JULY 2014 ORDER OF SHEETS

Section No. 1

Typical Sections and Details Section No. 2 Estimate of Quantities Section No. 3

Section No. 3 Miscellaneous Quantities Right of Way Plat

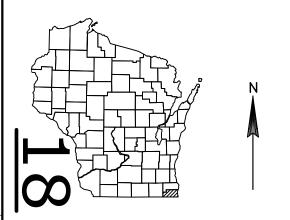
Section No. 6 Standard Detail Drawings

Section No. 7

Section No. 9 Computer Earthwork Data

Section No. 9 Cross Sections

TOTAL SHEETS = 204



DESIGN DESIGNATION

A.A.D.T. (2015) = 12,300 TO 18,500 A.A.D.T. (2035) = 17,400 TO 23,400

D.H.V. = 4.7% = 59/41 = 5.4% DESIGN SPEED = 50-60 MPH = 6,270,700

CONVENTIONAL SYMBOLS

PI AN 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

COMBUSTIBLE FLUIDS

WOODED OR SHRUB AREA

MARSH AREA

(Box or Pipe)

GRADE ELEVATION CULVERT (Profile View) UTILITIES ELECTRIC FIBER OPTIC SANITARY SEWER STORM SEWER TELEPHONE UTILITY PEDESTAL

POWER POLE

TELEPHONE POLE

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

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STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

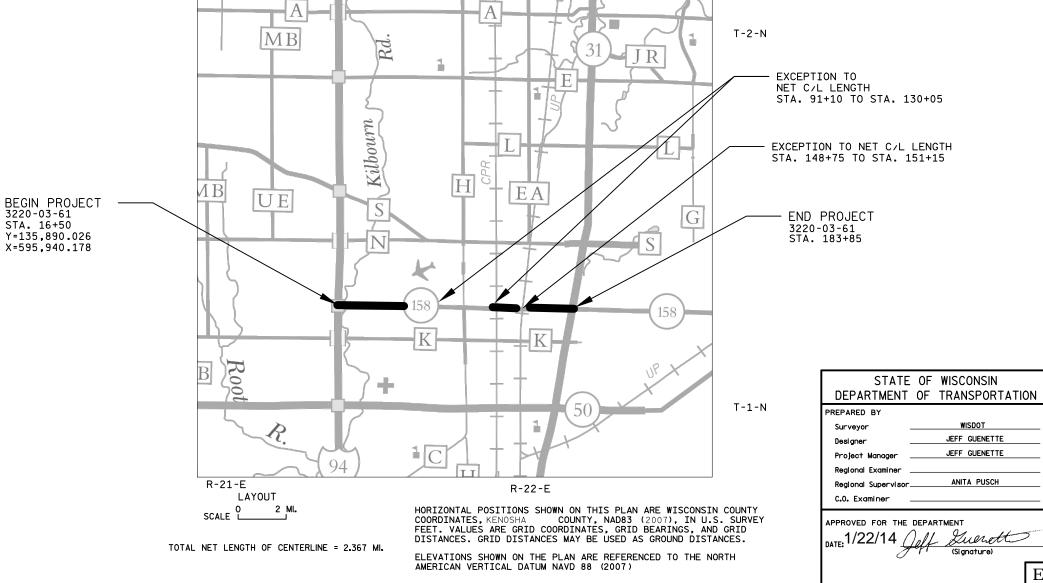
PROJECT CONTRACT 3220-03-61 **ROADWAY MAINTENANCE**

52ND STREET- CITY OF KENOSHA

IH-94 TO STH 31

STH 158 KENOSHA COUNTY

> STATE PROJECT NUMBER 3220-03-61



FEDERAL PROJECT

STATE PROJECT

GENERAL NOTES

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY UTILITY WHICH IS NOT A MEMBER OF DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

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

OBTAIN APPROVAL FROM THE ENGINEER FOR THE LOCATIONS OF LONGITUDINAL JOINTS IN HMA PAVEMENT PRIOR TO PAVING OPERATIONS.

THE CONTRACTOR WILL MAINTAIN ACCESS TO ALL DRIVEWAYS AND BUSINESSES AT ALL TIMES.

A SAWED JOINT WILL BE REQUIRED WHERE NEW PAVEMENT IS TO MEET AN EXISTING PAVED SURFACE.

TRAFFIC CONTROL LOCATIONS AS SHOWN IN THE PLAN ARE SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ALL SIGN LOCATIONS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO INSTALLATION.

STORM SEWER REHBILITATION WORK IS BASED ON A "LOOK THROUGH THE GRATE" SURVEY. ACTUAL WORK MAY BE ADJUSTED BY THE ENGINEER IN THE FIELD.

THE CONTRACTOR SHALL FIELD VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN PRIOR TO ORDERING DRAINAGE STRUCTURES.

NO TREES OR SHRUBS SHALL BE REMOVED UNLESS DESIGNATED FOR REMOVAL BY THE ENGINEER.

RE-TOPSOIL GRADED AREAS, AS DESIGNATED BY THE ENGINEER, IMMEDIATELY AFTER GRADING IS COMPLETED WITHIN THOSE AREAS. SEED, FERTILIZE, AND MULCH/EROSION MAT TOP-SOILED AREAS, AS DESIGNATED BY THE ENGINEER, WITHIN FIVE (5) CALENDAR DAYS AFTER PLACEMENT OF TOPSOIL. IF GRADED AREAS ARE LEFT EXPOSED FOR MORE THAN (14) CALENDAR DAYS, SEED THOSE AREAS WITH TEMPORARY SEED.

STOCKPILE EXCESS MATERIAL OR SPOILS ON UPLAND AREAS AWAY FROM WETLANDS, FLOODPLAINS AND WATERWAYS. STOCKPILED SOIL SHALL BE PROTECTED AGAINST EROSION. IF STOCKPILED MATERIAL IS LEFT FOR MORE THAN FOURTEEN (14) CALENDAR DAYS, SEED THE STOCKPILE WITH TEMPORARY SEED.

EROSION CONTROL BMP'S ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTORS ECIP AND BY THE ENGINEER. EROSION CONTROL BMP'S SHALL BE MAINTAINED UNTIL PERMANENT VEGATAION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE BMP IS NO LONGER REQUIRED.

THE CONTRACTOR MUST CONTACT THE PROJECT ENGINEER AND SEWRPC (DON SIMON OR JOHN WASHBURN) AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY PUBLIC SURVEY MONUMENT.

IF AN EXISTING SIGN IS TO BE REMOVED AND REPLACED WITH A NEW SIGN, DO NOT REMOVE THE EXISTING SIGN PRIOR TO INSTALLATION OF THE THE NEW SIGN.

TRAFFIC CONTROL GENERAL NOTES

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

FLAGGING OPERATIONS ARE ONLY ALLOWED DURING MILLING AND PAVING OPERATIONS AT SIDEROADS. SEE FLAGGING DETAIL SHEET FOR PLACEMENT OF TRAFFIC CONTROL DEVICES.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLAN.

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH SHALL BE CUT THROUGH IT'S FULL WIDTH AND THICKNESS AT 25-FOOT INTERVALS TO CONTROL RAVELING.

COVER EXISTING PAVEMENT MARKING 12.5' SKIPS IN LANE CLOSURE TAPERS WITH TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, BLACK.

HMA PAVING

	THICKNESS	HMA TYPE	ASPHALTIC MATERIAL	GRADATION
UPPER LAYER	2 1/2 INCH	E-3	PG 64-22	12.5 mm
SHOULDER	3 INCH	E-3	PG 64-22	12.5 mm

ORDER OF SHEETS

GENERAL NOTES

TYPICAL SECTIONS

CONSTRUCTION DETAILS

PLAN DETAILS

UTILITY PLAN

PERMANENT SIGNING

TRAFFIC SIGNALS

PAVEMENT MARKING

CONSTRUCTION STAGING

TRAFFIC CONTROL

DETOUR

ALIGNMENT



PROJECT NO: 3220-03-61 HWY: STH 158 COUNTY: KENOSHA GENERAL NOTES AND UTILITY CONTACTS SHEET: E

FILE NAME : ______ PLOT DATE : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT NAME : _____ PLOT SCALE : 1:1

2

UTILITY CONTACTS

ATC MANAGEMENT, INC MIKE OLSEN

WAUKESHA, WI 53187-0047 PHONE: (920) 660-2390

AT&T CORP.

PO BOX 47

KENNETH NINE 4900 SPRING STREET RACINE, WI 53406 PHONE: (952) 904-6336

AT&T WISCONSIN

DAVE SCHOLD 4420 COUNTY LINE ROAD RACINE, WI 53403 PHONE: (262) 707-6213

CITY OF KENOSHA WATER UTILITY

IAN BAGLEY 4401 GREEN BAY ROAD KENOSHA, WI 53144 PHONE: (262) 945-1405

FRONTIER - WISCONSIN ROBERT CHURCH

100 COMMUNICATIONS DRIVE SUN PRAIRIE, WI 53590 PHONE: (608) 837-1881

LEVEL 3 COMMUNICATIONS, LLC

MIKE DECHANT 507 SOUTH 2ND STREET MILWAUKEE, WI 53204 PHONE: (414) 426-1857

MIDWEST FIBER NETWORKS

RICHARD TRGOVEC 3701 W. BURNHAM STREET, STE C MILWAUKEE, WI 53215 PHONE: (414) 672-5612

PAETEC BUSINESS SERVICES

JOHN LOUIS 1858 WRIGHT STREET MADISON, WI 53704 PHONE: (414) 305-0332 SPRINT COMMUNICATIONS

JIM BURTON

5600 N RIVER ROAD STE 200 ROSEMONT, IL 60018

TCG MILWAUKEE (AT&T LOCAL)

DON DIETSCH

383 WILLIAMSTOWNE SUITE 102 DELAFIELD. WI 53018

PHONE: (262) 646-5602

TIME WARNER CABLE

LUKAS LACROSSE

1320 N. MARTIN LUTHER KING JR. DR.

MILWAUKEE, WI 53212 PHONE: (414) 430-9321

VERIZON BUSINESS

DEAN BOYERS 2400 N GLENVILLE RICHARDSON, TX 75082 PHONE: (972) 729-6322

WE ENERGIES - ELECTRIC

BRYAN STOEHR - CONSTRUCTION

500 S 116TH STREET WEST ALLIS, WI 53214 PHONE: (414) 416-6059 LATROY BRUMFIELD - GENERAL 333 W EVERETT ST - A29 MILWAUKEE, WI 53203 PHONE: (414) 221-5617

WE ENERGIES - GAS

CHRIS DEGRAVE - CONSTRUCTION
7815 NORTHWESTERN AVE
RACINE, WI 53406
PHONE: (262) 939-9814
LATROY BRUMFIELD - GENERAL
333 W EVERETT ST - A29
MILWAUKEE, WI 53203

WISDOT ELECTRICAL FIELD UNIT

DENNIS CAULEY 935 S. 60TH STREET WEST ALLIS, WI 53214 PHONE: (414) 266-1170

PHONE: (414) 221-5617

OTHER CONTACTS

CITY OF KENOSHA SHELLY BILLINGSLEY 625 52ND STREET KENOSHA, WI 53140

PHONE: (262) 653-4150

KENOSHA COUNTY PUBLIC WORKS

GARY SIPSMA 19600 75TH STREET PO BOX 609 BRISTOL, WI 53104 PHONE: (262) 857-1870

TOWN OF SOMERS

WILLIAM MORRIS 7511 12TH ST PO BOX 197 SOMERS, WI 53171 PHONE: (262) 859-2822

WISDOT SIGNALS

JOHN BRUGGEMAN 141 NW BARSTOW STREET

PO BOX 798

WAUKESHA, WI 53187-0798 PHONE: (262) 521-5339

WI DNR LIAISON

CRAIG WEBSTER
141 NW BARSTOW STREET, ROOM 180

WAUKESHA, WI 53188 PHONE: (262) 574-2141 FAX: (262) 574-2128

SOUTHEASTERN WISCONSIN REGIONAL

PLANNING COMMISSION

DON SIMON AND JOHN WASHBURN W239 N1812 ROCKWOOD DRIVE

P.O. BOX 1607

WAUKESHA, WI 53187-1607 PHONE: (262) 547-6721 FAX: (262) 547-1103 SEWRPC@SEWRPC.ORG KENOSHA COUNTY SHERIFF DEPARTMENT

DAVID BETH, SHERIFF 1000 55TH STREET KENOSHA, WI 53140 PHONE: (262) 605-5100

CITY OF KENOSHA POLICE DEPARTMENT

JOHN MORRISSEY, CHIEF OF POLICE

1000 55TH STREET KENOSHA, WI 53140 PHONE: (262) 605-5200

CITY OF KENOSHA FIRE DEPARTMENT

JOHN THOMSEN, FIRE CHIEF 625 52ND STREET

KENOSHA, WI 53140 PHONE: (262) 653-4100

KENOSHA REGIONAL AIRPORT

WADE BUCK 9900 52ND STREET KENOSHA, WI 53144 PHONE: (262) 653-4160

CANADIAN PACIFIC RAILWAY COMPANY

EDWARD OOM

11306 FRANKLIN AVENUE FRANKLIN PARK, IL 60131 PHONE: (630) 860-4975 FAX: (630) 860-4170

UNION PACIFIC RAILROAD COMPANY

JOHN VENICE

101 NORTH WACKER DRIVE, STE 1920

CHICAGO, IL 60606 PHONE: (312) 777-2043

WISDOT PROJECT MANAGER

JEFF GUENETTE

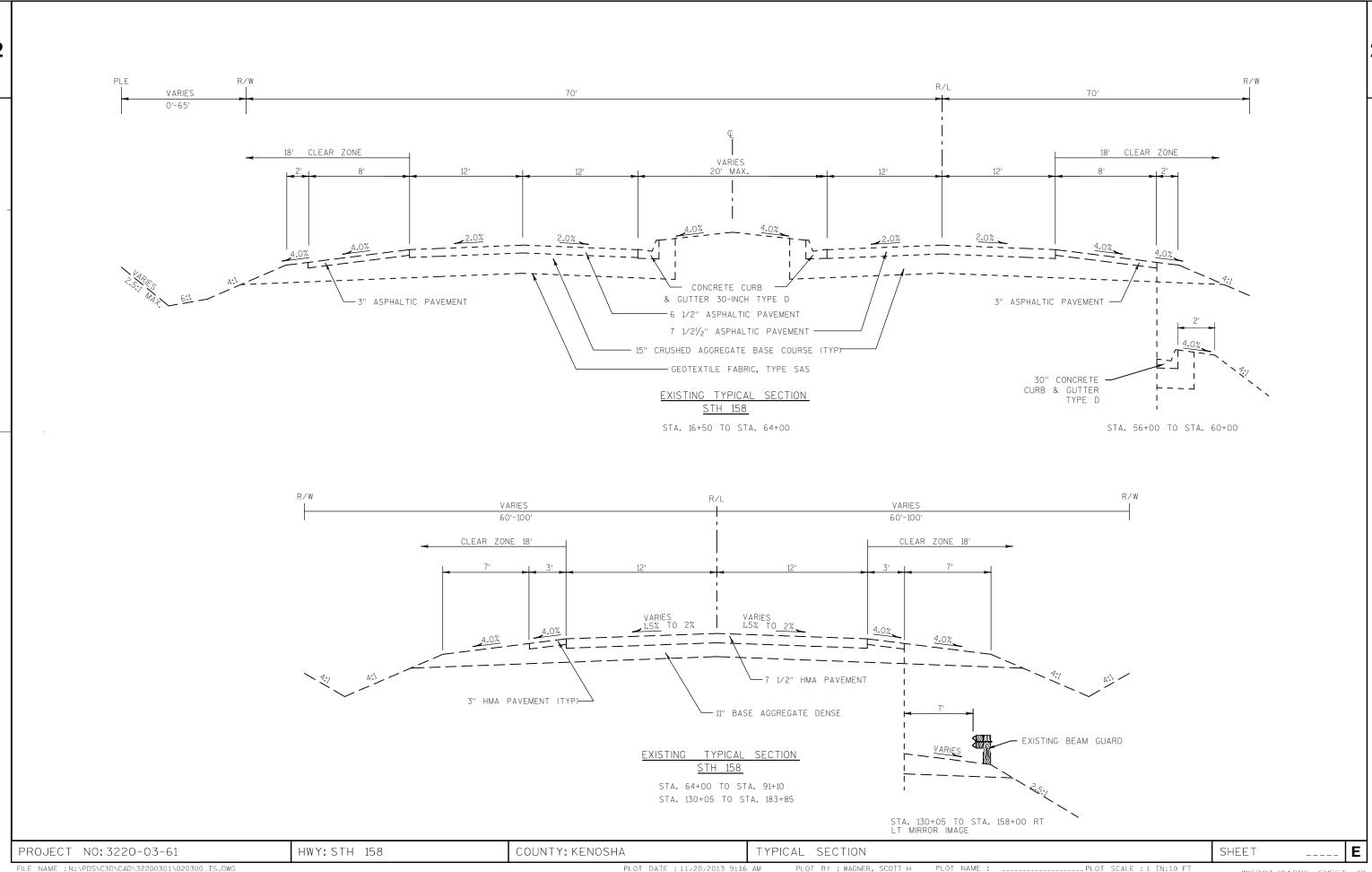
141 NW BARSTOW STREET

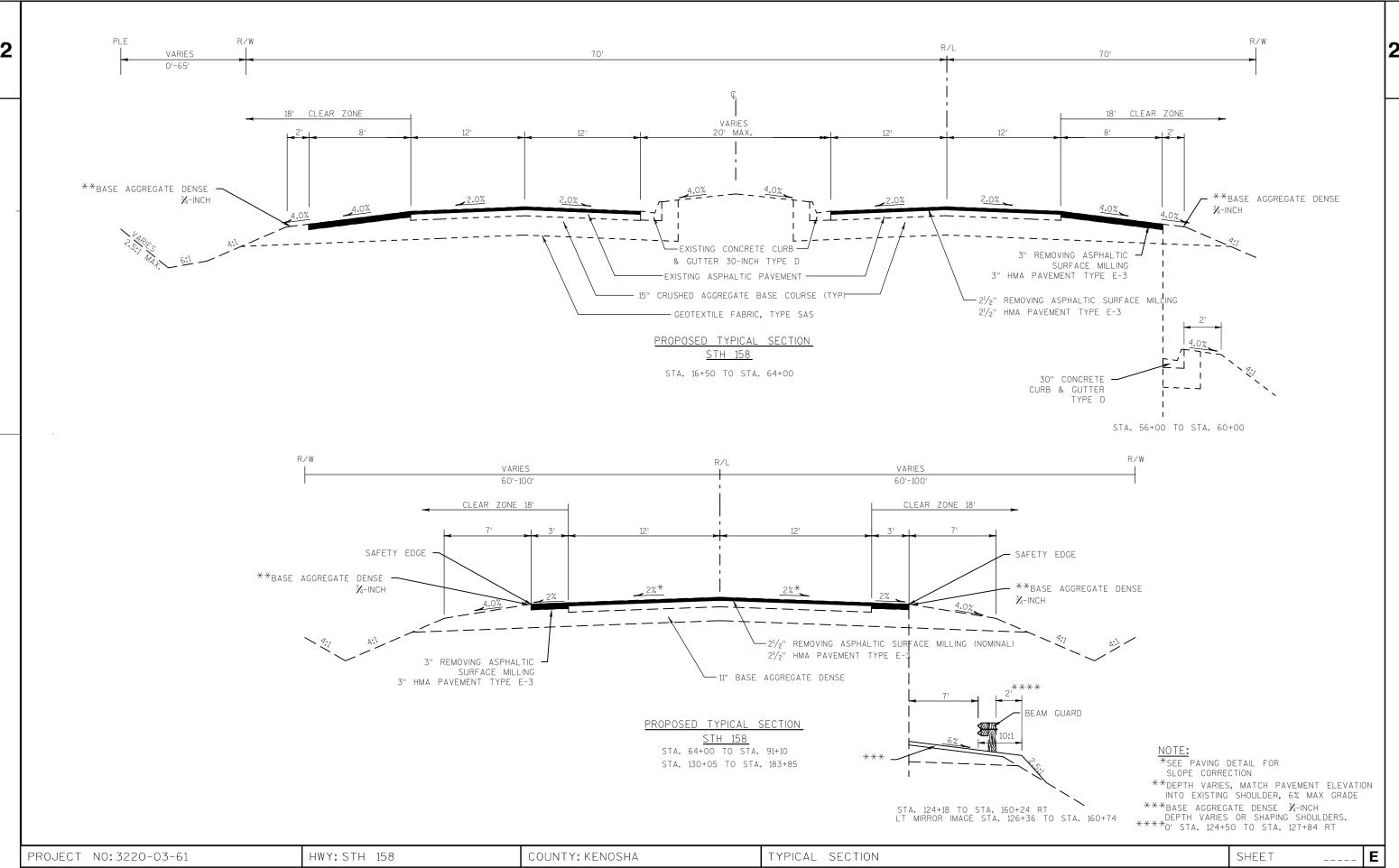
P.O. BOX 798

WAUKESHA, WI 53187-0798 PHONE: (262) 548-8663

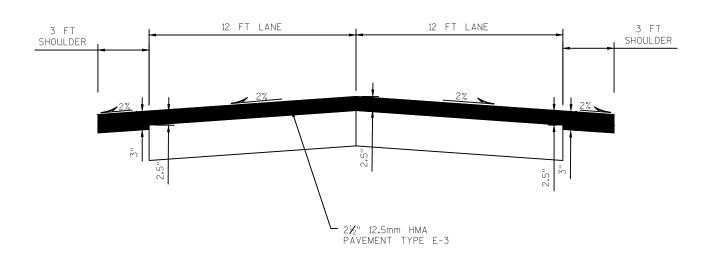
PROJECT NO: 3220-03-61 HWY: STH 158 COUNTY: KENOSHA GENERAL NOTES AND UTILITY CONTACTS SHEET: E

FILE NAME : ______ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT NAME : _____ PLOT SCALE : 1:1





3 FT SHOULDER 12 FT LANE 12 FT LANE 3 FT SHOULDER EXISTING EXISTING MILLED SURFACE 2% • MILLED SURFACE 2% EXISTING ASPHALTIC PAVEMENT -REMOVING ASPHALTIC SURFACE MILLING



SLOPE CORRECTION PAVING DETAIL

STA. 70+00 TO STA. 91+10 STA. 130+05 TO STA. 148+75 STA. 151+15 TO STA. 165+00

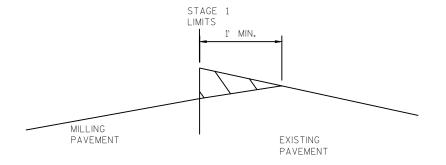
HWY: STH 158 COUNTY: KENOSHA CONSTRUCTION DETAIL PROJECT NO: 3220-03-61 SHEET

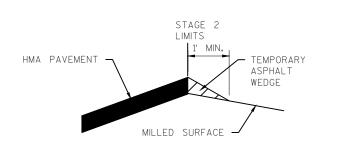
FILE NAME : N:\PDS\C3D\CAD\32200301\021001_CD.DWG

PLOT DATE : 1/7/2014 9:41 AM

PLOT BY : WAGNER, SCOTT H PLOT NAME : _____PLOT SCALE : 1 IN:10 FT







STAGE 1

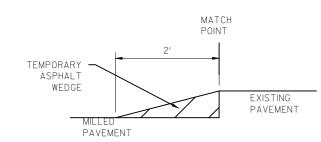
REMOVE WEDGE, PAID FOR AS REMOVING ASPHALTIC SURFACE MILLING

STAGE 2

PLACE TEMPORARY ASPHALT WEDGE
(PAPER JOINT) PAID AS ASPHALTIC SURFACE
TEMPORARY, REMOVAL IS INCIDENTAL.

UNEVEN ASPHALTIC PAVEMENT JOINTS

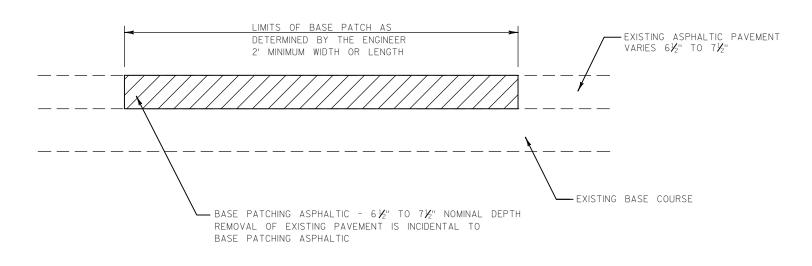
USE AT INTERSECTIONS, TURN LANES, AND DRIVEWAYS



UNEVEN ASPHALTIC PAVEMENT JOINTS

USE AT MATCH POINTS

PLACE TEMPORARY ASPHALT WEDGE
(PAPER JOINT) PAID AS ASPHALTIC SURFACE TEMPORARY. REMOVAL IS INCIDENTAL.



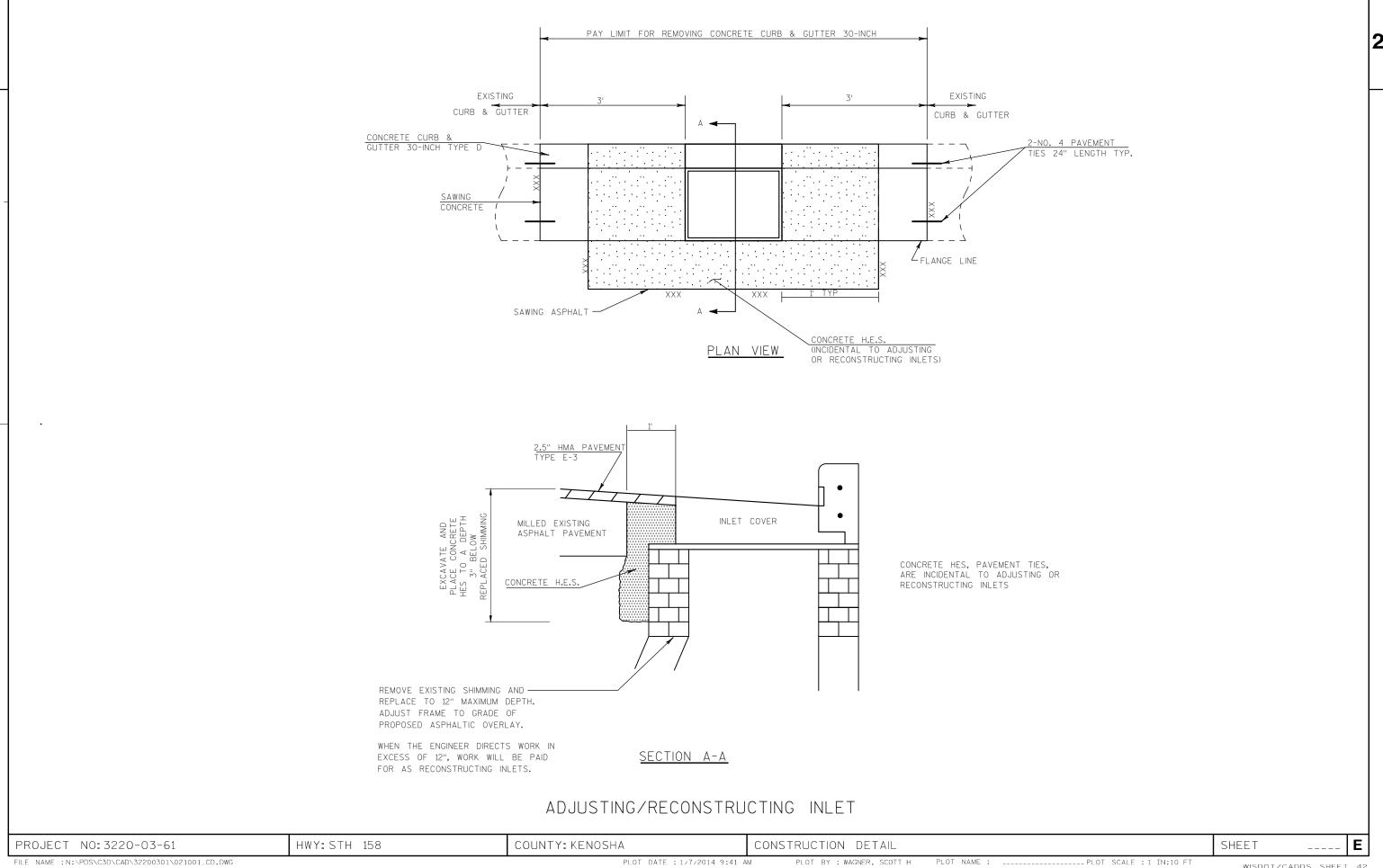
BASE PATCHING ASPHALTIC

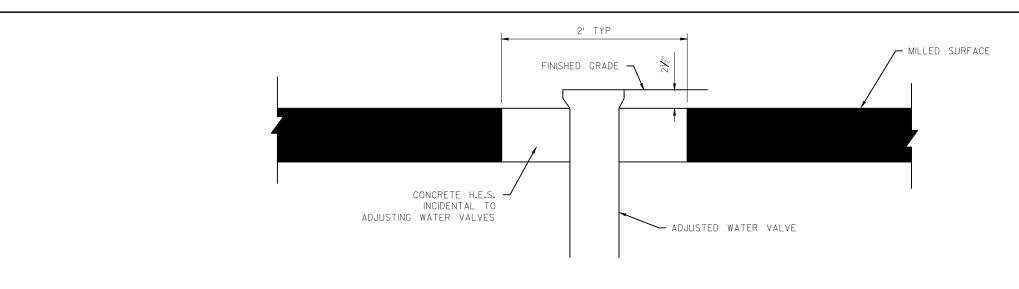
NOTE: PERFORM BASE PATCHING PRIOR TO MILLING ASPHALTIC SURFACE.

BASE PATCHING LIMITS FOR LOOP DETECTORS SHALL BE 3" OUTSIDE OF LOOP DETECTOR, 2' WIDE FOR CONDUIT FROM LOOP TO PULL BOX

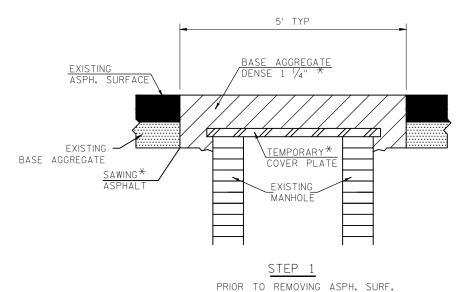
HWY: STH 158 Ε PROJECT NO: 3220-03-61 COUNTY: KENOSHA CONSTRUCTION DETAIL

FILE NAME : N:\PDS\C3D\CAD\32200301\021001_CD.DWG PLOT DATE : 1/13/2014 8:21 AM PLOT BY : WAGNER, SCOTT H PLOT NAME : _____PLOT SCALE : 1 IN:10 FT WISDOT/CADDS SHEET 42

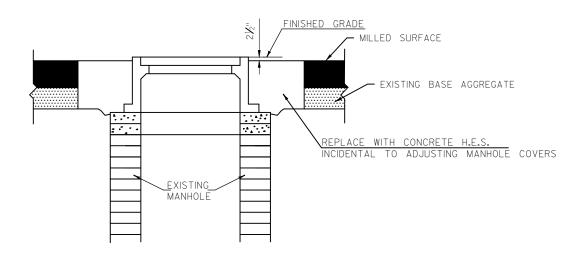




ADJUSTING WATER VALVES



- A. REMOVE AND STORE MANHOLE COVER
- B. FURNISH AND INSTALL TEMP. COVER PLATE.
- C. BACKFILL USING BASE AGGREGATE DENSE 1 1/4"
 - * TO BE PAID FOR UNDER THE APPROPRIATE ITEMS



AFTER MILLING ASPHALT PAVEMENT

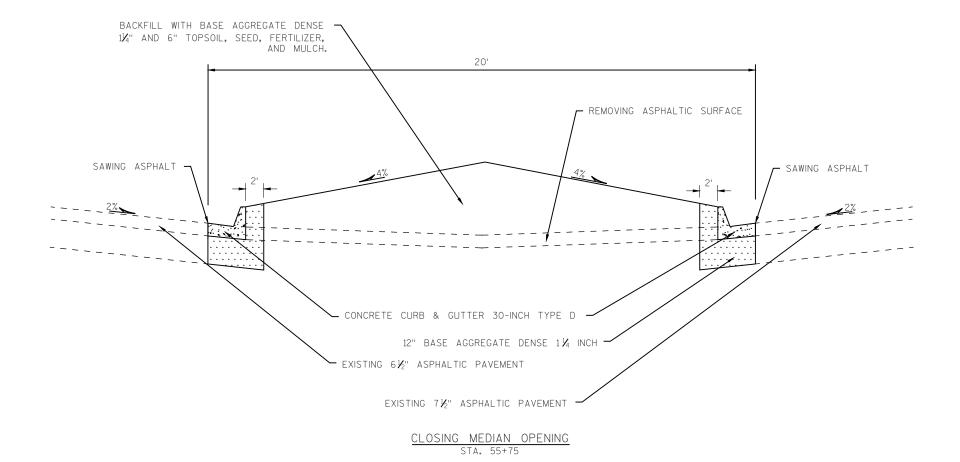
- A. EXCAVATE AND REMOVE TEMPORARY COVER PLATE.
- B. ADJUST MANHOLE AND REINSTALL MANHOLE COVER TO FINISH GRADE.

ADJUSTING SANITARY MANHOLE COVERS

PROJECT NO: 3220-03-61 HWY: STH 158 COUNTY: KENOSHA CONSTRUCTION DETAIL

FILE NAME: N: VPDS\C3D\CAD\32200301\021002_CDD.DWG SHEET 42

2



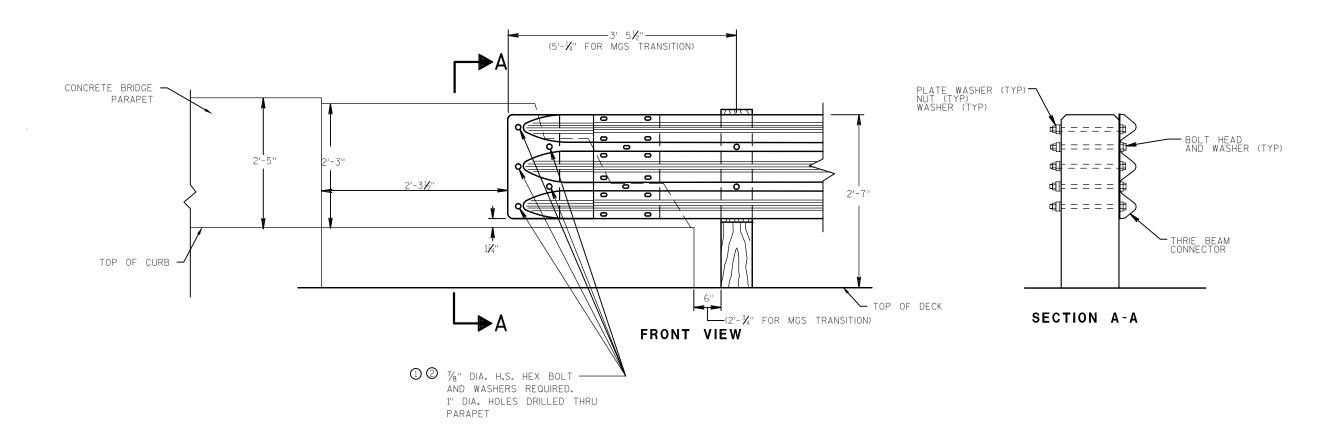
PROJECT NO:3220-03-61 HWY:STH 158 COUNTY:KENOSHA CONSTRUCTION DETAIL SHEET

GENERAL NOTES

BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A325, A449 AND GALVANIZED PER STANDARD SPECIFICATIONS 614.

- ① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

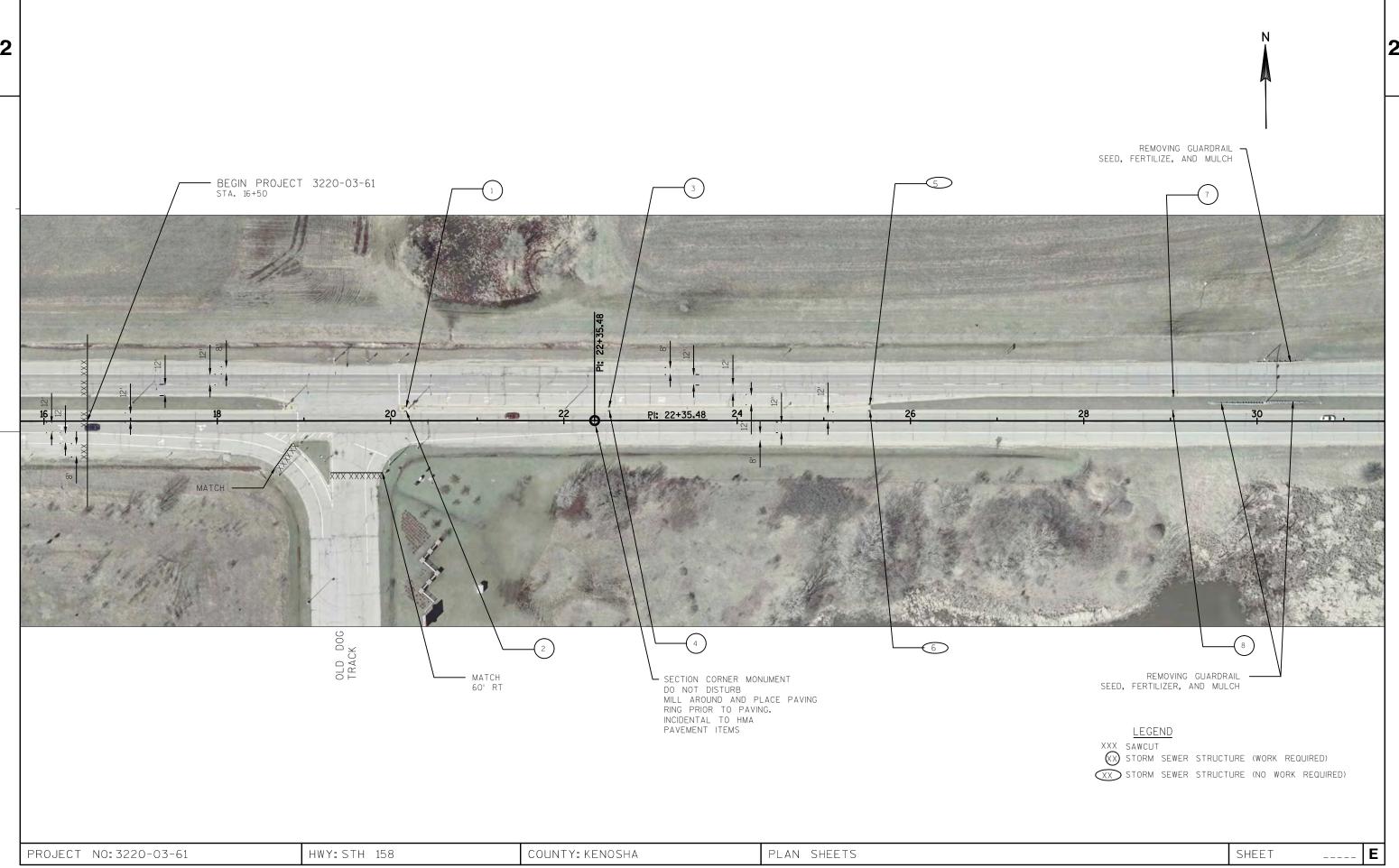


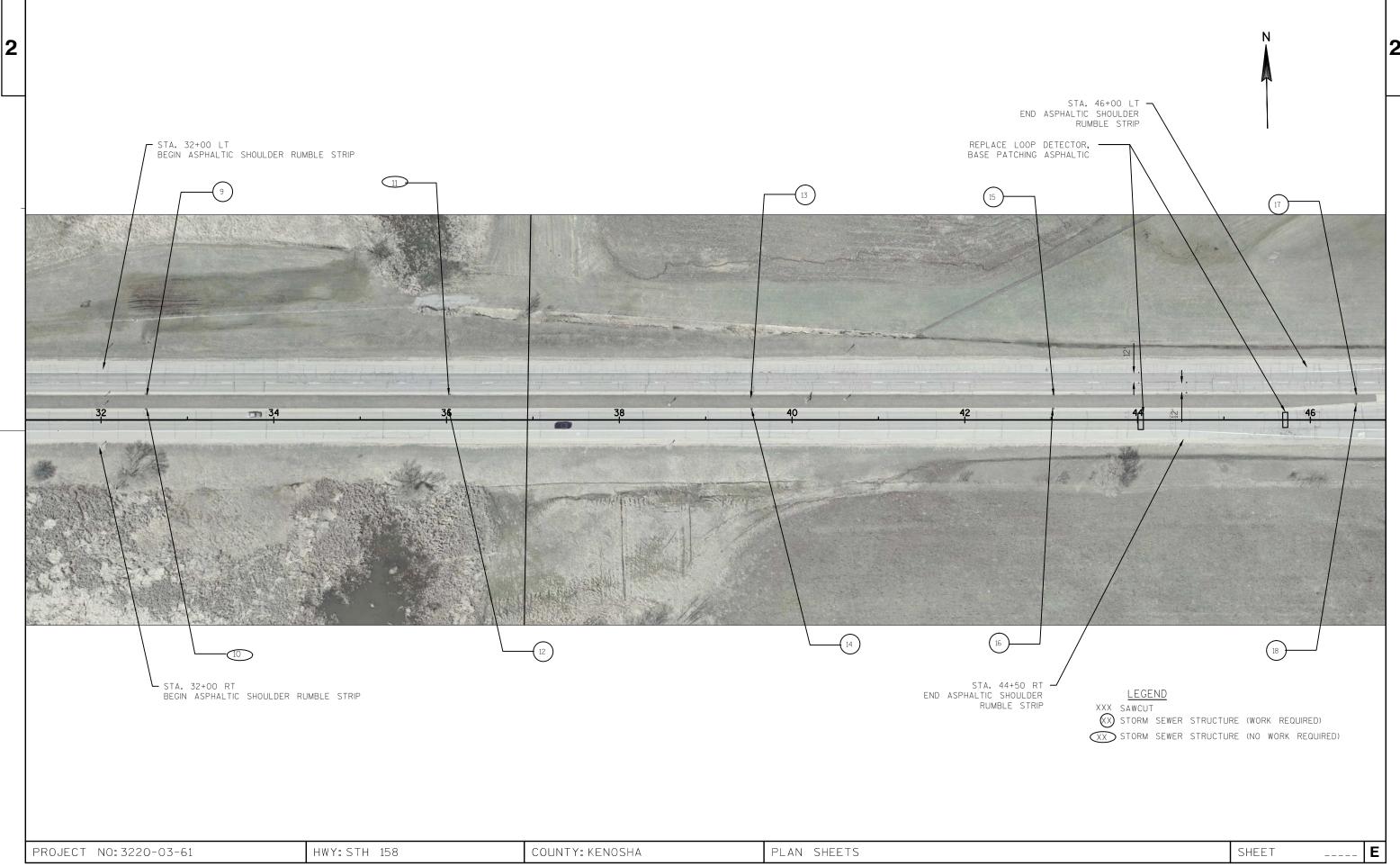
THRIE BEAM CONNECTION TO BRIDGE PARAPETS

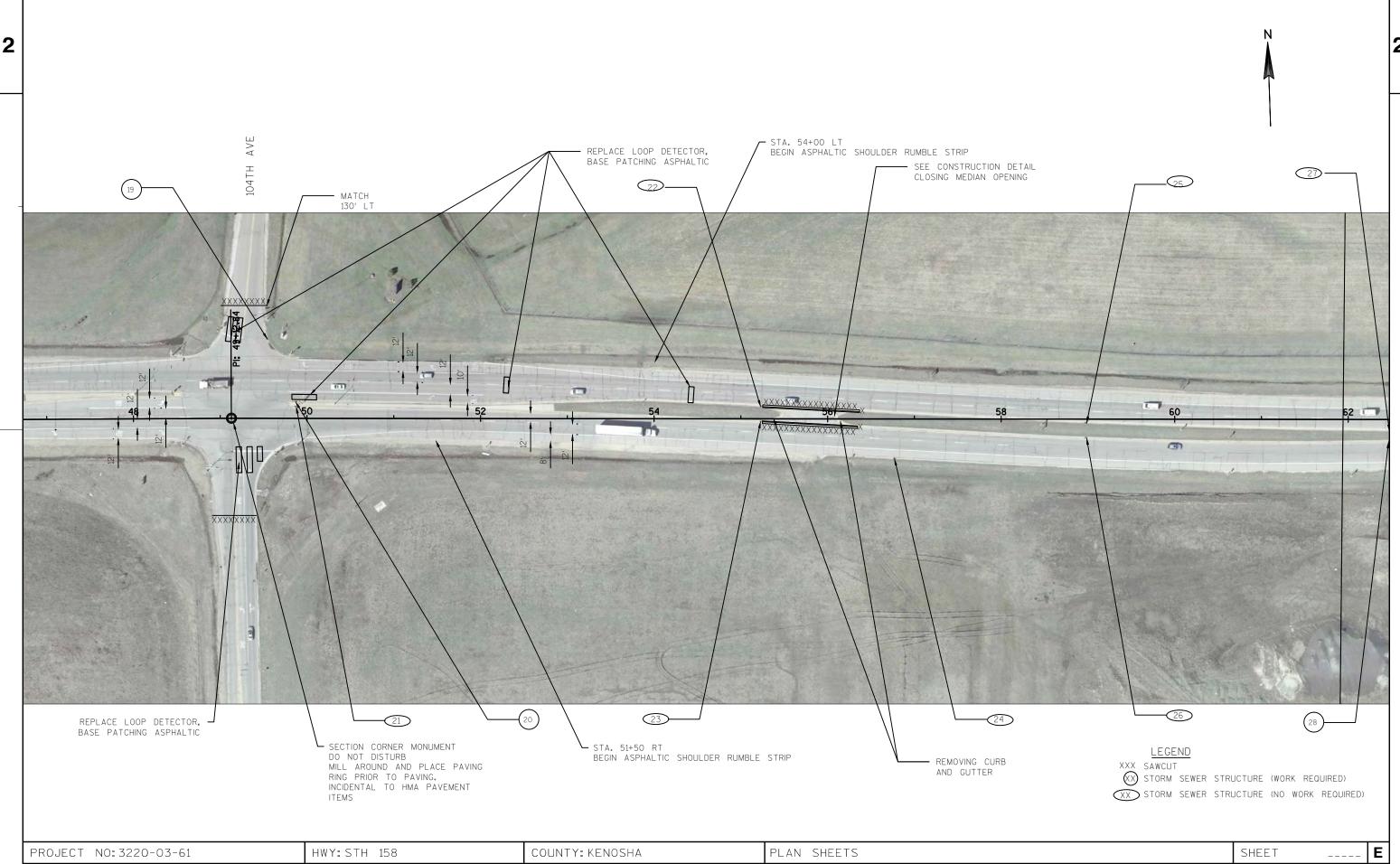
B-30-02 & B-30-03

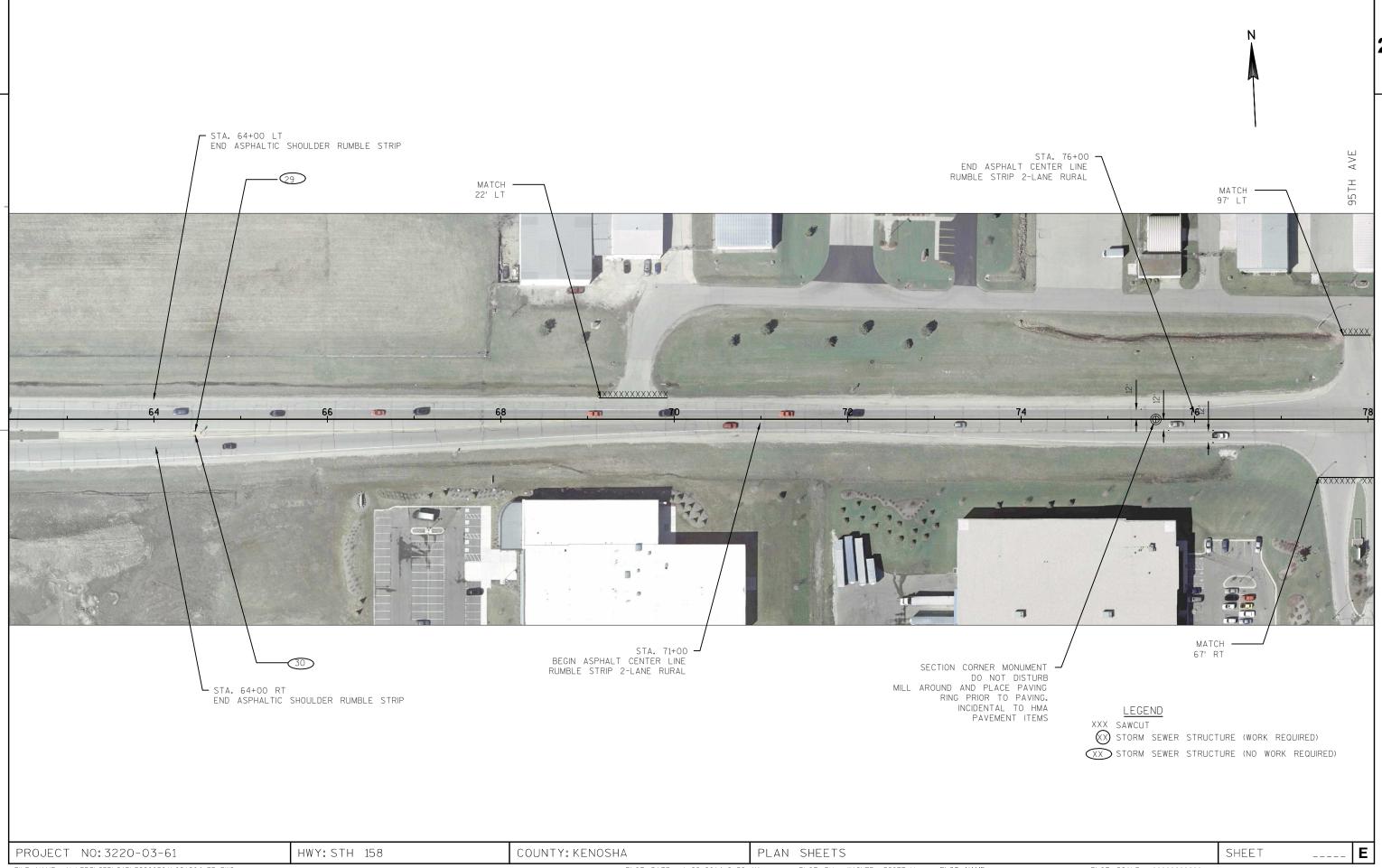
PROJECT NO: 3220-03-61 HWY: STH 158 COUNTY: KENOSHA CONSTRUCTION DETAIL SHEET **E**

FILE NAME :N:\PDS\C3D\CAD\32200301\021001_CD.DWG PLOT BY: WAGNER, SCOTT H PLOT NAME: _____PLOT SCALE :1 IN:10 FT WISDOT/CADDS SHEET 42

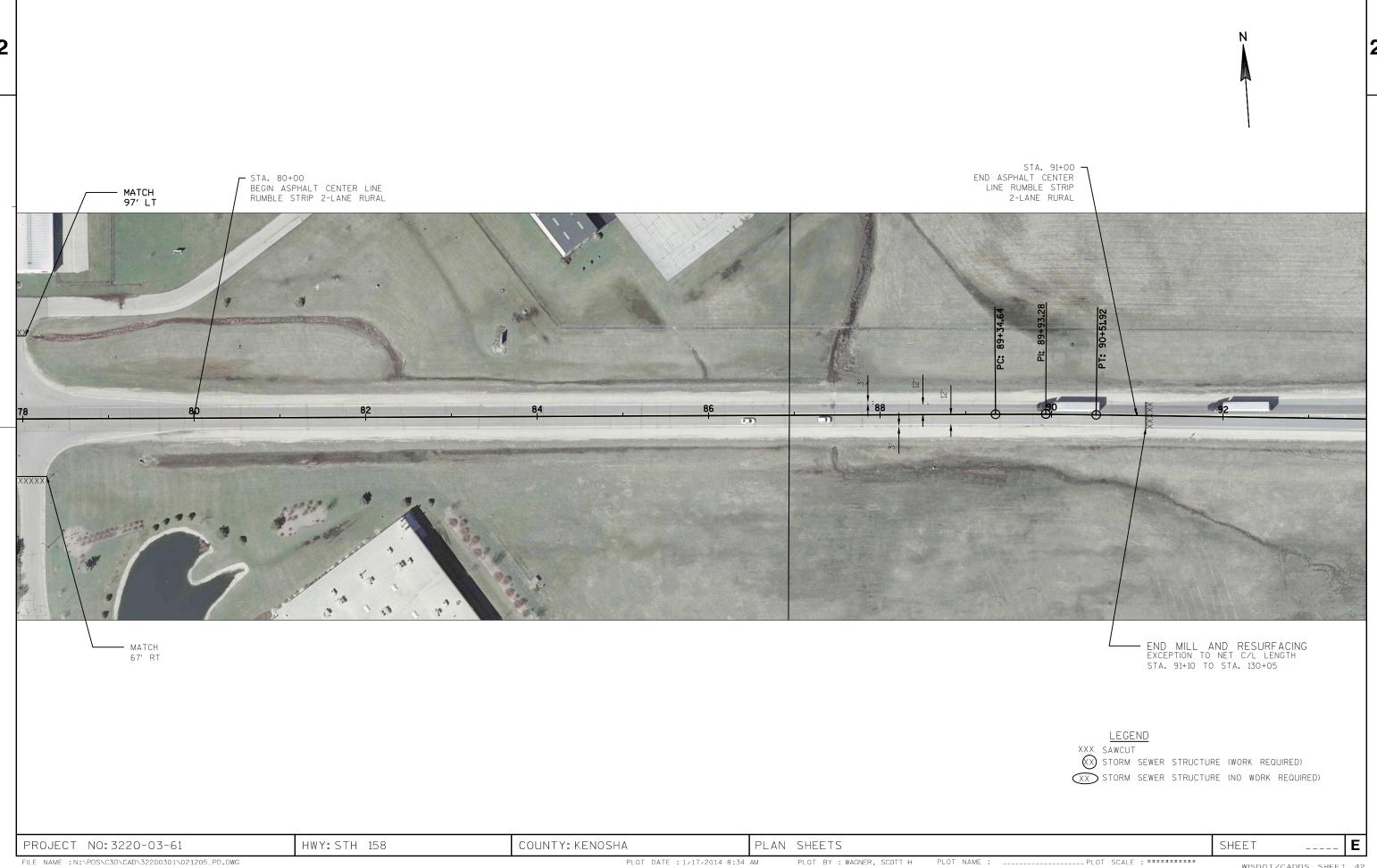




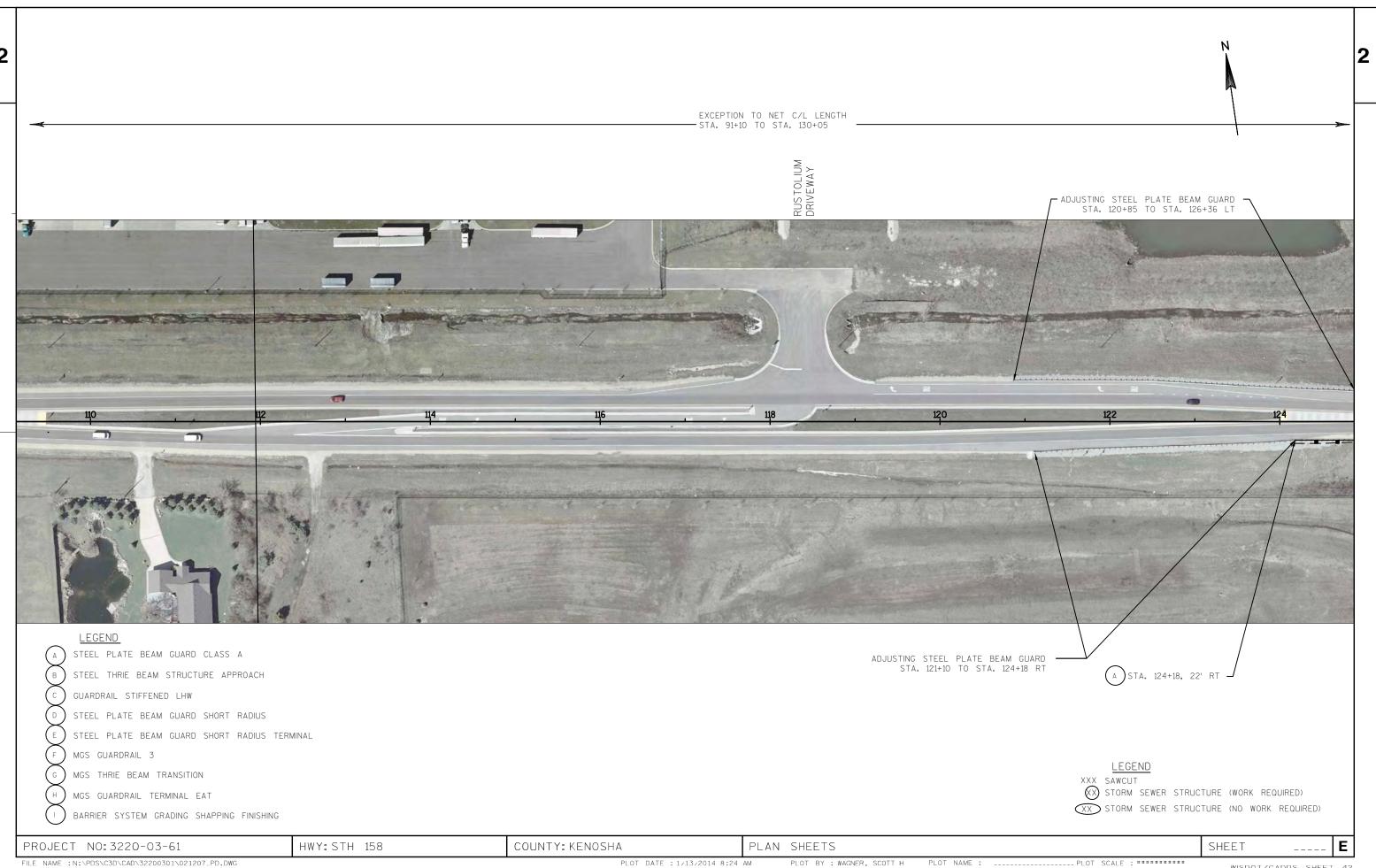




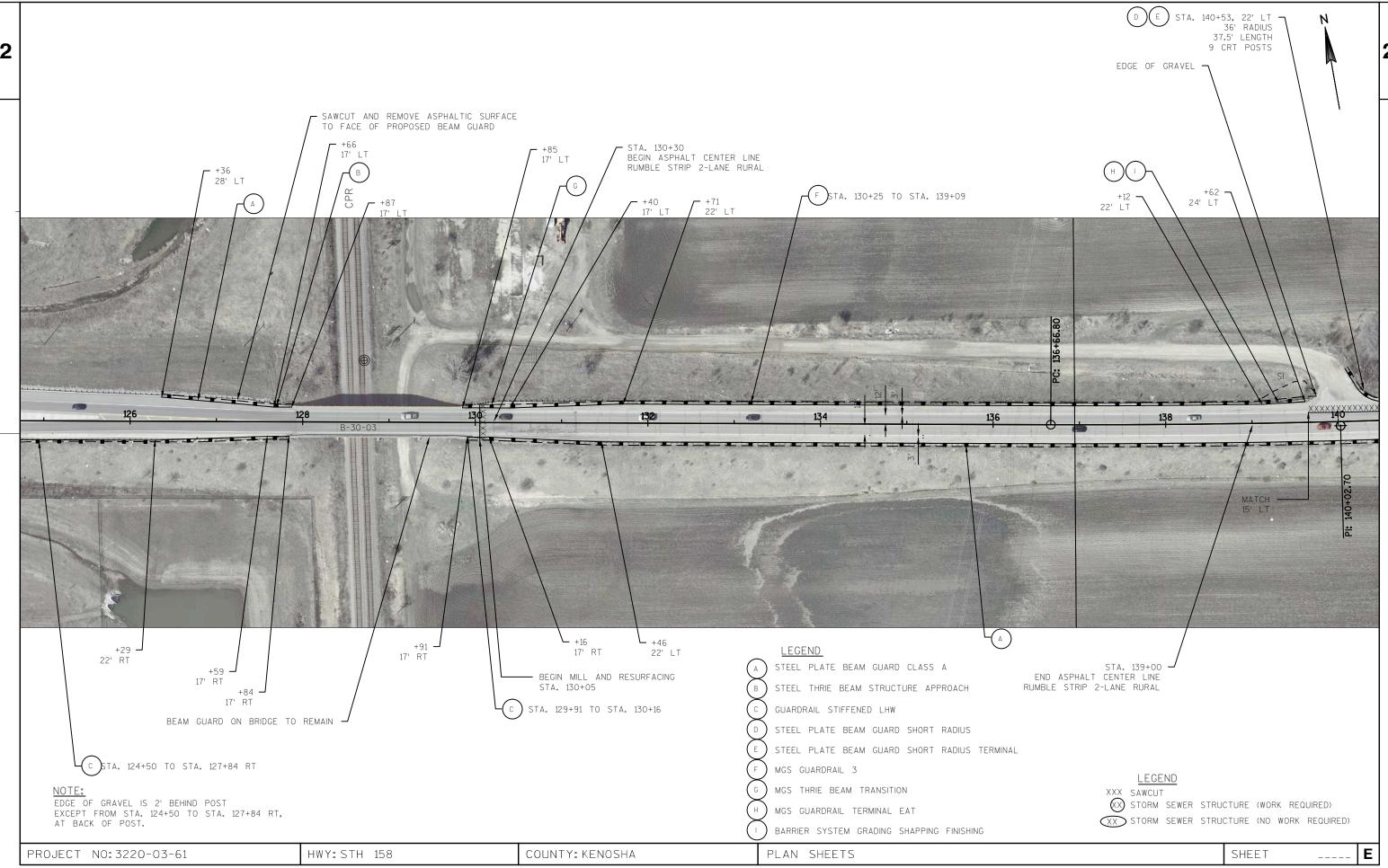
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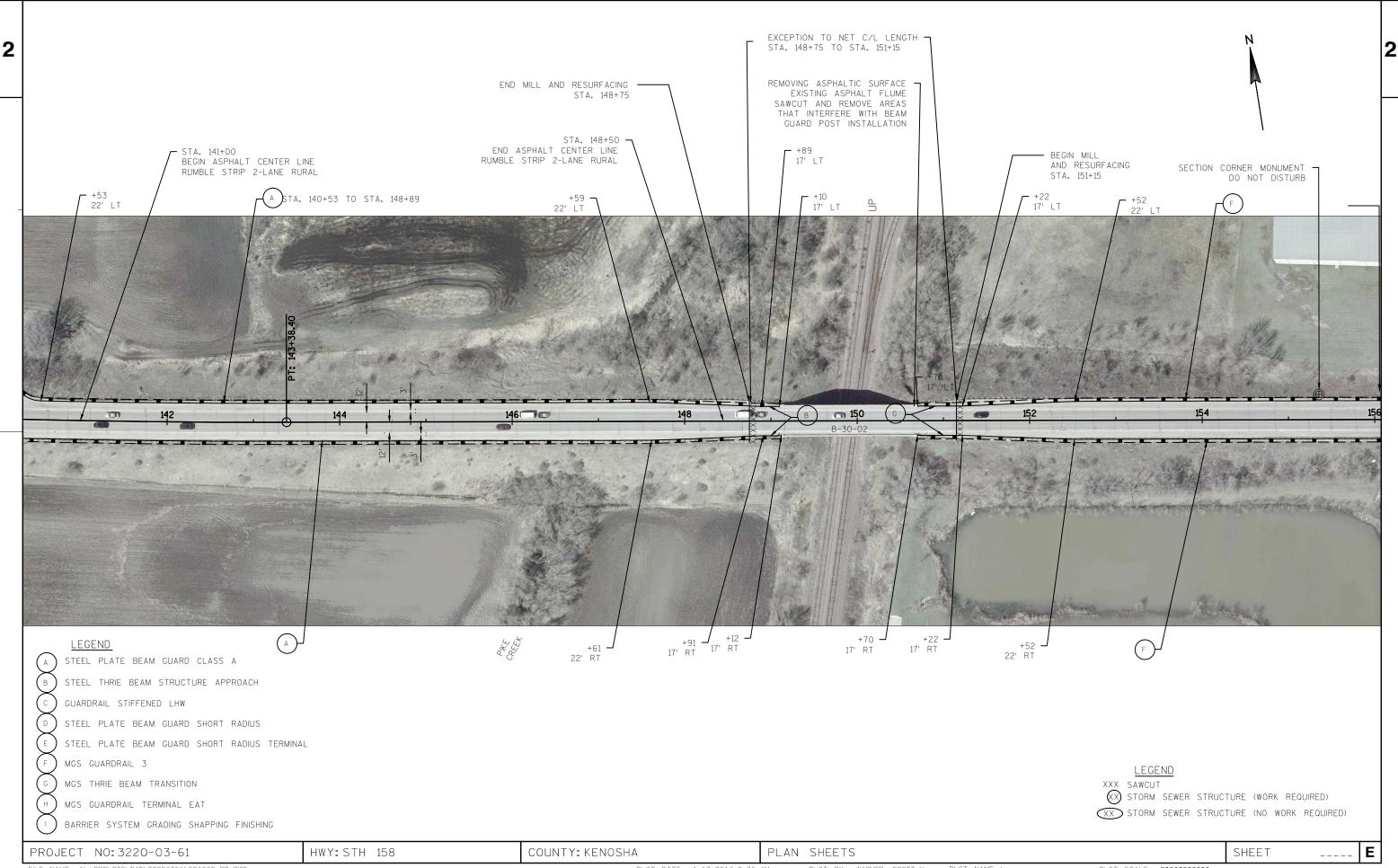


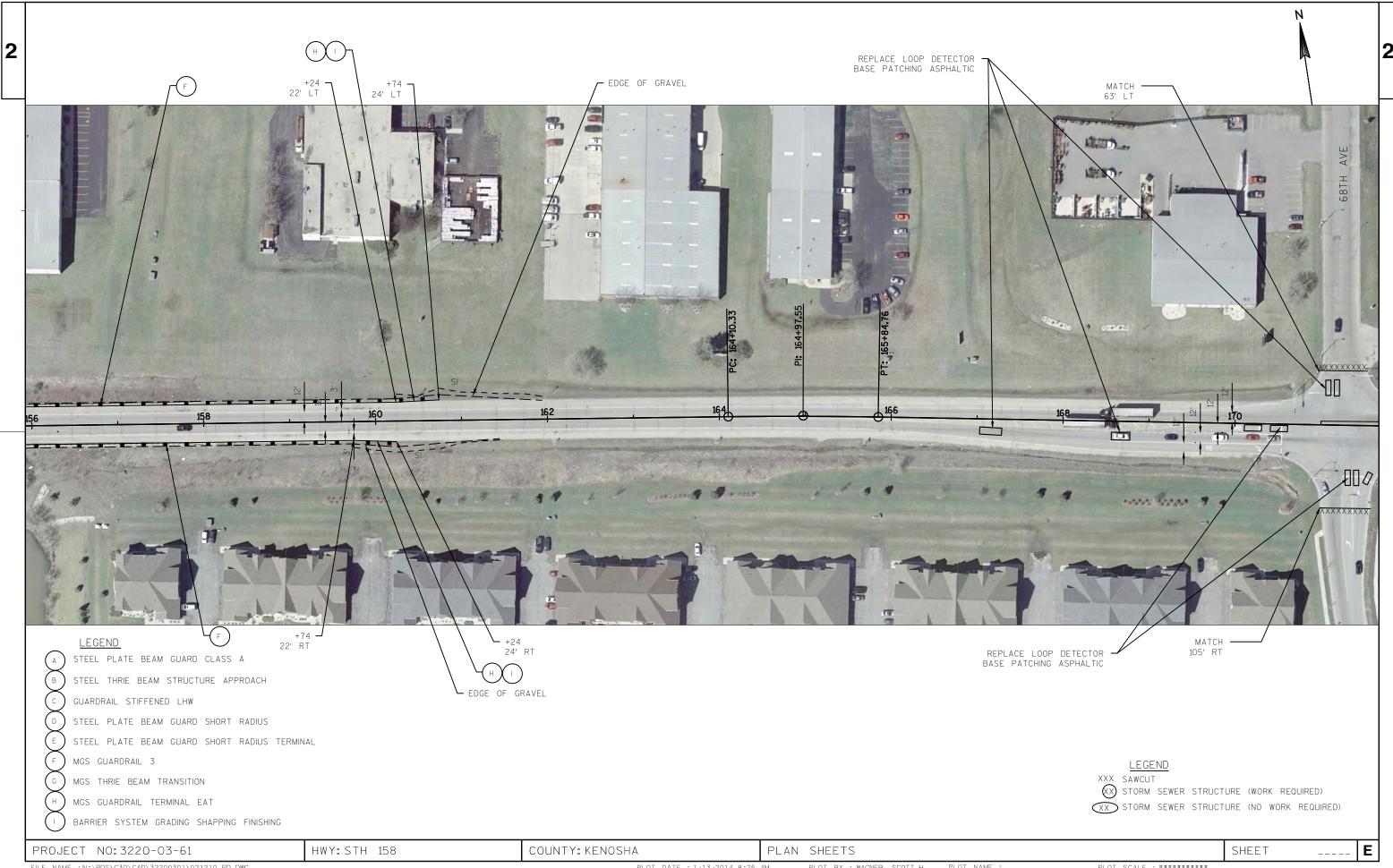


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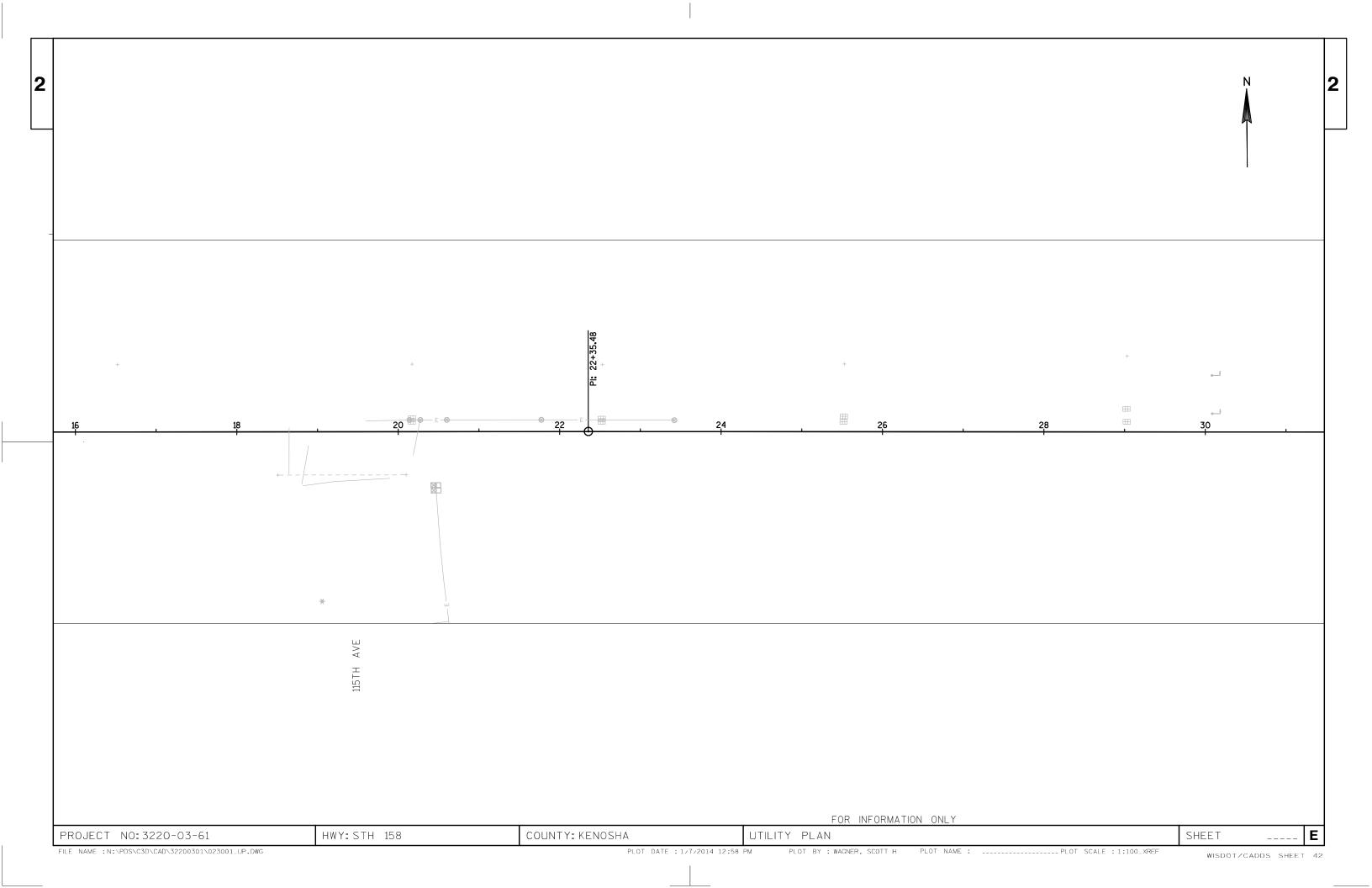
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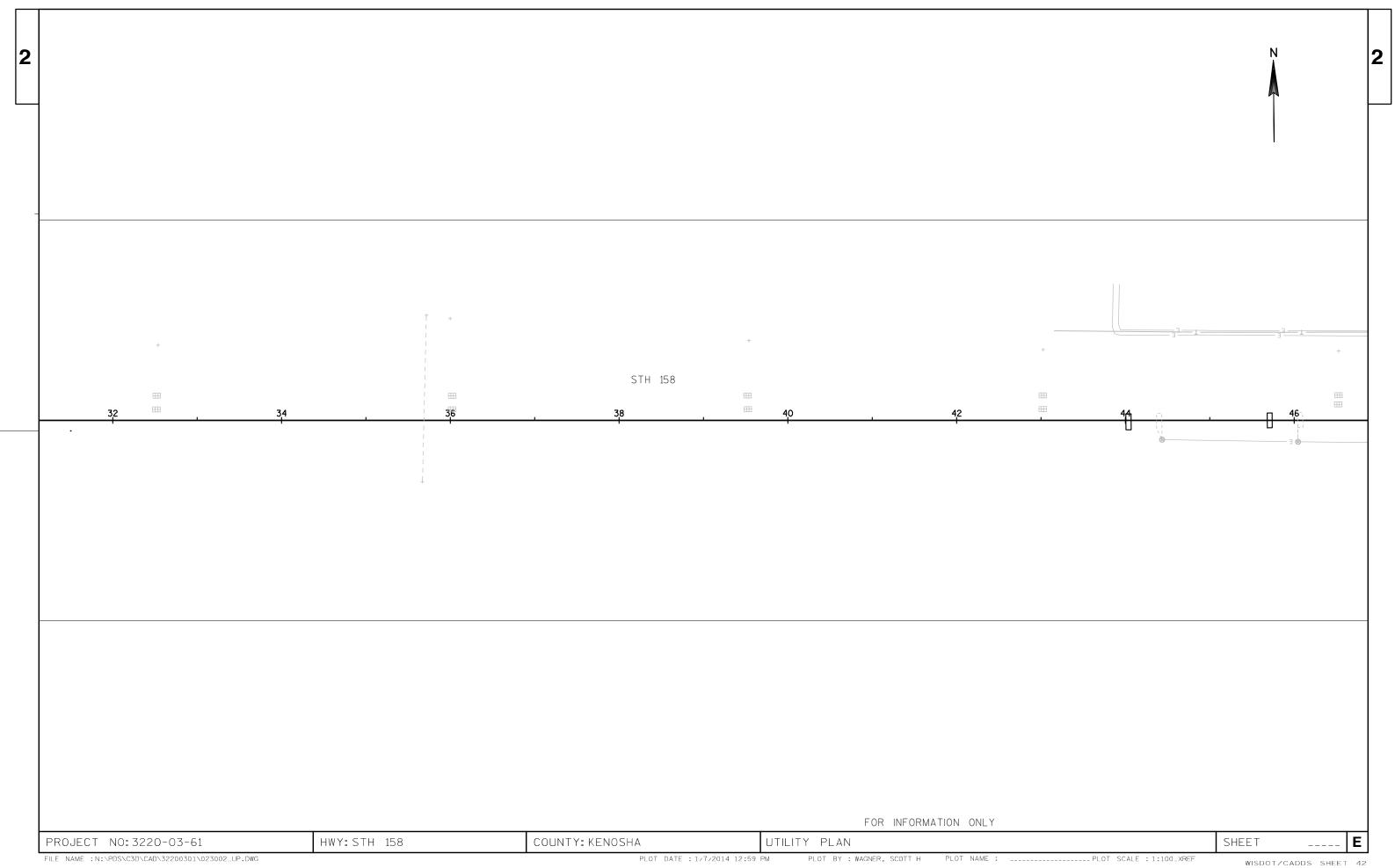


