MAD MAY 2015

PROJECT ID: 1670-01-75

COUNTY: SAUK

ORDER OF SHEETS

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

TOTAL SHEETS = 250



N

DESIGN DESIGNATION

A.A.D.T. 2015	=	11,100
A.A.D.T. 2035	=	13,800
D.H.V.	=	1410
D.D.	=	58/42
T.	=	4.4
DESIGN SPEED	=	60 MPH
ESALS	=	1,241,000

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

BARABOO - SAUK CITY

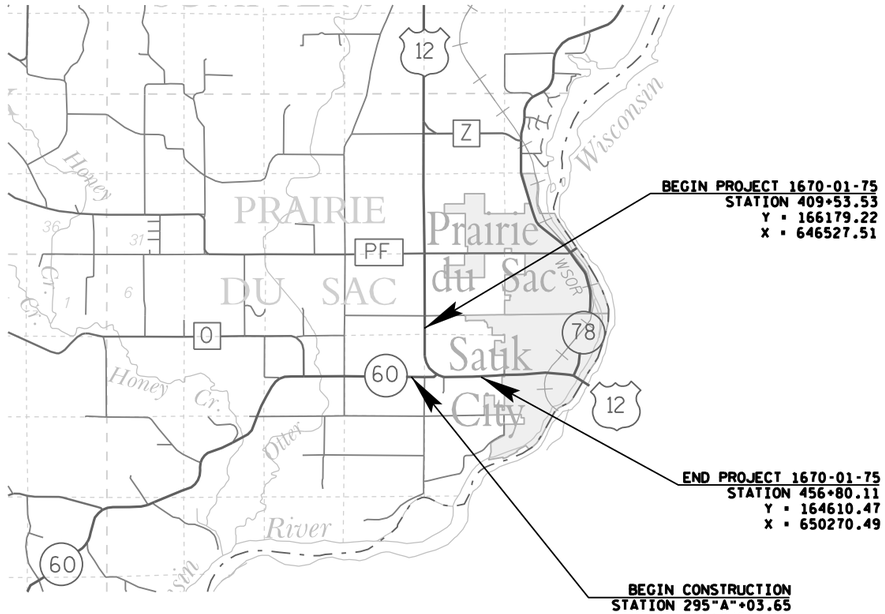
STH 60 INTERSECTION

USH 12

SAUK COUNTY

STATE PROJECT NUMBER
1670-01-75

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1670-01-75	WISC 2015280	1



LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.963 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), SAUK COUNTY.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT
Designer	PAUL VALENTI
Project Manager	ANTHONY VANDER WIELEN
Regional Examiner	ANTHONY VANDER WIELEN
Regional Supervisor	JOSEPH GREGAS III
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 1-29-2015 (Signature)

E

GENERAL NOTES

- 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.
- ALL RADII ARE MEASURED TO EDGE OF PAVEMENT UNLESS OTHERWISE SHOWN OR NOTED ON THE PLAN.
- EXPANSION JOINTS TO BE CONSTRUCTED AT ALL RADIUS POINTS IN CURB AND GUTTER.
- DO NOT REMOVE ANY TREES OR SHRUBS THAT HAVE NOT BEEN INDICATED FOR REMOVAL ON THE PLAN WITHOUT APPROVAL OF THE ENGINEER.
- WHEN PORTIONS OF EXISTING ASPHALTIC SURFACES ARE TO BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION, THE LINE OF SUCH REMOVAL SHALL BE NEATLY DELINEATED WITH A SAW CUT JOINT THROUGH THE ASPHALTIC SURFACE SO THAT REMOVAL OF THE ASPHALT SHALL BE ACCOMPLISHED WITHOUT DAMAGE TO REMAINING PORTIONS.
- EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS BUT IS MEASURED AND PAID FOR AS COMMON EXCAVATION. EBS WILL BE BACKFILLED WITH GRANULAR BACKFILL. THE LOCATION OF EBS WILL BE DETERMINED BY THE ENGINEER.
- INLET OFFSETS ARE GIVEN TO THE BACK OF CURB.
- INLET GRATE ELEVATIONS REFERRED TO ON INLET NOTES ARE FLAG OF CURB ELEVATIONS.
- THE LAST SECTION OF ALL EXISTING REINFORCED CONCRETE CULVERT PIPES THAT ARE TO BE EXTENDED SHALL BE, IF NECESSARY, RESET PRIOR TO INSTALLING THE PIPE EXTENSION. THIS WORK IS INCIDENTAL TO INSTALLATION OF THE NEW PIPE CULVERT.
- CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN PIPE LAYING OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAY SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER PIPE IN DRIVEWAY AREA IS INSTALLED. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS. COORDINATE ALL ACCESS INTERRUPTIONS WITH PROPERTY OWNERS A MINIMUM OF 24 HOURS IN ADVANCE OF DISRUPTING ACCESS.
- THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, BIKE OR PARKING LANE.
- HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.
- PLACE THE 3" ASPHALTIC SURFACE TEMPORARY IN ONE LAYER.
- PLACE THE 3.5" AND 4.5" HMA PAVEMENT IN TWO LAYERS. PLACE THE 5.5" HMA PAVEMENT IN THREE LAYERS. THE 12.5 mm GRADATION SHALL BE USED FOR ALL LAYERS.
- CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.
- DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE TOPSOILED (SALVAGED), FERTILIZED, SEEDED, AND MULCHED AS DIRECTED BY THE ENGINEER.
- DIMENSIONS OF RIPRAP PLACEMENT SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ORDER OF SECTION 2 SHEETS

GENERAL NOTES/WRITTEN MATERIAL
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
CROSS SECTION MATCHLINE
EROSION CONTROL AND DRAINAGE
STORM SEWER AND UTILITIES
SIGNING
LIGHTING
PAVEMENT MARKING
TRAFFIC CONTROL AND CONSTRUCTION STAGING
ALTERNATE ROUTE
ALIGNMENT

STANDARD ABBREVIATIONS

AC	ACRE	N	NORTH
AGG	AGGREGATE	NB	NORTHBOUND
<	ANGLE	NO.	NUMBER
AE, AEW	APRON ENDWALL	PAV'T	PAVEMENT
A.D.T.	AVERAGE DAILY TRAFFIC	P.L.E.	PERMANENT LIMITED EASEMENT
A.A.D.T.	ANNUAL AVERAGE DAILY TRAFFIC	P.C.	POINT OF CURVATURE
BM	BENCHMARK	P.I.	POINT OF INTERSECTION
C/L	CENTER LINE	P.T.	POINT OF TANGENCY
Δ	CENTRAL ANGLE OR DELTA	PCC	PORTLAND CEMENT CONCRETE
C.E.	COMMERCIAL ENTRANCE	P.E.	PRIVATE ENTRANCE
CMCP	CORRUGATED METAL CULVERT PIPE	PGL	PROFILE GRADE LINE
CMP	CORRUGATED METAL PIPE	P.L.	PROPERTY LINE
CO.	COUNTY	R	RADIUS OR RANGE
CTH	COUNTY TRUNK HIGHWAY	R/L	REFERENCE LINE
CABC	CRUSHED AGGREGATE BASE COURSE	R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE
CY	CUBIC YARD	REQ'D	REQUIRED
CP	CONTROL POINT OR CULVERT PIPE	RT	RIGHT
C&G	CURB AND GUTTER	R.H.F.	RIGHT HAND FORWARD
D	DEGREE OF CURVE	R/W	RIGHT OF WAY
D.H.V.	DESIGN HOURLY VOLUME	RD.	ROAD
DIA.	DIAMETER	SHLD.	SHOULDER(S)
D.D.	DIRECTIONAL DISTRIBUTION	SHR.	SHRINKAGE
DMS	DYNAMIC MESSAGE SIGN	S	SOUTH
EA	EACH	SB	SOUTHBOUND
E	EAST	S.F.	SQUARE FOOT (FEET)
EB	EASTBOUND	SDD	STANDARD DETAIL DRAWING(S)
ELEC.	ELECTRIC(AL), ELEC. CABLE	STH	STATE TRUNK HIGHWAY
EL., ELEV.	ELEVATION	STA.	STATION
ESALS	EQUIVALENT SINGLE AXLE LOADS	S.E.	SUPERELEVATION
EXC.	EXCAVATION	S/L	SURVEY LINE
EXIST	EXISTING	T.	PERCENT TRUCKS
F.F.	FACE TO FACE	TEL.	TELEPHONE
FERT.	FERTILIZER	TEMP.	TEMPORARY
F.E.	FIELD ENTRANCE	T.L.E.	TEMPORARY LIMITED EASEMENT
F/L, F.L.	FLOW LINE	T.O.C.	TOP OF CURB
CWT	HUNDRED WEIGHT	TYP	TYPICAL
INL	INLET	UNCL.	UNCLASSIFIED
LT	LEFT	U.G.	UNDERGROUND (CABLE)
L.H.F.	LEFT HAND FORWARD	VAR	VARIABLE
L.	LENGTH OF CURVE	V.C.	VERTICAL CURVE
L.F.	LINEAR FOOT(FEET)	V.P.C.	VERTICAL POINT OF CURVATURE
LC.	LONG CHORD	V.P.I.	VERTICAL POINT OF INTERSECTION
LS	LUMP SUM	V.P.T.	VERTICAL POINT OF TANGENCY
M.P.	MARKER POST	Wt.	WEIGHT
MGAL	1000 GALLONS	W	WEST
N.C.	NORMAL CROWN	WB	WESTBOUND

DNR LIAISON

ANDY BARTA
ENVIRONMENTAL ANALYSIS & REVIEW SPECIALIST
WISCONSIN DEPT. OF NATURAL RESOURCES
SOUTH CENTRAL REGION
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
608-275-3308

HIGHWAY COMMISIONER

SAUK COUNTY
STEPHEN MUCHOW
SAUK COUNTY HIGHWAY DEPARTMENT
620 STH 136
WEST BARABOO, WI 53913
608-355-4855

TOWN OF PRAIRIE DU SAC

RON LINS - CHAIRMAN
608-643-6955

DESIGN CONTACTS

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PROJECT DESIGNER
WISDOT SW REGION
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LA CROSSE, WI 54601
608-785-9053

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

UTILITY CONTACTS

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SUITE 1000
4902 N BILTMORE LANE
MADISON, WI 53718
PHONE: (608) 458-4871
EMAIL: jasonhogan@alliantenergy.com

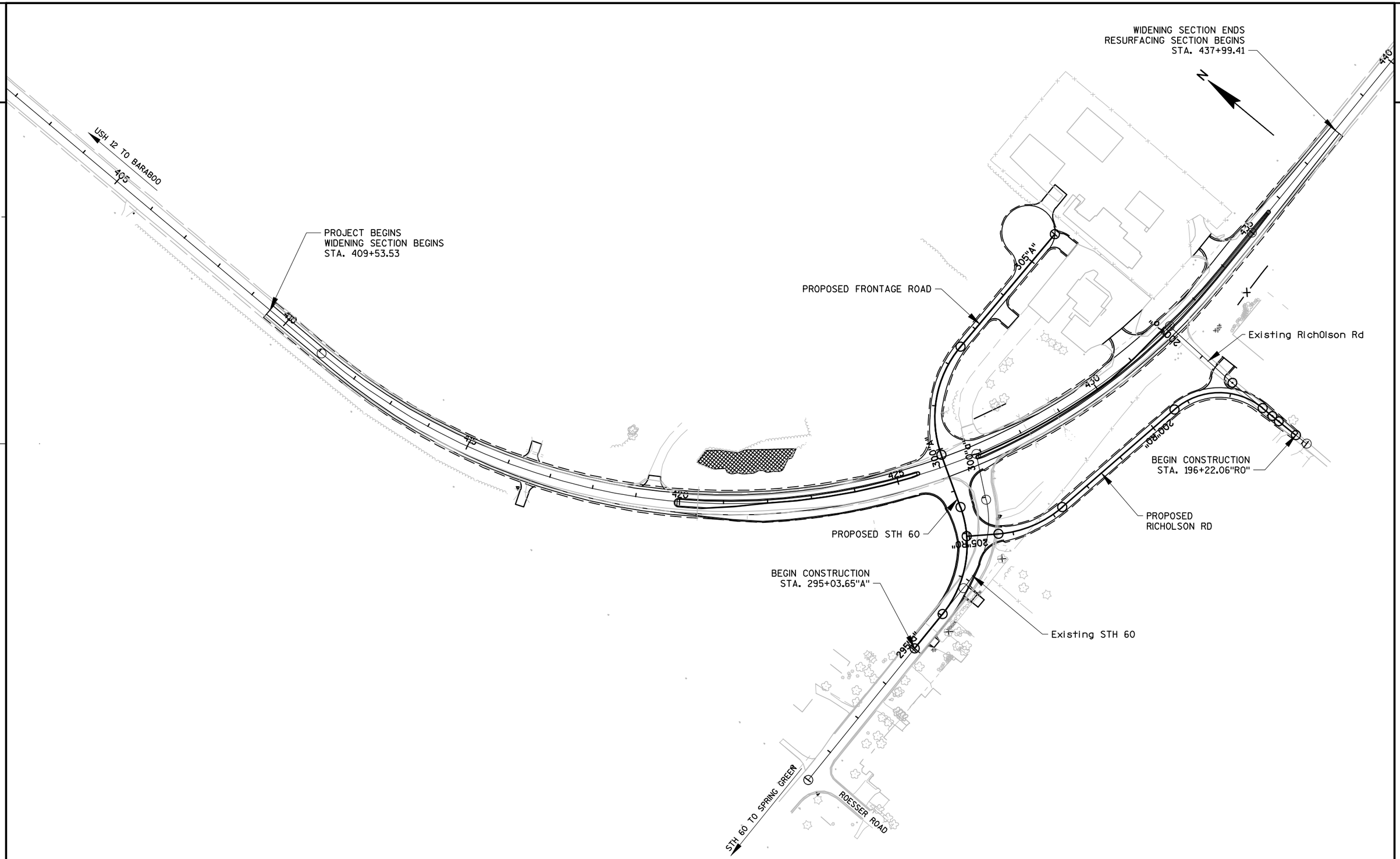
ALLIANT ENERGY - GAS/PETROLEUM
ATTN: JASON HOGAN
SUITE 1000
4902 N BILTMORE LANE
MADISON, WI 53718
PHONE: (608) 458-4871
EMAIL: jasonhogan@alliantenergy.com

CENTURY LINK - COMMUNICATIONS
ATTN: STEVE BISHOP
130 4TH ST
P.O. BOX 49
BARABOO, WI 53913
PHONE: (608) 355-7501
EMAIL: steve.bishop@centurytel.net

FRONTIER COMMUNICATIONS OF WI LLC
COMMUNICATIONS LINE
ATTN: JERALD MOORE
2222 WEST WISCONSIN STREET
PORTAGE, WI 53901
PHONE: (608) 742-1817
EMAIL: Jerald.r.moore@ftr.com

MERRIMAC COMMUNICATIONS LTD
COMMUNICATIONS LINE
ATTN: KIRK OLSON
327 PALLISADES ST
MERRIMAC, WI 53561
PHONE: (608) 493-9470
EMAIL: kolson@merr.com

SAUK CITY MUN WATER & LIGHT UTIL
ELECTRICITY
ATTN: MARV DOLPHIN
726 WATER ST
SAUK CITY, WI 53583-1597
PHONE: (608) 6443-8336
EMAIL: marv@saukcity.net



PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	PROJECT OVERVIEW	SHEET 3	E

2

N

305"A"

WIDENING SECTION ENDS
RESURFACING SECTION BEGINS
STA. 437+99.41

PROJECT ENDS
RESURFACING SECTION ENDS
STA. 456+80.11

USH 12 TO SAUK CITY

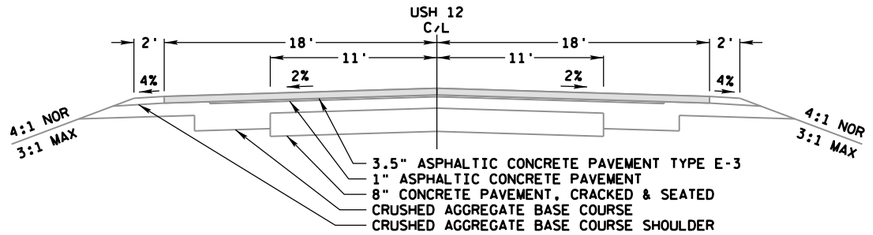
435 440 445 450 455 460

USH 12 CENTERLINE

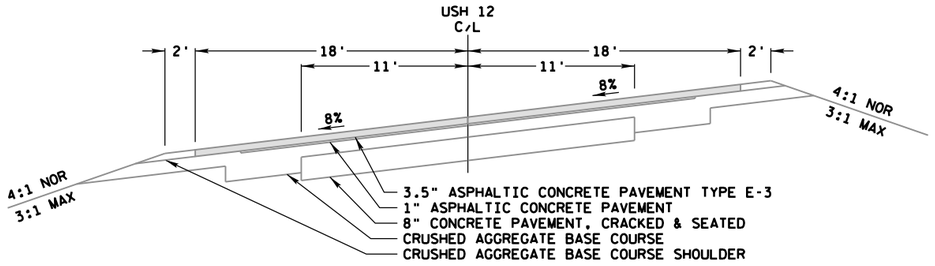
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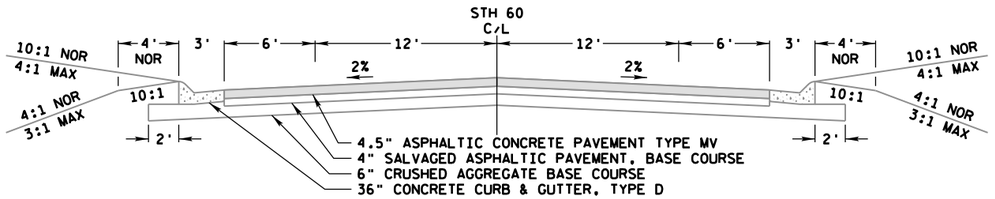
WISDOT/CADDS SHEET 42



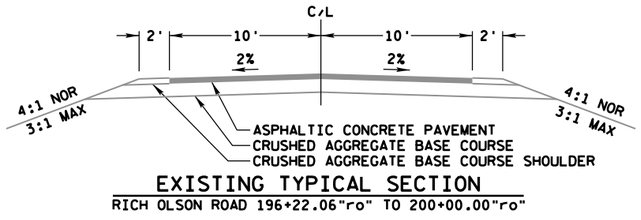
EXISTING TYPICAL SECTION
409+53.53 TO 411+13.53 & 433+88.53 TO 456+80.11



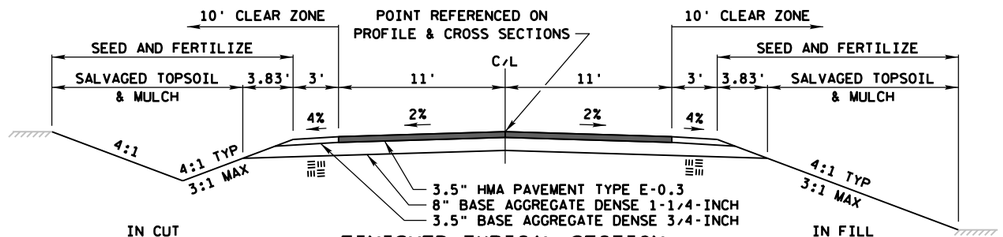
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411+13.53 TO 433+88.53



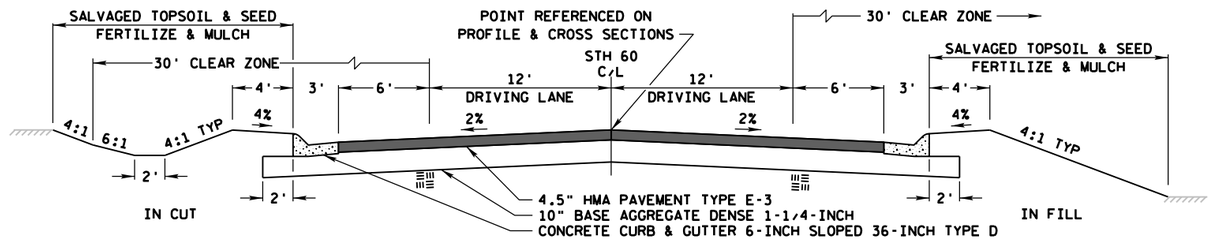
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295+03.65"a" TO 300+00.00"a"



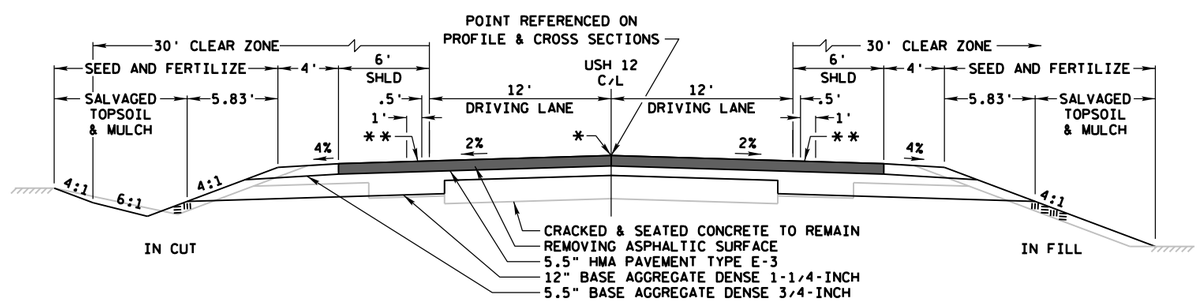
EXISTING TYPICAL SECTION
RICH OLSON ROAD 196+22.06"ro" TO 200+00.00"ro"



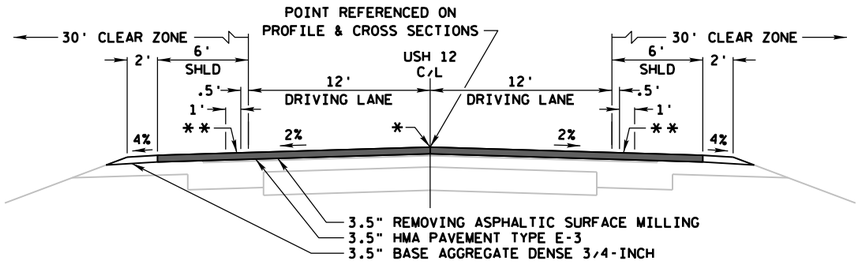
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FRONTAGE ROAD 299+61.92"A" TO 305+80.35"A"
RICH OLSON ROAD 196+22.06"RO" TO 205+06.00"RO"



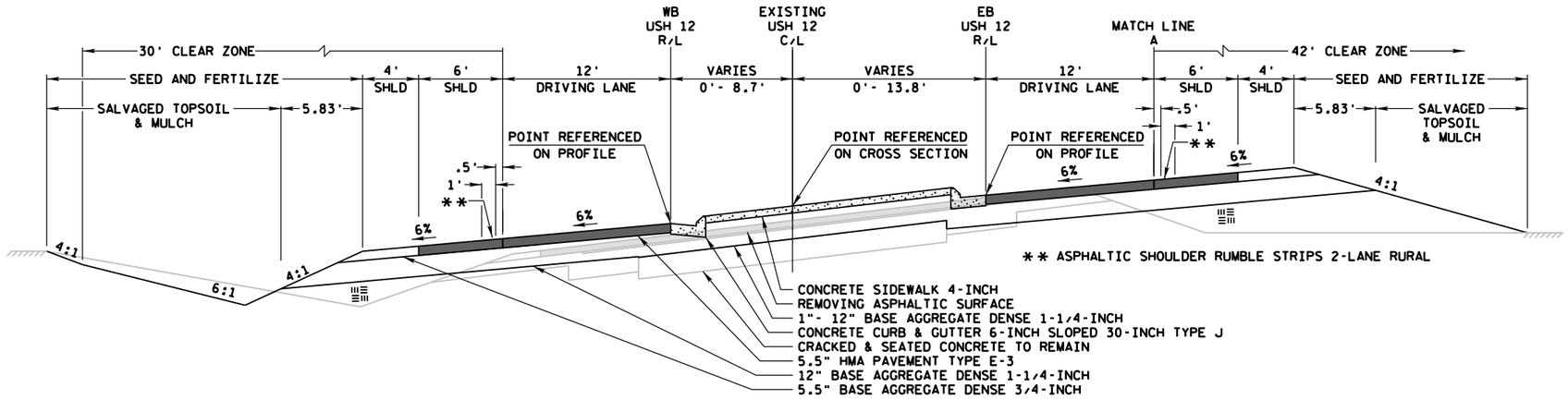
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295+03.65"A" TO 299+61.92"A"



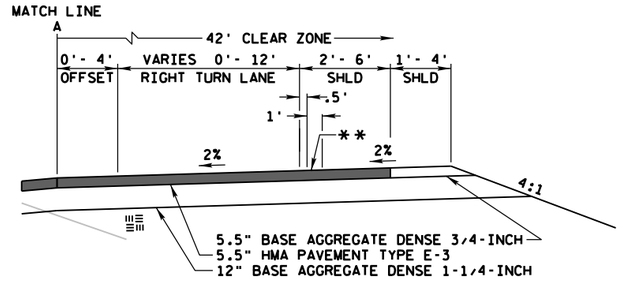
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409+53.53 TO 409+97.04



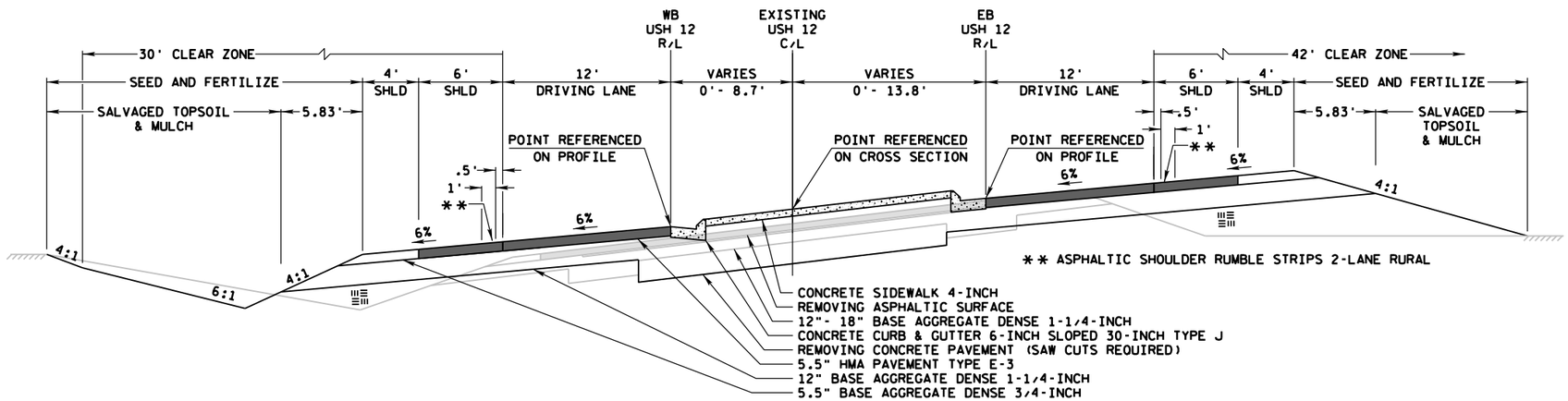
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437+99.00 TO 456+80.11



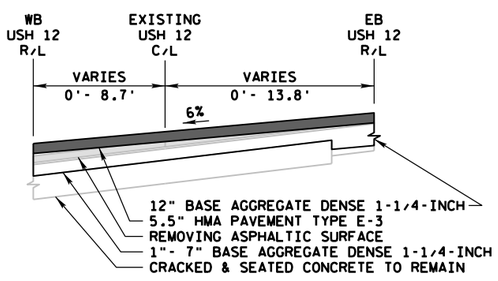
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409+97.04 - 431+20.00



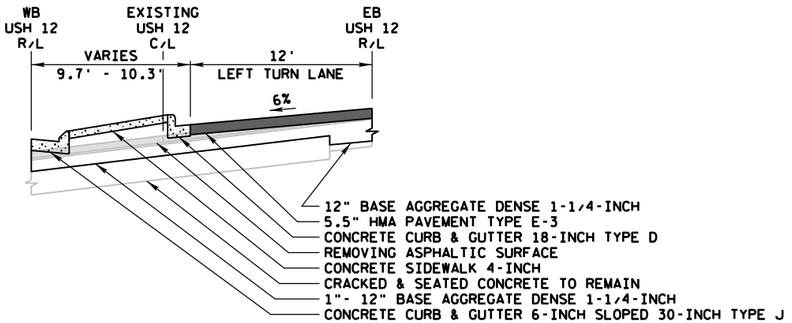
FINISHED PARTIAL SECTION
420+38.00 - 425+37.62



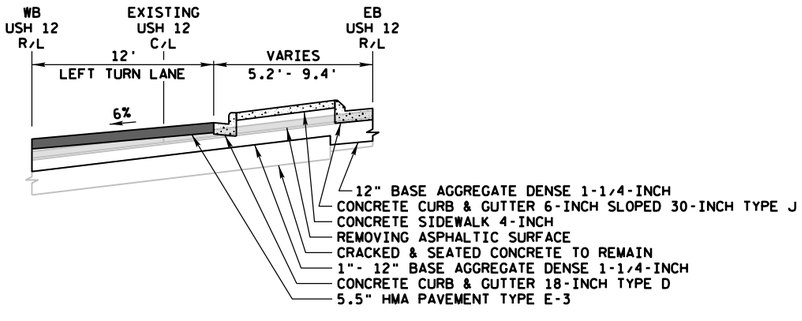
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431+20.00 - 433+88.53



FINISHED PARTIAL SECTION
409+97.04 TO 418+51.61 & 425+52.18 TO 426+84.17

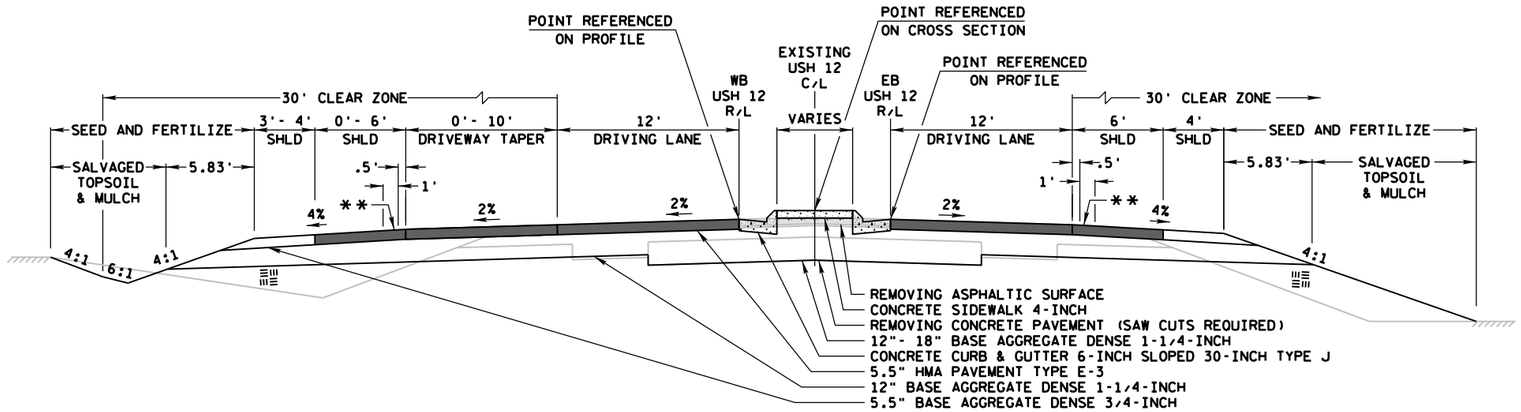


FINISHED PARTIAL SECTION
422+00.00 TO 425+52.18



FINISHED PARTIAL SECTION
426+84.17 TO 430+38.14

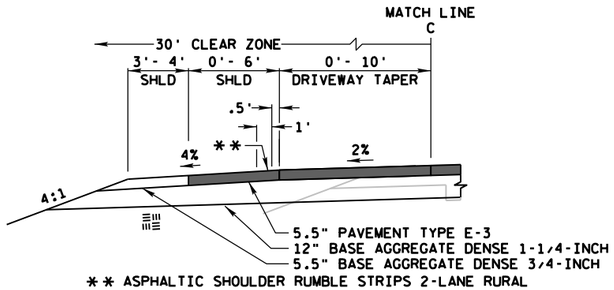
PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	TYPICAL SECTIONS	SHEET 6	E



** ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL

FINISHED TYPICAL SECTION

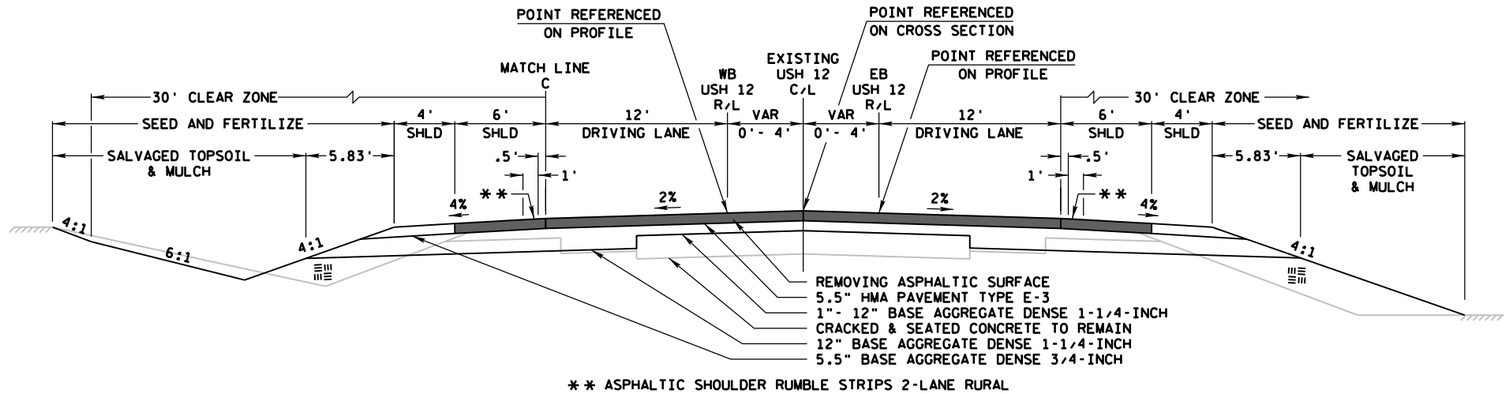
433+88.53 - 435+63.18



** ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL

FINISHED PARTIAL SECTION

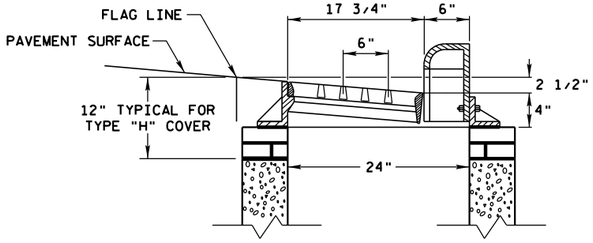
435+63.18 - 435+85.00



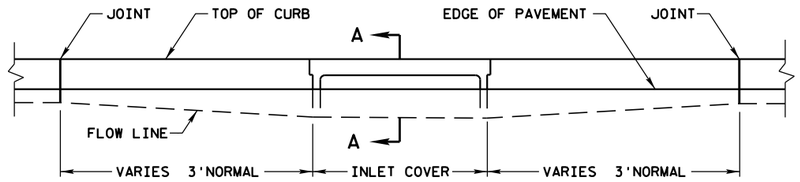
** ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL

FINISHED TYPICAL SECTION

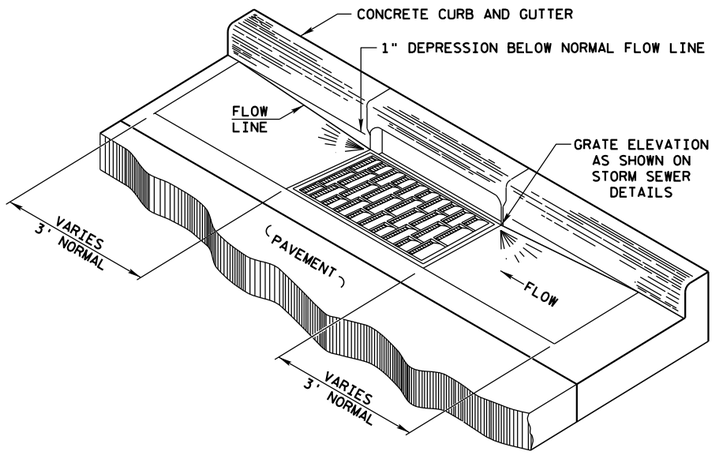
435+63.18 - 437+99.00



SECTION A-A

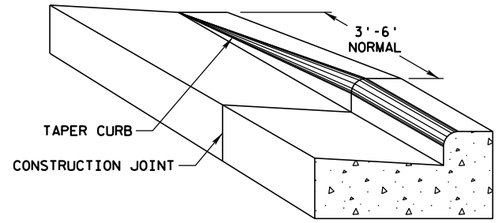


ELEVATION

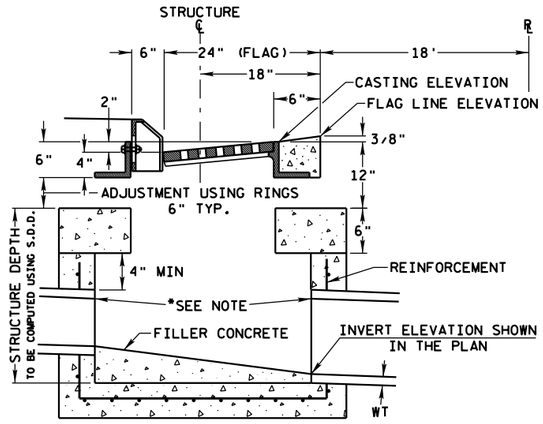


DETAIL OF CURB AND GUTTER AT INLETS

(INLET 2x3 FT AND INLET COVER TYPE H SHOWN)



CURB & GUTTER TERMINATION DETAIL



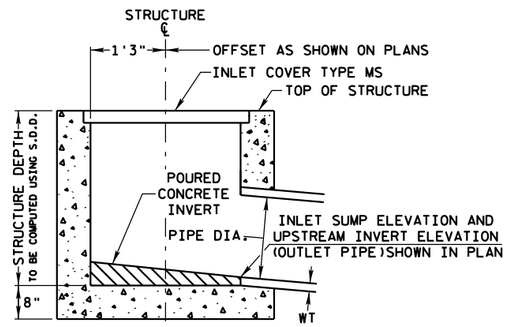
INLETS 2X3-FT WITH INLET COVERS TYPE HM-GJ

(REINFORCED & PRECAST REINFORCED CONCRETE)

*NOTE:
WHEN THE DIAMETER OF THE DISCHARGE PIPE IS LARGER THAN THAT OF THE INLET PIPE, THE ELEVATION OF THE INSIDE TOP OF THE INLET PIPE SHOULD BE THE SAME AS (OR HIGHER THAN) THE ELEVATION OF THE INSIDE TOP OF THE DISCHARGE PIPE.

ASSOCIATED PIPE WALL THICKNESS (WT) USED IN DEPTH COMPUTATIONS

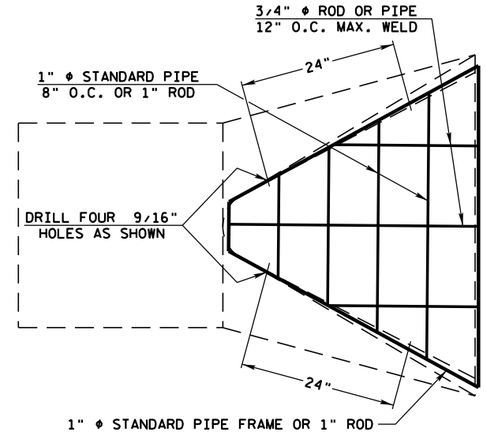
PIPE	WALL THICKNESS
12"	2" = 0.17'
15"	2 1/4" = 0.19'
18"	2 1/2" = 0.21'
21"	2 3/4" = 0.23'
24"	3" = 0.25'
27"	3 1/4" = 0.27'
30"	3 1/2" = 0.29'
36"	4" = 0.33'



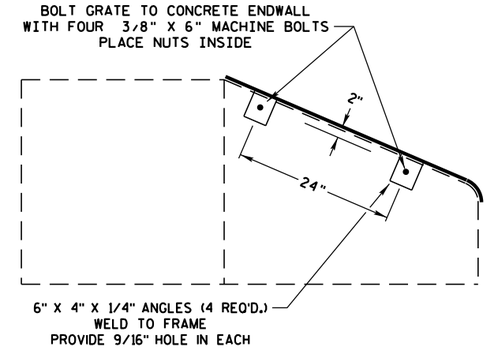
INLETS MEDIAN 1 GRATE

DETAIL FOR COMPUTING INLET ELEVATIONS

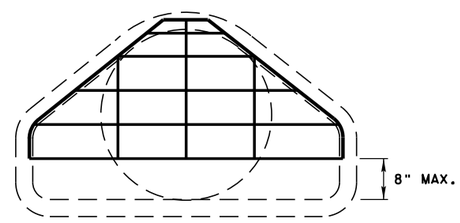
SEE S.D.D.'s FOR MORE DETAIL ON STRUCTURES AND CASTINGS



TOP VIEW



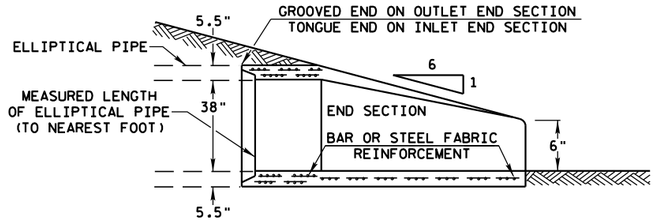
SIDE VIEW



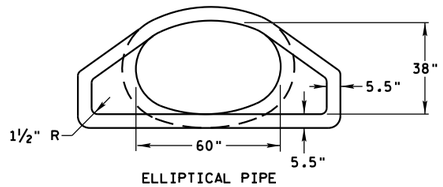
FRONT VIEW

PIPE GRATE DETAIL

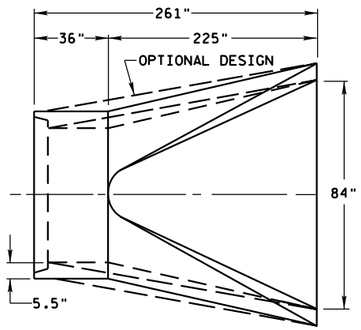
2



LONGITUDINAL SECTION



END VIEW



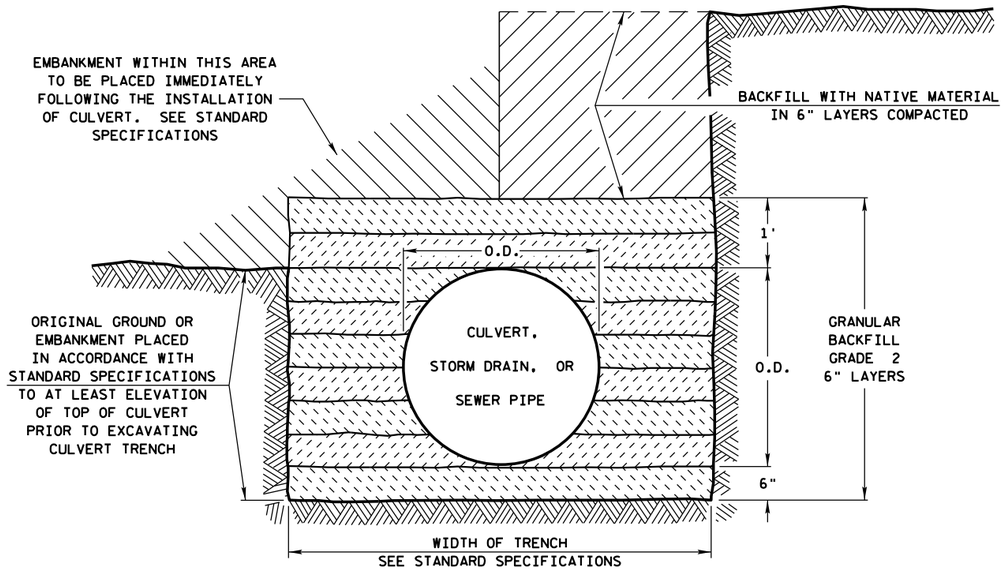
PLAN VIEW

APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE
HORIZONTAL ELLIPTICAL 38x60-INCH 6-TO-1 SLOPE

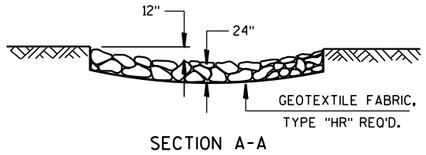
GENERAL NOTES:

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

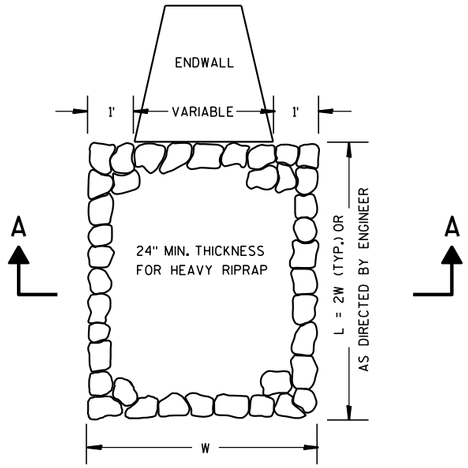
THE SHAPED SUBGRADE WITH GRANULAR FOUNDATION IS AN EQUAL ALTERNATE TO THE GRANULAR FOUNDATION EXCEPT WHERE ROCK IS ENCOUNTERED.



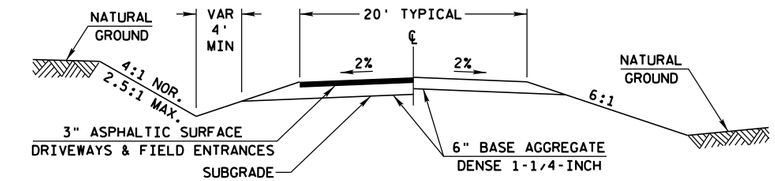
GRANULAR BACKFILL FOR CULVERT PIPES IN EXISTING ROADWAY



SECTION A-A



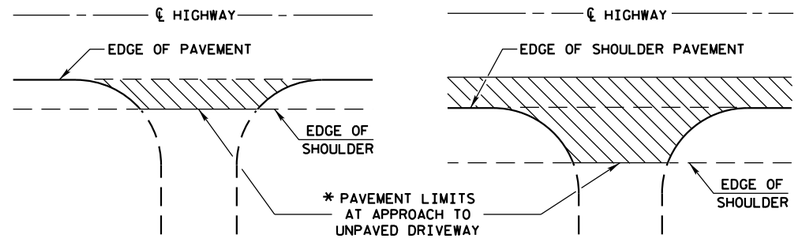
HEAVY RIPRAP TREATMENT AT CULVERTS



IN CUT
PRIVATE DRIVE, COMERICAL ENTRANCE SHOWN

IN FILL
FIELD ENTRANCE SHOWN

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE

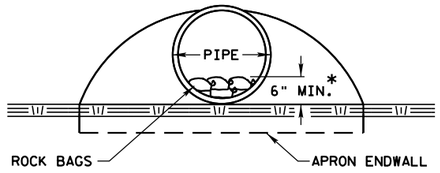


* WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD EXTEND TO MATCH DRIVEWAY PAVEMENT.

PLAN VIEW

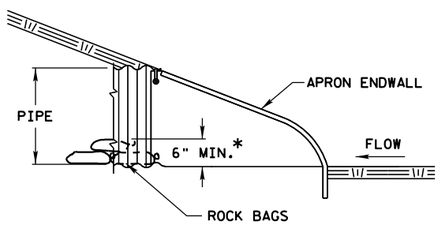
PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL



END VIEW

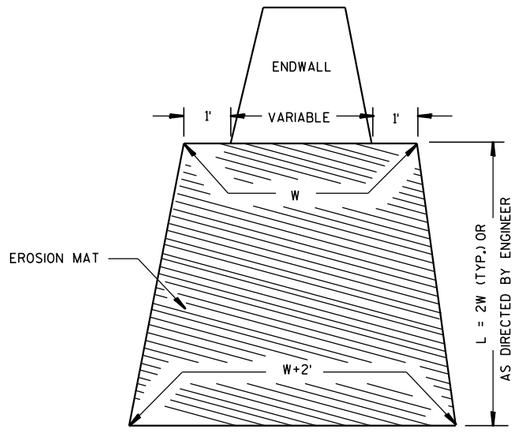
* OR AS DIRECTED BY THE ENGINEER



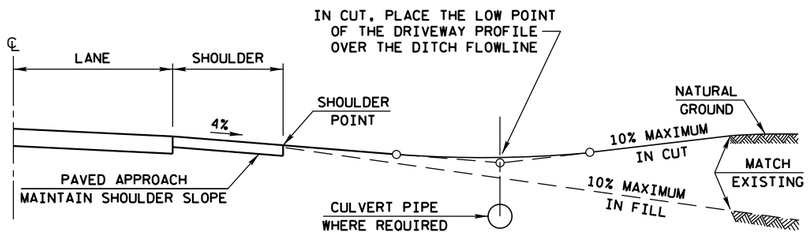
SIDE VIEW

PIPE SIZE INCHES	NUMBER OF BAGS
18	2
24	2
30	3
36	3
42	4
48	4
54	5
60	6

CULVERT PIPE CHECK



EROSION MAT TREATMENT AT CULVERTS



TYPICAL DRIVEWAY PROFILES

DATA TABLE					
POINT NO.	STATION	OFFSET	STATION	OFFSET	RADIUS
4	425+42.38"WB"	4.87' RT	299+65.20"A"	64.8' LT	4'
5	426+99.08"EB"	5.48' LT	299+54.42"A"	75.32' RT	4'
6	425+47.26"EB"	28.04' RT	299+20.33"A"	77.50' LT	50'
7	425+94.62"EB"	76.39' RT	298+70.39"A"	30' LT	50'
8	425+47.24"EB"	78.04' RT	298+70.39"A"	80' LT	50'
9	426+51.65"EB"	71.94' RT	298+75.07"A"	30' RT	50'
10	426+99.15"EB"	24' RT	299+24.99"A"	77.10' RT	50'
11	426+99.15"EB"	74' RT	298+75.07"A"	80' RT	50'
12	428+00.07"EB"	12' RT			
13	425+96.85"WB"	71.64' LT	300+37.55"A"	15' LT	60'
14	425+34.43"WB"	22' LT	299+51.16"A"	71.44' LT	60'
15	425+34.43"WB"	82' LT	300+37.55"A"	75' LT	60'
16	423+83.50"WB"	12' LT			
17			300+77.56"A"	11' LT	
18	427+00.40"WB"	22' LT	299+97.31"A"	91.82' RT	60'
19	426+44.02"WB"	110.85' LT	300+88.58"A"	15.10' RT	60' & 300'
20	427+00.40"WB"	82' LT	300+84.29"A"	75' RT	60'
21	427+88.12"WB"	228.54' LT	302+73.79"A"	11' RT	300'
22	429+01.98"WB"	52.0' RT	299+47.32"A"	303.48' RT	300'
23	428+49.53"WB"	12' LT			
24	425+42.89"EB"	12' LT	299+60.53"A"	79.84' LT	80'
25	425+31.21"WB"	ON ℝ	299+70.62"A"	75.72' LT	80'
26	426+81.29"WB"	12' RT	299+58.41"A"	75.12' RT	
27	427+14.49"EB"	ON ℝ	299+49.92"A"	91.02' RT	80'

STATION EQUATIONS

1. STA. 426+06.97"WB" (USH 12 WB ℝ) = STA. 299+68.55"A" (STH 60 PROPOSED)
2. STA. 426+13.16 (USH 12 Existing) = STA. 299+59.92"A" (STH 60 PROPOSED)
3. STA. 426+23.39"EB" (USH 12 EB ℝ) = STA. 299+46.59"A" (STH 60 PROPOSED)

N

USH 12

STH 60

FRONTAGE ROAD

PC: 299+86.75"A"

PT: 298+60.51"A"

89.9396°

89.7598°

90°

17.45"A"

302+00"A"

301+00"A"

300+00"A"

299+00"A"

424+00"WB"

424+00

424+00"EB"

425+00"WB"

425+00

425+00"EB"

426+00

426+00"EB"

427+00"WB"

427+00

427+00"EB"

428+00"WB"

428+00

428+00"EB"

429+00"WB"

429+00

429+00"EB"

3' AGGREGATE SHOULDER

6' ASPHALT SHOULDER

4' AGGREGATE SHOULDER

2' ASPHALT SHOULDER

1' AGGREGATE SHOULDER

CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J

CONCRETE CURB & GUTTER 18-INCH TYPE D

CONCRETE SIDEWALK 4-INCH

CONCRETE CURB AND GUTTER 6-INCH SLOPED 30-INCH TYPE J

CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

150' (15:1) TAPER

100' TAPER

60' R

60' R & 300' R

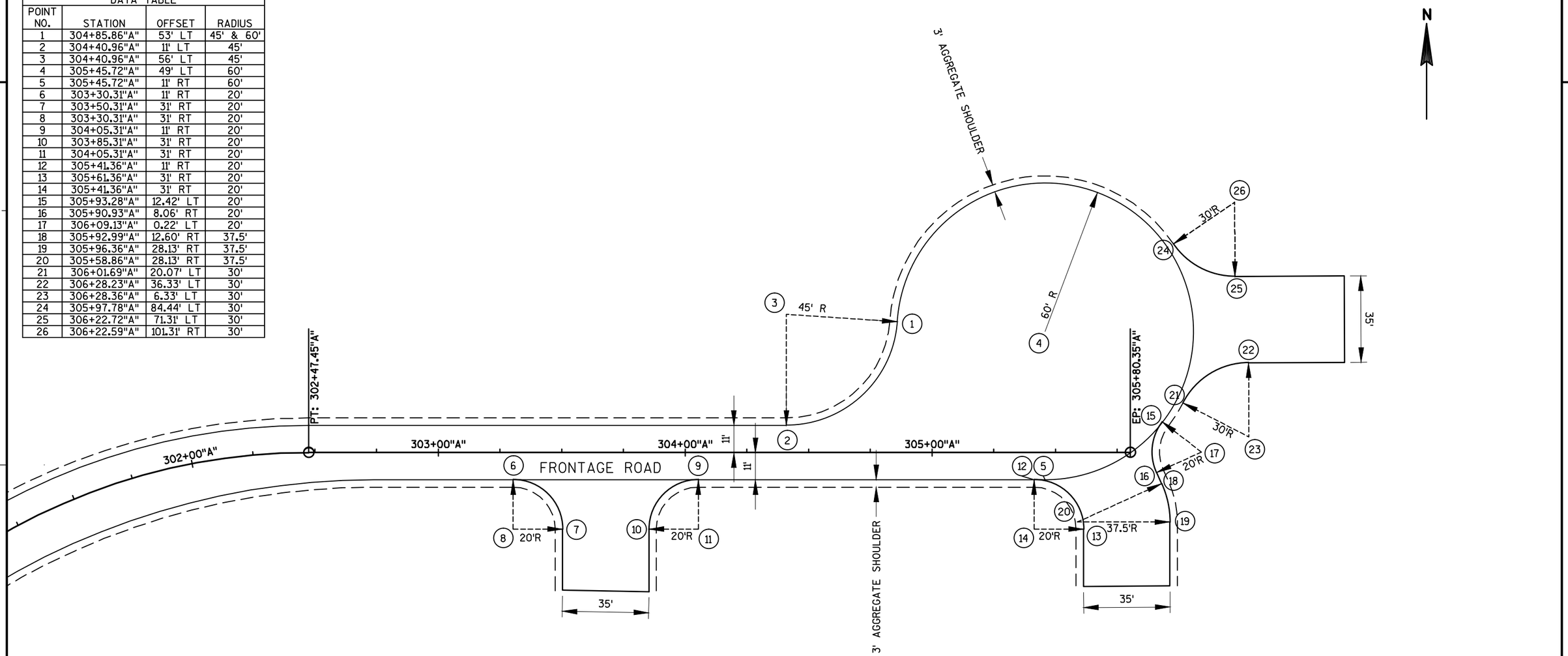
80'R

300' R

50' R

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	INTERSECTION DETAIL - USH 12 & STH 60	SHEET 11 E

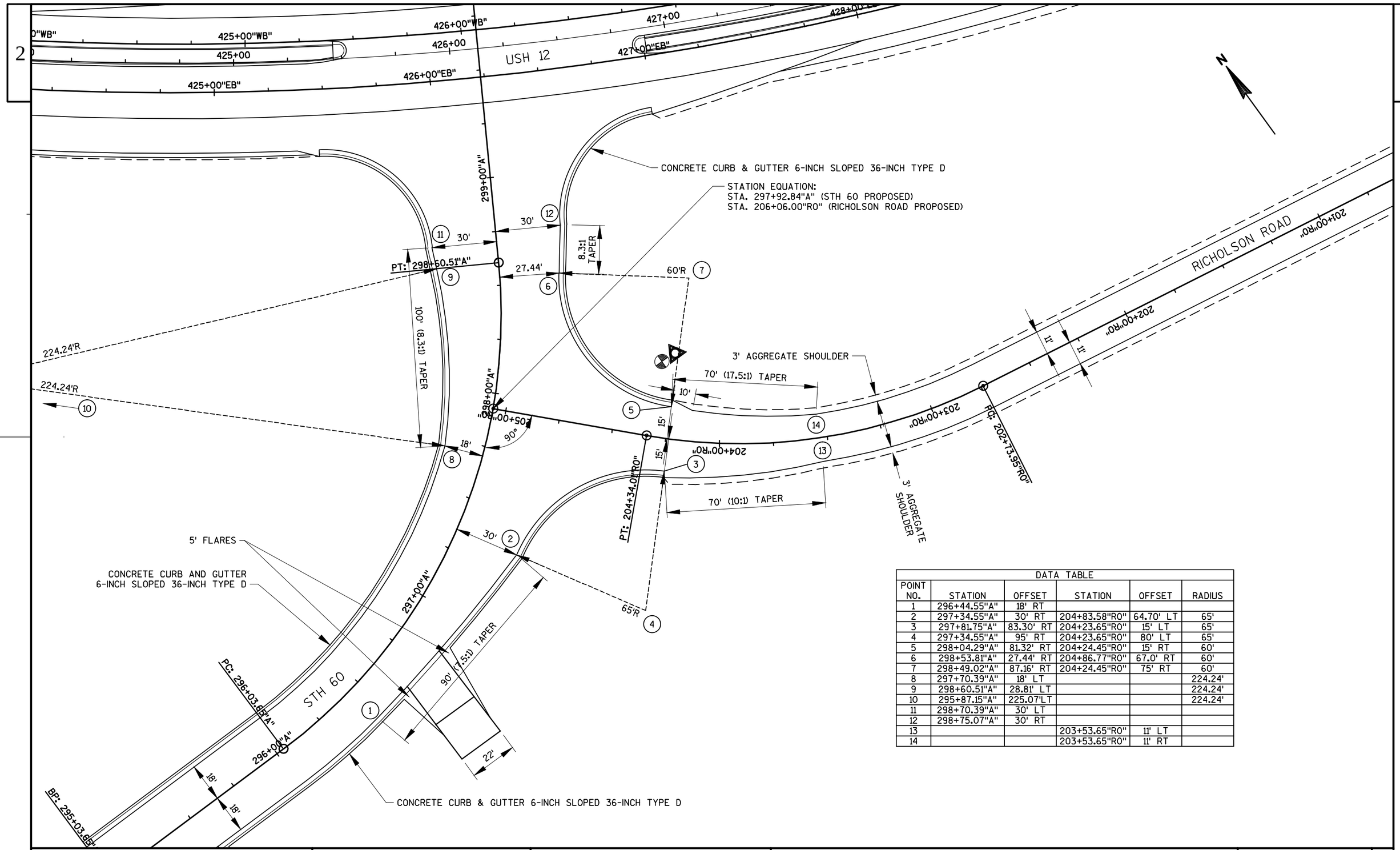
DATA TABLE			
POINT NO.	STATION	OFFSET	RADIUS
1	304+85.86"A"	53' LT	45' & 60'
2	304+40.96"A"	11' LT	45'
3	304+40.96"A"	56' LT	45'
4	305+45.72"A"	49' LT	60'
5	305+45.72"A"	11' RT	60'
6	303+30.31"A"	11' RT	20'
7	303+50.31"A"	31' RT	20'
8	303+30.31"A"	31' RT	20'
9	304+05.31"A"	11' RT	20'
10	303+85.31"A"	31' RT	20'
11	304+05.31"A"	31' RT	20'
12	305+41.36"A"	11' RT	20'
13	305+61.36"A"	31' RT	20'
14	305+41.36"A"	31' RT	20'
15	305+93.28"A"	12.42' LT	20'
16	305+90.93"A"	8.06' RT	20'
17	306+09.13"A"	0.22' LT	20'
18	305+92.99"A"	12.60' RT	37.5'
19	305+96.36"A"	28.13' RT	37.5'
20	305+58.86"A"	28.13' RT	37.5'
21	306+01.69"A"	20.07' LT	30'
22	306+28.23"A"	36.33' LT	30'
23	306+28.36"A"	6.33' LT	30'
24	305+97.78"A"	84.44' LT	30'
25	306+22.72"A"	71.31' LT	30'
26	306+22.59"A"	101.31' RT	30'



PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	INTERSECTION DETAIL - FRONTAGE ROAD TURNAROUND	SHEET 12	E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\021121-ID.DWG PLOT DATE : 1/29/2015 10:23 AM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:40 FT

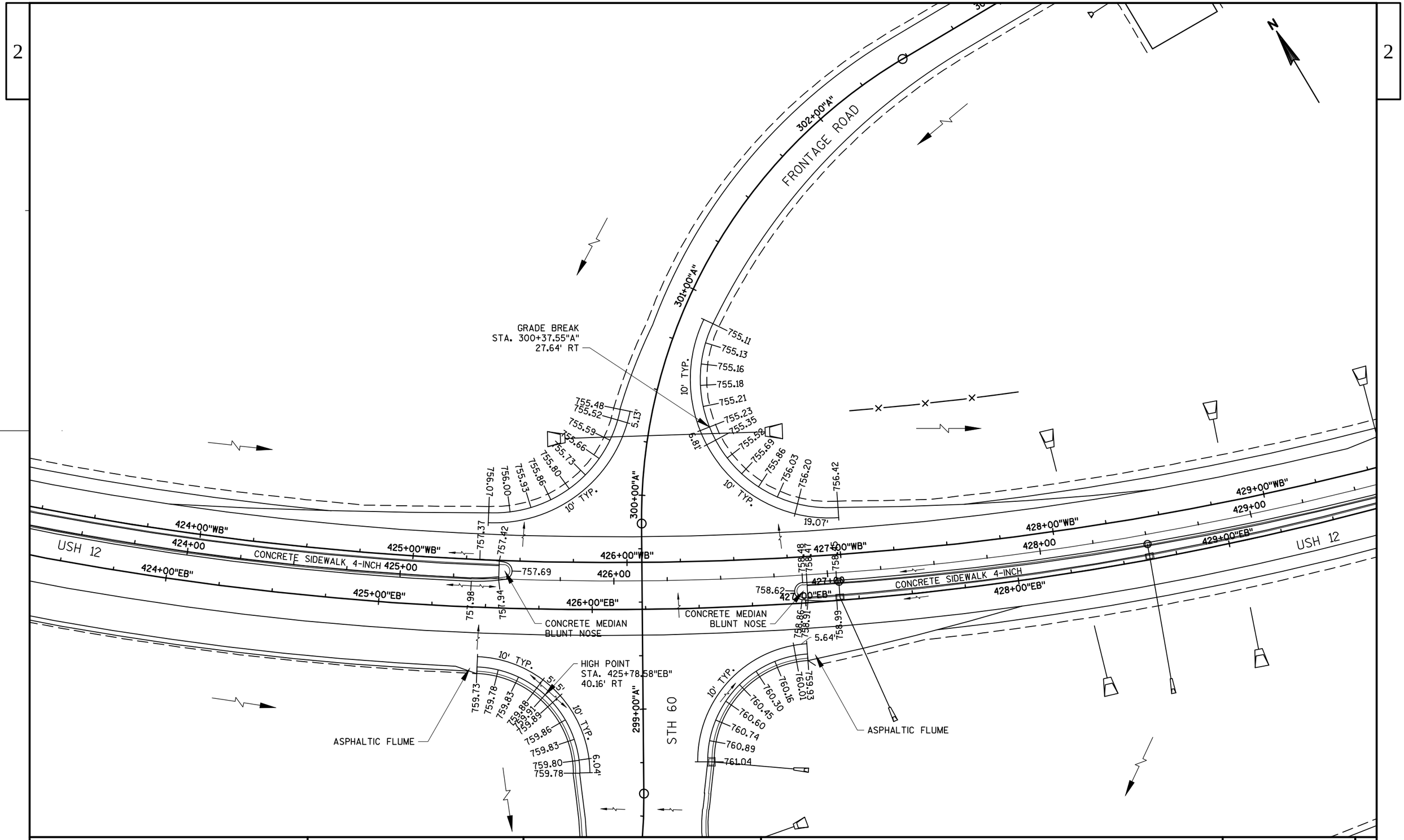
WISDOT/CADDS SHEET 42



DATA TABLE					
POINT NO.	STATION	OFFSET	STATION	OFFSET	RADIUS
1	296+44.55"A"	18' RT			
2	297+34.55"A"	30' RT	204+83.58"RO"	64.70' LT	65'
3	297+81.75"A"	83.30' RT	204+23.65"RO"	15' LT	65'
4	297+34.55"A"	95' RT	204+23.65"RO"	80' LT	65'
5	298+04.29"A"	81.32' RT	204+24.45"RO"	15' RT	60'
6	298+53.81"A"	27.44' RT	204+86.77"RO"	67.0' RT	60'
7	298+49.02"A"	87.16' RT	204+24.45"RO"	75' RT	60'
8	297+70.39"A"	18' LT			224.24'
9	298+60.51"A"	28.81' LT			224.24'
10	295+87.15"A"	225.07'LT			224.24'
11	298+70.39"A"	30' LT			
12	298+75.07"A"	30' RT			
13			203+53.65"RO"	11' LT	
14			203+53.65"RO"	11' RT	

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	INTERSECTION DETAIL - STH 60 & RICHOLSON ROAD	SHEET 13	E

2



PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	INTERSECTION DRAINAGE DETAIL - USH 12 & STH 60	SHEET 14	E

2

N

EP 753.53
ES 753.41

TP 758.59

EP 754.48
ES 754.60

302+00"A"

303+00"A"

304+00"A"

305+00"A"

FRONTAGE ROAD

EP 754.51
ES 754.63

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	INTERSECTION DRAINAGE DETAIL - FRONTAGE ROAD TURNAROUND	SHEET 15	E

2

425+00"WB"
425+00
425+00"EB"
426+00"WB"
426+00
426+00"EB"
427+00
427+00"EB"
428+00
USH 12

299+00"A"
298+00"A"
297+00"A"
296+00"A"
STH 60

205+00"RO"
204+00"RO"
203+00"RO"
202+00"RO"
201+00"RO"
RICHOLSON ROAD

HIGH POINT
STA. 298+31.09"A"
31.37' RT

GRADE BREAK
STA. 297+55.91"A"
35.79' RT

ASPHALTIC FLUME

5.88'
10' TYP.
12.50'
761.39
761.48
761.62
761.76
761.71
761.67
761.63
761.59
761.55
761.51
10' TYP.

8.11'
10' TYP.
5.5'
10' TYP.
761.33
761.74
762.00
762.04
762.08
762.11
760.91
760.80
760.55
760.25
759.95

N

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	INTERSECTION DRAINAGE DETAIL - STH 60 & RICHOLSON ROAD	SHEET 16	E

NOTES:

THIS LAYOUT SHOWS OFFSETS AT CROSS SECTIONS WHERE MATCH LINES ARE REQUIRED ONLY.

CROSS SECTIONS ARE PROVIDED EVERY 50 FEET (TYP.)

N

FRONTAGE ROAD

USH 12

RICHOLSON ROAD

Ex. USH 12 428+56.28, 113.94' RT
RICHOLSON RD 202+02.08"RO", 64.38' LT

Ex. C/L USH 12

Ex. USH 12 432+63.51, 100.00' RT
RICHOLSON RD 198+29.95"RO", 113.93' LT

Ex. C/L RICHOLSON ROAD

STH 60 298+64.26"A", ON C/L

PROPOSED C/L STH 60

STH 60

Ex. C/L STH 60

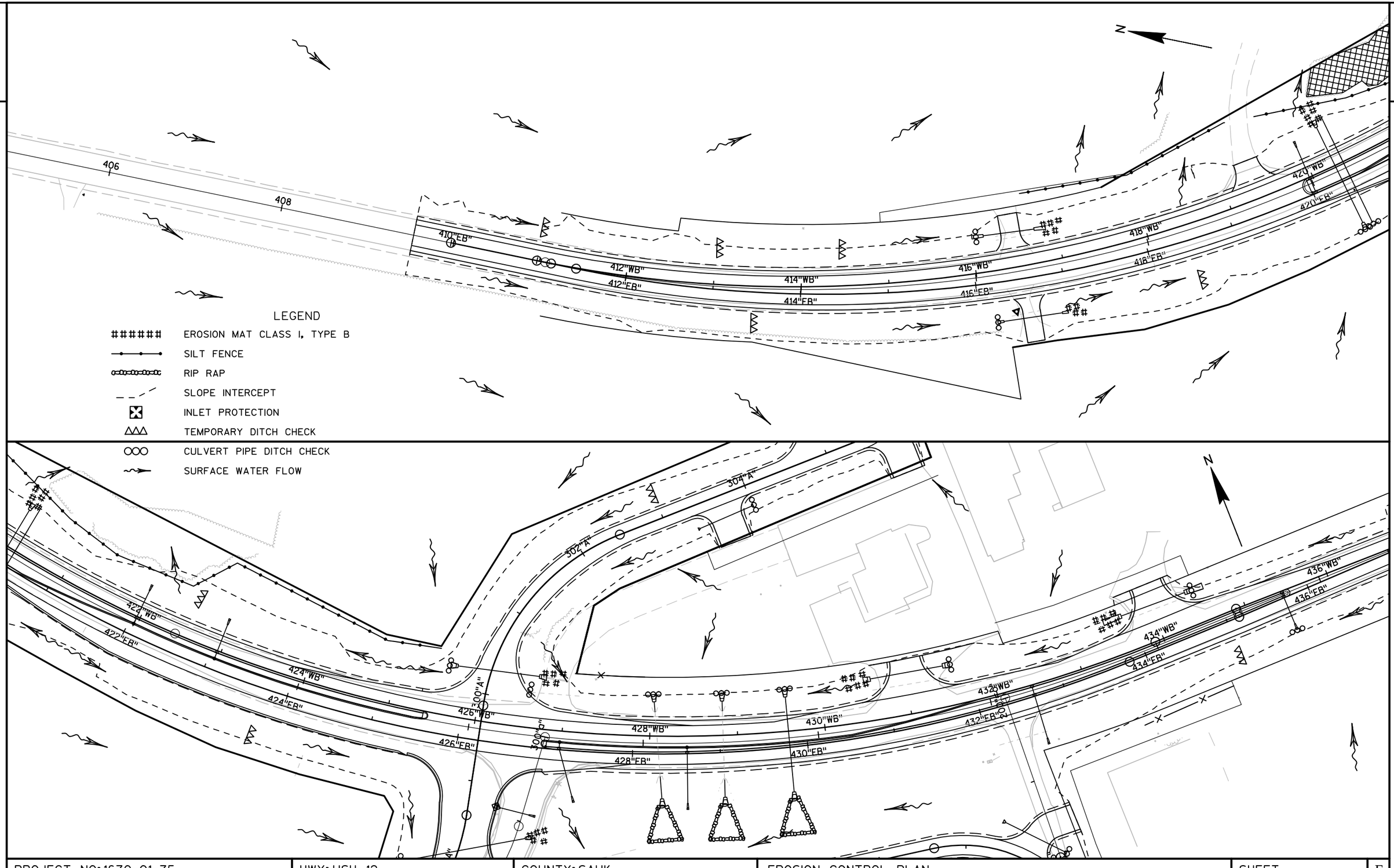
100.7'

PROPOSED C/L RICHOLSON ROAD

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTION MATCH LINE	SHEET 17	E

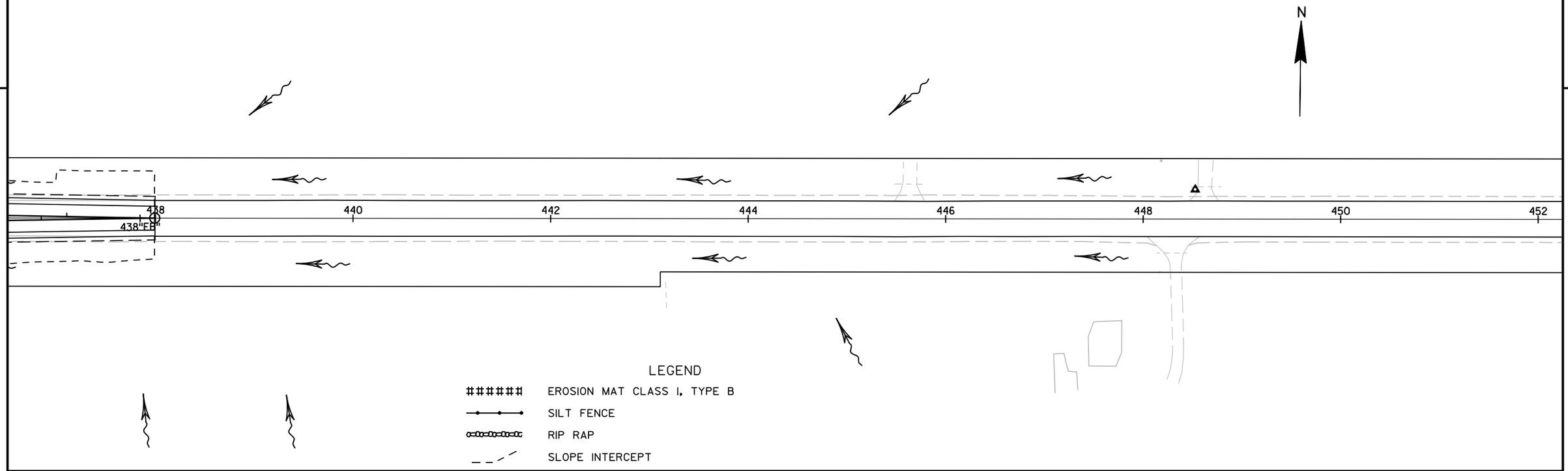
2

2



PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	EROSION CONTROL PLAN	SHEET 18	E

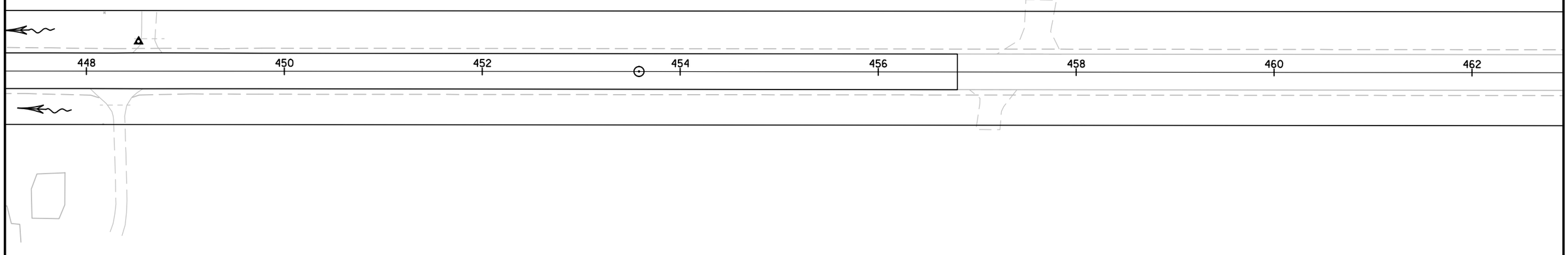
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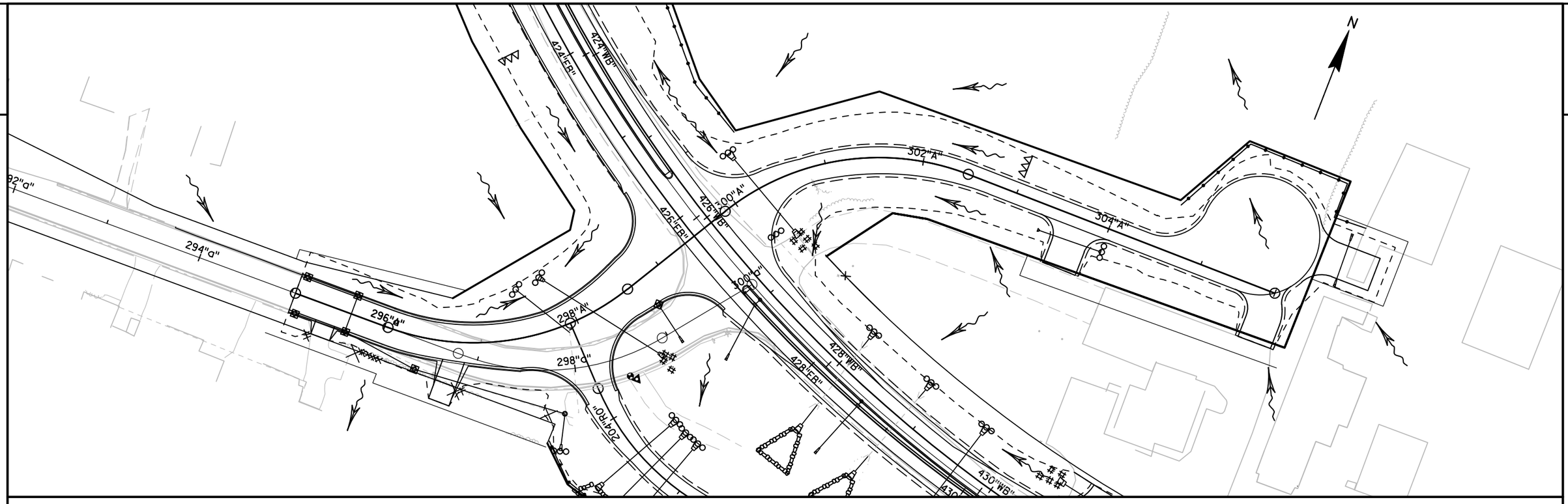
LEGEND

- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW





PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	EROSION CONTROL PLAN	SHEET 19	E

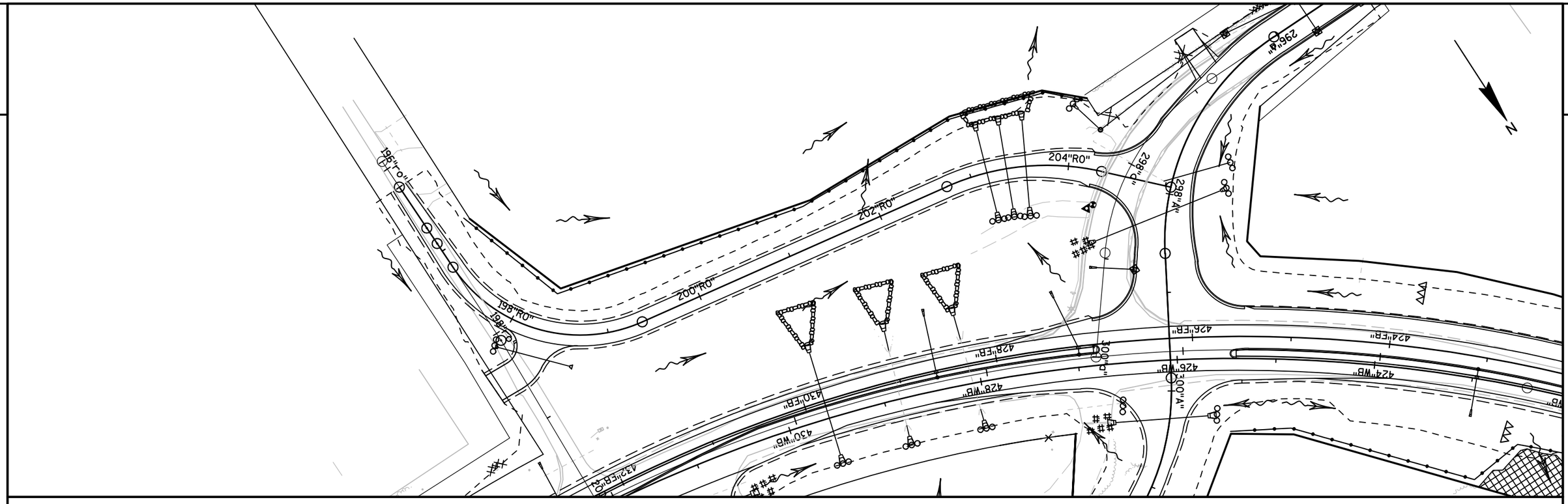


LEGEND

- ###### EROSION MAT CLASS I, TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	EROSION CONTROL PLAN	SHEET 20	E

FILE NAME : N:\PDS\C3D\16700105\DESIGN\VIEWFRAMEGROUPS\022001-EC_VFG.DWG
LAYOUT NAME - 022021-EC
PLOT DATE : 2/13/2015 7:11 AM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



LEGEND

- ###### EROSION MAT CLASS I, TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	EROSION CONTROL PLAN	SHEET 21	E

2

STA. 419+96.76"WB", 44.0' LT
APRON ENDWALL FOR CULVERT PIPE
REINFORCED CONCRETE 12-INCH
10.0

STA. 421+96.54"WB", 39.68' LT
APRON ENDWALL FOR CULVERT PIPE
REINFORCED CONCRETE 12-INCH
11.0

STA. 419+96.16"WB", 2.5' RT
INL 2X3-FT, TYPE HM-GJ GRATE
10.1

STA. 421+96.12"WB", 2.5' RT
INL 2X3-FT, TYPE HM-GJ GRATE
11.1

STA. 422+06.10"EB", 13.49' LT
INL 3 FT-DIA, TYPE Z GRATE
11.2

STA. 420+03.19"EB", 2.5' LT
INL 2X3-FT, TYPE HM-GJ GRATE
10.2

USH 12

416+00"WB"
416+00
416+00"EB"
417+00"WB"
417+00
417+00"EB"
418+00"WB"
418+00
418+00"EB"
419+00"WB"
419+00
419+00"EB"
420+00"WB"
420+00
420+00"EB"
421+00"WB"
421+00
421+00"EB"
422+00"WB"
422+00
422+00"EB"

FL 756.30
FL 756.54

755
750
745
760

39'-SS-RCP-CLIII-12"@1.70%
17'-SS-RCP-CLIII-12"@3.10%
FL 757.40
753.01
752.55
750.03
INV 749.27

FL 757.17
753.06
753.21
INV 750.55
34'-SS-RCP-CLIII-
12"@1.70%
8'-SS-RCP-CLIII-
12"@3.10%
751.23

USH12 EB REFERENCE GRADES

757.43 757.43
757.48 757.48
757.35 757.35
757.31 757.31
757.33 757.33
757.29 757.29
757.29 757.29
757.35 757.35
757.42 757.42
757.44 757.44
757.47 757.47
757.59 757.59
757.76 757.76

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	STORM SEWER	SHEET 22	E

2

12.0 STA. 422+95.78"WB", 38.84' LT
APRON ENDWALL FOR CULVERT PIPE
REINFORCED CONCRETE 12-INCH

12.1 STA. 422+95.69"WB", 2.5' RT
INL 2X3, TYPE HM-GJ COVER

12.2 STA. 423+07.22"EB", 13.5' LT
INL 3'-DIA., TYPE Z COVER

13.0 STA. 427+36.58"EB", 58.34' RT
APRON ENDWALL FOR CULVERT PIPE
REINFORCED CONCRETE 12-INCH

13.1 STA. 427+16.08"EB", 2.5' LT
INL 2X3, TYPE HM-GJ COVER

13.2 STA. 426+98.29"WB", 13.5' RT
INL 3'-DIA., TYPE Z COVER

FRONTAGE ROAD

STH 60

USH 12

422+00"WB"
422+00
22+00"EB"
423+00"WB"
423+00
423+00"EB"
424+00"WB"
424+00
424+00"EB"
425+00"WB"
425+00
425+00"EB"
426+00"WB"
426+00
426+00"EB"
427+00"WB"
427+00
427+00"EB"
428+00"WB"
428+00
428+00"EB"
300+00"A"
299+00"A"

FL 756.73
FL 758.79

8.0'-SS-RCP-CLIII-12"@3.10%
34'-SS-RCP-CLIII-12"@1.70%
FL 757.59
753.02
INV 750.95
751.62
752.85

FL 758.34
7'-SS-RCP-CLIII-12"@3.10%
56'-SS-RCP-CLIII-12"@1.00%
753.90
753.76
753.76
INV 752.80

USH 12 EB REFERENCE GRADES

757.76	757.86	757.88	757.88	757.79	757.80	758.00	758.01	758.30	757.72	758.28	758.72	758.86
757.98	758.08	758.18	758.29	758.39	758.49	758.59	758.70	758.80	758.89	758.97	759.05	759.13

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	STORM SEWER	SHEET 23	E

2

14.2 STA. 428+42.47"WB", 13.5' RT
INL 3'-DIA., TYPE Z COVER

15.2 STA. 432+40.43"WB", 2.5' RT
INL 2X3-FT, TYPE HM-GJ COVER

428+00"WB"
428+00
429+00"WB"
429+00
429+00"EB"
430+00"WB"
430+00
430+00"EB"
431+00"WB"
431+00
431+00"EB"
USH 12
432+00"WB"
432+00
432+00"EB"
433+00"WB"
433+00
433+00"EB"
434+00"EB"

14.1 STA. 428+62.34"EB", 2.5' LT
INL 2X3-FT, TYPE HM-GJ COVER

15.1 STA. 432+65.08"EB", 2.5' LT
INL 2X3-FT, TYPE HM-GJ COVER

14.0 STA. 428+61.81"EB", 63.46' RT
APRON ENDWALL FOR CULVERT PIPE
REINFORCED CONCRETE 12-INCH

15.0 STA. 432+64.22"EB", 56.63' RT
APRON ENDWALL FOR CULVERT PIPE
REINFORCED CONCRETE 12-INCH

14.1 FL 759.03

FL 757.58 15.1

755
750
745
760

14.1
14.2
FL 758.66
6'-SS-RCP-CLIII-12"@3.10%
58'-SS-RCP-CLIII-12"@1.70%
754.71
754.61
14.0
751.58
INV 750.49

FL 756.80
15.2
15.1
10'-SS-RCP-CLIII-12"@3.10%
51'-SS-RCP-CLIII-12"@1.70%
753.38
753.13
15.0
751.70
INV 750.73

USH 12 EB REFERENCE GRADES

758.86	759.13	758.62	759.21	758.83	759.28	758.59	759.29	758.63	759.23	758.66	759.09	758.45	758.89	758.42	758.61	758.03	758.27	757.34	757.89	757.43	757.51	757.08	757.13	756.69	756.68

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	STORM SEWER	SHEET 24	E

2

N

16.2 STA. 435+44.63"WB", 2.5' RT
INL 2X3-FT, TYPE HM-GJ COVER

16.1 STA. 435+70.31"EB", 2.5' LT
INL 2X3-FT, TYPE HM-GJ COVER

16.0 STA. 435+69.96"EB", 38.91' RT
APRON ENDDWALL FOR CULVERT PIPE
REINFORCED CONCRETE 12-INCH

USH 12

434+00"WB" 435+00"WB" 436+00"WB" 437+00"WB" 438+00"WB" 439+00 440+00

435+00"EB" 436+00"EB" 437+00"EB" 438+15"EB"

FL 755.38

5'-SS-RCP-CLIII-12"@3.10%

34'-SS-RCP-CLIII-12"@1.70%

751.62
751.52

751.52

INV 750.85

760 755 750 745

USH 12 EB REFERENCE GRADES ← → USH 12 CENTERLINE GRADES

756.69	756.37	756.15	755.77	755.51	755.31	755.25	754.87	755.00	755.32	755.35	755.37	755.40
756.68	756.29	755.93	755.66	755.55	755.49	755.43	755.37	755.31				

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	STORM SEWER	SHEET 25	E

23.2 STA. 295+10"A", 21.0' LT
INL 2.5X3-FT, TYPE F COVER

24.0 STA. 295+10"A", 21.0' RT
INL 2.5X3-FT, TYPE F COVER

23.1 STA. 295+10"A", 21.0' LT
INL 2.5X3-FT, TYPE F COVER
1 EA REMOVING INLETS

STA. 295+72"A" LT
17'-REMOVING STORM SEWER 15"

STA. 295+81"A" LT
1 EA REMOVING INLETS

STA. 295+64"A" LT & RT
40'-REMOVING STORM SEWER 15"

STA. 296+57"A" RT
1 EA REMOVING INLETS

STA. 297+06"A" RT
147'-REMOVING STORM SEWER 18"

STA. 298+75.07"A", 33.0' RT
INL 2.5X3-FT, TYPE F COVER 31.0

23.0 STA. 295+64"A", 21.0' RT
INL 2.5X3-FT, TYPE F COVER
1 EA REMOVING INLETS

STA. 296+10"A" RT
101'-REMOVING STORM SEWER 18"

22.0 STA. 296+39"A", 33.2' RT
INL TYPE 1 GRATE, TYPE MS COVER

30.0 STA. 298+70.78"A", 77.0' RT
APRON ENDWALL FOR CULVERT
REINFORCED CONCRETE 12-INCH

295+04"A"
295+00"a"
296+00"A"
296+00"a"
297+00"A"
297+00"a"
298+00"A"
298+00"a"
299+00"A"
299+00"a"
300+00"A"
301+00"A"
426+00"EB"
426+00
426+00"WB"
427+00"EB"
427+00
427+00"WB"
STH 60
USH 12

760
755
750
745

FL 753.78 24.0 * FL 753.93 23.0 *
RIM 754.00 22.0
21.0 31.0 FL 760.92
751.63
751.48
751.29
751.57
80'-SS-RCP-CLIV-18"@0.12%
159'-SS-RCP-CLIV-18"@0.12%
54'-SS-RCP-CLIV-18"@0.12%

54'-SS-RCP-CLIV-18"@0.12%
40'-SS-RCP-CLIV-18"@0.12%
FL 753.78 23.2 * FL 753.93 23.1 * 23.0
751.68
751.62
751.57

31.0
39'-SS-RCP-CLIII-12"@1.70%
30.0
753.05
INV 752.30

* INLETS 23.0, 23.1, 23.2
AND 24.0 DO NOT HAVE THE
12-IN CLEARANCE AS SHOWN IN
THE CONSTRUCTION DETAILS

754.26 754.26 | 754.30 754.35 | 754.26 754.84 | 754.68 755.98 | 755.06 757.61 | 754.28 759.21 | 752.24 760.24 | 753.56 760.57 | 754.48 760.20 | 757.81 758.64 | 753.36 | 754.17

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	STORM SEWER	SHEET 26	E

STA. 203+99.66"RO", 62.76' LT
APRON ENDWALL FOR CULVERT PIPE
REINFORCED CONCRETE 18-INCH
20.0

STA. 204+25.11"RO", 41.19' LT
MH 4'-DIA., TYPE M COVER
21.0

RICHOLSON ROAD

200+00"RO"
201+00"RO"
202+00"RO"
203+00"RO"
204+00"RO"
297+00
297+00"A"
298+00
298+00"A"
299+00

STH 60

N

RIM 757.85

31'-SS-RCP-CLIV-18"@0.12%

751.25

751.29

751.91 755.85
751.82 755.81
751.95 755.78
751.16 755.93
750.92 756.65
751.47 757.94
751.52 759.70
753.10 761.02
752.28 761.63
758.05 761.52
752.19 760.38

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	STORM SEWER	SHEET 27	E

* SIGN BOX OUT REQUIRED

N

406

USH 12

408

1-01 W6-1 36"X36"

1-03 W6-3 36"X36"

SPEED LIMIT 55 REMOVE 1-04R

1-05 Baraboo 15 Wis Dells 27 D2-2 78"X24"

1-07 SPEED LIMIT 55 R2-1 24"X30"

1-12 DO NOT ENTER R5-1 36"X36"

1-02R JCT 60 REMOVE

410"WB" 410"FB" 412"WB" 412"FB" 414"WB" 414"FB" 416"WB" 416"FB" 418"WB" 418"FB" 420"WB" 420"FB"

1-06 JCT 60 J1-1 24"X39"

1-08 EAST 12 EAST 60 WEST 60 J2-3 72"X57"

1-09R EAST 12 EAST 60 WEST 60 REMOVE

1-10 R4-7 36"X48"

W5-54 18"X18" 1-11

2-07 W6-2 36"X36"

2-16 WEST 60 WEST 12 J3-3 72"X57"

2-03R WEST 12 REMOVE

2-06 WRONG WAY R5-1A 36"X24"

2-05R Baraboo 15 Wis Dells 27 REMOVE

2-10 WEST 12 J4-1 24"X36"

2-11 2-14 R4-7 24"X30"

302"A"

2-17R WEST 60 WEST 12 REMOVE

2-21R REMOVE

2-23R Spring Green Baraboo Wis Dells REMOVE

2-22 WRONG WAY R5-1A 36"X24"

2-29R WEST 60 WEST 12 REMOVE

2-30 Baraboo Spring Green D1-2 90"X30"

*2-34 ONE WAY R6-2-R 24"X30"

2-35 DO NOT ENTER R5-1 30"X30"

2-15 DO NOT ENTER R5-1 30"X30"

2-24 ONE WAY R6-2-R 24"X30"

2-28 DO NOT ENTER R5-1 30"X30"

2-36 WEST 60 WEST 12 J2-2 48"X57"

Sauk City 2 Madison 29 REMOVE 2-33R

SPEED LIMIT 55 R2-1 24"X30" 2-32

422"WB" 422"FB" 424"WB" 424"FB" 426"WB" 426"FB" 428"WB" 428"FB" 430"WB" 430"FB" 432"WB" 432"FB" 434"WB" 434"FB"

USH 12

300"A"

298"A" STH 60

Sauk City Spring Green D1-2 90"X30" 2-01

Sauk City Madison Spring Green REMOVE 2-02R

WRONG WAY R5-1A 36"X24" 2-04

EAST 12 EAST 60 WEST 60 J3-3 72"X57" 2-08

DO NOT ENTER R5-1 30"X30" 2-09

EAST 60 WEST 60 REMOVE 2-12R

WEST 60 REMOVE 2-13R

2-18 EAST 12 EAST 60 J4-3 72"X36"

2-19R

EAST 12 EAST 60 REMOVE 2-20R

2-25 W6-2 36"X36"

WRONG WAY R5-1A 36"X24" 2-26

STOP REMOVE 2-31R

SPEED LIMIT 55 REMOVE 2-27R

RICHOLSON ROAD

200"RO"

198"RO"

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	PERMANENT SIGNING PLAN	SHEET 28	E

2

* SIGN BOX OUT REQUIRED

N

3-02
R4-7
24"X30"

3-03
W5-54
18"X18"

3-05
W6-1
36"X36"

436"WB"
436"EB"
438"EB"
438
440
442
444
446
448
450
USH 12

DO NOT ENTER
R5-1
36"X36"
3-01

W6-3
36"X36"
3-04

Sauk City 2
Madison 27
D2-2
78"X24"
3-06

3-07R
NO PASSING ZONE
REMOVE

3-08
NO PASSING ZONE
W14-3
48"X36"

N

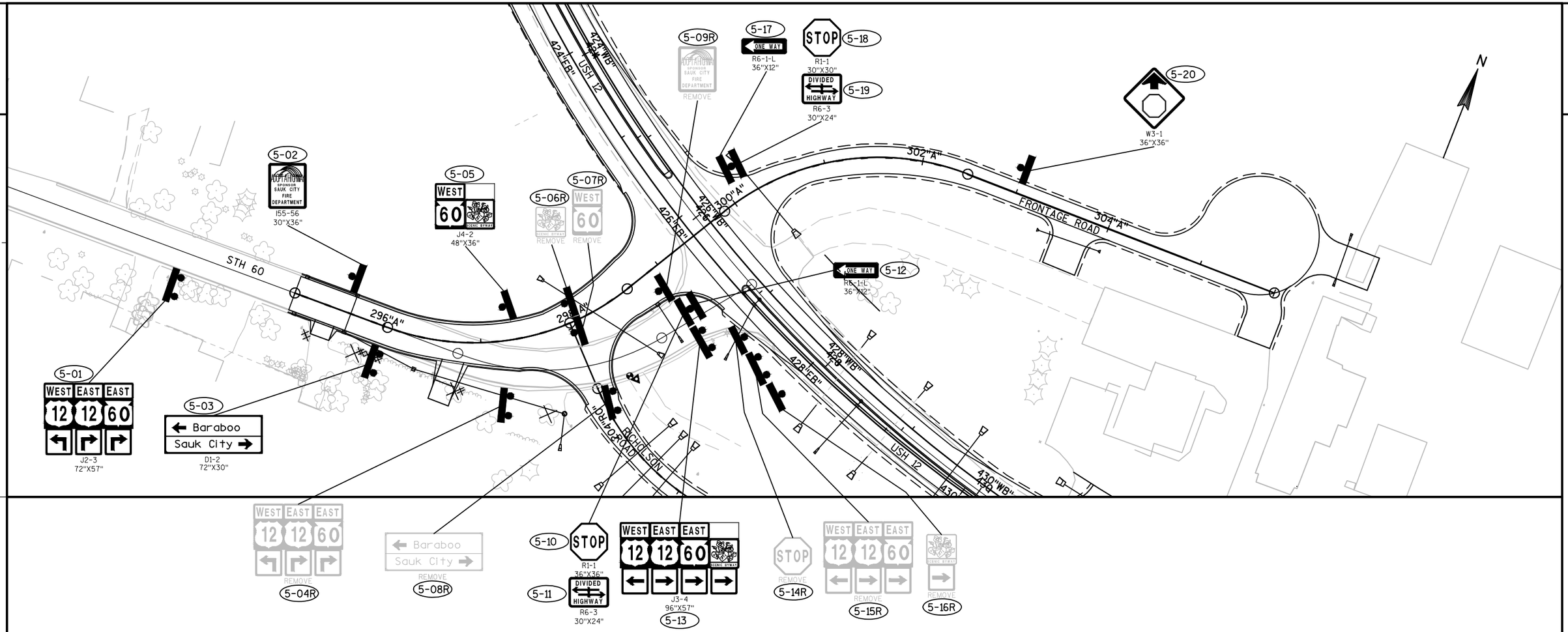
NO PASSING ZONE
LEAVE EXISTING

452
454
456
458
460
462
464
466
USH 12

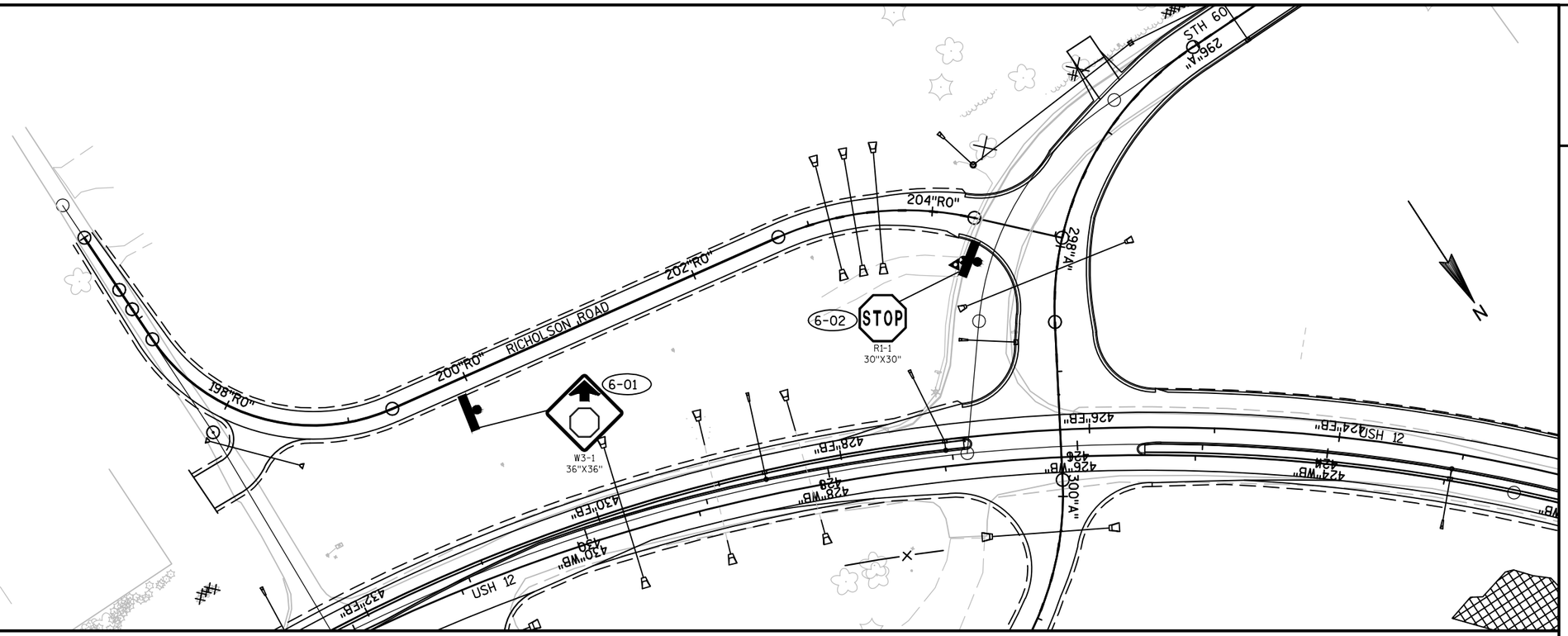
LEAVE EXISTING

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	PERMANENT SIGNING PLAN	SHEET 29	E

2

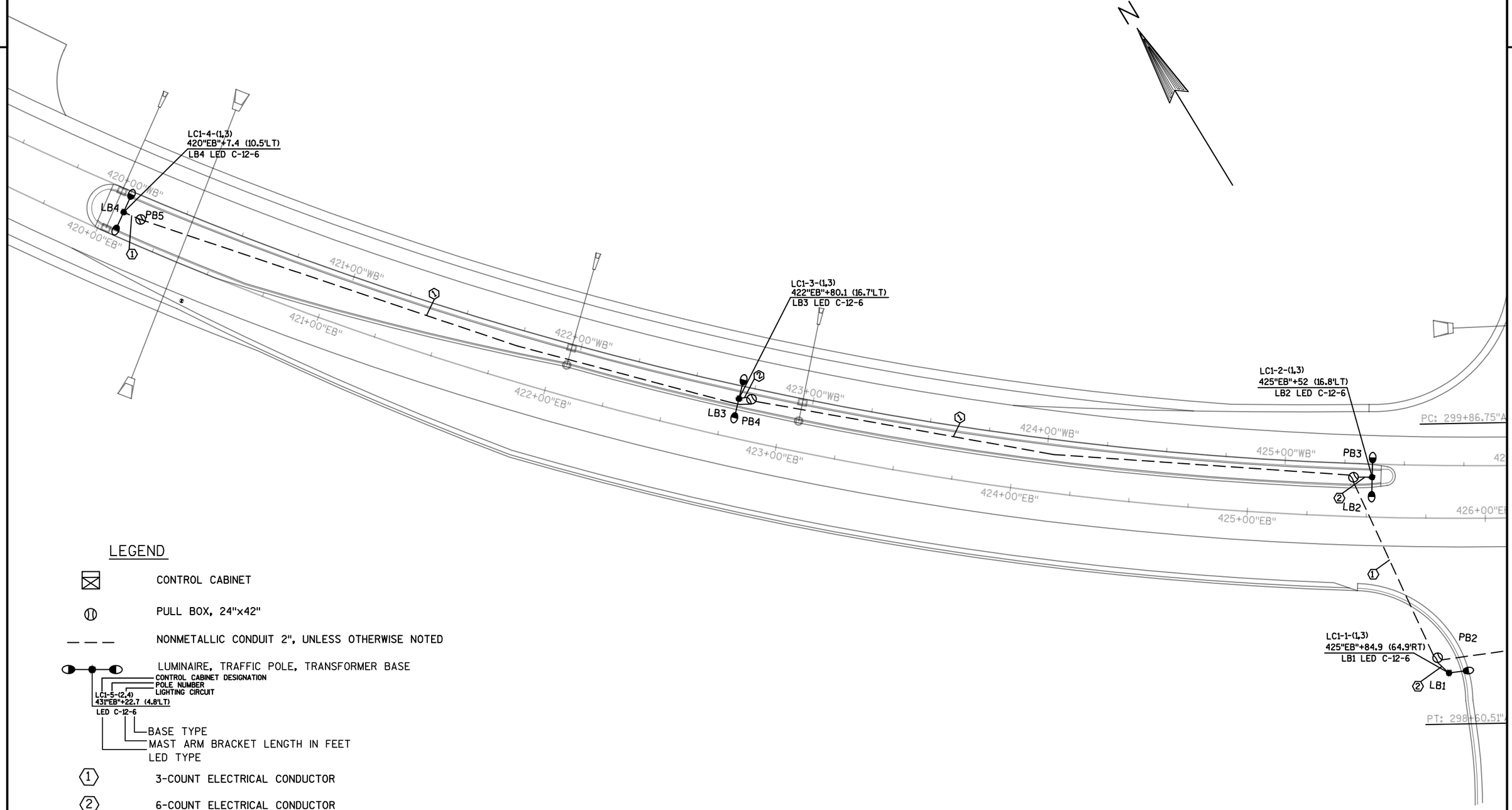


PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	PERMANENT SIGNING PLAN	SHEET 30	E



PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	PERMANENT SIGNING PLAN	SHEET 31	E

2



LEGEND

- CONTROL CABINET
- PULL BOX, 24"x42"
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE

LC1-5-(2,4)
431'EB"+22.7 (4.8'LT)
LED C-12-6

- CONTROL CABINET DESIGNATION
- POLE NUMBER
- LIGHTING CIRCUIT
- BASE TYPE
- MAST ARM BRACKET LENGTH IN FEET
- LED TYPE

- (1) 3-COUNT ELECTRICAL CONDUCTOR
- (2) 6-COUNT ELECTRICAL CONDUCTOR

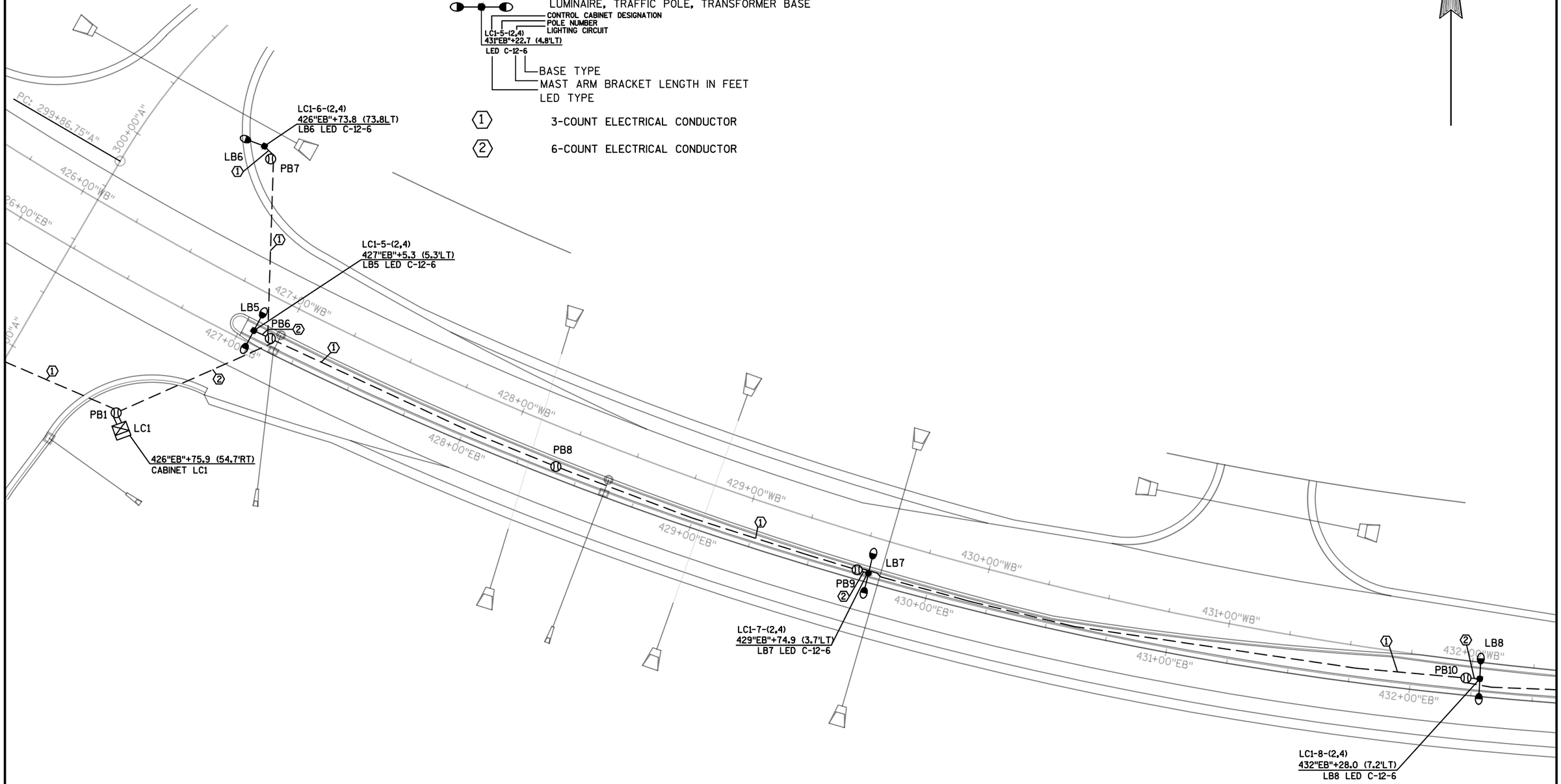
PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	LIGHTING PLAN - STH 60 INTERSECTION	SHEET 32	E

2

LEGEND

- CONTROL CABINET
- PULL BOX, 24"x42"
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
  - CONTROL CABINET DESIGNATION
  - POLE NUMBER
  - LIGHTING CIRCUIT
  - LC1-5-(2,4) 431'EB"+22.7 (4.8'LT) LED C-12-6
  - BASE TYPE
  - MAST ARM BRACKET LENGTH IN FEET
  - LED TYPE
- (1) 3-COUNT ELECTRICAL CONDUCTOR
- (2) 6-COUNT ELECTRICAL CONDUCTOR

N



PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	LIGHTING PLAN - STH 60 INTERSECTION	SHEET 33	E

2

LEGEND

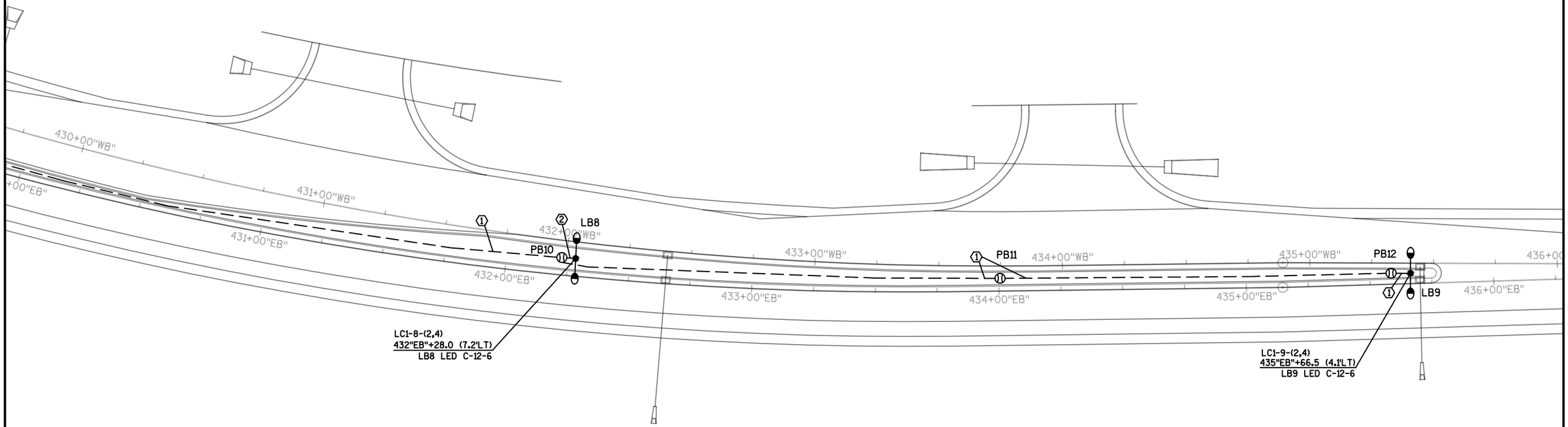
- CONTROL CABINET
- PULL BOX, 24"x42"
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE

LC1-5-(2,4)
431"EB"+22.7 (4.8'LT)
LED C-12-6

- CONTROL CABINET DESIGNATION
- POLE NUMBER
- LIGHTING CIRCUIT
- BASE TYPE
- MAST ARM BRACKET LENGTH IN FEET
- LED TYPE

- (1) 3-COUNT ELECTRICAL CONDUCTOR
- (2) 6-COUNT ELECTRICAL CONDUCTOR

N



2

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	LIGHTING PLAN - STH 60 INTERSECTION	SHEET 34	E

FILE NAME : N:\PDS\C3D\16700105\DESIGN\TRAFFIC\16700105_LIGHTING.DWG PLOT DATE : 2/13/2015 11:29 AM PLOT BY : WEBB, COLLIN J PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

CONTINUE BARRIER CENTERLINE TO MATCH EXISTING PASSING ZONE AT APPROXIMATE STATION 403+30

SAME DAY (10)

(1)

SAME DAY (3)

STA. 410+98.19
START PAINTED MEDIAN

N

PAVEMENT MARKING LEGEND

(1) EDGE MARKING - SOLID 4" WHITE EPOXY

(2) CHANNELIZING - SOLID 8" WHITE EPOXY

(3) CENTERLINE - DOUBLE SOLID 4" YELLOW EPOXY

(4) CENTERLINE - DASH 4" YELLOW EPOXY

(5) DIAGONAL MARKING - 12" YELLOW EPOXY

(6) STOP LINE - SOLID 18" WHITE EPOXY

(7) CURB MARKING - YELLOW EPOXY

(8) DOTTED EDGE EXTENSION MARKING - 8" WHITE (3' LINE, 9' GAP) EPOXY

(9) CHEVRON MARKING - 12" WHITE EPOXY

(10) BARRIER CENTERLINE - SOLID 4" YELLOW EPOXY AND DASH 4" YELLOW EPOXY

(11) ISLAND NOSE MARKING - YELLOW EPOXY

406 USH 12 408 410 410"FB" 412"WB" 412"FB" 414"WB" 414"FB" 416"WB" 416"FB" 418"WB" 418"FB" USH 12 420"WB" 420"FB"

FRONTAGE ROAD 302"A" 420"WB" USH 12 420"FB" 422"WB" 422"FB" 424"WB" 424"FB" 426"WB" 426"FB" 300"A" 428"WB" 428"FB" 430"WB" 430"FB" USH 12 432"WB" 432"FB" 434"WB" 434"FB"

STA. 421+44.22"EB", 12.0' RT
STA. 421+93.87"EB", 16.0' RT
STA. 422+05.15"EB", ON R/L
ARROWS, TYPE 2 (WHITE)

STA. 426+81.52"WB", ON R/L
STA. 428+49.53"WB"
START EDGE LINE
ARROWS, TYPE 2 (WHITE)
WORDS (WHITE)

STA. 430+29.61"WB", ON R/L

WORDS (WHITE)
STA. 425+47.07"EB", 16.0' RT
STA. 425+58.58, ON R/L

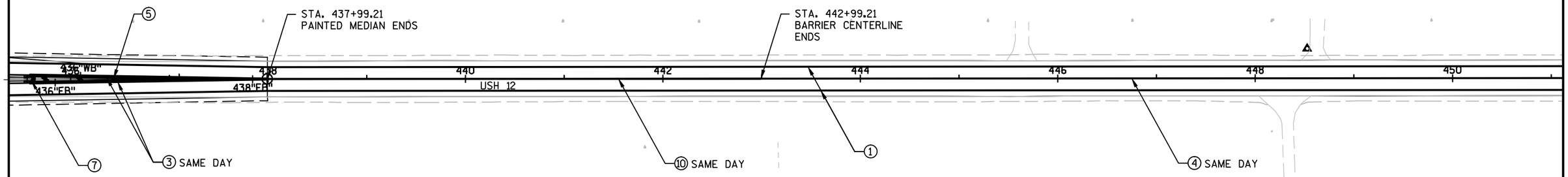
298"A" STH 60

RICHOLSON ROAD 202"RO" 198"RO"

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	PAVEMENT MARKING PLAN	SHEET 35	E

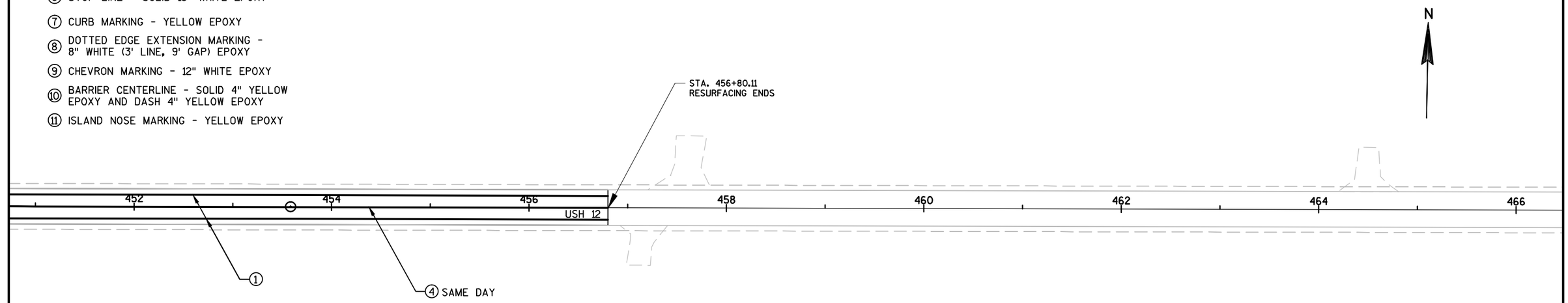
FILE NAME : N:\PDS\C3D\16700105\DESIGN\VIEWFRAMEGROUPS\020101_PM_VFG.DWG PLOT DATE : 1/29/2015 11:03 AM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

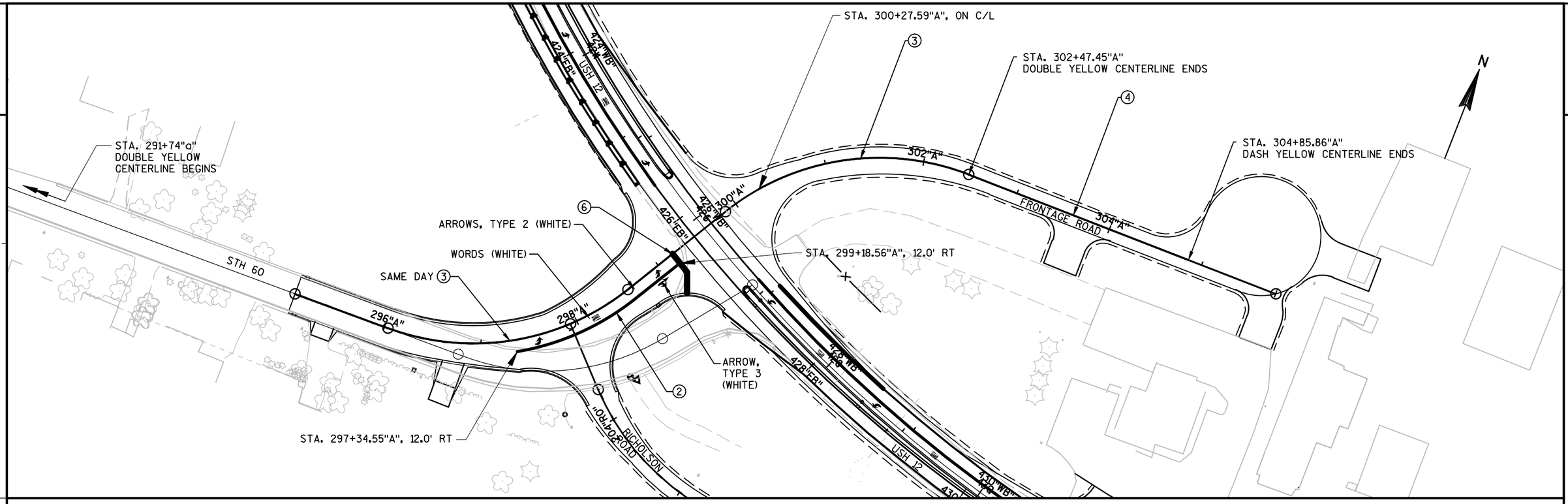


PAVEMENT MARKING LEGEND

1. EDGE MARKING - SOLID 4" WHITE EPOXY
2. CHANNELIZING - SOLID 8" WHITE EPOXY
3. CENTERLINE - DOUBLE SOLID 4" YELLOW EPOXY
4. CENTERLINE - DASH 4" YELLOW EPOXY
5. DIAGONAL MARKING - 12" YELLOW EPOXY
6. STOP LINE - SOLID 18" WHITE EPOXY
7. CURB MARKING - YELLOW EPOXY
8. DOTTED EDGE EXTENSION MARKING - 8" WHITE (3' LINE, 9' GAP) EPOXY
9. CHEVRON MARKING - 12" WHITE EPOXY
10. BARRIER CENTERLINE - SOLID 4" YELLOW EPOXY AND DASH 4" YELLOW EPOXY
11. ISLAND NOSE MARKING - YELLOW EPOXY



