SUP

PROJECT ID: 8010-02-76
WITH: N/A

COUNTY: DOUGLAS

SEPTEMBER 2014

ORDER OF SHEETS

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

TOTAL SHEETS = 76

PROJECT LOCATION

N

90

DESIGN DESIGNATION

A.A.D.T.	(2014)	=	5,550
A.A.D.T.	(2034)	=	6,650
D.H.V.	(2034)	=	672
D.D.		=	60/40
T.		=	12.1%
DESIGN SPEED		=	55 MPH
ESALS		=	1,151,100

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 (95.36)
- CULVERT (Profile View)

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

DAIRYLAND - SUPERIOR

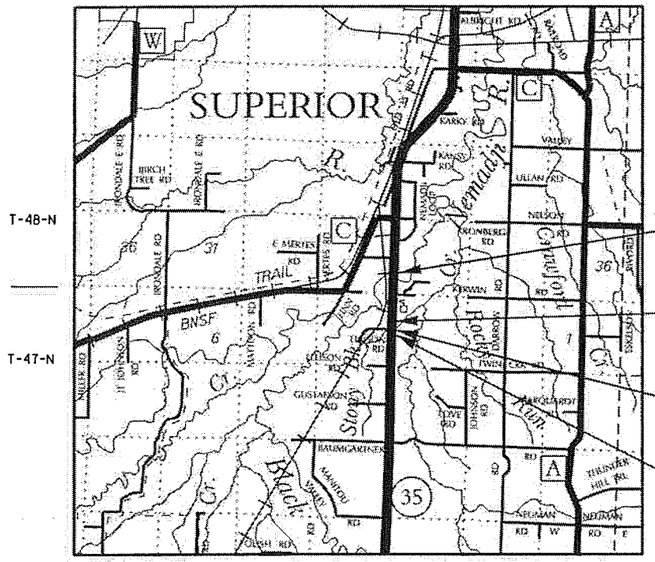
STONY BROOK CREEK & NEMADJI RV BRIDGE

STH 35

DOUGLAS COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8010-02-76	WISC 2014212	1

STATE PROJECT NUMBER
8010-02-76



LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.133 MI.

Coordinates on this plan are referenced to the Wixconsin County Coordinate System (WCCS), Douglas County.

ORIGINAL PLANS PREPARED BY:

MSA PROFESSIONAL SERVICES
TRANSPORTATION • MUNICIPAL DEVELOPMENT • ENVIRONMENTAL
1230 South Boulevard Baraboo, WI 53913
608-356-2771 1-800-362-2695 Fax: 608-356-2770
© MSA PROFESSIONAL SERVICES

WISCONSIN
MARVIN S. RUHLAND
E-15125
BARABOO, WISCONSIN
PROFESSIONAL ENGINEER

1-9-2014 Date
Signature

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	MSA Professional Services
Designer	MSA Professional Services
Project Manager	Brendan Dirkes
Regional Examiner	Dan Ojibway
Regional Supervisor	Andrew Stensland
C.O. Examiner	

APPROVED FOR THE DEPARTMENT
DATE: 1/9/14 Brendan Dirkes (Signature)

E

FILE NAME : P:\90s\93\00093189\cadd\DOT\Planshts\93189TS.dgn | PLOT DATE : 1/7/2014 | PLOT BY : pkriesel | PLOT NAME : | PLOT SCALE : 1:10560

WISDOT/CADDS SHEET 10

STANDARD ABBREVIATIONS

AC	ACRE
AGG	AGGREGATE
<	ANGLE
ASPH	ASPHALTIC
AC	ASPHALT CEMENT
ADT	AVERAGE DAILY TRAFFIC
B & B	BALLED AND BURLAPPED
BM	BENCH MARK
CB	CATCH BASIN
℄ OR C/L	CENTER LINE
C-C	CENTER TO CENTER
CONC	CONCRETE
CO	COUNTY
CTH	COUNTY TRUNK HIGHWAY
CY	CUBIC YARD
CULV	CULVERT
CP	CULVERT PIPE
CPRC	CULVERT PIPE REINFORCED CONCRETE
C & G	CURB AND GUTTER
D	DEGREE OF CURVE
DHV	DESIGN HOUR VOLUME
DIA OR ϕ	DIAMETER
DIST	DISTRICT
DWY	DRIVEWAY
E	EAST
X	EAST GRID COORDINATE
EB	EASTBOUND
ELEC	ELECTRIC
EL OR ELEV	ELEVATION
EMB	EMBANKMENT
EW	ENDWALL
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC	EXCAVATION
EBS	EXCAVATION BELOW SUBGRADE
EXIST	EXISTING
EXP	EXPANSION
F-F	FACE TO FACE
FERT	FERTILIZER
FE	FIELD ENTRANCE
F/L	FLOW LINE
FT	FOOT
GN	GRID NORTH
HR	HANDICAP RAMP
HT	HEIGHT
CWT	HUNDREDWEIGHT
HYD	HYDRANT
IN DIA	INCH DIAMETER
INL	INLET
ID	INSIDE DIAMETER
I	INTERSECTION ANGLE
IE	INVERT ELEVATION
IP	IRON PIPE OR PIN
JCT	JUNCTION
L	LENGTH OF CURVE
LF	LINEAR FOOT
LC	LONG CHORD OF CURVE
LCB	LONG CHORD BEARING
LS	LUMP SUM
MH	MANHOLE
N	NORTH
Y	NORTH GRID COORDINATE
OE	OUTLET ELEVATION
OL	OUT LOT
OD	OUTSIDE DIAMETER
OH	OVERHEAD LINES
PAVT	PAVEMENT
PLE	PERMANENT LIMITED EASEMENT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
PCC	PORTLAND CEMENT CONCRETE
LB	POUND
PE	PRIVATE ENTRANCE
R OR RAD	RADIUS
RR	RAILROAD
R	RANGE
ℝ OR R/L	REFERENCE LINE
REQD	REQUIRED
RT	RIGHT
R/W	RIGHT-OF-WAY
RD	ROAD
SALV	SALVAGED
SAN	SANITARY SEWER
SECT	SECTION
SHLDR	SHOULDER
SW	SIDEWALK
S	SOUTH
SB	SOUTHBOUND
SPECS	SPECIFICATIONS
SQ	SQUARE
SF OR SQ FT	SQUARE FEET
SY	SQUARE YARD
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
STD	STANDARD
SDD	STANDARD DETAIL DRAWINGS
STH	STATE TRUNK HIGHWAYS
STA	STATION
SS	STORM SEWER
T	TANGENT
TEL	TELEPHONE
TEMP	TEMPORARY
TLE	TEMPORARY LIMITED EASEMENT
T	TON
TC	TOP OF CURB
TN	TOWN
TRANS	TRANSITION
T	TRUCKS (percent of)
TYP	TYPICAL
UNCL	UNCLASSIFIED
USH	UNITED STATES HIGHWAY
VAR	VARIABLE
VERT	VERTICAL
VC	VERTICAL CURVE
VOL	VOLUME
WM	WATER MAIN
WV	WATER VALVE
W	WEST
WB	WESTBOUND
YD	YARD

UTILITIES

FIBER OPTIC:
KENNETH WALKER
ENVENTIS TELECOM,
21 W. SUPERIOR STREET SUITE 200
DULUTH, MN 55802
PHONE: 218-740-6131
ken.walker@enventis.com

TELEPHONE & FIBER OPTIC:
MICHAEL VANDENBOS
CENTURYLINK
2426 75TH AVENUE
OSCEOLA, WI 54020
PHONE: 715-294-2463
michael.vandenbos@centurytel.com

UTILITIES

ELECTRIC:
DAVE WALETSKI
EAST CENTRAL ENERGY
811 6th STREET NW
BRAHAM, MN 55006-0039
PHONE: 763-691-2037
dave.waletski@ecemn.com

GAS/PETROLEUM:
JAMISON MEHLE
SUPERIOR WATER LIGHT AND POWER CO
2915 HILL AVENUE
SUPERIOR, WI 54880
OFFICE: 715-395-6288
jmehle@swlp.com

DNR LIAISON

DEPARTMENT OF NATURAL RESOURCES
ATTN.: AMY CRONK
810 W. MAPLE STREET
SPOONER, WI 54801
PHONE: 715-635-4228
amy.cronk@wisconsin.gov

DESIGN CONTACT

MSA PROFESSIONAL SERVICES, INC.
ATTN.: CHAD SCHROEDER
1835 N. STEVENS STREET
RHINELANDER, WI 54501-2163
PHONE: 715-362-3244
cschroeder@msa-ps.com

WISDOT CONTACT

BRENDAN DIRKES
1701 N. 4th STREET
SUPERIOR, WI 54880
PHONE: 715-395-3026
brendan.dirkes@dot.wi.gov

* - NOT A MEMBER OF DIGGERS HOTLINE.

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

GENERAL NOTES

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS SHALL BE FERTILIZED, SEEDED AND MULCHED AS DIRECTED BY THE ENGINEER. OVERSOW PERMANENT SEEDING AREAS WITH TEMPORARY SEED AT 1.5 LBS. PER 1000 SQUARE FEET.

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

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

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO GPS MONUMENT "SUPERIOR C GPS" ELEVATION 703.92, NAVD 88 DATUM.

SILT FENCE TO BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER AND IN PLACE PRIOR TO CULVERT REMOVAL.

THE 7.5" ASPHALTIC SURFACE SPECIAL SHALL BE PLACED IN 2 LOWER 2.75-INCH LIFTS AND 1 UPPER 2-INCH LIFT.

THE 4.75" ASPHALTIC SURFACE SPECIAL (SHOULDERS) SHALL BE PLACED IN A 2.75-INCH LOWER AND 2-INCH UPPER LIFT.

WHEN THE QUANTITY OF THE ITEM OF BASE LAYER IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTURAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

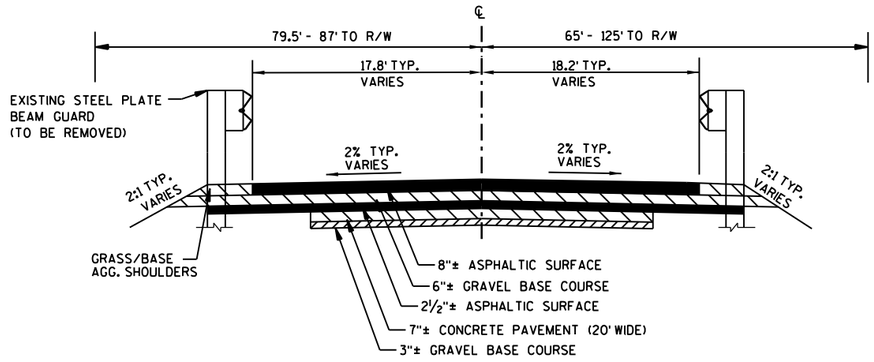
SHRINKAGE IS ESTIMATED AT 30%

THE WISCONSIN DEPARTMENT OF TRANSPORTATION WILL FURNISH THE CONTRACTOR A MONUMENT WHICH SHALL BE SET IN THE STRUCTURE AS DESIGNATED BY THE ENGINEER.

RUNOFF COEFFICIENT TABLE

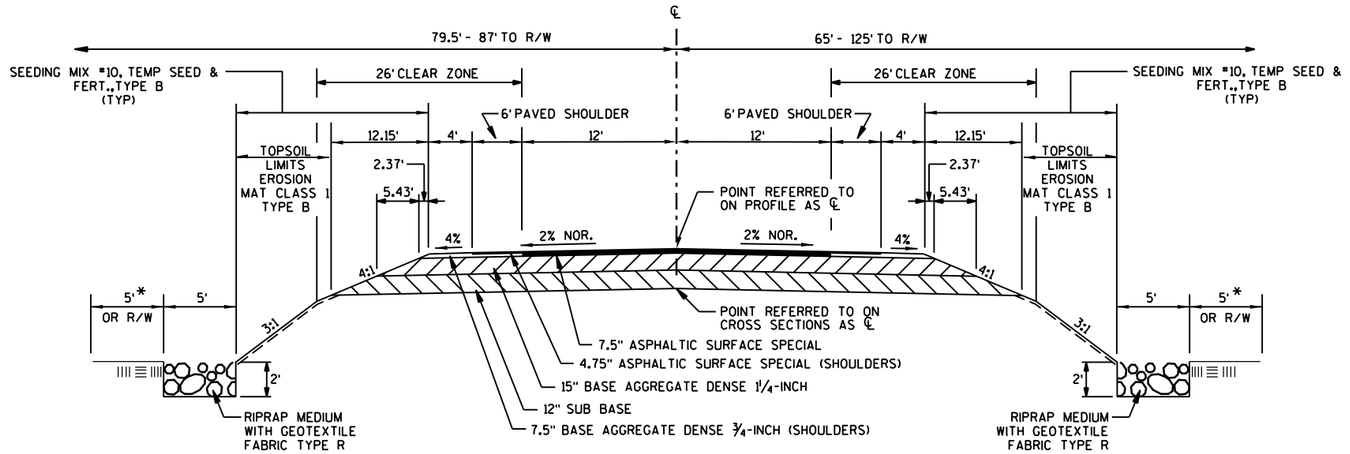
	HYDROLOGIC SOIL TABLE			
	A	B	C	D
	SLOPE RANGE %	SLOPE RANGE %	SLOPE RANGE %	SLOPE RANGE %
LAND USE:	6 & OVER	6 & OVER	6 & OVER	6 & OVER
SIDE SLOPE-TURF	.25 .32	.27 .34	.28 .36	.30 .38
PAVEMENT:				
ASPHALT	.70 - .95			
CONCRETE	.80 - .95			
GRAVEL ROADS, SHOULDERS	.40 - .60			

THE RUNOFF COEFFICIENTS OF SURFACE DRAINAGE AT THE PROJECT SITES WILL NOT BE CHANGED FROM BEFORE TO AFTER CONSTRUCTION. THE TOTAL AREA OF THE PROJECT IS 3.3 ACRES. THE TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES IS 2.6 ACRES.



TYPICAL EXISTING SECTION

(FROM PROJECT ID 8010-31-71 AS-BUILTS)



TYPICAL FINISHED SECTION

STA. 171+50- STA. 178+50

* SEEDING MIX #10, TEMP SEED & FERT.,TYPE B AND EROSION MAT (TYP)

PROJECT NO: 8010-02-76	HWY: STH 35	COUNTY: DOUGLAS	TYPICAL SECTIONS	SHEET 3	E

FILE NAME : P:\90s\93\00093189\caddWDOT\Planshts\00093189XC.dgn PLOT DATE : 1/17/2014 PLOT BY : pkriesel PLOT NAME : PLOT SCALE : 1:10

WISDOT/CADDS SHEET 42

00093189XC.dgn 1/17/2014 9:36:15 AM pkriesel

2

N

STONY BROOK CREEK

EXISTING STRUCTURE

MAILBOX
HOUSE #5109

1ST POST

12TH POST

1ST POST

CP#102
MAG NAIL
Y=255,644.706
X=142,966.483

6.2'

76.76'

37.70'

℄ STH 35

171+00 172+00 173+00 174+00 175+00 176+00 177+00 178+00 179+00

BOP STA. 170+87.91

EOP STA. 179+12.84

89.50'

55.60'

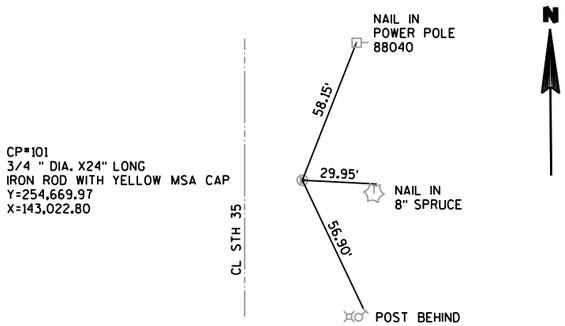
48.18'

1ST POST

1ST POST

CP#103
MAG NAIL
Y=255,043.546
X=142,992.057

CP#101



CP#101
3/4 " DIA. X24" LONG
IRON ROD WITH YELLOW MSA CAP
Y=254,669.97
X=143,022.80

PROJECT TIES

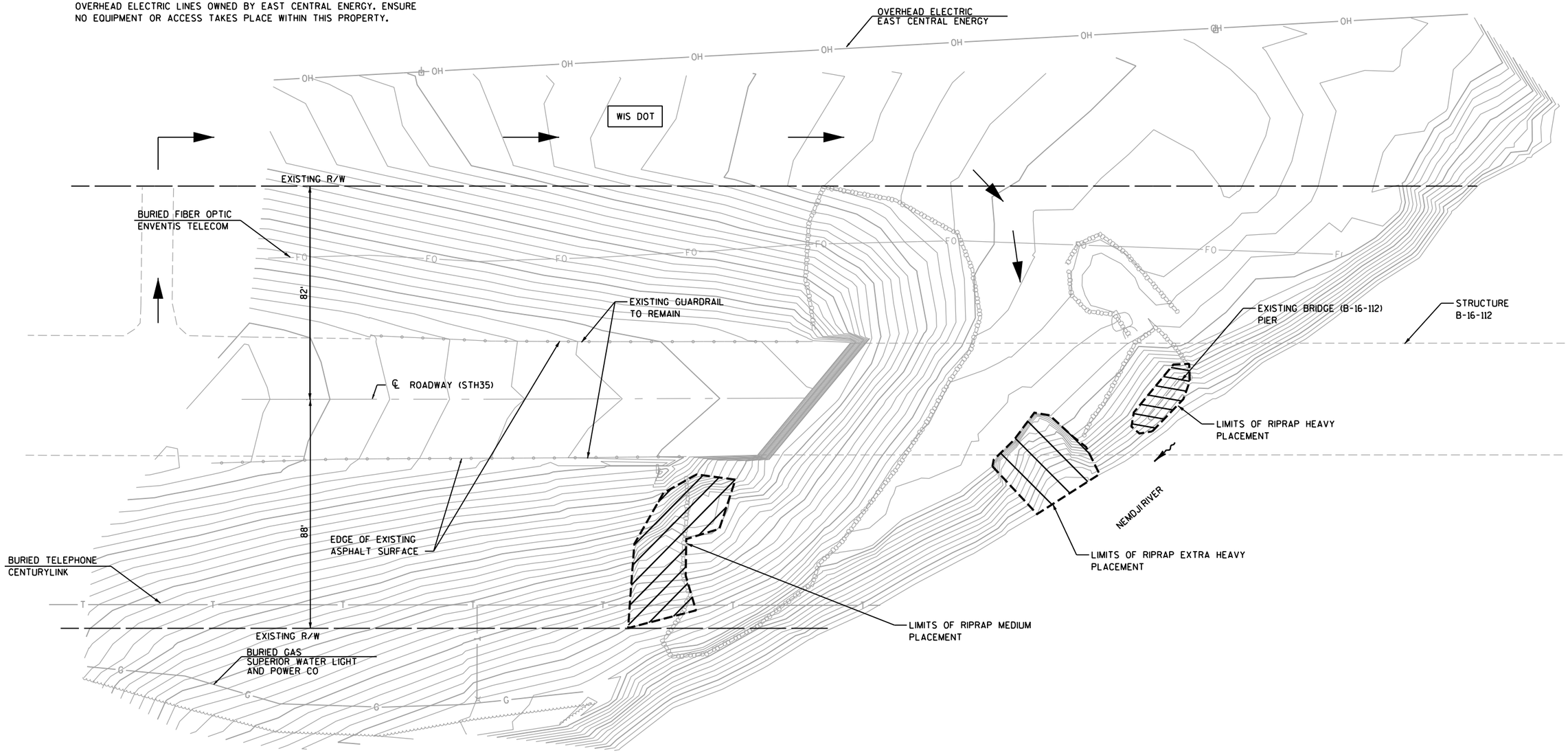
ALL MEASUREMENTS ARE SLOPE DISTANCES.

PROJECT NO: 8010-02-76	HWY: STH 35	COUNTY: DOUGLAS	PROJECT TIES	SHEET 4	E

LEGEND

CONTRACTOR ACCESS TO WORK AREA

NOTE:
THE EXISTING RAILROAD RIGHT OF WAY RUNS APPROXIMATELY ALONG THE OVERHEAD ELECTRIC LINES OWNED BY EAST CENTRAL ENERGY. ENSURE NO EQUIPMENT OR ACCESS TAKES PLACE WITHIN THIS PROPERTY.



PROJECT NO: 8010-02-76	HWY: STH 35	COUNTY: DOUGLAS	SITE DETAIL SHEET - NEMADJI RIVER SITE	SHEET 5	E

FILE NAME : P:\90s\93\00093189\caddWDOT\Planshts\PLAN3.dgn PLOT DATE : 1/28/2014 PLOT BY : pkriesel PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

PLAN3.dgn 1/28/2014 8:24:44 AM pkriesel

LEGEND

EROSION MAT CLASS 1 TYPE B

SILT FENCE

TEMPORARY DITCH CHECK (FOR USE PRIOR TO RIPRAP PLACEMENT)

RIPRAP MEDIUM OVER GEOTEXTILE FABRIC TYPE R

N

STONY BROOK CREEK

CAROLYN LINDBERG

TOWN OF SUPERIOR

FEE FOR SLOPES AND DRAINAGE

FEE FOR SLOPES AND DRAINAGE

SLOPE INTERCEPT

SILT FENCE (TYP.)

RIPRAP MEDIUM OVER GEOTEXTILE FABRIC TYPE R (TYP.)

EXISTING R/W

WETLAND BOUNDARY (TYP).

BOP STA. 170+87.91

171+00 172+00 173+00 174+00 175+00 176+00 177+00 178+00 179+00

℄ STH 35

EOP STA. 179+12.84

EXISTING R/W

EXISTING R/W

TLE FOR GRADING

FEE FOR DRAINAGE

EXISTING R/W

SLOPE INTERCEPT

COSMO RICH

TED NELSON

TLE FOR DRAINAGE

FEE FOR SLOPES AND DRAINAGE

SLOPE INTERCEPT

EXISTING GROUND

3:1

2'

MEDIUM RIPRAP WITH GEOTEXTILE FABRIC TYPE R

5'

SECTION A-A - RIPRAP PLACEMENT

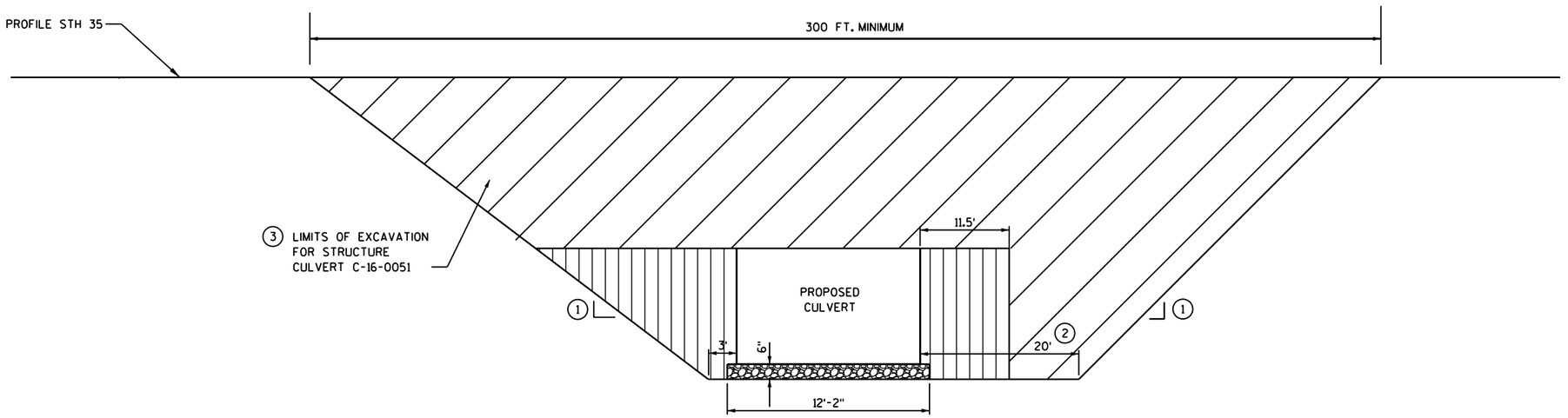
PROJECT NO: 8010-02-76	HWY: STH 35	COUNTY: DOUGLAS	PLAN SHEET OVERVIEW AND EROSION CONTROL - STONY BROOK CR	SHEET 6	E

FILE NAME : P:\90s\93\00093189\caddWDOT\Planshts\93189full plan viewEC.dgn PLOT DATE : 1/28/2014 PLOT BY : pkriesel PLOT NAME : PLOT SCALE : 1:60

WISDOT/CADDS SHEET 42

93189full plan viewEC.dgn 1/28/2014 8:24:48 AM pkriesel

2



STRUCTURE/ROADWAY EXCAVATION DETAIL

ELEVATION VIEW SHOWN

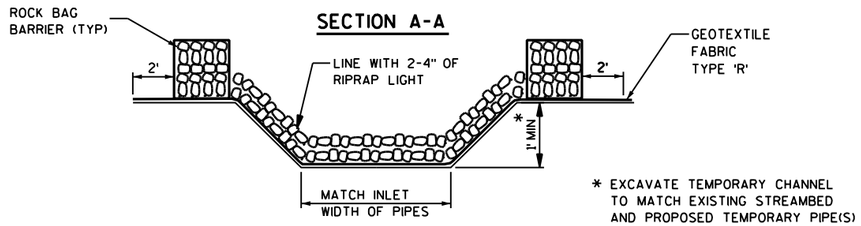
1. SLOPE AS REQUIRED FOR OSHA TRENCH REQUIREMENTS AND TO MEET MINIMUM LENGTH SHOWN.
2. LOCATION OF TEMPORARY WATER DIVERSION
3. REMOVED MATERIAL SHOULD BE PLACED BACK INTO THE FINISHED ROADWAY FILL. SELECT BORROW SHOULD ONLY BE USED FOR SLOPE FILL.

LEGEND

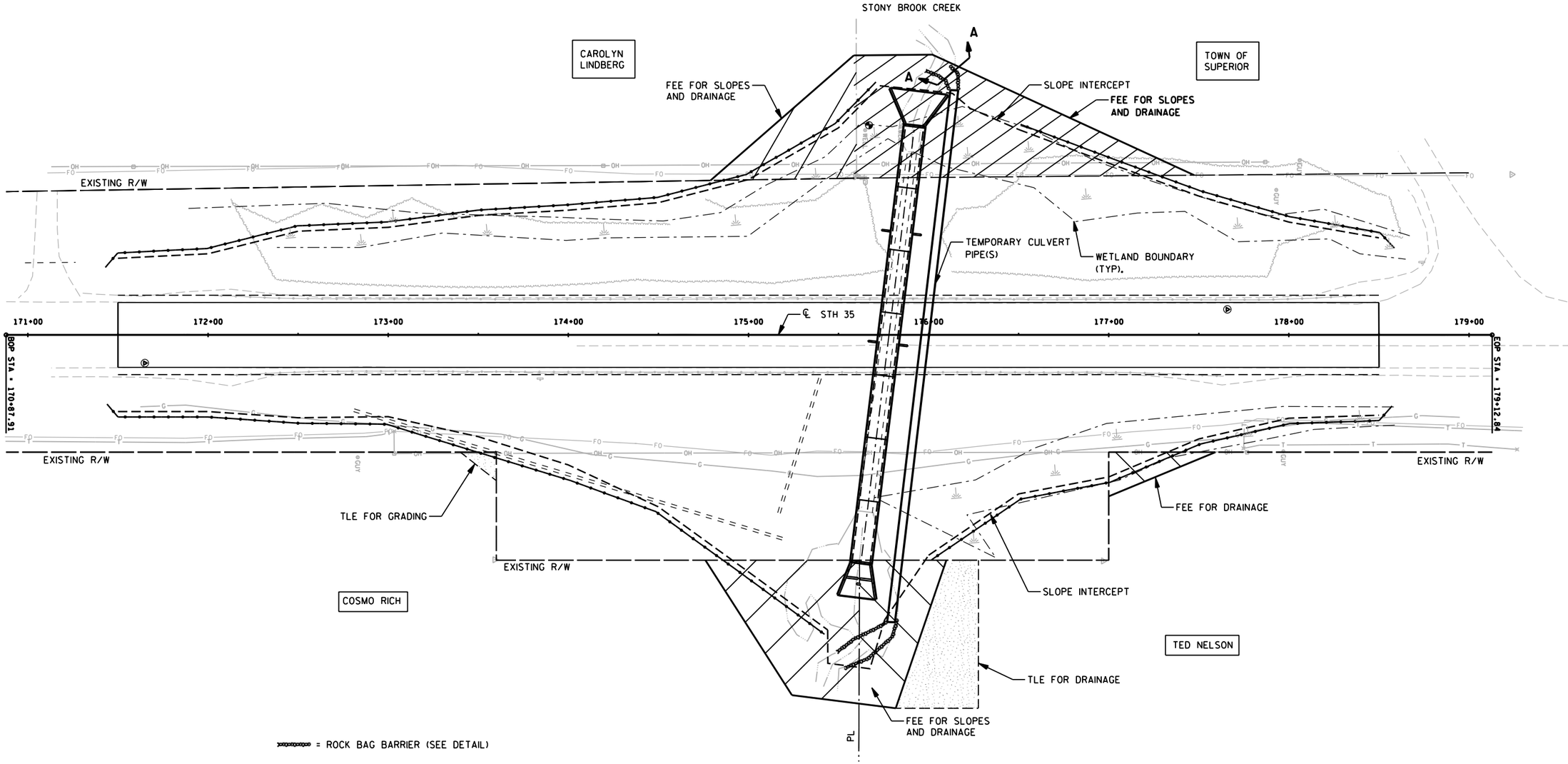
- REMOVE EXISTING ROADWAY FILL. SEE SPECIAL PROVISIONS. (INCIDENTAL TO EXCAVATION FOR STRUCTURE C-16-0051)
- LIMITS OF STRUCTURE BACKFILL
- BACKFILL COARSE AGGREGATE SIZE NO. 2

NOTE:
CLAY CAP REQUIRED ON WEST END OF PROPOSED STRUCTURE, SEE STRUCTURE PLANS.

ROCK BAG BARRIER
NOT TO SCALE



* EXCAVATE TEMPORARY CHANNEL TO MATCH EXISTING STREAMBED AND PROPOSED TEMPORARY PIPE(S)



PROJECT NO: 8010-02-76	HWY: STH 35	COUNTY: DOUGLAS	TEMPORARY WATER DIVERSION DETAILS	SHEET 8	E

FILE NAME : P:\90s\93\00093189\caddWDOT\Planshts\TEMP WATER DIVERSION.dgn PLOT DATE : 1/17/2014 PLOT BY : pkriesel PLOT NAME : PLOT SCALE : 1:60

WISDOT/CADDS SHEET 42

TEMP WATER DIVERSION.dgn 1/17/2014 9:36:32 AM pkriesel

of Superior

PLACE PCMS HERE
7 DAYS PRIOR TO
BEGINNING DETOUR

BRIDGE OUT
3.0 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3B
60" X 30"

BRIDGE OUT
3.0 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3B
60" X 30"

WORK ZONES

PLACE PCMS HERE
7 DAYS PRIOR TO
BEGINNING DETOUR

SUPERIOR

PARKLAND

South Range

Four Corners

PATTISON STATE PARK

Little Manitou Falls

Big Manitou Falls

Nemadji R.

Cr. Nemadji R.

Crawford Cr.

Rocky Run Cr.

Stony Brook

Black Cr.

Miller Cr.

Copper Cr.

Amnicon R.

Amnicon Lit. Silver Cr.

DMIR

BNSF

HAMMOND AVE
ALBRIGHT RD
BLACK BEAR RD
KARKY RD
KANSY RD
VALLEY BROOK RD
ULLAN RD
KRONBERG RD
KERWIN RD
TWIN CRK RD
GUSTAFSON RD
MARQUARDT RD
BAUMGARTNER RD
THUNDER HILL TRL
NEUMAN RD W
NEUMAN RD E
PETERSON RD
POLISH RD
TUFF RD
HALF MILE RD
OTTO RD
KOENEN RD
TORGERSON RD
WILKINSON RD
CONLEY RD
CRAIG RD
BLAISDELLE RD
LARSON RD
LEGG LAKE RD
TOWN LINE RD
RICE FARM RD
ARVIK RD
ARMOUR RD
ANDERSON RD
JACKSINO RD
PEARSON RD
FULK RD
BAYFIELD RD
CATERPILLAR TRL
ORCHARD DR
CLOVERDALE
ST LAWRENCE ST
WEBB RD
CUTTER RD
GRAND AVE
TOWER RD
EAU CLAIRE RD
PADNEAU RD
IRONDALE E RD
IRONDALE RD
E MERTES RD
MERTES RD
TRAIL
NEMADJI LOOP
FINN RD
ELLISON RD
MATTISON RD
DARROW RD
JOHNSON RD
LOVE RD
ESKELSON RD
RIVORD RD
PINE ST
WERMTER RD
LYMAN RD
LEE RD
WINDMILL RD
HUPPERT RD
FINDLAY RD
SAM ANDERSON
SORENSON RD
STONE RD
EASTMAN RD
STROMQUIST RD
OLSON RD
TURBETT RD
JODELL RD
HOLMS RD
MC KINLEY RD
PINE GROVE RD
SILVER RD
FULK RD
JAKE SCHMID RD
REED MERRILL RD
POINT OF ROCKS RD
MIEROTTO RD
TOWER RD
TUFF RD
KEITH RD
OAKLAND RD
LK
VALLEY RD
MANITOU VALLEY RD
915 35 RD

A Z E UU K V B C

13 53 35 31 36 6 1

N

LEGEND
- WORK ZONE
- DETOUR ROUTE
- POST MOUNTED SIGN
- TYPE III BARRICADE WITH/WITHOUT SIGN
- PAID FOR AS TRAFFIC CONTROL (NON-DETOUR)

1 M4-8 24" X 12" DETOUR NORTH 35 M3-1 24" X 12" M1-6 24" X 24" M5-1L 21" X 21"
2 M4-8 24" X 12" DETOUR NORTH 35 M3-1 24" X 12" M1-6 24" X 24" M6-1 21" X 21"
4 M4-8 24" X 12" DETOUR NORTH 35 M3-1 24" X 12" M1-6 24" X 24" M5-1R 21" X 21"
5 M4-8 24" X 12" DETOUR NORTH 35 M3-1 24" X 12" M1-6 24" X 24" M6-1 21" X 21"
6 M4-8 24" X 12" DETOUR SOUTH 35 M3-3 24" X 12" M1-6 24" X 24" M5-1L 21" X 21"
7 M4-8 24" X 12" DETOUR SOUTH 35 M3-3 24" X 12" M1-6 24" X 24" M6-1 21" X 21"
8 M4-8 24" X 12" DETOUR SOUTH 35 M3-3 24" X 12" M1-6 24" X 24" M5-1R 21" X 21"
9 M4-8 24" X 12" DETOUR SOUTH 35 M3-3 24" X 12" M1-6 24" X 24" M6-1 21" X 21"
10 END DETOUR M4-8A 24" X 18"
11 M4-8 24" X 12" DETOUR SOUTH 35 M3-3 24" X 12" M1-6 24" X 24"
12 M4-8 24" X 12" DETOUR NORTH 35 M3-1 24" X 12" M1-6 24" X 24"
13 DETOUR AHEAD W20-2
14 ROAD CLOSED AHEAD W20-3
15 ROAD CLOSED 500 FT W20-3
16 M4-8 24" X 12" DETOUR NORTH 35 M3-1 24" X 12" M1-6 24" X 24" M6-1 21" X 21"
17 M4-8 24" X 12" DETOUR SOUTH 35 M3-3 24" X 12" M1-6 24" X 24" M6-1 21" X 21"

NOTE: SPACING AND PLACEMENT OF SIGNS TO FOLLOW SDD "DETOUR SIGNING FOR MAINLINE CLOSURES", AND "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" OR AS DIRECTED BY THE ENGINEER.

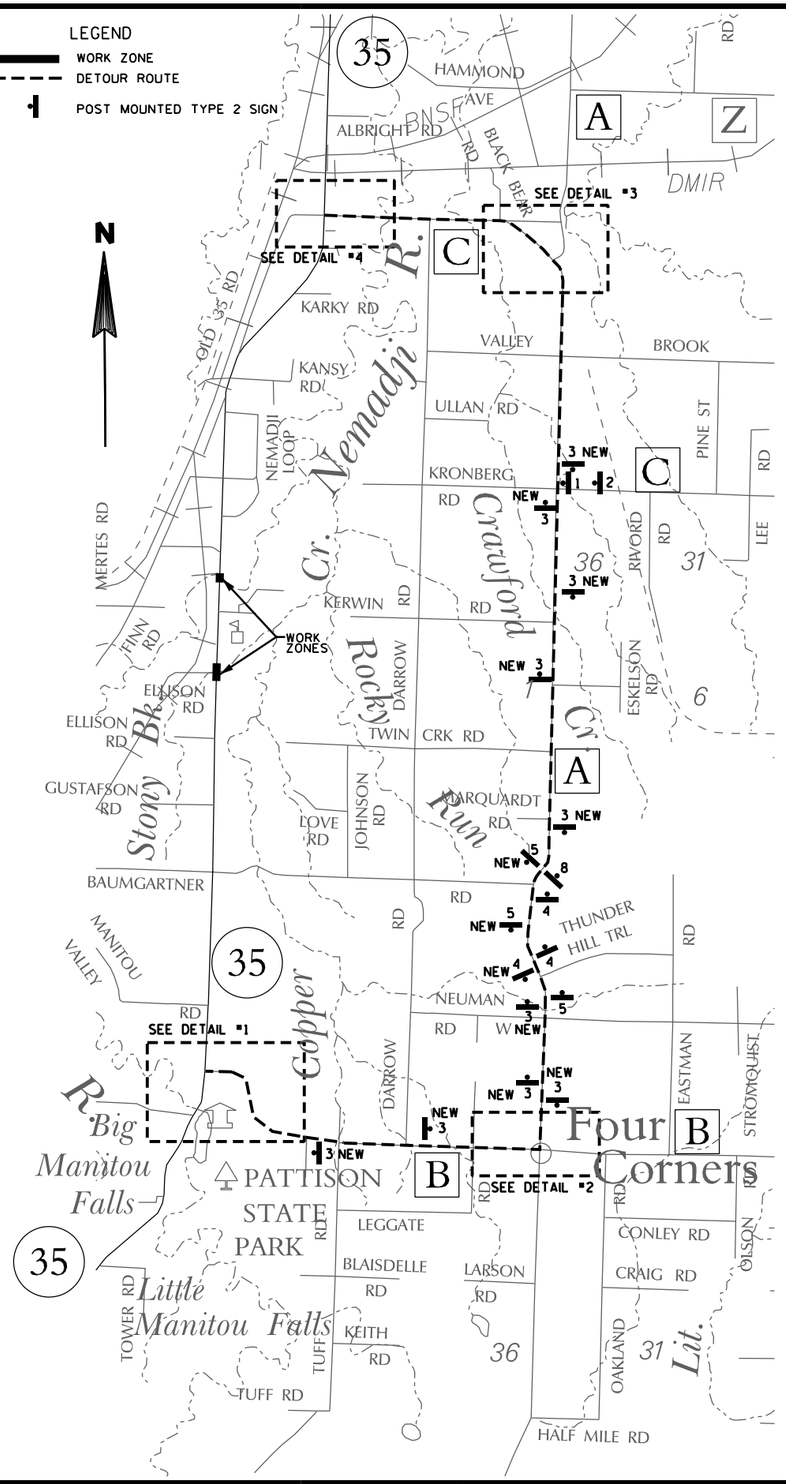
PROJECT NO: 8010-02-76	HWY: STH 35	COUNTY: DOUGLAS	DETOUR TRAFFIC CONTROL PLAN AND DETAILS	SHEET 9	E

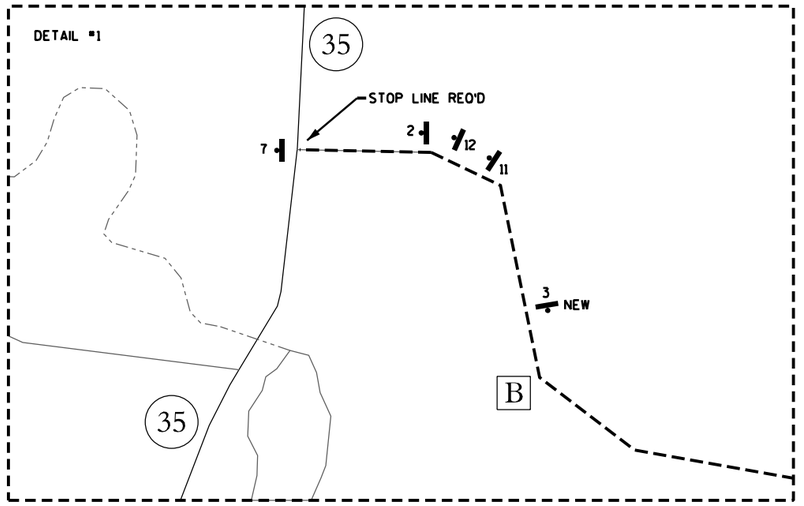
FILE NAME : P:\90s\93\00093189\caddWDOT\Planshts\93189detour.dgn PLOT DATE : 1/17/2014 PLOT BY : pkriesel PLOT NAME : PLOT SCALE : 1:6000

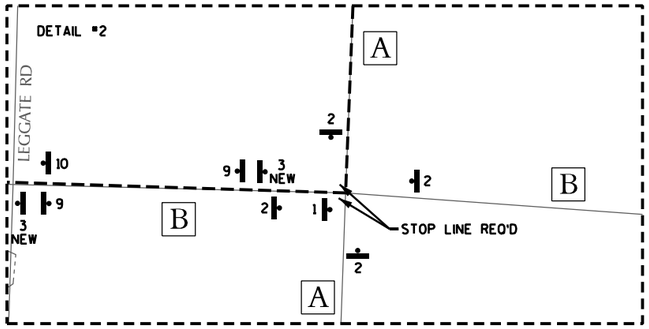
WISDOT/CADDS SHEET 42

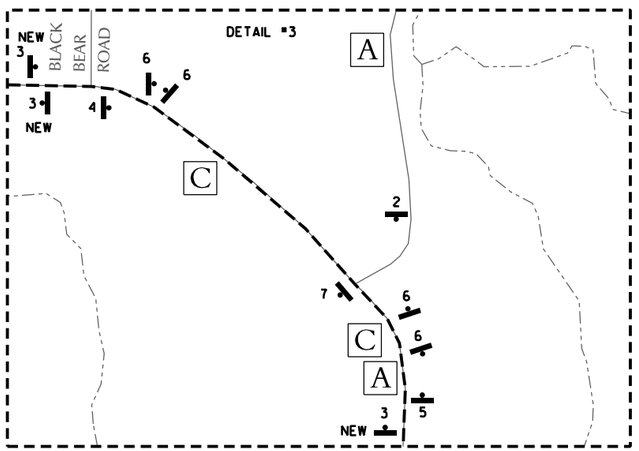
93189detour.dgn 1/17/2014 9:36:34 AM pkriesel

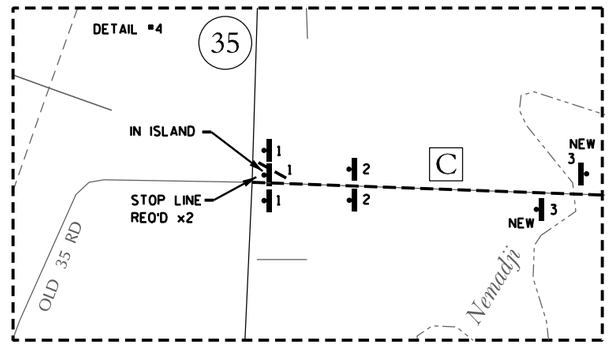
LEGEND
WORK ZONE
DETOUR ROUTE
POST MOUNTED TYPE 2 SIGN

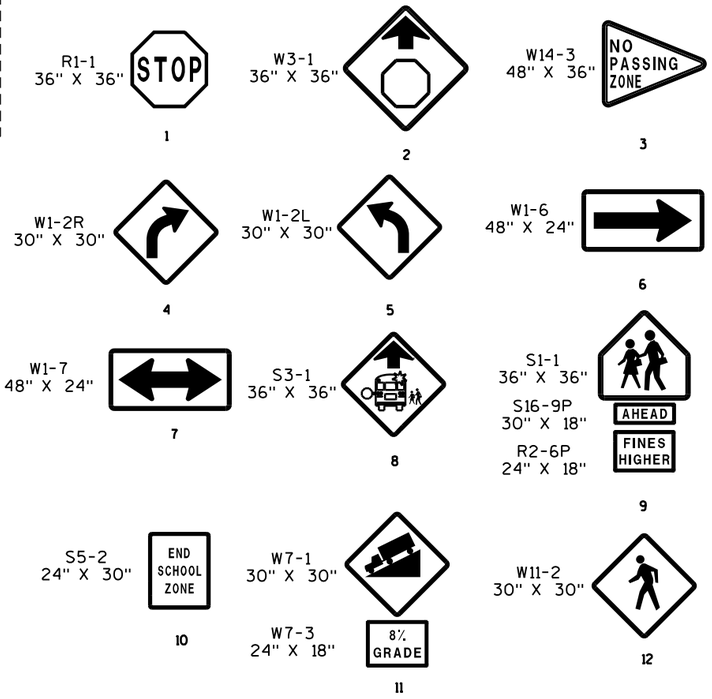












NOTES:

1. ALL DETOUR SIGNING AND PAVEMENT MARKINGS MUST BE FULLY COMPLETED PRIOR TO CLOSING STH 35 AND UTILIZING DETOUR ROUTE.
2. ALL SIGNS SHOWN WILL REPLACE EXISTING SIGNS IN SAME LOCATION, UNLESS OTHERWISE NOTED.
3. ALL W14-3 NO PASSING ZONE SIGNS TO BE LOCATED AND PLACED AFTER DETOUR ROUTE IS RESIGHTED UNDER ITEM "LOCATING NO PASSING ZONES".
4. ALL SIGN ASSEMBLY "9 (S1-1, S16-9P, R2-6P) SHALL BE PLACED 100 FEET PRIOR TO SCHOOL PROPERTY BOUNDARY.
5. S5-2 SIGNS SHALL BE PLACED AT SCHOOL PROPERTY LINE.
6. INSTALL W1-2 SIGNS A DISTANCE PRIOR TO CURVE OF 750 FEET FOR SPEED LIMIT 55. REFER TO WMUTCD TABLE 2C-4 FOR OTHER DISTANCES AS NEEDED.
7. ALL PAVEMENT MARKINGS ALONG DETOUR ROUTE TO BE REMARKED.
8. LOCATIONS SHOWN ARE APPROXIMATE.
9. DRAWING IS NOT TO SCALE.

