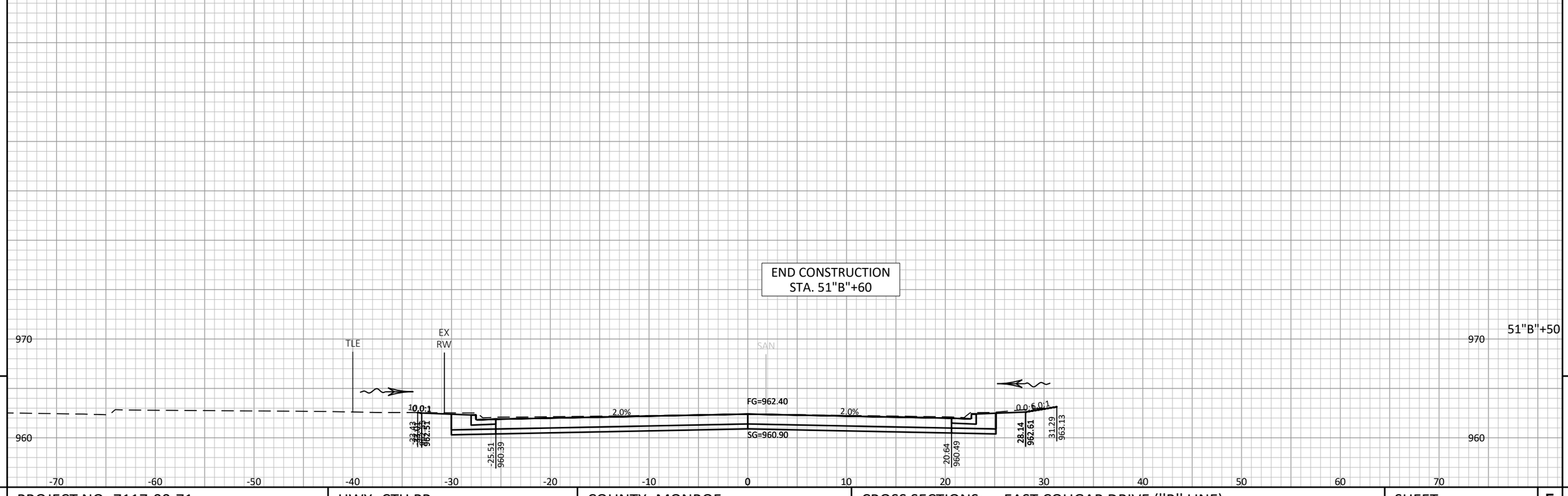
PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	CROSS SECTIONS: EAST COUGAR DRIVE (''B'' LINE)	SHEET	E

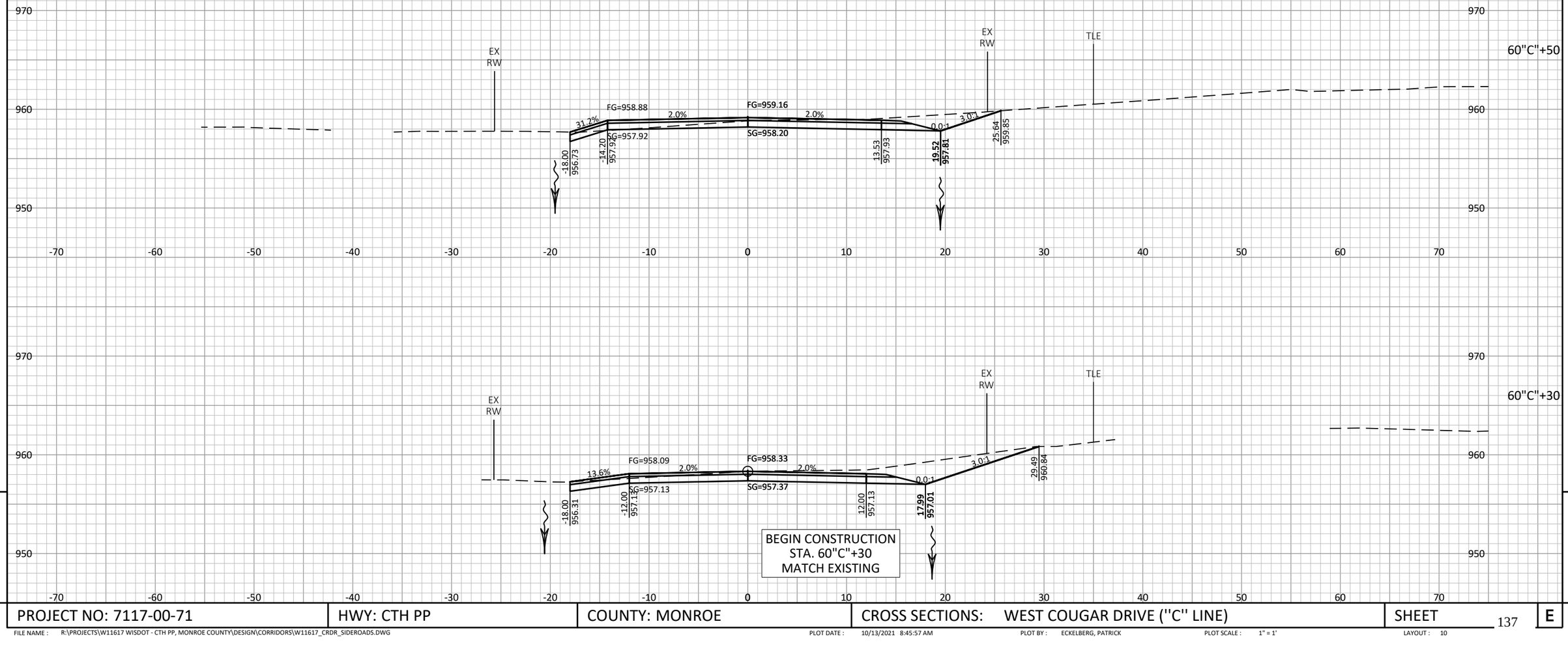
FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\DESIGN\CORRIDORS\W11617_CRDR_SIDEROADS.DWG PLOT DATE : 10/13/2021 8:45:47 AM PLOT BY : ECKELBERG, PATRICK PLOT SCALE : 1" = 1' LAYOUT : 8

END CONSTRUCTION
STA. 51"B"+60



PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	CROSS SECTIONS: EAST COUGAR DRIVE (''B'' LINE)	SHEET 136	E

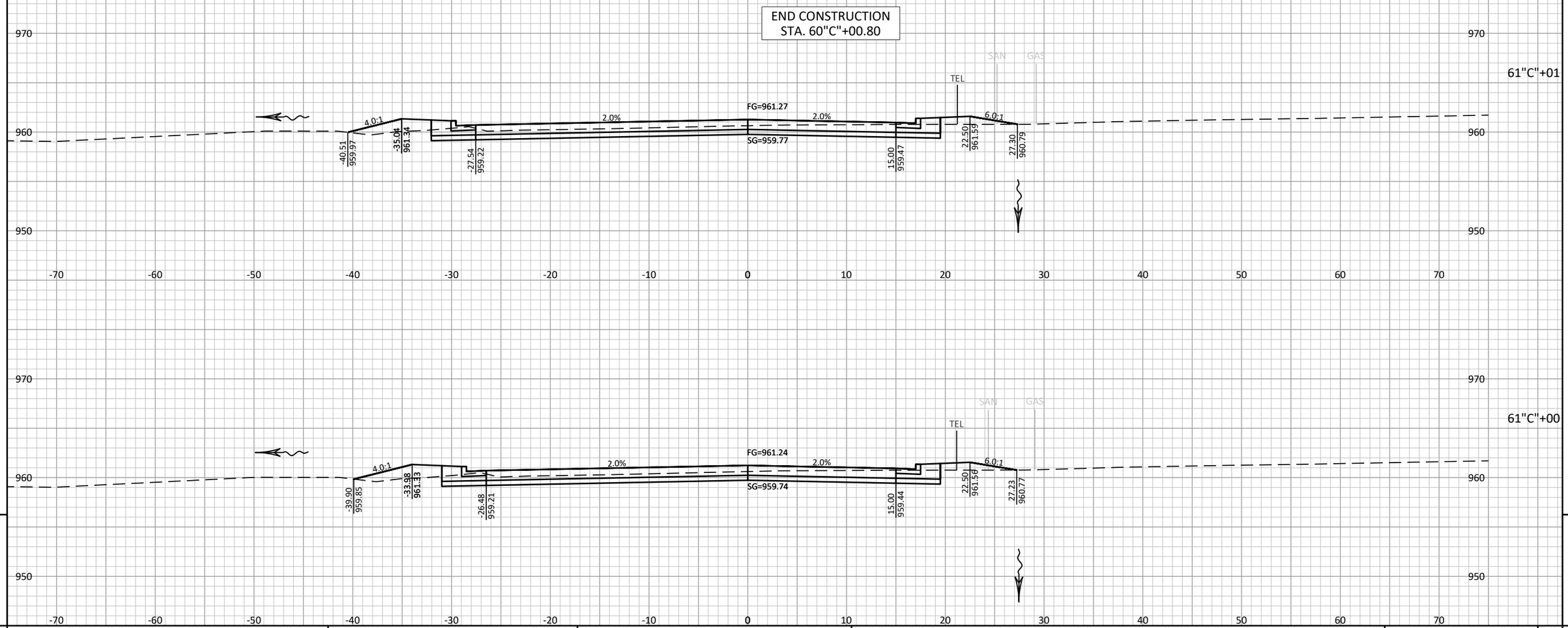
FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\DESIGN\CORRIDORS\W11617_CRDR_SIDEROADS.DWG
PLOT DATE : 10/13/2021 8:45:52 AM
PLOT BY : ECKELBERG, PATRICK
PLOT SCALE : 1" = 1'
LAYOUT : 9



PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	CROSS SECTIONS: WEST COUGAR DRIVE (''C'' LINE)	SHEET	E

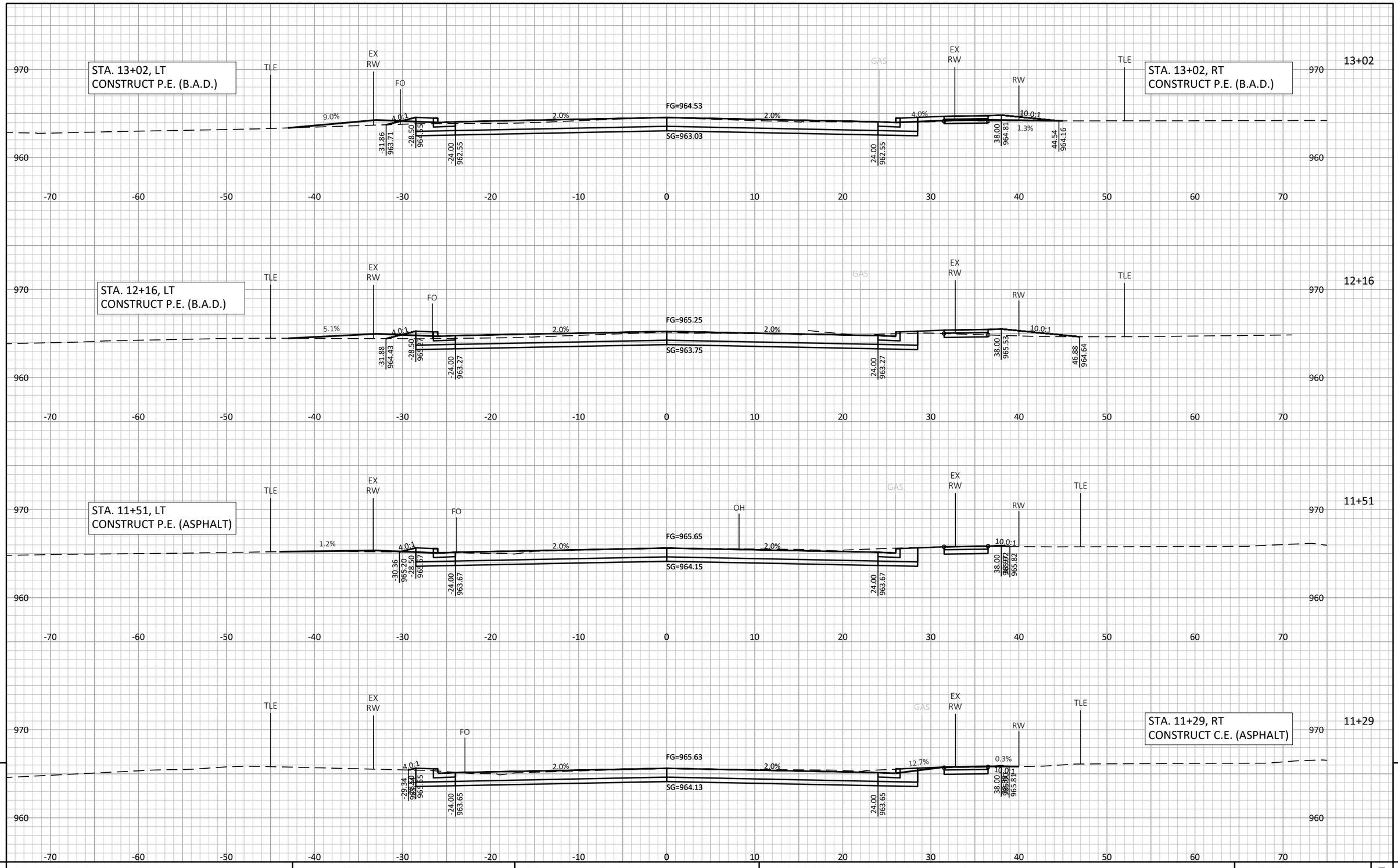
FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\DESIGN\CORRIDORS\W11617_CRDR_SIDEROADS.DWG
PLOT DATE : 10/13/2021 8:45:57 AM
PLOT BY : ECKELBERG, PATRICK
PLOT SCALE : 1" = 1'
LAYOUT : 10

END CONSTRUCTION
STA. 60"C"+00.80



PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	CROSS SECTIONS: WEST COUGAR DRIVE (''C'' LINE)	SHEET	E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\DESIGN\CORRIDORS\W11617_CRDR_SIDEROADS.DWG PLOT DATE : 10/13/2021 8:46:02 AM PLOT BY : ECKELBERG, PATRICK PLOT SCALE : 1" = 1' LAYOUT : 11



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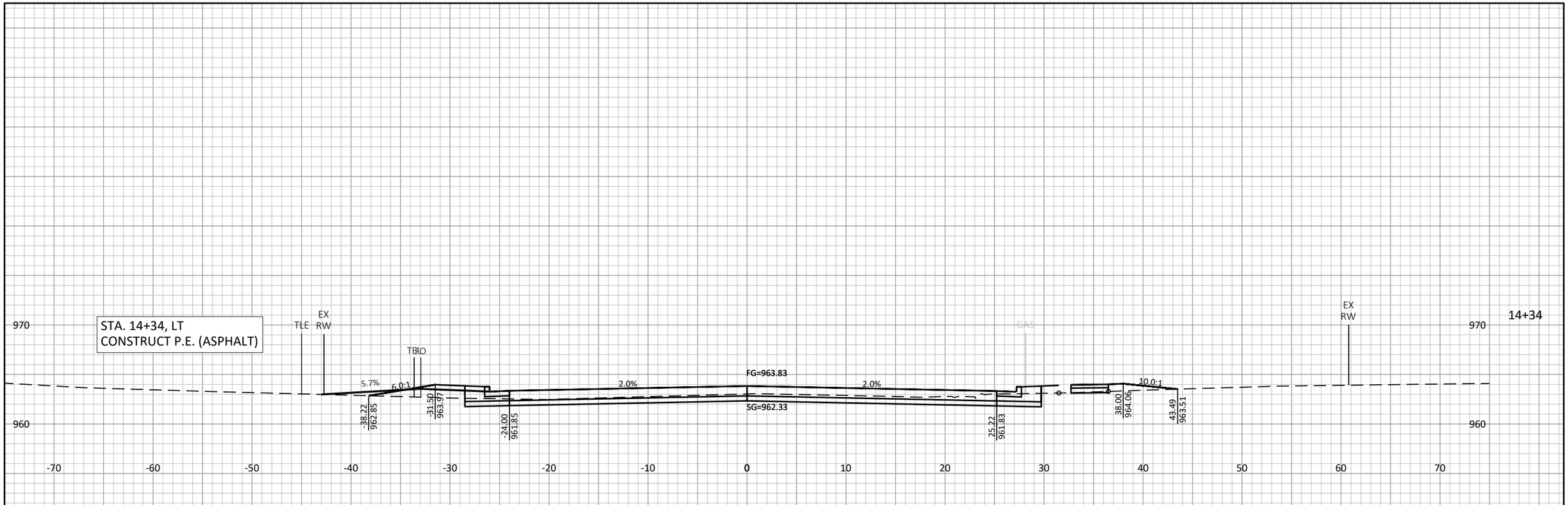
PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	CROSS SECTIONS: DRIVEWAYS	SHEET 139	E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\DESIGN\CORRIDORS\W11617_CRDR.DWG PLOT DATE : 10/13/2021 8:46:15 AM PLOT BY : ECKELBERG, PATRICK PLOT SCALE : 1" = 1' LAYOUT : 25



