EAU DEC 2016

PROJECT ID: 1530-02-62
WITH: 1530-02-72

COUNTY: PIERCE

ORDER OF SHEETS

Section No. 1 Title
Section No. 2 Typical Sections and Details (Inc. Erosion Control)
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 = 154

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

V ELLSWORTH, MAIN STREET

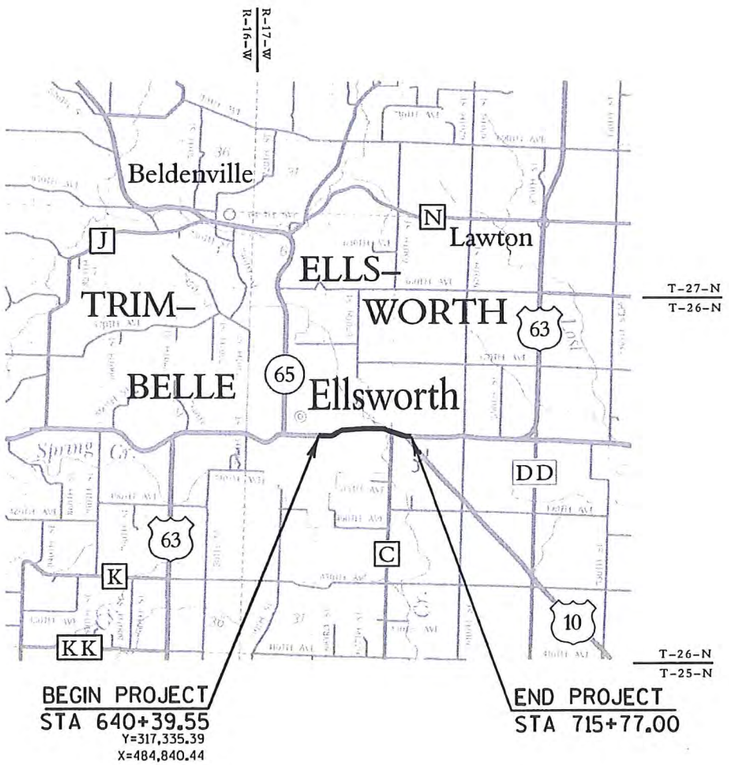
BEULAH ST TO NORTH JUNCTION USH 63

USH 10

PIERCE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1530-02-62	———	—

STATE PROJECT NUMBER
1530-02-62



DESIGN DESIGNATION

A.A.D.T. (2017)	=	7,800
A.A.D.T. (2037)	=	9,600
D.H.V. (2037)	=	1,000
D.D.	=	60/40
T.	=	17.0%
DESIGN SPEED	=	35 - 45 MPH
ESALS (2037)	=	3,197,000

CONVENTIONAL SYMBOLS

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

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

LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 1.428 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), 'PIERCE' COUNTY, HORIZONTAL DATUM NAD 83, (1991). ALL DISTANCES ARE GROUND. ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO NAVD 1988, (2012).

ORIGINAL PLANS PREPARED BY
emcs inc
500 North 17th Avenue
Wausau, WI 54401
715.845.1081 Fax 715.845.1099

WISCONSIN
STEPHANIE G. CHRISTENSEN
E35808
WAUSAU, WI
PROFESSIONAL ENGINEER

Stephanie G. Christensen
7-5-2016

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	EMCS, INC.
Designer	EMCS, INC.
Project Manager	NICOLE PASSUELLO
Regional Examiner	CHRISTINE KOSKI
Regional Supervisor	TIM MASON

APPROVED FOR THE DEPARTMENT
DATE: 7/11/16 Nicole Passuello (Signature)

E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\010101_t1.dgn | PLOT DATE : 7/5/2016 | PLOT BY : sgc | PLOT NAME : | PLOT SCALE : 1:200

WISDOT/CADDS SHEET 10

GENERAL NOTES

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

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

COVER ALL DISTURBED AREAS WITH TOPSOIL, FERTILIZER, SEED NO. 40, AND EROSION MAT URBAN CLASS I TYPE B EXCEPT WHERE SHOWN OTHERWISE AT ISABELLE CREEK.

PLACE INLET PROTECTION TYPE C ON ALL EXISTING INLETS ALONG USH 10 AND ON SIDE ROADS WITH RECEIVING STORM WATER FROM THE PROJECT AREA UNLESS OTHERWISE SHOWN AT ISABELLE CREEK.

PLACE HMA PAVEMENT LAYERS WITH THE FOLLOWING THICKNESSES AND NOMINAL SIZES:

HMA PAVEMENT TYPE 5 MT 58-34 H, 2.50-INCH (MAINLINE MILL AND OVERLAY)
UPPER LAYER THICKNESS = 1.25-INCH (9.5 MM)
LOWER LAYER THICKNESS = 1.25-INCH (9.5 MM)

HMA PAVEMENT TYPE 5 MT 58-34 H, 3.50-INCH (FULL DEPTH SHOULDERS)
UPPER LAYER THICKNESS = 1.25-INCH (9.5 MM)
LOWER LAYER THICKNESS = 2.25-INCH (9.5 MM)

ORDER OF SECTION 2 SHEETS

PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PAVING DETAILS
EROSION CONTROL
PERMANENT SIGNING & PAVEMENT MARKING
TRAFFIC CONTROL

AS-BUILTS USED FOR PLAN DEVELOPMENT

PROJECT NO: T019-1(11), CONSTRUCTION YEAR: 1953
PROJECT NO: 7210-06-72, CONSTRUCTION YEAR: 1986
PROJECT NO: 1538-03-71, CONSTRUCTION YEAR: 1992
PROJECT NO: 1530-03-75, CONSTRUCTION YEAR: 2006
PROJECT NO: 1530-03-70, CONSTRUCTION YEAR: 2011

UTILITIES

AT&T WISCONSIN
(COMMUNICATIONS)
RICK PODOLAK
304 SOUTH DEWEY STREET
EAU CLAIRE, WI 54701
(715) 839-5565
RP4514@ATT.COM

BEVCOMM
(COMMUNICATIONS)
CHAD WHITCOMB
W8108 165TH AVENUE
PO BOX 125
HAGER CITY, WI 54104
(651) 380-2379
CWHITCOMB@BEVCOMM.COM

MIDCONTINENT COMMUNICATIONS
(COMMUNICATIONS)
GEORGE MARTINEZ
924 LAKE AVENUE
FAIRMONT, MN 56031
(507) 848-5809
GEORGE.MARTINEZ@MIDCO.COM

PIERCE PEPIN COOPERATIVE SERVICES
(ELECTRIC DISTRIBUTION)
BRAD RISTOW
PO POX 420
ELLSWORTH, WI 54011
(715) 307-1904
BRISTOW@PIERCEPEPIN.COM

VILLAGE OF ELLSWORTH
(SEWER)
GREG ENGESET
130 NORTH CHESTNUT STREET
ELLSWORTH, WI 54011
(715) 821-1888
GREG@VILLAGEOFELLSWORTH.ORG

VILLAGE OF ELLSWORTH
(WATER)
GREG ENGESET
130 NORTH CHESTNUT STREET
ELLSWORTH, WI 54011
(715) 821-1888
GREG@VILLAGEOFELLSWORTH.ORG

WE ENERGIES
(GAS)
LEWIS KNAPP
104 W SOUTH STREET
RICE LAKE, WI 54868
(715) 419-2196
LEWIS.KNAPP@WE-ENERGIES.COM

WE ENERGIES
24-HOUR EMERGENCY (GAS)
800-261-5325

XCEL ENERGY
(ELECTRIC DISTRIBUTION)
BRIAN MELLO
1201 LIVINGSTONE ROAD
HUDSON, WI 54016
(715) 577-5828
BRIAN.M.MELLO@XCELENERGY.COM

COPY ALL CORRESPONDENCE TO:
DAWN SCHULTZ
1414 W HAMILTON AVE
PO BOX 8
EAU CLAIRE, WI 54702-0008
715-737-2482 (OFFICE)
dawn.schultz@xcelenergy.com

XCEL ENERGY
(ELECTRIC TRANSMISSION)
CHARLES DRENGER
1414 WEST HAMILTON
PO BOX 8
EAU CLAIRE, WI 54702
(651) 955-1089

COPY ALL CORRESPONDENCE TO:
DAWN SCHULTZ
1414 W HAMILTON AVE
PO BOX 8
EAU CLAIRE, WI 54702-0008
715-737-2482 (OFFICE)
dawn.schultz@xcelenergy.com

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

DNR CONTACT
CHRIS WILLGER
DNR WEST CENTRAL REGION HQ
1300 W. CLAIRMONT STREET
EAU CLAIRE, WI 54702
(715) 839-1609
CHRISTOPHERJ.WILLGER@WISCONSIN.GOV

PROPOSED WORK
STA 640+39.55- STA 715+77
REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE 5 MT 58-34 H OVERLAY
REMOVE AND REPLACE CURB RAMPS
REMOVE AND REPLACE GUARDRAIL AT ISABELLE CREEK

N

VILLAGE OF ELLSWORTH

TOWN OF ELLSWORTH

BEGIN PROJECT
STA 640+39.55

END PROJECT
STA 715+77.00

PROJECT 1530-02-72

N BEULAH ST

N PIETY ST

S PIETY ST

S BEEBE ST

S DAR ST

TERRACE AVE

WALL ST

N CROSSCUT AVE

BROADWAY ST

MORSE ST

N WALLACE ST

S WALLACE ST

S POND ST

UTILITY ST

ISABELLE CREEK

CTH C

HILLSDALE AVE

PLEASANT AVE

USH 10

USH 63

10+00

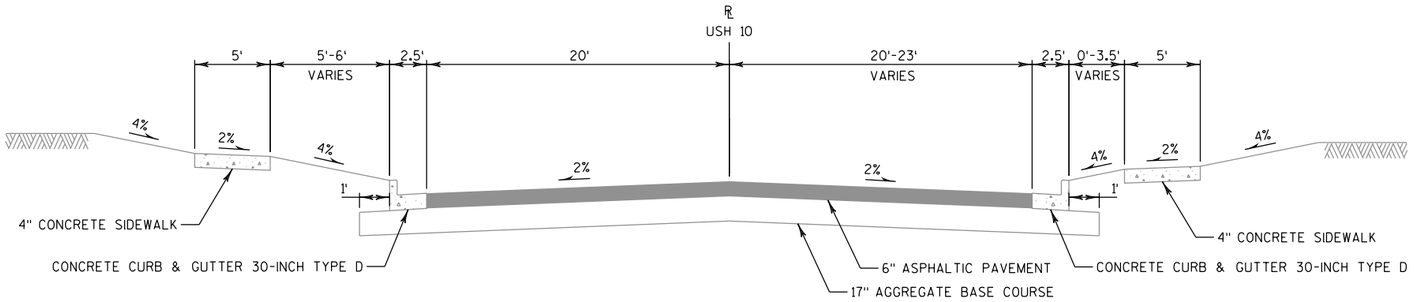
650+00

675+00

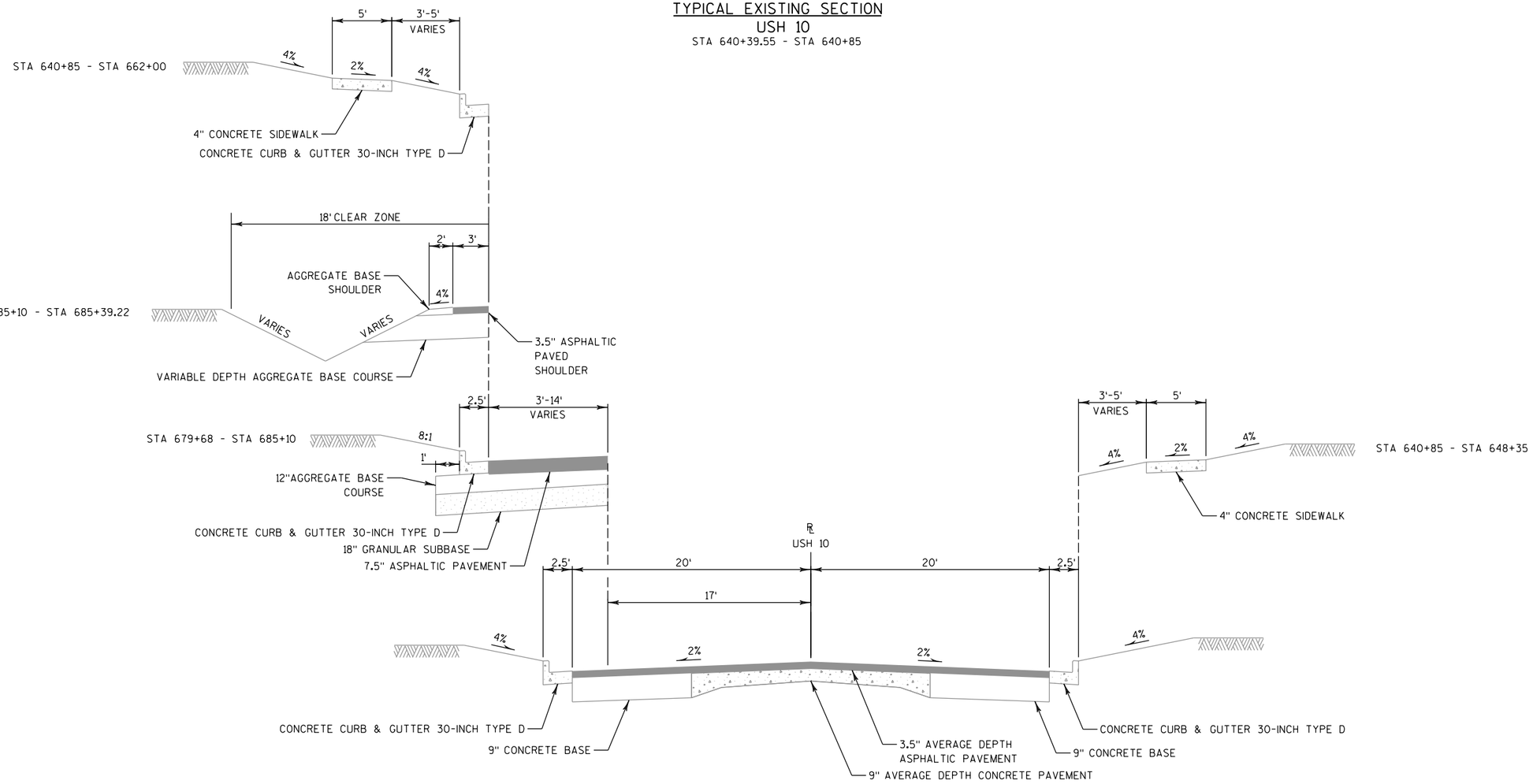
700+00

B-47-104
EXISTING BOX CULVERT TO REMAIN
REMOVE AND REPACE GUARDRAIL & GRADE SLOPES
(SEE CONSTRUCTION DETAILS)

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PROJECT OVERVIEW	SHEET 3	E

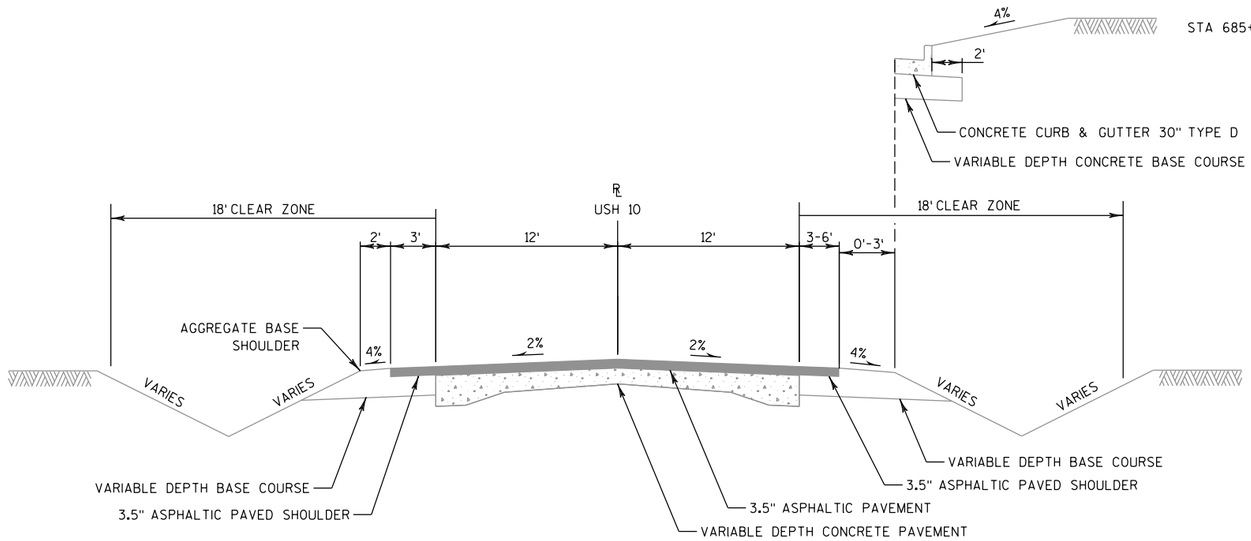


TYPICAL EXISTING SECTION
USH 10
STA 640+39.55 - STA 640+85

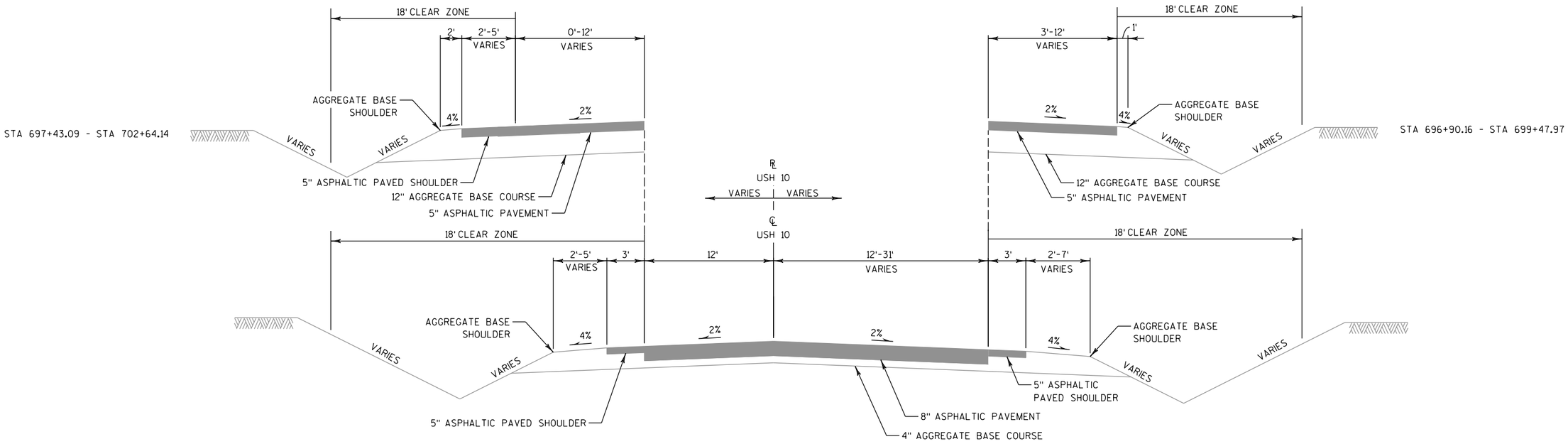


TYPICAL EXISTING SECTION
USH 10
STA 640+85 - STA 685+39.22

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	TYPICAL SECTIONS	SHEET 4	E



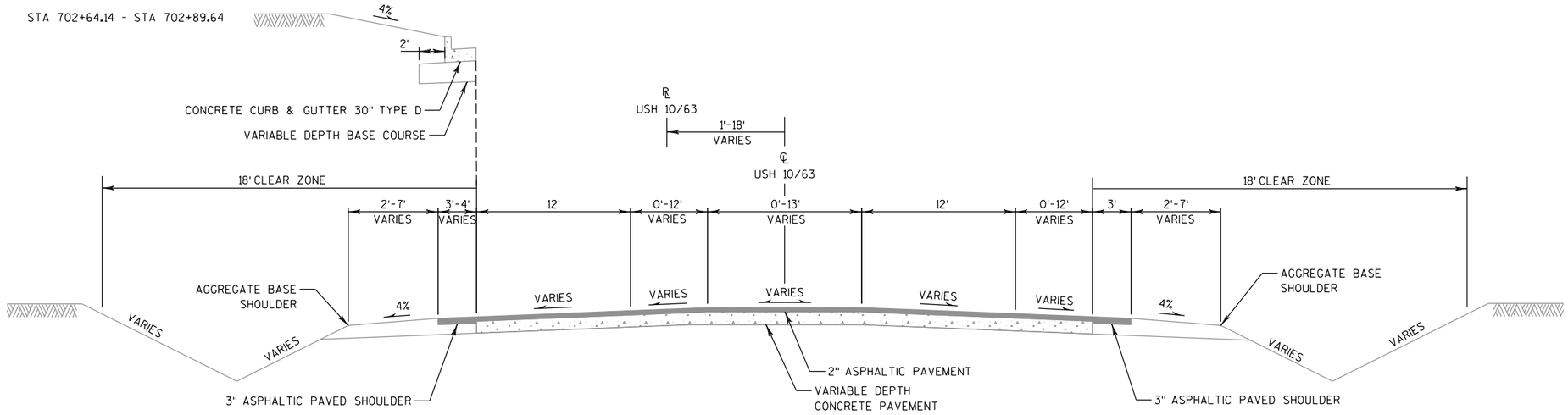
TYPICAL EXISTING SECTION
USH 10
STA 685+39.22 - STA 695+47



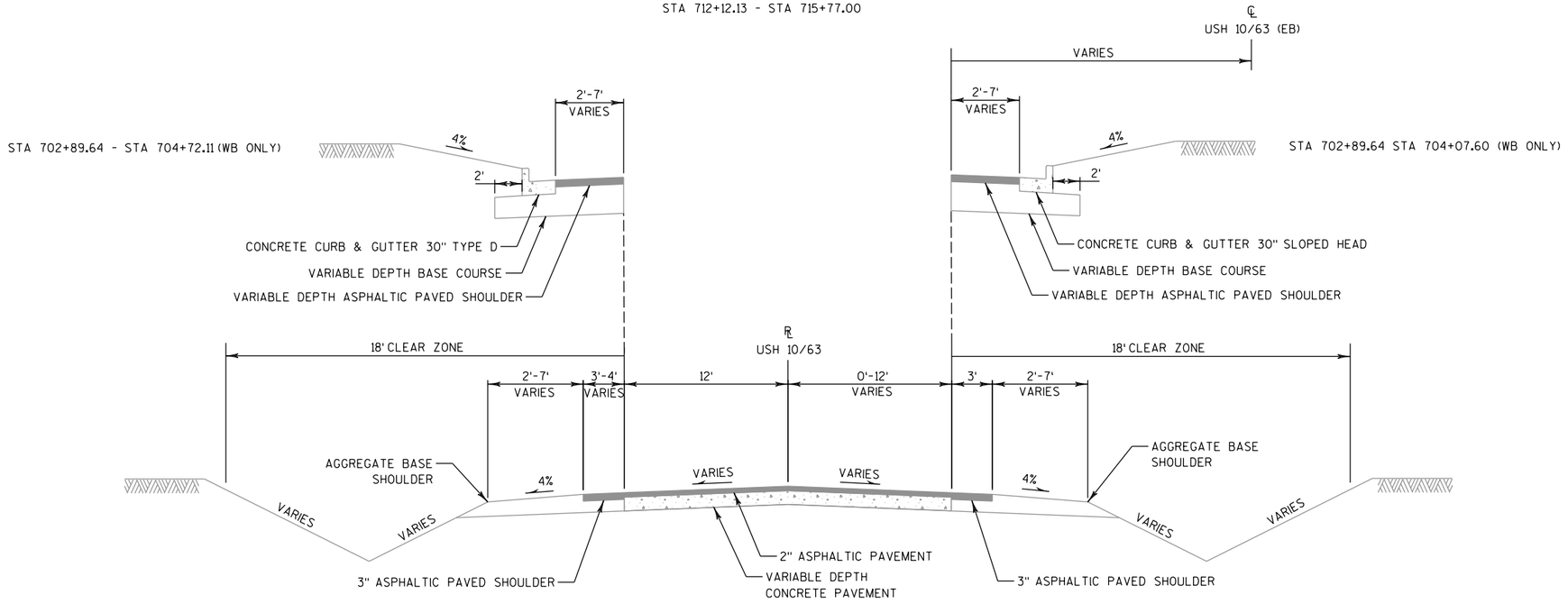
TYPICAL EXISTING SECTION
USH 10
STA 695+47 - STA 702+64.14

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	TYPICAL SECTIONS	SHEET 5	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\020301_ts.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

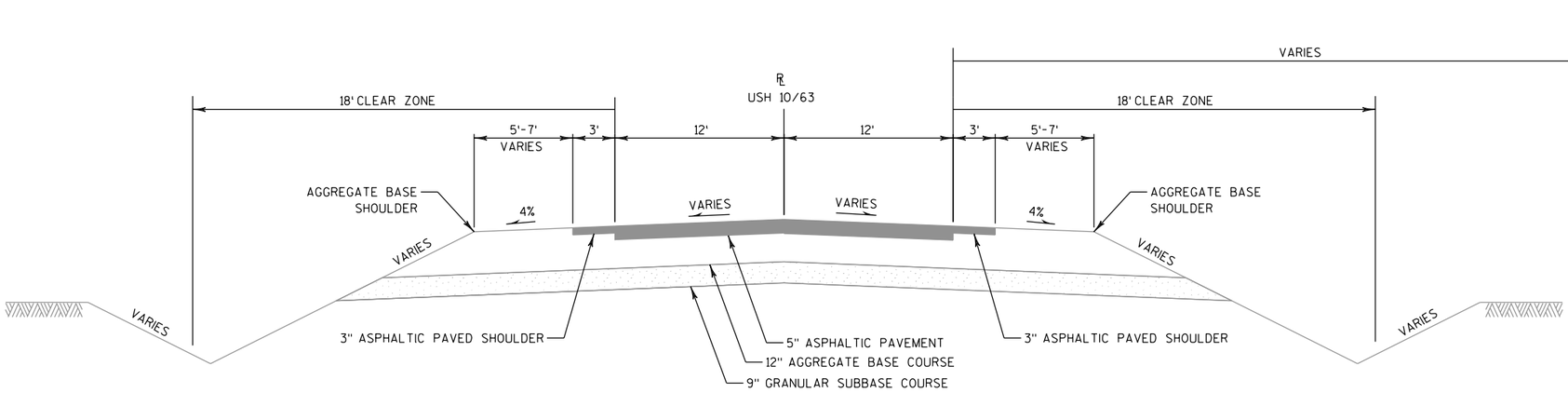


TYPICAL EXISTING SECTION
USH 10/63 NORTH JUNCTION
STA 702+64.14 - STA 702+89.64
STA 712+12.13 - STA 715+77.00

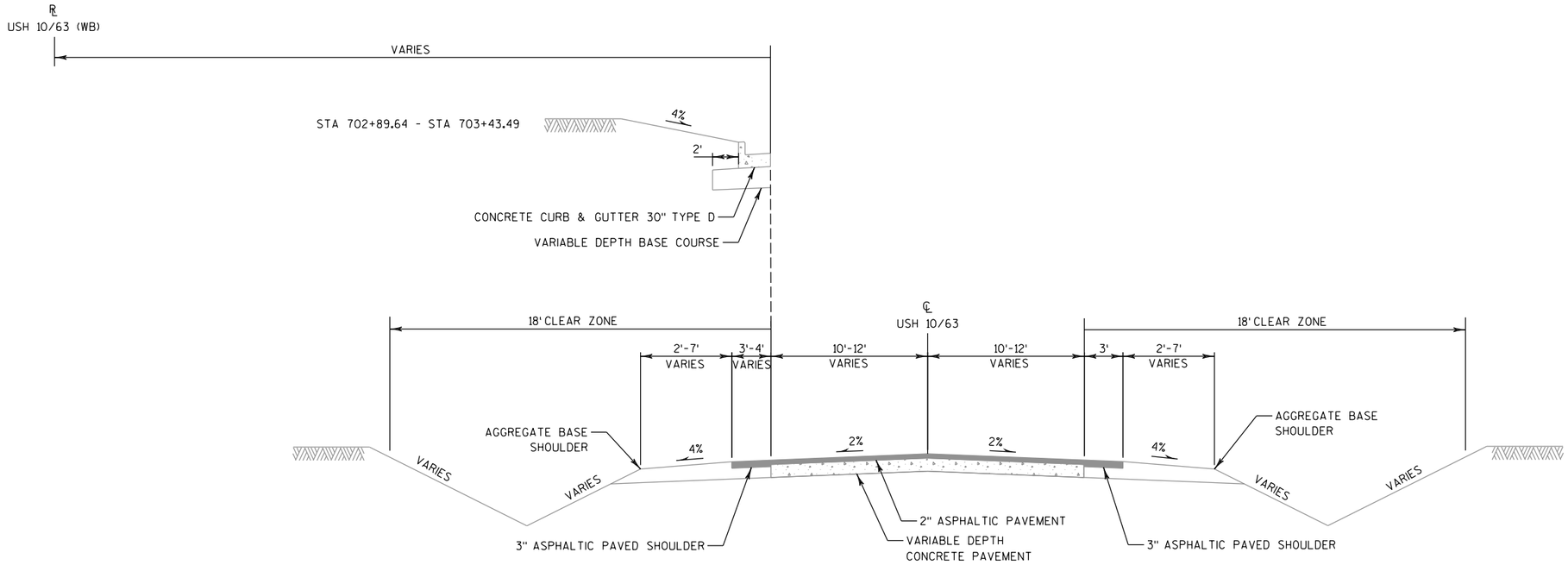


TYPICAL EXISTING SECTION
USH 10/63 NORTH JUNCTION
STA 702+89.64 - STA 707+25 (WB ONLY)
STA 709+00 - STA 712+12.13 (WB ONLY)

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	TYPICAL SECTIONS	SHEET 6	E



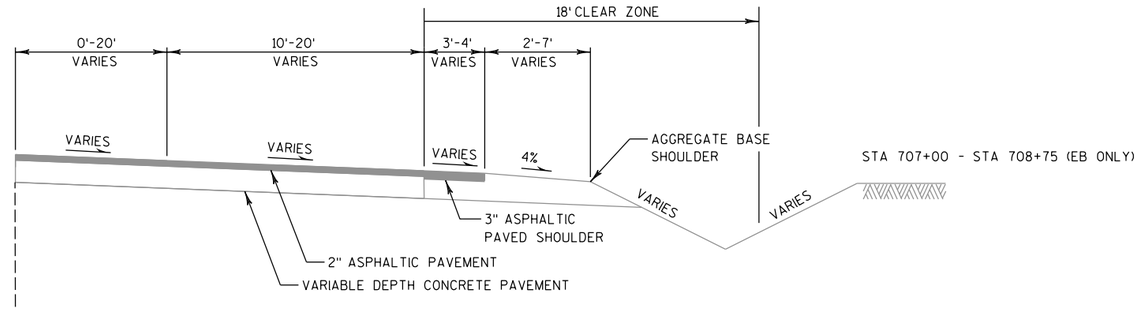
TYPICAL EXISTING SECTION
USH 10/63 NORTH JUNCTION
STA 707+25 - STA 709+00 (WB ONLY)

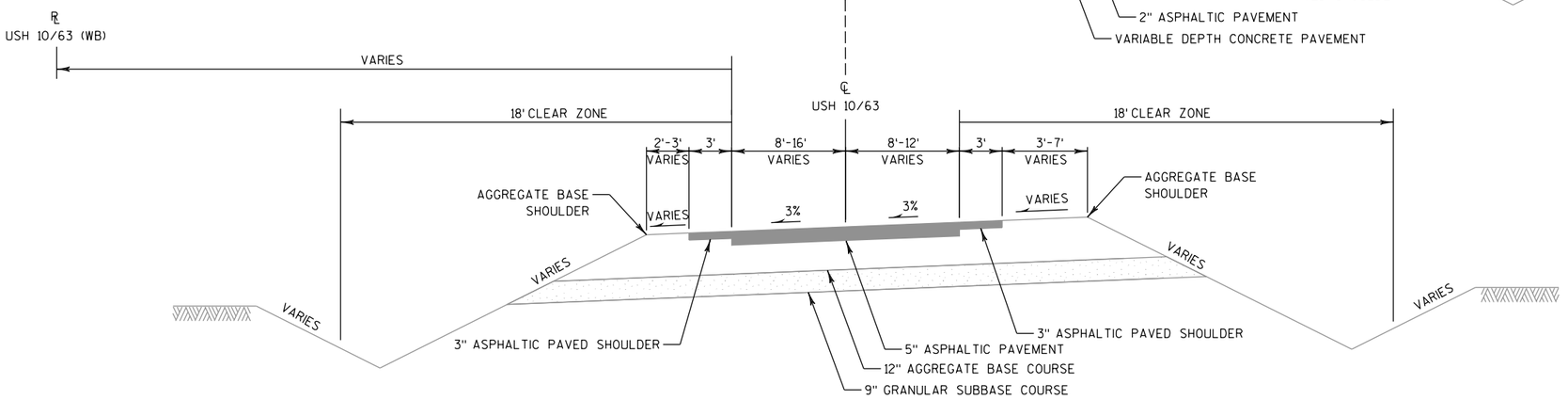


TYPICAL EXISTING SECTION
USH 10/63 NORTH JUNCTION
STA 702+89.64 - STA 707+00 (EB ONLY)

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	TYPICAL SECTIONS	SHEET 7	E

2

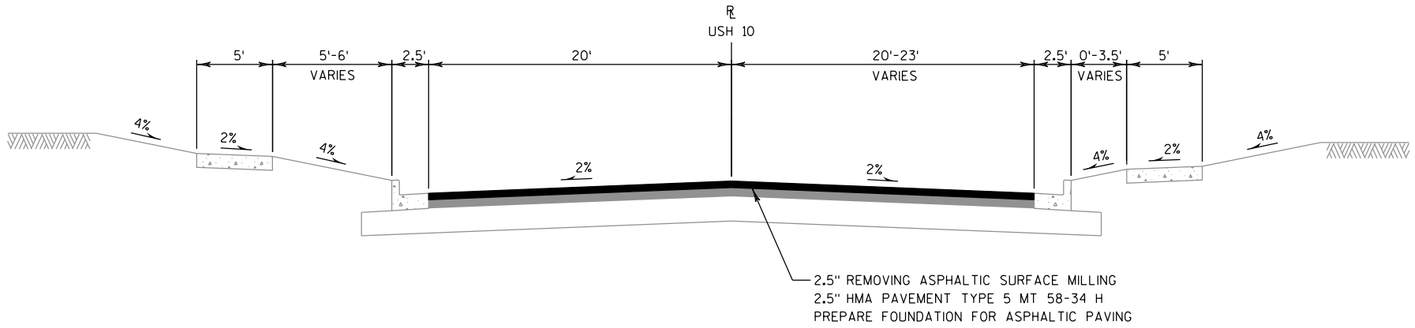




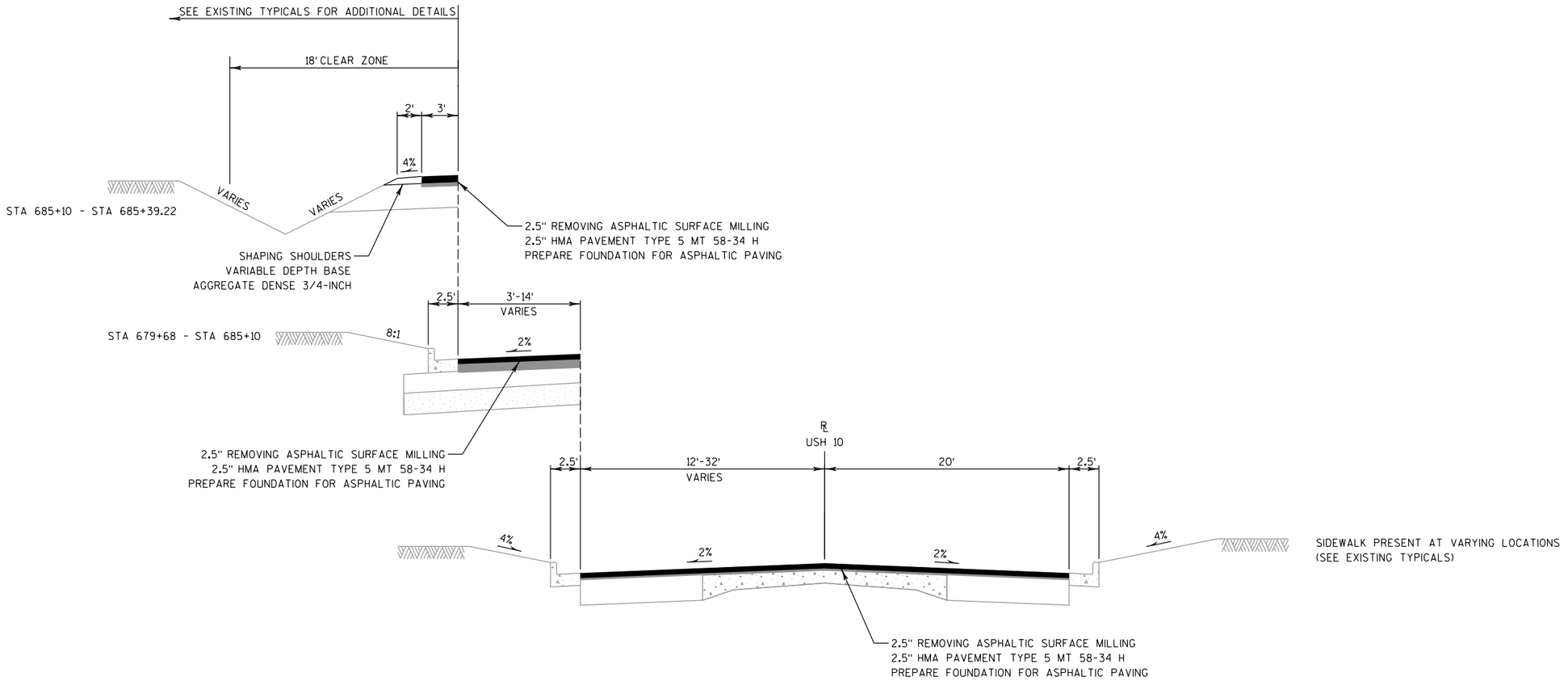
TYPICAL EXISTING SECTION
USH 10/63 NORTH JUNCTION
STA 707+00 - STA 715+77.00 (EB ONLY)

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	TYPICAL SECTIONS	SHEET 8	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\020301_ts.dgn
PLOT DATE : 7/24/2016
PLOT BY : sgc
PLOT NAME :
PLOT SCALE : 1:20
WISDOT/CADDS SHEET 42



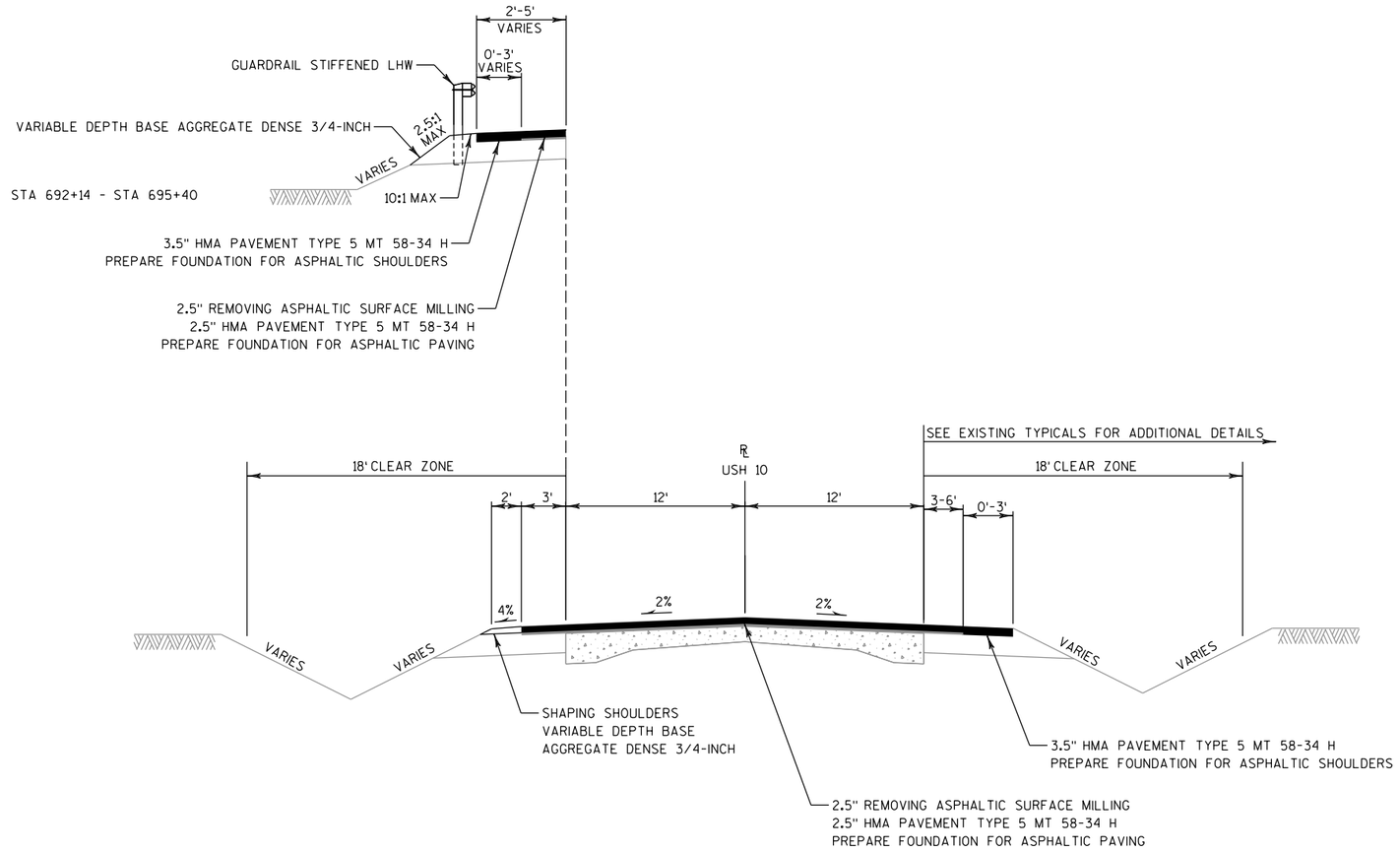
TYPICAL FINISHED SECTION
USH 10
STA 640+39.55 - STA 640+85



TYPICAL FINISHED SECTION
USH 10
STA 640+85 - STA 685+39.22

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	TYPICAL SECTIONS	SHEET 9	E

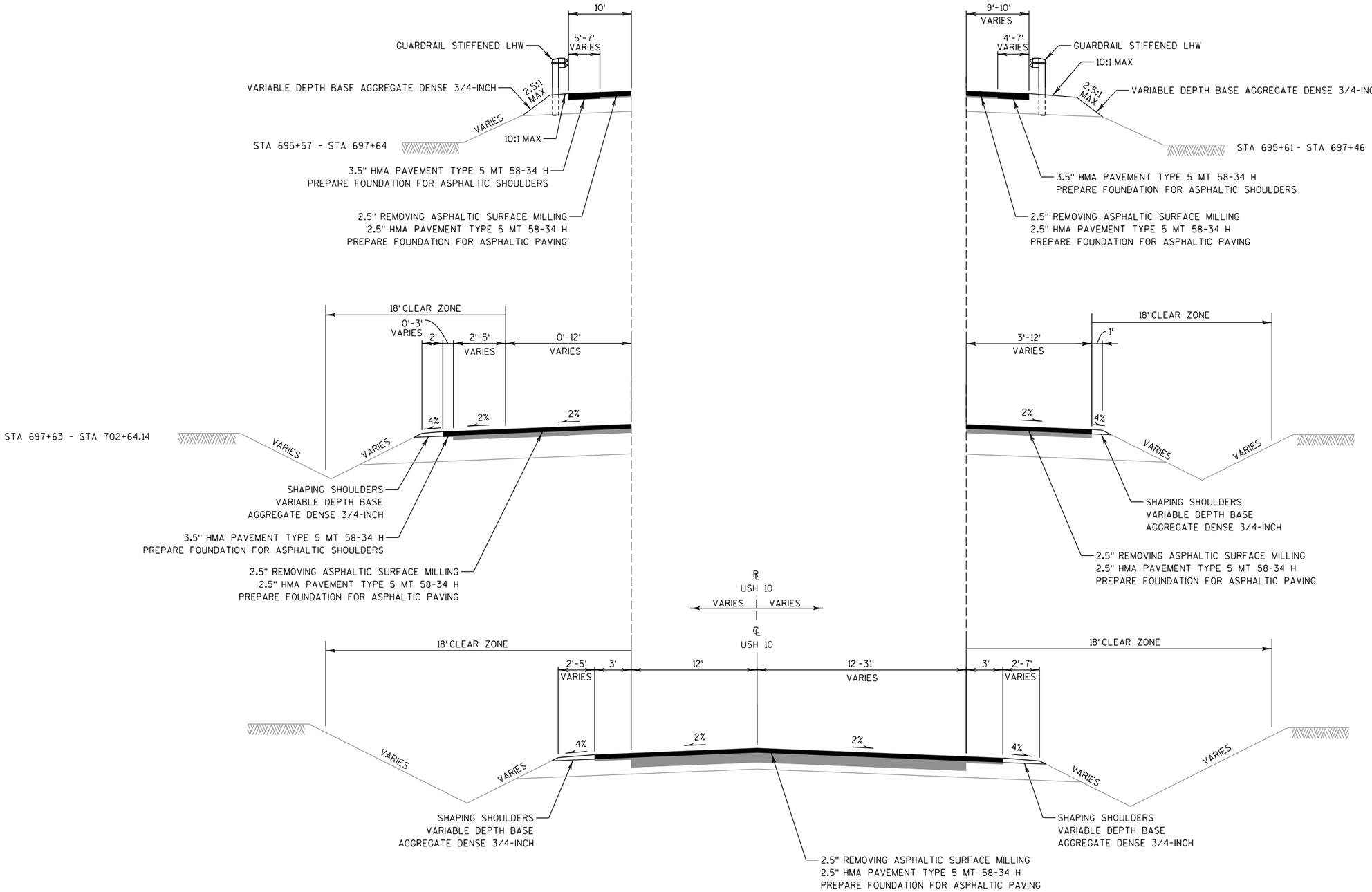
2



TYPICAL FINISHED SECTION

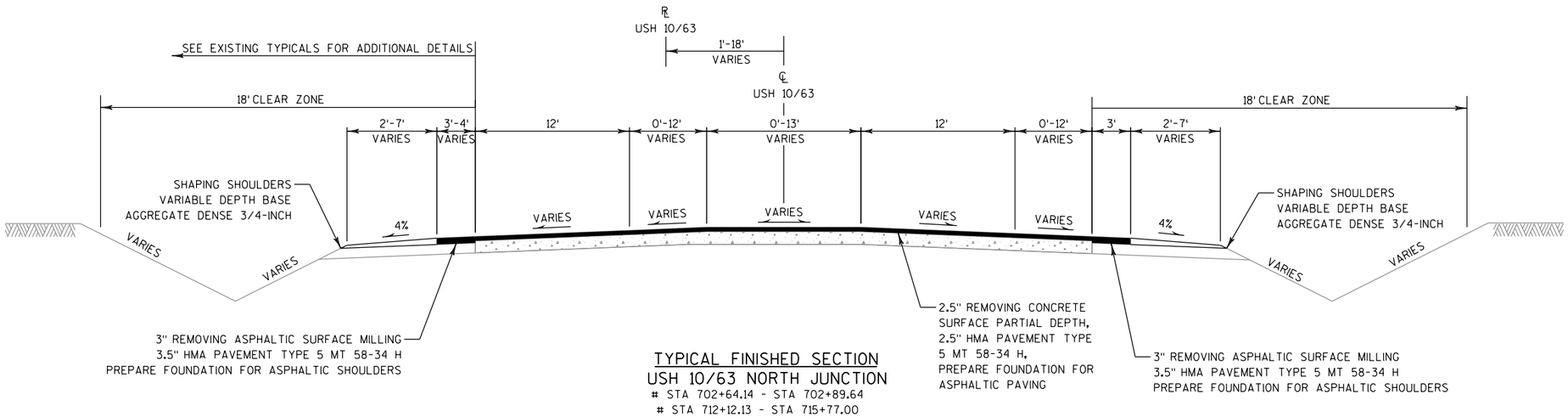
USH 10

STA 685+39.22 - STA 695+47



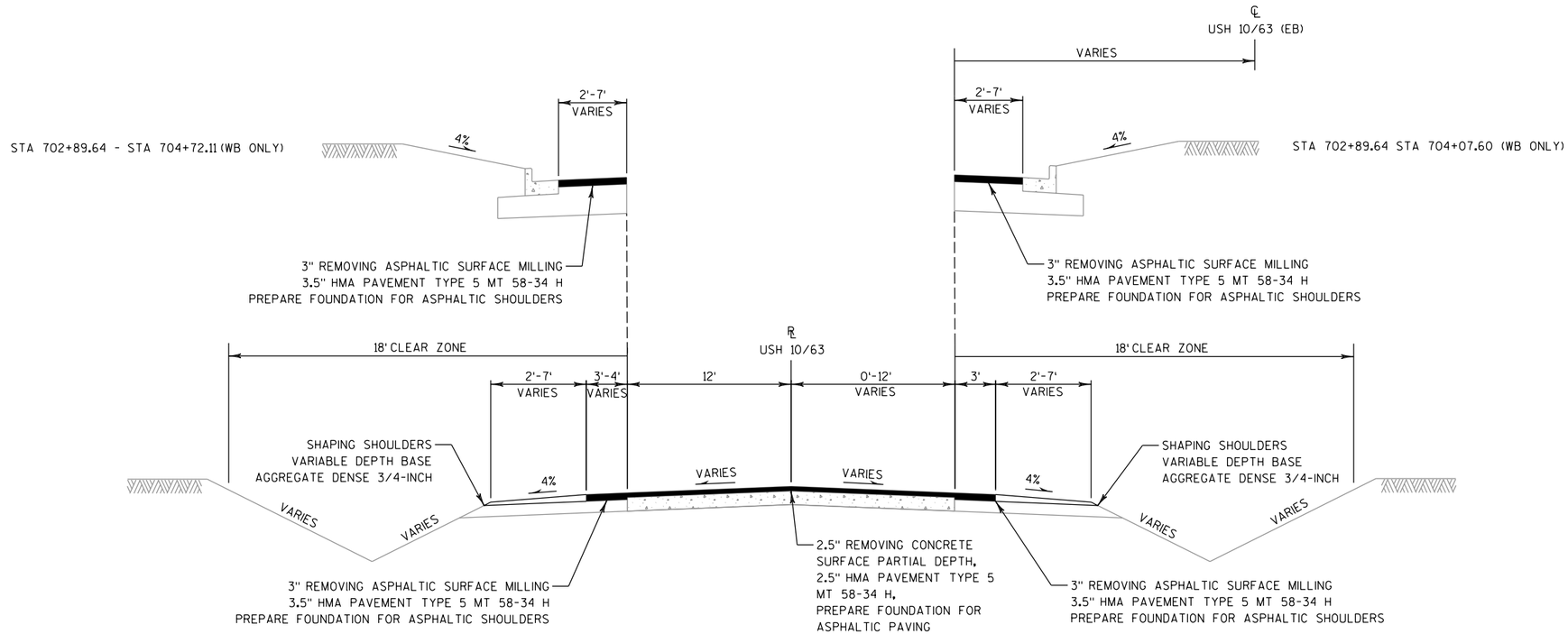
TYPICAL FINISHED SECTION
USH 10
STA 695+47 - STA 702+64.14

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	TYPICAL SECTIONS	SHEET 11	E



TYPICAL FINISHED SECTION
USH 10/63 NORTH JUNCTION

STA 702+64.14 - STA 702+89.64
STA 712+12.13 - STA 715+77.00



TYPICAL FINISHED SECTION
USH 10/63 NORTH JUNCTION

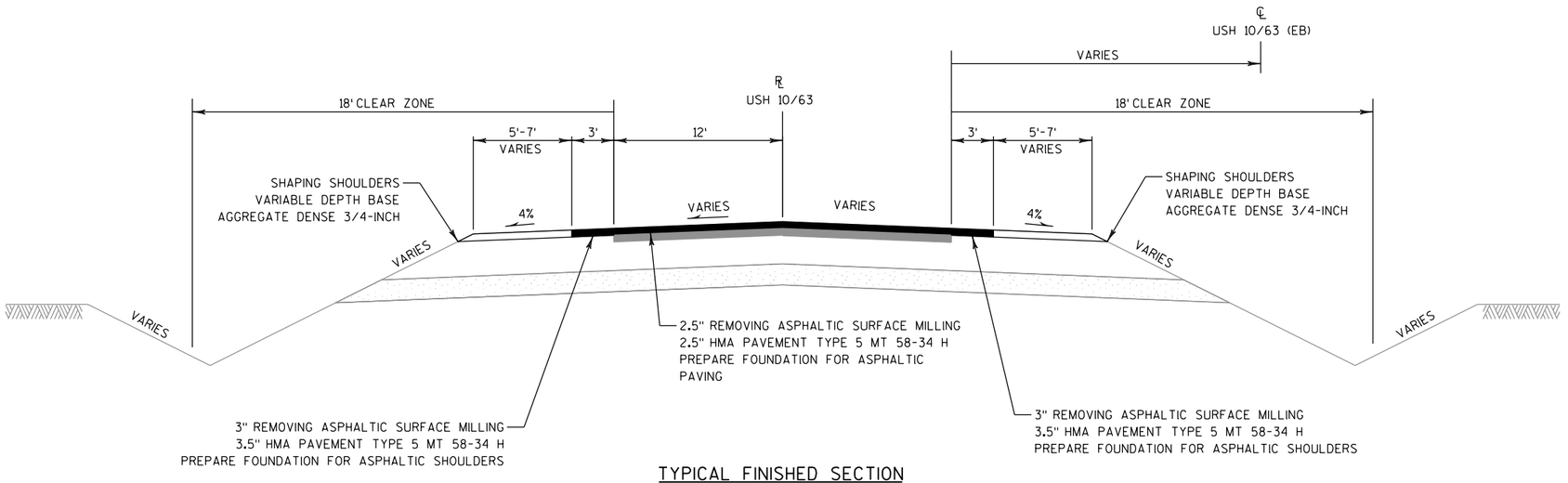
STA 702+89.64 - STA 707+25 (WB ONLY)
STA 709+00 - STA 712+12.13 (WB ONLY)

NOTES

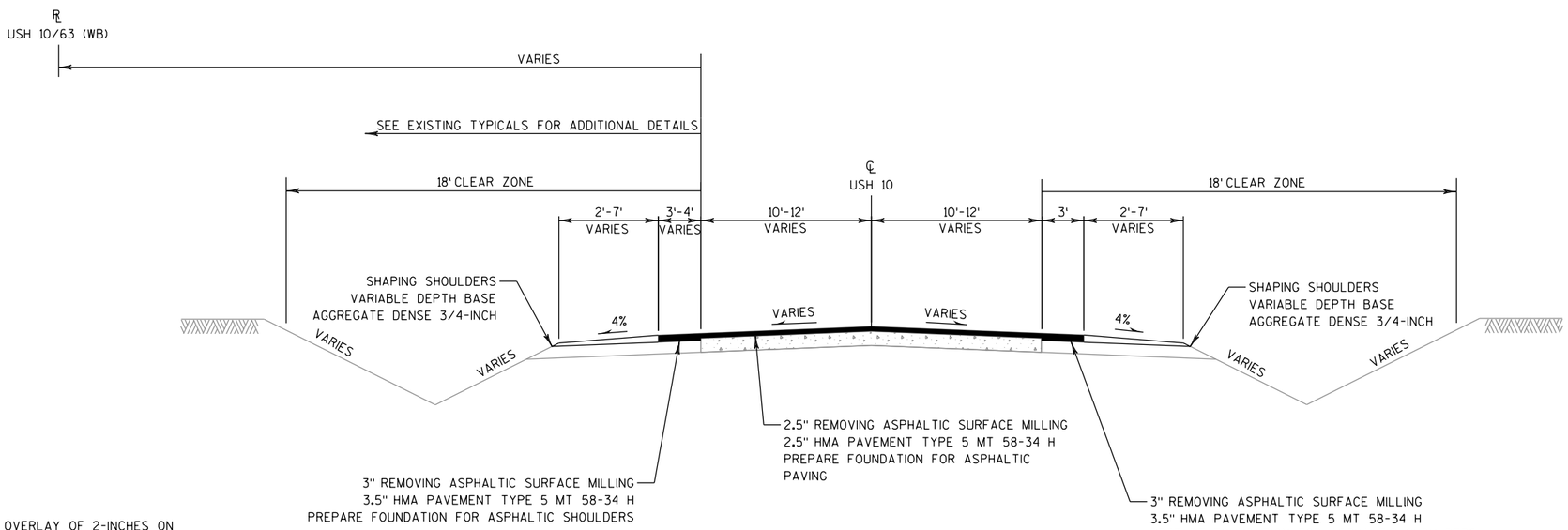
IN AREAS OF EXISTING ASPHALT OVERLAY OF 2-INCHES ON CONCRETE PAVEMENT OR UNKNOWN PAVEMENT TYPE, MILLING IS TO BE HELD AT THE 2.5-INCH DEPTH WILL BE PAID FOR AS REMOVING CONCRETE SURFACE PARTIAL DEPTH.

PAVEMENT CROSS SLOPES VARY DUE TO SUPERELEVATION. SEE SECTION 5 PLAN SHEETS FOR SUPERELEVATION DATA.

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	TYPICAL SECTIONS	SHEET 12	E



TYPICAL FINISHED SECTION
USH 10/63 NORTH JUNCTION
STA 707+25 - STA 709+00 (WB ONLY)



TYPICAL FINISHED SECTION
USH 10/63 NORTH JUNCTION
STA 702+89.64 - STA 707+00 (EB ONLY)

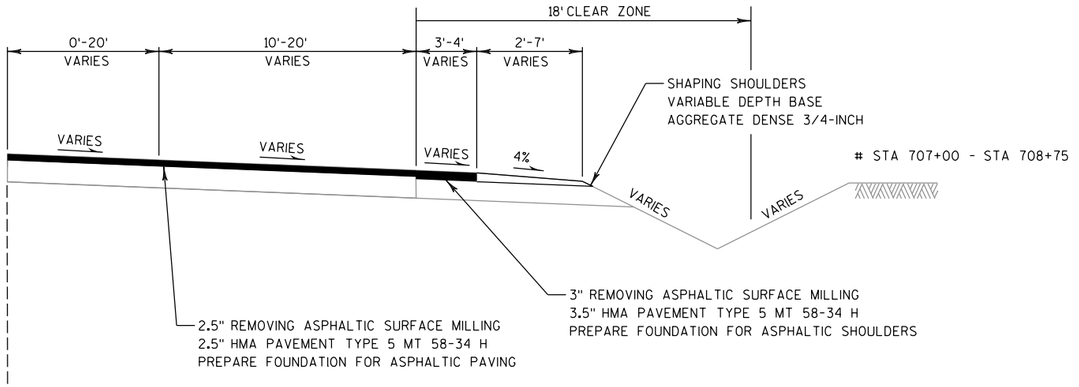
NOTES

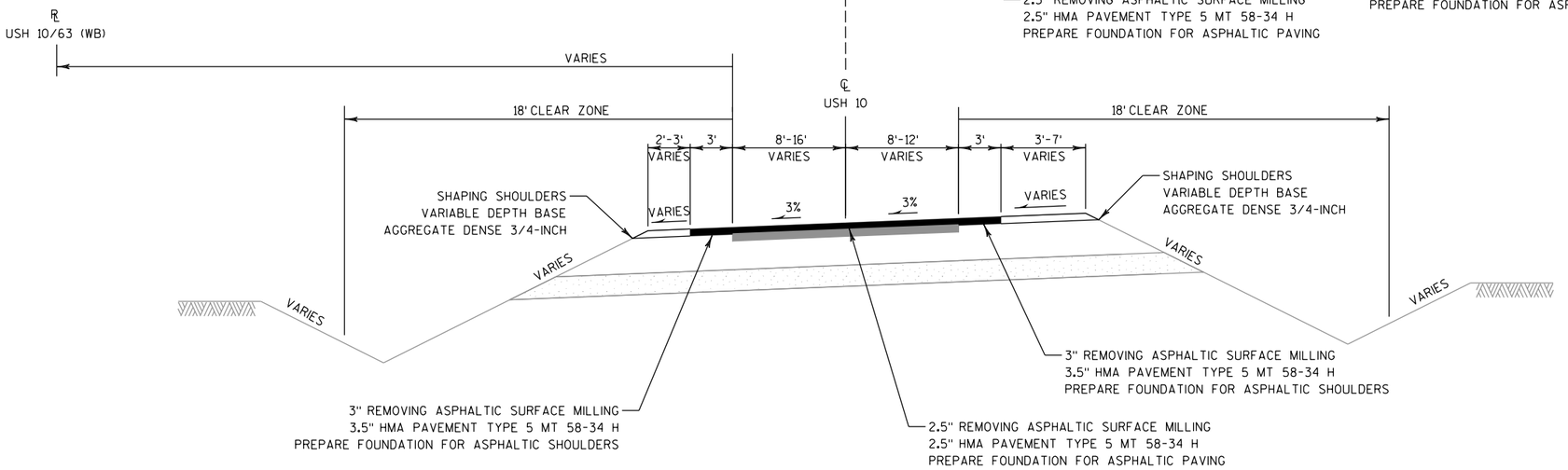
IN AREAS OF EXISTING ASPHALT OVERLAY OF 2-INCHES ON CONCRETE PAVEMENT OR UNKNOWN PAVEMENT TYPE, MILLING IS TO BE HELD AT THE 2.5-INCH DEPTH WILL BE PAID FOR AS REMOVING CONCRETE SURFACE PARTIAL DEPTH.

PAVEMENT CROSS SLOPES VARY DUE TO SUPERELEVATION. SEE SECTION 5 PLAN SHEETS FOR SUPERELEVATION DATA.

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	TYPICAL SECTIONS	SHEET 13	E

2



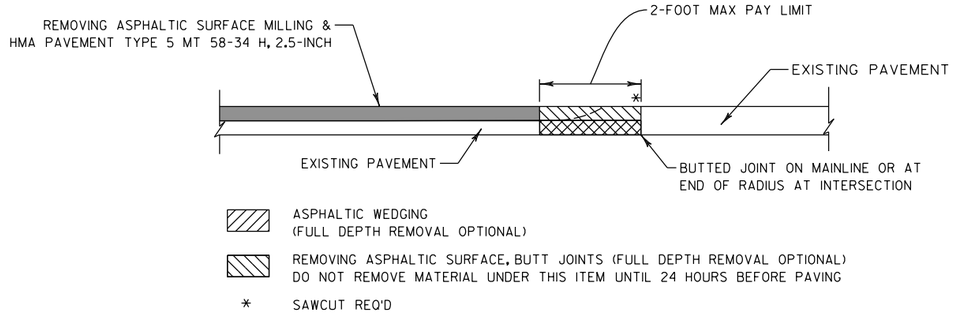


TYPICAL FINISHED SECTION
USH 10/63 NORTH JUNCTION
STA 707+00 - STA 715+77.00 (EB ONLY)

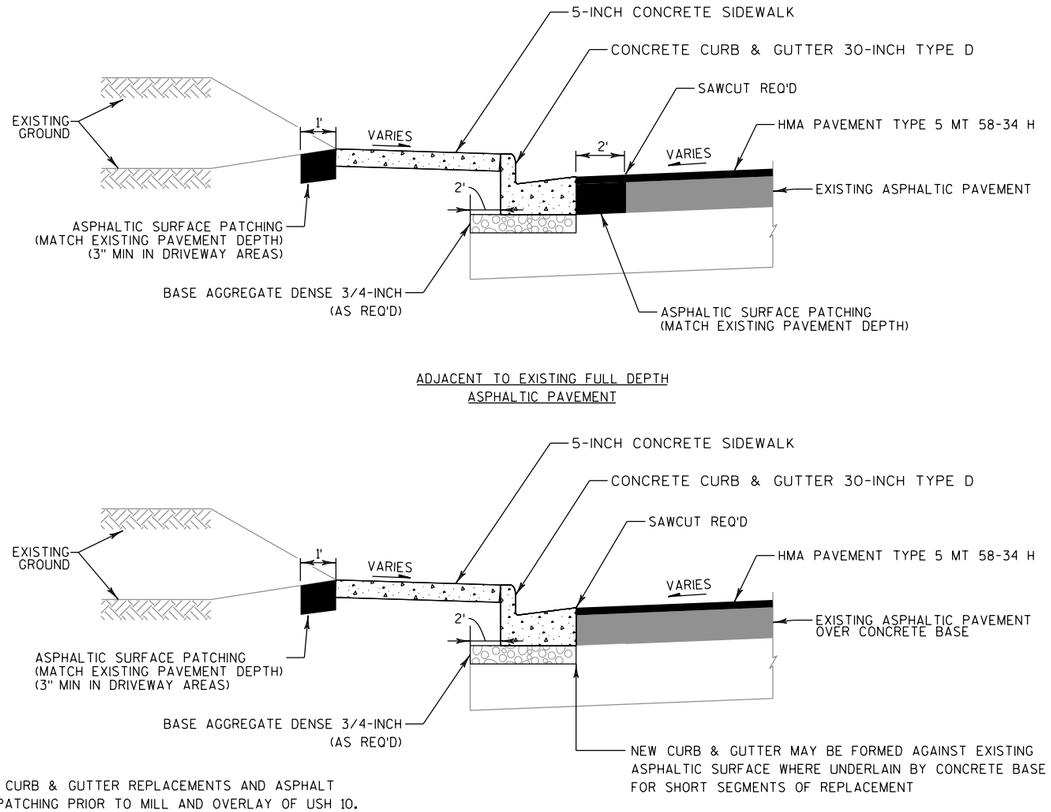
NOTES

\# IN AREAS OF EXISTING ASPHALT OVERLAY OF 2-INCHES ON CONCRETE PAVEMENT OR UNKNOWN PAVEMENT TYPE, MILLING IS TO BE HELD AT THE 2.5-INCH DEPTH WILL BE PAID FOR AS REMOVING CONCRETE SURFACE PARTIAL DEPTH.

PAVEMENT CROSS SLOPES VARY DUE TO SUPERELEVATION. SEE SECTION 5 PLAN SHEETS FOR SUPERELEVATION DATA.



BUTT JOINT DETAIL ON MAINLINE AND SIDE ROADS



ADJACENT TO EXISTING FULL DEPTH ASPHALTIC PAVEMENT

ADJACENT TO EXISTING CONCRETE BASE OVERLAID BY ASPHALTIC PAVEMENT

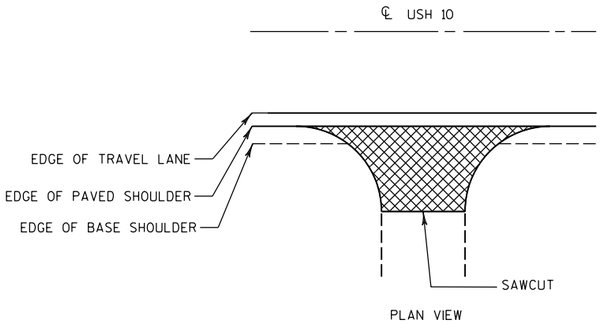
DETAILS OF CURB & GUTTER SPOT REPLACEMENT AREAS

NOTES

COMPLETE CURB & GUTTER REPLACEMENTS AND ASPHALT SURFACE PATCHING PRIOR TO MILL AND OVERLAY OF USH 10. (SEE PAVING DETAILS FOR ADDITIONAL INFORMATION)

WHERE CURB & GUTTER IS ADJACENT TO FULL DEPTH CONCRETE, SAWCUT AND CONSTRUCT CONCRETE CURB & GUTTER TYPE A

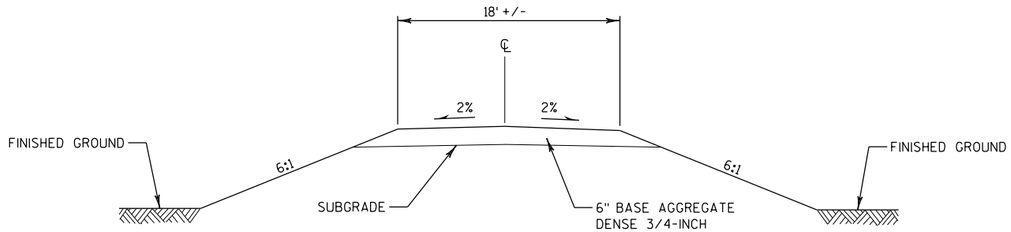
CURB & GUTTER ADJACENT TO CONCRETE BASE IS NOT TIED



DETAIL AT PAVED DRIVEWAYS

STA 695+45, LT (16' WIDE)
STA 697+61, RT (12' WIDE)

REMOVING ASPHALTIC SURFACE (FULL DEPTH WITHIN DRIVEWAY)
RESURFACE WITH 3" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

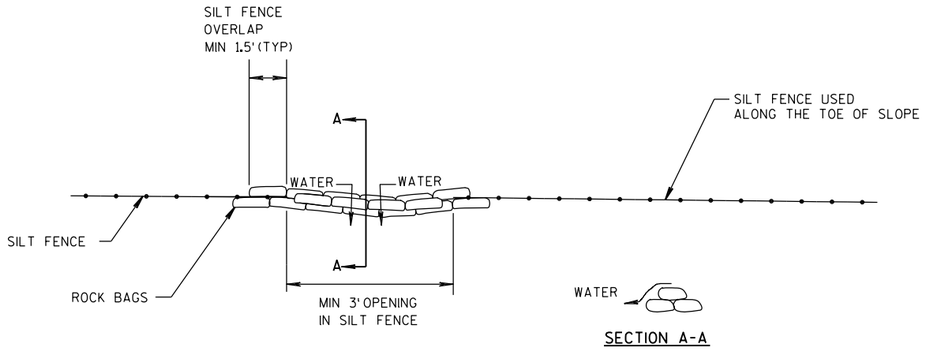


DETAIL OF PRIVATE ENTRANCE

STA 695+54, RT

NOTE

WHERE DRIVEWAYS ARE NOT BEING RECONSTRUCTED BUT HAVE CULVERT PIPES PROPOSED TO BE EXTENDED NEAR ISABELLE CREEK, GRADE SIDE SLOPE OF THE DRIVEWAYS TO 6:1 AS SHOWN ON THIS DETAIL

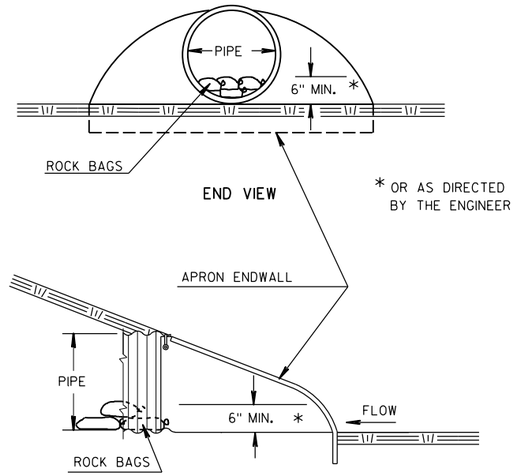


ROCK BAGS SILT FENCE RELIEF DETAIL

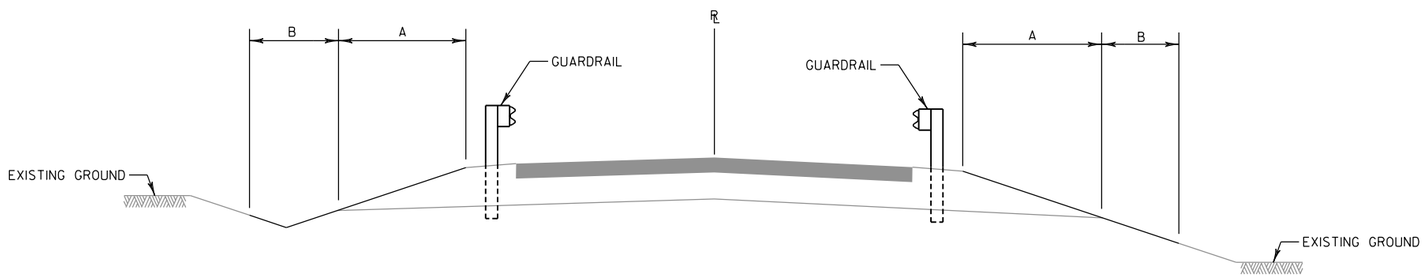
PAID AS ROCK BAGS

NOTE

SEE EROSION CONTROL PLANS FOR ADDITIONAL INFORMATION



CULVERT PIPE CHECK DETAIL



FINISHING ITEMS AT GUARDRAIL GRADING AREAS

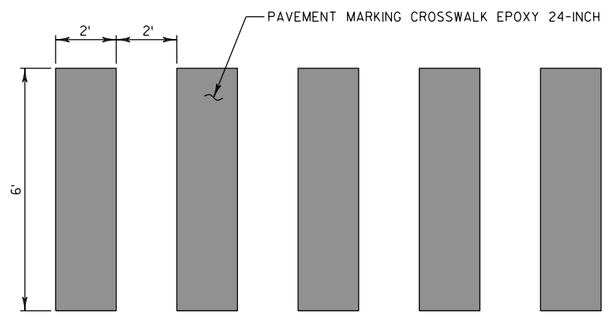
ISABELLE CREEK

NOTES

A= FERTILIZER TYPE B & SEEDING MIXTURE NO. 40

B= TOPSOIL, FERTILIZER TYPE B, SEEDING MIXTURE NO. 40 & EROSION MAT CLASS II TYPE C

TOPSOIL, FERTILIZER TYPE B, AND SEEDING MIXTURE NO. 40 ARE INCIDENTAL TO BARRIER SYSTEM GRADING SHAPING FINISHING ITEM



CROSSWALK PAVEMENT MARKING

BEULAH STREET
MORSE STREET

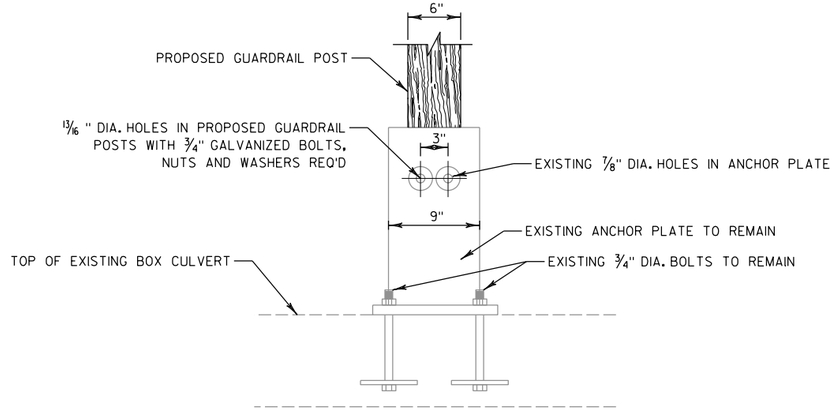
PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CONSTRUCTION DETAILS	SHEET 16	E

2

RUNOFF COEFFICIENT TABLE

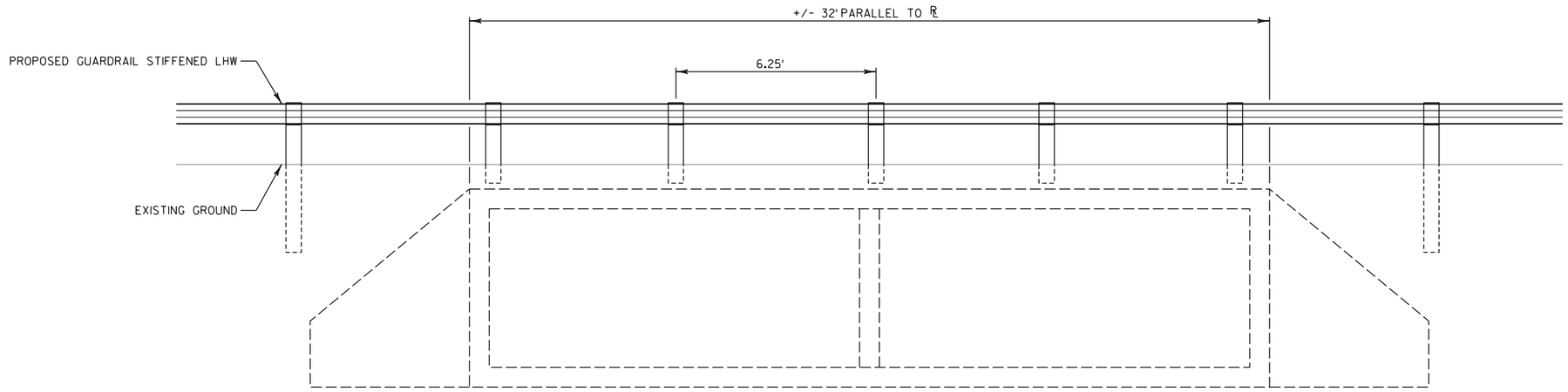
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33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

TOTAL PROJECT AREA = 12 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.4 ACRES



GUARDRAIL POST CONNECTION DETAIL

ELEVATION VIEW OF ANCHOR BRACKET LOOKING PERPENDICULAR TO ℄
10 POSTS REQ'D FOR MOUNTING TO EXISTING BRACKETS
PAID FOR AS GUARDRAIL POST CONNECTION



GUARDRAIL POST CONNECTION OVER BOX CULVERT PROFILE VIEW

ELEVATION VIEW LOOKING PERPENDICULAR TO ℄
B-47-104 OVER ISABELLE CREEK

NOTES

CONNECT WOOD POSTS TO EXISTING GUARDRAIL POST CONNECTIONS

MATCH POST SPACING ON STRUCTURE; USE HALF POST SPACING OUTSIDE OF STRUCTURE

EXPOSE AND CONFIRM SPACING OF POST CONNECTIONS PRIOR TO INSTALLATION OF ENTIRE GUARDRAIL SYSTEM

STA 694+21 - STA 697+64, LT
REMOVING GUARDRAIL

STA 692+09 - STA 697+63, LT
GUARDRAIL STIFFENED LHW (HALF POST SPACING)
STEEL PLATE BEAM GUARD SHORT RADIUS
STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
(SEE STANDARD DETAIL DRAWINGS)

N

TERMINAL ENDS
SHORT OF CULVERT
DO NOT IMPACT CULVERT

STEEL PLATE BEAM
GUARD SHORT RADIUS
36' RADIUS - 12.5' LENGTH
3 CRT POSTS

STEEL PLATE BEAM
GUARD SHORT RADIUS TERMINAL
12.5' LENGTH BEYOND SHORT RADIUS

R 1158+/-

SLOPE INTERCEPT

ISABELLE CREEK

MATCH EXISTING RIPRAP

MATCH BASE AGG DRIVEWAY

GUARDRAIL STIFFENED LHW
HALF POST SPACING

17'

23.4'

17'

USH 10

692+00
+09

693+00
+33

694+00
+58

695+00
+01.6

14.25'

UTILITY ST

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CONSTRUCTION DETAIL - GUARDRAIL LAYOUT	SHEET 18	E

2

2

NOTES

** MOUNT POSTS TO TOP OF BOX CULVERT AT EXISTING 6.25' POST SPACING FOR 25' (SEE CONSTRUCTION DETAIL)

LOCATION OF POST CONNECTIONS IS BASED UPON FIELD SURVEY AND AS-BUILT PLAN COORDINATION; PRIOR TO LAYOUT OF THE REMAINING GUARDRAIL SYSTEM, FIELD VERIFY THE POST CONNECTION LOCATIONS

TREE CANOPIES ARE SHOWN ON BASE MAP, CLEARING AND GRUBBING OF TREES ARE NOT ANTICIPATED

N

STA 694+21 - STA 697+64, LT
REMOVING GUARDRAIL

STA 692+09 - STA 697+63, LT
GUARDRAIL STIFFENED LHW (HALF POST SPACING)
STEEL PLATE BEAM GUARD SHORT RADIUS
STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
(SEE STANDARD DETAIL DRAWINGS)

MATCH EXISTING DRIVEWAY BRIDGE

REMOVE AND REPLACE DRIVEWAY PAVEMENT AS SHOWN ON SECTION 5 SHEETS AND CONSTRUCTION DETAILS

STEEL PLATE BEAM GUARD SHORT RADIUS 26' RADIUS - 12.5' LENGTH 3 CRT POSTS

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL 12.5' LENGTH BEYOND SHORT RADIUS

STEEL PLATE BEAM GUARD SHORT RADIUS 26' RADIUS - 12.5' LENGTH 3 CRT POSTS

ISABELLE CREEK

SLOPE INTERCEPT

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL 12.5' LENGTH BEYOND SHORT RADIUS

MATCH WING WALL

MATCH EXISTING RIPRAP

MATCH WING WALL

MATCH EXISTING CULVERT

**

MATCH BASE AGG DRIVEWAY

TERMINAL POSTS ARE LOCATED ON EACH SIDE OF THE CULVERT DO NOT IMPACT EXISTING CULVERT

STEEL PLATE BEAM GUARD SHORT RADIUS 8' RADIUS - 12.5' LENGTH 3 CRT POSTS

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL 12.5' LENGTH BEYOND SHORT RADIUS

14.25' 14.25' 22.9' 22.9' 18.2' **21.1' **21.6' 22' 42.4'

695+00 +01.6 +16.3 +39.5 +56.8 +60.9 +79.6 +84.4 696+00 +55.4 +72 +80.4 697+00 +97 +22 +45.9 +55.4 +63.4 698+00

USH 10

TERMINAL ENDS SHORT OF CULVERT DO NOT IMPACT NEW CULVERT

29.9' 22' ** 20.8' ** 20.4' 21.5' 28.5'

TERMINAL ENDS SHORT OF CULVERT DO NOT IMPACT EXISTING & NEW CULVERT

REMOVE AND REPLACE DRIVEWAY BASE AGG AS SHOWN ON SECTION 5 SHEETS AND CONSTRUCTION DETAILS

STEEL PLATE BEAM GUARD SHORT RADIUS 36' RADIUS - 12.5' LENGTH 3 CRT POSTS

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL 12.5' LENGTH BEYOND SHORT RADIUS

SLOPE INTERCEPT

**

MATCH EXISTING CULVERT

ISABELLE CREEK

REMOVE AND REPLACE DRIVEWAY PAVEMENT AS SHOWN ON SECTION 5 SHEETS AND CONSTRUCTION DETAILS

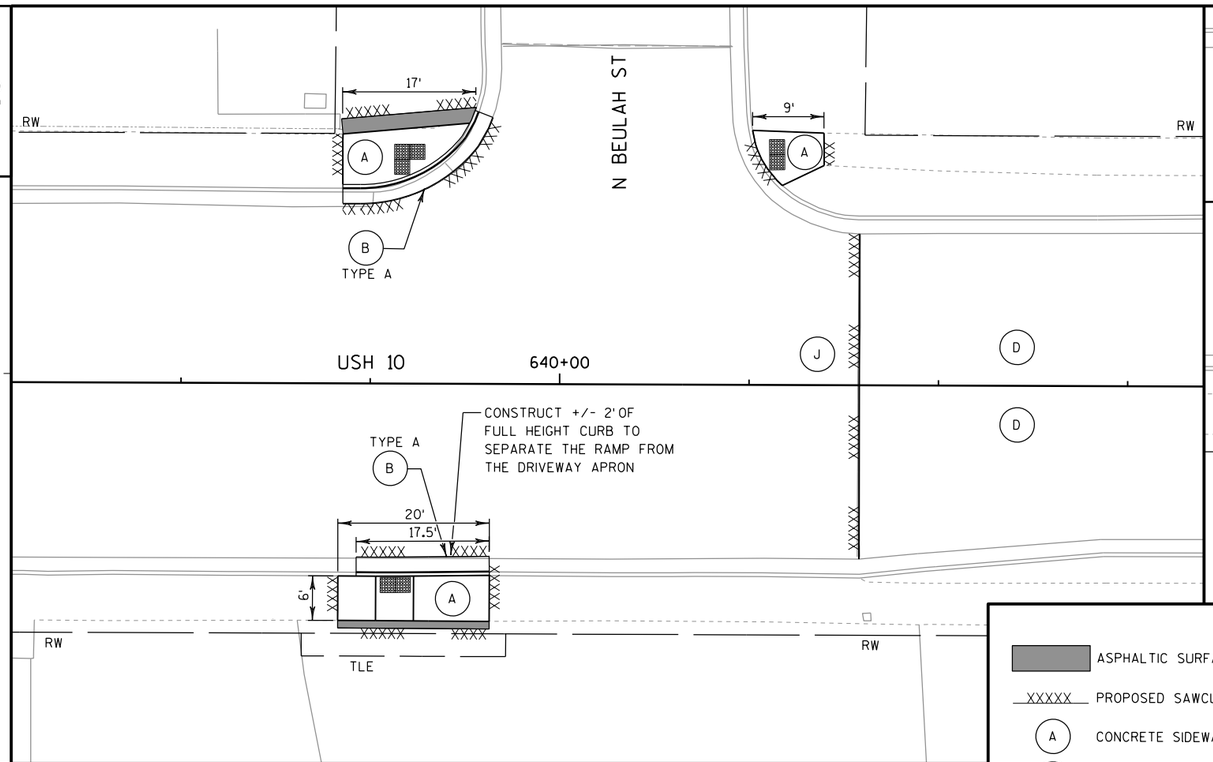
STEEL PLATE BEAM GUARD SHORT RADIUS 36' RADIUS - 12.5' LENGTH 3 CRT POSTS

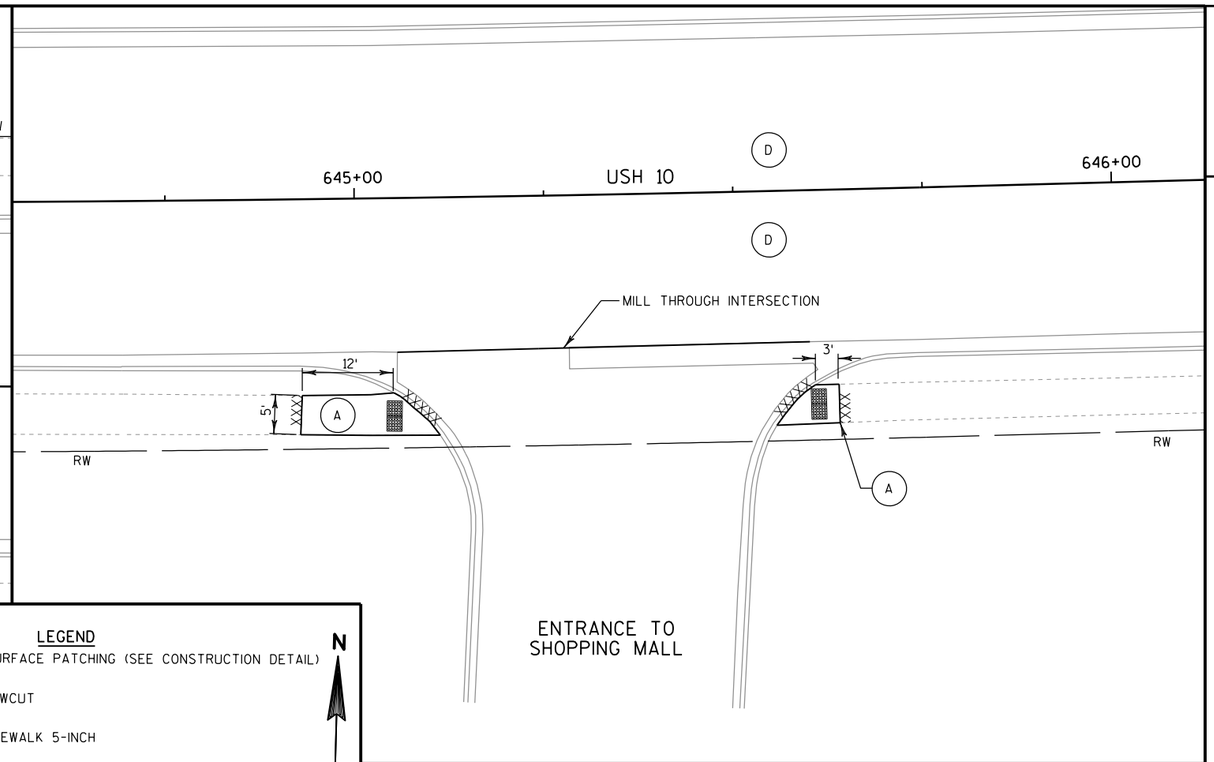
STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL 12.5' LENGTH BEYOND SHORT RADIUS

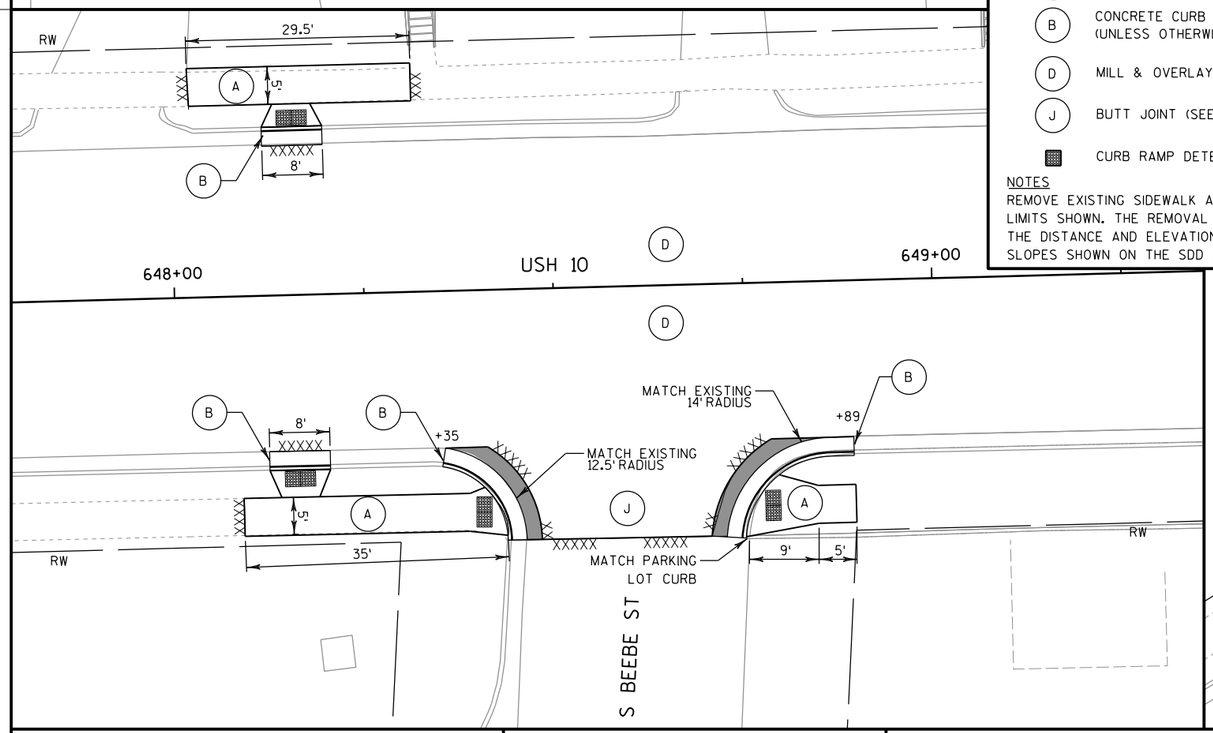
STA 695+60 - STA 697+48, RT
REMOVING GUARDRAIL

STA 695+61 - STA 697+46, RT
GUARDRAIL STIFFENED LHW (HALF POST SPACING)
STEEL PLATE BEAM GUARD SHORT RADIUS
STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
(SEE STANDARD DETAIL DRAWINGS)

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CONSTRUCTION DETAIL - GUARDRAIL LAYOUT	SHEET 19	E





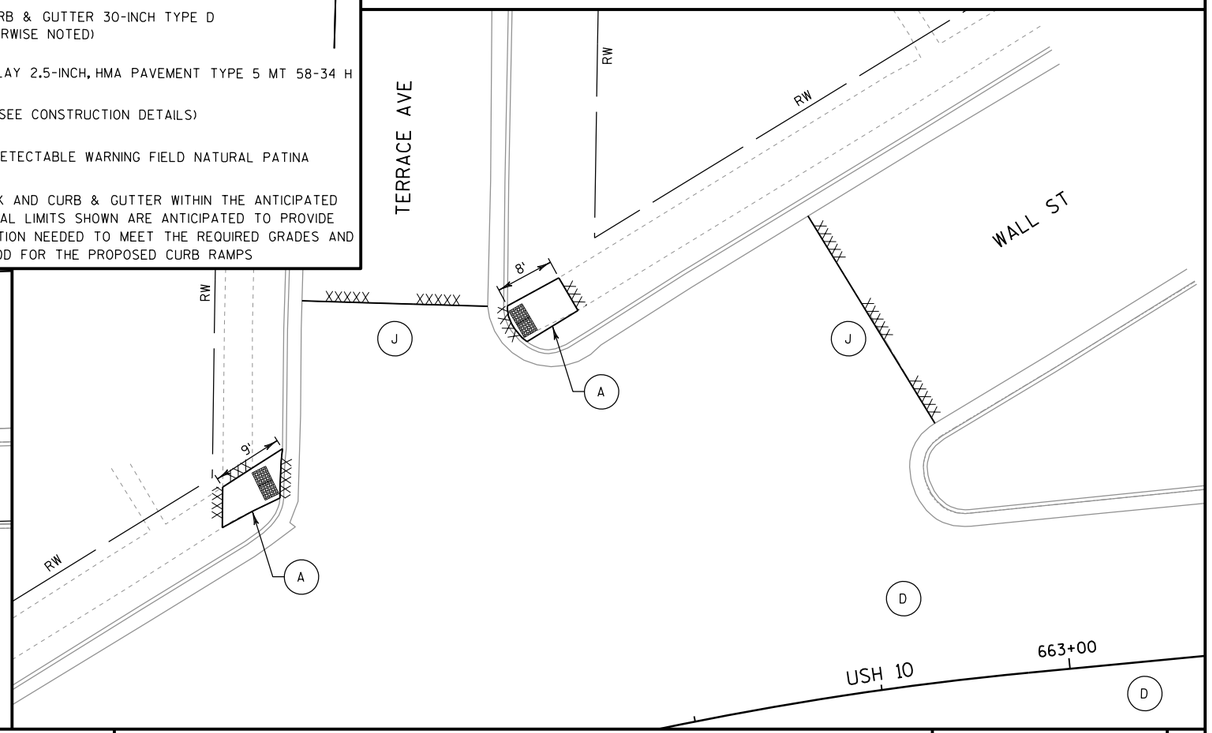


LEGEND

- ASPHALTIC SURFACE PATCHING (SEE CONSTRUCTION DETAIL)
- XXXXX PROPOSED SAWCUT
- (A) CONCRETE SIDEWALK 5-INCH
- (B) CONCRETE CURB & GUTTER 30-INCH TYPE D (UNLESS OTHERWISE NOTED)
- (D) MILL & OVERLAY 2.5-INCH, HMA PAVEMENT TYPE 5 MT 58-34 H
- (J) BUTT JOINT (SEE CONSTRUCTION DETAILS)
- CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

NOTES

REMOVE EXISTING SIDEWALK AND CURB & GUTTER WITHIN THE ANTICIPATED LIMITS SHOWN. THE REMOVAL LIMITS SHOWN ARE ANTICIPATED TO PROVIDE THE DISTANCE AND ELEVATION NEEDED TO MEET THE REQUIRED GRADES AND SLOPES SHOWN ON THE SDD FOR THE PROPOSED CURB RAMPS



PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PAVING DETAILS	SHEET 20	E

2

2

LEGEND

ASPHALTIC SURFACE PATCHING (SEE CONSTRUCTION DETAIL)

XXXXX PROPOSED SAWCUT

(A) CONCRETE SIDEWALK 5-INCH

(B) CONCRETE CURB & GUTTER 30-INCH TYPE D (UNLESS OTHERWISE NOTED)

(D) MILL & OVERLAY 2.5-INCH, HMA PAVEMENT TYPE 5 MT 58-34 H

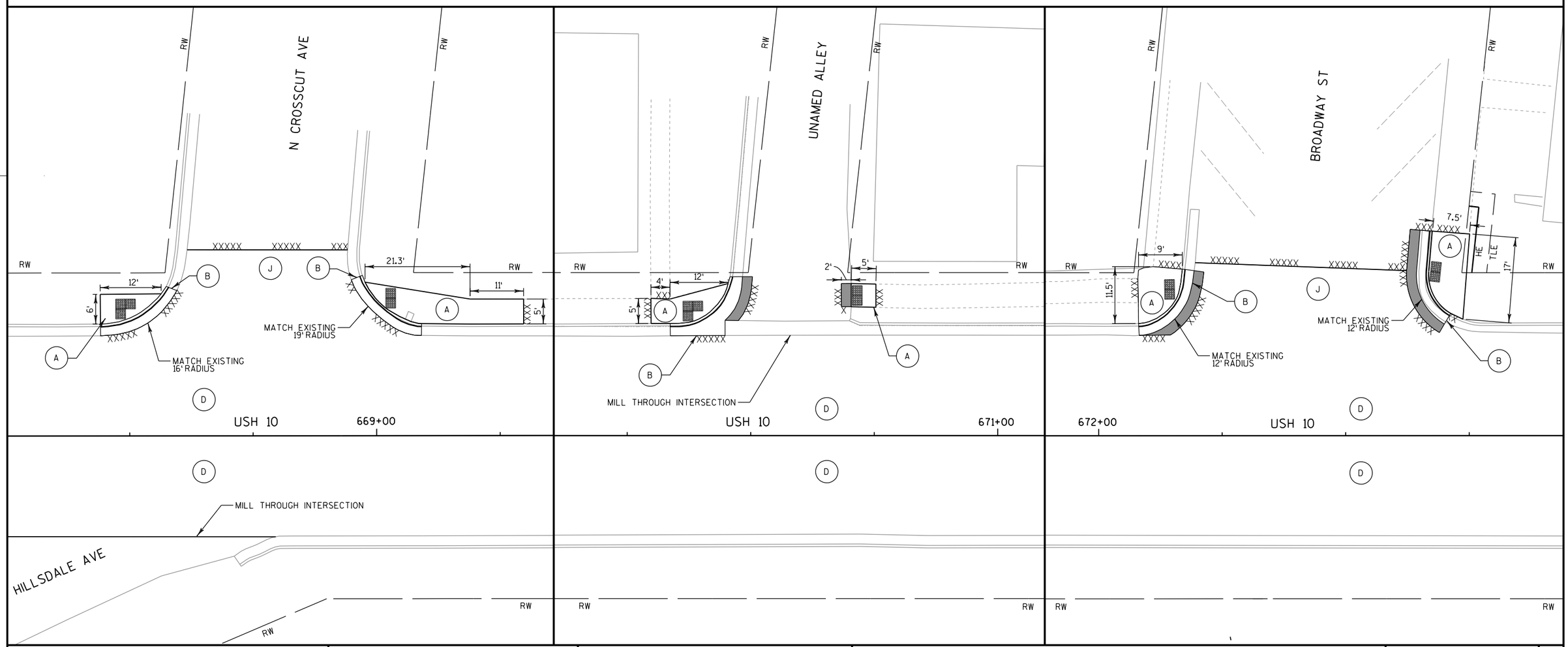
(J) BUTT JOINT (SEE CONSTRUCTION DETAILS)

CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

N

NOTES

REMOVE EXISTING SIDEWALK AND CURB & GUTTER WITHIN THE ANTICIPATED LIMITS SHOWN. THE REMOVAL LIMITS SHOWN ARE ANTICIPATED TO PROVIDE THE DISTANCE AND ELEVATION NEEDED TO MEET THE REQUIRED GRADES AND SLOPES SHOWN ON THE SDD FOR THE PROPOSED CURB RAMPS

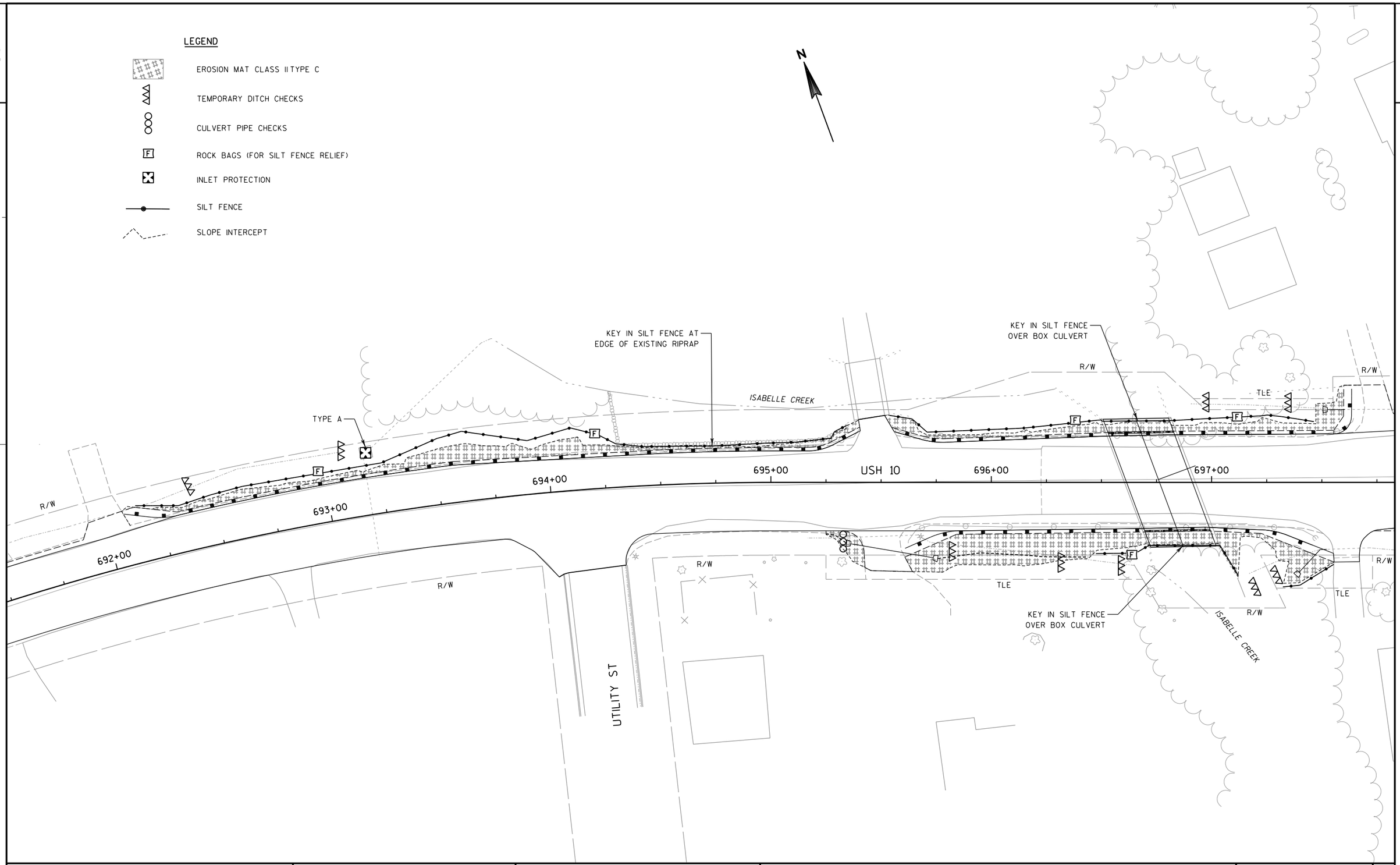


PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PAVING DETAILS	SHEET 21	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\021202_pd.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

LEGEND

- EROSION MAT CLASS II TYPE C
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- [F] ROCK BAGS (FOR SILT FENCE RELIEF)
- INLET PROTECTION
- SILT FENCE
- SLOPE INTERCEPT



PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	EROSION CONTROL	SHEET 22	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\022001_ec.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

LEGEND

EPOXY	EPOXY
MY4	PAVEMENT MARKING 4-INCH (YELLOW)
MSDDY4	PAVEMENT MARKING SAME DAY 4-INCH (DOUBLE YELLOW)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGELINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3'SEG., 9'GAP)
WS8-3	PAVEMENT MARKING 8-INCH (WHITE SKIP)(3'SEG., 9'GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE LANE LINE)(12.5'SEG., 37.5'GAP)
MWE8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWDY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW)(25'C-C)
MWDW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE)(25'C-C)
MAW	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
MWW	PAVEMENT MARKING WORDS (WHITE)
CWW6	PAVEMENT MARKING CROSSWALK 6-INCH (WHITE)
CWW24	PAVEMENT MARKING CROSSWALK 24-INCH (WHITE)
WSTP12	PAVEMENT MARKING STOP LINE 12-INCH (WHITE)

EXISTING SIGN

PROPOSED SIGN

X — SIGN - MOVE

X — SIGN - REMOVE AND REPLACE

X — SIGN - REMOVE

X — SIGN - PLACE NEW

W MAIN ST
W BEULAH ST
REMOVE BY MUNICIPALITY

ELLSWORTH SCHOOLS
TO REMAIN

NO PARKING ANY TIME
TO REMAIN

STOP
R1-1
30" X 30"
1-1

N BEULAH ST

WSTP12 EPOXY
CWW6 EPOXY
REM
REM
CWW24 EPOXY

REMOVE FROM UTILITY POLE
MOUNT ON POST
1-2
SPEED LIMIT 30
R2-1
24" X 30"

MSDDY4 EPOXY

REMOVE FROM UTILITY POLE
MOUNT ON POST
1-4
NO PARKING ANY TIME
R7-1D
18" X 24"

MWDY12 EPOXY

1-6
CENTER LANE ONLY
R3-9B
24" X 36"

N

639+00
640+00
USH 10
641+00
642+00
643+00
644+00
645+00
+00
+40
+93
+93
12'

REM

NO PARKING ANY TIME
CENTER LANE ONLY
TO REMAIN

NO PARKING ANY TIME
R7-1D
18" X 24"
1-3
MOUNT ON LIGHT POLE

MSDDY4 EPOXY

NO PARKING ANY TIME
R7-1D
18" X 24"
1-5
MOUNT ON LIGHT POLE

NOTE
REMOVE EXISTING PAVEMENT MARKING
OUTSIDE OF MILLING LIMITS IN
BEULAH INTERSECTION
(CROSSWALKS AND STOP LINE)

REM — REMOVING PAVEMENT MARKING

BEGIN PROJECT
STA 640+39.55

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 23	E

LEGEND

EPOXY	EPOXY
MY4	PAVEMENT MARKING 4-INCH (YELLOW)
MSDDY4	PAVEMENT MARKING SAME DAY 4-INCH (DOUBLE YELLOW)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGELINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS8-3	PAVEMENT MARKING 8-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE LANE LINE)(12.5' SEG., 37.5' GAP)
MWE8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWDY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW)(25' C-C)
MWDW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE)(25' C-C)
MAW	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
MWW	PAVEMENT MARKING WORDS (WHITE)
CWW6	PAVEMENT MARKING CROSSWALK 6-INCH (WHITE)
CWW24	PAVEMENT MARKING CROSSWALK 24-INCH (WHITE)
WSTP12	PAVEMENT MARKING STOP LINE 12-INCH (WHITE)

EXISTING SIGN

PROPOSED SIGN

X — SIGN - MOVE

X — SIGN - REMOVE AND REPLACE

X — SIGN - REMOVE

X — SIGN - PLACE NEW

N

2-1 NO PARKING ANY TIME R7-1L 18" X 24"

MSDDY4 EPOXY

REMOVE FROM UTILITY POLE

2-6 SPEED LIMIT 30 R2-1 24" X 30"

2-7 SPEED LIMIT 30 REMOVE

2-9 NO PARKING ANY TIME R7-1R 18" X 24"

2-13 WEST 10 SOUTH 63 REMOVE

2-14 WEST 10 SOUTH 63 JV 24" X 72"

NO PARKING ANY TIME REMOVE 2-15

645+00 646+00 647+00 USH 10 648+00 649+00 650+00 651+00

CWW6 EPOXY

REM

ENTRANCE TO STRIP MALL

STOP TO REMAIN

2-2 NO PARKING ANY TIME R7-1D 18" X 24"

2-3 NO PARKING ANY TIME R7-1D 18" X 24"

CWW24 EPOXY

CWW6 EPOXY

DO NOT REPLACE CROSSWALK

2-4 SPEED LIMIT 30 R2-1 24" X 30"

2-5 SPEED LIMIT 30 REMOVE

WSTP12 EPOXY

S BEEBE ST

2-8 STOP R1-1 30" X 30"

E MAIN ST

S BEEBE ST

REMOVE BY MUNICIPALITY

STOP REMOVE

2-10

2-11 NO PARKING ANY TIME R7-1D 18" X 24"

EAST 10 SOUTH 63 J3-2 48" X 57"

2-12

NOTE

REMOVE EXISTING PAVEMENT MARKING OUTSIDE OF MILLING LIMITS AT ENTRANCE TO STRIP MALL (CROSSWALK)

REM REMOVING PAVEMENT MARKING

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 24	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\024502_pm_ps.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:40

LEGEND

EPOXY	EPOXY
MY4	PAVEMENT MARKING 4-INCH (YELLOW)
MSDDY4	PAVEMENT MARKING SAME DAY 4-INCH (DOUBLE YELLOW)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGELINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS8-3	PAVEMENT MARKING 8-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE LANE LINE)(12.5' SEG., 37.5' GAP)
MWE8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWDY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW)(25' C-C)
MWDW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE)(25' C-C)
MAW	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
MWW	PAVEMENT MARKING WORDS (WHITE)
CWW6	PAVEMENT MARKING CROSSWALK 6-INCH (WHITE)
CWW24	PAVEMENT MARKING CROSSWALK 24-INCH (WHITE)
WSTP12	PAVEMENT MARKING STOP LINE 12-INCH (WHITE)

EXISTING SIGN

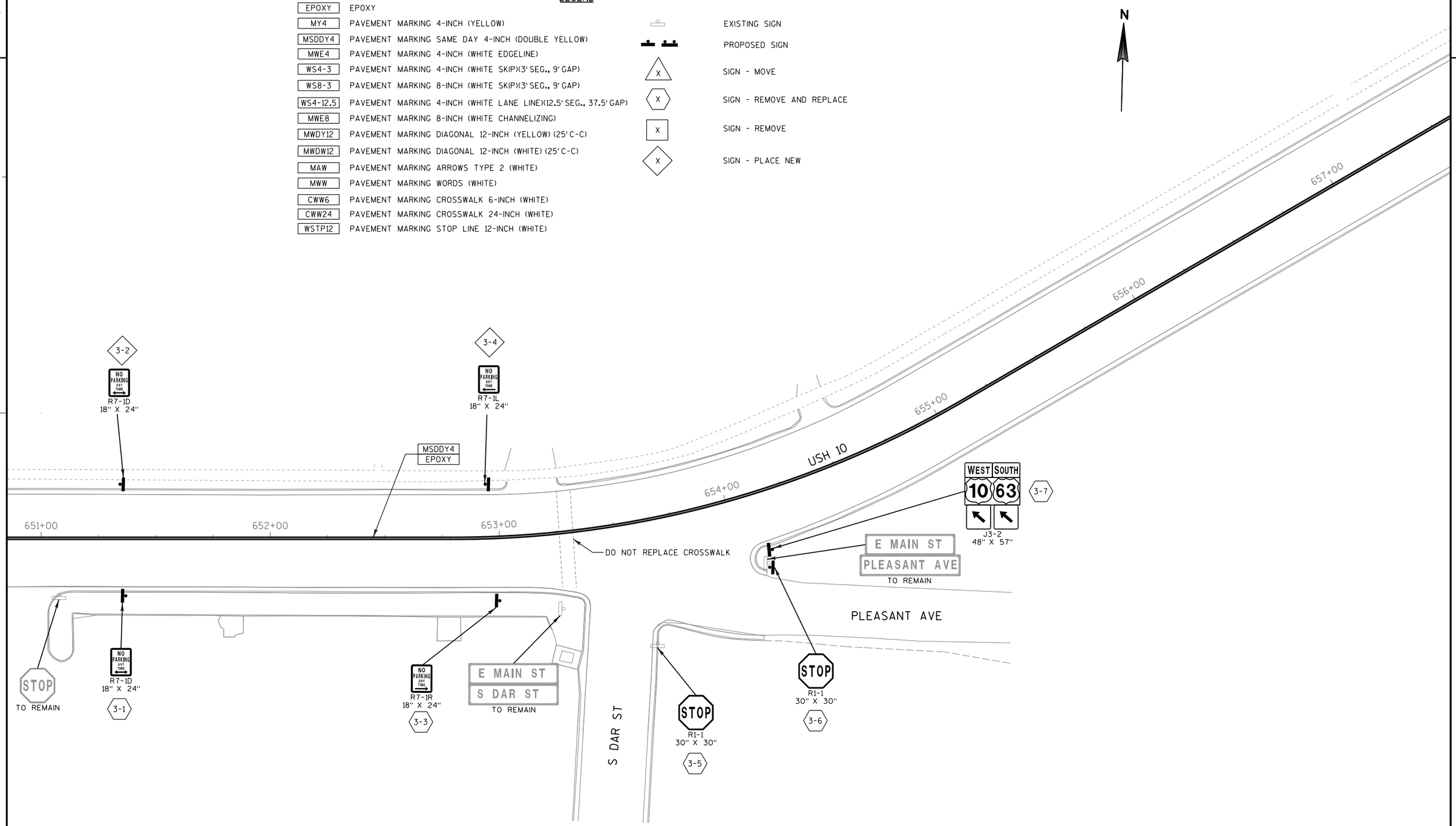
PROPOSED SIGN

SIGN - MOVE

SIGN - REMOVE AND REPLACE

SIGN - REMOVE

SIGN - PLACE NEW



PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 25	E

2

LEGEND

EPOXY	EPOXY
MY4	PAVEMENT MARKING 4-INCH (YELLOW)
MSDDY4	PAVEMENT MARKING SAME DAY 4-INCH (DOUBLE YELLOW)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGELINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS8-3	PAVEMENT MARKING 8-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE LANE LINE)(12.5' SEG., 37.5' GAP)
MWE8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWDY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW)(25' C-C)
MWDW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE)(25' C-C)
MAW	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
MWW	PAVEMENT MARKING WORDS (WHITE)
CWW6	PAVEMENT MARKING CROSSWALK 6-INCH (WHITE)
CWW24	PAVEMENT MARKING CROSSWALK 24-INCH (WHITE)
WSTP12	PAVEMENT MARKING STOP LINE 12-INCH (WHITE)

EXISTING SIGN

PROPOSED SIGN

X — SIGN - MOVE

X — SIGN - REMOVE AND REPLACE

X — SIGN - REMOVE

X — SIGN - PLACE NEW

N

4-1
SPEED LIMIT 30
R2-1
24" X 30"

4-3
WEST SOUTH 10 63
REMOVE

4-4
WEST 10
SOUTH 63
JV
24" X 72"

MSDDY4
EPOXY

4-5
STOP
R1-1
30" X 30"

TERRACE AVE

WSTP12
EPOXY

CWW6
EPOXY

WALL ST

657+00 658+00 659+00 USH 10 660+00 661+00 662+00 663+00

4-2
SPEED LIMIT 30
R2-1
24" X 30"

4-6
EAST NORTH 10 63
J2-2
48" X 57"

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 26	E

2

LEGEND

EPOXY	EPOXY
MY4	PAVEMENT MARKING 4-INCH (YELLOW)
MSDDY4	PAVEMENT MARKING SAME DAY 4-INCH (DOUBLE YELLOW)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGELINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS8-3	PAVEMENT MARKING 8-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE LANE LINE)(12.5' SEG., 37.5' GAP)
MWE8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWDY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW) (25' C-C)
MWDW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE) (25' C-C)
MAW	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
MWW	PAVEMENT MARKING WORDS (WHITE)
CWW6	PAVEMENT MARKING CROSSWALK 6-INCH (WHITE)
CWW24	PAVEMENT MARKING CROSSWALK 24-INCH (WHITE)
WSTP12	PAVEMENT MARKING STOP LINE 12-INCH (WHITE)

EXISTING SIGN

PROPOSED SIGN

X — SIGN - MOVE

X — SIGN - REMOVE AND REPLACE

X — SIGN - REMOVE

X — SIGN - PLACE NEW

N

WALL ST
TERRACE AVE
REMOVE BY MUNICIPALITY

STOP 5-1
R1-1
30" X 30"

TERRACE AVE

WSTP12
EPOXY

CWW6
EPOXY

WALL ST

5-2
EAST NORTH
10 63
J3-2
48" X 57"

5-3
EAST NORTH
10 63
REMOVE

5-4
SPEED LIMIT 30
R2-1
24" X 30"

MSDDY4
EPOXY

663+00 664+00 665+00 USH 10 666+00 667+00 668+00

662+00

SPEED LIMIT 30
R2-1
24" X 30"
5-5

HILLSDALE AVE

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 27	E

LEGEND

EPOXY	EPOXY
MY4	PAVEMENT MARKING 4-INCH (YELLOW)
MSDDY4	PAVEMENT MARKING SAME DAY 4-INCH (DOUBLE YELLOW)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGELINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS8-3	PAVEMENT MARKING 8-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE LANE LINE)(12.5' SEG., 37.5' GAP)
MWE8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWDY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW) (25' C-C)
MWDW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE) (25' C-C)
MAW	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
MWW	PAVEMENT MARKING WORDS (WHITE)
CWW6	PAVEMENT MARKING CROSSWALK 6-INCH (WHITE)
CWW24	PAVEMENT MARKING CROSSWALK 24-INCH (WHITE)
WSTP12	PAVEMENT MARKING STOP LINE 12-INCH (WHITE)

EXISTING SIGN

PROPOSED SIGN

X — SIGN - MOVE

X — SIGN - REMOVE AND REPLACE

X — SIGN - REMOVE

X — SIGN - PLACE NEW

N

E MAIN ST
N CROSSCUT AVE
TO REMAIN

6-1
WEST SOUTH
10 63
J1-2
48" X 39"

6-3
STOP
R1-1
30" X 30"

N CROSSCUT AVE

MSDDY4
EPOXY

WSTP12
EPOXY

CWW6
EPOXY

6-4
STOP
R1-1
30" X 30"

UNAMED ALLEY

WSTP12
EPOXY

CWW6
EPOXY

6-6
SPEED LIMIT 30
R2-1
24" X 30"

BROADWAY
E MAIN ST
REMOVE BY MUNICIPALITY

PLACE BOX OUT
IN NEW SIDEWALK

6-9
STOP
R1-1
30" X 30"

BROADWAY ST

WSTP12
EPOXY

CWW6
EPOXY

STOP
TO REMAIN

668+00 669+00 670+00 671+00 672+00 673+00 674+00

USH 10

MSDDY4
EPOXY

HILLSDALE AVE

STOP
R1-1
30" X 30"
6-2

E MAIN ST
HILLSDALE AVE
TO REMAIN

EAST ELLSWORTH BUS. DIST.
TO REMAIN

NO PARKING ANY TIME
R7-1L
18" X 24"
6-5

NO PARKING ANY TIME
REMOVE
6-7

SPEED LIMIT 30
R2-1
24" X 30"
6-8

SPEED LIMIT 30
REMOVE
6-10

NO PARKING ANY TIME
R7-1D
18" X 24"
6-11

NO PARKING ANY TIME
R7-1R
18" X 24"
6-12

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 28	E

LEGEND

EPOXY	EPOXY
MY4	PAVEMENT MARKING 4-INCH (YELLOW)
MSDDY4	PAVEMENT MARKING SAME DAY 4-INCH (DOUBLE YELLOW)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGELINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS8-3	PAVEMENT MARKING 8-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE LANE LINE)(12.5' SEG., 37.5' GAP)
MWE8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWDY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW)(25' C-C)
MWDW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE)(25' C-C)
MAW	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
MWW	PAVEMENT MARKING WORDS (WHITE)
CWW6	PAVEMENT MARKING CROSSWALK 6-INCH (WHITE)
CWW24	PAVEMENT MARKING CROSSWALK 24-INCH (WHITE)
WSTP12	PAVEMENT MARKING STOP LINE 12-INCH (WHITE)

EXISTING SIGN

PROPOSED SIGN

X — SIGN - MOVE

X — SIGN - REMOVE AND REPLACE

X — SIGN - REMOVE

X — SIGN - PLACE NEW

N

MORSE ST

USH 10

674+00 675+00 676+00 677+00 678+00 679+00 680+00

+50 +58 5'RT +00 5'RT +20 +03 5'RT

7-1 J4-2 EAST NORTH 10 63 48" X 36"

7-2 J4-2 WEST SOUTH 10 63 REMOVE

EAST ELLSWORTH BUS. DIST TO REMAIN

7-3 R7-1R NO PARKING ANY TIME 18" X 24"

7-4 R7-1L NO PARKING ANY TIME 18" X 24"

7-5 R7-1D NO PARKING ANY TIME 18" X 24"

MSDDY4 EPOXY

7-6 R2-1 SPEED LIMIT 30 24" X 30"

MSDDY4 EPOXY

MWDY12 EPOXY

7-7 R7-1D NO PARKING ANY TIME 18" X 24"

7-8 R2-1 SPEED LIMIT 30 24" X 30"

7-9 R7-1D NO PARKING ANY TIME 18" X 24"

MWE8 EPOXY

7-10 REMOVE NO PARKING ANY TIME

7-11 R1-1 STOP 30" X 30"

7-12 REMOVE SPEED LIMIT 30

7-13 REMOVE NO PARKING ANY TIME

MAW EPOXY

7-14 J4-2 WEST SOUTH 10 63 48" X 36"

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 29	E

LEGEND

EPOXY	EPOXY
MY4	PAVEMENT MARKING 4-INCH (YELLOW)
MSDDY4	PAVEMENT MARKING SAME DAY 4-INCH (DOUBLE YELLOW)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGELINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS8-3	PAVEMENT MARKING 8-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE LANE LINE)(12.5' SEG., 37.5' GAP)
MWE8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWDY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW) (25' C-C)
MWDW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE) (25' C-C)
MAW	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
MWW	PAVEMENT MARKING WORDS (WHITE)
CWW6	PAVEMENT MARKING CROSSWALK 6-INCH (WHITE)
CWW24	PAVEMENT MARKING CROSSWALK 24-INCH (WHITE)
WSTP12	PAVEMENT MARKING STOP LINE 12-INCH (WHITE)

EXISTING SIGN

PROPOSED SIGN

X — SIGN - MOVE

X — SIGN - REMOVE AND REPLACE

X — SIGN - REMOVE

X — SIGN - PLACE NEW

N

MORSE ST

N WALLACE ST

USH 10

S WALLACE ST

WSTP12 EPOXY

CWW24 EPOXY

MWE8 EPOXY

MSDDY4 EPOXY

MAW EPOXY

MWDY12 EPOXY

8-3

STOP
R1-1
30" X 30"

+79 11' +33

+64 6'LT

+04 5'RT

+14 11'

+94 5'RT

+98 5'RT

680+00 681+00 682+00 683+00

+73 11' +35

+69 6'LT

+98 5'RT

684+00 685+00 686+00

+36 +52

MWE4 EPOXY

NO PARKING ANY TIME
R7-1D
18" X 24"
8-1

NO OUTLET
W14-2
30" X 30"
8-2

STOP
R1-1
30" X 30"
8-4

WALLACE ST
E MAIN ST
REMOVE BY MUNICIPALITY

NO PARKING ANY TIME
R7-1D
18" X 24"
8-5

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 30	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\024508_pm_ps.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:40

LEGEND

EPOXY	EPOXY
MY4	PAVEMENT MARKING 4-INCH (YELLOW)
MSDDY4	PAVEMENT MARKING SAME DAY 4-INCH (DOUBLE YELLOW)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGELINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS8-3	PAVEMENT MARKING 8-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE LANE LINE)(12.5' SEG., 37.5' GAP)
MWE8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWDY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW) (25' C-C)
MWDW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE) (25' C-C)
MAW	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
MWW	PAVEMENT MARKING WORDS (WHITE)
CWW6	PAVEMENT MARKING CROSSWALK 6-INCH (WHITE)
CWW24	PAVEMENT MARKING CROSSWALK 24-INCH (WHITE)
WSTP12	PAVEMENT MARKING STOP LINE 12-INCH (WHITE)

EXISTING SIGN

PROPOSED SIGN

X — SIGN - MOVE

X — SIGN - REMOVE AND REPLACE

X — SIGN - REMOVE

X — SIGN - PLACE NEW

N

MOUNT ON EXISTING FLASHING BEACON POST

9-1

SPEED LIMIT 30

R2-1
24" X 30"

9-2

NO PARKING ON VILLAGE STREETS

MOVE

MWE4
EPOXY

686+00 687+00 688+00 USH 10 689+00 690+00 691+00 692+00

+18

MSDDY4
EPOXY

MSDDY4
EPOXY

MWE4
EPOXY

S POND ST

STOP

R1-1
30" X 30"

9-3

SPEED LIMIT 30

R2-1
24" X 30"

9-4

POND ST

E MAIN ST

REMOVE BY MUNICIPALITY

JCT
COUNTY C

REMOVE

9-5

2

LEGEND

EPOXY	EPOXY
MY4	PAVEMENT MARKING 4-INCH (YELLOW)
MSDDY4	PAVEMENT MARKING SAME DAY 4-INCH (DOUBLE YELLOW)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGELINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS8-3	PAVEMENT MARKING 8-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE LANE LINE)(12.5' SEG., 37.5' GAP)
MWE8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWDY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW)(25' C-C)
MWDW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE)(25' C-C)
MAW	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
MWW	PAVEMENT MARKING WORDS (WHITE)
CWW6	PAVEMENT MARKING CROSSWALK 6-INCH (WHITE)
CWW24	PAVEMENT MARKING CROSSWALK 24-INCH (WHITE)
WSTP12	PAVEMENT MARKING STOP LINE 12-INCH (WHITE)

EXISTING SIGN

PROPOSED SIGN

X — SIGN - MOVE

X — SIGN - REMOVE AND REPLACE

X — SIGN - REMOVE

X — SIGN - PLACE NEW

N

10-2
SPEED LIMIT 30
R2-1
24" X 30"

10-6
SPEED LIMIT 30
REMOVE

MWE4
EPOXY

10-7
W6-3
36" X 36"

LOCATION OF CENTERLINE VARIES TO ALLOW FOR 12' USH 10 THROUGH LANE AND 10' TO 11' TURN LANES AT CTH C

USH 10

692+00
693+00
694+00
695+00
+01
696+00
697+00
+53
+86
+91
12'
10'

+66

WS4-3
EPOXY

JCT
COUNTY C
J1-1
24" X 39"
10-1

MWE4
EPOXY

UTILITY ST

STOP
R1-1
30" X 30"
10-3

UTILITY ST
E MAIN ST
REMOVE BY MUNICIPALITY

JCT
72
J1-1
24" X 39"
10-4

MWE4
EPOXY

SPEED LIMIT 30
R2-1
24" X 30"
10-5

ISABELLE CREEK

MSDDY4
EPOXY

MWE8
EPOXY

MWDY12
EPOXY

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 32	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\024510_pm_ps.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

LEGEND

EPOXY	EPOXY
MY4	PAVEMENT MARKING 4-INCH (YELLOW)
MSDDY4	PAVEMENT MARKING SAME DAY 4-INCH (DOUBLE YELLOW)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGELINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS8-3	PAVEMENT MARKING 8-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE LANE LINE)(12.5' SEG., 37.5' GAP)
MWE8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWDY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW) (25' C-C)
MWDW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE) (25' C-C)
MAW	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
MWW	PAVEMENT MARKING WORDS (WHITE)
CWW6	PAVEMENT MARKING CROSSWALK 6-INCH (WHITE)
CWW24	PAVEMENT MARKING CROSSWALK 24-INCH (WHITE)
WSTP12	PAVEMENT MARKING STOP LINE 12-INCH (WHITE)
CURB	PAVEMENT MARKING CURB (YELLOW)
NOSE	PAVEMENT MARKING ISLAND NOSE (YELLOW)

EXISTING SIGN
PROPOSED SIGN
SIGN - MOVE
SIGN - REMOVE AND REPLACE
SIGN - REMOVE
SIGN - PLACE NEW

N

11-1 SPEED LIMIT 30 R2-1 24" X 30"
11-3 SPEED LIMIT 30 REMOVE
11-6 COUNTY C J13-1 24" X 45"
11-11 DO NOT ENTER R5-1 30" X 30"
11-12 ONLY ONLY R3-8E 36" X 30"

MSDDY4 EPOXY
MWE8 EPOXY
MWE4 EPOXY
WS8-3 EPOXY
CURB EPOXY
MY4 EPOXY
NOSE EPOXY
MAW EPOXY
MWDY12 EPOXY

699+00 700+00 701+00 702+00 703+00 704+00
+00 +50 +84 +88 +91 +92 +95 +15 +18 +75
12' 11' 10'
USH 10
℄ = ℄

11-2 COUNTY C J13-1 24" X 45"
11-4 STOP R1-1 30" X 30"
11-5 10 63 J3-2 48" X 45"
11-7 SPEED LIMIT 40 R2-1 24" X 30"
11-8 NORTH EAST EAST 63 72 10 J2-3 72" X 57"
11-9 R4-7 24" X 30"
11-10 REMOVE
11-13 Baldwin Elmwood Durand D1-3 66" X 36"

CTH C

LOCATION OF CENTERLINE VARIES TO ALLOW FOR 12' USH 10 THROUGH LANE AND 10' TO 11' TURN LANES AT CTH C

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 33	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\024511_pm_ps.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:40

2

LEGEND

EPOXY	EPOXY
MY4	PAVEMENT MARKING 4-INCH (YELLOW)
MSDDY4	PAVEMENT MARKING SAME DAY 4-INCH (DOUBLE YELLOW)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGELINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS8-3	PAVEMENT MARKING 8-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE LANE LINE)(12.5' SEG., 37.5' GAP)
MWE8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWDY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW)(25' C-C)
MWDW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE)(25' C-C)
MAW	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
MWW	PAVEMENT MARKING WORDS (WHITE)
CWW6	PAVEMENT MARKING CROSSWALK 6-INCH (WHITE)
CWW24	PAVEMENT MARKING CROSSWALK 24-INCH (WHITE)
WSTP12	PAVEMENT MARKING STOP LINE 12-INCH (WHITE)

EXISTING SIGN
PROPOSED SIGN
SIGN - MOVE
SIGN - REMOVE AND REPLACE
SIGN - REMOVE
SIGN - PLACE NEW

N

704+00 705+00 706+00 707+00 USH 10 (WB)/USH 63 (WB) 708+00 709+00 710+00

+60

12'
12'

USH 10 (EB)/USH 63 (EB)

11'
11'

+46

+73

+83

USH 63 (EB)

USH 10 (EB)

12-1 WRONG WAY R5-1A 36" X 24"

X ZONING ENGINE BRAKE REMOVE BY MUNICIPALITY

12-2 Ellsworth POPULATION 3,284 I2-3 66" X 24"

12-3 JCT COUNTY C J1-1 24" X 39"

12-4 SPEED LIMIT 40 R2-1 24" X 30"

MWE4 EPOXY

12-12 DO NOT ENTER R5-1 30" X 30"

12-13 WEST SOUTH 10 63 J4-2 48" X 36"

MY4 EPOXY

WS8-3 EPOXY

MWE4 EPOXY

MWE8 EPOXY

NORTH EAST EAST 63 72 10 J3-3 72" X 57" 12-5

DO NOT ENTER REMOVE 12-6

WRONG WAY R5-1A 36" X 24" 12-7 12-8

MWDW12 EPOXY

MY4 EPOXY

DO NOT ENTER R5-1 30" X 30" 12-11

WS4-12.5 EPOXY

MWE4 EPOXY

ALL SIGNS ON USH 10 SOUTH TO REMAIN

NORTH EAST EAST 63 72 10 J3-3 72" X 57" 12-9

NORTH EAST EAST 63 72 10 12-10

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 34	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\024512_pm_ps.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:40

2

LEGEND

EPOXY	EPOXY
MY4	PAVEMENT MARKING 4-INCH (YELLOW)
MSDDY4	PAVEMENT MARKING SAME DAY 4-INCH (DOUBLE YELLOW)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGELINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS8-3	PAVEMENT MARKING 8-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE LANE LINE)(12.5' SEG., 37.5' GAP)
MWE8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWDY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW) (25' C-C)
MWDW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE) (25' C-C)
MAW	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
MWW	PAVEMENT MARKING WORDS (WHITE)
CWW6	PAVEMENT MARKING CROSSWALK 6-INCH (WHITE)
CWW24	PAVEMENT MARKING CROSSWALK 24-INCH (WHITE)
WSTP12	PAVEMENT MARKING STOP LINE 12-INCH (WHITE)

EXISTING SIGN

PROPOSED SIGN

X — SIGN - MOVE

X — SIGN - REMOVE AND REPLACE

X — SIGN - REMOVE

X — SIGN - PLACE NEW

N

13-4 R6-2L ONE WAY 24" X 30"

13-5 R5-1 DO NOT ENTER 30" X 30"

13-6 J3-3 EAST 10 | WEST 10 | SOUTH 63 72" X 57"

13-10 R3-8E ONLY | ONLY 36" X 30"

13-15 D1-2 Ellsworth / Durand 72" X 30"

END PROJECT
STA 715+77.00

710+00 USH 10 (WB)/USH 63 (WB) 711+00 712+00 713+00 714+00 715+00 716+00

USH 63 (WB)

USH 63 (EB)

USH 10 (WB & EB)

USH 10 (EB)

MY4 EPOXY

13-3 R4-7 24" X 30"

WS4-12.5 EPOXY

MWW EPOXY +56 MAW EPOXY +96

MAW EPOXY +58

+78 +02

MWE8 EPOXY

MWE4 EPOXY

MSDDY4 EPOXY

MWDY12 EPOXY

MY4 EPOXY

MWE4 EPOXY

MWE4 EPOXY

13-1 13-2 R5-1 DO NOT ENTER 30" X 30"

ALL SIGNS ON USH 10 SOUTH TO REMAIN

13-7 J3-1 EAST 10 24" X 57"

13-9 R5-1A WRONG WAY 36" X 24"

13-11 J4-2 NORTH EAST 63 72 48" X 36"

13-8 R4-7 24" X 30"

13-13 NORTH EAST 63 72

13-12 R5-1 DO NOT ENTER 30" X 30"

13-14 W6-3 36" X 36"

SPONSOR JEFF HINES KNOCH SCREEN REPAIR TO REMAIN

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 35	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\024513_pm_ps.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

TRAFFIC CONTROL GENERAL NOTES

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

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

3) "WO" SIGNS ARE THE SAME A "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

4) FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A TYPE C WARNING LIGHT.