PROJECT NO: 8010-02-76	HWY: STH 35	COUNTY: DOUGLAS	DETOUR SIGNING AND MARKING DETAILS	SHEET 10	E

FILE NAME : P:\90s\93\00093189\caddWDOT\Planshts\93189detoursign1.dgn
PLOT DATE : 1/17/2014
PLOT BY : pkriesel
PLOT NAME :
PLOT SCALE : 1:6000
WISDOT/CADDS SHEET 42

93189detoursign1.dgn 1/17/2014 9:36:36 AM pkriesel

DATE 25JUN14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	8010-02-76 QUANTITY
0010	201.0105	CLEARING	STA	7.000	7.000
0020	201.0205	GRUBBING	STA	7.000	7.000
0030	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	2.000	2.000
0040	203.0200	REMOVING OLD STRUCTURE (STATION) 01. STA. 175+78	LS	1.000	1.000
0050	204.0100	REMOVING PAVEMENT	SY	1,555.000	1,555.000
0060	204.0265	ABANDONING WELLS	EACH	2.000	2.000
0070	205.0100	EXCAVATION COMMON	CY	2,775.000	2,775.000
0080	206.2000	EXCAVATION FOR STRUCTURES CULVERTS (STRUCTURE) 01. C-16-0051	LS	1.000	1.000
0090	208.1100	SELECT BORROW	CY	10,900.000	10,900.000
0100	209.0300.S	BACKFILL COARSE AGGREGATE (SIZE) 01. NO. 2	CY	85.000	85.000
0110	210.0100	BACKFILL STRUCTURE	CY	3,100.000	3,100.000
0120	213.0100	FINISHING ROADWAY (PROJECT) 01. 8010-02-76	EACH	1.000	1.000
0130	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	480.000	480.000
0140	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	3,630.000	3,630.000
0150	350.0145	SUBBASE 12-INCH	SY	4,905.000	4,905.000
0160	455.0605	TACK COAT	GAL	140.000	140.000
0170	504.0100	CONCRETE MASONRY CULVERTS	CY	554.000	554.000
0180	505.0410	BAR STEEL REINFORCEMENT HS CULVERTS	LB	82,530.000	82,530.000
0190	505.0610	BAR STEEL REINFORCEMENT HS COATED CULVERTS	LB	2,350.000	2,350.000
0200	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	63.000	63.000
0210	606.0200	RIPRAP MEDIUM	CY	805.000	805.000
0220	606.0300	RIPRAP HEAVY	CY	130.000	130.000
0230	606.0400	RIPRAP EXTRA-HEAVY	CY	150.000	150.000
0240	614.0920	SALVAGED RAIL	LF	1,197.000	1,197.000
0250	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 8010-02-76	EACH	1.000	1.000
0260	619.1000	MOBILIZATION	EACH	1.000	1.000
0270	621.0100	LANDMARK REFERENCE MONUMENTS	EACH	1.000	1.000
0280	625.0100	TOPSOIL	SY	8,000.000	8,000.000
0290	627.0200	MULCHING	SY	340.000	340.000
0300	628.1504	SILT FENCE	LF	1,700.000	1,700.000
0310	628.1520	SILT FENCE MAINTENANCE	LF	3,400.000	3,400.000
0320	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	3.000	3.000
0330	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	3.000	3.000
0340	628.2004	EROSION MAT CLASS I TYPE B	SY	8,000.000	8,000.000
0350	628.6510	SOIL STABILIZER TYPE B	ACRE	1.500	1.500
0360	628.7504	TEMPORARY DITCH CHECKS	LF	200.000	200.000
0370	629.0210	FERTILIZER TYPE B	CWT	12.000	12.000
0380	630.0110	SEEDING MIXTURE NO. 10	LB	135.000	135.000
0390	630.0200	SEEDING TEMPORARY	LB	240.000	240.000
0400	630.0300	SEEDING BORROW PIT	LB	100.000	100.000
0410	633.5100	MARKERS ROW	EACH	13.000	13.000
0420	633.5200	MARKERS CULVERT END	EACH	4.000	4.000
0430	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	52.000	52.000
0440	637.2210	SIGNS TYPE II REFLECTIVE H	SF	43.300	43.300
0450	637.2230	SIGNS TYPE II REFLECTIVE F	SF	337.500	337.500
0460	638.2102	MOVING SIGNS TYPE II	EACH	1.000	1.000
0470	638.2602	REMOVING SIGNS TYPE II	EACH	34.000	34.000
0480	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	31.000	31.000
0490	638.4000	MOVING SMALL SIGN SUPPORTS	EACH	1.000	1.000

3

DATE 25JUN14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	8010-02-76 QUANTITY
0500	642.5001	FIELD OFFICE TYPE B	EACH	1.000	1.000
0510	643.0100	TRAFFIC CONTROL (PROJECT) 01. 8010-02-76	EACH	1.000	1.000
0520	643.0300	TRAFFIC CONTROL DRUMS	DAY	390.000	390.000
0530	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	1,500.000	1,500.000
0540	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	2,300.000	2,300.000
0550	643.0900	TRAFFIC CONTROL SIGNS	DAY	960.000	960.000
0560	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	14.000	14.000
0570	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 01. 8010-02-76	EACH	1.000	1.000
0580	643.3000	TRAFFIC CONTROL DETOUR SIGNS	DAY	8,280.000	8,280.000
0590	645.0120	GEOTEXTILE FABRIC TYPE HR	SY	215.000	215.000
0600	645.0130	GEOTEXTILE FABRIC TYPE R	SY	1,390.000	1,390.000
0610	645.0140	GEOTEXTILE FABRIC TYPE SAS	SY	635.000	635.000
0620	646.0103	PAVEMENT MARKING PAINT 4-INCH	LF	185,215.000	185,215.000
0630	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	1,575.000	1,575.000
0640	646.0123	PAVEMENT MARKING PAINT 8-INCH	LF	175.000	175.000
0650	646.0600	REMOVING PAVEMENT MARKINGS	LF	1,000.000	1,000.000
0660	647.0563	PAVEMENT MARKING STOP LINE PAINT 18-INCH	LF	100.000	100.000
0670	648.0100	LOCATING NO-PASSING ZONES	MI	11.600	11.600
0680	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	700.000	700.000
0690	650.5000	CONSTRUCTION STAKING BASE	LF	700.000	700.000
0700	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. C-16-0051	LS	1.000	1.000
0710	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 8010-02-76	LS	1.000	1.000
0720	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	700.000	700.000
0730	690.0150	SAWING ASPHALT	LF	72.000	72.000
0740	690.0250	SAWING CONCRETE	LF	40.000	40.000
0750	715.0502	INCENTIVE STRENGTH CONCRETE STRUCTURES	DOL	3,324.000	3,324.000
0760	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5. 00/HR	HRS	1,200.000	1,200.000
0770	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	300.000	300.000
0780	SPV.0060	SPECIAL 01. POTHOLING FOR UTILITIES	EACH	2.000	2.000
0790	SPV.0105	SPECIAL 01. TEMPORARY WATER DIVERSION, C-16-0051	LS	1.000	1.000
0800	SPV.0195	SPECIAL 01. ASPHALTIC SURFACE SPECIAL	TON	1,060.000	1,060.000

201.0105 CLEARING
201.0205 GRUBBING

STATION	-	STATION	CLEARING STA	GRUBBING STA
171+50	-	178+50	7	7
		TOTALS:	7	7

203.0100 REMOVING SMALL PIPE CULVERTS

STATION	LOCATION	EACH	SIZING (APPROXIMATE)
174+00	RT	1	24-INCH x 250-FT LONG CMP
175+20	RT	1	15-INCH x 110-FT LONG CMP
TOTAL:		2	

204.0100 REMOVING PAVEMENT

STATION	-	STATION	SY
171+50	-	178+50	1555
TOTAL:			1555

204.0265 ABANDONING WELLS

LOCATION	EACH
C-16-0051 WEST APRON	2
TOTAL:	2

205.0100 EXCAVATION COMMON
208.1100 SELECT BORROW

STATION	-	STATION	EX. COMMON C.Y.	FILL C.Y. (1)	EXP. FILL C.Y. (1,2)	BORROW C.Y.
171+50	-	178+50	2775	8352	10858	10900
		TOTALS:	2775	8352	10858	10900

(1) - NOT A BID ITEM - FOR INFORMATIONAL PURPOSES ONLY.
(2) - FILL EXPANSION = 30%

305.0110 BASE AGGREGATE DENSE 3/4-INCH
305.0120 BASE AGGREGATE DENSE 1 1/4-INCH
350.0145 SUBBASE 12-INCH

STATION	-	STATION	3/4-INCH TON	1 1/4-INCH TON	SUBBASE SY
171+50	-	178+50	480	3630	4905
		TOTALS:	480	3630	4905

455.0605 TACK COAT
SPV.0195.01 ASPHALTIC SURFACE SPECIAL

STATION	-	STATION	TACK GAL	ASPHALT TON
171+50	-	178+50	140	1060
		TOTALS:	140	1060

606.0200 RIPRAP MEDIUM
606.0300 RIPRAP HEAVY
606.0400 RIPRAP EXTRA HEAVY
645.0130 GEOTEXTILE FABRIC TYPE R

STATION	-	STATION	LOCATION	RIPRAP MEDIUM CY	RIPRAP HEAVY CY	RIPRAP EXTRA HEAVY CY	FABRIC TYPE R SY
171+60		175+95	LT	165	--	--	440
171+60		157+20	RT	140	--	--	380
175+80		178+40	RT	110	--	--	300
176+10		178+40	LT	100	--	--	270
NEMADJI RIVER BRIDGE				290	30	150	--
		TOTALS:		805	30	150	1390

614.0920 SALVAGED RAIL

STATION	-	STATION	LOCATION	LF
172+02	-	178+44	LT	642
172+09	-	177+64	RT	555
		TOTAL:		1197

625.0100 TOPSOIL
627.0200 MULCHING
628.6510 SOIL STABILIZER TYPE B
629.0210 FERTILIZER TYPE B
630.0110 SEEDING MIXTURE NO. 10
630.0200 SEEDING TEMPORARY
630.0300 SEEDING BORROW PIT

STATION	-	STATION	TOPSOIL SY	MULCHING SY	STABILIZER AC (1)	FERTILIZER CWT	SEEDING #10 LB	SEEDING TEMPORARY LB	SEEDING BORROW PIT LB
171+50	-	178+50	7250	--	1.5	6	125	125	--
BORROW/WASTE AREA			--	310	--	5	--	95	95
UNDISTRIBUTED			750	30	--	1	10	20	5
		TOTALS	8000	340	1.5	12	135	240	100

(1) - FOR INTERIM USE PRIOR TO PERMANENT GRADING AND EROSION CONTROL PLACEMENT AS DIRECTED BY THE ENGINEER.

NOTE: ALL ITEMS LISTED ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

3

621.0100 LANDMARK REFERENCE MONUMENT

LOCATION	EACH
EAST 1/4 CORNER SEC 4, POINT 1378 ON TPP	1
TOTAL:	1

628.7504 TEMPORARY DITCH CHECKS

LOCATION	LF
UNDISTRIBUTED	200
TOTAL:	200

3

628.1504 SILT FENCE
628.1520 SILT FENCE MAINTENANCE

STATION	-	STATION	LOCATION	FENCE LF	MAINT. LF
171+50	-	178+50	LT	720	1440
171+50	-	178+50	RT	720	1440
UNDISTRIBUTED				260	520
			TOTALS:	1700	3400

633.5100 MARKERS ROW
633.5200 MARKERS CULVERT END

LOCATION	ROW EACH	CULVERT END EACH
C-16-0051, 2 ON EACH END	--	4
POINTS 602-605 ON TPP	4	--
POINTS 609-617 ON TPP	9	--
TOTALS:	13	4

628.2004 EROSION MAT CLASS I TYPE B

STATION	-	STATION	SY
171+50	-	178+50	7250
UNDISTRIBUTED			750
TOTAL:			8000

638.2102 MOVING SIGNS TYPE II
638.4000 MOVING SMALL SIGN SUPPORTS

STATION	LOCATION	MOVING SIGNS EACH	MOVING POSTS EACH	COMMENTS
173+80	RT	1	1	PED CROSSING
	TOTALS:	1	1	

634.0616 POSTS WOOD 4x6-INCH x 16-FT
637.2210 SIGNS TYPE II REFLECTIVE H
637.2230 SIGNS TYPE II REFLECTIVE F
638.2602 REMOVING SIGNS TYPE II
638.3000 REMOVING SMALL SIGN SUPPORTS

PLAN NUMBER	SIGN CODE	DESCRIPTION	WIDTH IN	LENGTH IN	INDIVIDUAL SQUARE FEET	INDIVIDUAL QTY REQUIRED	TOTAL "H" SQUARE FEET	TOTAL "F" SQUARE FEET	POSTS EACH	REMOVING SIGNS EACH	REMOVING SUPPORTS EACH
1	R1-1	STOP	36	36	7.46	5	37.30	0.00	5	5	5
2	W3-1	STOP AHEAD	36	36	9.00	9	0.00	81.00	9	9	9
3	W14-3	NO PASSING ZONE	48	36	6.00	18	0.00	108.00	18	0	0
4	W1-2R	RIGHT CURVE AHEAD	30	30	6.25	4	0.00	25.00	4	3	3
5	W1-2L	LEFT CURVE AHEAD	30	30	6.25	4	0.00	25.00	4	2	2
6	W1-6	NIGHT ARROW	48	24	8.00	4	0.00	32.00	4	4	4
7	W1-7	DOUBLE NIGHT ARROW	48	24	8.00	2	0.00	16.00	2	2	2
8	S3-1	SCHOOL BUS STOP	36	36	9.00	1	0.00	9.00	1	1	1
9	S1-1	SCHOOL ZONE	36	36	6.75	2	0.00	13.50	2	2	2
9	S16-9P	AHEAD	30	18	3.75	2	0.00	7.50	0	0	0
9	R2-6P	FINES HIGHER	24	18	3.00	2	6.00	0.00	0	2	0
10	S5-2	END SCHOOL ZONE	24	30	5.00	1	0.00	5.00	1	1	1
11	W7-1	GRADE	30	30	6.25	1	0.00	6.25	1	1	1
11	W7-3	8% GRADE	24	18	3.00	1	0.00	3.00	0	1	0
12	W11-2	PEDESTRIAN	30	30	6.25	1	0.00	6.25	1	1	1
					TOTALS:		43.30	337.50	52	34	31

ALL SIGNING SHOWN TO BE INSTALLED PER PLAN DETAIL ALONG DESIGNATED DETOUR ROUTE AND MUST BE IN PLACE PRIOR TO CLOSING STH 35 AND UTILIZING DETOUR.

NOTE: ALL ITEMS LISTED ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

643.0300 TRAFFIC CONTROL DRUMS
643.0420 TRAFFIC CONTROL BARRICADES TYPE III
643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A
643.0900 TRAFFIC CONTROL SIGNS
643.1050 TRAFFIC CONTROL PCMS
643.3000 TRAFFIC CONTROL DETOUR SIGNS

LOCATION	DRUMS DAYS	BARRICADES DAYS	LIGHTS DAYS	SIGNS DAYS	PCMS DAYS	DETOUR SIGNS DAYS
PROJECT LIMITS	--	1500	2300	820	14	--
DETOUR	--	--	--	--	--	8280
UNDISTRIBUTED - PRE & POST DETOUR	390	--	--	140	--	--
PROJECT TOTALS:	390	1500	2300	960	14	8280

UTILIZE PCMS FOR ONE WEEK PRIOR TO CLOSING STH 35. PLACE ONE IN EACH DIRECTION AS SHOWN IN THE PLANS.
UTILIZE DRUMS FOR SHOULDER PLACEMENT DURING WORK POST DETOUR, PRIOR TO COMPLETION OF WORK.

646.0103 PAVEMENT MARKING PAINT 4-INCH
646.0123 PAVEMENT MARKING PAINT 8-INCH
646.0600 REMOVING PAVEMENT MARKINGS
647.0563 PAVEMENT MARKING STOP LINE PAINT 18-INCH

LOCATION	4-INCH LF	8-INCH LF	REMOVAL LF (1)	STOP LINE LF	COMMENTS
DETOUR ROUTE	126200	175	--	--	WHITE EDGELINE
DETOUR ROUTE	65	--	--	--	WHITE SKIPS
DETOUR ROUTE	58950	--	1000	--	YELLOW CENTERLINE
DETOUR ROUTE	--	--	--	100	LOCATION AS SHOWN IN PLANS
	185215	175	1000	100	

ALL MARKINGS SHOWN TO BE INSTALLED ALONG DESIGNATED DETOUR ROUTE AND MUST BE IN PLACE PRIOR TO CLOSING STH 35 AND UTILIZING DETOUR.

(1) - UTILIZE FOR REMOVALS OF CENTERLINE WHERE RESIGHTING OF PASSING ZONES WARRANT USE.

646.0106 PAVEMENT MARKING EPOXY 4-INCH

STATION	-	STATION	LF	COMMENTS
171+50	-	178+50	175	YELLOW CL SKIPS
171+50	-	178+50	1400	WHITE EDGELINE
		TOTAL:	1575	

648.0100 LOCATING NO PASSING ZONES

LOCATION	MI
DETOUR ROUTE	11.6
TOTAL:	11.6

650.4500 CONSTRUCTION STAKING SUBGRADE
650.5000 CONSTRUCTION STAKING BASE
650.9920 CONSTRUCTION STAKING SLOPE STAKES

STATION	-	STATION	SUBGRADE LF	BASE LF	SLOPE STAKES LF
171+50	-	178+50	700	700	700
		TOTALS:	700	700	700

650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL

STATION	-	STATION	LS
171+50	-	178+50	1
		TOTAL:	1

650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT C-16-0051

LOCATION	LS
C-16-0051	1
TOTAL:	1

NOTE: CATEGORY 0020 ITEM

690.0150 SAWING ASPHALT
690.0250 SAWING CONCRETE

STATION	ASPHALT LF	CONCRETE LF
171+50	36	20
178+50	36	20
TOTALS:	72	40

SPV.0060.01 POTHOLING FOR UTILITIES

LOCATION	EACH
SUPERIOR LIGHT, WATER & POWER (GAS)	2
TOTAL:	2

SPV.0105.01 TEMPORARY WATER DIVERSION, C-16-0051

LOCATION	LS
C-16-0051	1
TOTAL:	1

NOTE: ALL ITEMS LISTED ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

TRANSPORTATION PROJECT PLAT NO: 8010-02-26- 4.01

THAT PART OF THE NE1/4 OF THE SE1/4 AND THE SE1/4 OF THE NE1/4 IN SECTION 4 AND THE SW1/4 OF THE NW1/4 AND THE NW1/4 OF THE SW1/4 IN SECTION 3, ALL LYING WITHIN TOWN 47 NORTH, RANGE 14 WEST, TOWN OF SUPERIOR, DOUGLAS COUNTY, WISCONSIN

RELOCATION ORDER STH 35 DAIRYLAND - SUPERIOR (STONY BROOK CREEK AND NEMADJI RIVER BRIDGE) DOUGLAS COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES,

THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

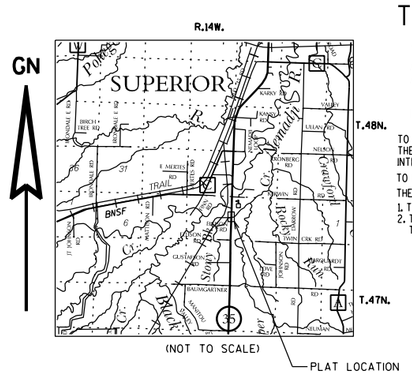
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8010-02-26- 4.01
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING THE OFFICE OF THE REGISTER OF DEED IN DOUGLAS COUNTY, WISCONSIN AT 2:00 PM ON 10/25/2013 AS DOCUMENT #863245 AND FILED IN T.P. VOL. 1 PG. 76

Gayle L. Wahner
SIGNATURE OF REGISTER OF DEEDS

16

8010-02-26- 4.01



GN

TOWN

2" DOT DISK, FOUND
Y=257832.31
X=142917.32

SW-NW SECTION 3

SE-NE SECTION 4

NE-SE SECTION 4

NW-SW SECTION 3

SUPERIOR

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER	INTEREST REQUIRED
100	CENTURY LINK	RELEASE OF RIGHTS
101	EAST CENTRAL ENERGY	RELEASE OF RIGHTS

UTILITY EASEMENT INFORMATION		
PARCEL#	UTILITY	RECORD DOCUMENT
20/21	WISCONSIN BELL, INC	V. 499 P. 227
20	HEAD OF THE LAKES ELECTRIC COOPERATIVE	V. 575 P. 549 (DOC #665480)
21	HEAD OF THE LAKES ELECTRIC COOPERATIVE	V. 193 P. 279 (DOC # 341462)

TS-030-00065-00
TOWN OF SUPERIOR
DOC. 853417
DOUGLAS COUNTY
EASEMENT V.204 P.584

TS-030-00045-00
TED R. NELSON,
JOHN T. KULAS
JEFFREY S. KULAS
DOC. 746352

TS-030-00053-00
COSMO A. RICH, JR.
DOC. 814377

TS-030-00076-01
CAROLYN M. LINDBERG
DOC. 754542

1 1/2" IRON PIPE, FOUND
Y=255438.01
X=142926.81

MONUMENT, FOUND
Y=255444.81
X=140341.08

1" IP, FOUND
Y=255372.04
X=145575.17

SPINDLE, FOUND
Y=252798.32
X=142959.01

STH 35 R/L OF

SLOPE INTERCEPT

TLE AREA FOR GRADING

BURIED GAS SUPERIOR WATER LIGHT AND POWER CO.

OVERHEAD TELEPHONE CENTURYLINK

OVERHEAD ELECTRIC EAST CENTRAL ENERGY

BURIED FIBER OPTIC CENTURYLINK

BURIED TELEPHONE CENTURYLINK

BURIED FIBER OPTIC ENVENTIS TELECOM

SCHEDULE OF LANDS & INTERESTS REQUIRED				
OWNER NUMBER	OWNER	INTEREST REQUIRED	FEE SQ.FT	TLE SQ.FT
20	CAROLYN M. LINDBERG	FEE	2722	---
21	TOWN OF SUPERIOR	FEE	7915	---
22	TED R. NELSON, JOHN T. KULAS, & JEFFREY S. KULAS	FEE & TLE	4053	2617
23	COSMO A. RICH, JR	FEE & TLE	4134	148

EXISTING MONUMENTS			
POINT	DESCRIPTION	NORTH (Y)	EAST (X)
1378	1 1/2" IRON PIPE SQUISHED	255438.01	142926.81

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.	**CURVE DATA**	
HIGHWAY EASEMENT	H.E.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	PL	LENGTH OF CURVE	L
RECORDED AS	(100')	TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	● (IF UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	● (SET)	PROPERTY LINE	
R/W STANDARD	▲ (SET)	LOT & TIE LINES	
SIGN	SIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT	⊕	CORPORATE LIMITS	
SECTION CORNER SYMBOL	(SEE NOTE)	NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		NO ACCESS (BY ACQUISITION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	RWB20	QUARTER LINE	
PARCEL NUMBER	102	SIXTEENTH LINE	
SIGN NUMBER (OFF PREMISE)	21	EXISTING CENTERLINE	
BUILDING		PROPOSED REFERENCE LINE	
		PARALLEL OFFSET	

SCALE, FEET
0 50' 100'

CONVENTIONAL UTILITY SYMBOLS

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

RESERVE FOR CLAUSES AND NOTE INFORMATION

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, DOUGLAS 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.

COORDINATES AS SHOWN ARE NOT INTENDED TO BE USED FOR RETRACEMENT PURPOSES AND MUST BE VERIFIED WITH THE COUNTY SURVEY DEPARTMENT.

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

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

RIGHT-OF-WAY REFERENCE LINE MAY NOT BE THE SAME AS THE CONSTRUCTION REFERENCE LINE.

EXISTING RIGHT-OF-WAY IS BASED ON DIVISION JOB NO. 8458.

ACCESS IS CONTROLLED BY SECTION 84.25 OF THE WISCONSIN STATE STATUTES UNDER WISDOT PROJECT NUMBER 8013-06-00 (1994).

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

A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR CONSTRUCTION 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. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY ¾" X 24" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO DEPARTMENT OF TRANSPORTATION.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION REGIONAL OFFICE.

MSA PROFESSIONAL SERVICES
TRANSPORTATION • MUNICIPAL
DEVELOPMENT • ENVIRONMENTAL
1835 N. Stevens St. Rhinelander, WI 54501
715-362-3244 1-800-844-7854 Fax: 715-362-4116
Web Address: www.msa-ps.com

© MSA Professional Services, Inc.

I, JEFFREY L. DEMUTH, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 AND 62.22 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 8010-02-26-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN JEFFREY L. DEMUTH S-2656 RHINELANDER, WI LAND SURVEYOR

(SIGNATURE) _____ DATE 10/23/2013

JEFFREY L. DEMUTH R.L.S. NUMBER S-2656

THIS PLAT AND RELOCATION ORDER IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION:

(SIGNATURE) Michael Piller DATE 10/23/2013

(PRINTED NAME) MICHAEL PILLER

FILE NAME : P:\90s\93\00093189\cadd\WDOT\Basemap\TPP Sheet.dgn
APPRAISAL PLAT DATE :
TPP Sheet.dgn 1/17/2014 9:36:47 AM pkriesel

PLOT SCALE : 1:100
PLOT NAME :
PLOT BY : pkriesel
PLOT DATE : 1/17/2014
PLOT DATE :

OVERHEAD ELECTRIC
EAST CENTRAL ENERGY

EXISTING BENCHMARK
TO BE BURIED

BM 139

STONY BROOK CREEK

EXISTING R/W

SLOPE INTERCEPTS
(TYP.)

BURIED FIBER OPTIC
CENTURYLINK

ABANDON
EXISTING WELLS

TALL
GRASS

SILT FENCE (TYP)

MEDIUM RIPRAP OVER
GEOTEXTILE
FABRIC TYPE R (TYP)

BRUSH

BRUSH

EXISTING STRUCTURE
C-672-48

EDGE OF BASE AGGREGATE DENSE 3/4"
SHOULDER (TYP)

EDGE OF EXISTING
GRAVEL SHOULDER (TYP)

REMOVE EXISTING GUARDRAIL

SAWCUT REQ'D

171+00 172+00 173+00 ℄ ROADWAY 174+00 175+00 176+00 177

STRUCTURE C-16-0051

N00°24'07"E

MATCH LINE STA. 177+00

BOP STA = 170+87.91

MOVE EXISTING SIGN

EDGE OF ASPHALT
SURFACE SPECIAL

EDGE OF EXISTING
ASPHALT SURFACE

BURIED FIBER OPTIC
ENVENTIS TELECOM

BURIED TELEPHONE
CENTURYLINK

BURIED GAS
SUPERIOR WATER LIGHT
AND POWER CO

TALL
GRASS

REMOVE EXISTING
CULVERT

REMOVE EXISTING STRUCTURE C-672-48
STA 175+78 ℄
6'W X 6.5'H SINGLE CELL REINFORCED
CONCRETE BOX CULVERT W/ EXTENSIONS
228' OVERALL LENGTH (W/ EXTENSIONS)
7.5° SKEW LHF

CAUTION

EXISTING R/W

GUY

GRASS

BEGIN PROJECT
STA. 171+50
Y = 255,028.75
X = 142,976.35

OVERHEAD TELEPHONE
CENTURYLINK

REMOVE EXISTING
CULVERT

TLE FOR GRADING

TREES

TREES

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
103	171+64.9, 15.6 RT	MAG NAIL	706.46
139	175+66.9, 116.4 LT	4" BRASS DISK IN CONC. USGS	671.23

NET LENGTH OF ℄ = 700 LF

VPC STA = 173+95.77
VPC EL = 703.07

VPT STA = 176+81.37
VPT EL = 701.50

BOP EL = 707.80

-1.60%

PROPOSED CL PROFILE

EXISTING GROUND

0.50%

VPI STA = 175+38.57
VPI EL = 700.78
CURVE LEN = 285.60
K = 136.00

STA 175+78 STRUCTURE C-16-0051 REO'D
SINGLE CELL 10'W X 7'H CONCRETE BOX CULVERT
245' BARREL LENGTH
7° SKEW LHF

STONY BROOK CREEK
HIGHWATER 100 = 671.24
OBSERVED WATER 664.68± (UPSTREAM) (2/7/13)
STREAMBED = 663.80± (UPSTREAM)

706 704 702 700 698 696 694

707.8 707.80 | 707.0 707.00 | 706.2 706.20 | 705.4 705.40 | 704.5 704.60 | 703.6 703.80 | 702.7 703.00 | 701.8 702.31 | 701.1 701.80 | 700.5 701.47 | 700.2 701.33 | 700.4 701.38 | 701.0 701.59

171+00 171+50 172+00 172+50 173+00 173+50 174+00 174+50 175+00 175+50 176+00 176+50 177+00

PROJECT NO: 8010-02-76	HWY: STH 35	COUNTY: DOUGLAS	PLAN AND PROFILE - STONY BROOK CREEK	SHEET	E

FILE NAME : P:\90s\93\00093189\caddWDOT\Planshts\PLAN1.dgn PLOT DATE : 1/17/2014 PLOT BY : pkriesel PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 30

PLAN1.dgn 1/17/2014 9:36:52 AM pkriesel

BM#1332

N

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
1332	178+43.1, 204.5 LT	GPS MONUMENT	703.95

SILT FENCE (TYP)
OVERHEAD ELECTRIC
EAST CENTRAL ENERGY
SLOPE INTERCEPT (TYP.)
BURIED FIBER OPTIC CENTURYLINK
MEDIUM RIPRAP OVER GEOTEXTILE FABRIC TYPE R (TYP)
BRUSH
REMOVE EXISTING GUARDRAIL
EDGE OF BASE AGGREGATE DENSE 3/4" SHOULDER (TYP)
EDGE OF EXISTING GRAVEL SHOULDER (TYP)
EDGE OF ASPHALT SURFACE SPECIAL
SAWCUT REQ'D
MATCH LINE STA. 177+00
EDGE OF EXISTING ASPHALT SURFACE
178+00
℄ ROADWAY
179+00
N00°24'07"E
EOP STA = 179+12.84
TALL GRASS
EDGE OF EXISTING ASPHALT SURFACE
EXISTING R/W
TREES
BURIED FIBER OPTIC ENVENTIS TELECOM
BURIED FIBER OPTIC ENVENTIS TELECOM
OVERHEAD TELEPHONE CENTURYLINK
BURIED TELEPHONE CENTURYLINK
BURIED GAS SUPERIOR WATER LIGHT AND POWER CO

END PROJECT
STA. 178+50
Y = 255,728.73
X = 142,981.26

PROPOSED CL PROFILE
0.50%
EXISTING GROUND
EOP STA = 179+00.00
EOP EL = 702.59

704
702
700
698
696
694
692

701.0 701.59
701.6 701.84
702.0 702.09
702.3 702.34
702.6

177+00 177+50 178+00 178+50 179+00 179+50 180+00 180+50 181+00 181+50 182+00 182+50 183+00

PROJECT NO: 8010-02-76	HWY: STH 35	COUNTY: DOUGLAS	PLAN AND PROFILE	SHEET	E

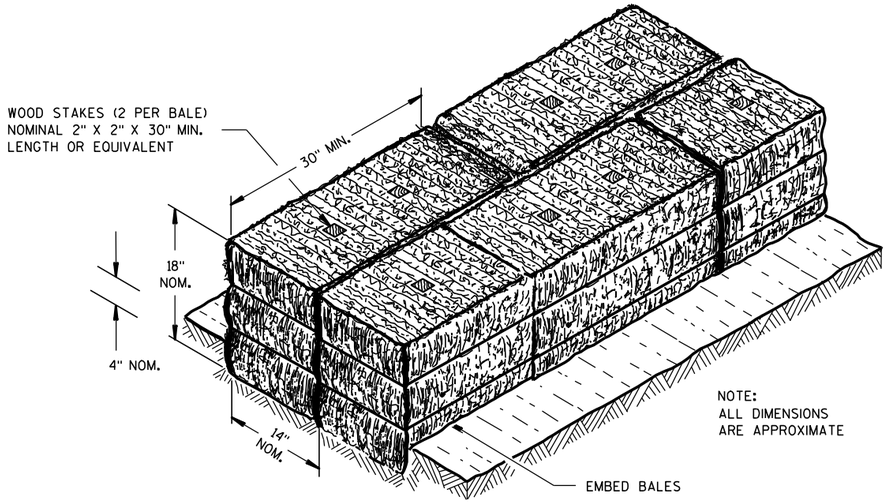
FILE NAME : P:\90s\93\00093189\caddWDOT\Planshts\PLAN2.dgn PLOT DATE : 1/17/2014 PLOT BY : pkriesel PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 30

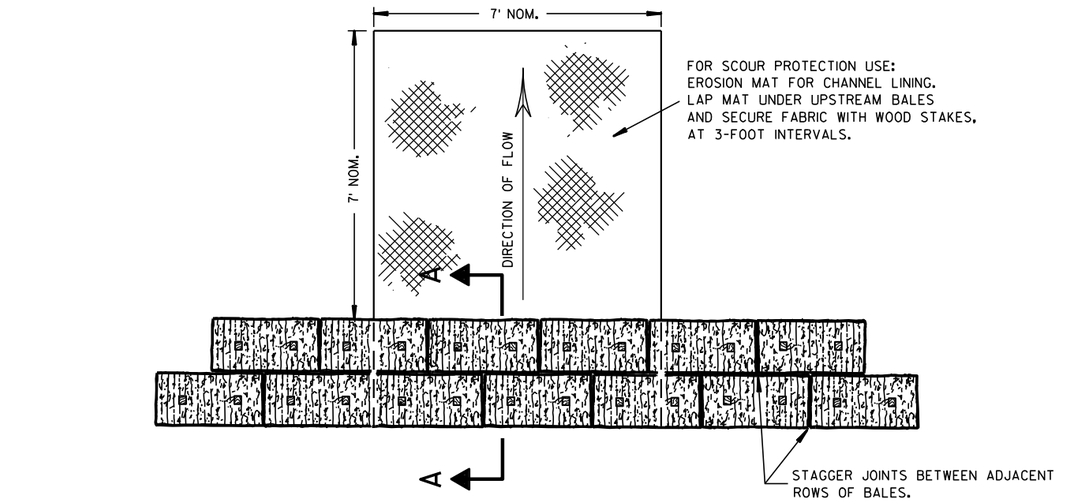
PLAN2.dgn 1/17/2014 9:36:57 AM pkriesel

Standard Detail Drawing List

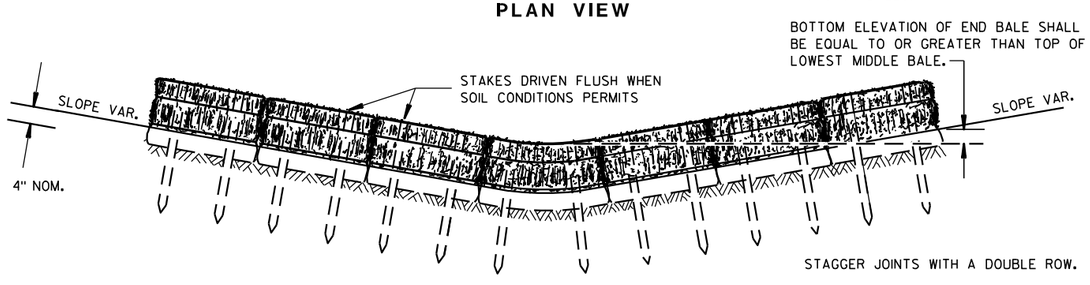
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
12A03-10	NAME PLATE (STRUCTURES)
15A01-11	MARKER POST FOR RIGHT-OF-WAY
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C04-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C19-02A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D12-04	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D28-02	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
16A01-06	LANDMARK REFERENCE MONUMENTS AND COVERS



SECTION A-A



PLAN VIEW



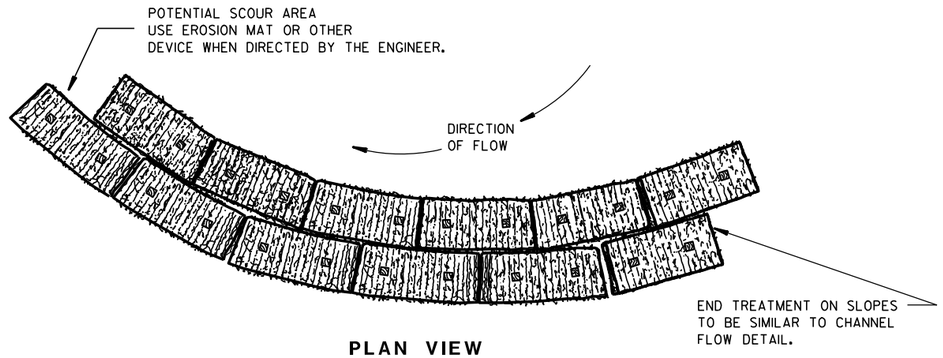
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

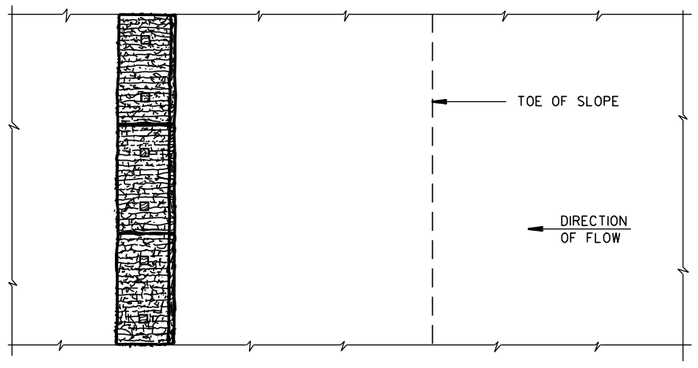
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