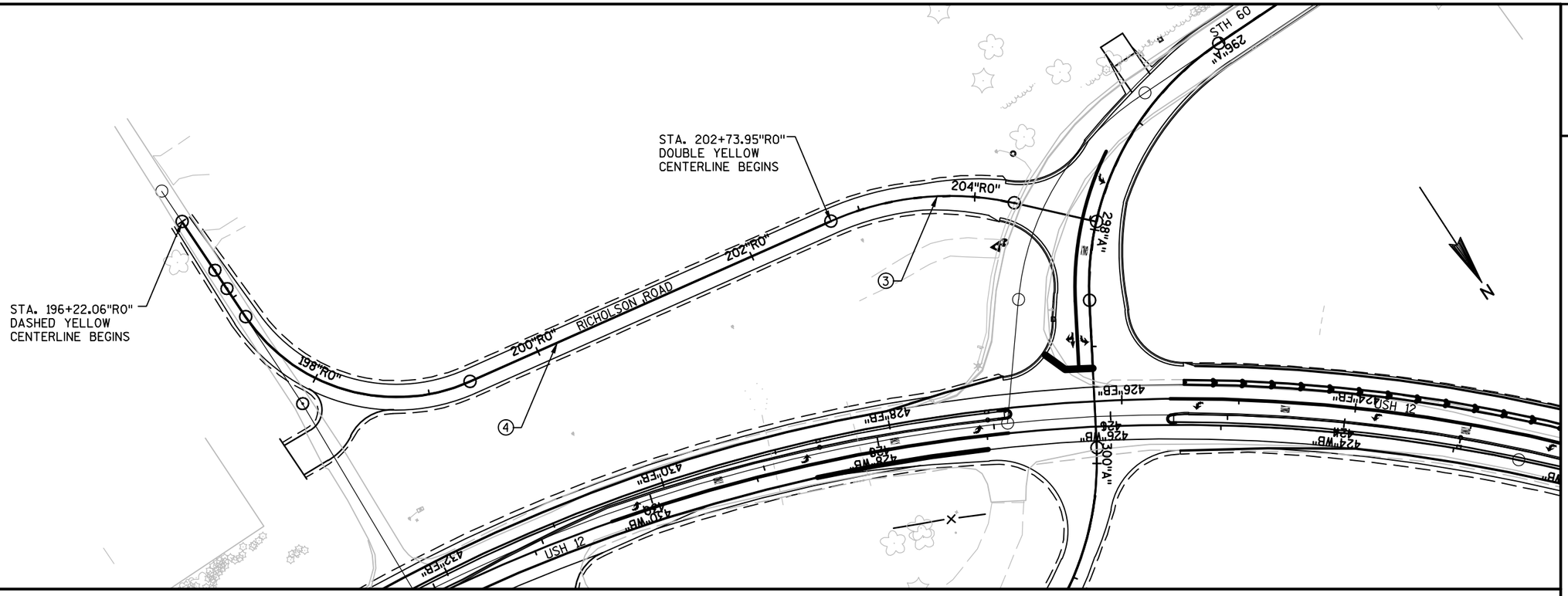
PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	PAVEMENT MARKING PLAN	SHEET 36	E



PAVEMENT MARKING LEGEND

1. EDGE MARKING - SOLID 4" WHITE EPOXY
2. CHANNELIZING - SOLID 8" WHITE EPOXY
3. CENTERLINE - DOUBLE SOLID 4" YELLOW EPOXY
4. CENTERLINE - DASH 4" YELLOW EPOXY
5. DIAGONAL MARKING - 12" YELLOW EPOXY
6. STOP LINE - SOLID 18" WHITE EPOXY
7. CURB MARKING - YELLOW EPOXY
8. DOTTED EDGE EXTENSION MARKING - 8" WHITE (3' LINE, 9' GAP) EPOXY
9. CHEVRON MARKING - 12" WHITE EPOXY
10. BARRIER CENTERLINE - SOLID 4" YELLOW EPOXY AND DASH 4" YELLOW EPOXY
11. ISLAND NOSE MARKING - YELLOW EPOXY

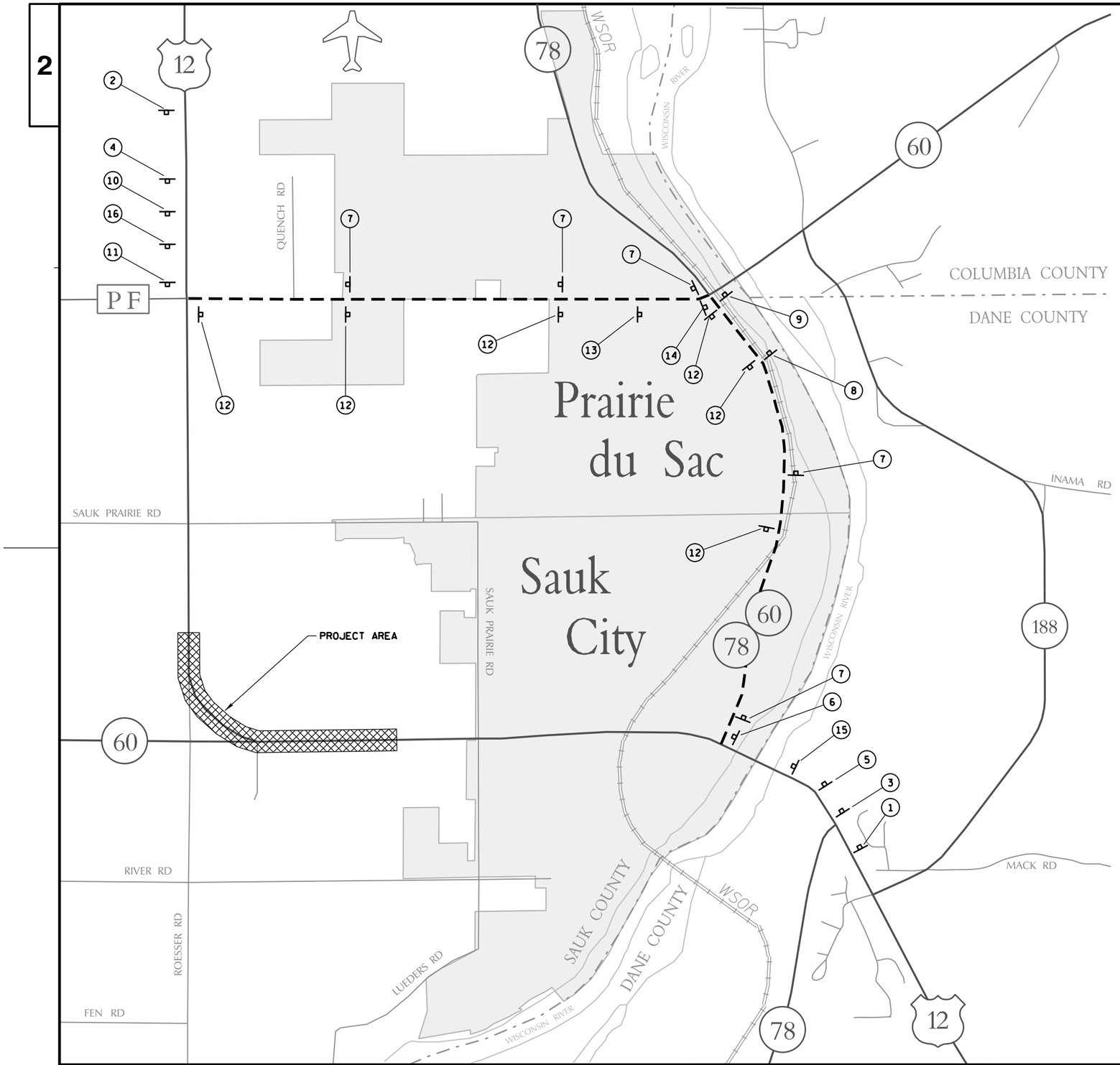
PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	PAVEMENT MARKING PLAN	SHEET 37	E



PAVEMENT MARKING LEGEND

1. EDGE MARKING - SOLID 4" WHITE EPOXY
2. CHANNELIZING - SOLID 8" WHITE EPOXY
3. CENTERLINE - DOUBLE SOLID 4" YELLOW EPOXY
4. CENTERLINE - DASH 4" YELLOW EPOXY
5. DIAGONAL MARKING - 12" YELLOW EPOXY
6. STOP LINE - SOLID 18" WHITE EPOXY
7. CURB MARKING - YELLOW EPOXY
8. DOTTED EDGE EXTENSION MARKING - 8" WHITE (3' LINE, 9' GAP) EPOXY
9. CHEVRON MARKING - 12" WHITE EPOXY
10. BARRIER CENTERLINE - SOLID 4" YELLOW EPOXY AND DASH 4" YELLOW EPOXY
11. ISLAND NOSE MARKING - YELLOW EPOXY

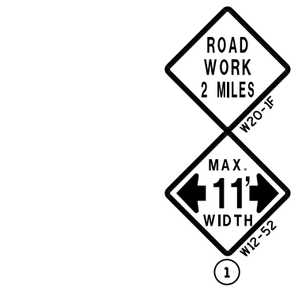
PROJECT NO:1670-01-75	HWY:USH 12	COUNTY:SAUK	PAVEMENT MARKING PLAN	SHEET 38	E

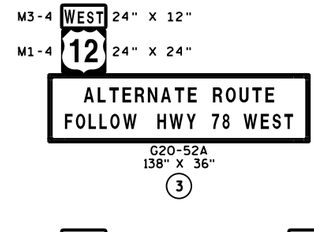


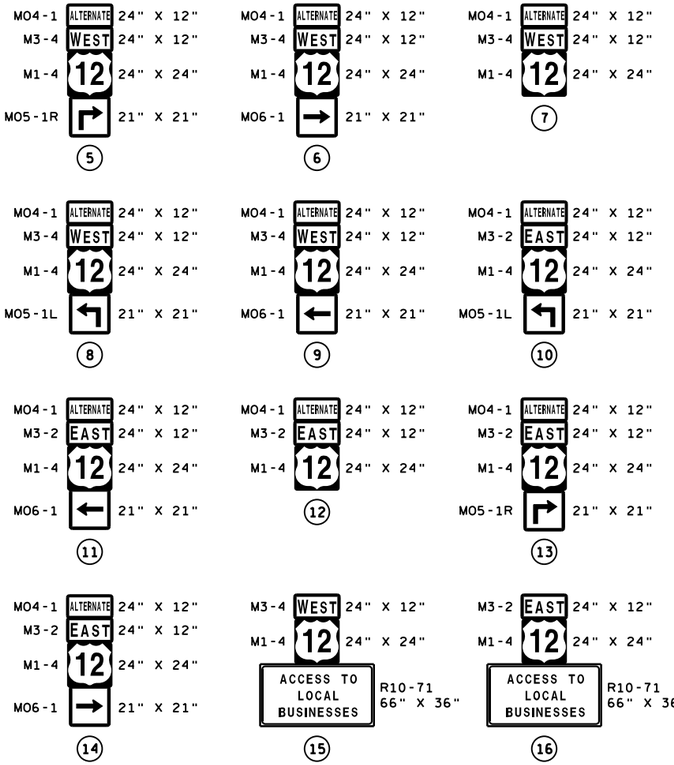
LEGEND

SIGN MOUNTED ON POST

ALTERNATE ROUTE - USH 12 EAST & WEST



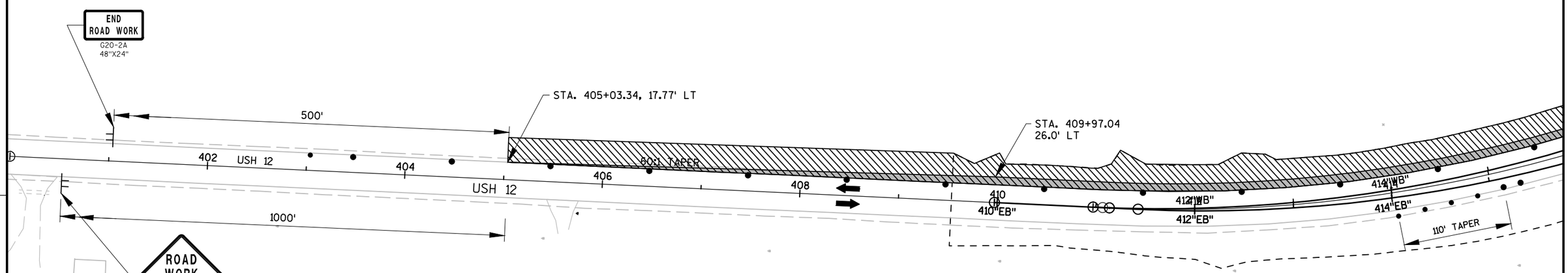




PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC CONTROL - ALTERNATE ROUTE SIGNING	SHEET 39	E

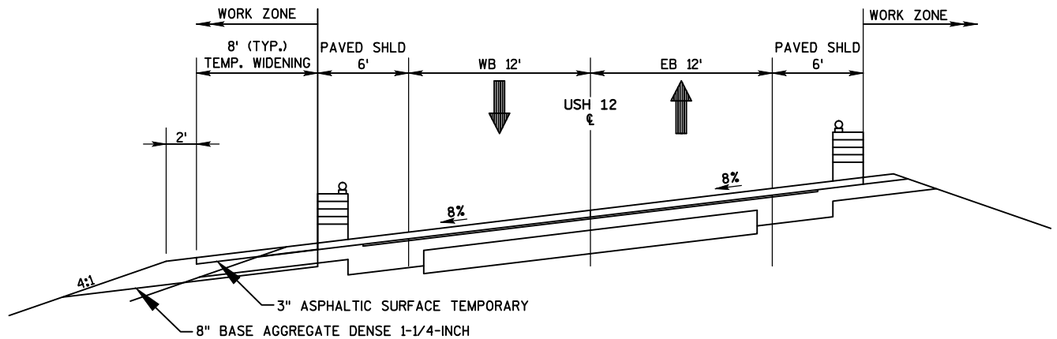
FILE NAME : N:\PDS\c3d\16700105\SheetsPlan\025001_tc.dgn PLOT DATE : 22-JAN-2015 18:01 PLOT BY : dotwow PLOT NAME : PLOT SCALE : 2000.000000:1.000000 WISDOT/CADDS SHEET 42

2



LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC



STAGE 1 TYPICAL - USH 12

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 1	SHEET 40	E

2

2

STA. 418+96.95, 26.0' LT

STA. 419+65.08, 26.0' LT

STA. 420+41 LT & RT
136'-PIPE CULVERT TEMPORARY 24-INCH
LAY IN FLOWLINE OF CATTLE PASS
SEALING PIPES - D/S END OF CATTLE PASS

STA. 425+51.72, 26.0' LT

STA. 428+21.75
26.0' LT

335' BUFFER SPACE

416"WB"
416"EB"
418"WB"
418"EB"
420"WB"
420"EB"
422"WB"
422"EB"
424"WB"
424"EB"
426"WB"
426"EB"
428"WB"
428"EB"
430"EB"
432"WB"

304"A"
302"A"
298"A"
298"D"
296"A"
202"RO"
204"RO"
200"RO"

100'

STH 60

N

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 1	SHEET 41	E

FILE NAME : N:\PDS\C3D\16700105\DESIGN\VIEWFRAMEGROUPS\020201_STAGE_VFG.DWG PLOT DATE : 2/11/2015 1:28 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

STA. 433+88.53, 26.0' LT

MAINTAIN COMMERCIAL ENTRANCE IN EXISTING CONFIGURATION UNTIL COMPLETION OF FRONTAGE ROAD

STA. 438+00.00, 26.0' LT

STA. 442+66.27, 18.23' LT

335' BUFFER AREA

110'

60:1 TAPER

USH 12

432"WB"

432

434"WB"

434"EB"

436"WB"

436

436"EB"

438

438"EB"

440

442

444

446

432"EB"

20'

RICHOLSON ROAD

198'10"

198'-0"

350'

196'10"

ROAD WORK AHEAD

W20-1-A

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 1	SHEET 42	E

2

N

SHOULDER WORK
W21-5

500'

1500'

ROAD WORK AHEAD
W20-1-A

448 450 452 454 456 458 460 462

USH 12

END ROAD WORK
G20-2A
48"X24"

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC

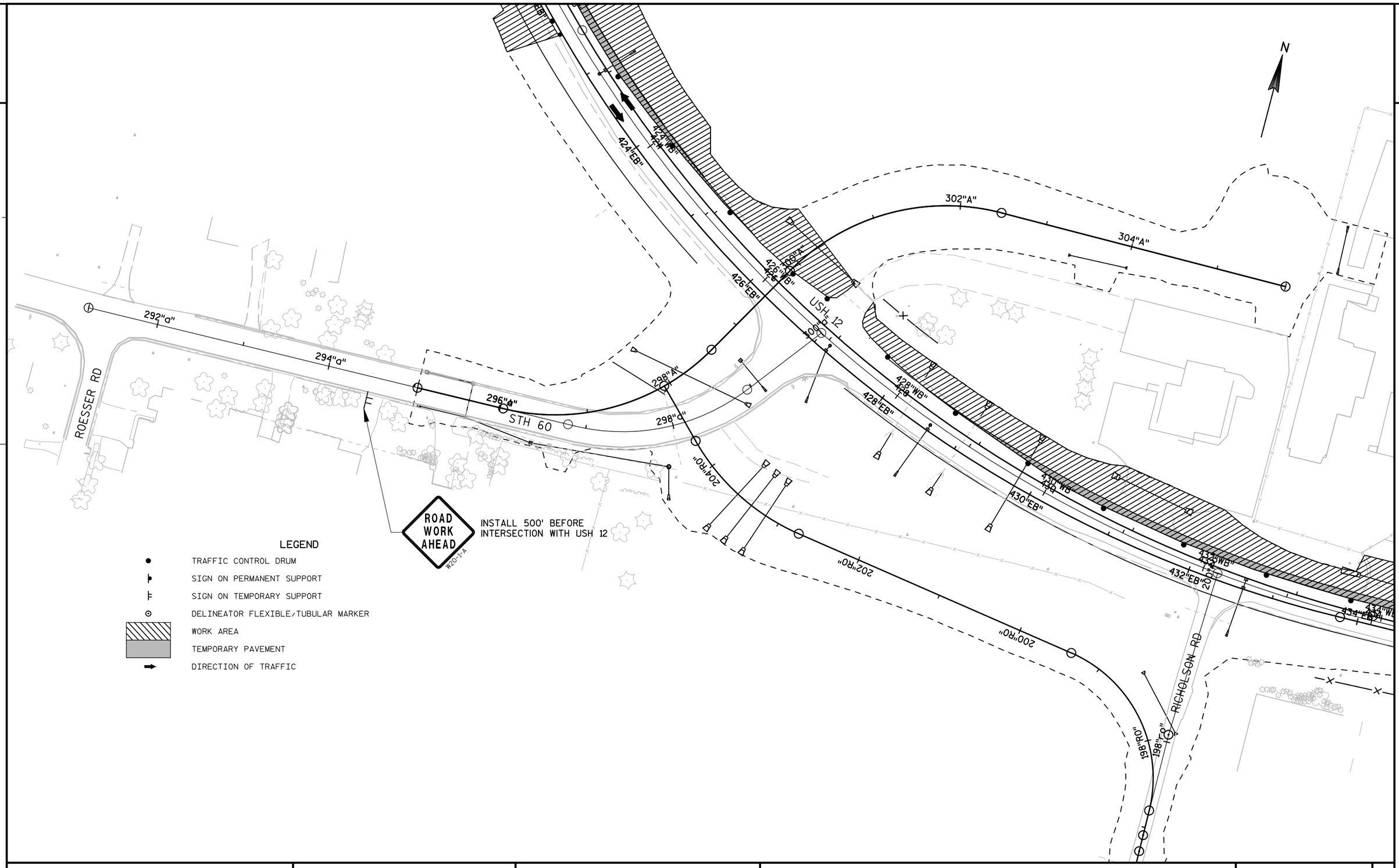
PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 1	SHEET 43	E

FILE NAME : N:\PDS\C3D\16700105\DESIGN\VIEWFRAMEGROUPS\020201_STAGE_VFG.DWG
LAYOUT NAME - 026004_S1

PLOT DATE : 2/11/2015 1:28 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

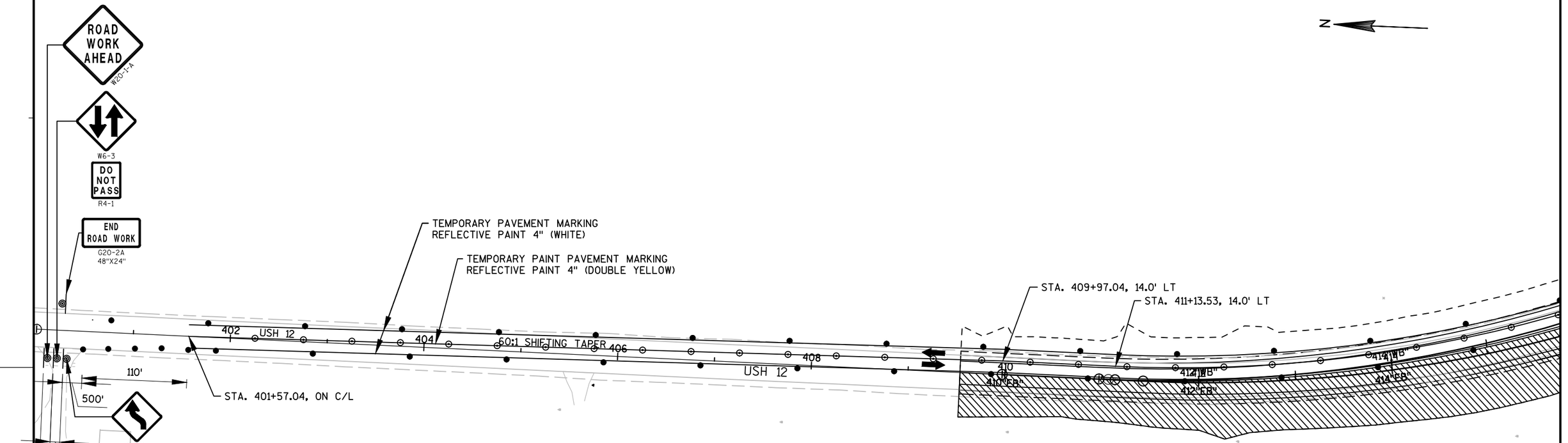
2



PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 1	SHEET 44	E

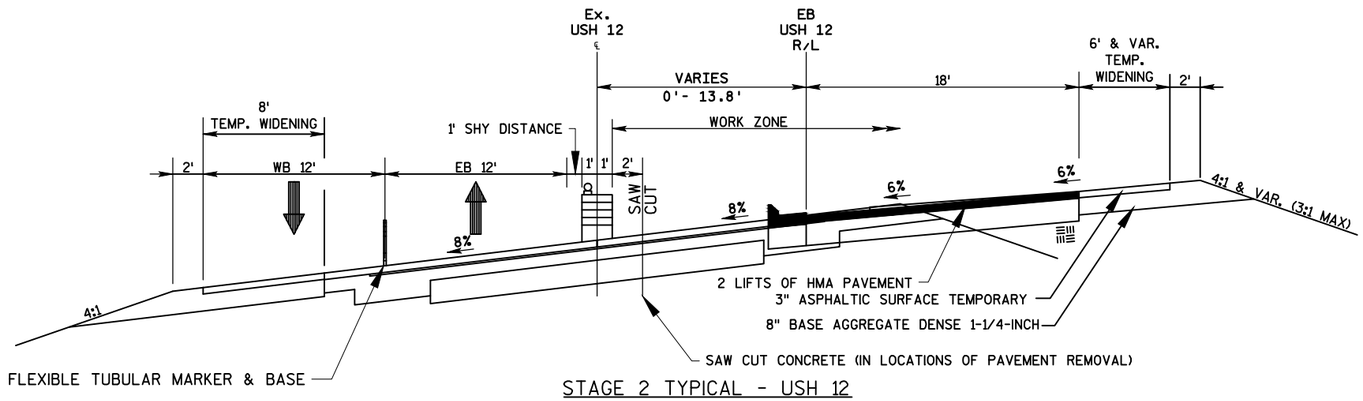
FILE NAME : N:\PDS\C3D\16700105\DESIGN\VIEWFRAMEGROUPS\020201_STAGE_VFG.DWG
LAYOUT NAME - 026011_S1
PLOT DATE : 2/13/2015 8:15 AM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



LEGEND

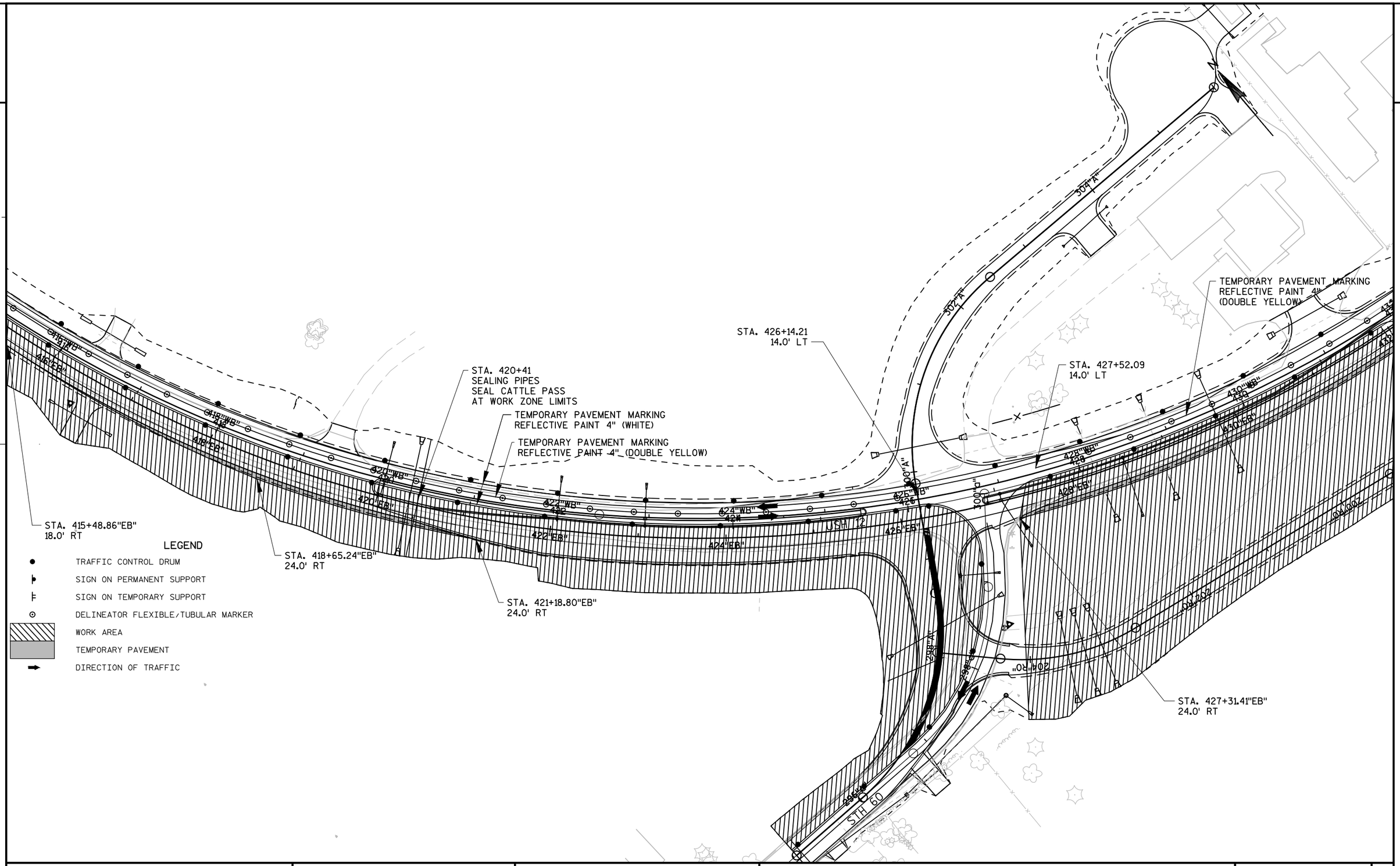
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC



STAGE 2 TYPICAL - USH 12

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 2	SHEET 45	E

2



PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 2	SHEET 46	E

2

N

STA. 433+88.53
14.0' LT

STA. 438+00.0
14.0' LT

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT 4" (WHITE)

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT 4" (DOUBLE YELLOW)

STA. 446+40.0
ON C/L

433"WB"
433"EB"
434"WB"
434"EB"
436"WB"
436"EB"
438
438"EB"
440
442
60:1 SHIFTING TAPER
444
446
USH 12

60:1 TAPER

STA. 433+80.01"EB"
24.0' RT

STA. 438+14.89"EB"
24.0' RT

STA. 441+52.44
17.9' RT

RICHOLSON RD

350'

198'

198'

ROAD
WORK
AHEAD
W20-1-A

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 2	SHEET 47	E

FILE NAME : N:\PDS\C3D\16700105\DESIGN\VIEWFRAMEGROUPS\020201_STAGE_VFG.DWG PLOT DATE : 2/11/2015 1:29 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

110'

500'

400'

1100'

448 450 452 454 456 458 460 462

USH 12

W1-4R

END ROAD WORK
G20-2A
48"X24"

W6-3
DO NOT PASS
R4-1

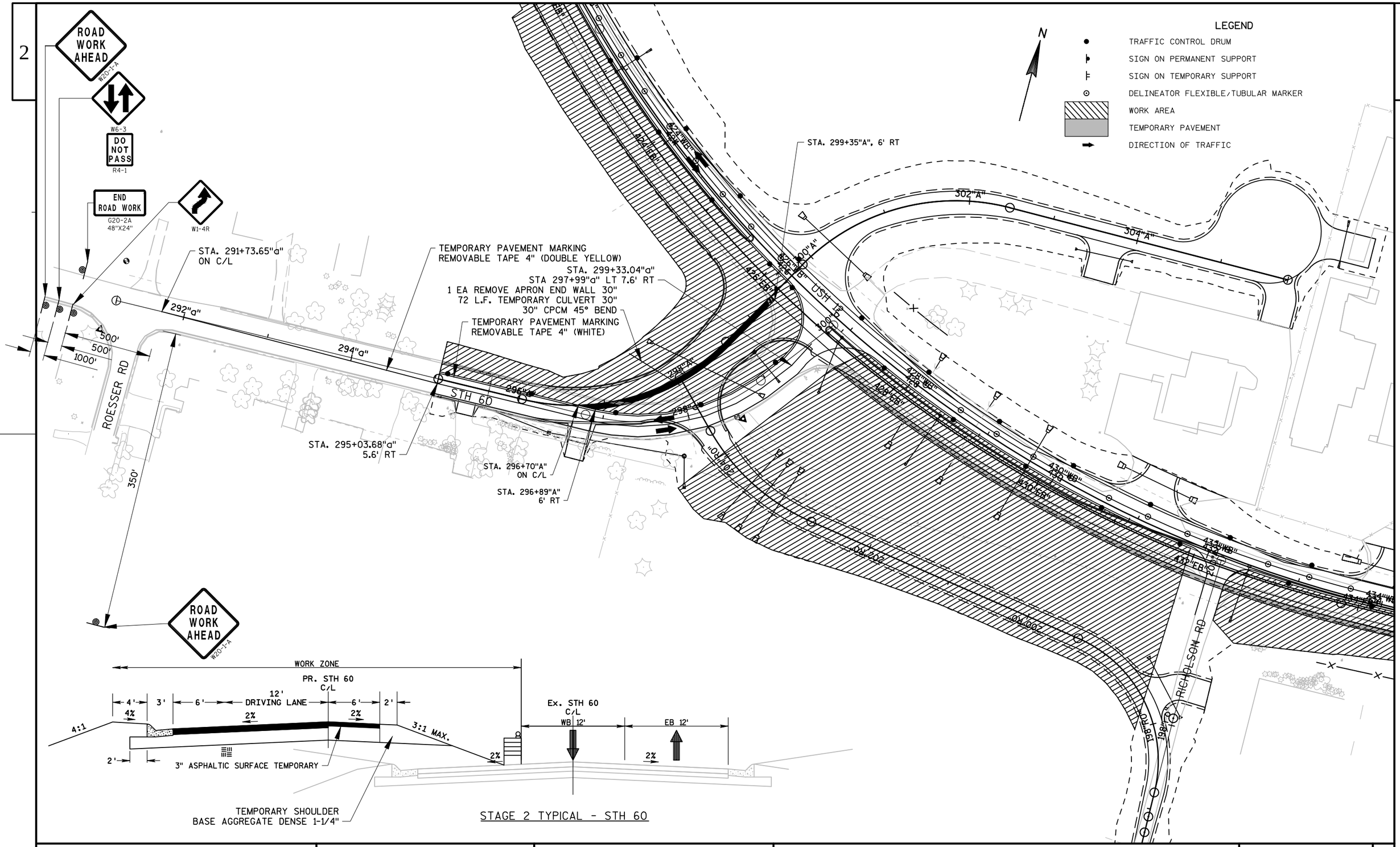
ROAD WORK AHEAD
W20-1-4

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC

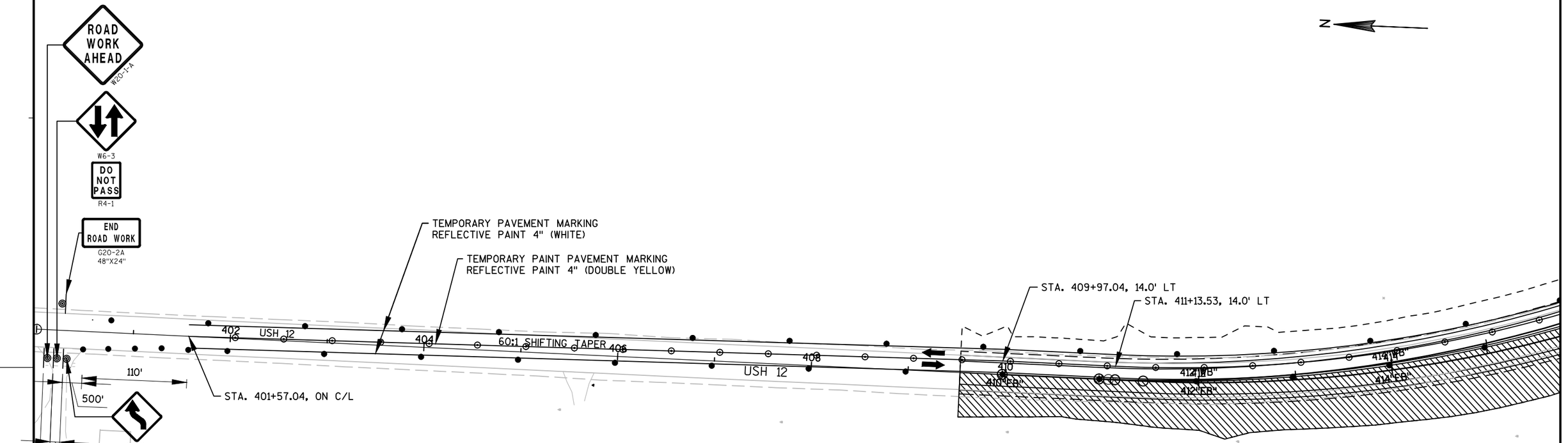
PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 2	SHEET 48	E

FILE NAME : N:\PDS\C3D\16700105\DESIGN\VIEWFRAMEGROUPS\020201_STAGE_VFG.DWG
LAYOUT NAME - 026004_S2
PLOT DATE : 2/11/2015 1:30 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



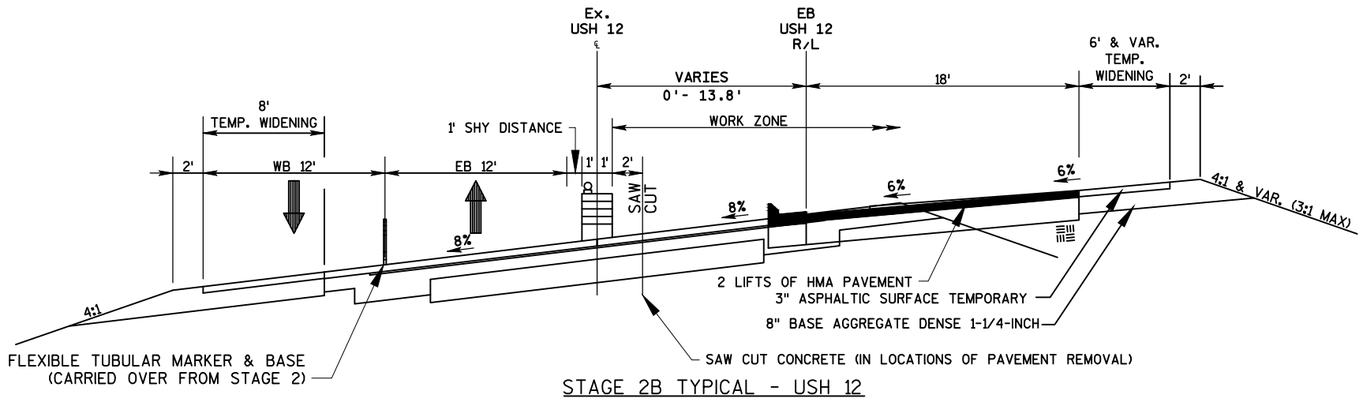
PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 2	SHEET 49	E

2



LEGEND

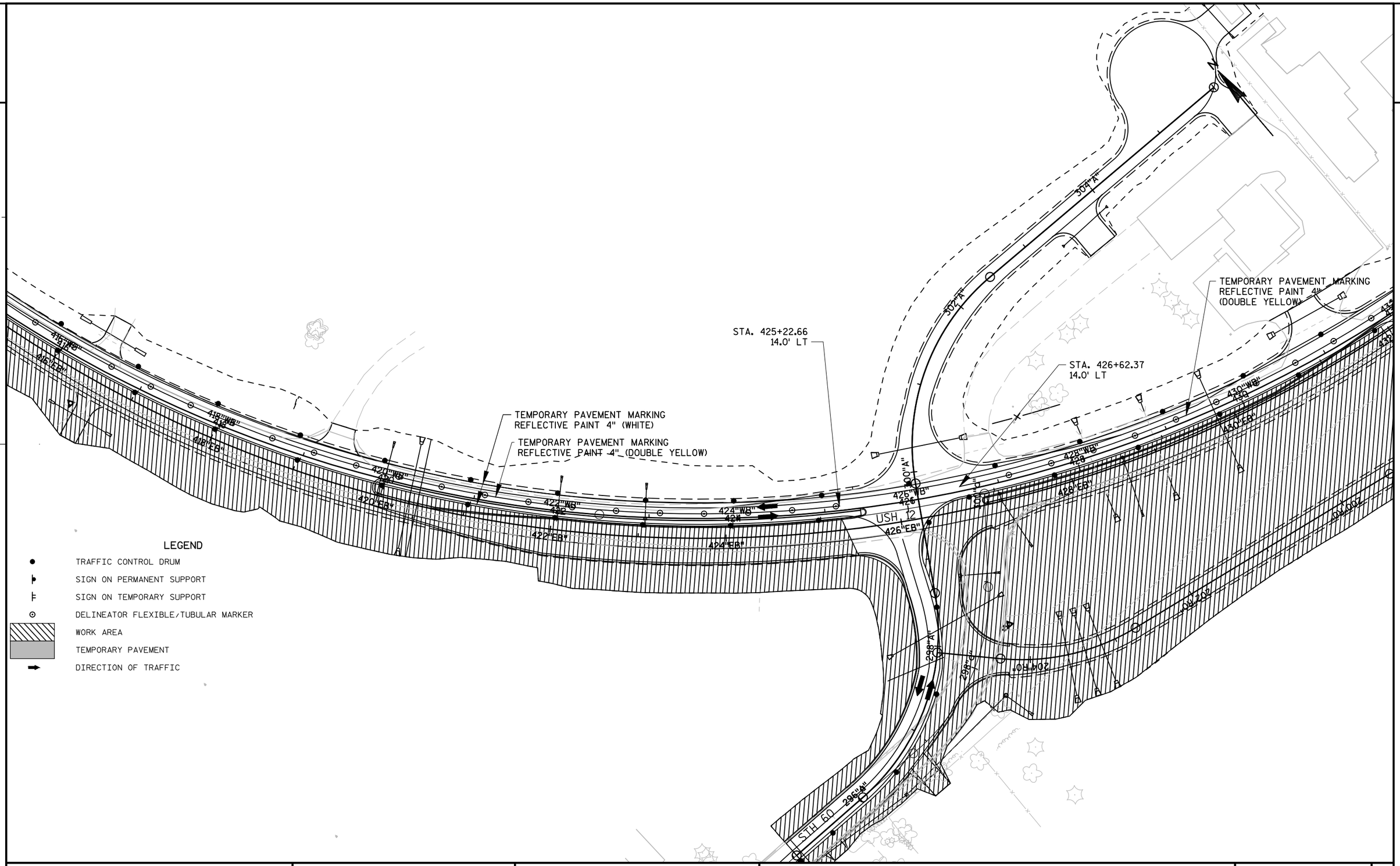
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC



STAGE 2B TYPICAL - USH 12

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 2B	SHEET 50	E

2



PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 2B	SHEET 51	E

2

N

STA. 433+88.53
14.0' LT

STA. 438+00.0
14.0' LT

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT 4" (WHITE)

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT 4" (DOUBLE YELLOW)

STA. 446+40.0
ON C/L

60:1 SHIFTING TAPER

USH 12

RICHOLSON RD

350'

198'

ROAD
WORK
AHEAD
W20-1-A

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 2B	SHEET 52	E

2

2

N

110'

500'

400'

1100'

448

450

452

454

456

458

460

462

USH 12

W1-4R

END ROAD WORK

G20-2A

48"X24"

W6-3

DO NOT PASS

R4-1

ROAD WORK AHEAD

W20-1-A

LEGEND

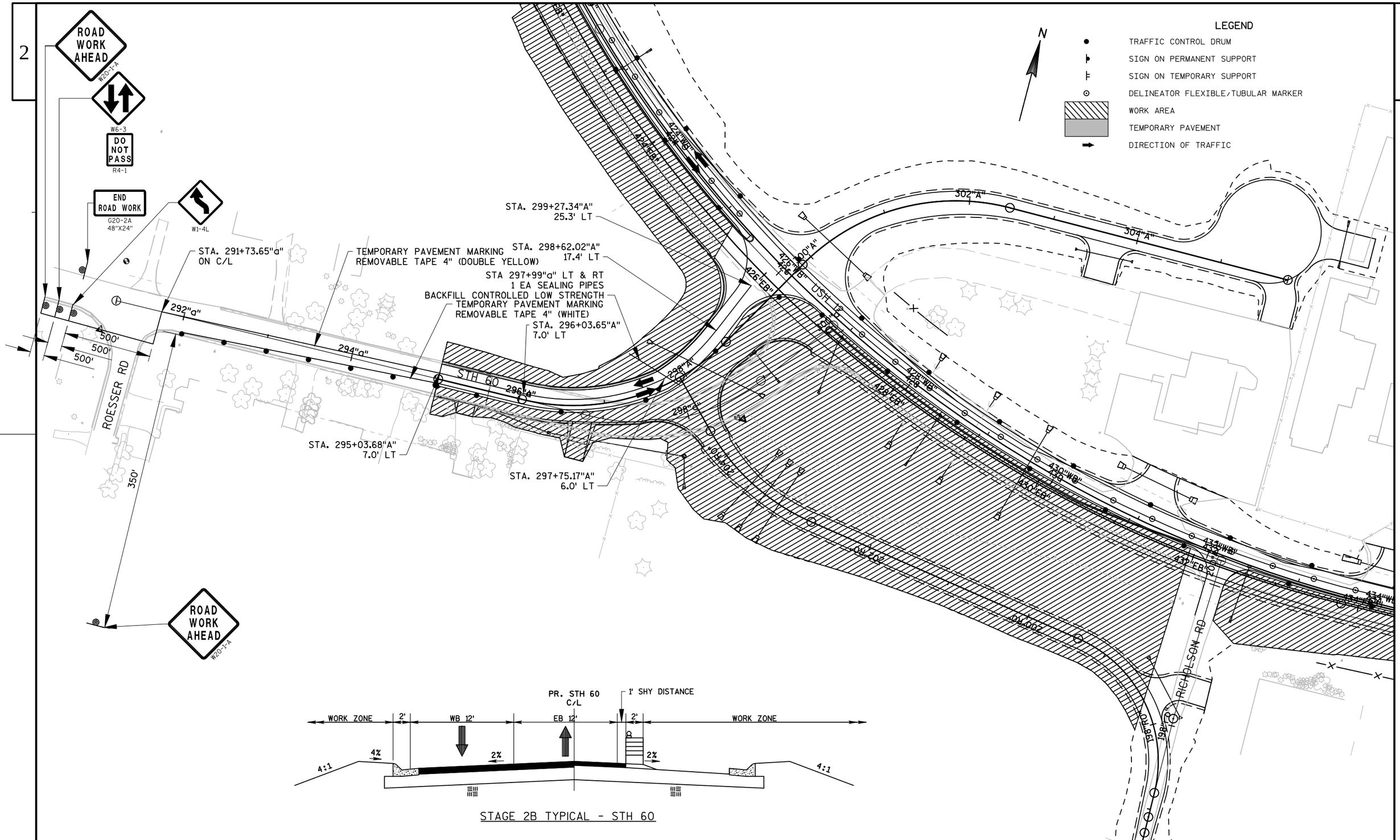
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 2B	SHEET 53	E

FILE NAME : N:\PDS\C3D\16700105\DESIGN\VIEWFRAMEGROUPS\020201_STAGE_VFG.DWG
LAYOUT NAME - 026004_S2B

PLOT DATE : 2/11/2015 1:31 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

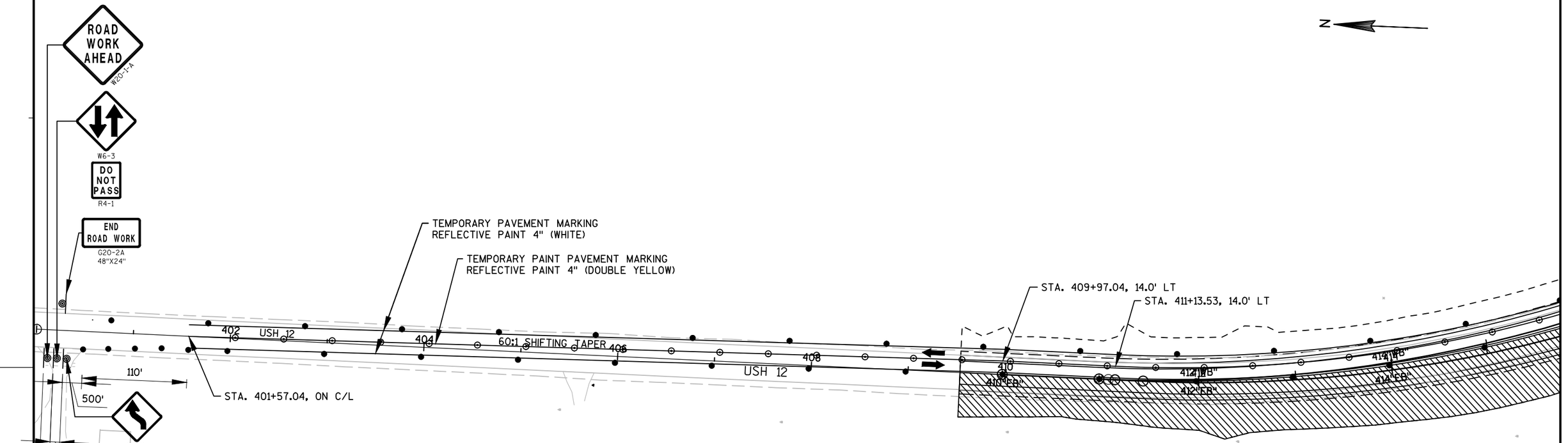


STAGE 2B TYPICAL - STH 60

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 2B	SHEET 54	E

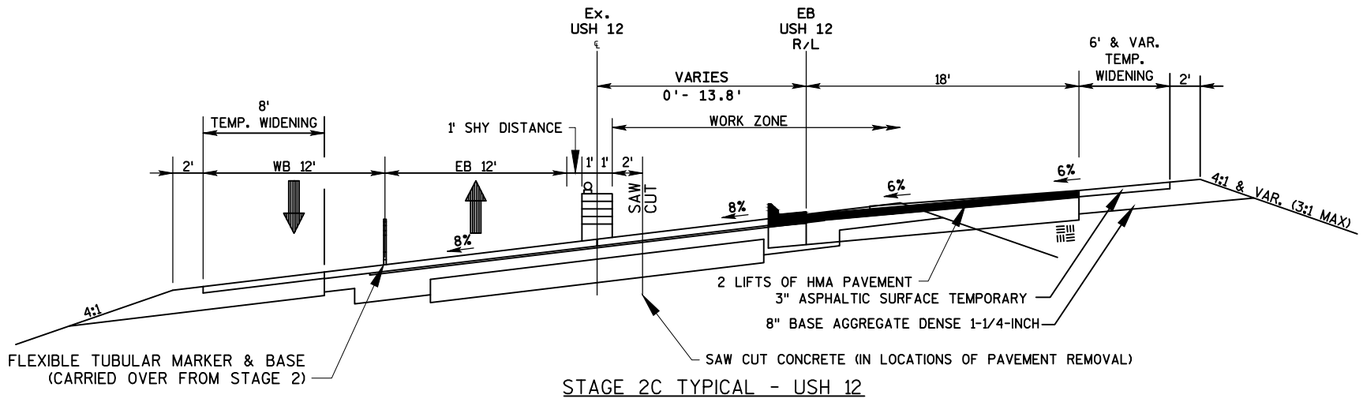
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LAYOUT NAME - 026011_S2B
PLOT DATE : 2/13/2015 8:15 AM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



LEGEND

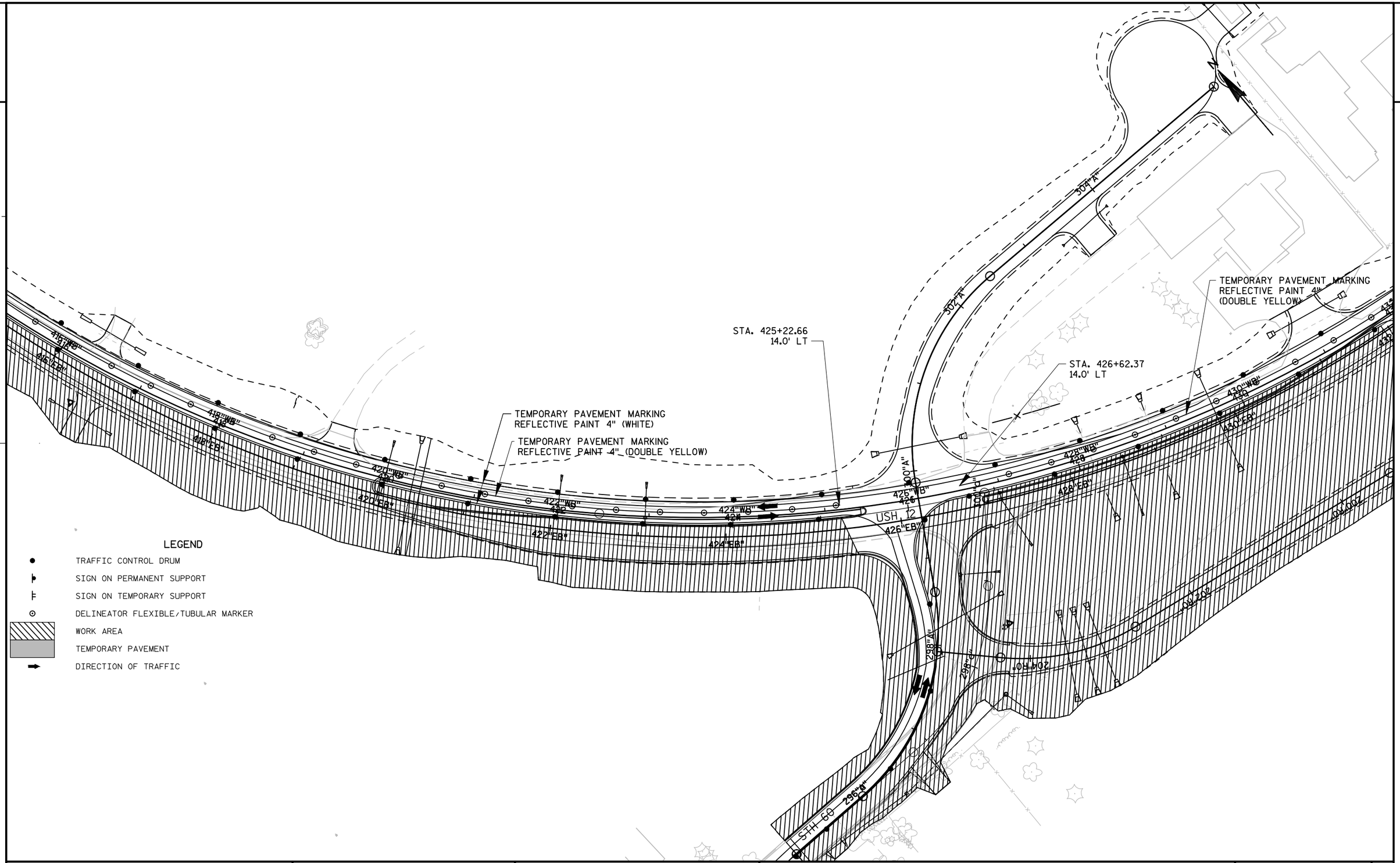
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC



STAGE 2C TYPICAL - USH 12

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 2C	SHEET 55	E

2



PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 2C	SHEET 56	E

2

N

STA. 433+88.53
14.0' LT

STA. 438+00.0
14.0' LT

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT 4" (WHITE)

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT 4" (DOUBLE YELLOW)

STA. 446+40.0
ON C/L

60:1 SHIFTING TAPER

USH 12

433'WB'
433'WB'
431'FB'
434'WB'
434'WB'
436'WB'
436'FB'
438'FB'
438
440
442
444
446

RICHOLSON RD

200'
350'
198'
198'
198'

ROAD
WORK
AHEAD
W20-1-A

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 2C	SHEET 57	E

2

2

N

110'

500'

400'

1100'

448

450

452

454

456

458

460

462

USH 12

W1-4R

END ROAD WORK

G20-2A
48"X24"

W6-3

DO NOT PASS

R4-1

ROAD WORK AHEAD

W20-1-A

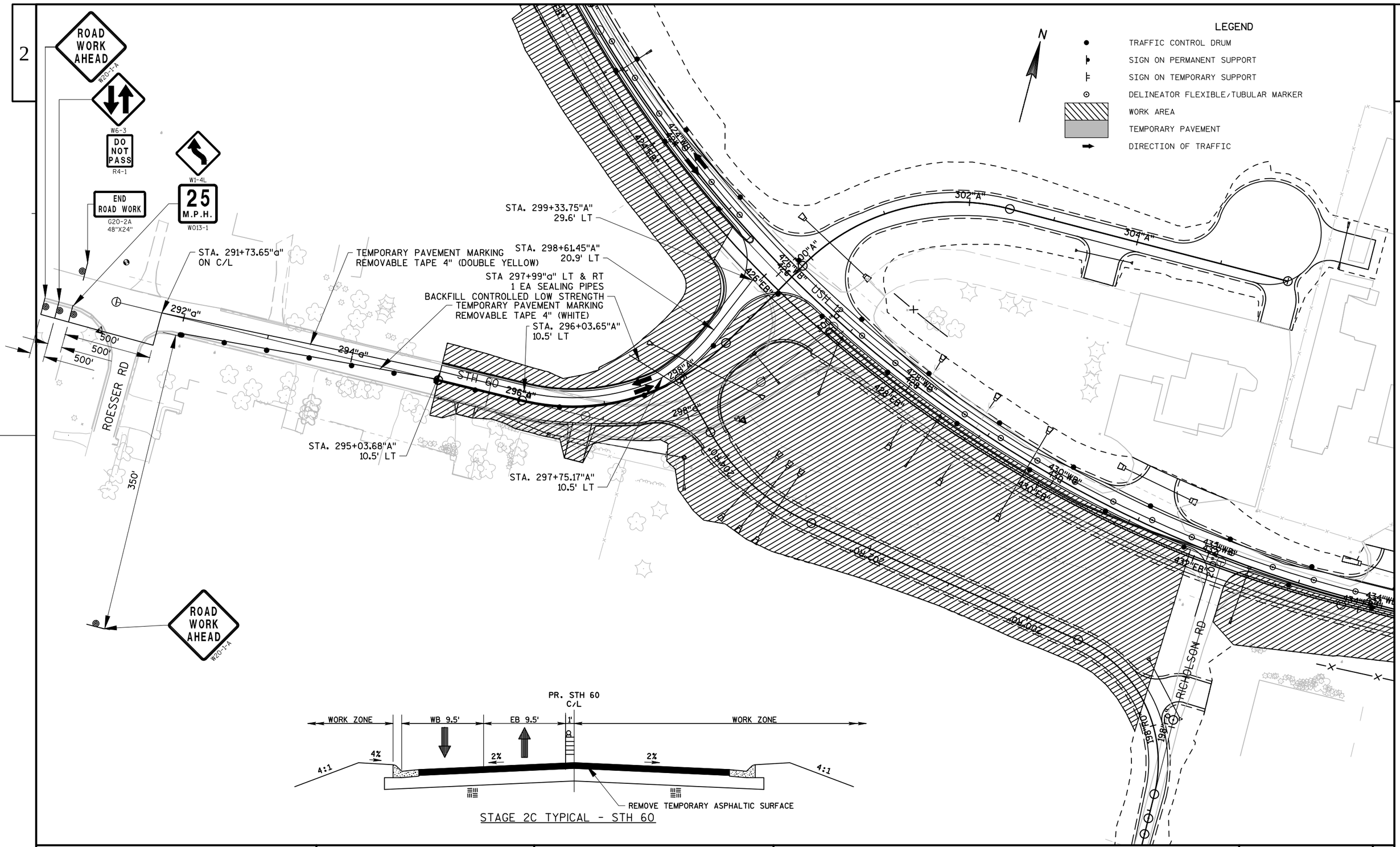
LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 2C	SHEET 58	E

FILE NAME : N:\PDS\C3D\16700105\DESIGN\VIEWFRAMEGROUPS\020201_STAGE_VFG.DWG
LAYOUT NAME - 026004_S2C

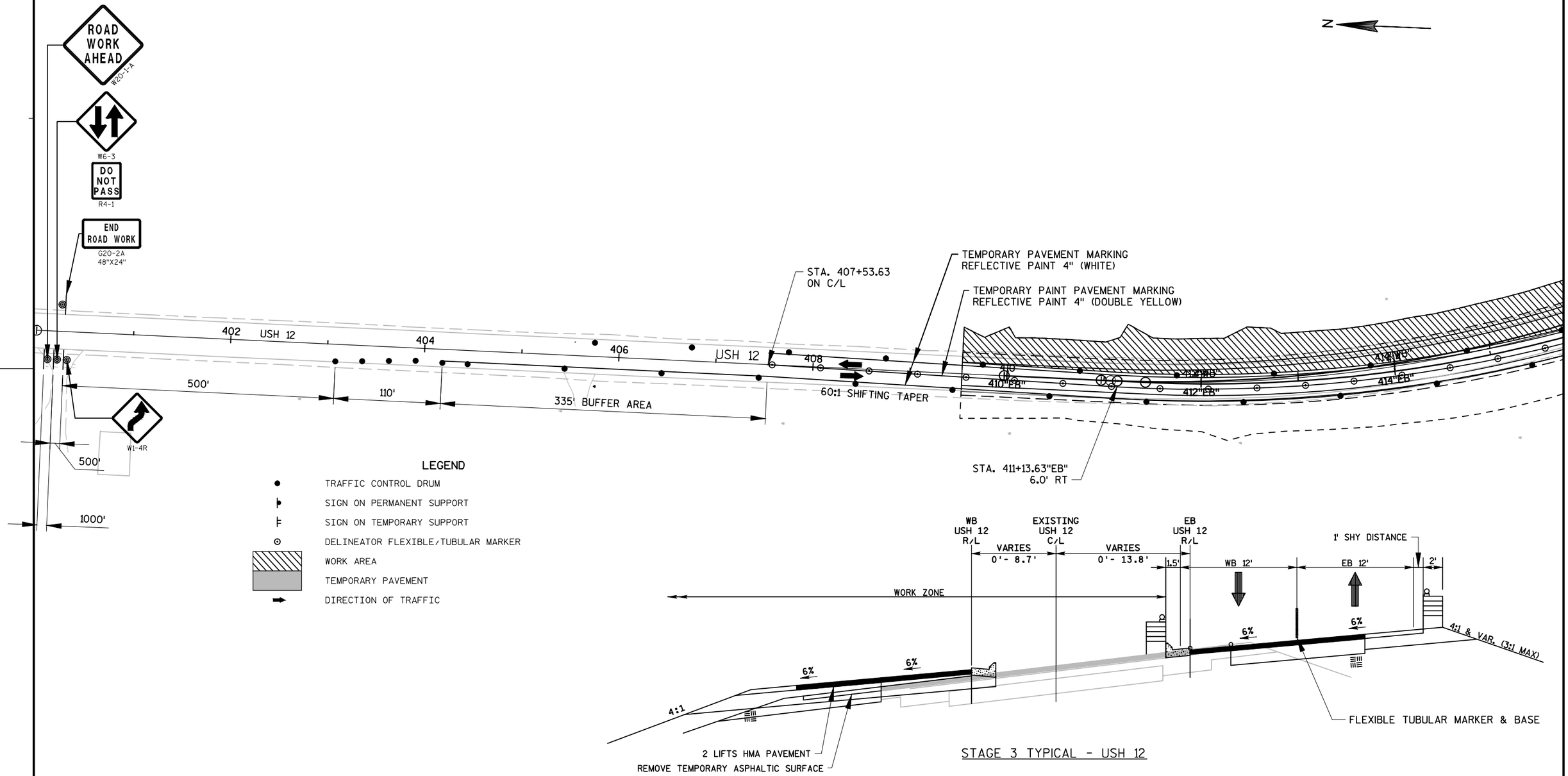
PLOT DATE : 2/11/2015 1:33 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:100 FT



STAGE 2C TYPICAL - STH 60

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 2C	SHEET 59	E

2



STAGE 3 TYPICAL - USH 12

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 3	SHEET 60	E

FILE NAME : N:\PDS\C3D\16700105\DESIGN\VIEWFRAMEGROUPS\020201_STAGE_VFG.DWG PLOT DATE : 2/11/2015 1:34 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

STA 420+41 LT & RT
SEAL TEMPORARY CULVERT AFTER COMPLETION OF NEW CULVERT
FILL WITH BACKFILL CONTROLLED LOW STRENGTH

STA. 418+65.24"EB"
11.0' RT

STA. 425+47.26"EB"
11.0' RT

STA. 426+99.15"EB"
11.0' RT

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT 4" (DOUBLE YELLOW)

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT 4" (WHITE)

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT 4" (DOUBLE YELLOW)

USH 12

STH 60

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 3	SHEET 61	E

FILE NAME : N:\PDS\C3D\16700105\DESIGN\VIEWFRAMEGROUPS\020201_STAGE_VFG.DWG PLOT DATE : 2/11/2015 1:34 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT 4" (WHITE)

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT 4" (DOUBLE YELLOW)

335' BUFFER AREA

110'

432"EB"

434"WB"

434"EB"

436"WB"

436"EB"

438"EB"

440

442

444

446

USH 12

60:1 SHIFTING TAPER

STA. 435+14.78"EB"
11.0' RT

STA. 433+80.01"EB"
11.0' RT

STA. 438+14.89"EB"
11.0' RT

STA. 445+19.21
ON C/L

RICHOLSON RD

COORDINATE WITH PROPERTY OWNERS
ALONG RICHOLSON ROAD TO MAINTAIN
ACCESS AS TRAFFIC IS SHIFTED FROM
THE OLD ALIGNMENT TO THE NEW ALIGNMENT

196'±

100'

ROAD
WORK
AHEAD
W20-1-A

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 3	SHEET 62	E

2

2

N

ROAD WORK AHEAD
W20-1-A

500'

500'

1000'

448 450 452 454 456 458 460 462

USH 12

W1-4L

END ROAD WORK
G20-2A
48"X24"

W6-3

DO NOT PASS
R4-1

LEGEND

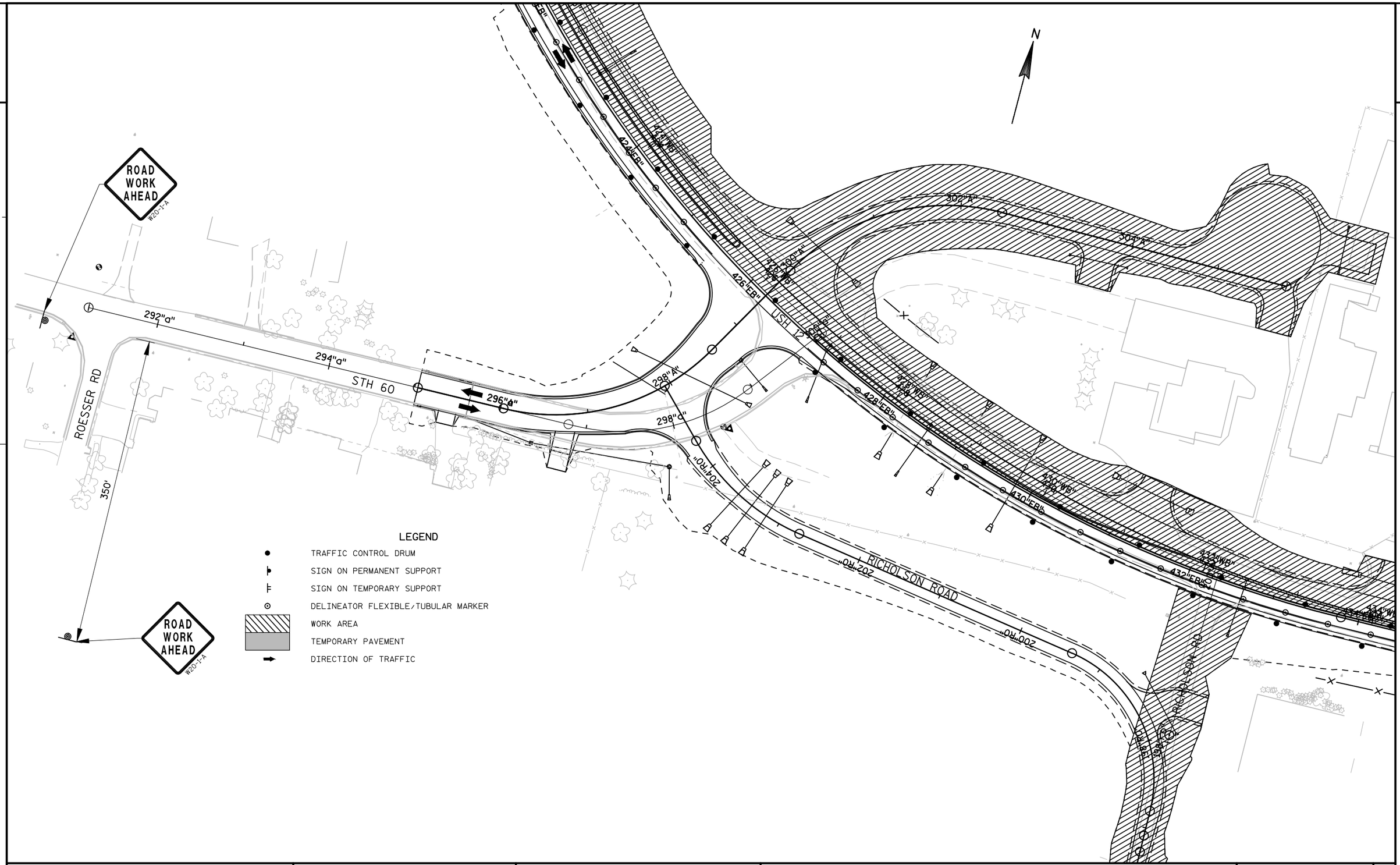
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 3	SHEET 63	E

FILE NAME : N:\PDS\C3D\16700105\DESIGN\VIEWFRAMEGROUPS\020201_STAGE_VFG.DWG
LAYOUT NAME - 026004_S3

PLOT DATE : 2/11/2015 1:34 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

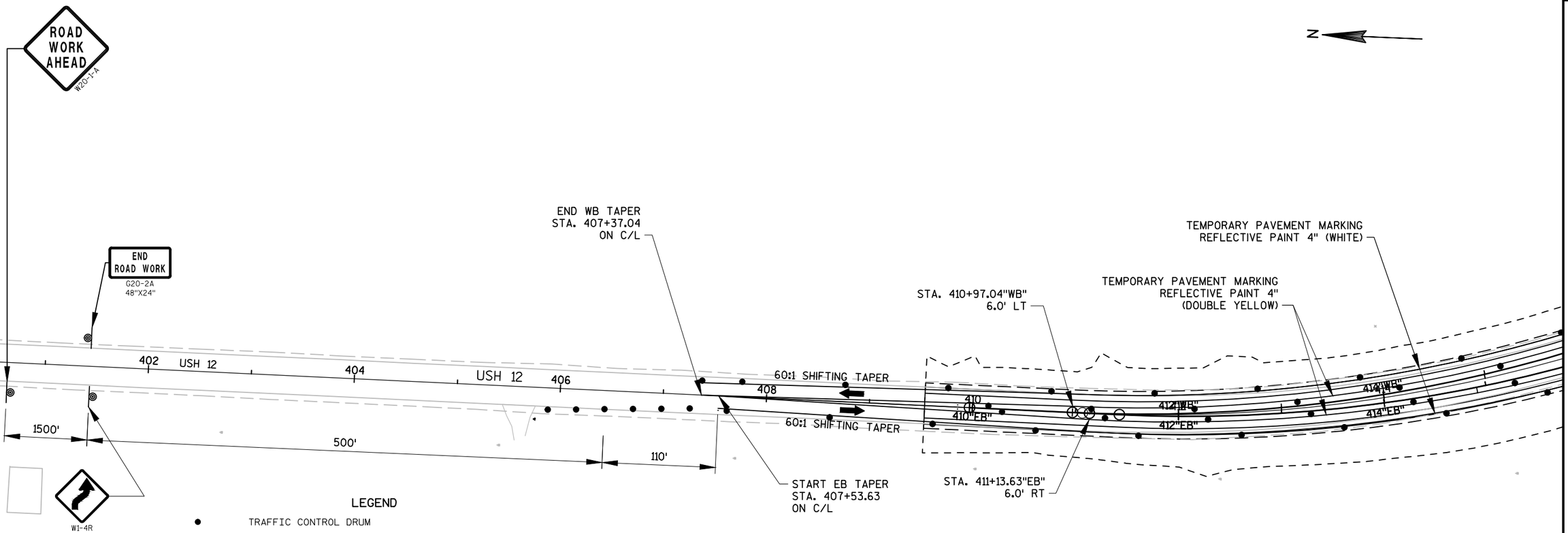


PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 3	SHEET 64	E

FILE NAME : N:\PDS\C3D\16700105\DESIGN\VIEWFRAMEGROUPS\020201_STAGE_VFG.DWG
LAYOUT NAME - 0260011_S3

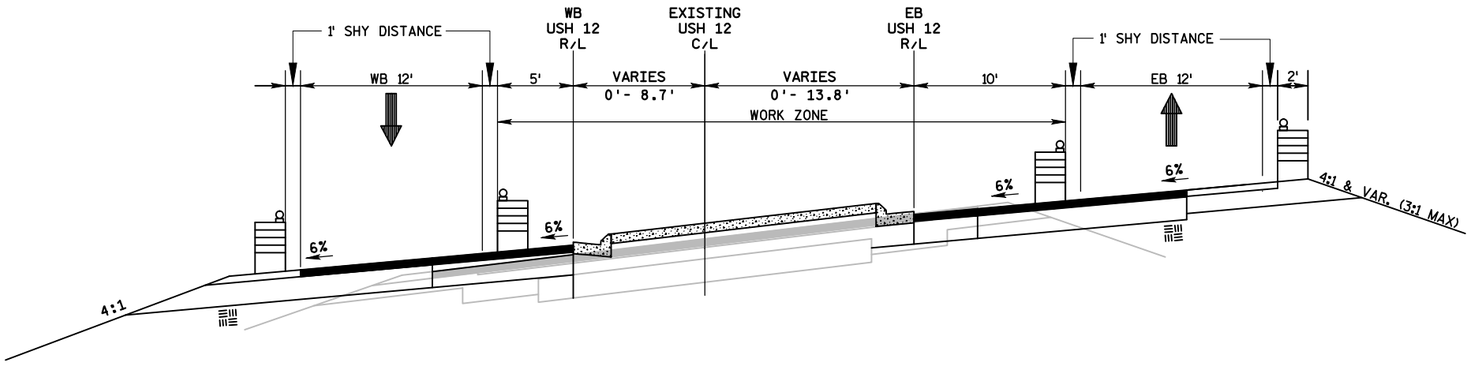
PLOT DATE : 2/13/2015 8:16 AM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



LEGEND

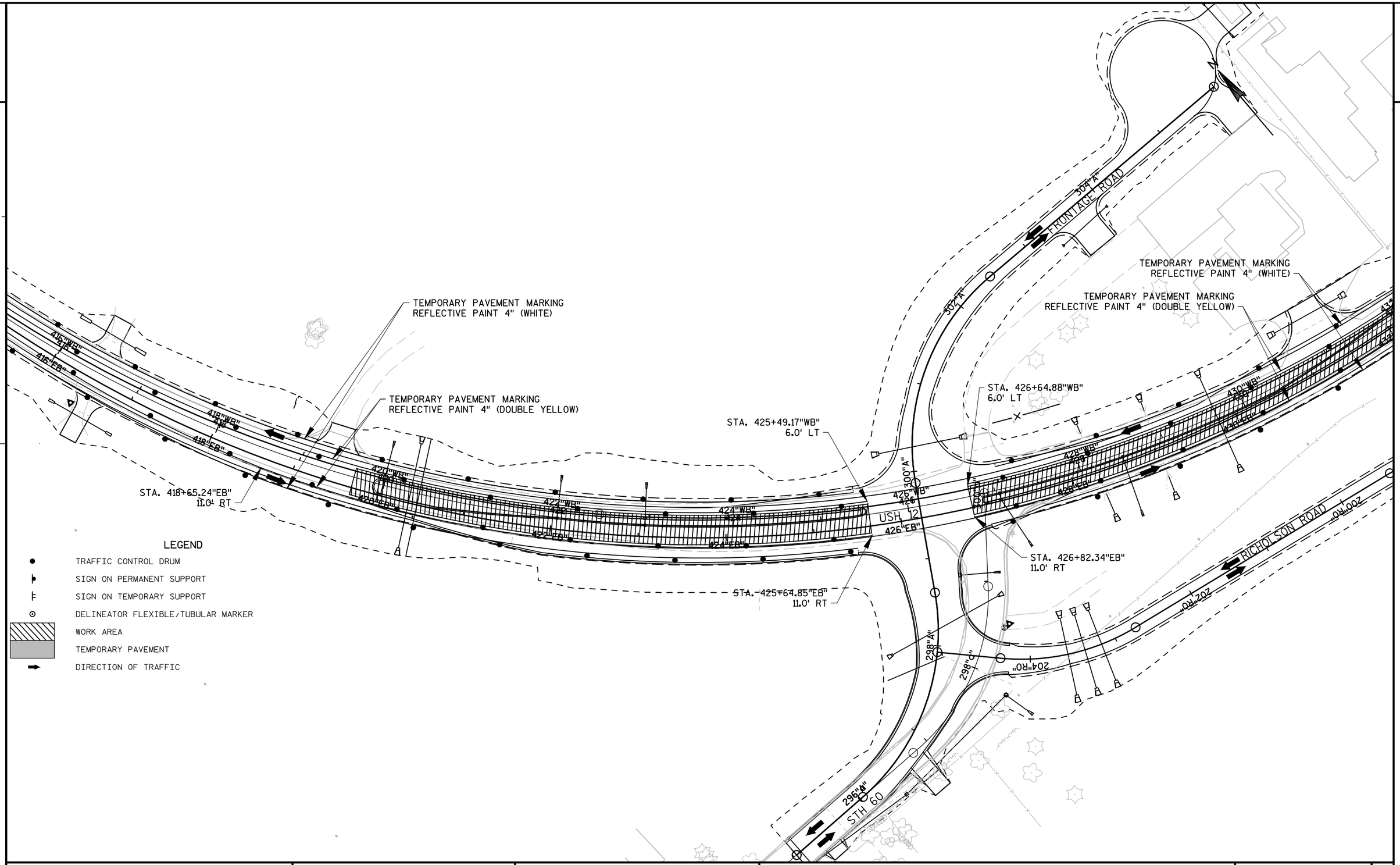
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC



STAGE 4 TYPICAL - USH 12

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 4	SHEET 65	E

2



PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 4	SHEET 66	E

2

2

N

STA. 434+89.16"WB"
6.0' LT

STA. 433+89.98"WB"
6.0' LT

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT 4" (WHITE)

TEMPORARY PAVEMENT MARKING
REFLECTIVE PAINT 4" (DOUBLE YELLOW)

END WB TAPER
STA. 441+59.41
ON C/L

110'

60:1 SHIFTING TAPER

433"WB"
434"WB"
436"WB"
438
438"EB"
436"EB"
434"EB"
432"EB"
440
442
444
446
USH 12

60:1 SHIFTING TAPER

STA. 433+80.01"EB"
11.0' RT

SIA. 435+14.77"EB"
11.0' RT

END EB TAPER
STA. 445+19.21
ON C/L

195'TYP

195'TYP

100'

ROAD
WORK
AHEAD
W20-1-A

LEGEND

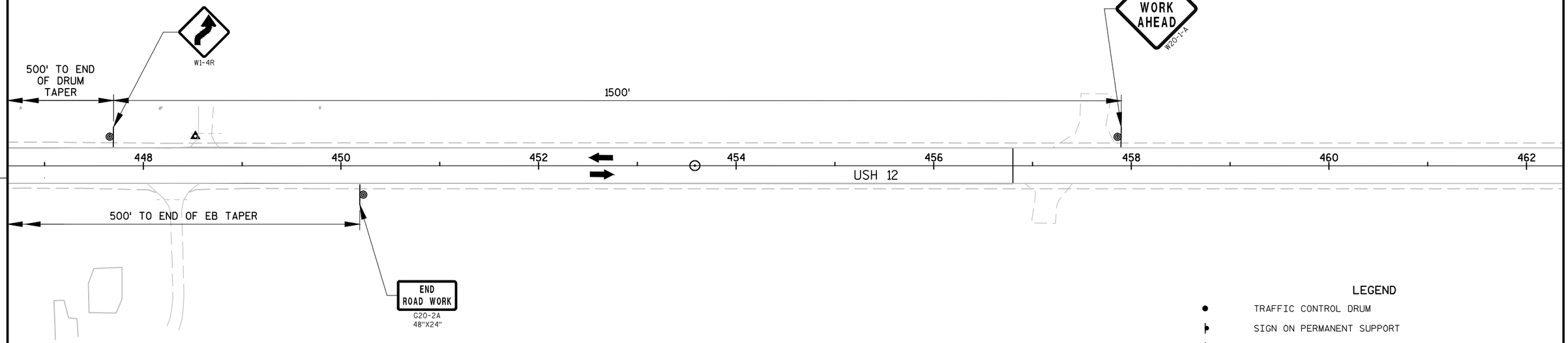
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 4	SHEET 67	E

2

2

N



LEGEND

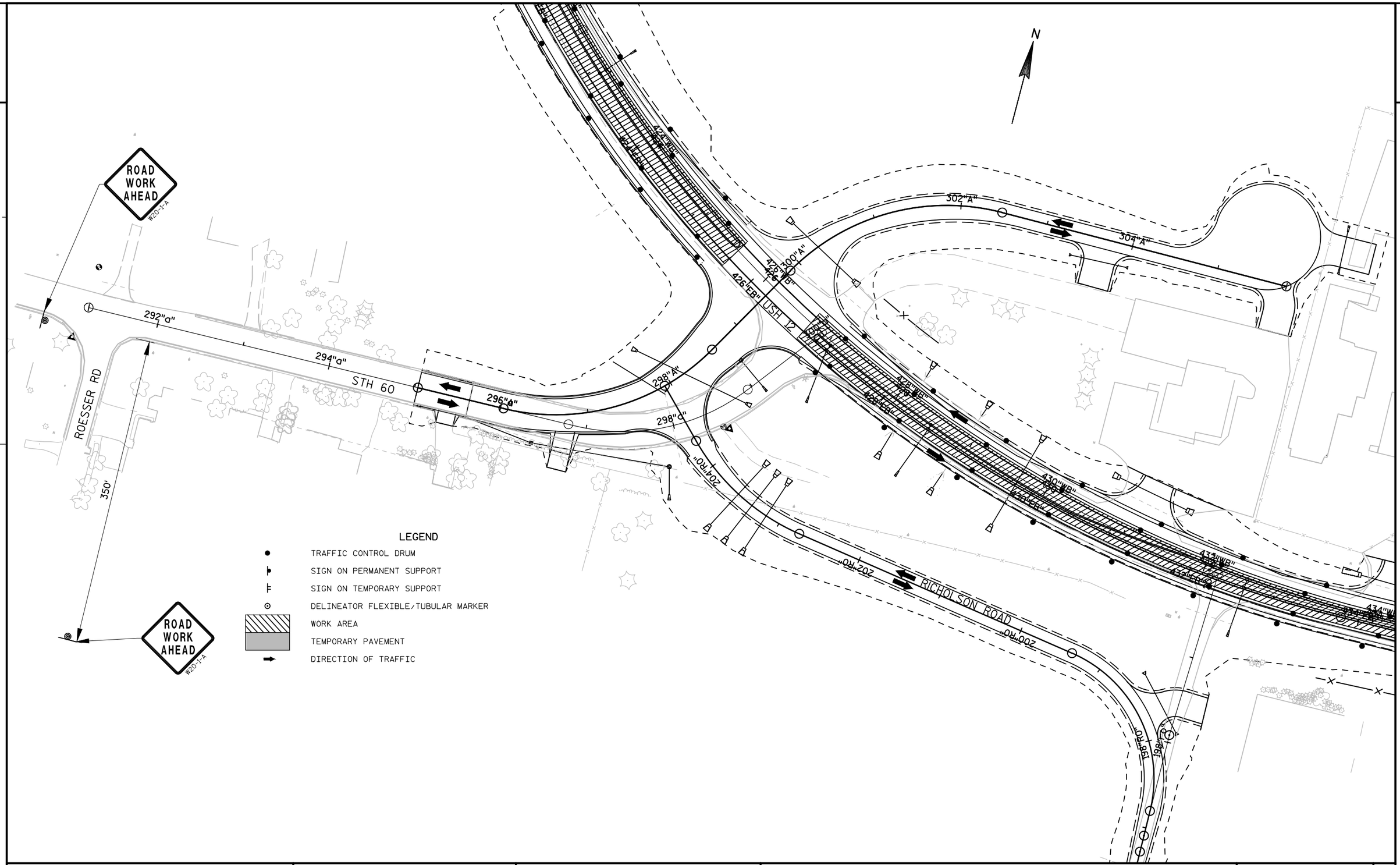
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 4	SHEET 68	E

FILE NAME : N:\PDS\C3D\16700105\DESIGN\VIEWFRAMEGROUPS\020201_STAGE_VFG.DWG
LAYOUT NAME - 026004_S4

PLOT DATE : 2/11/2015 1:36 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 4	SHEET 69	E

FILE NAME : N:\PDS\C3D\16700105\DESIGN\VIEWFRAMEGROUPS\020201_STAGE_VFG.DWG
LAYOUT NAME - 026011_S4
PLOT DATE : 2/13/2015 8:16 AM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC

N

ROAD WORK AHEAD W20-1-A

ROAD WORK 1000 FT W20-1-C

OR

ONE LANE ROAD 1000 FT W20-4-C

END ROAD WORK G20-2A 48"X24"

402 USH 12 404 406 408

410 410"EB" 412"EB" 414"EB"

1000'

500'

500'

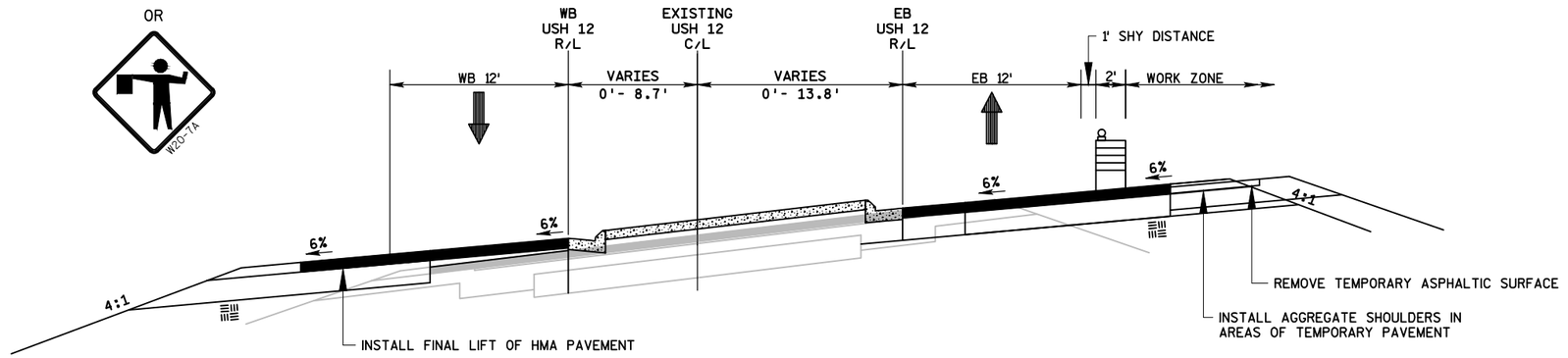
110' TAPER

335' BUFFER ZONE

ROAD WORK 500 FT W20-1-D

OR

W20-7A



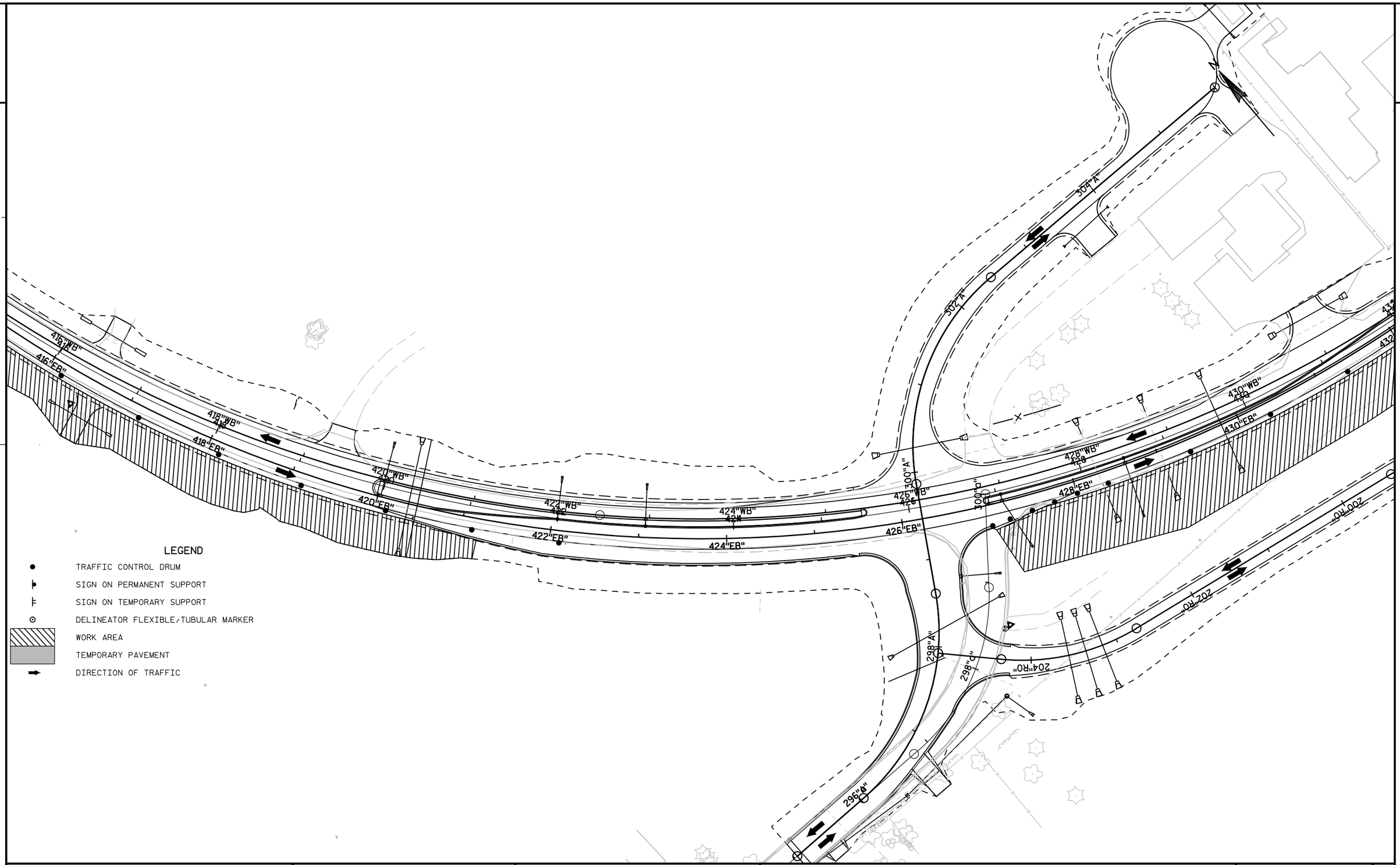
NOTE:
W20-7A AND W20-4-C SIGNS TO BE UTILIZED DURING ASPHALT PAVING OPERATIONS ONLY

STAGE 5 TYPICAL - USH 12

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 5	SHEET 70	E

2

2

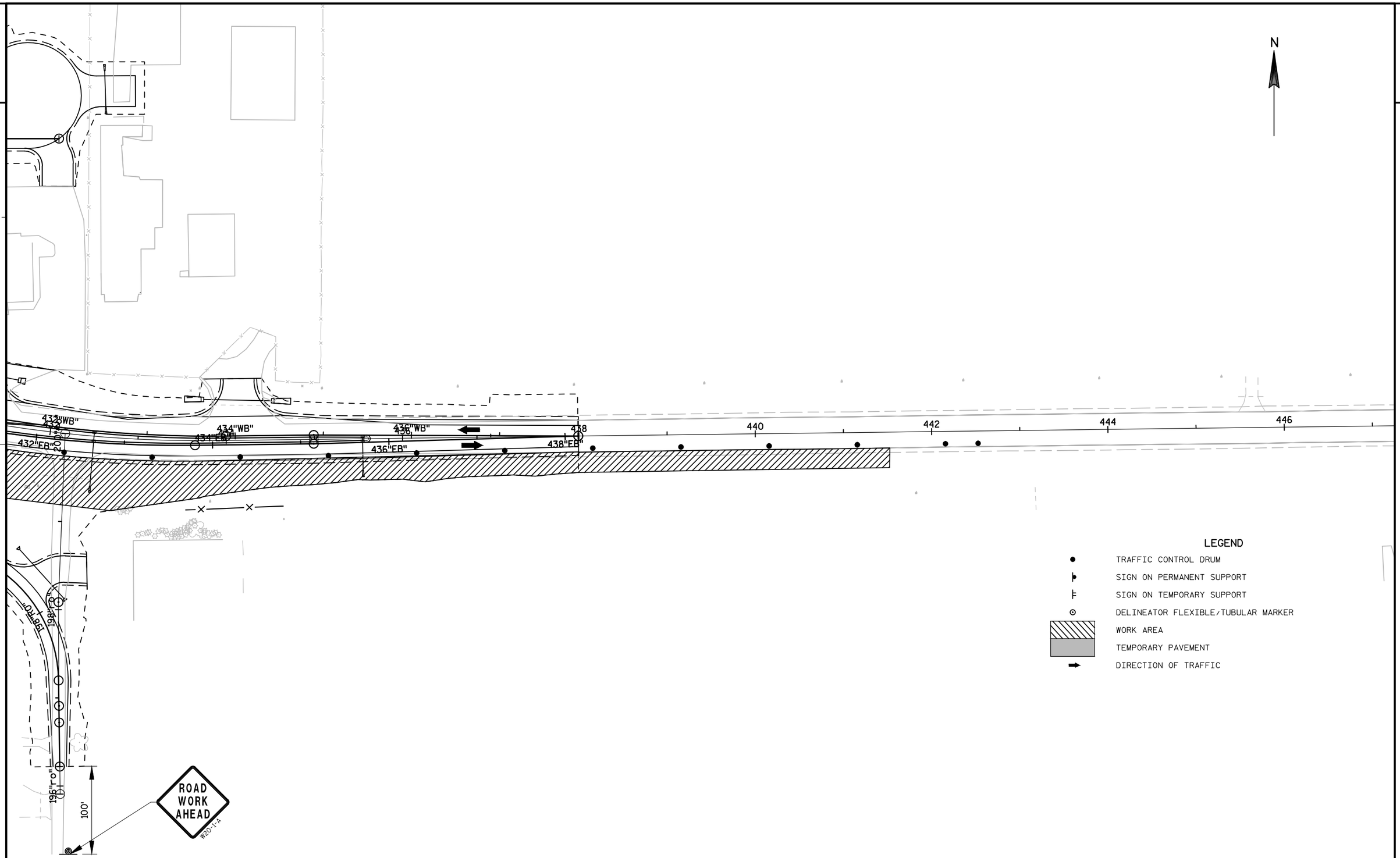


PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 5	SHEET 71	E

FILE NAME : N:\PDS\C3D\16700105\DESIGN\VIEWFRAMEGROUPS\020201_STAGE_VFG.DWG PLOT DATE : 2/11/2015 1:37 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N



LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 5	SHEET 72	E

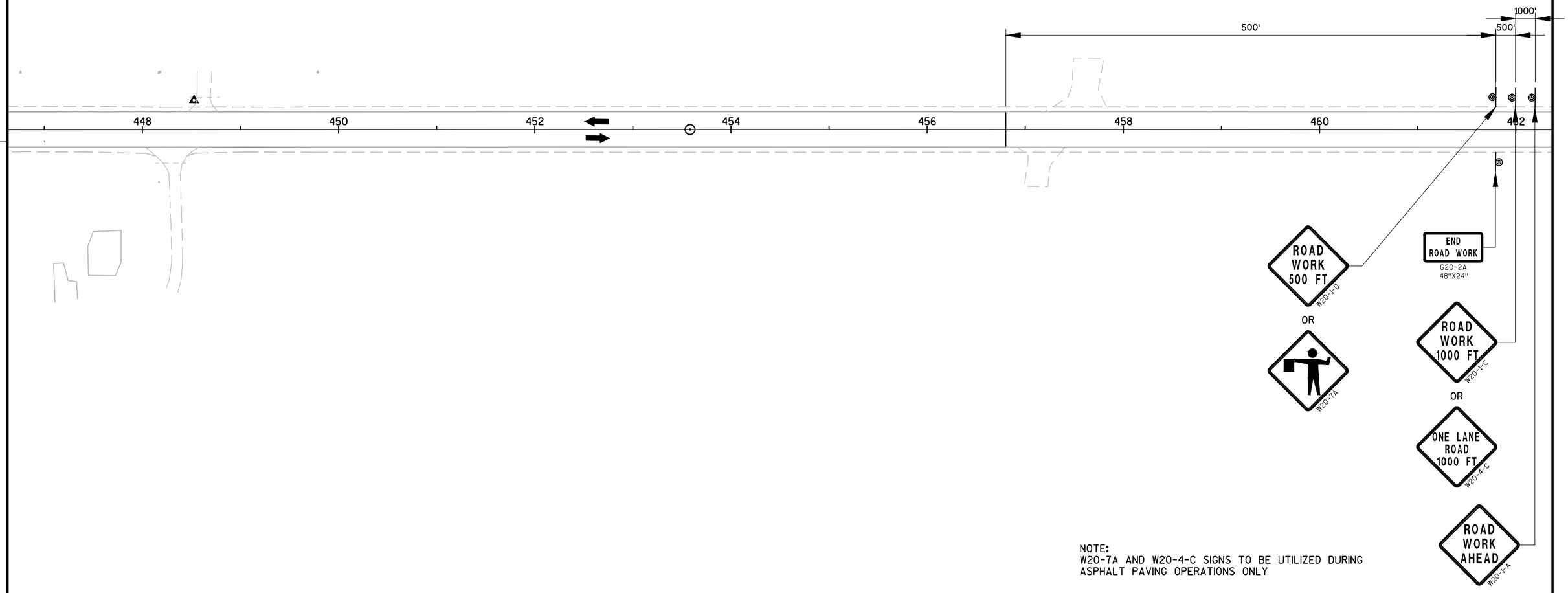
2

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC

N

2

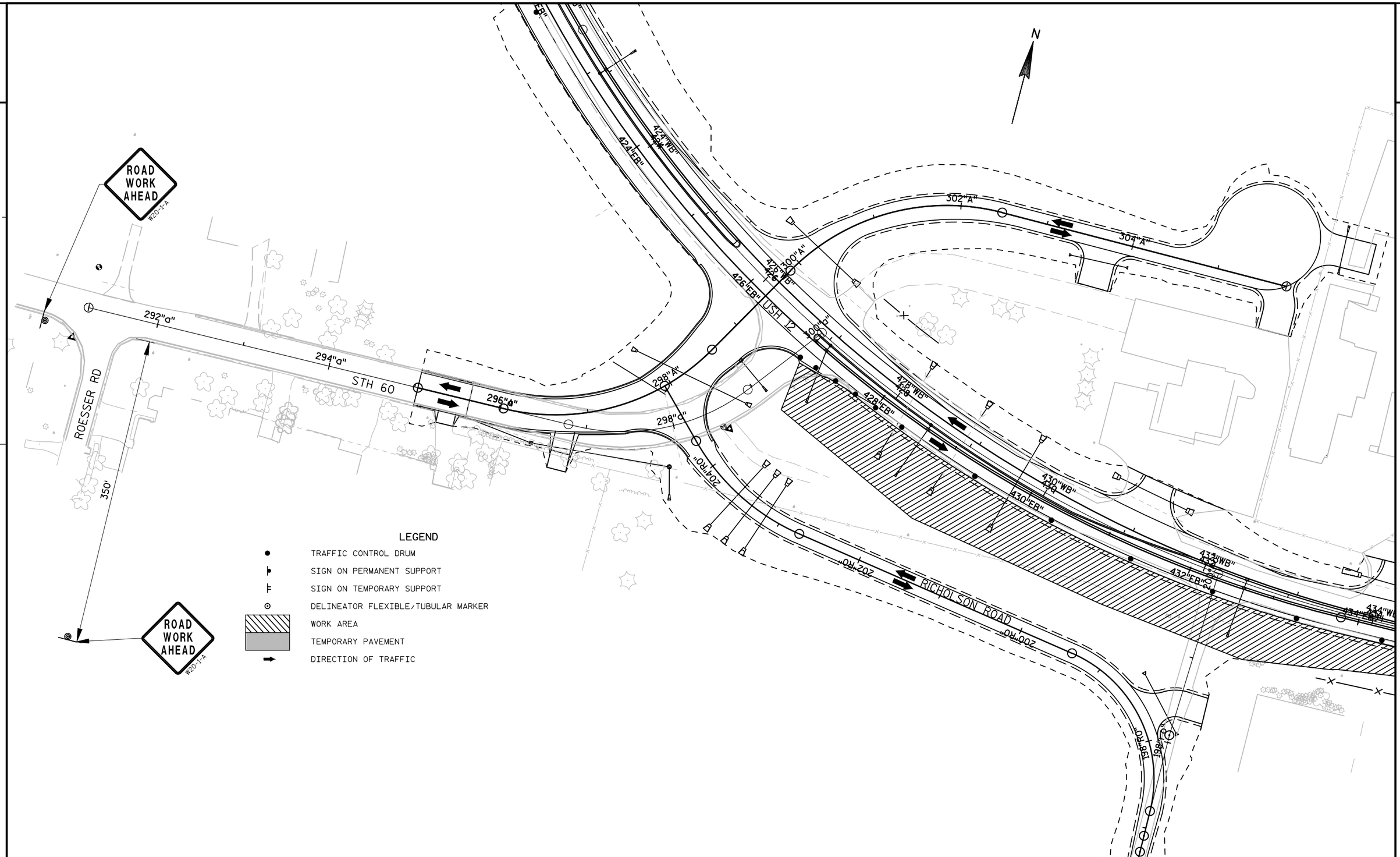


NOTE:
W20-7A AND W20-4-C SIGNS TO BE UTILIZED DURING ASPHALT PAVING OPERATIONS ONLY

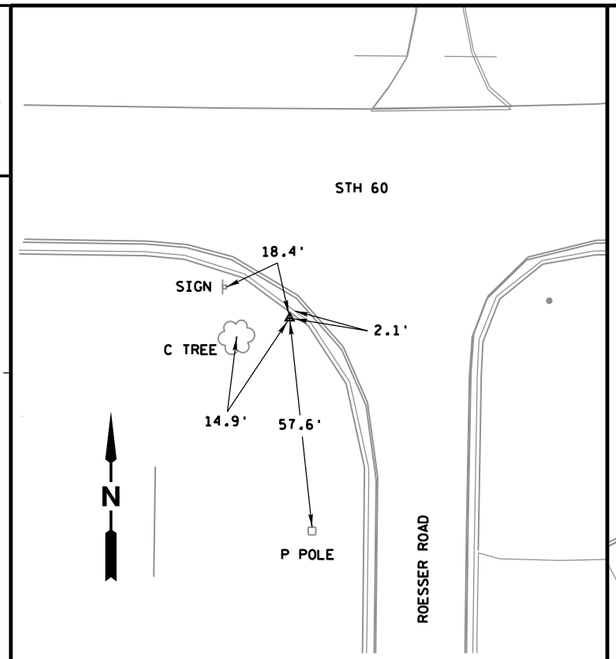
PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 5	SHEET 73	E

FILE NAME : N:\PDS\C3D\16700105\DESIGN\VIEWFRAMEGROUPS\020201_STAGE_VFG.DWG
LAYOUT NAME - 026004_S5
PLOT DATE : 2/11/2015 1:38 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

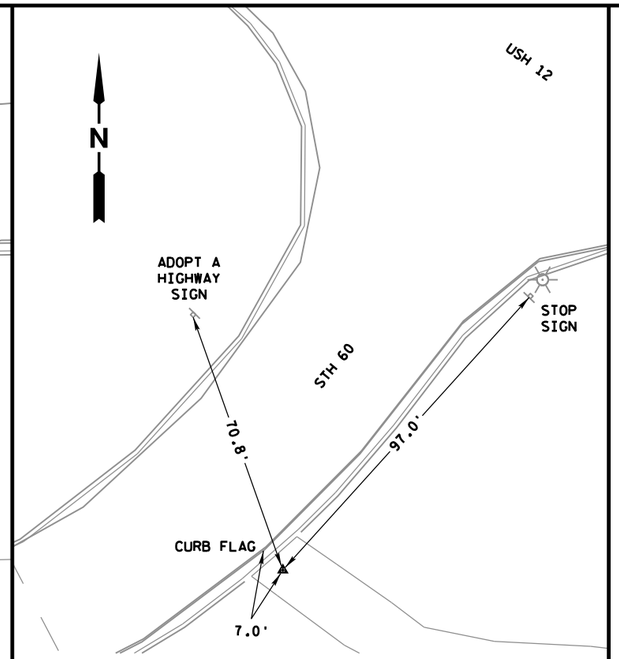
2



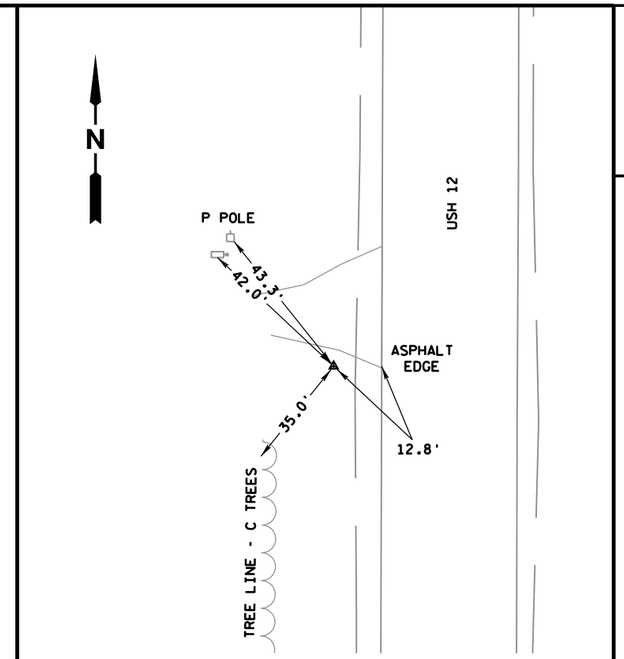
PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 5	SHEET 74	E



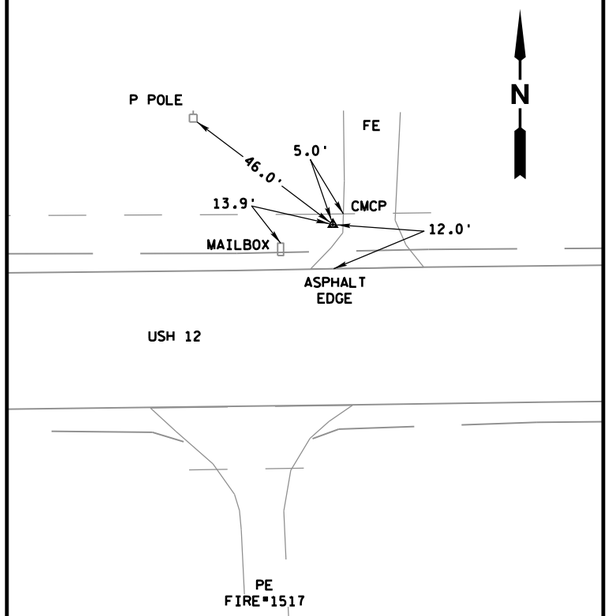
CONTROL POINT 9000
REBAR WITH CAP -- X=646482.360,Y=164521.782
WEST ON STH 60 FROM STH 60 & USH 12 INTERSECTION
IN THE SW QUADRANT OF STH 60 & ROESSER ROAD



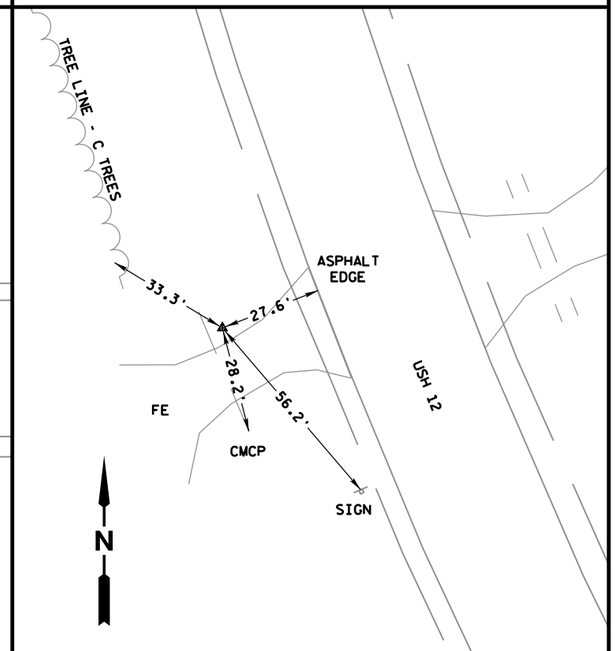
CONTROL POINT 9001
REBAR WITH RED CAP -- X=647230.022,Y=164608.699
+/-100' WEST ON STH 60 FROM STH 60 & USH 12 INTERSECTION
LOCATED ON THE RIGHT, SOUTHEAST SIDE OF STH 60



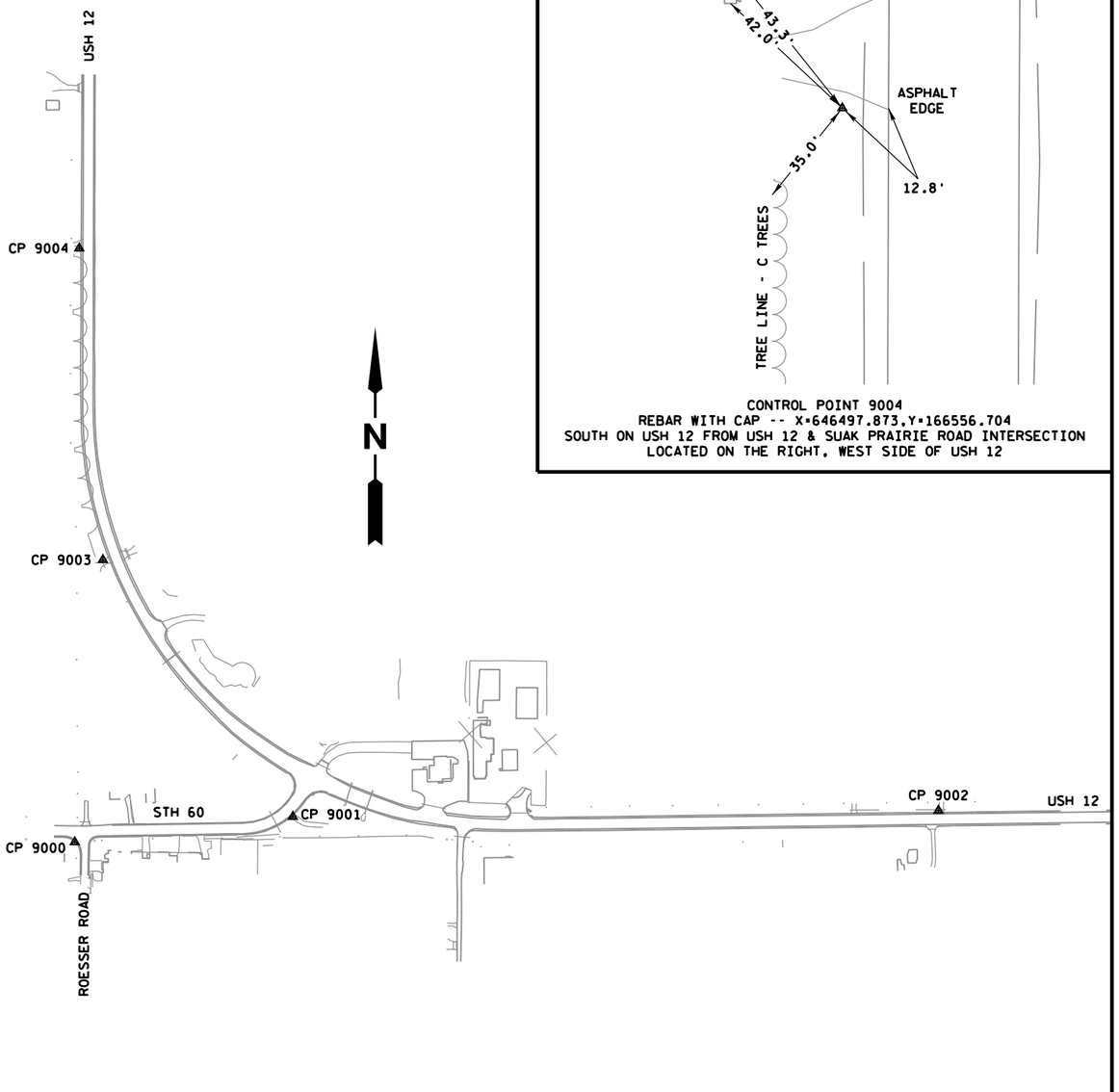
CONTROL POINT 9004
REBAR WITH CAP -- X=646497.873,Y=166556.704
SOUTH ON USH 12 FROM USH 12 & SUAK PRAIRIE ROAD INTERSECTION
LOCATED ON THE RIGHT, WEST SIDE OF USH 12



CONTROL POINT 9002
REBAR WITH RED CAP -- X=649442.756,Y=164629.899
EAST ON USH 12 FROM STH 60 & USH 12 INTERSECTION
LOCATED ON THE LEFT, NORTH SIDE OF USH 12



CONTROL POINT 9003
REBAR WITH RED CAP -- X=646578.929,Y=165488.915
SOUTH ON USH 12 FROM USH 12 & SUAK PRAIRIE ROAD INTERSECTION
LOCATED ON THE RIGHT, WEST SIDE OF USH 12



PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	ALIGNMENT TIES - CONTROL POINT LOCATION MAP	SHEET 75	E

CURVE 1
PI STA = 425+70.37
Y = 164562.390
X = 646522.379
DELTA = 90°55'03"
D = 3°59'47"
T = 1456.84'
L = 2275.00'
R = 1433.69'
PC STA = 411+13.53
Y = 166019.223
X = 646526.998
PT STA = 433+88.53
Y = 164581.103
X = 647979.100
BK = S00°10'53.9"W
AH = N89°15'50.5"E

CURVE 2
PI STA = 425+75.37"EB"
Y = 164557.389
X = 646522.364
DELTA = 90°55'03"
D = 4°03'49"
T = 1432.76'
L = 2237.40'
R = 1410.00'
PC STA = 411+42.61"EB"
Y = 165990.147
X = 646526.906
PT STA = 433+80.01"EB"
Y = 164575.793
X = 647955.010
BK = S00°10'53.9"W
AH = N89°15'50.5"E

CURVE 3
PI STA = 425+65.37"WB"
Y = 164567.391
X = 646522.395
DELTA = 90°55'03"
D = 3°57'54"
T = 1468.33'
L = 2292.94'
R = 1445.00'
PC STA = 410+97.04"WB"
Y = 166035.713
X = 646527.050
PT STA = 433+89.98"WB"
Y = 164586.251
X = 647990.604
BK = S00°10'53.9"W
AH = N89°15'50.5"E

CURVE 4
PI STA = 297+44.71"A"
Y = 164568.483
X = 647117.260
DELTA = 58°52'01"
D = 22°55'06"
T = 141.06'
L = 256.86'
R = 250.00'
PC STA = 296+03.65"A"
Y = 164566.311
X = 646976.217
PT STA = 298+60.51"A"
Y = 164690.335
X = 647188.325
BK = N89°07'04.4"E
AH = N30°15'02.9"E

CURVE 5
PI STA = 301+30.36"A"
Y = 164923.440
X = 647324.272
DELTA = 59°44'57"
D = 22°55'06"
T = 143.61'
L = 260.70'
R = 250.00'
PC STA = 299+86.75"A"
Y = 164799.387
X = 647251.924
PT STA = 302+47.45"A"
Y = 164923.440
X = 647467.881
BK = N30°15'02.9"E
AH = N90°00'00.0"E

CURVE 6
PI STA = 297+98.07"a"
Y = 164569.304
X = 647170.615
DELTA = 51°06'06"
D = 24°41'33"
T = 110.93'
L = 206.95'
R = 232.04'
PC STA = 296+87.14"a"
Y = 164567.596
X = 647059.700
PT STA = 298+94.10"a"
Y = 164656.698
X = 647238.935
BK = N89°07'04.4"E
AH = N38°00'58.6"E

CURVE 7
PI STA = 203+56.83"RO"
Y = 164526.225
X = 647254.837
DELTA = 36°40'54"
D = 22°55'06"
T = 82.88'
L = 160.05'
R = 250.00'
PC STA = 202+73.95"RO"
Y = 164513.149
X = 647336.676
PT STA = 204+34.01"RO"
Y = 164585.600
X = 647197.015
BK = N80°55'20.9"W
AH = N44°14'26.7"W

BP: 400+00.00
STA. 400+00.00 (USH 12 ℄)
Y = 167,132.75
X = 656,530.53

STA. 409+97.04 (USH 12 ℄)
STA. 409+97.04"EB" (USH 12 EB ℝ)
Y = 166,135.71
X = 646,527.37

STA. 409+53.53
Y = 166,179.22
X = 646,527.51

STA. 410+97.04 (USH 12 ℄)
STA. 410+97.04"WB" (USH 12 WB ℝ)
Y = 166,035.71
X = 646,527.05

PC: 411+42.61"EB"

PT: 433+89.98"WB"
PT: 433+88.53
PT: 433+80.01"EB"

STA. 305+80.35
(PR. STH 60 ℄)
Y = 164,923.44
X = 646,492.19

PT: 302+47.45"A"
PI: 301+30.36"A"
CURVE 5
PC: 299+86.75"A"
PR. RICHOLSON RD ℄
PC: 202+73.95"RO"
CURVE 6
CURVE 7
PI: 297+98.07"a"
PI: 297+44.71"A"
PI: 203+56.83"RO"
PT: 298+60.51"A"
PT: 298+94.10"a"
Ex. STH 60 ℄
CURVE 4
PR. STH 60 ℄
PT: 204+34.01"RO"
PC: 296+87.14"a"
PC: 296+03.65"A"
SECTION LINE

USH 12 WB ℝ - CURVE 3
USH 12 ℄ - CURVE 1
USH 12 EB ℝ - CURVE 2

STA. 205+03.65"a" (STH 60 EXISTING)
STA. 295+03.65"A" (STH 60 PROPOSED)
Y = 164,564.77
X = 646,876.23

FOUND RAILROAD SPIKE
Y = 164,599.02
X = 646,507.52

STA. 291+19.57"a" (Ex. STH 60 ℄)
Y = 164,558.86
X = 646,492.19

SUPERELEVATION TABLE

		LEFT		RIGHT	
STATION	TRANSITION TYPE	SHLD	PAVT	PAVT	SHLD
CURVE NO. 1					
409+53.53	END NORMAL CROWN	-0.040	-0.020	-0.020	-0.040
410+06.86	LEVEL CROWN	-0.040	-0.020	0.000	0.000
410+60.19	REVERSE CROWN	-0.040	-0.020	0.020	0.020
411+13.53	LOW SHLD MATCH	-0.040	-0.040	0.040	0.040
411+66.86	BEGIN FULL SUPER	-0.060	-0.060	0.060	0.060
433+35.21	END FULL SUPER	-0.060	-0.060	0.060	0.060
433+88.54	LOW SHLD MATCH	-0.040	-0.040	0.040	0.040
434+41.87	REVERSE CROWN	-0.040	-0.020	0.020	0.020
434+95.21	LEVEL CROWN	-0.040	-0.020	0.000	0.000
435+48.54	BEGIN NORMAL CROWN	-0.040	-0.020	-0.020	-0.040
CURVE NO. 4					
295+18.48"A"	END NORMAL CROWN		-0.020	-0.020	
295+54.98"A"	LEVEL CROWN		-0.020	0.000	
295+91.48"A"	REVERSE CROWN		-0.020	0.020	
296+27.98"A"	BEGIN FULL SUPER		-0.040	0.040	
298+36.18"A"	END FULL SUPER		-0.040	0.040	
298+72.68"A"	REVERSE CROWN		-0.020	0.020	
298+75.07"A"	CURB RETURN RT		-0.020	0.0187	
CURVE NO. 7					
201+88.78"RO"	END NORMAL CROWN	-0.040	-0.020	-0.020	-0.040
202+25.28"RO"	LEVEL CROWN	0.000	0.000	-0.020	-0.040
202+61.78"RO"	REVERSE CROWN	0.020	0.020	-0.020	-0.040
202+98.28"RO"	BEGIN FULL SUPER	0.020	0.020	-0.020	-0.040
204+09.68"RO"	END FULL SUPER	0.020	0.020	-0.020	-0.040
204+23.65"RO"	CURB RETURN LT	0.020	0.020	-0.020	-0.040

STATION EQUATIONS

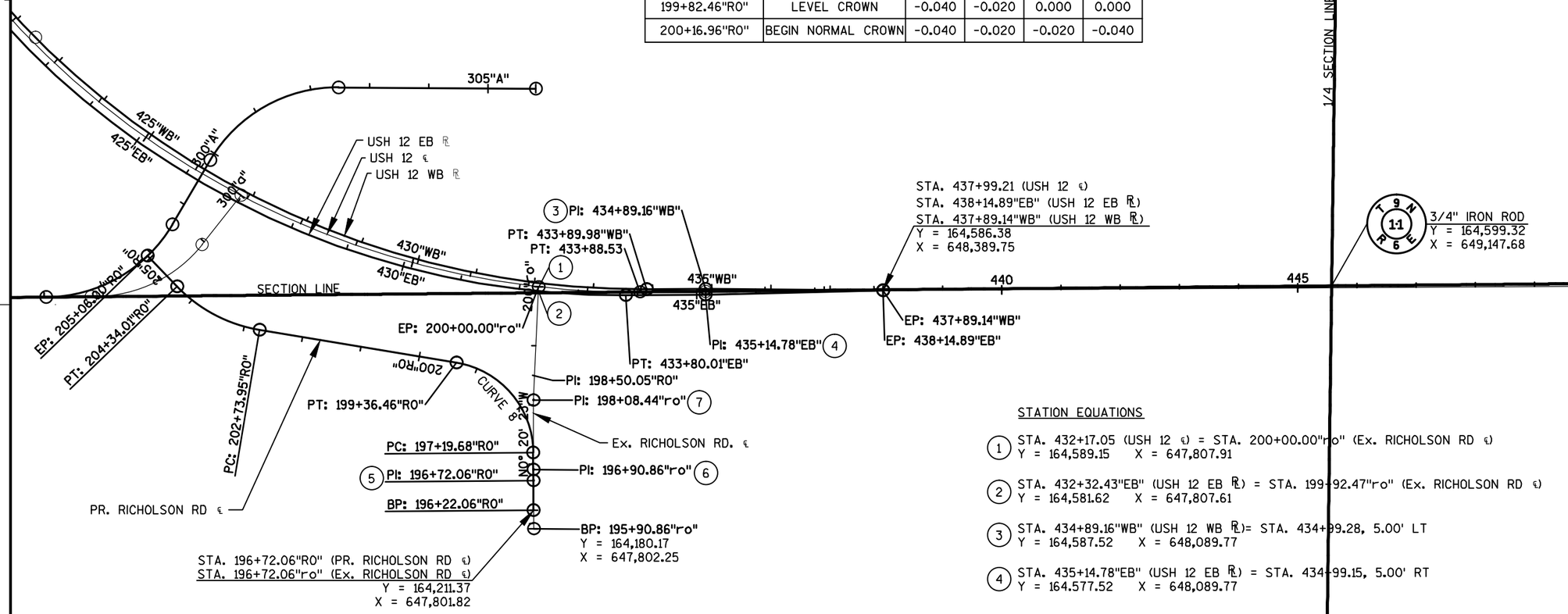
1. STA. 426+13.16 (USH 12 ℄) = STA. 299+59.92"A" (PR. STH 60 ℄)
   Y = 164,776.21 X = 647,238.41
2. STA. 426+23.39"EB" (USH 12 EB ℝ) = STA. 299+46.59"A" (PR. STH 60 ℄)
   Y = 164,764.70 X = 647,231.69
3. STA. 426+06.97"WB" (USH 12 WB ℝ) = STA. 299+68.55"A" (PR. STH 60 ℄)
   Y = 164,783.67 X = 647,242.76
4. STA. 297+92.84"A" (PR. STH 60 ℄) = STA. 205+06.00"RO" (PR. RICHOLSON RD. ℄)
   Y = 164,637.18 X = 647,146.79
5. STA. 426+88.15 (USH 12 ℄) = STA. 300+00.00"a" (Ex. STH 60 ℄)
   Y = 164,740.14 X = 647,304.16
6. STA. 426+96.62"EB" (USH 12 EB ℝ) = STA. 299+86.80"a" (Ex. STH 60 ℄)
   Y = 164,729.74 X = 647,296.03

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	ALIGNMENT DETAIL	SHEET 76	E

CURVE 8
PI STA = 198+50.05"RO"
Y = 164439.334
X = 647798.680
DELTA = 80°08'03"
D = 36°57'54"
T = 130.37'
L = 216.78'
R = 155.00'
PC STA = 197+19.68"RO"
Y = 164308.977
X = 647800.474
PT STA = 199+36.46"RO"
Y = 164459.903
X = 647669.943
BK = N00°47'18.3"W
AH = N80°55'20.9"W

SUPERELEVATION TABLE

		LEFT		RIGHT	
STATION	TRANSITION TYPE	SHLD	PAVT	PAVT	SHLD
CURVE NO. 8					
196+39.17"RO"	END NORMAL CROWN	-0.040	-0.020	-0.020	-0.040
196+73.67"RO"	LEVEL CROWN	-0.040	-0.020	0.000	0.000
197+08.17"RO"	REVERSE CROWN	-0.040	-0.020	0.020	0.020
197+42.67"RO"	BEGIN FULL SUPER	-0.040	-0.040	0.040	0.040
199+13.46"RO"	END FULL SUPER	-0.040	-0.040	0.040	0.040
199+47.96"RO"	REVERSE CROWN	-0.040	-0.020	0.020	0.020
199+82.46"RO"	LEVEL CROWN	-0.040	-0.020	0.000	0.000
200+16.96"RO"	BEGIN NORMAL CROWN	-0.040	-0.020	-0.020	-0.040