5) ALL TYPE III BARRICADES SHALL BE EQUIPED WITH TYPE "A" (LOW INTENSITY FLASHING) LIGHTS PER SDDS.

6) MAINTAIN ALL EXISTING STOP SIGNS AT ALL TIMES.

7) SEE SPECIAL PROVISIONS FOR ADDTIONAL TRAFFIC CONRTOL AND STAGING REQUIREMENTS.

8) MAINTAIN 16'(MIN) CLEAR ON USH 10 IN EACH DIRECTION AT ALL TIMES DURING NON-WORKING HOURS UNLESS OTHERWISE ALLOWED. USH 10 TRAFFIC MAY BE REDUCED TO ONE LANE WITH FLAGGING DURING WORKING HOURS; MAINTAIN 16'(MIN) CLEAR WIDTH UNLESS OTHERWISE ALLOWED.

NOTES

COMPLETE THE MILL AND OVERLAY ON THE RIGHT SIDE OF USH 10 PRIOR TO REMOVING THE EXISTING GUARDRAIL ON THE LEFT SIDE OF USH 10 FROM STA 692+00 TO STA 695+50. POST WIDTH RESTRICTIONS WHEN AVAILABLE WIDTH IS LESS THAN 16-FEET.

SEE SDD "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)" FOR WORK ON USH 10.

PLACE TRAFFIC CONTROL SIGNS AND DRUMS PER SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" DURING WORK FOR GUARDRAIL AND CURB RAMP REPLACEMENTS.

SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR SIDEWALK CLOSURE DEVICES AT EACH LOCATION WHEN SIDEWALK USE IS IMPEDED.

ADDITIONAL FLAGGERS MAY BE REQUIRED DURING CONSTRUCTION WORK NEAR THE USH 10/USH 63 INTERSECTION.

* PLACE SIGN M1-4 AND M3-2 OR M3-4 WHEN ASSEMBLY IS MOUNTED ON ALL ROADWAYS OTHER THAN USH 10 OR USH 63.

DURING WORK ALONG USH 10, PARKING MAY BE RESTRICTED BETWEEN BEEBE STREET AND MORSE STREET. PLACE NO PARKING SIGNING, AS REQUIRED.

LEGEND

- WORK ZONE
- PROJECT 1530-02-72 WORK ZONE
- MB — TRAFFIC CONTROL SIGNS PCMS
- (1) SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
- (2) SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
- (3) PLACE THE W20-1 SIGN PER THE "TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL" IN SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"

ADVANCED WARNING FOR LANE WIDTH RESTRICTIONS

PLACE THE FOLLOWING ADVANCED WARNING SIGNS AT THE FOLLOWING LOCATIONS DURING OPERATIONS THAT REDUCE THE AVAILABLE WIDTH TO 15-FEET IN THE AREA OF THE GUARDRAIL WORK FROM STA 692+00 TO STA 695+50

* EAST OR WEST — M3-2 24" X 12" / M3-4 24" X 12"

* 10 — M1-4 24" X 24"

MAX. 14' WIDTH — W12-52 48" X 48"

XX MILES AHEAD — W057-52 36" X 24"

1. STH 65 SB - 1.5 MILES
2. USH 10 EB - 1.5 MILES
3. USH 10 EB - 1.4 MILES
4. USH 10 EB - 3.1 MILES
5. USH 63 NB - 3.1 MILES
6. CTH C NB - 0.1 MILES
7. USH 10 WB - 0.1 MILES
8. USH 10 WB - 0.4 MILES
9. USH 63 SB - 0.4 MILES
10. USH 63 SB - 1.7 MILES
11. USH 63 SB - 10.5 MILES
12. USH 63 SB - 11.5 MILES
13. USH 63 SB - 17.7 MILES

NOTES

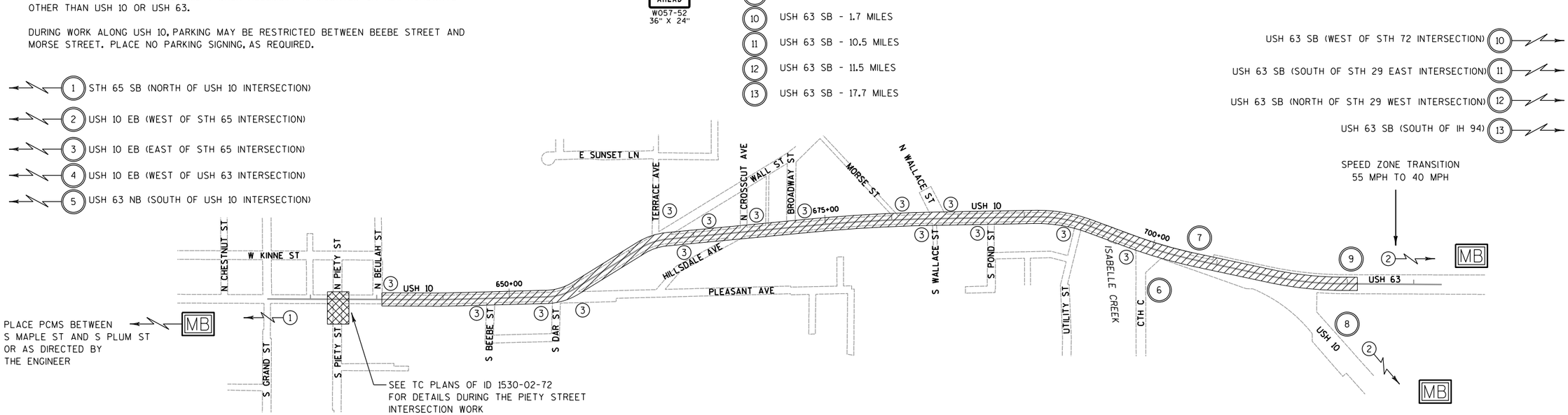
ADJUST TRAFFIC CONTROL PCMS MESSAGE AS NEEDED BASED ON WORK ZONE AREAS AND CONSTRUCTION SCHEDULE.

CONSIDER GEOMETRICS WHEN LOCATING MESSAGE BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE BOARD FOR A MINIMUM OF 1000 FEET IN FRONT OF THE MESSAGE BOARD.

PLACE TRAFFIC CONTROL SIGNS PCMS AND DISPLAY THE "PRIOR TO CONSTRUCTION" MESSAGE 7 DAYS PRIOR TO THE EXPECTED START OF THE PROPOSED WORK THAT WILL REQUIRE LANE CLOSURES. ADJUST THE MESSAGE DATE ACCORDINGLY.

TRAFFIC CONTROL SIGNS PCMS MESSAGES

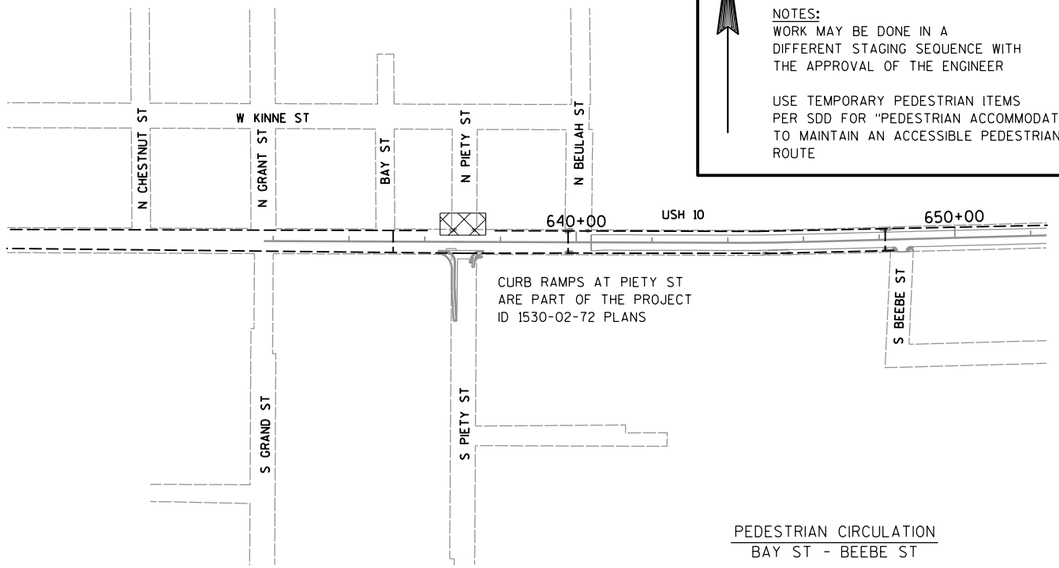
	PCMS SIGN LOCATION	PRIOR TO CONSTRUCTION PHASE 1 (2 SEC)	PRIOR TO CONSTRUCTION PHASE 2 (2 SEC)	DURING CONSTRUCTION AT USH 10/USH 63 JCT PHASE 1 (2 SEC)	DURING CONSTRUCTION AT USH 10/USH 63 JCT PHASE 2 (2 SEC)
#	EB USH 10 WEST OF PIETY ST	ROAD WORK STARTS	DATE	--	--
#	WB USH 63 EAST OF USH 10	ROAD WORK STARTS	DATE	ONE-WAY TRAFFIC AHEAD	WATCH FOR FLAGGER
#	WB USH 10 SOUTH OF USH 63	ROAD WORK STARTS	DATE	ONE-WAY TRAFFIC AHEAD	WATCH FOR FLAGGER



PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	TRAFFIC CONTROL OVERVIEW	SHEET 36	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\025001_tc.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:800

2



PEDESTRIAN CIRCULATION
BAY ST - BEEBE ST

LEGEND

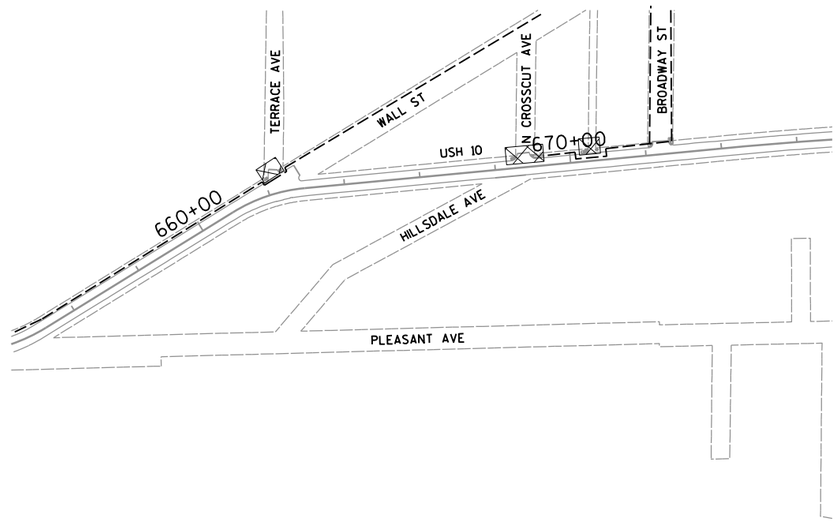
N

WORK ZONES

PEDESTRIAN ROUTE

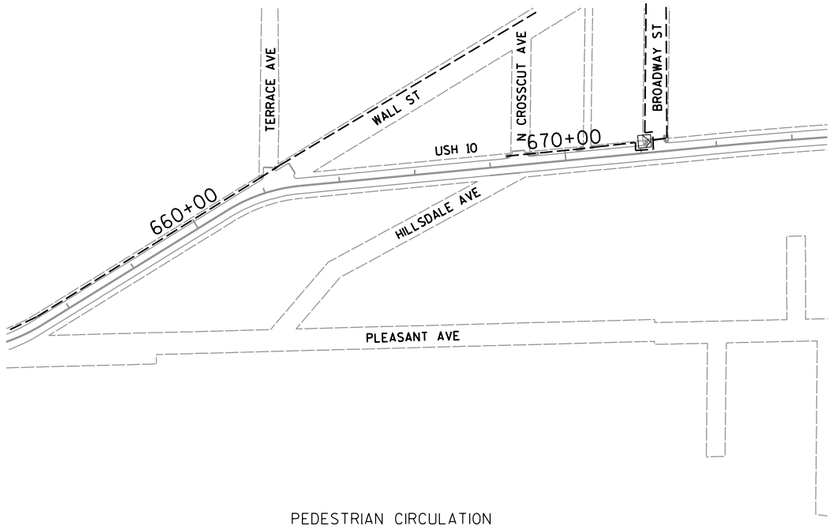
NOTES:
WORK MAY BE DONE IN A DIFFERENT STAGING SEQUENCE WITH THE APPROVAL OF THE ENGINEER

USE TEMPORARY PEDESTRIAN ITEMS PER SDD FOR "PEDESTRIAN ACCOMMODATION" TO MAINTAIN AN ACCESSIBLE PEDESTRIAN ROUTE

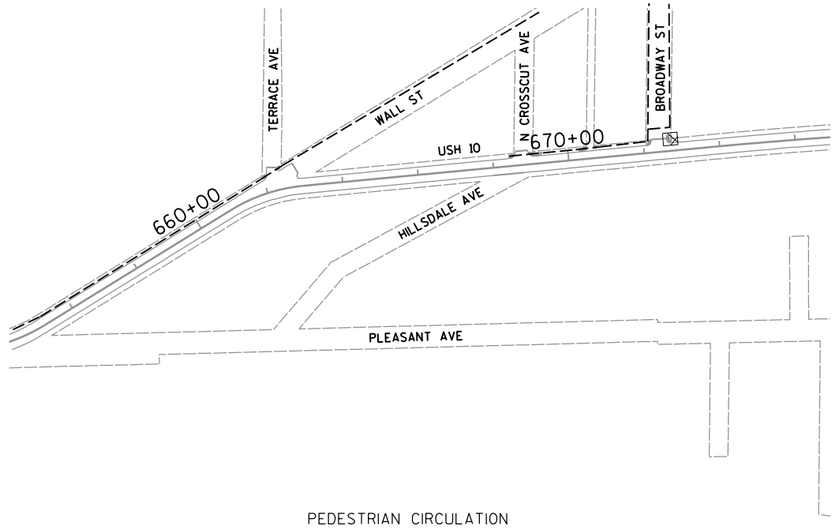


PEDESTRIAN CIRCULATION
TERRACE AVE - BROADWAY ST

2



PEDESTRIAN CIRCULATION
TERRACE AVE - BROADWAY ST



PEDESTRIAN CIRCULATION
TERRACE AVE - BROADWAY ST

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	TRAFFIC CONTROL - CURB RAMP STAGING	SHEET 37	E

2

LEGEND

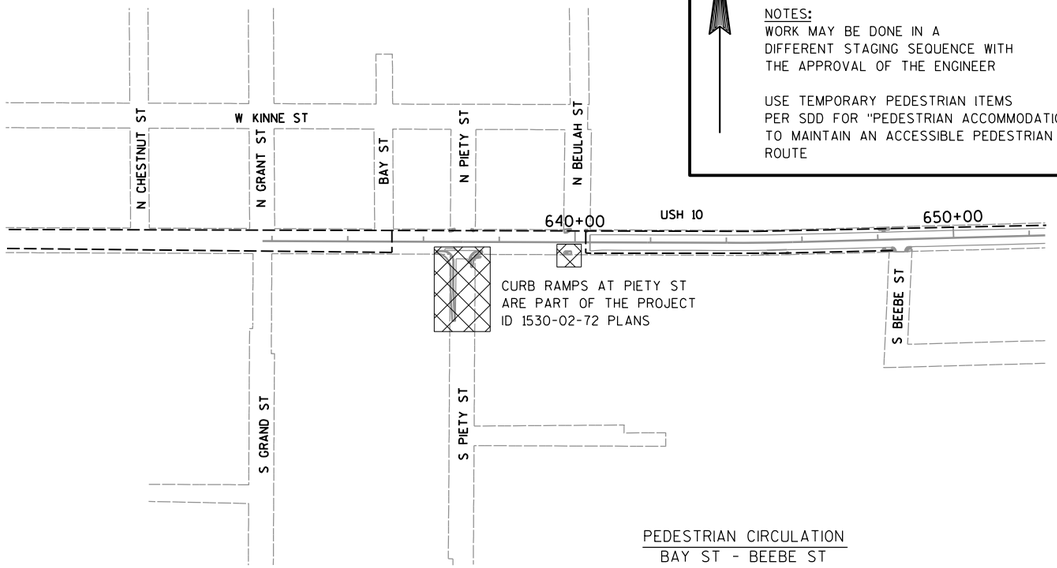
N

WORK ZONES

PEDESTRIAN ROUTE

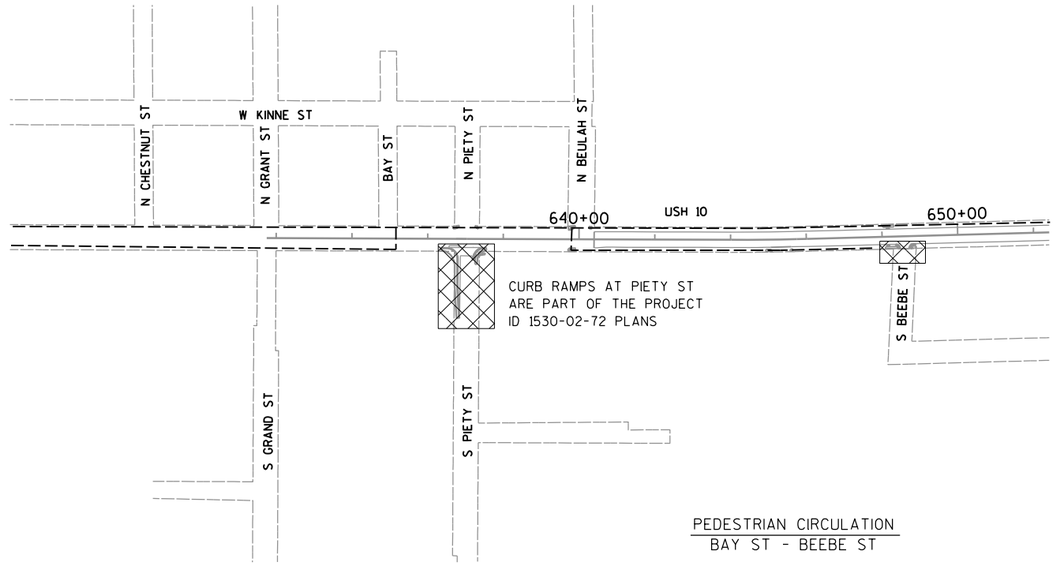
NOTES:
WORK MAY BE DONE IN A DIFFERENT STAGING SEQUENCE WITH THE APPROVAL OF THE ENGINEER

USE TEMPORARY PEDESTRIAN ITEMS PER SDD FOR "PEDESTRIAN ACCOMMODATION" TO MAINTAIN AN ACCESSIBLE PEDESTRIAN ROUTE

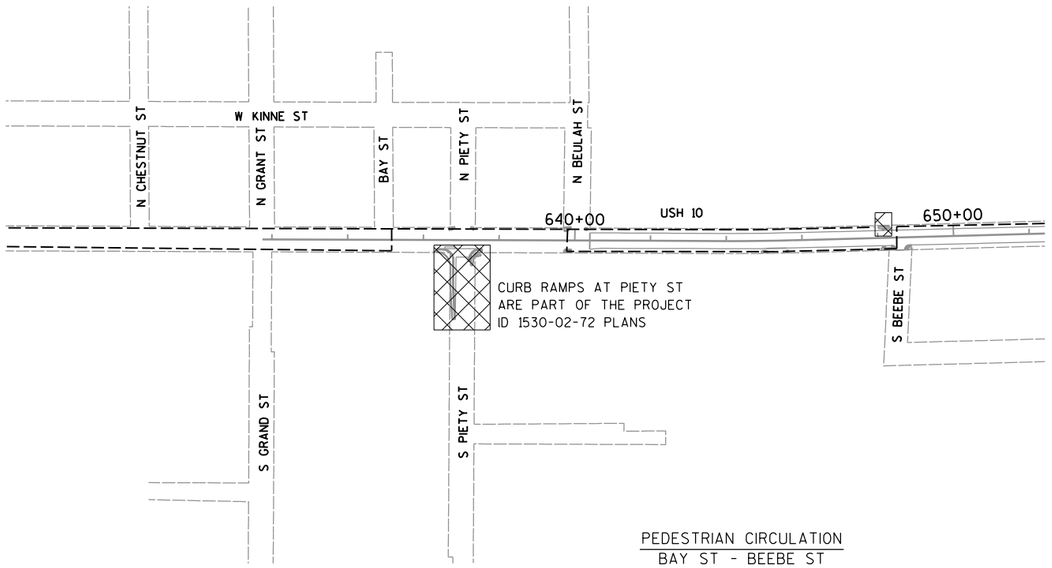


PEDESTRIAN CIRCULATION
BAY ST - BEEBE ST

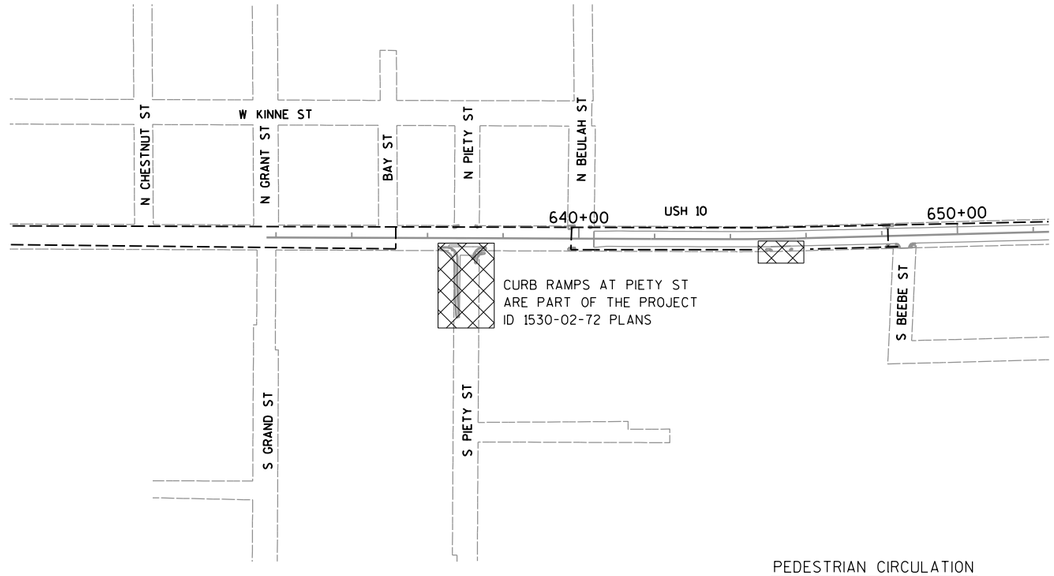
2



PEDESTRIAN CIRCULATION
BAY ST - BEEBE ST



PEDESTRIAN CIRCULATION
BAY ST - BEEBE ST



PEDESTRIAN CIRCULATION
BAY ST - BEEBE ST

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	TRAFFIC CONTROL - CURB RAMP STAGING	SHEET 38	E

DATE 28SEP16 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	1530-02-62 QUANTITY
0010	203.0100	Removing Small Pipe Culverts	EACH	3.000	3.000
0030	204.0109.S	Removing Concrete Surface Partial Depth	SF	23,800.000	23,800.000
0040	204.0110	Removing Asphaltic Surface	SY	80.000	80.000
0050	204.0115	Removing Asphaltic Surface Butt Joints	SY	105.000	105.000
0060	204.0120	Removing Asphaltic Surface Milling	SY	35,200.000	35,200.000
0070	204.0150	Removing Curb & Gutter	LF	180.000	180.000
0080	204.0155	Removing Concrete Sidewalk	SY	145.000	145.000
0090	204.0165	Removing Guardrail	LF	527.000	527.000
0110	204.0205	Removing Utility Poles	EACH	1.000	1.000
0170	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 1530-02-62	LS	1.000	1.000
0180	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	46.000	46.000
0190	213.0100	Finishing Roadway (project) 01. 1530-02-62	EACH	1.000	1.000
0210	305.0110	Base Aggregate Dense 3/4-Inch	TON	300.000	300.000
0230	305.0500	Shaping Shoulders	STA	58.000	58.000
0270	416.0610	Drilled Tie Bars	EACH	60.000	60.000
0290	440.4410	Incentive IRI Ride	DOL	5,700.000	5,700.000
0300	455.0605	Tack Coat	GAL	2,650.000	2,650.000
0310	460.2000	Incentive Density HMA Pavement	DOL	3,430.000	3,430.000
0320	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	7,540.000	7,540.000
0330	460.6445	HMA Pavement 5 MT 58-34 H	TON	6,100.000	6,100.000
0350	465.0110	Asphaltic Surface Patching	TON	60.000	60.000
0360	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	10.000	10.000
0390	521.0118	Culvert Pipe Corrugated Steel 18-Inch	LF	46.000	46.000
0400	521.0124	Culvert Pipe Corrugated Steel 24-Inch	LF	14.000	14.000
0410	521.1518	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 18-Inch 6 to 1	EACH	3.000	3.000
0420	521.1524	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 24-Inch 6 to 1	EACH	1.000	1.000
0430	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	40.000	40.000
0440	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	140.000	140.000
0450	602.0410	Concrete Sidewalk 5-Inch	SF	1,410.000	1,410.000
0460	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	148.000	148.000
0560	614.0010	Barrier System Grading Shaping Finishing	EACH	3.000	3.000
0570	614.0345	Steel Plate Beam Guard Short Radius	LF	75.000	75.000
0580	614.0390	Steel Plate Beam Guard Short Radius Terminal	EACH	6.000	6.000
0590	614.0515	Guardrail Stifened LHW	LF	600.000	600.000
0600	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1530-02-62	EACH	1.000	1.000
0620	619.1000	Mobilization	EACH	0.850	0.850
0630	624.0100	Water	MGAL	4.000	4.000
0640	625.0100	Topsoil	SY	100.000	100.000
0650	628.1504	Silt Fence	LF	750.000	750.000
0660	628.1520	Silt Fence Maintenance	LF	750.000	750.000
0670	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0680	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0690	628.2008	Erosion Mat Urban Class I Type B	SY	100.000	100.000
0700	628.2027	Erosion Mat Class II Type C	SY	525.000	525.000
0710	628.7005	Inlet Protection Type A	EACH	2.000	2.000

3

DATE 28SEP16 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	1530-02-62 QUANTITY
0720	628.7015	Inlet Protection Type C	EACH	20.000	20.000
0740	628.7504	Temporary Ditch Checks	LF	150.000	150.000
0750	628.7555	Culvert Pipe Checks	EACH	15.000	15.000
0760	628.7570	Rock Bags	EACH	100.000	100.000
0770	629.0210	Fertilizer Type B	CWT	0.500	0.500
0780	630.0140	Seeding Mixture No. 40	LB	1.500	1.500
0790	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	62.000	62.000
0800	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	28.000	28.000
0810	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	6.000	6.000
0820	634.0620	Posts Wood 4x6-Inch X 20-FT	EACH	6.000	6.000
0830	637.2210	Signs Type II Reflective H	SF	724.130	724.130
0840	637.2230	Signs Type II Reflective F	SF	24.250	24.250
0850	638.2102	Moving Signs Type II	EACH	1.000	1.000
0860	638.2602	Removing Signs Type II	EACH	83.000	83.000
0870	638.3000	Removing Small Sign Supports	EACH	84.000	84.000
0880	642.5201	Field Office Type C	EACH	1.000	1.000
0890	643.0100	Traffic Control (project) 01. 1530-02-62	EACH	1.000	1.000
0910	643.0300	Traffic Control Drums	DAY	1,865.000	1,865.000
0930	643.0420	Traffic Control Barricades Type III	DAY	720.000	720.000
0960	643.0900	Traffic Control Signs	DAY	5,520.000	5,520.000
0970	643.1050	Traffic Control Signs PCMS	DAY	49.000	49.000
0980	644.1420.S	Temporary Pedestrian Surface Plywood	SF	192.000	192.000
0990	644.1601.S	Temporary Curb Ramp	EACH	11.000	11.000
1000	644.1616.S	Temporary Pedestrian Safety Fence	LF	180.000	180.000
1020	646.0106	Pavement Marking Epoxy 4-Inch	LF	7,620.000	7,620.000
1030	646.0126	Pavement Marking Epoxy 8-Inch	LF	1,195.000	1,195.000
1040	646.0406	Pavement Marking Same Day Epoxy 4-Inch	LF	15,920.000	15,920.000
1050	646.0600	Removing Pavement Markings	LF	505.000	505.000
1060	647.0166	Pavement Marking Arrows Epoxy Type 2	EACH	6.000	6.000
1080	647.0356	Pavement Marking Words Epoxy	EACH	1.000	1.000
1090	647.0456	Pavement Marking Curb Epoxy	LF	165.000	165.000
1100	647.0556	Pavement Marking Stop Line Epoxy 12-Inch	LF	105.000	105.000
1110	647.0606	Pavement Marking Island Nose Epoxy	EACH	1.000	1.000
1120	647.0726	Pavement Marking Diagonal Epoxy 12-Inch	LF	410.000	410.000
1130	647.0766	Pavement Marking Crosswalk Epoxy 6-Inch	LF	510.000	510.000
1140	647.0796	Pavement Marking Crosswalk Epoxy 24-Inch	LF	192.000	192.000
1150	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	110.000	110.000
1160	649.0402	Temporary Pavement Marking Paint 4-Inch	LF	15,920.000	15,920.000
1200	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	180.000	180.000
1210	650.8000	Construction Staking Resurfacing Reference	LF	8,910.000	8,910.000
1230	650.9910	Construction Staking Supplemental Control (project) 01. 1530-02-62	LS	1.000	1.000
1280	690.0150	Sawing Asphalt	LF	670.000	670.000
1290	690.0250	Sawing Concrete	LF	265.000	265.000
1320	SPV.0060	Special 02. Culvert Pipe Corrugated Steel 45-Degree Elbow 24-Inch	EACH	1.000	1.000
1330	SPV.0090	Special 01. Concrete Curb and Gutter Cure and Seal Treatment	LF	180.000	180.000
1340	SPV.0105	Special 01. Guardrail Post Connection	LS	1.000	1.000
1370	SPV.0165	Special 03. Concrete Sidewalk Cure and Seal Treatment	SF	1,410.000	1,410.000

3

REMOVING SMALL PIPE CULVERTS

STATION	LOCATION	203.0100 EACH	COMMENTS
CAT 0010			
695+55	RT	1	18" PIPE
697+55	LT	1	24" PIPE; REMOVE ENDWALL ONLY
697+60	RT	1	18" PIPE; REMOVE ENDWALL ONLY
TOTAL		3	

REMOVING CONCRETE ITEMS

STATION - STATION	LOCATION	204.0109.S SURFACE PARTIAL DEPTH SF	204.0150 CURB & GUTTER LF	204.0155 SIDEWALK SY
CAT 0010				
639+70 - 648+90	LT&RT	--	92	77
662+00 - 663+00	LT&RT	--	--	10
668+45 - 672+75	LT	--	88	58
702+64 - 715+77	LT&RT	23,800	--	--
TOTALS		23,800	180	145

REMOVING ASPHALTIC SURFACE ITEMS

STATION - STATION	LOCATION	204.0110 SY	204.0115 BUTT JOINTS SY	204.0120 MILLING SY
CAT 0010				
640+39 - 663+00	LT&RT	14	40	10,860
663+00 - 685+39	LT&RT	11	30	10,690
685+39 - 700+16	LT&RT	55	19	6,455
700+16 - 715+77	LT&RT	--	16	7,195
TOTALS		80	105	35,200

REMOVING GUARDRAIL

STATION - STATION	LOCATION	204.0165 LF
CAT 0010		
694+21 - 695+40	LT	122
695+55 - 697+64	LT	214
695+92 - 697+48	RT	191
TOTAL		527

REMOVING UTILITY POLES

STATION	LOCATION	204.0205 EACH
CAT 0010		
695+68	RT	1
TOTAL		1

PREPARE FOUNDATION ITEMS

STATION - STATION	LOCATION	211.0100 ASPHALTIC PAVING (1530-02-62) LS	211.0400 ASPHALTIC SHOULDERS STA
CAT 0010			
692+14 - 715+77	LT	--	24
694+25 - 715+77	RT	--	22
PROJECT	--	1	--
TOTALS		1	46

BASE AGGREGATE ITEMS

STATION - STATION	LOCATION	305.0110 DENSE 3/4-INCH TON	305.0500 SHAPING SHOULDERS STA
CAT 0010			
640+39 - 663+00	LT&RT	5	--
663+00 - 685+39	LT&RT	5	--
685+39 - 700+16	LT&RT	90	18
700+16 - 715+77	LT&RT	165	40
UNDISTRIBUTED	LT&RT	35	--
TOTALS		300	58

ASPHALTIC ITEMS

STATION - STATION	LOCATION	455.0605 TACK COAT GAL	460.4110.S REHEATING HMA PAVEMENT LONGITUDINAL JOINTS LF	460.6445 HMA PAVEMENT 5 MT 58-34 H TON	465.0110 ASPHALTIC SURFACE PATCHING TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON
CAT 0010						
640+39 - 663+00	LT&RT	765	2,260	1,500	5	--
663+00 - 685+39	LT&RT	765	2,240	1,500	5	--
685+39 - 700+16	LT&RT	445	1,480	950	--	10
700+16 - 715+77	LT&RT	625	1,560	1,400	--	--
PROJECT	--	--	--	--	--	--
UNDISTRIBUTED	--	50	--	750	50	--
TOTALS		2,650	7,540	6,100	60	10

NOTE: UNDISTRIBUTED QUANTITY OF HMA PAVEMENT 5 MT 58-34 H FOR LEVELING AND WEDGING; UNDISTRIBUTED QUANTITY OF ASPHALTIC SURFACE PATCHING IS FOR REPAIRING POTHOLES AND OTHER REPAIRS PRIOR TO PLACEMENT OF LEVELING/WEDGING MATERIAL OR LOWER LAYER

CULVERT PIPE ITEMS

STATION	LOCATION	METAL THICKNESS IN	521.0118 CULVERT PIPE CORRUGATED STEEL 18-INCH LF	521.0124 CULVERT PIPE CORRUGATED STEEL 24-INCH LF	521.1518 APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 18-INCH 6 TO 1 EACH	521.1524 APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 24-INCH 6 TO 1 EACH	SPV.0060.02 CULVERT PIPE CORRUGATED STEEL 45-DEGREE ELBOW 24-INCH EACH
CAT 0010							
695+55	RT	0.064	38	--	2	--	--
697+55	RT	0.064	--	14	--	1	1
697+60	LT	0.064	8	--	1	--	--
TOTALS			46	14	3	1	1

CONCRETE CURB & GUTTER ITEMS

STATION - STATION	LOCATION	416.0610 DRILLED TIE BARS EACH	601.0409 30-INCH TYPE A LF	601.0411 30-INCH TYPE D LF	SPV.0090.01 CURE AND SEAL TREATMENT LF
CAT 0010					
639+70 - 648+90	LT&RT	40	40	52	92
668+45 - 672+75	LT	20	--	88	88
TOTALS		60	40	140	180

CONCRETE SIDEWALK ITEMS

STATION - STATION	LOCATION	602.0410 5-INCH SF	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF	SPV.0165.03 CURE AND SEAL TREATMENT SF
CAT 0010				
639+70 - 648+90	LT&RT	817	76	817
662+00 - 663+00	LT	88	16	88
668+45 - 672+75	LT	505	56	505
TOTALS		1,410	148	1,410

BARRIER SYSTEM GRADING SHAPING FINISHING

STATION - STATION	LOCATION	614.0010 EACH	**COMMON EXC. CY	**FILL CY	**BORROW EXC. CY	**TOPSOIL SY	**FERTILIZER TYPE B CWT	**SEEDING #40 LB
CAT 0010								
692+09 - 695+40	LT	1	22	1	-20	120	0.1	0.1
695+56 - 697+68	LT	1	10	5	-5	100	0.1	0.1
695+60 - 697+55	RT	1	10	21	11	250	0.2	0.1
TOTALS		3	42	27	-14	470	0.4	0.3

NOTES: **NON-BID ITEM, ITEMS AND QUANTITIES LISTED FOR BID INFORMATION ONLY; ITEMS INCIDENTAL TO BARRIER SYSTEM GRADING SHAPING FINISHING; ANY STAKING REQUIRED IS INCIDENTAL TO BARRIER SYSTEM GRADING SHAPING FINISHING

BEAM GUARD AND GUARDRAIL ITEMS

STATION - STATION	LOCATION	614.0345 STEEL PLATE BEAM GUARD SHORT RADIUS LF	614.0390 STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL EACH	614.0515 GUARDRAIL STIFFENED LHW LF	SPV.0105.01 GUARDRAIL POST CONNECTION LS
CAT 0010					
692+09 - 695+40	LT	25.0	2	287.5	--
695+56 - 697+63	LT	25.0	2	175.0	--
695+61 - 697+46	RT	25.0	2	137.5	--
PROJECT	--	--	--	--	1
TOTALS		75.0	6	600.0	1

WATER

LOCATION	624.0100 MGAL
CAT 0010	
PROJECT	4
TOTAL	4

NOTE: WATER PROVIDED FOR COMPACTION OF BASE AGGREGATE AND DUST CONTROL

EROSION CONTROL AND FINISHING ITEMS

STATION - STATION	LOCATION	625.0100 TOPSOIL SY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.2027 EROSION MAT CLASS II TYPE C SY	628.7005 INLET PROTECTION TYPE A EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH	629.0210 FERTILIZER TYPE B CWT	630.0140 SEEDING MIXTURE NO. 40 LBS
CAT 0010													
640+39 - 663+00	LT&RT	50	--	--	50	--	--	14	--	--	--	0.3	0.9
663+00 - 685+39	LT&RT	25	--	--	25	--	--	3	--	--	--	0.1	0.4
685+39 - 700+16	LT&RT	--	600	600	--	425	1	--	120	3	75	--	--
UNDISTRIBUTED	--	25	150	150	25	100	1	3	30	12	25	0.1	0.2
TOTALS		100	750	750	100	525	2	20	150	15	100	0.5	1.5

NOTE: ROCK BAGS ARE FOR SILT FENCE RELIEF

MOBILIZATIONS EROSION CONTROL

LOCATION	628.1905 EACH	628.1910 EMERGENCY EACH
CAT 0010		
PROJECT	2	2
TOTALS	2	2

TYPE II SIGNS AND SUPPORTS

SIGN NO.	SIGN CODE	W	X	H	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	634.0620 POSTS WOOD 4x6x20 EACH	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	COMMENTS
CAT 0010														
1-1	R1-1	30	X	30	5.18	--	1	--	--	--	--	1	1	
1-2	R2-1	24	X	30	5.00	--	1	--	--	--	--	1	--	30 MPH
1-3	R7-1D	18	X	24	3.00	--	--	--	--	--	--	1	--	MOUNT ON LIGHT POLE
1-4	R7-1D	18	X	24	3.00	--	1	--	--	--	--	1	--	
1-5	R7-1D	18	X	24	3.00	--	--	--	--	--	--	1	--	MOUNT ON LIGHT POLE
1-6	R3-9B	24	X	36	6.00	--	--	1	--	--	--	1	1	
2-1	R7-1L	18	X	24	3.00	--	1	--	--	--	--	1	1	
2-2	R7-1D	18	X	24	3.00	--	1	--	--	--	--	1	1	
2-3	R7-1D	18	X	24	3.00	--	1	--	--	--	--	1	1	
2-4	R2-1	24	X	30	5.00	--	1	--	--	--	--	--	--	30 MPH
2-5	--	--	X	--	--	--	--	--	--	--	--	1	1	
2-6	R2-1	24	X	30	5.00	--	1	--	--	--	--	--	--	30 MPH
2-7	--	--	X	--	--	--	--	--	--	--	--	1	--	REMOVE FROM UTILITY POLE
2-8	R1-1	30	X	30	5.18	--	1	--	--	--	--	--	--	
2-9	R7-1R	18	X	24	3.00	--	1	--	--	--	--	--	--	
2-10	--	--	X	--	--	--	--	--	--	--	--	1	1	
2-11	R7-1D	18	X	24	3.00	--	1	--	--	--	--	1	1	
2-12	J3-2	48	X	57	19.00	--	--	1	--	--	--	1	1	
2-13	--	--	X	--	--	--	--	--	--	--	--	1	1	
2-14	JV	24	X	72	12.00	--	--	--	1	--	--	--	--	
2-15	--	--	X	--	--	--	--	--	--	--	--	1	1	
3-1	R7-1D	18	X	24	3.00	--	1	--	--	--	--	1	1	
3-2	R7-1D	18	X	24	3.00	--	1	--	--	--	--	--	--	
3-3	R7-1R	18	X	24	3.00	--	1	--	--	--	--	1	1	
3-4	R7-1L	18	X	24	3.00	--	1	--	--	--	--	--	--	
3-5	R1-1	30	X	30	5.18	--	1	--	--	--	--	1	1	
3-6	R1-1	30	X	30	5.18	--	1	--	--	--	--	1	1	
3-7	J3-2	48	X	57	19.00	--	--	1	--	--	--	1	1	
4-1	R2-1	24	X	30	5.00	--	1	--	--	--	--	1	1	30 MPH
4-2	R2-1	24	X	30	5.00	--	1	--	--	--	--	1	1	30 MPH
4-3	--	--	X	--	--	--	--	--	--	--	--	1	1	
4-4	JV	24	X	72	12.00	--	--	--	1	--	--	--	--	
4-5	R1-1	30	X	30	5.18	--	1	--	--	--	--	1	1	
4-6	J2-2	48	X	57	19.00	--	--	1	--	--	--	--	--	
5-1	R1-1	30	X	30	5.18	--	1	--	--	--	--	1	1	
5-2	J3-2	48	X	57	19.00	--	--	1	--	--	--	--	--	
5-3	--	--	X	--	--	--	--	--	--	--	--	1	1	
5-4	R2-1	24	X	30	5.00	--	1	--	--	--	--	1	1	30 MPH
5-5	R2-1	24	X	30	5.00	--	1	--	--	--	--	--	--	30 MPH
6-1	J1-2	48	X	39	13.00	--	--	1	--	--	--	1	1	
6-2	R1-1	30	X	30	5.18	--	1	--	--	--	--	1	1	
6-3	R1-1	30	X	30	5.18	--	1	--	--	--	--	1	1	
6-4	R1-1	30	X	30	5.18	--	1	--	--	--	--	1	1	
6-5	R7-1L	18	X	24	3.00	--	1	--	--	--	--	1	1	
6-6	R2-1	24	X	30	5.00	--	1	--	--	--	--	1	1	30 MPH
6-7	--	--	X	--	--	--	--	--	--	--	--	1	1	
6-8	R2-1	24	X	30	5.00	--	1	--	--	--	--	--	--	30 MPH
6-9	R1-1	30	X	30	5.18	--	1	--	--	--	--	--	--	BOX OUT REQUIRED
6-10	--	--	X	--	--	--	--	--	--	--	--	1	1	
6-11	R7-1D	18	X	24	3.00	--	1	--	--	--	--	--	--	
6-12	R7-1R	18	X	24	3.00	--	1	--	--	--	--	--	--	
SUBTOTALS					260.80	0.00	32	6	2	0	0	36	31	

TYPE II SIGNS AND SUPPORTS (CONTINUED)

SIGN NO.	SIGN CODE	W	X	H	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	634.0620 POSTS WOOD 4x6x20 EACH	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	COMMENTS
CAT 0010														
7-1	J4-2	48	X	36	12.00	--	--	1	--	--	--	1	1	
7-2	--	--	X	--	--	--	--	--	--	--	--	1	1	
7-3	R7-1R	18	X	24	3.00	--	1	--	--	--	--	--	--	
7-4	R7-1L	18	X	24	3.00	--	1	--	--	--	--	--	--	
7-5	R7-1D	18	X	24	3.00	--	1	--	--	--	--	1	1	
7-6	R2-1	24	X	30	5.00	--	1	--	--	--	--	--	--	30 MPH
7-7	R7-1D	18	X	24	3.00	--	1	--	--	--	--	--	--	
7-8	R2-1	24	X	30	5.00	--	1	--	--	--	--	--	--	30 MPH
7-9	R7-1D	18	X	24	3.00	--	1	--	--	--	--	--	--	
7-10	--	--	X	--	--	--	--	--	--	--	--	1	1	
7-11	R1-1	30	X	30	5.18	--	1	--	--	--	--	1	1	
7-12	--	--	X	--	--	--	--	--	--	--	--	1	1	
7-13	--	--	X	--	--	--	--	--	--	--	--	1	1	
7-14	J4-2	48	X	36	12.00	--	--	1	--	--	--	--	--	
8-1	R7-1D	18	X	24	3.00	--	1	--	--	--	--	1	1	
8-2	W14-2	30	X	30	--	6.25	1	--	--	--	--	1	1	
8-3	R1-1	30	X	30	5.18	--	1	--	--	--	--	1	1	
8-4	R1-1	30	X	30	5.18	--	1	--	--	--	--	1	1	
8-5	R7-1D	18	X	24	3.00	--	1	--	--	--	--	--	--	
9-1	R2-1	24	X	30	5.00	--	--	--	--	--	--	1	--	30 MPH MOUNT ON EXISTING FLASHING BEACON POST
9-2	--	--	X	--	--	--	--	--	--	--	1	--	--	MOVE BELOW SIGN 9-1 ON EXISTING FLASHING BEACON POST
9-3	R1-1	30	X	30	5.18	--	1	--	--	--	--	1	1	
9-4	R2-1	24	X	30	5.00	--	1	--	--	--	--	1	1	30 MPH
9-5	--	--	X	--	--	--	--	--	--	--	--	1	1	
10-1	J1-1	24	X	39	6.50	--	1	--	--	--	--	--	--	
10-2	R2-1	24	X	30	5.00	--	--	1	--	--	--	--	--	30 MPH
10-3	R1-1	30	X	30	5.18	--	1	--	--	--	--	1	1	
10-4	J1-1	24	X	39	6.50	--	1	--	--	--	--	1	1	
10-5	R2-1	24	X	30	5.00	--	--	1	--	--	--	1	1	30 MPH
10-6	--	--	X	--	--	--	--	--	--	--	--	1	1	
10-7	W6-3	36	X	36	--	9.00	--	1	--	--	--	--	--	
11-1	R2-1	24	X	30	5.00	--	1	--	--	--	--	--	--	30 MPH
11-2	J13-1	24	X	45	7.50	--	--	1	--	--	--	1	1	
11-3	--	--	X	--	--	--	--	--	--	--	--	1	1	
11-4	R1-1	30	X	30	5.18	--	1	--	--	--	--	1	1	
11-5	J3-2	48	X	45	15.00	--	1	--	--	--	--	1	1	
11-6	J13-1	24	X	45	7.50	--	--	1	--	--	--	1	1	
11-7	R2-1	24	X	30	5.00	--	1	--	--	--	--	1	1	40 MPH
11-8	J2-3	72	X	57	28.50	--	--	--	--	2	--	1	2	
11-9	R4-7	24	X	30	5.00	--	1	--	--	--	--	1	1	
11-10	--	--	X	--	--	--	--	--	--	--	--	--	--	DO NOT REINSTALL SIGN 11-10, REMOVE WITH 11-9
11-11	R5-1	30	X	30	6.25	--	1	--	--	--	--	1	1	MOUNTED ON SAME POST AS SIGN 11-12
11-12	R3-8E	36	X	30	7.50	--	--	--	--	--	--	--	--	MOUNTED ON SAME POST AS SIGN 11-11
11-13	D1-3	66	X	36	16.50	--	--	--	2	--	--	1	2	
12-1	R5-1A	36	X	24	6.00	--	1	--	--	--	--	1	1	
12-2	I2-3	66	X	24	11.00	--	--	2	--	--	--	1	2	
12-3	J1-1	24	X	39	6.50	--	--	1	--	--	--	1	1	
12-4	R2-1	24	X	30	5.00	--	--	1	--	--	--	1	1	40 MPH
12-5	J3-3	72	X	57	28.50	--	--	--	--	2	--	1	2	MOUNTED ON SAME POST AS SIGN 12-7
12-6	--	--	X	--	--	--	--	--	--	--	--	--	--	DO NOT REINSTALL SIGN 12-6, REMOVE WITH 12-5
SUBTOTALS					279.83	15.25	25	11	2	4	1	34	37	

TYPE II SIGNS AND SUPPORTS (CONTINUED)

SIGN NO.	SIGN CODE	W	X	H	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	634.0620 POSTS WOOD 4x6x20 EACH	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	COMMENTS
CAT 0010														
12-7	R5-1A	36	X	24	6.00	--	--	--	--	--	--	--	--	MOUNTED ON SAME POST AS SIGN 12-5
12-8	R5-1A	36	X	24	6.00	--	--	1	--	--	--	--	--	
12-9	J3-3	72	X	57	28.50	--	--	--	2	--	--	--	--	
12-10	--	--	X	--	--	--	--	--	--	--	--	1	2	
12-11	R5-1	30	X	30	6.25	--	--	1	--	--	--	--	--	
12-12	R5-1	30	X	30	6.25	--	--	1	--	--	--	1	1	MOUNTED ON SAME POST AS SIGN 12-13
12-13	J4-2	48	X	36	12.00	--	--	--	--	--	--	--	--	MOUNTED ON SAME POST AS SIGN 12-12
13-1	R5-1	30	X	30	6.25	--	1	--	--	--	--	1	1	
13-2	R5-1	30	X	30	6.25	--	1	--	--	--	--	1	1	
13-3	R4-7	24	X	30	5.00	--	1	--	--	--	--	1	1	
13-4	R6-2L	24	X	30	5.00	--	--	1	--	--	--	1	1	
13-5	R5-1	30	X	30	6.25	--	--	--	--	--	--	--	--	MOUNTED ON SAME POST AS 13-6
13-6	J3-3	72	X	57	28.50	--	--	--	--	2	--	1	2	MOUNTED ON SAME POST AS 13-5
13-7	J3-1	24	X	57	9.50	--	--	1	--	--	--	1	1	
13-8	R4-7	24	X	30	5.00	--	1	--	--	--	--	1	1	
13-9	R5-1A	36	X	24	6.00	--	--	1	--	--	--	1	1	MOUNTED ON SAME POST AS 13-11
13-10	R3-8E	36	X	30	7.50	--	--	1	--	--	--	--	--	
13-11	J4-2	48	X	36	12.00	--	--	1	--	--	--	--	--	MOUNT ON SAME POST AS 13-9
13-12	R5-1	30	X	30	6.25	--	1	--	--	--	--	1	1	
13-13	--	--	X	--	--	--	--	--	--	--	--	--	--	REMOVE WITH 13-12
13-14	W6-3	36	X	36	--	9.00	--	1	--	--	--	1	1	
13-15	D1-2	72	X	30	15.00	--	--	2	--	--	--	1	2	
SUBTOTALS					183.50	9.00	5	11	2	2	0	13	16	
TOTALS					724.13	24.25	62	28	6	6	1	83	84	

TRAFFIC CONTROL ITEMS

LOCATION	DAYS	643.0100 TRAFFIC CONTROL (1530-02-62) EACH	643.0300 DRUMS NO.	643.0300 DRUMS DAYS	643.0420 BARRICADES TYPE III NO.	643.0420 BARRICADES TYPE III DAYS	643.0900 SIGNS NO.	643.0900 SIGNS DAYS	643.1050 SIGNS PCMS NO.	643.1050 SIGNS PCMS DAYS
CAT 0010										
SHOULDER CLOSURE AT GUARDRAIL	21	--	20	420	--	--	--	--	--	--
SHOULDER CLOSURES AT CURB RAMP REPLACEMENTS	30	--	40	1,200	24	720	16	480	--	--
JCT USH 10/USH 63 INTERSECTION REPAVING	14	--	10	140	--	--	--	--	2	28
PRIOR TO CONSTRUCTION	7	--	15	105	--	--	--	--	3	21
PROJECT	80	1	--	--	--	--	63	5,040	--	--
TOTALS		1		1,865		720		5,520		49

TEMPORARY PEDESTRIAN ITEMS

LOCATION	644.1420.S TEMPORARY PEDESTRIAN SURFACE PLYWOOD SF	644.1601.S TEMPORARY CURB RAMP EACH	644.1616.S TEMPORARY PEDESTRIAN SAFETY FENCE LF	649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE CROSSWALK) LF
CAT 0010				
N BEULAH ST	24	1	--	110
S BEEBE ST	24	1	--	--
TERRACE AVE	72	3	60	--
UNNAMED ALLEY	48	2	40	--
BROADWAY ST	24	4	80	--
TOTALS	192	11	180	110

PAVEMENT MARKING ITEMS

STATION - STATION	LOCATION	646.0106 EPOXY 4-INCH (YELLOW) LF	646.0106 EPOXY 4-INCH (WHITE) LF	646.0126 EPOXY 8-INCH (WHITE) LF	646.0406 SAME DAY EPOXY 4-INCH (YELLOW) LF	646.0600 REMOVING LF	647.0166 ARROWS EPOXY TYPE 2 (WHITE) EACH	647.0356 WORDS EPOXY (ONLY) (WHITE) EACH	647.0456 CURB EPOXY LF	647.0556 STOP LINE EPOXY 12-INCH (WHITE) LF	647.0606 ISLAND NOSE EPOXY EACH	647.0726 DIAGONAL EPOXY 12-INCH (YELLOW) LF	647.0726 DIAGONAL EPOXY 12-INCH (WHITE) LF	647.0766 CROSSWALK EPOXY 6-INCH (WHITE) LF	647.0796 CROSSWALK EPOXY 24-INCH (WHITE) LF
CAT 0010															
639+75 - 663+00	LT&RT	--	--	--	5,432	505	--	--	--	39	--	193	--	286	132
663+00 - 685+39	LT&RT	--	30	320	5,390	--	2	--	--	66	--	93	--	224	60
685+39 - 700+00	LT&RT	--	2,695	97	3,423	--	--	--	--	--	--	41	--	--	--
700+00 - 715+77	LT&RT	1,805	3,090	778	1,675	--	4	1	165	--	1	51	32	--	--
TOTALS		1,805	5,815	1,195	15,920	505	6	1	165	105	1	378	32	510	192
		7,620										410			

NOTE: REMOVING PAVEMENT MARKING IS PER 4-INCH LINE; MULTIPLE PASSES REQUIRED FOR REMOVAL OF CROSSWALKS AND STOP LINE OUTSIDE OF PAVING LIMITS

TEMPORARY PAVEMENT MARKING PAINT

STATION - STATION	LOCATION	649.0402 4-INCH (YELLOW) LF
CAT 0010		
639+75 - 663+00	LT&RT	5,432
663+00 - 685+39	LT&RT	5,390
685+39 - 700+00	LT&RT	3,423
700+00 - 715+77	LT&RT	1,675
TOTAL		15,920

NOTE: ITEM FOR MAINTAINING CENTERLINE DURING CONSTRUCTION

CONSTRUCTION STAKING ITEMS

STATION - STATION	LOCATION	650.5500 CURB GUTTER AND CURB & GUTTER LF	650.8000 RESURFACING REFERENCE LF	650.9910 SUPPLEMENTAL CONTROL (1530-02-62) LS
CAT 0010				
639+70 - 648+90	LT&RT	92	--	--
668+45 - 672+75	LT	88	--	--
PROJECT		--	8,910	1
TOTALS		180	8,910	1

SAWING ITEMS

STATION - STATION	LOCATION	690.0150 ASPHALT LF	690.0250 CONCRETE LF
CAT 0010			
639+70 - 648+90	LT&RT	97	135
662+00 - 663+00	LT	--	15
668+45 - 672+75	LT	75	115
BUTT JOINTS	LT & RT	474	--
695+46	LT	12	--
697+61	RT	12	--
TOTALS		670	265

COMPOSITE DRAWING, ORIGINAL ON FILE IN THE PEIRCE COUNTY REGISTER OF DEEDS

TRANSPORTATION PROJECT PLAT NO: 1530-02-20 - 4.01

THAT PART OF LOT 3 OF CSM VOLUME 13 PAGE 98 IN THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 19, TOWNSHIP 26 NORTH, RANGE 17 WEST, VILLAGE OF ELLSWORTH, PIERCE COUNTY, WISCONSIN

RELOCATION ORDER USH 10 (BEULAH STREET - USH 63) PIERCE 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.

556832
PIERCE COUNTY
REGISTER OF DEEDS
VICKI J NELSON
PAGES: 1
PLATTRANS
RECORDING FEE: 25.00
04/01/2015 08:00AM
PRC-C 258

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1530-02-20-4.01
AMENDMENT NO:

4

SCHEDULE OF LANDS & INTERESTS REQUIRED

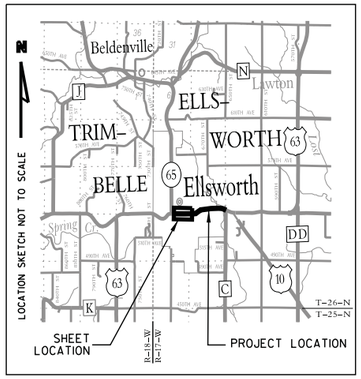
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE DEPARTMENT.

PARCEL		INTEREST	R/W SQ FT REQUIRED			TLE
NUMBER	OWNERS	REQUIRED	NEW	EXISTING	TOTAL	SQ FT
1	DANIEL W. ACKER AND PHYLLIS G. ACKER	TLE	---	---	---	81

COURSE TABLE		
COURSE	BEARING	DISTANCE
100-101	S 89°47'13" E	175.00'
101-102	S 00°12'47" W	33.00'
102-103	N 89°47'13" W	175.00'
103-100	N 00°12'47" E	33.00'

STATION & OFFSET TABLE		
POINT NO.	STATION	OFFSET
100	638+75.00	0.00'
101	640+50.00	0.00'
102	640+50.00	33.00'
103	638+75.00	33.00'

TLE STATION & OFFSET TABLE		
POINT NO.	STATION	OFFSET
TLE150	639+66.00	33.00
TLE151	639+93.00	33.00
TLE152	639+93.00	36.00
TLE153	639+66.00	36.00



NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES. PIERCE COUNTY, NAD83 (1991) IN U.S. 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 MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

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

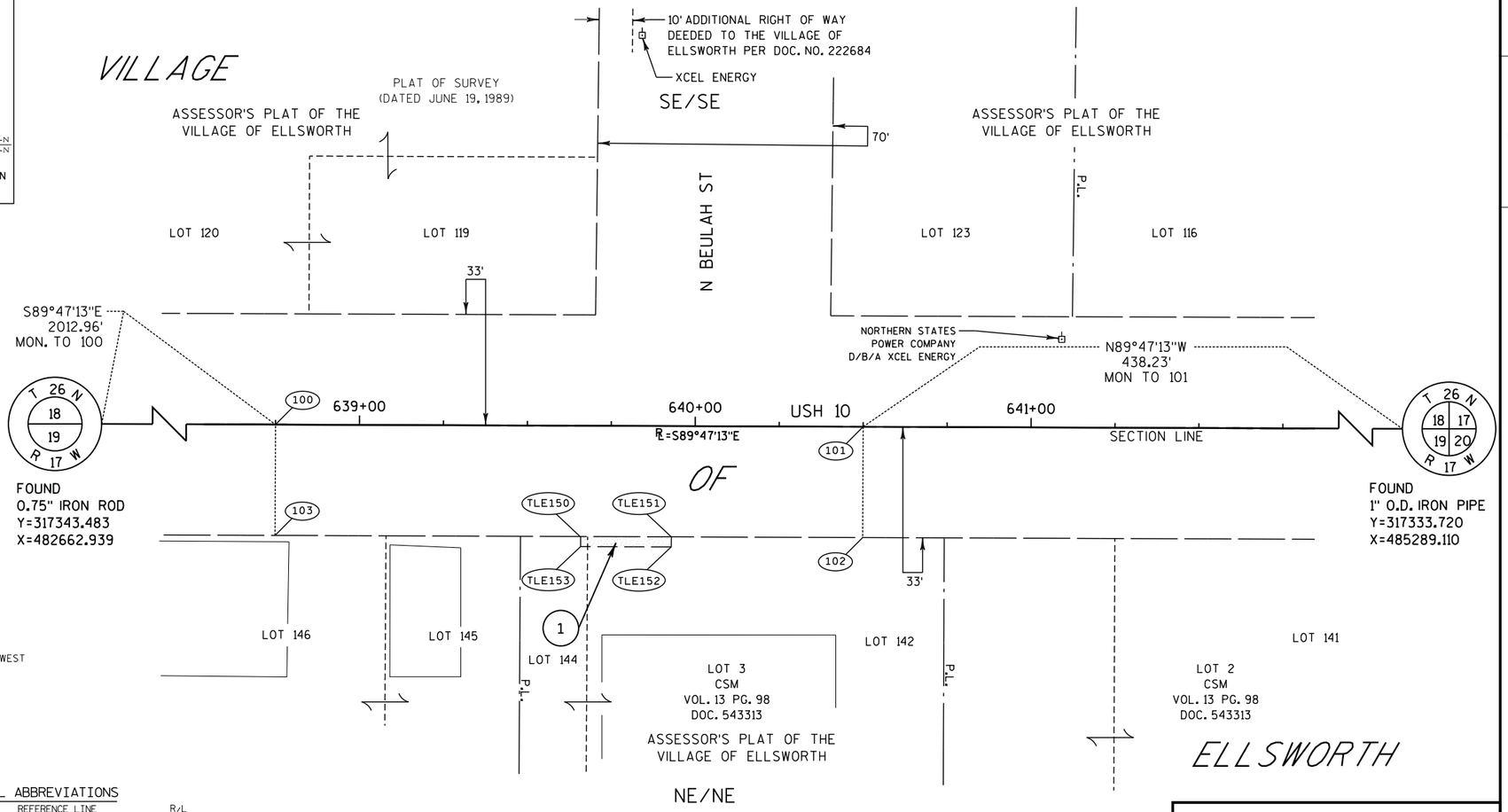
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR USH 10 ESTABLISHED FROM PREVIOUS PROJECT 6088, ASSESSOR'S PLAT OF THE VILLAGE OF ELLSWORTH, CSM VOLUME 13 PAGE 98, PLAT OF SURVEY DATED JUNE 19 1989, AND EXISTING CENTERLINE.
EXISTING HIGHWAY RIGHT-OF-WAY FOR NORTH BEULAH STREET ESTABLISHED FROM ASSESSOR'S PLAT OF THE VILLAGE ELLSWORTH, PLAT OF SURVEY DATED JUNE 1989, DOCUMENT NO. 222684, AND EXISTING CENTERLINE.

NO PREVIOUS ACCESS CONTROL EXISTS

OWNERS 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 NORTHWEST REGIONAL OFFICE EAU CLAIRE.

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.



CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	LS (1" UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	•(SET)	PROPERTY LINE	
R/W STANDARD	▲(SET)	LOT & TIE LINES	
SIGN	ISIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT		CORPORATE LIMITS	
SECTION CORNER SYMBOL	SECTION CORNER MONUMENT	RESTRICTED ACCESS (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		RESTRICTED ACCESS (BY ACQUISITION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	PRW20	QUARTER LINE	
PARCEL NUMBER	102	SIXTEENTH LINE	
UTILITY NUMBER	40	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	21	PROPOSED REFERENCE LINE	
BUILDING		PARALLEL OFFSET	

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 UTILITY SYMBOLS

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

THE TLE SHOWN ON THIS SHEET IS FOR SLOPE GRADING

GN

0 20 40

SCALE, FEET

emcs.llc

I, KEVIN C. BOYER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1530-02-20-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

Kevin C. Boyer DATE: 2015-03-18
KEVIN C. BOYER
PROFESSIONAL LAND SURVEYOR NUMBER 2675

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

(SIGNATURE) DATE: 2015-03-18
(PRINTED NAME) MI 48 R

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\TPP\1530-02-22 Beulah St to USH 63 Resurfacing\040101_rp.dgn
PLOT DATE : 3/17/2015
PLOT BY : bjl
PLOT NAME :
PLOT SCALE : 1:20
APPRAISAL PLAT DATE :

1530-02-20-4.01

COMPOSITE DRAWING, ORIGINAL ON FILE IN THE PEIRCE COUNTY REGISTER OF DEEDS

TRANSPORTATION PROJECT PLAT NO: 1530-02-20 - 4.02

THAT PART OF LOT 11 OF MOSES MORSE'S ADDITION TO THE VILLAGE OF ELLSWORTH IN THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 17, TOWNSHIP 26 NORTH, RANGE 17 WEST, VILLAGE OF ELLSWORTH, PIERCE COUNTY, WISCONSIN

RELOCATION ORDER USH 10 (BEULAH STREET - USH 63) PIERCE 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.

556833
PIERCE COUNTY REGISTER OF DEEDS VICKI J NELSON
PAGES: 1
PLATTRANS
RECORDING FEE: 25.00
04/01/2015 08:00AM
PRCC 258 A

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1530-02-20-4.02
AMENDMENT NO:

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W SQ FT REQUIRED NEW	EXISTING	TOTAL	HE SQ FT	TLE SQ FT
2	JANEEN SAMPSON AS TRUSTEE OF JEFFERY J. HINES AND MERRY C. HINES IRREVOCABLE FAMILY TRUST	HE/TLE	---	---	---	27	54

COURSE TABLE		
COURSE	BEARING	DISTANCE
200-201	N 00°10'15" W	50.00'
201-H230	N 89°49'45" E	36.32'
H230-H231	S 89°15'37" E	2.00'
H231-H232	S 00°44'23" W	13.32'
H232-202	N 84°34'05" E	24.47'
202-203	S 05°25'55" E	33.00'
203-200	S 84°34'05" W	65.78'

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 250	317907.234	487889.495	2.375" O.D. IRON PIPE
IP 251	317857.484	488043.042	1.5" O.D. IRON PIPE
IP 252	317873.172	488211.116	1.25" O.D. IRON PIPE

TLE STATION & OFFSET TABLE		
POINT NO.	STATION	OFFSET
TLE250	672+75.30	-49.44'
TLE251	672+80.27	-48.90'
TLE252	672+78.55	-33.00'

STATION & OFFSET TABLE		
POINT NO.	STATION	OFFSET
200	672+34.22	0.00'
201	672+38.81	-49.79'
H230	672+74.97	-46.46'
H231	672+76.96	-46.24'
H232	672+75.53	-33.00'
202	673+00.00	-33.00'
203	673+00.00	0.00'

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, PIERCE COUNTY, NAD83 (1991) IN U.S. 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 MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR USH 10 ESTABLISHED FROM PREVIOUS PROJECT 6088, ASSESSOR'S PLAT OF THE VILLAGE OF ELLSWORTH, C.W. YOUNGMAN'S MIDWAY ADDITION TO THE VILLAGE OF ELLSWORTH, MOSES MORSE'S ADDITION TO THE VILLAGE OF ELLSWORTH, CSM VOLUME 13 PAGE 24, PLAT OF SURVEY RF-06-253 DATED 12/05/1986, AND EXISTING CENTERLINE.
EXISTING HIGHWAY RIGHT OF WAY FOR BROADWAY AVENUE ESTABLISHED FROM C.W. YOUNGMAN'S MIDWAY ADDITION TO THE VILLAGE OF ELLSWORTH, MOSES MORSE'S ADDITION TO THE VILLAGE OF ELLSWORTH, PLAT OF SURVEYS RF-06-253 DATED 12/05/1986, AND RF-07-485 DATED 7/13/2001, AND EXISTING CENTERLINE.

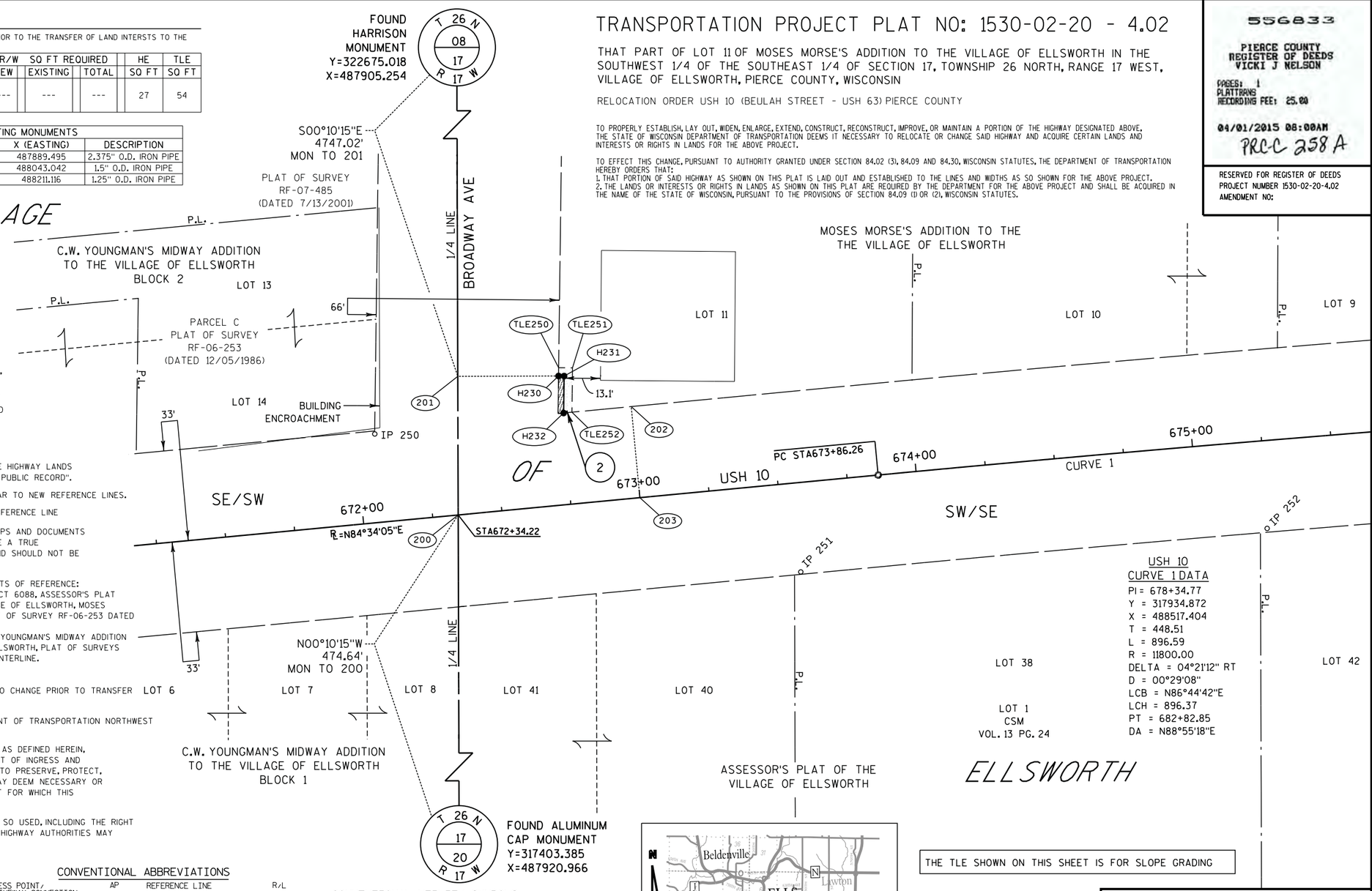
NO PREVIOUS ACCESS CONTROL EXISTS

OWNERS 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 NORTHWEST REGIONAL OFFICE EAU CLAIRE.

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.

A **HIGHWAY EASEMENT** (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE.



CONVENTIONAL SYMBOLS

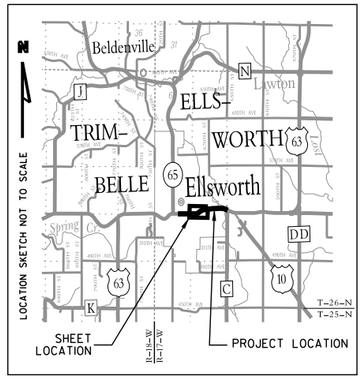
FOUND IRON PIPE/PIN	LP (1" UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	•(SET)	PROPERTY LINE	
R/W STANDARD	▲(SET)	LOT & TIE LINES	
SIGN	ISIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT		CORPORATE LIMITS	
SECTION CORNER SYMBOL		RESTRICTED ACCESS (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		RESTRICTED ACCESS (BY ACQUISITION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	PRW20	QUARTER LINE	
HIGHWAY EASEMENT BOUNDARY POINT	H30	SIXTEENTH LINE	
PARCEL NUMBER	102	EXISTING CENTERLINE	
UTILITY NUMBER	40	PROPOSED REFERENCE LINE	
SIGN NUMBER (OFF PREMISE)	21-1	PARALLEL OFFSET	
		BUILDING	

CONVENTIONAL ABBREVIATIONS

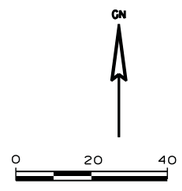
ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.	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 UTILITY SYMBOLS

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



THE TLE SHOWN ON THIS SHEET IS FOR SLOPE GRADING



emcs.inc

I, KEVIN C. BOYER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1530-02-20-4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

KEVIN C. BOYER DATE: 2015-03-18
PROFESSIONAL LAND SURVEYOR NUMBER 2675

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

(SIGNATURE) DATE: 2013-03-18
(PRINTED NAME) MIC

49

1530-02-20-4.02

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\TPP\1530-02-22 Beulah St to USH 63 Resurfacing\040102_rp.dgn
PLOT DATE : 3/17/2015
PLOT BY : bjl
PLOT NAME :
PLOT SCALE : 1:20
APPRAISAL PLAT DATE :

COMPOSITE DRAWING, ORIGINAL ON FILE IN THE PEIRCE COUNTY REGISTER OF DEEDS

TRANSPORTATION PROJECT PLAT NO: 1530-02-20 - 4.03

THAT PART OF LOT 1 OF CSM VOLUME 1, PAGE 83, LOCATED IN AND PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 17, TOWNSHIP 26 NORTH, RANGE 17 WEST, VILLAGE OF ELLSWORTH, PIERCE COUNTY, WISCONSIN.

RELOCATION ORDER USH 10 (BEULAH STREET - USH 63) PIERCE 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.

556834
PIERCE COUNTY REGISTER OF DEEDS VICKI J NELSON
PAGES: 1
PLAT/RNS
RECORDING FEE: 25.00
04/01/2015 08:00AM
PRCC 259

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1530-02-20-4.03
AMENDMENT NO:

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W SQ FT REQUIRED NEW	EXISTING	TOTAL	TLE SQ FT
3	DANIEL W. SARNSTROM	TLE	---	---	---	303
4	LEROY O. HINES AND JEANETTE M. HINES IRREVOCABLE TRUST, DONALD L HINES AND DARLA J. LAU, CO-TRUSTEES	TLE	---	---	---	754
6	AARON LUTSCHER	TLE	---	---	---	1406
7	CAROLINE M. HANVELT	TLE	---	---	---	94

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
200	WISCONSIN GAS LLC D/B/A WE ENERGIES (GAS)	RELEASE OF RIGHTS
202	WISCONSIN BELL, INC. D/B/A AT&T WISCONSIN	RELEASE OF RIGHTS
203	VILLAGE OF ELLSWORTH (SAN)	RELEASE OF RIGHTS

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

(200) WISCONSIN GAS LLC D/B/A WE ENERGIES (GAS)
NO EASEMENT OF RECORD - PAR 4
DOC. 328378 - PAR. 6
DOC. 284748 - PAR. 7

(202) WISCONSIN BELL, INC. D/B/A AT&T WISCONSIN
DOC. 325513 - PAR. 4
DOC. 325512 - PAR. 6
DOC. 284748 - PAR. 7

(203) VILLAGE OF ELLSWORTH (SAN)
DOC. 372239 - PAR. 4
DOC. 372238 - PAR. 7, 6

PLE TO CONSTRUCT AND MAINTAIN DRAINAGE SLOPES
PROJECT 1538-01-21
VOL. 234 PG. 552
DOC. 325907

PLE TO CONSTRUCT AND MAINTAIN DRAINAGE SLOPES
PROJECT 1538-01-21
VOL. 234 PG. 729
DOC. 326013

NORTHERN STATES POWER COMPANY D/B/A XCEL ENERGY

TOWN OF ELLSWORTH
VILLAGE OF ELLSWORTH

USH 10
CURVE 2 DATA
PI = 692+90.77
Y = 317962.282
X = 489973.576
T = 215.82
L = 426.65
R = 1145.92
DELTA = 21°19'57" RT
D = 05°00'00"
LCB = S80°24'44"E
LCH = 424.19
PC = 690+74.94
DB = S88°55'18"W

COURSE TABLE		
COURSE	BEARING	DISTANCE
300-301	SEE CURVE DATA ON SHEET	
301-302	S 20°15'15" W	33.00'
302-303	N 69°44'45" W	103.23'
303-304	S 05°12'33" E	26.58'
304-305	N 69°44'50" W	57.15'
305-306	N 10°29'20" W	27.93'
306-307	N 69°44'45" W	160.61'
307-308	N 20°15'15" E	33.00'
308-309	N 20°15'15" E	33.00'
309-310	S 69°44'45" E	60.60'
310-311	S 86°55'18" E	57.57'
311-312	S 69°44'45" E	61.41'
312-313	S 27°18'35" E	25.19'
313-314	S 69°44'45" E	57.93'
314-315	N 19°29'32" E	14.98'
315-316	S 70°30'28" E	70.52'
316-301	S 20°15'15" W	48.92'

TLE STATION & OFFSET TABLE		
POINT NO.	STATION	OFFSET
TLE350	697+73.00	33.00'
TLE351	697+73.00	48.00'
TLE352	697+29.35	48.00'
TLE353	696+68.75	44.00'
TLE354	695+25.00	44.00'
TLE355	695+25.00	33.00'
TLE356	696+91.73	-38.00'
TLE357	697+55.06	-38.00'

STATION & OFFSET TABLE		
POINT NO.	STATION	OFFSET
300	699+06.63	0.00'
301	698+25.44	0.00'
302	698+25.44	33.00'
303	697+22.21	33.00'
304	697+33.64	57.00'
305	696+76.48	57.00'
306	696+62.21	33.00'
307	695+01.60	33.00'
308	695+01.60	0.00'
309	695+01.60	-33.00'
310	695+62.20	-33.00'
311	696+17.20	-50.00'
312	696+78.61	-50.00'
313	696+97.20	-33.00'
314	697+55.13	-33.00'
315	697+54.93	-47.98'
316	698+25.44	-48.92'

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 350	317844.740	490430.480	0.75" IRON ROD
IP 351	317827.980	490424.360	0.75" IRON ROD

USH 10
CURVE 3 DATA
PI = 700+82.04
Y = 317686.625
X = 490720.611
T = 256.60
L = 512.33
R = 3589.28
DELTA = 08°10'42" LT
D = 01°35'47"
LCB = S73°50'06"E
LCH = 511.89
PT = 703+37.77
DA = S77°55'27"E

FOUND BERNTSEN ALUMINUM MONUMENT
Y=320110.171
X=490550.945

SECTION LINE
S00°07'52"E
2361.96'
MON TO 300

NO0°07'52"W
287.38'
MON TO 300

FOUND SURVEY NAIL
Y=317460.837
X=490557.010

CTH C

300-301
R = 3589.28
L = 81.18
LCB = N70°23'38"W
LCH = 81.18

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, PIERCE COUNTY, NAD83 (1991) IN U.S. 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 MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR USH 10 ESTABLISHED FROM PREVIOUS PROJECTS 6088, 1530-03-23, AND 1538-01-21, LOT 1 OF CSM VOLUME 1 PAGE 83, AND EXISTING CENTERLINE.
EXISTING HIGHWAY RIGHT-OF-WAY FOR UTILITY STREET ESTABLISHED FROM LOT 1 OF CSM VOLUME 1 PAGE 83 AND EXISTING CENTERLINE.

NO PREVIOUS ACCESS CONTROL EXISTS

OWNERS 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 NORTHWEST REGIONAL OFFICE EAU CLAIRE.

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.

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN (1" UNLESS NOTED)
R/W MONUMENT
R/W STANDARD
SIGN
SECTION CORNER MONUMENT
SECTION CORNER SYMBOL
FEE (HATCH VARIES)
TEMPORARY LIMITED EASEMENT
PERMANENT LIMITED EASEMENT
R/W BOUNDARY POINT
PARCEL NUMBER
UTILITY NUMBER
SIGN NUMBER (OFF PREMISE)
BUILDING

PROPOSED R/W LINE
EXISTING H.E. LINE
PROPERTY LINE
LOT & TIE LINES
SLOPE INTERCEPTS
CORPORATE LIMITS
RESTRICTED ACCESS (BY PREVIOUS ACQUISITION/CONTROL)
RESTRICTED ACCESS (BY ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
EXISTING CENTERLINE
PROPOSED REFERENCE LINE
PARALLEL OFFSET

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 UTILITY SYMBOLS

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

LOCATION SKETCH NOT TO SCALE
Beldenville, Lawton, TRIMBELLE, ELLSWORTH, Ellsworth, Spring Creek
PROJECT LOCATION
SHEET LOCATION
T-26-N
T-25-N
R-18-W
R-17-W

SCALE, FEET
0 20 40

emcs, LLC

I, KEVIN C. BOYER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1530-02-20-4.03 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

KEVIN C. BOYER — DATE: 2015-03-18
KEVIN C. BOYER
PROFESSIONAL LAND SURVEYOR NUMBER 2675

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

(SIGNATURE) — DATE: 2015-03-18
(PRINTED NAME) MIKE SOMERS

WISCONSIN KEVIN C BOYER E-2675 HEWITT WI LAND SURVEYOR

50

1530-02-20-4.03

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\TPP\1530-02-22 Beulah St to USH 63 Resurfacing\040103_rp.dgn
PLOT DATE : 3/17/2015
PLOT BY : bj1
PLOT NAME :
PLOT SCALE : 1:20
APPRAISAL PLAT DATE :

PROPOSED WORK
STA 640+39.55 - STA 645+00
REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE 5 MT 58-34 H OVERLAY
REMOVE AND REPLACE CURB RAMPS

LEGEND
- (A) REMOVING ASPHALTIC SURFACE
- (C) REMOVING CURB & GUTTER
- (S) REMOVING CONCRETE SIDEWALK

USH 10 CURVE 1 DATA
PI = STA 644+88.23
Y = 317333.72
X = 485289.11
PC = STA 644+01.76
Y = 317334.04
X = 485202.64
PT = STA 645+74.68
Y = 317336.01
X = 485375.55
T = 86.47
L = 172.93
R = 5729.58
DEGREE OF CURVE = 1°00'00"
DELTA = 1°43'45" LT
BK = N 89°47'13" W
AH = N 88°29'01" E
EXISTING SE = NA
PROPOSED SE = NC
SE TRANSITION (T) = NA
RO (RUNOFF) = NA

N

RESIDUAL GROUNDWATER AND SOIL CONTAMINATION (NO EXCAVATION BEYOND 18-INCHES; SEE SPECIAL PROVISIONS)

REALTY INCOME PROPERTIES 3, LLC
ASP CE
(A) (C) (S)
VILLAGE OF ELLSWORTH (LIGHT)
EXIST R/W
CAUTION
N BEULAH ST
JOHN W & NANCY L EATON
P.L.
KENNETH M. NOLTEE
VILLAGE OF ELLSWORTH (WATER)
AT&T WISCONSIN (COMM)
WE ENERGIES (GAS)
VILLAGE OF ELLSWORTH
COORDINATE WITH COUNTY SURVEYOR
T 26 N
18 17
19 20
R 17 W
SEC LINE
EXIST R/W

639+00 640+00 641+00 USH 10 642+00 643+00 644+00 645+00
S 89°47'13" E
CURVE 1
PC STA644+01.76
PI STA644+88.23

EXIST R/W
TLE
ASP CE
BEGIN PROJECT
STA 640+39.55
BUTT JOINT REQ'D
Y=317335.388
X=484840.439
(A) (C) (S)
GREGORY A & KRISTINE E EATON
P.L.
DANIEL W ACKER
AT&T WISCONSIN (COMM)
VILLAGE OF ELLSWORTH (SAN)
XCEL ENERGY (ELEC)
EXIST R/W
(S)
SEC LINE

NOTES
SEE PAVING AND CONSTRUCTION DETAILS FOR CURB RAMP WORK

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PLAN	SHEET 51	E

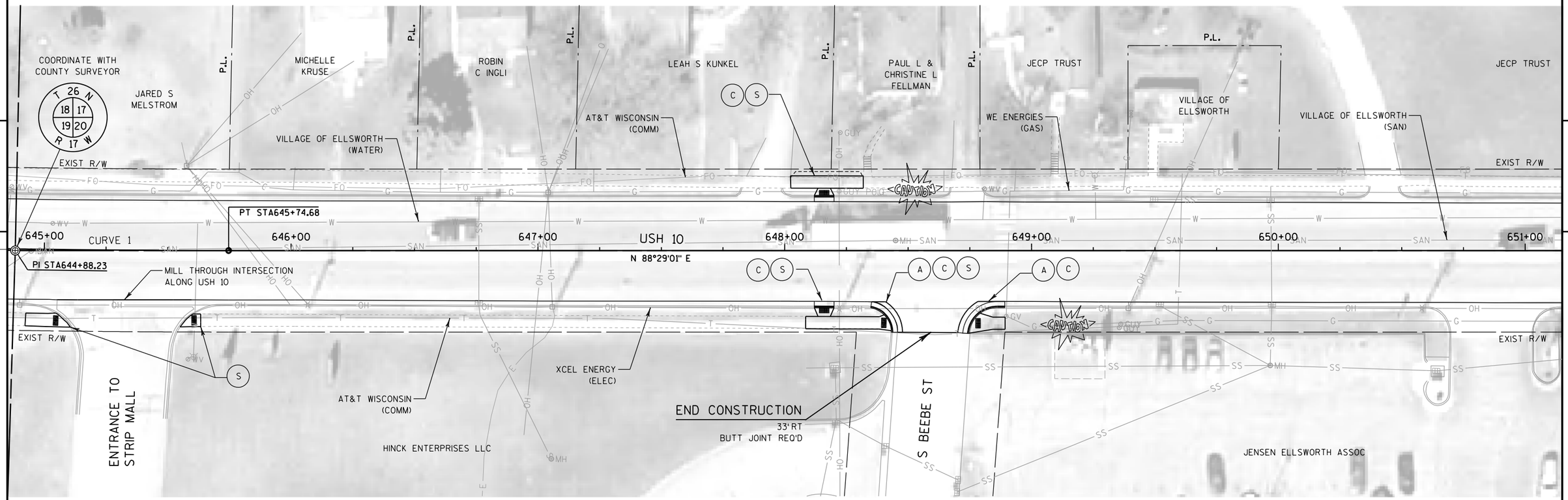
FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\050201_pn.dgn
PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:40

PROPOSED WORK
STA 645+00 - STA 651+00
REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE 5 MT 58-34 H OVERLAY
REMOVE AND REPLACE CURB RAMPS

USH 10 CURVE 1 DATA
PI = STA 644+88.23
Y = 317333.72
X = 485289.11
PC = STA 644+01.76
Y = 317334.04
X = 485202.64
PT = STA 645+74.68
Y = 317336.01
X = 485375.55
T = 86.47
L = 172.93
R = 5729.58
DELTA = 1°43'45" LT
BK = N 89°47'13" W
AH = N 88°29'01" E
EXISTING SE = NA
PROPOSED SE = NC
SE TRANSITION (T) = NA
RO (RUNOFF) = NA

LEGEND
(A) REMOVING ASPHALTIC SURFACE
(C) REMOVING CURB & GUTTER
(S) REMOVING CONCRETE SIDEWALK

N



NOTES
SEE PAVING AND CONSTRUCTION DETAILS
FOR CURB RAMP WORK

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PLAN	SHEET 52	E

PROPOSED WORK
STA 651+00 - STA 657+00
REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE 5 MT 58-34 H OVERLAY

N

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
601	653+58.94' RT	RR SPIKE IN PP#8EE22	1104.64

USH 10 CURVE 2 DATA
PI = STA 653+98.88
Y = 317357.82
X = 486199.45
PC = 652+79.98
Y = 317354.67
X = 486080.60
PT = STA 655+12.24
Y = 317420.31
X = 486300.60
T = 118.90
L = 232.27
R = 440.74
DEGREE OF CURVE = 12°59"59.66"
DELTA = 30°11'39" LT
BK = N 89°29'01" E
AH = N 58°17'22"E
EXISTING SE = 5.8%
PROPOSED SE = 5.8%
SE TRANSITION (T) = 151
RO (RUNOFF) = 112

5

5

JECP TRUST
FRED W & JACQUELINE LUTZ
JOSEPH P GATHMAN
GREG & LYNELLE ENGESET
DEAN H & EILEEN C MEWES
MIGUEL ANGEL DE JESUS MCCORMICK
ANITA M SKARMAN
DANIEL C UNSER
JENSEN ELLSWORTH ASSOC
NORTHERN STATES POWER CO

VILLAGE OF ELLSWORTH (SAN)
VILLAGE OF ELLSWORTH (WATER)
WE ENERGIES (GAS)
AT&T WISCONSIN (COMM)
AT&T WISCONSIN (COMM)
XCEL ENERGY (ELEC)

EXIST R/W
USH 10
PLEASANT AVE
S DAR ST
SEC LINE
P.L.

651+00
652+00
N 88°29'01" E
PC STA652+79.98
653+00
654+00
CURVE 2
PI STA653+98.88
655+00
PT STA655+12.24
656+00
N 58°17'22" E
657+00

CAUTION
CAUTION

END CONSTRUCTION
44' RT
BUTT JOINT REQ'D

END CONSTRUCTION
49' RT
BUTT JOINT REQD

BM 601

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PLAN	SHEET 53	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\050203_pn.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:40

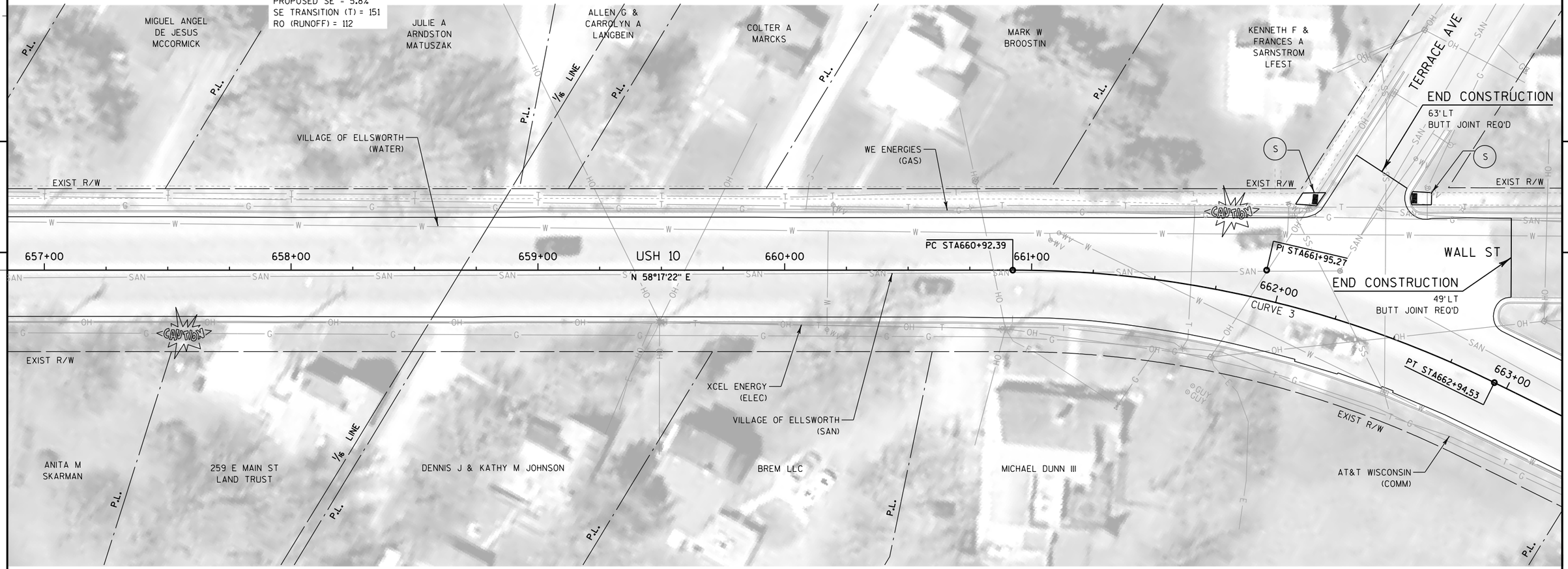
PROPOSED WORK
STA 657+00 - STA 662+00
REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE 5 MT 58-34 H OVERLAY
REMOVE AND REPLACE CURB RAMPS

USH 10 CURVE 3 DATA

PI = STA 661+95.27
Y = 317779.33
X = 486881.66
PC = STA 660+92.39
Y = 317725.25
X = 486794.14
PT = STA 662+94.53
Y = 317789.07
X = 486984.08
T = 102.88
L = 202.15
R = 440.74
DEGREE OF CURVE = 12°59'59.66"
DELTA = 26°16'43" RT
BK = N 58°17'22" E
AH = N 84°34'05"E
EXISTING SE = 5.8%
PROPOSED SE = 5.8%
SE TRANSITION (T) = 151
RO (RUNOFF) = 112

LEGEND

(A) REMOVING ASPHALTIC SURFACE
(C) REMOVING CURB & GUTTER
(S) REMOVING CONCRETE SIDEWALK



NOTES
SEE PAVING AND CONSTRUCTION DETAILS
FOR CURB RAMP WORK

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PLAN	SHEET 54	E

PROPOSED WORK
STA 662+00 - STA 668+00
REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE 5 MT 58-34 H OVERLAY
REMOVE AND REPLACE CURB RAMPS

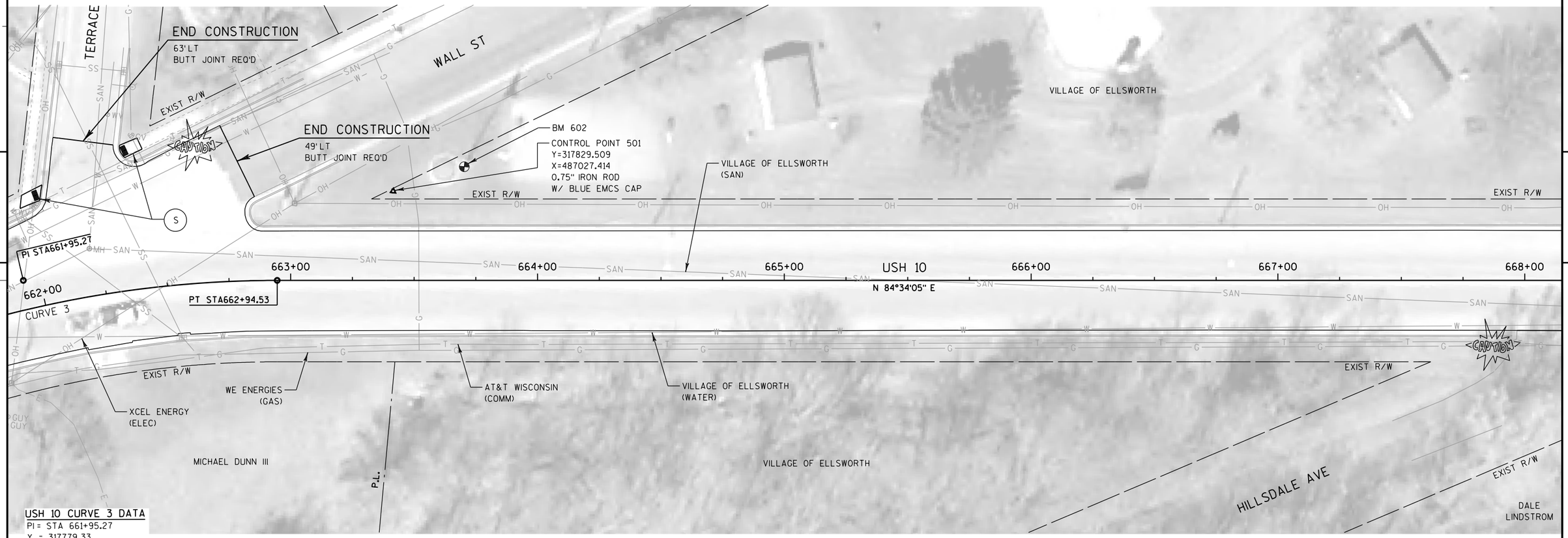
BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
602	663+70, 46'LT	CHISELED SQUARE ON FLAG POLE BASE	1082.06

LEGEND

(A) REMOVING ASPHALTIC SURFACE
(C) REMOVING CURB & GUTTER
(S) REMOVING CONCRETE SIDEWALK

N



5

5

USH 10 CURVE 3 DATA
PI = STA 661+95.27
Y = 317779.33
X = 486881.66
PC = STA 660+92.39
Y = 317725.25
X = 486794.14
PT = STA 662+94.53
Y = 317789.07
X = 486984.08
T = 102.88
L = 202.15
R = 440.74
DEGREE OF CURVE = 12°59'59.66"
DELTA = 26°16'43" RT
BK = S 58°17'22" W
AH = N 84°34'05"E
EXISTING SE = 5.8%
PROPOSED SE = 5.8%
SE TRANSITION (T) = 151
RO (RUNOFF) = 112

NOTES
SEE PAVING AND CONSTRUCTION DETAILS FOR CURB RAMP WORK

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PLAN	SHEET 55	E

PROPOSED WORK
STA 668+00 - STA 674+00
REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE 5 MT 58-34 H OVERLAY
REMOVE AND REPLACE CURB RAMPS

BENCH MARKS

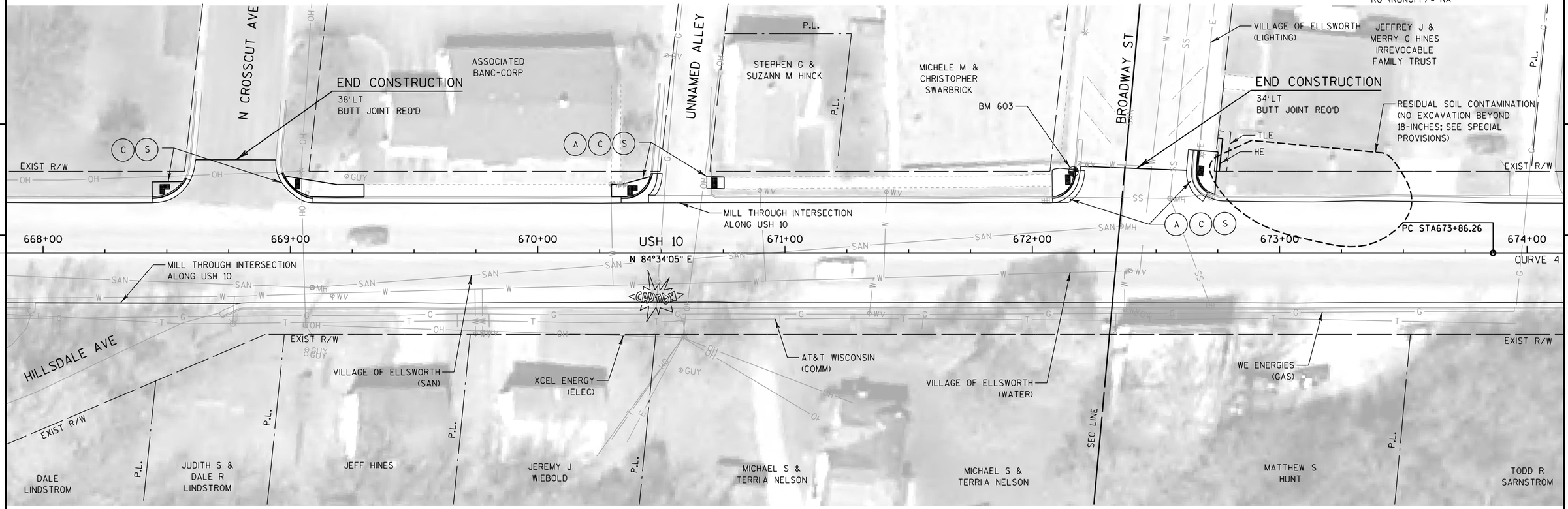
NO.	STATION	DESCRIPTION	ELEV.
603	672+17, 33'LT	NORTH FLANGE BOLT ON HYDRANT	1072.01

LEGEND

(A) REMOVING ASPHALTIC SURFACE
(C) REMOVING CURB & GUTTER
(S) REMOVING CONCRETE SIDEWALK

USH 10 CURVE 4 DATA
PI = STA 678+34.77
Y = 317934.87
X = 488517.40
PC = STA 673+86.26
Y = 317892.41
X = 488070.91
PT = STA 682+82.85
Y = 317943.31
X = 488965.83
T = 448.51
L = 896.59
R = 11800.00
DEGREE OF CURVE = 0°29'8.01"
DELTA = 04°21'12" RT
BK = S 84°34'05" W
AH = N 88°55'18" E
EXISTING SE = NA
PROPOSED SE = NC
SE TRANSITION (T) = NA
RO (RUNOFF) = NA

N



NOTES
SEE PAVING AND CONSTRUCTION DETAILS
FOR CURB RAMP WORK

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PLAN	SHEET 56	E

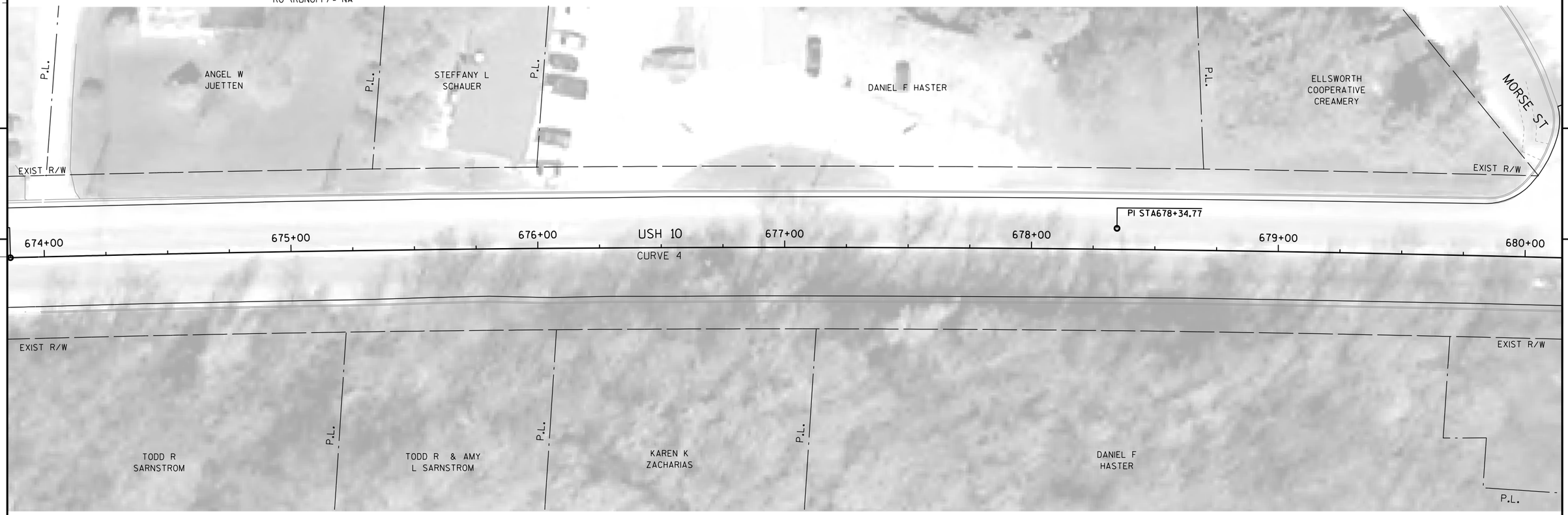
FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\050206_pn.dgn
PLOT DATE : 7/24/2016
PLOT BY : sgc
PLOT NAME :
PLOT SCALE : 1:40

PROPOSED WORK
STA 674+00 - STA 680+00
REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE 5 MT 58-34 H OVERLAY

NOTE
NO UTILITIES FIELD LOCATED ON THIS SHEET

USH 10 CURVE 4 DATA
PI= STA 678+34.77
Y = 317934.87
X = 488517.40
PC = STA 673+86.26
Y = 317892.41
X = 488070.91
PT = STA 682+82.85
Y = 317943.31
X = 488965.83
T = 448.51
L = 896.59
R = 11800.00
DEGREE OF CURVE = 0°29'8.01"
DELTA = 04°21'12" RT
BK = S 84°34'05" W
AH = N 88°55'18" E
EXISTING SE = NA
PROPOSED SE = NC
SE TRANSITION (T) = NA
RO (RUNOFF) = NA

N



5

5

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PLAN	SHEET 57	E

PROPOSED WORK

STA 680+00 - STA 686+00
REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE 5 MT 58-34 H OVERLAY

NOTE

NO UTILITIES FIELD LOCATED EXCEPT FOR VALVES AND MANHOLES IN THE PAVEMENT SURFACE

USH 10 CURVE 4 DATA
PI= STA 678+34.77
Y = 317934.87
X = 488517.40
PC = STA 673+86.26
Y = 317892.41
X = 488070.91
PT = STA 682+82.85
Y = 317943.31
X = 488965.83
T = 448.51
L = 896.59
R = 11800.00
DEGREE OF CURVE = 0°29'8.01"
DELTA = 04°21'12" RT
BK = S 84°34'05" W
AH = N 88°55'18" E
EXISTING SE = NA
PROPOSED SE = NC
SE TRANSITION (T) = NA
RO (RUNOFF) = NA

N

END CONSTRUCTION
67'LT
BUTT JOINT REQ'D

END CONSTRUCTION
58'LT
BUTT JOINT REQ'D

MORSE ST

N WALLACE ST

CONSOLIDATED ENERGY COOPERATIVE

COUNTRYSIDE COOPERATIVES

WARREN & VIOLET MAGADANZ FAMILY TRUST

P.L.

1/16 LINE

EXIST R/W

MH

WV

PT STA682+82.85

680+00 681+00 682+00 683+00 USH 10 684+00 685+00 686+00

N 88°55'18" E

CURVE 4

MILL THROUGH INTERSECTION

COLBY W & HEATHER D BROWN

JAMES M COUGHLIN

CONSOLIDATED ENERGY COOPERATIVE

S WALLACE ST

WALTER GULBRANSON

NICOLE J WEBB

JOSHUA STODOLA

STACEY NESSETH

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PLAN	SHEET 58	E

PROPOSED WORK
STA 686+00 - STA 692+00
REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE 5 MT 58-34 H OVERLAY

NOTE
IN THE RURAL SECTION WITHOUT CURB & GUTTER
MILL TO EDGE OF USH 10 SHOULDER THROUGH
ANY PAVED DRIVEWAYS; DRIVEWAY REPAVING
NOT ANTICIPATED EXCEPT AT LOCATIONS NOTED NEAR
ISABELLE CREEK

USH 10 CURVE 5 DATA
PI = STA 692+90.77
Y = 317962.28
X = 489973.58
PC = STA 690+74.94
Y = 317958.22
X = 489757.79
PT = STA 695+01.60
Y = 317887.57
X = 490176.06
T = 215.82
L = 426.65
R = 1145.92
DEGREE OF CURVE = 4°59'59.93"
DELTA = 21°19'57" RT
BK = S 88°55'18" W
AH = N 69°44'45"E
EXISTING SE = 3.9%
PROPOSED SE = 3.9%
SE TRANSITION (T) = 113
RO (RUNOFF) = 75

N

5

5

CHRISTOPHER O & KAREN G MEYER
DAWN LINDSTROM
DENNIS D & ANGELA B SKARMAN
DOROTHY M SCHULTE SURVIVORS TRUST
XCEL ENERGY (ELEC)
MIDCONTINENT COMMUNICATIONS (COMM)
VILLAGE OF ELLSWORTH (WATER)
BASE AGG PE
EXIST R/W
25' LT
P.L.
PC STA690+74.94
686+00
687+00
688+00
USH 10
N 88°55'18" E
689+00
690+00
691+00
692+00
CURVE 5
CAUTION
AT&T WISCONSIN (COMM)
WE ENERGIES (GAS)
VILLAGE OF ELLSWORTH (SAN)
END CONSTRUCTION
39' RT
BUTT JOINT REQ'D
S POND ST
STACEY NESSETH
CURTIS D KEES
BRADLEY J MEYER
ADAM BLEGEN
ANTHONY J & NANCY K RADERMACHER
ANTHONY R & KATHLEEN M HINES
ELFRIEDA L JENNINGS

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PLAN	SHEET 59	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\050209_pn.dgn
PLOT DATE : 7/24/2016
PLOT BY : sgc
PLOT NAME :
PLOT SCALE : 1:40

PROPOSED WORK

STA 692+00 - STA 698+00
REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE 5 MT 58-34 H OVERLAY
REMOVE & REPLACE GUARDRAIL
PREPARE FOUNDATION FOR ASPHALTIC
SHOULDERS STA 692+14 - STA 697+75 LT AND
STA 695+61 - 697+75 RT

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
604	693+92, 35' RT	TAG BOLT ON HYDRANT FLANGE	1038.20

USH 10 CURVE 5 DATA

PI = STA 692+90.77
Y = 317962.28
X = 489973.58
PC = STA 690+74.94
Y = 317958.22
X = 489757.79
PT = STA 695+01.60
Y = 317887.57
X = 490176.06
T = 215.82
L = 426.65
R = 1145.92
DEGREE OF CURVE = 4°59'59.93"
DELTA = 21°19'57" RT
BK = S 88°55'18" W
AH = N 69°44'45"E
EXISTING SE = 3.9%
PROPOSED SE = 3.9%
SE TRANSITION (T) = 113
RO (RUNOFF) = 75

LEGEND

(A) REMOVING ASPHALTIC SURFACE IN DRIVEWAYS (FULL DEPTH)

(B) STA 695+55, RT CONSTRUCT 18' WIDE DRIVEWAY WITH 6" BASE AGG DENSE (SEE CONSTRUCTION DETAIL)

(D) STA 695+45, LT (16') AND STA 697+61, RT (12') RESURFACE DRIVEWAYS WITH 3" ASPHALTIC DRIVEWAYS AND FIELD ENTRANCES (SEE CONSTRUCTION DETAIL)

NOTES

IN THE RURAL SECTION WITHOUT CURB & GUTTER MILL TO EDGE OF USH 10 SHOULDER THROUGH ANY PAVED DRIVEWAYS; DRIVEWAY REPAVING NOT ANTICIPATED EXCEPT AT LOCATIONS NOTED NEAR ISABELLE CREEK

********** ADJUST PAVEMENT CROSS SLOPE WITH MILL AND OVERLAY ON THE LOW SIDE OF THE SUPERELEVATION TO ENSURE POSITIVE DRAINAGE THROUGH THIS INTERSECTION

N

DOROTHY M SCHULTE SURVIVORS TRUST
VILLAGE OF ELLSWORTH (WATER)
+09 BEGIN BARRIER SYSTEM GRADING SHAPING FINISHING
BASE AGG PE
EXIST R/W
PI STA692+90.77
SLOPE INTERCEPT
+58
692+00
693+00
694+00
CURVE 5
EXIST R/W
ELFRIEDA L JENNINGS
KATHY L GOULD
P.L.
ANN M KRAEMER
WE ENERGIES (GAS)
BM 604
END CONSTRUCTION
36' RT
BUTT JOINT REQ'D
UTILITY ST
STA 694+21 - STA 697+64, LT
REMOVING GUARDRAIL
STA 692+09 - STA 697+63, LT
GUARDRAIL STIFFENED LHW (HALF POST SPACING)
STEEL PLATE BEAM GUARD SHORT RADIUS
STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
(SEE STANDARD DETAIL DRAWINGS AND CONSTRUCTION DETAILS)
MYRNA A BURI
XCEL ENERGY (ELEC)
MIDCONTINENT COMMUNICATIONS (COMM)
ASPH PE
(A) (D)
29' LT
+40
+56
695+00
USH 10
696+00
697+00
698+00
S 69°44'45" E
PT STA695+01.60
CAUTION
REMOVE UTILITY POLE (PRIVATE)
B-47-104 EXISTING BOX CULVERT TO REMAIN
(A) (D)
XCEL ENERGY (ELEC)
STATION 697+60
REMOVE ENDWALL OF 18-INCH CPCS
EXTEND 18-INCH CPCS 8-FEET
1 - AEW REQD
DANIEL W SARNSTROM
SLOPE INTERCEPT
BASE AGG PE
EXIST R/W
+64
END BARRIER SYSTEM GRADING SHAPING FINISHING
TLE
D
(B)
STATION 695+55
REMOVE 1 - 18" CPCS
1 - 18-INCH CPCS REQD
2 - AEW REQD
40' RT
+60
BEGIN BARRIER SYSTEM GRADING SHAPING FINISHING
AT&T WISCONSIN (COMM)
CAROLINE M HANVELT
VILLAGE OF ELLSWORTH (SAN)
TLE
SLOPE INTERCEPT
REMOVING GUARDRAIL
AARON LUTSCHER
ISABELLE CREEK
STA 695+60 - STA 697+48, RT
REMOVING GUARDRAIL
STA 695+61 - STA 697+46, RT
GUARDRAIL STIFFENED LHW (HALF POST SPACING)
STEEL PLATE BEAM GUARD SHORT RADIUS
STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
(SEE STANDARD DETAIL DRAWINGS AND CONSTRUCTION DETAILS)
STATION 697+49
REMOVE ENDWALL OF 24-INCH CPCS
1 - 24-INCH 45° ELBOW REQ'D
EXTEND 24-INCH CPCS 14-FEET
1 - AEW REQD
EXIST R/W
36' RT
ASPH PE
+55
END BARRIER SYSTEM GRADING SHAPING FINISHING
LEROY O & JEANETTE M HINES TRUST

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PLAN	SHEET 60	E

PROPOSED WORK
STA 698+00 - STA 704+00
REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE 5 MT 58-34 H OVERLAY
PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

USH 10 CURVE 6 DATA
PI = STA 700+82.04
Y = 317686.63
X = 490720.61
PC = STA 698+25.44
Y = 317775.46
X = 490479.88
PT = STA 703+37.77
Y = 317632.94
X = 490971.53
T = 256.60
L = 512.33
R = 3589.28
DEGREE OF CURVE = 1°35'46.69"
DELTA = 08°10'42" LT
BK = N 69°44'45" W
AH = S 77°55'27" E
EXISTING SE = 2.6%
PROPOSED SE = 2.6%
SE TRANSITION (T) = 103
RO (RUNOFF) = 58

NOTE
IN THE RURAL SECTION WITHOUT CURB & GUTTER
MILL TO EDGE OF USH 10 SHOULDER THROUGH
ANY PAVED DRIVEWAYS; DRIVEWAY REPAVING
NOT ANTICIPATED EXCEPT AT LOCATIONS NOTED NEAR
ISABELLE CREEK

N

5

5

SEC LINE
WANDA A CLARK
KEVIN J LINDSTROM
XCEL ENERGY (ELEC)
MIDCONTINENT COMMUNICATIONS (COMM)
BEVCOMM (COMM)
EXIST R/W
28' LT
PC STA698+25.44
698+00
CURVE 5
699+00
700+00
USH 10
701+00
CURVE 6
PI STA700+82.04
702+00
703+00
PT STA703+37.77
USH 10 (WB)
704+00
USH 10 (EB)
EXIST R/W
CAUTION
SEC LINE
VILLAGE OF ELLSWORTH (SAN)
WE ENERGIES (GAS)
LEROY O & JEANETTE M HINES TRUST
END CONSTRUCTION
66' RT
BUTT JOINT REQ'D
CTH C
EXIST R/W
AT&T WISCONSIN (COMM)
EXIST R/W
BERNARD & FAYE LARSON FAMILY TRUST

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PLAN	SHEET 61	E

PROPOSED WORK
STA 704+00 - STA 710+00
REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE 5 MT 58-34 H OVERLAY
PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
605	705+79, 33'RT	CHISELED SQUARE ON INLET STRUCTURE	1032.77

NOTES

NO UTILITIES FIELD LOCATED ON THIS SHEET

IN THE RURAL SECTION WITHOUT CURB & GUTTER MILL TO EDGE OF USH 10 SHOULDER THROUGH ANY PAVED DRIVEWAYS; DRIVEWAY REPAVING NOT ANTICIPATED EXCEPT AT LOCATIONS NOTED NEAR ISABELLE CREEK

USH 10 CURVE 7 DATA
PI= STA 711+88.87
Y = 317454.89
X = 491803.80
PC = STA 709+12.83
Y = 317512.64
X = 491533.87
PT = STA 714+63.01
Y = 317452.96
X = 492079.84
T = 276.05
L = 550.18
R = 2700.00
DEGREE OF CURVE = 2°7'19.44"
DELTA = 11°40'31" LT
BK = N 77°55'27" W
AH = S 89°35'58" E
EXISTING SE = 3.2%
PROPOSED SE = 3.2%
SE TRANSITION (T) = 115
RO (RUNOFF) = 71

N

KEVIN J
LINDSTROM

EXIST R/W

EXIST R/W

PC STA709+12.83

704+00 705+00 706+00 707+00 USH 10 (WB) S 77°55'27" E 708+00 709+00 710+00 CURVE 7

BM 605

USH 10 (EB)

CONTROL POINT 500
Y=317494.274
X=491482.777
0.75" IRON ROD
W/ BLUE EMCS CAP

USH 63 (EB)

EXIST R/W

END CONSTRUCTION
STA 708+63.82
BUTT JOINT REQ'D

USH 10 (EB)

SEC LINE

BERNARD &
FAYE LARSON
FAMILY TRUST

MICHAEL P
HUPPERT

EXIST R/W

P.L.

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PLAN	SHEET 62	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\050212_pn.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 44

PROPOSED WORK
STA 710+00 - STA 715+77
REMOVING ASPHALTIC SURFACE MILLING
HMA PAVEMENT TYPE 5 MT 58-34 H OVERLAY
PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

NOTES

NO UTILITIES FIELD LOCATED ON THIS SHEET

IN THE RURAL SECTION WITHOUT CURB & GUTTER
MILL TO EDGE OF USH 10 SHOULDER THROUGH
ANY PAVED DRIVEWAYS; DRIVEWAY REPAVING
NOT ANTICIPATED EXCEPT AT LOCATIONS NOTED NEAR
ISABELLE CREEK

USH 10 CURVE 7 DATA
PI = STA 711+88.87
Y = 317454.89
X = 491803.80
PC = STA 709+12.83
Y = 317512.64
X = 491533.87
PT = STA 714+63.01
Y = 317452.96
X = 492079.84
T = 276.05
L = 550.18
R = 2700.00
DEGREE OF CURVE = 2°7"19.44"
DELTA = 11°40'31" LT
BK = N 77°55'27" W
AH = S 89°35'58" E
EXISTING SE = 3.2%
PROPOSED SE = 3.2%
SE TRANSITION (T) = 115
RO (RUNOFF) = 71

N

EXIST R/W
P.L.
RONALD CAMPBELL TRUST
1/16 LINE
KEVIN J & JEANNE S LINDSTROM
EXIST R/W
710+00
711+00
712+00
713+00
714+00
715+00
716+00
CURVE 7
SEC LINE
PI STA711+88.87
USH 63 (WB)
USH 63 (EB)
PT STA714+63.01
S 89°35'58" E
SEC LINE
MILL THROUGH INTERSECTION
ALONG USH 10/63
END CONSTRUCTION
STA 711+76.24
BUTT JOINT REQ'D
USH 10 (EB & WB)
END PROJECT
STA 715+77.00
BUTT JOINT REQ'D
1/16 LINE
EXIST R/W
EXIST R/W

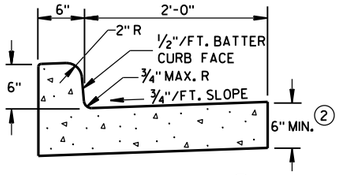
5
5

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE COUNTY	PLAN	SHEET 63	E

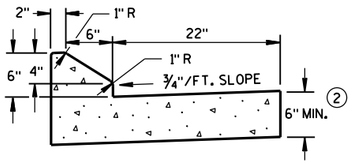
Standard Detail Drawing List

08D01-18	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-17A	CURB RAMPS TYPES 1 AND 1-A
08D05-17B	CURB RAMPS TYPES 2 AND 3
08D05-17C	CURB RAMPS TYPES 4A AND 4A1
08D05-17D	CURB RAMPS TYPE 4B AND 4B1
08D05-17E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F07-05	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE FRAINS
14B15-09A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-09B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-09C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B18-06A	STEEL PLATE BEAM GUARD, CLASS "A" (AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS)
14B27-01A	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-01B	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-01C	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B29-01	SAFETY EDGE
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C03-03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-13B	PAVEMENT MARKING WORDS
15C07-13C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-04A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-02	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-03A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-03B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-03C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

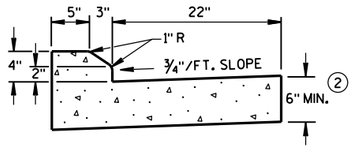
6



TYPES A & D ①

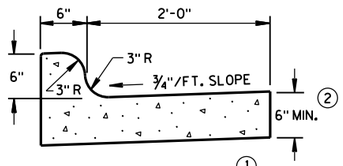


6" SLOPED CURB TYPES G & J ①

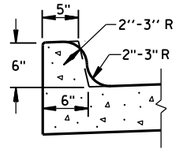


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

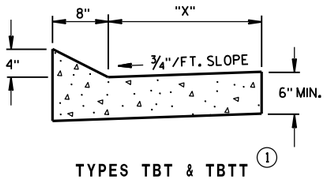


TYPES K & L ①



OPTIONAL CURB SHAPE FOR TYPES K & L ①

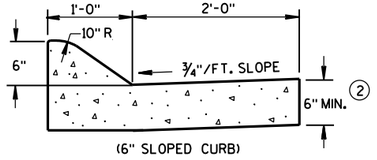
CONCRETE CURB & GUTTER 30"



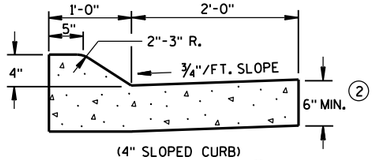
TYPES TBT & TBTT ①

CONCRETE CURB & GUTTER

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

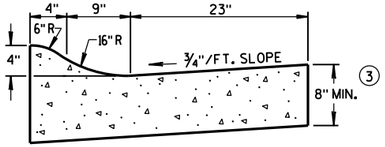


(6" SLOPED CURB)



(4" SLOPED CURB)

TYPES A & D ①



4" SLOPED CURB TYPES R & T ① ④

CONCRETE CURB & GUTTER 36"

GENERAL NOTES

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

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

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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

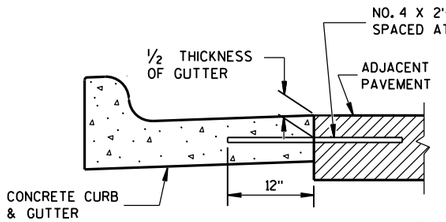
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

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

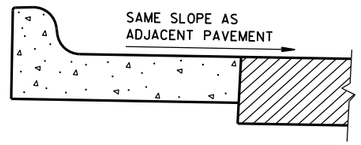
③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

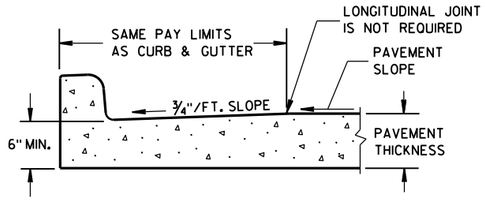
⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



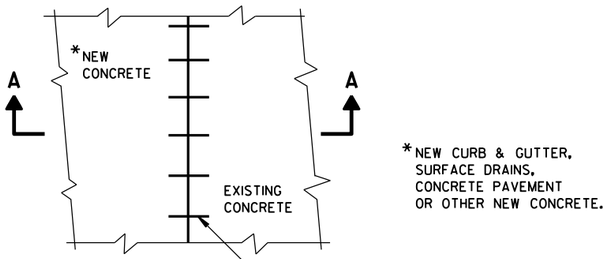
TYPICAL TIE BAR LOCATION ①



REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)

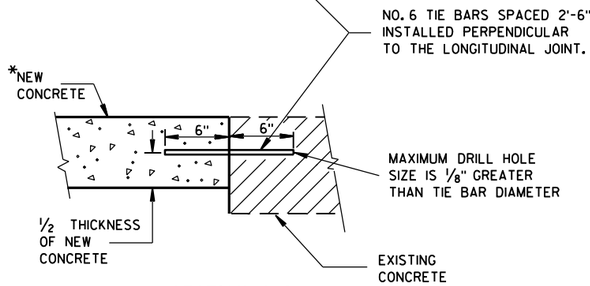


PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



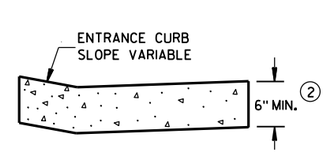
PLAN VIEW

*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

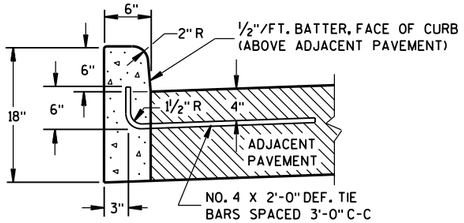


SECTION A-A

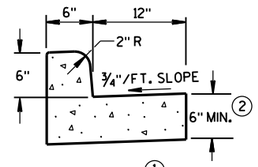
TIE BARS DRILLED
INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

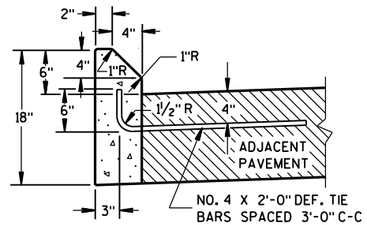


① TYPES A & D

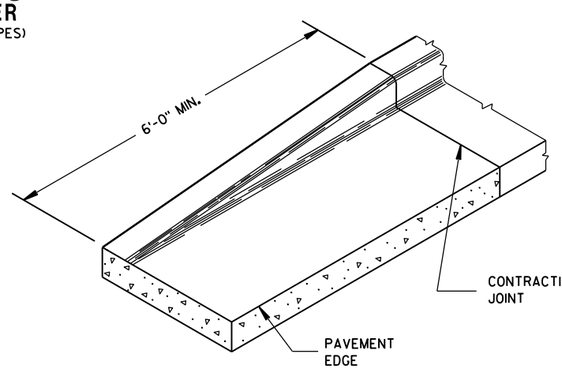


① TYPES A & D

CONCRETE CURB & GUTTER 18"



① TYPES G & J



END SECTION CURB & GUTTER

CONCRETE CURB

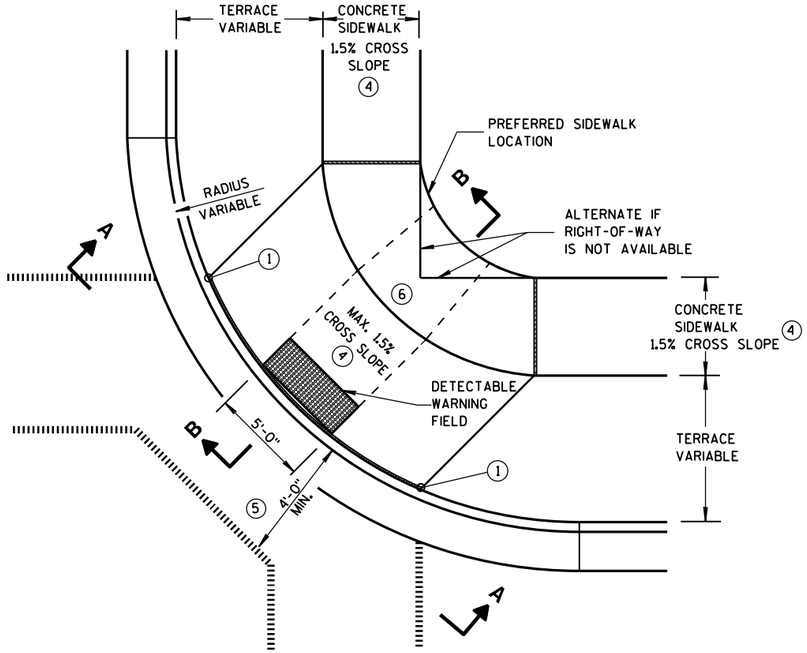
CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

6

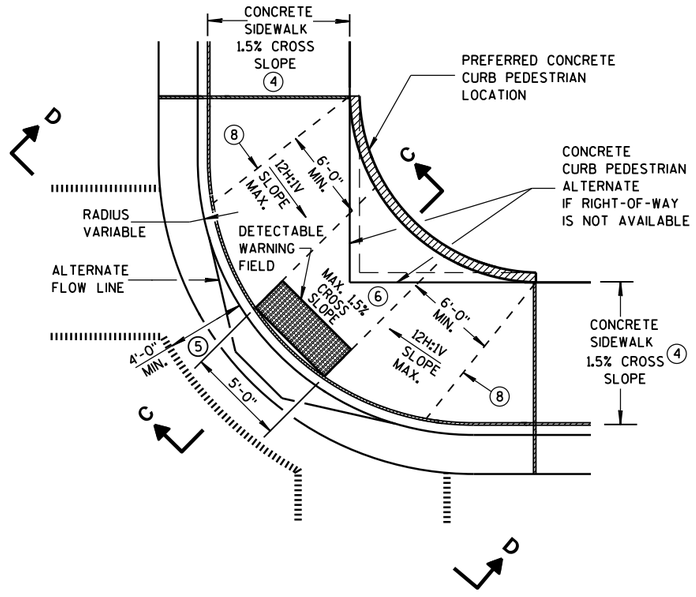
S.D.D. 8 D 1-18



PLAN VIEW

TYPE 1 RAMP

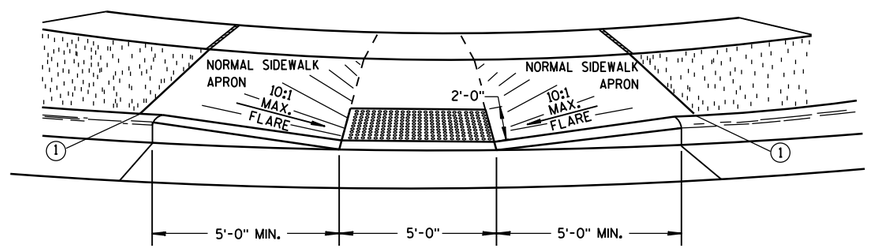
(CENTER OF CORNER RADIUS)



PLAN VIEW

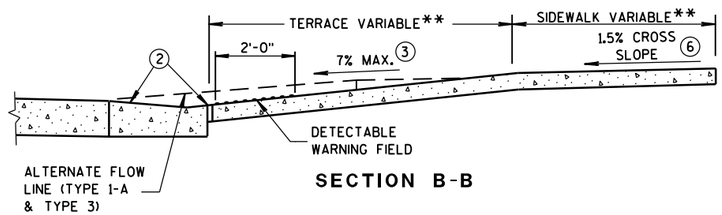
TYPE 1-A RAMP

(NO TERRACE)

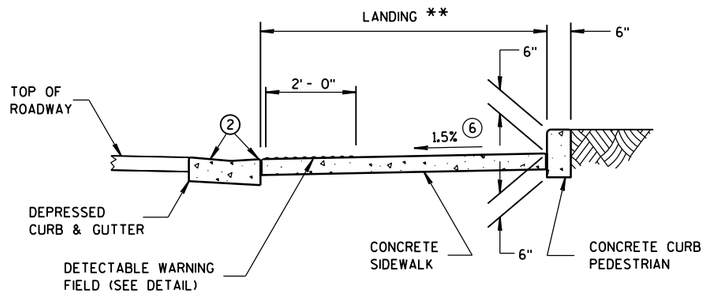


VIEW A-A

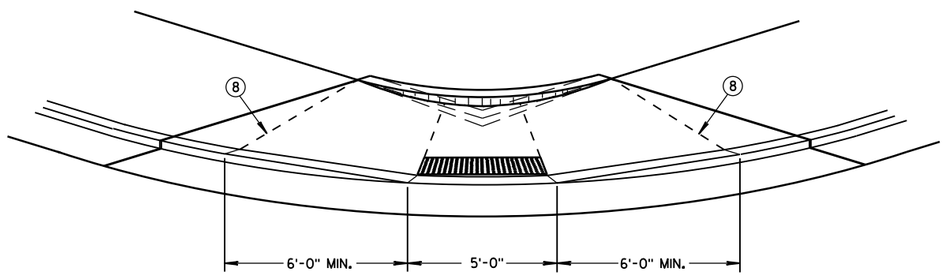
** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



SECTION C-C



VIEW D-D

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.