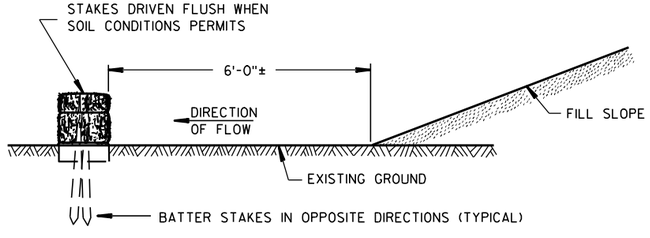


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

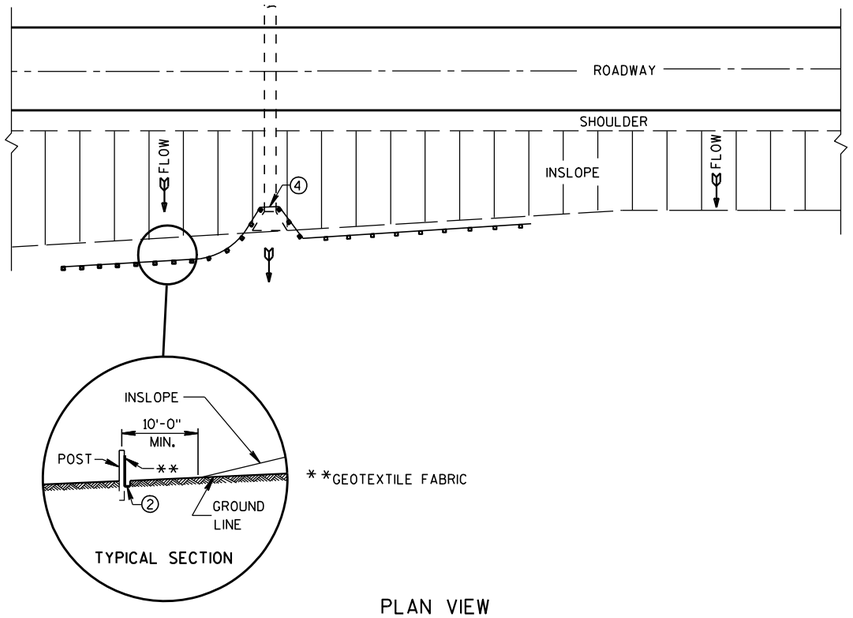
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

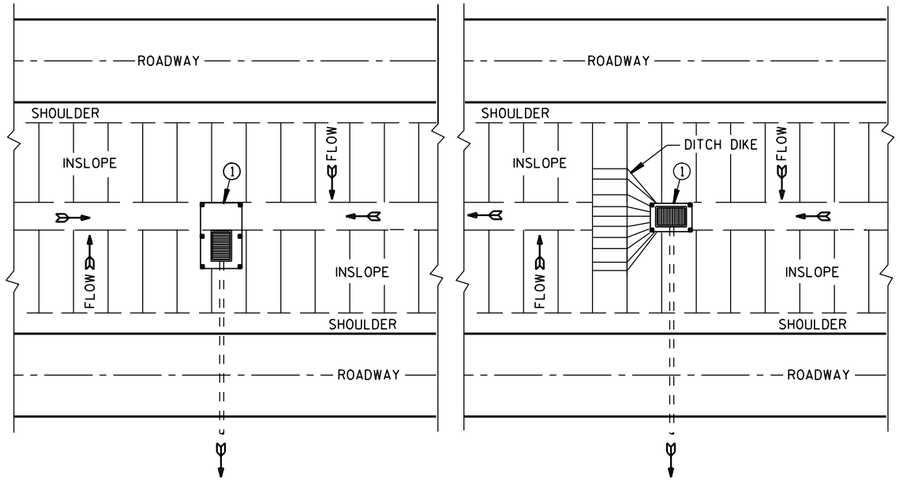
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

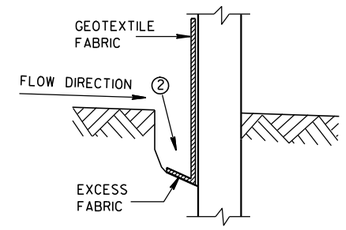
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

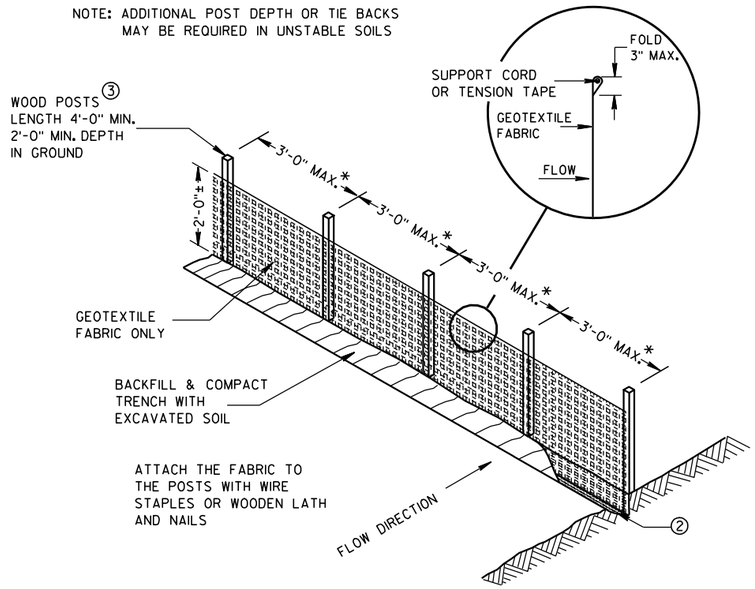
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

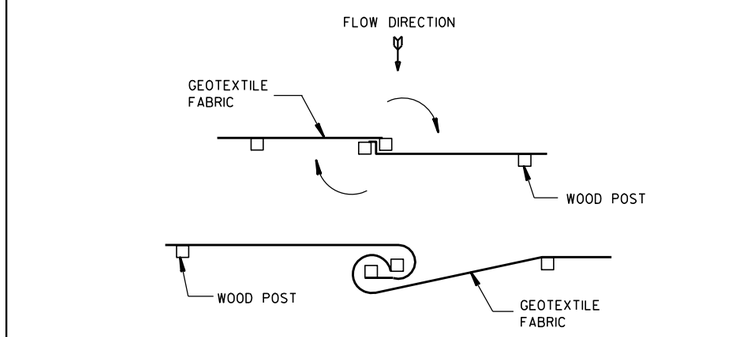
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



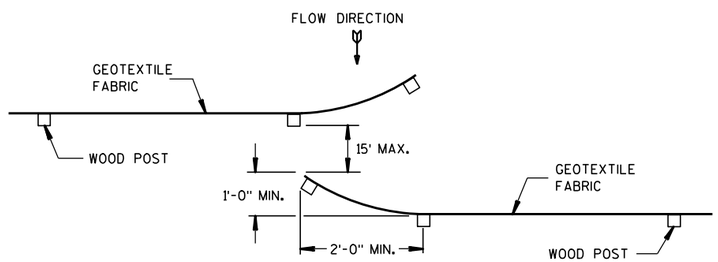
TRENCH DETAIL



SILT FENCE

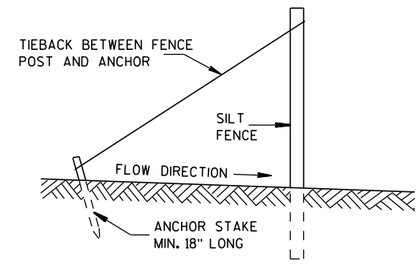


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

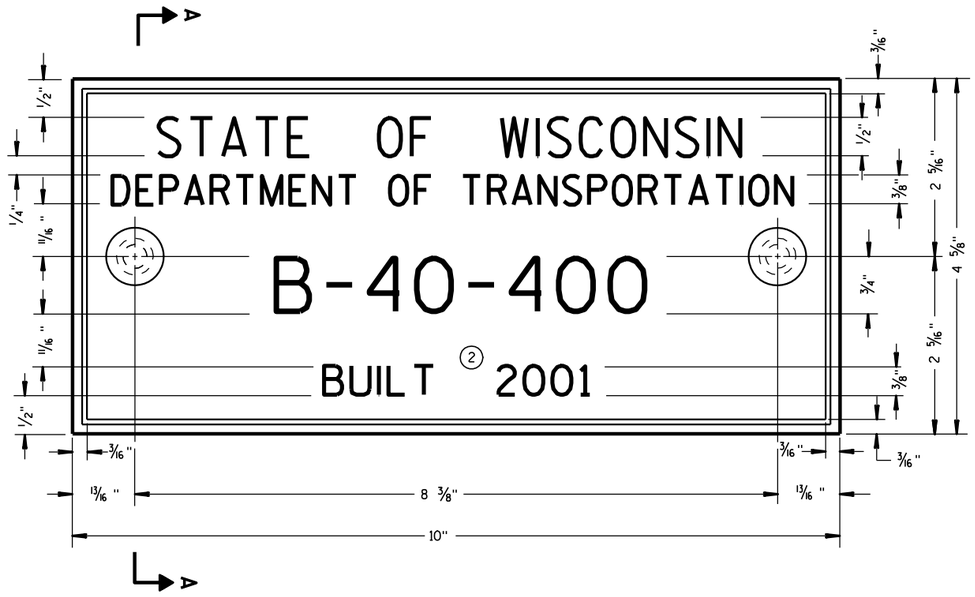
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION MULTI-UNIT STRUCTURES

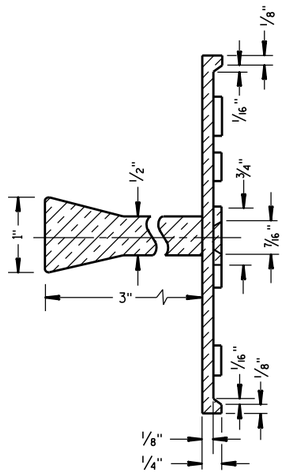
GENERAL NOTES

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

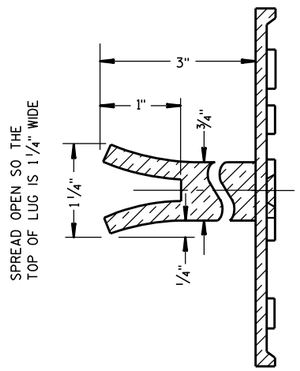
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

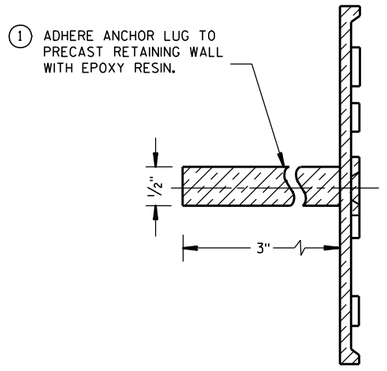
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

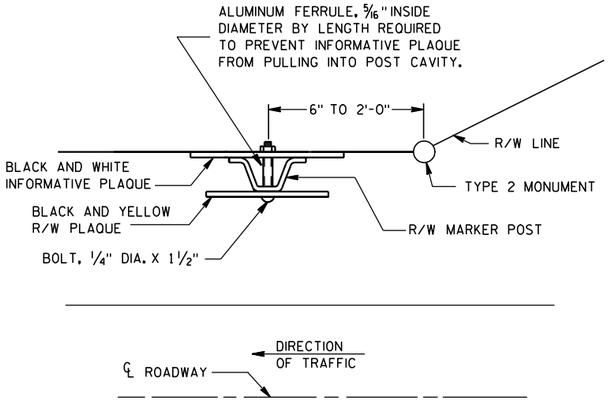
3/26/10 DATE

/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOPMENT ENGINEER

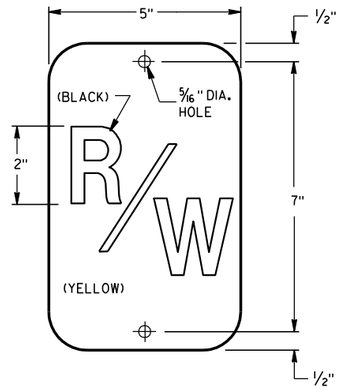
FHWA

6

S.D.D. 12 A 3-10

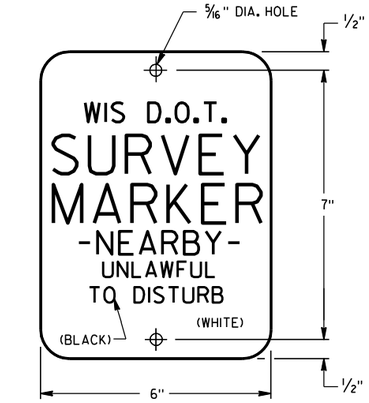


PLAN VIEW



R/W PLAQUE

THE RIGHT-OF-WAY PLAQUE AND INFORMATIVE PLAQUE WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.



INFORMATIVE PLAQUE

GENERAL NOTES

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

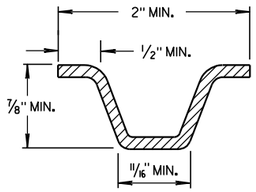
A STEEL MARKER POST FOR RIGHT-OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY, WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE "R/W" PLAQUE SHALL FACE THE ROADWAY AND THE INFORMATIVE PLAQUE SHALL FACE AWAY FROM THE ROADWAY. R/W AND INFORMATIVE PLAQUES WILL BE FURNISHED BY THE DEPARTMENT OF TRANSPORTATION.

STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

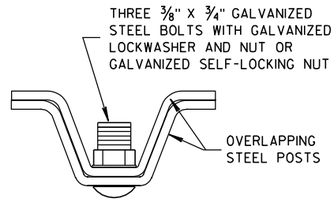
(1) IN AREAS OF SOLID ROCK, DRILL A BORE HOLE 2" GREATER THAN THE WIDEST DIMENSION OF THE POST CROSS SECTION INTO THE ROCK TO A MINIMUM DEPTH OF 12 INCHES. CUT OR SPLICE THE POST SO THAT A MINIMUM LENGTH OF 3' 10" PROTRUDES ABOVE THE GROUND. BLOW OUT THE BORE HOLE IN THE ROCK USING COMPRESSED AIR.

FILL THE BORE HOLE WITH CEMENT GROUT, OR EQUIVALENT, DEPENDING ON THE STABILITY OF THE ROCK.

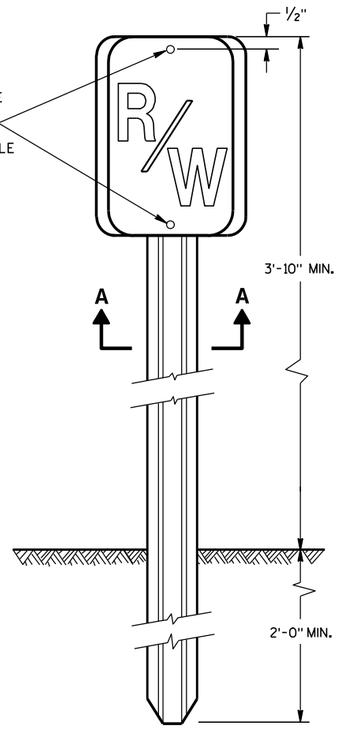


MIN. WEIGHT 1.12 LB./FT.

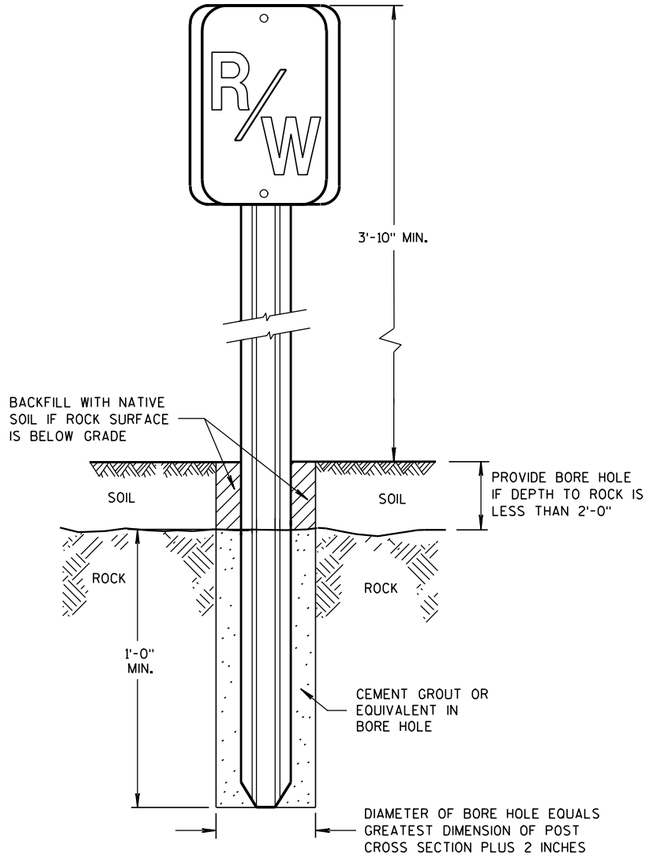
SECTION A-A



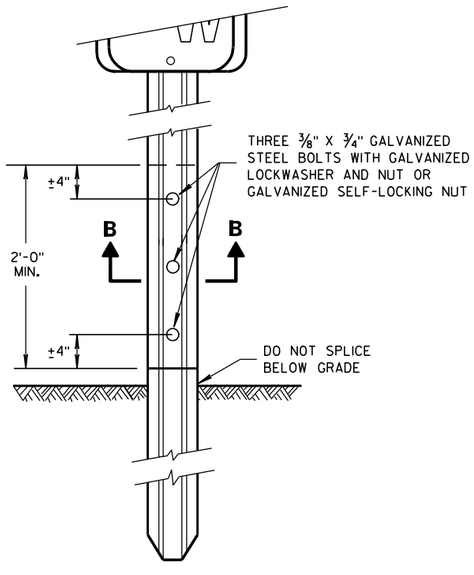
SECTION B-B



FRONT VIEW
STEEL MARKER POST



FRONT VIEW
ROCK INSTALLATION (1)



FRONT VIEW
SPLICE DETAIL

MARKER POST FOR RIGHT-OF-WAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/27/09 — DATE
/S/ Ray Kumapayi — CHIEF SURVEYING AND MA[illegible]GINEER

FHWA

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S.D.D. 15 A 1-11

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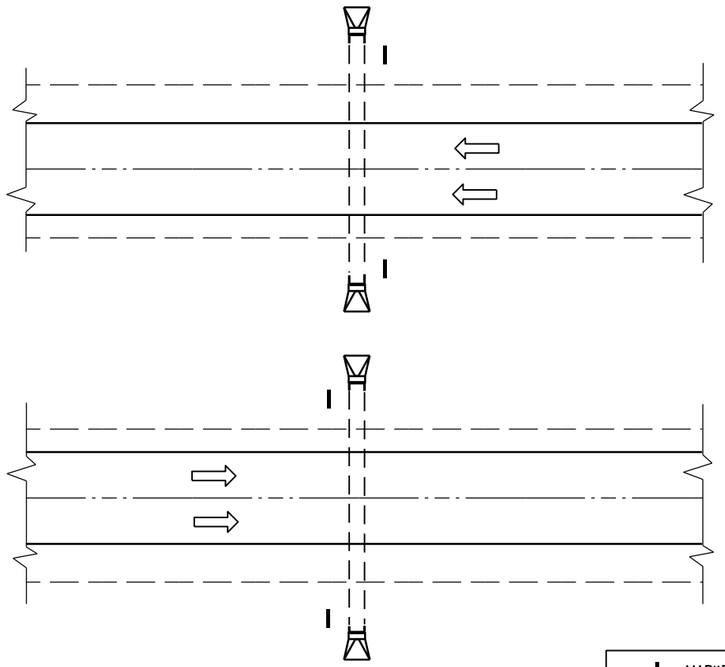
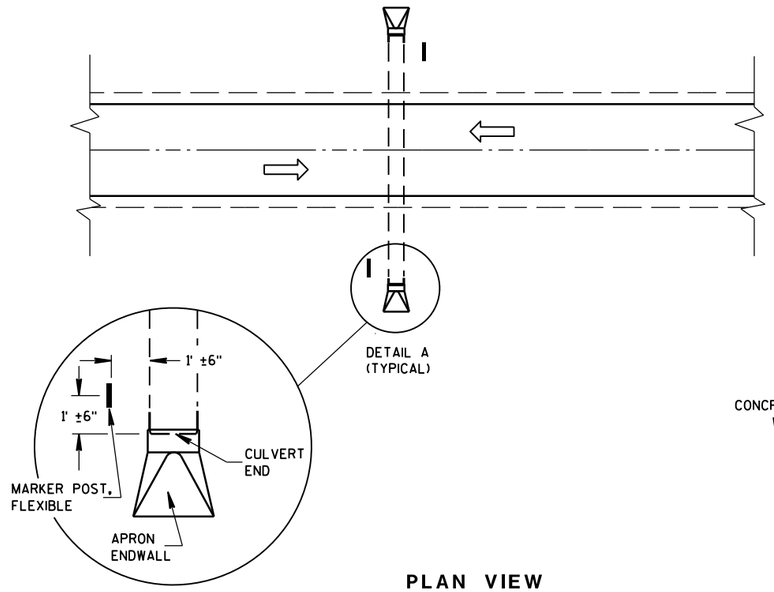
S.D.D. 15 A 1-11



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

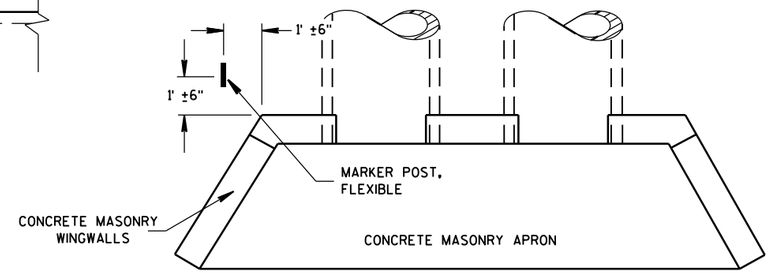
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

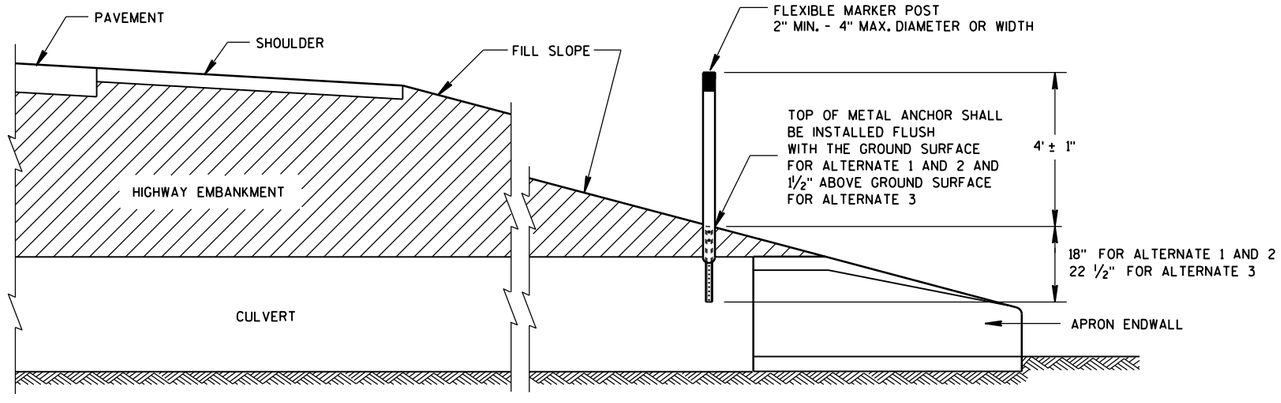
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

6

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

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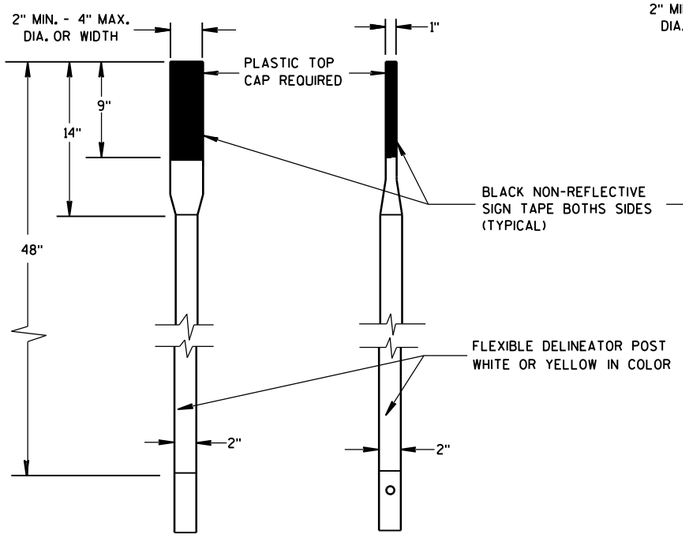
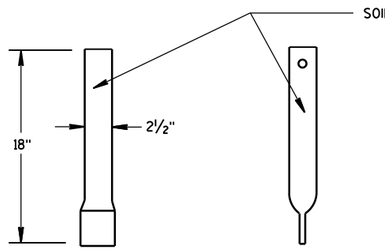
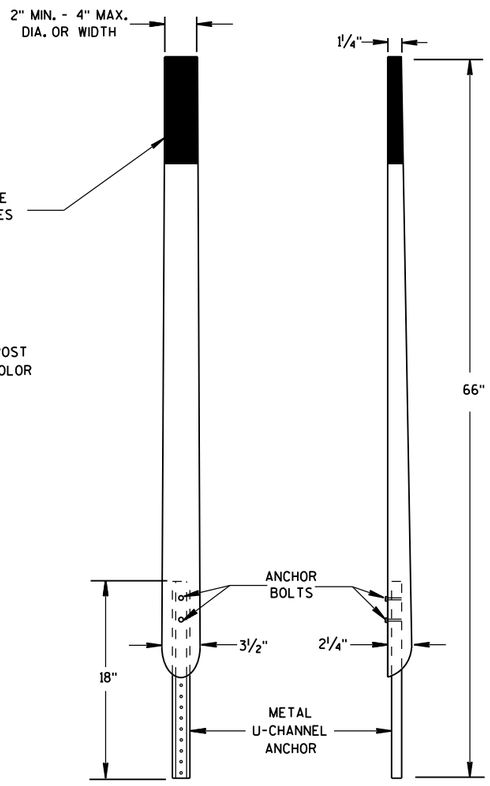
S.D.D. 15 A 3-2a





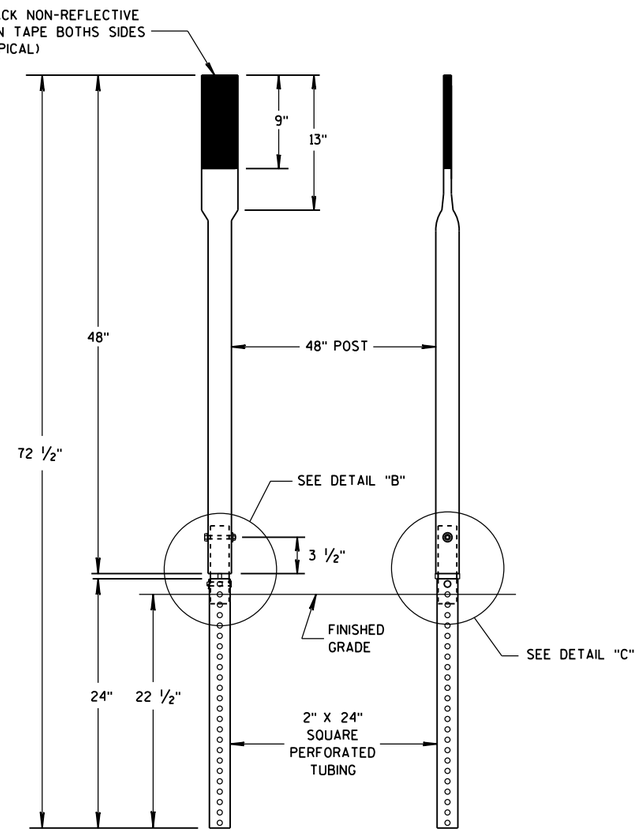
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

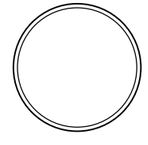
ALTERNATE 2



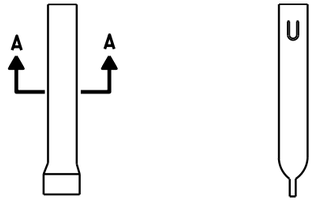
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

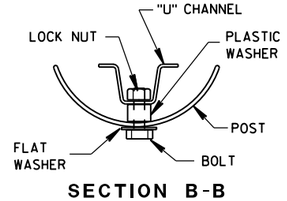


SECTION A-A

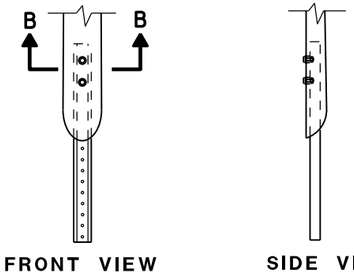


FRONT VIEW SIDE VIEW

ALTERNATE 1

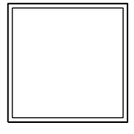


SECTION B-B

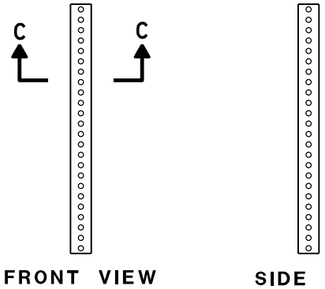


FRONT VIEW SIDE VIEW

ALTERNATE 2



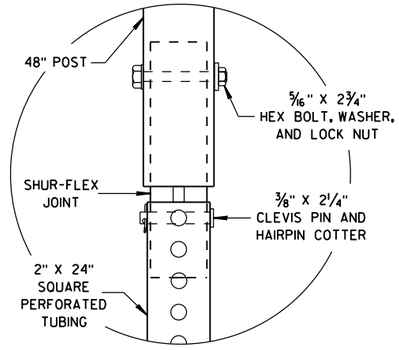
SECTION C-C



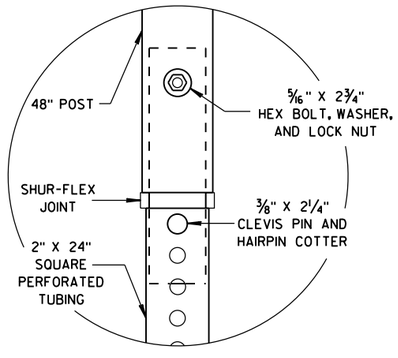
FRONT VIEW SIDE VIEW

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

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

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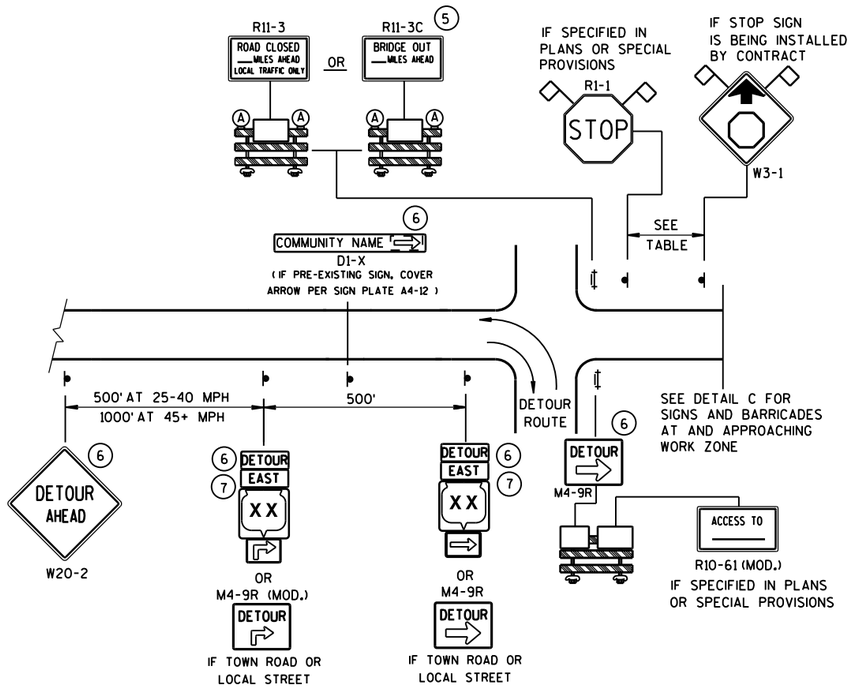
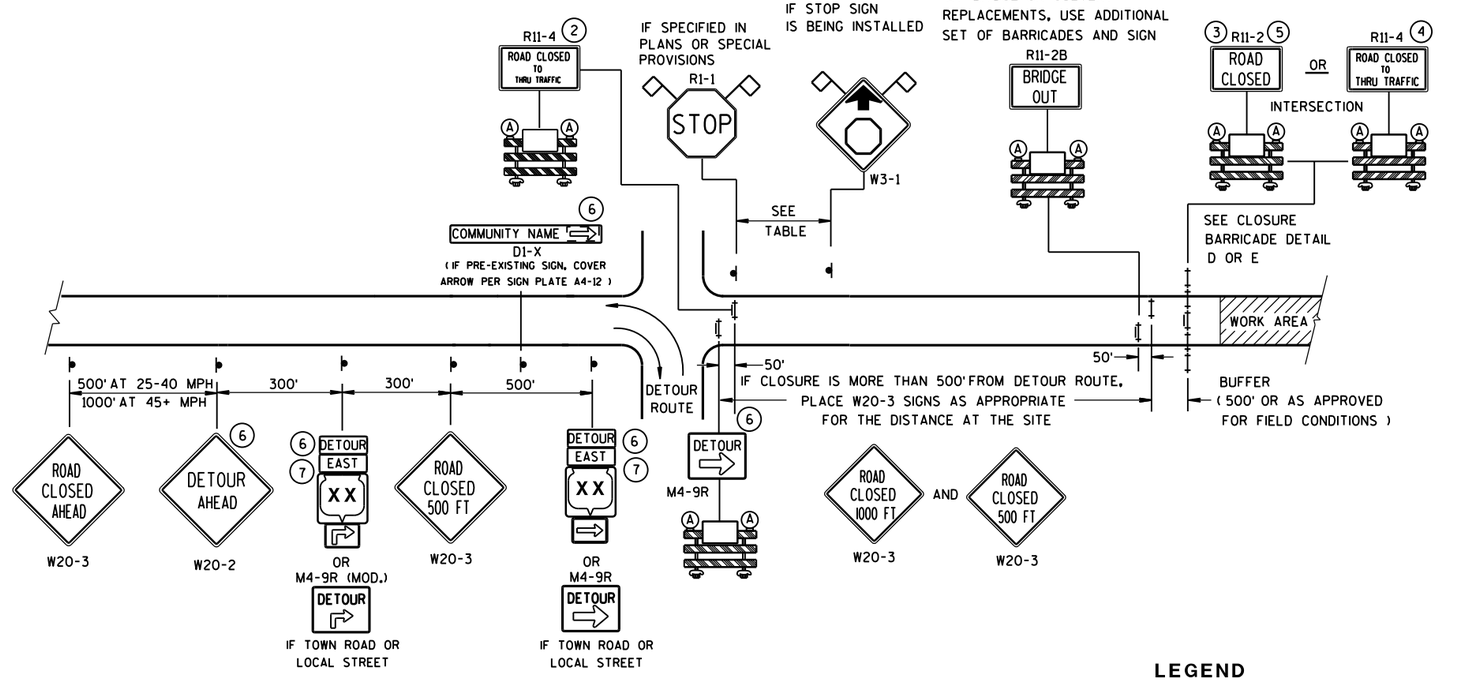
S.D.D. 15 A 3-2b



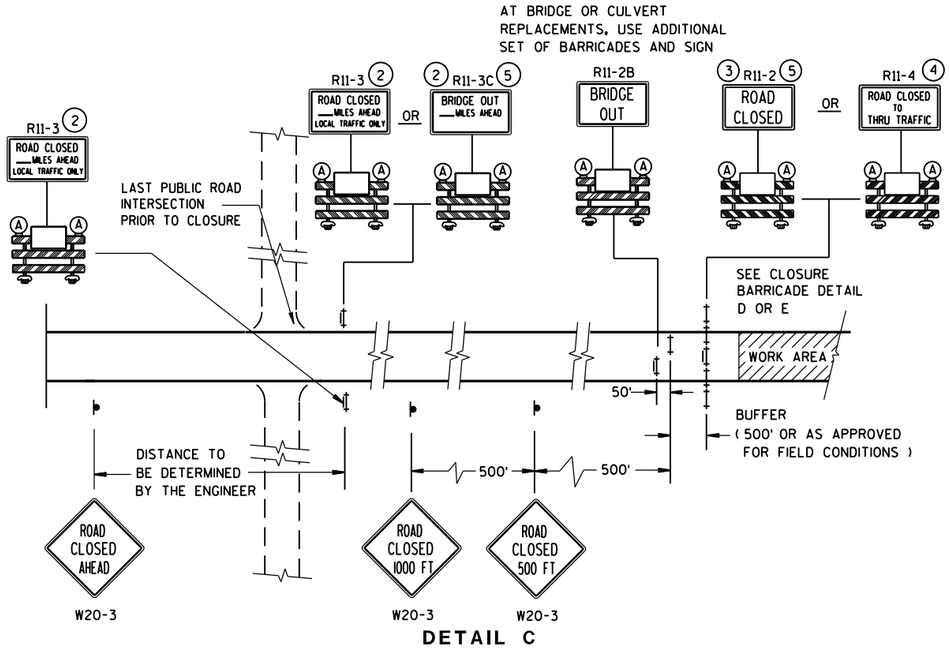
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

LEGEND

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

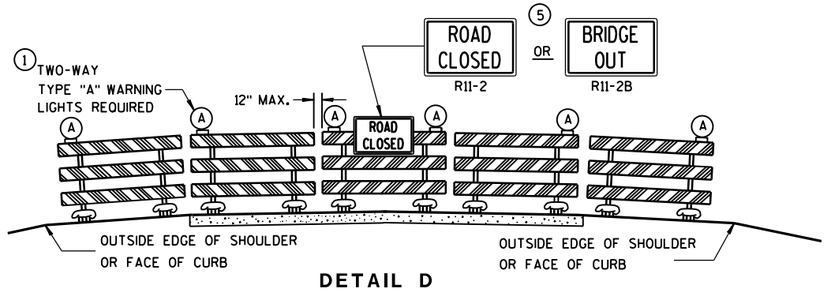
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 DATE — /S/ Travis Feltes STATE TRAFFIC ENGINEER — DESIGN

FHWA

6

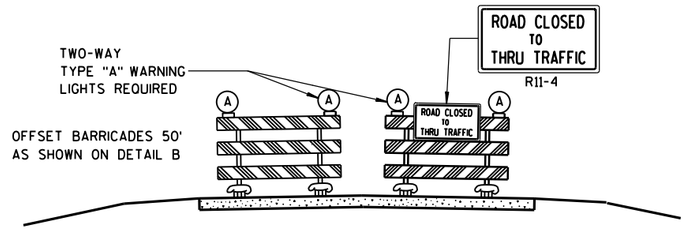
S.D.D. 15 C 2-5a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 2-5b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

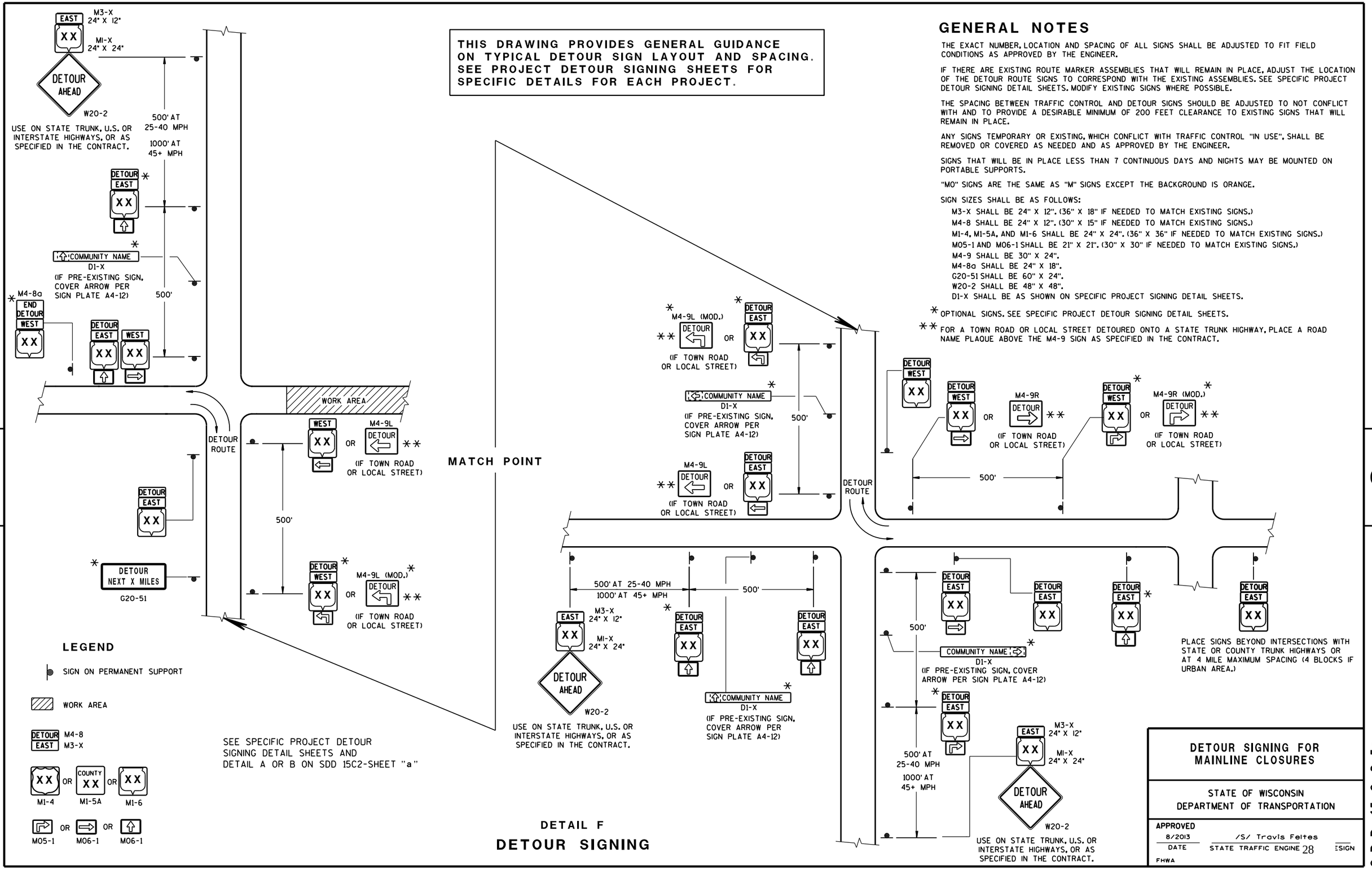
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