STATION EQUATIONS

1. STA. 432+17.05 (USH 12 ℄) = STA. 200+00.00"ro" (Ex. RICHOLSON RD ℄)
   Y = 164,589.15 X = 647,807.91
2. STA. 432+32.43"EB" (USH 12 EB ℄) = STA. 199+92.47"ro" (Ex. RICHOLSON RD ℄)
   Y = 164,581.62 X = 647,807.61
3. STA. 434+89.16"WB" (USH 12 WB ℄)= STA. 434+89.28, 5.00' LT
   Y = 164,587.52 X = 648,089.77
4. STA. 435+14.78"EB" (USH 12 EB ℄) = STA. 434+99.15, 5.00' RT
   Y = 164.577.52 X = 648,089.77

POINTS OF INTERSECTION

5. STA. 196+72.06"RO" (PR. RICHOLSON RD ℄)
   Y = 164,261.36 X = 647,801.13
   AH = N 0° 47' 18" W BK = N 0° 47' 18" W
6. STA. 196+90.86"ro" (Ex. RICHOLSON RD ℄)
   Y = 164,280.16 X = 647,800.87
   AH = N 0° 20' 23" W BK = N 0° 47' 18" W
7. STA. 198+08.44"ro" (Ex. RICHOLSON RD ℄)
   Y = 164,397.74 X = 647,800.17
   AH = N 2° 18' 53" E BK = N 0° 20' 23" W

PROJECT NO:1670-01-75	HWY: USH 12	COUNTY: SAUK	ALIGNMENT DETAIL	SHEET 77	E

2

2

N

SECTION LINE

PI: 453+58.38

STA. 456+80.11 (USH 12 ℄)
Y = 164,610.47 X = 650270.49

455 460 465 SECTION LINE 470

EP: 471+28.81

USH 12 ℄

STA. 453+58.38 (USH 12 ℄)
Y = 164,606.40 X = 649,948.78
AH = N 89° 16' 34" E BK = N 89° 15' 51" E

STA. 471+28.81 (USH 12 ℄)
Y = 164,628.77
X = 651,719.08

453+00.00

BENCHMARKS		
POINT NO.	DESCRIPTION	ELEVATION
1000	PK NAIL IN FLAG OF CURB, APPROXIMATELY 100' FROM INTERSECTION OF USH 12 & STH 60, BY CP 9001 ON STH 60, NW QUAD, PE	758.70
1001	PK NAIL IN POWER POLE #9-6-1 52A/27 BCA WP & L CO. AT INTERSECTION OF STH 60 & ROESSER ROAD	755.43
1002	MARK IN NW HEADWAY OF EXISTING CATTLE PASS ON USH 12, APPROXIMATELY 550' N OF INTERSECTION OF USH 12 & STH 60	756.06

DATE 17MAR15 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	1670-01-75 QUANTITY
0010	201.0105	Clearing	STA	3.000	3.000
0020	201.0120	Clearing	ID	210.000	210.000
0030	201.0205	Grubbing	STA	3.000	3.000
0040	201.0220	Grubbing	ID	210.000	210.000
0050	203.0100	Removing Small Pipe Culverts	EACH	6.000	6.000
0060	203.0200	Removing Old Structure (station) 01. 420+41	LS	1.000	1.000
0070	203.0200	Removing Old Structure (station) 02. 431+28	LS	1.000	1.000
0080	204.0100	Removing Pavement	SY	1,220.000	1,220.000
0090	204.0110	Removing Asphaltic Surface	SY	16,325.000	16,325.000
0100	204.0120	Removing Asphaltic Surface Milling	SY	7,524.000	7,524.000
0110	204.0150	Removing Curb & Gutter	LF	989.000	989.000
0120	204.0170	Removing Fence	LF	697.000	697.000
0130	204.0195	Removing Concrete Bases	EACH	3.000	3.000
0140	204.0220	Removing Inlets	EACH	4.000	4.000
0150	204.0235	Removing Buildings (parcel) 01. Parcel 7	LS	1.000	1.000
0160	204.0245	Removing Storm Sewer (size) 01. 15-Inch	LF	57.000	57.000
0170	204.0245	Removing Storm Sewer (size) 02. 18-Inch	LF	248.000	248.000
0180	204.0280	Sealing Pipes	EACH	3.000	3.000
0190	204.9060.S	Removing (item description) 01. Apron End Wall 30-Inch	EACH	1.000	1.000
0200	204.9060.S	Removing (item description) 02. Apron End Wall 42-Inch	EACH	4.000	4.000
0210	205.0100	Excavation Common	CY	13,013.000	13,013.000
0220	208.1100	Select Borrow	CY	14,563.000	14,563.000
0230	209.0100	Backfill Granular	CY	733.000	733.000
0240	209.0200.S	Backfill Controlled Low Strength	CY	43.000	43.000
0250	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 1670-01-75	LS	1.000	1.000
0260	213.0100	Finishing Roadway (project) 01. 1670-01-75	EACH	1.000	1.000
0270	214.0100	Obliterating Old Road	STA	1.850	1.850
0280	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,292.000	1,292.000
0290	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	21,833.000	21,833.000
0300	440.4410.S	Incentive IRI Ride	DOL	5,122.000	5,122.000
0310	455.0105	Asphaltic Material PG58-28	TON	402.000	402.000
0320	455.0605	Tack Coat	GAL	3,534.000	3,534.000
0330	460.1100	HMA Pavement Type E-0.3	TON	965.000	965.000
0340	460.1103	HMA Pavement Type E-3	TON	6,346.000	6,346.000
0350	460.4000	HMA Cold Weather Paving	TON	694.000	694.000
0360	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	6,316.000	6,316.000
0370	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	281.000	281.000
0380	465.0125	Asphaltic Surface Temporary	TON	604.000	604.000
0390	465.0315	Asphaltic Flumes	SY	49.000	49.000
0400	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	5,544.000	5,544.000
0410	465.0475	Asphalt Center Line Rumble Strips 2-Lane Rural	LF	1,881.000	1,881.000
0420	511.1100	Temporary Shoring	SF	216.000	216.000
0430	520.4024	Culvert Pipe Temporary 24-Inch	LF	136.000	136.000
0440	520.4030	Culvert Pipe Temporary 30-Inch	LF	72.000	72.000
0450	520.8000	Concrete Collars for Pipe	EACH	4.000	4.000

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DATE 17MAR15 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	1670-01-75 QUANTITY
0460	521.0112	Culvert Pipe Corrugated Steel 12-Inch	LF	106.000	106.000
0470	521.0118	Culvert Pipe Corrugated Steel 18-Inch	LF	76.000	76.000
0480	521.0124	Culvert Pipe Corrugated Steel 24-Inch	LF	68.000	68.000
0490	521.0136	Culvert Pipe Corrugated Steel 36-Inch	LF	58.000	58.000
0500	521.1012	Apron Endwalls for Culvert Pipe Steel 12-Inch	EACH	4.000	4.000
0510	521.1018	Apron Endwalls for Culvert Pipe Steel 18-Inch	EACH	2.000	2.000
0520	521.1524	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 24-Inch 6 to 1	EACH	2.000	2.000
0530	521.1536	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 36-Inch 6 to 1	EACH	2.000	2.000
0540	522.0130	Culvert Pipe Reinforced Concrete Class III 30-Inch	LF	138.000	138.000
0550	522.0136	Culvert Pipe Reinforced Concrete Class III 36-Inch	LF	122.000	122.000
0560	522.0142	Culvert Pipe Reinforced Concrete Class III 42-Inch	LF	190.000	190.000
0570	522.0148	Culvert Pipe Reinforced Concrete Class III 48-Inch	LF	264.000	264.000
0580	522.0348	Culvert Pipe Reinforced Concrete Class IV 48-Inch	LF	94.000	94.000
0590	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	8.000	8.000
0600	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	1.000	1.000
0610	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	2.000	2.000
0620	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	2.000	2.000
0630	522.1042	Apron Endwalls for Culvert Pipe Reinforced Concrete 42-Inch	EACH	6.000	6.000
0640	522.1048	Apron Endwalls for Culvert Pipe Reinforced Concrete 48-Inch	EACH	8.000	8.000
0650	523.0138	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 38x60-Inch	LF	162.000	162.000
0660	523.0538	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 38x60-Inch	EACH	2.000	2.000
0670	601.0407	Concrete Curb & Gutter 18-Inch Type D	LF	974.000	974.000
0680	601.0415	Concrete Curb & Gutter 6-Inch Sloped 30-Inch Type J	LF	1,868.000	1,868.000
0690	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	924.000	924.000
0700	602.0405	Concrete Sidewalk 4-Inch	SF	9,037.000	9,037.000
0710	606.0300	Riprap Heavy	CY	293.000	293.000
0720	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	406.000	406.000
0730	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	418.000	418.000
0740	611.0550	Manhole Covers Type M	EACH	1.000	1.000
0750	611.0615	Inlet Covers Type F	EACH	5.000	5.000
0760	611.0630	Inlet Covers Type HM-GJ	EACH	10.000	10.000
0770	611.0642	Inlet Covers Type MS	EACH	1.000	1.000
0780	611.0666	Inlet Covers Type Z	EACH	4.000	4.000
0790	611.2004	Manholes 4-FT Diameter	EACH	1.000	1.000
0800	611.3003	Inlets 3-FT Diameter	EACH	4.000	4.000

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DATE 17MAR15 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	1670-01-75 QUANTITY
0810	611.3230	Inlets 2x3-FT	EACH	10.000	10.000
0820	611.3253	Inlets 2.5x3-FT	EACH	5.000	5.000
0830	611.3901	Inlets Median 1 Grate	EACH	1.000	1.000
0840	611.9800.S	Pipe Grates	EACH	2.000	2.000
0850	616.0700.S	Fence Safety	LF	191.000	191.000
0860	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1670-01-75	EACH	1.000	1.000
0870	619.1000	Mobilization	EACH	1.000	1.000
0880	620.0200	Concrete Median Blunt Nose	SF	84.000	84.000
0890	620.0300	Concrete Median Sloped Nose	SF	147.000	147.000
0900	624.0100	Water	MGAL	449.000	449.000
0910	625.0500	Salvaged Topsoil	SY	37,495.000	37,495.000
0920	627.0200	Mulching	SY	37,495.000	37,495.000
0930	628.1504	Silt Fence	LF	2,203.000	2,203.000
0940	628.1520	Silt Fence Maintenance	LF	8,812.000	8,812.000
0950	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0960	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0970	628.2004	Erosion Mat Class I Type B	SY	136.000	136.000
0980	628.7005	Inlet Protection Type A	EACH	1.000	1.000
0990	628.7015	Inlet Protection Type C	EACH	5.000	5.000
1000	628.7504	Temporary Ditch Checks	LF	150.000	150.000
1010	628.7555	Culvert Pipe Checks	EACH	71.000	71.000
1020	628.7560	Tracking Pads	EACH	1.000	1.000
1030	629.0210	Fertilizer Type B	CWT	23.500	23.500
1040	630.0110	Seeding Mixture No. 10	LB	507.000	507.000
1050	630.0200	Seeding Temporary	LB	339.000	339.000
1060	631.1100	Sod Erosion Control	SY	15.000	15.000
1070	633.5200	Markers Culvert End	EACH	10.000	10.000
1080	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	16.000	16.000
1090	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	20.000	20.000
1100	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	12.000	12.000
1110	637.2210	Signs Type II Reflective H	SF	444.070	444.070
1120	637.2230	Signs Type II Reflective F	SF	82.500	82.500
1130	638.2602	Removing Signs Type II	EACH	25.000	25.000
1140	638.3000	Removing Small Sign Supports	EACH	33.000	33.000
1150	642.5201	Field Office Type C	EACH	1.000	1.000
1160	643.0100	Traffic Control (project) 01. 1670-01-75	EACH	1.000	1.000
1170	643.0300	Traffic Control Drums	DAY	10,546.000	10,546.000
1180	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	225.000	225.000
1190	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	225.000	225.000
1200	643.0900	Traffic Control Signs	DAY	1,192.000	1,192.000
1210	643.2000	Traffic Control Detour (project) 01. 1670-01-75	EACH	1.000	1.000
1220	643.3000	Traffic Control Detour Signs	DAY	10,125.000	10,125.000
1230	645.0120	Geotextile Fabric Type HR	SY	439.000	439.000
1240	646.0106	Pavement Marking Epoxy 4-Inch	LF	10,592.000	10,592.000
1250	646.0126	Pavement Marking Epoxy 8-Inch	LF	1,692.000	1,692.000
1260	646.0136	Pavement Marking Epoxy 12-Inch	LF	1,335.000	1,335.000
1270	646.0406	Pavement Marking Same Day Epoxy 4-Inch	LF	8,025.000	8,025.000
1280	646.0600	Removing Pavement Markings	LF	15,108.000	15,108.000
1290	647.0166	Pavement Marking Arrows Epoxy Type 2	EACH	8.000	8.000
1300	647.0176	Pavement Marking Arrows Epoxy Type 3	EACH	1.000	1.000

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DATE 17MAR15 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	1670-01-75 QUANTITY
1310	647.0356	Pavement Marking Words Epoxy	EACH	5.000	5.000
1320	647.0456	Pavement Marking Curb Epoxy	LF	93.000	93.000
1330	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	45.000	45.000
1340	647.0606	Pavement Marking Island Nose Epoxy	EACH	2.000	2.000
1350	649.0200	Temporary Pavement Marking Reflective Paint 4-Inch	LF	35,247.000	35,247.000
1360	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	6,073.000	6,073.000
1370	650.4000	Construction Staking Storm Sewer	EACH	26.000	26.000
1380	650.4500	Construction Staking Subgrade	LF	4,754.000	4,754.000
1390	650.5000	Construction Staking Base	LF	4,754.000	4,754.000
1400	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	3,766.000	3,766.000
1410	650.6000	Construction Staking Pipe Culverts	EACH	27.000	27.000
1420	650.8000	Construction Staking Resurfacing Reference	LF	4,727.000	4,727.000
1430	650.8500	Construction Staking Electrical Installations (project) 01. 1670-01-75	LS	1.000	1.000
1440	650.9910	Construction Staking Supplemental Control (project) 01. 1670-01-75	LS	1.000	1.000
1450	650.9920	Construction Staking Slope Stakes	LF	4,754.000	4,754.000
1460	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	1,786.000	1,786.000
1470	653.0140	Pull Boxes Steel 24x42-Inch	EACH	12.000	12.000
1480	654.0106	Concrete Bases Type 6	EACH	9.000	9.000
1490	654.0224	Concrete Control Cabinet Bases Type L24	EACH	1.000	1.000
1500	655.0610	Electrical Wire Lighting 12 AWG	LF	2,640.000	2,640.000
1510	655.0625	Electrical Wire Lighting 6 AWG	LF	6,462.000	6,462.000
1520	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. 426+76 EB RT.	LS	1.000	1.000
1530	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	9.000	9.000
1540	657.0327	Poles Type 6-Aluminum	EACH	9.000	9.000
1550	657.0710	Luminaire Arms Truss Type 4 1/2-Inch Clamp 12-FT	EACH	16.000	16.000
1560	659.1125	Luminaires Utility LED C	EACH	16.000	16.000
1570	659.2124	Lighting Control Cabinets 120/240 24-Inch	EACH	1.000	1.000
1580	690.0150	Sawing Asphalt	LF	509.000	509.000
1590	690.0250	Sawing Concrete	LF	769.000	769.000
1600	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,200.000	1,200.000
1610	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	600.000	600.000
1620	SPV.0060	Special 01. Apron Endwalls for Culvert Pipe RCHE 38 X 60-Inch 6-to-1 Slope	EACH	2.000	2.000
1630	SPV.0090	Special 01. Removing HMA Pavement Notched Wedge Longitudinal Joint Milling	LF	6,316.000	6,316.000

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CLEARING AND GRUBBING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	CLEARING 201.0105 STA	CLEARING 201.0120 ID	GRUBBING 201.0205 STA	GRUBBING 201.0220 ID	REMARKS
	USH 12								
0010	420+33 "WB"	-	422+74 "WB"	LT	3		3		
	STH 60								
0010	295+81 "A"			RT		120		120	
0010	296+77 "A"					18		18	
0010	297+50 "A"			RT		72		72	
				TOTAL 0010	3	210	3	210	

REMOVING SMALL PIPE CULVERTS

CATEGORY	STATION	LOCATION	203.0100 EACH	REMARKS
	USH 12			
0010	416+50 "WB"	LT	2	FE 416+52 LT
0010	416+50 "EB"	RT	1	FE 416+52 RT
0010	427+00 "WB"	LT	1	former CE 427+00 LT
0010	432+39 "EB"	RT	1	CROSS CULVERT - RICHOLSON ROAD
0010	434+07 "WB"	LT	1	CE 434+32 LT
		TOTAL 0010	6	

REMOVING OLD STRUCTURE (STATION) .01 STA 420+41

CATEGORY	STATION	LOCATION	203.0200.01 LS	REMARKS
	USH 12			
0010	420+41	LT & RT	1	CATTLE PASS
		TOTAL 0010	1	

REMOVING OLD STRUCTURE (STATION) .02 STA 431+28

CATEGORY	STATION	LOCATION	203.0200.02 LS	REMARKS
	USH 12			
0010	431+28	LT	1	BOX CULVERT; CE 431+28 LT
		TOTAL 0010	1	

REMOVING CURB & GUTTER

CATEGORY	STATION	TO	STATION	LOCATION	204.0150 LF	REMARKS
	STH 60					
0010	295+04 "A"	-	299+33 "A"	LT	469	
0010	295+04 "A"	-	299+40 "A"	RT	520	
				TOTAL 0010	989	

REMOVING FENCE

CATEGORY	STATION	TO	STATION	LOCATION	204.0170 LF	REMARKS
	STH 60					
0010	296+11 "a"	-	297+05 "a"	RT	100	
	FRONTAGE ROAD					
0010	306+15 "A"			LT	78	
	RICHOLSON RD					
0010	199+16 "RO"	-	204+04 "RO"	LT & RT	519	
				TOTAL 0010	697	

REMOVING PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	204.0100 SY	REMARKS
	USH 12					
0010	420+31 "EB"	-	420+53 "EB"	LT & RT	54	36" CROSS CULVERT
0010	429+72 "EB"	-	429+88 "EB"	LT & RT	39	42" CROSS CULVERT
0010	421+93 "WB"	-	421+99 "WB"	LT & RT	15	12" STORM SEWER
0010	422+93 "WB"	-	422+99 "WB"	LT & RT	15	12" STORM SEWER
0010	427+13 "EB"	-	427+19 "EB"	LT & RT	7	12" STORM SEWER
0010	428+59 "EB"	-	428+65 "EB"	LT & RT	7	12" STORM SEWER
0010	431+20	-	435+63	LT & RT	1083	
				TOTAL 0010	1220	

REMOVING ASPHALTIC SURFACE

CATEGORY	STATION	TO	STATION	LOCATION	204.0110 SY	REMARKS
	USH 12 STAGE 2					
0010	409+53	-	420+31 "EB"	RT	1363	Existing Mainline Pavement
0010	420+53 "EB"	-	428+89 "EB"	RT	949	Existing Mainline Pavement
0010	429+72 "EB"	-	431+34 "EB'	RT	190	Existing Mainline Pavement
0010	435+78 "EB"	-	438+14 "EB"	RT	421	Existing Mainline Pavement
	USH 12 STAGE 3					
0010	405+03	-	418+97	LT	988	Temporary Widening
0010	409+53	-	420+24 "WB"	LT	1793	Existing Mainline Pavement
0010	420+45 "WB"	-	429+50 "WB"	LT	1530	Existing Mainline Pavement
0010	429+66 "WB"	-	431+11 "WB"	LT	174	Existing Mainline Pavement
0010	435+52 "WB"	-	437+89 "WB"	LT	416	Existing Mainline Pavement
0010	419+65	-	425+52	LT	408	Temporary Widening
0010	428+22	-	442+66	LT	954	Temporary Widening
	USH 12 STAGE 4					
0010	411+13 "EB"	-	420+31 "EB"	RT	1173	Existing Mainline Pavement
0010	420+53 "EB"	-	428+89 "EB"	RT	2167	Existing Mainline Pavement
0010	429+72 "EB"	-	431+34 "EB'	RT	276	Existing Mainline Pavement
0010	435+78 "EB"	-	438+14 "EB"	RT	103	Existing Mainline Pavement
	USH 12 STAGE 5					
0010	415+48 "EB"	-	421+19 "EB"	RT	239	Temporary Widening
0010	427+31 "EB"	-	438+15 "EB"	RT	722	Temporary Widening
0010	438+00	-	441+52	RT	113	Temporary Widening
	STH 60 STAGE 2					
0010	295+04 "a"	-	299+75 "a"	LT	680	Existing Mainline Pavement
	STH 60 STAGE 2B					
0010	295+04 "a"	-	299+75 "a"	LT & RT	1495	Existing Mainline Pavement
	STH 60 STAGE 2C					
0010	296+70 "A"	-	299+35 "A"	RT	171	Temporary Widening
				TOTAL 0010	16325	

REMOVING ASPHALTIC SURFACE MILLING

CATEGORY	STATION	TO	STATION	LOCATION	204.0120 SY	REMARKS
	USH 12					
0020	437+99	-	456+80	LT & RT	7524	3.5" DEPTH; RESURFACING SECTION
				TOTAL 0020	7524	

REMOVING CONCRETE BASES

CATEGORY	STATION	TO	STATION	LOCATION	204.0195 EACH	REMARKS
	USH 12					
0010	424+36 "EB"			RT	2	
0010	427+18 "EB"			RT	1	
				TOTAL 0010	3	

REMOVING INLETS

CATEGORY	STATION	TO	STATION	LOCATION	204.0220 EACH
	STH 60				
0010	295+64 "A"			LT	1
0010	295+64 "A"			RT	1
0010	295+81 "A"			LT	1
0010	296+57 "A"			RT	1
				TOTAL 0010	4

REMOVING STORM SEWER (SIZE) .01 15-INCH

CATEGORY	STATION	TO	STATION	LOCATION	204.0245.01 LF
	STH 60				
0010	295+64 "A"			LT & RT	40
0010	295+72 "A"			LT	17
				TOTAL 0010	57

3

REMOVING BUILDINGS (PARCEL) .01 PARCEL 7

CATEGORY	STATION	TO	STATION	LOCATION	204.0235 LS	REMARKS
	FRONTAGE RD					
0010	307+00 "A"			LT	1	PARCEL 7 - PARTIAL REMOVAL
				TOTAL 0010	1	

REMOVING STORM SEWER (SIZE) .02 18-INCH

CATEGORY	STATION	TO	STATION	LOCATION	204.0245.02 LF
	STH 60				
0010	296+10 "A"			RT	101
0010	297+06 "A"			RT	147
				TOTAL 0010	248

REMOVING (ITEM DESCRIPTION) 01. APRON END WALL 30-INCH

CATEGORY	STATION	TO	STATION	LOCATION	204.9060.S.01 EACH
	STH 60 STAGE 2				
0010	297+99 "a"			LT	1
				TOTAL 0010	1

OBLITERATING OLD ROAD

CATEGORY	STATION	TO	STATION	LOCATION	214.0100 STA
	EX RICHOLSON RD				
0010	197+85 "ro"	-	199+70 "ro"	LT & RT	1.85
				TOTAL 0010	1.85

SEALING PIPES

CATEGORY	STATION	TO	STATION	LOCATION	EACH	REMARKS
	USH 12 STAGE 1					
0010	420+41			LT	0.5	SEAL D/S END
	USH 12 STAGE 2					
0010	420+41			LT	0.5	SEAL AT WORK ZONE LIMITS
	STH 60 STAGE 2B					
0010	297+99 "a"			LT & RT	1	30" CMP & TEMPORARY CULVERT
	USH 12 STAGE 3					
0010	420+41			RT	1	TEMPORARY CULVERT
				TOTAL 0010	3	

REMOVING (ITEM DESCRIPTION) 02. APRON END WALL 42-INCH

CATEGORY	STATION	TO	STATION	LOCATION	204.9060.S.02 EACH
	USH 12				
0010	428+29 "EB"			LT	1
0010	428+29 "EB"			RT	1
0010	429+04 "EB"			LT	1
0010	429+04 "EB"			RT	1
				TOTAL 0010	4

BACKFILL GRANULAR

CATEGORY	STATION	TO	STATION	LOCATION	209.0100 CY	REMARKS
	USH 12					
0010	420+31 "EB"	-	420+53 "EB"	LT & RT	121	36" CROSS CULVERT
0010	429+72 "EB"	-	429+88 "EB"	LT & RT	127	42" CROSS CULVERT
	STH 60					
0010	295+04 "A"	-	296+60 "A"	LT & RT	485	2' EBS
				TOTAL 0010	733	

BACKFILL CONTROLLED LOW STRENGTH

CATEGORY	STATION	LOCATION	209.0200.S CY	REMARKS
	USH 12 STAGE 3			
0010	420+41	LT & RT	16	TEMPORARY CULVERT
	STH 60 STAGE 2B			
0010	297+99 "a"	LT & RT	27	30" CMP & TEMPORARY CULVERT
		TOTAL 0010	43	

3

BASE AGGREGATE DENSE 3/4-INCH

305.0110

CATEGORY	STATION	TO	STATION	LOCATION	TON	REMARKS
	USH 12					
0010	409+53	-	410+97	LT	25	Aggregate Shoulder
0010	409+53	-	409+97	RT	8	Aggregate Shoulder
0010	409+97 "EB"	-	420+81 "EB"	RT	190	Aggregate Shoulder
0010	410+97 "WB"	-	424+76 "WB"	LT	242	Aggregate Shoulder
0010	420+81 "EB"	-	425+47 "EB"	RT	32	Aggregate Shoulder
0010	424+76 "WB"	-	425+34 "WB"	LT	8	Aggregate Shoulder
0010	426+99 "EB"	-	427+53 "EB"	RT	8	Aggregate Shoulder
0010	427+45 "WB"	-	430+05 "WB"	LT	46	Aggregate Shoulder
0010	427+53 "EB"	-	438+18 "EB"	RT	187	Aggregate Shoulder
0010	430+05 "WB"	-	430+46 "WB"	LT	6	Aggregate Shoulder
0010	431+63 "WB"	-	432+39 "WB"	LT	11	Aggregate Shoulder
0010	432+39 "WB"	-	433+06 "WB"	LT	12	Aggregate Shoulder
0010	433+06 "WB"	-	433+48 "WB"	LT	6	Aggregate Shoulder
0010	434+59 "WB"	-	435+02 "WB"	LT	6	Aggregate Shoulder
0010	435+02 "WB"	-	437+89 "WB"	LT	50	Aggregate Shoulder
	FRONTAGE RD					
0010	299+91 "A"	-	306+05 "A"	LT	66	Aggregate Shoulder
0010	300+02 "A"		303+30 "A"	RT	28	Aggregate Shoulder
0010	304+05 "A"		305+41 "A"	RT	11	Aggregate Shoulder
	RICHOLSON RD					
0010	196+22 "RO"	-	204+24 "RO"	LT	65	Aggregate Shoulder
0010	196+22 "RO"	-	204+24 "RO"	RT	65	Aggregate Shoulder
				TOTAL 0010	1072	
	USH 12					
0020	437+99	-	456+80	LT	110	Aggregate Shoulder
0020	437+99		456+80	RT	110	Aggregate Shoulder
				TOTAL 0020	220	

REHEATING HMA PAVEMENT LONGITUDINAL JOINTS

460.4110.S

CATEGORY	STATION	TO	STATION	LOCATION	LF	REMARKS
	USH 12 STAGE 5					
0010	409+53	-	409+97	ON C/L	44	
0010	409+97 "EB"	-	419+98 "EB"	ON R/L	1001	
0010	420+54 "EB"	-	427+14 "EB"	ON R/L	660	
0010	425+46 "WB"	-	432+03 "WB"	ON R/L	657	
0010	435+75 "EB"	-	438+15 "EB"	ON R/L	240	
	STH 60 STAGE 2C					
0010	295+04 "A"	-	299+35 "A"	ON C/L	431	
	FRONTAGE ROAD					
0010	299+80 "A"	-	305+80 "A"	ON C/L	600	
	RICHOLSON ROAD					
0010	196+22 "RO"	-	204+24 "RO"	ON C/L	802	
				TOTAL 0010	4435	
	USH 12 STAGE 5					
0020	437+99	-	456+80	ON C/L	1881	
				TOTAL 0020	1881	

REMOVING HMA PAVEMENT NOTCHED WEDGE LONGITUDINAL JOINT MILLING

SPV.0090.01

CATEGORY	STATION	TO	STATION	LOCATION	LF	REMARKS
	USH 12 STAGE 5					
0010	409+53	-	409+97	ON C/L	44	
0010	409+97 "EB"	-	419+98 "EB"	ON R/L	1001	
0010	420+54 "EB"	-	427+14 "EB"	ON R/L	660	
0010	425+46 "WB"	-	432+03 "WB"	ON R/L	657	
0010	435+75 "EB"	-	438+15 "EB"	ON R/L	240	
	STH 60 STAGE 2C					
0010	295+04 "A"	-	299+35 "A"	ON C/L	431	
	FRONTAGE ROAD					
0010	299+80 "A"	-	305+80 "A"	ON C/L	600	
	RICHOLSON ROAD					
0010	196+22 "RO"	-	204+24 "RO"	ON C/L	802	
				TOTAL 0010	4435	
	USH 12 STAGE 5					
0020	437+99	-	456+80	ON C/L	1881	
				TOTAL 0020	1881	

BASE AGGREGATE DENSE 1 1/4-INCH

CATEGORY	STATION		TO	STATION		LOCATION	305.0120 TON	REMARKS
	USH 12							
0010	409+53		-	437+99		LT	3322	WB Driving Lane
0010	409+53		-	437+99		RT	2552	EB Driving Lane
0010	419+94	"EB"	-	428+00	"EB"	RT	746	EB Right Turn Lane
0010	420+54	"EB"	-	426+40	"EB"	LT	509	EB Left Turn Lane
0010	426+23	"WB"	-	431+78	"WB"	RT	472	WB Left Turn Lane
0010	409+53		-	409+97		RT	1	Paved Shoulder
0010	409+97	"EB"	-	425+42	"EB"	RT	427	Paved Shoulder
0010	411+49	"WB"	-	418+92	"WB"	LT	208	Paved Shoulder
0010	419+64	"WB"	-	424+60	"WB"	LT	198	Paved Shoulder
0010	427+60	"EB"	-	437+98	"EB"	RT	363	Paved Shoulder
0010	428+04	"WB"	-	429+95	"WB"	LT	23	Paved Shoulder
0010	432+53	"WB"	-	432+96	"WB"	LT	3	Paved Shoulder
0010	435+17	"WB"	-	437+89	"WB"	LT	39	Paved Shoulder
0010	420+66	"EB"	-	425+56	"EB"	RT	27	18" Curb
0010	426+84	"WB"	-	431+66	"WB"	RT	27	18" Curb
0010	419+92	"WB"	-	425+40	"WB"	RT	51	30" Curb
0010	419+99	"EB"	-	420+66	"EB"	LT	6	30" Curb
0010	427+01	"EB"	-	435+72	"EB"	LT	81	30" Curb
0010	431+66	"WB"	-	435+46	"WB"	RT	35	30" Curb
0010	419+99	"EB"	-	425+56	"EB"	LT	518	Median Surface
0010	427+01	"EB"	-	435+72	"EB"	LT	486	Median Surface
0010	409+53		-	410+97		LT	84	Aggregate Shoulder
0010	409+53		-	409+97		RT	26	Aggregate Shoulder
0010	409+97	"EB"	-	420+81	"EB"	RT	629	Aggregate Shoulder
0010	410+97	"WB"	-	424+76	"WB"	LT	800	Aggregate Shoulder
0010	420+81	"EB"	-	425+47	"EB"	RT	167	Aggregate Shoulder
0010	424+76	"WB"	-	425+34	"WB"	LT	29	Aggregate Shoulder
0010	426+99	"EB"	-	427+53	"EB"	RT	27	Aggregate Shoulder
0010	427+45	"WB"	-	430+05	"WB"	LT	151	Aggregate Shoulder
0010	427+53	"EB"	-	438+18	"EB"	RT	618	Aggregate Shoulder
0010	430+05	"WB"	-	430+46	"WB"	LT	21	Aggregate Shoulder
0010	431+63	"WB"	-	432+39	"WB"	LT	38	Aggregate Shoulder
0010	432+39	"WB"	-	433+06	"WB"	LT	39	Aggregate Shoulder
0010	433+06	"WB"	-	433+48	"WB"	LT	21	Aggregate Shoulder
0010	434+59	"WB"	-	435+02	"WB"	LT	22	Aggregate Shoulder
0010	435+02	"WB"	-	437+89	"WB"	LT	167	Aggregate Shoulder
0010	FE 416+52	"WB"				LT	35	
0010	FE 416+52	"EB"				RT	40	
0010	CE 419+39	"WB"				LT	35	
0010	CE 431+28	"WB"				LT	80	
0010	CE 434+32	"WB"				LT	82	
						SUBTOTAL 0010	13205	

BASE AGGREGATE DENSE 1 1/4-INCH (CONTINUED)

CATEGORY	STATION		TO	STATION		LOCATION	305.0120 TON	REMARKS
	USH 12 STAGE 1							
0010	405+03		-	418+97		LT	818	Temporary Widening & Shoulder
0010	419+65		-	425+52		LT	341	Temporary Widening & Shoulder
0010	428+22		-	442+66		LT	816	Temporary Widening & Shoulder
0010	FE 416+52	"WB"				LT	35	Temporary Driveway
0010	CE 419+39	"WB"				LT	35	Temporary Driveway
0010	CE 427+00	"WB"				LT	43	Temporary Driveway
0010	CE 431+28	"WB"				LT	80	Temporary Driveway
0010	CE 434+32	"WB"				LT	124	Temporary Driveway
	USH 12 STAGE 2							
0010	415+48	"EB"	-	421+19	"EB"	RT	261	Temporary Widening & Shoulder
0010	427+31	"EB"	-	438+15	"EB"	RT	615	Temporary Widening & Shoulder
0010	438+00		-	441+52		RT	146	Temporary Widening & Shoulder
0010	FE 416+52	"EB"				RT	40	Temporary Driveway
	STH60							
0010	295+04	"A"		299+25	"A"	LT & RT	1400	
0010	PE 295+45	"A"				RT	14	
0010	PE 296+72	"A"				RT	42	
0010	295+04	"A"	-	299+18	"A"	LT	155	36" Curb
0010	295+04	"A"	-	297+80	"A"	RT	120	36" Curb
0010	298+06	"A"	-	299+23	"A"	RT	67	36" Curb
	STH 60 STAGE 2B							
0010	PE 295+45	"A"				RT	14	Temporary Driveway
0010	PE 296+72	"A"				RT	42	Temporary Driveway
	FRONTAGE RD							
0010	299+93	"A"	-	306+05	"A"	LT & RT	1312	
0010	CE 303+69	"A"				RT	65	
0010	CE 305+71	"A"				RT	68	
0010	CE 307+10	"A"				LT	89	
0010	299+91	"A"	-	306+05	"A"	LT	219	Aggregate Shoulder
0010	300+02	"A"		303+30	"A"	RT	95	Aggregate Shoulder
0010	304+05	"A"		305+41	"A"	RT	37	Aggregate Shoulder
	RICHOLSON RD							
0010	196+22	"RO"	-	204+24	"RO"	LT & RT	875	
0010	CE 198+34	"RO"				RT	112	
0010	196+22	"RO"	-	204+24	"RO"	LT	218	Aggregate Shoulder
0010	196+22	"RO"	-	204+24	"RO"	RT	218	Aggregate Shoulder
	RICHOLSON RD STAGE 3							
0010	CE 198+34	"RO"				RT	112	Temporary Driveway
						SUBTOTAL 0010	8628	
						TOTAL 0010	21833	

ASPHALTIC MATERIAL PG58-28

455.0105

CATEGORY	STATION	TO	STATION	LOCATION	TON	REMARKS
	USH 12					
0010	409+53	-	437+99	LT	84	WB Driving Lane
0010	409+53	-	437+99	RT	65	EB Driving Lane
0010	419+94 "EB"	-	428+00 "EB"	RT	19	EB Right Turn Lane
0010	420+54 "EB"	-	426+40 "EB"	LT	13	EB Left Turn Lane
0010	426+23 "WB"	-	431+78 "WB"	RT	12	WB Left Turn Lane
0010	409+53	-	409+97	RT	0	Paved Shoulder
0010	409+97 "EB"	-	425+42 "EB"	RT	11	Paved Shoulder
0010	411+49 "WB"	-	418+92 "WB"	LT	5	Paved Shoulder
0010	419+64 "WB"	-	424+60 "WB"	LT	5	Paved Shoulder
0010	427+60 "EB"	-	437+98 "EB"	RT	9	Paved Shoulder
0010	428+04 "WB"	-	429+95 "WB"	LT	1	Paved Shoulder
0010	432+53 "WB"	-	432+96 "WB"	LT	0	Paved Shoulder
0010	435+17 "WB"	-	437+89 "WB"	LT	1	Paved Shoulder
	STH60					
0010	295+04 "A"		299+25 "A"	LT & RT	43	
	FRONTAGE ROAD					
0010	299+93 "A"	-	306+05 "A"	LT & RT	32	
	RICHOLSON RD					
0010	196+22 "RO"	-	204+24 "RO"	LT & RT	21	
				TOTAL 0010	321	
	USH 12					
0020	437+99	-	456+80	LT & RT	81	
				TOTAL 0020	81	

TACK COAT

455.0605

CATEGORY	STATION	TO	STATION	LOCATION	GAL	REMARKS
	USH 12					
0010	409+53	-	437+99	LT	847	WB Driving Lane
0010	409+53	-	437+99	RT	651	EB Driving Lane
0010	419+94 "EB"	-	428+00 "EB"	RT	190	EB Right Turn Lane
0010	420+54 "EB"	-	426+40 "EB"	LT	130	EB Left Turn Lane
0010	426+23 "WB"	-	431+78 "WB"	RT	120	WB Left Turn Lane
0010	409+97 "EB"	-	438+15 "EB"	RT	201	Paved Shoulder
0010	411+49 "WB"	-	437+89 "WB"	LT	120	Paved Shoulder
	STH60					
0010	295+04	-	299+25	LT & RT	126	
	FRONTAGE ROAD					
0010	299+93 "A"	-	306+05 "A"	LT & RT	148	
	RICHOLSON RD					
0010	196+22 "RO"	-	204+24 "RO"	LT & RT	98	
				TOTAL 0010	2631	
	USH 12					
0020	437+99	-	456+80	LT & RT	903	
				TOTAL 0020	903	

HMA PAVEMENT TYPE E-0.3

460.1100

CATEGORY	STATION	TO	STATION	LOCATION	TON	REMARKS
	FRONTAGE ROAD					
0010	299+93 "A"	-	306+05 "A"	LT & RT	579	
	RICHOLSON RD					
0010	196+22 "RO"	-	204+24 "RO"	LT & RT	386	
				TOTAL 0010	965	

HMA PAVEMENT TYPE E-3

460.1103

CATEGORY	STATION	TO	STATION	LOCATION	TON	REMARKS
	USH 12					
0010	409+53	-	437+99	LT	1535	WB Driving Lane
0010	409+53	-	437+99	RT	1179	EB Driving Lane
0010	419+94 "EB"	-	428+00 "EB"	RT	345	EB Right Turn Lane
0010	420+54 "EB"	-	426+40 "EB"	LT	235	EB Left Turn Lane
0010	426+23 "WB"	-	431+78 "WB"	RT	218	WB Left Turn Lane
0010	409+53	-	409+97	RT	1	Paved Shoulder
0010	409+97 "EB"	-	425+42 "EB"	RT	197	Paved Shoulder
0010	411+49 "WB"	-	418+92 "WB"	LT	96	Paved Shoulder
0010	419+64 "WB"	-	424+60 "WB"	LT	91	Paved Shoulder
0010	427+60 "EB"	-	437+98 "EB"	RT	168	Paved Shoulder
0010	428+04 "WB"	-	429+95 "WB"	LT	11	Paved Shoulder
0010	432+53 "WB"	-	432+96 "WB"	LT	1	Paved Shoulder
0010	435+17 "WB"	-	437+89 "WB"	LT	18	Paved Shoulder
	STH60					
0010	295+04	-	299+25	LT & RT	776	
				TOTAL 0010	4871	
	USH 12					
0020	437+99	-	456+80	LT & RT	1475	
				TOTAL 0020	1475	

HMA COLD WEATHER PAVING

460.4000

CATEGORY	STATION	TO	STATION	LOCATION	TON	REMARKS
0010	USH 12 STAGE 5				325	
				TOTAL 0010	325	
0020	USH 12 STAGE 5				369	
				TOTAL 0020	369	

3

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

CATEGORY	STATION	TO	STATION	LOCATION	465.0120 TON	REMARKS
	USH 12					
0010	CE 419+39 "WB"			LT	18	
0010	CE 431+28 "WB"			LT	40	
0010	CE 434+32 "WB"			LT	41	
	STH 60					
0010	PE 295+45 "A"			RT	7	
0010	PE 296+72 "A"			RT	21	
	FRONTAGE ROAD					
0010	CE 303+69 "A"			RT	33	
0010	CE 305+71 "A"			RT	34	
0010	CE 307+10 "A"			LT	45	
	RICHOLSON RD					
0010	CE 198+34 "RO"			RT	42	
				TOTAL 0010	281	

ASPHALTIC SURFACE TEMPORARY

CATEGORY	STATION	TO	STATION	LOCATION	465.0125 TON	REMARKS
	USH 12 STAGE 1					
0010	405+03	-	418+97	LT	166	Temporary Widening
0010	419+65	-	425+52	LT	69	Temporary Widening
0010	428+22	-	442+66	LT	160	Temporary Widening
	USH 12 STAGE 2					
0010	415+48 "EB"	-	421+19 "EB"	RT	40	Temporary Widening
0010	427+31 "EB"	-	438+15 "EB"	RT	121	Temporary Widening
0010	438+00	-	441+52	RT	19	Temporary Widening
	STH 60 STAGE 2					
0010	296+70 "A"	-	299+35 "A"	RT	29	Temporary Widening
				TOTAL 0010	604	

ASPHLATIC FLUMES SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	ASPHALTIC FLUMES 465.0315 SY	SOD EROSION CONTROL 631.1100 SY	REMARKS
	USH 12						
0010	425+47 "EB"			RT	13	5	
0010	426+99 "EB"			RT	16	5	
	RICHOLSON RD						
0010	204+24 "RO"			RT	20	5	
				TOTAL 0010	49	15	

ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL

CATEGORY	STATION	TO	STATION	LOCATION	465.0425 LF	REMARKS
	USH 12					
0010	409+53	-	410+97	LT	115	TYPE 1 RUMBLES
0010	409+53	-	409+97	RT	35	TYPE 1 RUMBLES
0010	409+97 "EB"	-	419+87 "EB"	RT	792	TYPE 1 RUMBLES
0010	410+97 "WB"	-	418+08 "WB"	LT	569	TYPE 1 RUMBLES
0010	420+12 "WB"	-	423+34 "WB"	LT	258	TYPE 1 RUMBLES
0010	428+50 "EB"	-	438+15 "EB"	RT	772	TYPE 1 RUMBLES
0010	436+11 "WB"	-	437+89 "WB"	LT	142	TYPE 1 RUMBLES
				TOTAL 0010	2683	
	USH 12					
0020	437+99	-	448+21	LT	818	TYPE 1 RUMBLES
0020	437+99	-	447+78	RT	783	TYPE 1 RUMBLES
0020	448+82	-	456+80	RT	638	TYPE 1 RUMBLES
0020	449+02	-	456+80	LT	622	TYPE 1 RUMBLES
				TOTAL 0020	2861	

ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL

CATEGORY	STATION	TO	STATION	LOCATION	465.0475 LF	REMARKS
	USH 12					
0020	437+99	-	456+80	C/L	1881	
				TOTAL 0020	1881	

3

TEMPORARY SHORING

CATEGORY	STATION	TO	STATION	LOCATION	511.1100 SF	REMARKS
	USH 12					
0010	420+31 "EB"	-	420+53 "EB"		78	36" CROSS CULVERT
0010	429+72 "EB"	-	429+88 "EB"		77	42" CROSS CULVERT
	STH 60					
0010	298+16 "A"	-	298+22 "A"		61	30" CROSS CULVERT
				TOTAL 0010	216	

CULVERT PIPE TEMPORARY 30-INCH

CATEGORY	STATION	TO	STATION	LOCATION	520.4030 LF	REMARKS
	STH 60 STAGE 2					
0010	297+99 "a"				72	30" CMP; REMAINS IN PLACE REQUIRES 45 DEGREE BEND
				TOTAL 0010	72	

CULVERT PIPE TEMPORARY 24-INCH

CATEGORY	STATION	TO	STATION	LOCATION	520.4024 LF	REMARKS
	USH 12 STAGE 1					
0010	420+41			LT & RT	136	REMAINS IN PLACE
				TOTAL 0010	136	

3

CORRUGATED STEEL PIPE CULVERTS SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	MINIMUM PIPE THICKNESS INCHES	CULVERT PIPE CORRUGATED STEEL 12-INCH 521.0112 LF	18-INCH 521.0118 LF	24-INCH 521.0124 LF	36-INCH 521.0136 LF	AEW FOR CULVERT PIPE STEEL 12-INCH 521.1012 EACH	18-INCH 521.1018 EACH	AEW FOR CULVERT PIPE SLOPE SIDE DRAIN STEEL 24-INCH 6:1 521.1524 EACH	36-INCH 6:1 521.1536 EACH	REMARKS
	USH12													
0010	416+44 "WB"			LT	0.079				58				2	
0010	416+59 "EB"			RT	0.064			68				2		
	FRONTAGE ROAD													
0010	303+67 "A"			RT	0.064	64				2				
0010	306+33 "A"			LT	0.064	42				2				
	RICHOLSON RD													
0010	198+31 "RO"			RT	0.064		76				2			
					TOTAL 0010	106	76	68	58	4	2	2	2	

REINFORCED CONCRETE PIPE CULVERTS SUMMARY

CATEGORY	STATION	LOCATION	CONCRETE COLLARS FOR PIPE 520.8000 EACH	CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH 522.0130 LF	CLASS III 36-INCH 522.0136 LF	CLASS III 42-INCH 522.0142 LF	CLASS III 48-INCH 522.0148 LF	CLASS IV 48-INCH 522.0348 LF	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH 522.1012 EACH	18-INCH 522.1018 EACH	30-INCH 522.1030 EACH	36-INCH 522.1036 EACH	42-INCH 522.1042 EACH	48-INCH 522.1048 EACH	CULVERT PIPE RC H EP CL HE-III 38x60-INCH 523.0138 LF	APRON ENDWALL CULVERT PIPE RC H EP 38x60-INCH 523.0538 EACH	MARKERS CULVERT END 633.5200 EACH	APRON ENDWALL CULVERT PIPE RC H EP 38x60-INCH 6-TO-1 SLOPE SPV.0060.01 EACH	REMARKS
	USH 12																		
0010	419+97 "WB"	44.0' LT							1										JOINT TIES REQ'D
0010	420+36 "EB"	LT & RT			122							2					2		JOINT TIES REQ'D
0010	421+97 "WB"	39.7' LT							1										JOINT TIES REQ'D
0010	422+96 "WB"	38.8' LT							1										JOINT TIES REQ'D
0010	427+37 "EB"	58.3' RT							1										JOINT TIES REQ'D
0010	428+29 "EB"	LT	1			14							1				1		JOINT TIES REQ'D
0010	428+29 "EB"	RT	1			28							1				1		JOINT TIES REQ'D
0010	428+62 "EB"	63.5' RT							1										JOINT TIES REQ'D
0010	429+04 "EB"	LT	1			14							1				1		JOINT TIES REQ'D
0010	429+04 "EB"	RT	1			24							1				1		JOINT TIES REQ'D
0010	429+80 "EB"	LT & RT				110							2				2		JOINT TIES REQ'D
0010	431+04 "WB"	LT													84	2			JOINT TIES REQ'D
0010	432+64 "EB"	64.2' RT							1										JOINT TIES REQ'D
0010	434+03 "WB"	LT													78			2	JOINT TIES REQ'D
0010	436+70 "EB"	38.9' RT							1										JOINT TIES REQ'D
	STH 60																		JOINT TIES REQ'D
0010	298+19 "A"	LT & RT		138							2						2		JOINT TIES REQ'D
0010	298+71 "A"	77.0' RT							1										JOINT TIES REQ'D
	FRONTAGE ROAD																		JOINT TIES REQ'D
0010	300+28 "A"	LT & RT						94						2					JOINT TIES REQ'D
	RICHOLSON RD																		JOINT TIES REQ'D
0010	203+17 "RO"	LT & RT					86							2					JOINT TIES REQ'D
0010	203+37 "RO"	LT & RT					88							2					JOINT TIES REQ'D
0010	203+57 "RO"	LT & RT					90							2					JOINT TIES REQ'D
0010	204+00 "RO"	62.8' LT								1									JOINT TIES REQ'D
		TOTAL 0010	4	138	122	190	264	94	8	1	2	2	6	8	162	2	10	2	

RIPRAP SUMMARY

CATEGORY	STATION	TO STATION	LOCATION	RIPRAP HEAVY 606.0300 CY	GEOTEXTILE TYPE HR 645.0120 SY	REMARKS
	USH 12					
0010	428+29 "EB"		RT	75	112	Stage 2 Install
0010	429+04 "EB"		RT	75	112	Stage 2 Install
0010	429+80 "EB"		RT	75	112	Stage 2 Install
	RICHOLSON ROAD					
0010	203+09 "RO"	203+66 "RO"	RT	68	103	Stage 3 Install
			TOTAL 0010	293	439	

PIPE GRATES

CATEGORY	STATION	TO STATION	LOCATION	611.9800.S EACH	REMARKS
	USH 12				
0010	434+03 "WB"		LT	2	38"x60" Horiz. Elliptical Conc
			TOTAL 0010	2	

3

CONCRETE CURB & GUTTER 18-INCH TYPE D

CATEGORY	STATION	TO	STATION	LOCATION	601.0407 LF	REMARKS
	USH 12					
0010	420+66 "EB"	-	425+56 "EB"	RT	486	
0010	426+84 "WB"	-	431+66 "WB"	RT	488	
				TOTAL 0010	974	

CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J

CATEGORY	STATION	TO	STATION	LOCATION	601.0415 LF	REMARKS
	USH 12					
0010	419+92 "WB"	-	425+40 "WB"	RT	550	
0010	419+99 "EB"	-	420+66 "EB"	LT	68	
0010	427+01 "EB"	-	435+72 "EB"	LT	870	
0010	431+66 "WB"	-	435+46 "WB"	RT	380	
				TOTAL 0010	1868	

CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D

CATEGORY	STATION	TO	STATION	LOCATION	601.0557 LF	REMARKS
	STH 60					
0010	295+04 "A"	-	299+18 "A"	LT	418	
0010	295+04 "A"	-	297+80 "A"	RT	325	
0010	298+06 "A"	-	299+23 "A"	RT	181	
				TOTAL 0010	924	

FENCE SAFETY

CATEGORY	STATION	TO	STATION	LOCATION	616.0700.S LF	REMARKS
	USH 12					
0010	427+10 "WB"	-	427+93 "WB"	66.6' LT	80	
0010	433+69 "EB"	-	434+79 "EB"	73.3'-70.2' RT	111	
				TOTAL 0010	191	

CONCRETE SIDEWALK 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	602.0405 SF	REMARKS
	USH 12					
0010	419+99 "EB"	-	425+56 "EB"	LT	4664	Median Surface
0010	427+01 "EB"	-	435+72 "EB"	LT	4373	Median Surface
				TOTAL 0010	9037	

CONCRETE MEDIAN BLUNT NOSE

CATEGORY	STATION	TO	STATION	LOCATION	620.0200 SF	REMARKS
	USH 12					
0010	425+56 "EB"	-	425+62 "EB"	LT	42	
0010	426+95 "EB"	-	427+01 "EB"	LT	42	
				TOTAL 0010	84	

CONCRETE MEDIAN SLOPED NOSE

CATEGORY	STATION	TO	STATION	LOCATION	620.0300 SF	REMARKS
	USH 12					
0010	419+92 "EB"	-	419+99 "EB"	LT	98	
0010	435+72 "EB"	-	435+79 "EB"	LT	49	
				TOTAL 0010	147	

STORM SEWER SUMMARY

CATEGORY	STATION	TO STATION	LOCATION	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH 608.0312 LF	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH 608.0418 LF	MANHOLE COVERS TYPE M 611.0550 EACH	INLET COVERS TYPE F 611.0615 EACH	INLET COVERS TYPE HM-GJ 611.0630 EACH	INLET COVERS TYPE MS 611.0642 EACH	INLET COVERS TYPE Z 611.0666 EACH	MANHOLES 4-FT DIA 611.2004 EACH	INLETS 3-FT DIA 611.3003 EACH	INLETS 2x3-FT 611.3230 EACH	2.5x3-FT 611.3253 EACH	INLET MEDIAN 1 GRATE 611.3901 EACH	REMARKS
	USH 12															
0010	420+03	"EB"	2.5' LT	17				1					1			
0010	419+96	"WB"	2.5' RT	39				1					1			
0010	422+06	"EB"	13.5' LT	8						1		1				
0010	421+96	"WB"	2.5' RT	34				1					1			
0010	423+07	"EB"	13.5' LT	8						1		1				
0010	422+96	"WB"	2.5' RT	34				1					1			
0010	426+98	"WB"	13.5' RT	7						1		1				
0010	427+16	"EB"	2.5' LT	56				1					1			
0010	428+42	"WB"	13.5' RT	6						1		1				
0010	428+62	"EB"	2.5' LT	58				1					1			
0010	432+40	"WB"	2.5' RT	10				1					1			
0010	432+65	"EB"	2.5' LT	51				1					1			
0010	435+45	"WB"	2.5' RT	5				1					1			
0010	435+70	"EB"	2.5' RT	34				1					1			
	STH 60															
0010	295+10	"A"	21.0' LT		54		1							1		
0010	295+10	"A"	21.0' RT		54		1							1		
0010	295+64	"A"	21.0' LT		40		1							1		
0010	295+64	"A"	21.0' RT		80		1							1		
0010	296+39	"A"	33.2' RT		159				1						1	
0010	298+75	"A"	33.0' RT	39			1							1		
	RICHOLSON RD															
0010	204+25	"RO"	41.2' LT		31	1					1					
			TOTAL 0010	406	418	1	5	10	1	4	1	4	10	5	1	

INLET PROTECTION TYPE A

CATEGORY	STATION	TO STATION	LOCATION	628.7005 EACH	REMARKS
	STH 60				
0010	296+39	"A"	33.2' RT	1	Stage 2 Install
			TOTAL 0010	1	

INLET PROTECTION TYPE C

CATEGORY	STATION	TO STATION	LOCATION	628.7015 EACH	REMARKS
	STH 60				
0010	295+10		LT	1	Stage 2 Install
0010	295+10		RT	1	Stage 2 Install
0010	295+64		LT	1	Stage 2 Install
0010	295+64		RT	1	Stage 2 Install
0010	298+75		RT	1	Stage 2 Install
			TOTAL 0010	5	

WATER

CATEGORY	STATION		TO	STATION		LOCATION	624.0100 MGAL	REMARKS
	ENTIRE PROJECT					LT & RT	181.8	DUST CONTROL
	USH 12							
0010	409+53		-	437+99		LT & RT	39.8	WB Driving Lane
0010	409+53		-	437+99		LT	30.6	EB Driving Lane
0010	419+94	"EB"	-	428+00	"EB"	RT	8.9	EB Right Turn Lane
0010	420+54	"EB"	-	426+40	"EB"	LT	6.1	EB Left Turn Lane
0010	426+23	"WB"	-	431+78	"WB"	RT	5.7	WB Left Turn Lane
0010	409+53		-	410+97		LT	1.3	AGGREGATE SHOULDER
0010	409+53		-	409+97		RT	0.4	AGGREGATE SHOULDER
0010	409+53		-	409+97		RT	0	BASE FOR PAVED SHOULDER
0010	409+97	"EB"	-	438+18	"EB"	RT	22.3	AGGREGATE SHOULDER
0010	409+97	"EB"	-	437+98	"EB"	RT	24.9	BASE FOR PAVED SHOULDER
0010	410+97	"WB"	-	437+89	"WB"	LT	4.6	AGGREGATE SHOULDER
0010	411+49	"WB"	-	437+89	"WB"	LT	5.6	BASE FOR PAVED SHOULDER
0010	419+99	"EB"	-	425+56	"EB"	LT	5.1	BASE FOR EB LEFT TURN MEDIAN
0010	427+01	"EB"	-	435+72	"EB"	LT	5.6	BASE FOR WB LEFT TURN MEDIAN
0010	416+52	"WB"	-	434+32	"WB"	LT	2.8	DRIVEWAYS
0010	416+52	"EB"				RT	0.5	DRIVEWAY
	USH 12 STAGE 1							
0010	405+03		-	442+66		LT	17.7	TEMPORARY WIDENING
0010	416+52	"WB"	-	434+32		LT	3.3	TEMPORARY DRIVEWAYS
	USH 12 STAGE 2							
0010	415+48	"EB"	-	441+52		RT	12.2	TEMPORARY WIDENING
0010	416+52	"EB"				RT	0.5	TEMPORARY DRIVEWAY
	STH 60							
0010	295+04	"A"	-	229+25	"A"	LT & RT	16.8	BASE FOR PAVEMENT
0010	295+45	"A"	-	296+72	"A"	RT	0.7	DRIVEWAYS
0010	295+04	"A"	-	299+18	"A"	LT	1.9	BASE FOR CURB
0010	295+04	"A"	-	299+23	"A"	RT	2.2	BASE FOR CURB
	STH 60 STAGE 2B							
0010	295+45	"A"	-	296+72	"A"	RT	0.7	TEMPORARY DRIVEWAY
	FRONTAGE ROAD							
0010	299+93	"A"	-	306+05	"A"	LT & RT	15.7	BASE FOR PAVEMENT
0010	299+91	"A"	-	306+05	"A"	LT	3.4	AGGREGATE SHOULDER
0010	300+02	"A"	-	303+30	"A"	RT	2	AGGREGATE SHOULDER
0010	303+69	"A"	-	307+10	"A"	LT & RT	2.7	DRIVEWAYS
	RICHOLSON RD							
0010	196+22	"RO"	-	196+22	"RO"	LT & RT	10.5	BASE FOR PAVEMENT
0010	196+22	"RO"	-	204+24	"RO"	LT	3.4	AGGREGATE SHOULDER
0010	196+22	"RO"	-	204+24	"RO"	RT	3.4	AGGREGATE SHOULDER
0010	198+34	"RO"				RT	1.3	DRIVEWAY
	RICHOLSON RD STAGE 3							
0010	198+34	"RO"				RT	1.3	TEMPORARY DRIVEWAY
						TOTAL 0010	446	
	USH 12							
0020	43799		-	45680		LT	1.3	3/4" AGGREGATE SHOULDER
0020	43799		-	45680		RT	1.3	3/4" AGGREGATE SHOULDER
						TOTAL 0020	3	

3

RESTORATION SUMMARY

NOTE: THIS TABLE INCLUDES THE FINISHED RESTORATION OF ALL CONSTRUCITON STAGES

CATEGORY	STATION	TO	STATION	LOCATION	SALVAGED TOPSOIL 625.0500 SY	MULCHING 627.0200 SY	FERTILIZER TYPE B 629.0210 CWT	SEEDING MIX NO. 10 630.0110 LB	REMARKS
	USH12								
0010	409+53	-	410+97	LT	376	376	0.2	5	
0010	409+53	-	409+97	RT	132	132	0.1	2	
0010	409+97 "EB"	-	425+93 "EB"	RT	7224	7224	4.6	98	
0010	410+97 "WB"	-	425+94 "WB"	LT	5695	5695	3.6	77	
0010	426+49 "WB"	-	430+82 "WB"	LT	1726	1726	1.1	23	
0010	426+52 "EB"	-	438+14 "EB"	RT	7608	7608	4.8	103	
0010	431+25 "WB"	-	433+84 "WB"	LT	915	915	0.6	12	
0010	434+25 "WB"	-	437+88 "WB"	LT	825	825	0.5	11	
	STH 60								
0010	295+04 "A"	-	298+70 "A"	LT	1182	1182	0.7	16	
0010	295+04 "A"	-	297+80 "A"	RT	871	871	0.5	12	
0010	298+06 "A"	-	298+65 "A"	RT	379	379	0.2	5	
	FRONTAGE ROAD								
0010	300+38 "A"	-	306+05 "A"	LT	1851	1851	1.2	25	
0010	300+88 "A"	-	303+47 "A"	RT	866	866	0.5	12	
0010	303+88 "A"	-	305+58 "A"	RT	334	334	0.2	5	
	RICHOLSON RD								
0010	196+25 "RO"	-	204+21 "RO"	LT	2331	2331	1.5	31	
0010	196+25 "RO"	-	198+10 "RO"	RT	537	537	0.3	7	
0010	198+31 "RO"	-	204+24 "RO"	RT	4643	4643	2.9	63	
				TOTAL 0010	37495	37495	23.5	507	

SEEDING TEMPORARY

CATEGORY	STATION	TO	STATION	LOCATION	630.0200 LB	REMARKS
0010	STAGE 1				71	
0010	STAGE 2				145	
0010	STAGE 3				123	
				TOTAL 0010	339	

EROSION MAT CLASS I TYPE B

CATEGORY	STATION	TO	STATION	LOCATION	628.2004 SY	REMARKS
	USH 12					
0010	416+83 "WB"			LT	16	Stage 3 Install
0010	416+97 "EB"			RT	9	Stage 2 Install
0010	420+28 "WB"			LT	16	Stage 3 Install
0010	426+76 "WB"			LT	20	Stage 3 Install
0010	430+51 "WB"			LT	20	Stage 3 Install
0010	433+56 "WB"			LT	20	Stage 3 Install
	STH 60					
0010	298+50 "A"			RT	12	Stage 2 Install
0010	UNDISTRIBUTED				23	
				TOTAL 0010	136	

SILT FENCE

628.1504

CATEGORY	STATION	TO	STATION	LOCATION	LF	REMARKS
	USH 12					
0010	416+66 "WB"	-	419+29 "WB"	LT	250	Stage 1 Install
0010	419+64 "WB"	-	425+46 "WB"	LT	580	Stage 1 Install
	FRONTAGE ROAD					
0010	304+59 "A"	-	306+93 "A"	LT	270	Stage 3 Install
	RICHOLSON RD					
0010	196+84 "RO"	-	204+11 "RO"	RT	703	Stage 2 Install
0010	UNDISTRIBUTED				400	AS DIRECTED BY ENGINEER
				TOTAL 0010	2203	

SILT FENCE MAINTENANCE

628.1520

CATEGORY	STATION	TO	STATION	LOCATION	LF	REMARKS
	USH 12					
0010	416+66 "WB"	-	419+29 "WB"	LT	1000	
0010	419+64 "WB"	-	425+46 "WB"	LT	2320	
	FRONTAGE ROAD					
0010	304+59 "A"	-	306+93 "A"	LT	1080	
	RICHOLSON RD					
0010	196+84 "RO"	-	204+11 "RO"	RT	2812	
0010	UNDISTRIBUTED				1600	AS DIRECTED BY ENGINEER
				TOTAL 0010	8812	

TEMPORARY DITCH CHECKS

628.7504

CATEGORY	STATION	TO	STATION	LOCATION	LF	REMARKS
	USH 12					
0010	411+00			LT	10	Stage 1 Install
0010	413+00 "WB"			LT	10	Stage 1 Install
0010	413+50 "EB"			RT	10	Stage 2 Install
0010	414+50 "WB"			LT	10	Stage 1 Install
0010	418+50 "EB"			RT	10	Stage 2 Install
0010	422+60 "WB"			LT	10	Stage 1 Install
0010	423+70 "EB"			RT	10	Stage 2 Install
0010	435+00 "EB"			RT	10	Stage 2 Install
	FRONTAGE ROAD					
0010	303+00 "A"			LT	10	Stage 3 Install
0010	UNDISTRIBUTED				60	AS DIRECTED BY ENGINEER
				TOTAL 0010	150	

CULVERT PIPE CHECKS

628.7555

CATEGORY	STATION	TO	STATION	LOCATION	EACH	REMARKS
	USH12					
0010	416+05 "WB"			LT	3	36" Pipe
0010	416+20 "EB"			RT	2	24" Pipe
0010	420+36 "EB"			RT	3	36" Pipe
0010	425+60 "WB"			LT	4	48" Pipe
0010	426+59 "WB"			LT	2	18" Pipe
0010	428+03 "WB"			LT	4	42" Pipe
0010	428+83 "WB"			LT	4	42" Pipe
0010	429+58 "WB"			LT	4	42" Pipe
0010	431+55 "WB"			LT	6	38"x60" Pipe
0010	434+50 "WB"			LT	6	38"x60" Pipe
	USH12 STAGE 1					
0010	420+41			RT	2	24" Pipe
	STH 60					
0010	297+78 "A"			LT	3	30" Pipe
	STH 60 STAGE 2					
0010	298+00 "a"			LT	3	30" Pipe
	FRONTAGE ROAD					
0010	304+02 "A"			RT	1	12" Pipe
	RICHOLSON RD					
0010	197+97 "RO"			RT	2	18" Pipe
0010	203+17 "RO"			RT	4	48" Pipe
0010	203+37 "RO"			RT	4	48" Pipe
0010	203+57 "RO"			RT	4	48" Pipe
0010	UNDISTRIBUTED				10	
				TOTAL 0010	71	

TRACKING PADS

628.7560

CATEGORY	STATION	TO	STATION	LOCATION	EACH	REMARKS
0010	UNDISTRIBUTED				1	AT BORROW SITE
				TOTAL 0010	1	

PERMANENT SIGNING SUMMARY

CATEGORY	SIGN NUMBER	APPROXIMATE STATION	LOCATION	SIGN CODE	SIGN DESCRIPTION	SIGN MESSAGE	SIGN SIZE IN INCHES	634.0614 POSTS WOOD 4X6-INCH 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH 18-FT EACH	637.2210 SIGNS TYPE II RELFECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	MOUNTED ON SAME POST AS SIGN NUMBER	REMARKS
0010	1-01	406+50	RT	W6-1	DIVIDED HIGHWAY BEGINS		36 X 36		1			9.00				
0010	1-02R	411"EB"+00	RT	J1-1	JUNCTION ASSEMBLY	JCT 60	24 X 39						1	1		
0010	1-03	411"WB"+15	LT	W6-3	TWO WAY TRAFFIC		36 X 36		1			9.00				
0010	1-04R	411"WB"+65	LT	R2-1	SPEED LIMIT (55)	55 MPH	24 X 30						1	1		
0010	1-05	411"WB"+60	LT	D2-2	DESTINATIONS DISTANCES	BARABOO 15 WIS DELLS 27	72 X 24	1	1		12.00					
0010	1-06	415"EB"+50	RT	J1-1	JUNCTION ASSEMBLY	JCT 60	24 X 39		1		6.50					
0010	1-07	417"WB"+50	LT	R2-1	SPEED LIMIT (55)	55 MPH	24 X 30	1			5.00					
0010	1-08	418"EB"+00	RT	J2-3	ADVANCE ROUTE TURN ASSEMBLY	EAST, EAST, WEST 12, 60, 60 (UP ARROW) (UP ARROW) (RIGHT TURN ARROW)	72 X 57			2	28.50					
0010	1-09R	418"EB"+50	RT	J2-3	ADVANCE ROUTE TURN ASSEMBLY	EAST, EAST, WEST 12, 60, 60 (LEFT BENT ARROW) (LEFT BENT ARROW) (RIGHT TURN ARROW)	36 X 48						1	2		
0010	1-10	420"EB"+00	MEDIAN	R4-7	KEEP RIGHT		36 X 48				12.00					BAND TO LIGHT POLE
0010	1-11	420"EB"+00	MEDIAN	W5-54	ISLAND CLEARANCE MARKER		18 X 18					2.25				BAND TO LIGHT POLE
0010	1-12	420'WB"+00	LT	R5-1	DO NOT ENTER		36 X 36		1		9.00					
0010	2-01	420"EB"+00	RT	D1-2	DESTINATIONS ARROWS	(UP ARROW) SAUK CITY SPRING GREEN (RIGHT ARROW)	84 X 30	1	1		17.50					
0010	2-02R	421"EB"+55	RT	D1-3	DESTINATIONS ARROWS	(TILT LEFT ARROW) SAUK CITY (TILT LEFT ARROW) MADISON SPRING GREEN (RIGHT ARROW)							1	2		
0010	2-03R	421"WB"+60	LT	J4-1	REASSURANCE ASSEMBLY	WEST 12	24 X 36						1	1		
0010	2-04	423"EB"+00	RT	R5-1A	WRONG WAY		36 X 24	1			6.00					
0010	2-05R	423"WB"+90	LT	D2-2	DESTINATIONS DISTANCES	BARABOO 15 WIS DELLS 27	72 X 24						1	2		
0010	2-06	424"WB"+00	LT	R5-1A	WRONG WAY		36 X 24				6.00				2-07	
0010	2-07	424"WB"+00	LT	W6-2	DIVIDED HIGHWAY ENDS		36 X 36		1			9.00				
0010	2-08	425"EB"+00	RT	J3-3	ROUTE TURN ASSEMBLY	EAST, EAST, WEST 12, 60, 60 (UP ARROW) (UP ARROW) (RIGHT ARROW)	72 X 57			2	28.50					
0010	2-09	425"EB"+00	RT	R5-1	DO NOT ENTER		30 X 30				6.25				2-08	
0010	2-10	425"WB"+00	LT	J4-1	REASSURANCE ASSEMBLY	WEST 12	24 X 36		1		6.00					
0010	2-11	425"WB"+40	MEDIAN	R4-7	KEEP RIGHT		24 X 30				5.00					BAND TO LIGHT POLE
0010	2-12R	426"EB"+20	RT	J3-2	ROUTE TURN ASSEMBLY	EAST, WEST 60, 60 (TILT LEFT ARROW) (RIGHT ARROW)	48 X 57						1	1		
0010	2-13R	426"EB"+20	RT	J3-1	ROUTE TURN ASSEMBLY	WEST 60 (LEFT ARROW)	24 X 57								2-12R	
0010	2-14	426"EB"+90	MEDIAN	R4-7	KEEP RIGHT		24 X 30				5.00					BAND TO LIGHT POLE
0010	2-15	427"WB"+20	LT	R5-1	DO NOT ENTER		30 X 30				6.25				2-16	
0010	2-16	427"WB"+20	LT	J3-3	ROUTE TURN ASSEMBLY	WEST, Blank, WEST 60, STATE SCENIC BYWAY, 12 (LEFT ARROW) (LEFT ARROW) (UP ARROW)	72 X 57			2	28.50					
0010	2-17R	427"WB"+55	LT	J3-2	ROUTE TURN ASSEMBLY	WEST, WEST 60, 12 (LEFT ARROW) (TILT RIGHT ARROW)	48 X 57						1	1		
0010	2-18	428"EB"+00	RT	J4-3	REASSURNACE ASSEMBLY	EAST, EAST, BLANK 12, 60, STATE SCENIC BYWAY	72 X 36		2		18.00					
0010	2-19R	428"EB"+60	RT	J4-2	REASSURNACE ASSEMBLY	EAST, EAST 12, 60	48 X 36						1	1		
0010	2-20R	428"EB"+60	RT	D6-4S	STATE SCENIC BYWAY		24 X 24									
0010	2-21R	428"WB"+50	LT	J13-1	ROUTE TURN WITHOUT CARDINALS	STATE SCENIC BYWAY (LEFT ARROW)	24 X 45						1 1	1 1		
0010	2-22	429"WB"+20	LT	R5-1A	WRONG WAY		36 X 24	1			6.00					
0010	2-23R	429"WB"+35	LT	D1-3	DESTINATIONS ARROWS	(LEFT ARROW) SPRING GREEN BARABOO (TILT RIGHT ARROW) WIS DELLS (TILT RIGHT ARROW)	84 X 36						1	2		
0010	2-24	431"WB"+05	MEDIAN	R6-2-R	ONE WAY RIGHT ARRROW		24 X 30				5.00					BAND TO LIGHT POLE
0010	2-25	431"EB"+30	RT	W6-2	DIVIDED HIGHWAY ENDS		36 X 36		1			9.00				
0010	2-26	431"EB"+30	RT	R5-1A	WRONG WAY		36 X 24				6.00				2-25	
0010	2-27R	431"EB"+45	RT	R2-1	SPEED LIMIT (55)	55 MPH	24 X 30									
							SUBTOTAL 0010	5	11	6	223.00	38.25	12	16		

PERMANENT SIGNING SUMMARY CONTINUED

CATEGORY	SIGN NUMBER	APPROXIMATE STATION	LOCATION	SIGN CODE	SIGN DESCRIPTION	SIGN MESSAGE	SIGN SIZE IN INCHES	634.0614 POSTS WOOD 4X6-INCH 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH 18-FT EACH	637.2210 SIGNS TYPE II RELFECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	MOUNTED ON SAME POST AS SIGN NUMBER	REMARKS
0010	2-28	431"WB"+75	LT	R5-1	DO NOT ENTER		30 X 30	1			6.25		1	1		
0010	2-29R	432"WB"+00	LT	J2-2	ADVANCE ROUTE TURN ASSEMBLY	WEST, WEST 60, 12 (LEFT TURN ARROW) (RIGHT BENT ARROW)	48 X 57						1	1		
0010	2-30	432"WB"+00	LT	D1-2	DESTINATIONS ARROWS	(UP ARROW) BARABOO (LEFT ARROW) SPRING GREEN	90 X 30	1	1		18.75					
0010	2-31R	432"EB"+65	RT	R1-1	STOP		30 X 30									
0010	2-32	433"EB"+80	RT	R2-1	SPEED LIMIT (55)	55 MPH	24 X 30	1			5.00		1	1		
0010	2-33R	434"EB"+05	RT	D2-2	DESTINATIONS DISTANCES	SAUK CITY 2 MADISON 29	72 X 24						1	2		BOX OUT REQUIRED
0010	2-34	434"WB"+10	MEDIAN	R6-2-R	ONE WAY RIGHT ARRROW		24 X 30	1			5.00					
0010	2-35	434"WB"+75	LT	R5-1	DO NOT ENTER		30 X 30	1			6.25					
0010	2-36	435"WB"+00	LT	J2-2	ADVANCE ROUTE TURN ASSEMBLY	WEST, WEST 60, 12 (LEFT TURN ARROW) (UP ARROW)	48 X 57			1	19.00					
0010	3-01	435"EB"+70	RT	R5-1	DO NOT ENTER		36 X 36		1		9.00					
0010	3-02	435"EB"+75	MEDIAN	R4-7	KEEP RIGHT		24 X 30				5.00					BAND TO LIGHT POLE
0010	3-03	435"EB"+75	MEDIAN	W5-54	ISLAND CLEARANCE MARKER		18 X 18					2.25				BAND TO LIGHT POLE
0010	5-01	294"A"+00	RT	J2-3	ADVANCE ROUTE TURN ASSEMBLY	WEST, EAST, EAST 12, 12, 60 (LEFT TURN ARROW) (RIGHT TURN ARROW) (RIGHT TURN ARROW)	72 X 57			2	28.50					
0010	5-02	295"A"+65	LT	I55-56	ADOPT A HIGHWAY	SAUK CITY FIRE DEPARTMENT	30 X 36	1			7.50					
0010	5-03	296"A"+00	RT	D1-2	DESTINATIONS ARROWS	(LEFT ARROW) BARABOO SAUK CITY (RIGHT ARROW)	72 X 30	2			15.00					
0010	5-04R	297"A"+25	RT	J2-3	ADVANCE ROUTE TURN ASSEMBLY	WEST, EAST, EAST 12, 12, 60 (LEFT TURN ARROW) (RIGHT TURN ARROW) (RIGHT TURN ARROW)	72 X 57						1	2		
0010	5-05	297"A"+35	LT	J4-2	REASSURANCE ASSEMBLY	WEST, BLANK 60, STATE SCENIC BYWAY	48 X 36		1		12.00					
0010	5-06R	298"A"+00	LT	D6-4S	STATE SCENIC BYWAY		24 X 24						1	1		
0010	5-07R	298"A"+00	LT	J4-1	REASSURANCE ASSEMBLY	WEST	24 X 36						1	1		
0010	5-08R	298"A"+10	RT	D1-2	DESTINATIONS ARROWS	(LEFT ARROW) BARABOO SAUK CITY (RIGHT ARROW)	84 X 30						1	2		
0010	5-09R	298"A"+95	LT	I55-56	ADOPT A HIGHWAY	SAUK CITY FIRE DEPARTMENT	30 X 36						1	1		
0010	5-10	299"A"+00	RT	R1-1	STOP		36 X 36			1	7.46					
0010	5-11	299"A"+00	RT	R6-3	DIVIDED HIGHWAY		30 X 24				5.00					5-10
0010	5-12	299"A"+00	RT	R6-1L	NARROW ONE WAY LEFT ARROW		36 X 12				3.00					5-10
0010	5-13	299"A"+00	RT	J3-4	ROUTE TURN ASSEMBLY	WEST, EAST, EAST, BLANK 12, 12, 60, STATE SCENIC BYWAY (LEFT ARROW) (RIGHT ARROW) (RIGHT ARROW) (RIGHT ARROW)	96 X 57			2	38.00					
0010	5-14R	299"A"+25	RT	R1-1	STOP		36 X 36						1	1		
0010	5-15R	299"A"+25	RT	J3-3	ROUTE TURN ASSEMBLY	WEST, EAST, EAST 12, 12, 60 (LEFT ARROW) (RIGHT ARROW) (RIGHT ARROW)	72 X 57						1	2		
0010	5-16R	299"A"+25	RT	J13-1	ROUTE TURN WITHOUT CARDINALS	STATE SCENIC BYWAY (RIGHT ARROW)	24 X 45						1	1		
0010	5-17	300"A"+15	LT	R6-1L	NARROW ONE WAY LEFT ARROW		36 X 12				3.00					5-18
0010	5-18	300"A"+15	LT	R1-1	STOP		30 X 30		1		5.18					
0010	5-19	300"A"+15	LT	R6-3	DIVIDED HIGHWAY		30 X 24				5.00					5-18
0010	5-20	303"A"+00	LT	W3-1	STOP AHEAD		36 X 36		1			9.00				
0010	6-01	199"RO"+95	RT	W3-1	STOP AHEAD		36 X 36		1			9.00				
0010	6-02	204"RO"+35	RT	R1-1	STOP		30 X 30	1			5.18					
							SUBTOTAL 0010	9	6	6	209.07	20.25	12	16		
							TOTAL 0010	14	17	12	432.07	58.50	24	32		
0020	3-04	438+10	RT	W6-3	TWO WAY TRAFFIC		36 X 36		1			9.00				
0020	3-05	438+10	LT	W6-1	DIVIDED HIGHWAY BEGINS		36 X 36		1			9.00				
0020	3-06	441+00	RT	D2-2	DESTINATIONS DISTANCES	SAUK CITY 2 MADISON 17	78 X 24	1	1		13.00					
0020	3-07R	441+55	RT	W14-3	NO PASSING ZONE PENNANT		48 X 36									
0020	3-08	443+00	RT	W14-3	NO PASSING ZONE PENNANT		48 X 36	1				6.00	1	1		
							TOTAL 0020	2	3	0	13	24	1	1		

TRAFFIC CONTROL DETOUR SIGNS

643.3000

CATEGORY	LOCATION	SIGN CODE	SIGN DESCRIPTION	SIGN MESSAGE	SIGN SIZE IN INCHES	SERVICE DAYS	QTY	DAY	REMARKS
0010	EB USH 12	W20-1-F	ROAD WORK X MILES	3 MILES	48 X 48	125	2	250	
		W12-52	MAX X FT WIDTH	11	48 X 48				
	EB USH 12	M3-2	CARDINAL DIRECTION MARKER	EAST	24 X 12	125	3	375	
		M1-4	USH ROUTE MARKER	12	24 X 24				
0010		G20-52A	ALTERNATE ROUTE FOLLOW HWY	FOLLOW HWY PF EAST	138 X 36				
0010	EB USH 12	M04-1	ALTERNATE		24 X 12	125	4	500	
		M3-2	CARDINAL DIRECTION MARKER	EAST	24 X 12				
		M1-4	USH ROUTE MARKER	12	24 X 24				
		M05-1L	ADVANCE TURN ARROW	LEFT TURN ARROW	21 X 21				
0010	EB USH 12	M3-2	CARDINAL DIRECTION MARKER	EAST	24 X 12	125	3	375	
		M1-4	USH ROUTE MARKER	12	24 X 24				
		R10-71	ACCESS TO LOCAL BUSINESSES		66 X 36				
0010	EB USH 12	M04-1	ALTERNATE		24 X 12	125	4	500	
		M3-2	CARDINAL DIRECTION MARKER	EAST	24 X 12				
		M1-4	USH ROUTE MARKER	12	24 X 24				
		M06-1	DIRECTIONAL ARROW	LEFT ARROW	21 X 21				
0010	EB CTH PF	M04-1	ALTERNATE		24 X 12	125	9	1125	3 INSTALLATIONS ALONG EB HWY PF
		M3-2	CARDINAL DIRECTION MARKER	EAST	24 X 12				
		M1-4	USH ROUTE MARKER	12	24 X 24				
0010	WB CTH PF	M04-1	ALTERNATE		24 X 12	125	9	1125	3 INSTALLATIONS ALONG WB HWY PF
		M3-2	CARDINAL DIRECTION MARKER	WEST	24 X 12				
		M1-4	USH ROUTE MARKER	12	24 X 24				
0010	EB CTH PF	M04-1	ALTERNATE		24 X 12	125	4	500	
		M3-2	CARDINAL DIRECTION MARKER	EAST	24 X 12				
		M1-4	USH ROUTE MARKER	12	24 X 24				
		M05-1R	ADVANCE TURN ARROW	RIGHT TURN ARROW	21 X 21				
0010	EB CTH PF	M04-1	ALTERNATE		24 X 12	125	4	500	
		M3-2	CARDINAL DIRECTION MARKER	EAST	24 X 12				
		M1-4	USH ROUTE MARKER	12	24 X 24				
		M06-1	DIRECTIONAL ARROW	RIGHT ARROW	21 X 21				
0010	WB STH 78	M04-1	ALTERNATE		24 X 12	125	4	500	
		M3-4	CARDINAL DIRECTION MARKER	WEST	24 X 12				
		M1-4	USH ROUTE MARKER	12	24 X 24				
		M06-1	DIRECTIONAL ARROW	LEFT ARROW	21 X 21				
0010	WB STH 78	M04-1	ALTERNATE		24 X 12	125	4	500	
		M3-4	CARDINAL DIRECTION MARKER	WEST	24 X 12				
		M1-4	USH ROUTE MARKER	12	24 X 24				
		M05-1L	ADVANCE TURN ARROW	LEFT TURN ARROW	21 X 21				
0010	WB STH 78	M04-1	ALTERNATE		24 X 12	125	9	1125	3 INSTALLATIONS ALONG WB HWY 78
		M3-4	CARDINAL DIRECTION MARKER	WEST	24 X 12				
		M1-4	USH ROUTE MARKER	12	24 X 24				
						SUBTOTAL		7375	

TRAFFIC CONTROL DETOUR SIGNS (CONTINUED)

CATEGORY	LOCATION	SIGN CODE	SIGN DESCRIPTION	SIGN MESSAGE	SIGN SIZE IN INCHES	SERVICE DAYS	QTY	643.3000 DAY	REMARKS
0010	EB STH 78	M04-1	ALTERNATE		24 X 12	125	6	750	2 INSTALLATIONS ALONG EB HWY 78
		M3-2	CARDINAL DIRECTION MARKER	EAST	24 X 12				
		M1-4	USH ROUTE MARKER	12	24 X 24				
0010	WB USH 12	M04-1	ALTERNATE		24 X 12	125	4	500	
		M3-4	CARDINAL DIRECTION MARKER	WEST	24 X 12				
		M1-4	USH ROUTE MARKER	12	24 X 24				
		M06-1	DIRECTIONAL ARROW	RIGHT ARROW	21 X 21				
0010	WB USH 12	M3-4	CARDINAL DIRECTION MARKER	WEST	24 X 12	125	3	375	
		M1-4	USH ROUTE MARKER	12	24 X 24				
		R10-71	ACCESS TO LOCAL BUSINESSES		66 X 36				
0010	WB USH 12	M04-1	ALTERNATE		24 X 12	125	4	500	
		M3-2	CARDINAL DIRECTION MARKER	EAST	24 X 12				
		M1-4	USH ROUTE MARKER	12	24 X 24				
		M05-1R	ADVANCE TURN ARROW	RIGHT TURN ARROW	21 X 21				
0010	WB USH 12	M3-4	CARDINAL DIRECTION MARKER	WEST	24 X 12	125	3	375	
		M1-4	USH ROUTE MARKER	12	24 X 24				
		G20-52A	ALTERNATE ROUTE FOLLOW HWY	FOLLOW HWY 78 WEST	138 X 36				
0010	WB USH 12	W20-1-F	ROAD WORK X MILES	2 MILES	48 X 48	125	2	250	
		W12-52	MAX X FT WIDTH	11	48 X 48				
						SUBTOTAL		2750	
						TOTAL 0010		10125	

TRAFFIC CONTROL SUMMARY (STAGE 1)

CATEGORY	STATION	TO	STATION	LOCATION	SERVICE DAYS	QTY	DRUMS 643.0300 DAY	FLEXIBLE MARKER POSTS 643.0500 EACH	FLEXIBLE MARKER BASES 643.0600 EACH	QTY	TRAFFIC CONTROL SIGNS 643.0900 DAY	REMARKS
	USH 12											
0010	395+00			RT	12					1	12	W20-1 ROAD WORK AHEAD
0010	400+00			LT	12					1	12	G20-2A END ROAD WORK
0010	403+00	-	416+00	LT	12	14	168					MAINLINE
0010	414+00	-	415+10	RT	12	5	60					SHOULDER CLOSURE TAPER
0010	415+10	-	418+45	RT	12	3	36					335' BUFFER SPACE
0010	418+45	-	422+50	RT	12	5	60					MAINLINE
0010	419+85	-	426+67	LT	12	8	96					MAINLINE
0010	427+35	-	442+66	LT	12	16	192					MAINLINE
0010	442+66	-	446+00	LT	12	4	48					335' BUFFER SPACE
0010	446+00		449+35	LT	12	5	60					SHOULDER CLOSURE TAPER
0010	454+35			LT	12					1	12	W21-5 SHOULDER WORK
0010	454+35			RT	12					1	12	G20-2A END ROAD WORK
0010	469+35			LT	12					1	12	W20-1 ROAD WORK AHEAD
	STH 60											
0010	294+50	"a"		RT	12					1	12	W20-1 ROAD WORK AHEAD
	RICHOLSON RD											
0010	196+30	"ro"		RT	12					1	12	W20-1 ROAD WORK AHEAD
					STAGE 1 SUBTOTAL		720	0	0		84	

TRAFFIC CONTROL SUMMARY (STAGE 2)

CATEGORY	STATION	TO	STATION	LOCATION	SERVICE DAYS	DRUMS 643.0300 QTY	DRUMS 643.0300 DAY	FLEXIBLE MARKER POSTS 643.0500 EACH	FLEXIBLE MARKER BASES 643.0600 EACH	TRAFFIC CONTROL SIGNS 643.0900 QTY	TRAFFIC CONTROL SIGNS 643.0900 DAY	REMARKS
	USH 12											
0010	380+50			RT	24					1	24	W20-1 ROAD WORK AHEAD
0010	390+50			RT	24					2	48	W6-3 TWO WAY TRAFFIC
												R4-1 DO NOT PASS
0010	395+50			LT	24					1	24	G20-2A END ROAD WORK
0010	395+50			RT	24					1	24	W1-4L ROAD CURVES AHEAD LEFT
0010	400+50	-	401+60	RT	24	5	120					SHOULDER TAPER
0010	401+60	-	409+97	LT	24	10	240					SHIFTING TAPER
0010	401+60		409+97	LT	24			17	17			SHIFTING TAPER
0010	401+60	-	409+97	RT & LT	24	10	240					SHIFTING TAPER
0010	409+97	-	438+00	LT	24	30	720					MAINLINE LEFT EDGE
0010	409+97	-	426+14	LT	24			34	34			MAINLINE
0010	409+97	-	426+14	LT	24	18	432					MAINLINE RIGHT EDGE
0010	427+52	-	438+00	LT	24			22	22			MAINLINE
0010	427+52	-	431+78	LT	24	6	144					MAINLINE RIGHT EDGE
0010	432+59	-	438+00	LT	24	7	168					MAINLINE RIGHT EDGE
0010	438+00	-	446+40	LT	24	10	240					SHIFTING TAPER
0010	438+00	-	446+40	LT	24			18	18			SHIFTING TAPER
0010	438+00	-	446+40	LT & RT	24	10	240					SHIFTING TAPER
0010	446+40	-	448+05	LT	24	7	168					SHOULDER TAPER
0010	446+40	-	448+05	RT	24	4	96					MAINLINE
0010	452+50			LT	24					1	24	W1-4R ROAD CURVES AHEAD RIGHT
0010	452+50			RT	24					1	24	G20-2A END ROAD WORK
0010	456+50			LT	24					2	48	W6-3 TWO WAY TRAFFIC
												R4-1 DO NOT PASS
0010	467+50			LT	24					1	24	W20-1 ROAD WORK AHEAD
	STH60											
0010	271+75	"a"		RT	24					1	24	W20-1 ROAD WORK AHEAD
0010	281+75	"a"		RT	24					2	48	W6-3 TWO WAY TRAFFIC
												R4-1 DO NOT PASS
0010	286+75	"a"		LT	24					1	24	G20-2A END ROAD WORK
0010	286+75	"a"		RT	24					1	24	W1-4R ROAD CURVES AHEAD RIGHT
0010	292+00	"a"		370' RT	24					1	24	W20-1 ROAD WORK AHEAD
0010	295+04	"a"	- 299+90 "a"	LT & RT	24	6	144					
	RICHOLSON RD											
0010	196+29	"ro"		RT	24					1	24	W20-1 ROAD WORK AHEAD
	UNDISTRIBUTED							15	15			
				STAGE 2 SUBTOTAL			2952	106	106		408	

TRAFFIC CONTROL SUMMARY (STAGE 2B)

CATEGORY	STATION	TO	STATION	LOCATION	SERVICE DAYS	DRUMS 643.0300 QTY	DRUMS 643.0300 DAY	FLEXIBLE MARKER POSTS 643.0500 EACH	FLEXIBLE MARKER BASES 643.0600 EACH	TRAFFIC CONTROL SIGNS 643.0900 QTY	TRAFFIC CONTROL SIGNS 643.0900 DAY	REMARKS
	USH 12											
0010	380+50			RT	10					1	10	W20-1 ROAD WORK AHEAD
0010	390+50			RT	10					2	20	W6-3 TWO WAY TRAFFIC
												R4-1 DO NOT PASS
0010	395+50			LT	10					1	10	G20-2A END ROAD WORK
0010	395+50			RT	10					1	10	W1-4L ROAD CURVES AHEAD LEFT
0010	400+50	-	401+60	RT	10	5	50					SHOULDER TAPER
0010	401+60	-	409+97	LT	10	10	100					SHIFTING TAPER
0010	401+60	-	409+97	RT & LT	10	10	100					SHIFTING TAPER
0010	409+97	-	438+00	LT	10	30	300					MAINLINE LEFT EDGE
0010	409+97	-	425+23	LT	10	17	170					MAINLINE RIGHT EDGE
0010	426+62	-	431+78	LT	10	7	70					MAINLINE RIGHT EDGE
0010	432+59	-	438+00	LT	10	7	70					MAINLINE RIGHT EDGE
0010	438+00	-	446+40	LT	10	10	100					SHIFTING TAPER
0010	438+00	-	446+40	LT & RT	10	10	100					SHIFTING TAPER
0010	446+40	-	448+05	LT	10	7	70					SHOULDER TAPER
0010	446+40	-	448+05	RT	10	4	40					MAINLINE RIGHT EDGE
0010	452+50			LT	10					1	10	W1-4R ROAD CURVES AHEAD RIGHT
0010	452+50			RT	10					1	10	G20-2A END ROAD WORK
0010	456+50			LT	10					2	20	W6-3 TWO WAY TRAFFIC
												R4-1 DO NOT PASS
0010	467+50			LT	10					1	10	W20-1 ROAD WORK AHEAD
	STH60											
0010	271+75	"a"		RT	10					1	10	W20-1 ROAD WORK AHEAD
0010	281+75	"a"		RT	10					2	20	W6-3 TWO WAY TRAFFIC
												R4-1 DO NOT PASS
0010	286+75	"a"		LT	10					1	10	G20-2A END ROAD WORK
0010	286+75	"a"		RT	10					1	10	W1-4R ROAD CURVES AHEAD RIGHT
0010	292+00	"a"		370' RT	10					1	10	W20-1 ROAD WORK AHEAD
0010	295+04	"a"	- 299+90 "a"	LT & RT	10	6	60					
	RICHOLSON RD											
0010	196+29	"ro"		RT	10					1	10	W20-1 ROAD WORK AHEAD
	UNDISTRIBUTED							15	15			
				STAGE 2B SUBTOTAL		1230		15	15		170	

TRAFFIC CONTROL SUMMARY (STAGE 2C)

CATEGORY	STATION	TO	STATION	LOCATION	SERVICE DAYS	QTY	DRUMS 643.0300 DAY	FLEXIBLE MARKER POSTS 643.0500 EACH	FLEXIBLE MARKER BASES 643.0600 EACH	QTY	TRAFFIC CONTROL SIGNS 643.0900 DAY	REMARKS
	USH 12											
0010	380+50			RT	2					1	2	W20-1 ROAD WORK AHEAD
0010	390+50			RT	2					2	4	W6-3 TWO WAY TRAFFIC
												R4-1 DO NOT PASS
0010	395+50			LT	2					1	2	G20-2A END ROAD WORK
0010	395+50			RT	2					1	2	W1-4L ROAD CURVES AHEAD LEFT
0010	400+50	-	401+60	RT	2	5	10					SHOULDER TAPER
0010	401+60	-	409+97	LT	2	10	20					SHIFTING TAPER
0010	401+60	-	409+97	RT & LT	2	10	20					SHIFTING TAPER
0010	409+97	-	438+00	LT	2	30	60					MAINLINE LEFT EDGE
0010	409+97	-	425+23	LT	2	17	34					MAINLINE RIGHT EDGE
0010	426+62	-	431+78	LT	2	7	14					MAINLINE RIGHT EDGE
0010	432+59	-	438+00	LT	2	7	14					MAINLINE RIGHT EDGE
0010	438+00	-	446+40	LT	2	10	20					SHIFTING TAPER
0010	438+00	-	446+40	LT & RT	2	10	20					SHIFTING TAPER
0010	446+40	-	448+05	LT	2	7	14					SHOULDER TAPER
0010	446+40	-	448+05	RT	2	4	8					MAINLINE RIGHT EDGE
0010	452+50			LT	2					1	2	W1-4R ROAD CURVES AHEAD RIGHT
0010	452+50			RT	2					1	2	G20-2A END ROAD WORK
0010	456+50			LT	2					2	4	W6-3 TWO WAY TRAFFIC
												R4-1 DO NOT PASS
0010	467+50			LT	2					1	2	W20-1 ROAD WORK AHEAD
	STH60											
0010	271+75	"a"		RT	2					1	2	W20-1 ROAD WORK AHEAD
0010	281+75	"a"		RT	2					2	4	W6-3 TWO WAY TRAFFIC
												R4-1 DO NOT PASS
0010	286+75	"a"		LT	2					1	2	G20-2A END ROAD WORK
0010	286+75	"a"		RT	2					2	4	W1-4L ROAD CURVES AHEAD LEFT
												W013-1 ADVISOTRY SPEED - 25 MPH
0010	292+00	"a"		370' RT	2					1	2	W20-1 ROAD WORK AHEAD
0010	292+00	"a"	- 295+04 "a"	RT	2	6	12					
0010	295+04	"a"	- 299+90 "a"	LT & RT	2	6	12					
	RICHOLSON RD											
0010	196+29	"ro"		RT	2					1	2	W20-1 ROAD WORK AHEAD
	UNDISTRIBUTED							15	15			
				STAGE 2C SUBTOTAL			258	15	15		36	

TRAFFIC CONTROL SUMMARY (STAGE 3)

CATEGORY	STATION	TO	STATION	LOCATION	SERVICE DAYS	DRUMS 643.0300 QTY	DRUMS 643.0300 DAY	FLEXIBLE MARKER POSTS 643.0500 EACH	FLEXIBLE MARKER BASES 643.0600 EACH	TRAFFIC CONTROL SIGNS 643.0900 QTY	TRAFFIC CONTROL SIGNS 643.0900 DAY	REMARKS
	USH 12											
0010	385+10			RT	22					1	22	W20-1 ROAD WORK AHEAD
0010	395+10			RT	22					2	44	W6-3 TWO WAY TRAFFIC
												R4-1 DO NOT PASS
0010	398+10			LT	22					1	22	G20-2A END ROAD WORK
0010	398+10			RT	22					1	22	W1-4R ROAD CURVES AHEAD RIGHT
0010	403+10	-	404+20	RT	22	5	110					SHOULDER TAPER
0010	404+20	-	407+54	RT	22	5	110					BUFFER AREA
0010	407+54	-	409+97	LT	22	4	88					SHIFTING TAPER
0010	407+54	-	409+97	RT	22			6	6			SHIFTING TAPER
0010	407+54	-	409+97	RT	22	4	88					SHIFTING TAPER
0010	409+97 "EB"	-	411+14 "EB"	LT	22	3	66					SHIFTING TAPER
0010	409+97 "EB'	-	411+14 "EB"	RT	22			4	4			SHIFTING TAPER
0010	409+97 "EB"	-	411+14 "EB"	RT	22	3	66					SHIFTING TAPER
0010	411+14 "EB"	-	438+15 "EB"	LT	22	28	616					MAINLINE LEFT EDGE
0010	411+14 "EB"	-	425+47 "EB"	RT	22			30	30			MAINLINE
0010	411+14 "EB"	-	425+47 "EB"	RT	22	16	352					MAINLINE RIGHT EDGE
0010	426+99 "EB"	-	438+15 "EB"	RT	22			24	24			MAINLINE
0010	426+99 "EB"	-	438+15 "EB"	RT	22	13	286					MAINLINE RIGHT EDGE
0010	437+99	-	442+67	RT & LT	22	6	132					SHIFTING TAPER
0010	437+99	-	445+19	RT	22			16	16			SHIFTING TAPER
0010	437+99	-	445+19	RT	22	9	198					SHIFTING TAPER
0010	442+67	-	446+00	LT	22	5	110					BUFFER AREA
0010	446+00	-	447+10	LT	22	7	154					SHOULDER TAPER
0010	452+10			LT	22					1	22	W1-4L ROAD CURVES AHEAD LEFT
0010	452+10			RT	22					1	22	G20-2A END ROAD WORK
0010	457+10			LT	22					1	22	W6-3 TWO WAY TRAFFIC
												R4-1 DO NOT PASS
0010	467+10			LT	22					1	22	W20-1 ROAD WORK AHEAD
	STH 60											
0010	290+75 "a"			RT	22					1	22	W20-1 ROAD WORK AHEAD
0010	292+00 "a"			370' RT	22					1	22	W20-1 ROAD WORK AHEAD
	RICHOLSON RD											
0010	195+25 "ro"			RT	22					1	22	W20-1 ROAD WORK AHEAD
	UNDISTRIBUTED							12	12			
					STAGE 3 SUBTOTAL	2376	92	92		264		

TRAFFIC CONTROL SUMMARY (STAGE 4)

CATEGORY	STATION	TO	STATION	LOCATION	SERVICE DAYS	QTY	DRUMS 643.0300 DAY	FLEXIBLE MARKER POSTS 643.0500 EACH	FLEXIBLE MARKER BASES 643.0600 EACH	QTY	TRAFFIC CONTROL SIGNS 643.0900 DAY	REMARKS
	USH 12											
0010	385+85			RT	20					1	20	W20-1 ROAD WORK AHEAD
0010	400+85			LT	20					1	20	G20-2A END ROAD WORK
0010	400+85			RT	20					1	20	W1-4R ROAD CURVES AHEAD RIGHT
0010	405+85	-	407+54	RT	20	7	140					SHOULDER TAPER
0010	407+37	-	410+97	LT	20	5	100					SHIFTING TAPER
0010	407+54	-	409+97	RT	20	4	80					SHIFTING TAPER
0010	409+97	-	410+97	LT	20	2	40					SHIFTING TAPER
0010	409+97 "EB"	-	411+14 "EB"	LT	20	3	60					SHIFTING TAPER
0010	409+97 "EB"	-	411+14 "EB"	RT	20	3	60					SHIFTING TAPER
0010	410+97 "WB"	-	425+49 "WB"	LT	20	16	320					WB MAINLINE OUTSIDE EDGE
0010	410+97 "WB"	-	425+49 "WB"	LT	20	16	320					WB MAINLINE INSIDE EDGE
0010	411+14 "EB"	-	425+65 "EB"	RT	20	16	320					EB MAINLINE INSIDE EDGE
0010	411+14 "EB"	-	425+65 "EB"	RT	20	16	320					EB MAINLINE OUTSIDE EDGE
0010	426+65 "WB"	-	437+89 "WB"	LT	20	13	260					WB MAINLINE OUTSIDE EDGE
0010	426+65 "WB"	-	437+89 "WB"	LT	20	13	260					WB MAINLINE INSIDE EDGE
0010	426+82 "EB"	-	438+15 "EB"	RT	20	13	260					EB MAINLINE INSIDE EDGE
0010	426+82 "EB"	-	438+15 "EB"	RT	20	13	260					EB MAINLINE OUTSIDE EDGE
0010	437+99	-	441+59	LT	20	5	100					SHIFTING TAPER
0010	437+99	-	441+59	LT	20	5	100					SHIFTING TAPER
0010	437+99	-	441+59	RT	20	5	100					SHIFTING TAPER
0010	437+99	-	445+19	RT	20	9	180					SHIFTING TAPER
0010	441+59		443+50	LT	20	8	160					SHOULDER TAPER
0010	447+70			LT	20					1	20	W1-4R ROAD CURVES AHEAD RIGHT
0010	450+20			RT	20					1	20	G20-2A END ROAD WORK
0010	462+70			LT	20					1	20	W20-1 ROAD WORK AHEAD
	STH 60											
0010	290+75 "a"			RT	20					1	20	W20-1 ROAD WORK AHEAD
0010	292+00 "a"			370' RT	20					1	20	W20-1 ROAD WORK AHEAD
	RICHOLSON RD											
0010	195+25 "ro"			RT	20					1	20	W20-1 ROAD WORK AHEAD
	UNDISTRIBUTED							12	12			
				STAGE 4 SUBTOTAL			3440	12	12		180	

TRAFFIC CONTROL SUMMARY (STAGE 5)

CATEGORY	STATION	TO	STATION	LOCATION	SERVICE DAYS	QTY	DRUMS 643.0300 DAY	FLEXIBLE MARKER POSTS 643.0500 EACH	FLEXIBLE MARKER BASES 643.0600 EACH	QTY	TRAFFIC CONTROL SIGNS 643.0900 DAY	REMARKS
	USH 12											
0010	399+35			RT	20					1	20	W20-1 ROAD WORK AHEAD
0010	401+35			RT	18					1	18	W20-1 ROAD WORK 1000 FT
0010	401+35			RT	2					1	2	W20-4 ONE LANE ROAD 1000 FT
0010	406+35			RT	18					1	18	W20-1 ROAD WORK 500 FT
0010	406+35			RT	2					1	2	W20-7A FLAGGER AHEAD SYMBOL
0010	406+35			LT	20					1	20	G20-2A END ROAD WORK
0010	411+03	"EB" -	412+13 "EB"	RT	20	5	100					SHOULDER TAPER
0010	412+13	"EB" -	415+50 "EB"	RT	20	4	80					BUFFER AREA
0010	415+50	"EB" -	422+18 "EB"	RT	20	8	160					MAINLINE SHOULDER WORK
0010	427+00	"EB" -	428+00 "EB"	RT	20	5	100					SHOULDER TAPER
0010	428+00	"EB" -	438+15 "EB"	RT	20	12	240					MAINLINE SHOULDER WORK
0010	437+99	-	442+52 "EB"	RT	20	6	120					MAINLINE SHOULDER WORK
0010	462+80			LT	18					1	18	W20-1 ROAD WORK 500 FT
0010	462+80			LT	2					1	2	W20-7A FLAGGER AHEAD SYMBOL
0010	462+80			RT	20					1	20	G20-2A END ROAD WORK
0010	467+80			LT	18					1	18	W20-1 ROAD WORK 1000 FT
0010	467+80			LT	2					1	2	W20-4 ONE LANE ROAD 1000 FT
0010	477+80			LT	20					1	20	W20-1 ROAD WORK AHEAD
	STH 60											
0010	290+75	"a"		RT	20					1	20	W20-1 ROAD WORK AHEAD
0010	292+00	"a"		370' RT	20					1	20	W20-1 ROAD WORK AHEAD
	RICHOLSON RD											
0010	195+25	"ro"		RT	20					1	20	W20-1 ROAD WORK AHEAD
				STAGE 5 SUBTOTAL		800	0	0			220	
				TOTAL 0010		10546	225	225			1192	

PAVEMENT MARKING EXPOXY 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.0106 LF	SAME DAY 646.0406 LF	REMARKS
	USH 12						
0010	401+57	-	405+98	LT	441		WHITE EDGE LINE
0010	401+57	-	403+30	ON C/L		43.25	YELLOW DASH CENTERLINE
0010	401+57	-	405+98	RT	441		WHITE EDGE LINE
0010	403+30	-	410+98	ON C/L		960	YELLOW BARRIER CENTERLINE
0010	409+53	-	410+97	LT	144		WHITE EDGE LINE
0010	409+53	-	409+97	RT	44		WHITE EDGE LINE
0010	409+97 "EB"	-	425+38 "EB"	RT	1601		WHITE EDGE LINE
0010	410+97 "WB"	-	425+34 "WB"	LT	1569		WHITE EDGE LINE
0010	410+98 "EB"	-	420+02 "EB"	ON R/L		1808	YELLOW DOUBLE CENTERLINE
0010	410+98 "WB"	-	419+95 "WB"	ON R/L		1794	YELLOW DOUBLE CENTERLINE
0010	426+99 "EB"	-	438+15 "EB"	RT	1116		WHITE EDGE LINE
0010	427+00 "WB"	-	428+50 "WB"	LT	37.5		WHITE SHORT DASH
0010	428+50 "WB"	-	437+89 "WB"	LT	939		WHITE EDGE LINE
0010	435+49 "WB"	-	437+89 "WB"	ON R/L		480	YELLOW DOUBLE CENTERLINE
0010	435+75 "EB"	-	438+15 "EB"	ON R/L		480	YELLOW DOUBLE CENTERLINE
	STH 60						
0010	291+74 "a"	-	295+04 "a"	ON C/L		660	YELLOW DOUBLE CENTERLINE
0010	295+04 "A"	-	299+19 "A"	ON C/L		830	YELLOW DOUBLE CENTERLINE
	FRONTAGE ROAD						
0010	300+28 "A"	-	302+47 "A"	ON C/L	438		YELLOW DOUBLE CENTERLINE
0010	302+47 "A"	-	304+86 "A"	ON C/L	59.75		YELLOW DASH CENTERLINE
				TOTAL 0010	6830	7055	
	USH 12						
0020	437+99	-	456+80	LT	1881		WHITE EDGE LINE
0020	437+99	-	456+80	RT	1881		WHITE EDGE LINE
0020	437+99	-	442+99	CL		625	YELLOW BARRIER CENTERLINE
0020	442+99	-	456+80	CL		345.25	YELLOW DASH CENTERLINE
				TOTAL 0020	3762	970	

PAVEMENT MARKING EPOXY 8-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.0126 LF	REMARKS
	USH 12					
0010	421+44 "EB"	-	425+47 "EB"	RT	806	WHITE CHANNELIZING (2 LINES)
0010	422+05 "EB"	-	425+59 "EB"	ON R/L	354	WHITE CHANNELIZING
0010	426+82 "WB"	-	430+30 "WB"	ON R/L	348	WHITE CHANNELIZING
	STH 60					
0010	297+35 "A"	-	299+19 "A"	RT	184	WHITE CHANNELIZING
				TOTAL 0010	1692	

PAVEMENT MARKING EPOXY 12-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.0136 LF	REMARKS
	USH 12					
0010	410+98 "EB"	-	420+02 "EB"	LT	1144	YELLOW DIAGONAL
0010	421+44 "EB"	-	425+47 "EB"	RT	90	WHITE CHEVRON
0010	435+75 "EB"	-	438+15 "EB"	LT	101	YELLOW DIAGONAL
				TOTAL 0010	1335	

3

REMOVING PAVEMENT MARKINGS

CATEGORY	STATION		TO	STATION		LOCATION	646.0600 LF	REMARKS
	USH 12 STAGE 2							
0010	401+57		-	409+97		ON C/L	1680	CENTERLINE; BLAST CLEANING REQUIRED
0010	401+57		-	409+97		LT	840	EDGE LINE; BLAST CLEANING REQUIRED
0010	409+97		-	437+99		LT	2802	EDGE LINE
0010	437+99		-	446+40		LT	841	EDGE LINE; BLAST CLEANING REQUIRED
0010	441+52		-	446+40		ON C/L	976	CENTERLINE; BLAST CLEANING REQUIRED
	STH 60 STAGE 2							
0010	291+74	"a"	-	295+04	"a"	ON C/L	660	CENTERLINE; BLAST CLEANING REQUIRED
0010	295+04	"a"	-	296+60	"a"	ON C/L	312	CENTERLINE
	USH 12 STAGE 2B							
0010	425+23		-	426+14		LT	182	CENTERLINE
0010	425+23		-	426+14		LT	91	EDGE LINE
	USH 12 STAGE 3							
0010	401+57		-	409+97		LT	840	EDGE LINE; BLAST CLEANING REQUIRED
0010	401+57		-	409+97		LT	1680	CENTERLINE; BLAST CLEANING REQUIRED
0010	401+57		-	409+97		RT & LT	840	EDGE LINE; BLAST CLEANING REQUIRED
0010	437+99		-	446+40		LT	841	EDGE LINE; BLAST CLEANING REQUIRED
0010	437+99		-	446+40		LT	1682	CENTERLINE; BLAST CLEANING REQUIRED
0010	437+99		-	446+40		LT & RT	841	EDGE LINE; BLAST CLEANING REQUIRED
						TOTAL 0010	15108	

PAVEMENT MARKING ARROWS EPOXY TYPE 2

CATEGORY	STATION		TO	STATION	LOCATION	647.0166 EACH	REMARKS
	USH 12						
0010	422+25	"EB"			LT	1	EB LEFT TURN
0010	423+77	"EB"			LT	1	EB LEFT TURN
0010	425+30	"EB"			LT	1	EB LEFT TURN
0010	427+11	"WB"			RT	1	WB LEFT TURN
0010	428+60	"WB"			RT	1	WB LEFT TURN
0010	430+10	"WB"			RT	1	WB LEFT TURN
	STH 60						
0010	297+57	"A"			RT	1	EB LEFT TURN
0010	298+66	"A"			RT	1	EB LEFT TURN
					TOTAL 0010	8	

PAVEMENT MARKING ARROWS EPOXY TYPE 3

CATEGORY	STATION		TO	STATION	LOCATION	647.0176 EACH	REMARKS
	STH 60						
0010	298+92	"A"			RT	1	EB THRU AND RIGHT
					TOTAL 0010	1	

PAVEMENT MARKING WORDS EPOXY

CATEGORY	STATION		TO	STATION	LOCATION	647.0356 EACH	REMARKS
	USH 12						
0010	423+04	"EB"			LT	1	ONLY
0010	424+60	"EB"			LT	1	ONLY
0010	427+79	"WB"			RT	1	ONLY
0010	429+33	"WB"			RT	1	ONLY
	STH 60						
0010	298+11	"A"			RT	1	ONLY
					TOTAL 0010	5	

PAVEMENT MARKING STOP LINE EPOXY 18-INCH

CATEGORY	STATION		TO	STATION	LOCATION	647.0566 LF	REMARKS
	STH 60						
0010	299+19	"A"			RT	45	
					TOTAL 0010	45	

PAVEMENT MARKING CURB EPOXY

CATEGORY	STATION	TO	STATION	LOCATION	647.0456 LF	REMARKS
	USH 12					
0010	419+92 "EB"	-	419+99 "EB"	LT	35	MEDIAN SLOPED NOSE
0010	425+56 "EB"	-	425+62 "EB"	LT	18	MEDIAN BLUNT NOSE
0010	426+95 "EB"	-	427+01 "EB"	LT	24	MEDIAN BLUNT NOSE
0010	435+72 "EB"	-	435+79 "EB"	LT	16	MEDIAN SLOPED NOSE
				TOTAL 0010	93	

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	649.0200 LF	REMARKS
	USH 12 STAGE 2					
0010	401+57	-	409+97	LT	840	WHITE EDGE LINE
0010	401+57	-	409+97	LT	1680	DOUBLE YELLOW CENTERLINE
0010	401+57	-	409+97	RT & LT	840	WHITE EDGE LINE
0010	409+97	-	438+00	LT	2803	WHITE EDGE LINE
0010	409+97	-	426+14	LT	3234	DOUBLE YELLOW CENTERLINE
0010	409+97	-	426+14	LT	1617	WHITE EDGE LINE
0010	427+52	-	438+00	LT	2096	DOUBLE YELLOW CENTERLINE
0010	427+52	-	431+78	LT	426	WHITE EDGE LINE
0010	432+59	-	438+00	LT	541	WHITE EDGE LINE
0010	438+00	-	446+40	LT	840	WHITE EDGE LINE
0010	438+00		446+40	LT	1680	DOUBLE YELLOW CENTERLINE
0010	438+00		446+40	LT & RT	840	WHITE EDGE LINE
	USH 12 STAGE 2B					
0010	426+62	-	427+52	LT	180	DOULBE YELLOW CENTERLINE
0010	426+62	-	427+52	LT	90	WHITE EDGE LINE
	USH 12 STAGE 3					
0010	401+57	-	407+54	ON C/L	1194	DOUBLE YELLOW CENTERLINE
0010	401+57		409+97	RT	840	WHITE EDGE LINE
0010	401+57		409+97	LT	840	WHITE EDGE LINE
0010	407+54		409+97	RT	486	DOUBLE YELLOW CENTERLINE
0010	409+97 "EB"		438+15 "EB"	LT	2818	WHITE EDGE LINE
0010	409+97 "EB"	-	425+47 "EB"	RT	3100	DOUBLE YELLOW CENTERLINE
0010	409+97 "EB"	-	425+47 "EB"	RT	1550	WHITE EDGE LINE
0010	426+99 "EB"	-	438+15 "EB"	RT	2232	DOUBLE YELLOW CENTERLINE
0010	426+99 "EB"	-	438+15 "EB"	RT	1116	WHITE EDGE LINE
0010	437+99	-	446+40	LT	841	WHITE EDGE LINE
0010	437+99		446+40	RT	1682	DOUBLE YELLOW CENTERLINE
0010	437+99	-	446+40	RT	841	WHITE EDGE LINE
	USH 12 STAGE 4					
0010	407+37	-	410+97	LT	360	WHITE EDGE LINE
0010	407+37	-	410+97	LT	720	DOUBLE YELLOW CENTERLINE
0010	410+97 "WB"	-	425+49 "WB"	LT	1452	WHITE EDGE LINE
0010	410+97 "WB"	-	425+49 "WB"	LT	2904	DOUBLE YELLOW CENTERLINE
0010	426+65 "WB"	-	438+15 "WB"	LT	1150	WHITE EDGE LINE
0010	426+65 "WB"	-	438+15 "WB"	LT	2300	DOUBLE YELLOW CENTERLINE
0010	437+99		441+59	LT	360	WHITE EDGE LINE
0010	437+99		441+59	LT	720	DOUBLE YELLOW CENTERLINE
				TOTAL 0010	35247	

PAVEMENT MARKING ISLAND NOSE EPOXY

CATEGORY	STATION	TO	STATION	LOCATION	647.0606 EACH	REMARKS
	USH 12					
0010	419+92 "EB"	-	419+99 "EB"	LT	1	YELLOW
0010	435+72 "EB"	-	435+79 "EB"	LT	1	YELLOW
				TOTAL 0010	2	

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	649.0400 LF	REMARKS
	STH 60 STAGE 2					
0010	291+74 "a"		299+67 "a"	RT	1586	DOULBE YELLOW CENTERLINE
	STH 60 STAGE 2B					
0010	291+74 "a"	-	295+04 "a"	LT	660	DOUBLE YELLOW CENTERLINE
0010	292+00 "a"	-	295+04 "a"	RT	304	WHITE EDGE LINE
0010	295+04 "A"	-	299+27 "A"	LT	846	DOUBLE YELLOW CENTERLINE
0010	295+04 "A"	-	299+27 "A"	RT	423	WHITE EDGE LINE
	STH 60 STAGE 2C					
0010	291+74 "a"	-	295+04 "a"	LT	660	DOUBLE YELLOW CENTERLINE
0010	292+00 "a"	-	295+04 "a'	RT	304	WHITE EDGE LINE
0010	295+04 "A"	-	299+34 "A"	LT	860	DOUBLE YELLOW CENTERLINE
0010	295+04 "A"	-	299+34 "A"	LT	430	WHITE EDGE LINE
				TOTAL 0010	6073	

CONSTRUCTION STAKING STORM SEWER

650.4000

CATEGORY	STATION	TO STATION	LOCATION	EACH	REMARKS
	USH 12				
0010	420+03 "EB"		2.5' LT	1	
0010	419+96 "WB"		2.5' RT	1	
0010	419+97 "WB"		44.0' LT	1	
0010	422+06 "EB"		13.5' LT	1	
0010	421+96 "WB"		2.5' RT	1	
0010	421+97 "WB"		39.7' LT	1	
0010	423+07 "EB"		13.5' LT	1	
0010	422+96 "WB"		2.5' RT	1	
0010	422+96 "WB"		38.8' LT	1	
0010	427+16 "EB"		2.5' LT	1	
0010	427+37 "EB"		58.3' RT	1	
0010	428+42 "WB"		13.5' RT	1	
0010	428+62 "EB"		2.5' LT	1	
0010	428+62 "EB"		63.5' RT	1	
0010	432+40 "WB"		2.5' RT	1	
0010	432+65 "EB"		2.5' LT	1	
0010	432+64 "EB"		64.2' RT	1	
0010	435+45 "WB"		2.5' RT	1	
0010	435+70 "EB"		2.5' RT	1	
0010	436+70 "EB"		38.9' RT	1	
	STH 60				
0010	295+10 "A"		21.0' LT	1	
0010	295+10 "A"		21.0' RT	1	
0010	296+39 "A"		33.2' RT	1	
0010	298+75 "A"		33.0' RT	1	
0010	298+71 "A"		77.0' RT	1	
	RICHOLSON RD				
0010	204+25 "RO"		41.2' LT	1	
			TOTAL 0010	26	

CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER

650.5500

CATEGORY	STATION	TO STATION	LOCATION	LF	REMARKS
	USH 12				
0010	419+92 "WB"	- 425+40 "WB"	RT	550	
0010	419+99 "EB"	- 420+66 "EB"	LT	68	
0010	420+66 "EB"	- 425+56 "EB"	RT	486	
0010	426+84 "WB"	- 431+66 "WB"	RT	488	
0010	427+01 "EB"	- 435+72 "EB"	LT	870	
0010	431+66 "WB"	- 435+46 "WB"	RT	380	
	STH 60				
0010	295+04 "A"	- 299+18 "A"	LT	418	
0010	295+04 "A"	- 297+80 "A"	RT	325	
0010	298+06 "A"	- 299+23 "A"	RT	181	
			TOTAL 0010	3766	

CONSTRUCTION STAKING PIPE CULVERTS

650.6000

CATEGORY	STATION	TO STATION	LOCATION	EACH	REMARKS
	USH 12				
0010	416+44 "WB"		LT	1	
0010	416+59 "EB"		RT	1	
0010	419+97 "WB"		44.0' LT	1	
0010	420+36 "EB"		LT & RT	1	
0010	421+97 "WB"		39.7' LT	1	
0010	422+96 "WB"		38.8' LT	1	
0010	427+37 "EB"		58.3' RT	1	
0010	428+29 "EB"		LT	1	
0010	428+29 "EB"		RT	1	
0010	428+62 "EB"		63.5' RT	1	
0010	429+04 "EB"		LT	1	
0010	429+04 "EB"		RT	1	
0010	429+80 "EB"		LT & RT	1	
0010	431+04 "WB"		LT	1	
0010	432+64 "EB"		64.2' RT	1	
0010	434+03 "WB"		LT	1	
0010	436+70 "EB"		38.9' RT	1	
	USH 12 STAGE 1				
0010	420+41		LT & RT	1	TEMPORARY CULVERT
	STH 60				
0010	298+19 "A"		LT & RT	1	
0010	298+71 "A"		77.0' RT	1	
	FRONTAGE ROAD				
0010	300+28 "A"		LT & RT	1	
0010	303+67 "A"		RT	1	
	RICHOLSON RD				
0010	198+31 "RO"		RT	1	
0010	203+17 "RO"		LT & RT	1	
0010	203+37 "RO"		LT & RT	1	
0010	203+57 "RO"		LT & RT	1	
0010	204+00 "RO"		62.8' LT	1	
			TOTAL 0010	27	

CONSTRUCTION STAKING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	SUBGRADE 650.4500 LF	BASE 650.5000 LF	RESURFACING REFERENCE 650.8000 LF	SLOPE STAKES 650.9920 LF	REMARKS
	USH 12								
0010	409+53	-	437+99	LT & RT	2846	2846	2846	2846	WIDENING SECTION
	STH 60								
0010	295+04	-	299+35	LT & RT	431	431	0	431	
	FRONTAGE ROAD								
0010	299+81	-	306+05	LT & RT	624	624	0	624	
	RICHOLSON RD								
0010	196+22	-	204+75	LT & RT	853	853	0	853	
				TOTAL 0010	4754	4754	2846	4754	
	USH 12								
0020	437+99	-	456+80	LT & RT	0	0	1881	0	RESURFACING SECITON
				TOTAL 0020	0	0	1881	0	

SAWING ASPHALT

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 LF	REMARKS
	USH 12					
0010	409+53			LT & RT	36	
0010	CE 419+39	"WB"		LT	28	
0010	CE 431+28	"WB"		LT	122	
0010	CE 434+32	"WB"		LT	67	
0010	437+99			LT & RT	36	
	STH 60					
0010	295+04	"A"		LT & RT	36	
0010	PE 295+45	"A"		RT	20	
0010	PE 296+72	"A"		RT	22	
	FRONTAGE ROAD					
0010	CE 306+10	"A"		LT	60	
	RICHOLSON ROAD					
0010	196+22	"RO"		LT & RT	16	
0010	CE 198+34	"RO"		RT	30	
				TOTAL 0010	473	
	USH 12					
0020	456+80			LT & RT	36	
				TOTAL 0020	36	

SAWING CONCRETE

CATEGORY	STATION	TO	STATION	LOCATION	690.0250 LF	REMARKS
	USH 12					
0010	420+31 "EB"			LT & RT	22	36" CROSS CULVERT
0010	420+31 "EB"	-	420+53 "EB"	LT	22	SAW FOR STAGING
0010	420+53 "EB"			LT & RT	22	36" CROSS CULVERT
0010	421+93 "WB"			LT & RT	22	12" STORM SEWER
0010	421+93 "WB"	-	421+99 "WB"	RT	6	SAW FOR STAGING
0010	421+99 "WB"			LT & RT	22	12" STORM SEWER
0010	422+93 "WB"			LT & RT	22	12" STORM SEWER
0010	422+93 "WB"	-	422+99 "WB"	RT	6	SAW FOR STAGING
0010	422+99 "WB"			LT & RT	22	12" STORM SEWER
0010	427+13 "EB"	-	427+19 "EB"	LT & RT	28	12" STORM SEWER
0010	429+72 "EB"			LT & RT	22	42" CROSS CULVERT
0010	429+72 "EB"	-	429+88 "EB"	LT	16	SAW FOR STAGING
0010	429+88 "EB"			LT & RT	22	42" CROSS CULVERT
0010	428+59 "EB"	-	428+65 "EB"	LT & RT	28	12" STORM SEWER
0010	431+20			LT & RT	22	
0010	431+20	-	435+63	C/L	443	SAW FOR STAGING
0010	435+63			LT & RT	22	
				TOTAL 0010	769	

3

Pull Boxes

Category	Station	Dir	Location	653.0140 Pull Boxes Steel 24"x42" EACH	Description
0000	426 E + 72	RIGHT	50	1	PB1
0000	425 E + 80	RIGHT	59	1	PB2
0000	425 E + 44	LEFT	17	1	PB3
0000	422 E + 86	LEFT	18	1	PB4
0000	420 E + 15	LEFT	11	1	PB5
0000	427 E + 13	LEFT	6	1	PB6
0000	426 E + 79	LEFT	70	1	PB7
0000	428 E + 40	LEFT	5	1	PB8
0000	429 E + 70	LEFT	4	1	PB9
0000	432 E + 22	LEFT	7	1	PB10
0000	434 E + 0	LEFT	5	1	PB11
0000	435 E + 59	LEFT	4	1	PB12
		Total		**12**	

Signal Bases

Category	Station	Dir	Location	654.0106 Concrete Bases Type 6 EACH	Description
0000	425 E + 85	RIGHT	65	1	LB1
0000	425 E + 52	LEFT	17	1	LB2
0000	422 E + 80	LEFT	17	1	LB3
0000	420 E + 7	LEFT	11	1	LB4
0000	427 E + 5	LEFT	5	1	LB5
0000	426 E + 74	LEFT	74	1	LB6
0000	429 E + 75	LEFT	4	1	LB7
0000	432 E + 28	LEFT	7	1	LB8
0000	435 E + 66	LEFT	4	1	LB9
		Total		**9**	

Electrical Conduit

Category	Station	to	Station	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch LF	Description
0000	426 E + 76	to	426 E + 72	13	LC1 to PB1
0000	426 E + 72	to	425 E + 80	93	PB1 to PB2
0000	425 E + 80	to	425 E + 85	9	PB2 to LB1
0000	425 E + 80	to	425 E + 44	84	PB2 to PB3
0000	425 E + 44	to	425 E + 52	9	PB3 to LB2
0000	425 E + 44	to	422 E + 86	259	PB3 to PB4
0000	422 E + 86	to	422 E + 80	7	PB4 to LB3
0000	422 E + 86	to	420 E + 15	272	PB4 to PB5
0000	420 E + 15	to	420 E + 07	8	PB5 to LB4
0000	426 E + 72	to	427 E + 13	70	PB1 to PB6
0000	427 E + 13	to	427 E + 05	9	PB6 to LB5
0000	427 E + 13	to	426 E + 79	74	PB6 to PB7
0000	427 E + 13	to	428 E + 40	128	PB6 to PB8
0000	426 E + 79	to	426 E + 74	7	PB7 to LB6
0000	428 E + 40	to	429 E + 70	131	PB8 to PB9
0000	429 E + 70	to	429 E + 75	6	PB9 to LB7
0000	429 E + 70	to	432 E + 22	253	PB9 to PB10
0000	432 E + 22	to	432 E + 28	7	PB10 to LB8
0000	432 E + 22	to	434 E + 00	179	PB10 to PB11
0000	434 E + 00	to	435 E + 59	160	PB11 to PB12
0000	435 E + 59	to	435 E + 66	8	PB12 to LB9
			Total	**1786**	

Electrical items

Category	Station	Dir	Location	656.0200 Electrical Service Meter Breaker Pedestal STH 60 LS	650.8500 Construction Staking Electrical Installations 1670-01-75 LS	654.0224 Concrete Control Cabinet Bases Type 6 EACH	659.2124 Lighting Control Cabinets 120/240 24-Inch EACH	Description
0000	426 E + 76	RIGHT	55	1		1	1	LC1
0000	426 E + 76	RIGHT	55		1			Project
			Total	**1**	**1**	**1**	**1**	

3

Poles, Arms & Equipment

Station	Dir	Location	657.0255 Transformer Bases Breakaway 11 1/2 Inch Bolt Circle EACH	657.0327 Poles Type 6- Aluminum EACH	657.0710 Luminaire Arms Truss Member 4.5-Inch Clamp 12-FT EACH	659.1125 Luminaires Utility LED C EACH	Desc
425 E + 85	RIGHT	65	1	1	1	1	LB1
425 E + 52	LEFT	17	1	1	2	2	LB2
422 E + 80	LEFT	17	1	1	2	2	LB3
420 E + 7	LEFT	11	1	1	2	2	LB4
427 E + 5	LEFT	5	1	1	2	2	LB5
426 E + 74	LEFT	74	1	1	1	1	LB6
429 E + 75	LEFT	4	1	1	2	2	LB7
432 E + 28	LEFT	7	1	1	2	2	LB8
435 E + 66	LEFT	4	1	1	2	2	LB9
	Total		**9**	**9**	**16**	**16**	

Street Light Wire

Category	Station	to	Station	655.0610 Electrical Wire Lighting 12 AWG LF	655.0620 Electrical Wire Lighting 8 AWG LF	Description
0000	426 E + 76	to	425 E + 85		363	LC1 to LB1
0000	425 E + 85	to	425 E + 52		459	LB1 to LB2
0000	425 E + 52	to	422 E + 80		861	LB2 to LB3
0000	422 E + 80	to	420 E + 07		897	LB3 to LB4
0000	426 E + 76	to	427 E + 05		411	LC1 to LB5
0000	427 E + 05	to	426 E + 74		306	LB5 to LB6
0000	426 E + 76	to	429 E + 75		1215	LC1 to LB7
0000	429 E + 75	to	432 E + 28		834	LB7 to LB8
0000	432 E + 28	to	435 E + 66		1116	LB8 to LB9
0000	425 E + 85			165		LB1 Up Pole
0000	425 E + 52			330		LB2 Up Pole
0000	422 E + 80			330		LB3 Up Pole
0000	420 E + 07			330		LB4 Up Pole
0000	427 E + 05			330		LB5 Up Pole
0000	426 E + 74			165		LB6 Up Pole
0000	429 E + 75			330		LB7 Up Pole
0000	432 E + 28			330		LB8 Up Pole
0000	435 E + 66			330		LB9 Up Pole
			Total	**2640**	**6462**	

TRANSPORTATION PROJECT PLAT NO: 1670-01-25 - 4.01

PART OF LOT 1 OF CSM 1119, V. 5, PG. 1119, DOC. 442516 IN AND INCLUDING PART OF THE SW 1/4-NW 1/4; LOT 1 OF CSM 990, V. 4, PG. 990, DOC. 434653, IN AND INCLUDING PART OF THE NE 1/4-SW 1/4; ALSO PART OF THE NW 1/4-SW 1/4 AND THE SE 1/4-NW 1/4, ALL BEING PART OF SECTION 11, TOWNSHIP 9 NORTH, RANGE 6 EAST, TOWN OF PRAIRIE DU SAC, SAUK COUNTY, WISCONSIN.