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

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

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

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

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

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

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

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

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

LEGEND

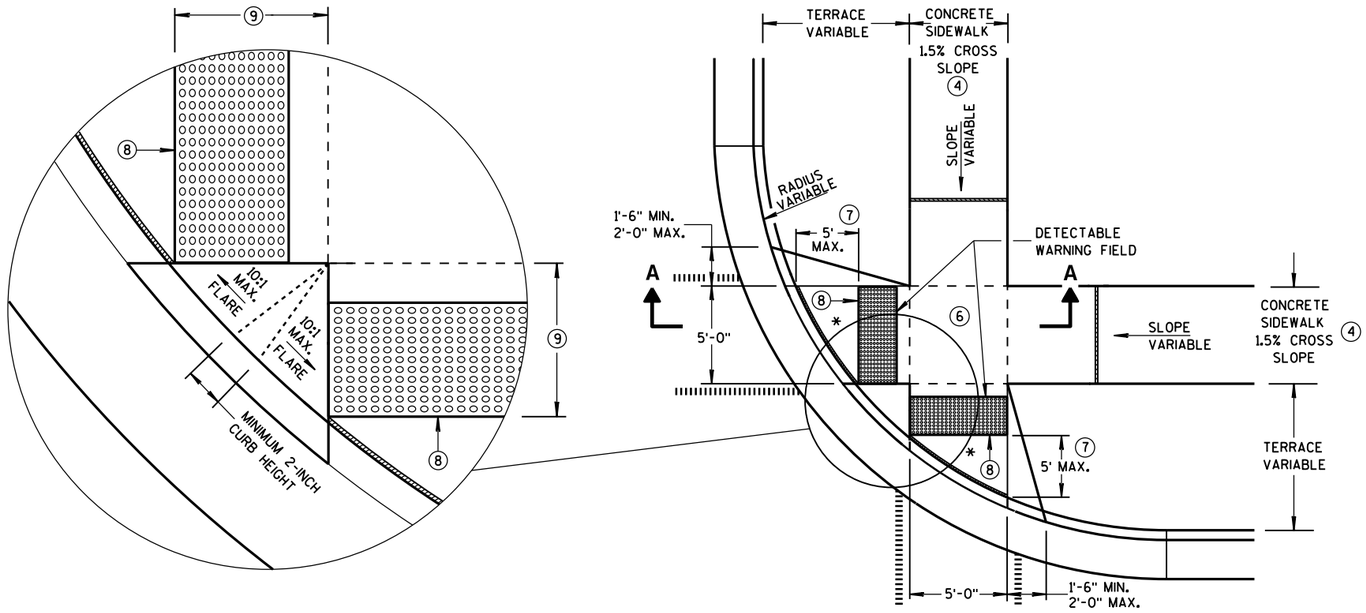
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 5-17a

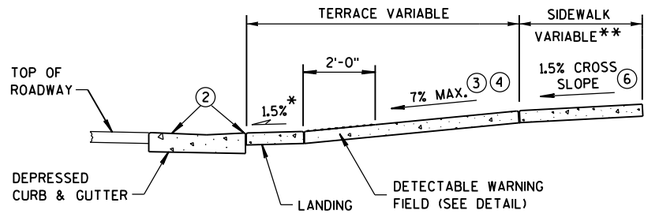


PLAN VIEW

TYPE 2 RAMP

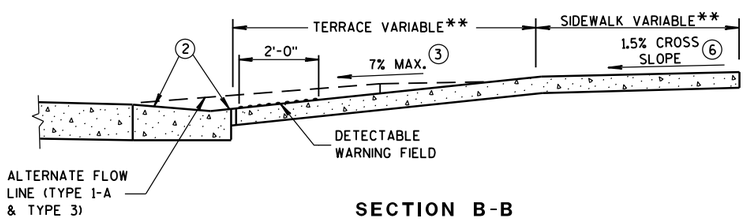
(ON LINE WITH SIDEWALK)

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



SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B

GENERAL NOTES

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

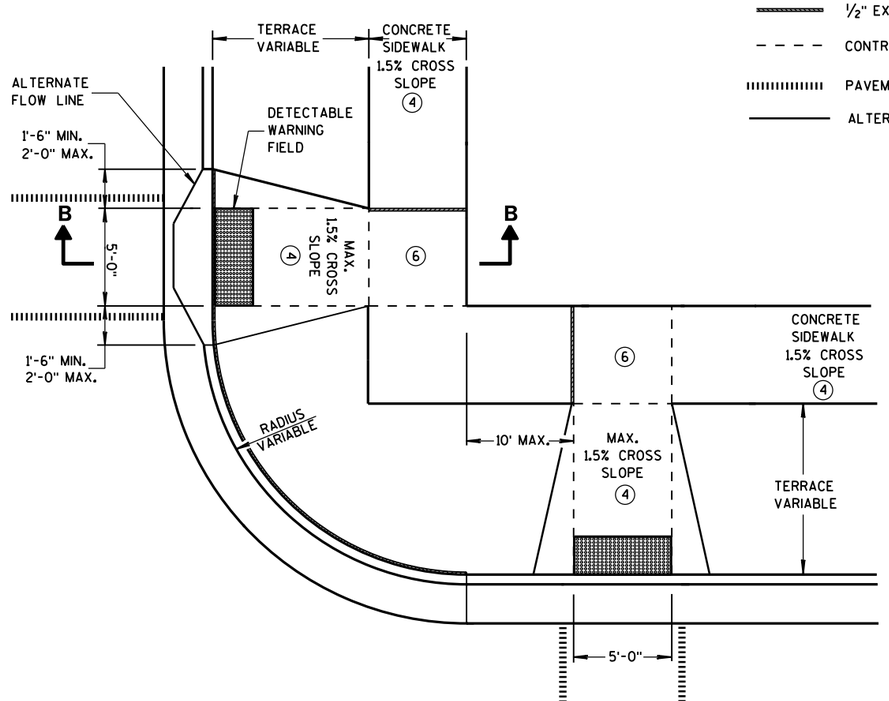
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

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

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

LEGEND

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



PLAN VIEW

TYPE 3 RAMP

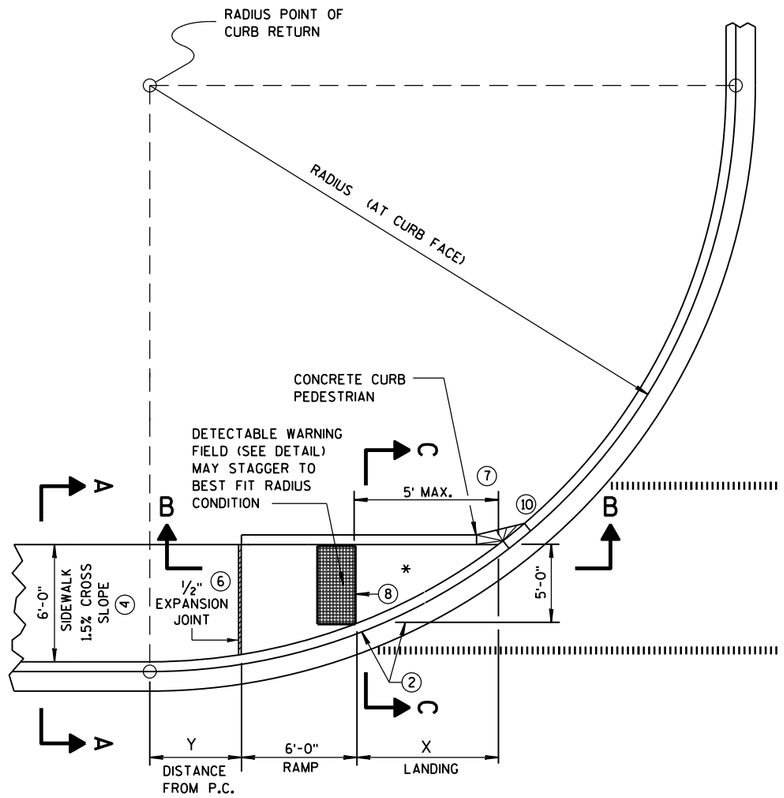
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

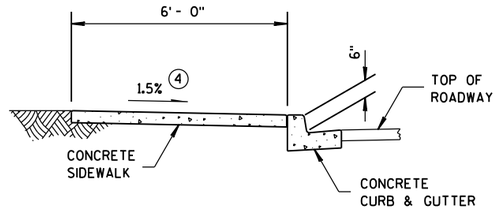
S.D.D. 8 D 5-17b



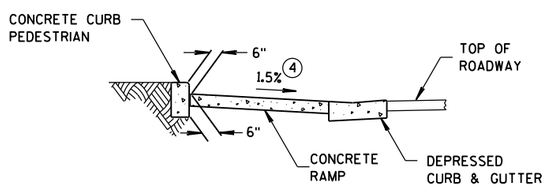
CURB RAMP TYPE 4A
PLAN VIEW

RADIUS (AT CURB FACE)	X	Y
20 FEET	7'-11"	0'-2"
30 FEET	10'-2¾"	1'-7½"
40 FEET	12'-1¼"	2'-10"
50 FEET	13'-8¾"	3'-10¾"
60 FEET	15'-2"	4'-10¼"

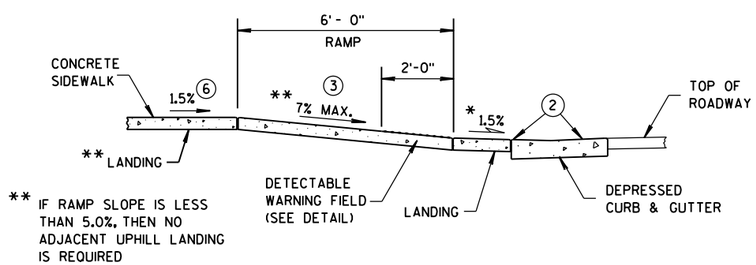
INTERMEDIATE RADII CAN BE INTERPOLATED



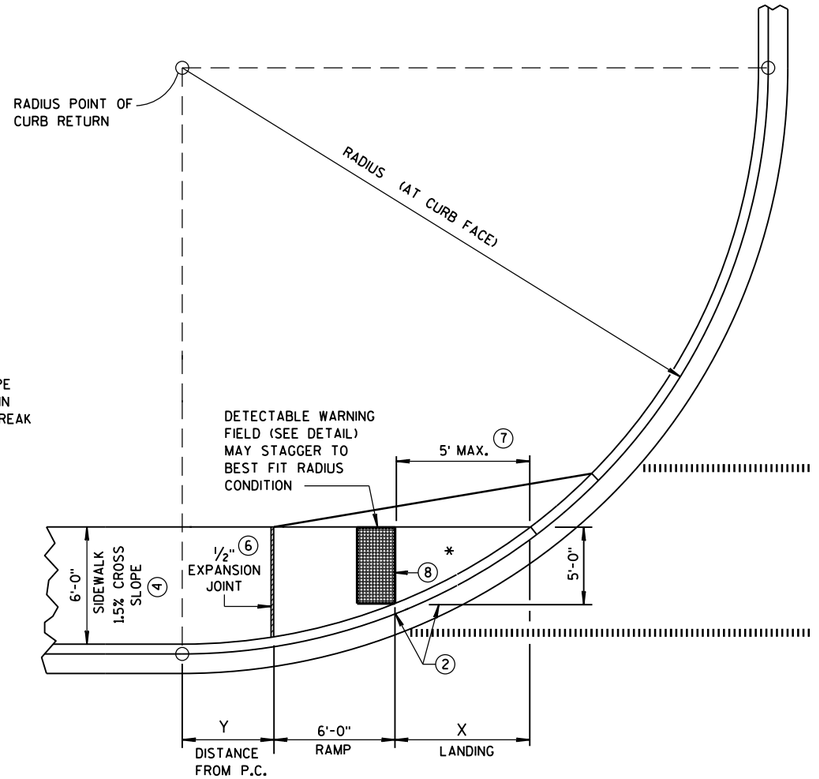
SECTION A-A FOR TYPE 4A



SECTION C-C FOR TYPE 4A



SECTION B-B FOR TYPE 4A



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

CURB RAMP TYPE 4A1
PLAN VIEW

GENERAL NOTES

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

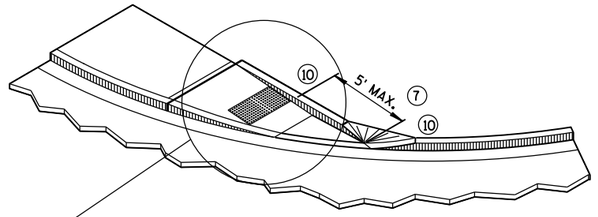
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

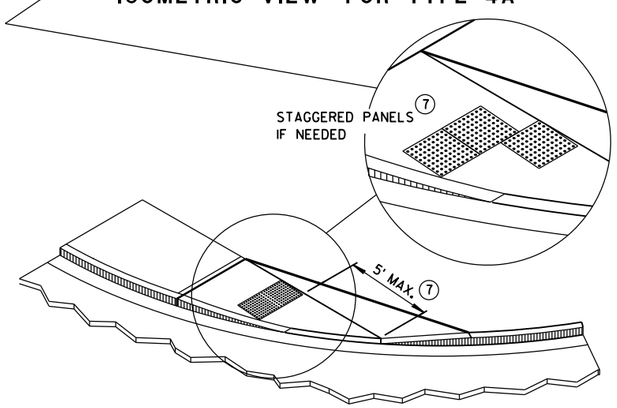
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

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

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



ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

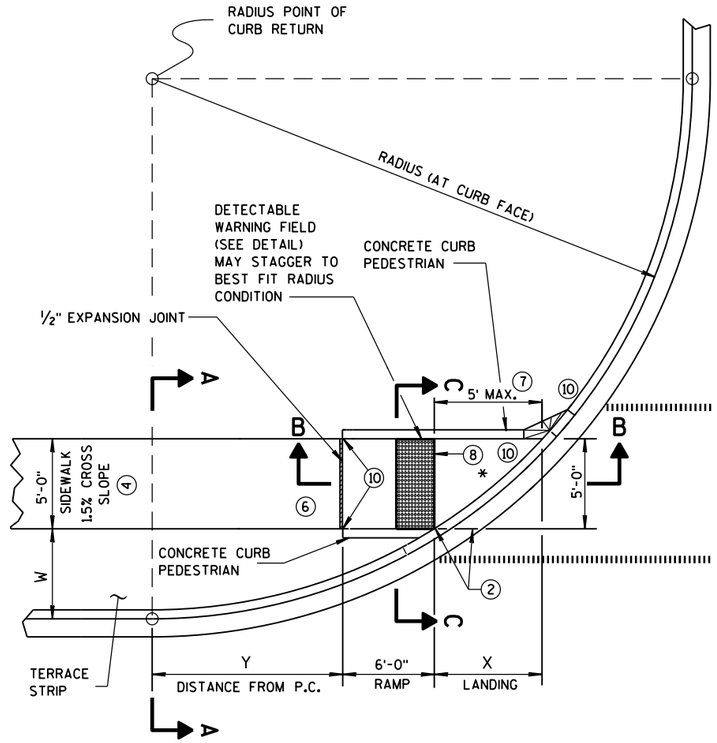
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

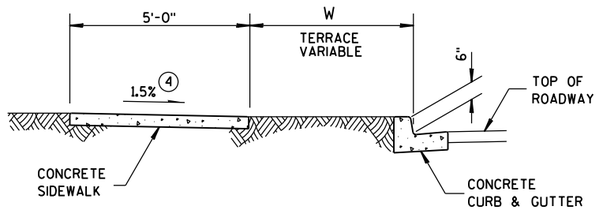
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

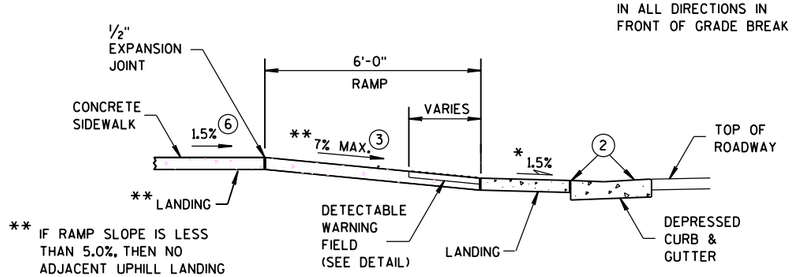
S.D.D. 8 D 5-17c



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



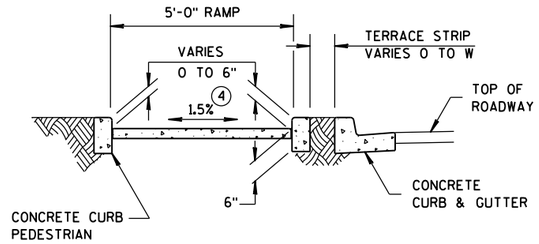
SECTION B-B FOR TYPE 4B

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)



SECTION C-C FOR TYPE 4B

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-9¾"	3'-6½"	4'-11½"	5'-1¾"	4'-3¼"	6'-5½"	3'-8¾"	7'-6¾"	3'-3"	8'-6¼"
30 FEET	7'-9¼"	5'-10½"	6'-9½"	7'-11¼"	6'-0¼"	9'-8"	5'-5"	11'-1¾"	4'-10¾"	12'-5¾"
40 FEET	9'-4"	7'-10"	8'-2¾"	10'-3"	7'-4¾"	12'-3¾"	6'-8½"	14'-1¼"	6'-1¾"	15'-8½"
50 FEET	10'-8"	9'-6½"	9'-5½"	12'-3¼"	8'-6½"	14'-7½"	7'-9¾"	16'-8¼"	7'-2½"	18'-6¼"
60 FEET	11'-10¼"	11'-0¾"	10'-6½"	14'-1¼"	9'-6½"	16'-8½"	8'-9¼"	18'-11¾"	8'-1½"	21'-0½"

INTERMEDIATE RADII CAN BE INTERPOLATED

GENERAL NOTES

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

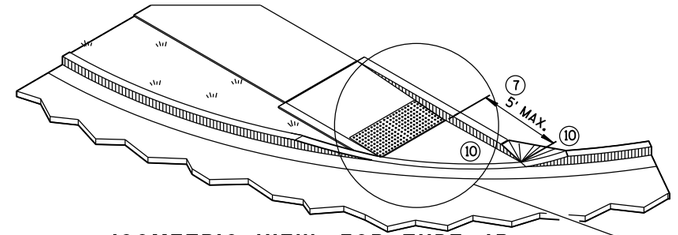
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

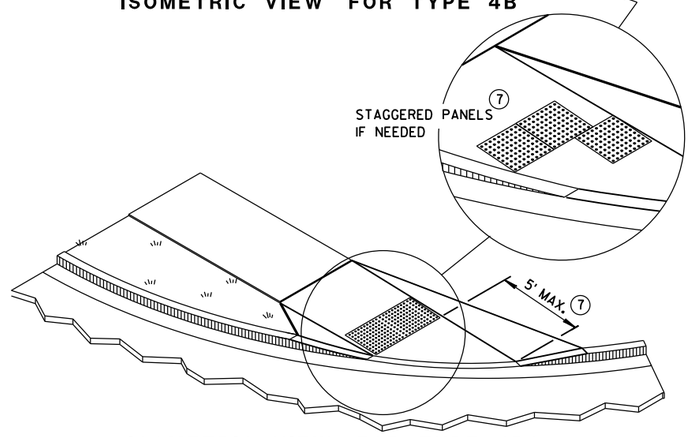
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

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

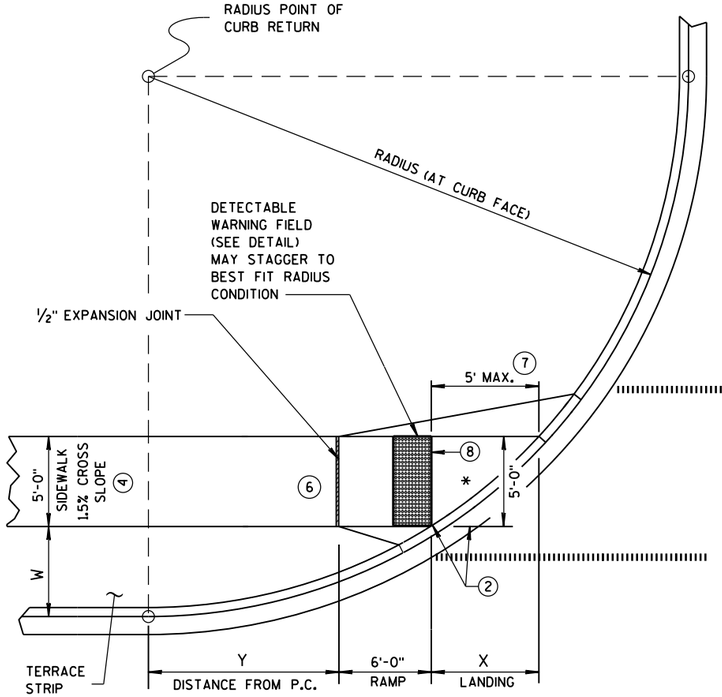
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1



CURB RAMP TYPE 4B1
PLAN VIEW

CURB RAMPS
TYPE 4B AND 4B1

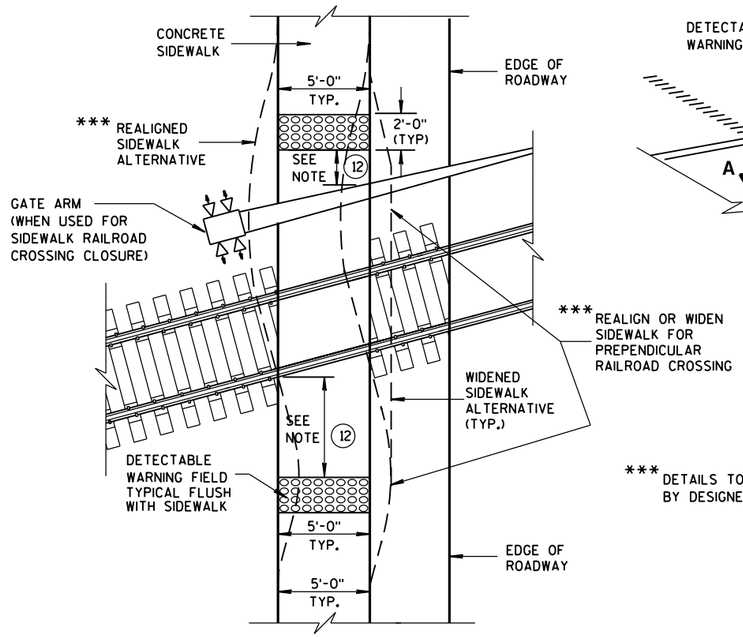
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 8 D 5-17d

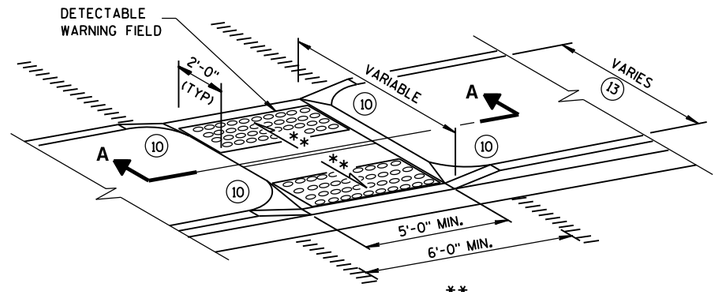
6

S.D.D. 8 D 5-17d



*** DETAILS TO BE DETERMINED BY DESIGNER

TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



MEDIAN ISLAND NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

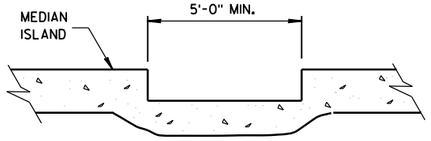
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

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

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

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

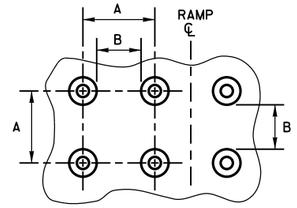
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS IF MEDIAN WIDTH BETWEEN BACK OF CURBS IS LESS THAN 6 FEET.



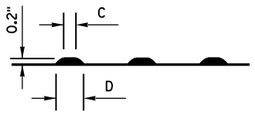
SECTION A-A

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

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

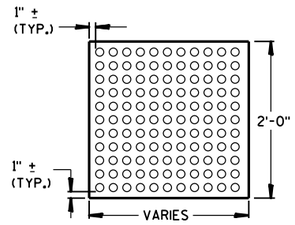


PLAN VIEW

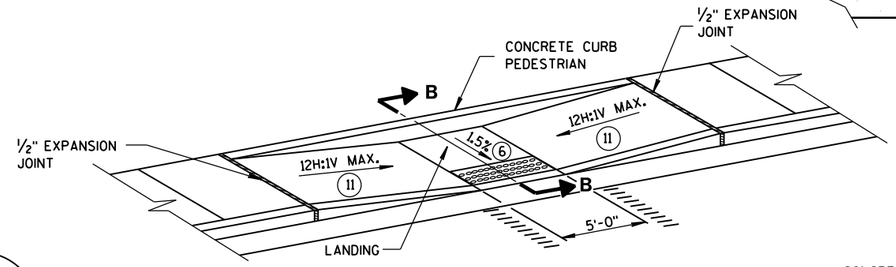


ELEVATION VIEW

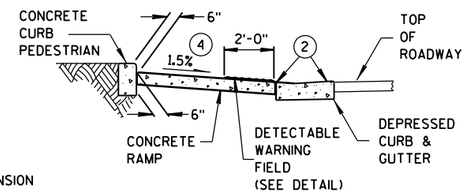
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



PLAN VIEW
DETECTABLE WARNING FIELD (TYPICAL)

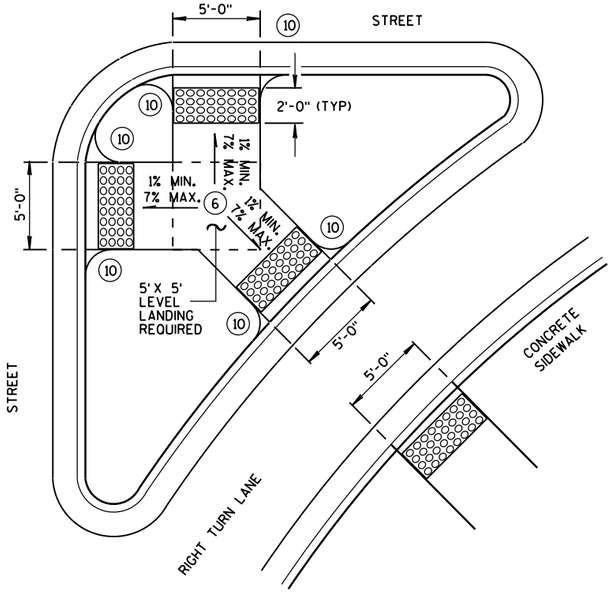


MID-BLOCK CROSSING
TYPE 7A

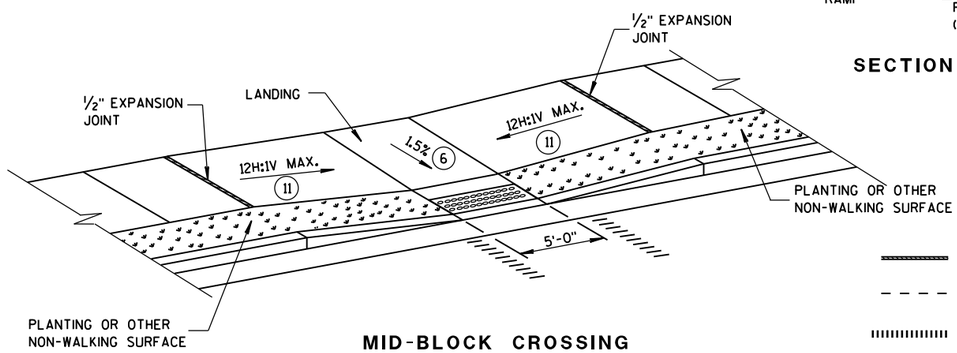


SECTION B-B

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



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

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

LEGEND

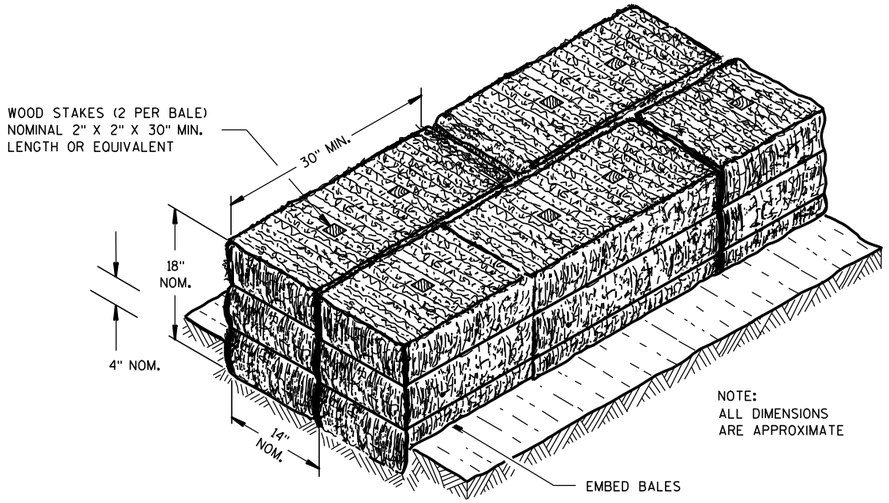
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

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

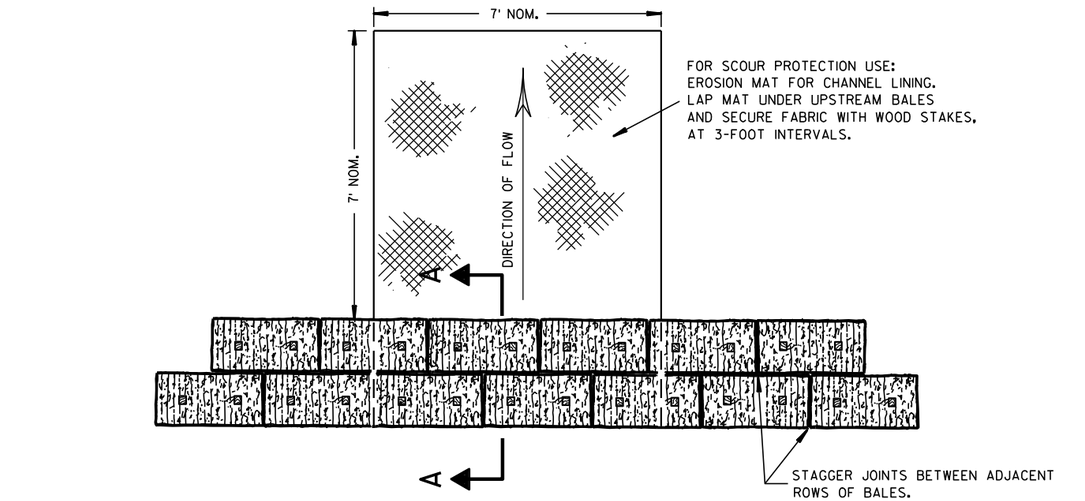
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2016 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

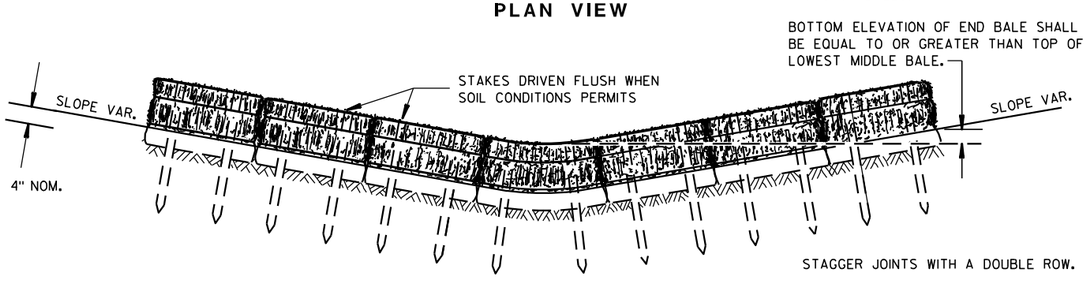
6
S.D.D. 8 D 5-17e



SECTION A-A



PLAN VIEW



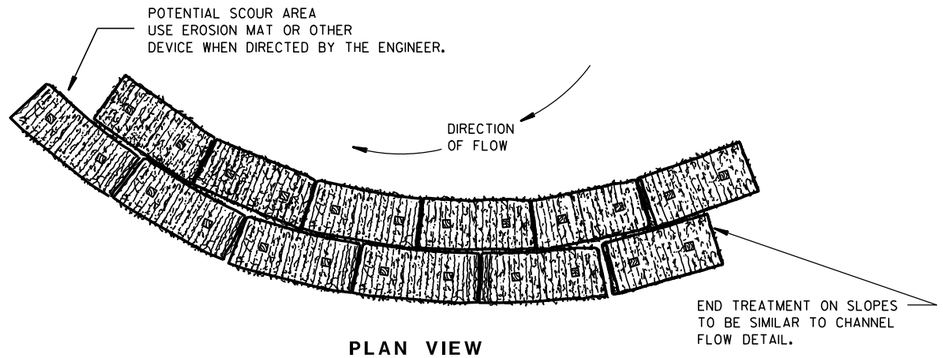
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

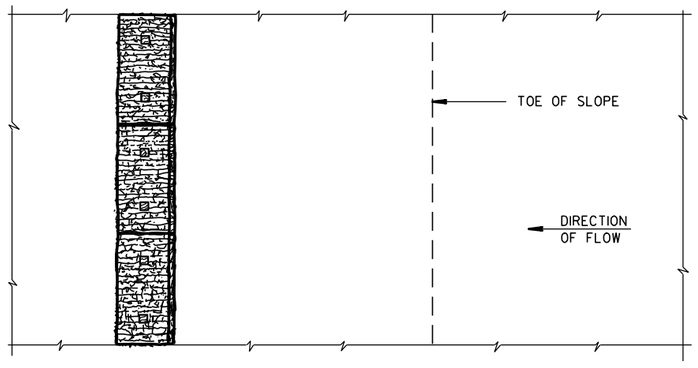
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

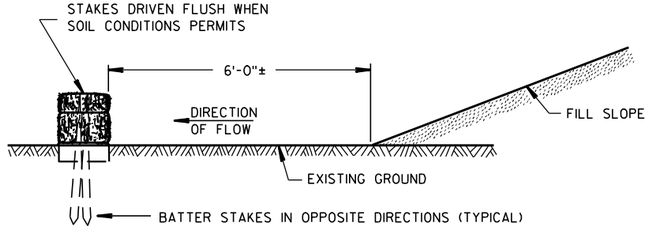


PLAN VIEW

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

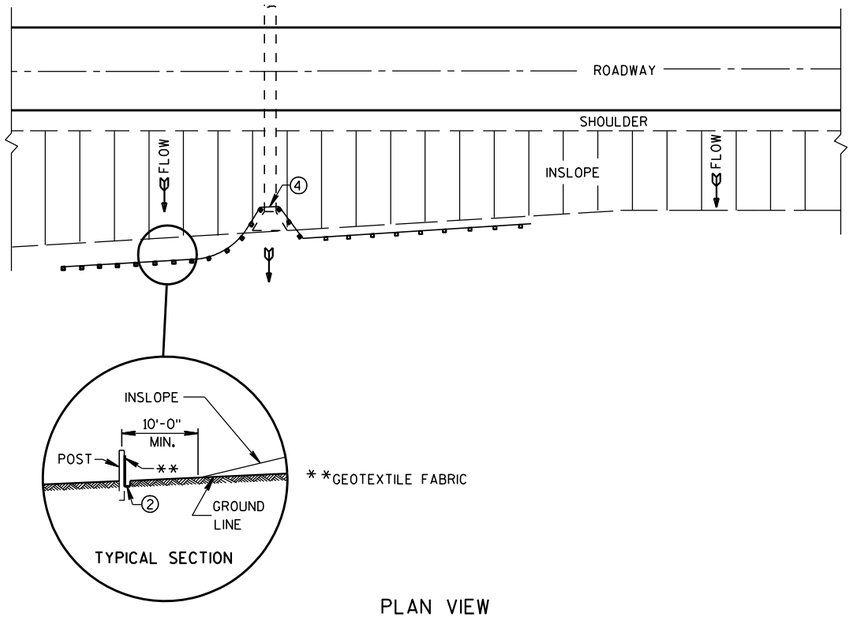
APPROVED

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

FHWA

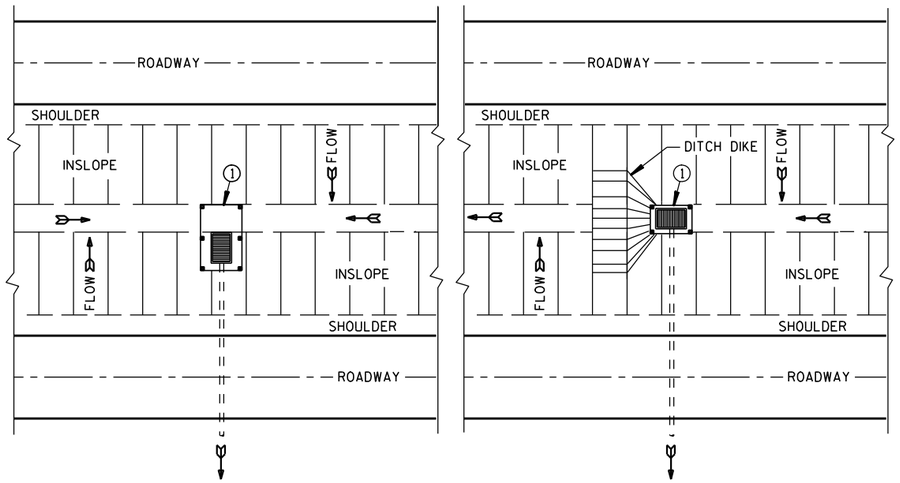
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



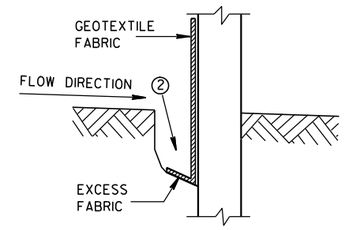
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

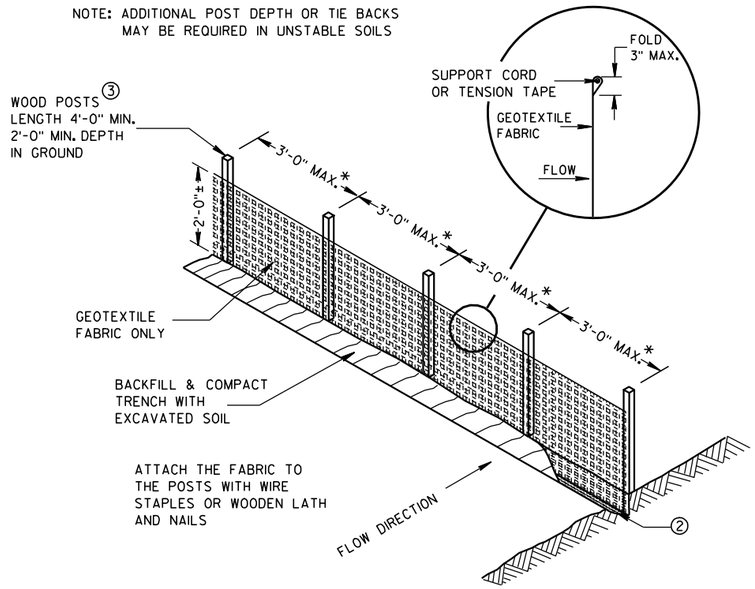
GENERAL NOTES

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

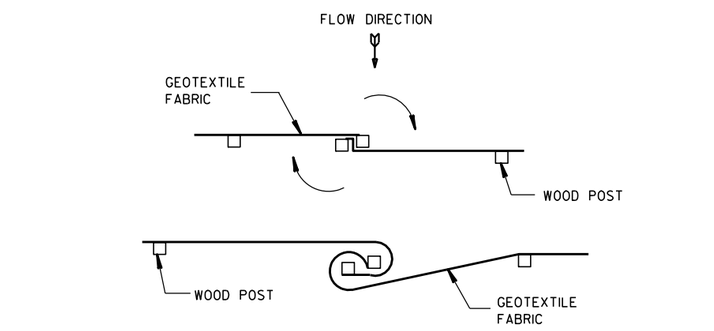
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



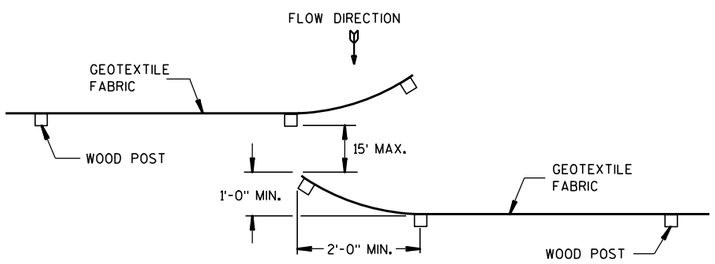
TRENCH DETAIL



SILT FENCE

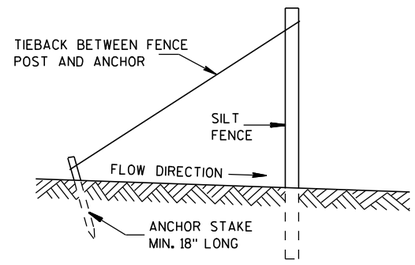


TWIST METHOD



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

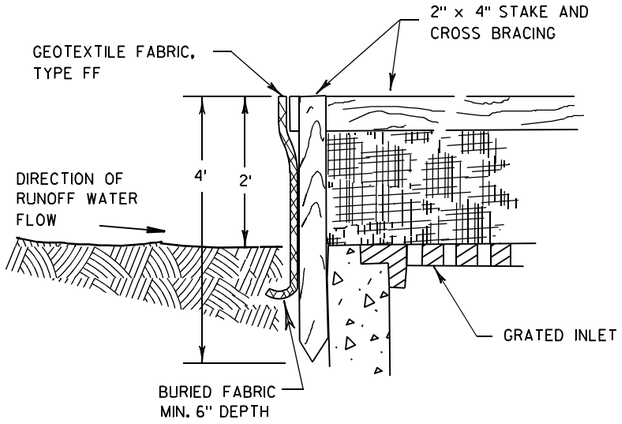
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

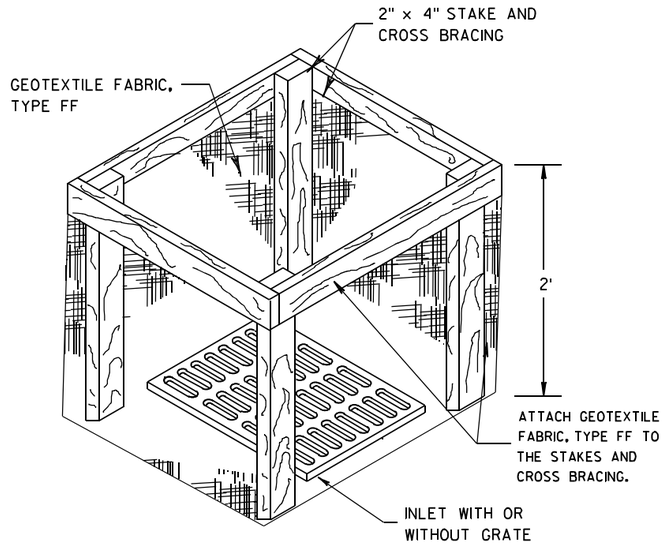
6

S.D.D. 8 E 9-6

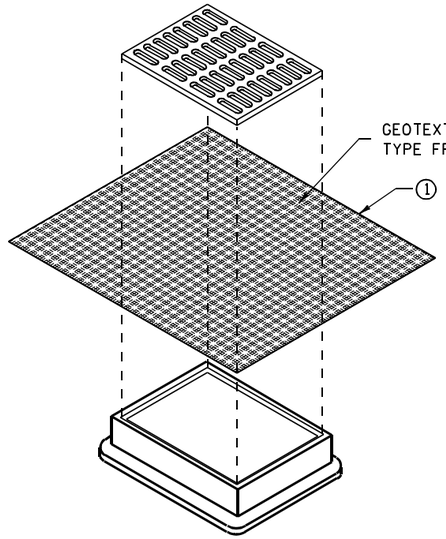
6

S.D.D. 8 E 9-6



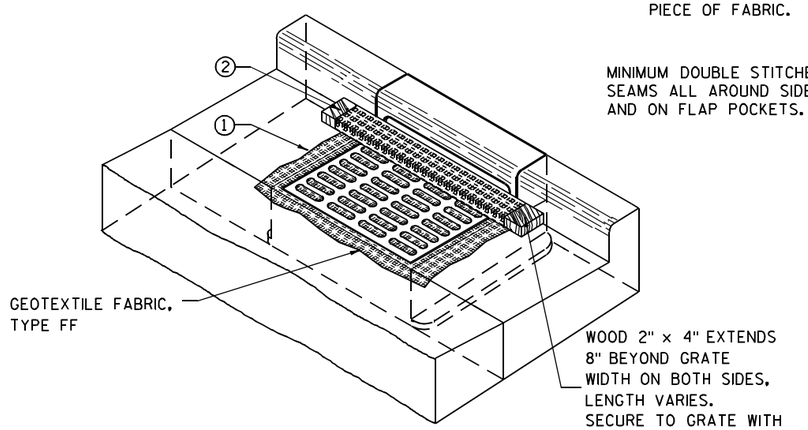


INLET PROTECTION, TYPE A

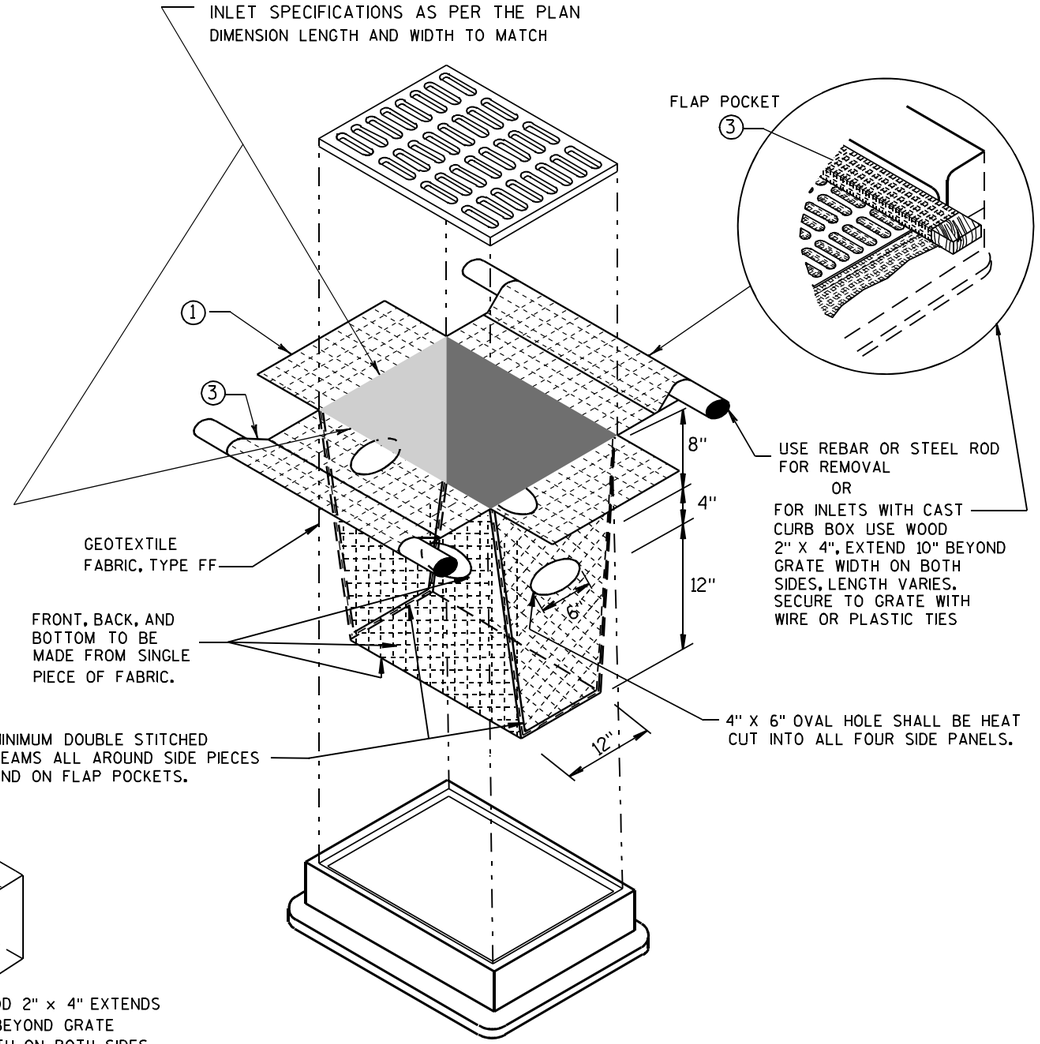


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

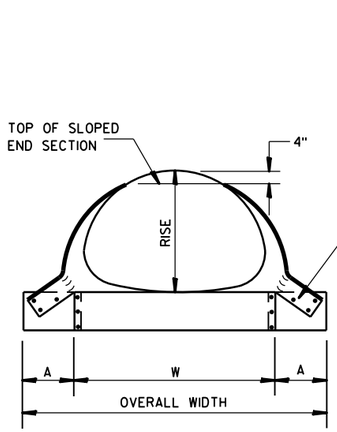
APPROVED

10/16/02
DATE

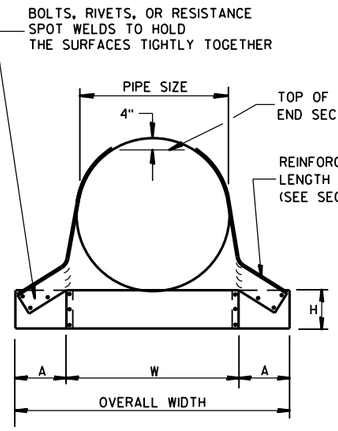
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

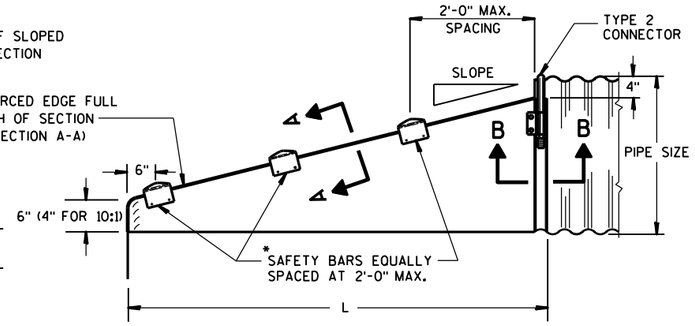
6
S.D.D. 8 E 10-2



FRONT VIEW



FRONT VIEW



SIDE VIEW

GENERAL NOTES

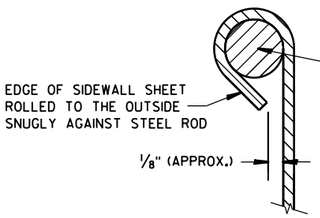
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SLOPED END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 521 FOR STEEL APRON ENDWALLS.

SAFETY BARS SHALL BE FABRICATED FROM GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL.

STEEL APRON ENDWALLS FOR CULVERT PIPE
SLOPED SIDE DRAINS

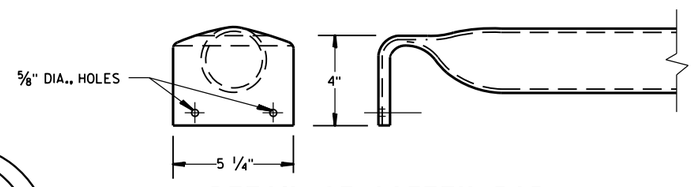
PIPE DIA. (IN.)	MIN. THICK. (Inches)	DIMENSIONS (Inches)				L DIMENSIONS					
		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	.064	8	6	21	37	4:1	20	6:1	30	10:1	70
18	.064	8	6	24	40	4:1	32	6:1	48	10:1	100
21	.064	8	6	27	43	4:1	44	6:1	66	10:1	130
24	.064	8	6	30	46	4:1	56	6:1	84	10:1	160
30	.109	12	9	36	60	4:1	80	6:1	120	10:1	220
36	.109	12	9	42	66	4:1	104	6:1	156	10:1	280
42	.109	16	12	48	80	4:1	128	6:1	192	——	——
48	.109	16	12	54	86	4:1	152	6:1	228	——	——
54	.109	16	12	60	92	4:1	176	6:1	264	——	——
60	.109	16	12	66	98	4:1	200	6:1	300	——	——



SECTION A-A

*NOTE:
THREE SAFETY BARS ARE SHOWN. ACTUAL NUMBER OF BARS REQUIRED AT A 2'-0" C-C MAX. SPACING WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

3" GALVANIZED PIPE. FLATTEN ENDS, THEN BEND OUTSIDE 4" TO MATCH END SECTION SIDES.

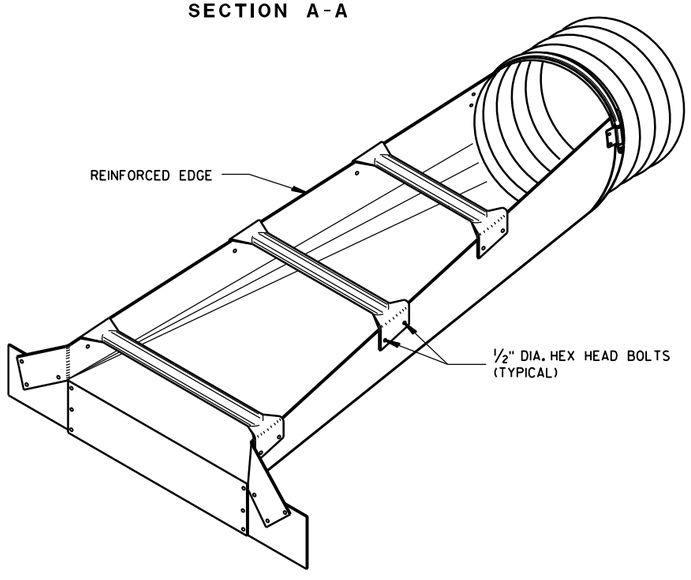


DETAIL OF SAFETY BAR

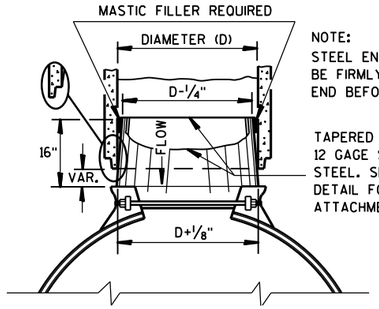
STEEL APRON ENDWALLS FOR PIPE ARCH
SLOPED SIDE DRAINS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) ①	DIMENSIONS (Inches) A	H	W	OVERALL WIDTH	L DIMENSIONS SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	17	13	.064 *	7	6	30	44	4:1	19	6:1	30	10:1 ②	70
18	21	15	.064 *	8	6	27	43	4:1	20	6:1	30	10:1	70
21	24	18	.064 *	8	6	30	46	4:1	32	6:1	48	10:1	100
24	28	20	.064 *	8	6	34	50	4:1	40	6:1	60	10:1	120
30	35	24	.079 *	12	9	41	65	4:1	56	6:1	84	10:1	160
36	42	29	.109 *	12	9	48	72	4:1	76	6:1	114	10:1	210
42	49	33	.109	16	12	55	87	4:1	92	6:1	138	——	——
48	57	38	.109	16	12	63	95	4:1	112	6:1	168	——	——
54	64	43	.109	16	12	70	102	4:1	132	6:1	198	——	——

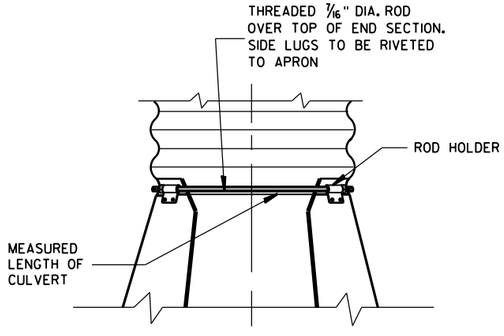
① * MINIMUM THICKNESS OF ALL 10:1 SLOPED SIDE DRAINS IS 0.109".
② ACTUAL SLOPE GREATER THAN 10:1.



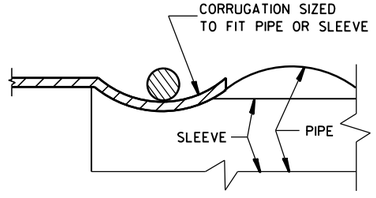
ISOMETRIC VIEW



STEEL ADAPTER SLEEVE FOR CONCRETE PIPE



TYPE 2
CONNECTION DETAIL



SECTION B-B

STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/14/2012 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 F 7-5

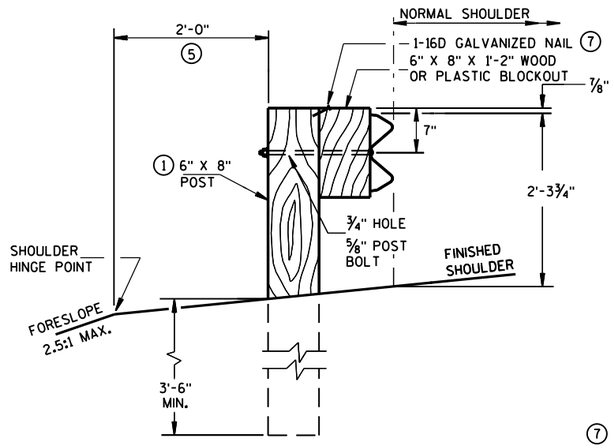
6

S.D.D. 8 F 7-5

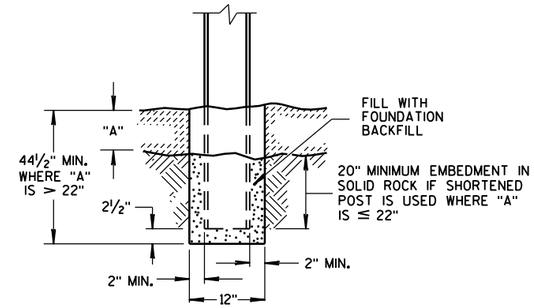
GENERAL NOTES

1. W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS.
   DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.
2. USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36. GALVANIZED POSTS ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.
3. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
4. USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.
5. IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).
6. IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN YHE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATEY.
7. WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

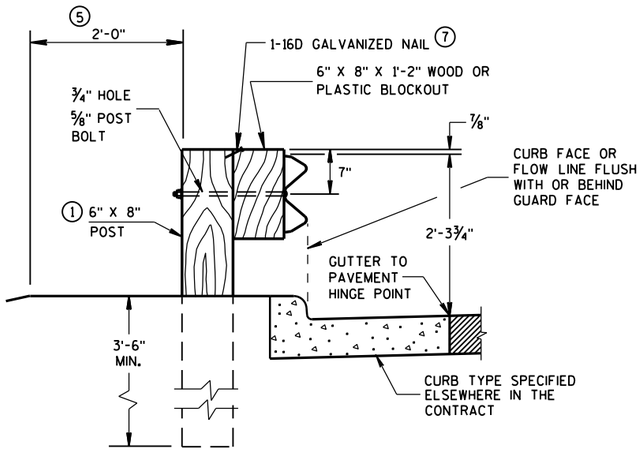
INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



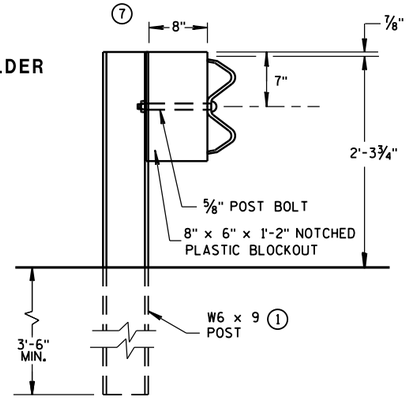
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



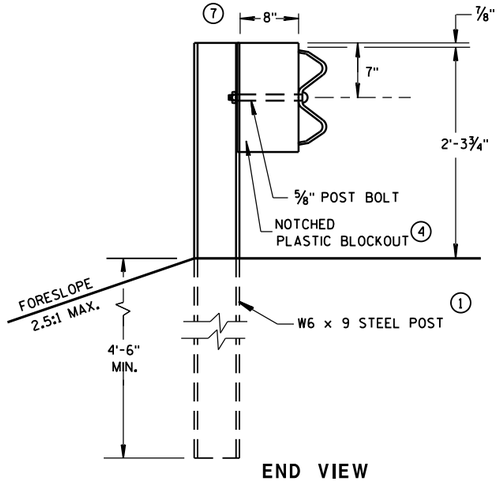
END VIEW
SETTING STEEL OR WOOD POST IN ROCK ⑥



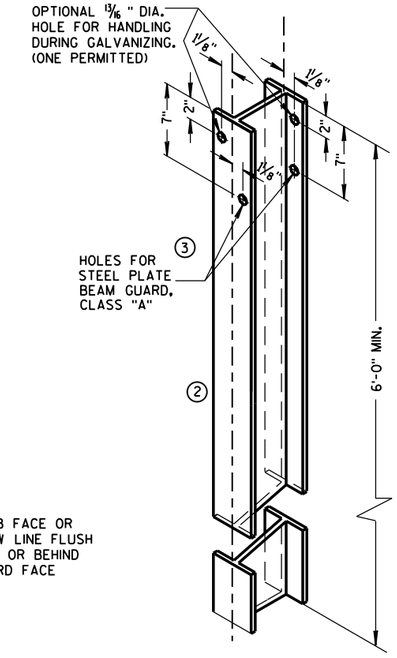
END VIEW
LOCATED ALONG A CURBED ROADWAY



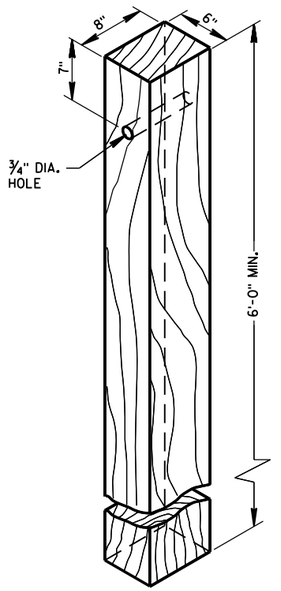
END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



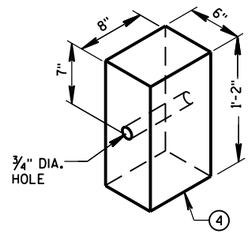
END VIEW
LONGER POST AT HALF
POST SPACING W BEAM
(LHW)



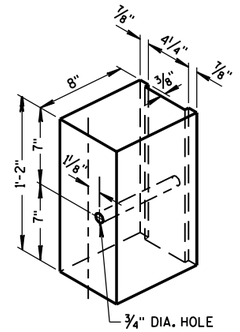
STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) ①
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



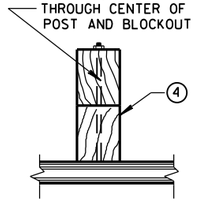
WOOD POST
(6"X8") NOMINAL



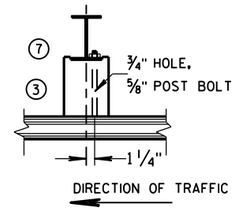
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



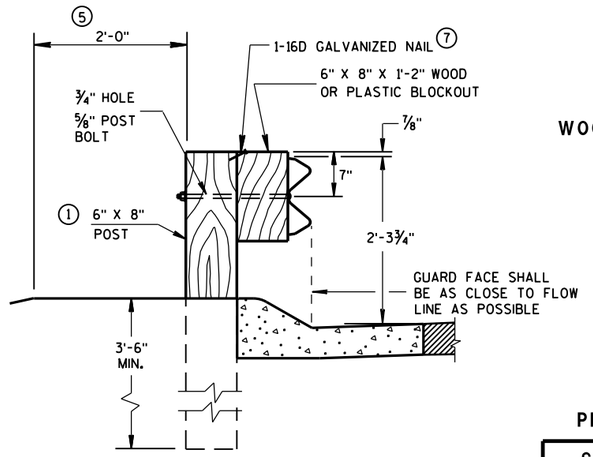
TYPICAL NOTCHED ①
PLASTIC BLOCKOUT
FOR STEEL POSTS



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



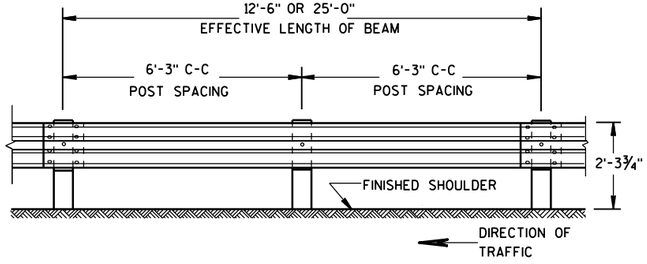
END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY

STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 75

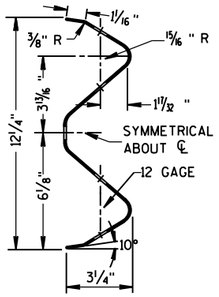
TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

6
S.D.D. 14 B 15-9a

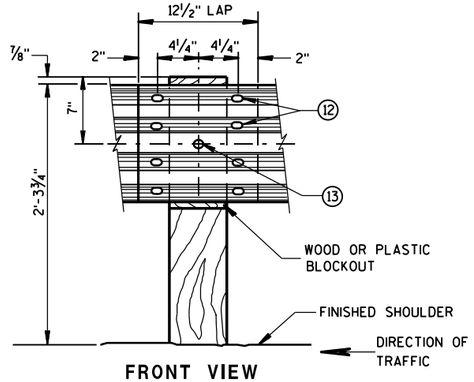


FRONT VIEW

POST SPACING STANDARD INSTALLATION



SECTION THRU W BEAM



FRONT VIEW

BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

GENERAL NOTES

(8) PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.

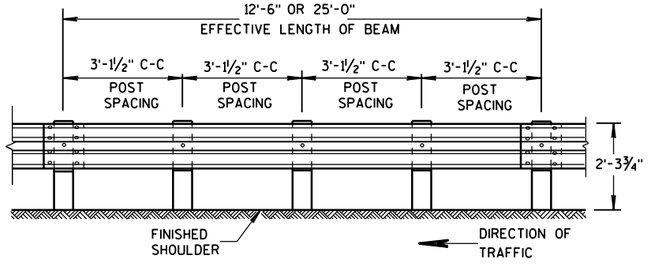
(9) DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

(10) REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.

(11) PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.

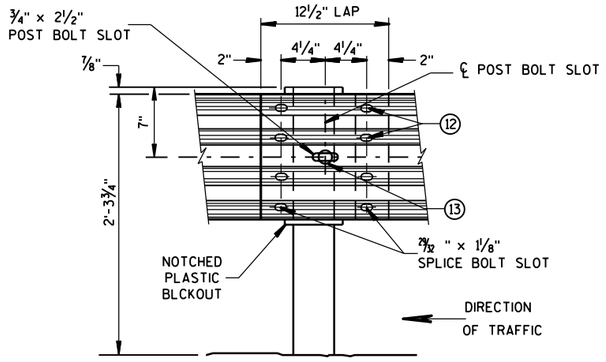
(12) 8 -⅝" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.

(13) ⅝" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH ⅝" DIA. F844 FLAT WASHER UNDER NUT.



FRONT VIEW

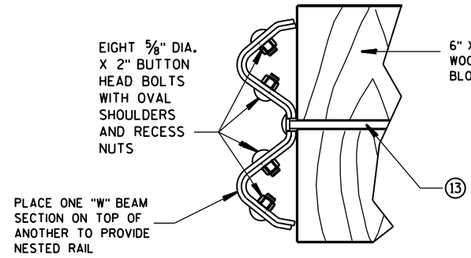
POST SPACING FOR LONGER POST AT HALF POST SPACING W BEAM (LHW)



FRONT VIEW

BEAM SPLICE AT STEEL POST

TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

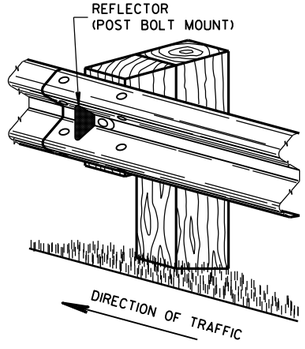


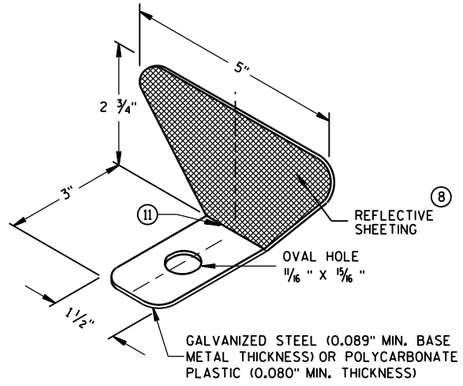
NESTED W BEAM (NW)

USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR CONSTRUCTING NESTED W BEAM (NW)

REFLECTOR SPACING (9)

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 (10)	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2 (11)	3
	> 200'	100' C-C	2	



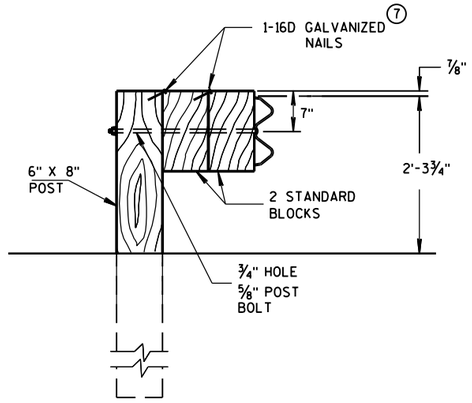


ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION (8)

STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

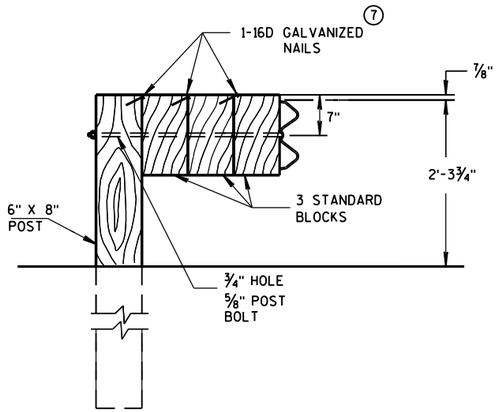
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 14 B 15-9b



DETAIL FOR DOUBLE BLOCKS

THE NUMBER OF DOUBLE BLOCK POSTS WITHIN A BARRIER RUN IS UNLIMITED

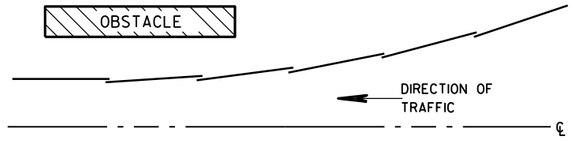


DETAIL FOR TRIPLE BLOCKS

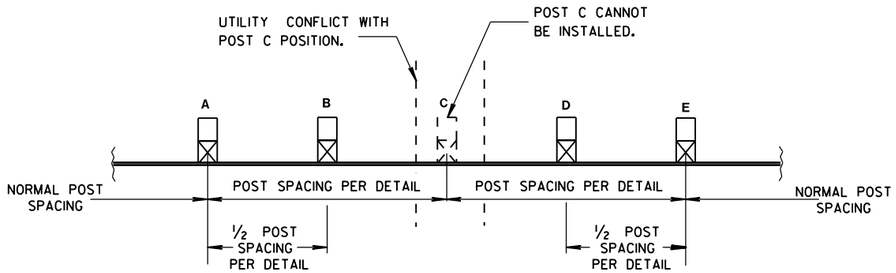
TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES PREVENT THE POST FROM BEING INSTALLED.

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



PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

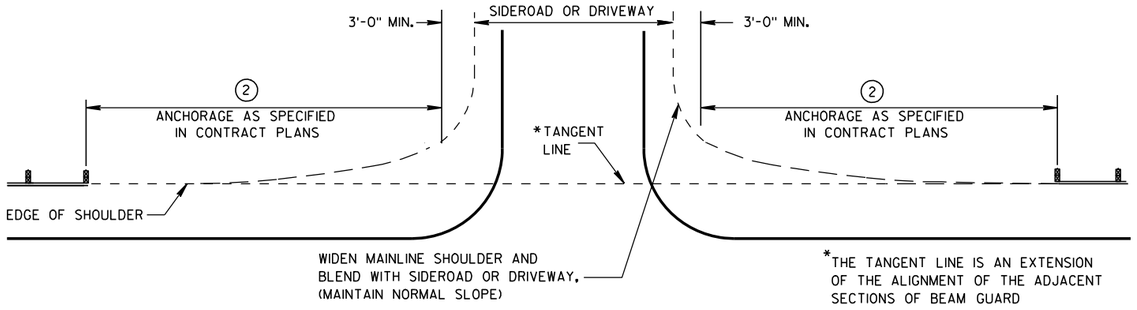
FHWA

6

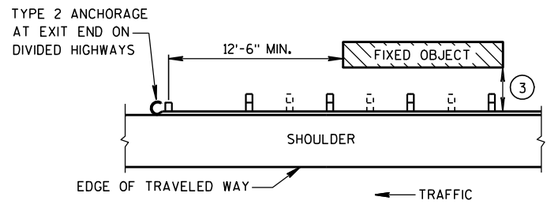
S.D.D. 14 B 15-9c

6

S.D.D. 14 B 15-9c



BEAM GUARD AT SIDEROADS OR DRIVEWAYS



BEAM GUARD AT OBSTACLES EXIT END - ONE WAY TRAFFIC

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE PERTINENT STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

W6 X 9 OR W6 X 8.5 STEEL POSTS WITH NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

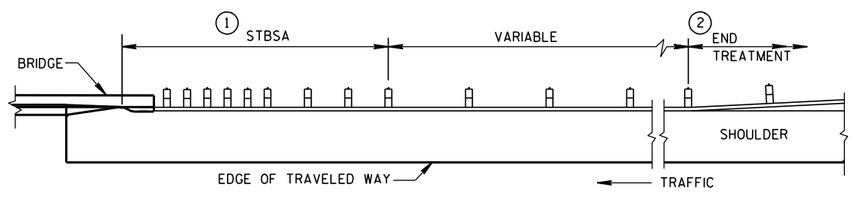
THE LOCATIONS AND LENGTHS OF BEAM GUARD ARE SHOWN ELSEWHERE IN THE PLAN.

(1) STEEL THRIE BEAM STRUCTURAL APPROACH (STBSA) - SEE CURRENT SDD 14B20.

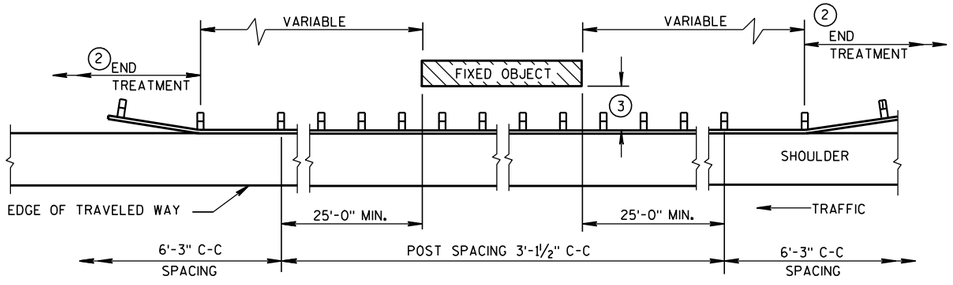
(2) USE AN APPROVED END TREATMENT FOR THE TRAFFIC APPROACH SIDE OF BRIDGE/OBSTACLES. USE TYPE 2 ANCHORAGE ONLY AT THE DOWNSTREAM ENDS OF BEAM GUARD LOCATED ALONG ROADWAYS WITH ONE WAY TRAFFIC.

(3)

MINIMUM LATERAL DISTANCE FROM FACE OF BEAM GUARD TO FIXED OBJECT	POST SPACING
3'-6"	3' - 1½"
4'-6"	6' - 3"

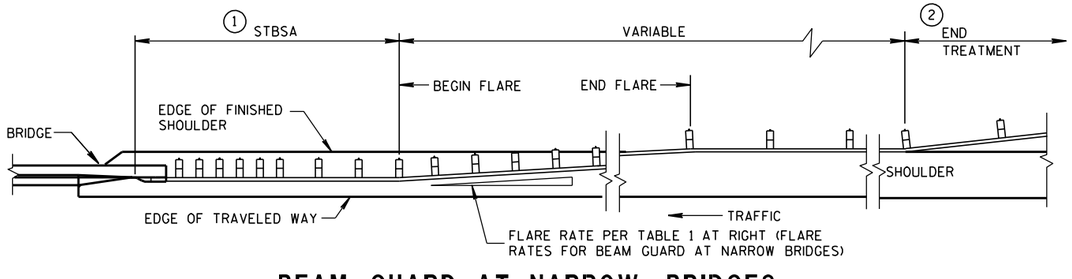


BEAM GUARD AT FULL WIDTH BRIDGES



BEAM GUARD AT OBSTACLES - TWO WAY TRAFFIC

(RAIL TO OBSTACLE CLEARANCE 3'-6" TO 4'-6")



BEAM GUARD AT NARROW BRIDGES
(FLARED TO SHOULDER EDGE, THEN PARALLEL TO ROADWAY)

TABLE 1
FLARE RATES FOR BEAM GUARD AT NARROW BRIDGES

POSTED SPEED (MPH)	FLARE RATE
25	13:1
30	15:1
35	16:1
40	18:1
45	21:1
50	24:1
55	26:1
65	30:1

STEEL PLATE BEAM GUARD CLASS "A" AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

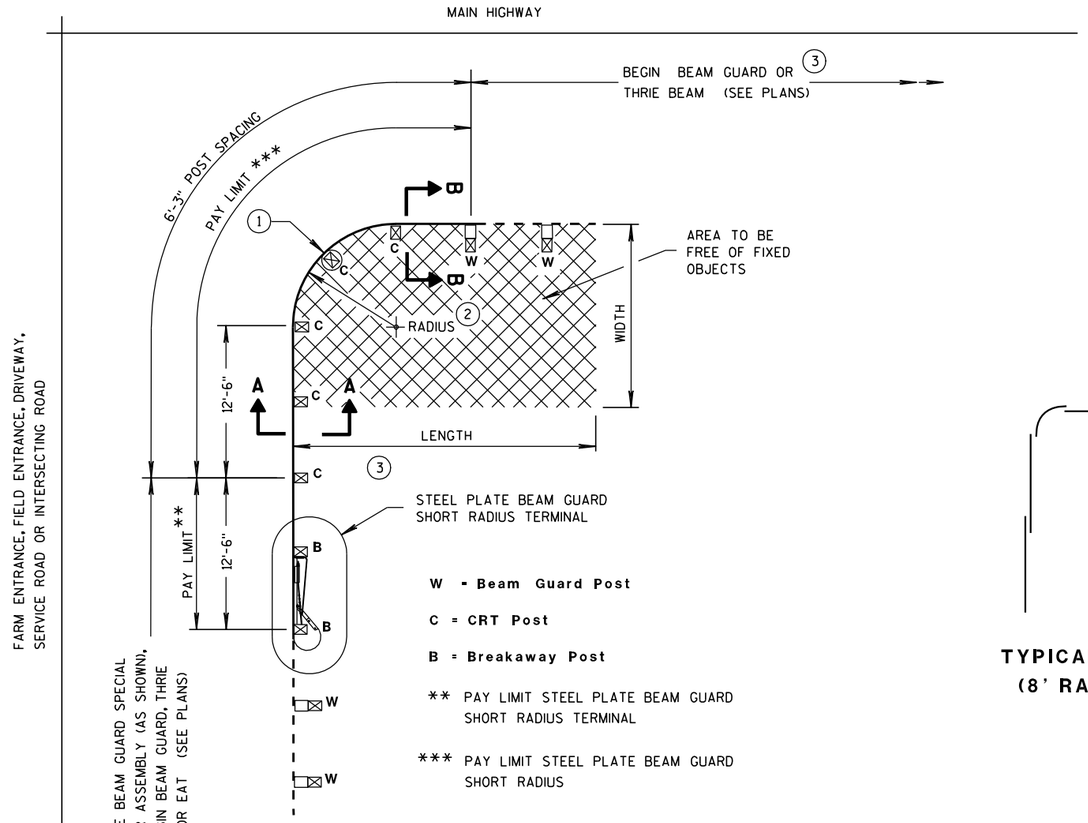
APPROVED

8-21-07
DATE

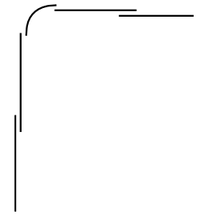
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

6
S.D.D. 14 B 18-6a



TYPICAL LAYOUT
(8' RADIUS SHOWN)



TYPICAL LAP SPLICES
(8' RADIUS SHOWN)

GENERAL NOTES

ALL ANGLES, CHANNELS, AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36 AND THE STRUCTURAL TUBING SHALL CONFORM TO ASTM A 500. WELDING SHALL MEET THE CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE ANSI/AWS D1.1. ALL STRUCTURAL STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 123. PUNCHING, DRILLING, CUTTING, OR WELDING WILL NOT BE PERMITTED AFTER GALVANIZING. FURNISH AND INSTALL HARDWARE PER STANDARD SPECIFICATION 614.2. UNLESS NOTED OTHERWISE.

SHOP BEND CURVED RAIL SECTIONS.

SEE STANDARD DETAIL DRAWING 14 B 15 FOR OTHER DETAIL.

(1) ON THE 8 FOOT RADIUS INSTALLATION, DO NOT INSTALL BUTTON HEAD BOLT AT CENTER CRT POST.

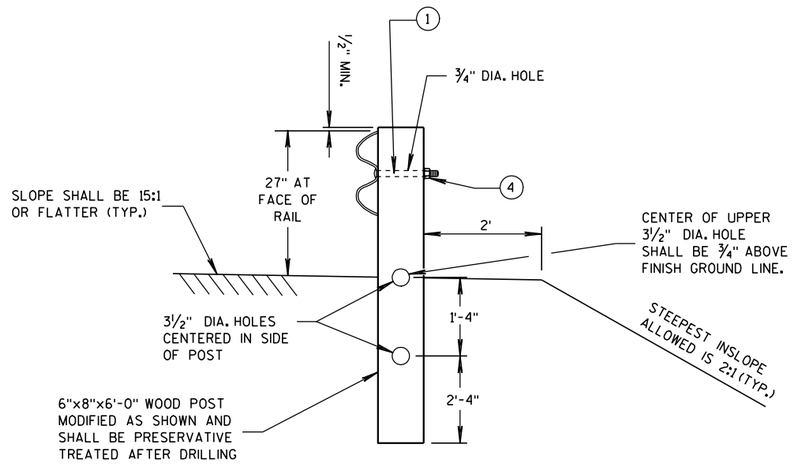
(2) RADIUS FROM 8' - 36'. SEE PLAN.

(3) HEIGHT TRANSITION MAY BE REQUIRED. SEE PLAN OR PROJECT ENGINEER.

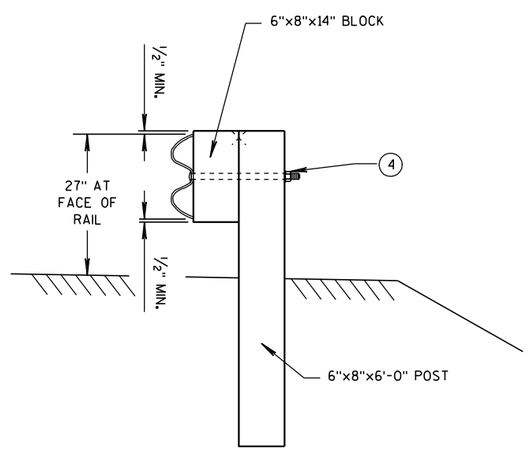
(4) 5/8" ø X 1'-6" BUTTON HEAD BOLT AND RECESS NUT WITH ROUND WASHER UNDER NUT.

RADIUS	NUMBER OF CRT POSTS	*NUMBER AND LENGTH OF CURVED RAILS	REQUIRED AREA FREE OF FIXED OBJECTS (LENGTH x WIDTH)
8'	5	1 at 12.5'	25' x 15'
16'	7	1 at 25'	30' x 15'
24'	9	1 at 25' and 1 at 12.5'	40' x 20'
32'	11	2 at 25'	50' x 20'

* THE NUMBER OF RAILS IS BASED ON A 90° INTERSECTION. SEE PLAN FOR NON 90° INSTALLATIONS.



SECTION A-A
(CRT POST)



SECTION B-B
(BEAM GUARD POST)

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

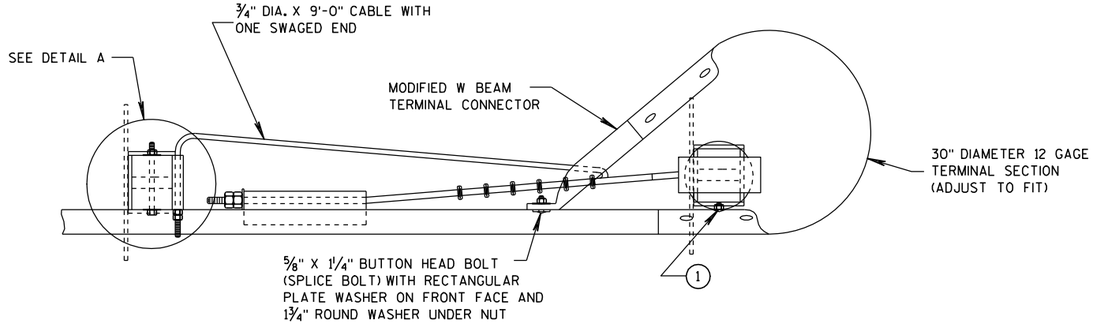
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

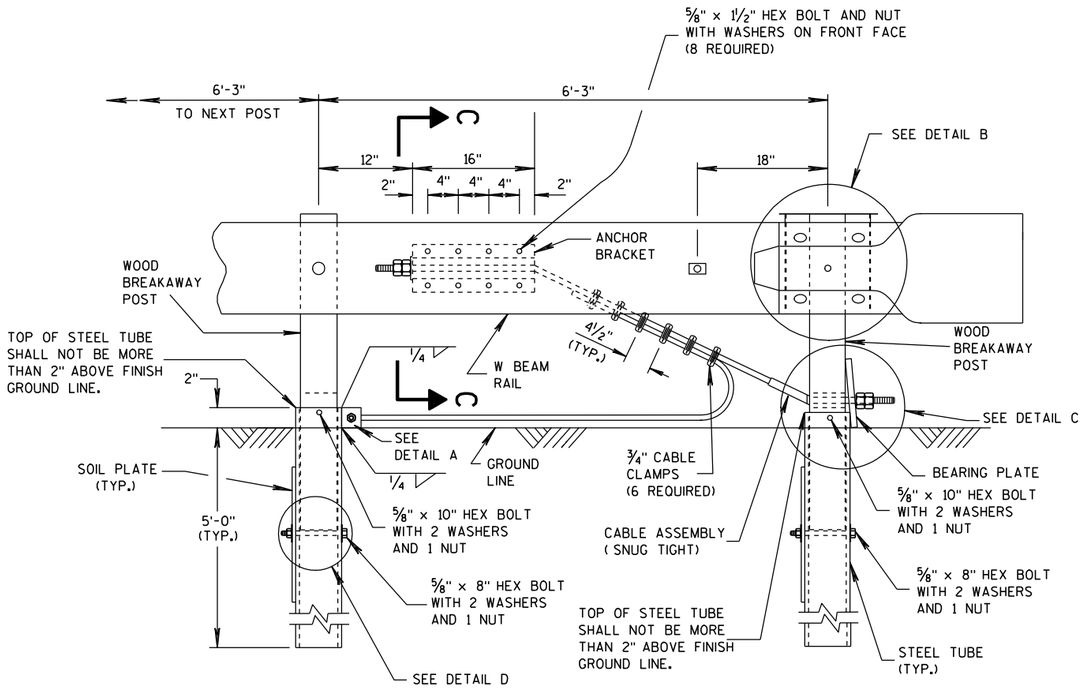
S.D.D. 14 B 27-1a

6

S.D.D. 14 B 27-1a



PLAN VIEW



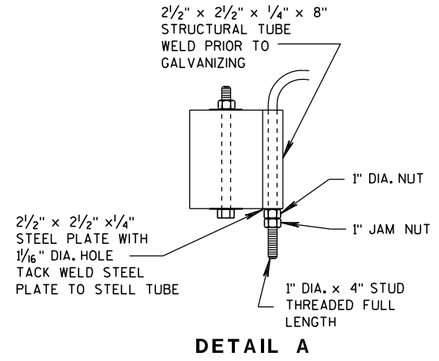
ELEVATION VIEW

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

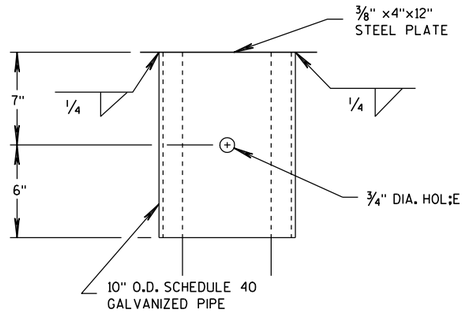
GENERAL NOTES

(1) ATTACH W BEAM RAIL TO THE STEEL PIPE WITH A ⅝" X 2" BUTTON HEAD BOLT WITH NO WASHER. CONNECTION TO THE POST IS NOT REQUIRED.

INSTALL GALVANIZED ¾" (6X19) PREFORMED WIRE OR INDEPENDENT WIRE ROPE CORE CONFORMING TO AASHTO M 30. MANUFACTURE WIRE ROPE OUT OF IMPROVED PLOW STEEL WITH A MINIMUM BREAKING STRENGTH OF 42,800 PSI.



DETAIL A



DETAIL B

(BEAM GUARD AND TERMINAL SECTION NOT SHOWN)

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

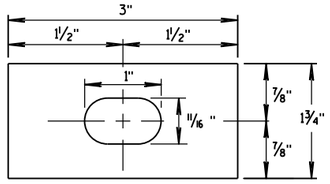
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

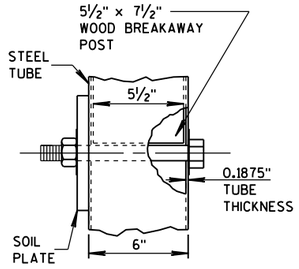
S.D.D. 14 B 27-1b

6

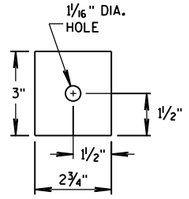
S.D.D. 14 B 27-1b



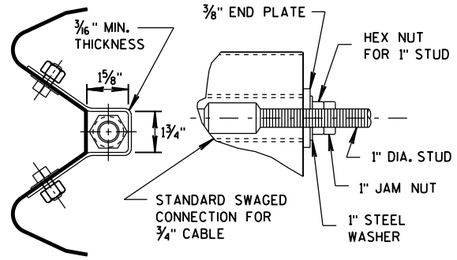
RECTANGULAR PLATE WASHER



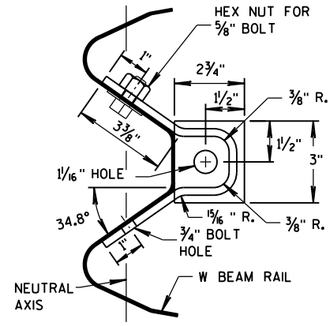
DETAIL D



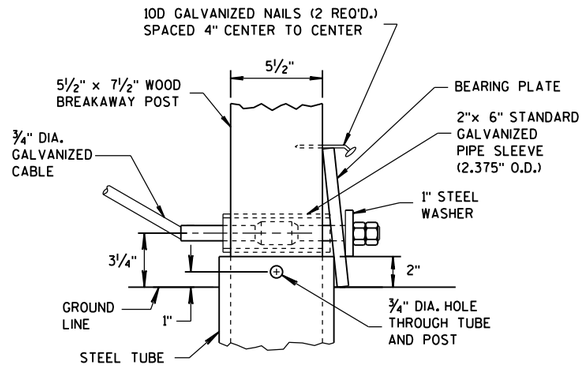
END PLATE



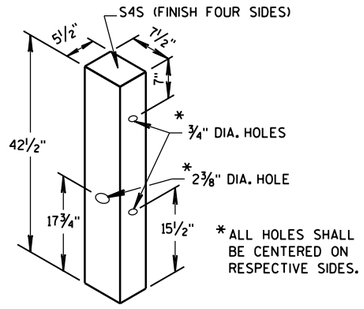
SECTION C-C
(END PLATE REMOVED)



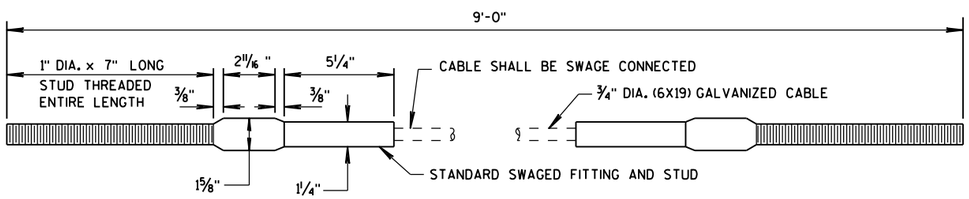
ANCHOR BRACKET



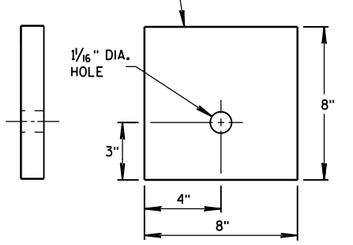
DETAIL C



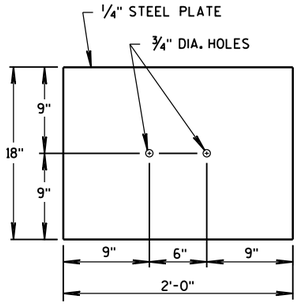
WOOD BREAKAWAY POST



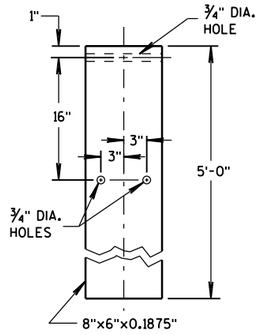
CABLE ASSEMBLY



BEARING PLATE



SOIL PLATE



STEEL TUBE

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

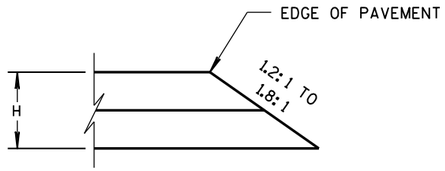
APPROVED
12/18/08 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 14 B 27-1c

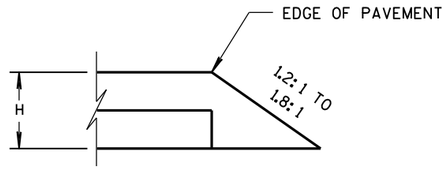
6

S.D.D. 14 B 27-1c



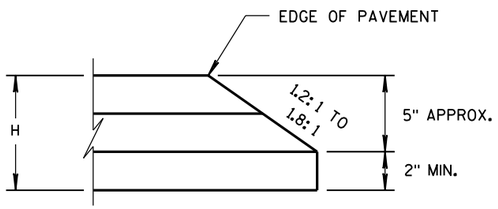
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



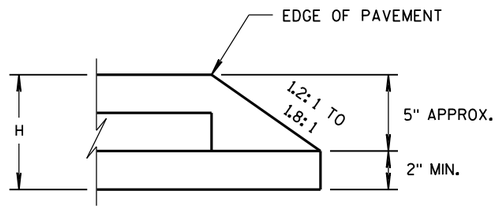
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

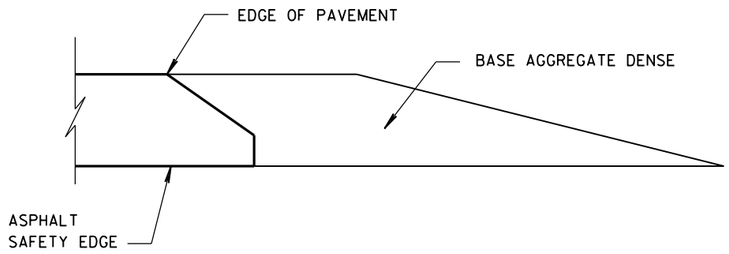
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

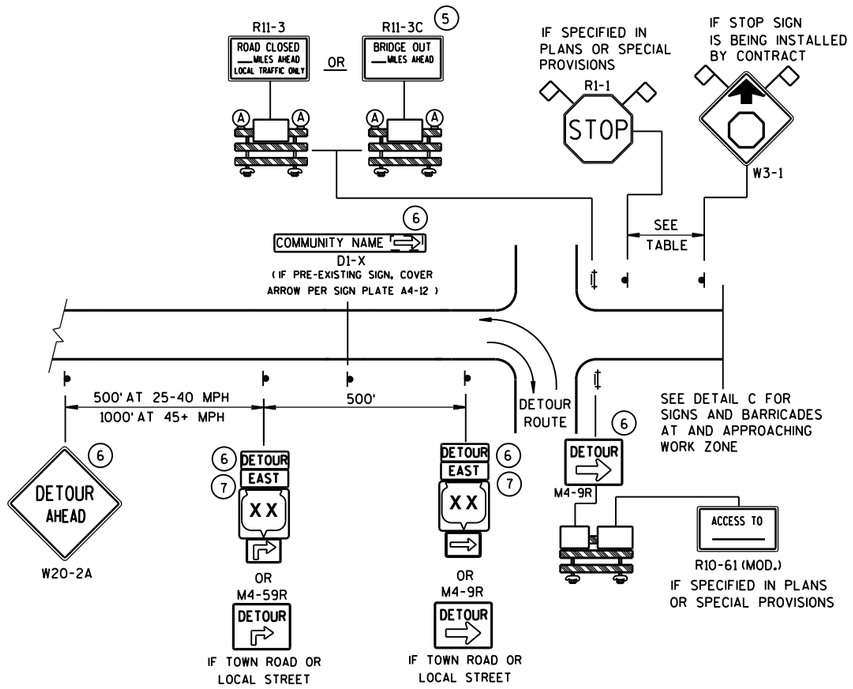
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

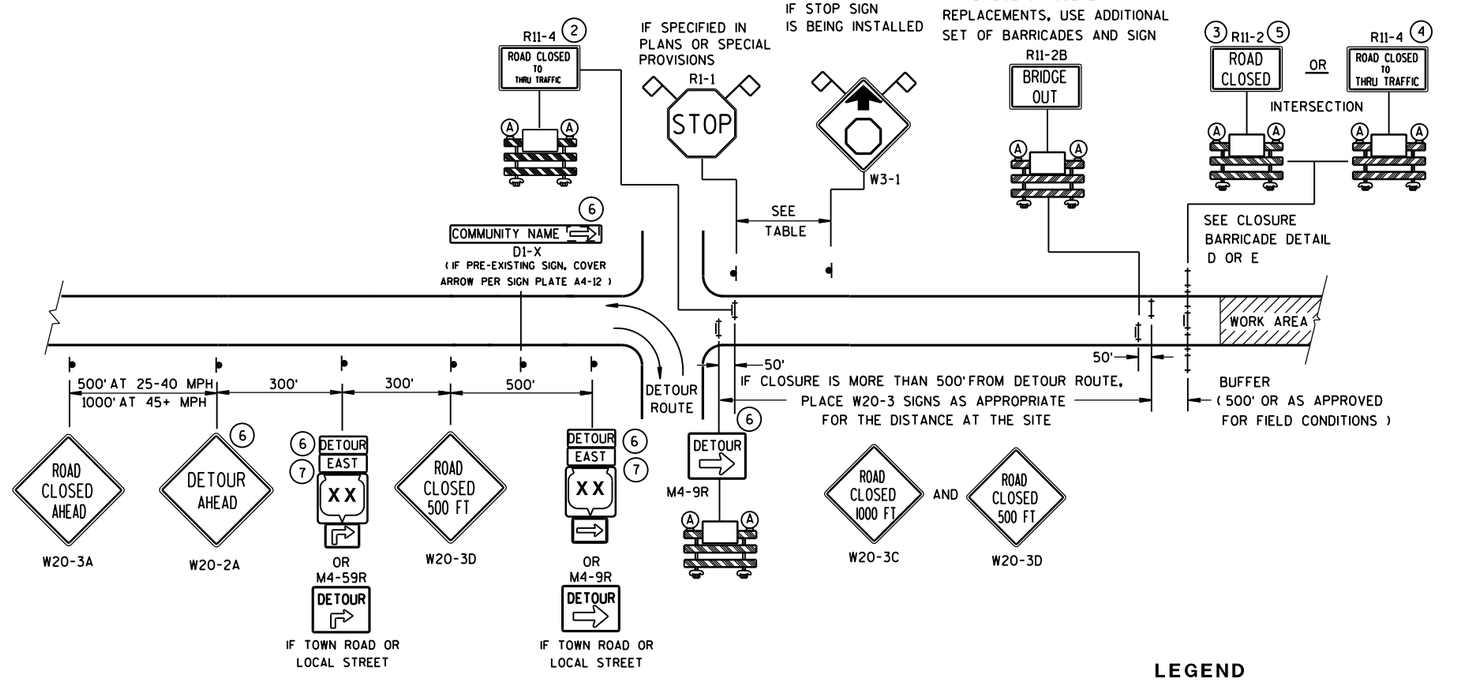
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA



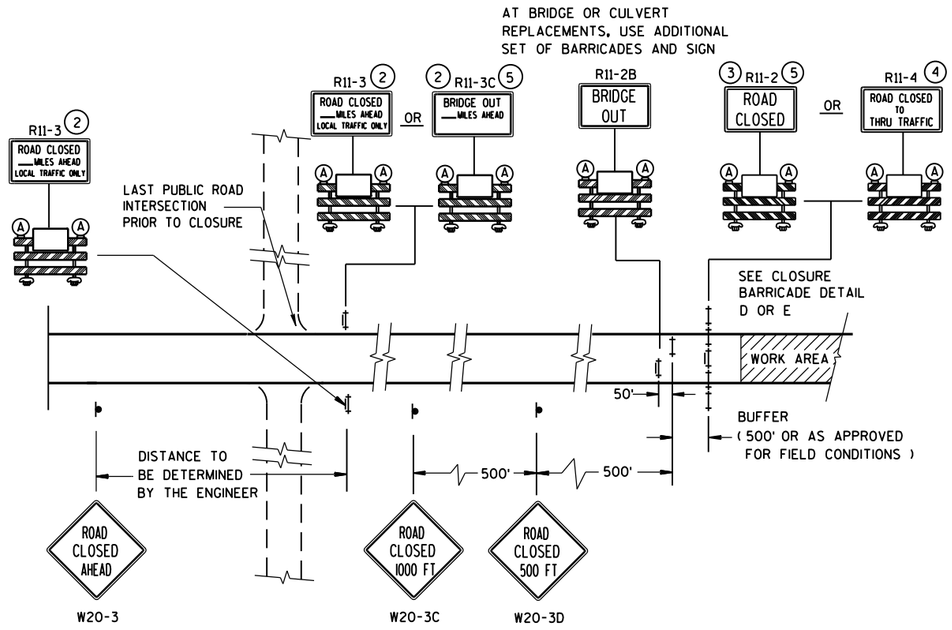
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

LEGEND

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

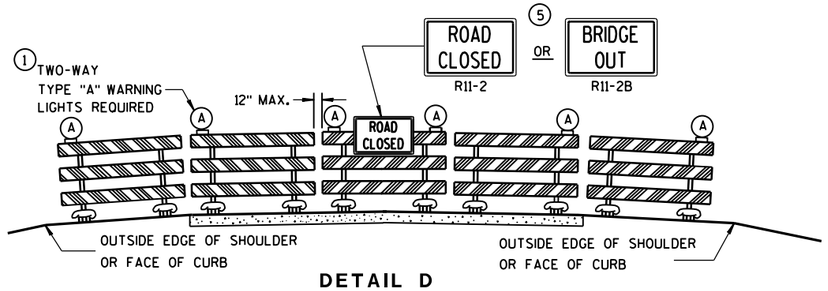
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

6

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

6

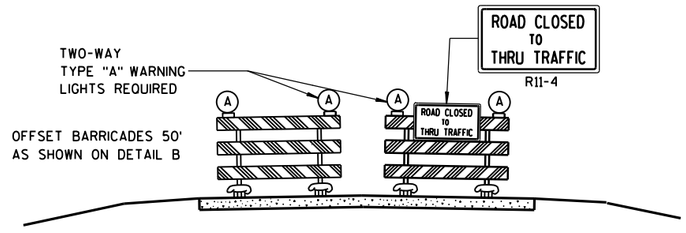
S.D.D. 15 C 2-6a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

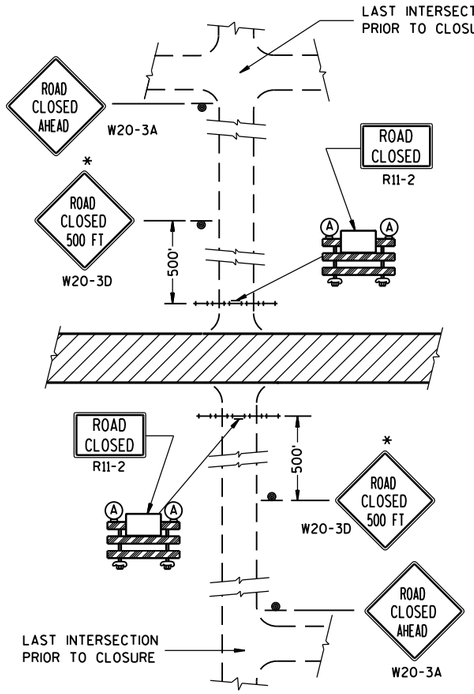
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO... SAFETY ENGI... — FHWA — FIC

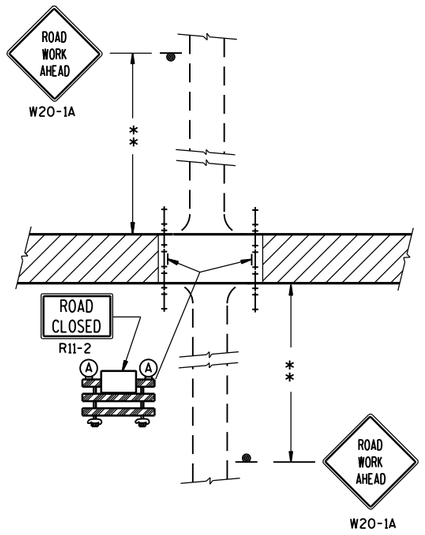
6

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



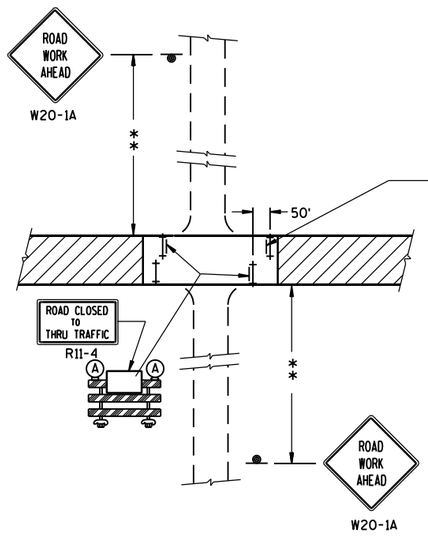
DETAIL 1

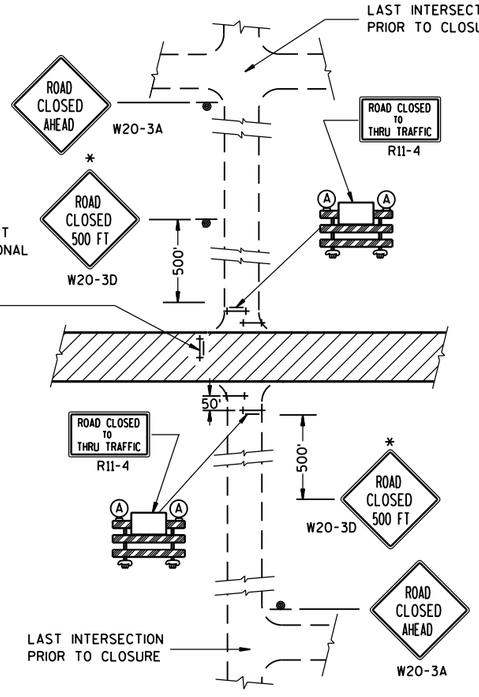
(NO ACCESS TO PROJECT)



DETAIL 2

(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).





DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).

DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

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

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

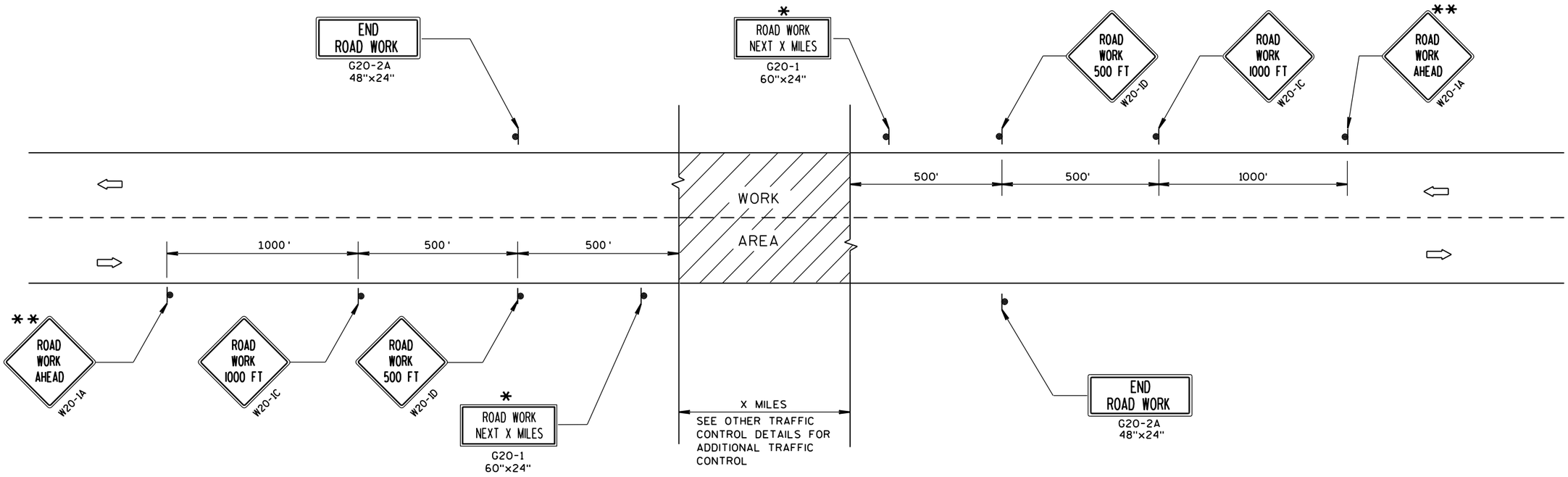
APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO... SAFETY ENGI... — FHWA

6

S.D.D. 15 C 3-3

6

S.D.D. 15 C 3-3



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

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

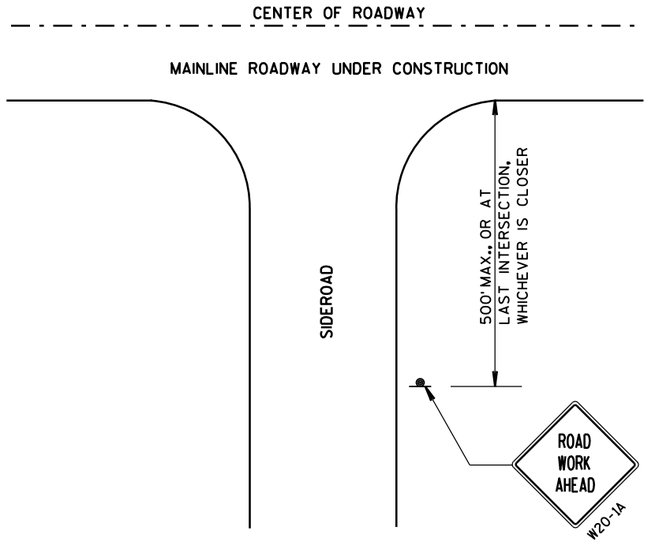
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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



LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

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

FHWA

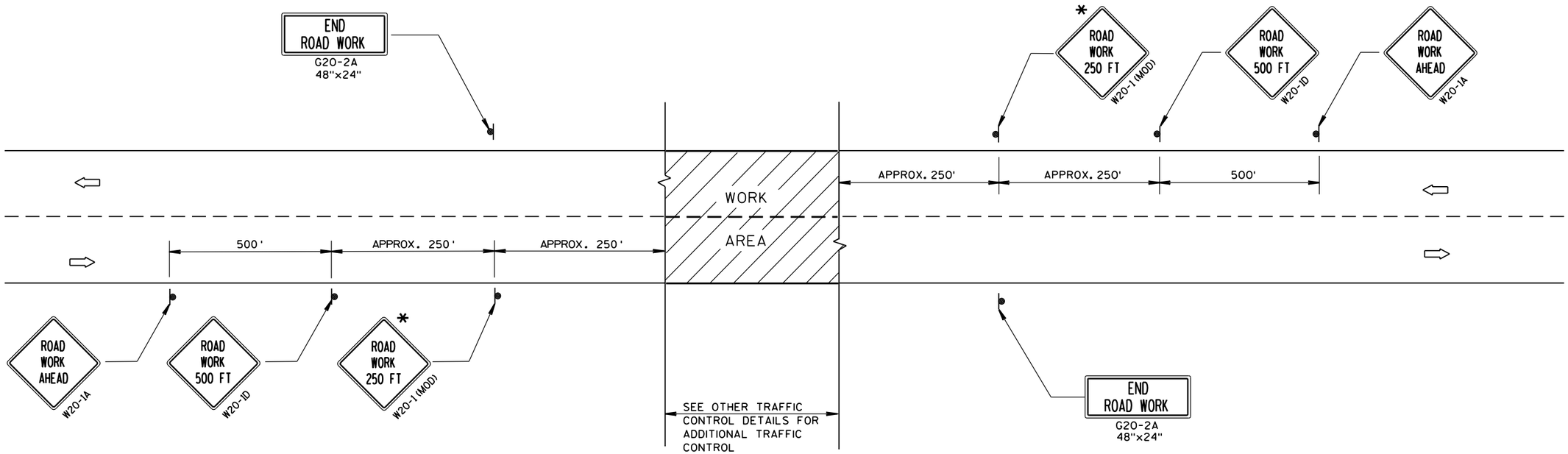
6

S.D.D. 15 C 4-3

6

S.D.D. 15 C 4-3

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

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

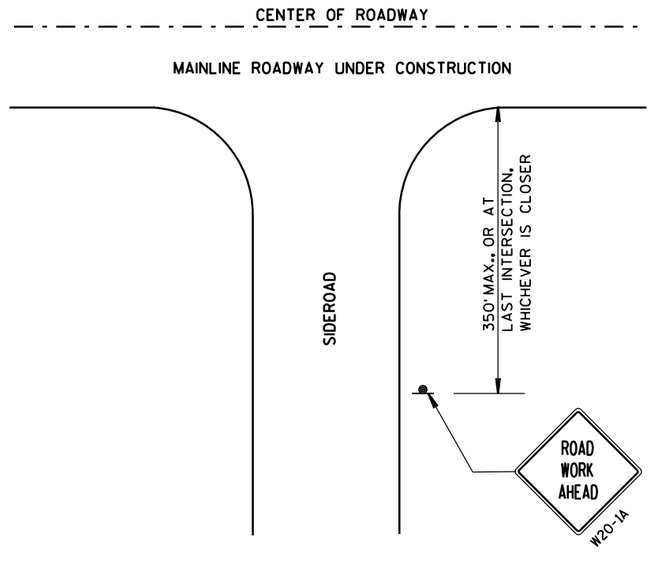
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

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



LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

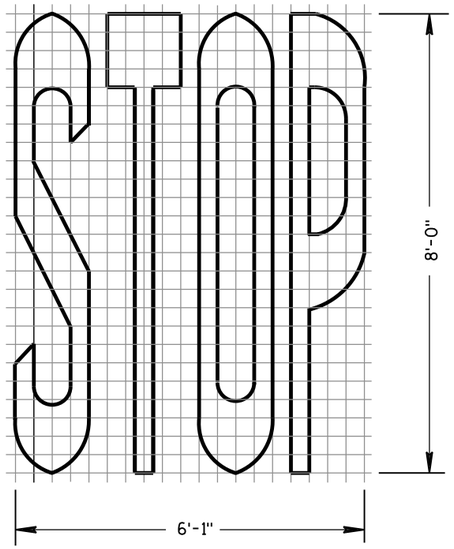
APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

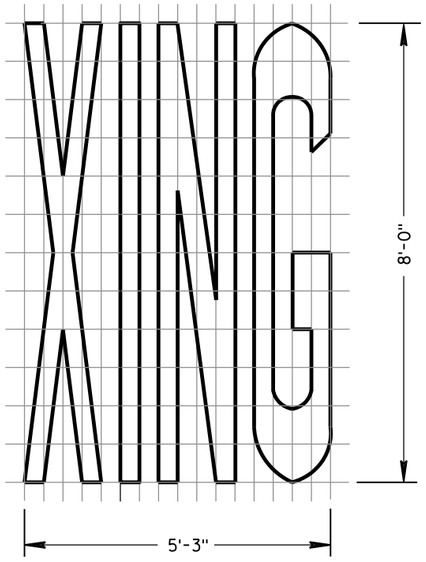
6

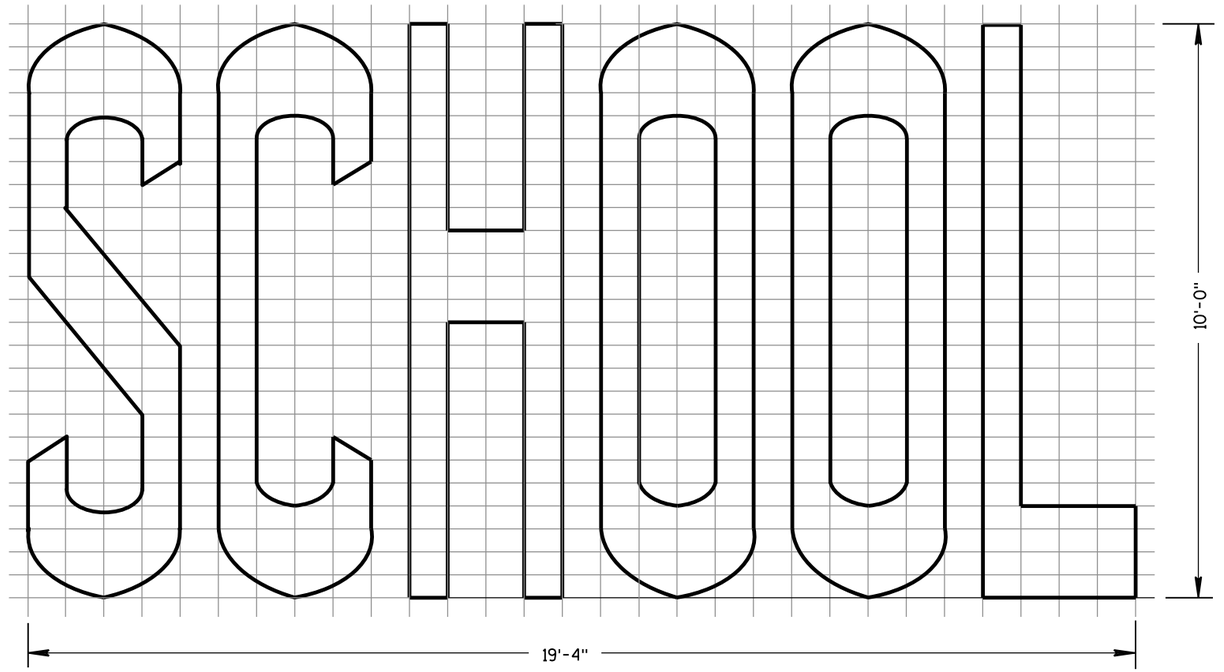
S.D.D. 15 C 5-3

GENERAL NOTES

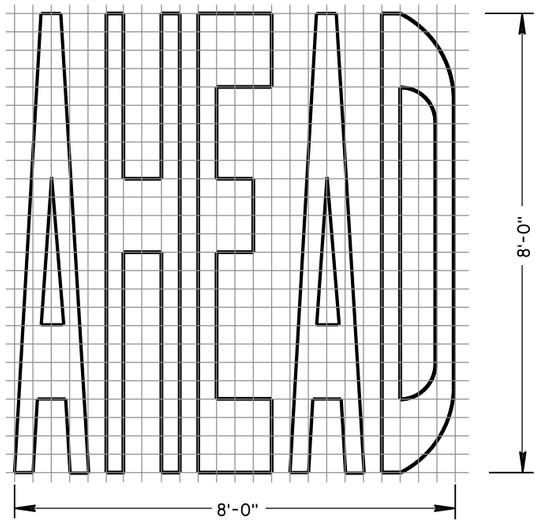
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

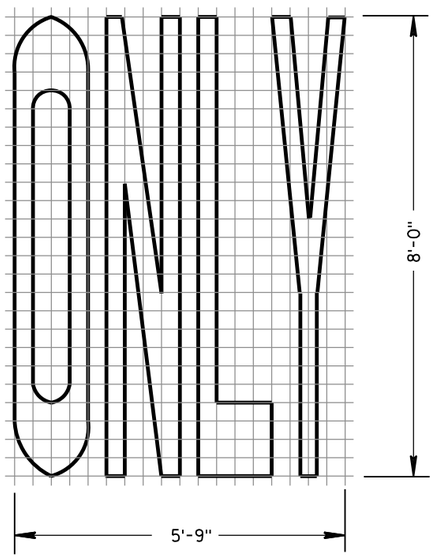


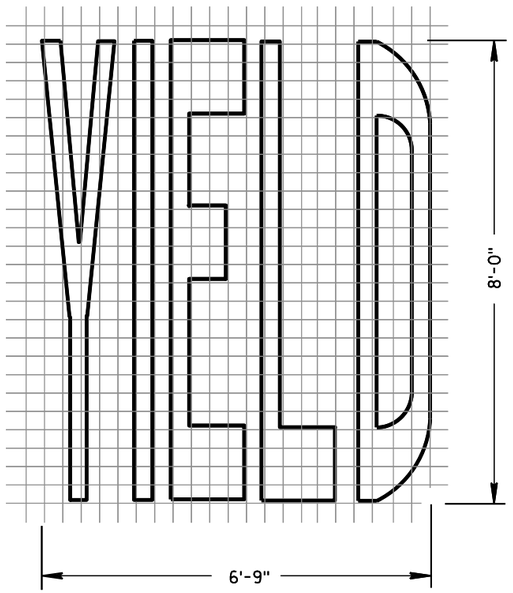


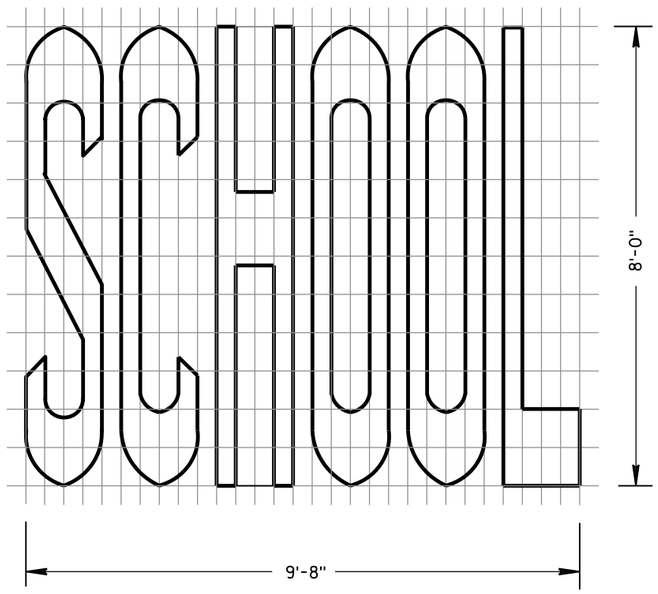


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-16	/S/ Matthew R. Rauch	
DATE	STATE SIGNING AND MARK	EER

FHWA

6

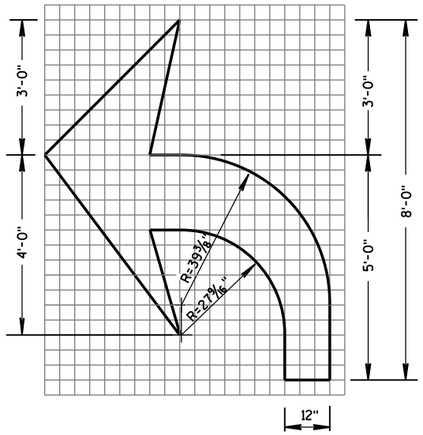
S.D.D. 15 C 7-13b

6

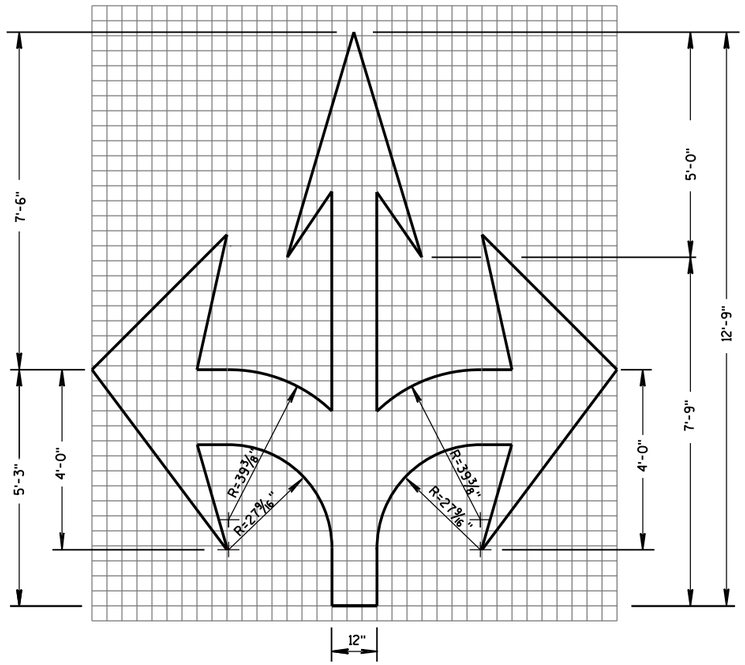
S.D.D. 15 C 7-13b

GENERAL NOTES

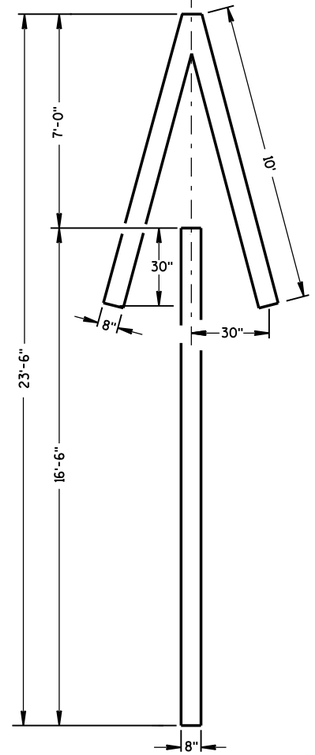
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



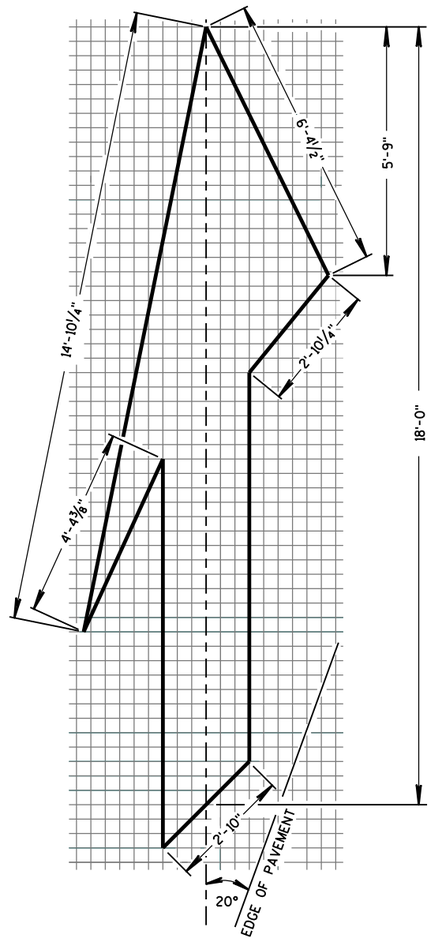
TYPE 2



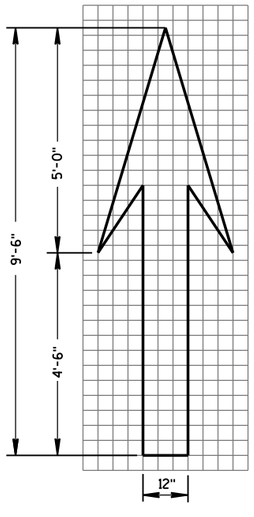
TYPE 6



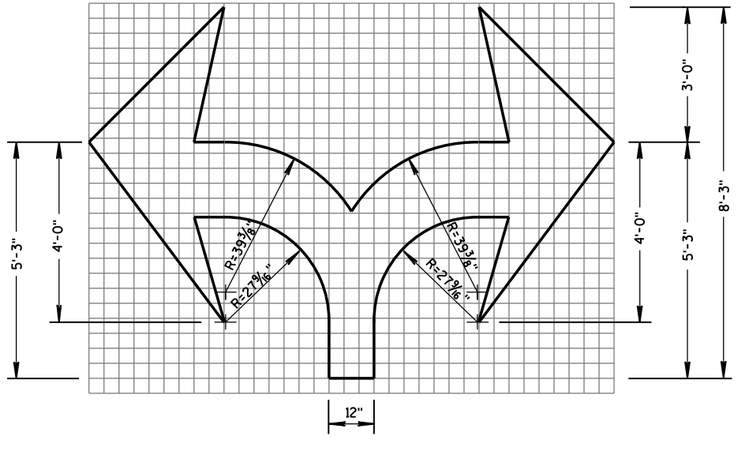
TYPE 4



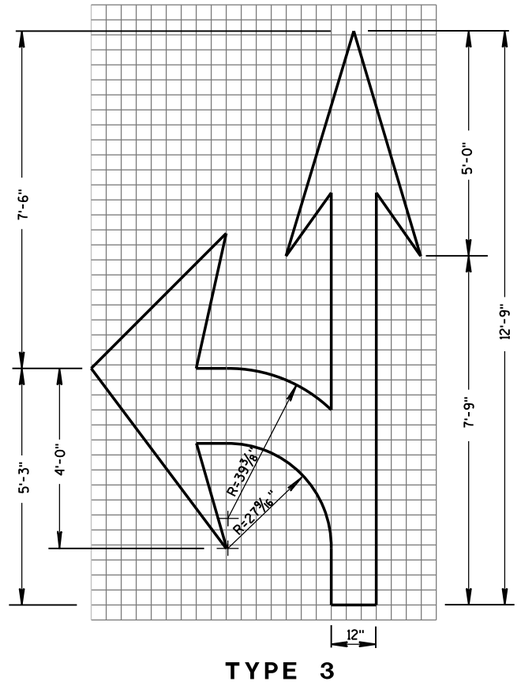
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

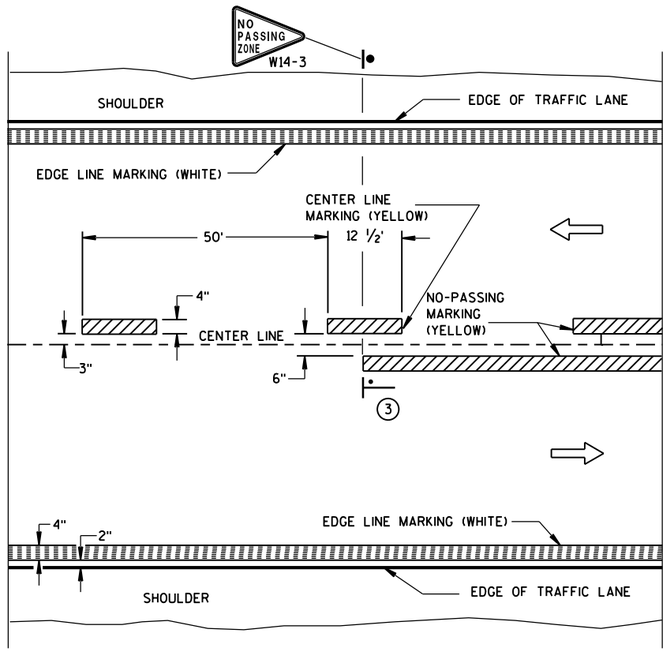
APPROVED
4-18-16 DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MAR[illegible] ENGINEER
FHWA

6

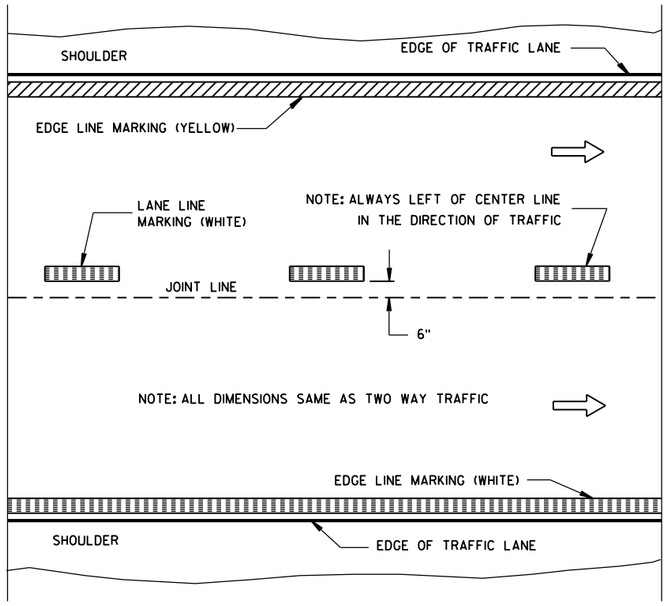
S.D.D. 15 C 7-13c

6

S.D.D. 15 C 7-13c

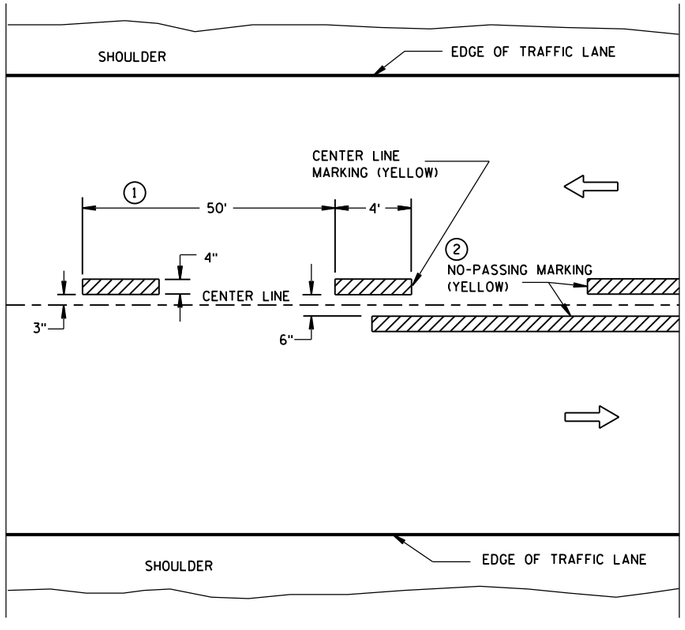


TWO WAY TRAFFIC

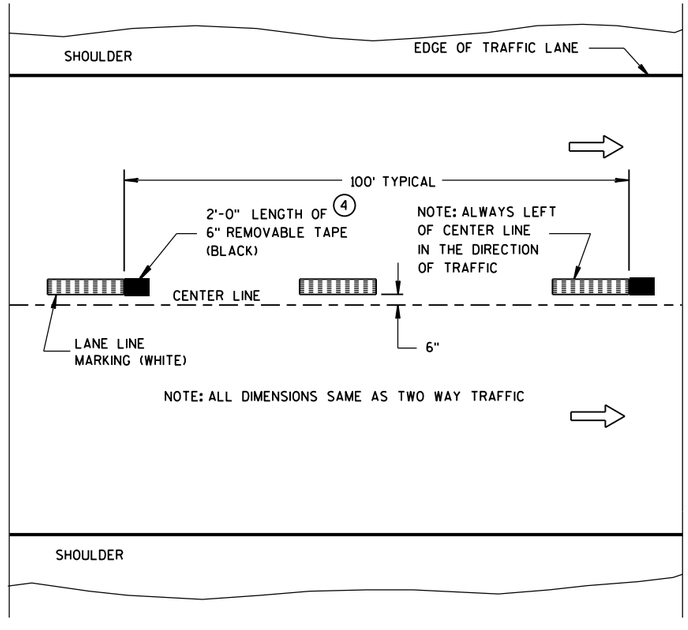


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

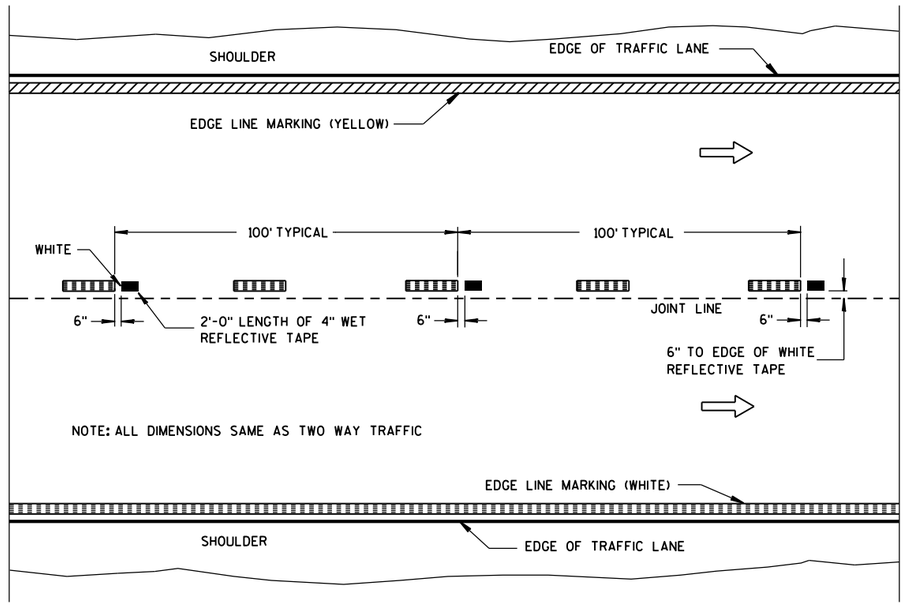
GENERAL NOTES

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

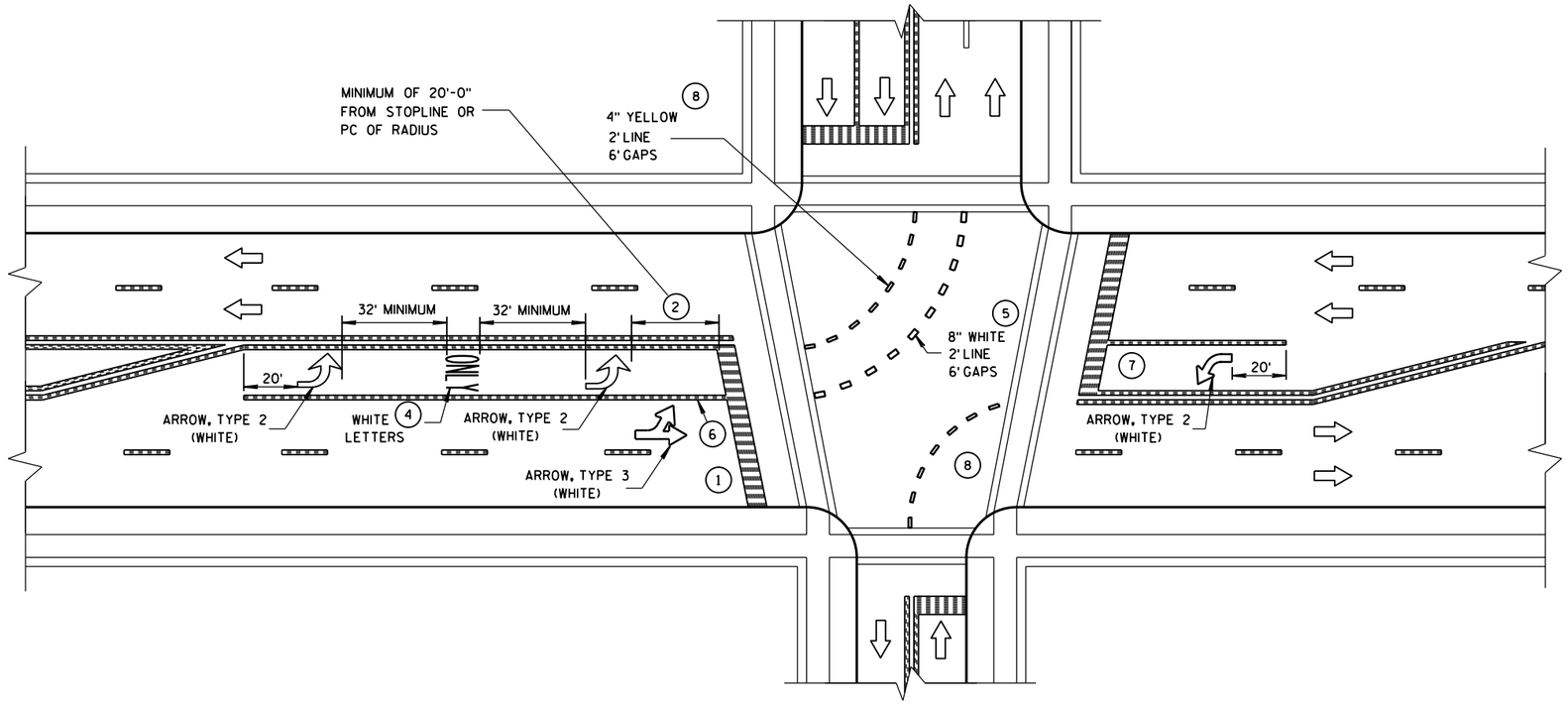
FHWA

6

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

6

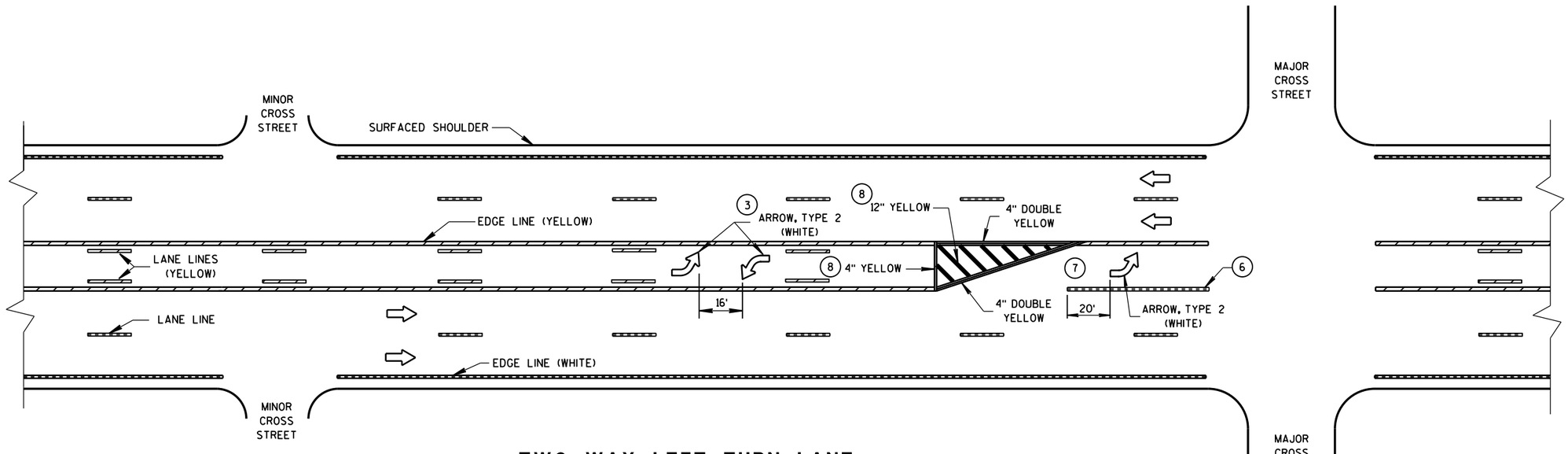
S.D.D. 15 C 8-16a



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

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

6

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

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

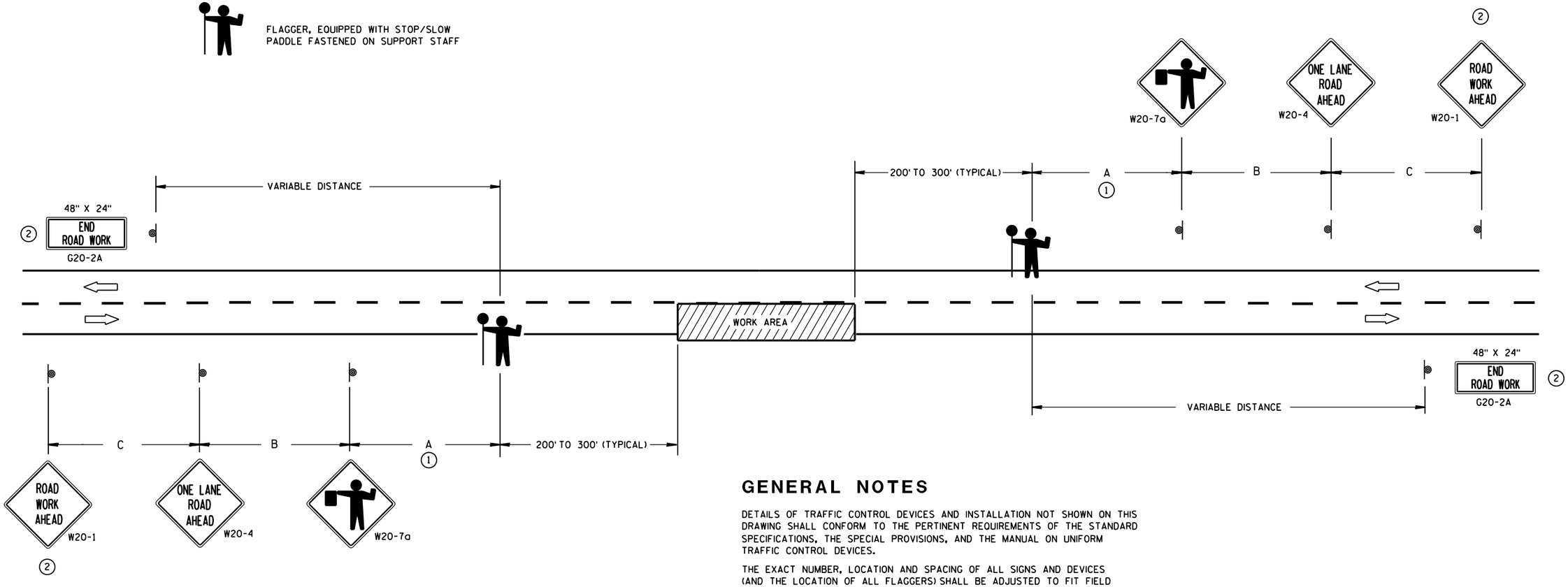
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

BE PREPARED TO STOP
W3-4

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



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

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

GENERAL NOTES

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

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

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

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

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

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

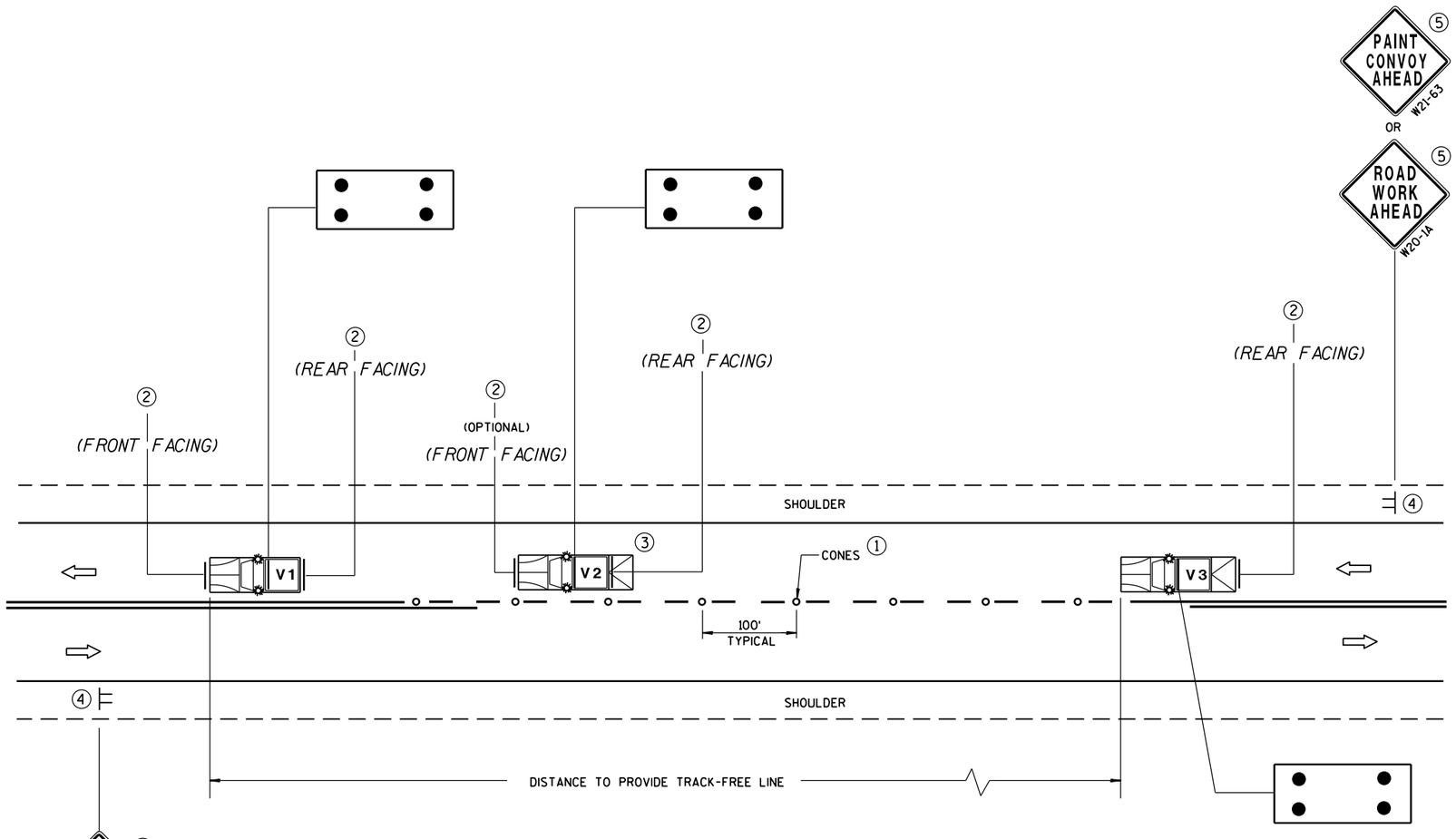
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 12-4

6

S.D.D. 15 C 12-4



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

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

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

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

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

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

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

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

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

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

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

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

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

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

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

LEGEND

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

MOVING PAVEMENT MARKING OPERATION
TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

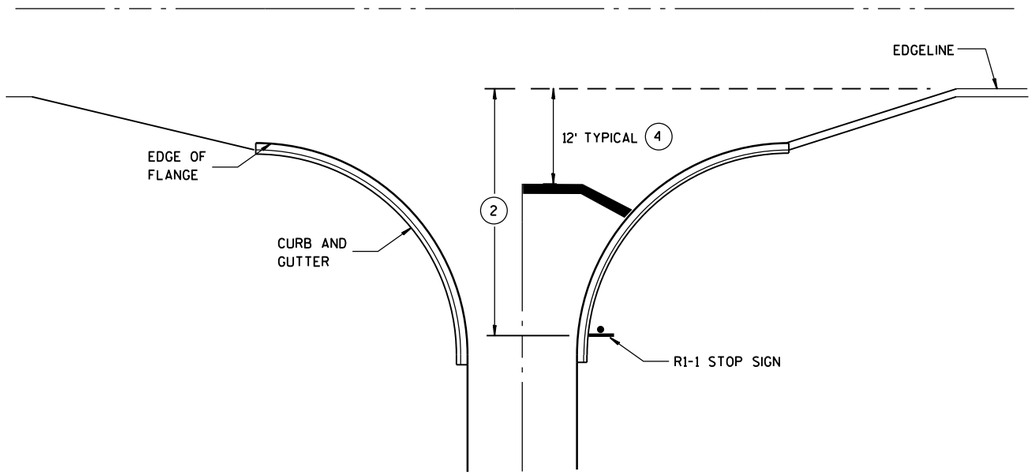
APPROVED
June 2016 — DATE
/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

6

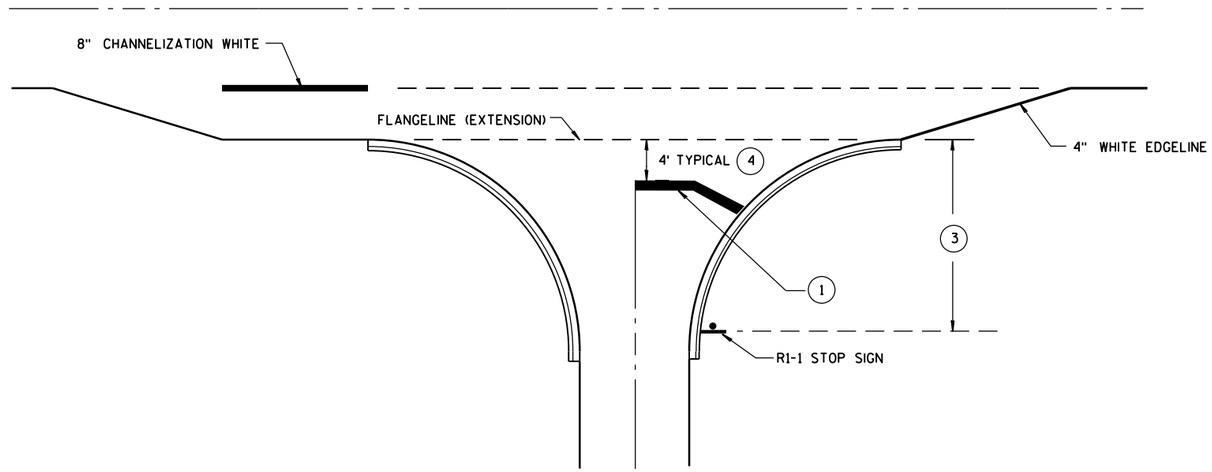
S.D.D. 15 C 19-4a

6

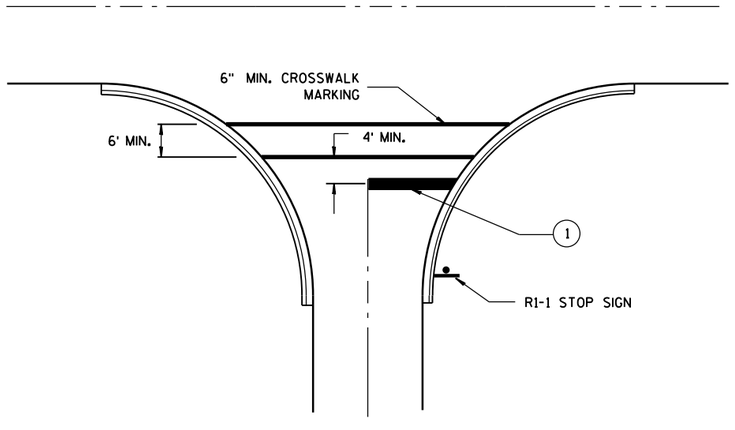
S.D.D. 15 C 19-4a



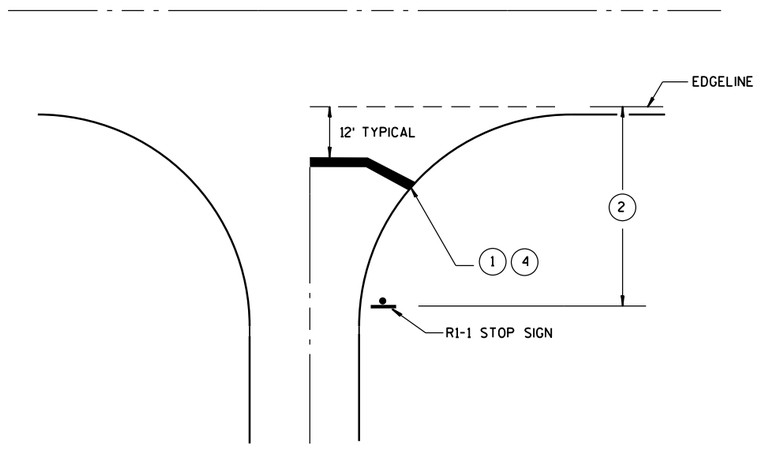
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-2016 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]NEER

FHWA

6

S.D.D. 15 C 33-2

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.

W20-1A 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	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

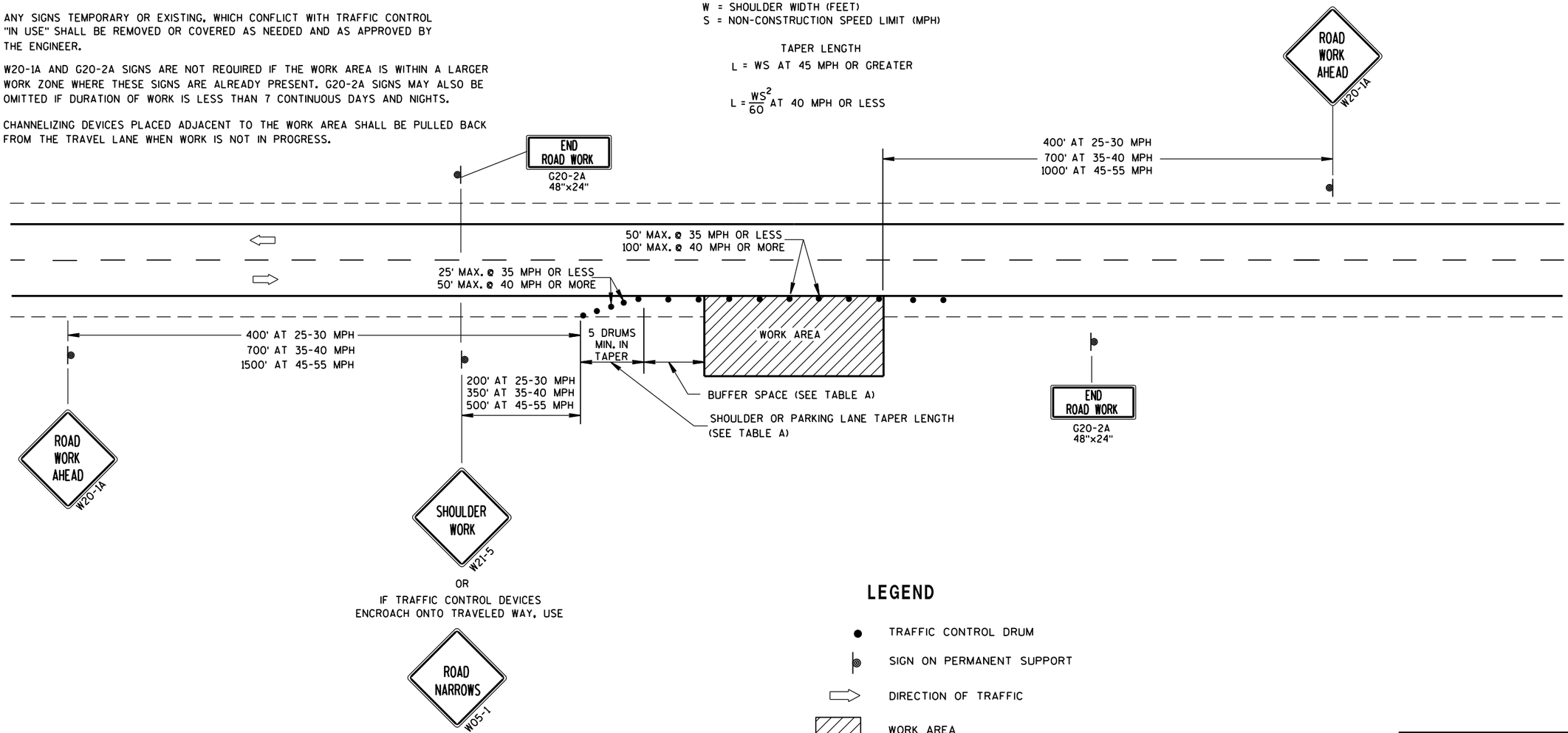
W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L = WS AT 45 MPH OR GREATER

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

SHOULDER TAPER LENGTH = $\frac{1}{3}L$



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

July 14, 2015 — DATE

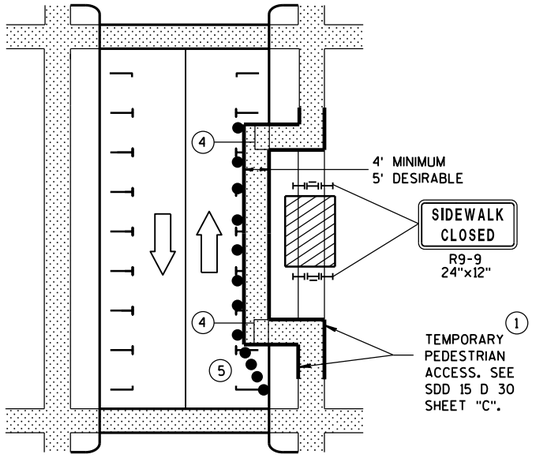
/S/ Peter Amakobe Atepe — STATEWIDE WORK ZO SAFETY ENGI FIC

FHWA

6

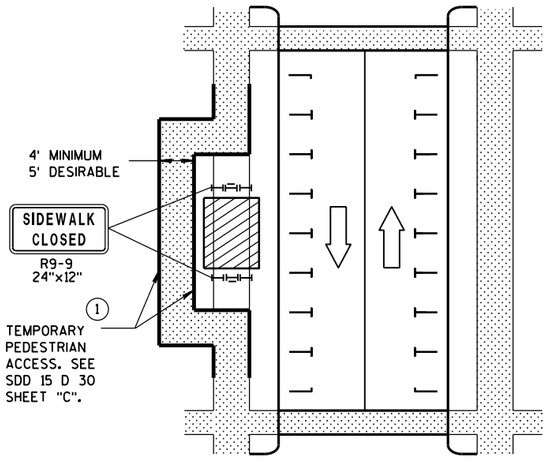
S.D.D. 15 D 28-3

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

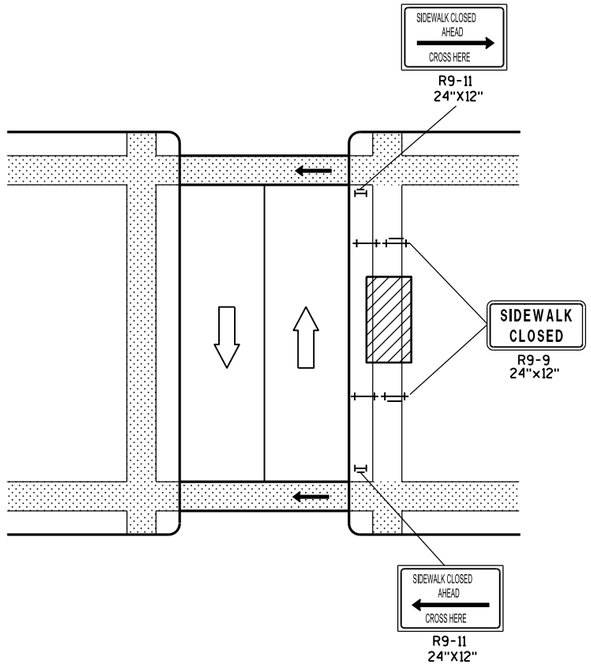


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

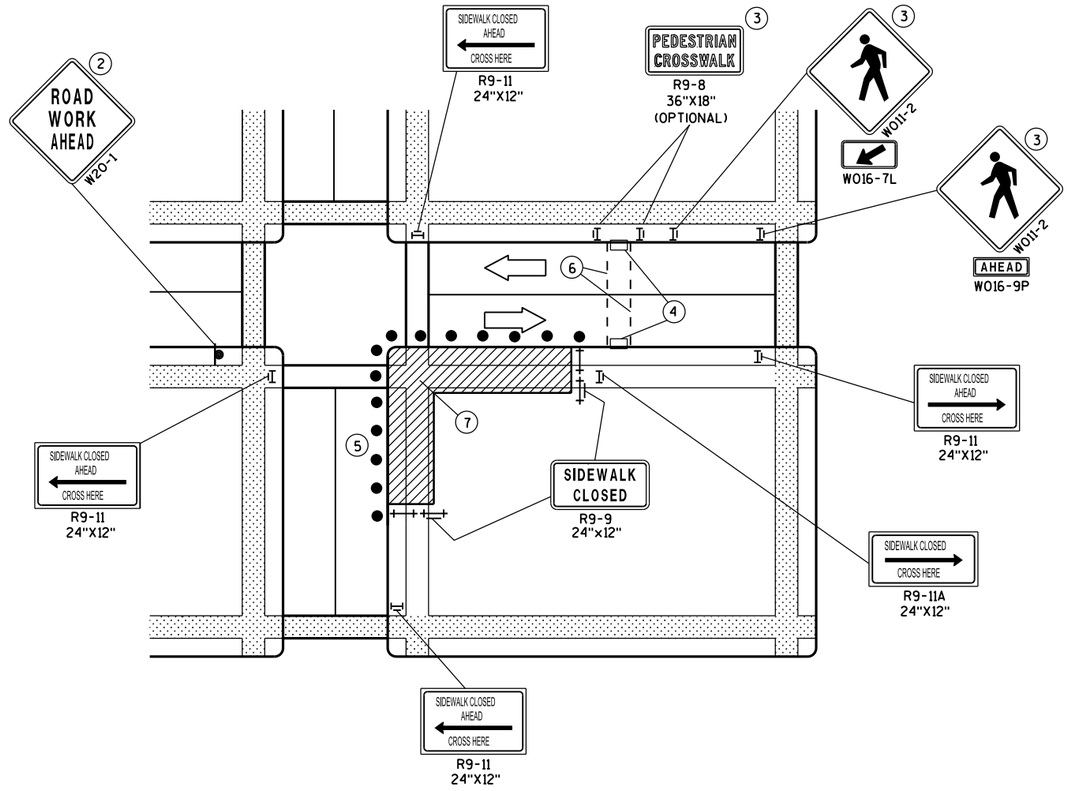
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

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

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

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

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

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

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

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

(1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.

(2) "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

(3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".

(5) DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.

(6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.

(7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

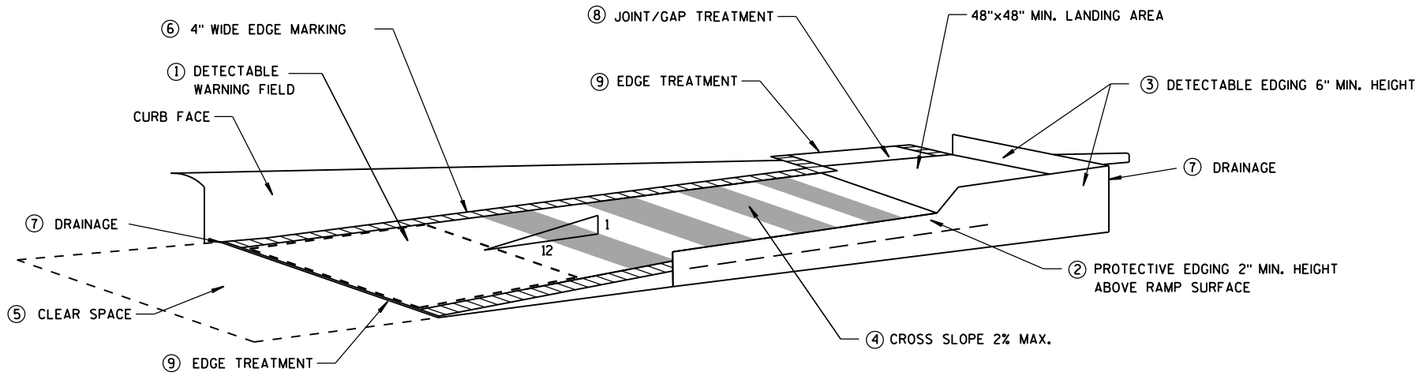
- SIGN ON PERMANENT SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)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

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 D 30-3a



TEMPORARY CURB RAMP PARALLEL TO CURB

GENERAL NOTES

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

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

① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 SHEET "E".

② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

④ CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

⑤ CLEAR SPACE OF 48"X48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

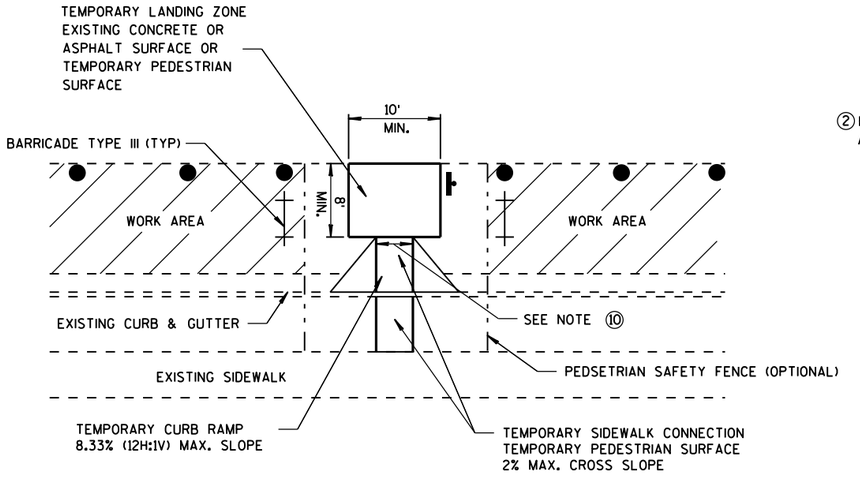
⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.

⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

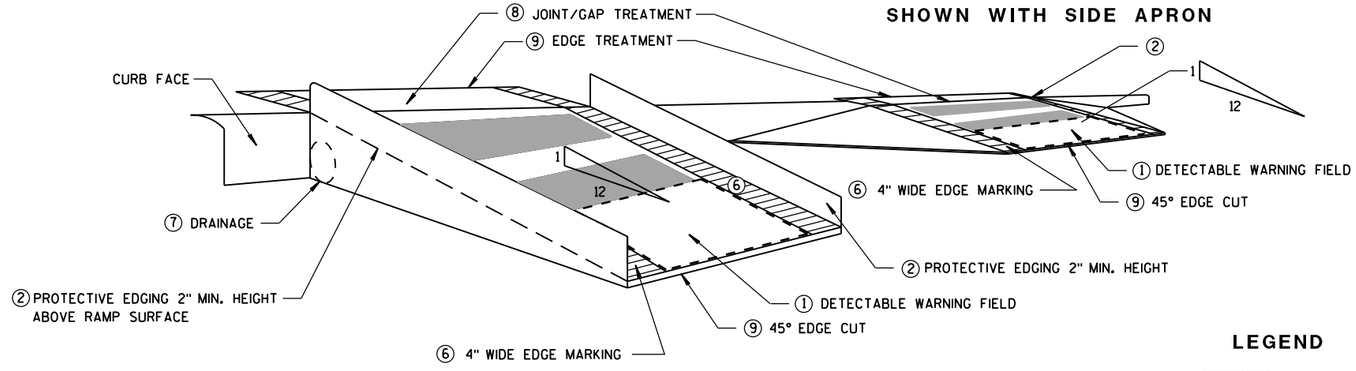
⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

⑩ 5' WIDE MIN. WITH PEDSETRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.



TEMPORARY BUS STOP PAD



SHOWN WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

LEGEND

WORK AREA

TYPE III BARRICADE

TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

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

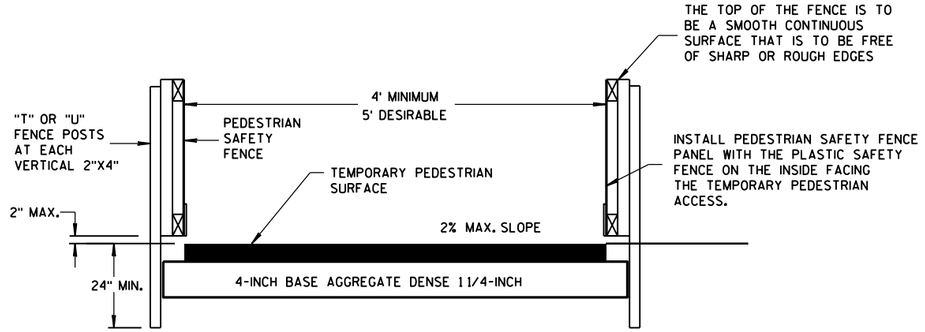
FHWA

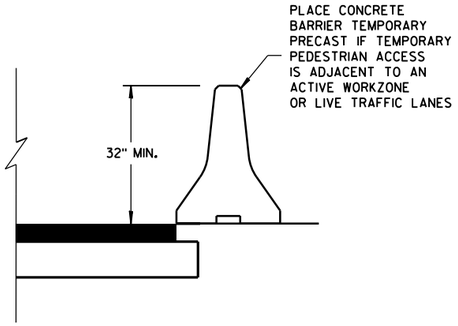
6

S.D.D. 15 D 30-3b

6

S.D.D. 15 D 30-3b

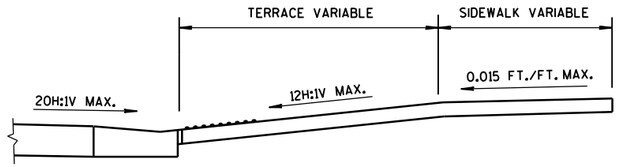




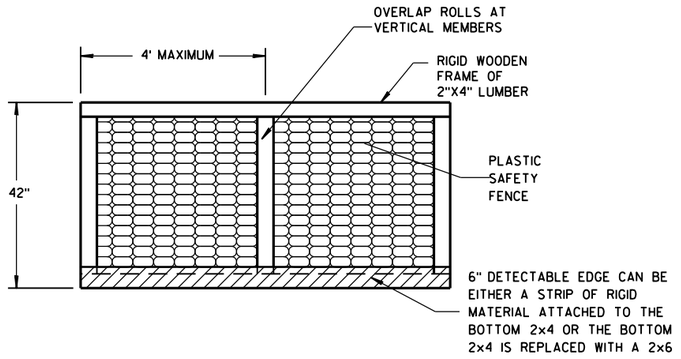
TEMPORARY PEDESTRIAN ACCESS

GENERAL NOTES

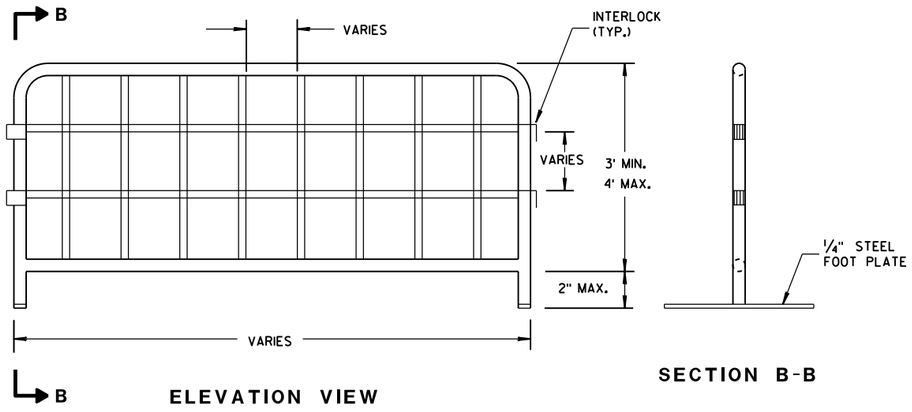
(1) INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



SECTION A-A



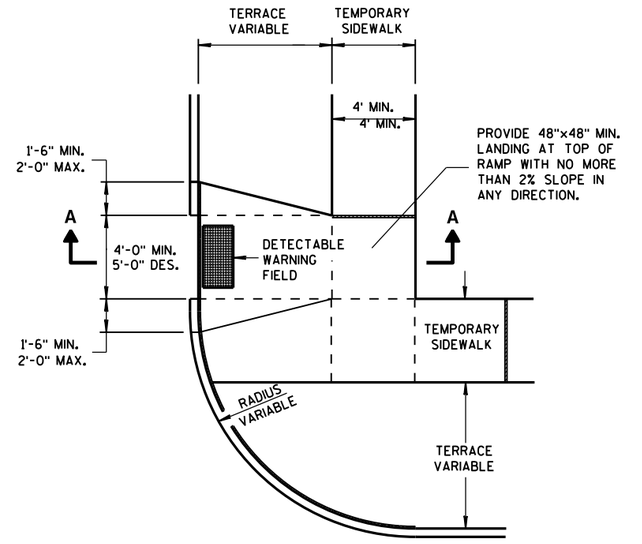
PEDESTRIAN SAFETY FENCE



ELEVATION VIEW

SECTION B-B

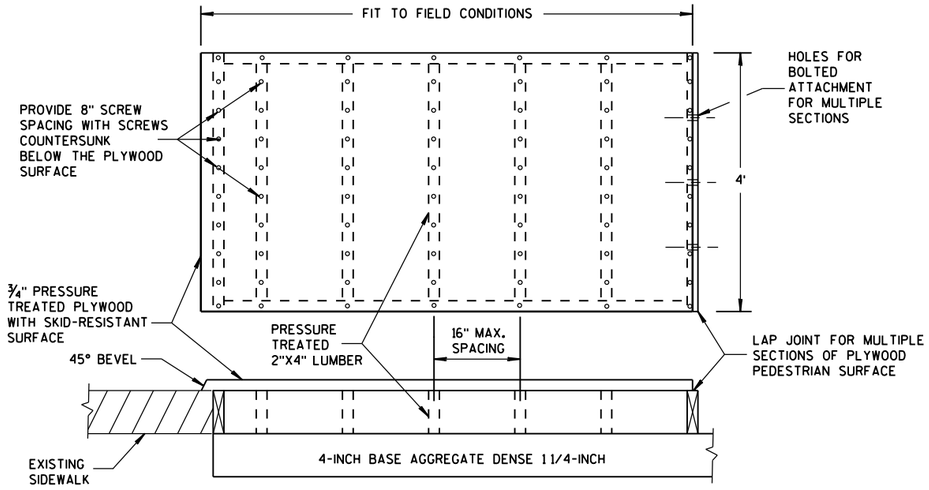
TEMPORARY PEDESTRIAN STEEL BARRICADE (1)



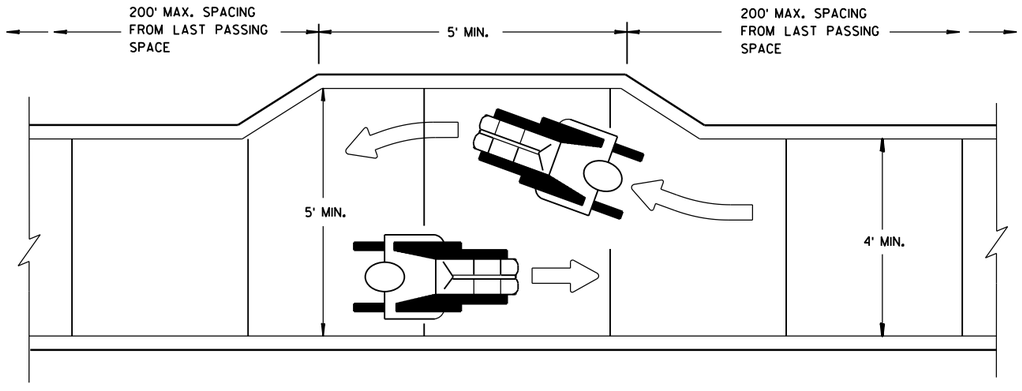
PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



NARROW SIDEWALK PASSING DETAIL

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016
DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZON SAFETY ENGIN IC
FHWA

6

S.D.D. 15 D 30-3c

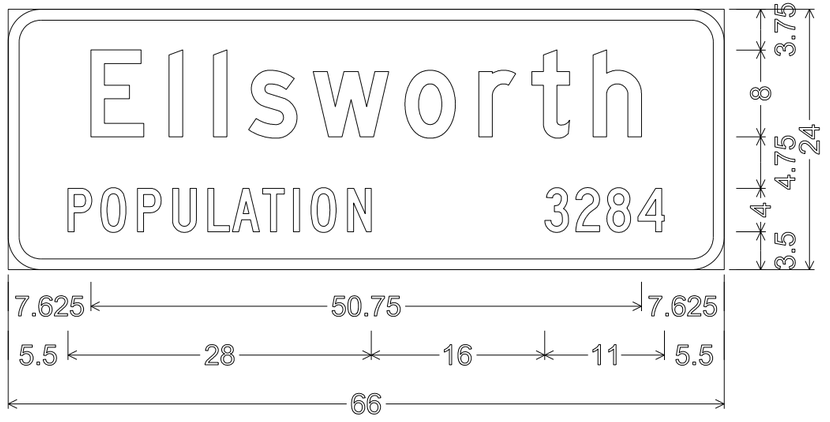
6

S.D.D. 15 D 30-3c

NOTES

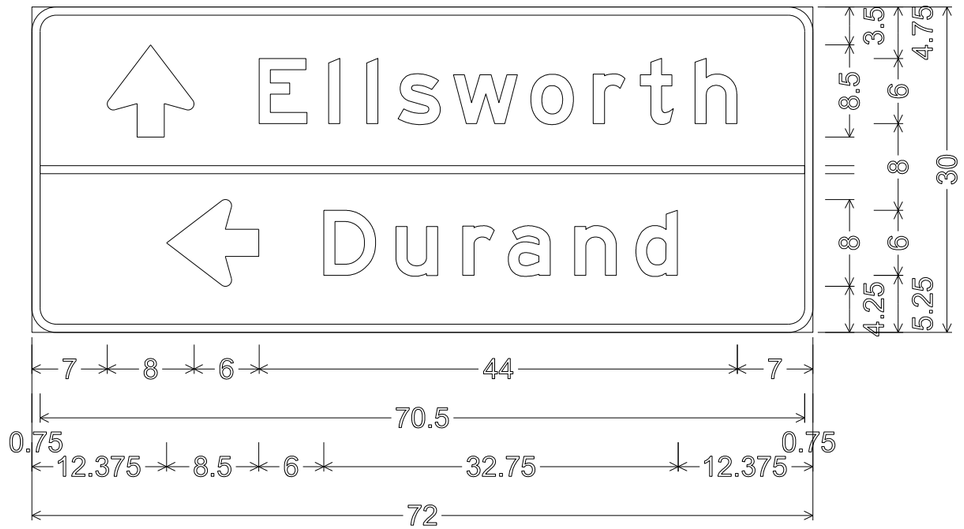
1. Signs are Type II- Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted

12-5

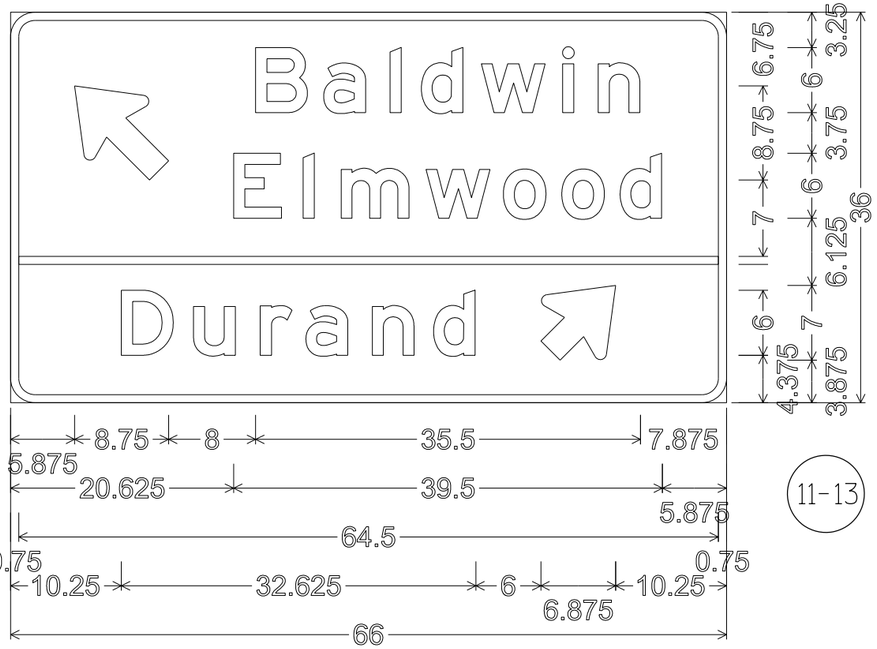


I2-3; 3.000" Radius, 1.000" Border,
"Ellsworth" D; "POPULATION" C; "3284" C

13-14



D1-2; 2.250" Radius, 0.750" Border



11-13

2.250" Radius, 0.750" Border, White on Green;

7

7

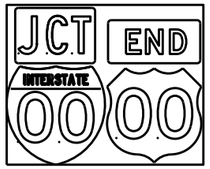
PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	PERMANENT SIGNING	SHEET NO: 99	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\070101_sd.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:13.9668

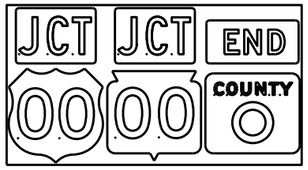
WISDOT/CADDS SHEET 42

TYPICAL ASSEMBLIES

J1-1

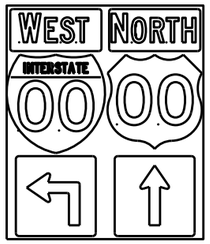


J1-2

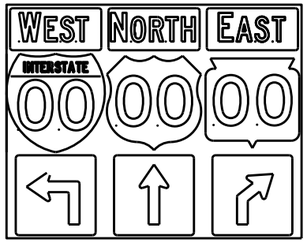


J1-3

J2-1



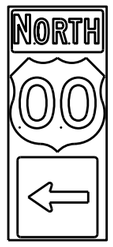
J2-2



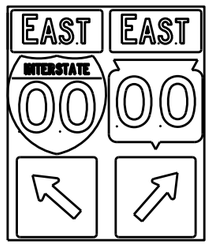
J2-3

JV

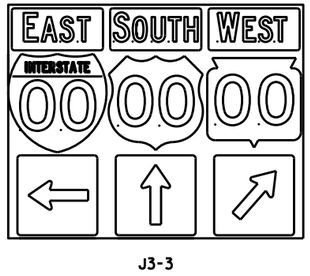
(Typical Vertical J-Assembly
See Note 10 and 11)



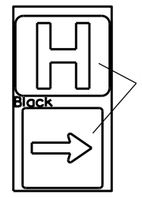
J3-1



J3-2



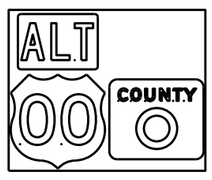
J3-3



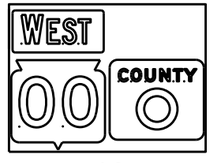
Blue Background

JH-1

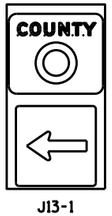
J4-1



J4-2



J4-2



J13-1

J12-1

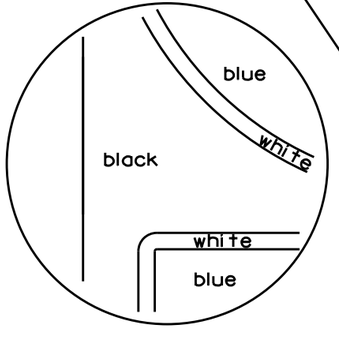
J32-1

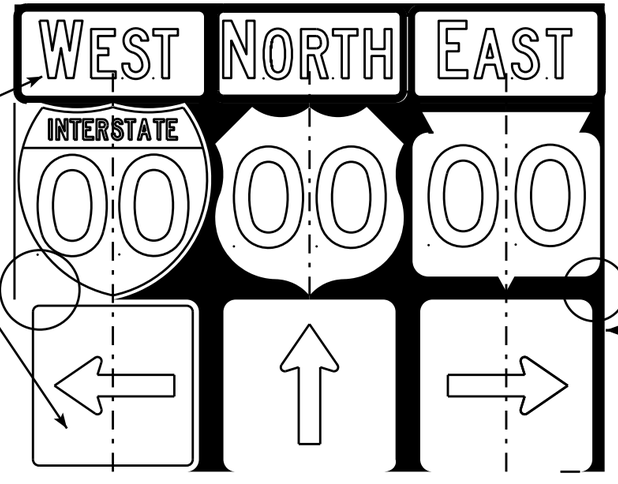
J33-1

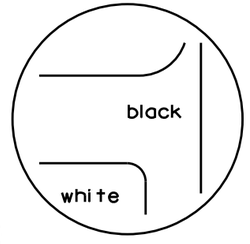
J23-1

J22-1

[blue background with interstate]







[black background]

NOTES

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

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/14 PL... A2-1S.8

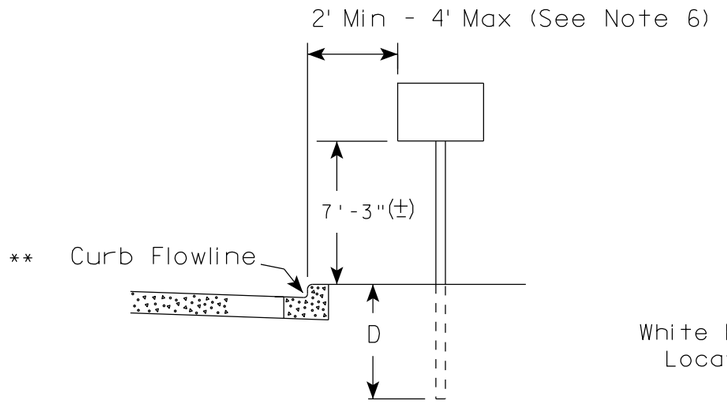
PROJECT NO:

SHEET NO: E

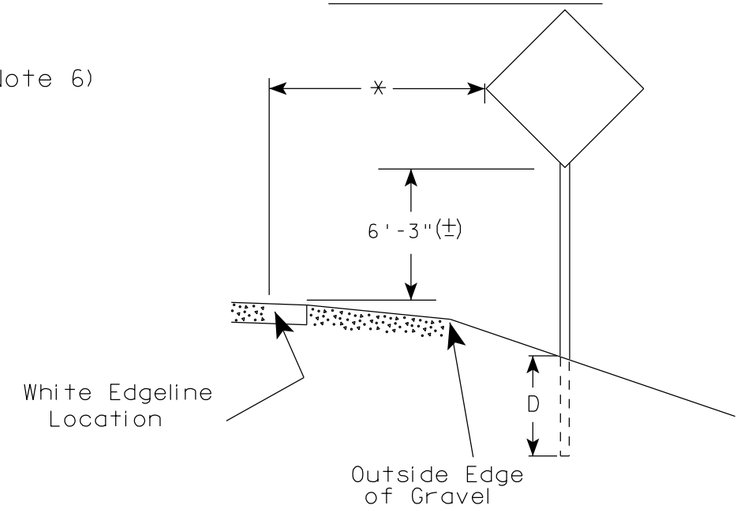
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

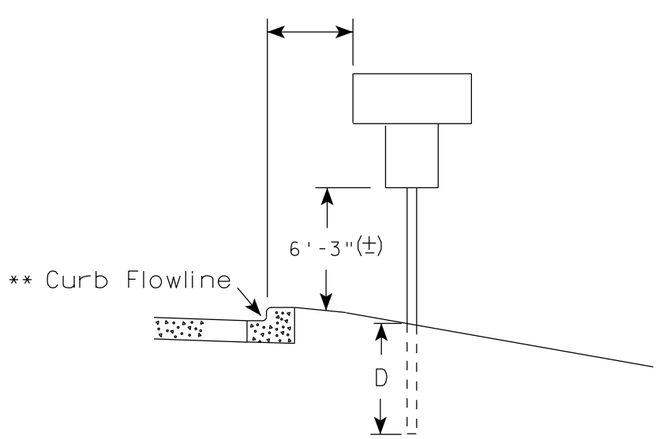
WISDOT/CADDS SHEET 42

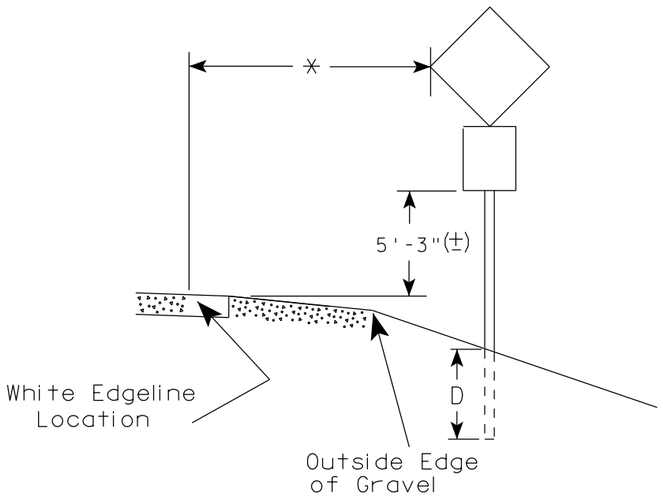
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

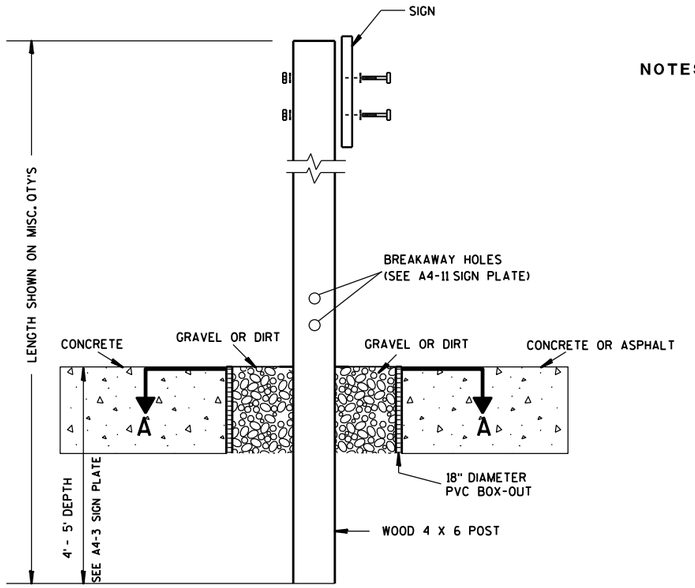
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

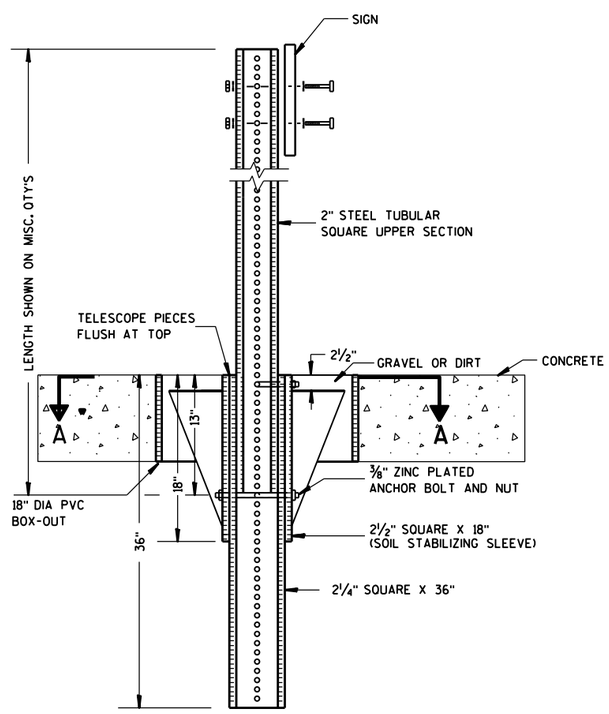
7



ELEVATION VIEW

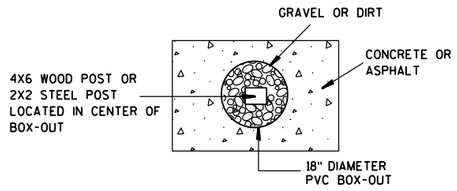
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

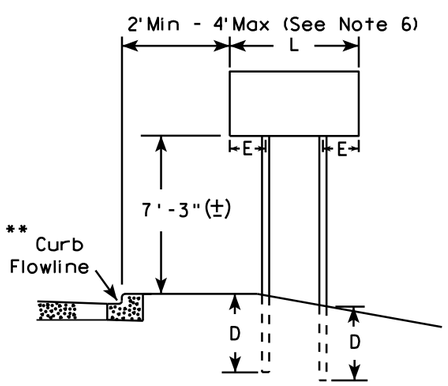
APPROVED Matthew R Rauch
for State Traffic Engineer

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

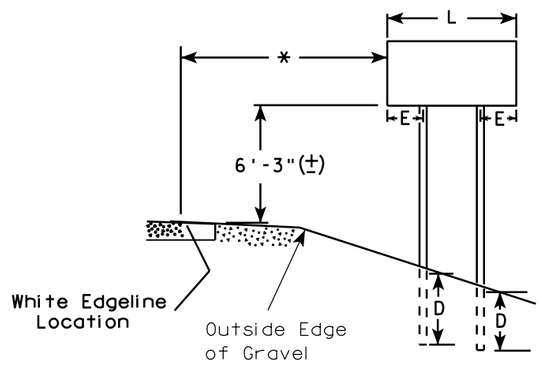
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

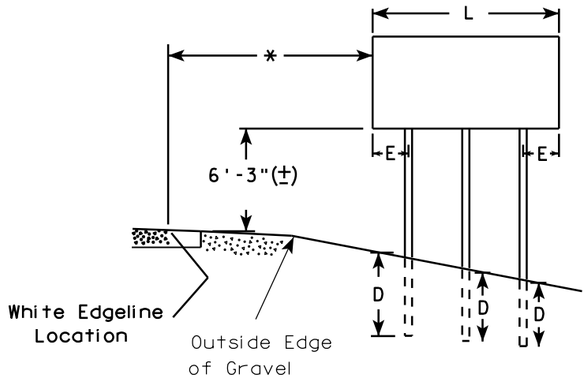
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

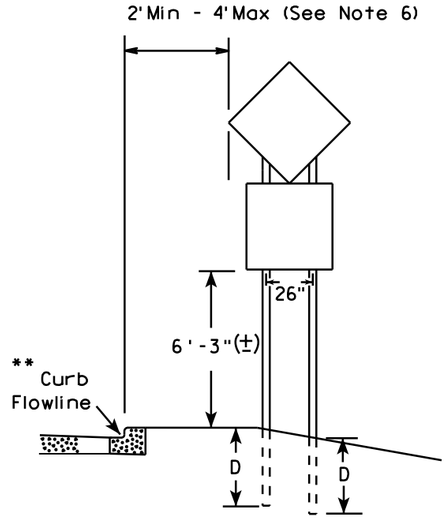
URBAN AREA



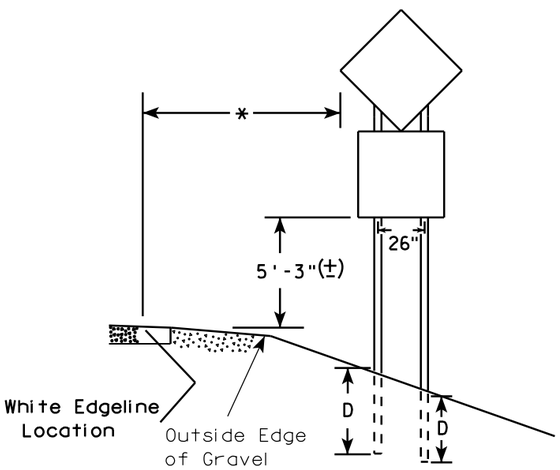
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

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

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

*** See A4-3 sign plate for signs 4' or less in width and 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'

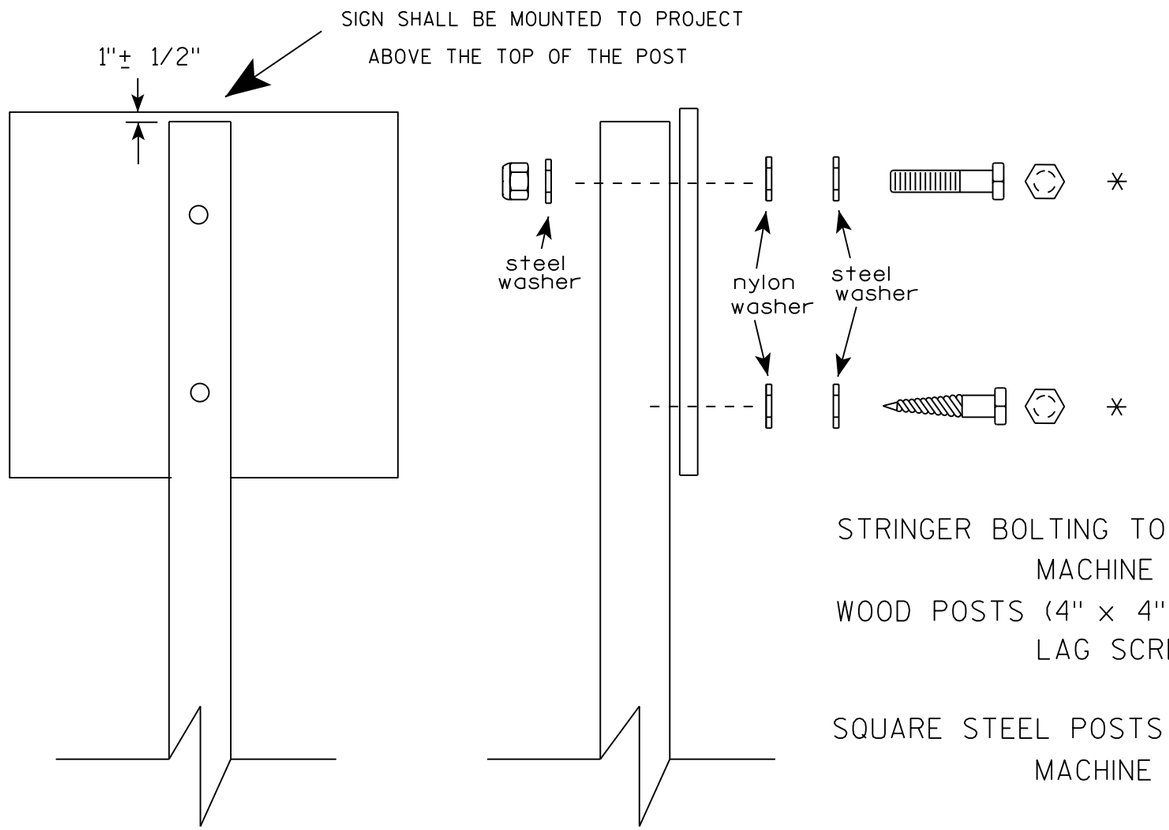
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-4 14

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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

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

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

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts
WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)
SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

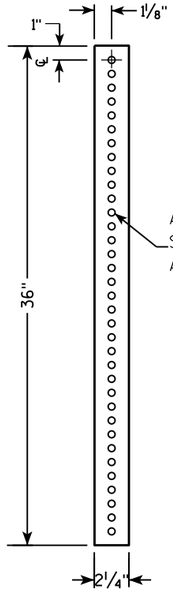
DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: SHEET NO: E

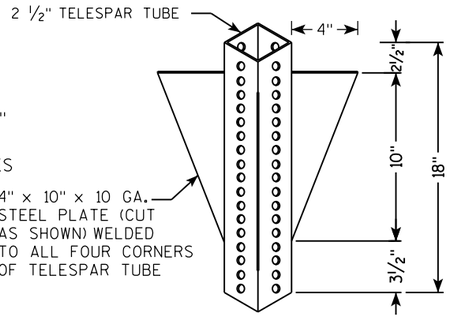
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

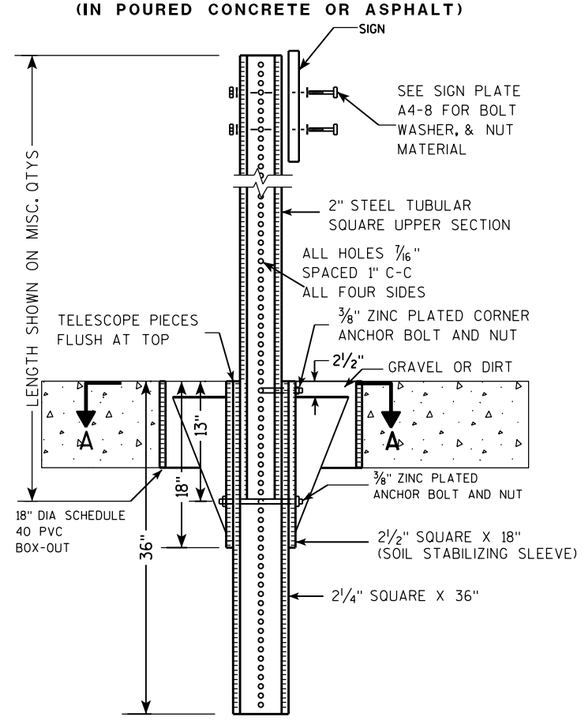
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



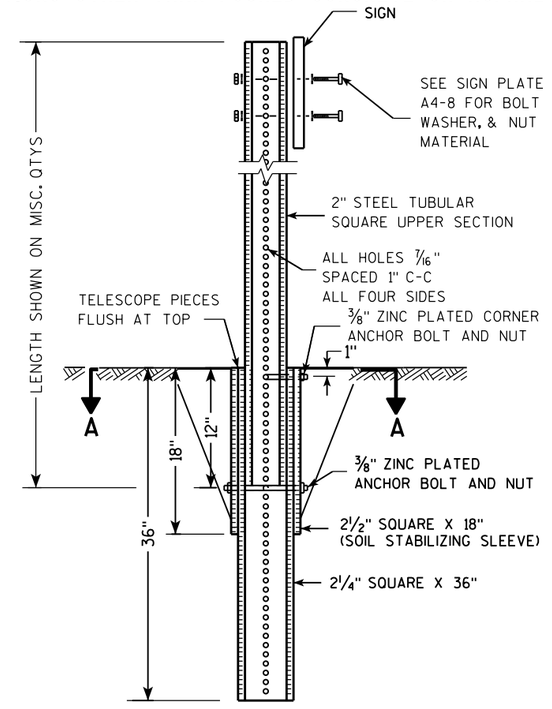
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

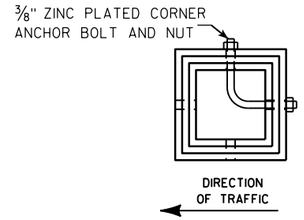


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

TUBULAR STEEL
SIGN POST
A4-9

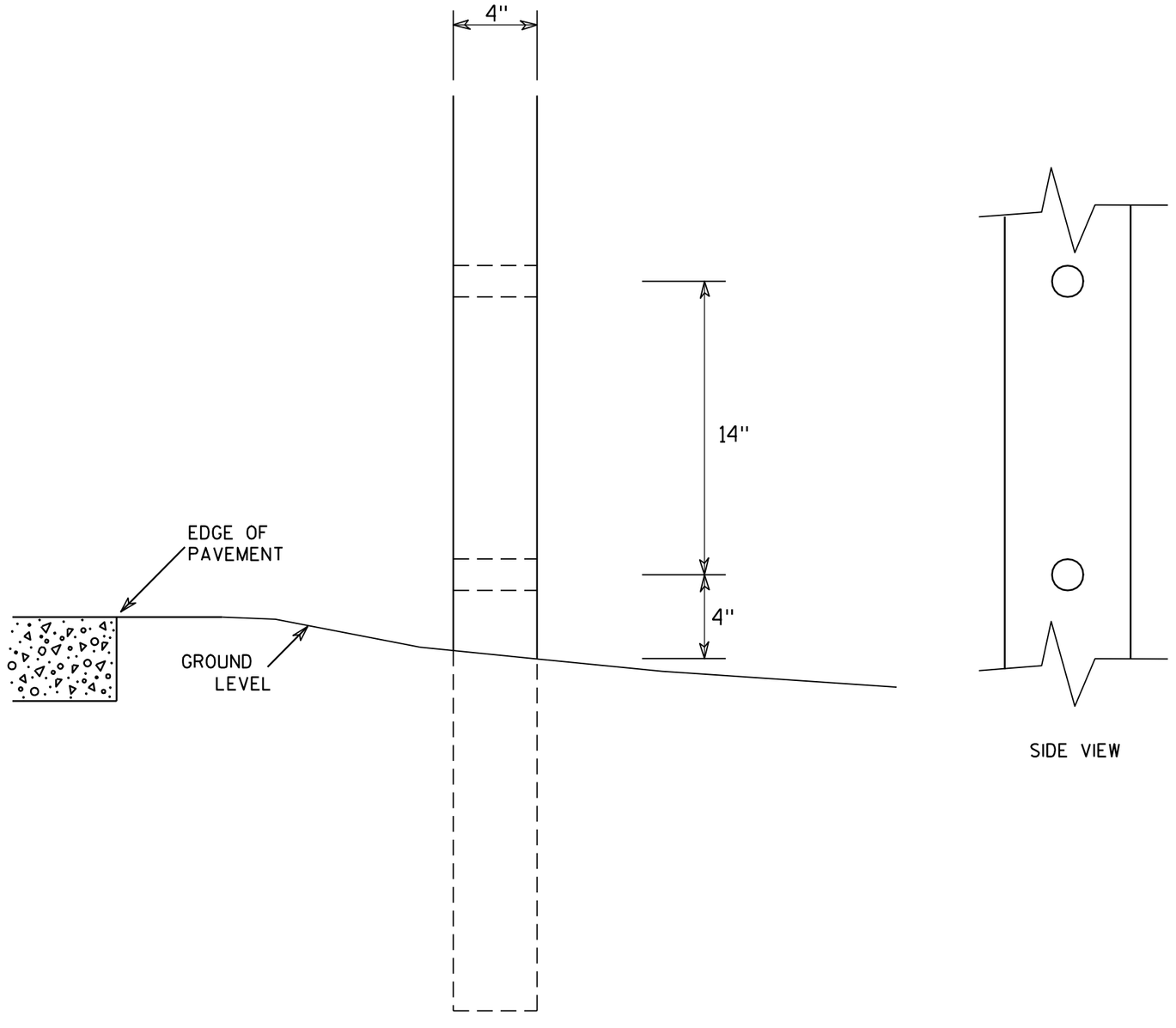
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42



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.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

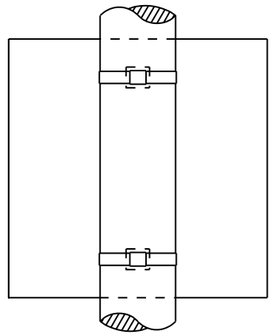
APPROVED Chester J Spang
for State Traffic Engineer

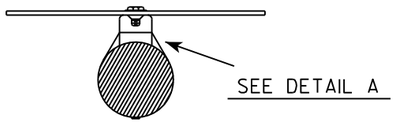
DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 106	E

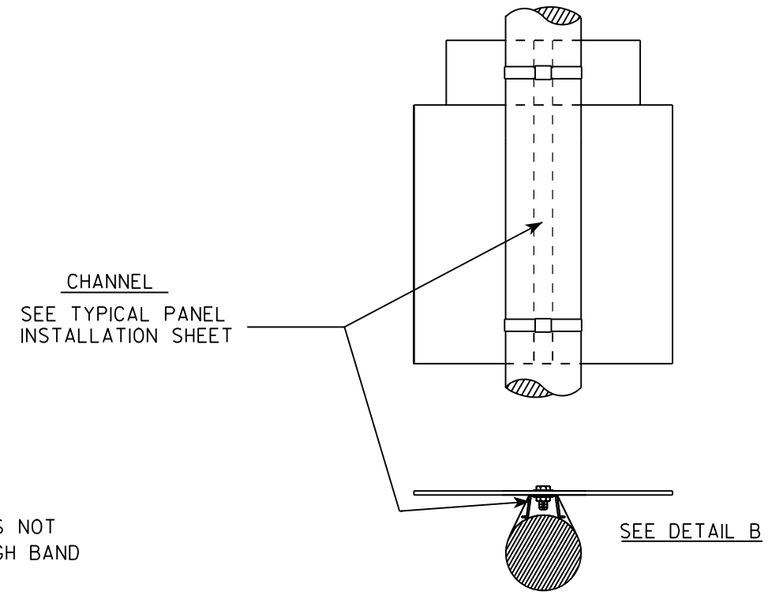
BANDING

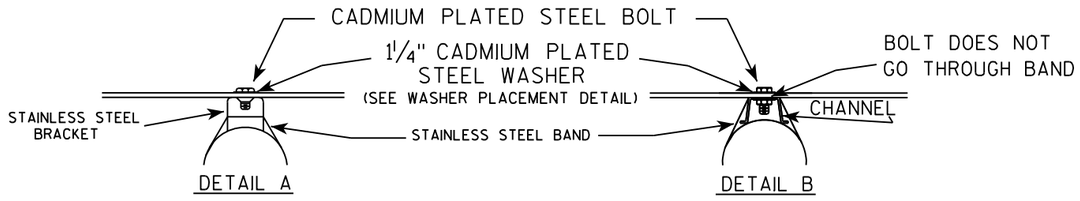
SINGLE SIGN



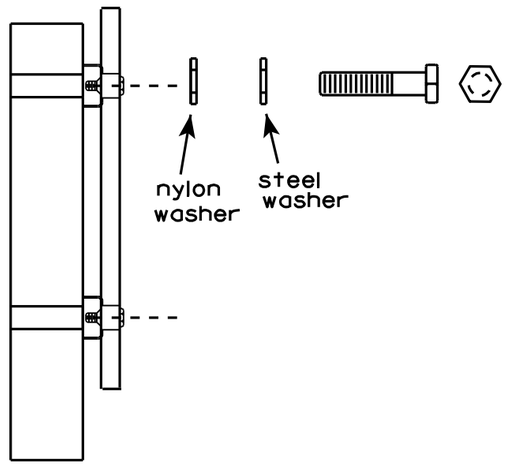


"J" ASSEMBLY





WASHER PLACEMENT



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

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

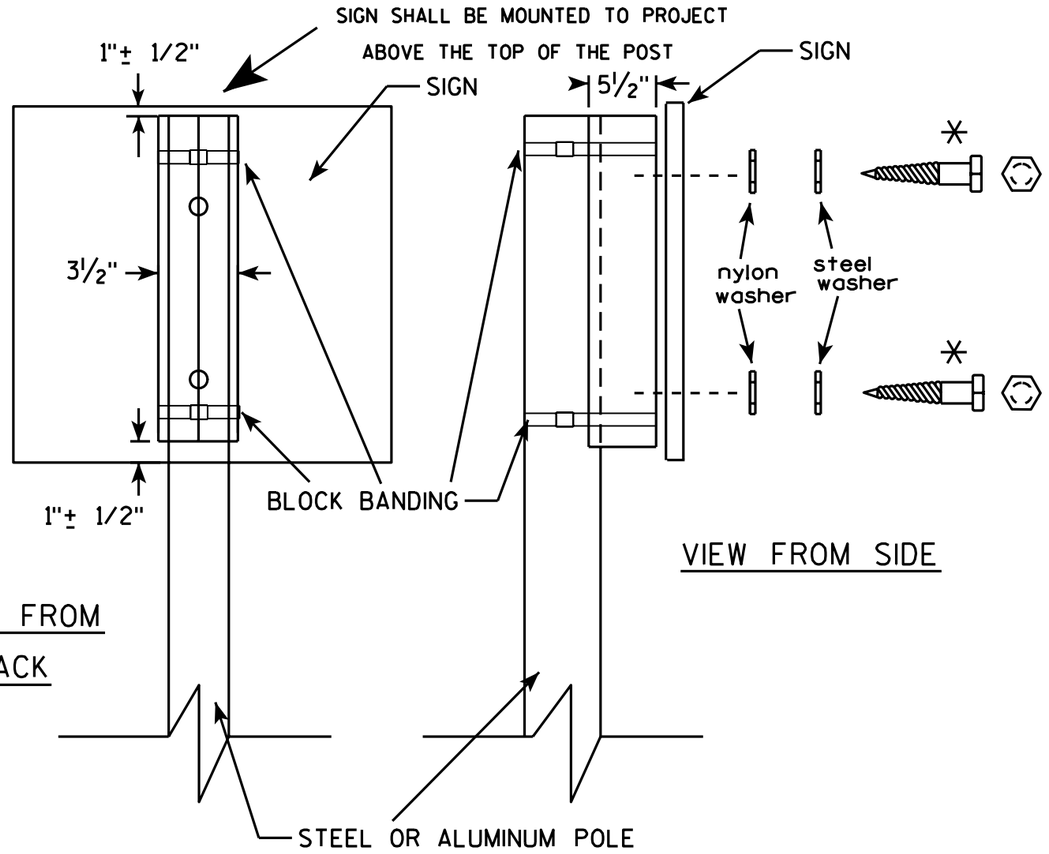
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

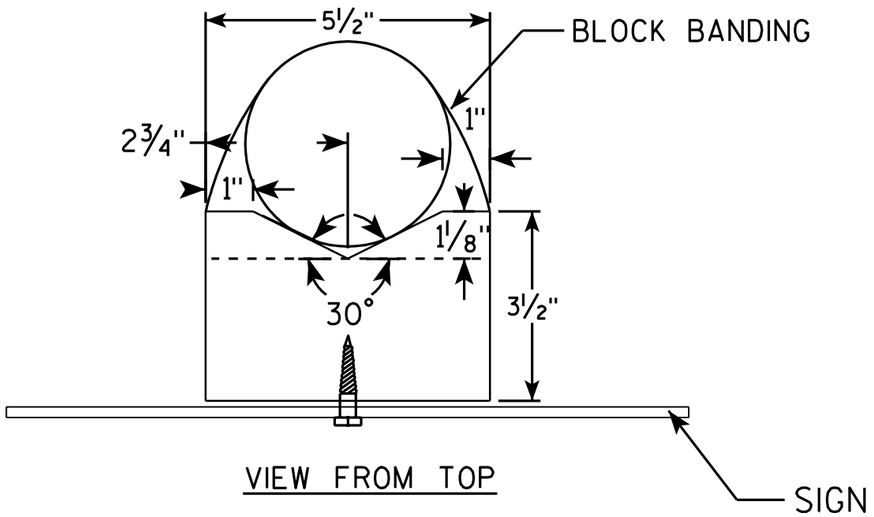
DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 107	E



VIEW FROM SIDE

VIEW FROM BACK



VIEW FROM TOP

GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

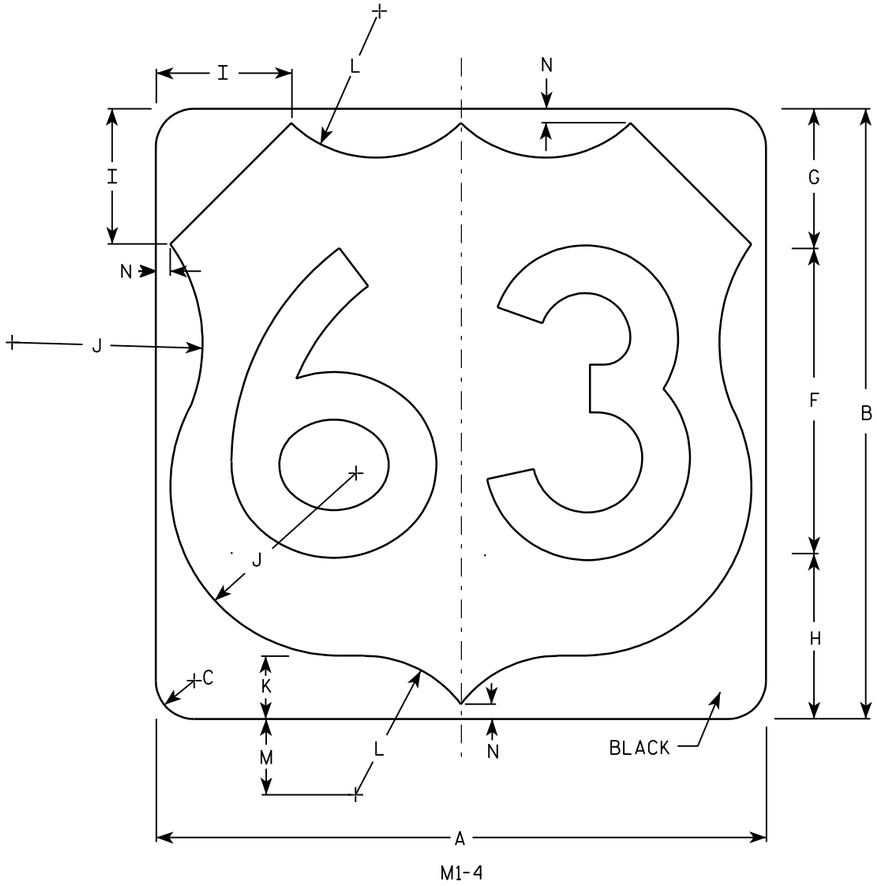
SHEET NO: 108 E

FILE NAME : C:\Users\Projects\tr_stdplate\A510.dgn PLOT DATE : 06-AUG-2007 13:37 PLOT BY : ditjph

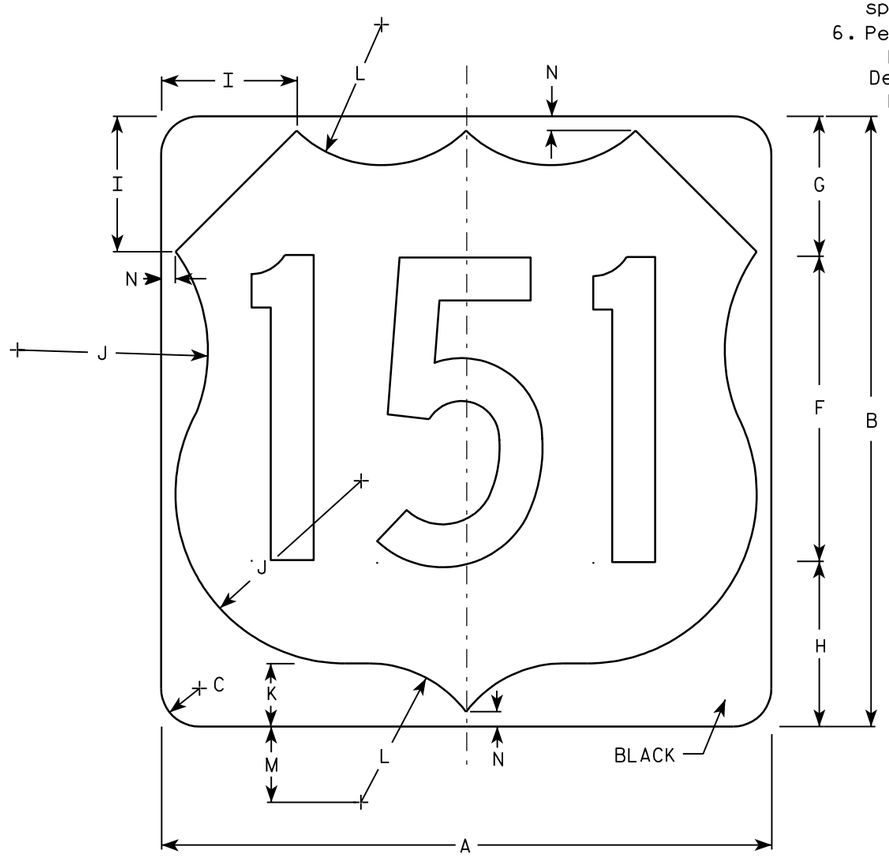
WISDOT/CADDS SHEET 42

NOTES

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



M1-4



M1-4

7

7

Metric equivalent for this sign is:

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

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

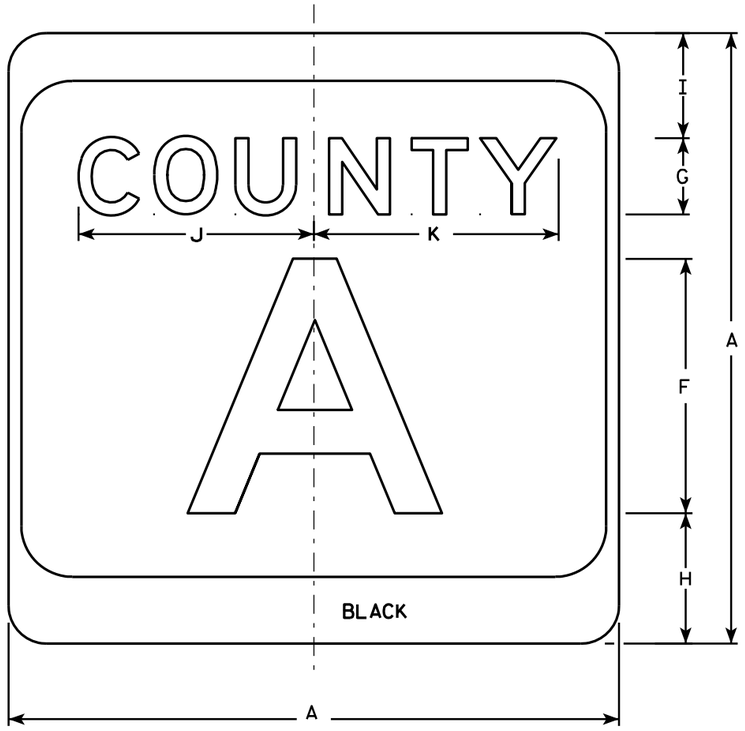
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

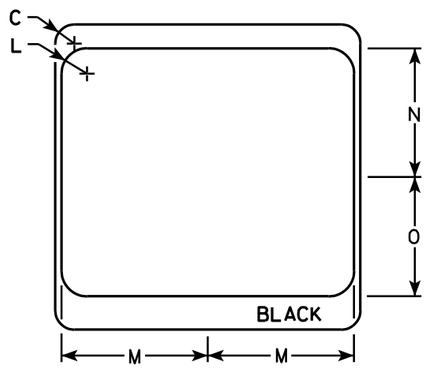
APPROVED Matthew R Rauch
for State Traffic Engineer

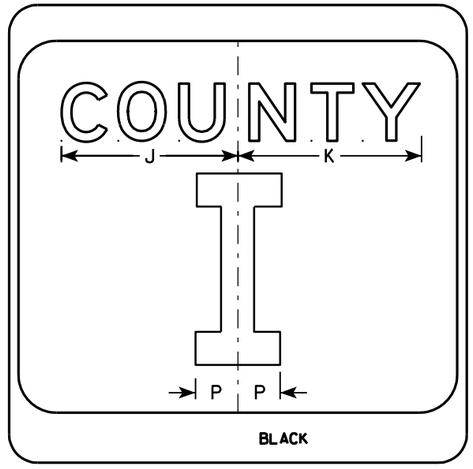
DATE 08/25/05 PLATE NO. M1-4.9

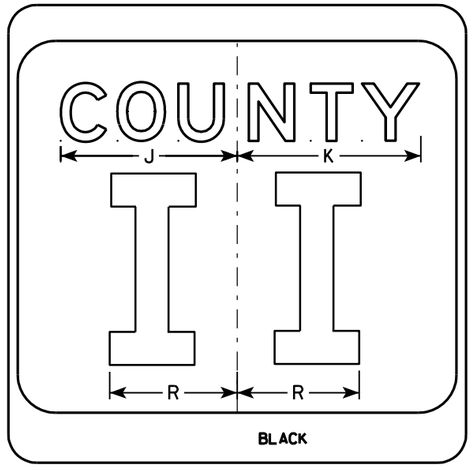
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 109	E



M1-5A







NOTES

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

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

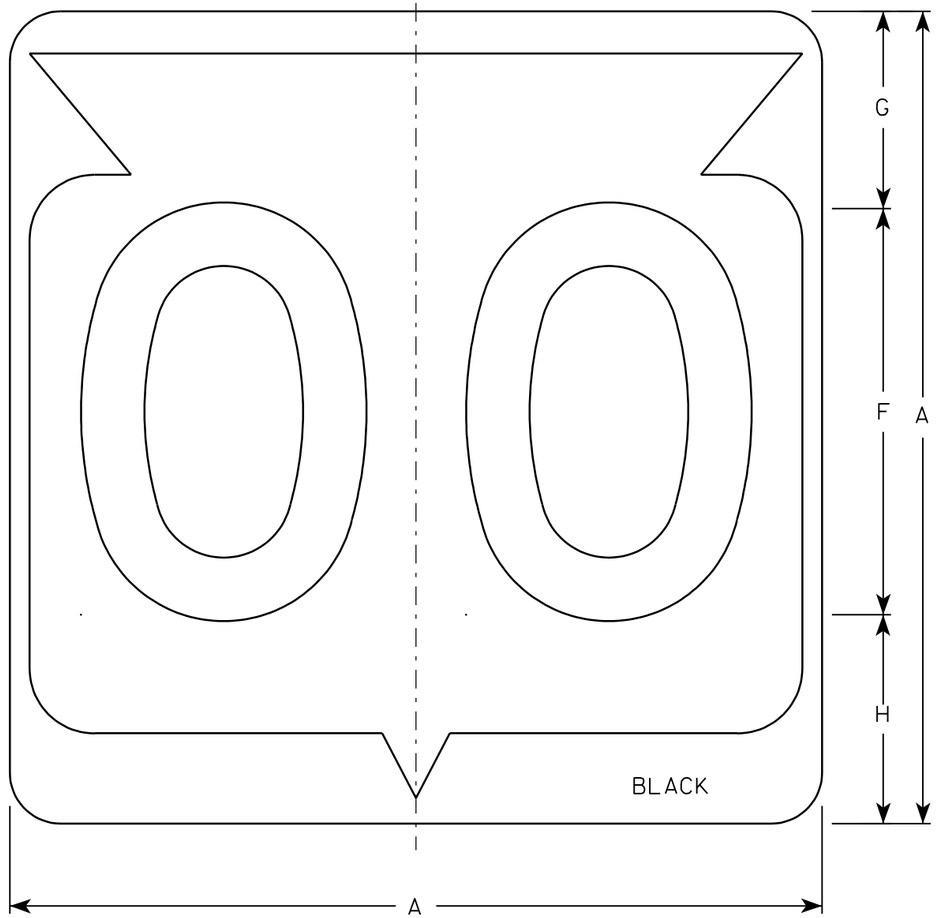
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

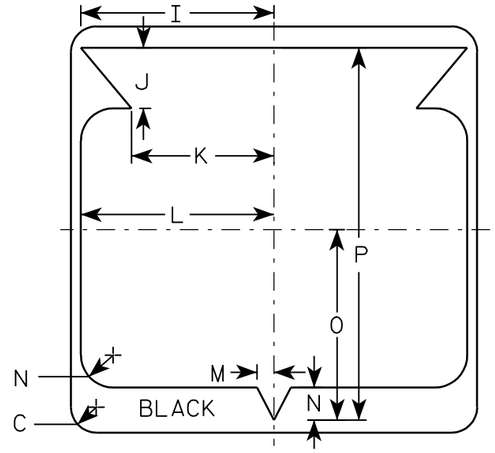
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 110	E



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

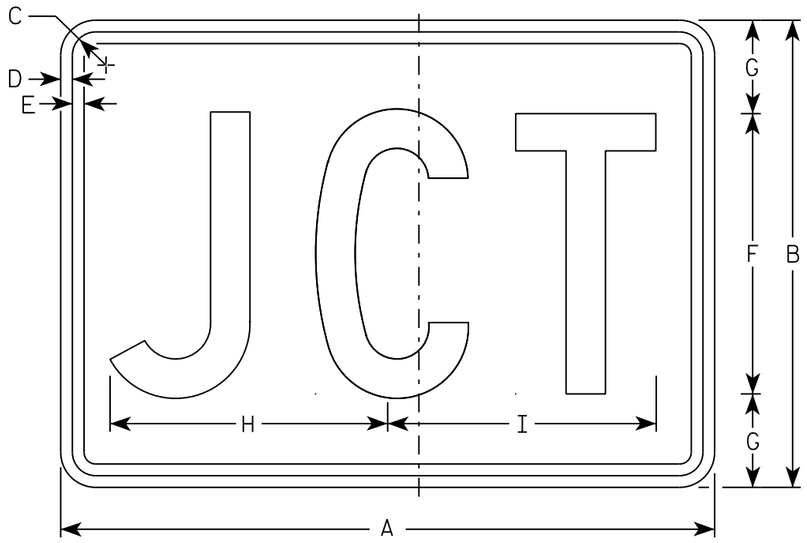
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

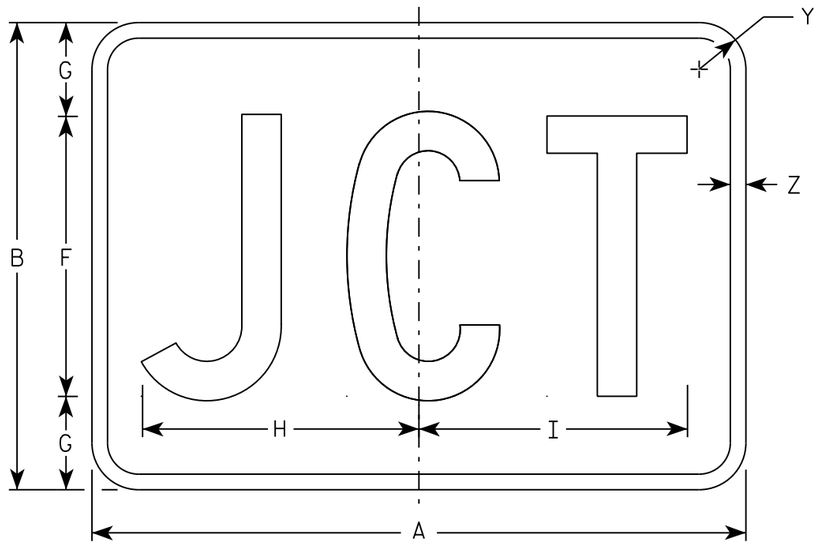
APPROVED Chester J Spang for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 111	E



M2-1
MM2-1
MP2-1



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

NOTES

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

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

STANDARD SIGN
M2-1

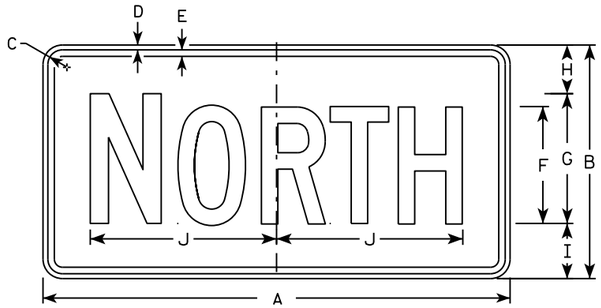
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

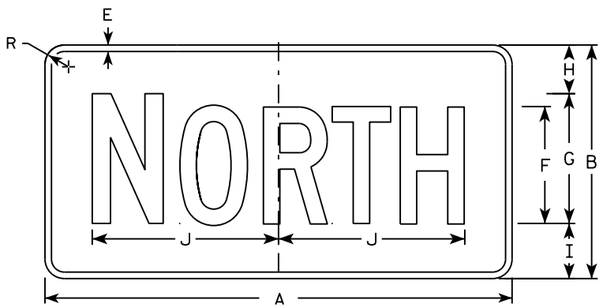
DATE 10/15/15 PLATE 112 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



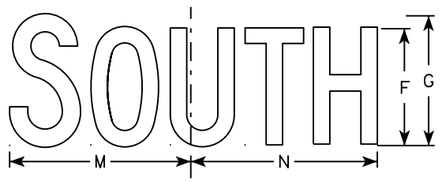
M3-1
MM3-1
MP3-1



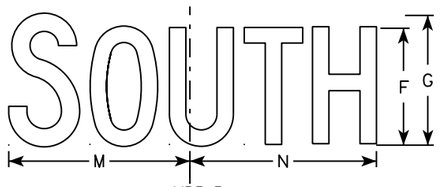
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

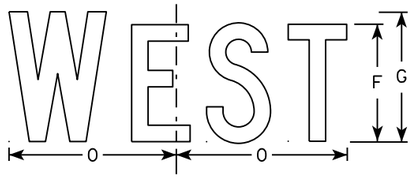
MB3-2
MK3-2
MN3-2



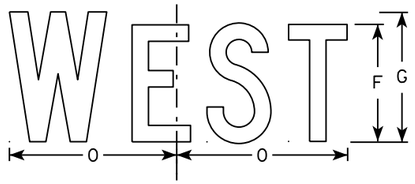
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

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

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

STANDARD SIGNS
M3-1 thur M3-4
SERIES

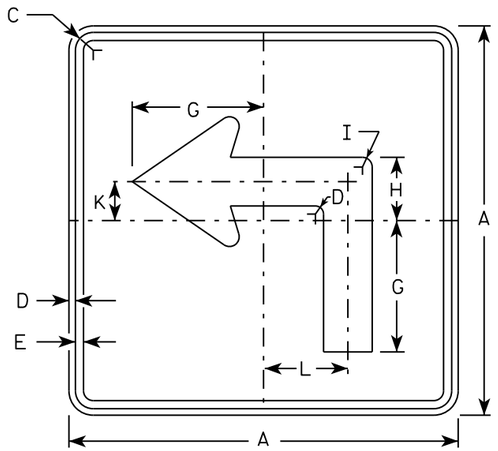
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

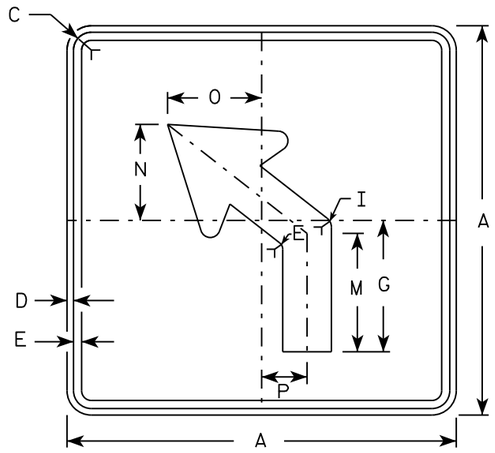
DATE 10/15/15 PLATE NO M3-1.14

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

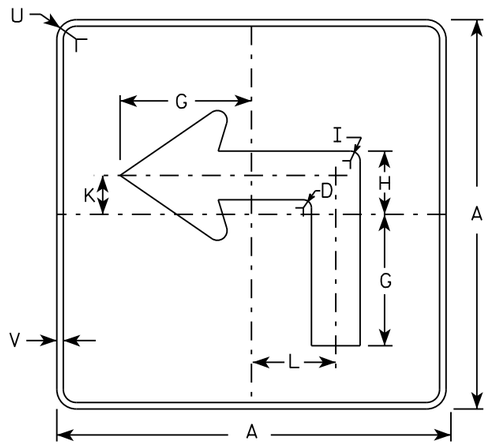
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



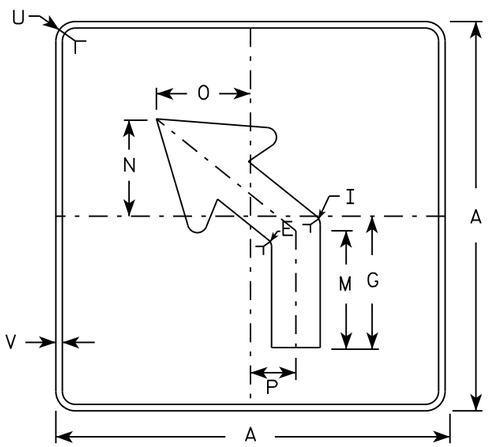
M5-1L
MM5-1L
MO5-1L
MP5-1L



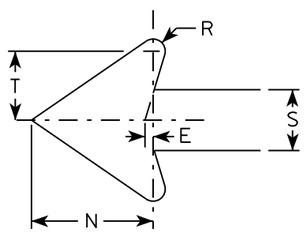
M5-2L
MM5-2L
MO5-2L
MP5-2L



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



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



NOTES

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

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

STANDARD SIGN
M5-1 & M5-2

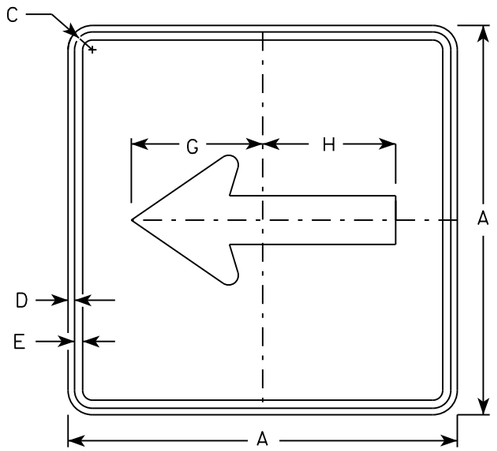
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

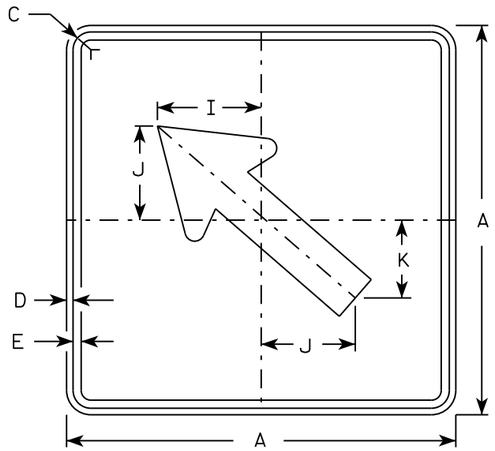
DATE 10/15/15 PLATE NO. M5-1.13

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



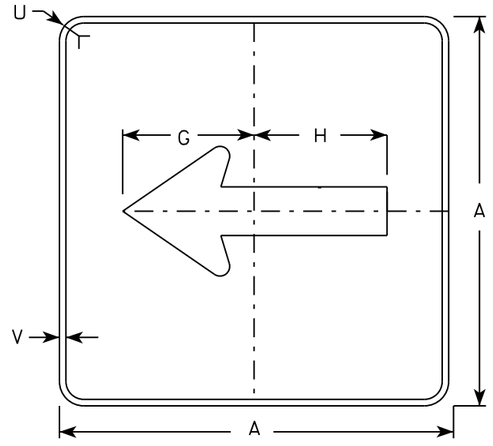
M6-1
MM6-1
MO6-1
MP6-1



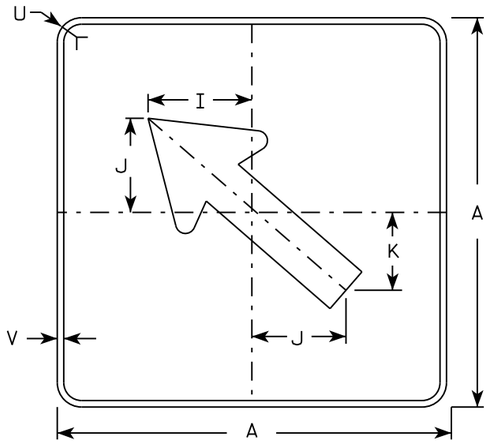
M6-2
MM6-2
MO6-2
MP6-2

NOTES

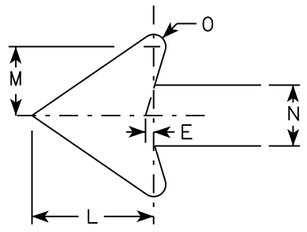
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background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



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



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



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

STANDARD SIGN
M6-1 & M6-2
SERIES

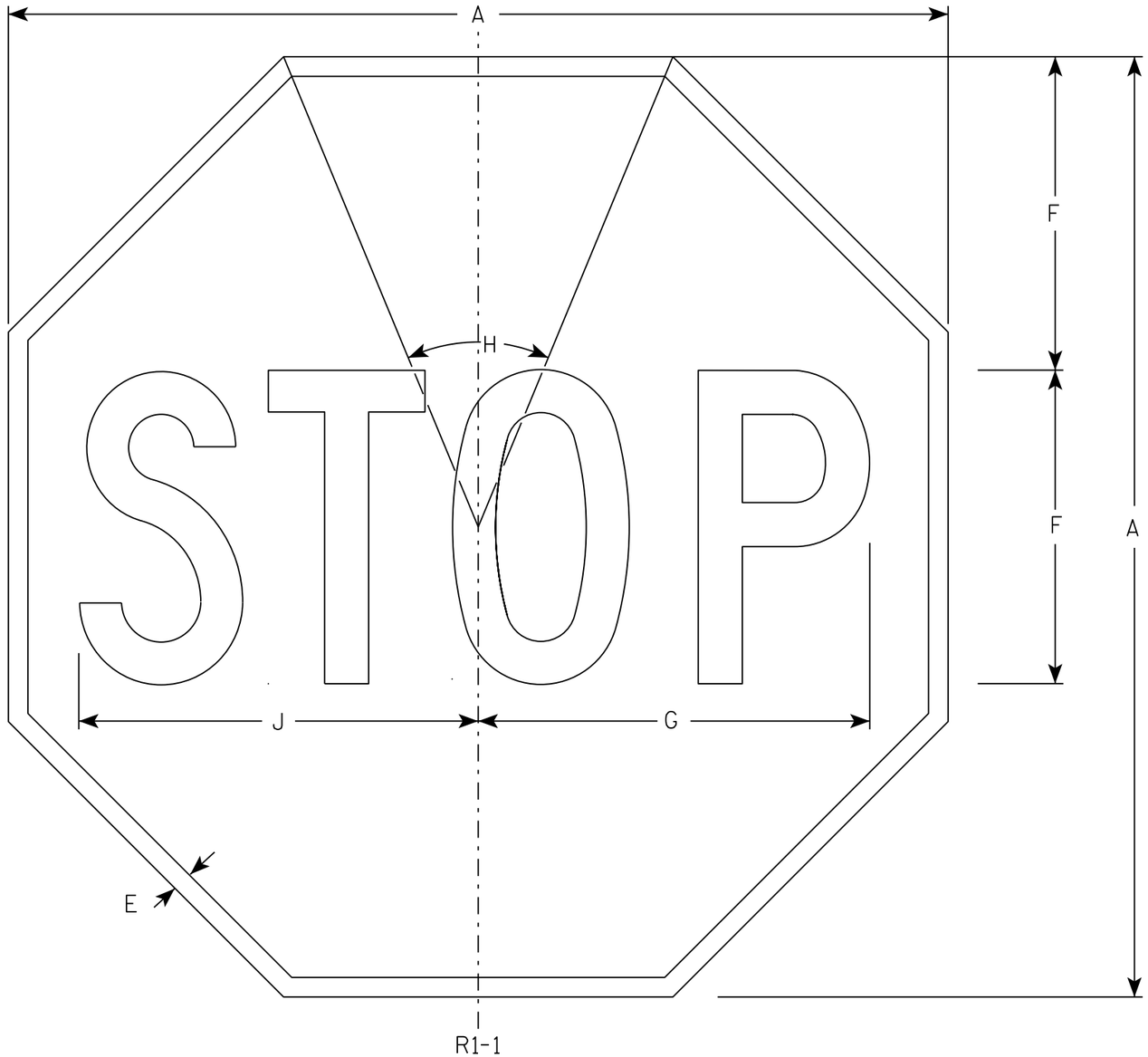
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 115 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



R1-1

NOTES

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

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

STANDARD SIGN
R1-1

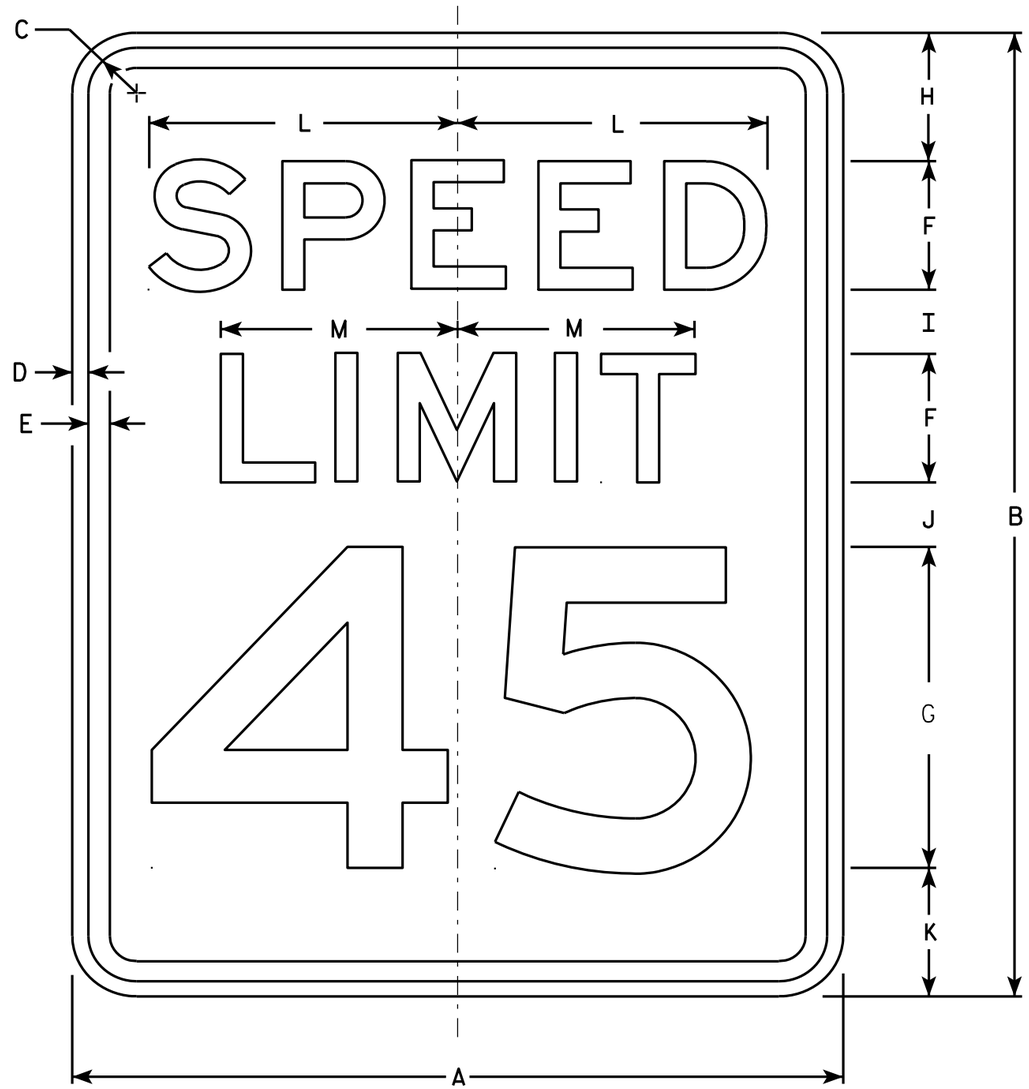
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R11.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.378143:1.000000



R2-1

NOTES

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

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

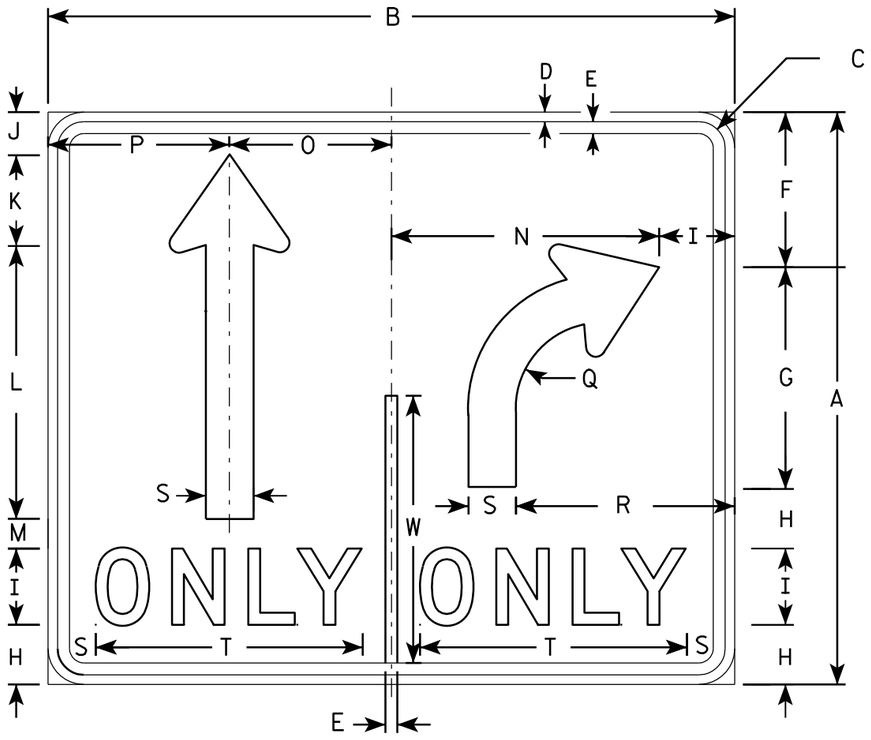
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

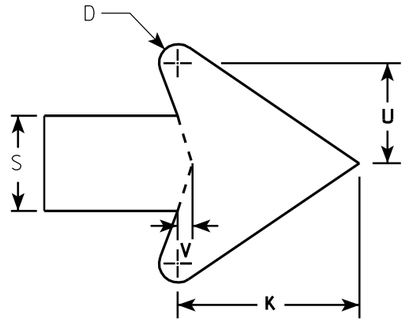
APPROVED Matthew R Rauch
for State Traffic Engineer

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

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



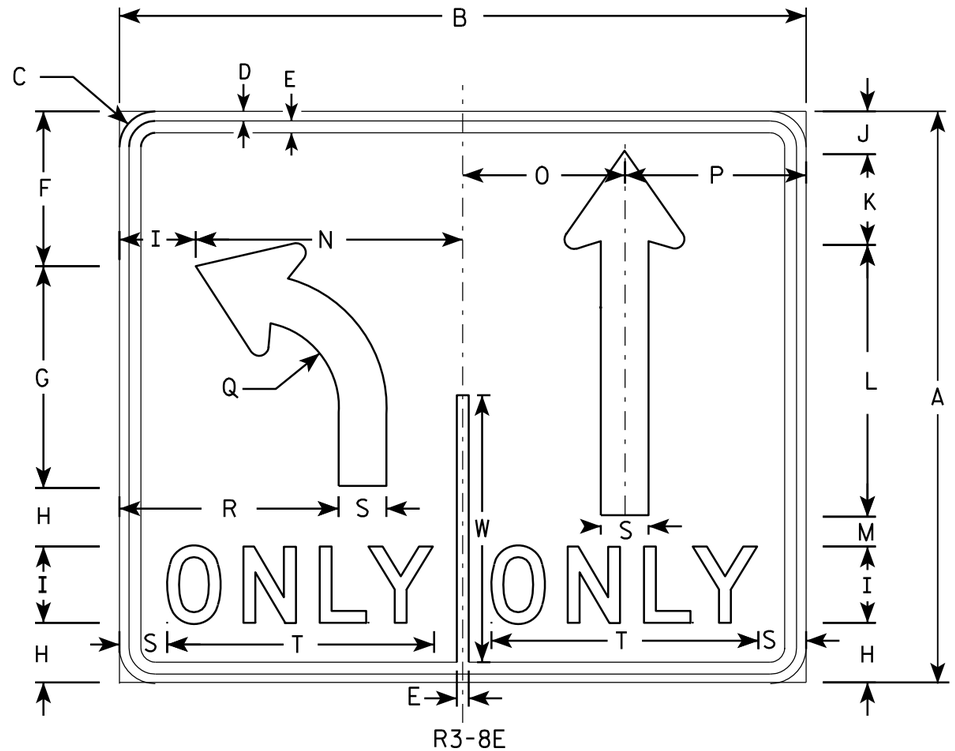
R3-8D



ARROW DETAIL

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.