DETAIL F

DETOUR SIGNING

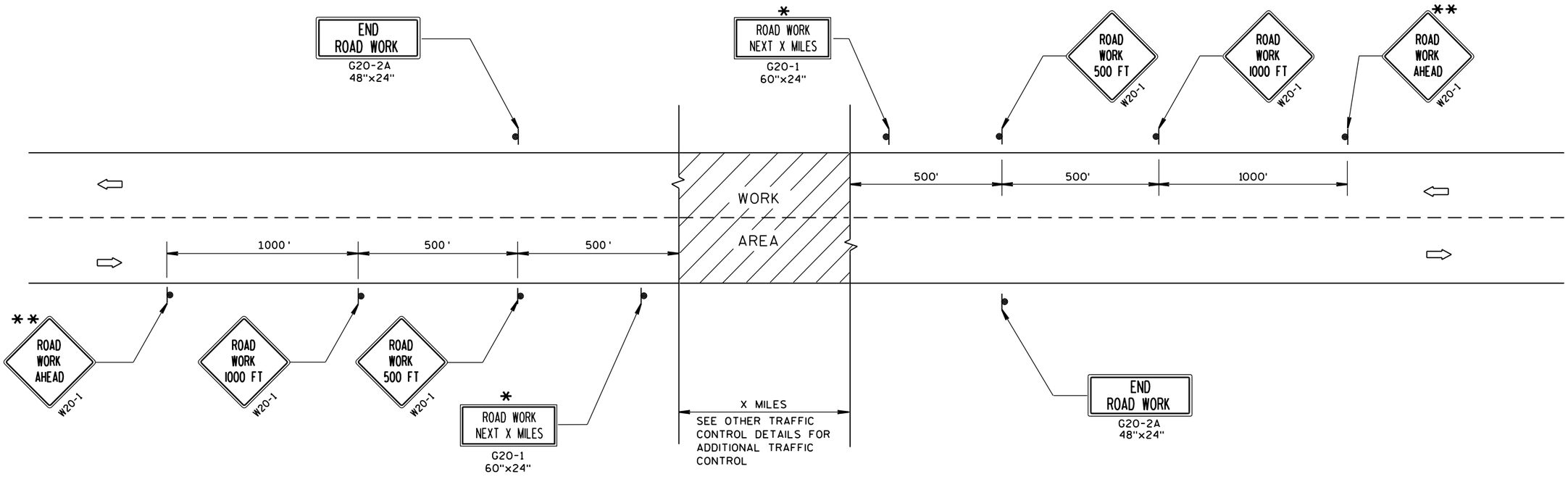
DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

S.D.D. 15 C 2-5c

S.D.D. 15 C 2-5c



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

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

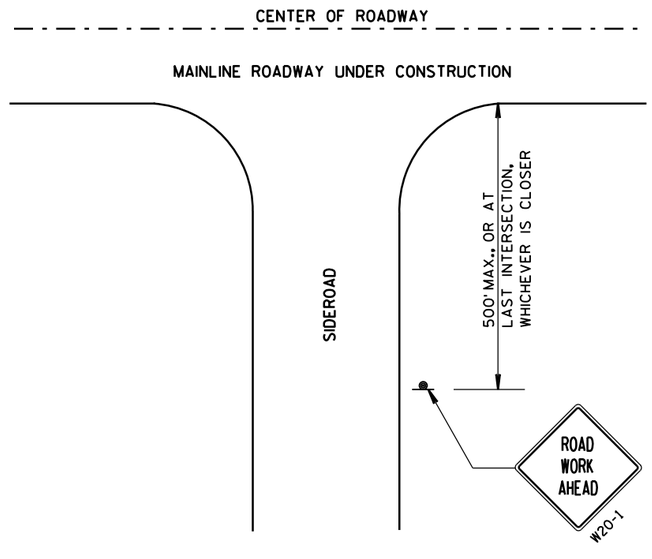
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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



LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

FHWA

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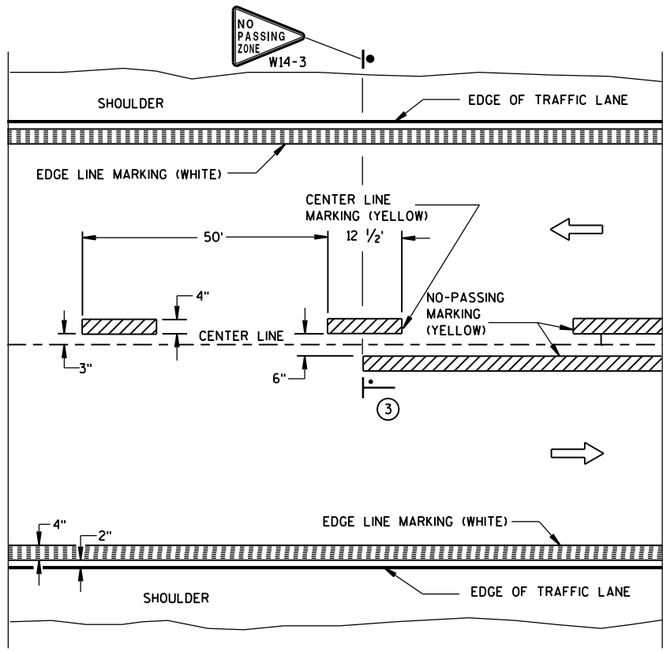
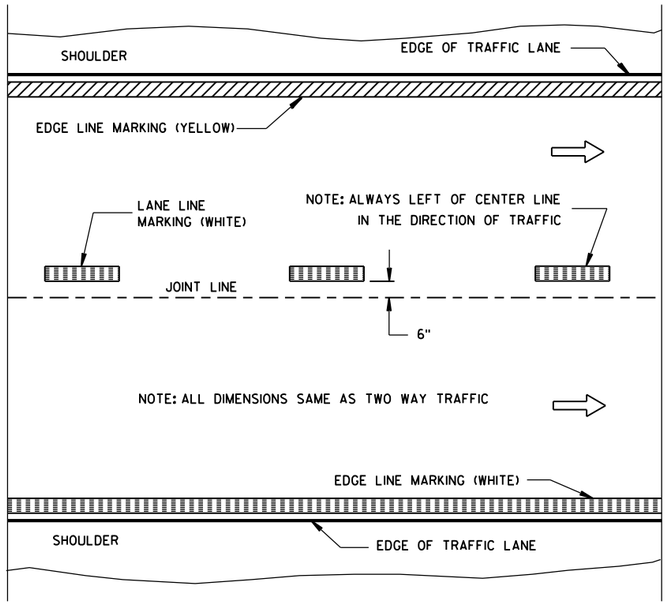
S.D.D. 15 C 4-2

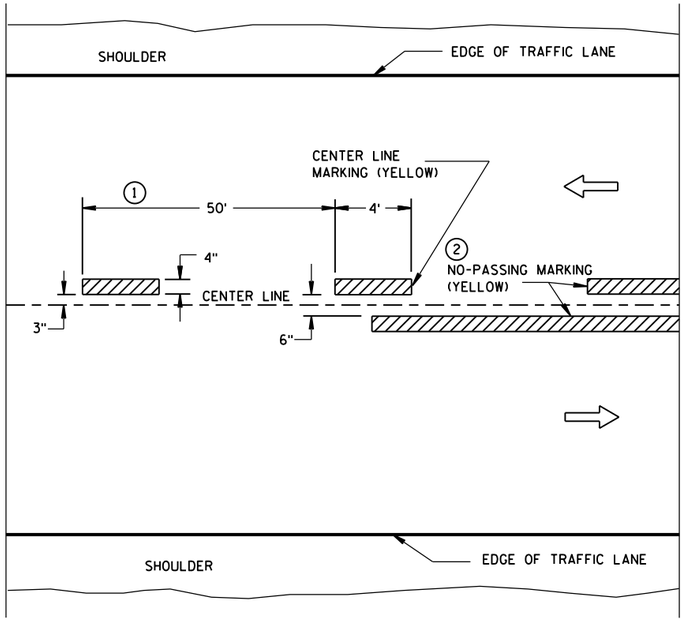


TWO WAY TRAFFIC

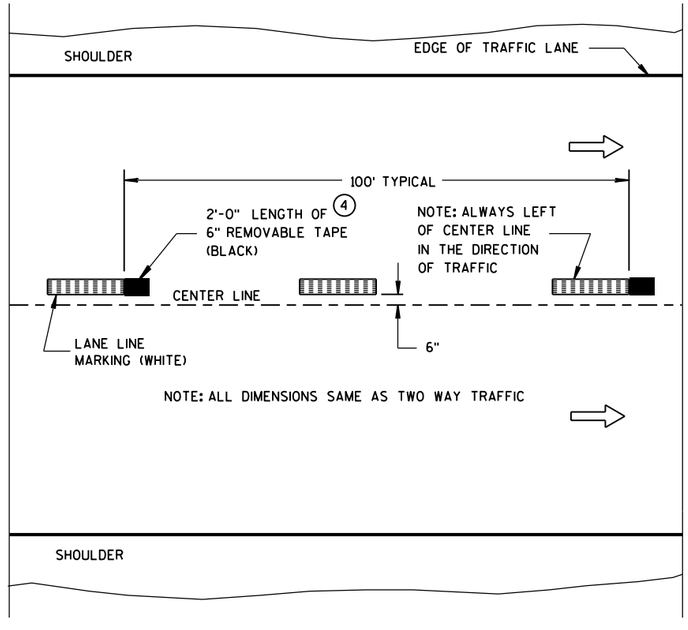


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

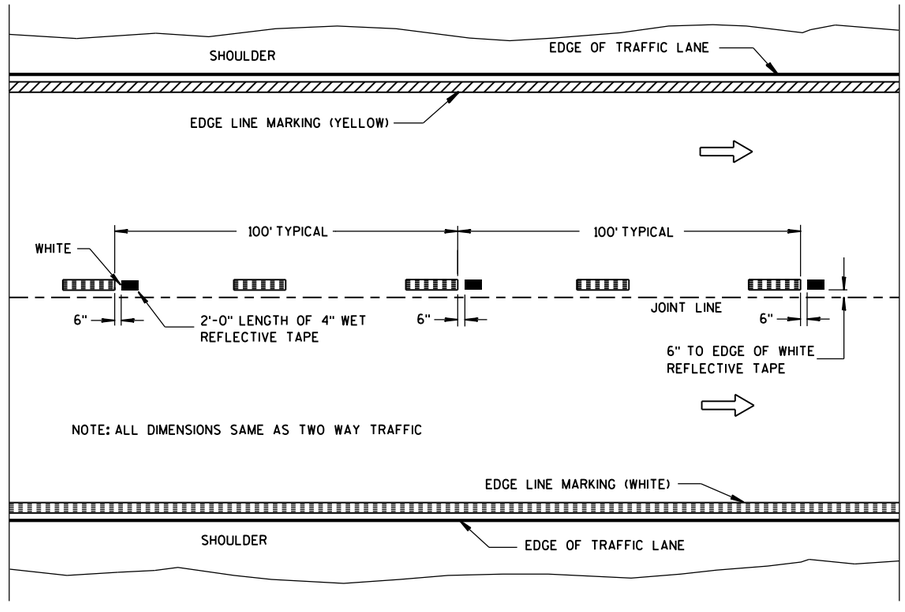
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



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

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-13-2013 DATE
/S/ Travis Feltes STATE TRAFFIC E
FHWA

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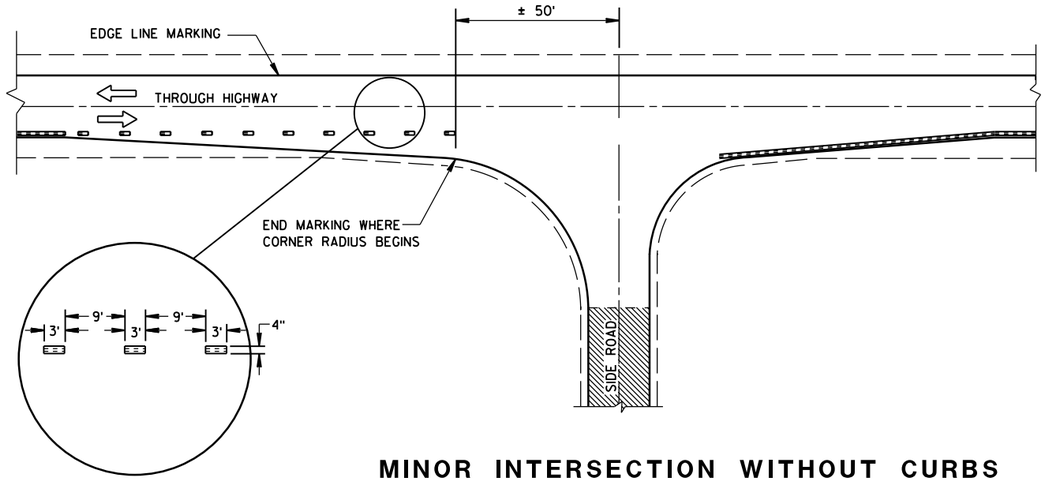
S.D.D. 15 C 8-16a



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.

(4) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

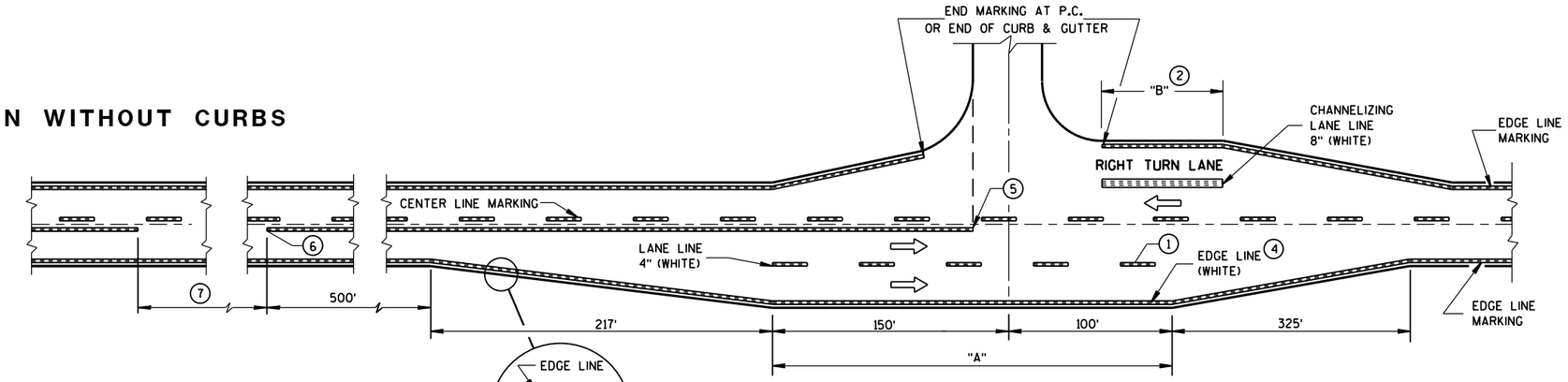
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

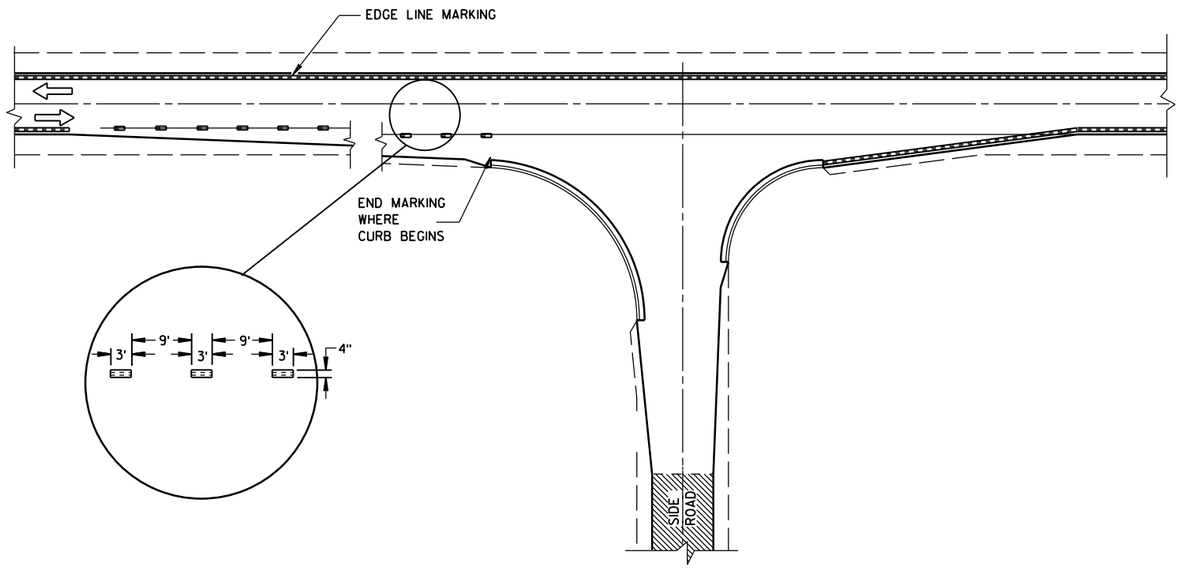
(7)

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



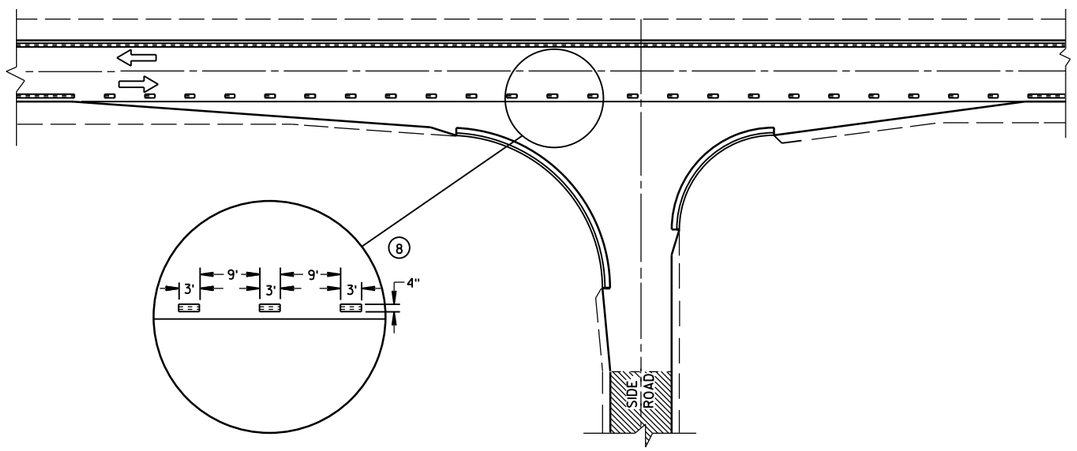
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 15 C 8-16b

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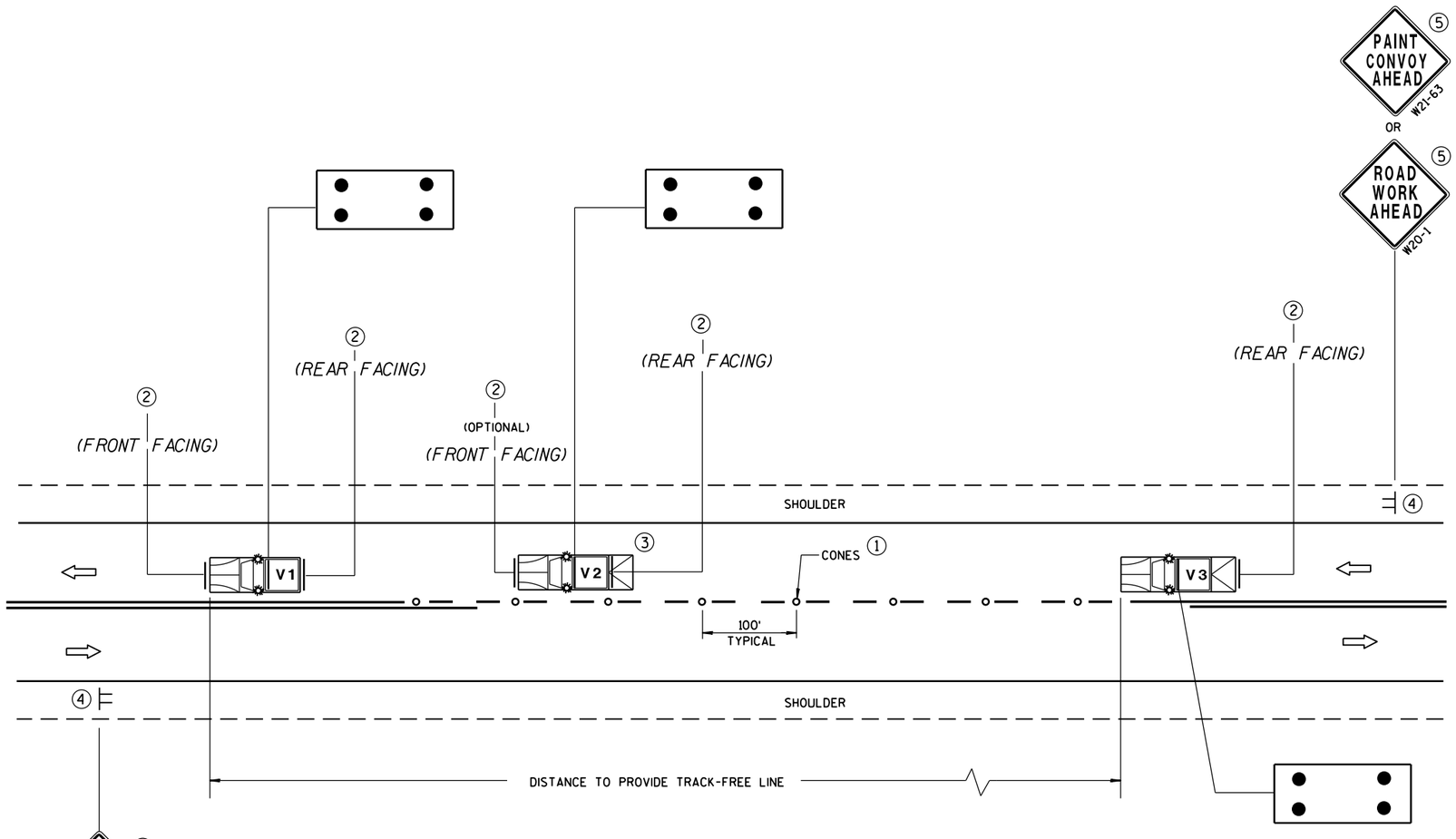
S.D.D. 15 C 8-16b



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

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

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

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

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

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

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

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

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

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

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

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

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

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

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

LEGEND

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

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 5/3/2013 DATE — /S/ Travis Feltes STATE TRAFFIC E FHWA

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S.D.D. 15 C 19-2a

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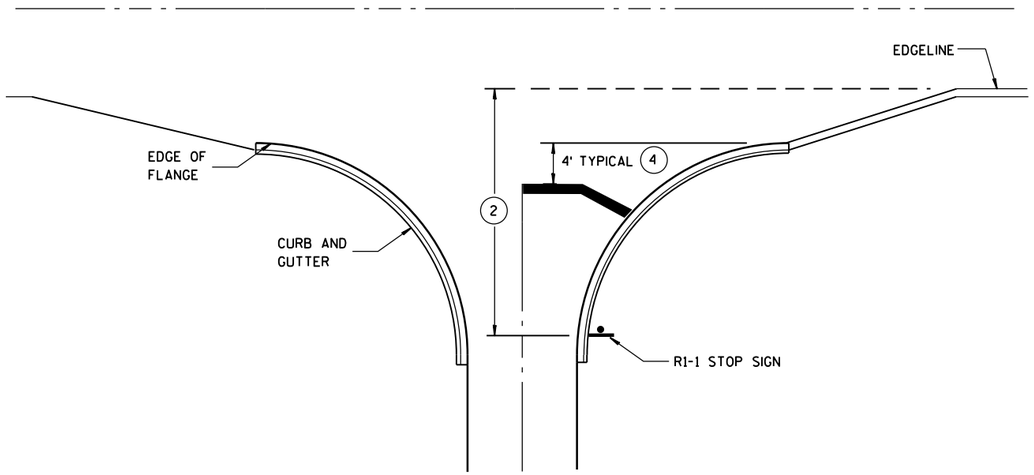
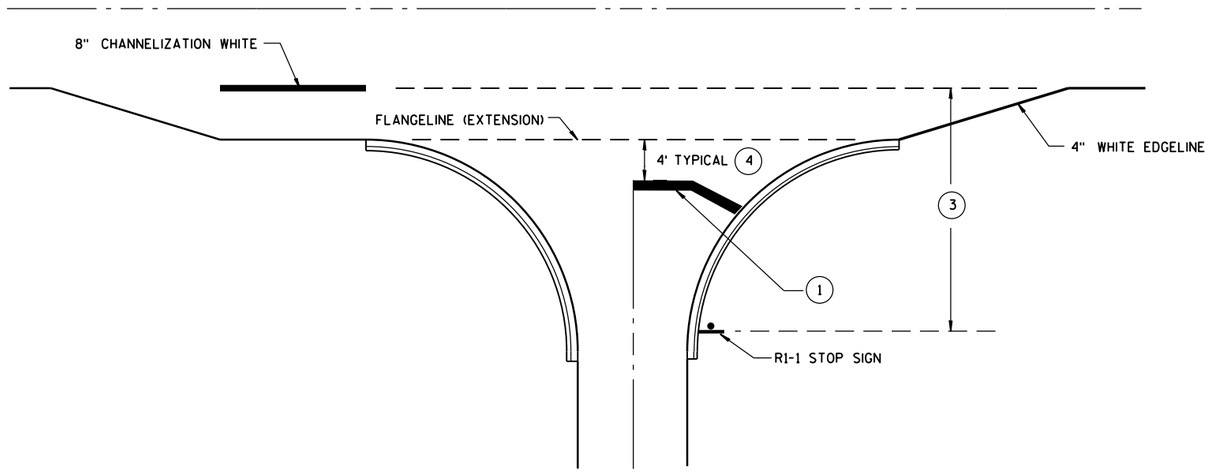
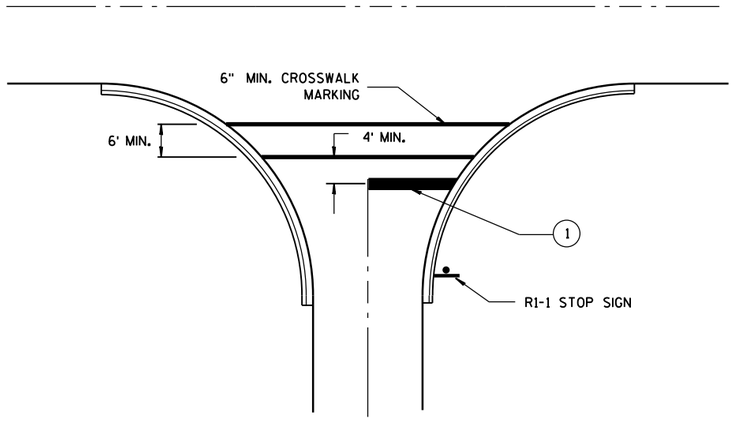
S.D.D. 15 C 19-2a



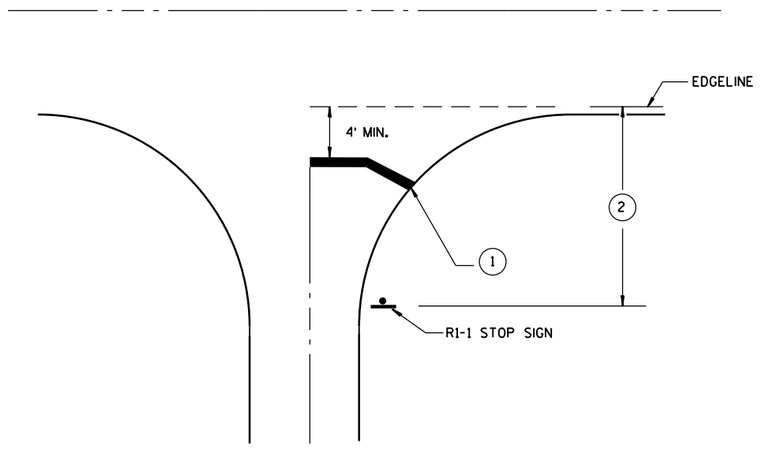
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

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

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

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S.D.D. 15 C 33-1

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMENENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

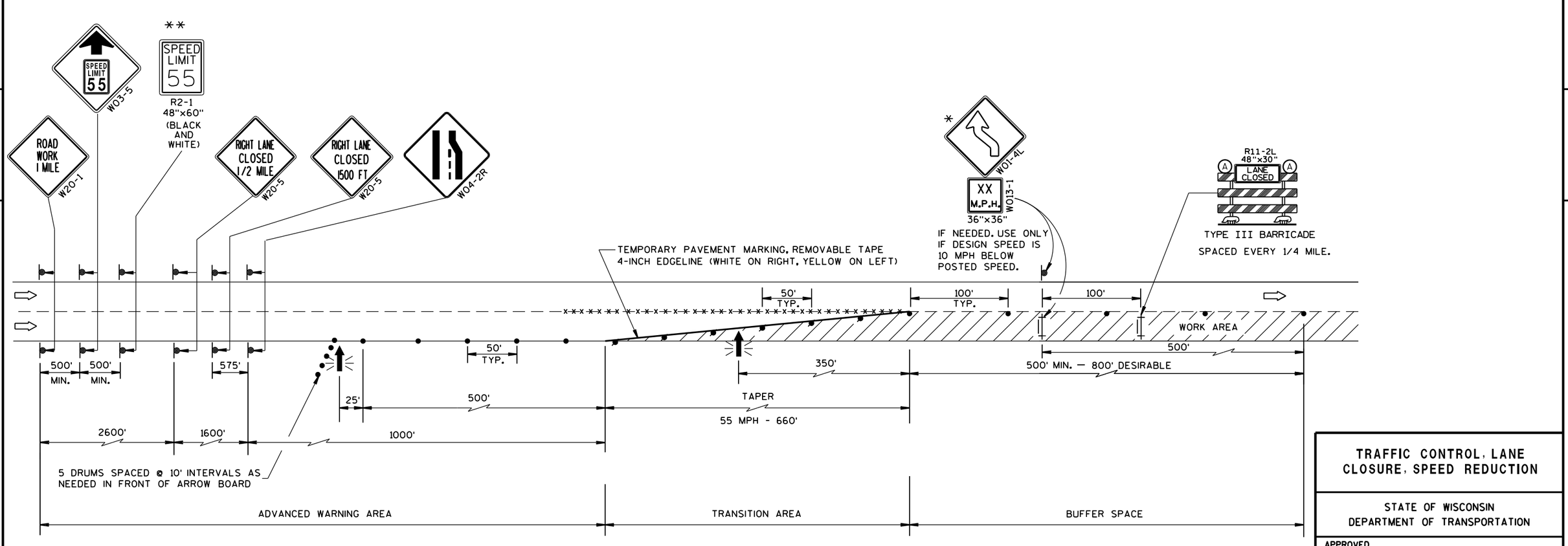
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (W01-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.

** A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES. INCLUDE A 65 MPH RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIREABLE) BEYOND THE "END OF ROADWORK" SIGN.



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3-2014 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
DESIGN
FHWA

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S.D.D. 15 D 12-4

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S.D.D. 15 D 12-4

GENERAL NOTES

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

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

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

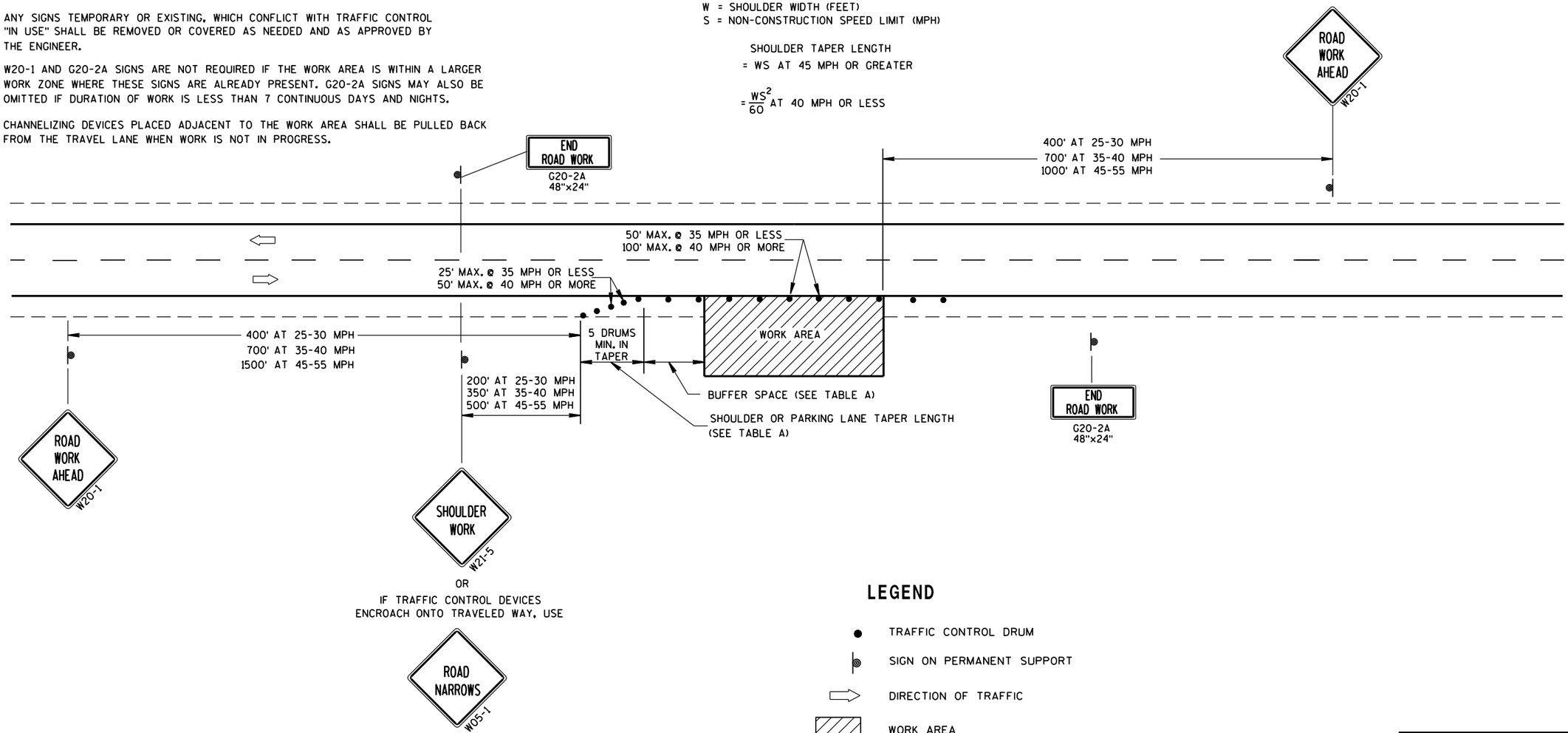
TABLE A

S \ W	SHOULDER TAPER LENGTH (FEET) 4	6	8	10	BUFFER SPACE (FEET)
30	20	30	40	50	85
35	30	45	55	70	120
40	40	55	75	90	170
45	60	90	120	150	220
50	70	100	135	170	280
55	75	110	150	185	335

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

SHOULDER TAPER LENGTH
= WS AT 45 MPH OR GREATER

$= \frac{WS^2}{60}$ AT 40 MPH OR LESS



LEGEND

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

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

FHWA

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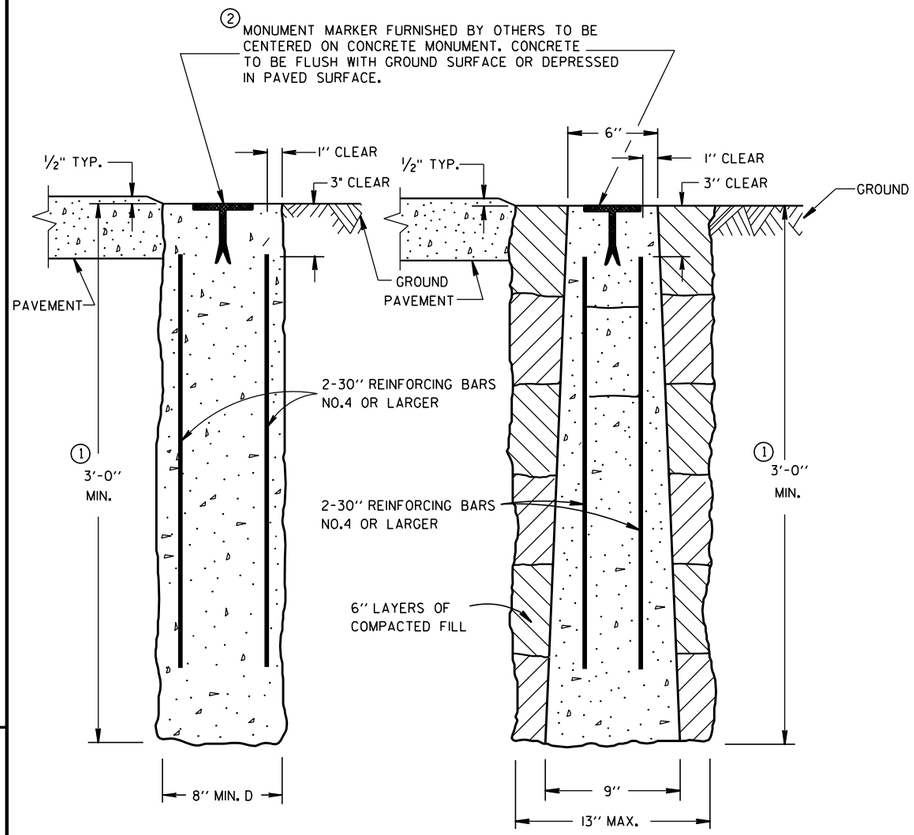
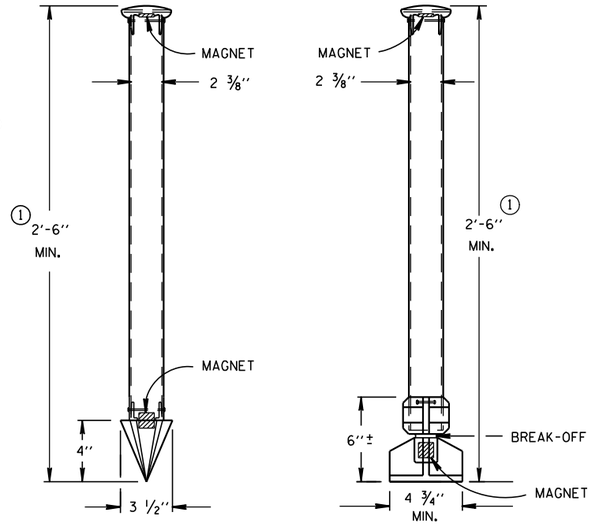
S.D.D. 15 D 28-2



CAST-IN-PLACE PRECAST

CONCRETE MONUMENTS

TYPE A



TYPE C DRIVE-IN MONUMENT

TYPE D BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

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.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

INSTALLED METAL MONUMENTS MUST BE EASILY DETECTED WITH A DIP NEEDLE. INSERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

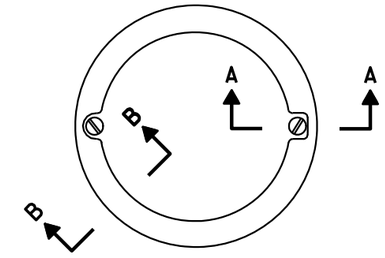
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

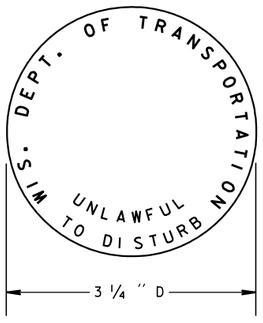
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

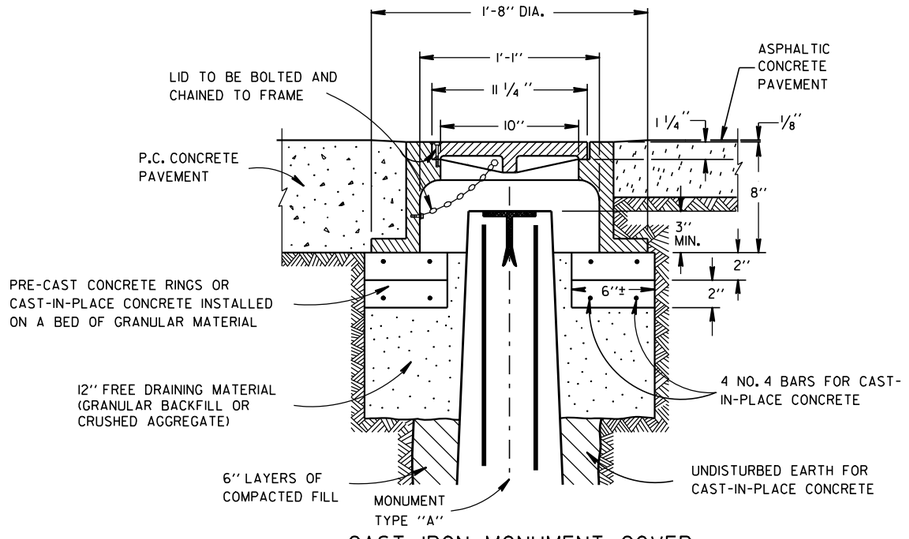
② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



TOP VIEW

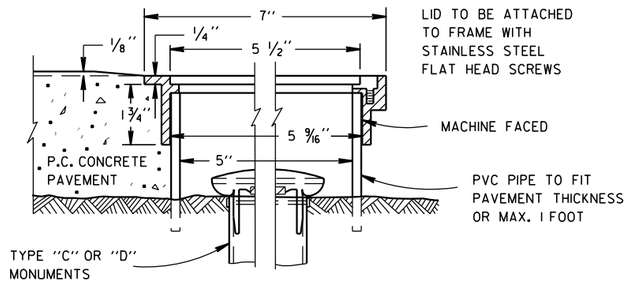


② WIS DOT MONUMENT MARKER LOGO FOR TYPES "A", "C" & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT - 95 LBS.)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)

(FOR CONCRETE PAVEMENT ONLY)