RELOCATION ORDER USH 12, BARABOO - SAUK CITY, STH 60 INTERSECTION

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.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, SAUK COUNTY ZONE, NAD83 (2007); IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS. EXCLUDING RIGHT-OF-WAY LINES, THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

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 THE NEW REFERENCE LINES.

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

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN LACROSSE, WI.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

EXISTING ACCESS CONTROL ALONG USH 12 HAS BEEN ESTABLISHED FROM PREVIOUS PROJECT 1670-02-29.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
WISDOT HIGHWAY PLAT - DIVISION JOB NO. 1641
WISDOT HIGHWAY PLAT - PROJECT NO. 1670-02-21
WISDOT HIGHWAY PLAT - PROJECT NO. 5680-02-21

ALIGNMENT INFORMATION

USH 12	SIDE STREET
STA. 400+00.00 Y = 167,132.75 X = 646,529.81	BOP = STA. 300+00.00 Y = 164,776.17 X = 647,238.38
DB = S00°11'49"W	DB = N30°15'03"E
PI = STA. 425+69.41 Y = 164,563.36 X = 646,520.98 Δ = 90°56'10" T = 1,456.82' L = 2,273.57' R = 1,432.50' LC = 2,042.34' PC = STA. 411+13.31 PT = STA. 433+86.88	PI = STA. 301+61.71 Y = 164,915.86 X = 647,315.85 Δ = 58°23'24" T = 159.69' L = 254.71' R = 250.00' LC = 243.89' PC = STA. 300+22.02 PT = STA. 302+76.79
DA = N89°15'39"E	DA = N88°38'27"E
STA. 448+00.00 Y = 164,600.37 X = 649,389.96	EOP = STA. 307+50.00 Y = 164,930.39 X = 647,932.58

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RIGHT	RT
CENTERLINE	C/L	RIGHT OF WAY	R/W
CERTIFIED SURVEY MAP	CSM	SECTION	SEC
CONCRETE	CONC	SEPTIC VENT	SEPV
COUNTY	CO	SQUARE FEET	SF
COUNTY TRUNK HIGHWAY	CTH	STATE TRUNK HIGHWAY	STH
DISTANCE	DIST	STATION	STA
CORNER	COR	SUBDIVISION	SUBD
DOCUMENT NUMBER	DOC	TANGENT	TAN
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
GAS VALVE	GV	TRANSPORTATION PROJECT PLAT	TPP
GRID NORTH	GN	UNITED STATES HIGHWAY	USH
HIGHWAY EASEMENT	HE	VOLUME	V
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CURVE DATA

CHORD LENGTH	LC
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	Δ
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL SYMBOLS

SECTION LINE; QUARTER LINE; SIXTEENTH LINE; NEW REFERENCE LINE; NEW R/W LINE; EXISTING R/W LINE; PROPERTY LINE; LOT, TIE & OTHER MINOR LINES; CORPORATE LIMITS; UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC) (TYPE); FEE ACQUISITION AREA (HATCHING VARIES BY OWNER); TEMPORARY LIMITED EASEMENT AREA; EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT); TRANSMISSION STRUCTURES; BUILDING; BUILDING TO BE REMOVED; NATIONAL GEODETIC SURVEY MONUMENT; SIXTEENTH CORNER MONUMENT

SECTION CORNER; NOTATION FOR COMBUSTABLE FLUIDS; NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES; R/W MONUMENT; NON-MONUMENTED R/W POINT; FOUND IRON PIN; VALVE (GAS, WATER, ETC.); SIGN; OFF-PREMISE SIGN; BRIDGE; PARCEL NUMBER; UTILITY NUMBER

COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	
TELEPHONE POLE	
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)	

ACCESS CONTROLLED BY ACQUISITION; NO ACCESS (BY STATUTORY AUTHORITY); ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)

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 INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
1	JOSEPH W. BALLWEG	FEE/TLE/AR	2.22	--	2.22	0.13
2	JEFFREY E. CAMPBELL LE TO EDWARD E. CAMPBELL AND BERNICE E. CAMPBELL	TLE	--	0.09	0.09	0.04
3	GREGORY K. PORTER AND PHYLLIS J. PORTER, HUSBAND AND WIFE WITH RIGHT OF MARITAL SURVIVORSHIP, ON PART, GREGORY K. PORTER AND PHYLLIS J. PORTER, HUSBAND & WIFE AS SURVIVORSHIP MARITAL PROPERTY, ON PART.	TLE	--	0.14	0.14	0.11
4	UPRIGHT BUILDING, LLC, A WISCONSIN LIMITED LIABILITY COMPANY	FEE	1.42	0.76	2.18	--
6	JOHN R. MARCH AND JENNIFER L. MARCH, HUSBAND AND WIFE, AS SURVIVORSHIP MARITAL PROPERTY	TLE	--	--	--	0.25
7	R & R BUILDING FACILITIES, LLC, A WISCONSIN LIMITED LIABILITY COMPANY	TLE	--	--	--	0.25
8	J&D RENTAL ENTERPRISES LLC	FEE/TLE/AR	0.15	--	--	0.14
9	WF PRAIRIE PROPERTIES, LLC, A WISCONSIN LIMITED LIABILITY COMPANY	FEE/TLE	0.46	--	0.46	0.01

SIGN NUMBER	OWNER(S)	INTEREST REQUIRED
1-1	LAMAR ADVERTISING COMPANY	RELEASE OF RIGHTS

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
81	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS
82	WISCONSIN POWER AND LIGHT COMPANY	RELEASE OF RIGHTS
83	AMERITECH, INC.	RELEASE OF RIGHTS

R/W POINT	STATION	OFFSET
100	416+29.41	70.00
101	416+29.41	83.34
102	416+77.92	84.21
103	417+71.61	94.14
104	418+65.46	94.20
105	419+59.34	89.27
106	420+53.53	84.34
107	421+47.98	84.43
108	422+42.15	89.52
109	423+36.01	94.62
110	424+29.83	94.72
111	425+23.64	94.84
112	425+36.41	109.79
113	425+25.57	246.69
114	424+32.10	352.27
115	424+26.54	357.78
116	424+56.58	411.75
117	426+65.95	243.39
118	426+74.17	261.95
119	427+11.59	274.52

R/W POINT	STATION	OFFSET
120	427+92.96	262.20
121	429+27.31	230.34
122	431+60.77	212.87
123	432+05.11	316.29
124	432+06.62	333.63
125	432+60.04	327.86
126	432+43.07	70.00
127	433+86.88	70.00
128	443+11.61	70.00
129	443+11.61	55.00
130	448+00.00	55.00
131	448+00.00	60.00
132	433+86.88	60.00
133	432+32.15	60.00
134	432+30.77	75.00
135	427+19.04	74.92
136	302+12.56	52.44
137	302+57.18	51.89
138	306+46.03	52.50
139	306+51.73	128.69

R/W POINT	STATION	OFFSET
140	305+41.81	132.53
141	304+96.29	52.50
142	301+93.46	70.12
143	425+52.80	85.19
144	424+85.01	84.78
145	417+64.57	75.00
146	414+95.26	75.00

TLE POINT	STATION	OFFSET
T-1	425+26.73	230.91
T-2	424+21.50	349.93
T-3	424+63.40	423.90
T-4	425+40.21	354.13
T-5	425+44.52	362.55
T-6	426+75.75	256.57
T-7	432+75.60	332.13
T-8	432+73.86	305.35
T-9	432+66.47	189.12
T-10	432+63.93	100.88
T-11	434+64.01	99.22
T-12	434+64.01	70.00
T-13	434+64.01	60.00
T-14	434+64.01	83.93
T-15	434+08.55	83.93
T-16	433+03.65	84.06
T-17	432+29.83	84.96
T-18	303+69.38	52.50
T-19	303+68.86	74.50
T-20	306+45.34	74.50
T-21	306+48.39	22.51
T-22	307+25.68	20.94
T-23	307+27.34	90.92
T-24	306+50.60	92.74
T-25	417+96.23	82.78
T-26	414+95.22	86.00

DOCUMENT 1089461

ACCEPTED IN THE OFFICE OF THE REGISTER OF DEEDS IN SAUK COUNTY, WISCONSIN AT 12:05 P.M. ON MARCH 25, 2014

FILED IN D-290B

ORIGINAL DOCUMENT WAS SIGNED BY BRENT BAILEY, R.O.D.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1670-01-25 - 4.01

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

KEVIN LORD (PRINTED NAME) — SIGNATURE — 3-15-14 (DATE)

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

JENNIFER QUERAM (PRINTED NAME) — SIGNATURE — 3-18-14

WISCONSIN KEVIN C. LORD S-2645 MADISON, WIS. LAND SURVEYOR

PLOT DATE : 3/15/2014 2:45 PM PLOT BY : KEVIN LORD

1670-01-25 4.01

JOSEPH W. BALLWEG

PROJECT BEGINS
RECONSTRUCTION BEGINS
STA 409+53.53

N

SLOPE INTERCEPTS

BP: 409+97.04"EB"

S.H.W CUT

404+00 405+00 406+00 407+00 408+00 409+00 410+00

Section Line

FE +60

SUMPTER PRAIRIE FARMS LLC

SLOPE INTERCEPTS

760.00

750.00

404 405 406 407 408 409 410

STA 409+53.53
EL 759.70

VPC STA 409+78.53
VPC EL 759.65

-0.19%

Ex. USH 12 Profile

PROPOSED USH 12 PROFILE

VCL = 200.00
K = 656.25

762.42 762.17 761.93 761.68 761.44 761.19 760.94 760.70 760.45 760.20 759.96 759.71 759.47 759.60

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	PLAN AND PROFILE: USH 12	SHEET 115	E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\050101_PP.DWG PLOT DATE : 2/11/2015 1:54 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

CONSTRUCTION BEGINS
STA 295+03.65"A"

JOSEPH W. BALLWEG

SLOPE INTERCEPTS

STA. 298+18.70"A" LT & RT
138'-CPRC-CLII-30"ø0.33%
SKEW 28.75° RHF
2 EA-AEW FOR CULVERT PIPE
REINFORCED CONCRETE
U/S INVERT 752.50
D/S INVERT 752.00

TEMPORARY LIMITED EASEMENT

RIGHT OF WAY

295+00"A"
295+00"Q"

SAW CUT

5' FLARES

SAW CUT
20'

TEMPORARY LIMITED EASEMENT

PE+45

PC: 296+03.65"A"

296+00"A"
296+00"Q"

297+00"A"

STH 60

297+00"Q"

RIGHT OF WAY

TEMPORARY LIMITED EASEMENT

JEFFREY E CAMPELL

REMOVING FENCE
STA. 296+11"Q" RT

NOTE:
CONTACT GREGORY & PHYLLIS PORTER 7 DAYS BEFORE REMOVING FENCE

GREGORY K & PHYLLIS J PORTER

SAW CUT

PE +72

SLOPE INTERCEPTS

APPROX. END REMOVING FENCE
STA. 297+05"Q" RT

STATION EQUATION
STA. 297+92.84"A" (PR STH 60)
STA. 205+06.00"RO" (RICHOLSON RD)

PT: 298+60.51"A"

298+00"A"

205+00"RO"

RICHOLSON RD

PROPOSED STH 60 CENTERLINE

STATION EQUATION
STA. 426+23.39"EB" (USH 12 EB ℄)
= STA. 299+46.59"A" (PR STH 60)

PC: 299+86.75"A"

301+00"A"

300+00"A"

426+00"EB"

426+00

426+00"WB"

USH 12

STATION EQUATION
STA. 426+06.97"WB" (USH 12 WB ℄) =
STA. 299+68.55"A" (PR STH 60)

299+00"A"

Ex. STH 60 Centerline

299+00"Q"

298+00"Q"

427+00"EB"

427+00

427+00"WB"

BENCHMARK *1000
PK NAIL IN FLAG OF CURB, ELEV 758.70

CONTROL POINT *9001
REBAR /W RED CAP

N

5

5

BENCHMARKS		
POINT NO.	DESCRIPTION	ELEVATION
1000	PK NAIL IN FLAG OF CURB, APPROXIMATELY 100' FROM INTERSECTION OF USH 12 & STH 60, BY CP 9001 ON STH 60, NW QUAD, PE	758.70

VCL = 120.00
K = 38.48

VPC STA 297+30.00"A"
VPC EL 758.61

VPI STA 298+25.00"A"
VPI EL 761.76

STH 60 PROPOSED PROFILE

VPT STA 299+20.00"A"
VPT EL 759.86

STA 299+22.59"A"
EL 759.81

STA 299+34.59"A"
EL 759.57

VCL = 130.00
K = 45.92

760.00

STA 295+03.65"A"
EL 754.26

3.32%

0.20%

VCL = 190.00
K = 35.73

-2.00%

-6.00%

STA 299+80.55"A"
EL 756.81

-2.00%

EXISTING GROUND PROFILE

VPC STA 295+45.00"A"
VPC EL 754.34

VPI STA 296+05.00"A"
VPI EL 754.46

VPT STA 296+65.00"A"
VPT EL 756.45

VPC STA 300+05.00"A"
VPC EL 756.32

VPI STA 300+70.00"A"
VPI EL 755.02

750.00

295 296 297 298 299 300

754.26 754.26 754.30 754.35 754.26 754.84 754.68 755.98 755.06 757.61 754.28 759.21 752.24 760.24 753.56 760.57 754.48 760.20 757.81 758.64 753.36 754.17

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	PLAN AND PROFILE: STH 60	SHEET 116 E

JOSEPH W. BALLWEG

TEMPORARY LIMITED EASEMENT

WF PRAIRIE PROPERTIES

RIGHT OF WAY

FE +52 LT

20'R
STA 416+14.42"WB"
38.0' LT

22'

STA. 416+44.41"WB" LT
58'-CPCS-36"@0.44%
2 EA-AEW FOR CULVERT PIPE
SLOPED SIDE DRAINS STEEL 36" 6 TO 1
U/S INVERT 751.13
D/S INVERT 750.80
2 EA-PIPE GRATE
20'R
STA. 416+78.10"WB", 38.0' LT

STA. 416+50"WB" LT
REMOVE 2-18" CMCP

SLOPE INTERCEPTS

USH 12 WB REFERENCE LINE

416+00"WB"
416+00
416+00"EB"
417+00"WB"
417+00
417+00"EB"
418+00"WB"
418+00
418+00"EB"
419+00"WB"
419+00
419+00"EB"

USH 12

STA. 418+89.33"WB", 42.0' LT

30'R

28'

CE +39

STA. 420+01.69"EB", 9.94' LT
9.94' RADIUS POINT

CONCRETE MEDIAN SLOPED NOSE

STA. 420+35.96"EB" LT & RT
122'-CPRC-CLIII-36"@1.15%
2 EA-AEW FOR CULVERT
PIPE REINFORCED CONCRETE 36-INCH
EB SIDE INVERT 749.58
WB SIDE INVERT 746.18

Existing Right of Way

30'R
STA. 419+79.98"EB"
42.0' LT

420+00"WB"
420+00
420+00"EB"

STA. 420+53.82"EB", ON R/L
BEGIN LEFT TURN LANE TAPER

CONCRETE CURB & GUTTER 6-INCH
SLOPED 30-INCH TYPE J

421+00"WB"
421+00
421+00"EB"

12.5:1 TAPER

422+00"WB"
422+00
422+00"EB"

STA. 422+05.15"EB", 12.0' LT
END LEFT TURN TAPER

CLEARING AND GRUBBING
(STATION)

CONCRETE CURB AND GUTTER
18-INCH TYPE D

12.5:1 TAPER

STA. 421+93.72"EB", 28.0' RT
END TAPER FOR RIGHT TURN LANE

CONTROL POINT
#9002
REBAR W/
RED CAP

20'R
STA. 416+28.77"EB"
38.0' RT

STA. 416+50"EB" RT
REMOVE 1-24" CMCP

STA. 416+58.75"EB" RT
68'-CPCS-24"@0.50%
2 EA-AEW FOR CULVERT PIPE
SLOPED SIDE DRAINS STEEL 24" 6 TO 1
U/S INVERT 753.54
D/S INVERT 753.14
2 EA-PIPE GRATE

20'

20'R
STA. 416+87.20, 38.0' RT

FE +52 RT

USH 12 EB REFERENCE LINE

SLOPE INTERCEPTS

STA. 419+93.72"EB", 12.0' RT
BEGIN TAPER FOR RIGHT TURN LANE

BM #1002
MARK IN NW HEADWALL
ELEV = 756.06

STA. 420+46"EB" LT & RT
REMOVE OLD CULVERT C-1680-42
3-SIDED ARCH CULVERT CATTLE PASS
81.5' OVERALL LENGTH
8.5' OVERALL WIDTH

BENCHMARKS		
POINT NO.	DESCRIPTION	ELEVATION
1002	MARK IN NW HEADWAY OF EXISTING CATTLE PASS ON USH 12, APPROXIMATELY 550' N OF INTERSECTION OF USH 12 & STH 60	756.06

JOSEPH W. BALLWEG

RIGHT OF WAY

5

5

VCL = 900.00
K = 1388.64"EB"

VCL = 895.00
K = 1207.54"WB"

760.00
754.00
750.00

USH 12 EB REFERENCE PROFILE
USH 12 EB Reference Line Ground Profile
USH 12 WB REFERENCE PROFILE
USH 12 WB Reference Line Ground Profile

VPI STA 417+34.63"WB"
VPI EL 755.86
VPI STA 417+38.31"EB"
VPI EL 756.82

VPT STA 421+82.13"WB"
VPT EL 756.72
VPT STA 421+88.31"EB"
VPT EL 757.95
STA 421+92.15"EB"
EL 757.96

0.25%

757.43	757.71	757.48	757.64	757.35	757.58	757.31	757.54	757.33	757.51	757.29	757.51	757.29	757.52	757.35	757.56	757.42	757.61	757.44	757.67	757.47	757.76	757.59	757.86	757.76	757.98
USH 12 EB REFERENCE GRADES																							
416		417				418				419				420				421				422	
USH 12 WB REFERENCE GRADES																							
756.44	757.01	756.40	756.87	756.21	756.76	756.08	756.66	755.98	756.59	755.89	756.54	755.89	756.51	755.80	756.50	755.87	756.51	755.84	756.54	755.89	756.59	756.15	756.66	756.22	756.75

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	PLAN AND PROFILE: USH 12	SHEET 117	E

CLEARING & GRUBBING (STATION)

JOSEPH W. BALLWEG

RIGHT OF WAY

SLOPE INTERCEPTS

STATION EQUATION
STA. 426+06.97"WB" (USH 12 WB ℄)
= STA. 299+68.55"A" (PR STH 60)

FRONTAGE ROAD

STA. 427+10"WB" TO
427+93"WB", 66.6'LT
80'-FENCE SAFETY
TO PROTECT SEPTIC FIELD

J&D RENTAL
ENTERPRISES LLC

CE +00 LT
REMOVE

STA. 427+00"WB" LT
REMOVE 1-18" CMCP

422+00"WB"
422+00
22+00"EB"
USH 12
423+00"WB"
423+00
423+00"EB"
424+00"WB"
424+00
424+00"EB"
425+00"WB"
425+00
425+00"EB"
426+00"WB"
426+00
426+00"EB"
427+00"WB"
427+00
427+00"EB"
428+00"WB"
428+00
428+00"EB"

CONCRETE CURB & GUTTER 6-INCH
SLOPED 30-INCH TYPE J

CONCRETE CURB & GUTTER 18-INCH TYPE D

CONCRETE CURB & GUTTER 18-INCH TYPE D
CONCRETE CURB & GUTTER 6-INCH
SLOPED 30-INCH TYPE J

300+00"A"
299+00"A"
STH 60

STATION EQUATION
STA. 426+23.39"EB" (USH 12 EB ℄)
= STA. 299+46.59"A" (PR STH 60)

SLOPE INTERCEPTS

STA. 424+36"EB" RT
2 EA-REMOVING CONCRETE
BASES

CONCRETE CURB & GUTTER 6-INCH
SLOPED 36-INCH TYPE D

STA. 427+18"EB" RT
1 EA-REMOVING CONCRETE BASE
EXISTING LIGHT POLE TO BE
REMOVED BY DOT ELECTRICIANS
CONTACT DOT ELECTRICIANS AT
(608) 785-9080 7 DAYS PRIOR TO
DESIRED REMOVAL DATE

JOSEPH W. BALLWEG

RIGHT OF WAY

5

5

STA 426+06.98"WB"
EL 757.53

STA 426+23.45"EB"
EL 758.85

760.00
754.00
750.00

0.20%"EB"
0.19%"WB"
0.16%"EB"
0.22%"WB"

757.76	757.86	757.88	757.88	757.79	757.80	758.00	758.01	758.30	757.72	758.28	758.72	758.86
757.98	758.08	758.18	758.29	758.39	758.49	758.59	758.70	758.80	758.89	758.97	759.05	759.13

USH 12 EB REFERENCE GRADES
USH 12 WB REFERENCE GRADES

422 423 424 425 426 427 428

756.22	756.29	756.24	756.38	756.27	756.47	756.54	756.56	756.79	756.60	757.32	757.32	757.41
756.75	756.85	756.94	757.04	757.13	757.23	757.32	757.42	757.52	757.63	757.74	757.85	757.96

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	PLAN AND PROFILE: USH 12	SHEET	E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\050104_PP.DWG PLOT DATE : 2/11/2015 1:58 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

J&D RENTAL ENTERPRISES LLC

J&D RENTAL ENTERPRISES LLC

R&R BUILDING FACILITIES LLC

SLOPE INTERCEPTS

40'R
STA. 430+43.68"WB"
62.07' LT

RIGHT OF WAY

C6A

CE +28

STA. 431+02.79"WB" LT
84'-CPRC-HE-CL HE-III-38"x60"@0.24%
2 EA-AEW FOR CULVERT PIPE REINFORCED CONCRETE
HORIZONTAL ELLIPTICAL 38X60-INCH
U/S INVERT 750.93
D/S INVERT 750.69

SAW CUT

TEMPORARY LIMITED EASEMENT

40'R
STA. 433+45.35"WB"
62.07' LT

STA. 433+47.96"WB" 22.16' LT
END DRIVEWAY TAPER

N

40'R
STA. 431+63.88"WB"
62.0' LT

STA. 429+43.03"WB", 12' LT
START DRIVEWAY TAPER

STA. 430+46.33"WB", 22.16' LT
END DRIVEWAY TAPER

STA. 431+63.29"WB", 22.0' LT
START DRIVEWAY TAPER

STA. 431+75.00"WB", ON RL
START LEFT TURN TAPER

STA. 432+76.81"WB" 16.02'LT
DRIVEWAY TAPER MATCH

PT: 433+89.98"WB"

428+00"WB"

428+00

USH 12

429+00"WB"

429+00

USH 12 WB REFERENCE LINE

430+00"WB"

430+00

STA. 430+29.61"WB" 12.0'RT
END LEFT TURN TAPER

431+00"WB"

431+00

STA. 431+04"WB" LT
REMOVE BOX CULVERT
2.5' X 3.5' REINFORCED CONCRETE
83.5' OVERALL LENGTH
3.5' OVERALL WIDTH

432+00"WB"

432+00

200.00

433+00"WB"

433+00

434+00"WB"

434+00

429+00"EB"

430+00"EB"

431+00"EB"

432+00"EB"

433+00"EB"

434+00"EB"

USH 12 EB REFERENCE LINE

PT: 433+80.01"EB"

STA. 429+04.07"EB" LT & RT
SKEW 1.00° LHF
2 EA-AEW FOR PIPE CULVERT
REINFORCED CONCRETE 42-INCH
WB SIDE
1 EA'-REMOVING APRON END WALL 42"
14'-CPRC-CLIII-42"@0.12%
U/S INVERT 750.52
EB SIDE
1 EA-REMOVING APRON END WALL 42"
24'-CPRC-CLIII-42"@0.12%
D/S INVERT 750.37

STA. 429+79.65"EB" LT & RT
SKEW 0.60° LHF
110'-CPRC-CLIII-42"@0.25%
2 EA-AEW FOR PIPE CULVERT
REINFORCED CONCRETE 42-INCH
U/S INVERT 750.68
D/S INVERT 750.37

PROTECT EXISTING UTILITIES
AS EXISTING RICHOLSON ROAD
IS REMOVED

CAUTION

STA. 432+39"EB" RT
REMOVE 1-18" CMCP

CONCRETE CURB & GUTTER
6-INCH SLOPED 30-INCH TYPE J

RIGHT OF WAY

SLOPE INTERCEPTS

TEMPORARY LIMITED EASEMENT

JOHN R & JENNIFER L MARCH

PROTECT SIGN TO REMAIN

STA. 433+69"EB", 73.3' RT TO
STA. 434+79"EB", 70.2' RT
111'-FENCE SAFETY
TO PROTECT SEPTIC FIELD

C6A STA. 428+28.59"EB" LT & RT
SKEW 4.69° RHF
2 EA-AEW FOR PIPE CULVERT
REINFORCED CONCRETE 42-INCH
WB SIDE
1 EA'-REMOVING APRON END WALL 42"
14'-CPRC-CLIII-42"@0.20%
WB SIDE INVERT 750.67
EB SIDE
1 EA-REMOVING APRON END WALL 42"
28'-CPRC-CLIII-42"@0.20%
EB SIDE INVERT 750.93

VPC STA 428+56.36"WB"
VPC EL 758.09

VPC STA 428+76.61"EB"
VPC EL 759.25

VPI STA 430+14.36"WB"
VPI EL 758.46

VPI STA 430+36.61"EB"
VPI EL 759.50

VPT STA 431+72.36"WB"
VPT EL 757.44

VPT STA 431+96.61"EB"
VPT EL 758.29

STA 433+25.33"WB"
EL 756.46

STA 433+50.74"EB"
EL 757.13

STA 433+78.46"WB"
EL 756.24

USH 12 EB REFERENCE PROFILE

USH 12 EB Reference
Ground Profile

760.00

0.23%"WB"

-0.76%"EB"

-0.64%"WB"

-0.91%"EB"

-0.42%"WB"

VCL = 320.00

K = 349.33"EB"

VCL = 316.00

K = 360.39"WB"

754.00

USH 12 WB REFERENCE PROFILE

USH 12 WB Reference Ground Profile

STA 428+55.22"WB"
EL 758.08

758.86 759.13
758.62 759.21
758.83 759.28
758.59 759.29
758.63 759.23
758.66 759.09
758.45 758.89
758.42 758.61
758.03 758.27
757.34 757.89
757.43 757.51
757.08 757.13
756.69 756.68

EB REFERENCE LINE GRADES

WB REFERENCE LINE GRADES

750.00

428 429 430 431 432 433 434

757.41 757.96
757.36 758.07
757.68 758.16
757.49 758.18
757.65 758.14
757.42 758.02
757.31 757.83
757.18 757.58
757.00 757.26
756.66 756.94
756.33 756.62
756.08 756.35
755.72 756.16

5

5

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	PLAN AND PROFILE: USH 12	SHEET 119	E

R&R BUILDING FACILITIES LLC

TEMPORARY LIMITED EASEMENT

35'

SAW CUT

CE +32

40'R
STA. 434+62.28"WB", 62.13' LT
STA. 434+02.79"WB" LT
78'-CPRC-HE-CL HE-III-38"x60"@0.13%
2 EA-AEW FOR PIPE CULVERT REINFORCED CONCRETE
HORIZONTAL ELLIPTICAL 38X60 INCH 6-TO-1 SLOPE
U/S INVERT 751.20
D/S INVERT 751.08
2 EA-PIPE GRATE

WEISS FARMS INC.

N

SLOPE INTERCEPTS

RIGHT OF WAY

STA. 434+59.06"WB", 22.26' LT
BEGIN DRIVEWAY TAPER

STA. 436+11.35"WB", 12.0' LT
END DRIVEWAY TAPER

RECONSTRUCTION SECTION ENDS
RESURFACING SECTION BEGINS
STA 437+99.41 (USH 12 ℄)
STA 438+14.89 (USH 12 EB ℞)
STA 437+89.14 "A" (USH 12 WB ℞)

PT: 433+89.98"WB"

PI: 434+89.16"WB"

EP: 437+89.14"WB"

STA. 435+74.89"EB", 4.0' LT
4' RADIUS POINT

STA. 434+07"WB" LT
REMOVE 1-36" CMCP

USH 12 WB REFERENCE LINE

434+00"WB"
434+00
435+00"WB"
436+00"WB"
437+00"WB"
439+00
440+00
0"EB"
435+00"EB"
436+00"EB"
437+00"EB"
438+35"EB"

USH 12

CONCRETE MEDIAN SLOPED NOSE

USH 12 EB REFERENCE LINE

USH 12 CENTERLINE

CONCRETE CURB & GUTTER 6-INCH
SLOPED 30-INCH TYPE J

PI: 435+14.78"EB"

SAW CUT

EP: 438+14.89"EB"

5

RIGHT OF WAY

JOHN R & JENNIFER L MARCH

TEMPORARY LIMITED EASEMENT

SLOPE INTERCEPTS

MICHAEL & CATHERINE WEISS LIMITED PARTNERSHIP

5

USH 12 CENTERLINE
PROFILES OMITTED
FOR CLARITY

USH 12 EB Reference Ground Profile

USH 12 EB REFERENCE LINE PROFILE

STA 434+04.17"EB"
EL 756.64

STA 434+57.50"EB"
EL 756.24

STA 435+10.84"EB"
EL 755.86

STA 435+64.25"EB"
EL 755.59

STA 437+89.13"WB"
EL 755.30

STA 438+11.36"EB"
EL 755.30

760.00

-0.75%"EB"

-0.71%"EB"

-0.50%"EB"

-0.37%"WB"

-0.48%"WB"

-0.36%"WB"

-0.11%"WB" -0.12%"EB"

Ex. USH 12 Profile

754.00

USH 12 WB REFERENCE LINE PROFILE

USH 12 WB Reference Ground Profile

STA 434+31.75"WB"
EL 756.04

STA 434+85.09"WB"
EL 755.78

STA 435+38.50"WB"
EL 755.59

756.69 756.68
756.37 756.29
756.15 755.93
755.77 755.66
755.51 755.55
755.31 755.49
755.25 755.43
754.87 755.37
755.03 755.31

USH 12 EB REFERENCE GRADES

750.00

434 435 436 437 438 439 440

USH 12 WB REFERENCE GRADES | USH 12 CENTERLINE GRADES

755.72 756.16
755.52 755.95
755.47 755.73
755.23 755.57
755.27 755.52
755.17 755.46
754.97 755.40
754.83 755.34
755.30 755.32
755.35 755.37
755.40

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	PLAN AND PROFILE: USH 12	SHEET 120	E

WEISS FARMS LLC

RIGHT OF WAY

N

FE +64

440+00 441+00 442+00 443+00 444+00 445+00 446+00

USH 12 CENTERLINE

RIGHT OF WAY

MICHAEL & CATHERINE WEISS LIMITED PARTNERSHIP

WEISS FARMS LLC

5

5

WEISS FARMS LLC

N

RIGHT OF WAY

CP #9002
REBAR W/ RED CAP

PE +62

446+00 447+00 448+00 449+00 450+00 451+00 452+00

USH 12 CENTERLINE

RIGHT OF WAY

PE +34

WEISS FARMS LLC

PROJECT NO:1670-01-75	HWY:USH 12	COUNTY:SAUK	PLAN: USH 12	SHEET	E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\050121_PP.DWG PLOT DATE : 2/11/2015 2:26 PM PLOT BY : VALENTI, PAUL M PLOT NAME : _____ PLOT SCALE : **********

WISDOT/CADDS SHEET 42

WEISS FARMS LLC

C/O MICHAEL WEISS SR
WEISS FARMS LLC

RIGHT OF WAY

PI: 453+58.38

452+00 453+00 454+00 455+00 456+00 457+00 458+00

USH 12 CENTERLINE

SAW CUT

STA. 456+80.11
RESURFACING SECTION ENDS
PROJECT ENDS

FE +64

N

RIGHT OF WAY

WEISS FARMS LLC

PE +11

5

5

C/O MICHAEL WEISS SR
WEISS FARMS LLC

WEISS FARMS LLC

N

RIGHT OF WAY

458+00 459+00 460+00 461+00 462+00 463+00 464+00

USH 12 CENTERLINE

RIGHT OF WAY

WEISS FARMS LLC

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	PLAN: USH 12	SHEET 122	E

CONSTRUCTION BEGINS
STA 295+03.65"A"

JOSEPH W. BALLWEG

SLOPE INTERCEPTS

STA. 298+18.70"A" LT & RT
138'-CPRC-CLII-30"ø0.33%
SKEW 28.75° RHF
2 EA-AEW FOR CULVERT PIPE
REINFORCED CONCRETE
U/S INVERT 752.50
D/S INVERT 752.00

TEMPORARY LIMITED EASEMENT

RIGHT OF WAY

295+00"A"
295+00"a"

SAW CUT

5' FLARES

SAW CUT
20'

TEMPORARY LIMITED EASEMENT

PE+45

296+00"A"
296+00"a"

PC: 296+03.65"A"

297+00"A"

STH 60

297+00"a"

RIGHT OF WAY

TEMPORARY LIMITED EASEMENT

JEFFREY E CAMPELL

REMOVING FENCE
STA. 296+11"a" RT

NOTE:
CONTACT GREGORY & PHYLLIS PORTER 7 DAYS BEFORE REMOVING FENCE

GREGORY K & PHYLLIS J PORTER

SAW CUT

PE +72

SLOPE INTERCEPTS

APPROX. END REMOVING FENCE
STA. 297+05"a" RT

STATION EQUATION
STA. 297+92.84"A" (PR STH 60)
STA. 205+06.00"RO" (RICHOLSON RD)

PT: 298+60.51"A"

298+00"A"

205+00"RO"

PROPOSED STH 60 CENTERLINE

RICHOLSON RD

298+00"a"

Ex. STH 60 Centerline

299+00"a"

BENCHMARK *1000
PK NAIL IN FLAG OF CURB, ELEV 758.70
CONTROL POINT *9001
REBAR /W RED CAP

STATION EQUATION
STA. 426+23.39"EB" (USH 12 EB ℄)
= STA. 299+46.59"A" (PR STH 60)

PC: 299+86.75"A"

301+00"A"

300+00"A"

426+00"EB"

426+00

426+00"WB"

USH 12

STATION EQUATION
STA. 426+06.97"WB" (USH 12 WB ℄) =
STA. 299+68.55"A" (PR STH 60)

4200+00"a"

4200+00"EB"

427+00

427+00"WB"

5

5

BENCHMARKS		
POINT NO.	DESCRIPTION	ELEVATION
1000	PK NAIL IN FLAG OF CURB, APPROXIMATELY 100' FROM INTERSECTION OF USH 12 & STH 60, BY CP 9001 ON STH 60, NW QUAD, PE	758.70

760.00

750.00

295

296

297

298

299

300

VCL = 120.00
K = 38.48

VCL = 190.00
K = 35.73

VCL = 130.00
K = 45.92

STA 295+03.65"A"
EL 754.26

VPC STA 295+45.00"A"
VPC EL 754.34

VPT STA 296+05.00"A"
VPT EL 754.46

VPI STA 296+65.00"A"
VPT EL 756.45

VPC STA 297+30.00"A"
VPC EL 758.61

VPI STA 298+25.00"A"
VPI EL 761.76

VPT STA 299+20.00"A"
VPT EL 759.86

STA 299+22.59"A"
EL 759.81

STA 299+34.59"A"
EL 759.57

STA 299+80.55"A"
EL 756.81

VPC STA 300+05.00"A"
VPC EL 756.32

VPI STA 300+70.00"A"
VPI EL 755.02

0.20%

3.32%

-2.00%

-6.00%

-2.00%

STH 60 PROPOSED PROFILE

EXISTING GROUND PROFILE

754.26 754.26
754.30 754.35
754.26 754.84
754.68 755.98
755.06 757.61
754.28 759.21
752.24 760.24
753.56 760.57
754.48 760.20
757.81 758.64
753.36
754.17

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	PLAN AND PROFILE: STH 60	SHEET 123	E

JOSEPH W BALLWEG

WF PRAIRIE PROPERTIES

N

SLOPE INTERCEPTS

STA. 300+27.98"A" LT & RT
94'-CPRC-CLIV-48"@0.41%
SKEW 10.86° RHF
2 EA-APRON ENDWALL FOR PIPE CULVERT
REINFORCED CONCRETE 48-INCH
U/S INVERT 751.16
D/S INVERT 750.71

RIGHT OF WAY

425+00"EB"
425+00
425+00"WB"
USH 12

PC: 299+86.75"A"

301+00"A"
302+00"A"
PT: 302+47.45"A"

STATION EQUATION
STA. 426+23.39"EB" (USH 12 EB R)
= STA. 299+46.59"A" (PR STH 60)

426+00"EB"
426+00
426+00"WB"
300+00"A"

CAUTION

PT: 298+50.51"A"
299+00"A"
303+00"A"
FRONTAGE ROAD

STH 60

SLOPE INTERCEPTS

J&D RENTAL ENTERPRISES LLC

RIGHT OF WAY

298+00"A"

STATION EQUATION
STA. 426+06.97"WB" (USH 12 WB R)
= STA. 299+68.55"A" (PR STH 60)

427+00"EB"
427+00
427+00"WB"
300+00"A"

304+00"A"

5

5

VPI STA 298+25.00"A"
VPI EL 761.76

VPT STA 299+20.00"A"
VPT EL 759.86

STA 299+34.59"A"
EL 759.57

VCL = 130.00
K = 45.92

VPC STA 301+50.00"A"
VPC EL 755.68

VPI STA 302+00.00"A"
VPI EL 756.10

VPT STA 302+50.00"A"
VPT EL 755.77

760.00

2.00%

0.00%

-6.00%

STA 299+22.59"A"
EL 759.81

STA 299+80.55"A"
EL 756.81

-2.00%

POSSIBLE CONFLICT BETWEEN GAS LINE AND PIPE CULVERT

0.83%

VCL = 190.00
K = 35.73

VPC STA 300+05.00"A"
VPC EL 756.32

PROPOSED FRONTAGE ROAD PROFILE

Existing Ground Profile

CAUTION

VPI STA 300+70.00"A"
VPI EL 755.02

VPT STA 301+35.00"A"
VPT EL 755.56

VCL = 100.00
K = 66.84

750.00

298 299 300 301 302 303

752.24 753.56 754.48 757.81 753.36 756.42 754.17 755.64 754.67 755.40 755.05 755.68 755.09 755.91 754.88 755.77 754.51 755.43

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	PLAN AND PROFILE: FRONTAGE ROAD	SHEET 124	E

WF PRAIRIE PROPERTIES LLC

JOSEPH W BALLWEG

SLOPE INTERCEPTS

RIGHT OF WAY

PT: 302+47.45"A"

302+00"A"

303+00"A"

304+00"A"

305+00"A"

305+80"A"

FRONTAGE ROAD

STA. 303+66.95"A" RT
64'-CPCS-12"@0.20%
2 EA-APRON ENDWALL FOR
PIPE CULVERT STEEL 12-INCH
U/S INVERT 751.72
D/S INVERT 751.58

CE +69

SLOPE INTERCEPTS

RIGHT OF WAY

CE +71

J&D RENTAL ENTERPRISES LLC

STA. 306+32.80 LT
42'-CPCS-12"@0.36%
2 EA-APRON ENDWALL FOR
PIPE CULVERT STEEL 12-INCH
U/S INVERT 753.20
D/S INVERT 753.00

CE +10

SAW CUT

TEMPORARY LIMITED EASEMENT

R&R BUILDING
FACILITIES LLC

OHP

N

END CONSTRUCTION
STA. 305+80.35"A"

5

5

VCL = 100.00

K = 85.79

760.00

750.00

PROPOSED FRONTAGE ROAD PROFILE

VPC STA 304+50.00"A"
VPC EL 754.44

VPT STA 305+50.00"A"
VPT EL 754.35

STA 305+80.35
EL 754.51

-0.67%

0.50%

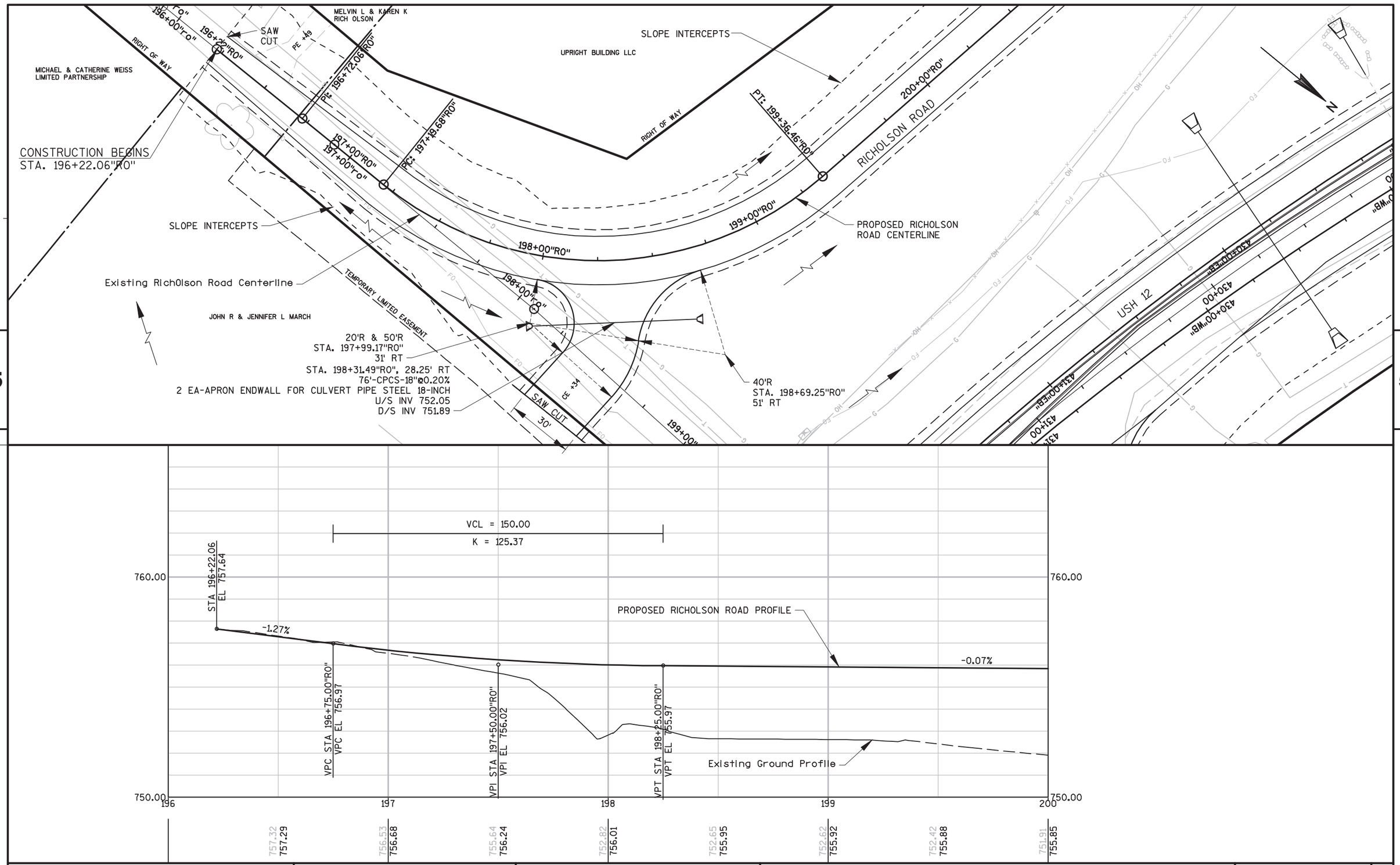
Existing Ground Profile

VPI STA 305+00.00"A"
VPI EL 754.10

303 304 305 305

754.51 755.43 | 754.12 755.10 | 753.76 754.77 | 753.20 754.44 | 752.77 754.25 | 753.22 754.35 | 753.66 754.51

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	PLAN AND PROFILE: FRONTAGE ROAD	SHEET 125	E



PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	PLAN AND PROFILE: RICHOLSON ROAD	SHEET 126 E

UPRIGHT BUILDING LLC

BENCHMARKS		
POINT NO.	DESCRIPTION	ELEVATION
1000	PK NAIL IN FLAG OF CURB, APPROXIMATELY 100' FROM INTERSECTION OF USH 12 & STH 60, BY CP 9001 ON STH 60, NW QUAD, PE	758.70

SLOPE INTERCEPTS

PROPOSED RICHOLSON ROAD CENTERLINE

RIGHT OF WAY

RICHOLSON ROAD

200+00"RO"

201+00"RO"

202+00"RO"

RC: 202+73.95"RO"

203+00"RO"

204+00"RO"

PT: 204+34.01"RO"

C7A

C7B

C7C

RELOCATE POWER POLE

GREGORY K & PHYLLIS J PORTER

TEMPORARY LIMITED EASEMENT

297+00"A"

STH 60

N

"P"00+862

205+06.00"RO"

Ex. STH 60 Centerline

PR. STH 60 CENTERLINE

RIGHT OF WAY

SLOPE INTERCEPTS

REMOVE FENCE

CONTROL POINT 9001
REBAR W/ RED CAP

BENCHMARK #1000
PK NAIL IN FLAG OF CURB
ELEV = 758.70

STATION EQUATION
205+06.00"RO" (RICHOLSON RD) =
297+92.84"A" (PR STH 60)

5

5

VCL = 160.00

K = 43.13

VPC STA 202+90.00"RO"
VPC EL 759.35

VPI STA 203+80.00"RO"
VPI EL 762.63

VPT STA 204+82.00"RO"
EL 761.10

STA 205+06.00"RO"
EL 760.14

3.64%

-1.50%

-4.00%

760.00

750.00

SPECIAL DITCH LT & RT

VPC STA 201+10.00"RO"
VPC EL 755.77

VPI STA 201+90.00"RO"
VPI EL 755.71

VPT STA 202+70.00"RO"
VPT EL 758.62

VCL = 180.00

K = 35.02

VPT STA 204+70.00"RO"
VPT EL 761.28

POSSIBLE CONFLICT BETWEEN GAS AND CULVERT INSTALLATION

CAUTION

200 201 202 203 204 205

751.91 755.85 | 751.82 755.81 | 751.95 755.78 | 751.16 755.93 | 750.92 756.65 | 751.47 757.94 | 751.52 759.70 | 753.40 761.02 | 752.28 761.63 | 758.05 761.52 | 752.19 760.38

(C7A) STA. 203+16.86"RO" LT & RT
86'-CPRC-CLIII-42"@0.20%
2 EA-APRON ENDWALL FOR CULVERT
PIPE REINFORCED CONCRETE 42-INCH
U/S INVERT 751.20
D/S INVERT 751.00

(C7B) STA. 203+36.86"RO" LT & RT
88'-CPRC-CLIII-42"@0.20%
2 EA-APRON ENDWALL FOR CULVERT
PIPE REINFORCED CONCRETE 42-INCH
U/S INVERT 751.20
D/S INVERT 751.00

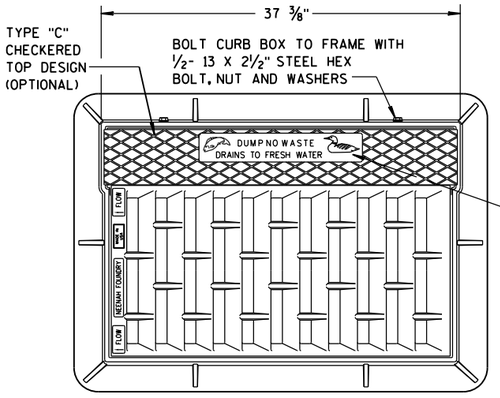
(C7C) STA. 203+56.86"RO" LT & RT
90'-CPRC-CLIII-42"@0.20%
2 EA-APRON ENDWALL FOR CULVERT
PIPE REINFORCED CONCRETE 42-INCH
U/S INVERT 751.20
D/S INVERT 751.00

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	PLAN AND PROFILE: RICHOLSON ROAD	SHEET 127	E

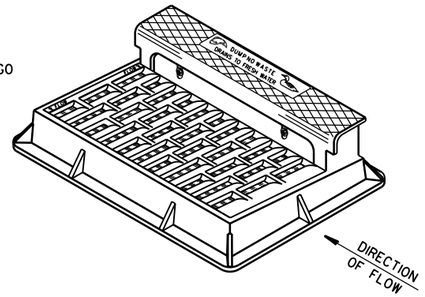
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
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
08C07-01	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-01	INLETS MEDIAN 1 AND 2 GRATE
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F07-05	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE FRAINS
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C05-09	CONCRETE CONTROL CABINET BASES
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D04-01	LIGHTING CONTROL CABINET
09E01-13E	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6 (35 FEET)
09E01-13G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
11B02-02	CONCRETE MEDIAN NOSE
13A10-01A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C04-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C11-05	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C18-03	MEDIAN ISLAND MARKING
15C19-02A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D06-03	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
15D28-02	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

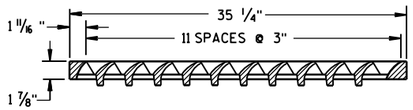
6

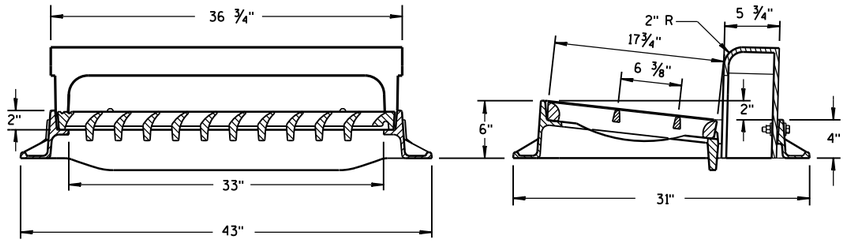


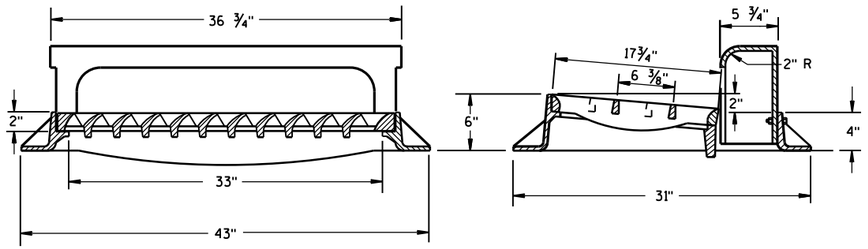
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

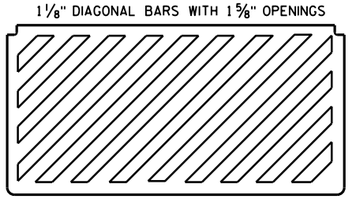






TYPE "H"

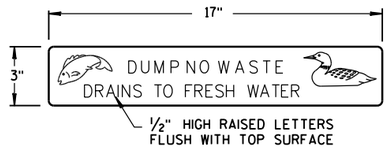
NOTE: EITHER CASTING IS ACCEPTABLE



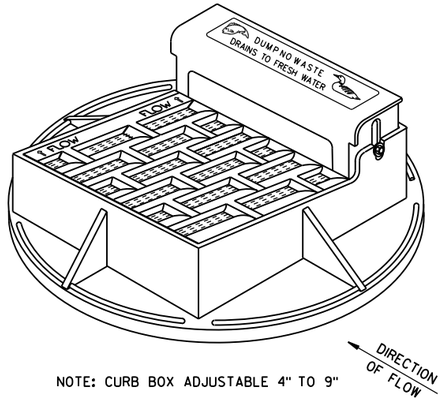
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

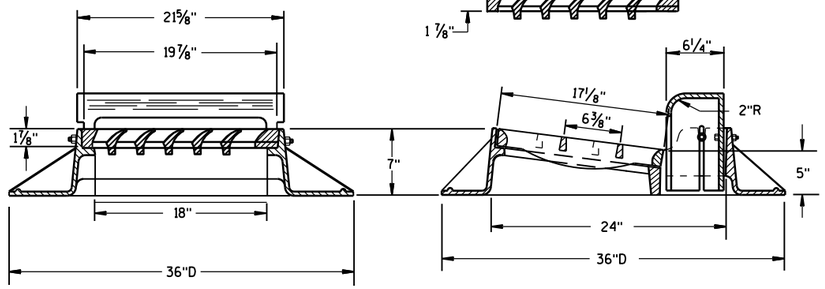


LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.



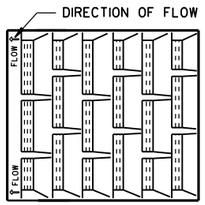
TYPE "A"

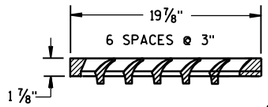
GENERAL NOTES

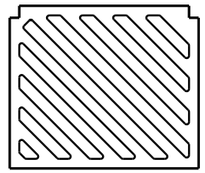
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.



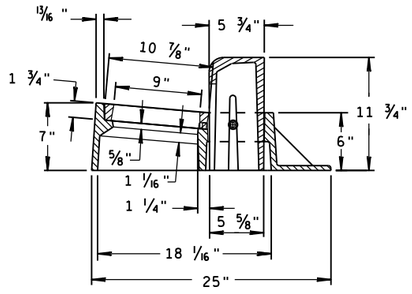


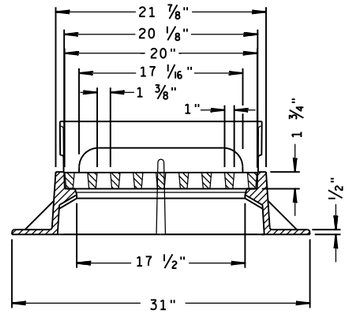


SPECIAL GRATE FOR TYPE "A" COVER

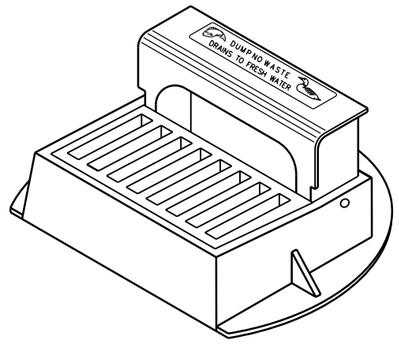
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





TYPE "Z"



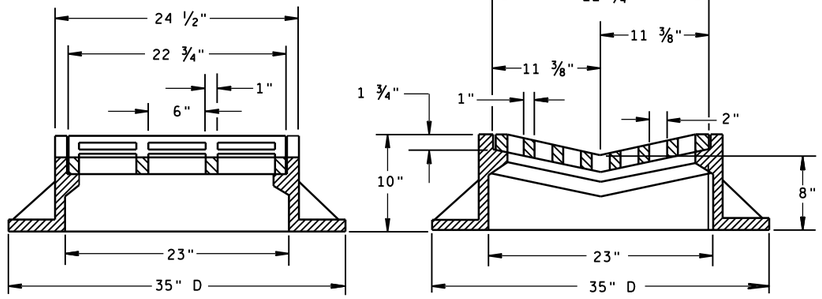
INLET COVERS
TYPE A, H, A-S, H-S & Z

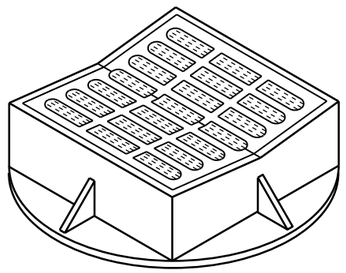
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

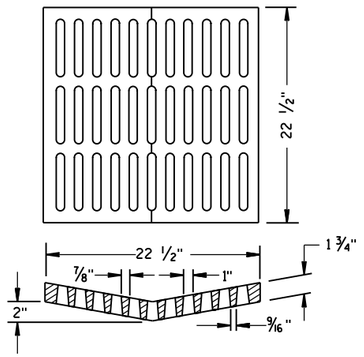
6

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



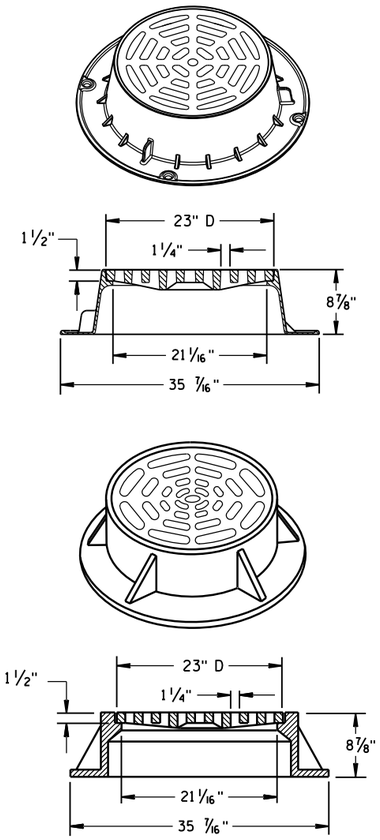


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

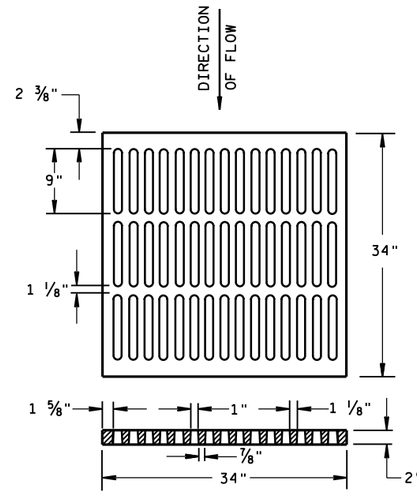
NOTE: EITHER CASTING IS ACCEPTABLE

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.

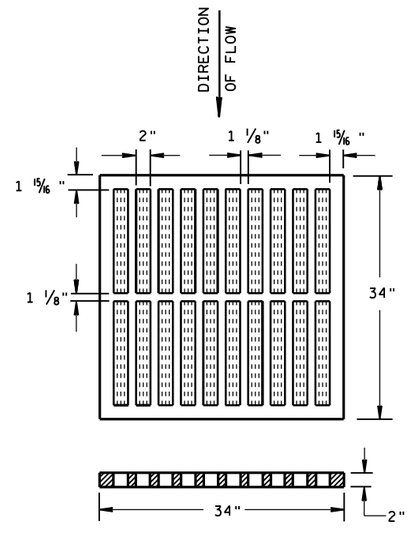
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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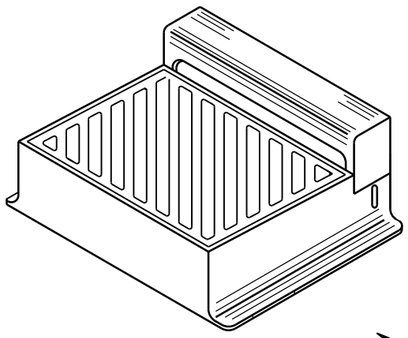
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

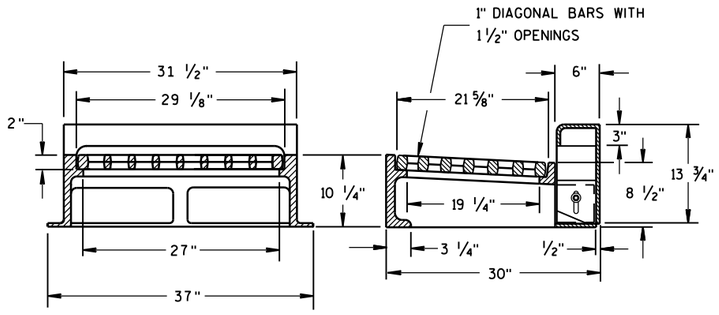


TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

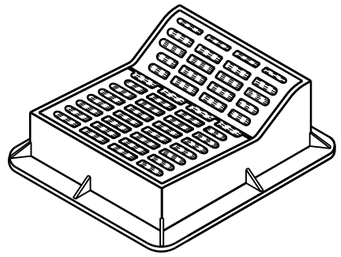
INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM

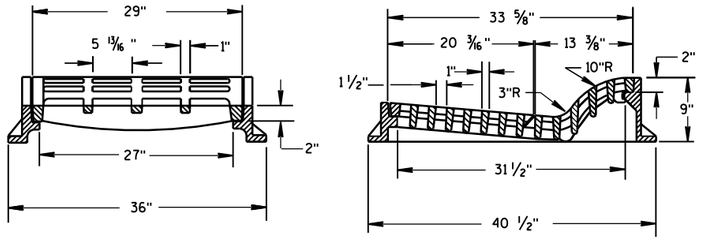
STATE OF WISCONSIN
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APPROVED
11/27/2013 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

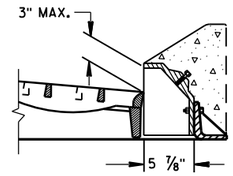
S.D.D. 8 A 5-19b





TYPE "F"

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



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

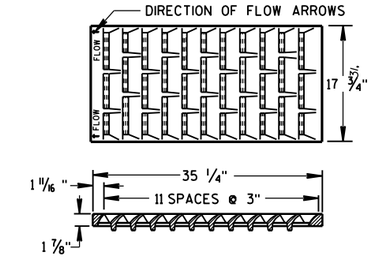
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

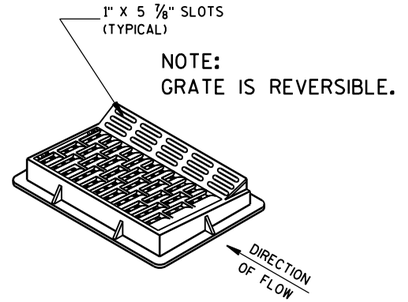
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

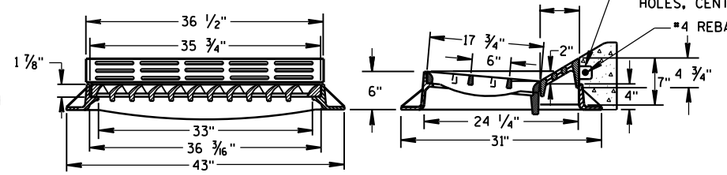
GENERAL NOTES

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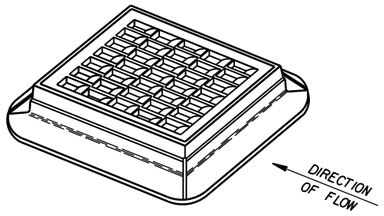


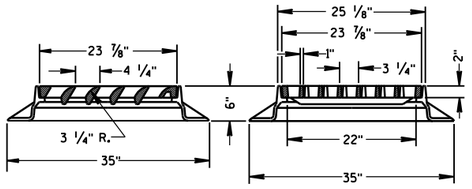


TYPE "HM"

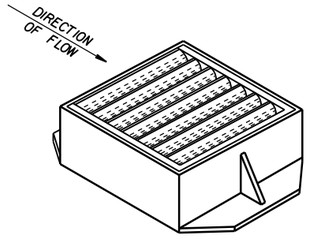
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

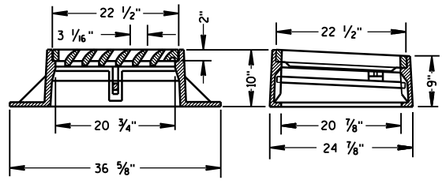
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



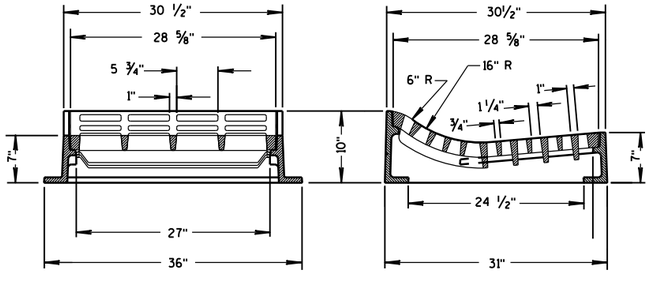


TYPE "S"



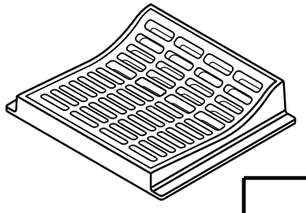


TYPE "V"



TYPE "T"

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



INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

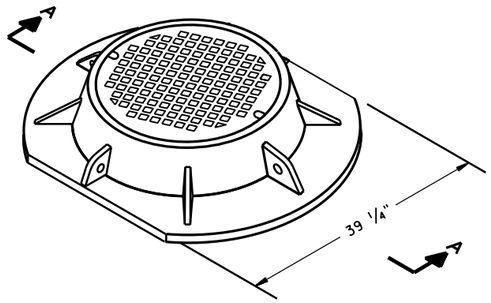
FHWA

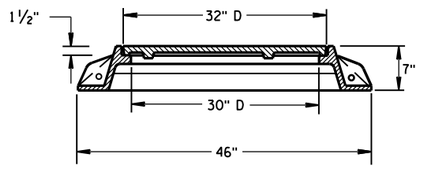
6

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

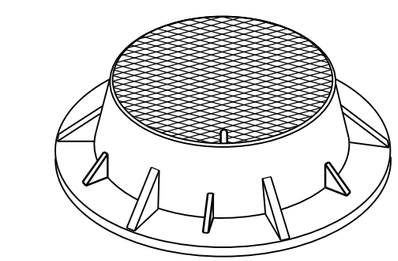
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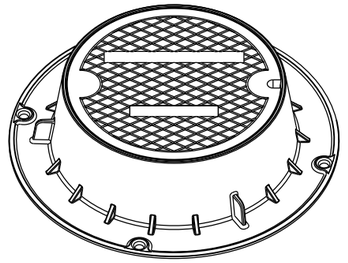
S.D.D. 8 A 5-19c

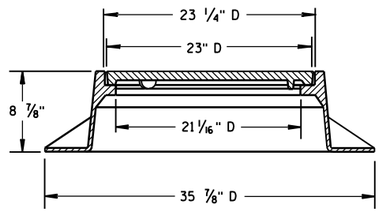


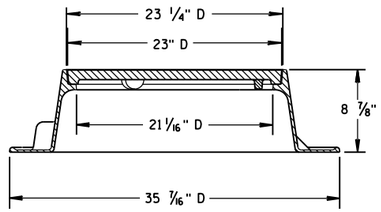


SECTION A-A
TYPE "K"









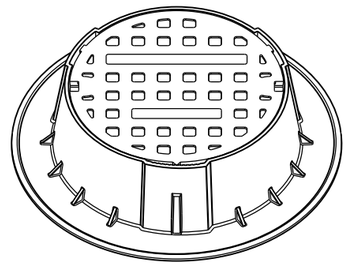
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

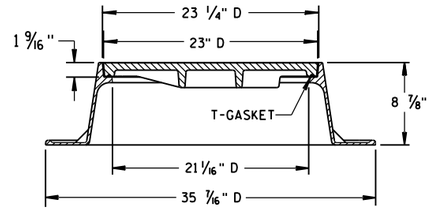
GENERAL NOTES

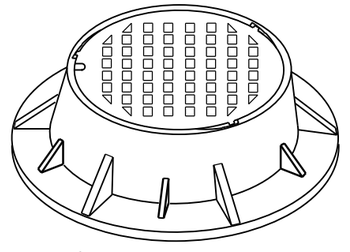
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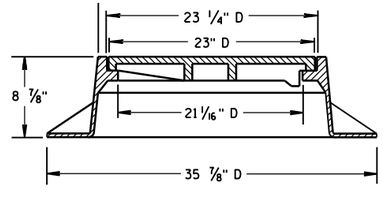
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

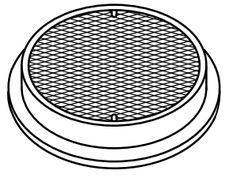


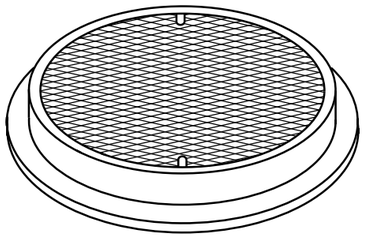


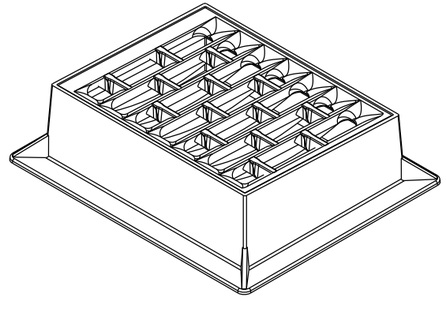


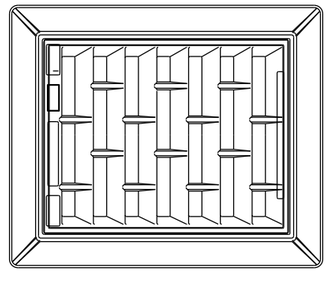


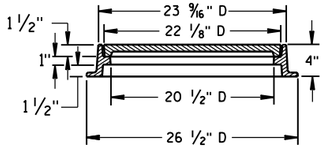
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



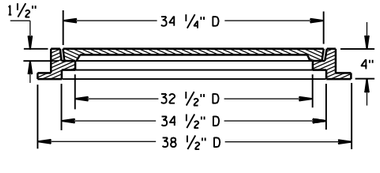




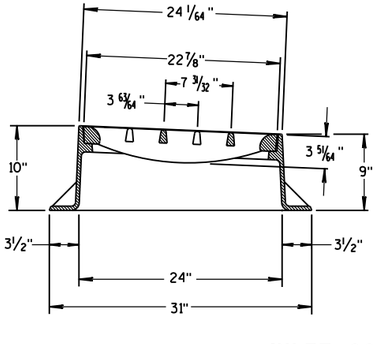


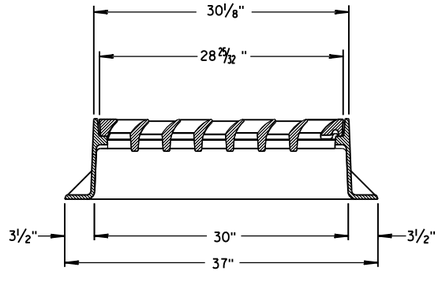


TYPE "L"



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

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11/27/2013
DATE
FHWA

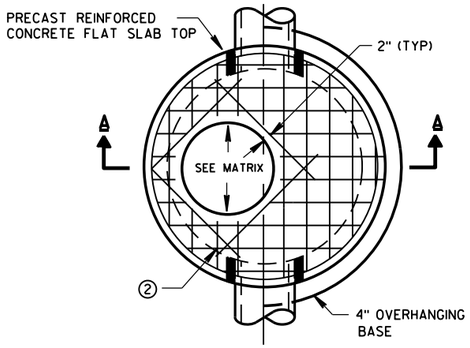
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

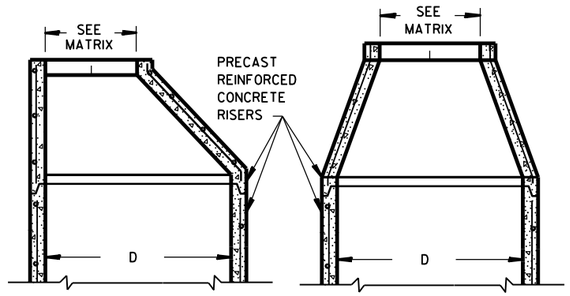
S.D.D. 8 A 5-19d

6

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

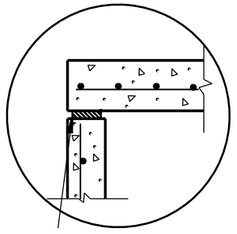


PLAN VIEW CIRCULAR OPENING

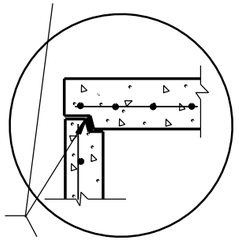


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

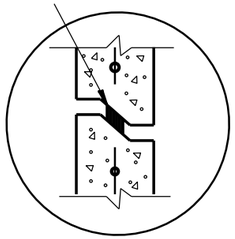


TOP WITH PLAIN END JOINT



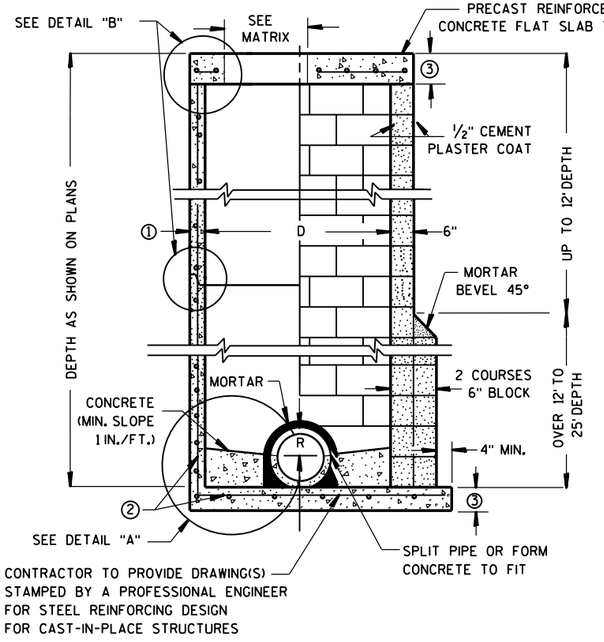
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



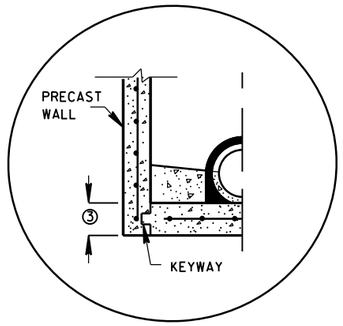
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

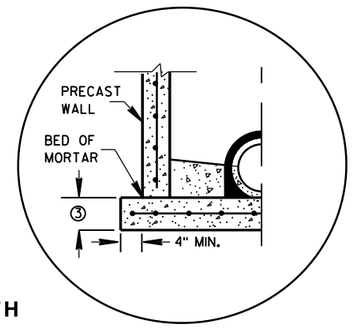


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

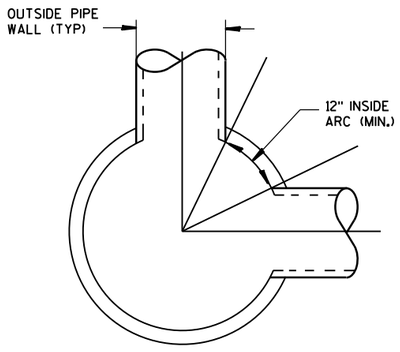


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

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

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

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

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF 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

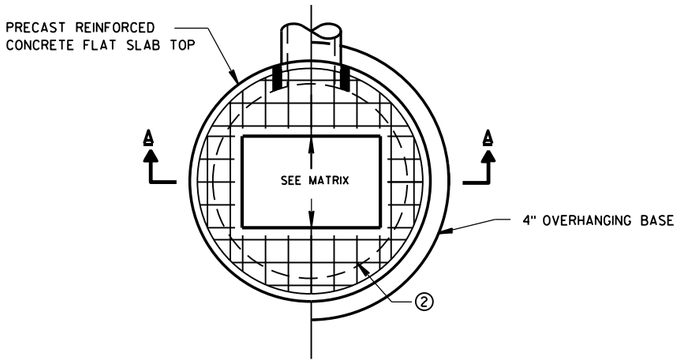
MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

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

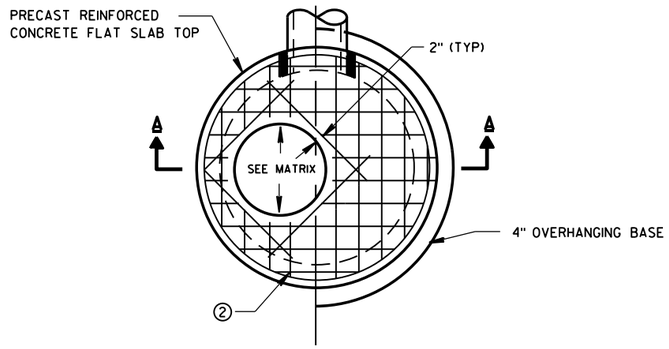
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

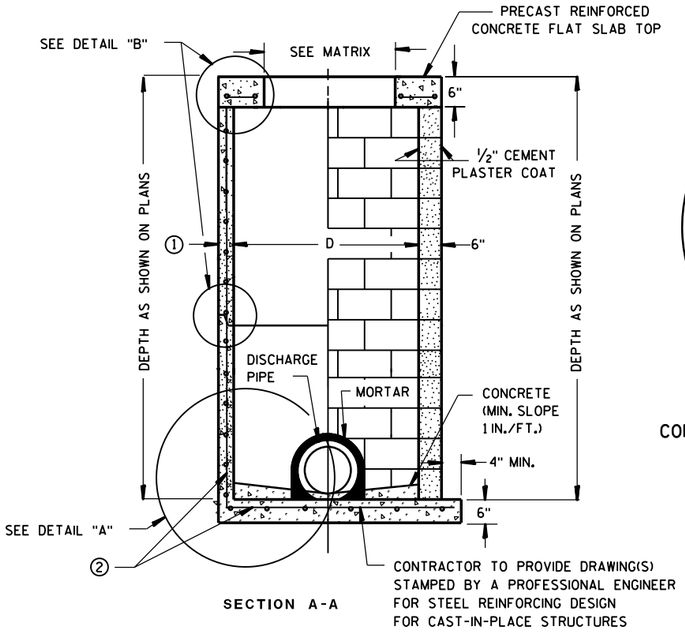
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PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

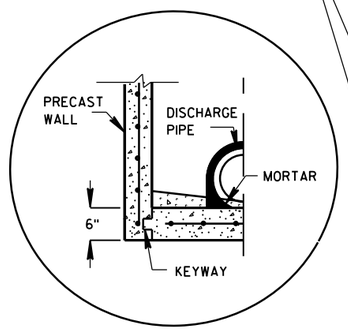


SECTION A-A

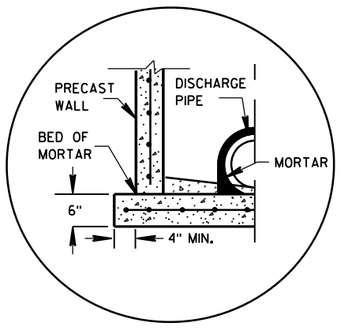
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

CIRCULAR INLETS W/ FLAT TOP

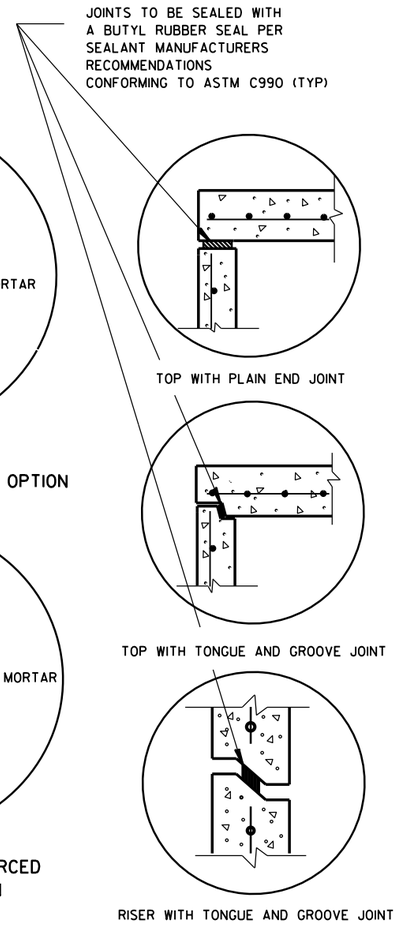


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



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.

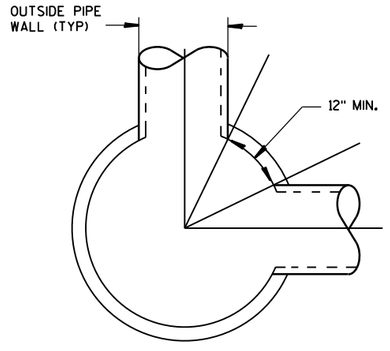
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

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

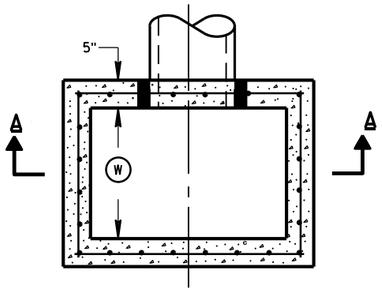
INLETS 3-FT AND 4-FT DIAMETER

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DEPARTMENT OF TRANSPORTATION

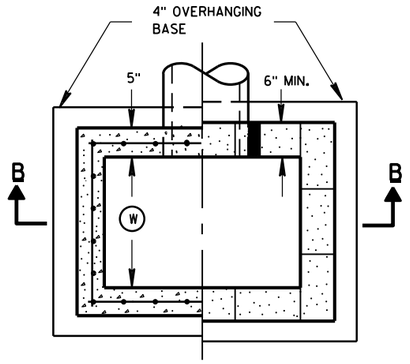
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6/5/2012 — DATE
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FHWA

INLETS 3-FT AND 4-FT DIAMETER

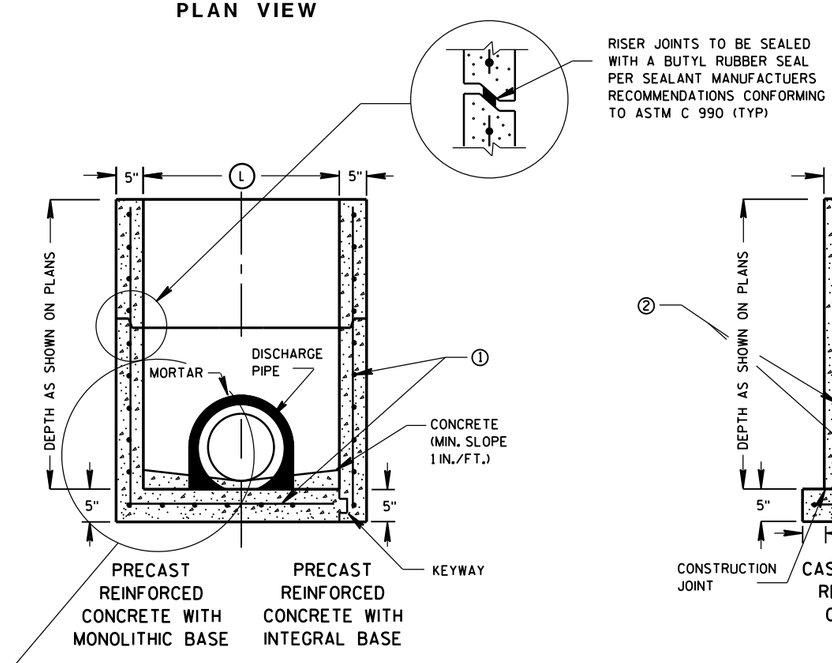
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S.D.D. 8 C 6-1



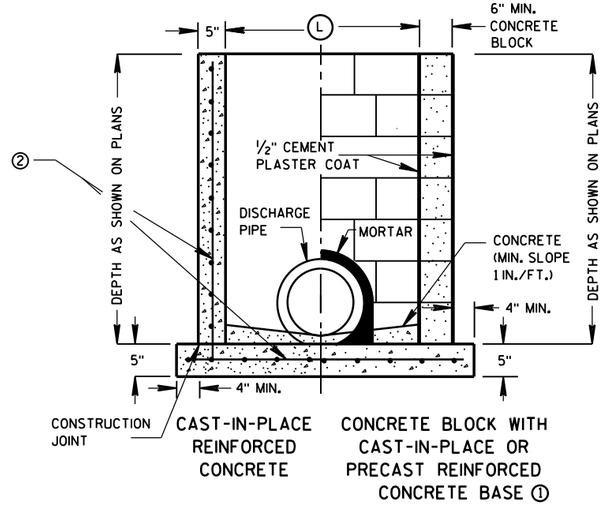
PLAN VIEW



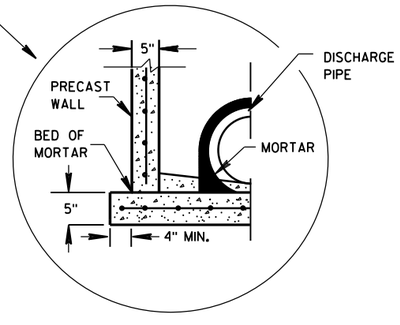
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

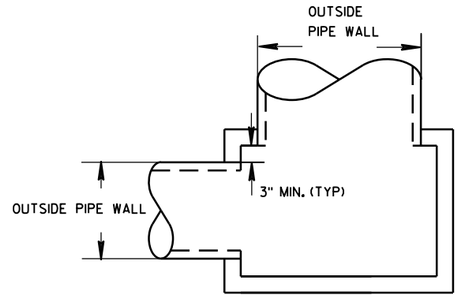
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

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

PIPE MATRIX

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



DETAIL "A"

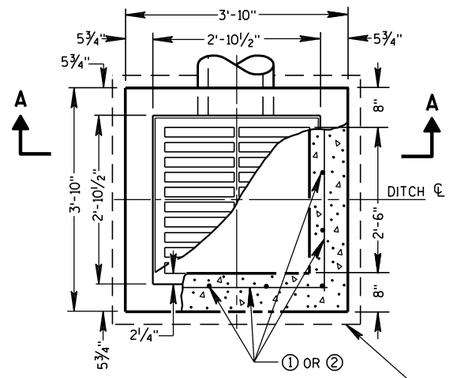
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

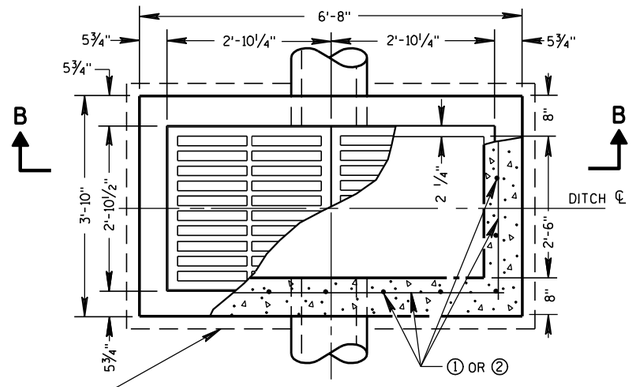
APPROVED
6/5/2012
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DE ENGINEER
FHWA

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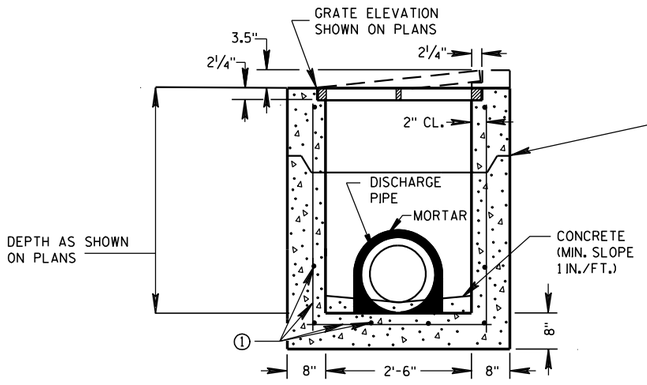


PLAN VIEW

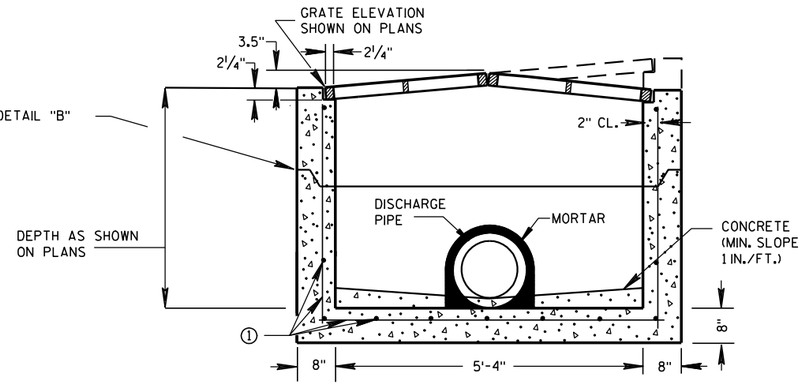


PLAN VIEW

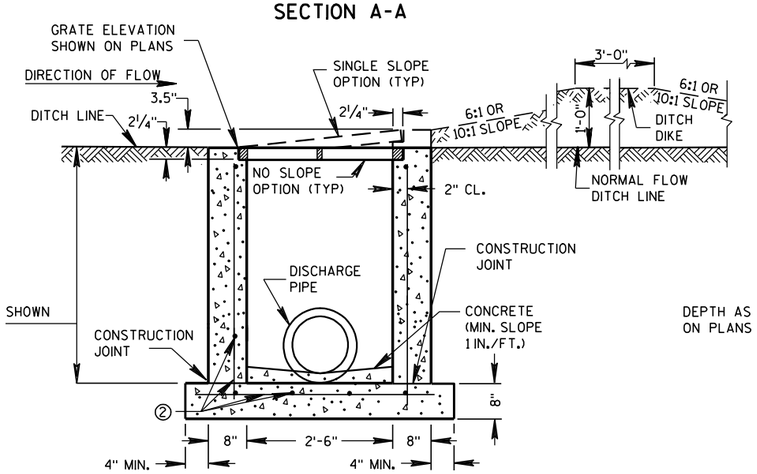
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



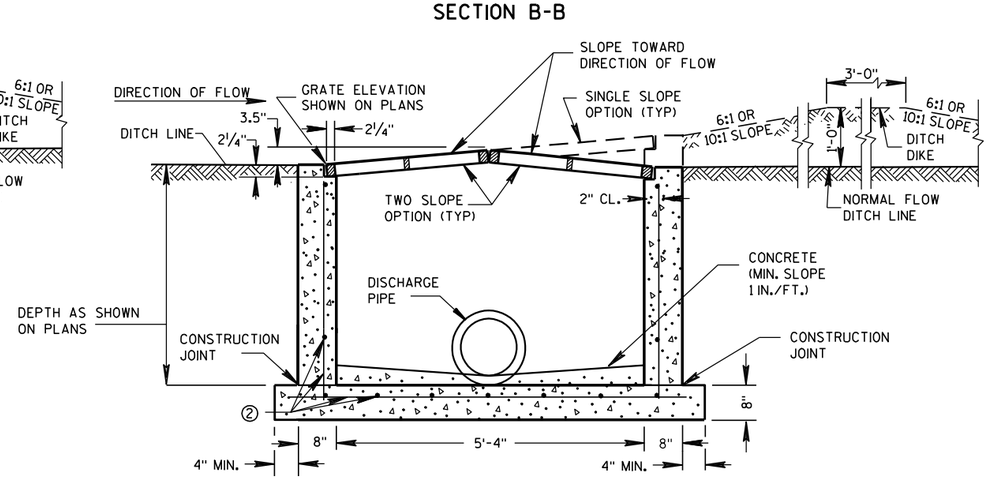
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

GENERAL NOTES

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DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

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

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

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

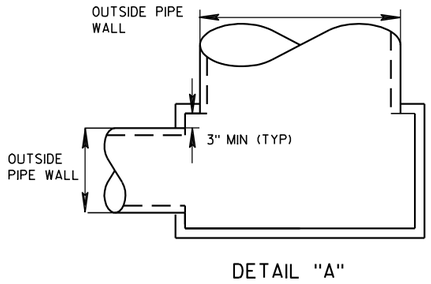
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

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

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

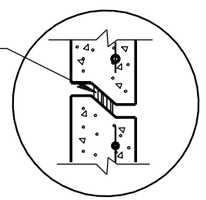
PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

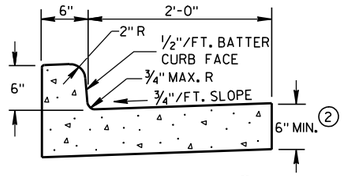
APPROVED

6/5/2012
DATE

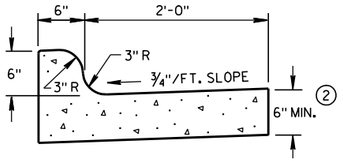
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

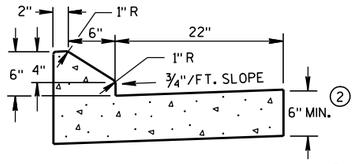
6
S.D.D. 8 C 8-1



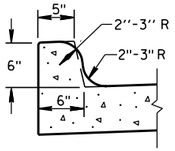
TYPES A & D (1)



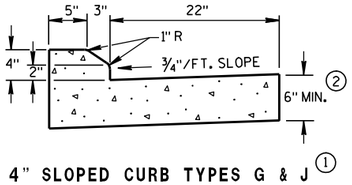
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

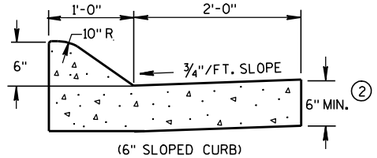


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

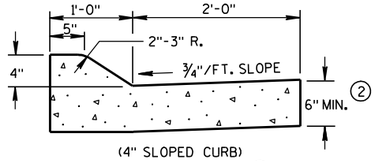


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

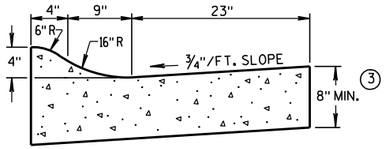


(6" SLOPED CURB)



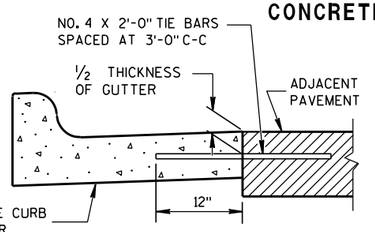
(4" SLOPED CURB)

TYPES A & D (1)

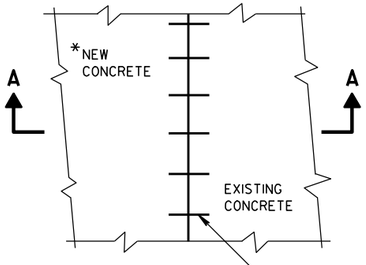


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

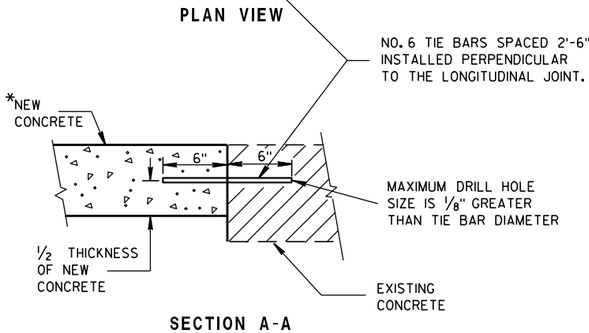


TYPICAL TIE BAR LOCATION (1)



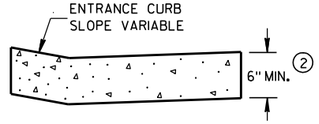
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW

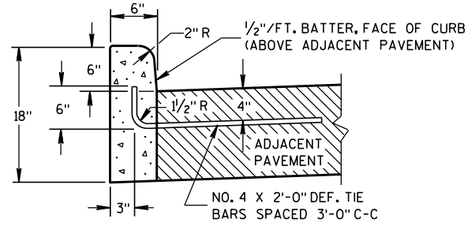


SECTION A-A

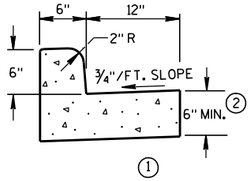
TIE BARS DRILLED INTO EXISTING PAVEMENT



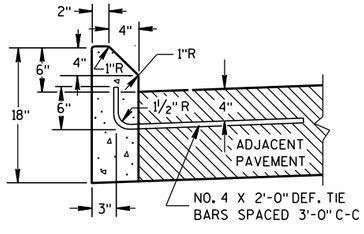
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



(1)
TYPES A & D

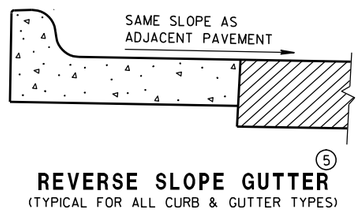


(1)
TYPES A & D
CONCRETE CURB & GUTTER 18"

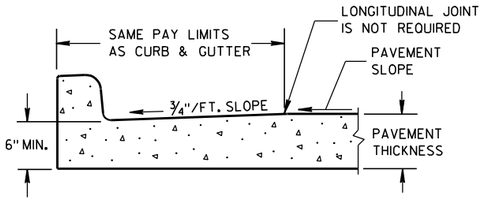


(1)
TYPES G & J

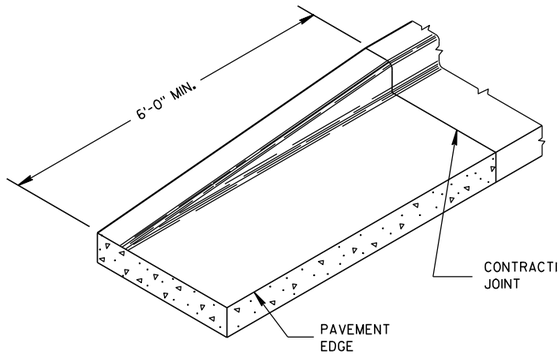
CONCRETE CURB



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



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

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 AND R.

(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.

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

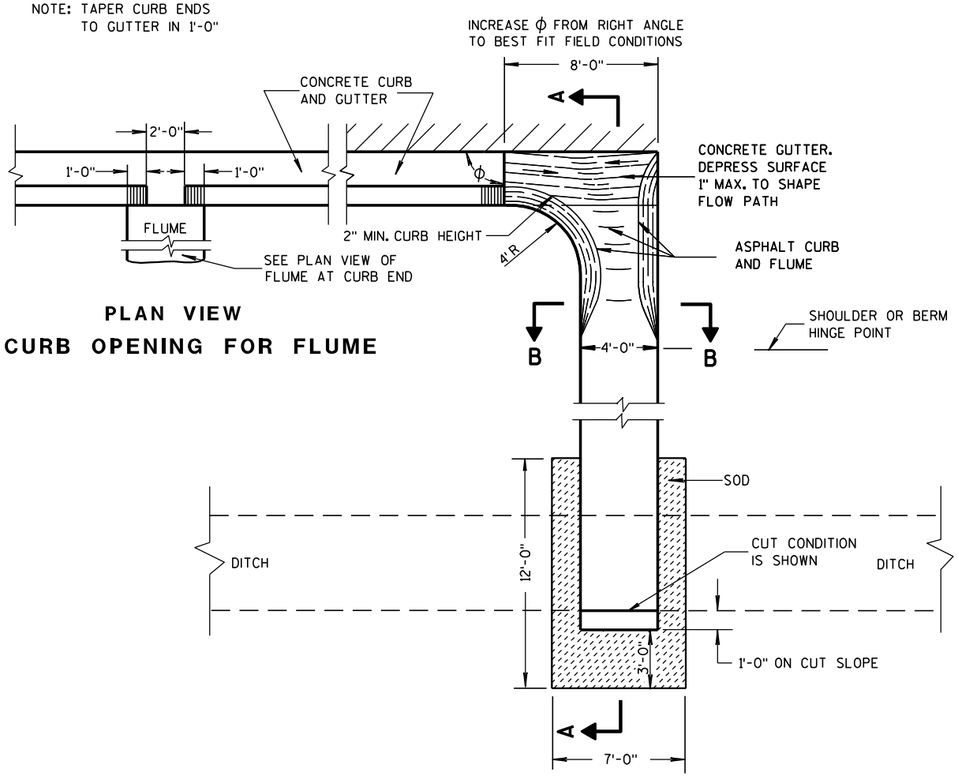
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
FHWA

6

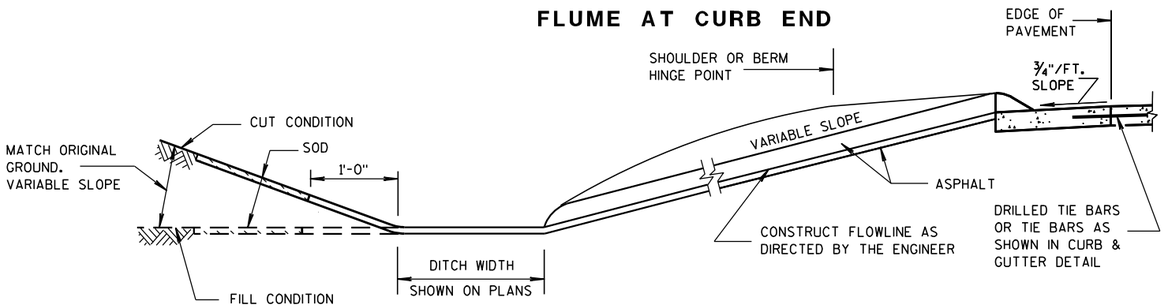
S.D.D. 8 D 1-17

ASPHALTIC FLUME

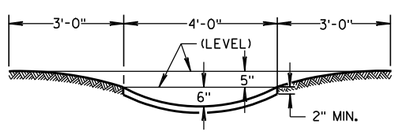


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

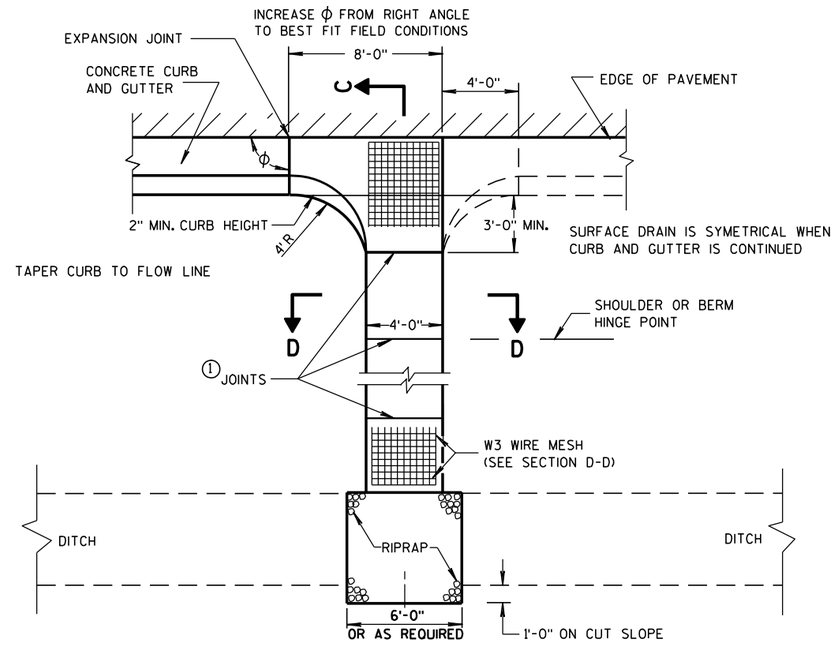
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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

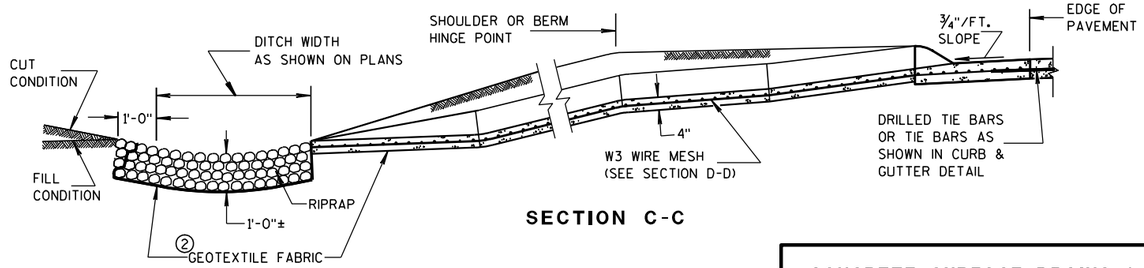
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

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

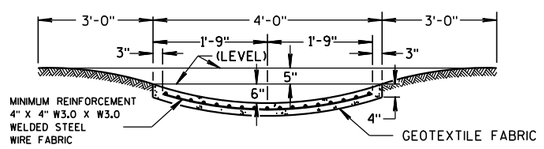
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



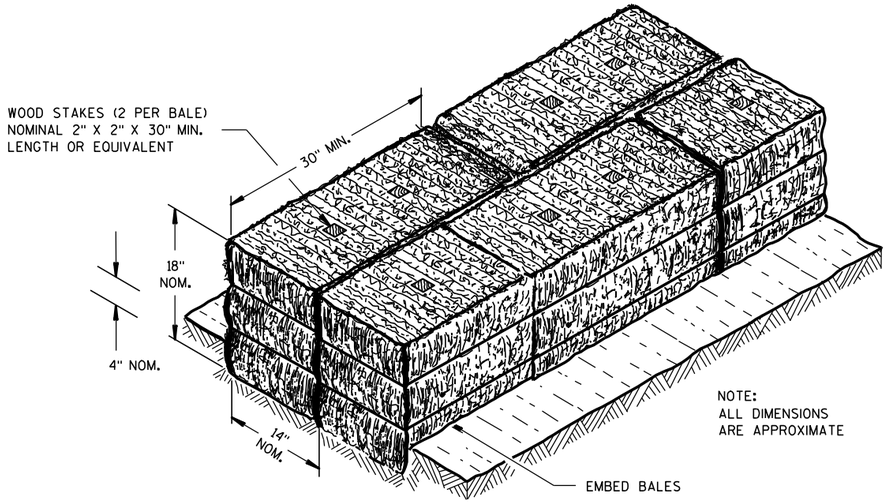
SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

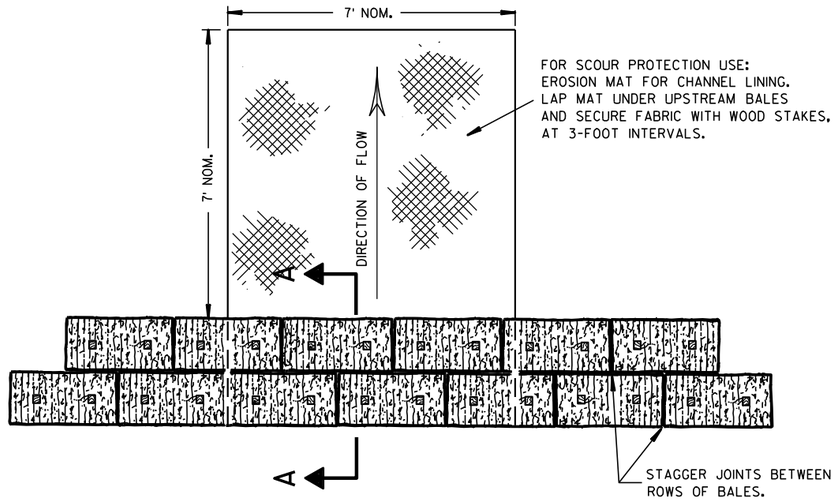
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

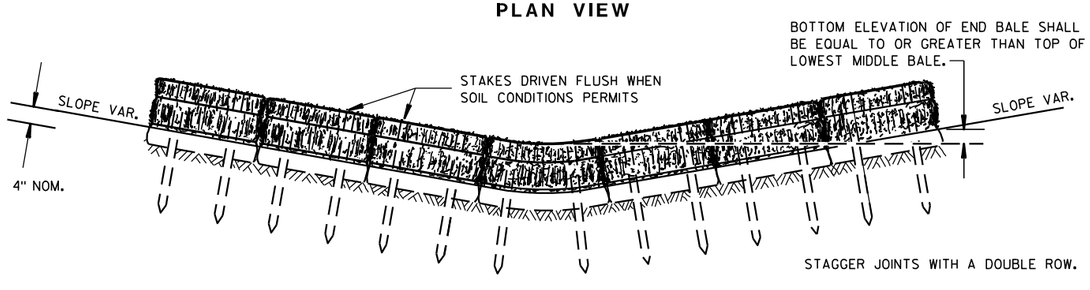
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S.D.D. 8 D 4-5



SECTION A-A



PLAN VIEW



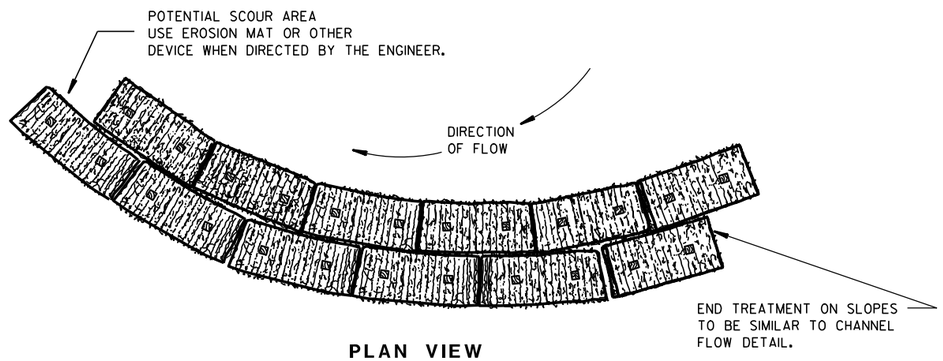
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

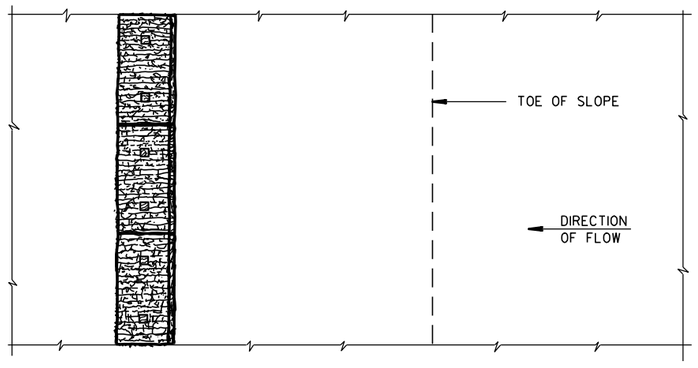
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

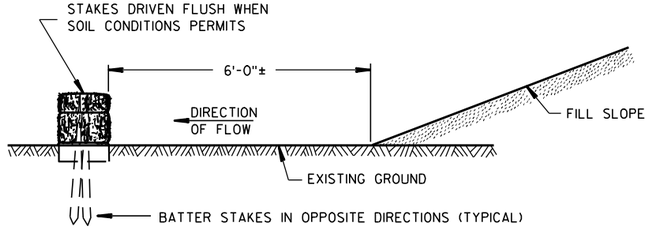


PLAN VIEW

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

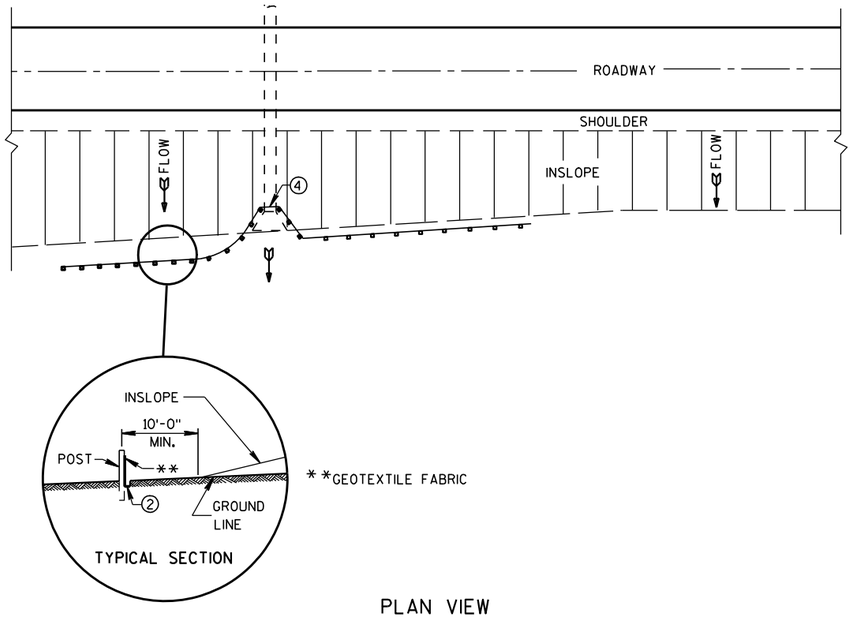
FHWA

6

S.D.D. 8 E 8-3

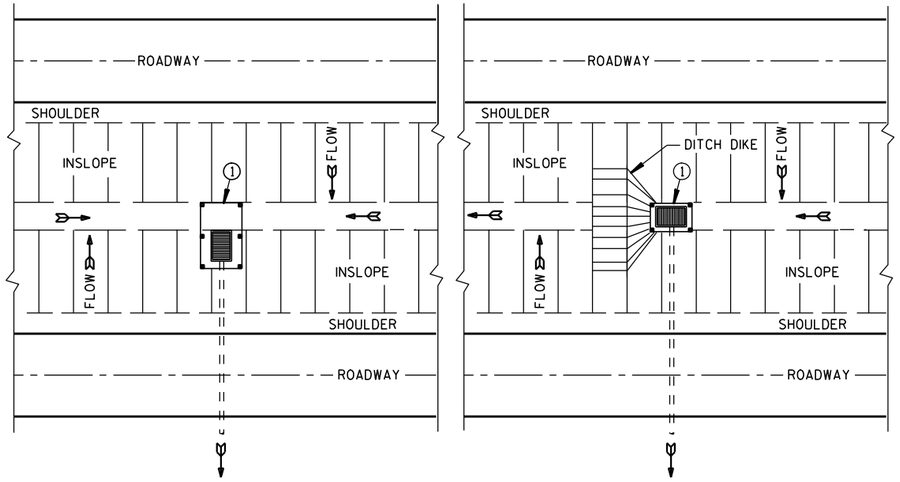
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



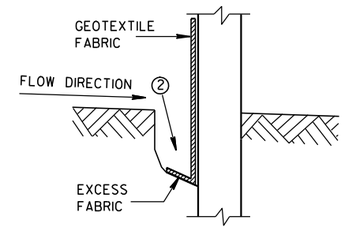
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

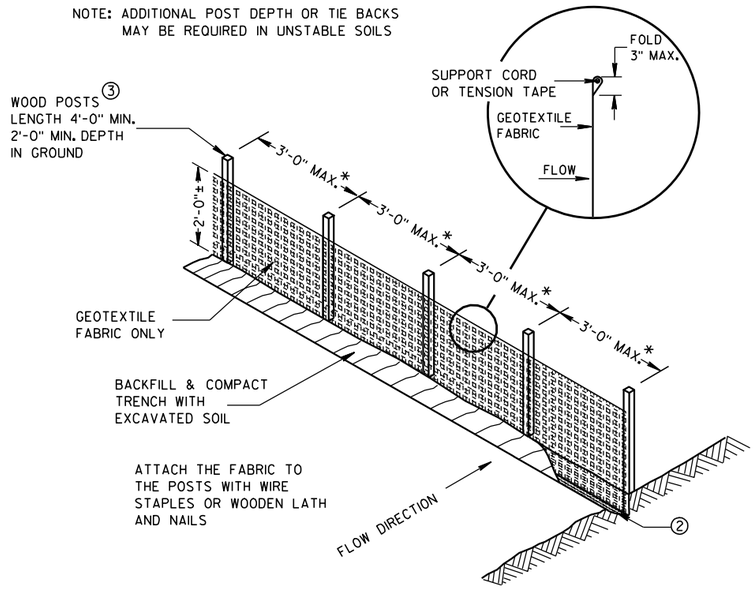
GENERAL NOTES

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

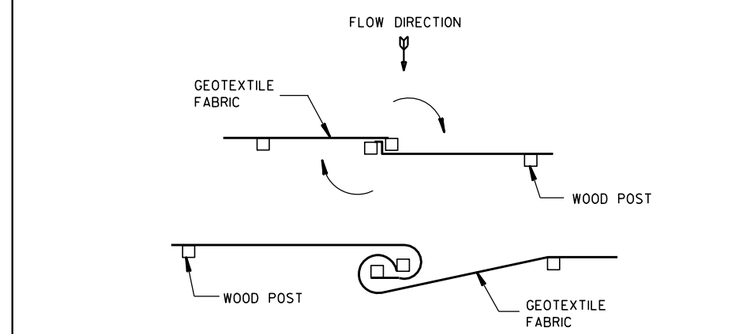
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



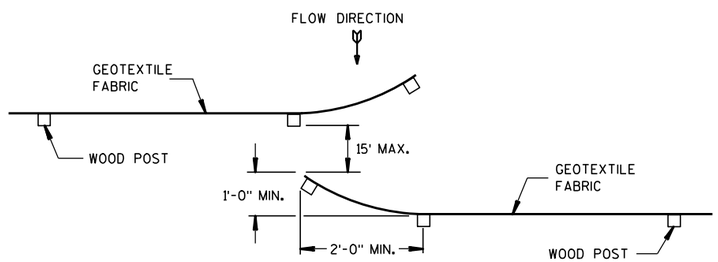
TRENCH DETAIL



SILT FENCE

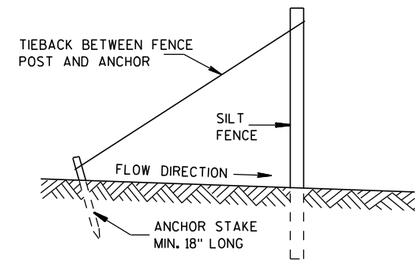


TWIST METHOD



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

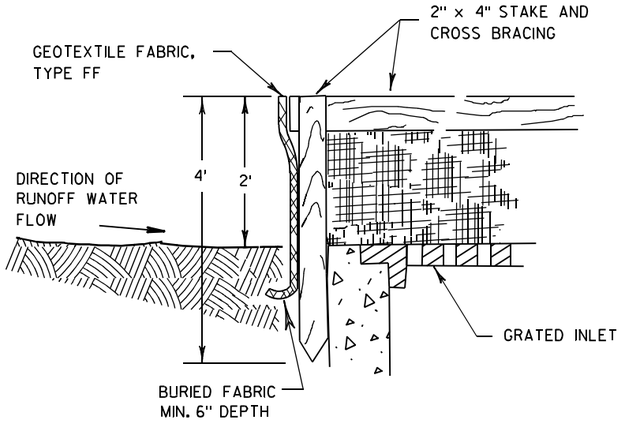
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

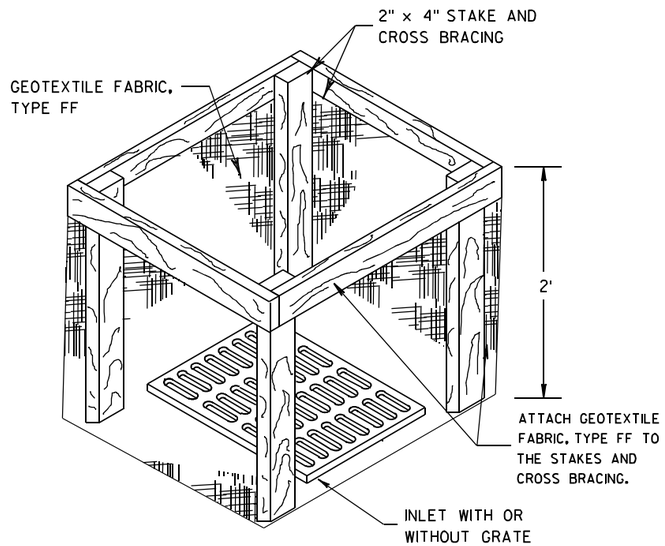
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S.D.D. 8 E 9-6

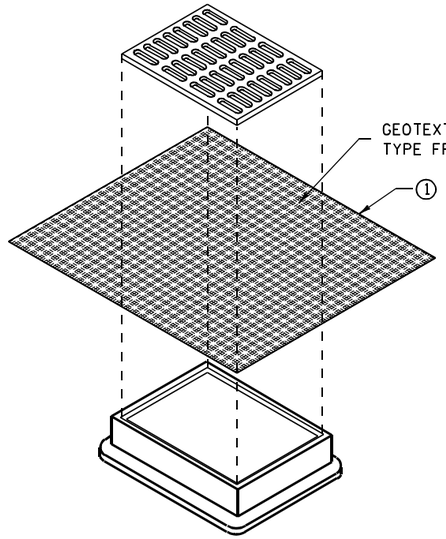
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S.D.D. 8 E 9-6



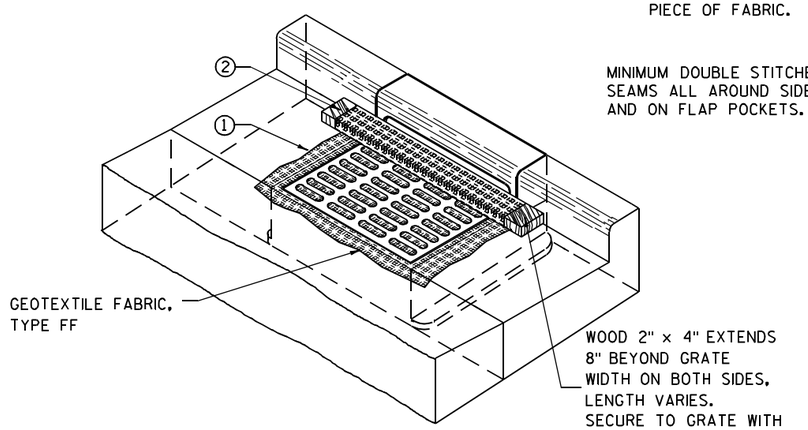


INLET PROTECTION, TYPE A

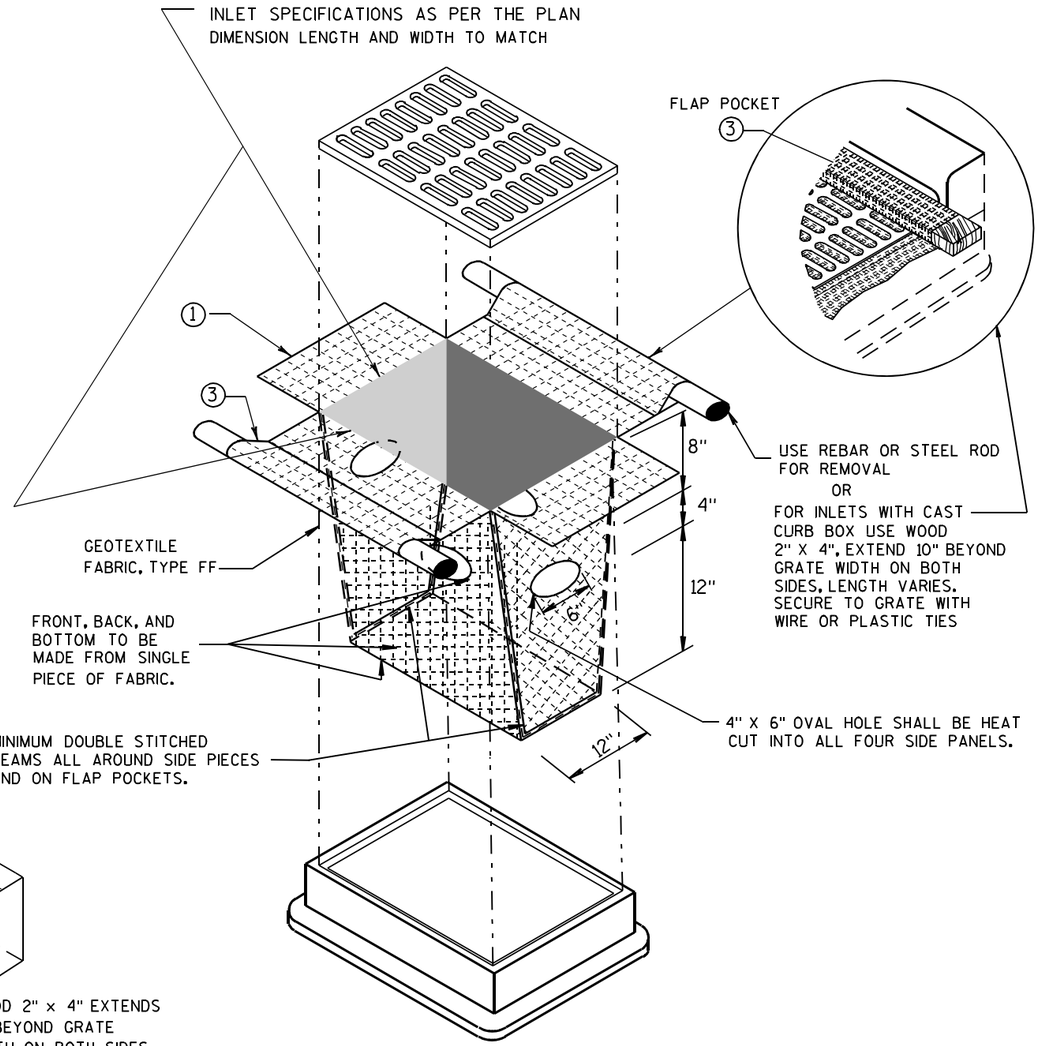


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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.