R3-8E

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	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	14	8 1/2	9 1/2	4 1/2	11 1/2	2 1/2	14	2 5/8	3/8	14				7.5
2M	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	14	8 1/2	9 1/2	4 1/2	11 1/2	2 1/2	14	2 5/8	3/8	14				7.5
3																											
4	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	3 1/2	7 1/8	21 1/2	4 3/4	21	12 3/4	14 1/4	7 1/4	17 1/8	3 3/4	20 5/8	4	5/8	22 3/8				18.0
5	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	3 1/2	7 1/8	21 1/2	4 3/4	21	12 3/4	14 1/4	7 1/4	17 1/8	3 3/4	20 5/8	4	5/8	22 3/8				18.0

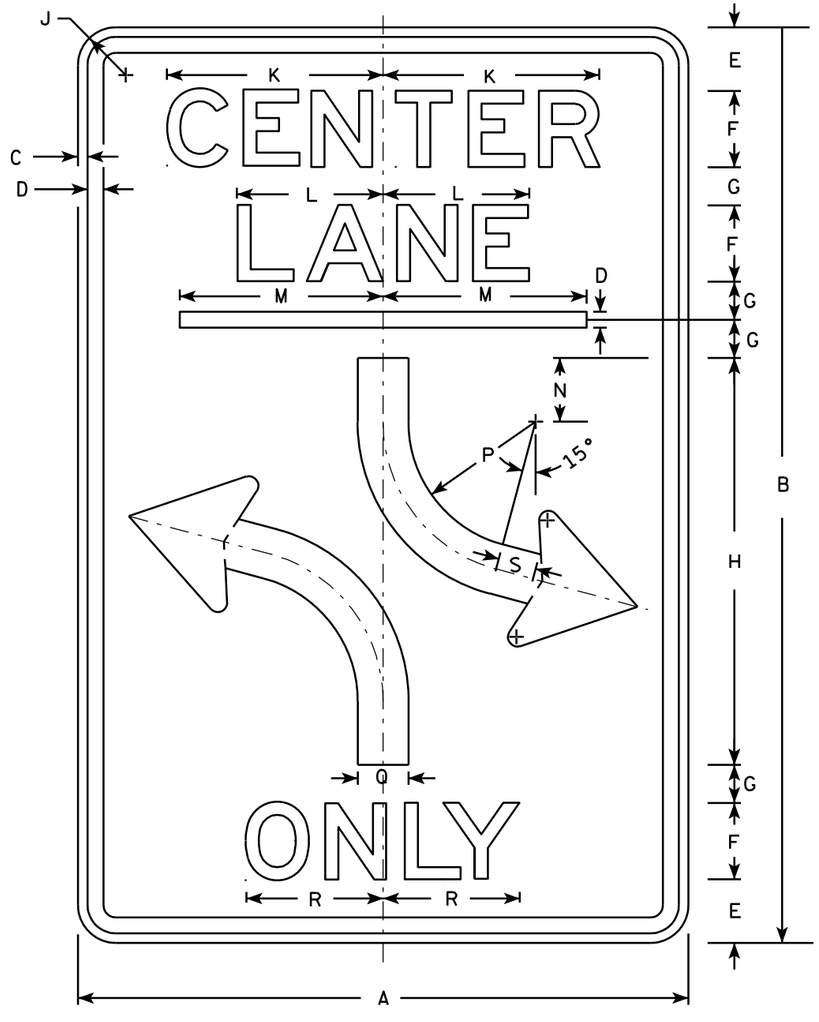
STANDARD SIGN
R3-8D & R3-8E

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8D.2

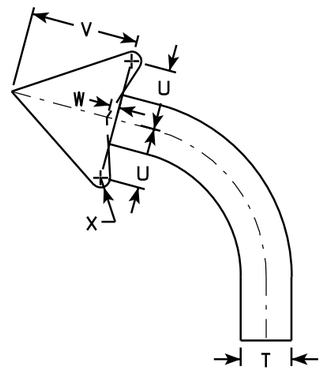
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 118	E



R3-9B

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	3/8	1/2	2 1/2	3	1 1/2	16		1 1/2	8 1/2	5 3/4	8	2 1/2		6	2	5 1/8	1 1/2		2 3/8	4 3/8	3/8				6.0
2M	24	36	3/8	1/2	2 1/2	3	1 1/2	16		1 1/2	8 1/2	5 3/4	8	2 1/2		6	2	5 1/8	1 1/2		2 3/8	4 3/8	3/8				6.0
3	36	48	5/8	7/8	3 1/2	5	1 1/2	20		2 1/4	14 1/8	9 1/2	12	3		4	3	9 7/8	2		3 1/2	6 1/8	1/2				12.0
4																											
5																											

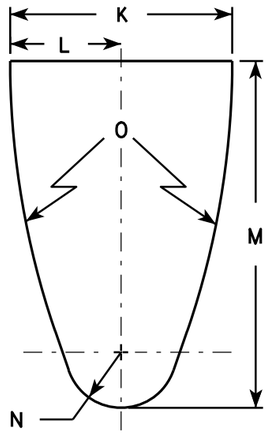
STANDARD SIGN
R3-9B

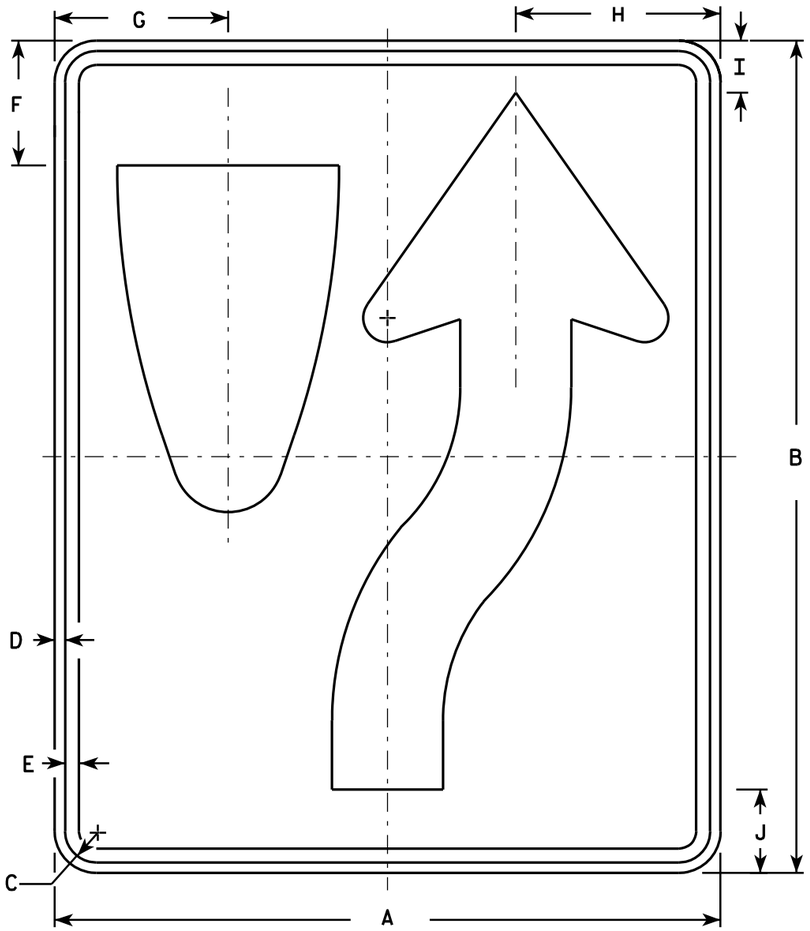
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-9B.5

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

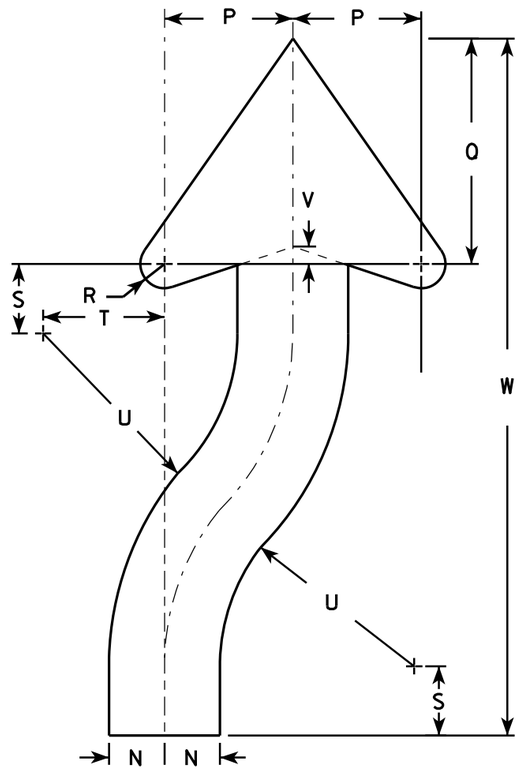




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

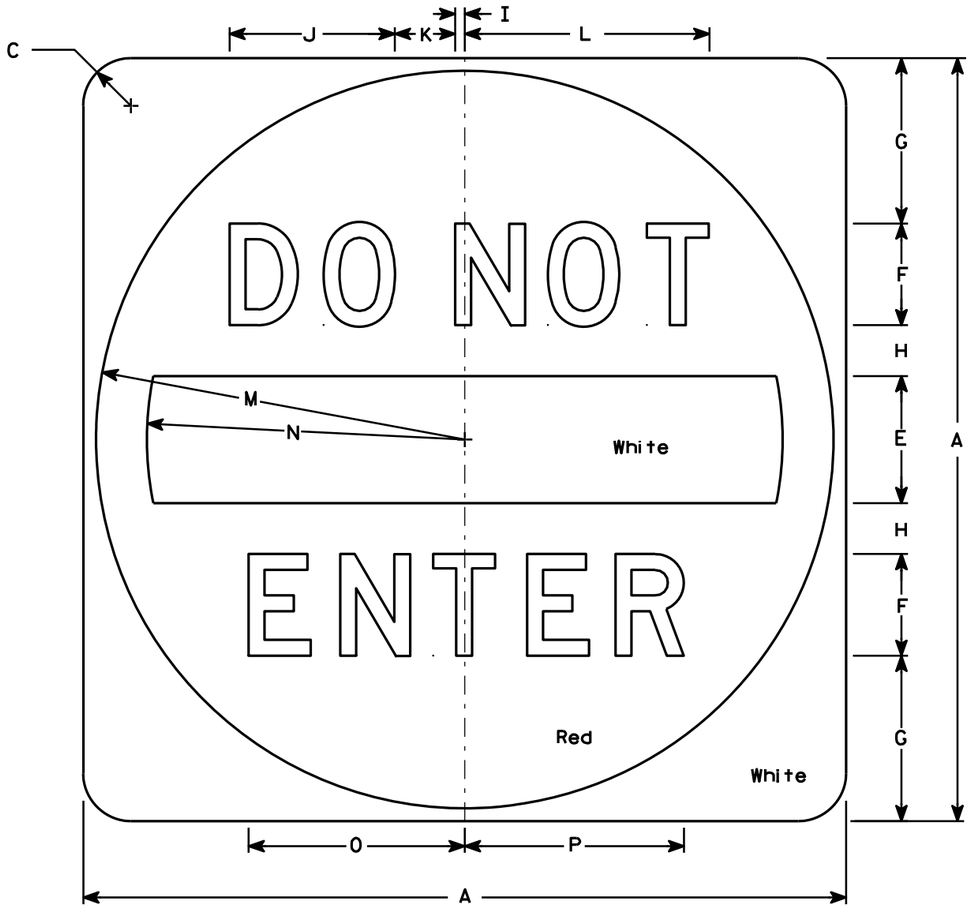
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 120	E



R5-1

NOTES

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

SIZE	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	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

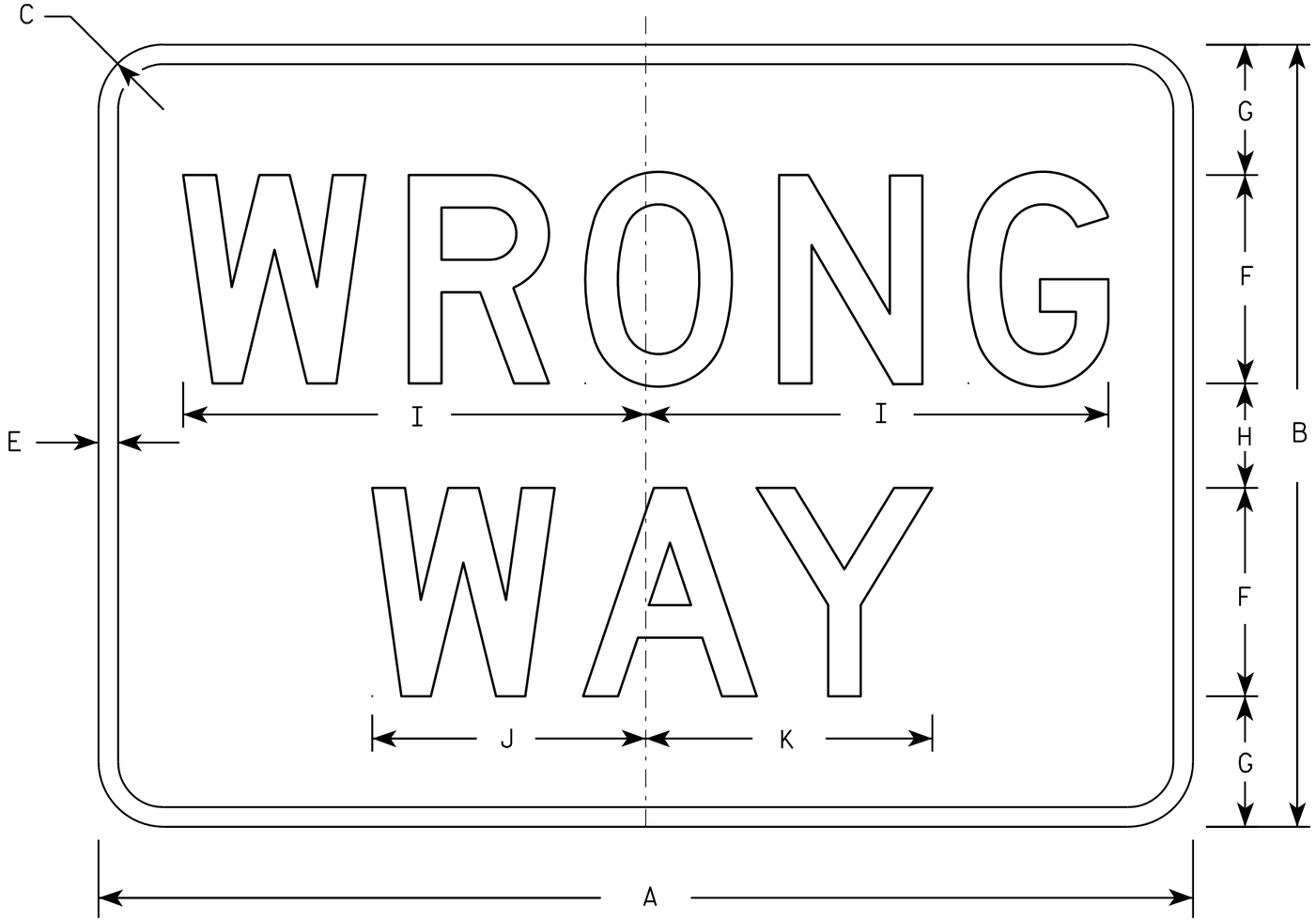
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15

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



R5-1A

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

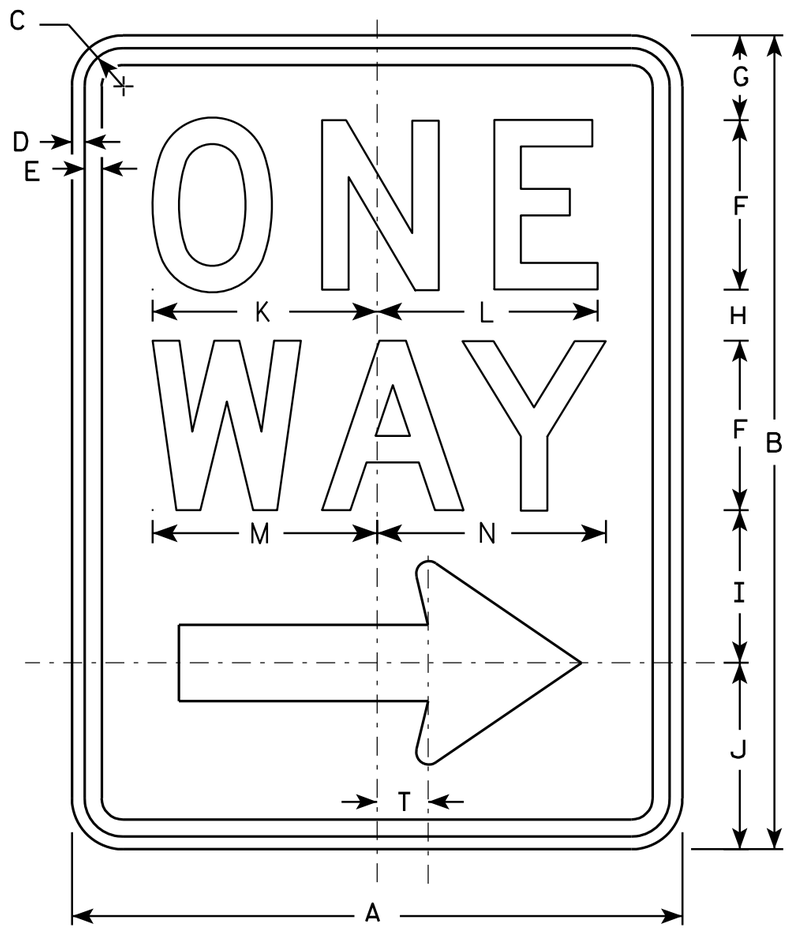
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

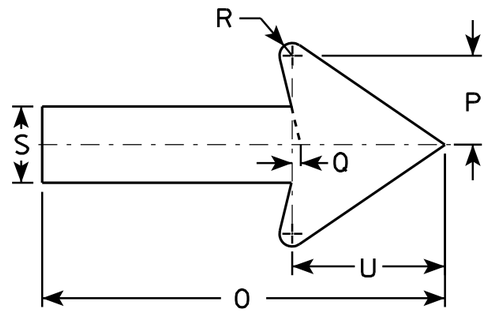
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 122 | E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



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
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

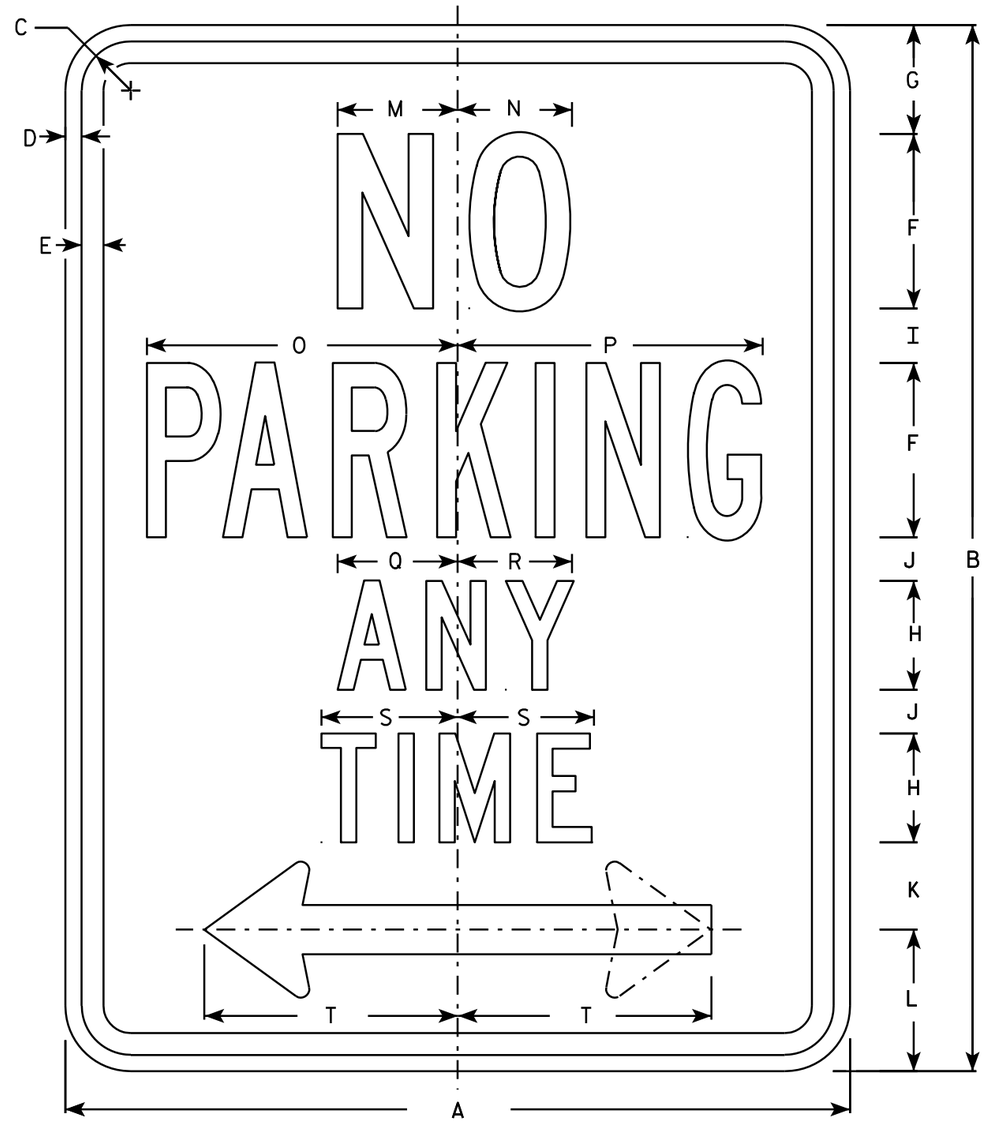
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

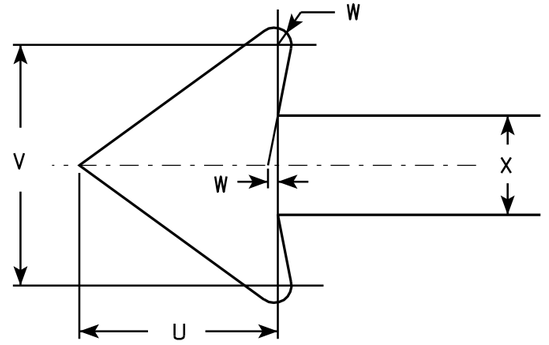
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 123	E



R7-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
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, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



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

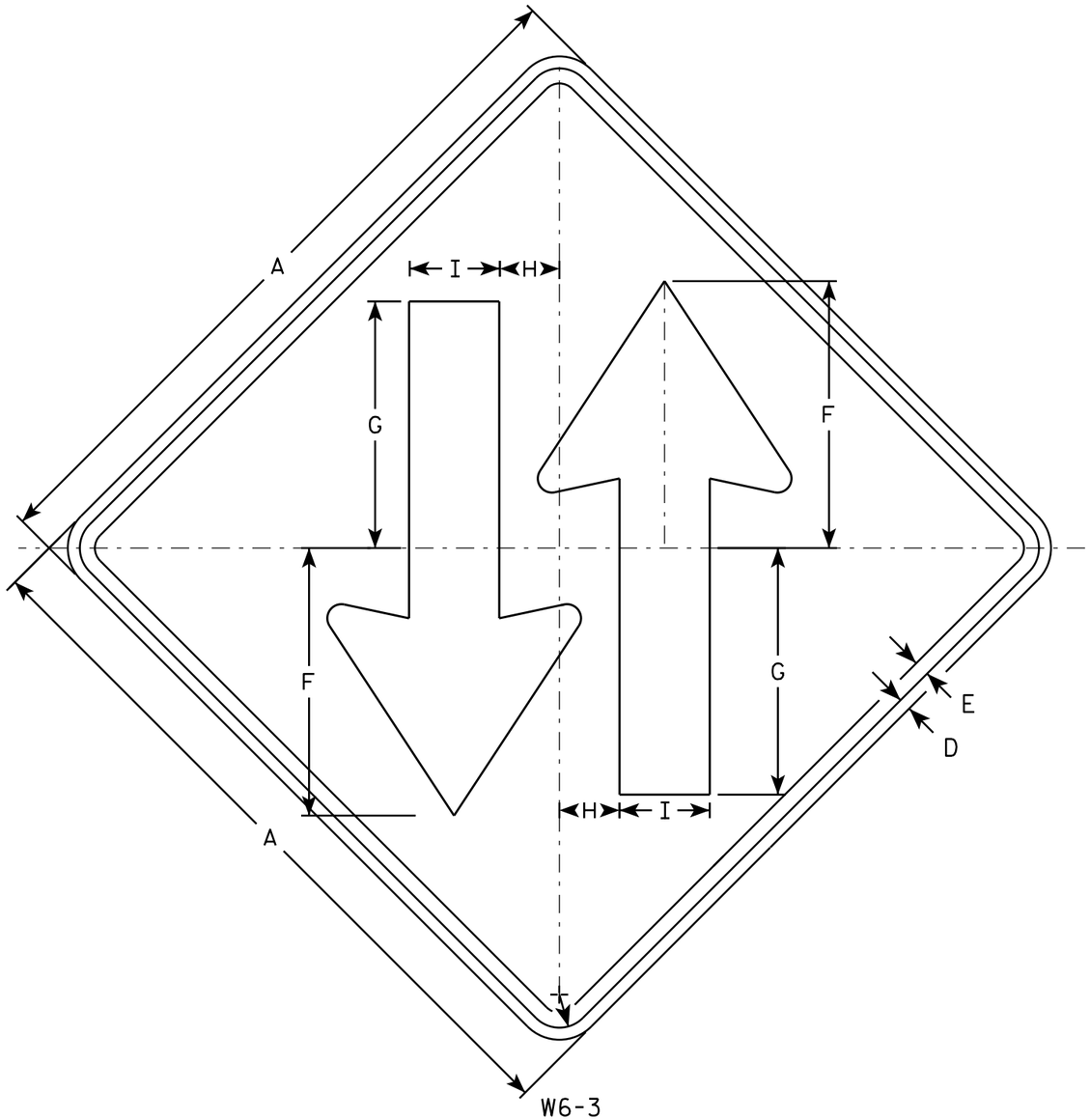
STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

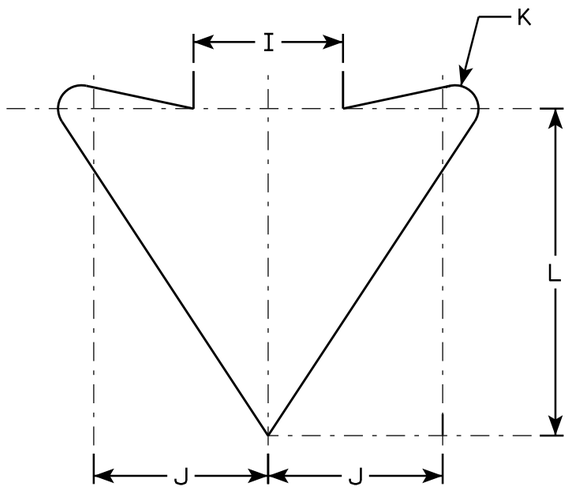
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 124	E



W6-3

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.



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	11 1/8	10 1/4	2 1/2	3 3/4	4 3/8	5/8	8 1/4															6.25
2S	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
2M	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
3																											
4	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0
5	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0

STANDARD SIGN
W6-3

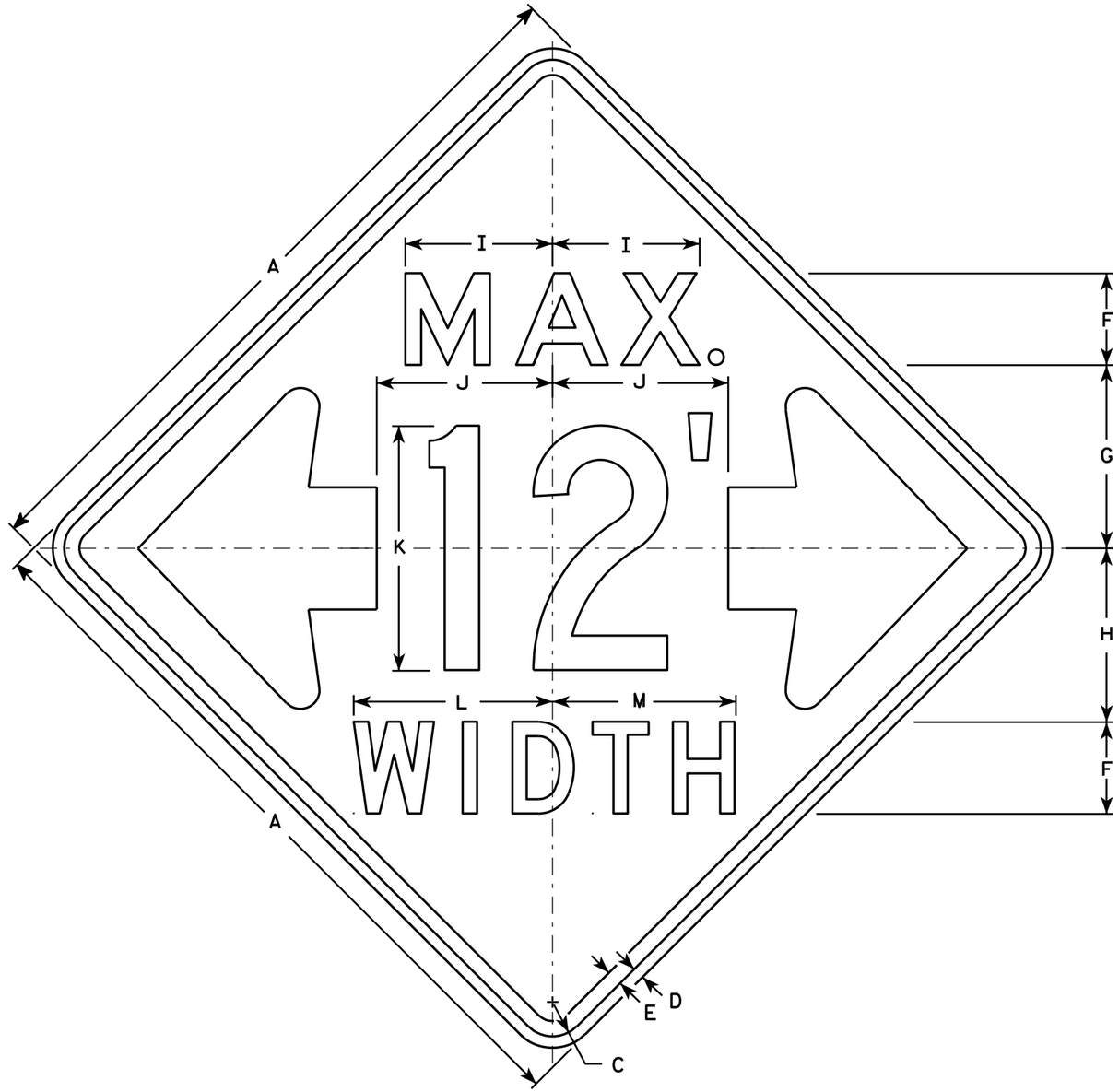
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/10/16 PLATE W6-3.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

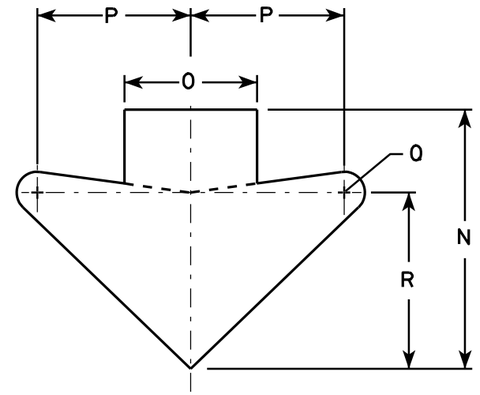
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W63.DGN PLOT DATE : 10-MAR-2016 14:01 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.080757:1.000000 WISDOT/CADDS SHEET 42



W12-52

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. The top line is series E, the numerals are series C, and the bottom line is series D.
6. Substitute appropriate numerals and adjust spacing as required.



ARROW DETAIL

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

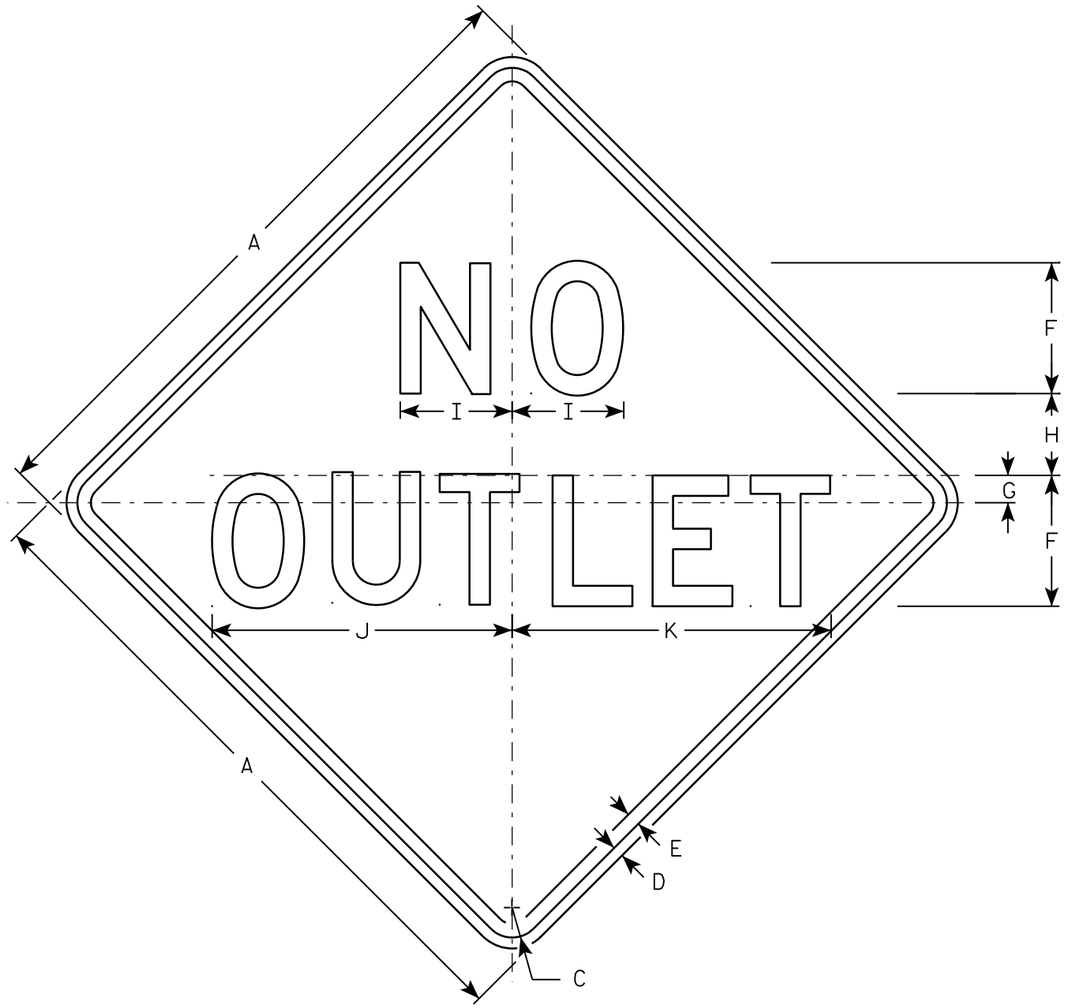
STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-52.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 126	E



W14-2

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. 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	1/2	5	1	2 3/4	4 1/8	11 3/4	12 3/8																4.0
2S	30		1 3/8	1/2	5/8	6	1 1/4	3 3/4	5 1/8	13 3/4	14 5/8																6.25
2M	30		1 3/8	1/2	5/8	6	1 1/4	3 3/4	5 1/8	13 3/4	14 5/8																6.25
3	36		1 5/8	5/8	3/4	7	1 3/8	4 5/8	6	16 1/8	17 1/8																9.0
4																											
5																											

STANDARD SIGN
W14-2

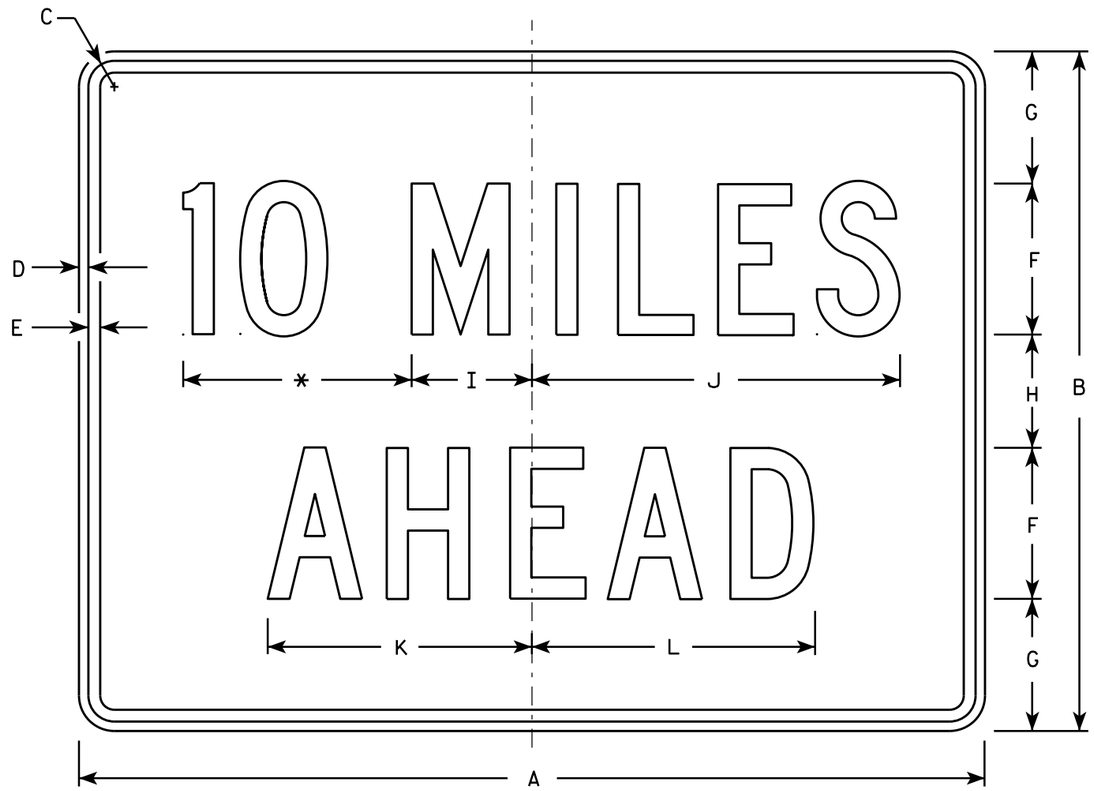
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

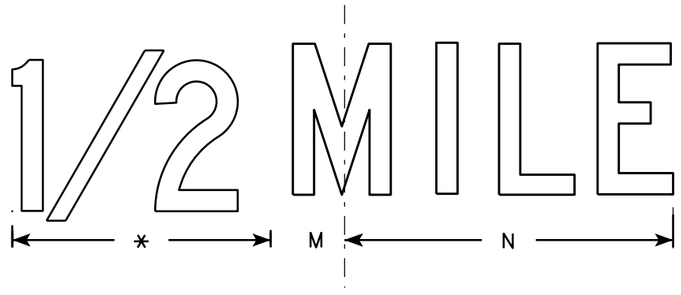
DATE 3/13/13 PLATE NO. W14-2.3

PROJECT NO:

SHEET NO: 127 E



W057-52



NOTES

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

* See note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	13													6.0
2S	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	17 3/8													12.0
2M	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	17 3/8													12.0
3	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	17 3/8													12.0
4	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	17 3/8													12.0
5	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	17 3/8													12.0

STANDARD SIGN
W057-52

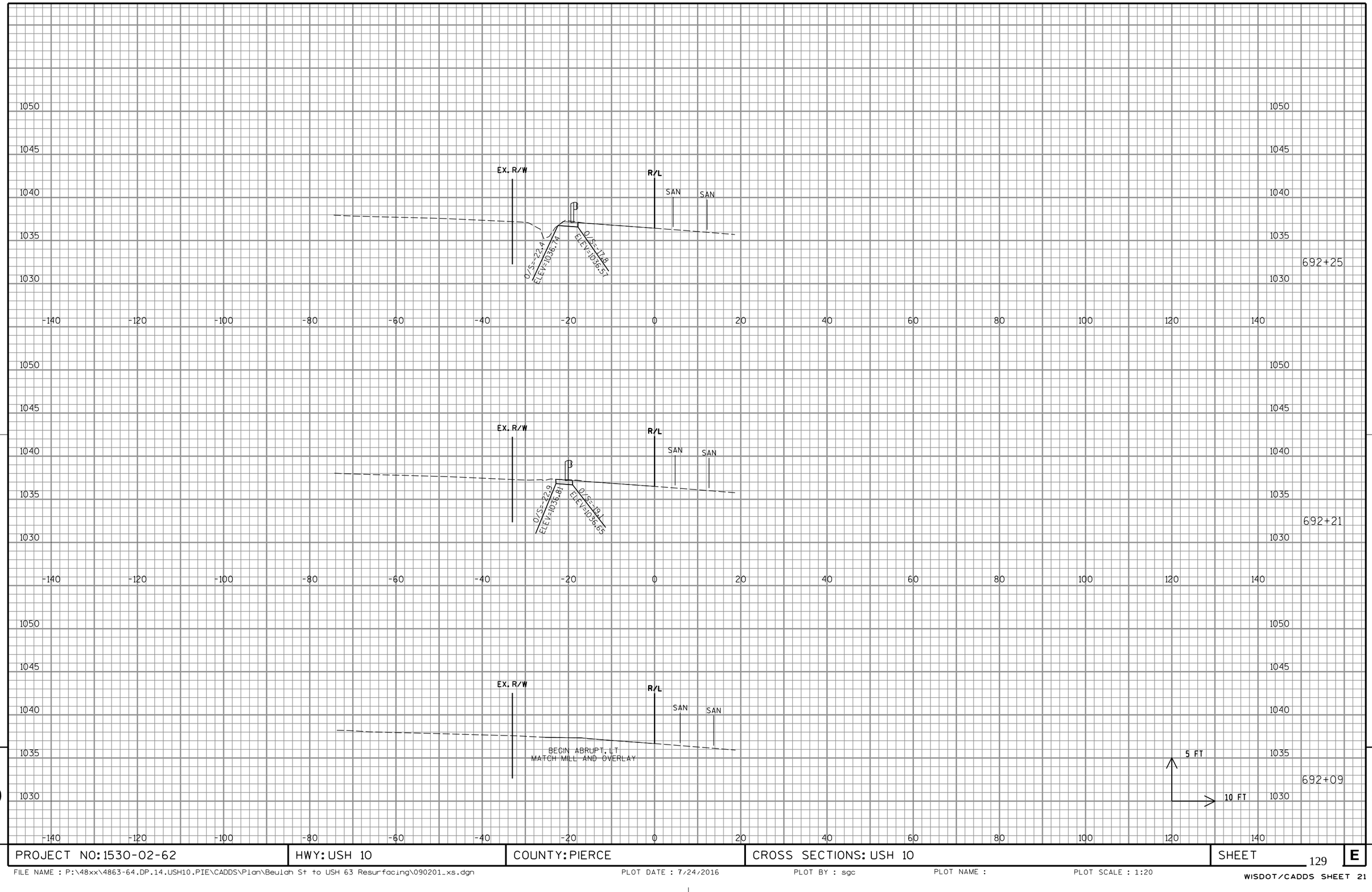
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W057-52.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W05752.DGN PLOT DATE : 28-FEB-2014 11:42 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 8.026599:1.000000 WISDOT/CADDS SHEET 42



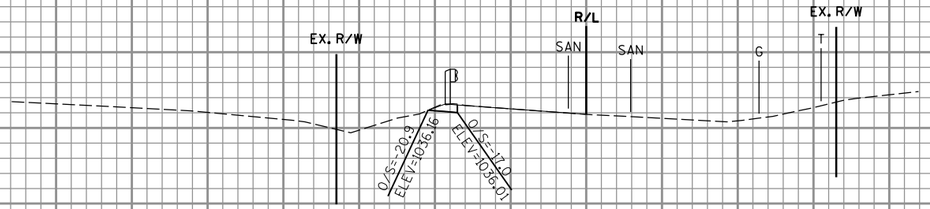
9

9

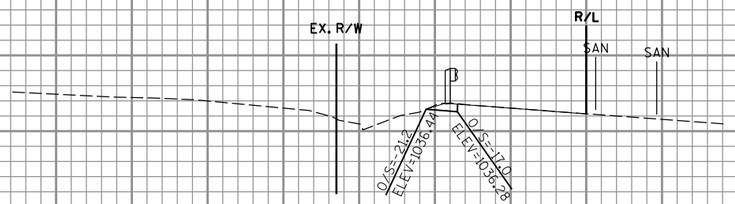
PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 129	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\090201_xs.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

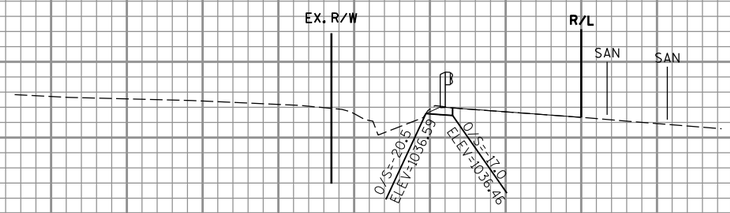
WISDOT/CADDS SHEET 21

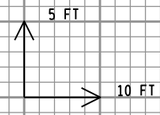


692+75



692+50





692+33

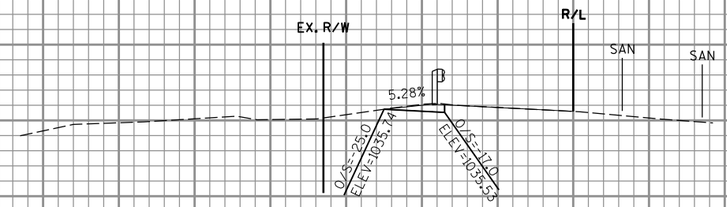
9

9

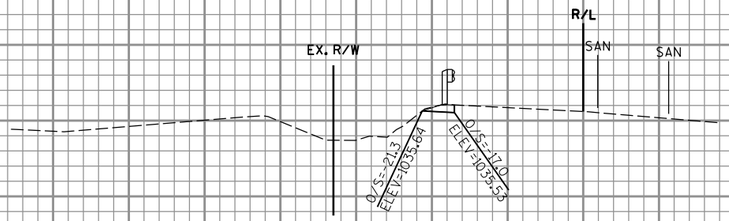
PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 130	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\090201_xs.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

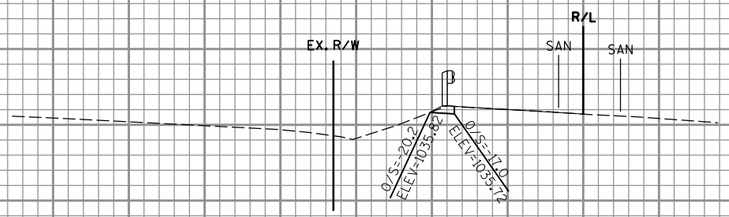
WISDOT/CADDS SHEET 21



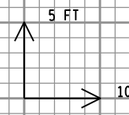
693+50



693+25



693+00

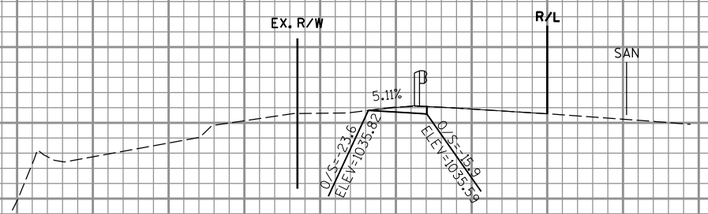


9

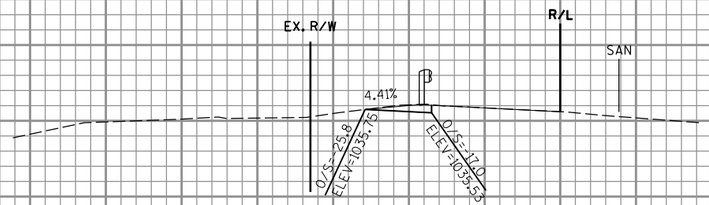
9

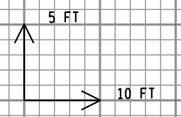
PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 131	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\090201_xs.dgn
PLOT DATE : 7/24/2016
PLOT BY : sgc
PLOT NAME :
PLOT SCALE : 1:20
WISDOT/CADDS SHEET 21



693+75



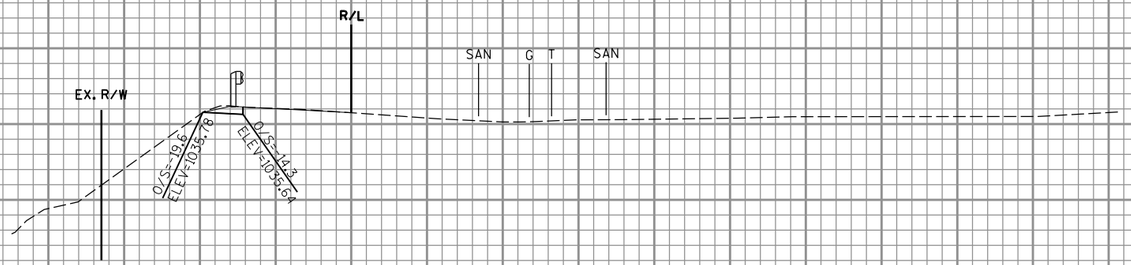


693+58

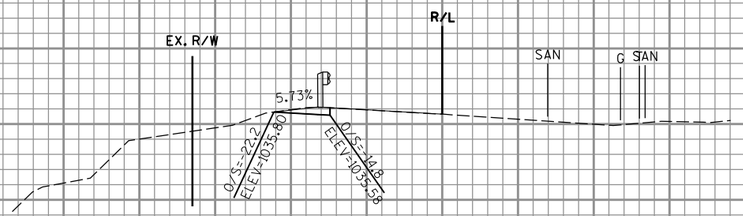
9

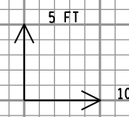
9

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 132	E



694+25





694+00

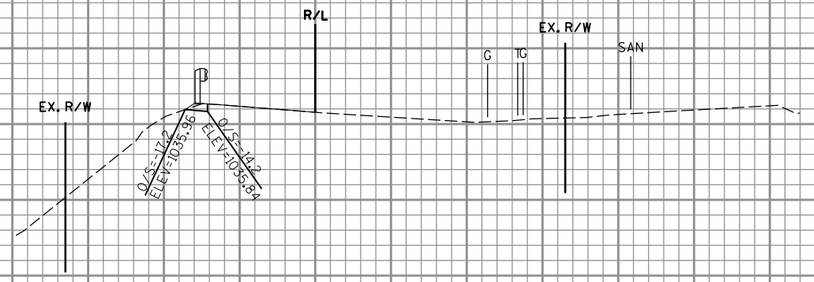
9

9

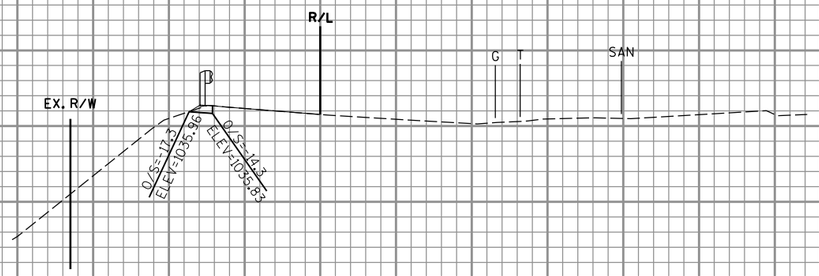
PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 133	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\090201_xs.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



694+50



694+44

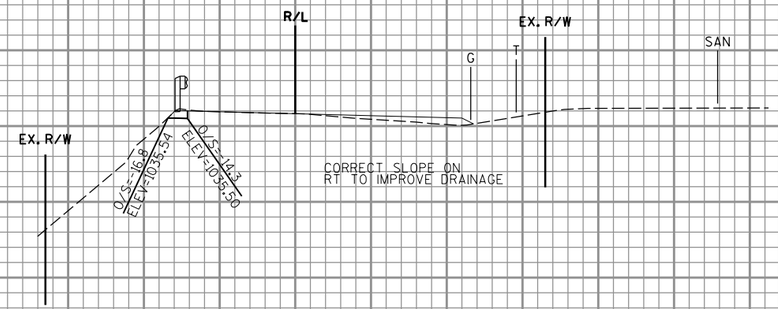
5 FT

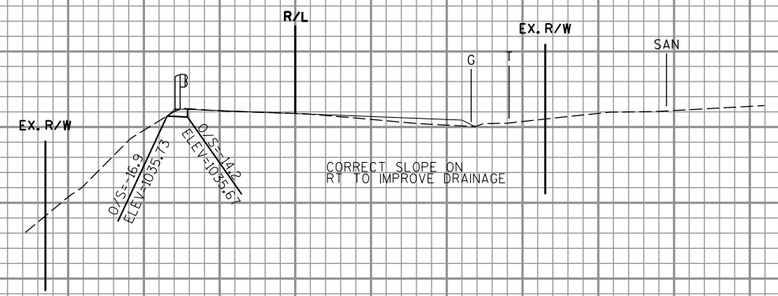
10 FT

9

9

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 134	E

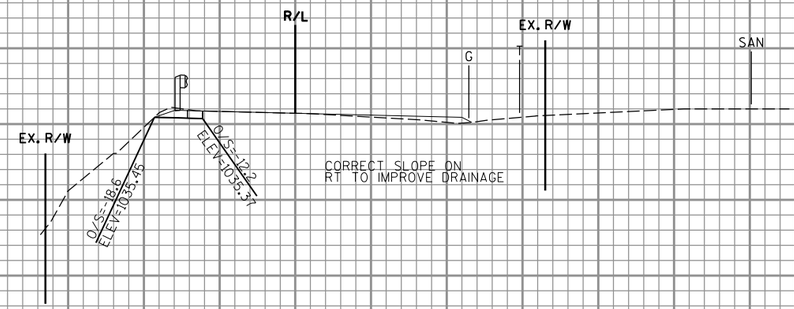




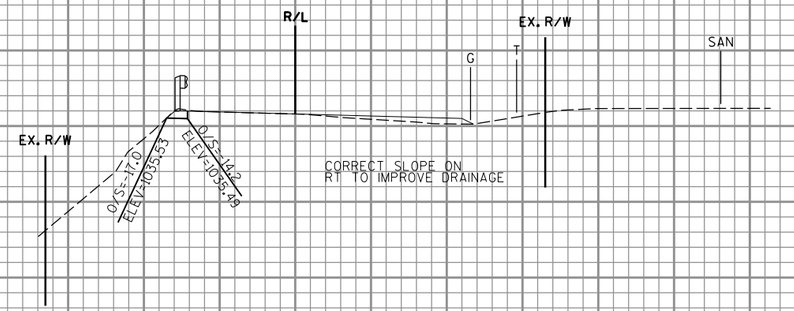
PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 135	E

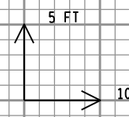
FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\090201_xs.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



695+16



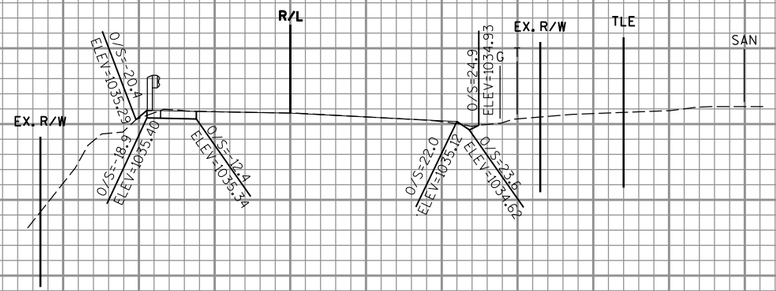


695+02

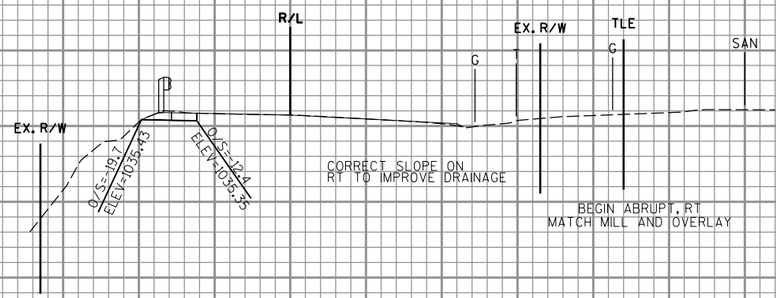
9

9

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 136	E



695+28



695+25

5 FT

10 FT

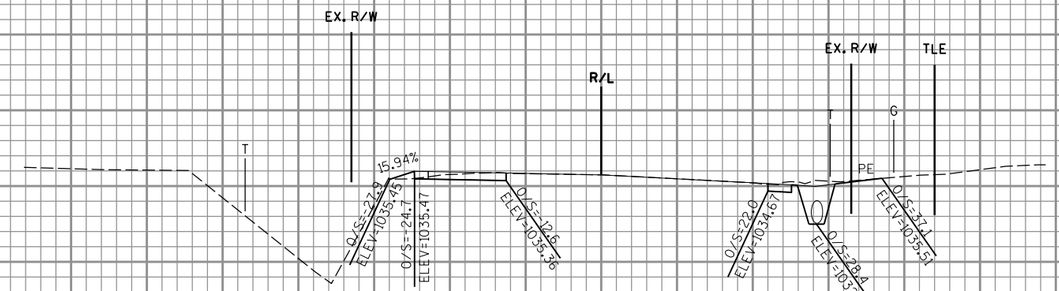
9

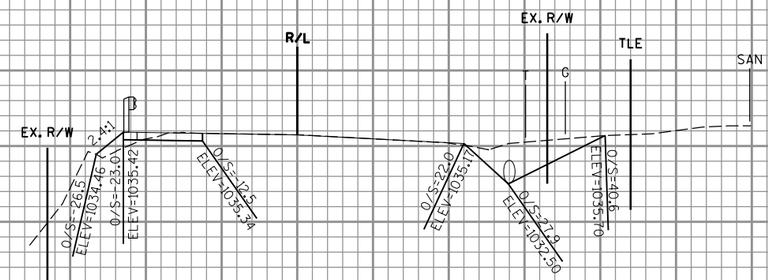
9

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 137	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\090201_xs.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21





695+40

695+36

5 FT

10 FT

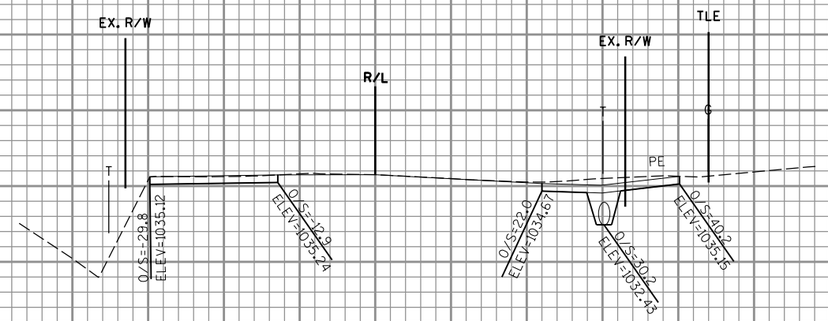
9

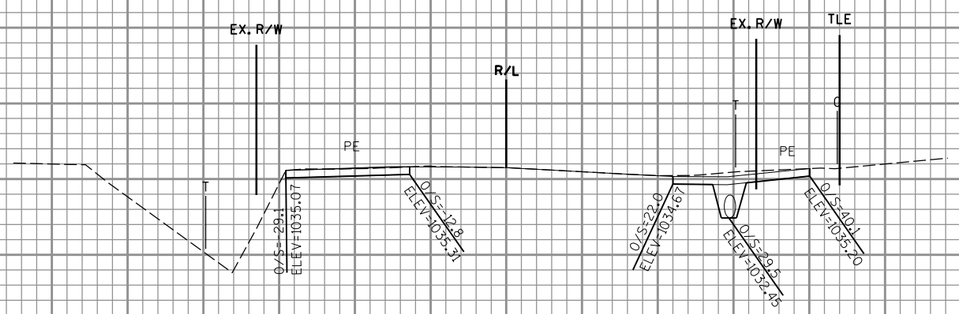
9

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 138	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\090201_xs.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21





695+50

695+46

5 FT

10 FT

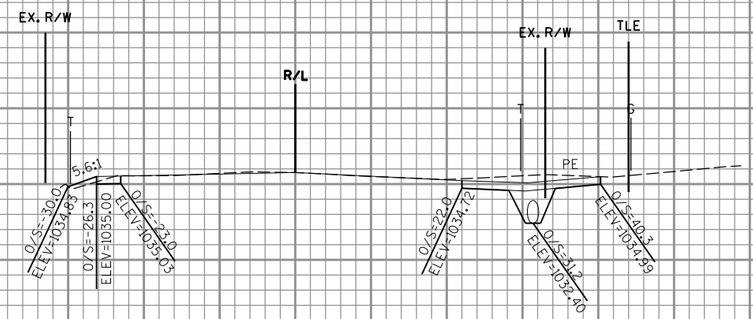
9

9

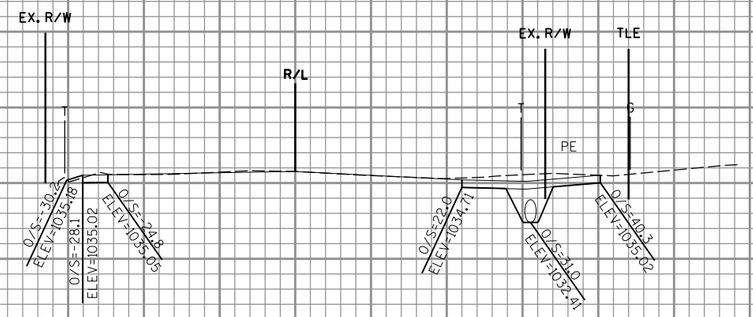
PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 139	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\090201_xs.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



695+56



695+55

5 FT

10 FT

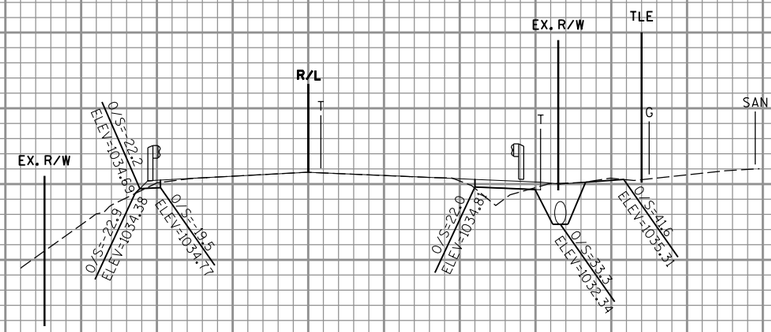
9

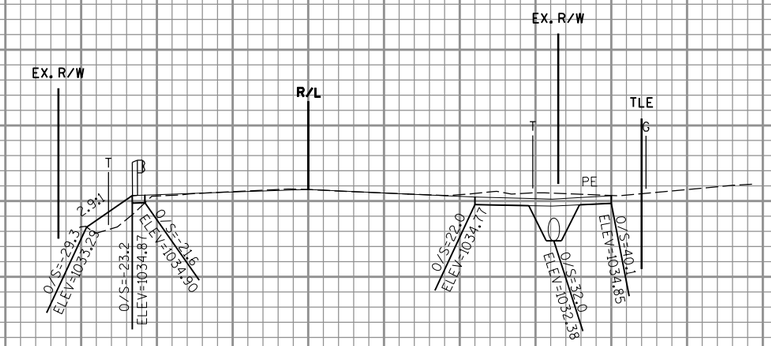
9

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 140	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\090201_xs.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

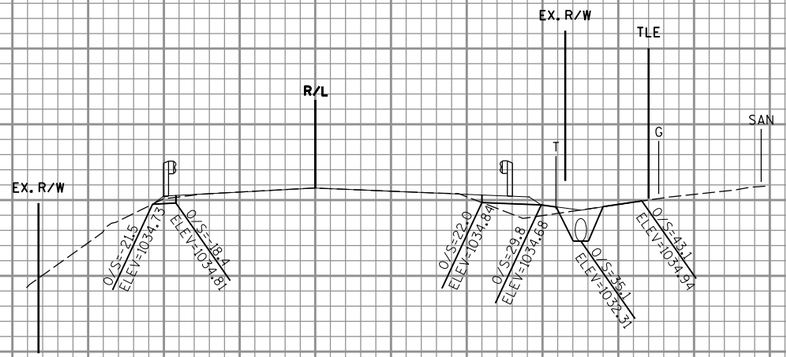


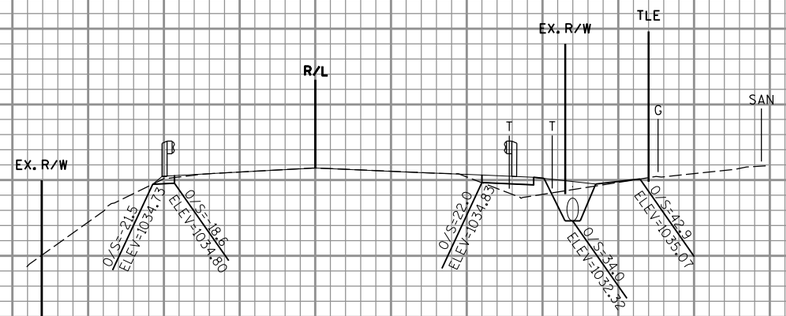


PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 141	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\090201_xs.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

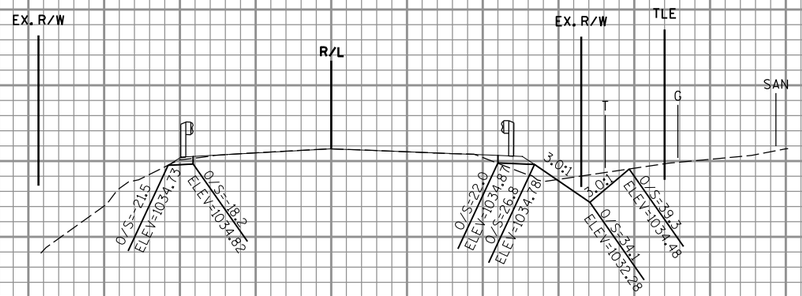




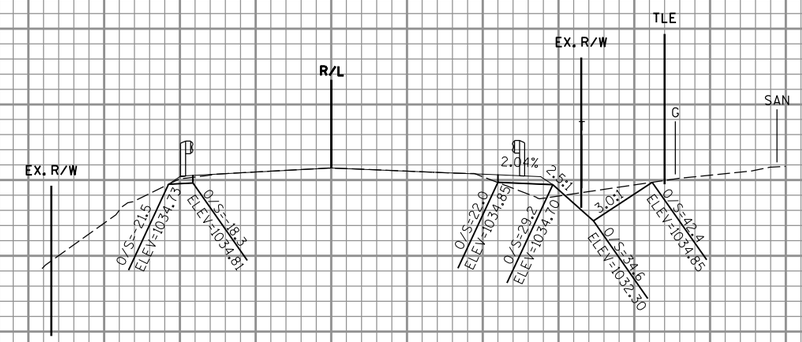
PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 142	E

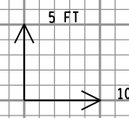
FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\090201_xs.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



695+81





695+75

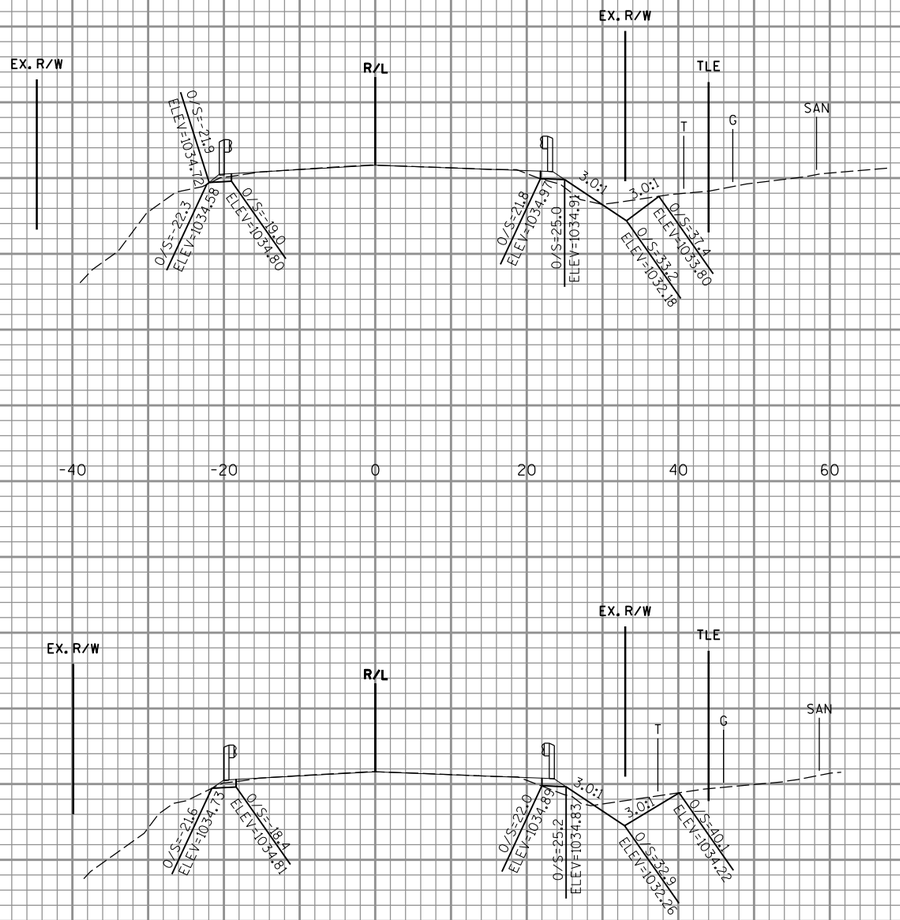
9

9

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 143	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\090201_xs.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



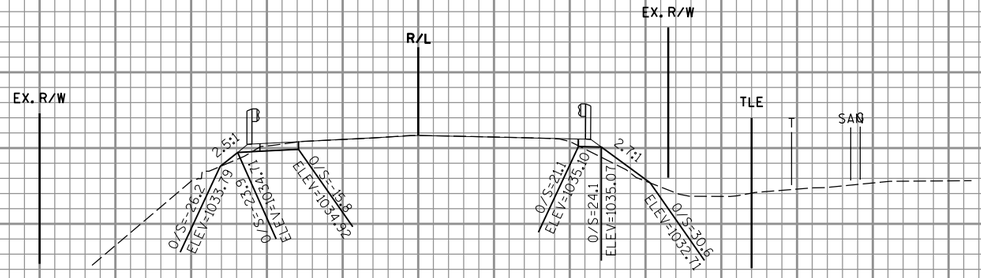
9

9

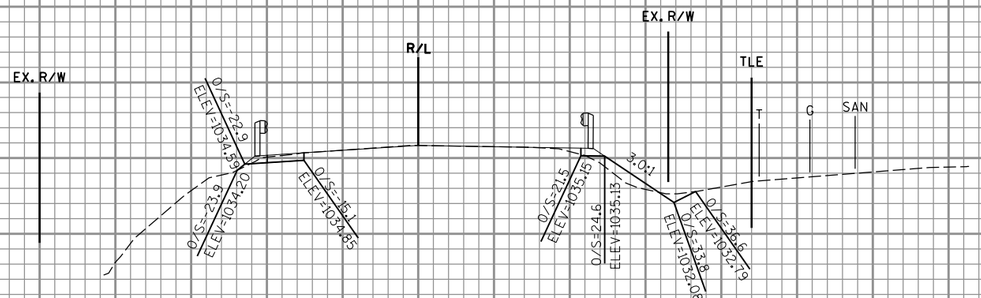
PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 144	E

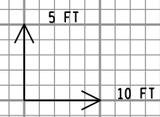
FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\090201_xs.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



696+50





696+25

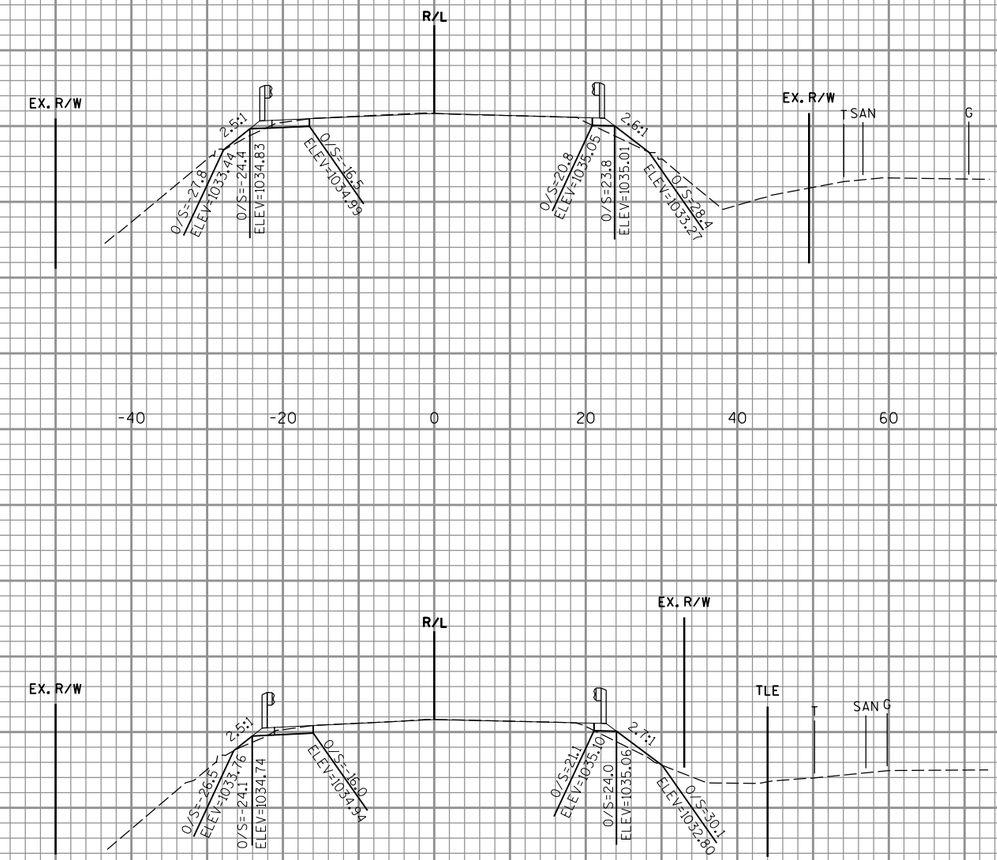
9

9

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 145	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\090201_xs.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

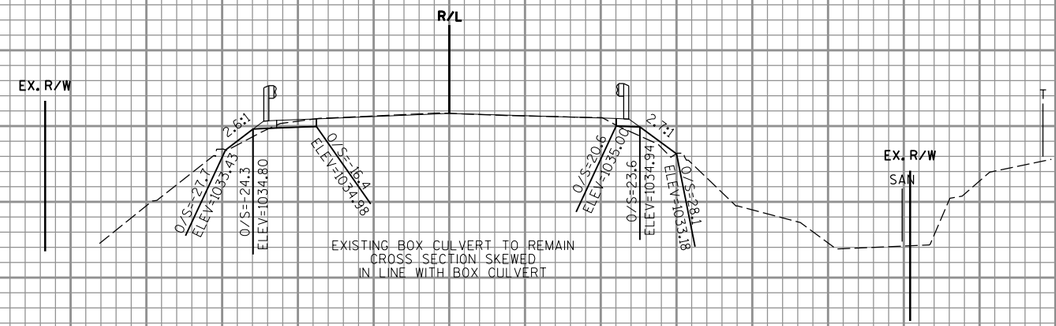
WISDOT/CADDS SHEET 21



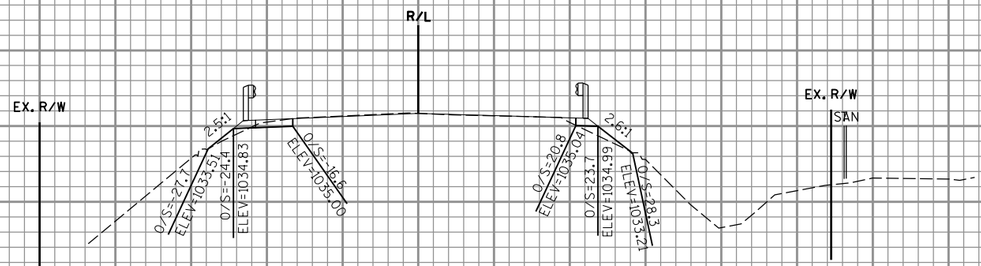
PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 146	E

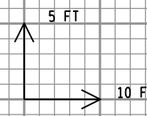
FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\090201_xs.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



696+76





696+75

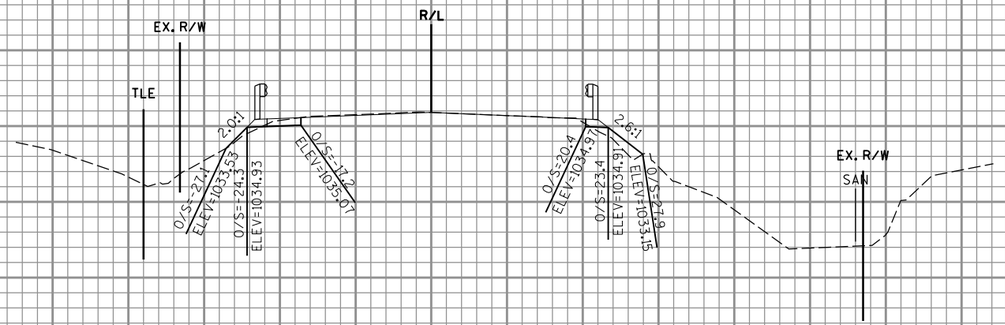
9

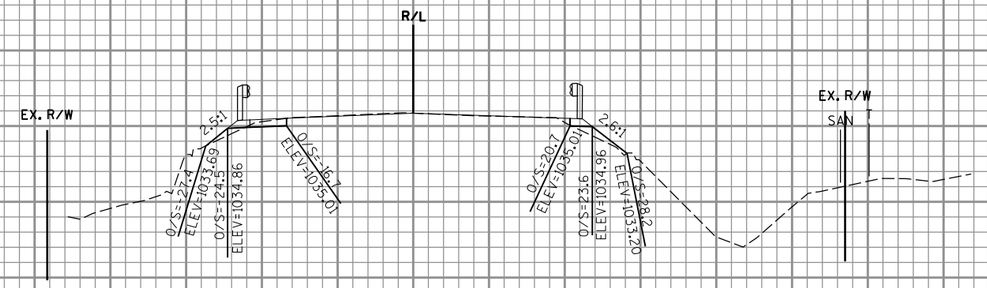
9

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 147	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\090201_xs.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

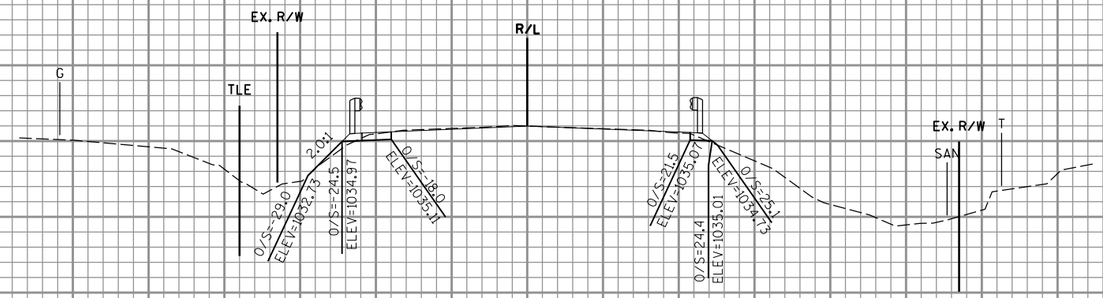




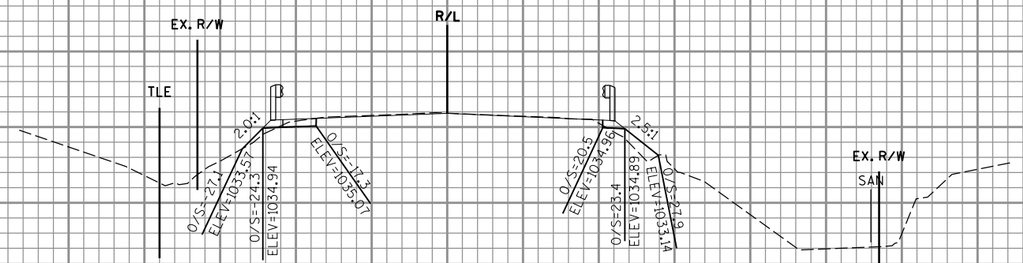
PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 148	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\090201_xs.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



697+22



697+00

5 FT

10 FT

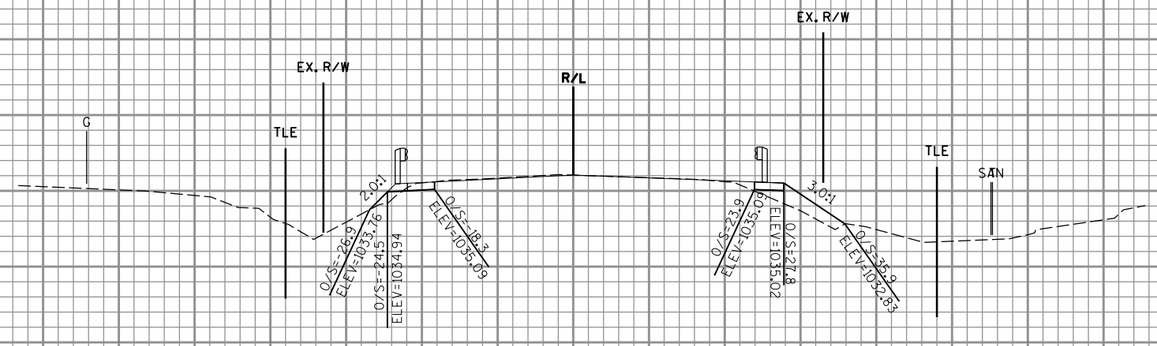
9

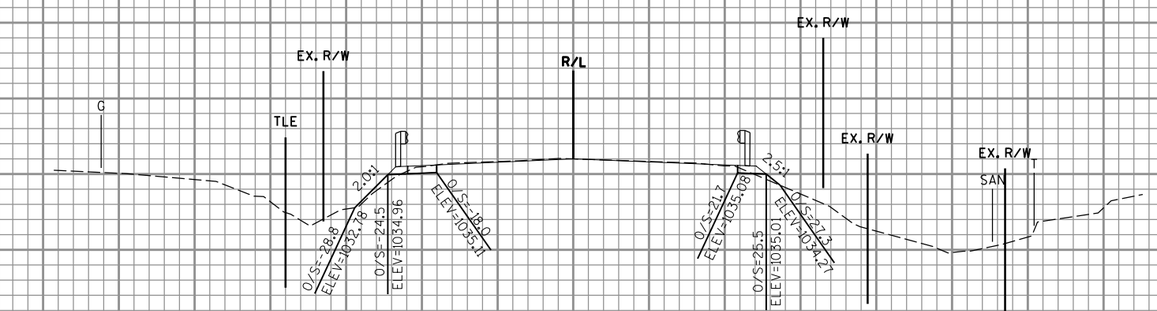
9

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 149	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\090201_xs.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

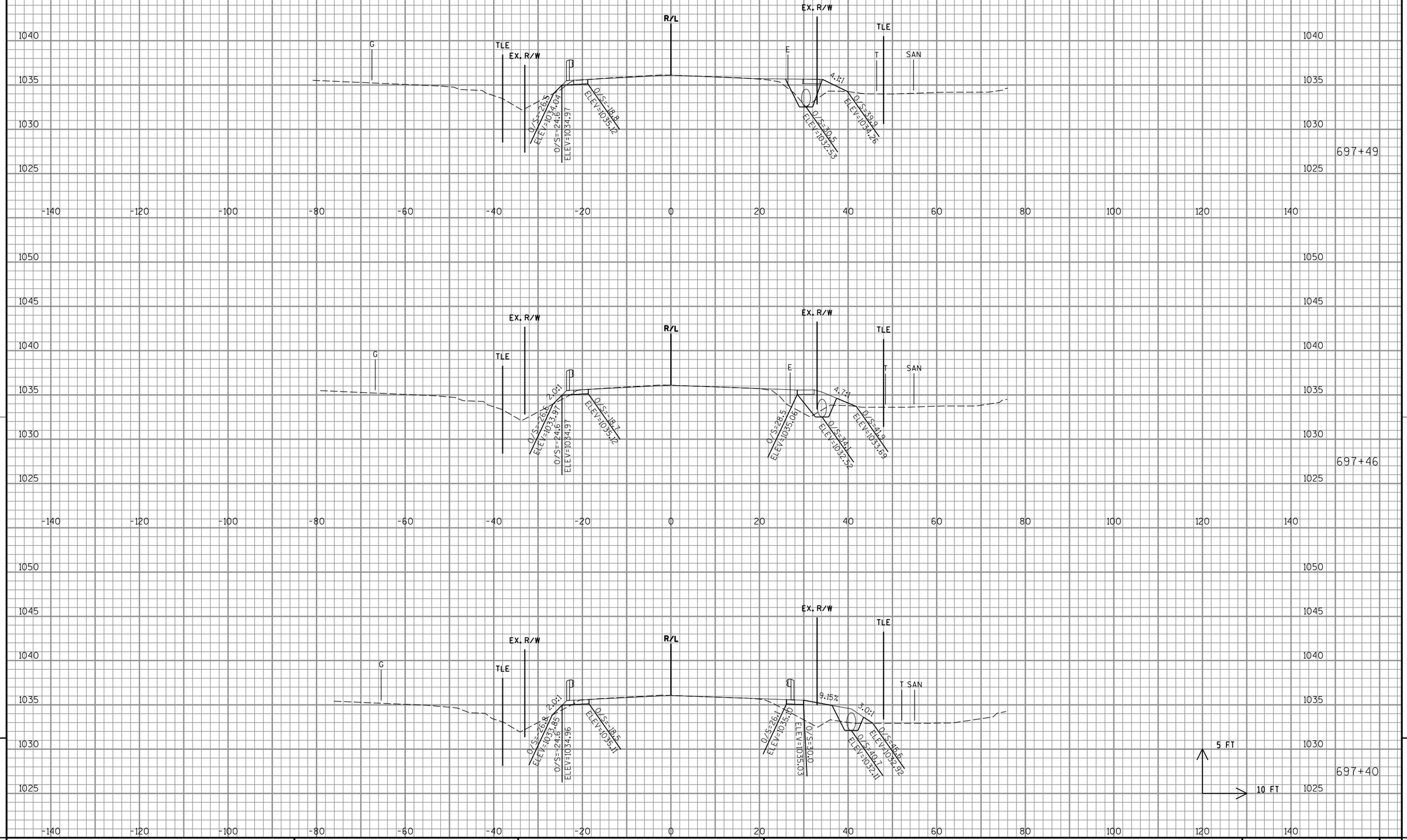




9

9

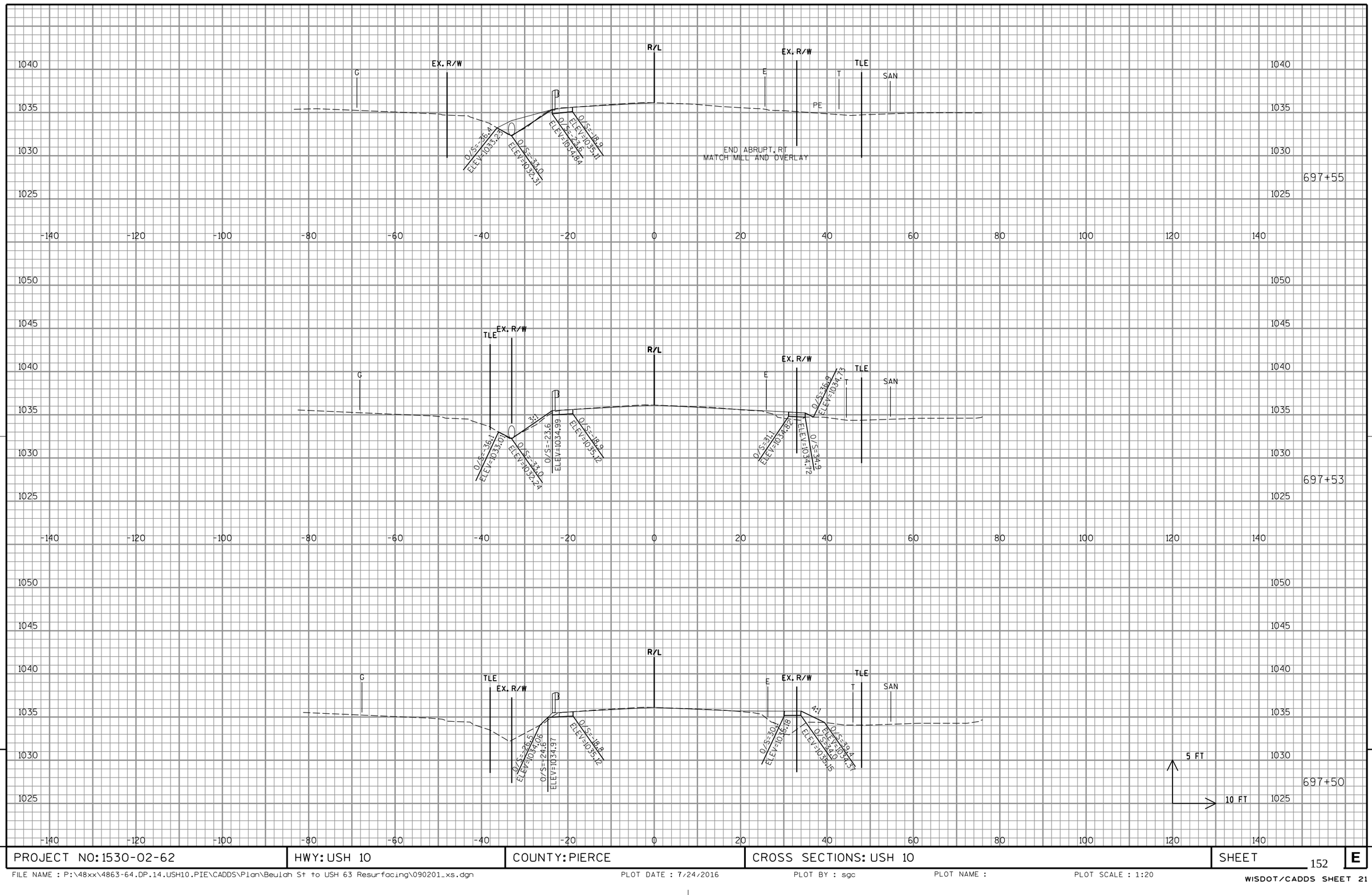
PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 150	E



PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 151	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\090201_xs.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

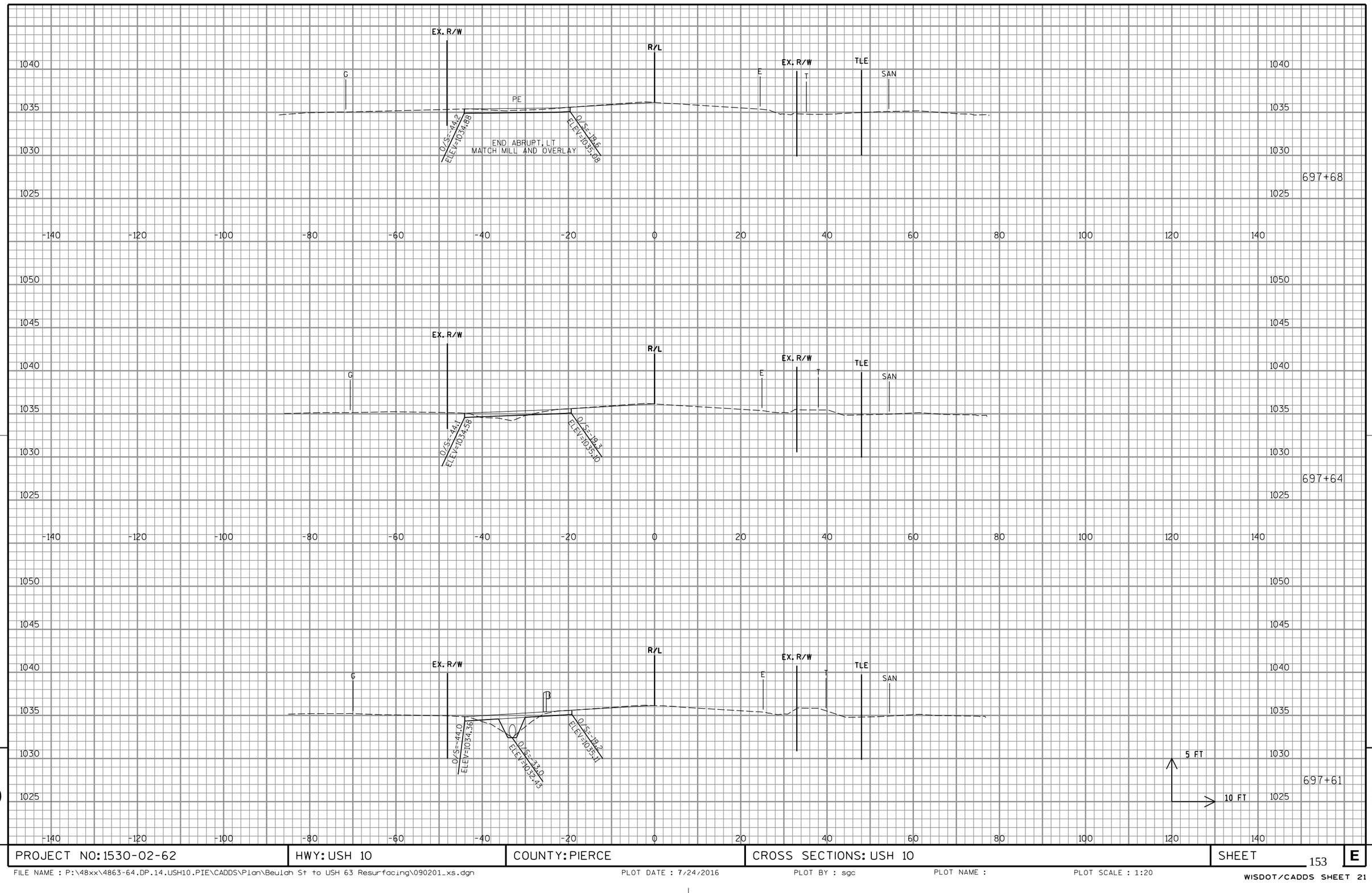
WISDOT/CADDS SHEET 21



PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 152	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Beulah St to USH 63 Resurfacing\090201_xs.dgn PLOT DATE : 7/24/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



9

PROJECT NO: 1530-02-62	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: USH 10	SHEET 153	E

9

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

EAU DEC 2016

PROJECT ID: 1530-02-72
WITH: 1530-02-62

COUNTY: PIERCE

37

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details (Inc. Erosion Control)
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 = 92

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

V ELLSWORTH, MAIN STREET

PIETY STREET INTERSECTION

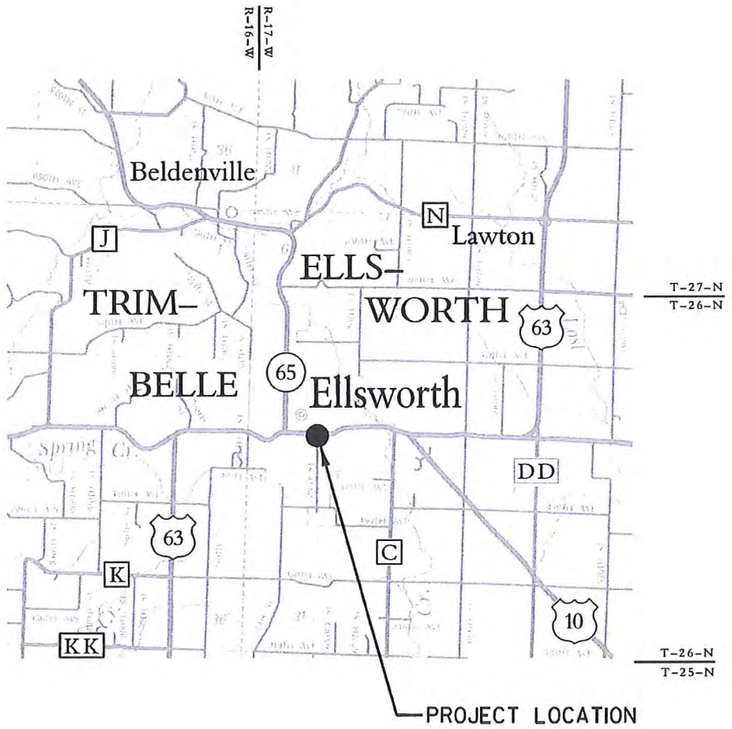
USH 10

PIERCE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1530-02-72	WISC 2016496	1

STATE PROJECT NUMBER
1530-02-72

N



DESIGN DESIGNATION		USH 10	PIETY ST
A.A.D.T. (2017)	=	7,800	3,000
A.A.D.T. (2037)	=	9,600	3,600
D.H.V. (2037)	=	1,000	--
D.D.	=	60/40	--
T.	=	17.0%	--
DESIGN SPEED	=	35 MPH	30 MPH
ESALS (2037)	=	--	--

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

LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.000 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), 'PIERCE' COUNTY, HORIZONTAL DATUM NAD 83, (1991). ALL DISTANCES ARE GROUND. ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO NAVD 1988, (2012).

ORIGINAL PLANS PREPARED BY
emcs inc
500 North 17th Avenue
Wausau, WI 54401
715.845.1081 Fax 715.845.1099

WISCONSIN
STEPHANIE G. CHRISTENSEN
E35808
WAUSAU, WI
PROFESSIONAL ENGINEER

Stephanie G Christensen
7-5-2016

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	EMCS, INC.
Designer	EMCS, INC.
Project Manager	NICOLE PASSUELLO
Regional Examiner	CHRISTINE KOSKI
Regional Supervisor	TIM MASON

APPROVED FOR THE DEPARTMENT
DATE: 7/14/16 Nicole Passuello (Signature)

E

2

GENERAL NOTES

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

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

ORDER OF SECTION 2 SHEETS

PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PAVING DETAILS
STORM SEWER & EROSION CONTROL
PERMANENT SIGNING & PAVEMENT MARKING
TRAFFIC CONTROL

AS-BUILTS USED FOR PLAN DEVELOPMENT

PROJECT NO: T019-1(11), CONSTRUCTION YEAR: 1954
PROJECT NO: 1538-03-71, CONSTRUCTION YEAR: 1992

UTILITIES

AT&T WISCONSIN
(COMMUNICATIONS)
RICK PODOLAK
304 SOUTH DEWEY STREET
EAU CLAIRE, WI 54701
(715) 839-5565
RP4514@ATT.COM

MIDCONTINENT COMMUNICATIONS
(COMMUNICATIONS)
GEORGE MARTINEZ
924 LAKE AVENUE
FAIRMONT, MN 56031
(507) 848-5809
GEORGE.MARTINEZ@MIDCO.COM

VILLAGE OF ELLSWORTH
(SEWER)
GREG ENGESET
130 NORTH CHESTNUT STREET
ELLSWORTH, WI 54011
(715) 821-1888
GREG@VILLAGEOFELLSWORTH.ORG

VILLAGE OF ELLSWORTH
(WATER)
GREG ENGESET
130 NORTH CHESTNUT STREET
ELLSWORTH, WI 54011
(715) 821-1888
GREG@VILLAGEOFELLSWORTH.ORG

WE ENERGIES
(GAS)
LEWIS KNAPP
104 W SOUTH STREET
RICE LAKE, WI 54868
(715) 419-2196
LEWIS.KNAPP@WE-ENERGIES.COM

WE ENERGIES
24-HOUR EMERGENCY (GAS)
800-261-5325

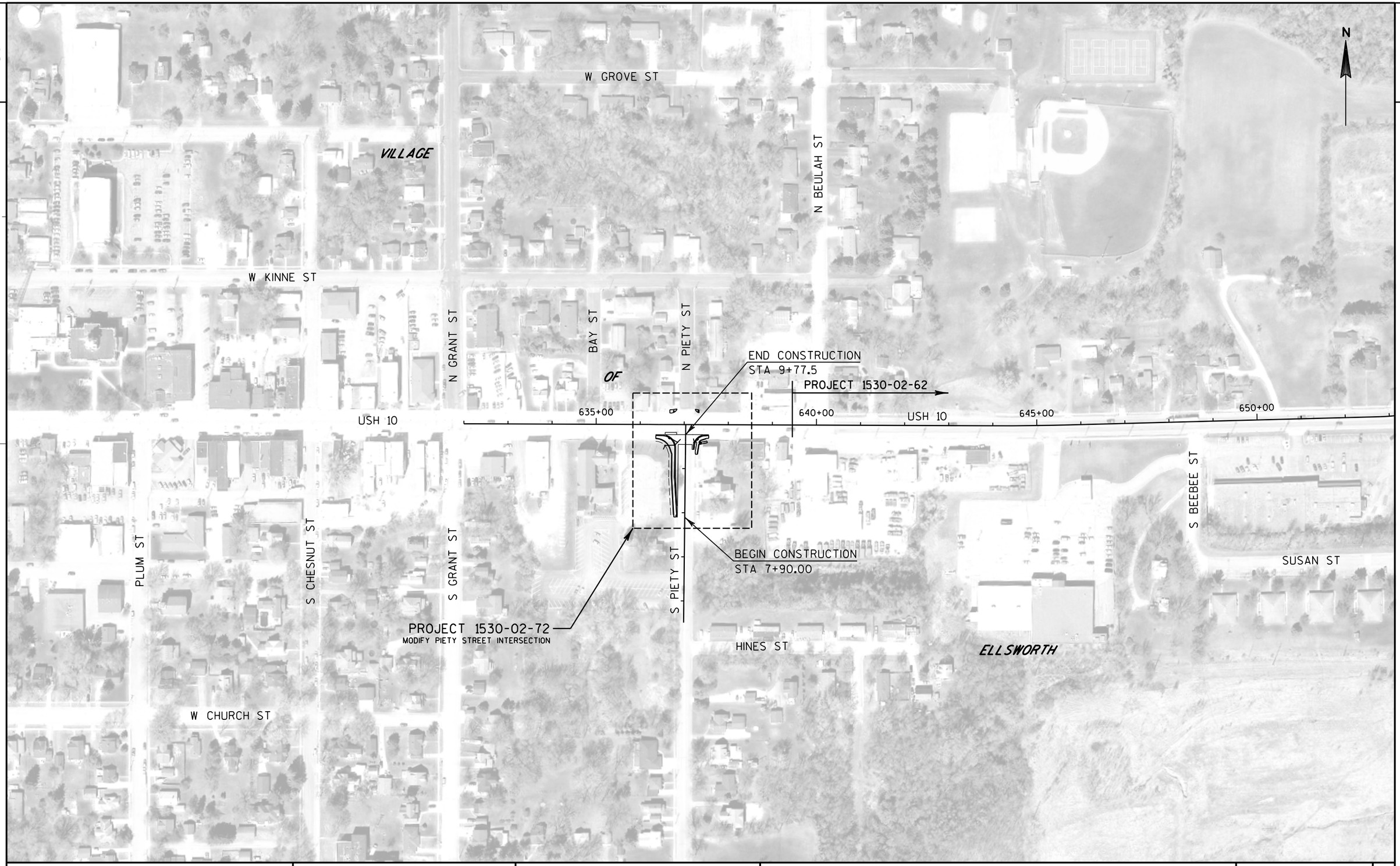
XCEL ENERGY
(ELECTRIC DISTRIBUTION)
BRIAN MELLO
1201 LIVINGSTONE ROAD
HUDSON, WI 54016
(715) 577-5828
BRIAN.M.MELLO@XCELENERGY.COM

COPY ALL CORRESPONDENCE TO:
DAWN SCHULTZ
1414 W HAMILTON AVE
PO BOX 8
EAU CLAIRE, WI 54702-0008
715-737-2482 (OFFICE)
dawn.schultz@xcelenergy.com

2

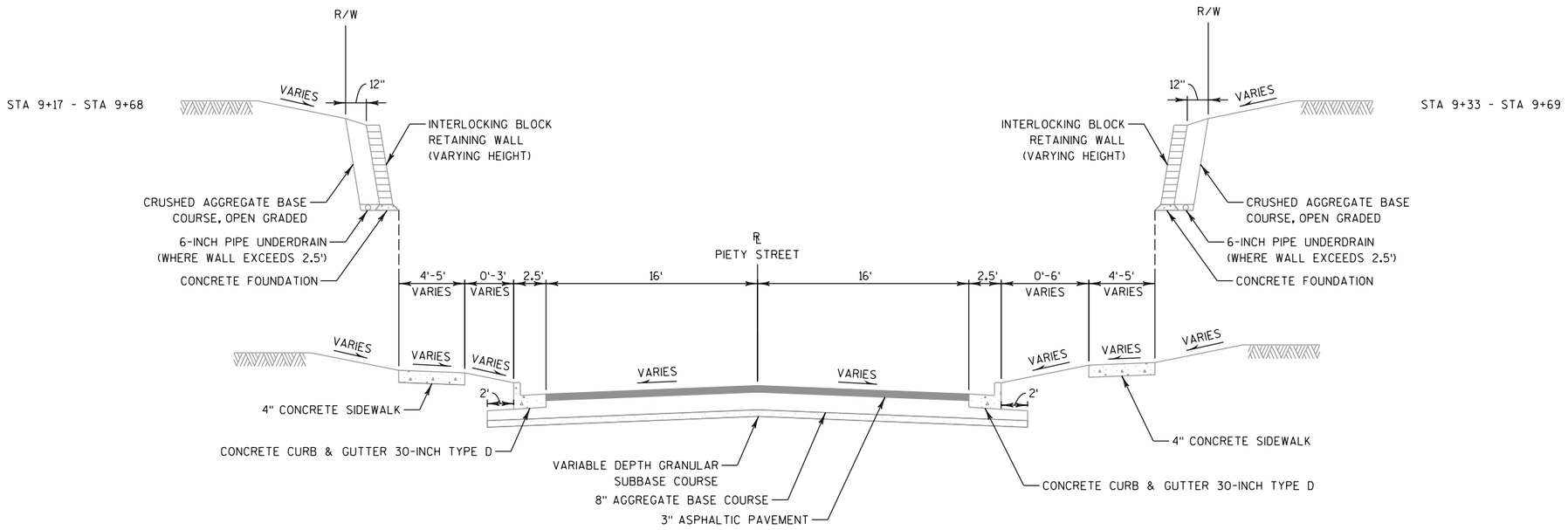
DIGGERS HOTLINE
Dial 811 or (800) 242-8511
www.DiggersHotline.com

DNR CONTACT
CHRIS WILLGER
DNR WEST CENTRAL REGION HQ
1300 W. CLAIRMONT STREET
EAU CLAIRE, WI 54702
(715) 839-1609
CHRISTOPHERJ.WILLGER@WISCONSIN.GOV

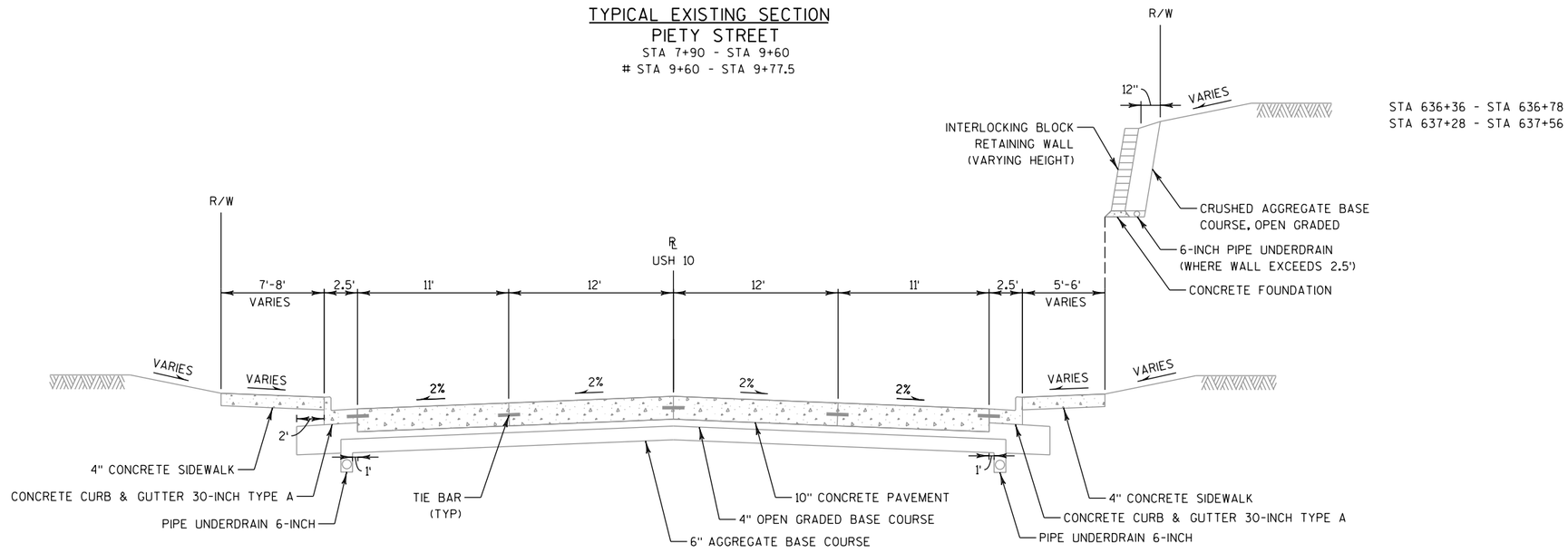


PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Piety Street Intersection\020201_po.dgn PLOT DATE : 7/22/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:200



TYPICAL EXISTING SECTION
PIETY STREET
STA 7+90 - STA 9+60
STA 9+60 - STA 9+77.5



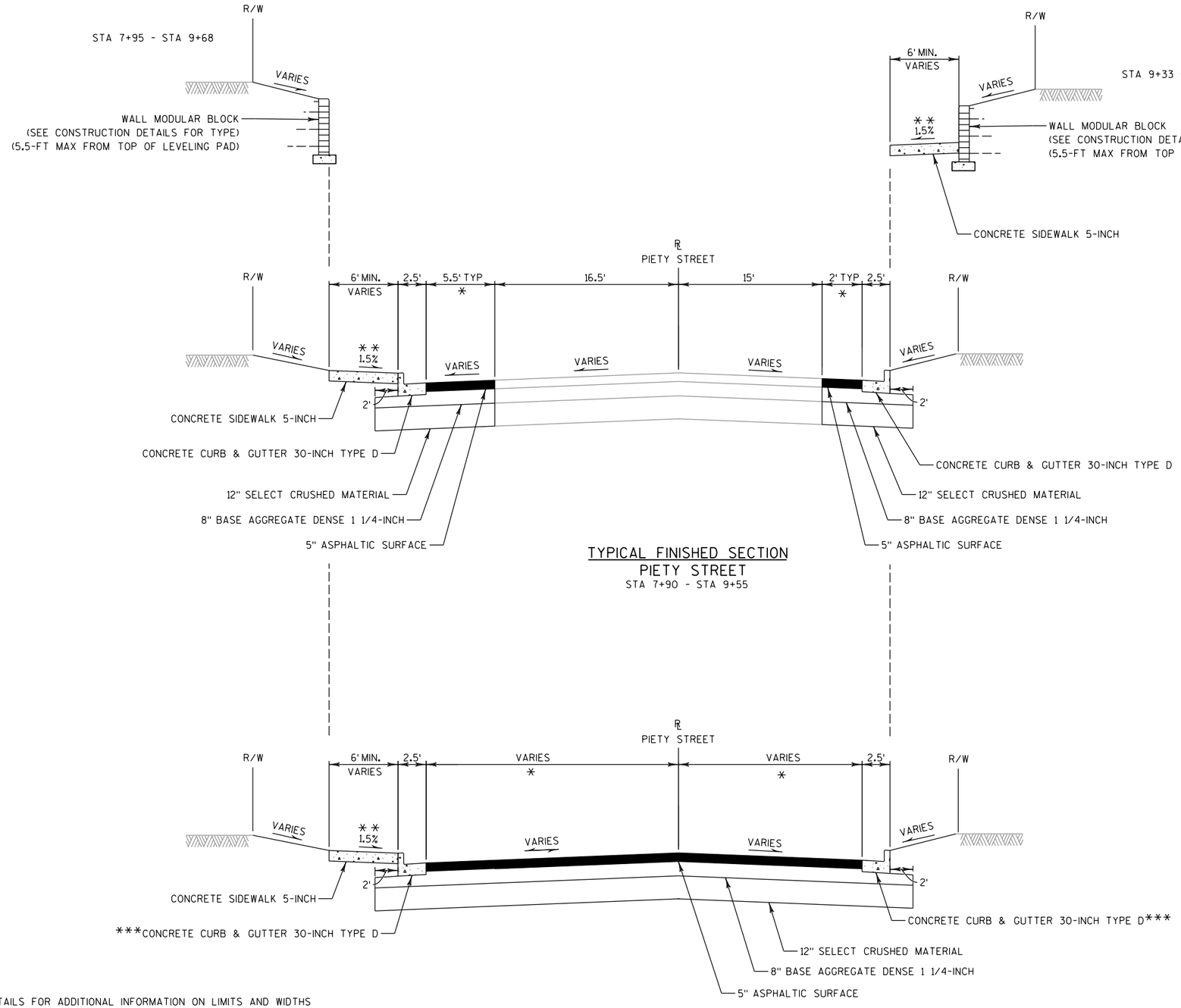
TYPICAL EXISTING SECTION
USH 10
STA 636+35 - STA 637+56

NOTES

FROM STA 9+60 - 9+77.5, THE PIETY STREET PAVEMENT STRUCTURE MATCHES THE USH 10 PAVEMENT

EXISTING RIGHT-OF-WAY ALONG USH 10 AND PIETY STREET IS 66-FEET

PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	TYPICAL SECTIONS	SHEET 4	E



TYPICAL FINISHED SECTION
PIETY STREET
STA 7+90 - STA 9+55

TYPICAL FINISHED SECTION
PIETY STREET
STA 9+55 - STA 9+77.5

NOTES

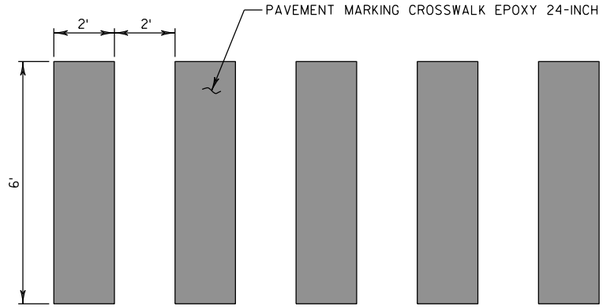
* TYPICAL WIDTHS SHOWN, SEE PAVING DETAILS FOR ADDITIONAL INFORMATION ON LIMITS AND WIDTHS

** SIDEWALK SLOPE IS 1.5% TYPICAL, 2% MAX, EXCEPT AT RAMPS

*** USE CONCRETE CURB & GUTTER TYPE A WHERE ADJACENT TO USH 10 EXISTING CONCRETE PAVEMENT

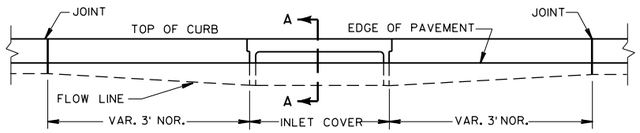
RIGHT-OF-WAY VARIES, SEE PLANS AND RIGHT-OF-WAY PLAT

PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	TYPICAL SECTIONS	SHEET 5	E

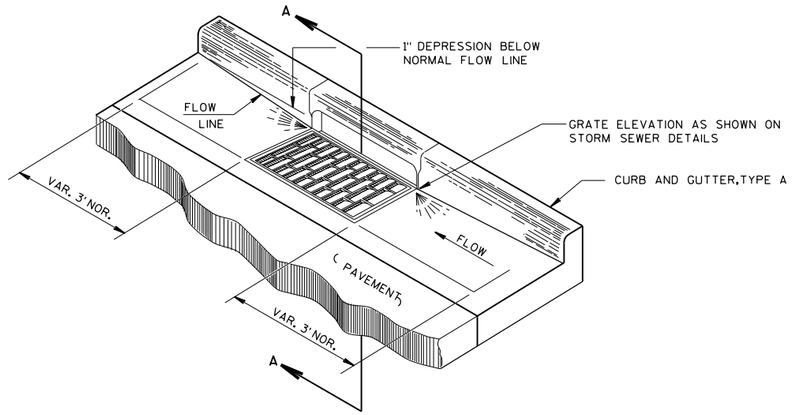


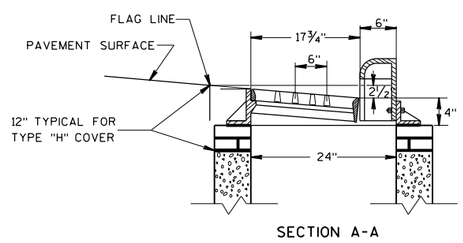
CROSSWALK PAVEMENT MARKING

WEST SIDE OF USH 10/PIETY STREET
CROSSING USH 10



ELEVATION





SECTION A-A

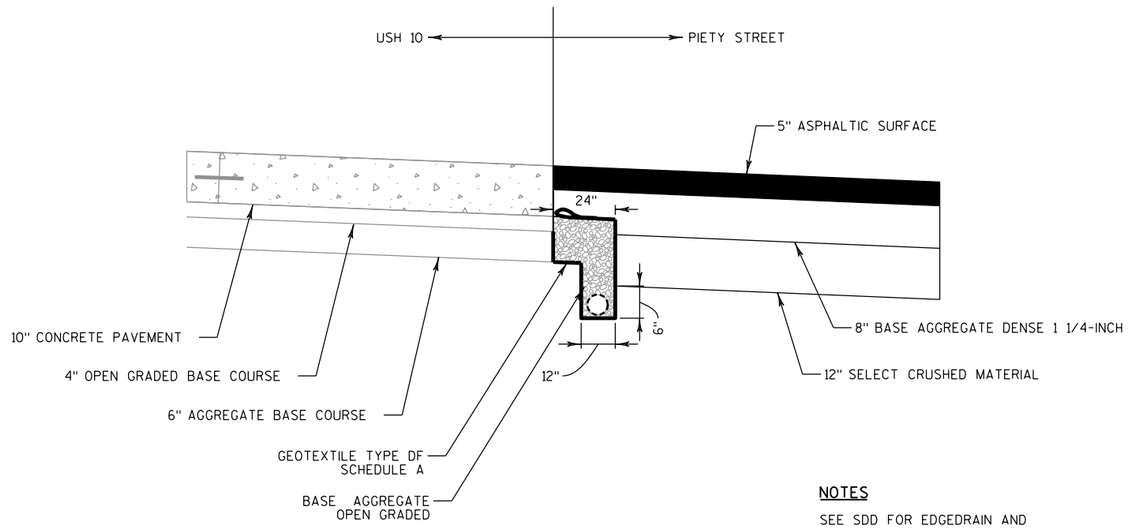
DETAIL OF CURB AND GUTTER AT INLETS

(TYPE 3-H INLET SHOWN)

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 1 ACRE
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.2 ACRES (GRADING AREA)



DETAIL OF DRAIN TILE

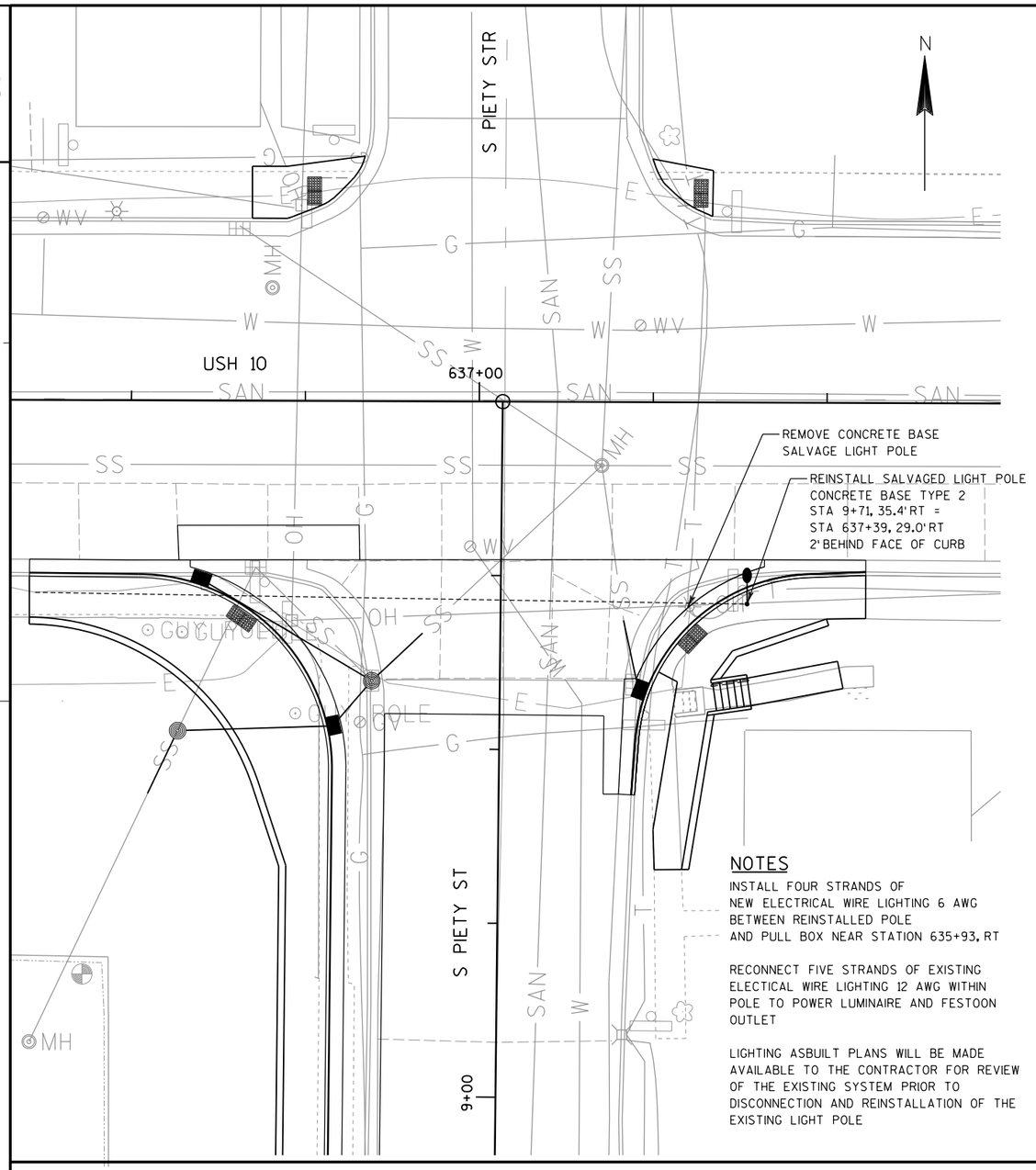
USH 10/PIETY STREET

NOTES

SEE SDD FOR EDGEDRAIN AND BASE AGGREGATE OPEN GRADED FOR ADDITIONAL INFORMATION

TIE EDGEDRAIN TO INLET #1 AND INLET #4 (SEE SS PLANS FOR LOCATIONS)

PIPE UNDERDRAIN 6-INCH

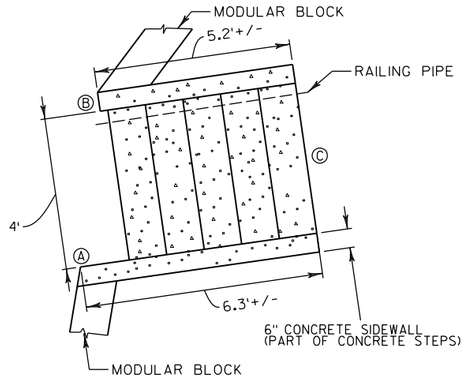


NOTES

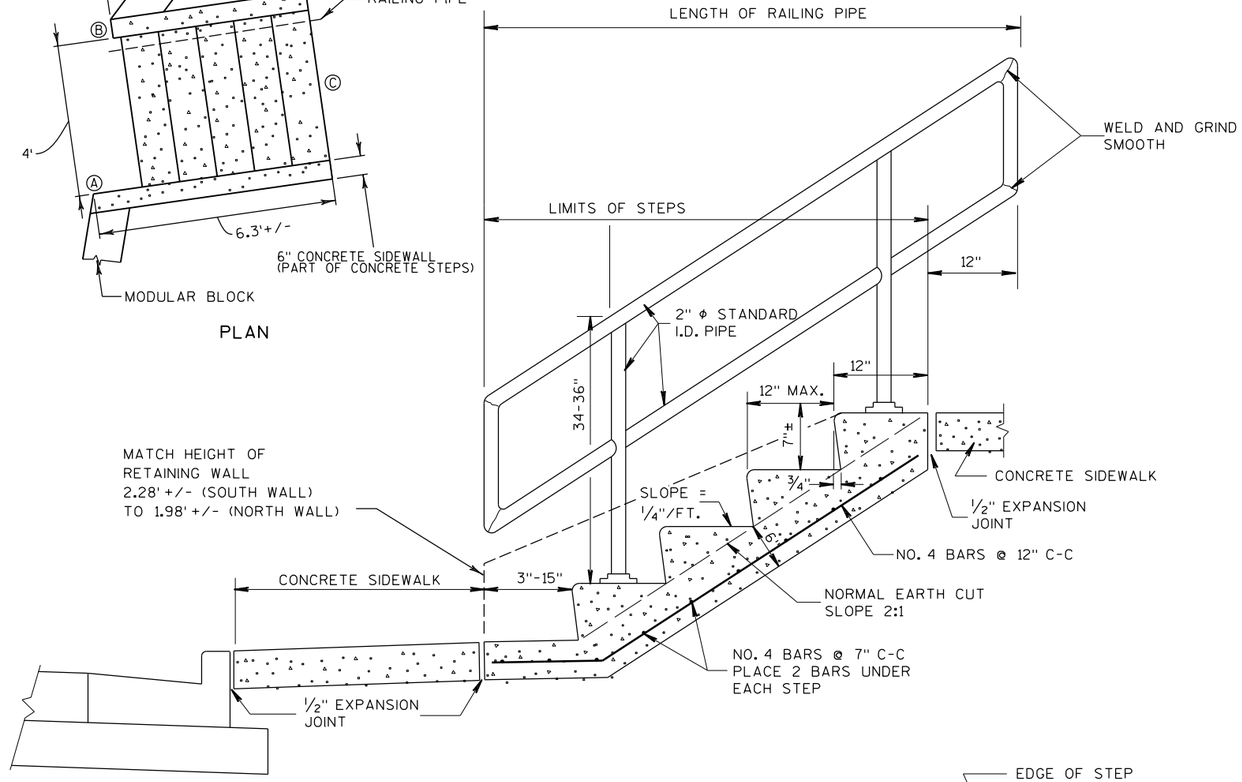
INSTALL FOUR STRANDS OF NEW ELECTRICAL WIRE LIGHTING 6 AWG BETWEEN REINSTALLED POLE AND PULL BOX NEAR STATION 635+93, RT

RECONNECT FIVE STRANDS OF EXISTING ELECTICAL WIRE LIGHTING 12 AWG WITHIN POLE TO POWER LUMINAIRE AND FESTOON OUTLET

LIGHTING ASBUILT PLANS WILL BE MADE AVAILABLE TO THE CONTRACTOR FOR REVIEW OF THE EXISTING SYSTEM PRIOR TO DISCONNECTION AND REINSTALLATION OF THE EXISTING LIGHT POLE



PLAN



SECTION THROUGH STEPS

APPROXIMATE ELEVATIONS

Ⓐ 1149.68

Ⓑ 1149.02

Ⓒ 1151.50

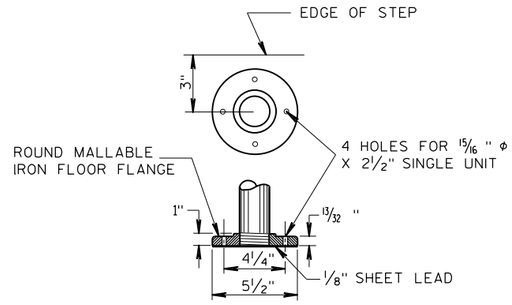
NOTES

THE EXACT LOCATION, WIDTHS, & NUMBER OF STEPS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

MINIMUM WIDTH OF STEP EQUALS 4 FEET.