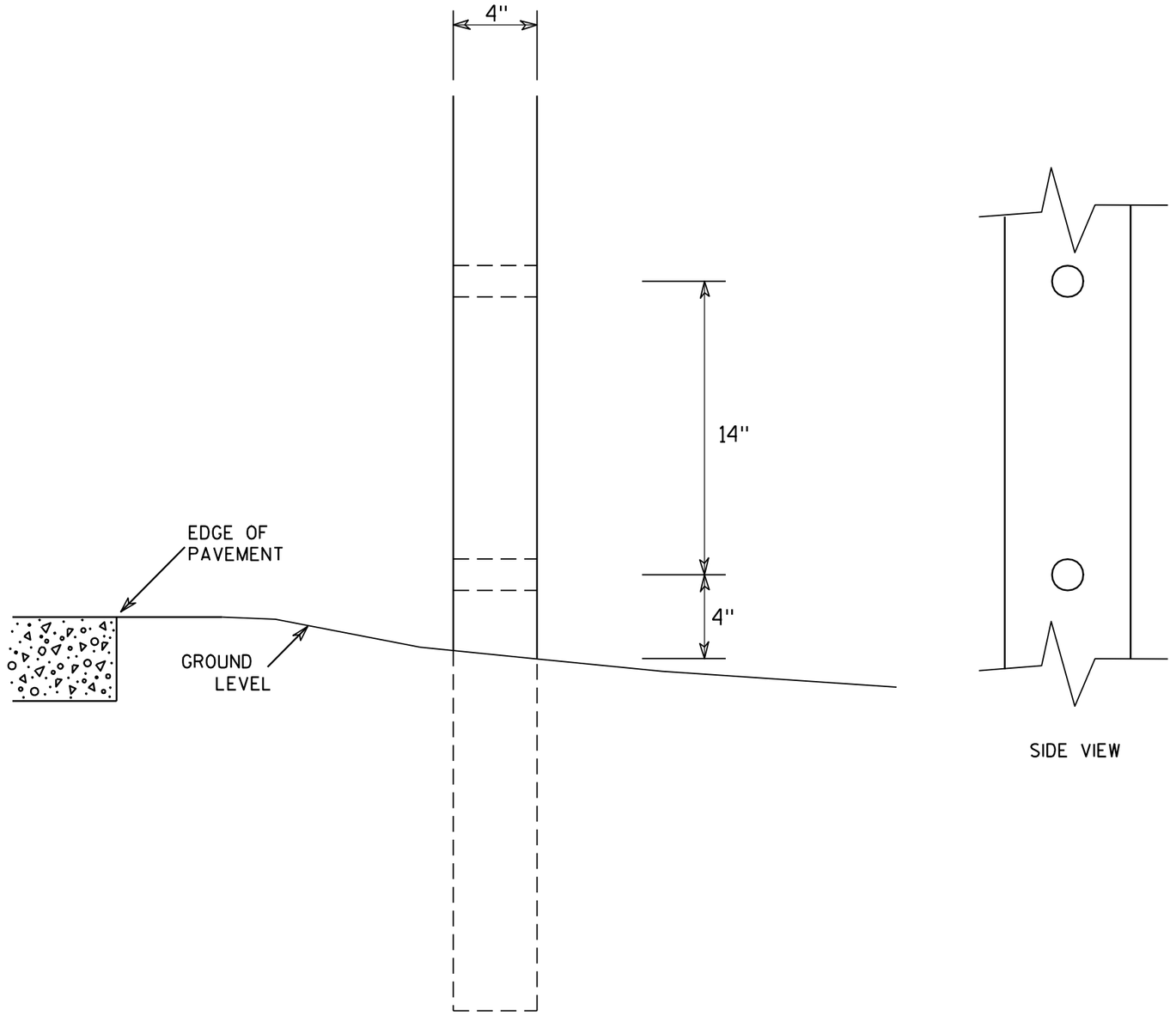
LANDMARK REFERENCE MOUNMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/22/1999 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 16 A 1-6



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

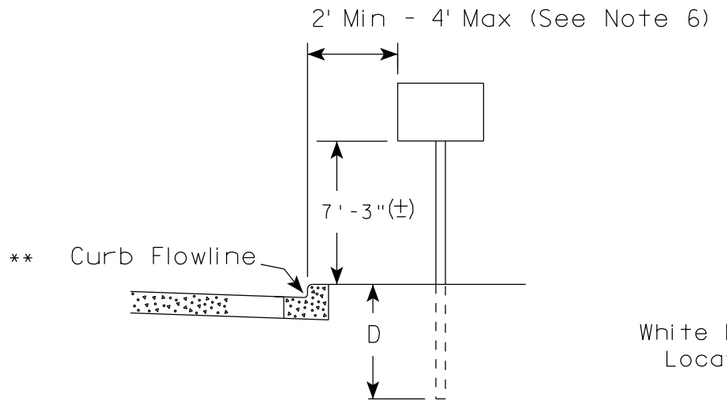
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

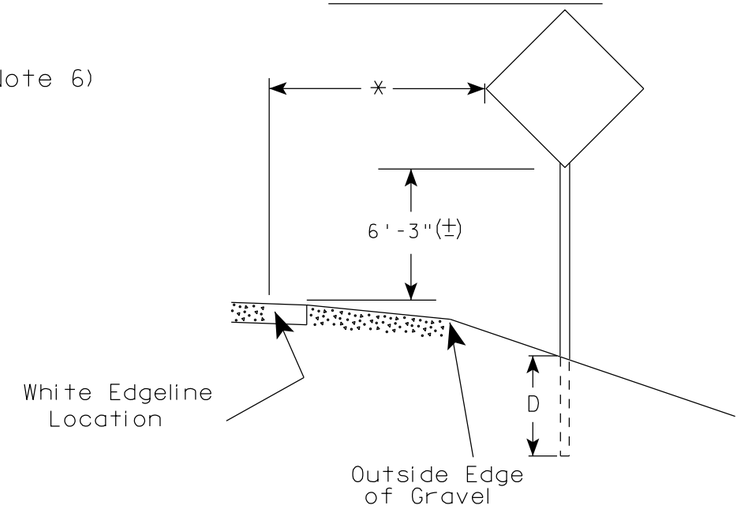
DATE 3/27/97 PLATE NO. A4-11.2

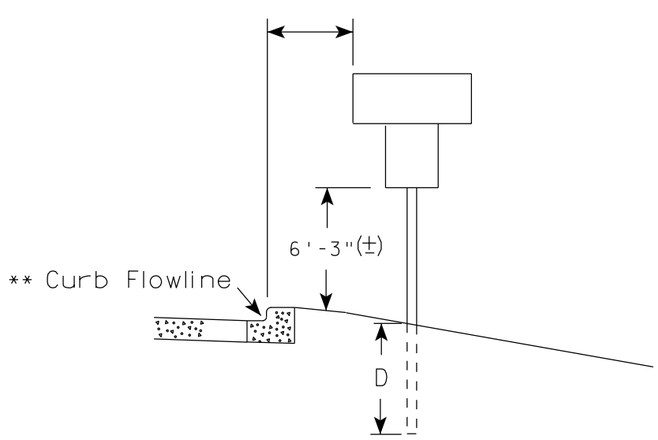
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 37	E

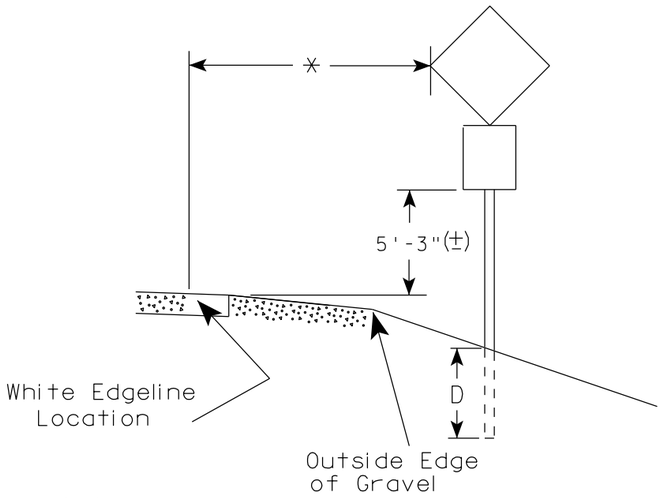
URBAN AREA



RURAL AREA (See Note 2)







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

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

GENERAL NOTES

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

POST EMBEDMENT DEPTH

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

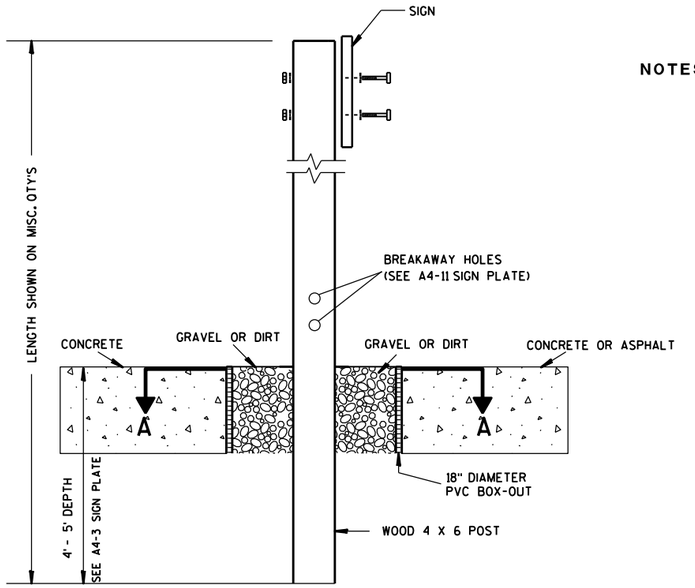
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 9/30/13 PLATE NO. A4-3.18

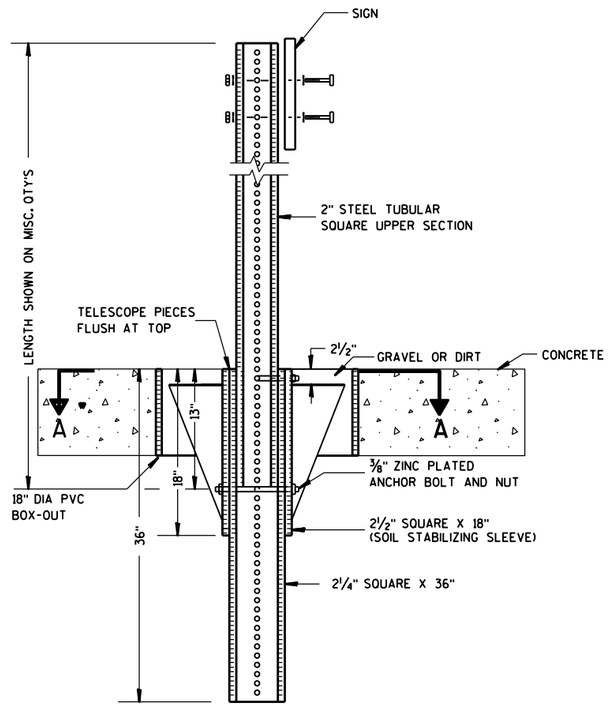
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

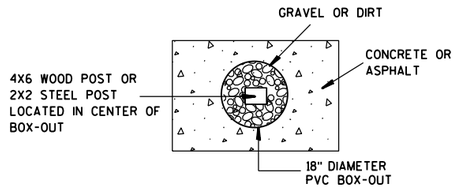
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

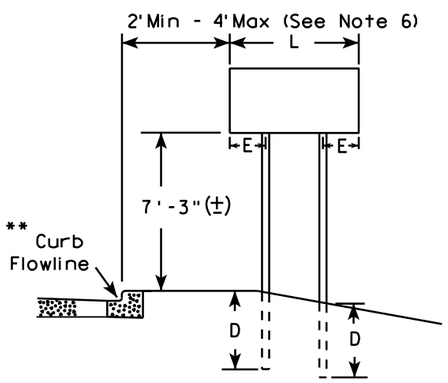
APPROVED Matthew R Rauch
for State Traffic Engineer

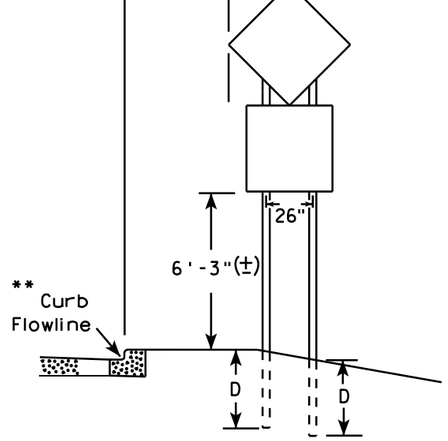
DATE 1/27/14 PLATE NO. A4-3B.1

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

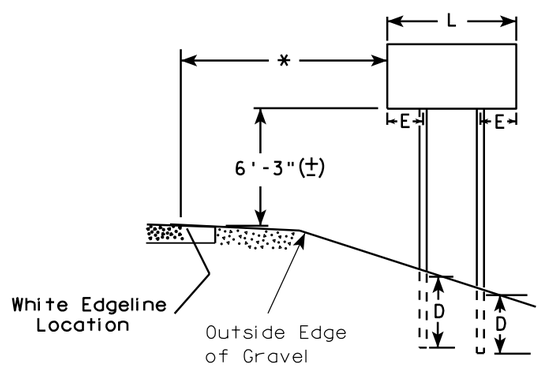
URBAN AREA

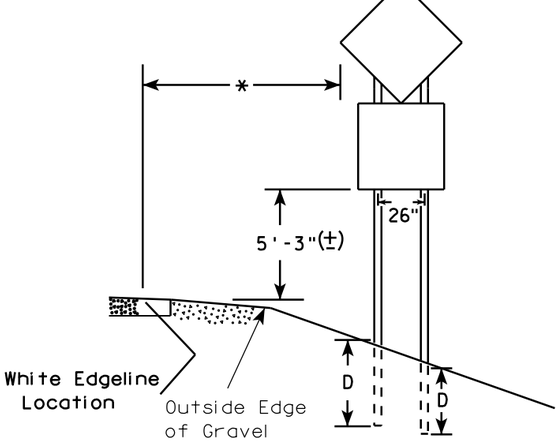




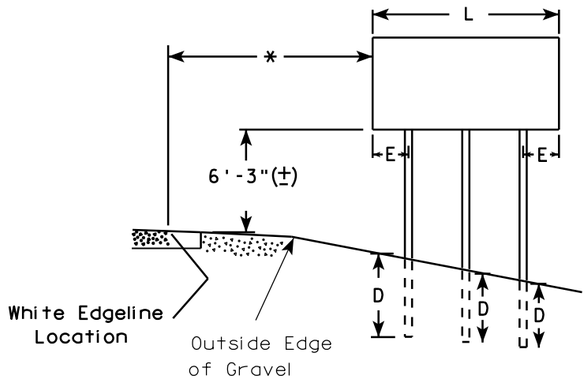
48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)





48" DIAMOND WARNING SIGN



GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding stop signs (R1-1F) 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) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4"-3" (±).

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

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

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

***

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

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

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

POST EMBEDMENT DEPTH

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

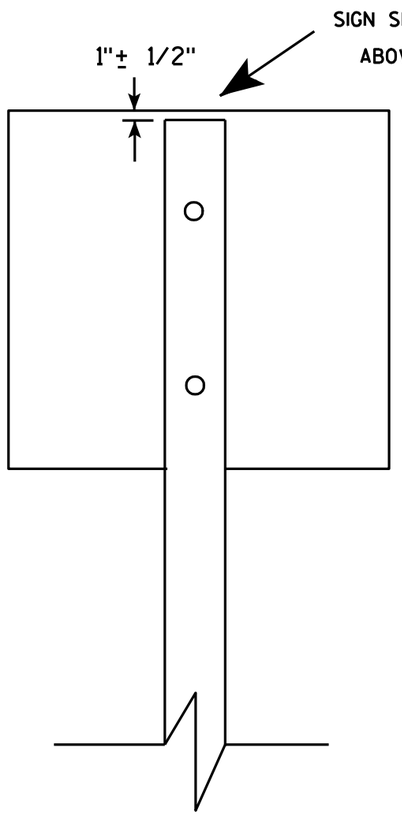
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

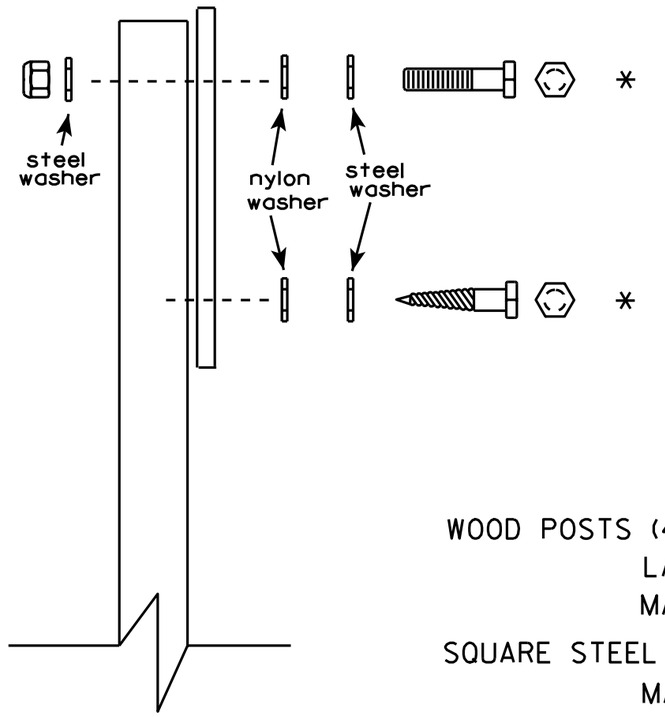
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/29/14 PLATE NO. A4-4 13

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E





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

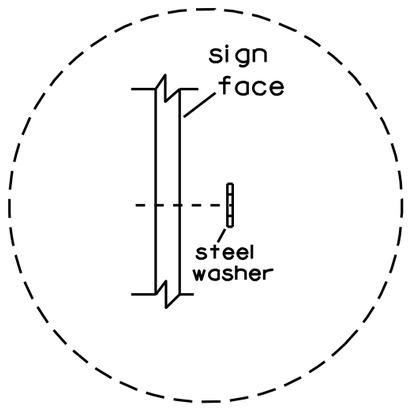
a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



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

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

ATTACHMENT OF SIGNS TO POSTS

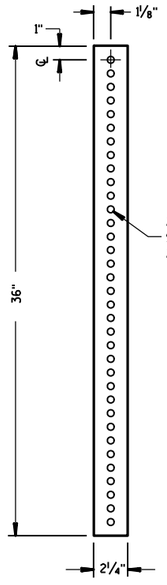
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

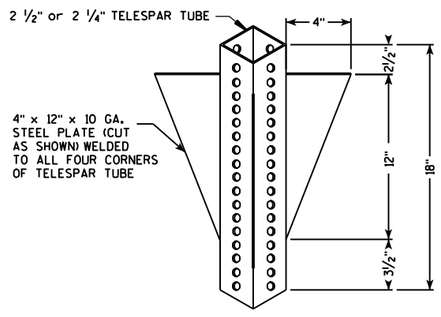
DATE 3/23/10 PLATE NO. A4-8.7

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

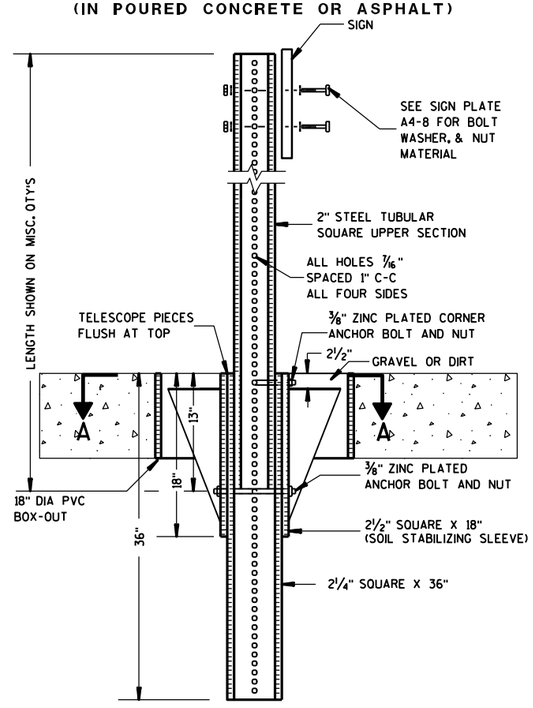
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



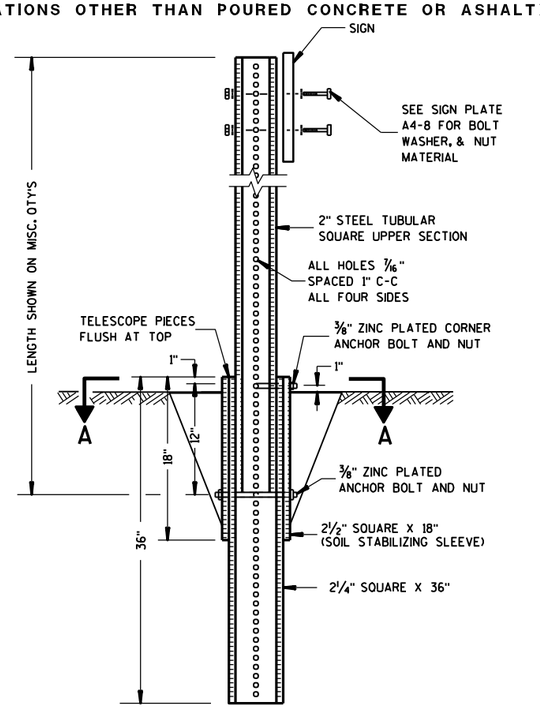
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

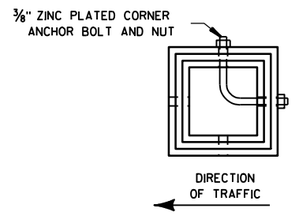


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





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

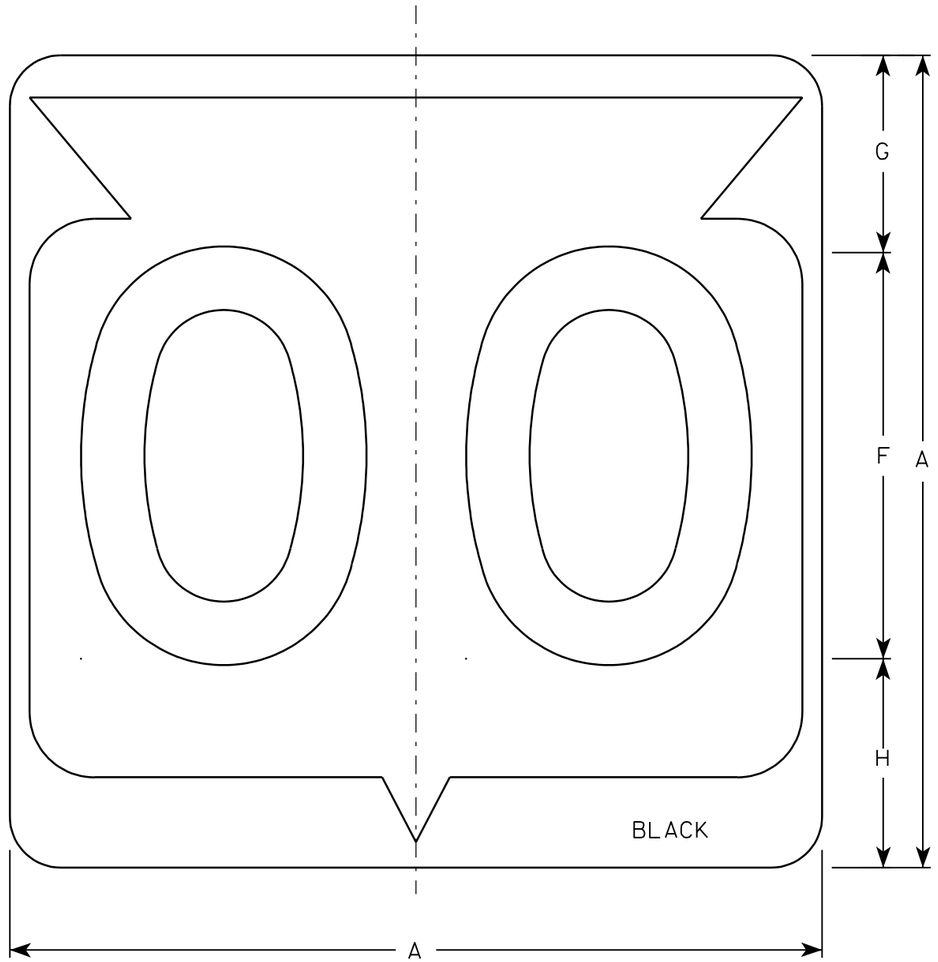
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 5/30/12 PLATE NO. A4-9.7

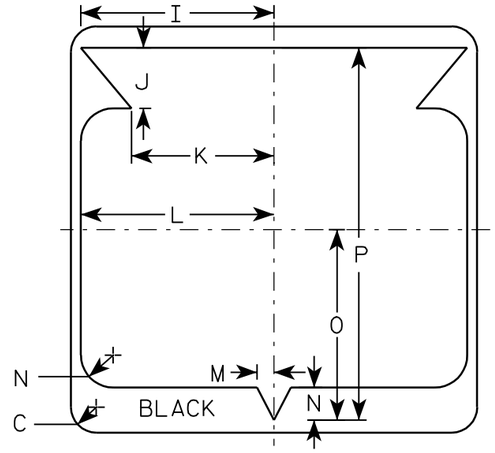
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 42	E



M1-6

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective



Metric equivalent for this sign is:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

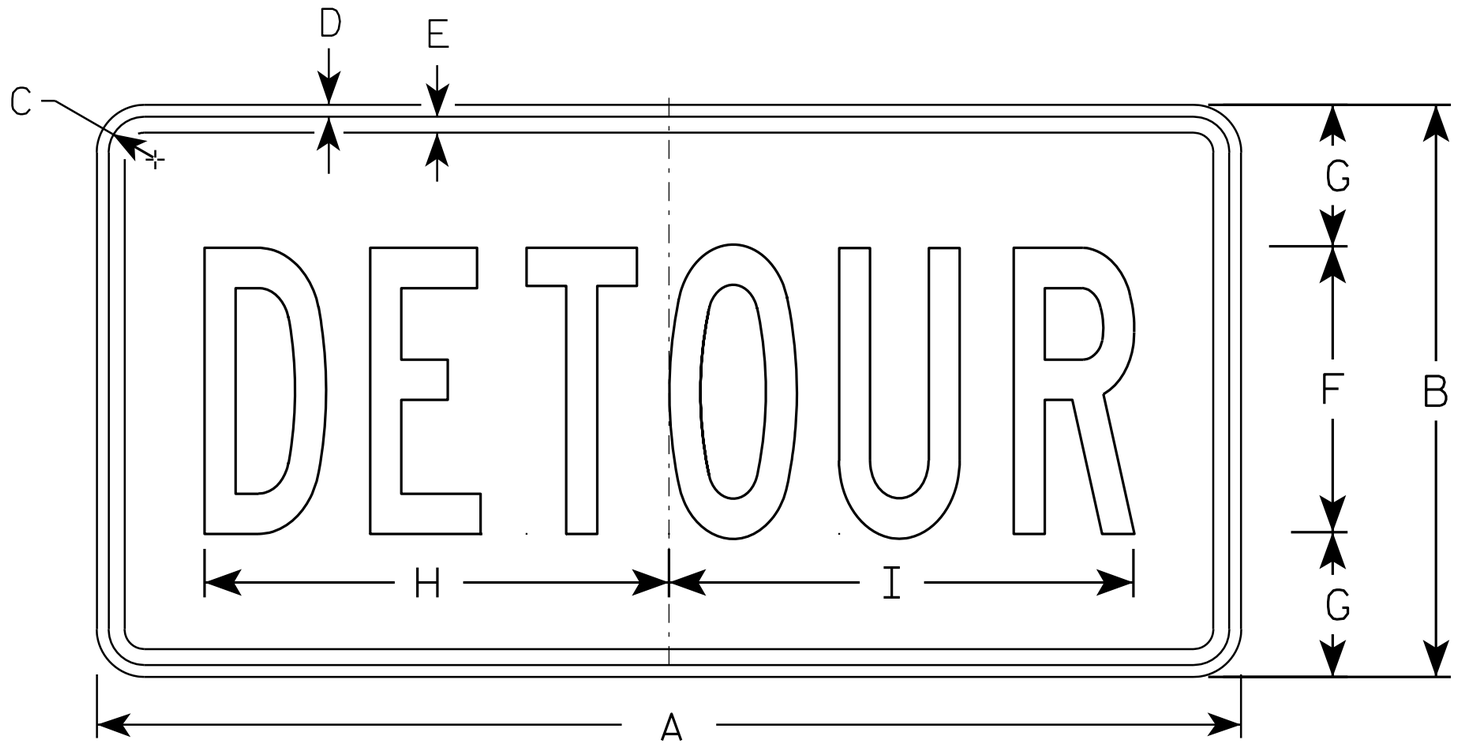
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

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



M4-8

NOTES

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

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	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

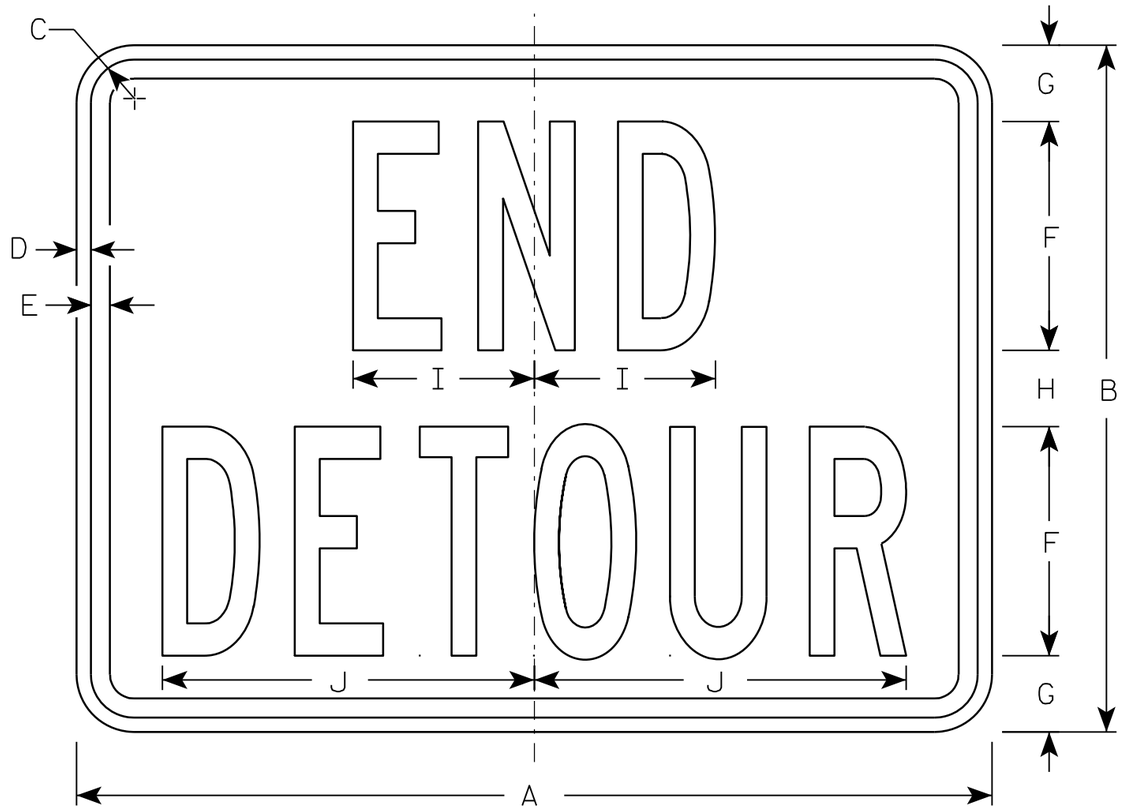
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 44	E



M4-8A

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 - 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.

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	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

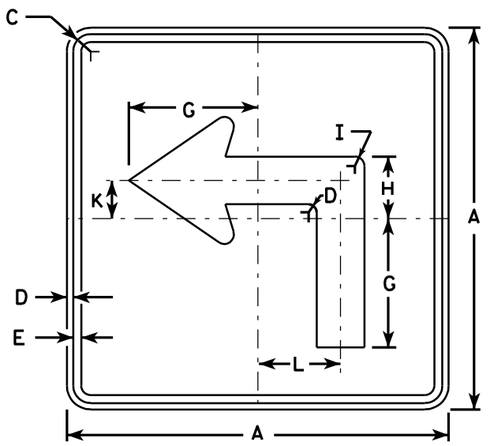
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

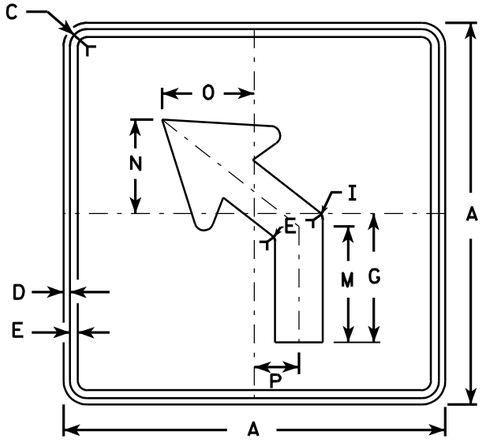
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

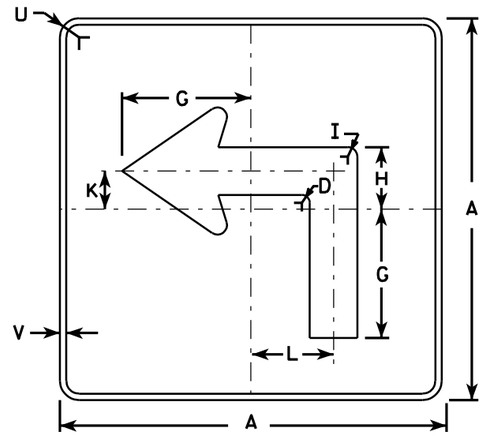
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 45	E



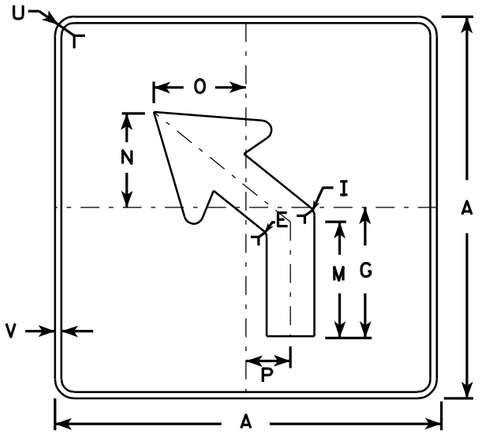
M5-1L
MK5-1L
MM5-1L
MO5-1L
MP5-1L
MR5-1L



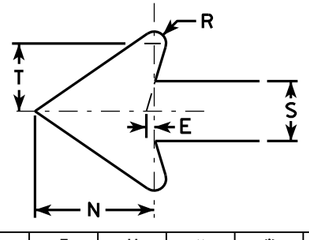
M5-2L
MK5-2L
MM5-2L
MO5-2L
MP5-2L
MR5-2L



MB5-1L
MG5-1L
MN5-1L



MB5-2L
MG5-2L
MN5-2L



NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White - Type H Reflective
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White - Type H Reflective
   MG5-1 and MG5-2 Background - Green
   Message - White - Type H Reflective
   MK5-1 and MK5-2 Background - Green
   Message - White Type H Reflective
   MM5-1 and MM5-2 Background - White - Type H Reflective
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White - Type H Reflective
   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 - Type H Reflective
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

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 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

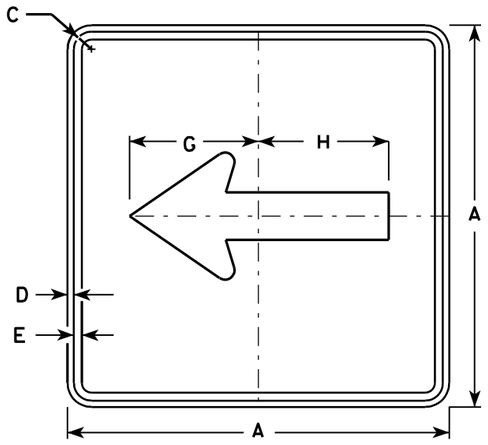
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

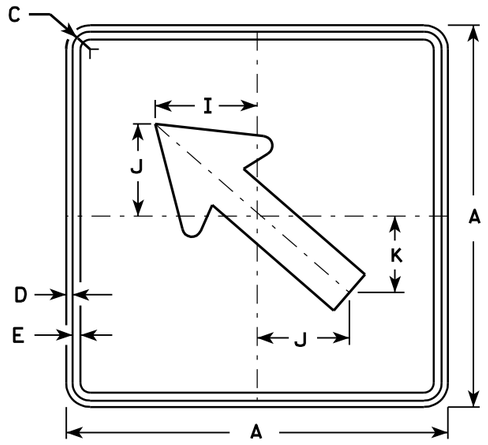
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/29/13 PLATE NO. M5-1.12

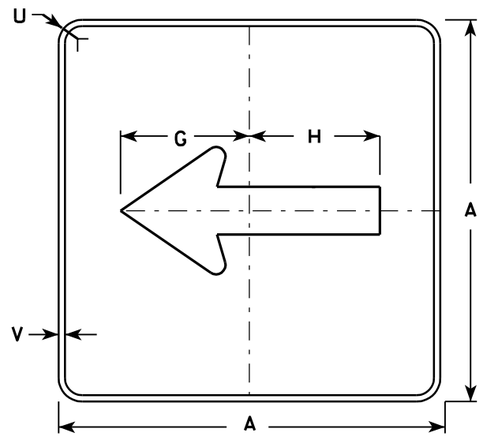
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 46 | E



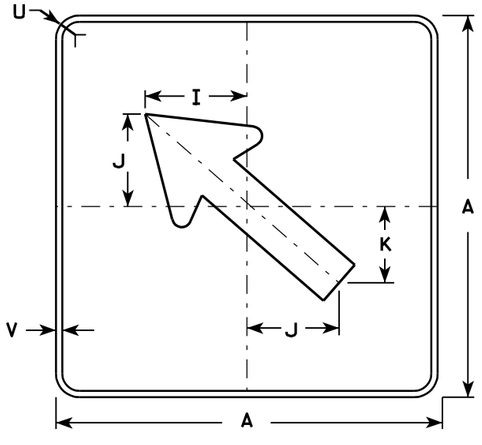
M6-1
MK6-1
MM6-1
MO6-1
MP6-1
MR6-1



M6-2
MK6-2
MM6-2
MO6-2
MP6-2
MR6-2



MB6-1
MG6-1
MN6-1



MB6-2
MG6-2
MN6-2

NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White - Type H Reflective
   Message - Black

   MB6-1 and MB6-2 Background - Blue
   Message - White - Type H Reflective

   MG6-1 and MG6-2 Background - Green
   Message - White - Type H Reflective

   MK6-1 and MK6-2 Background - Green
   Message - White - Type H Reflective

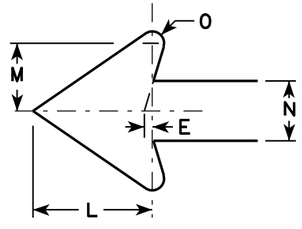
   MM6-1 and MM6-2 Background - White - Type H Reflective
   Message - Green

   MN6-1 and MN6-2 Background - Brown
   Message - White - Type H Reflective

   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black

   MP6-1 and MP6-2 Background - White - Type H Reflective
   Message - Blue

   MR6-1 and MR6-2 Background - Brown
   Message - White - Type H 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	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

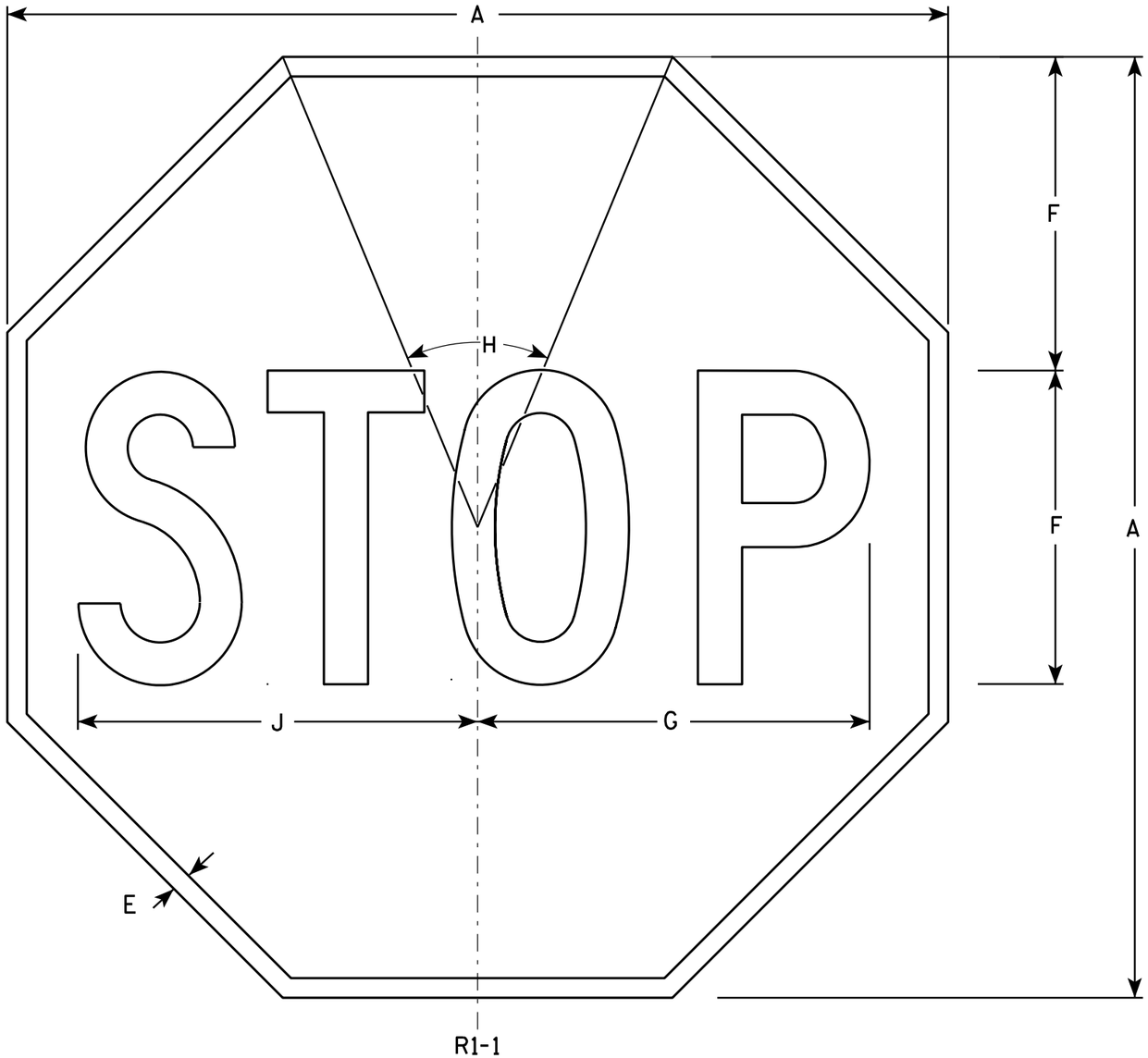
STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/29/13 PLATE NO. M6-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 47	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	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