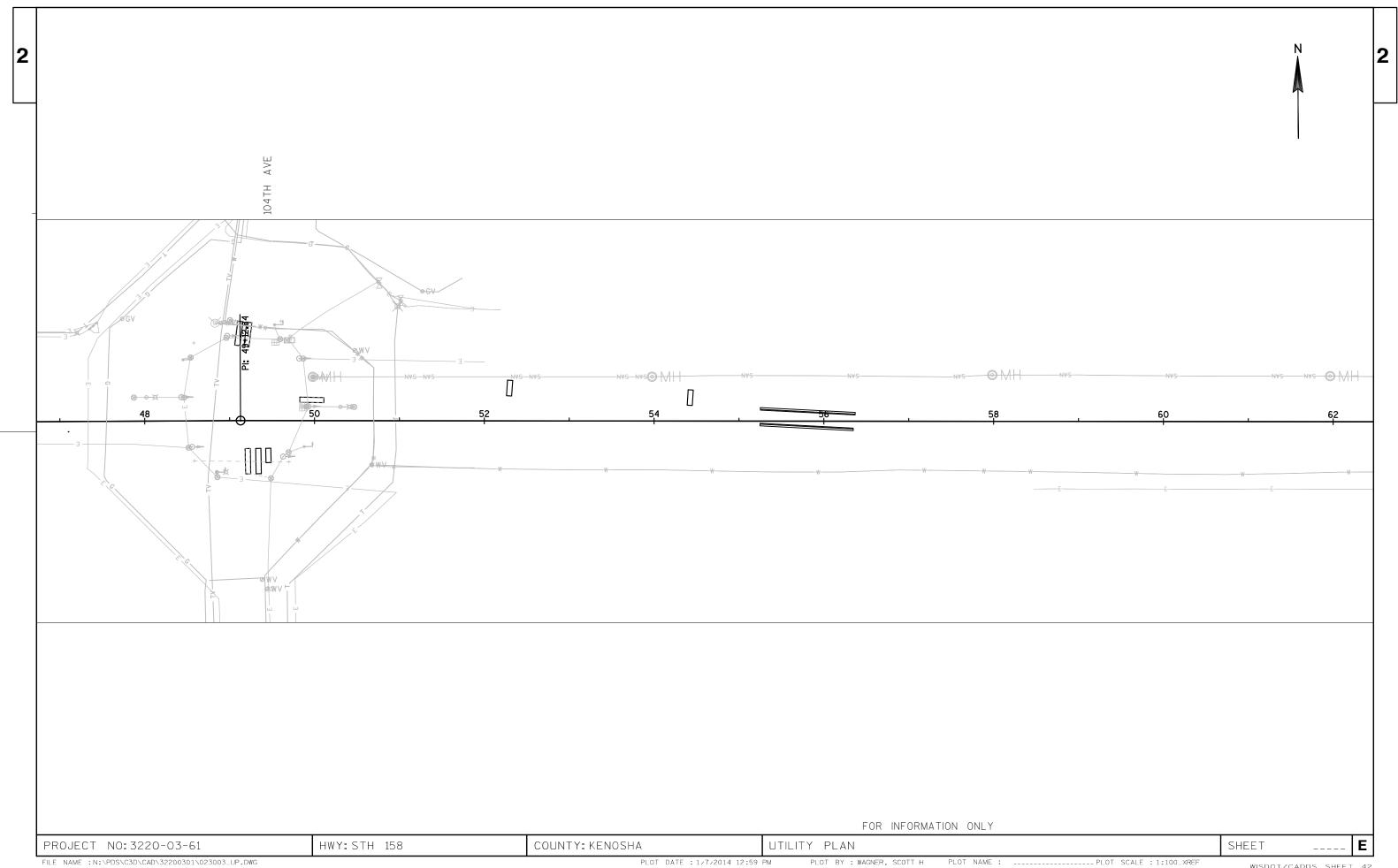


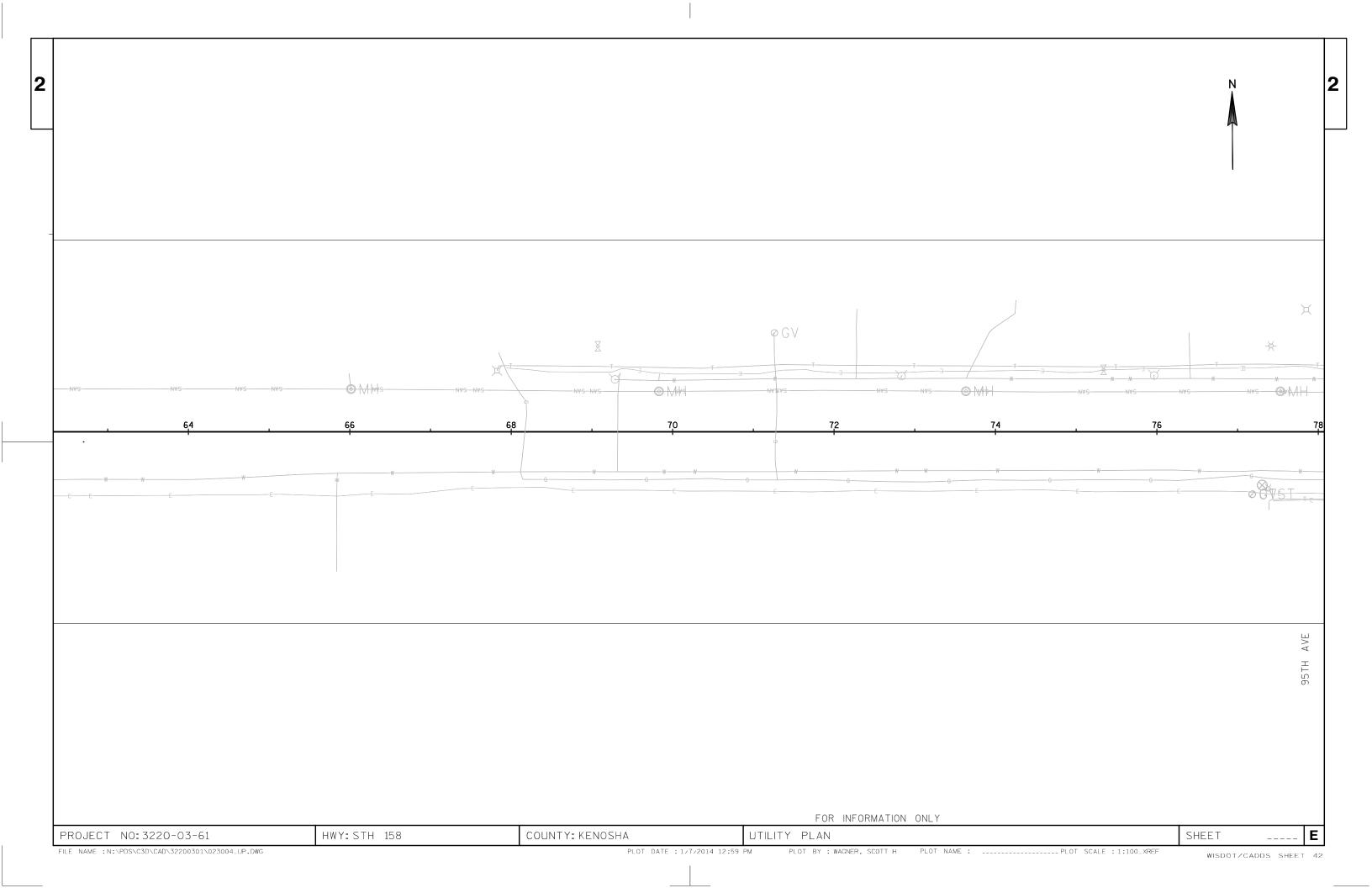


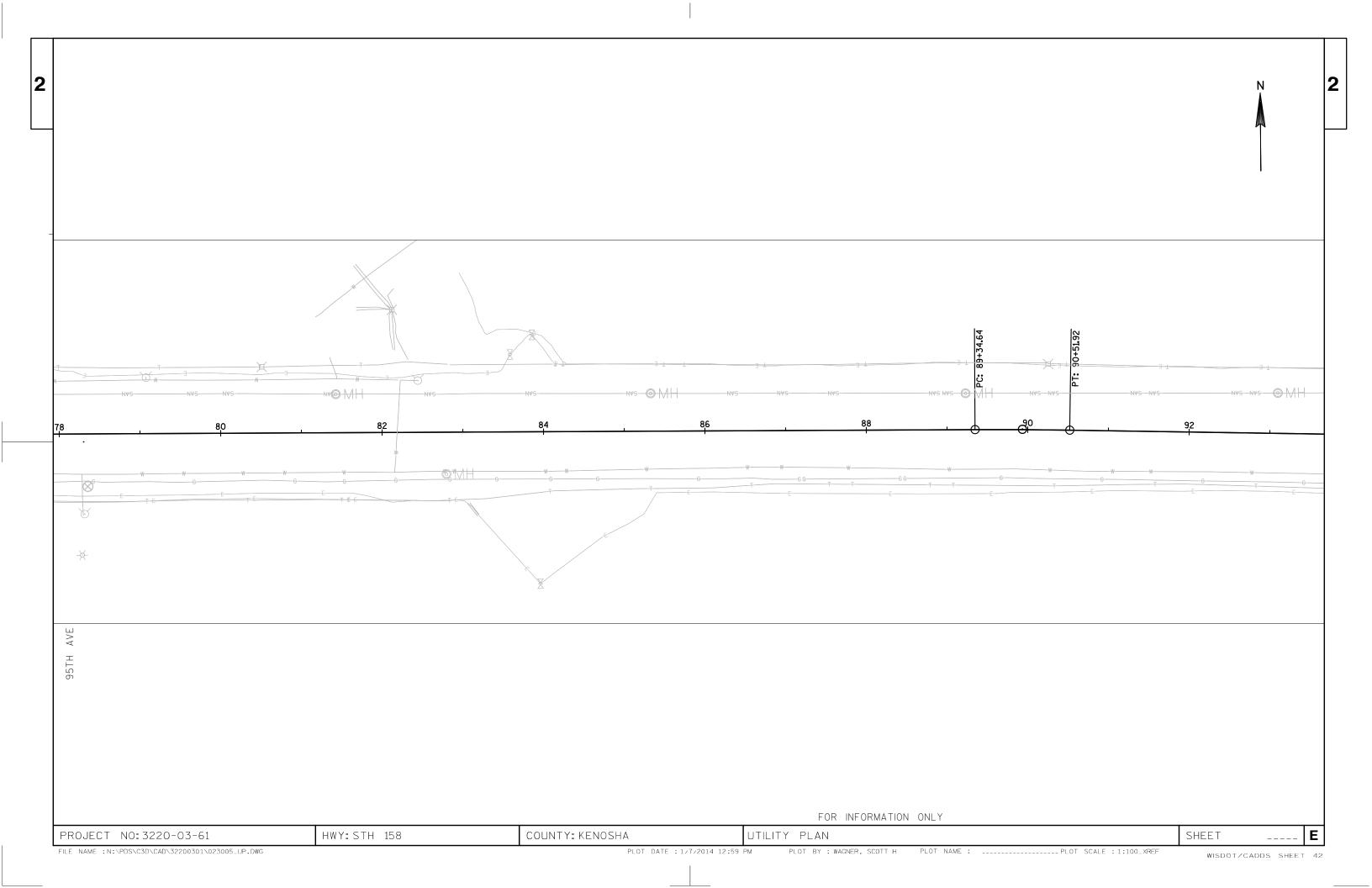
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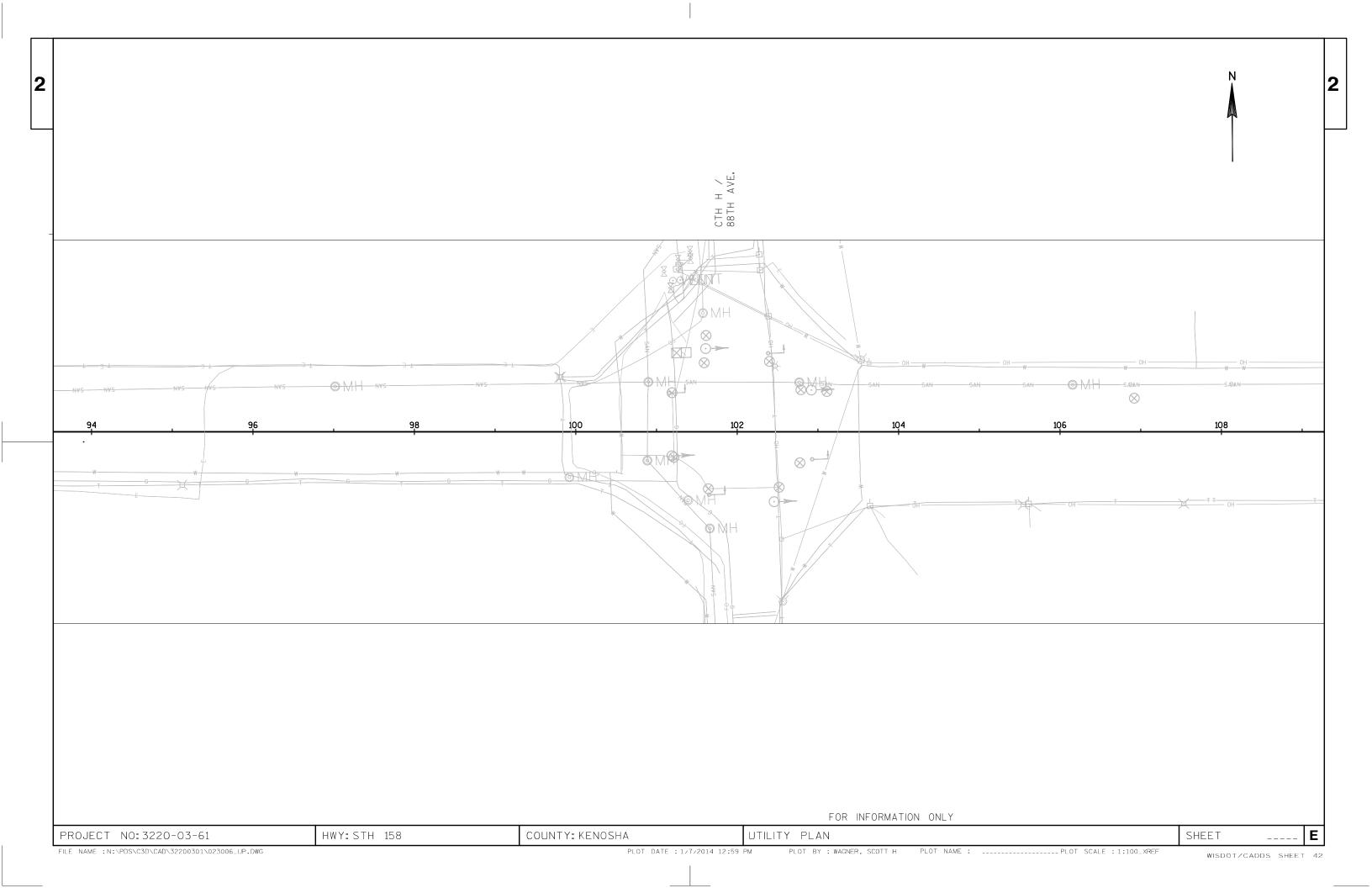


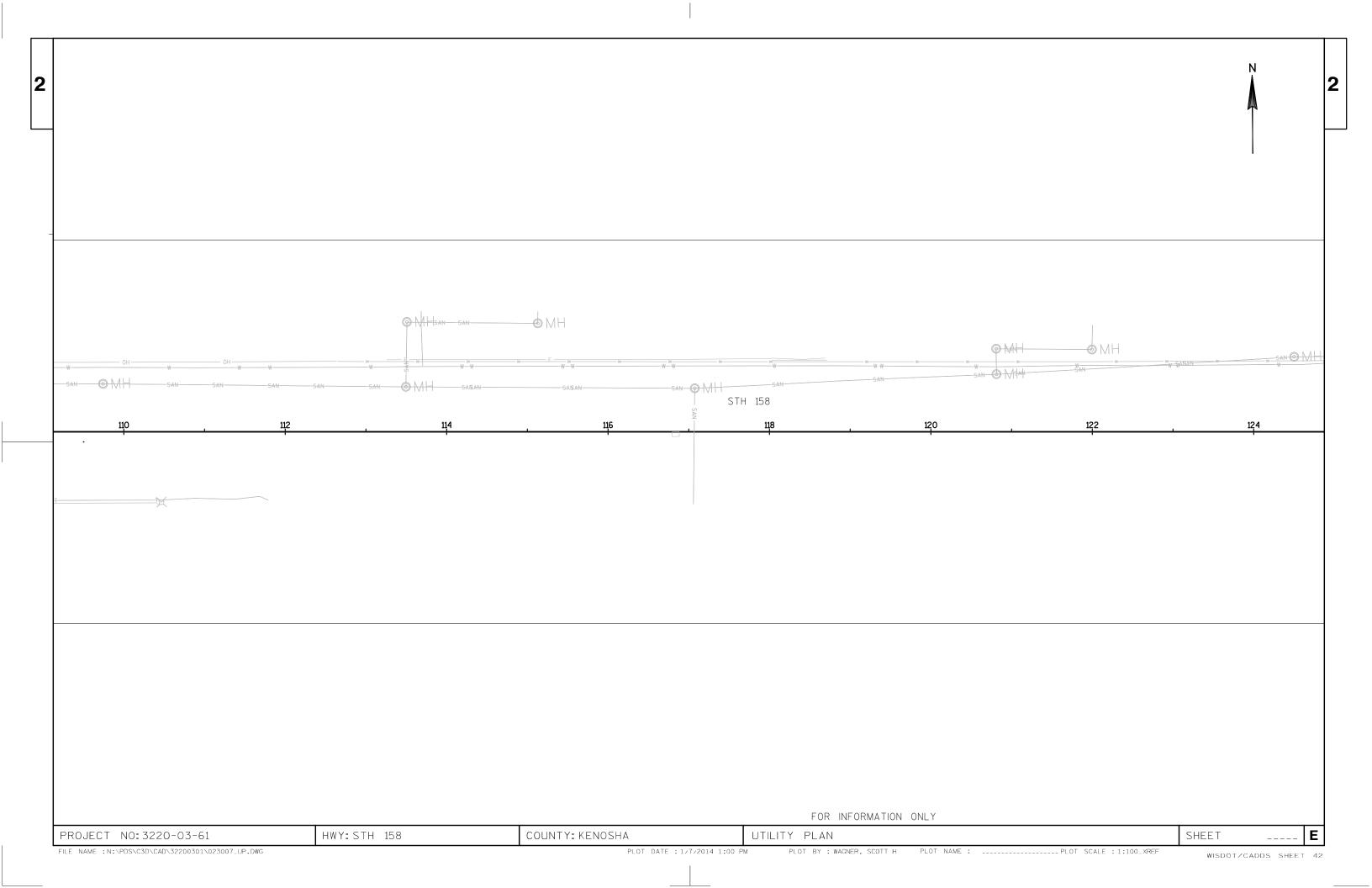


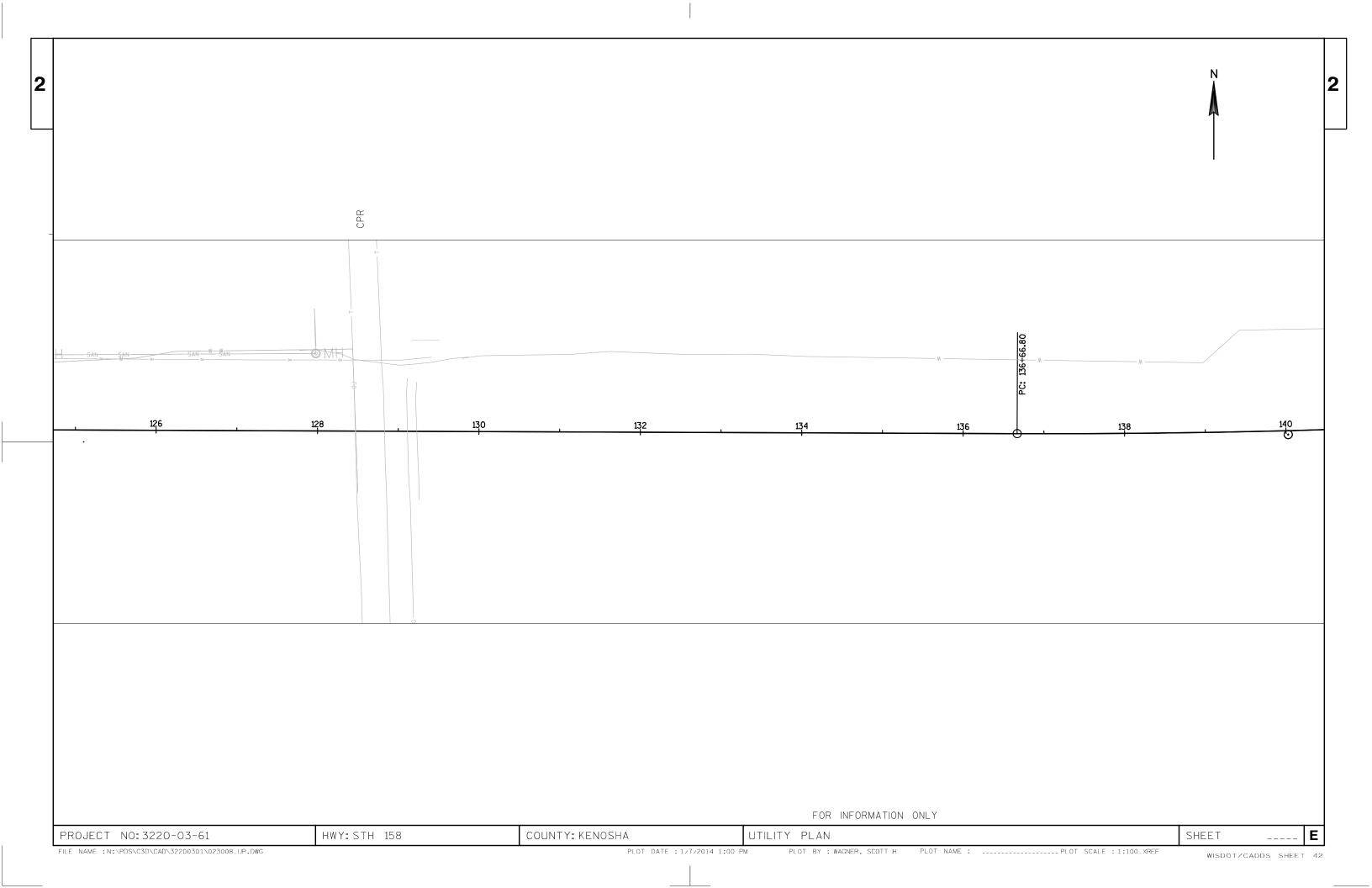


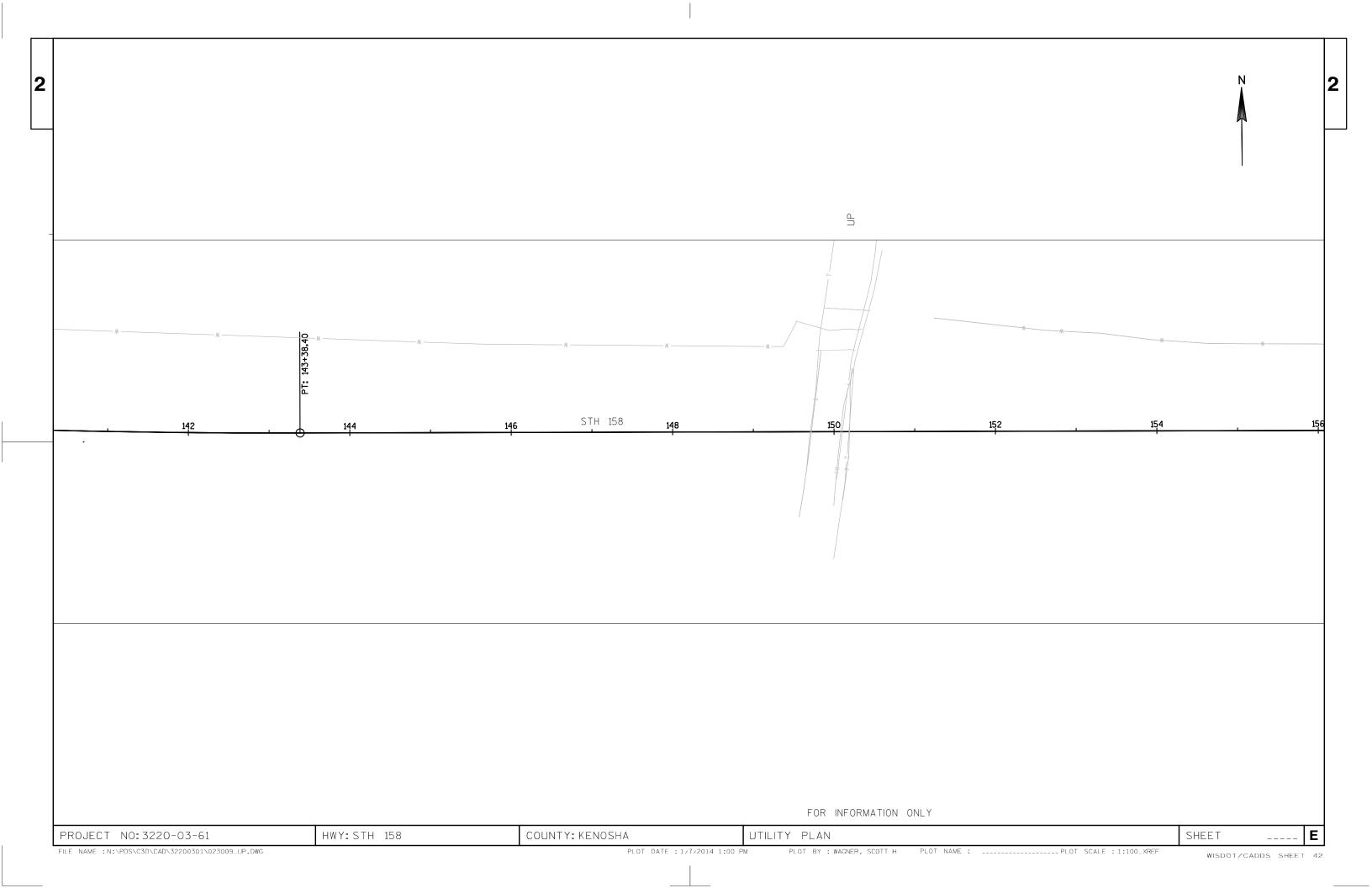


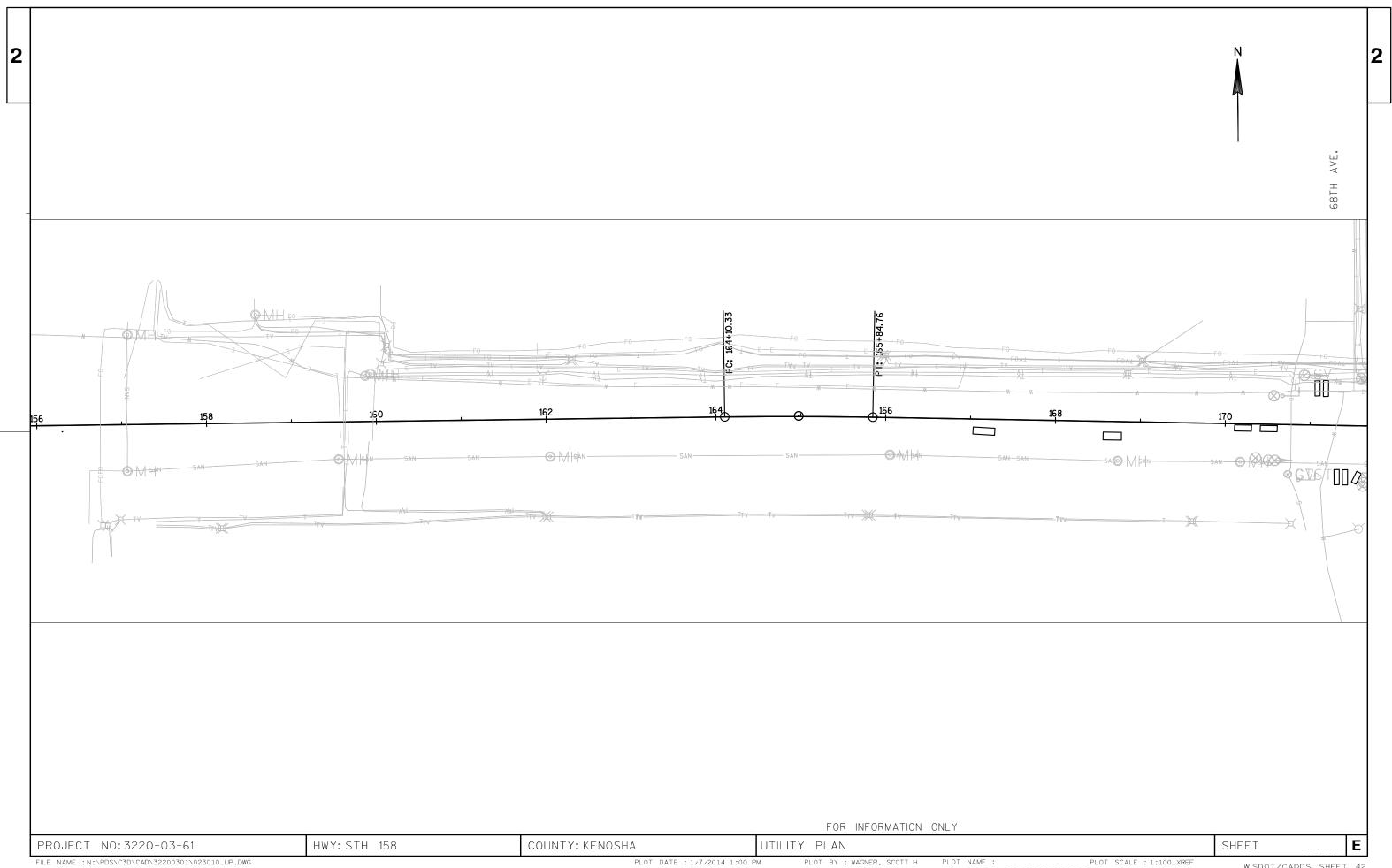


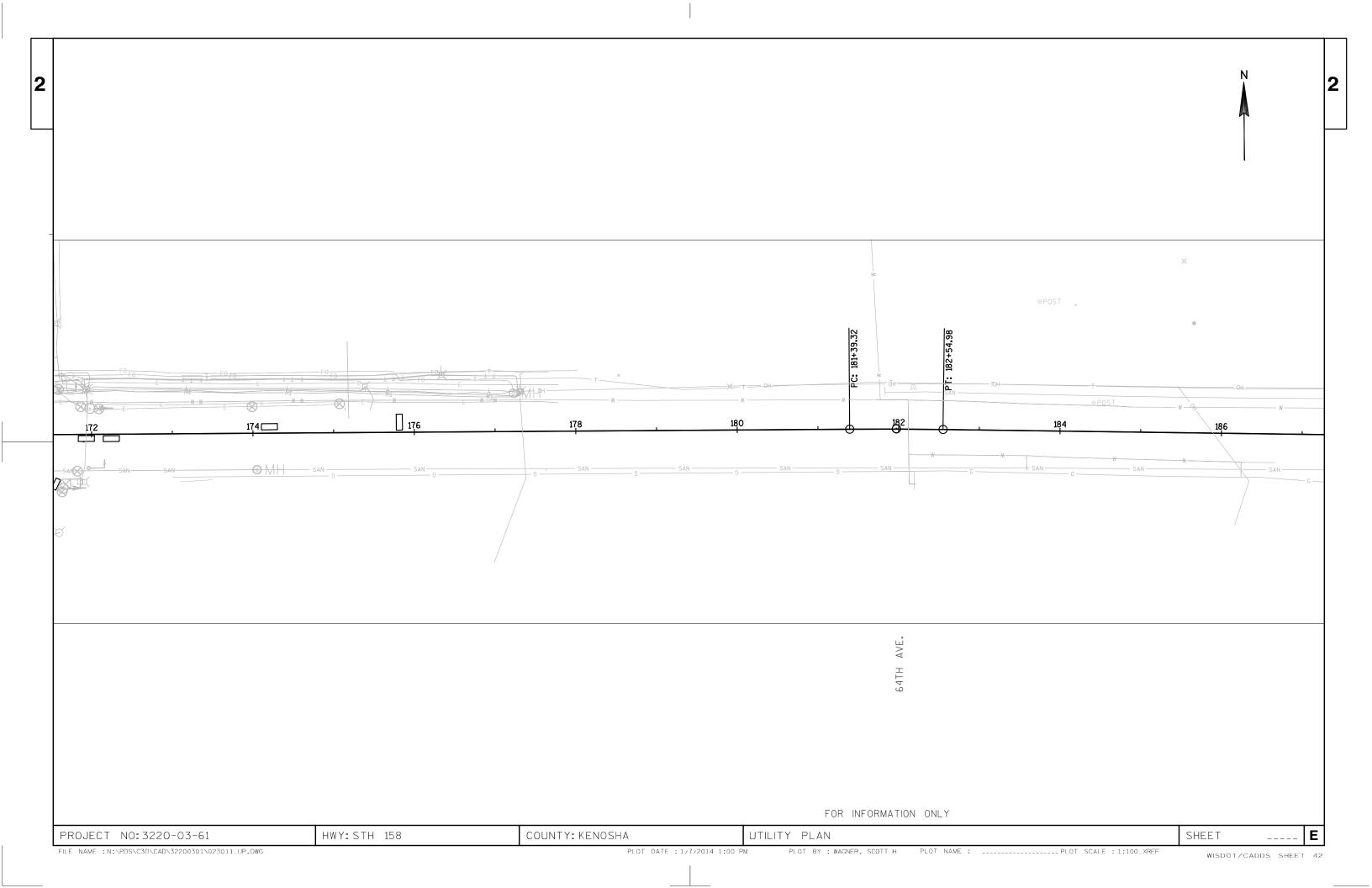


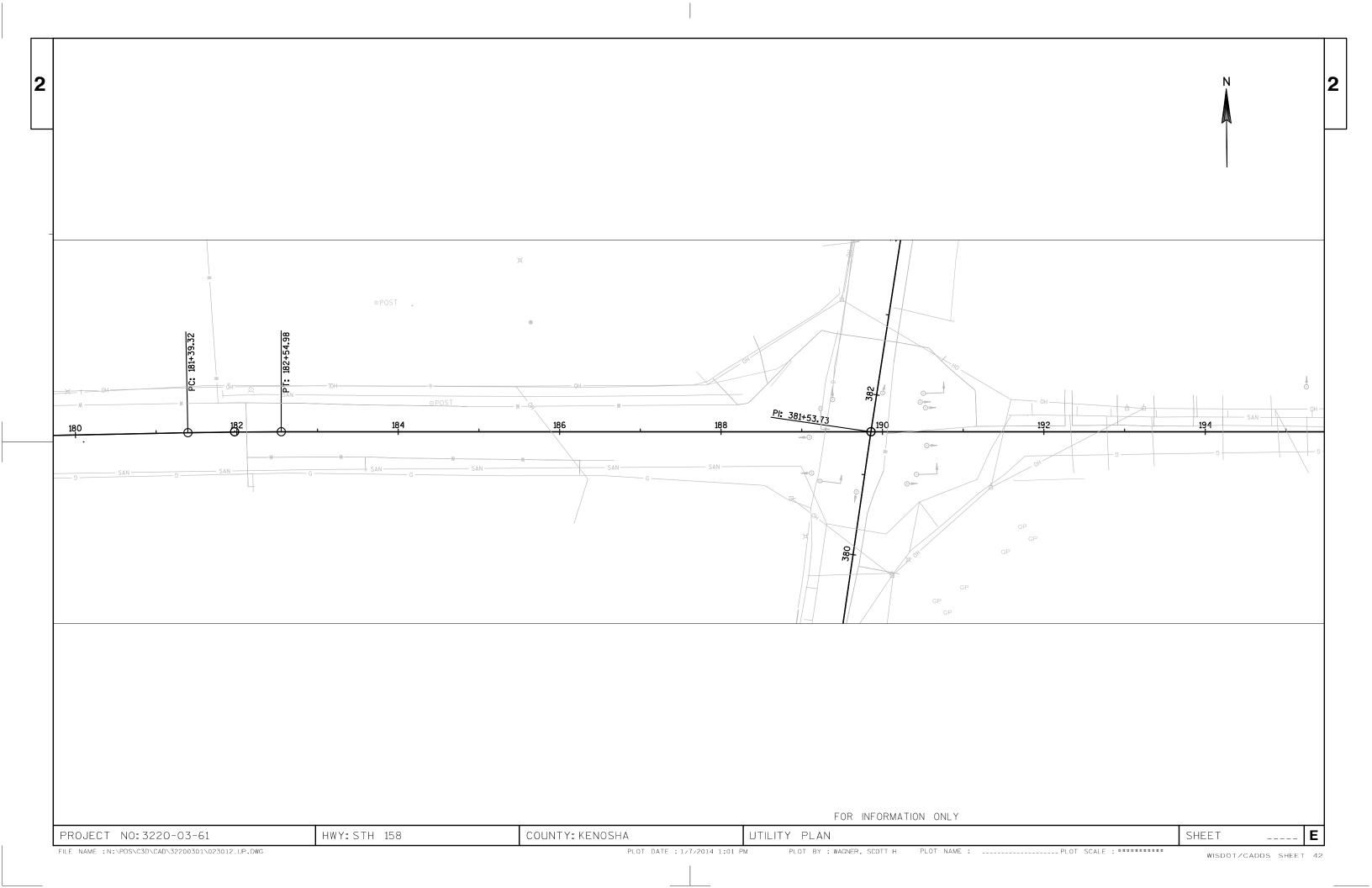








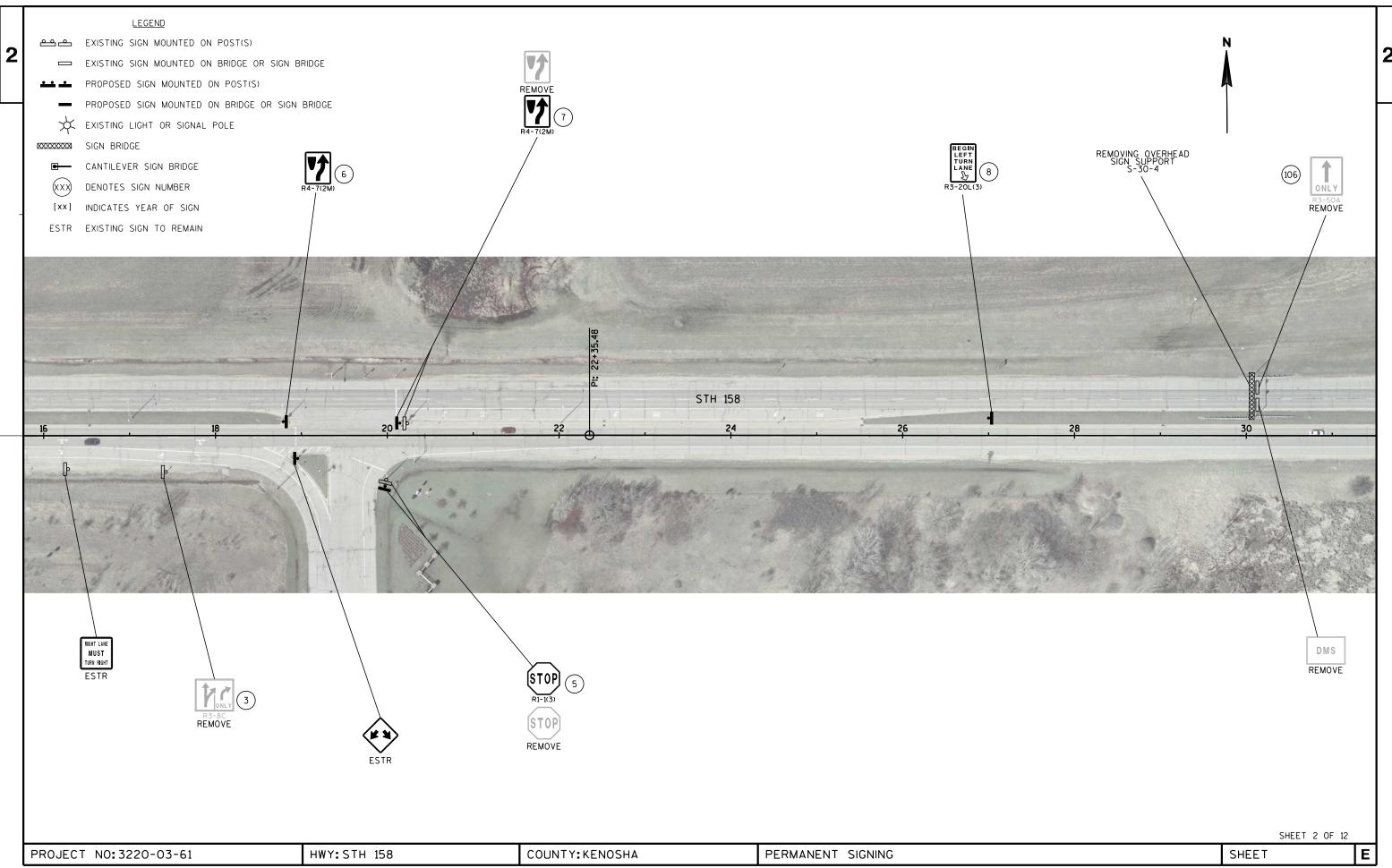


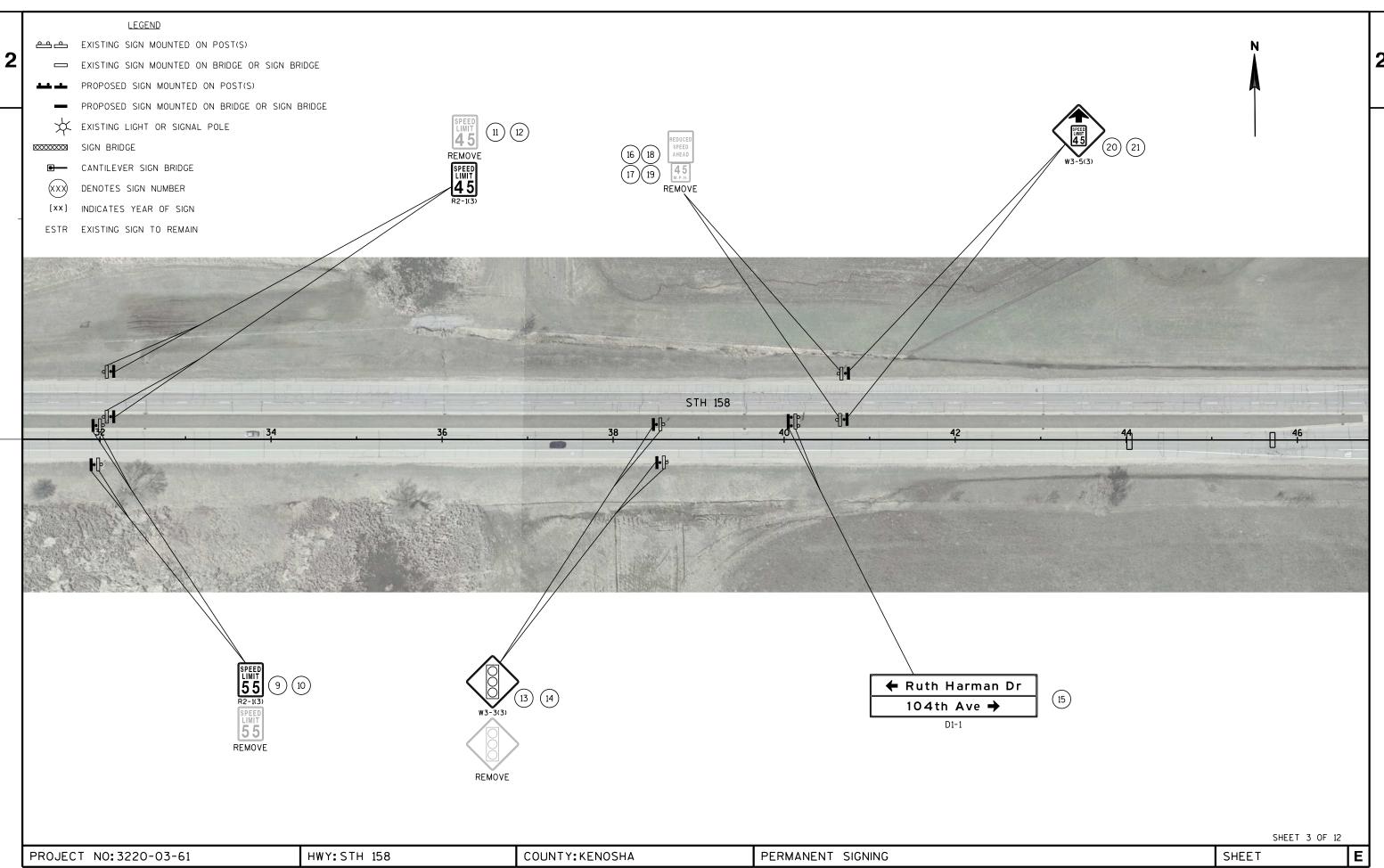


LEGEND ee EXISTING SIGN MOUNTED ON POST(S) EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE PROPOSED SIGN MOUNTED ON POST(S) PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE EXISTING LIGHT OR SIGNAL POLE SIGN BRIDGE CANTILEVER SIGN BRIDGE DENOTES SIGN NUMBER [xx] INDICATES YEAR OF SIGN ESTR EXISTING SIGN TO REMAIN STH 158 EXIT Ξ SHEET 1 OF 12 COUNTY: KENOSHA HWY:STH 158 SHEET PROJECT NO: 3220-03-61 PERMANENT SIGNING

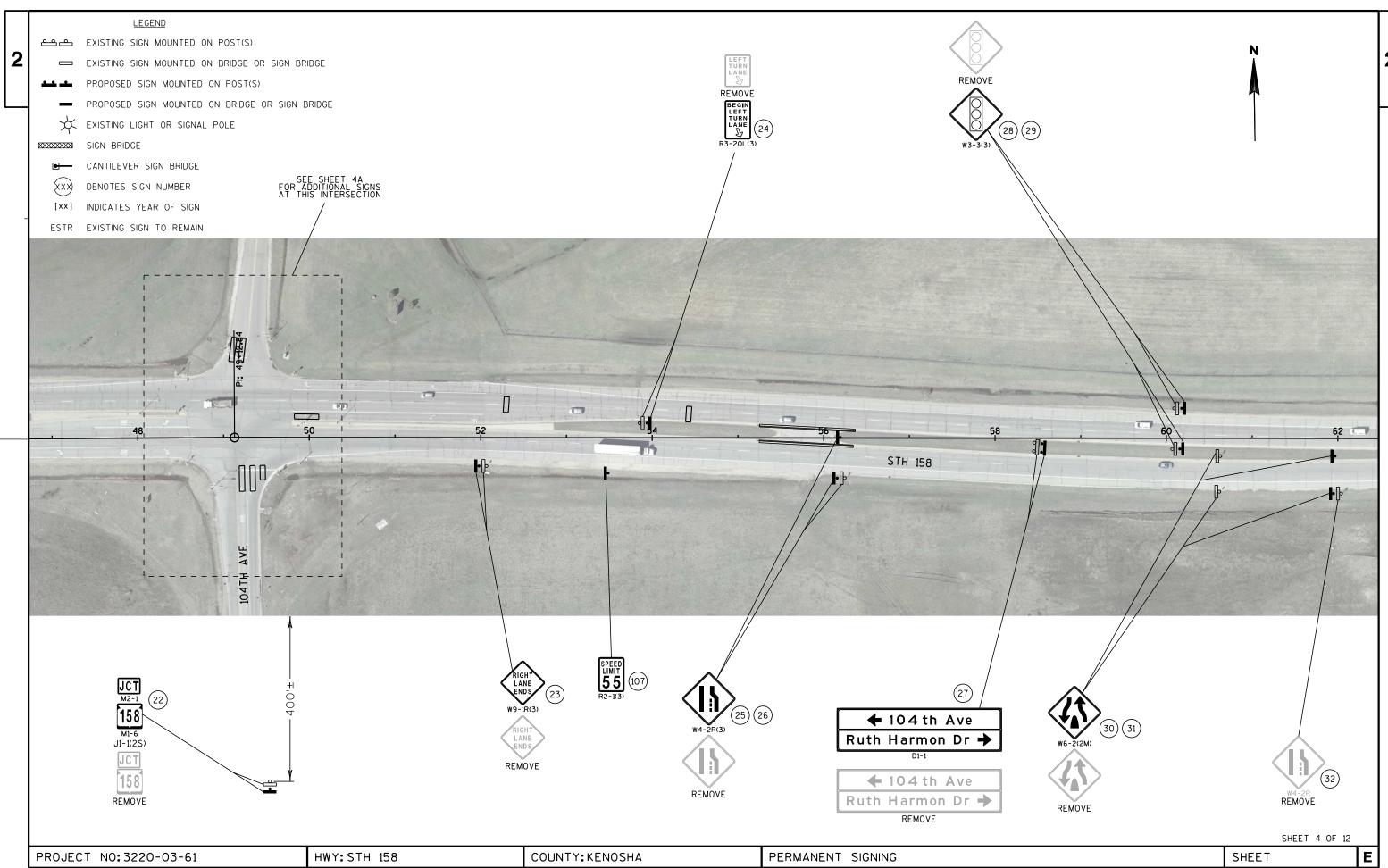
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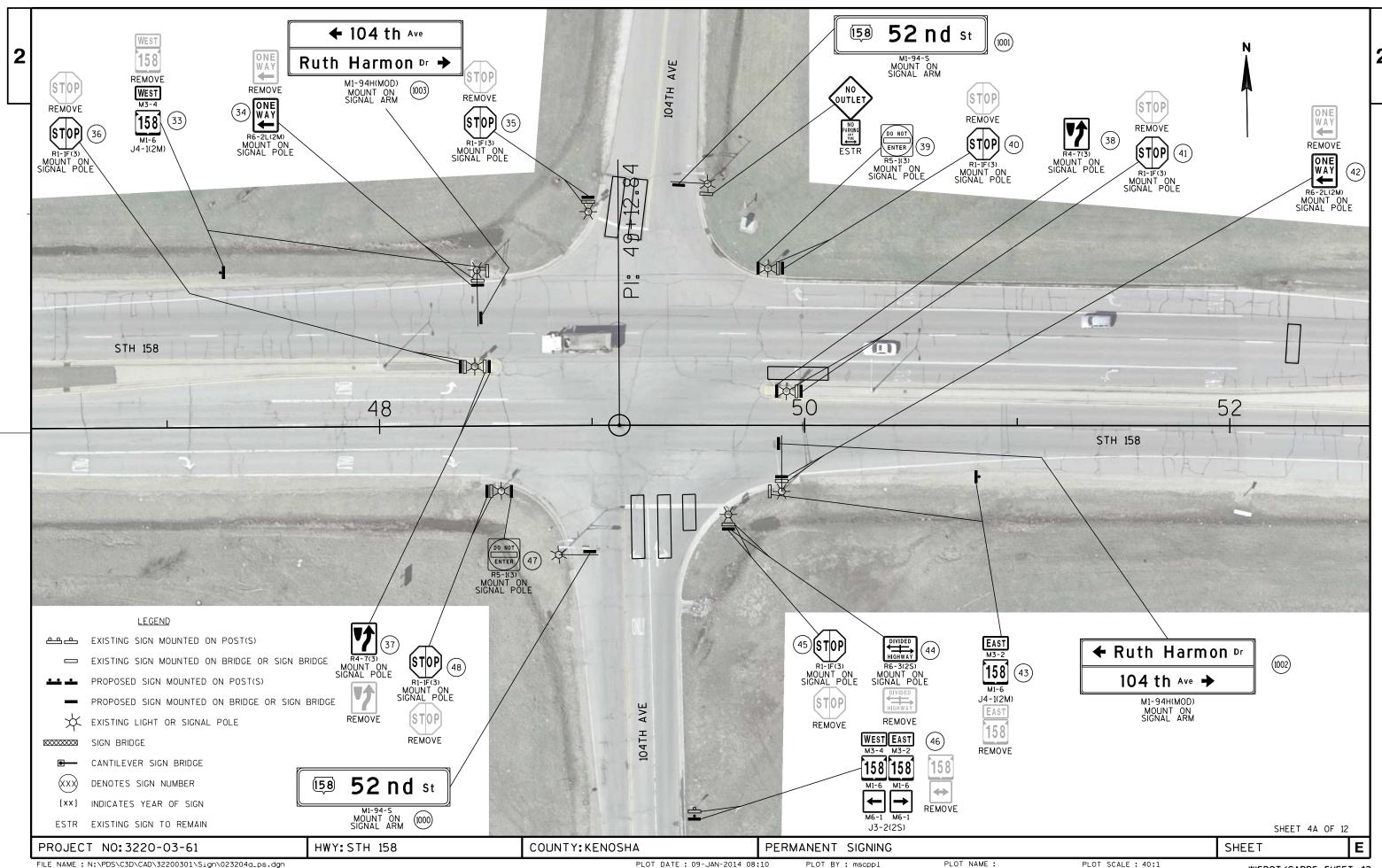
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PLOT DATE: 09-JAN-2014 08:08 PLOT BY: mscppl PLOT NAME: PLOT SCALE: 100:1 WISDOT/CADDS SHEET 42

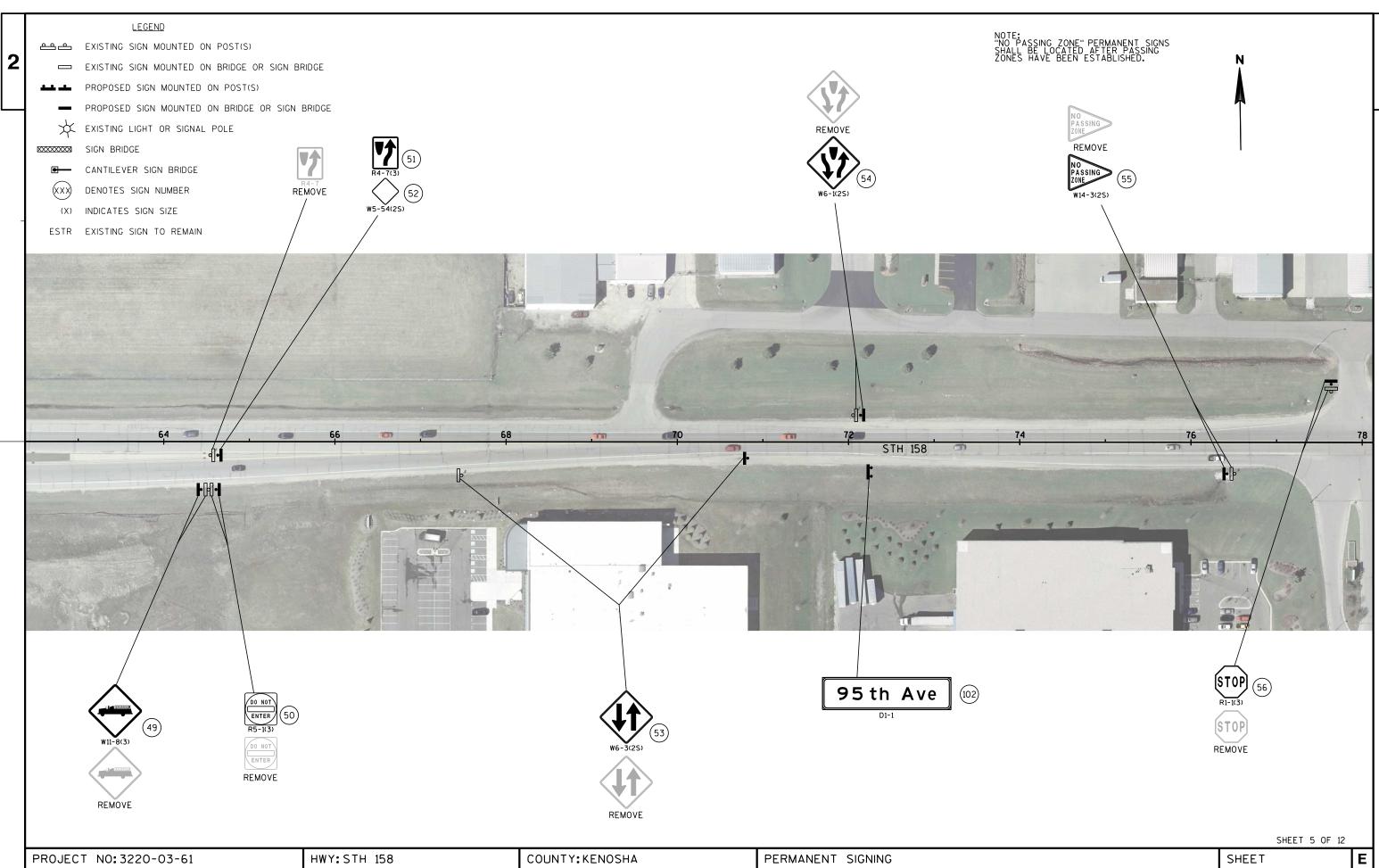


FILE NAME: N:\PDS\C3D\CAD\32200301\Sign\023204_ps.dgn

PLOT DATE: 09-JAN-2014 08:09 PLOT BY: mscppl PLOT NAME: PLOT SCALE: 100:1

WISDOT/CADDS SHEET 42





FILE NAME: N:\PDS\C3D\CAD\32200301\Sign\023205_ps.dgn

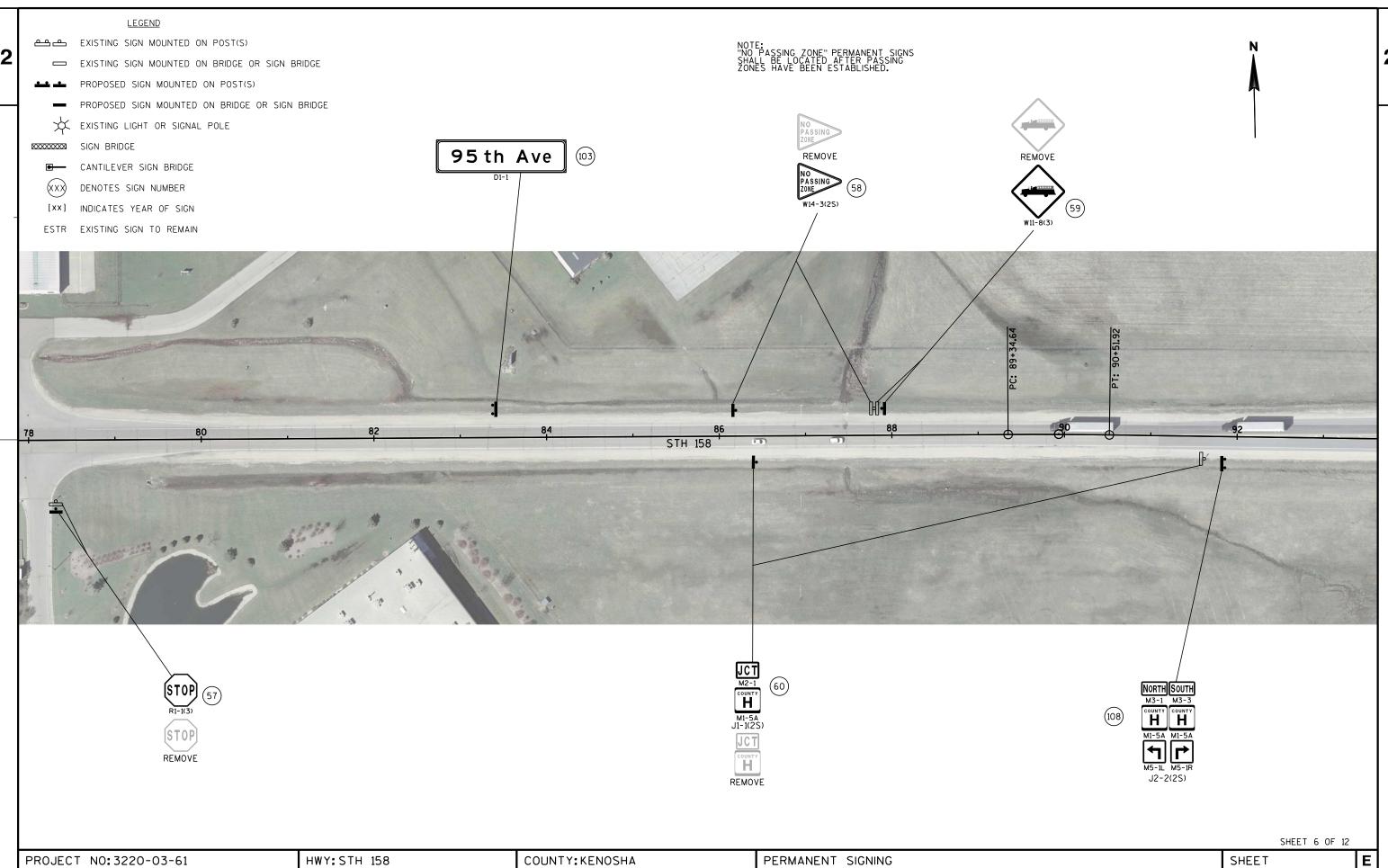
PLOT DATE: 09-JAN-2014 08:11

PLOT BY: mscppl

PLOT NAME:

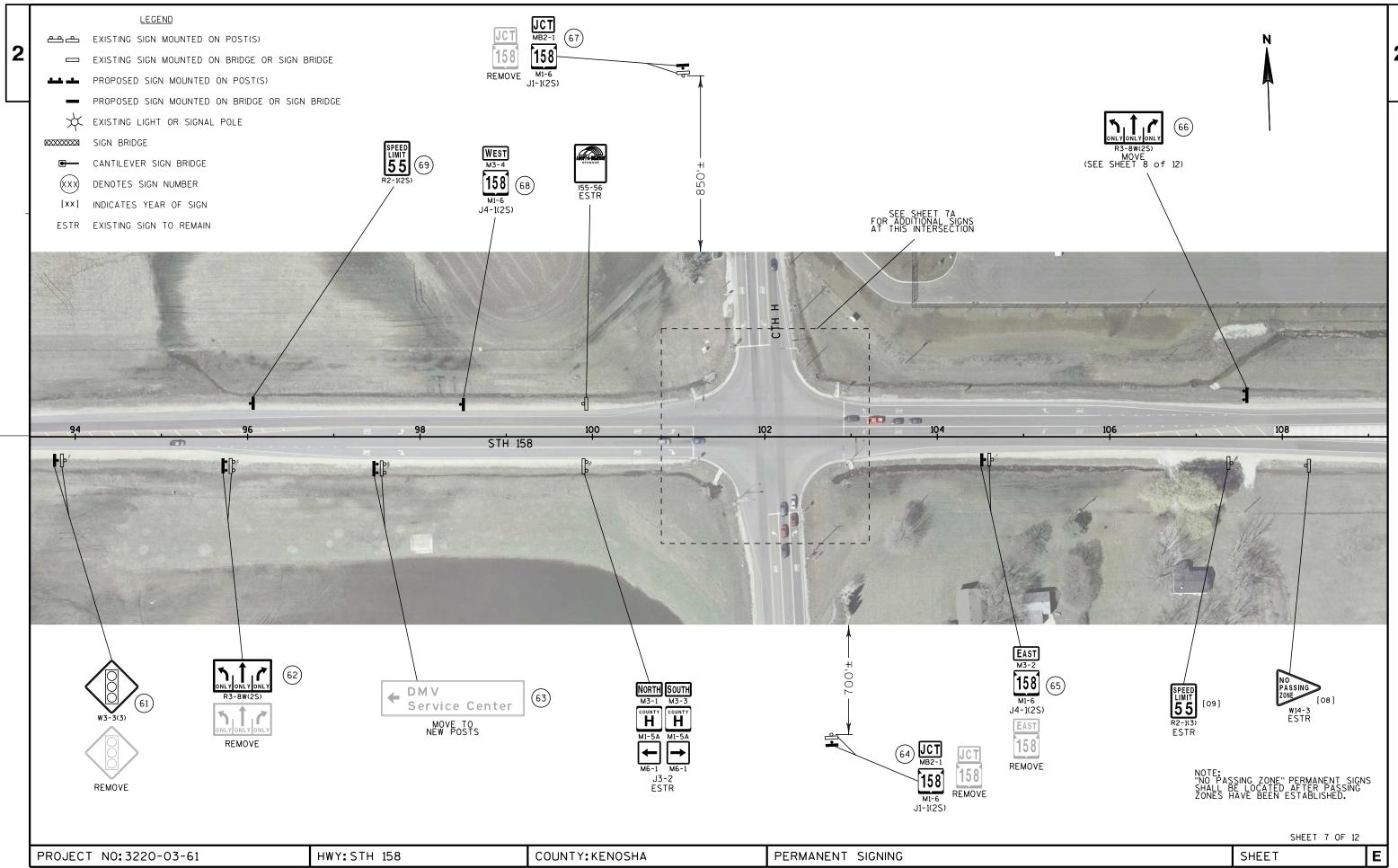
PLOT SCALE: 100:1

WISDOT/CADDS SHEET 42



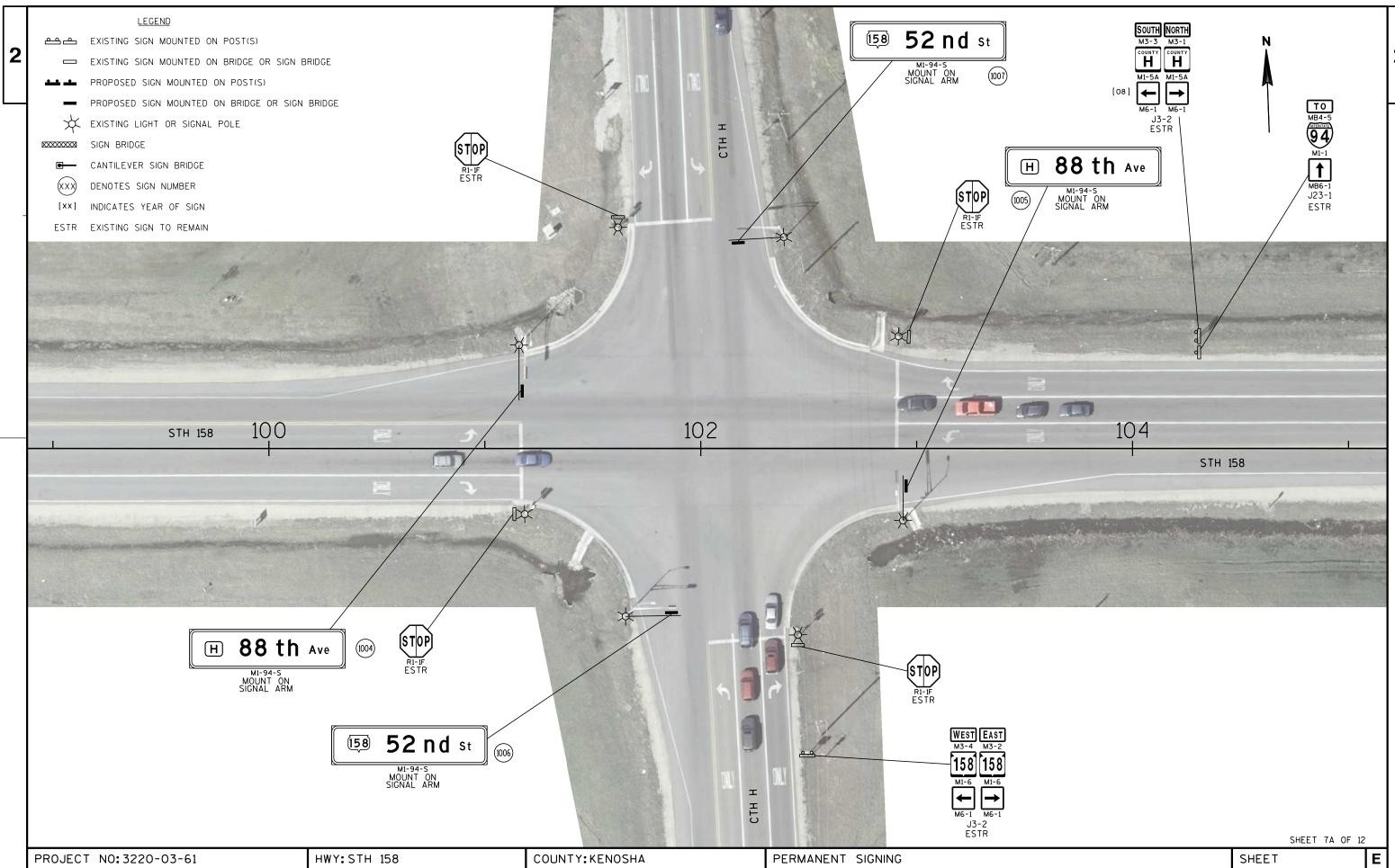
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PLOT DATE: 09-JAN-2014 08:11 PLOT BY: mscppl PLOT NAME: PLOT SCALE: 100:1 WISDOT/CADDS SHEET 42



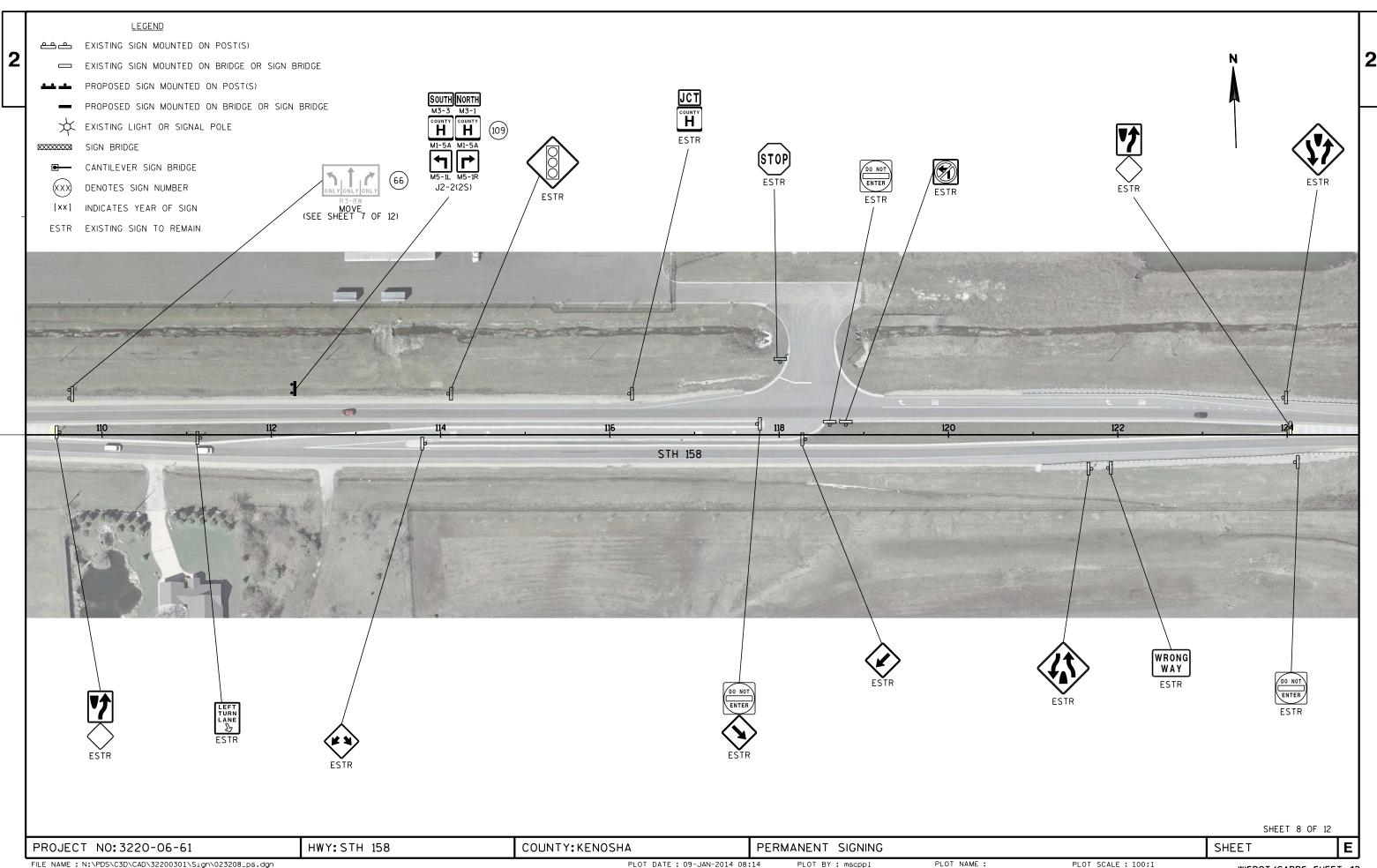
FILE NAME: N:\PDS\C3D\CAD\32200301\Sign\023207_ps.dgn

PLOT DATE: 09-JAN-2014 08:12 PLOT BY: mscppl PLOT NAME: PLOT SCALE: 100:1 WISDOT/CADDS SHEET 42

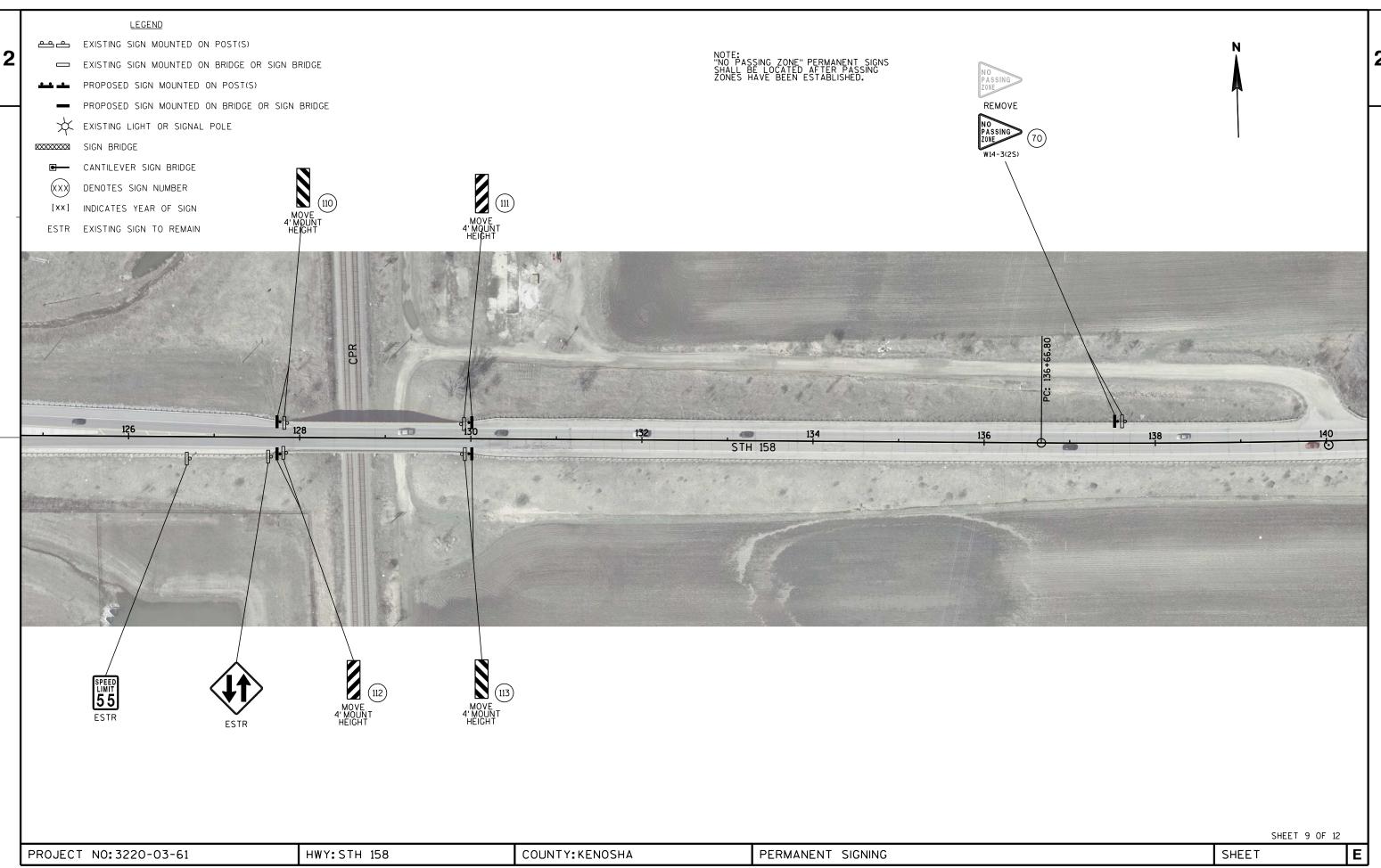


FILE NAME: N:\PDS\C3D\CAD\32200301\Sign\023207a_ps.dgn

PLOT DATE: 09-JAN-2014 08:13 PLOT BY: mscppl PLOT NAME: PLOT SCALE: 40:1 WISDOT/CADDS SHEET 42

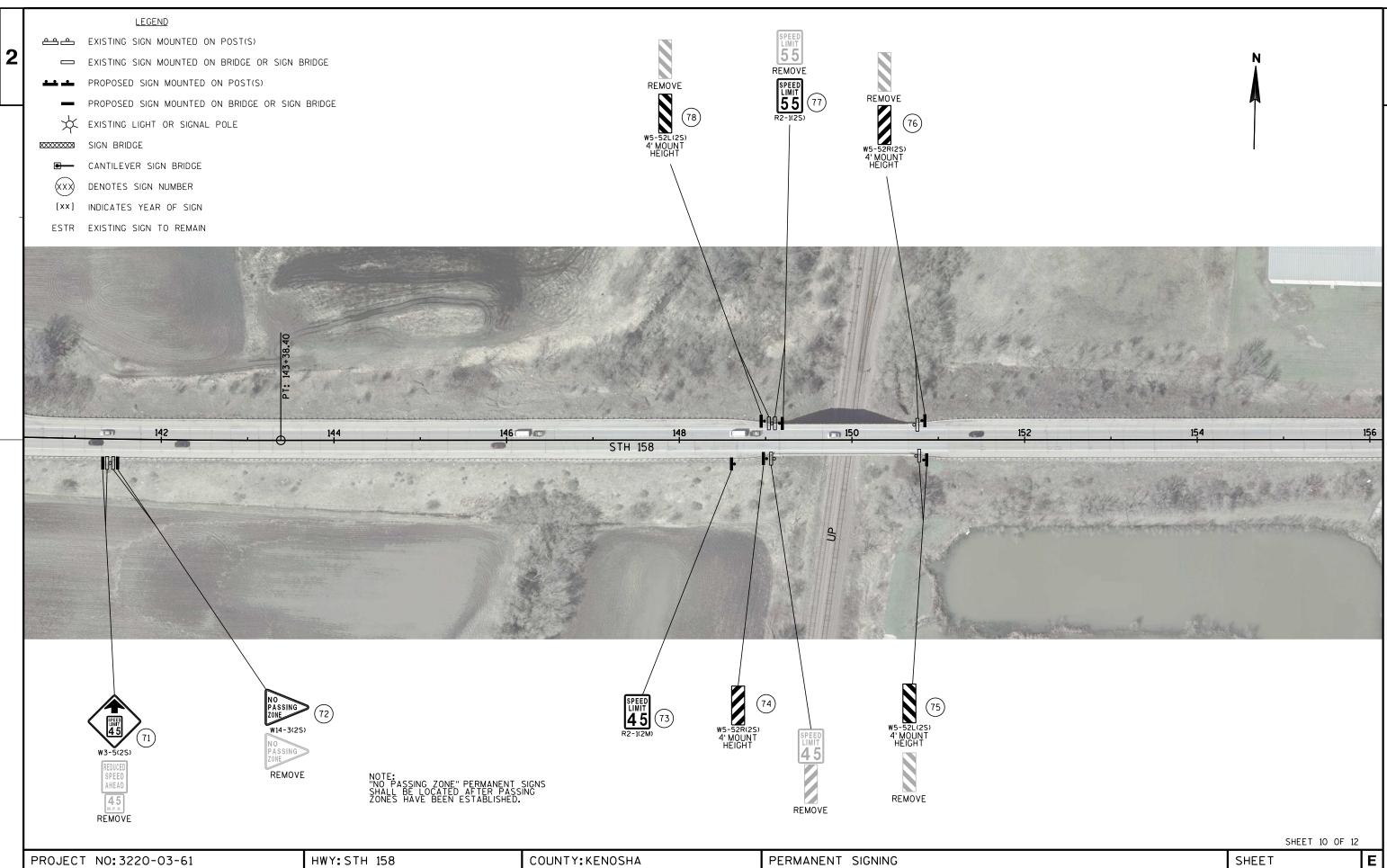


FILE NAME: N:\PDS\C3D\CAD\32200301\Sign\023208_ps.dgn WISDOT/CADDS SHEET 42



FILE NAME: N:\PDS\C3D\CAD\32200301\Sign\023209_ps.dgn

PLOT DATE: 09-JAN-2014 08:14 PLOT BY: mscppl PLOT NAME: PLOT SCALE: 100:1 WISDOT/CADDS SHEET 42



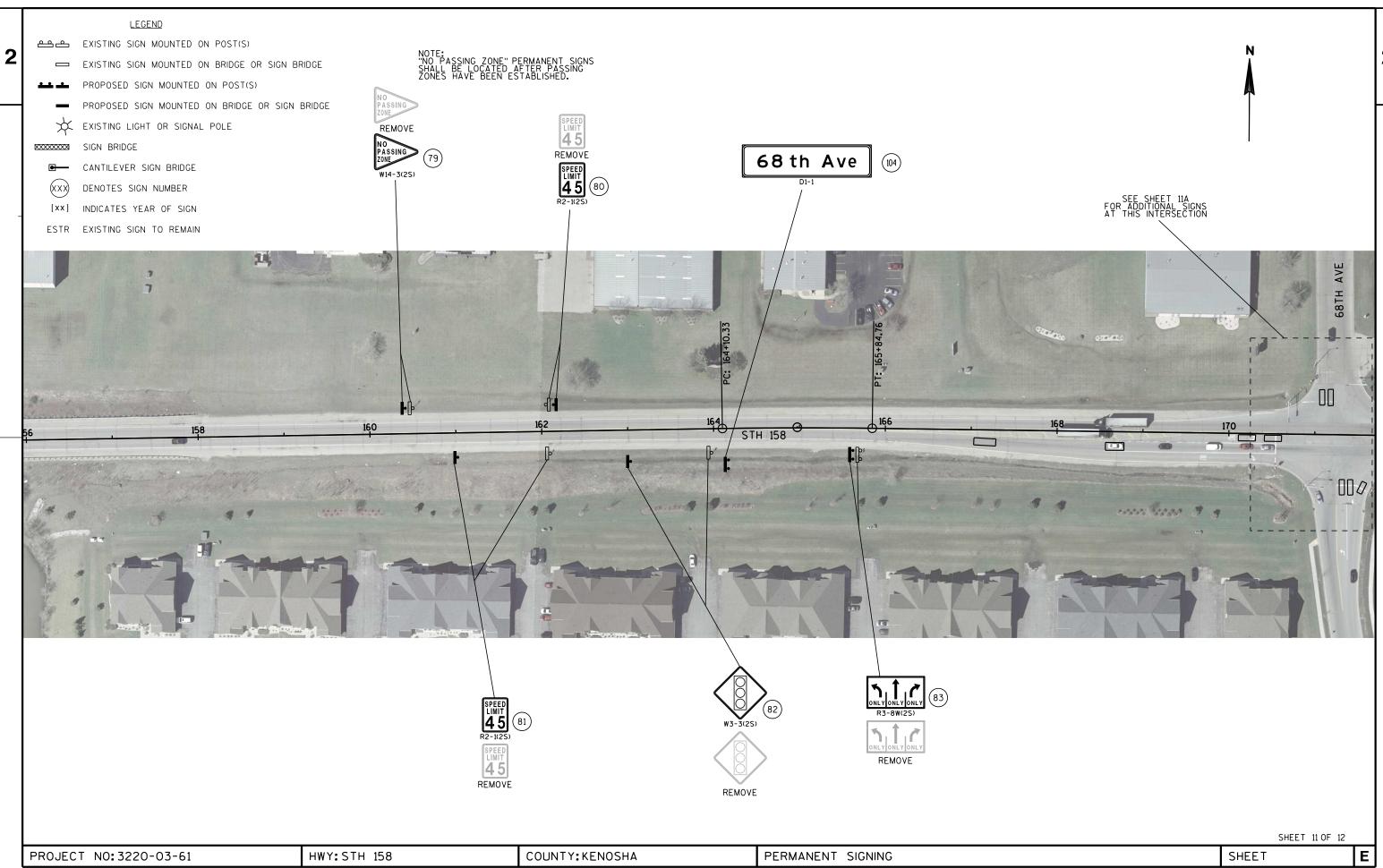
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PLOT DATE: 09-JAN-2014 08:15

PLOT BY: mscppl

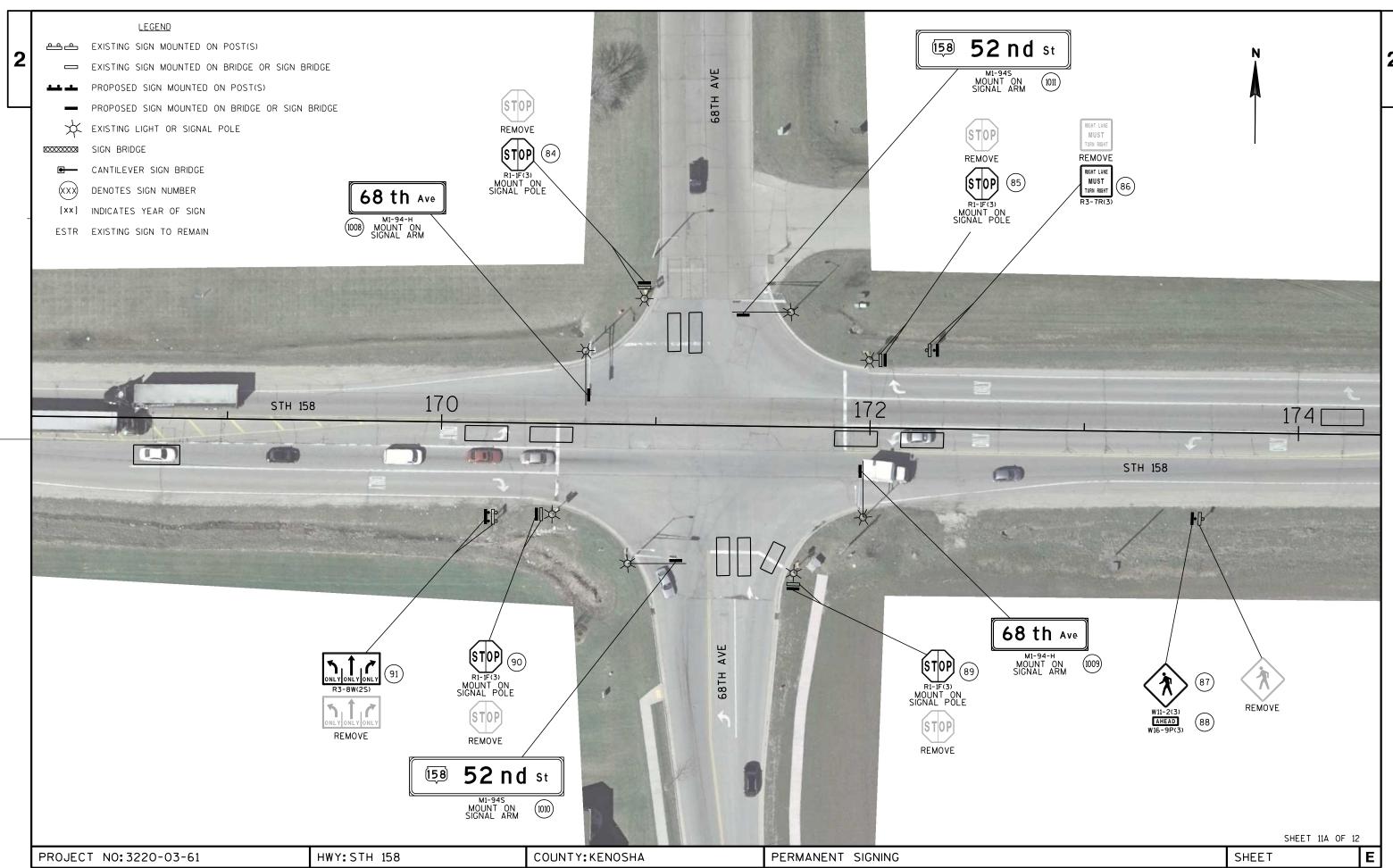
PLOT NAME: PLOT SCALE: 100:1

WISDOT/CADDS SHEET 42

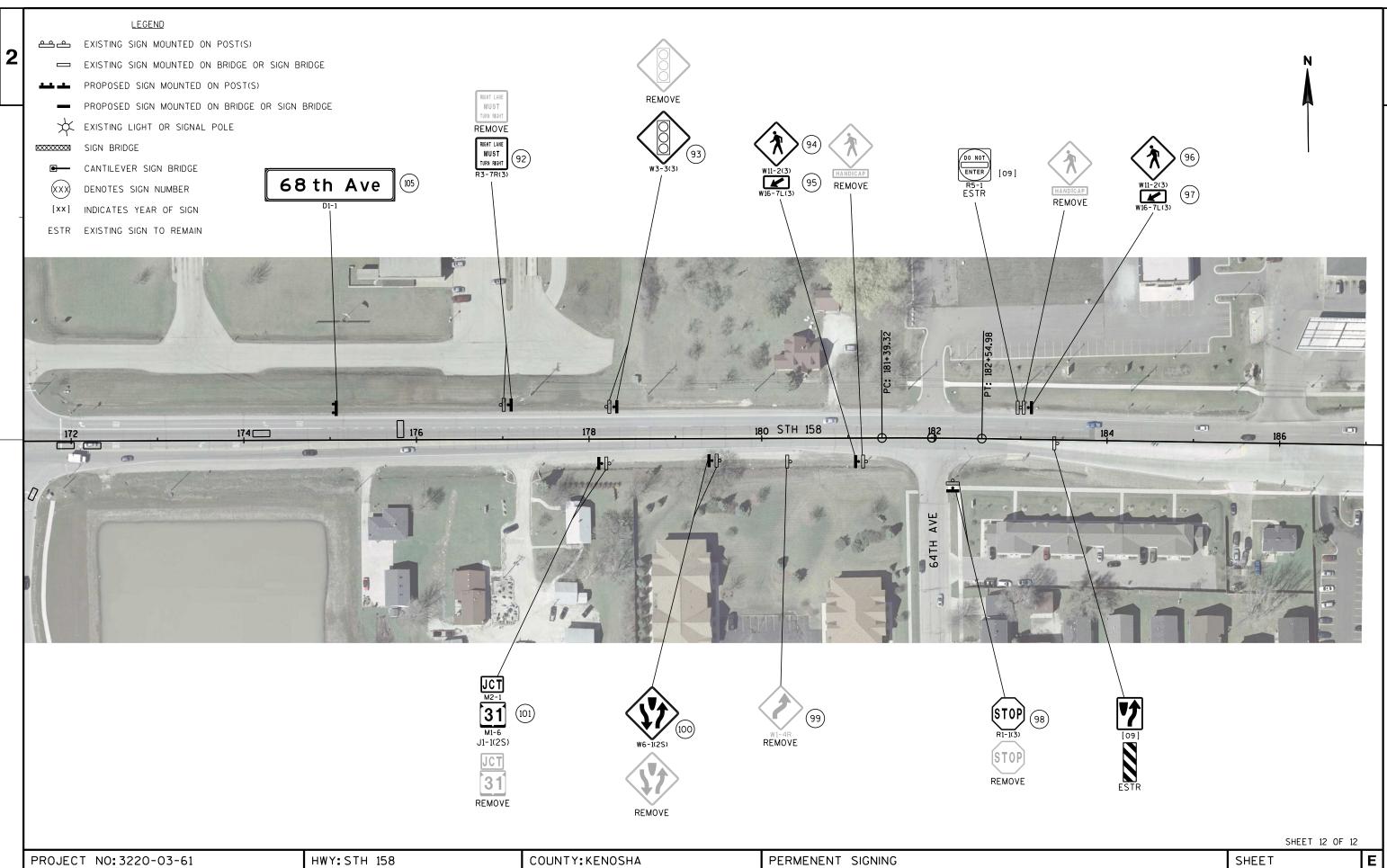


FILE NAME: N:\PDS\C3D\CAD\32200301\Sign\023211_ps.dgn

PLOT DATE: 09-JAN-2014 08:16 PLOT BY: mscppl PLOT NAME: PLOT SCALE: 100:1 WISDOT/CADDS SHEET 42

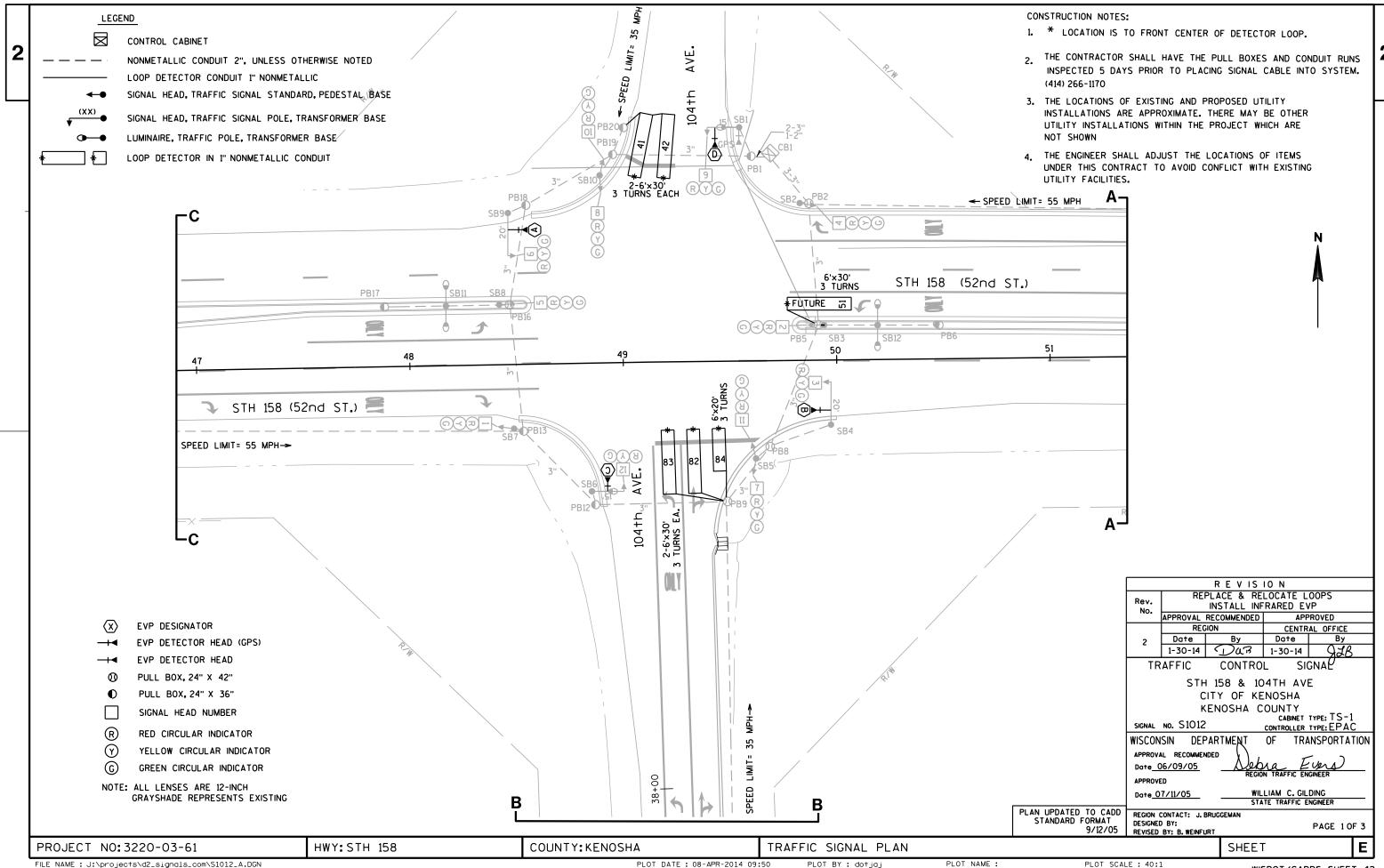


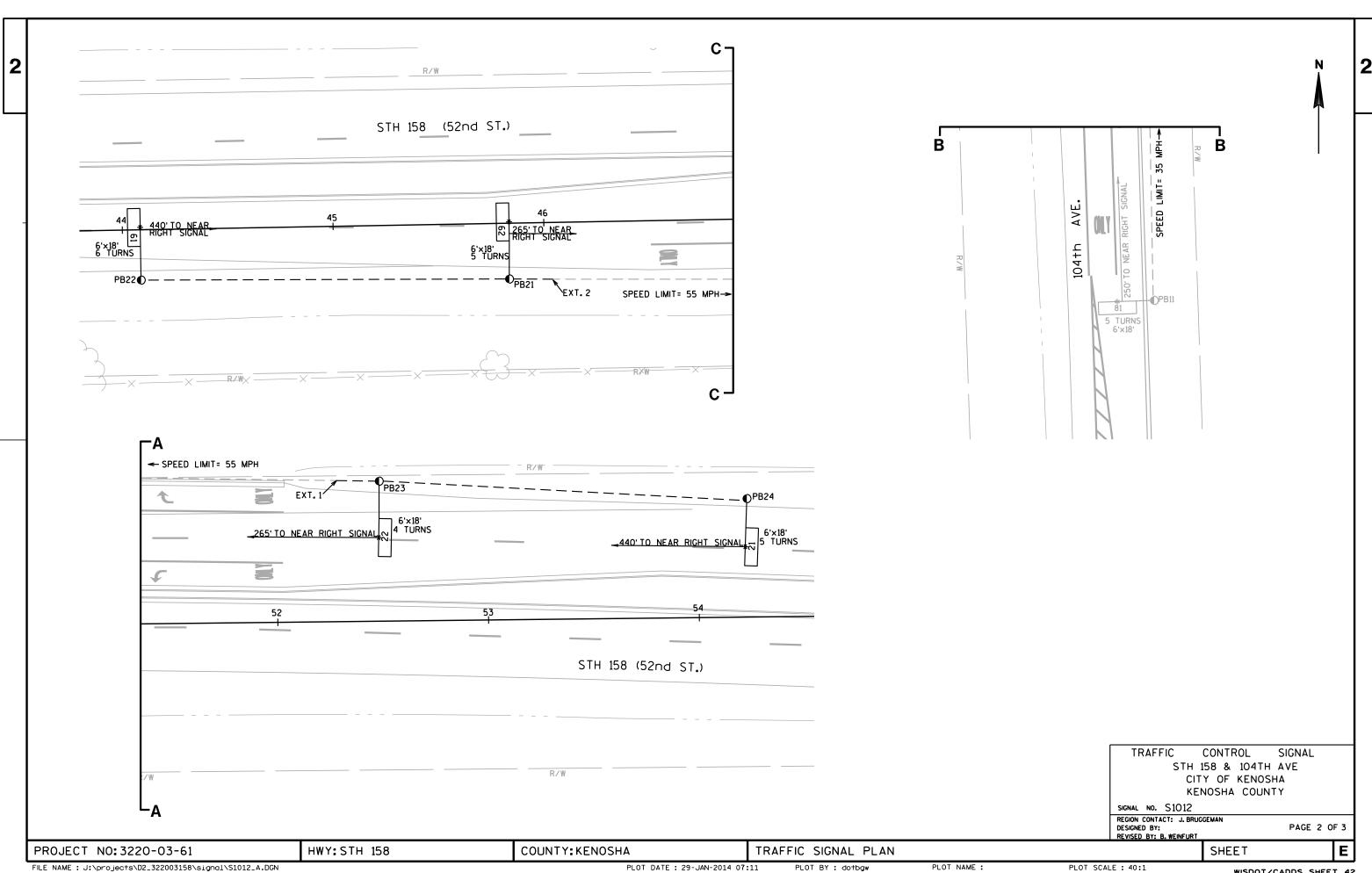
FILE NAME: N:\PDS\C3D\CAD\32200301\Sign\023211a_ps.dgn
PLOT DATE: 09-JAN-2014 08:17
PLOT BY: mscppl
PLOT NAME: PLOT SCALE: 40:1
WISDOT/CADDS SHEET 42

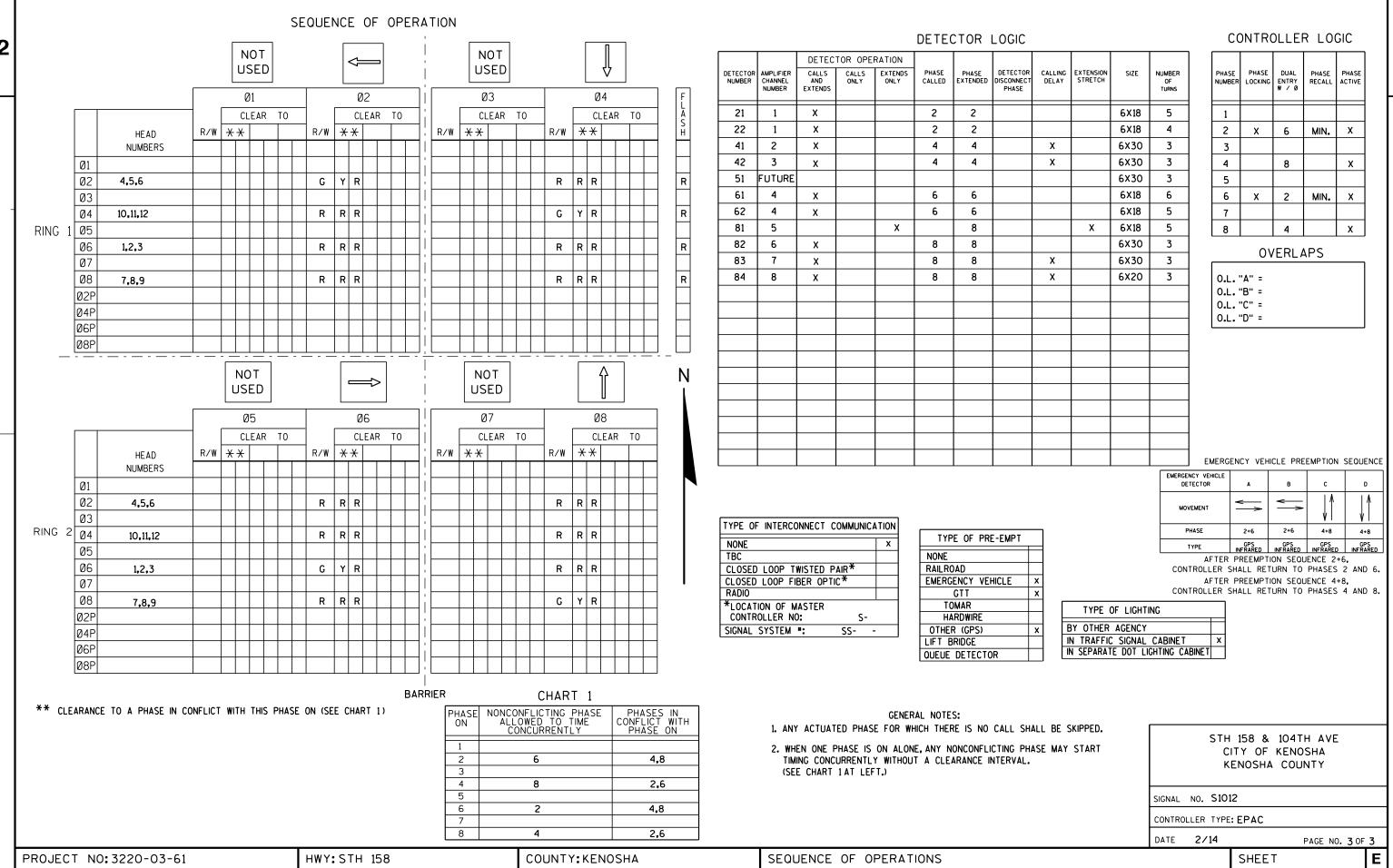


FILE NAME: N:\PDS\C3D\CAD\32200301\Sign\023212_ps.dgn

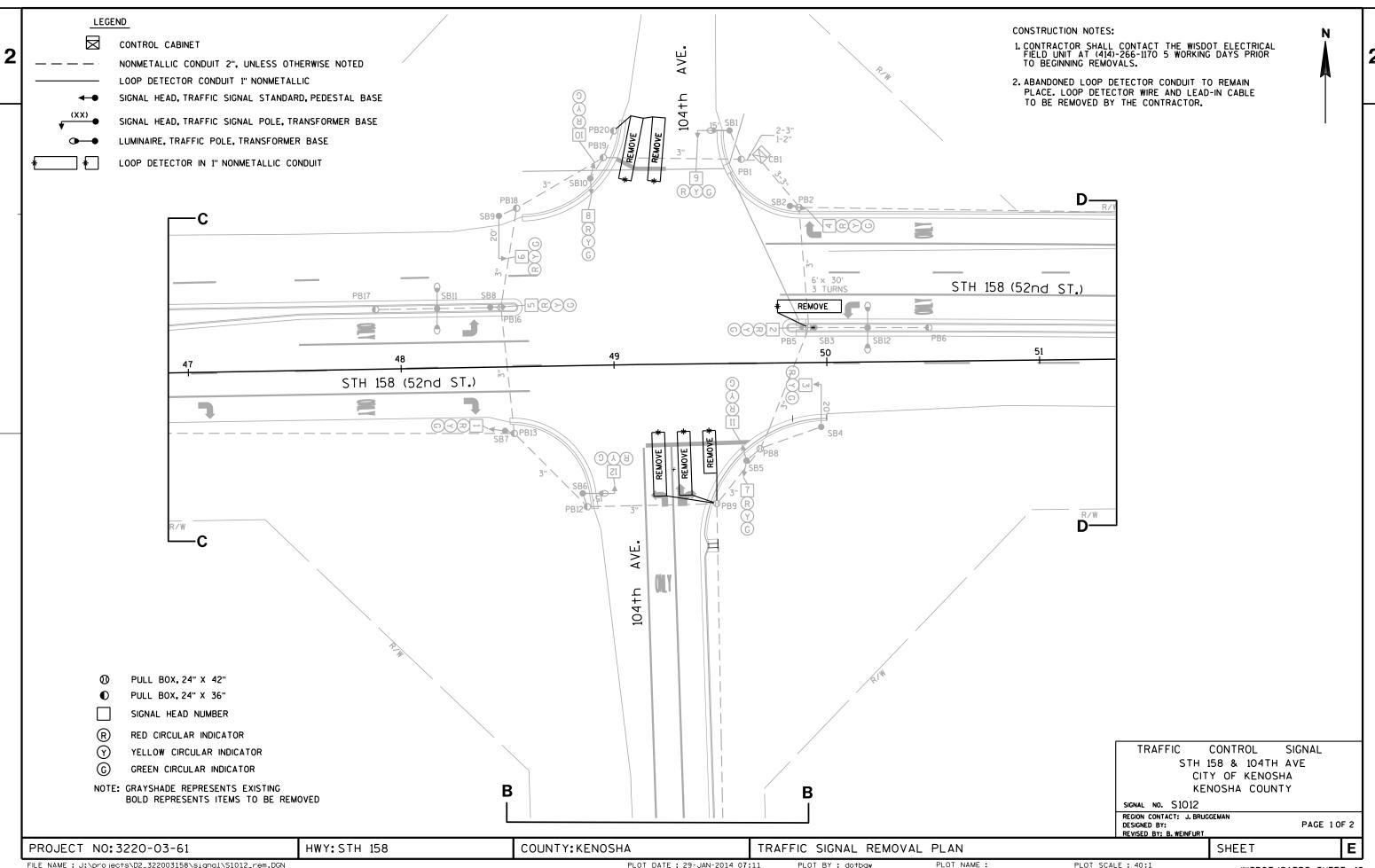
PLOT DATE: 09-JAN-2014 08:17 PLOT BY: mscppl PLOT NAME: PLOT SCALE: 100:1 WISDOT/CADDS SHEET 42

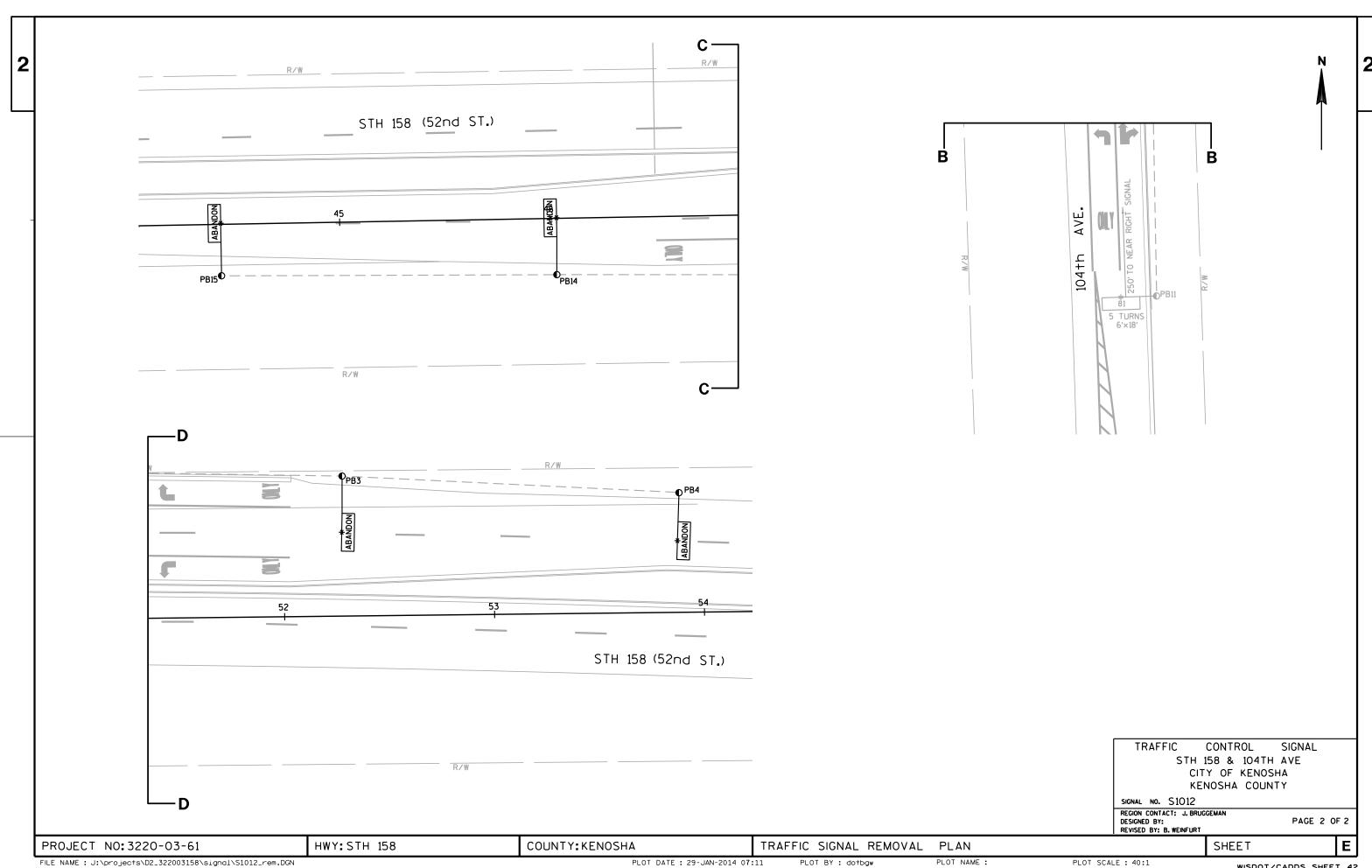


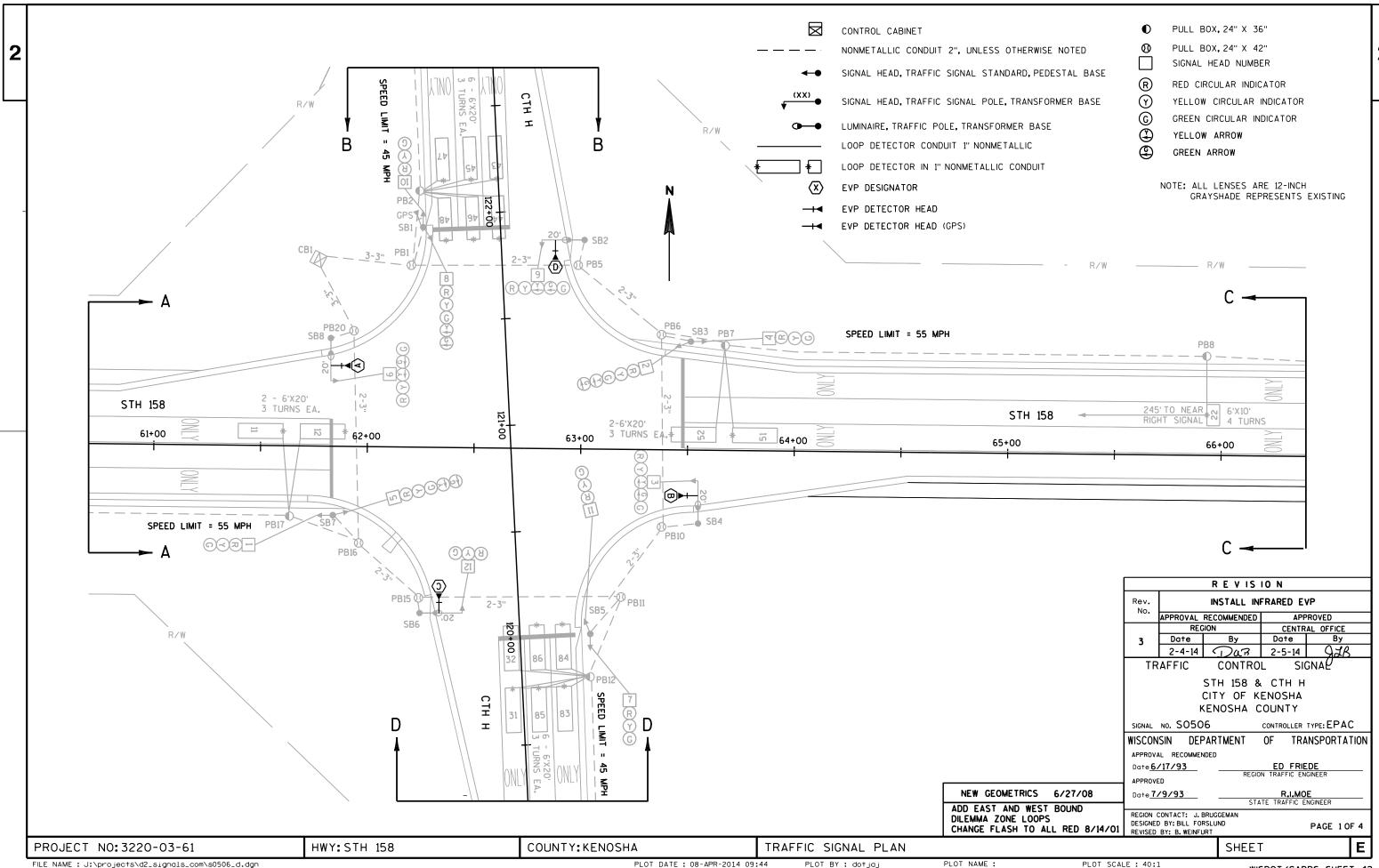




PLOT BY: dotbgw

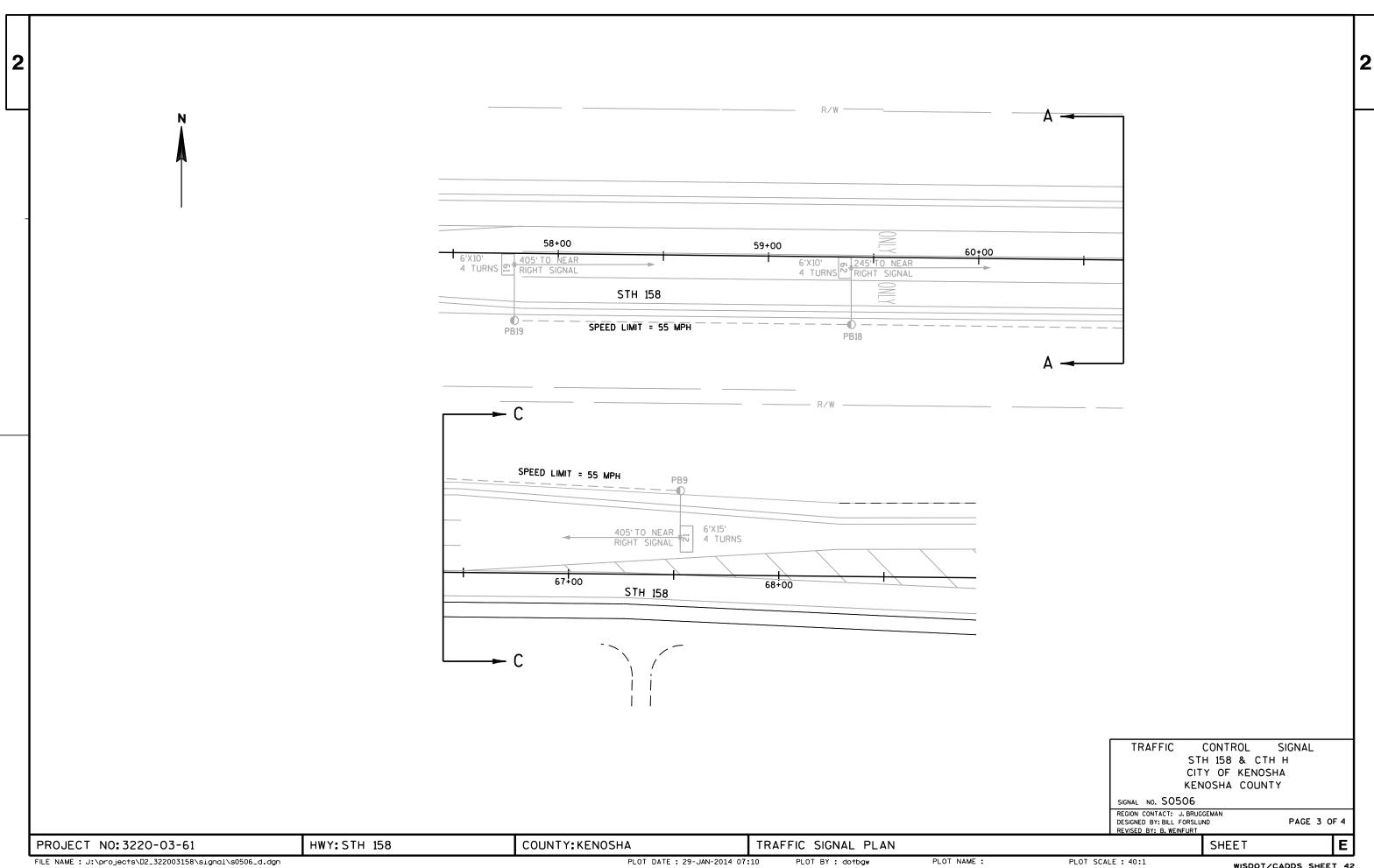






PB4 ● SPEED LIMIT = 45 MPH R/W СТН I R/W В TRAFFIC CONTROL SIGNAL STH 158 & CTH H CITY OF KENOSHA KENOSHA COUNTY SIGNAL NO. SO506

REGION CONTACT: J. BRUGGEMAN
DESIGNED BY: BILL FORSLUND
REVISED BY: B. WEINFURT PAGE 2 OF 4 HWY:STH 158 COUNTY: KENOSHA PROJECT NO: 3220-03-61 TRAFFIC SIGNAL PLAN SHEET PLOT NAME :



Х

O.L. "A" = 0.L. "B" =

8

O.L. "C" = O.L. "D" =

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE DETECTOR	A	В	С	D
MOVEMENT	<u>~</u>	\longrightarrow	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
PHASE	2+5	6+1	4+8	3+8
TYPE	GPS INFRARED	GPS INFRARED	GPS INFRARED	GPS INFRARE(

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2 AND 6. AFTER PREEMPTION SEQUENCE 4+8 OR 3+8 CONTROLLER SHALL RETURN TO PHASES 4 AND 8.

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.

DETECTOR LOGIC

PHASE EXTENDED

1

2

2

3

3

4

4

4

4

4

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5

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6

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8

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8

CALLED

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2

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TYPE OF PRE-EMPT

EMERGENCY VEHICLE

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NONE

RAILROAD

GTT

TOMAR

OTHER (GPS)

QUEUE DETECTOR

LIFT BRIDGE

HARDWIRE

DETECTOR

DISCONNEC

CALLING DELAY

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TYPE OF LIGHTING

IN TRAFFIC SIGNAL CABINET

IN SEPARATE DOT LIGHTING CABINET

BY OTHER AGENCY

EXTENSION STRETCH

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SIZE

6X20

6X20

6X15

6X10

6X20

6X20

6X10

6X10

6X20

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DETECTOR OPERATION

HANNEL

NUMBER

2

2

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- TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1AT LEFT.)
- TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

CITY OF KENOSHA
KENOSHA COUNTY
SIGNAL NO. SO506
CONTROLLER TYPE: EPAC
DATE 2/1/1 BACE N

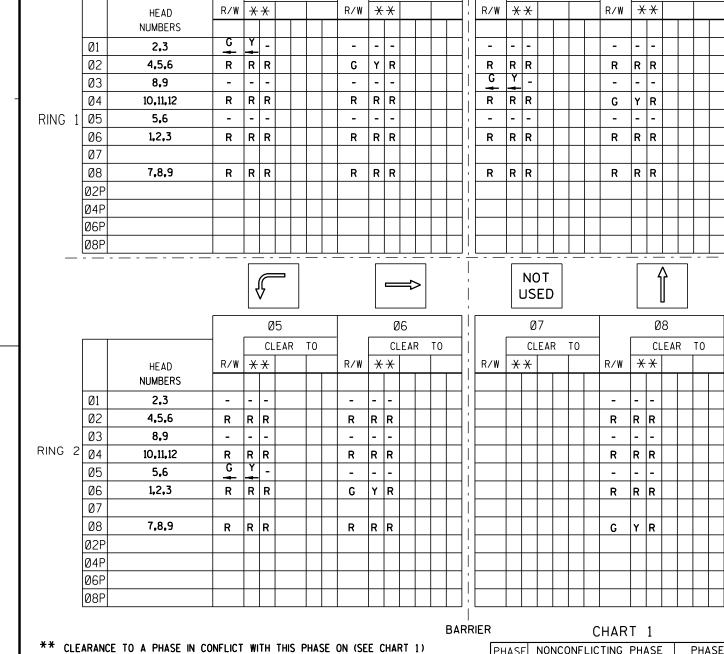
PAGE NO.4 OF 4 DATE 2/14 SHEET

STH 158 & CTH H

SEQUENCE OF OPERATIONS

PLOT NAME :





SEQUENCE OF OPERATION

02

CLEAR TO

CLEAR TO

01

CLEAR TO

> TYPE OF INTERCONNECT COMMUNICATION NONE CLOSED LOOP TWISTED PAIR* CLOSED LOOP FIBER OPTIC* RADIO *LOCATION OF MASTER

CONTROLLER NO: S-

SIGNAL SYSTEM *: SS- -

1,2,5,6

PHASE NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY PHASES IN CONFLICT WITH PHASE ON 5 OR 6 2.3.4.8 5 OR 6 2 1.3.4.8 1,2,4,5,6 4 1,2,3,5,6 5 10R 2 3,4,6,8 6 1 OR 2 3,4,5,8

3 OR 4

8

GENERAL NOTES:

2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START

3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL

HWY: STH 158

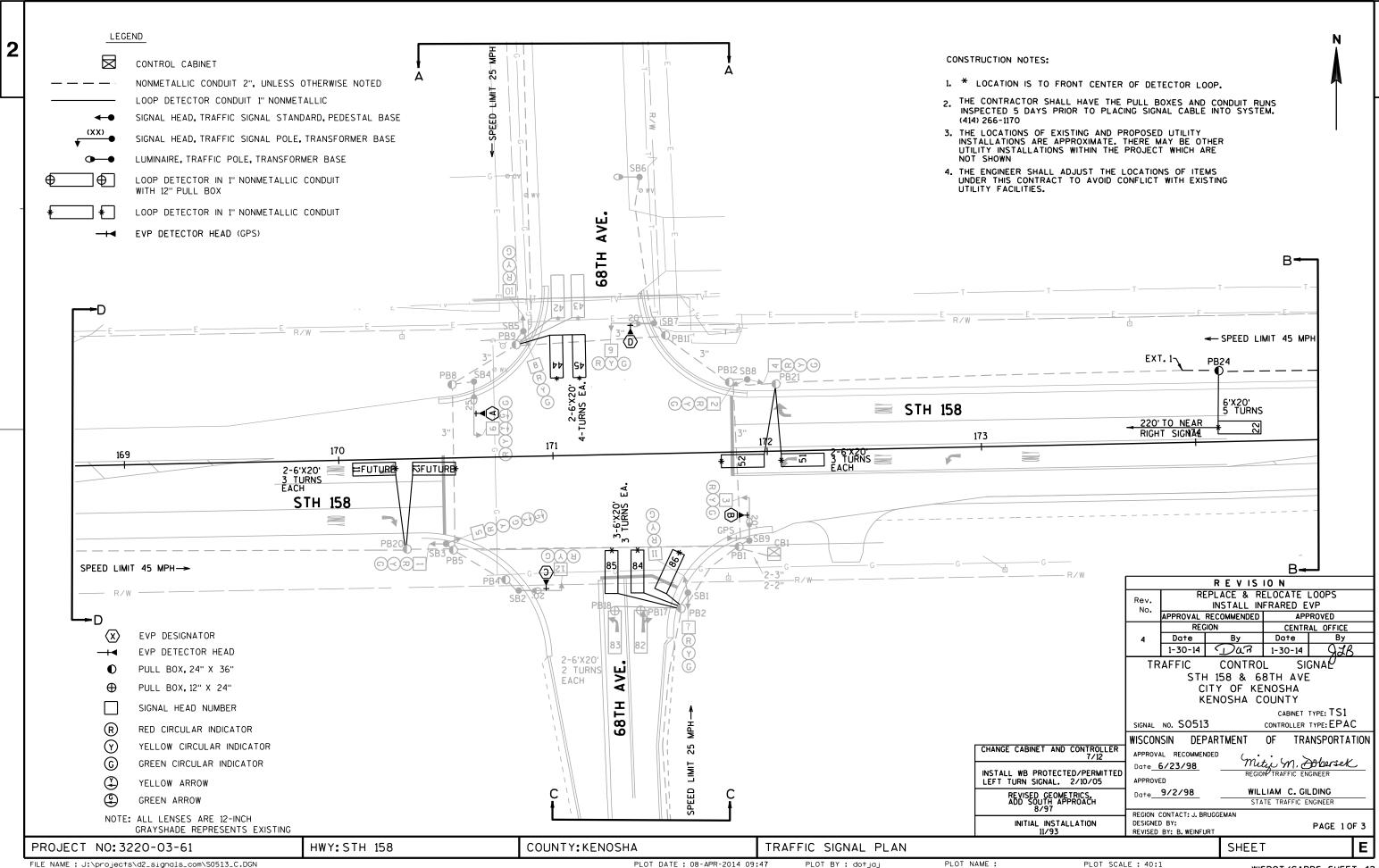
COUNTY: KENOSHA

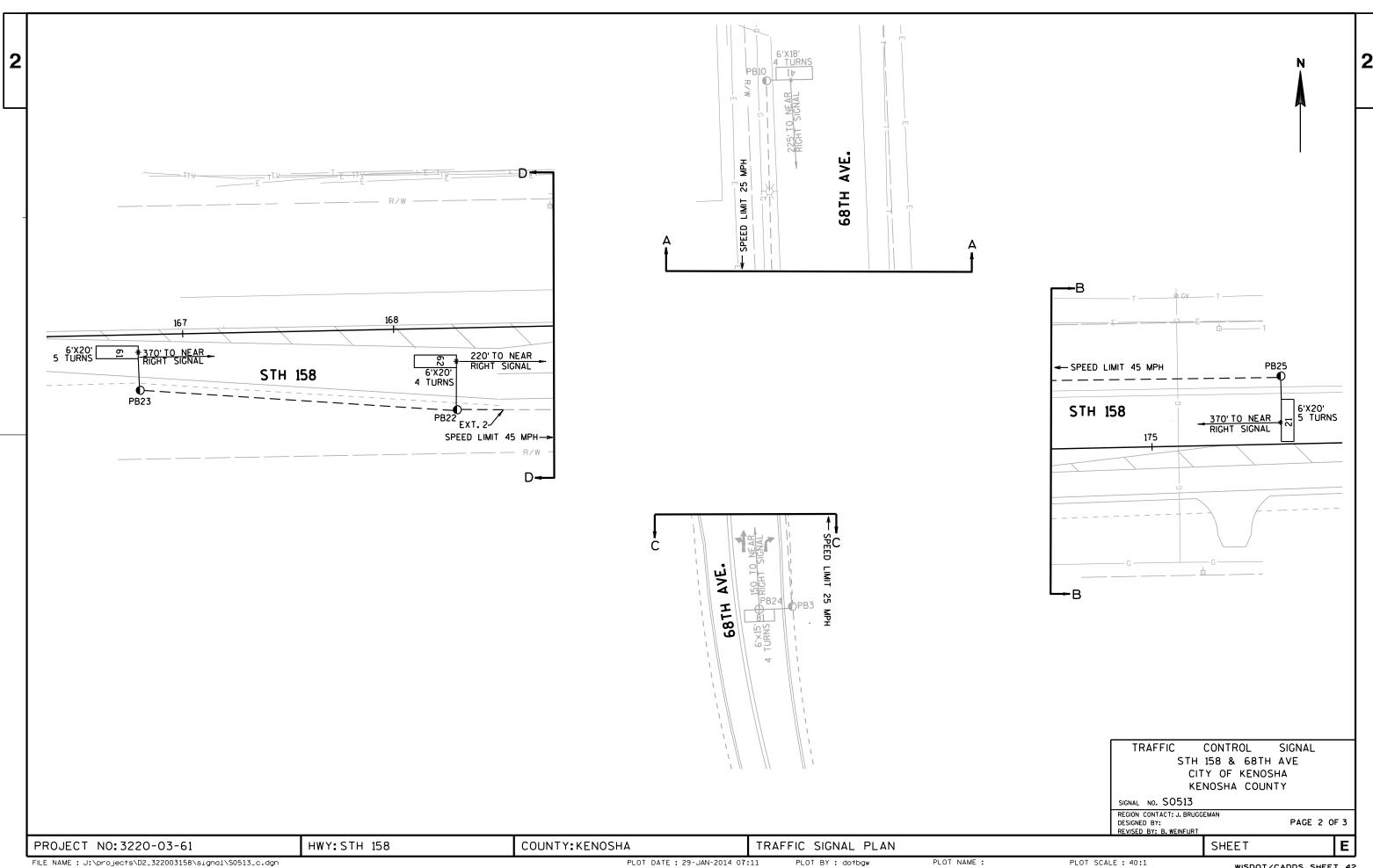
PLOT DATE: 29-JAN-2014 07:10

PLOT BY: dotbaw

PLOT SCALE: 40.000373:1

PROJECT NO: 3220-03-61





NOT USED NOT USED									SE	QUE	NC	Ε	OF	0	PEF	RA '	TION												
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RING 1 05 5.6		03	• •					\top								1								T					
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RING 2 HEAD NUMBERS														 	0]				 ∆R	TO							0	
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RING 2 4,5,6 R R R R R R R R R R R R R R R R R R R		Q1	NUMBERS				\vdash	+	+					+	-	∤ ¦			-				+	\dashv	\dashv	\dashv	+	+	
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08 7,8,9 R R R R R R R R R	RING 2			-				- 1	- 1					- 1	- 1	4'			- 1	1	ıl	K		띠	<u> </u>	\dashv	+	+	+
#* CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) BARRIER CHART 1 PHASE NONCONFLICTING PHASE CONFLICT WITH THIS PHASE ON (SEE CHART 1) PHASE NONCONFLICTING PHASE CONFLICT WITH THIS PHASE ON (SEE CHART 1) PHASE ON CONCURRENTLY PHASE ON CONCURRENTLY 1 2 5 OR 6 4.8	RING 2	Ø6		-		R	\vdash	+	+	G	Y	R	\dashv	\top										I.			- 1	+	
#** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) BARRIER CHART 1 PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) PHASE ON CONCURRENTLY PHASE ON 1 2 5 OR 6 4,8	RING 2	Ø6 Ø7	1,2,3	R	R			$\frac{1}{2}$	+					1									-	\dashv		\dashv	+	- 1	
## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) ## CLEARANCE TO	RING 2	Ø6 Ø7 Ø8	1,2,3	R	R			<u>+</u> +	+													G		Y	R			+	-
BARRIER CHART 1 ** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) PHASE NONCONFLICTING PHASE CONFLICT WITH THIS PHASE ON (SEE CHART 1) PHASE NONCONFLICTING PHASE CONFLICT WITH THIS PHASE ON (SEE CHART 1) 1 2 5 OR 6 4.8	RING 2	Ø6Ø7Ø8Ø2P	1,2,3	R	R			<u>+</u> +	<u>+</u>													G		Y -	R				
BARRIER CHART 1 ** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) PHASE ON CONCURRENTLY PHASE ON CONCURRENTLY PHASE ON 1 2 5 OR 6 4.8	RING 2	Ø6Ø7Ø8Ø2PØ4P	1,2,3	R	R			+ + +														G		Y	R				- - -
** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) PHASE ON SEE CHART 1) 1 2 5 OR 6 4.8	RING 2	Ø6Ø7Ø8Ø2PØ4PØ6P	1,2,3	R	R			+ - - - -														G		Y	R				_ _ _ _
** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1) PHASE ON SEE CHART 1) PHASE ON CONCURRENTLY PHASE ON 1 2 5 OR 6 4.8	RING 2	Ø6Ø7Ø8Ø2PØ4PØ6P	1,2,3	R	R																	G		Y	R				
1 2 5 OR 6 4,8	RING 2	Ø6Ø7Ø8Ø2PØ4PØ6P	1,2,3	R	R										BΔ		RIFR												
2 5 OR 6 4,8		Ø6Ø7Ø8Ø2PØ4PØ6PØ8P	1,2,3	R	R	R		PH	ASE	R	R	R	RT 1)	BA		PH	IASE	NO	DNCC	ONF. OW	CHAI	RT		1		PCON	HAS	ES IN
, ,		Ø6Ø7Ø8Ø2PØ4PØ6PØ8P	1,2,3	R	R	R		PH	ASE	R	R	R	RT 1)	BA		PH ()N	NO	DNC(ALL C	DNF	CHAI	RT		1		PCON	HAS	ES INCT WE ON
4 8 2,5,6		Ø6Ø7Ø8Ø2PØ4PØ6PØ8P	1,2,3	R	R	R		PH	IASE	R	R	R	RT 1)	BA		PH ()N 1	NO	DNCC ALL		CHAI LICTING ED TO CURREN	RT F P		1		PCONP	HAS FLI(I	E ON

HWY:STH 158

DETECTOR LOGIC

		DETEC	TOR OPE	RATION							
DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
11	FUTURE									6X20	3
12	FUTURE									6X20	3
21	1	Х			2	2				6X20	5
22	1	Х			2	2				6X20	5
41	2			X		4			х	6X18	4
42	3	х			4	4		X		6X20	4
43	4	Х			4	4		X		6X20	4
44	3	X			4	4		X		6X20	4
45	4	Х			4	4		X		6X20	4
51	5	Х			5	5				6X20	3
52	5	Х			5	5				6X20	3
61	6	Х			6	6				6X20	5
62	6	X			6	6				6X20	4
81	7			X		8			х	6X15	4
82	8	Х			8	8				6X20	2
83	9	X			8	8		X		6X20	2
84	8	X			8	8				6X20	3
85	9	Х			8	8		Х		6X20	3
86	10	Х			8	8		Х		6X20	3

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2	Х	6	MIN.	Х
3				
4		8		Х
5		2		Х
6	Х	2	MIN.	Х
7				
8		4		Х

OVERLAPS

0.L. "A"	=		
0 . L. "B"	=		
0.L. "C"	=		
0.L. "D"	=		

TYPE OF INTERCONNECT COMMUNICATION CLOSED LOOP TWISTED PAIR*
CLOSED LOOP FIBER OPTIC* RADIO *LOCATION OF MASTER CONTROLLER NO: SIGNAL SYSTEM *: SS- -

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	Х
GTT	х
TOMAR	
HARDWIRE	
OTHER (GPS)	×
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	
-	

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE DETECTOR	A	В	С	D
MOVEMENT	~~	*	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\
PHASE	2+6	2+6	4+8	4+8
TYPE	GPS INFRARED	GPS INFRARED	GPS INFRARED	GPS INFRARED

AFTER PREEMPTION SEQUENCE 2+6, CONTROLLER SHALL RETURN TO PHASES 2 AND 6. AFTER PREEMPTION SEQUENCE 4+8, CONTROLLER SHALL RETURN TO PHASES 4 AND 8.

GENERAL NOTES:

- 1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
- 2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1AT LEFT.)

STH 158 & 68TH AVE CITY OF KENOSHA KENOSHA COUNTY

SIGNAL NO. SO513

CONTROLLER TYPE: EPAC

DATE 2/14

PAGE NO. 3 OF 3

COUNTY: KENOSHA

4

SEQUENCE OF OPERATIONS

PLOT DATE: 29-JAN-2014 07:11 PLOT NAME : PLOT BY : dotbgw

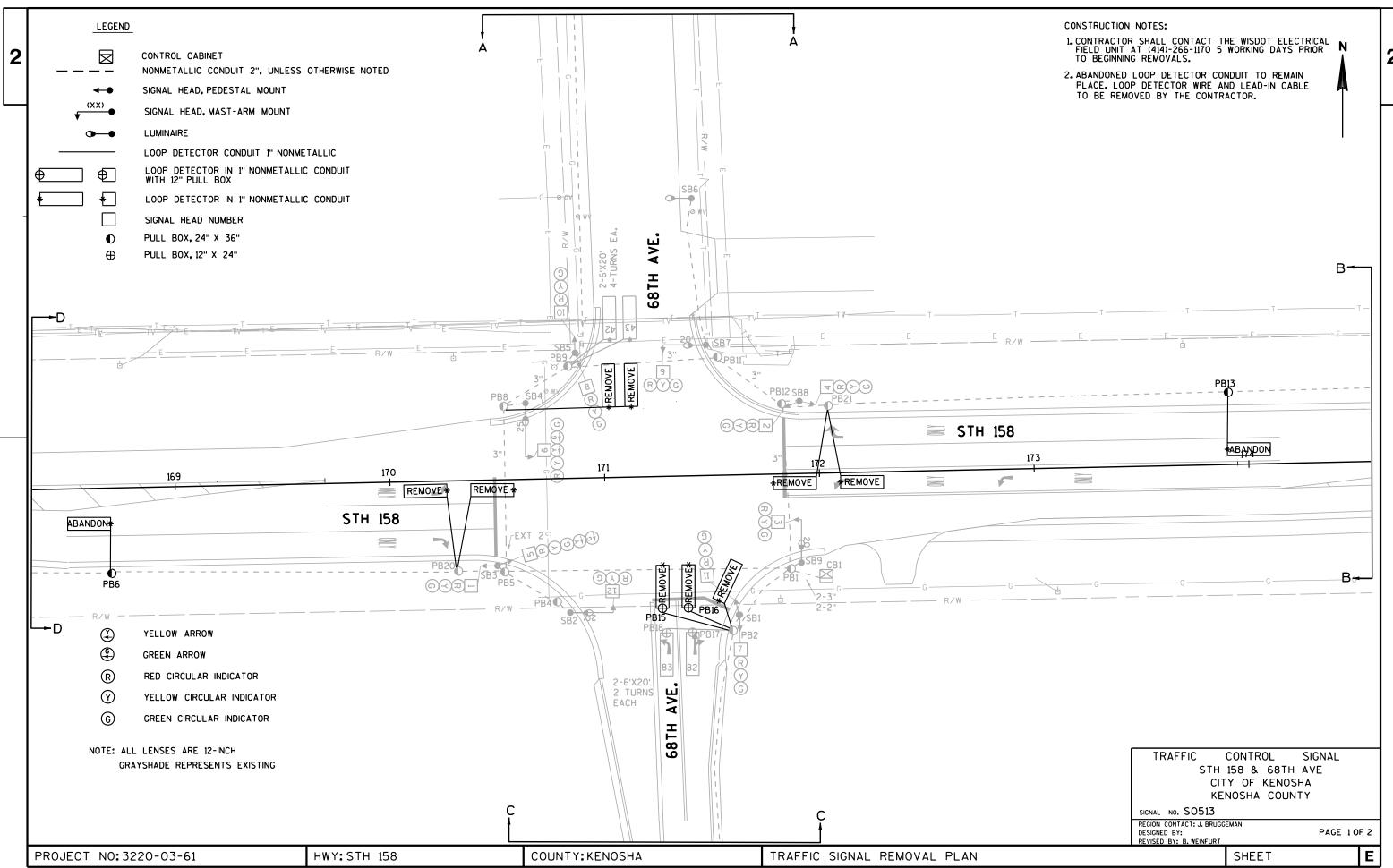
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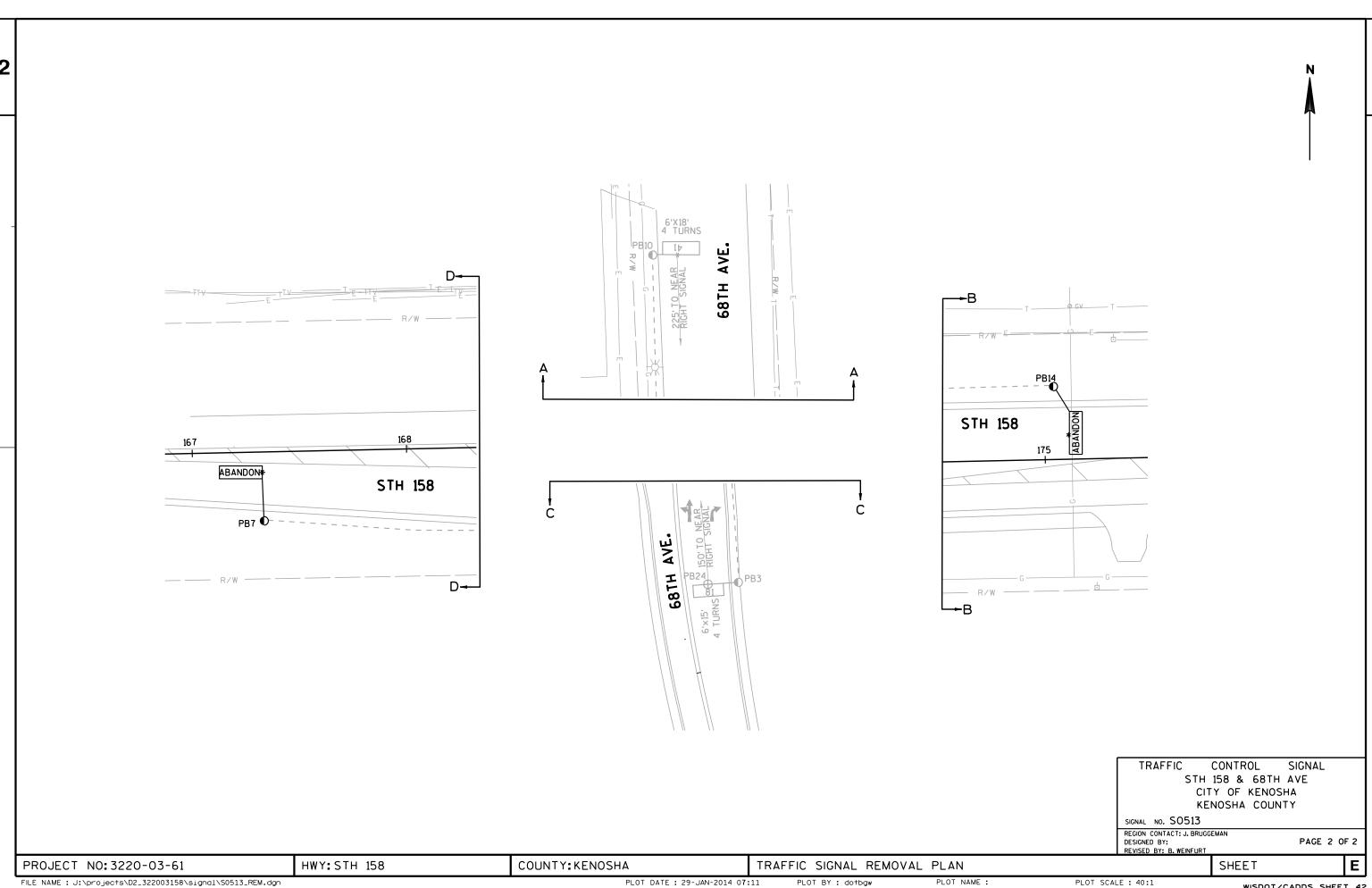
PROJECT NO: 3220-03-61

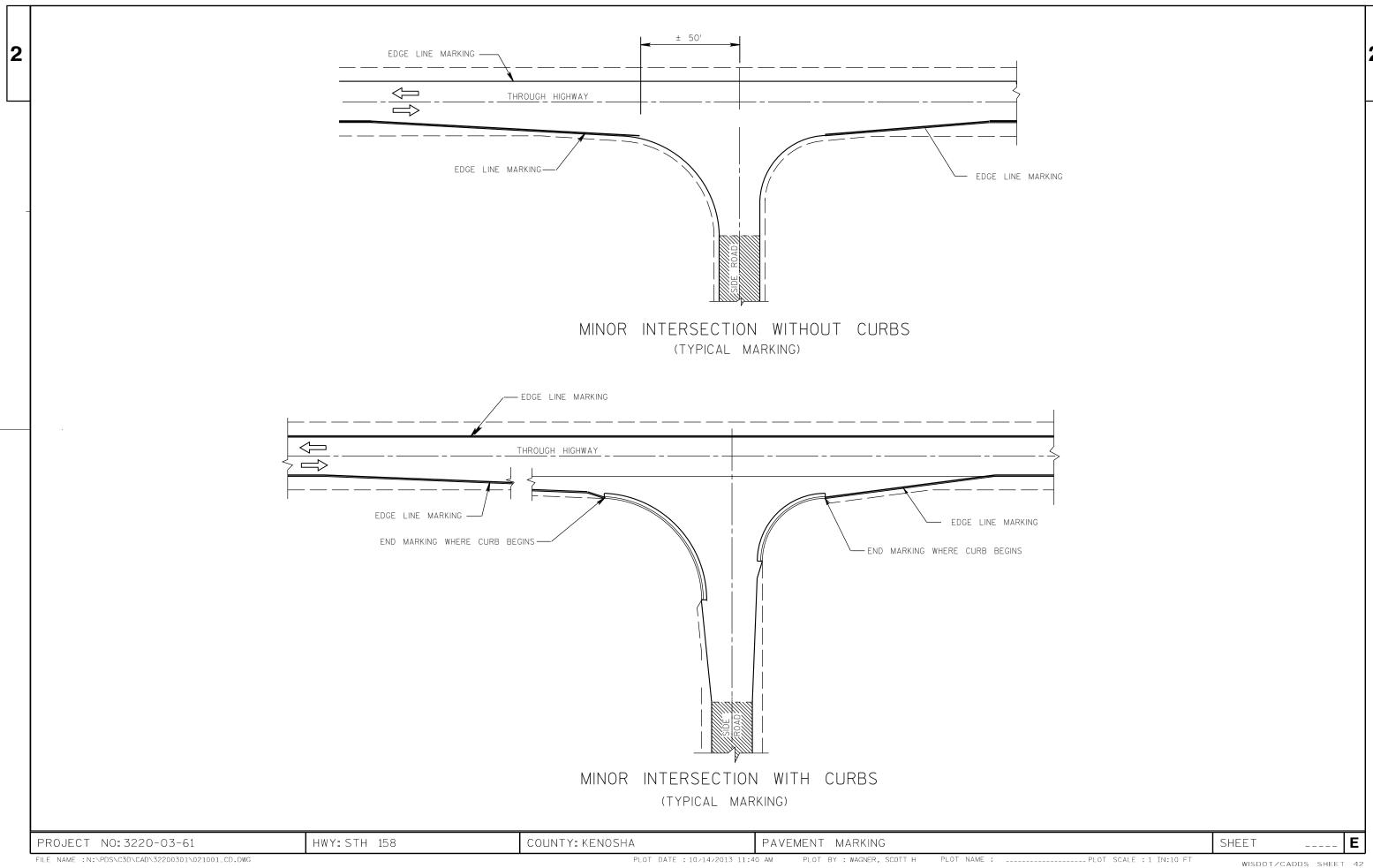
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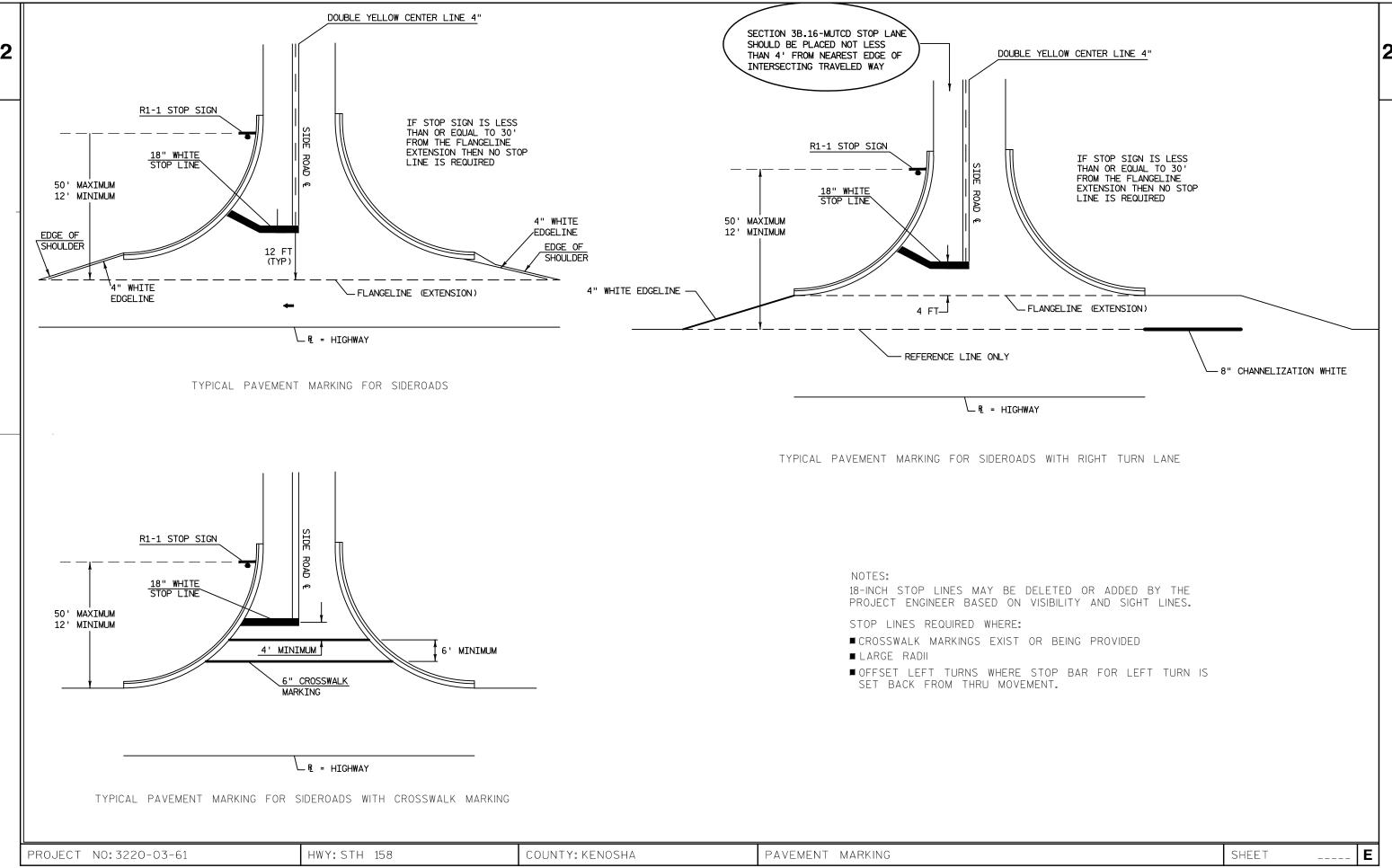
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2,5,6

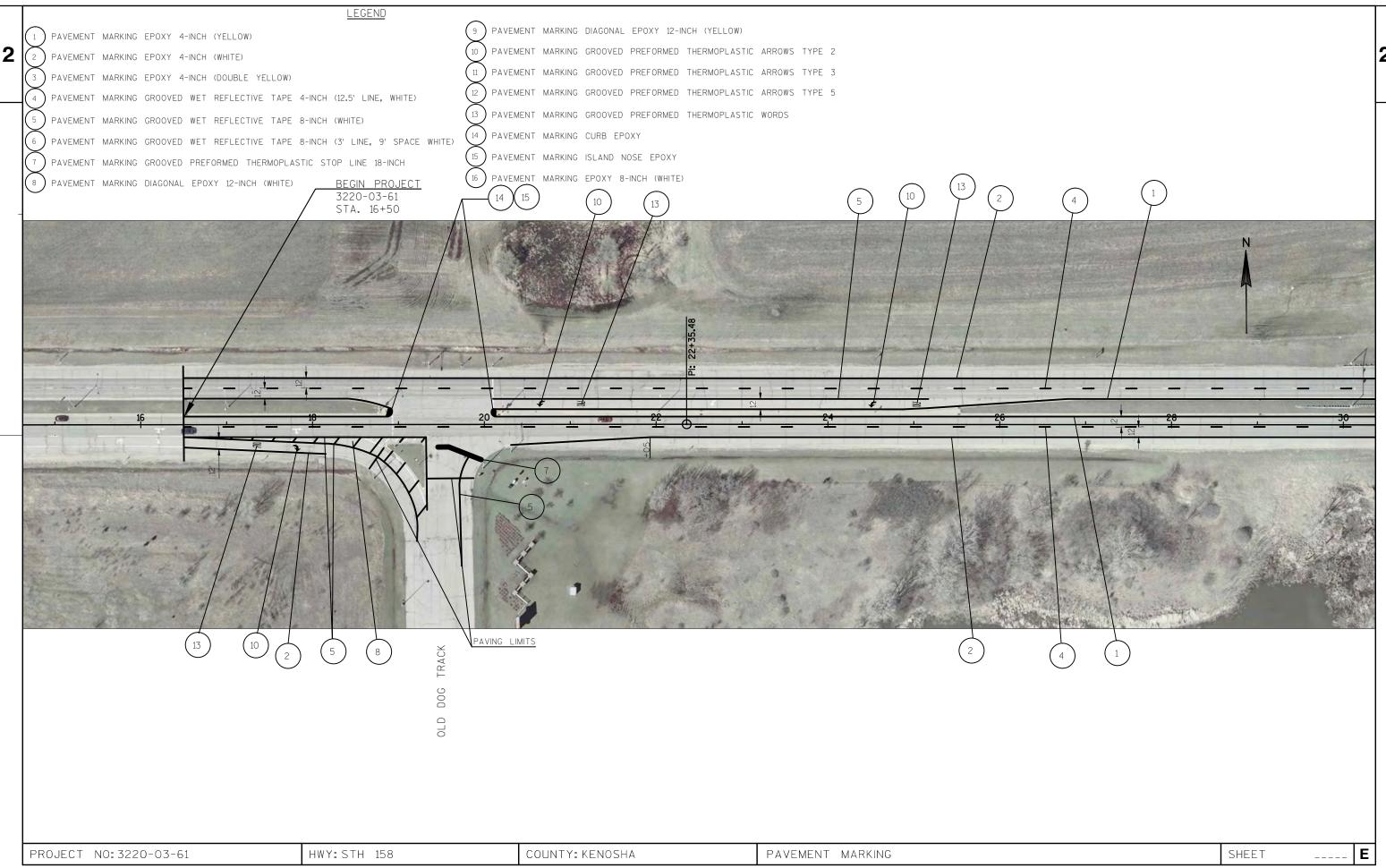






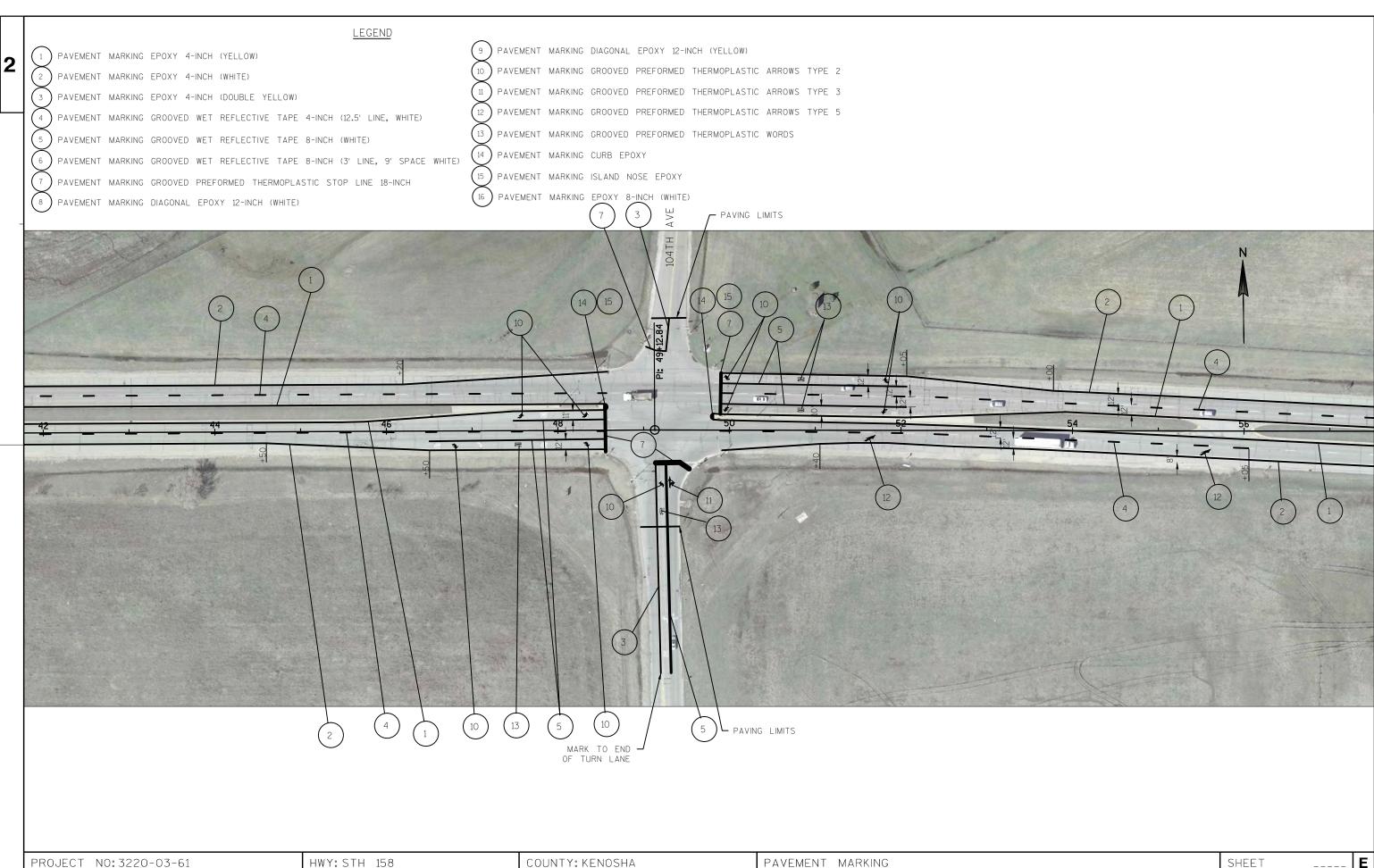


FILE NAME : N:\PDS\C3D\C4D\32200301\021001_CD.DWG PLOT BY : WAGNER, SCOTT H PLOT NAME : ______PLOT SCALE : 1 IN:10 FT



PLOT DATE : 1/7/2014 2:04 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : _____PLOT SCALE : ************

FILE NAME : N:\PDS\C3D\CAD\32200301\024501_PM.DWG



FILE NAME :N:\PDS\C3D\CAD\32200301\024503_PM.DWG PLOT BY: WAGNER, SCOTT H PLOT NAME: ______PLOT SCALE: ######### WISDOT/CADDS SHEET 42

2

PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

PAVEMENT MARKING EPOXY 4-INCH (DOUBLE YELLOW)

PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH (12.5' LINE, WHITE)

PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)

PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (3' LINE, 9' SPACE WHITE)

PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOP LINE 18-INCH

PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)

PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2

PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3

PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 5

PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS

PAVEMENT MARKING CURB EPOXY

PAVEMENT MARKING ISLAND NOSE EPOXY

PAVEMENT MARKING EPOXY 8-INCH (WHITE)



NOTE: SHOULDER WIDTH VARIES EB STA. 61+40 TO STA. 69+00

<u>LEGEND</u>

PROJECT NO: 3220-03-61

HWY: STH 158

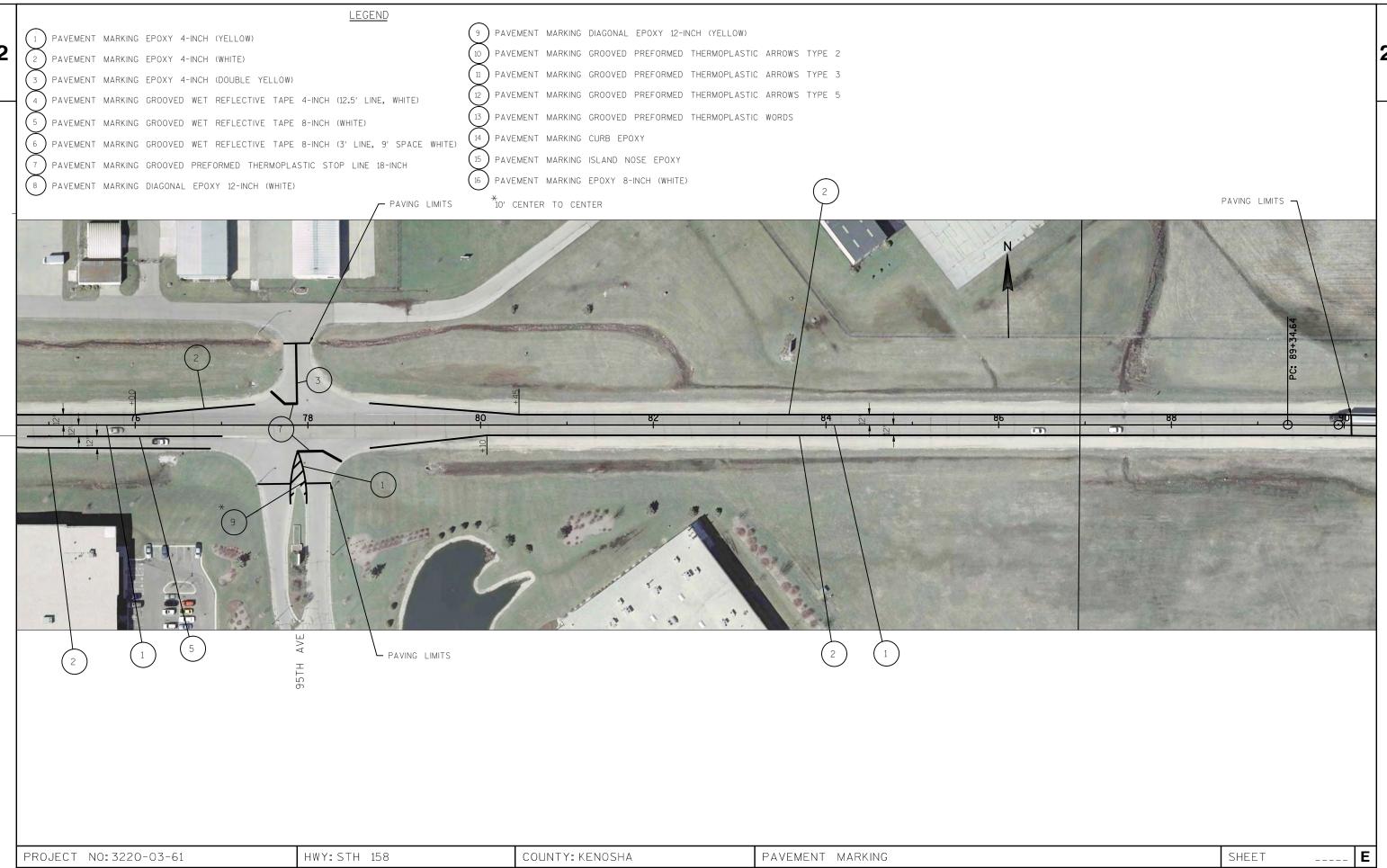
COUNTY: KENOSHA

PAVEMENT MARKING

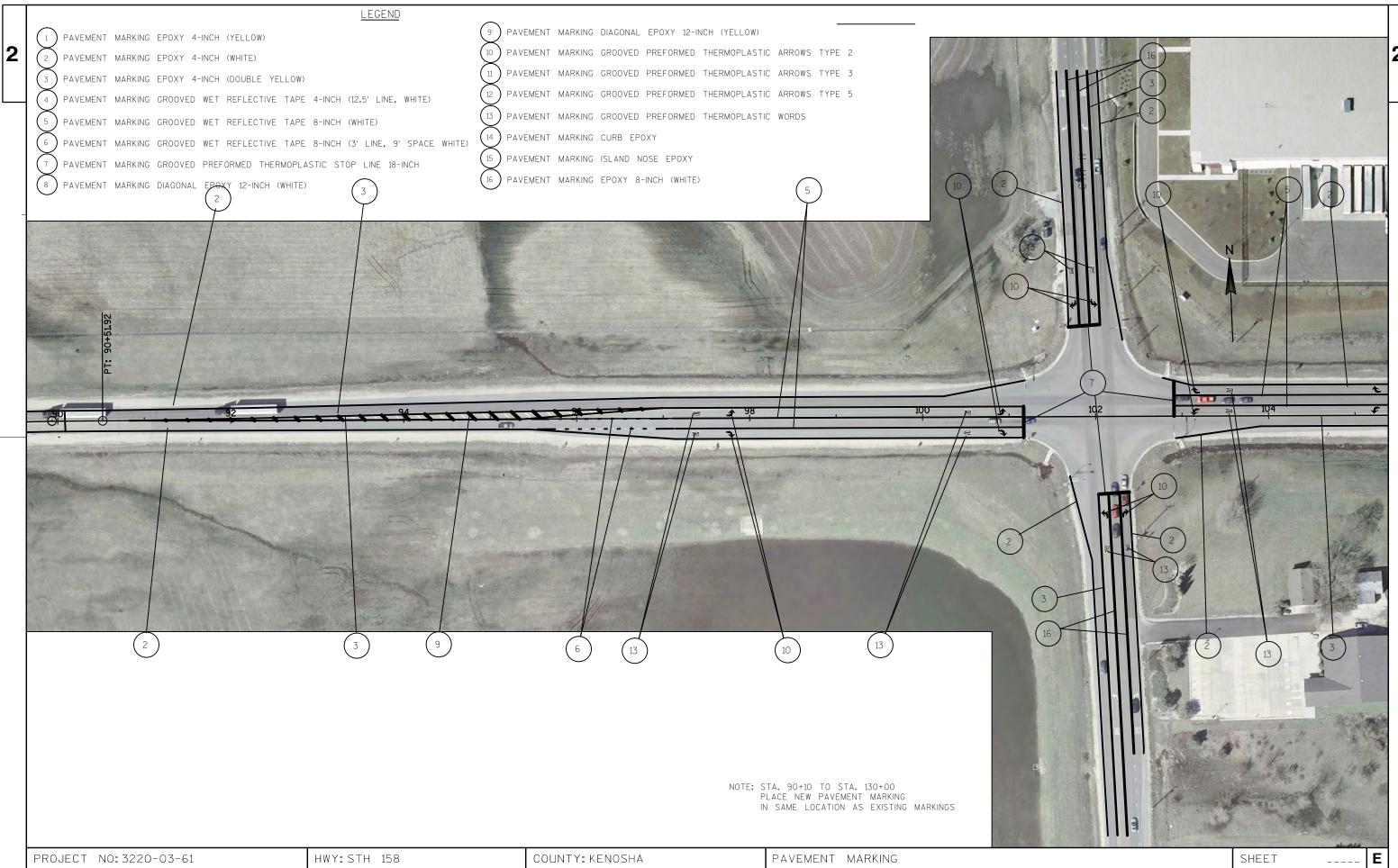
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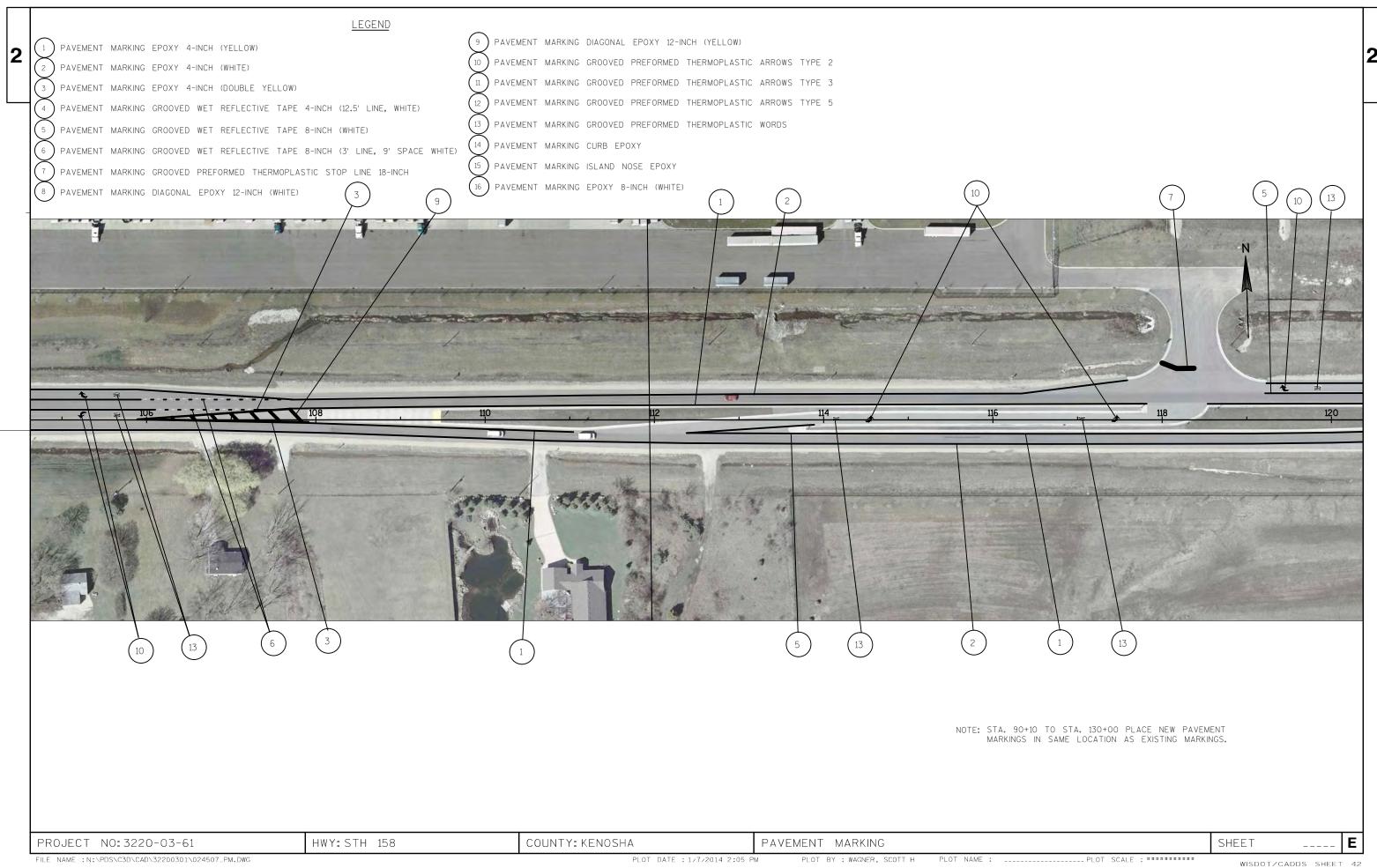
WISDOT/CADDS SHEET 42

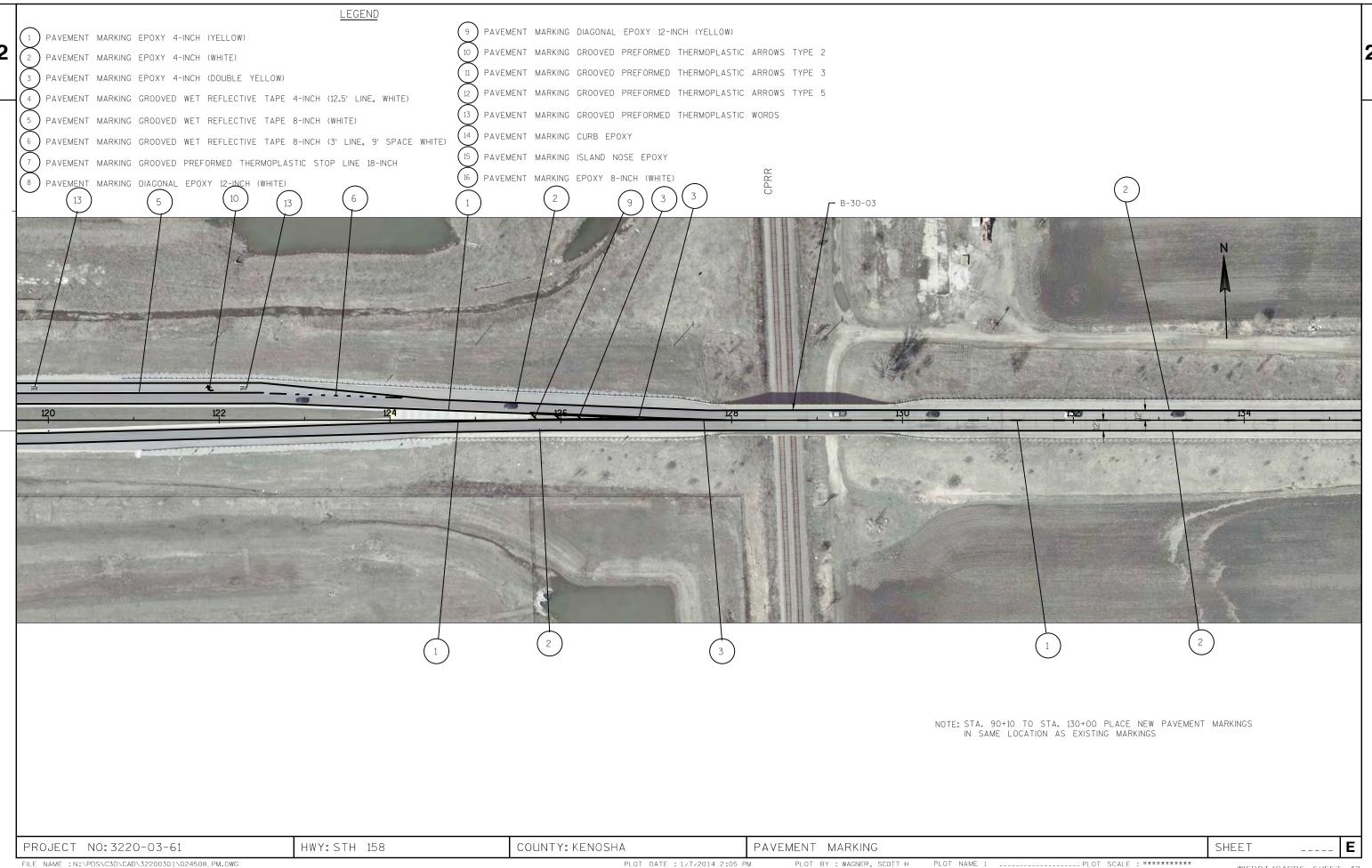


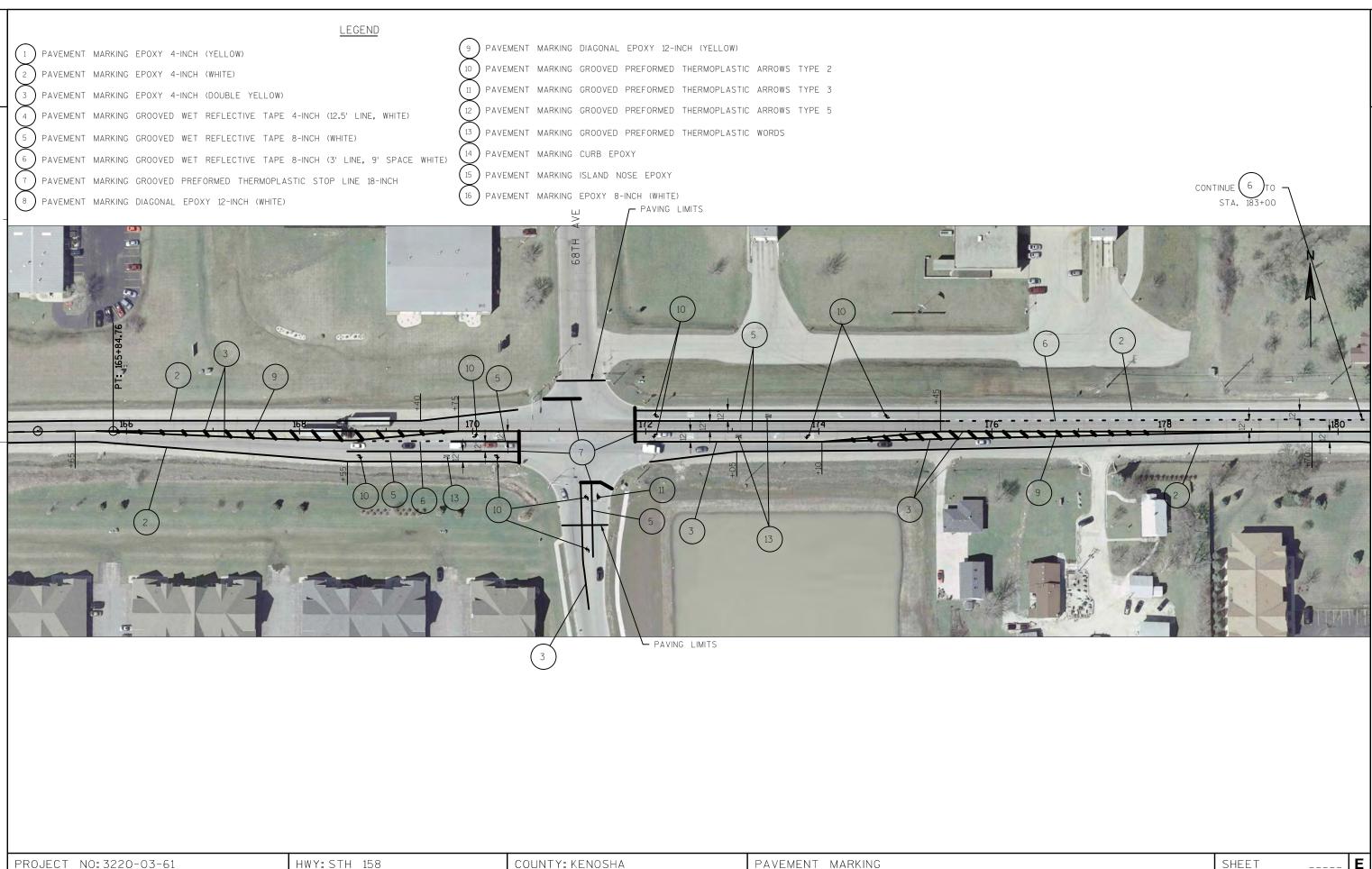
WISDOT/CADDS SHEET 42



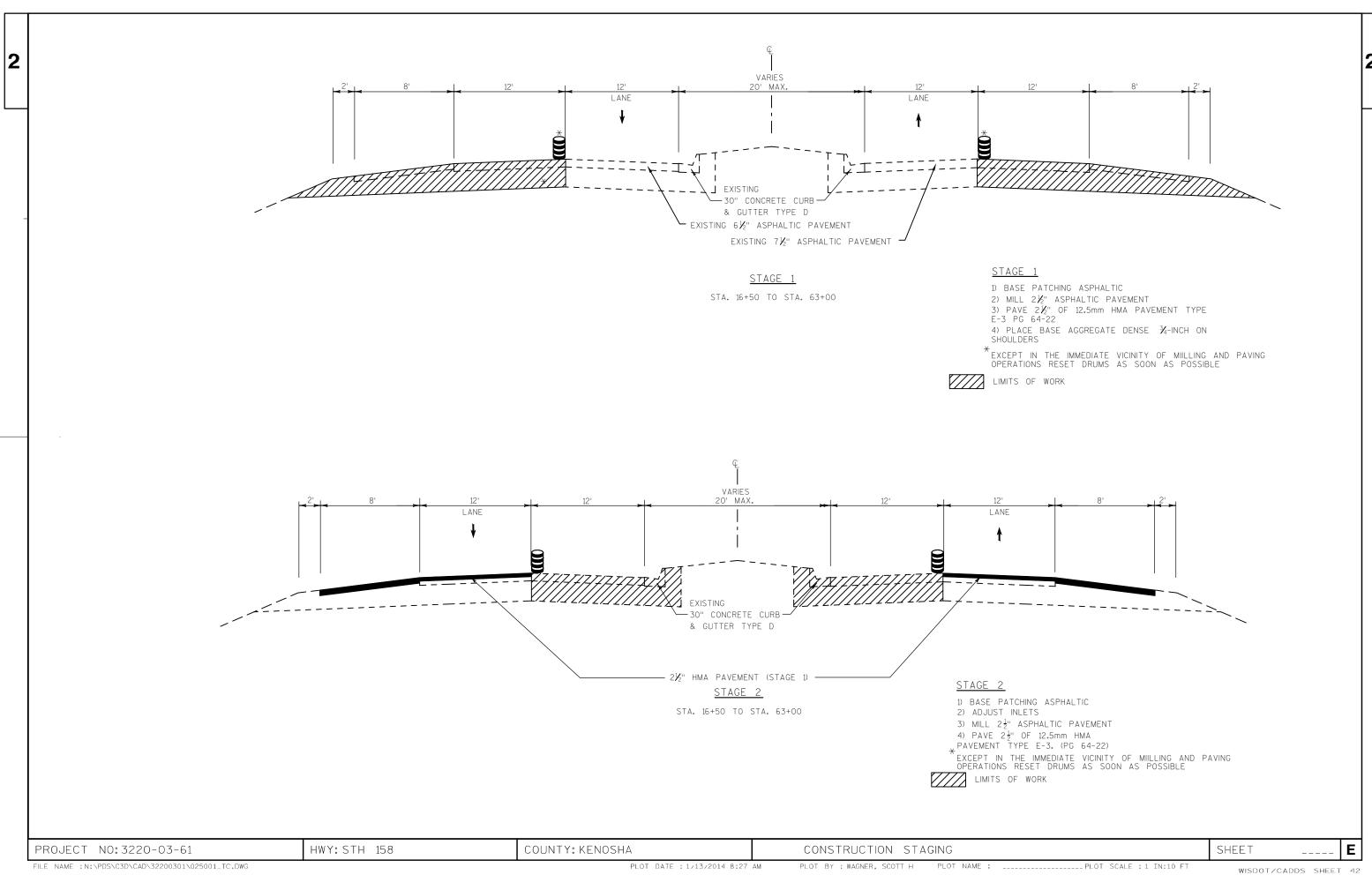
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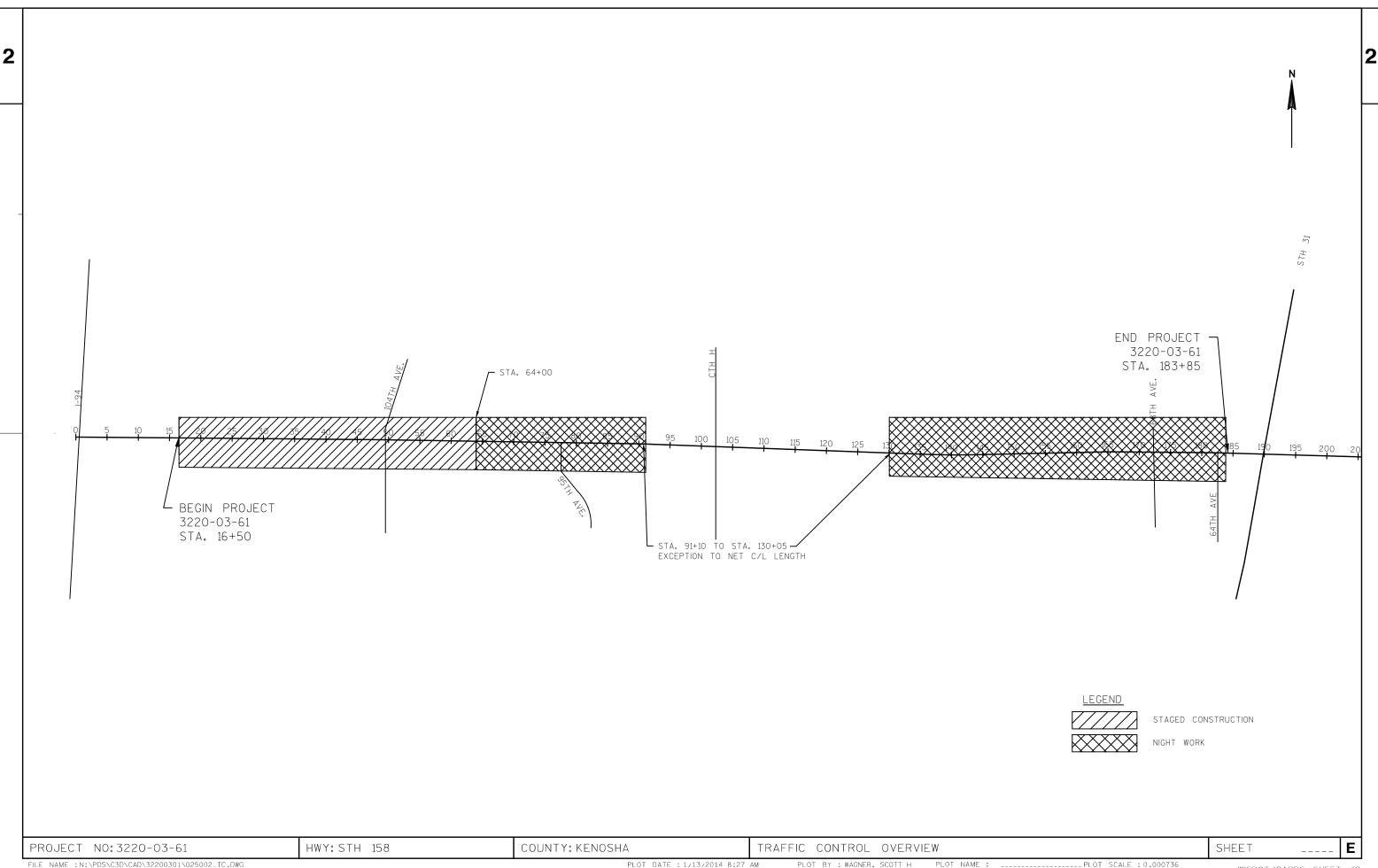






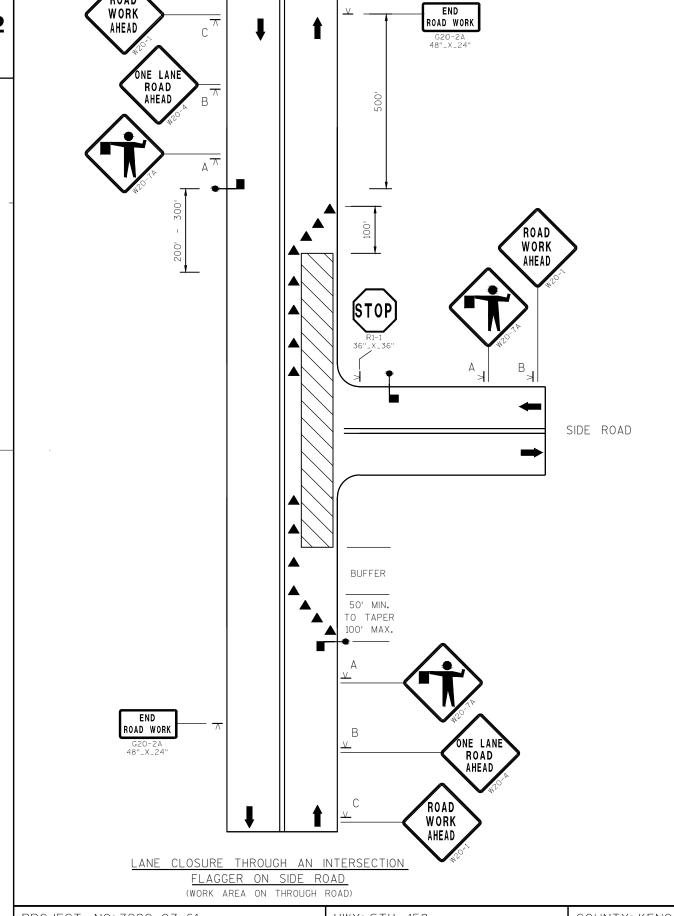
FILE NAME : N:\PDS\C3D\CAD\32200301\024511_PM.DWG PLOT DATE : 1/7/2014 2:05 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : _____PLOT SCALE : ************ WISDOT/CADDS SHEET 42





PLOT DATE : 1/13/2014 8:27 AM PLOT BY : WAGNER, SCOTT H PLOT NAME : _____PLOT SCALE : 0.000736





LEGEND

◆ CHANNELIZING DEVICE

F PORTABLE SIGN SUPPORT

/ WORK AREA

TRAFFIC FLOW

FLAGGER

SPEED SIGN SPACING BUFFER LIMIT (MPH) A, B, C ,(FT) (FT) 25 200 55 30 35 200 85 350 120 40 350 170 45 500 220 50 500 280 55 500 335

1. DEPENDING ON TRAFFIC CONDITIONS, CONSIDER ADDITIONAL TRAFFIC CONTROL ON THE SIDE ROAD APPROACHES, SUCH AS FLAGGERS AND APPROPRIATE SIGNS.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATION, 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 DIRECTED BY THE ENGINEER.

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

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

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

HWY: STH 158 PROJECT NO: 3220-03-61 COUNTY: KENOSHA TRAFFIC CONTROL SHEET FILE NAME :N:\PDS\C3D\CAD\32200301\021001_CD.DWG PLOT BY : WAGNER, SCOTT H PLOT NAME : _____PLOT SCALE : 1 IN:10 FT

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

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING. REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS OR NIGHTS.

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

"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, OR THAT WILL BE PLACED IN A CLOSED LANE, 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. STH 158 TEMPORARY PAVEMENT MARKING 4-INCH REMOVABLE TAPE (WHITE) 48" X 30" LEGEND TYPE III BARRICADE WITH ATTACHED SIGN SEE SDD TRAFFIC CONTROL, ROAD INTERSECTION WITHIN SINGLE SIGN ON PERMANENT SUPPORT LANE CLOSURE DETAIL B WORK TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT AHEAD TRAFFIC CONTROL DRUM FLASHING ARROW BOARD

FILE NAME : N:\PDS\C3D\CAD\32200301\026001_S1.DWG

HWY: STH 158

PROJECT NO: 3220-03-61

PLOT DATE : 1/13/2014 8:34 AM

COUNTY: KENOSHA

PLOT BY : WAGNER, SCOTT H

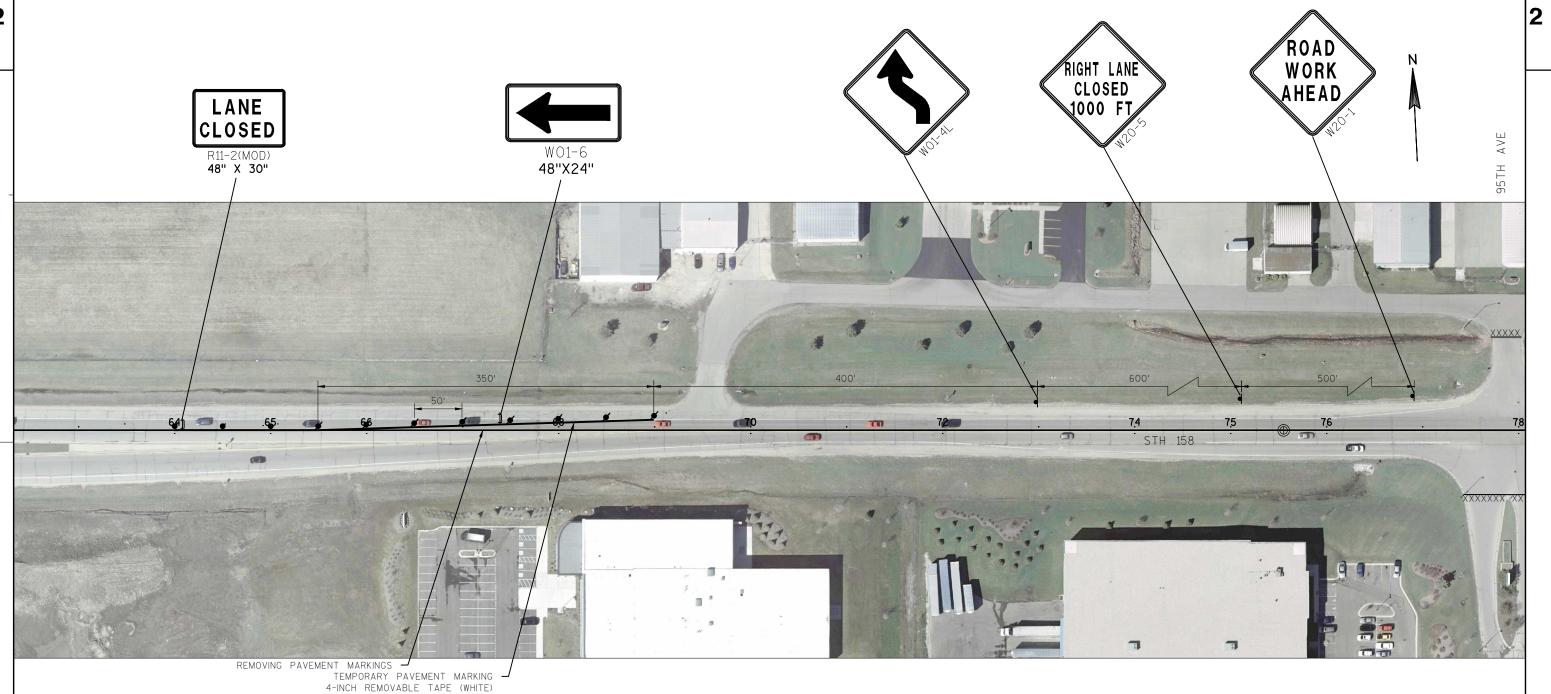
TRAFFIC CONTROL STAGE 1 EASTBOUND

GENERAL NOTES

PLOT NAME : _____PLOT SCALE : **********

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GENERAL NOTES

HWY: STH 158

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

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

PROJECT NO: 3220-03-61

"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, OR THAT WILL BE PLACED IN A CLOSED LANE, 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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING. REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS OR NIGHTS.

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

LEGEND

TYPE III BARRICADE WITH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

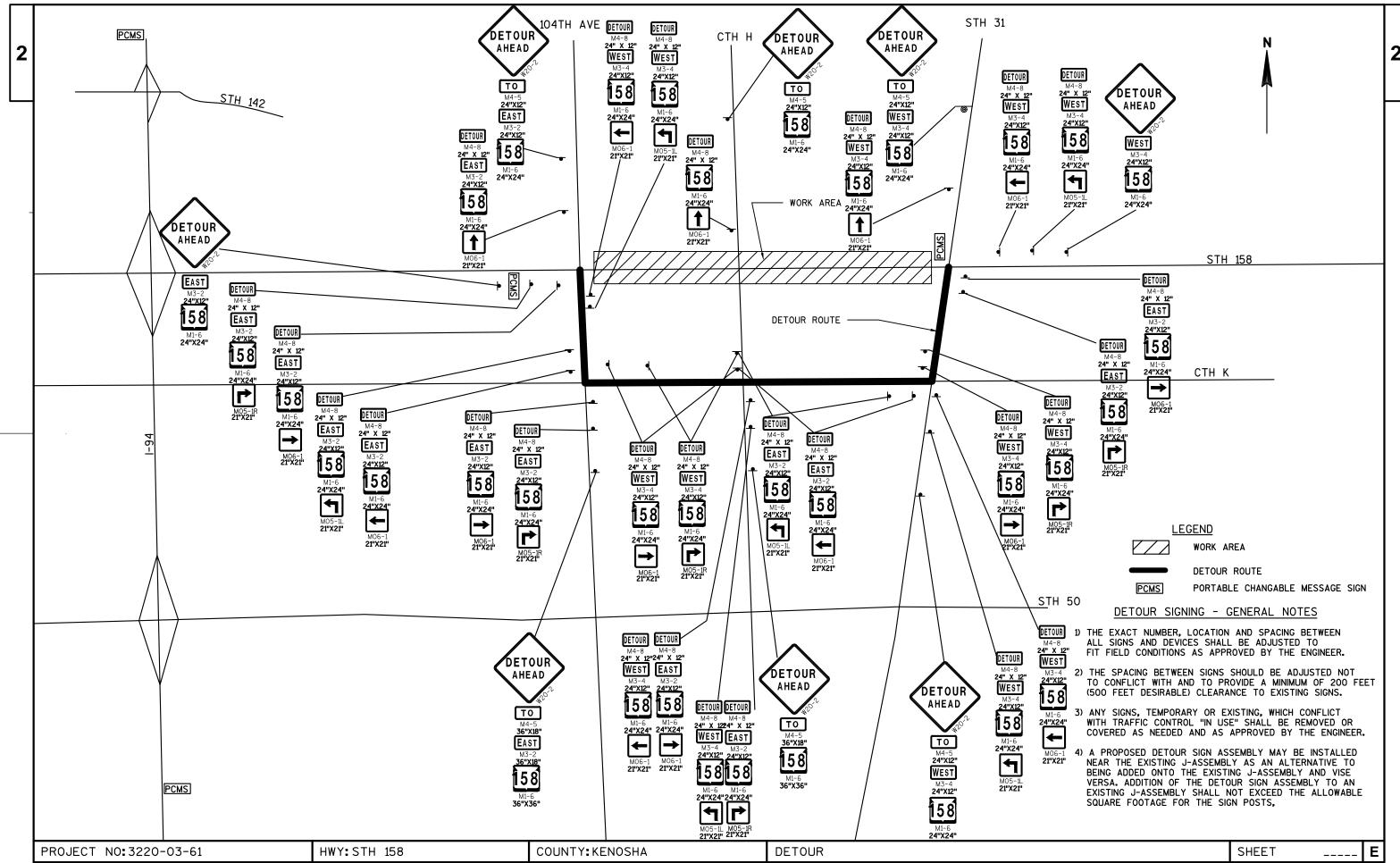
TRAFFIC CONTROL DRUM

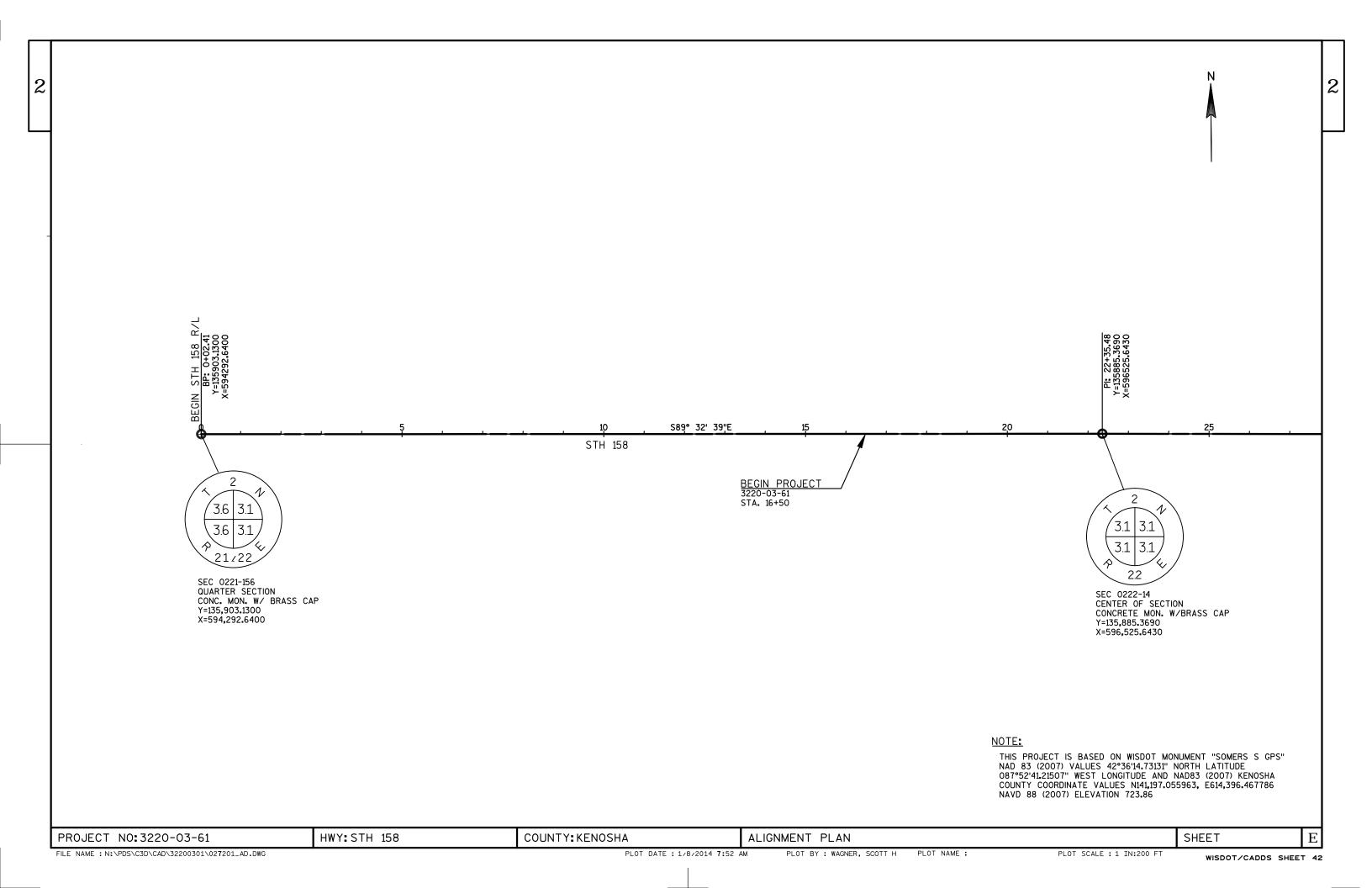
FLASHING ARROW BOARD

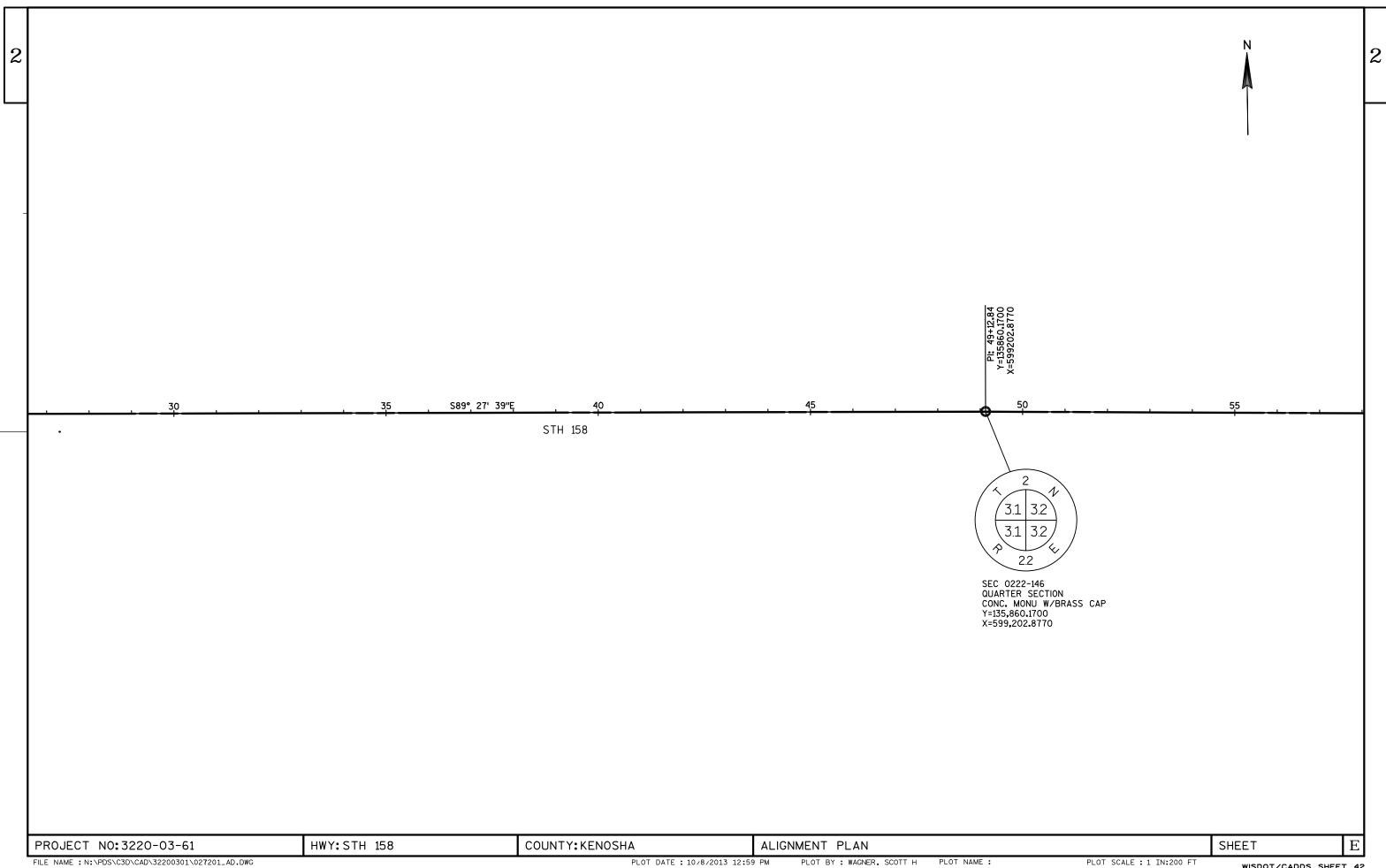
COUNTY: KENOSHA TRAFFIC CONTROL STAGE 1 WESTBOUND

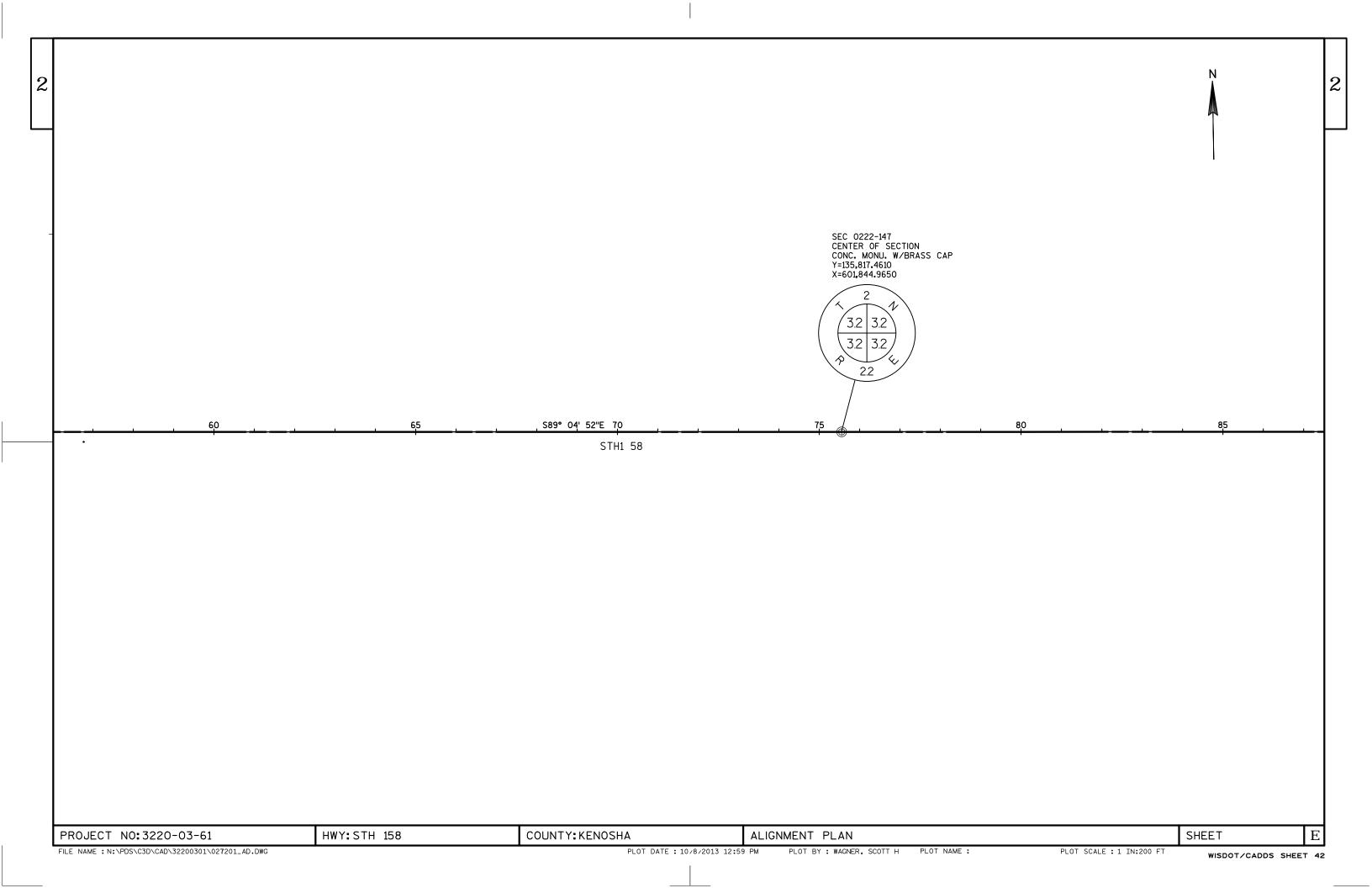
SHEET

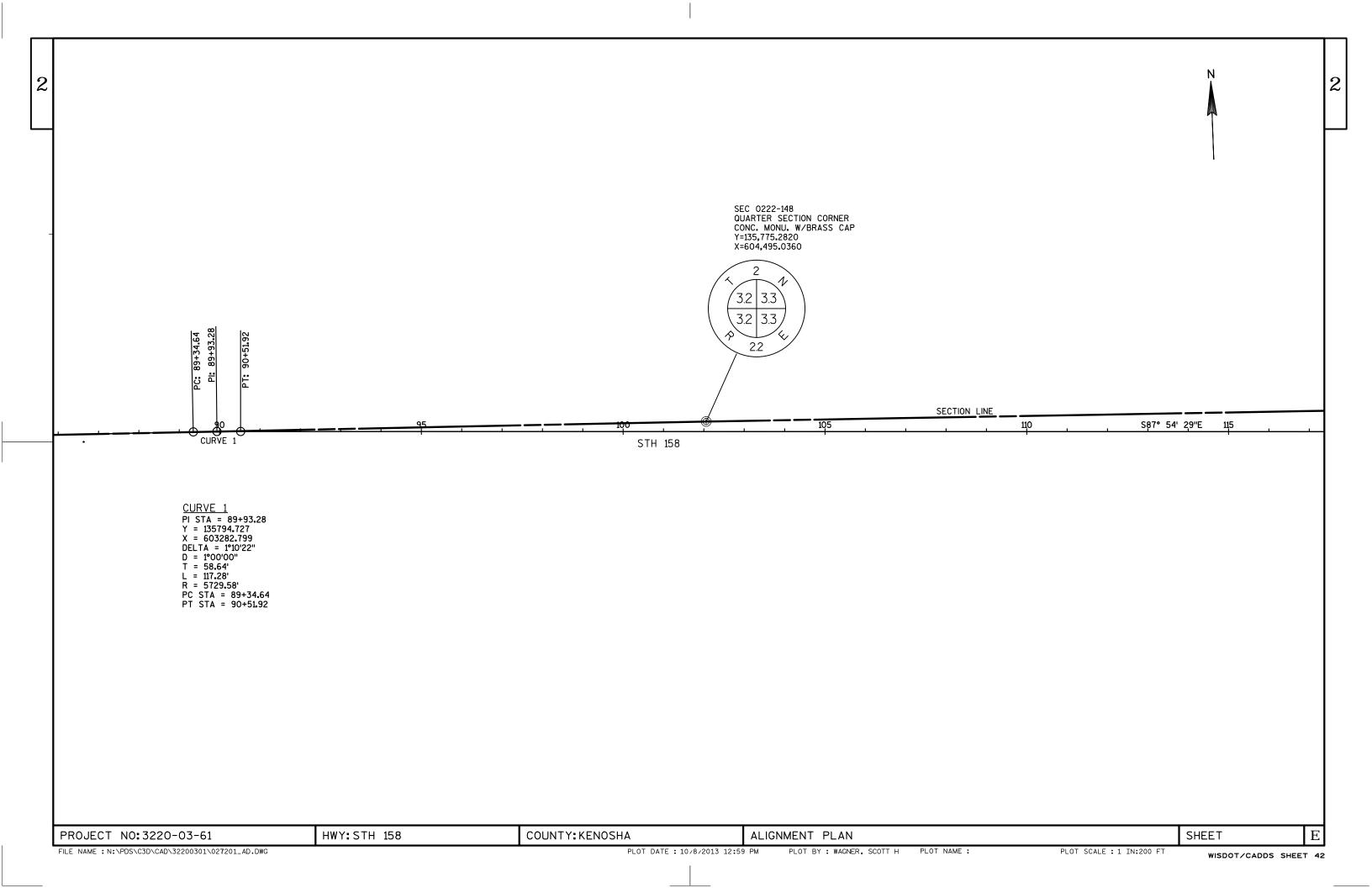
____E

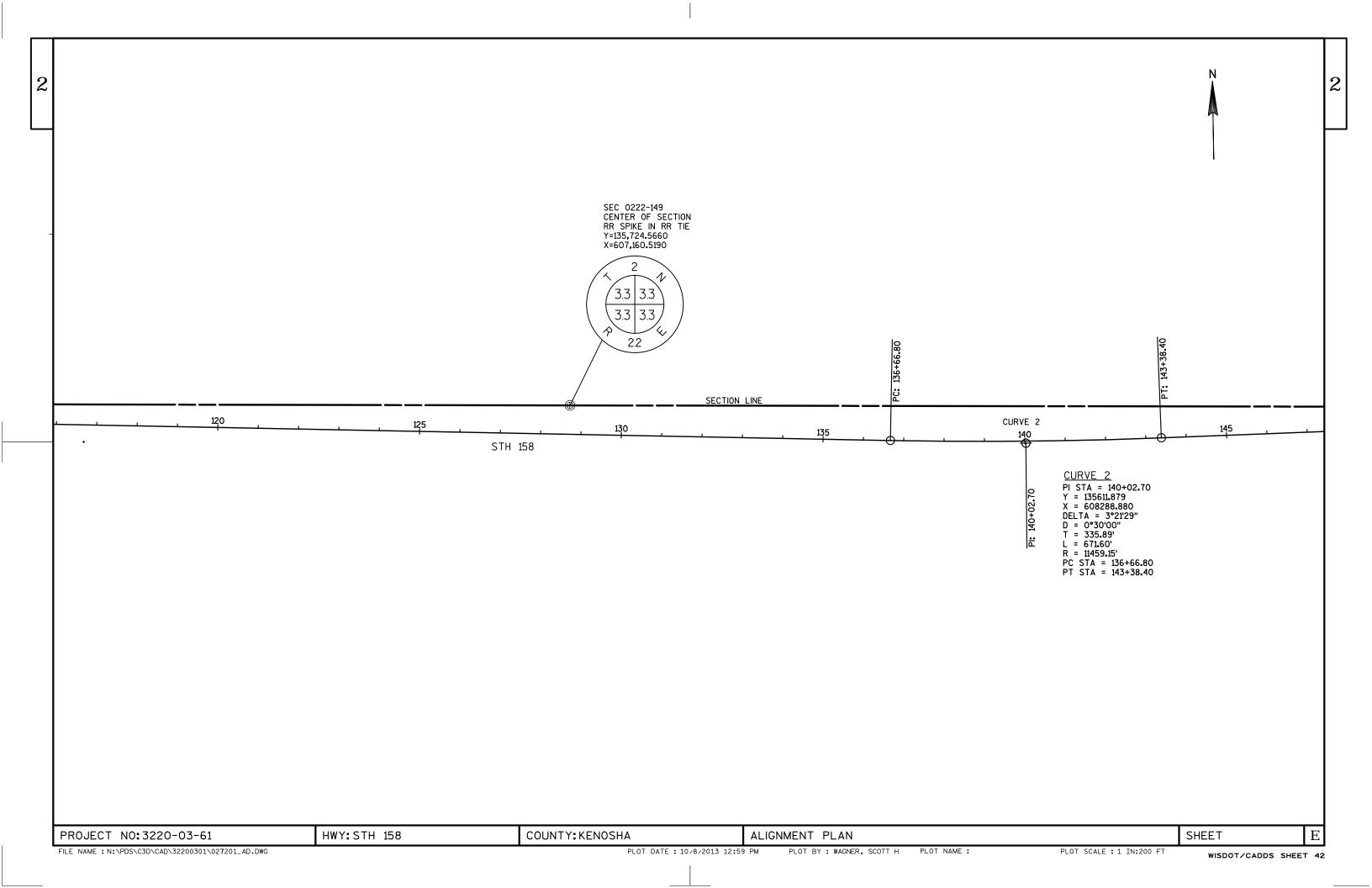


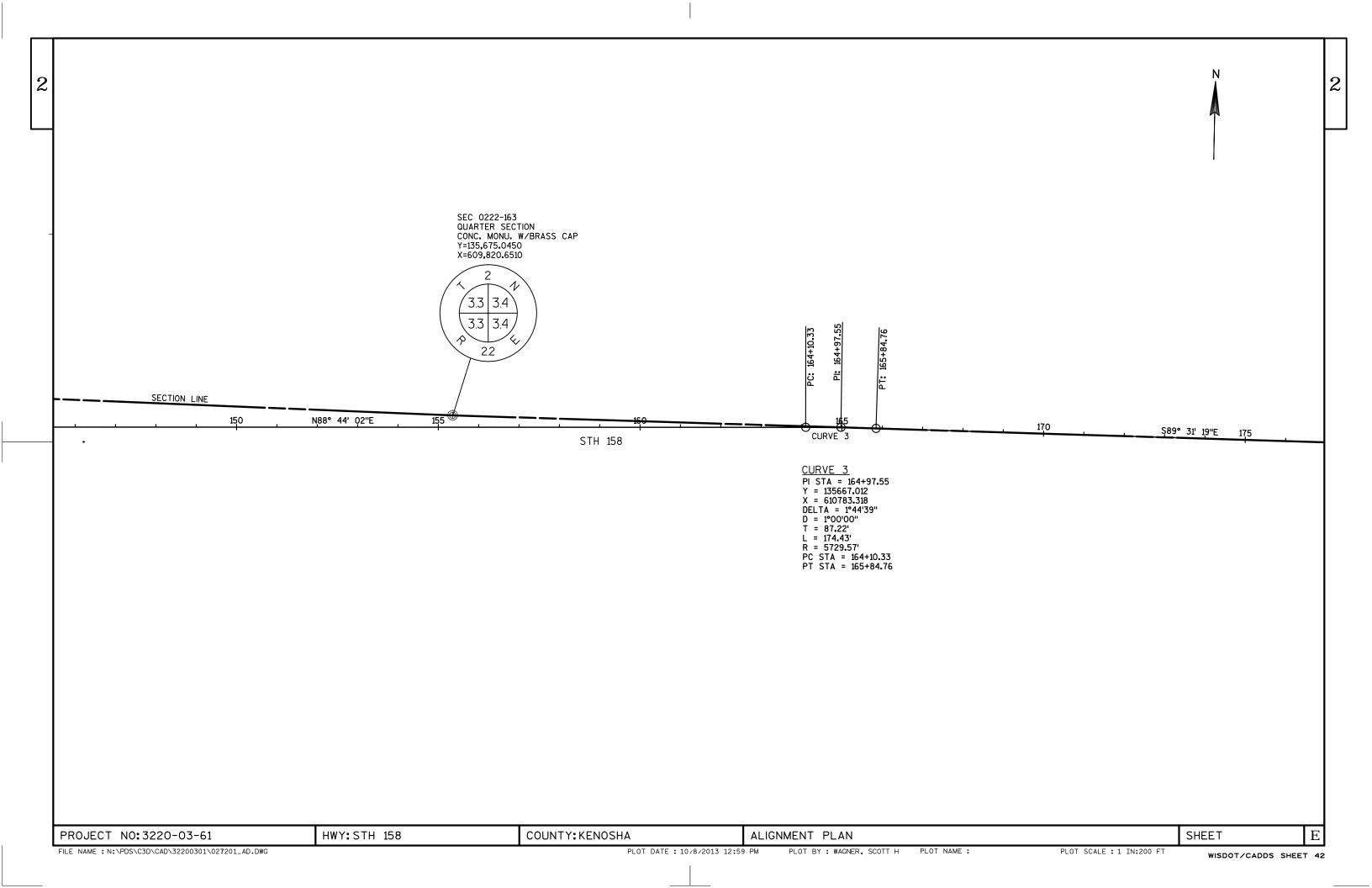


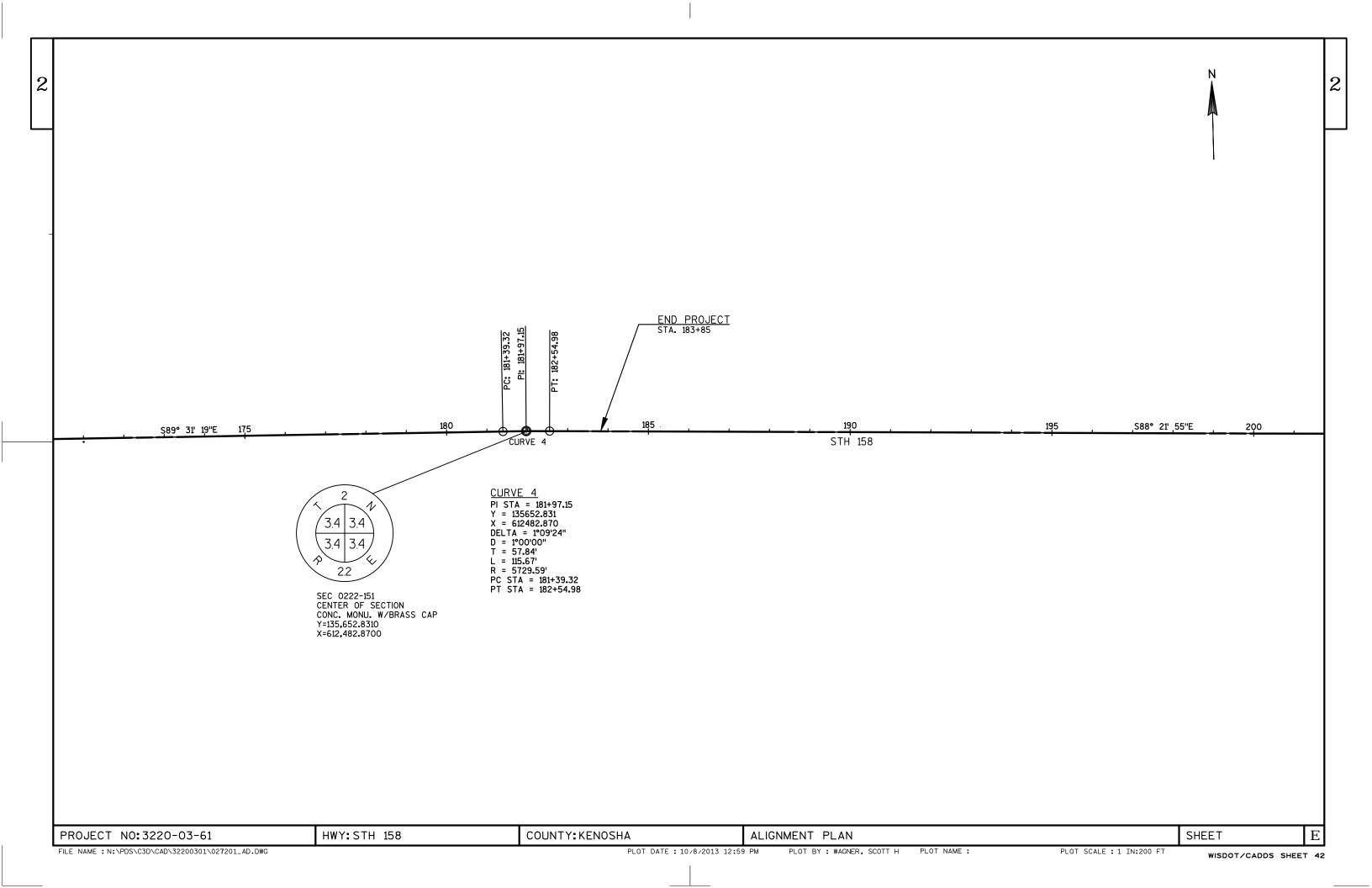












RITEM				
	I TEM DESCRIPTION	UNI T	TOTAL	3220-03-61 QUANTI TY
204. 0110 204. 0120	REMOVING ASPHALTIC SURFACE REMOVING ASPHALTIC SURFACE MILLING	SY SY	211. 000 73, 000. 000	211. 000 73, 000. 000
204. 0150	REMOVING CURB & GUTTER	LF	239. 000	239. 000
204. 0165 213. 0100	REMOVING GUARDRAIL FINISHING ROADWAY (PROJECT) 01.	LF EACH	5, 960. 000 1. 000	5, 960. 000 1. 000
	3220-03-61			
305. 0110	BASE AGGREGATE DENSE 3/4-INCH	TON	480.000	480. 000
				130. 000 211. 000
390. 0203	BASE PATCHING ASPHALTIC	SY	3, 070. 000	3, 070. 000
416. 0610	DRILLED TIE BARS	EACH	28. 000	28. 000
		DOL	13, 600. 000	13, 600. 000
				600. 000 1, 500. 000
460. 1103	HMA PAVEMENT TYPE E-3	TON	10, 860. 000	10, 860. 000
460. 2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	6, 960. 000	6, 960. 000
465. 0125	ASPHALTIC SURFACE TEMPORARY	TON	11.000	11.000
465. 0400 465. 0475	ASPHALTIC SHOULDER RUMBLE STRIP ASPHALT CENTER LINE RUMBLE STRIP 2-LANE	LF LF	4, 900. 000 3, 220. 000	4, 900. 000 3, 220. 000
	RURAL			
611. 0411	RECONSTRUCTING INLETS	EACH	4.000	400. 000 4. 000
611 0624	INLET COVERS TYPF H	EACH	4 000	4. 000
611. 8115	ADJUSTING INLET COVERS	EACH	9. 000	9. 000
		EACH	2.000	2.000
614. 0010	STEEL THRIE BEAM STRUCTURE APPROACH	LF LF	63. 000	3. 000 63. 000
614. 0305	STEEL PLATE BEAM GUARD CLASS A	LF	2, 873. 000	2, 873. 000
614. 0345	STEEL PLATE BEAM GUARD SHORT RADIUS	LF	50.000	50.000
614.0390	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL	EACH	1.000	1. 000
614. 0400	ADJUSTING STEEL PLATE BEAM GUARD	LF	860.000	860. 000
614. 0515	GUARDRAIL STIFENED LHW	LF	360. 000	360. 000
614. 2300	MGS GUARDRAIL 3	LF	2, 650. 000	2, 650. 000
				120. 000 3. 000
619. 1000	MOBILIZATION	EACH	1. 000	1. 000
625. 0100	TOPS0I L	SY	875. 000	875. 000
625. 0500	SALVAGED TOPSOIL	SY	230.000	230. 000
				1, 105. 000 600. 000
628. 1520	SILT FENCE MAINTENANCE	LF	600.000	600.000
628. 1905	MOBILIZATIONS EROSION CONTROL	EACH	3. 000	3. 000
628. 1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	1.000	1.000
628. 7015 628. 7020	INLET PROTECTION TYPE C INLET PROTECTION TYPE D			24. 000 6. 000
628. 7504	TEMPORARY DITCH CHECKS	LF	40.000	40. 000
628. 7570	ROCK BAGS	EACH	10. 000	10. 000
629. 0210	FERTILIZER TYPE B	CWT	0. 720	0. 720
		LB I R		24. 000 15. 000
634. 0618	POSTS WOOD 4X6-INCH X 18-FT	EACH	91. 000	91. 000
637. 2210	SIGNS TYPE II REFLECTIVE H	SF	639. 090	639. 090
637. 2215	SIGNS TYPE II REFLECTIVE H FOLDING	SF	74. 600	74. 600
	305. 0120 305. 0500 390. 0203 416. 0610 440. 4410. 3 455. 0115 455. 0605 460. 1103 460. 2000 465. 0425 465. 0400 465. 0475 601. 0411 611. 0430 611. 0624 611. 8115 611. 8120. 3 614. 0200 614. 0305 614. 0305 614. 0345 614. 0390 614. 0400 614. 0515 614. 2300 614. 2500 614. 2500 614. 2610 619. 1000 625. 0100 625. 0100 628. 1504 628. 1520 628. 1905 628. 7504 629. 0210 630. 0130 630. 0200 634. 0618 637. 2210	305. 0110 BASE AGGREGATE DENSE 3/4-INCH 305. 0120 BASE AGGREGATE DENSE 1 1/4-INCH 305. 0500 SHAPI NG SHOULDERS 390. 0203 BASE PATCHING ASPHALTIC 416. 0610 DRI LLED TIE BARS 440. 4410. S INCENTIVE IRI RIDE 455. 0115 ASPHALTIC MATERIAL PG64-22 455. 0605 TACK COAT 460. 1103 HMA PAVEMENT TYPE E-3 460. 2000 INCENTIVE DENSITY HMA PAVEMENT 465. 0425 ASPHALTIC SURFACE TEMPORARY 465. 0400 ASPHALTIC SURFACE TEMPORARY 465. 0475 ASPHALTIC SHOULDER RUMBLE STRIP 2-LANE RURAL 601. 0411 CONCRETE CURB & GUTTER 30-INCH TYPE D 611. 0624 INLET COVERS TYPE H 611. 8115 ADJUSTING INLETS 611. 0624 INLET COVERS TYPE H 611. 0624 STEEL PLATE BEAM GUARD SHAPING FINISHING 614. 0200 STEEL THRIE BEAM STRUCTURE APPROACH 614. 0305 STEEL PLATE BEAM GUARD SHORT RADIUS 614. 0515 GUARDRAIL 3 614. 2500 MGS GUARDRAIL 3 614. 2500 MGS THRIE BEAM TRANSITION 614. 2610 MGS GUARDRAIL 3 614. 2500 MGS THRIE BEAM TRANSITION 614. 2610 MGS GUARDRAIL 3 614. 2500 MGS THRIE BEAM TRANSITION 615. 0500 SALVAGED TOPSOIL 627. 0200 MULCHING 628. 1504 SILT FENCE 628. 1505 SILT FENCE 628. 1505 SILT FENCE MAINTENANCE 628. 1905 MOBILIZATION EMERGENCY EROSION CONTROL 628. 7504 TEMPORARY DITCH CHECKS 629. 0210 FERTILIZER TYPE B 630. 0130 SEEDING MIXTURE NO. 30 630. 0200 SEEDING TEMPORARY 634. 0618 POSTS WOOD 4X6-INCH X 18-FT 637. 2210 SIGNS TYPE II REFLECTIVE H	305. 0110	305. 0110 BASE AGGREGATE DENSE 3/4-INCH TON 130. 000 305. 0500 SHAPI NG SHOULDERS TA/4-INCH TON 130. 000 305. 0500 SHAPI NG SHOULDERS TA/4-INCH TON 130. 000 309. 0203 BASE PATCHING ASPHALTIC SY 3,070. 000 416. 0610 DRI LLED TIE BARS EACH 28. 000 440. 4410. S I NCENTI VE IRI RIDE DOL 13,600. 000 455. 0115 ASPHALTIC MATERIAL PG64-22 TON 600. 000 455. 0105 TACK COAT GAL 1,500. 000 440. 4410. S I NCENTI VE IRI RIDE DOL 13,600. 000 440. 0103 MMA PAVEMENT TYPE E-3 TON 10,860. 000 460. 1103 MMA PAVEMENT TYPE E-3 TON 10,860. 000 460. 1003 MMA PAVEMENT TYPE E-3 TON 10,860. 000 460. 1003 ASPHALTI C SURFACE TEMPORARY TON 11,000 465. 0425 ASPHALTI C SHOULDER RUMBLE STRIP LF 4,900. 000 465. 0475 ASPHALTI C SHOULDER RUMBLE STRIP LF 4,900. 000 465. 0475 ASPHALTI C SHOULDER RUMBLE STRIP LF 4,900. 000 465. 0475 ASPHALTI C SHOULDER RUMBLE STRIP LF 4,000. 000 461. 0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF 400. 000 611. 0430 RECONSTRUCTING INLETS EACH 4. 000 611. 0430 RECONSTRUCTING INLETS EACH 4. 000 611. 0410 ADJUSTING INLET COVERS EACH 9. 000 611. 0410 BARRIER SYSTEM GRADING SHAPING FINISHING EACH 2. 000 614. 0200 STEEL PLATE BEAM GUARD SHORT RADIUS LF 2,873. 000 614. 0305 STEEL PLATE BEAM GUARD SHORT RADIUS LF 2,873. 000 614. 0305 STEEL PLATE BEAM GUARD SHORT RADIUS EACH 1. 000 TERMI NAL CALL OF THE STEEL PLATE BEAM GUARD SHORT RADIUS EACH 1. 000 614. 0305 STEEL PLATE BEAM GUARD SHORT RADIUS EACH 1. 000 614. 0305 STEEL PLATE BEAM GUARD SHORT RADIUS EACH 1. 000 614. 0305 STEEL PLATE BEAM GUARD SHORT RADIUS EACH 1. 000 614. 0305 STEEL PLATE BEAM GUARD SHORT RADIUS EACH 1. 000 614. 0305 STEEL PLATE BEAM GUARD SHORT RADIUS EACH 1. 000 614. 0305 STEEL PLATE BEAM GUARD SHORT RADIUS EACH 1. 000 614. 0305 STEEL PLATE BEAM GUARD SHORT RADIUS EACH 1. 000 628. 1000 MGLIL

0530 638 2102 MOVING SIGNS TYPE II EACH 6.000 6.000 0540 638 3000 REMOVING SIGNS TYPE II EACH 86.000 86.000 0550 643 3000 REMOVING SIGNS TYPE II EACH 77.000 71.000 0570 643 0200 TRAFFIC CONTROL SURVEILLANCE AND DAY 60.000 60.000 0580 643 0300 TRAFFIC CONTROL DEWIS 1000 10, 896.0000	DATE 28	3APR14	E S	TIMAT	E O F Q U A N		
0530 638 2102 MOVING SIGNS TYPE II EACH 6.000 6.000 0540 638 3000 REMOVING SIGNS TYPE II EACH 71.000 71.000 0550 643 3000 REMOVING SIGNS SIPPE II EACH 71.000 71.000 0570 643 0200 TRAFFIC CONTROL SURVEILLANCE AND DAY 60.000 60.000 0580 643 0300 TRAFFIC CONTROL BRINKS DEPORTS II DAY 10,896,000 10,896,000 05950 643 0300 TRAFFIC CONTROL BRINKS DEPORTS III DAY 1,493,000 1,493,000 0500 643 0300 TRAFFIC CONTROL BRINKS DEPORTS III DAY 1,493,000 1,493,000 0500 643 0300 TRAFFIC CONTROL BRINKS DEPORTS III DAY 1,493,000 1,493,000 0500 643 0305 TRAFFIC CONTROL WARNING LICHTS TYPE 1 DAY 1,493,000 2,551,000 0500 643 0300 TRAFFIC CONTROL WARNING LICHTS TYPE A DAY 2,551,000 2,551,000 0500 643 090 TRAFFIC CONTROL WARNING LICHTS TYPE C DAY 1,810,000 1,800,000 0501 643 090 TRAFFIC CONTROL ARROW BOARDS DAY 2,574,000 2,567,000 0501 643 090 TRAFFIC CONTROL SIGNS DAY 2,547,000 2,547,000 2,547,000 0501 643 090 TRAFFIC CONTROL SIGNS DAY 2,547,000 2,547,000 0501 643 090 TRAFFIC CONTROL SIGNS DAY 1,000 00 108,000 0501 643 1050 TRAFFIC CONTROL SIGNS DAY 1,000 00 108,000 0501 643 1050 TRAFFIC CONTROL EDUTY IN TAFFIC DAY 1,000 00 108,000 0501 644 050 TRAFFIC CONTROL DETOUR SIGNS DAY 2,265,000 1,000 00 108,000 0501 644 050 TRAFFIC CONTROL DETOUR SIGNS DAY 1,000 00 1,000 00 108,000 0501 644 050 TRAFFIC CONTROL DETOUR SIGNS DAY 1,000 00 1		ITEM	ITEM DESCRIPTION	UNI T	TOTAL		
0.540 0.582 0.69	0520						
0550 638.3000 REMOVING SMALL SIGN SUPPORTS EACH 71.000 71.000 0570 643.0200 TRAFFIC CONTROL SURVEI LLANCE AND DAY 60.000 60.000 0580 643.0200 TRAFFIC CONTROL DELWS 10.000 10.000 0580 643.0200 TRAFFIC CONTROL DELWS 10.000 10.000 10.000 0580 643.0200 TRAFFIC CONTROL WARNING LICHTS TYPE 1 DAY 1.493.000 1.493.000 0580 643.0200 TRAFFIC CONTROL WARNING LICHTS TYPE C DAY 1.881.000 1.881.000 0580 643.0000 TRAFFIC CONTROL BOWN SIGNS TYPE 11 DAY 60.000 60.000 0580 643.0000 TRAFFIC CONTROL SIGNS 10.000 DAY 60.000 60.000 0580 643.0000 TRAFFIC CONTROL SIGNS 10.000 DAY 60.000 10.000 0580 643.0000 TRAFFIC CONTROL DETOUR (PROJECT) 01. EACH 10.000 10.000 0580 643.0000 TRAFFIC CONTROL DETOUR (PROJECT) 01. EACH 10.000 10.000 0580 643.0000 TRAFFIC CONTROL DETOUR SIGNS 10.000 DAY 10.000 10.000 0580 643.0000 TRAFFIC CONTROL DETOUR SIGNS 10.000 DAY 10.000 10.000 0580 643.0000 TRAFFIC CONTROL DETOUR SIGNS 10.000 DAY 10.000 10.000 0580 645.0000 TRAFFIC CONTROL DETOUR SIGNS 10.000 DAY 10.000 10.000 10.000 0580 646.0000 TRAFFIC CONTROL DETOUR SIGNS 10.000 DAY 10.000 10.000 10.000 0580 646.0000 TRAFFIC CONTROL DETOUR SIGNS 10.000 DAY 10.000 10.000 10.000 10.000 0580 646.0000 TRAFFIC CONTROL DETOUR SIGNS 10.000 DAY 10.000 10.							
MAINTENANCE (PROJECT) 01. 3220-03-61 TARFFIC CONTROL SURVEILLANCE AND MAINTENANCE (PROJECT) 01. 3220-03-61 TARFFIC CONTROL BRUNS (PROJECT) 01. 3220-03-61 TARFFIC CONTROL WARNING LIGHTS TYPE A DAY 1. 493. 000 2, 551. 000 2, 251. 000 2, 251. 00	0550						
Main Femance Project Discourage Day 10, 896, 000 10, 8	0560						
TRAFFIC CONTROL BRINGS DAY 10,896.000 10,896.000 10,996.000	0570	643. 0200		DAY	60. 000	60. 000	
15990 643, 0420 TRAFFIC CONTROL BARRIL CADES TYPE II DAY	0580	643. 0300		DAY	10, 896. 000	10, 896. 000	
10.00	0590	643. 0420		DAY	•		
0-20 643, 0800 TRAFFIC CONTROL ARROW BOARDS DAY 60, 000 60, 000 000 300 443, 0900 TRAFFIC CONTROL SIGNS DAY 5, 547, 000 108, 000	0600	643. 0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	2, 551. 000	2, 551. 000	
0.630 643.0900 TRAFFIC CONTROL SIGNS DAY 2,547.000 1,55.000 10	0610	643. 0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	1, 881. 000	1, 881. 000	
10-640 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH 105.000 1	0620	643. 0800	TRAFFIC CONTROL ARROW BOARDS	DAY			
DAY 108.000	0630						
1.000 1.00							
3220-03-61 643, 3000 TRAFFIC CONTROL DETOUR SIGNS DAY 2, 265, 000 2, 265, 000 0680 646, 0106 PAVEMENT MARKIN EPDXY 4-INCH LF 52,680, 000 52, 680, 000 0690 646, 0126 PAVEMENT MARKIN EPDXY 4-INCH LF 1, 300, 000 1, 300, 000 0700 646, 0406 PAVEMENT MARKIN SAME DAY EPDXY 4-INCH LF 16, 200, 000 16, 200, 000 0710 646, 0400 PAVEMENT MARKIN SAME DAY EPDXY 4-INCH LF 16, 200, 000 16, 200, 000 0710 646, 0801 S PAVEMENT MARKIN SAME DAY EPDXY 4-INCH LF 2, 125, 000 2, 125, 000 0710 646, 0803 S PAVEMENT MARKIN SGOVED WET REFLECTIVE LF 2, 125, 000 2, 125, 000 0710 646, 0803 S PAVEMENT MARKIN SGOVED WET REFLECTIVE LF 5, 960, 000 5, 960, 000 0710 646, 0803 S PAVEMENT MARKIN SGOVED WET REFLECTIVE LF 5, 960, 000 5, 960, 000 0710 647, 0456 PAVEMENT MARKIN SCOVED WET REFLECTIVE LF 90, 000 90, 000 0710 648, 0100 LOCATIN SCOVED WET REFLECTIVE LF 1, 050, 000 1, 050, 000 0710 648, 0100 LOCATIN SCOVED WET REFLECTIVE LF 1, 050, 000 1, 050, 000 0710 648, 0100 LOCATIN SCOVED WET REFLECTIVE LF 1, 050, 000 1, 050, 000 0710 648, 0100 LOCATIN SCOVED WET REFLECTIVE LF 1, 050, 000 1, 050, 000 0710 649, 0400 TEMPORARY PAVEMENT MARKIN SCOVED WET REFLECTIVE LF 1, 050, 000 1, 050, 000 0710 649, 0400 TEMPORARY PAVEMENT MARKIN SCOVED WET REFLECTIVE LF 1, 050, 000 1, 050, 000 0710 649, 0400 TEMPORARY PAVEMENT MARKIN SCOVED WET REFLECTIVE LF 1, 050, 000 2, 880, 000 0710 649, 0400 TEMPORARY PAVEMENT MARKIN SCOVED WET REFLECTIVE LF 1, 050, 000 2, 880, 000 0710 649, 0400 TEMPORARY PAVEMENT MARKIN SCOVED WET REFLECTIVE LF 2, 880, 000 2, 880, 000 0710 649, 0400 TEMPORARY PAVEMENT MARKIN SCOVED WET REFLECTIVE LF 1, 050, 000 1, 050, 000 0710 649, 0400 TEMPORARY PAVEMENT MARKIN SCOVED WET REFLECTIVE LF 2, 880, 000 2, 880, 000 0710 649, 0400 TEMPORARY PAVEMENT MARKIN SCOVED WET REFLECTIVE LF 1, 745, 000 1, 745, 000 0710 649, 0400 TEMPORARY PAVEMENT MARKIN SCOVED WET REFLECTIVE LF 1, 746, 000 1, 745, 000 0710 649, 0400 TEMPORARY PAVEMENT MARKIN SCOVED WET REFLECTIVE LF 1, 746, 000 1, 745, 000 0710 649, 0400 TEMPORARY PAVEMENT MARKIN SCOVED							
0680 646. 0106 PAVEMENT MARKI NG EPOXY 4-INCH LF 52,860.000 52,680.000 0 1.300.000 07000 646.0126 PAVEMENT MARKI NG EPOXY 8-INCH LF 1,300.000 1.300.000 0 1.300.00	0660	643. 2000	• • • • • • • • • • • • • • • • • • • •	EACH	1. 000	1. 000	
0690 646. 0126 PAVEMENT MARKING EPOXY 8-INCH LF 1,300.000 1,300.000 16,200.000 17,200.00	0670						
0700 044. 0406 PAVEMENT MARKI NG SAME DAY EPOXY 4-I NCH LF 16, 200. 000 16, 200. 000 16, 200. 000 16, 200. 000 070	0680						
10710	0690					,	
0.720							
TAPE 4-INCH 0730 646.0883. S PAVEMENT MARKING GROOVED WET REFLECTIVE LF 5, 960.000 5, 960.000 TAPE 8-INCH 0740 647.0456 PAVEMENT MARKING CURB EPOXY LF 90.000 90.000 0750 647.0666 PAVEMENT MARKING ISLAND NOSE EPOXY EACH 4.000 4.000 0760 647.0726 PAVEMENT MARKING DIAGONAL EPOXY 12-INCH LF 1,050.000 1,050.000 0760 648.0100 LOCATING NO-PASSING ZONES MI 1.530 1.530 0760 649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE LF 2,880.000 2,880.000 0760 649.0801 TEMPORARY PAVEMENT MARKING REMOVABLE LF 2,880.000 2,880.000 0760 649.0801 TEMPORARY PAVEMENT MARKING REMOVABLE LF 680.000 680.000 0760 650.5500 CONSTRUCTION STAKING CURB GUTTER AND LF 220.000 220.000 0760 650.5500 CONSTRUCTION STAKING SESURFACING LF 13,700.000 13,700.000 0760 650.000 CONSTRUCTION STAKING SUPPLEMENTAL LS 1.000 1.000 0760 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 LF 736.000 736.000 0760 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 LF 736.000 736.000 0760 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 LF 736.000 1,745.000 0760 653.0135 PULL BOXES STEEL 24X36-INCH EACH 8.000 8.000 0760 653.000 CONDUIT RIGID NONMETALLIC SCHEDULE 40 LF 1,745.000 1,745.000 0760 655.000 CONDUIT RIGID NONMETALLIC SCHEDULE 40 LF 1,745.000 1,745.000 0760 650 0760 CONDUIT RIGID NONMETALLIC SCHEDULE 40 LF 1,745.000 1,745.000 0760 650 0760 CONDUIT RIGID NONMETALLIC SCHEDULE 40 LF 1,745.000 1,745.000 0760 650 0760 CONDUIT RIGID NONMETALLIC SCHEDULE LF 1,745.000 1,745.000 0760 650 0760 CONDUIT RIGID NONMETALLIC SCHEDULE LF 1,745.000 1,745.000 0760 650 0760 CONDUIT RIGID NONMETALLIC SCHEDULE LF 10,210.000 10,210.000 0760 690.0150 SAWING SAPHALT LF 10,210.000 10,210.000 0760 690.0150 SAWING SAPHALT LF 1,540.000 10,210.000 0760 690.0250 SAWING CONCRETE LF 10,210.000 10,210.000 0760 690.0250 SAWING CONCRETE LF 10,210.000 10,210.000 0760 690.0250 SAWING CONCRETE LF 10,210.000 10,210.000 0760 690.0060 SPECIAL 0. ADJUSTING WATER VALVES EACH 3.000 3.000 0760 SPV.0060 SPECIAL 0. ADJUSTING WATER VALVES EACH 3.000 3.000 0760 SPV.0060 SPECIAL 0. APAVEMENT MARKING GROOVED EACH 3.000 2.000	0710						
0730 044.0883.\$ PAVEMENT MARKI NG GROVED WET REFLECTIVE LF 5,960.000 5,960.000	0720	040. UXX I. 3		LF	2, 125.000	2, 125.000	
D740 647, 0456 PAVEMENT MARKI NG CURB EPOXY LF 90,000 90,000	0730	646. 0883.	S PAVEMENT MARKING GROOVED WET REFLECTIVE	LF	5, 960. 000	5, 960. 000	
D760	0740	647. 0456		LF	90.000	90. 000	
1.530	0750	647. 0606	PAVEMENT MARKING ISLAND NOSE EPOXY	EACH	4.000	4. 000	
TEMPORARY PAVEMENT MARKING REMOVABLE LF 2,880.000 2,880.000 1	0760			LF			
TAPE 4-I NCH TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-I NCH CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER OB10 650. 8000 CONSTRUCTION STAKING RESURFACING CONSTRUCTION STAKING RESURFACING CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 3220-03-61 CONDUIT RIGID NONMETALLIC SCHEDULE 40 CONDUIT RIGID NONMETALLIC SCHEDULE 40 CONDUIT RIGID NONMETALLIC SCHEDULE 40 CONDUIT LOOP DETECTOR CONDUIT RIGID NOON TOOP CON	0770						
0790 649.0801 TEMPORARY PAVEMENT MARKING REMOVABLE LF 680.000 680.000 680.000 TAPE 8-INCH	0780	649. 0400		LF	2, 880. 000	2, 880. 000	
CONSTRUCTION STAKING CURB GUTTER AND LF 220.000	0790	649. 0801	TEMPORARY PAVEMENT MARKING REMOVABLE	LF	680.000	680. 000	
0810 650. 8000 CONSTRUCTI ON STAKI NG RESURFACI NG	0800	650. 5500	CONSTRUCTION STAKING CURB GUTTER AND	LF	220. 000	220. 000	
REFERENCE CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 3220-03-61 0830 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 LF 736.000 736.000 2-I NCH 0840 652.0800 CONDUIT LOOP DETECTOR LFF 1,745.000 1,745.000 0850 653.0135 PULL BOXES STEEL 24X36-I NCH EACH 8.000 8.000 0860 653.0905 REMOVING PULL BOXES EACH 10.000 10.000 0870 655.0700 LOOP DETECTOR LEAD IN CABLE LF 6,578.000 6,578.000 0880 655.0800 LOOP DETECTOR WIRE LF 5,668.000 5,668.000 0890 690.0150 SAWING ASPHALT LF 10,210.000 10,210.000 0900 690.0250 SAWING CONCRETE LF 10,210.000 120.000 0910 SPV.0060 SPECIAL 01. ADJUSTING SANITARY MANHOLE EACH 2.000 2.000 0920 SPV.0060 SPECIAL 02. ADJUSTING WATER VALVES EACH 3.000 3.000 0920 SPV.0060 SPECIAL 03. PAVEMENT MARKING GROOVED EACH 37.000 37.000 0920 SPV.0060 SPECIAL 03. PAVEMENT MARKING GROOVED EACH 2.000 2.000			CURB & GUTTER				
CONSTRUCTION STAKING SUPPLEMENTAL LS	0810	650. 8000		LF	13, 700. 000	13, 700. 000	·
CONTROL (PROJECT) 01. 3220-03-61 0830 652.0225 CONDUI T RIGID NONMETALLIC SCHEDULE 40 LF 736.000 736.000 2-INCH 0840 652.0800 CONDUI T LOOP DETECTOR LF 1,745.000 1,745.000 0850 653.0135 PULL BOXES STEEL 24X36-INCH EACH 8.000 8.000 0860 653.0905 REMOVING PULL BOXES 0870 655.0700 LOOP DETECTOR LEAD IN CABLE LF 6,578.000 6,578.000 0880 655.0800 LOOP DETECTOR WIRE LF 5,668.000 5,668.000 0890 690.0150 SAWING ASPHALT LF 10,210.000 10,210.000 0900 690.0250 SAWING CONCRETE LF 120.000 120.000 0910 SPV.0060 SPECIAL 01. ADJUSTING SANITARY MANHOLE EACH 2.000 2.000 0920 SPV.0060 SPECIAL 02. ADJUSTING WATER VALVES EACH 3.000 37.000 0930 SPV.0060 SPECIAL 03. PAVEMENT MARKING GROOVED EACH 3.000 37.000 0940 SPV.0060 SPECIAL 04. PAVEMENT MARKING GROOVED EACH 2.000 2.000				1.0	4 005	4 000	
0830 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 LF 736.000 736.000 0840 652.0800 CONDUIT LOOP DETECTOR LF 1,745.000 1,745.000 0850 653.0135 PULL BOXES STEEL 24X36-INCH EACH 8.000 8.000 0860 653.0905 REMOVING PULL BOXES 0870 655.0700 LOOP DETECTOR LEAD IN CABLE LF 6,578.000 6,578.000 0880 655.0800 LOOP DETECTOR WIRE LF 5,668.000 5,668.000 0890 690.0150 SAWING ASPHALT LF 10,210.000 10,210.000 0900 690.0250 SAWING CONCRETE LF 120.000 120.000 0910 SPV.0060 SPECIAL 01. ADJUSTING SANITARY MANHOLE EACH 2.000 2.000 0920 SPV.0060 SPECIAL 02. ADJUSTING WATER VALVES EACH 3.000 37.000 0930 SPV.0060 SPECIAL 03. PAVEMENT MARKING GROOVED EACH 3.000 37.000 0940 SPV.0060 SPECIAL 04. PAVEMENT MARKING GROOVED EACH 2.000 2.000	0820	650. 9910		LS	1. 000	1. 000	
2-I NCH CONDUIT LOOP DETECTOR D850 652.0800 CONDUIT LOOP DETECTOR D850 653.0135 PULL BOXES STEEL 24X36-I NCH EACH D860 653.0905 REMOVI NG PULL BOXES D870 655.0700 LOOP DETECTOR LEAD I N CABLE D870 655.0700 LOOP DETECTOR LEAD I N CABLE D870 655.0800 LOOP DETECTOR WI RE D870 690.0150 SAWI NG ASPHALT D870 690.0250 SAWI NG CONCRETE D870 COVERS D870 690.0250 SAWI NG CONCRETE D870 COVERS D870 690.0250 SPV.0060 SPECI AL 01. ADJUSTI NG SANI TARY MANHOLE D870 COVERS	0830	652, 0225		LF	736, 000	736, 000	
0850 653. 0135 PULL BOXES STEEL 24X36-INCH EACH 8. 000 8. 000 0860 653. 0905 REMOVING PULL BOXES EACH 10. 000 10. 000 0870 655. 0700 LOOP DETECTOR LEAD IN CABLE LF 6, 578. 000 6, 578. 000 0880 655. 0800 LOOP DETECTOR WIRE LF 5, 668. 000 5, 668. 000 0890 690. 0150 SAWING ASPHALT LF 10, 210. 000 10, 210. 000 0900 690. 0250 SAWING CONCRETE LF 120. 000 120. 000 0910 SPV. 0060 SPECIAL 01. ADJUSTING SANITARY MANHOLE EACH 2. 000 2. 000 0920 SPV. 0060 SPECIAL 02. ADJUSTING WATER VALVES EACH 3. 000 37. 000 0930 SPV. 0060 SPECIAL 03. PAVEMENT MARKING GROOVED EACH 37. 000 37. 000 PREFORMED THERMOPLASTIC ARROWS TYPE 2 0940 SPV. 0060 SPECIAL 04. PAVEMENT MARKING GROOVED EACH 2. 000 2. 000			2-I NCH		. 55. 555	, 55. 555	
0860 653.0905 REMOVING PULL BOXES EACH 10.000 10.000 0870 655.0700 LOOP DETECTOR LEAD IN CABLE LF 6,578.000 6,578.000 0880 655.0800 LOOP DETECTOR WIRE LF 5,668.000 5,668.000 0890 690.0150 SAWING ASPHALT LF 10,210.000 10,210.000 0900 690.0250 SAWING CONCRETE LF 120.000 120.000 0910 SPV.0060 SPECIAL 01. ADJUSTING SANITARY MANHOLE EACH 2.000 2.000 0920 SPV.0060 SPECIAL 02. ADJUSTING WATER VALVES EACH 3.000 3.000 0930 SPV.0060 SPECIAL 03. PAVEMENT MARKING GROOVED EACH 37.000 37.000 PREFORMED THERMOPLASTIC ARROWS TYPE 2 0940 SPV.0060 SPECIAL 04. PAVEMENT MARKING GROOVED EACH 2.000 2.000	0840						
0870 655.0700 LOOP DETECTOR LEAD IN CABLE LF 6,578.000 6,578.000 0880 655.0800 LOOP DETECTOR WIRE LF 5,668.000 5,668.000 0890 690.0150 SAWING ASPHALT LF 10,210.000 10,210.000 0900 690.0250 SAWING CONCRETE LF 120.000 120.000 0910 SPV.0060 SPECIAL 01. ADJUSTING SANITARY MANHOLE EACH 2.000 2.000 0920 SPV.0060 SPECIAL 02. ADJUSTING WATER VALVES EACH 3.000 3.000 0930 SPV.0060 SPECIAL 03. PAVEMENT MARKING GROOVED EACH 37.000 37.000 PREFORMED THERMOPLASTIC ARROWS TYPE 2 0940 SPV.0060 SPECIAL 04. PAVEMENT MARKING GROOVED EACH 2.000 2.000	0850	653. 0135	PULL BOXES STEEL 24X36-INCH	EACH	8. 000	8. 000	
0870 655.0700 LOOP DETECTOR LEAD IN CABLE LF 6,578.000 6,578.000 0880 655.0800 LOOP DETECTOR WIRE LF 5,668.000 5,668.000 0890 690.0150 SAWING ASPHALT LF 10,210.000 10,210.000 0900 690.0250 SAWING CONCRETE LF 120.000 120.000 0910 SPV.0060 SPECIAL 01. ADJUSTING SANITARY MANHOLE EACH 2.000 2.000 0920 SPV.0060 SPECIAL 02. ADJUSTING WATER VALVES EACH 3.000 3.000 0930 SPV.0060 SPECIAL 03. PAVEMENT MARKING GROOVED EACH 37.000 37.000 PREFORMED THERMOPLASTIC ARROWS TYPE 2 0940 SPV.0060 SPECIAL 04. PAVEMENT MARKING GROOVED EACH 2.000 2.000	0860	653. 0905	REMOVING PULL BOXES	EACH	10. 000	10. 000	
0890 690. 0150 SAWI NG ASPHALT LF 10, 210. 000 10, 210. 000 0900 690. 0250 SAWI NG CONCRETE LF 120. 000 120. 000 0910 SPV. 0060 SPECI AL 01. ADJUSTI NG SANI TARY MANHOLE EACH 2. 000 2. 000 0920 SPV. 0060 SPECI AL 02. ADJUSTI NG WATER VALVES EACH 3. 000 3. 000 0930 SPV. 0060 SPECI AL 03. PAVEMENT MARKI NG GROOVED EACH 37. 000 37. 000 PREFORMED THERMOPLASTI C ARROWS TYPE 2 0940 SPV. 0060 SPECI AL 04. PAVEMENT MARKI NG GROOVED EACH 2. 000 2. 000	0870	655. 0700	LOOP DETECTOR LEAD IN CABLE	LF	6, 578. 000	6, 578. 000	
0900 690. 0250 SAWING CONCRETE LF 120. 000 120. 000 0910 SPV. 0060 SPECIAL 01. ADJUSTING SANITARY MANHOLE EACH 2. 000 2. 000 COVERS 0920 SPV. 0060 SPECIAL 02. ADJUSTING WATER VALVES EACH 3. 000 3. 000 0930 SPV. 0060 SPECIAL 03. PAVEMENT MARKING GROOVED EACH 37. 000 37. 000 PREFORMED THERMOPLASTIC ARROWS TYPE 2 0940 SPV. 0060 SPECIAL 04. PAVEMENT MARKING GROOVED EACH 2. 000 2. 000	0880						
0910 SPV. 0060 SPECIAL 01. ADJUSTING SANITARY MANHOLE EACH 2. 000 2. 000 COVERS 0920 SPV. 0060 SPECIAL 02. ADJUSTING WATER VALVES EACH 3. 000 3. 000 0930 SPV. 0060 SPECIAL 03. PAVEMENT MARKING GROOVED EACH 37. 000 37. 000 PREFORMED THERMOPLASTIC ARROWS TYPE 2 0940 SPV. 0060 SPECIAL 04. PAVEMENT MARKING GROOVED EACH 2. 000 2. 000							
COVERS 0920 SPV. 0060 SPECIAL 02. ADJUSTING WATER VALVES EACH 3. 000 3. 000 0930 SPV. 0060 SPECIAL 03. PAVEMENT MARKING GROOVED EACH 37. 000 37. 000 PREFORMED THERMOPLASTIC ARROWS TYPE 2 0940 SPV. 0060 SPECIAL 04. PAVEMENT MARKING GROOVED EACH 2. 000 2. 000					120.000		
0920 SPV.0060 SPECIAL 02. ADJUSTING WATER VALVES EACH 3.000 3.000 0930 SPV.0060 SPECIAL 03. PAVEMENT MARKING GROOVED EACH 37.000 37.000 PREFORMED THERMOPLASTIC ARROWS TYPE 2 0940 SPV.0060 SPECIAL 04. PAVEMENT MARKING GROOVED EACH 2.000 2.000	0910	SPV. 0060		EACH	2.000	2. 000	
0930 SPV.0060 SPECIAL 03. PAVEMENT MARKING GROOVED EACH 37.000 37.000 PREFORMED THERMOPLASTIC ARROWS TYPE 2 0940 SPV.0060 SPECIAL 04. PAVEMENT MARKING GROOVED EACH 2.000 2.000	0920	SPV NOAN		FACH	3 000	3 000	
PREFORMED THERMOPLASTIC ARROWS TYPE 2 0940 SPV.0060 SPECIAL 04. PAVEMENT MARKING GROOVED EACH 2.000 2.000	0920		SPECIAL 03. PAVEMENT MARKING GROOVED				
			PREFORMED THERMOPLASTIC ARROWS TYPE 2				
PREFURMED IMERMUPLASTIC ARROWS TIPE 3	0940	SPV. 0060		EACH	2. 000	2. 000	
			FALLORWED INERWOPLASTIC ARROWS TIPE 3				

	DATE 28APR14 LI NE		EST	T I T I E S 3220-03-61			
N	IUMBER	I TEM SPV. 0060	ITEM DESCRIPTION SPECIAL 05. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 5	UNI T EACH	TOTAL 2. 000	QUANTI TY 2. 000	
Ö	960	SPV. 0060	SPECIAL 06. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS	EACH	26. 000	26. 000	
C	970	SPV. 0090	SPECIAL 01. PAVEMENT MARKING GROOVED PRE FORMED THERMOPLASTIC STOP LINE 18-INCH	LF	650. 000	650. 000	
C	980	SPV. 0105	SPECIAL 01. REMOVE LOOP DETECTOR WIRE AND LEAD-IN CABLE STH 158 & 68TH AVENUE	LS	1. 000	1. 000	
C	1990	SPV. 0105	SPECIAL 02. REMOVE LOOP DETECTOR WIRE AND LEAD-IN CABLE STH 158 & 104TH AVENUE	LS	1. 000	1. 000	
1	000	SPV. 0105	SPECIAL 03. REMOVING OVERHEAD SIGN SUPPORT S-30-4	LS	1. 000	1. 000	
1	010	SPV. 0105	SPECIAL 04. EVP DETECTOR HEAD INSTALLATION STH 158 & 104TH AVENUE	LS	1. 000	1. 000	
1	020	SPV. 0105	SPECIAL 05. EVP DETECTOR HEAD INSTALLATION STH 158 & 88TH AVENUE	LS	1. 000	1. 000	
1	030	SPV. 0105	SPECIAL 06. EVP DETECTOR HEAD INSTALLATION STH 158 & 68TH AVENUE	LS	1. 000	1. 000	

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REMOVALS

	204.0110	204.0120	204.0150	204.0165
	REMOVING	REMOVING	REMOVING	REMOVING
	ASPHALTIC	ASPHALTIC	CURB &	GUARDRAIL
	SURFACE	SURFACE	GUTTER	
		MILLING		
LOCATION	SY	SY	LF	LF
STA 16+50 - STA 64+00				
STAGE 1		24,000	12	60
STAGE 2	165	14,300	215	130
STA 64+00 - STA 91+10		12,500		
STA 91+10 - STA 128+00	45			520
STA 128+00 - STA 150+00		6,200		3,790
STA 150+00 - STA 183+85	1	16,000	12	1,460
TOTAL	211	73.000	239	5.960

SAWING

690.0150 SAWING	690.0250 SAWING
ASPHALT	CONCRETE
LF	LF
4,820	10
810	100
1,910	
2,600	10
10.140	120
	SAWING ASPHALT LF 4,820 810 1,910

CONCRETE

	416.0610 DRILLED TIF	601.0411 CONCRETE CURB & GUTTER
	BARS	30-INCH TYPE D
LOCATION	EACH	LF
INLET WORK		150
STA 56+00 MEDIAN	8	220
104TH AVE LOOPS	12	18
68TH AVE LOOPS	8	12
TOTAL	28	400

HWY: STH 158

BASE AGGREGATE DENSE

LOCATION	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON
STAGE 1		
UNDER CURB AND GUTTER FOR LOOP REPLACEMENT**		5
STAGE 2		
UNDER CURB AND GUTTER FOR LOOP REPLACEMENT**		5
MEDIAN OPENING STA 56+00		115
68TH AVE		
UNDER CURB AND GUTTER FOR LOOP REPLACEMENT**		5
BEAM GUARD		
STA 124+18 TO STA 160+24 RT	245	
STA 126+36 TO STA 160+74 LT	235	
TOTAL	480	130

** 6" DEPTH UNDER CONCRETE CURB AND GUTTER

SHAPING SHOULDERS

305.0500 SHAPING SHOULDERS LOCATION STA EASTBOUND STA 16+50 TO STA 91+10 66 STA 124+18 TO STA 160+24 10 STA 160+24 TO STA 182+85 22 WESTBOUND 72 STA 16+50 TO STA 91+10 STA 126+36 TO 160+74 18 STA 160+74 TO 183+85 23 TOTAL 211

ASPHALT

	390.0203	455.0115	455.0605	460.1103	465.0125	465.0400	465.0475
	BASE	ASPHALTIC	TACK	HMA	ASPHALTIC	ASPHALTIC	ASPHALT
	PATCHING	MATERIAL	COAT	PAVEMENT	SURFACE	SHOULDER	CENTER LINE
	ASPHALTIC	PG64-22		TYPE E-3	TEMPORARY	RUMBLE	RUMBLE STRIP
						STRIP	2-LANE RURAL
LOCATION	SY	TON	GAL	TON	TON	LF	LF
STA 16+50 - STA 64+00						4,900	
STAGE 1	1,970	200	410	3,650	4		
STAGE 2	240	120	360	2,060	7		
STA 64+00 - STA 91+10	270	100	270	1,850			1,600
STA 130+05 - STA 150+00	260	50	120	930			1,620
STA 150+00 - STA 183+85	330	130	340	2,370			
TOTAL	3,070	600	1,500	10,860	11	4,900	3,220

MISCELLANEOUS QUANTITIES

NOTE: UNLESS OTHERWISE NOTED, ALL ITEMS ARE CATEGORY 0010

SHEET:

COUNTY: KENOSHA FILE NAME : ___ PLOT NAME : ___

PROJECT NO: 3220-03-61

PLOT SCALE: 1:1

2

EXISTING DRAINAGE STRUCTURE

						EROSION		
			EXISTIN	١G		CONTROL		
			STRUCTURE COVER		WORK	INLET		
No.	STATION	OFFSET	TYPE	TYPE	CODE	PROTECTION	REMARKS	
1	20+17	16.7' LT	2 x 3 - FT	Н	В	С		
2	20+17	12.4' LT	2 x 3 - FT	Н	В	С		
3	22+52	16' LT	2 x 3 - FT	Н	Α	С		
4	22+52	12' LT	2 x 3 - FT	Н	В	С		
5	25+52	19' LT	2 x 3 - FT	Н		С	NO WORK REQUIRED	
6	25+52	12.4' LT	2 x 3 - FT	Н		С	NO WORK REQUIRED	
7	29+02	28.5 ' LT	2 x 3 - FT	Н	А	С		
8	29+02	12.5' LT	2 x 3 - FT	Н	Α	С		
9	32+52	26.4' LT	2 x 3 - FT	Н	Α	С		
10	32+52	13' LT	2 x 3 - FT	Н		С	NO WORK REQUIRED	
11	36+02	29.2' LT	2 x 3 - FT	Н		С	NO WORK REQUIRED	
12	36+02	13' LT	2 x 3 - FT	Н	С	С		
13	39+52	29.5' LT	2 x 3 - FT	Н	С	С		
14	39+52	13.2' LT	2 x 3 - FT	Н	С	С		
15	43+02	29.7' LT	2 x 3 - FT	Н	Α	С		
16	43+02	13.4' LT	2 x 3 - FT	Н	Α	С		
17	46+52	29.8' LT	2 x 3 - FT	Н	В	С		
18	46+52	19' LT	2 x 3 - FT	Н	Α	С		
19	46+54	91' LT	2 x 3 - FT	Н	С	С		
20	49+87	18.7' LT	2 x 3 - FT	Н	Α	D		
21	49+87	14.5' LT	2 x 3 - FT	Н		D	NO WORK REQUIRED	
22	55+23	14.4' LT	2 x 3 - FT	Н		D	NO WORK REQUIRED	
23	55+23	3.2' LT	2 x 3 - FT	Н		D	NO WORK REQUIRED	
24	56+77	45.7' RT	2 x 3 - FT	Н		С	NO WORK REQUIRED	
25	58+97	4.1' RT	2 x 3 - FT	Н		С	NO WORK REQUIRED	
26	58+97	21.5' RT	2 x 3 - FT	Н		С	NO WORK REQUIRED	
27	62+47	13.2' RT	2 x 3 - FT	Н		С	NO WORK REQUIRED	
28	62+47	25.1' RT	2 x 3 - FT	Н	Α	С		
29	64+47	13.9' RT	2 x 3 - FT	Н		D	NO WORK REQUIRED	
30	64+47	19.5' RT	2 x 3 - FT	Н		D	NO WORK REQUIRED	

EXISTING DRAINAGE STRUCTURE QUANTITY SUMMARY

	WORK				
_	CODE	QUANTITY	UNIT	ITEM	DESCRIPTION
-	Α	9	EACH	611.8115	ADJUSTING INLET COVERS
	В	4	EACH	611.0430	RECONSTRUCTING INLETS
	С	4	EACH	611.0624	INLET COVERS TYPE H
		24	EACH	628.7015	INLET PROTECTION TYPE C
		6	EACH	628.7020	INLET PROTECTION TYPE D

SANITARY SEWER

		SPV.0060.01 ADJUSTING	611.8120.S COVER	690.0150 SAWING
CATEGO	D\/ 0000	SANITARY	PLATES	ASPHALT
CATEGORY 0020		MANHOLE	TEMPORARY	
		COVERS		
STATION	OFFSET	EACH	EACH	LF
49+98	51.5' LT	1	1	20
53+97	52.2' LT	1	1	20
TOTAL		2	2	40

WATER VALVE

CATEGO	RY 0020	SPV.0060.02 ADJUSTING WATER VALVES	690.0150 SAWING ASPHALT
STATION	OFFSET	EACH	LF
171+38	33' LT	1	10
182+30	30' RT	1	10
182+35	30' LT	1	10
TOTAL		3	30

NOTE: UNLESS OTHERWISE NOTED, ALL ITEMS ARE CATEGORY 0010 * ADDITIONAL QUANTITIES SHOWN ELSEWHERE

_						
	PROJECT NO: 3220-03-61	HWY: STH 158	COUNTY: KENOSHA	MISCELLANEOUS QUANTITIES	SHEET:	E

FILE NAME : _____ PLOT DATE : ____ PLOT BY : ____ PLOT NAME : ____ PLOT SCALE : 1:1

		BARRIER SY	STEM GRA	DING SHAPIN	IG FINISHING								BEA	M GUARD	ITEMS				
STATION	*EXCAVATION COMMON	* BORROW	* SALVAGED TOPSOIL	TYPE B	R MIXTURE NO. 30	* EROSION I CLASS I TYPE A	614.0				614.0200 STEEL THR BEAM STRUCTUR	IE STEEL CLASS	05 614.0345 L PLATE BEAM A SHORT RADIUS		614.0400 ADJUSTINO STEEL PLATE	G GUARD	RAIL NED GUARD	MGS RAIL THRIE BEA	614.2610 M GUARDRAIL N TERMINAL
(POST # 1)	CY	CY	SY	CWT	LB	SY	EAC	H			APPROACE				BEAM GUAR		v 5	TIVALIONIO	EAT
139+70 LT	1	38	90	0.06	2	90	1		LOCATION		LF	LF	LF	EACH	LF	LF		LF	EACH
160+20 RT	4	25	85	0.05	2	85	1		STA 120+85-		21	162			860	335			
160+70 LT	10	8	95	0.06	2	95	1		STA 128+00			2,711	50	1		25			1
	* ITEMS AND C	QUANTITIES FO	OR INFORMA ⁻	TION ONLY.		TOTAL	3		STA 150+00	TOTAL	63	2,873	50	1	860	360	1,77		3
											LANDSCAP	ING AND E	ROSION CON	ΓROL					
									625.0100	625.0500	627.0200	628.1504	628.1520	628.7	7504 6:	28.7570	629.0210	630.0130	630.0200
									TOPSOIL	SALVAGED	MULCHING	SILT	SILT FENCE	TEMPO			FERTILIZER	SEEDING	SEEDING
	ED0010	NI CONTROL								TOPSOIL		FENCE	MAINTENANC	E DITCH C	HECKS	BAGS	TYPE B	MIXTURE NO. 30	TEMPORARY
	EROSIO	N CONTROL			LOCATION				SY	SY	SY	LF	LF	LI	F	EACH	CWT	LB	LB
	e	328.1905	628.1910	0	STA 30+00 SI		-		85		85			-	-		0.06	2	
		BILIZATIONS	MOBILIZATION		STA 56+00 ME	DIAN			130		130						0.09	3	
		ROSION	EMERGEN		INLET WORK	ID COTH AVE	1 00DC			45	45						0.03	1	
	C	ONTROL	EROSIOI	N	104TH AVE AN STA 172+50 F				 NT 30	140 	140 30		 	 			0.09 0.02	3 1	
			CONTRO	DL	BEAMGUARD	EIVIOVIING D	XIVE VVAI P	\ _ IVIII \ AI	N1 30		30				-		0.02	ı	
LOCATON		EACH	EACH			6 - 131+71 L ⁻	& RT		260		260				-		0.16	5	
					STA 147+59	9 - 152+52 L ⁻	& RT		195		195				-		0.12	4	
TOTAL		3	1		STA 139+6	2 LT						80	80	10	0				
					STA 160+24	1 RT						200	200	10	0				
					STA 160+74							200	200	10					
					UNDISTRIBU	IED (25%)			175	45	220	120	120	10	0	10	0.15	5	15
						тоти	L		875	230	1,105	600	600	40	0	10	0.72	24	15
									TRAFFI	C CONTROL									
			А	643.0200 SURVEILLANO AND MAINTENA	CE DF NCE	3.0300 RUMS	643.0 BARRIC TYPI	CADES	643.0 WARNINO TYP	LIGHTS	643.0715 WARNING LIGH TYPE C		643.0800 OW BOARDS		3.0900 GNS		3.1050 S PCMS		
				3220-03-61 DAYS	EACH	DAYS	EACH	DAYS	EACH	DAYS	EACH DA	YS EAC	H DAYS	EACH	DAYS	EACH	DAYS	ESTIMATED DURATION	
	STAGE 1 STAGE 2 STA 64+00 To	O STA 183+85			193 169	5,597 5,239	17 10	493 310	34 20	986 620	36 1,0- 27 83		29 31	45 27	1,305 837	2	20 	29 31	
		WORK					46	690	63	945				26	390	4	88	15	
		LDER CLOSU	RES		20	60								5	15			3	
		-				40.000		1,493		2,551	1,8	 81	60		2,547		108		
		TOTAL		60		10,896		1,100		2,00	1,0	01	00		,				
		TOTAL		60		10,896								No.		SS OTHER\		, ALL ITEMS ARE	CATEGORY 00

TRAFFIC CONTROL I	DETOUR
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	643.0920 COVERING SIGN			3000 R SIGNS	ESTIMATED
	PER CLOSURE	EACH	EACH	DAYS	DURATION
STA 64+00 TO STA 183+85	7	105	151	2,265	15
TOTAL		105		2,265	

TEMPORARY PAVEMENT MARKING

	646.0600 REMOVING	RE	649.0 MOVABLE		Э	649.0801 REMOVABLE
	PAVEMENT	BLACK	YELLOW	WH	ITE	TAPE 8-INCH
	MARKINGS	12.5' LINE	SOLID	SOLID	4' LINE	WHITE
LOCATION	LF	LF	LF	LF	LF	LF
STAGE 1 EASTBOUND LANE CLOSURE				1,350		
STAGE 1 WESTBOUND LANE CLOSURE	900			500		
STAGE 1 & 2 EASTBOUND LANE CLOSURE		190				
STAGE 2 EASTBOUND LANE CLOSURE			760			
PRIOR TO PERMANENT MARKING STA 168+00 TO 183+85					80	680
SUBTOTAL		190	760	1,850	80	
TOTAL	900		2,88	30		680

PAVEMENT MARKING

	646.0 EPOXY		646.0126 EPOXY		0406 POXY 4-INCH	646.0881.S GROOVED V		0883.S CTIVE TAPE	647.0456 CURB	647.0606 ISLAND	_	0726 AL EPOXY			SPV.0060.05 EFORMED THE			648.0100 LOCATING
	YELLOW	WHITE	8-INCH	YEL	LOW	4-INCH	8-II	NCH	_ EPOXY	NOSE	12-IN	NCH	ARROWS	ARROWS	ARROWS	WORDS	STOP LINE	NO-PASSING
			WHITE	SOLID	12.5' LINE	12.5' LINE	SOLID	3' LINE	_	EPOXY	YELLOW	WHITE	TYPE 2	TYPE 3	TYPE 5		18-INCH	ZONES
LOCATION	LF	LF	LF	LF	LF	LF	LF	LF	LF	EACH	LF	LF	EACH	EACH	EACH	EACH	LF	MI
STA 16+50 - STA 64+00	9,580	9,020				2,100	2,270		90	4		160	12	1	2	7	225	
STA 64+00 - STA 91+10	240	4,910		4,345	125		230				330						90	0.51
STA 91+10 - STA 130+05	9,520	8,840	1,300	630			2,090	210			280		16			16	185	
STA 130+05 - STA 183+85	300	10,270		10,680	420	25	940	220			280		9	1		3	150	1.02
SUBTOTAL	19,640	33,040		15,655	545		5,530	430			890	160						
TOTAL	52,6	680	1,300	16,	200	2,125	5,	960	90	4	1,0	50	37	2	2	26	650	1.53

CONSTRUCTION STAKING

650.5500 650.8000 CURB GUTTER RESURFACING AND REFERENCE **CURB & GUTTER** LOCATION LF LF STA 16+00 - STA 92+00 220 7,600 STA 123+00 TO STA 184+00 6,100 13,700 TOTAL 220

NOTE: UNLESS OTHERWISE NOTED, ALL ITEMS ARE CATEGORY 0010

_						
	PROJECT NO: 3220-03-61	HWY: STH 158	COUNTY: KENOSHA	MISCELLANEOUS QUANTITIES	SHEET:	E

FILE NAME : _____ PLOT DATE : ____ PLOT NAME : ____ PLOT NAME : ____ PLOT SCALE : 1:1

3

TYPE II PERMANENT SIGNING

						637.2210	637.2230	637.2215	638.2602	638.3000	634.0618	638.2102		
SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	W [IN.]	SIGN SIZE x x		SIGNS TYPE II REFLC H [SF]	SIGNS TYPE II REFLC F [SF]	SIGNS TYPE II REFLC H FOLDING [SF]	REM SIGNS TYPE II (EA)	REM SMALL SIGN SUP (EA)	WOOD POSTS 4"X 6"x18' [EA]	MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
1	*NOT USED*			Х										
2	*NOT USED*			х										
3	R3-8C			Х					1	1				
4	*NOT USED*			Х										
5	R1-1(3)		36	Х	36	7.460			1	1	1			
6	R4-7(2M)		24	Х	30	5.000					1			
7	R4-7(2M)		24	Х	30	5.000			1	1	1			
8	R3-20L(3)		36	Х	54	13.500					1			
9	R2-1(3)	55 MPH	36	Х	48	12.000			1	1	1			
10	R2-1(3)	55 MPH	36	Х	48	12.000			1	1	1			
11	R2-1(3)	45 MPH	36	Х	48	12.000			1	1	1			
12	R2-1(3)	45 MPH	36	Х	48	12.000			1	1	1			
13	W3-3(3)		36	Х	36		9.000		1	1	1			
14	W3-3(3)		36	Х	36		9.000		1	1	1			
15	D1-2	[A] RUTH HARMAN DR 104TH AVE [A]	138	х	36	34.500			1	2	2			
16		REDUCED SPEED AHEAD		Х					1	1				
17		45 MPH		Х					1					
18		REDUCED SPEED AHEAD		Х					1	1				
19		45 MPH		х					1					
20	W3-5(3)	45 MPH	36	х	36		9.000				1			
21	W3-5(3)	45 MPH	36	Х	36		9.000				1			
22	J1-1(2S)		24	Х	39	6.500			1	1	1			
	M2-1		21	х	15									
	M1-6	STH 158	24	х	24									
23	W9-1R(3)		36	Х	36		9.000		1	1	1			
24	R3-20L(3)		36	х	54	13.500			1	1	1			
25	W4-2R(3)		36	х	36		9.000				1			
26	W4-2R(3)		36	х	36		9.000		1	1	1			
27	D1-2	[A] 104TH AVE RUTH HARMAN DR [A]	138	Х	36	34.500			1	2	2			

SHEET 1 OF 5

E

FILE NAME : N:\SPO\Operations\Traffic_Ops\Signing\Miscellaneous Quantities\32200361\030501_mq.pptx

HWY: STH 158

PROJECT NO: 3220-03-61

PLOT DATE: 09-JAN-2014

COUNTY: KENOSHA

PLOT BY : DOTKLM

PERMANENT SIGNING QUANTITIES

PLOT NAME: 030501_mq.pdf

PLOT SCALE : 1:1

				637.2210	637.2230	637.2215	638.2602	638.3000	634.0618	638.2102		
				SIGNS	SIGNS	SIGNS		REM				
	SIGN		SIGN	TYPE II	TYPE II	TYPE II	REM	SMALL	WOOD	MOVE	MOUNT	
SIGN	CODE	SIGN	SIZE	REFLC	REFLC	REFLC H	SIGNS	SIGN	POSTS	SIGNS	ON SAME	
NO.	& SIZE	MESSAGE	W x H	Н	F	FOLDING	TYPE II	SUP	4"X 6"x18'	TYPE II	POST AS	
140.	G 0.22	WESS/ SE	[IN.] x [IN.]	[SF]	[SF]	[SF]	(EA)	(EA)	[EA]	[EA]	SIGN#	REMARKS / NEW SIGN LOCATION
			[[[4.]]	[0,]	[OI]	[01]	(LA)	(LA)	[[[[[[01011#	INCIDENTAL SIGN EGGATION
28	W3-3(3)		36 x 36		9.000		1	1	1			
29	W3-3(3)		36 x 36		9.000		1	1	1			
30	W6-2(2M)		36 x 36		9.000		1	1	1			
31	W6-2(2M)		36 x 36		9.000		1	1	1			
32	W4-2R		x				1	1				
33	J4-1(2M)		24 x 36	6.000			1		1			
	M3-4		24 x 12									
	M1-6	STH 158	24 x 24									
34	R6-2L(2M)		30 x 36	7.500			1					MOUNT ON SIGNAL POLE
35	R1-1F(3)		36 x 36			7.460	1					MOUNT ON SIGNAL POLE
36	R1-1F(3)		36 x 36			7.460	1					MOUNT ON SIGNAL POLE
37	R4-7(3)		36 x 48	12.000			1					MOUNT ON SIGNAL POLE
38	R4-7(3)		36 x 48	12.000								MOUNT ON SIGNAL POLE
39	R5-1(3)		36 x 36	9.000								MOUNT ON SIGNAL POLE
40	R1-1F(3)		36 x 36			7.460	1					MOUNT ON SIGNAL POLE
41	R1-1F(3)		36 x 36			7.460	1					MOUNT ON SIGNAL POLE
42	R6-2L(2M)		30 x 36	7.500			1					MOUNT ON SIGNAL POLE
43	J4-1(2M)		24 x 36	6.000			1		1			
	M3-2		24 x 12									
	M1-6	STH 158	24 x 24									
44	R6-3(2S)		30 x 24	5.000			1					MOUNT ON SIGNAL POLE
45	R1-1F(3)		36 x 36			7.460	1					MOUNT ON SIGNAL POLE
46	J3-2(2S)		48 x 57	19.000			1	1	1			
	M3-4		24 x 12									
	M1-6	STH 158	24 x 24									
	M6-1		21 x 21									
	M3-2		24 x 12									
	M1-6	STH 158	24 x 24									
	M6-1		21 x 21									
47	R5-1(3)		36 x 36	9.000								MOUNT ON SIGNAL POLE

SHEET 2 OF 5

PROJECT NO: 3220-03-61 HWY: STH 158 COUNTY: KENOSHA PERMANENT SIGNING QUANTITIES SHEET: **E**

7.460

R1-1F(3)

MOUNT ON SIGNAL POLE

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TYPE II PERMANENT SIGNING

				637.2210	637.2230	637.2215	638.2602	638.3000	634.0618	638.2102		
				SIGNS	SIGNS	SIGNS		REM				
	SIGN		SIGN	TYPE II	TYPE II	TYPE II	REM	SMALL	WOOD	MOVE	MOUNT	
SIGN	CODE	SIGN	SIZE	REFLC	REFLC	REFLC H	SIGNS	SIGN	POSTS	SIGNS	ON SAME	
NO.	& SIZE	MESSAGE	W x H	Н	F	FOLDING	TYPE II	SUP	4"X 6"x18'	TYPE II	POST AS	
			[IN.] x [IN.]	[SF]	[SF]	[SF]	(EA)	(EA)	[EA]	[EA]	SIGN #	REMARKS / NEW SIGN LOCATION
					' '							
49	W11-8(3)		36 x 36		9.000		1	1	1			
50	R5-1(3)		36 x 36	9.000			1				#49	BACK OF SIGN #49
51	R4-7(3)		36 x 48	12.000			1	1	1			
52	W5-54(2S)		18 x 18		2.250						#51	
53	W6-3(2S)		36 x 36		9.000		1	1	1			
54	W6-1(2S)		36 x 36		9.000		1	1	1			
55	W14-3(2S)		48 x 36		6.000		1	1	1			
56	R1-1(3)		36 x 36	7.460			1	1	1			
57	R1-1(3)		36 x 36	7.460			1	1	1			
58	W14-3(2S)		48 x 36		6.000		1	1	1			
59	W11-8(3)		36 x 36		9.000		1		1			
60	J1-1(2S)		24 x 39	6.500			1	1	1			
	M2-1		21 x 15									
	M1-5A	СТН Н	24 x 24									
61	W3-3(3)		36 x 36		9.000		1	1	1			
62	R3-8W(2S)		30 x 54	11.250			1	2	2			
63		DMV SERVICE CENTER	x					2	2	1		
64	J1-1(2S)		24 x 39	6.500			1	1	1			
	M2-1		21 x 15									
	M1-6	STH 158	24 x 24									
65	J4-1(2S)		24 x 36	6.000			1	1	1			
	M3-2		24 x 12									
	M1-6	STH 158	24 x 24									
66	R3-8W		x					2	2	1		
67	J1-1(2S)		24 x 39	6.500			1	1	1			
	M2-1		21 x 15									
	M1-6	STH 158	24 x 24									
68	J4-1(2S)		24 x 36	6.000					1			
	M3-4		24 x 12									
	M1-6	STH 158	24 x 24									
69	R2-1(2S)	55 MPH	24 x 30	5.000					1			

SHEET 3 OF 5

Е PROJECT NO: 3220-03-61 COUNTY: KENOSHA PERMANENT SIGNING QUANTITIES SHEET: HWY: STH 158

	1	1				637.2210	637.2230	637.2215	638.2602	638.3000	634.0618	638.2102		1
						007.2210	037.2230	037.2213	030.2002	030.3000	034.0010	030.2102		
						SIGNS	SIGNS	SIGNS		REM				
	SIGN			CICN		TYPE II	TYPE II		DEM		WOOD	NAON/E	MOUNT	
01011		0.01		SIGN				TYPE II	REM	SMALL	WOOD	MOVE	MOUNT	
SIGN	CODE	SIGN		SIZE		REFLC	REFLC -	REFLC H	SIGNS	SIGN	POSTS	SIGNS	ON SAME	
NO.	& SIZE	MESSAGE	W	Х	Н	Н	F	FOLDING	TYPE II	SUP	4"X 6"x18'	TYPE II	POST AS	
			[IN.]	Х	[IN.]	[SF]	[SF]	[SF]	(EA)	(EA)	[EA]	[EA]	SIGN #	REMARKS / NEW SIGN LOCATION
70	W14-3(2S)		48	X	36		6.000		1	1	1			
71	W3-5(2S)	45 MPH	36	X	36		9.000		2	1	1			
72	W14-3(2S)		48	Х	36		6.000		1				#71	BACK OF SIGN #71
73	R2-1(2M)	45 MPH	30	Х	36	7.500			1		1			
74	W5-52R(2S)		12	х	36		3.000		1	1	1			4' MOUNTING HEIGHT
75	W5-52L(2S)		12	Х	36		3.000		1	1	1			4' MOUNTING HEIGHT
76	W5-52R(2S)		12	Х	36		3.000		1	1	1			4' MOUNTING HEIGHT
77	R2-1(2S)	55 MPH	24	х	30	5.000			1	1	1			
78	W5-52L(2S)		12	х	36		3.000		1		1			4' MOUNTING HEIGHT
79	W14-3(2S)		48	Х	36		6.000		1	1	1			
80	R2-1(2S)	45 MPH	24	Х	30	5.000			1	1	1			
81	R2-1(2S)	45 MPH	24	Х	30	5.000			1	1	1			
82	W3-3(3)		36	х	36		9.000		1	1	1			
83	R3-8W(2S)		30	х	54	11.250			1	2	2			
84	R1-1F(3)		36	Х	36			7.460	1					MOUNT ON SIGNAL POLE
85	R1-1F(3)		36	Х	36			7.460	1					MOUNT ON SIGNAL POLE
86	R3-7R(3)		36	Х	36	9.000			1	1	1			
87	W11-2(3)		36	х	36		9.000		1	1	1			
88	W16-9P(3)		30	х	18		3.750						#87	
89	R1-1F(3)		36	Х	36			7.460	1					MOUNT ON SIGNAL POLE
90	R1-1F(3)		36	х	36			7.460	1					MOUNT ON SIGNAL POLE
91	R3-8W(2S)		30	Х	54	11.250			1	2	2			
92	R3-7R(3)		36	х	36	9.000			1	1	1			
93	W3-3(3)		36	х	36		9.000		1	1	1			
94	W11-2(3)		36	Х	36		9.000		1	1	1			
95	W16-7L(3)		30	х	18		3.750		1				#94	
96	W11-2(3)		36	х	36		9.000		1					
97	W16-7L(3)		30	x	18		3.750		1				#96	
98	R1-1(3)		36	x	36	7.460			1	1	1			
99	W1-4R			x					1	1				
100	W6-1(2S)		36	x	36		9.000		1	1	1			
	(=0)			^			0.000		'	<u> </u>				

SHEET 4 OF 5

PROJECT NO: 3220-03-61 HWY: STH 158 COUNTY: KENOSHA PERMANENT SIGNING QUANTITIES SHEET: **E**

	T			637.2210	637.2230	637.2215	638.2602	638.3000	634.0618	638.2102		
				037.2210	037.2230	037.2213	030.2002	030.3000	034.0010	030.2102		
				SIGNS	SIGNS	SIGNS		REM				
	SIGN		SIGN	TYPE II	TYPE II	TYPE II	REM	SMALL	WOOD	MOVE	MOUNT	
SIGN	CODE	SIGN	SIZE	REFLC	REFLC	REFLC H	SIGNS	SIGN	POSTS	SIGNS	ON SAME	
NO.	& SIZE	MESSAGE	W x H	Н	F	FOLDING	TYPE II	SUP	4"X 6"x18'	TYPE II	POST AS	
			[IN.] x [IN.]	[SF]	[SF]	[SF]	(EA)	(EA)	[EA]	[EA]	SIGN #	REMARKS / NEW SIGN LOCATION
			[ma] and [ma]		[]	[0.1]	(=: 4	(4	[1	[]		
101	J1-1(2S)		24 x 39	6.500			1	1	1			
	M2-1		21 x 15									
	M1-6	STH 31	24 x 24									
102	D1-1	95TH AVE	60 x 15	6.250					2			SHEET 5 OF12
103	D1-1	95TH AVE	60 x 15	6.250					2			SHEET 6 OF 12
104	D1-1	68TH AVE	60 x 15	6.250					2			SHEET 11 OF 12
105	D1-1	68TH AVE	60 x 15	6.250					2			SHEET 12 OF 12
106	R3-50A		x				1					SHEET 2 OF 12
107	R2-1(3)	55 MPH	36 x 48	12.000					1			SHEET 4 OF 12
108	J2-2(2S)		48 x 57	19.000					2			SHEET 6 OF12
	M3-1		24 x 12									
	M1-5A	СТН Н	24 x 24									
	M5-1L		21 x 21									
	M3-3		24 x 12									
	M1-5A	СТН Н	24 x 24									
	M5-1R		21 x 21									
109	J2-2(2S)		48 x 57	19.000					2			SHEET 8 OF12
	M3-3		24 x 12									
	M1-5A	СТН Н	24 x 24									
	M5-1L		21 x 21									
	M3-1		24 x 12									
	M1-5A	стн н	24 x 24									
	M5-1R		21 x 21									
110	W5-52L		x					1	1	1		4' MOUNTING HEIGHT - SHEET 9 OF 12
111	W5-52R		x					1	1	1		4' MOUNTING HEIGHT - SHEET 9 OF 12
	1			1				1		I	1	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SHEET 5 OF 5

PROJECT NO: 3220-03-61 HWY: STH 158 COUNTY: KENOSHA PERMANENT SIGNING QUANTITIES SHEET: **E**

74.600

86

112

113

W5-52R

W5-52L TOTALS

TYPE II PERMANENT SIGNING

496.590

262.500

71

6

4' MOUNTING HEIGHT - SHEET 9 OF 12 4' MOUNTING HEIGHT - SHEET 9 OF 12 |3

TYPE II PERMANENT SIGNING -3220-03-61 STH 158

						637.2210	
						SIGNS	
	SIGN			SIGN		TYPE II	
SIGN	CODE	SIGN		SIZE		REFLC	
NO.	& SIZE	MESSAGE	W	х	Н	н	
			[IN.]	х	[IN.]	[SF]	REMARKS / NEW SIGN LOCATION
1000	M1-94S	[SHIELD] 52ND ST	72	х	18	9.000	MOUNT ON OVERHEAD MAST ARM
1001	M1-94S	[SHIELD] 52ND ST	72	х	18	9.000	MOUNT ON OVERHEAD MAST ARM
1002	M1-94H(MOD)	[A] RUTH HARMAN DR	114	х	36	28.500	MOUNT ON OVERHEAD MAST ARM
		104TH AVE [A]					
1003	M1-94H(MOD)	[A] 104TH AVE	114	х	36	28.500	MOUNT ON OVERHEAD MAST ARM
		RUTH HARMAN DR [A]					
1004	M1-94S	[H] 88TH AVE	72	Х	18	9.000	MOUNT ON OVERHEAD MAST ARM
1005	M1-94S	[H] 88TH AVE	72	х	18	9.000	MOUNT ON OVERHEAD MAST ARM
1006	M1-94S	[SHIELD] 52ND ST	72	х	18	9.000	MOUNT ON OVERHEAD MAST ARM
1007	M1-94S	[SHIELD] 52ND ST	72	x	18	9.000	MOUNT ON OVERHEAD MAST ARM
1008	M1-94H	68TH AVE	54	х	18	6.750	MOUNT ON OVERHEAD MAST ARM
1009	M1-94H	68TH AVE	54	x	18	6.750	MOUNT ON OVERHEAD MAST ARM
1010	M1-94S	[SHIELD] 52ND ST	72	x	18	9.000	MOUNT ON OVERHEAD MAST ARM
1011	M1-94S	[SHIELD] 52ND ST	72	х	18	9.000	MOUNT ON OVERHEAD MAST ARM
	TOTALS					142.500 *	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SHEET 1 OF 1

SHEET:

E

COUNTY: KENOSHA PROJECT NO: 3220-03-61 HWY: STH 158 PERMANENT SIGNING QUANTITIES FILE NAME : N:\SPO\Operations\Traffic_Ops\Signing\Miscellaneous Quantities\32200361\030502_mq.pptx PLOT BY : DOTKLM PLOT SCALE: 1:1

13

5

REMOVE OVERHEAD SIGN SUPPORTS - MISC QUANTITIES	3220-03-61 STH 158
LOCATION	REMOVING OVERHEAD SIGN SUPPORT S-30-4 SPV.0105.03 L.S.
STH 158 WESTBOUND AT STA 30+00	1
TOTAL	1

SHEET 1 OF 1

PROJECT NO: 3220-03-61 HWY: STH 158 COUNTY: KENOSHA MISCELLANEOUS QUANTITIES SHEET: **E**

STH 158 & 104TH AVE 3220-03-61

CONDUIT

OONDOIT				
				652.0225
				CONDUIT
				NONMET.
				2-INCH
LOC.	TO	LOC.		L.F.
EXT.1		PB23		21
PB23		PB24		177
EXT.2		PB1		21
PB21		PB22		175
			TOTAL	394

PULL BOXES

			653.0135
PULL			PULL BOXES
вох			24"x36"
NO.	LOCATION*		EACH
PB21	45+83.0', 27.0 RT		1
PB22	44+9.0', 24.0' RT		1
PB23	52+49.0', 67.0' LT		1
PB24	54+23.0', 56.0' LT		1
		TOTAL	4

^{*} FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

TRAFFIC DETECTOR LOOPS

							652.0800	655.0700	655.0800
						SDD	CONDUIT	LEAD IN	LOOP DETECTOR
LOOP	HOME		SIZE	NO. OF	PAVEMENT	INSTALLATION	LOOP DETECTOR	CABLE	WIRE
NO.	RUN PB	LOCATION*	(FT)x(FT)	TURNS	TYPE	REFERENCE	L.F.	L.F.	L.F.
21	PB24	54+22.0', 34.0' LT	6'X18'	5	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)	62	495	270
22	PB23	52+48.0', 40.0' LT	6'X18'	4	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)	65	315	225
41	PB20	49+7.0', 87.0' LT	6'X30'	3	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)	82	126	242
42	PB20	49+20.0, 86.0' LT	6'X30'	3	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)	93	126	258
51	PB5	49+77.0', 27.0' LT	6'X30'	3	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)	72	75	248
61	PB22	44+9.0', 1.0' LT	6'X18'	6	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)	58	755	320
62	PB21	45+84.0', 1.0' LT	6'X18'	5	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)	66	567	280
82	PB9	49+32.0', 32.0' RT	6'X30'	3	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)	85	230	246
83	PB9	49+20.0', 32.0' RT	6'X30'	3	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)	96	230	266
84	PB9	49+44.0', 32.0' RT	6'X20'	3	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)	67	230	186
						TOTAL	746	3149	2541

* LOCATION IS TO FRONT CENTER OF DETECTOR LOOP

PAGE 1 OF 2

PROJECT NO:3220-03-61	HWY: STH 158	COUNTY: KENOSHA	MISCELLANEOUS QUANTITIES	SHEET:	E
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STH 158 & 104TH AVE 3220-03-61

3|

REMOVE LOOP DETECTOR WIRE AND LEAD-IN CABLE

SPV.0105.02
REMOVE
LOOP WIRE
& LEAD-IN CABLE
LOCATION
L.S.

STH 158 & 104TH AVE.

1

	REMOVE PULL BOXES								
•			653.0905						
			REMOVE						
	PULL BOX		PULL BOX						
	NO.		EACH						
	PB3		1						
-	PB4		1						
-	PB14		1						
	PB15		1						
		TOTAL	4						

SPV.0105.04
EVP DETECTOR HEAD INSTALLATION

BYV.0105.04
EVP DETECTOR
HEAD
INSTALLATION
LOCATION
L.S.

STH 158 & 104TH AVE

1

TOTAL
1

PAGE 2 OF 2

PROJECT NO:3220-03-61 HWY: STH 158 COUNTY: KENOSHA MISCELLANEOUS QUANTITIES SHEET: **E**

STH 158 & 88TH AVE. KENOSHA COUNTY

3

|3

EVP DETECTOR HEAD INSTALLATION

SPV.0105.05
EVP DETECTOR
HEAD
INSTALLATION
LOCATION

STH 158 & 88TH AVE

1

TOTAL

1

PAGE 1 OF 1

PROJECT NO:3220-03-61 HWY: STH 158 COUNTY: KENOSHA MISCELLANEOUS QUANTITIES SHEET: **E**

STH 158 & 68TH AVE. KENOSHA COUNTY

CONDUIT

				652.0225 CONDUIT NONMET. 2-INCH
LOC.	TO	LOC.		L.F.
EXT.1		PB24		18
PB24		PB25		150
EXT.2		PB22		23
PB22		PB23		151
			TOTAL	342

PULL BOXES				
			653.0135	
PULL			PULL BOXES	
вох			24"x36"	
NO.	LOCATION*		EACH	
PB22	168+30.0', 39.0' RT		1	
PB23	166+79.0', 26.0' RT		1	
PB24	174+12.0', 33.0' LT		1	
PB25	175+62.0', 32.0' LT		1	
		TOTAL	4	

^{*} FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

TRAFFIC DETECTOR LOOPS

								652.0800	655.0700	655.0800
						SDD		CONDUIT	LEAD IN	LOOP DETECTOR
LOOP	HOME		SIZE	NO. OF	PAVEMENT	INSTALLATION		LOOP DETECTOR	CABLE	WIRE
NO.	RUN PB	LOCATION*	(FT)x(FT)	TURNS	TYPE	REFERENCE		L.F.	L.F.	L.F.
11	PB20	170+27.0', 4.0' RT	6'X20'	3	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)		88	212	226
12	PB20	170+54.0', 5.0' RT	6'X20'	3	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)		88	212	226
21	PB25	175+61.0', 10.0' LT	6'X20'	5	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)		64	535	284
22	PB24	174+11.0', 7.0' LT	6'X20'	5	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)		76	377	310
44	PB9	171+3.0', 36.0' LT	6'X20'	4	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)		70	253	240
45	PB9	171+13.0', 36.0' LT	6'X20'	4	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)		80	253	268
51	PB21	172+7.0', 4.0' RT	6'X20'	3	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)		87	158	222
52	PB21	171+79.0', 4.0' RT	6'X20'	3	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)		87	158	222
61	PB23	166+79.0', 8.0' RT	6'X20'	5	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)		68	587	290
62	PB22	168+30.0', 16.0' RT	6'X20'	4	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)		72	423	248
84	PB2	171+39.0', 45.0' RT	6'X20'	3	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)		72	87	196
85	PB2	171+27.0', 45.0' RT	6'X20'	3	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)		84	87	218
86	PB2	171+58.0', 46.0' RT	6'X20'	3	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)		63	87	177
							TOTAL	999	3429	3127

^{*} LOCATION IS TO FRONT CENTER OF DETECTOR LOOP

PAGE 1 OF 2

PROJECT NO:3220-03-61 HWY: STH 158	COUNTY: KENOSHA	MISCELLANEOUS QUANTITIES	SHEET:	E
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^{* *} FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

STH 158 & 68TH AVE. KENOSHA COUNTY

3

REMOVE LOOP DETECT	TOR WIRE AN	D LEAD-IN CABLE
		SPV.0105.01
		REMOVE
		LOOP WIRE
		& LEAD-IN CABLE
LOCATION		L.S.
STH 158 & 68TH AVE.		1
	TOTAL	1

REMOVE PULL BOXES		
		653.0905
		REMOVE
PULL BOX		PULL BOX
NO.		EACH
PB6		1
PB7		1
PB13		1
PB14		1
PB15		1
PB16		1
	TOTAL	6

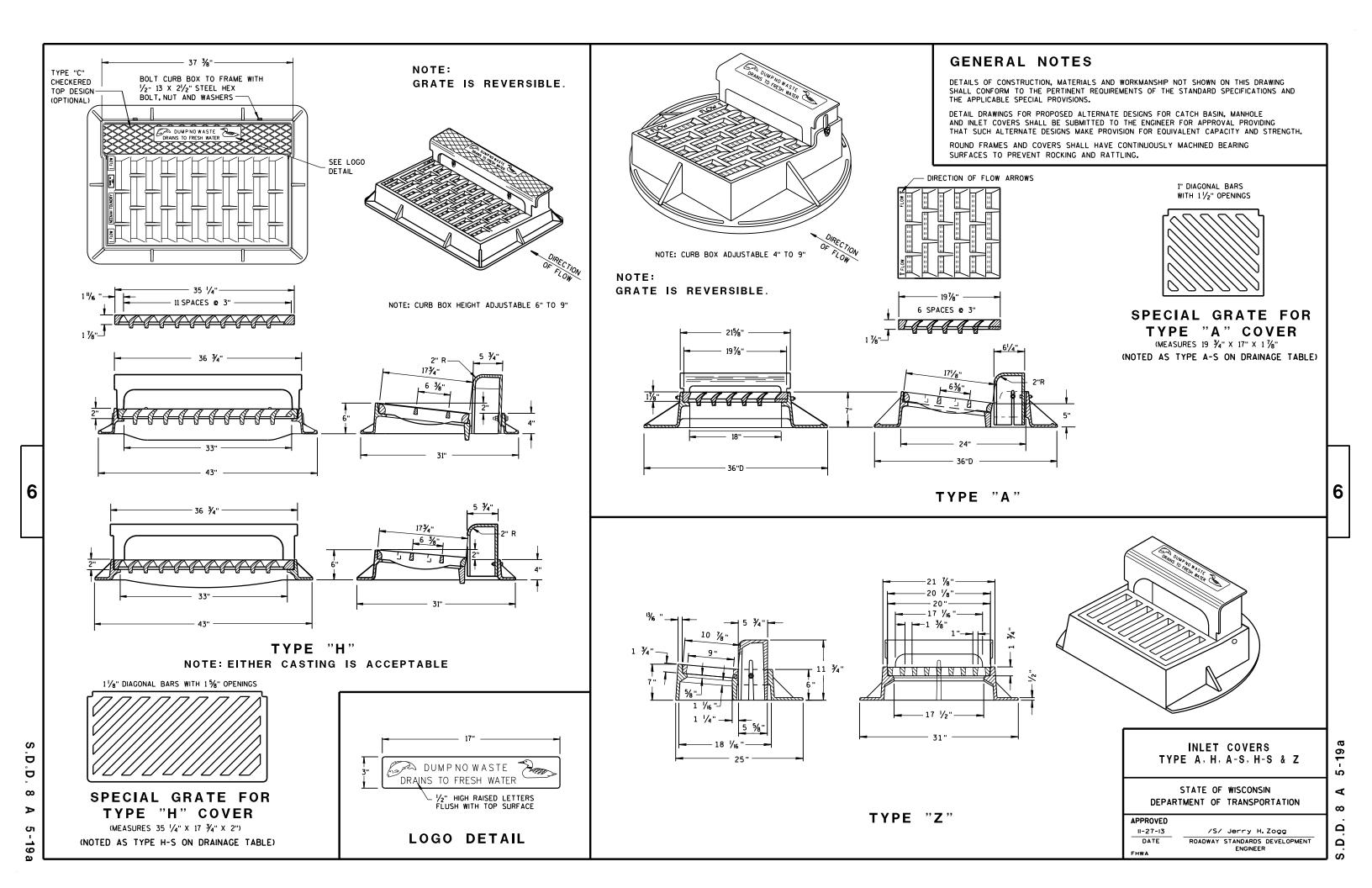
PAGE 2 OF 2

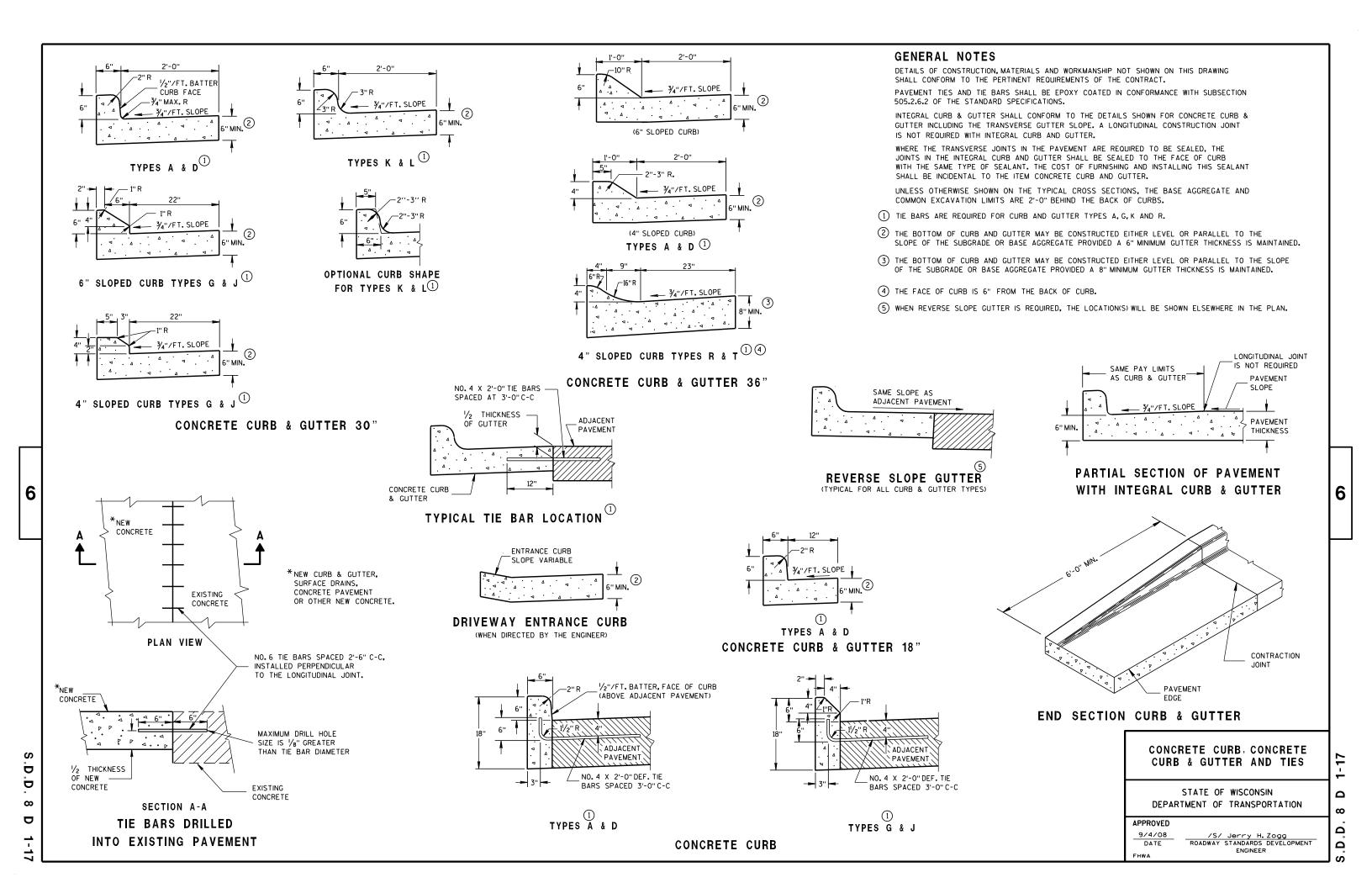
PROJECT NO:3220-03-61 HWY: STH 158 COUNTY: KENOSHA MISCELLANEOUS QUANTITIES SHEET: **E**

6

Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
	SILT FENCE
08E09-06	
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09B02-07	CONDUI T
09B04-10	PULL BOX
09F08-03	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
14B15-07A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-07B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-07C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B18-06A	STEEL PLATE BEAM GUARD, CLASS "A" (AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS)
14B18-06B	STEEL PLATE BEAM GUARD, CLASS "A" AT MEDIAN APPROACH TO BRIDGES
14B20-11A	STEEL THRIE BEAM STRUCTURE APPROACH
14B27-01A	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-01B	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-01C	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B29-01	SAFETY EDGE
14B42-02A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02C	MI DWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-01A	MI DWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01B	MI DWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01C	MI DWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-03A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-02	BARRI CADES AND SIGNS FOR SIDEROAD CLOSURES
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)
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
15C19-02B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C19-02C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C21-05	SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS
15C27-01	DOUBLE ARROW WARNING SIGN PLACEMENT
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D20-02	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-02	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D22-02	TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D23-02	TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE
15D27-02	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D27-02 15D28-02	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
13020-02	TIGHT TO CONTROL, WORK ON SHOULDER OR LARRING LANE, UNDIVIDED ROADWAT





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.

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.



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 /S/ Beth Connestro
CHIEF ROADWAY DEVELOPMENT ENGINEER

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TYPICAL APPLICATION OF SILT FENCE

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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.

- \bigcirc 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 11/8" X 11/8" 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 TIE BACK

(WHEN REQUIRED BY THE ENGINEER)



SILT FENCE

S.D.D. 8 E 9-6





INLET PROTECTION, TYPE A

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

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

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION TYPE A, B, C, AND D

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02

/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER 6

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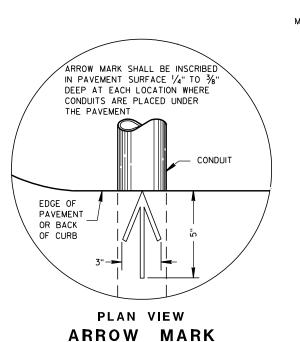
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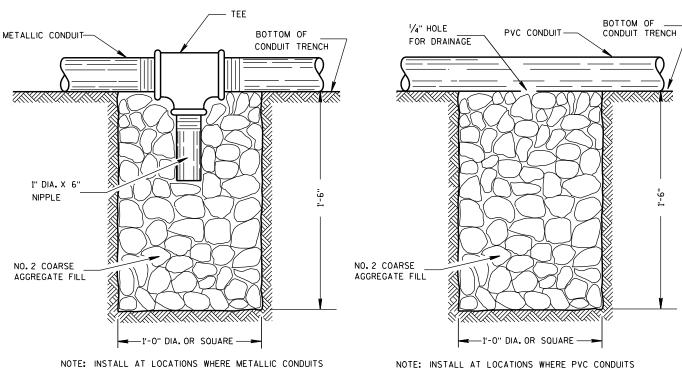
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DRAIN SUMP FOR METALLIC CONDUIT

CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

ARROW MARK INSCRIBED IN PAVEMENT SURFACE OVER ← OF CONDUIT (BOTH ENDS) NORMAL EDGE ÒF PAVEMENT PAVEMENT **PAVEMENT** OR BACK OF CURB BASE COURSE BACKFILL SLOPE 1/8"/FT. EITHER DIRECTION *DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES CONDUIT, PITCH TO DRAIN WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652,2,2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

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

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REIN-STALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

POLY ROPE OR A PULL WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

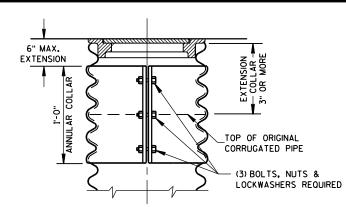
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

/S/ Balu Ananthanarayanan 10/23/03 STATE ELECTRICAL ENGINEER FOR HWYS

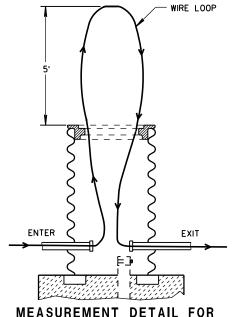
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- * THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.
- NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL



CORRUGATED PIPE EXTENDER

HEAVY DUTY FRAME -

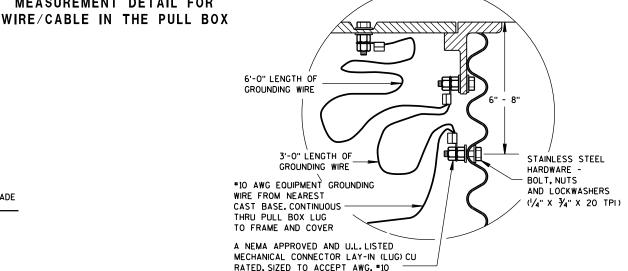


ALTERNATE COVER (LOCKING)

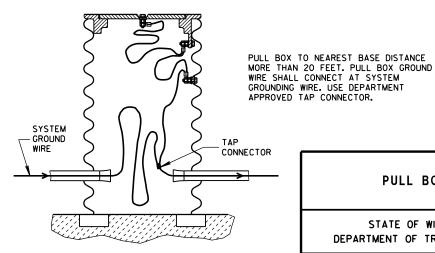
SECTION

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TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



EQUIPMENT GROUNDING LUG AND

LOCATION IN STEEL PULL BOXES

TO #4 COPPER STRANDED WIRE

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

FHWA

2-7-2013 /S/ Ahmet Demirbilek DATE STATE ELECTRICAL ENGINEER

PULL BOX

TO THE PULL BOX BID PRICE.

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

GROUNDING LUGS ARE NOT REQUIRED IN PULL BOXES WHEN VOLTAGES OF LESS THAN 50 VOLTS AC ARE THE ONLY VOLTAGES ENCOUNTERED IN THE BOXES.

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

S.D.D. 9B2. "CONDUIT". APPLIES TO THIS DRAWING.

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.

AND COVER ELECTRIC WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE FINAL GRADE ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED CUT OPENINGS AS REQUIRED IN THE FIELD 6" MIN. ALL CONDUIT PITCHED (TYP.) TO DRAIN TO PULL BOXES 4 TO 8 BRICKS **EQUALLY SPACED** 2" DRAIN DUCT TO DITCH OR SEWER NO. 2 COARSE WHEN SPECIFIED AGGREGATE 2" PVC PIPE CAP ON BOTH ENDS (SEE SECTION 501 WITH 7,8 1/4" HOLES DRILLED OF THE STANDARD IN EACH END. SPECIFICATIONS) INSTALL END BELLS (U.L. LISTED FOR ELECTRICAL USE) ON ALL NONMETALLIC CONDUIT BEFORE INSTALLATION OF WIRE AND/OR CABLE.

PULL BOX

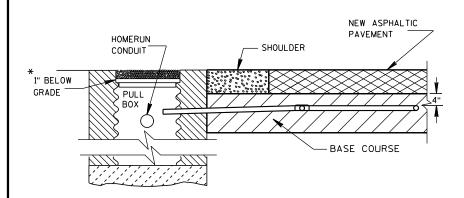
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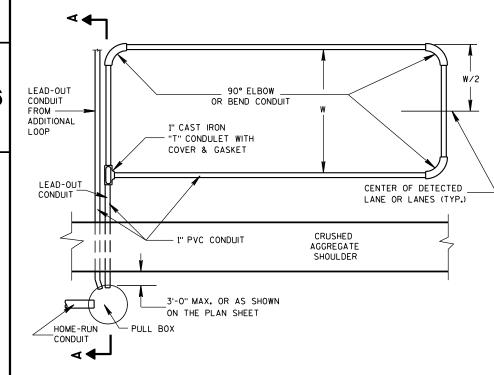
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SECTION A-A NO CURB & GUTTER

DETECTOR LOOP INSTALLATION DETAIL

*RECESS PULL BOX SO THAT THE COVER IS 3"
BELOW GRADE IN SHOULDER AREAS OF CRUSHED
AGGREGATE. BACKFILL OVER COVER WITH THE
CRUSHED AGGREGATE TO BRING THE AREA TO
GRADE LEVEL.



TYPICAL PLAN OF LOOP DETECTOR

GENERAL NOTES

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

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD-OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS SUCH AS 3M TYPE 82A1 OR APPROVED EQUAL, NON-INSULATED BUTT SPLICES TO FIT *12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

ANTI-SIEZE LUBRICATING MATERIAL SHALL BE USED ON ALL THREADS OF THREADED ASSEMBLIES BEFORE INSTALLATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

THE *12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

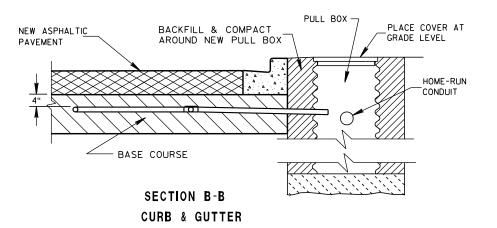
THE *12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP DUCT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT AND CONDULET SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE THE ASPHALTIC PAVEMENT IS PLACED.

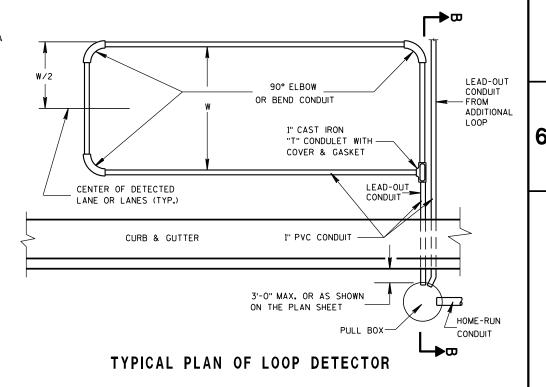
WHEN MULTIPLE LAYERS OF ASPHALTIC PAVEMENT ARE TO BE PLACED, LOOPS MAY BE INSTALLED BY SAWING A TWO INCH WIDE SLOT IN THE FIRST LAYER, DIG OUT THE ASPHALTIC MATERIAL AND BASE COURSE, PLACE THE LOOP, FILL THE SLOT WITH BASE COURSE MATERIAL AND NEW ASPHALTIC MATERIAL AND TAMP THE ASPHALTIC MATERIAL IN PLACE.

SHOULD TRAFFIC BE ALLOWED TO USE THE AREA OF ROADWAY WITH THE NEWLY INSTALLED LOOP BEFORE THE PLACEMENT OF THE NEXT LAYER OF ASPHALTIC PAVEMENT, THE SLOT/PAVEMENT OPENING SHALL BE SEALED WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".

DRIVE A $1\frac{1}{2}$ " MAX. PK NAIL INTO THE NEW ASPHALTIC PAVEMENT AND DIRECTLY ABOVE THE CONDULET AFTER THE FINAL LAYER OF NEW ASPHALTIC PAVEMENT IS COMPLETELY INSTALLED, IF REQUIRED BY THE DISTRICT TRAFFIC SECTION.



LOOP DETECTOR INSTALLATION DETAIL



LOOP DETECTOR PLACED
IN CRUSHED AGGREGATE BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

(NEW ASPHALTIC PAVEMENT)

APPROVED

/S/ Balu Ananthanarayanan STATE ELECTRICAL ENGINEER FOR HWYS က

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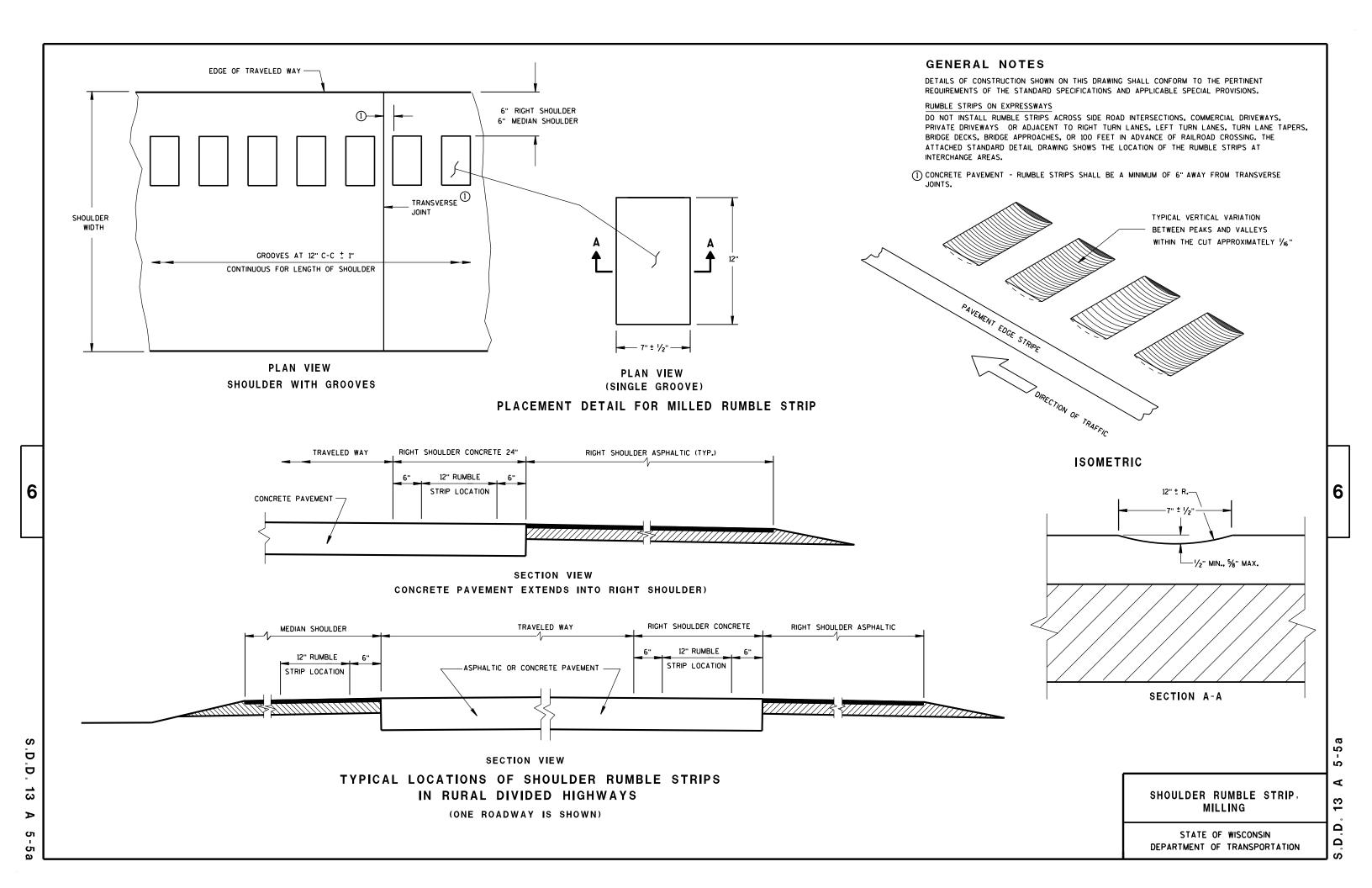
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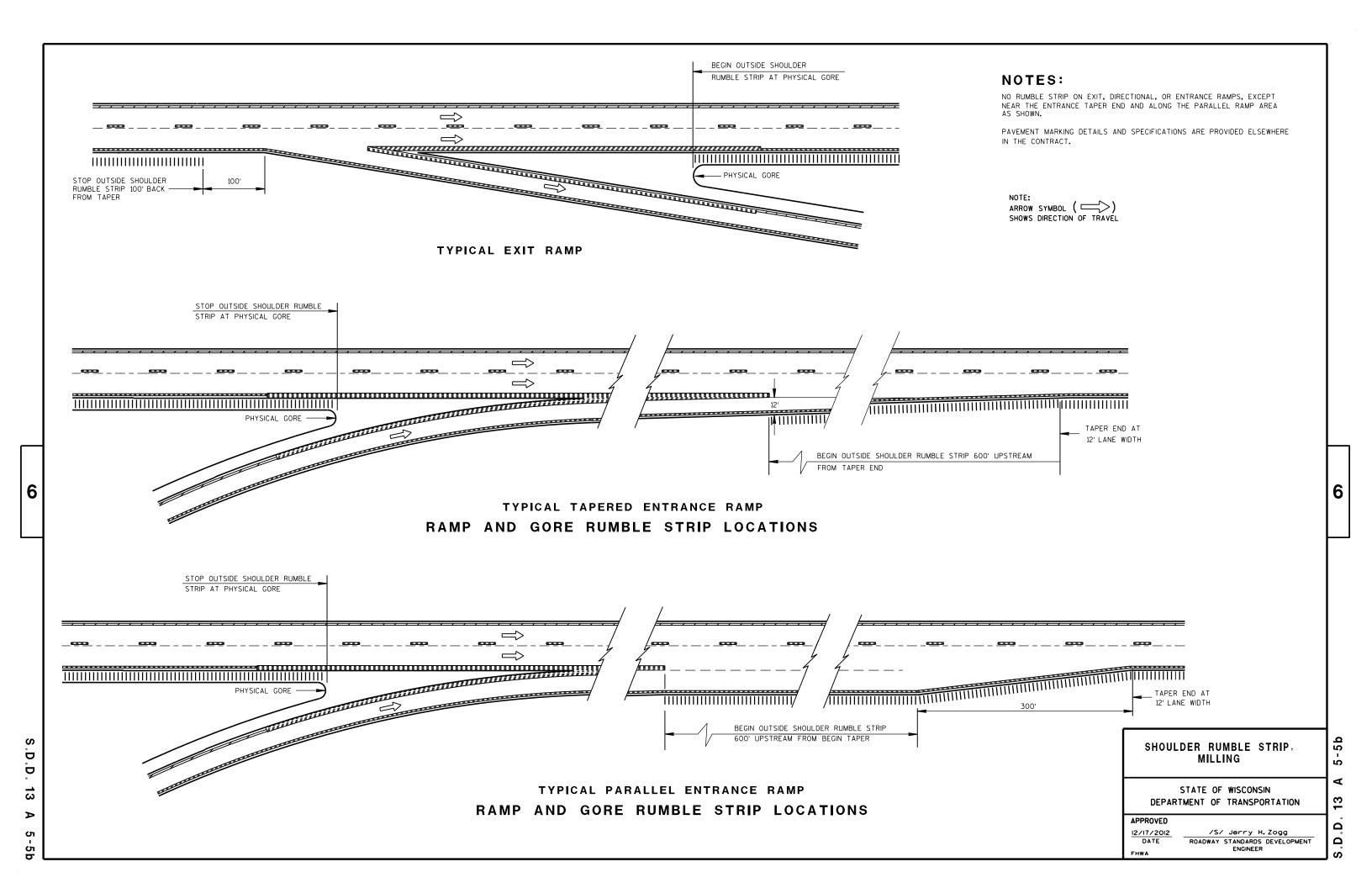
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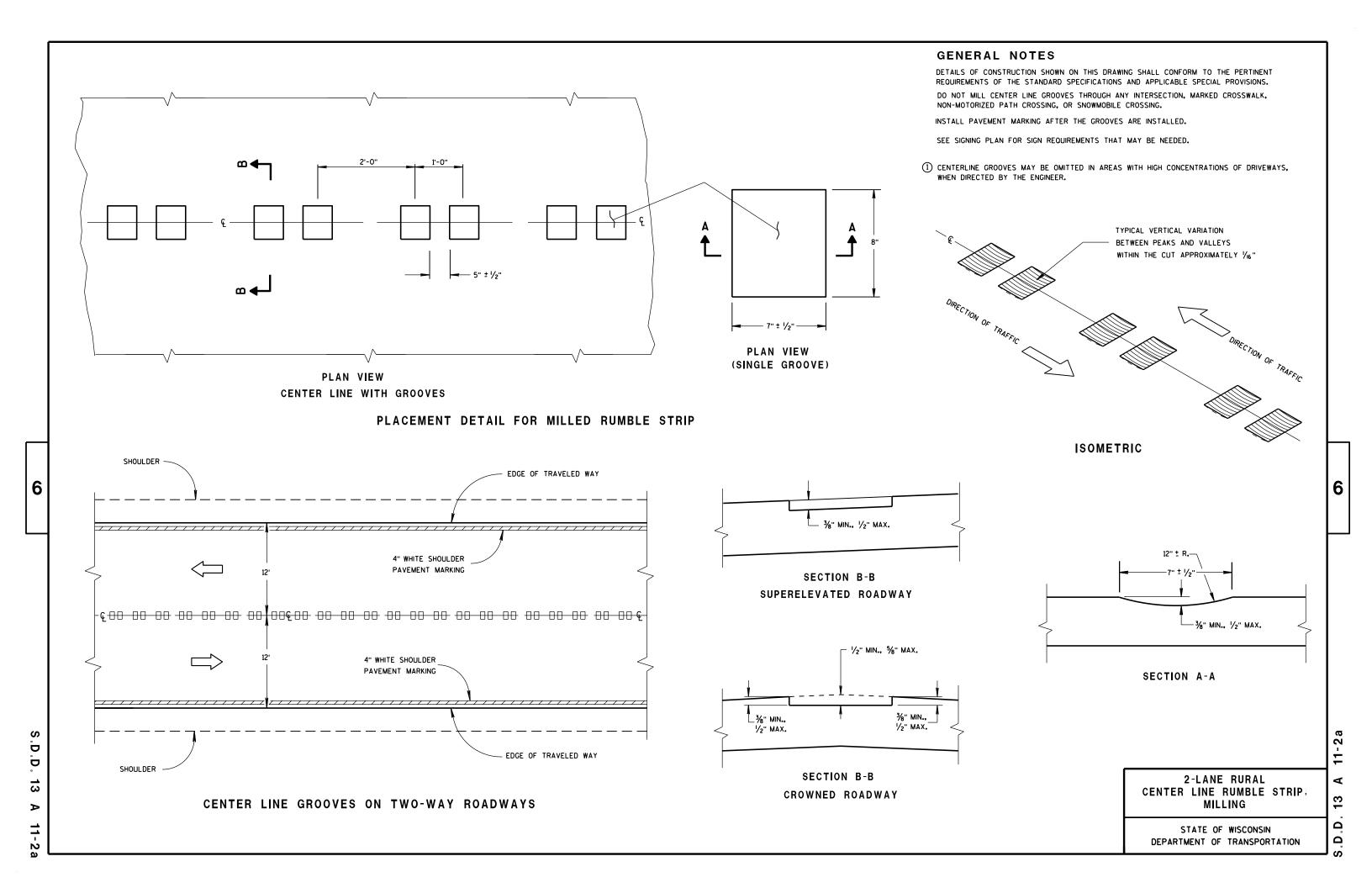
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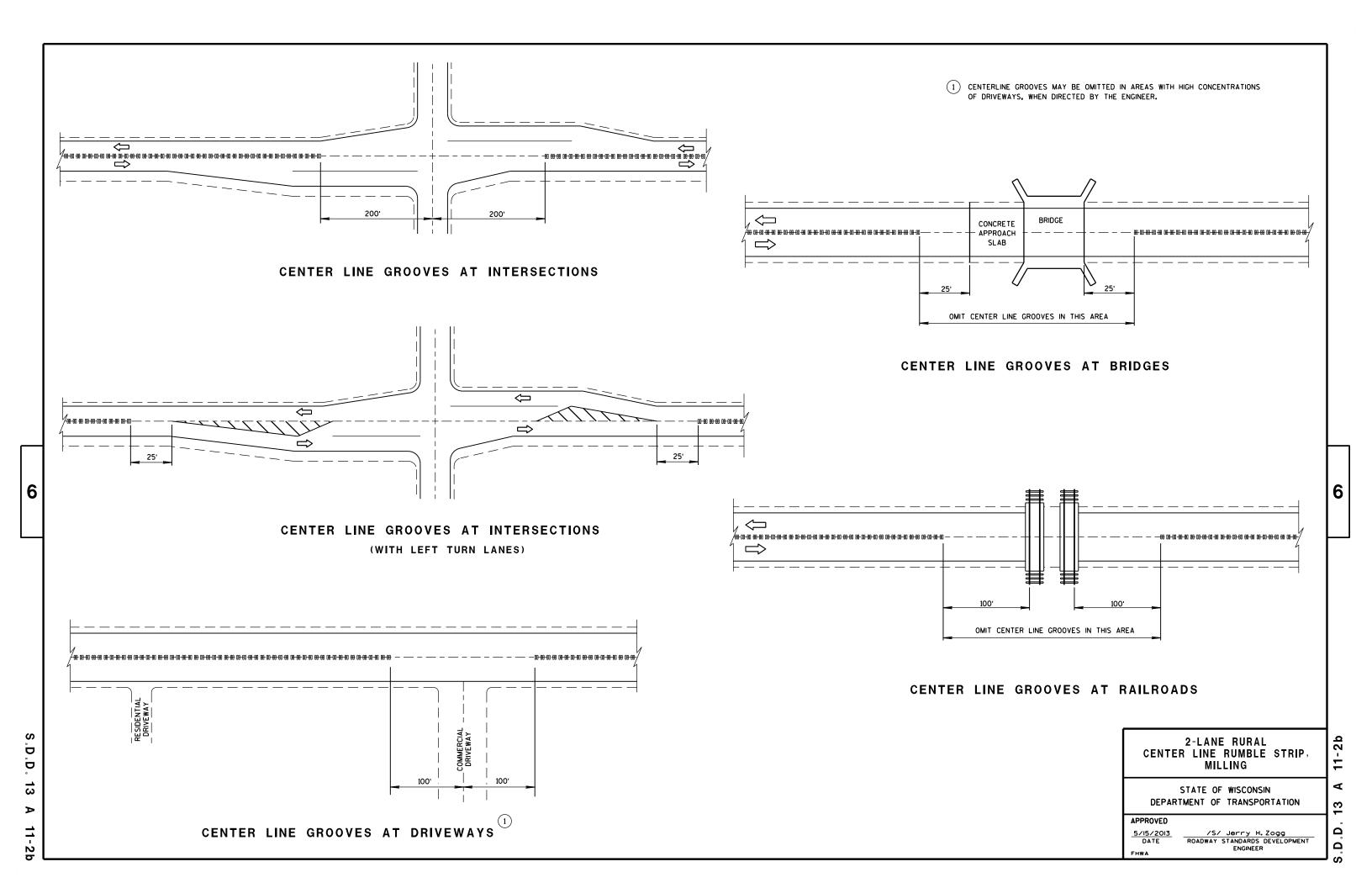
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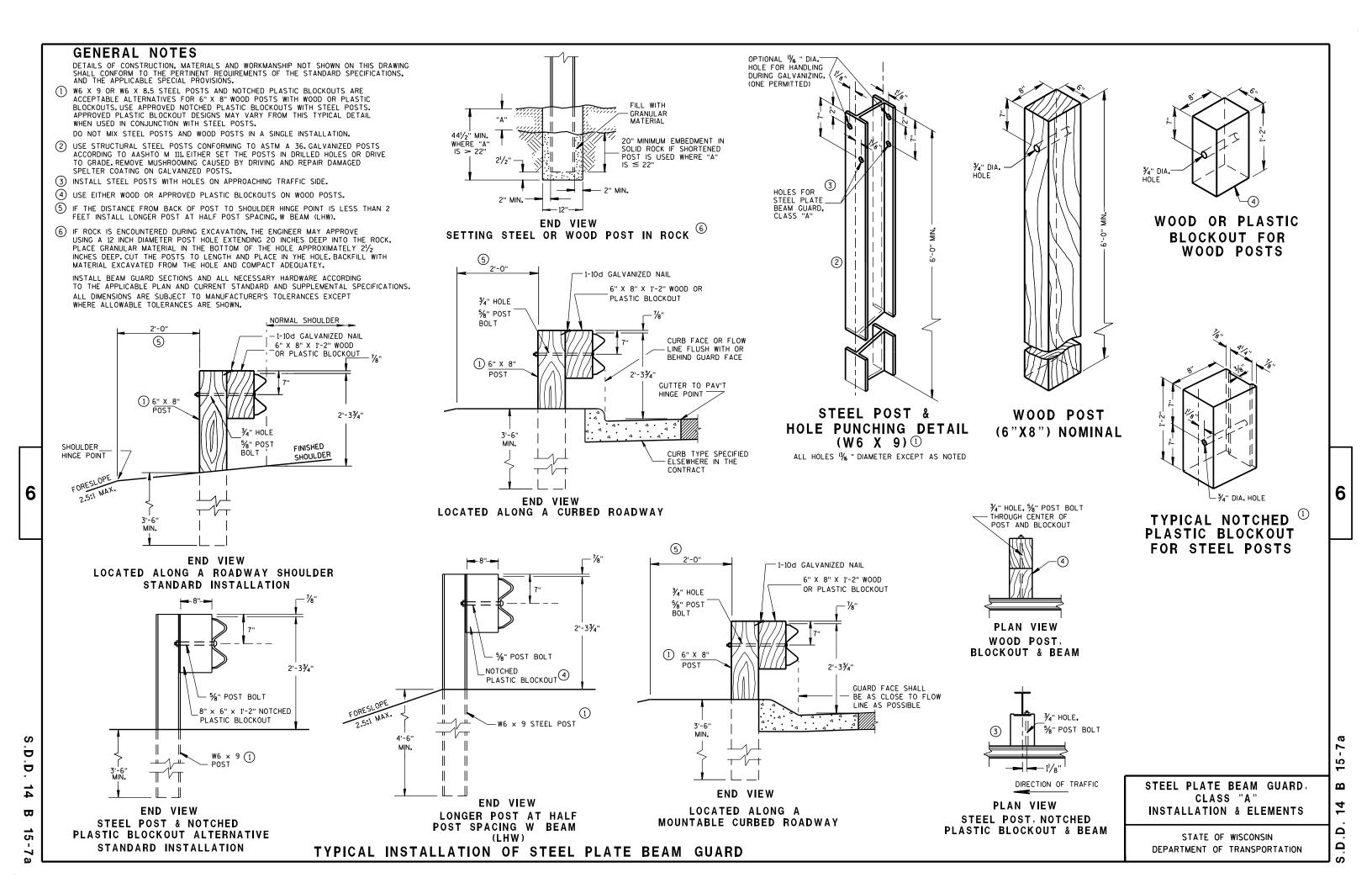
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POST SPACING STANDARD INSTALLATION

SECTION THRU W BEAM

7/8" 2" 41/4" 41/4" 2"

WOOD OR PLASTIC BLOCKOUT

FINISHED SHOULDER

DIRECTION OF TRAFFIC

BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

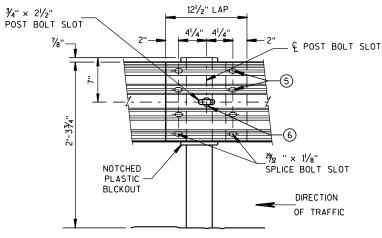
GENERAL NOTES

- 1 PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
- ② DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
- (3) REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
- (4) PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
- (5) 8 % " ϕ X 2 " BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
- (6) 5%" ♦ X 1'-6" BUTTON HEAD BOLT AND AND RECESS NUT WITH ROUND WASHER UNDER NUT.

12'-6" OR 25'-0" EFFECTIVE LENGTH OF BEAM 3'-1¹/₂" C-C 3'-1¹/₂" C-C 3'-1<mark>'/</mark>2" C-C 3'-11/2" C-C POST POST POST SPACING **SPACING** SPACING SPACING FINISHED DIRECTION OF SHOULDER TRAFFIC

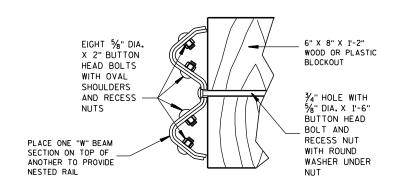
FRONT VIEW

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



FRONT VIEW
BEAM SPLICE AT STEEL POST

TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

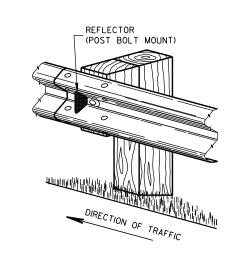


NESTED W BEAM (NW)

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

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RFFI FCTOR	SPACING

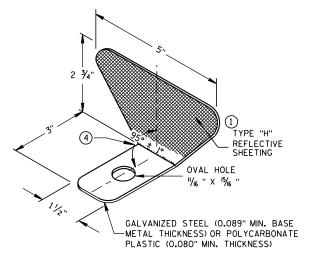
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	BEAM GUARD	REFLECTOR	NO. SURFACES	MIN. NO.
	LENGTH	SPACING	REFLECTORIZED	REFLECTORS
ONE WAY	< 200'	50' C-C	1	3
TRAFFIC	> 200'	100, C-C	1	
TWO WAY	< 200'	25' C-C	1(3)	6
TRAFFIC	> 200'	50' C-C	1 🔍	
TWO WAY	< 200'	50' C-C	2(4)	3
TRAFFIC	> 200'	100' C-C	2 4	



SYMMETRICAL

∕-12 GAGE

TABOUT €



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION $\stackrel{\sim}{}$

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

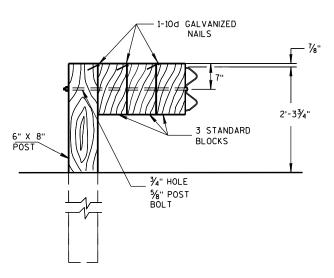
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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D.D. 14

- 1-10d GALVANIZED NAILS

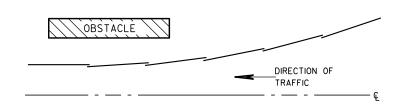


DETAIL FOR TRIPLE BLOCKS

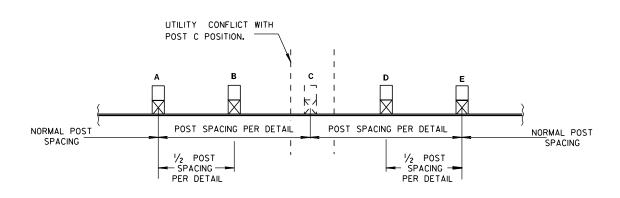
TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.

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

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



PLAN VIEW BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/23/II /S/ Je

DATE ROADWAY STA

/S/ Jerry H. Zogg

ROADWAY STANDARDS DEVELOPMENT ENGINEER

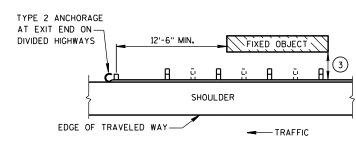
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BEAM GUARD AT SIDEROADS OR DRIVEWAYS



BEAM GUARD AT OBSTACLES EXIT END - ONE WAY TRAFFIC

GENERAL NOTES

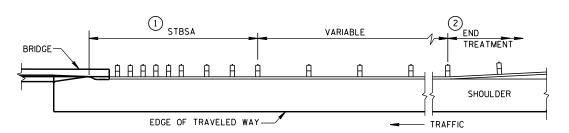
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE PERTINENT STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

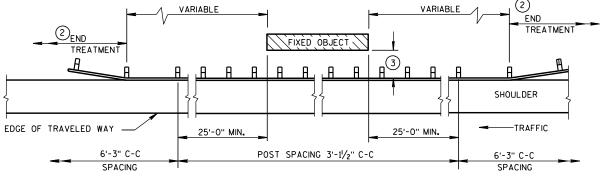
THE LOCATIONS AND LENGTHS OF BEAM GUARD ARE SHOWN ELSEWHERE IN THE PLAN.

- (1) STEEL THRIE BEAM STRUCTURAL APPROACH (STBSA) SEE CURRENT SDD 14B20.
- 2 USE AN APPROVED END TREATMENT FOR THE TRAFFIC APPROACH SIDE OF BRIDGE/OBSTACLES. USE TYPE 2 ANCHORAGE ONLY AT THE DOWNSTREAM ENDS OF BEAM GUARD LOCATED ALONG ROADWAYS WITH ONE WAY TRAFFIC.

3	MINIMUM LATERAL DISTANCE FROM FACE OF BEAM GUARD TO FIXED OBJECT	POST SPACING
	3'-6"	3' - 11/2"
	4'-6"	6' - 3"

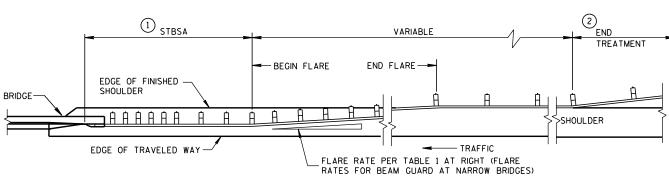


BEAM GUARD AT FULL WIDTH BRIDGES



BEAM GUARD AT OBSTACLES - TWO WAY TRAFFIC

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



BEAN	M GUARD	AT	NAR	ROW E	RID	GES
(FLARED TO	SHOULDER	EDGE,	THEN	PARALLE	L TO	ROADWAY)

TABLE 1
FLARE RATES FOR BEAM
GUARD AT NARROW BRIDGES

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED	
8-21-07	/S/ Jerry H.Zogg
DATE	ROADWAY STANDARDS DEVELOPMENT
FHWΔ	ENGINEER

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S.D.D.

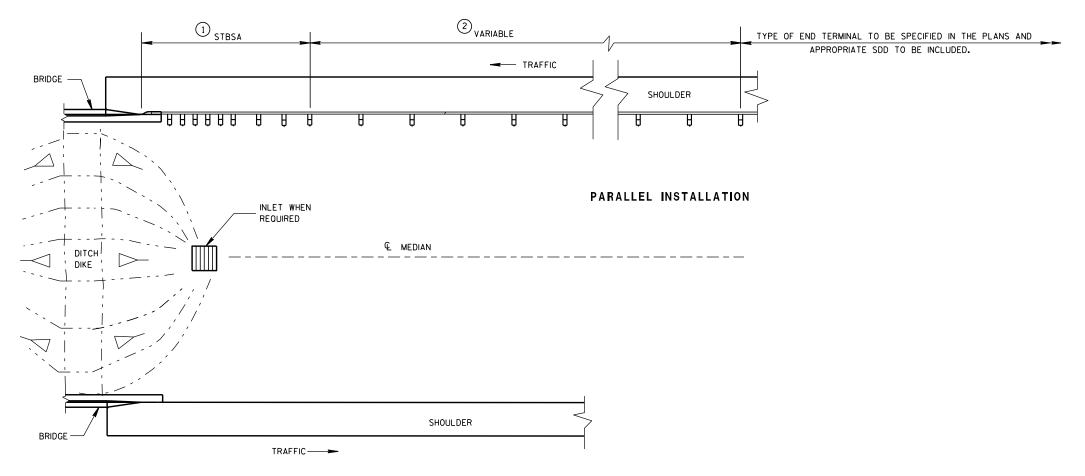
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D.D. 14 B 18

- 1 STEEL THRIE BEAM STRUCTURAL APPROACH (STBSA) SEE CURRENT SDD 14B20.
- 2 LOCATIONS AND LENGTHS OF BEAM GUARD ARE SHOWN ELSEWHERE IN THE PLAN.



BEAM GUARD AT MEDIAN APPROACH TO BRIDGES

STEEL PLATE BEAM GUARD CLASS "A" AT MEDIAN APPROACH TO BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

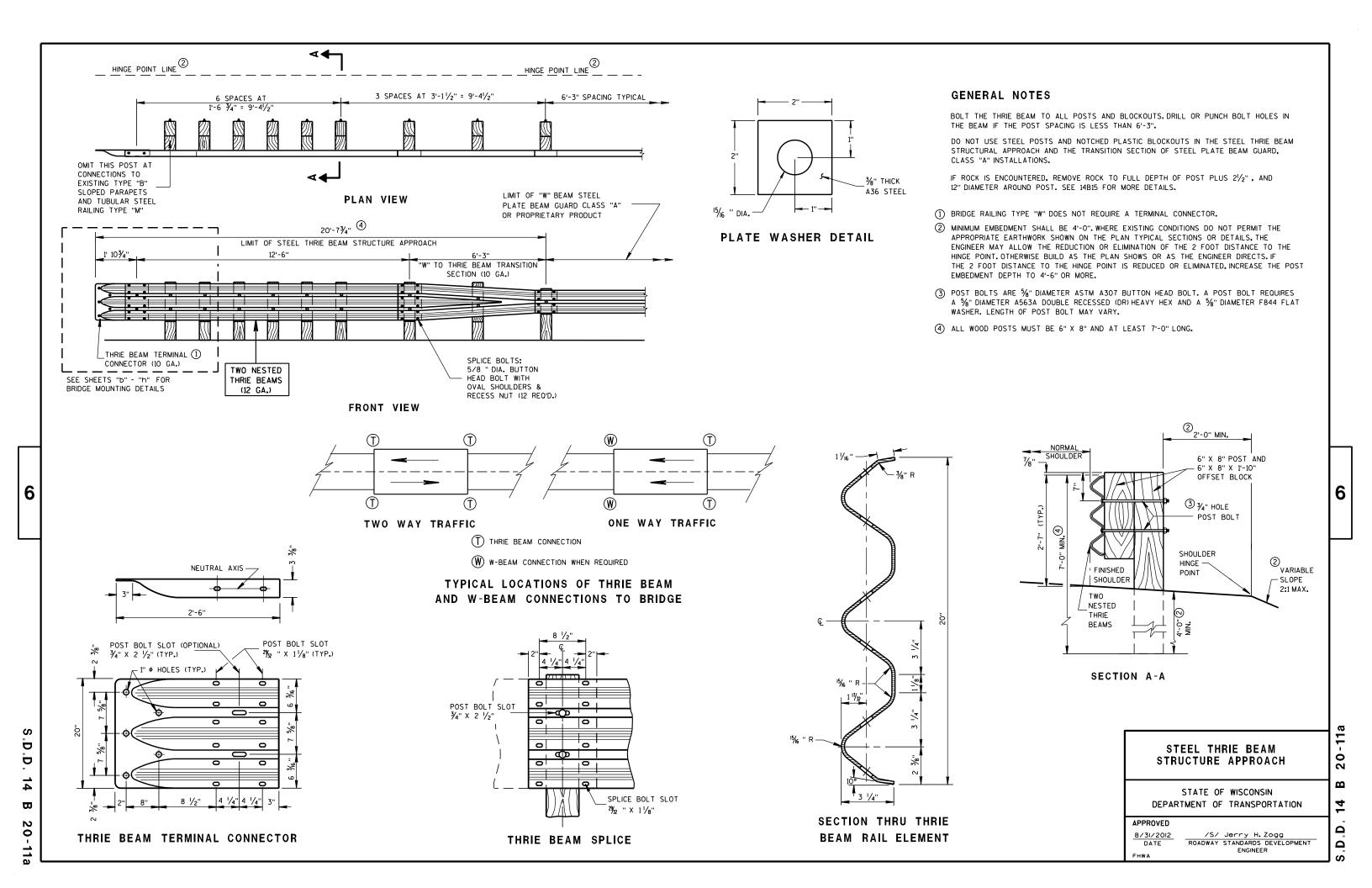
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APPROVED

8-21-07 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT ENGINEER

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



STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

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GENERAL NOTES

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

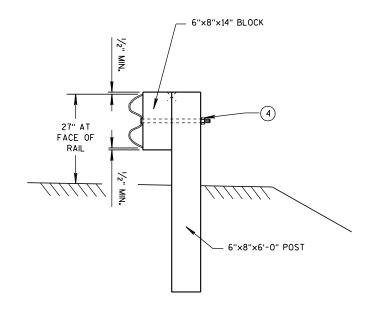
SHOP BEND CURVED RAIL SECTIONS.

SEE STANDARD DETAIL DRAWING 14 B 15 FOR OTHER DETAIL.

- (1) ON THE 8 FOOT RADIUS INSTALLATION, DO NOT INSTALL BUTTON HEAD BOLT AT CENTER CRT POST.
- 2) RADIUS FROM 8' 36'. SEE PLAN.
- 3 HEIGHT TRANSITION MAY BE REQUIRED. SEE PLAN OR PROJECT ENGINEER.
- (4) %" ø X 1'-6" BUTTON HEAD BOLT AND RECESS NUT WITH ROUND WASHER UNDER NUT.

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

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



SECTION B-B (BEAM GUARD POST)

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

DEPARTMENT OF TRANSPORTATION

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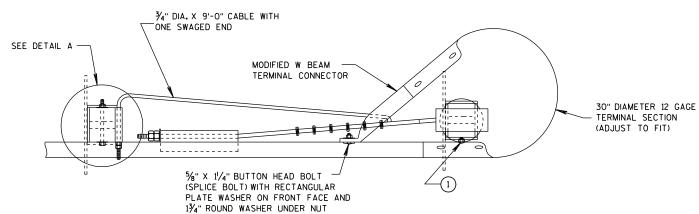
STATE OF WISCONSIN

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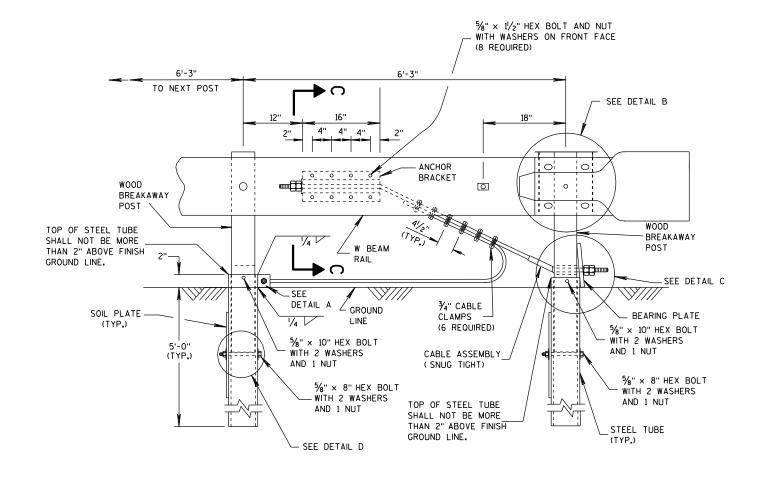
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PLAN VIEW



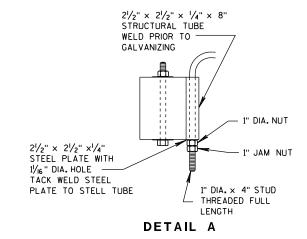
ELEVATION VIEW

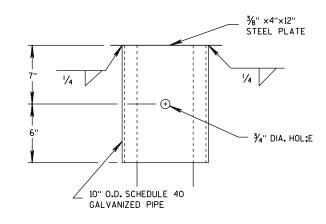
STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

GENERAL NOTES

ATTACH W BEAM RAIL TO THE STEEL PIPE WITH A 5%" X 2" BUTTON HEAD BOLT WITH NO WASHER. CONNECTION TO THE POST IS NOT REQUIRED.

INSTALL GALVANIZED 3/4" (6X19) PREFORMED WIRE OR INDEPENDENT WIRE ROPE CORE CONFORMING TO AASHTO M 30. MANUFACTURE WIRE ROPE OUT OF IMPROVED PLOW STEEL WITH A MINIMUM BREAKING STRENGTH OF 42,800 PSI.

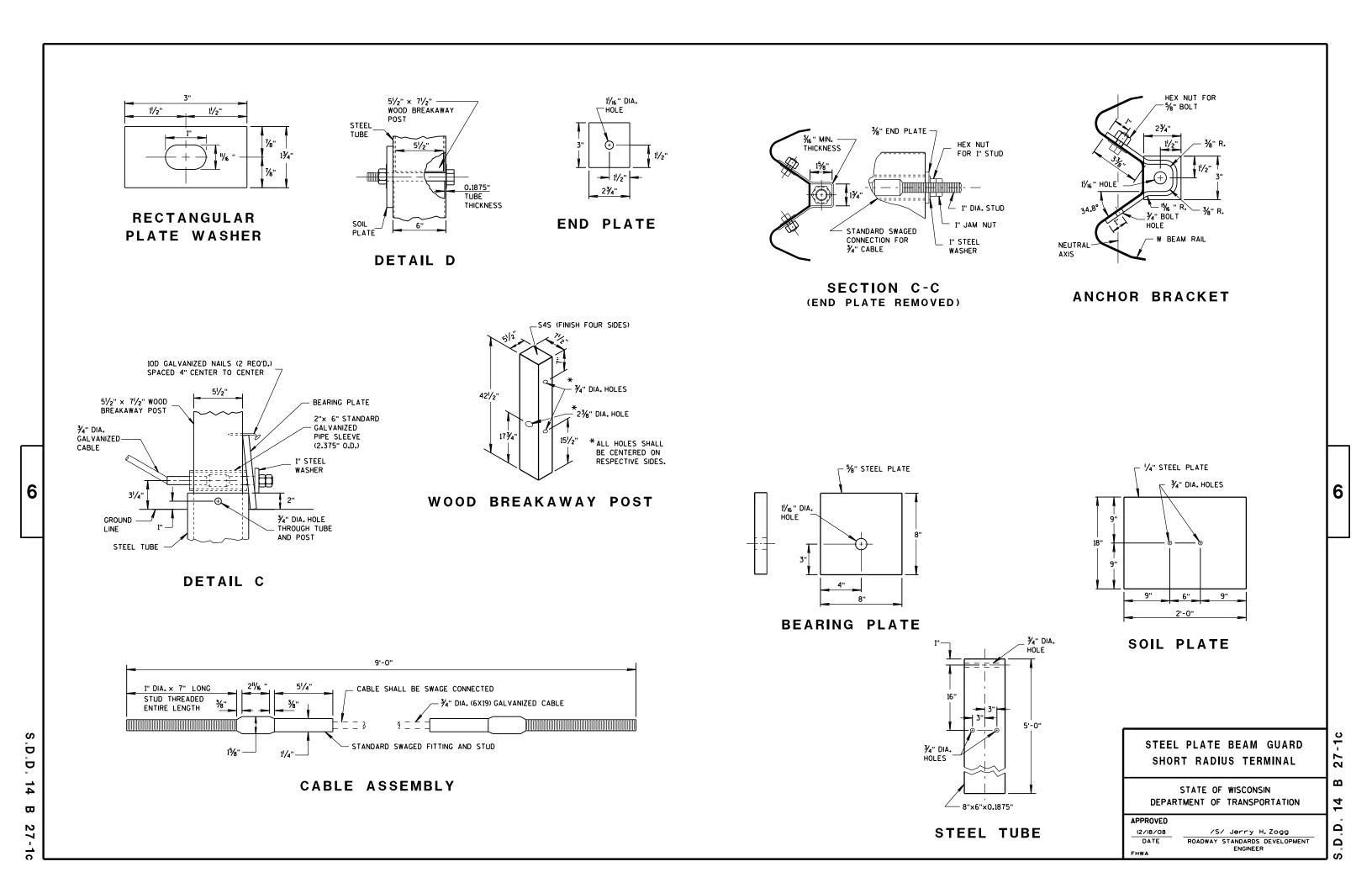


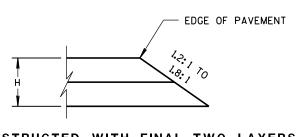


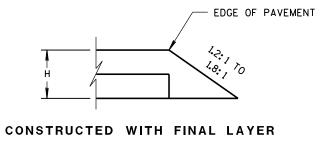
DETAIL B (BEAM GUARD AND TERMINAL SECTION NOT SHOWN)

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION



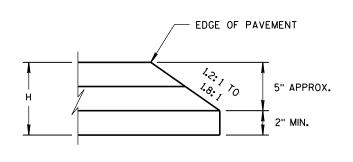


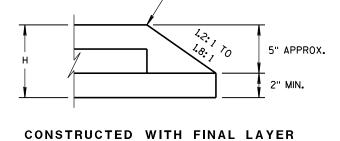


FOR H 5" OR LESS

CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS





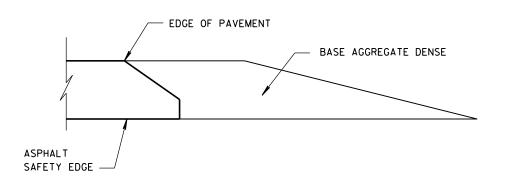
FOR H GREATER THAN 5"

EDGE OF PAVEMENT

CONSTRUCTED WITH FINAL TWO LAYERS

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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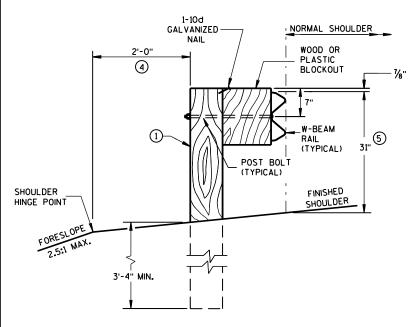
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APPROVED

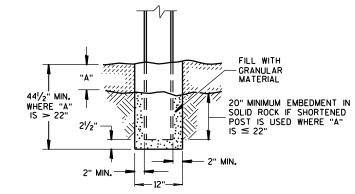
DATE ROADWAY STANDARDS DEVELOPMENT ENGINEER

- (1) WOOD OR STEEL POSTS (W6X9 OR W6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ② USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.
- (3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 21/2INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.
- (4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).
- (5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

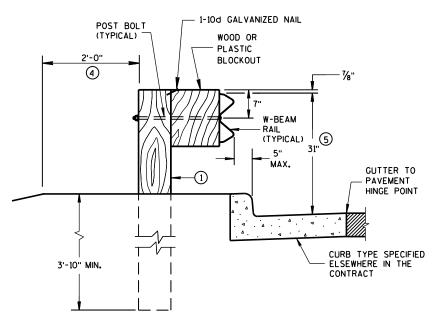


END VIEW

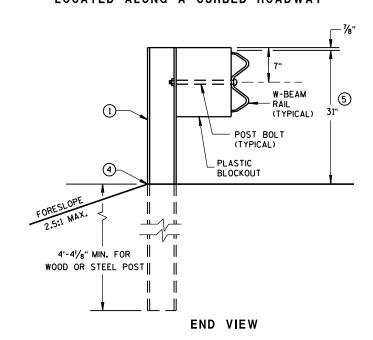
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



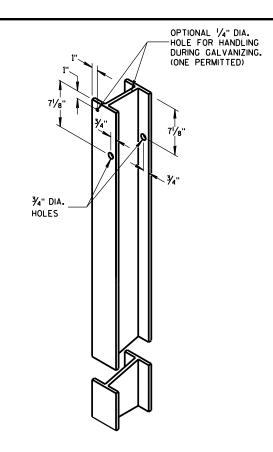
SETTING STEEL OR WOOD POST IN ROCK $^{\scriptsize{\textcircled{3}}}$



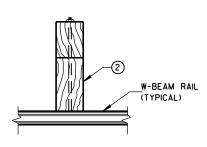
END VIEW
LOCATED ALONG A CURBED ROADWAY



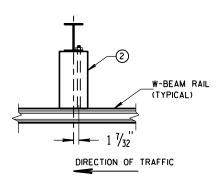
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



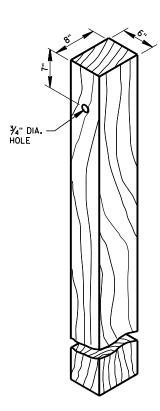
STEEL POST & HOLE PUNCHING DETAIL (w6X9)



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM



WOOD POST (6" X 8") NOMINAL



WOOD OR PLASTIC BLOCKOUT

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D.

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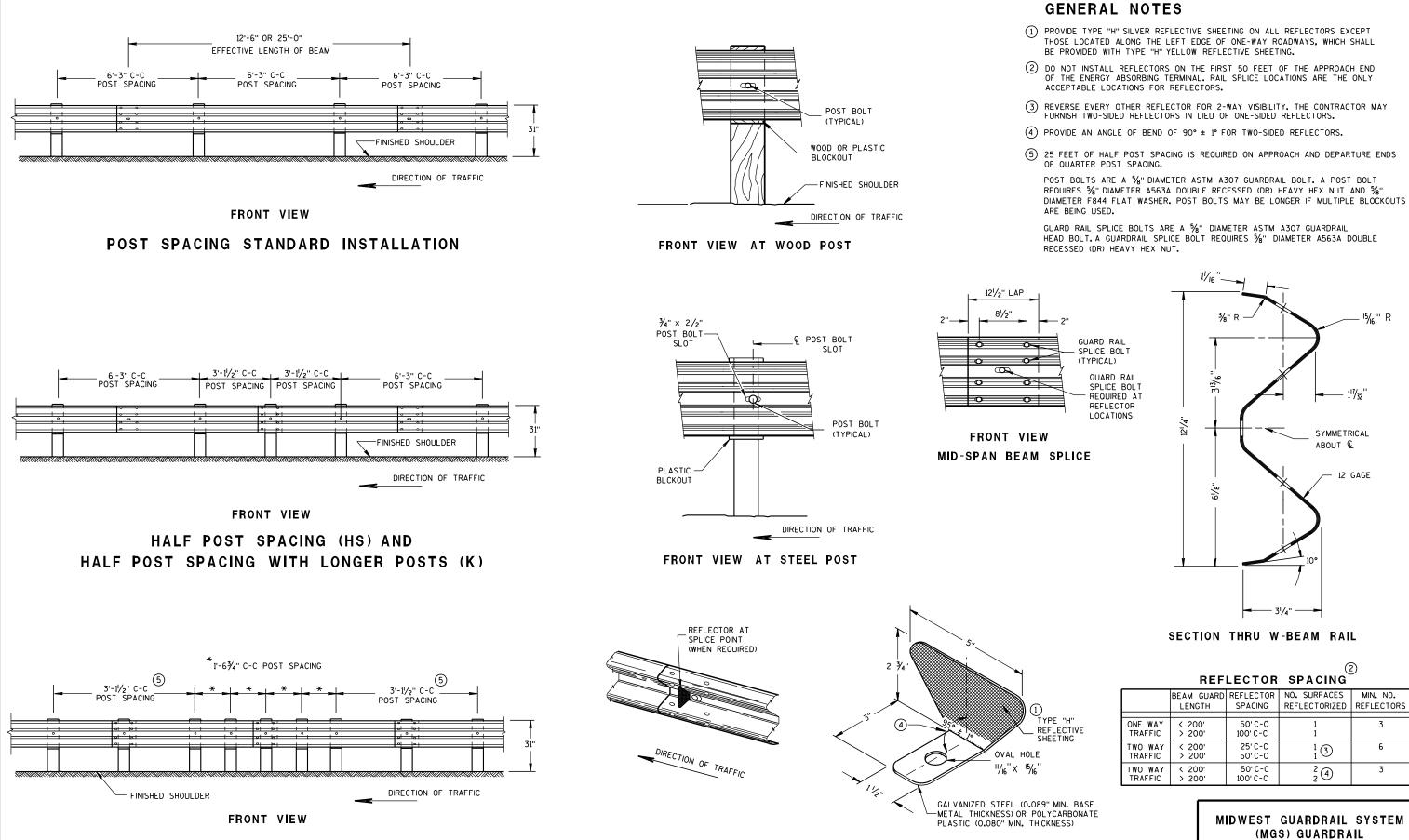
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ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

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QUARTER POST SPACING (QS)

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SYMMETRICAL

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REFLECTOR SPACING

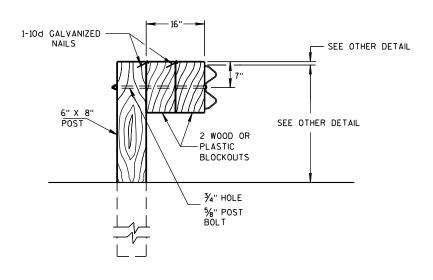
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY	< 200' > 200'	25' C-C 50' C-C	1 3	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 4	3

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

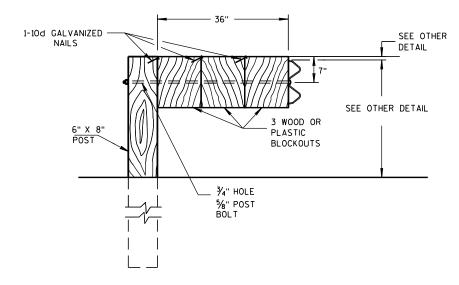
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DETAIL FOR 16" BLOCKOUT DEPTH

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

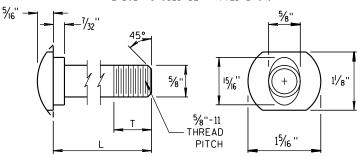


DETAIL FOR 36" BLOCKOUT DEPTH

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

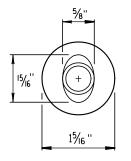
> DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

NOTE: 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 1/16". 2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

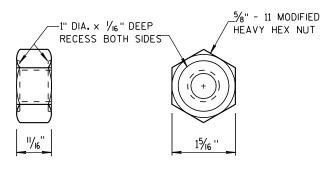


POST BOLT TABLE

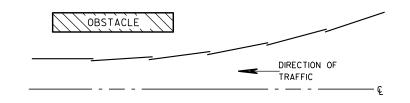
L	T (MIN.)
11/4"	11/8"
2"	13/4"
10''	4"
14''	41/16"
18"	4"
21"	41/16"
25"	4"



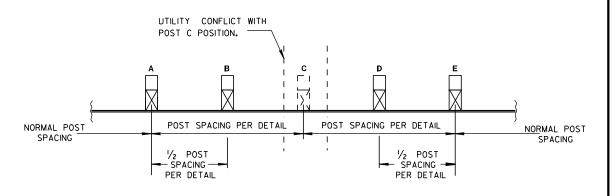
ALTERNATE BOLT HEAD



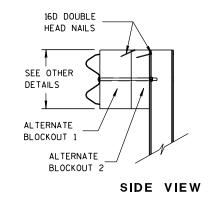
POST BOLT AND RECESS NUT

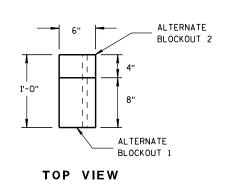


PLAN VIEW **BEAM LAPPING DETAIL**



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION





ALTERNATE WOOD

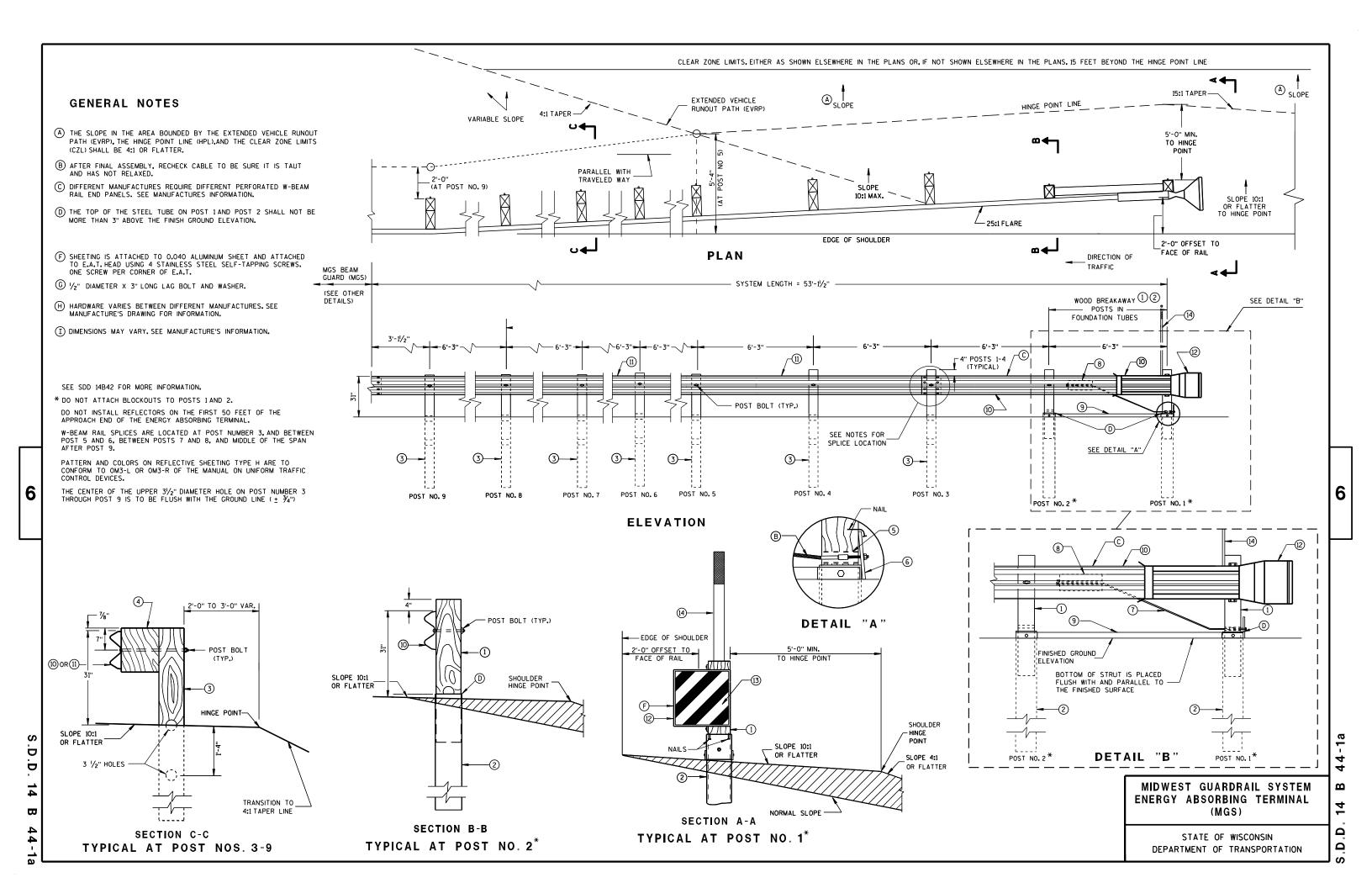
BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

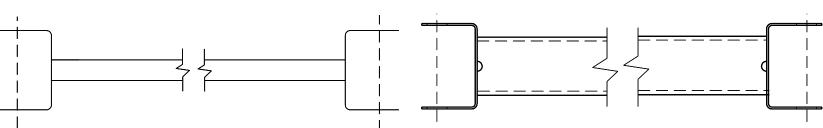
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

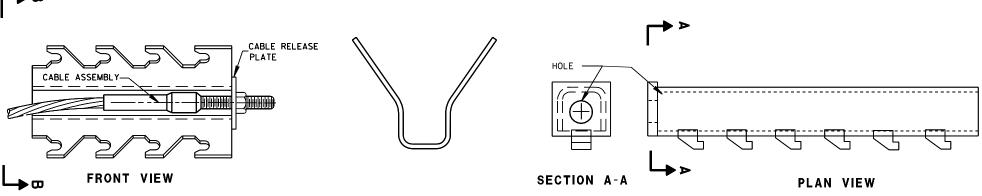
APPROVED /S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT

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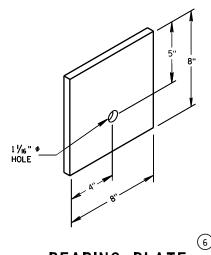


9 H

GENERIC ANCHOR CABLE BOX

BILL OF MATERIALS

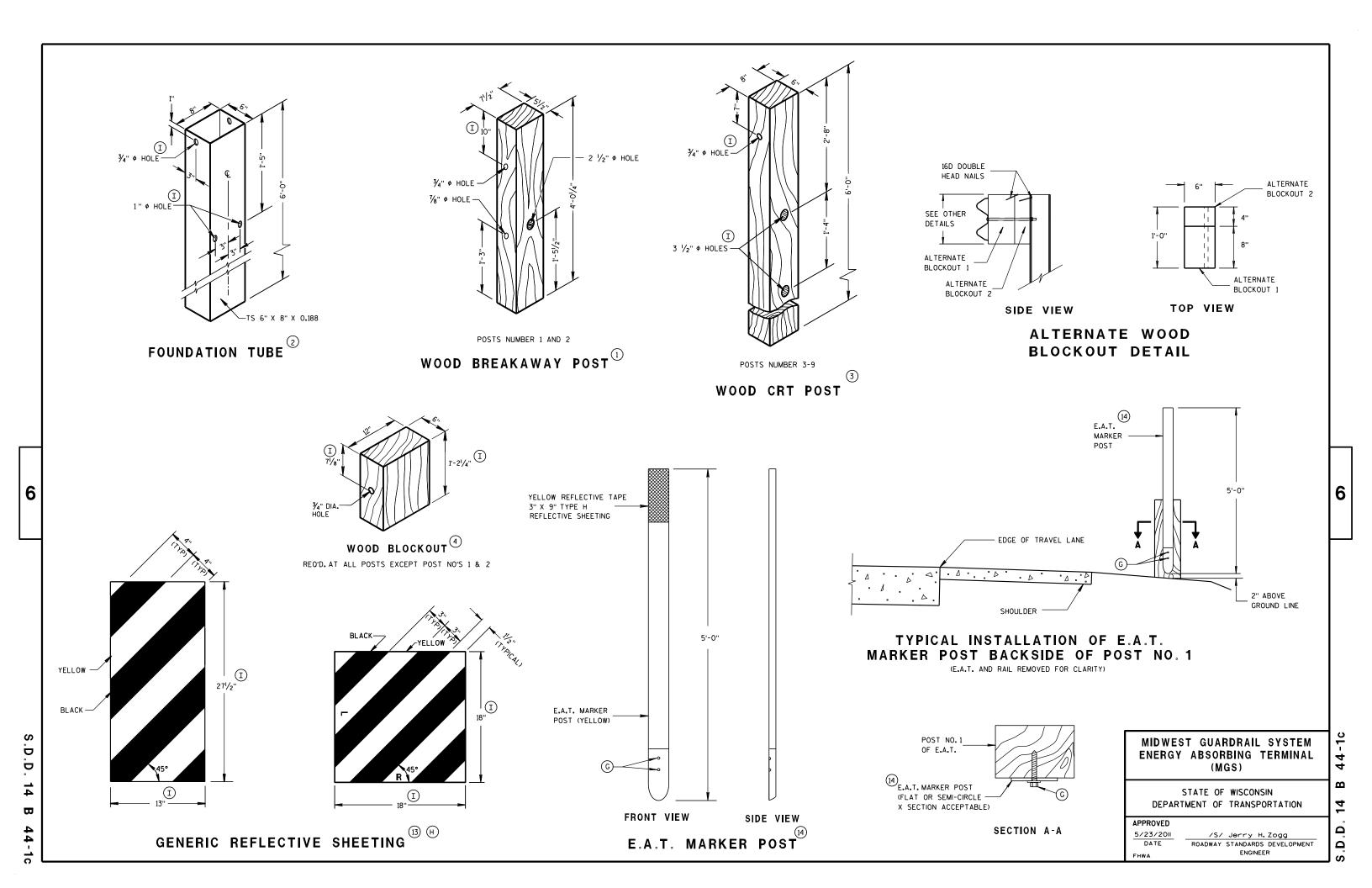
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
1	WOOD BREAKAWAY POST
2	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1AND 2
3	WOOD CRT
4	WOOD BLOCKOUT
(5)	PIPE SLEEVE
6	BEARING PLATE
7	BCT CABLE ASSEMBLY
8	ANCHOR CABLE BOX
9	GROUND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

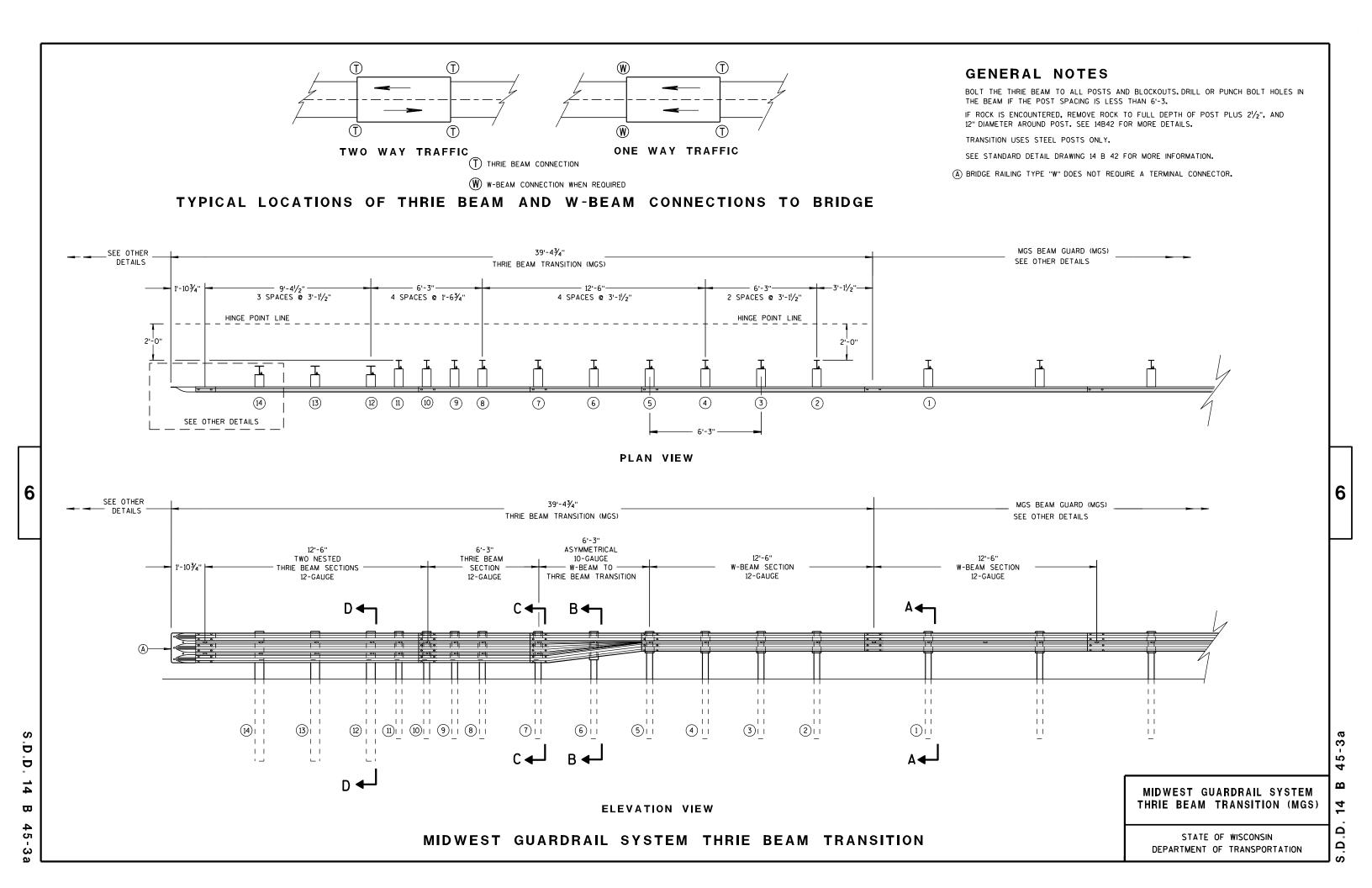


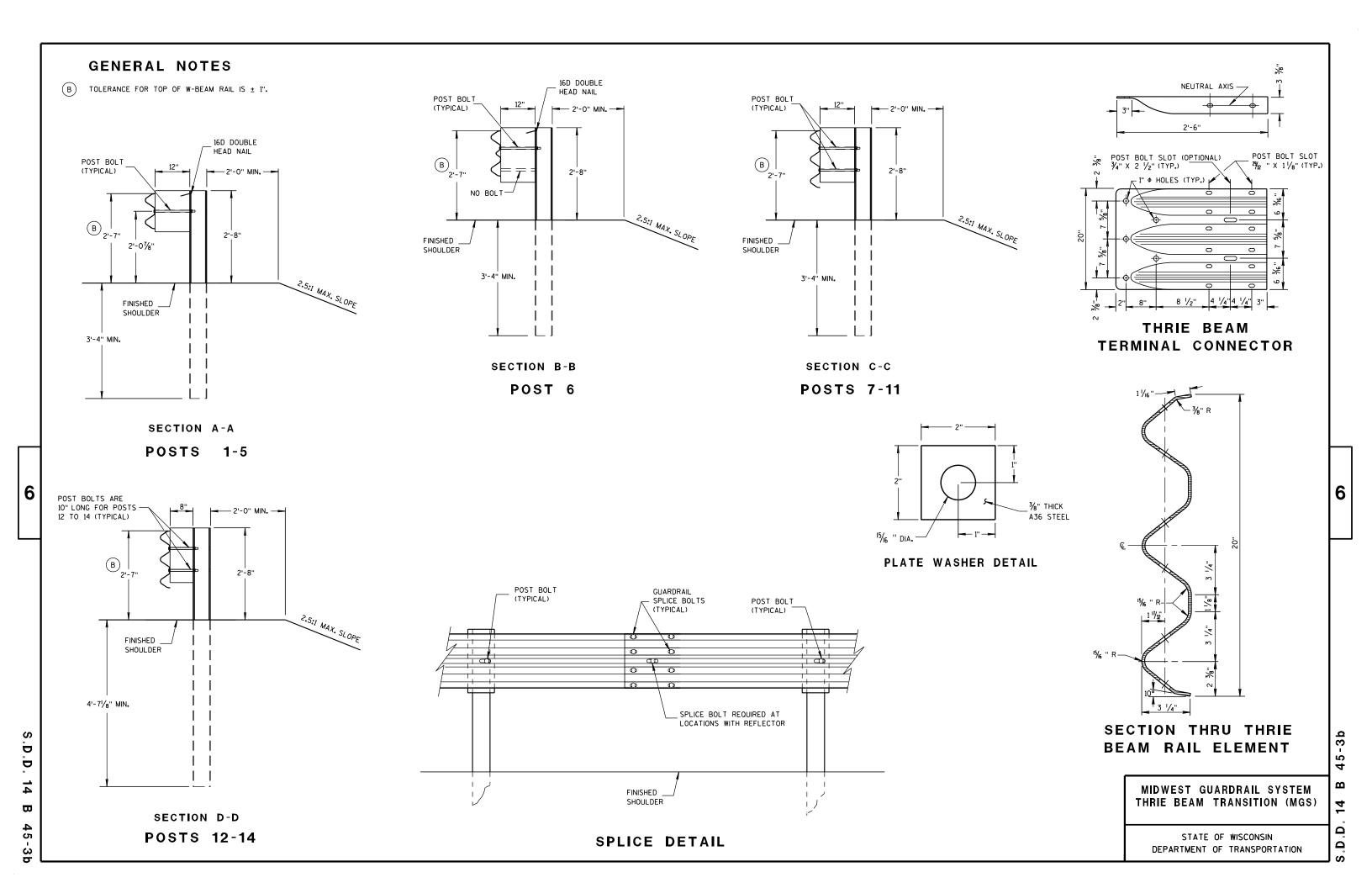
BEARING PLATE

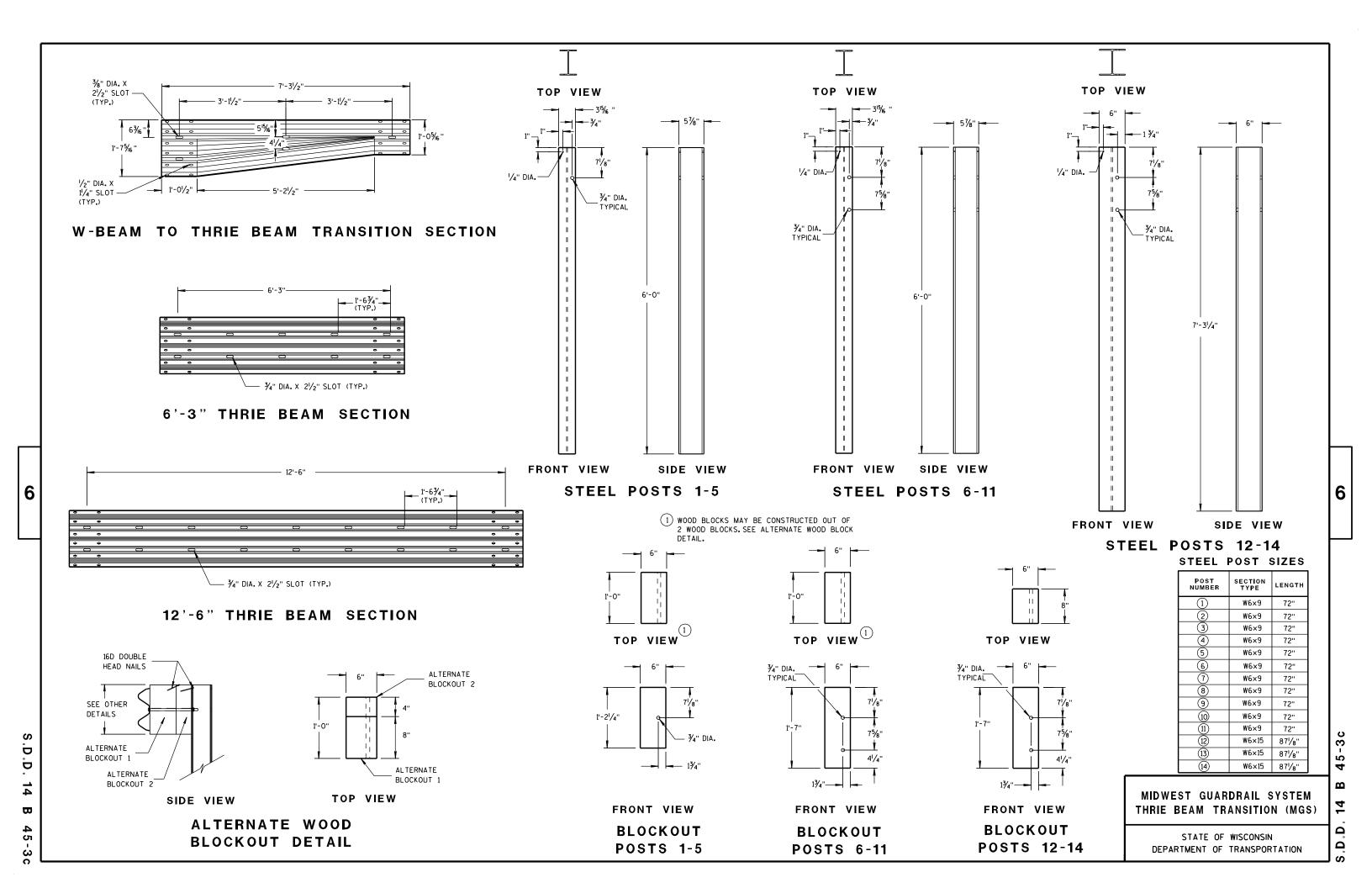
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION S.D.D.











BRIDGE ROAD 1)TWO-WAY **CLOSED** TYPE "A" WARNING LIGHTS REQUIRED OUTSIDE EDGE OF SHOULDER OUTSIDE EDGE OF SHOULDER OR FACE OF CURB OR FACE OF CURB **DETAIL D**

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30". R11-3, R11-4 AND R10-61 SHALL BE 60" X 30". M4-9 SHALL BE 30" X 24". M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.) M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)

M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.) MO5-1 AND MO6-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.) D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS. R1-1 SHALL BE 36" X 36".

- (1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT
- THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS. PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

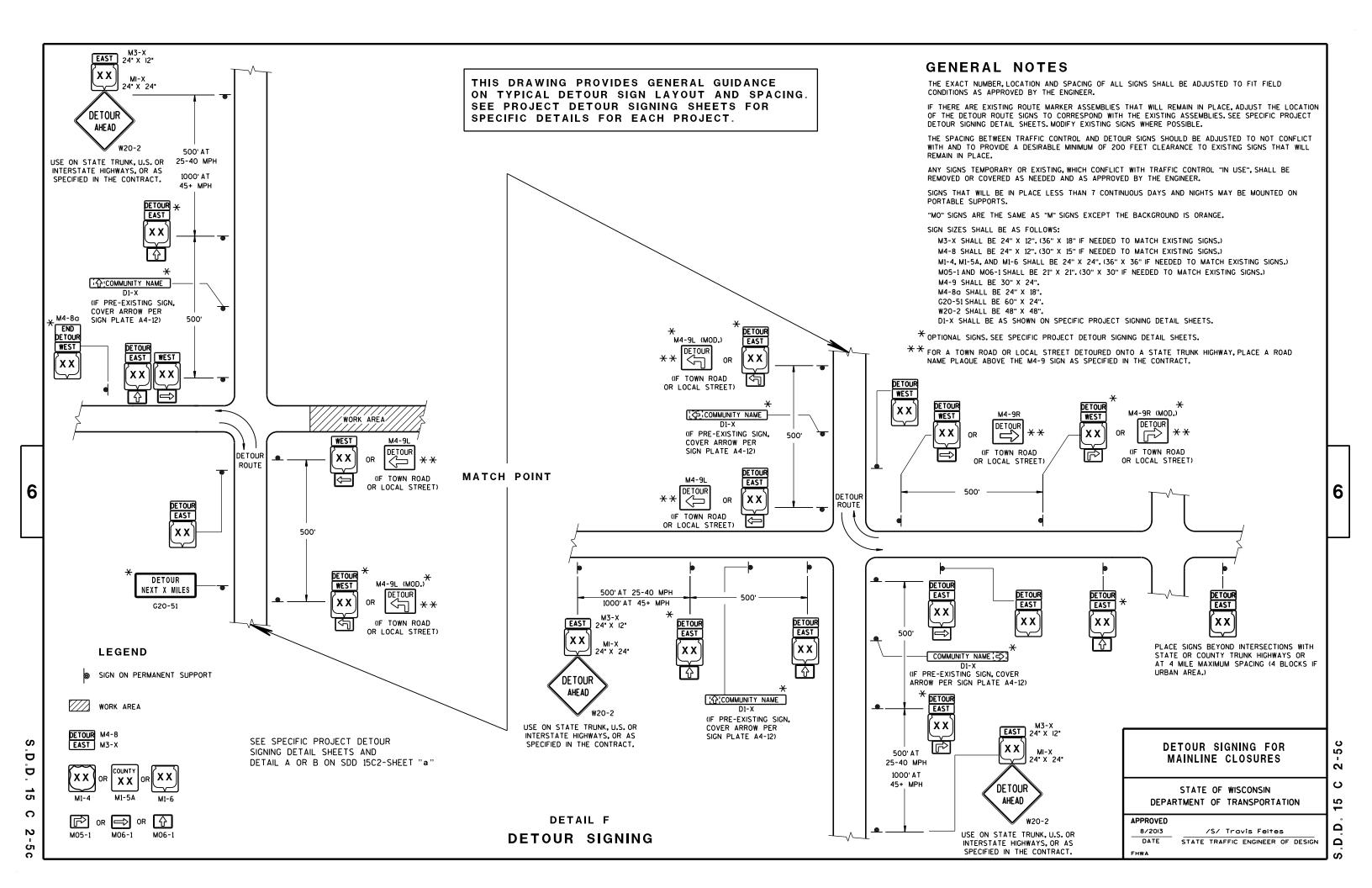
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
RI1-2 SHALL BE 48" X 30".
RI1-4 AND RI1-3 SHALL BE 60" X 30".

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

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

LEGEND

SIGN ON PERMANENT SUPPORT

TYPE III BARRICADE

TYPE III BARRICADE WITH
ATTACHED SIGN

(A) TYPE "A" WARNING LIGHT (FLASHING)

//// w

WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 /S/ Travis Feltes

DATE STATE TRAFFIC ENGINEER OF DESIGN

S.D.D. 15 C 3-2

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

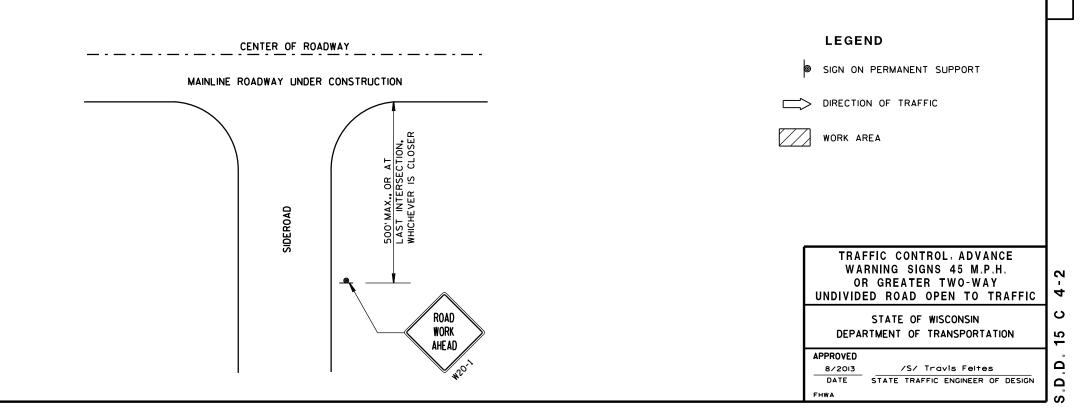
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

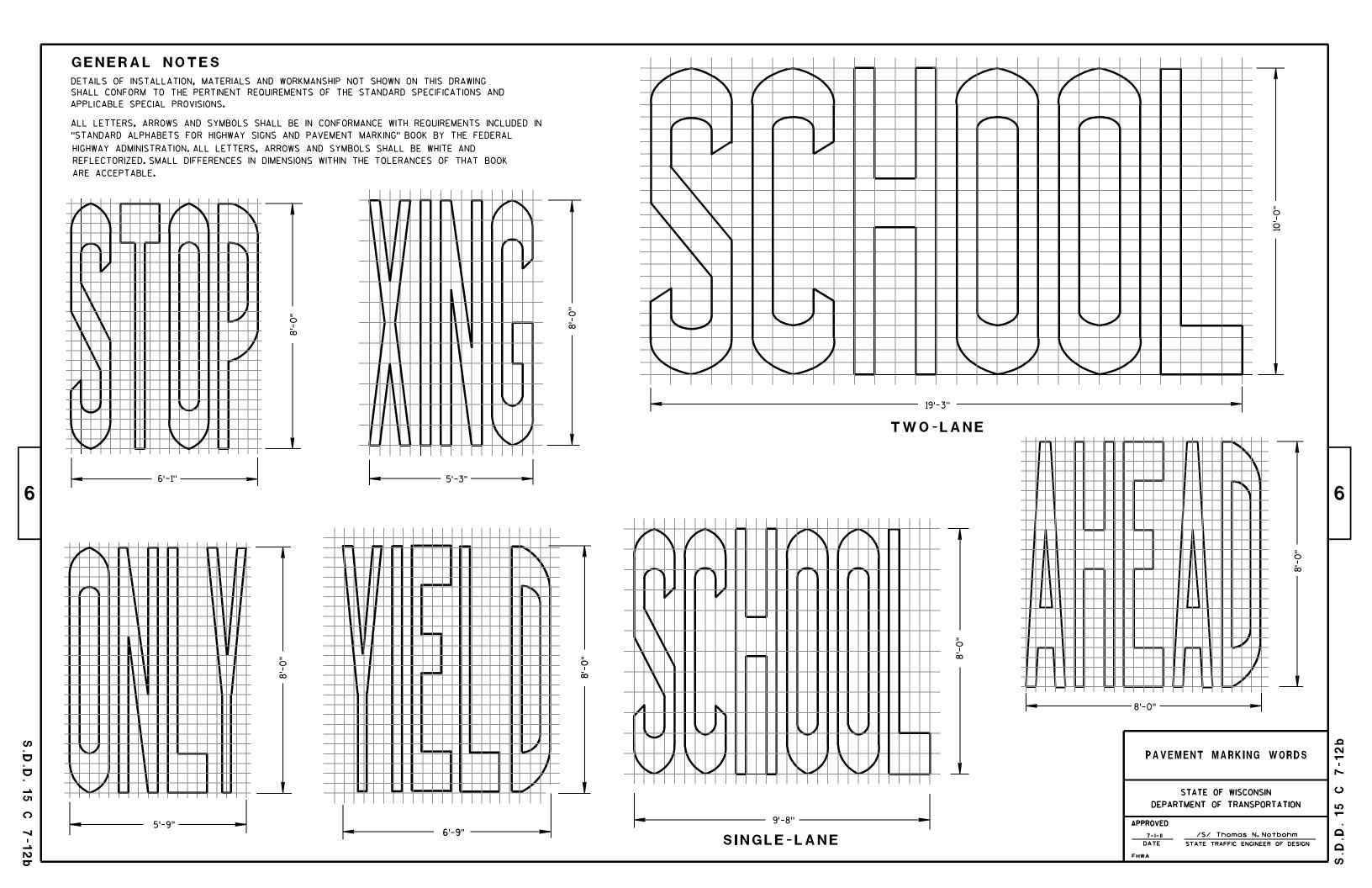
ALL SIGNS ARE 48"×48" UNLESS OTHERWISE NOTED.

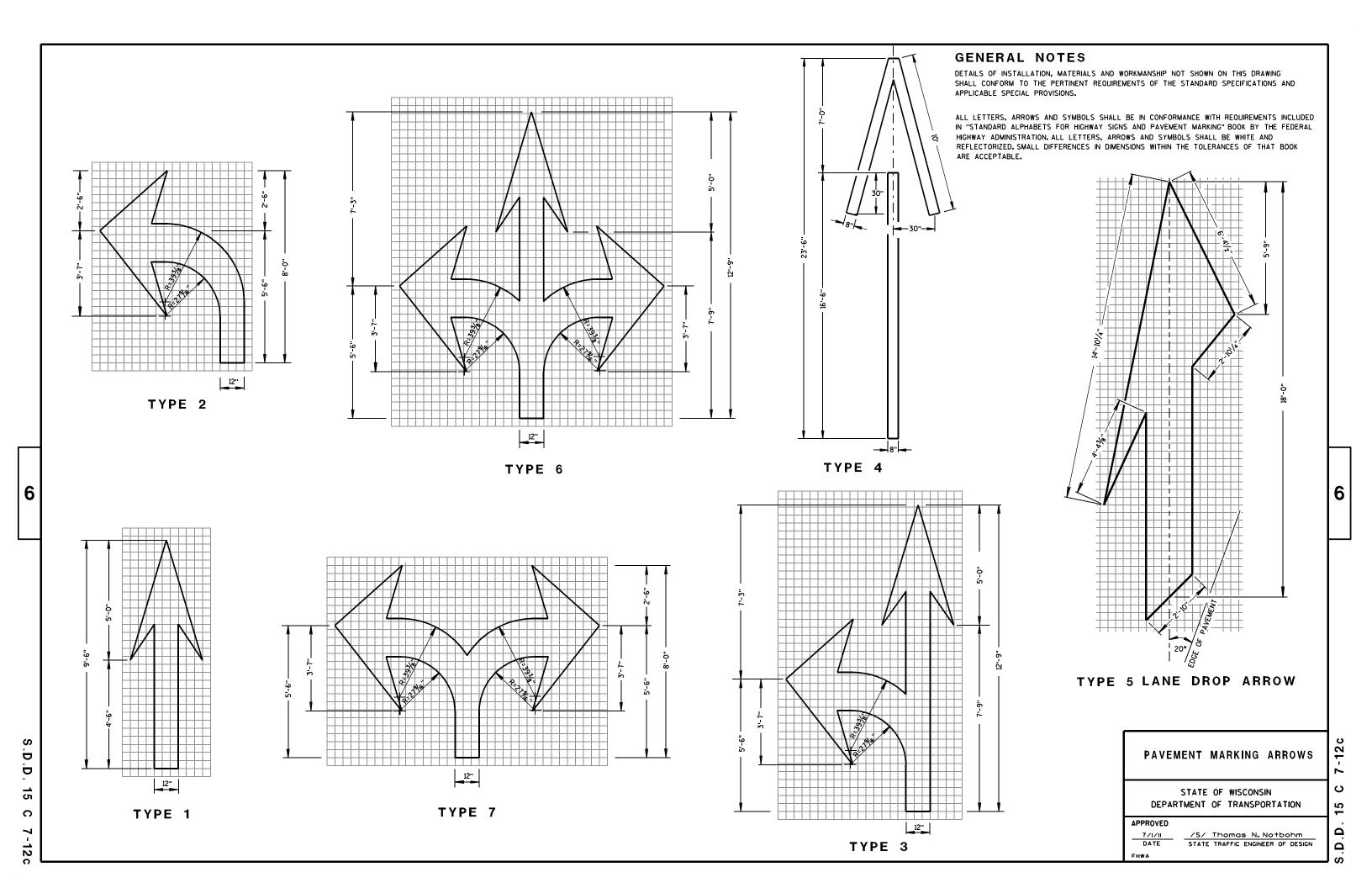
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.



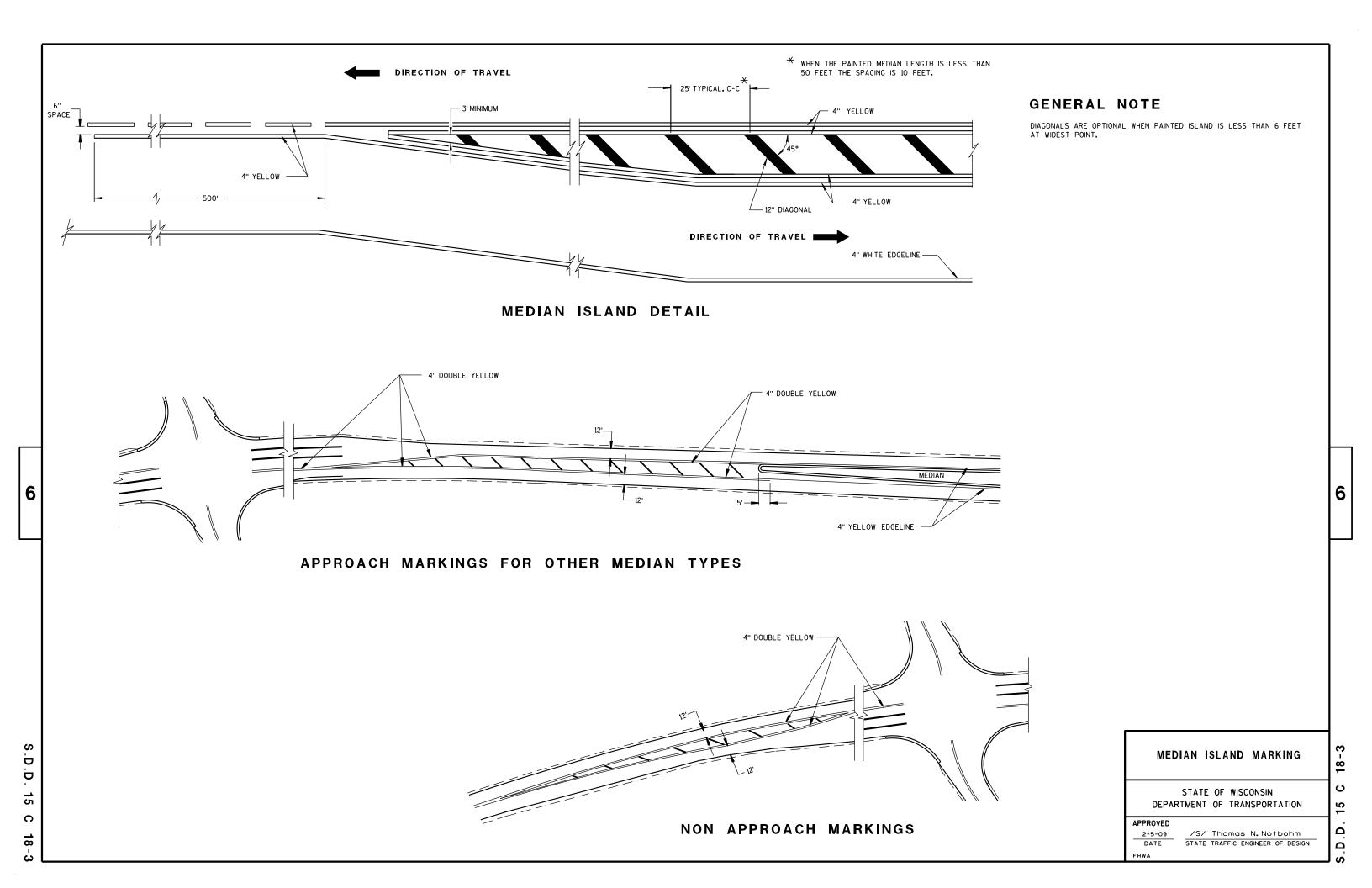


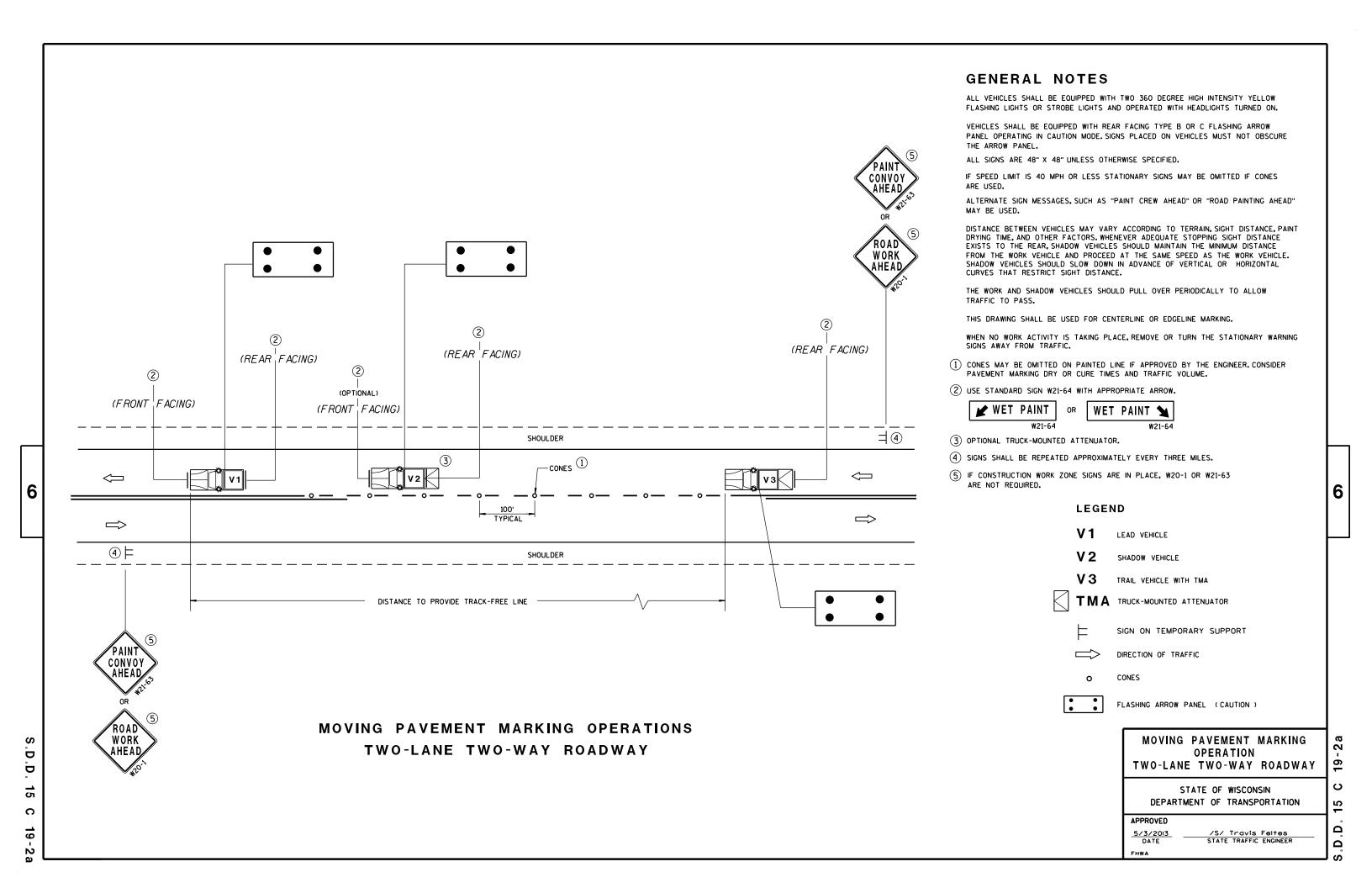


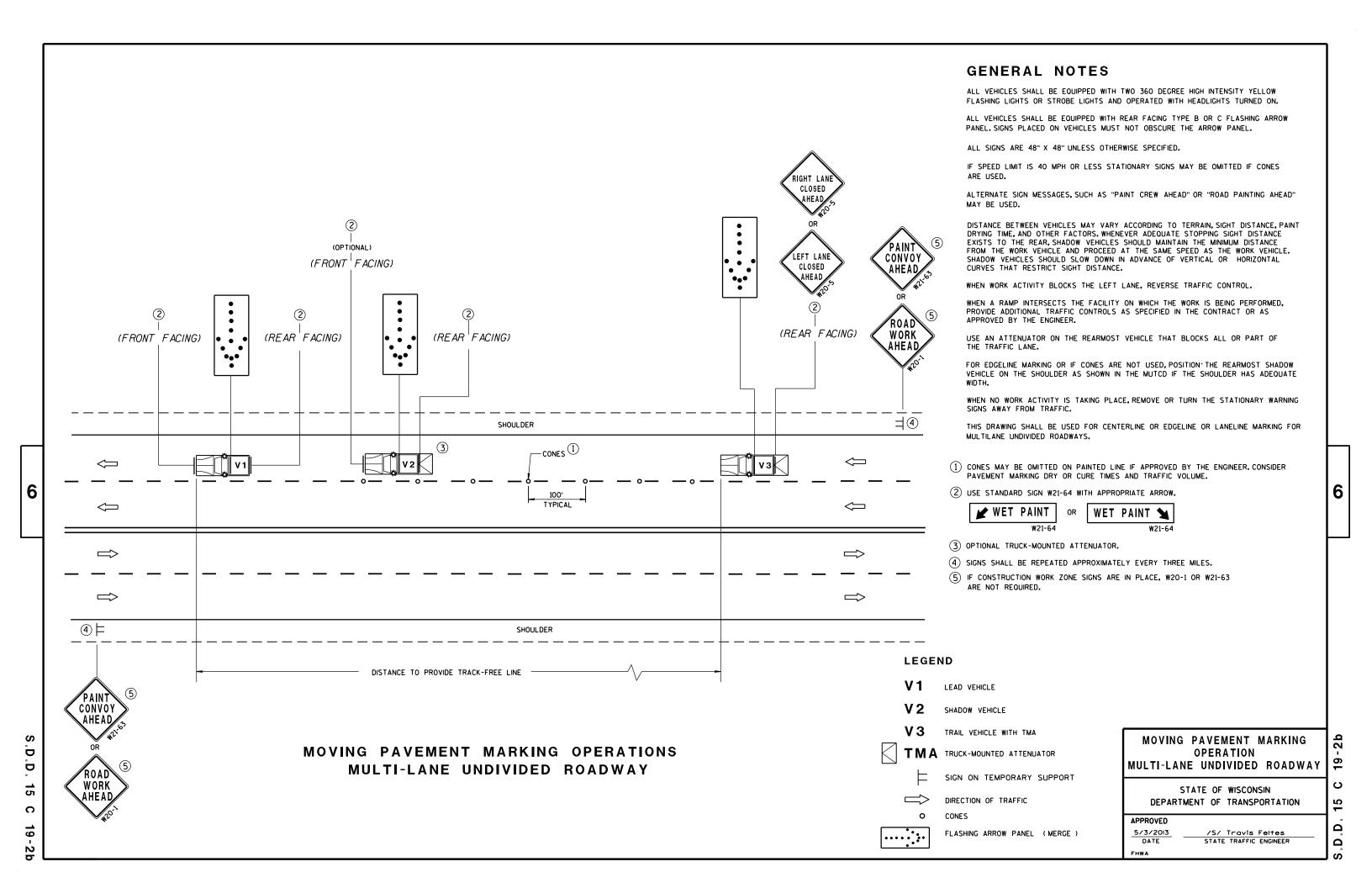


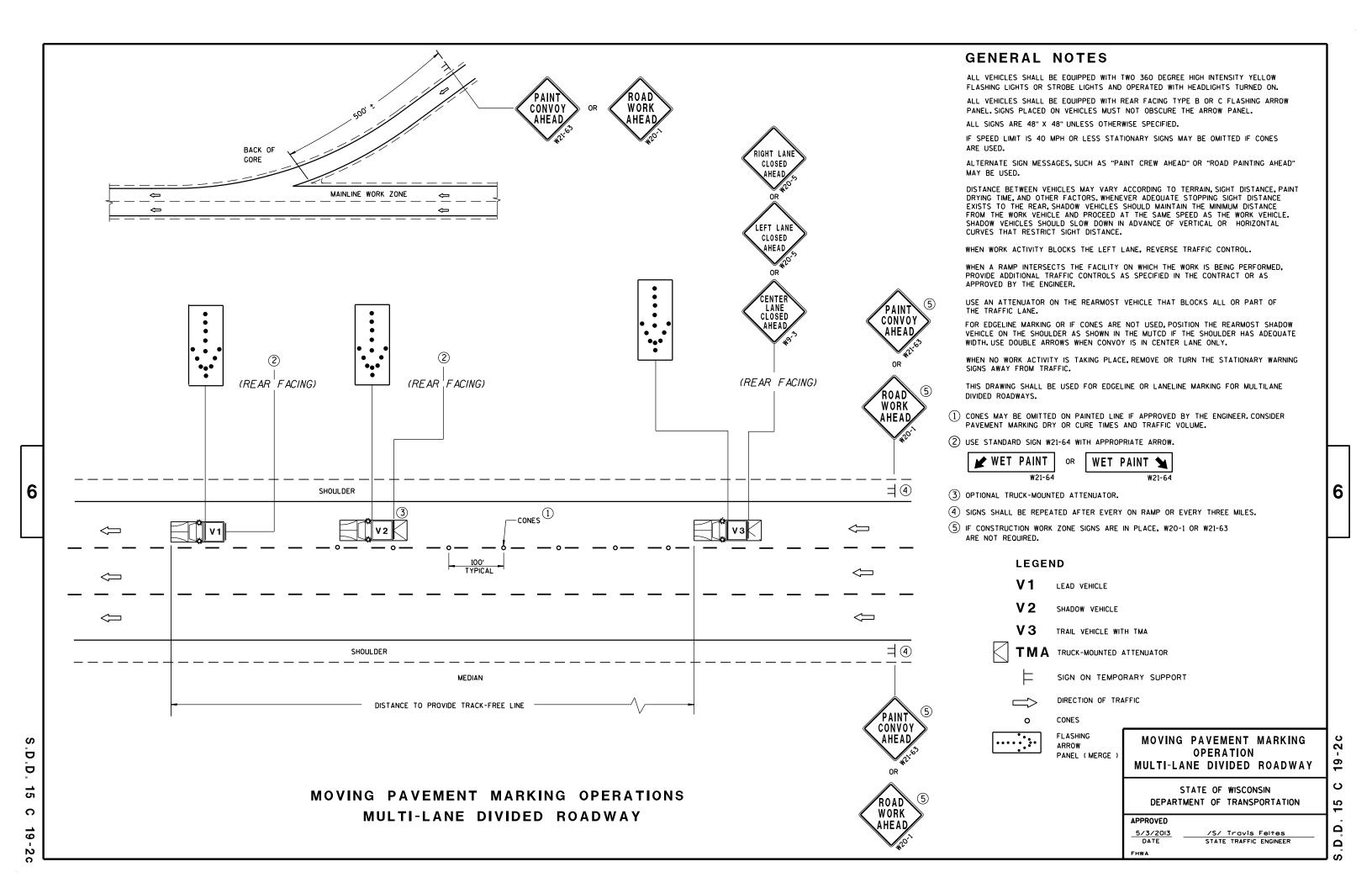


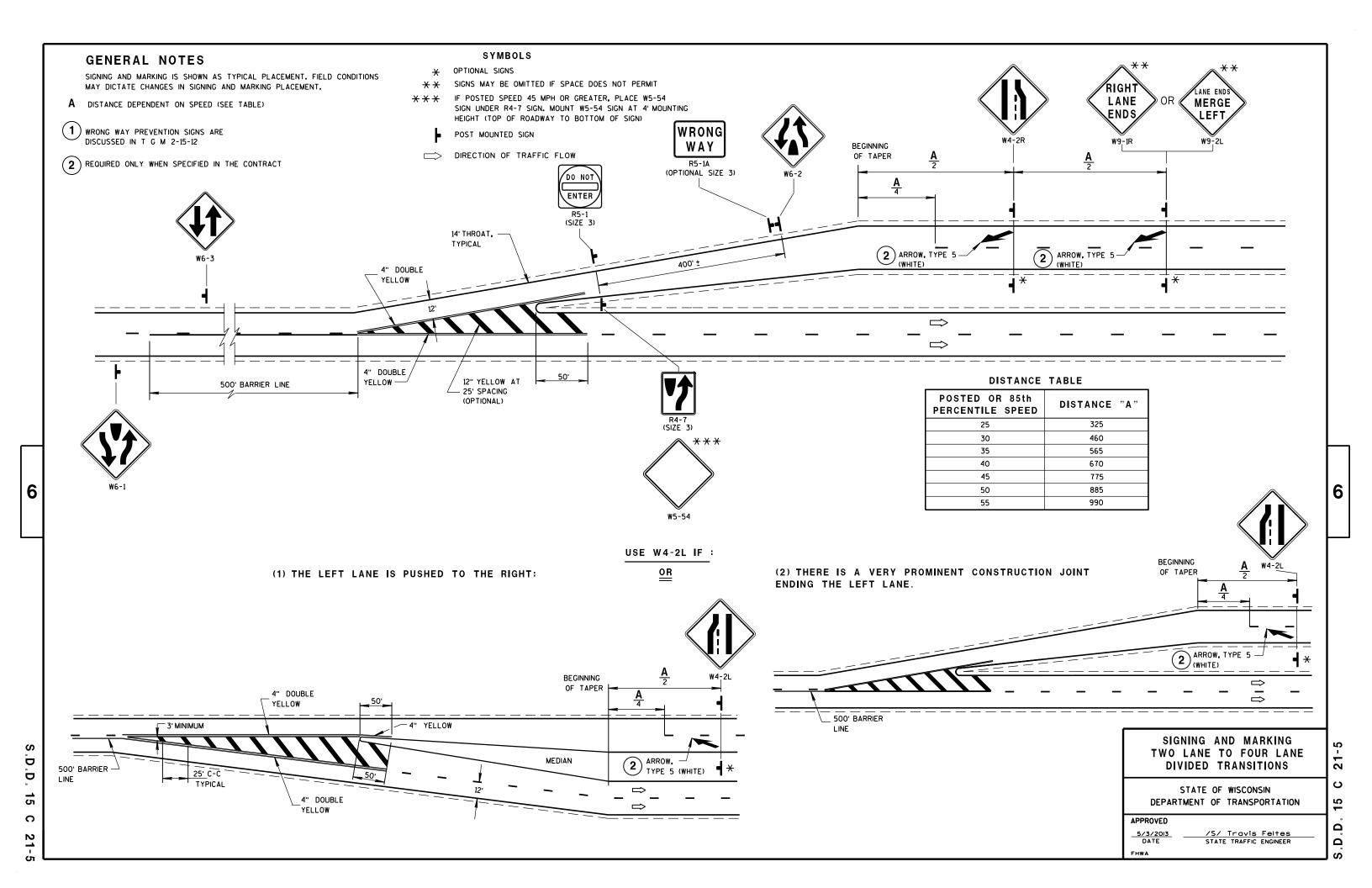


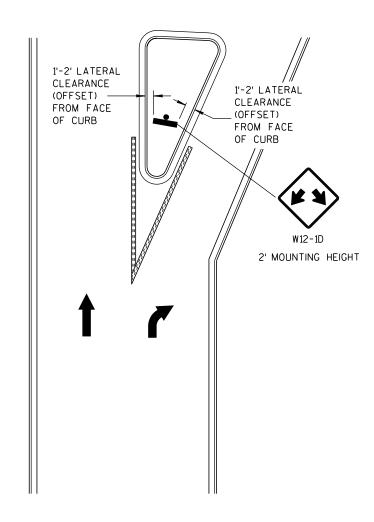




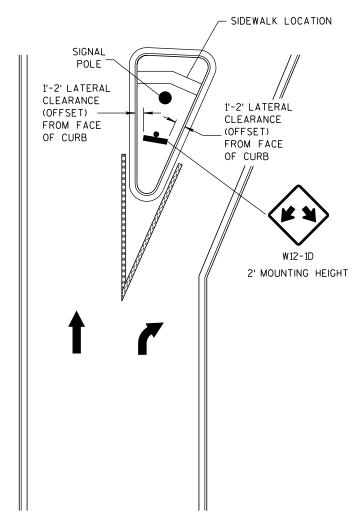




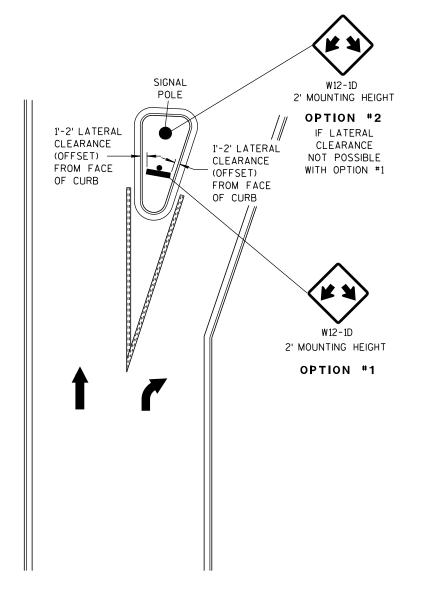




LARGE RIGHT TURN ISLAND



LARGE RIGHT TURN ISLAND
WITH SIGNAL POLE



SMALL RIGHT TURN ISLAND

DOUBLE ARROW WARNING SIGN PLACEMENT

DOUBLE ARROW Warning Sign Placement

27

ပ

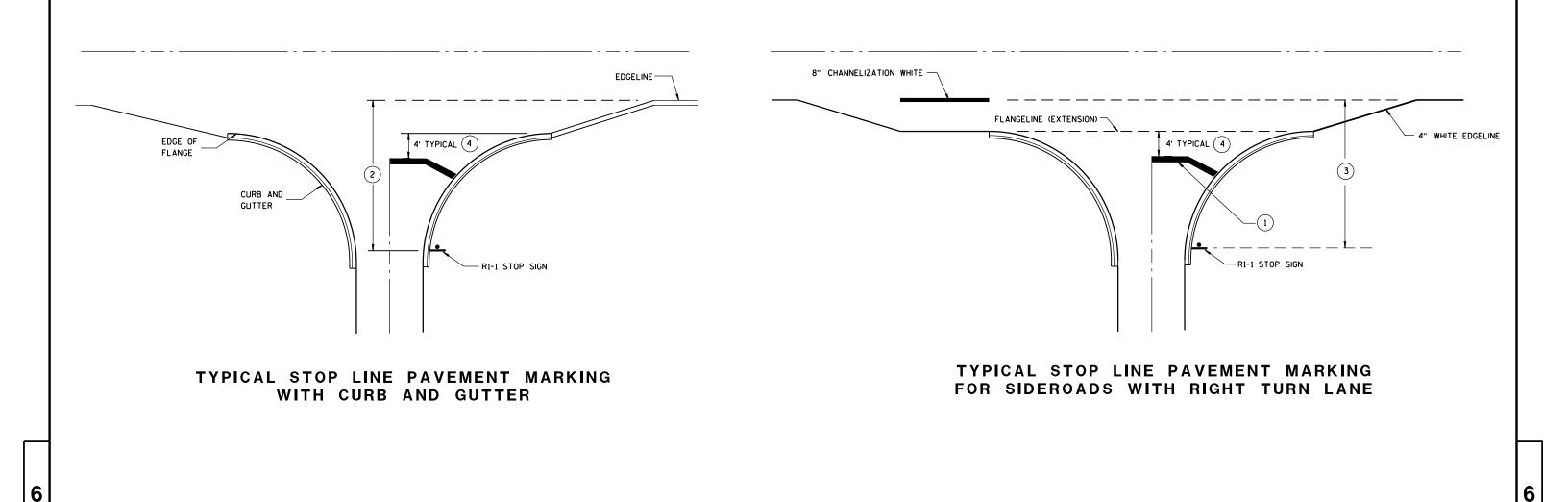
Ω

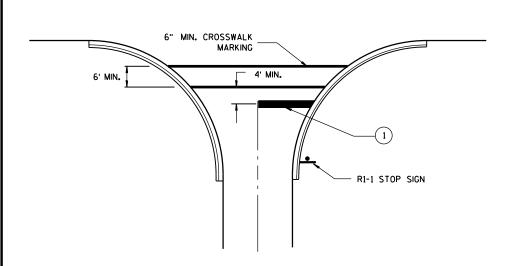
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

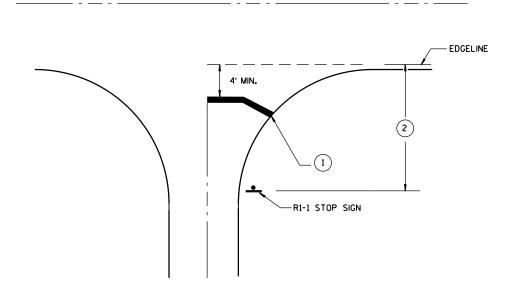
.D.D. 15 C 27-1

6





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.
- MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

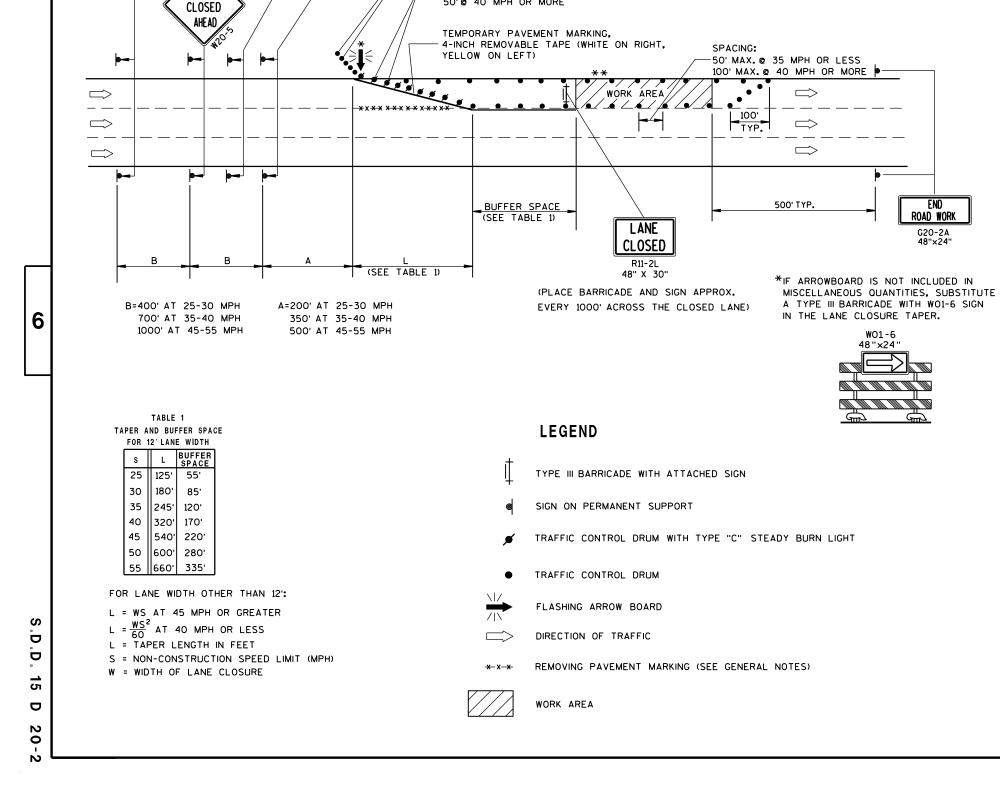
APPROVED	
4/30/2013	/S/ Travis Feltes
DATE	STATE TRAFFIC ENGINEER
FHWA	

.D.D. 15 C 33-1

S.D.D.

33





(5) DRUMS SPACED @ 10'

INTERVALS AS NEEDED IN

FRONT OF ARROW BOARD

25' @ 35 MPH OR LESS 50' @ 40 MPH OR MORE

SPACING:

ROAD WORK

NEXT___MILES

G20-1

60" X 24"

AHEAD

GENERAL NOTES

**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE

ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL

W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF

IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC

TRAFFIC. IN ADVANCE OF THE WORK AREA.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE, FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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

ALL SIGNS ARE 48"×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, OR THAT WILL BE PLACED IN A CLOSED LANE, 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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W2O-1, G2O-1 AND G2O-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

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

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

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

TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

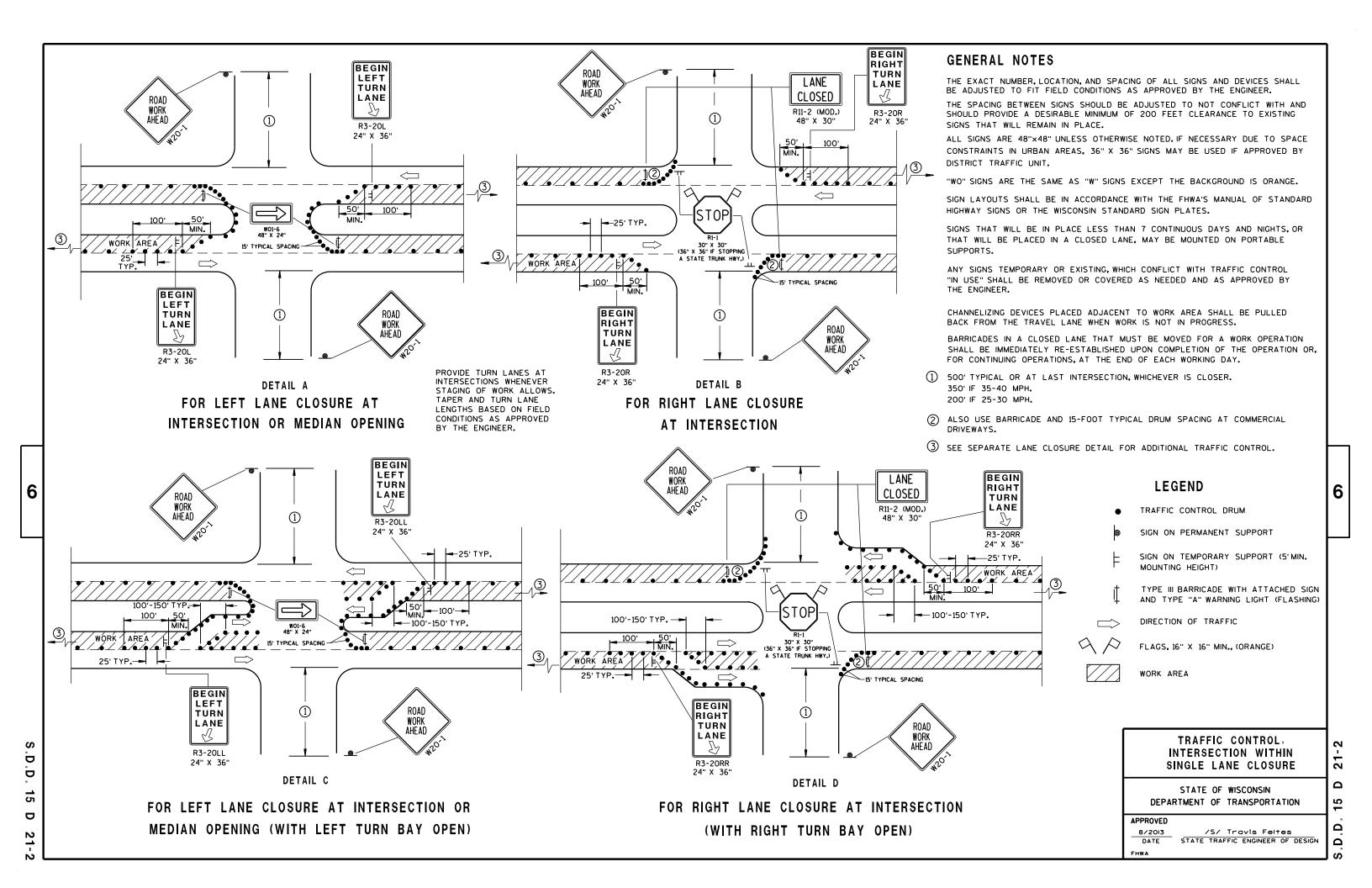
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

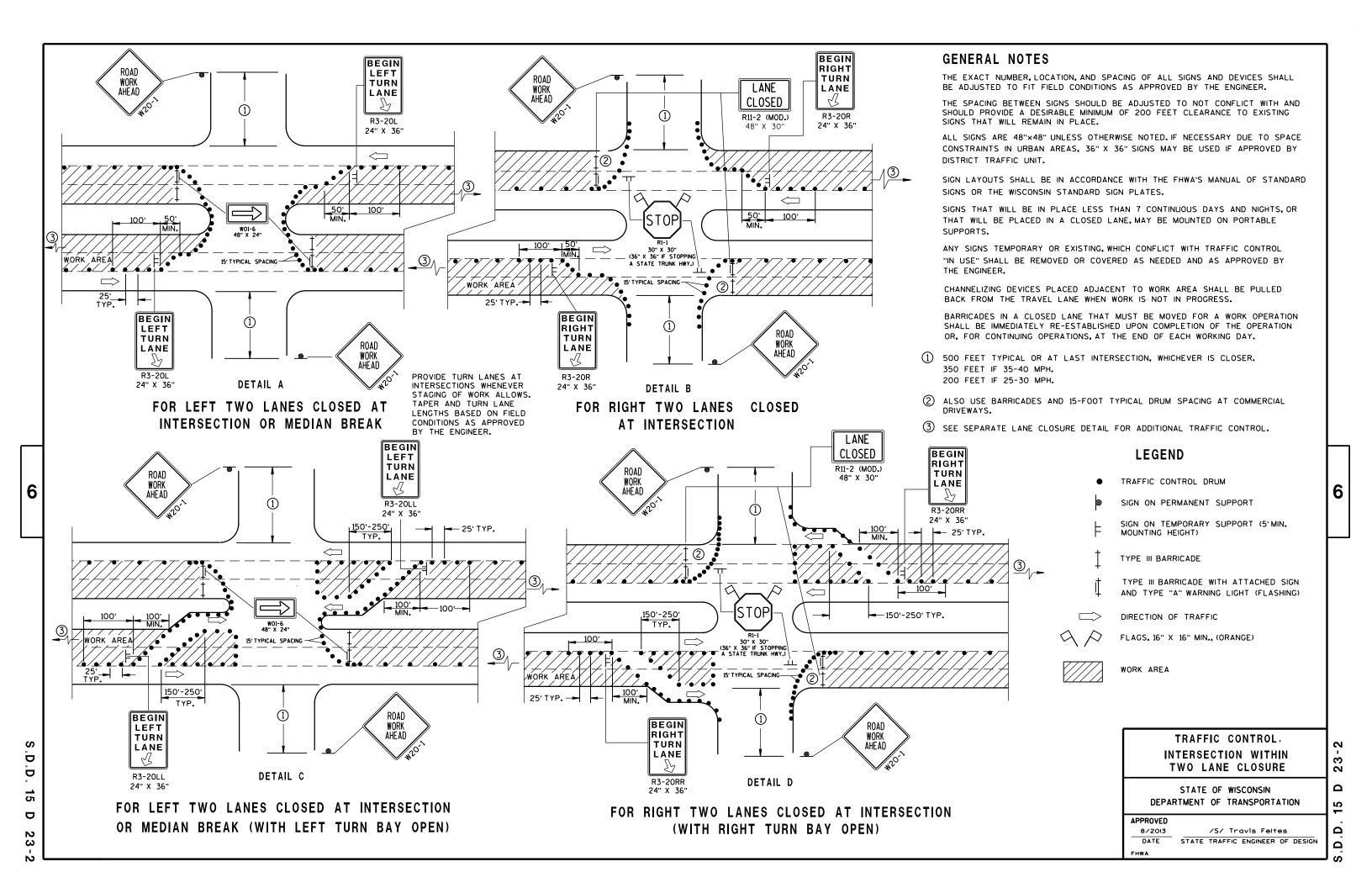
APPROVED

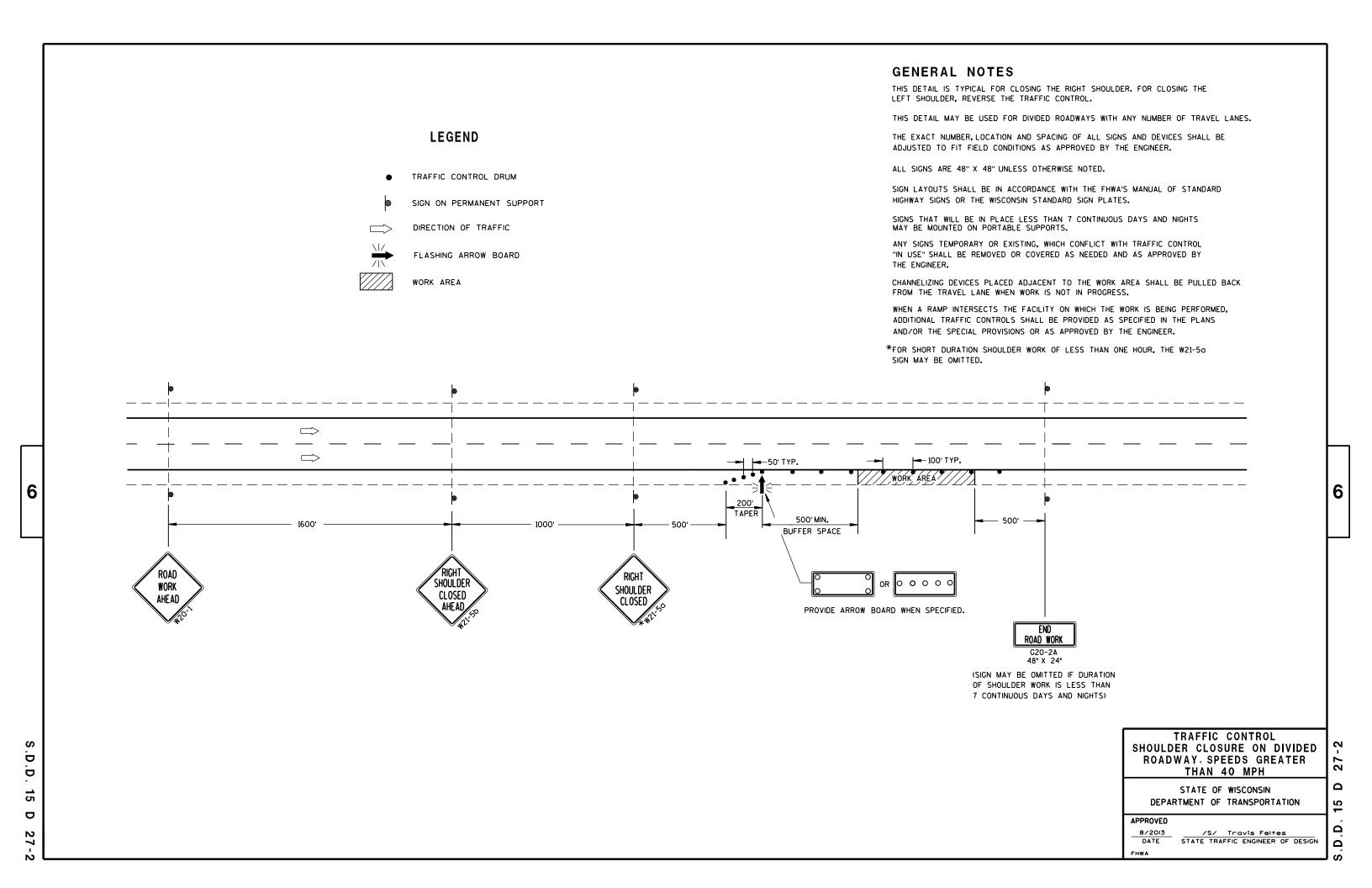
8/2013 /S/ Travis Feites

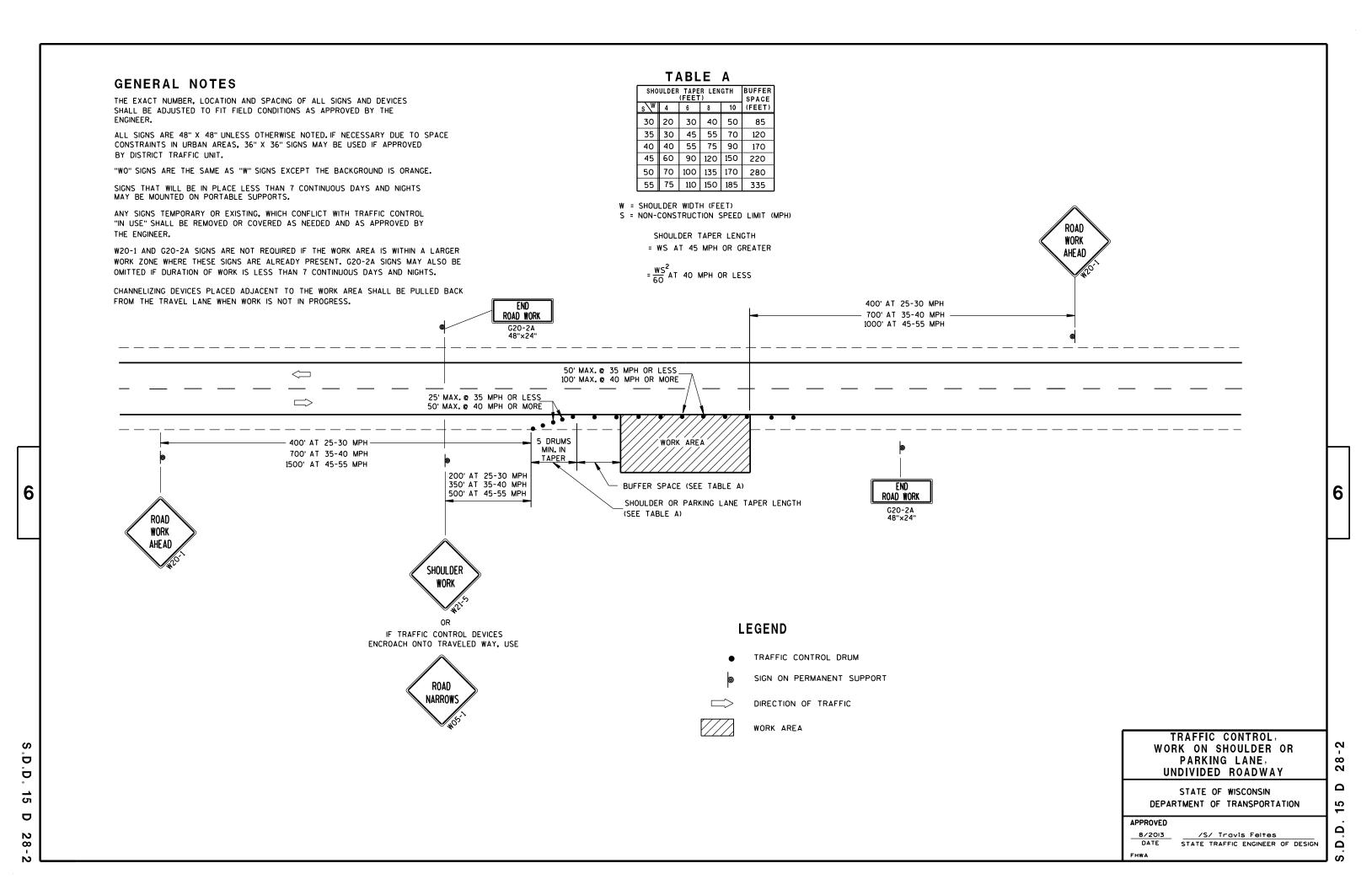
DATE TRAFFIC ENGINEER OF DESIGN

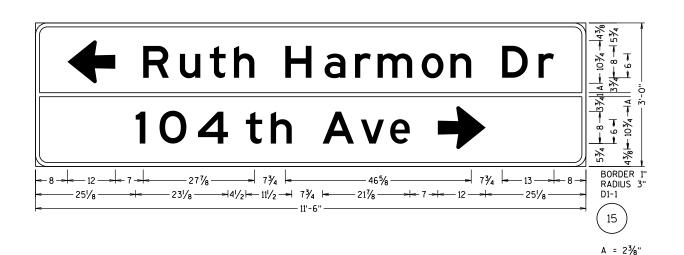
S.D.D. 15 D 2





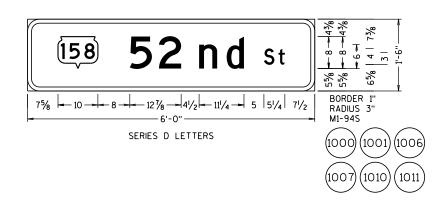


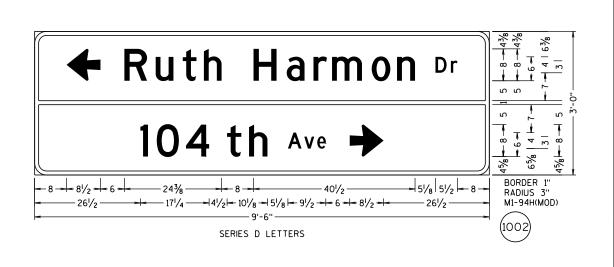




GENERAL NOTES:

- 1. DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE PLANS.
- 2. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET ARE "SIGNS, TYPE II".
- 3. UNLESS OTHERWISE NOTED, TYPE II SIGNS ON THIS SHEET SHALL HAVE "TYPE H REFLECTIVE SHEETING" AND. "TYPE H MESSAGE MATERIAL". TYPE ISIGNS SHALL HAVE TYPE SH REFLECTIVE SHEETING.
- 4. UNLESS OTHERWISE NOTED. ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE A GREEN BACKGROUND AND WHITE MESSAGE.
- 5. TYPE IISIGNS ALL UPPER CASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE "SERIES E. ALL LOWER CASE MESSAGE WITH AN INITIAL UPPER CASE LETTER SHALL BE "SERIES E.
- 6. TYPE ISIGNS ALL UPPER CASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE SERIES "E" MODIFIED. ALL LOWER CASE MESSAGE WITH AN INITIAL UPPER CASE LETTER SHALL BE SERIES "E" MODIFIED. ALL CAP WORDS ARE "SERIES E"
- 7. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE "TYPE A" OR "TYPE C" ARROWS AS SHOWN. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS.
- 8. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS ON ROUTE MARKER SHIELDS.
- 9. THE SIGN NUMBER IS DENOTED IN THE CIRCLE NEAR EACH
- 10. NUMBER FRACTIONS FOR INTERCHANGE SEQUENCE SIGNS SHALL BE SERIES "E" PER PLATES A11-7 AND A11-10
- 11. DO NOT SCALE.

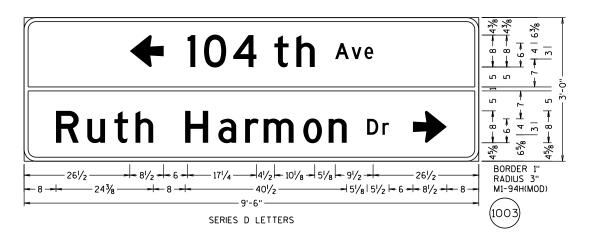




← 104 th Ave

Ruth Harmon Dr

— 46⁵/₈ —



PLOT BY: mscppl

-8-|- 27⁷/₈ -- 7³/₄ |-

SHEET 1 OF 2

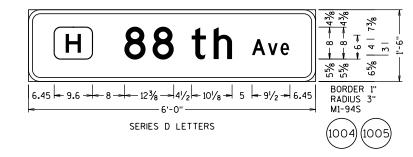
SHEET

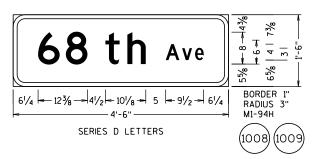
PROJECT NO: 3220-03-61 HWY: STH 158 COUNTY: KENOSHA SIGNING DETAIL - TYPE II SIGNS

FILE NAME: N:\PDS\C3D\CAD\32200301\Sign\070101_ms.dgn

PLOT DATE: 07-NOV-2013 07:50

PLOT SCALE: 48.125:1





GENERAL NOTES:

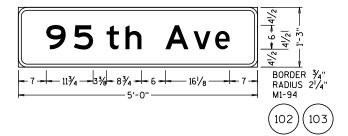
- 1. DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE PLANS.
- 2. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET ARE "SIGNS, TYPE II".
- 3. UNLESS OTHERWISE NOTED, TYPE IISIGNS ON
 THIS SHEET SHALL HAVE "TYPE H REFLECTIVE SHEETING" AND,
 "TYPE H MESSAGE MATERIAL". TYPE ISIGNS SHALL HAVE TYPE SH
 REFLECTIVE SHEETING.
- 4. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE A GREEN BACKGROUND AND WHITE MESSAGE.
- 5. TYPE IISIGNS ALL UPPER CASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE "SERIES E. ALL LOWER CASE MESSAGE WITH AN INITIAL UPPER CASE LETTER SHALL BE "SERIES E.
- 6.TYPE ISIGNS ALL

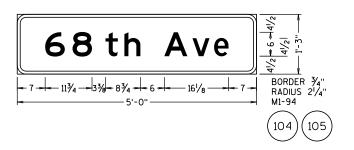
 UPPER CASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE

 NOTED) SHALL BE SERIES "E" MODIFIED. ALL LOWER CASE

 MESSAGE WITH AN INITIAL UPPER CASE LETTER SHALL BE SERIES "E" MODIFIED.

 ALL CAP WORDS ARE "SERIES E"
- 7. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE "TYPE A" OR "TYPE C" ARROWS AS SHOWN. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS.
- 8. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS ON ROUTE MARKER SHIELDS.
- 9. THE SIGN NUMBER IS DENOTED IN THE CIRCLE NEAR EACH DETAIL.
- 10. NUMBER FRACTIONS FOR INTERCHANGE SEQUENCE SIGNS SHALL BE SERIES "E" PER PLATES A11-7 AND A11-10
- 11. DO NOT SCALE.





7

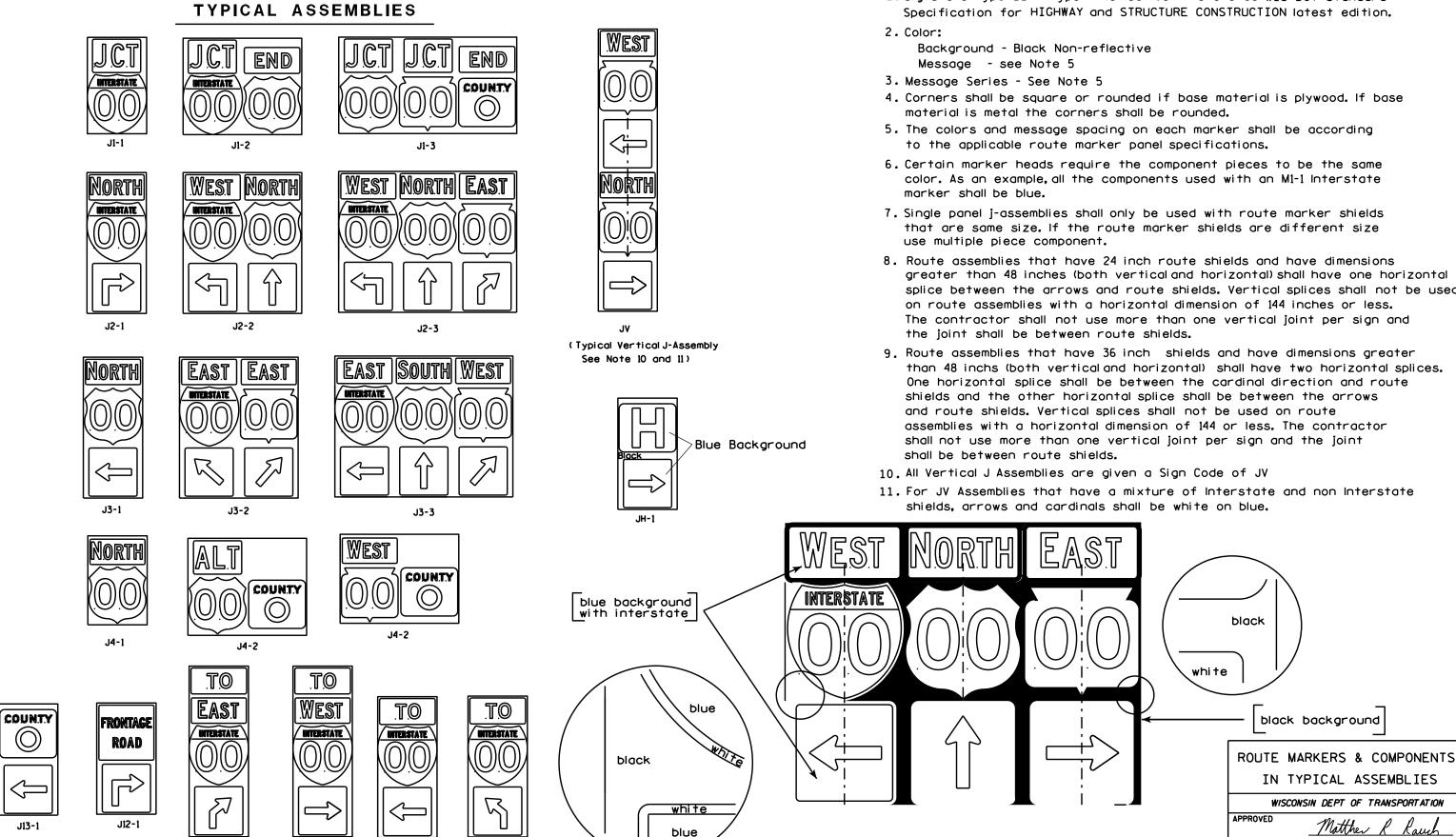
SHEET 2 OF 2

PROJECT NO:3220-03-61 HWY:STH 158 COUNTY:KENOSHA SIGNING DETAIL - TYPE II SIGNS SCALE: SIGNING DETAIL - TYPE II SIGNS

PLOT BY: mscppl

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard

areater 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.



PROJECT NO:

J32-1

J22-1

J23-1

J33-1

PLOT BY: mscsja

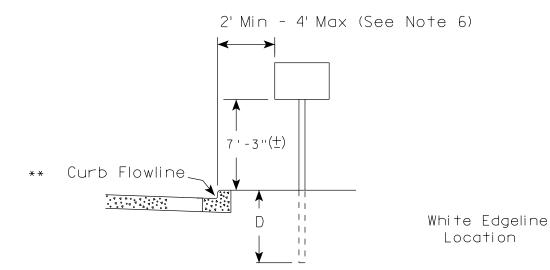
PLATE NO. __A2-15.8

DATE 2/06/14

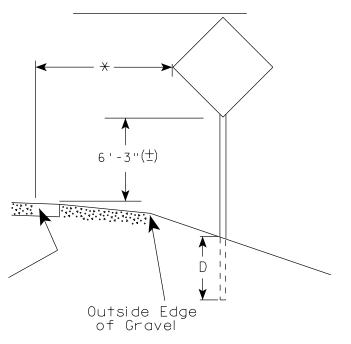
SHEET NO:



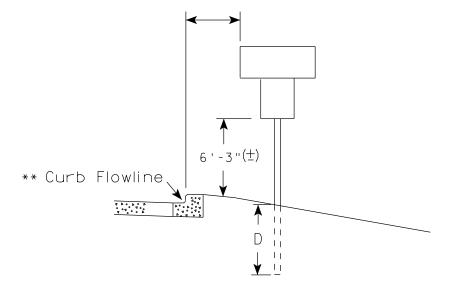
urban area



RURAL AREA (See Note 2)



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



White Edgeline
Location

Outside Edge
of Gravel

** 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.

HWY:

* 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.

PLOT BY : mscj9h

GENERAL NOTES

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

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matther & Rauh
For State Traffic Engineer

DATE 9/30/13

SHEET NO:

COUNTY:

JN I Y:

PLOT DATE: 30-SEP-2013 13:25

PLOT NAME :

PLOT SCALE: 99.237937:1.000000

WISDOT/CADDS SHEET 42



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



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

HWY:



PLAN VIEW

COUNTY:

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

For State Traffic Engineer

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

SHEET NO:

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN

PROJECT NO:

PLOT DATE: 27-JAN-2014 09:48

PLOT NAME :

PLOT BY: mscsja

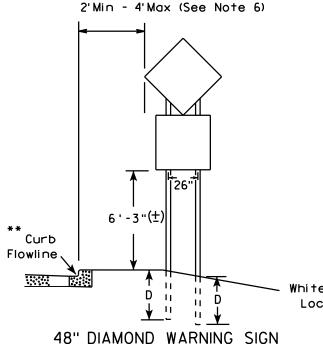
PLOT SCALE: 13.659812:1.000000

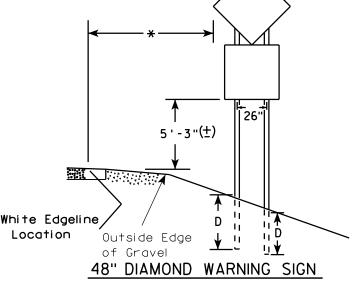
APPROVED

GENERAL NOTES

- 1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
- 2. See tables below for required number of posts.
- 3. For expressways and freeways, mounting height is 7'-3'' (±) or 6'-3'' (±) depending upon existence of sub-sign.
- 4. The (±) tolerance for mounting height is 3 inches.
- 5. Minimum mounting height for J assemblies (A4-5) is 7'-3" (\pm) or 6'-3" (\pm) per urban or rural detail respectively.
- 6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
- 7. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
- 8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B). Clearance Markers (W5-52). Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4"-3" (\pm).
- * 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.
- ** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.
- ** See A4-3 sign plate for signs 4' or less in width or 20 S.F. or less in area.

URBAN AREA RURAL AREA (See Note 3) 2'Min - 4'Max (See Note 6) ₩E# FF# 6'-3"(±) 6'-3"(±) 7'-3"(±) ** Curb ****\ Flowline D 700 M White Edgeline D 11 White Edgeline, Location Outside Edae Location Outside Edge of Gravel





COUNTY:

of Gravel

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

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

HWY:

SIGN SHAPE OTHER THAN (FOUR POSTS REQUIRE	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

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

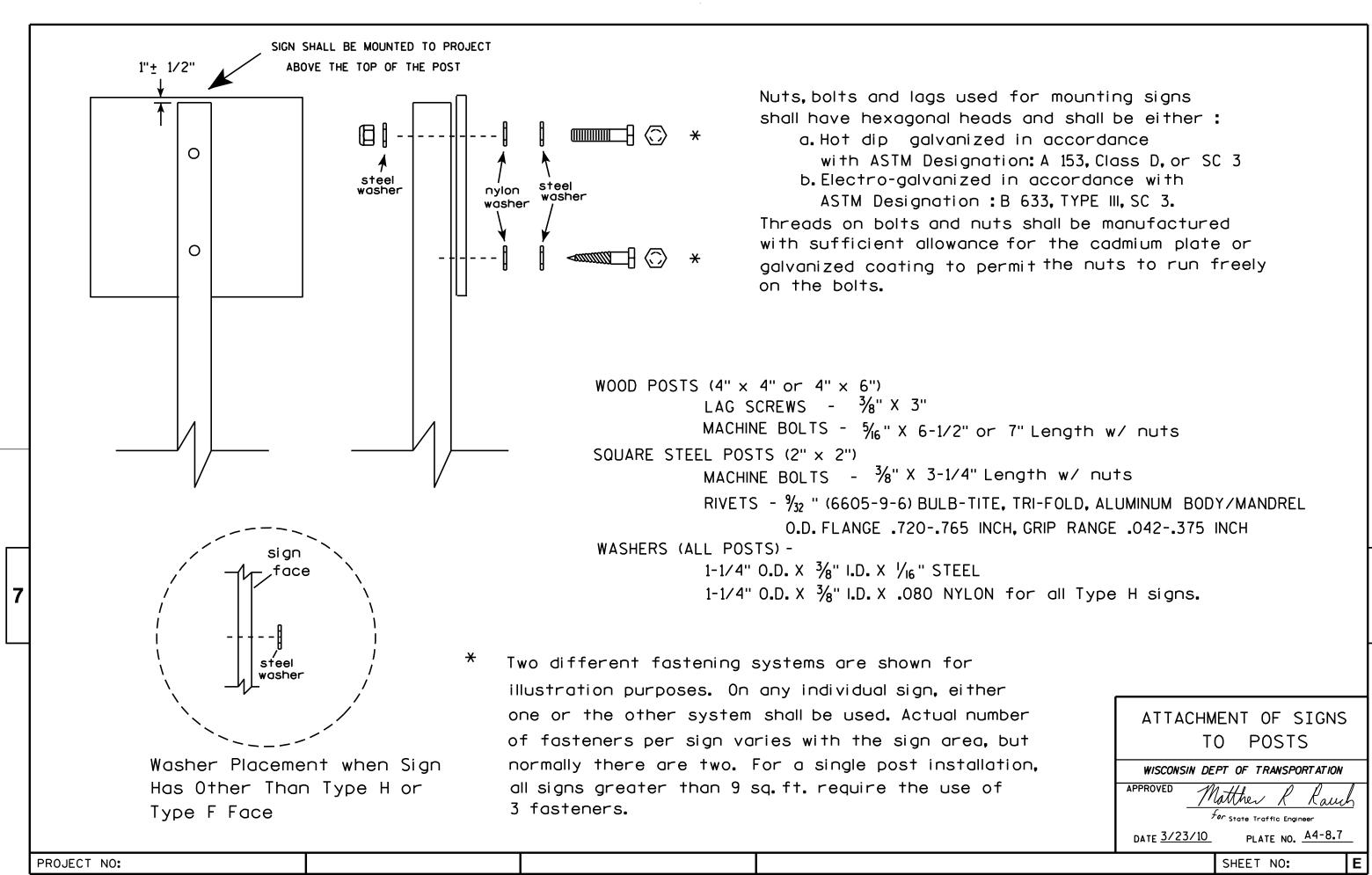
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

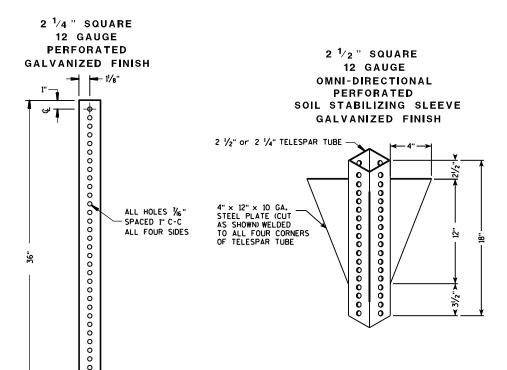
APPROVED Matther For State Traffic Engineer

PLATE NO. A4-4.12 DATE 9/30/13

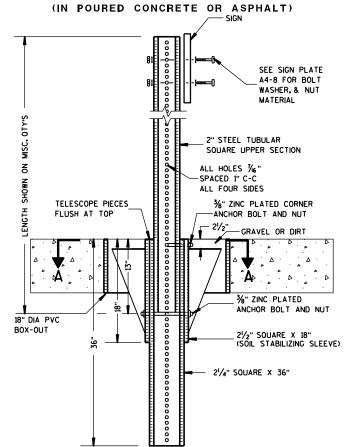
SHEET NO: PLOT BY: mscj9h



TELESCOPIC TUBING ANCHORS TWO PIECE SYSTEM



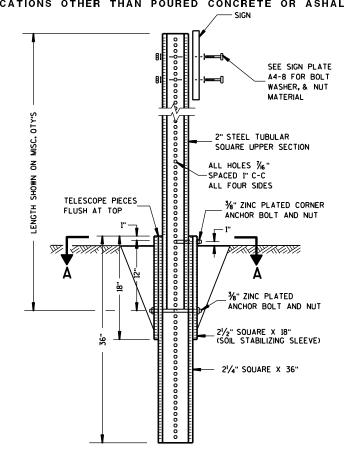
HWY:

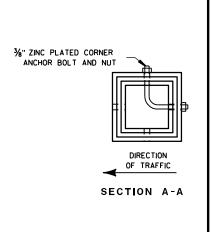


DETAIL OF TUBULAR STEEL SIGN POST

DETAIL OF TUBULAR STEEL SIGN POST

(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASHALT)





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

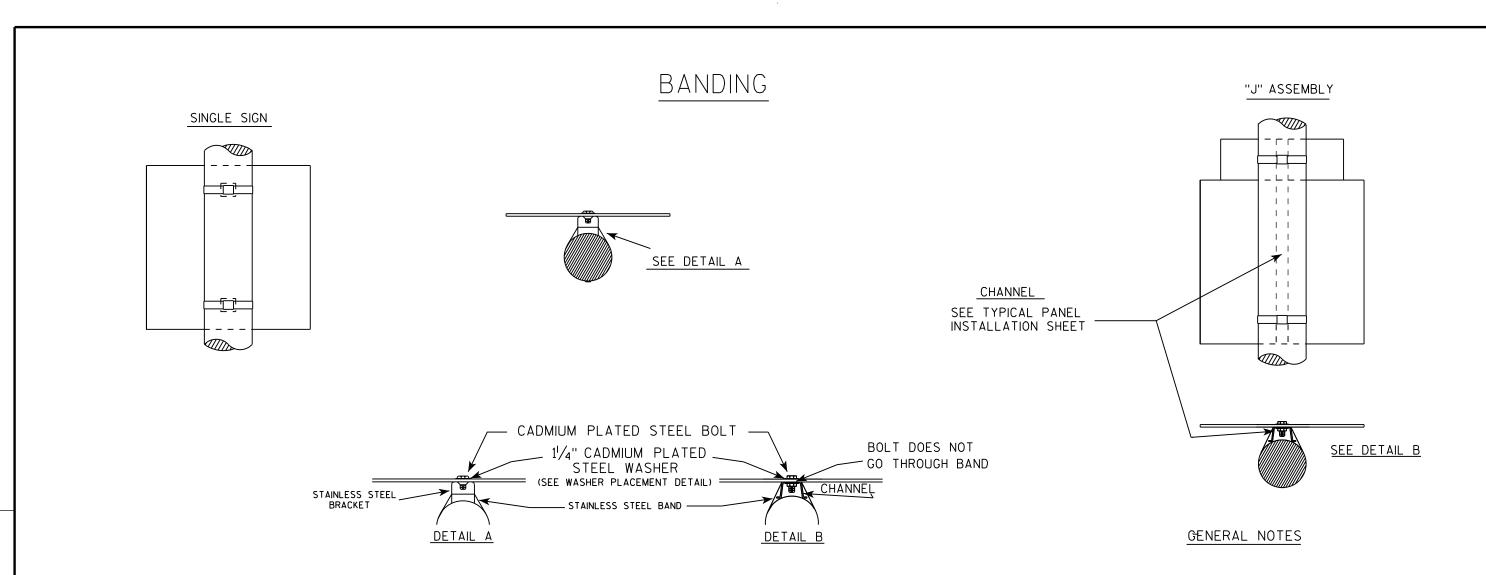
APPROVED Matther

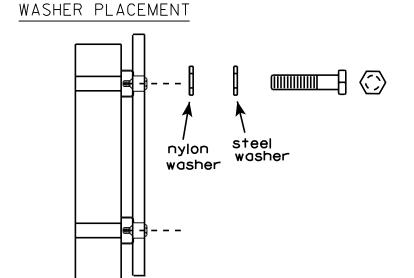
For State Traffic Engineer DATE <u>5/30/1</u>2 PLATE NO. <u>A4-9.7</u>

SHEET NO:

PROJECT NO: FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN COUNTY:

PLOT NAME :





HWY:

WASHERS (ALL POSTS) -

COUNTY:

1-1/4" O.D. X3/8" I.D. X1/16" STEEL 1-1/4" O.D. X3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

PLOT BY: mscsja

- 1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
- 2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
- 3. Banding and assembly bracket shall be stainless steel. All bands shall be $\frac{3}{4}$ " in width and 0.025" thickness.