RAILING TO BE PLACED ON LEFT ASCENDING SIDE OF STEPS ONLY.

FIVE STEPS ANTICIPATED AT 6" EACH; FIELD FIT FOR UNIFORM STEP HEIGHT.



FLANGE DETAIL

LEGEND

SALVAGED LIGHT POLE, 30-FT MOUNTING HEIGHT - INSTALL ON NEW CONCRETE BASE TYPE 2

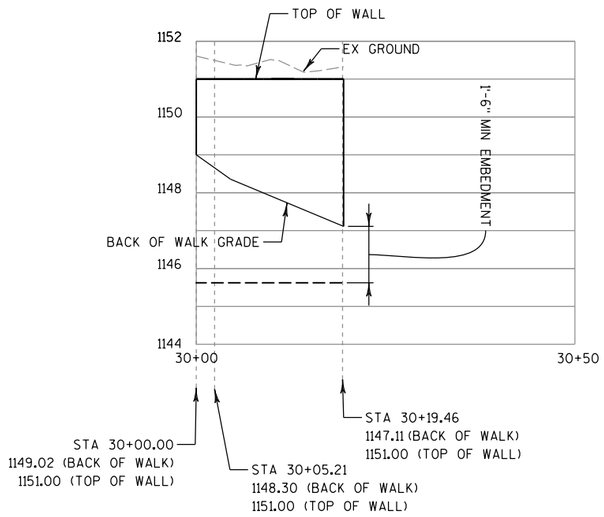
------- CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH (+/- 100')

SALVAGE AND REINSTALL LIGHT POLE AND CONCRETE STEPS DETAILS

USH 10/PIETY STREET

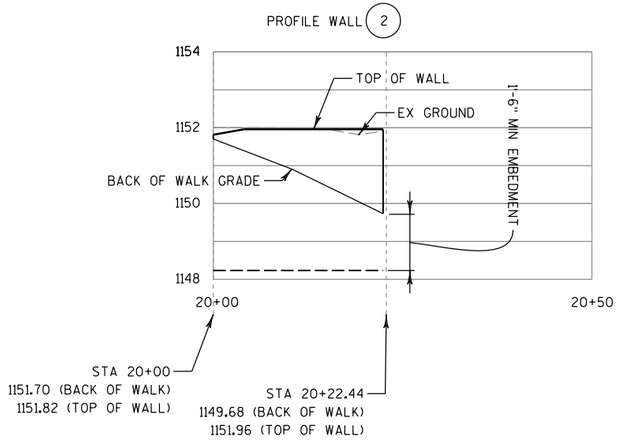
PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	CONSTRUCTION DETAILS	SHEET 7	E

PROFILE WALL (3)



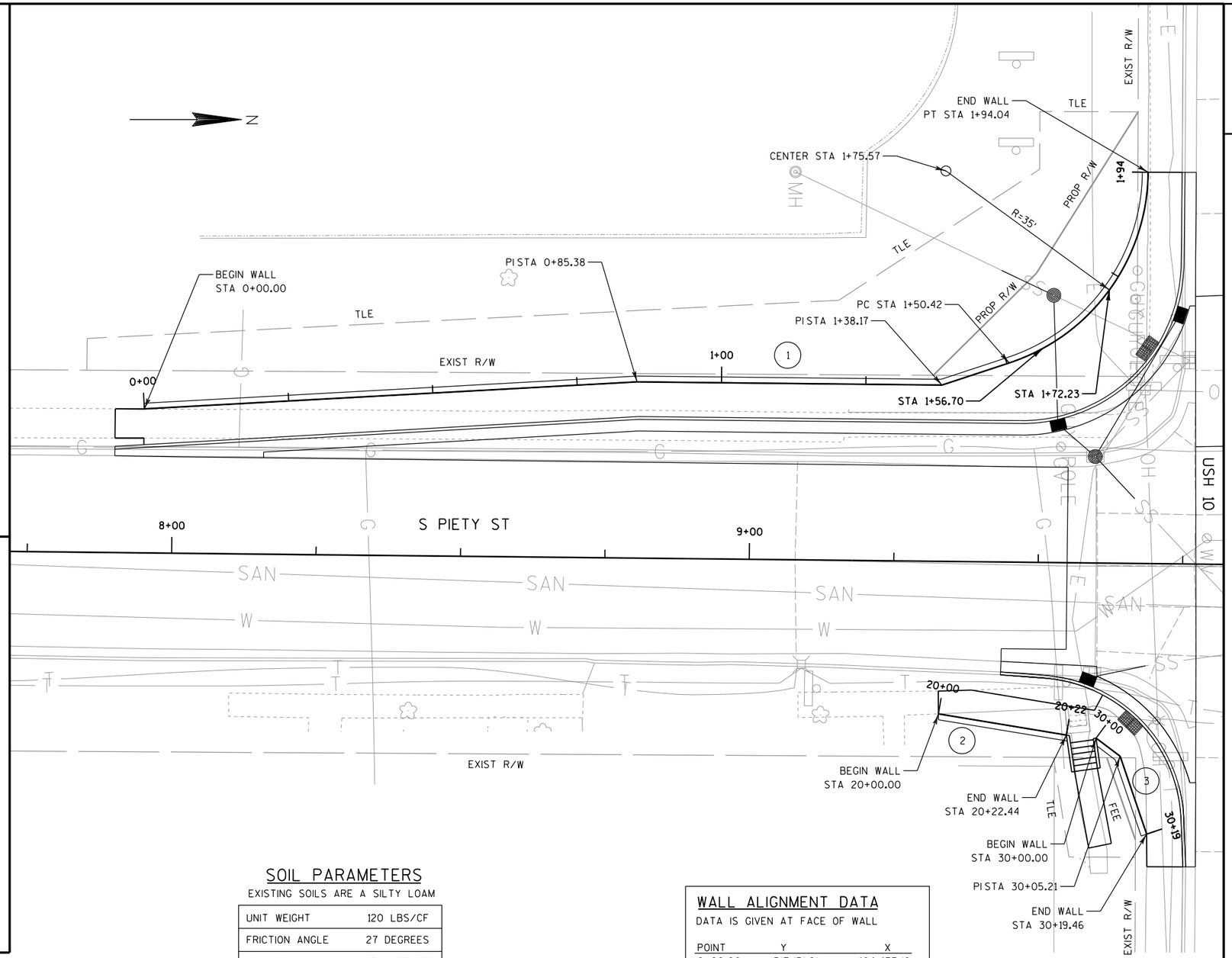
TYPE: WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH LRFD/QMP

PROFILE WALL (2)



TYPE: WALL MODULAR BLOCK GRAVITY LANDSCAPE LRFD

NOTE



SOIL PARAMETERS

EXISTING SOILS ARE A SILTY LOAM

UNIT WEIGHT	120 LBS/CF
FRICTION ANGLE	27 DEGREES
COHESION	270 LBS/SF
ALLOWABLE BEARING CAPACITY	1,500 LBS/SF

WALL ALIGNMENT DATA

DATA IS GIVEN AT FACE OF WALL

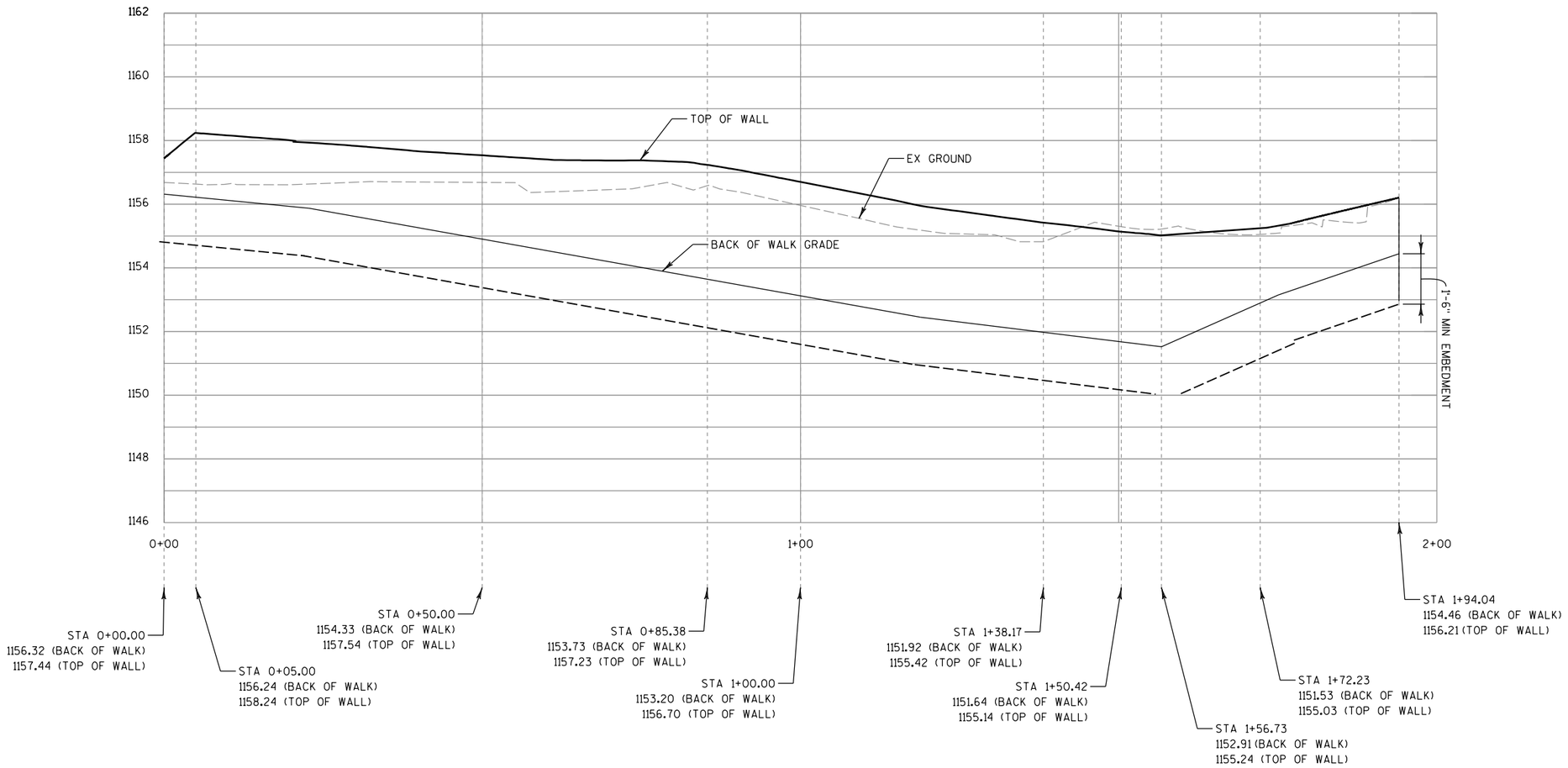
POINT	Y	X
0+00.00	317,131.91	484,477.18
0+85.38	317,217.20	484,472.49
1+38.17	317,269.98	484,473.06
1+50.42	317,281.61	484,469.22
1+94.04	317,305.67	484,436.20
20+00.00	317,269.37	484,529.96
20+22.44	317,291.52	484,533.62
30+00.00	317,296.64	484,534.15
30+05.21	317,300.81	484,537.28
30+19.46	317,305.40	484,550.77

RETAINING WALL DETAILS

USH 10/PIETY STREET

PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	CONSTRUCTION DETAILS	SHEET 8	E

PROFILE WALL (1)

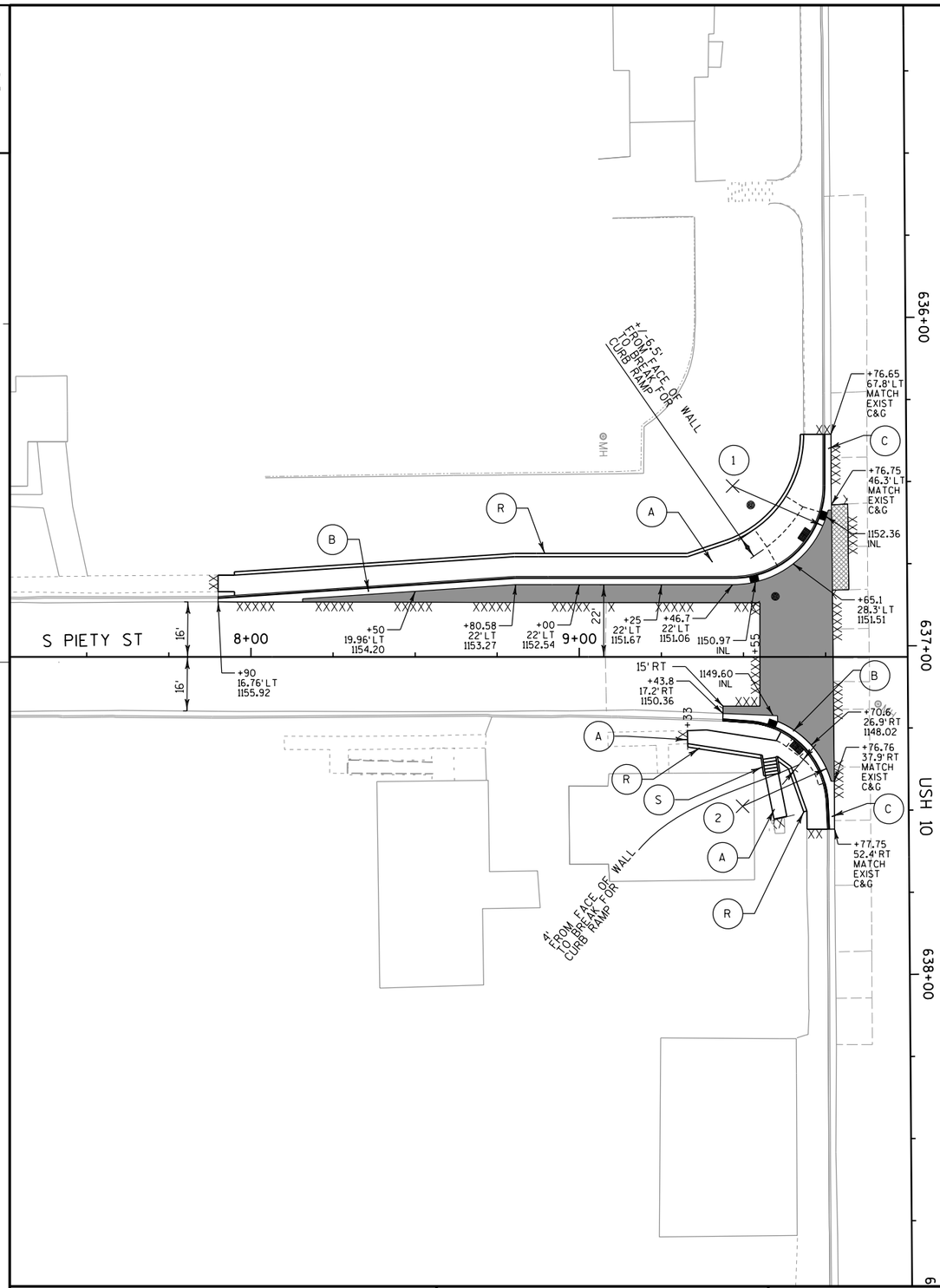


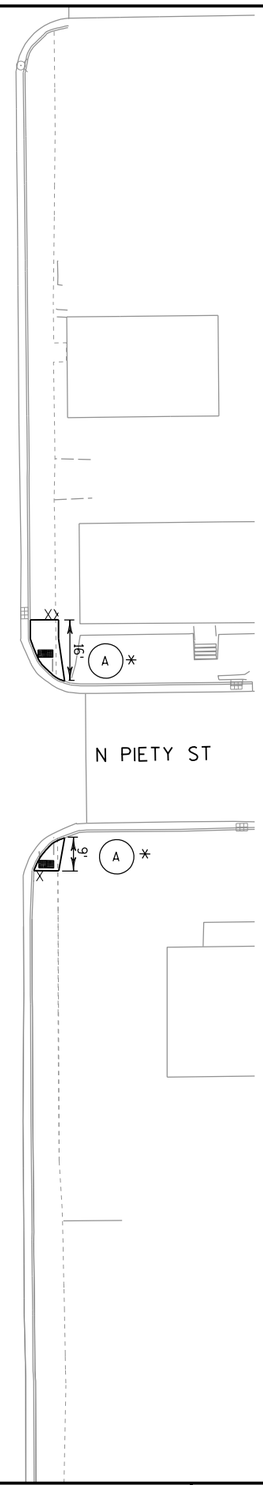
TYPE: WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH LRFD/QMP

RETAINING WALL DETAILS

USH 10/PIETY STREET

PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	CONSTRUCTION DETAILS	SHEET 9	E





LEGEND

- 5" ASPHALTIC SURFACE
- CONCRETE PAVEMENT 10"
- (A) CONCRETE SIDEWALK 5-INCH
- (B) CONCRETE CURB & GUTTER 30-INCH TYPE D
- (C) CONCRETE CURB & GUTTER 30-INCH TYPE A WITH DRILLED TIE BARS
- (R) MODULAR BLOCK RETAINING WALLS (SEE CONSTRUCTION DETAILS)
- (S) CONCRETE STEPS (SEE CONSTRUCTION DETAILS)
- CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
- XXXXX PROPOSED SAWCUT

N

NOTES

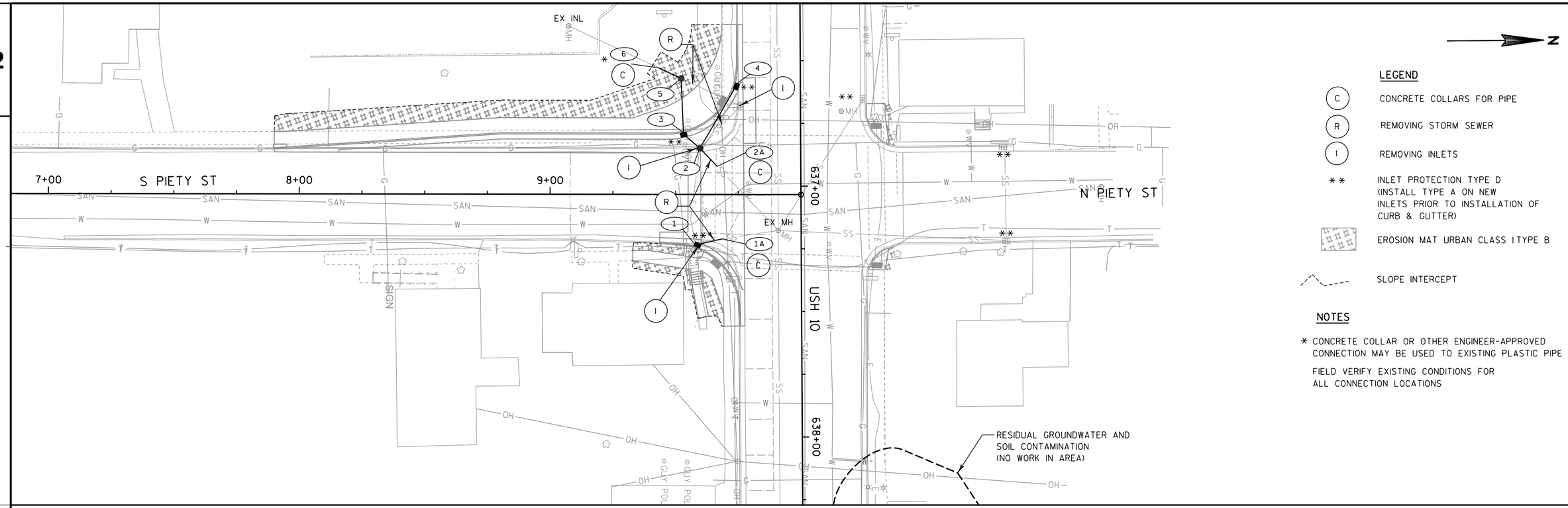
RADIUS AND ROADWAY WIDTH DIMENSIONS ARE SHOWN TO CURB & GUTTER FLANGELINE

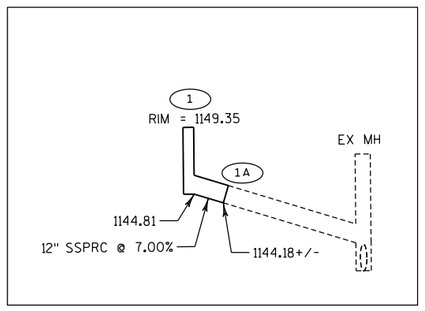
* REMOVE AND REPLACE EXISTING CURB RAMPS TO THE APPROXIMATE DIMENSION SHOWN TO MEET ADA STANDARDS

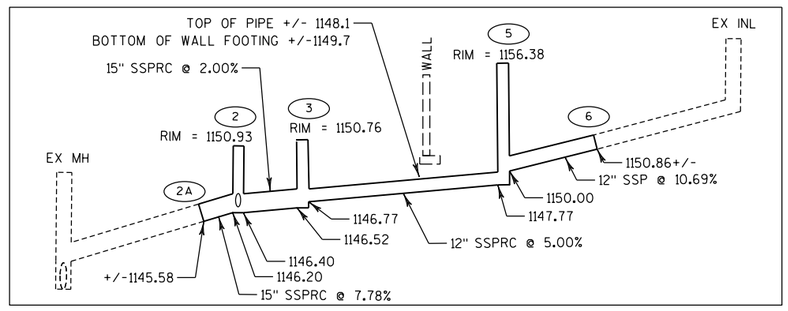
DATA TABLE

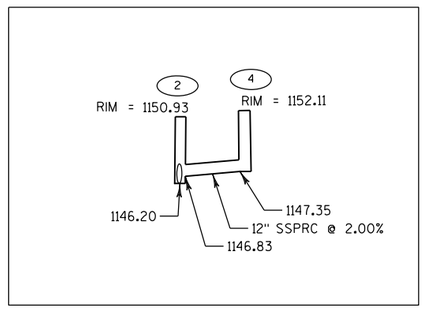
POINT NO.	STATION	OFFSET	RADIUS
1	9+46.67	52.00' LT	30' R
2	9+49.71	45.48' RT	28' R

PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	PAVING DETAIL	SHEET 10	E





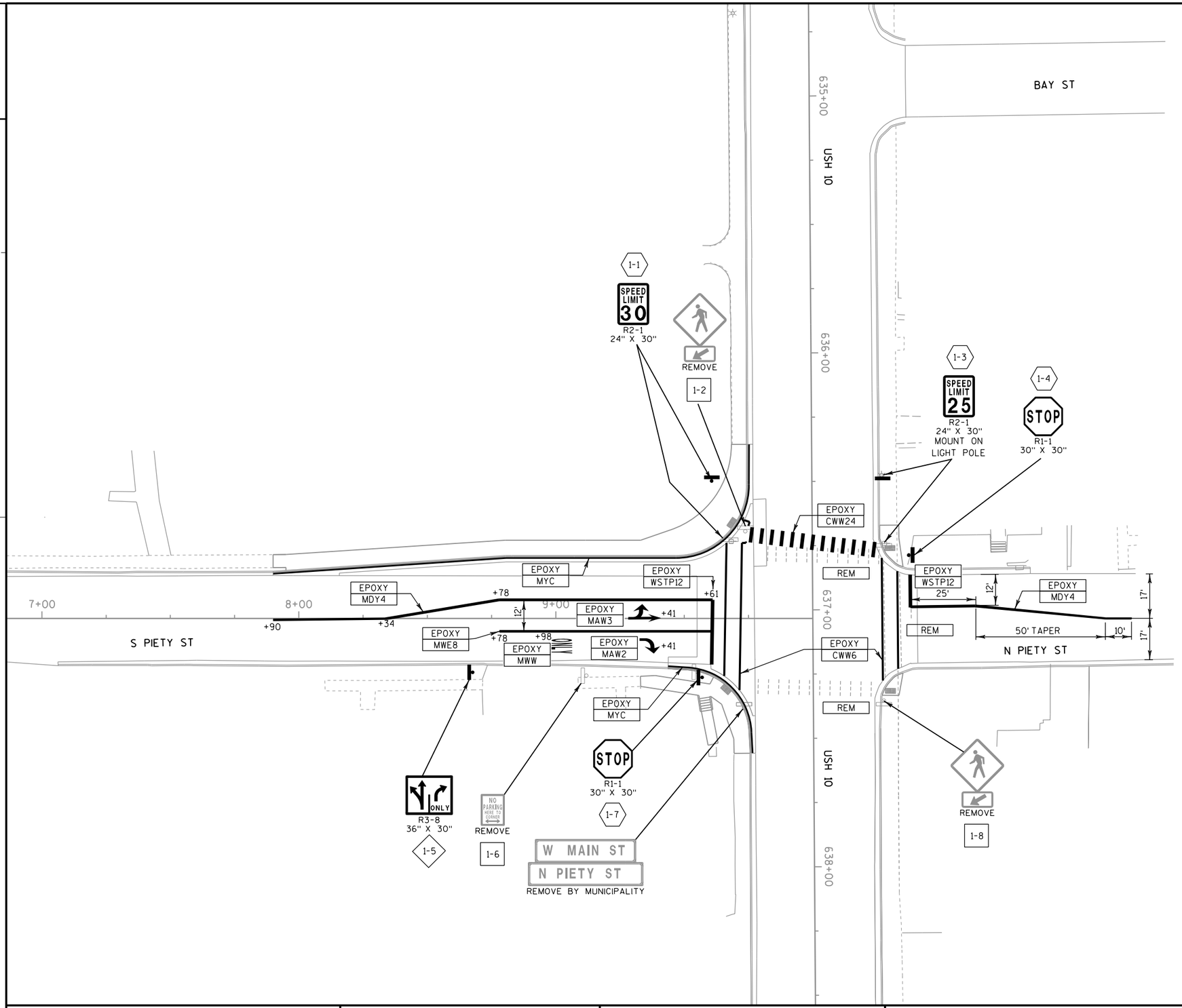




STRUCT NO.	STATION	(1) OFFSET	C-C (FT)	TO STRUCT	INLET TYPE / COVER	MH TYPE / COVER	(2) RIM/ GRATE ELEV.	(3) T.O.S. ELEV.	(4) DEPTH (FT)	DISCHARGE PIPE CLASS	SIZE (IN)	INLET ELEV.	DISCHARGE ELEV.	(5) LENGTH (FT)	(6) SLOPE (%)	REMARKS
1	9+59	20.2' RT	11.0	EX MH	4-FT DIAMETER / H	--	1149.35	1148.52	3.71	III	12	1144.81	1144.18	9	7.00	CONNECT DRAIN TILE, CONCRETE COLLAR REQUIRED AT 1A
2	9+59.68	18.4' LT	10.0	EX MH	--	4-FT DIAMETER / J	1150.93	1149.68	3.48	III	15	1146.20	1145.58	8	7.78	CONCRETE COLLAR REQUIRED AT 2A
3	9+53.13	24.0' LT	8.6	2	4-FT DIAMETER / H	--	1150.76	1149.93	3.41	III	15	1146.52	1146.40	6	2.00	
4	9+74	43.1' LT	28.5	2	4-FT DIAMETER / H	--	1152.11	1151.28	3.93	III	12	1147.35	1146.83	26	2.00	CONNECT EXISTING DRAIN TILE
5	9+52.21	46.3' LT	22.3	3	--	4-FT DIAMETER / J	1156.38	1155.13	7.36	III	12	1147.77	1146.77	20	5.00	
6	9+43	50.5' LT	10.0	5	--	--	--	--	--	III-A	12	1150.86	1150.00	8	10.69	CONCRETE COLLAR REQUIRED, EXISTING PIPE FROM 6 TO 5 IS PLASTIC

(1) STRUCTURE OFFSET IS TO CENTER OF STRUCTURE.
(2) RIM ELEVATION FOR MANHOLE AND FIELD INLET TO CENTER OF CASTING. RIM ELEVATION FOR INLET IN CURB AND GUTTER IS 1-INCH BELOW FLOW LINE ELEVATION.
(3) TOP OF STRUCTURE ELEVATION (TOS) DETERMINED BY SUBTRACTING CASTING HEIGHT AND 6-INCHES FOR ADJUSTMENT FROM RIM ELEVATION. A TYPE J MH CASTING HEIGHT IS 9-INCHES IN HEIGHT AND A TYPE H CATCH BASIN CASTING IS 4-INCHES IN HEIGHT.
(4) DEPTH OF STRUCTURE MEASURED BY SUBTRACTING DISCHARGE ELEVATION FROM T.O.S.
(5) PIPE LENGTH IS MEASURED FROM INSIDE WALL OF STRUCTURE TO INSIDE WALL OF STRUCTURE, PAYMENT WILL BE FOR C-C OF STRUCTURE PIPE LENGTHS.
(6) PIPE SLOPE IS CALCULATED USING PIPE LENGTH BETWEEN INSIDE WALL OF STRUCTURE TO INSIDE WALL OF STRUCTURE.

2



N

LEGEND

- EXISTING SIGN
- PROPOSED SIGN
- X — SIGN - MOVE
- X — SIGN - REMOVE AND REPLACE
- X — SIGN - REMOVE
- X — SIGN - PLACE NEW

EPOXY	EPOXY
MDY4	PAVEMENT MARKING 4-INCH (YELLOW DOUBLE CENTER LINE)
MWE8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
WSTP12	PAVEMENT MARKING STOP LINE 12-INCH (WHITE)
MYC	PAVEMENT MARKING CURB (YELLOW)
CWW6	PAVEMENT MARKING CROSSWALK 6-INCH (WHITE)
CWW24	PAVEMENT MARKING CROSSWALK 24-INCH (WHITE)
MAW2	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
MAW3	PAVEMENT MARKING ARROWS TYPE 3 (WHITE)
MWW	PAVEMENT MARKING WORDS (WHITE) (ONLY)
REM	REMOVING PAVEMENT MARKING

NOTES

SEE STANDARD DETAIL DRAWINGS FOR ADDITIONAL INFORMATION

SEE CONSTRUCTION DETAIL FOR LADDER CROSSWALK FOR ADDITIONAL INFORMATION

PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 12	E

TRAFFIC CONTROL GENERAL NOTES

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

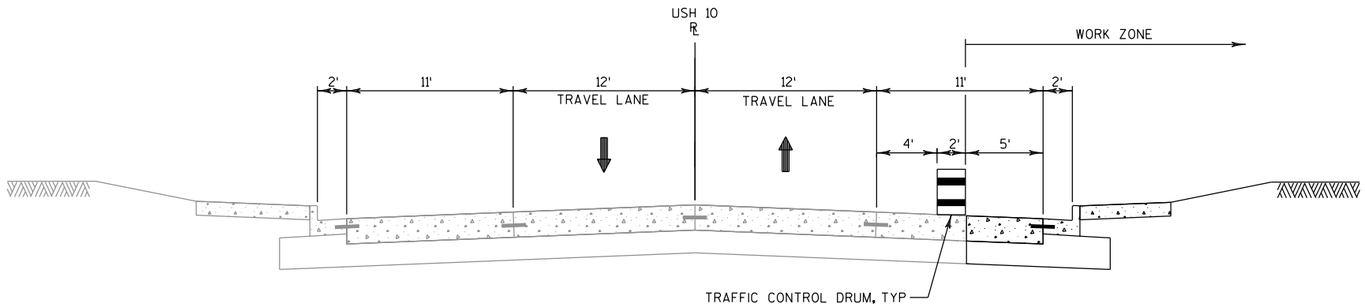
2) ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

3) "WO" SIGNS ARE THE SAME A "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

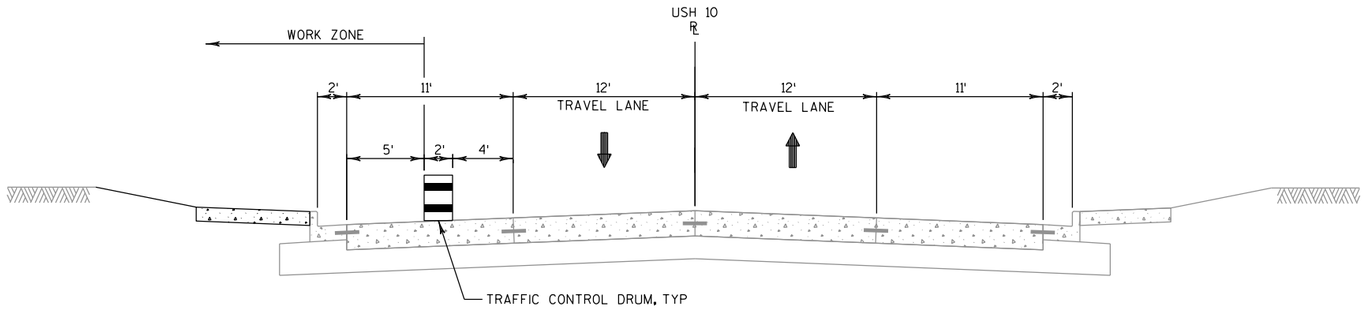
4) FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A TYPE C WARNING LIGHT.

5) ALL TYPE III BARRICADES SHALL BE EQUIPED WITH TYPE "A" (LOW INTENSITY FLASHING) LIGHTS PER SDDS.

6) MAINTAIN ALL EXISTING STOP SIGNS AT ALL TIMES.



STAGE 1 TYPICAL SECTION
USH 10
CONSTRUCT SOUTH LEG OF PIETY STREET



STAGE 2 TYPICAL SECTION
USH 10
CONSTRUCT RAMPS ON NORTH LEG OF PIETY STREET

NOTES

MAINTAIN 16'(MIN) CLEAR ON USH 10 IN EACH DIRECTION AT ALL TIMES DURING NON-WORKING HOURS.

USH 10 TRAFFIC MAY BE REDUCED TO ONE LANE WITH FLAGGING DURING WORKING HOURS THROUGH THE PIETY STREET INTERSECTION.

2

N

W KINNE ST

N GRANT ST

BAY ST

N PIETY ST

N BEULAH ST

S GRANT ST

S PIETY ST

USH 10

632+00 634+00 636+00 638+00 640+00 642+00 644+00

600+00 602+00 604+00 606+00

PROJECT 1530-02-62

15' TYP

R9-11
24" X 12"
(5)

R9-11
24" X 12"

ROAD CLOSED
R11-2
48" X 30"

NO PARKING ANY TIME
R7-1R
18" X 24"

NO PARKING ANY TIME
R7-1L
18" X 24"

R3-2
24" X 24"

NO PARKING ANY TIME
R7-1L
18" X 24"

R3-1
24" X 24"

SIDEWALK CLOSED
R9-9
24" X 12"
(5)

SIDEWALK CLOSED
R9-9
24" X 12"
(5)

R9-11
24" X 12"
(5)

LANE CLOSED
R11-2L
48" X 30"

R9-11
24" X 12"
(5)

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

(5) PLACE AT S PIETY STREET AND STRICKLAND STREET

R9-11
24" X 12"

(1) (2) (3) (4)

LEGEND

- STAGE 1 WORK ZONE
- TYPE II BARRICADE WITHOUT/WITH ATTACHED SIGN
- TYPE III BARRICADE WITHOUT/WITH ATTACHED SIGN
- TRAFFIC CONTROL SIGNS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

(1) SEE PROJECT 1530-02-62 FOR ADVANCED WARNING SIGNING AND TRAFFIC CONTROL SIGNS PCMS PAID IN PROJECT 1530-02-62

(2) PLACE THE W20-1 SIGN PER THE "TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL" IN SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" PAID IN PROJECT 1530-02-62

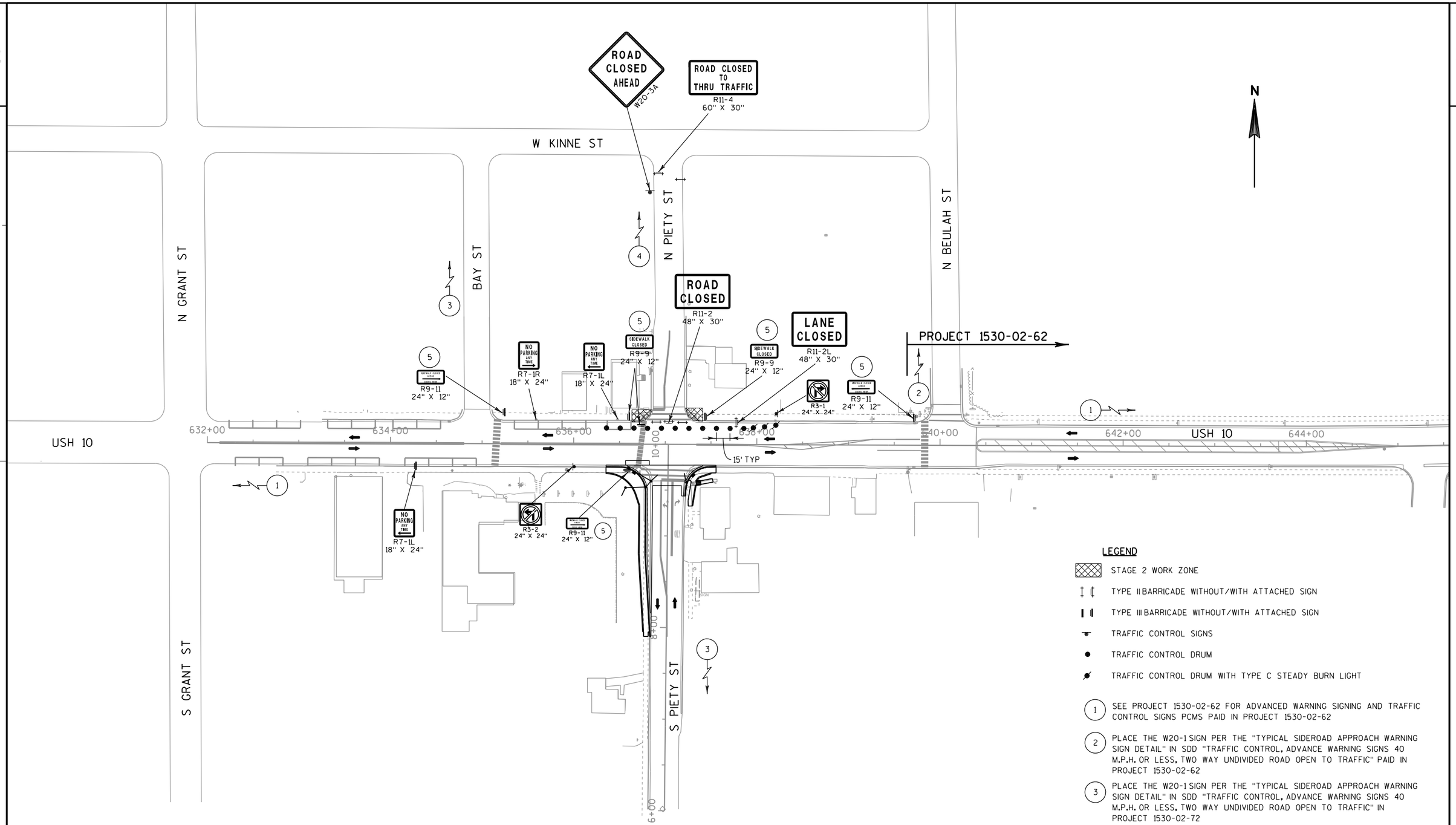
(3) PLACE THE W20-1 SIGN PER THE "TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL" IN SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" IN PROJECT 1530-02-72

(4) PLACE TRAFFIC CONTROL SIGNS AND BARRICADES PER SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES"

(5) SEE SDD FOR "TRAFFIC CONTROL, PEDESTRIAN ACOMMODATION" FOR ADDITIONAL INFORMATION

PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	TRAFFIC CONTROL - STAGE 1	SHEET 14	E

2



LEGEND

- STAGE 2 WORK ZONE
- TYPE II BARRICADE WITHOUT/WITH ATTACHED SIGN
- TYPE III BARRICADE WITHOUT/WITH ATTACHED SIGN
- TRAFFIC CONTROL SIGNS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

(1) SEE PROJECT 1530-02-62 FOR ADVANCED WARNING SIGNING AND TRAFFIC CONTROL SIGNS PCMS PAID IN PROJECT 1530-02-62

(2) PLACE THE W20-1 SIGN PER THE "TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL" IN SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" PAID IN PROJECT 1530-02-62

(3) PLACE THE W20-1 SIGN PER THE "TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL" IN SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" IN PROJECT 1530-02-72

(4) PLACE TRAFFIC CONTROL SIGNS AND BARRICADES PER SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DURING STAGE 1

(5) SEE SDD FOR "TRAFFIC CONTROL, PEDESTRIAN ACOMMODATION" FOR ADDITIONAL INFORMATION

PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	TRAFFIC CONTROL - STAGE 2	SHEET 15	E

DATE 28SEP16 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	1530-02-72 QUANTITY
0020	204.0100	Removing Pavement	SY	95.000	95.000
0070	204.0150	Removing Curb & Gutter	LF	286.000	286.000
0080	204.0155	Removing Concrete Sidewalk	SY	185.000	185.000
0100	204.0195	Removing Concrete Bases	EACH	1.000	1.000
0120	204.0220	Removing Inlets	EACH	3.000	3.000
0130	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	70.000	70.000
0140	204.0245	Removing Storm Sewer (size) 02. 15-Inch	LF	10.000	10.000
0150	204.9105.S	Removing (item description) 01. Retaining Walls	LS	1.000	1.000
0160	205.0100	Excavation Common	CY	403.000	403.000
0200	213.0100	Finishing Roadway (project) 02. 1530-02-72	EACH	1.000	1.000
0220	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	160.000	160.000
0240	310.0115	Base Aggregate Open-Graded	CY	12.000	12.000
0250	312.0110	Select Crushed Material	TON	220.000	220.000
0260	415.0100	Concrete Pavement 10-Inch	SY	15.000	15.000
0270	416.0610	Drilled Tie Bars	EACH	36.000	36.000
0280	416.0620	Drilled Dowel Bars	EACH	6.000	6.000
0300	455.0605	Tack Coat	GAL	10.000	10.000
0340	465.0105	Asphaltic Surface	TON	60.000	60.000
0370	513.2050.S	Railing Pipe	LF	7.000	7.000
0380	520.8000	Concrete Collars for Pipe	EACH	3.000	3.000
0430	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	38.000	38.000
0440	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	234.000	234.000
0450	602.0410	Concrete Sidewalk 5-Inch	SF	2,025.000	2,025.000
0460	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	32.000	32.000
0470	602.1500	Concrete Steps	SF	30.000	30.000
0480	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	62.000	62.000
0490	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	19.000	19.000
0500	608.3012	Storm Sewer Pipe Class III-A 12-Inch	LF	10.000	10.000
0510	611.0530	Manhole Covers Type J	EACH	2.000	2.000
0520	611.0624	Inlet Covers Type H	EACH	3.000	3.000
0530	611.2004	Manholes 4-FT Diameter	EACH	2.000	2.000
0540	611.3004	Inlets 4-FT Diameter	EACH	3.000	3.000
0550	612.0106	Pipe Underdrain 6-Inch	LF	140.000	140.000
0610	618.0100	Maintenance And Repair of Haul Roads (project) 02. 1530-02-72	EACH	1.000	1.000
0620	619.1000	Mobilization	EACH	0.150	0.150
0630	624.0100	Water	MGAL	1.000	1.000
0640	625.0100	Topsoil	SY	270.000	270.000
0670	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0680	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0690	628.2008	Erosion Mat Urban Class I Type B	SY	270.000	270.000
0710	628.7005	Inlet Protection Type A	EACH	6.000	6.000
0730	628.7020	Inlet Protection Type D	EACH	8.000	8.000
0770	629.0210	Fertilizer Type B	CWT	2.000	2.000
0780	630.0140	Seeding Mixture No. 40	LB	5.000	5.000
0790	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	4.000	4.000
0830	637.2210	Signs Type II Reflective H	SF	27.860	27.860
0860	638.2602	Removing Signs Type II	EACH	7.000	7.000
0870	638.3000	Removing Small Sign Supports	EACH	5.000	5.000
0900	643.0100	Traffic Control (project) 02. 1530-02-72	EACH	1.000	1.000

3

DATE 28SEP16 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	1530-02-72 QUANTITY
0910	643.0300	Traffic Control Drums	DAY	1,800.000	1,800.000
0920	643.0410	Traffic Control Barricades Type II	DAY	900.000	900.000
0930	643.0420	Traffic Control Barricades Type III	DAY	840.000	840.000
0940	643.0705	Traffic Control Warning Lights Type A	DAY	1,200.000	1,200.000
0950	643.0715	Traffic Control Warning Lights Type C	DAY	360.000	360.000
0960	643.0900	Traffic Control Signs	DAY	2,220.000	2,220.000
1010	645.0111	Geotextile Type DF Schedule A	SY	85.000	85.000
1020	646.0106	Pavement Marking Epoxy 4-Inch	LF	520.000	520.000
1030	646.0126	Pavement Marking Epoxy 8-Inch	LF	83.000	83.000
1050	646.0600	Removing Pavement Markings	LF	1,244.000	1,244.000
1060	647.0166	Pavement Marking Arrows Epoxy Type 2	EACH	1.000	1.000
1070	647.0176	Pavement Marking Arrows Epoxy Type 3	EACH	1.000	1.000
1080	647.0356	Pavement Marking Words Epoxy	EACH	1.000	1.000
1090	647.0456	Pavement Marking Curb Epoxy	LF	272.000	272.000
1100	647.0556	Pavement Marking Stop Line Epoxy 12-Inch	LF	38.000	38.000
1130	647.0766	Pavement Marking Crosswalk Epoxy 6-Inch	LF	200.000	200.000
1140	647.0796	Pavement Marking Crosswalk Epoxy 24-Inch	LF	78.000	78.000
1170	650.4000	Construction Staking Storm Sewer	EACH	5.000	5.000
1180	650.4500	Construction Staking Subgrade	LF	187.000	187.000
1190	650.5000	Construction Staking Base	LF	187.000	187.000
1200	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	272.000	272.000
1220	650.8500	Construction Staking Electrical Installations (project) 02. 1530-02-72	LS	1.000	1.000
1240	650.9910	Construction Staking Supplemental Control (project) 02. 1530-02-72	LS	1.000	1.000
1250	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	100.000	100.000
1260	654.0102	Concrete Bases Type 2	EACH	1.000	1.000
1270	655.0625	Electrical Wire Lighting 6 AWG	LF	625.000	625.000
1280	690.0150	Sawing Asphalt	LF	210.000	210.000
1290	690.0250	Sawing Concrete	LF	180.000	180.000
1300	715.0415	Incentive Strength Concrete Pavement	DOL	500.000	500.000
1310	SPV.0060	Special 01. Remove and Reinstall Salvaged Light Pole	EACH	1.000	1.000
1330	SPV.0090	Special 01. Concrete Curb and Gutter Cure and Seal Treatment	LF	272.000	272.000
1350	SPV.0165	Special 01. Wall Modular Block Mechanically Stabilized Earth LRFD/QMP	SF	965.000	965.000
1360	SPV.0165	Special 02. Wall Modular Block Gravity Landscape LRFD	SF	85.000	85.000
1370	SPV.0165	Special 03. Concrete Sidewalk Cure and Seal Treatment	SF	2,025.000	2,025.000

3

REMOVING PAVEMENT

STATION - STATION	LOCATION	204.0100 SY
CAT 0010		
9+60 - 9+82	LT & RT	95
TOTAL		95

REMOVING CURB & GUTTER

STATION - STATION	LOCATION	204.0150 LF
CAT 0010		
7+90 - 9+77	LT	228
9+44 - 9+77	RT	58
TOTAL		286

REMOVING CONCRETE SIDEWALK

STATION - STATION	LOCATION	204.0155 SY	COMMENTS
CAT 0010			
7+90 - 9+77	LT	128	--
9+33 - 9+77	RT	45	--
636+75	LT	9	NW CORNER OF INTERSECTION
637+30	LT	3	NE CORNER OF INTERSECTION
TOTAL		185	

REMOVING CONCRETE BASES

STATION	LOCATION	204.0195 EACH
CAT 0010		
9+71	RT	1
TOTAL		1

REMOVING INLETS

STATION	LOCATION	204.0220 EACH
CAT 0010		
9+59	19'RT	1
9+59	18'LT	1
9+76	35'LT	1
TOTAL		3

REMOVING STORM SEWER

STATION - STATION	LOCATION	204.0245.01 12-INCH LF	204.0245.02 15-INCH LF
CAT 0010			
9+43 - 9+76	LT	36	--
9+59 - 9+76	LT	24	--
9+59 - 9+67	LT	--	10
9+59 - 9+69	RT	10	--
TOTAL		70	10

REMOVING RETAINING WALLS

STATION	LOCATION	204.9105.S LS
CAT 0010		
PROJECT	LT&RT	1
TOTAL		1

EARTHWORK SUMMARY

DIVISION	LOCATION	EXCAVATION COMMON (NOTE 1) (ITEM #205.0100)	SALVAGED / UNUSEABLE PAVEMENT MATERIAL (NOTE 2)	AVAILABLE MATERIAL (NOTE 3)	UNEXPANDED FILL	EXPANDED FILL (NOTE 4)	MASS ORDINATE +/- (NOTE 5)
						FACTOR 1.25	
CAT 0010							
1	PIETY STREET	403	9	394	16	20	374
TOTAL		403	9	394	16	20	374

1) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT
2) SALVAGED/UNUSABLE PAVEMENT MATERIAL = (AREA OF PROJECT PAVEMENT REMOVAL) * (TYPICAL EXISTING PAVEMENT DEPTH)
3) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
4) EXPANDED FILL FACTOR = (UNEXPANDED FILL) * (FILL FACTOR)
5) MASS ORDINATE = CUT - (EXPANDED FILL); PLUS INDICATES AN EXCESS OF MATERIAL

BASE AGGREGATE ITEMS

STATION - STATION	LOCATION	305.0120 DENSE 1 1/4-INCH TON	310.0115 OPEN GRADED CY	312.0110 SELECT CRUSHED MATERIAL TON	COMMENTS
CAT 0010					
7+90 - 9+77	LT&RT	154	--	220	PIETY STREET
636+36 - 637+56	RT	--	10	--	DRAIN TILE
636+57 - 636+83	RT	6	2	--	USH 10 CONCRETE PATCH
TOTALS		160	12	220	

CONCRETE PAVEMENT ITEMS

STATION - STATION	LOCATION	415.0100 CONCRETE PAVEMENT 10-INCH SY	416.0610 * DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH
CAT 0010				
636+57 - 636+83	RT	15	10	6
TOTALS		15	10	6

*ADDITIONAL QUANTITIES LOCATED ELSEWHERE

ASPHALTIC ITEMS

STATION - STATION	LOCATION	455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON
CAT 0010			
7+90 - 9+77	LT&RT	10	60
TOTALS		10	60

CONCRETE CURB & GUTTER ITEMS

STATION - STATION	LOCATION	416.0610 * DRILLED TIE BARS EACH	601.0409 30-INCH TYPE A LF	601.0411 30-INCH TYPE D LF	SPV.0090.01 CURE AND SEAL TREATMENT LF
CAT 0010					
7+90 - 9+77	LT	12	24	194	218
9+44 - 9+77	RT	14	14	40	54
TOTALS		26	38	234	272

*ADDITIONAL QUANTITIES LOCATED ELSEWHERE

CONCRETE SIDEWALK ITEMS

STATION - STATION	LOCATION	602.0410 5-INCH SF	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF	SPV.0165.03 CURE AND SEAL TREATMENT SF	COMMENTS
CAT 0010					
7+90 - 9+77	LT	1,494	8	1,494	--
9+33 - 9+77	RT	394	8	394	--
636+75	LT	97	8	97	NW CORNER OF INTERSECTION
637+30	LT	40	8	40	NE CORNER OF INTERSECTION
TOTALS		2,025	32	2,025	

CONCRETE STEP ITEMS

STATION - STATION	LOCATION	513.2050.S RAILING PIPE LF	602.1500 CONCRETE STEPS SF
CAT 0010			
637+30	RT	7	30
TOTALS		7	30

STORM SEWER PIPE ITEMS

FROM STRUCT	TO STRUCT	520.8000 CONCRETE COLLARS FOR PIPE EACH	608.0312 REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 REINFORCED CONCRETE CLASS III 15-INCH LF	608.3012 CLASS III-A 12-INCH LF	COMMENTS
CAT 0010						
1	1A	1	11	--	--	CONNECT TO EXISTING 12" SSPRC
2	2A	1	--	10	--	CONNECT TO EXISTING 15" SSPRC
3	2	--	--	9	--	--
4	2	--	29	--	--	--
5	3	--	22	--	--	--
6	5	1	--	--	10	CONNECT TO EXISTING PLASTIC PIPE
TOTALS		3	62	19	10	

STORM SEWER MANHOLE AND INLET ITEMS

STRUCT NO.	STATION	OFFSET	611.0530 MANHOLE COVERS TYPE J EACH	611.0624 INLET COVERS TYPE H EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.3004 INLETS 4-FT DIAMETER EACH
CAT 0010						
1	9+59	20.2' RT	--	1	--	1
2	9+59.68	18.4' LT	1	--	1	--
3	9+53.13	24.0' LT	--	1	--	1
4	9+74	43.1' LT	--	1	--	1
5	9+52.21	46.3' LT	1	--	1	--
6	9+43	50.5' LT	--	--	--	--
TOTALS			2	3	2	3

PIPE UNDERDRAIN ITEMS

STATION	LOCATION	612.0106 6-INCH LF	645.0111 GEOTEXTILE TYPE DF SCHEDULE A SY
CAT 0010			
636+36 - 367+56	RT	140	85
TOTALS		140	85

WATER

LOCATION	624.0100 MGAL
CAT 0010	
PROJECT	1
TOTAL	1

NOTE: WATER PROVIDED FOR COMPACTION OF BASE AGGREGATE AND DUST CONTROL

EROSION CONTROL AND FINISHING ITEMS

STATION - STATION	LOCATION	625.0100 TOPSOIL SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.7005 INLET PROTECTION TYPE A EACH	628.7020 INLET PROTECTION TYPE D EACH	629.0210 FERTILIZER TYPE B CWT	630.0140 SEEDING MIXTURE NO. 40 LBS	COMMENTS
CAT 0010								
7+90 - 9+77	LT	185	185	4	2	1.2	3.3	--
9+33 - 9+77	RT	33	33	1	1	0.2	0.6	--
636+75	LT	--	--	--	2	--	--	NW CORNER OF INTERSECTION
637+30	LT	2	2	--	1	0.1	0.1	NE CORNER OF INTERSECTION
UNDISTRIBUTED	--	50	50	1	2	0.5	1.0	--
TOTALS		270	270	6	8	2.0	5.0	

MOBILIZATIONS EROSION CONTROL

LOCATION	628.1905 EACH	628.1910 EMERGENCY EACH
CAT 0010		
PROJECT	2	2
TOTALS	2	2

TYPE II SIGNS AND SUPPORTS

SIGN NO.	SIGN CODE	W	X	H	637.2210 SIGNS TYPE II REFLECTIVE H SF	634.0614 POSTS WOOD 4x6x14 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	COMMENTS
CAT 0010									
1-1	R2-1	24	X	30	5.00	1	1	--	--
1-2	--	--	X	--	--	--	1	1	--
1-3	R2-1	24	X	30	5.00	--	1	--	MOUNT ON LIGHT POLE
1-4	R1-1	30	X	30	5.18	1	1	1	--
1-5	R3-8	36	X	30	7.50	1	--	--	--
1-6	--	--	X	--	--	--	1	1	--
1-7	R1-1	30	X	30	5.18	1	1	1	--
1-8	--	--	X	--	--	--	1	1	--
TOTALS					27.86	4	7	5	

TRAFFIC CONTROL ITEMS

LOCATION	DAYS	643.0100 TRAFFIC CONTROL (1530-02-72) EACH	643.0300 DRUMS NO.	643.0300 DRUMS DAYS	643.0410 BARRICADES TYPE II NO.	643.0410 BARRICADES TYPE II DAYS	643.0420 BARRICADES TYPE III NO.	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A NO.	643.0705 WARNING LIGHTS TYPE A DAYS	643.0715 WARNING LIGHTS TYPE C NO.	643.0715 WARNING LIGHTS TYPE C DAYS	643.0900 SIGNS NO.	643.0900 SIGNS DAYS
CAT 0010														
STAGE 1	60	--	15	900	8	480	8	480	10	600	3	180	20	1,200
STAGE 2	60	--	15	900	7	420	6	360	10	600	3	180	17	1,020
PROJECT	--	1	--	--	--	--	--	--	--	--	--	--	--	--
TOTALS		1		1,800		900		840		1,200		360		2,220

PAVEMENT MARKING ITEMS

LOCATION	646.0106 EPOXY 4-INCH (YELLOW) LF	646.0126 EPOXY 8-INCH (WHITE) LF	646.0600 REMOVING PAVEMENT MARKINGS LF	647.0166 ARROWS EPOXY TYPE 2 (WHITE) EACH	647.0176 ARROWS EPOXY TYPE 3 (WHITE) EACH	647.0356 WORDS EPOXY (ONLY) (WHITE) EACH	647.0456 CURB EPOXY (YELLOW) LF	647.0556 STOP LINE EPOXY 12-INCH (WHITE) LF	647.0766 CROSSWALK EPOXY 6-INCH (WHITE) LF	647.0796 CROSSWALK EPOXY 24-INCH (WHITE) LF
CAT 0010										
S. PIETY ST	345	83	--	1	1	1	272	25	115	--
N. PIETY ST	175	--	380	--	--	--	--	13	85	--
USH 10	--	--	864	--	--	--	--	--	--	78
TOTALS	520	83	1,244	1	1	1	272	38	200	78

NOTE: REMOVING PAVEMENT MARKING IS PER 4-INCH LINE; MULTIPLE PASSES REQUIRED FOR REMOVAL OF CROSSWALKS AND STOP LINE ON USH 10 AD N. PIETY STREET

CONSTRUCTION STAKING ITEMS

STATION - STATION	LOCATION	650.4000 STORM SEWER EACH	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 CURB GUTTER AND CURB & GUTTER LF	650.8500 ELECTRICAL INSTALLATIONS (1530-02-72) LS	650.9910 SUPPLEMENTAL CONTROL (1530-02-72) LS
CAT 0010							
7+90 - 9+77	LT&RT	5	187	187	272	--	--
PROJECT	--	--	--	--	--	1	1
TOTALS		5	187	187	272	1	1

ELECTRICAL ITEMS

STATION - STATION	LOCATION	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	654.0102 CONCRETE BASES TYPE 2 EACH	655.0625 ELECTRICAL WIRE LIGHTING 6 AWG LF	SPV.0060.01 REMOVE AND REINSTALL SALVAGED LIGHT POLE EACH
CAT 0010					
635+93 - 637+39	29.0' RT	100	1	625	1
TOTALS		100	1	625	1

SAWING ITEMS

STATION - STATION	LOCATION	690.0150 ASPHALT LF	690.0250 CONCRETE LF	COMMENTS
CAT 0010				
7+90 - 9+77	LT	181	94	--
9+33 - 9+77	RT	29	70	--
636+75	LT	--	8	NW CORNER OF INTERSECTION
637+30	LT	--	8	NE CORNER OF INTERSECTION
TOTALS		210	180	

WALL MODULAR BLOCK ITEMS

STATION - STATION	WALL #	SPV.0165.01 MECHANICALLY STABILIZED EARTH LRFD/QMP SF	SPV.0165.02 GRAVITY LANDSCAPE LRFD SF
CAT 0010			
0+00 - 1+94.04	1	860	--
20+00 - 20+22.44	2	--	85
30+00 - 30+19.46	3	105	--
TOTALS		965	85

NOTE: WALL STATIONING SHOWN; SEE CONSTRUCTION DETAILS

COMPOSITE DRAWING, THE ORIGINAL IS ON FILE IN THE PIERCE COUNTY REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1530-02-22 - 4.01
AMENDMENT NO: 1

AMENDS PARCELS 1 AND 4 AND REMOVES PARCEL 3 FROM TRANSPORTATION PROJECT PLAT 1530-02-22-4.01 RECORDED AS DOCUMENT NUMBER 556110
BEING THAT PART OF OUTLOTS 147, 161 & 168 OF ASSESSOR'S PLAT OF THE VILLAGE OF ELLSWORTH LOCATED IN THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 19, ALSO THAT PART OF LOT 2, BLOCK 16 OF THE ORIGINAL PLAT VILLAGE OF ELLSWORTH, LOCATED IN THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 18, ALL IN TOWNSHIP 26 NORTH, RANGE 17 WEST, VILLAGE OF ELLSWORTH, PIERCE COUNTY, WISCONSIN

RELOCATION ORDER USH 10 (PIETY STREET INTERSECTION) PIERCE 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.

562404
PIERCE COUNTY REGISTER OF DEEDS VICKI J NELSON
PAGES: 1
PLATTRNS
RECORDING FEE: 25.00
01/12/2016 08:00AM
PRC-C 260

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1530-02-22-4.01
AMENDMENT NO: 1

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W SQ FT REQUIRED NEW	EXISTING	TOTAL	TLE SQ FT
1	ENGLISH LUTHERAN CHURCH OF ELLSWORTH	FEE/TLE	713.91	---	713.91	2102.68
2	ML HOLST LLC	FEE	24.88	---	24.88	---
4	J.E.C.P. TRUST, MARY JANE VANEK, TRUSTEE, KAREN ENGEL, FIRST ALTERNATE TRUSTEE, BENJAMIN M. VANEK, SECOND ALTERNATE TRUSTEE	FEE/TLE	35.51	---	35.51	186.01

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
200	WISCONSIN GAS LLC D/B/A WE ENERGIES (GAS)	RELEASE OF RIGHTS

(200) WISCONSIN GAS LLC D/B/A WE ENERGIES (GAS)
NO EASEMENT OF RECORD - PAR. 2

STATION & OFFSET TABLE		
POINT NO.	STATION	OFFSET
100	636+25.00	0.00'
101	636+50.00	-33.00'
102	637+36.95	-33.00'
103	638+75.00	-33.00'
104	638+75.00	0.00'
105	638+75.00	33.00'
106	7+85.00	34.48'
107	7+85.00	0.00'
108	7+85.00	-31.52
PRW121	636+61.00	-33.00'
PRW122	636+70.96	-38.00'
PRW123	637+51.00	33.00'
PRW124	9+62.23	33.67'
PRW125	9+31.50	-32.19'
PRW126	636+53.00	50.50'
PRW127	636+25.00	33.00'

COURSE TABLE		
COURSE	BEARING	DISTANCE
100-101	N 0°12'47" E	33.00'
101-PRW121	S 89°47'13" E	36.00'
PRW121-PRW122	N 63°33'55" E	11.15'
PRW122-102	S 85°27'14" E	66.18'
102-103	S 89°47'13" E	138.05'
103-104	S 0°12'47" W	33.00'
104-105	S 0°12'47" W	33.00'
105-PRW123	N 89°47'13" W	124.00'
PRW123-PRW124	S 70°49'57" W	15.07'
PRW124-106	S 0°20'50" W	177.23'
106-107	N 89°23'23" W	34.48'
107-108	N 89°23'23" W	31.52'
108-PRW125	N 0°20'50" E	146.50'
PRW125-PRW126	N 44°41'23" W	25.10'
PRW126-PRW127	N 57°46'54" W	33.02'
PRW127-100	N 0°12'47" E	33.00'

TLE STATION & OFFSET TABLE		
POINT NO.	STATION	OFFSET
TLE150	637+54.00	33.00'
TLE151	637+54.00	44.50'
TLE152	9+53.00	33.71'
TLE153	7+85.00	-37.00'
TLE154	9+15.00	-45.00'
TLE155	636+35.00	50.00'
TLE156	636+25.00	50.00'

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, PIERCE COUNTY, NAD83 (1991) IN U.S. 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 MONUMENTS ARE TYPE 2 (TYPICALLY 3/4" X 24" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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.

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

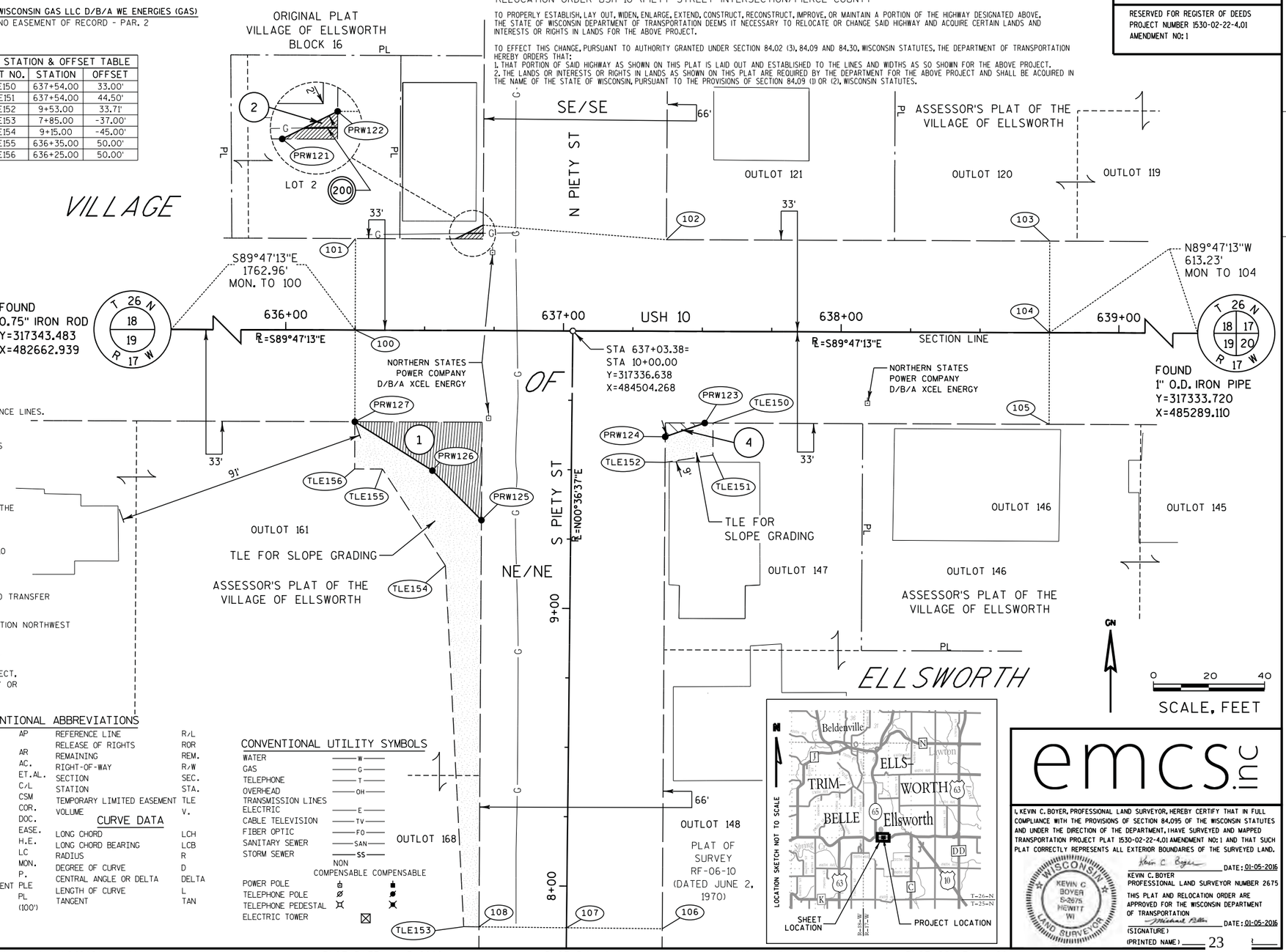
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR USH 10 ESTABLISHED FROM PREVIOUS PROJECT 6088, PLAT OF THE VILLAGE OF ELLSWORTH, ASSESSOR'S PLAT OF THE VILLAGE OF ELLSWORTH, PLAT OF SURVEY DATED JUNE 19, 1989, AND EXISTING CENTERLINE.
EXISTING HIGHWAY RIGHT-OF-WAY FOR NORTH AND SOUTH PIETY ST ESTABLISHED FROM PLAT OF THE VILLAGE OF ELLSWORTH, ASSESSOR'S PLAT OF THE VILLAGE OF ELLSWORTH, PLAT OF SURVEY RF-06-10 DATED JUNE 2, 1970, AND EXISTING CENTERLINE.

NO PREVIOUS ACCESS CONTROL EXISTS.

OWNERS 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 NORTHWEST REGIONAL OFFICE EAU CLAIRE.

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.



CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	LP (1" 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		RESTRICTED ACCESS (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		RESTRICTED ACCESS (BY ACQUISITION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	PRW20	QUARTER LINE	
PARCEL NUMBER	102	SIXTEENTH LINE	
UTILITY NUMBER	40	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	21-1	PROPOSED REFERENCE LINE	
BUILDING		PARALLEL OFFSET	

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 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		

emcs.llc

I, KEVIN C. BOYER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1530-02-22-4.01 AMENDMENT NO: 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 01-05-2016
KEVIN C. BOYER
PROFESSIONAL LAND SURVEYOR NUMBER 2675

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

(SIGNATURE) DATE: 01-05-2016
(PRINTED NAME)

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\TPP\1530-02-22 Piety Intersection\040101_rp_A1.dgn
PLOT DATE : 1/5/2016
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:20
APPRAISAL PLAT DATE :

1530-02-22-4.01 AMENDMENT NO: 1

COMPOSITE DRAWING, THE ORIGINAL IS ON FILE IN THE PIERCE COUNTY REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1530-02-22 - 4.01

THAT PART OF LOTS 146, 147, 148, AND 161 OF ASSESSOR'S PLAT OF THE VILLAGE OF ELLSWORTH IN THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 19, AND ALSO THAT PART OF LOT 2, BLOCK 16 OF THE VILLAGE OF ELLSWORTH IN THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 18, ALL IN TOWNSHIP 26 NORTH, RANGE 17 WEST, VILLAGE OF ELLSWORTH, PIERCE COUNTY, WISCONSIN

RELOCATION ORDER USH 10 (PIETY STREET INTERSECTION) PIERCE 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.

556110
PIERCE COUNTY
REGISTER OF DEEDS
VICKI J NELSON
PAGES: 1
PLATTRANS
RECORDING FEE: 25.00
02/23/2015 08:00AM
PRC-C 257A

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1530-02-22-4.01
AMENDMENT NO:

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W NEW	SQ FT REQUIRED EXISTING	SQ FT REQUIRED TOTAL	TLE SQ FT
1	ENGLISH LUTHRAN CHURCH OF ELLSWORTH	FEE/TLE	35.39	---	35.39	1234.12
2	ML HOLST LLC	FEE	24.88	---	24.88	---
3	GREGORY A. EATON & KRISTINE E.	TLE	---	---	---	116.82
4	J.E.C.P. TRUST, MARY JANE VANEK, TRUSTEE, KAREN ENGEL, FIRST ALTERNATE TRUSTEE, BENJAMIN M. VANEK, SECOND ALTERNATE TRUSTEE	FEE/TLE	2940.67	---	2940.67	3118.66

UTILITY INTERESTS REQUIRED

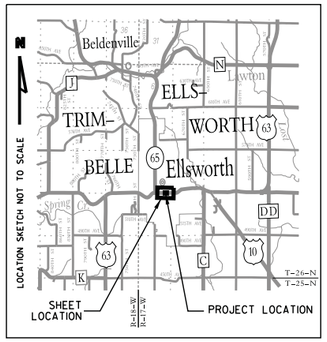
UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
200	WISCONSIN GAS LLC D/B/A WE ENERGIES (GAS)	RELEASE OF RIGHTS

(200) WISCONSIN GAS LLC D/B/A WE ENERGIES (GAS)
NO EASEMENT OF RECORD - PAR. 2

STATION & OFFSET TABLE		
POINT NO.	STATION	OFFSET
100	636+50.00	0.00'
101	636+50.00	-33.00'
PRW121	636+61.00	-33.00'
PRW122	636+70.96	-38.00'
102	637+36.95	-33.00'
103	638+75.00	-33.00'
104	638+75.00	0.00'
105	638+75.00	33.00'
PRW123	638+07.89	33.00'
PRW124	638+07.86	45.00'
PRW125	637+77.00	68.00'
PRW126	9+32.36	52.09'
PRW127	8+88.36	52.40'
PRW128	8+88.23	34.01'
106	8+50.00	34.19'
107	8+50.00	0.00'
108	8+50.00	-31.81'
PRW129	636+70.78	39.00'
PRW130	636+59.00	33.00'

COURSE TABLE		
COURSE	BEARING	DISTANCE
100-101	N 00°12'47" E	33.00'
101-PRW121	S 89°47'13" E	11.00'
PRW121-PRW122	N 63°33'55" E	11.15'
PRW122-102	S 85°27'14" E	66.18'
102-103	S 89°47'13" E	138.05'
103-104	S 00°12'47"W	33.00'
104-105	S 00°12'47"W	33.00'
105-PRW123	N 89°47'13" W	67.11'
PRW123-PRW124	S 00°20'50" W	12.00'
PRW124-PRW125	S 53°30'56" W	38.49'
PRW125-PRW126	N 89°47'13" W	22.00'
PRW126-PRW127	S 00°12'47" W	44.00'
PRW127-PRW128	N 89°47'13" W	18.39'
PRW128-106	S 00°20'50" W	38.23'
106-107	N 89°23'23" W	34.19'
107-108	N 89°23'23" W	31.81'
108-PRW129	N 00°20'50" E	110.78'
PRW129-PRW130	N 62°48'09" W	13.22'
PRW130-TLE161	N 89°47'13" W	9.00'
TLE161-100	N 00°12'47" E	33.00'

TLE STATION & OFFSET TABLE		
POINT NO.	STATION	OFFSET
TLE150	638+21.00	33.00'
TLE151	638+17.00	36.65'
TLE152	638+17.00	45.00'
TLE156	8+85.98	105.11'
TLE153	8+85.59	50.00'
TLE154	8+70.00	50.00'
TLE155	8+70.00	34.09'
TLE157	9+15.00	-32.11'
TLE158	9+25.00	-70.00'
TLE159	9+33.51	-70.00'
TLE160	9+41.63	-52.97'
TLE161	636+50.00	33.00'



VILLAGE

VILLAGE OF ELLSWORTH
BLOCK 16

ASSESSOR'S PLAT OF THE VILLAGE OF ELLSWORTH

PLAT OF SURVEY (DATED JUNE 19, 1989)

ASSESSOR'S PLAT OF THE VILLAGE OF ELLSWORTH

PLAT OF SURVEY RF-06-10 (DATED JUNE 2, 1970)

ELLSWORTH

N PIETY ST

S PIETY ST

USH 10

SECTION LINE

SE/SE

NE/NE

LOT 1
LOT 2
LOT 161
LOT 121
LOT 120
LOT 119
LOT 147
LOT 146
LOT 148

P.L.
66'
33'
1.5'
2.4'
12.8'

NORTHERN STATES POWER COMPANY D/B/A XCEL ENERGY

S89°47'13"E 1787.96' MON. TO 100

N89°47'13"W 613.23' MON TO 104

R=S89°47'13"E

R=N00°36'37"E

636+00
637+00
638+00
639+00
9+00

STA637+03.38/STA10+00.00
Y=317336.638
X=484504.268

FOUND
0.75" IRON ROD
Y=317343.483
X=482662.939

FOUND
1" O.D. IRON PIPE
Y=317333.720
X=485289.110

T 26 N
R 17 W
18
19

T 26 N
R 17 W
18 17
19 20

TLE FOR SLOPE GRADING

TLE FOR BUILDING REMOVAL AND SLOPE GRADING

BUILDING FOR REMOVAL

TLE FOR SLOPE GRADING EXISTING BUILDING WILL NOT BE AFFECTED

GN

0 20 40
SCALE, FEET

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, PIERCE COUNTY, NAD83 (1991) IN U.S. 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 MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR USH 10 ESTABLISHED FROM PREVIOUS PROJECT 6088, PLAT OF THE VILLAGE OF ELLSWORTH, ASSESSOR'S PLAT OF THE VILLAGE OF ELLSWORTH, PLAT OF SURVEY DATED JUNE 19 1989, AND EXISTING CENTERLINE.
EXISTING HIGHWAY RIGHT-OF-WAY FOR NORTH AND SOUTH PIETY ST ESTABLISHED FROM PLAT OF THE VILLAGE OF ELLSWORTH, ASSESSOR'S PLAT OF THE VILLAGE OF ELLSWORTH, PLAT OF SURVEY RF-06-10 DATED JUNE 2 1970, AND EXISTING CENTERLINE.

NO PREVIOUS ACCESS CONTROL EXISTS

OWNERS 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 NORTHWEST REGIONAL OFFICE EAU CLAIRE

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.

CONVENTIONAL SYMBOLS

- FOUND IRON PIPE/PIN (UP (1" UNLESS NOTED))
- R/W MONUMENT (●(SET))
- R/W STANDARD (▲(SET))
- SIGN (SIGN)
- SECTION CORNER MONUMENT
- SECTION CORNER SYMBOL (SECTION CORNER MONUMENT)
- FEE (HATCH VARIES)
- TEMPORARY LIMITED EASEMENT
- PERMANENT LIMITED EASEMENT
- R/W BOUNDARY POINT (PRW20)
- PARCEL NUMBER (102)
- UTILITY NUMBER (40)
- SIGN NUMBER (OFF PREMISE) (21-1)
- BUILDING
- PROPOSED R/W LINE
- EXISTING H.E. LINE
- PROPERTY LINE
- LOT & TIE LINES
- SLOPE INTERCEPTS
- CORPORATE LIMITS
- RESTRICTED ACCESS (BY PREVIOUS ACQUISITION/CONTROL)
- RESTRICTED ACCESS (BY ACQUISITION)
- NO ACCESS (BY STATUTORY AUTHORITY)
- SECTION LINE
- QUARTER LINE
- SIXTEENTH LINE
- EXISTING CENTERLINE
- PROPOSED REFERENCE LINE
- PARALLEL OFFSET

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 UTILITY SYMBOLS

- WATER (W)
- GAS (G)
- TELEPHONE (T)
- OVERHEAD TRANSMISSION LINES ELECTRIC (OH)
- CABLE TELEVISION (TV)
- FIBER OPTIC (FO)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)

NON COMPENSABLE

- POWER POLE
- TELEPHONE POLE
- TELEPHONE PEDESTAL
- ELECTRIC TOWER

emcs.LLC

I, KEVIN C. BOYER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1530-02-22-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

Kevin C. Boyer DATE: 2015-02-16
KEVIN C. BOYER
PROFESSIONAL LAND SURVEYOR NUMBER 2675

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

Michael Pitts DATE: 2015-02-16
(SIGNATURE)
(PRINTED NAME) 24

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\TPP\1530-02-22 Piety Intersection\040101_rp.dgn
PLOT DATE : 2/16/2015
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:20
APPRAISAL PLAT DATE :

1530-02-22-4.01

LEGEND

- SLOPE INTERCEPT
- (S) REMOVING CONCRETE SIDEWALK
- (C) REMOVING CURB & GUTTER
- REMOVING PAVEMENT
- REMOVING RETAINING WALLS

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
600	637+43, 26'LT	TAG BOLT ON HYDRANT FLANGE	1150.30

BAY ST

S PIETY ST

N PIETY ST

USH 10

S 89°47'13" E

N 0°36'37" E

635+00

636+00

637+00

638+00

7+00

8+00

9+00

EXIST R/W

PROP R/W

TLE

ASPH PE

CONTROL POINT 502
Y=317123.508
X=484482.784
0.75" IRON ROD
W/ BLUE EMCS CAP

ENGLISH LUTHERAN CHURCH OF ELLSWORTH

XCEL ENERGY (ELEC)

WE ENERGIES (GAS)

VILLAGE OF ELLSWORTH (SAN)

VILLAGE OF ELLSWORTH (WATER)

AT&T WISCONSIN (COMM)

BEGIN CONSTRUCTION
STA 7+90
MATCH EXISTING

END CONSTRUCTION
STA 9+77.5
MATCH EXISTNG

ML HOLST LLC

FEE

XCEL ENERGY (ELEC)
MIDCONTINENT COMMUNICATIONS (COMM)

CAUTION

BM 600

ALLEN LANGER

SALVAGE AND REINSTALL LIGHT POLE (SEE CONSTRUCTION DETAILS)

VILLAGE OF ELLSWORH (STEET LIGHTING)

RESIDUAL GROUNDWATER AND SOIL CONTAMINATION (NO WORK IN AREA)

JECP TRUST

XCEL ENERGY (ELEC)
MIDCONTINENT COMMUNICATIONS (COMM)

NOTES

SEE PROJECT 1530-02-62 FOR ADDITIONAL CONTROL POINTS AND BENCHMARKS

STORM SEWER REMOVALS ARE SHOWN ON THE STORM SEWER PLAN

* INCLUDES CONCRETE STEPS

ALIGNMENT DATA

USH 10: STA 636+00, Y=317,337.022, X=484,400.891

USH 10: STA 640+00, Y=317,335.535, X=484,800.888

PIETY STREET: STA 6+00, Y=316,936.660, X=484,500.007

ALIGNMENT INTERSECTION:
STA 637+03.38 (USH 10) = STA 10+00.00 (PIETY)
Y=317,336.638, X=484,504.268

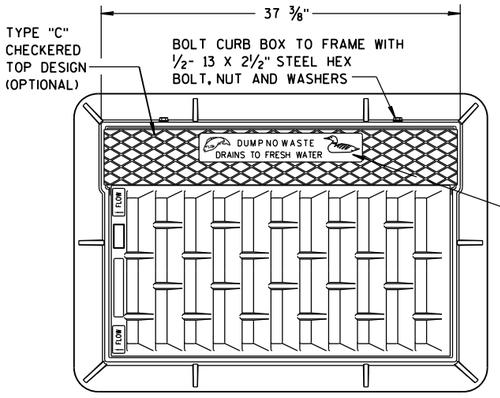
PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	PLAN	SHEET 25 E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Piety Street Intersection\050101_pp.dgn PLOT DATE : 7/22/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:40

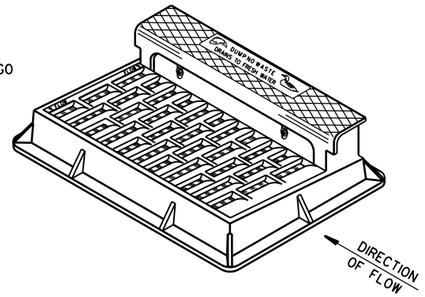
WISDOT/CADDS SHEET 44

Standard Detail Drawing List

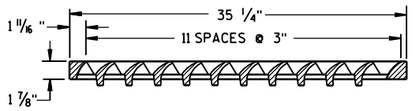
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-01	INLETS 3-FT AND 4-FT DIAMETER
08D01-18	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-17A	CURB RAMPS TYPES 1 AND 1-A
08D05-17B	CURB RAMPS TYPES 2 AND 3
08D05-17C	CURB RAMPS TYPES 4A AND 4A1
08D05-17D	CURB RAMPS TYPE 4B AND 4B1
08D05-17E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D15-05A	EDGEDRAIN OUTLET AND OUTFALL MARKERS
08D15-05B	EDGEDRAIN AND BASE AGGREGATE OPEN GRADED
08D15-05C	EDGEDRAIN AND BASE AGGREGATE OPEN GRADED
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-09	CONDUIT
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C09-13A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-13B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-13C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C03-03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-13B	PAVEMENT MARKING WORDS
15C07-13C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-04A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-02	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-03A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-03B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-03C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

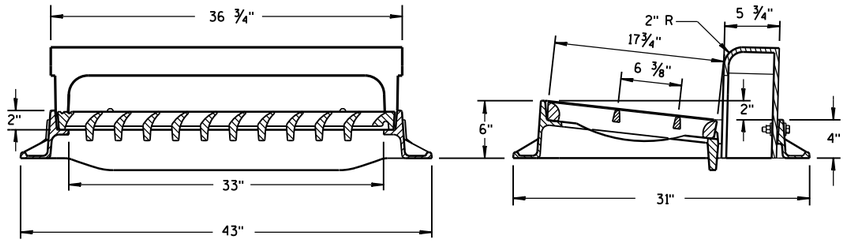


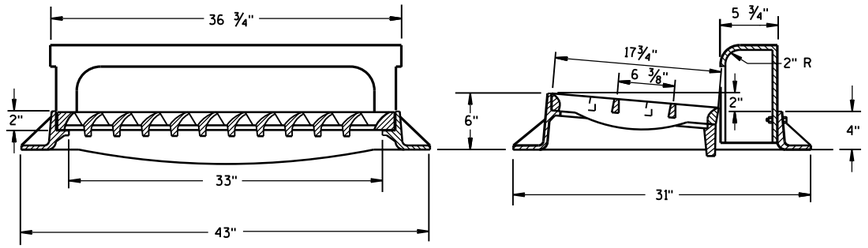
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

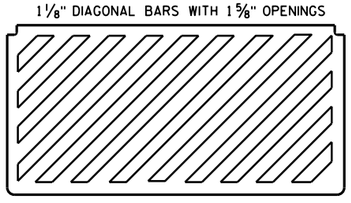






TYPE "H"

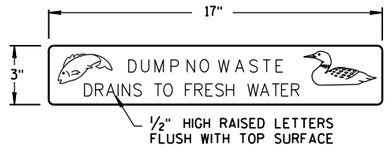
NOTE: EITHER CASTING IS ACCEPTABLE



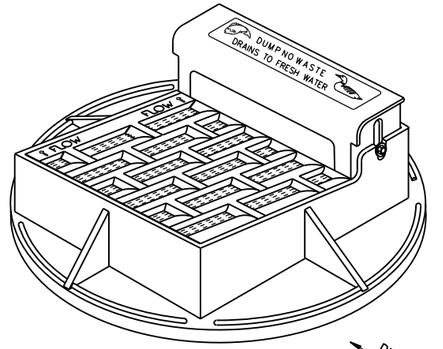
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

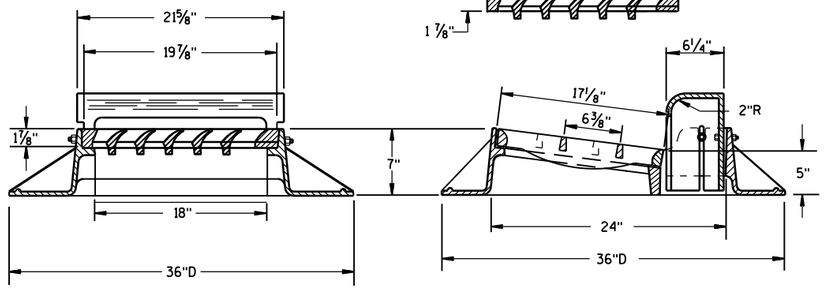


LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.



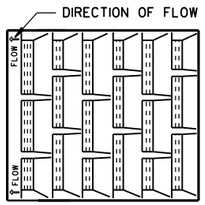
TYPE "A"

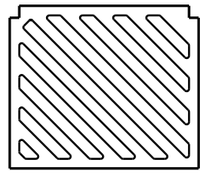
GENERAL NOTES

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

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

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

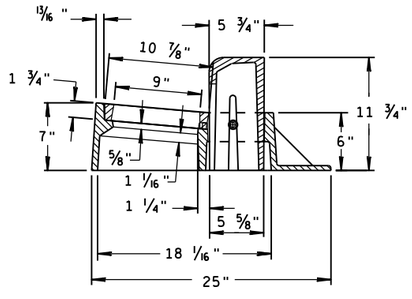


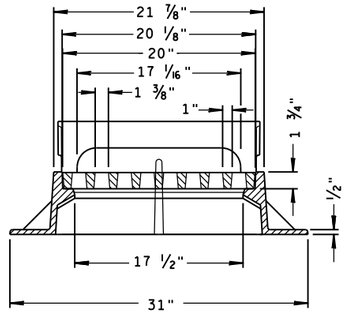


SPECIAL GRATE FOR TYPE "A" COVER

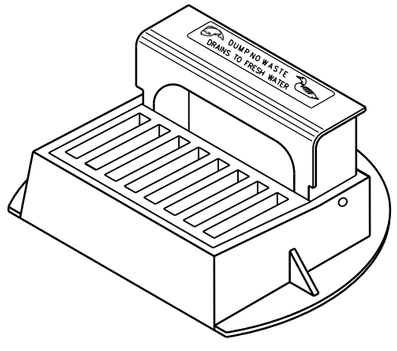
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





TYPE "Z"



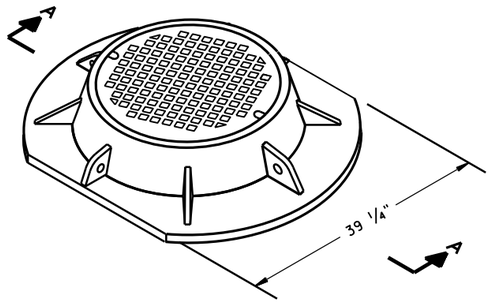
INLET COVERS TYPE A, H, A-S, H-S & Z

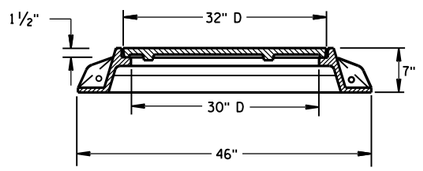
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

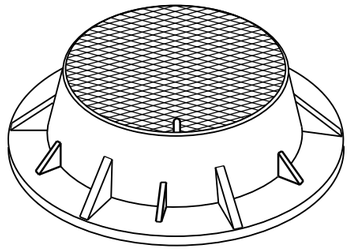
6

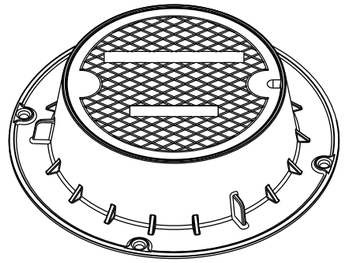
S.D.D. 8 A 5-19a

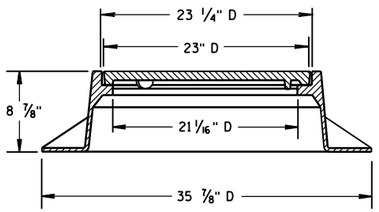


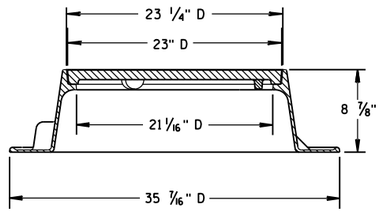


SECTION A-A
TYPE "K"









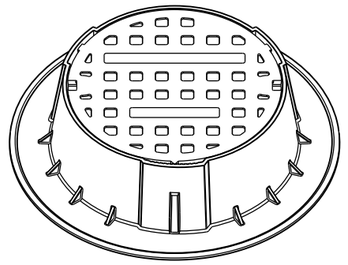
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

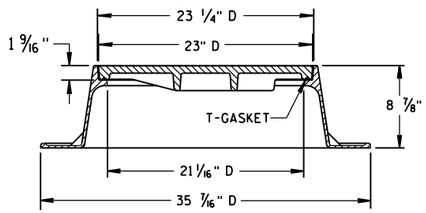
GENERAL NOTES

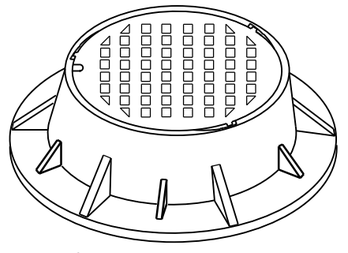
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

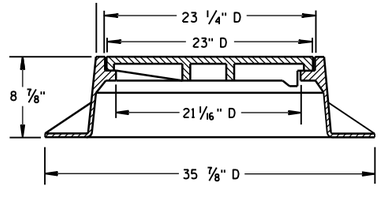
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

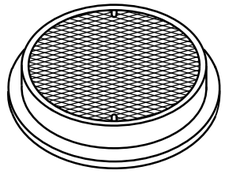


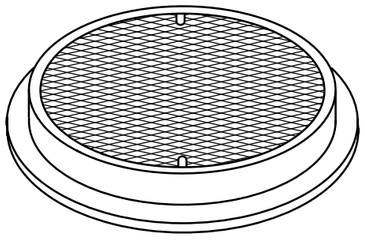


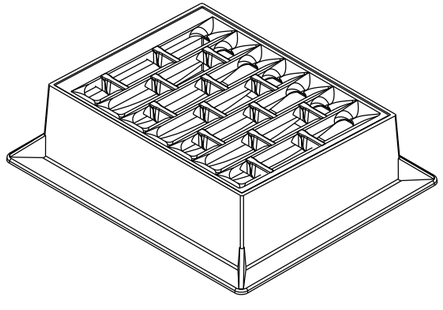


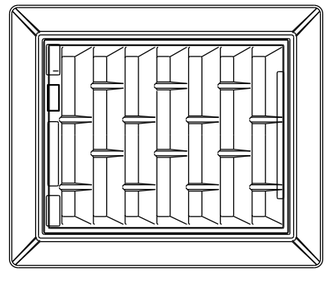


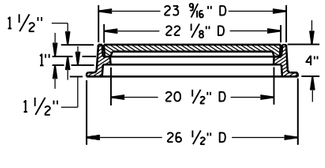
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



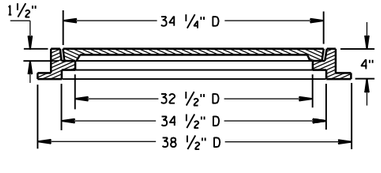




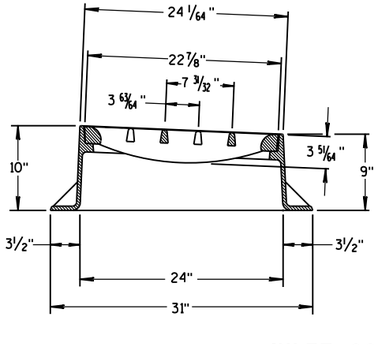


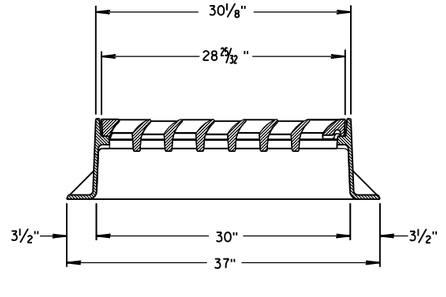


TYPE "L"



TYPE "M"



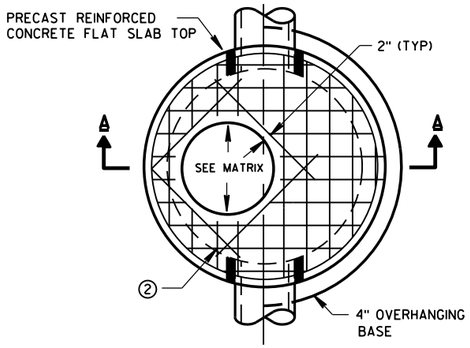


INLET COVER TYPE "BW"

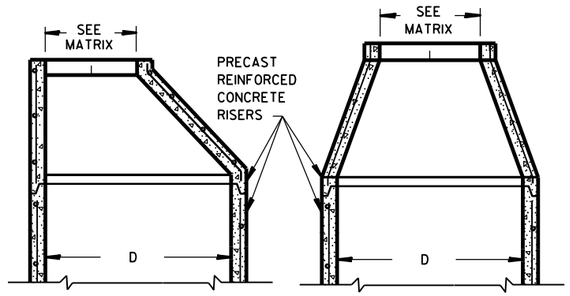
INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

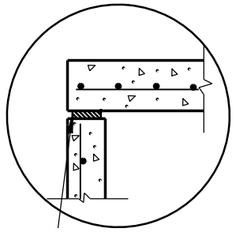


PLAN VIEW CIRCULAR OPENING

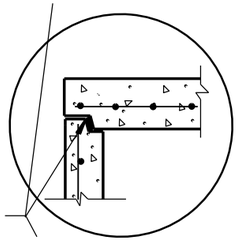


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

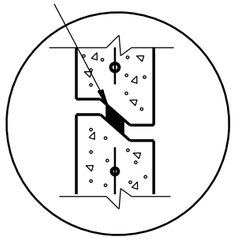


TOP WITH PLAIN END JOINT



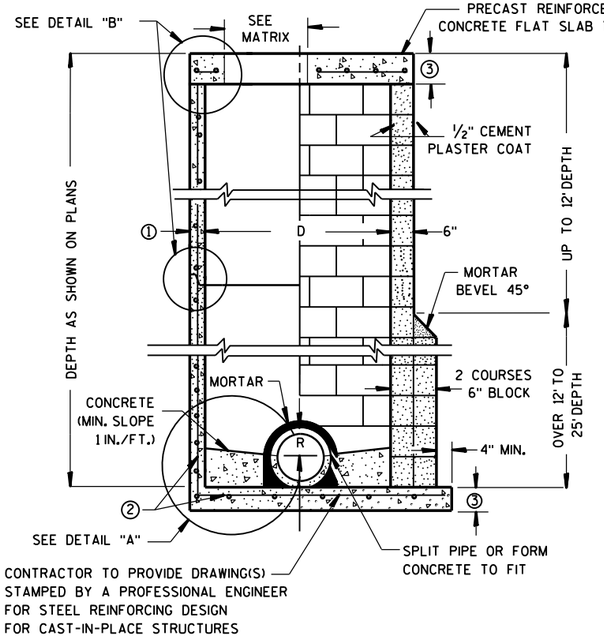
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



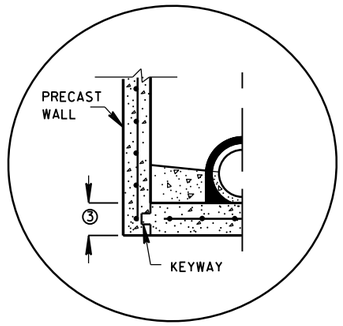
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

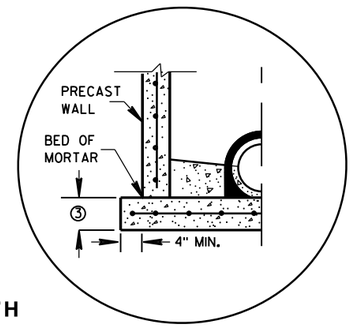


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

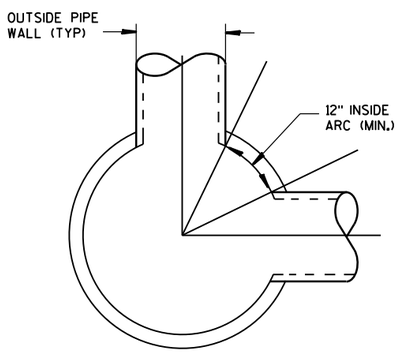


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

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

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

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

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

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

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

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

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

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

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

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

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

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

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

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

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

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

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

MANHOLE COVER OPENING MATRIX

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

PIPE MATRIX

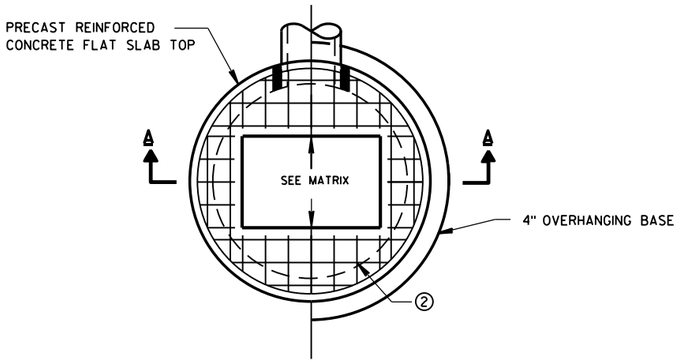
MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

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

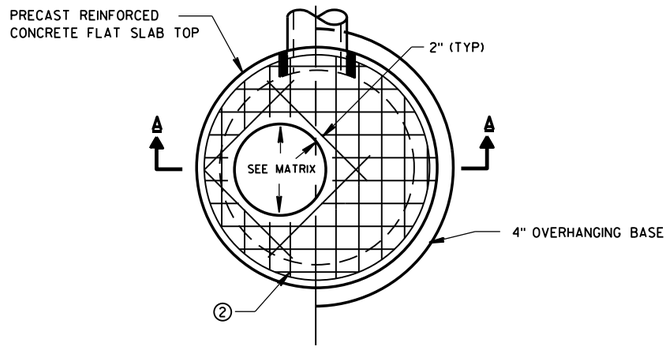
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

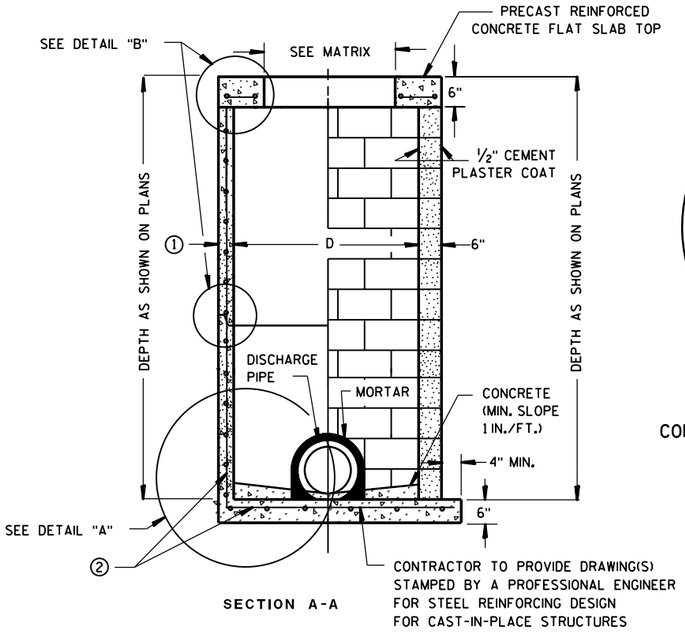
6
S.D.D. 8 B 9-1



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

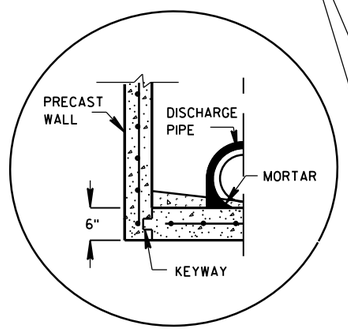


SECTION A-A

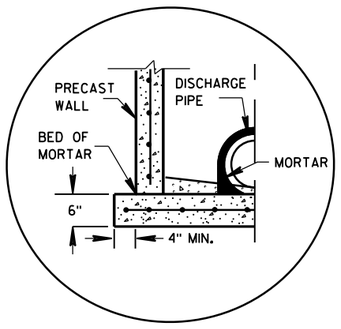
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

CIRCULAR INLETS W/ FLAT TOP

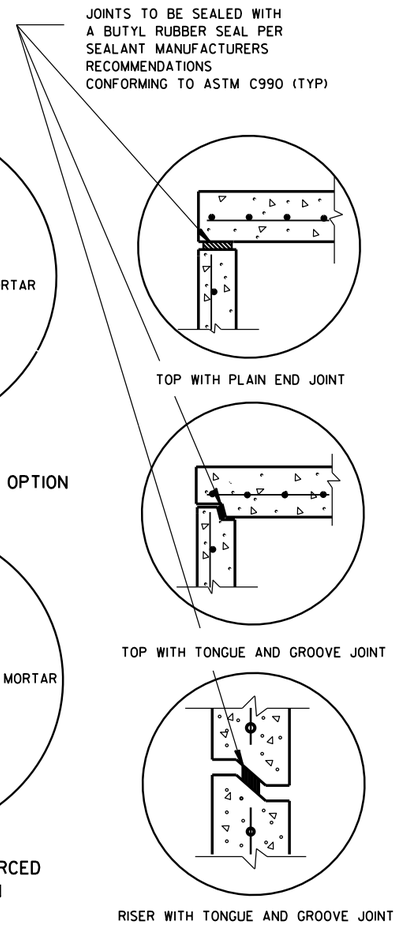


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "B"

GENERAL NOTES

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

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

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

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

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

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

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

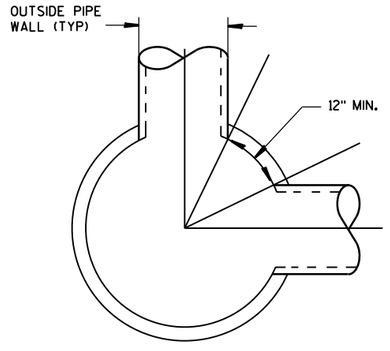
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

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

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

PIPE MATRIX

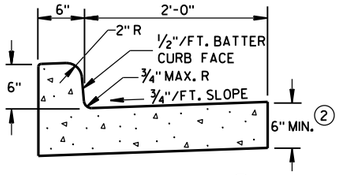
INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

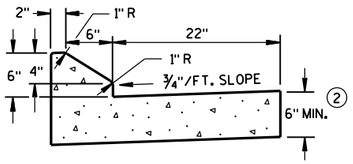
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

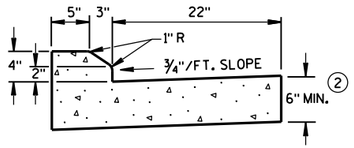
INLETS 3-FT AND 4-FT DIAMETER



TYPES A & D ①

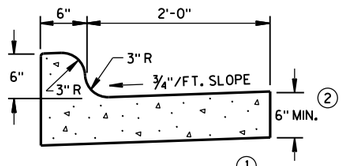


6" SLOPED CURB TYPES G & J ①

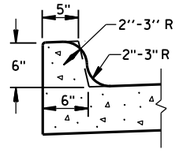


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

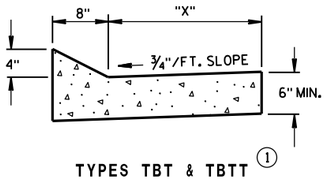


TYPES K & L ①



OPTIONAL CURB SHAPE FOR TYPES K & L ①

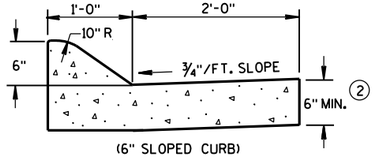
CONCRETE CURB & GUTTER 30"



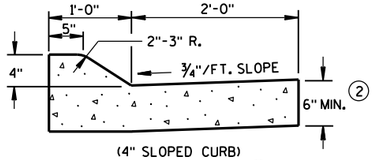
TYPES TBT & TBTT ①

CONCRETE CURB & GUTTER

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

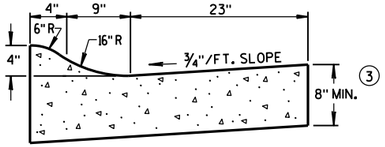


(6" SLOPED CURB)



(4" SLOPED CURB)

TYPES A & D ①



4" SLOPED CURB TYPES R & T ① ④

CONCRETE CURB & GUTTER 36"

GENERAL NOTES

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

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

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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

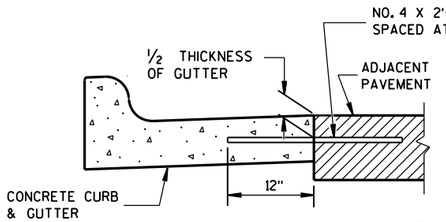
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

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

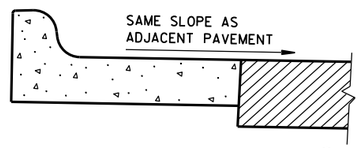
③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

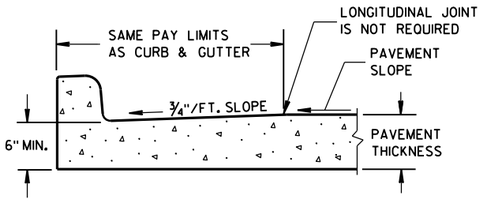
⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



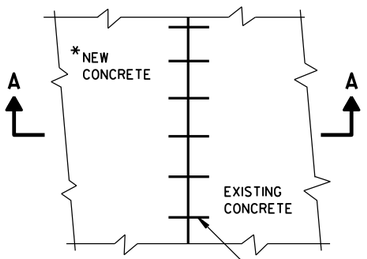
TYPICAL TIE BAR LOCATION ①



REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)

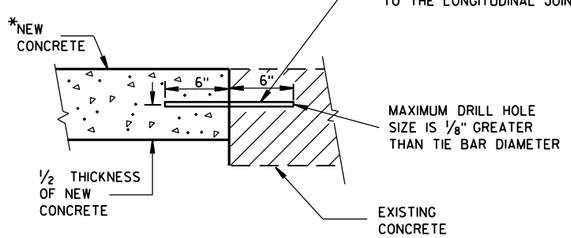


PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



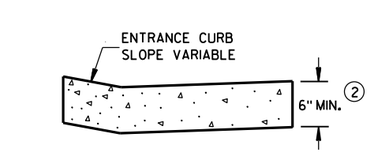
PLAN VIEW

*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

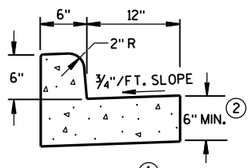


SECTION A-A

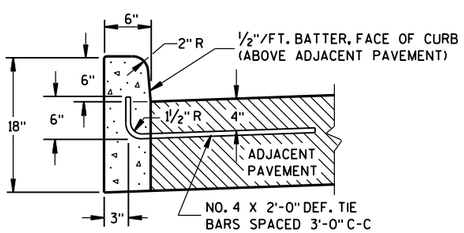
TIE BARS DRILLED
INTO EXISTING PAVEMENT



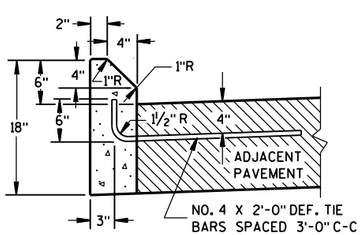
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



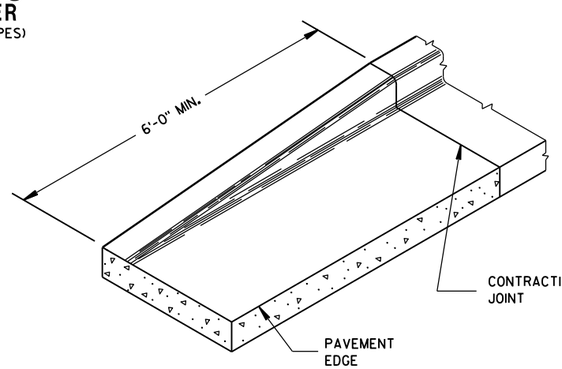
①
TYPES A & D
CONCRETE CURB & GUTTER 18"



① TYPES A & D



① TYPES G & J



END SECTION CURB & GUTTER

CONCRETE CURB

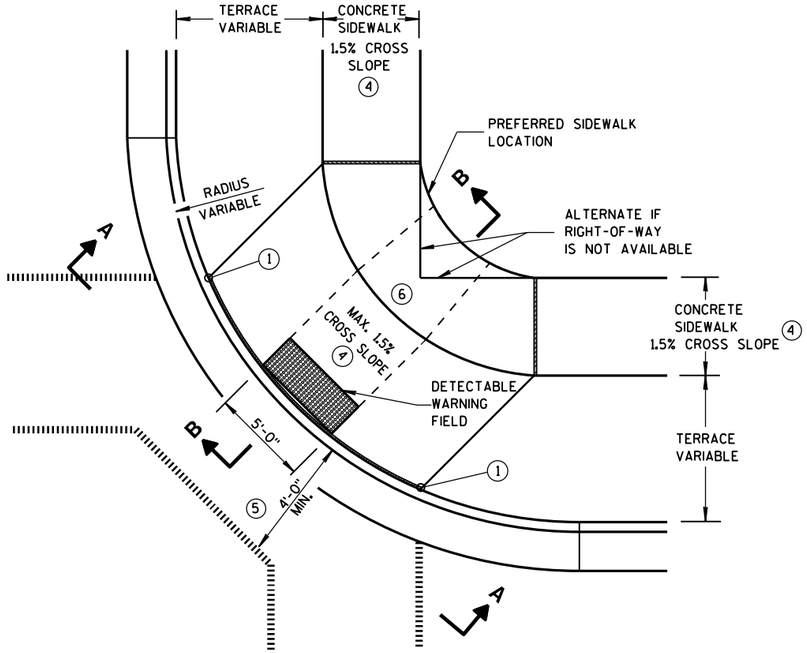
CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

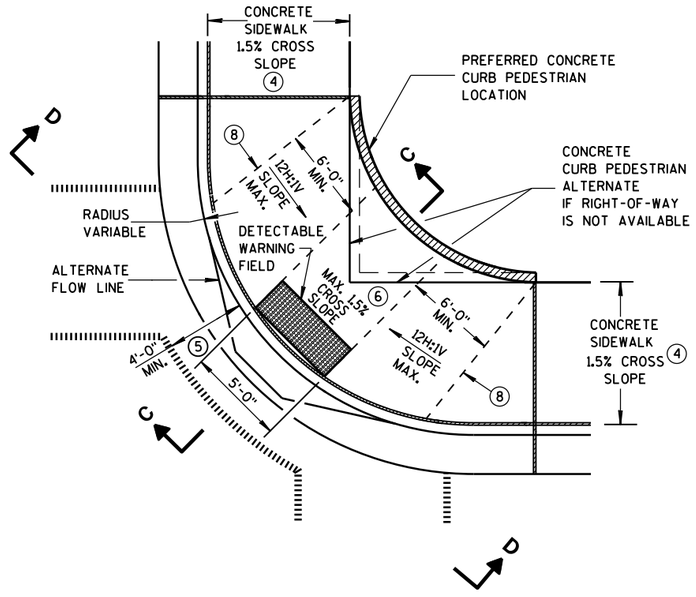
S.D.D. 8 D 1-18



PLAN VIEW

TYPE 1 RAMP

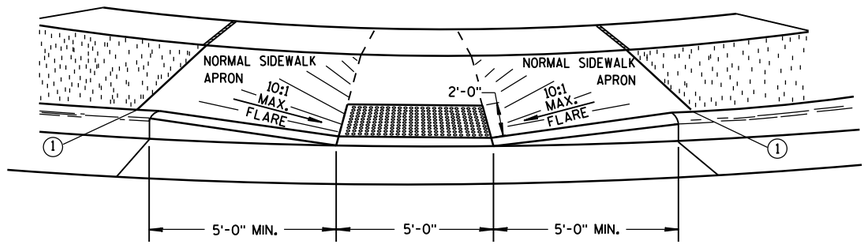
(CENTER OF CORNER RADIUS)



PLAN VIEW

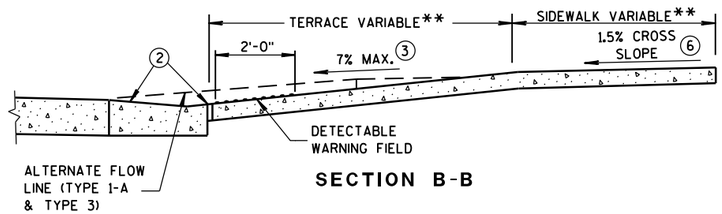
TYPE 1-A RAMP

(NO TERRACE)

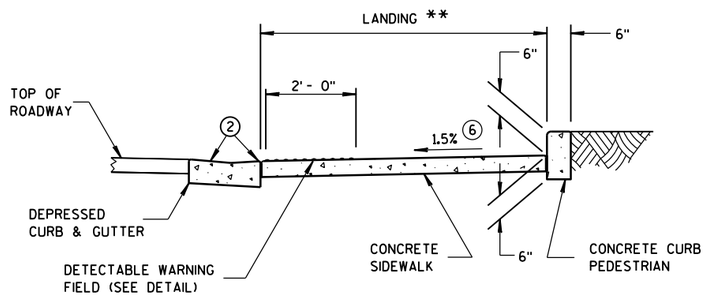


VIEW A-A

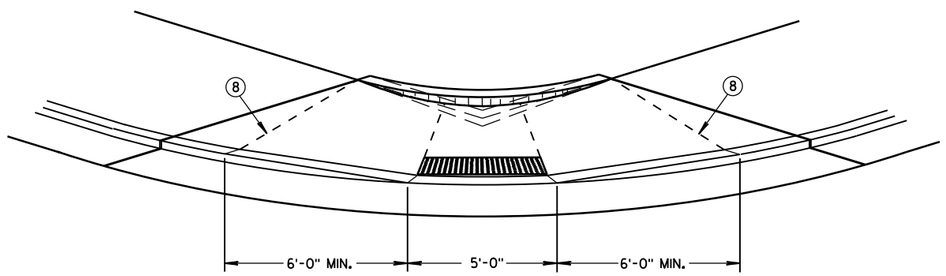
** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



SECTION C-C



VIEW D-D

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.

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

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

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

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

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

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

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

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

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

LEGEND

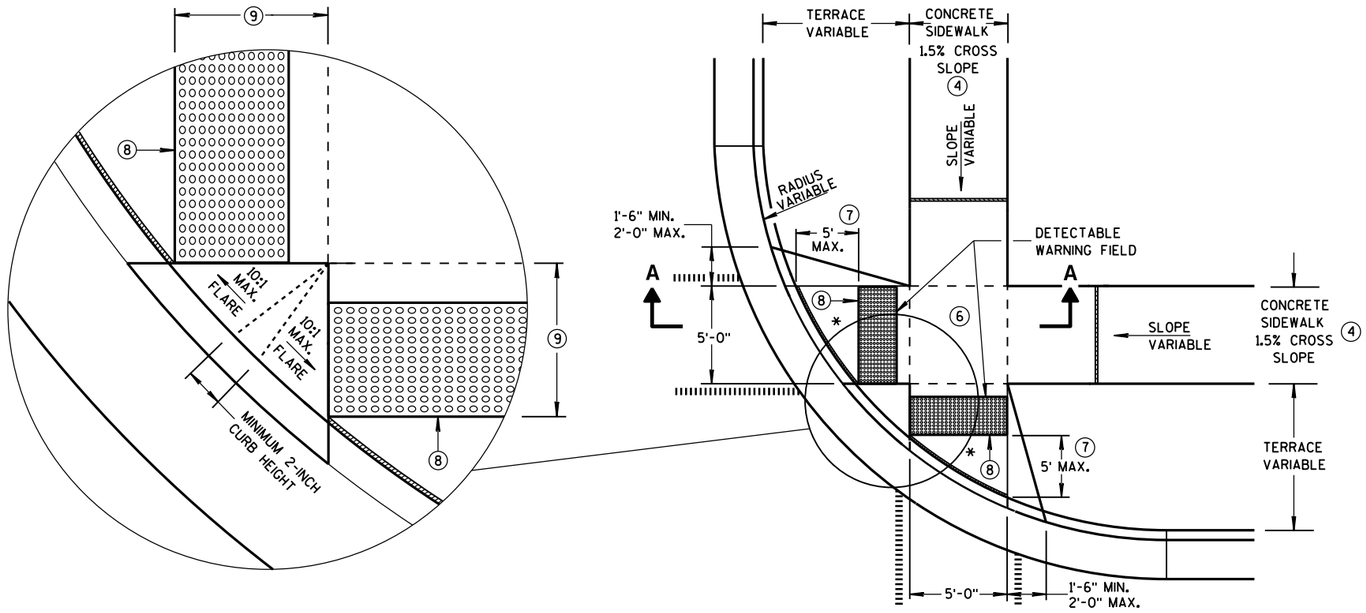
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

S.D.D. 8 D 5-17a

S.D.D. 8 D 5-17a

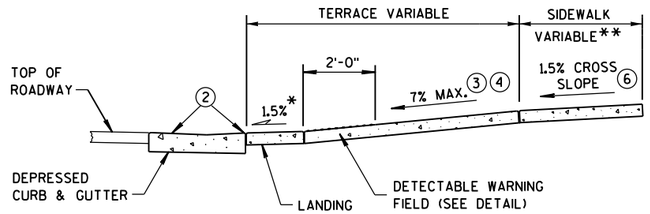


PLAN VIEW

TYPE 2 RAMP

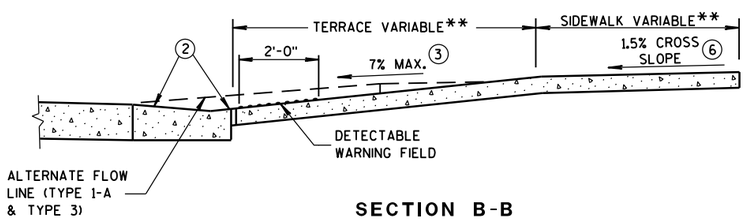
(ON LINE WITH SIDEWALK)

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



SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B

GENERAL NOTES

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

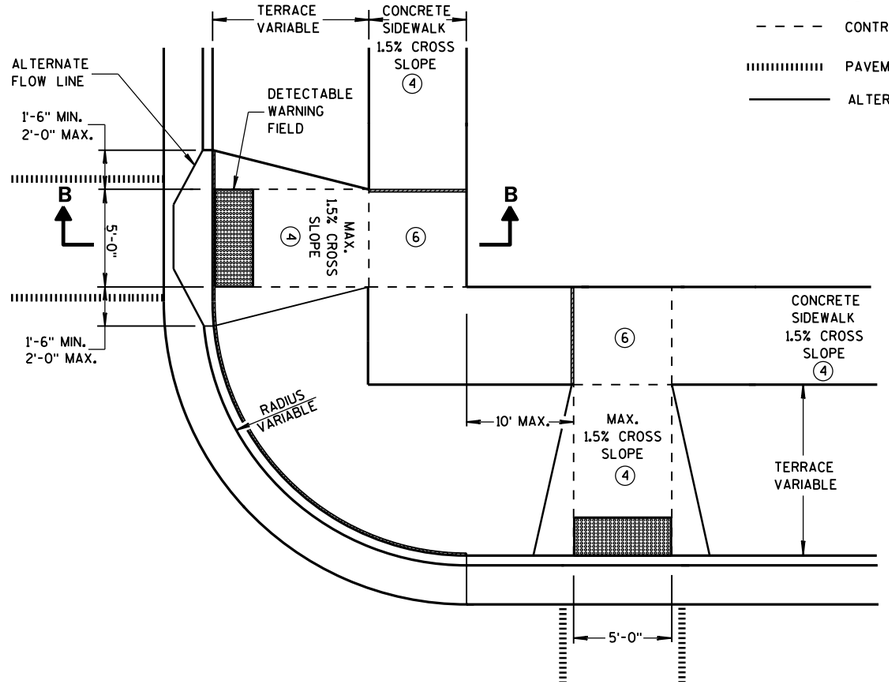
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

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

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

LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



PLAN VIEW

TYPE 3 RAMP

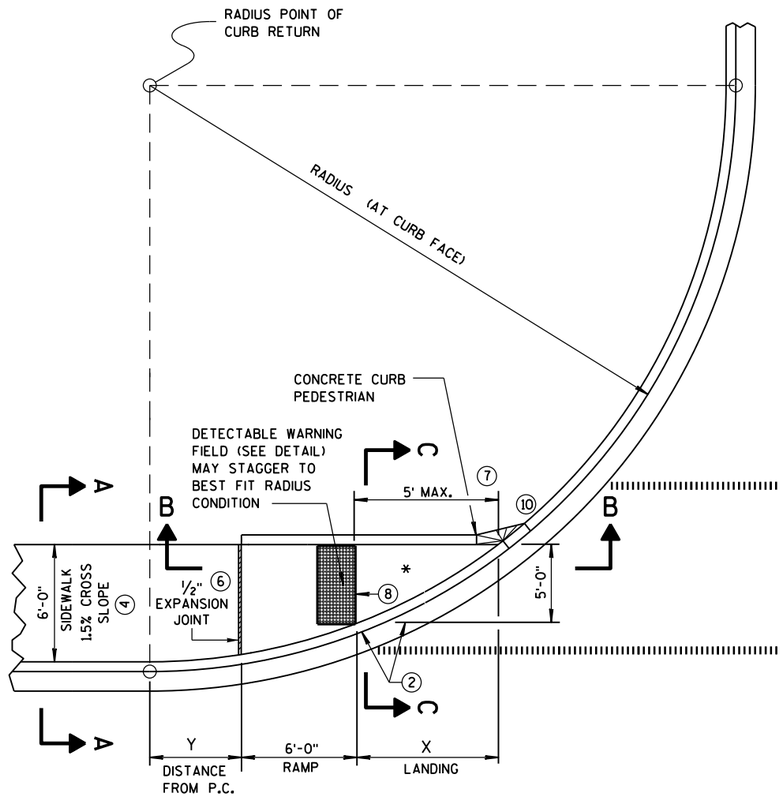
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

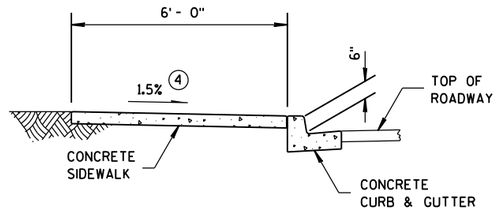
S.D.D. 8 D 5-17b



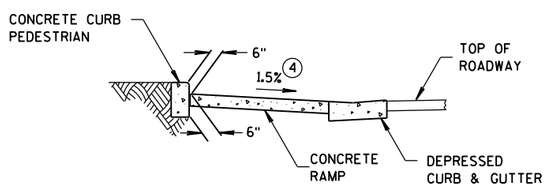
CURB RAMP TYPE 4A
PLAN VIEW

RADIUS (AT CURB FACE)	X	Y
20 FEET	7'-11"	0'-2"
30 FEET	10'-2¾"	1'-7½"
40 FEET	12'-1¼"	2'-10"
50 FEET	13'-8¾"	3'-10¾"
60 FEET	15'-2"	4'-10¼"

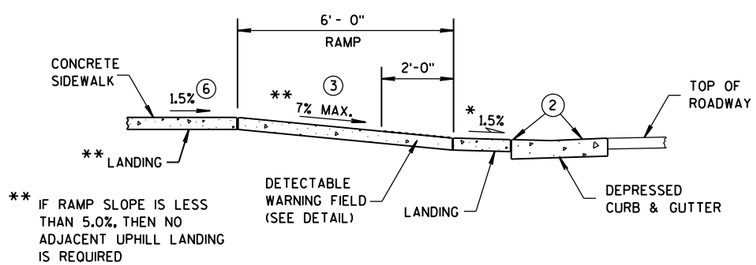
INTERMEDIATE RADII CAN BE INTERPOLATED



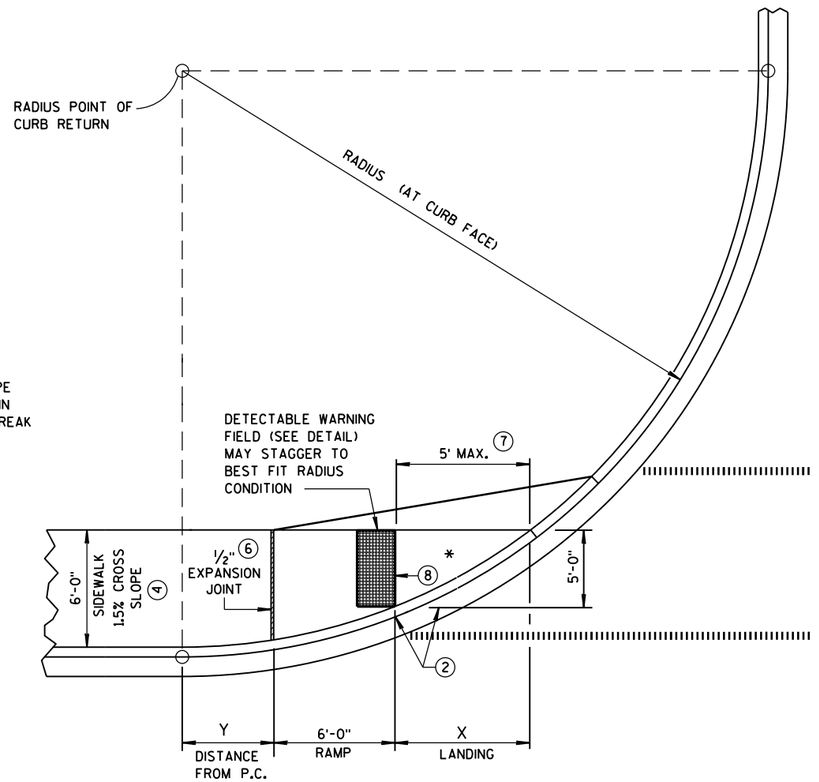
SECTION A-A FOR TYPE 4A



SECTION C-C FOR TYPE 4A



SECTION B-B FOR TYPE 4A



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

CURB RAMP TYPE 4A1
PLAN VIEW

GENERAL NOTES

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

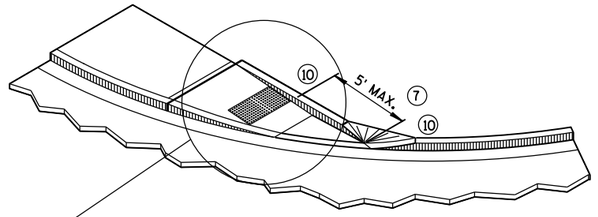
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

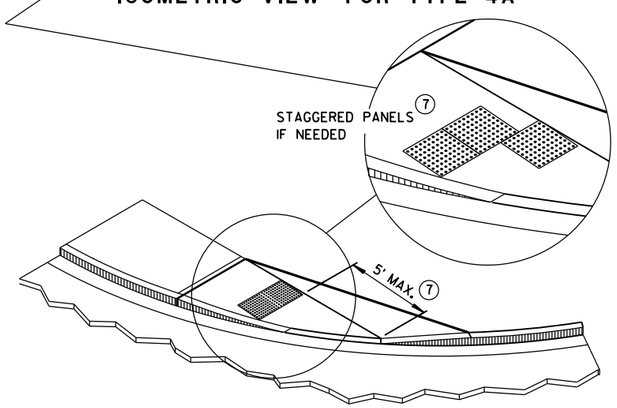
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

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

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



ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

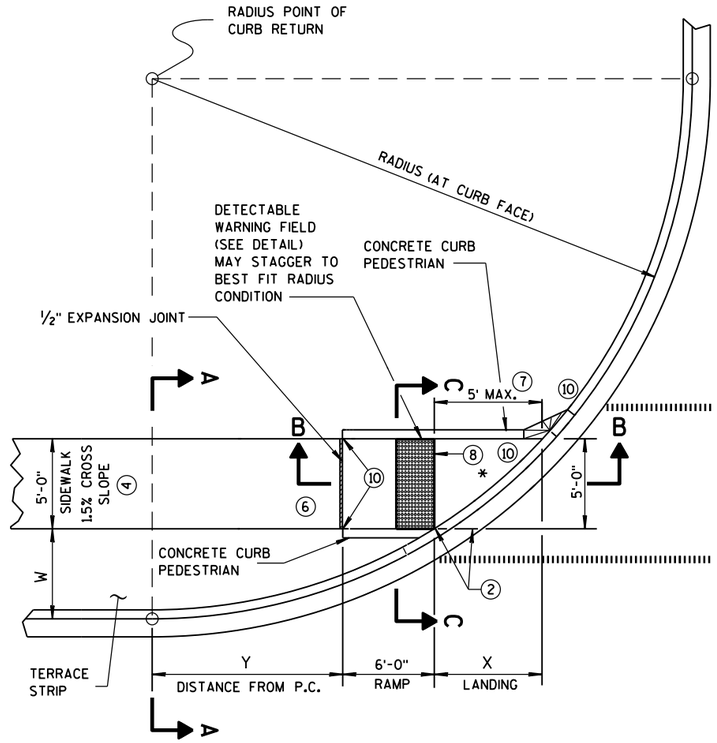
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

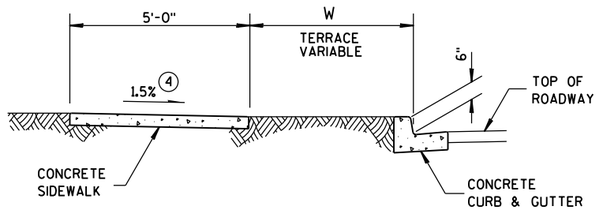
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

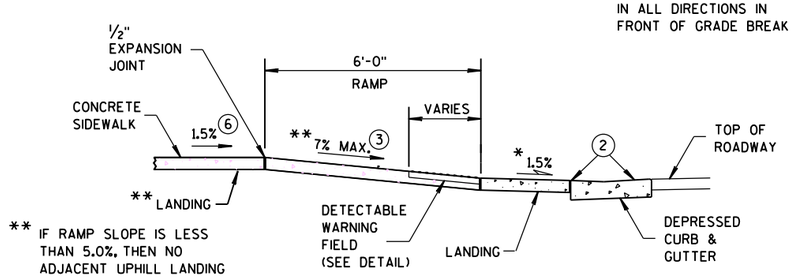
S.D.D. 8 D 5-17c



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



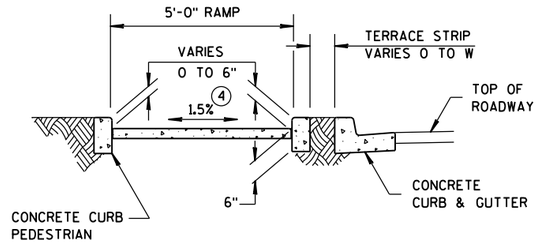
SECTION B-B FOR TYPE 4B

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)



SECTION C-C FOR TYPE 4B

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-9¾"	3'-6½"	4'-11½"	5'-1¾"	4'-3¼"	6'-5½"	3'-8¾"	7'-6¾"	3'-3"	8'-6¼"
30 FEET	7'-9¼"	5'-10½"	6'-9½"	7'-11¼"	6'-0¼"	9'-8"	5'-5"	11'-1¾"	4'-10¾"	12'-5¾"
40 FEET	9'-4"	7'-10"	8'-2¾"	10'-3"	7'-4¾"	12'-3¾"	6'-8½"	14'-1¼"	6'-1¾"	15'-8½"
50 FEET	10'-8"	9'-6½"	9'-5½"	12'-3¼"	8'-6½"	14'-7½"	7'-9¾"	16'-8¼"	7'-2½"	18'-6¼"
60 FEET	11'-10¼"	11'-0¾"	10'-6½"	14'-1¼"	9'-6½"	16'-8½"	8'-9¼"	18'-11¾"	8'-1½"	21'-0½"

INTERMEDIATE RADII CAN BE INTERPOLATED

GENERAL NOTES

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

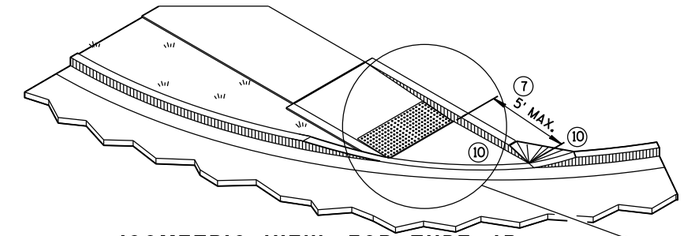
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

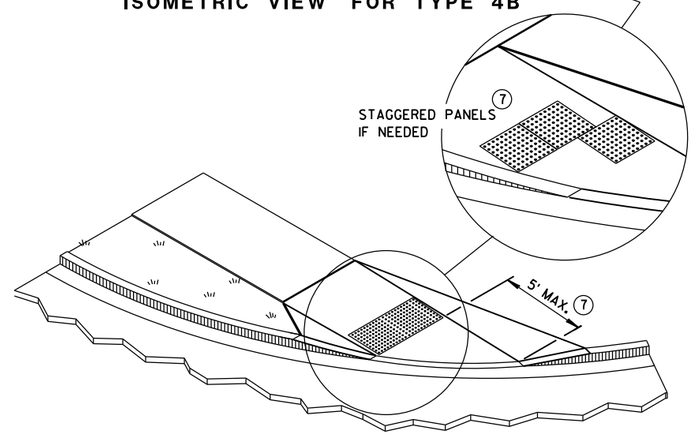
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

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

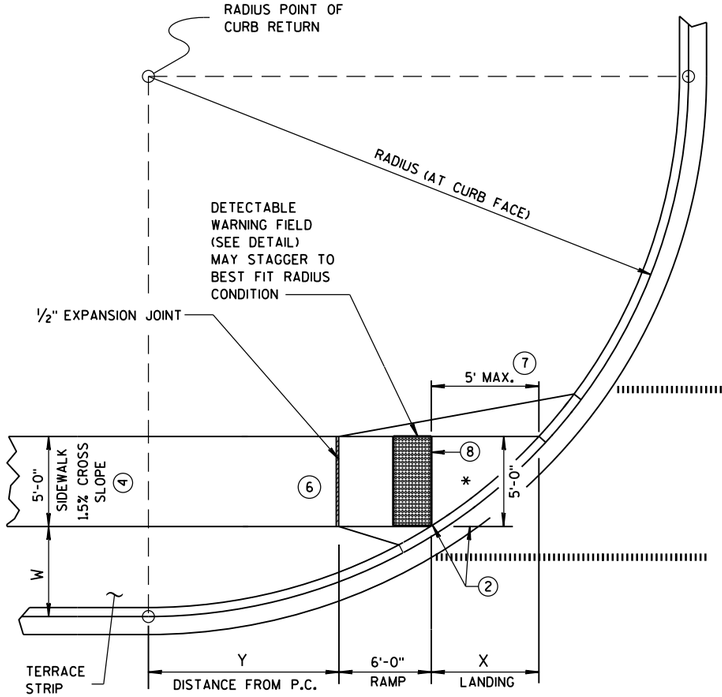
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1



CURB RAMP TYPE 4B1
PLAN VIEW

CURB RAMPS
TYPE 4B AND 4B1

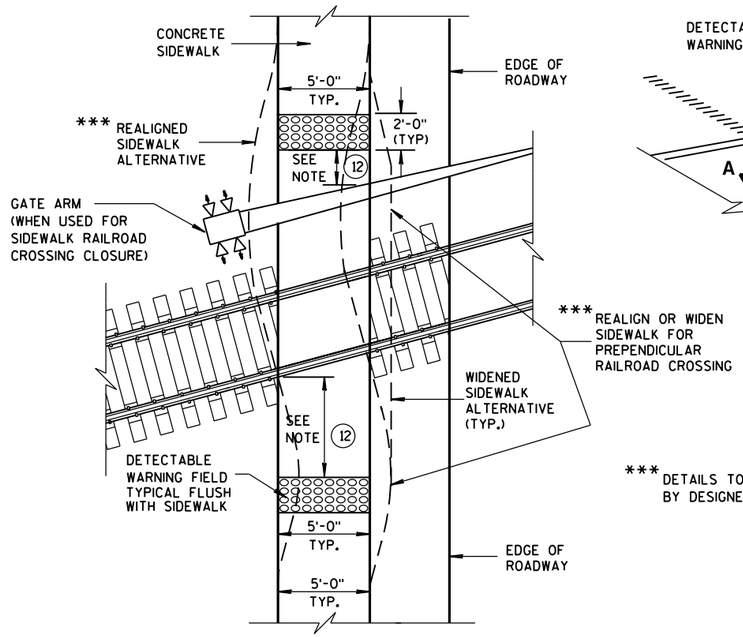
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 8 D 5-17d

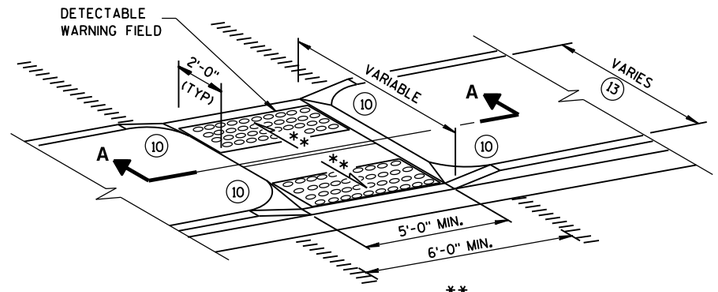
6

S.D.D. 8 D 5-17d



*** DETAILS TO BE DETERMINED BY DESIGNER

TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



** 1% MIN. (PROVIDE DRAINAGE)

MEDIAN ISLAND NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

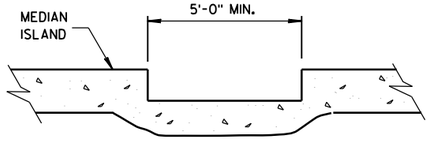
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

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

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

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

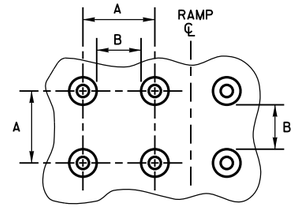
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS IF MEDIAN WIDTH BETWEEN BACK OF CURBS IS LESS THAN 6 FEET.