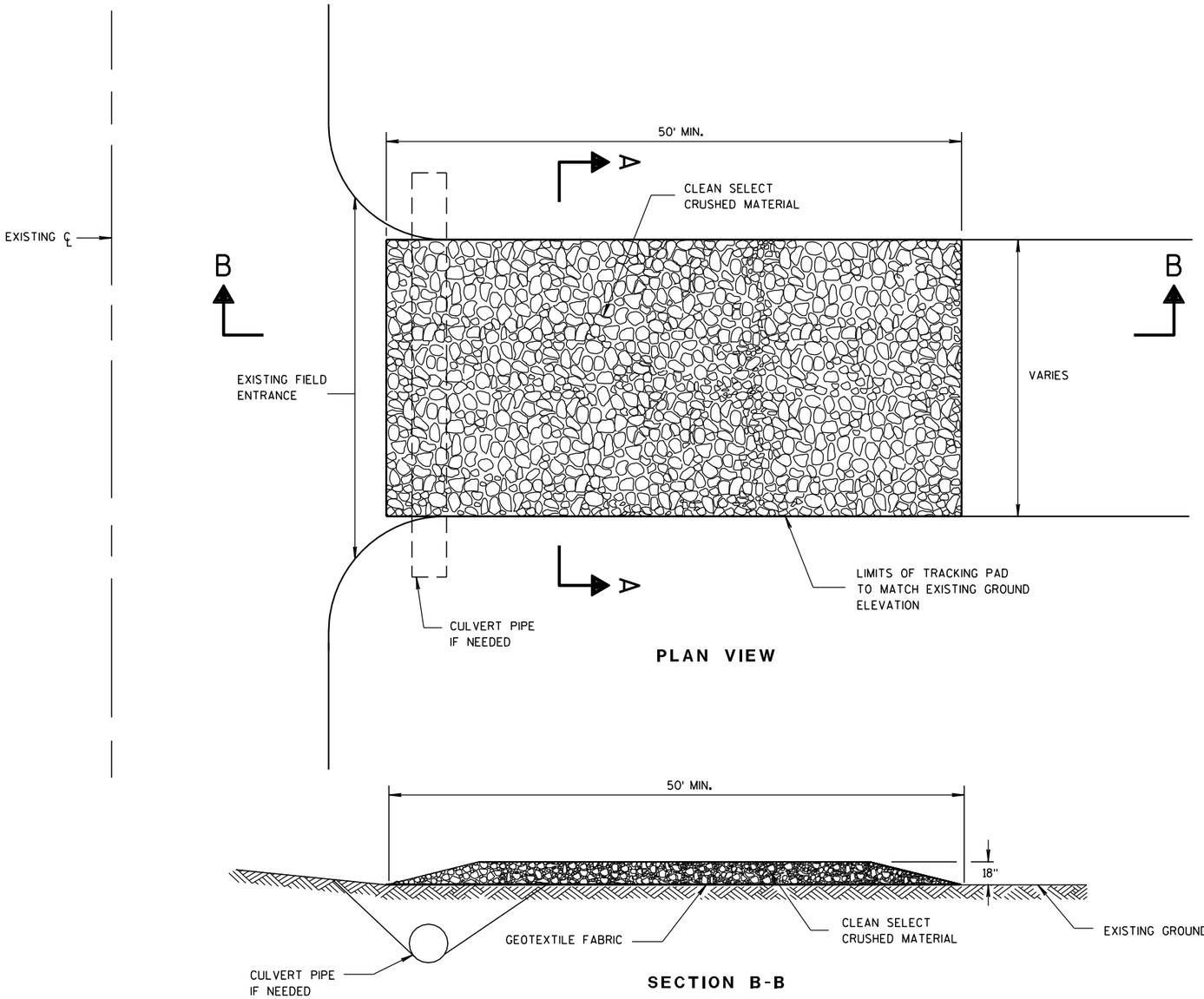
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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



PLAN VIEW

SECTION B-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.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

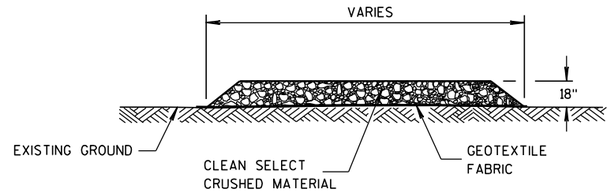
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

6

S.D.D. 8 E 14-1

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/24/2011	/S/ Jerry H. Zoda	
DATE	ROADWAY STANDARDS ENGINEER	ENT

FHWA

6

S.D.D. 8 E 14-1

METAL APRON ENDWALLS

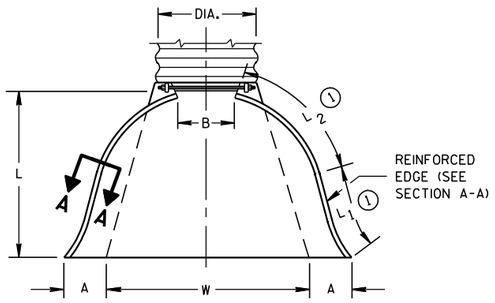
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

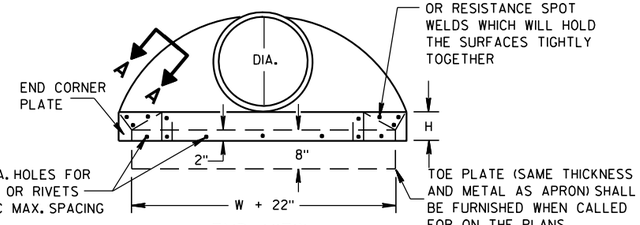
REINFORCED CONCRETE APRON ENDWALLS

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

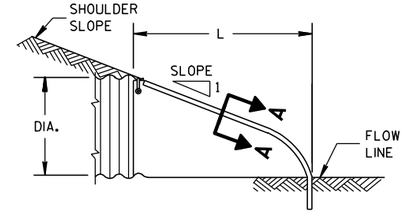
*MINIMUM
**MAXIMUM



PLAN VIEW

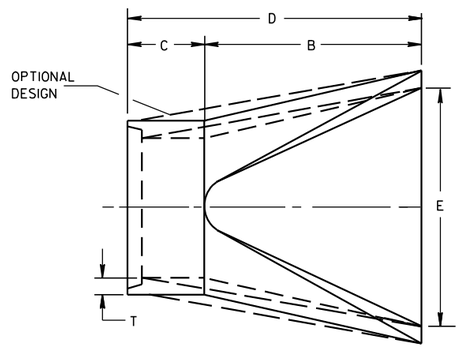


END VIEW

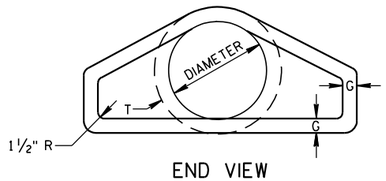


SIDE ELEVATION

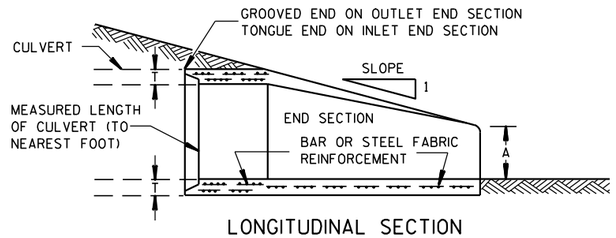
METAL ENDWALLS



PLAN

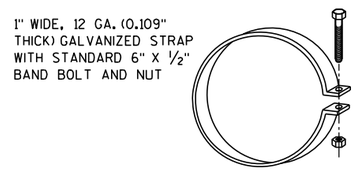


END VIEW



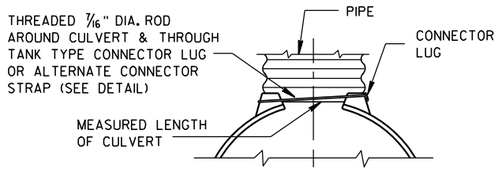
LONGITUDINAL SECTION

CONCRETE ENDWALLS

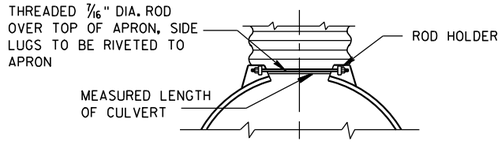


ALTERNATE FOR TYPE 1 CONNECTION

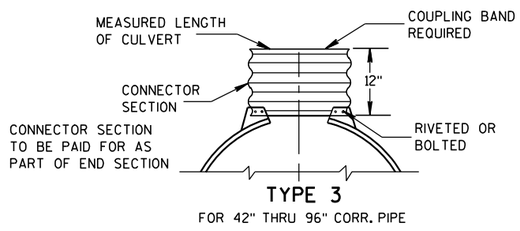
END SECTION CONNECTOR STRAP



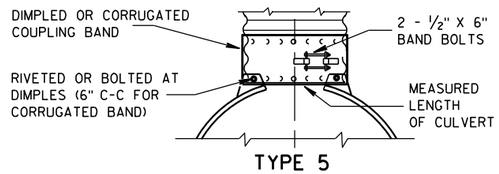
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

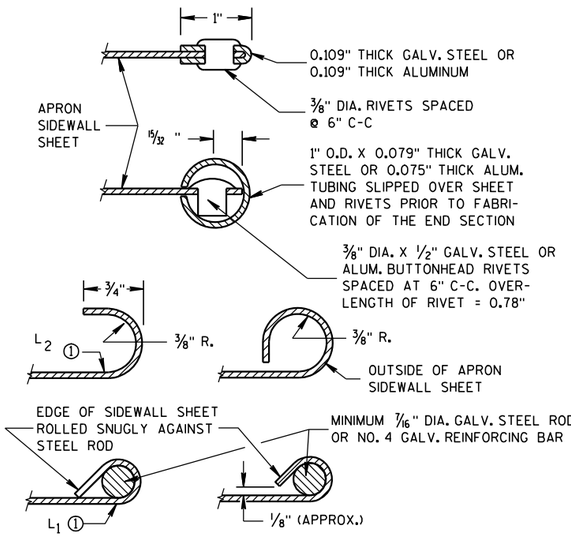
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

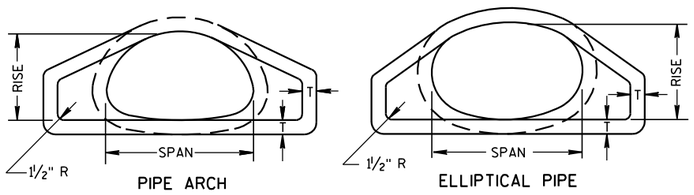
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

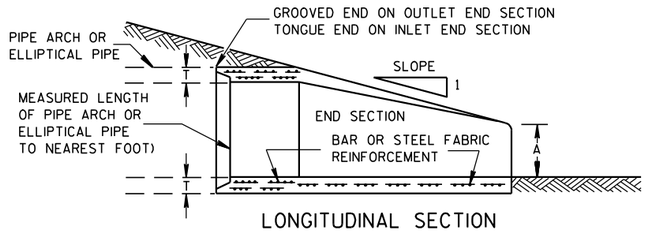
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

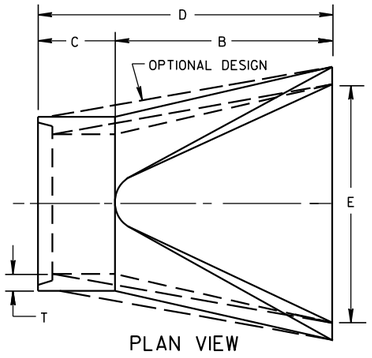
6
S.D.D. 8 F 1-11



END VIEW

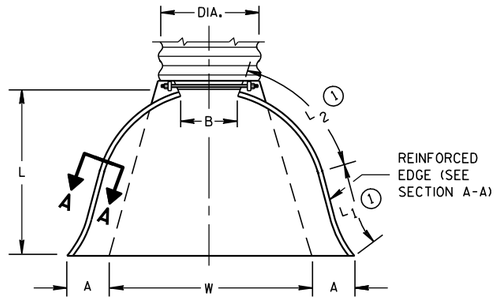


LONGITUDINAL SECTION

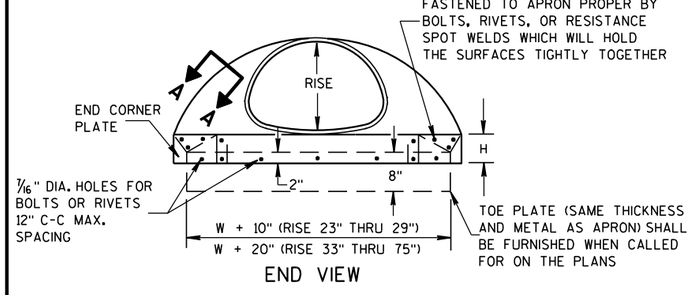


PLAN VIEW

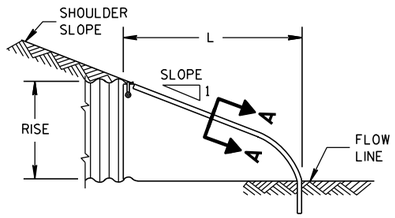
CONCRETE ENDWALLS



PLAN VIEW

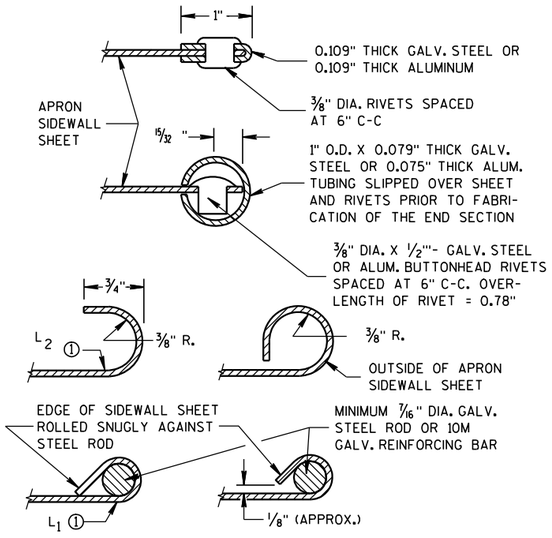


END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

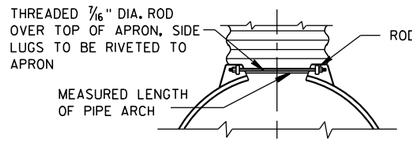
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

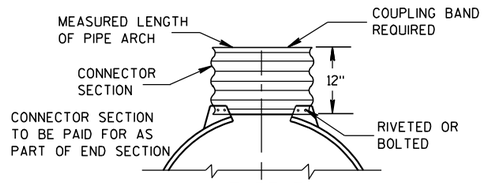
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



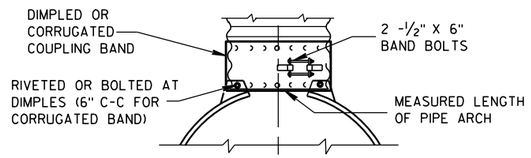
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

GENERAL NOTES

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

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

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

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

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

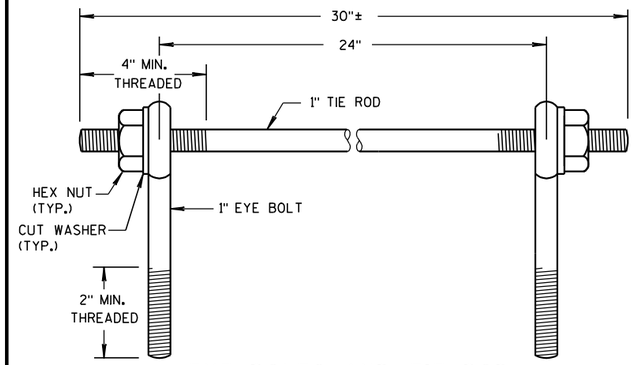
11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

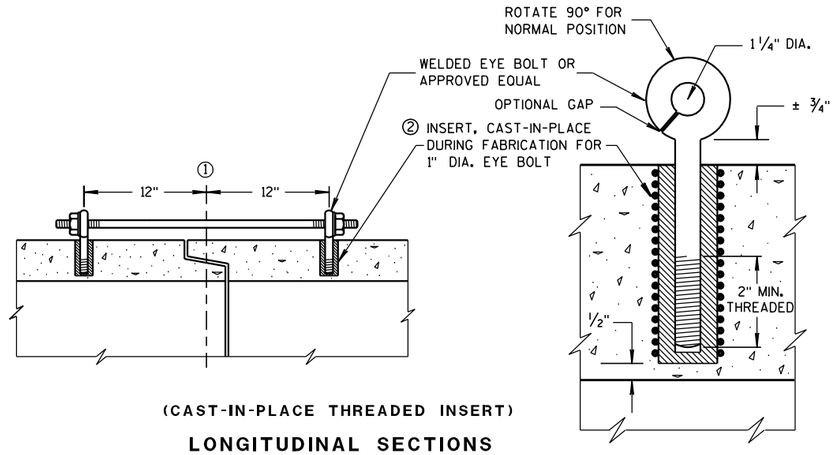
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S.D.D. 8 F 2-1



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.

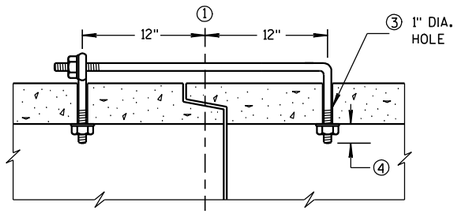
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

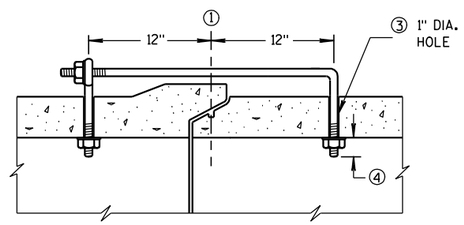
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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)

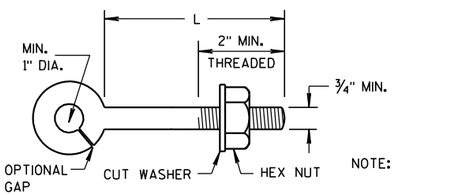


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

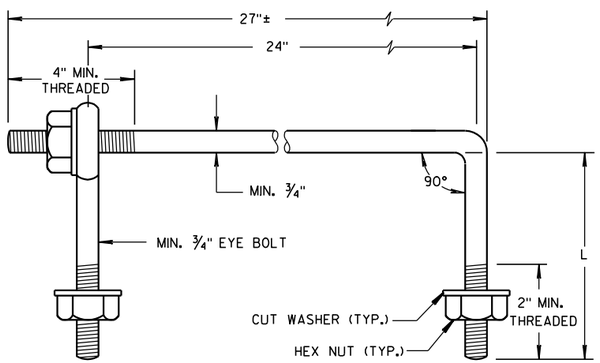
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



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

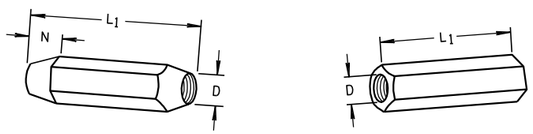
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

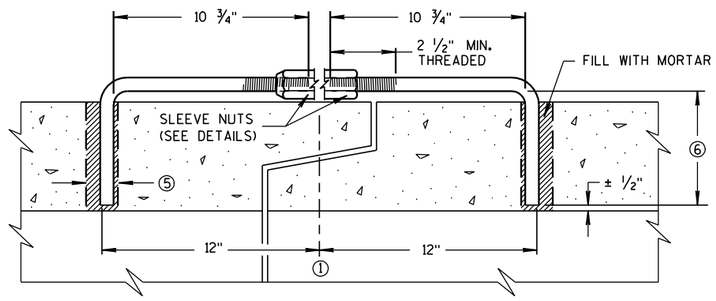
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

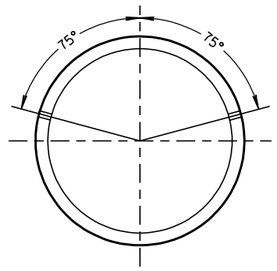
SLEEVE NUTS



LONGITUDINAL SECTION

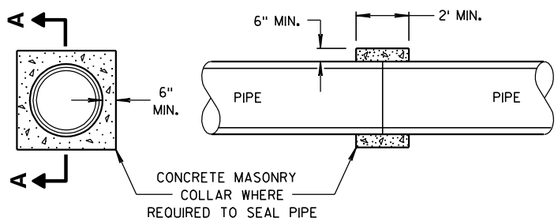
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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

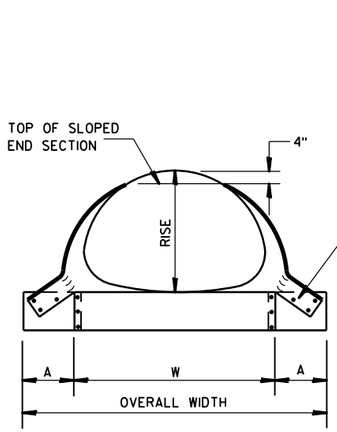
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

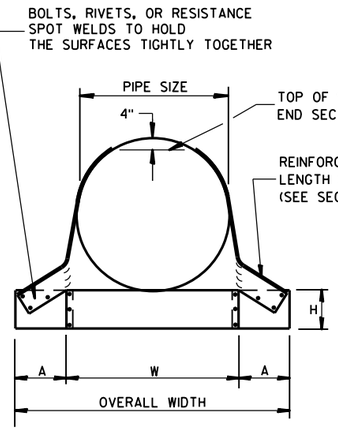
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
145
FHWA

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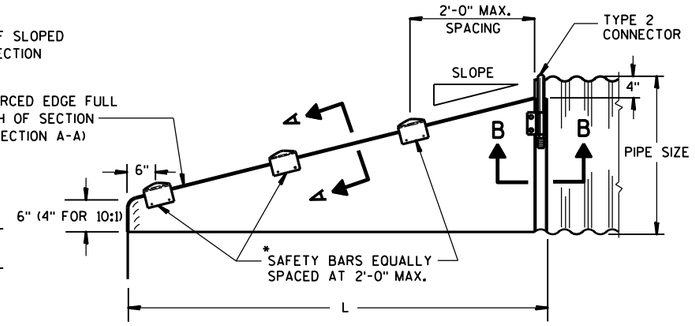
S.D.D. 8 F 4-7



FRONT VIEW



FRONT VIEW



SIDE VIEW

GENERAL NOTES

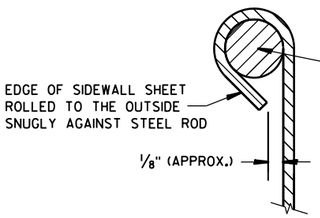
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

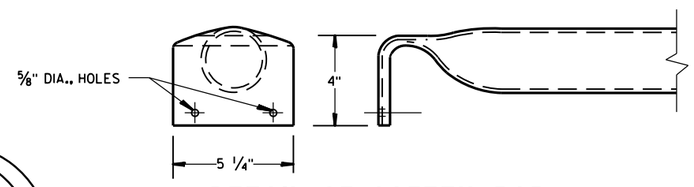
PIPE DIA. (IN.)	MIN. THICK. (Inches)	DIMENSIONS (Inches)				L DIMENSIONS					
		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	.064	8	6	21	37	4:1	20	6:1	30	10:1	70
18	.064	8	6	24	40	4:1	32	6:1	48	10:1	100
21	.064	8	6	27	43	4:1	44	6:1	66	10:1	130
24	.064	8	6	30	46	4:1	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.

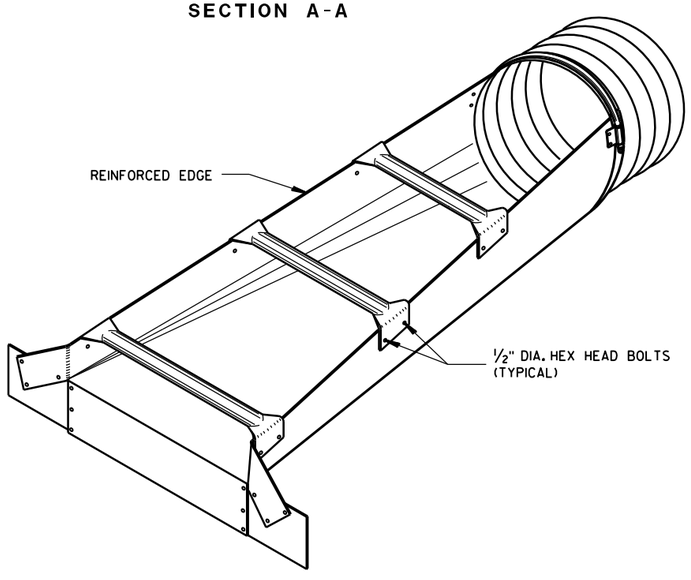


DETAIL OF SAFETY BAR

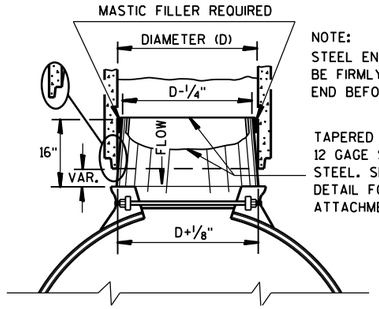
STEEL APRON ENDWALLS FOR PIPE ARCH
SLOPED SIDE DRAINS

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	——	——

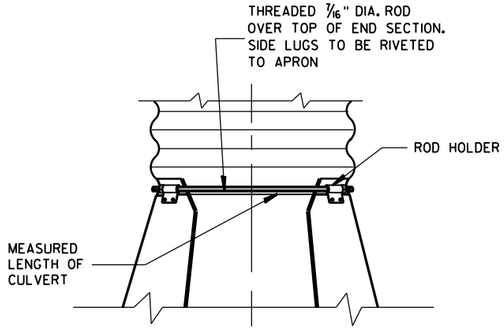
① * MINIMUM THICKNESS OF ALL 10:1 SLOPED SIDE DRAINS IS 0.109".
② ACTUAL SLOPE GREATER THAN 10:1.



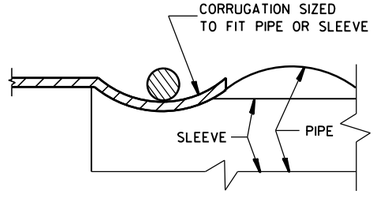
ISOMETRIC VIEW



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

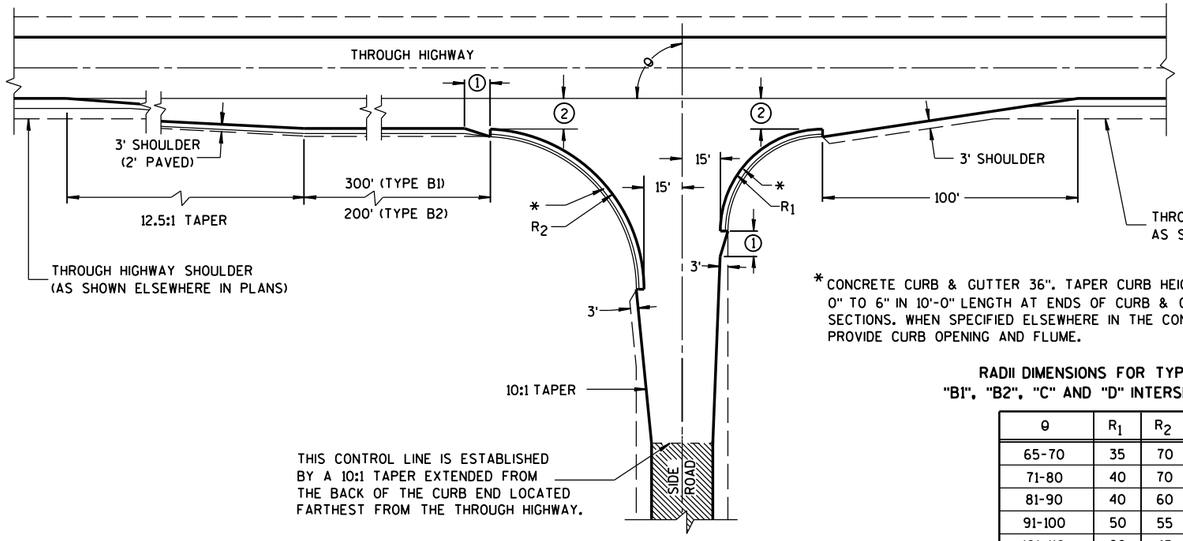
APPROVED
9/14/2012 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 F 7-5

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S.D.D. 8 F 7-5

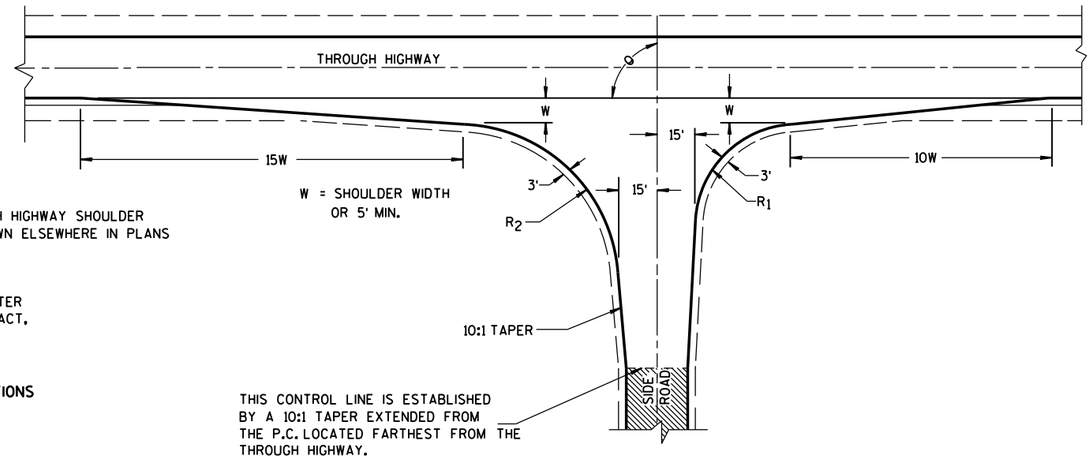


TYPE "B1" AND "B2"

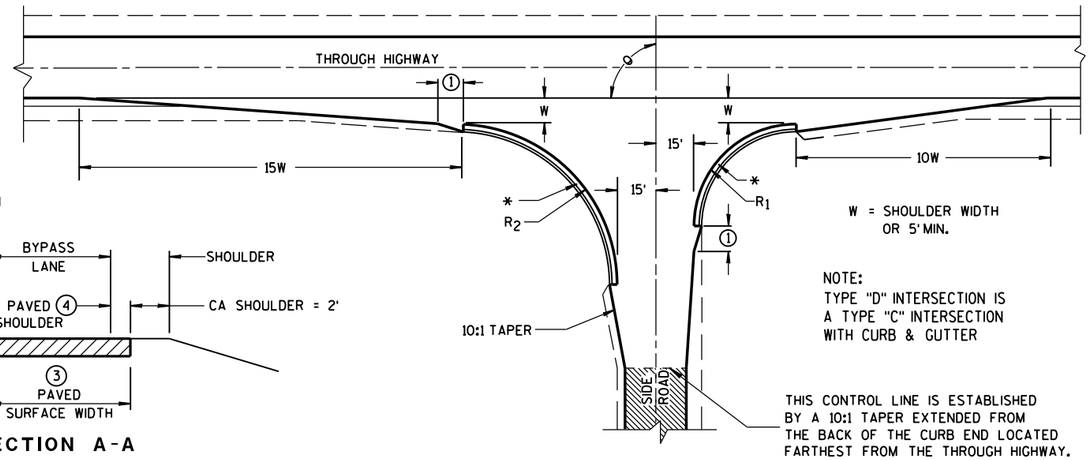
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45



TYPE "C"



TYPE "D"

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING PAVED SURFACE

BYPASS LANE

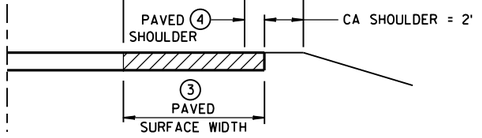
(1) 10-FT TYPICAL.

(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

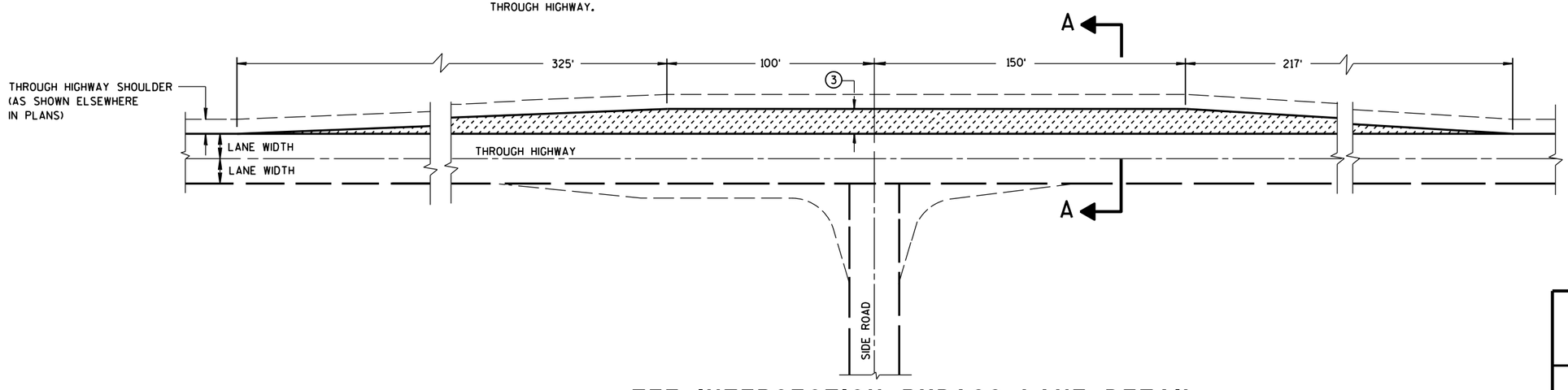
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.

(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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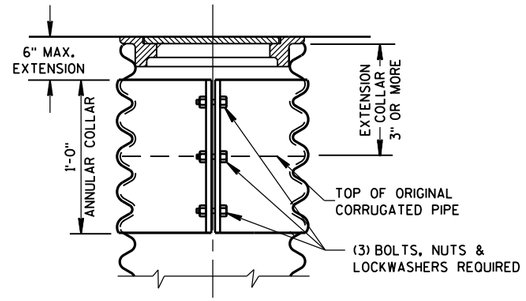
S.D.D. 9 A 1-13a

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

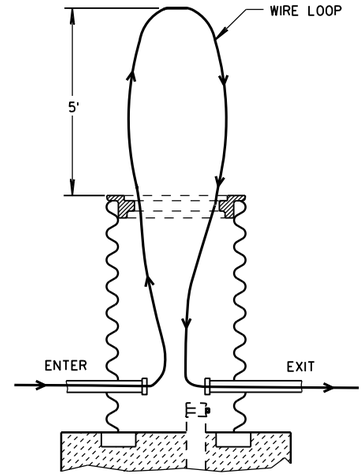
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2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

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

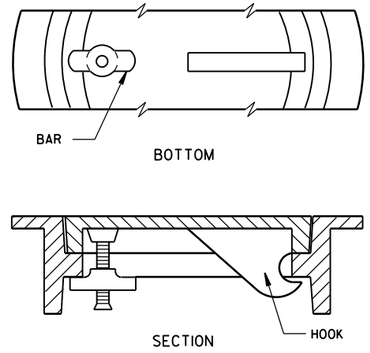
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

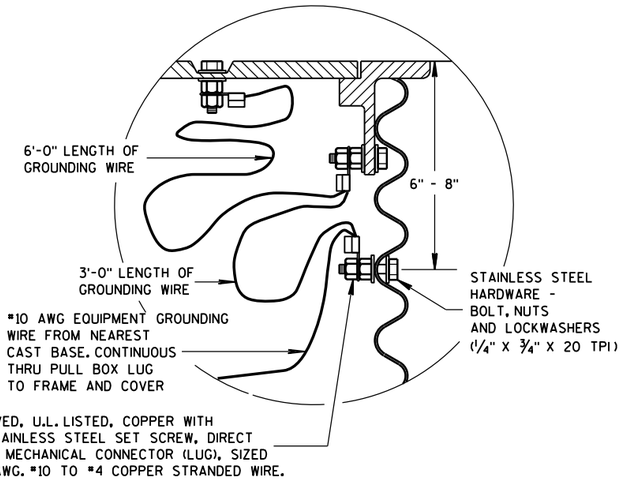


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

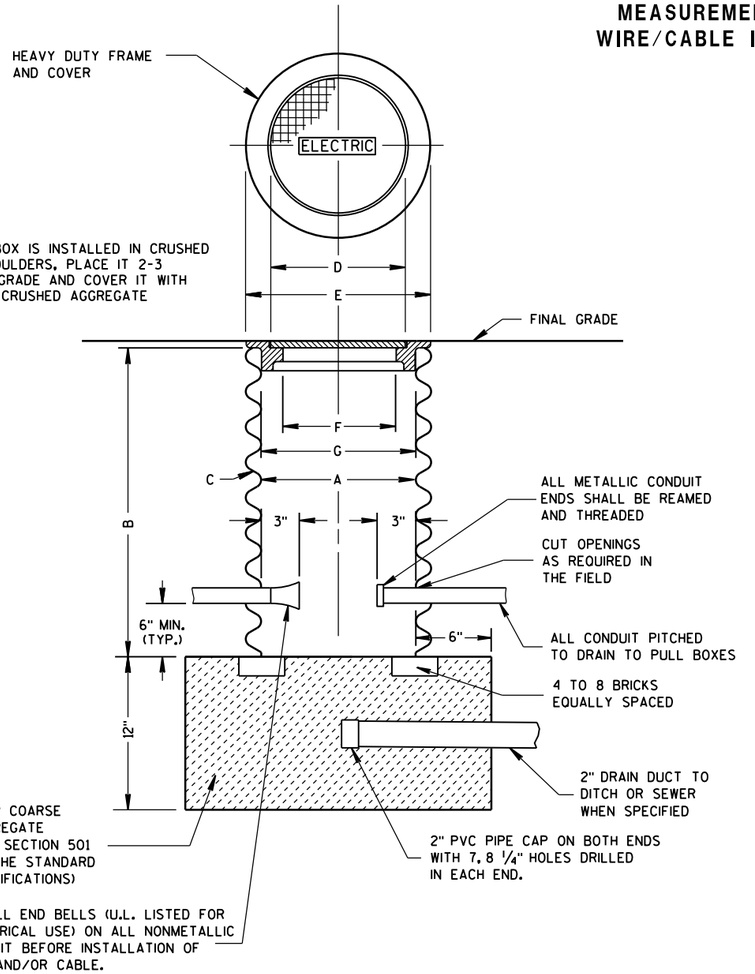


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

GENERAL NOTES

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

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

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

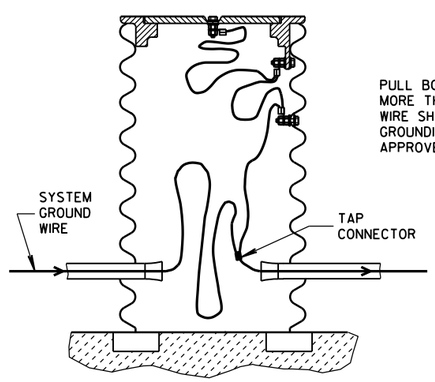
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

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

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

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

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



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

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

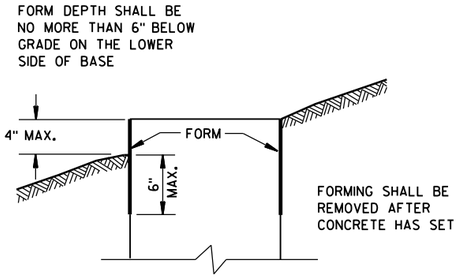
PULL BOX

STATE OF WISCONSIN
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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.

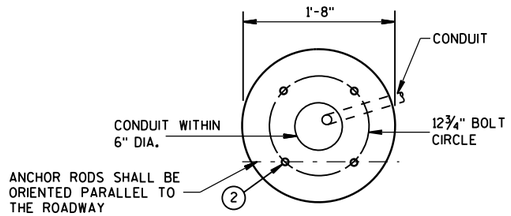
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

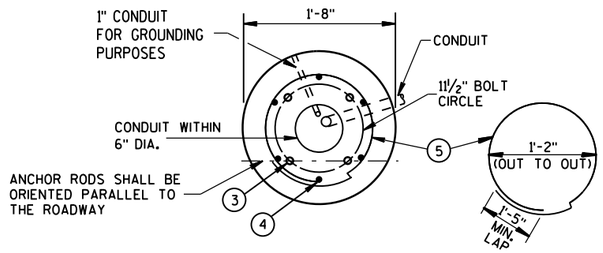
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

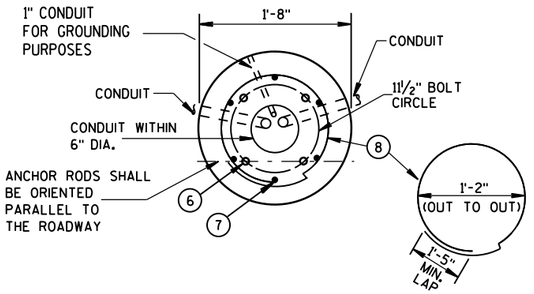
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

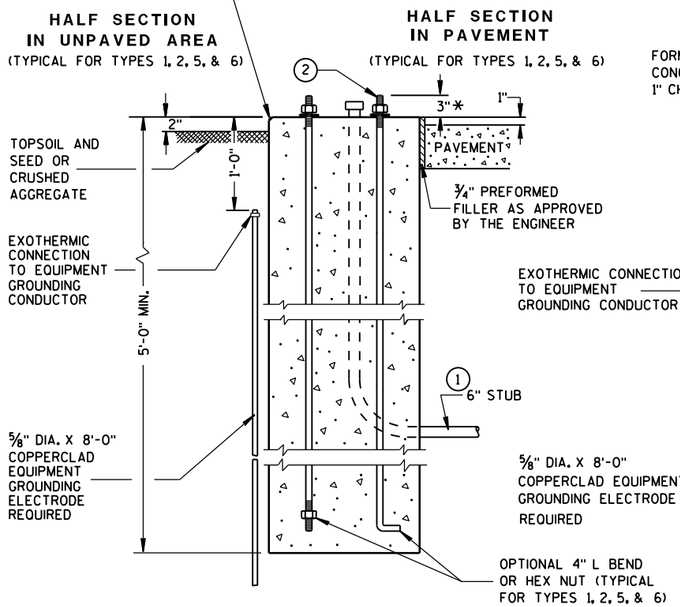






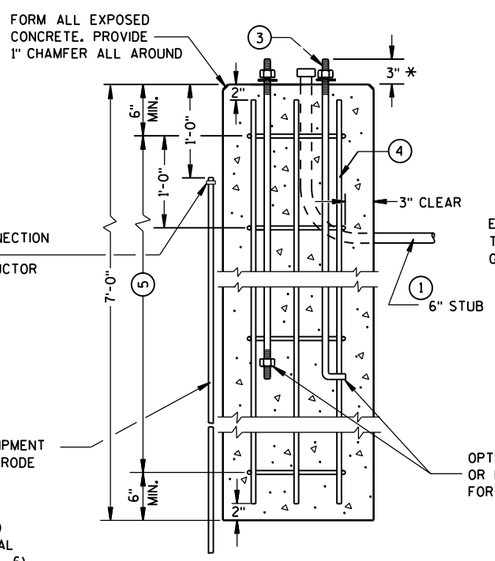
HALF SECTION IN UNPAVED AREA

(TYPICAL FOR TYPES 1, 2, 5, & 6)

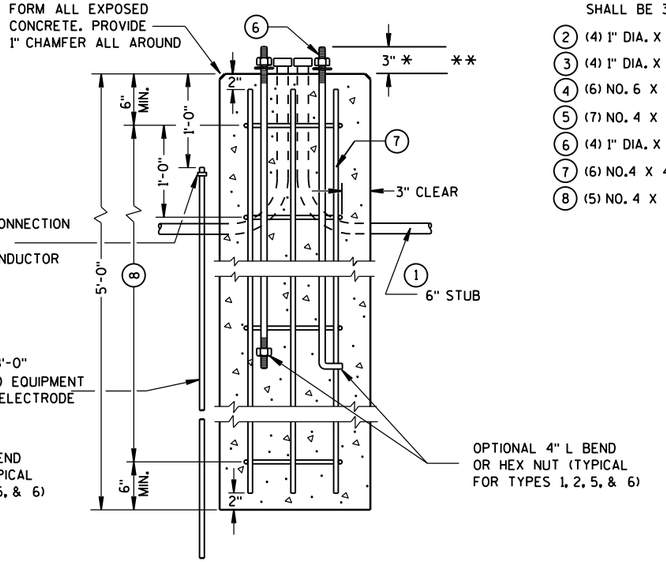


HALF SECTION IN PAVEMENT

(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
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S.D.D. 9 C 2-7

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

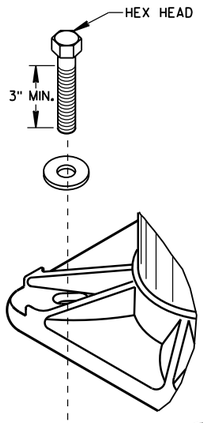
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

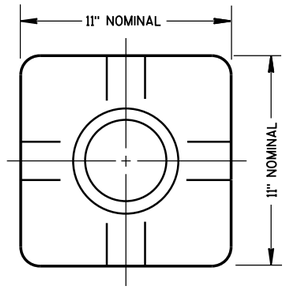
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

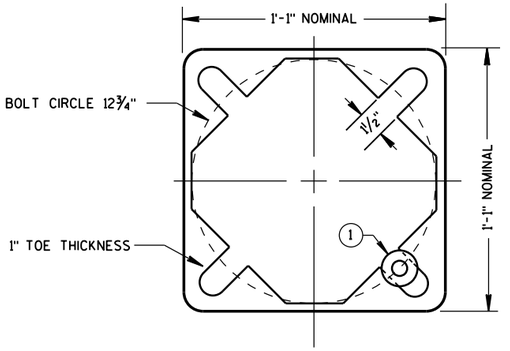
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

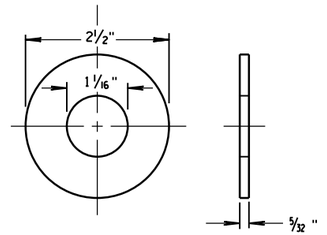




TOP VIEW
(PEDESTAL BASE)

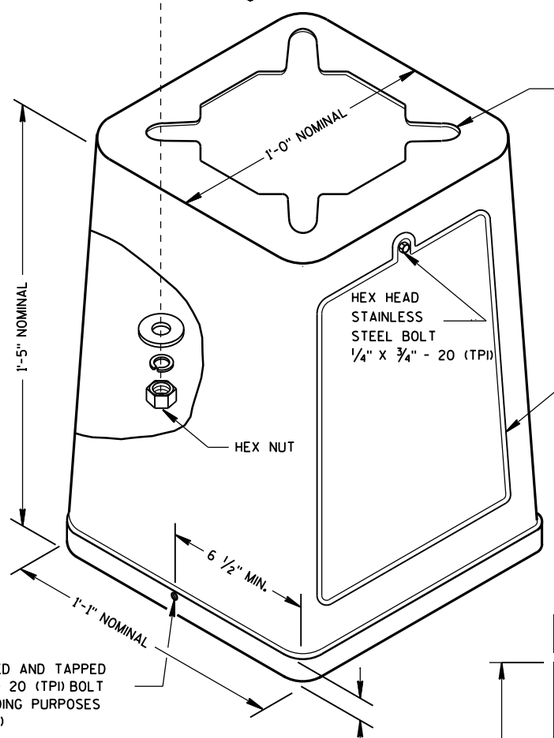


BOTTOM VIEW
(PEDESTAL BASE)

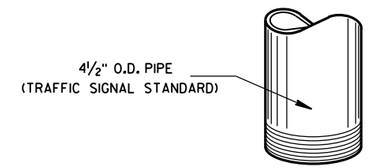


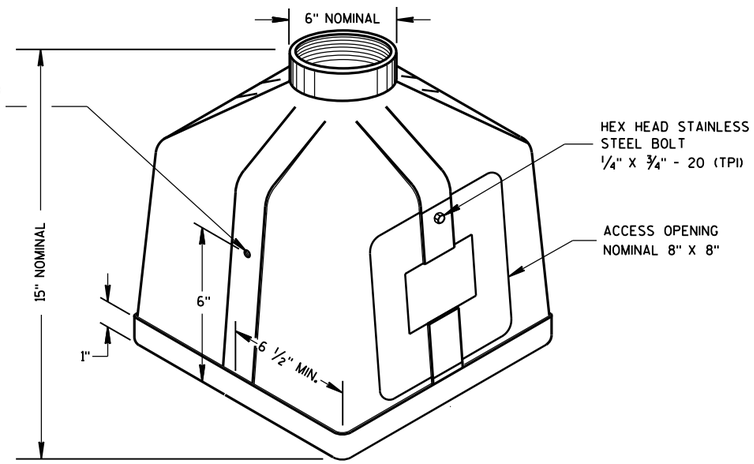
ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)



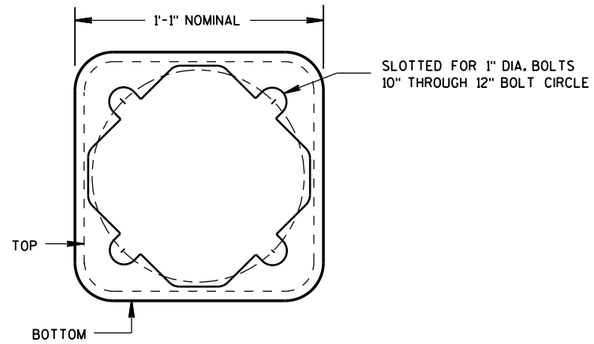
ISOMETRIC VIEW



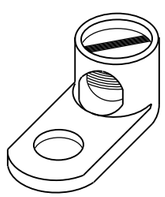


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

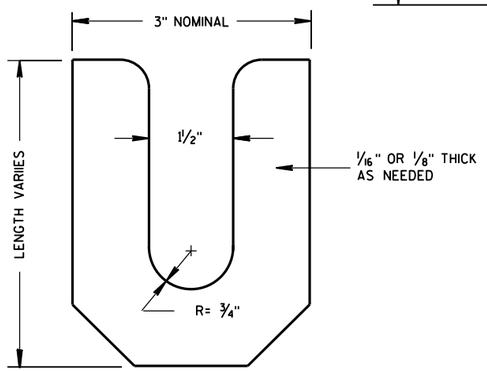


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
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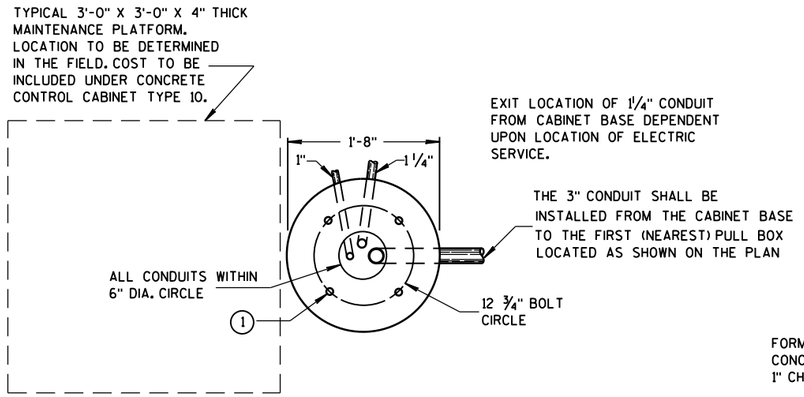
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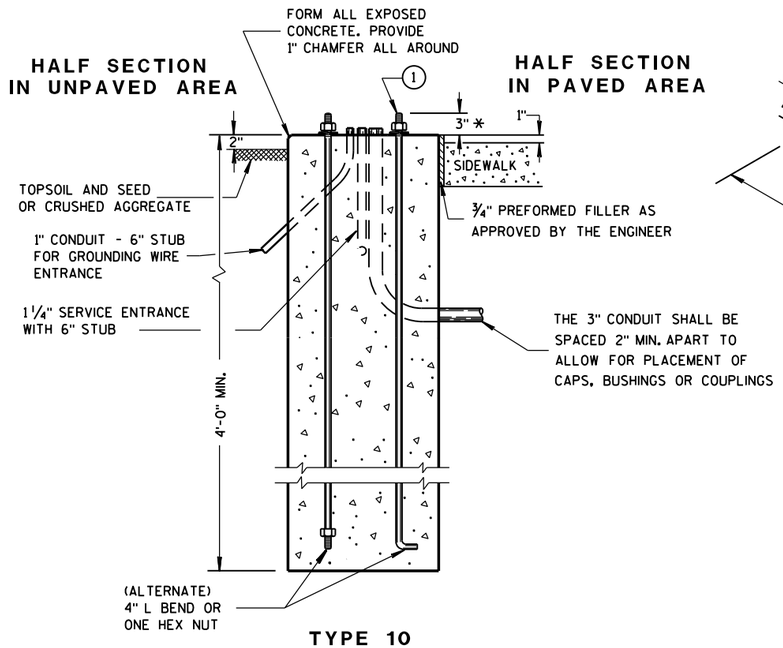
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S.D.D. 9 C 3-4

CONTROL CABINET BASE TYPE	DIMENSIONS				C.Y. CONCRETE (APPROX.)
	H	I	J	K	
TYPE 6 - 30" CABINET	34"	60"	10"	17"	.64
TYPE 7 - 38" CABINET	42"	60"	10"	21"	.93
TYPE 8 - 38" CABINET	42"	72"	12"	21"	1.29
TYPE 9 - VARIABLE	54"	72"	14"	27"	1.56
TYPE 10 - POST MOUNT	AS SHOWN				.65 *

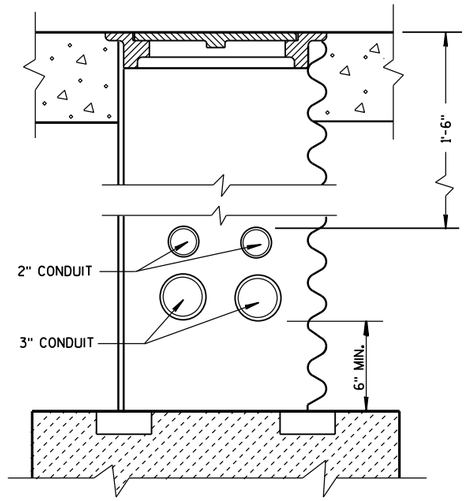
* INCLUDES MAINTENANCE PLATFORM.





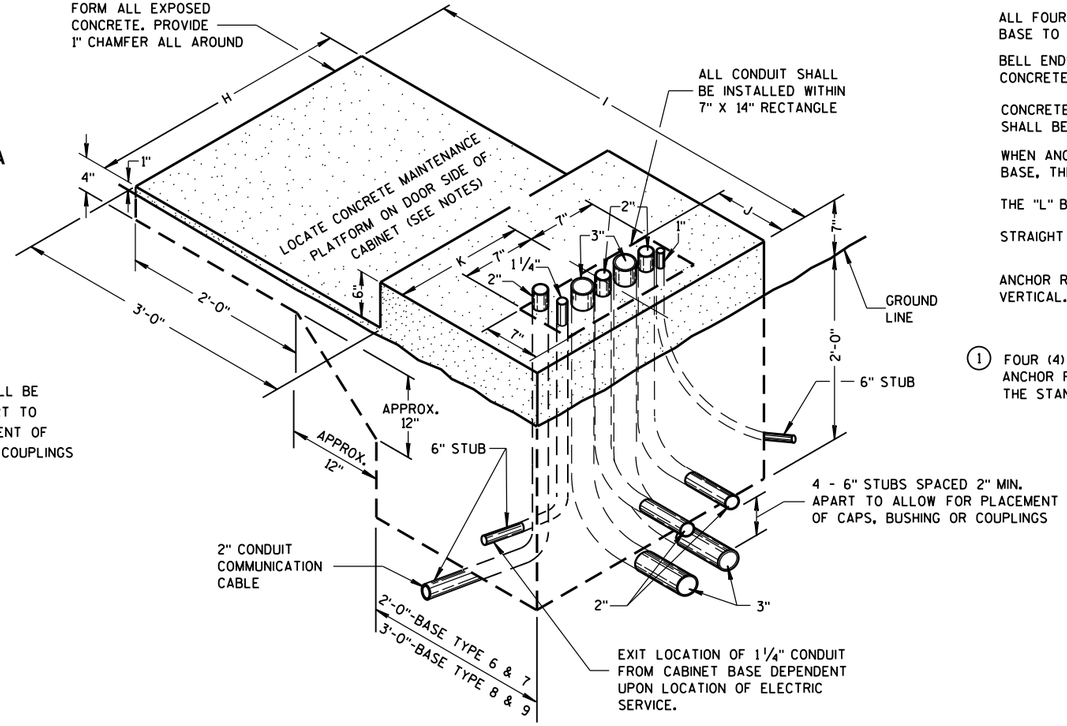
TYPE 10

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.



CONDUIT LOCATIONS IN 24" X 36" PULL BOX

(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)



TYPE 6,7,8 AND 9
(ISOMETRIC VIEW)

GENERAL NOTES

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

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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.

CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

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 BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

ALL FOUR (TWO INCH AND THREE INCH) CONDUIT SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST PULL BOX LOCATED AS SHOWN ON THE PLANS.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

WHEN ANCHOR RODS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

STRAIGHT ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD.

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

(1) FOUR (4) ANCHOR RODS, 1" DIA. X 3'-6".
ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

CONCRETE CONTROL CABINET BASES

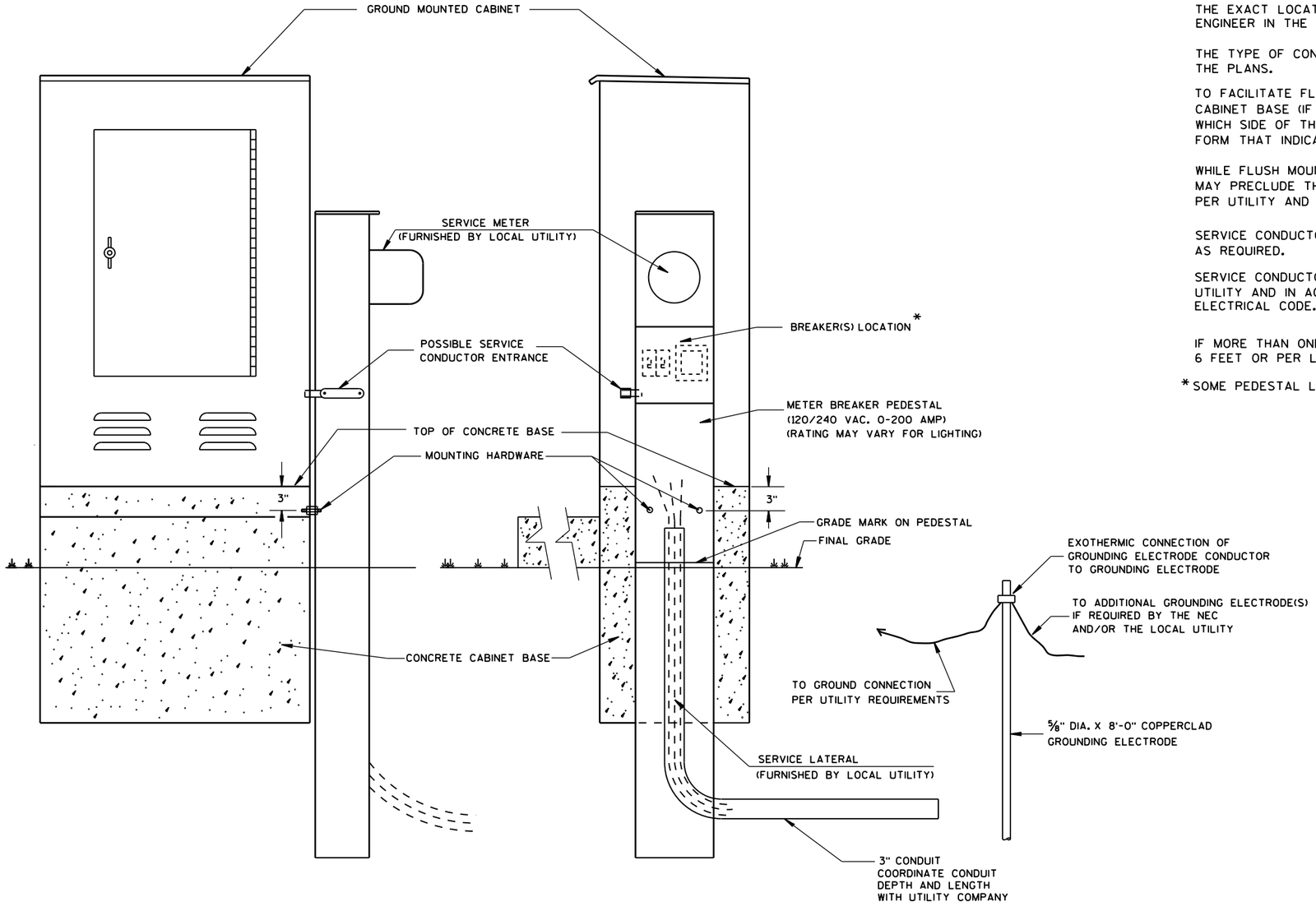
CONCRETE CONTROL CABINET BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 C 5-9



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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GENERAL NOTES

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

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

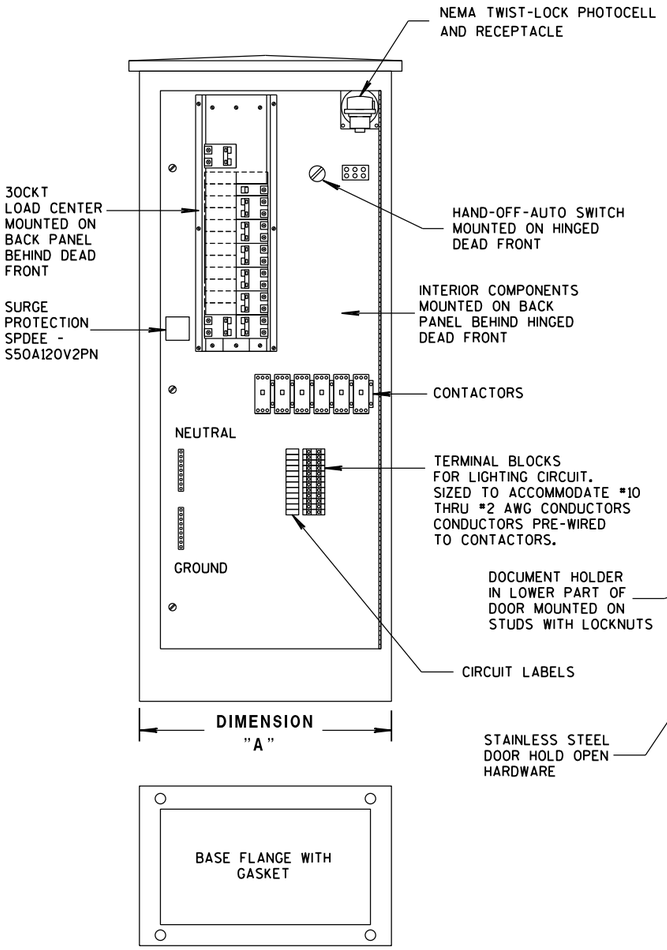
ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

FRONT INTERIOR ELEVATION



SIDE VIEW

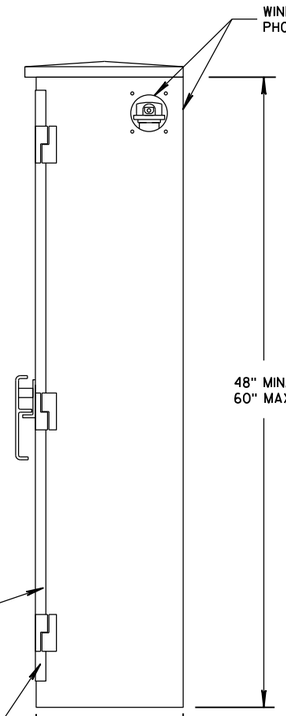
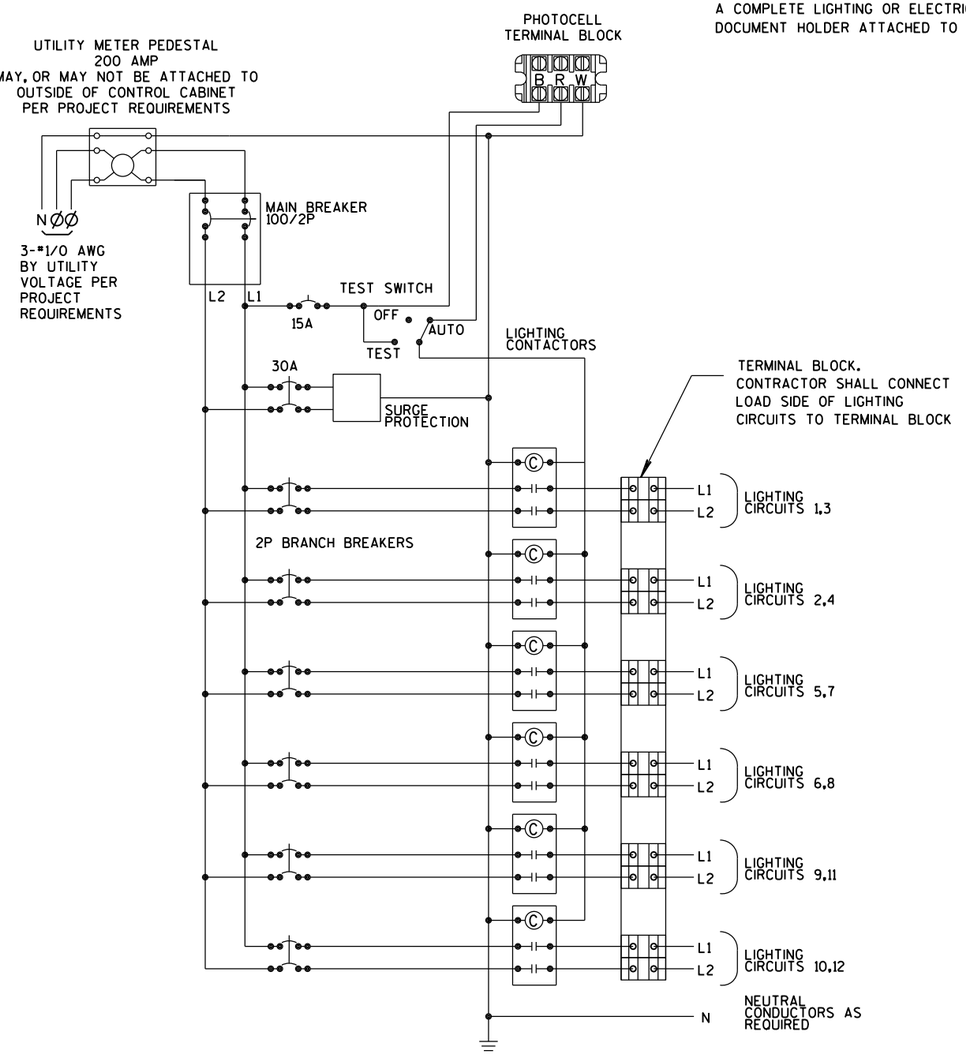


TABLE OF DIMENSIONS (INCHES)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"



CONTROL CABINET SCHEMATIC

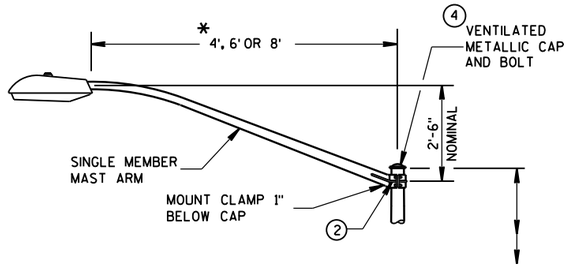
LIGHTING CONTROL CABINET

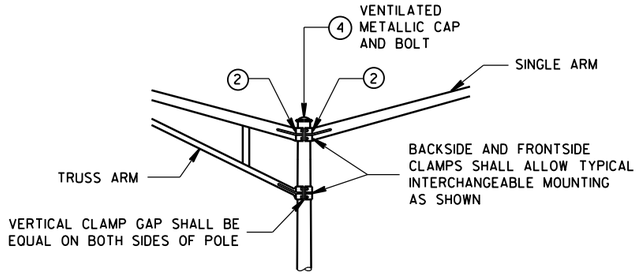
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DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Thomas Gonring — STATE LIGHTING ENGINEER
FHWA

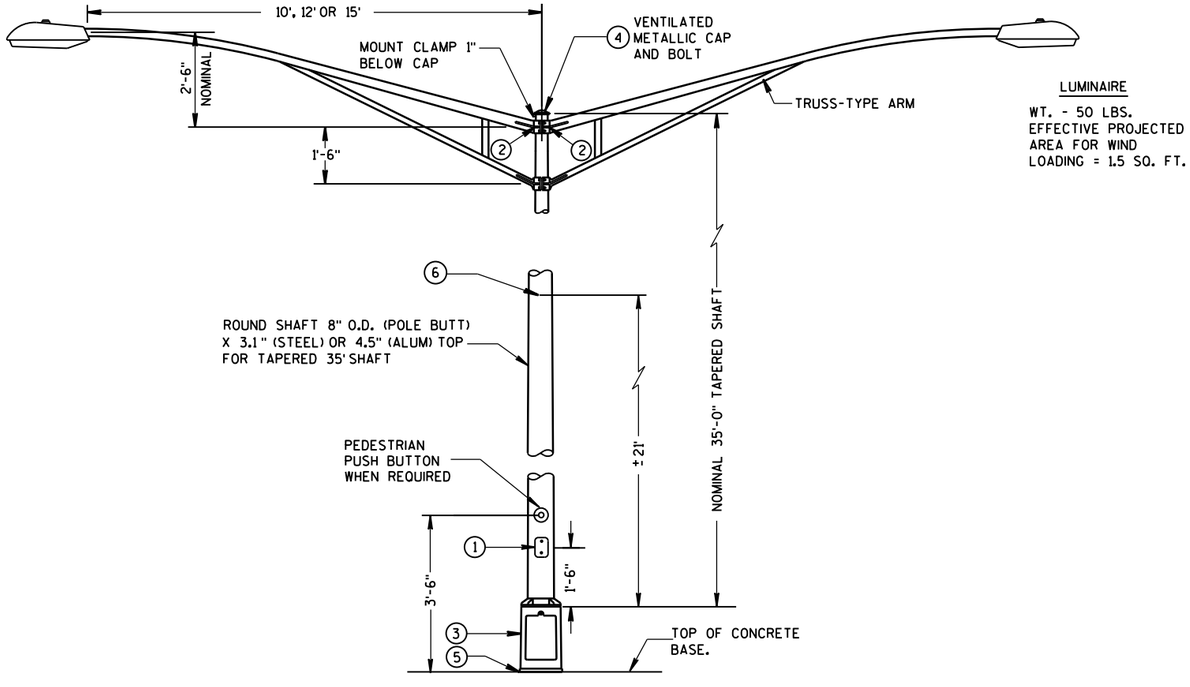
6
S.D.D. 9 D 4-1

* RISE FOR 4' ARM SHALL BE 2'-0".





INTERCHANGEABLE MOUNTING DETAIL



TYPE 6 POLE MOUNTING CONFIGURATION

(MAXIMUM LOAD)

LIGHTING ONLY

GENERAL NOTES

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

ALL TYPE 6 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE EITHER GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 6 ALUMINUM POLES, SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 6 ALUMINUM POLES SHALL HAVE MINIMUM WALL THICKNESS OF 0.219".

TYPE 6 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

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

(1) 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

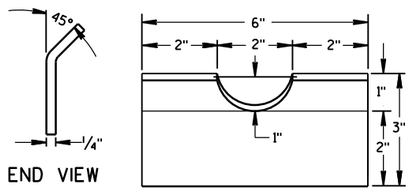
(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6 (35 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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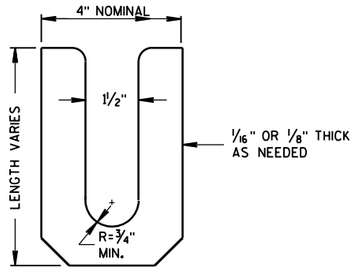


END VIEW

FRONT VIEW

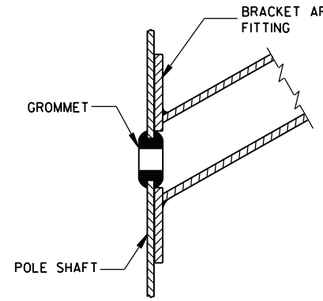
RECTANGULAR CLAMP SHIM

(4 TO A SET)

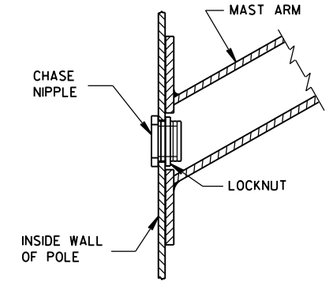


LEVELING SHIM (15)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

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

(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13) OUTSIDE SHIM DIAMETER - (4.5" O.D. FOR LUMINAIRE MAST ARM)
(6.625" O.D. FOR TROMBONE MAST ARM)

(14) VARIABLE SHIM THICKNESS - (0.10", 0.25", 0.35", 0.53" OR 0.70")

SHIM THICKNESS FOR TROMBONE MAST ARMS MAY BE TYPICALLY 0.25", 0.35", 0.53" OR 0.70".

SHIM THICKNESS FOR LUMINAIRE MAST ARMS MAY BE TYPICALLY 0.10", 0.25" OR 0.35".

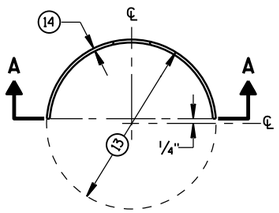
SHIM MATERIAL SHALL BE ALUMINUM ALLOY.

SHIM THICKNESS SHALL BE IMPRESSED INTO EACH SHIM. NUMERALS SHALL BE 1/4" HIGH AND LEGIBLE.

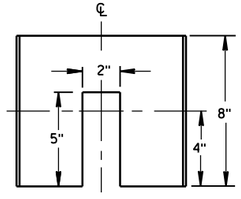
THE CONTRACTOR SHALL SUBMIT TWO COPIES OF ALL SHIM SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

(15) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

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



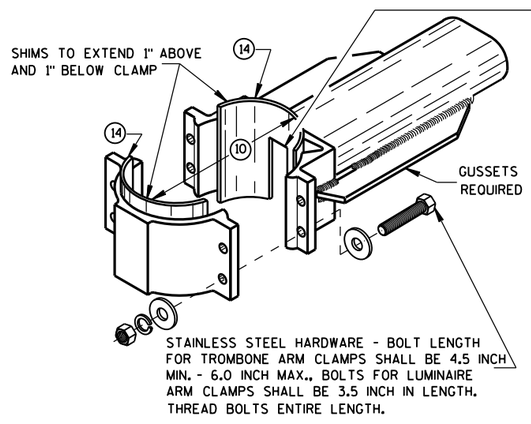
PLAN VIEW



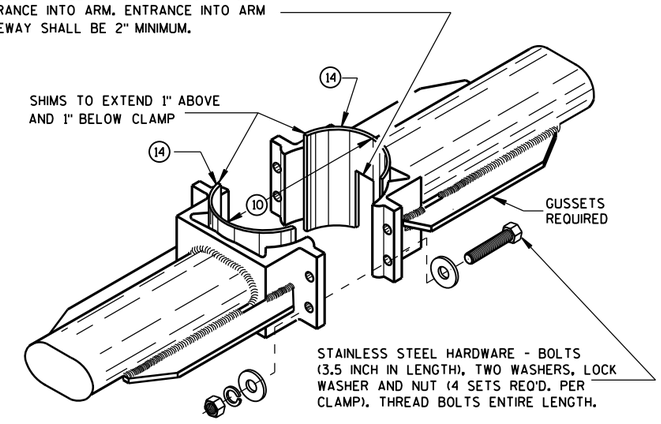
SECTION A-A

CIRCULAR CLAMP SHIM

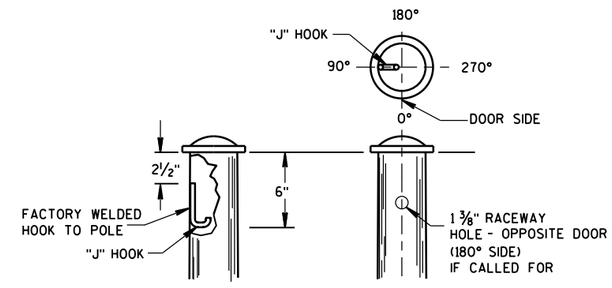
(2 TO A SET)



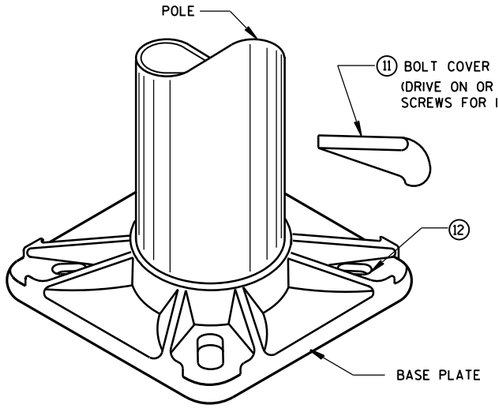
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



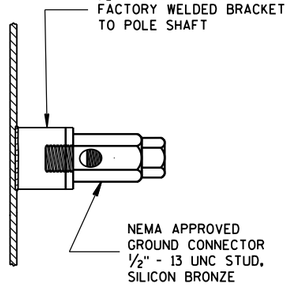
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

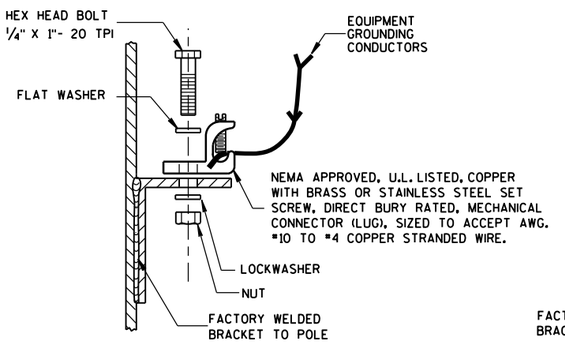


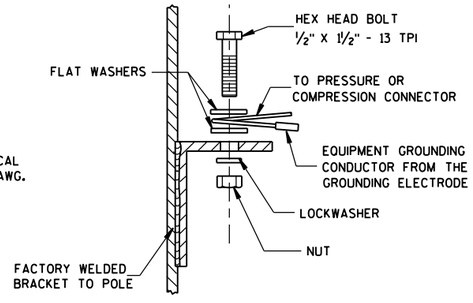
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

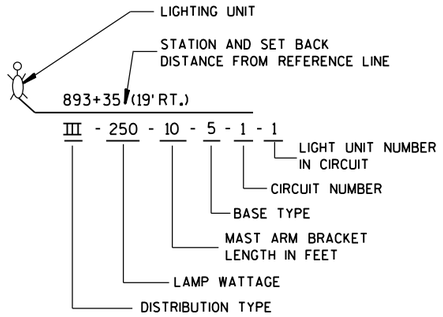
HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

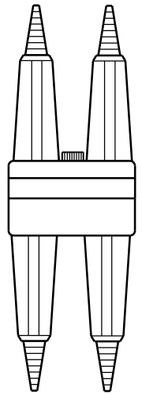
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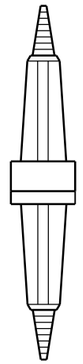
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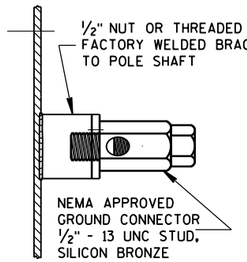
LIGHTING UNIT CODE
(TYPICAL)

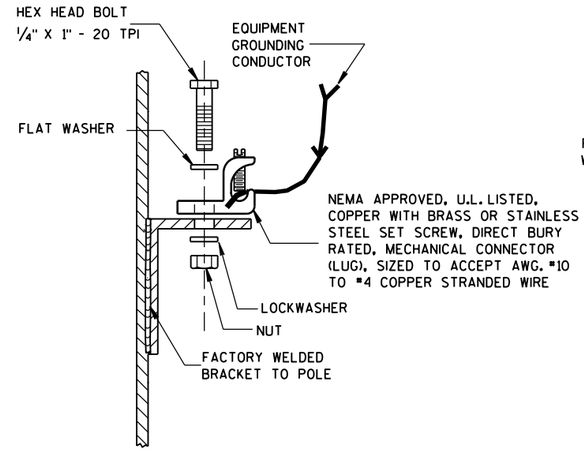


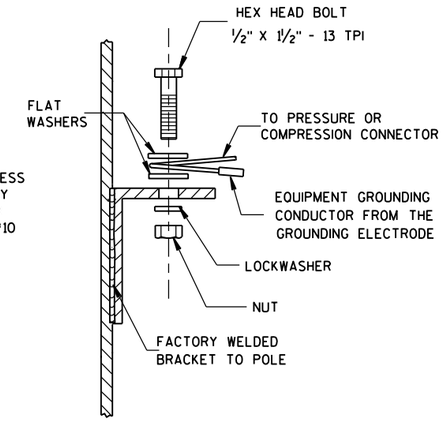
DETAIL "A"
BREAKAWY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



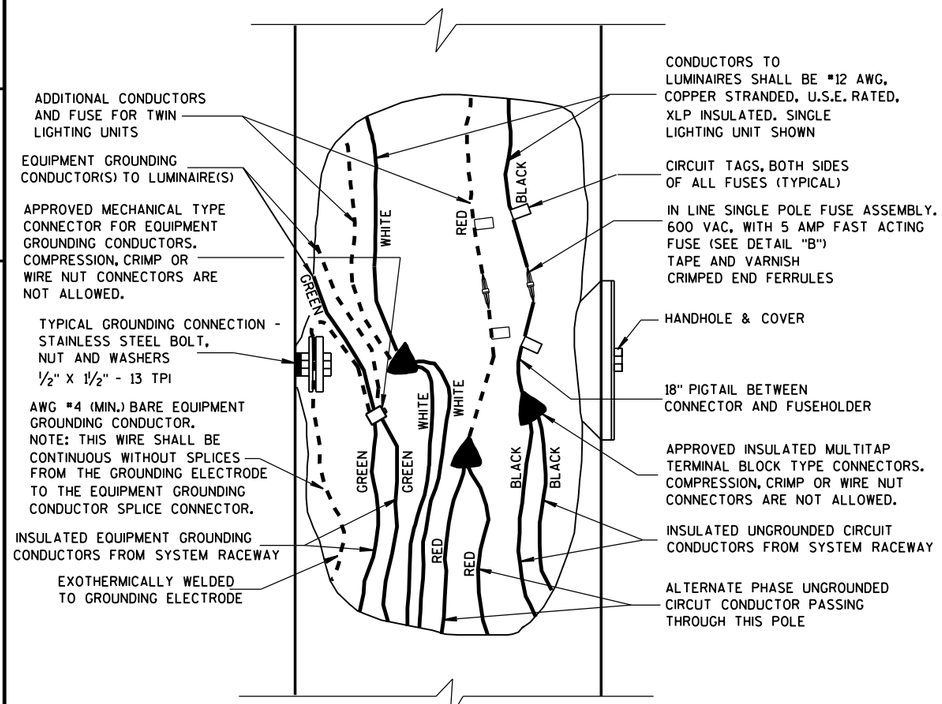
DETAIL "B"
BREAKAWY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT



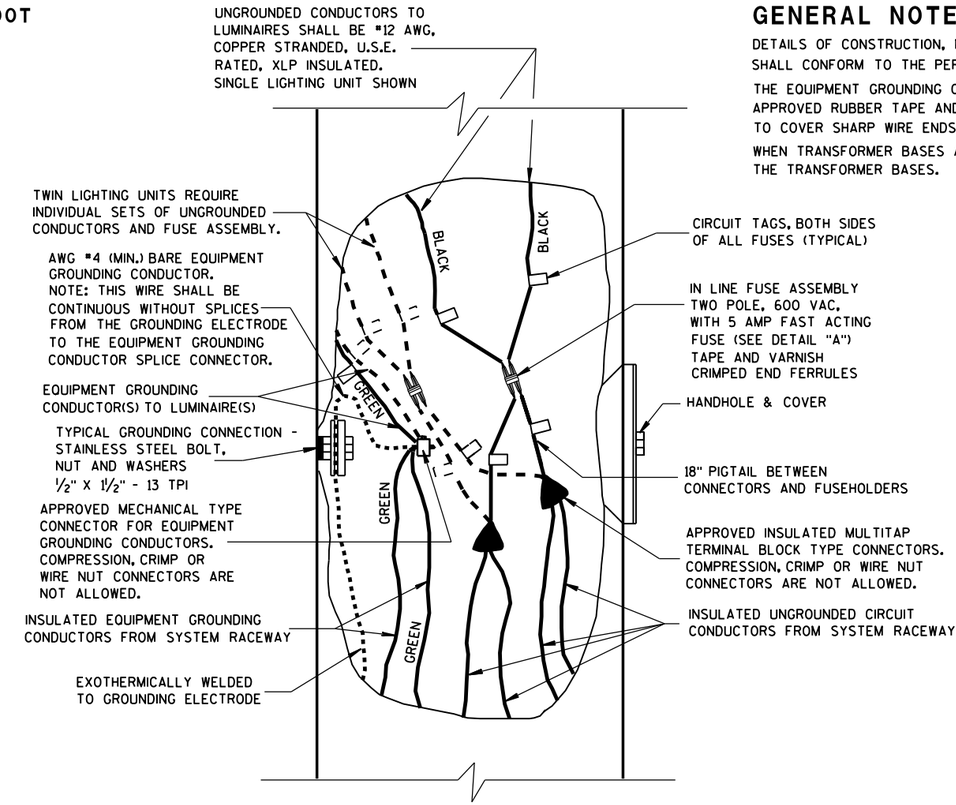




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



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.

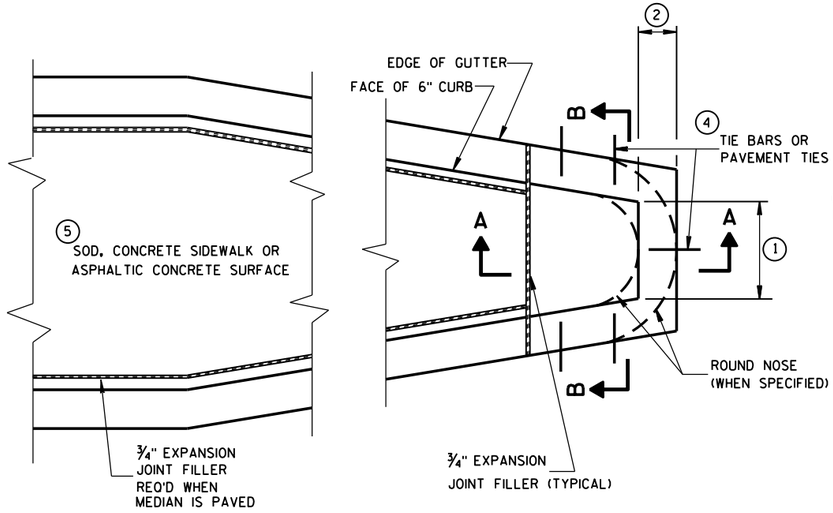
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

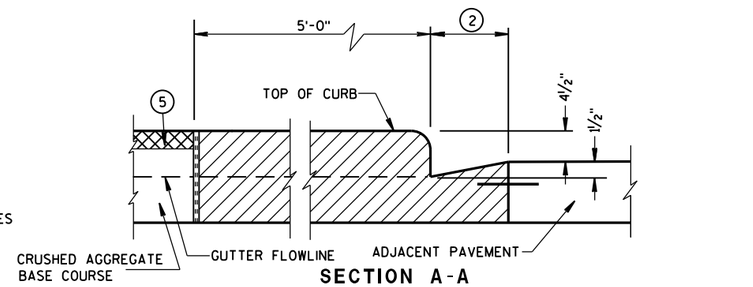
NON-FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6
S.D.D. 9 E 3-5





CONCRETE MEDIAN BLUNT NOSE DETAIL

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) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

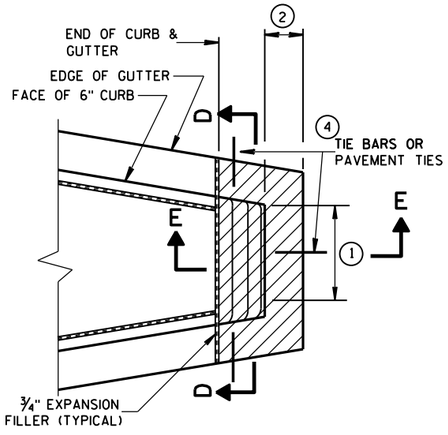
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

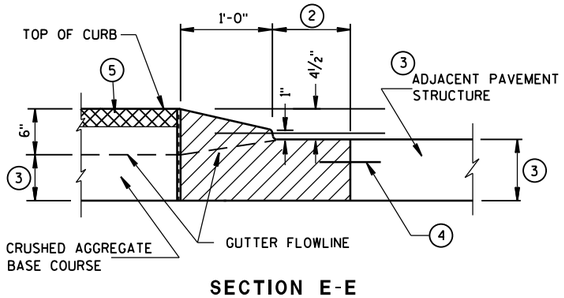
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

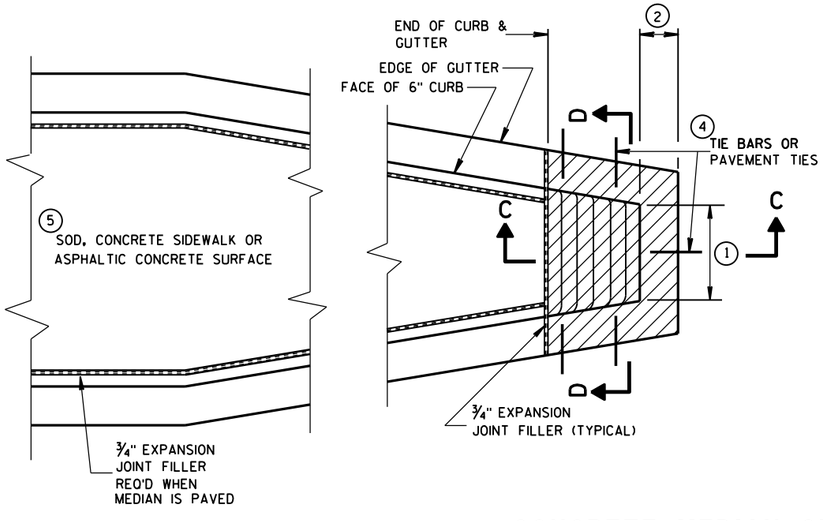
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

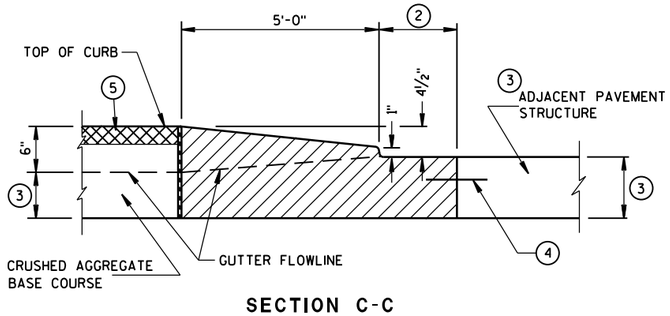




SECTION E-E

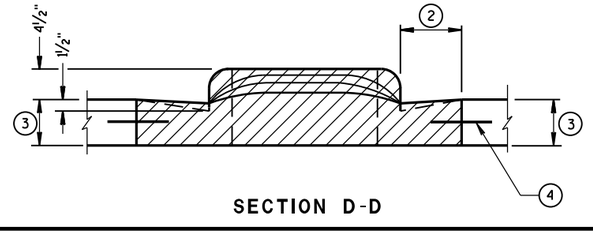
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

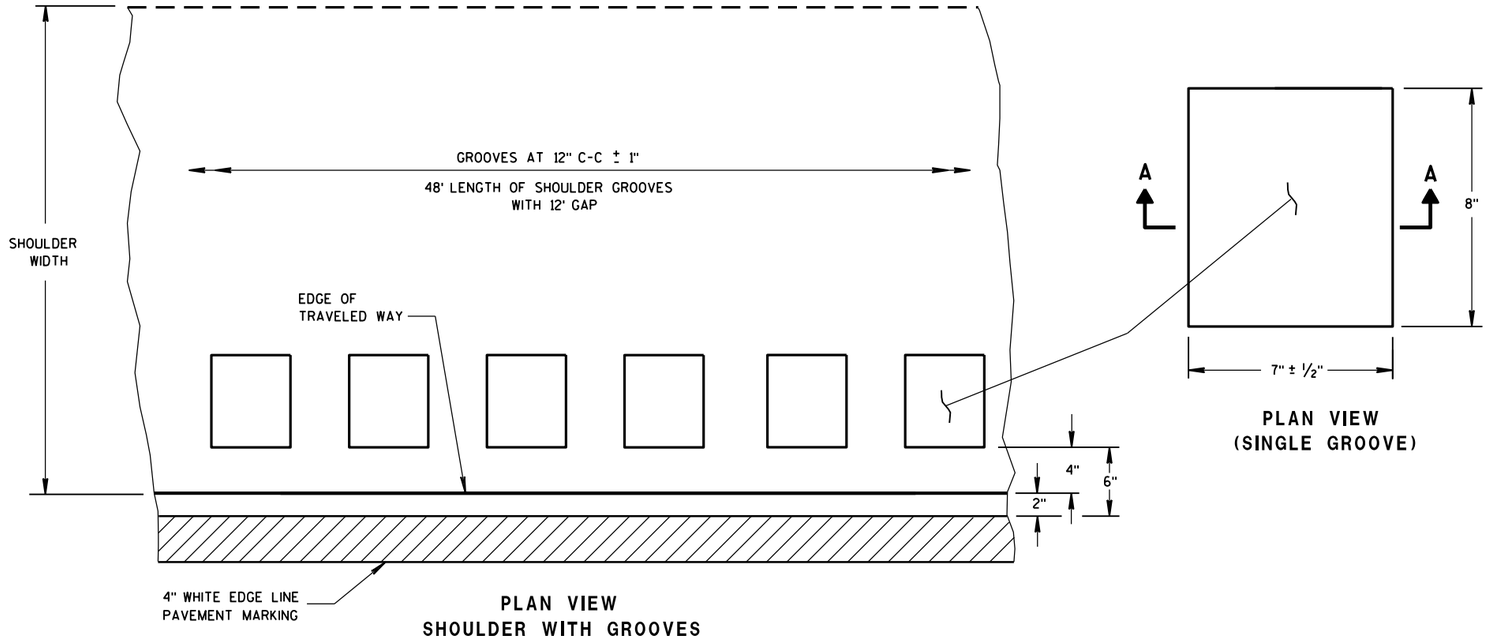
APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER
FHWA

6

S.D.D. 11 B 2-2

6

S.D.D. 11 B 2-2



PLAN VIEW
SHOULDER WITH GROOVES

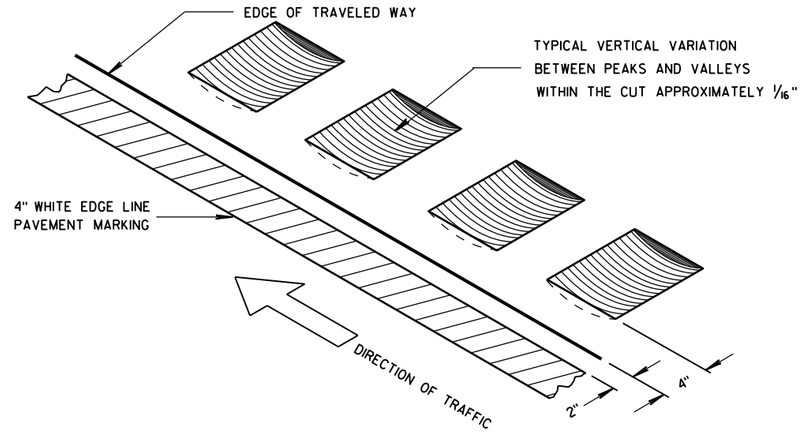
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

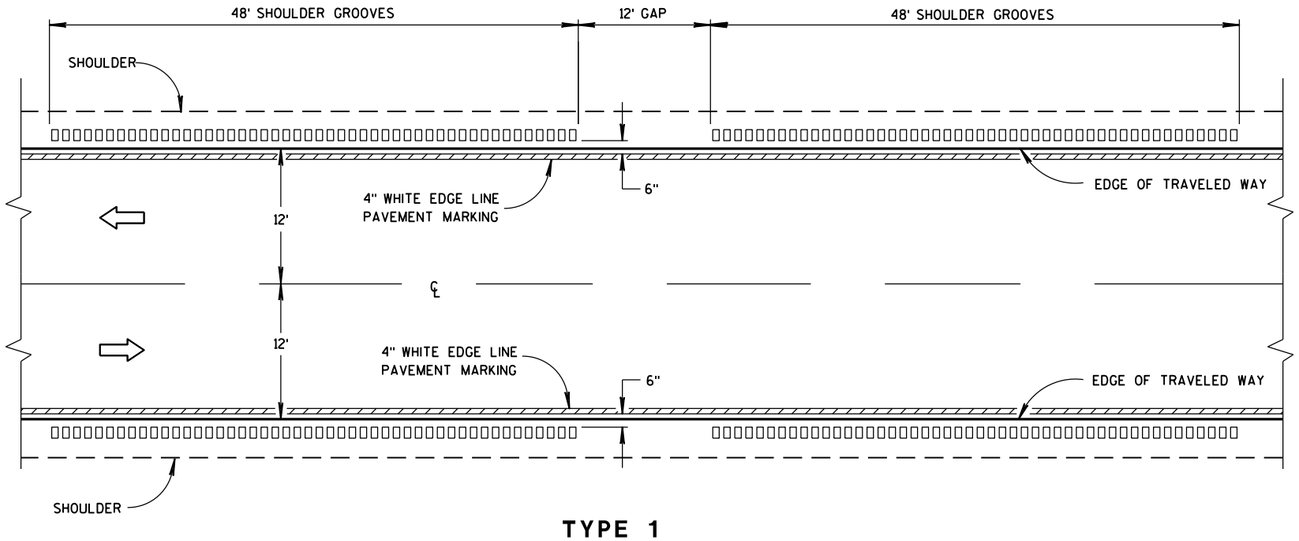
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.