STANDARD SIGN SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

DATE 8/16/13

SHEET NO:

State Traffic Engineer

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A59.DGN

PROJECT NO:

PLOT DATE: 16-AUG-2013 13:27

PLOT NAME :

PLOT SCALE: 33.740899:1.000000

WISDOT/CADDS SHEET 42

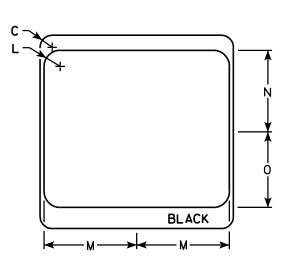
PLATE NO. A5-9.3

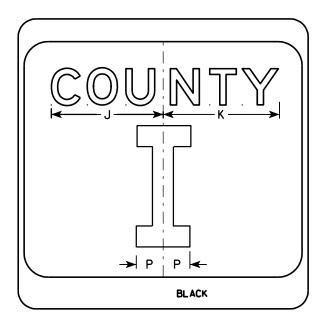
- 1. Sign is Type II see Note 7 reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

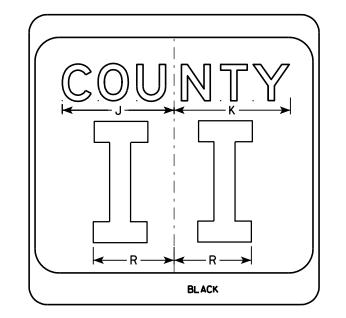
Background - White & Black - See Note 7 Message - Black

- 3. Message Series see Note 5
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Message Series E for 1 letter. Message Series D for 2 letters unless message is too big then Series C. Message Series C for 3 letters unless message is too big then Series B.
- 6. Substitute appropriate letters & optically center to achieve proper balance.
- 7. Permanent Signs

Background - Type H Reflective Detour or temporary Signs Background - Reflective







SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	M	N	0	Р	0	R	S	T	U	٧	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 %	2	11 1/2	10 1/8	9 %	2 1/4		6 %									4.0
3	36		2 1/4			16	4	7 5/8	5 %	12 1/4	12 1/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 %	5 %	12 1/4	12 1/8	3	17 1/8	15 1/4	14	3 %		10									9.0
5	36		2 1/4			16	4	7 %	5 %	12 1/4	12 1/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
																			_								

COUNTY:

CTH MARKER M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

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

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\M15A.DGN

PROJECT NO:

BLACK

HWY:

M1-5A

PLOT DATE: 29-SEP-2011 11:25

PLOT NAME :

PLOT BY: mscsja

PLOT SCALE: 5.959043:1.000000

- 1. Sign is Type II See Note 6 reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

Background - White & Black - See Note 6 Message - Black

- 3. Message Series See note 5
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
- 6. Permanent Signs Background - Type H Reflective Detour or temporary Signs Background - Reflective

	BLACK BLACK
Metric equivalent for this sign is:	>

HWY:

SIZE 600 mm X 600 mm 900 mm X 900 mm 900 mm X 900 mm 900 mm X 900 mm

PROJECT NO:

SIZE	Α	В	С	D	E	F	G	Н	I	J	К	L	М	N	0	Р	Q	R	S	Т	U	٧	W	Х	Y	Z	Area sq. ft.	Area m2
1																												ļ
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 %	11 ½	1	1 %	11 1/4	21 1/8											4.0	. 36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5	12 %	17 1/8	1 1/2	2 1/8	16 1/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5	12 5/8	17 1/8	1 1/2	2 1/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5	12 5/8	17 1/8	1 1/2	2 1/8	16 1/8	33											9.0	. 81

COUNTY:

STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

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

SHEET NO:

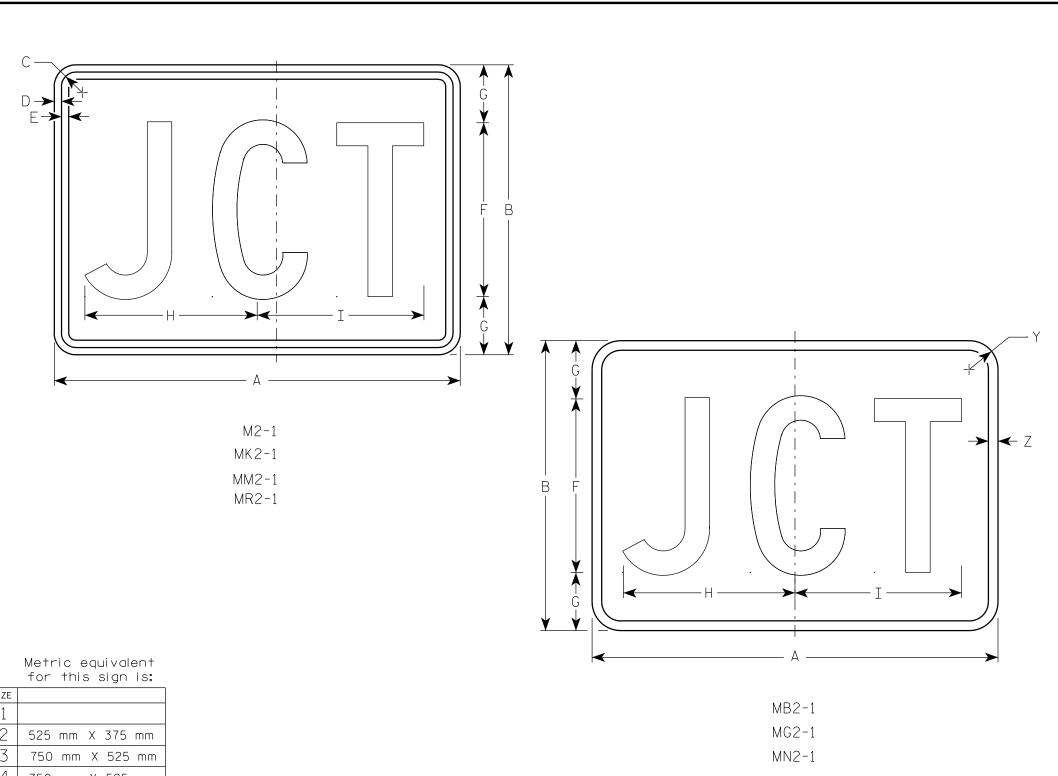
FILE NAME : C:\Users\Projects\tr_stdplate\M16.DGN

PLOT DATE: 13-OCT-2005 14:55

PLOT BY : DITJPH

PLOT NAME :

PLOT SCALE : 6.715871:1.000000



- 1. Sign is Type II See Note 5 reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

Background - See note 5 Message - See note 5

- 3. Message Series C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. M2-1 Background White Type H Reflective (Detour or temporary Signs - Reflective) Message - Black
 - MB2-1 Background Blue Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
 - MG2-1 Background Green Message - White - Type H Reflective
 - MK2-1 Background Green Message - White - Type H Reflective
 - MM2-1 Background White Type H Reflective Message - Green
 - MN2-1 Background Brown Message - White - Type H Reflective
 - MR2-1 Background Brown Message - Yellow - Type H Reflective

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

15

21

21

21

21

30

30

30

3

4

5

STANDARD SIGN M2 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Area Area sq. ft. m2

4.40 0.20

0.20

0.20

0.20

2.20

4.40

4.40

For State Traffic Engineer PLATE NO. M2-1.10 DATE 3/16/10

HWY: COUNTY: SHEET NO: PROJECT NO: PLOT BY: dotsja

0

FILE NAME : C:\Users\PROJECTS\tr_stdplate\M21.DGN

1 1/8

1 1/8

1 1/8

1 1/8

3/8

3/8

3/8

3/8

3/8

3/8

3/8

13

13

13

4

8 7/8 | 8 5/8

12 $\frac{7}{8}$ 12 $\frac{3}{8}$

12 $\frac{7}{8}$ 12 $\frac{3}{8}$

12 $\frac{7}{8}$ 12 $\frac{3}{8}$

PLOT DATE: 16-MAR-2010 09:49

PLOT NAME :

 $1 \frac{1}{2}$

 $1 \frac{1}{2}$

 $1 \frac{1}{2}$

 $1 \frac{1}{2}$

 $\frac{1}{2}$

 $\frac{1}{2}$

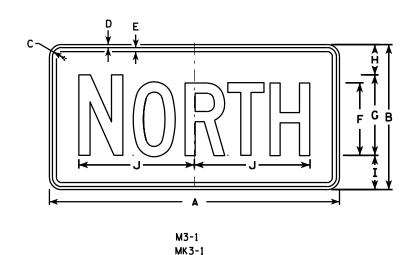
1/2

1/2

W

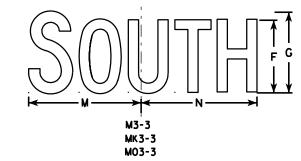
U

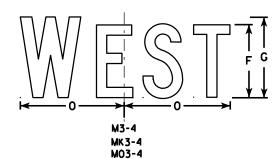
PLOT SCALE: 4.965868:1.000000



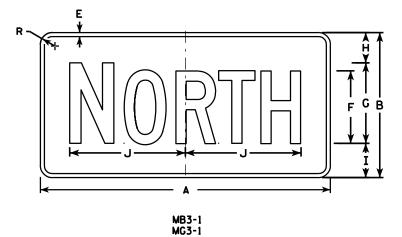
M3-2 MK3-2 M03-2

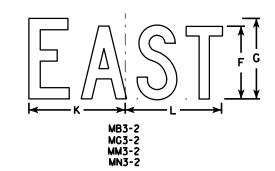
MO3-1





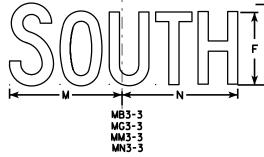
HWY:

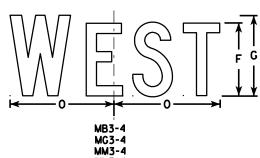




MM3-1

MN3-1





NOTES

- 1. All Signs Type II See Note 5 reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

Background - See note 5 Message - See note 5

- 3. Message Series C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

5. M3-1 thru M3-4 Background - White - Type H Reflective (Detour or temporary signs - Reflective) Message -Black

MB3-1 thru MB3-4 Background - Blue Message - White - Type H Reflective (Detour or temporary signs - Reflective)

Background - Green MG3-1 thru MG3-4 Message - White - Type H Reflective

Background - Green MK3-1 thru MK3-4 Message - White - Type H Reflective

MM3-1 thru MM3-4 Background - White - Type H Reflective Message - Green

Background - Brown MN3-1 thru MN3-4 Message - White - Type H Reflective

M03-1 thru M03-4 Background - Orange - Reflective Message -Black

6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	В	С	D	Е	F	G	Н	I	7	K	L	М	N	0	Р	0	R	S	T	U	٧	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 1/8	8 3/8	10 1/4	9 3/4	8 ¾			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

COUNTY:

STANDARD SIGNS M3-1 thur M3-4 **SERIES**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

DATE 11/10/10

PLATE NO. M3-1.12 SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\M31.DGN

PROJECT NO:

PLOT DATE: 10-NOV-2010 09:34

PLOT NAME :

PLOT BY : ditjph

PLOT SCALE: 11.918087:1.000000

- 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

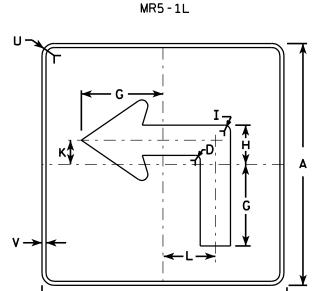
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. M5-1 and M5-2 Background - White - Type H Reflective Message - Black
 - MB5-1 and MB5-2 Background Blue Message - White - 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
 - M05-1 and M05-2 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.

	c —
	D → E →
←	
M5-2L	

MK5-2L

MM5-2L M05-2L

MP5-2L MR5-2L



MB5-1L

MG5-1L

MN5-1L

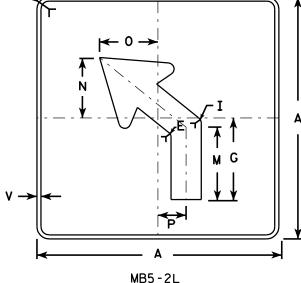
HWY:

M5-1L

MK5-1L

MM5-1L

MO5-1L MP5-1L



MG5-2L

MN5-2L

PLOT BY: mscj9h

1																											
SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	M	N	0	Р	0	R	S	Т	U	٧	₩	Х	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 %	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 1/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 1/8	1 / 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 %	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 1/8	½		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 1/8	1/2					6.25

COUNTY:

STANDARD SIGN M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

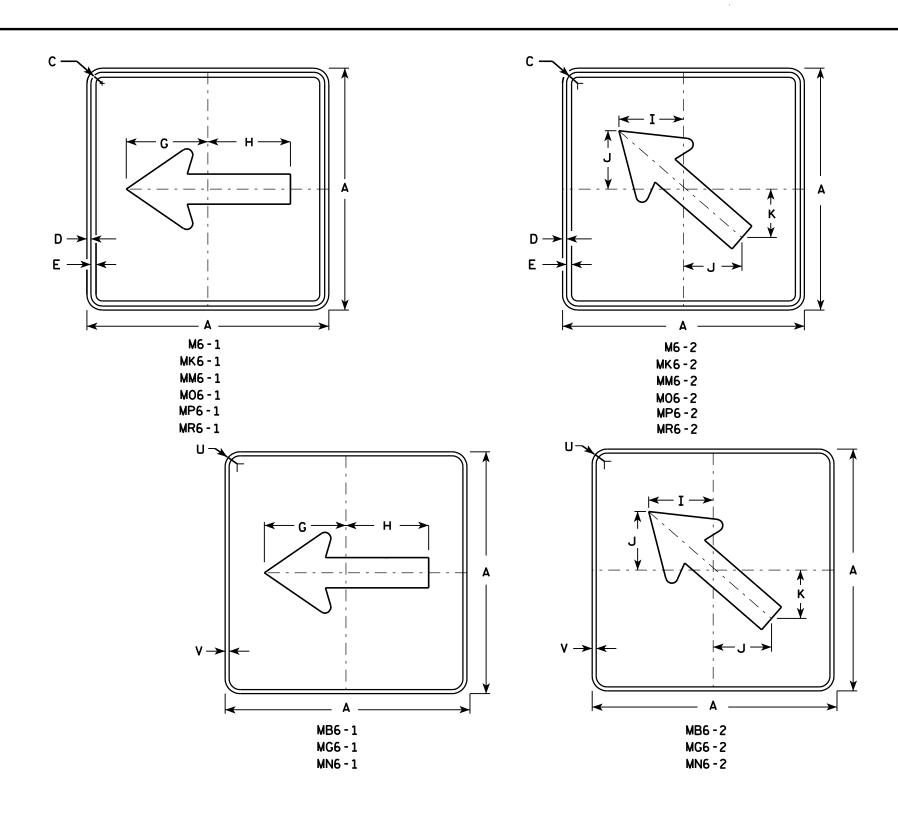
APPROVED

For State Traffic Engineer PLATE NO. M5-1.12

DATE 7/29/13 SHEET NO:

PLOT NAME :

PLOT DATE: 29-JUL-2013 13:34



- 1. Signs are Type II See Note 4 reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

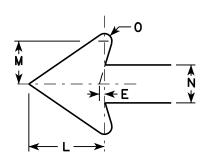
Background - See note 4 Message - See note 4

- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. M6-1 and M6-2 Background White Type H Reflective Message Black
 - MB6-1 and MB6-2 Background Blue Message - White - Type H Reflective
 - MG6-1 and MG6-2 Background Green
 Message White Type H Reflective
 - MK6-1 and MK6-2 Background Green

 Message White Type H Reflective
 - MM6-1 and MM6-2 Background White Type H Reflective Message Green
 - MN6-1 and MN6-2 Background Brown

 Message White Type H Reflective
- M06-1 and M06-2 Background Orange Type F Reflective Message - Black
- MP6-1 and MP6-2 Background White Type H Reflective Message Blue
- MR6-1 and MR6-2 Background Brown

 Message Yellow Type H Reflective



SIZE	Α	В	С	D	Ε	F	G	Ι	I	J	K	L	М	N	0	Ρ	0	R	S	T	U	٧	₩	X	Y	Z	Area sq. ft.
1 1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 %	5	4 1/4	5 1/4	3	2 %	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 ¾	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 1/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 ¾	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 1/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 ¾	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 1/8	1/2					6.25

COUNTY:

STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

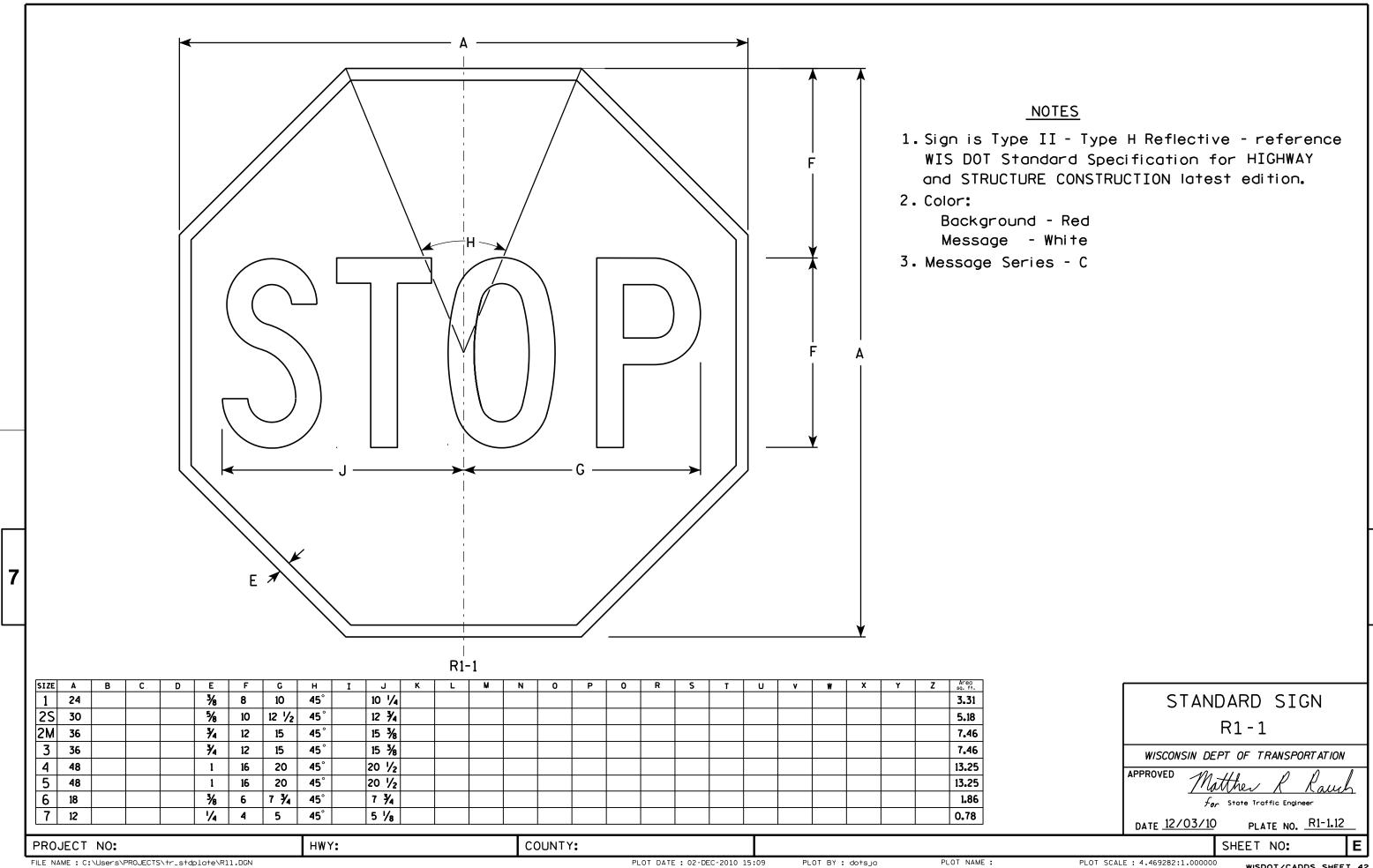
APPROVED

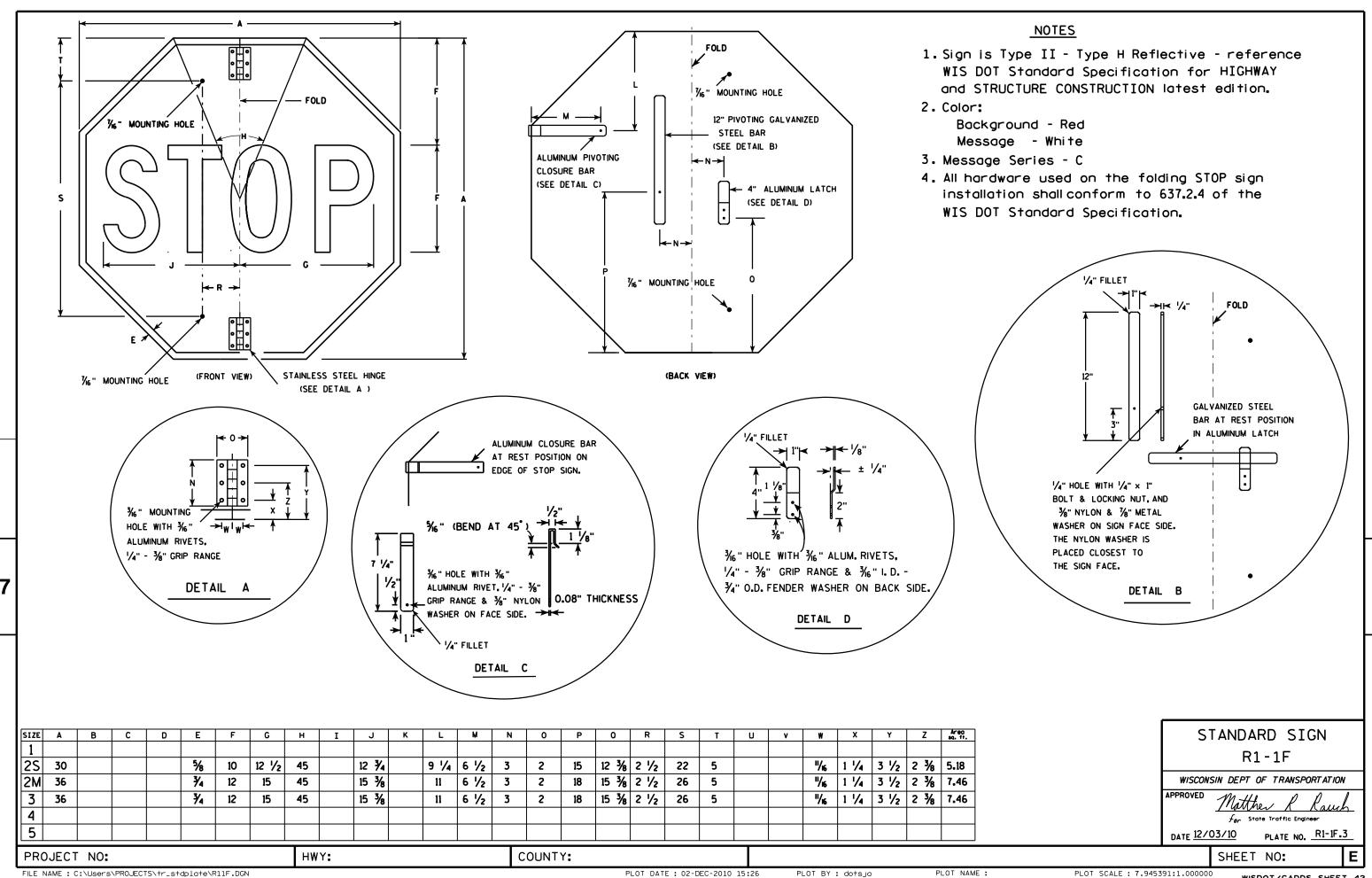
Matther R Rauch
for State Traffic Engineer

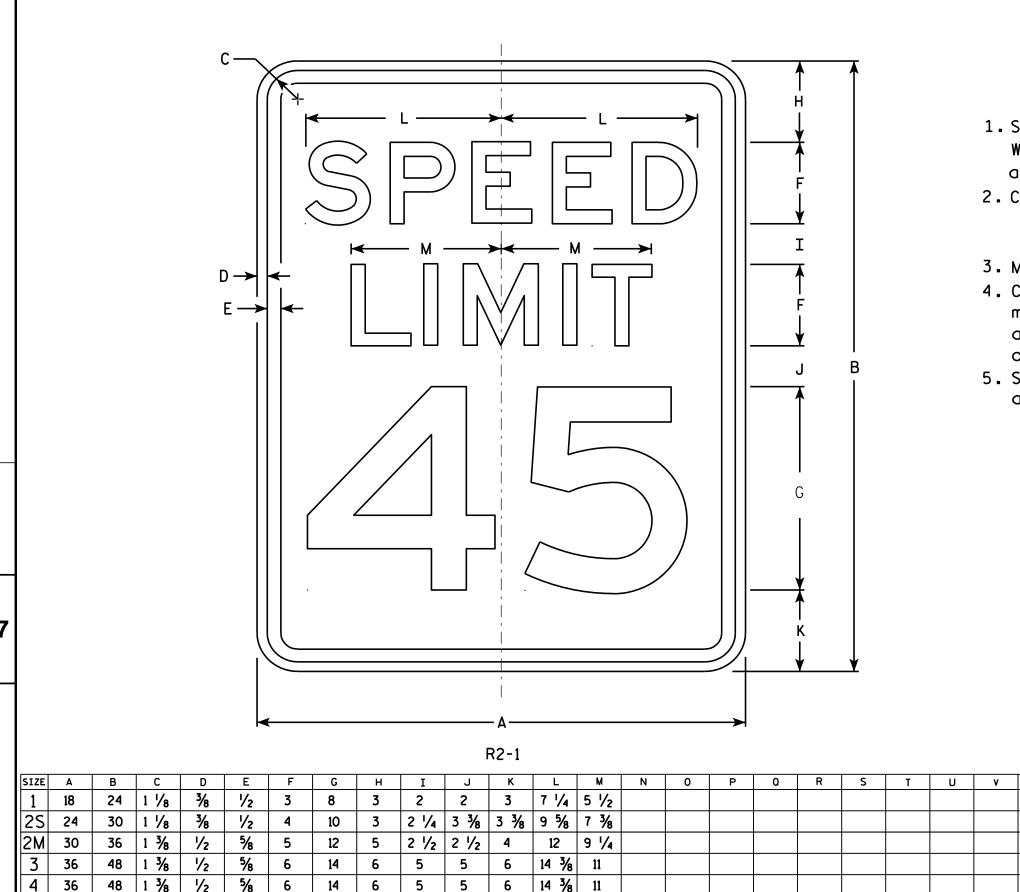
DATE 7/29/13 PLATE NO. M6-1.13

SHEET NO:

HWY:







4 1/2 6 3/4 6 3/4 19 1/4 14 5/8

COUNTY:

20

HWY:

6

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.

3.0

5.0

7.5

12.0

12.0

20.0

STANDARD SIGN R2-1

WISCONSIN DEPT OF TRANSPORTATION APPROVED

Matther R Raus For State Traffic Engineer PLATE NO. R2-1.13

DATE <u>5/26/1</u>0

SHEET NO:

2 1/4

60

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48

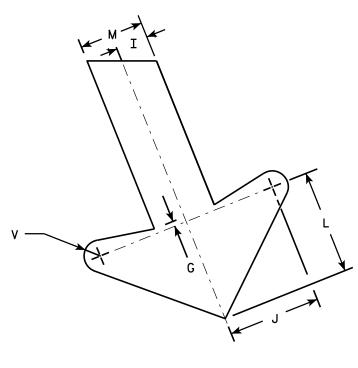
PROJECT NO:

PLOT NAME :

- 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.



|--|

SIZE	Α	В	С	D	Ε	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	T	U	٧	W	X	Y	Z	Areg sq. ft.
1																											
25	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 1/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 1/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 %	3	2 1/4	10 %	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

М

М

0

STANDARD SIGN R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED For State Traffic Engineer DATE 10/18/10 PLATE NO. R3-20L.7

SHEET NO:

HWY:

R3-20L

COUNTY:

PLOT SCALE: 5.959043:1.000000

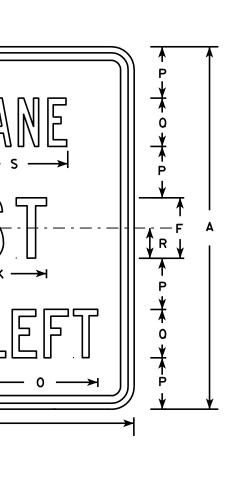
PROJECT NO:

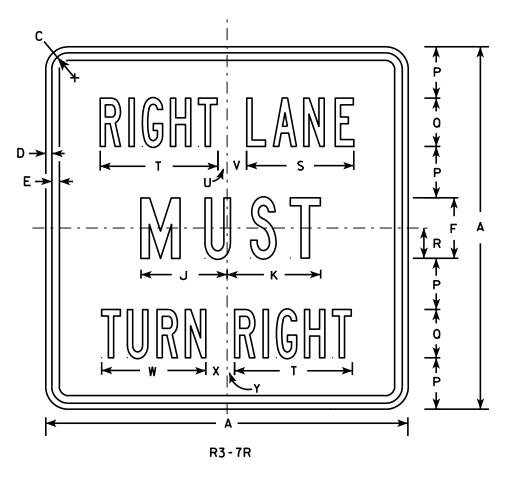
PLOT BY: dotsja

- 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 Line 1 is Series B. Line 2 is Series C. Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.
- 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	Α	В	С	D	E	F	G	Н	I	J	К	L	М	N	0	Р	0	R	S	Т	U	V	w	X	Y	Z	Areo sq. ft.
1	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 %	4 1/4	4	2 1/2	8 %	9 3/4	3/4	1 %	8 %	1 %	5/8		6.25
25	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 %	4 1/4	4	2 1/2	8 1/8	9 3/4	3/4	1 %	8 %	1 %	5/8		6.25
2M	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 %	4 1/4	4	2 1/2	8 %	9 3/4	3/4	1 %	8 %	1 %	5/8		6.25
3	36		1 5/8	5/8	3/4	6	9 %	2	1 1/8	8 3/4	9	13 ½	3 %	1 1/2	12 1/2	5	5	3	10 %	12	7∕8	2 1/4	10 %	2 1/8	1		9.00
4	48		2 1/4	3/4	1	8	13 1/2	2 3/8	1 ½	11 1/2	11 1/8	17 3/4	3 %	2 1/2	16 3/8	6 1/2	7	4	14 3/8	16 1/8	5/8	3 1/4	15 1/8	2 3/4	1 1/8		16.00
5																											

COUNTY:

STANDARD SIGN R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matther R Rauch

DATE 3/18/2011

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R37.DGN

PROJECT NO:

R3-7L

HWY:

PLOT DATE: 18-MAR-2011 09:43

PLOT BY: mscsja

PLOT NAME :

PLOT SCALE: 7.945391:1.000000

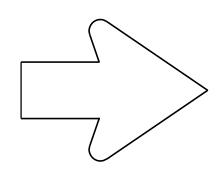
WISDOT/CADDS SHEET 42

PLATE NO. R3-7.3

- 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.



SEE R3-8 FOR ARROW DETAIL

C B	
	
F	F F
	_\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	_
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	↓ <u> </u>
$\begin{array}{c c} & & & \\ \hline & & \\ \hline \end{array} \qquad \begin{array}{c} & & \\ \hline \end{array} \qquad \begin{array}{c} \\ \\ \end{array} \qquad \begin{array}{c} \\ \end{array} \qquad \begin{array}{c} \\ \\ \end{array} \qquad \begin{array}{c} \\ \end{array} \qquad \begin{array}{c} \\ \\ \end{array} \qquad \begin{array}{c} \\ \end{array} \qquad \begin{array}{c} \\ \\ \end{array} \qquad \begin{array}{c} \\ \end{array} \qquad \begin{array}{c} \\ \\ \end{array} \qquad \begin{array}{c} \\ \\ \end{array} \qquad \begin{array}{c} \\ \end{array} \qquad \begin{array}{c} \\ \end{array} \qquad \begin{array}{c} \\ \\ \end{array} \end{array} \qquad \begin{array}{c} \\ \\ \end{array} \end{array} \qquad \begin{array}{c} \\ \\ \end{array} \qquad \begin{array}{c} \\\\ \end{array} \end{array} \qquad \begin{array}{c} \\\\ \end{array} \qquad \begin{array}{c} \\\\ \end{array} \end{array} \begin{array}{c} \\\\ \end{array} \end{array} \begin{array}{c} \\\\ \end{array} \begin{array}{c} \\\\\\ \end{array} \end{array} \begin{array}{c} \\\\\\\\\\\\\\ \end{array} \end{array} \begin{array}{c} \\$	H → H → A
	<u> </u>
	← н н ↓
↑ → E E E → E	↑ ↑
R3-8W	

SIZE	Α	В	С	D	E	F	G	Ι	I	J	K	L	М	N	0	Р	0	R	S	T	U	٧	W	X	Y	Z	Area sq. ft.
1																											
2S	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 %	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
2M	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 %	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
3																											
4	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 3/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0
5	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 1/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0

WISCONSIN DEPT OF TRANSPORTATION

STANDARD SIGN

R3-8W

APPROVED

For State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-8W.4

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R38W.DGN

PROJECT NO:

PLOT DATE: 24-MAR-2011 10:19

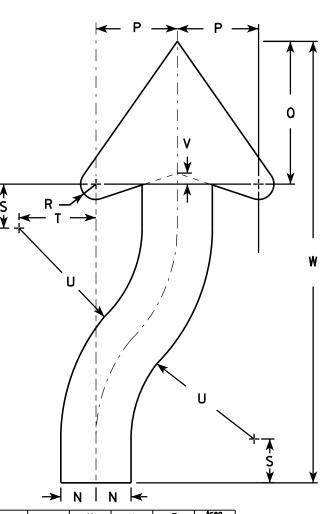
PLOT BY: mscsja

PLOT NAME :

- 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

																							→	N I	N 		
SIZE	Α	В	С	D	Ε	F	G	Н	I	J	K	L	M	N	0	Р	0	R	S	Т	U	٧	W	X	Y	Z	Arec sq. f
1	18	24	1 1/8	3∕8	1/2	3 %	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%	1 %	3 1/4	6 3/4	1/2	20 3/8				3.0
25	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 %	3	8	4	12 1/2	2	30	4 %	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2N	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 1/8	3	8	4	12 1/2	2	30	4 %	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 1/8	4 1/2	12	6	18 3/4	3	45	6 %	12 1/4	1 1/4	3 3/4	6 %	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 1/8	4 1/2	12	6	18 3/4	3	45	6 %	12 1/4	1 1/4	3 3/4	6 %	13 1/2	1	40 3/4				12.
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 ¾	18	1 1/4	50 1/4				20.

COUNTY:

R4-7

STANDARD SIGN R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

State Traffic Engineer
3/25/2011 PLATE NO. R4-

DATE 3/25/2011 PLATE NO. R4-7.8

SHEET NO:

PROJECT NO:

D→

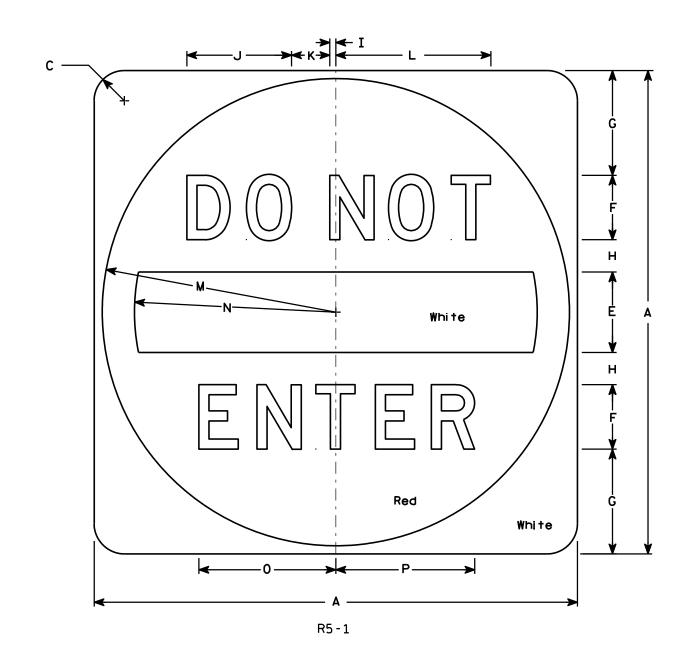
HWY:

PLOT BY: mscsja

- 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	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	Т	U	V	W	Х	Y	Z	Area sq. ft.
1																											
25	30		1 1/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 %	14 1/2	12 1/2	8 1/2	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 %	10 ¾											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 %	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 %	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 %	14 1/2	23 ½	20	12 3/4	12 1/8											16.0

COUNTY:

STANDARD SIGN R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

For State Traffic Engineer

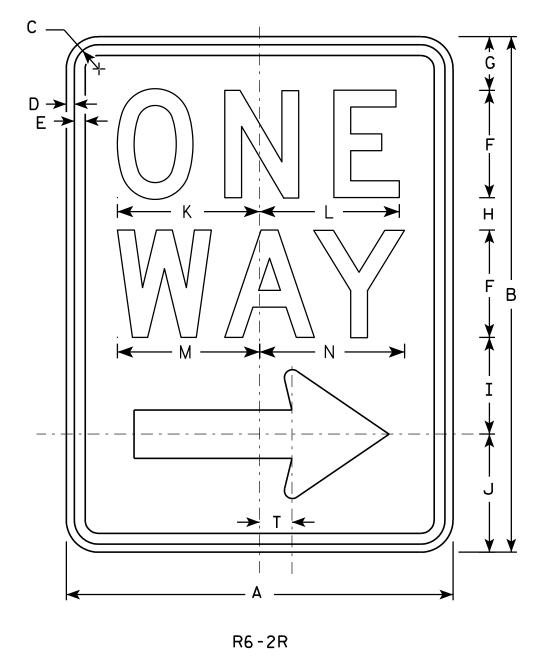
DATE 12/17/10

10 PLATE NO. R5-1.15

Р

PLOT NAME :

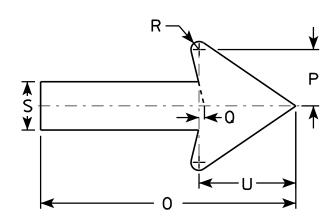
HWY:



- 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	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	T	U	٧	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 ½	6 %	6 1/2	6 %	6 3/4	11 1/8	2 %	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 %	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	6 %	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 1/8	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 %	1/2	3/4	4 3/4	3	9					
4	36	48	1 1/8	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 %	1/2	3/4	4 3/4	3	9					
5																										

COUNTY:

STANDARD SIGN R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

For State Traffic Engineer

DATE 11/2/10

PLATE NO. R6-2.8 SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R62.DGN

HWY:

PROJECT NO:

PLOT DATE: 02-NOV-2010 15:25

PLOT BY: ditjph

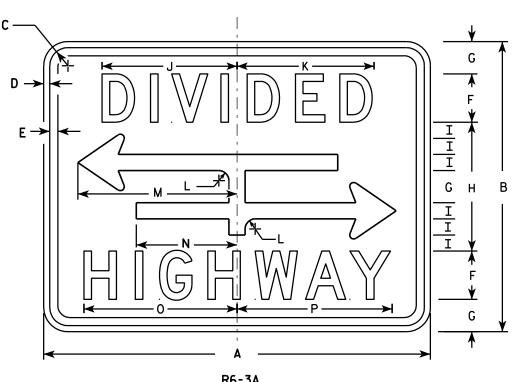
PLOT NAME :

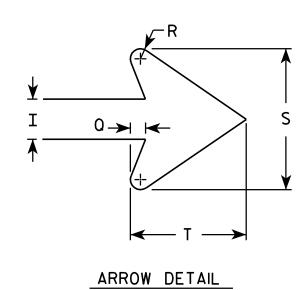
PLOT SCALE: 4.469282:1.000000

- 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.





		_	
D٤	_	₹	٨

SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	M	N	0	Р	0	R	S	T	U	٧	W	X	Y	Z	Area sq. ft.
1	24	18	1 1/8	3/8	3/8	3	2	8	1	8 3/8 8	3 1/2	5/8	9 %	6 1/4	9 1/2	9 %	3∕8	1/4	3 1/2	2 3/4							3.0
2S	30	24	1 1/8	3/8	1/2	4	2 5/8	10 ¾	1 3/8	10 1/2 1	10 %	1 / ₈	12 1/2	7 1/8	12 1/4	12 3/8	1/2	3/8	4 %	3 %							5.0
2M	30	24	1 1/8	3/8	1/2	4	2 %	10 ¾	1 3/8	10 1/2 10	10 %	%	12 1/2	7 1/8	12 1/4	12 3/8	1/2	3/8	4 %	3 %							5.0
3																											
4																											
5								·																		·	

STANDARD SIGN R6-3 & R6-3A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

for State Traffic Engineer DATE 3/31/2011 PLATE NO. R6-3.5

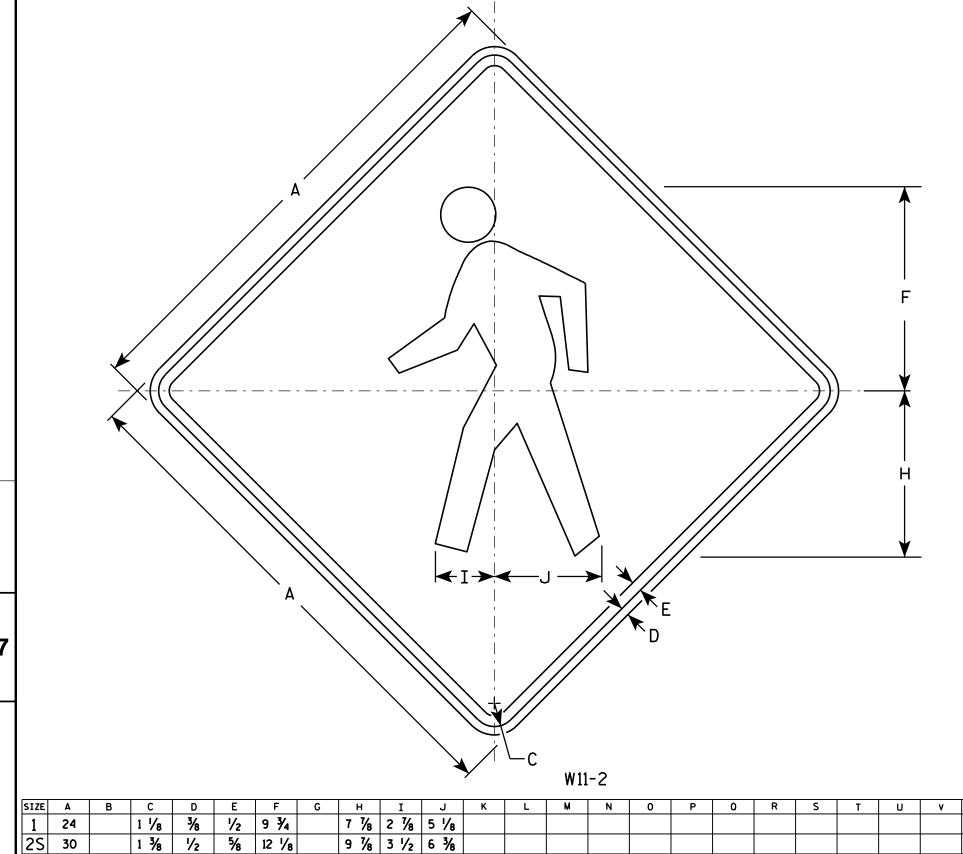
SHEET NO:

5.959043:1.000000

R6-3

PLOT DATE: 31-MAR-2011 09:08

PLOT BY: mscsja



- 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.

STANDARD SIGN W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

For State Traffic Engineer

DATE 6/7/10

PLATE NO. W11-2.7

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W112.DGN

1 1/8

1 %

2 1/4 3/4

2M

3

4 48

5

PROJECT NO:

5/8

5/8

3/4

14 1/2

3/4 14 1/2

1 19 3/8

11 1/8 4 1/4 7 5/8

11 1/8 4 1/4 7 5/8

15 3/4 5 5/8 10 1/4

HWY:

PLOT DATE: 07-JUN-2010 13:29

COUNTY:

PLOT NAME :

PLOT BY: ditjph

4.0

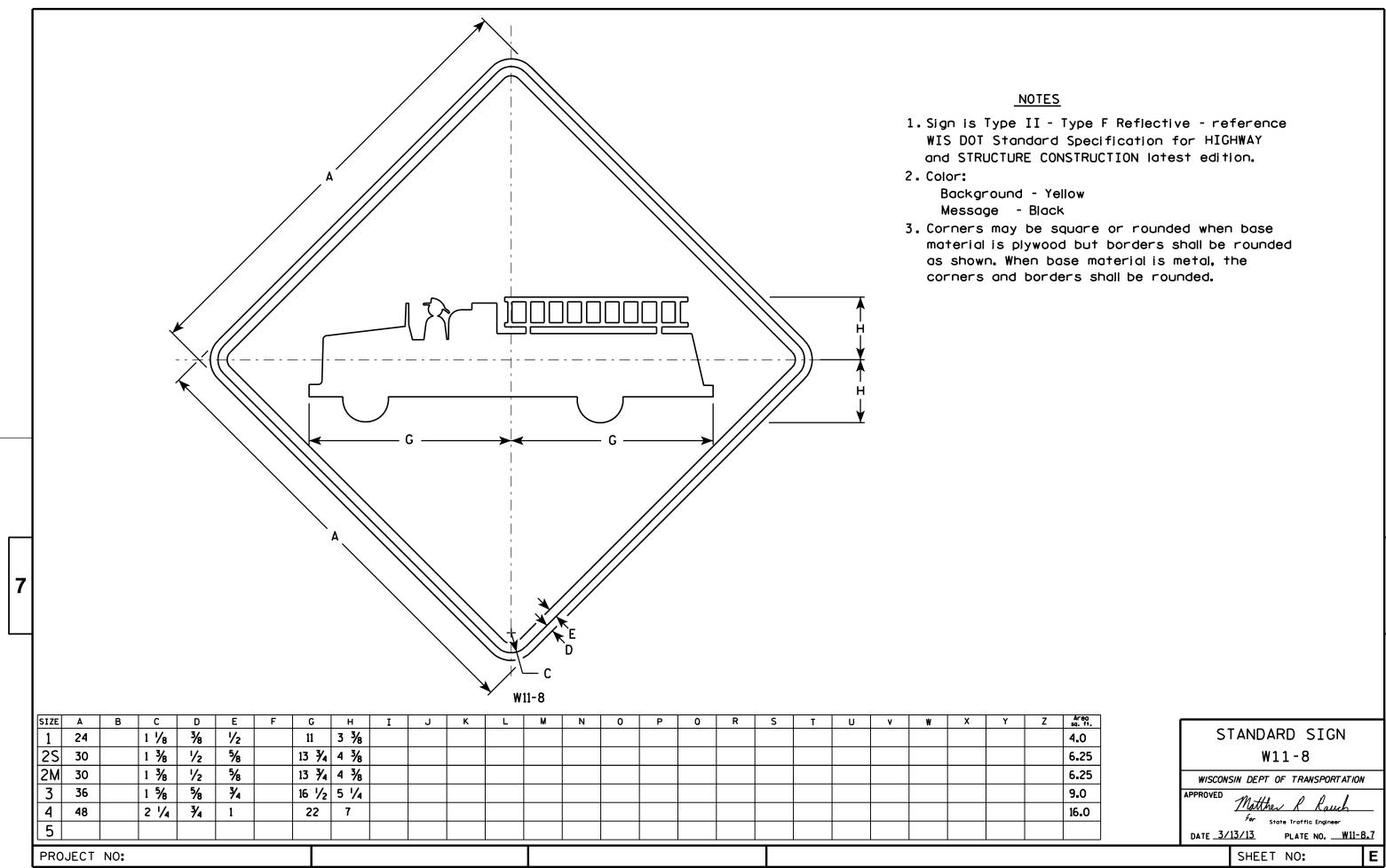
6.25

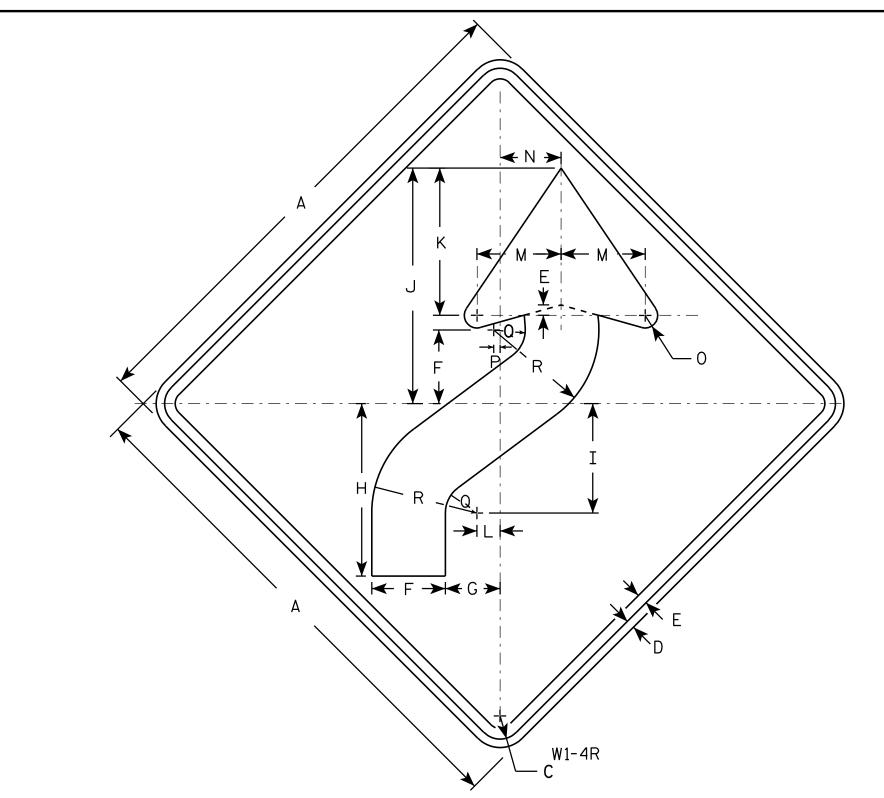
9.0

9.0

16.0

PLOT SCALE: 5.700818:1.000000





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

Background - Yellow Message - Black

- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. W1-4L is the same as W1-4R except the arrow is reversed along the vertical centerline.

3 1/2 2 5/8 8 1/4 5 1/4 11 1/4 5/8 1/4 1 1/2 5 24 1 1/8 4.0 25 3 5/8 3/4 3/8 1 1/8 6 1/4 30 4 3/8 3 1/4 10 1/4 6 1/2 14 8 3/4 1 3/8 6.25 36 12 3/8 7 1/8 16 1/8 10 1/2 1 5/8 4 1/2 1 1/2 2 1/4 7 1/2 9.0 3 12 3/8 7 1/8 16 1/8 10 1/2 1 5/8 36 5 1/4 4 1/2 | 1 1/2 2 1/4 7 1/2 9.0 4 36 1 % 5 1/4 | 12 3/8 | 7 3/8 | 16 3/8 | 10 1/2 | 1 5/8 4 1/2 1 2 1/4 7 1/2 1/2 9.0 5 48 5 1/4 16 1/2 10 1/2 22 1/2 14 2 1/4 6 1 1/4 16.0

STANDARD SIGN W1-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthe R Raw
For State Traffic Engineer

SHEET NO:

DATE 5/17/12

PLATE NO. W1-4.11

HWY:

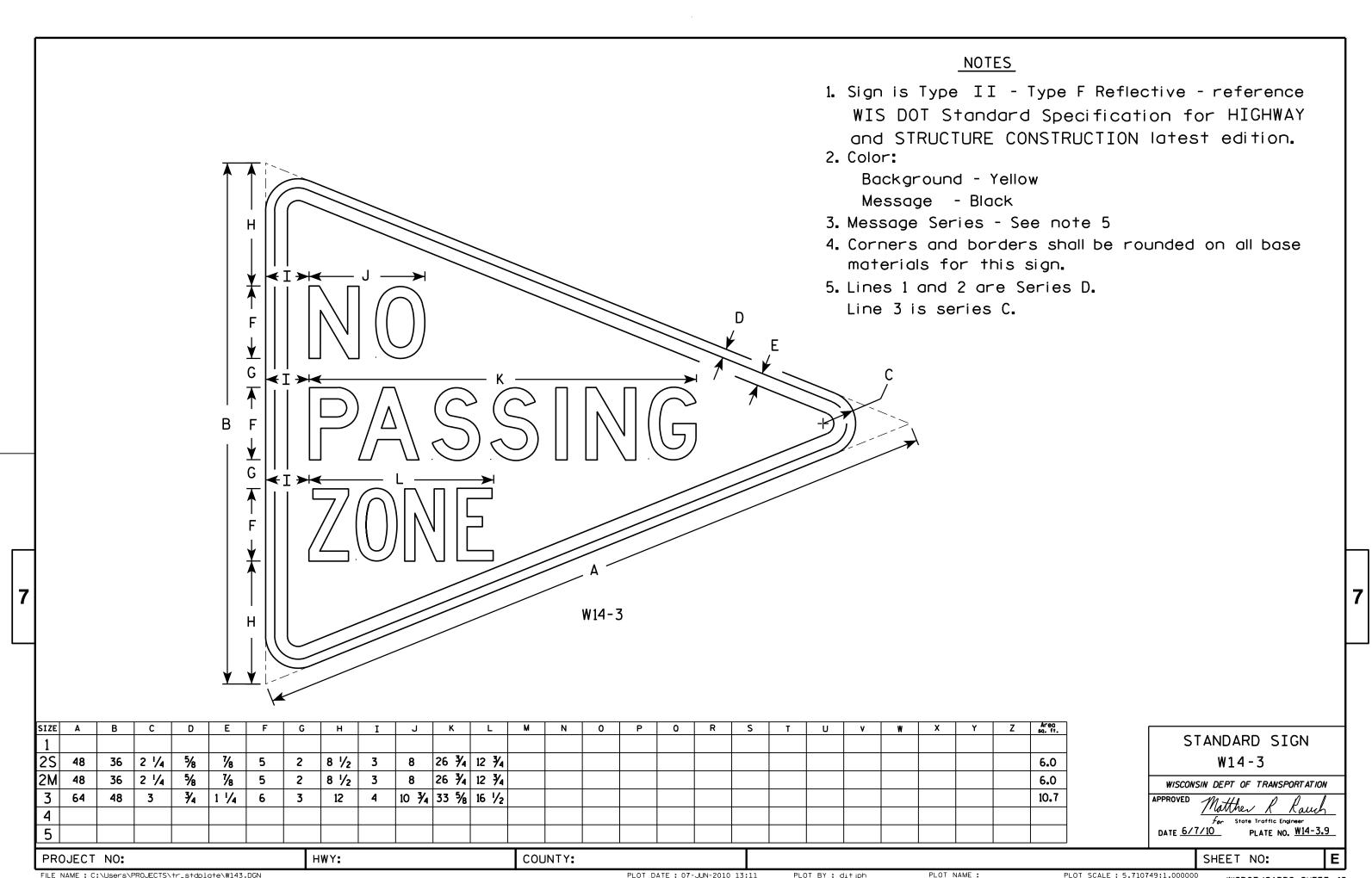
COUNTY:

PLOT DATE: 17-MAY-2012 13:20 PLOT BY: mscsja

PLOT NAME :

PLOT SCALE: 5.706180:1.000000

WISDOT/CADDS SHEET 42



FILE NAME : C:\Users\PROJECTS\tr_stdplate\W143.DGN

PLOT DATE: 07-JUN-2010 13:11

PLOT BY: ditjph

PLOT SCALE: 5.710749:1.000000

- 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. W16-7R is the same as W16-L except the arrow is reversed along the vertical centerline.

E	E —
	C →
W16-7L	

2M 3 4	30 30	18	3/8 3/8	1/2	1 1/8	4 1/2	30° 30°	8 1/2	6	5% 5%	10 1/4									3.75 3.75 8
5 PRO	JECT	NO:					НW	Y:				COUN	TY:							8

STANDARD SIGN W16-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Ray

For State Traffic Engineer

DATE 11/02/10 PLATE NO. W16-7.5

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W167.DGN

PLOT DATE: 02-NOV-2010 09:34

PLOT BY: dotsja

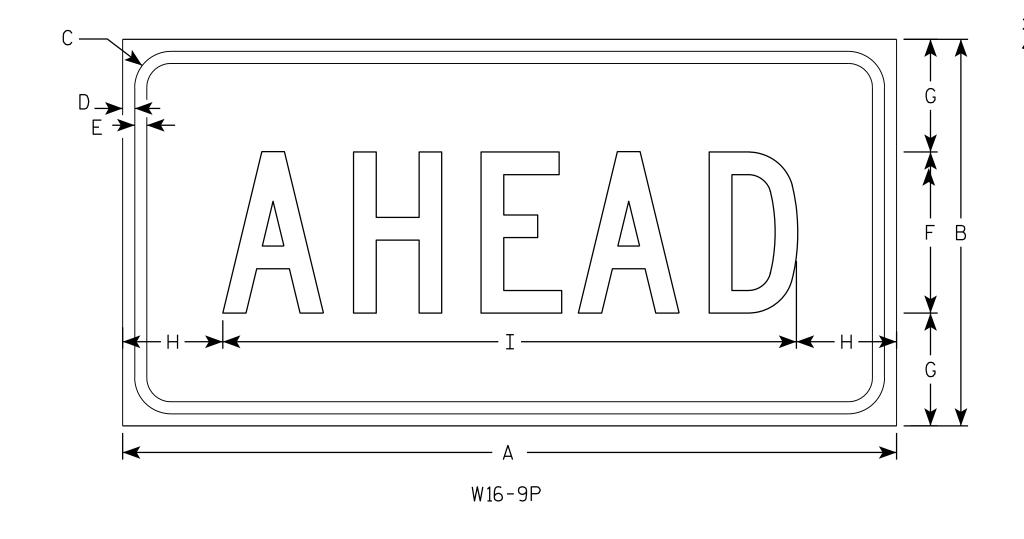
PLOT NAME :

PLOT SCALE: 3.972696:1.000000

- 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 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	Α	В	С	D	Е	F	G	Н	I	J	К	L	М	N	0	Р	0	R	S	T	U	٧	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 ¾																		8.0
5																											

COUNTY:

STANDARD SIGN W16-9P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matther R Rawh
For State Traffic Engineer

DATE 12/28/10

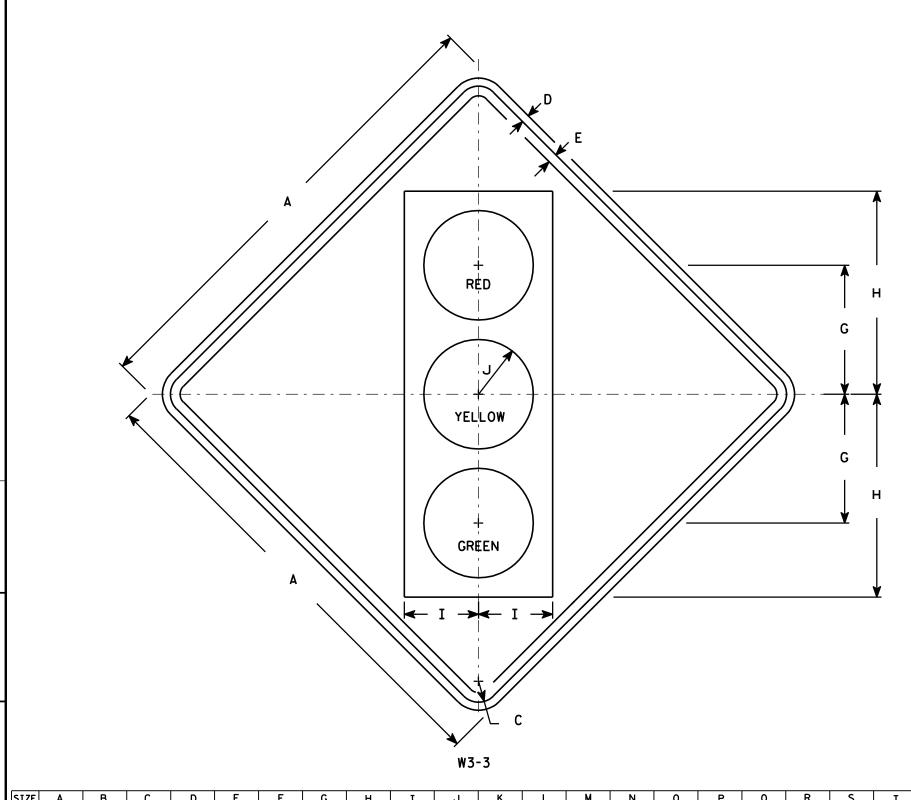
PLATE NO. W16-9P.6

SHEET NO:

HWY:

PROJECT NO:

PLOT NAME :



- 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 - 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. Symbol and border are non-reflective black. Top circle - Type H Reflectorized Red Center circle - Same as background Bottom circle - Type H Reflectorized Green

SIZE Α 1 3/8 1/2 13 3/4 5 5/8 8 3/4 3 3/4 30 6.25 25 1 % 5/8 15 3/4 5 3/4 4 1/4 36 3/4 9.0 2M 15 3/4 5 3/4 4 1/4 36 1 % 5/8 9.0 3 36 1 % 5/8 15 3/4 5 3/4 4 1/4 9.0 3/4 4 12 1/2 20 7 1/2 5 48 2 1/4 16.0 12 1/2 5 20 7 1/2 5 48 2 1/4 16.0

COUNTY:

STANDARD SIGN W3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED _____

DATE 6/7/10 PLATE NO. W3-3.11

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W33.DGN

HWY:

PROJECT NO:

PLOT DATE: 07-JUN-2010 13:07

PLOT BY : ditjph

PLOT NAME: PLOT S

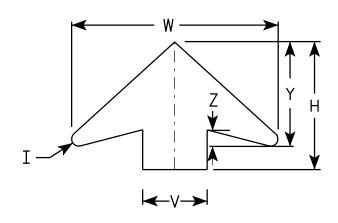
PLOT SCALE: 7.448805:1.000000

- 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 C for numbers Series E for wording
- 4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	Α	В	С	D	E	F	G	н	I	J	K	L	М	N	0	Р	0	R	S	T	U	٧	W	X	Y	Z	Area sq. ft
1																											
25	36		1 1/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 %	9.0
2M	36		1 %	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 %	9.0
3	36		1 %	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3∕8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 %	9.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	1 /8	30	2 1/4	4	1 1/4	15	10	1 %	1/2	8	9 1/4	9 3/8	12	8	25 %	3∕8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7 ⁄8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN W3-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matther R Rauch.

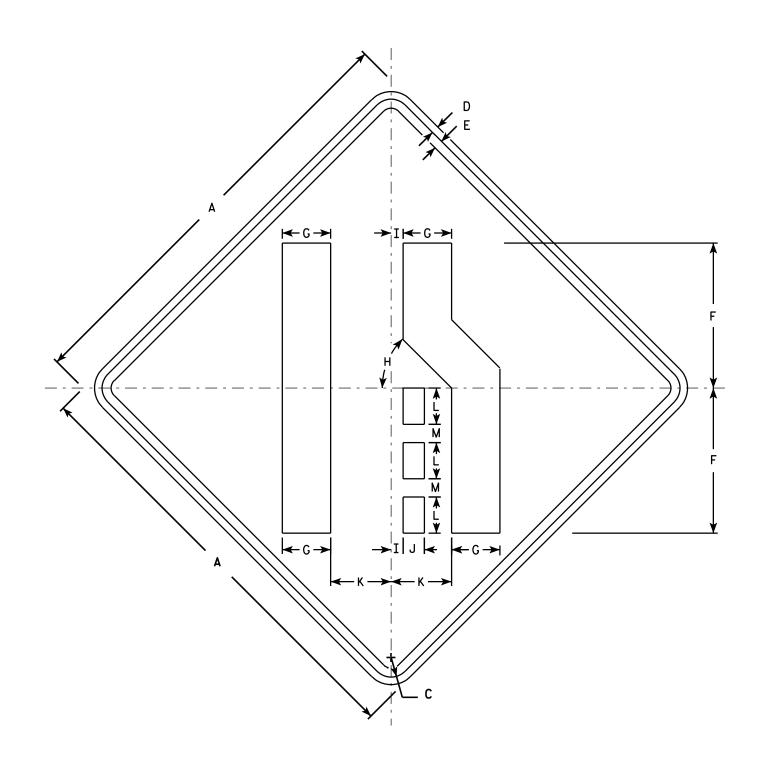
DATE 5/29/12 PLATE NO. W3-5.5

SHEET NO:

- 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. W4-2L is the same as W4-2R except the symbolis reversed along the vertical centerline.



W4-2R

SIZE	Α	В	С	D	E	F	G	Н	I	J	К	L	M	N	0	Р	0	R	S	T	U	٧	W	Х	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10	3 3/8	45°	1 / ₈	1 1/2	4 1/4	2 1/2	1 1/4														6.25
25	36		1 1/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2M	36		1 1/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
3	36		1 1/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 %	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
	JECT	NO:	- /4				1 78		- /4	- 78	- /4		<u> </u>			<u> </u>											=

STANDARD SIGN W4-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

DATE 3/12/13

PLATE NO. W4-2.14 SHEET NO:

For State Traffic Engineer

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W42.DGN

PLOT DATE: 12-MAR-2013 11:09

PLOT BY: mscsja



- 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.

	>
W5-54	

SIZE	Α	В	С	D	E	F	G	Н	I	C	K	L	М	N	0	Р	a	R	S	T	U	٧	W	X	Υ	Z	Area sq. ft.
1	12								1																		1.0
2S	18								1 1/2																		2.25
2M	18								1 1/2																		2.25
3																											
4																											
5																							·				
													1														

COUNTY:

STANDARD SIGN W5-54

WISCONSIN DEPT OF TRANSPORTATION APPROVED

Matthew R Rauch DATE 11/3/10 PLATE NO. W5-54.8

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W554.DGN

PROJECT NO:

HWY:

PLOT DATE: 03-NOV-2010 09:54

PLOT BY : ditjph

PLOT NAME :

PLOT SCALE: 4.965871:1.000000

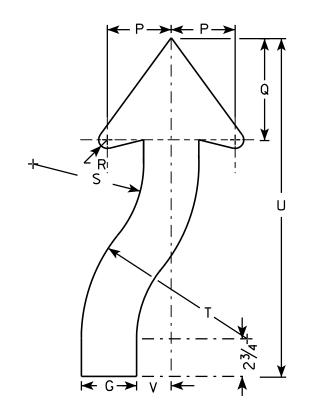
WISDOT/CADDS SHEET 42

Ε

- 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

PLOT NAME :

SIZE	Α	В	С	D	E	F	G	Н	I	J	К	L	М	N	0	Ρ	0	R	S	T	U	٧	₩	Х	Y	Z	Areg sq. ft.
1	30		1 3/8	1/2	5/8		3 1/4	8	8 1/4	4 1/8	7 1/8	25	1 3/4	11 %	4 1/8	3 %	6 3/4	5/8	6 %	9 %	21 %	2					6.25
2S	36		1 1/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 %	7 3/8	7 /8	8	12	24 1/2	2 1/2					9.0
2M	36		1 1/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 %	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 %	13 %	6 3/8	12 5/8	40	2 5%	18 %	6 5%	6 1/4	9 %	1 1/4	10 %	16	32 %	3 %					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 %	18 %	6 %	6 1/4	9 %	1 1/4	10 %	16	32 %	3 3/8					16.0

COUNTY:

W6-1

← G → ← G →

STANDARD SIGN W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matther R Rauch
For State Traffic Engineer

DATE <u>03/12/13</u>

PLATE NO. W6-1.14

SHEET NO:

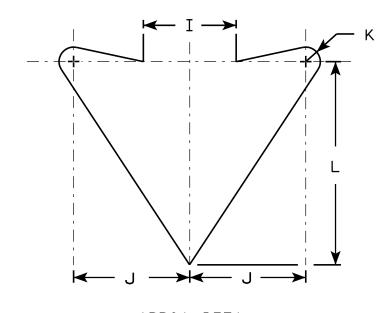
PROJECT NO:

HWY:

- 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	Α	В	С	D	Ε	F	G	Н	I	J	К	L	М	N	0	Р	0	R	S	Т	U	٧	W	Х	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10 1/2	1	3 %	4	5	5/8	8 3/4	5 %														6.25
2S	36		1 %	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
2M	36		1 1/8	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

COUNTY:

W6-3

HWY:

STANDARD SIGN W6-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED _/

Matthe R Rauch

For State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-3.10

SHEET NO:

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W63.DGN

PROJECT NO:

PLOT DATE: 12-MAR-2013 14:11

PLOT BY: mscsja

PLOT SCALE: 6.202372:1.000000



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

Background - Yellow Message - Black

- 3. Message Series D
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. W9-1L same as W9-1R except the word Left replaces Right.

	I -			J —							-1R						G A		
+	C 1 3/	D I/-	E 5/	F	G	9 1/-	I	J - 5/	K	L L	M - 5/	N 5/	0	Р	0	R	S	T	U

SIZE	Α	В	С	D	E	F	G	Н	I	J	К	L	M	N	0	Р	0	R	S	Т	U	v	W	Х	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	5	1 1/2	2 1/2	7 1/8	7 %	9 1/4	8 1/8	7 %	8 %													6.25
2S	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
2M	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
3	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
4	36		1 5/8	5/8	3/4	6	2	3	8 ½	9 1/8	11	9 3/4	9	10 3/8													9.0
5	48		2 1/4	3/4	1	8	3	4	11 1/4	12 1/4	14 3/4	12 1/8	12 1/4	13 %													16.0
PRO.	JECT	NO:																									

STANDARD SIGN W9-1

WISCONSIN DEPT OF TRANSPORTATION

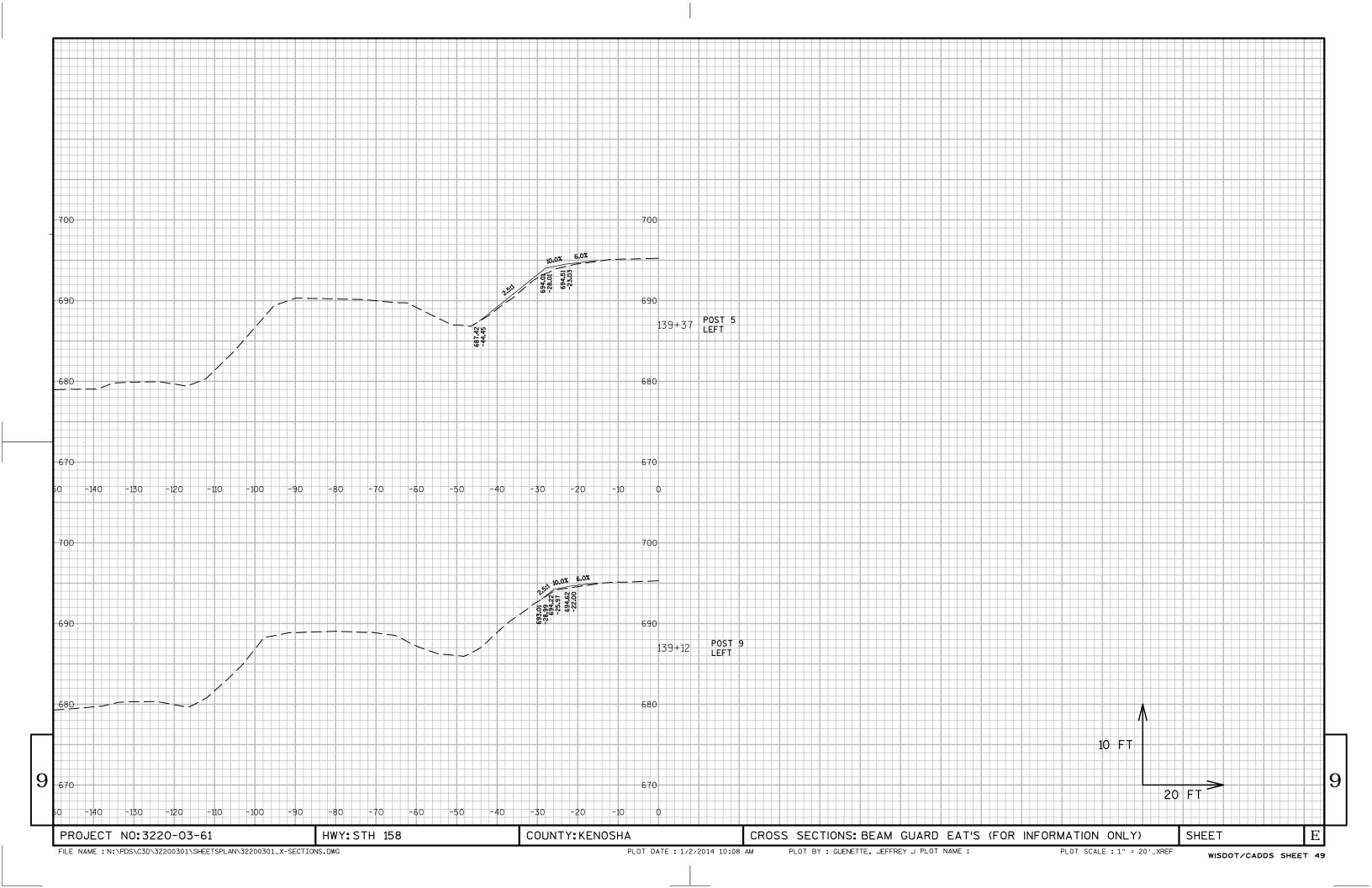
APPROVED

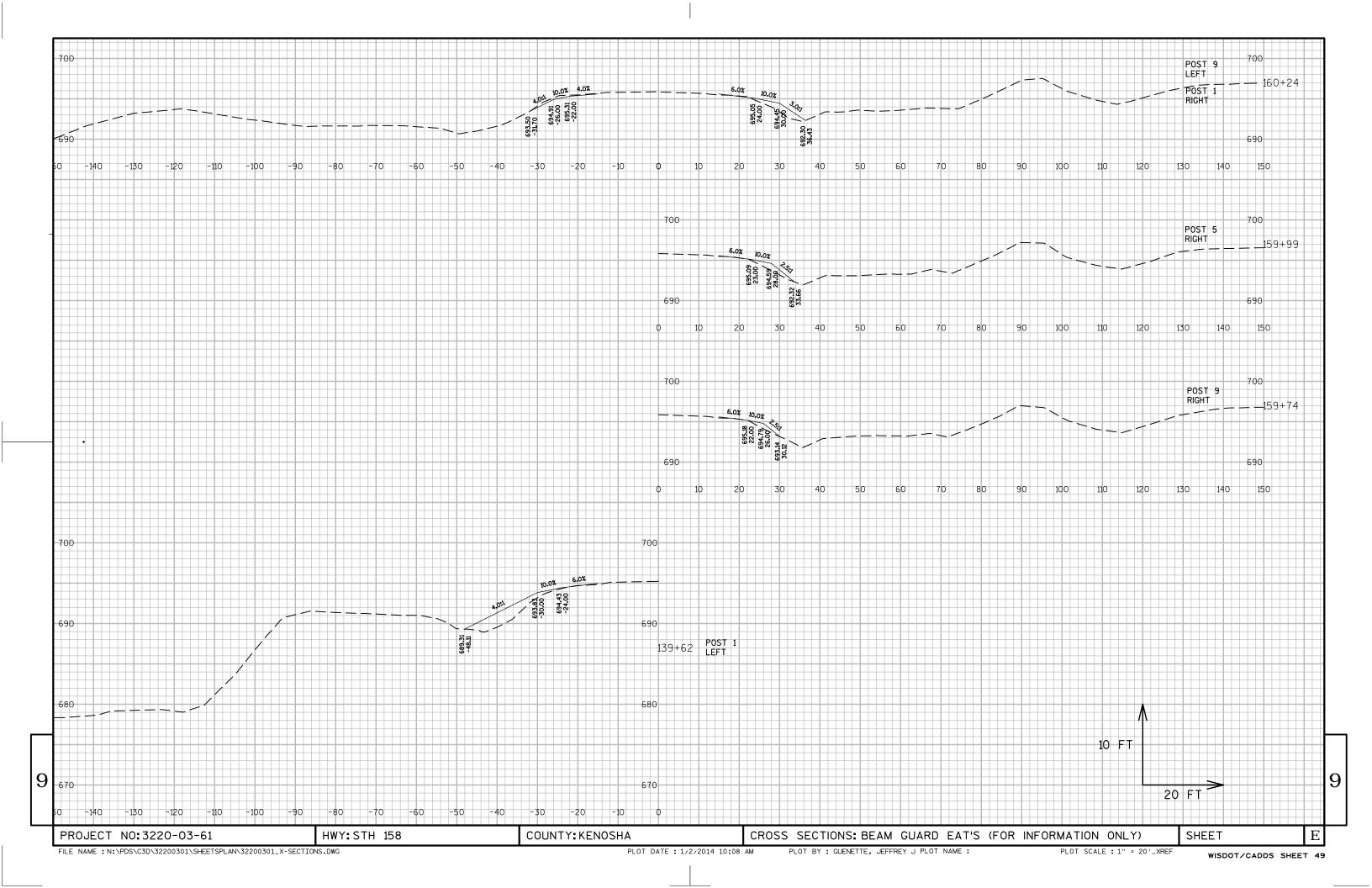
For State Traffic Engineer

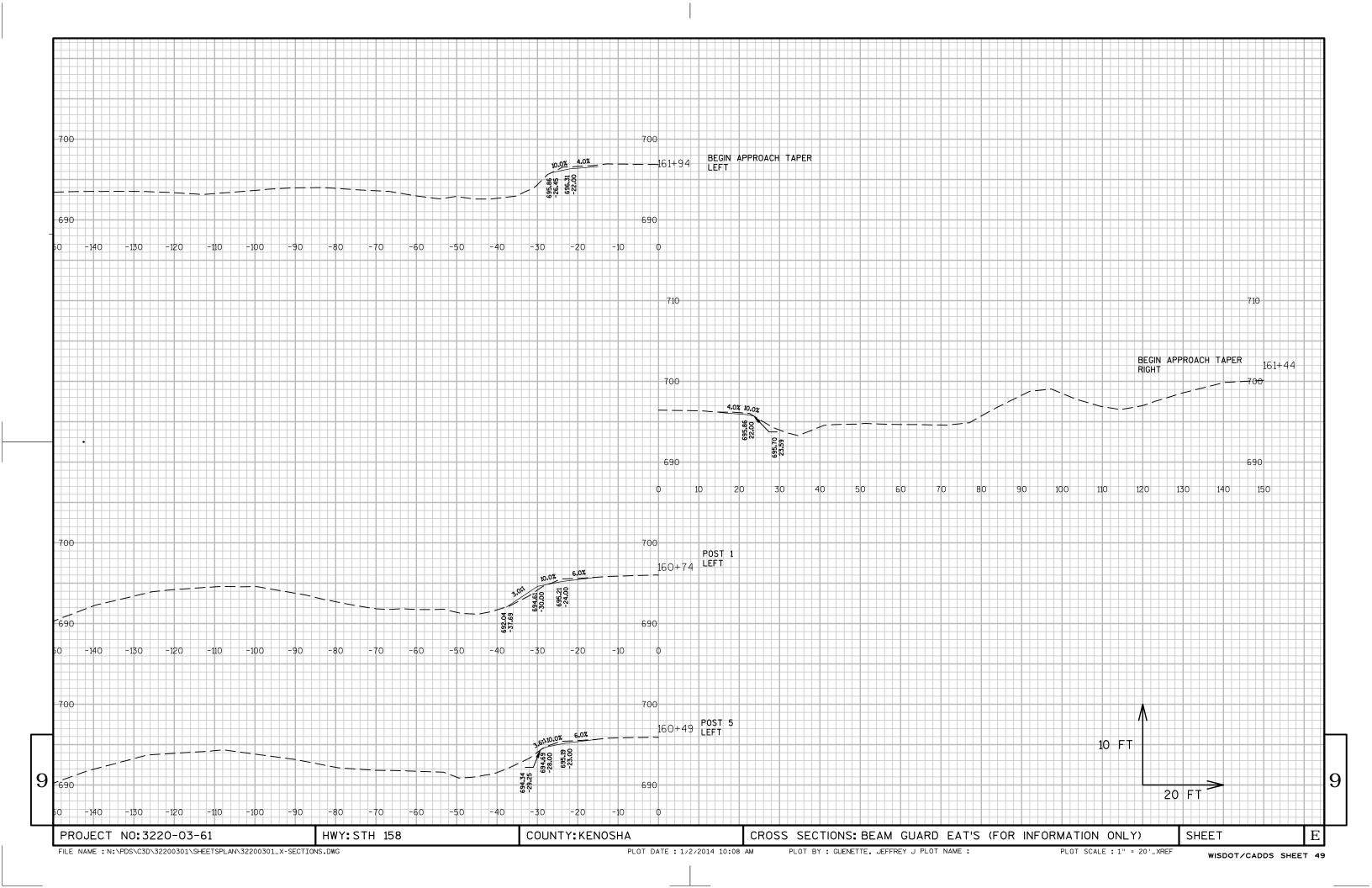
DATE 03/18/13

PLATE NO. W9-1.8

SHEET NO:









Wisconsin Department of Transportation

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