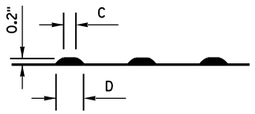
SECTION A-A

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

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

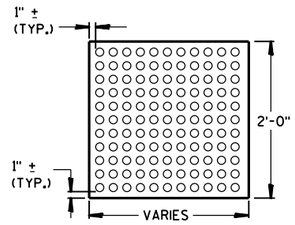


PLAN VIEW

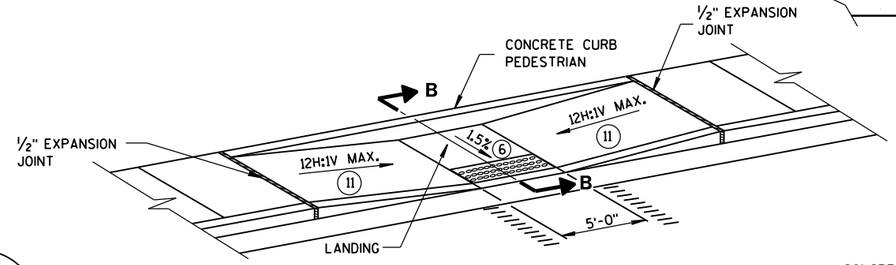


ELEVATION VIEW

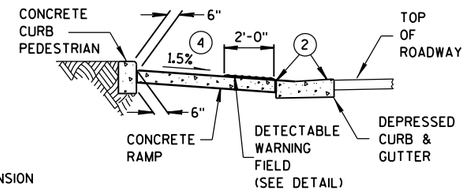
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



PLAN VIEW
DETECTABLE WARNING FIELD (TYPICAL)

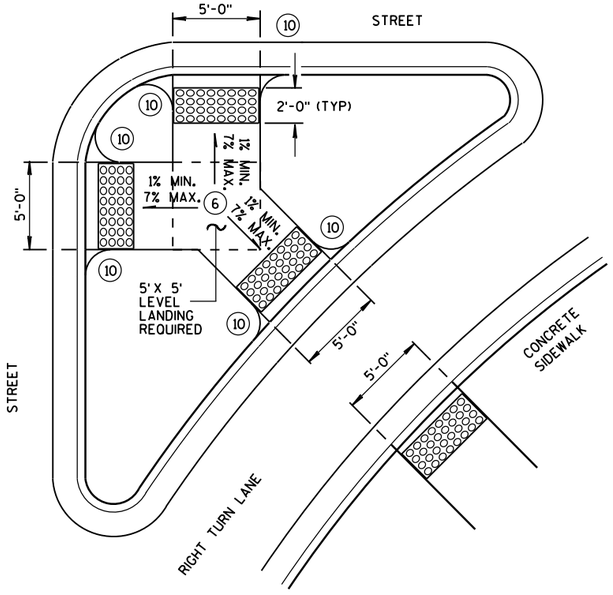


MID-BLOCK CROSSING
TYPE 7A

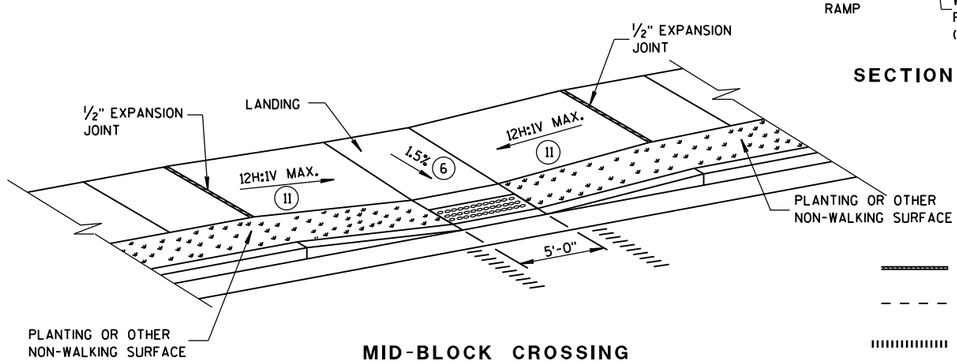


SECTION B-B

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



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

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

LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2016 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 8 D 5-17e

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) UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

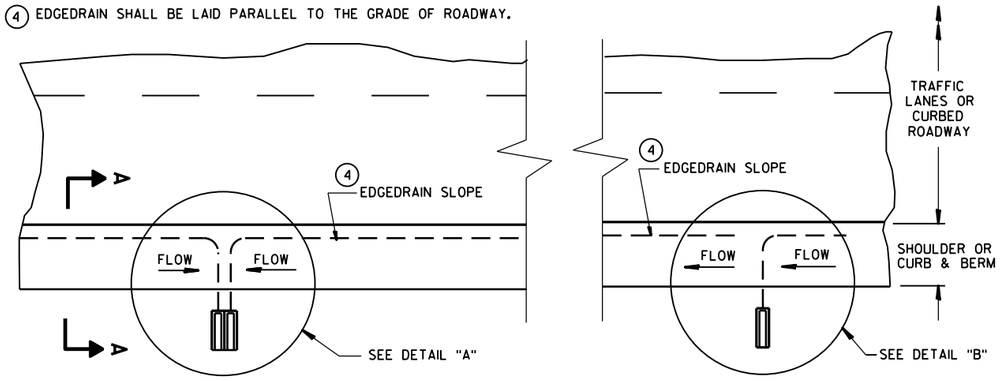
POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.

TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.

(2) MAXIMUM SPACING OF EDGEDRAIN OUTLETS SHALL BE 250 FEET UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

(3) EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.

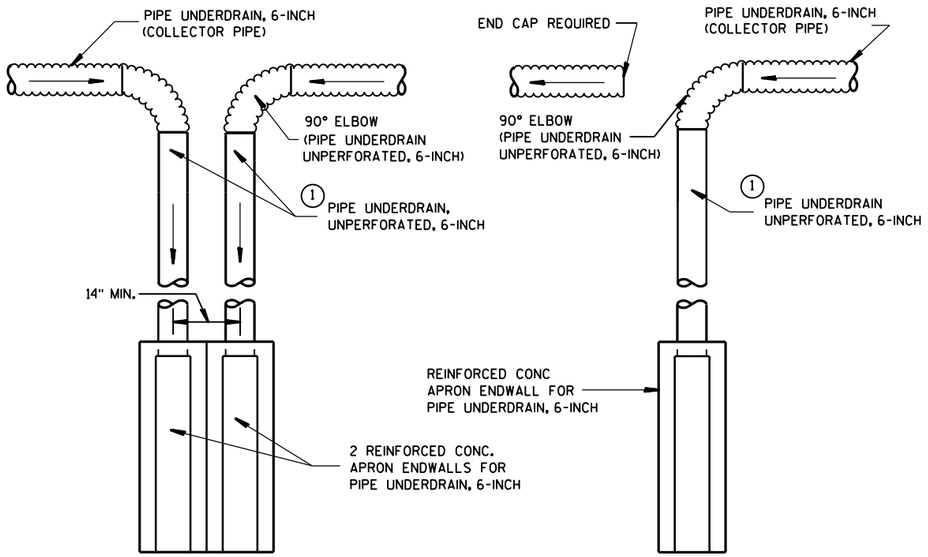
(4) EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.



PLAN VIEW

ROADWAY WITH SHOULDERS OR CURBS

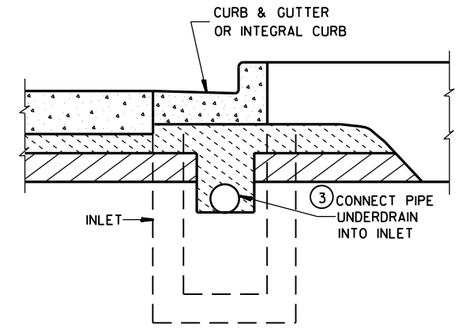
(EDGEDRAIN OUTLETS TO ROADSIDE)(2)



DETAIL "A"
TO BE USED AT LOW POINT LOCATIONS

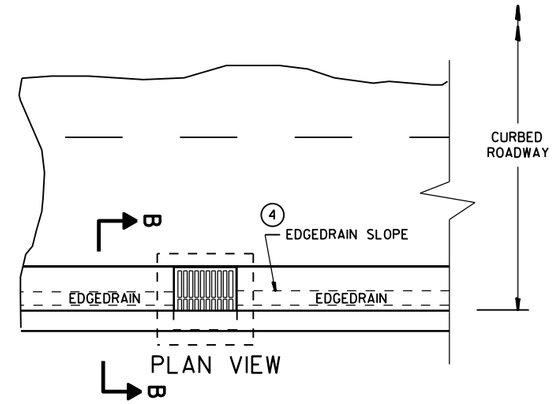
DETAIL "B"
TO BE USED AT INTERMEDIATE LOCATIONS

TYPICAL DRAIN OUT DETAILS



SECTION B-B

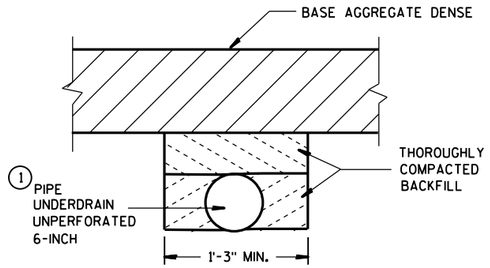
URBAN CROSS SECTION



PLAN VIEW

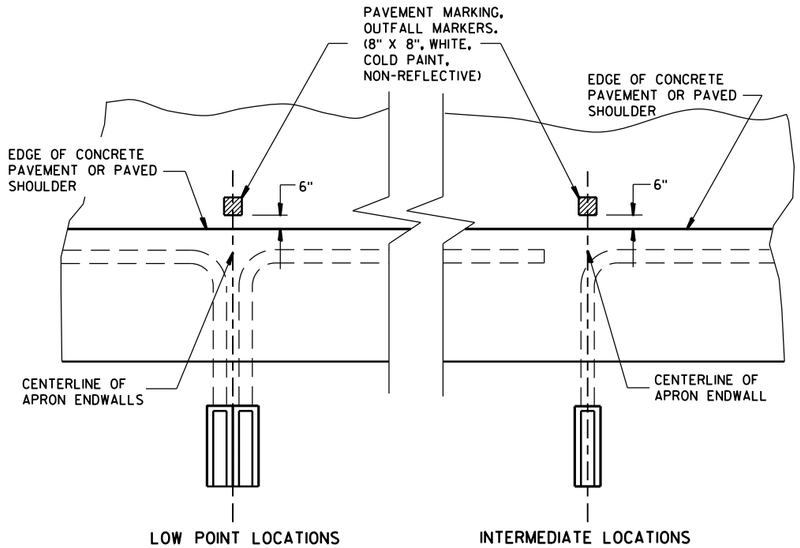
ROADWAY WITH CURBS

(EDGEDRAIN CONNECTS INTO INLET STRUCTURE)



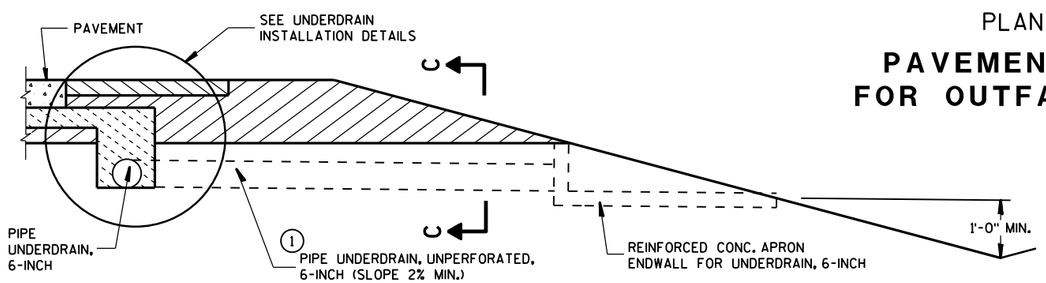
SECTION C-C

(TRENCH FOR OUTFALL PIPE)



PLAN VIEW

PAVEMENT MARKING FOR OUTFALL MARKERS



SECTION A-A

RURAL CROSS SECTION

EDGEDRAIN OUTLET AND OUTFALL MARKERS

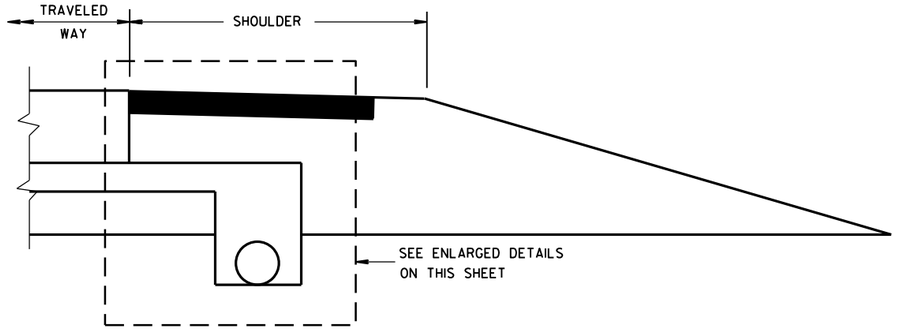
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 8 D 15-5a

6

S.D.D. 8 D 15-5a



RURAL CROSS SECTION

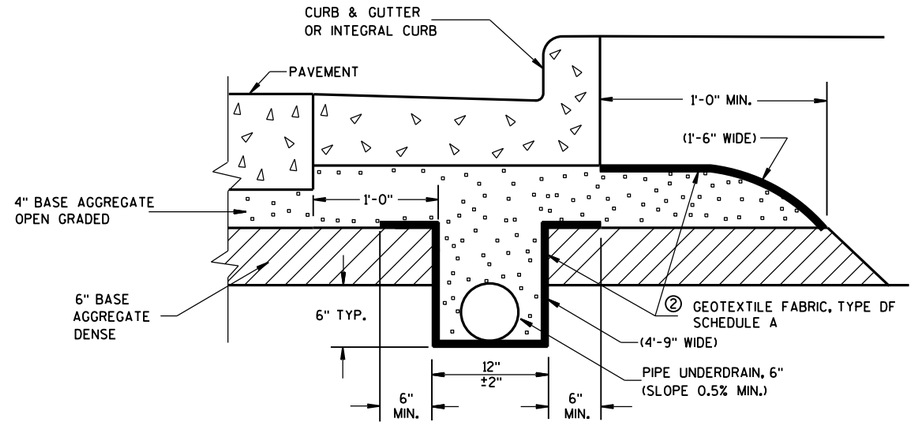
GENERAL NOTES

THE DIMENSIONS SHOWN ON THE TYPICAL CROSS SECTIONS WILL GOVERN IN THE EVENT THERE IS A CONFLICT WITH THE DETAILS SHOWN ON THIS DRAWING.

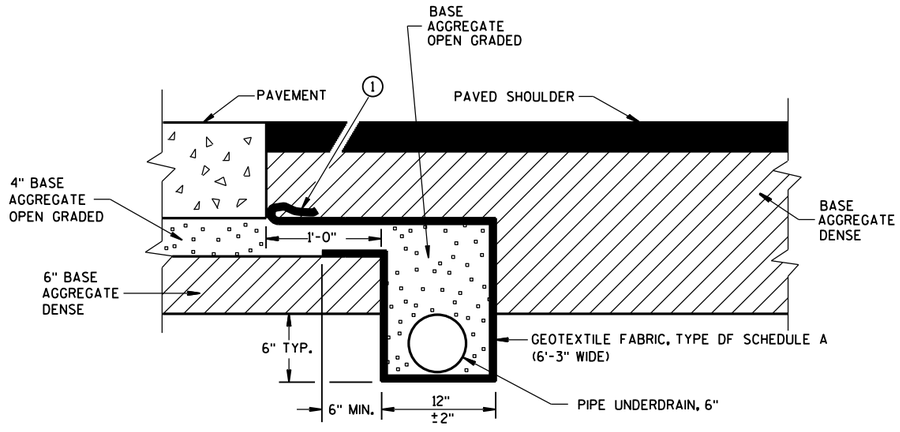
PIPE UNDERDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF THE ROADWAY.

① FOLD OVER EXCESS GEOTEXTILE FABRIC AT THIS LOCATION.

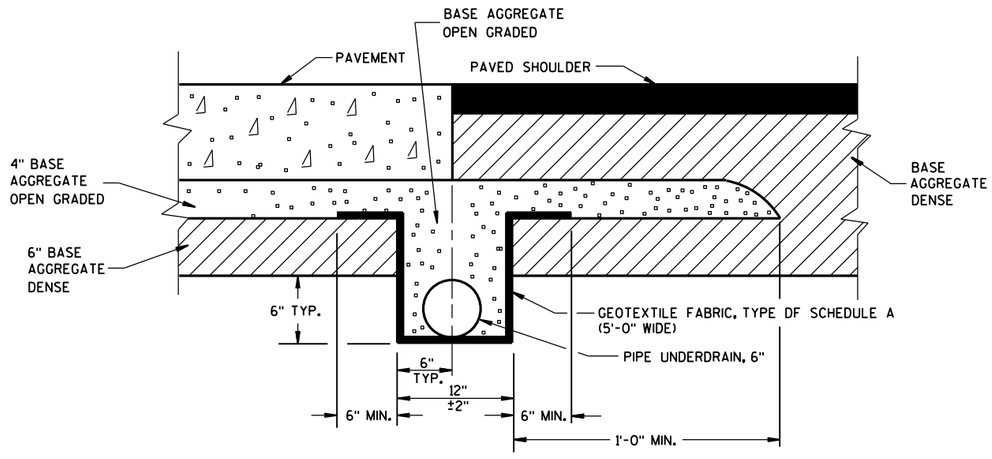
② TOTAL FABRIC WIDTH IS 6'-3" FOR PAYMENT.



EDGEDRAIN IN URBAN ROADWAY



POST PAVING INSTALLATION
(QUANTITIES ARE BASED ON THIS DETAIL)



PRE-PAVING INSTALLATION ALTERNATE

EDGEDRAIN IN RURAL ROADWAY

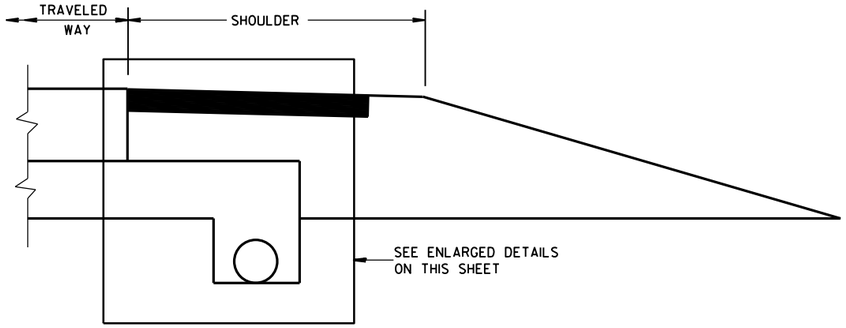
EDGEDRAIN AND BASE AGGREGATE OPEN GRADED

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPE
FHWA

6

S.D.D. 8 D 15-5b

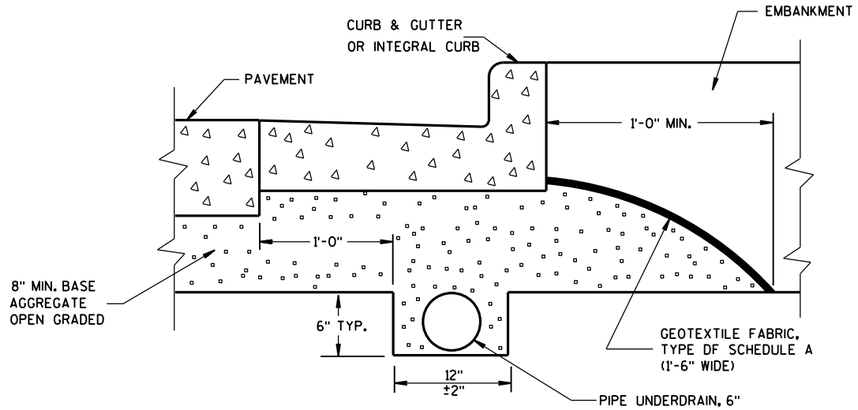


RURAL CROSS SECTION

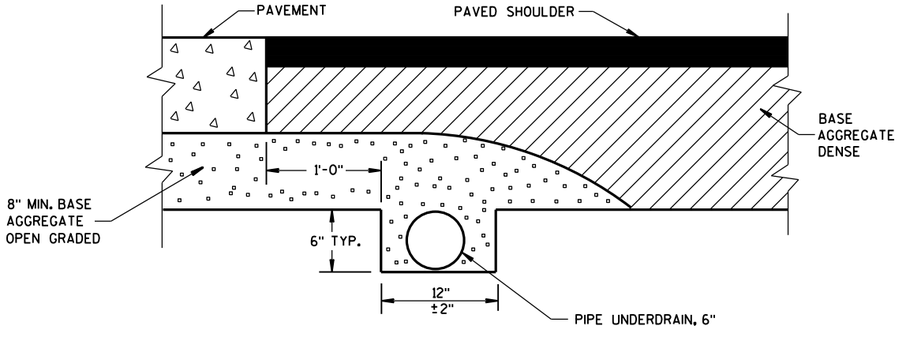
GENERAL NOTES

THE DIMENSIONS SHOWN ON THE TYPICAL CROSS SECTIONS WILL GOVERN IN THE EVENT THERE IS A CONFLICT WITH THE DETAILS SHOWN ON THIS DRAWING.

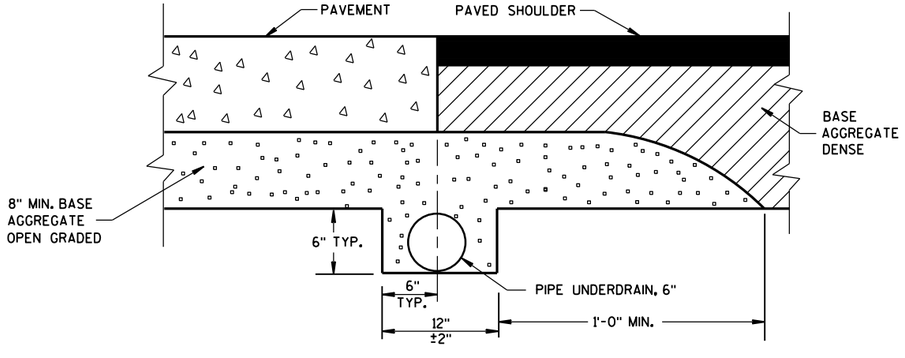
PIPE UNDERDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF THE ROADWAY.



EDGEDRAIN IN URBAN ROADWAY



POST PAVING INSTALLATION
(QUANTITIES ARE BASED ON THIS DETAIL)



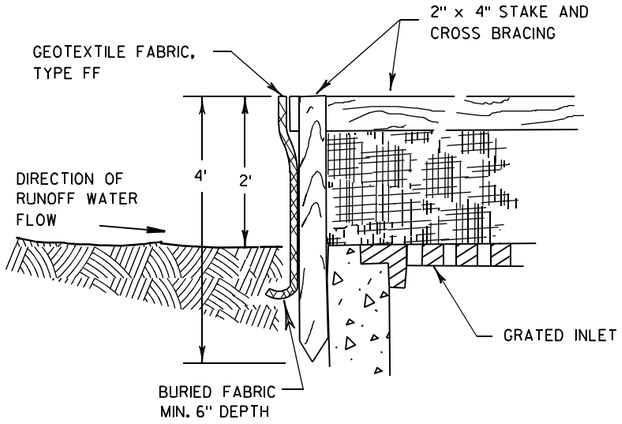
PRE-PAVING INSTALLATION ALTERNATIVE

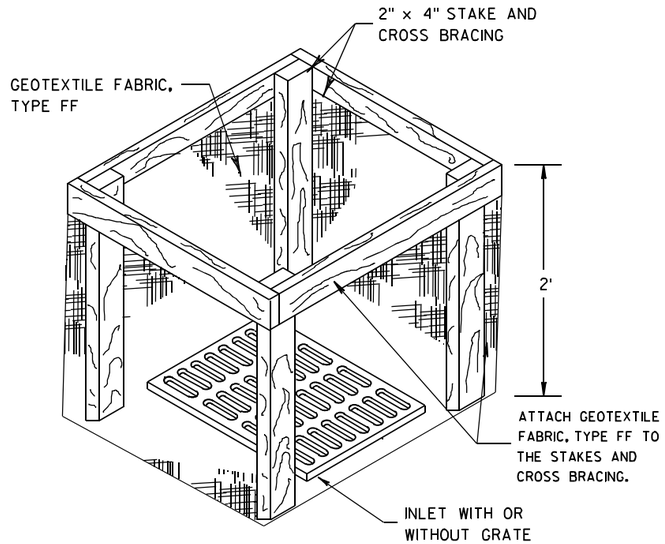
EDGEDRAIN IN RURAL ROADWAY

6

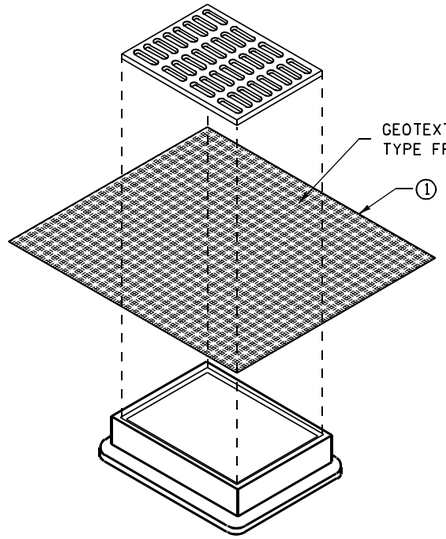
EDGEDRAIN AND BASE AGGREGATE OPEN GRADED	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
Sept. 2015 DATE	/S/ Peter Kemp, P.E. PAVEMENT SUPE
FHWA	

S.D.D. 8 D 15-5c



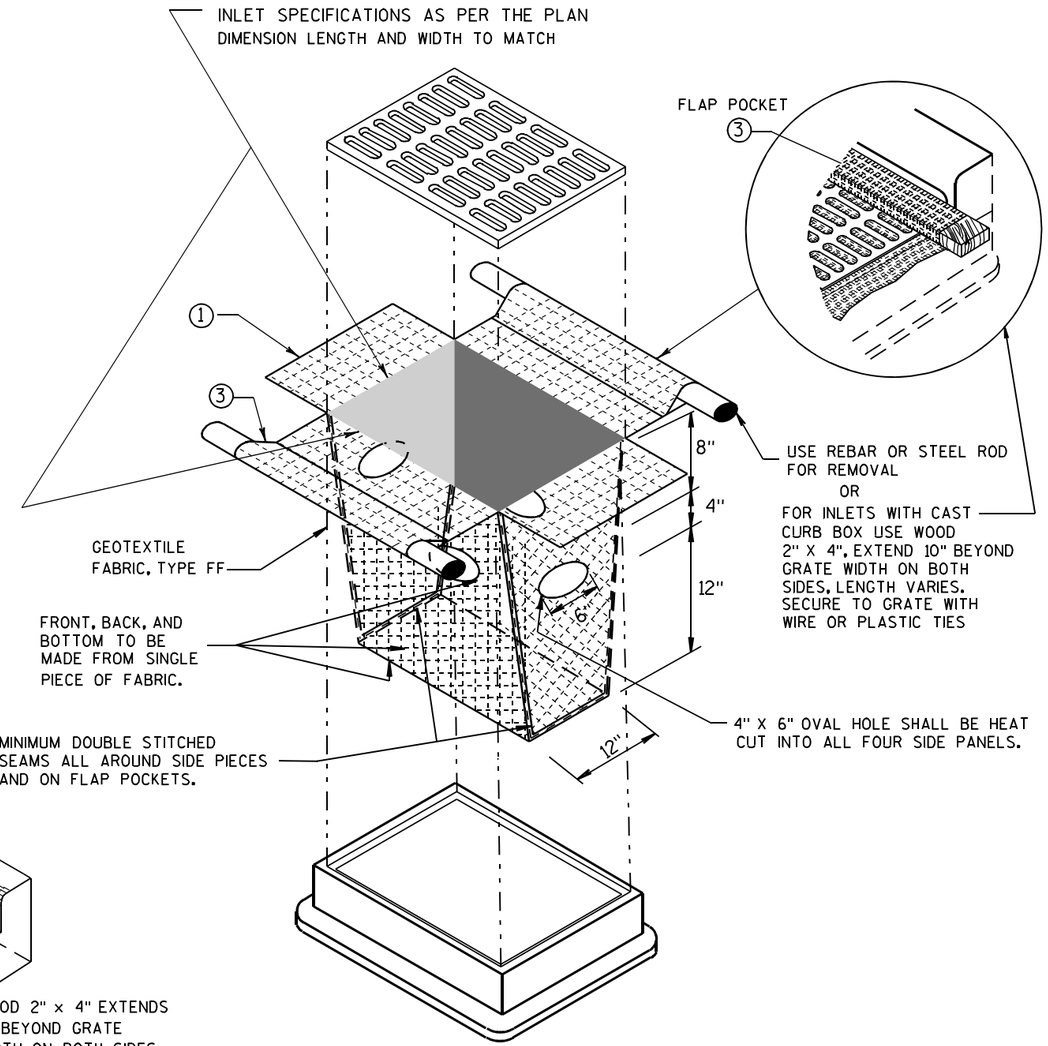


INLET PROTECTION, TYPE A



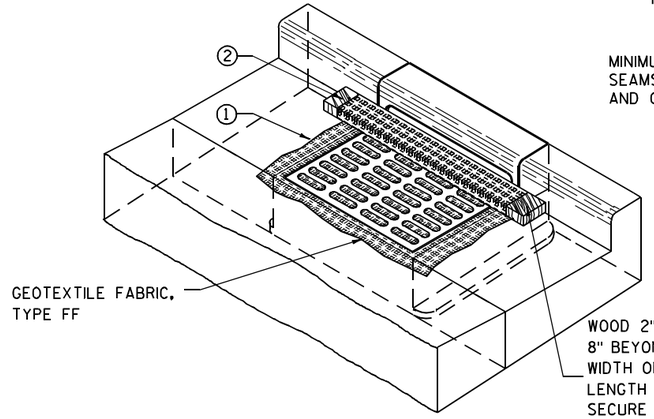
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

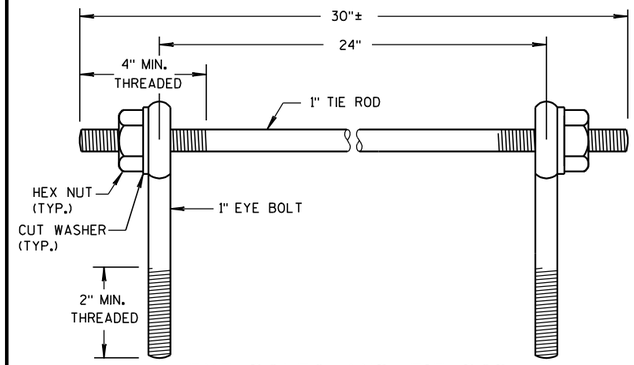
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

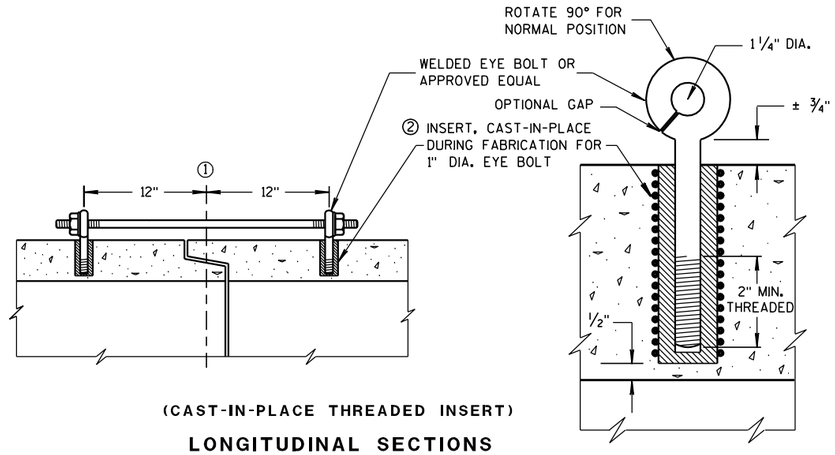
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 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 APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

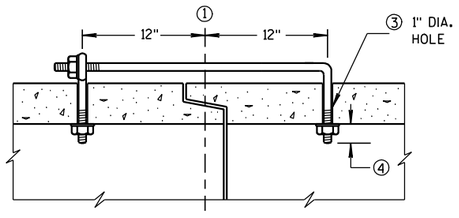
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

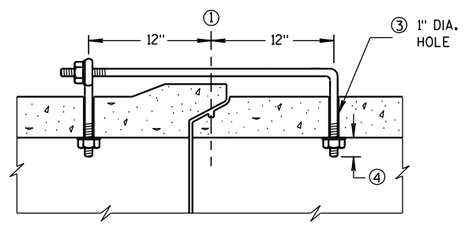
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

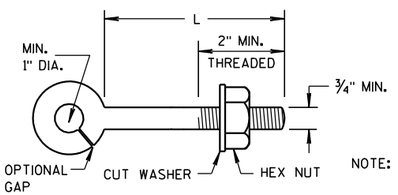


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

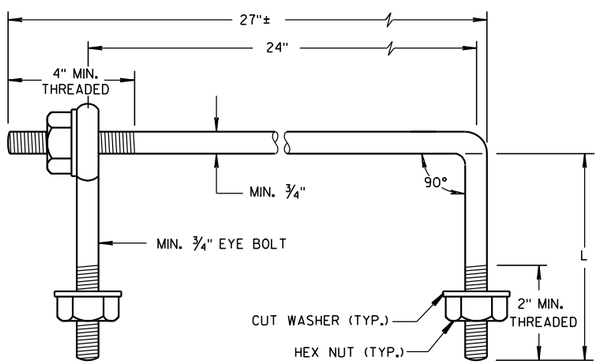
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

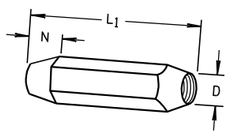
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

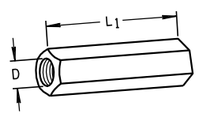
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES



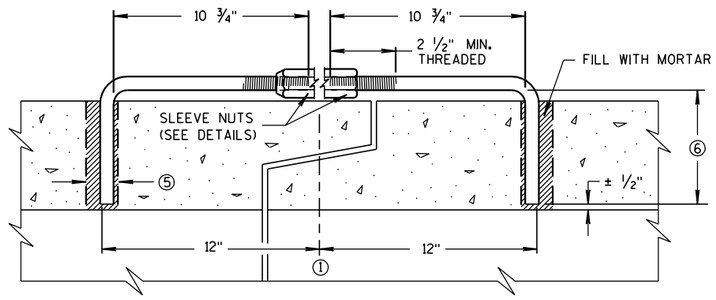
TAPERED



PLAIN

RIGHT AND LEFT THREADS

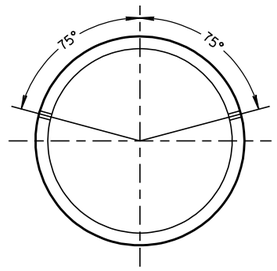
SLEEVE NUTS



LONGITUDINAL SECTION

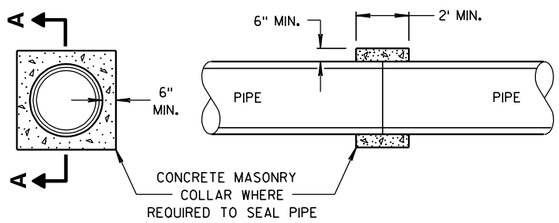
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

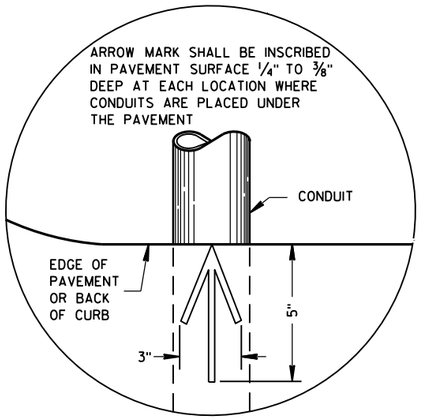
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 8 F 4-7

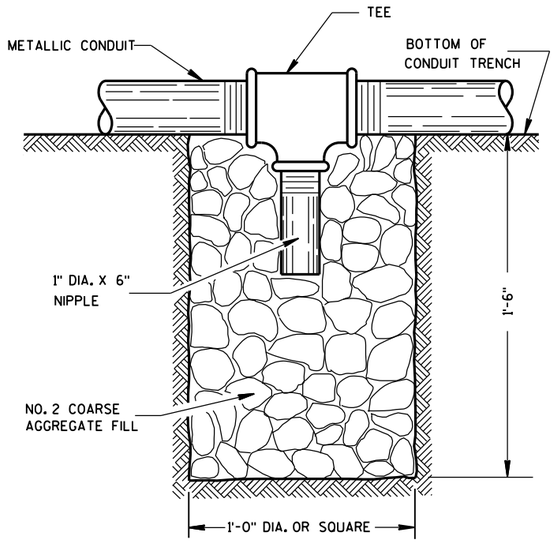
6

S.D.D. 8 F 4-7



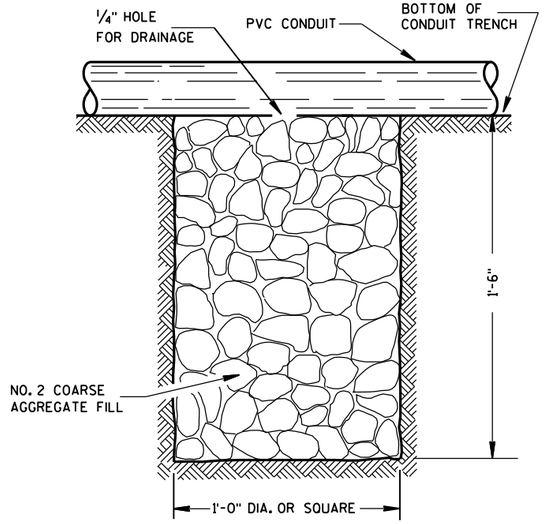
PLAN VIEW

ARROW MARK



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

DRAIN SUMP FOR METALLIC CONDUIT



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

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

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

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

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

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

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

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

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

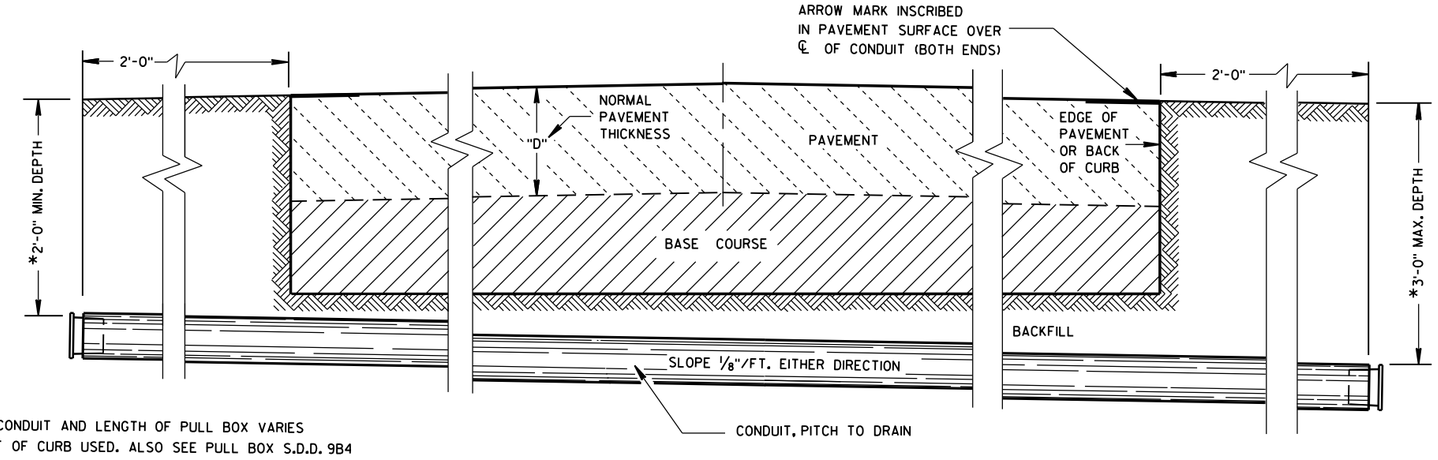
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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

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

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

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



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

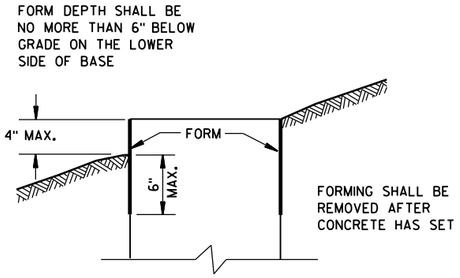
CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 B 2-9



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

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

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

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

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

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

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

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

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

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

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

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

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

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

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

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

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

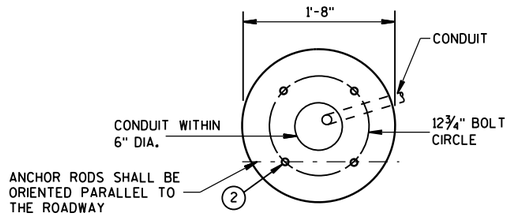
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

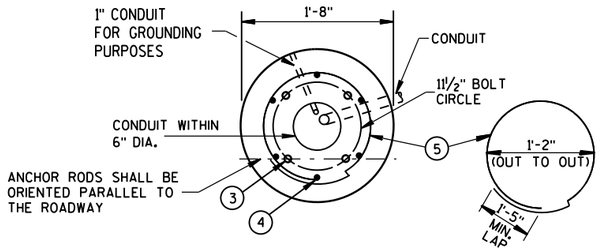
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

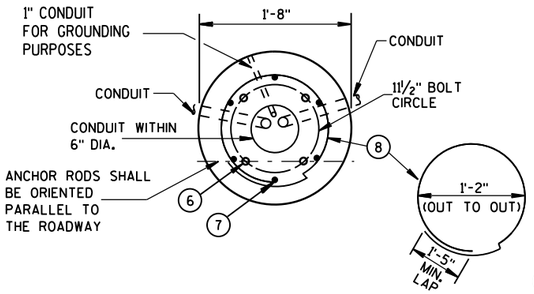
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

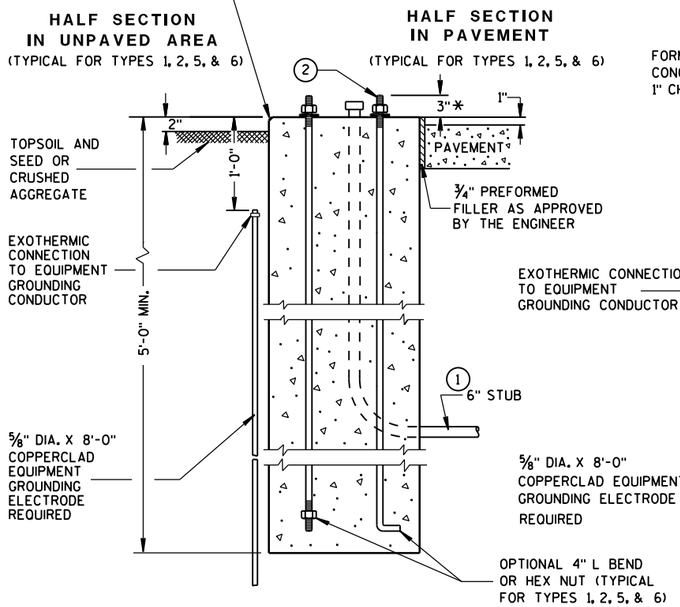






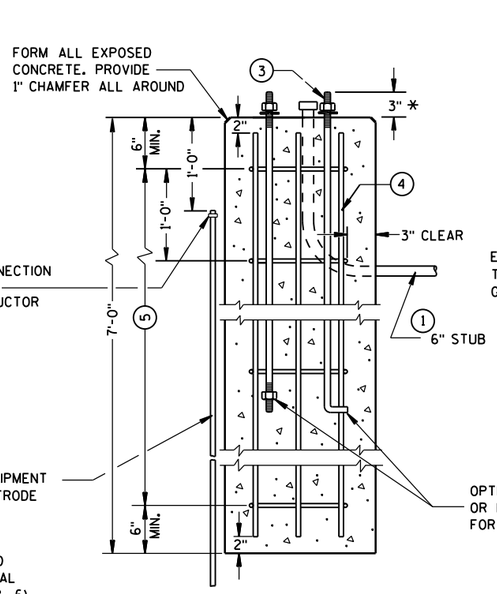
HALF SECTION IN UNPAVED AREA

(TYPICAL FOR TYPES 1, 2, 5, & 6)

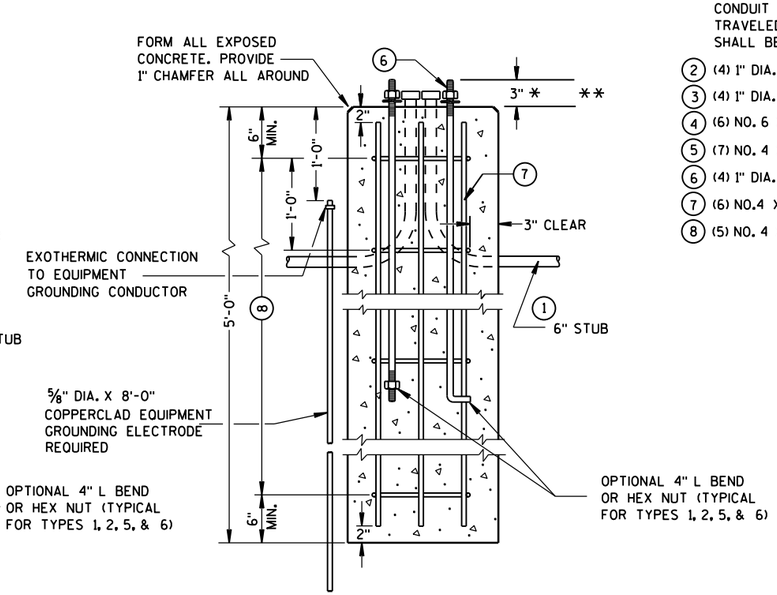


HALF SECTION IN PAVEMENT

(TYPICAL FOR TYPES 1, 2, 5, & 6)



TYPE 2



TYPE 5 & 6

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

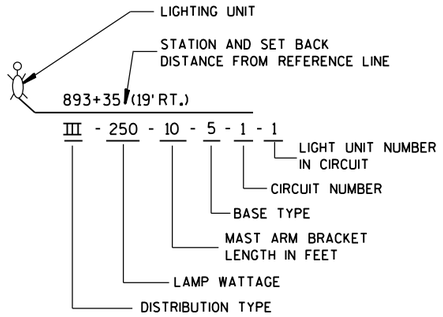
CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

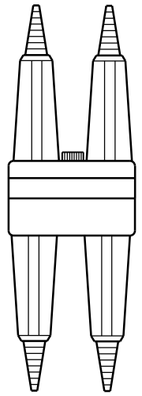
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

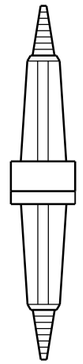
S.D.D. 9 C 2-7



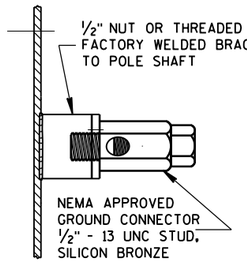
LIGHTING UNIT CODE
(TYPICAL)

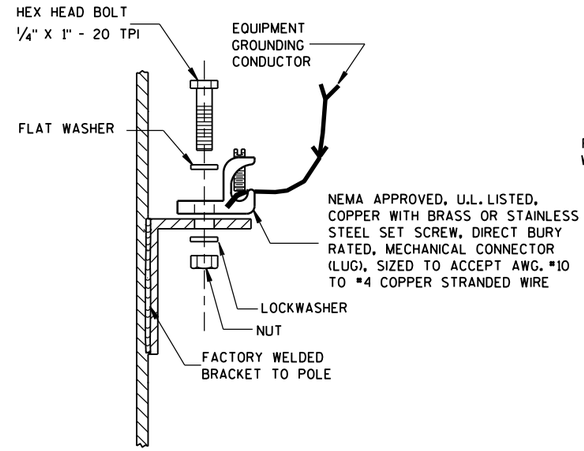


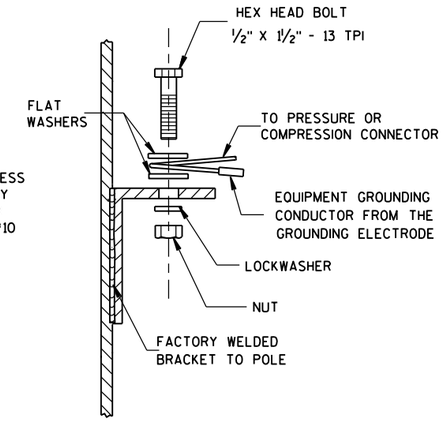
DETAIL "A"
BREAKAWY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



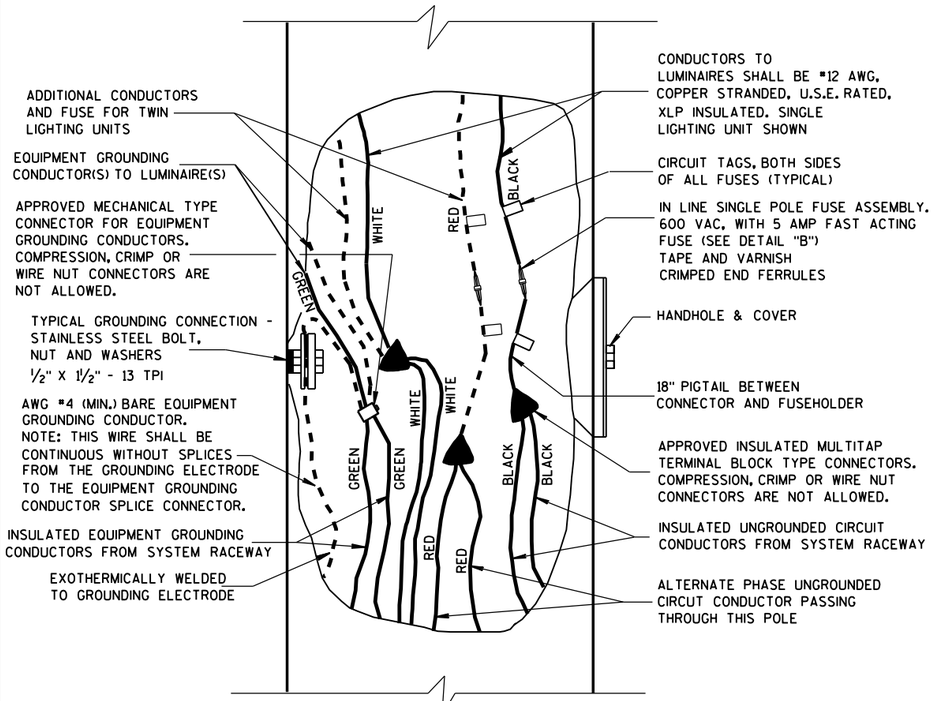
DETAIL "B"
BREAKAWY SINGLE POLE WITH WATERPROOF INSULATING BOOT



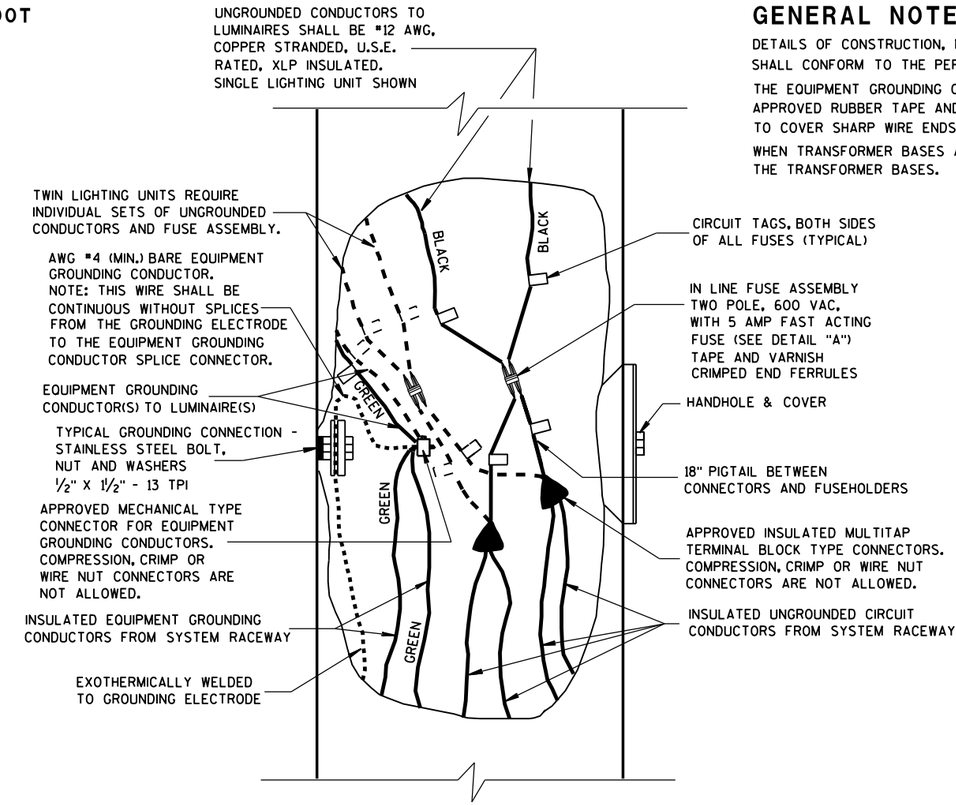




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

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

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

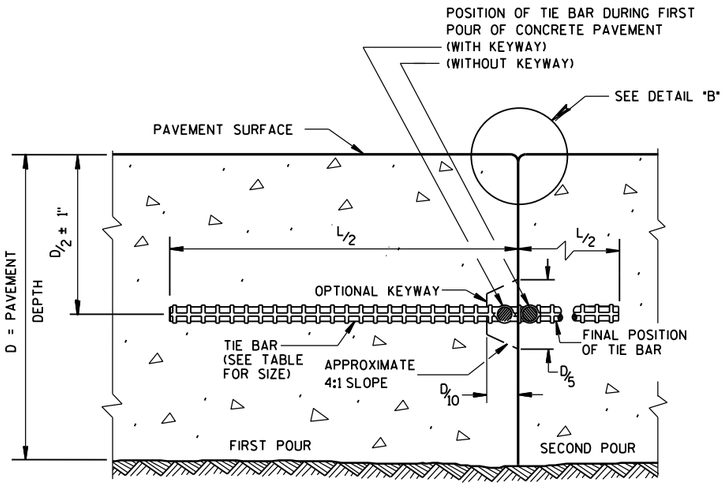
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

NON-FREEWAY LIGHTING UNIT POLE WIRING

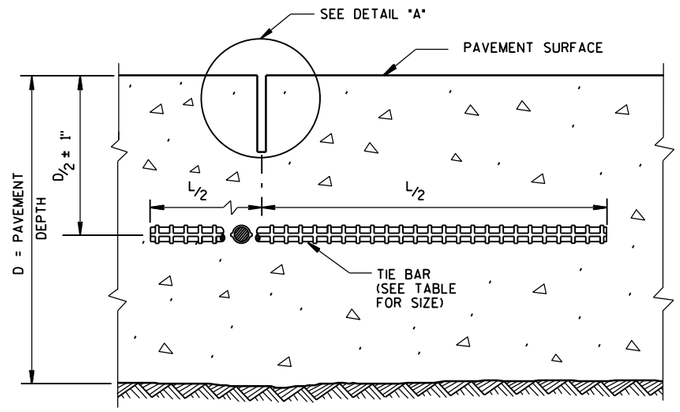
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6
S.D.D. 9 E 3-5



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

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

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

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

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

PLAN VIEW

SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

DETAIL "A"

DETAIL "B"

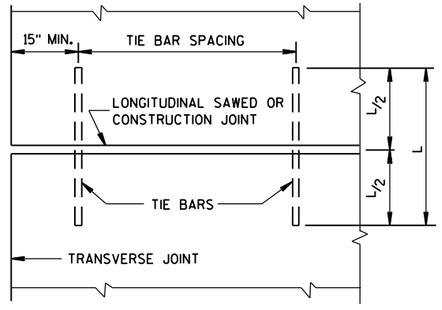
DETAIL "C"

TIE BAR TABLE

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

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

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



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

6
S.D.D. 13 C 1-18

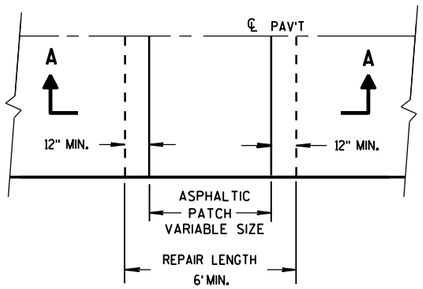
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

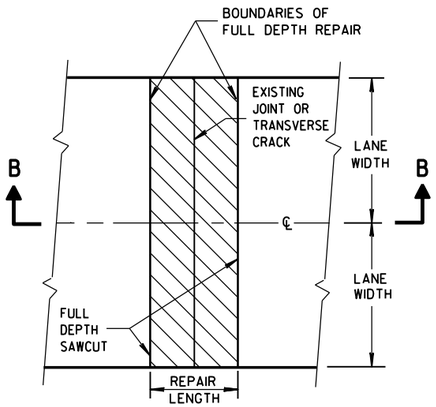
PROVIDE A 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK IN THE SAME LANE.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

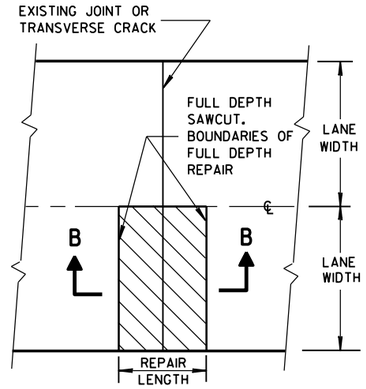
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

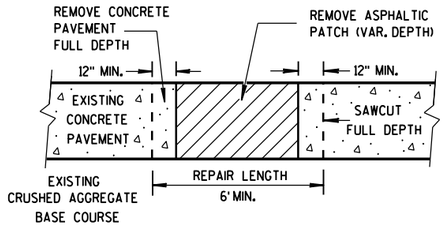


PLAN VIEW
(DOUBLE LANE REPAIR)



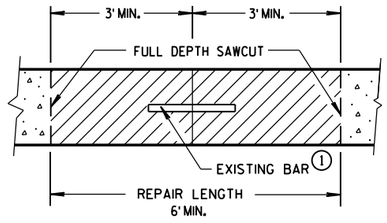
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



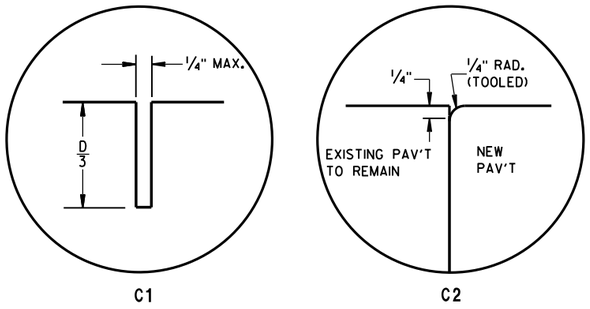
SECTION B-B

CONCRETE REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6
S.D.D. 13 C 9-13a



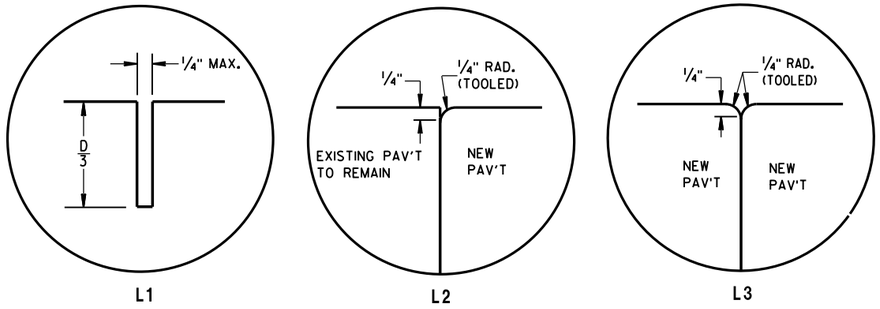
TRANSVERSE JOINTS

TIE BAR TABLE

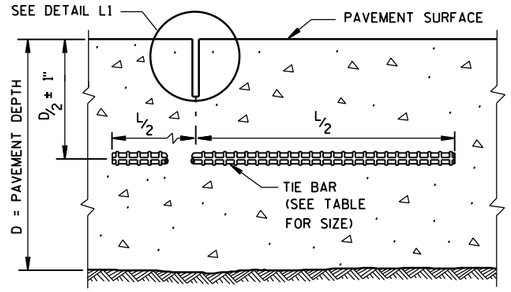
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24"**

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

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



LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT

GENERAL NOTES

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

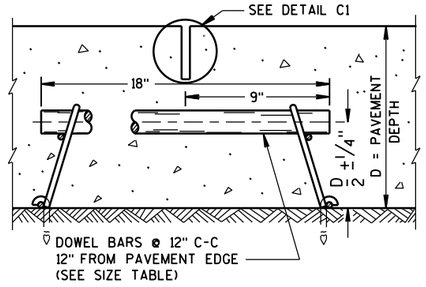
CONCRETE PAVEMENT REPAIRS OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

DO NOT SEAL OR FILL JOINTS.

ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

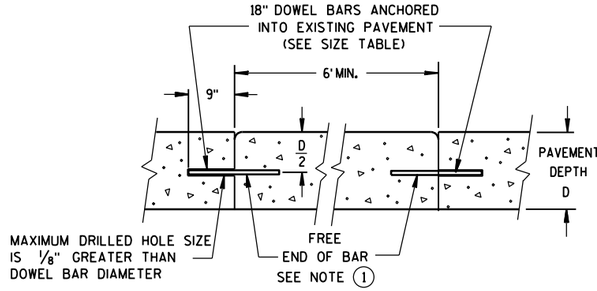
FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

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

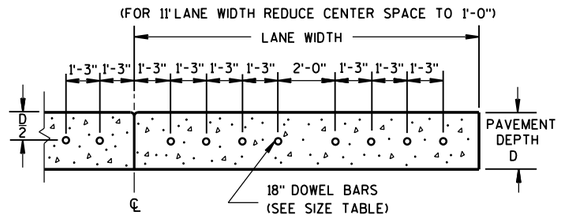


SECTION F-F

CONTRACTION JOINT



SECTION D-D

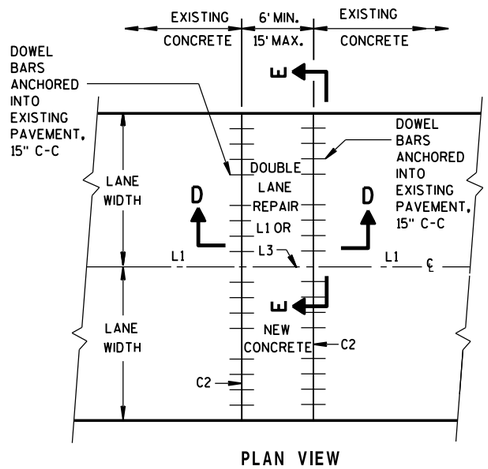


SECTION E-E

DRILLED DOWEL BAR CONSTRUCTION JOINT

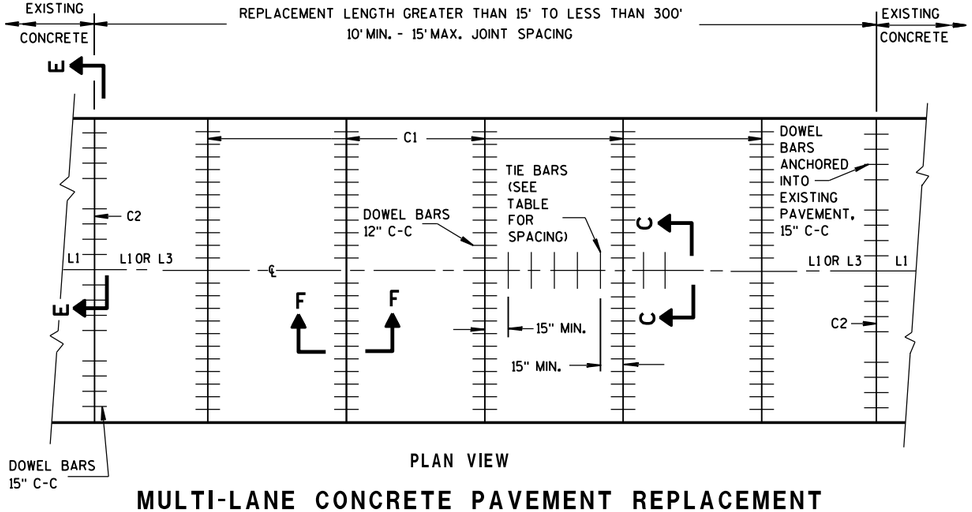
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

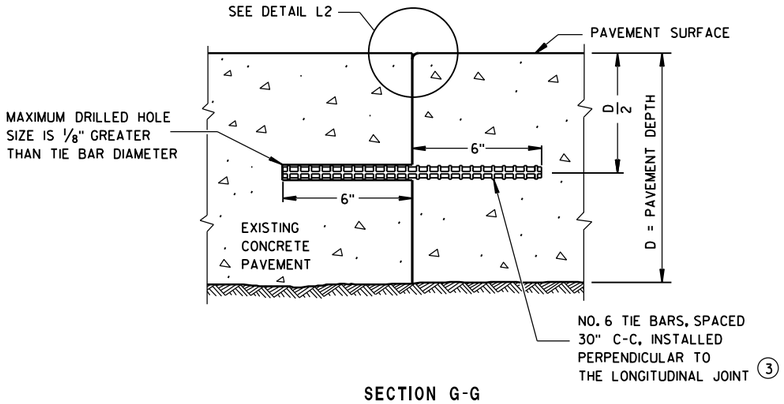
MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 13 C 9-13b



SECTION G-G

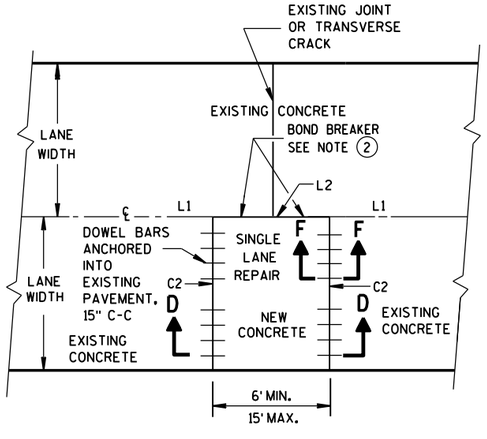
TIE BARS ANCHORED INTO EXISTING PAVEMENT

GENERAL NOTES

(1) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

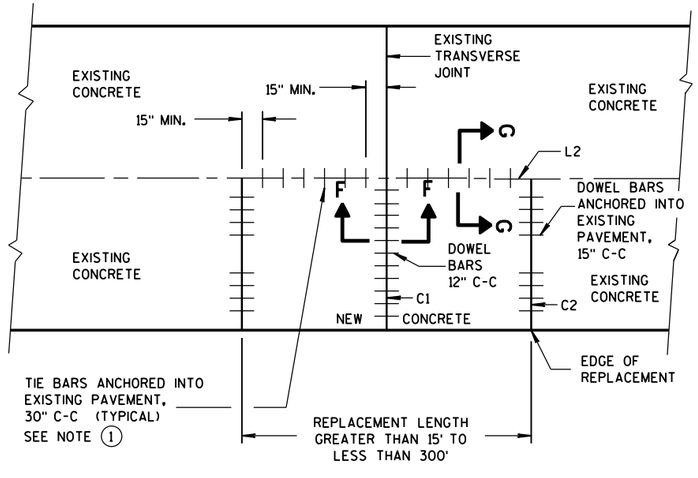
(2) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.

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



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

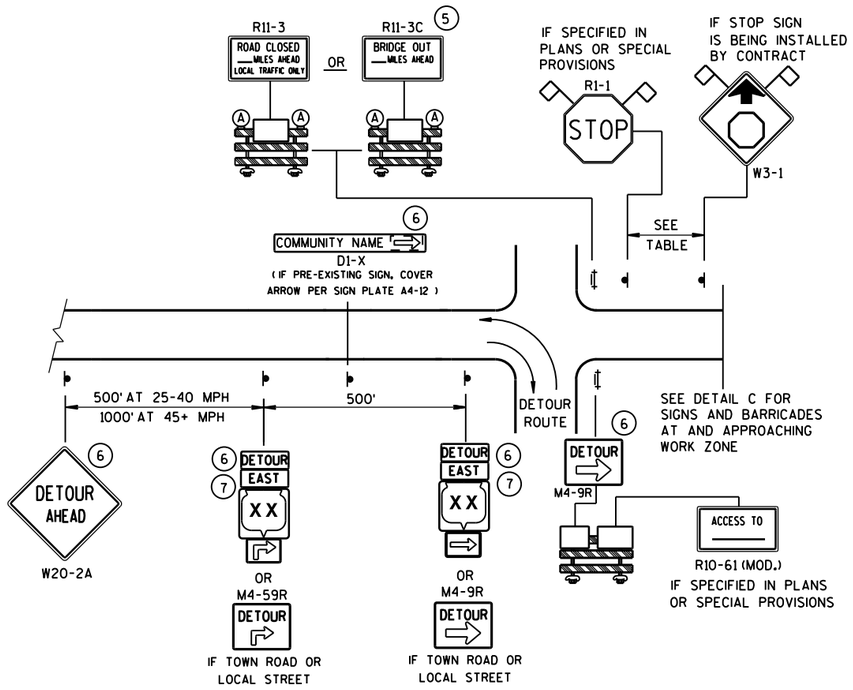
CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

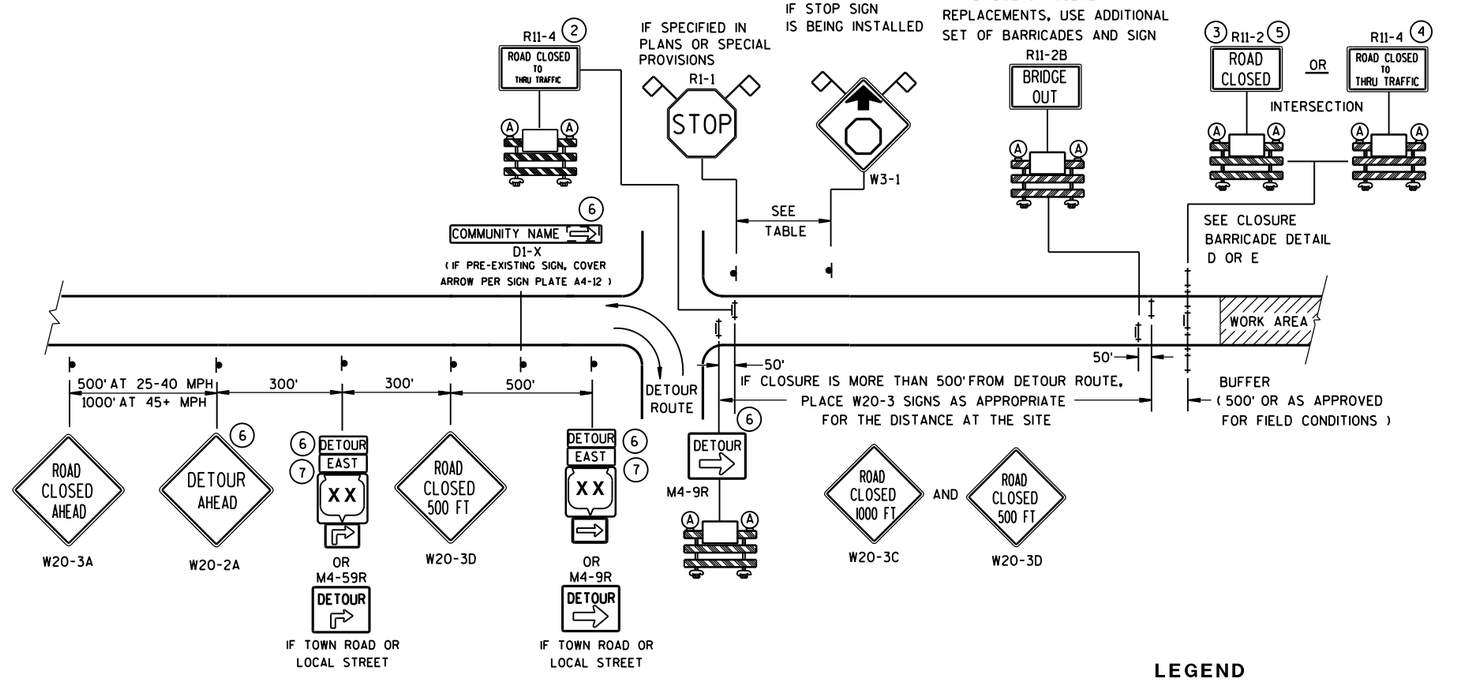
6

S.D.D. 13 C 9-13c



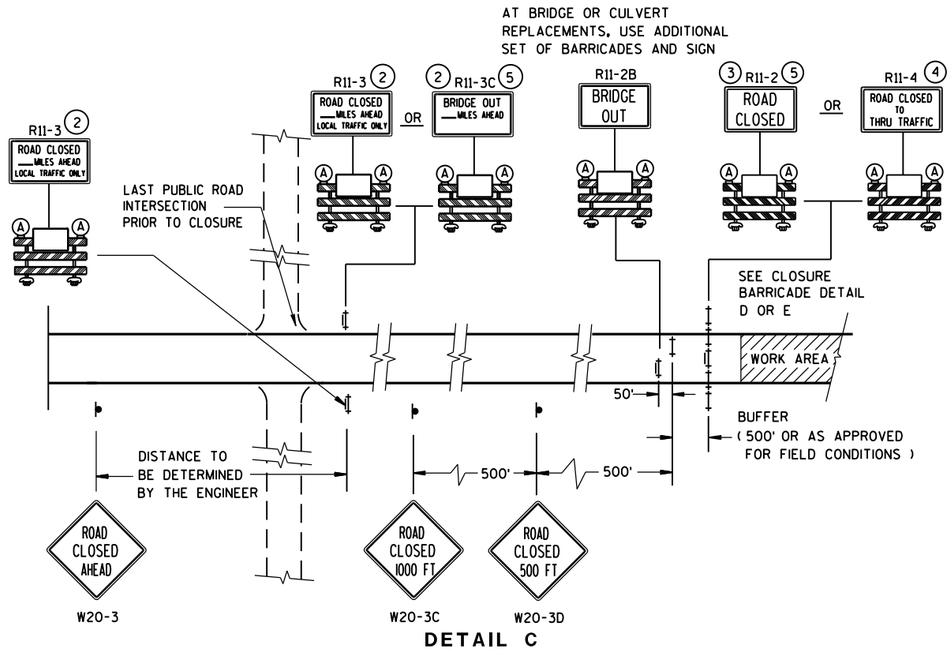
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

LEGEND

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

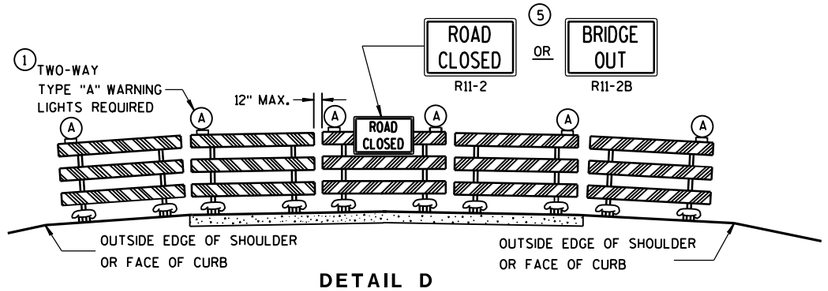
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

6

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

6

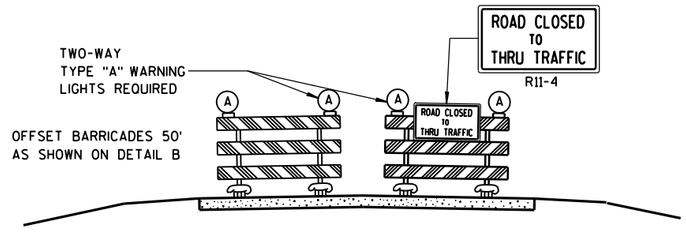
S.D.D. 15 C 2-6a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGI — FIC

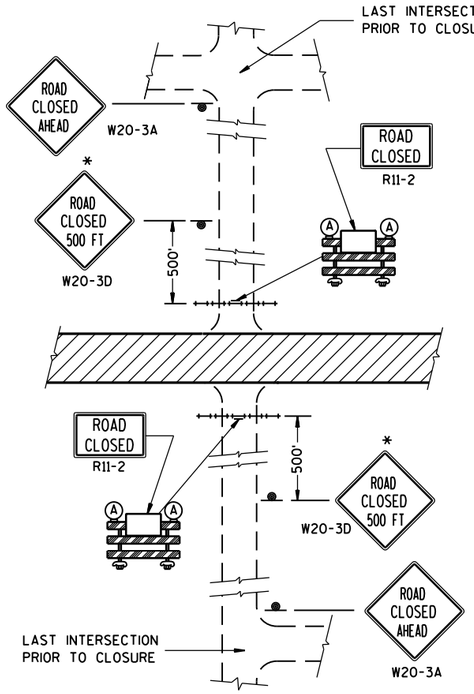
FHWA

6

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

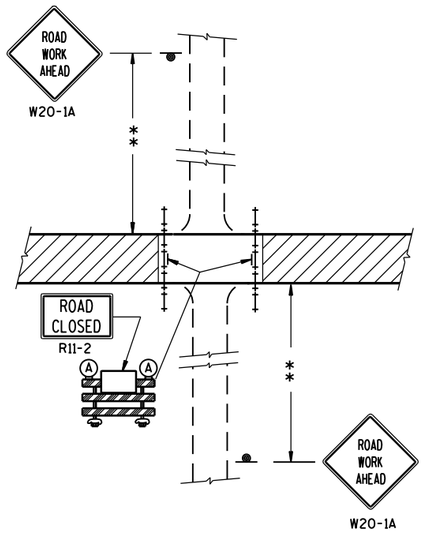
6

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



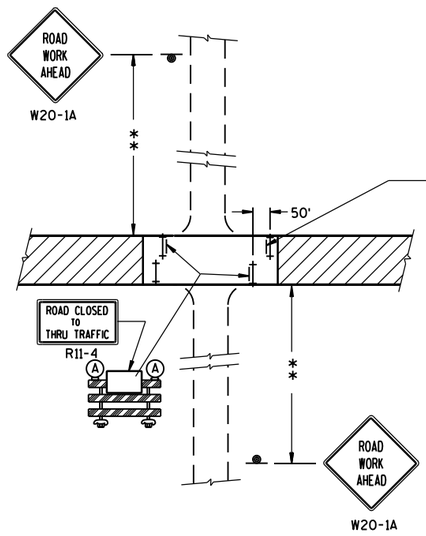
DETAIL 1

(NO ACCESS TO PROJECT)



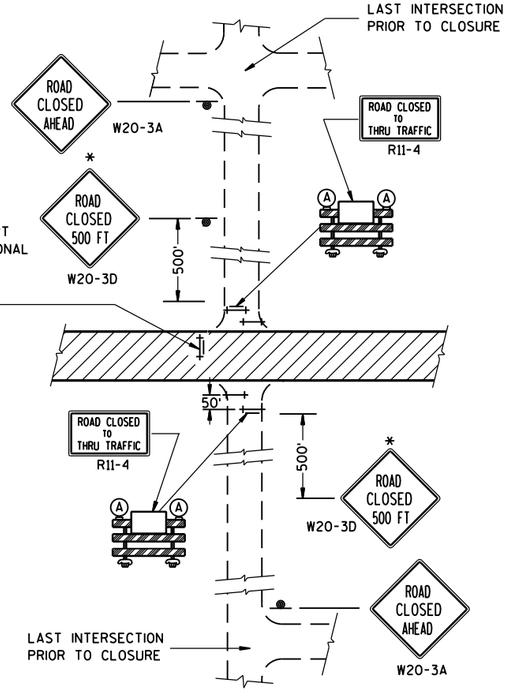
DETAIL 2

(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).



DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

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

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible]FIC SAFETY ENGI[illegible]
FHWA

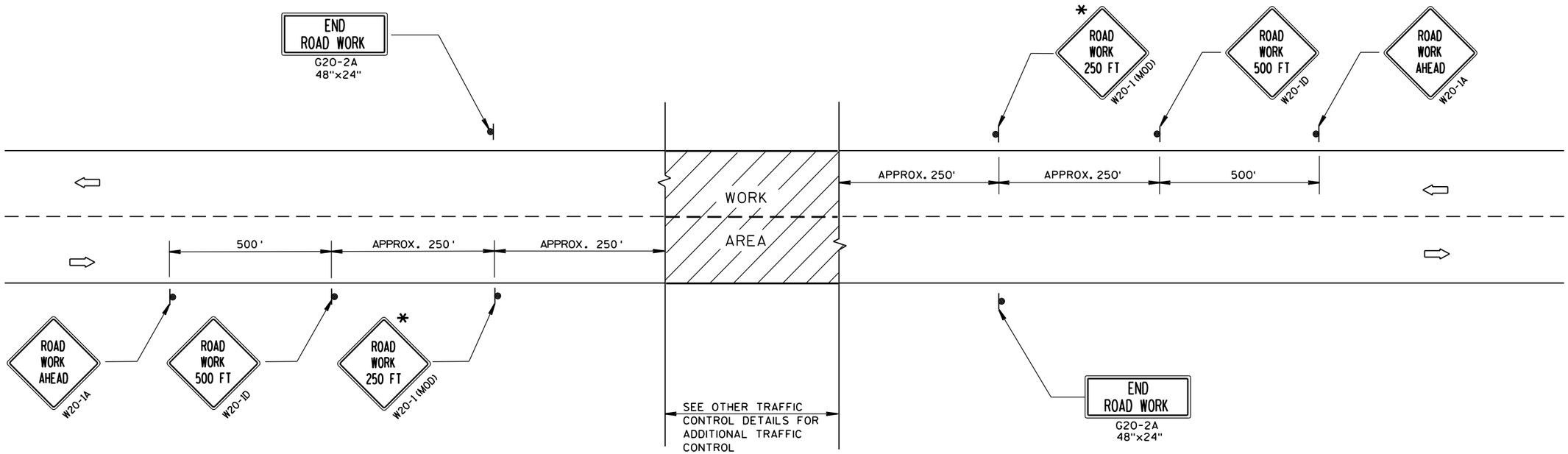
6

S.D.D. 15 C 3-3

6

S.D.D. 15 C 3-3

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

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

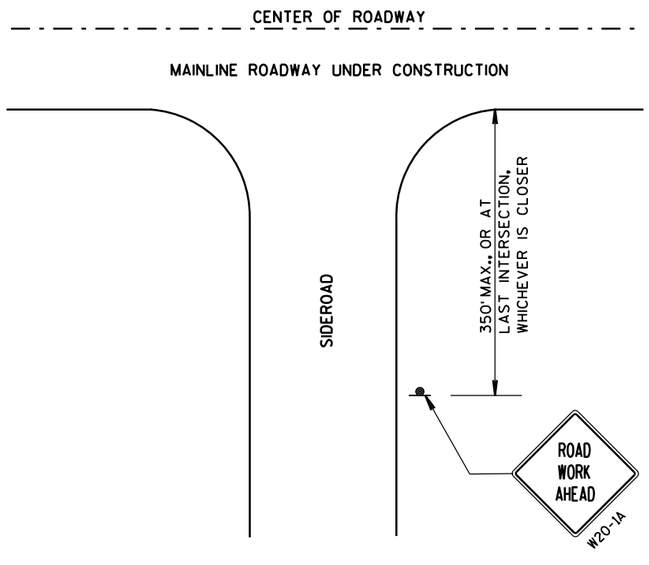
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

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



LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

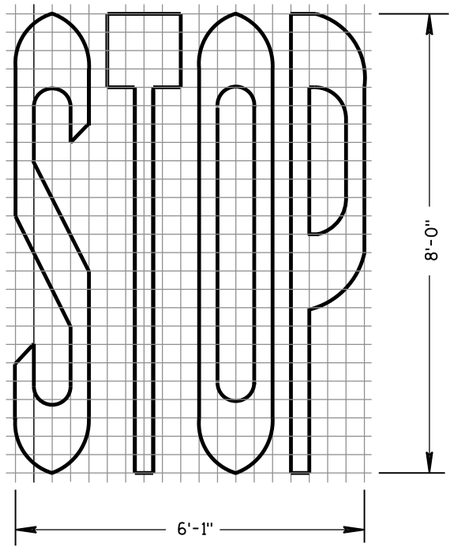
APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

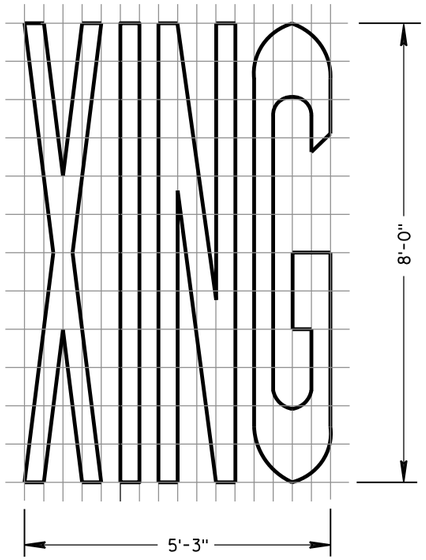
6

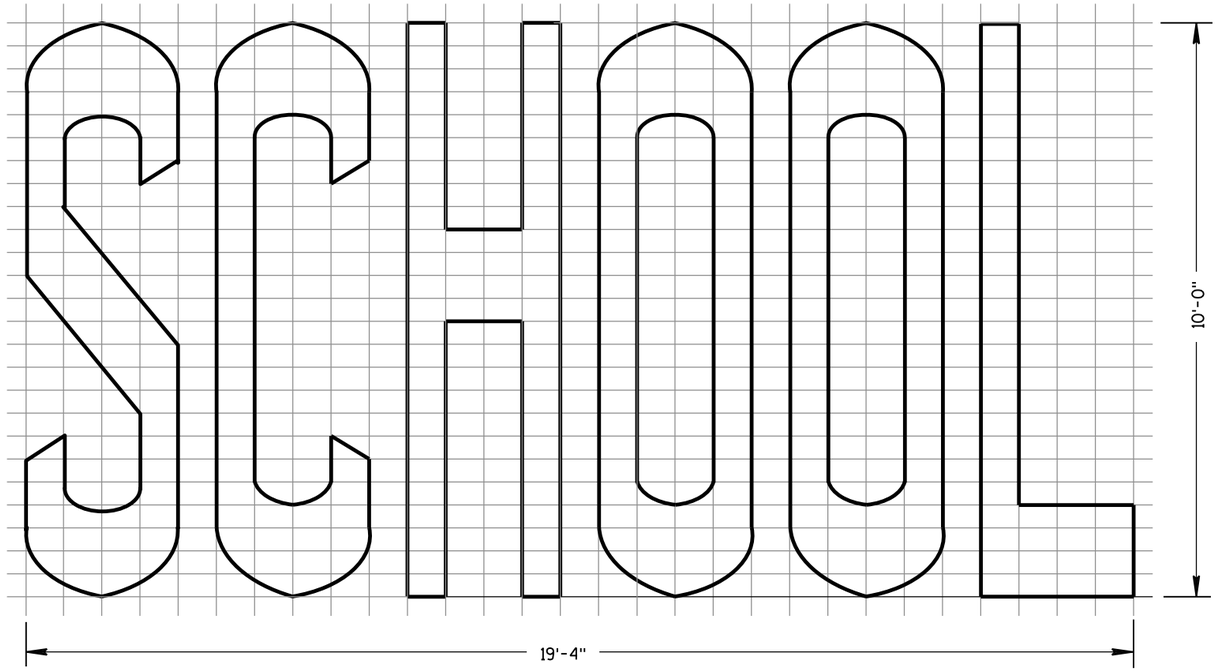
S.D.D. 15 C 5-3

GENERAL NOTES

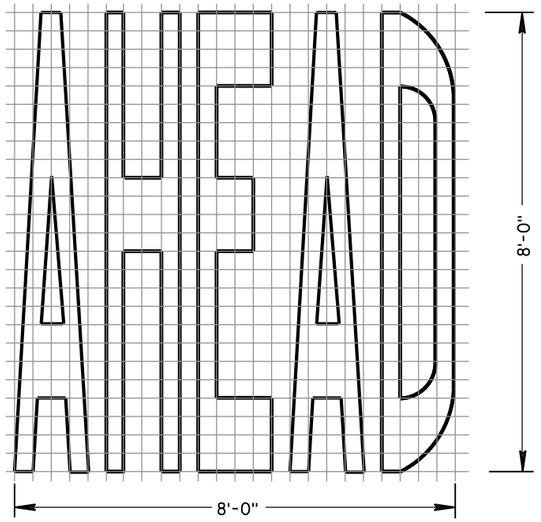
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

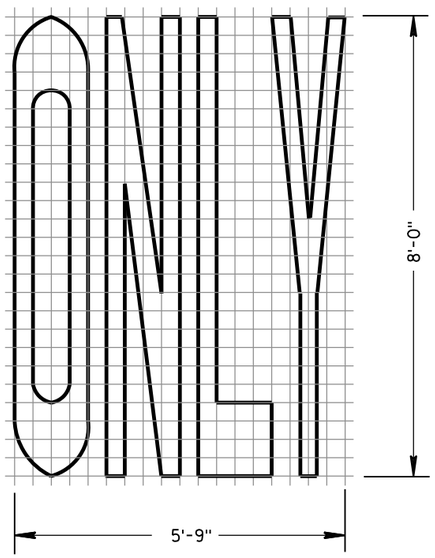


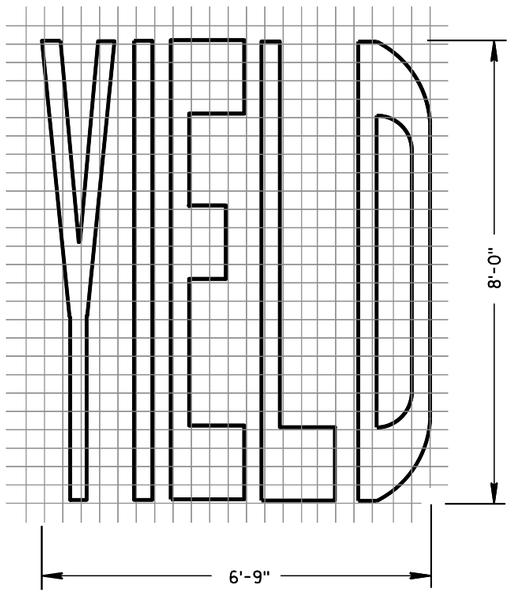


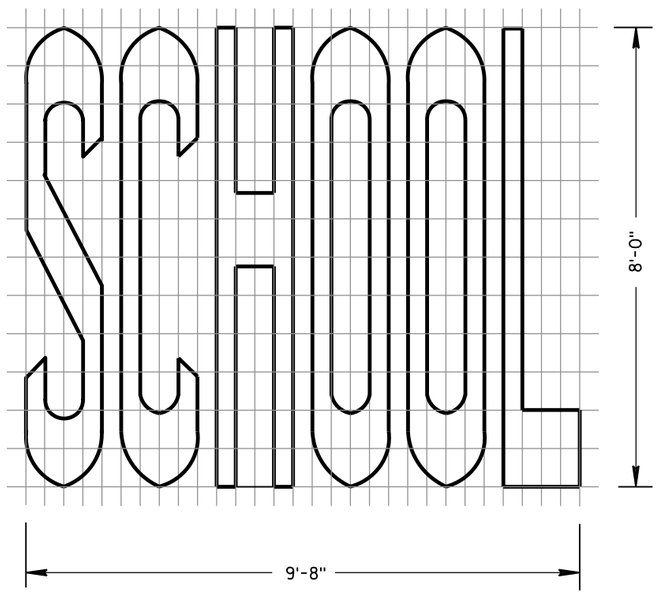


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-16	/S/ Matthew R. Rauch	
DATE	STATE SIGNING AND MARK	EER

FHWA

6

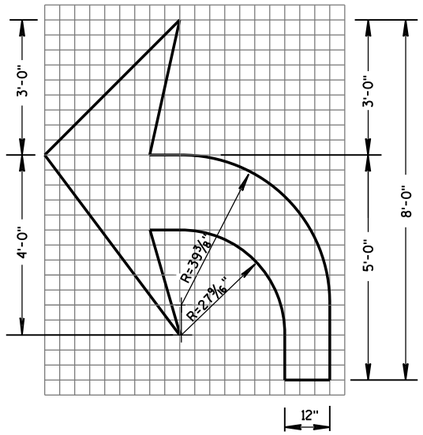
S.D.D. 15 C 7-13b

6

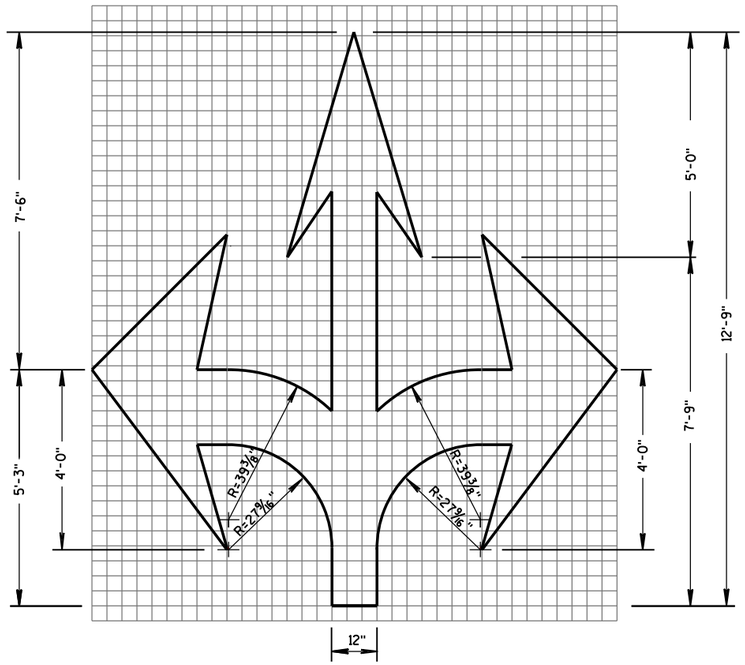
S.D.D. 15 C 7-13b

GENERAL NOTES

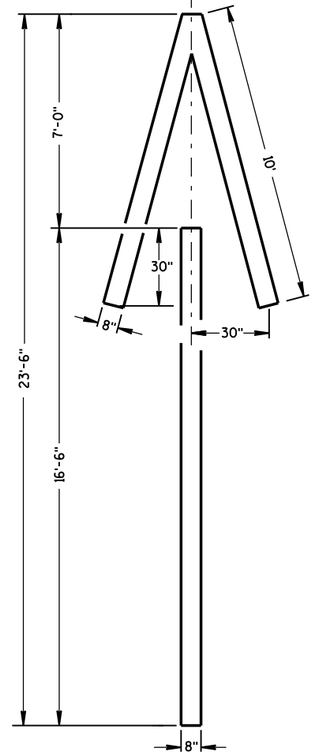
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



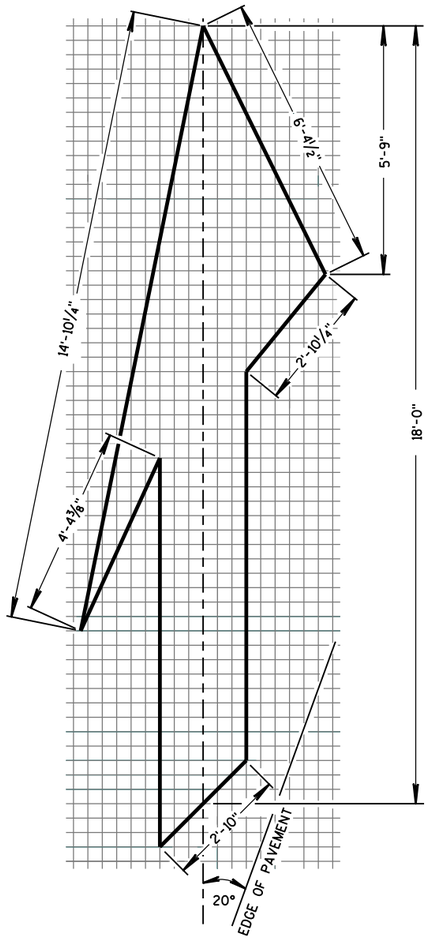
TYPE 2



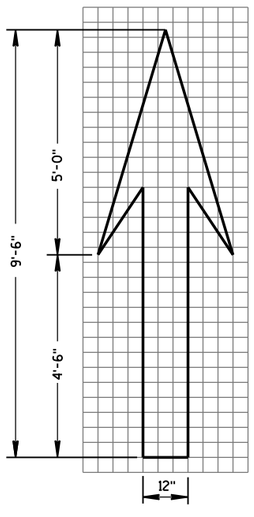
TYPE 6



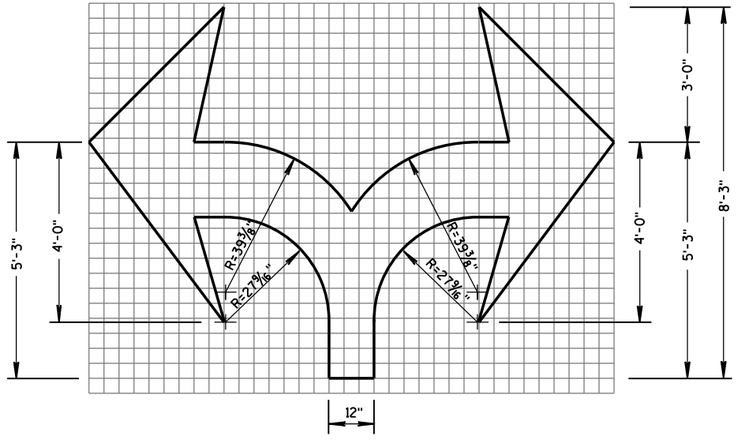
TYPE 4



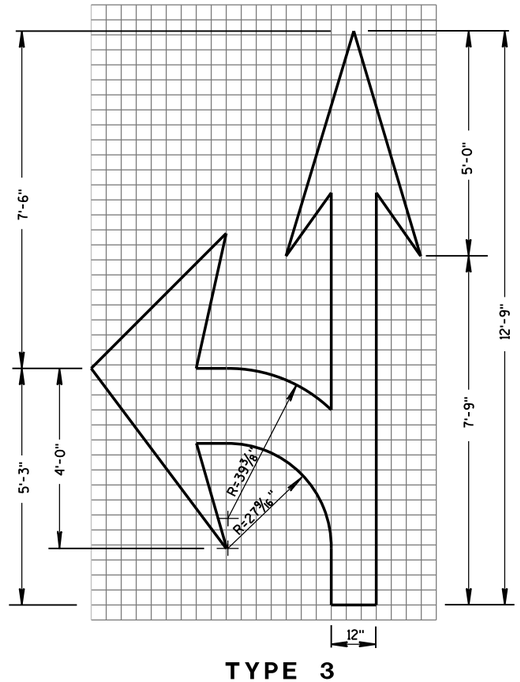
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

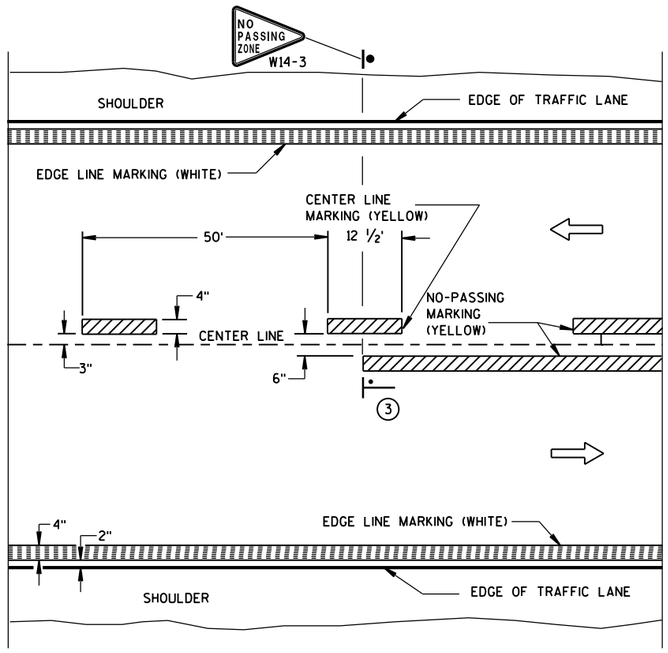
APPROVED
4-18-16 DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MAR ENGINEER
FHWA

6

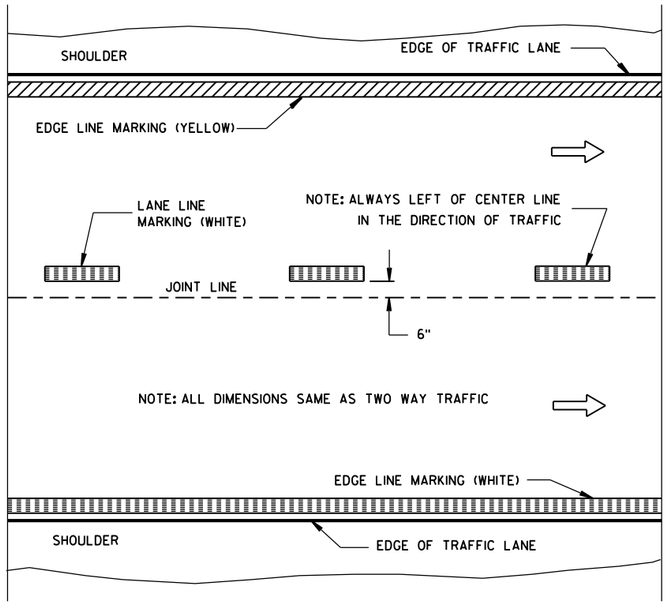
S.D.D. 15 C 7-13c

6

S.D.D. 15 C 7-13c

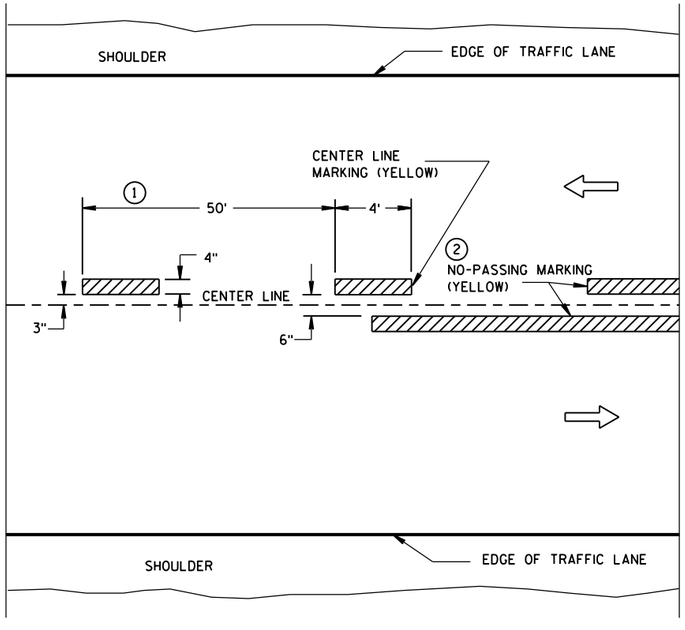


TWO WAY TRAFFIC

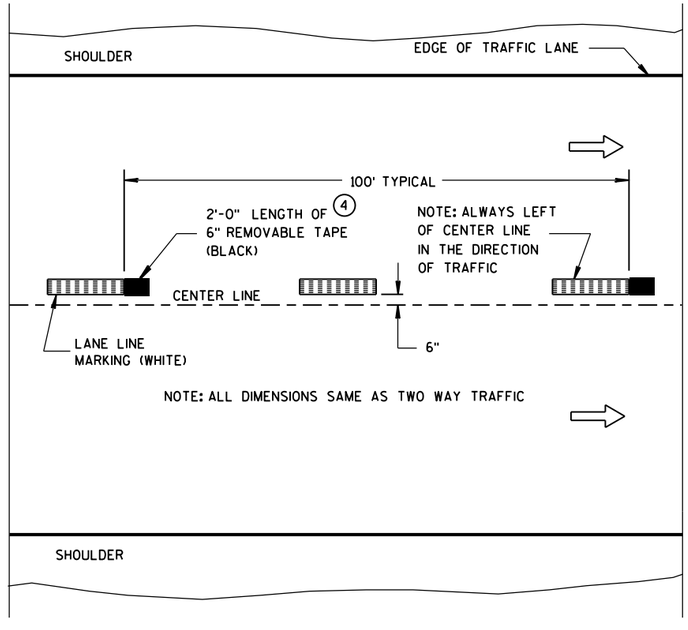


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

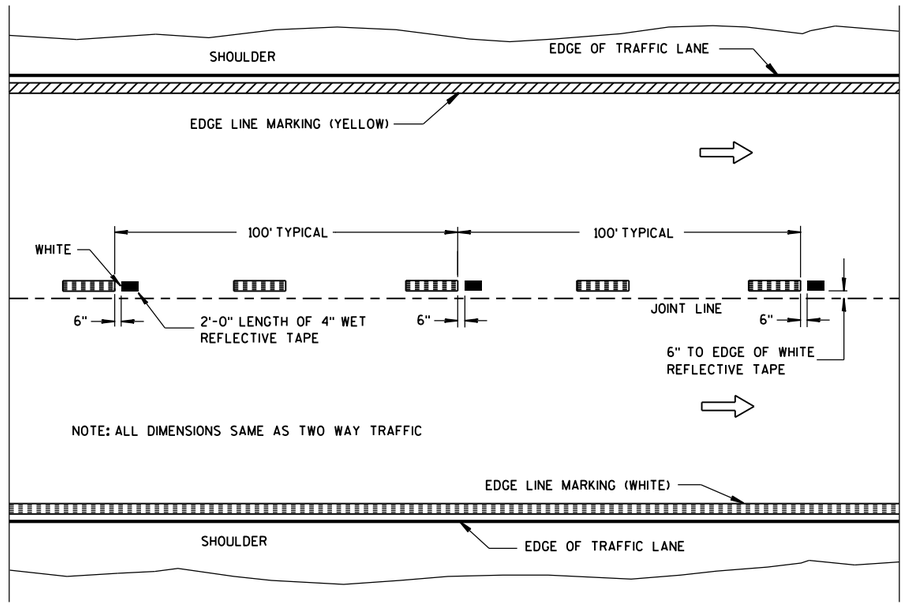
GENERAL NOTES

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 ENGINEER

FHWA

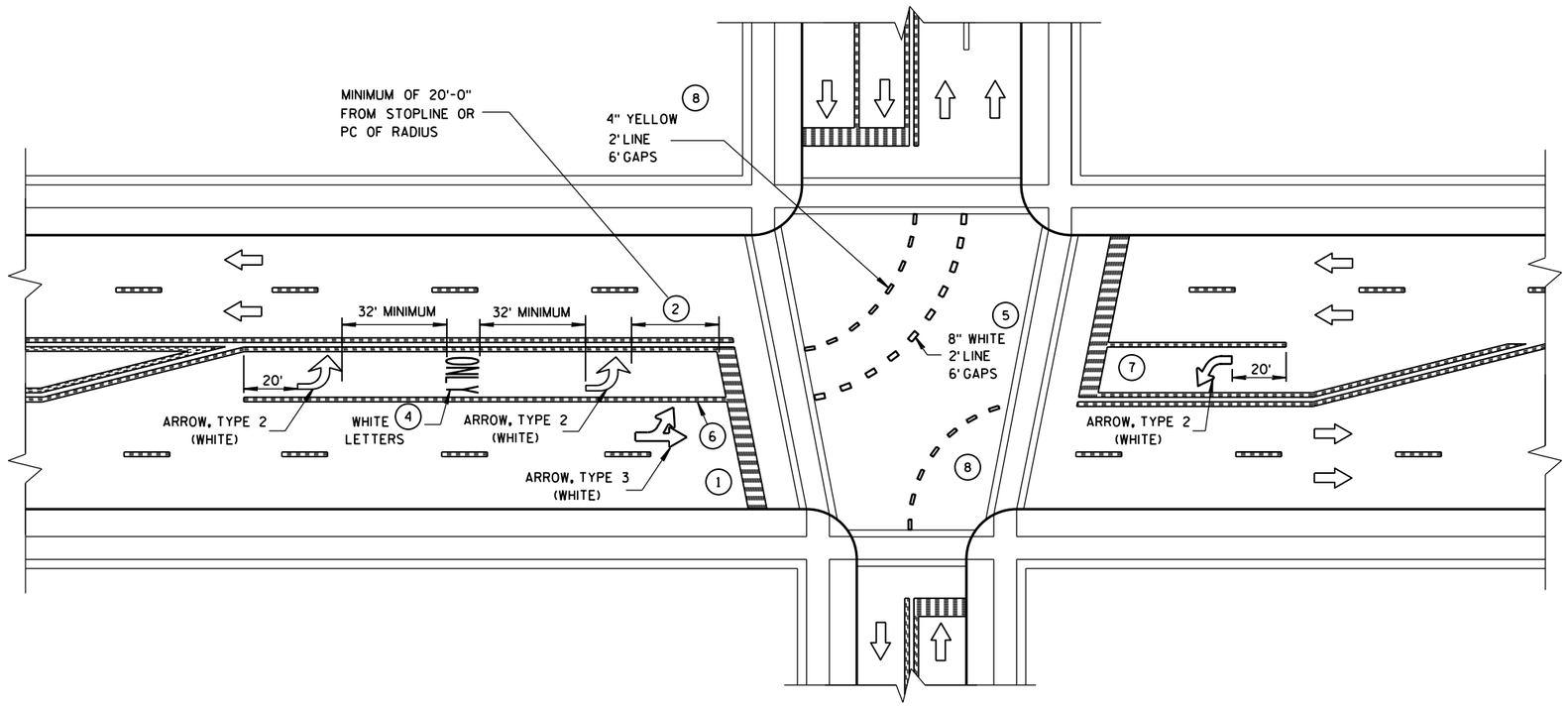
55

6

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

6

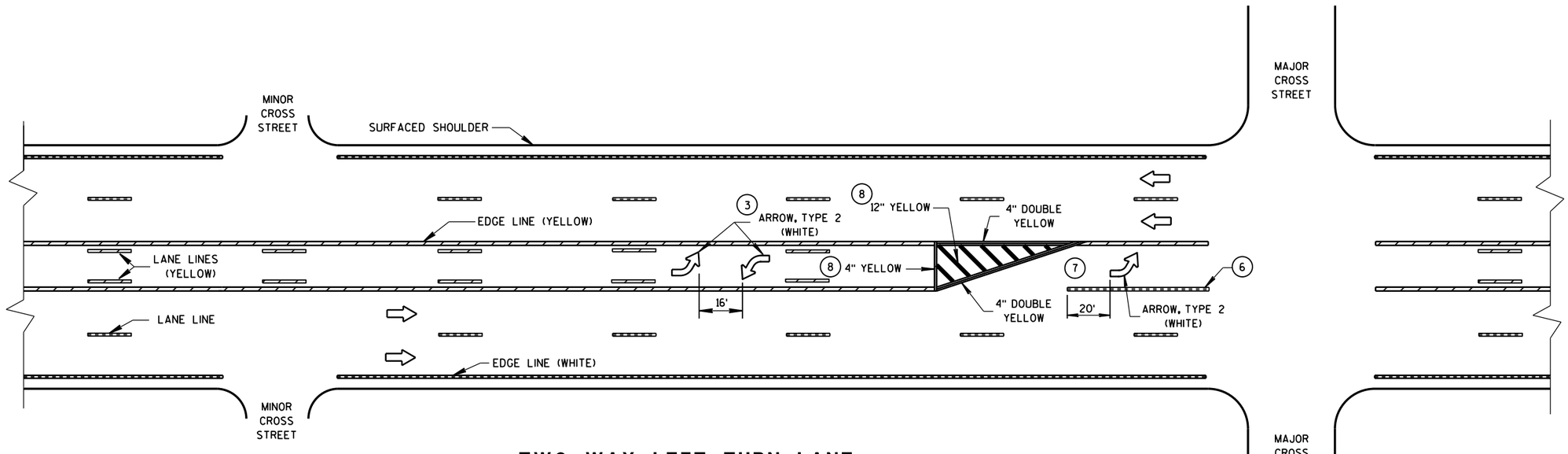
S.D.D. 15 C 8-16a



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

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

6

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

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

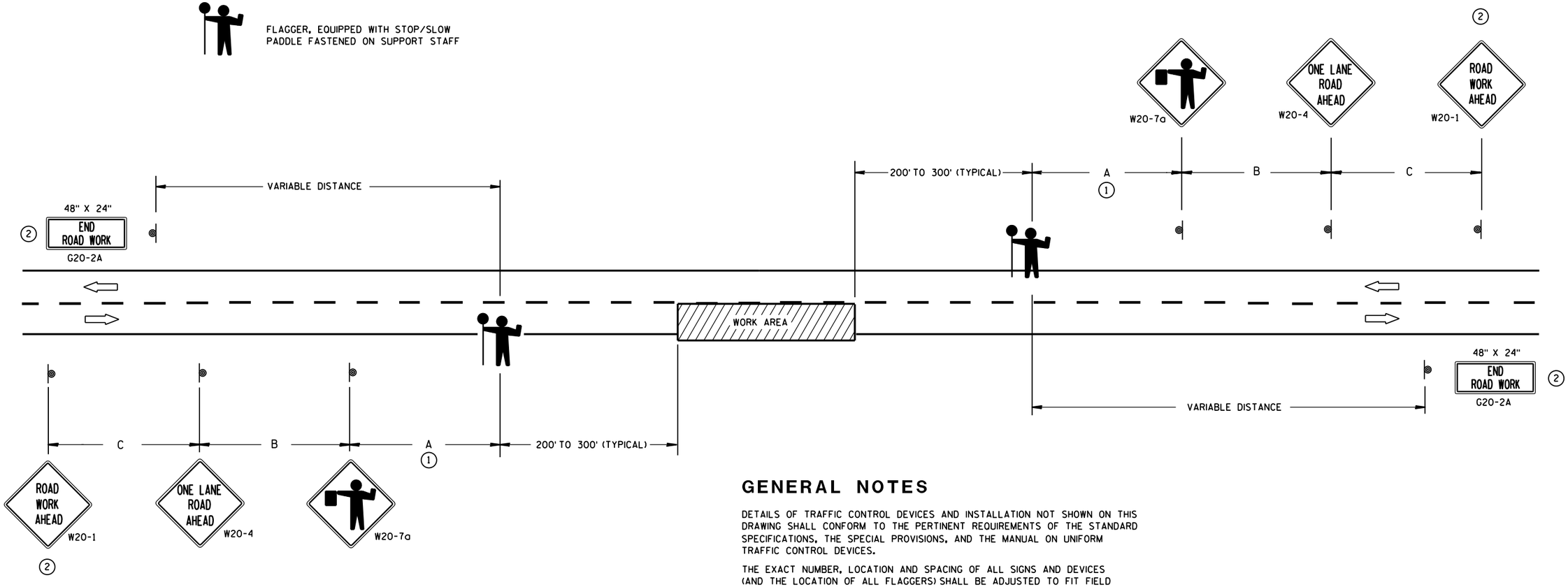
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

BE PREPARED TO STOP
W3-4

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



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

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

GENERAL NOTES

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

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

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

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

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

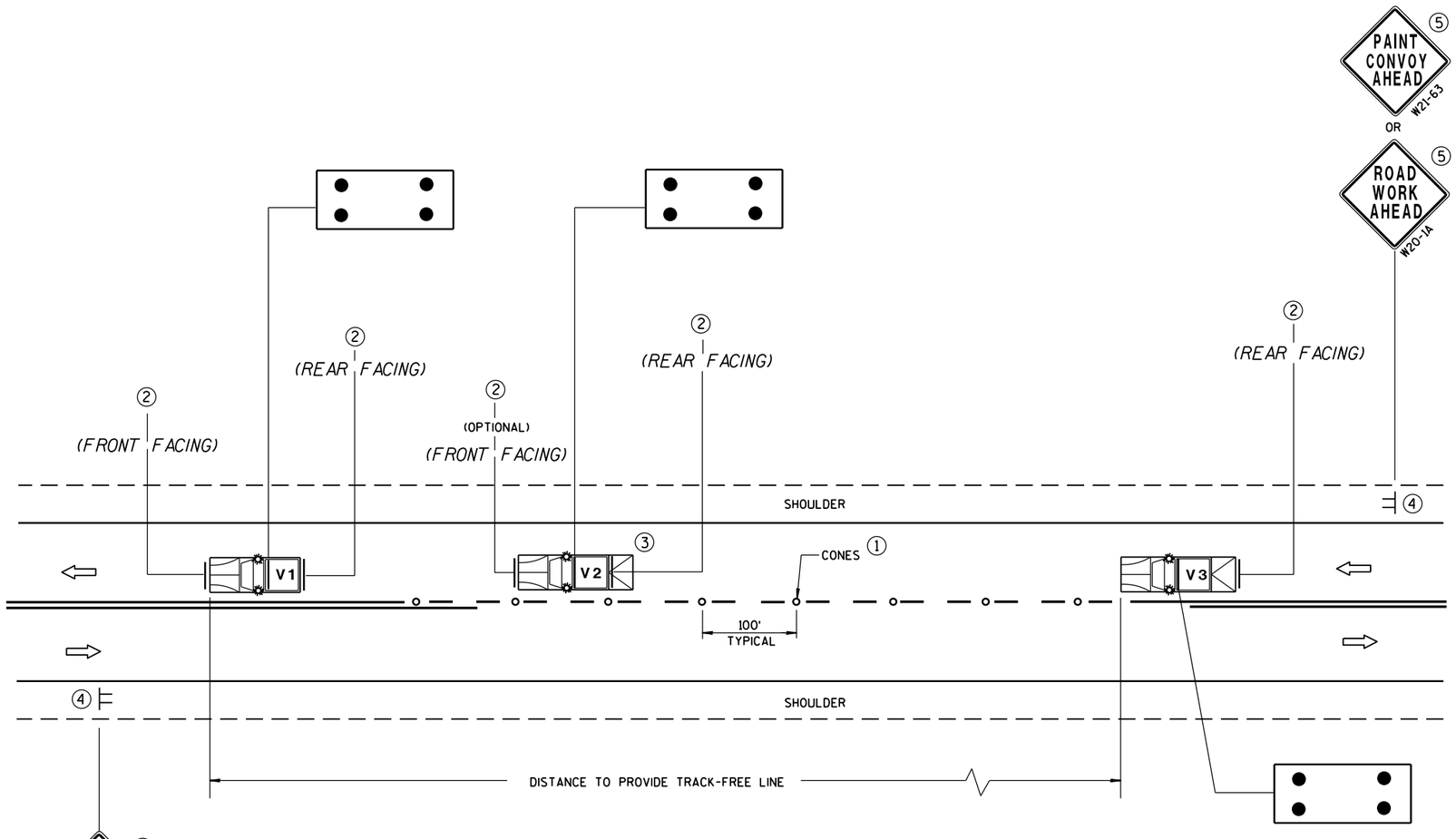
TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 15 C 12-4



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
o	CONES
⁘	FLASHING ARROW PANEL (CAUTION)

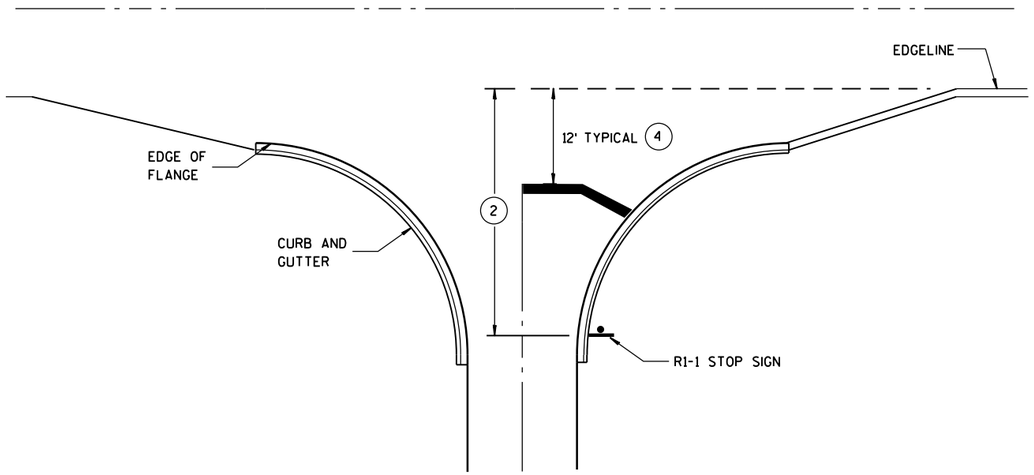
MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
June 2016 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZON SAFETY ENGINE
FHWA	

6

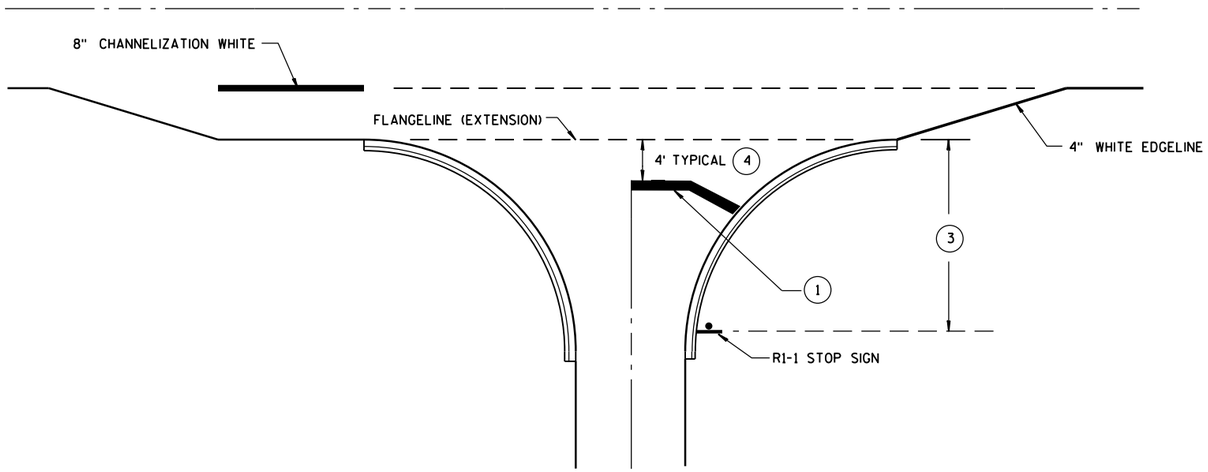
S.D.D. 15 C 19-4a

6

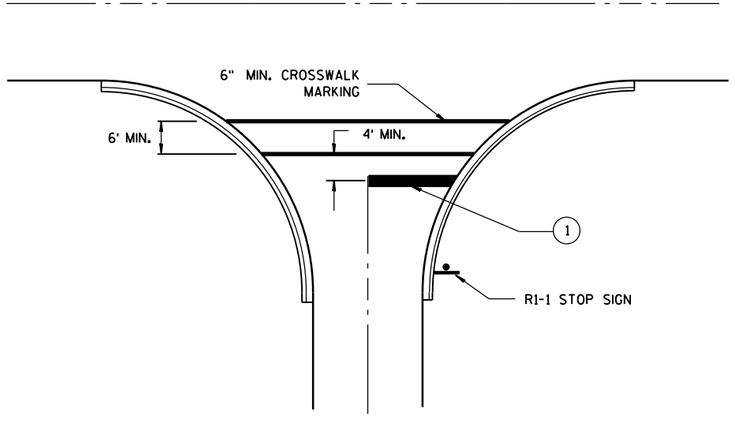
S.D.D. 15 C 19-4a



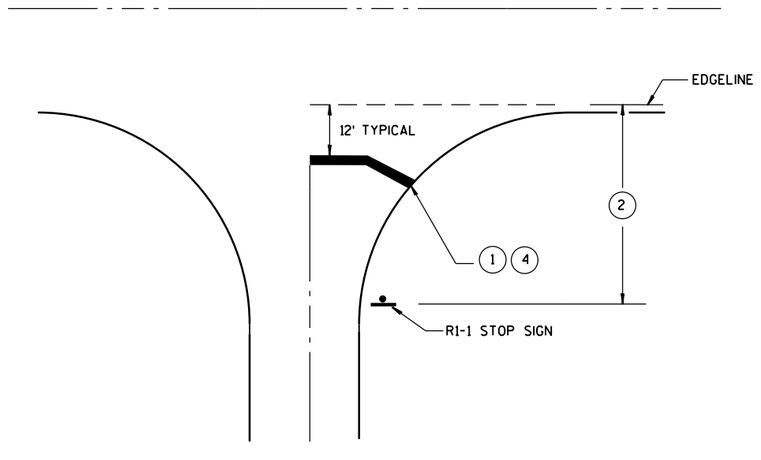
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR 59 NEER

FHWA

6

S.D.D. 15 C 33-2

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.