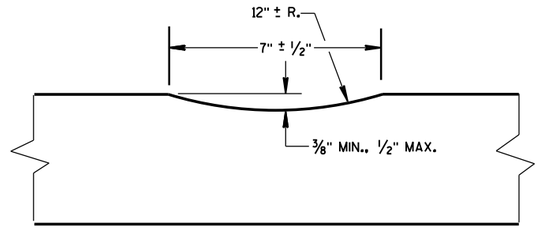


ISOMETRIC

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



TYPE 1
2-LANE SHOULDER RUMBLE STRIP



SECTION A-A

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

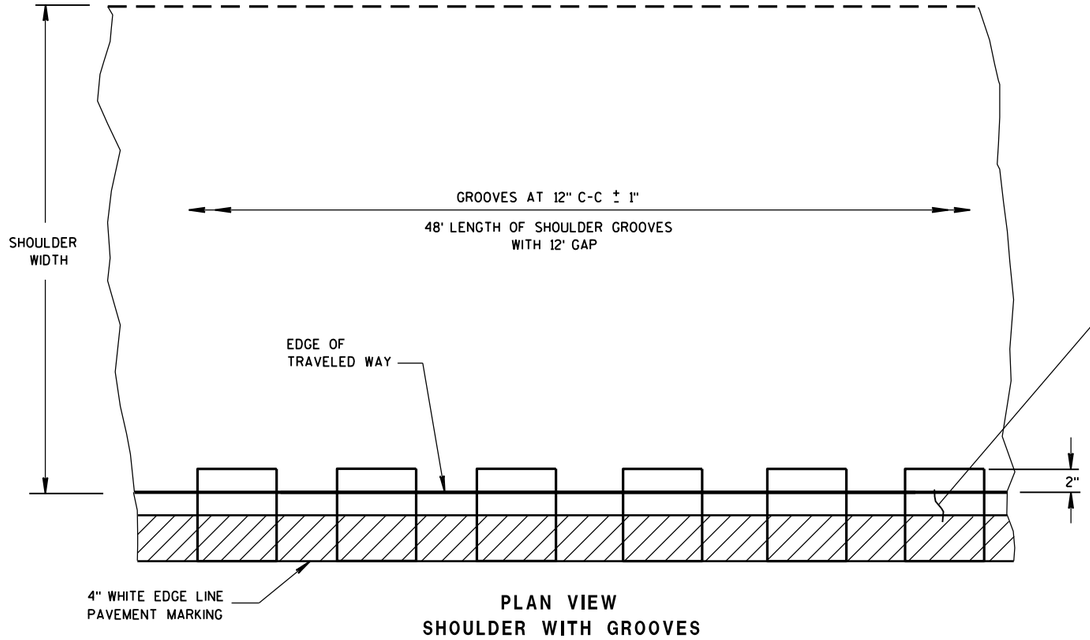
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

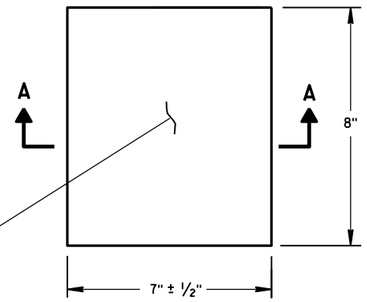
S.D.D. 13 A 10-1a

6

S.D.D. 13 A 10-1a



PLAN VIEW
SHOULDER WITH GROOVES



PLAN VIEW
(SINGLE GROOVE)

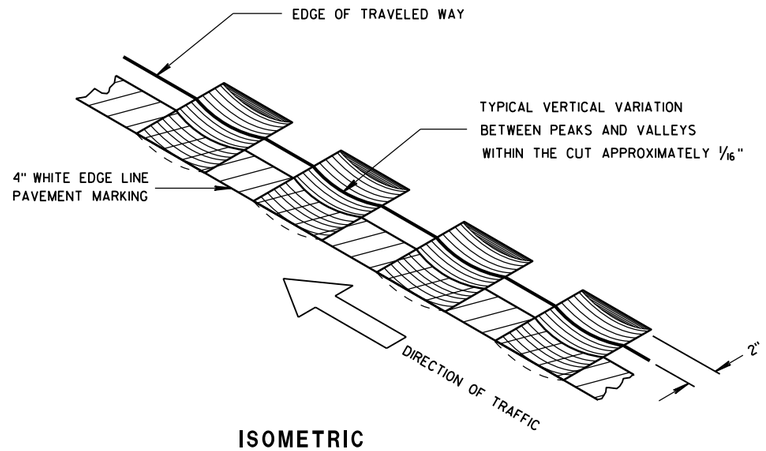
PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP

GENERAL NOTES

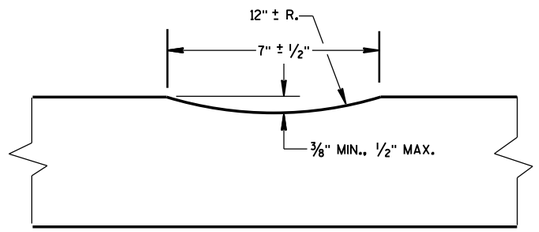
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

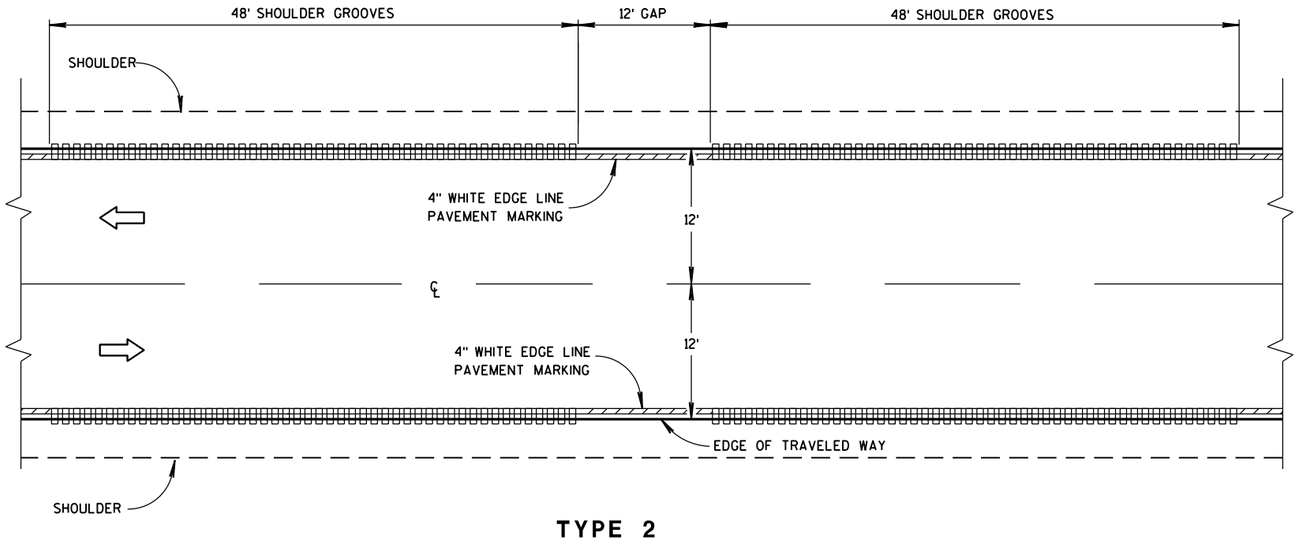
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



ISOMETRIC



SECTION A-A



TYPE 2
2-LANE SHOULDER RUMBLE STRIP

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

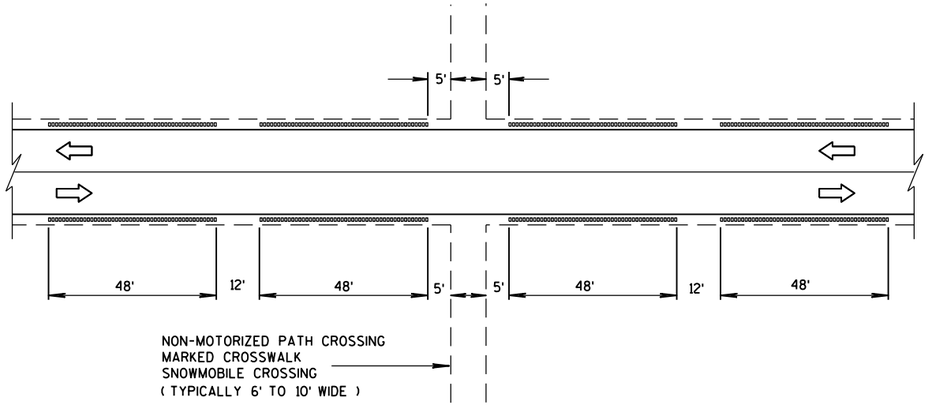
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

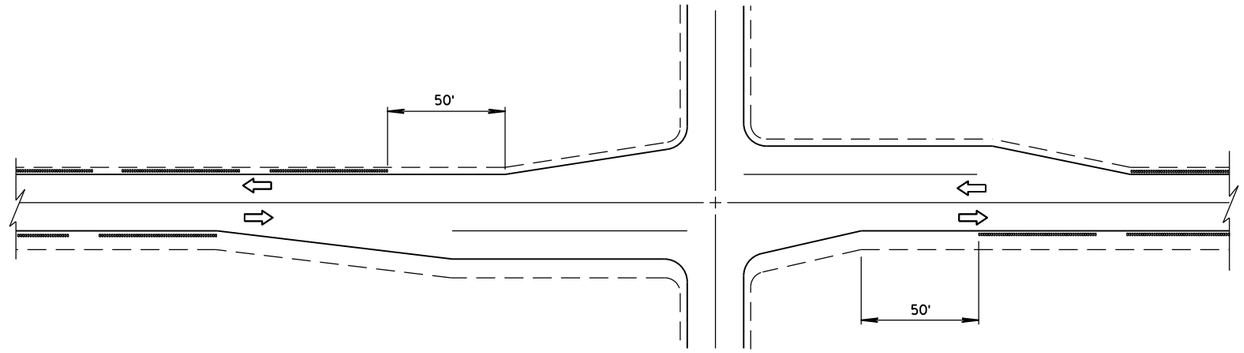
S.D.D. 13 A 10-1b

6

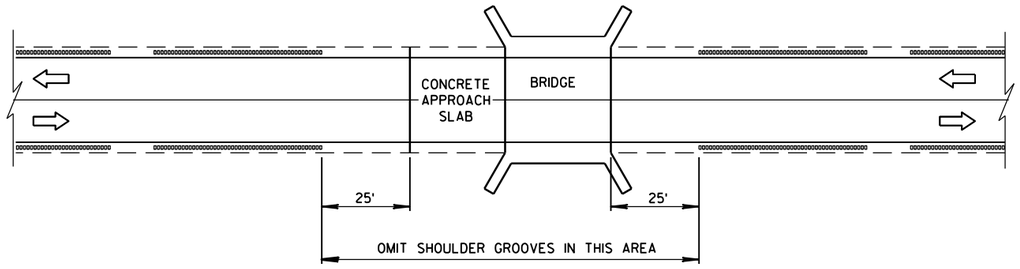
S.D.D. 13 A 10-1b



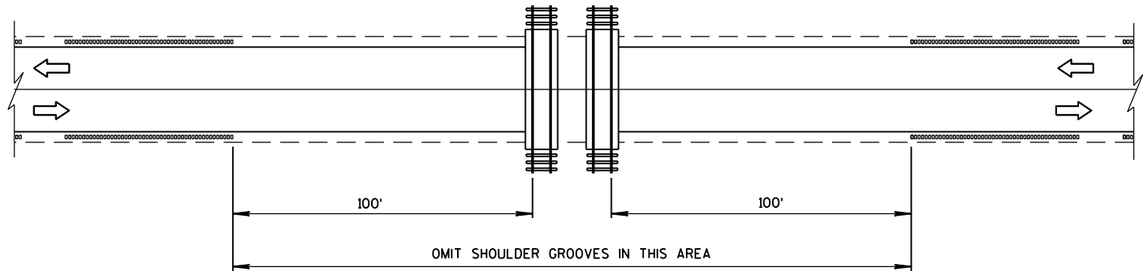
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



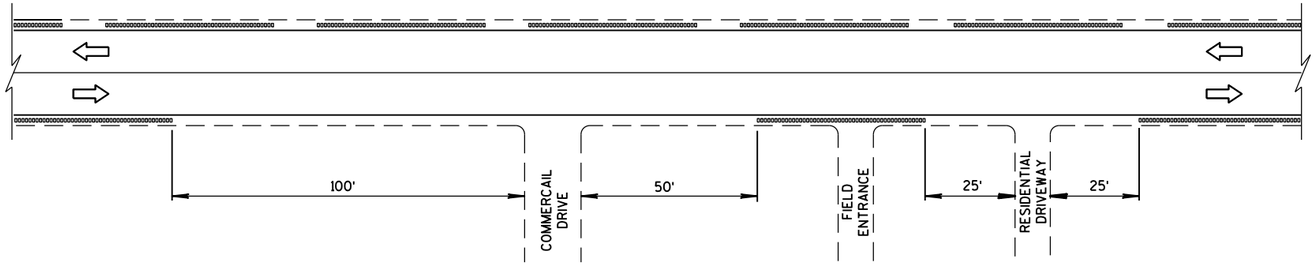
SHOULDER GROOVES AT INTERSECTIONS



SHOULDER GROOVES AT BRIDGES



SHOULDER GROOVES AT RAILROADS



SHOULDER GROOVES AT DRIVEWAYS (1)

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

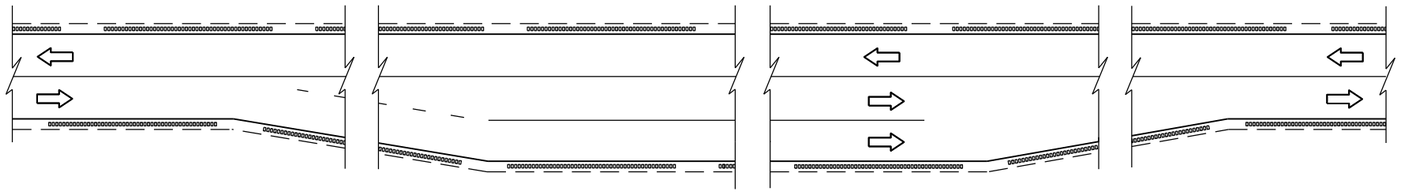
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

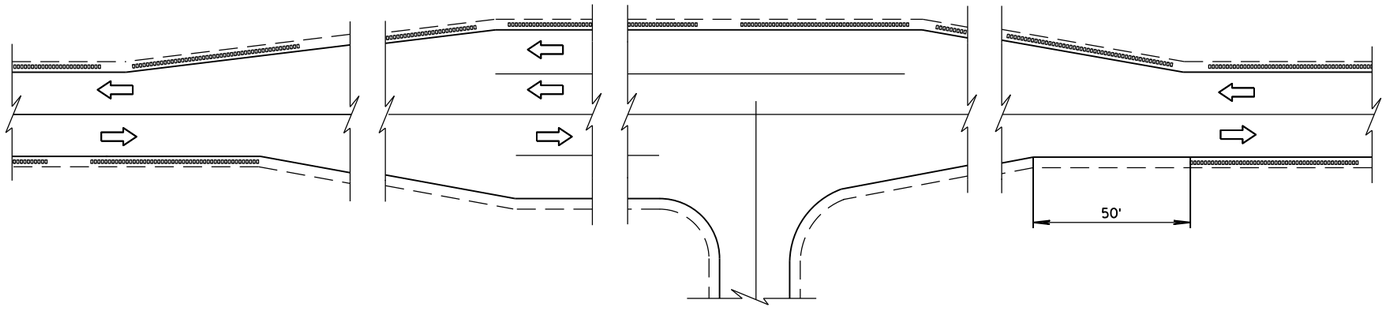
S.D.D. 13 A 10-1c

6

S.D.D. 13 A 10-1c



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

6

6

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

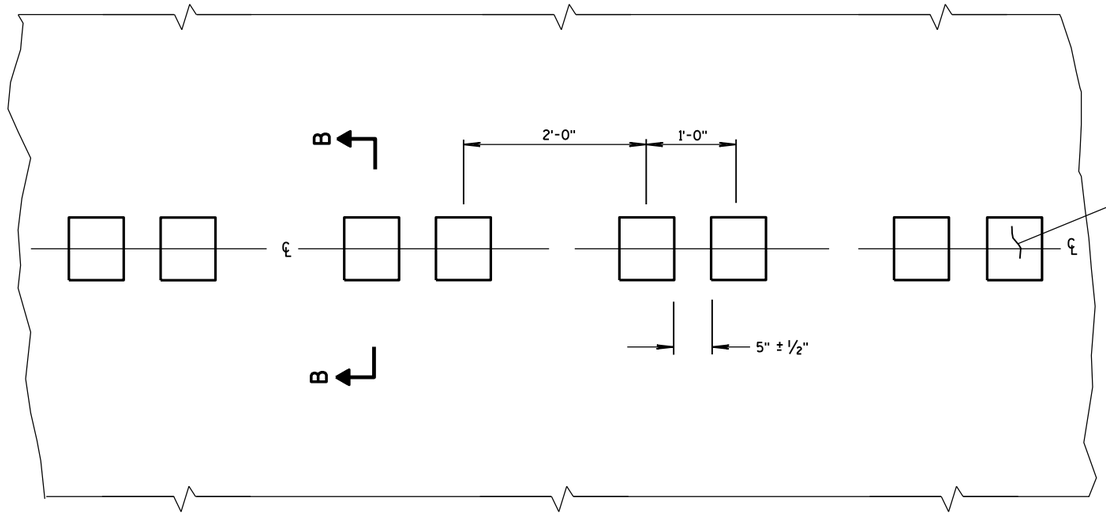
12/17/2012
DATE

/S/ Jerry H. Zoga
ROADWAY STANDARDS ENGINEER

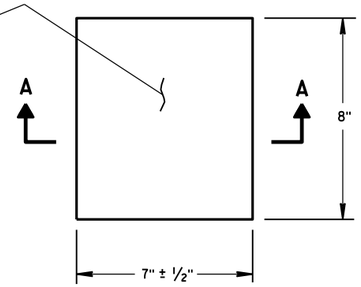
FHWA

S.D.D. 13 A 10-1d

S.D.D. 13 A 10-1d



PLAN VIEW
CENTER LINE WITH GROOVES



PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

GENERAL NOTES

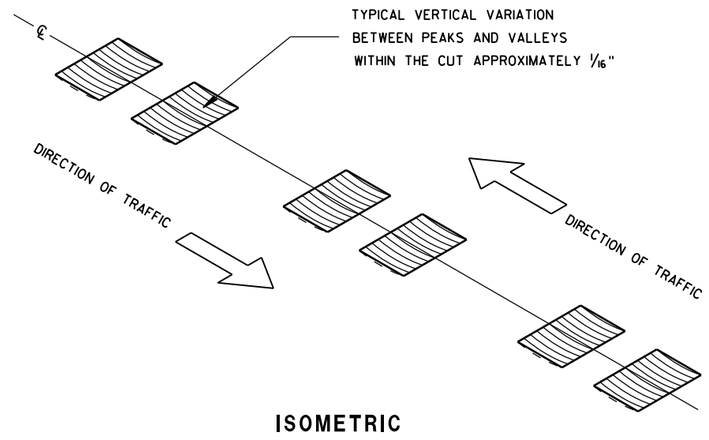
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTER LINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

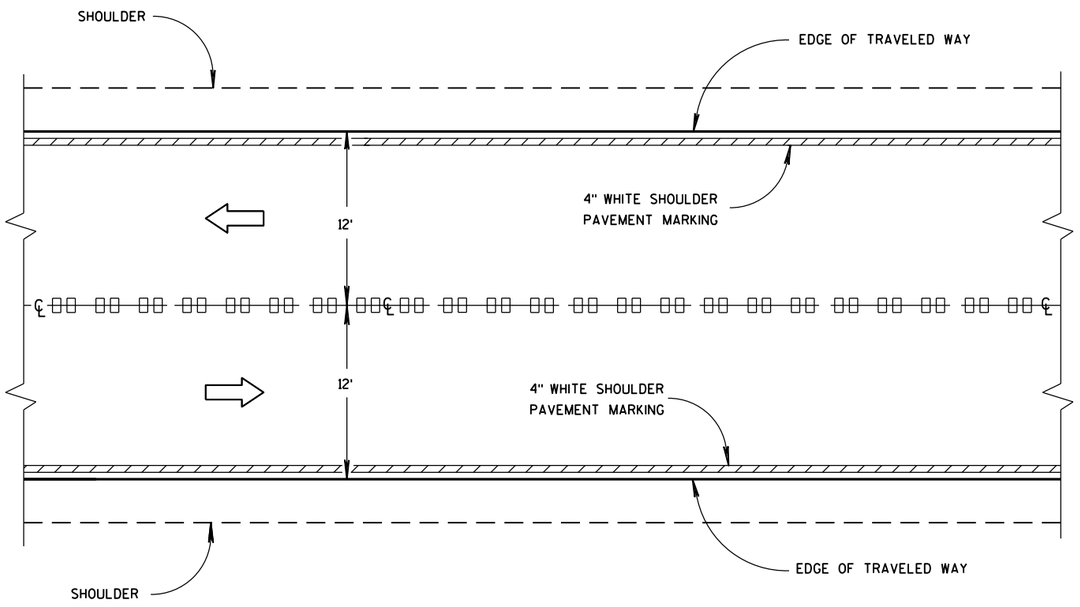
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

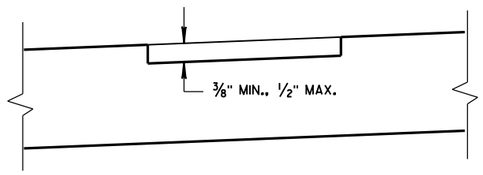
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



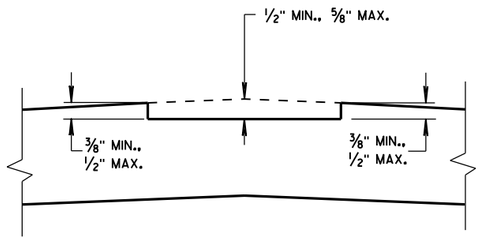
ISOMETRIC



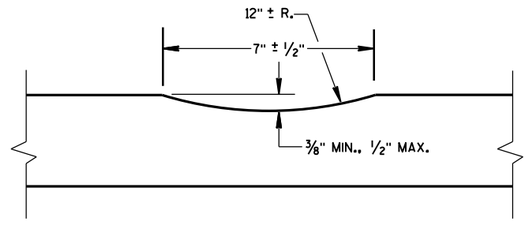
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



SECTION B-B
CROWNED ROADWAY



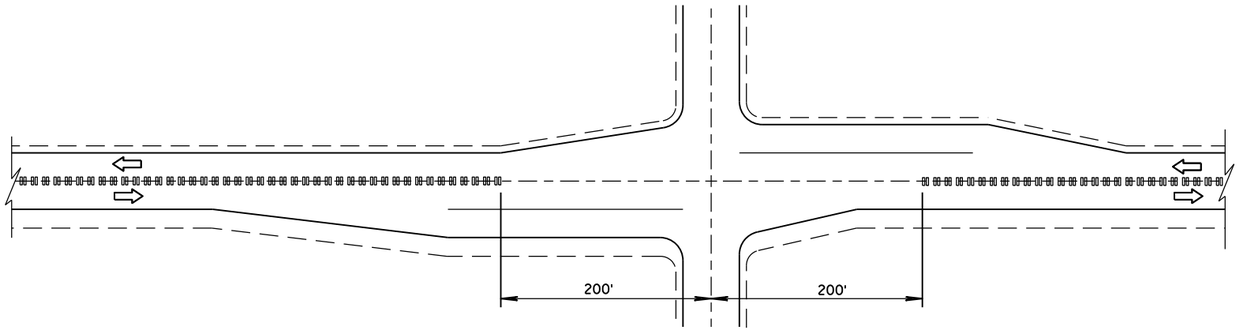
SECTION A-A

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

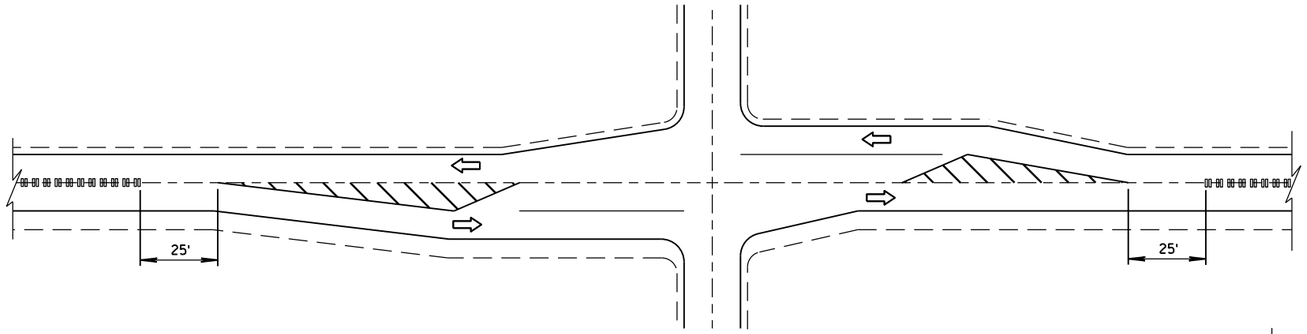
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

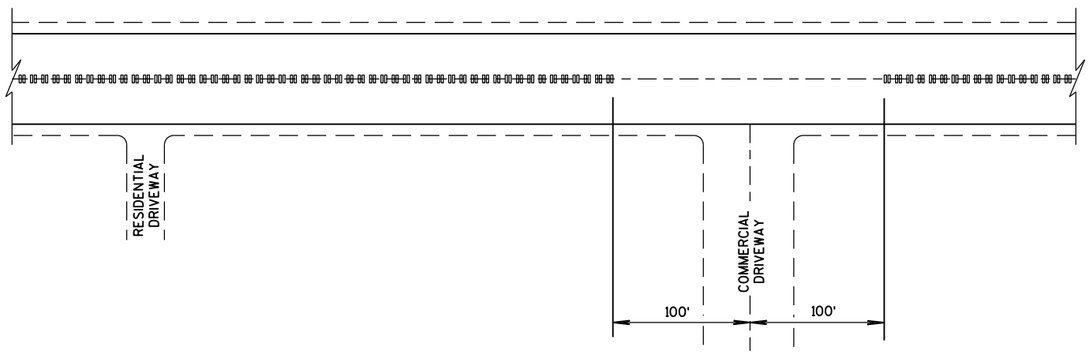
S.D.D. 13 A 11-2a



CENTER LINE GROOVES AT INTERSECTIONS

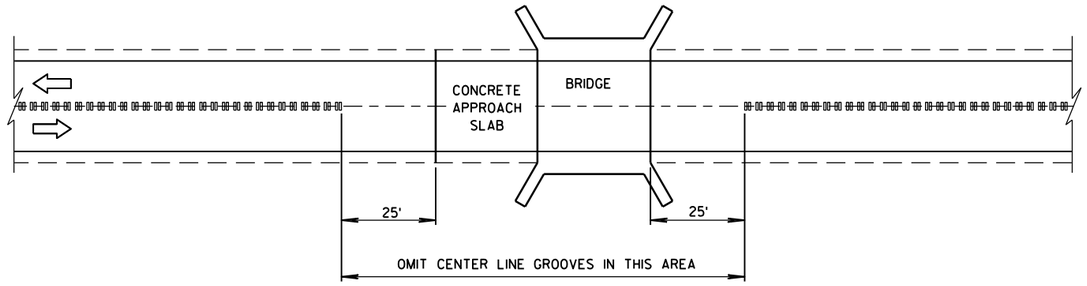


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

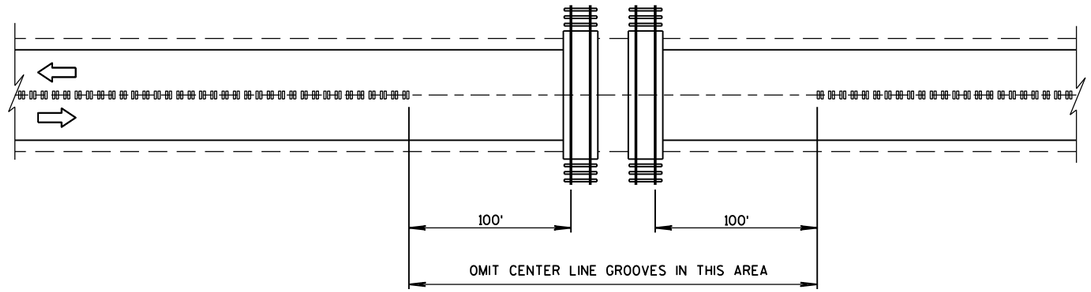


CENTER LINE GROOVES AT DRIVEWAYS (1)

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



CENTER LINE GROOVES AT BRIDGES



CENTER LINE GROOVES AT RAILROADS

6

S.D.D. 13 A 11-2b

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/15/2013
DATE

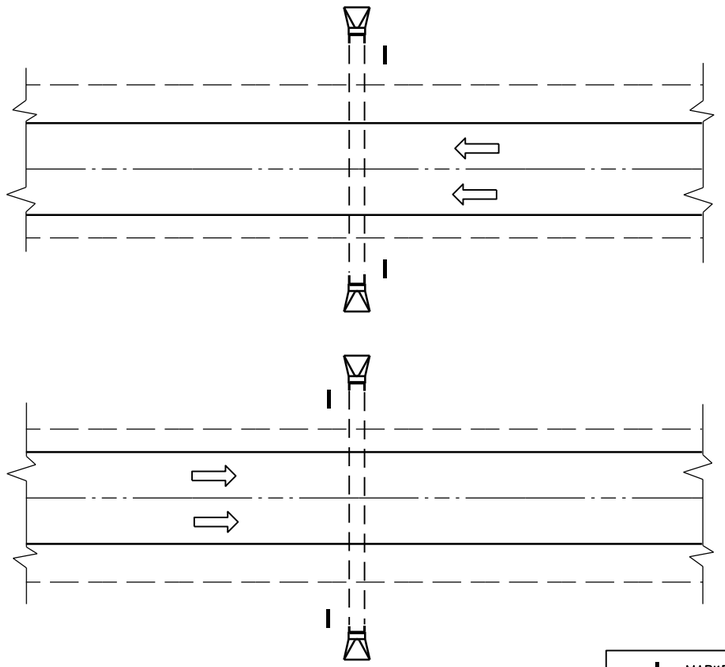
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

NT

FHWA

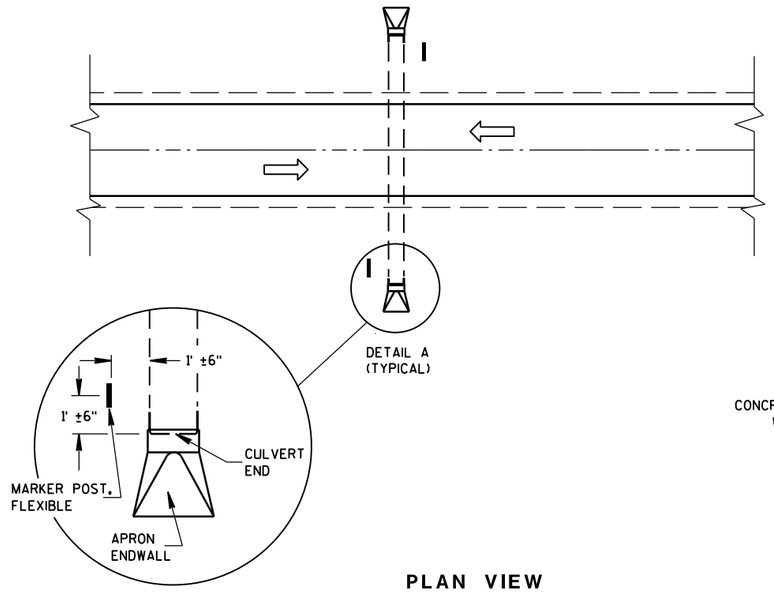
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S.D.D. 13 A 11-2b



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

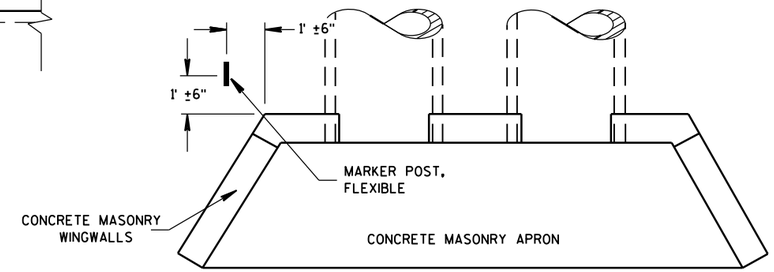
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

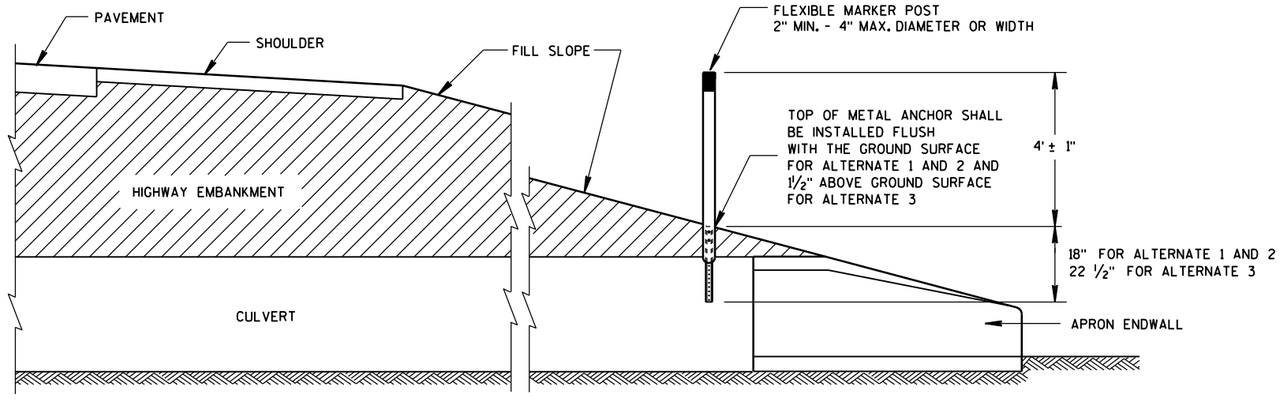
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

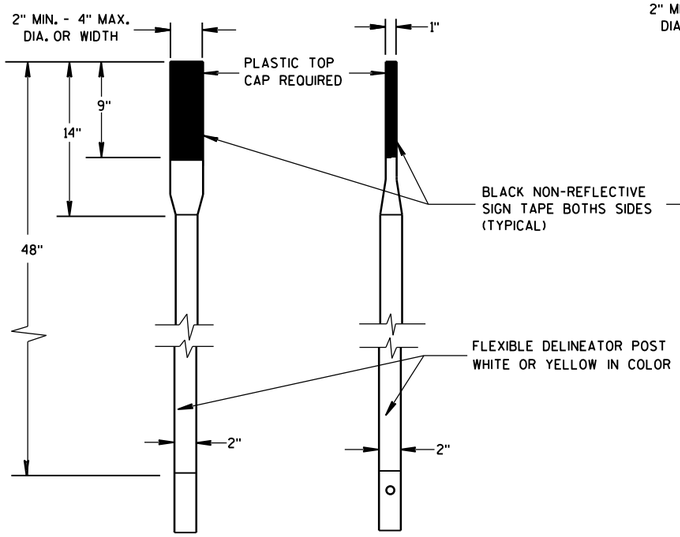
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

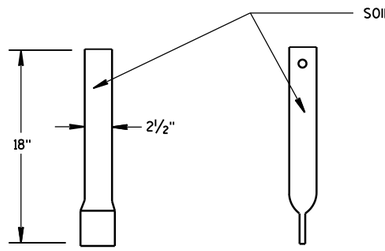
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S.D.D. 15 A 3-2a

6

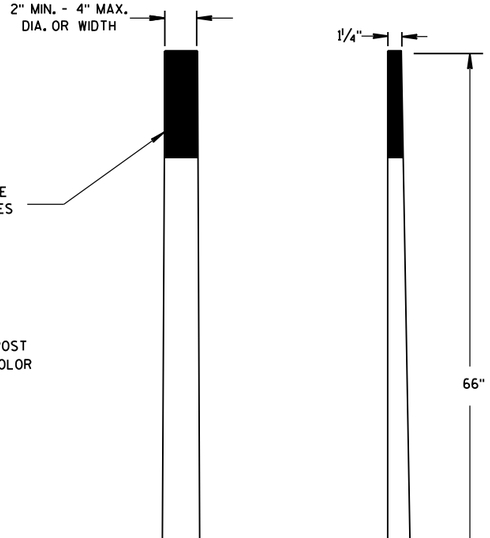
S.D.D. 15 A 3-2a





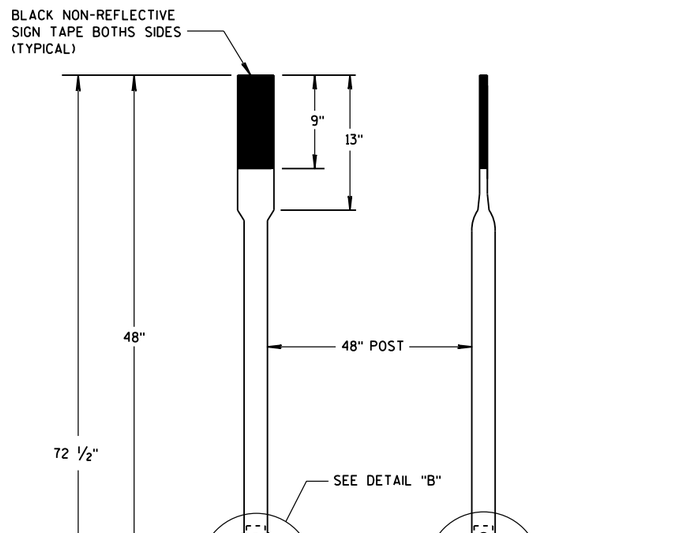
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

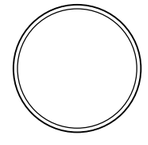
ALTERNATE 2



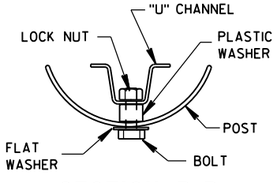
FRONT VIEW SIDE VIEW

ALTERNATE 3

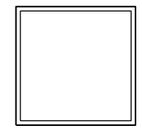
FLEXIBLE MARKER POSTS



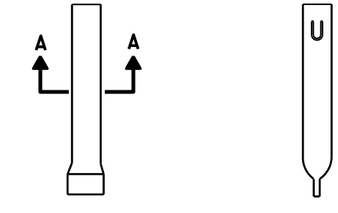
SECTION A-A



SECTION B-B

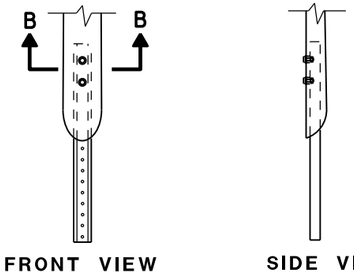


SECTION C-C



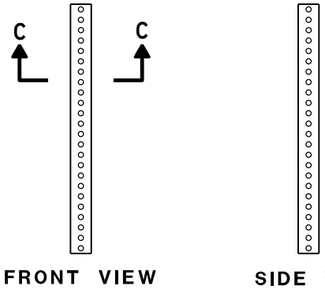
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

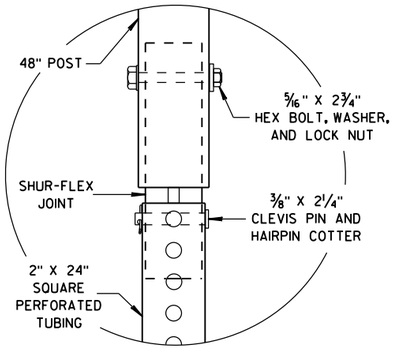
ALTERNATE 2



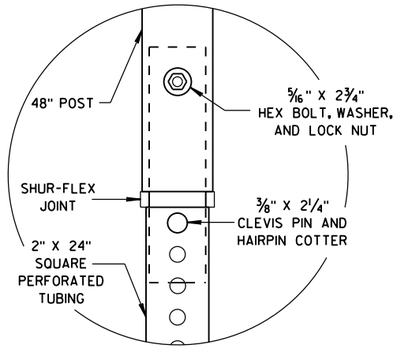
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

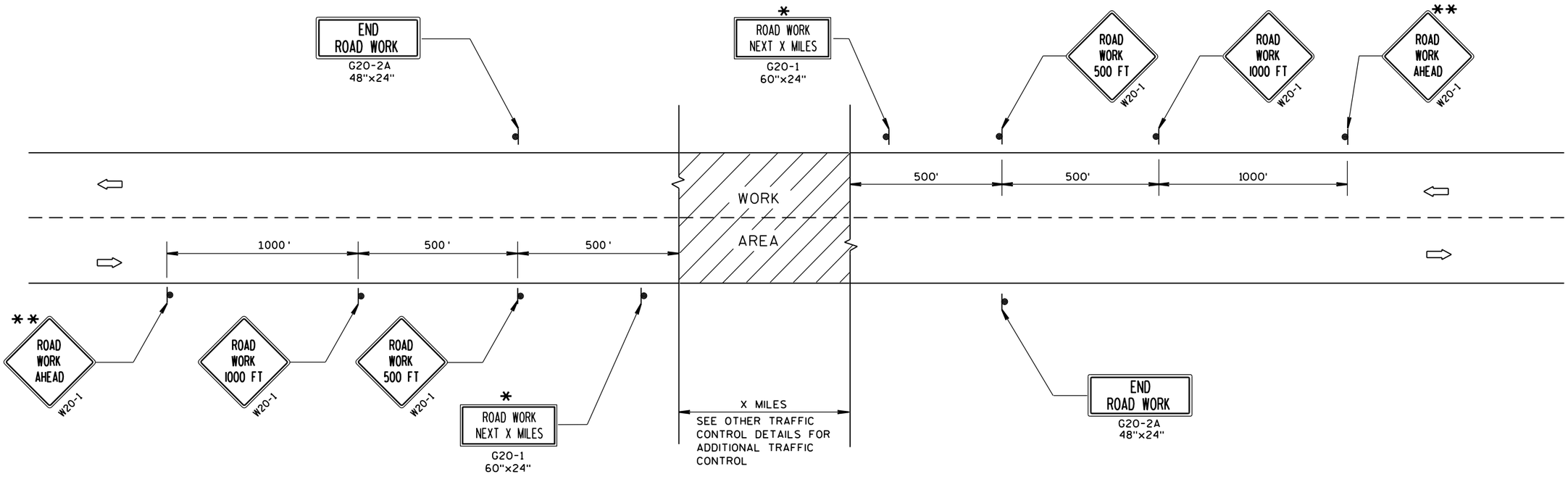
APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

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

6

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



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

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

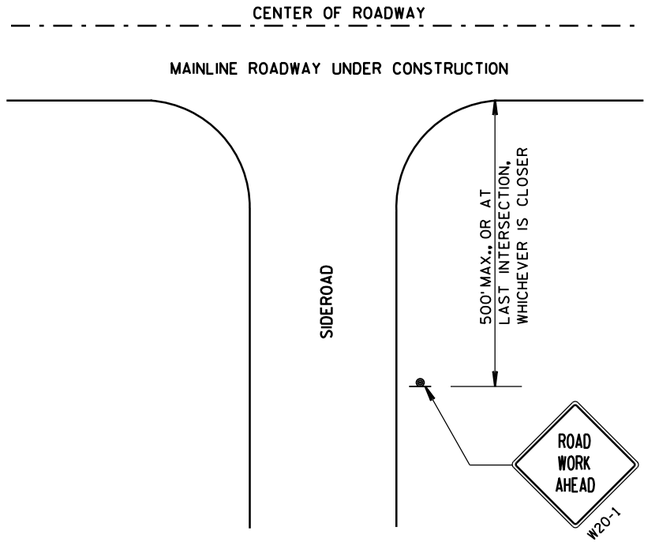
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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



LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

SIGN

FHWA

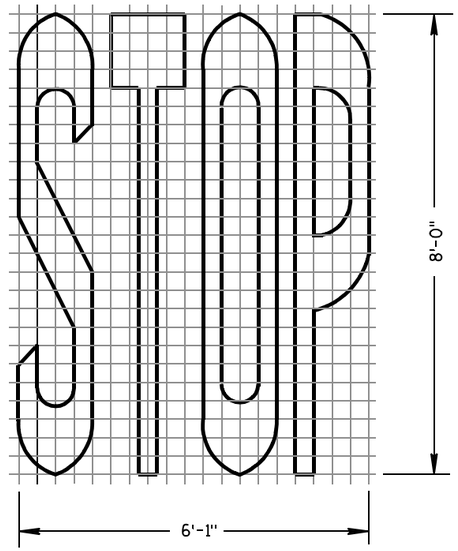
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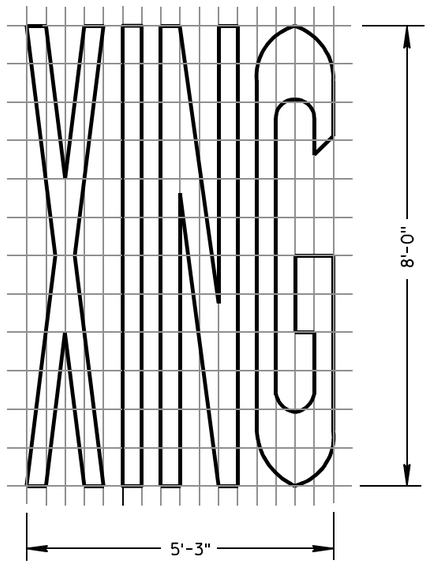
S.D.D. 15 C 4-2

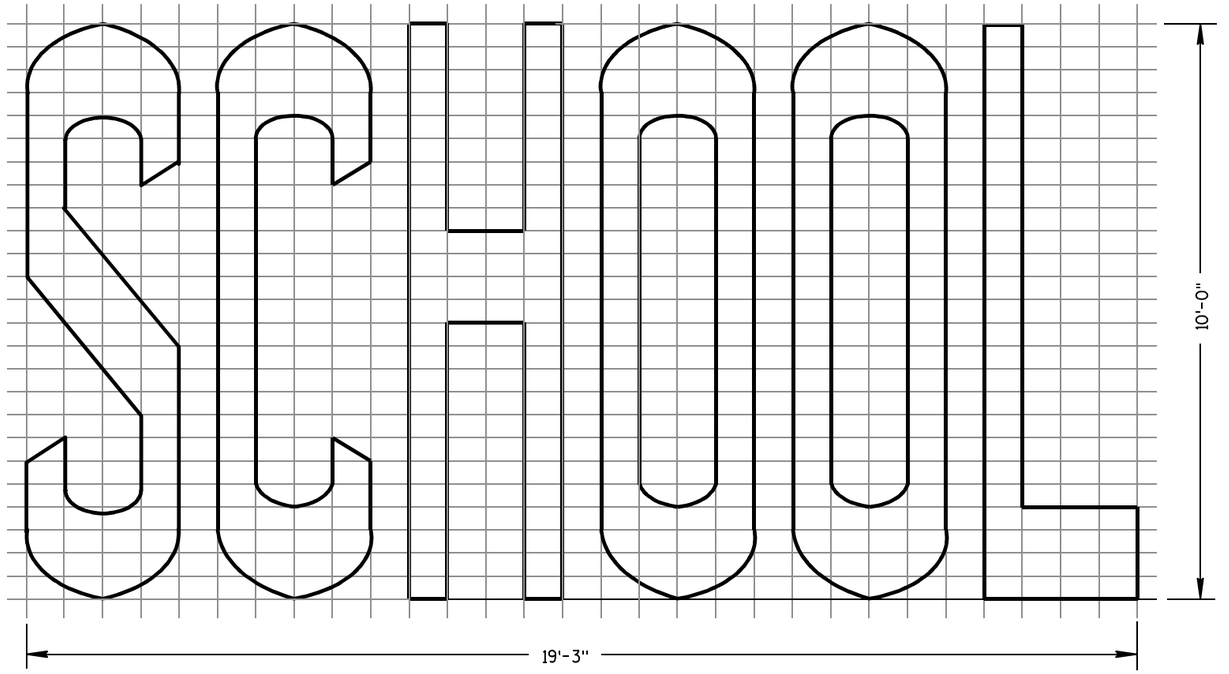
GENERAL NOTES

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

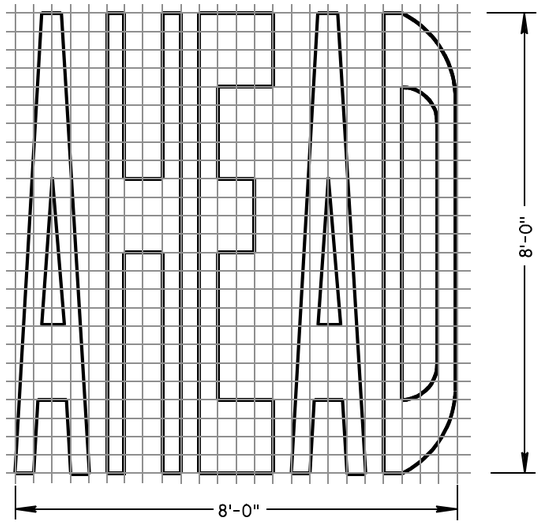
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES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

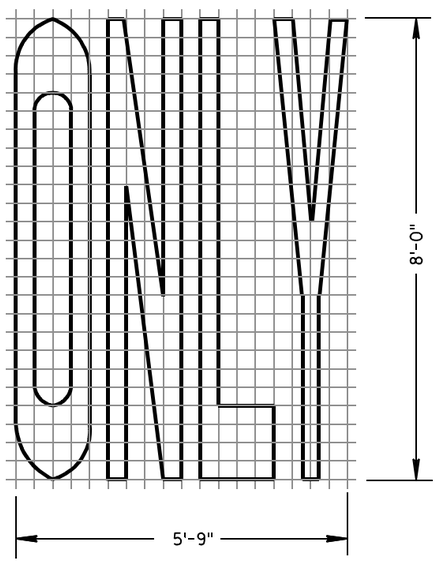


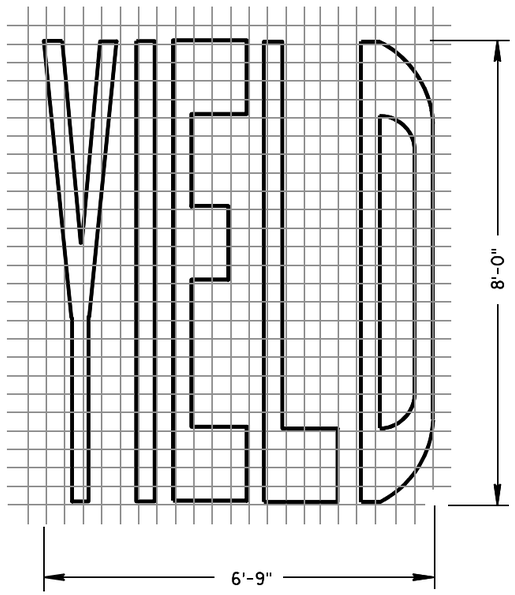


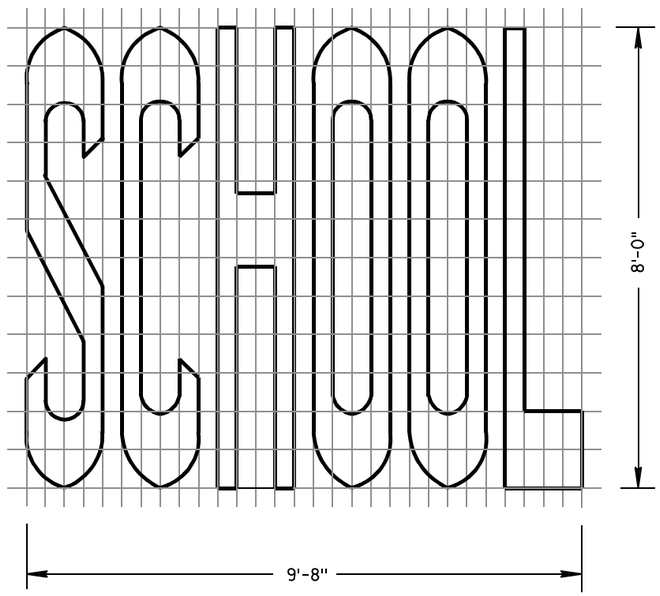


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 DATE — /S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER

FHWA

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S.D.D. 15 C 7-12b

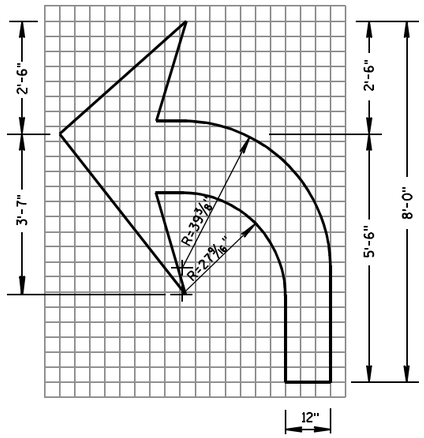
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S.D.D. 15 C 7-12b

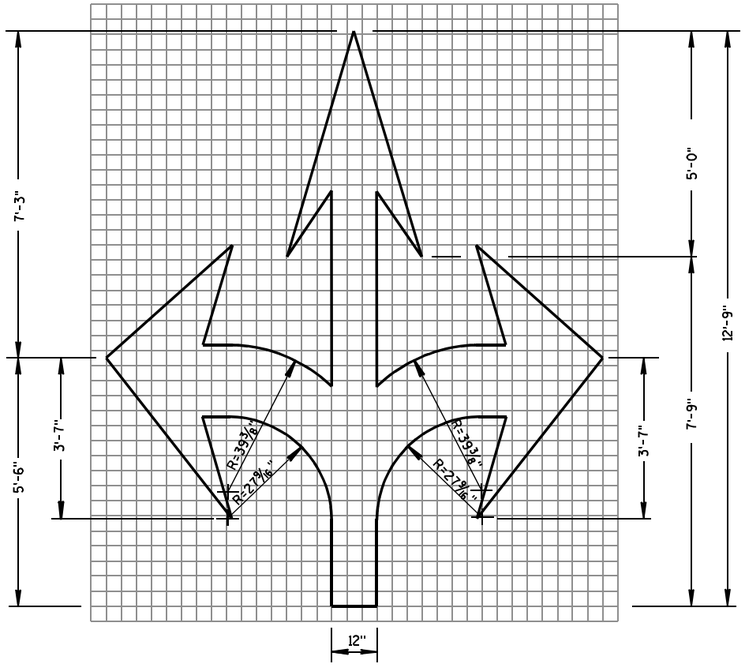
GENERAL NOTES

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

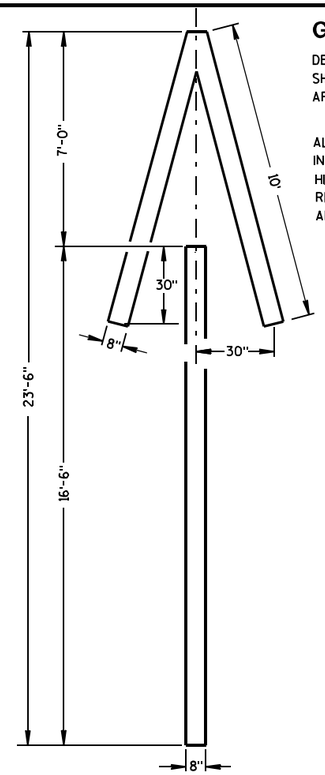
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES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



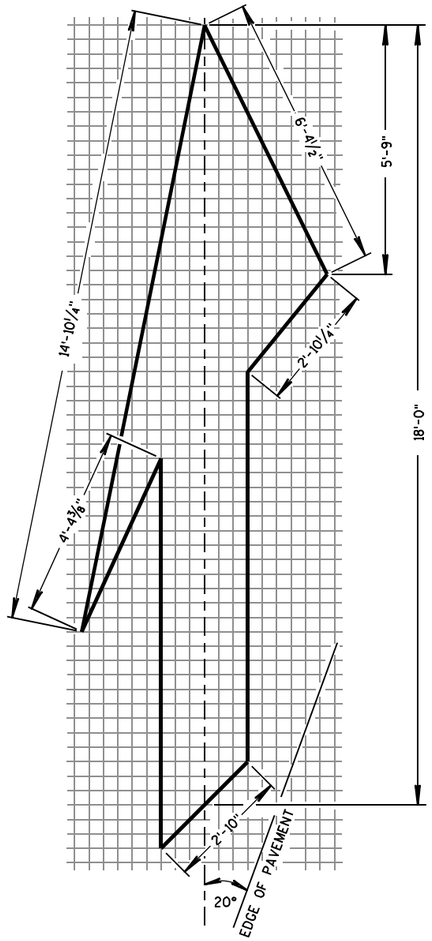
TYPE 2



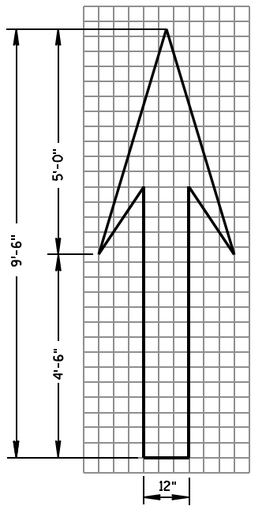
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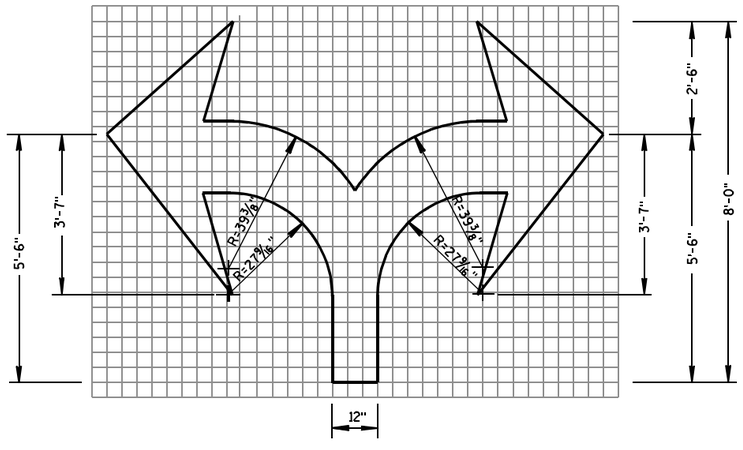
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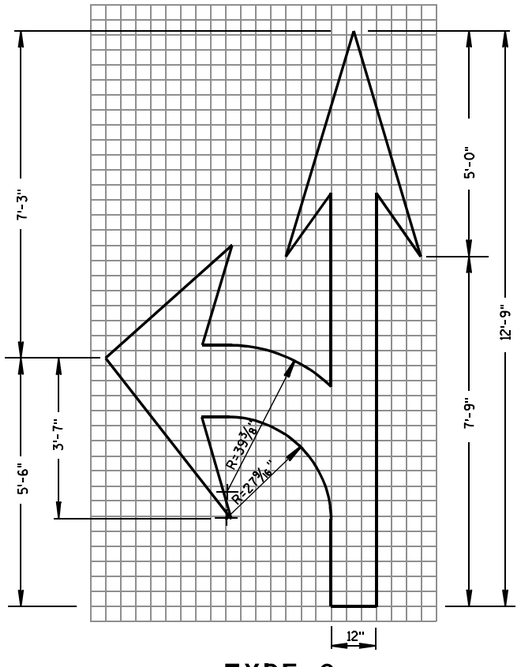
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

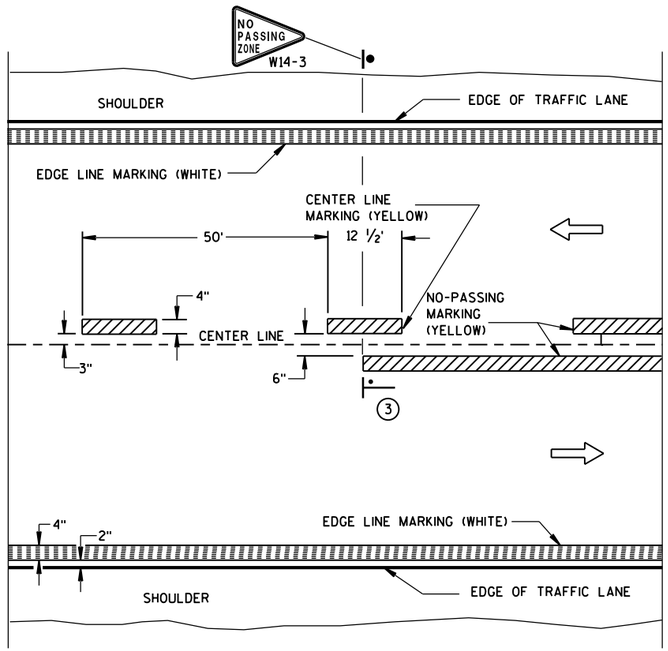
FHWA

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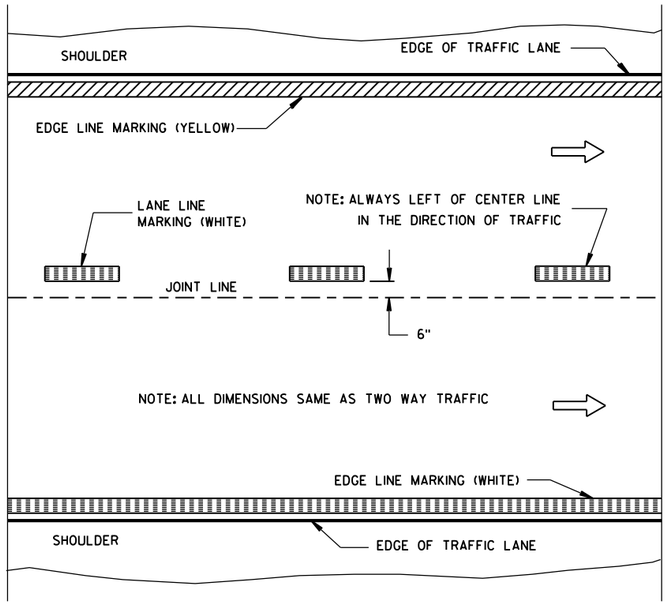
S.D.D. 15 C 7-12c

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S.D.D. 15 C 7-12c

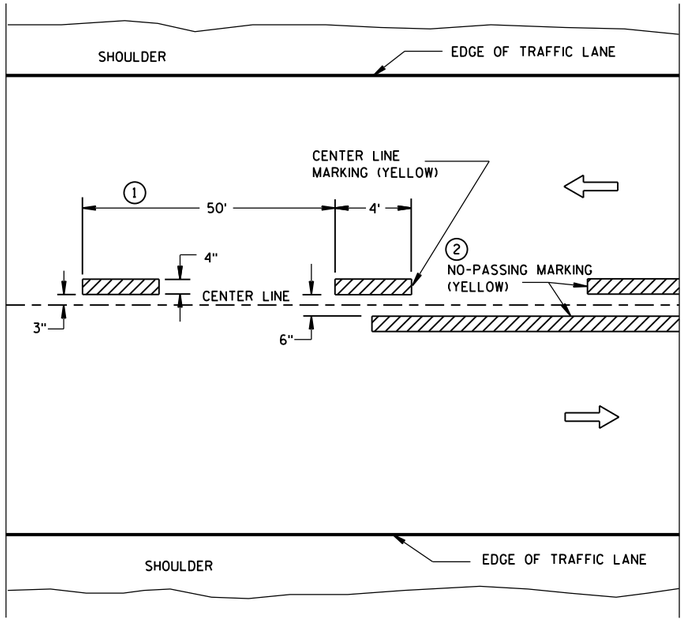


TWO WAY TRAFFIC

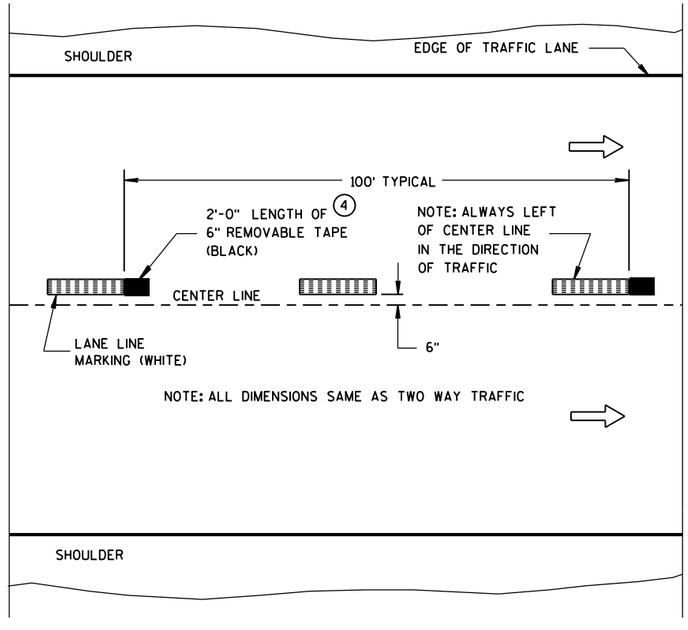


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

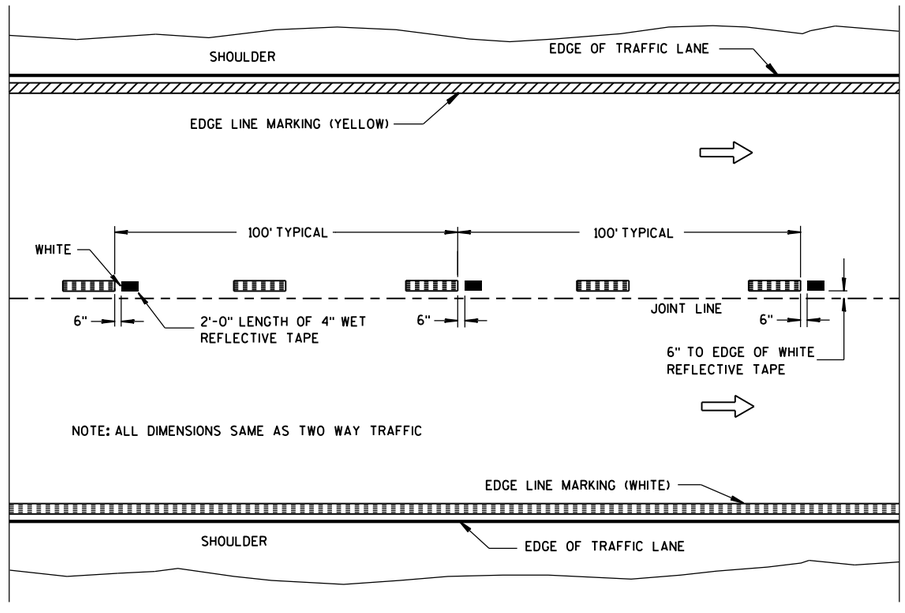
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



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

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013 DATE

/S/ Travis Feltes STATE TRAFFIC E

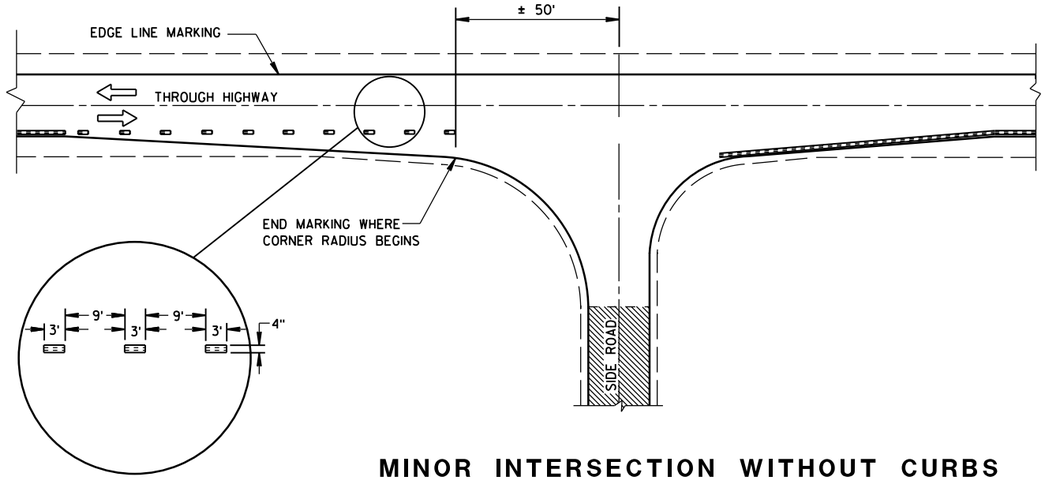
FHWA

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

6

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



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

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

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

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

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

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

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

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

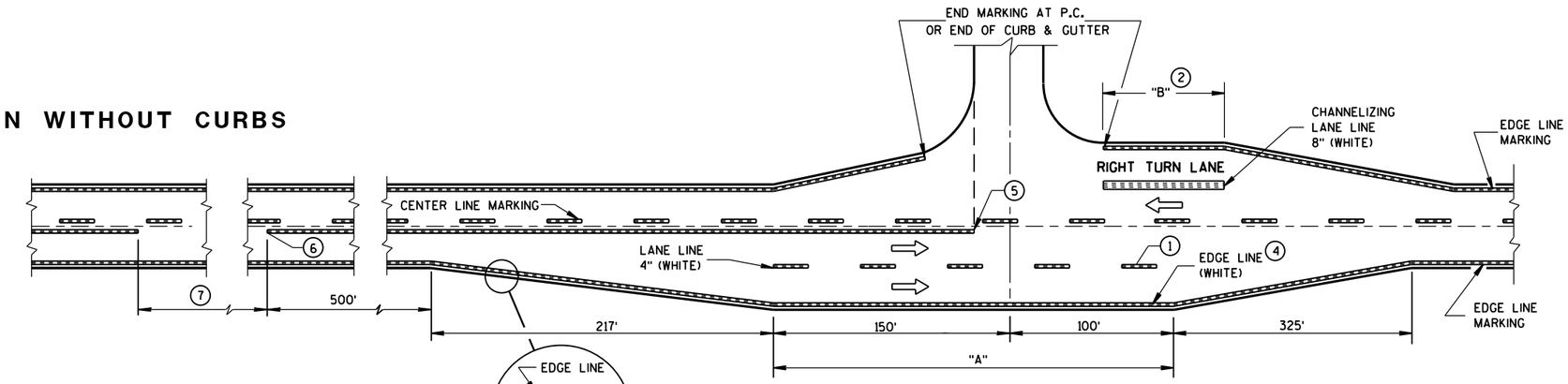
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

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

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

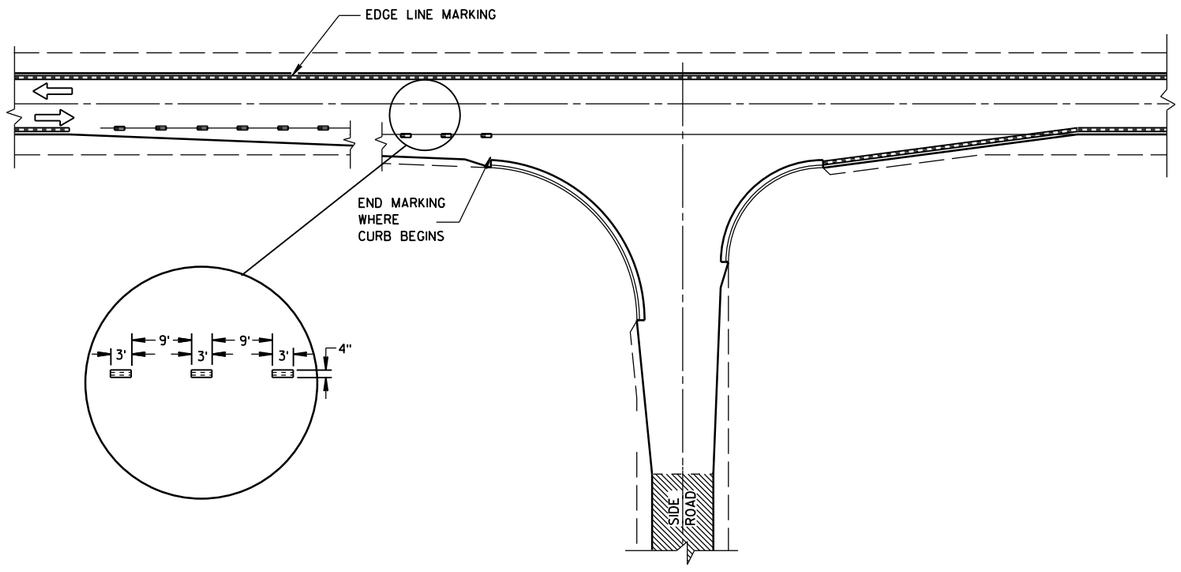
(7)

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



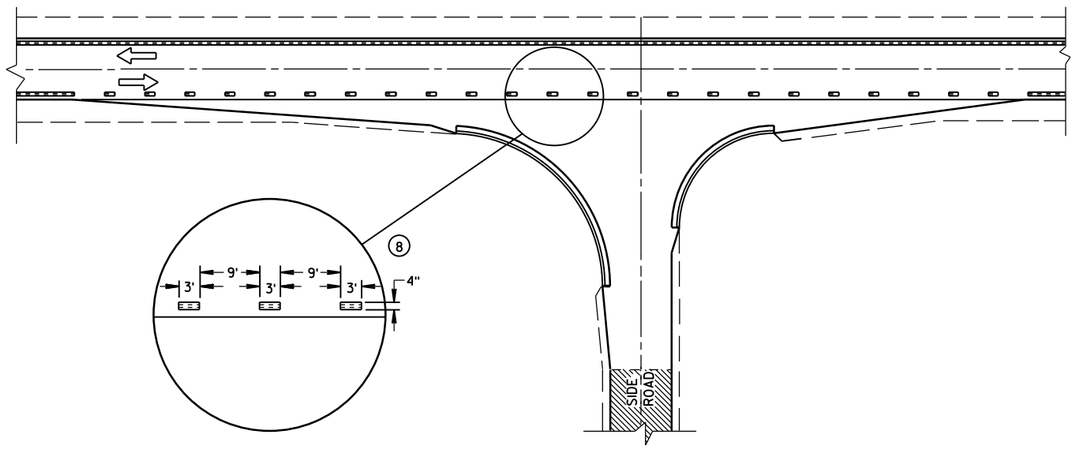
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

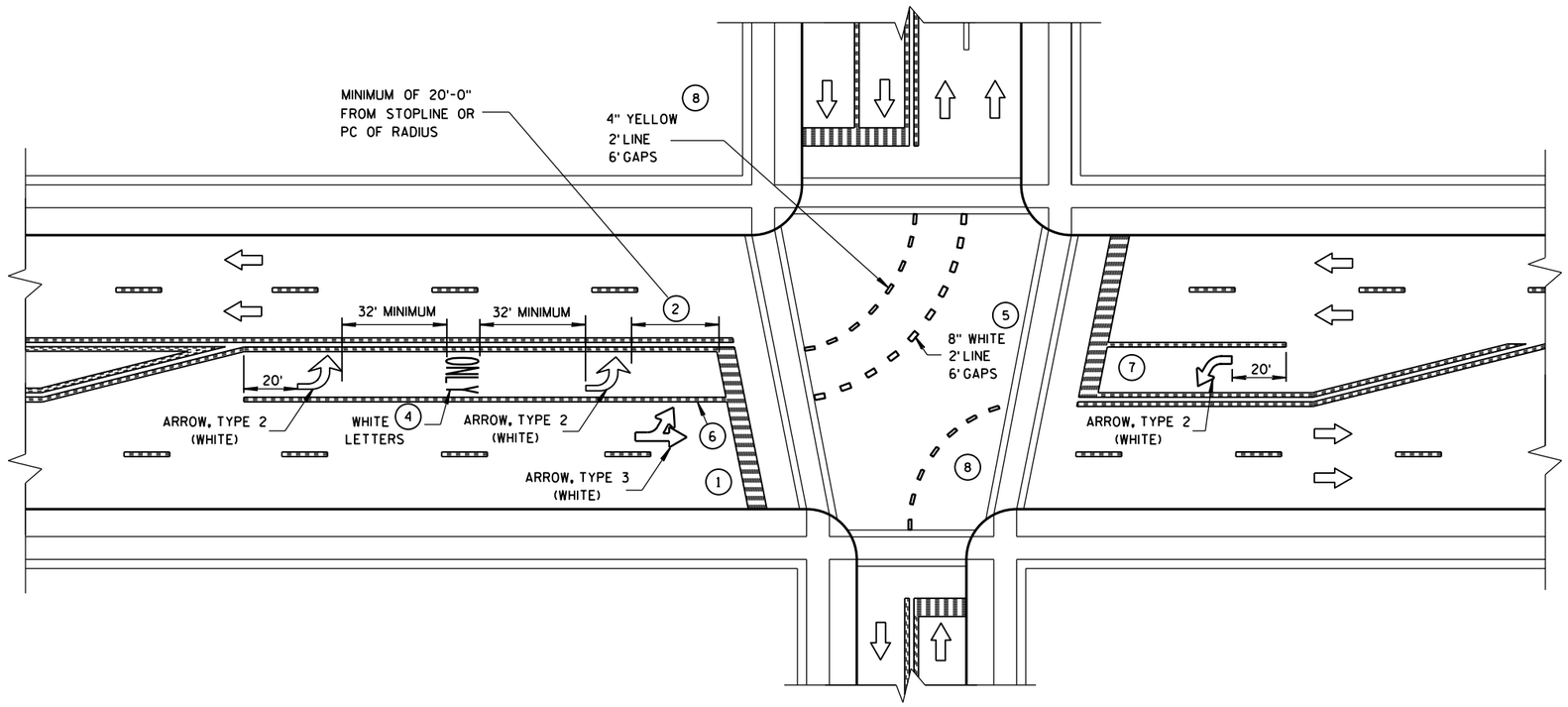
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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

6

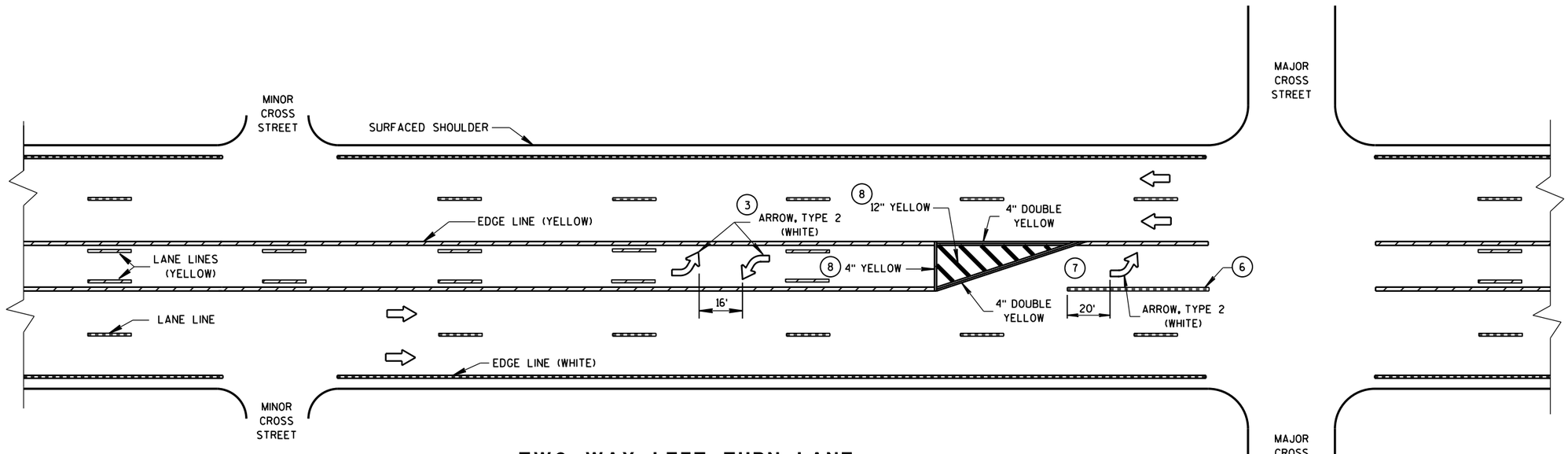
S.D.D. 15 C 8-16b



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)

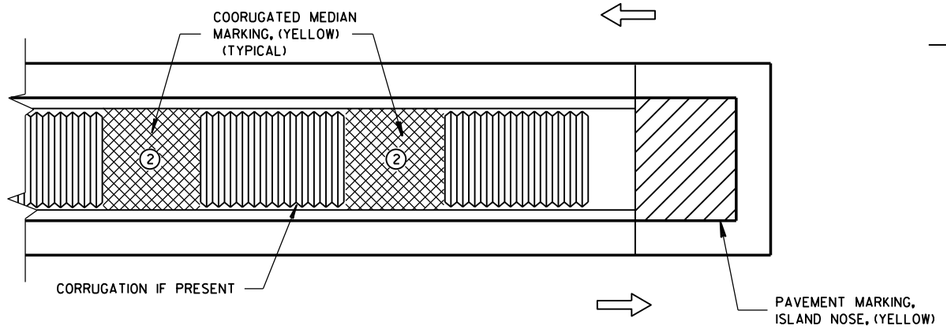
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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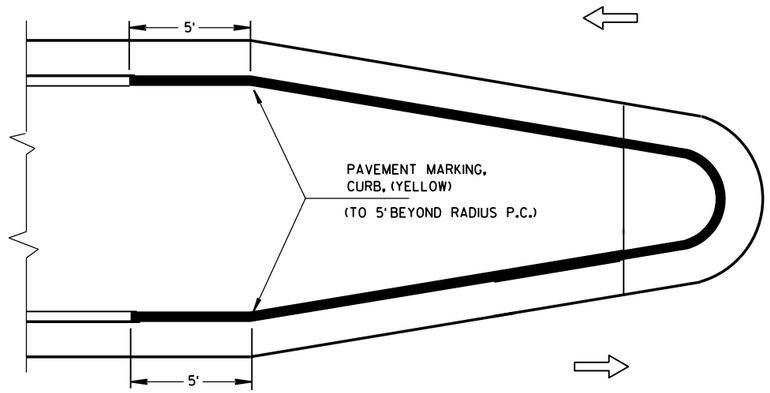
S.D.D. 15 C 8-16e

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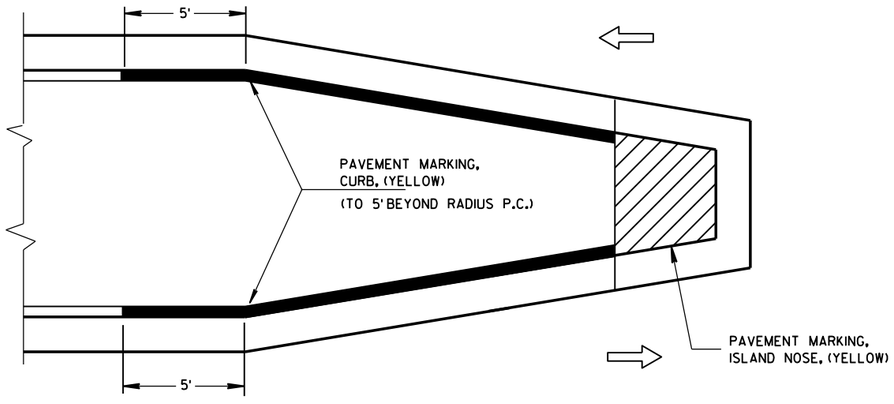
S.D.D. 15 C 8-16e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

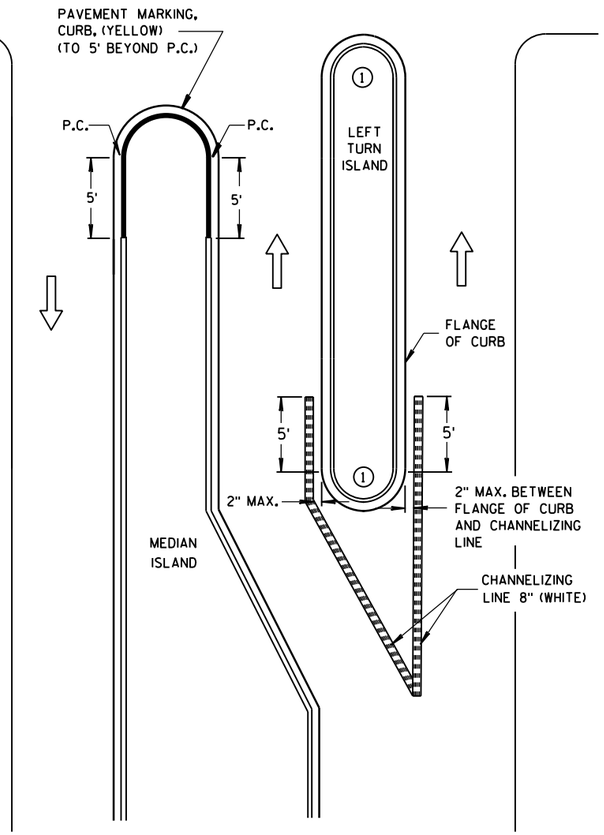


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

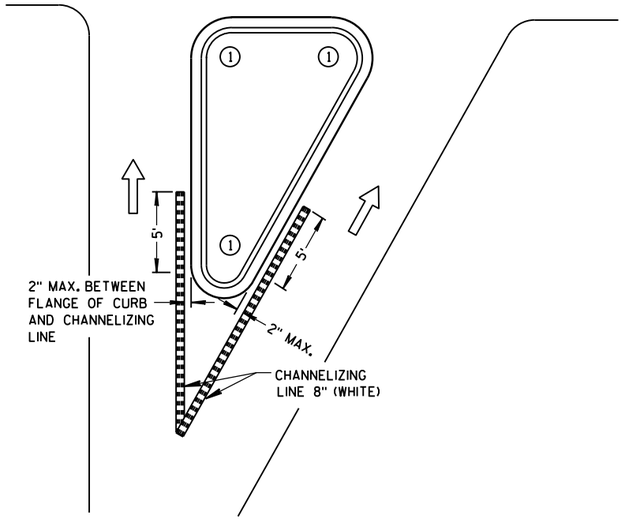


LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.

2. WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

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

PAVEMENT MARKING
(ISLANDS)

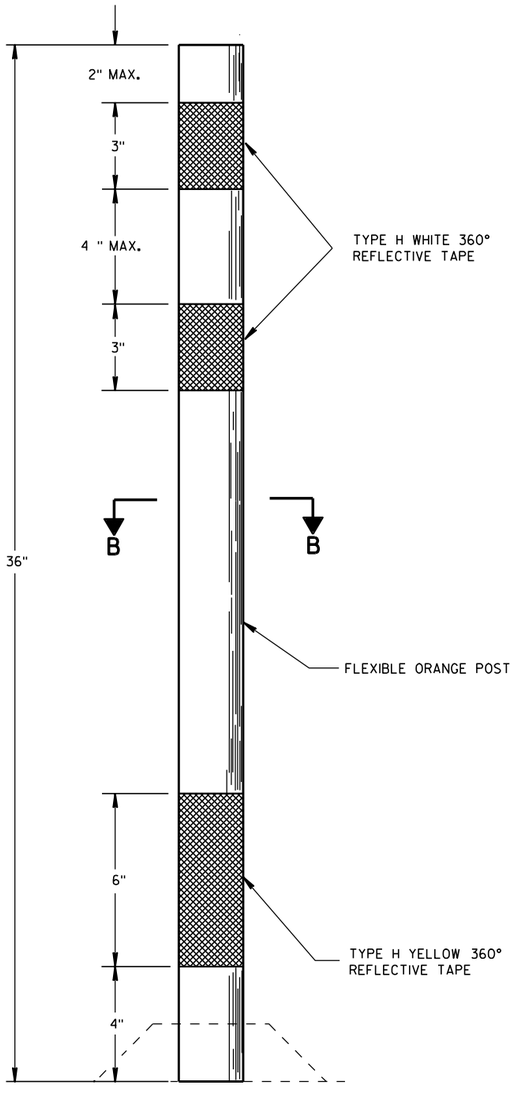
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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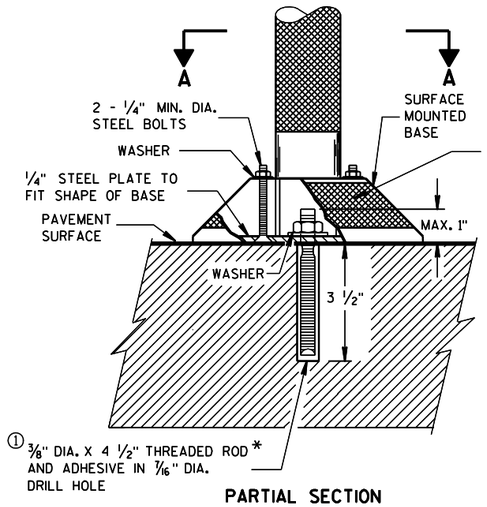
S.D.D. 15 C 8-16f

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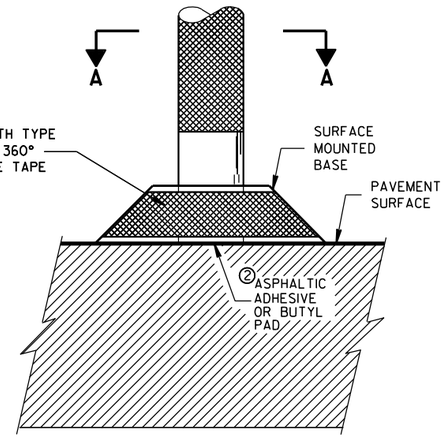
S.D.D. 15 C 8-16f



FLEXIBLE TUBULAR MARKER POST



PARTIAL SECTION TO SHOW BOLTS



POST BASES ON NEW OR EXISTING PAVEMENT

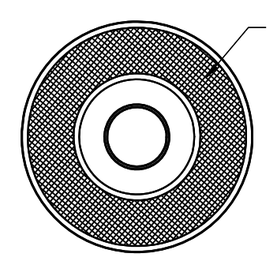
GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

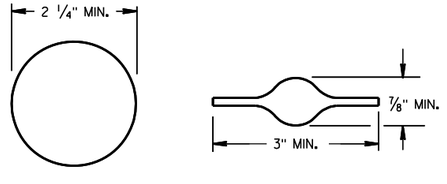
① THREADED ROD SHALL BE MACHINED DOWN TO 0.280 INCH DIA. 1 1/4 INCHES FROM THE TOP.

② THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



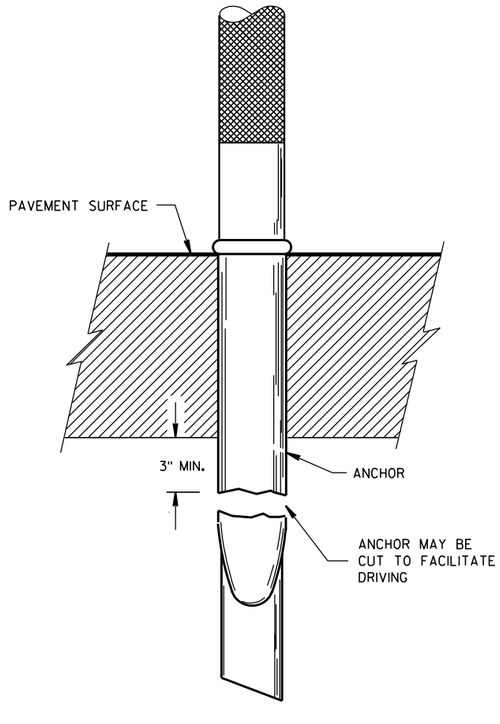
SECTION A-A

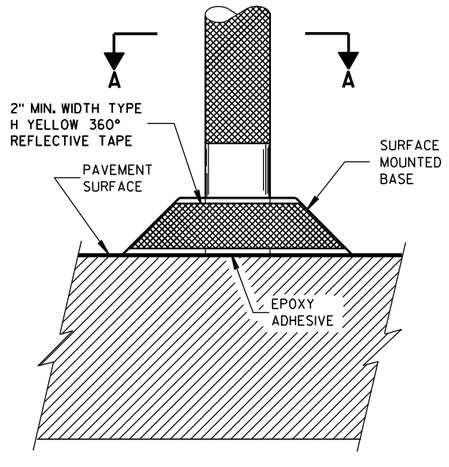
SURFACE MOUNTED BASE



SECTION B-B

ALTERNATIVE SHAPES





POST ANCHOR AND BASE ON PAVEMENT WHICH WILL BE REMOVED

FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2/17/94 DATE

/S/ Chester J. [illegible] DIRECTOR, OFFICE O

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LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

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

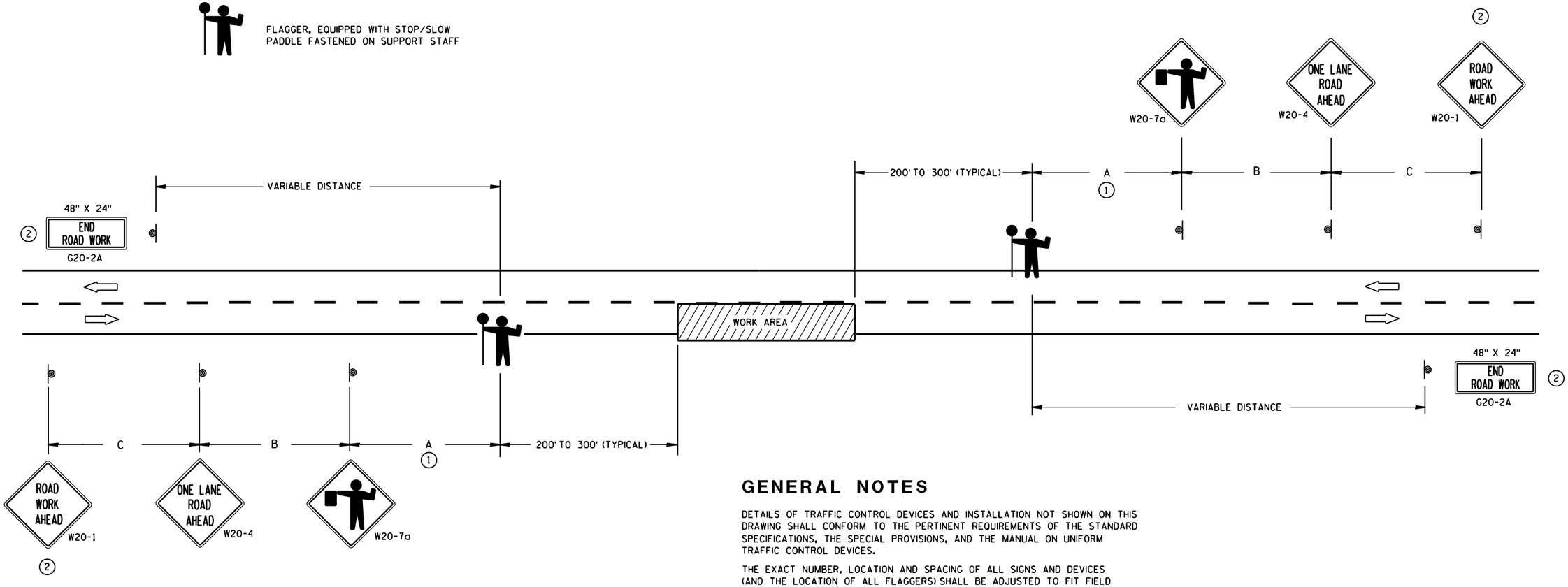
SIGN SPACING TABLE

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



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

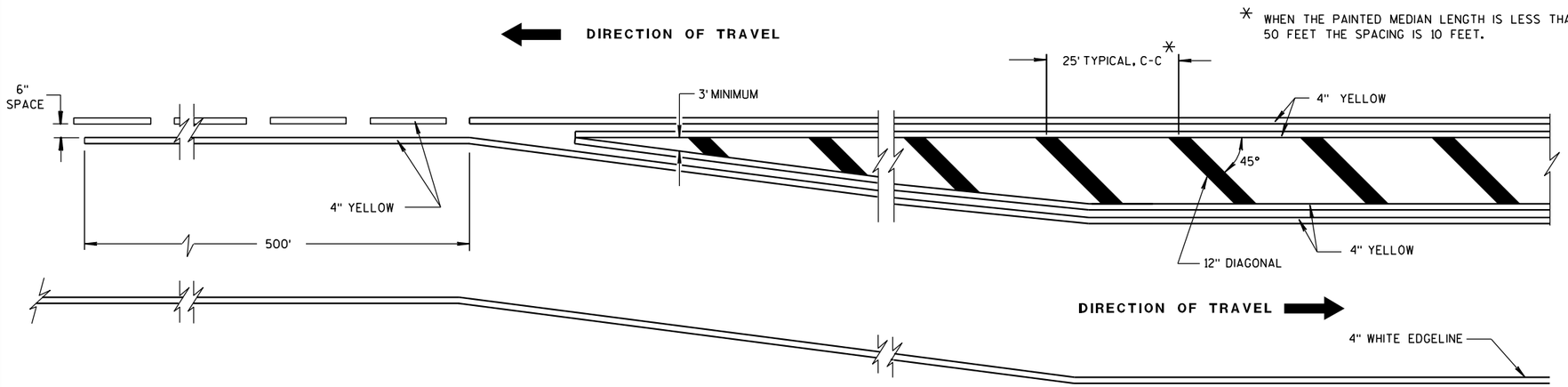
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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S.D.D. 15 C 12-4

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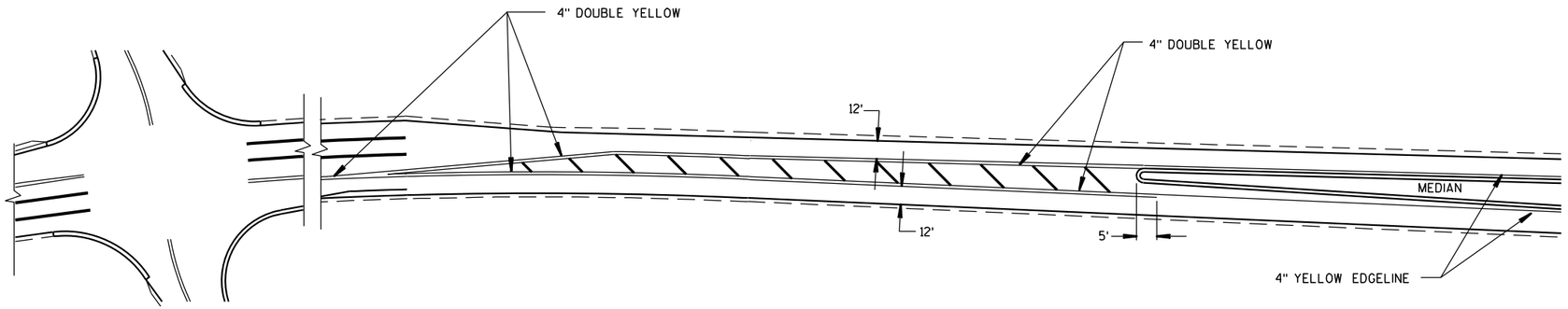
S.D.D. 15 C 12-4



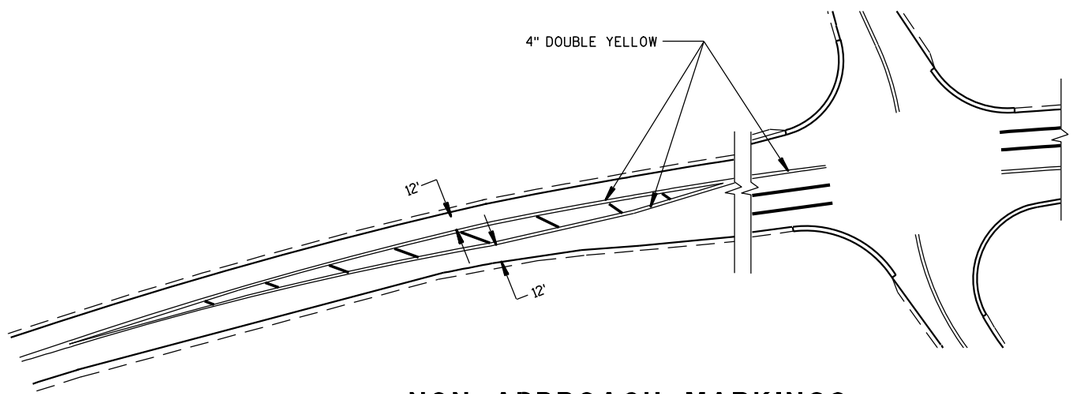
MEDIAN ISLAND DETAIL

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

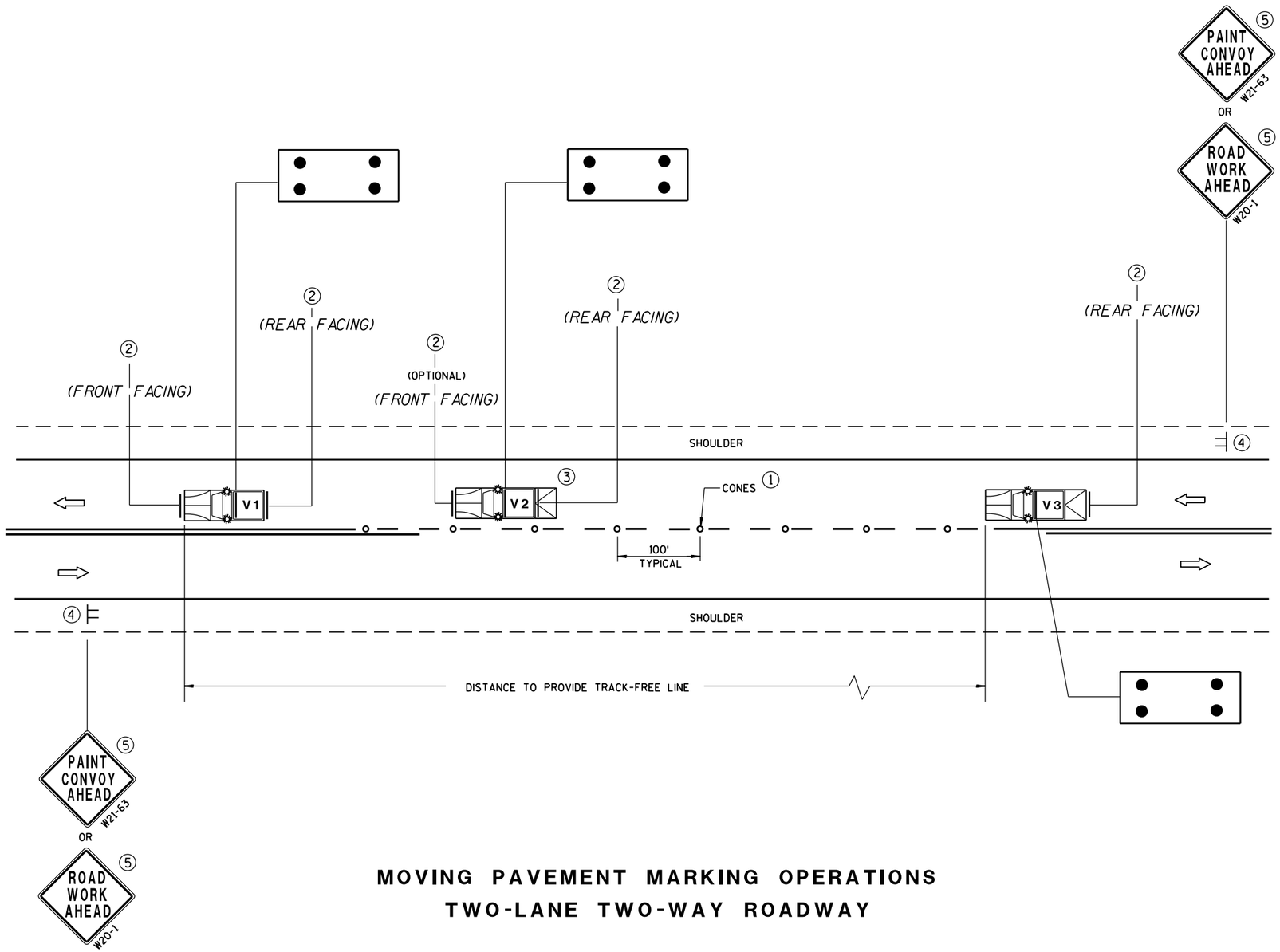
MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-5-09 DATE	/S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER
FHWA	175 IGN

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S.D.D. 15 C 18-3

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S.D.D. 15 C 18-3



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

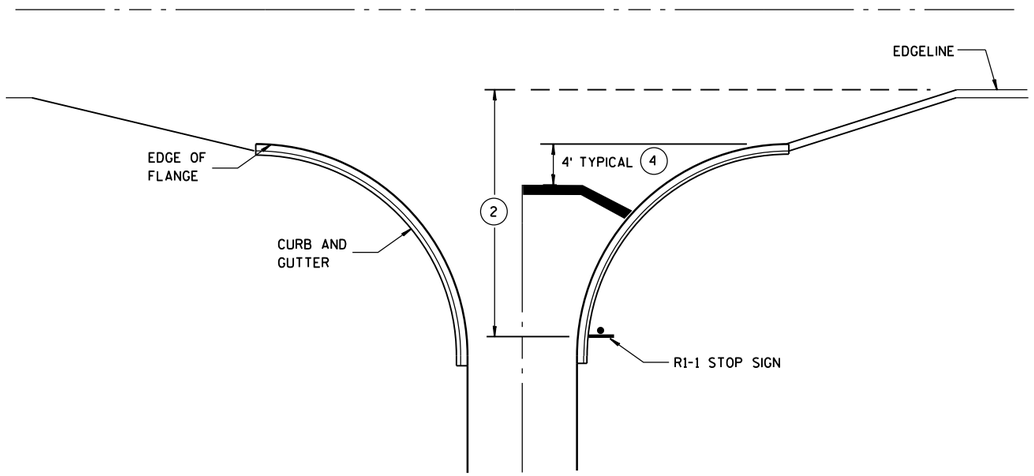
- **V1** LEAD VEHICLE
- **V2** SHADOW VEHICLE
- **V3** TRAIL VEHICLE WITH TMA
- **TMA** TRUCK-MOUNTED ATTENUATOR
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- CONES
- FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

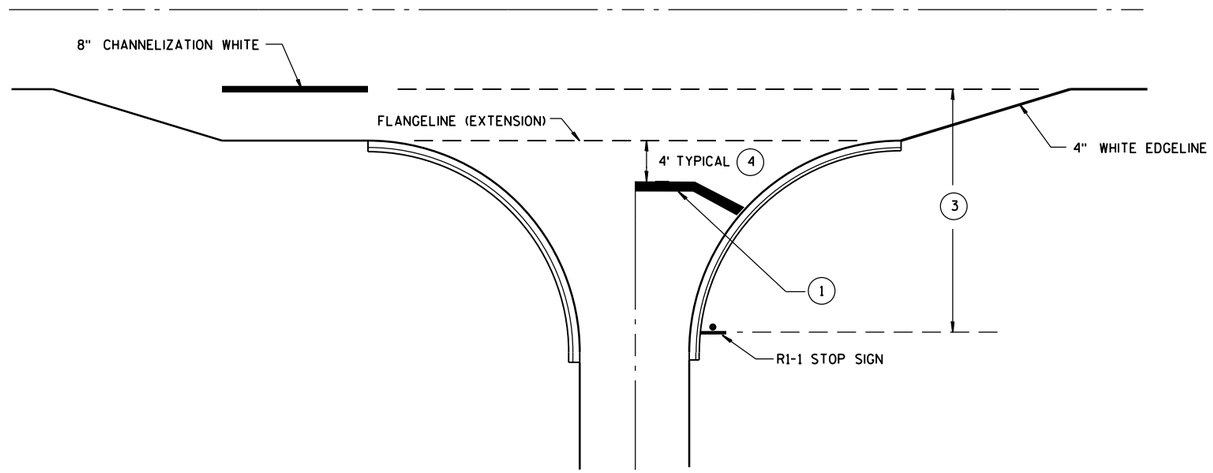
MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
5/3/2013 DATE	/S/ Travis Feltes STATE TRAFFIC E
FHWA	

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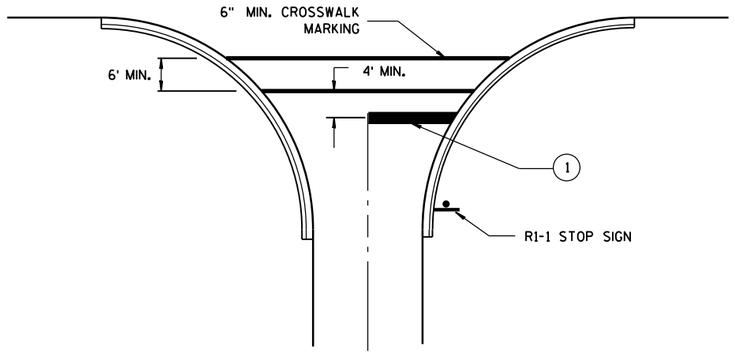
S.D.D. 15 C 19-2a



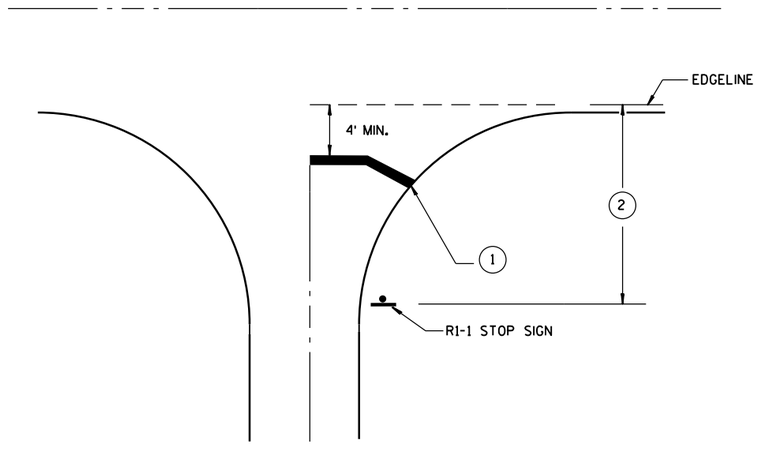
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

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

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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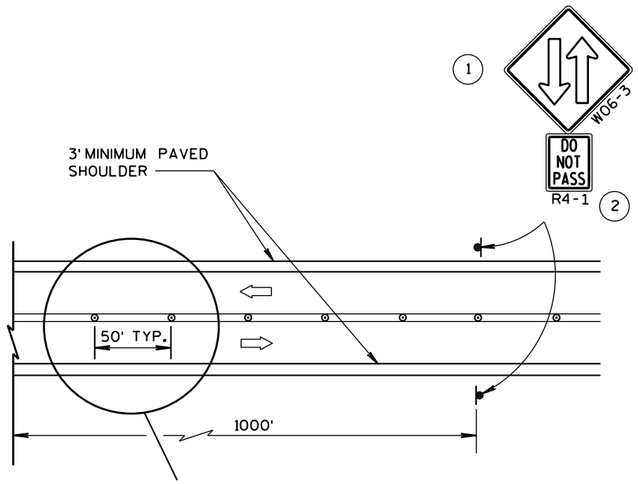
4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

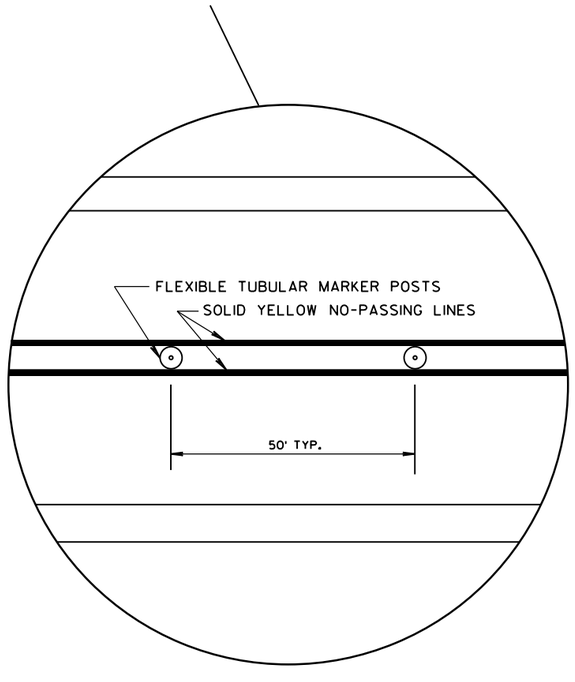
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S.D.D. 15 C 33-1



TWO LANE, TWO WAY OPERATION



LEGEND

- SIGN ON PERMANENT SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC

GENERAL NOTES

ALL SIGNS ARE 48"x48" UNLESS OTHERS NOTED.

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

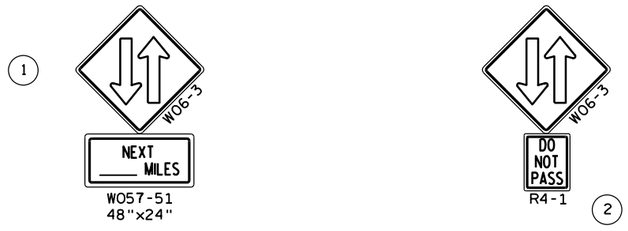
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

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

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

A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC AT 50-FOOT SPACING.

COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW.



THE W06-3 WITH THE W057-51 SHALL BE LOCATED 200 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND/OR 500 FEET BEYOND ANY SIDEROAD. THE W06-3 WITH THE R4-1 SHALL BE LOCATED 1000 FEET BEYOND THE W06-3 AND THE W057-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN W06-3 SIGNS.

(2) CONVENTIONAL: 24"x30"
FREEWAY AND EXPRESSWAY: 36"x48"

TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 DATE
/S/ Travis Feltes STATE TRAFFIC ENGINEE
SIGN
FHWA

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S.D.D. 15 D 6-3

GENERAL NOTES

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

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

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

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

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

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

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

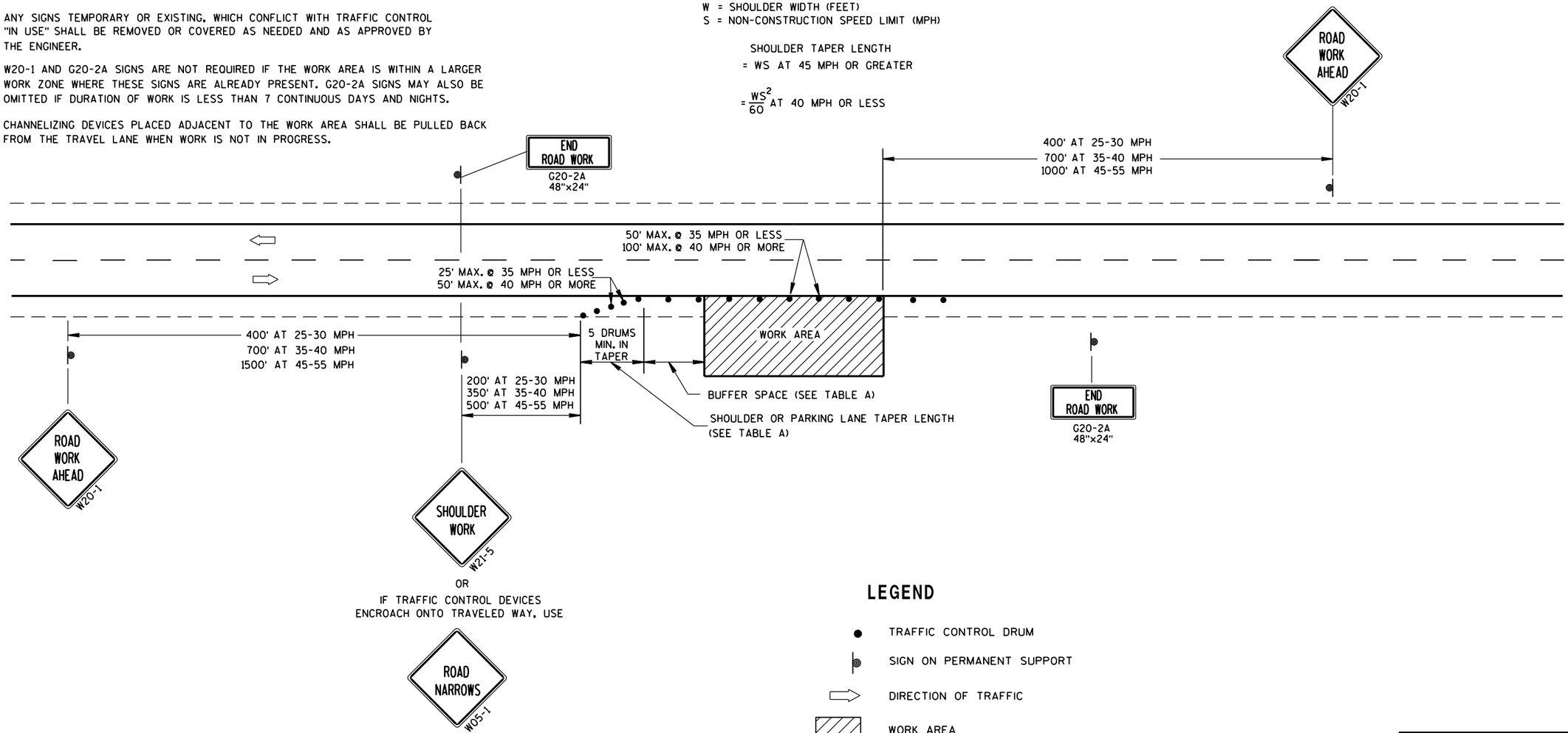
TABLE A

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

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

SHOULDER TAPER LENGTH
= WS AT 45 MPH OR GREATER

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



LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

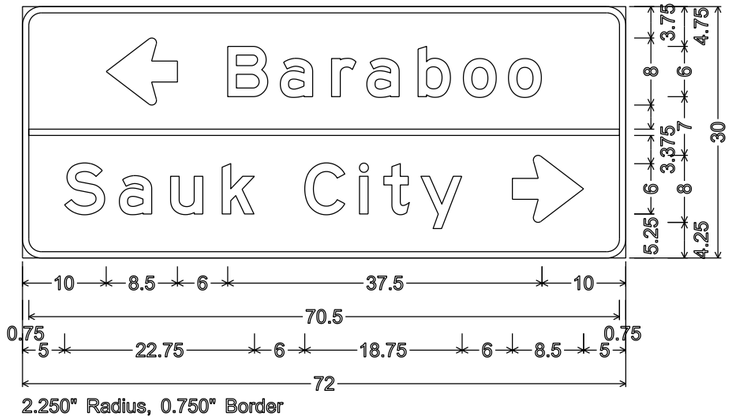
8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

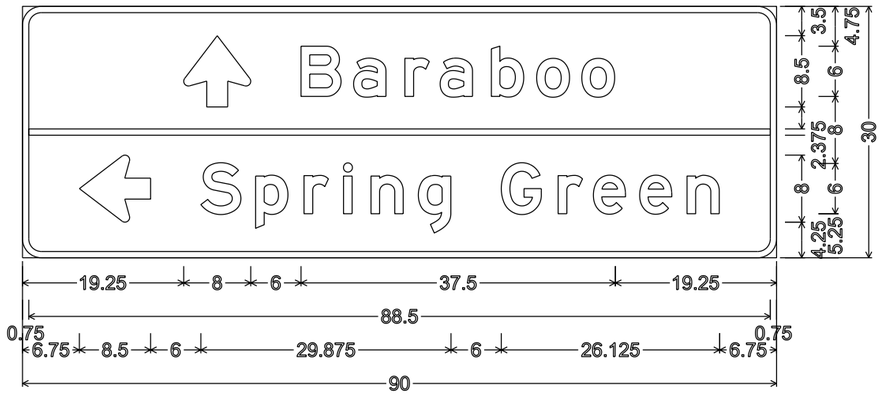
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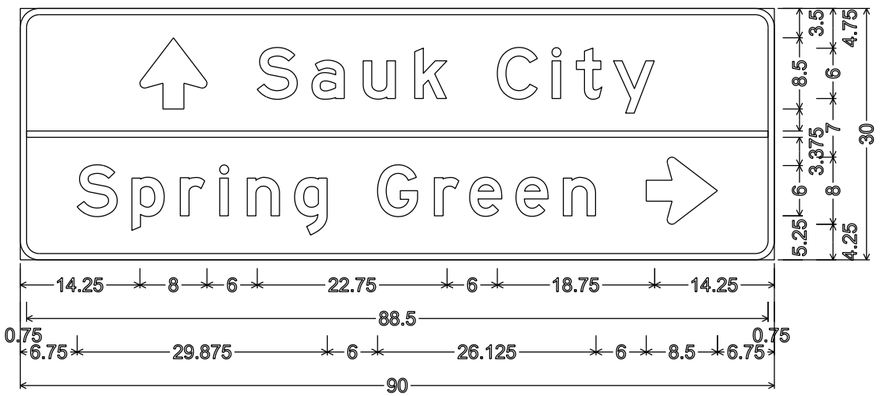
S.D.D. 15 D 28-2



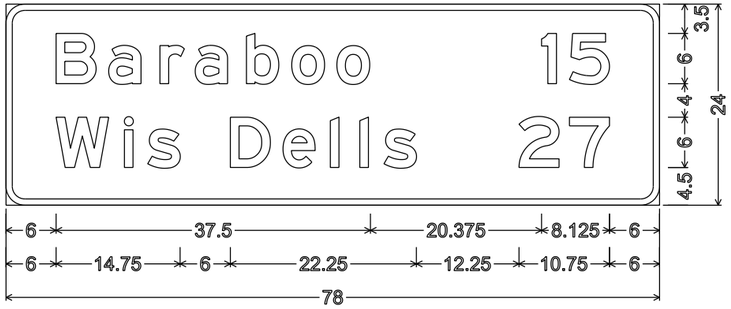
2.250" Radius, 0.750" Border



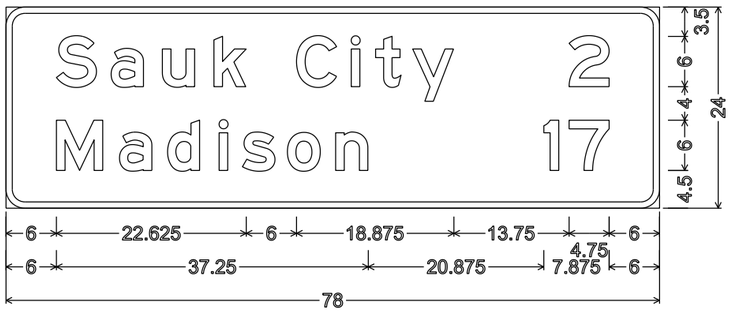
2.250" Radius, 0.750" Border



2.250" Radius, 0.750" Border



2.250" Radius, 0.750" Border



2.250" Radius, 0.750" Border

NOTES

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

7

7

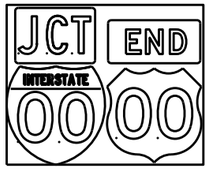
PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	PERMANENT SIGNING	SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_d1\1562c814.dgn PLOT DATE : 14-AUG-2014 14:11 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 20.342609:1.000000 WISDOT/CADDS SHEET 42

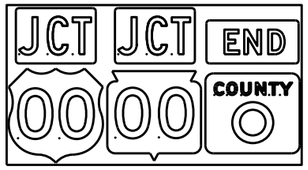
TYPICAL ASSEMBLIES



J1-1



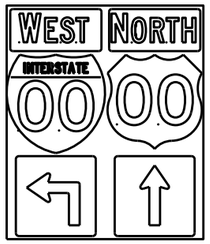
J1-2



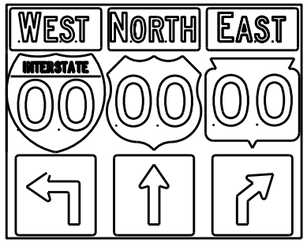
J1-3



J2-1



J2-2

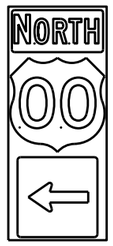


J2-3

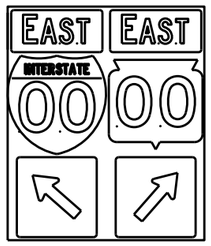


JV

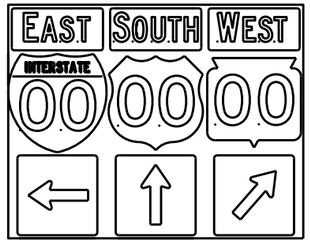
(Typical Vertical J-Assembly
See Note 10 and 11)



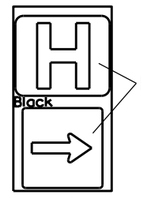
J3-1



J3-2



J3-3

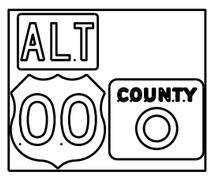


Blue Background

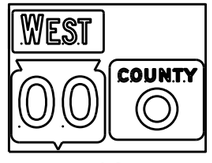
JH-1



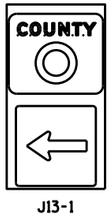
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

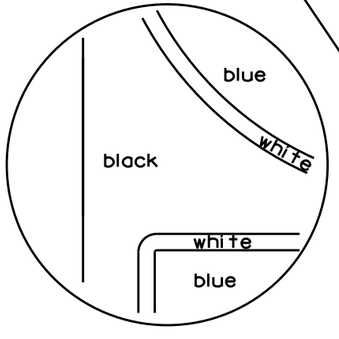


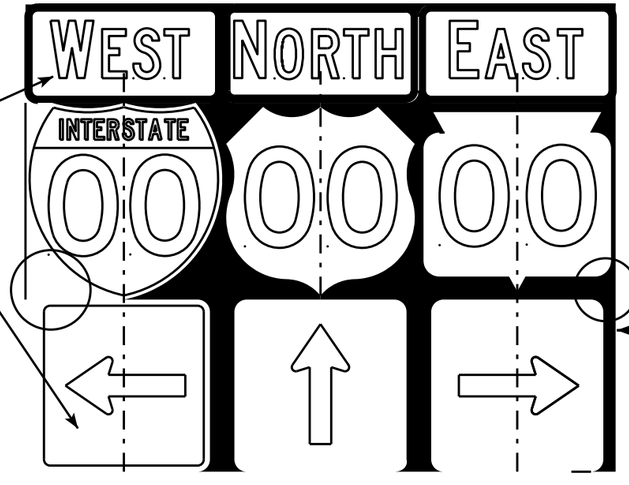
J23-1

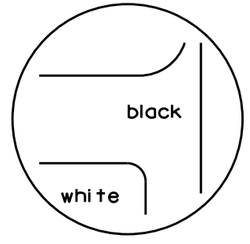


J22-1

[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.

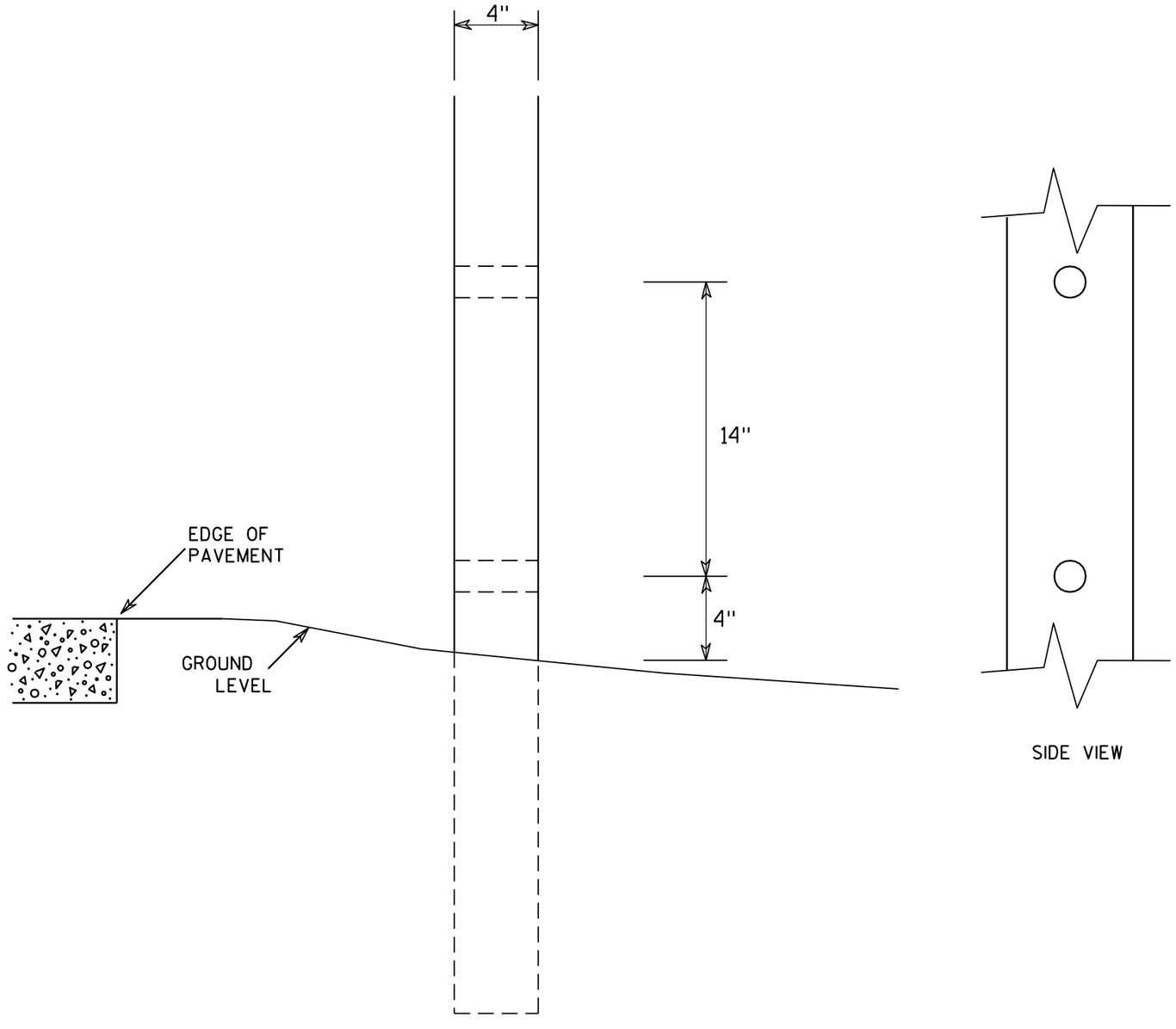
ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

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



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

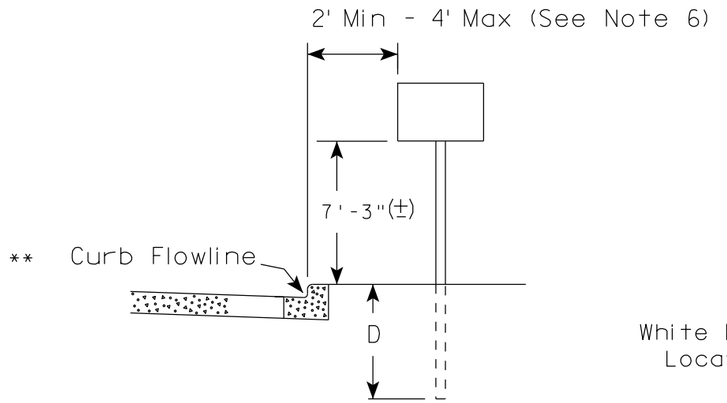
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

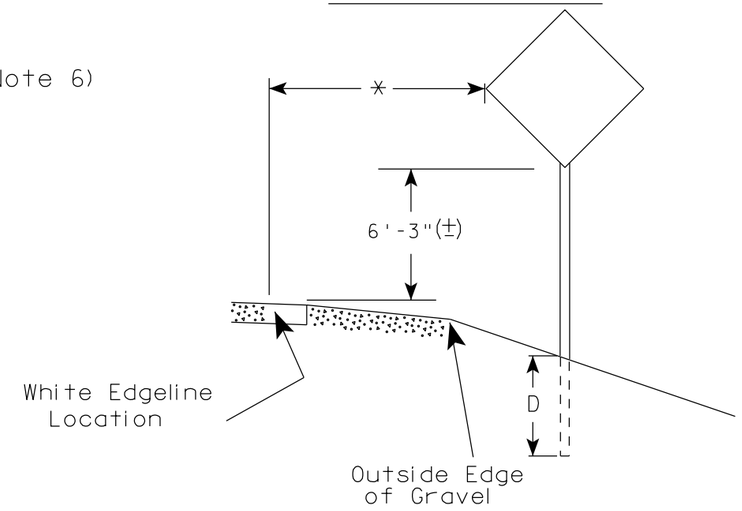
DATE 3/27/97 PLATE NO. A4-11.2

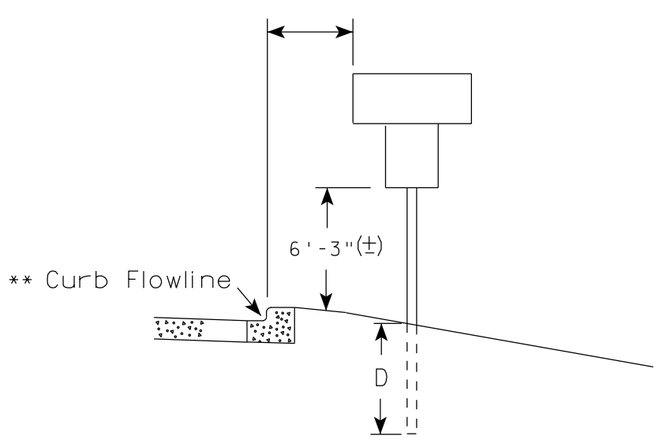
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 182	E

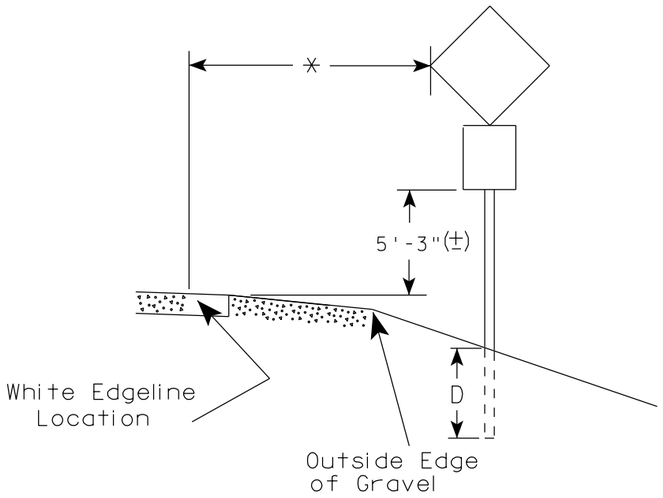
URBAN AREA



RURAL AREA (See Note 2)







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

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

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, 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

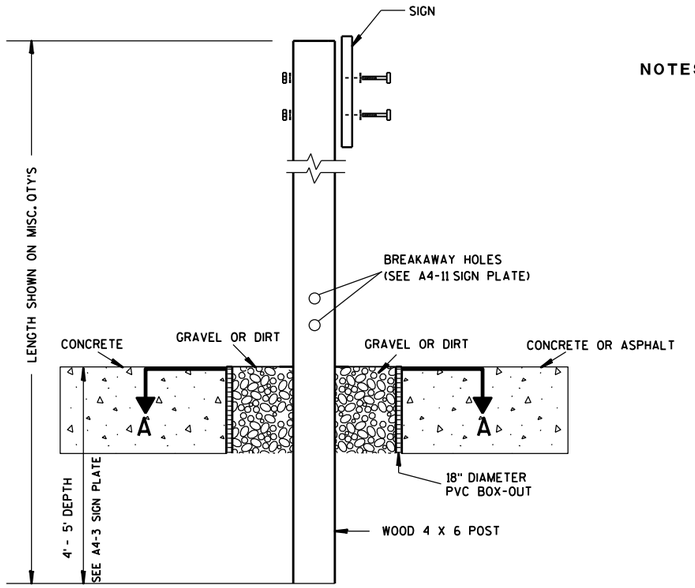
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/14 PLATE NO. A4-3.19

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

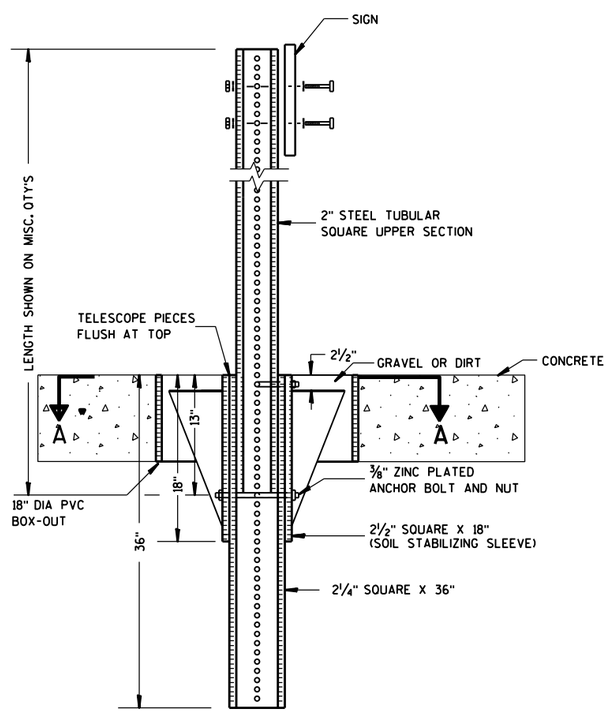
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43.DGN PLOT DATE : 12-NOV-2014 14:03 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 99.237937:1.000000 WISDOT/CADDS SHEET 42



ELEVATION VIEW

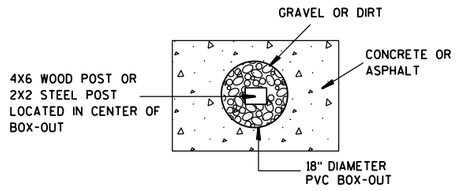
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

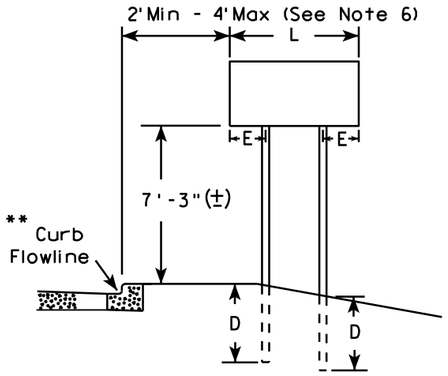
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

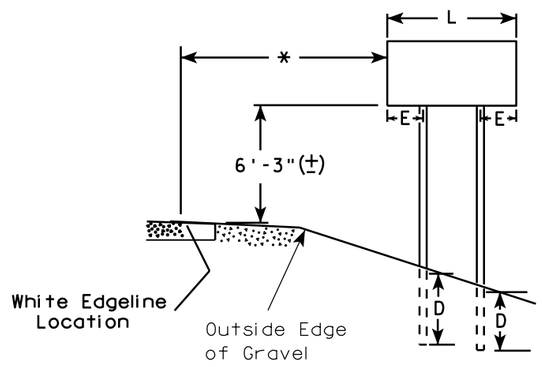
DATE 1/27/14 PLATE NO. A4-3B.1

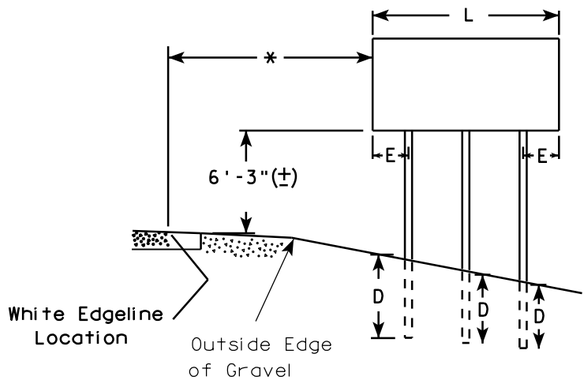
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

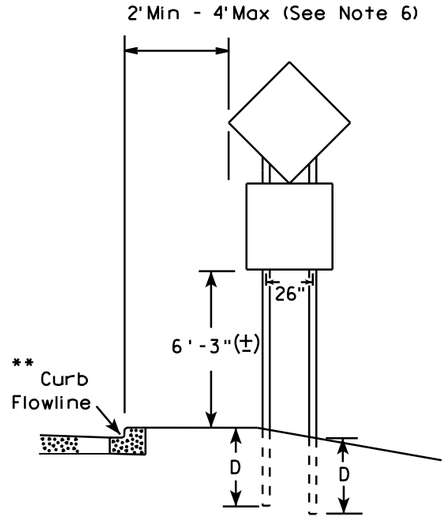
URBAN AREA



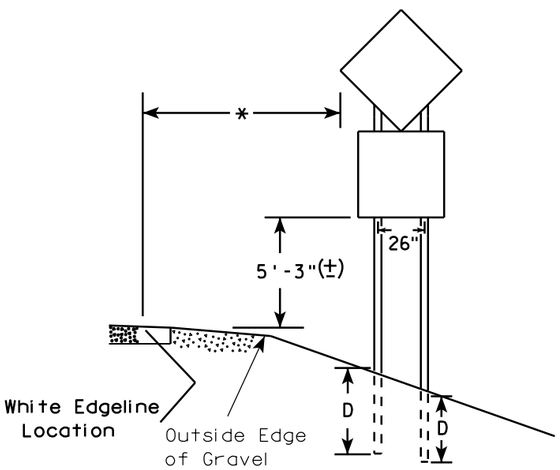
RURAL AREA (See Note 3)







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 or less than 20 S.F. in area.

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

***

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

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

POST EMBEDMENT DEPTH

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

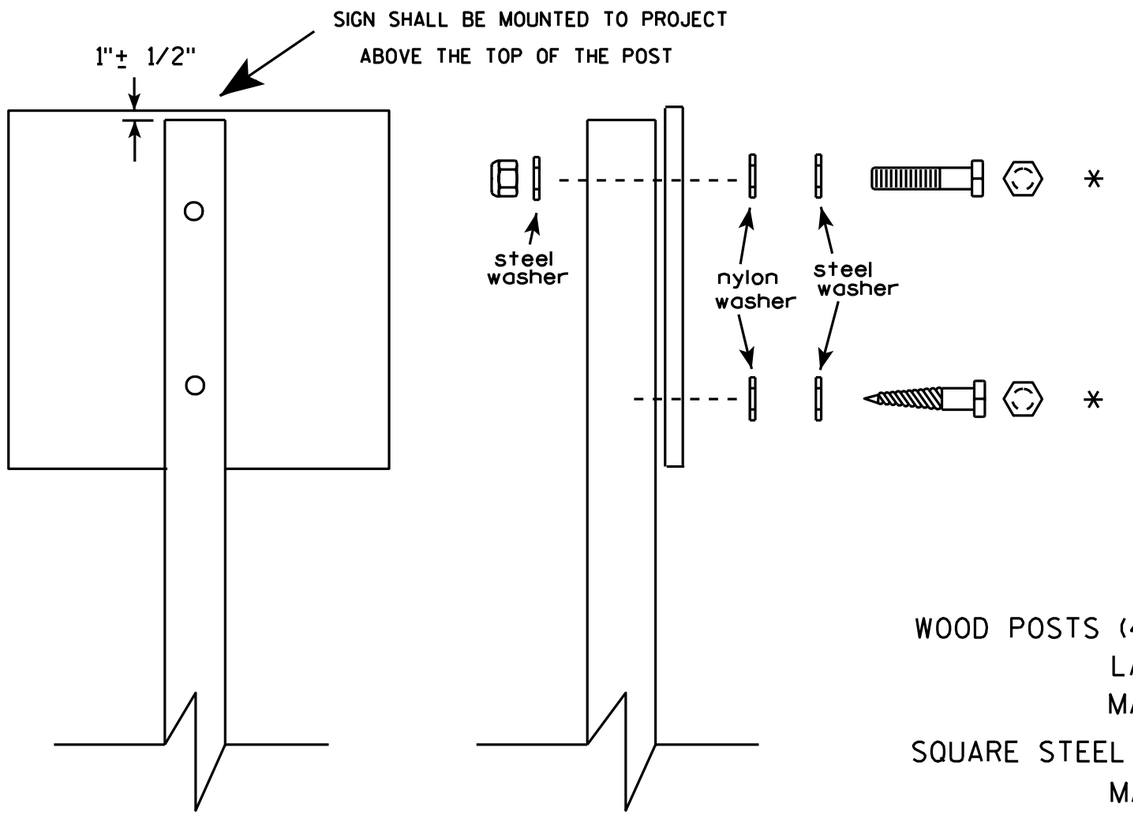
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/14 PLATE NO. A4-4 13 185

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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

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

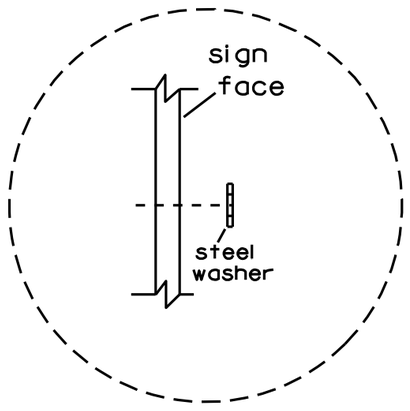
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

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

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

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



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

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

7

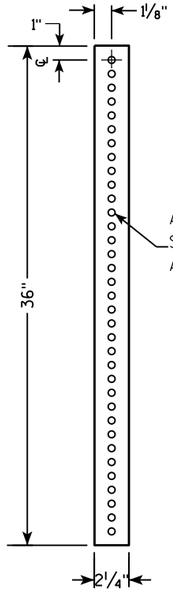
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PROJECT NO:

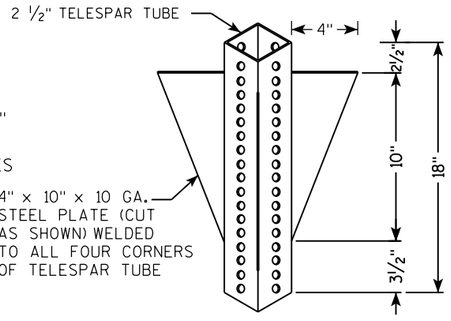
SHEET NO: 186 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

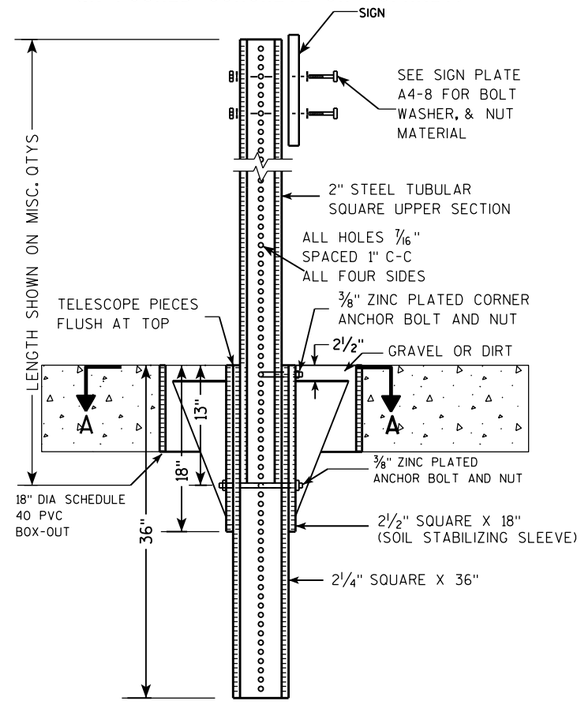
2 ¼ " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



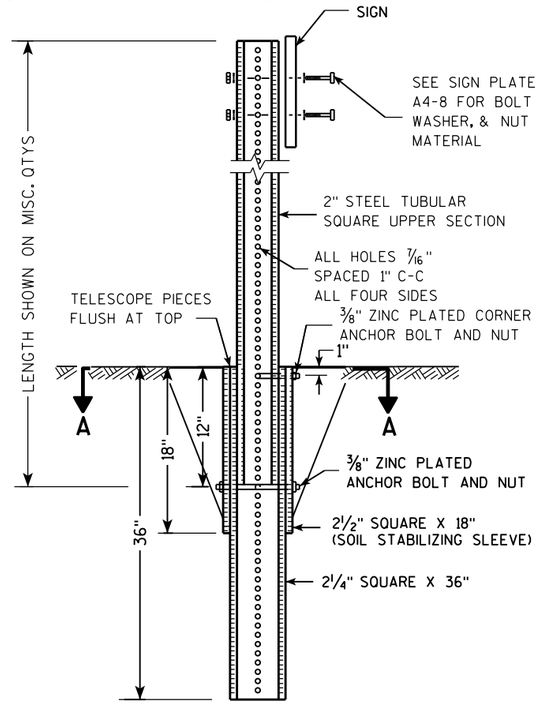
2 ½ " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

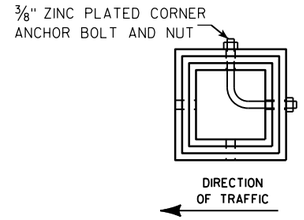


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

TUBULAR STEEL
SIGN POST
A4-9

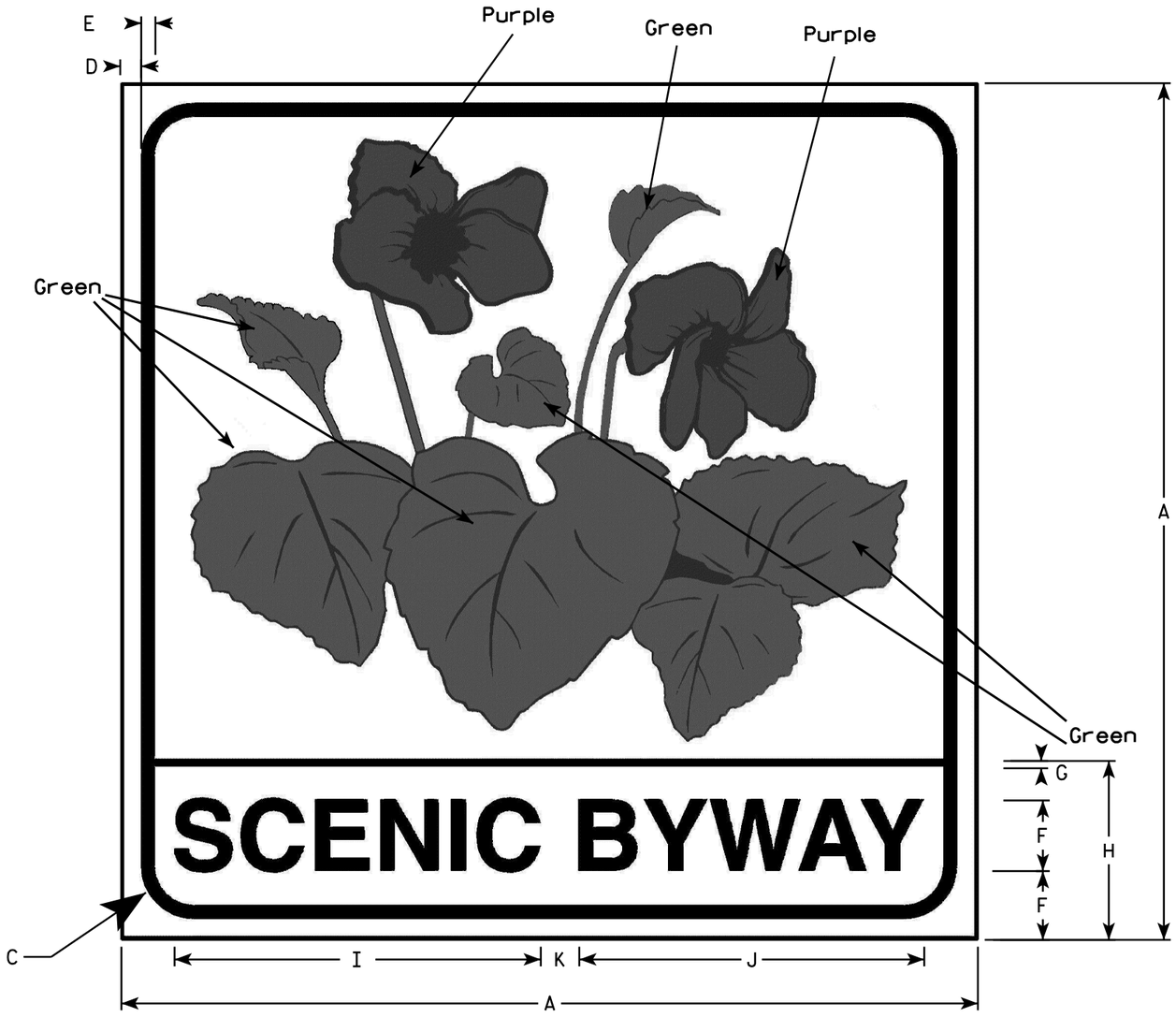
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 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



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 Except as noted
   Border of Leaves and Flowers is Black
3. Message Series - Special
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. Contact WisDOT with any questions.

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	5/8	3/8	2	1/4	5	10 1/4	9 5/8	1 1/8																4.0	.36
3																												
4	36		4	7/8	5/8	3	1/4	7 1/2	15 3/8	14 1/2	1 5/8																9.0	.81
5																												

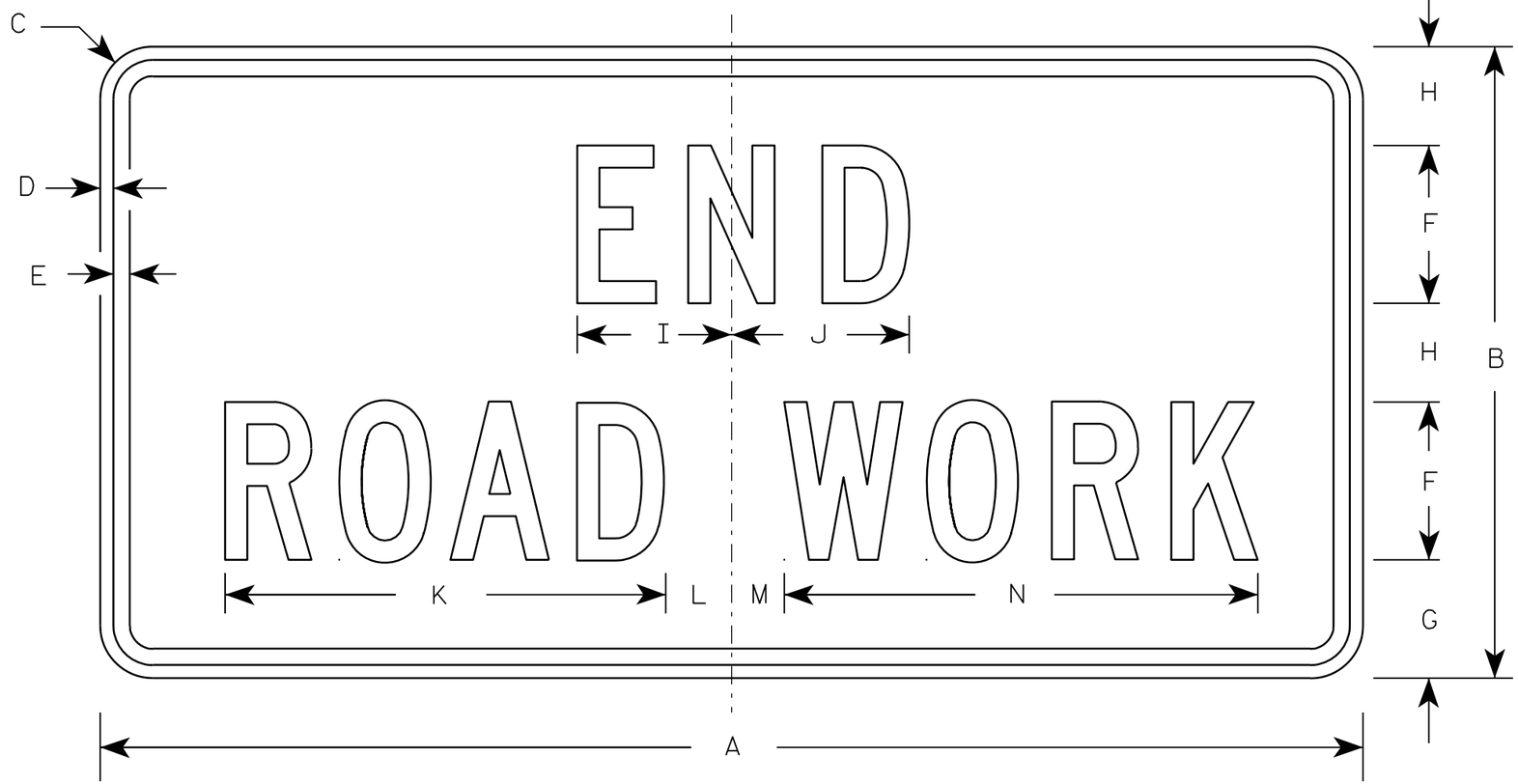
STANDARD SIGN
D6-4S

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 10/05/09 PLATE NO. D6-4S.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 188 | E



G20-2A

NOTES

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

Metric equivalent for this sign is:

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

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

STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

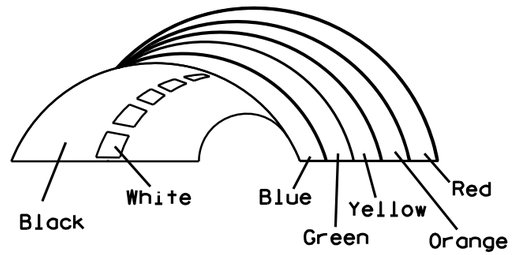
DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 189	E



* VARIES

Background Colors of Symbol*



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

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - (See Note 5)
3. Message Series - (See Note 6)
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Border - Blue
   Line 1 - Red
   Line 2 - Black
   Line 3-5 - Blue
6. Line 1 - Dutch 8011L
   Line 2 - Series E
   Line 3-5 - Series C
7. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.

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

STANDARD SIGN
I55-56

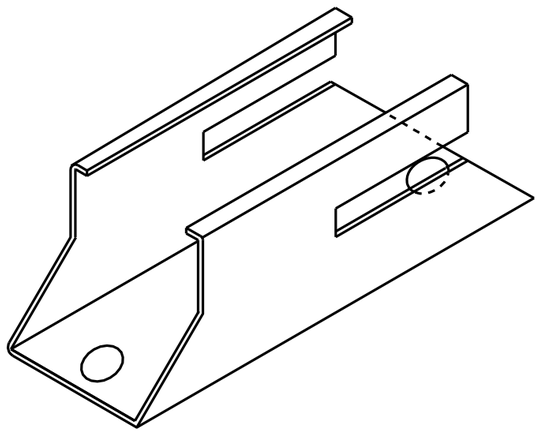
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/27/11 PLATE NO. 155-56.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 190

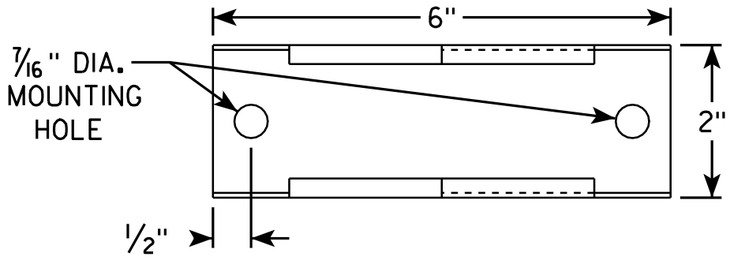
ISOMETRIC VIEW



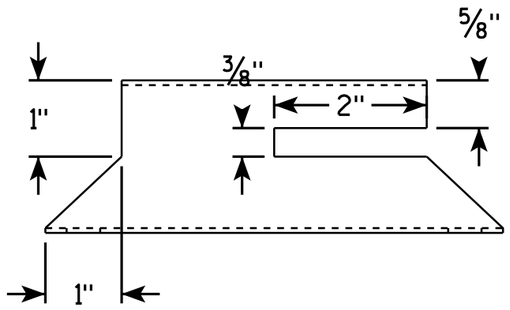
NOTES

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

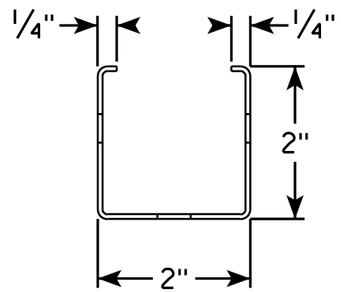
TOP VIEW



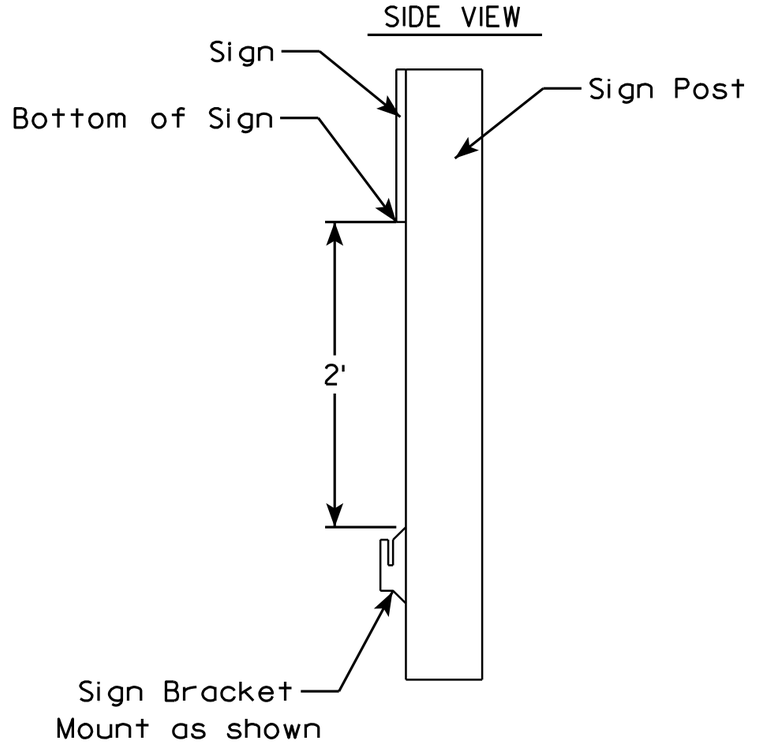
SIDE VIEW



END VIEW



SIDE VIEW



7

7

ROLLUP SIGN BRACKET
I55-56B

WISCONSIN DEPT OF TRANSPORTATION

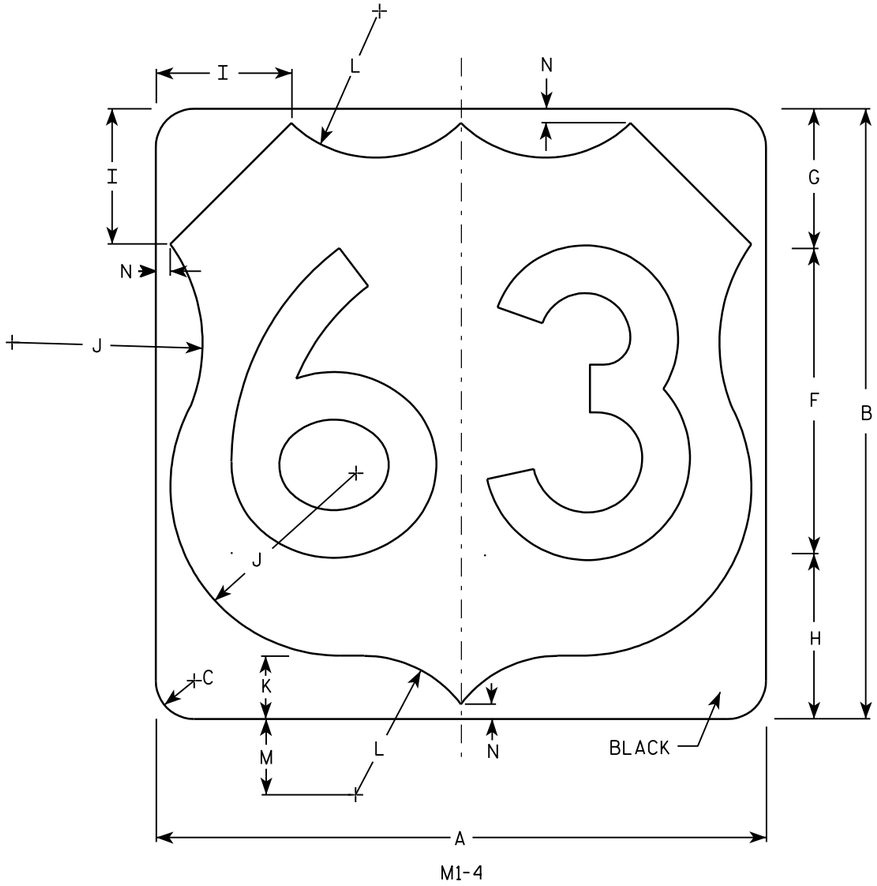
APPROVED Matthew R Rauch
for State Traffic Engineer

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

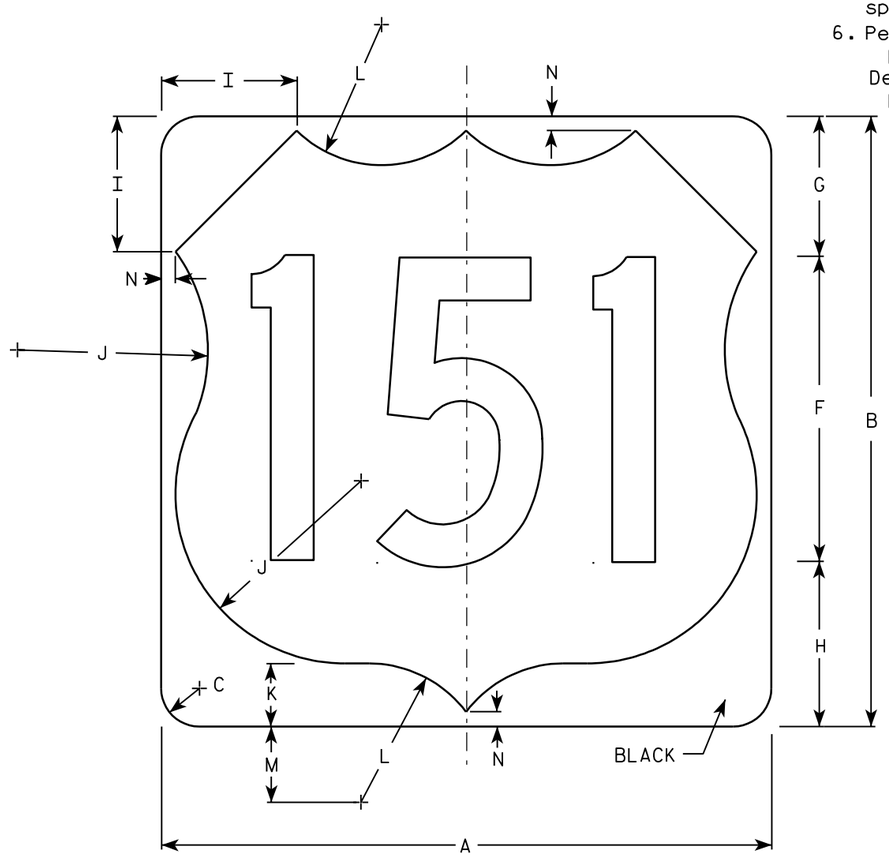
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 191	E

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

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	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

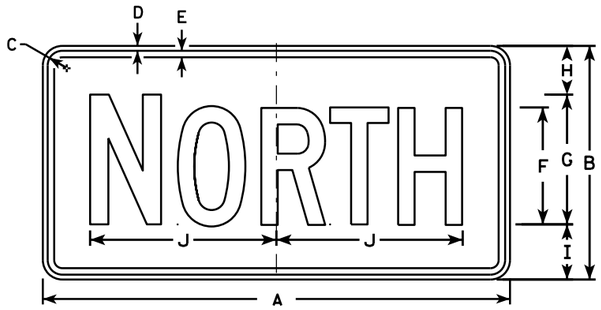
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/25/05 PLATE NO. M1-4.9

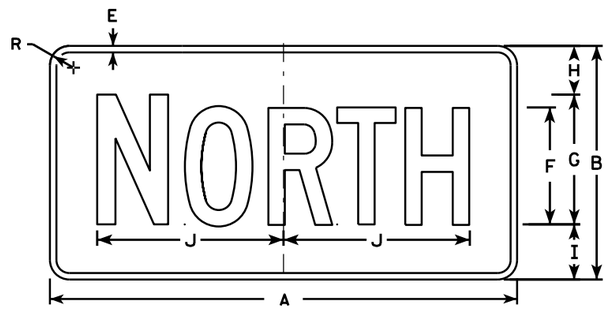
7

7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 192 | E



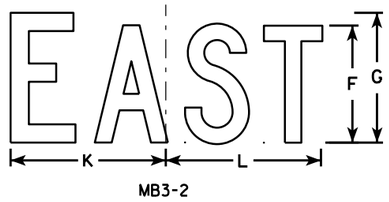
M3-1
MK3-1
MM3-1
MN3-1



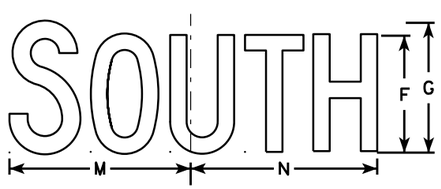
MB3-1



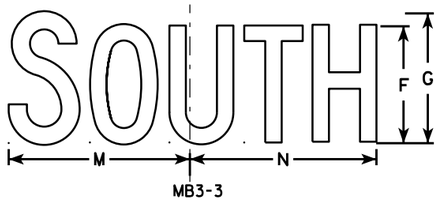
M3-2
MK3-2
MM3-2
MN3-2



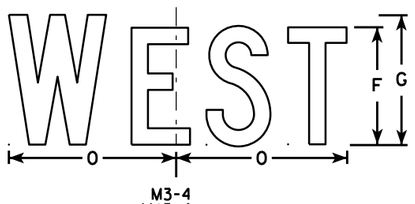
MB3-2



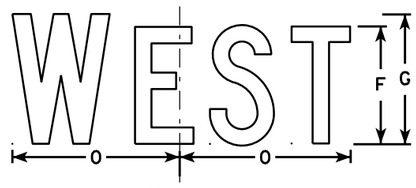
M3-3
MK3-3
MM3-3
MN3-3



MB3-3



M3-4
MK3-4
MM3-4
MN3-4



MB3-4

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
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

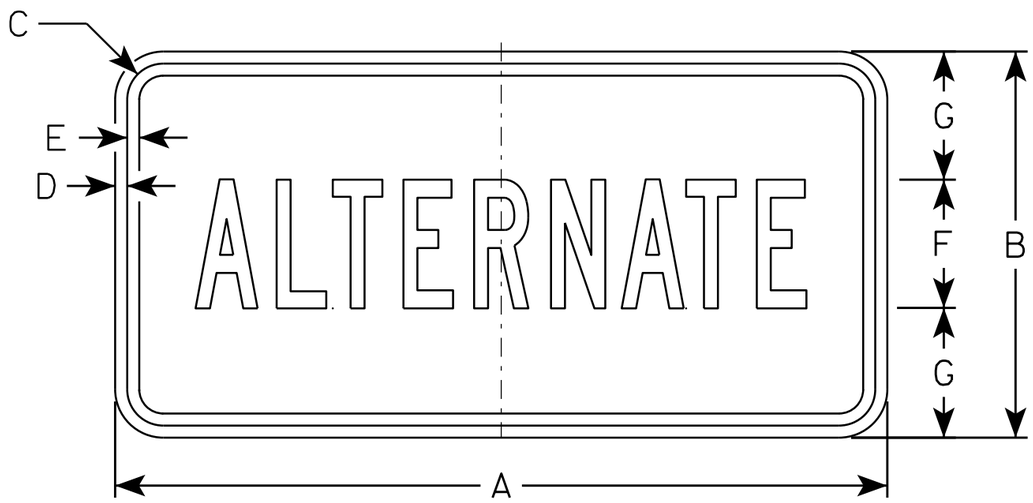
STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

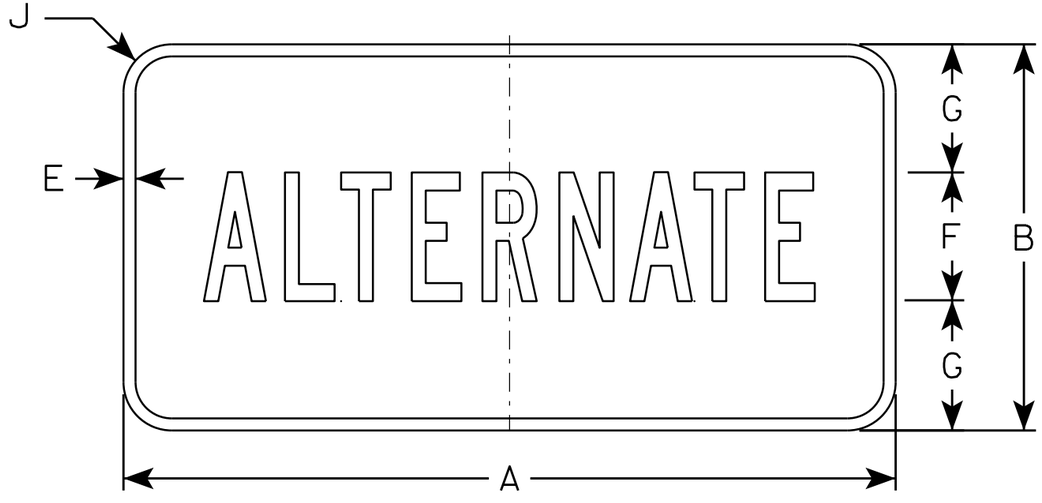
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 6/30/14 PLATE NO M3-1.13

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



M4-1
MO4-1



MB4-1

NOTES

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

   MB4-1 Background - Blue
   Message - White

   MO4-1 Background - Orange - Type F
   Message - Black

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	4	4	9 3/4	9 1/2	1 1/2																	2.00
3	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5
4	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5
5	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5

STANDARD SIGN
M4-1

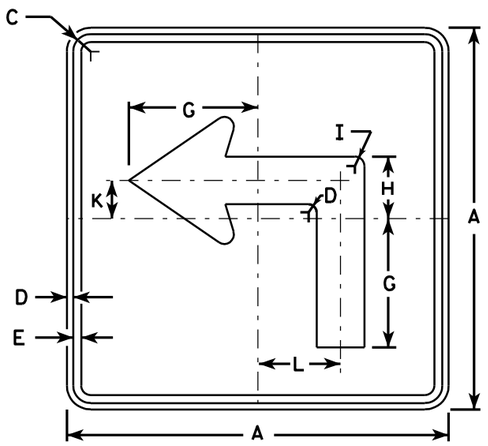
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

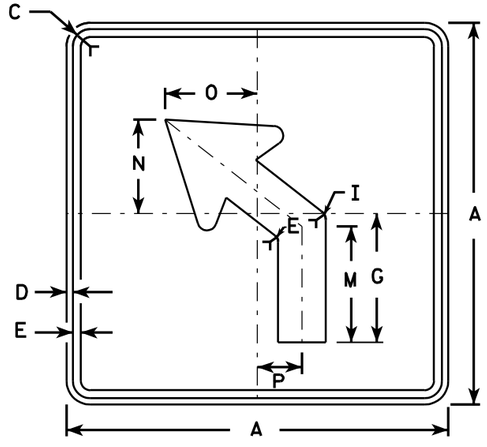
DATE 6/30/14 PLATE 14-1.8

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

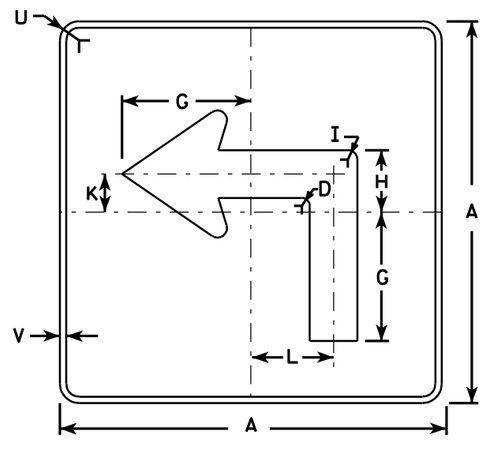
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M41.DGN PLOT DATE : 30-JUN-2014 15:38 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 4.708937:1.000000 WISDOT/CADDS SHEET 42



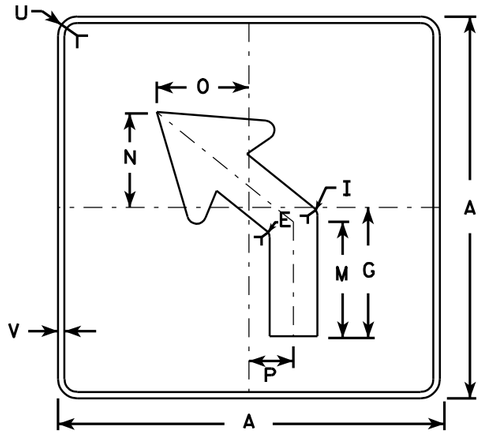
M5-1L
MK5-1L
MM5-1L
MO5-1L
MP5-1L
MR5-1L



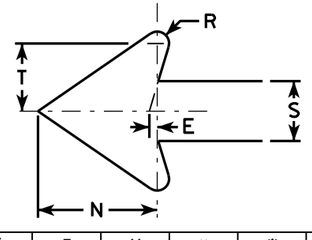
M5-2L
MK5-2L
MM5-2L
MO5-2L
MP5-2L
MR5-2L



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



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



NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White - Type H Reflective
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White - Type H Reflective
   MG5-1 and MG5-2 Background - Green
   Message - White - Type H Reflective
   MK5-1 and MK5-2 Background - Green
   Message - White Type H Reflective
   MM5-1 and MM5-2 Background - White - Type H Reflective
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White - Type H Reflective
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow - Type H Reflective
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

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

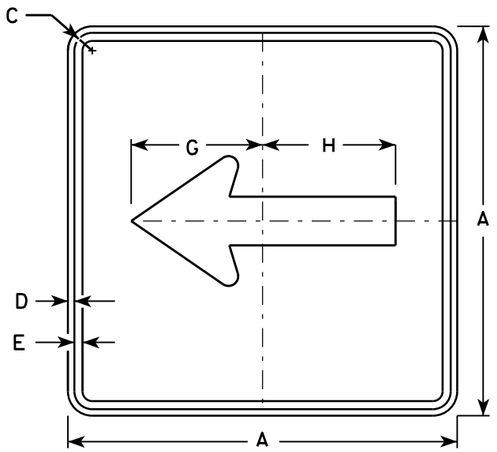
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

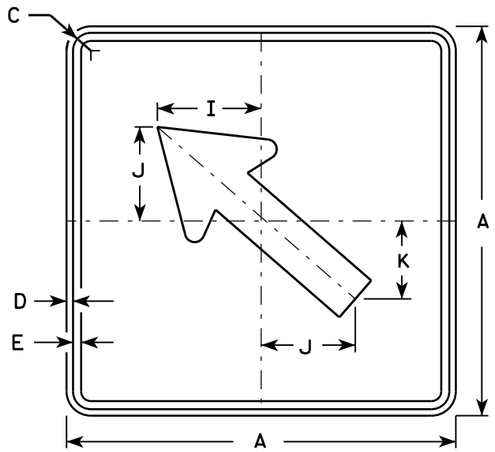
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 195 | E



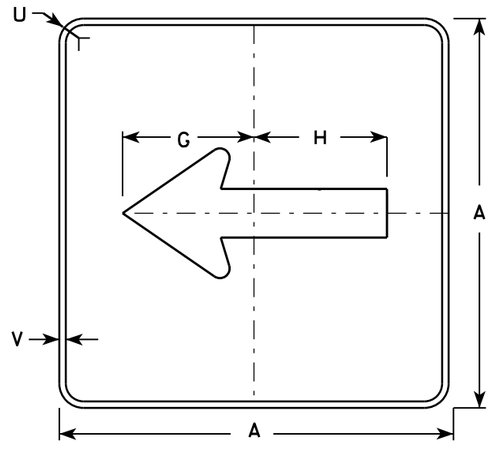
M6-1
MK6-1
MM6-1
MN6-1
MO6-1
MP6-1
MR6-1



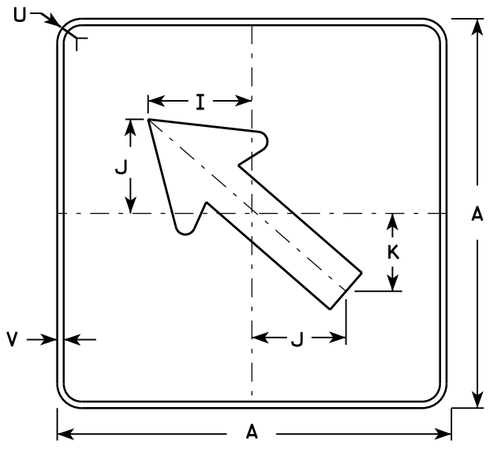
M6-2
MK6-2
MM6-2
MN6-2
MO6-2
MP6-2
MR6-2

NOTES

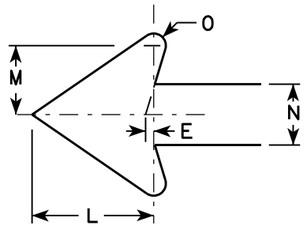
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MG6-1 and MG6-2 Background - Green
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   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



MB6-2



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 7/03/14 PLATE M6-1.14

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

7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 03-JUL-2014 14:28 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 11.675051:1.000000
WISDOT/CADDS SHEET 42



R10-71



R10-71L

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.



R10-71R

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	R10-71L&R Area sq. ft.	R10-71 Area sq. ft.
1																												
2S	72	36	2 1/4	3/4	1	18	5	4	6	20 5/8	11 3/4	9 1/8	8 1/2	12 7/8	9 7/8	16 1/8	23 7/8	30	5 5/8	26 3/4	66	23 5/8	8 3/4	13	26 7/8	27	18.0	16.5
2M	72	36	2 1/4	3/4	1	18	5	4	6	20 5/8	11 3/4	9 1/8	8 1/2	12 7/8	9 7/8	16 1/8	23 7/8	30	5 5/8	26 3/4	66	23 5/8	8 3/4	13	26 7/8	27	18.0	16.5
3																												
4																												
5																												

STANDARD SIGN
R10-71

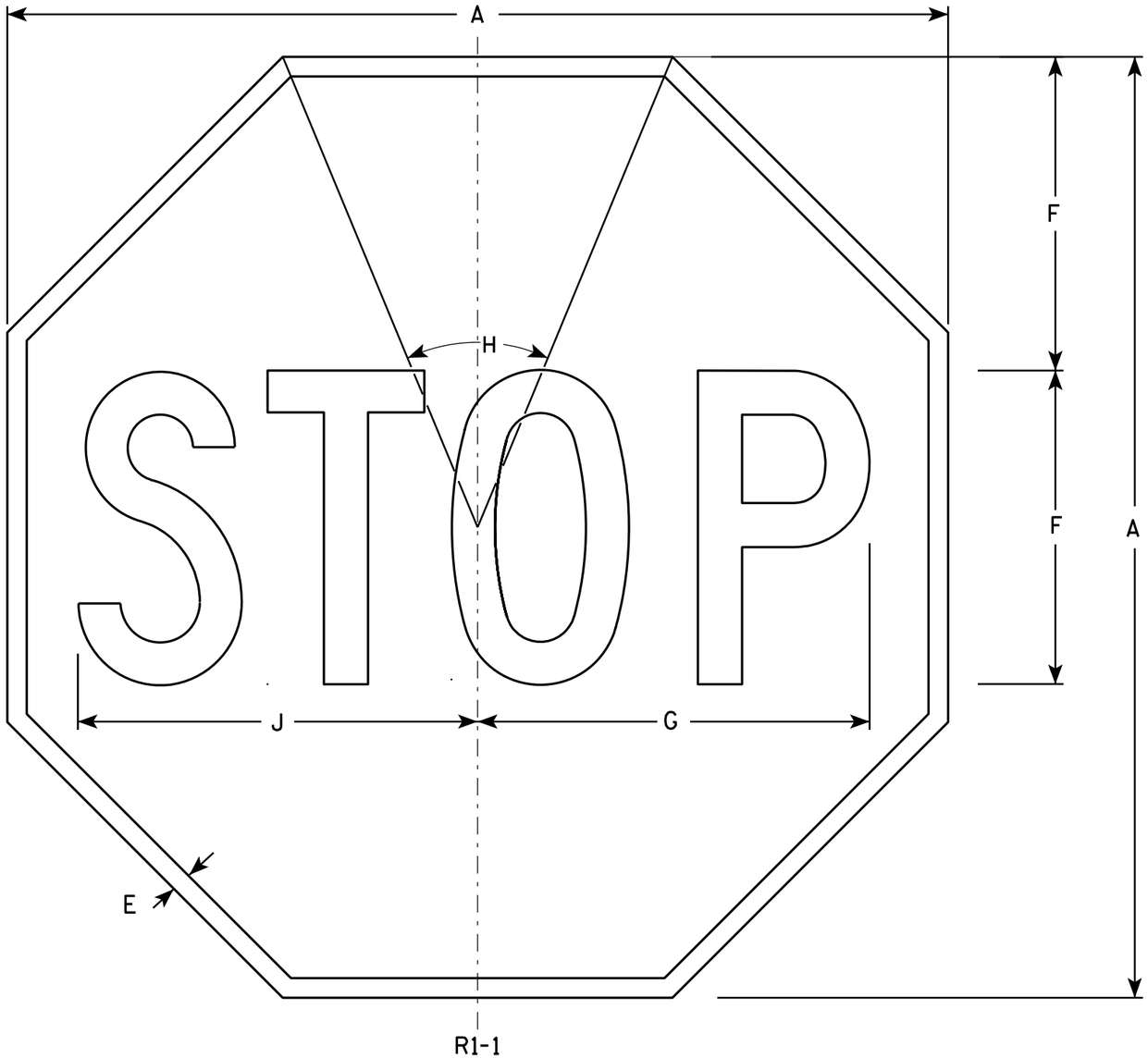
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/4/11 PLATE NO. R10-71.3

PROJECT NO:

SHEET NO: 197 E



NOTES

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

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

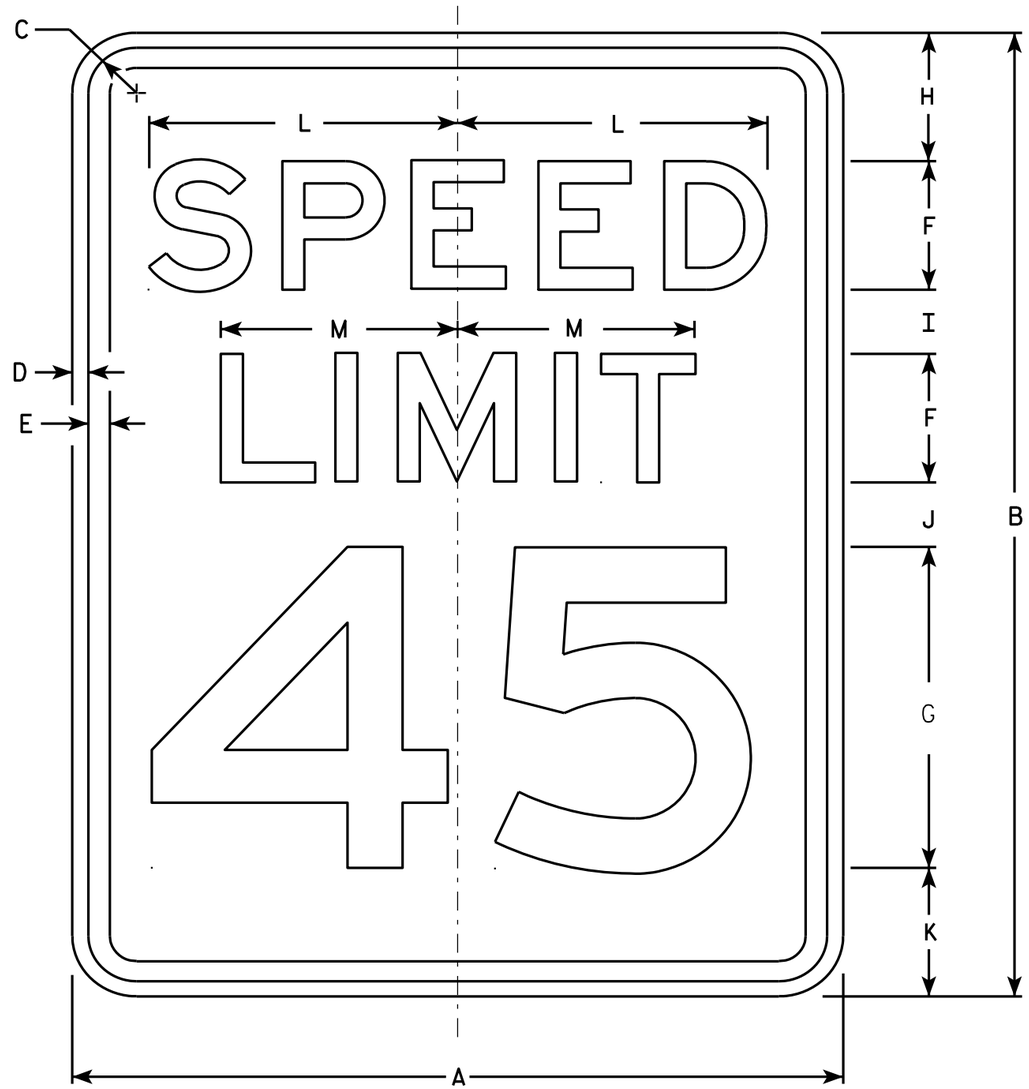
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 198	E



R2-1

NOTES

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

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

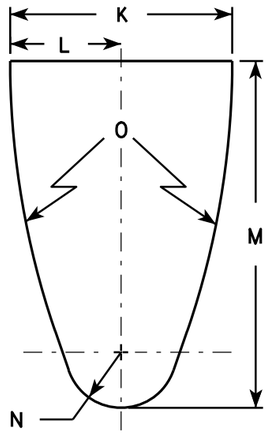
STANDARD SIGN
R2-1

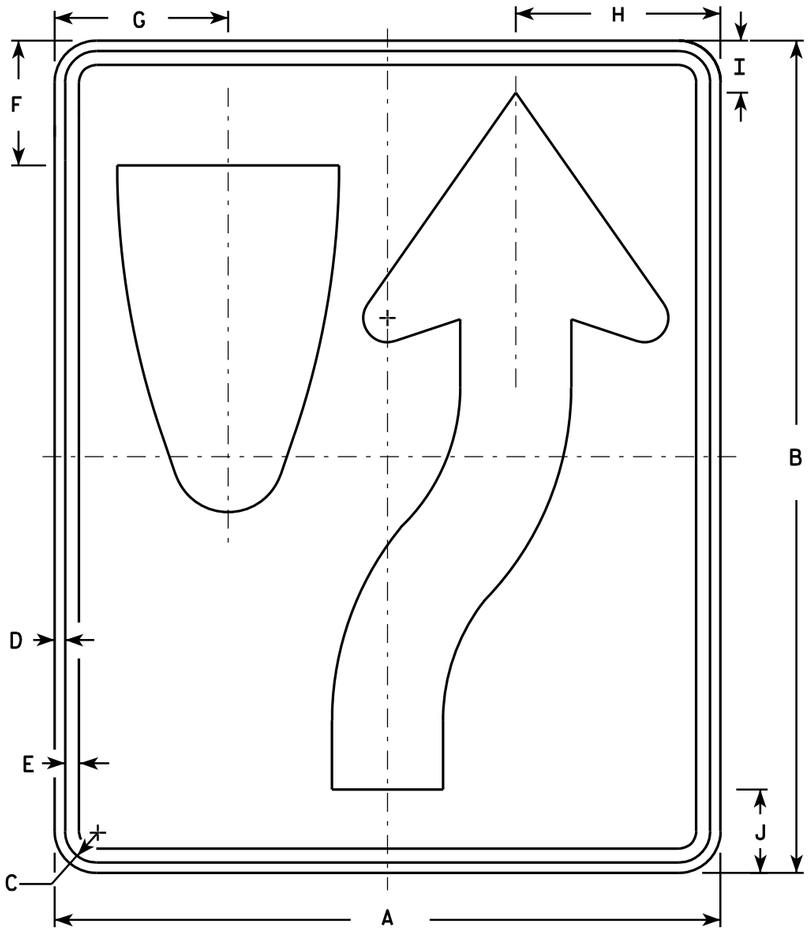
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 199	E

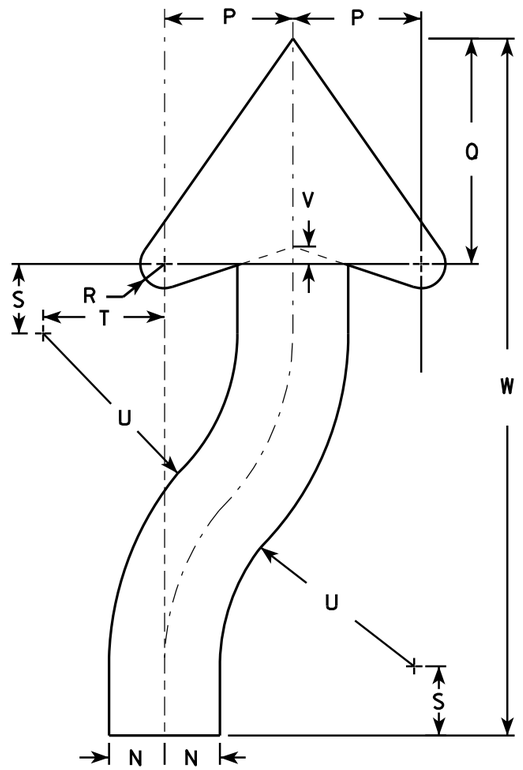




R4-7

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

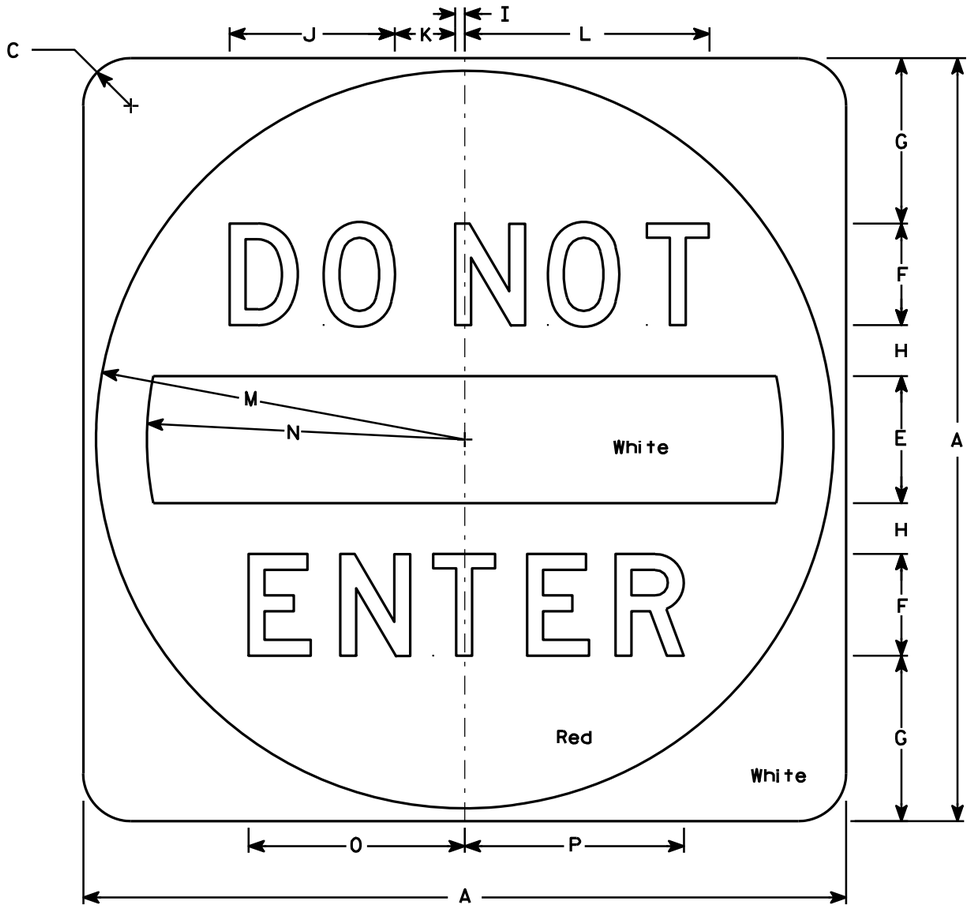
STANDARD SIGN
R4-7 & R4-8

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: 200	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

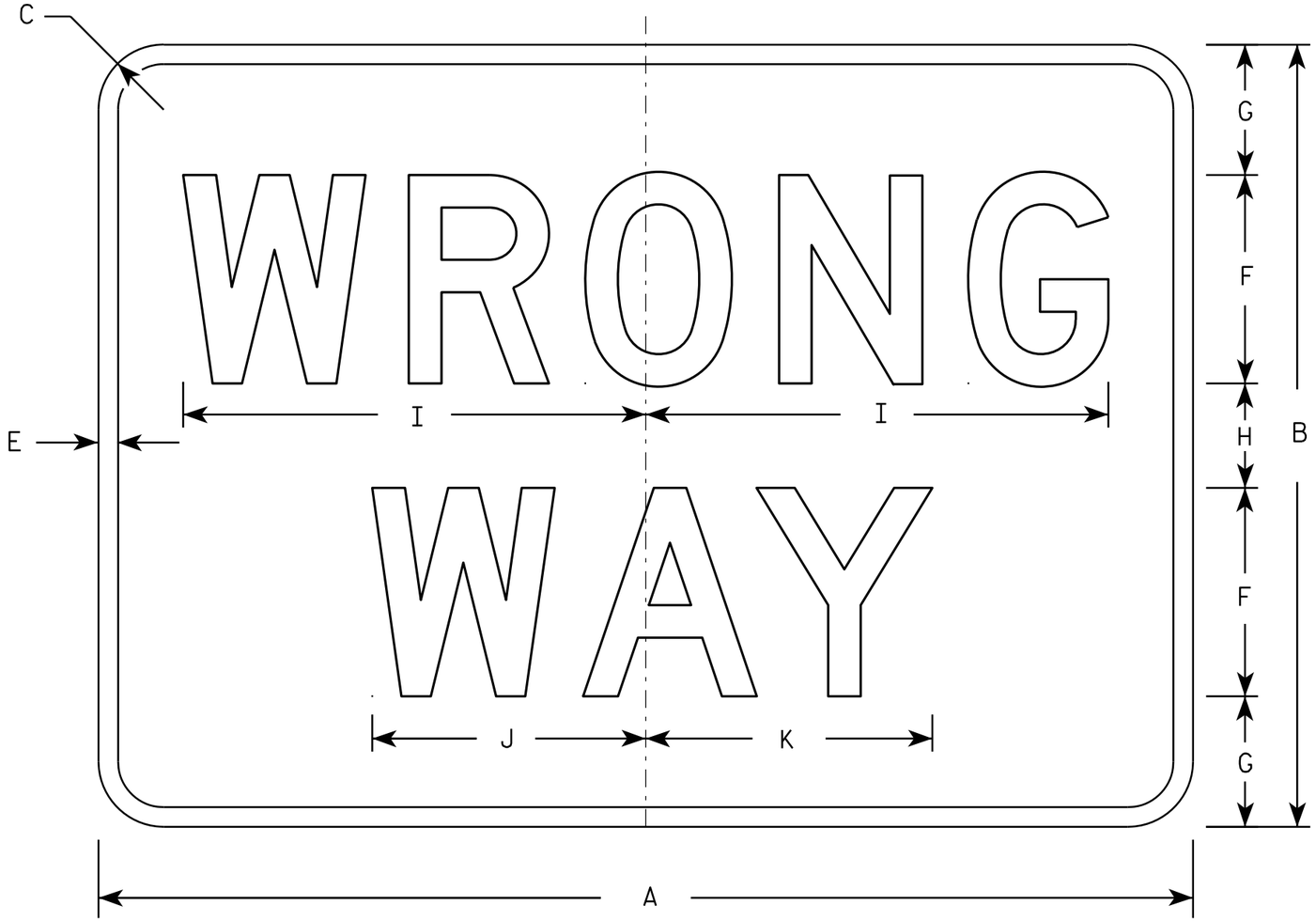
STANDARD SIGN
R5-1

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: 201 | 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

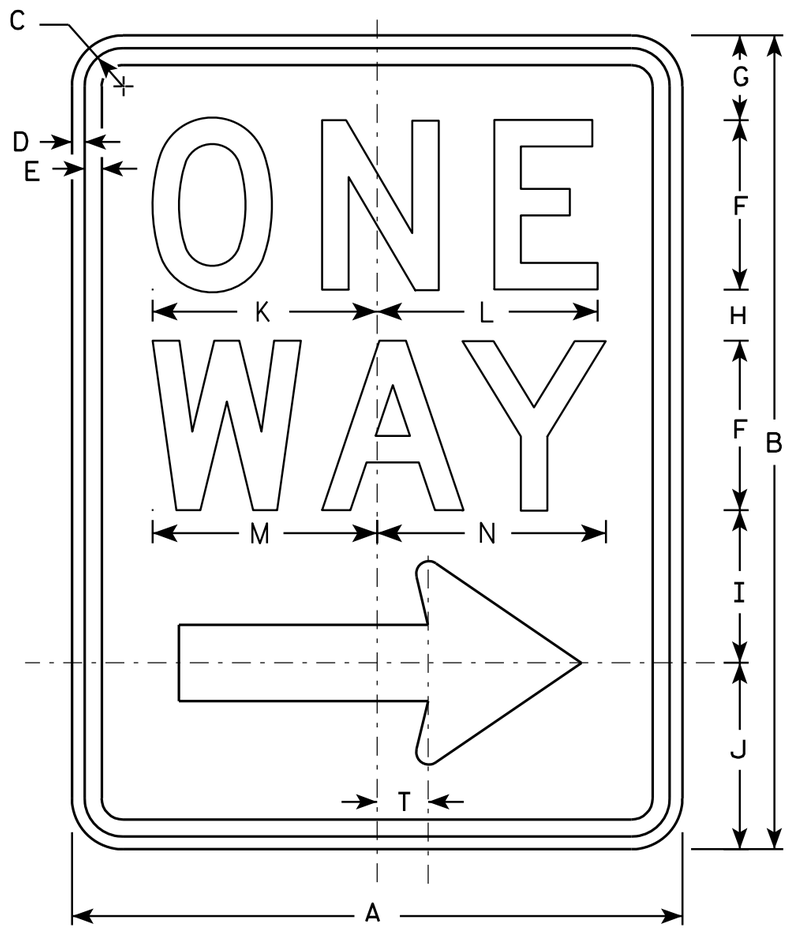
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

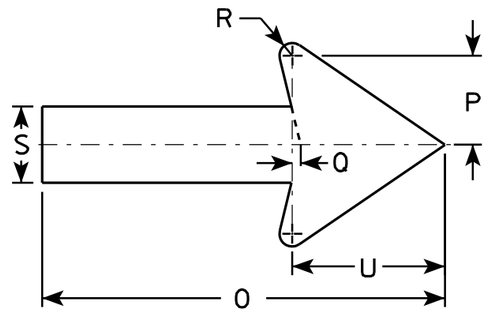
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 202 | E



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																										

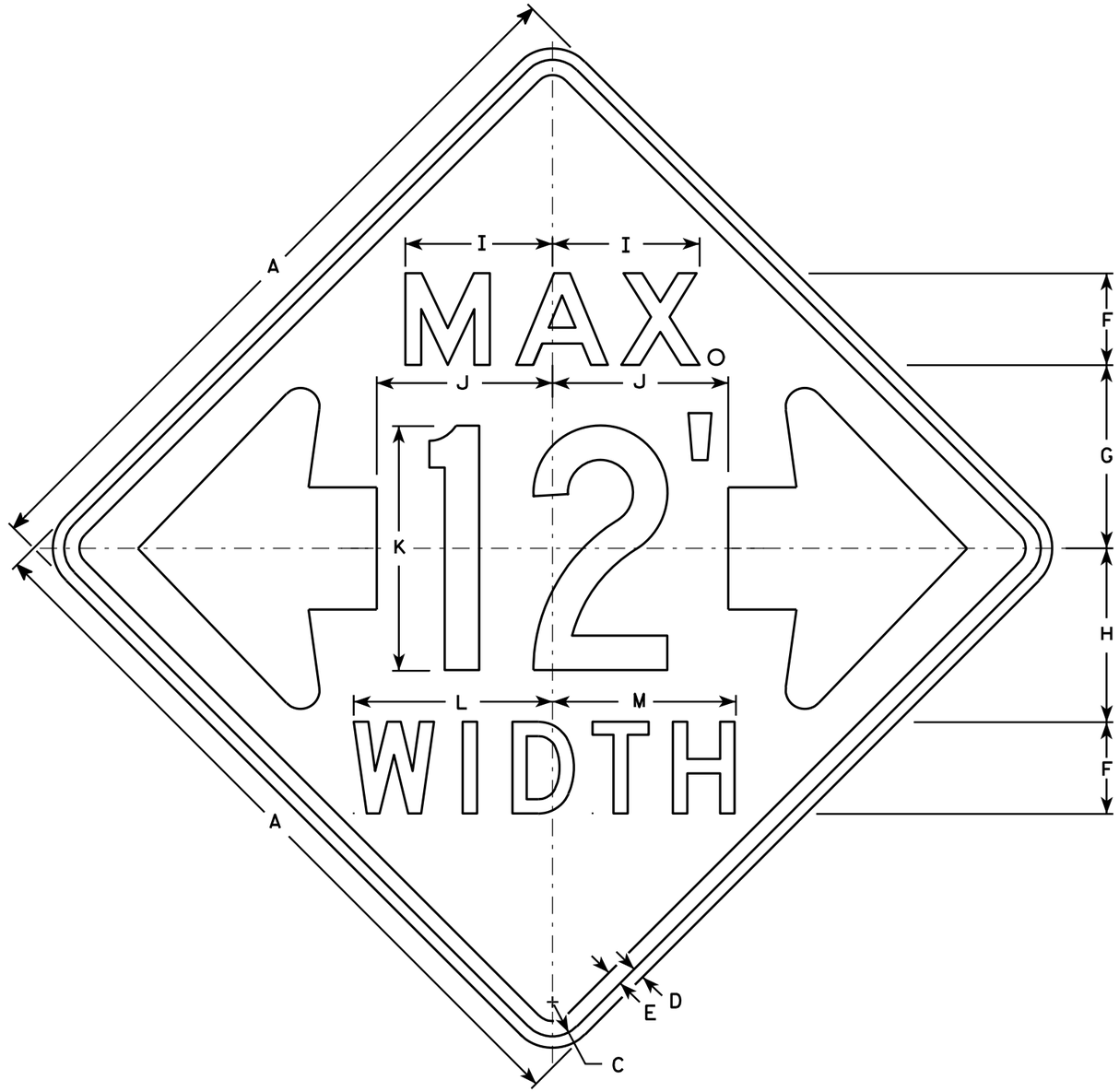
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

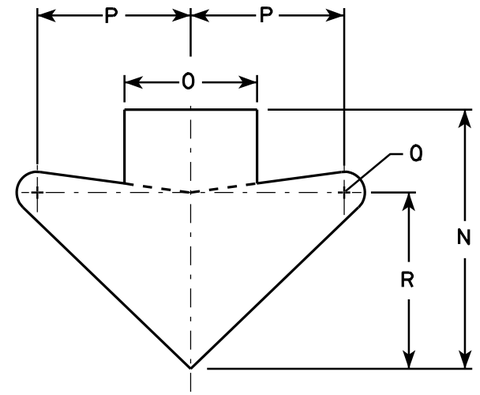
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 203	E



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

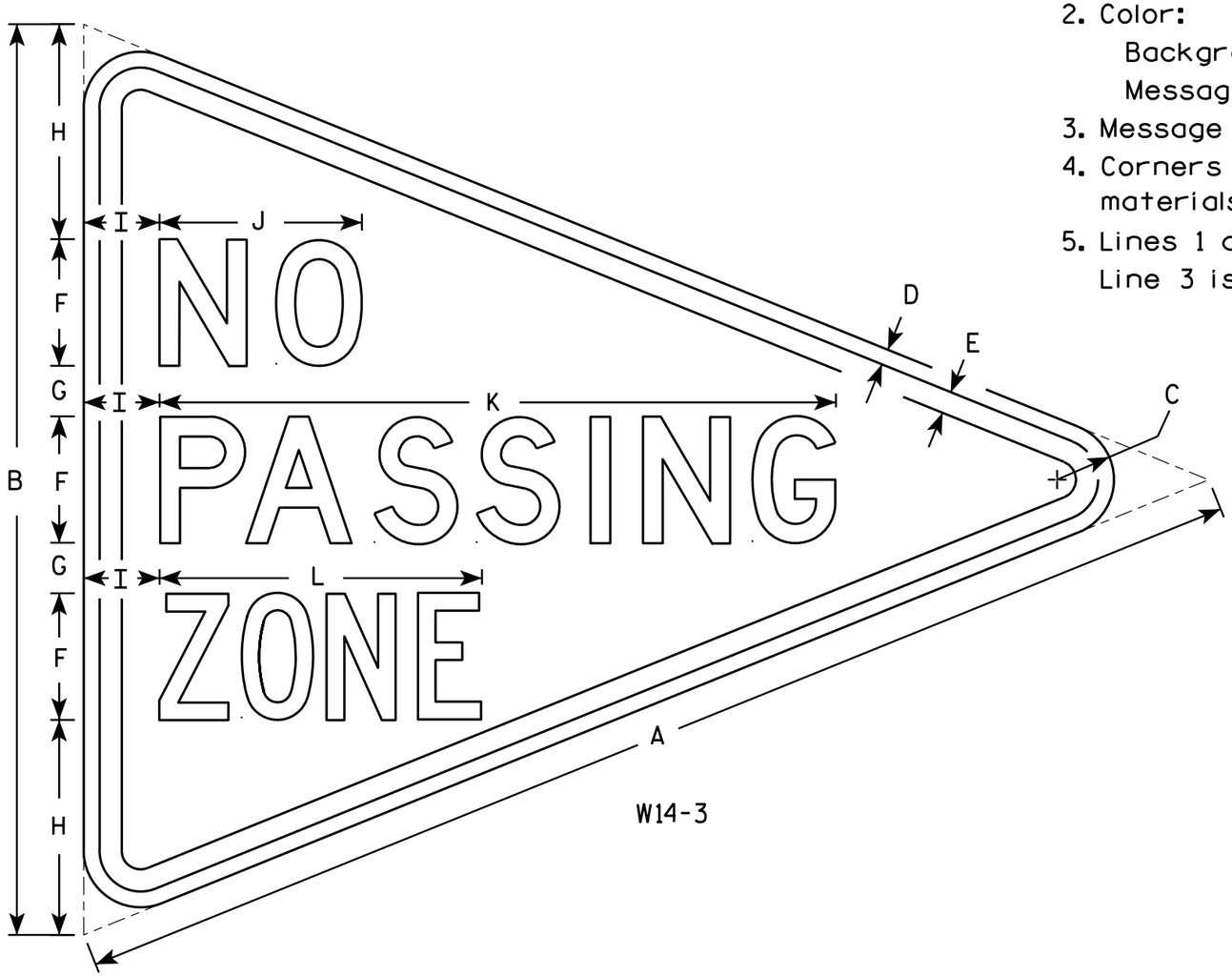
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 204 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W1252.DGN PLOT DATE : 16-MAR-2011 14:45 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.137199:1.000000
WISDOT/CADDS SHEET 42

NOTES

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



W14-3

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

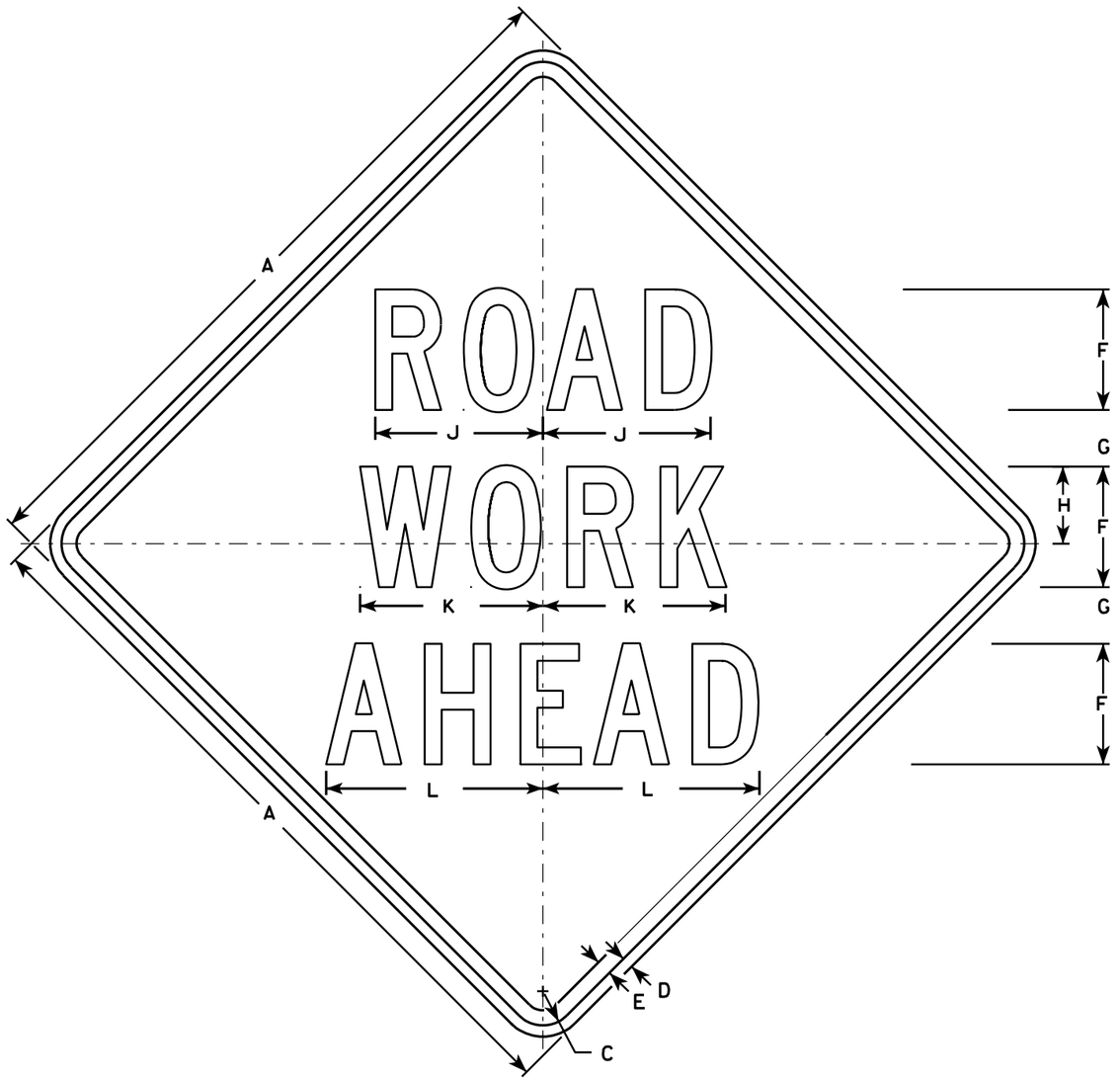
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

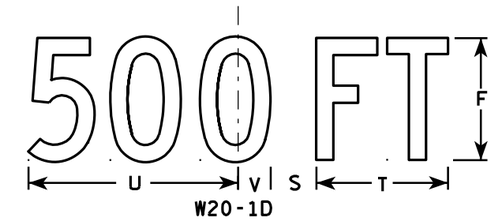
APPROVED Matthew R Rauch
for State Traffic Engineer

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

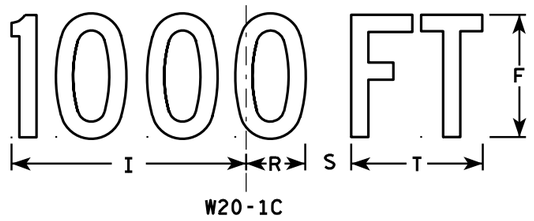
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 205	E



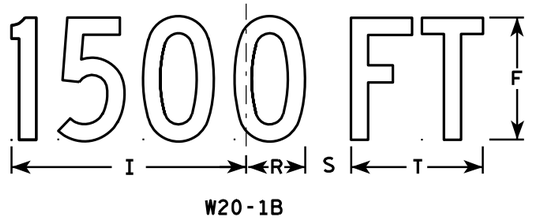
W20-1A



W20-1D



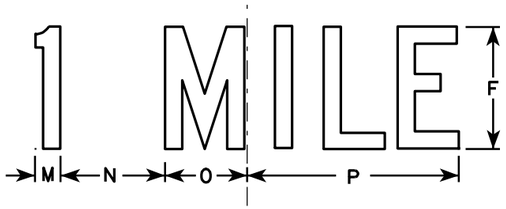
W20-1C



W20-1B



W20-1G



W20-1F

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.

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 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	1 7/8	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8		3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8		3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8		3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8		3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8		3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-1.9

PROJECT NO:

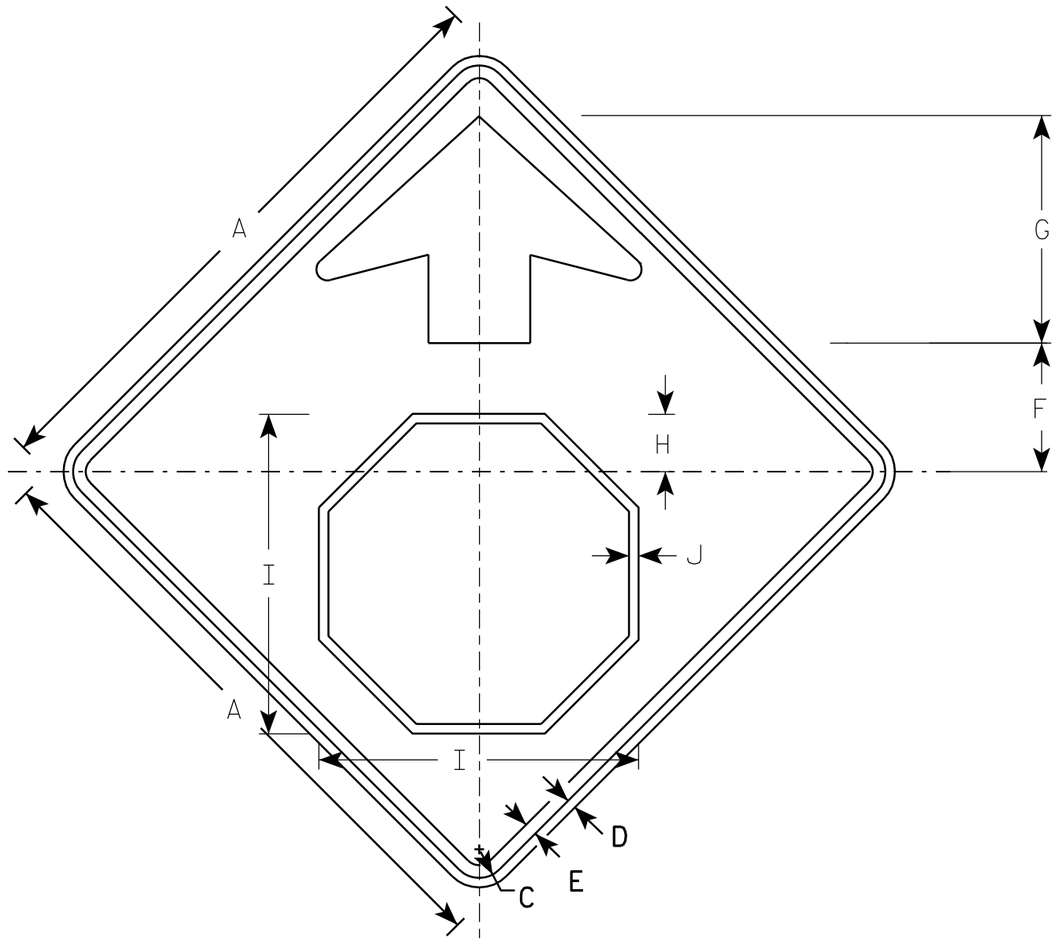
SHEET NO: 206 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W201.DGN PLOT DATE : 18-MAR-2011 09:56 PLOT BY : mscj9h

WISDOT/CADDS SHEET 42

7

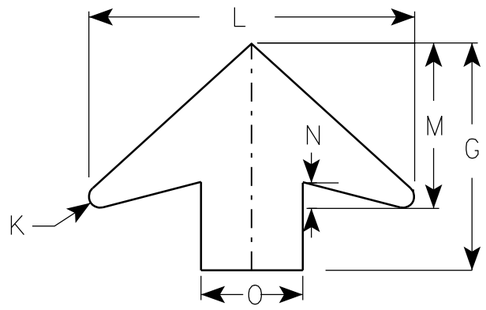
7



W3-1

NOTES

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



ARROW DETAIL

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

STANDARD SIGN
W3-1

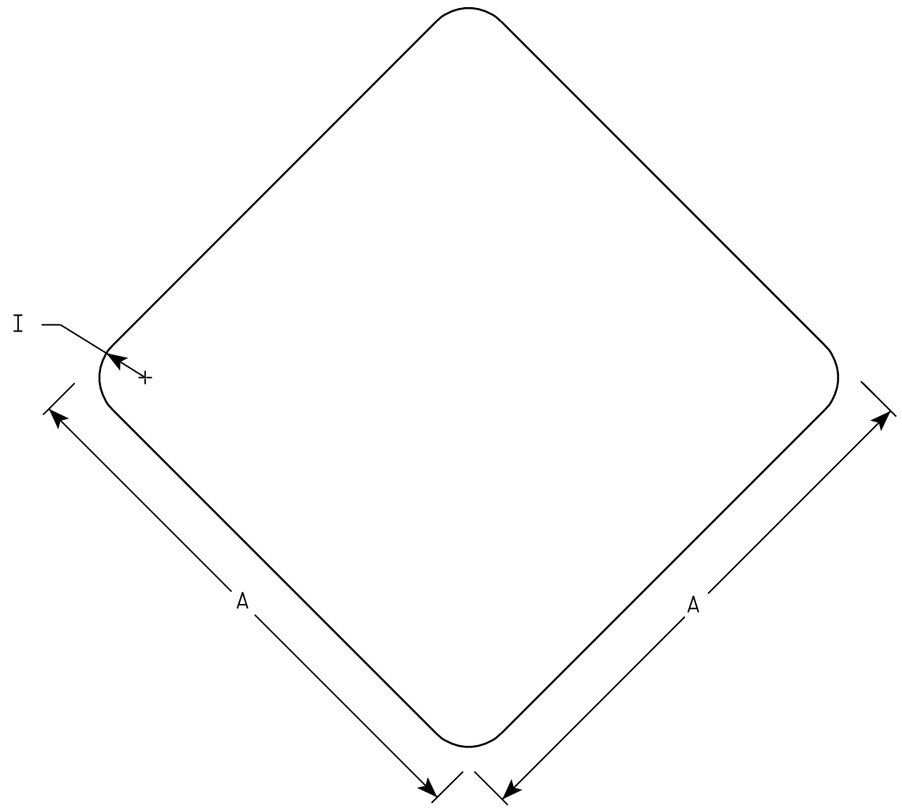
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 207 E



W5-54

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
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners 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	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

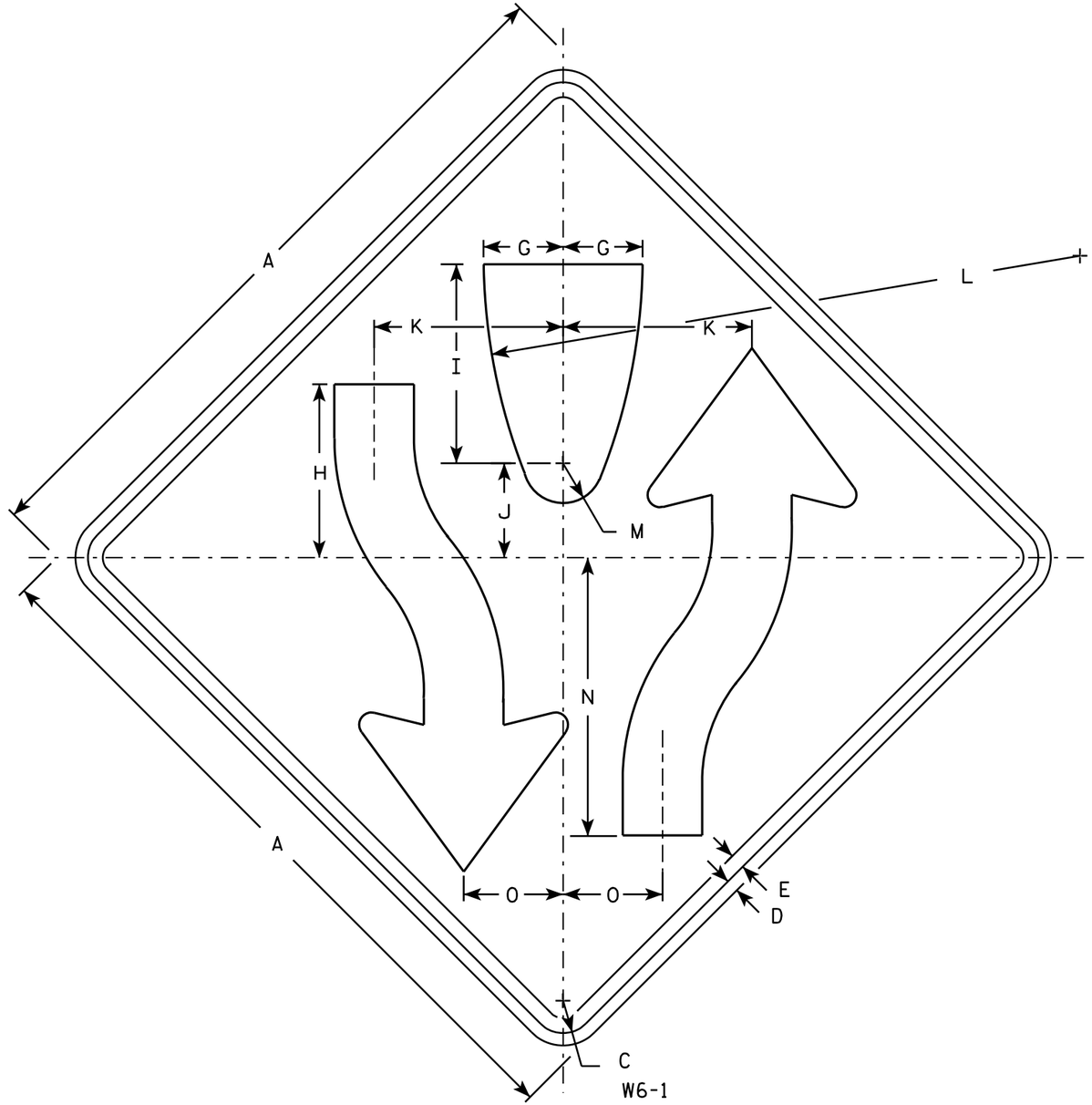
STANDARD SIGN
W5-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

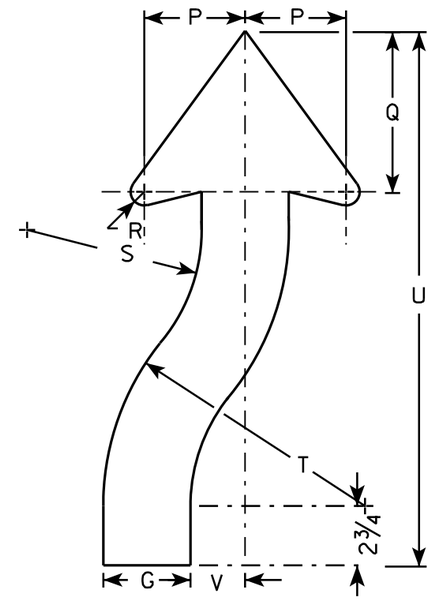
DATE 11/3/10 PLATE NO. W5-54.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 208 | E



NOTES

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



ARROW DETAIL

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

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

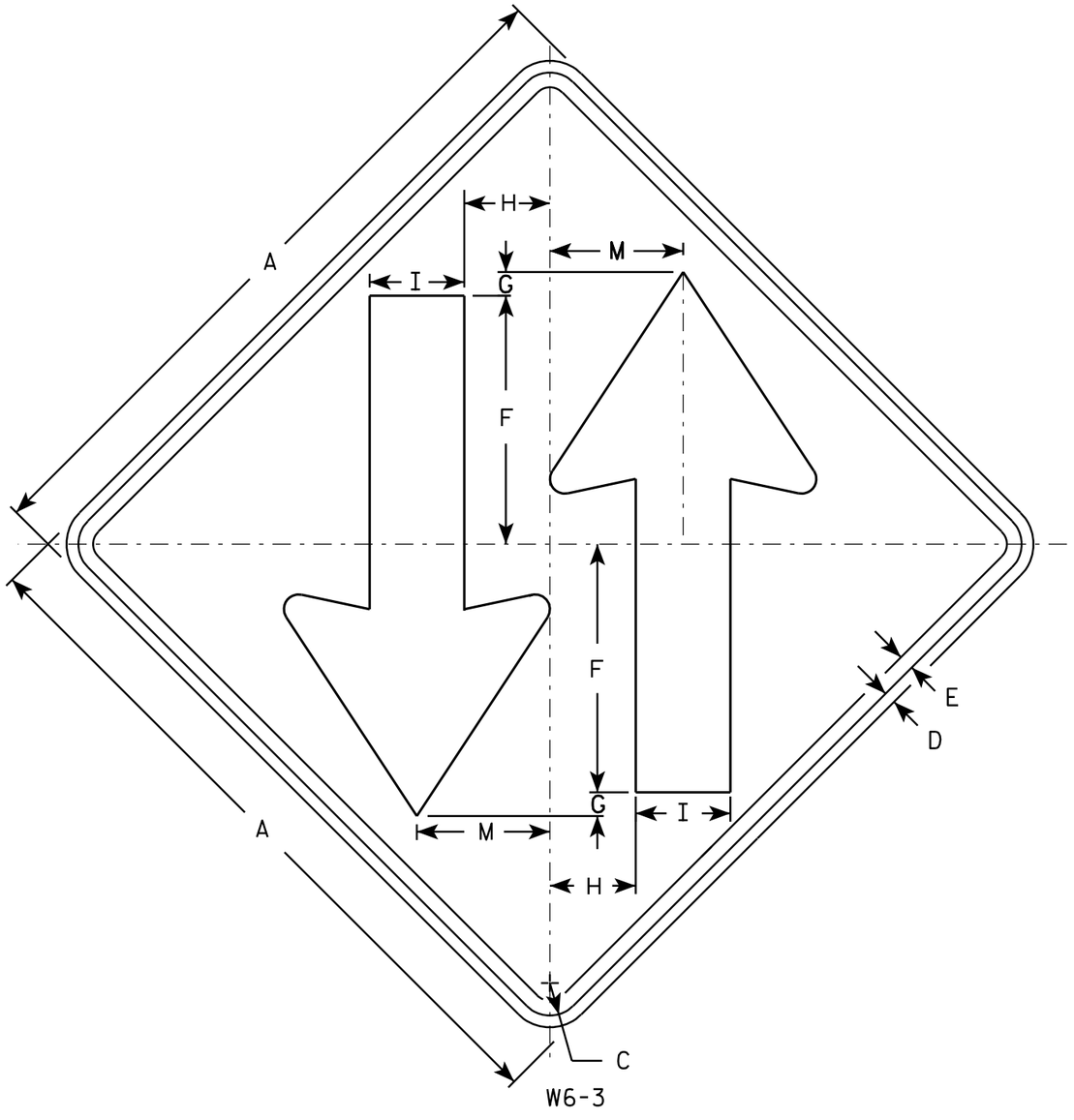
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-1.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 209	E

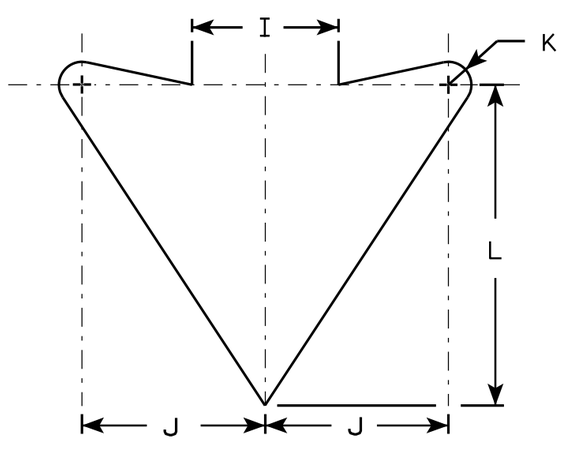
7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W61.DGN PLOT DATE : 12-MAR-2013 14:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.946657:1.000000
WISDOT/CADDS SHEET 42



NOTES

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



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	10 1/2	1	3 5/8	4	5	5/8	8 3/4	5 5/8														6.25
2S	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
2M	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
3																											
4	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
5	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0

STANDARD SIGN
W6-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-3.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 210 | E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W63.DGN PLOT DATE : 12-MAR-2013 14:11 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.202372:1.000000
WISDOT/CADDS SHEET 42

EARTHWORK SUMMARY							
	Cumulative Volume (Unadjusted)				Total Expanded Fill Factor = 1.2	Mass Ordinate	Select Borrow
Alignment	Cut (Common Excavation) Cu. Yd.	Unusable Material Cu. Yd.	Available Material Cu. Yd.	Fill Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.
STAGE 1							
USH 12	1378	0	1378	2061	2473		
STAGE 1 SUBTOTAL	1378	0	1378	2061	2473	(1095)	1095
STAGE 2							
USH 12	4239	593	3646	6594	7913		
STH 60	240	0	240	1610	1932		
STH 60 - EBS	242	242	0	0	0		
RICHOLSON ROAD	891	0	891	6034	7241		
STAGE 2 SUBTOTAL	5612	835	4777	14238	17086	(12309)	12309
STAGE 2B							
STH 60	838	0	838	1664	1997		
STH 60 - EBS	242	242	0	0	0		
STAGE 2B SUBTOTAL	1080	242	838	1664	1997	(1159)	1159
STAGE 3							
USH 12	920	757	163	0	0		
FRONTAGE ROAD	1554	0	1554	79	95		
RICHOLSON ROAD	403	0	403	487	584		
STAGE 3 SUBTOTAL	2877	757	2120	566	679	1441	0
STAGE 4							
USH 12	977	831	146	0	0		
STAGE 4 SUBTOTAL	977	831	146	0	0	146	0
STAGE 5							
USH 12	1089	104	985	0	0		
STAGE 5 SUBTOTAL	1089	104	985	0	0	985	0
TOTAL	13013		10244	18529	22235		14563

EARTHWORK NOTES:

MASS ORDINATE IS THE MATERIAL REMAINING FROM THE CONSTRUCTION STAGE. A POSITIVE VALUE REPRESENTS AN EXCESS OF MATERIAL. A NEGATIVE VALUE (SHOW IN PARENTHESIS) INDICATES A SHORTAGE OF MATERIAL IN THE STAGE. CROSS SECTIONS DO NOT SHOW EXISTING CRACKED AND SEATED PAVEMENT TO REMAIN FROM USH 12 STA 409+53 TO STA 431+20 AND USH 12 STA 435+63 TO STA 437+99. COMMON EXCAVATION IS ADJUSTED FROM EARTHWORK VOLUME CHART TOTALS BY 980 CY (245 CY STAGE 2, 245 CY STAGE 3, 450 CY STAGE 4) TO ACCOUNT FOR PAVEMENT NOT BEING REMOVED.

EARTHWORK VOLUME REPORT - USH 12									
Station	End Areas		Incremental Volume (Unadjusted)			Cumulate Volume (Unadjusted)			Mass Ordinate
	Cut	Fill	Cut	Reusable Cut	Fill	Cut	Reusable Cut	Fill	
	Sq. Ft.	Sq. Ft.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.
409+53.530	106.8	28.08	0	0	0	0	0	0	0.00
410+06.860	81.96	13.44	186.41	186.41	41	186.41	186.41	41	145.41
410+50.000	57.82	19.33	111.66	111.66	26.19	298.07	298.07	67.19	230.88
411+00.000	52.09	16.89	101.76	101.76	33.54	399.84	399.83	100.73	299.10
411+13.526	52.39	15.02	26.17	26.17	7.99	426.01	426	108.72	317.28
411+50.000	51.24	11.02	70.33	70.33	17.3	496.34	496.33	126.02	370.31
411+66.860	51.77	10.54	32.16	32.16	6.73	528.5	528.49	132.75	395.74
412+00.000	58.54	9.7	67.95	67.95	12.39	596.45	596.44	145.14	451.30
412+50.000	76.56	8.84	125.67	125.67	17.07	722.13	722.11	162.22	559.89
413+00.000	61.89	12.87	128.88	128.88	20.12	851	850.99	182.34	668.65
413+50.000	63.56	13.23	117.04	117.04	24.32	968.04	968.03	206.66	761.37
414+00.000	71.66	14.98	126.35	126.35	26.36	1094.39	1094.38	233.02	861.36
414+50.000	82.76	17.61	144.45	144.45	30.58	1238.84	1238.83	263.6	975.23
415+00.000	76.67	26.6	149.24	149.24	41.62	1388.08	1388.07	305.21	1082.86
415+50.000	66.26	36.77	133.64	133.64	59.76	1521.72	1521.71	364.98	1156.73
416+00.000	56.76	54.59	114.58	114.58	86.19	1636.3	1636.29	451.17	1185.12
416+50.000	175.95	1.47	214.84	214.84	52.91	1851.13	1851.13	504.07	1347.06
417+00.000	72.6	70.53	229.87	229.87	67.9	2081	2081	571.97	1509.03
417+50.000	71.35	96.15	134.37	134.37	157.04	2215.38	2215.37	729.01	1486.36
418+00.000	80.54	163.59	142.98	142.98	243	2358.36	2358.35	972.02	1386.33
418+50.000	55.84	215.9	128.71	128.71	354.06	2487.07	2487.06	1326.08	1160.98
419+00.000	51.46	180.88	99.85	99.85	374.14	2586.92	2586.91	1700.22	886.69
419+50.000	59.05	178.66	101.83	101.83	343.45	2688.75	2688.74	2043.67	645.07
420+00.000	45.66	259.25	96.76	96.76	414.71	2785.51	2785.5	2458.39	327.11
420+36.000	44.61	309.27	60.33	60.33	383.6	2845.84	2845.83	2841.99	3.84
420+50.000	43.12	332.48	22.74	22.74	166.38	2868.58	2868.57	3008.37	(139.80)
421+00.000	41.85	141.39	78.9	78.9	443.63	2947.48	2947.47	3452	(504.53)
421+50.000	49.38	94.36	84.63	84.63	220.97	3032.11	3032.1	3672.97	(640.87)
422+00.000	76.33	86.15	116.7	116.7	169.45	3148.81	3148.8	3842.42	(693.62)
422+50.000	97.67	85.09	161.43	161.43	161.04	3310.24	3310.23	4003.46	(693.23)
423+00.000	77.78	90.87	163.25	163.25	165.67	3473.49	3473.48	4169.13	(695.65)
423+50.000	65.5	98.54	133.58	133.58	178.71	3607.08	3607.06	4347.84	(740.78)
424+00.000	53.43	89.73	110.68	110.68	177.95	3717.76	3717.74	4525.79	(808.05)
424+50.000	43.72	93.86	90.71	90.71	173.65	3808.47	3808.45	4699.44	(890.99)
425+00.000	48.05	98.33	85.73	85.73	182.3	3894.21	3894.18	4881.74	(987.56)
425+50.000	84.24	154.61	125.05	125.05	240.86	4019.26	4019.23	5122.6	(1103.37)
426+00.000	48.56	137.72	125.24	125.24	277.92	4144.49	4144.47	5400.52	(1256.05)
426+50.000	32.98	36.69	75.65	75.65	163.8	4220.15	4220.12	5564.32	(1344.20)
427+00.000	417.85	0	422.59	422.59	33.29	4642.74	4642.71	5597.61	(954.90)
427+50.000	89.04	57.25	475.73	475.73	54.44	5118.46	5118.44	5652.04	(533.60)

EARTHWORK VOLUME REPORT - USH 12									
Station	End Areas		Incremental Volume (Unadjusted)			Cumulate Volume (Unadjusted)			Mass Ordinate
	Cut	Fill	Cut	Reusable Cut	Fill	Cut	Reusable Cut	Fill	
	Sq. Ft.	Sq. Ft.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.
428+00.000	105.92	133.95	184.42	184.42	181.77	5302.89	5302.86	5833.81	(530.92)
428+50.000	92.56	162.73	189.24	189.24	282.11	5492.13	5492.1	6115.93	(623.80)
428+90.838	84.38	199.76	137.79	137.79	281.53	5629.92	5629.89	6397.45	(767.53)
429+00.000	66.06	172.09	25.52	25.52	63.09	5655.44	5655.41	6460.54	(805.10)
429+50.000	68.11	82.27	126.51	126.51	240.34	5781.95	5781.92	6700.88	(918.93)
429+66.368	79.9	88.86	44.86	44.86	51.87	5826.82	5826.78	6752.76	(925.94)
430+00.000	57.03	79.85	86.92	86.92	105.8	5913.74	5913.7	6858.56	(944.82)
430+50.000	77.07	99.41	125.91	125.91	166.71	6039.65	6039.61	7025.27	(985.62)
431+00.000	166.93	92.2	227.12	227.12	180.59	6266.77	6266.73	7205.86	(939.09)
431+50.000	217.08	117.3	356.41	356.41	199.94	6623.18	6623.14	7405.8	(782.62)
432+00.000	127.76	94.02	322.21	322.21	200.62	6945.39	6945.35	7606.42	(661.03)
432+50.000	127.85	58.57	241.79	241.79	144.21	7187.18	7187.14	7750.63	(563.45)
433+00.000	91.56	107.36	207.59	207.59	156.93	7394.77	7394.73	7907.57	(512.80)
433+35.206	74.8	99.71	109.93	109.93	137.91	7504.71	7504.66	8045.47	(540.76)
433+50.000	68.82	91.98	39.35	39.35	52.52	7544.05	7544.01	8097.99	(553.94)
433+88.539	99.08	58.28	119.58	119.58	109.62	7663.63	7663.59	8207.61	(543.98)
434+00.000	100.1	53.02	42.27	42.27	23.62	7705.91	7705.86	8231.24	(525.33)
434+41.872	94.44	38.62	150.85	150.85	71.06	7856.75	7856.71	8302.3	(445.55)
434+50.000	78.63	36.6	26.05	26.05	11.32	7882.8	7882.76	8313.62	(430.82)
434+95.206	72.11	36.93	126.19	126.19	61.55	8009	8008.95	8375.16	(366.16)
435+00.000	73.2	34.73	12.9	12.9	6.36	8021.9	8021.85	8381.53	(359.63)
435+48.539	77.05	16.78	135.05	135.05	46.3	8156.95	8156.9	8427.83	(270.88)
435+50.000	77.97	16.76	4.19	4.19	0.91	8161.15	8161.09	8428.74	(267.59)
436+00.000	70.21	14.5	137.2	137.2	28.95	8298.35	8298.29	8457.68	(159.33)
436+50.000	67.92	13.82	127.9	127.9	26.23	8426.25	8426.19	8483.91	(57.66)
437+00.000	70.98	7.6	128.61	128.61	19.83	8554.86	8554.8	8503.74	51.12
437+50.000	66.84	5.08	127.61	127.61	11.74	8682.47	8682.41	8515.48	166.99
438+00.000	0	0	61.89	61.89	4.7	8744.36	8744.3	8520.18	224.18

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PROJECT NO: 1670-01-75 | **HWY: USH 12** | **COUNTY: SAUK** | **EARTHWORK SUMMARY** | **SHEET NO:** E

FILE NAME : 090101-ew.ppt PLOT DATE : February 16, 2015 PLOT BY : dotp1v PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

EARTHWORK VOLUME REPORT - STH 60									
Station	End Areas		Incremental Volume (Unadjusted)			Cumulate Volume (Unadjusted)			Mass Ordinate
	Cut	Fill	Cut	Reusable Cut	Fill	Cut	Reusable Cut	Fill	
	Sq. Ft.	Sq. Ft.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.
295+03.650	120.15	0	0	0	0	0	0	0	0.00
295+18.481	101.48	0	60.87	60.87	0	60.87	60.87	0	60.87
295+54.981	68.87	2.98	115.14	115.14	2.01	176.01	176.01	2.01	174.00
295+91.481	43.95	6.53	76.26	76.26	6.42	252.27	252.27	8.44	243.83
296+00.000	40.24	8.71	13.28	13.28	2.4	265.55	265.55	10.84	254.71
296+27.981	23.63	16.47	31.57	31.57	13.76	297.12	297.12	24.6	272.52
296+50.000	5.7	36.75	11.17	11.17	22.88	308.29	308.29	47.49	260.80
296+75.000	0	48.14	2.46	2.46	42.15	310.75	310.75	89.63	221.11
297+00.000	0.25	141.85	0.1	0.1	89.63	310.84	310.84	179.27	131.58
297+50.000	3.81	333.28	3.01	3.01	444.49	313.85	313.85	623.76	(309.90)
298+00.000	8.5	595.52	8.83	8.83	908.66	322.68	322.68	1532.41	(1209.73)
298+36.175	193.59	444.45	172.92	172.92	721.43	495.6	495.6	2253.84	(1758.24)
298+50.000	259.82	432.32	150.84	150.84	218.17	646.44	646.44	2472.01	(1825.57)
298+72.675	248.69	412.15	242.99	242.99	348.35	889.43	889.43	2820.35	(1930.92)
299+00.000	121.56	436.63	187.35	187.35	429.49	1076.79	1076.79	3249.84	(2173.06)

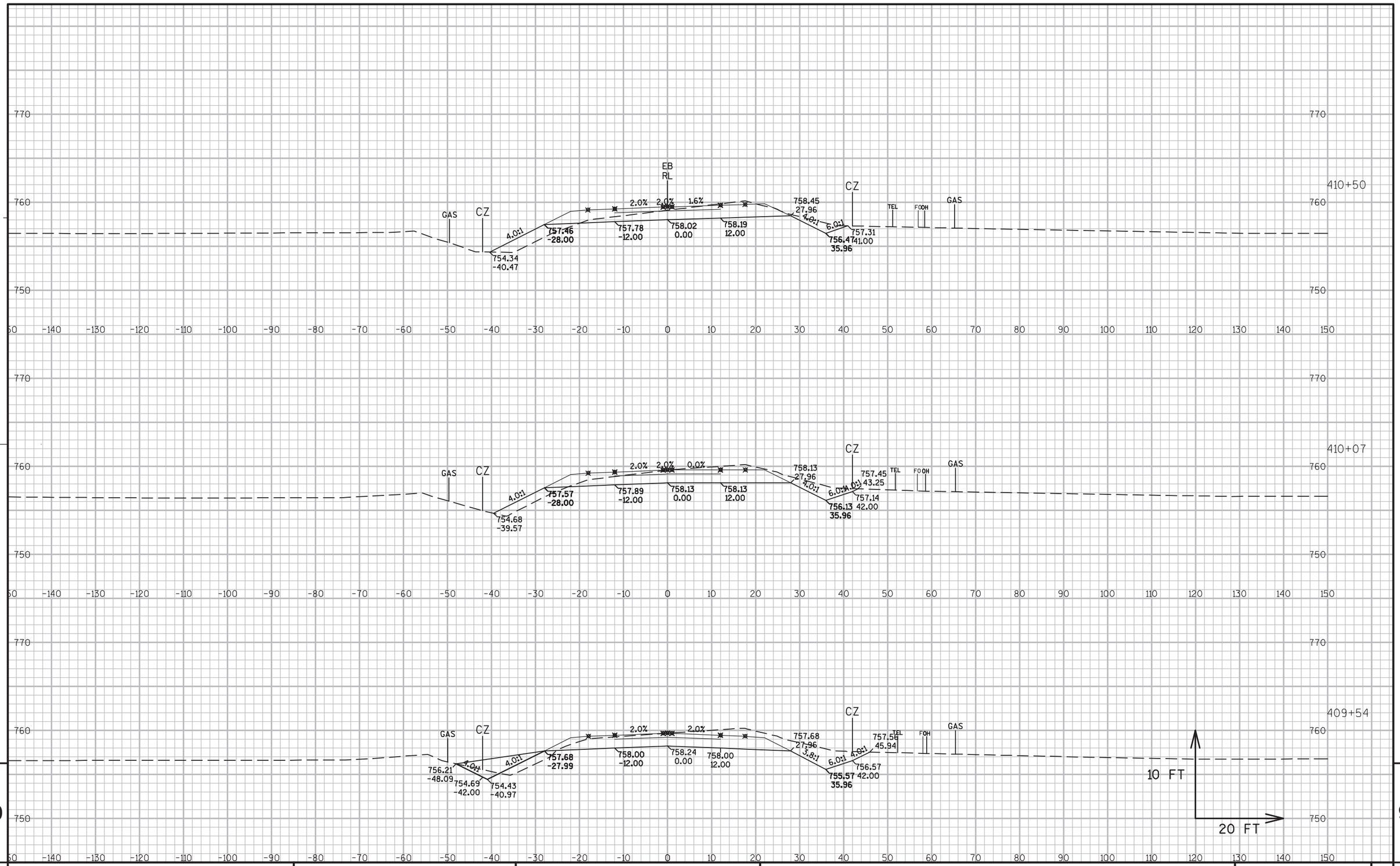
EARTHWORK VOLUME REPORT - FRONTAGE ROAD									
Station	End Areas		Incremental Volume (Unadjusted)			Cumulate Volume (Unadjusted)			Mass Ordinate
	Cut	Fill	Cut	Reusable Cut	Fill	Cut	Reusable Cut	Fill	
	Sq. Ft.	Sq. Ft.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.
300+50.000	140.46	4	0	0	0	0	0	0	0
301+00.000	126.13	0	226.92	226.92	3.71	226.92	226.92	3.71	223.21
301+50.000	133.99	0	237.51	237.51	0	464.43	464.43	3.71	460.72
302+00.000	122.24	0	237.5	237.5	0	701.93	701.93	3.71	698.22
302+50.000	96.09	0	204.87	204.87	0	906.8	906.8	3.71	903.09
303+00.000	74.41	0	157.87	157.87	0	1064.67	1064.67	3.71	1060.95
303+50.000	53.36	0.06	118.3	118.3	0.06	1182.97	1182.97	3.78	1179.19
304+00.000	36.19	0.2	82.92	82.92	0.24	1265.89	1265.89	4.02	1261.87
304+50.000	15.17	12.63	47.55	47.55	11.88	1313.44	1313.44	15.9	1297.54
305+00.000	48.13	21.77	58.61	58.61	31.86	1372.05	1372.05	47.76	1324.29
305+50.000	61.39	7.72	101.4	101.4	27.3	1473.45	1473.45	75.06	1398.39
305+80.350	81.55	0	80.33	80.33	4.34	1553.79	1553.79	79.4	1474.39

EARTHWORK VOLUME REPORT - RICHOLSON ROAD									
Station	End Areas		Incremental Volume (Unadjusted)			Cumulate Volume (Unadjusted)			Mass Ordinate
	Cut	Fill	Cut	Reusable Cut	Fill	Cut	Reusable Cut	Fill	
	Sq. Ft.	Sq. Ft.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.
196+22.060	60.92	0.3	0	0	0	0	0	0	0.00
196+39.174	70.54	0.27	41.66	41.66	0.18	41.66	41.66	0.18	41.48
196+50.000	52.54	0.63	24.68	24.68	0.18	66.34	66.34	0.36	65.98
196+73.674	44.81	1.96	42.68	42.68	1.14	109.02	109.02	1.49	107.52
197+00.000	26.98	7.28	34.99	34.99	4.5	144.01	144.01	6	138.01
197+08.174	23.4	9.38	7.63	7.63	2.52	151.64	151.64	8.52	143.12
197+42.674	14.93	15.42	23.29	23.29	16.36	174.93	174.93	24.87	150.05
198+00.000	25.97	64.63	47.61	47.61	86.41	222.53	222.53	111.29	111.25
198+25.000	12.55	96.69	21.64	21.64	76.4	244.18	244.18	187.69	56.49
198+50.000	57.81	106.03	47.11	47.11	96.6	291.29	291.29	284.28	7.01
199+00.000	25.5	106.98	111.27	111.27	202.28	402.56	402.56	486.56	(84.00)
199+13.462	22.38	107.01	15.74	15.74	54.69	418.3	418.3	541.24	(122.95)
199+47.962	16.5	113.1	29.98	29.98	142.55	448.28	448.28	683.8	(235.52)
199+82.462	14.28	132.4	19.66	19.66	156.85	467.94	467.94	840.64	(372.70)
200+00.000	12.39	139.3	8.66	8.66	88.24	476.6	476.6	928.89	(452.29)
200+16.962	8.76	146.73	6.64	6.64	89.85	483.24	483.24	1018.74	(535.49)
200+50.000	9.87	141.93	11.4	11.4	176.61	494.64	494.64	1195.35	(700.70)
201+00.000	19.06	131.22	26.79	26.79	252.92	521.43	521.43	1448.26	(926.83)
201+50.000	12.35	186.26	29.08	29.08	293.96	550.52	550.52	1742.22	(1191.71)
201+88.784	16.17	237.7	20.49	20.49	304.5	571	571	2046.73	(1475.72)
202+00.000	19.89	258.72	7.49	7.49	103.1	578.49	578.49	2149.83	(1571.34)
202+25.284	23.29	282.32	20.22	20.22	253.33	598.71	598.71	2403.16	(1804.45)
202+50.000	51.71	329.62	34.33	34.33	280.08	633.04	633.04	2683.24	(2050.21)
202+61.784	56.12	383.94	23.53	23.53	155.72	656.57	656.57	2838.96	(2182.39)
202+98.284	85.07	523.47	77.4	77.4	611.82	733.97	733.97	3450.78	(2716.82)
203+50.000	92.57	615.21	121.51	121.51	1090.35	855.48	855.48	4541.13	(3685.65)
204+00.000	149.92	616.31	161.14	161.14	1158.61	1016.61	1016.61	5699.74	(4683.13)
204+09.677	225.26	560.28	47.97	47.97	218.15	1064.58	1064.58	5917.89	(4853.31)
204+50.000	147.88	230.72	229.9	229.9	603.13	1294.49	1294.49	6521.02	(5226.53)

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PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	EARTHWORK SUMMARY	SHEET NO: 213	E



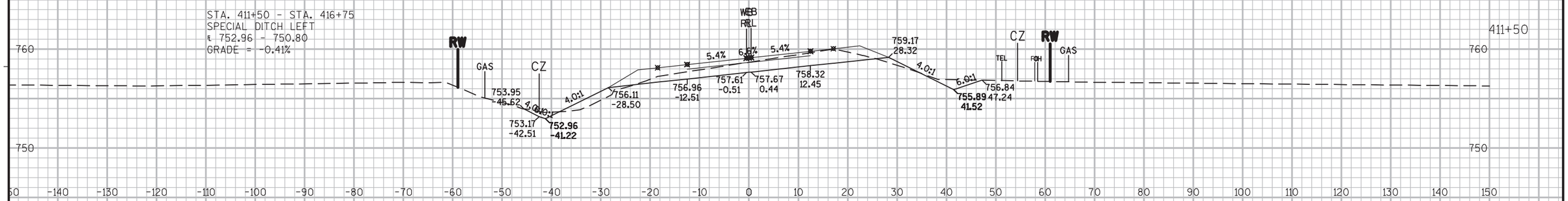
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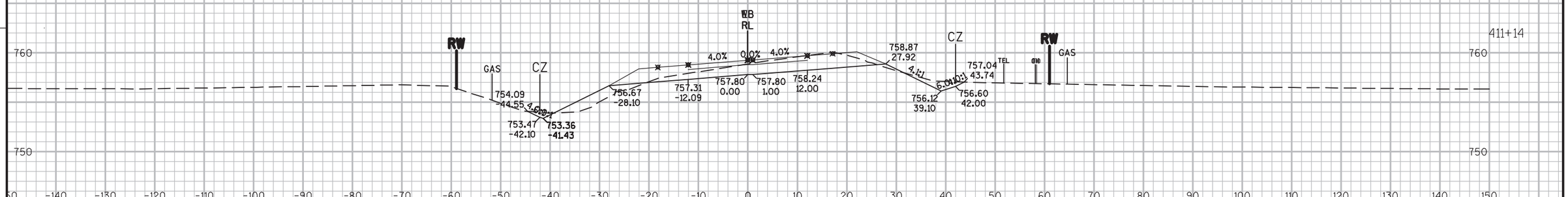
PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: USH 12	SHEET 214	E

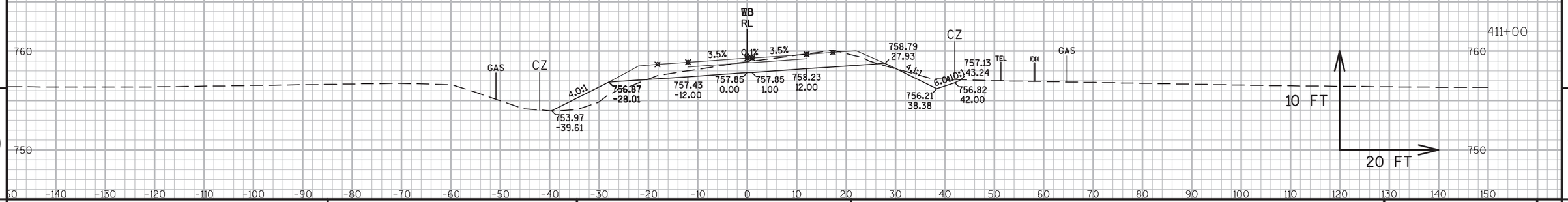
FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090100_XS.DWG PLOT DATE : 1/29/2015 1:11 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

STA. 411+50 - STA. 416+75
SPECIAL DITCH LEFT
℄ 752.96 - 750.80
GRADE = -0.41%



STA. 411+13.53 - STA. 416+25
SPECIAL DITCH RIGHT
℄ 756.06 - 753.50
GRADE = -0.50%

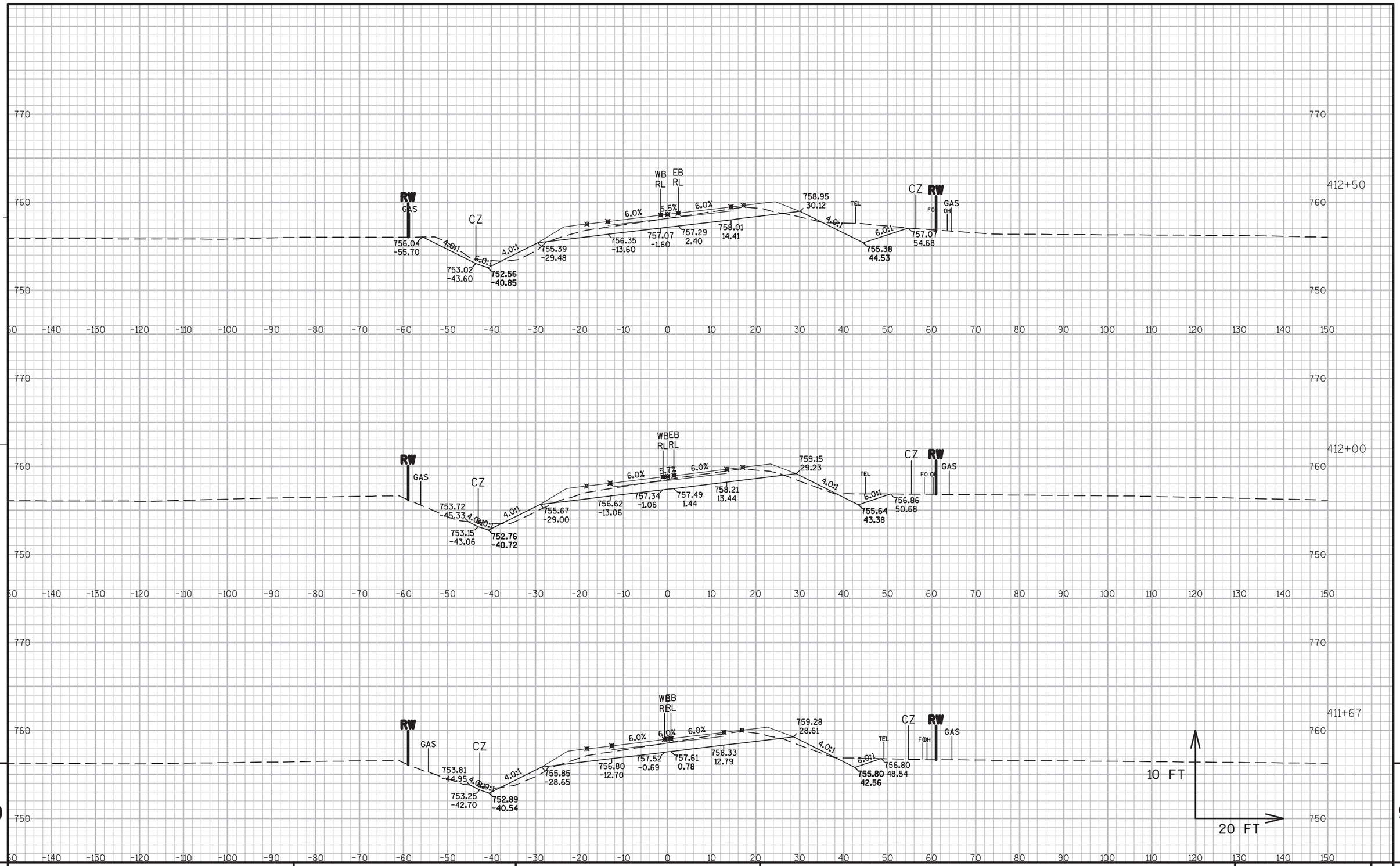




PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: USH 12	SHEET 215	E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090100_XS.DWG
PLOT DATE : 1/29/2015 1:11 PM
PLOT BY : VALENTI, PAUL M
PLOT NAME :
PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