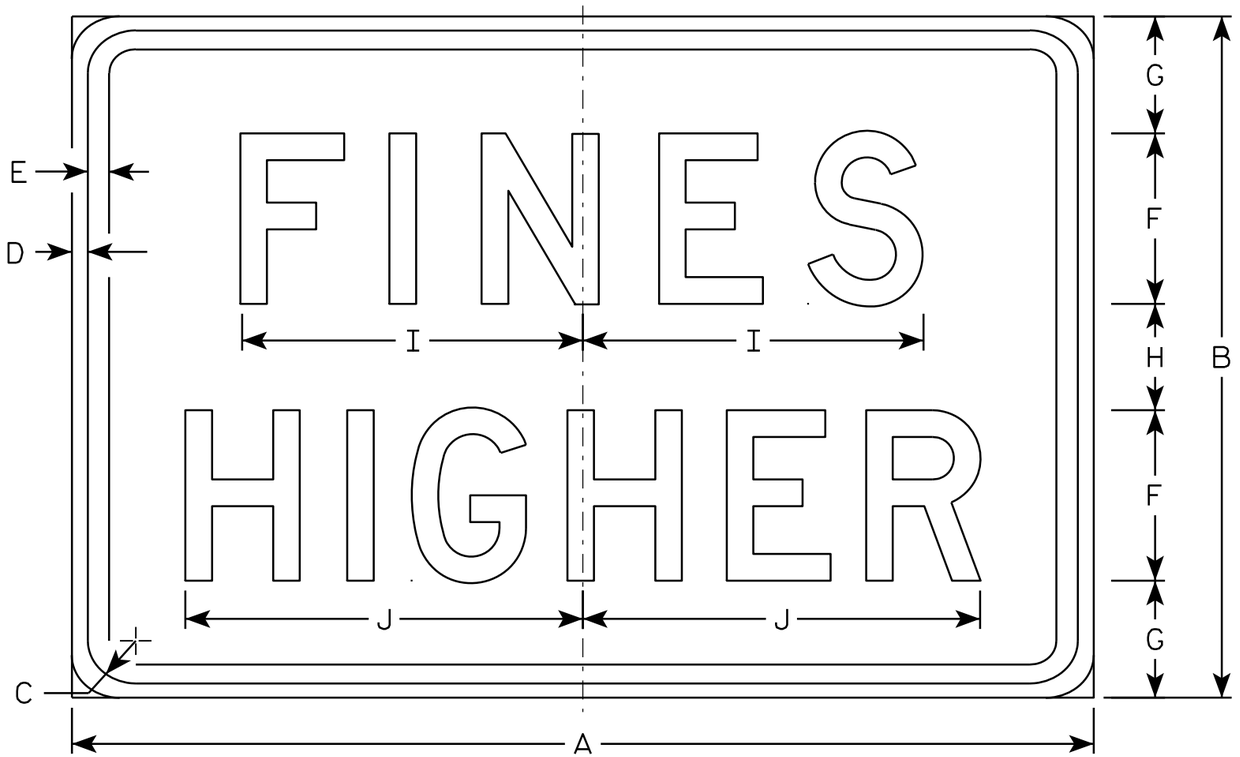
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 48	E



R2-6P

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
2M	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
3	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
4	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
5	48	36	1 3/8	1/2	5/8	8	7	6	15 1/8	19																	12.0

STANDARD SIGN
R2-6P

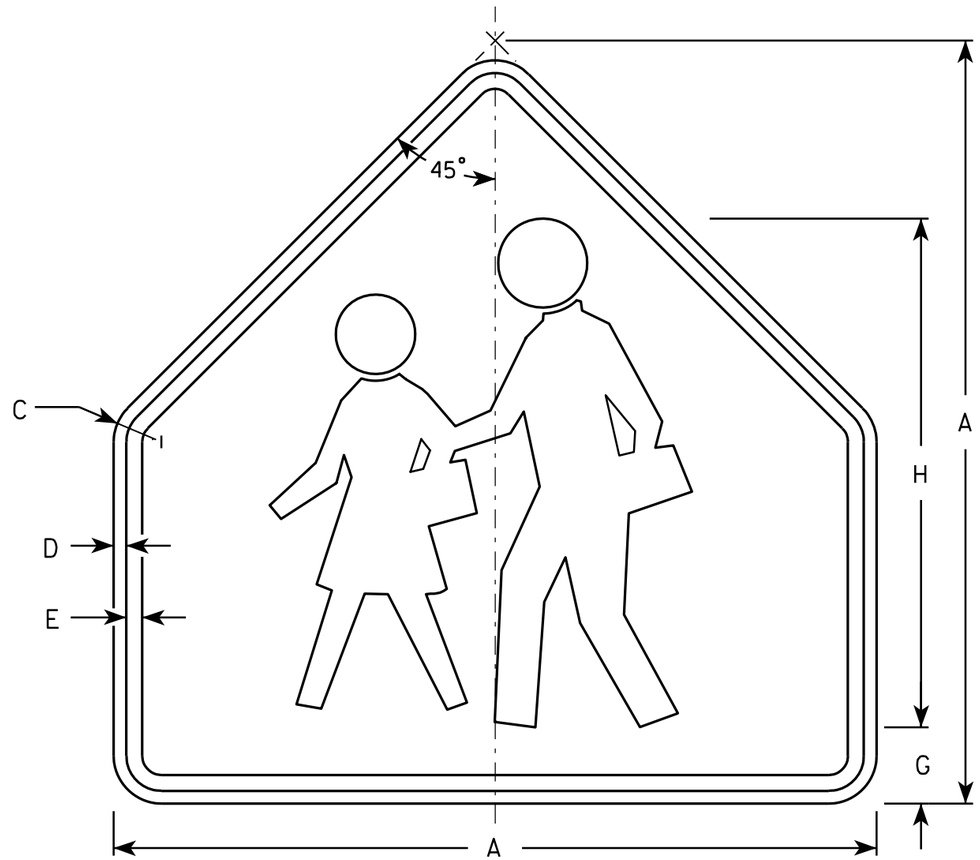
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/10 PLATE NO. R2-6P.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 49 | E

7



S1-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow-Green
   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	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

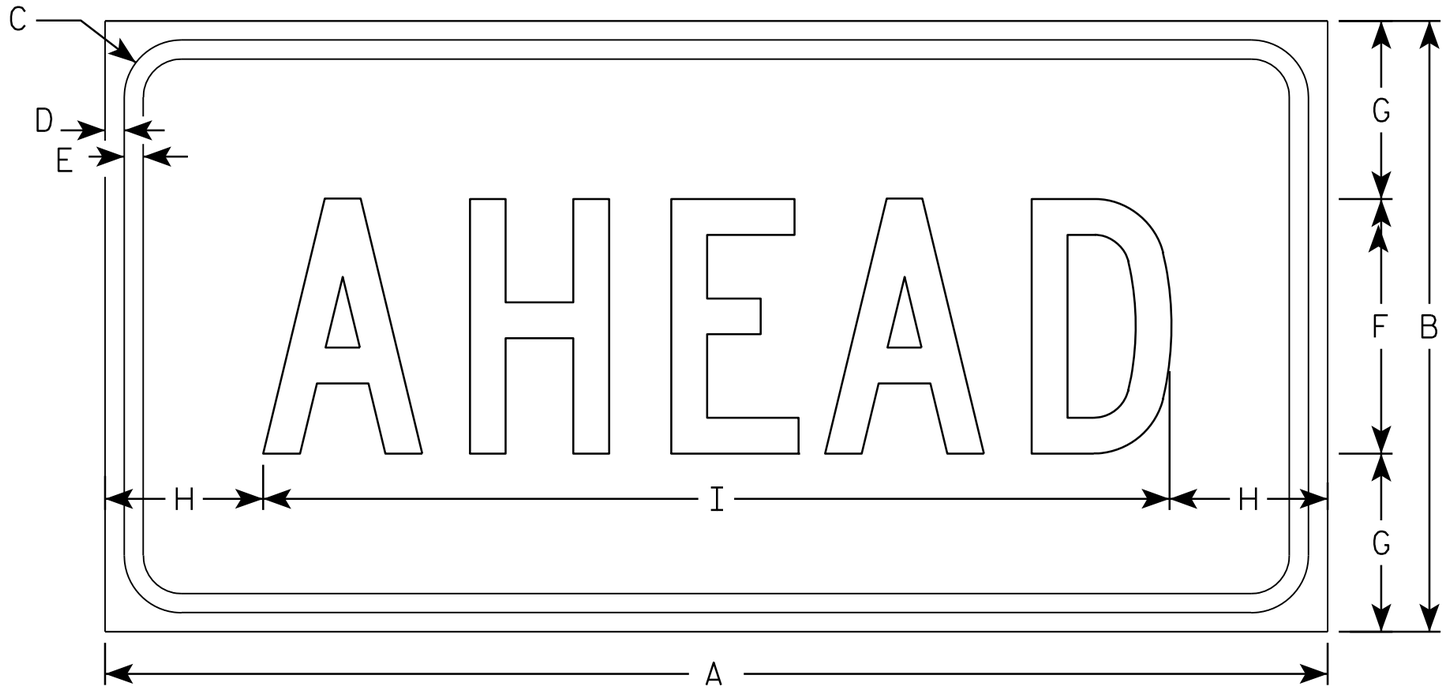
STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/05 PLATE NO. S1-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 50	E



S16-9P

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2S	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

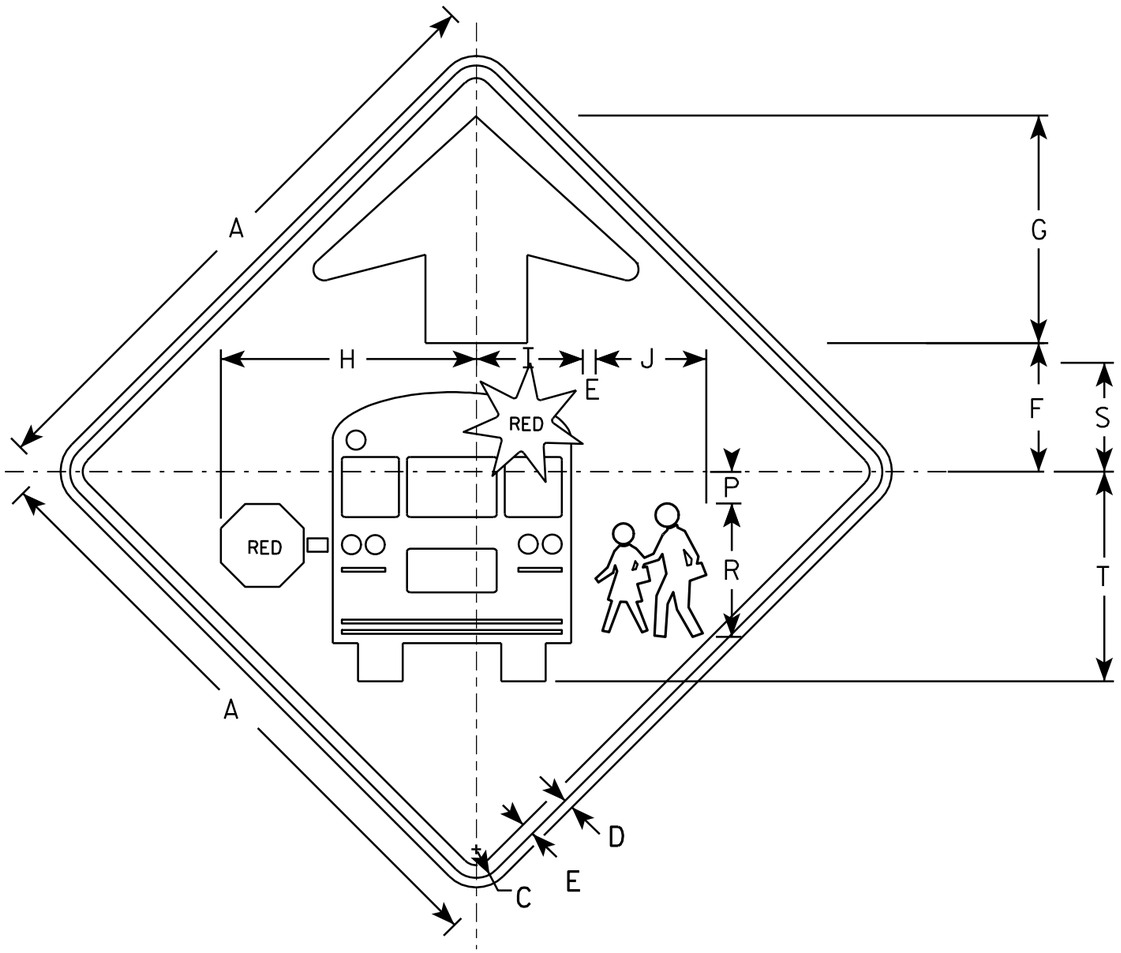
STANDARD SIGN
S16-9P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-9P.1

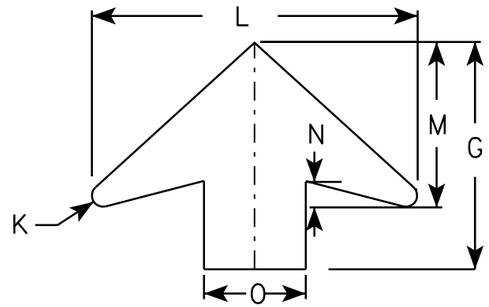
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 51 | E



S3-1

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-GREEN
   Message - BLACK except as noted
   Circles except PEDS- RED BACKGROUND
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.



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	12 1/2	5 1/4	5 1/2	1/2	16	8	1 1/4	5	1 1/2		6 5/8	5 3/8	10 3/8							6.25
2	36		1 5/8	5/8	3/4	7 1/2	13 1/2	15 1/8	6 1/4	6 1/2	5/8	19 1/4	9 3/4	1 5/8	6	1 7/8		7 7/8	6 3/8	12 3/8							9.0
3	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
4	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
5																											

STANDARD SIGN
S3-1

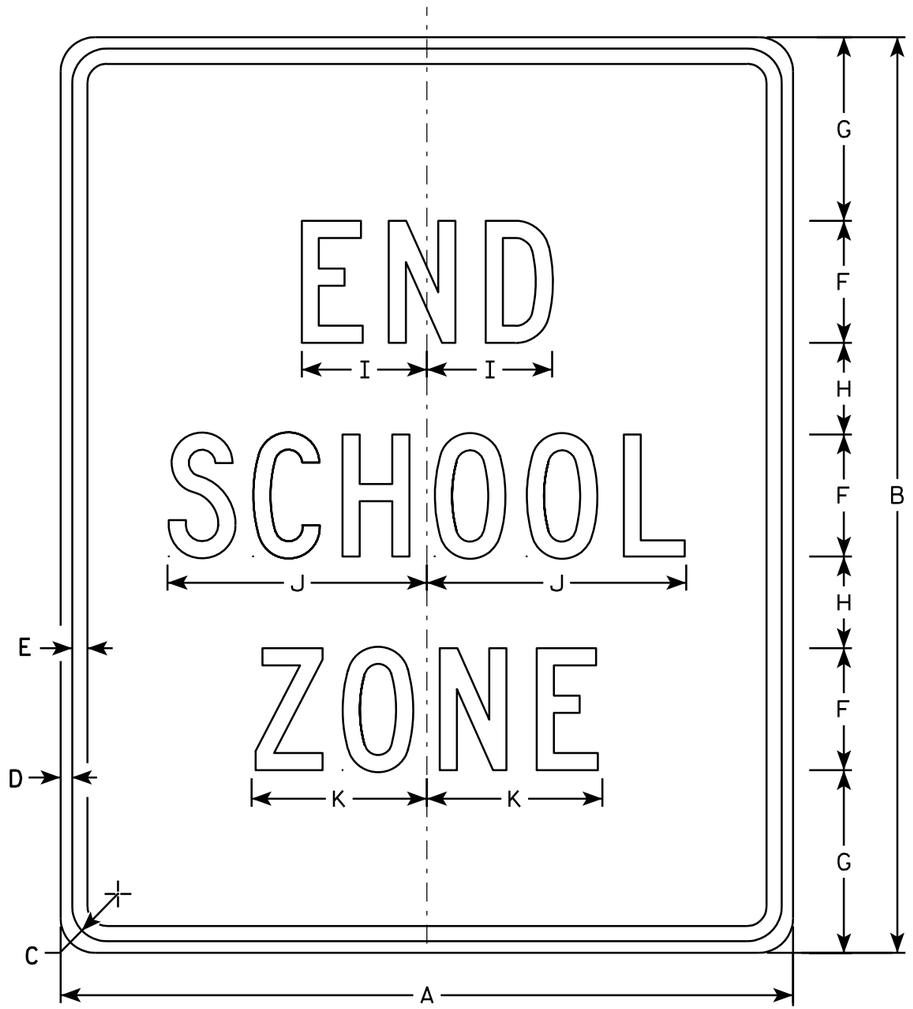
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/8/10 PLATE NO. S3-1.6

PROJECT NO:

SHEET NO: 52 E



S5-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - 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	30	1 1/8	3/8	1/2	4	6	3	4 1/8	8 1/2	5 3/4																5.0
3	36	42	1 5/8	5/8	3/4	6	7	5	6 1/8	12 5/8	8 5/8																10.5
4																											
5																											

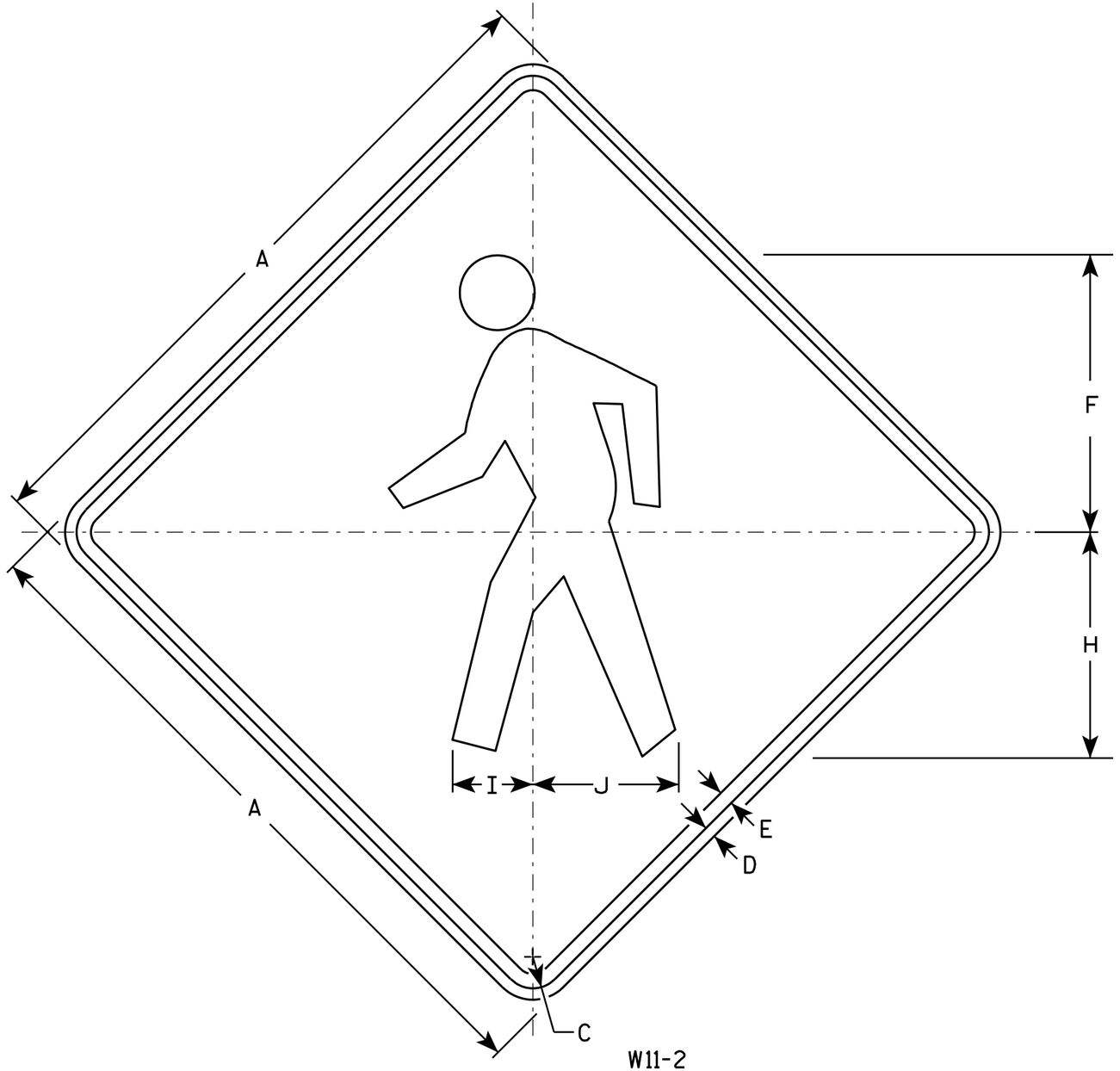
STANDARD SIGN
S5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/8/11 PLATE NO. S5-2.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 53 | E



W11-2

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

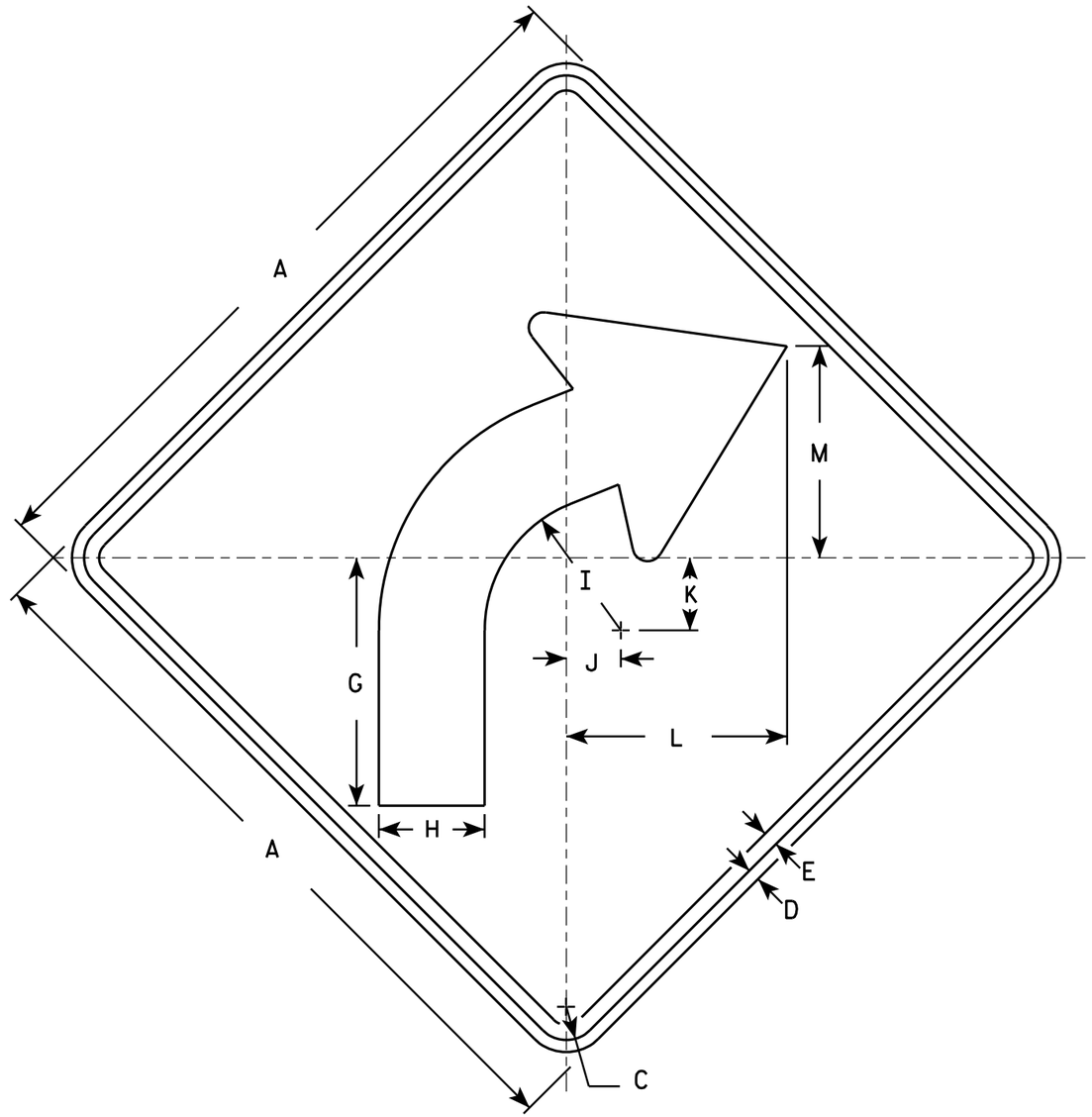
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W11-2.7

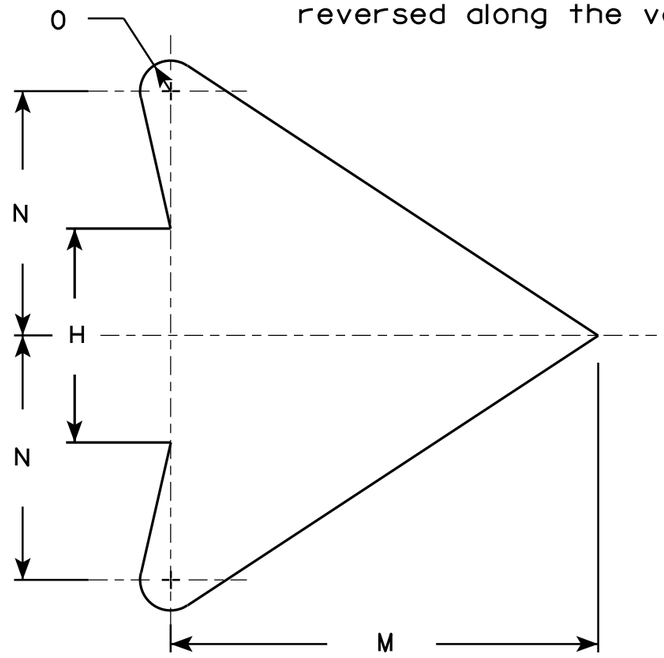
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 54	E

NOTES

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



W1-2R



ARROW DETAIL

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

STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

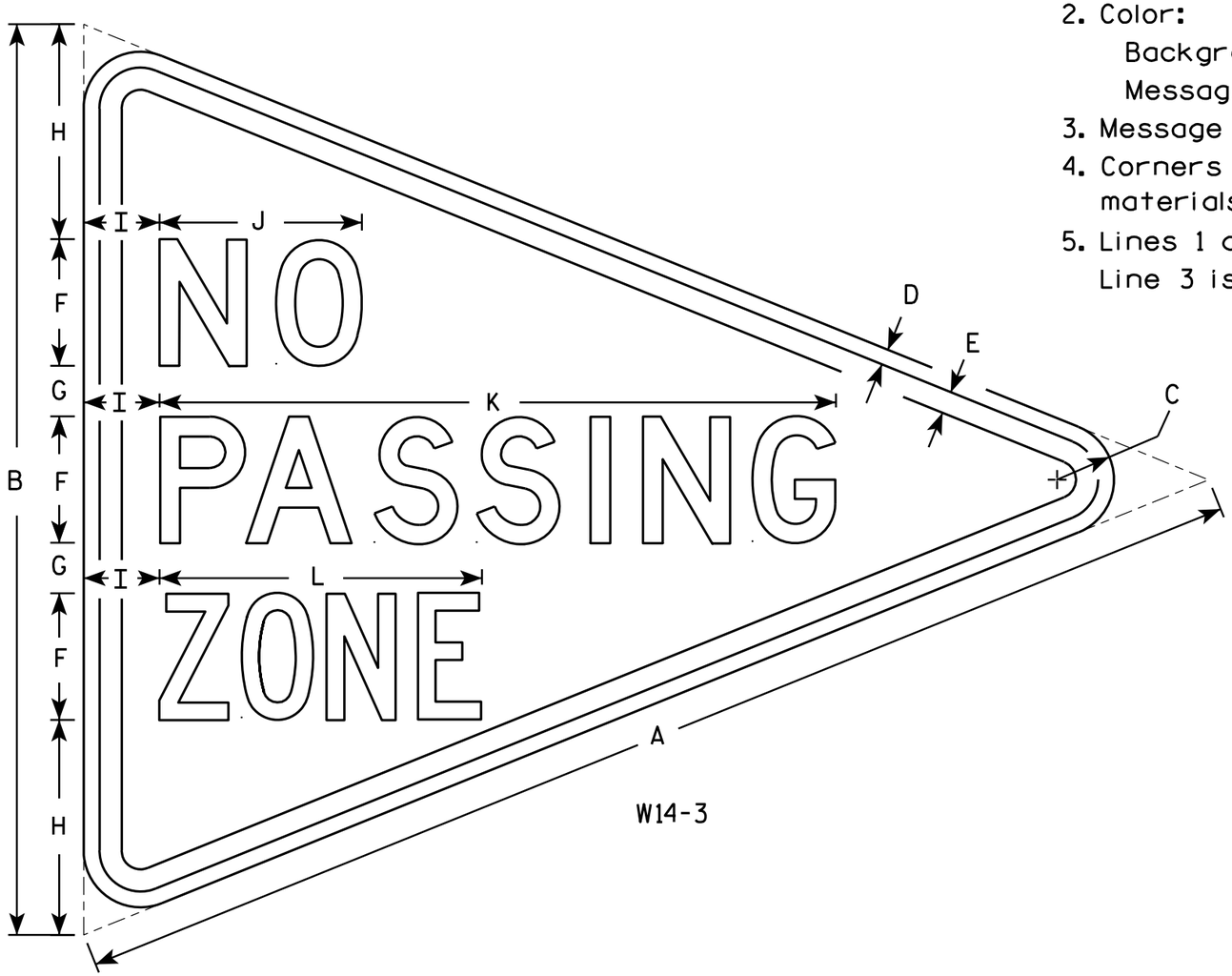
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 55	E

NOTES

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



W14-3

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

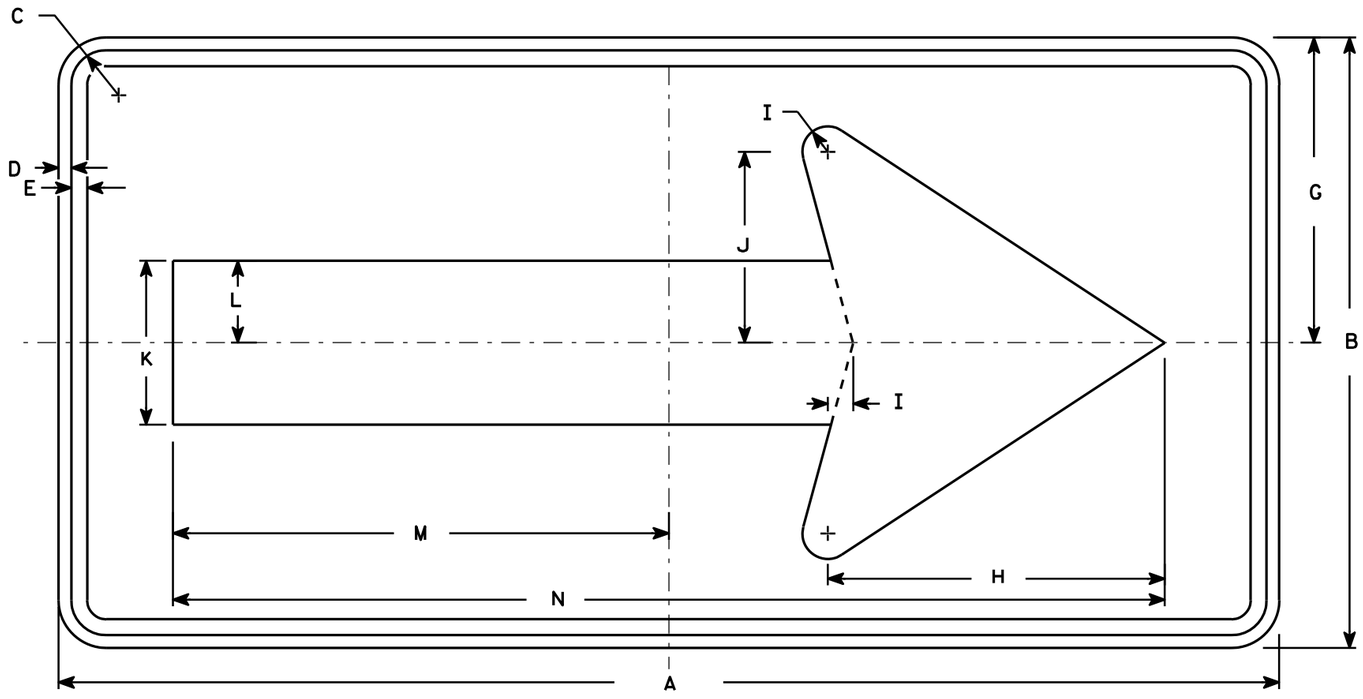
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 56	E



W1-6

NOTES

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

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

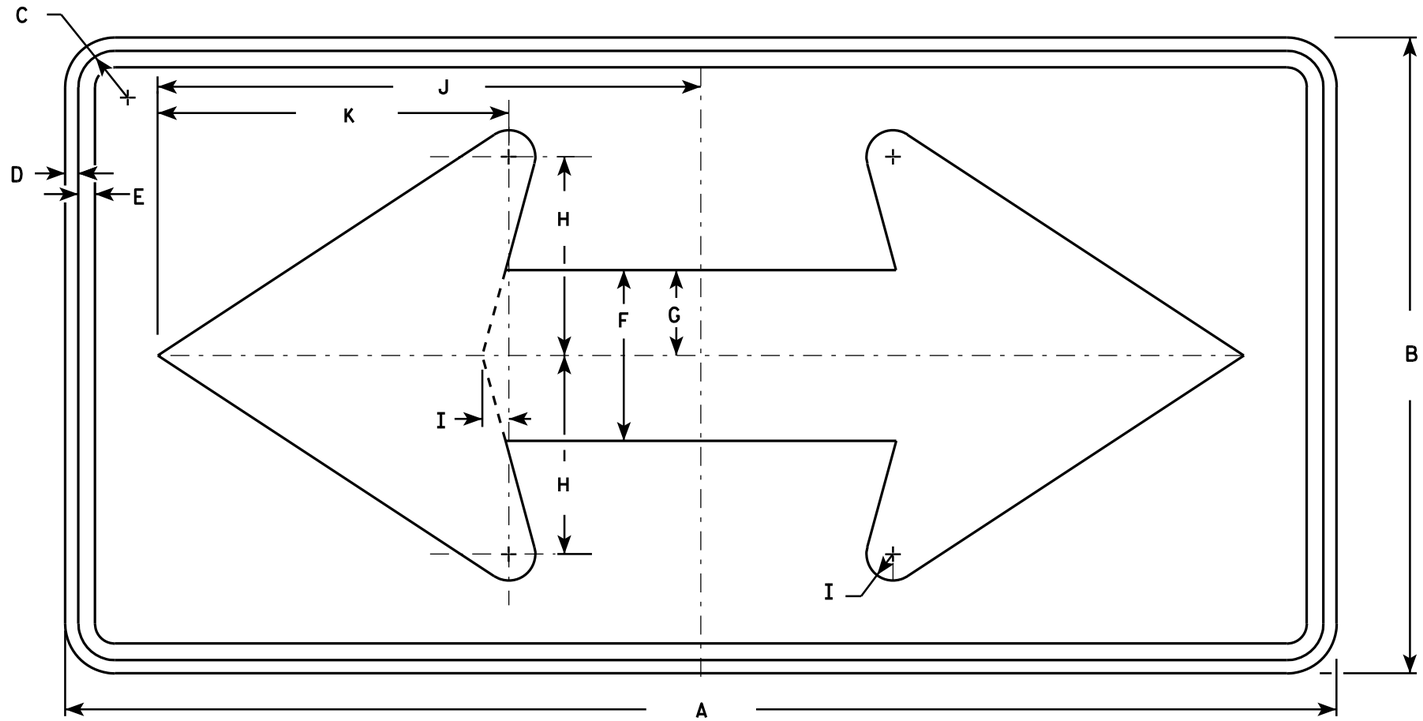
STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-6.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 57



W1-7

NOTES

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

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

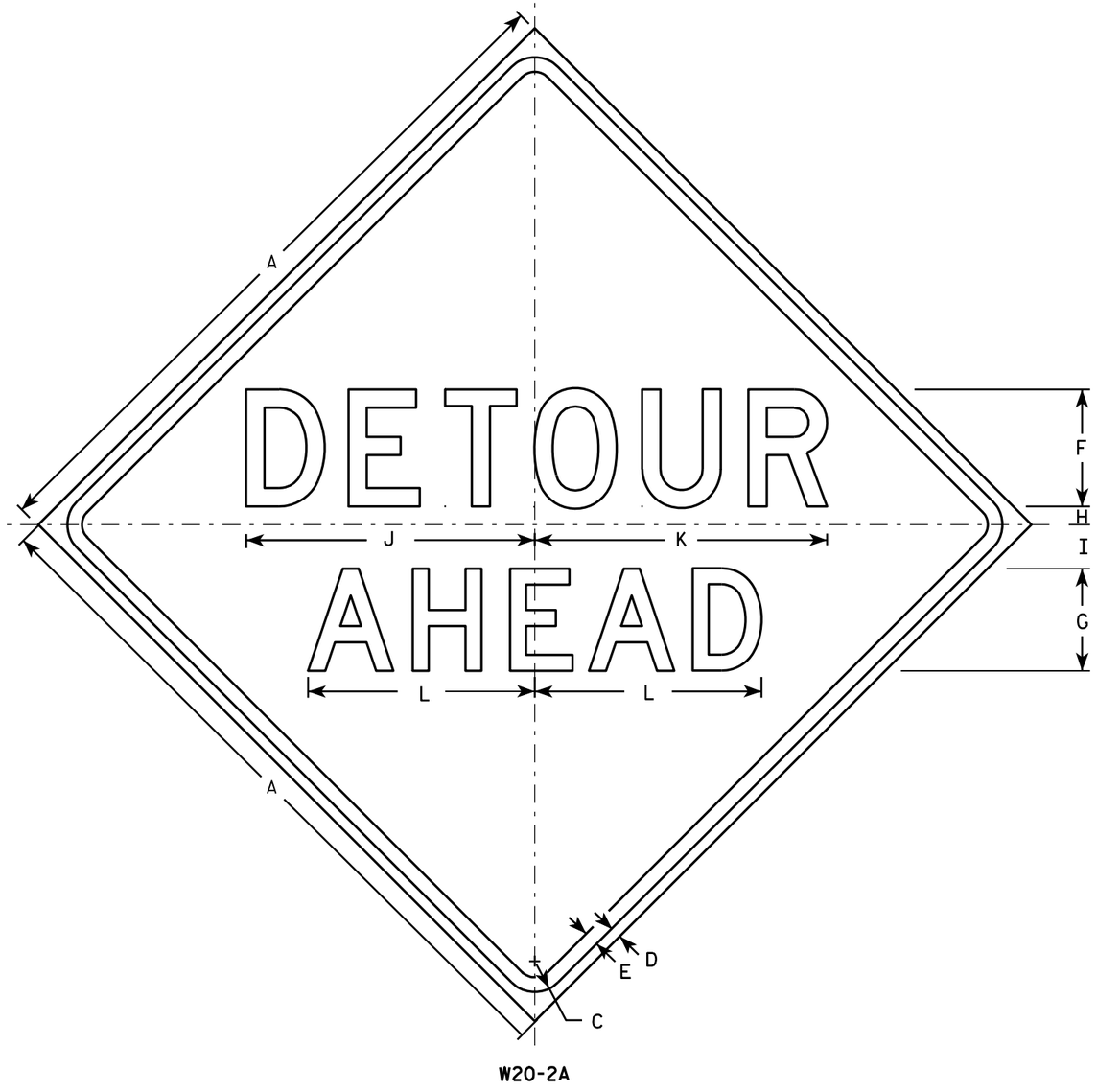
STANDARD SIGN
W1-7

WISCONSIN DEPT OF TRANSPORTATION

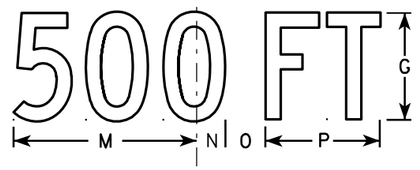
APPROVED Matthew R Rauch
for State Traffic Engineer

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

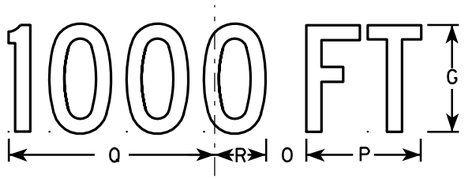
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 58 | E



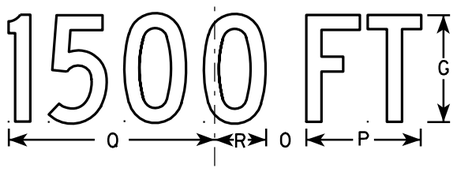
W20-2A



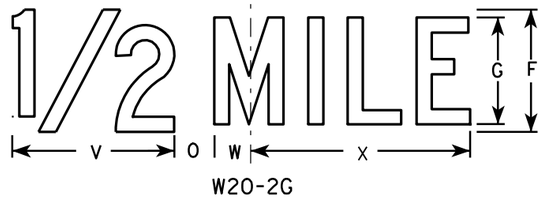
W20-2D



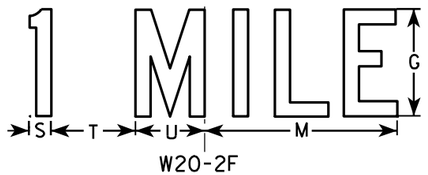
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

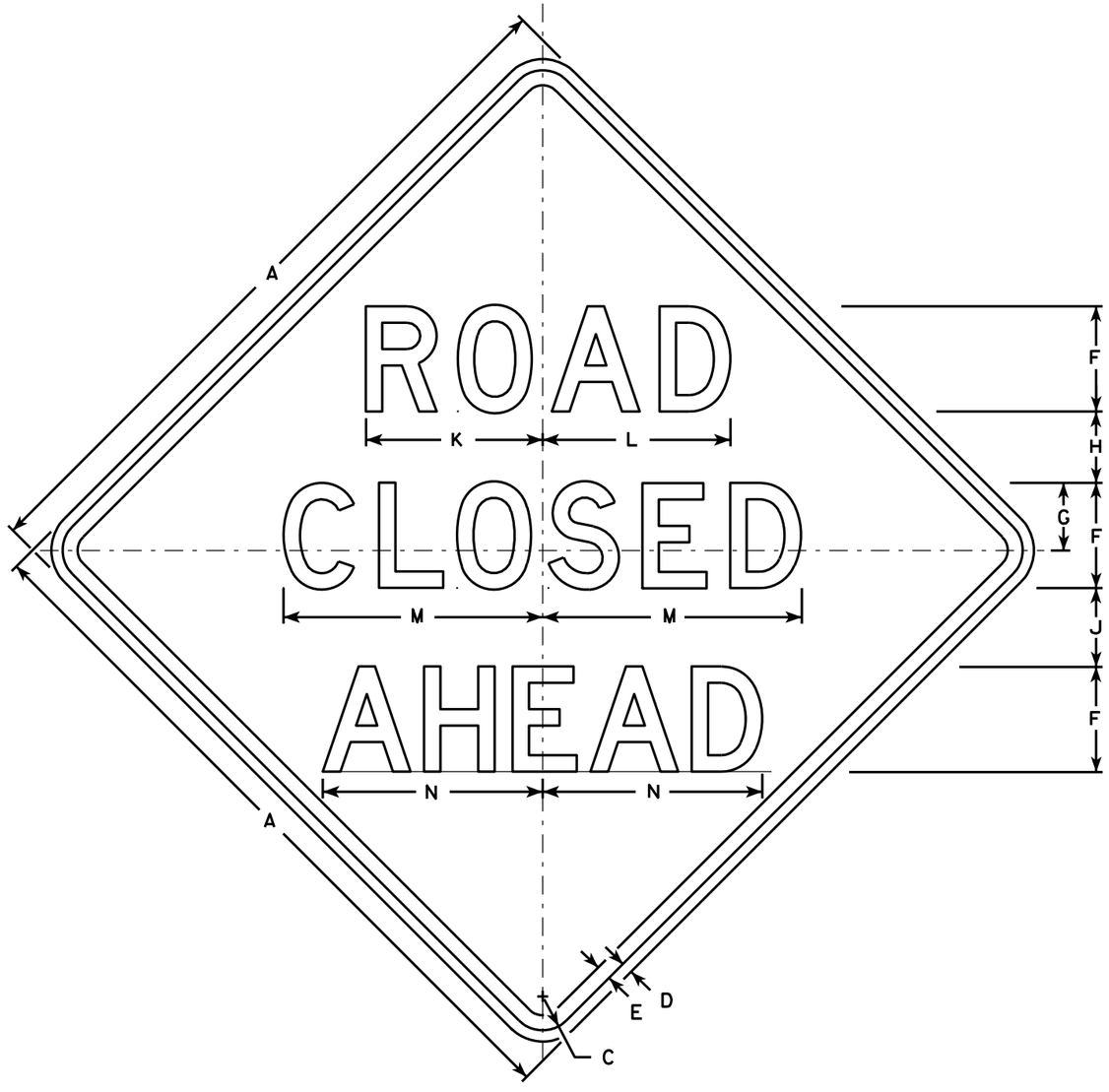
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

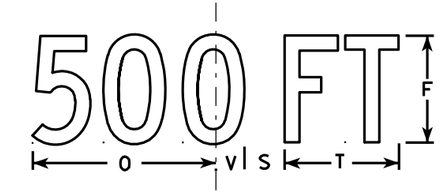
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 59 | E

7

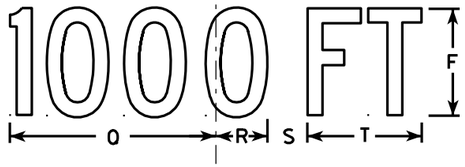
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W202.DGN PLOT DATE : 18-MAR-2011 10:00 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



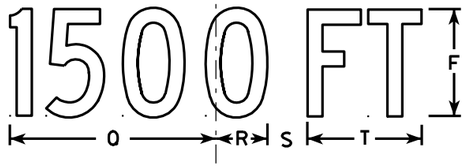
W20-3A



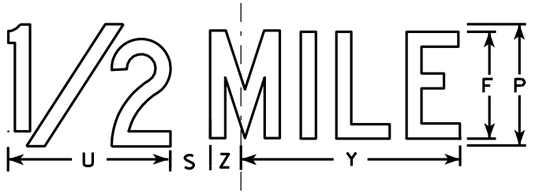
W20-3D



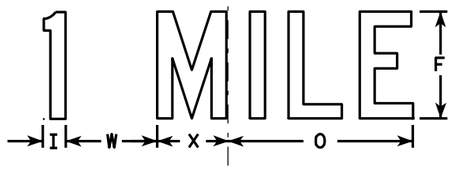
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

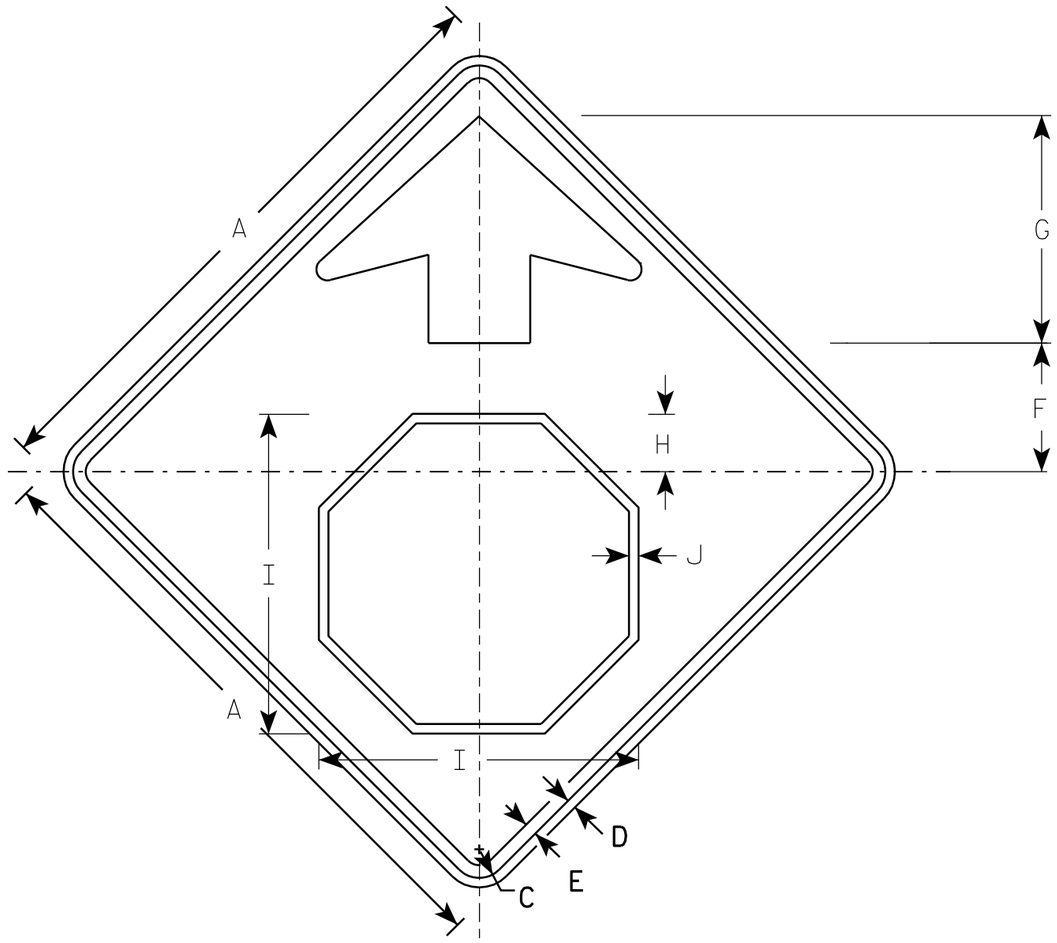
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

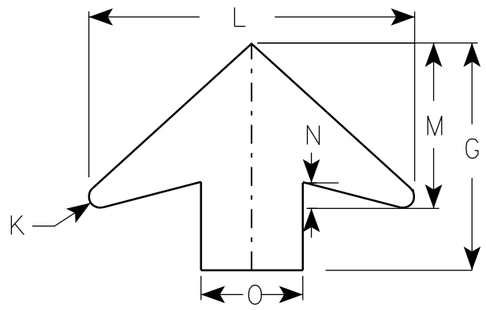
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 60 | E



W3-1

NOTES

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



ARROW DETAIL

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

STANDARD SIGN
W3-1

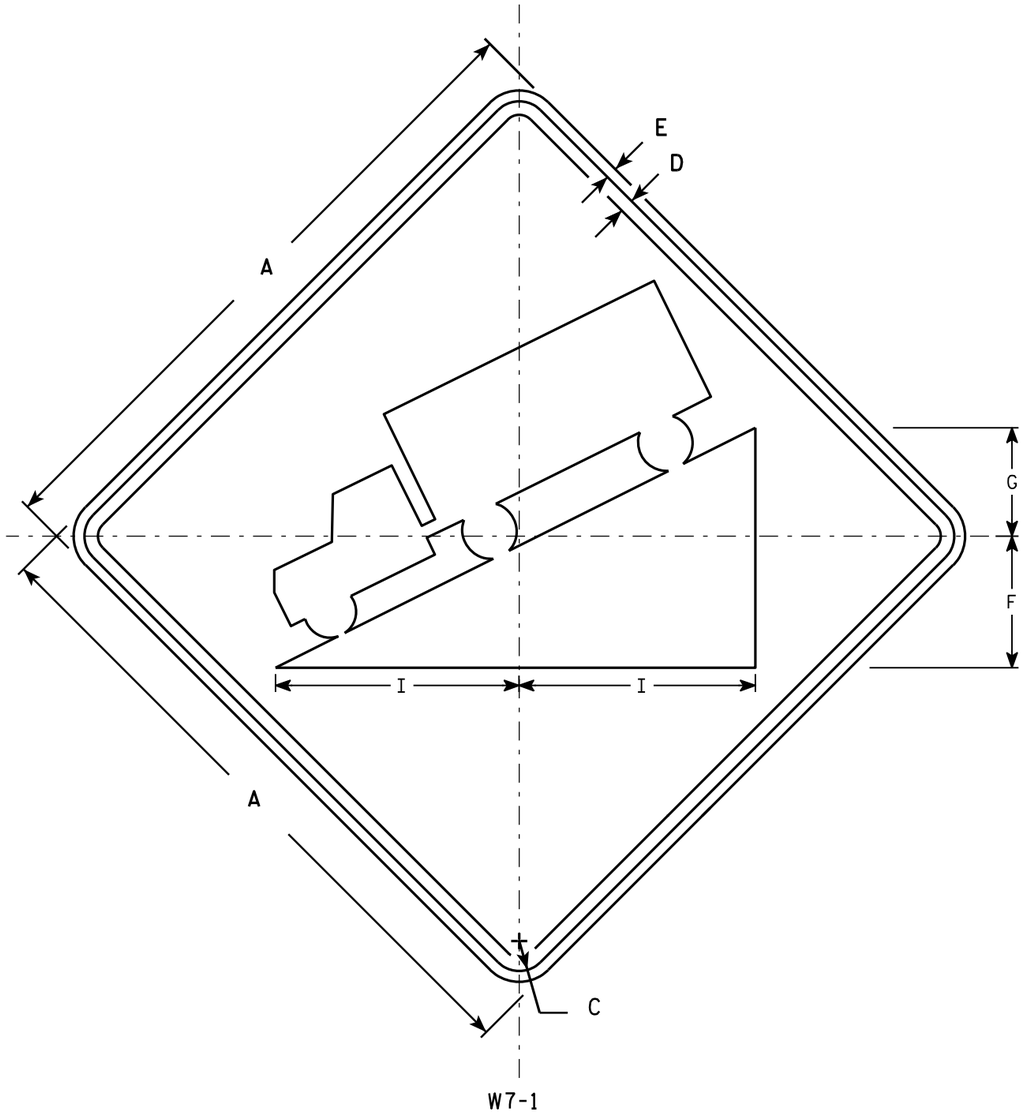
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 61 E



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	3/8	5	4		8 3/4																		4.0
2S	30		1 3/8	1/2	5/8	6	5		11																		6.25
2M	36		1 5/8	5/8	3/4	7 1/4	6		13 1/4																		9.0
3	36		1 5/8	5/8	3/4	7 1/4	6		13 1/4																		9.0
4	36		1 5/8	5/8	3/4	7 1/4	6		13 1/4																		9.0
5	48		2 1/4	3/4	1	9 3/4	8		17 1/2																		16.0

STANDARD SIGN
W7-1

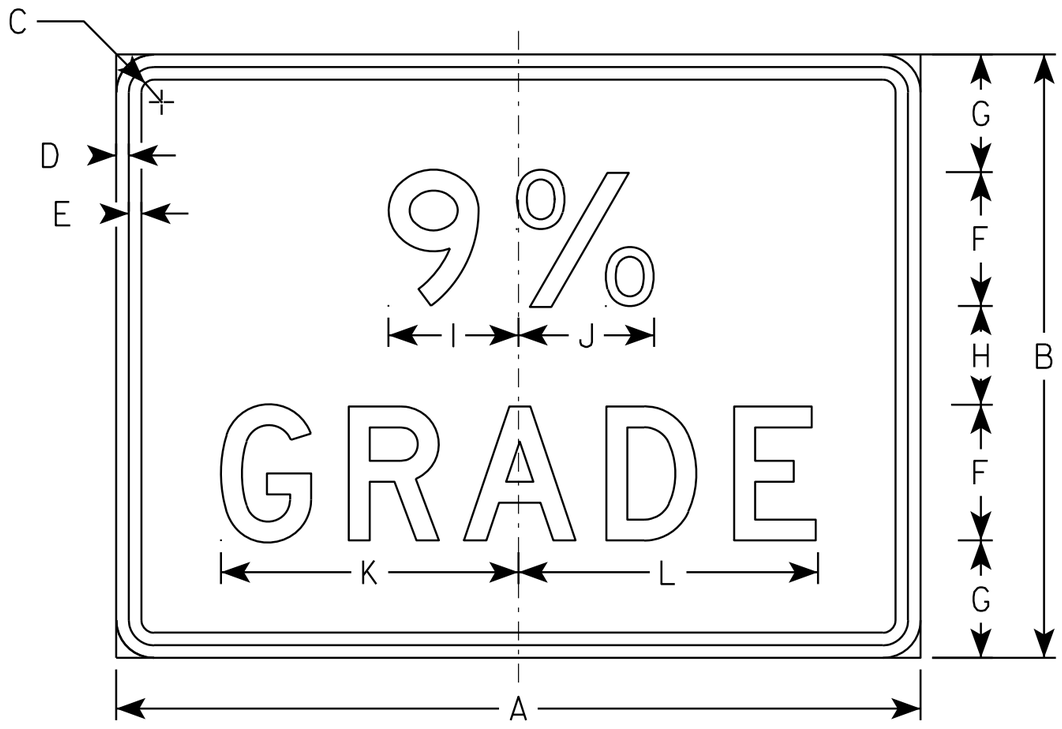
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W7-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 62	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W71.DGN PLOT DATE : 12-MAR-2013 14:38 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.946657:1.000000
WISDOT/CADDS SHEET 42



W7-3

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Substitute appropriate numeral 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																											
2S	24	18	1 1/8	3/8	3/8	4	3 1/2	3	3 7/8	4	8 7/8	9															3.0
2M	24	18	1 1/8	3/8	3/8	4	3 1/2	3	3 7/8	4	8 7/8	9															3.0
3																											
4																											
5																											

STANDARD SIGN
W7-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W7-3.4

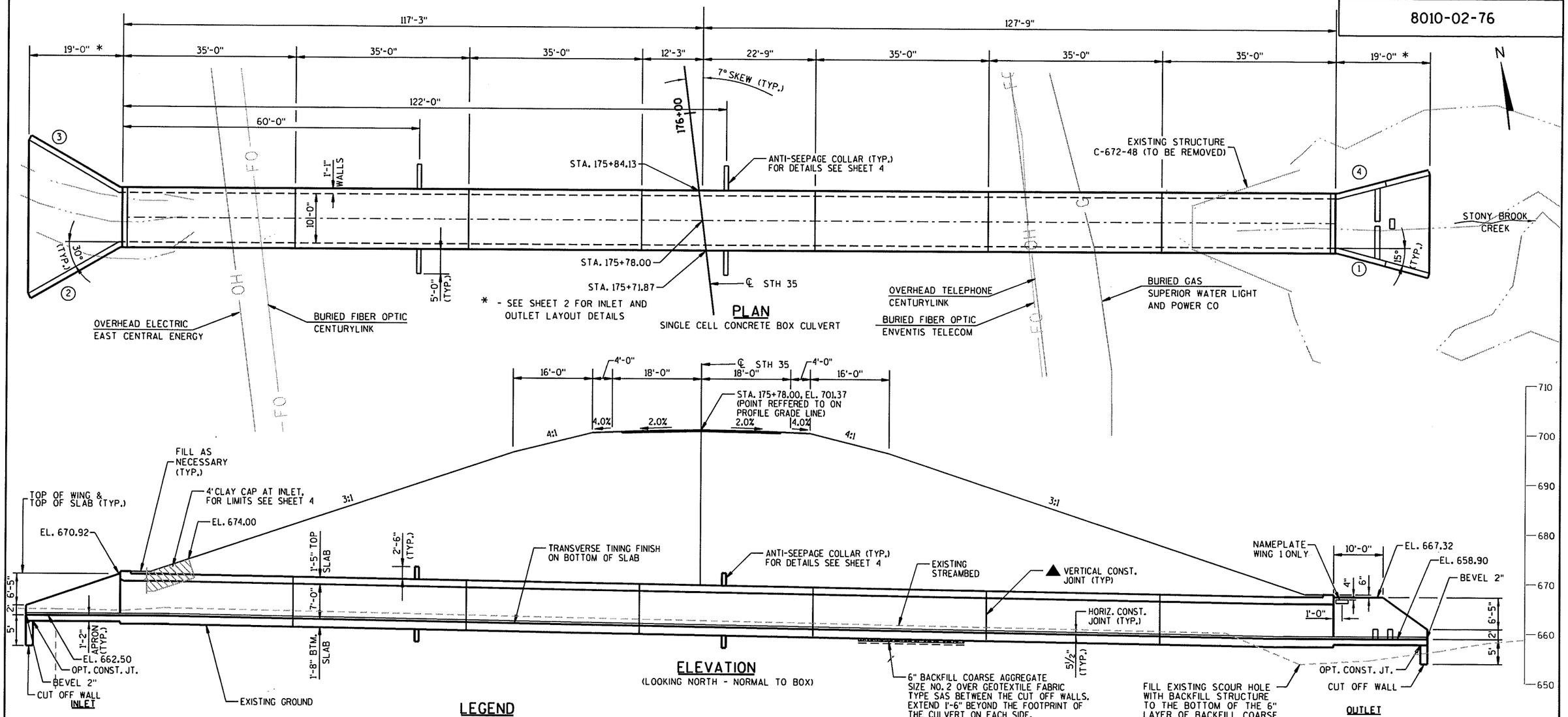
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 63 | E

7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W73.DGN PLOT DATE : 12-MAR-2013 14:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 4.521529:1.000000

STATE PROJECT NUMBER

8010-02-76



BENCHMARKS				
NO.	STATION	OFFSET	DESCRIPTION	ELEV.
139	175+66.9	116.4' LT	4" BRASS DISK IN CONC. USGS	671.23

LEGEND

◯ – INDICATES WING NUMBER

▲ – 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING UP WALLS AND ACROSS TOP SLAB.

DESIGN DATA

LIVE LOAD:
- DESIGN LOAD : HL-93
- INVENTORY RATING FACTOR : 1.05
- OPERATIONAL RATING FACTOR : 1.35
- WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) : 255 KIPS

TRAFFIC DATA:
- A.D.T. (2014) = 5550
- A.D.T. (2034) = 6650
- R.D.S. = 55 MPH

EARTH LOAD:
- DESIGNED FOR 33'-0" OF FILL

ULTIMATE DESIGN STRESSES:
- CONCRETE MASONRY ——— f'c = 3,500 P.S.I.
- BAR STEEL REINFORCEMENT ——— fy = 60,000 P.S.I.

HYDRAULIC DATA

100 YEAR FREQUENCY

DRAINAGE AREA = 1.9 SQ. MI
Q_{100} = 680 C.F.S.
VEL MAX. = 13.0 F.P.S.
VEL. OUTLET = 6.84 F.P.S.
HIGH $WATER_{100}$ ELEVATION = EL. 671.24
OVERTOPPING RDWAY. = N.A.
SCOUR CODE = 8

2 YEAR FREQUENCY

Q_2 = 170 C.F.S.
HIGH $WATER_2$ ELEVATION = EL. 666.68

LIST OF DRAWINGS

1. GENERAL PLAN
2. NOTES, QUANTITIES & DETAILS
3. BOX CULVERT SECTIONS & DETAILS
4. ANTI-SEEPAGE COLLAR & CULVERT DETAILS
5. INLET APRON & WING DETAILS
6. OUTLET APRON & WING DETAILS
7. SUBSURFACE EXPLORATION

DESIGN CONTACT:
MARK HARNOIS
(608) 242-6630

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608) 266-8489

WISCONSIN
MARK L. HARNOIS
E-19330
BARABOO, WIS.
PROFESSIONAL ENGINEER

Mark Harnois
11-25-2013

NO.	DATE	REVISION	BY

MSA PROFESSIONAL SERVICES
TRANSPORTATION • MUNICIPAL DEVELOPMENT • ENVIRONMENTAL
1230 South Boulevard Baraboo, WI 53913
608-356-2771 1-800-362-4505 Fax: 608-356-2770

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 02/19/14
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE C-16-0051

STH 35 OVER STONY BROOK CREEK

COUNTY	TOWN/~~CITY/VILLAGE~~
DOUGLAS	SUPERIOR

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
MLH	JRS	CAR	LJR

GENERAL PLAN

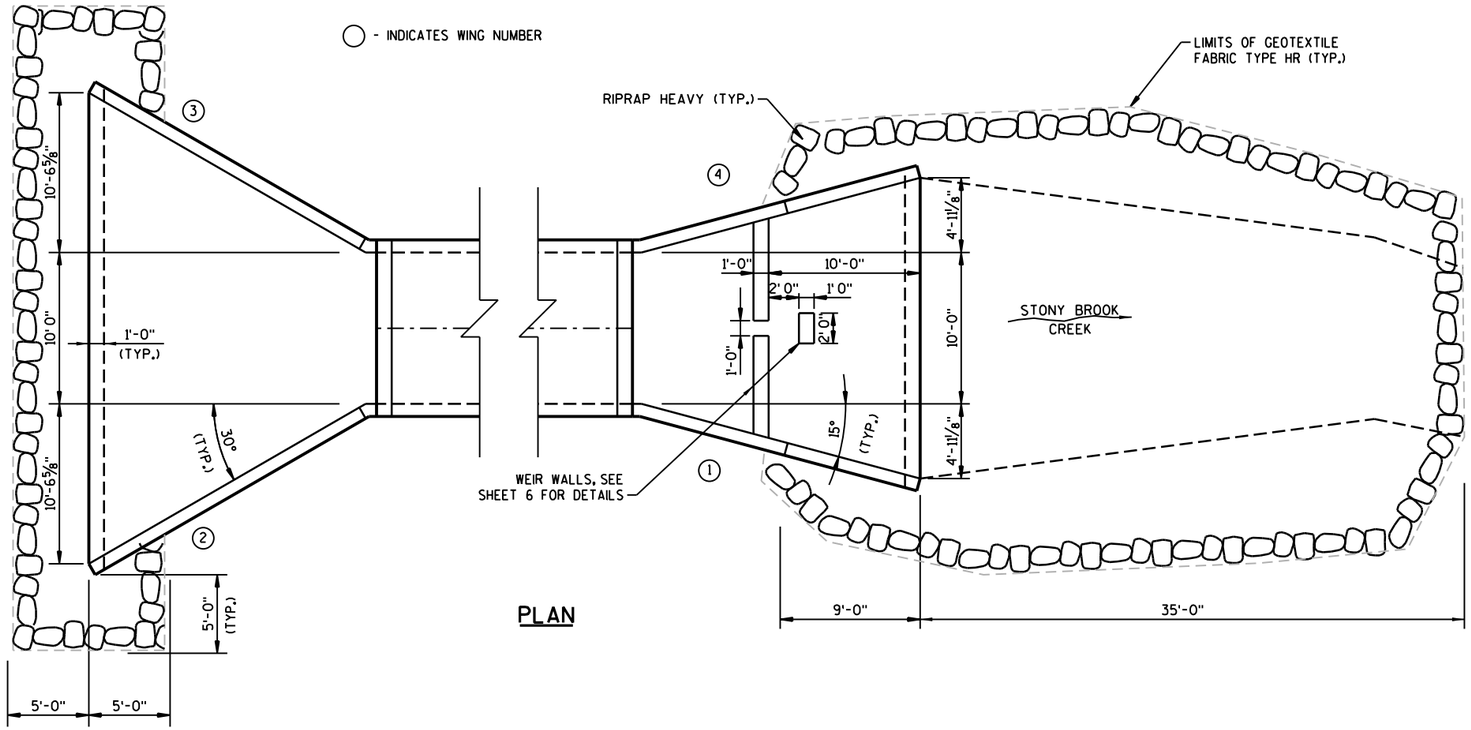
SHEET 64 OF 7

FILE= 93189_01.DGN
DATE= 11/25/2013

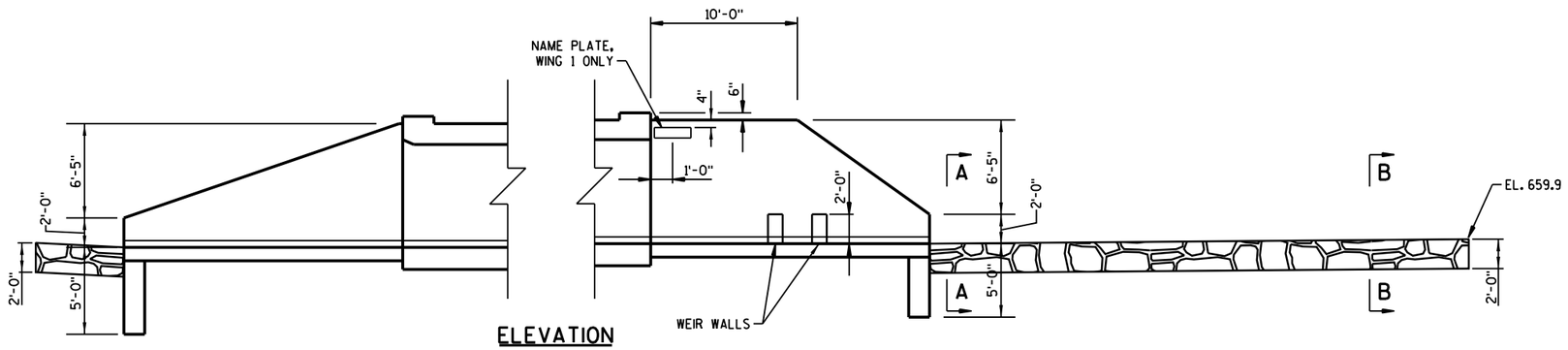
93189_01.dgn 11/25/2013 11:26:46 AM lmoates

STATE PROJECT NUMBER

8010-02-76



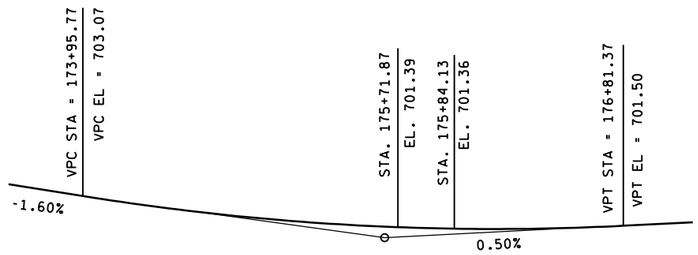
PLAN



ELEVATION

INLET

OUTLET



VPI STA = 175+38.57
VPI EL = 700.78
CURVE LEN = 285.60
K = 136.00

PROFILE GRADE LINE STH 35

APRON LAYOUT DETAILS

ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNITS	AMOUNT
203.0200	REMOVING OLD STRUCTURE STATION 175+78	LS	1
206.2000	EXCAVATION FOR STRUCTURES CULVERTS (C-16-0051)	LS	1
209.0300.S	BACKFILL COARSE AGGREGATE SIZE NO. 2	CY	85
✳ 210.0100	BACKFILL STRUCTURE	CY	3100
504.0100	CONCRETE MASONRY CULVERTS	CY	554
505.0410	BAR STEEL REINFORCEMENT HS CULVERTS	LB	82,530
505.0610	BAR STEEL REINFORCEMENT HS COATED CULVERTS	LB	2350
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	63
606.0300	RIPRAP HEAVY	CY	100
645.0120	GEOTEXTILE FABRIC TYPE HR	SY	215
645.0140	GEOTEXTILE FABRIC TYPE SAS	SY	635

NON-BID ITEMS

FILLER	¾" SIZE
PVC WATERSTOP	6-INCH

✳ BACKFILL STRUCTURE QUANTITY INCLUDES 300 CY OF NATIVE HEAVY CLAY MATERIAL.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST DIGIT OF A THREE DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

THE CONCRETE IN THE CUT OFF WALL MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

THE ALTERNATE CUT OFF WALL MAY BE USED IN LIEU OF THE CAST IN PLACE CUT OFF WALLS. PAYMENT SHALL BE BASED ON CONCRETE CUT OFF WALLS.

THIS STRUCTURE WILL REPLACE THE EXISTING STRUCTURE, C-672-48, A SINGLE CELL CONCRETE BOX CULVERT.

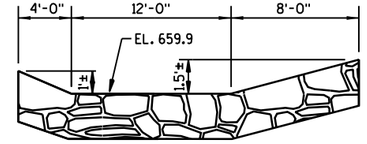
THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS (C-16-0051)" SHALL BE THE EXISTING GROUND LINE. SEE STRUCTURE BACKFILL DETAIL ON SHEET 4 FOR LIMITS OF EXCAVATION AND BACKFILL STRUCTURE.

A 4' THICK CLAY CAP CONSISTING OF NATIVE HEAVY CLAY MATERIAL SHALL BE USED AT THE INLET ENDS OF STRUCTURE FROM TOE OF SLOPE ELEVATION 662.5 UP TO ELEVATION 674.00. THIS BACKFILL MATERIAL SHALL BE INCLUDED IN THE BID ITEM "BACKFILL STRUCTURE". WHEN PLACING NATVIE HEAVY CLAY MATERIAL, SPECIAL COMPACTION MEASURES SHALL INCLUDE A PAD FOOT ROLLER AS INDICATED IN SUBSECTION 207.3.6 OF THE STANDARD SPECIFICATIONS. SEE SHEET 4 FOR TRANSVERSE LIMITS OF CLAY CAP.

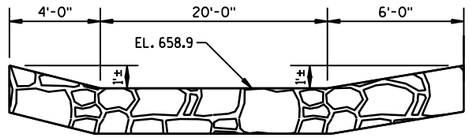
ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO GPS MONUMENT "SUPERIOR C GPS" ELEVATION 703.92, NAVD 88 DATUM.

TRANSVERSELY TINE THE TOP SURFACE OF THE BOTTOM SLAB WITH UNIFORMLY DEEP GROOVES APPROXIMATELY ⅛-INCH TO 3/16-INCH DEEP. PROVIDE A FINSIHED SURFACE FREE OF TINING DEFECTS. USE A RAKE WITH INDIVIDUAL⅛-INCH WIDE TINES SPACED UNIFORMLY ¾-INCHES ON CENTER.

WHEN SPLICING PVC WATERSTOP IN THE FIELD, USE A THERMOSTATICALLY CONTROLLED HEAT IRON. FACTORY MADE SPLICES MAY ALSO BE USED.



SECTION B-B



SECTION A-A

SECTIONS THRU OUTLET RIPRAP

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-16-0051

DRAWN BY CAR | PLANS CK'D. LJR

NOTES, QUANTITIES & DETAILS

SHEET 2 OF 7
65

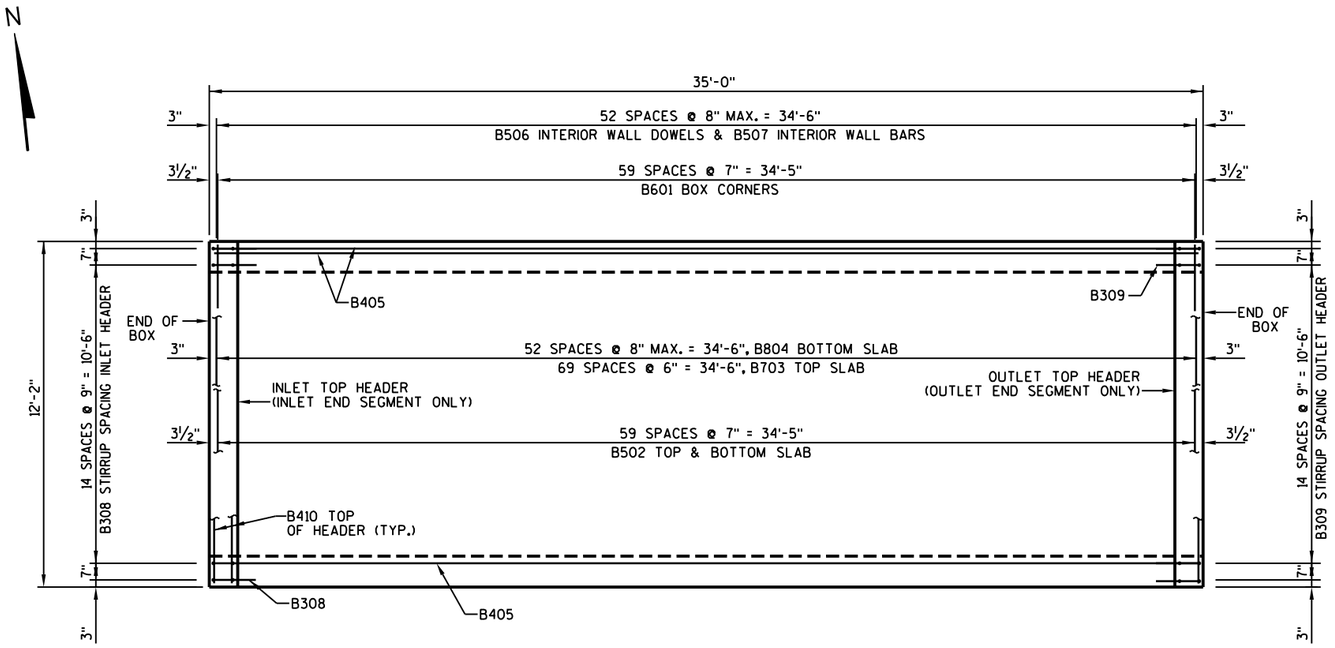
FILE= 93189_02.DGN
DATE= 2/19/2014

8

8

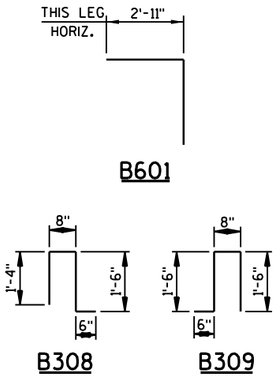
93189_02.dgn 2/19/2014 2:28:42 PM RRABSKA

STATE PROJECT NUMBER
8010-02-76



PLAN VIEW OF BOX

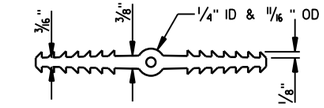
(INLET & OUTLET TOP HEADERS NOT REQUIRED ON MIDDLE BOX SEGMENTS)



BILL OF BARS — UNCOATED 78,630 LBS.

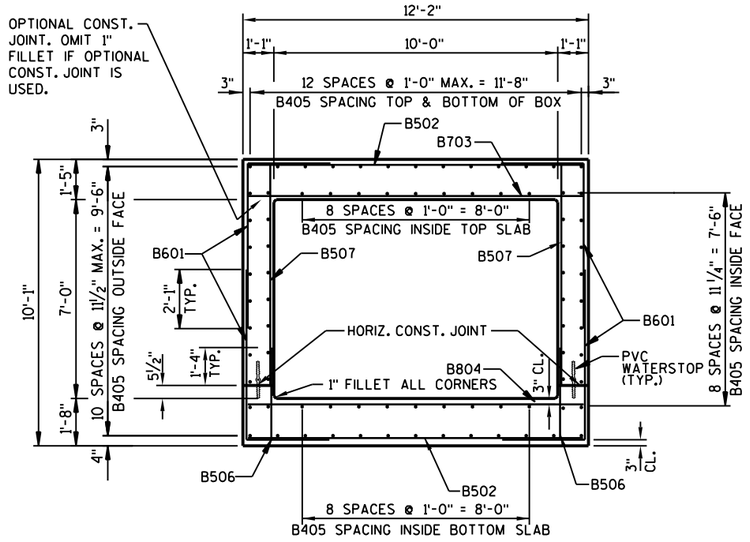
MARK	NO. REQ'D.	LENGTH	BENT	LOCATION	
B601	1680	8-8	X	BOX CORNERS - TOP & BOTTOM	- TRANS.
B502	840	11-10		" SLABS - TOP & BOTTOM	- "
B703	490	11-10		" " - TOP	- "
B804	371	11-10		" " - BOTTOM	- "
B405	560	34-6		" SLABS & WALLS	- LONGIT.
B506	742	3-3		" WALLS - DOWEL	- VERT.
B507	742	8-2		" "	- "
B308	17	3-9	X	" INLET HEADER - STIRRUP	- VERT.
B309	17	3-11	X	" OUTLET " "	- "
B410	4	11-10		" HEADER - TOP	- TRANS.
B511	240	4-0		VERT. CONST. JOINT	

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.



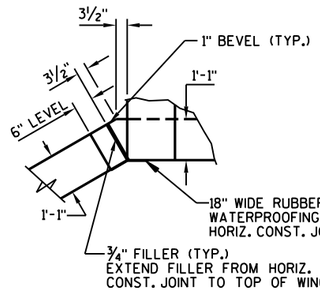
PVC WATERSTOP DETAIL

PROVIDE PVC WATERSTOP AT ALL CONSTRUCTION JOINTS

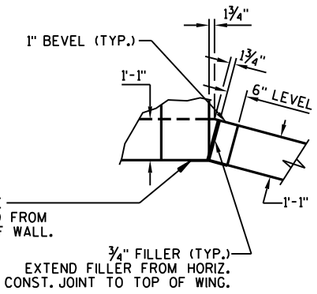


TYPICAL SECTION THRU BOX

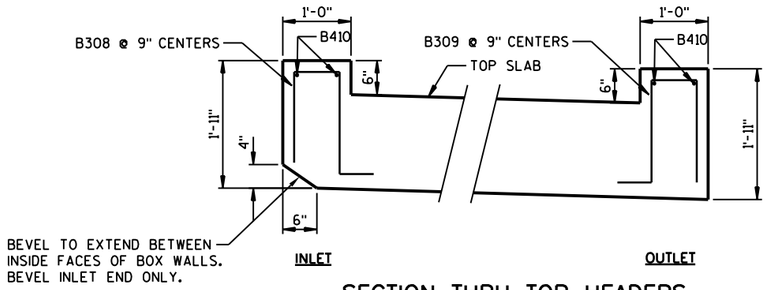
ALL LONGITUDINAL BARS NOT IDENTIFIED ARE B405 AS SHOWN.



INLET CORNER DETAIL

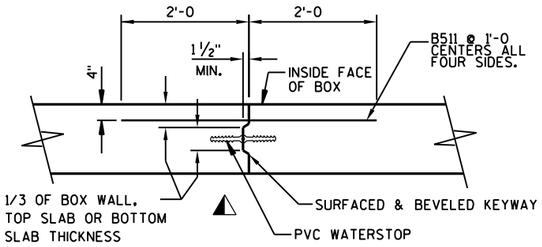


OUTLET CORNER DETAIL



SECTION THRU TOP HEADERS

▲ - IN LIEU OF CONSTRUCTION JOINTS IN THE BOTTOM SLAB, THE CONTRACTOR MAY USE 2" DEEP SAW CUTS WITHIN 12 HOURS OF POURING. PVC WATERSTOP IS REQUIRED FOR BOTH KEYED CONSTRUCTION JOINTS AND 2" DEEP SAW CUTS.



VERTICAL CONSTRUCTION JOINT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-16-0051

DRAWN BY CAR | PLANS CK'D. JRS

BOX CULVERT SECTIONS & DETAILS

SHEET 3 OF 7
66

FILE= 93189_03.dgn
DATE= 2/19/2014

93189_03.dgn 2/19/2014 2:29:16 PM RRABSKA

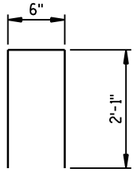
STATE PROJECT NUMBER

8010-02-76

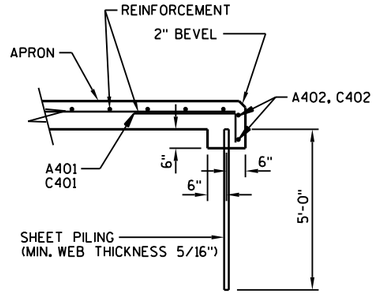
BILL OF BARS

UNCOATED 1190 LBS.

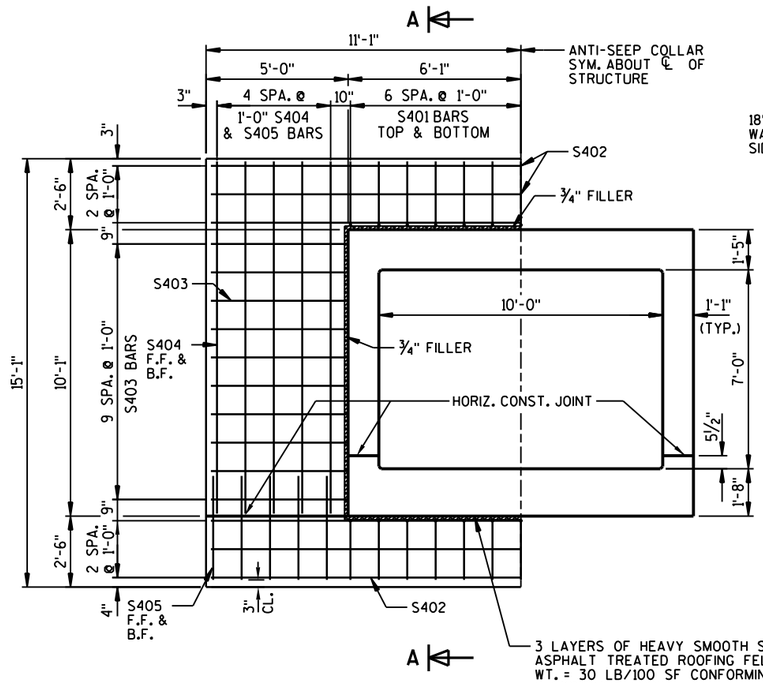
MARK	NUMBER REQUIRED COATED	NUMBER REQUIRED UNCOATED	LENGTH	BENT	BAR SERIES	LOCATION
S401	-	52	4'-6"	X		ANTI-SEEP COLLAR U-BAR
S402	-	24	21'-10"			ANTI-SEEP COLLAR HORIZONTAL
S403	-	80	4'-7"			ANTI-SEEP COLLAR HORIZONTAL
S404	-	40	12'-3"			ANTI-SEEP COLLAR VERTICAL
S405	-	40	4'-0"			ANTI-SEEP COLLAR VERTICAL



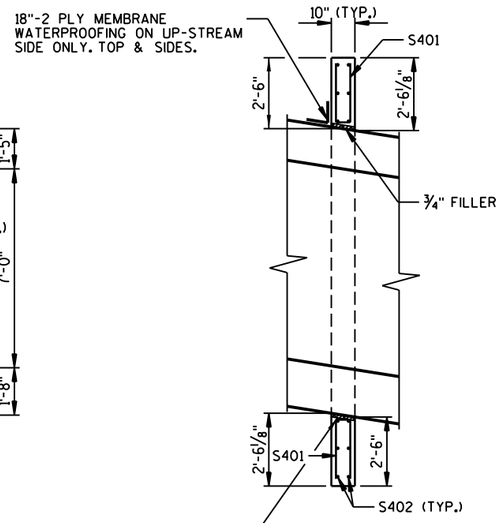
S401



SECTION THRU
ALTERNATE CUT OFF WALL

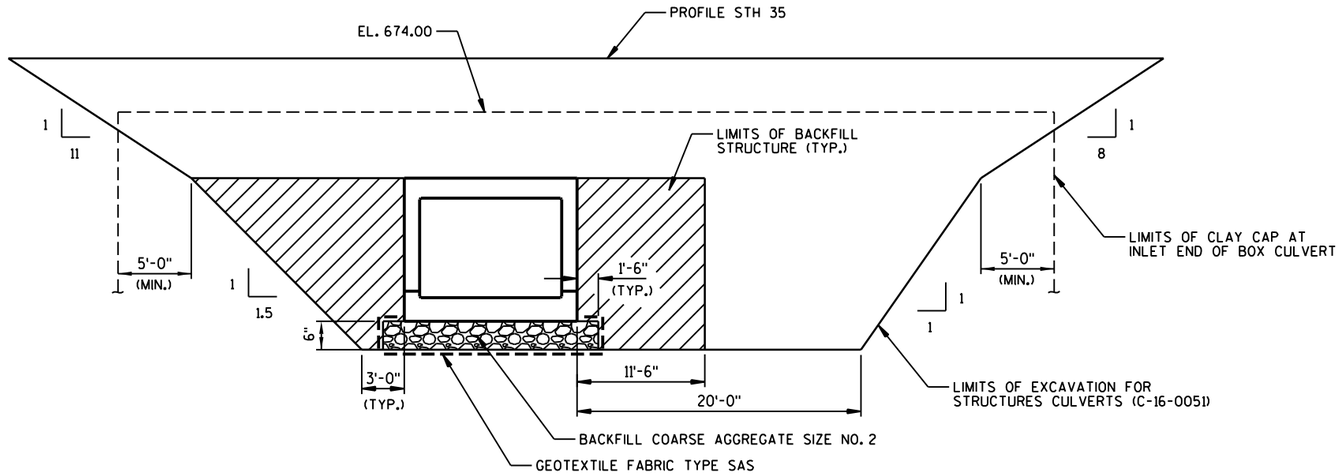


ELEVATION



SECTION A-A

ANTI-SEEPAGE COLLAR DETAILS



STRUCTURE BACKFILL DETAIL
(LOOKING UPSTREAM)

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-16-0051

DRAWN BY CAR | PLANS CK'D. JRS

ANTI-SEEPAGE COLLAR & CULVERT DETAILS

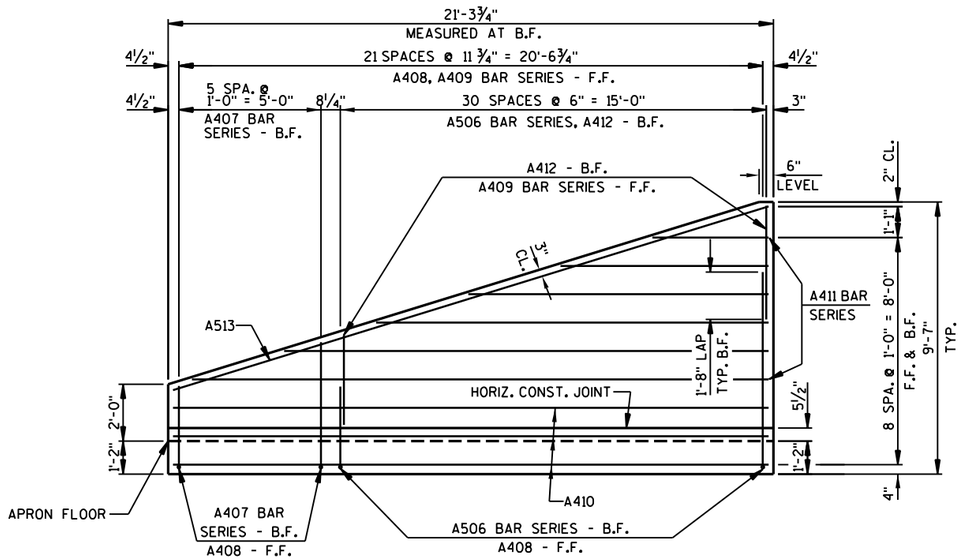
SHEET 4 OF 7
67

FILE= 93189_04.dgn
DATE= 2/19/2014

93189_04.dgn 2/19/2014 2:29:55 PM RRABSKA

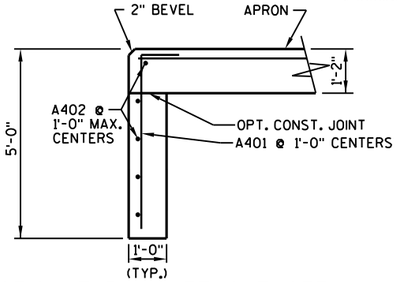
STATE PROJECT NUMBER

8010-02-76



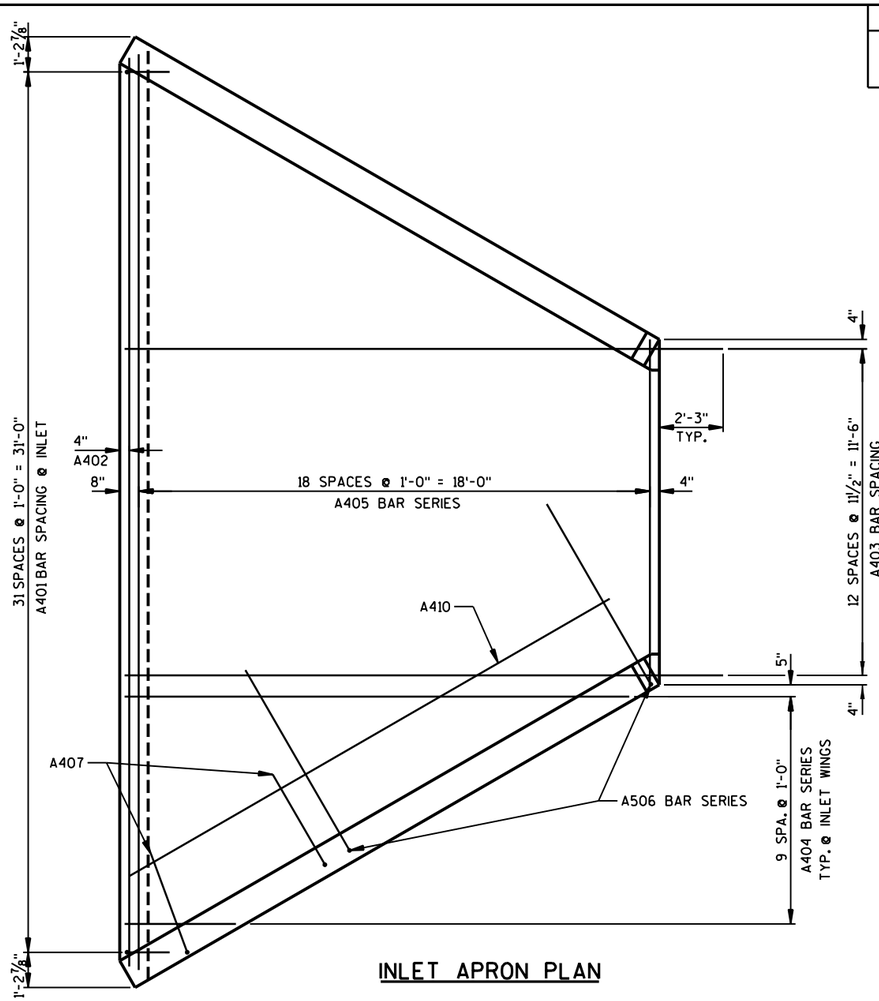
INLET WING ELEVATION

(LOOKING AT B.F.)



SECTION THRU INLET CUT OFF WALL

FOR ALTERNATE CUT OFF WALL DETAIL, SEE SHEET 4.



INLET APRON PLAN

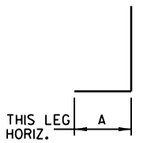
BILL OF BARS

COATED 1100 LBS.
UNCOATED 1370 LBS.

MARK	NUMBER REQUIRED COATED	NUMBER REQUIRED UNCOATED	LENGTH	BENT	BAR SERIES	LOCATION
A401	-	32	5-5	X		CUT OFF WALL - INLET APRON - VERT.
A402	-	5	31-9			" " " - " " - TRANS.
A403	-	13	21-1			APRON - LONGIT.
A404	-	20	9-11		*	" AT WINGS - "
A405	-	19	22-6		*	" - TRANS.
A506	62	-	12-9	X	*	WINGS - B.F. DOWELS - VERT.
A407	12	-	7-3	X	*	" " " - "
A408	44	-	2-10			" F.F. " - "
A409	44	-	4-7		*	" " - "
A410	-	12	20-11			" & APRON - LONGIT.
A411	-	24	11-10		*	" - F.F. & B.F. - "
A412	-	48	3-2			" - B.F. - VERT.
A513	-	4	21-7			" - F.F. & B.F. - TOP - LONGIT.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

* - LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS. BENT BARS IF USED IN BAR SERIES TABLE SHALL BE BENT AFTER CUTTING.

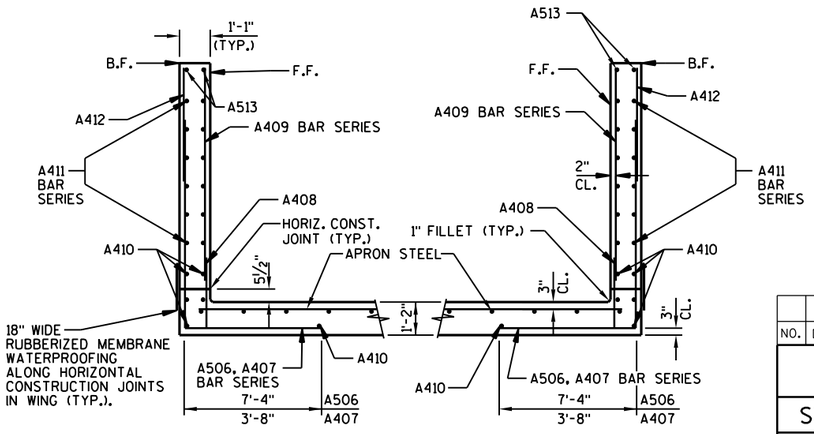


MARK	A
A401	1'-0"
A506	7'-4"
A407	3'-8"

BAR SERIES TABLE

MARK	NO. REQUIRED	LENGTH
A404	2 SERIES OF 10	2'-2" TO 17'-8"
A405	1 SERIES OF 19	12'-2" TO 32'-10"
A506	2 SERIES OF 31	10'-5" TO 15'-1"
A407	2 SERIES OF 6	6'-6" TO 8'-0"
A409	2 SERIES OF 22	1'-5" TO 7'-9"
A411	4 SERIES OF 6	3'-8" TO 20'-0"

BUNDLE AND TAG EACH SERIES SEPARATELY



SECTION THRU WINGS

(NORMAL TO WINGWALLS)

LEGEND

F.F.— FRONT FACE

B.F.— BACK FACE

CL.— CLEAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-16-0051

DRAWN BY CAR | PLANS CK'D. JRS

INLET APRON & WING DETAILS

SHEET 5 OF 7
68

FILE= 93189_05.dgn
DATE= 2/19/2014

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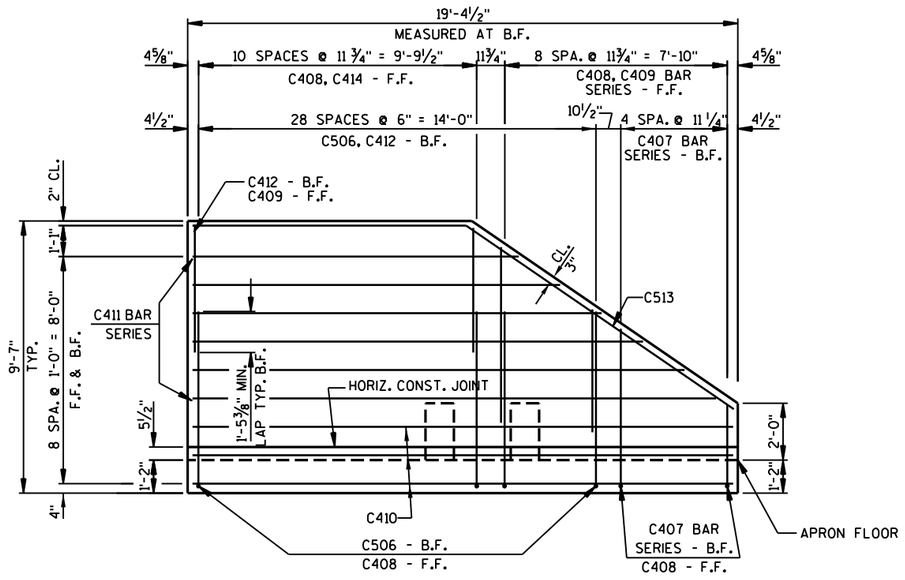
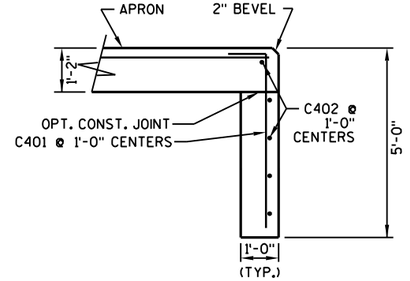


OUTLET WING ELEVATION

(LOOKING AT B.F.)



SECTION THRU OUTLET CUT OFF WALL

FOR ALTERNATE CUT OFF WALL DETAIL, SEE SHEET 4.

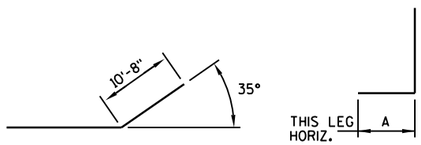
BILL OF BARS

COATED 1250 LBS.
UNCOATED 1340 LBS.

MARK	NUMBER REQUIRED COATED	NUMBER REQUIRED UNCOATED	LENGTH	BENT	BAR SERIES	LOCATION
C401	-	21	5-5	X		CUT OFF WALL - OUTLET APRON - VERT.
C402	-	5	21-0			" " " - " " - TRANS.
C403	-	13	21-1			APRON - LONGIT.
C404	-	8	11-0		*	" AT WINGS - "
C405	-	19	16-8		*	" - TRANS.
C506	58	-	13-7	X		WINGS - B.F. DOWELS - VERT.
C407	10	-	9-5	X	*	" " " - "
C408	40	-	3-1			" F.F. " - "
C409	18	-	5-5		*	" " - "
C410	-	12	19-0			" & APRON - LONGIT.
C411	-	24	15-3		*	" - F.F. & B.F. - "
C412	-	58	4-6			" - B.F. - VERT.
C513	-	4	21-1	X		" - F.F. & B.F. - TOP - LONGIT.
C414	22	-	7-9			" F.F. - VERT.
C415	17	-	9-1	X		WEIR WALL - VERTICAL
C416	-	12	8-6	X		WEIR WALL - HORIZONTAL
C417	-	6	3-10	X		WEIR WALL - HORIZONTAL

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

* - LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS. BENT BARS IF USED IN BAR SERIES TABLE SHALL BE BENT AFTER CUTTING.



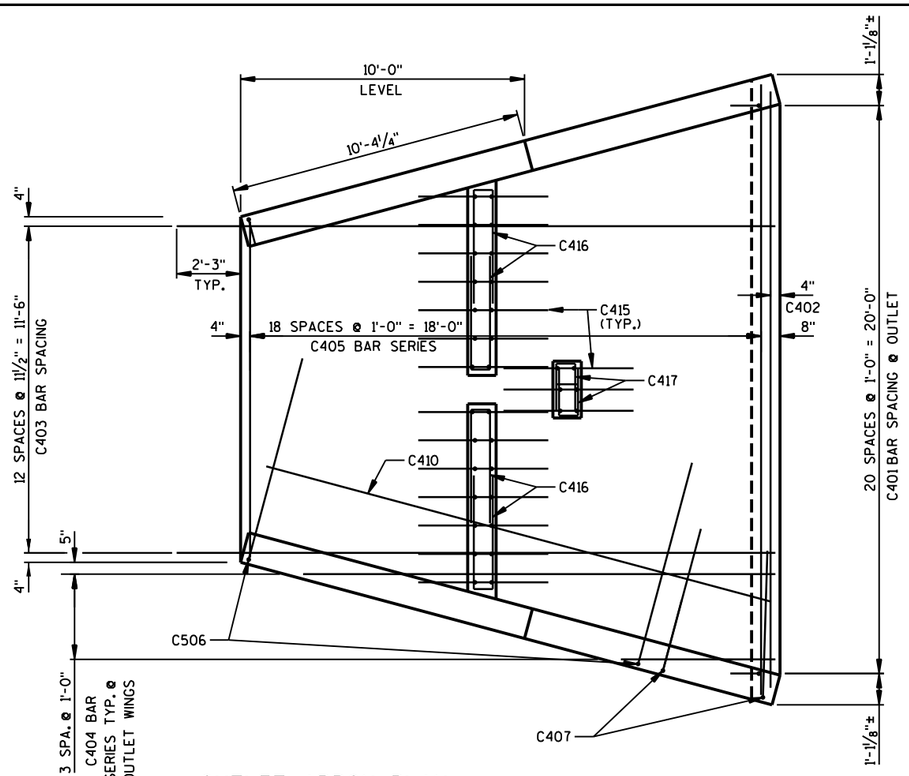
C513

MARK	A
C401	1'-0"
C506	7'-4"
C407	5'-2"

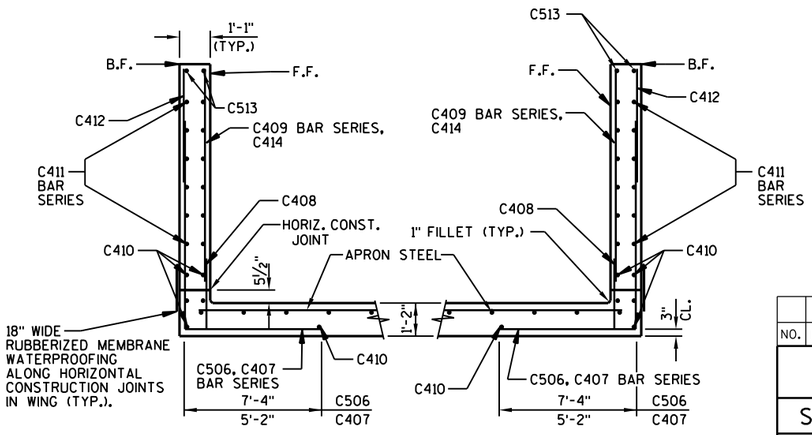
BAR SERIES TABLE

MARK	NO. REQUIRED	LENGTH
C404	2 SERIES OF 4	5'-5" TO 16'-7"
C405	1 SERIES OF 19	11'-10" TO 21'-6"
C407	2 SERIES OF 5	8'-0" TO 10'-10"
C409	2 SERIES OF 20	1'-6" TO 7'-4"
C411	4 SERIES OF 6	11'-10" TO 18'-8"

BUNDLE AND TAG EACH SERIES SEPARATELY



OUTLET APRON PLAN



SECTION THRU WINGS

(NORMAL TO WINGWALLS)

STATE PROJECT NUMBER

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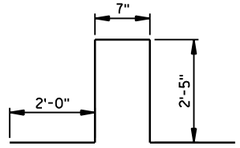

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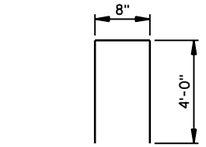
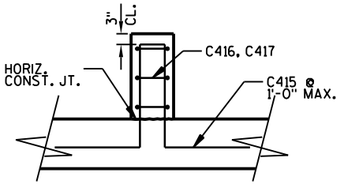


C416

C417



WEIR WALL

LEGEND

F.F.— FRONT FACE

B.F.— BACK FACE

CL. — CLEAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-16-0051

DRAWN BY CAR | PLANS CK'D. JRS

OUTLET APRON & WING DETAILS

SHEET 6 OF 7
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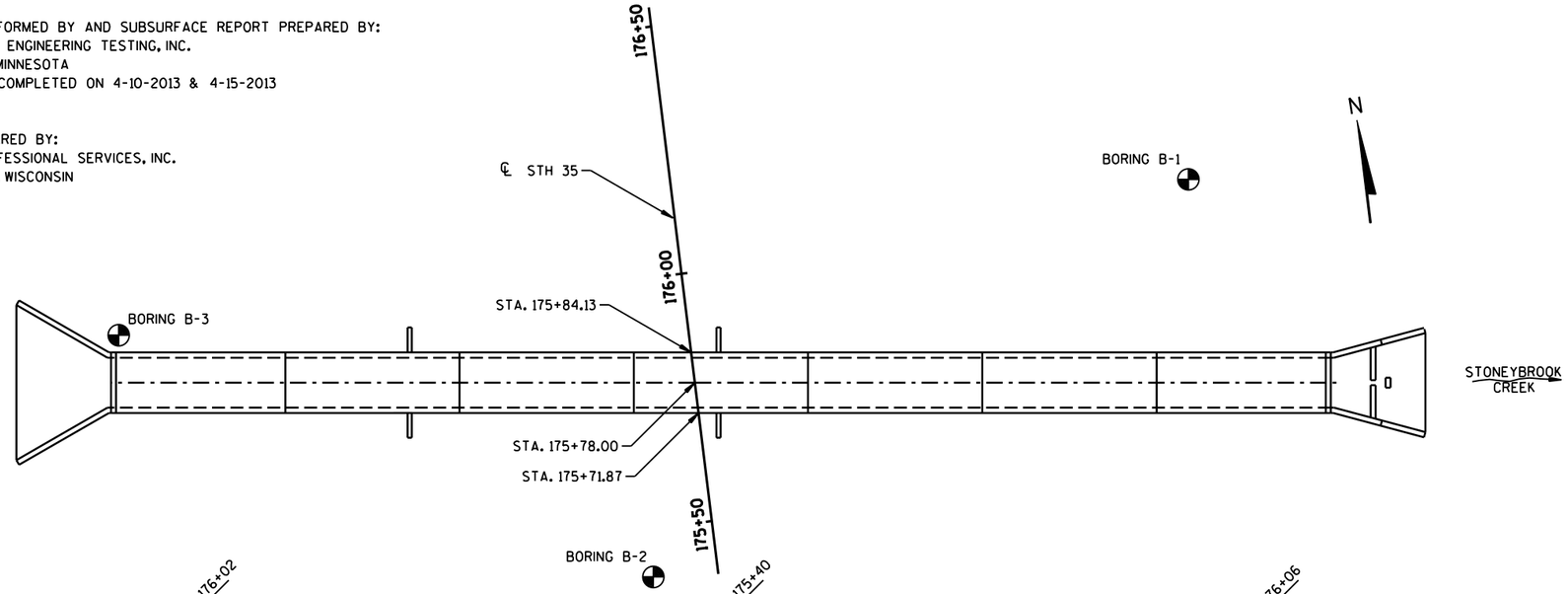
BORINGS PERFORMED BY AND SUBSURFACE REPORT PREPARED BY:
AMERICAN ENGINEERING TESTING, INC.
DULUTH, MINNESOTA
BORINGS COMPLETED ON 4-10-2013 & 4-15-2013

PLANS PREPARED BY:
MSA PROFESSIONAL SERVICES, INC.
BARABOO, WISCONSIN



STATE PROJECT NUMBER

8010-02-76

ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING

95/6=95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6

LEGEND OF BORING

BORING NO.
ELEV. STA.
UNCONFINED STRENGTH → 7.7 7
BLOWS PER FT. USING 140# WT. FALLING 30"
WASH SAMPLE
SHELBY TUBE — S.T.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION
SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SO LIMESTONE

UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-16-0051

DRAWN BY CAR | PLANS CK'D. LJR

SUBSURFACE EXPLORATION

SHEET 7 OF 7
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DATE= 2/19/2014

EARTHWORK								
	AREA (SF)			INCREMENTAL VOL. (CY) (UNADJUSTED)			CUMULATIVE VOL. (CY)	
STATION	CUT	CONCRETE PAVEMENT	FILL	CUT	CONCRETE PAVEMENT	FILL	CUT 1.00 (WASTE) (1)	EXPANDED FILL 1.30 (SELECT BORROW)
171+50	152.00	11.67	0.00	0.00	0.00	0.00	0.00	0.00
172+00	168.00	11.67	0.00	296.30	21.60	0.00	274.69	0.00
172+50	144.00	11.67	16.00	288.89	21.60	14.81	541.98	19.26
173+00	134.00	11.67	36.80	257.41	21.60	48.89	777.78	82.81
173+50	127.00	11.67	67.20	241.67	21.60	96.30	997.84	208.00
174+00	120.00	11.67	196.00	228.70	21.60	243.70	1204.94	524.81
174+50	107.00	11.67	384.00	210.19	21.60	537.04	1393.52	1222.96
175+00	95.90	11.67	669.00	187.87	21.60	975.00	1559.78	2490.46
175+50	78.50	11.67	1294.00	161.48	21.60	1817.59	1699.66	4853.33
176+00	73.10	11.67	858.00	140.37	21.60	1992.59	1818.43	7443.70
176+50	84.00	11.67	500.00	145.46	21.60	1257.41	1942.28	9078.33
177+00	105.00	11.67	308.00	175.00	21.60	748.15	2095.68	10050.93
177+50	132.00	11.67	131.00	219.44	21.60	406.48	2293.52	10579.35
178+00	140.00	11.67	44.00	251.85	21.60	162.04	2523.77	10790.00
178+50	155.00	11.67	12.00	273.15	21.60	51.85	2775.31	10857.41
	COLUMN TOTALS:			3077.78	302.47	8351.85		

NOTES:
1. CONCRETE PAVEMENT NOT INCLUDED IN THIS TOTAL - PAID SEPARATELY.

ALL CUT MATERIAL TO BE WASTED.
ALL FILL MATERIAL TO BE SELECT BORROW UNLESS SHOWN OTHERWISE IN STRUCTURE C-16-0051 PLANS.
NO MARSH EXCAVATION ANTICIPATED OR INCLUDED IN TOTALS.
NO ROCK EXCAVATION ANTICPATED OR INCLUDED IN TOTALS.

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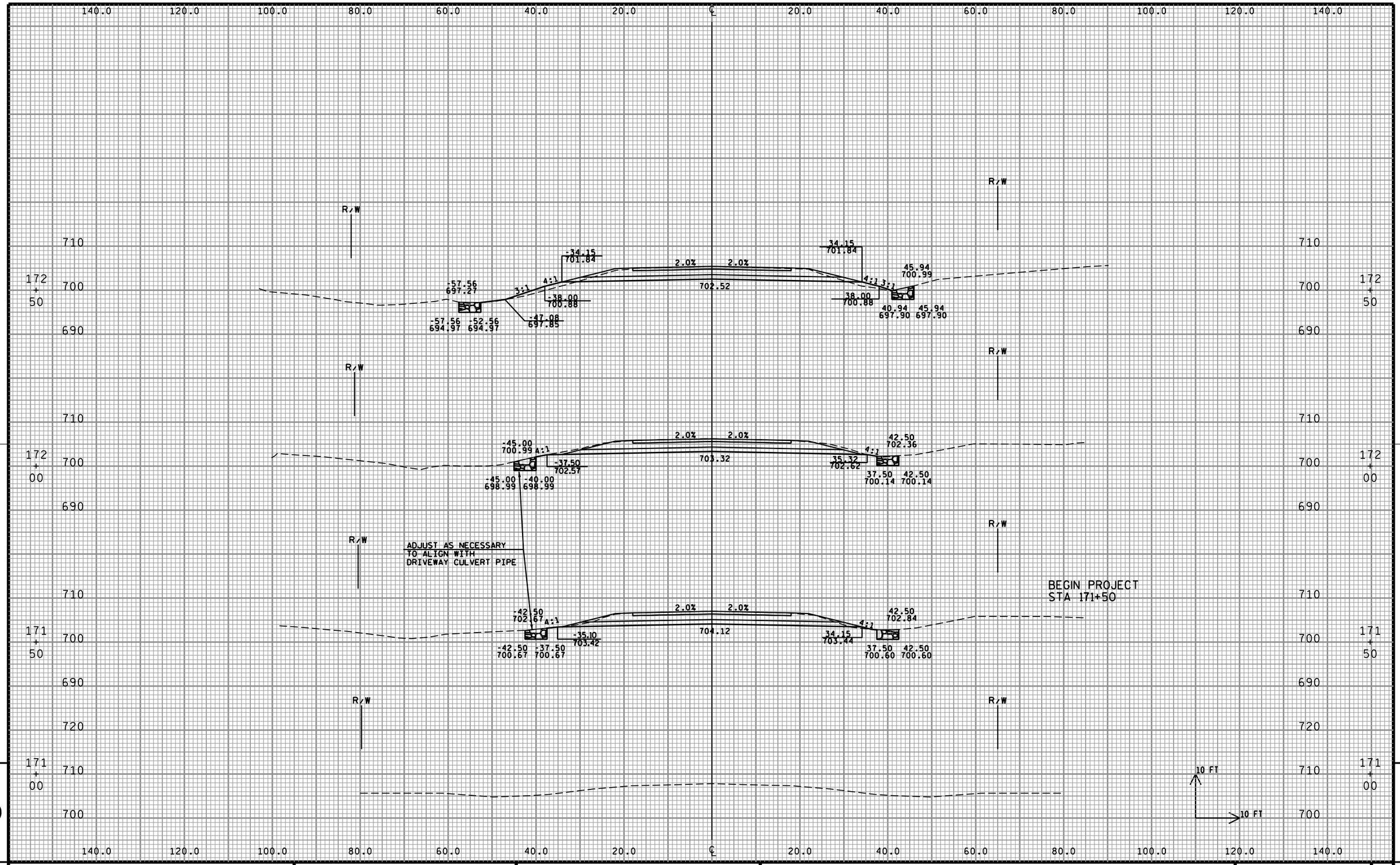

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PROJECT NO: 8010-02-76	HWY: STH 35	COUNTY: DOUGLAS	CROSS SECTIONS: STH 35	SHEET	E

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WISDOT/CADDS SHEET 21

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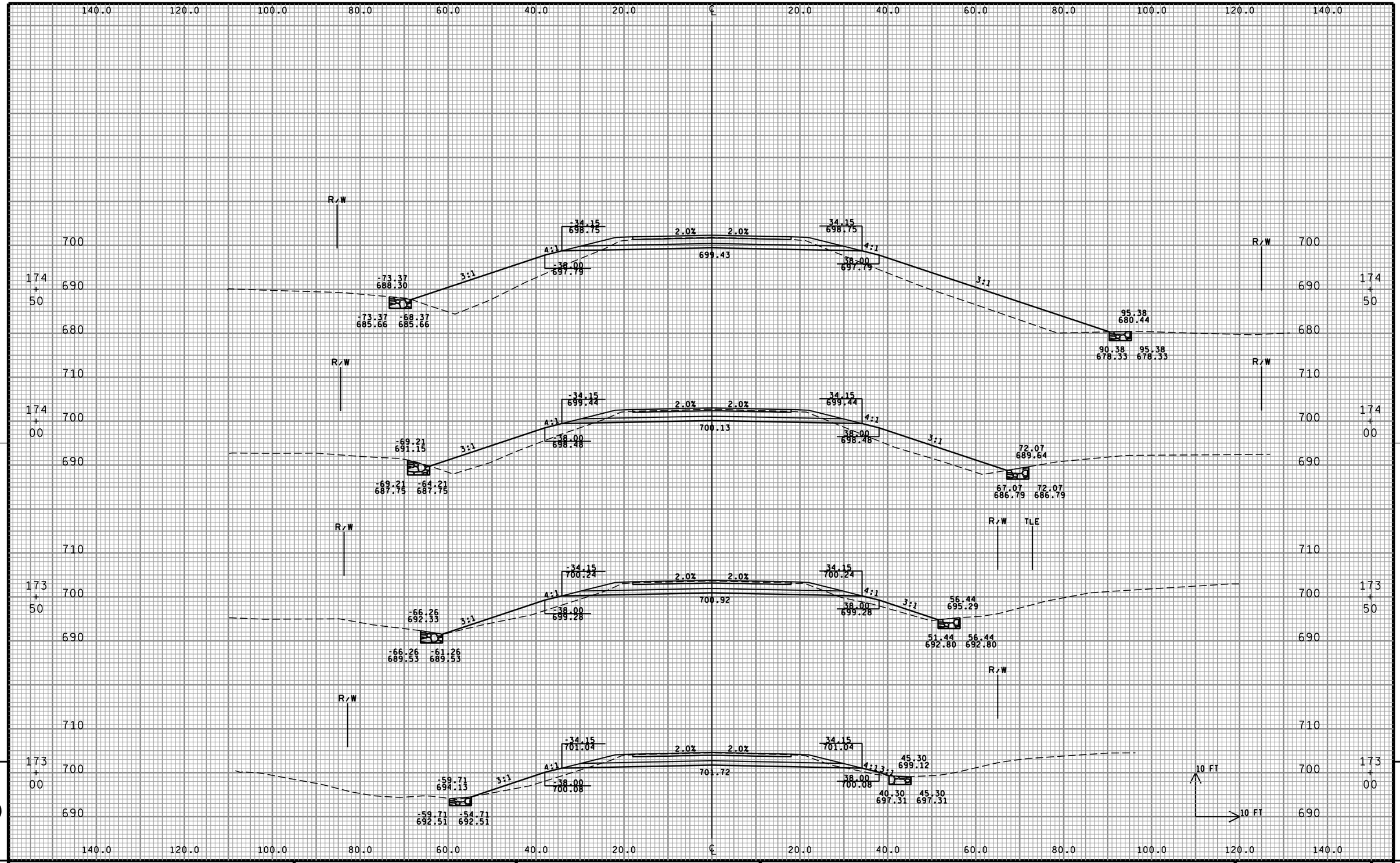

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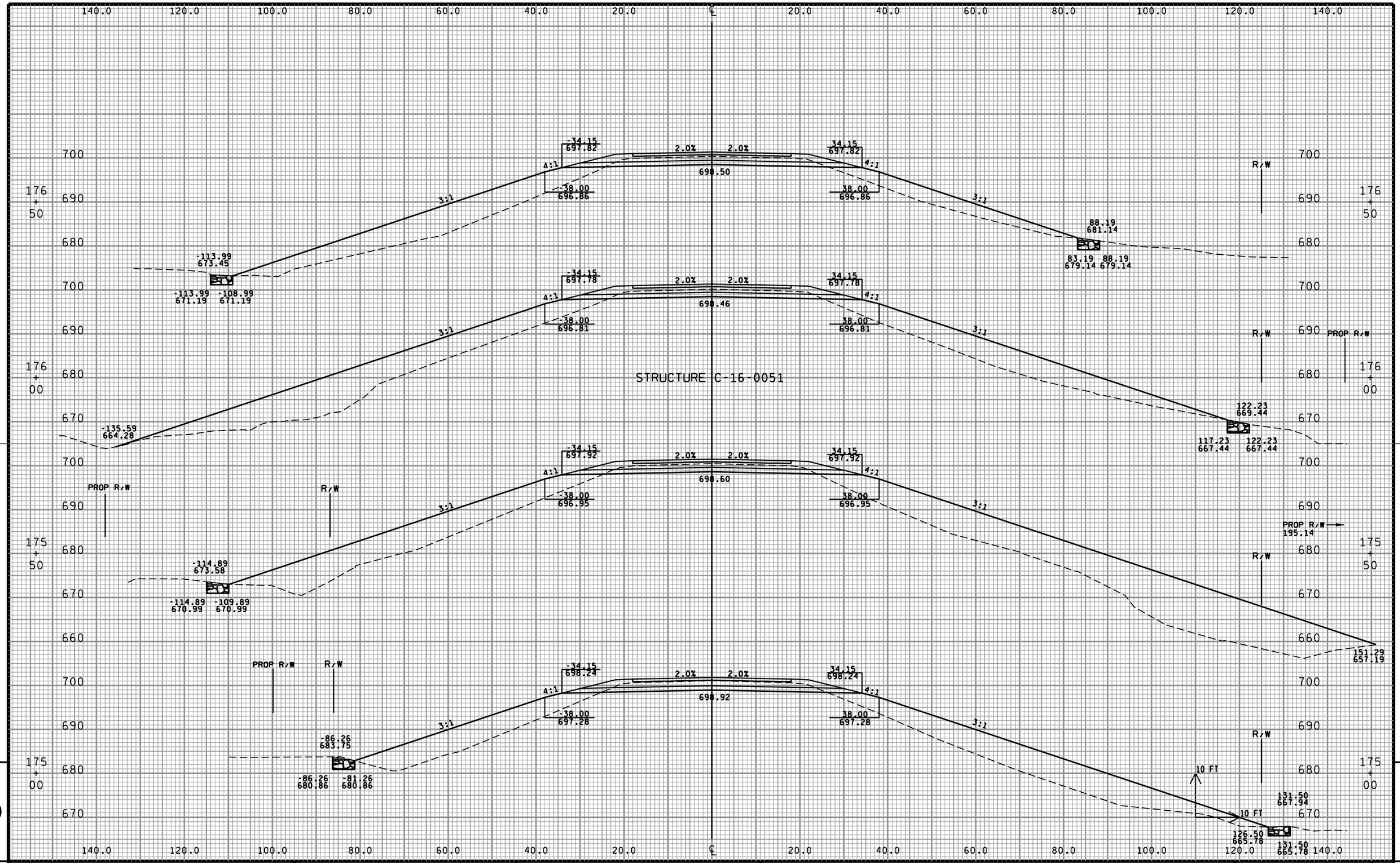

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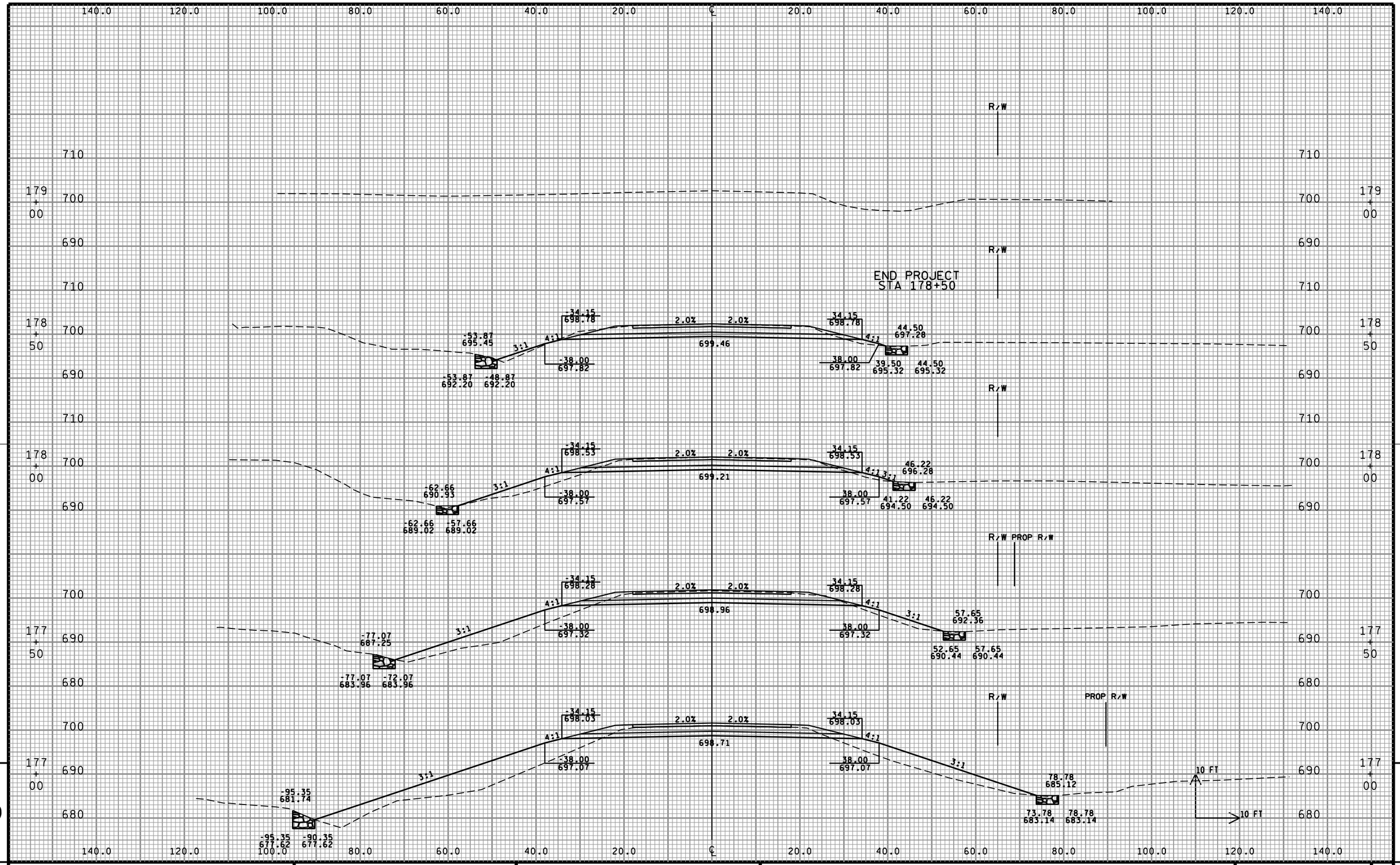

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WISDOT/CADDS SHEET 21

rc004004.dgn 1/17/2014 9:37:04 AM pkriesel

Wisconsin Department of Transportation

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