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PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	CROSS SECTIONS: DRIVEWAYS	SHEET 140	E

9

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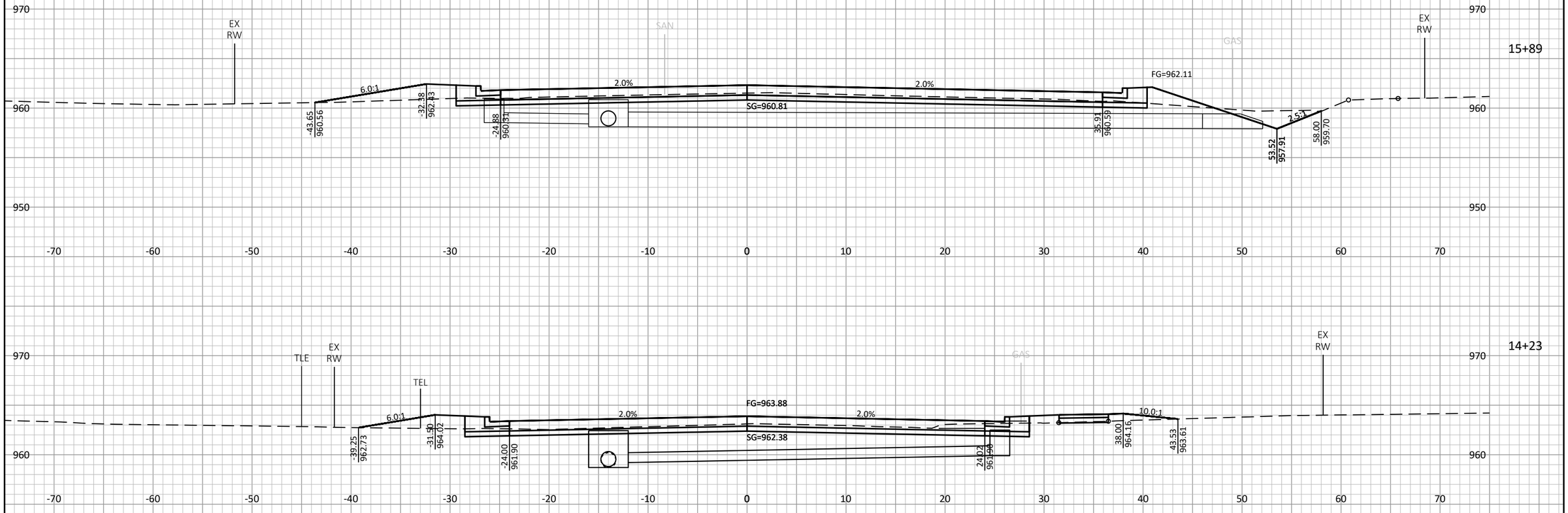
PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	CROSS SECTIONS: DRIVEWAYS	SHEET 141	E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\DESIGN\CORRIDORS\W11617_CRDR.DWG PLOT DATE : 10/13/2021 8:46:23 AM PLOT BY : ECKELBERG, PATRICK PLOT SCALE : 1" = 1' LAYOUT : 27



9	PROJECT NO: 7117-00-71	HWY: CTH PP	COUNTY: MONROE	CROSS SECTIONS: STORM SEWER	SHEET 142 E

FILE NAME : R:\PROJECTS\W11617 WISDOT - CTH PP, MONROE COUNTY\DESIGN\CORRIDORS\W11617_CRDR.DWG PLOT DATE : 10/13/2021 8:46:28 AM PLOT BY : ECKELBERG, PATRICK PLOT SCALE : 1" = 1' LAYOUT : 21

Notes

Wisconsin Department of Transportation

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