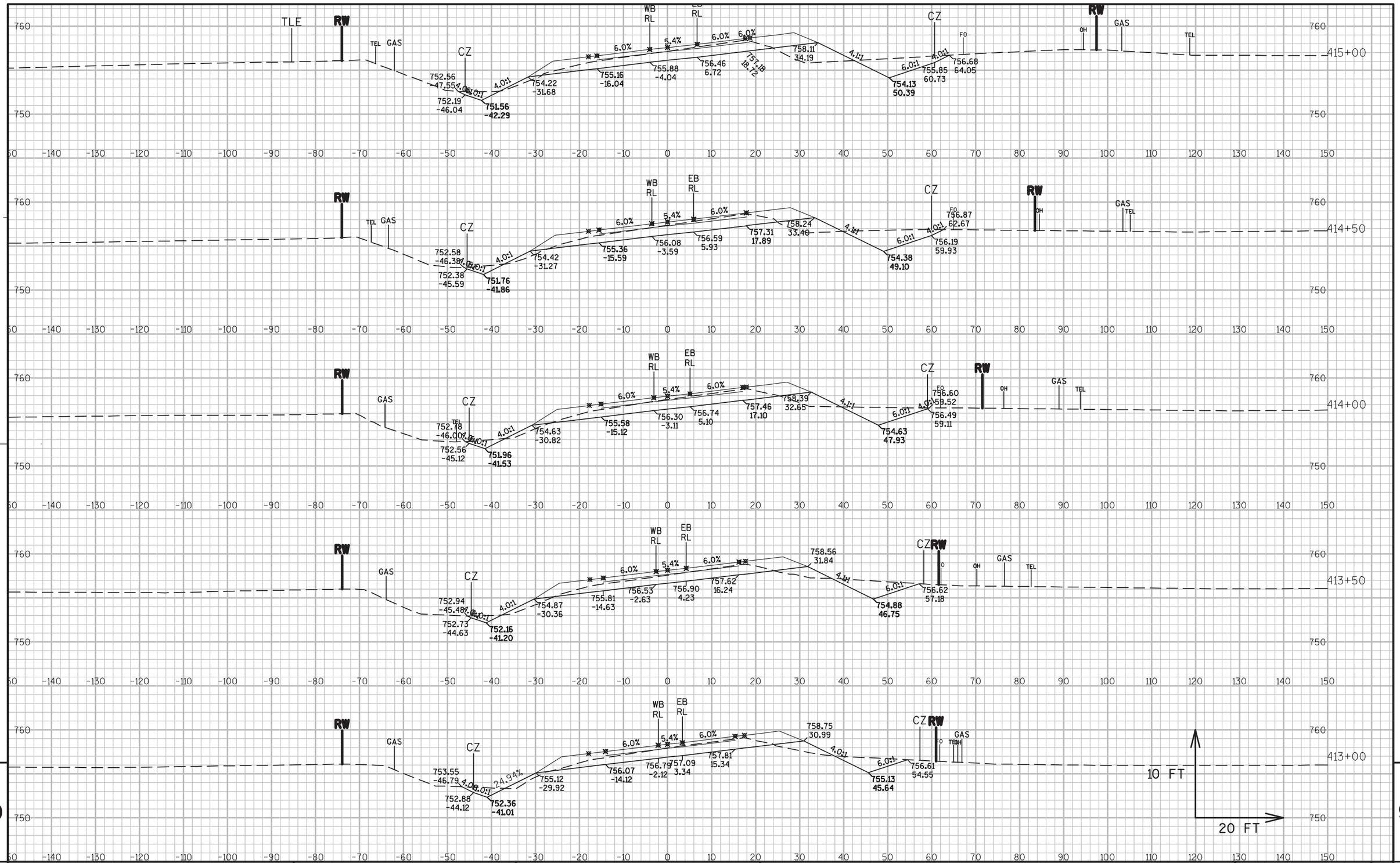


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PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: USH 12	SHEET 216	E

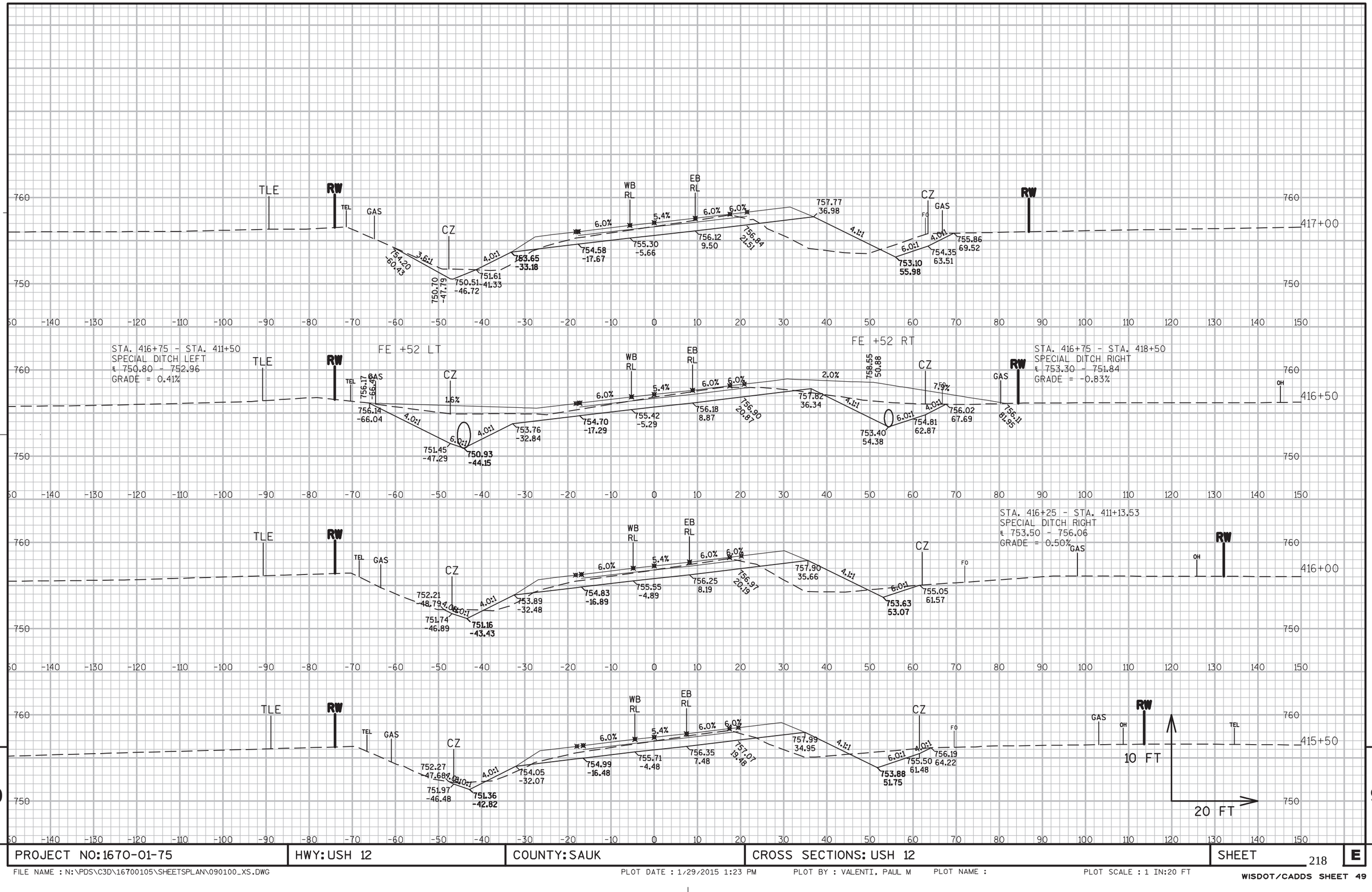
FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090100_XS.DWG PLOT DATE : 1/29/2015 1:12 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: USH 12	SHEET 217	E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090100_XS.DWG PLOT DATE : 1/29/2015 1:22 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

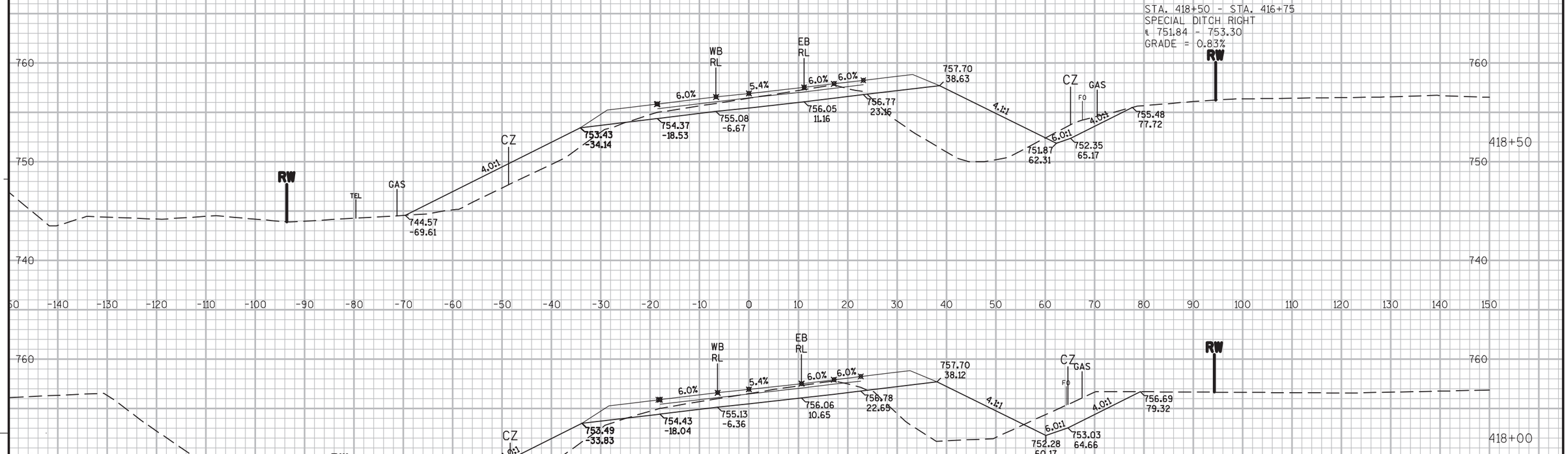


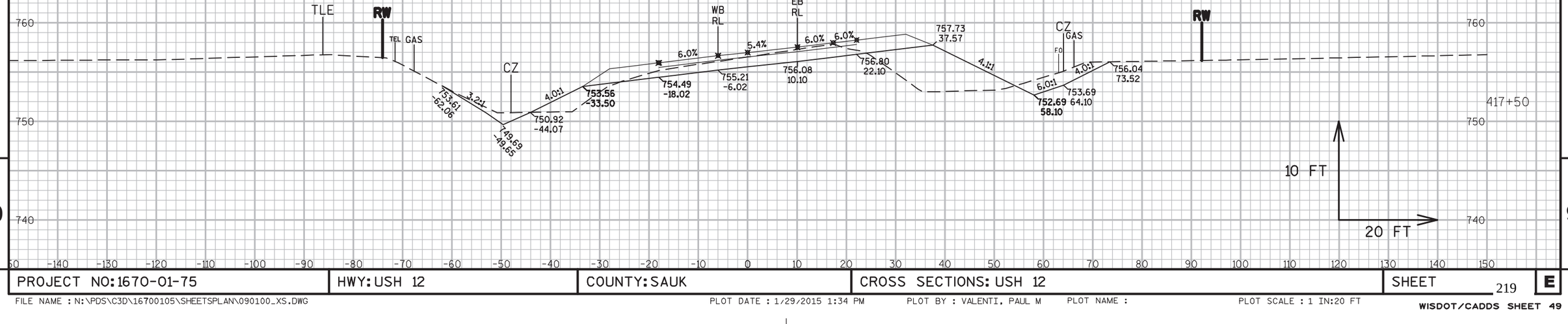
PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: USH 12	SHEET 218	E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090100_XS.DWG PLOT DATE : 1/29/2015 1:23 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

STA. 418+50 - STA. 416+75
SPECIAL DITCH RIGHT
℄ 751.84 - 753.30
GRADE = 0.83%

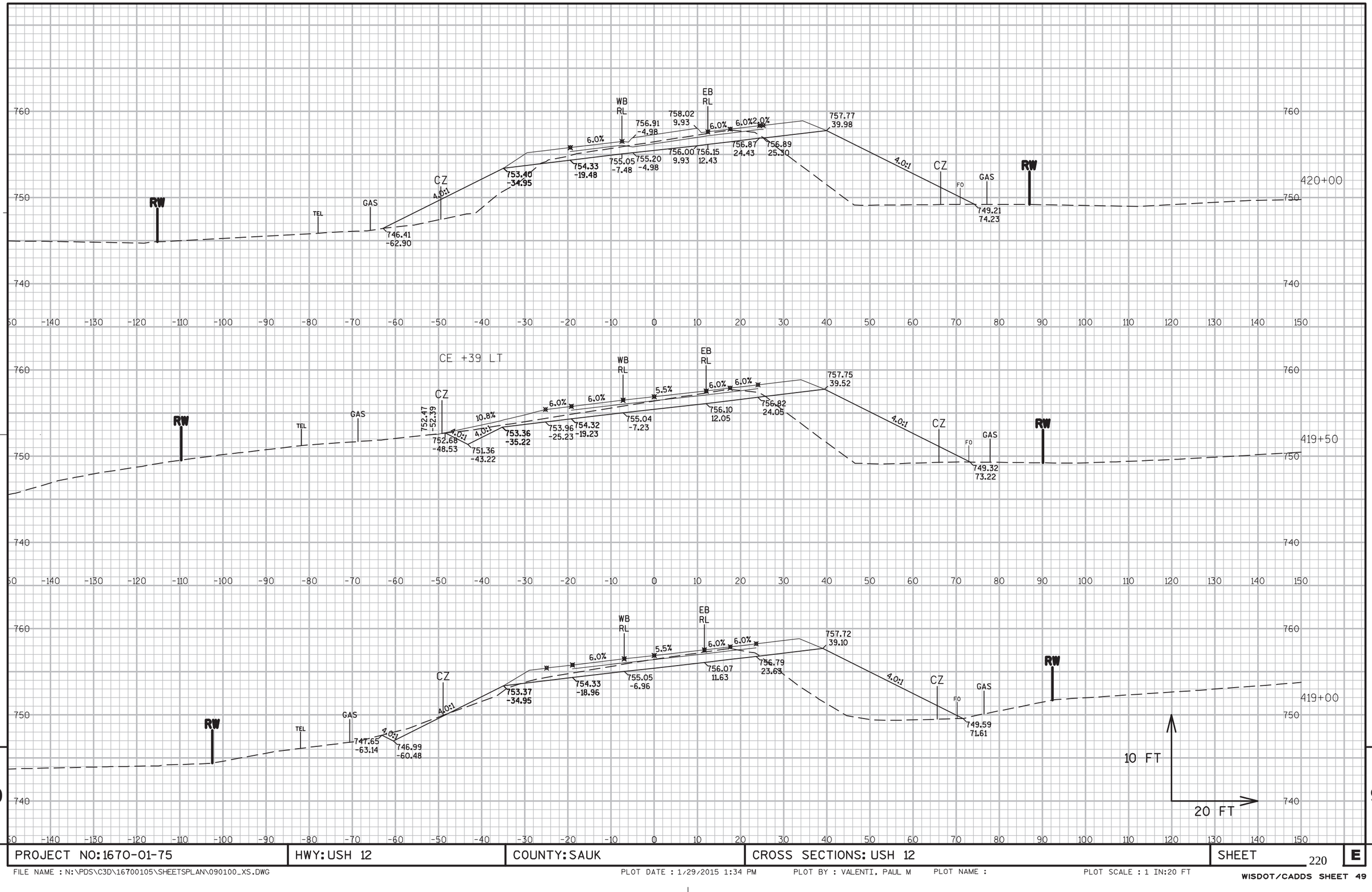




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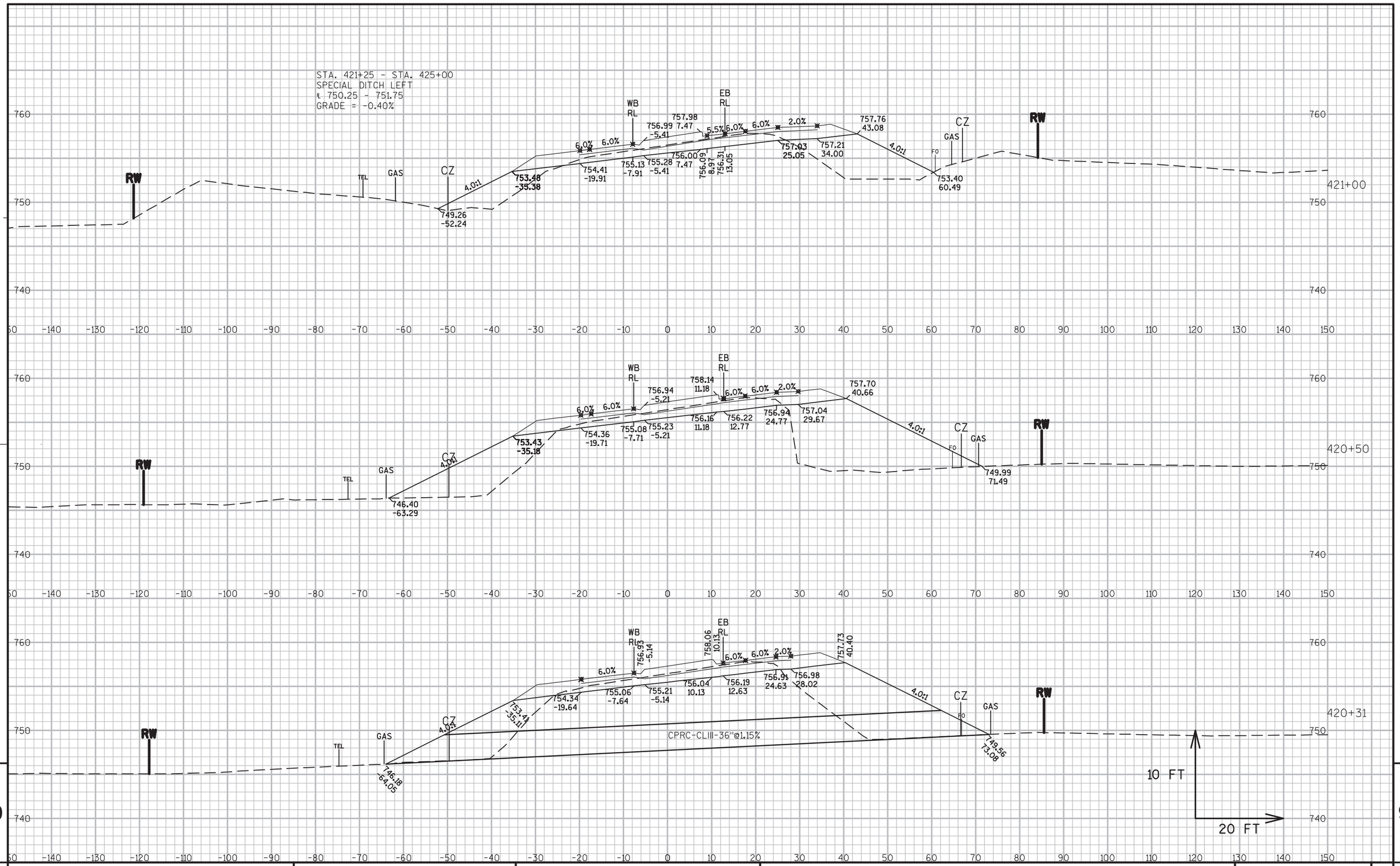
PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: USH 12	SHEET 219	E



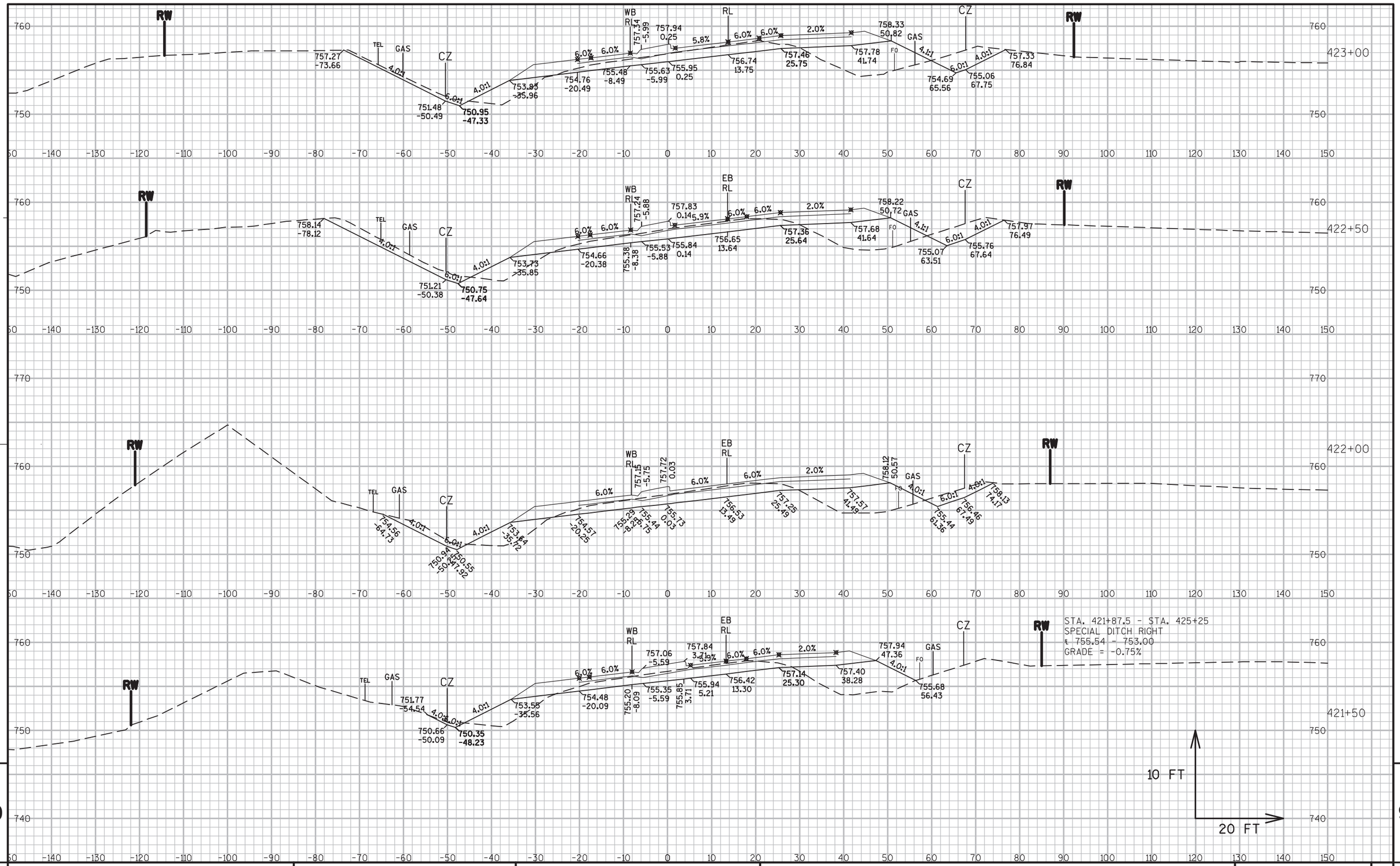
PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: USH 12	SHEET 220 E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090100_XS.DWG PLOT DATE : 1/29/2015 1:34 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

STA. 421+25 - STA. 425+00
SPECIAL DITCH LEFT
℄ 750.25 - 751.75
GRADE = -0.40%



PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: USH 12	SHEET 221	E



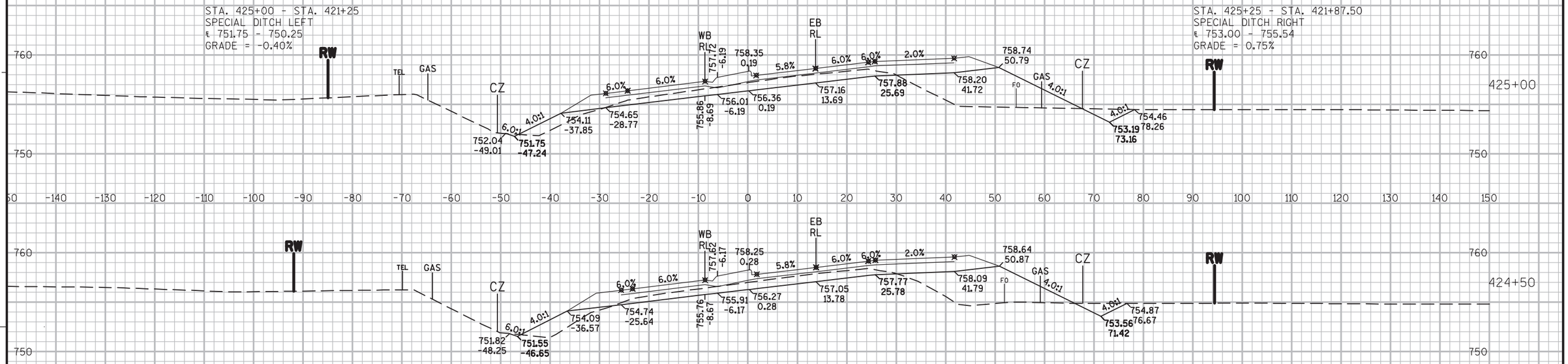
PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: USH 12	SHEET 222 E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090100_XS.DWG PLOT DATE : 1/29/2015 1:36 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

STA. 425+00 - STA. 421+25
SPECIAL DITCH LEFT
℄ 751.75 - 750.25
GRADE = -0.40%

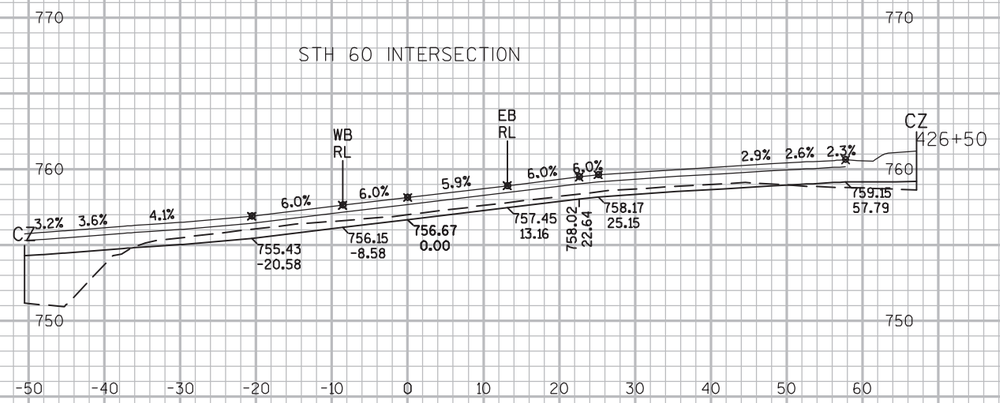
STA. 425+25 - STA. 421+87.50
SPECIAL DITCH RIGHT
℄ 753.00 - 755.54
GRADE = 0.75%

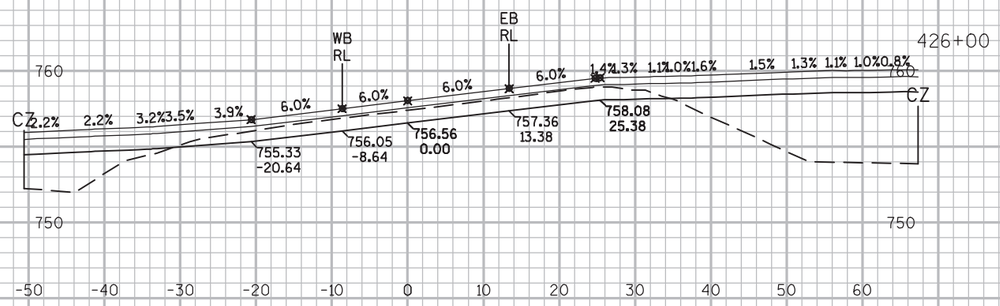


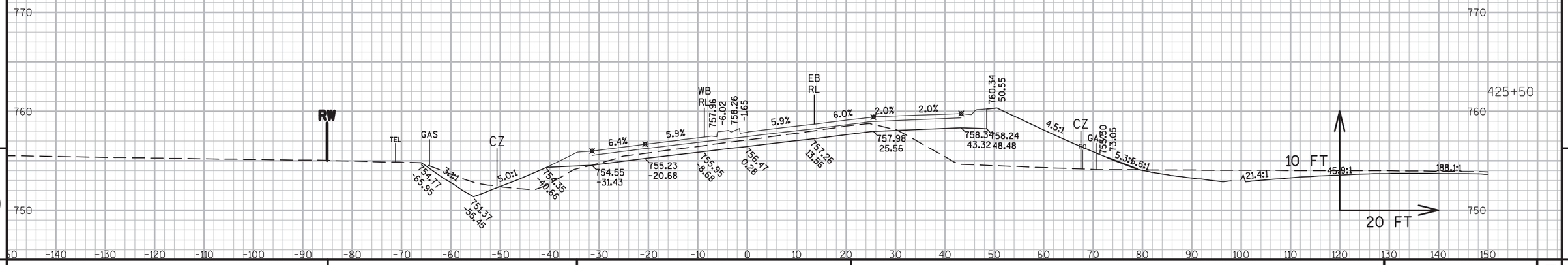
PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: USH 12	SHEET 223	E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090100_XS.DWG PLOT DATE : 1/29/2015 1:37 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



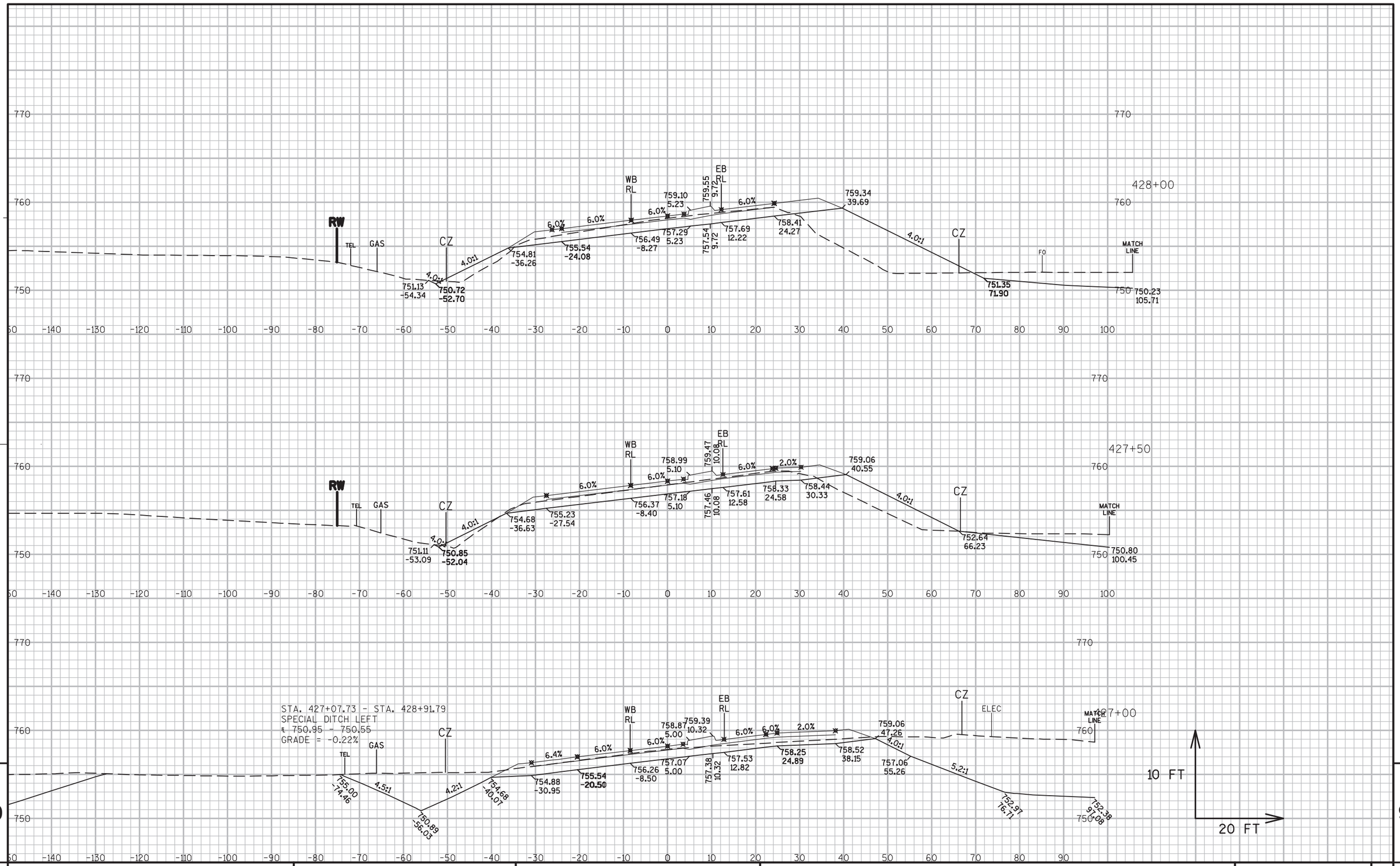




9

9

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: USH 12	SHEET 224	E

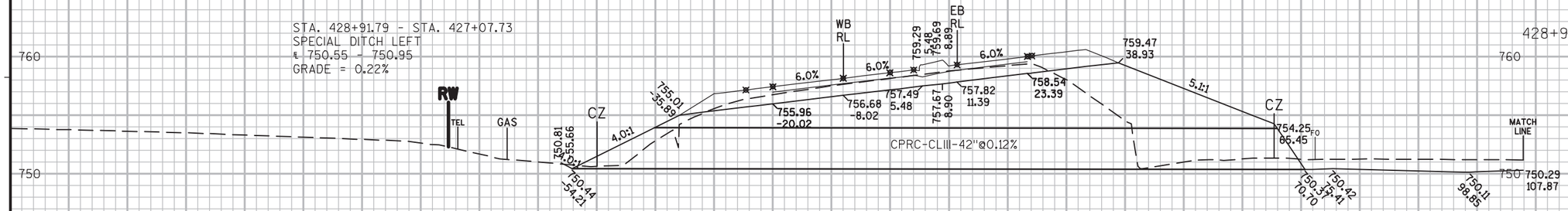


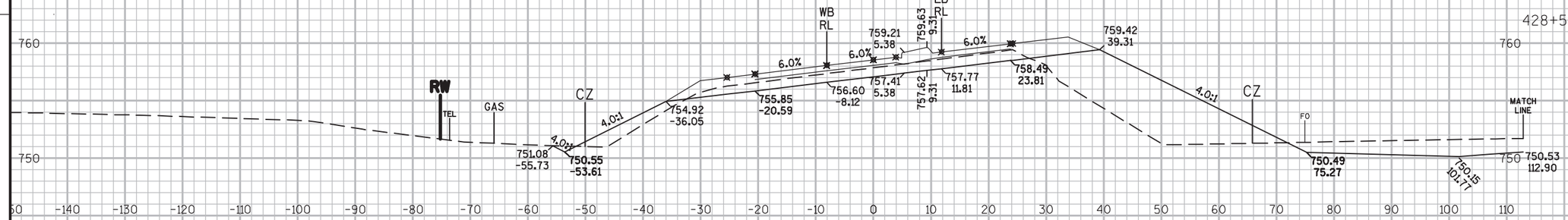
PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: USH 12	SHEET 225	E

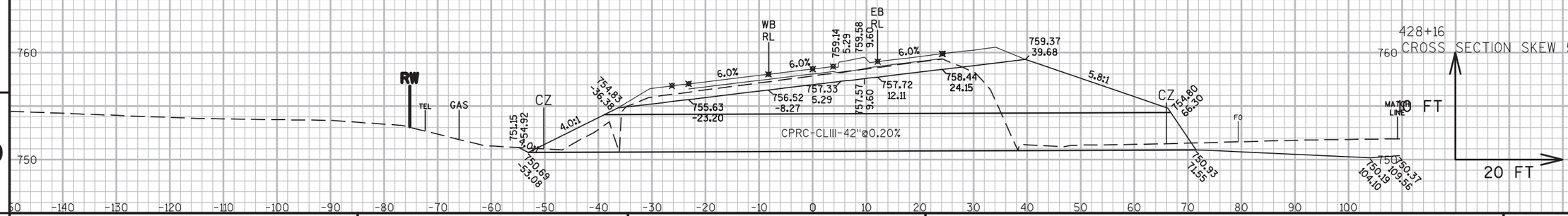
FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090100_XS.DWG PLOT DATE : 1/29/2015 1:39 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

STA. 428+91.79 - STA. 427+07.73
SPECIAL DITCH LEFT
℄ 750.55 - 750.95
GRADE = 0.22%





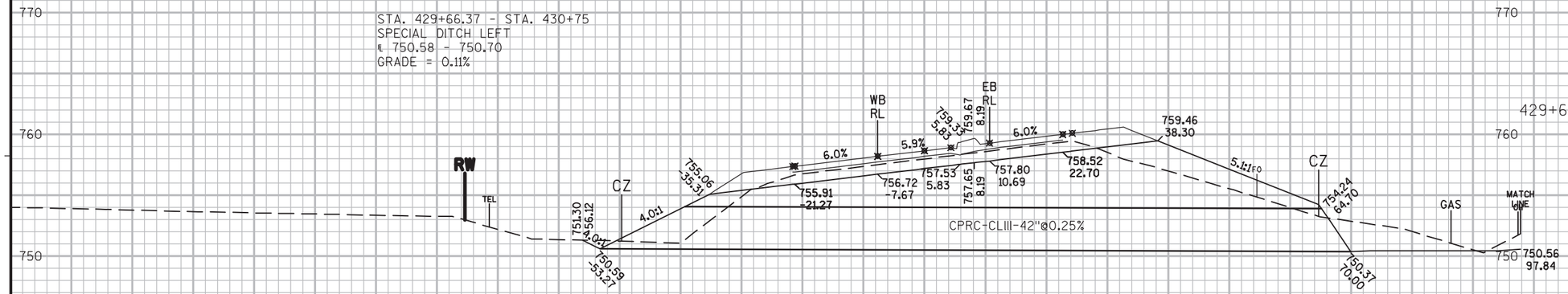


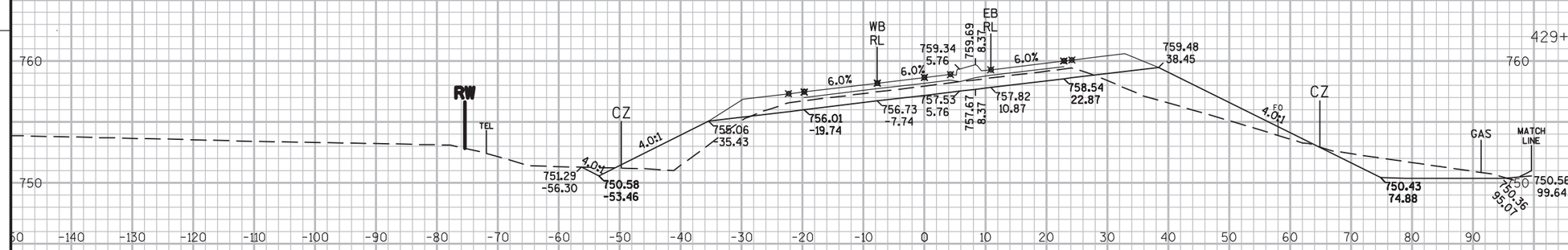
9

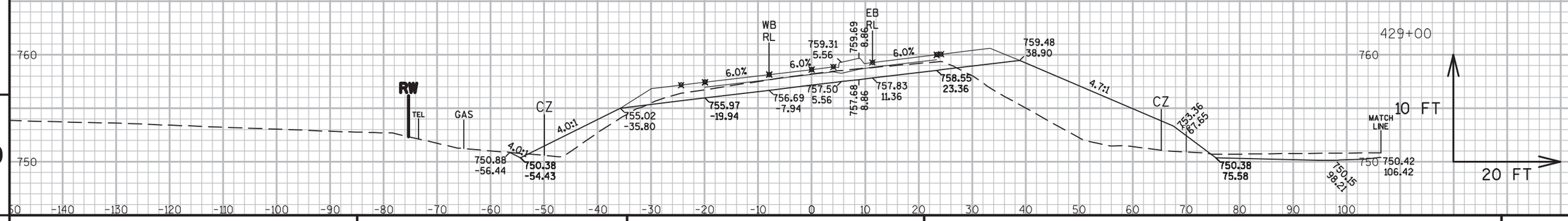
9

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: USH 12	SHEET 226 E

STA. 429+66.37 - STA. 430+75
SPECIAL DITCH LEFT
℄ 750.58 - 750.70
GRADE = 0.11%



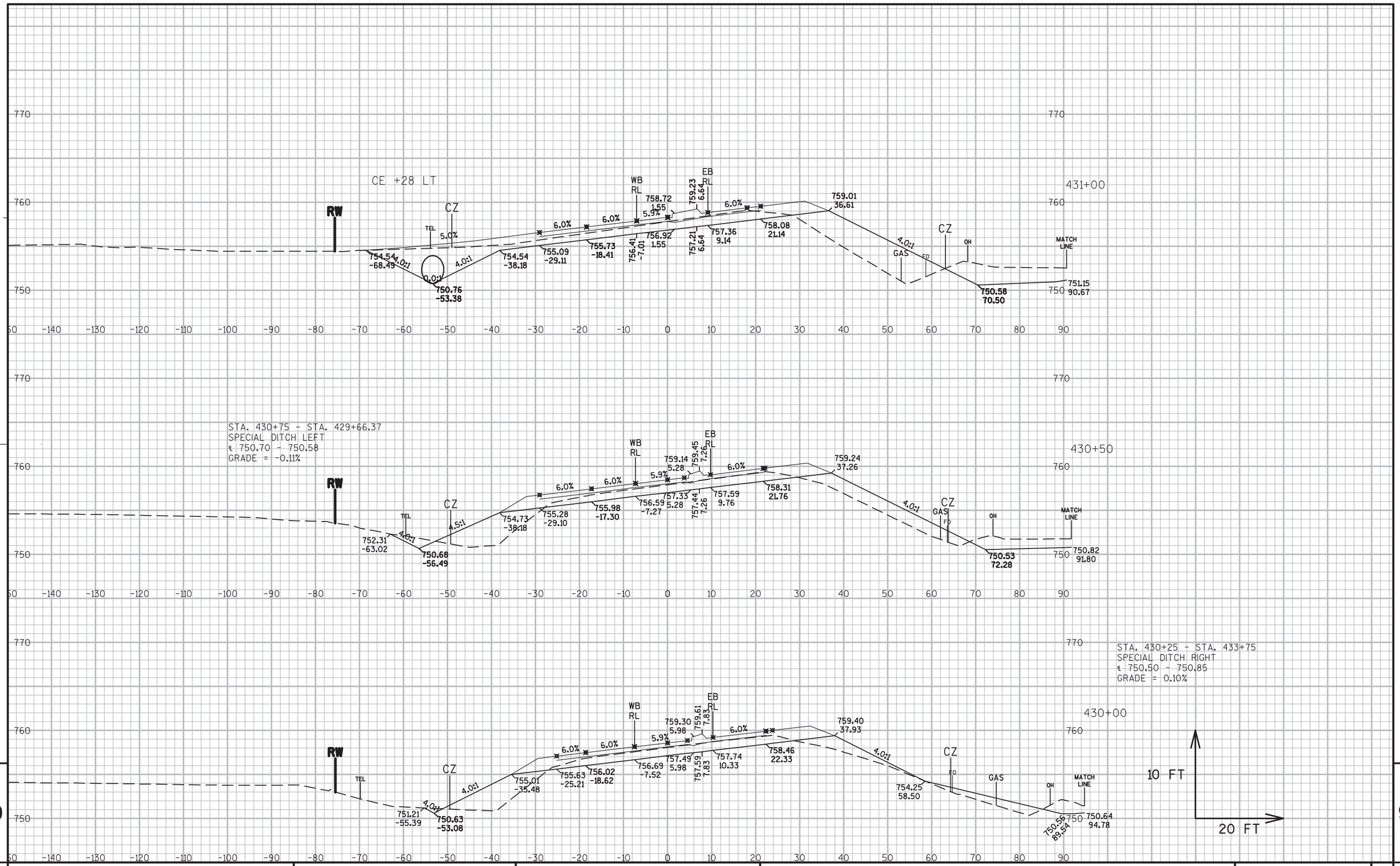




PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: USH 12	SHEET 227 E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090100_XS.DWG PLOT DATE : 1/29/2015 1:40 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

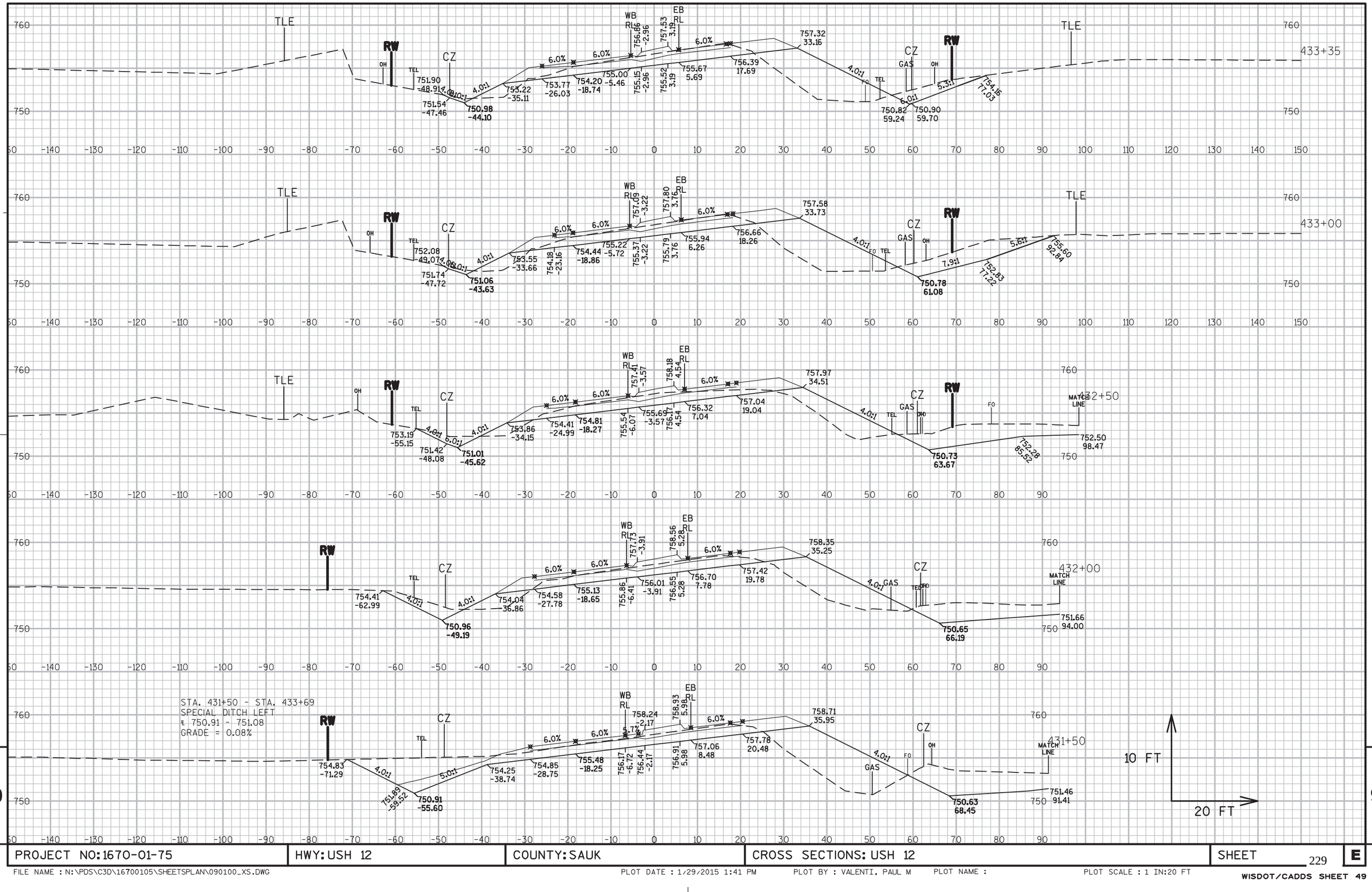
WISDOT/CADDS SHEET 49



PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: USH 12	SHEET 228	E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090100_XS.DWG PLOT DATE : 1/29/2015 1:40 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

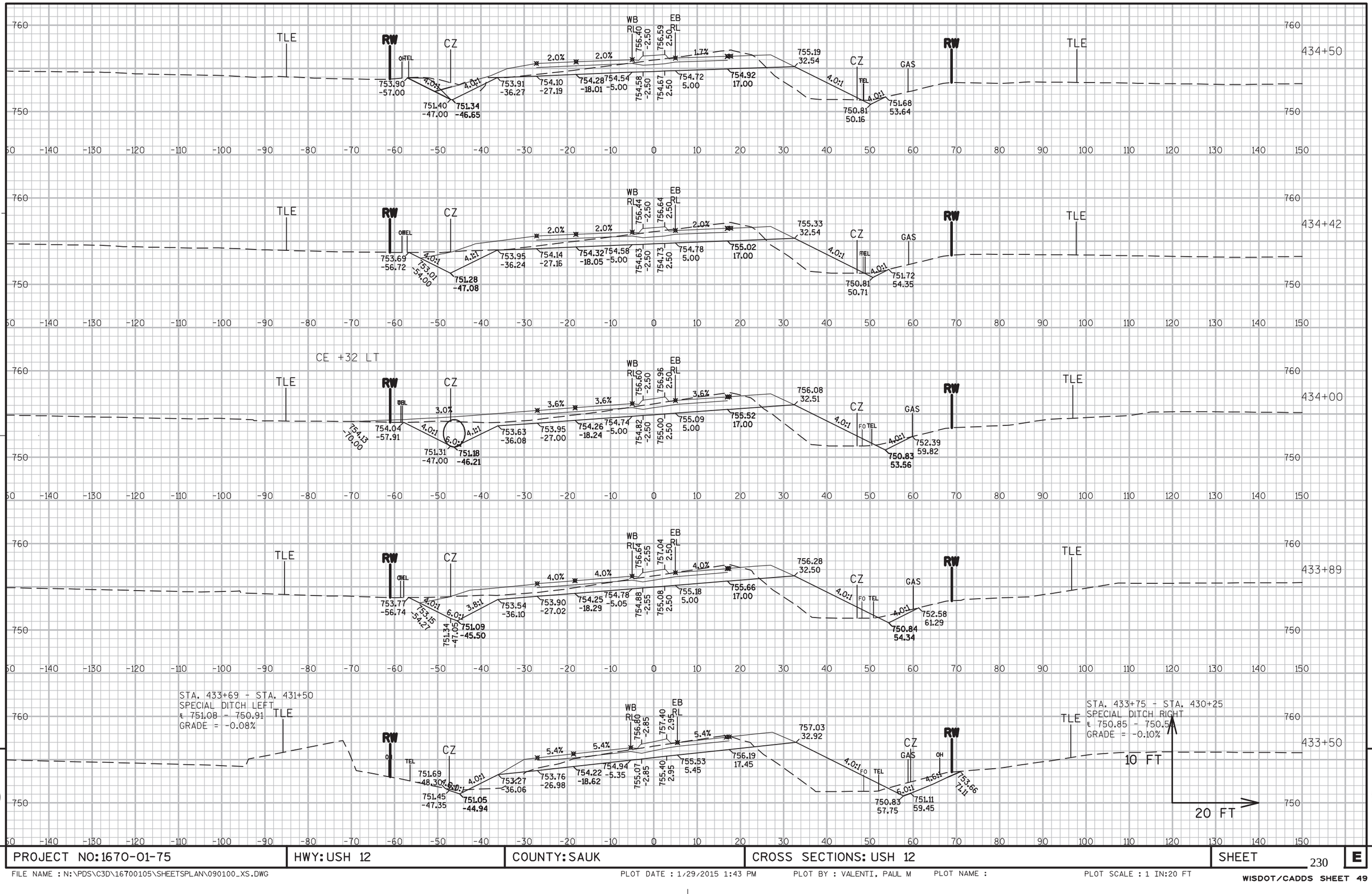
WISDOT/CADDS SHEET 49



PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: USH 12	SHEET 229	E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090100_XS.DWG PLOT DATE : 1/29/2015 1:41 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

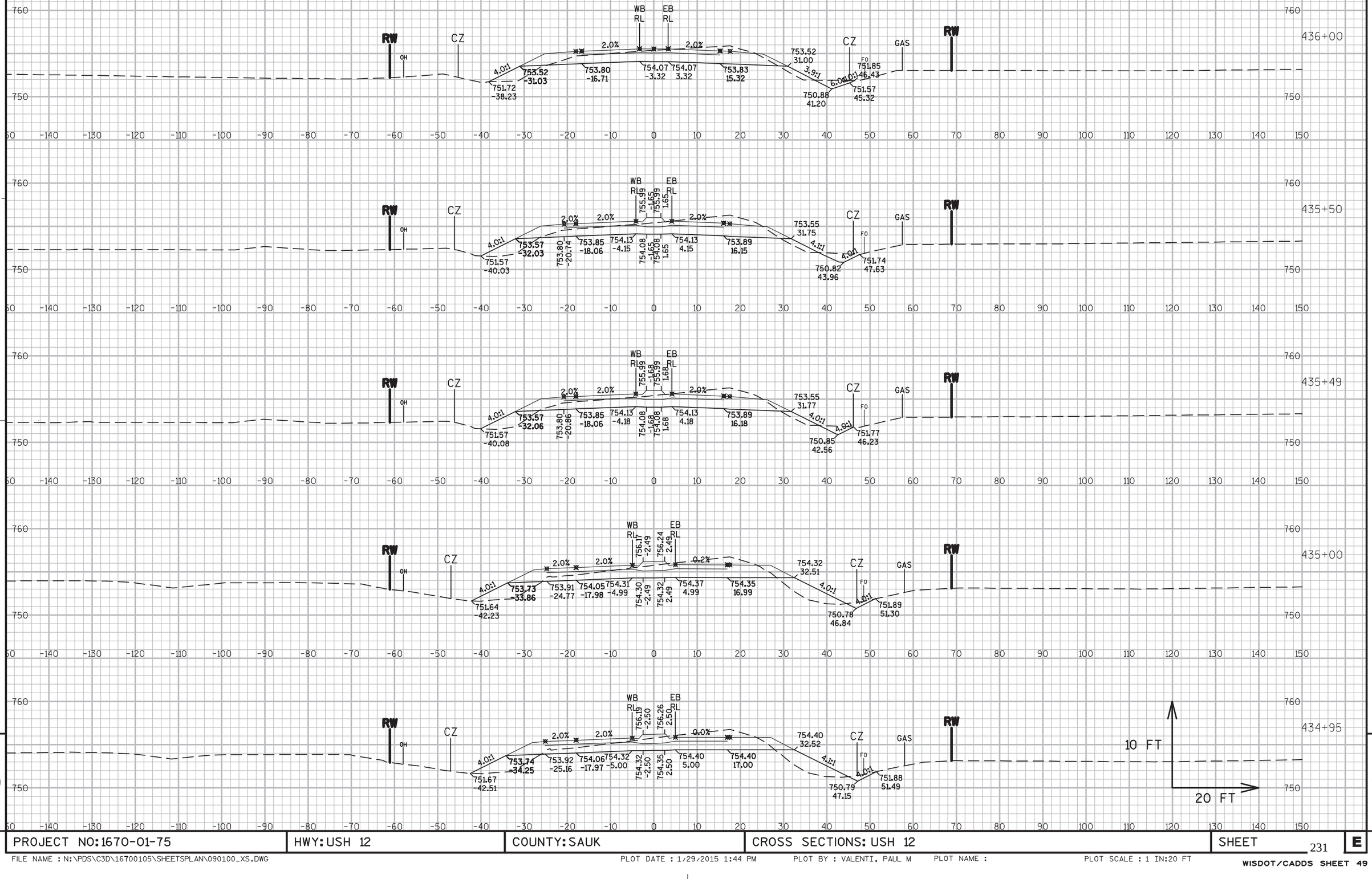


9

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: USH 12	SHEET 230	E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090100_XS.DWG PLOT DATE : 1/29/2015 1:43 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

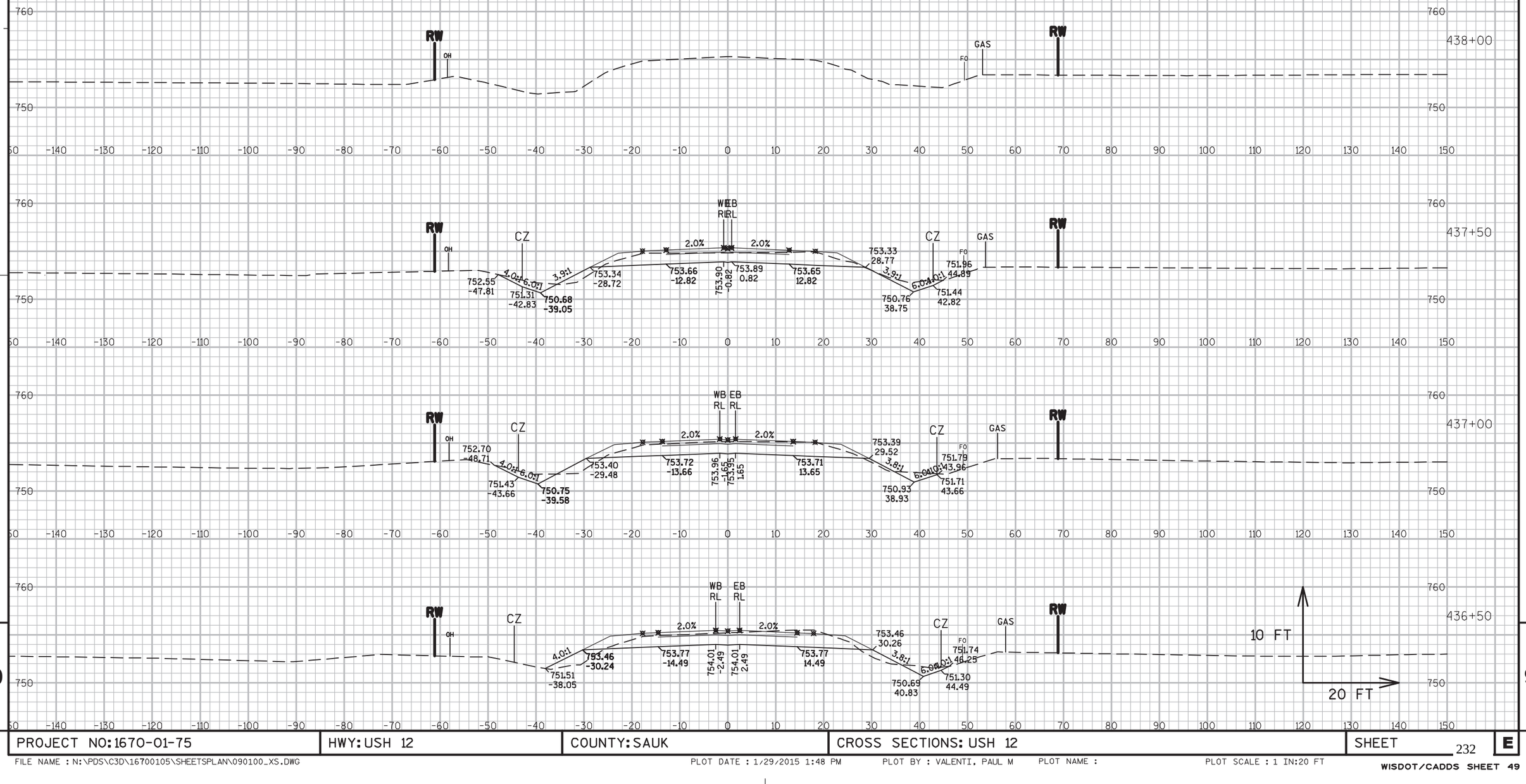
WISDOT/CADDS SHEET 49



PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: USH 12	SHEET 231	E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090100_XS.DWG PLOT DATE : 1/29/2015 1:44 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

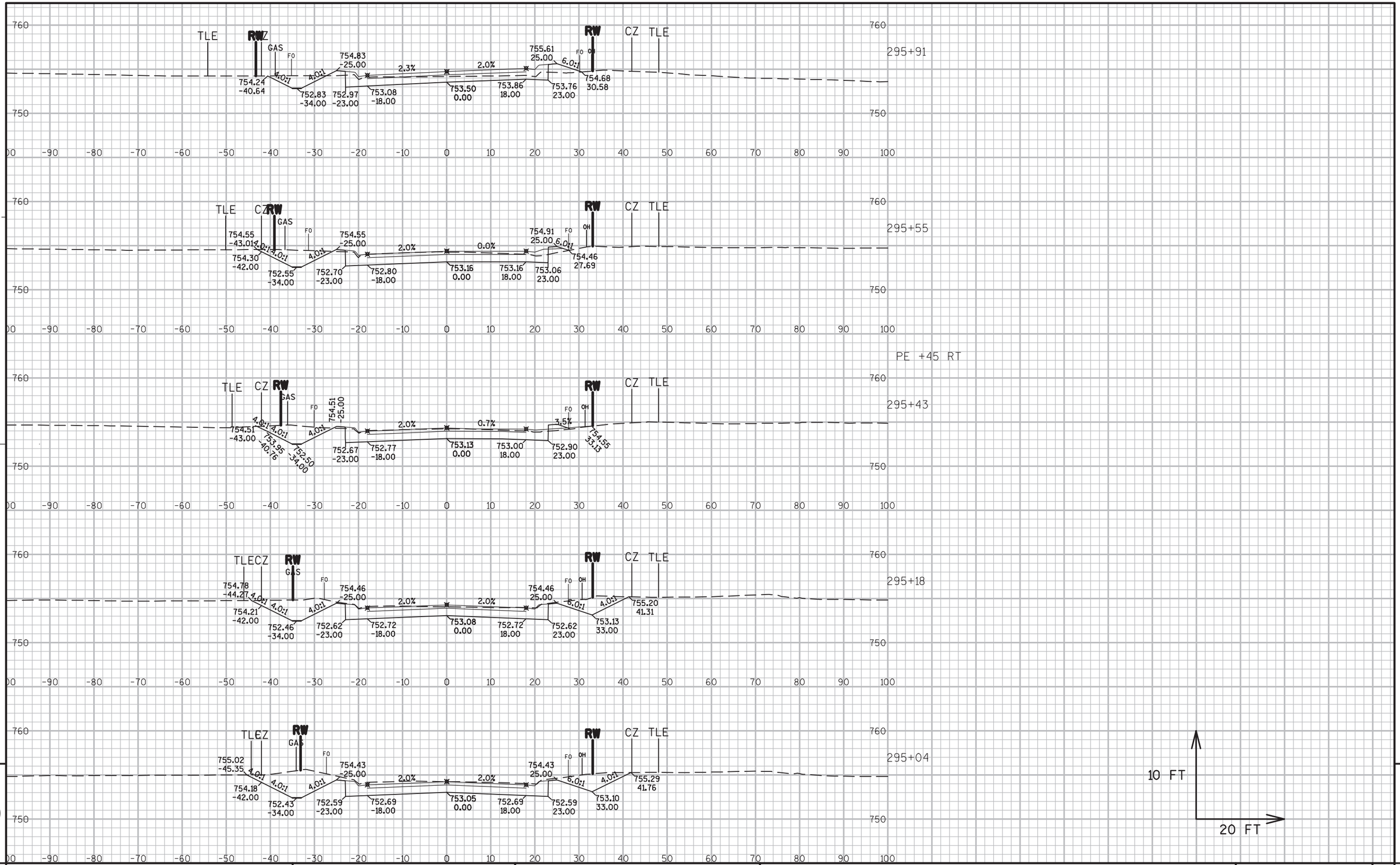
WISDOT/CADDS SHEET 49



PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: USH 12	SHEET 232	E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090100_XS.DWG PLOT DATE : 1/29/2015 1:48 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

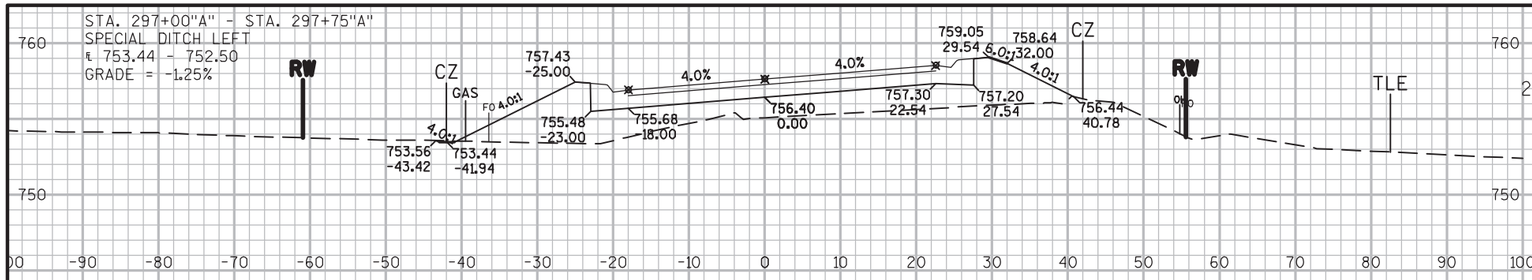


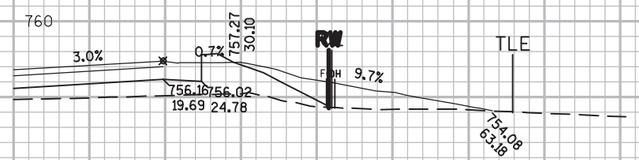
PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: STH 60	SHEET 233	E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090200_XS.DWG PLOT DATE : 1/29/2015 1:52 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

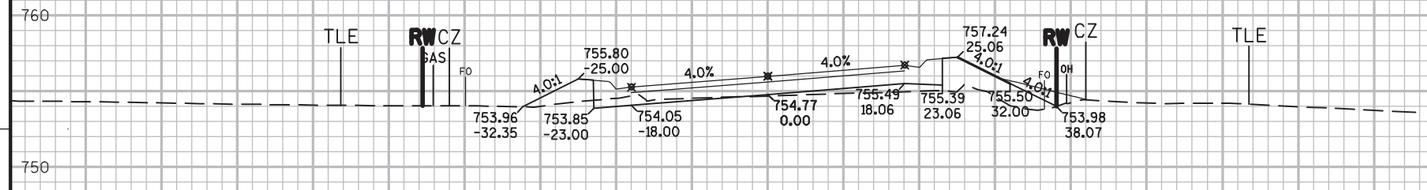
WISDOT/CADDS SHEET 49

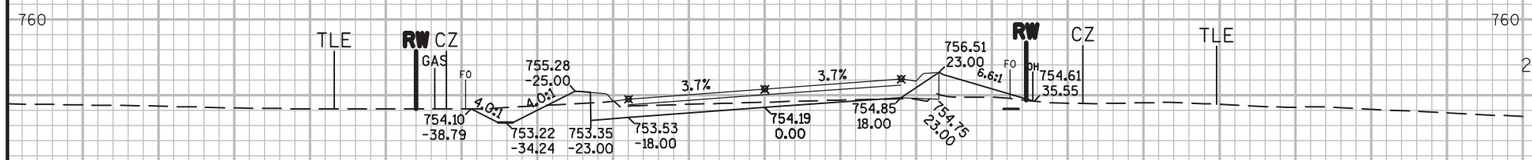
STA. 297+00"A" - STA. 297+75"A"
SPECIAL DITCH LEFT
℄ 753.44 - 752.50
GRADE = -1.25%

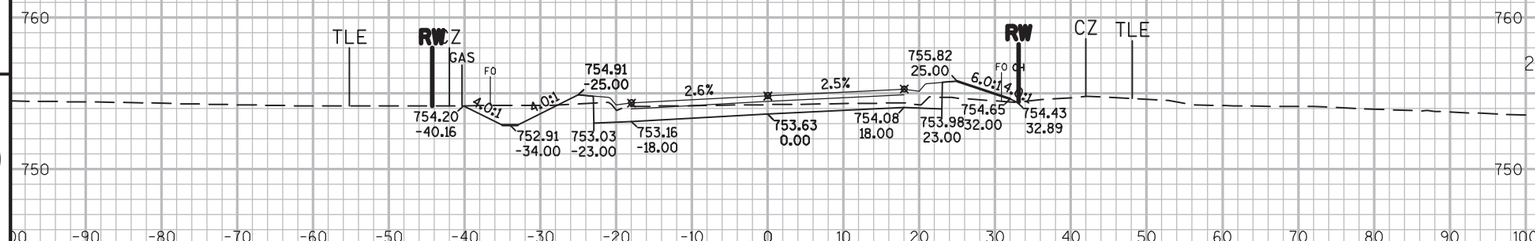


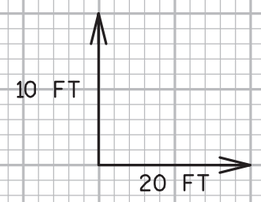


PE +72 RT
CROSS SECTION SKEW 17°14'24" LHF
296+75



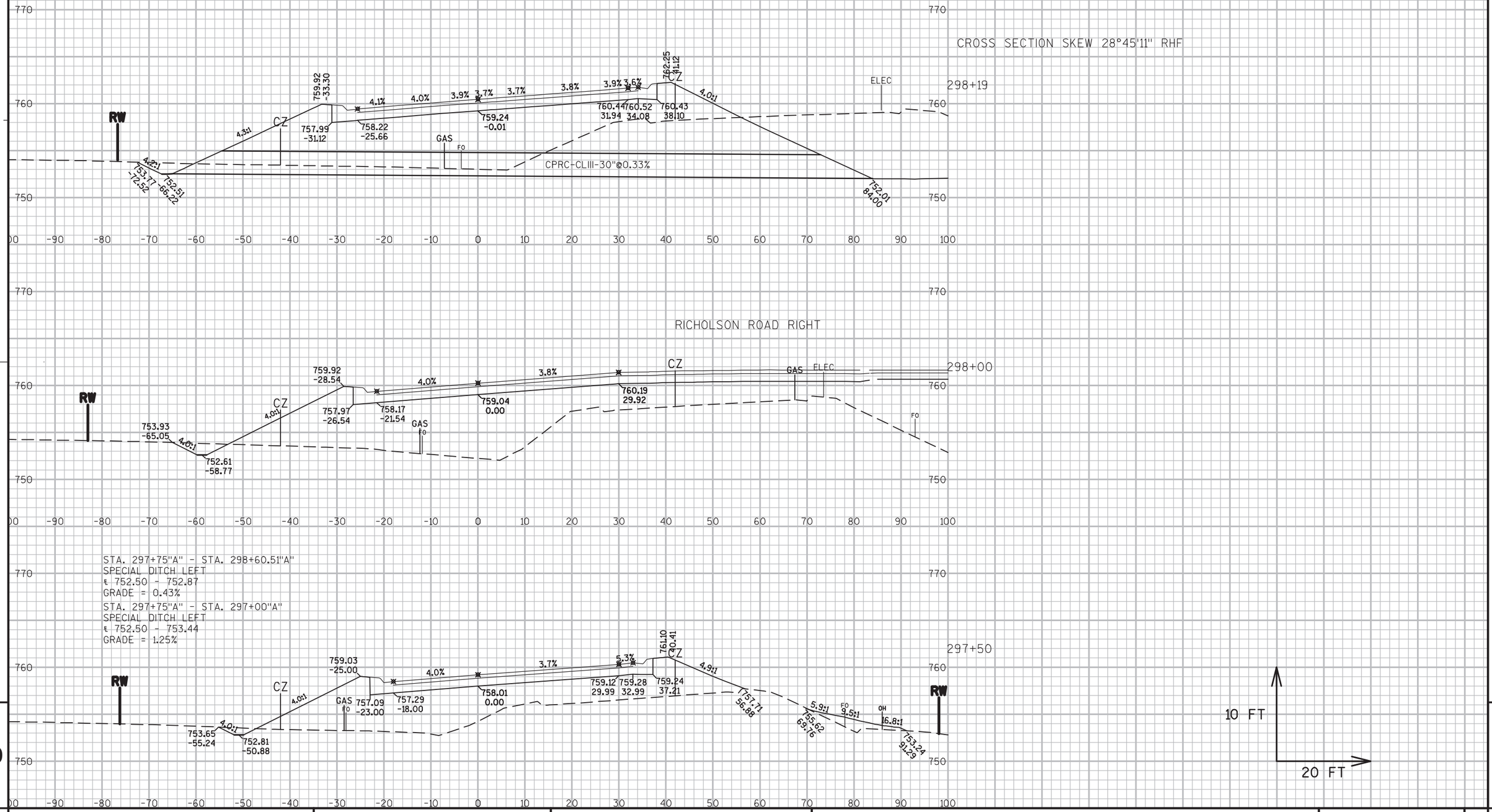






9 9

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: STH 60	SHEET 234	E



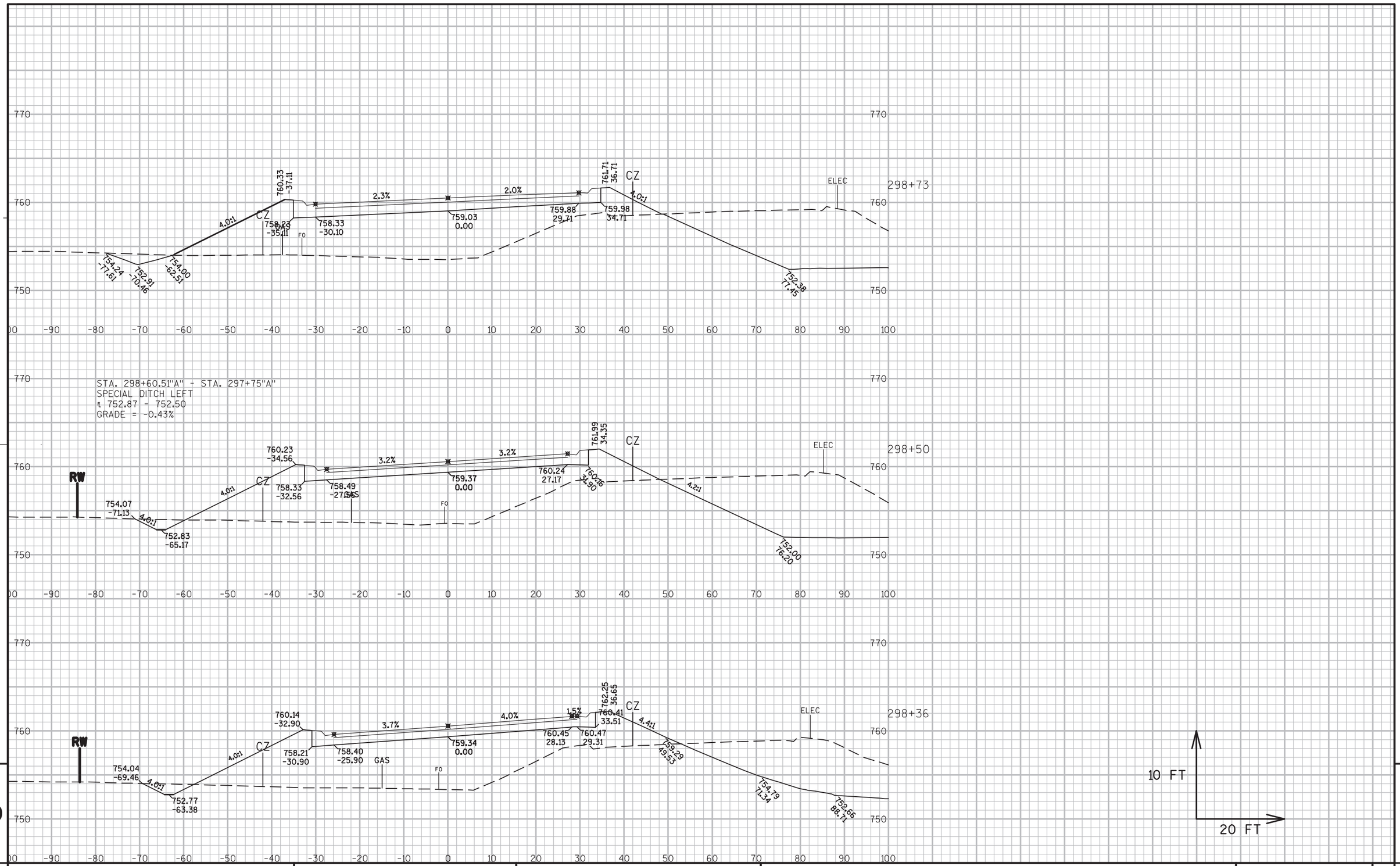
STA. 297+75"A" - STA. 298+60.51"A"
SPECIAL DITCH LEFT
℄ 752.50 - 752.87
GRADE = 0.43%

STA. 297+75"A" - STA. 297+00"A"
SPECIAL DITCH LEFT
℄ 752.50 - 753.44
GRADE = 1.25%

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: STH 60	SHEET 235	E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090200_XS.DWG PLOT DATE : 1/29/2015 1:53 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

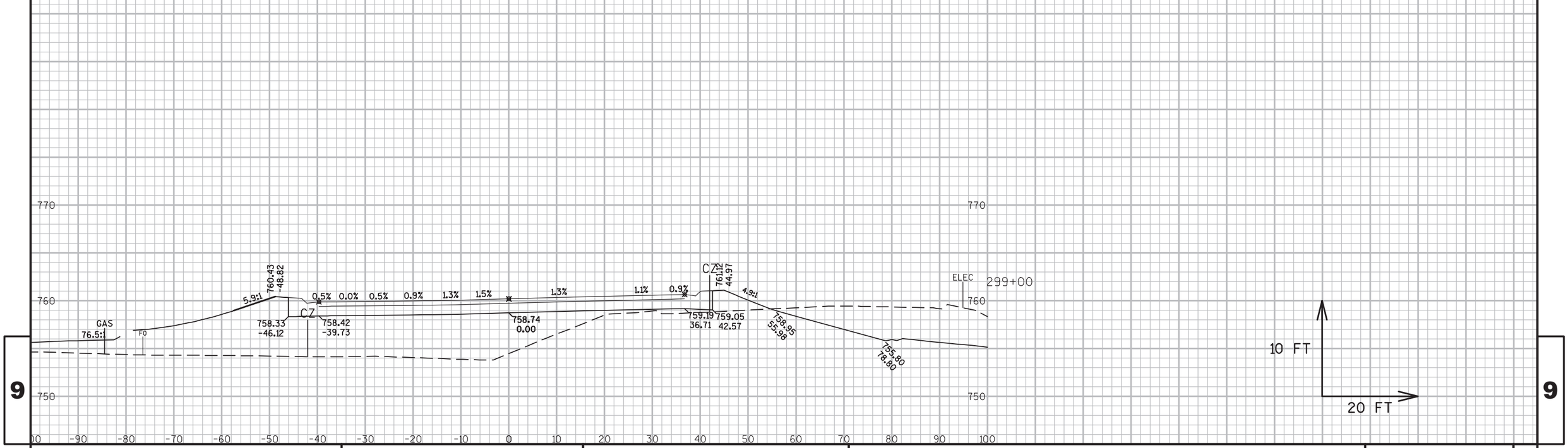


STA. 298+60.51"A" - STA. 297+75"A"
SPECIAL DITCH LEFT
℄ 752.87 - 752.50
GRADE = -0.43%

9

9

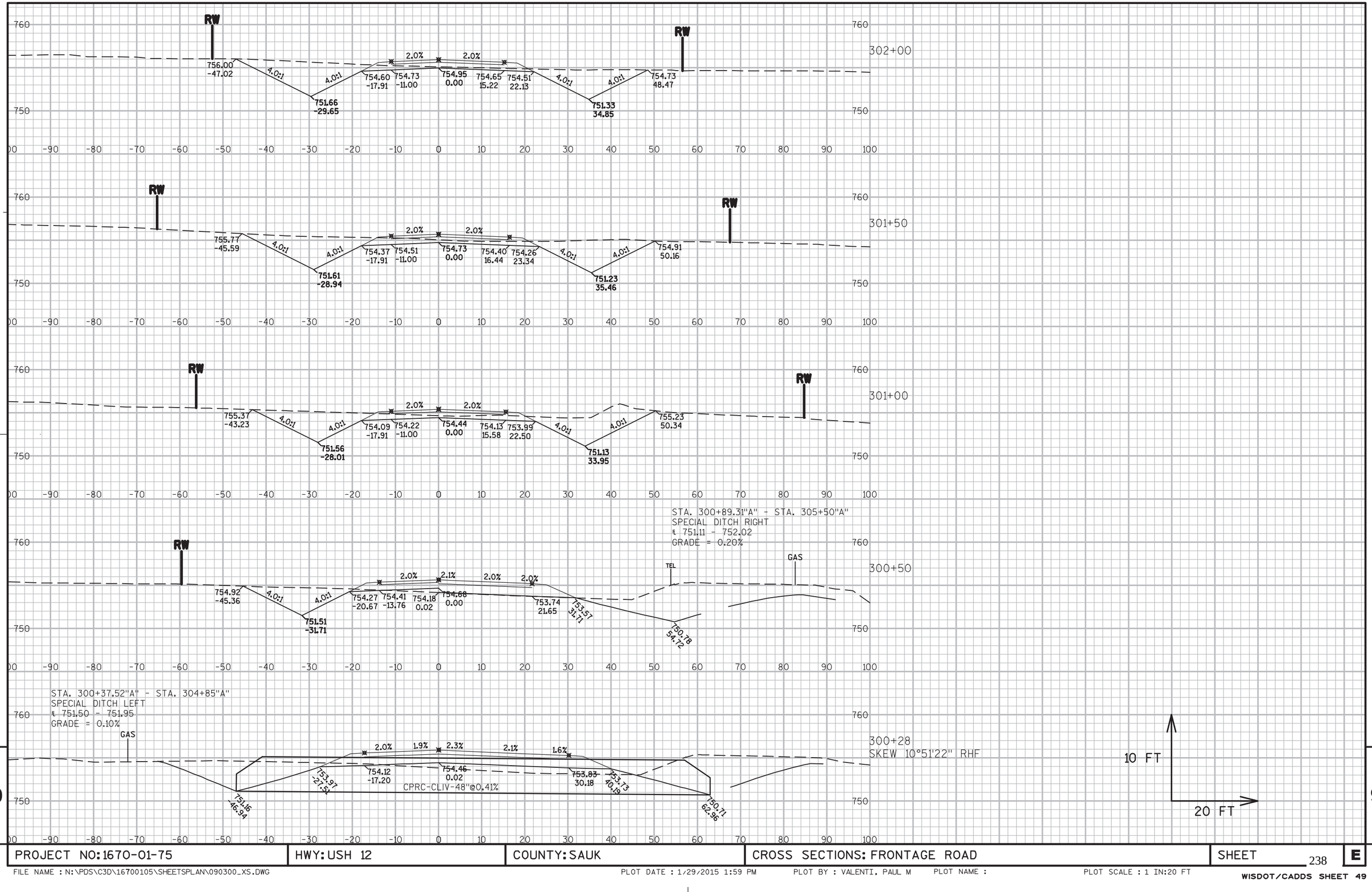
PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: STH 60	SHEET 236	E



PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: STH 60	SHEET 237	E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090200_XS.DWG PLOT DATE : 1/29/2015 1:56 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

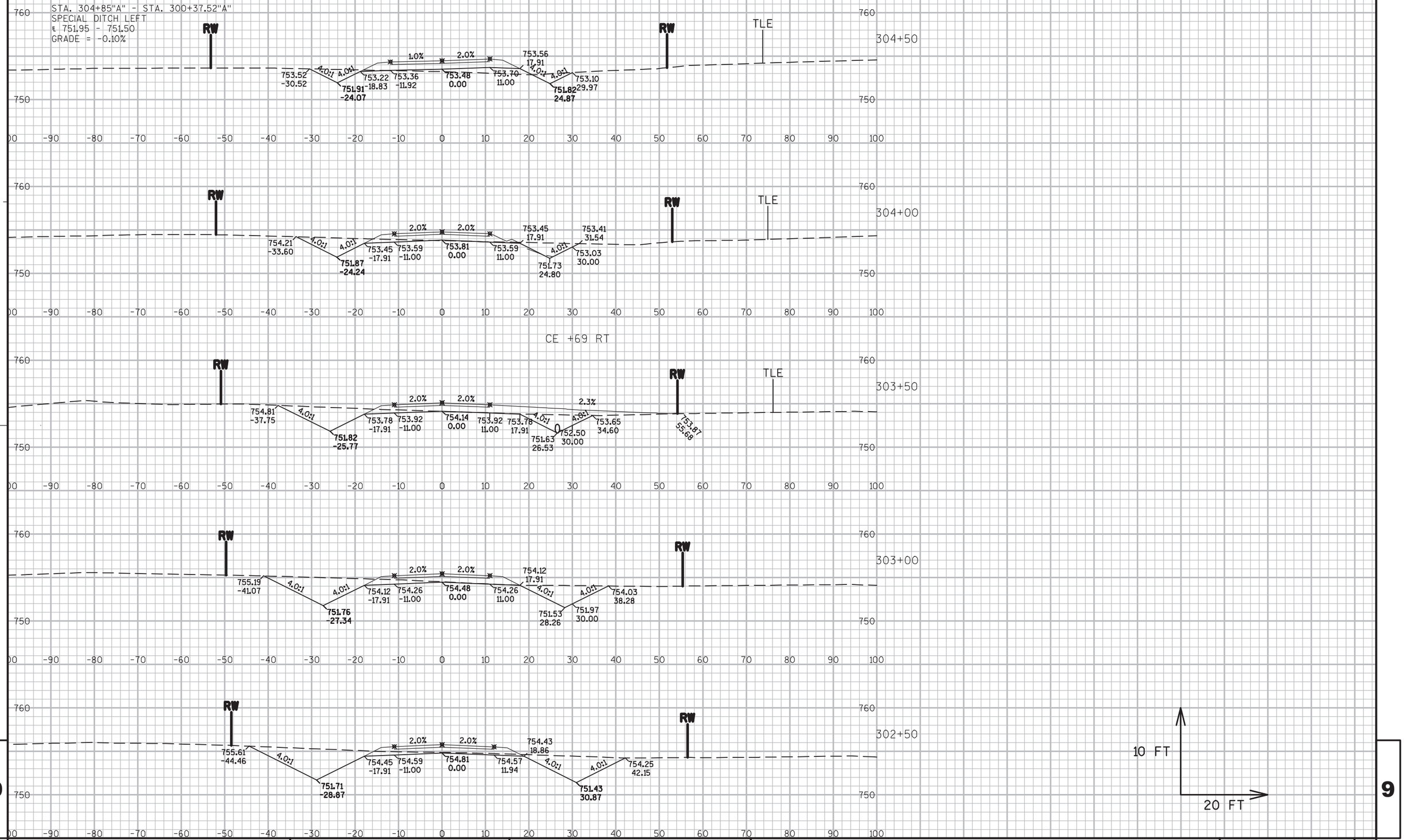
9

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: FRONTAGE ROAD	SHEET 238	E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090300_XS.DWG PLOT DATE : 1/29/2015 1:59 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

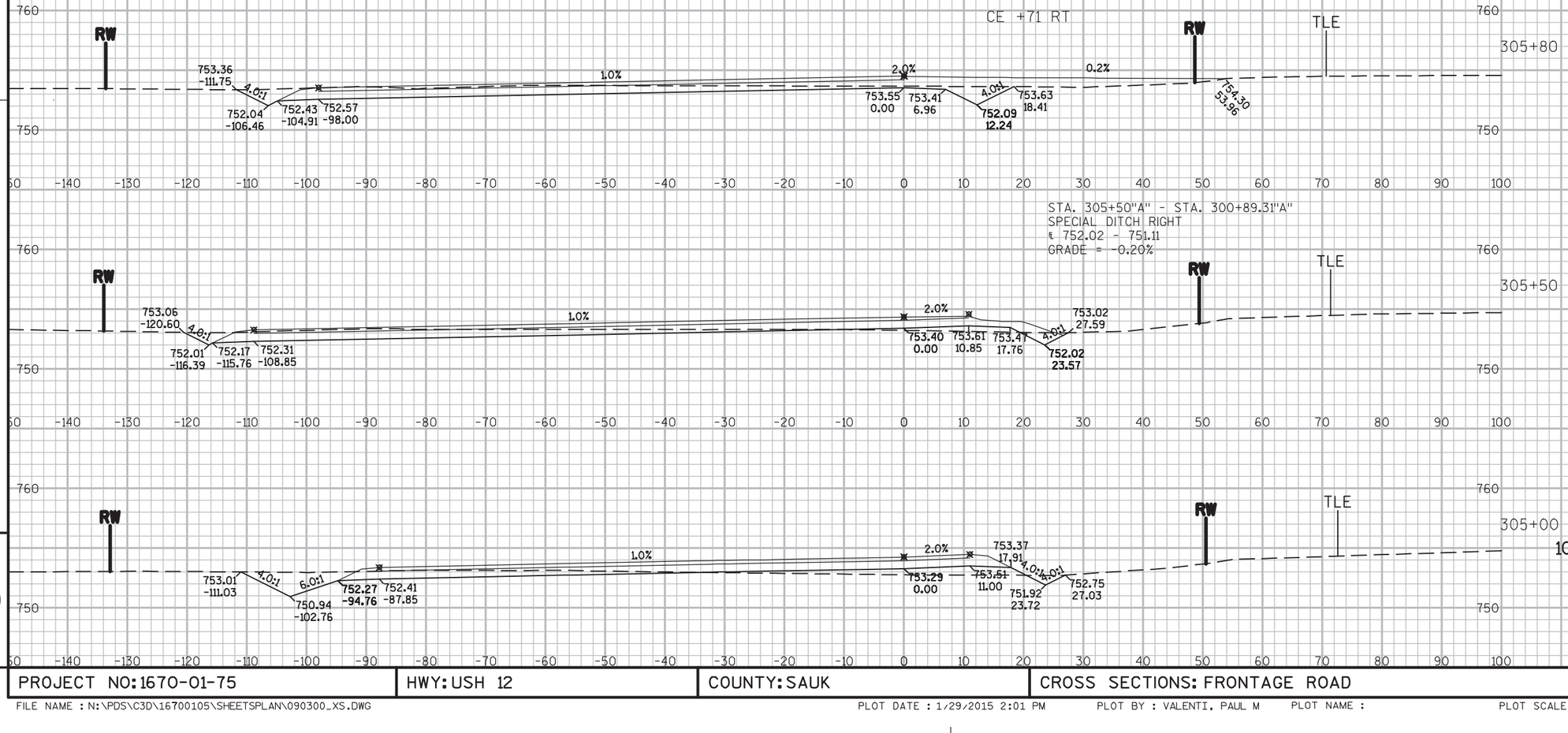
WISDOT/CADDS SHEET 49

STA. 304+85"A" - STA. 300+37.52"A"
SPECIAL DITCH LEFT
℄ 751.95 - 751.50
GRADE = -0.10%



9

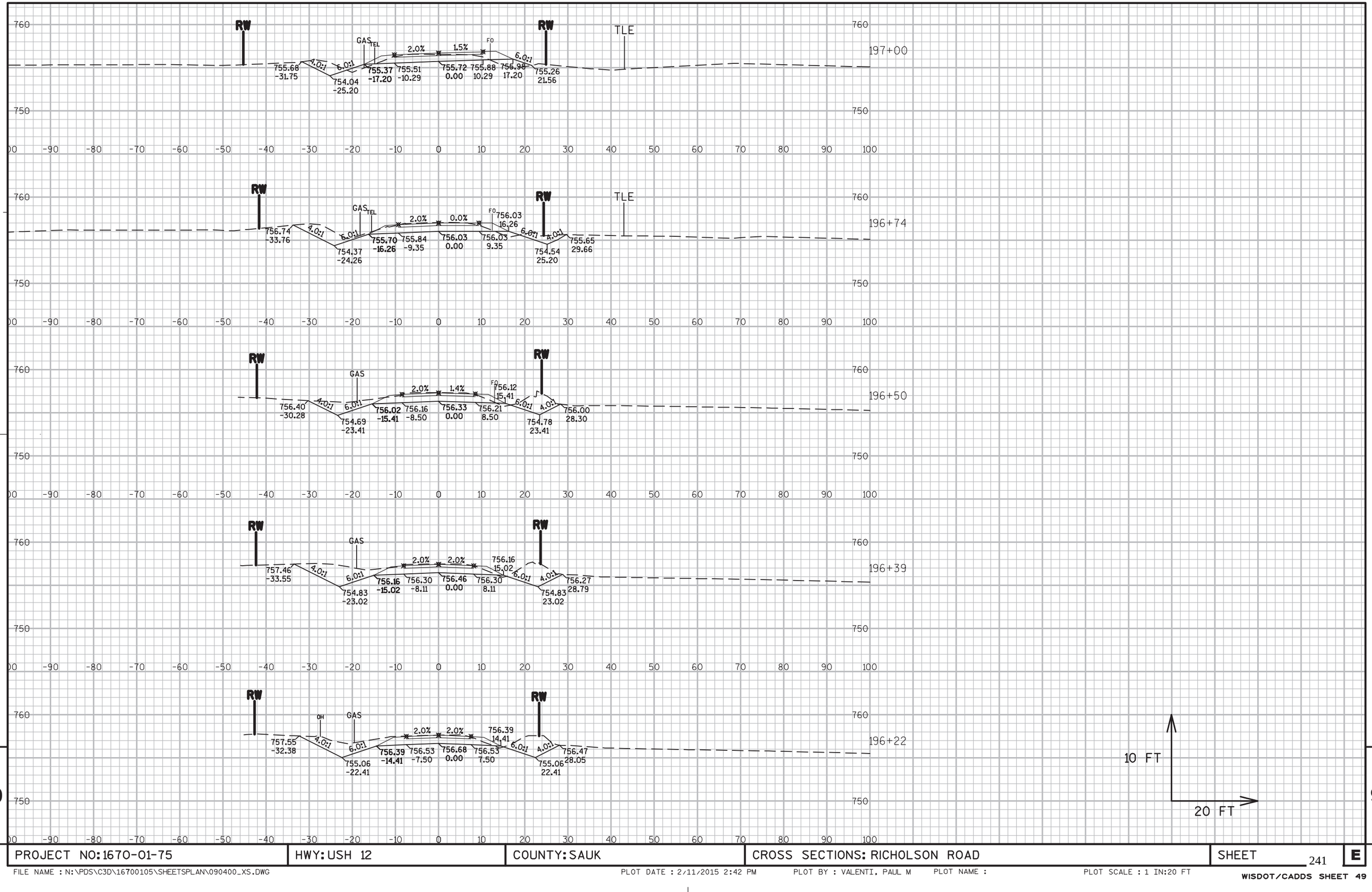
PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: FRONTAGE ROAD	SHEET 239	E



PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: FRONTAGE ROAD	SHEET 240	E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090300_XS.DWG PLOT DATE : 1/29/2015 2:01 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



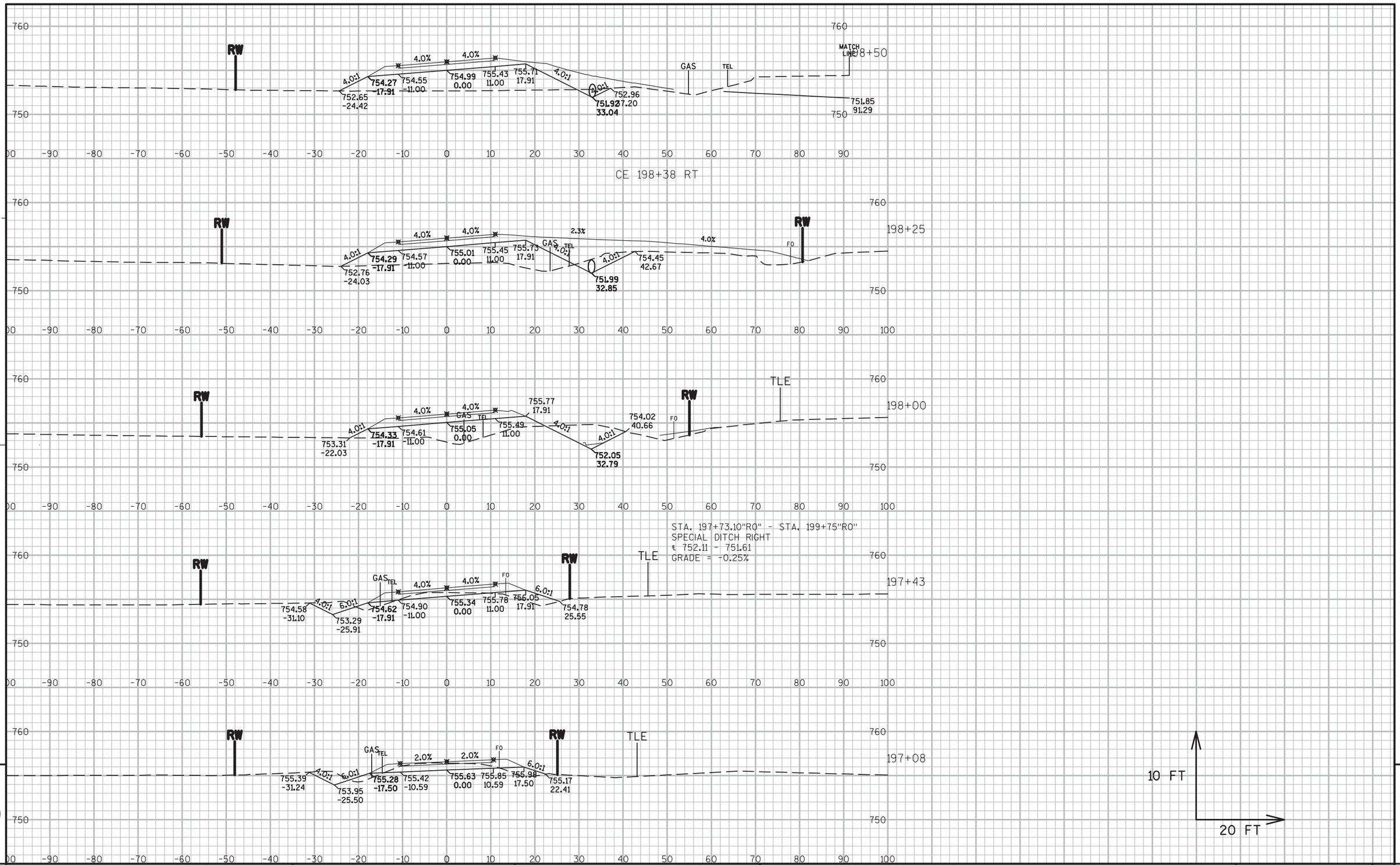
9

9

PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: RICHOLSON ROAD	SHEET 241	E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090400_XS.DWG PLOT DATE : 2/11/2015 2:42 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



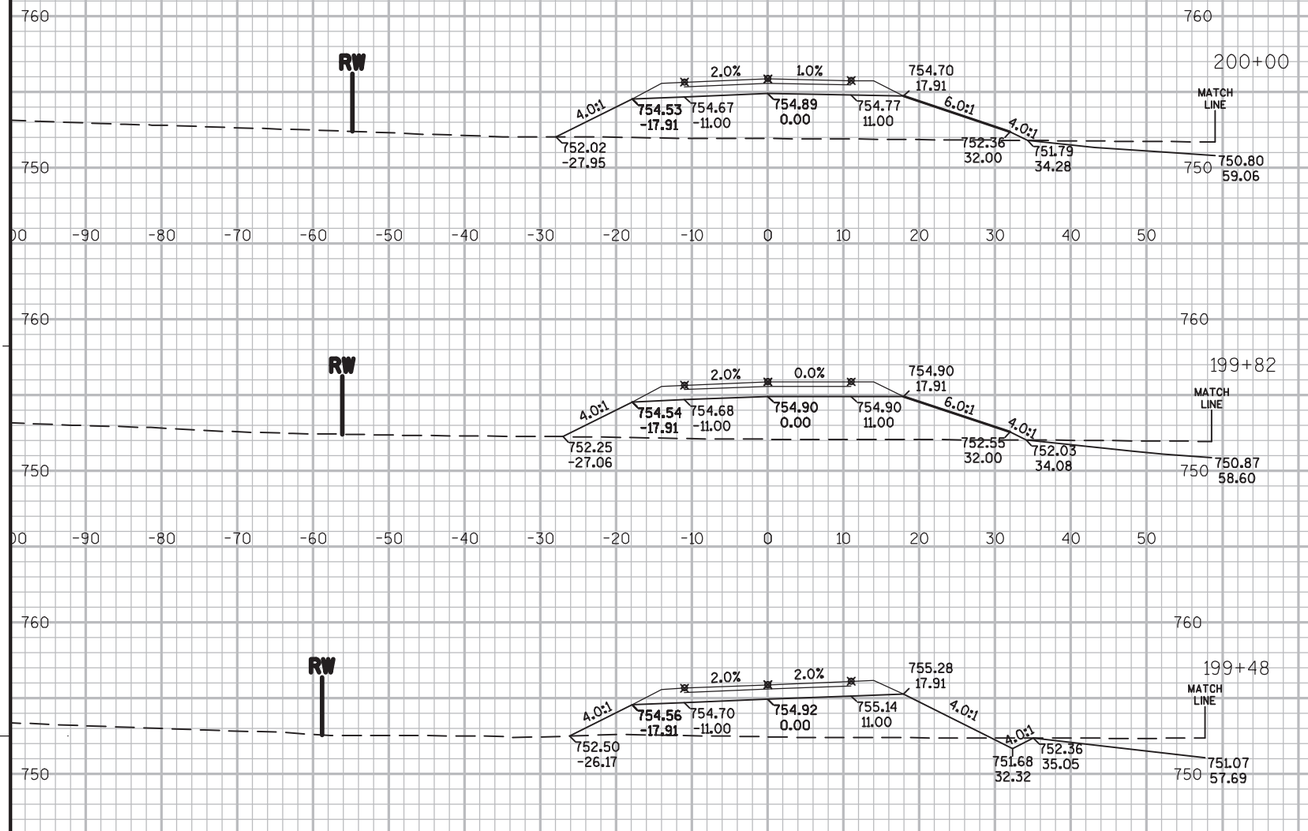
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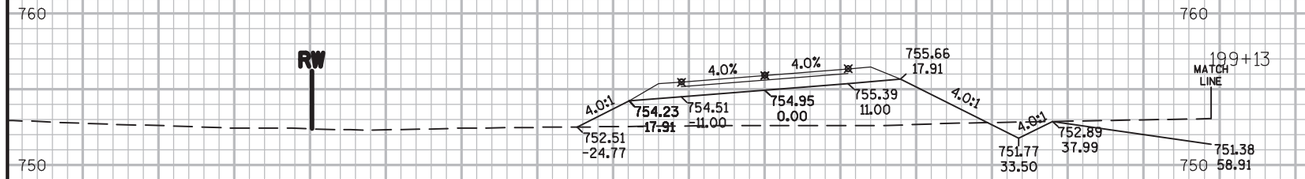
PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: RICHOLSON ROAD	SHEET 242	E

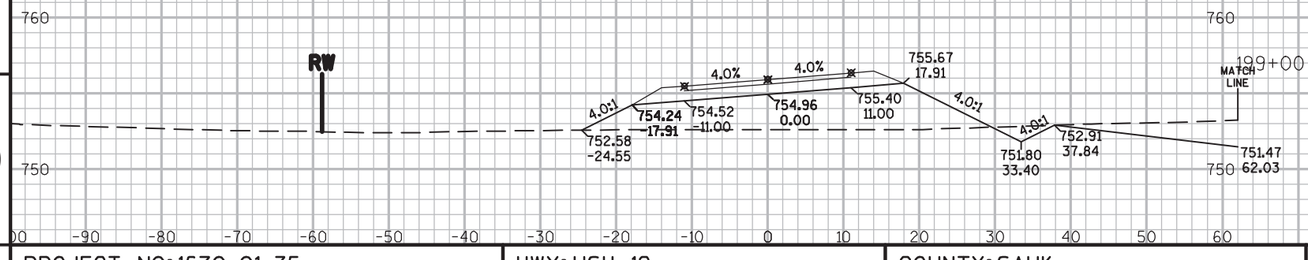
9

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090400_XS.DWG PLOT DATE : 2/11/2015 2:42 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

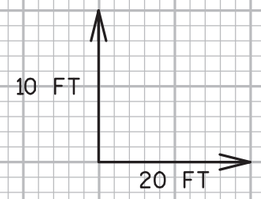
WISDOT/CADDS SHEET 49







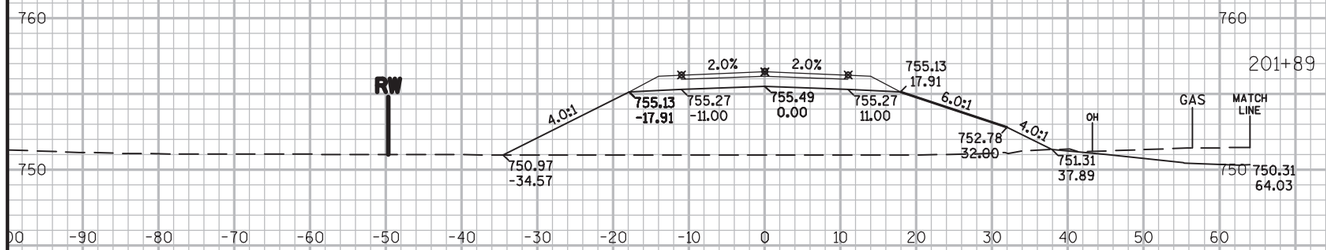
STA. 197+73.10"RO" - STA. 199+75"RO"
SPECIAL DITCH RIGHT
℄ 752.11 - 751.61
GRADE = -0.25%

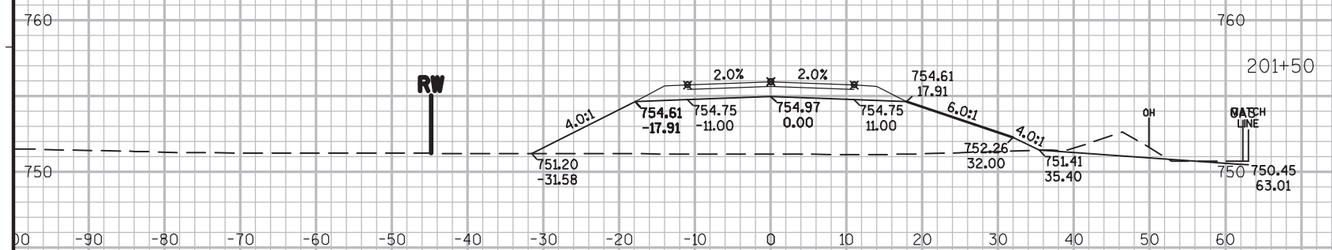


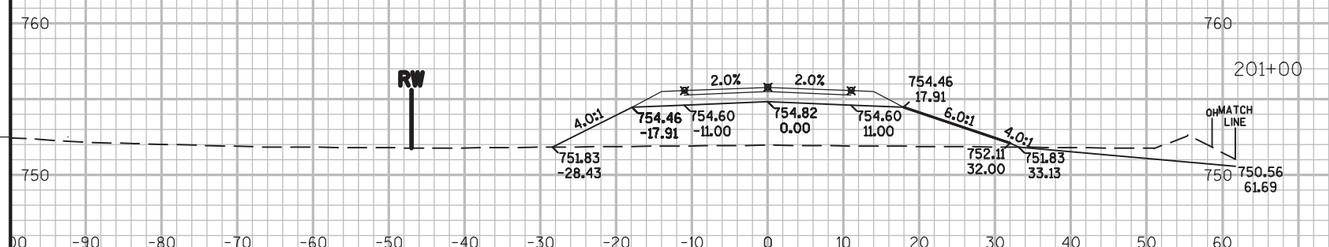
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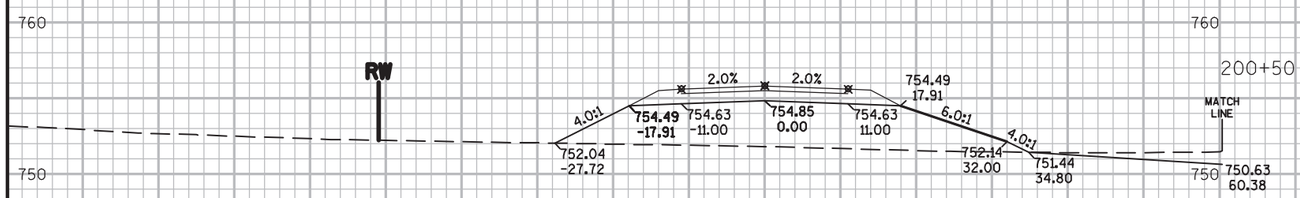
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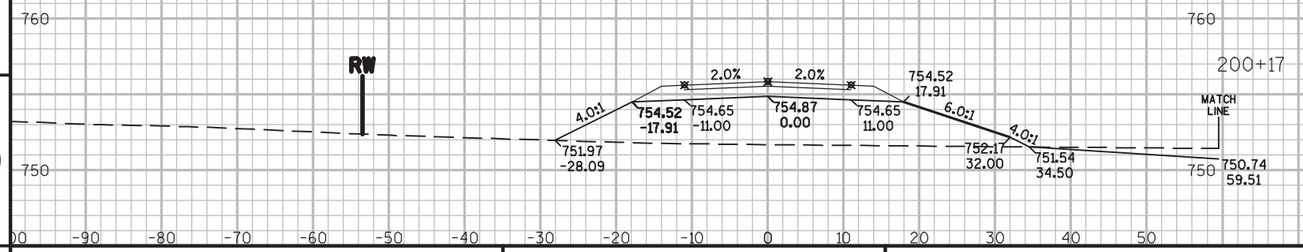
PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: RICHOLSON ROAD	SHEET 243	E

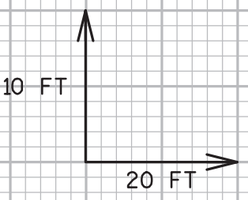








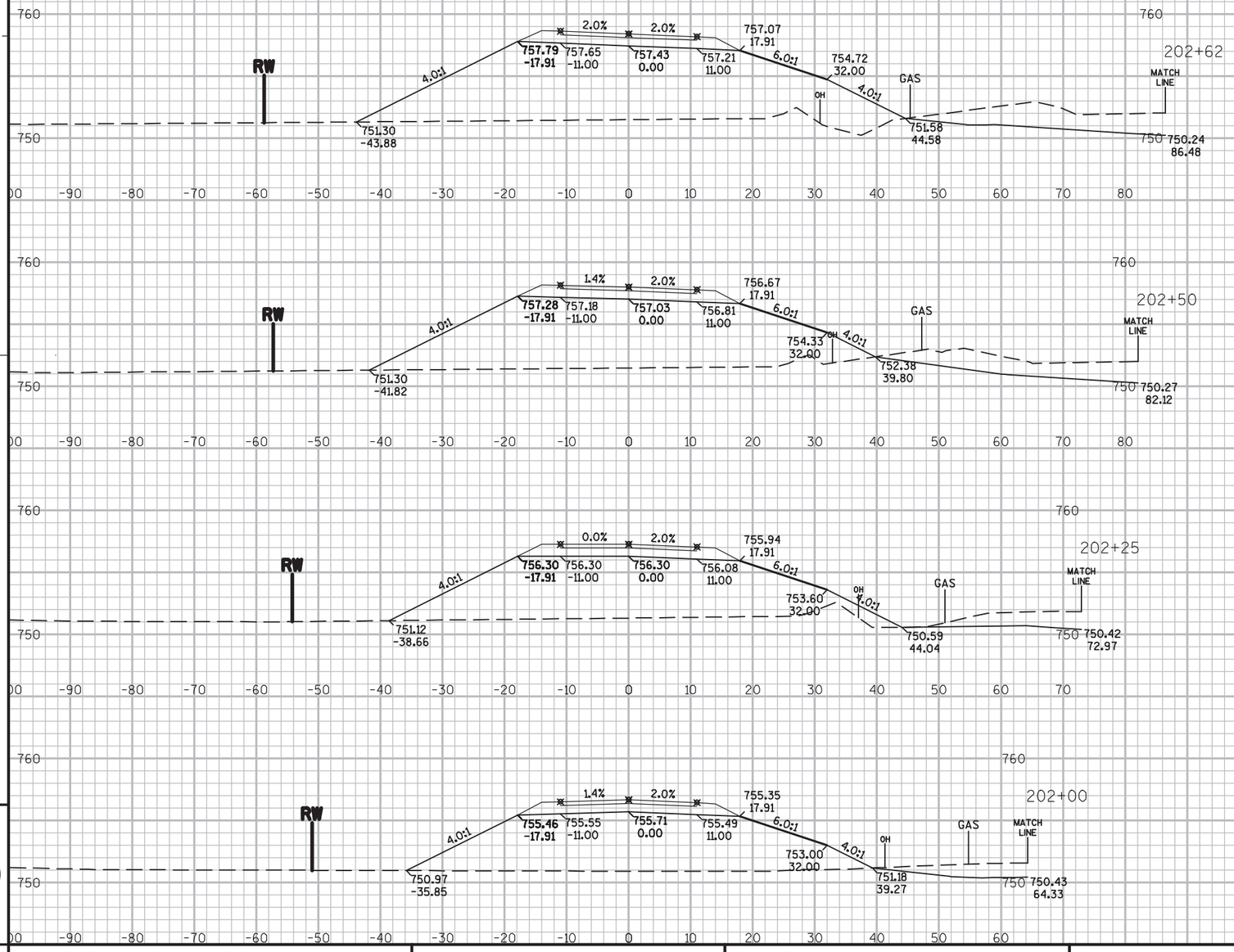




9

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PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: RICHOLSON ROAD	SHEET 244	E

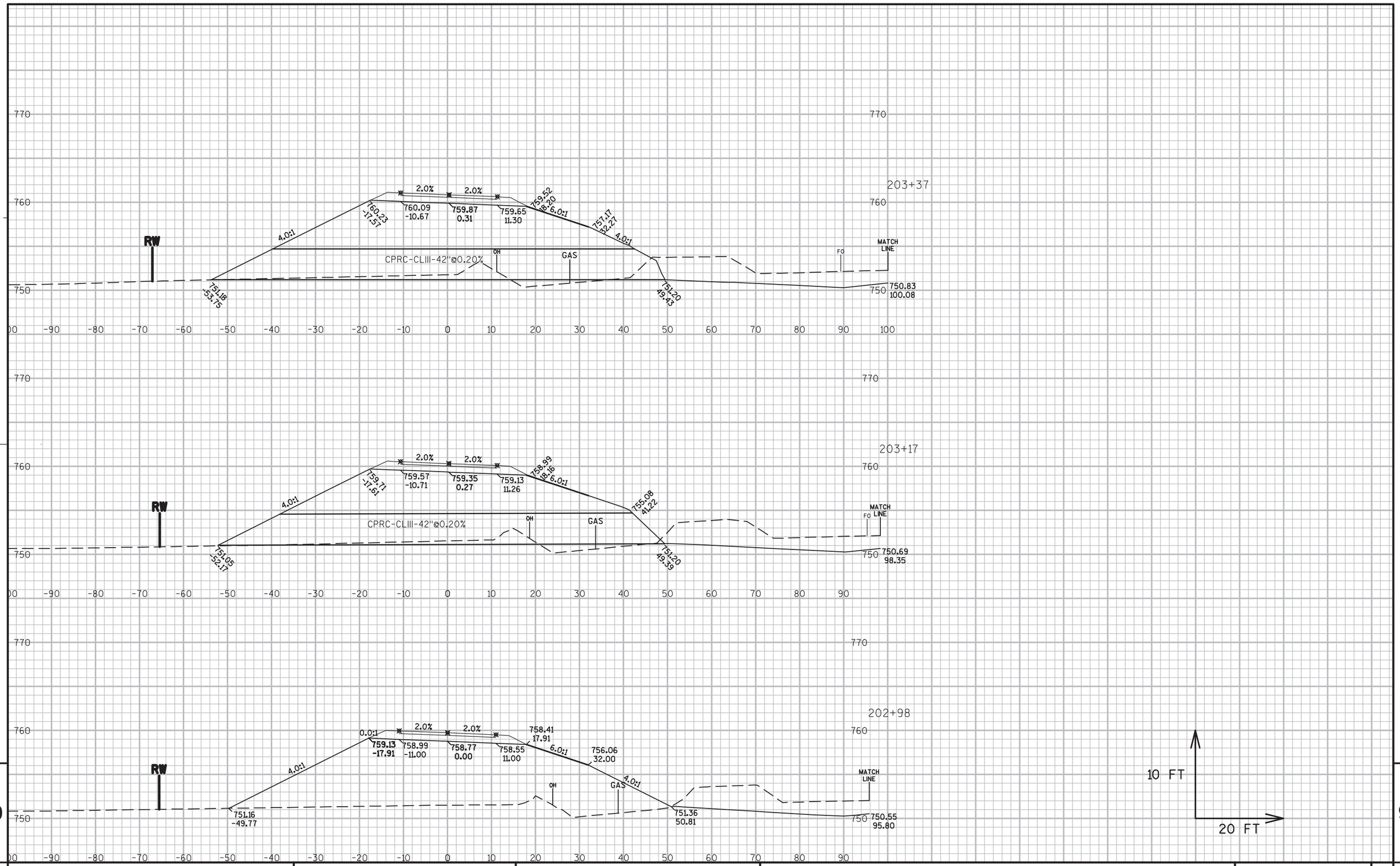


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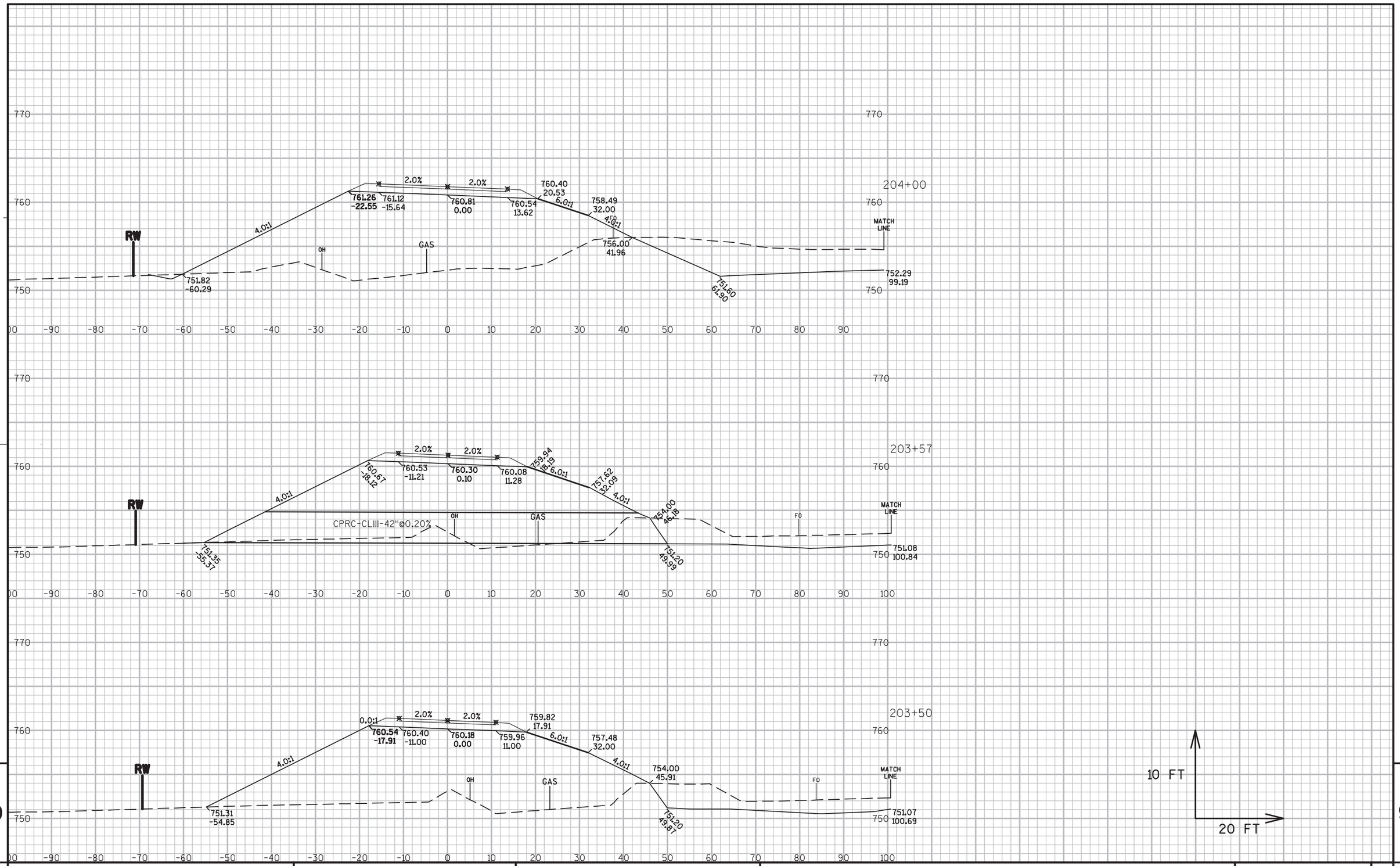
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PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: RICHOLSON ROAD	SHEET 245	E

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PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: RICHOLSON ROAD	SHEET 246	E

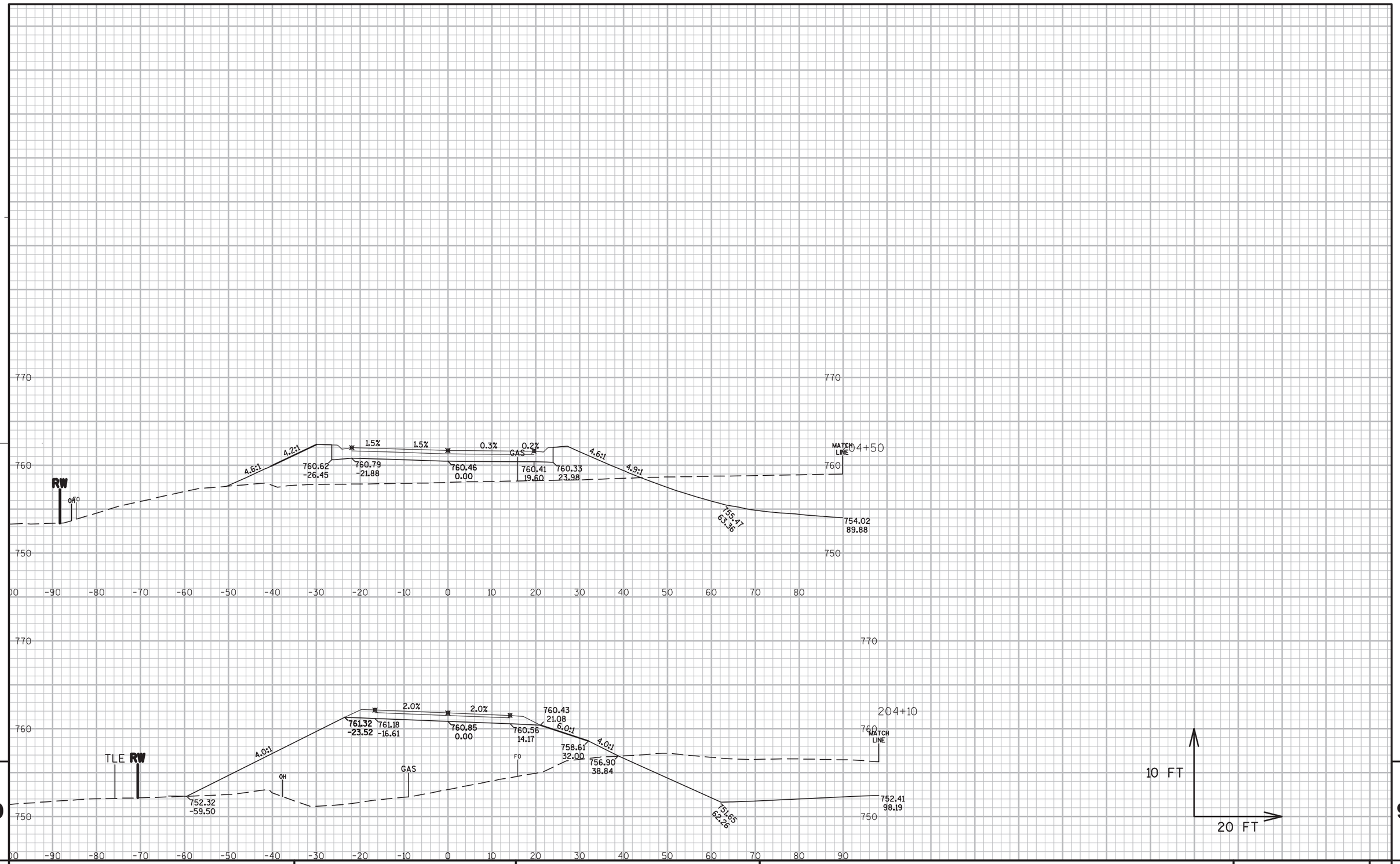


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PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: RICHOLSON ROAD	SHEET 247	E

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PROJECT NO: 1670-01-75	HWY: USH 12	COUNTY: SAUK	CROSS SECTIONS: RICHOLSON ROAD	SHEET 248	E

FILE NAME : N:\PDS\C3D\16700105\SHEETSPLAN\090400_XS.DWG PLOT DATE : 2/11/2015 2:45 PM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:20 FT

Notes

Wisconsin Department of Transportation

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