W20-1A 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	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

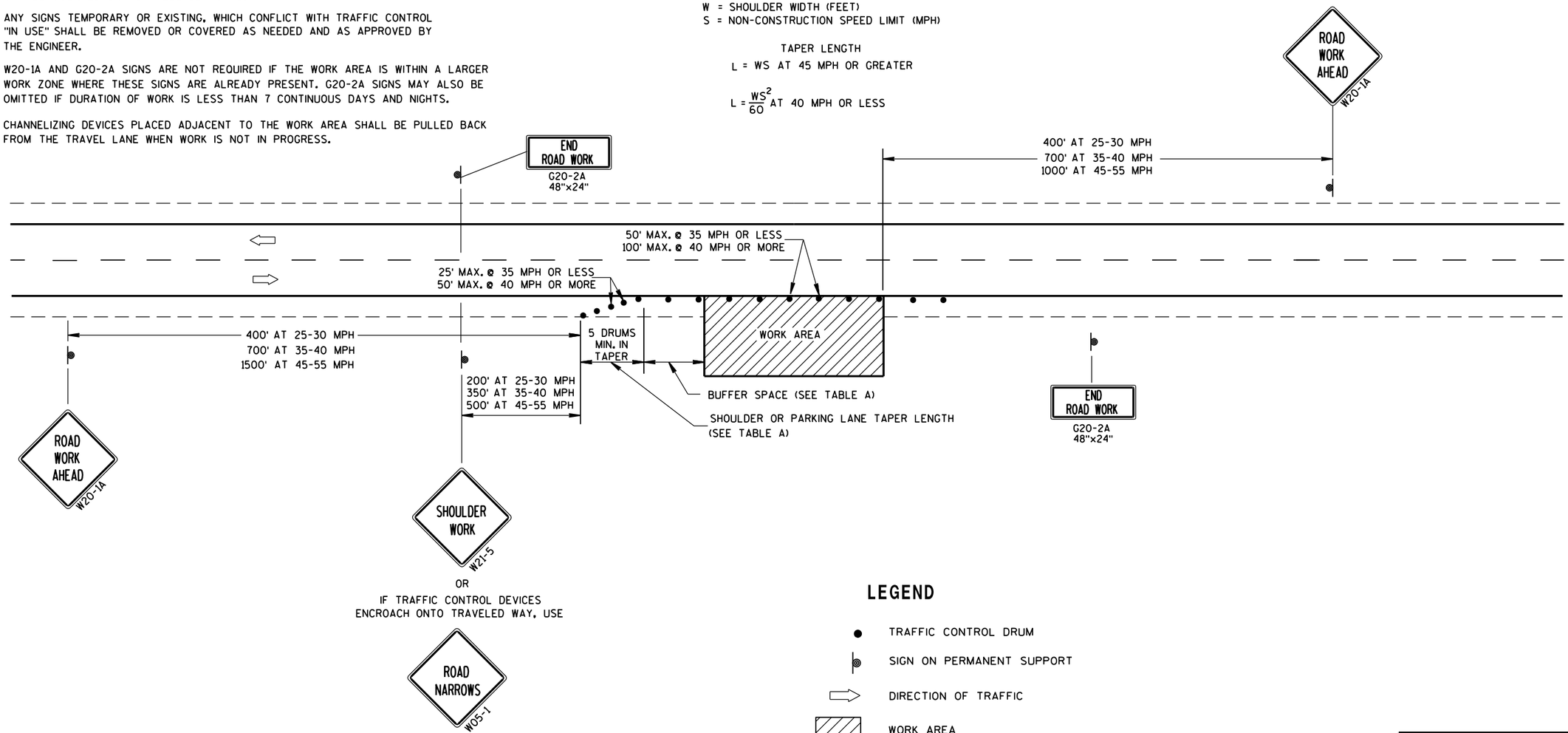
W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L = WS AT 45 MPH OR GREATER

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

SHOULDER TAPER LENGTH = $\frac{1}{3}L$



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

July 14, 2015 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZO SAFETY ENGI FIC

FHWA

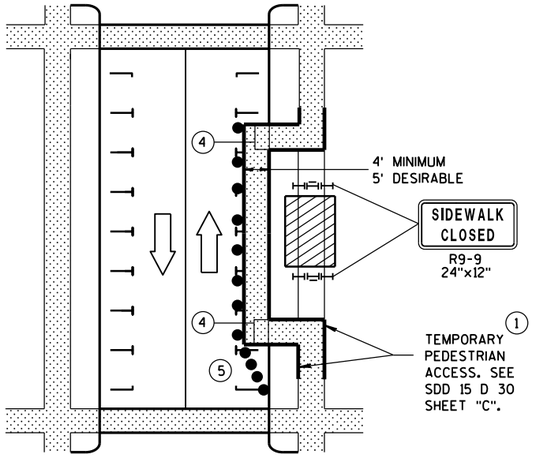
6

S.D.D. 15 D 28-3

6

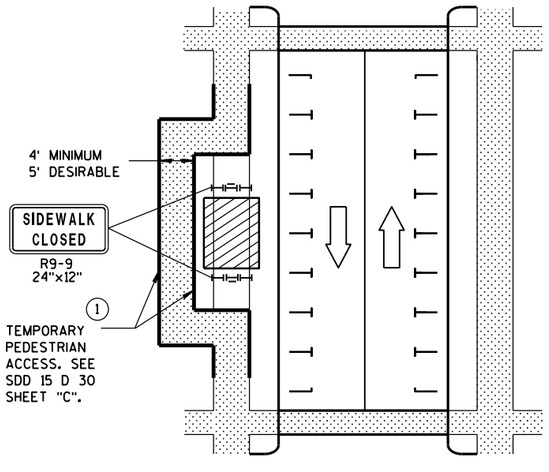
S.D.D. 15 D 28-3

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

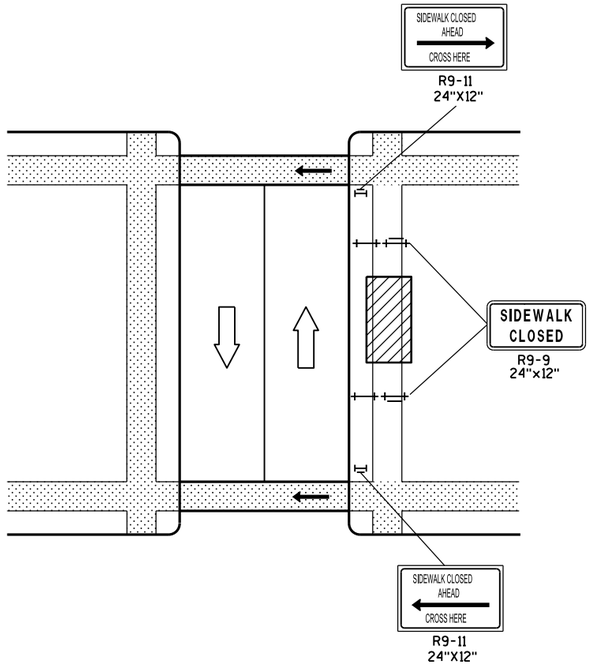


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

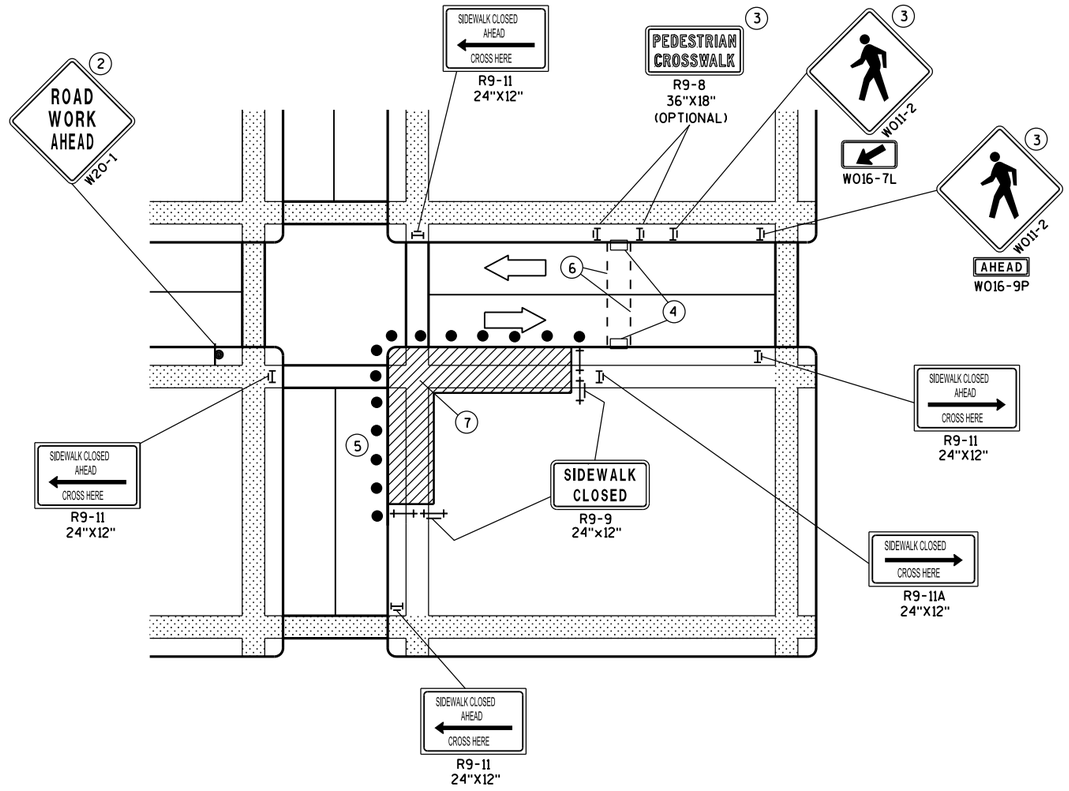
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

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

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

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

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

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

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

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

(1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.

(2) "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

(3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".

(5) DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.

(6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.

(7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

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

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

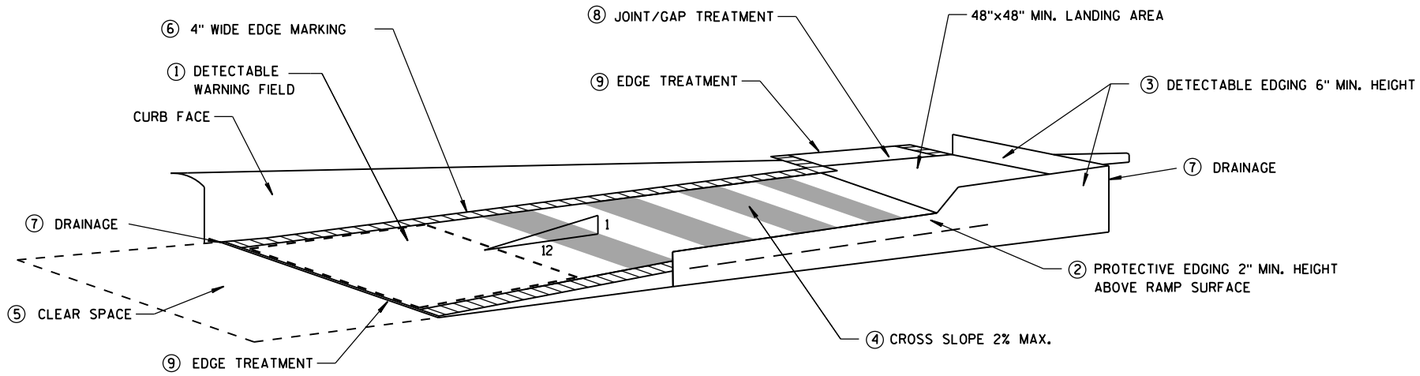
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 D 30-3a

6

S.D.D. 15 D 30-3a



TEMPORARY CURB RAMP PARALLEL TO CURB

GENERAL NOTES

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

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

① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 SHEET "E".

② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

④ CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

⑤ CLEAR SPACE OF 48"X48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

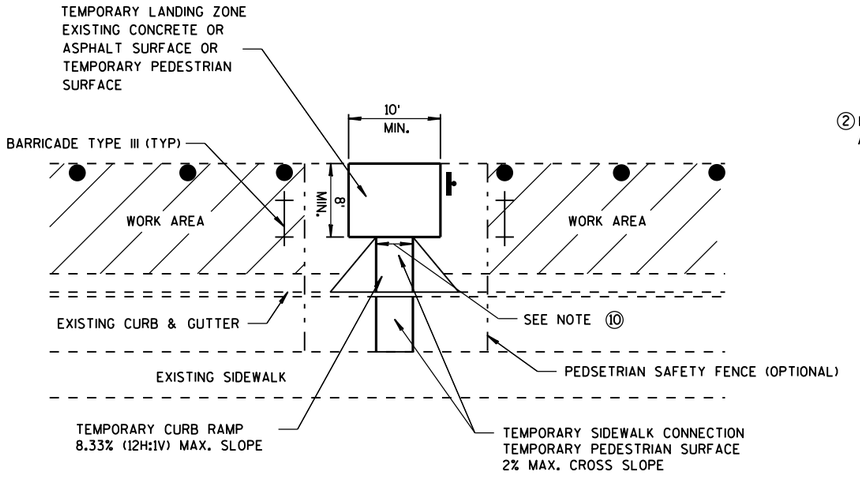
⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.

⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

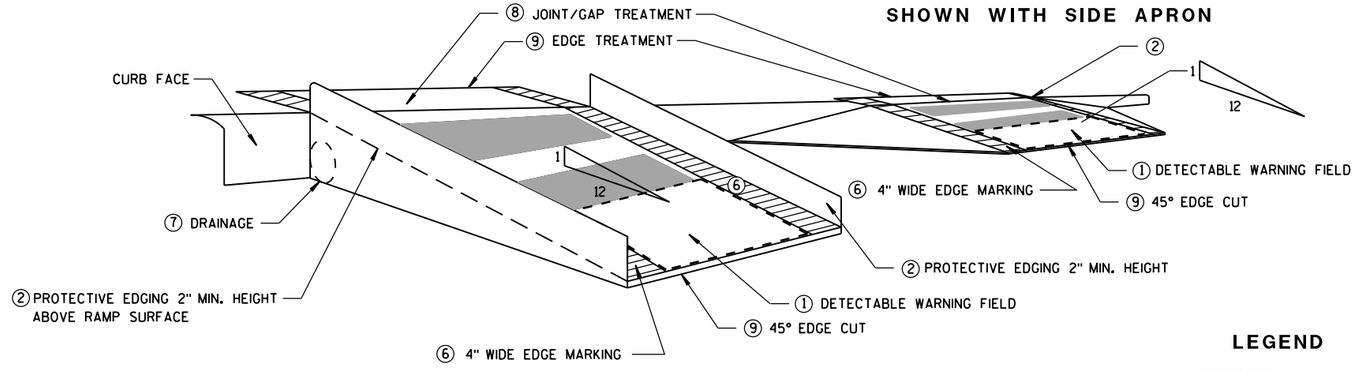
⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

⑩ 5' WIDE MIN. WITH PEDSETRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.



TEMPORARY BUS STOP PAD



SHOWN WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

LEGEND

WORK AREA

TYPE III BARRICADE

TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

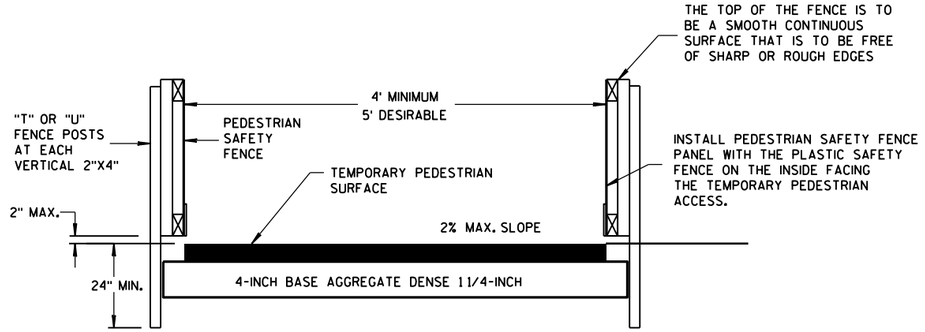
June 2016 — DATE

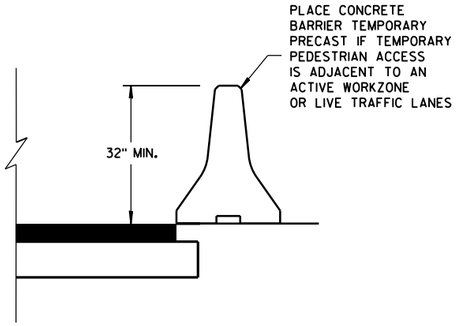
/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA

6

S.D.D. 15 D 30-3b

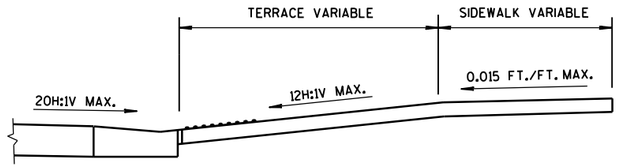




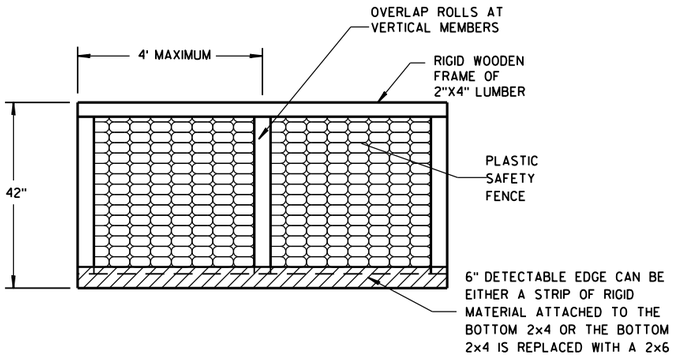
TEMPORARY PEDESTRIAN ACCESS

GENERAL NOTES

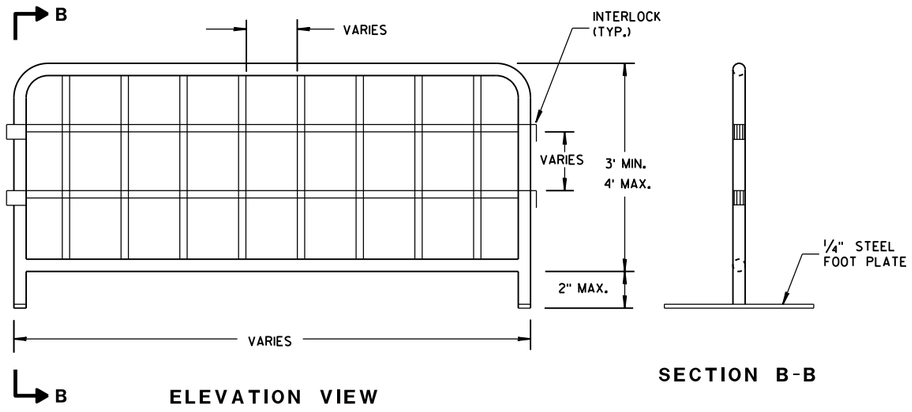
(1) INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



SECTION A-A



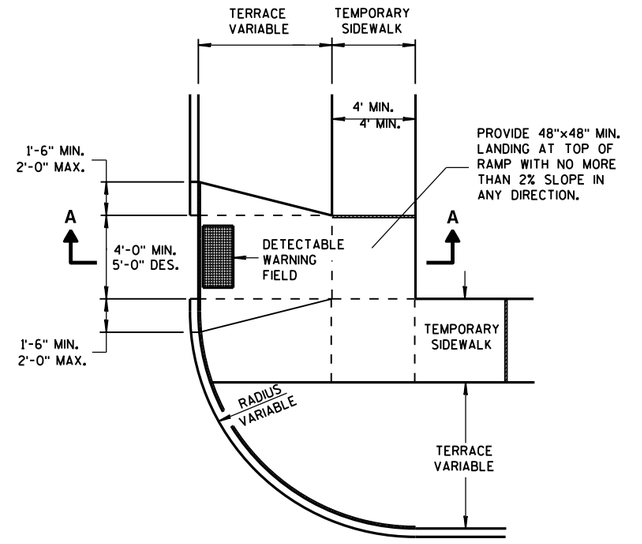
PEDESTRIAN SAFETY FENCE



ELEVATION VIEW

SECTION B-B

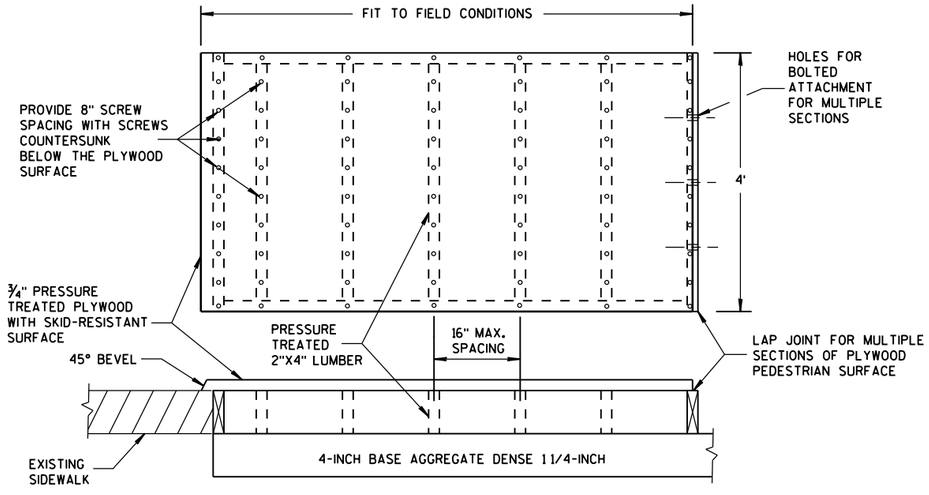
TEMPORARY PEDESTRIAN STEEL BARRICADE (1)



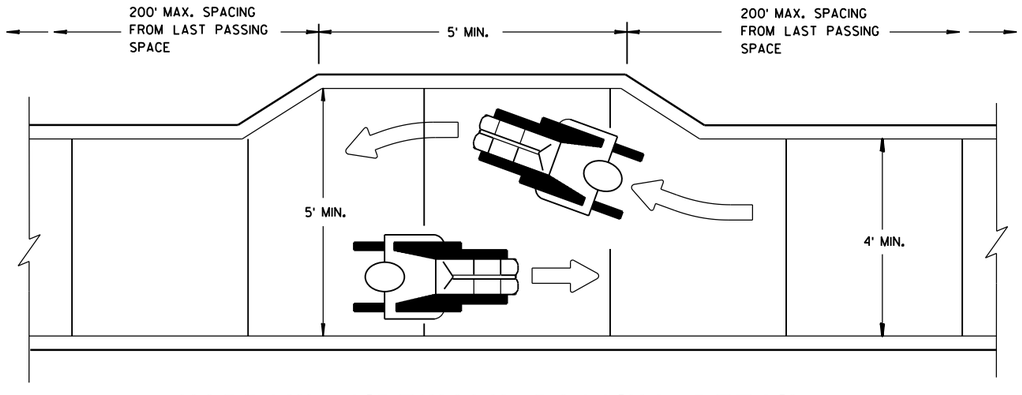
PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



NARROW SIDEWALK PASSING DETAIL

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016
DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZON SAFETY ENGIN IC
FHWA

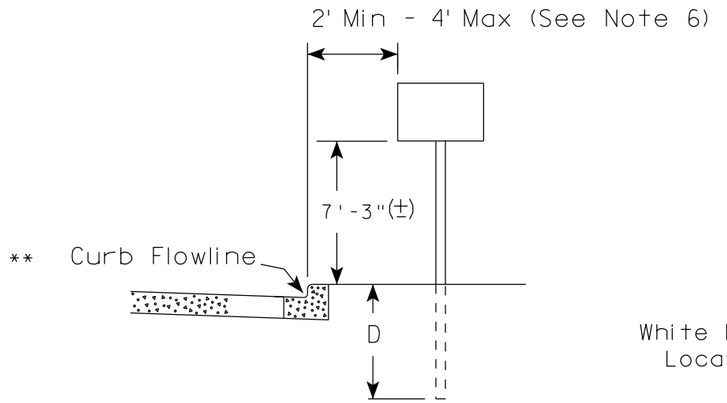
6

S.D.D. 15 D 30-3c

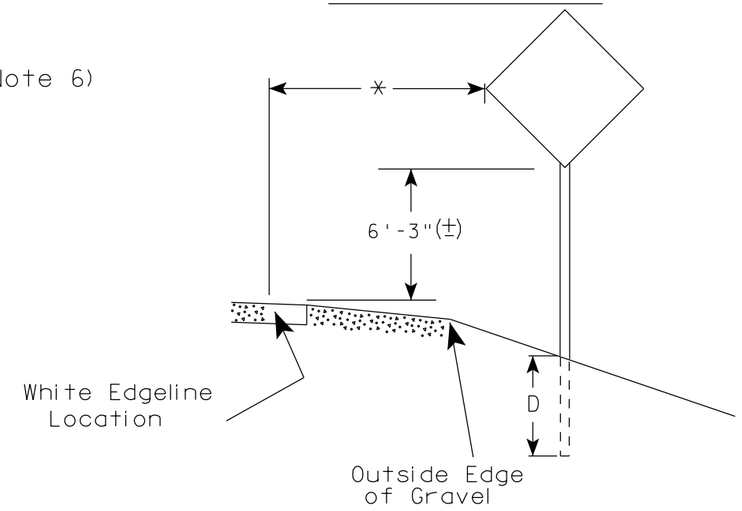
6

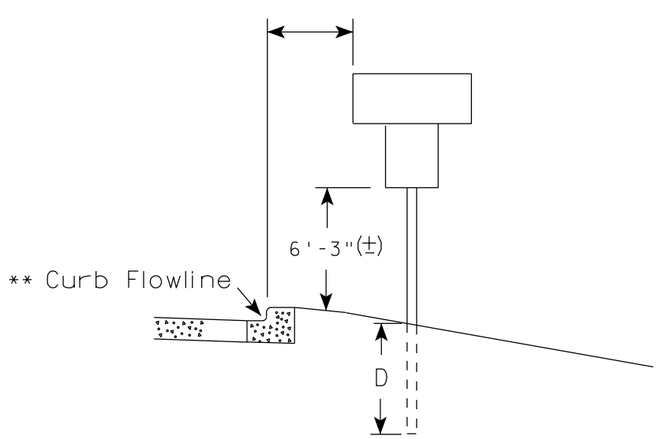
S.D.D. 15 D 30-3c

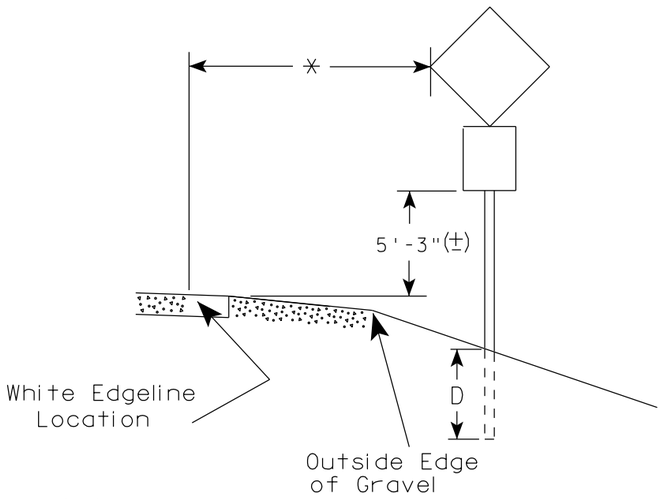
URBAN AREA



RURAL AREA (See Note 2)







GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

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

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

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

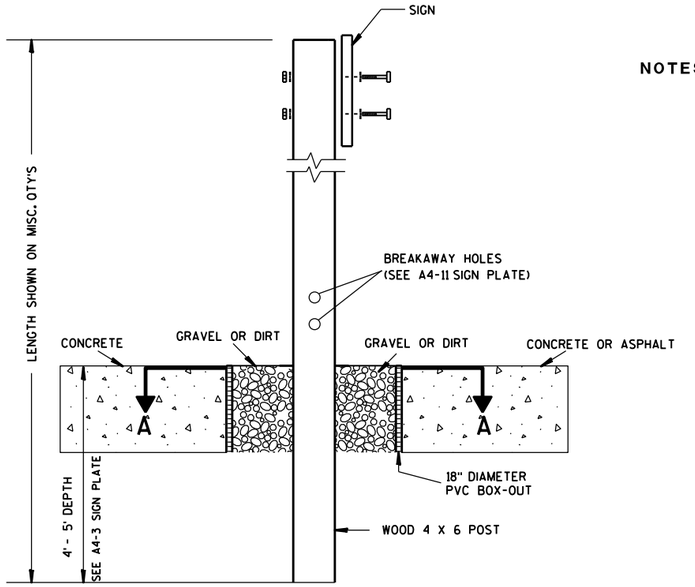
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

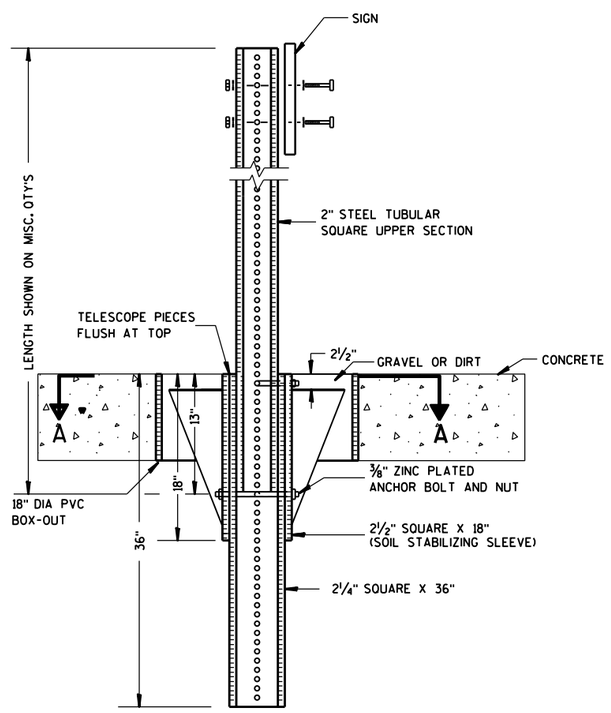
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

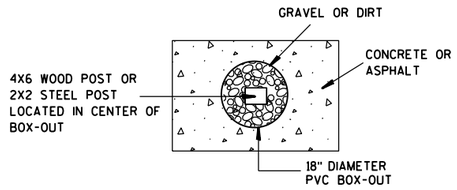
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

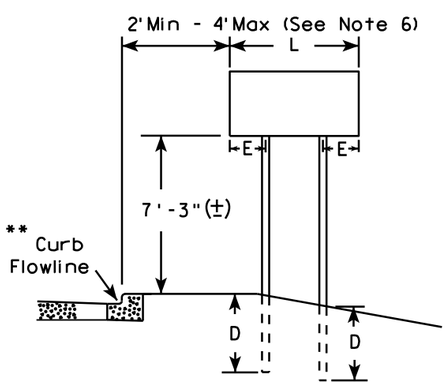
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

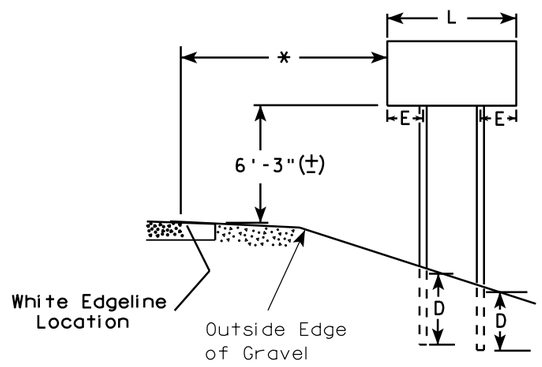
DATE 1/27/14 PLATE NO. A4-3B.1

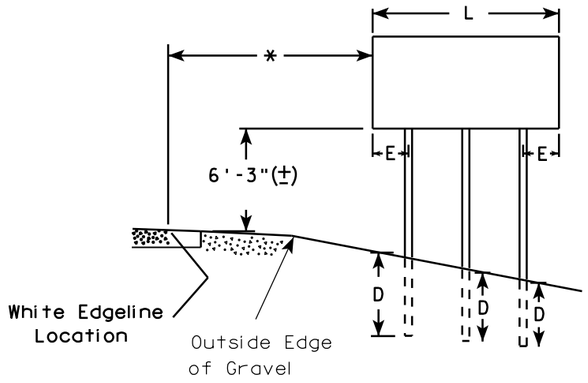
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

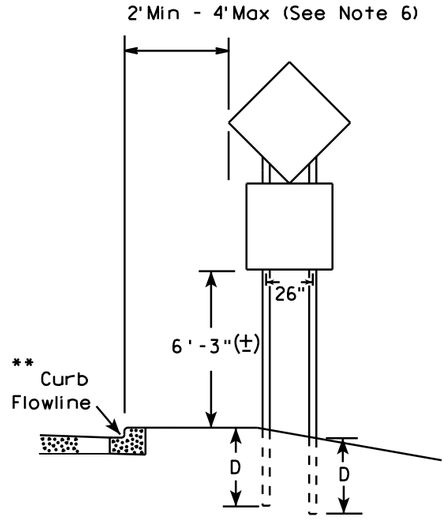
URBAN AREA



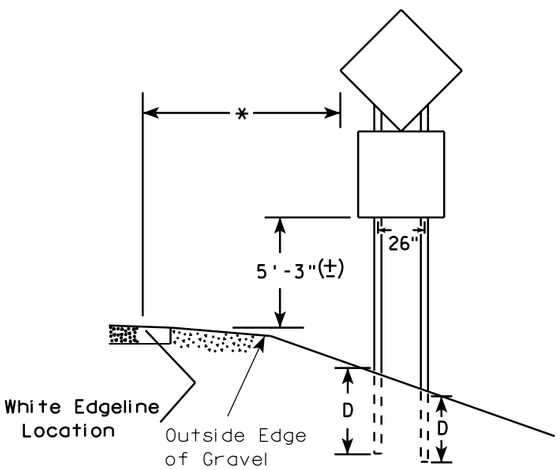
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



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 (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

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

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

*** See A4-3 sign plate for signs 4' or less in width and 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'

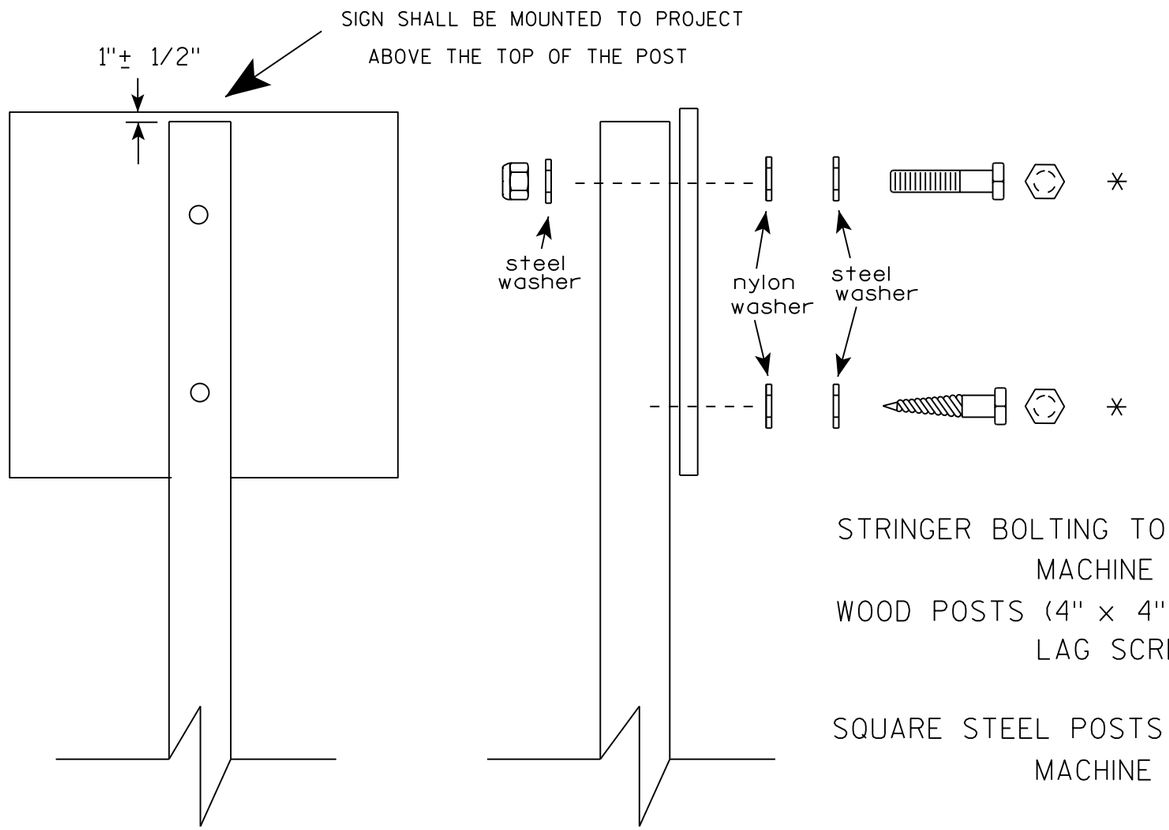
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-4 66 14

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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

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

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

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

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

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

WOOD POSTS (4" x 4" or 4" x 6")

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

3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

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

3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

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

WASHERS (ALL POSTS) -

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

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

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

ATTACHMENT OF SIGNS TO POSTS

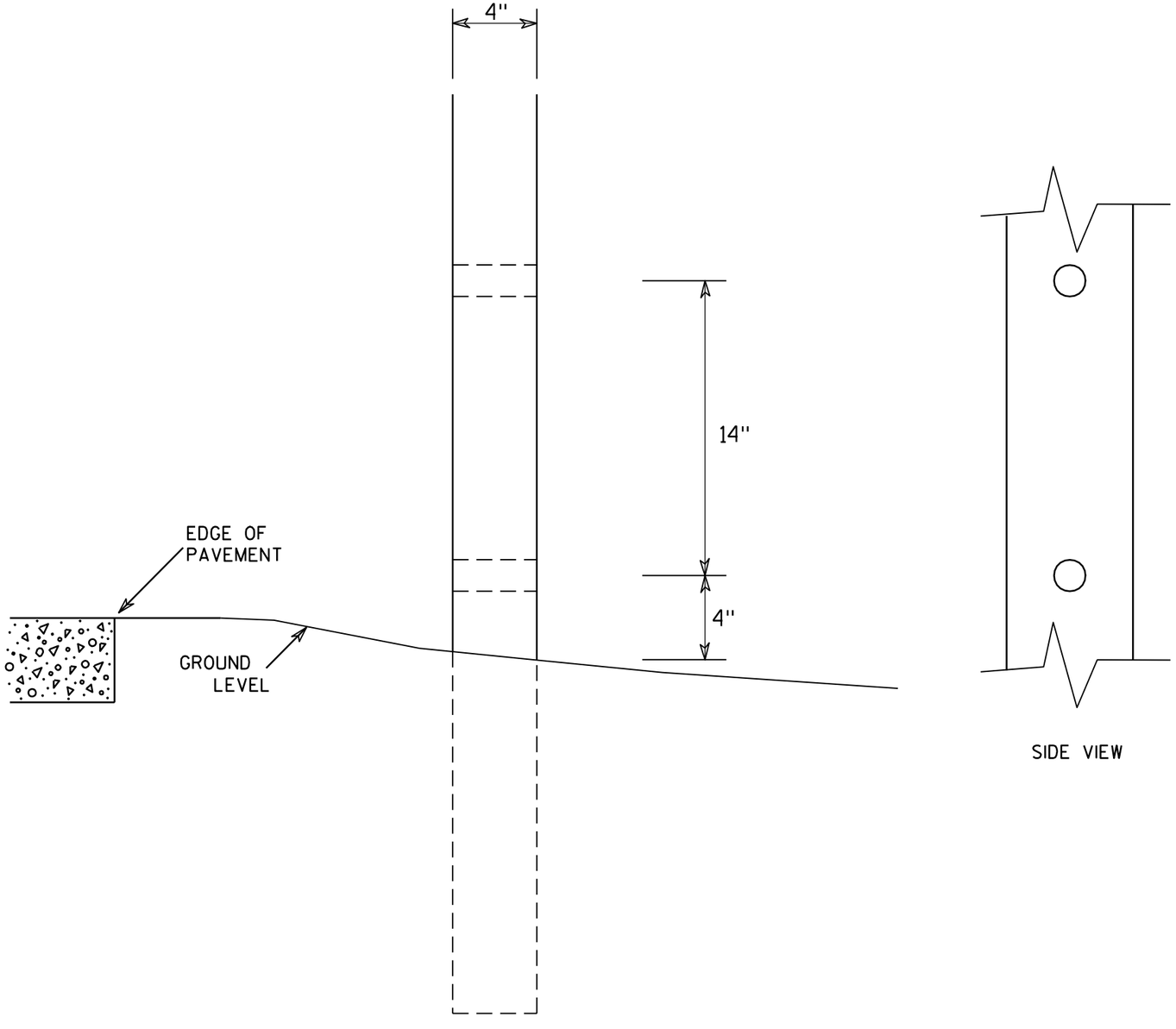
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO: SHEET NO: E

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



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

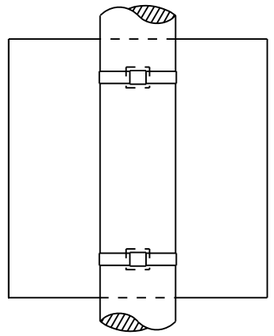
APPROVED Chester J Spang for State Traffic Engineer

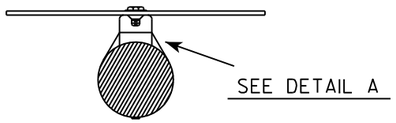
DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 68	E

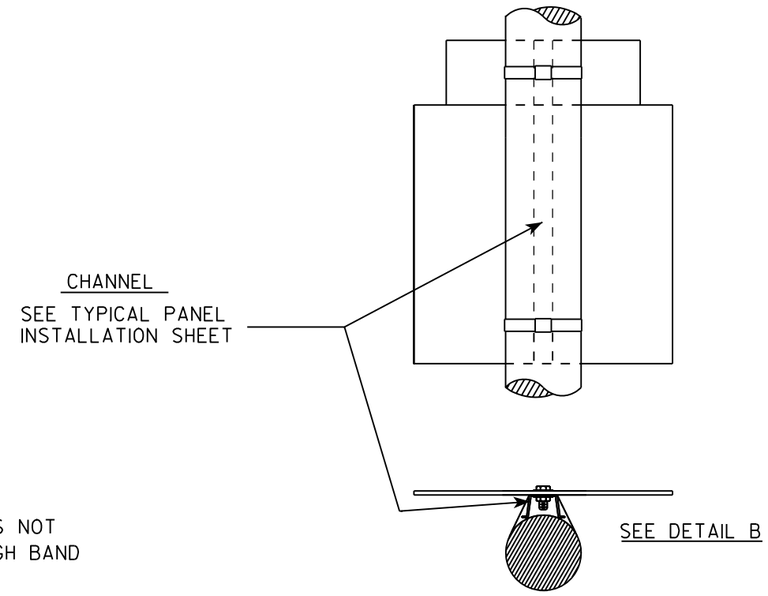
BANDING

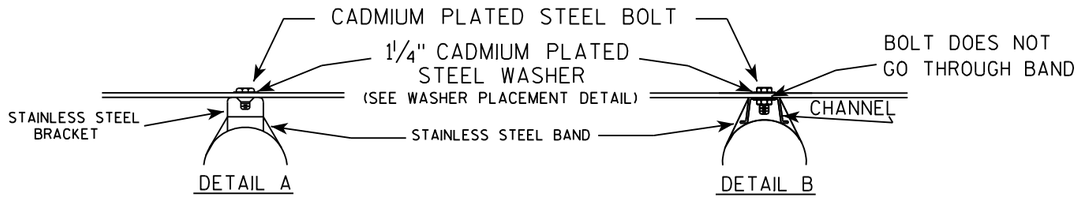
SINGLE SIGN



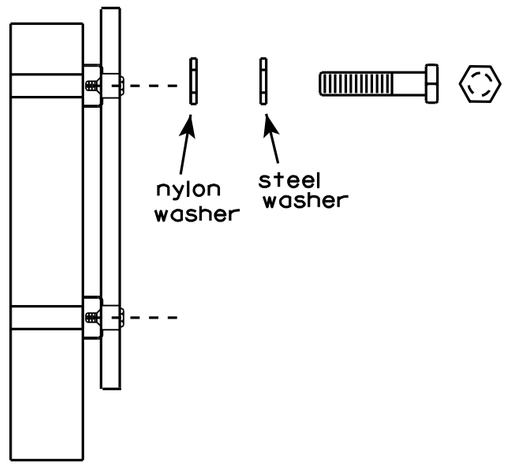


"J" ASSEMBLY





WASHER PLACEMENT



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

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

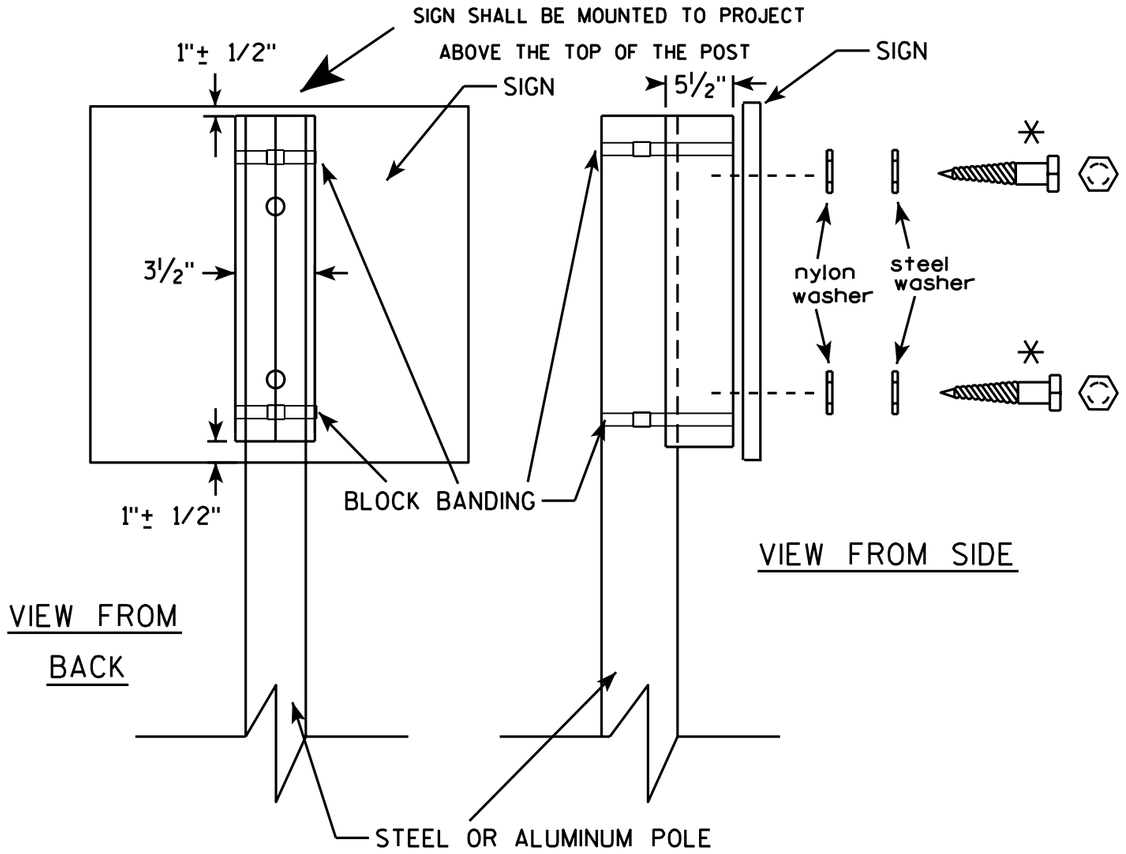
STANDARD SIGN
SIGN BANDING DETAILS

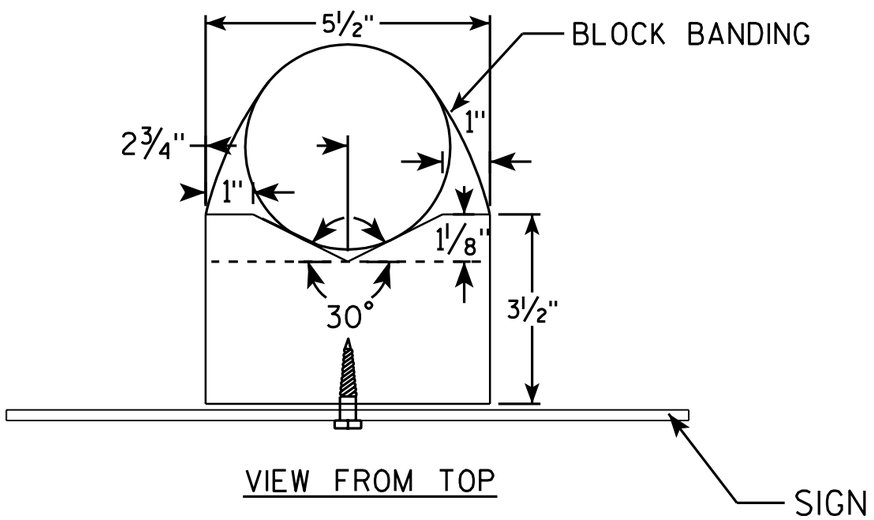
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 69	E





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

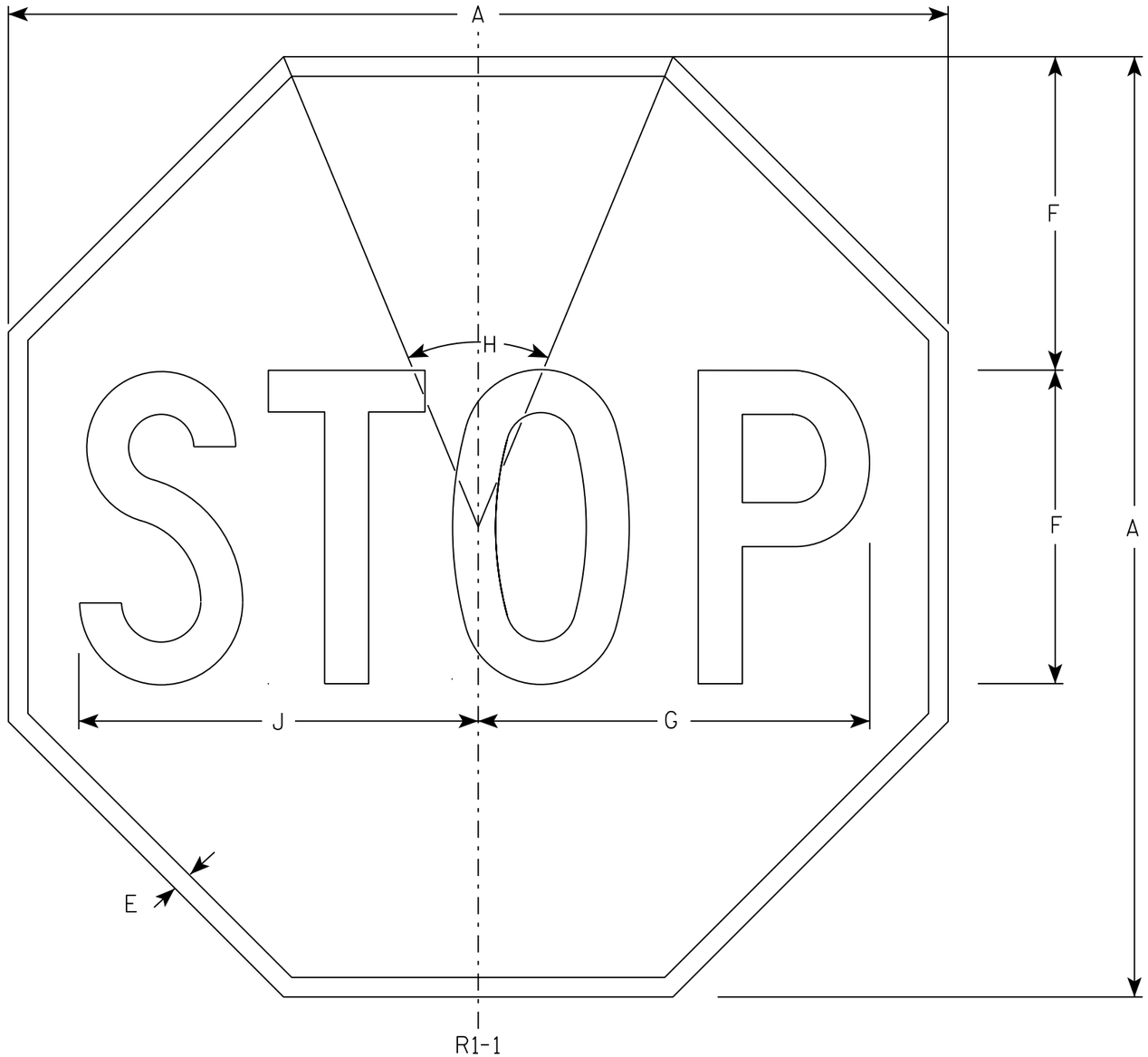
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO: 70 E



R1-1

NOTES

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

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

STANDARD SIGN
R1-1

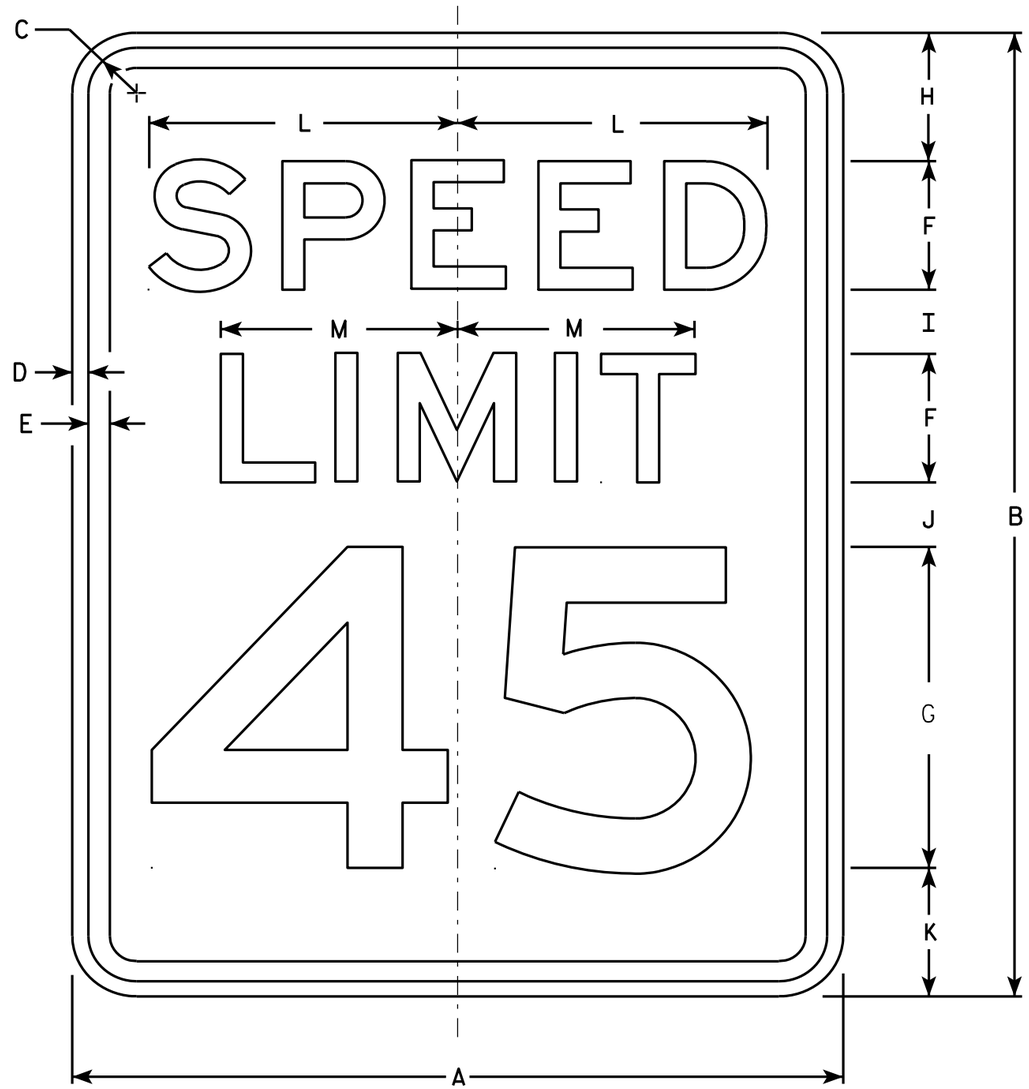
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R11.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.378143:1.000000



R2-1

NOTES

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

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

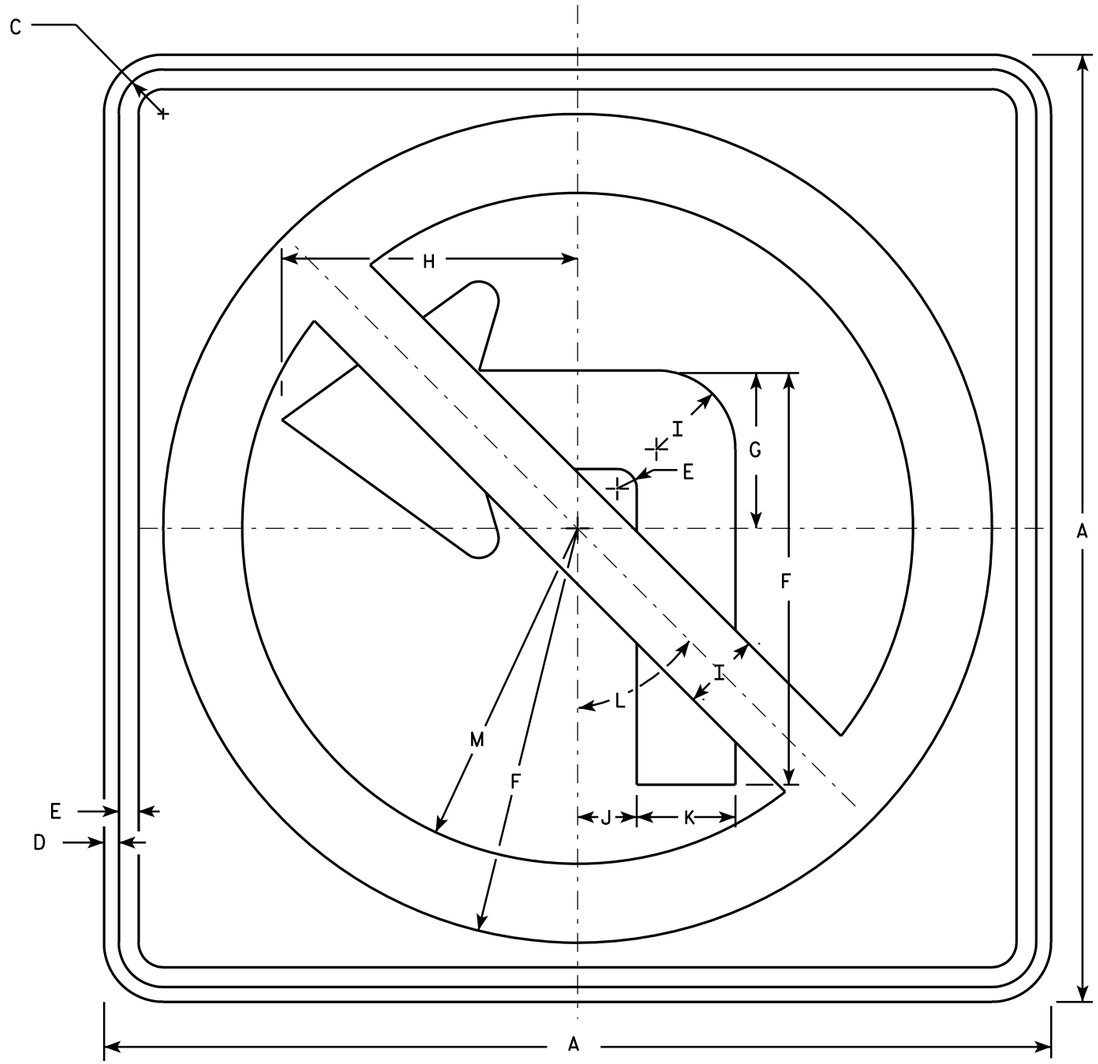
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

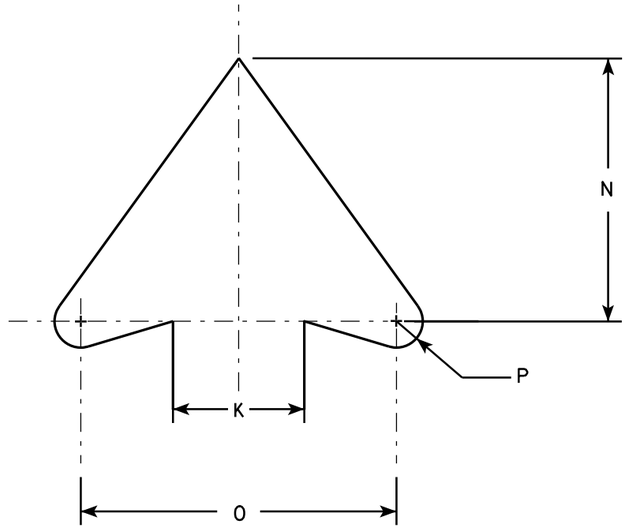
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 72	E



R3-2

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

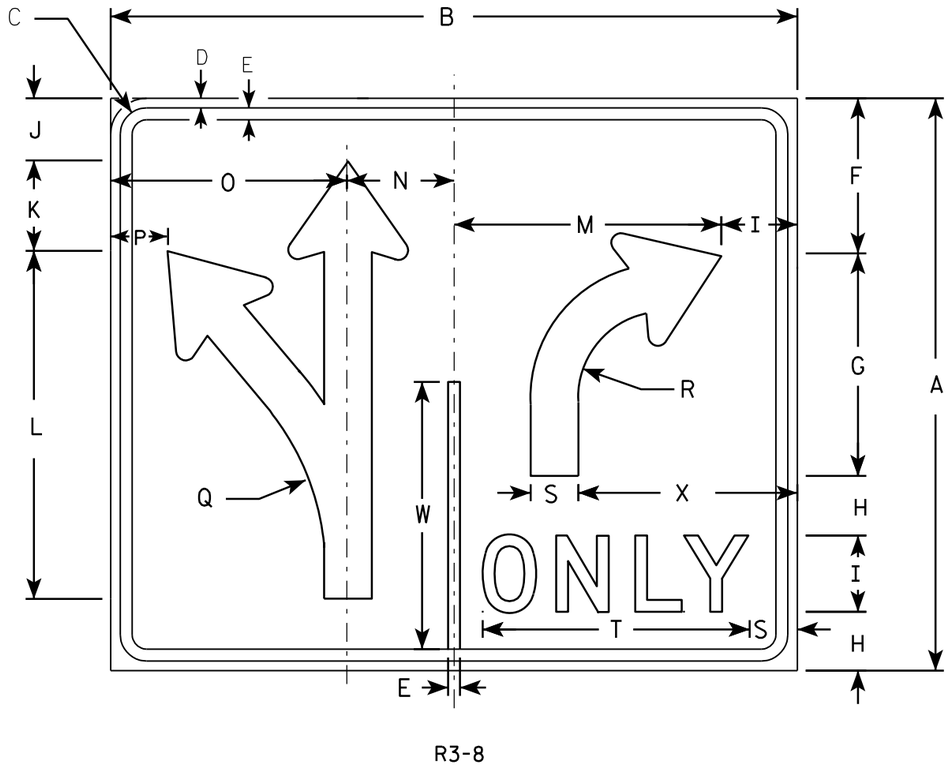
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

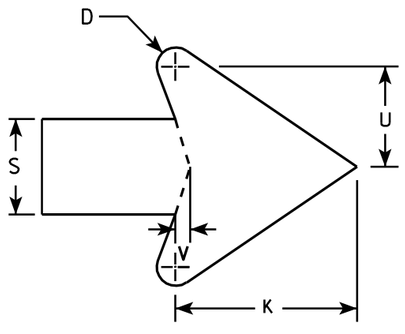
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 73	E



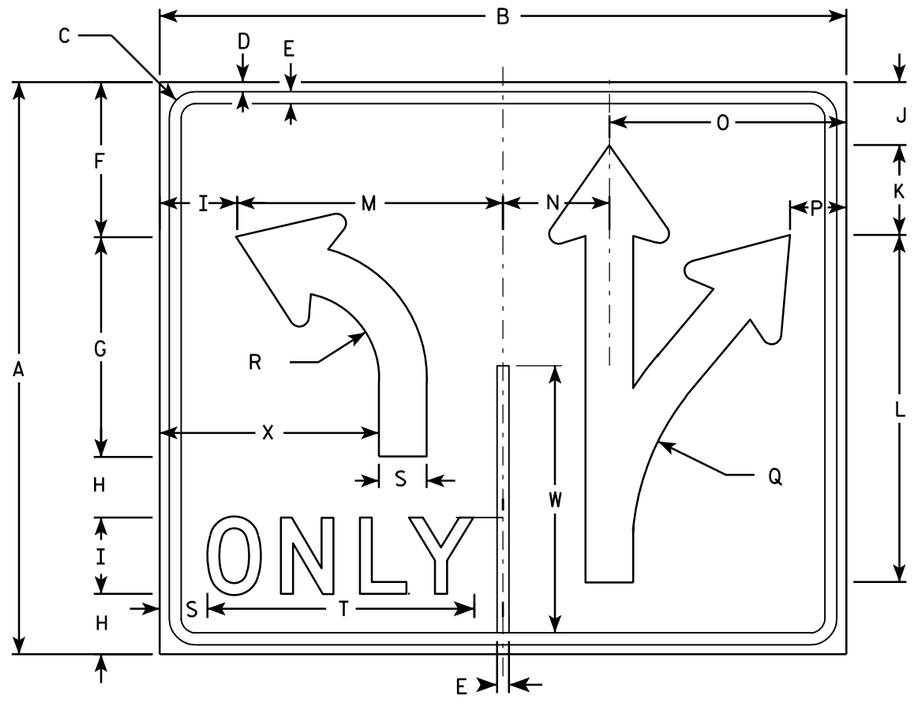
R3-8



ARROW DETAIL

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.



R3-8A

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	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	14	5 5/8	12 3/8	3	13 1/4	4 1/2	2 1/2	14	2 5/8	3/8	14	11 1/2			7.5
2M	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	14	5 5/8	12 3/8	3	13 1/4	4 1/2	2 1/2	14	2 5/8	3/8	14	11 1/2			7.5
3																											
4	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	21	8 3/8	18 5/8	4 3/8	21 7/8	7 1/4	3 3/4	20 5/8	4	5/8	22 3/8	17 1/4			18.0
5	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	21	8 3/8	18 5/8	4 3/8	21 7/8	7 1/4	3 3/4	20 5/8	4	5/8	22 3/8	17 1/4			18.0

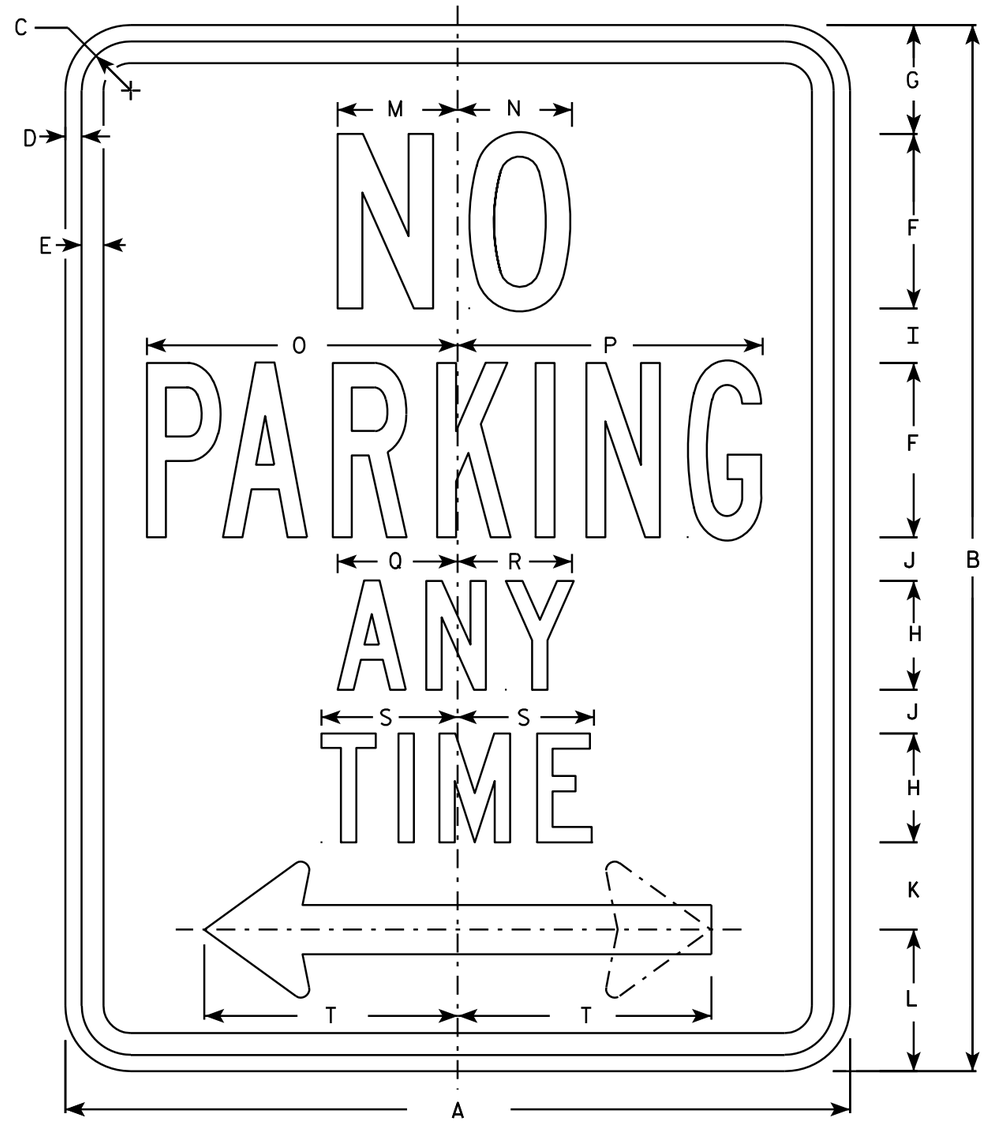
STANDARD SIGN
R3-8 & R3-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8.5

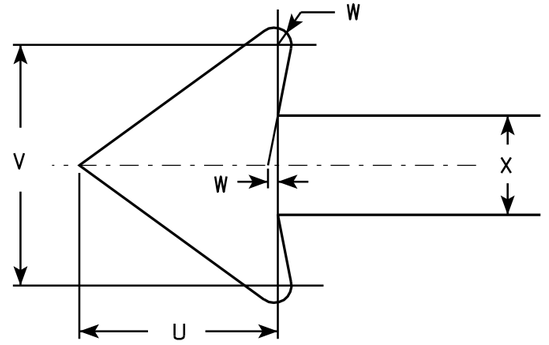
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 74	E



R7-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
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, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



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

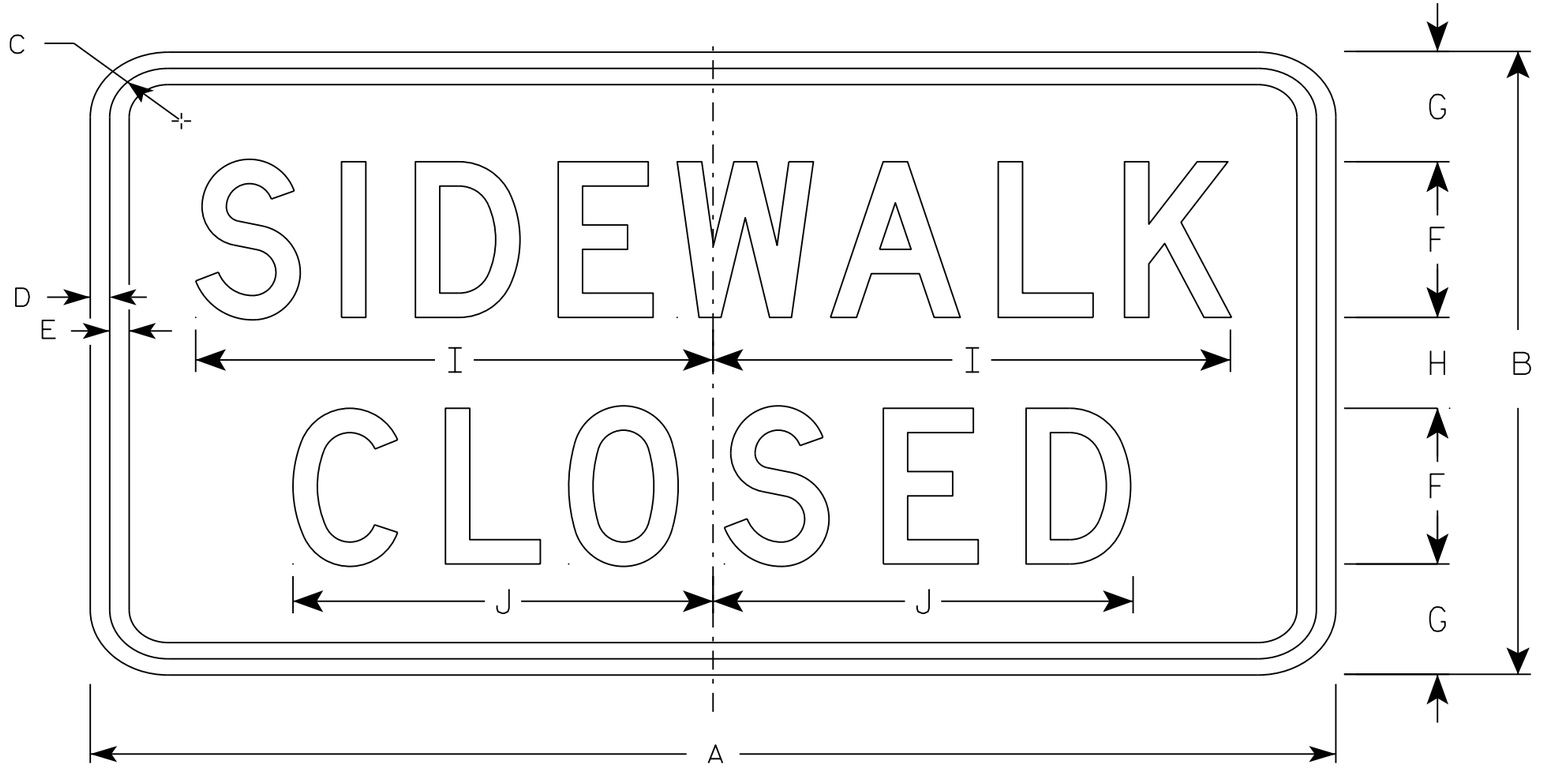
STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 75	E



R9-9

NOTES

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

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

STANDARD SIGN
R9-9

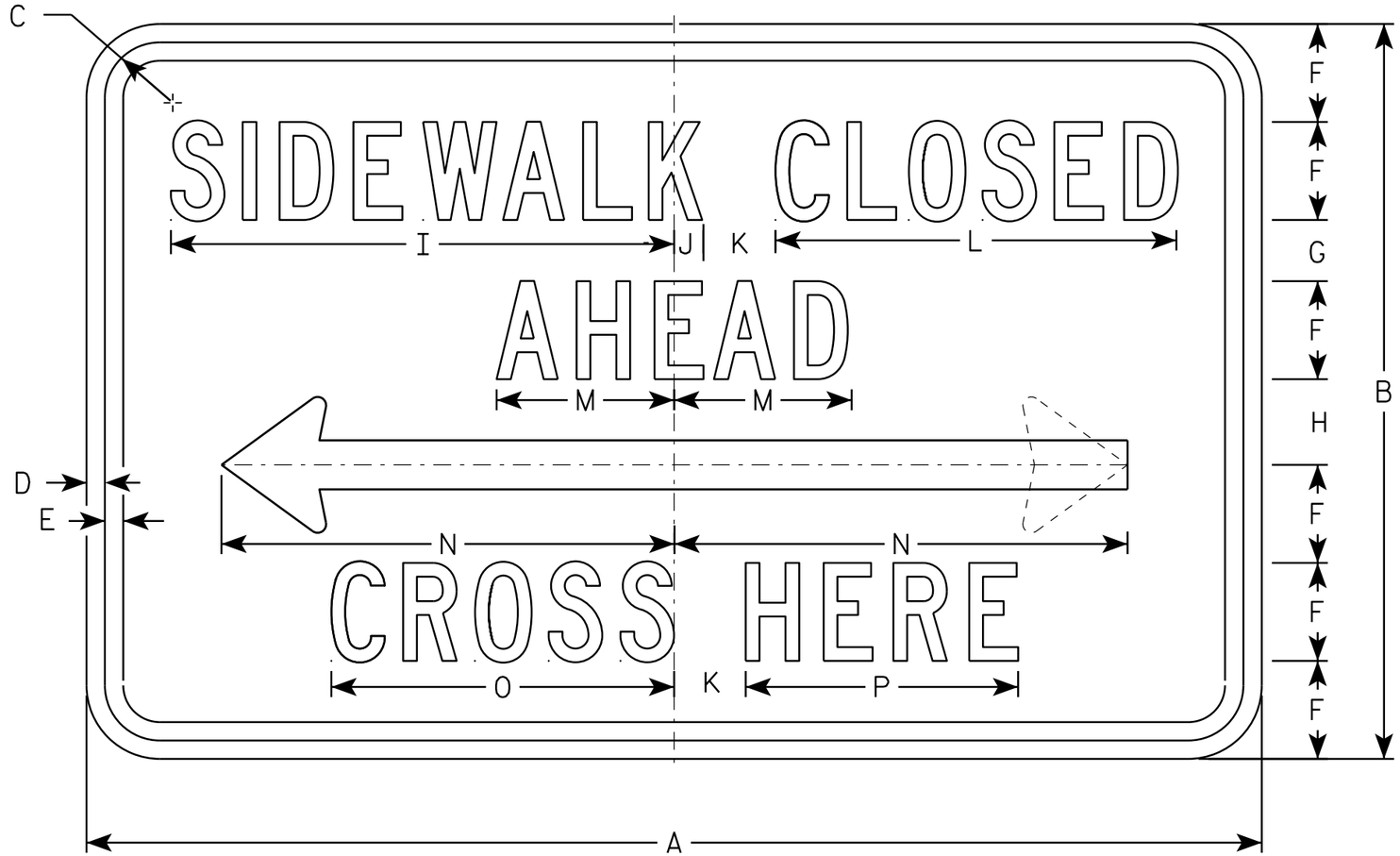
WISCONSIN DEPT OF TRANSPORTATION

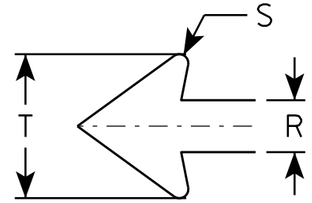
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE 76 R9-9.6

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

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





R9-11

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 except Size 1 is 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	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
2M	24	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
3	48	30	2 3/4	3/4	3/4	4	2 1/2	3 1/2	20 1/2	1 1/4	3	16 3/8	7 1/4	18 1/2	14	11 1/8		2	3/8	5 1/2							10.0
4																											
5																											

STANDARD SIGN
R9-11

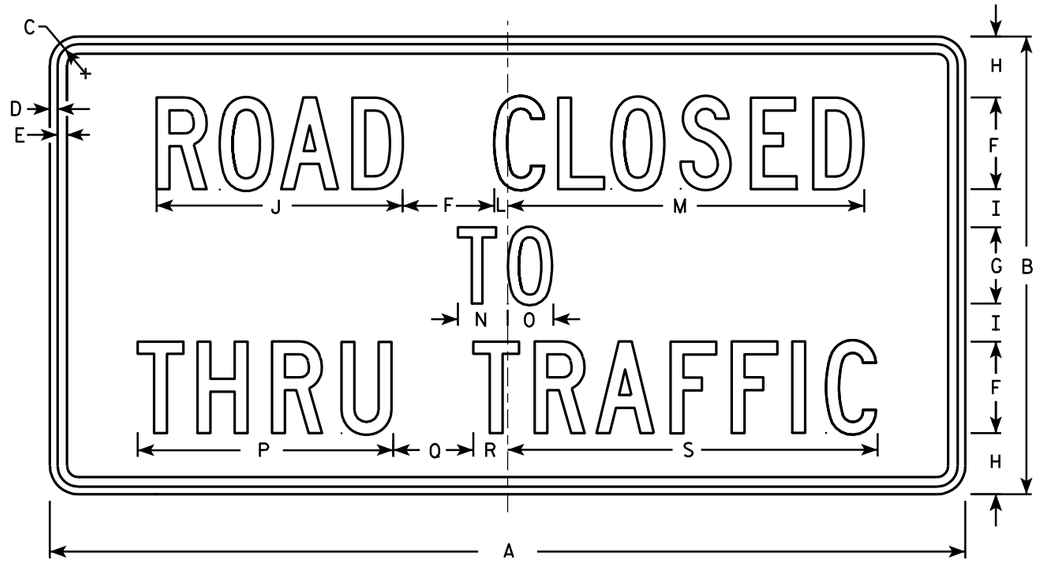
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/10/16 PLATE NO. R9-11.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R911.DGN PLOT DATE : 10-MAR-2016 14:57 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837529:1.000000
WISDOT/CADDS SHEET 42



R11-4

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																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

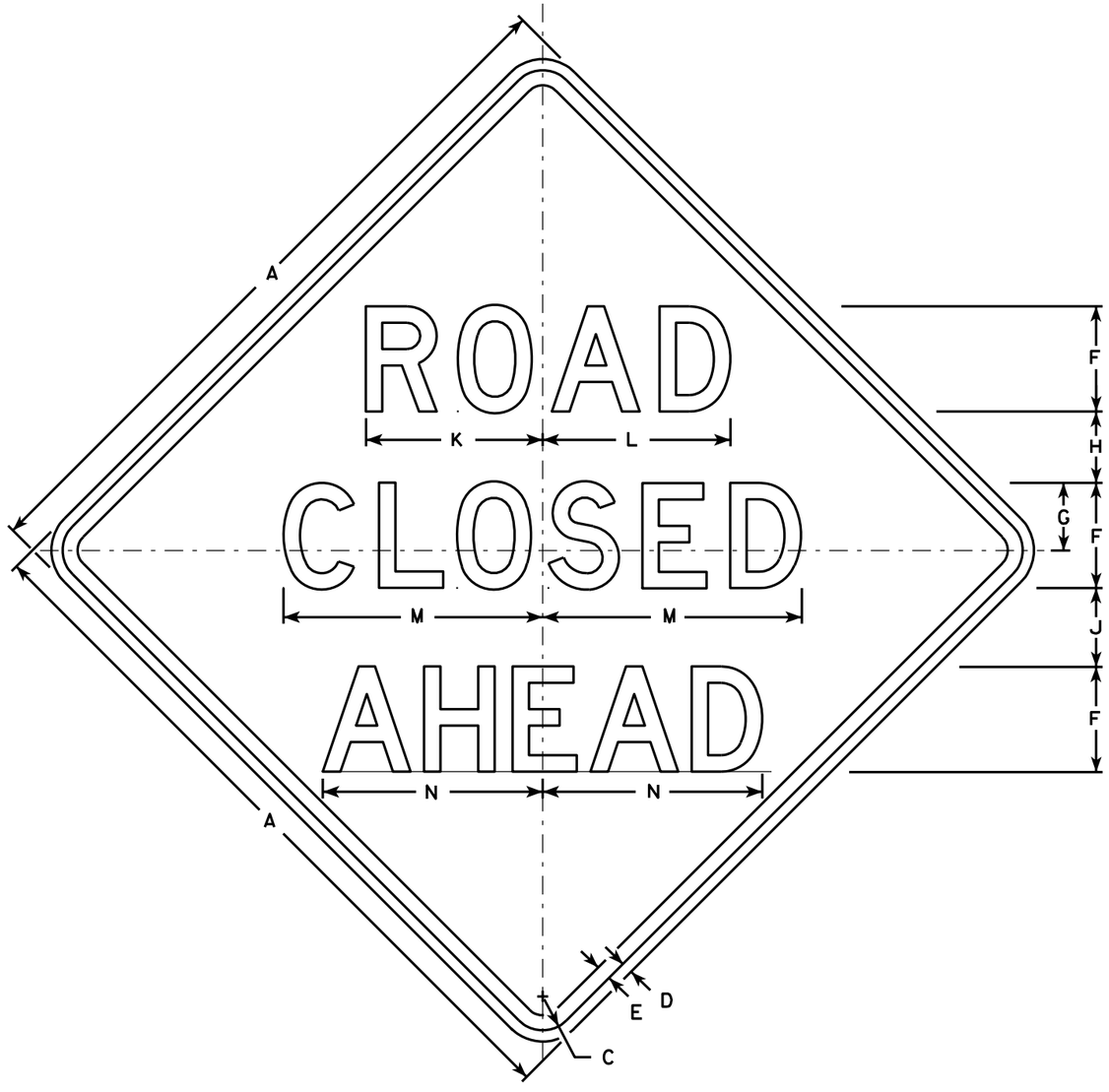
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

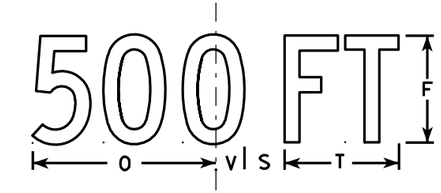
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

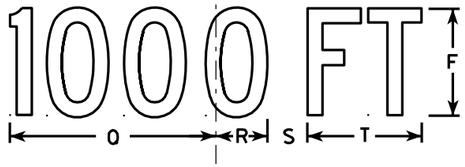
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 78 | E



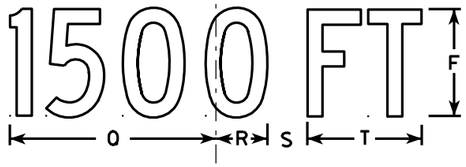
W20-3A



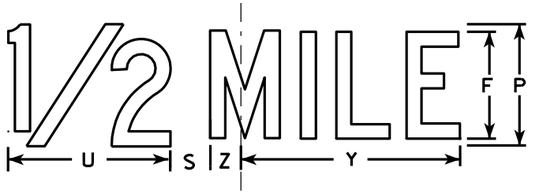
W20-3D



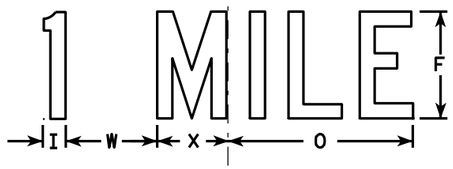
W20-3C



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

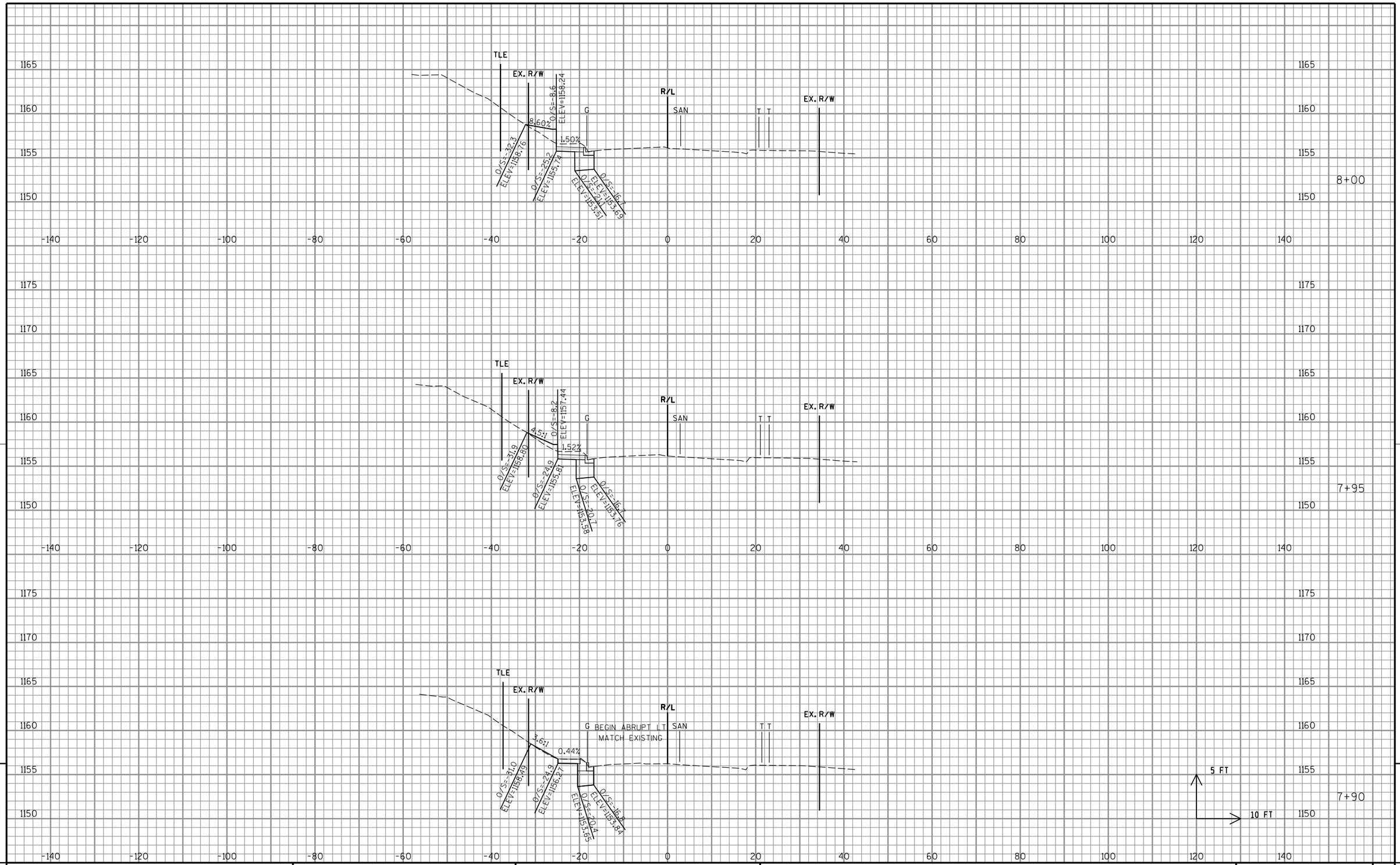
WISCONSIN DEPT OF TRANSPORTATION

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 79 | E

PIETY STREET

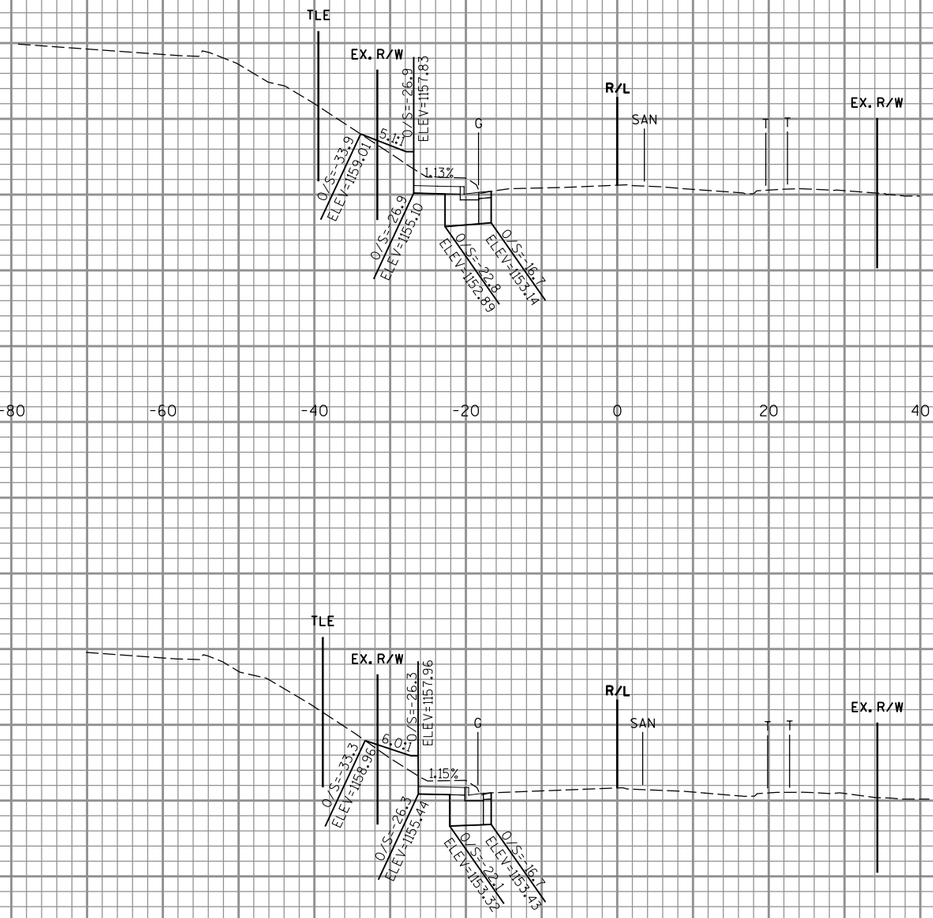
STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			MASS ORDINATE
			CUT	SALVAGED/ UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	SALVAGED UNUSABLE PAVEMENT MATERIAL NOTE 2	EXPANDED FILL 1.25 NOTE 4	NOTE 9
7+90	790	0	12	0	1	0	0	0	0	0	0	0
7+95	795	5	14	0	3	2	0	0	2	0	0	2
8+00	800	5	15	0	5	3	0	1	5	0	1	4
8+16	816	16	18	0	4	10	0	3	15	0	5	9
8+25	825	9	22	0	3	7	0	1	21	1	7	14
8+50	850	25	32	0	3	25	0	3	46	1	10	35
8+75	875	25	40	0	2	33	0	2	80	1	13	65
9+00	900	25	44	0	2	39	0	2	118	2	15	101
9+25	925	25	43	0	2	40	0	2	159	2	17	139
9+33	933	8	45	0	2	14	0	1	172	2	18	152
9+44	944	10	80	0	0	24	0	0	197	2	19	175
9+47	947	3	85	0	0	9	0	0	205	3	19	184
9+50	950	3	93	0	0	11	0	0	216	3	19	195
9+51	951	1	95	0	0	5	0	0	221	3	19	200
9+55	955	4	168	5	1	18	0	0	239	3	19	217
9+62	962	7	196	5	1	47	1	0	286	4	19	263
9+65	965	3	212	5	3	24	1	0	310	5	20	285
9+71	971	6	197	6	0	42	1	0	351	6	20	326
9+75	975	4	259	17	0	37	2	0	388	8	20	361
9+77	977	2	251	17	0	15	1	0	403	9	20	374
				COLUMN TOTALS		403	9	16				



PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: PIETY STREET	SHEET 81	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Piety Street Intersection\090201_xs.dgn PLOT DATE : 7/22/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

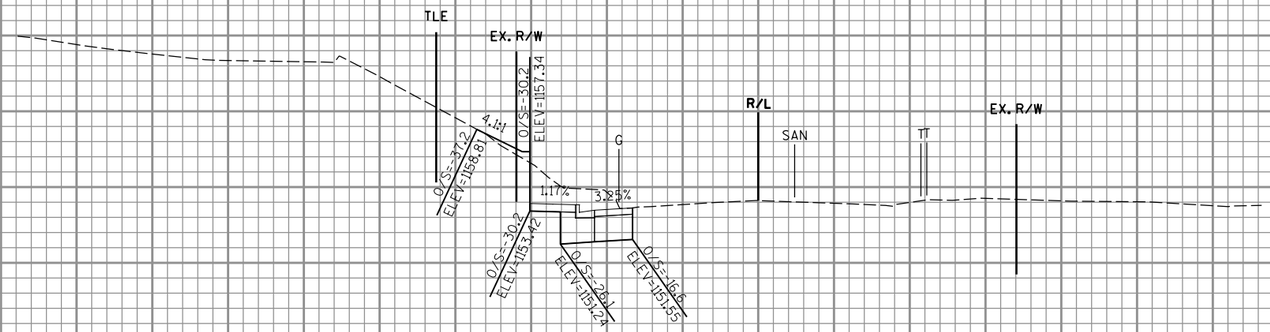
WISDOT/CADDS SHEET 21

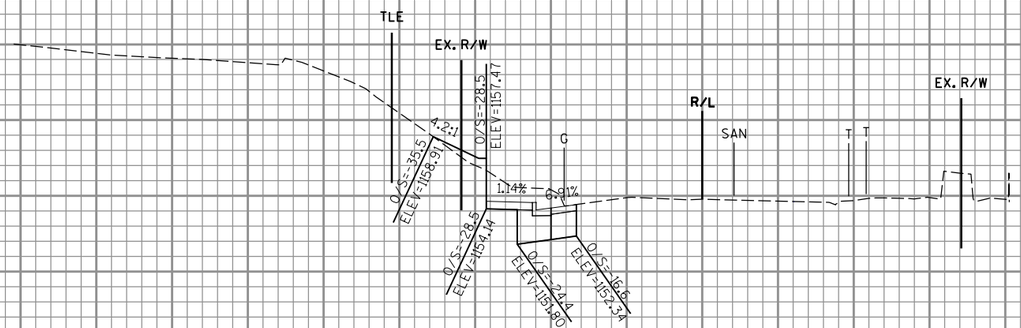


PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: PIETY STREET	SHEET 82	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Piety Street Intersection\090201_xs.dgn PLOT DATE : 7/22/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21





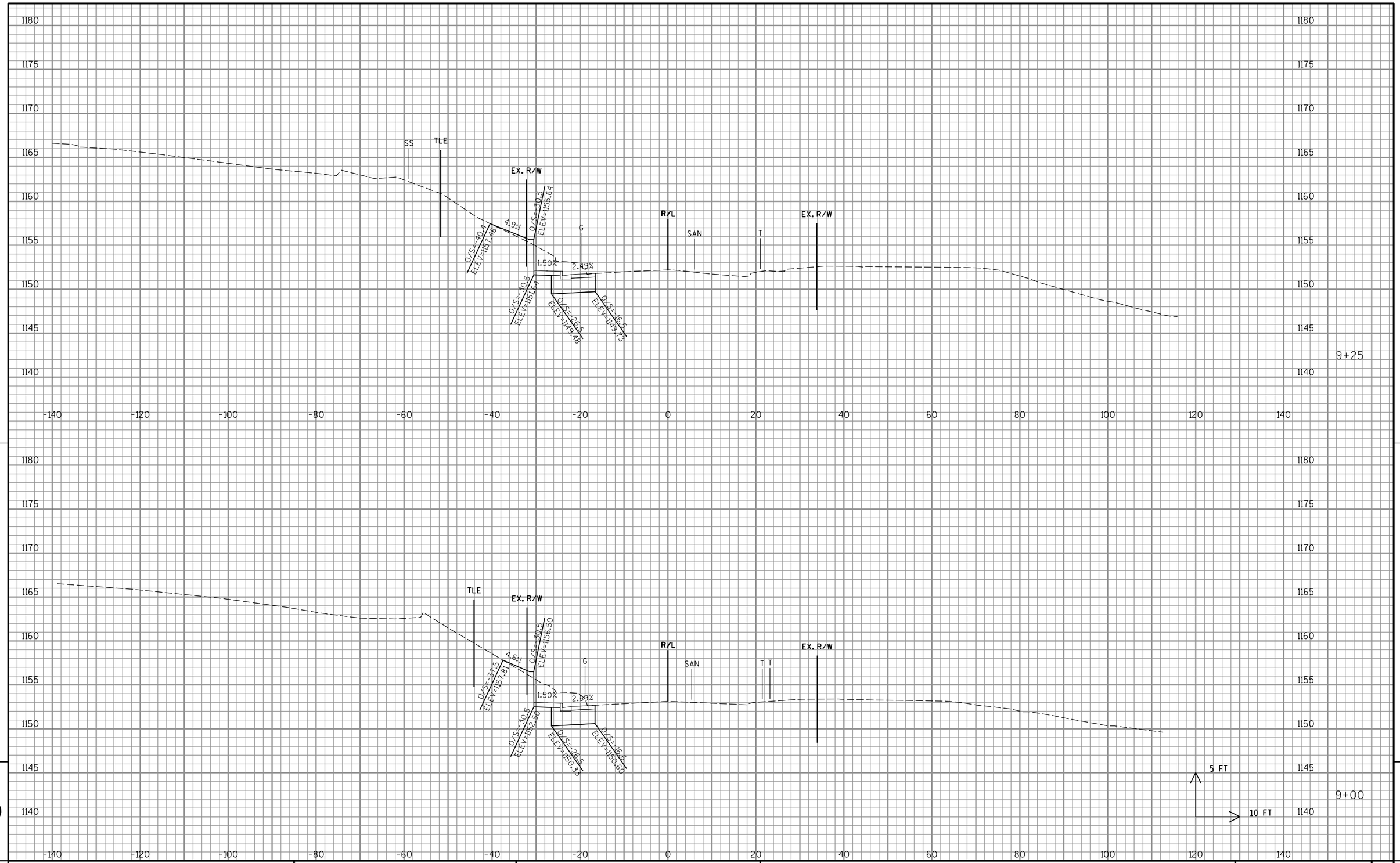
9

9

PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: PIETY STREET	SHEET 83	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Piety Street Intersection\090201_xs.dgn PLOT DATE : 7/22/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

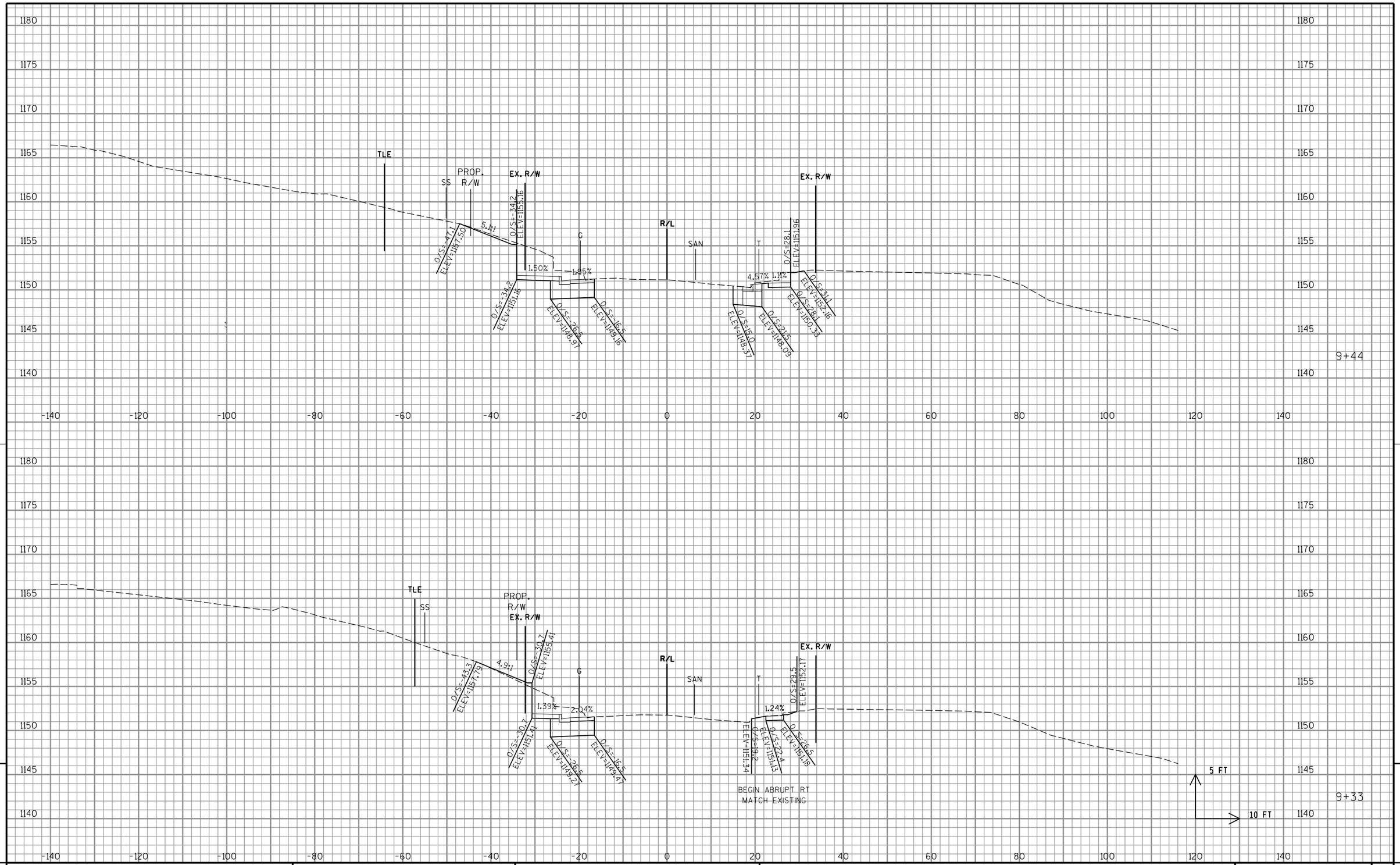


9

9

PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: PIETY STREET	SHEET 84	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Piety Street Intersection\090201_xs.dgn
PLOT DATE : 7/22/2016
PLOT BY : sgc
PLOT NAME :
PLOT SCALE : 1:20
WISDOT/CADDS SHEET 21



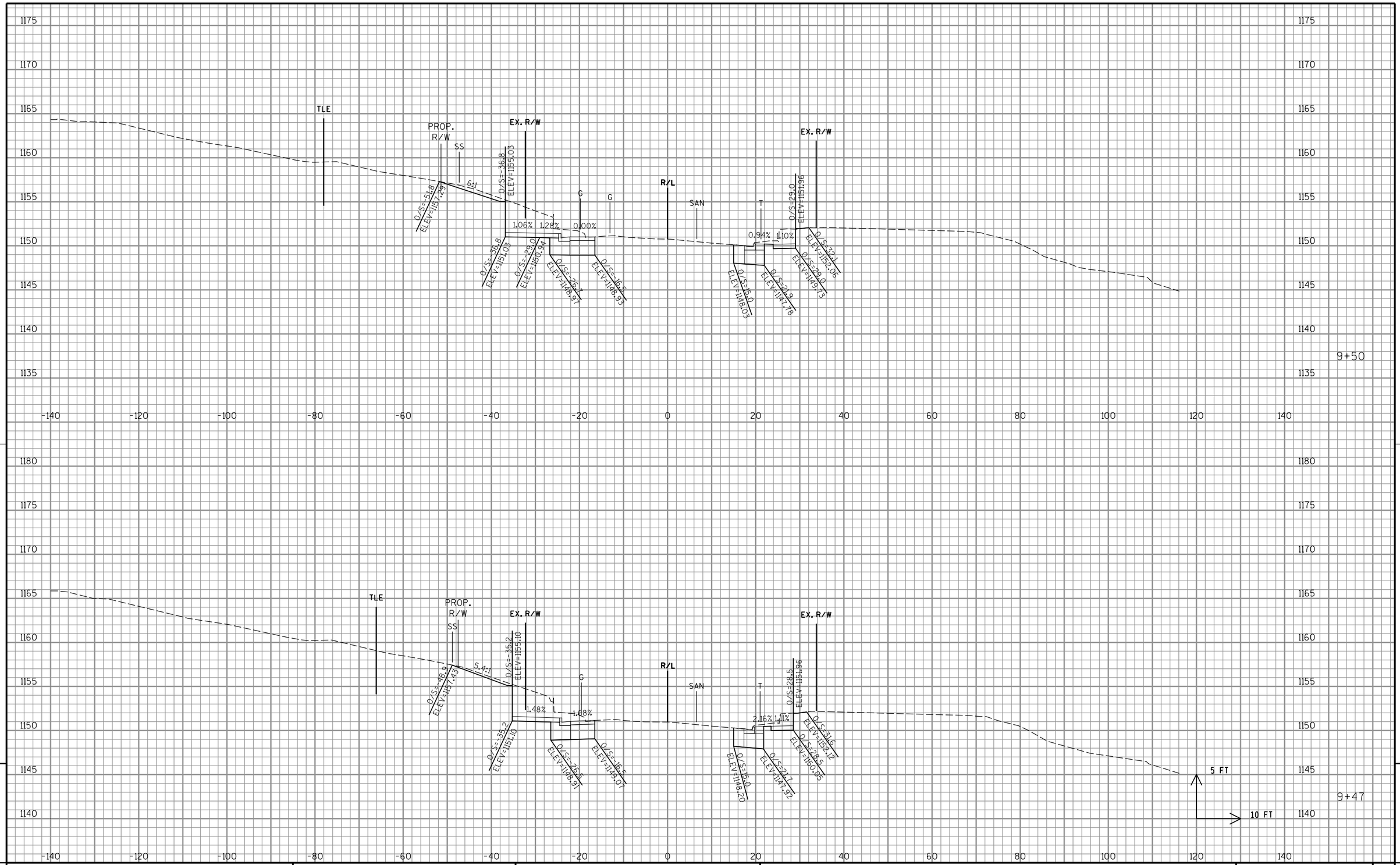
9

9

PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: PIETY STREET	SHEET 85	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Piety Street Intersection\090201_xs.dgn PLOT DATE : 7/22/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

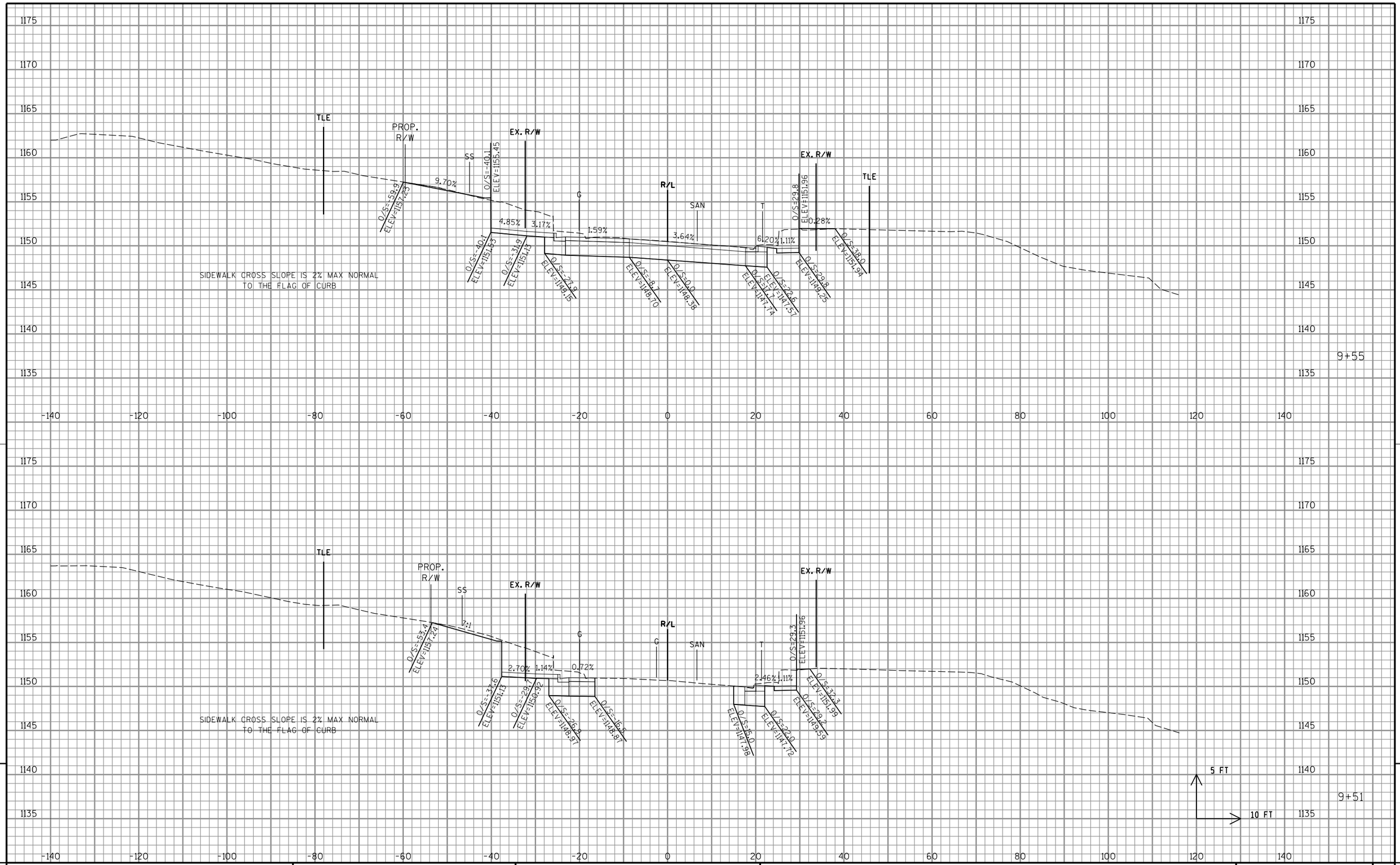


9

9

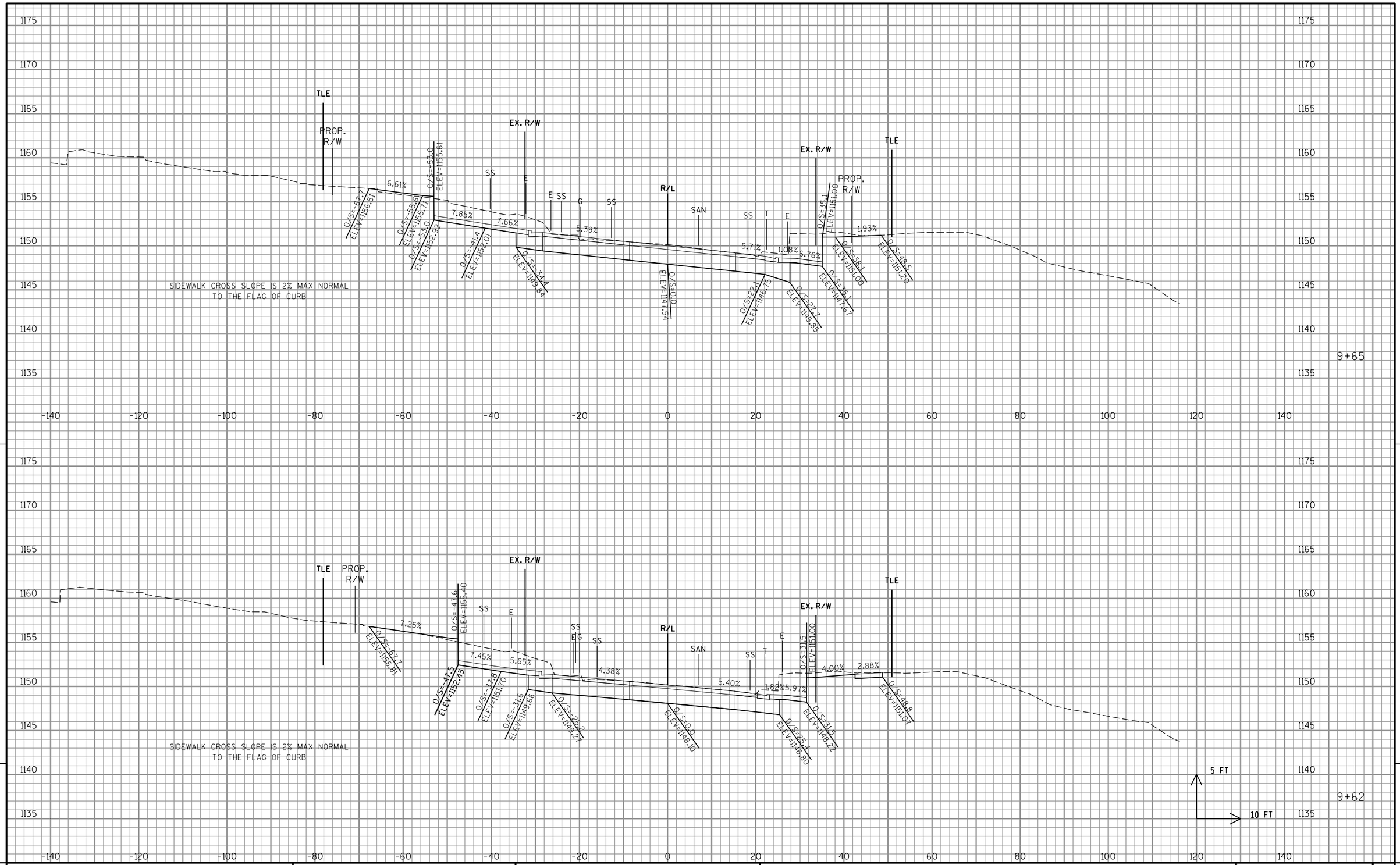
PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: PIETY STREET	SHEET 86	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Piety Street Intersection\090201_xs.dgn
PLOT DATE : 7/22/2016
PLOT BY : sgc
PLOT NAME :
PLOT SCALE : 1:20
WISDOT/CADDS SHEET 21



PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: PIETY STREET	SHEET 87	E

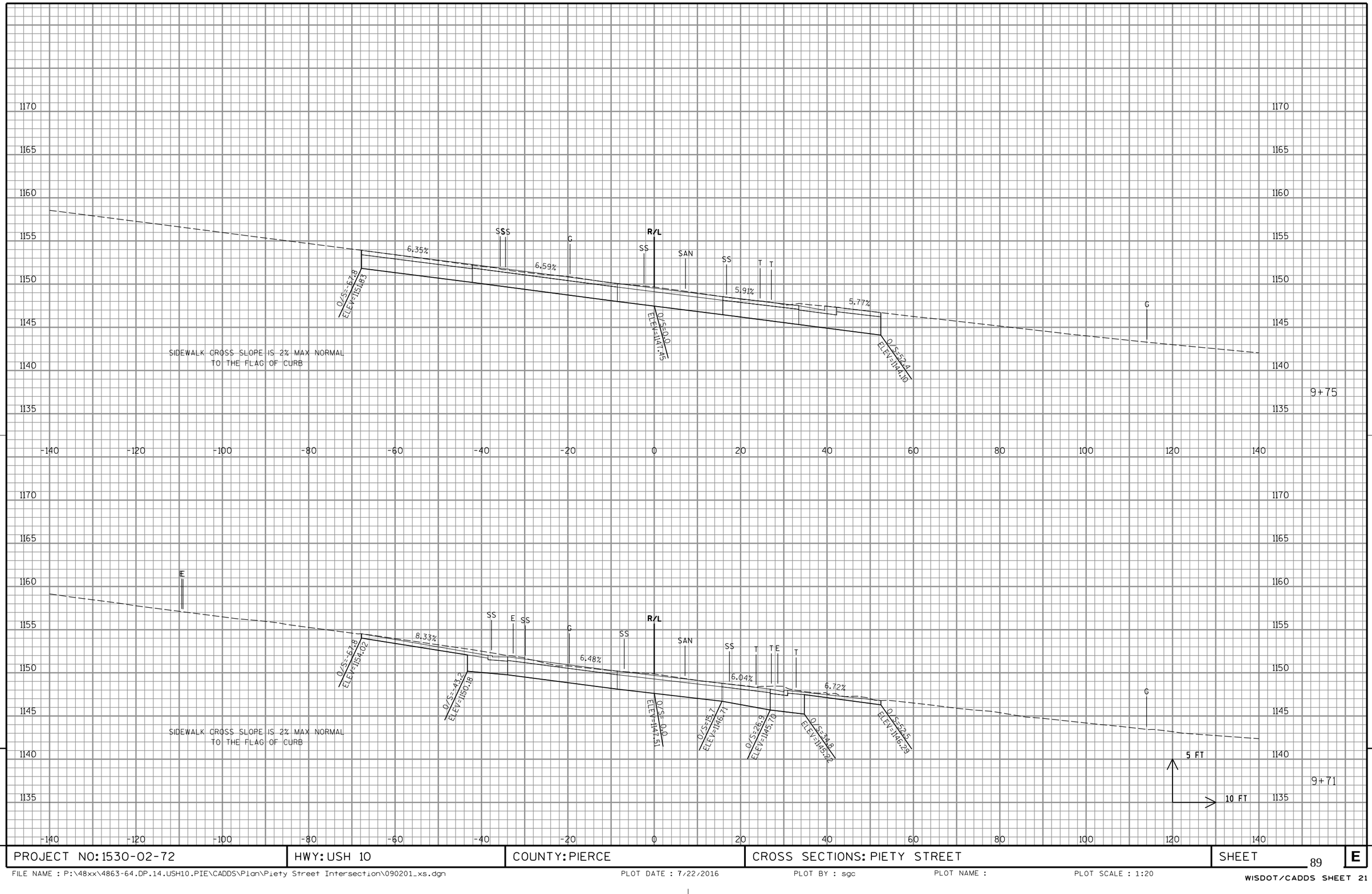
FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Piety Street Intersection\090201_xs.dgn
PLOT DATE : 7/22/2016
PLOT BY : sgc
PLOT NAME :
PLOT SCALE : 1:20
WISDOT/CADDS SHEET 21



PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: PIETY STREET	SHEET 88	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Piety Street Intersection\090201_xs.dgn PLOT DATE : 7/22/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



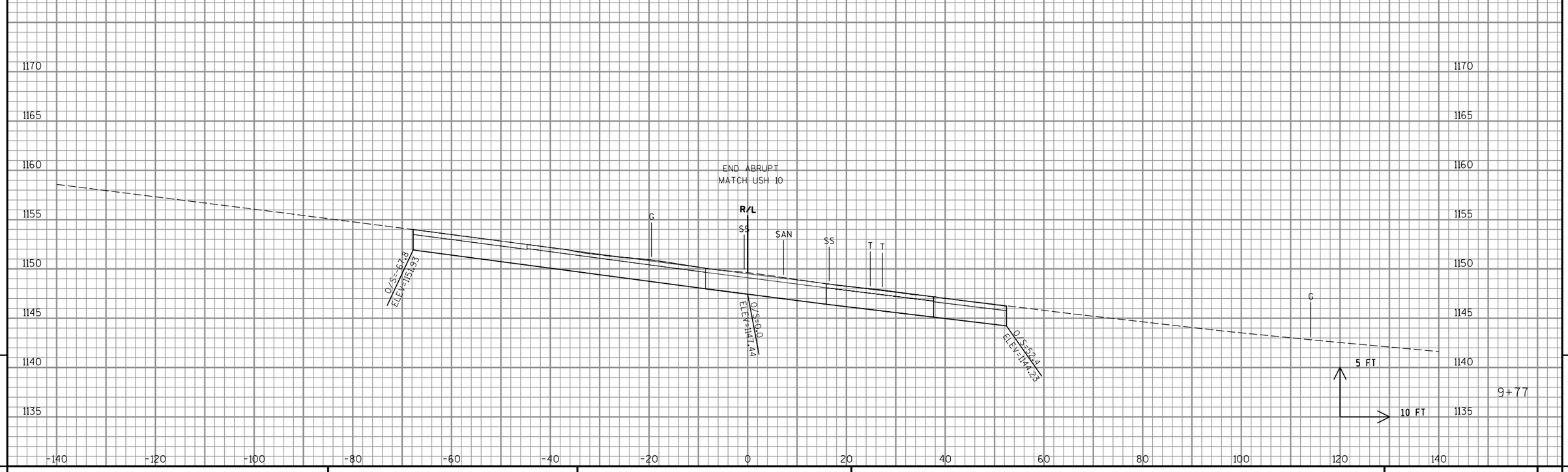
9

9

PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: PIETY STREET	SHEET 89	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Piety Street Intersection\090201_xs.dgn PLOT DATE : 7/22/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



9

9

PROJECT NO: 1530-02-72	HWY: USH 10	COUNTY: PIERCE	CROSS SECTIONS: PIETY STREET	SHEET 90	E

FILE NAME : P:\48xx\4863-64.DP.14.USH10.PIE\CADDS\Plan\Piety Street Intersection\090201_xs.dgn PLOT DATE : 7/22/2016 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov