WKE

FEB 11, 2020

PROJECT ID: 2718-15-70

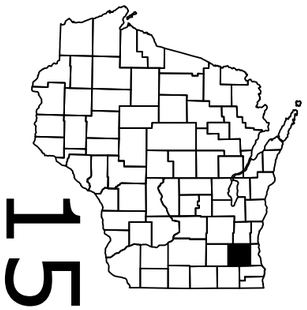
WITH:

COUNTY: WAUKESHA

ORDER OF SHEETS

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

TOTAL SHEETS = 540



15

N

	STH 164 (CTH ES- SKYLINE AVE)	STH 164 (SKYLINE AVE - GLENDALE RD)	STH 164 (GLENDALE RD. - CTH I)	STH 164 (CTH I - STH 59)
DESIGN DESIGNATION				
A.A.D.T. 2022	= 19,000	= 18,500	= 19,100	= 19,600
A.A.D.T. 2042	= 21,600	= 21,200	= 21,900	= 22,900
D.H.V.	= 11.9			
D.D.	= 59/41			
T.	= 13.8%			
DESIGN SPEED	= 60 m.p.h			
ESALS	=			

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

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

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2718-15-70	WISC 2020043	1

CHINOOK PASS, TOWN OF WAUKESHA

CTH ES TO LES PAUL PARKWAY

STH 164

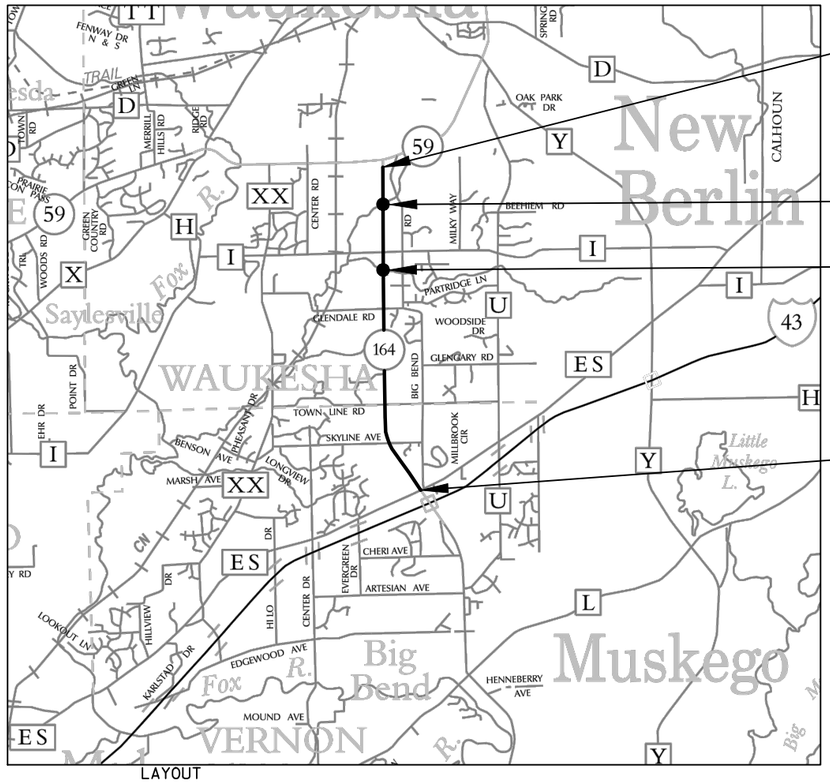
WAUKESHA COUNTY

STATE PROJECT NUMBER
2718-15-70

R-19-E

T-6-N

T-5-N



LAYOUT

SCALE 0 2 MILES

TOTAL NET LENGTH OF CENTERLINE = 4.459 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, WAUKESHA COUNTY, NAD83 (2011), NAVD (2012) IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES. ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD88 (2012).

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	EMCS
Designer	DAWN MARSHALL
Project Manager	MARK WILFERT
Regional Examiner	WISDOT
Regional Supervisor	REEM SHAHIN

APPROVED FOR THE DEPARTMENT

DATE: August 1, 2019

E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\010101_TI.DWG
LAYOUT NAME - ****

PLOT DATE : 1/15/2019 4:13 PM

PLOT BY : SCHMIDT, JUDENE M PLOT NAME :

WISDOT/CADDS SHEET 10

GENERAL NOTES

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.

THE LOCATIONS OF JOINTS IN THE HMA PAVEMENT SHALL BE APPROVED BY THE ENGINEER.

MAINTAIN ACCESS TO ALL DRIVEWAYS AND ALL BUSINESSES AT ALL TIMES.

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

BEAMGUARD END TREATMENTS SHALL BE REPLACED WITHIN 3 CALENDAR DAYS OF REMOVAL. RAW ENDS SHALL BE PROTECTED.

BINDER LAYER SHALL BE PLACED WITHIN 14 CALENDAR DAYS OF MILLING

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

PROTECT FROM DAMAGE AND COMPLETE SHOULDER WORK AROUND ANY EXISTING SIGNS OR MAILBOXES THAT ARE TO REMAIN IN PLACE.

THE EXACT LOCATION OF PRIVATE ENTRANCES IS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

RESTORATION OF EXPOSED SLOPES AND DITCHES SHALL TAKE PLACE WITHIN 5 CALENDAR DAYS AFTER FINISHED GRADING IS COMPLETE

CONTACT THE PROJECT ENGINEER AND THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION, AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY PUBLIC SURVEY MONUMENT.

ALL DISTURBED AREAS WITHIN THE RIGHT-OF-WAY SHALL BE TOPSOILED, FERTILIZED, AND SEEDED, AS DIRECTED BY THE ENGINEER

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 NEW SIGN.

THE LOCATIONS OF EROSION CONTROL ITEMS SHALL BE DETERMINED BY THE ENGINEER. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

TEMPORARY STORAGE OF ANY MATERIAL SHALL NOT BE PERMITTED IN WETLANDS

MILLINGS (SALVAGED ASPHALTIC PAVEMENT BASE) SHALL BE PLACED ON THE LOW SIDE SHOULDER IN SUPERELEVATION SECTIONS

ALL CURB AND GUTTER ELEVATIONS PROVIDED ARE AT FLANGE LINE

RE-TOPSOIL OF GRADED AREAS, AS DESIGNATED BY THE ENGINEER, IMMEDIATELY AFTER GRADING IS COMPLETED WITHIN THOSE AREAS. SEED, FERTILIZE, AND 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 WITHIN THREE (3) DAYS OF ANY DISTURBANCE.

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 WITHIN THREE (3) DAYS OF ANY DISTURBANCE.

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 VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE BMP IS NO LONGER REQUIRED.

STANDARD ABBREVIATIONS

ABUT	Abutment
AH	Ahead
AADT	Annual Average Daily Traffic
BK	Back
CL or C/L	Center Line
Δ	Central Angle or Delta
CH	Chord
D	Degree of Curve
DHV	Design Hour Volume
DIA	Diameter
X	East Grid Coordinate
EBS	Excavation Below Subgrade
FL or F/L	Flow Line
CWT	Hundredweight
IN DIA	Inch Diameter
ID	Inside Diameter
I	Intersection Angle
INV	Invert
LHF	Left-Hand Forward
LC	Long Chord of Curve
LS	Lump Sum
ML or M/L	Match Line
NC	Normal Crown
Y	North Grid Coordinate
PAVT	Pavement
PCC	Point of Compound Curve
PC	Point of Curvature
PI	Point of Intersection
PRC	Point of Reverse Curvature
PT	Point of Tangency
POC	Point On Curve
POT	Point on Tangent
R	Radius
RL or R/L	Reference Line
RHF	Right-Hand Forward
R/W	Right-of-Way
SALV	Salvaged
SAN S	Sanitary Sewer
SF	Square Feet
SY	Square Yard
STD	Standard
SDD	Standard Detail Drawings
SSD	Stopping Sight Distance
SE	Superelevation
SL or S/L	Survey Line
T	Tangent
TEL	Telephone
TLE	Temporary Limited Easement
T	Ton
T	Trucks (percent of)
UG	Underground
VAR	Variable
V	Velocity or Design Speed
VC	Vertical Curve
VPCC	Vertical Point of Compound Curve
VPC	Vertical Point of Curve
VPI	Vertical Point of Intersection
VPRC	Vertical Point of Reverse Curve
VPT	Vertical Point of Tangency
W	Water
WM	Water Main
WV	Water Valve

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

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UTILITY CONTACTS

AT&T LEGACY - COMMUNICATION LINE
CARL DONAHUE
866 ROCK CREEK RD
PLANO, IL 60545
(847) 420-9115
cd8729@att.com

AT&T WISCONSIN - COMMUNICATION LINE
JEFF OLDENBURG
2005 PEWAUKEE RD
WAUKESHA, WI 53188
(262) 896-7522
jo2376@att.com

ATC MANAGEMENT, INC. - ELECTRICITY-TRANSMISSION
TONY MARCINIAK
801 O'KEEFE RD
P.O. BOX 6113
DE PERE, WI 54115-6113
(920) 338-6582
tmarciniak@atcllc.com

WE ENERGIES - ELECTRICITY
DAN SANDE
333 WEST EVERETT ST, ROOM A299
MILWAUKEE, WI 53203
(414) 221-4578
dan.sande@we-energies.com

WE ENERGIES - GAS/PETROLEUM
DAN SANDE
333 WEST EVERETT ST, ROOM A299
MILWAUKEE, WI 53203
(414) 221-4578
dan.sande@we-energies.com

TIME WARNER CABLE - COMMUNICATION LINE
STEVEN CRAMER
1320 N. DR. MARTIN LUTHER KING JR. DR.
MILWAUKEE, WI 53212-4002
(414) 277-4045
wis.engineering@twcable.com

CITY OF WAUKESHA - STREET LIGHTING
MICHAEL GRULKE
130 DELAFIELD ST
WAUKESHA, WI 53188
(262) 524-3600
mgrulke@ci.waukesha.wi.us

CITY OF WAUKESHA - WATER
CHRIS J. WALTER
P.O. BOX 1648
WAUKESHA, WI 53187-1648
(262) 521-5272
cwalter@waukesha-water.com

LEVEL 3 COMMUNICATIONS LLC - COMMUNICATION LINE
NETWORK RELATIONS
1025 ELDORADO BLVD
BROOMFIELD, CO 80021
relo@level3.com

PAETEC COMMUNICATIONS, LLC - COMMUNICATION LINE
NATHAN BECKER
13935 BISHOPS DR
BROOKFIELD, WI 53005
(262) 792-7938
nathan.becker@windstream.com

TDS METROCOM - COMMUNICATION LINE
MATTHEW SCHULTE
16924 WEST VICTOR RD
NEW BERLIN, WI 53151
(262) 754-3063
matt.schulte@tdstelecom.com

WISCONSIN DEPARTMENT OF TRANSPORTATION - COMMUNICATION LINE
JEFF MADSON
STE. 300
433 W. ST. PAUL AVE.
MILWAUKEE, WI 53203-3007
(414) 225-3723
Jeffrey.Madson@dot.wi.gov

WISCONSIN DEPARTMENT OF TRANSPORTATION - STREET LIGHTING
ERIC PEREA
141 NW BARSTOW STREET
P.O. BOX 798
WAUKESHA, WI 53187-0798
(262) 574-5422
Eric.Perea@dot.wi.gov

WISCONSIN DEPARTMENT OF TRANSPORTATION - WISCONSIN SIGNAL
JARRETT GATES
141 NW BARSTOW STREET
P.O. BOX 798
WAUKESHA, WI 53187-0798
(414) 750-2472
jarrett.gates@dot.wi.gov
(414) 750-2605 (SIGNALS UNIT 8AM-5PM)

CITY OF MUSKEGO SEWER AND WATER UTILITIES - SEWER
SCOTT KLOSKOWSKI
P.O. BOX 749
MUSKEGO, WI 53150-749
(262) 679-4128
skloskowski@ci.muskego.wi.us

CITY OF MUSKEGO SEWER AND WATER UTILITIES - WATER
SCOTT KLOSKOWSKI
P.O. BOX 749
MUSKEGO, WI 53150-749
(262) 679-4128
skloskowski@ci.muskego.wi.us

VILLAGE OF BIG BEND DEPARTMENT OF PUBLIC WORKS - WATER
TOM JOHNSON
P.O. BOX 130
BIG BEND, WI 53103
(262) 662-4903

WAUKESHA COUNTY DEPARTMENT OF PUBLIC WORKS - ROAD FACILITY
ALLISON BUSSLER
515 W. MORELAND RD
WAUKESHA, WI 53188
(262) 896-7740
abussler@waukeshacounty.gov

CITY OF WAUKESHA - ROAD FACILITY
FRED ABADI
130 DELAFIELD ST.
WAUKESHA, WI 53188
(262) 524-3600
dpw@ci.waukesha.wi.us

CITY OF WAUKESHA - SEWER
JEFF HARENDA
600 SENTRY DR
WAUKESHA, WI 53186
(262) 524-3629
jharenda@ci.waukesha.wi.us

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION
JOHN WASHBURN
W239 N1812 ROCKWOOD DRIVE
PO BOX 1607
WAUKESHA, WI 53187-1607
PHONE: (262)953-4295
FAX: (262) 547-1103
jwashburn@sewrpc.org

WI DNR LIAISON
CRAIG WEBSTER
141 NW BARSTOW STREET, ROOM 180
WAUKESHA, WI 53188
PHONE: (262) 574-2141
craig.webster@Wisconsin.gov

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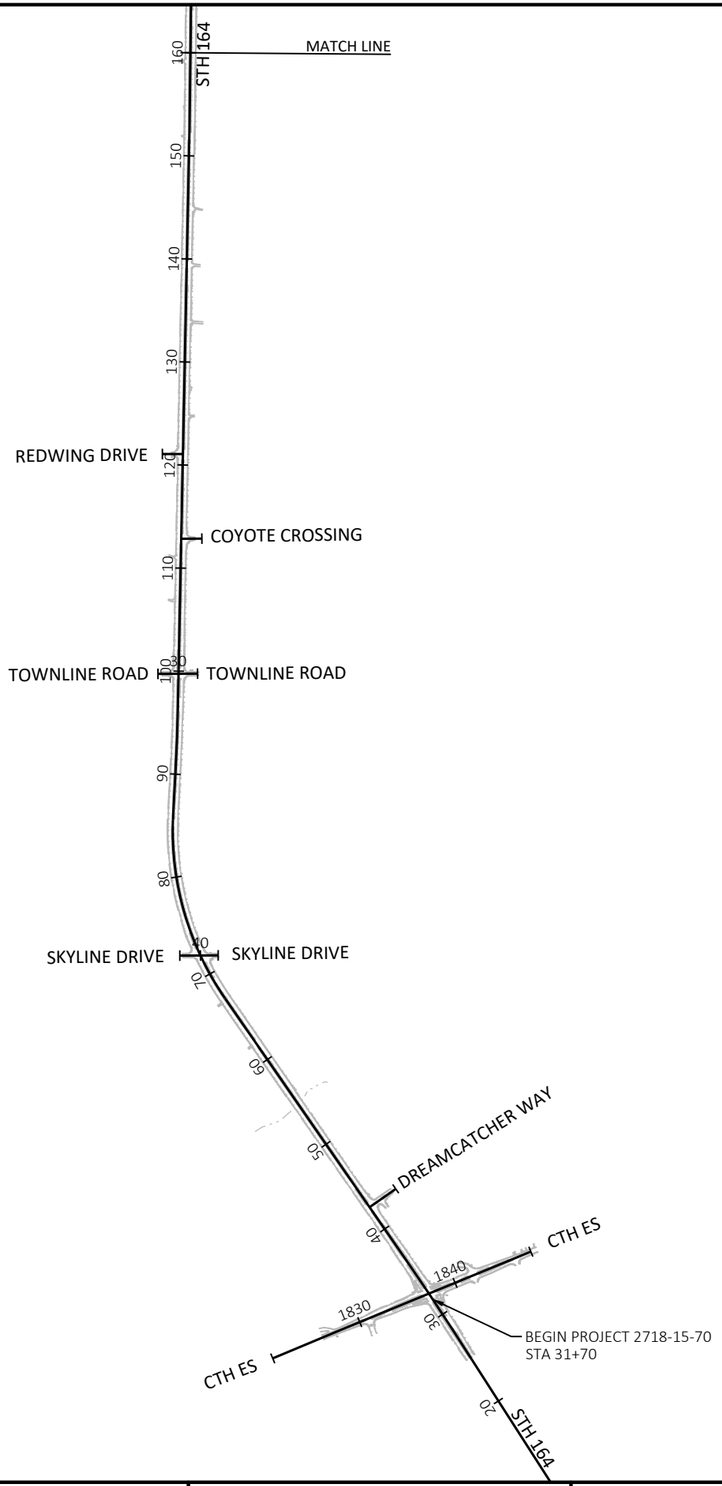
PWL Mixture Use Table

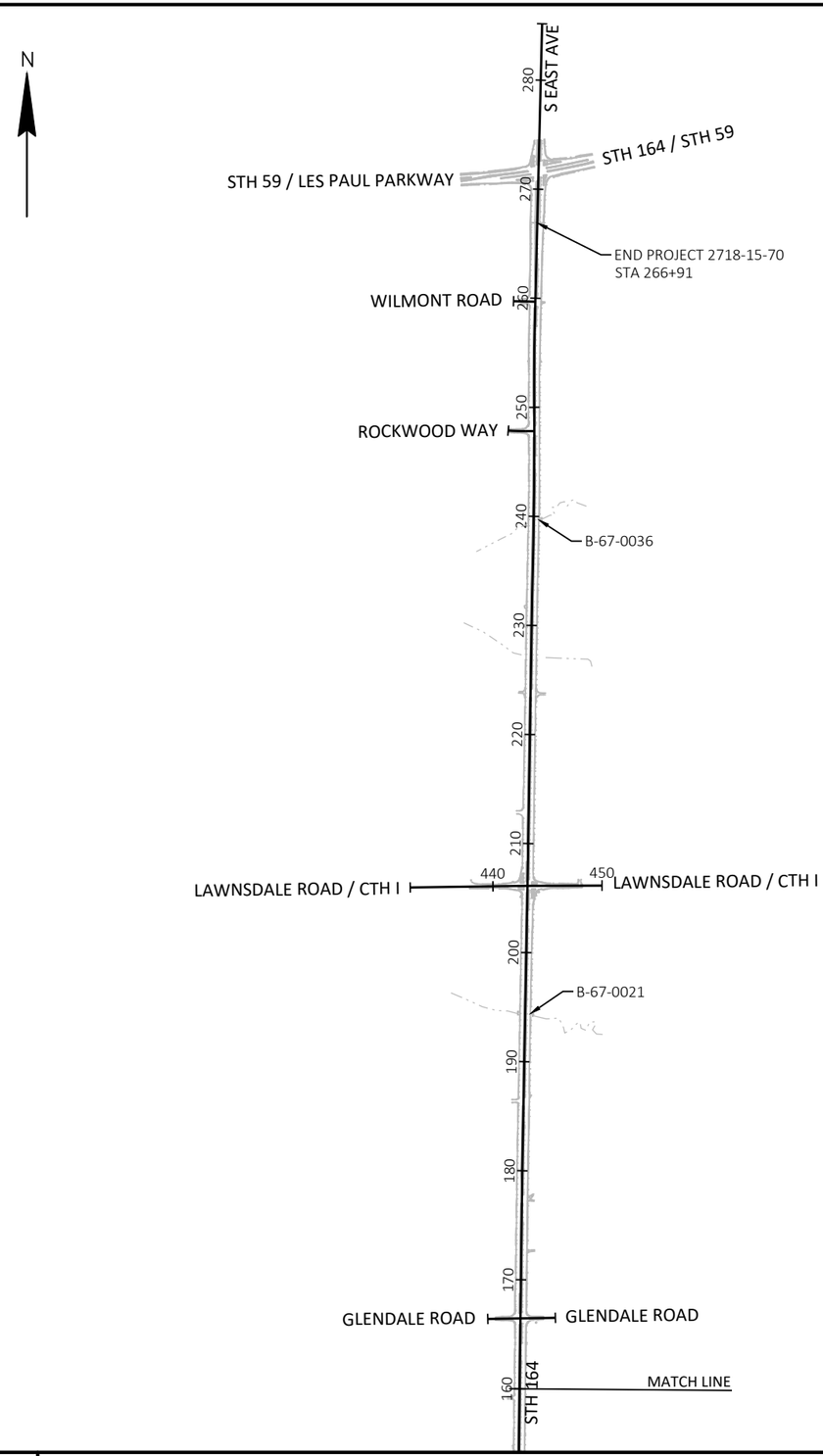
The following acceptance criteria are applicable for this project:

Location	Station	Mixture Use	Underlying surface	Bid Item	Tons	Thickness	Quality Management Program to be used for: Mixture Acceptance	Quality Management Program to be used for: Density Acceptance
11.8' Driving Lane (NB and SB)	31+43 to 266+91	Upper Layer	3 MT 58-28 S	4 MT 58-28 S	12,967	1-3/4"	460.2010 Incentive Air Voids HMA Pavement	460.2005 Incentive Density PWL HMA Pavement
11.8' Driving Lane (NB and SB)	31+43 to 266+91	Lower Layer	Milled Existing HMA Surface	3 MT 58-28 S	16,672	2-1/4"	460.2010 Incentive Air Voids HMA Pavement	460.2005 Incentive Density PWL HMA Pavement
3.8' Inside Shoulder (NB & SB)	31+43 to 266+91	Upper Layer	3 MT 58-28 S	4 MT 58-28 S	1,937	Varies 1-3/4" to 2-1/2"	460.2010 Incentive Air Voids HMA Pavement	Acceptance testing by the department; Not eligible for incentive.
3.8' Inside Shoulder (NB & SB)	31+43 to 266+91	Lower Layer	Milled Existing HMA Surface	3 MT 58-28 S	59	2-1/4"	460.2010 Incentive Air Voids HMA Pavement	Acceptance testing by the department; Not eligible for incentive.
7.9' Outside Shoulder (NB & SB)	31+43 to 266+91	Upper Layer	3 MT 58-28 S	4 MT 58-28 S	2,670	Varies 1-3/4" to 2-1/2"	460.2010 Incentive Air Voids HMA Pavement	Acceptance testing by the department; Not eligible for incentive.
7.9' Outside Shoulder (NB & SB)	31+43 to 266+91	Lower Layer	Milled Existing HMA Surface	3 MT 58-28 S	117	2-1/4"	460.2010 Incentive Air Voids HMA Pavement	Acceptance testing by the department; Not eligible for incentive.
11.8' Turn Lane (NB & SB)	31+43 to 266+91	Upper Layer	3 MT 58-28 S	4 MT 58-28 S	1,781	1-3/4"	460.2010 Incentive Air Voids HMA Pavement	Acceptance testing by the department; Not eligible for incentive.
11.8' Turn Lane (NB & SB)	31+43 to 266+91	Lower Layer	Milled Existing HMA Surface	3 MT 58-28 S	2,290	2-1/4"	460.2010 Incentive Air Voids HMA Pavement	Acceptance testing by the department; Not eligible for incentive.
11.8' Driving Lane (CTH I)	439+00 to 447+75	Upper Layer	Milled Existing HMA Surface	4 MT 58-28 S	162	1-3/4"	460.2010 Incentive Air Voids HMA Pavement	Acceptance testing by the department; Not eligible for incentive.
Various Gore/Intersection/ Median Openings	31+43 to 266+91	Upper Layer	3 MT 58-28 S	4 MT 58-28 S	2,579	1-3/4"	460.2010 Incentive Air Voids HMA Pavement	Acceptance testing by the department; Not eligible for incentive.
Various Gore/Intersection/ Median Openings	31+43 to 266+91	Lower Layer	Milled Existing HMA Surface	3 MT 58-28 S	3,317	2-1/4"	460.2010 Incentive Air Voids HMA Pavement	Acceptance testing by the department; Not eligible for incentive.

HMA PAVING

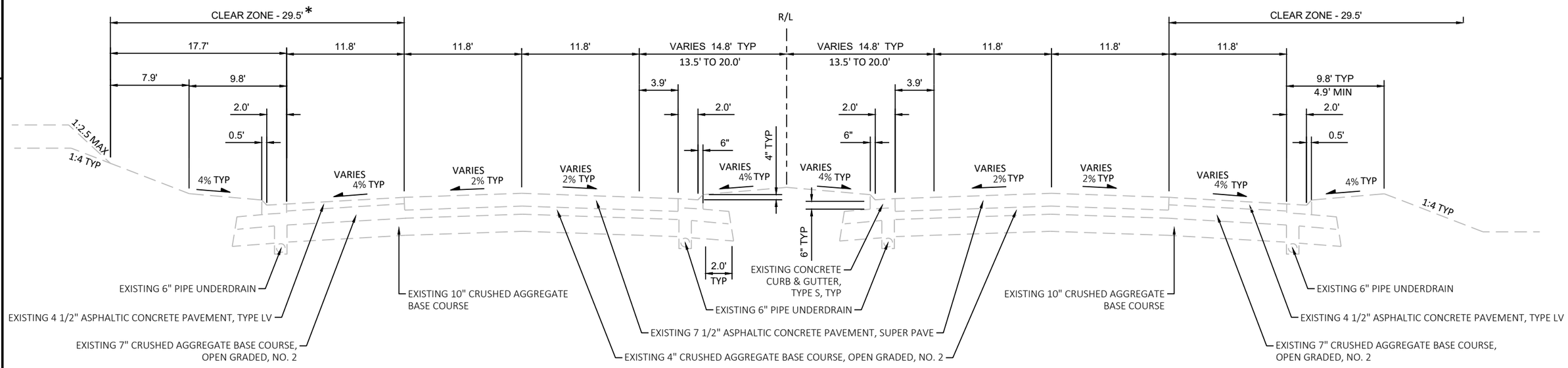
		THICKNESS	HMA PAVEMENT
OVERLAY	UPPER LAYER	1 3/4 - INCH	4 MT 58-28 S
	LOWER LAYER	2 1/4 - INCH	3 MT 58-28 S





2

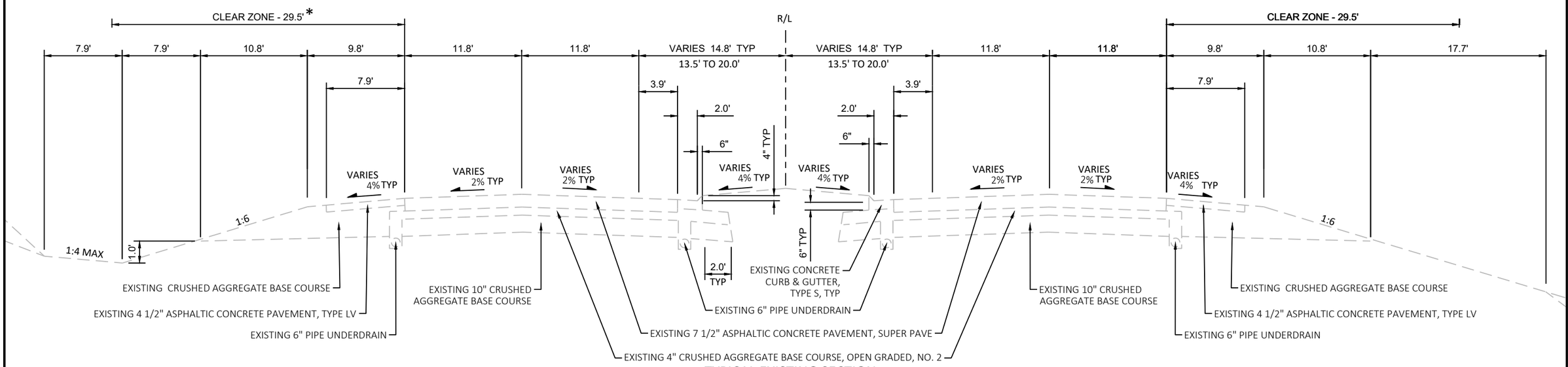
PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PROJECT OVERVIEW	SHEET 5	E



TYPICAL EXISTING SECTION
STH 164

STA 56+13.94 TO STA 71+88.74
STA 254+30.21 TO STA 266+91

* CLEAR ZONE = 36.1'
STA 65+32.58 TO STA 85+99.51, LT

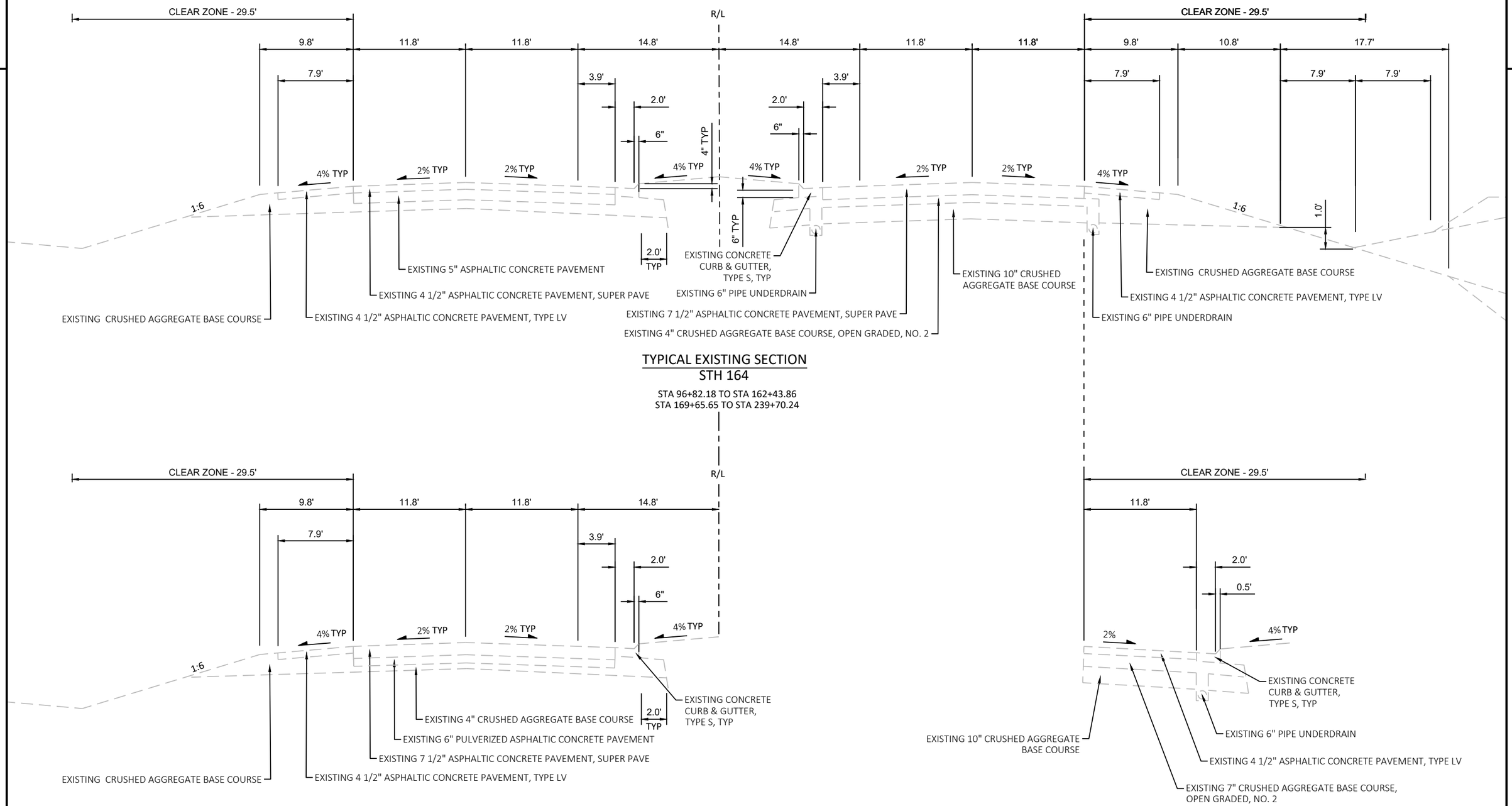


TYPICAL EXISTING SECTION
STH 164

STA 31+43 TO STA 56+13.94
STA 71+88.74 TO STA 96+82.18
STA 239+70.24 TO STA 254+30.21

* CLEAR ZONE = 36.1'
STA 65+32.58 TO STA 85+99.51, LT

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 6	E



TYPICAL EXISTING SECTION
STH 164

STA 96+82.18 TO STA 162+43.86
STA 169+65.65 TO STA 239+70.24

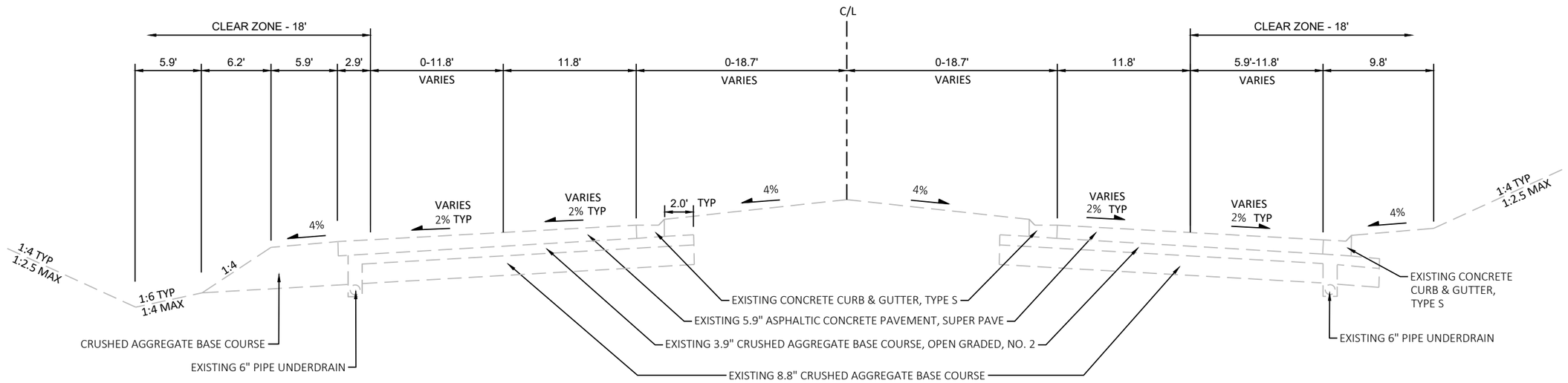
TYPICAL EXISTING SECTION
STH 164

STA 162+43.86 TO STA 169+65.65, LT

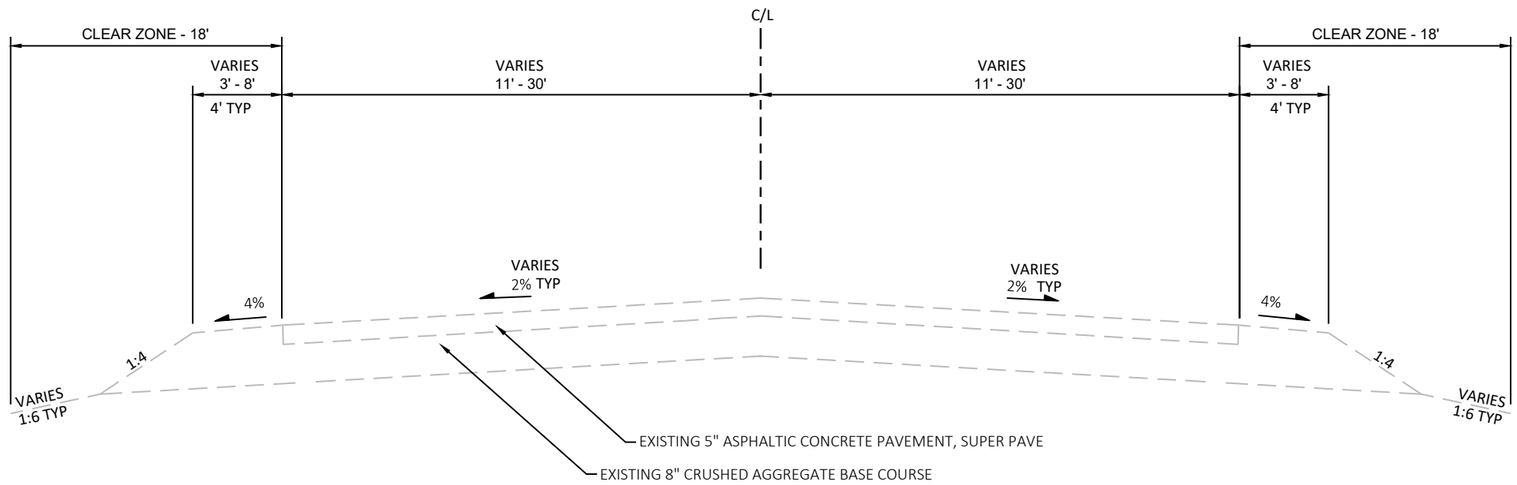
TYPICAL EXISTING SECTION
STH 164

STA 150+62.76 TO STA 186+71.68, RT

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 7	E



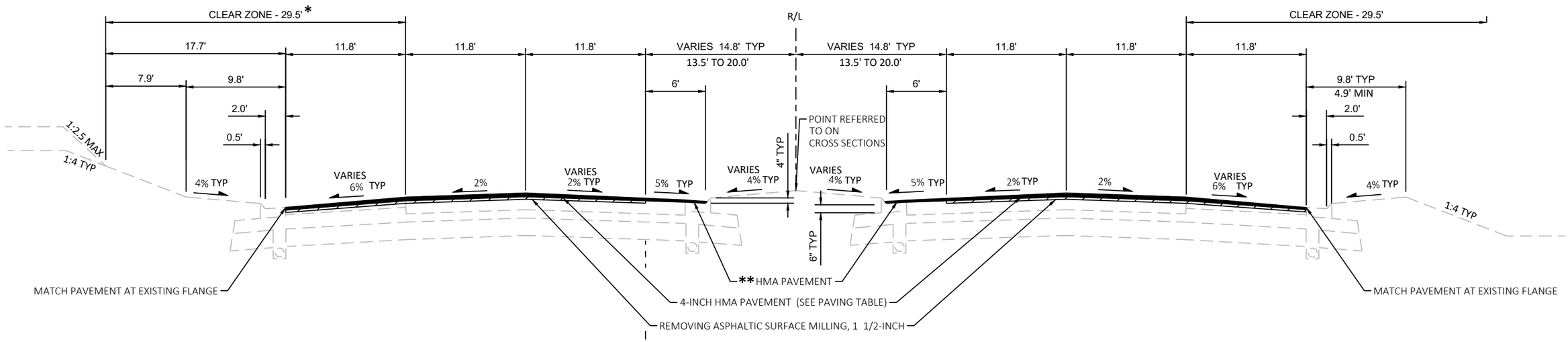
TYPICAL EXISTING SECTION
CTH ES



TYPICAL EXISTING SECTION
CTH I

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 8	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\020301_TS.DWG
LAYOUT NAME - 03_TS
PLOT DATE : 12/2/2019 6:06 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:10 FT

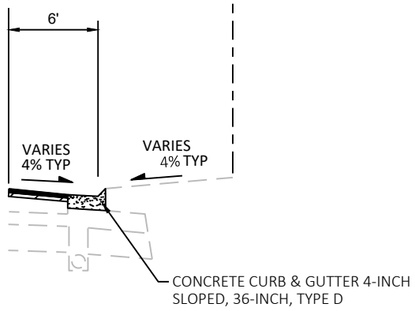


TYPICAL FINISHED SECTION
STH 164

STA 56+13.94 TO STA 71+88.74
STA 254+30.21 TO STA 264+00

* CLEAR ZONE = 36.1'
STA 65+32.58 TO STA 85+99.51, LT

** TAPERED INSIDE SHOULDER
2 1/2-INCH AT LANE EDGE TO 1 3/4-INCH AT FLOW LINE
OR FLANGE LINE WHERE CURB & GUTTER IS REPLACED



NOTE:
LANES SHALL BE MILLED 1 1/2-INCHES DOWN WITH A 2% SLOPE BEGINNING AT THE CROWN.
TURN LANES WILL BE MILLED 2 1/4-INCHES AT THE FLANGE AND 1 1/2-INCHES AT THE INSIDE EDGE OF LANE 1.
MILLING OF THE OUTSIDE SHOULDERS WILL MATCH THE SLOPE CORRECTED EDGE OF LANE 2 ON THE INSIDE AND WILL BE MILLED 1 3/4-INCHES AT THE EXISTING EDGE OF PAVEMENT.

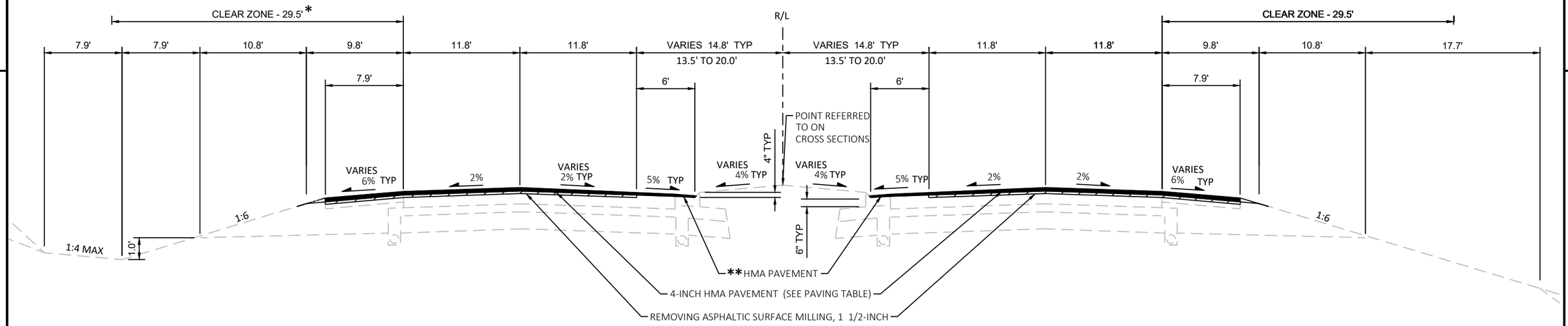
TYPICAL FINISHED SECTION
STH 164

STA 36+16.00 TO STA 42+12.50, RT
STA 36+62.00 TO STA 42+12.50, LT
STA 43+13.50 TO STA 44+94.00, RT
STA 43+13.50 TO STA 46+27.00, LT

STA 62+30.00 TO STA 71+06.00, LT
STA 62+30.00 TO STA 64+75.00, RT
STA 67+00.00 TO STA 50+61.00, RT
STA 72+90.00 TO STA 84+90.00, RT & LT
STA 85+65.00 TO STA 86+43.00, RT

STA 136+35.00 TO STA 137+35.00, RT
STA 193+40.00 TO STA 194+50.00, RT
STA 227+18.00 TO STA 227+38.00, LT
STA 227+16.00 TO STA 227+36.00, RT
STA 234+60.00 TO STA 236+50.00, RT

STA 253+31.00 TO STA 259+11.00, RT
STA 255+80.00 TO STA 259+11.00, LT
STA 260+12.50 TO STA 263+83.00, RT
STA 260+12.50 TO STA 265+10.50, LT

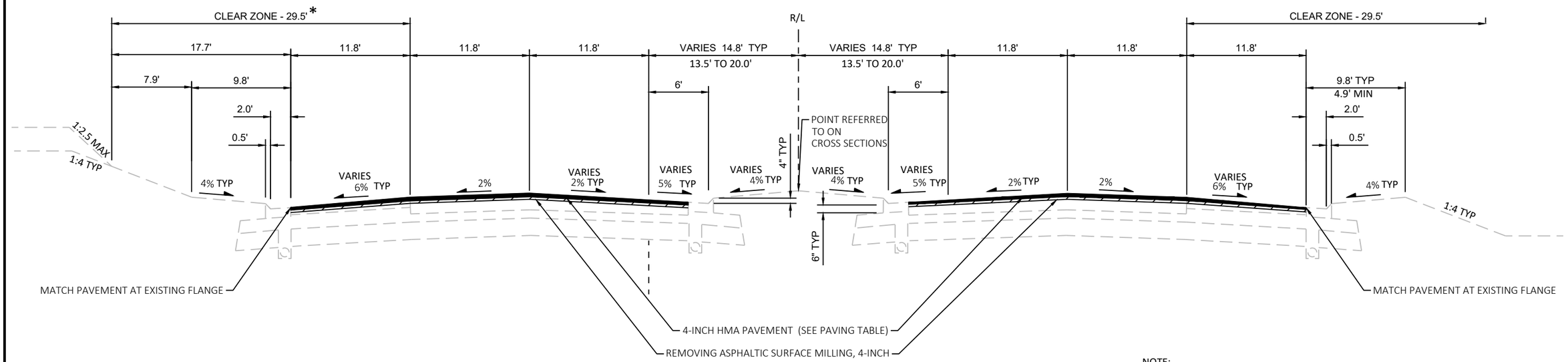


TYPICAL FINISHED SECTION
STH 164

STA 37+12 TO STA 56+13.94
STA 71+88.74 TO STA 96+82.18
STA 239+70.24 TO STA 254+30.21

* CLEAR ZONE = 36.1'
STA 65+32.58 TO STA 85+99.51, LT

** TAPERED INSIDE SHOULDER
2 1/2-INCH AT LANE EDGE TO 1 3/4-INCH AT FLOW LINE
OR FLANGE LINE WHERE CURB & GUTTER IS REPLACED

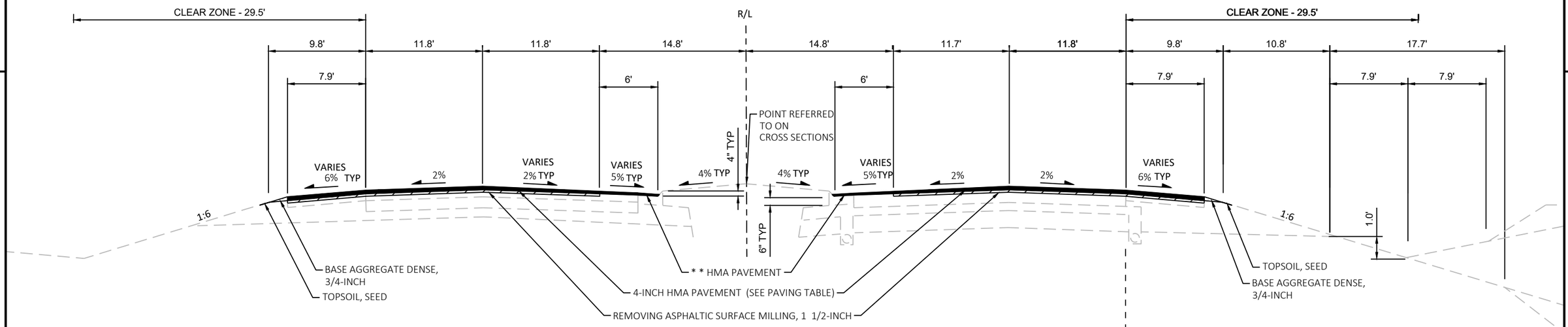


TYPICAL FINISHED SECTION
STH 164

STA 31+43 TO STA 37+12
STA 264+00 TO STA 266+91

NOTE:
LANES SHALL BE MILLED 1 1/2-INCHES DOWN WITH A 2% SLOPE BEGINNING AT THE CROWN.
TURN LANES WILL BE MILLED 2 1/4-INCHES AT THE FLANGE AND 1 1/2-INCHES AT THE INSIDE EDGE OF LANE 1.
MILLING OF THE OUTSIDE SHOULDERS WILL MATCH THE SLOPE CORRECTED EDGE OF LANE 2 ON THE INSIDE AND WILL BE MILLED 1 3/4-INCHES AT THE EXISTING EDGE OF PAVEMENT.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 10	E

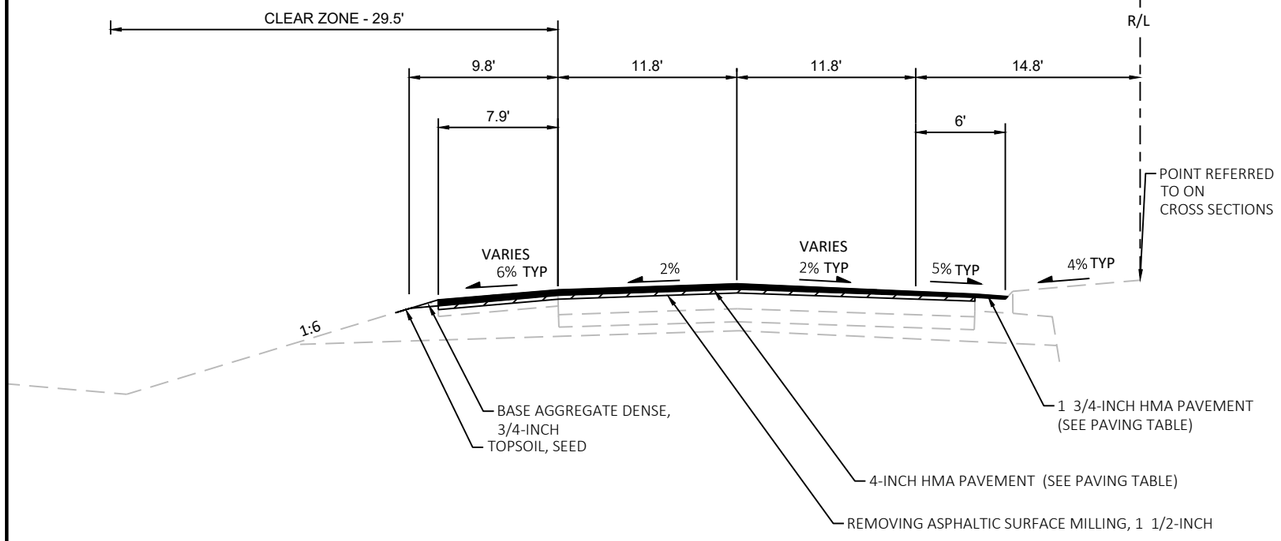


NOTE:
LANES SHALL BE MILLED 1 1/2-INCHES DOWN WITH A 2% SLOPE BEGINNING AT THE CROWN.
TURN LANES WILL BE MILLED 2 1/4-INCHES AT THE FLANGE AND 1 1/2-INCHES AT THE INSIDE EDGE OF LANE 1.
MILLING OF THE OUTSIDE SHOULDERS WILL MATCH THE SLOPE CORRECTED EDGE OF LANE 2 ON THE INSIDE AND WILL BE MILLED 1 3/4-INCHES AT THE EXISTING EDGE OF PAVEMENT.

TYPICAL FINISHED SECTION
STH 164

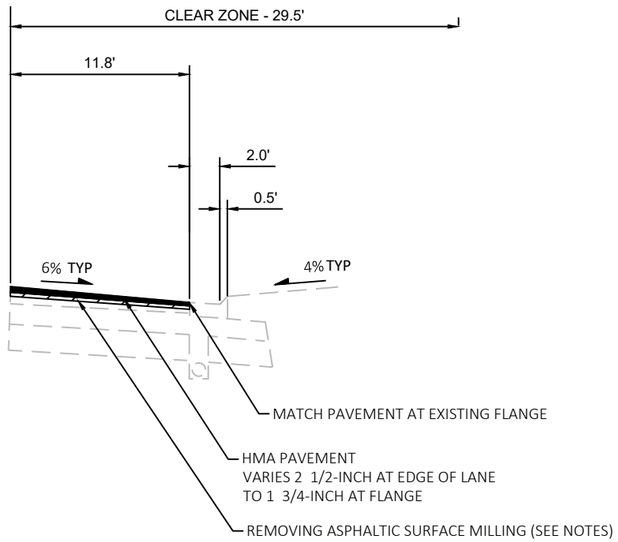
STA 96+82.18 TO STA 162+43.86
STA 169+65.65 TO STA 239+70.24

** TAPERED INSIDE SHOULDER
2 1/2-INCH AT LANE EDGE TO 1 3/4-INCH AT FLOW LINE OR FLANGE LINE WHERE CURB & GUTTER IS REPLACED



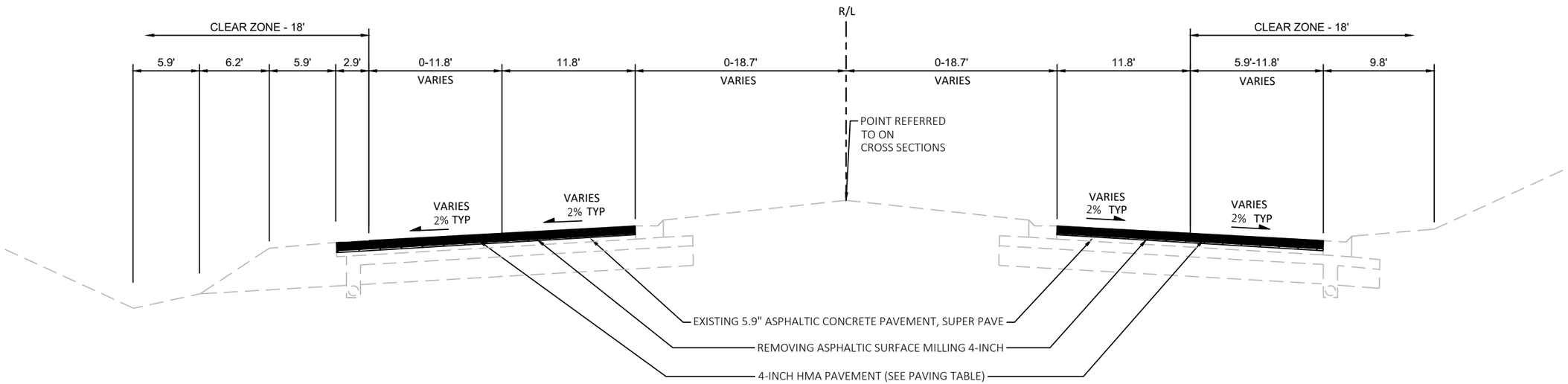
TYPICAL FINISHED SECTION
STH 164

STA 162+43.86 TO STA 169+65.65, LT

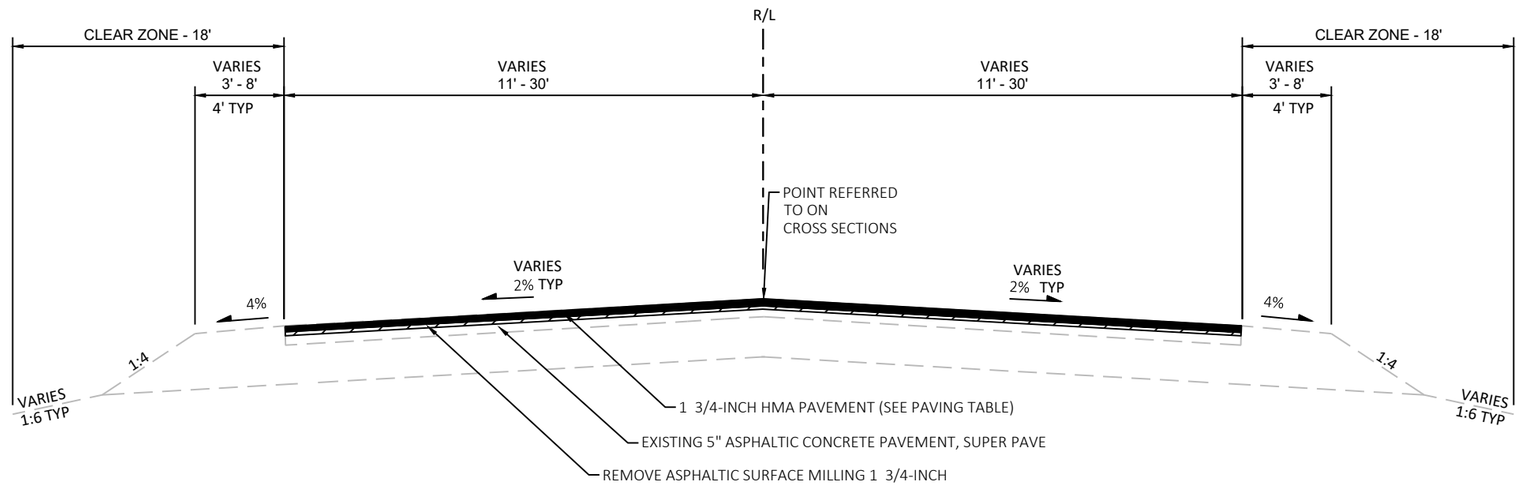


TYPICAL FINISHED SECTION
STH 164

STA 150+62.76 TO STA 186+71.68, RT



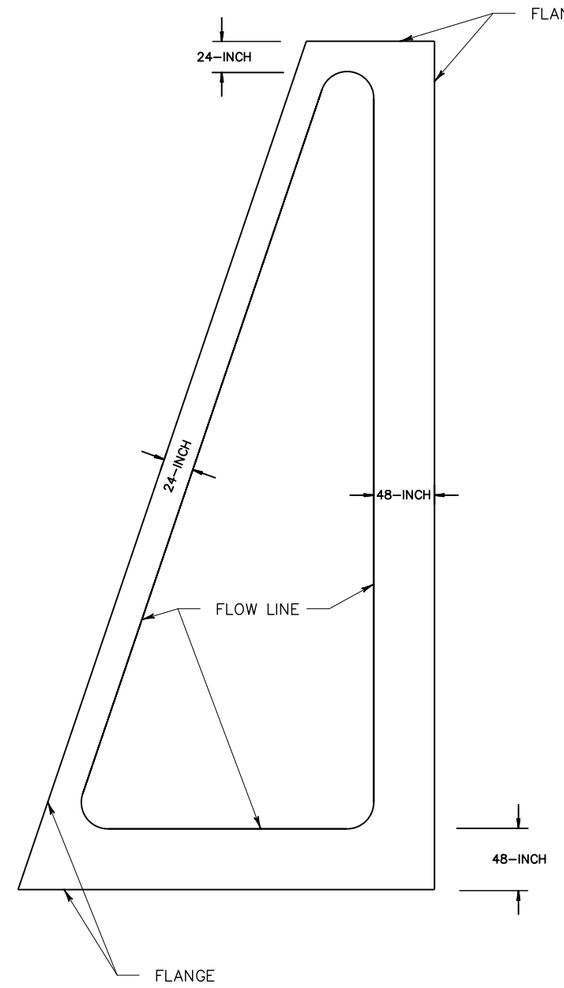
TYPICAL FINISHED SECTION
CTH ES



TYPICAL FINISHED SECTION
CTH I

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 12	E

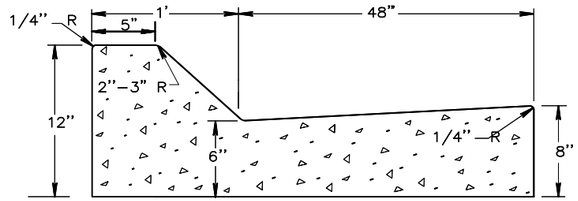
2



TYPICAL CONCRETE SAFETY ISLAND

STH 164 AND CTH ES INTERSECTION
STH 164 AND CTH I INTERSECTION

2

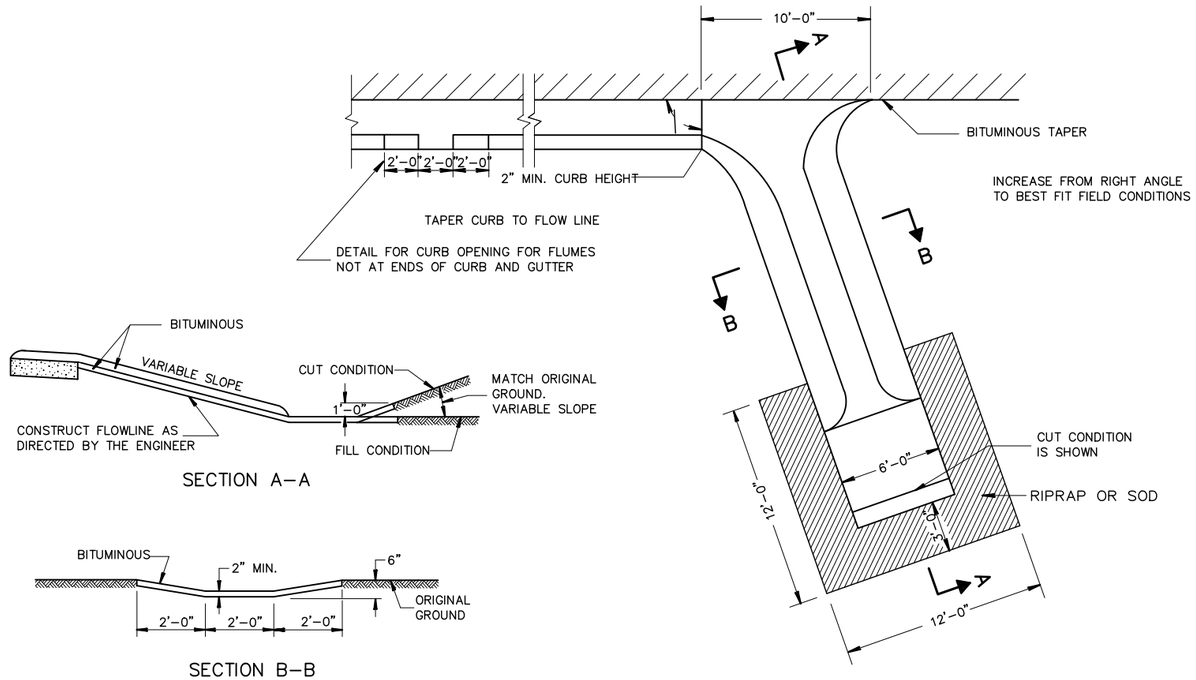


CONCRETE CURB AND GUTTER MODIFIED PAN SPECIAL

(SEE PLAN DETAILS)

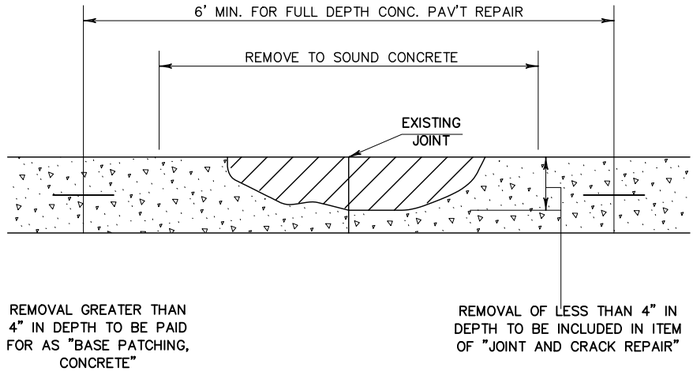
STATION 31+70.09 – 31+87.27 RT
STATION 32+18.70 – 32+22.08 LT
STATION 32+56.95 – 33+91.74 RT
STATION 32+99.75 – 33+17.50 LT
STATION 204+99.74 – 205+85.39 RT
STATION 205+74.47 – 205+93.50 LT
STATION 206+30.01 – 206+50.38 RT
STATION 206+38.91 – 207+26.67 LT

2



DETAIL OF ASPHALTIC FLUME AT TERMINAL END OF CURB AND GUTTER

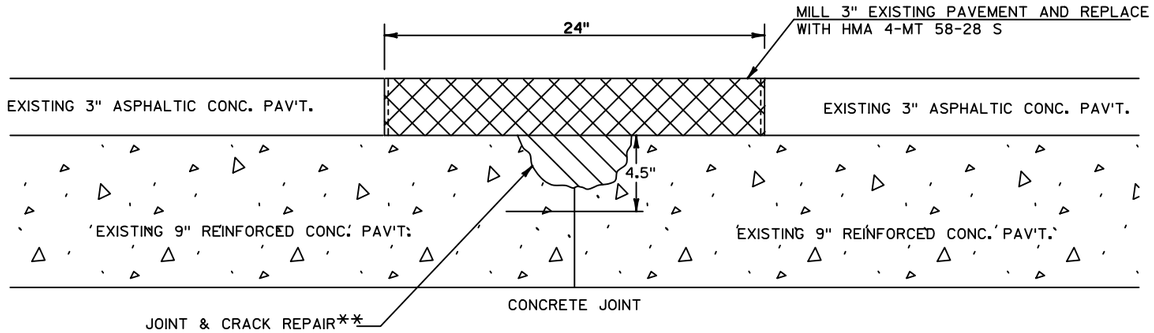
2



JOINT AND CRACK REPAIR DETAIL

NOTE : WHEN THE DEPTH OF DETERIORATED CONCRETE IS GREATER THAN 4", REMOVE TO FULL DEPTH AND MEASURE AND PAY FOR AS BASE PATCHING, CONCRETE

2

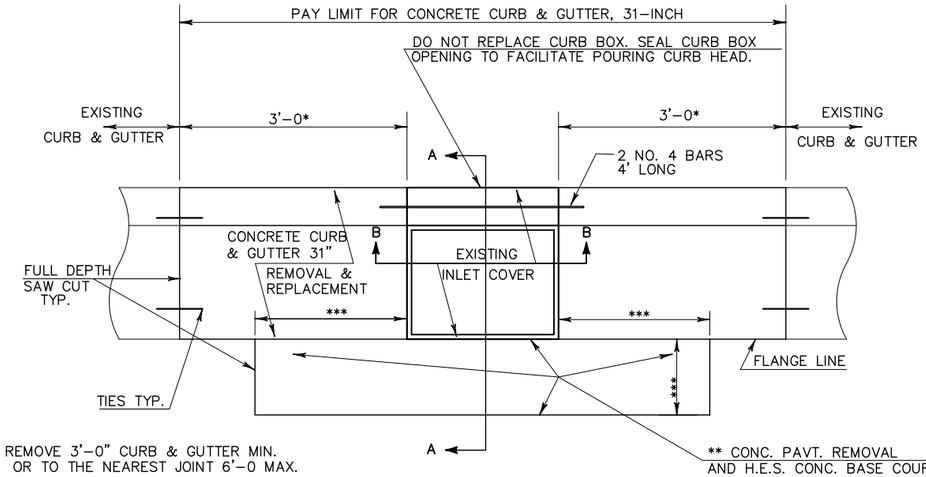


LONGITUDINAL JOINT REPAIR DETAIL

NOTE:

--------- TACK COAT

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	CONSTRUCTION DETAIL	SHEET 17	E



* REMOVE 3'–0" CURB & GUTTER MIN. OR TO THE NEAREST JOINT 6'–0 MAX. UNLESS OTHERWISE DIRECTED

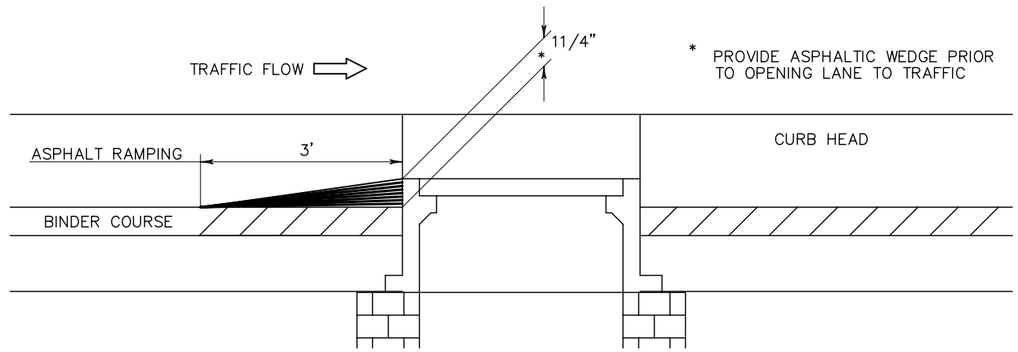
** PAVEMENT REMOVAL & REPLACEMENT IS INCIDENTAL TO ADJUSTING OR RECONSTRUCTING INLETS OR MANHOLES.

*** 9" WHEN ADJUSTING INLETS OR MANHOLES. 1'–6" WHEN RECONSTRUCTING INLETS OR MANHOLES.

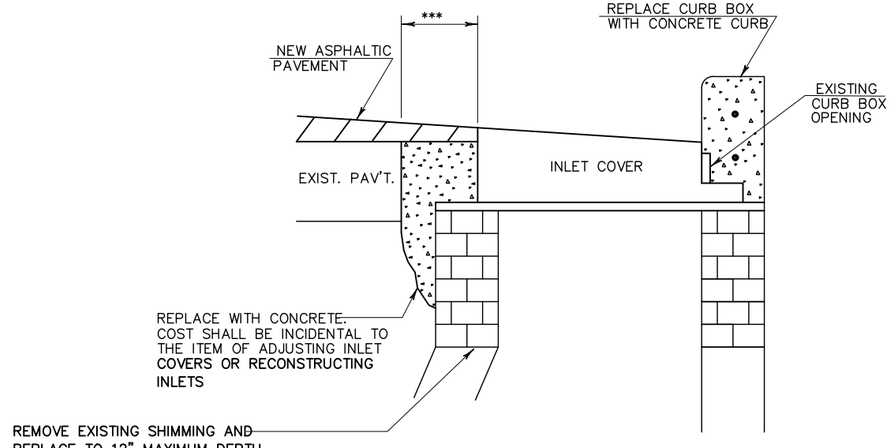
PLAN VIEW

** CONC. PAVT. REMOVAL AND H.E.S. CONC. BASE COURSE, 9–INCH OR CONCRETE SHOULDER, 9–INCH IF EXPOSED

SECTION B–B SHOWN OTHER SHEET.



SECTION B–B



NOTE: AIR–ENTRAINED MORTAR SHALL BE USED.

WHEN THE ENGINEER DIRECTS WORK IN EXCESS OF 12", WORK WILL BE PAID FOR AS RECONSTRUCTING INLETS.

SECTION A–A

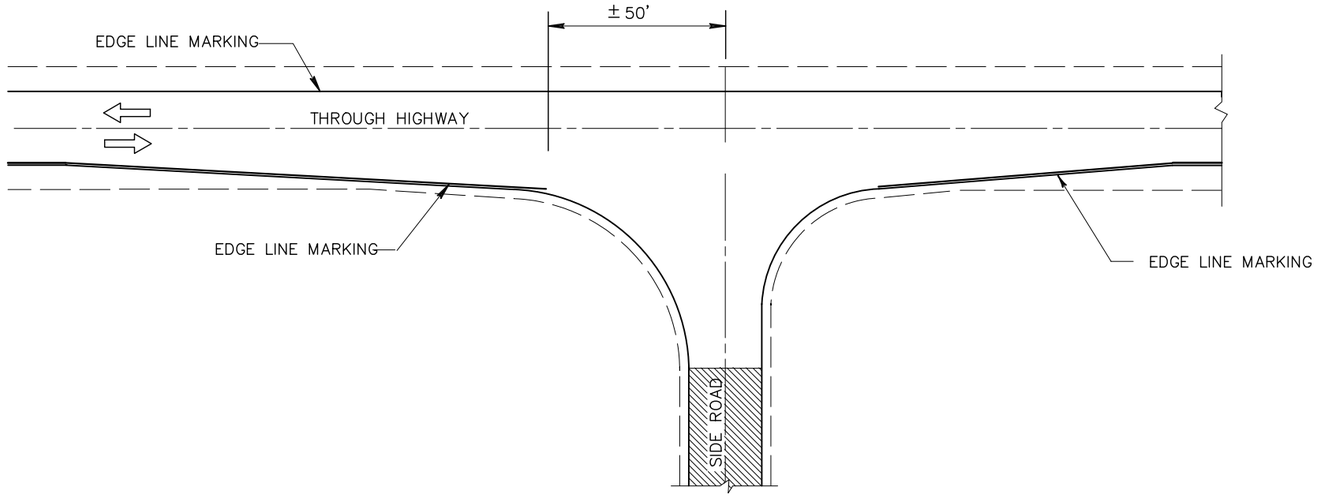
INLETS

GENERAL DRAINAGE STRUCTURE NOTES

1. LOCATIONS OF STRUCTURES IN THE DRAINAGE TABLE REFER TO CENTERLINE OF STRUCTURE.
2. GRATE AND RIM ELEVATIONS ARE GIVEN AT FLOW LINE OF INLET COVER OR CENTERLINE OF MANHOLE COVER.
3. WHEN NEW COVERS ARE PLACED, THE FIRST 6" OF ADJUSTMENT OR REPAIRING SHALL BE INCIDENTAL TO THE COST OF THE NEW COVER. ANY ADJUSTMENT OR REPAIR OF BRICKWORK BETWEEN 6" AND 12" WILL BE PAID AS ADJUSTING COVERS. REPAIRS GREATER THAN 12" WILL BE PAID AS RECONSTRUCTING INLETS OR MANHOLES.
4. MANHOLE ADJUSTMENTS IN ASPHALTIC PAVEMENT SHALL BE MADE AFTER THE BINDER COURSE IS PLACED.
5. WHEN A NEW INLET COVER IS SPECIFIED, BOTH THE FRAME AND GRATE ARE INCLUDED.
6. ALL FRAMES, GRATES, AND CURB BOXES NOT REUSED SHALL BECOME THE PROPERTY OF THE D.O.T. AND BE DELIVERED TO: WALLY HOFFMAN AT THE HIGHWAY MAINTENANCE BUILDING 10190 WATERTOWN PLANK ROAD, WAUWATOSA, WI. 53226
7. THE CURB BOX OPENING SHALL BE SEALED BEFORE POURING CONCRETE CURB TO PREVENT CONCRETE FROM ENTERING STRUCTURE.
8. WHEN CURB PLUG IS NOT REQUIRED, REPLACEMENT OF CONCRETE CURB AND GUTTER IS TO BE PAID FOR UNDER "CONCRETE CURB AND GUTTER, 31–INCH".
9. SAWING OF EXISTING CURB AND GUTTER AND PAVEMENT SHALL BE PAID FOR AS "SAWING CONCRETE PAVEMENT, FULL DEPTH".

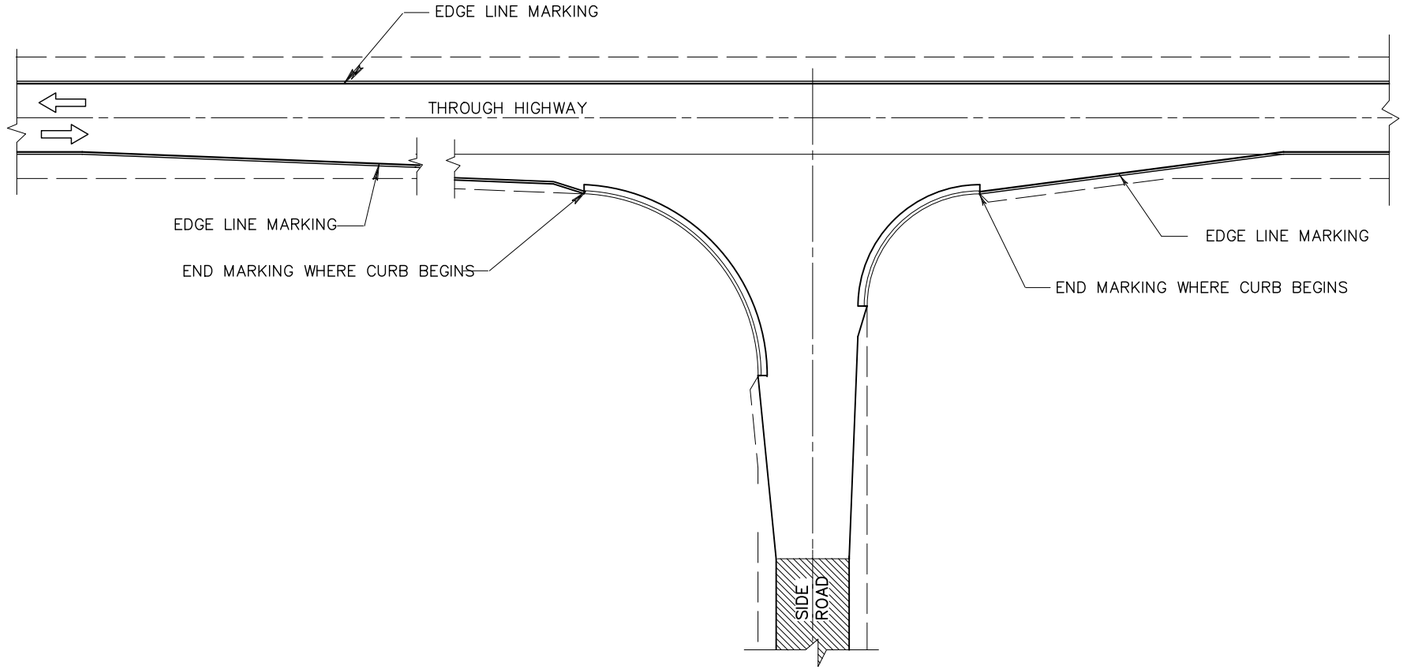
ADJUSTING OR RECONSTRUCTING INLETS OR MANHOLES (AT CURB & GUTTER LOCATIONS)

2



MINOR INTERSECTION WITHOUT CURBS

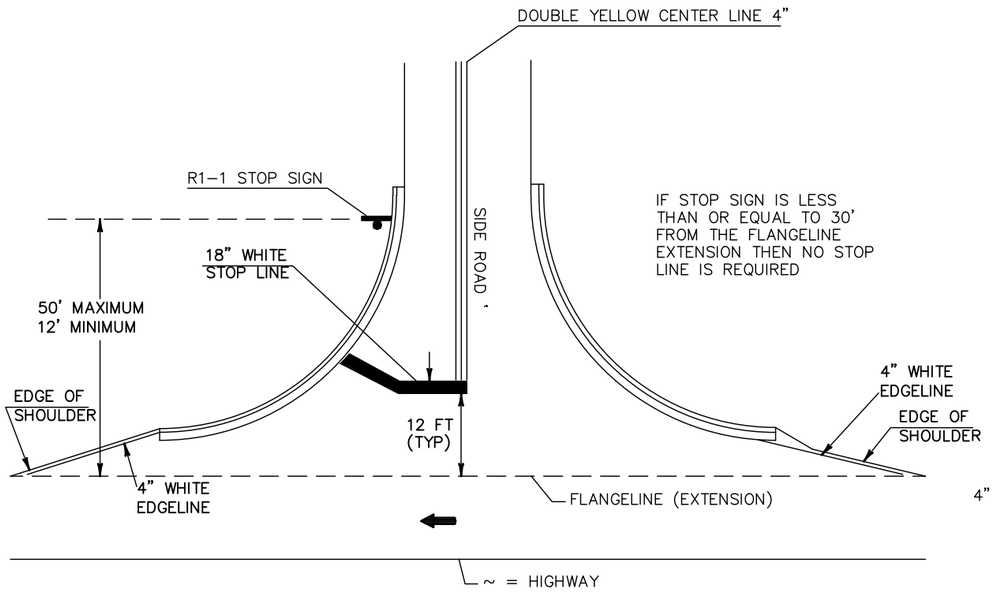
(TYPICAL MARKING)



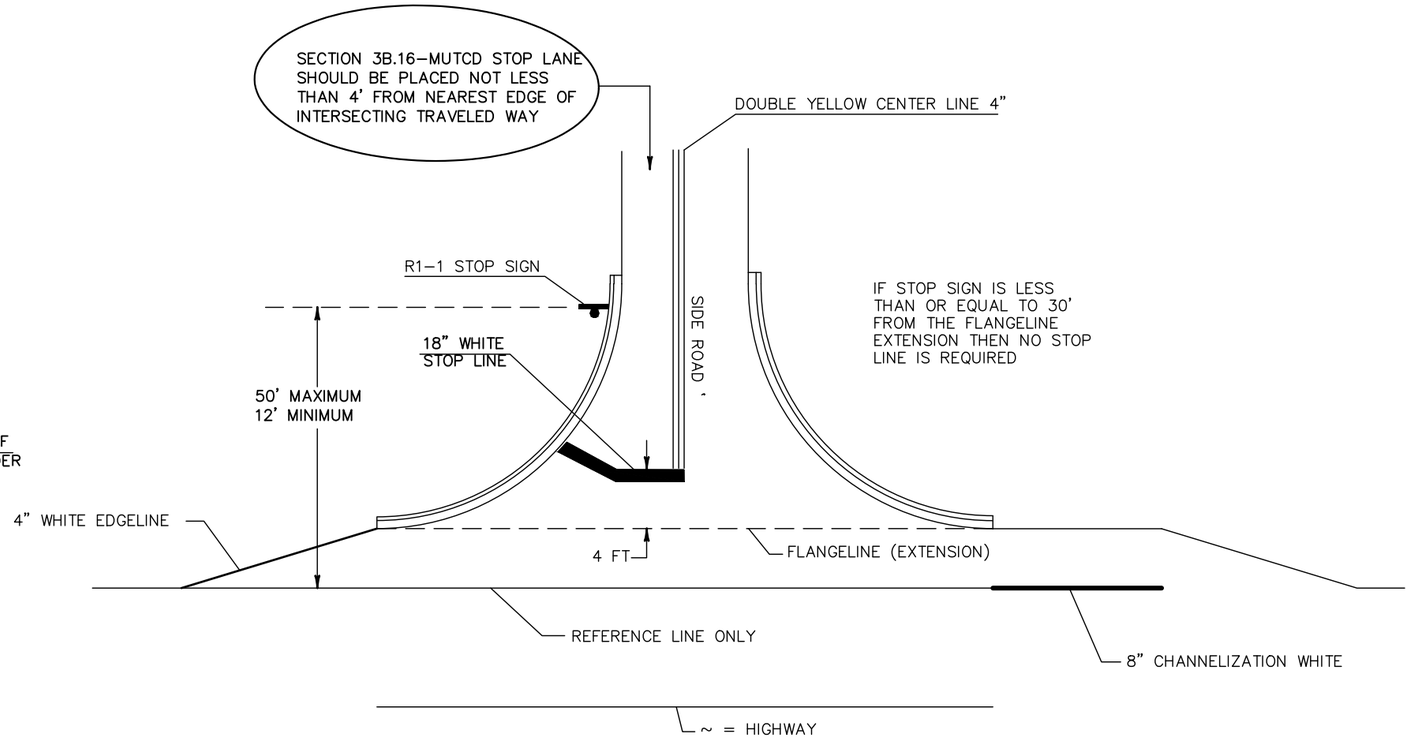
MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)

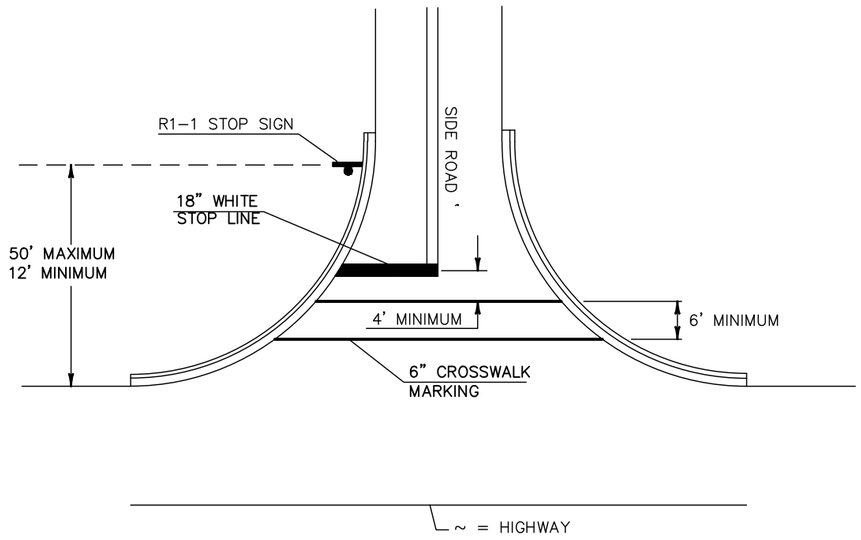
PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	CONSTRUCTION DETAIL	SHEET 19	E



TYPICAL PAVEMENT MARKING FOR SIDEROADS



TYPICAL PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING

NOTES:
18–INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.

STOP LINES REQUIRED WHERE:

- CROSSWALK MARKINGS EXIST OR BEING PROVIDED
- LARGE RADII
- OFFSET LEFT TURNS WHERE STOP BAR FOR LEFT TURN IS SET BACK FROM THRU MOVEMENT.



STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
81	31+80.94	53.743 RT	125453.94	686542.08	945.268
82	31+78.01	53.358 RT	125451.27	686543.39	945.185
83	31+75.08	52.974 RT	125448.61	686544.69	945.161
84	31+76.00	48.286 RT	125446.78	686540.28	945.209
85	31+76.14	47.748 RT	125446.61	686539.75	945.187
86	31+77.28	43.609 RT	125445.28	686535.67	945.423
87	31+72.19	43.623 RT	125441.03	686538.50	945.486
88	31+71.06	47.709 RT	125442.35	686542.53	945.232
89	31+70.91	48.258 RT	125442.53	686543.07	945.255
90	31+70.13	52.325 RT	125444.11	686546.90	945.193
91	31+69.18	57.200 RT	125446.02	686551.48	945.118
92	31+67.42	66.288 RT	125449.57	686560.03	944.979
93	31+65.66	75.375 RT	125453.11	686568.58	944.482
94	31+64.85	79.546 RT	125454.74	686572.51	944.227
95	31+64.73	80.158 RT	125454.98	686573.08	944.202
96	31+64.35	82.152 RT	125455.76	686574.96	944.324
97	31+69.15	83.575 RT	125460.56	686573.49	944.210
98	31+69.52	81.672 RT	125459.82	686571.69	944.093
99	31+69.64	81.031 RT	125459.57	686571.09	944.120
100	31+70.55	76.328 RT	125457.73	686566.67	944.407
101	31+72.34	67.109 RT	125454.13	686557.99	944.945
102	31+74.13	57.889 RT	125450.53	686549.32	945.086
103	31+77.11	58.304 RT	125453.25	686548.01	944.976
104	31+80.08	58.720 RT	125455.97	686546.71	945.015
105	31+80.44	58.730 RT	125456.27	686546.52	944.795
106	31+84.66	58.857 RT	125459.86	686544.29	944.864

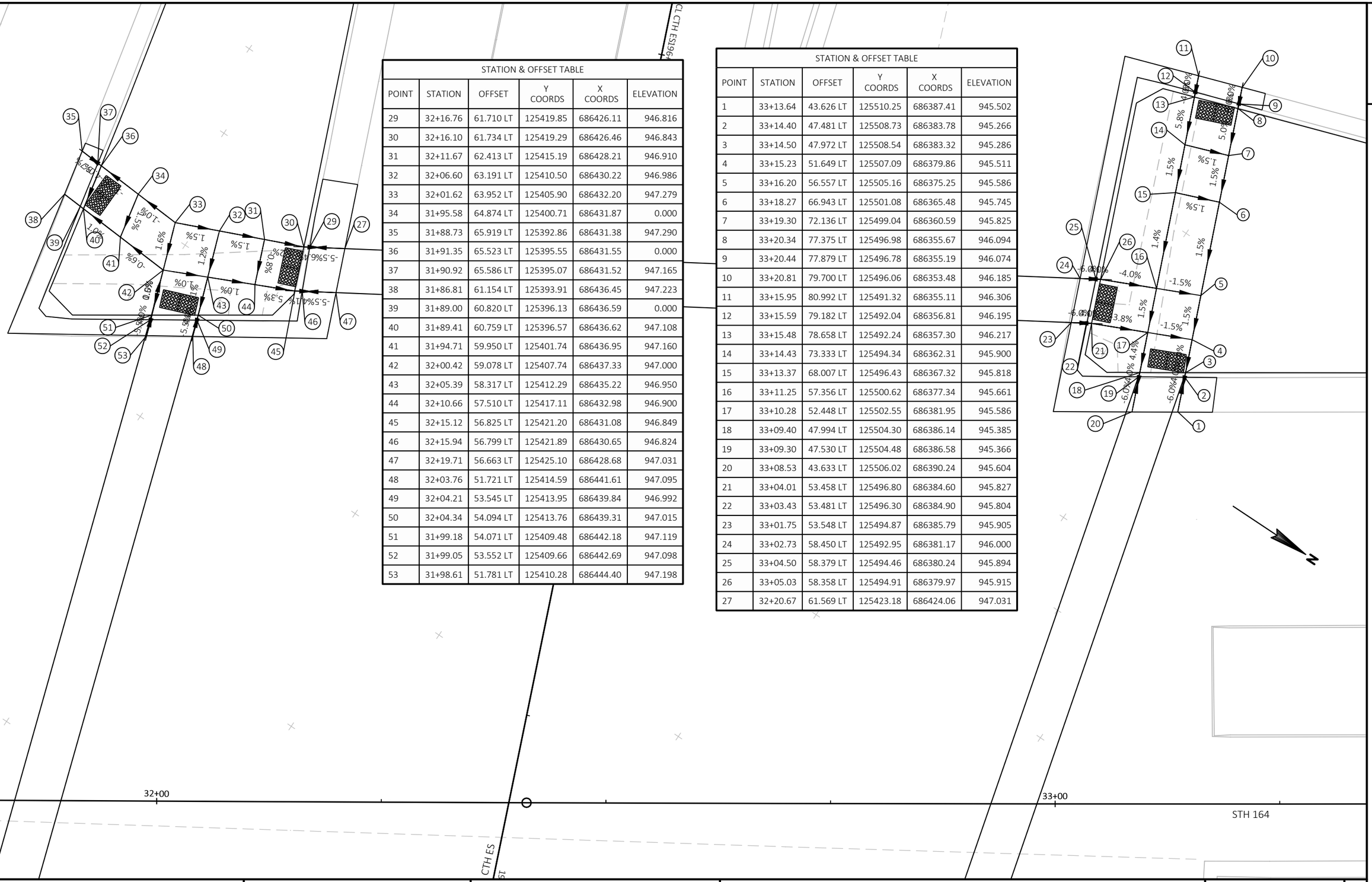
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
54	32+58.22	61.187 RT	125522.54	686505.34	944.196
55	32+62.07	61.315 RT	125525.82	686503.30	943.965
56	32+62.64	61.334 RT	125526.30	686503.00	943.987
57	32+72.76	62.253 RT	125535.26	686498.12	943.834
58	32+77.79	62.710 RT	125539.70	686495.70	943.759
59	32+80.62	62.969 RT	125542.20	686494.33	943.593
60	32+81.09	63.012 RT	125542.62	686494.10	943.574
61	32+83.19	63.203 RT	125544.47	686493.10	943.701
62	32+85.32	58.377 RT	125543.56	686487.90	943.750
63	32+83.22	58.185 RT	125541.70	686488.91	943.623
64	32+82.75	58.143 RT	125541.29	686489.13	943.642
65	32+79.01	57.801 RT	125537.98	686490.94	943.823
66	32+80.19	53.070 RT	125536.33	686486.35	943.887
67	32+81.37	48.339 RT	125534.68	686481.76	943.813
68	32+81.55	47.815 RT	125534.54	686481.22	943.790
69	32+82.92	43.807 RT	125533.45	686477.13	944.023
70	32+77.77	43.854 RT	125529.19	686480.04	944.109
71	32+76.45	47.706 RT	125530.23	686483.98	943.885
72	32+76.22	48.362 RT	125530.41	686484.65	943.913
73	32+75.10	52.853 RT	125531.98	686489.00	944.143
74	32+73.99	57.343 RT	125533.54	686493.36	943.898
75	32+68.87	56.878 RT	125529.02	686495.83	943.976
76	32+63.69	56.367 RT	125524.42	686498.29	944.054
77	32+63.11	56.357 RT	125523.93	686498.60	944.031
78	32+59.25	56.218 RT	125520.64	686500.64	944.263
79	31+85.67	53.885 RT	125457.96	686539.58	945.007
80	31+81.60	53.763 RT	125454.49	686541.74	944.974

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	CONSTRUCTION DETAIL: CTH ES CURB RAMPS	SHEET 21 E

FILE NAME : N:\PDS\C3D\27181500\DESIGN\SURFACES\SW AT ES.DWG
LAYOUT NAME - 3

PLOT DATE : 7/31/2019 3:26 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42


CL CTH ES
1.5%
1.6%
1.2%
1.0%
0.6%
-5.5%
5.3%
-5.5%
4.1%
-5.5%
0.8%
-5.5%
-5.5%
-5.5

2

205+00

STH 164

206+00

2

N

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
57	205+75.35	38.802 RT	142084.49	684260.66	831.770
58	205+75.14	42.530 RT	142084.21	684264.38	831.621
59	205+75.10	43.224 RT	142084.15	684265.07	831.645
60	205+76.40	50.054 RT	142085.33	684271.93	831.891
61	205+76.01	55.071 RT	142084.85	684276.94	831.888
62	205+75.40	58.184 RT	142084.17	684280.04	831.824
63	205+74.29	62.528 RT	142082.98	684284.36	831.589
64	205+74.15	63.072 RT	142082.83	684284.90	831.561
65	205+73.68	64.928 RT	142082.32	684286.75	831.638
66	205+78.55	66.052 RT	142087.17	684287.96	831.713
67	205+79.03	64.160 RT	142087.69	684286.08	831.635
68	205+79.17	63.608 RT	142087.84	684285.53	831.650
69	205+80.28	59.288 RT	142089.03	684281.23	831.770
70	205+81.13	54.969 RT	142089.96	684276.93	831.836
71	205+81.04	49.970 RT	142089.96	684271.93	831.845
72	205+81.47	49.962 RT	142090.40	684271.93	831.841
73	205+80.19	43.215 RT	142089.24	684265.16	831.723
74	205+80.22	42.539 RT	142089.28	684264.49	831.711
75	205+80.36	38.789 RT	142089.50	684260.74	831.861
76	205+83.29	49.929 RT	142092.21	684271.93	831.822
77	205+83.38	54.924 RT	142092.22	684276.93	831.814
78	205+84.03	54.911 RT	142092.86	684276.93	831.807
79	205+83.88	49.918 RT	142092.81	684271.93	831.816
80	205+85.62	49.887 RT	142094.55	684271.93	831.886
81	205+85.75	54.885 RT	142094.58	684276.93	831.876

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
82	206+30.79	54.179 RT	142139.80	684276.99	832.542
83	206+34.61	54.118 RT	142143.63	684276.99	832.389
84	206+35.18	54.109 RT	142144.19	684276.99	832.417
85	206+38.26	54.059 RT	142147.27	684276.98	832.571
86	206+42.09	53.998 RT	142151.10	684276.98	832.607
87	206+43.18	48.980 RT	142152.27	684271.98	832.585
88	206+38.18	49.060 RT	142147.27	684271.98	832.521
89	206+35.04	49.110 RT	142144.14	684271.99	832.410
90	206+34.38	49.121 RT	142143.47	684271.99	832.388
91	206+30.54	49.183 RT	142139.63	684271.99	832.542
92	206+38.13	45.987 RT	142147.27	684268.91	832.496
93	206+38.08	42.675 RT	142147.27	684265.60	832.463
94	206+38.15	42.142 RT	142147.35	684265.07	832.457
95	206+38.66	38.330 RT	142147.92	684261.26	832.611
96	206+43.70	38.317 RT	142152.96	684261.33	832.682
97	206+43.18	42.128 RT	142152.38	684265.13	832.528
98	206+43.09	42.847 RT	142152.27	684265.85	832.535
99	206+43.13	45.913 RT	142152.27	684268.91	832.566
100	206+45.51	49.486 RT	142154.59	684272.52	832.583
101	206+46.10	49.616 RT	142155.18	684272.66	832.581
102	206+47.80	49.986 RT	142156.88	684273.06	832.651
103	206+46.70	54.979 RT	142155.70	684278.03	832.616
104	206+45.01	54.618 RT	142154.01	684277.65	832.547
105	206+44.41	54.490 RT	142153.41	684277.51	832.559

LAWNSDALE RD/ CTH I

444+00

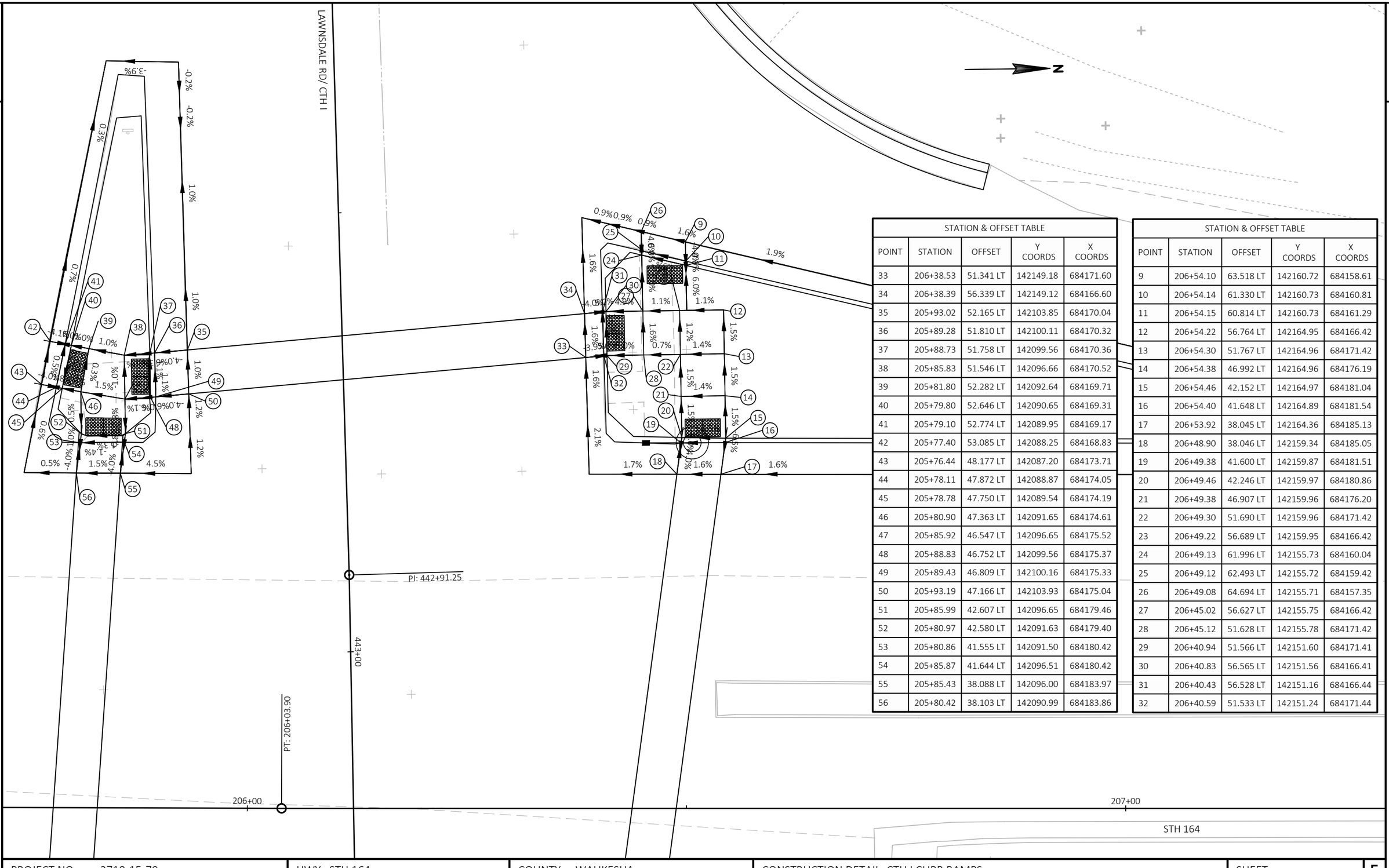
PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	CONSTRUCTION DETAIL: CTH I CURB RAMPS	SHEET 23	E

FILE NAME : N:\PDS\C3D\27181500\DESIGN\SURFACES\SW AT CTH I.DWG
LAYOUT NAME - 5

PLOT DATE : 7/31/2019 3:27 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2



STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
33	206+38.53	51.341 LT	142149.18	684171.60
34	206+38.39	56.339 LT	142149.12	684166.60
35	205+93.02	52.165 LT	142103.85	684170.04
36	205+89.28	51.810 LT	142100.11	684170.32
37	205+88.73	51.758 LT	142099.56	684170.36
38	205+85.83	51.546 LT	142096.66	684170.52
39	205+81.80	52.282 LT	142092.64	684169.71
40	205+79.80	52.646 LT	142090.65	684169.31
41	205+79.10	52.774 LT	142089.95	684169.17
42	205+77.40	53.085 LT	142088.25	684168.83
43	205+76.44	48.177 LT	142087.20	684173.71
44	205+78.11	47.872 LT	142088.87	684174.05
45	205+78.78	47.750 LT	142089.54	684174.19
46	205+80.90	47.363 LT	142091.65	684174.61
47	205+85.92	46.547 LT	142096.65	684175.52
48	205+88.83	46.752 LT	142099.56	684175.37
49	205+89.43	46.809 LT	142100.16	684175.33
50	205+93.19	47.166 LT	142103.93	684175.04
51	205+85.99	42.607 LT	142096.65	684179.46
52	205+80.97	42.580 LT	142091.63	684179.40
53	205+80.86	41.555 LT	142091.50	684180.42
54	205+85.87	41.644 LT	142096.51	684180.42
55	205+85.43	38.088 LT	142096.00	684183.97
56	205+80.42	38.103 LT	142090.99	684183.86

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
9	206+54.10	63.518 LT	142160.72	684158.61
10	206+54.14	61.330 LT	142160.73	684160.81
11	206+54.15	60.814 LT	142160.73	684161.29
12	206+54.22	56.764 LT	142164.95	684166.42
13	206+54.30	51.767 LT	142164.96	684171.42
14	206+54.38	46.992 LT	142164.96	684176.19
15	206+54.46	42.152 LT	142164.97	684181.04
16	206+54.40	41.648 LT	142164.89	684181.54
17	206+53.92	38.045 LT	142164.36	684185.13
18	206+48.90	38.046 LT	142159.34	684185.05
19	206+49.38	41.600 LT	142159.87	684181.51
20	206+49.46	42.246 LT	142159.97	684180.86
21	206+49.38	46.907 LT	142159.96	684176.20
22	206+49.30	51.690 LT	142159.96	684171.42
23	206+49.22	56.689 LT	142159.95	684166.42
24	206+49.13	61.996 LT	142155.73	684160.04
25	206+49.12	62.493 LT	142155.72	684159.42
26	206+49.08	64.694 LT	142155.71	684157.35
27	206+45.02	56.627 LT	142155.75	684166.42
28	206+45.12	51.628 LT	142155.78	684171.42
29	206+40.94	51.566 LT	142151.60	684171.41
30	206+40.83	56.565 LT	142151.56	684166.41
31	206+40.43	56.528 LT	142151.16	684166.44
32	206+40.59	51.533 LT	142151.24	684171.44

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	CONSTRUCTION DETAIL: CTH I CURB RAMPS	SHEET 24	E

FILE NAME : N:\PDS\C3D\27181500\DESIGN\SURFACES\SW AT CTH I.DWG
LAYOUT NAME - 6

PLOT DATE : 7/31/2019 3:27 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

REMOVING ASPHALTIC SURFACE MILLING, 4-INCH
HMA PAVEMENT, 4-INCH

CP SET 1000 FENO 2IN ALUMINUM CAP
959.000
503

CTH ES

95+00

96+00

97+00

98+00

BEGIN PROJECT
STA 31+43

+08.36
109.01'LT

+24.72
106.27'LT

+91.69
73.13'LT

+22.08
68.70'LT

+83.11
51.95'LT
947.312

+18.70
51.54'LT
946.922

8M CHIS BOX
944.900
601

+07.72
83.18'LT
946.414

+23.39
79.02'LT

+47.72
70.00'LT

+67.82
81.78'LT

+99.75
43.64'LT
945.846

+17.50
43.58'LT

+46.59
47.94'LT

REMOVING CONCRETE CORRUGATED
CHANNELIZATION MILLING

+68.60
55.84'LT

BEGIN CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 36+62, LT
(STAGE 4)

REMOVING CURB & GUTTER
BEGIN STA 36+62, LT

PT: 36+34.31

+12.05
15.95'LT

31+00

32+00

33+00

34+00

35+00

36+00

37+00

STH 164

+31.00
48.20'RT

+70.09
43.65'RT

+85.35
43.58'RT
945.314

+87.27
45.95'RT
945.224

+30.45
68.97'RT

+58.89
80.40'RT

+79.02
86.63'RT
943.975

+61.81
43.89'RT
944.391

+91.74
43.81'RT
943.866

+56.95
67.25'RT

+81.29
67.51'RT

+57.06
88.96'RT

+68.33
91.18'RT

+00.08
52.17'RT

REMOVING CURB & GUTTER
BEGIN STA 36+16, RT

BEGIN CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 36+16, RT
(STAGE 4)

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 25	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (1)

PLOT DATE : 12/5/2019 9:17 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

N

REMOVING CURB & GUTTER
STA 36+62 TO STA 42+12.5, LT

CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 36+62 TO STA 42+12.5, LT
(STAGE 4)

END CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 42+12.5, RT & LT
(STAGE 4)

REMOVING CURB & GUTTER
END STA 42+12.5, RT & LT

+60.26
47.86'LT

+12.05
15.95'LT

37+00 38+00 39+00 40+00 41+00 42+00 43+00

STH 164

BP: 70+00.00

INLET TO BE USED WITH CROSSOVER

CONCRETE MEDIAN
SLOPED NOSE

+99.33
48.87'RT

+40.19
49.96'RT

CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 36+16 TO STA 42+12.5, RT
(STAGE 4)

REMOVING CURB & GUTTER
STA 36+16 TO STA 42+12.5, RT

71+00

DREAMCATCHER WAY

CP SET 1000 F

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 26	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (2)

PLOT DATE : 12/5/2019 9:17 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

2

BEGIN CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 43+13.5, LT & RT
(STAGE 4)

REMOVING CURB & GUTTER
BEGIN STA 43+13.5, LT & RT

REMOVING CONCRETE CORRUGATED
CHANNELIZATION MILLING

BEGIN REMOVING BEAM GUARD
BEGIN MGS GUARDRAIL 3

+68.52
48.09'LT

END CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 46+27, LT
(STAGE 4)

REMOVING CURB & GUTTER
END STA 46+27, LT

+61.36
48.08'LT

+21.7
50.73

43+00 44+00 45+00 46+00 47+00 48+00 49+00

BP: 70+00.00

STH 164

CONCRETE MEDIAN
SLOPED NOSE

+80.79
50.79'RT

+01.64
48.06'RT

+90.62
46.20'RT

REMOVING CURB & GUTTER
END STA 44+94, RT

END CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 44+94, RT
(STAGE 4)

REMOVING ASPHALTIC SURFACE
ASPHALTIC FLUMES

CP SET 1000 FENO 2IN ALUMINUM CAP
917.980
504

LEGEND

A ADJUSTING INLET COVERS
B ADJUSTING MANHOLE COVERS
C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 27	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (3)

PLOT DATE : 12/5/2019 9:18 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

2

END MGS GUARDRAIL 3
BEGIN MGS GUARDRAIL TERMINAL EAT

END REMOVING BEAM GUARD

+21.79
50.73'LT

CP SET 1000 FENO 2IN ALUMINUM CAP
980.040
585

49+00 50+00 51+00 52+00 53+00 54+00 55+00

STH 164

LEGEND

A ADJUSTING INLET COVERS
B ADJUSTING MANHOLE COVERS
C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 28	E

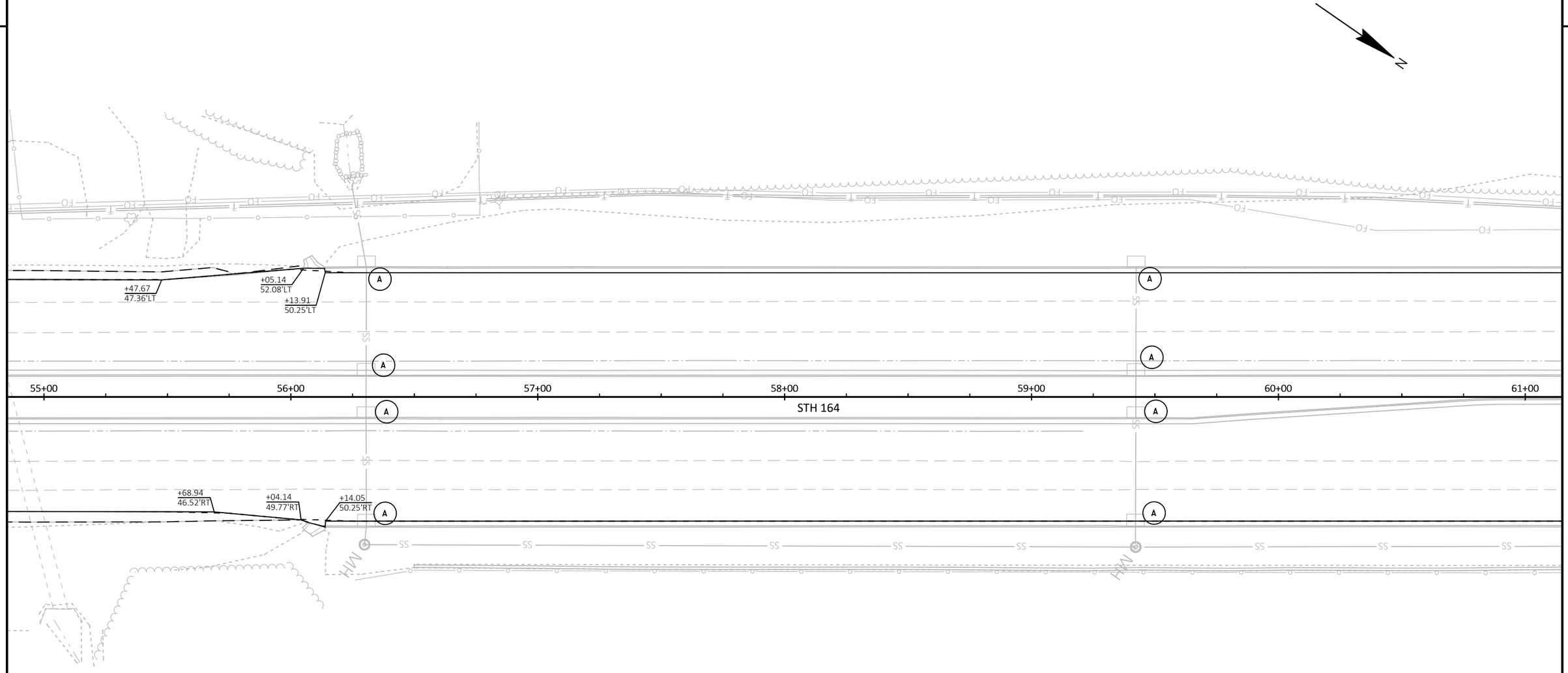
FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (4)

PLOT DATE : 12/5/2019 9:18 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

2



LEGEND

- (A) ADJUSTING INLET COVERS
- (B) ADJUSTING MANHOLE COVERS
- (C) 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 29	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (5)

PLOT DATE : 12/5/2019 9:18 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

2

BEGIN CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 62+30, LT & RT

REMOVING CURB & GUTTER
BEGIN STA 62+30, LT & RT

CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 62+30 TO STA 71+06, LT

REMOVING CURB & GUTTER
STA 62+30 TO STA 71+06, LT

915.040
915.039
916.667
917.866
919.029
920.100
921.011
921.905
922.754
923.610
924.408
917.040
918.080
919.119
920.096
923.166

61+00 62+00 63+00 64+00 65+00 66+00 67+00

STH 164

CONCRETE MEDIAN
SLOPED NOSE

END CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 64+75, RT

REMOVING CURB & GUTTER
END STA 64+75, RT

CP SET 1000 FENO 2IN ALUMINUM CAP
920.640
506

LEGEND

A ADJUSTING INLET COVERS
B ADJUSTING MANHOLE COVERS
C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 30	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (6)

PLOT DATE : 12/5/2019 9:18 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

SEE E3-5-19 C

SKYLINE DRIVE

REMOVING CONCRETE
CORRUGATED
CHANNELIZATION MILLING

CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 62+30 TO STA 71+06, LT

REMOVING CURB & GUTTER
STA 62+30 TO STA 71+06, LT

END CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 71+06, LT

REMOVING CURB & GUTTER
END STA 71+06, LT

PC: 67+17.86

924.408 924.988 925.743 926.448 927.054 927.577 928.124 928.665 928.969

67+00 68+00 69+00 70+00 71+00 72+00 73+00

STH 164

+78.14
50.10'LT

39+00

+17.1
50.40

CONCRETE MEDIAN
SLOPED NOSE

929.860

930.127

923.166 923.650 924.222 924.800 925.435 925.907 926.316 926.766

+84.81
50.61'RT

+70.67
49.70'RT

REMOVING CURB & GUTTER
BEGIN STA 67+00, RT

BEGIN CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 67+00, RT

REMOVING CONCRETE CORRUGATED
CHANNELIZATION MILLING

END CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 70+85, RT

REMOVING CURB & GUTTER
END STA 70+85, RT

41+00

SKYLINE DRIVE

EP: 41+72.50

REMOVING CURB & GUTTER
BEGIN STA 72+90, LT & RT

BEGIN CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 72+90, LT & RT

CP SET 1000 FENO 2IN ALUMINUM CAP
930.330
507

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 31 E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (7)

PLOT DATE : 12/5/2019 9:18 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

2

BP: 38+00.00

N

BEGIN CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 72+90, LT & RT

REMOVING CONCRETE CORRUGATED
CHANNELIZATION MILLING

REMOVING CURB & GUTTER
BEGIN STA 72+90, LT & RT

REMOVING CURB & GUTTER
STA 72+90 TO STA 84+90, LT & RT

CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 72+90 TO STA 84+90, LT & RT

+17.11
50.40'LT

+00.92
51.50'LT

+27.86
48.65'LT

929.860
73+00

929.961

930.156
74+00

930.292

930.385
75+00

930.468

930.726
76+00

930.787

930.635
77+00

930.495

930.328
78+00

930.127

929.923
79+00

STH 164

930.127
CONCRETE MEDIAN
SLOPED NOSE

930.380

930.595

930.736

930.817

930.870

930.861

930.810

930.710

930.518

930.289

930.047

929.861

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 32	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (8)

PLOT DATE : 12/5/2019 9:19 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

2

N

REMOVING CURB & GUTTER
STA 72+90 TO STA 84+90, LT & RT

CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 72+90 TO STA 84+90, LT & RT

END CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 84+90, LT & RT

REMOVING CURB & GUTTER
END STA 84+90, LT & RT

CONCRETE MEDIAN
SLOPED NOSE

STH 164

79+00 80+00 81+00 82+00 83+00 84+00 85+00

929.923 929.861 929.670 929.661 929.410 929.420 929.170 929.191 928.955 928.970 928.769 928.767 928.541 928.498 928.299 928.272 928.068 928.125 927.848 928.068 927.605 927.744 927.341 927.217

A A A A A A

TILE

TILE

LEGEND

A ADJUSTING INLET COVERS
B ADJUSTING MANHOLE COVERS
C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 33	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (9)

PLOT DATE : 12/5/2019 9:19 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

2

N

BEGIN CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 85+65, RT

REMOVING CURB & GUTTER
BEGIN STA 85+65, RT

PCC: 85+57.74

PCC: 86+05.54

CP SET 1000 FENO 2IN ALUMINUM CAP
925.980
508

POST

PRC: 90+25.05

A

85+00

86+00

87+00

88+00

89+00

90+00

91+00

STH 164

CONCRETE MEDIAN
SLOPED NOSE

926.740

926.771

926.554

REMOVING CURB & GUTTER
END STA 86+43, RT

END CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 86+43, RT

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 34	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (10)

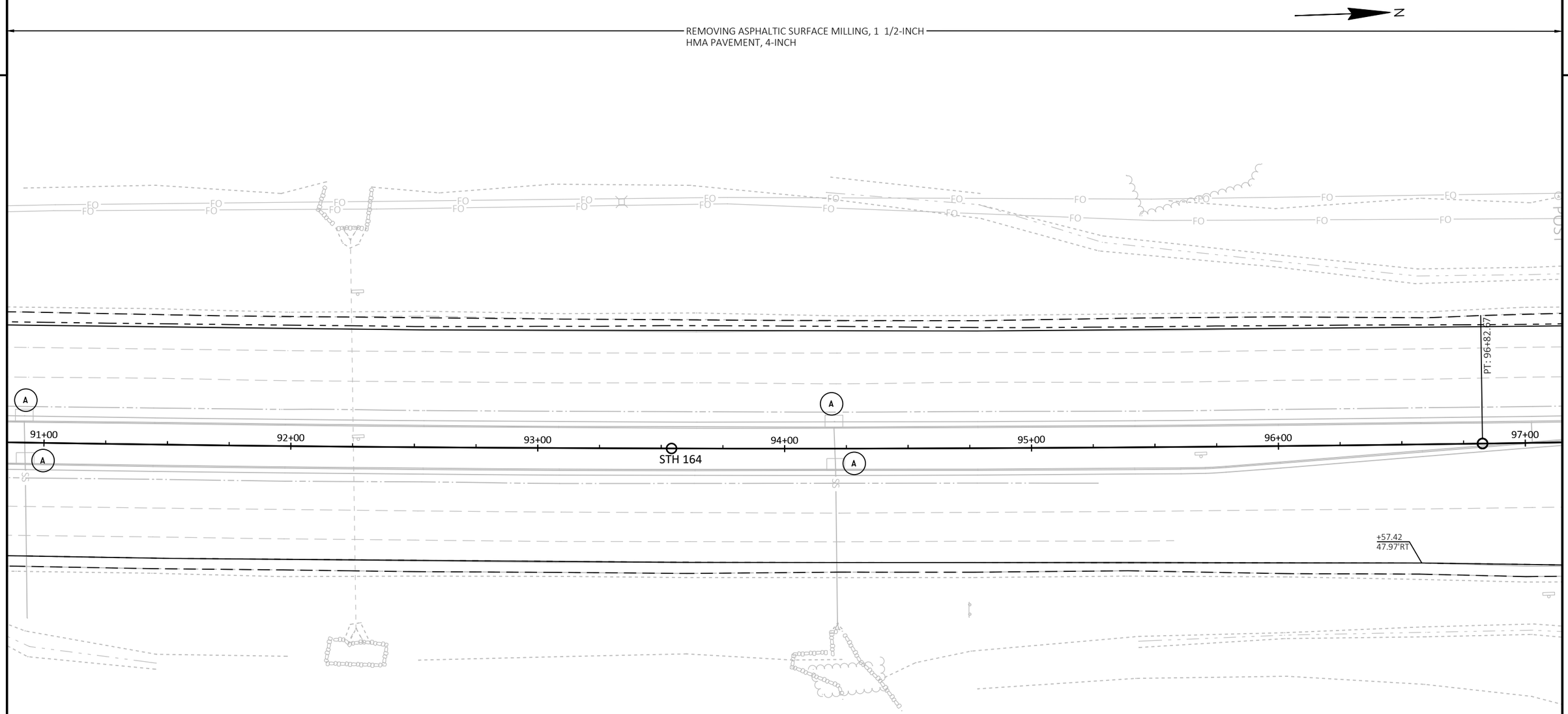
PLOT DATE : 12/5/2019 9:19 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

N

2



LEGEND

- (A) ADJUSTING INLET COVERS
- (B) ADJUSTING MANHOLE COVERS
- (C) 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 35	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (11)

PLOT DATE : 12/5/2019 9:19 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

SECTION CORNER MONUMENT
STA 99+87.5, 26.5' LT
DO NOT DISTURB
MONUMENT TO BE MILLED AROUND
AND PAVING RING PLACED PRIOR TO PAVING

CP SET 1000 FENO RIN ALUMINUM CAP
928.000
509

REMOVING CONCRETE CORRUGATED
CHANNELIZATION MILLING

+70.42
46.44'LT

+57.67
49.91'LT

+23.17
49.66'LT

+83.55
47.80'LT

TOWNLINE ROAD

29+00

30+00

31+00

PI: 99+87.41

PI: 30+00.00

SEC SE34-6-19 CONC MON BRASS CAP
619165

97+00

98+00

99+00

100+00

101+00

102+00

103+00

STH 164

+49.07
50.58'RT

+85.10
50.00'RT

REMOVING CONCRETE CORRUGATED
CHANNELIZATION MILLING

+36.63
52.40'RT

+73.41
52.72'RT

+93.53
90.07'RT

SECTION CORNER MONUMENT
STA 99+88.7, 23.9' RT
DO NOT DISTURB
MONUMENT TO BE MILLED AROUND
AND PAVING RING PLACED PRIOR TO PAVING

+94.27
104.62'RT

END REMOVING BEAM GUARD
END MGS GUARDRAIL TERMINAL TYPE 2

BEGIN REMOVING BEAM GUARD
BEGIN MGS GUARDRAIL TERMINAL TYPE 2

TOWNLINE ROAD

EP: 31+84.24

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 36	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (12)

PLOT DATE : 12/5/2019 9:19 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

2

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

103+00 104+00 105+00 106+00 107+00 108+00 109+00

STH 164

+23.42
48.42'RT

TILE

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 37	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (13)

PLOT DATE : 12/5/2019 9:20 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

109+00 110+00 111+00 112+00 113+00 114+00 115+00

STH 164

BP: 60+00.00

+59.05
46.43'RT

+87.30
48.62'RT

+48.16
52.89'RT

+91.80
46.31'RT

61+00

COYOTE CROSSING

CP SET 1000 FENO 2IN ALUMINUM CAP
936.410
510

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 38	E

2

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

REDWING DRIVE

N

49+00

+13.36
47.39'LT

115+00 116+00 117+00 118+00 119+00 120+00 121+00

STH 164

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 39	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (15)

PLOT DATE : 12/5/2019 9:20 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

REDWING DRIVE

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

49+00

REMOVING ASPHALTIC SURFACE
ASPHALTIC FLUMES

CP SET 1000 FENO 2IN ALUMINUM CAP
926.550
511

+88.52
49.64'LT

SECTION CORNER MONUMENT
STA 126+38.2, 9.9' LT
DO NOT DISTURB
MONUMENT TO BE MILLED AROUND
AND PAVING RING PLACED PRIOR TO PAVING

121+00 122+00 123+00 124+00 125+00 126+00 127+00

EP: 50+00.00

STH 164

SEC E34-6-19 CONC MON BRASS CAP
619152

+10.48
46.81'RT

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

2

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 40	E

2

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

BEGIN REMOVING BEAM GUARD
BEGIN MGS GUARDRAIL 3

+18.17
49.69'LT

POST

POST

127+00 128+00 129+00 130+00 131+00 132+00 133+00

STH 164

+10.48
46.81'RT

+13.74
47.80'RT

TILE

POST

CP SET 1000 FENO 2IN ALUMINUM CAP
882.970
512

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 41	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (17)

PLOT DATE : 12/5/2019 9:20 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

END MGS GUARDRAIL 3
BEGIN MGS GUARDRAIL TERMINAL EAT

BEGIN CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 136+35, RT

REMOVING CURB & GUTTER
BEGIN STA 136+35, RT

+45.63
49.95'LT

END REMOVING BEAM GUARD

133+00 134+00 135+00 136+00 137+00 138+00 139+00

STH 164

867.943

865.592

863.582

REMOVING CURB & GUTTER
END STA 137+35, RT

END CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 137+35, RT

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 42	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (18)

PLOT DATE : 12/5/2019 9:21 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

CP STT 1000 FENO 2IN ALUMINUM CAP
844,980
513

139+00 140+00 141+00 142+00 143+00 144+00 145+00

STH 164

LEGEND

- (A) ADJUSTING INLET COVERS
- (B) ADJUSTING MANHOLE COVERS
- (C) 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 43	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (19)

PLOT DATE : 12/5/2019 9:21 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

145+00 146+00 147+00 148+00 149+00 150+00 151+00

STH 164

+63.49
50.28'RT

+47.70
49.84'RT

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 44	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (20)

PLOT DATE : 12/5/2019 9:21 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

SECTION CORNER MONUMENT
STA 152+92.2, 26.4' LT
DO NOT DISTURB
MONUMENT TO BE MILLED AROUND
AND PAVING RING PLACED PRIOR TO PAVING

RESTRUCTURING INLETS

SEC SE27-6-19 CONC MON BRASS CAP
ELEV: 152+92.01

CP SET 1000 FENO 2IN ALUMINUM CAP
836.600
514

151+00 152+00 153+00 154+00 155+00 156+00 157+00

STH 164

LEGEND

A ADJUSTING INLET COVERS
B ADJUSTING MANHOLE COVERS
C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 45	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (21)

PLOT DATE : 12/5/2019 9:21 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

157+00 158+00 159+00 160+00 161+00 162+00 163+00

STH 164

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 46	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (22)

PLOT DATE : 12/5/2019 9:22 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

CP SET 1000 FENO 2IN ALUMINUM CAP
835.750
515

+47.15
46.67'LT

REMOVING CONCRETE CORRUGATED
CHANNELIZATION MILLING

+31.00
50.14'LT

GLENDALE ROAD

2+00

3+00

4+00

163+00 164+00 165+00 166+00 167+00 168+00 169+00

STH 164

REMOVING CONCRETE CORRUGATED
CHANNELIZATION MILLING

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

2

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 47	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (23)

PLOT DATE : 12/5/2019 9:22 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

169+00 170+00 171+00 172+00 173+00 174+00 175+00

STH 164

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 48	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (24)

PLOT DATE : 12/5/2019 9:22 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

SECTION CORNER MONUMENT
STA 179+52.8, 26.3' LT
DO NOT DISTURB
MONUMENT TO BE MILLED AROUND
AND PAVING RING PLACED PRIOR TO PAVING

CP SET 1000 FENO 2IN ALUMINUM CAP
834.690
516

PC: 179+52.84

SEC E27-6-19 CONC MON BRASS CAP
619126

175+00 176+00 177+00 178+00 179+00 180+00 181+00

STH 164

LEGEND

- (A) ADJUSTING INLET COVERS
- (B) ADJUSTING MANHOLE COVERS
- (C) 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 49	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (25)

PLOT DATE : 12/5/2019 9:22 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

181+00 182+00 183+00 184+00 185+00 186+00 187+00

STH 164

+72.26
50.70'RT

+17.19
48.41'RT

CP SET 1000 FENO 2IN ALUMINUM CAP
832.090
517

LEGEND

A ADJUSTING INLET COVERS
B ADJUSTING MANHOLE COVERS
C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 50	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (26)

PLOT DATE : 12/5/2019 9:22 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

FO G FO G FO FO FO FO FO FO FO FO FO FO FO FO

A

187+00 188+00 189+00 190+00 191+00 192+00 193+00

A

STH 164

+17.19
48.41'RT

STA

TILE

LEGEND

A ADJUSTING INLET COVERS
B ADJUSTING MANHOLE COVERS
C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 51	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (27)

PLOT DATE : 12/5/2019 9:23 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

PROVIDE 12-INCH LIGHT RIPRAP ALONG EDGE OF CULVERT APRON
AT LEAST 1-INCH BELOW APRON LIP AT THE STREAM (NO FABRIC)

BEGIN CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 193+40, RT

REMOVING CURB & GUTTER
BEGIN STA 193+40, RT

B-67-0021

- CLEAN APRONS AT CELL 1 AND CELL 3.
- CLEAN OUT ALL WEEDS/DEBRIS IN CHANNEL TO RIGHT OF WAY.
- CLEAN/REMOVE ALL BRUSH AND CHEMICAL TREAT WOODY STUMPS AT WING WALLS.
- NO REASON TO CLEAN/REMOVE SEDIMENT FROM INSIDE BARRELS

CELL 1
CELL 2
CELL 3

CP SET 1000 FENO 2IN ALUMINUM CAP
818.280
518

193+00 194+00 195+00 196+00 197+00 198+00 199+00

STH 164

821.090
820.904
820.703

REMOVING CURB & GUTTER
END STA 194+50, RT

END CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 194+50, RT

B-67-0021

- CLEAN APRONS AT CELL 1 AND CELL 3.
- CLEAN OUT ALL WEEDS/DEBRIS IN CHANNEL TO RIGHT OF WAY.
- CLEAN/REMOVE ALL BRUSH AND CHEMICAL TREAT WOODY STUMPS AT WING WALLS.
- NO REASON TO CLEAN/REMOVE SEDIMENT FROM INSIDE BARRELS

LEGEND

- (A) ADJUSTING INLET COVERS
- (B) ADJUSTING MANHOLE COVERS
- (C) 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 52	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (28)

PLOT DATE : 12/5/2019 9:23 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

REMO
CON
4-INCH SL

FO FO FO FO FO FO FO FO FO FO FO FO

REMOVING ASPHALTIC PAVEMENT
ASPHALTIC FLUMES

+95.96
46.98'LT

205+30.5

BEGIN REMOVING CURB & GUTTER
BEGIN CONCRETE CURB & GUTTER
4-INCH SLOPED 36-INCH TYPE D
STA 204+39, LT

A

199+00 200+00 201+00 202+00 203+00 204+00 205+00

STH 164

A

BEGIN REMOVING CURB & GUTTER
BEGIN CONCRETE CURB & GUTTER
4-INCH SLOPED 36-INCH TYPE D
STA 201+03, RT

+92.33
47.63'RT

+31.57
50.17'RT

+46.62
51.19'RT

+99.74
38.99'RT

+99.18
47.75'RT

205+

REMOVING CONCRETE CORRUGATED
CHANNELIZATION MILLING

REMO
CONC
4-INCH SLO

LEGEND

A ADJUSTING INLET COVERS
B ADJUSTING MANHOLE COVERS
C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 53	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (29)

PLOT DATE : 12/5/2019 9:23 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LAWNSDALE ROAD / CTH I

REMOVING ASPHALTIC PAVEMENT
ASPHALTIC FLUMES

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

206+38, LT

SECTION CORNER MONUMENT
STA 206+04.0, 26.2' LT
DO NOT DISTURB
MONUMENT TO BE MILLED AROUND
AND PAVING RING PLACED PRIOR TO PAVING

REMOVING CURB & GUTTER
CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D

205+68, LT

PLACE OPENING IN CURB FOR FUTURE CURB RAMP

REMOVING ASPHALTIC PAVEMENT
ASPHALTIC FLUMES

+83.65
85.05'LT

+91.90
84.94'LT

PLACE OPENING IN CURB
FOR FUTURE CURB RAMP

REMOVING CURB & GUTTER
CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D

206+84, LT

+38.08
67.27'LT

+94.68
68.11'LT

REMOVING CONCRETE CORRUGATED
CHANNELIZATION MILLING

+27.22
46.40'LT

+81.11
50.00'LT

205+30.5, LT

+74.47
38.14'LT

+93.50
38.10'LT

+38.91
38.05'LT

+26.67
38.03'LT

PI: 442+91.25

END REMOVING CURB & GUTTER
BEGIN CONCRETE CURB & GUTTER
4-INCH SLOPED 36-INCH TYPE D
STA 211+00, LT

205+00 206+00 207+00 208+00 209+00 210+00 211+00

STH 164

SEC SE22-6-19 CONC MON BRASS CAP
619113

CONCRETE MEDIAN
SLOPED NOSE

END REMOVING CURB & GUTTER
BEGIN CONCRETE CURB & GUTTER
4-INCH SLOPED 36-INCH TYPE D
STA 207+90, RT

+99.74
38.99'RT

+85.39
38.76'RT

+30.01
38.35'RT

+50.38
38.30'RT

+56.89
47.17'RT

206.92.5, RT

+99.18
47.75'RT

205+40, RT

+86.04
67.94'RT

PLACE OPENING IN CURB FOR FUTURE CURB RAMP

REMOVING CURB & GUTTER
CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D

+32.17
82.40'RT

+40.54
82.95'RT

206+55, RT

REMOVING ASPHALTIC PAVEMENT
ASPHALTIC FLUMES

REMOVING CONCRETE CORRUGATED
CHANNELIZATION MILLING

PLACE OPENING IN CURB
FOR FUTURE CURB RAMP

205+85, RT

REMOVING CURB & GUTTER
CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D

LAWNSDALE ROAD / CTH I

CP SET 1000 FENO 2IN ALUMINUM CAP
840.280
519

LEGEND

A ADJUSTING INLET COVERS
B ADJUSTING MANHOLE COVERS
C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 54	E

2

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

211+00 212+00 213+00 214+00 215+00 216+00 217+00

STH 164

A

A

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 55	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (31)

PLOT DATE : 12/5/2019 9:23 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

E E E

2

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

REMOVING CURB & GUTTER
CONCRETE CURB & GUTTER
4-INCH SLOPED 36-INCH TYPE D
STA 227+18 TO STA 227+38, LT

APRON ENDWALL FOR CULVERT PIPE 36-INCH

STA 227+27
REMOVING SMALL PIPE CULVERTS

223+00 224+00 225+00 226+00 227+00 228+00 229+00

STH 164

CULVERT PIPE REINFORCED CONCRETE
CLASS IV 36-INCH
BACKFILL CONTROLLED LOW STRENGTH

REMOVING CURB & GUTTER
CONCRETE CURB & GUTTER
4-INCH SLOPED 36-INCH TYPE D
STA 227+16 TO STA 227+36, RT

APRON ENDWALL FOR CULVERT PIPE 36-INCH

CP SET 1000 FENO 2IN ALUMINUM CAP
818.190

LEGEND

A ADJUSTING INLET COVERS
B ADJUSTING MANHOLE COVERS
C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 57	E

2

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

SECTION CORNER MONUMENT
STA 232+55.0, 26.2' LT
DO NOT DISTURB
MONUMENT TO BE MILLED AROUND
AND PAVING RING PLACED PRIOR TO PAVING

POST

POST

POST

PC 232+55.04

SEE E22-6-19 CONC MON BOX & CAP
619094

229+00 230+00 231+00 232+00 233+00 234+00 235+00

STH 164

A

A

A

A

817.962

817.890

BEGIN CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 234+60, RT

REMOVING CURB & GUTTER
BEGIN STA 234+60, RT

TILE

TILE

CP SET 1000 FENO 2IN ALUMINUM CAP
818.190
520

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 58	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (34)

PLOT DATE : 12/5/2019 9:24 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

CLEAN/REMOVE ALL BRUSH AND CHEMICAL TREAT WOODY STUMPS AT WING WALLS.

B-67-0036

235+00 236+00 237+00 238+00 239+00 240+00 241+00

STH 164

817.890 817.857 817.844 818.133

REMOVING CURB & GUTTER
END STA 236+50, RT

END CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 236+50, RT

B-67-0036

CLEAN/REMOVE ALL BRUSH AND CHEMICAL TREAT WOODY STUMPS AT WING WALLS.

CP SET 1000 FENO 2IN ALUMINUM CAP
816.280
521

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 59	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (35)

PLOT DATE : 12/5/2019 9:24 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

E E E

2

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

ROCKWOOD WAY

81+00

82+00

PT: 81+58.49

+00.58
50.52'LT

+70.45
51.67'LT

+31.61
51.81'LT

+85.09
47.18'LT

PRC: 252+10.46

247+00 248+00 249+00 250+00 251+00 252+00 253+00

EP: 82+39.47

STH 164

REMOVING CONCRETE CORRUGATED
CHANNELIZATION MILLING

CP SET 1000 FENO 2IN ALUMINUM CAP
830.330
522

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 61	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (37)

PLOT DATE : 12/5/2019 9:25 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

BEGIN CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 255+80, LT
(STAGE 4)

REMOVING CURB & GUTTER
BEGIN STA 255+80, LT

REMOVING CURB & GUTTER
END STA 259+11, RT & LT

END CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 259+11, RT & LT
(STAGE 4)

+76.88
47.41'LT

+30.68
49.90'LT

PT: 258+61.87

+20.48
50.83'

253+00 254+00 255+00 256+00 257+00 258+00 259+00

STH 164

CONCRETE MEDIAN
SLOPED NOSE

+51.61
46.42'RT

+30.33
50.53'RT

REMOVING CURB & GUTTER
BEGIN STA 253+31, RT

BEGIN CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 253+31, RT
(STAGE 4)

REMOVING CONCRETE CORRUGATED
CHANNELIZATION MILLING

SEC SE15-6-19 CONC MON BRASS CAP
619085

SECTION CORNER MONUMENT
STA 258+62.0, 0' RT
DO NOT DISTURB
MONUMENT TO BE MILLED AROUND
AND PAVING RING PLACED PRIOR TO PAVING

LEGEND

- (A) ADJUSTING INLET COVERS
- (B) ADJUSTING MANHOLE COVERS
- (C) 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 62	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (38)

PLOT DATE : 12/5/2019 9:25 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

WILMONT ROAD

REMOVING ASPHALTIC SURFACE MILLING, 1 1/2-INCH
HMA PAVEMENT, 4-INCH

REMOVING ASPHALTIC SURFACE MILLING, 4-INCH
HMA PAVEMENT, 4-INCH

REMOVING CURB & GUTTER
END STA 265+10.5, LT

END CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 265+10.5, LT
(STAGE 4)

9+00

+20.48
50.83'LT

+56.78
54.41'LT

+74.86
54.88'LT

259+00
260+00
261+00
262+00
263+00
264+00
265+00

EP: 10+00.00

STH 164

CONCRETE MEDIAN
SLOPED NOSE

REMOVING CONCRETE CORRUGATED
CHANNELIZATION MILLING

BEGIN CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 260+12.5, LT & RT
(STAGE 4)

REMOVING CURB & GUTTER
BEGIN STA 260+12.5, LT & RT

CP SET 1000 FENO 2IN ALUMINUM CAP
857.140
523

+33.19
50.23'RT

REMOVING CURB & GUTTER
END STA 263+83, RT

END CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D
STA 263+83, RT
(STAGE 4)

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 63	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (39)

PLOT DATE : 12/5/2019 9:25 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

REMOVING ASPHALTIC SURFACE MILLING, 4-INCH
HMA PAVEMENT, 4-INCH

+91.13
59.94'LT

STH 164

265+00 266+00 267+00 268+00 269+00 270+00 271+00

END PROJECT
STA 266+91

+91.09
55.92'RT

STH 59

CP SET 1000 FENO 2IN ALUMINUM CAP
841.990
527

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

2

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 64	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (40)

PLOT DATE : 12/5/2019 9:25 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

STH 164

191+00 192+00 193+00 194+00 195+00 196+00

CTH ES

BASE PATCH FOR LOOP

BASE PATCH FOR LOOP

601
947.900
BM/CHIS BOX

+67.82
81.78'LT

+46.59
47.94'LT

+47.72
70.00'LT

+23.39
79.00'LT

+17.50
43.58'LT

+90.75
43.64'LT
945.846

+07.72
83.18'LT
946.414

+22.08
68.70'LT

+18.70
51.54'LT
946.922

+24.72
106.27'LT

+08.36
109.01'LT

+91.69
74.17'LT

+88.11
51.95'LT
947.312

503
959.000
CP SET 1000 FENO 2IN ALUMINUM CAP

SI

00+34

33+00

00+23

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS - CTH "ES" EAST	SHEET 65	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (41)

PLOT DATE : 12/5/2019 9:25 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

+00.08
52.17'RT

SI

+91.74
43.81'RT
943.866

+81.29
67.51'RT

+68.33
91.13'RT

+57.06
88.96'RT

+61.81
43.89'RT
944.297

BASE PATCH FOR LOOP

197+00 198+00 199+00 200+00 201+00 202+00 203+00

CTH ES

32+00

+87.27
45.95'RT
945.224

+85.35
43.58'RT
945.314

+79.02
86.63'RT
943.975

+70.09
43.65'RT

+58.89
80.40'RT

+31.00
48.20'RT

+30.45
68.97'RT

31+00

STH 164

GUY

TILE

POST

MH

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS - CTH "ES" WEST	SHEET 66	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (42)

PLOT DATE : 12/5/2019 9:26 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

438+00
439+00
440+00
441+00
442+00
443+00
207+00
208+00

CTH I

BASE PATCH FOR LOOP

BASE PATCH FOR LOOP

REMOVING CURB & GUTTER
CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D

206+84, LT

+94.68
68.11'LT

+81.67
50.00'LT

+27.22
46.49'LT

+26.67
38.03'LT

+38.08
67.27'LT

+38.05
38.05'LT

206+38, LT

PI: 442+91.25

PT: 206+03.90

619113
SEC 5

205+68, LT

+91.90
84.94'LT

+83.65
85.05'LT

+93.50
38.10'LT

+74.47
38.14'LT

REMOVING CURB & GUTTER
CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D

205+30.5, LT

+95.96
46.98'LT

+99.74
38.99'RT

STH 164

GUY
POST

LEGEND

A ADJUSTING INLET COVERS

B ADJUSTING MANHOLE COVERS

C 5" CONCRETE SIDEWALK

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS - CTH "I" WEST	SHEET 67	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (43)

PLOT DATE : 12/5/2019 9:26 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

519
840.280
CP SET 1000 FENO 2IN ALUMINUM CAP

N

208+00

207+00

+56.89
47.17'RT

+26.67
38.03'LT

206.92.5, RT

REMOVING CURB & GUTTER
CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D

206+55, RT

+50.38
38.30'RT

+40.54
82.95'RT

+30.01
38.35'RT

+32.17
82.40'RT

BASE PATCH FOR LOOP

BASE PATCH FOR LOOP

PI: 442+91.25

443+00 444+00 445+00 446+00 447+00 448+00 449+00

CTH I

619113
SEC 6-6-19 CONC MON BRASS CAP

206+00

205+85, RT

+86.04
67.94'RT

+85.39
38.76'RT

GV
POST

GUY POLE

GUY

205+40, RT

+99.74
38.99'RT

+99.18
47.79'RT

205+00

STH 164

+46.62
51.19'RT

REMOVING CURB & GUTTER
CONCRETE CURB & GUTTER
4-INCH SLOPED, 36-INCH, TYPE D

LEGEND

A ADJUSTING INLET COVERS
B ADJUSTING MANHOLE COVERS
C 5" CONCRETE SIDEWALK

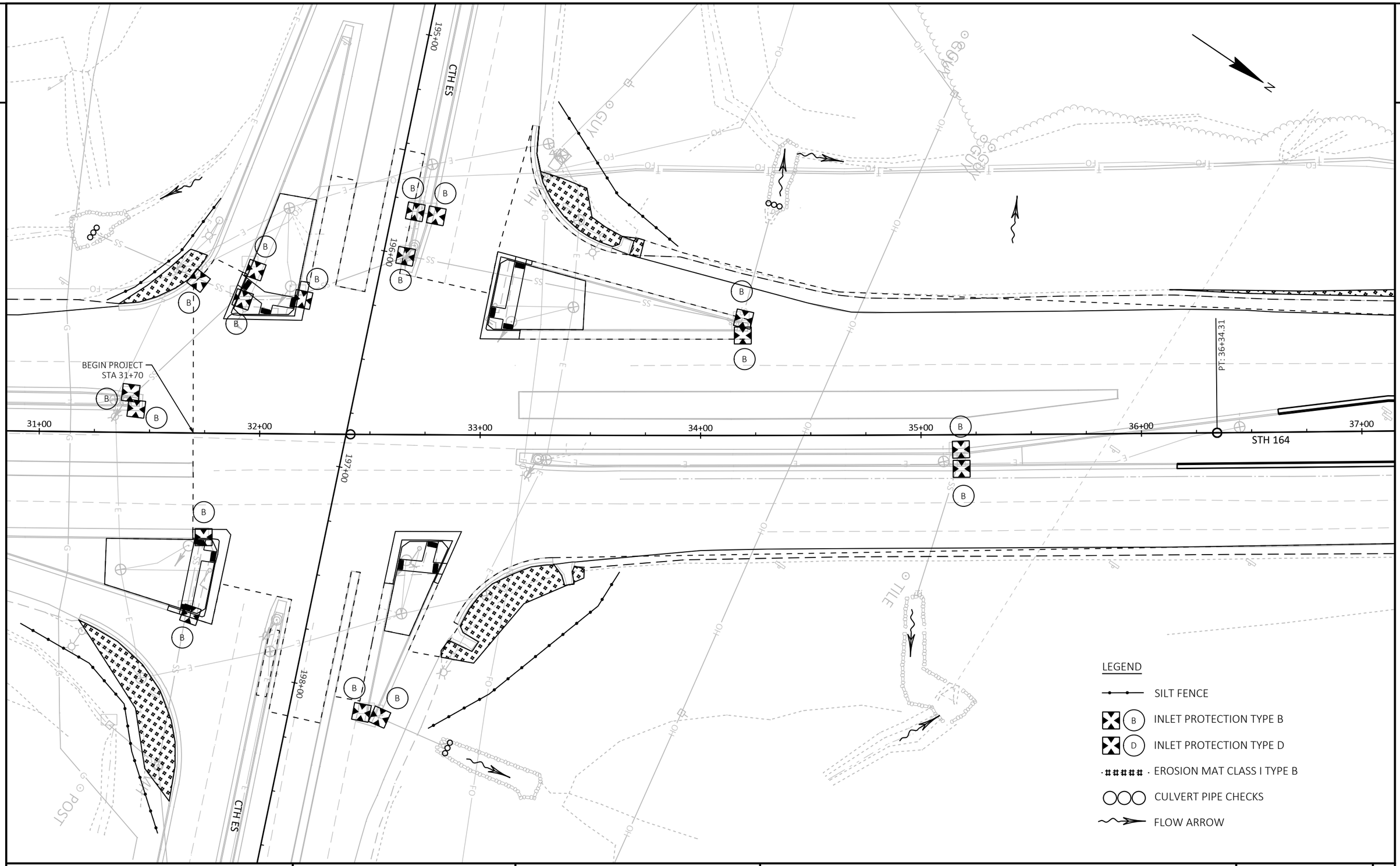
2

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PLAN DETAILS - CTH "I" EAST	SHEET 68	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - PD (44)

PLOT DATE : 12/5/2019 9:26 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



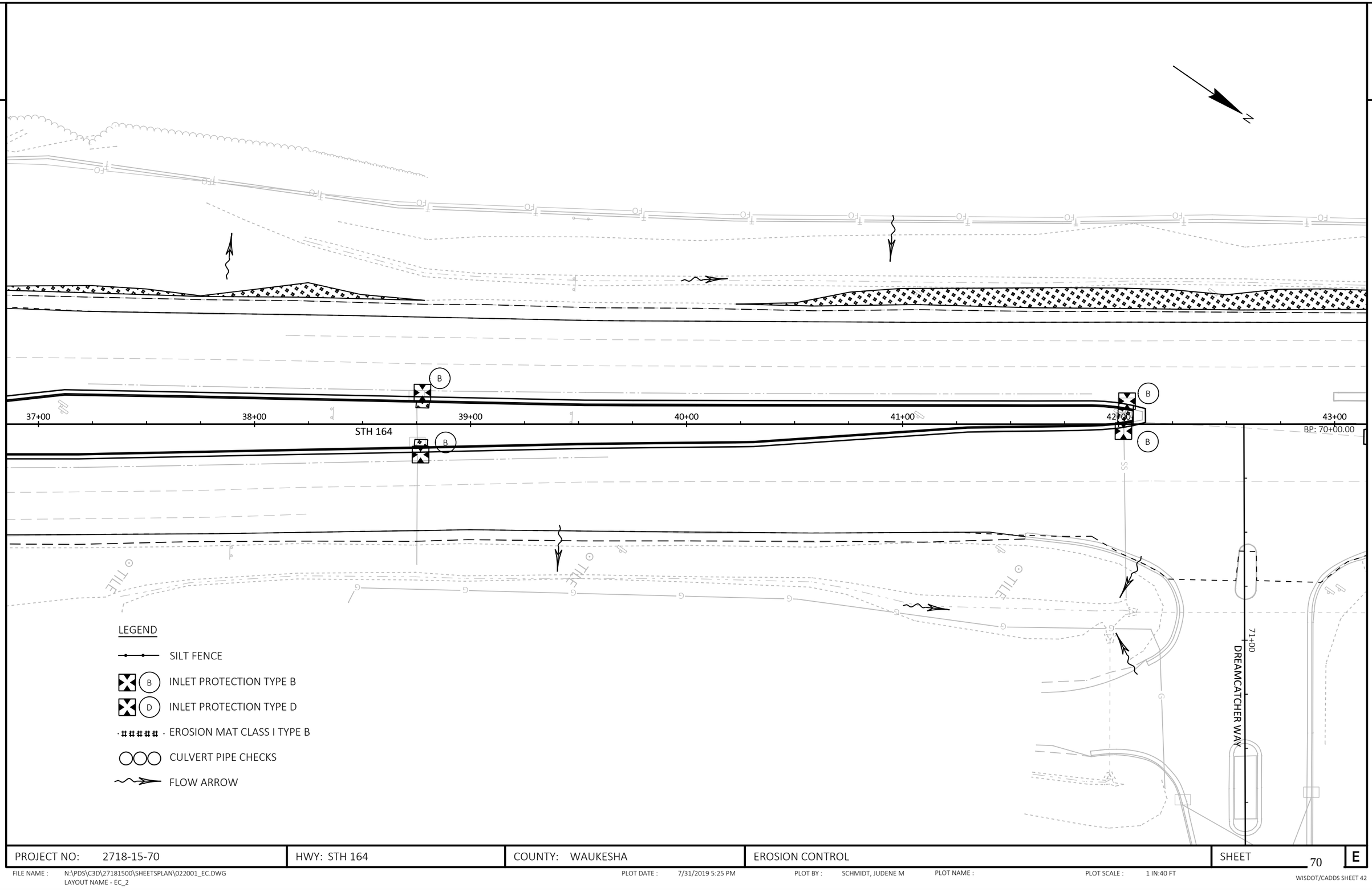
PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 69	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_1

PLOT DATE : 7/31/2019 5:25 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2



PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 70	E

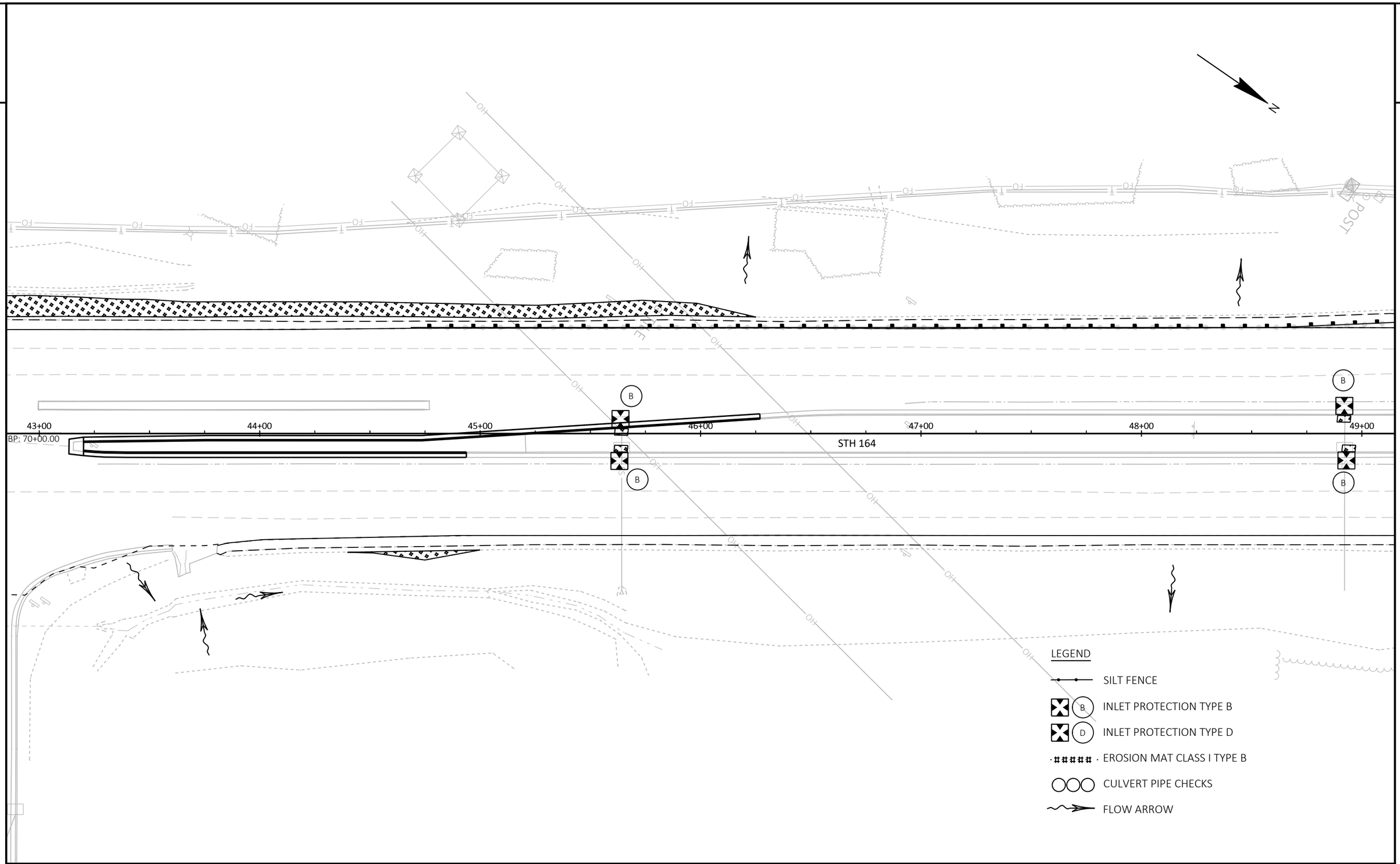
FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_2

PLOT DATE : 7/31/2019 5:25 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2



PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 71	E

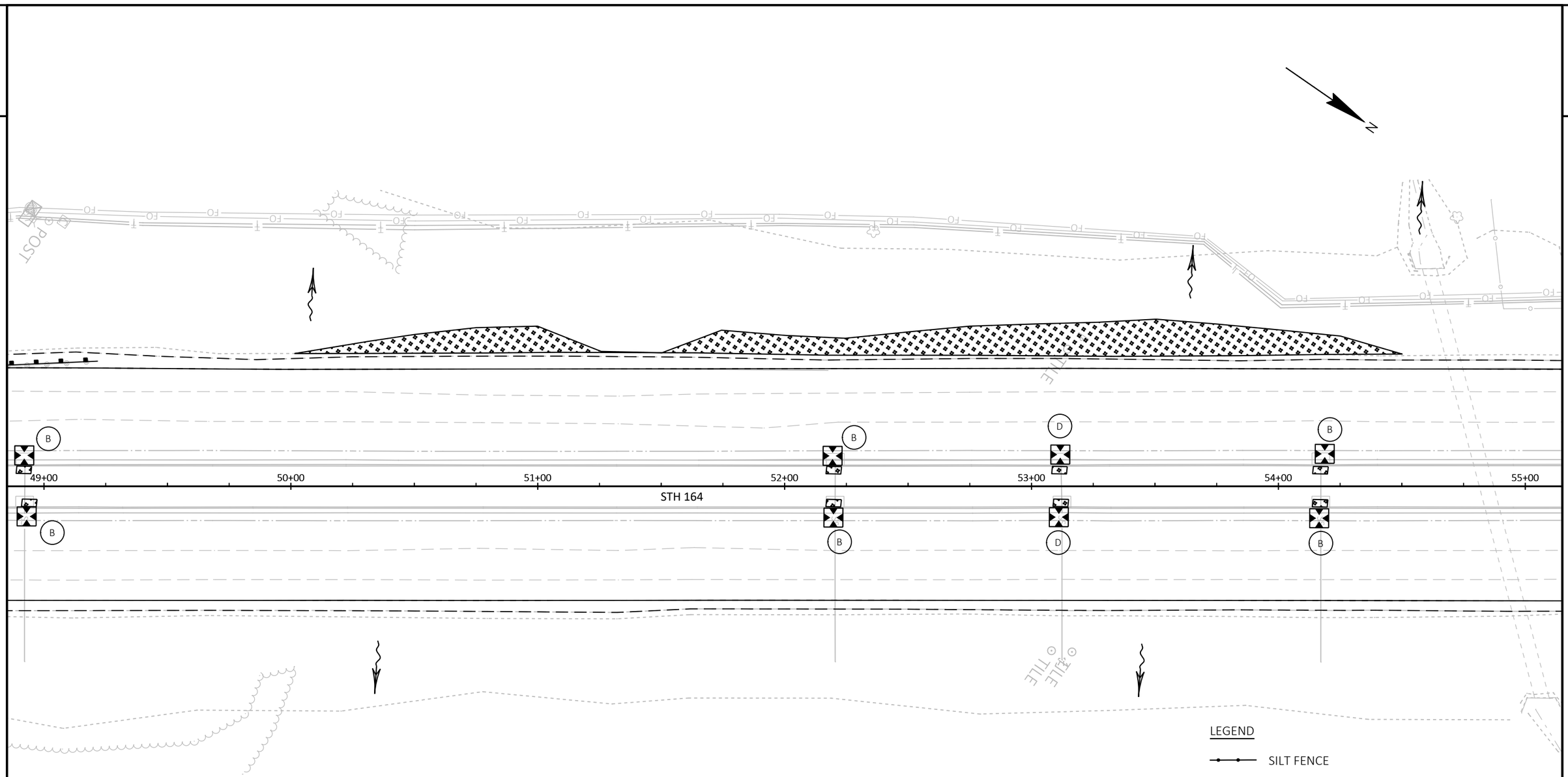
FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_3

PLOT DATE : 7/31/2019 5:26 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

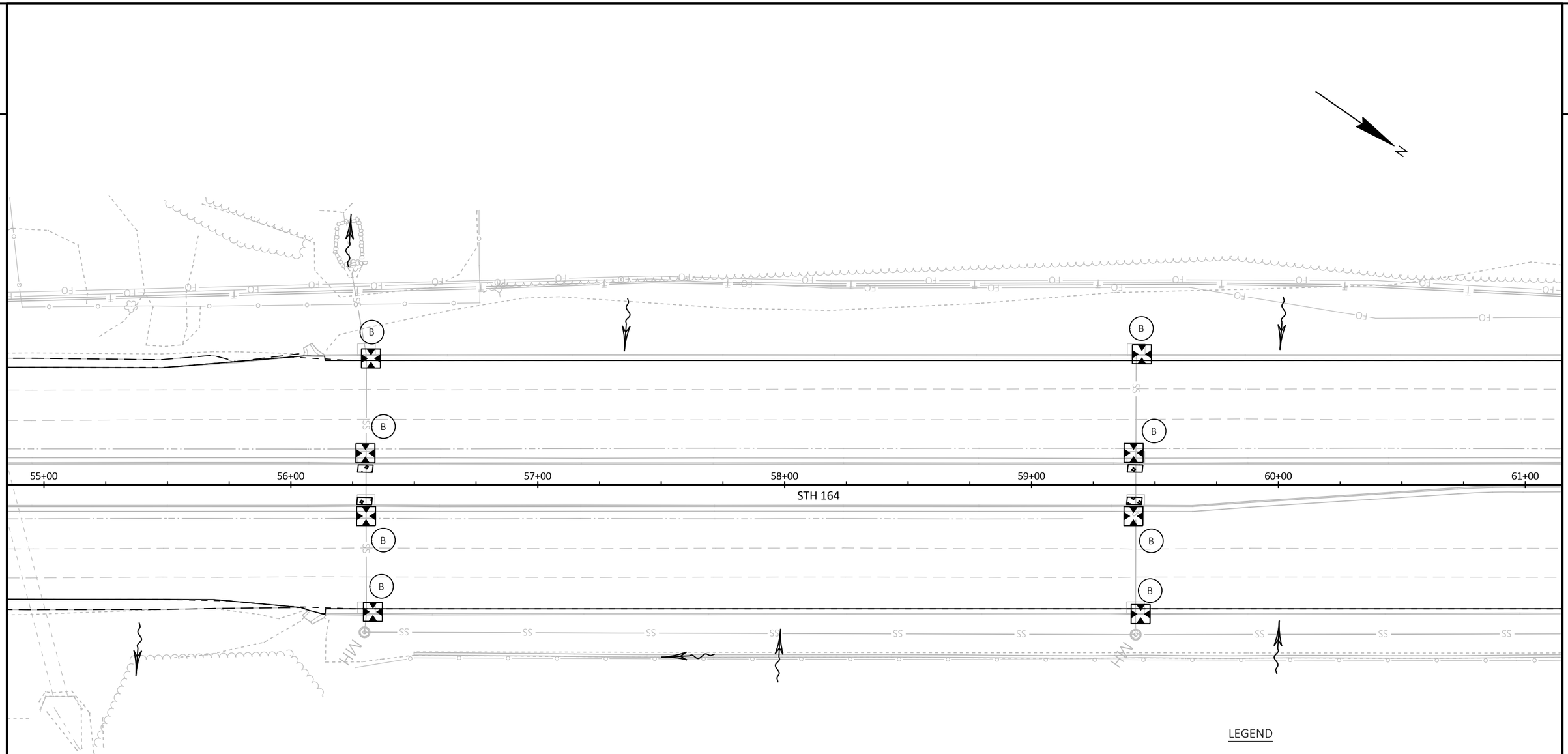
2

2



PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 72	E

2

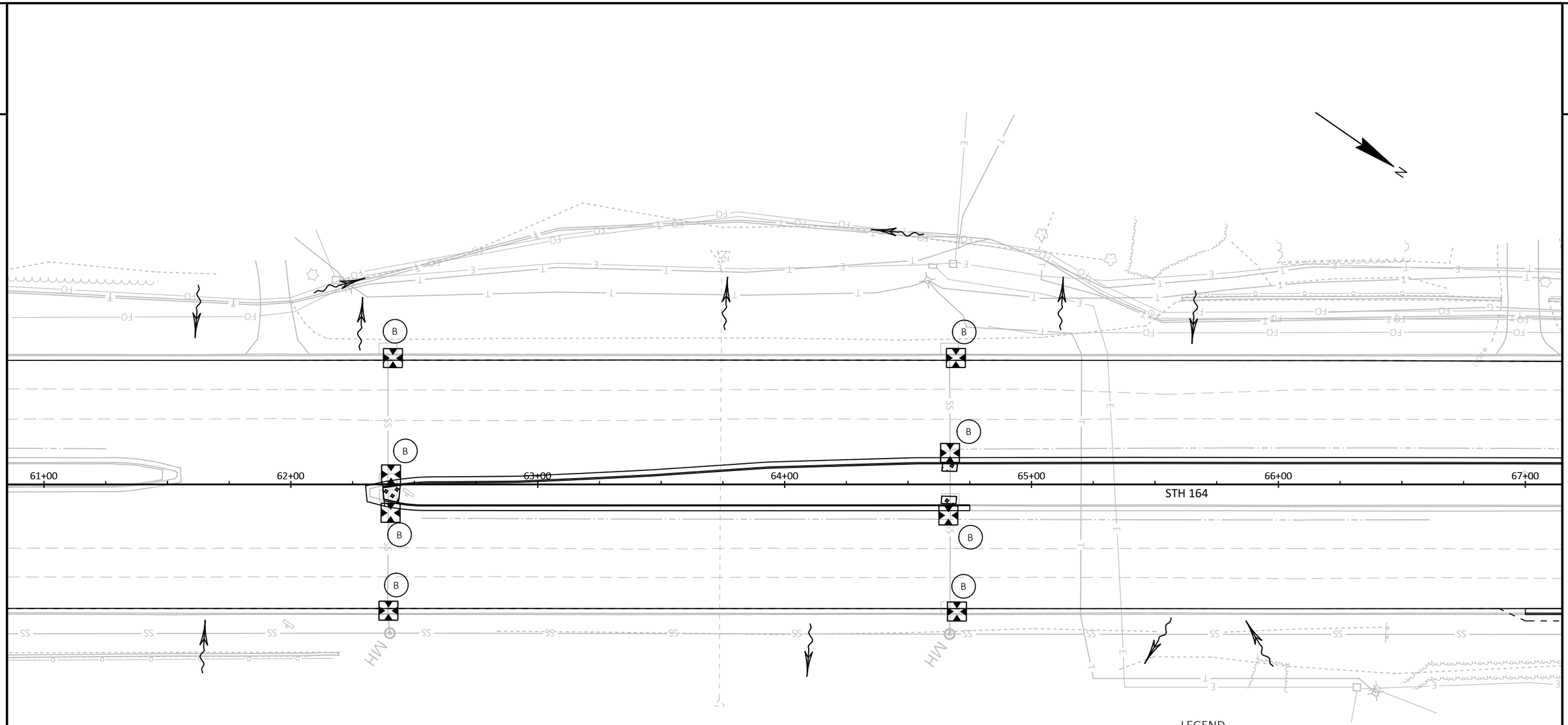


LEGEND

- SILT FENCE
- B — INLET PROTECTION TYPE B
- D — INLET PROTECTION TYPE D
- EROSION MAT CLASS I TYPE B
- CULVERT PIPE CHECKS
- FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 73	E

2



PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 74	E

2

N

PC: 67+17.85

67+00

68+00

69+00

70+00

71+00

72+00

73+00

STH 164

SKYLINE DRIVE

39+00

40+00

41+00

SKYLINE DRIVE

EP: 41+72.50

MH

MH

TILE

LEGEND

- SILT FENCE
- B — INLET PROTECTION TYPE B
- D — INLET PROTECTION TYPE D
- EROSION MAT CLASS I TYPE B
- CULVERT PIPE CHECKS
- FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 75	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_7

PLOT DATE : 7/31/2019 5:26 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

BP: 38+00.00

N

73+00

74+00

75+00

76+00

STH 164

77+00

78+00

79+00

B

B

B

B

LEGEND

SILT FENCE

B INLET PROTECTION TYPE B

D INLET PROTECTION TYPE D

EROSION MAT CLASS I TYPE B

CULVERT PIPE CHECKS

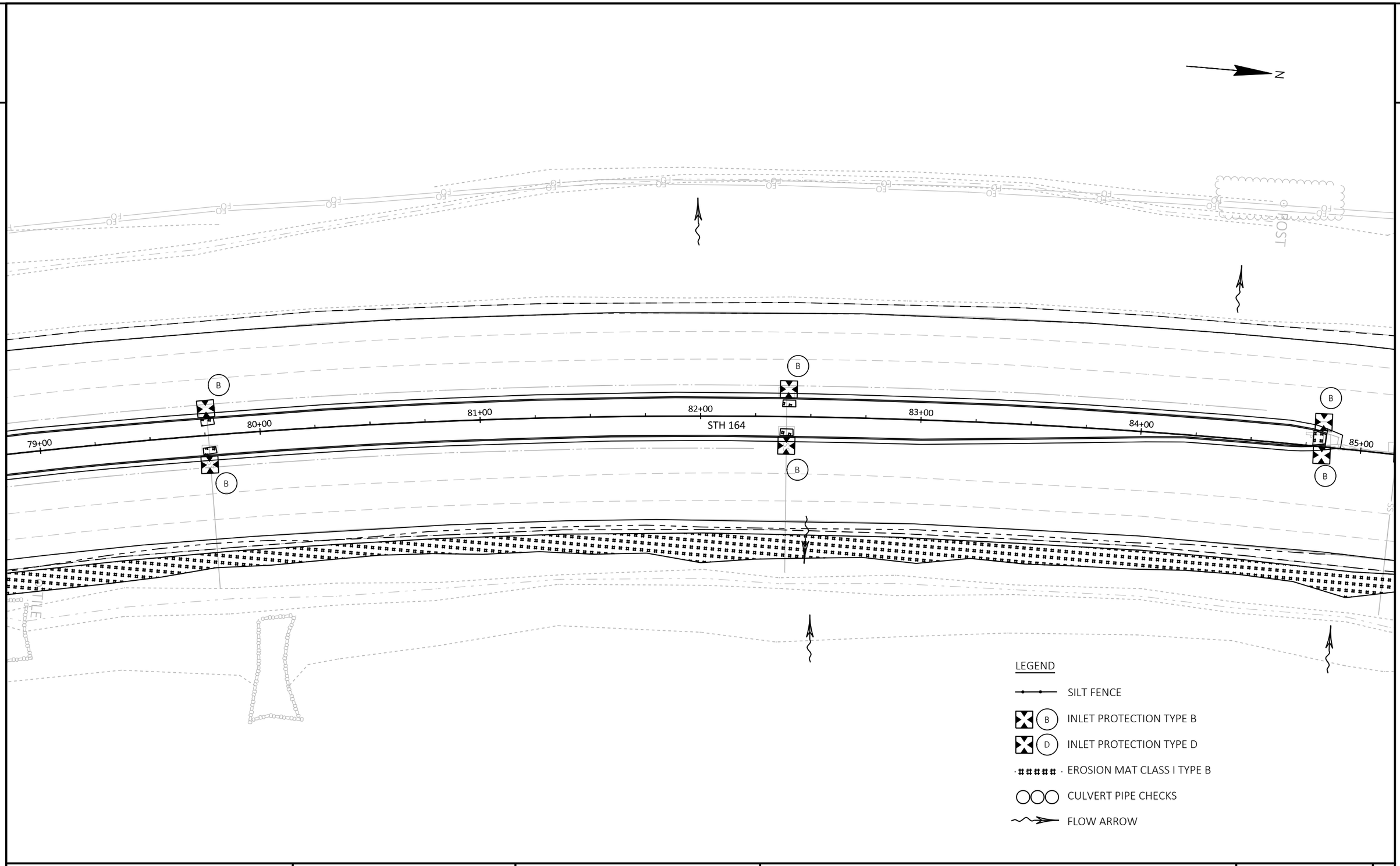
FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 76	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_8

PLOT DATE : 7/31/2019 5:27 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 77	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_9
PLOT DATE : 7/31/2019 5:27 PM
PLOT BY : SCHMIDT, JUDENE M
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

N

PCC: 85+57.74

PCC: 86+05.54

PRC: 90+25.65

85+00

86+00

87+00

88+00

STH 164

89+00

90+00

91+00

B

D

SS

POST

FO

LEGEND

SILT FENCE

INLET PROTECTION TYPE B

INLET PROTECTION TYPE D

EROSION MAT CLASS I TYPE B

CULVERT PIPE CHECKS

FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 78	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_10

PLOT DATE : 7/31/2019 5:27 PM

PLOT BY : SCHMIDT, JUDENE M

PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

FO

91+00 92+00 93+00 STH 164 94+00 95+00 96+00 97+00

B

PT: 96+82.67

LEGEND

- SILT FENCE
- B INLET PROTECTION TYPE B
- D INLET PROTECTION TYPE D
- EROSION MAT CLASS I TYPE B
- CULVERT PIPE CHECKS
- FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 79	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_11

PLOT DATE : 7/31/2019 5:27 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

TOWNLINE ROAD

29+00

30+00

31+00

97+00

98+00

99+00

100+00

101+00

102+00

103+00

PI: 99+87.41

PI: 30+00.00

STH 164

TOWNLINE ROAD

EP: 31+84.24

LEGEND

- SILT FENCE
- B — INLET PROTECTION TYPE B
- D — INLET PROTECTION TYPE D
- EROSION MAT CLASS I TYPE B
- CULVERT PIPE CHECKS
- FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 80	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_12

PLOT DATE : 7/31/2019 5:27 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

OH

FO

T

B

103+00

104+00

105+00

106+00

107+00

108+00

109+00

STH 164

TILE

LEGEND

SILT FENCE

INLET PROTECTION TYPE B

INLET PROTECTION TYPE D

EROSION MAT CLASS I TYPE B

CULVERT PIPE CHECKS

FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 81	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_13

PLOT DATE : 7/31/2019 5:28 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

109+00 110+00 111+00 112+00 113+00 114+00 115+00

STH 164

BP: 60+00.00

61+00

COYOTE CROSSING

LEGEND

- SILT FENCE
- B INLET PROTECTION TYPE B
- D INLET PROTECTION TYPE D
- EROSION MAT CLASS I TYPE B
- CULVERT PIPE CHECKS
- FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 82	E

2

2

N

REDWING DRIVE

49+00

115+00 116+00 117+00 118+00 119+00 120+00 121+00

STH 164

LEGEND

- SILT FENCE
- B — INLET PROTECTION TYPE B
- D — INLET PROTECTION TYPE D
- EROSION MAT CLASS I TYPE B
- CULVERT PIPE CHECKS
- FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 83	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_15

PLOT DATE : 7/31/2019 5:28 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

REDWING DRIVE

49+00

N

GUY

POST

121+00 122+00 123+00 124+00 125+00 126+00 127+00

EP: 50+00.00

STH 164

B

B

B

B

LEGEND

SILT FENCE

B INLET PROTECTION TYPE B

D INLET PROTECTION TYPE D

EROSION MAT CLASS I TYPE B

CULVERT PIPE CHECKS

FLOW ARROW

2

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 84	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_16

PLOT DATE : 7/31/2019 5:28 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

127+00 128+00 129+00 130+00 131+00 132+00 133+00

STH 164

B B B B

⊙ POST ⊙ POST ⊙ TILE ⊙ POST

LEGEND

- SILT FENCE
- B INLET PROTECTION TYPE B
- D INLET PROTECTION TYPE D
- EROSION MAT CLASS I TYPE B
- CULVERT PIPE CHECKS
- FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 85	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_17

PLOT DATE : 7/31/2019 5:29 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

133+00 134+00 135+00 136+00 137+00 138+00 139+00

STH 164

LEGEND

- SILT FENCE
- B — INLET PROTECTION TYPE B
- D — INLET PROTECTION TYPE D
- EROSION MAT CLASS I TYPE B
- CULVERT PIPE CHECKS
- FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 86	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_18

PLOT DATE : 7/31/2019 5:29 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

139+00
140+00
141+00
142+00
143+00
144+00
145+00

STH 164

B
B
B
B

TILE
POST
POST
POST
POST

LEGEND

- SILT FENCE
- B — INLET PROTECTION TYPE B
- D — INLET PROTECTION TYPE D
- EROSION MAT CLASS I TYPE B
- CULVERT PIPE CHECKS
- FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 87	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_19

PLOT DATE : 7/31/2019 5:29 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

145+00 146+00 147+00 148+00 149+00 150+00 151+00

STH 164

B B B B

LEGEND

- SILT FENCE
- B INLET PROTECTION TYPE B
- D INLET PROTECTION TYPE D
- EROSION MAT CLASS I TYPE B
- CULVERT PIPE CHECKS
- FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 88	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_20

PLOT DATE : 7/31/2019 5:29 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

151+00 152+00 153+00 154+00 155+00 156+00 157+00

STH 164

PI: 152+92.01

LEGEND

- SILT FENCE
- INLET PROTECTION TYPE B
- INLET PROTECTION TYPE D
- EROSION MAT CLASS I TYPE B
- CULVERT PIPE CHECKS
- FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 89	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_21

PLOT DATE : 7/31/2019 5:29 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

157+00 158+00 159+00 160+00 161+00 162+00 163+00

STH 164

LEGEND

- SILT FENCE
- B — INLET PROTECTION TYPE B
- D — INLET PROTECTION TYPE D
- EROSION MAT CLASS I TYPE B
- CULVERT PIPE CHECKS
- FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 90	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_22

PLOT DATE : 7/31/2019 5:30 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

GLENDALE ROAD

2+00

3+00

4+00

163+00

164+00

165+00

166+00

167+00

168+00

169+00

STH 164

LEGEND

SILT FENCE

INLET PROTECTION TYPE B

INLET PROTECTION TYPE D

EROSION MAT CLASS I TYPE B

CULVERT PIPE CHECKS

FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 91	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_23

PLOT DATE : 7/31/2019 5:30 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

169+00 170+00 171+00 172+00 173+00 174+00 175+00

STH 164

B B B B B B

LEGEND

SILT FENCE

B INLET PROTECTION TYPE B

D INLET PROTECTION TYPE D

EROSION MAT CLASS I TYPE B

CULVERT PIPE CHECKS

FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 92	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_24

PLOT DATE : 7/31/2019 5:30 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

175+00 176+00 177+00 178+00 179+00 180+00 181+00

STH 164

PC: 179+52.84

LEGEND

- SILT FENCE
- B — INLET PROTECTION TYPE B
- D — INLET PROTECTION TYPE D
- EROSION MAT CLASS I TYPE B
- CULVERT PIPE CHECKS
- FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 93	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_25

PLOT DATE : 7/31/2019 5:30 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

181+00 182+00 183+00 184+00 185+00 186+00 187+00

STH 164

LEGEND

- SILT FENCE
- B — INLET PROTECTION TYPE B
- D — INLET PROTECTION TYPE D
- EROSION MAT CLASS I TYPE B
- CULVERT PIPE CHECKS
- FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 94	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_26

PLOT DATE : 7/31/2019 5:30 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

FO G FO G FO FO FO FO FO FO FO FO FO FO FO

B

187+00 188+00 189+00 190+00 191+00 192+00 193+00

STH 164

B

S

TILE

LEGEND

- SILT FENCE
- B — INLET PROTECTION TYPE B
- D — INLET PROTECTION TYPE D
- EROSION MAT CLASS I TYPE B
- CULVERT PIPE CHECKS
- FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 95	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_27

PLOT DATE : 7/31/2019 5:31 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

FO FO FO FO FO FO FO FO FO FO FO FO

POST

POST

B-67-0021

B B D B B

193+00 194+00 195+00 196+00 197+00 198+00 199+00

SS SS

STH 164

B B D B B

TILE

B-67-0021

TILE

LEGEND

- SILT FENCE
- B — INLET PROTECTION TYPE B
- D — INLET PROTECTION TYPE D
- EROSION MAT CLASS I TYPE B
- CULVERT PIPE CHECKS
- FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 96	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_28

PLOT DATE : 7/31/2019 5:31 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

FO

199+00

200+00

201+00

202+00

203+00

204+00

205+00

STH 164

B

LEGEND

SILT FENCE

INLET PROTECTION TYPE B

INLET PROTECTION TYPE D

EROSION MAT CLASS I TYPE B

CULVERT PIPE CHECKS

FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 97	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_29

PLOT DATE : 7/31/2019 5:31 PM

PLOT BY : SCHMIDT, JUDENE M

PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LAWNSDALE ROAD / CTH I

LAWNSDALE ROAD / CTH I

PT: 206+03.90

PI: 442+91.25

205+00 206+00 207+00 208+00 209+00 210+00 211+00

STH 164

442+00 443+00 444+00 445+00

N

LEGEND

- SILT FENCE
- B — INLET PROTECTION TYPE B
- D — INLET PROTECTION TYPE D
- EROSION MAT CLASS I TYPE B
- CULVERT PIPE CHECKS
- FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 98	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_30

PLOT DATE : 7/31/2019 5:31 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

211+00 212+00 213+00 214+00 215+00 216+00 217+00

STH 164

B

B

LEGEND

SILT FENCE

B INLET PROTECTION TYPE B

D INLET PROTECTION TYPE D

EROSION MAT CLASS I TYPE B

CULVERT PIPE CHECKS

FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 99	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_31

PLOT DATE : 7/31/2019 5:31 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

E OH T FO

CULVERT

B

217+00 218+00 219+00 220+00 221+00 222+00 223+00

STH 164

TILE

LEGEND

- SILT FENCE
- B — INLET PROTECTION TYPE B
- D — INLET PROTECTION TYPE D
- EROSION MAT CLASS I TYPE B
- CULVERT PIPE CHECKS
- FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 100	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_32
PLOT DATE : 7/31/2019 5:32 PM
PLOT BY : SCHMIDT, JUDENE M
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

223+00 224+00 225+00 226+00 227+00 228+00 229+00

STH 164

LEGEND

- SILT FENCE
- B INLET PROTECTION TYPE B
- D INLET PROTECTION TYPE D
- EROSION MAT CLASS I TYPE B
- CULVERT PIPE CHECKS
- FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 101	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_33

PLOT DATE : 7/31/2019 5:32 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

POST

POST

POST

PC: 232+55.04

B

B

229+00

230+00

231+00

232+00

233+00

234+00

235+00

STH 164

B

B

TILE

TILE

LEGEND

SILT FENCE

B INLET PROTECTION TYPE B

D INLET PROTECTION TYPE D

EROSION MAT CLASS I TYPE B

CULVERT PIPE CHECKS

FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 102	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_34

PLOT DATE : 7/31/2019 5:32 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

B-67-0036

POST

POST

POST

B

D

B

B

235+00

236+00

237+00

238+00

239+00

240+00

241+00

SS

SS

STH 164

B

D

B

B

TILE

B-67-0036

LEGEND

SILT FENCE

B INLET PROTECTION TYPE B

D INLET PROTECTION TYPE D

EROSION MAT CLASS I TYPE B

CULVERT PIPE CHECKS

FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 103	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_35

PLOT DATE : 7/31/2019 5:32 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

E

OH

HO

TFO

GUY

TILE

B

241+00

242+00

243+00

244+00

245+00

246+00

247+00

STH 164

LEGEND

SILT FENCE

B INLET PROTECTION TYPE B

D INLET PROTECTION TYPE D

EROSION MAT CLASS I TYPE B

CULVERT PIPE CHECKS

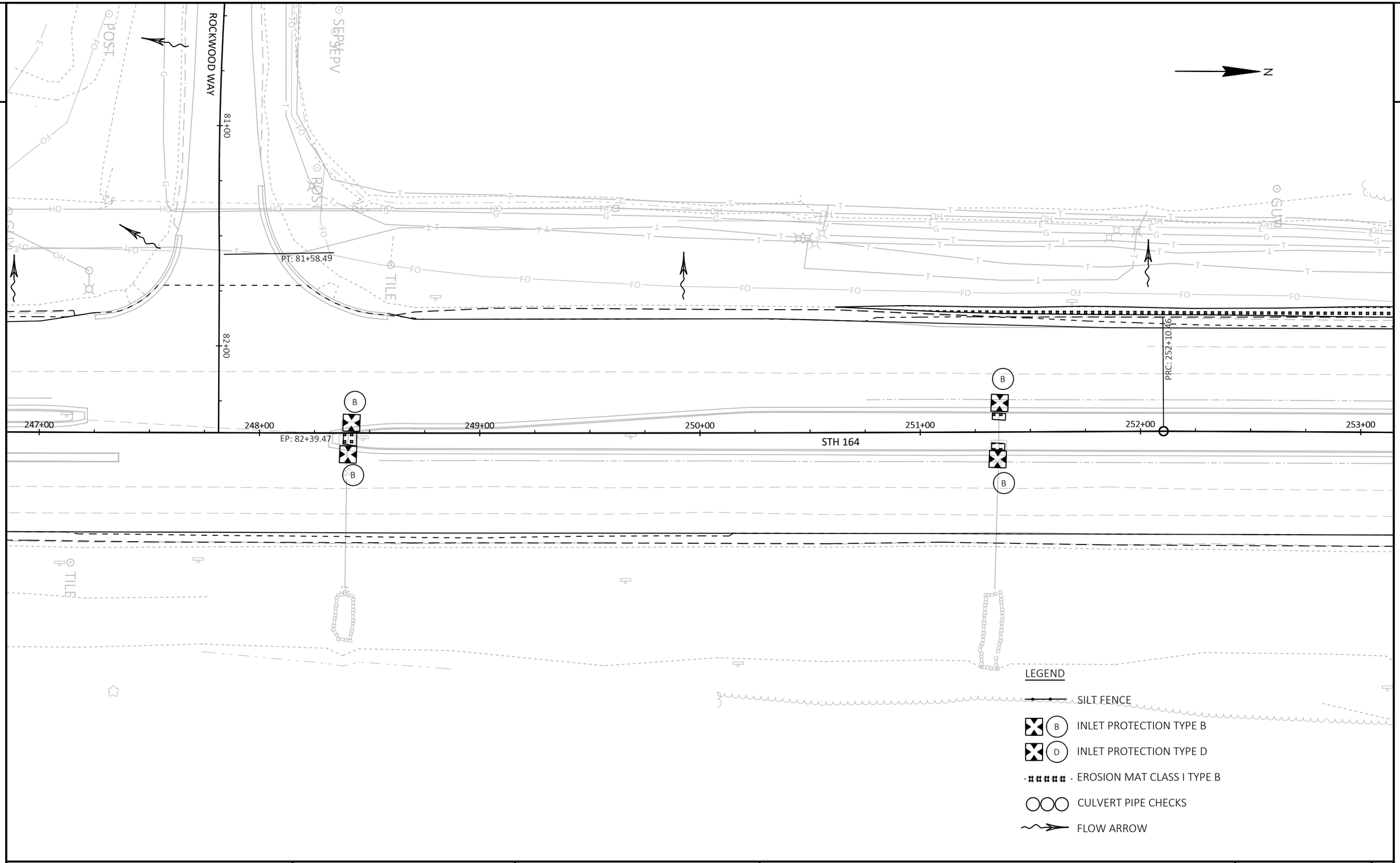
FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 104	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_36

PLOT DATE : 7/31/2019 5:33 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 105	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_37

PLOT DATE : 7/31/2019 5:33 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

253+00

254+00

255+00

256+00

257+00

258+00

259+00

STH 164

PT: 258+61.87

B

MH

LEGEND

SILT FENCE

INLET PROTECTION TYPE B

INLET PROTECTION TYPE D

EROSION MAT CLASS I TYPE B

CULVERT PIPE CHECKS

FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 106	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_38

PLOT DATE : 7/31/2019 5:33 PM

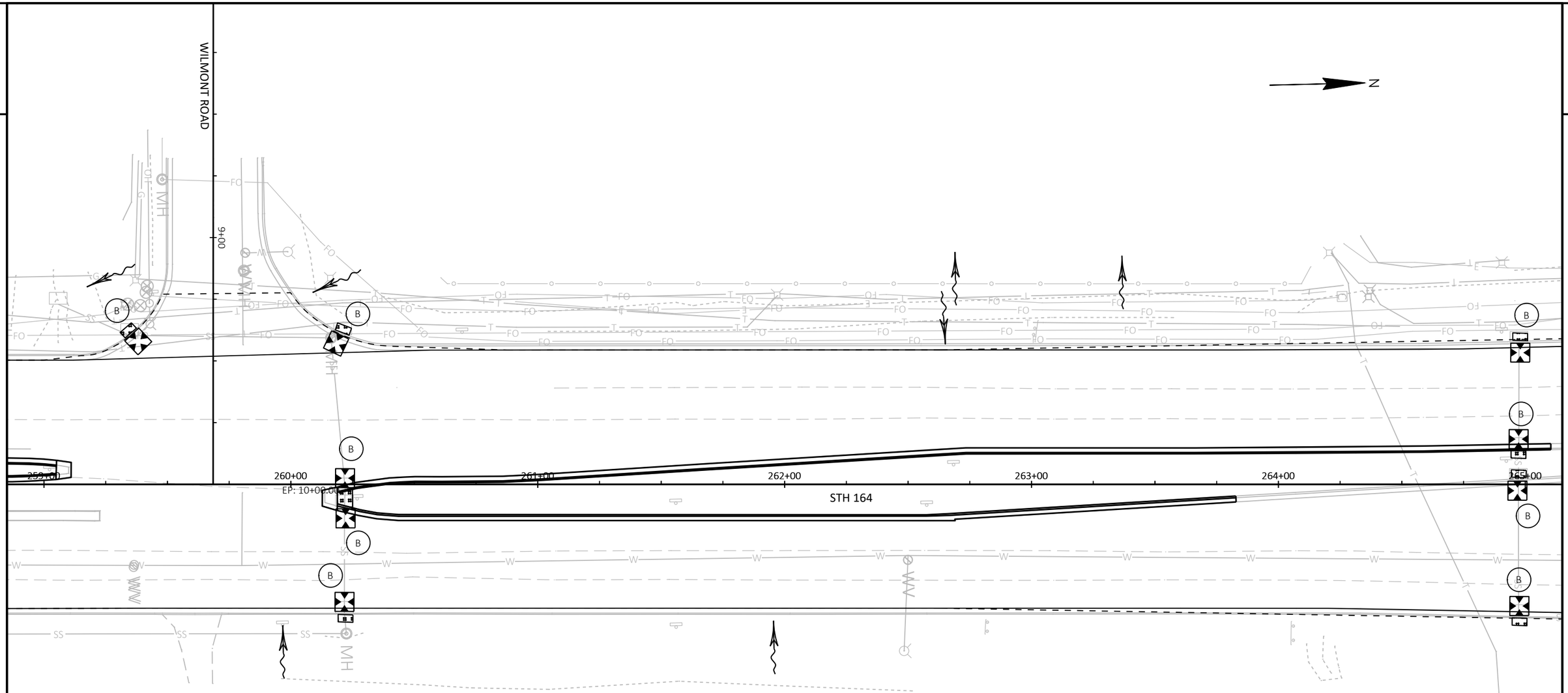
PLOT BY : SCHMIDT, JUDENE M

PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 107	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_39

PLOT DATE : 7/31/2019 5:33 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

STH 59

STH 164

265+00 266+00 267+00 268+00 269+00 270+00 271+00

END PROJECT
STA 266+91

LEGEND

- SILT FENCE
- B INLET PROTECTION TYPE B
- D INLET PROTECTION TYPE D
- EROSION MAT CLASS I TYPE B
- CULVERT PIPE CHECKS
- FLOW ARROW

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 108	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - EC_40

PLOT DATE : 7/31/2019 5:33 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LAWNSDALE RD/ CTH I

443+00

STH 164

206+00

207+00

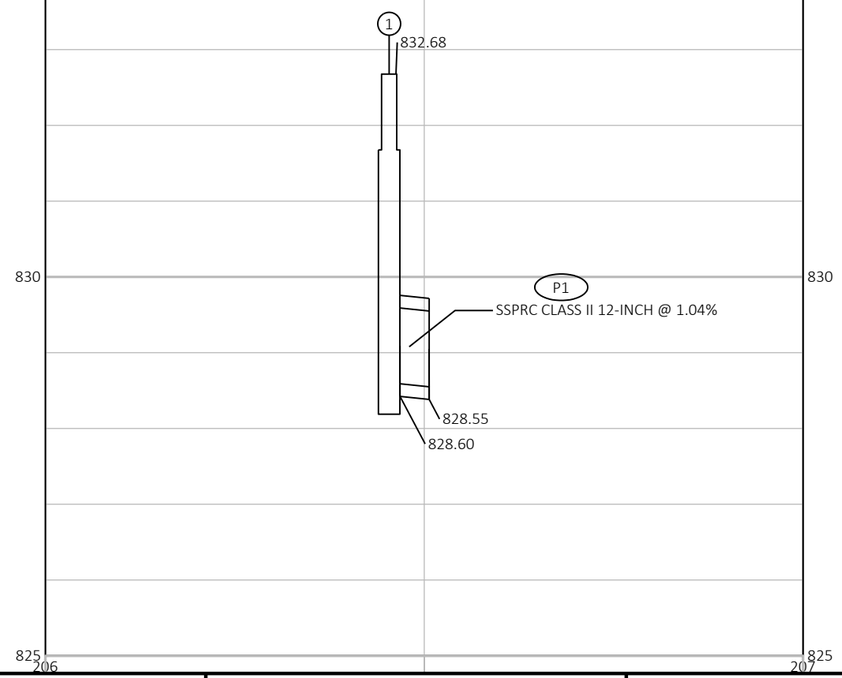
208+00

N

STA 206+45, 41.6' LT
INLETS 2x2-S
1

2 STA 206+51, 41.6' LT
MANHOLE COVER TYPE A

P1



PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	STORM SEWER	SHEET 109	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - SS01

PLOT DATE : 7/31/2019 11:52 AM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:20 FT

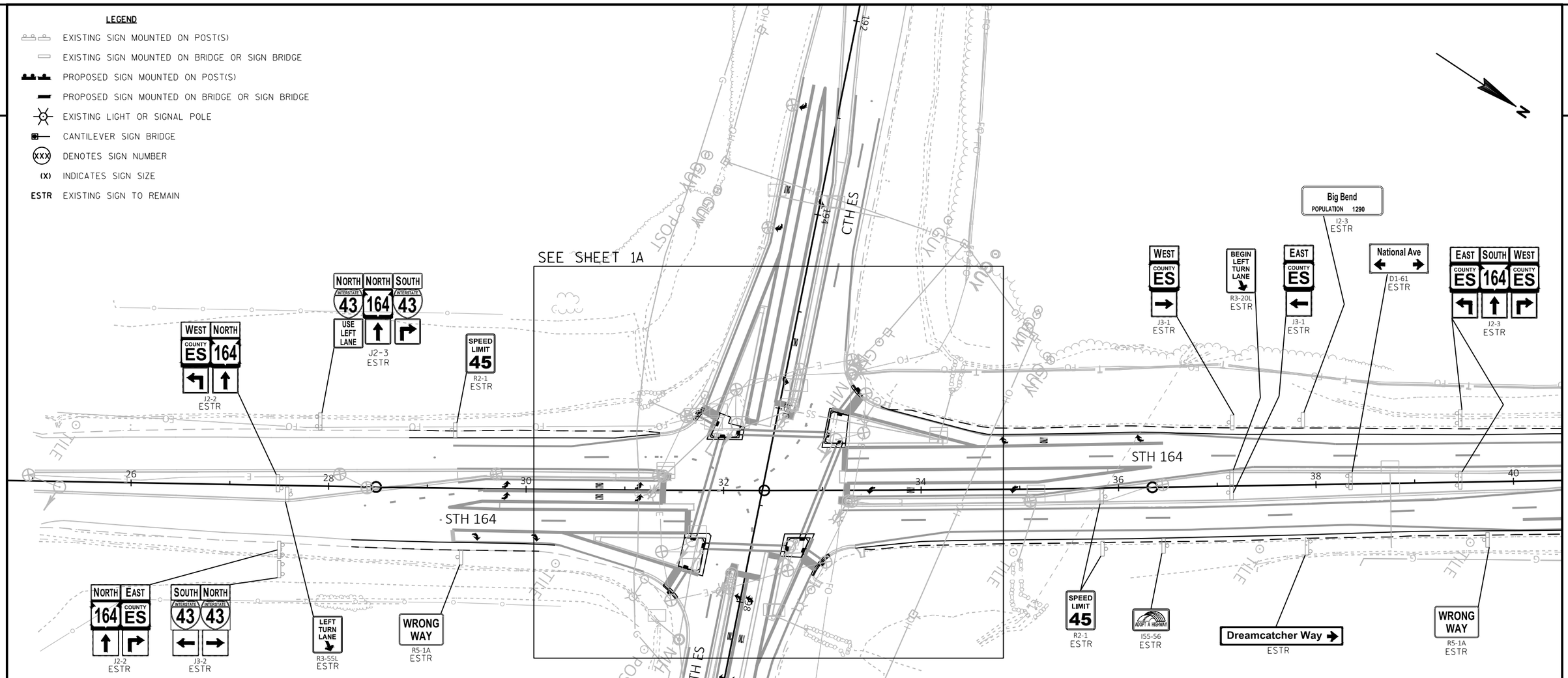
WISDOT/CADDS SHEET 41

2

2

LEGEND

- 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
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN



TYPE II ALUMINUM SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE COUNTY SIGN SHOP. CONTACT THE FOLLOWING INDIVIDUAL AT THE SIGN SHOP FOR DISTRIBUTION COUNTY LOCATION.
SIGNING COORDINATOR COUNTY(S) PHONE#

- DENNIS NEWTON MILWAUKEE 414-750-0257
- ANDRE CHAPMAN RACINE 414-531-2635
- JENNY BUCKETT KENOSHA, WASHINGTON, OZAUKEE 414-750-2427
- CHUCK SALDIVAR WALWORTH, WAUKESHA 414-750-1682

SIGNS SHALL BE CAREFULLY REMOVED FROM SIGN SUPPORTS. THE SIGNS SHALL BE PALLETIZED FOR HANDLING WITH A FORKLIFT (SEE STANDARD SPEC 638.3.4). THE REGIONAL SIGN SHOP (414-266-1165) SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF THE SIGNS.

WHEN AN EXISTING STOP SIGN SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED, THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POST SIZES, FOR TYPE II SIGNS ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

STREET NAME SIGNS ARE PROPERTY OF THE MUNICIPALITY (CITY, VILLAGE OR TOWN). THE MUNICIPALITY SHALL BE CONTACTED TO REMOVE THEIR STREET NAME SIGNS PRIOR TO CONSTRUCTION AND IT IS THEIR RESPONSIBILITY TO REINSTALL THE OLD SIGNS OR REPLACE THEM FOLLOWING CONSTRUCTION. WISDOT DOES NOT FURNISH OR INSTALL STREET NAME SIGNS. THE STREET NAME SIGNS SHALL NOT BE PLACED ON TOP OF THE STOP SIGNS.

LOCATE NO PASSING PENNANTS BASED ON ESTABLISHING NO PASSING ZONES PAY ITEM. PLACE SIGNS BASED ON WHERE THE PAVEMENT MARKING FOR NO PASSING ZONES BEGIN.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 110	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIGN\023201_PS_16.DWG
LAYOUT NAME - 023201_ps
PLOT DATE : 1/14/2019 11:31 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- 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
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

EXISTING SIGN STRUCTURE TO REMAIN S-67-230

WEST ES ONLY ESTR

JCT INTERSTATE 43 J1-1 ESTR

ADOPT A HIGHWAY I55-56 ESTR

1 LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-50L(2S) MOUNT ON SIGNAL POLE ABOVE SIGNAL HEAD

2 ONE WAY R6-2L(2M)

3 YIELD R1-2 MOVE

4 5 STOP R1-1F MOVE MOUNT ON SIGNAL POLE

W12-1D ESTR

6 R4-7 MOVE MOUNT ON SIGNAL POLE

7 ES National Ave M1-94S ON MAST ARM

8 DO NOT ENTER R5-1 MOVE MOUNT ON SIGNAL POLE

9 R4-7 MOVE MOUNT ON SIGNAL POLE

10 ONE WAY R6-2L(2M) MOUNT ON SIGNAL POLE

11 YIELD R1-2 MOVE

12 DO NOT ENTER R5-1 MOVE MOUNT ON SIGNAL POLE

W12-1D ESTR

13 14 STOP R1-1F MOVE MOUNT ON SIGNAL POLE

STH 164

CTH ES

196

21 ES National Ave M1-94S ON MAST ARM

22 R4-7 MOVE MOUNT ON SIGNAL POLE

23 DO NOT ENTER R5-1 MOVE MOUNT ON SIGNAL POLE

15 DO NOT ENTER R5-1 MOVE MOUNT ON SIGNAL POLE

16 R4-7 MOVE MOUNT ON SIGNAL POLE

17 ONE WAY R6-2L(2M)

18 YIELD R1-2 MOVE

19 20 STOP R1-1F MOVE MOUNT ON SIGNAL POLE

NORTH 164 J4-1 ESTR

24 ONE WAY R6-2L(2M)

25 LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-50L(2S) MOUNT ON SIGNAL POLE ABOVE SIGNAL HEAD

26 STOP R1-1 MOVE

27 STOP R1-1 MOVE

EAST COUNTY ES J3-1 ESTR

W12-1D ESTR

28 29 STOP R1-1F MOVE MOUNT ON SIGNAL POLE

W12-1D ESTR

CTH ES

ONLY ONLY

SHEET 1A OF 17

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 111	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIGN\023201_PS_16.DWG
LAYOUT NAME - 023201A_ps

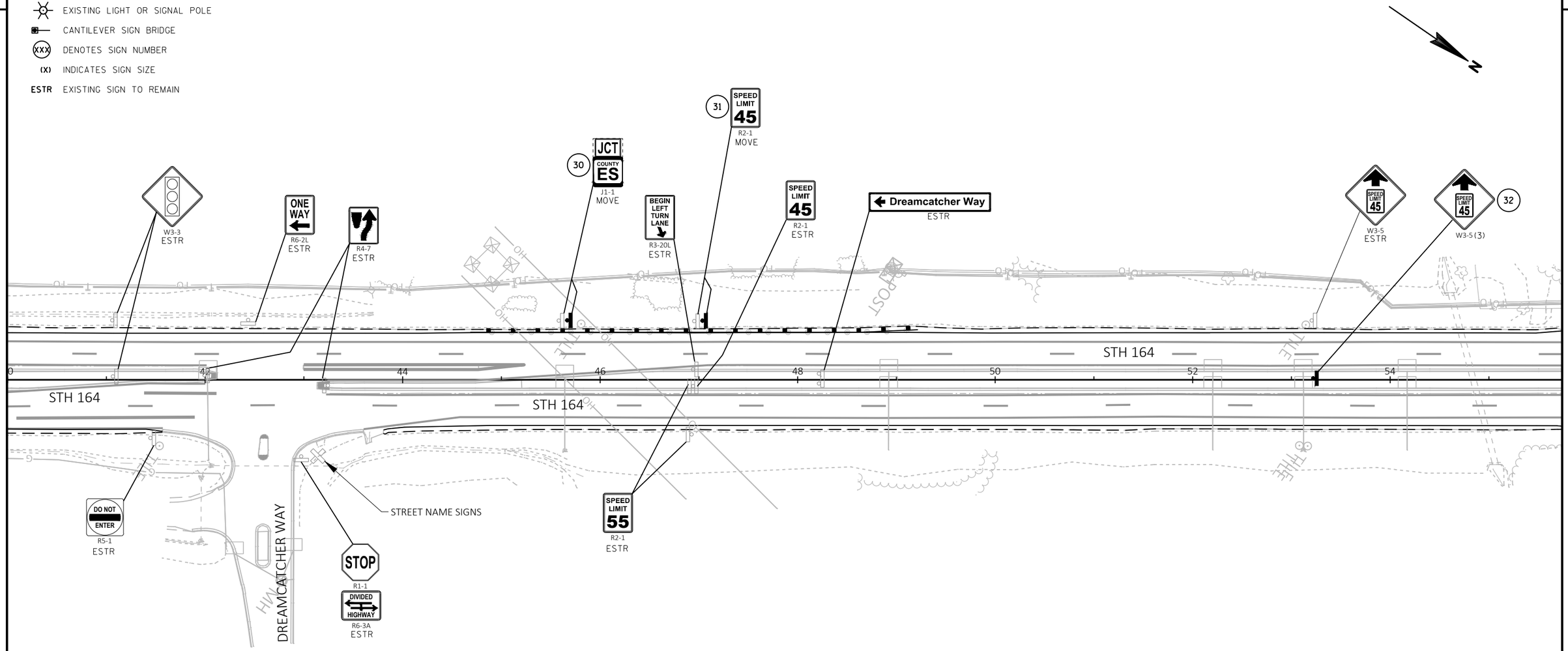
PLOT DATE : 1/14/2019 11:31 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- 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
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN



SHEET 2 OF 17

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 112	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIGN\023201_PS_16.DWG
LAYOUT NAME - 023202_ps

PLOT DATE : 1/14/2019 11:31 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

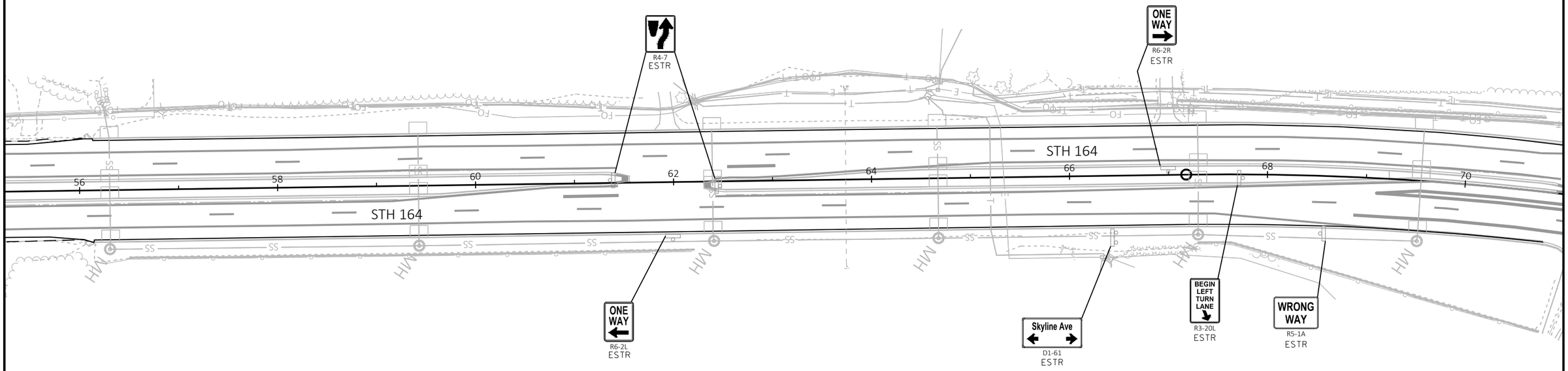
WISDOT/CADDS SHEET 42

2

2

LEGEND

- 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
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN



SHEET 3 OF 17

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 113	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIGN\023201_PS_16.DWG
LAYOUT NAME - 023203_ps

PLOT DATE : 1/14/2019 11:31 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- 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
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

N

33 STOP R1-1

34 DIVIDED HIGHWAY R6-3 — MOVE TO NEW POST

35 ONE WAY R6-2L — REMOVE

36 ONE WAY R6-1L(2S) — MOUNT ABOVE STOP SIGN

DO NOT ENTER R5-1 ESTR

WRONG WAY R5-1A ESTR

BEGIN LEFT TURN LANE R3-20L ESTR

Skyline Ave D1-61 ESTR

POST

POST

POST

STH 164

STH 164

SKYLINE AVE

72 74 76 78 80 82 84 86

SPEED LIMIT 55 R2-1 ESTR

R4-7 ESTR

R4-7 ESTR

DO NOT ENTER R5-1 ESTR

37 STOP R1-1

38 DIVIDED HIGHWAY R6-3 — MOVE TO NEW POST

39 ONE WAY R6-1L(2S) — MOUNT ABOVE STOP SIGN

40 ONE WAY R6-2L — REMOVE

SHEET 4 OF 17

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 114	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIGN\023201_PS_16.DWG
LAYOUT NAME - 023204_ps

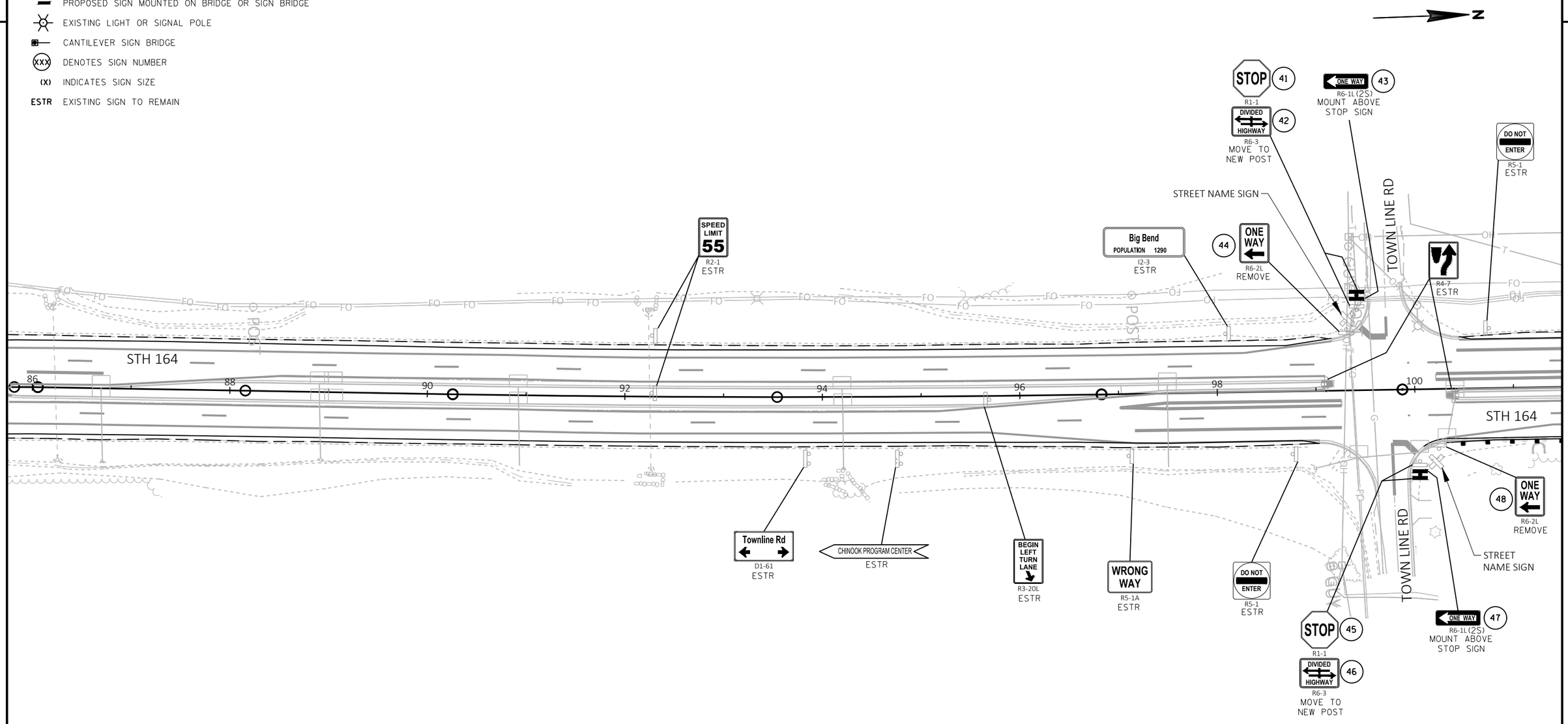
PLOT DATE : 1/14/2019 11:32 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- 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
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN



SHEET 5 OF 17

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 115	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIGN\023201_PS_16.DWG
LAYOUT NAME - 023205_ps

PLOT DATE : 1/14/2019 11:32 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- 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
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

N

WRONG WAY
R5-1A
ESTR

BEGIN LEFT TURN LANE
R3-20L
ESTR

CHINOOK PROGRAM CENTER
ESTR

Townline Rd
D1-61
ESTR

SPEED LIMIT 55
R2-1
ESTR

ONE WAY
R6-2R
ESTR

ONE WAY
R6-2L
ESTR

Red Wing Dr
ESTR

NO ENGINE BRAKING EXCEPT IN EMERGENCY
R10-64
ESTR

Coyote Crossing
ESTR

STOP
R1-1
ESTR

49 DIVIDED HIGHWAY
R6-3A(2S)
MOUNT BELOW STOP SIGN

R4-7
ESTR

STREET NAME SIGN

STH 164

102 104 106 108 110 112 114 116

COYOTE CROSSING

SHEET 6 OF 17

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 116	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIGN\023201_PS_16.DWG
LAYOUT NAME - 023206_ps

PLOT DATE : 1/14/2019 11:32 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

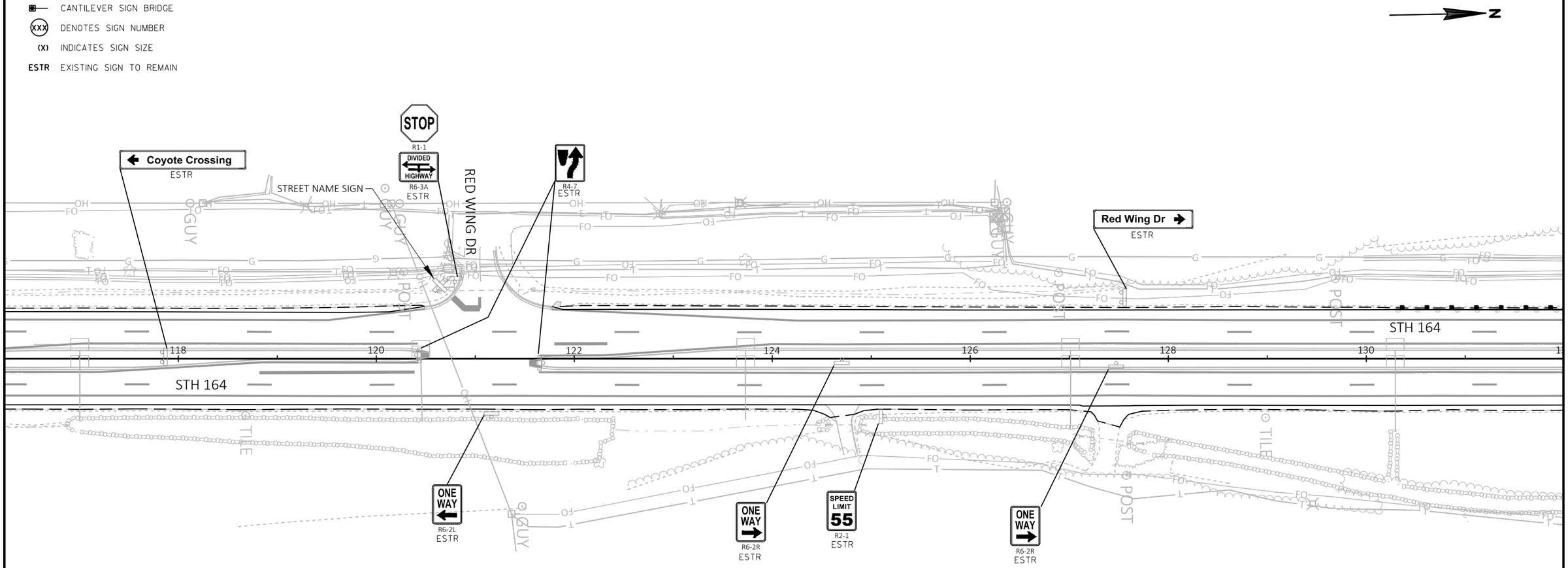
WISDOT/CADDS SHEET 42

2

2

LEGEND

- 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
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN



SHEET 7 OF 17

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 117	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIGN\023201_PS_16.DWG
LAYOUT NAME - 023207_ps

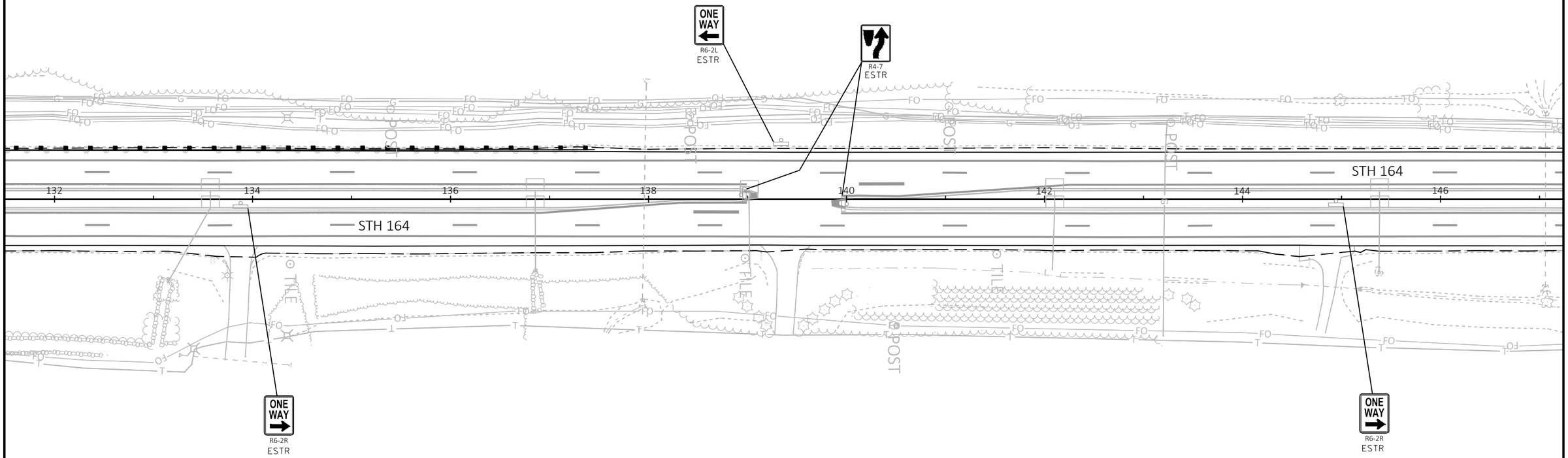
PLOT DATE : 1/14/2019 11:32 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- 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
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN



2

SHEET 8 OF 17

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 118	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIGN\023201_PS_16.DWG
LAYOUT NAME - 023208_ps

PLOT DATE : 1/14/2019 11:32 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

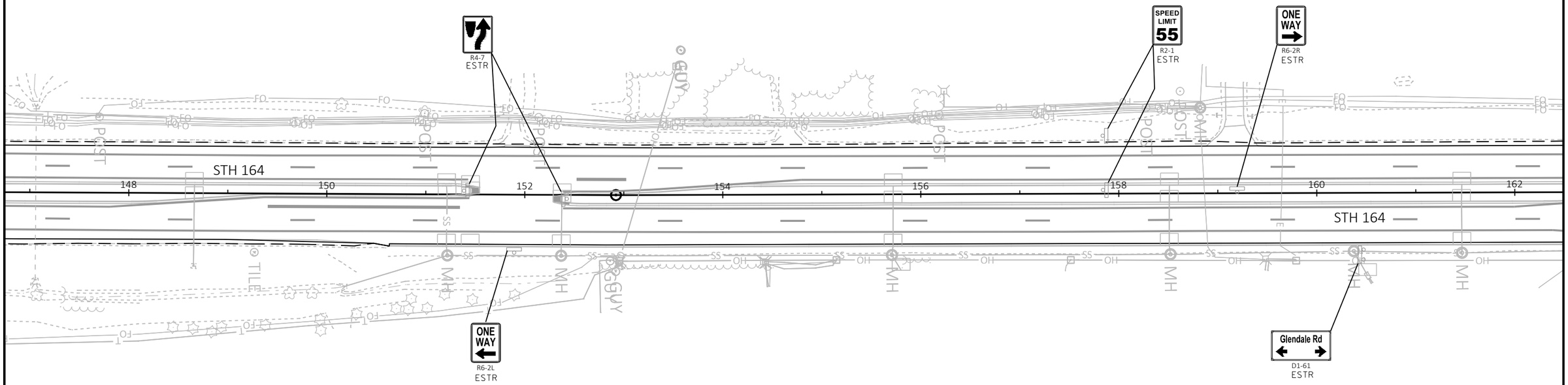
WISDOT/CADDS SHEET 42

2

2

LEGEND

- 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
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN



SHEET 9 OF 17

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 119	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIGN\023201_PS_16.DWG
LAYOUT NAME - 023209_ps

PLOT DATE : 1/14/2019 11:33 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- 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
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

N

50 STOP R1-1

51 DIVIDED HIGHWAY R6-3 MOVE TO NEW POST

53 ONE WAY R6-1L(2S) MOUNT ABOVE STOP SIGN

GLENDALE RD

ADOPT A HIGHWAY I55-56 ESTR

52 ONE WAY R6-2L REMOVE

DO NOT ENTER R5-1 ESTR

WRONG WAY R5-1A ESTR

BEGIN LEFT TURN LANE R3-20L ESTR

Glendale Rd D1-61 ESTR

ONE WAY R6-2L ESTR

STH 164

162 164 166 168 170 172 174 176

BEGIN LEFT TURN LANE R3-20L ESTR

WRONG WAY R5-1A ESTR

DO NOT ENTER R5-1 ESTR

R4-7 ESTR

54 STOP R1-1

55 DIVIDED HIGHWAY R6-3 MOVE TO NEW POST

ONE WAY R6-2L REMOVE 57

56 ONE WAY R6-1L(2S) MOUNT ABOVE STOP SIGN

ADOPT A HIGHWAY I55-56 ESTR

ONE WAY R6-2R ESTR

SPEED LIMIT 55 R2-1 ESTR

R4-7 ESTR

STH 164

GLENDALE RD

SHEET 10 OF 17

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 120	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIGN\023201_PS_16.DWG
LAYOUT NAME - 023210_ps

PLOT DATE : 1/14/2019 11:33 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

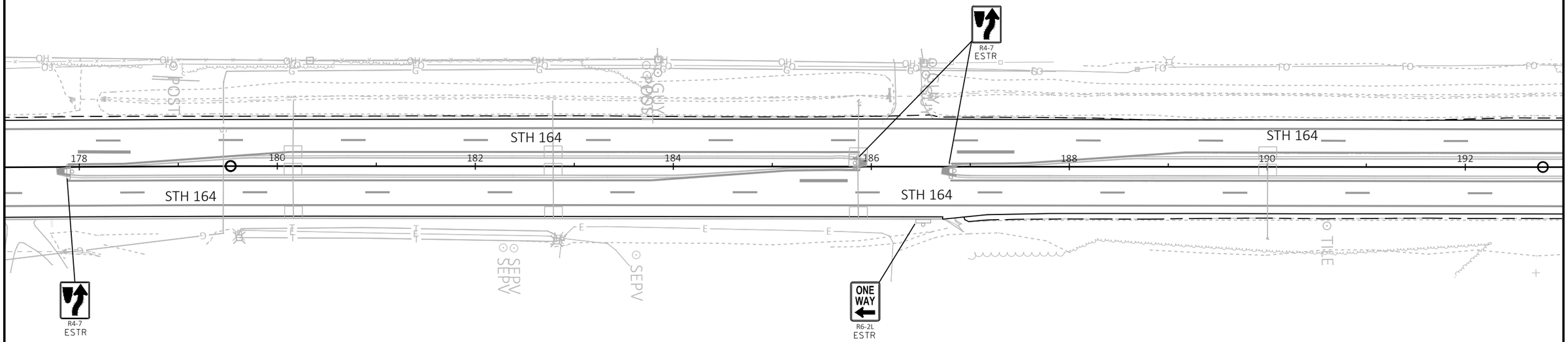
WISDOT/CADDS SHEET 42

2

2

LEGEND

- 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
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN



SHEET 11 OF 17

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 121	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIGN\023201_PS_16.DWG
LAYOUT NAME - 023211_ps

PLOT DATE : 1/14/2019 11:33 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- 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
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

2

N

SEE SHEET 12A

STH 164

194 196 198 200 202 204 206 208

LAWNSDALE RD

SPEED LIMIT 55 R2-1 ESTR

SOUTH 164 J4-1 ESTR

JCT COUNTY I J1-1 ESTR

W3-3 ESTR

WEST COUNTY I | NORTH 164 | EAST COUNTY I J2-3 ESTR

BEGIN LEFT TURN LANE R3-20L ESTR

WRONG WAY R5-1A ESTR

Lawnsdale Rd D1-61 ESTR

SHEET 12 OF 17

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 122	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIGN\023201_PS_16.DWG
LAYOUT NAME - 023212_ps

PLOT DATE : 1/14/2019 11:33 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- 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
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

2

N

CTH I (LAWNSDALE RD)

59 I Lawnsdale Rd — M1-94S ON MAST ARM

61 YIELD — R1-2 MOVE

58 WEST COUNTY I — J3-1 MOVE MOUNT HIGH ON SIGNAL POLE

60 ONE WAY — R6-2L (2M) MOUNT ON SIGNAL POLE

W12-1D ESTR

63 DIVIDED HIGHWAY — R6-3(2S) MOUNT ON SIGNAL POLE

64 STOP — R1-1F MOVE MOUNT ON SIGNAL POLE

81 LEFT TURN YIELD ON FLASHING YELLOW ARROW — R10-50L (2M) MOUNT ON MAST ARM

65 STOP — R1-1 MOVE

66 STOP — R1-1F MOVE MOUNT ON SIGNAL POLE

W12-1D ESTR

DO NOT ENTER — R5-1 ESTR

WEST COUNTY I — J3-1 ESTR

40'

62 — R4-7 MOVE MOUNT ON SIGNAL POLE

SOUTH 164 — 67 — J3-1 MOVE MOUNT ON SIGNAL POLE

84 LEFT TURN YIELD ON FLASHING YELLOW ARROW — R10-50L (2M) MOUNT HIGH ON SIGNAL POLE

25 STH 164

204 206 208

77 78 STOP — R1-1F MOVE MOUNT ON SIGNAL POLE

65

STH 164

83 LEFT TURN YIELD ON FLASHING YELLOW ARROW — R10-50L (2M) MOUNT HIGH ON SIGNAL POLE

68 — R4-7 MOVE MOUNT ON SIGNAL POLE

45'

40'

82 LEFT TURN YIELD ON FLASHING YELLOW ARROW — R10-50L (2M) MOUNT ON MAST ARM

W12-1D ESTR

EAST COUNTY I — J3-1 ESTR

DO NOT ENTER — R5-1 ESTR

76 STOP — R1-1 MOVE

75 DIVIDED HIGHWAY — R6-3(2S) MOUNT ON SIGNAL POLE

72 ONE WAY — R6-2L (2M) MOUNT ON SIGNAL POLE

70 STOP — R1-1F MOVE MOUNT ON SIGNAL POLE

EAST COUNTY I — 69 — J3-1 MOVE MOUNT HIGH ON SIGNAL POLE

NORTH 164 — J4-1 ESTR

73 YIELD — R1-2 MOVE

71 I Lawnsdale Rd — M1-94S ON MAST ARM

74 STOP — R1-1F MOVE

W12-1D ESTR

CTH I (LAWNSDALE RD)

SHEET 12A OF 17

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 123	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIGN\023201_PS_16.DWG
LAYOUT NAME - 023212A_ps
PLOT DATE : 1/14/2019 11:33 AM
PLOT BY : MARTENS, KAREN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

- 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
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

N

EAST SOUTH WEST
COUNTY I 164 COUNTY I
J2-3
ESTR

Lawnsdale Rd
D1-61
ESTR

BEGIN LEFT TURN LANE
R3-20L
ESTR

ONE WAY
R6-2R
ESTR

W3-3
ESTR

JCT
COUNTY I
J1-1
ESTR

SPEED LIMIT 55
R2-1
ESTR

STH 164

208 210 212 214 216 218 220 222

SHEET 13 OF 17

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 124	E

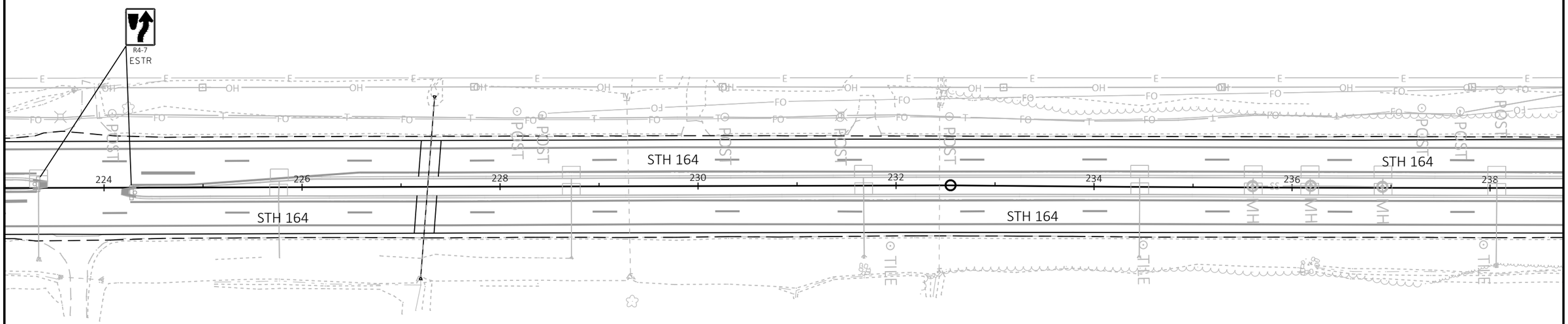
FILE NAME : N:\PDS\C3D\CAD\27181500\SIGN\023201_PS_16.DWG
LAYOUT NAME - 023213_ps

PLOT DATE : 1/14/2019 11:34 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- 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
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN



SHEET 14 OF 17

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 125	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIGN\023201_PS_16.DWG
LAYOUT NAME - 023214_ps

PLOT DATE : 1/14/2019 11:34 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

LEGEND

- 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
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

N

STREET NAME SIGNS

SPEED LIMIT 55 R2-1 ESTR

RIDESHARE INFO CALL 1 - 800 - 455 - POOL D12-2A ESTR

STOP R1-1

DIVIDED HIGHWAY R6-3A ESTR

ROCKWOOD WAY

DO NOT ENTER R5-1 ESTR

WRONG WAY R5-1A ESTR

Rockwood Way ESTR

STH 164

240 242 244 246 248 250 252

STH 164

STH 164

ESTR

Rockwood Way ESTR

BEGIN LEFT TURN LANE R3-20L ESTR

WRONG WAY R5-1A ESTR

DO NOT ENTER R5-1 ESTR

ONE WAY R6-2L ESTR

R4-7 ESTR

SPEED LIMIT 45 W3-5 ESTR

Wilmont Dr ESTR

SHEET 15 OF 17

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 126	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIGN\023201_PS_16.DWG
LAYOUT NAME - 023215_ps

PLOT DATE : 1/14/2019 11:34 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- 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
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

N

79
SPEED LIMIT 55
R2-1
MOVE

SPEED LIMIT 55
R2-1
ESTR

STOP
R1-1

DIVIDED HIGHWAY
R6-3A
ESTR

WILMONT DR

DO NOT ENTER
R5-1
ESTR

BEGIN LEFT TURN LANE
R3-20L
ESTR

WRONG WAY
R5-1A
ESTR

Wilmont Dr
ESTR

SPEED LIMIT 45
R2-1
ESTR

SOUTH 164
J4-1
ESTR

Wilmont Dr ONLY
ESTR

WEST 59 ONLY
ESTR

ADOPT A HIGHWAY
I55-56
ESTR

R3-4
ESTR

STH 164

254 256 258 260 262 264 266 268

STH 164

STH 164

SPEED LIMIT 45
R2-1
ESTR

SPEED LIMIT 45
80
R2-1
MOVE

BEGIN LEFT TURN LANE
R3-20L
ESTR

WRONG WAY
R5-1A
ESTR

JCT 59
J1-1
ESTR

DO NOT ENTER
R5-1
ESTR

R4-7
ESTR

ONE WAY
R6-2L
ESTR

W3-3
ESTR

LEFT TURN LANE
R3-5SL
ESTR

Waukesha
POPULATION 70,718
I2-3
ESTR

WEST 59 | EAST 59 | NORTH 164
J2-3
ESTR

THRU TRUCKS MUST FOLLOW U.S. AND STATE HIGHWAYS IN CITY OF WAUKESHA
NO PARKING VEHICLES OVER 5 TONS 6PM-6AM
ESTR

Waukesha
Historic Downtown
Waukesha Memorial Hospital
ESTR

SHEET 16 OF 17

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 127	E

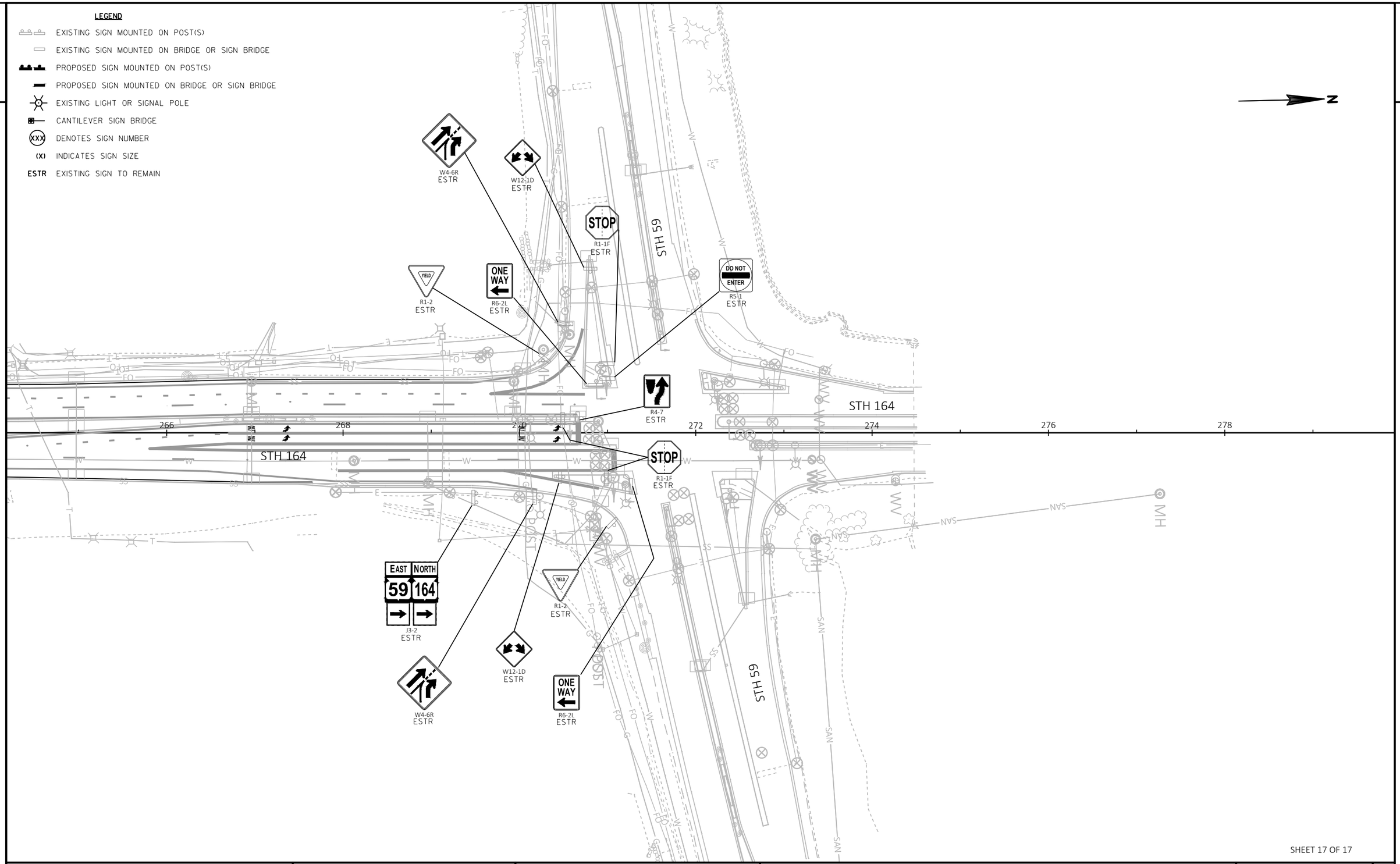
FILE NAME : N:\PDS\C3D\CAD\27181500\SIGN\023201_PS_16.DWG
LAYOUT NAME - 023216_ps

PLOT DATE : 1/14/2019 11:34 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- 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
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN



SHEET 17 OF 17

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 128	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIGN\023201_PS_16.DWG
LAYOUT NAME - 023217_ps

PLOT DATE : 1/14/2019 11:35 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- SPAN WIRE
- WOOD POLE, CLASS 4
- SIGNAL HEAD, OVERHEAD MOUNT
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW

DIRECTION OF TRAFFIC

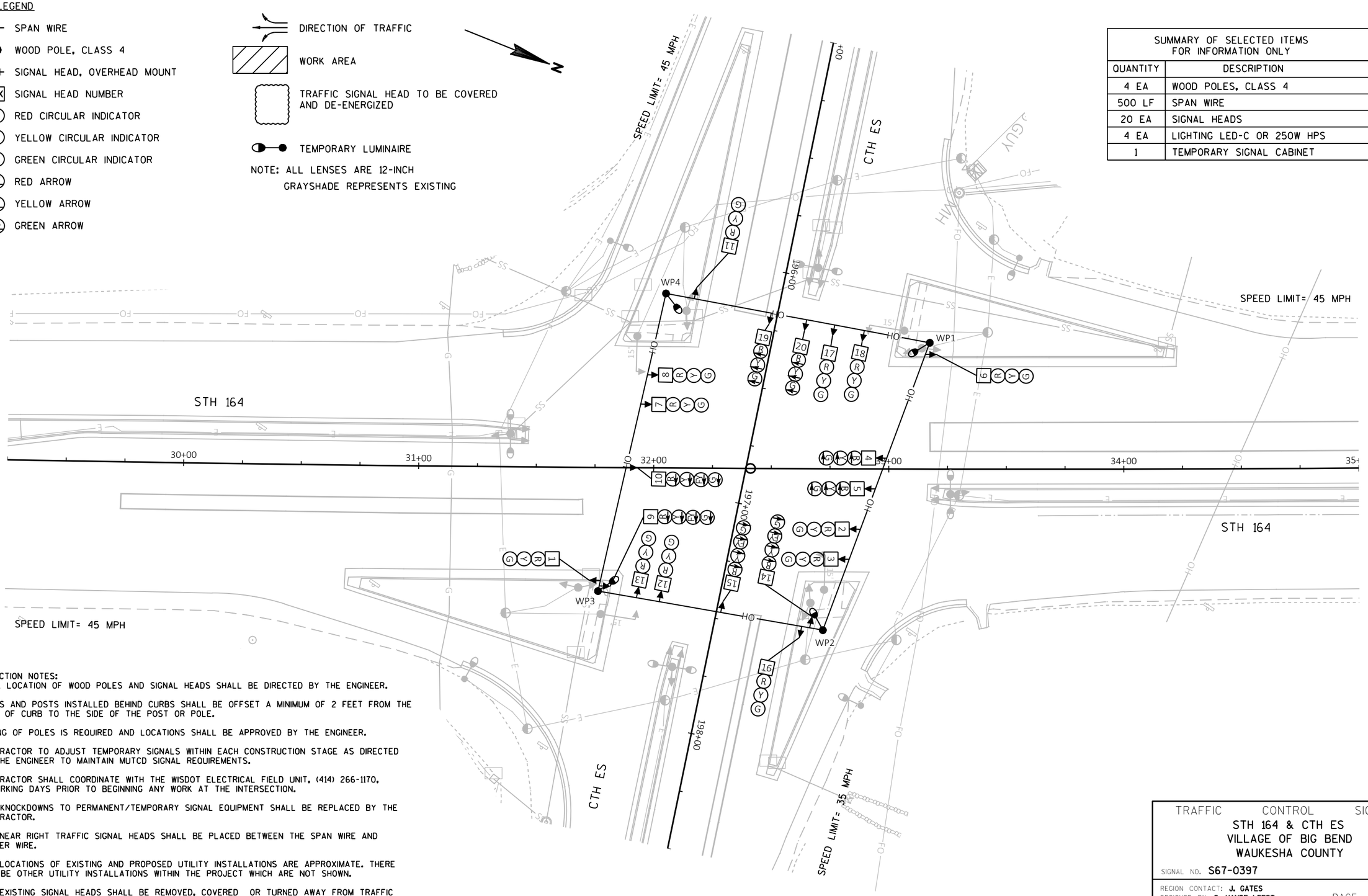
WORK AREA

TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

TEMPORARY LUMINAIRE

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

SUMMARY OF SELECTED ITEMS FOR INFORMATION ONLY	
QUANTITY	DESCRIPTION
4 EA	WOOD POLES, CLASS 4
500 LF	SPAN WIRE
20 EA	SIGNAL HEADS
4 EA	LIGHTING LED-C OR 250W HPS
1	TEMPORARY SIGNAL CABINET



CONSTRUCTION NOTES:

1. FINAL LOCATION OF WOOD POLES AND SIGNAL HEADS SHALL BE DIRECTED BY THE ENGINEER.
2. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POST OR POLE.
3. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
4. CONTRACTOR TO ADJUST TEMPORARY SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
5. CONTRACTOR SHALL COORDINATE WITH THE WISDOT ELECTRICAL FIELD UNIT, (414) 266-1170, 5 WORKING DAYS PRIOR TO BEGINNING ANY WORK AT THE INTERSECTION.
6. ANY KNOCKDOWNS TO PERMANENT/TEMPORARY SIGNAL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR.
7. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
8. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
9. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.

TRAFFIC CONTROL SIGNAL
STH 164 & CTH ES
VILLAGE OF BIG BEND
WAUKESHA COUNTY

SIGNAL NO. S67-0397

REGION CONTACT: J. GATES
DESIGNED BY: C. VANDE LEEST
REVISED BY:

PAGE 1 OF 4

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - PRECONSTRUCTION	SHEET 129	E

LEGEND

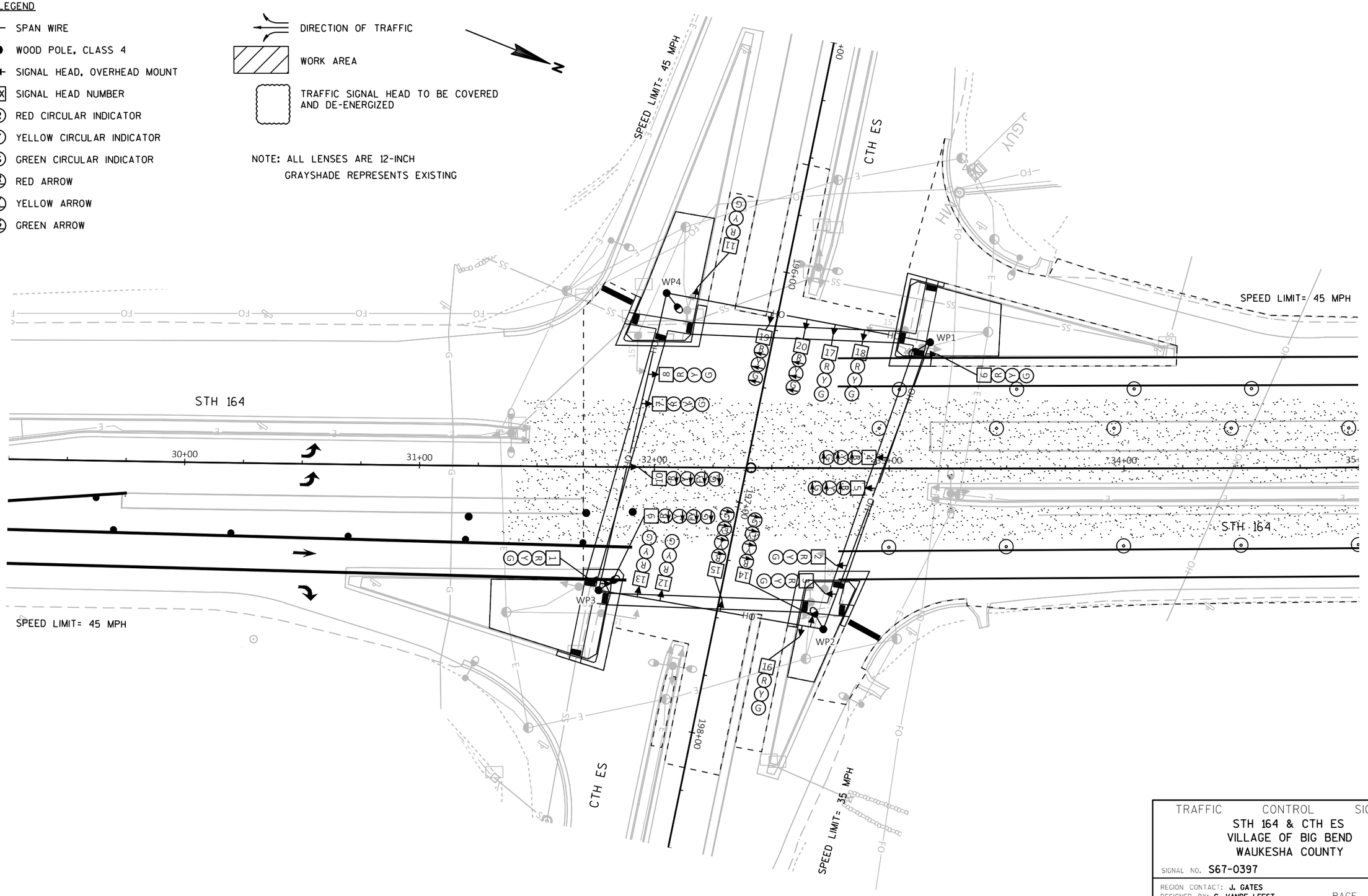
- SPAN WIRE
- WOOD POLE, CLASS 4
- SIGNAL HEAD, OVERHEAD MOUNT
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW

DIRECTION OF TRAFFIC

WORK AREA

TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



TRAFFIC CONTROL SIGNAL
STH 164 & CTH ES
VILLAGE OF BIG BEND
WAUKESHA COUNTY

SIGNAL NO. S67-0397

REGION CONTACT: J. GATES
DESIGNED BY: C. VANDE LEEST
REVISED BY:

PAGE 2 OF 4

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1 & STAGE 3	SHEET 130	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIG\S67-0397\S67-0397_TSIGS1_16.DWG
LAYOUT NAME - S67-0397_TSigS1_pg1

PLOT DATE : 1/31/2019 10:41 AM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

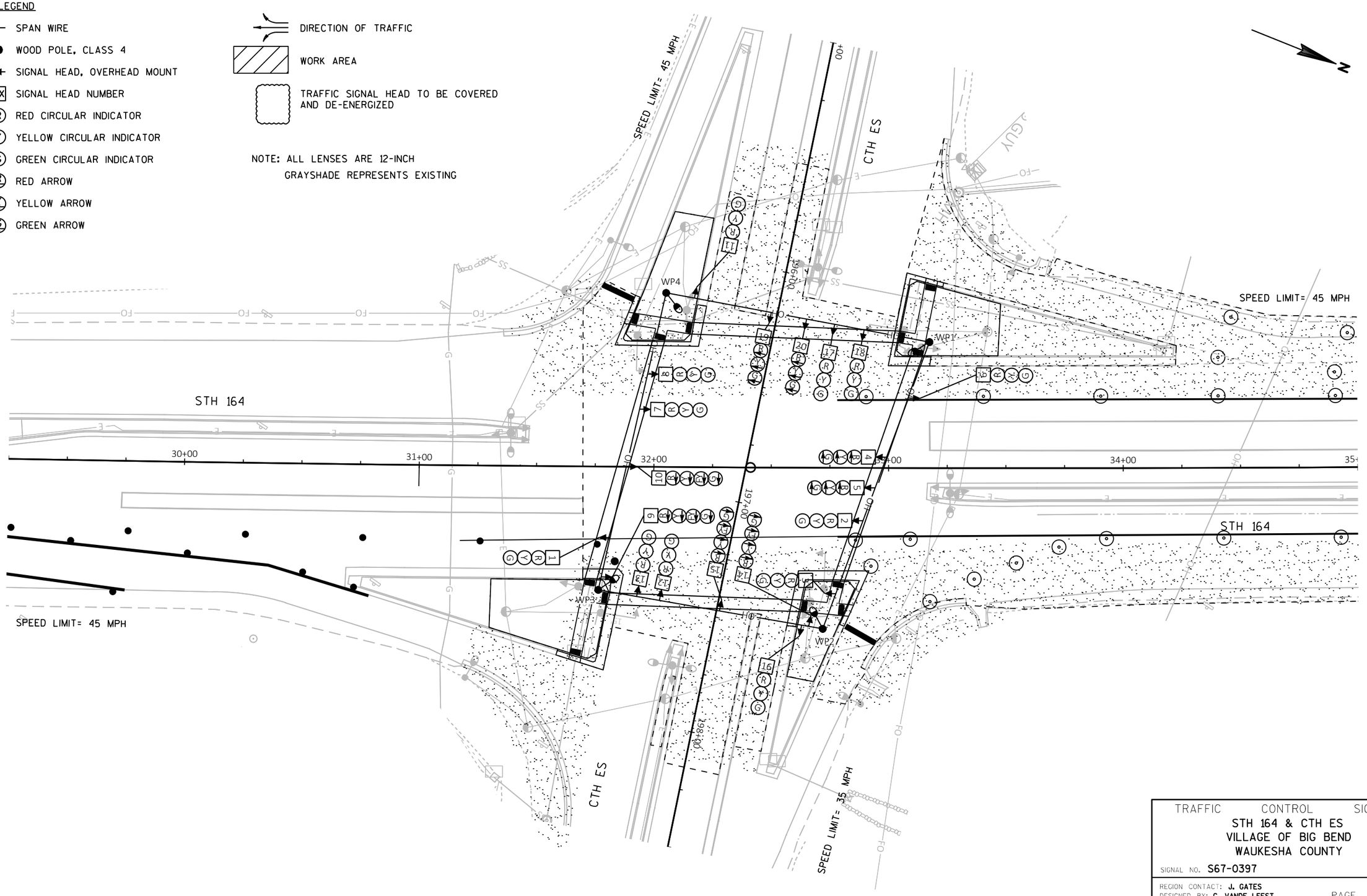
- SPAN WIRE
- WOOD POLE, CLASS 4
- SIGNAL HEAD, OVERHEAD MOUNT
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW

DIRECTION OF TRAFFIC

WORK AREA

TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



TRAFFIC CONTROL SIGNAL
STH 164 & CTH ES
VILLAGE OF BIG BEND
WAUKESHA COUNTY

SIGNAL NO. S67-0397

REGION CONTACT: J. GATES
DESIGNED BY: C. VANDE LEEST
REVISED BY:

PAGE 3 OF 4

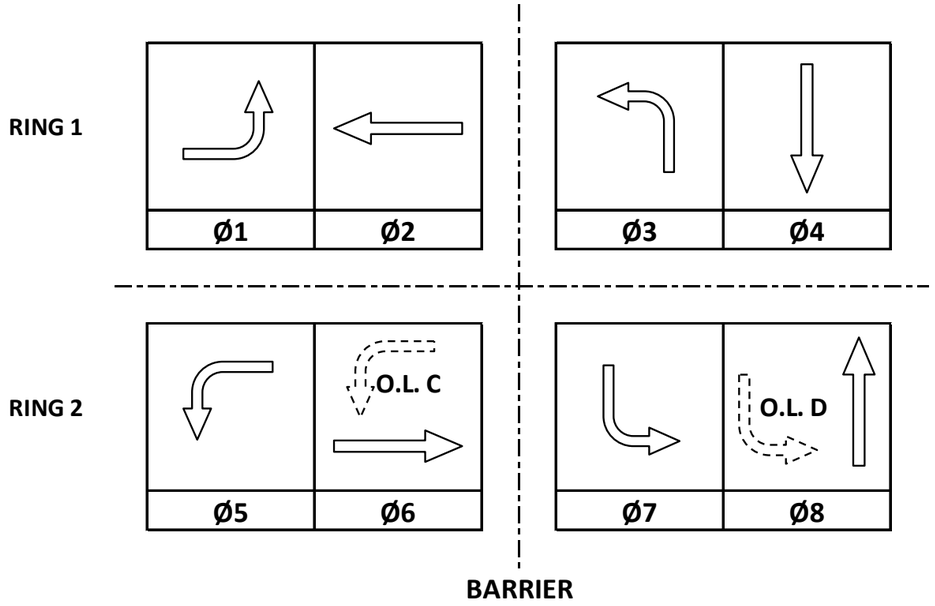
PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2	SHEET 131	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIG\S67-0397\S67-0397_TSIGS2_16.DWG
LAYOUT NAME - S67-0397_TSigS2_pg1

PLOT DATE : 1/31/2019 10:43 AM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	4,5	R ←
Ø2	6,7,8	R
Ø3	19,20	R ←
Ø4	11,12,13	R
Ø5	9,10	-
Ø6	1,2,3	R
Ø7	14,15	-
Ø8	16,17,18	R
Ø2P		
Ø4P		
Ø6P		
Ø8P		
OLA		
OLB		
OLC	9,10	R ←
OLD	14,15	R ←



TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	X

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS-

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

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
CONFIRMATION LIGHTS	
LIFT BRIDGE	
QUEUE DETECTION	

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1	X	6	MAX	X
2	X	6	MAX	X
3	X	8	MAX	X
4	X	8	MAX	X
5	X	2	MAX	X
6	X	2	MAX	X
7	X	4	MAX	X
8	X	4	MAX	X

GENERAL NOTES:

1. PHASES 5 AND 7 WILL BE OMITTED AT OFF-PEAK TIMES.
2.
3.
4.

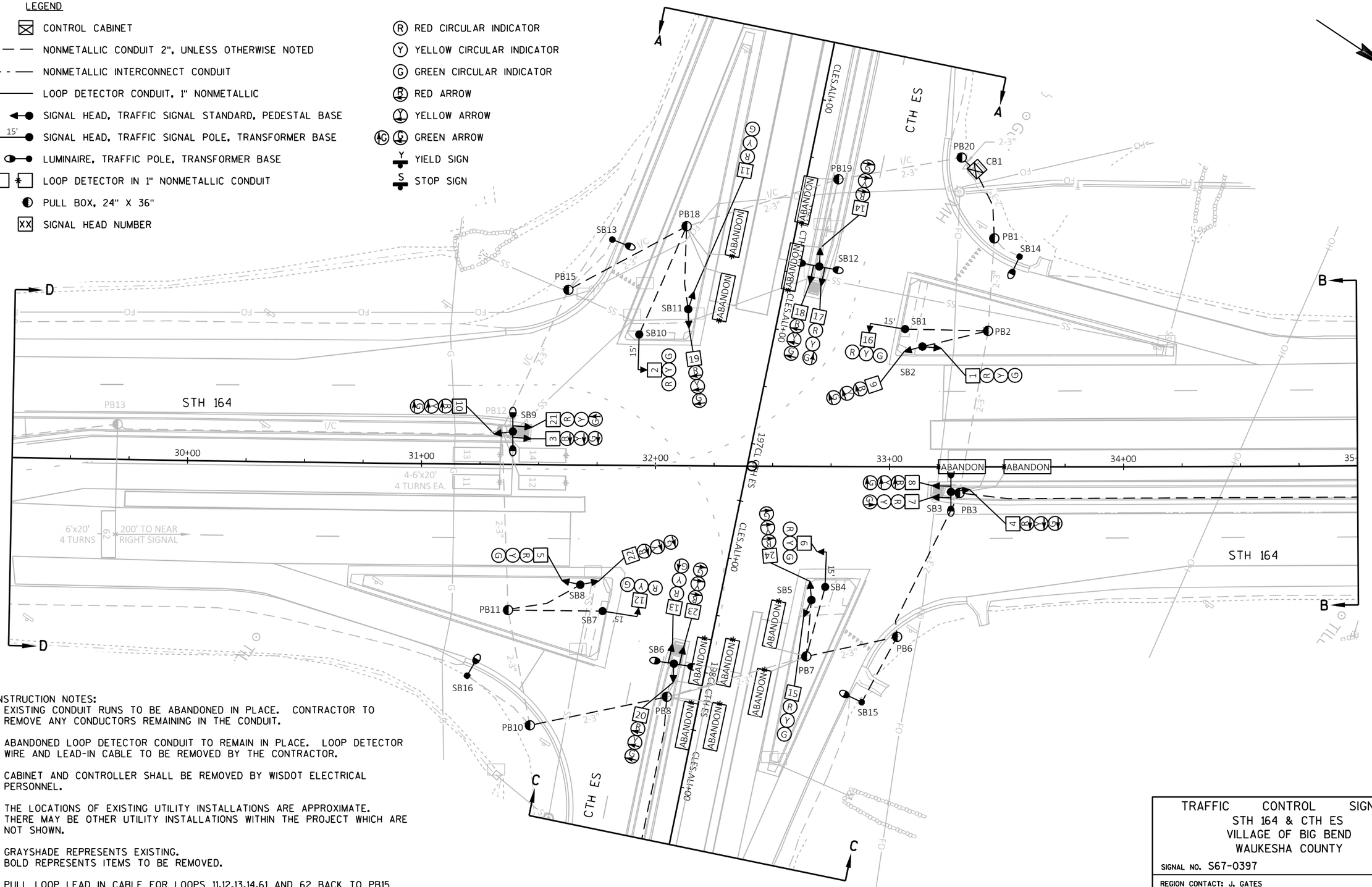
STH 164 & CTH ES
VILLAGE OF BIG BEND
WAUKESHA COUNTY
SIGNAL NO: S67-0397 CABINET TYPE: TEMP
CONTROLLER TYPE: ECONOLITE
DATE: 1/19 PAGE NUMBER: 4 OF 4

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	SEQUENCE OF OPERATIONS	SHEET NO:	E

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT
- LOOP DETECTOR CONDUIT, 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- 15' SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- XX SIGNAL HEAD NUMBER

- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (Y) YELLOW ARROW
- (AG) (G) GREEN ARROW
- Y YIELD SIGN
- S STOP SIGN



CONSTRUCTION NOTES:

1. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRE AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.
3. CABINET AND CONTROLLER SHALL BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.
4. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
5. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.
6. PULL LOOP LEAD IN CABLE FOR LOOPS 11,12,13,14,61 AND 62 BACK TO PB15 PRIOR TO SIGNAL WORK AND RECONNECT BEFORE COMPLETION.

TRAFFIC CONTROL SIGNAL
STH 164 & CTH ES
VILLAGE OF BIG BEND
WAUKESHA COUNTY

SIGNAL NO. S67-0397

REGION CONTACT: J. GATES
DESIGNED BY: C. VANDE LEEST
REVISED BY:

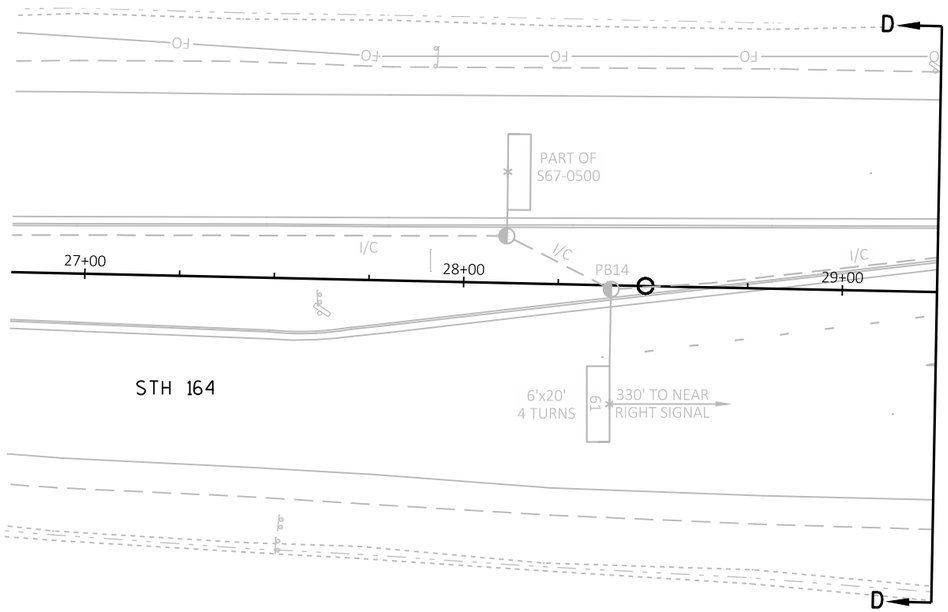
PAGE 1 OF 3

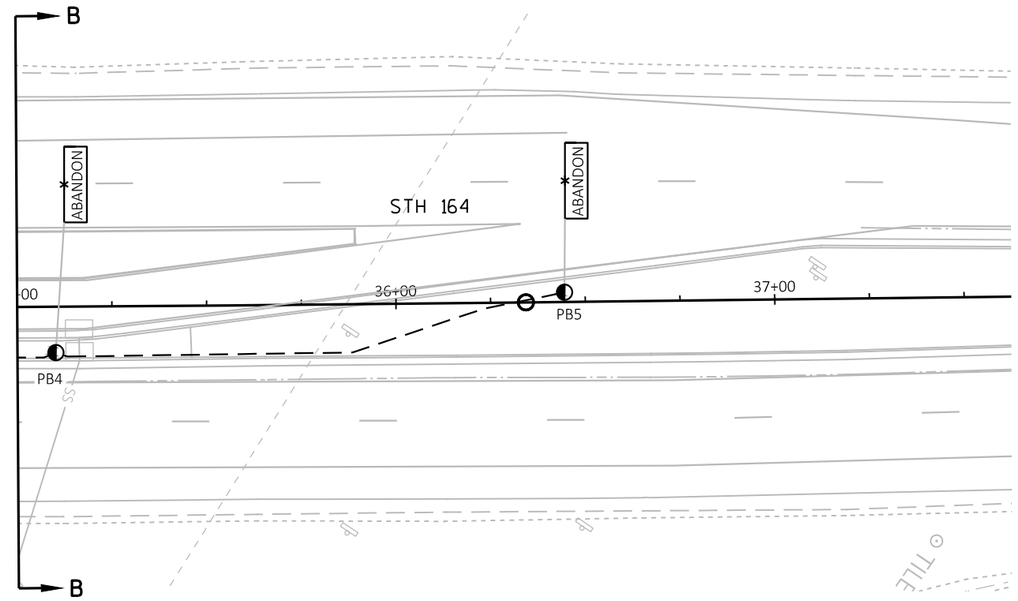
PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 133	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIG\S67-0397\S67-0397_REM_16.DWG
LAYOUT NAME - S67-0397_rem_pg1
PLOT DATE : 1/31/2019 2:08 PM
PLOT BY : WAGNER, SCOTT H
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2





TRAFFIC CONTROL SIGNAL
STH 164 & CTH ES
VILLAGE OF BIG BEND
WAUKESHA COUNTY

SIGNAL NO. S67-0397

REGION CONTACT: J. GATES
DESIGNED BY: C. VANDE LEEST
REVISED BY:

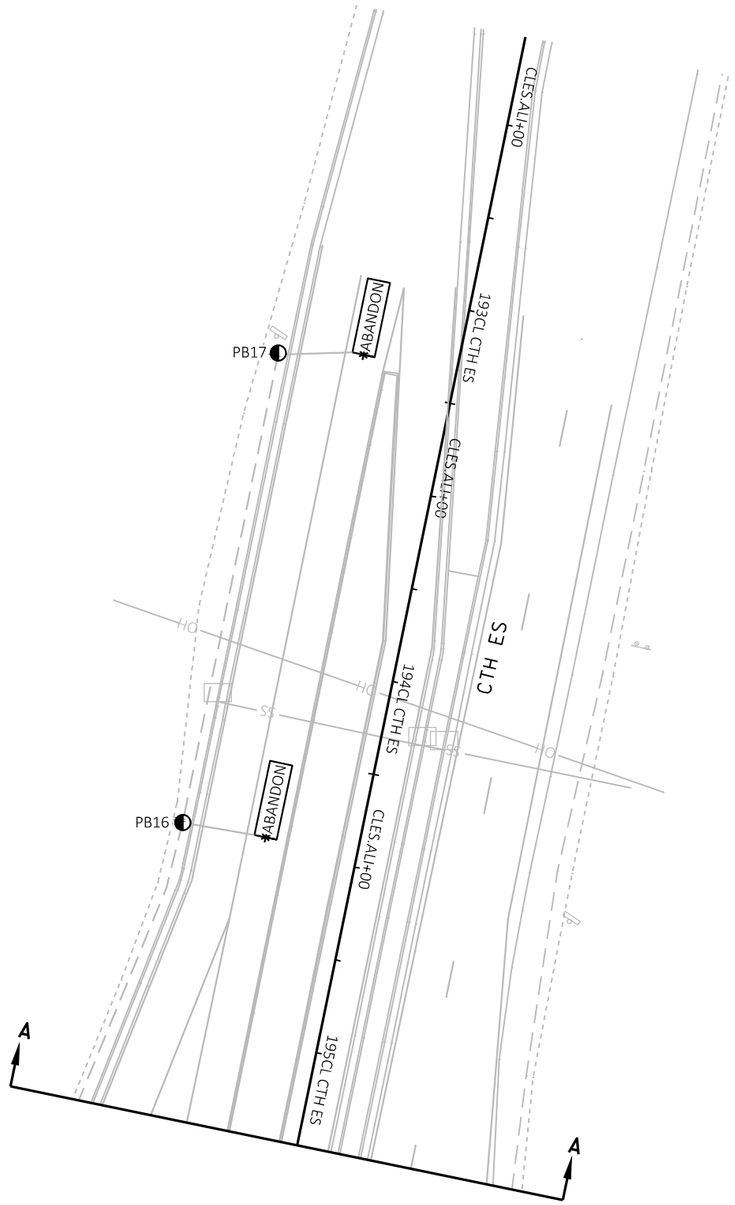
PAGE 2 OF 3

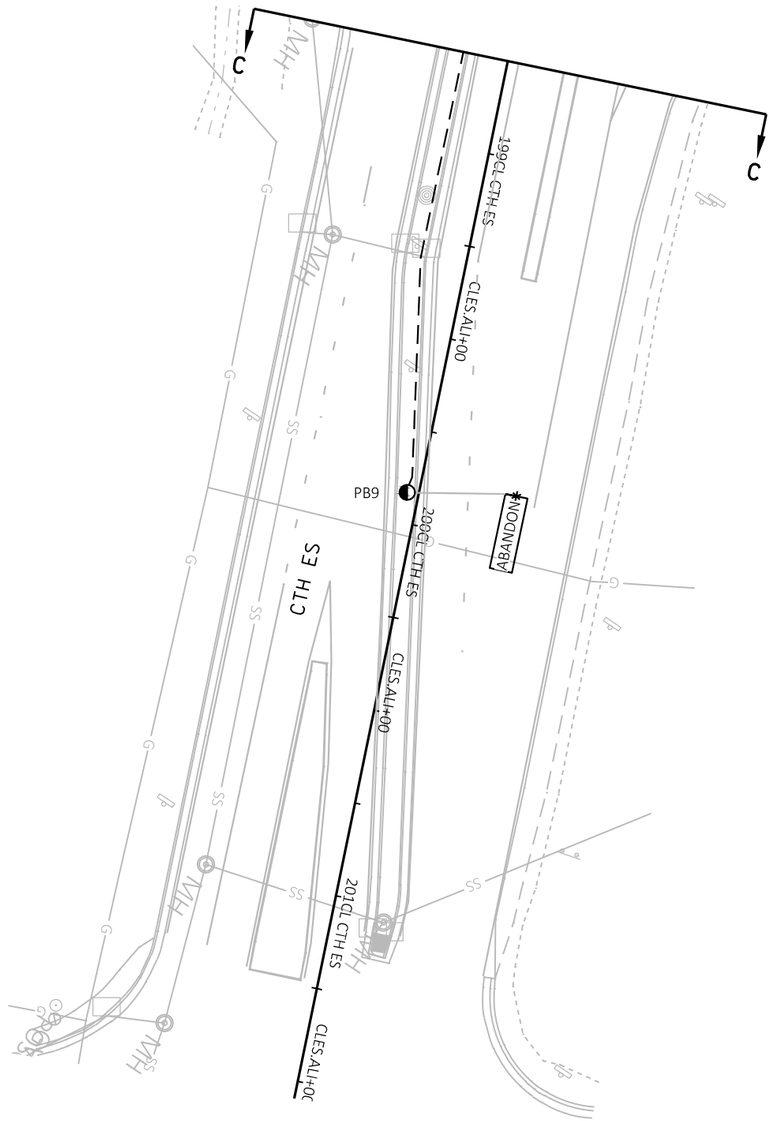
PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 134	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIG\S67-0397\S67-0397_REM_16.DWG
LAYOUT NAME - S67-0397_rem_pg2

PLOT DATE : 1/31/2019 2:08 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

2





TRAFFIC CONTROL SIGNAL
STH 164 & CTH ES
VILLAGE OF BIG BEND
WAUKESHA COUNTY

SIGNAL NO. S67-0397

REGION CONTACT: J. GATES
DESIGNED BY: C. VANDE LEEST
REVISED BY:

PAGE 3 OF 3

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 135	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIG\S67-0397\S67-0397_REM_16.DWG
LAYOUT NAME - S67-0397_rem_pg3

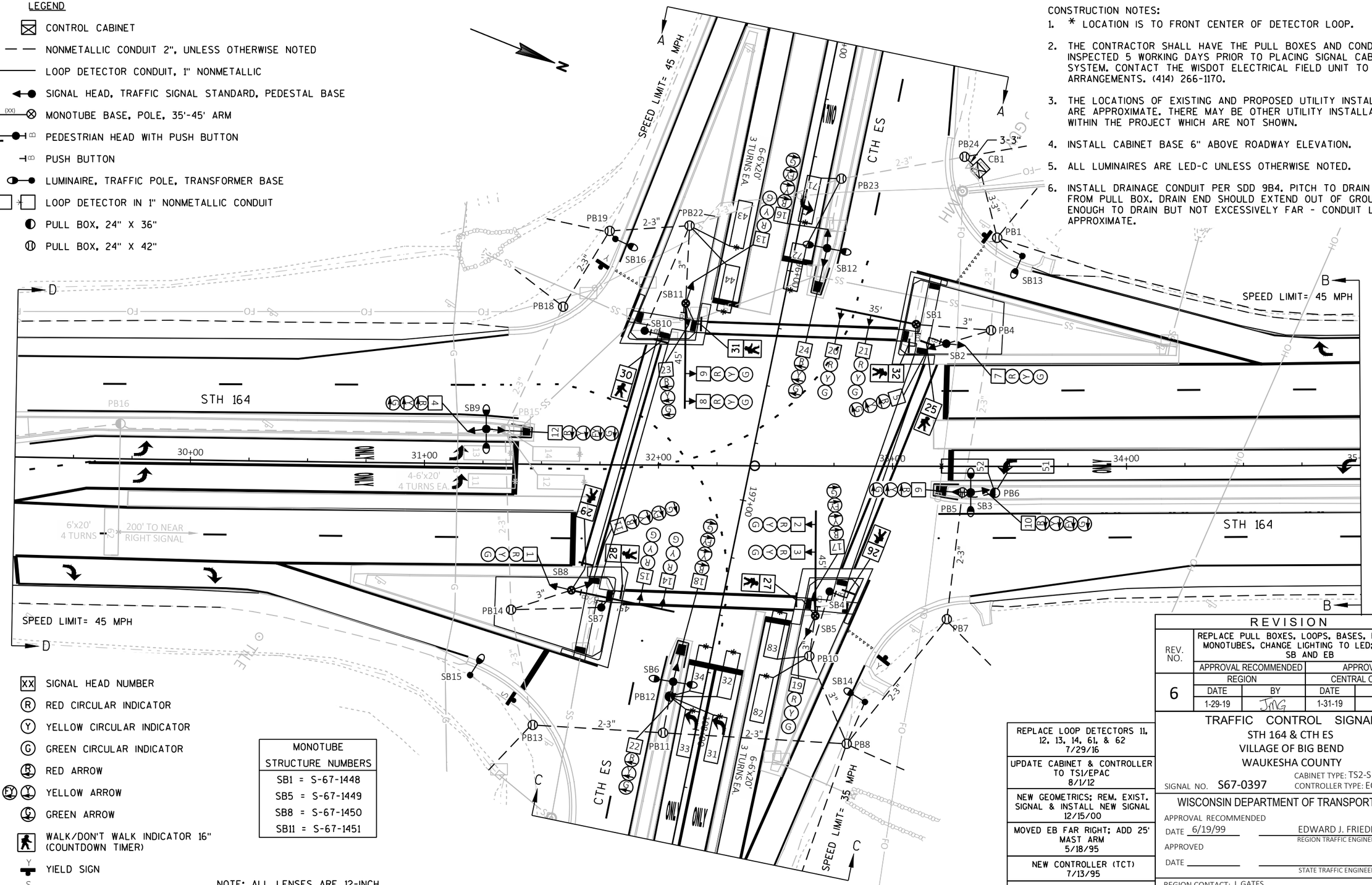
PLOT DATE : 1/31/2019 2:08 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT, 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 35'-45' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"

CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (414) 266-1170.
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. INSTALL CABINET BASE 6" ABOVE ROADWAY ELEVATION.
5. ALL LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.
6. INSTALL DRAINAGE CONDUIT PER SDD 9B4. PITCH TO DRAIN WATER FROM PULL BOX. DRAIN END SHOULD EXTEND OUT OF GROUND ENOUGH TO DRAIN BUT NOT EXCESSIVELY FAR - CONDUIT LENGTH IS APPROXIMATE.



XX SIGNAL HEAD NUMBER
R RED CIRCULAR INDICATOR
Y YELLOW CIRCULAR INDICATOR
G GREEN CIRCULAR INDICATOR
R RED ARROW
FY Y YELLOW ARROW
G GREEN ARROW
WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
Y YIELD SIGN
S STOP SIGN

MONOTUBE STRUCTURE NUMBERS
SB1 = S-67-1448
SB5 = S-67-1449
SB8 = S-67-1450
SB11 = S-67-1451

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

REVISION				
REV. NO.	REPLACE PULL BOXES, LOOPS, BASES, POLES; ADD MONOTUBES, CHANGE LIGHTING TO LED; ADD FYA SB AND EB			
	APPROVAL RECOMMENDED		APPROVED	
6	REGION		CENTRAL OFFICE	
	DATE	BY	DATE	BY
	1-29-19	JMG	1-31-19	JRJ

REPLACE LOOP DETECTORS 11, 12, 13, 14, 61, & 62 7/29/16
UPDATE CABINET & CONTROLLER TO TS1/EPAC 8/1/12
NEW GEOMETRICS; REM. EXIST. SIGNAL & INSTALL NEW SIGNAL 12/15/00
MOVED EB FAR RIGHT; ADD 25' MAST ARM 5/18/95
NEW CONTROLLER (TCT) 7/13/95
TRANSFER FROM COUNTY 6/15/89

TRAFFIC CONTROL SIGNAL
STH 164 & CTH ES
VILLAGE OF BIG BEND
WAUKESHA COUNTY
SIGNAL NO. S67-0397
CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE

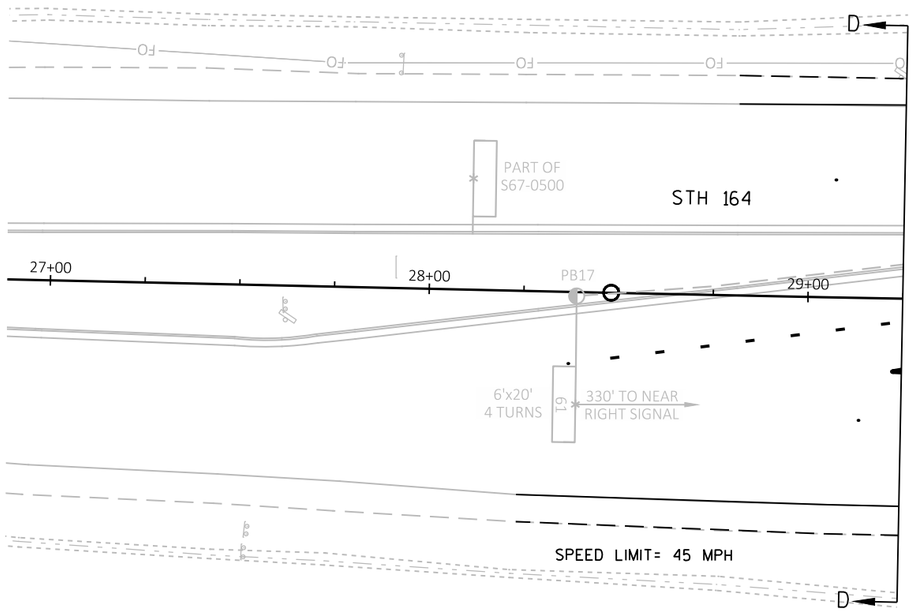
WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVAL RECOMMENDED
DATE 6/19/99 EDWARD J. FRIEDE, REGION TRAFFIC ENGINEER
APPROVED
DATE _____ STATE TRAFFIC ENGINEER

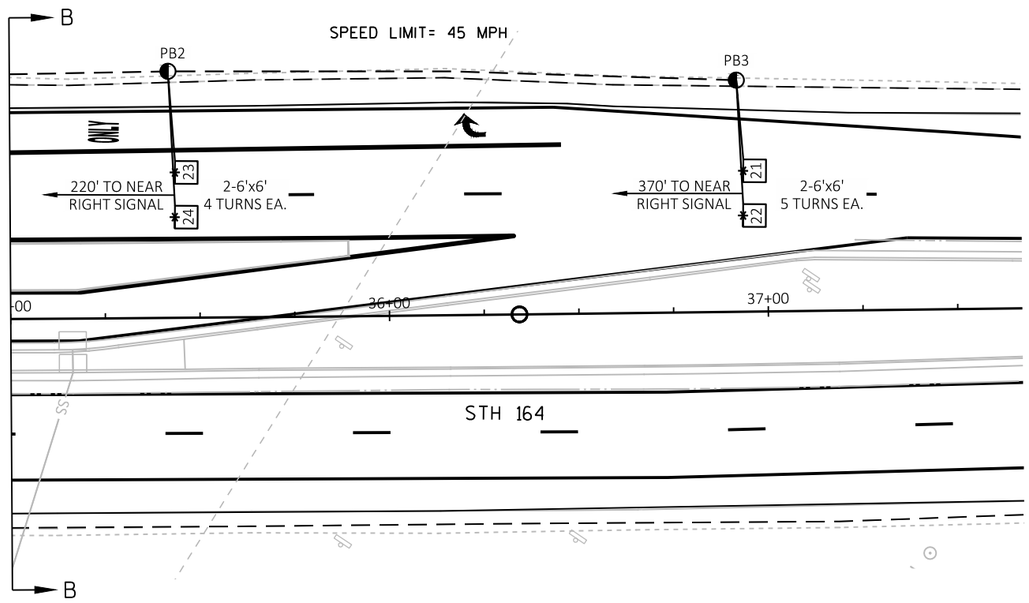
REGION CONTACT: J. GATES
DESIGNED BY: C. VANDE LEEST
REVISED BY:

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 136 E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIG\S67-0397\S67-0397_REV6_16.DWG
LAYOUT NAME - S67-0397_Rev6_pg1
PLOT DATE : 1/31/2019 10:09 AM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2





TRAFFIC CONTROL SIGNAL
STH 164 & CTH ES
VILLAGE OF BIG BEND
WAUKESHA COUNTY

SIGNAL NO. S67-0397

REGION CONTACT: J. GATES
DESIGNED BY: C. VANDE LEEST
REVISED BY:

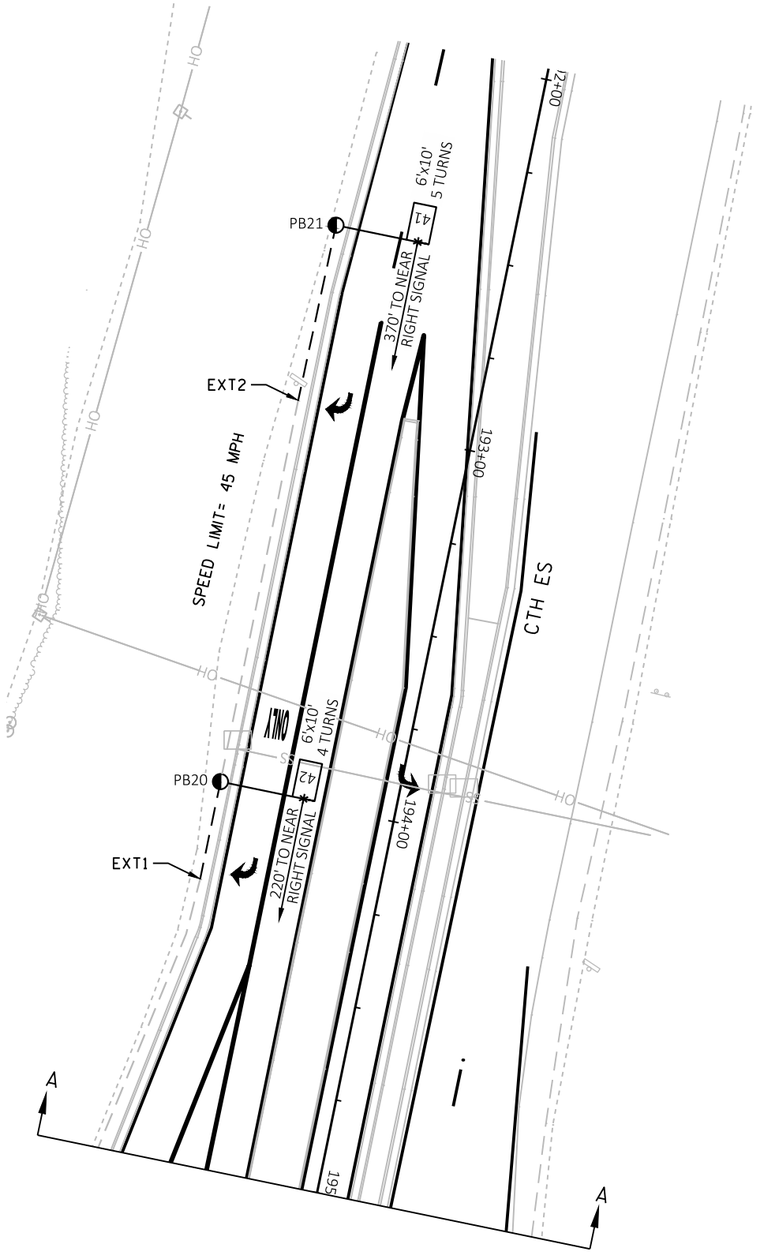
PAGE 2 OF 4

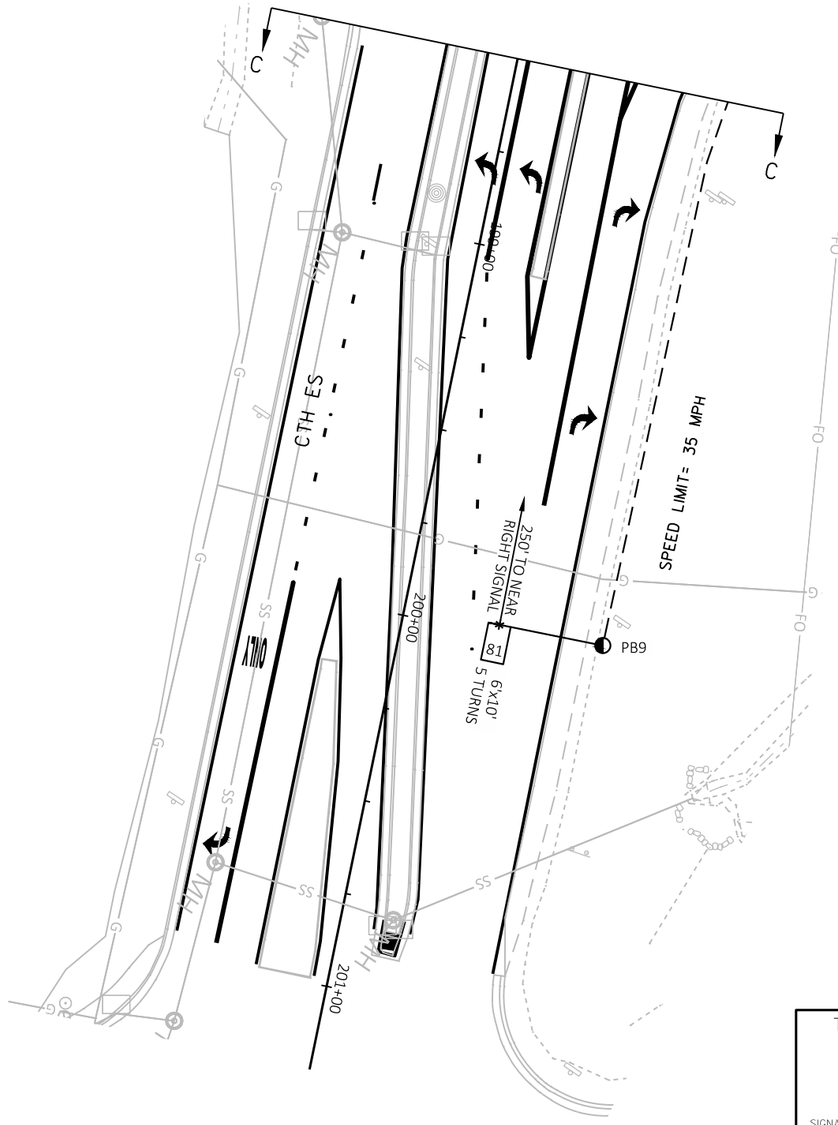
PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 137	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIG\S67-0397\S67-0397_REV6_16.DWG
LAYOUT NAME - S67-0397_Rev6_pg2

PLOT DATE : 1/31/2019 10:09 AM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

2





TRAFFIC CONTROL SIGNAL
STH 164 & CTH ES
VILLAGE OF BIG BEND
WAUKESHA COUNTY

SIGNAL NO. S67-0397

REGION CONTACT: J. GATES
DESIGNED BY: C. VANDE LEEST
REVISED BY:

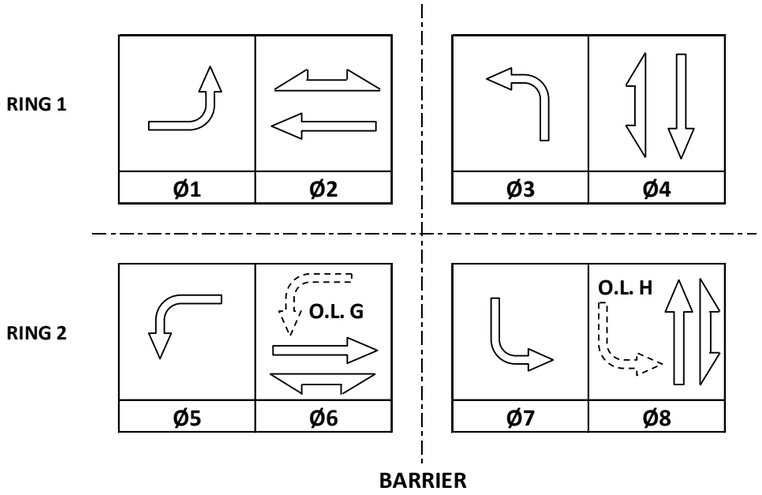
PAGE 3 OF 4

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 138	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIG\S67-0397\S67-0397_REV6_16.DWG
LAYOUT NAME - S67-0397_Rev6_pg3

PLOT DATE : 1/31/2019 10:09 AM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

	HEAD NUMBERS	FLASH
Ø1	4,5,6	R ←
Ø2	7,8,9	R
Ø3	22,23,24	R ←
Ø4	13,14,15	R
Ø5	10,11,12	R ←
Ø6	1,2,3	R
Ø7	16,17,18	R ←
Ø8	19,20,21	R
Ø2P	31,32	
Ø4P	29,30	
Ø6P	27,28	
Ø8P	25,26	
OLE		
OLF		
OLG	10,11,12	-
OLH	16,17,18	-



CONTROLLER LOGIC

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

N

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	X

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS- 67-2057

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

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
CONFIRMATION LIGHTS	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	11	13	21	23	31	33	41	43	51	61	71	81	83				PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	1	2	2	3	3	4	4	5	6	7	8	8				CALLED PHASE
CALL OPTION	X	X	X	X	X	X		X	X	X	X		X				CALL OPTION
DELAY TIME																	DELAY TIME
EXTENTION OPTION	X	X	X	X	X	X	X	X	X	X	X	X	X				EXTENTION OPTION
EXTEND TIME							X					X					EXTEND TIME
USE ADDED INITIAL			X	X						X							USE ADDED INITIAL
CROSS SWITCH PHASE									6		8						CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	12	14	22	24	32	34	42	44	52	62	72	82					PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	1	2	2	3	3	4	4	5	6	7	8					CALLED PHASE
CALL OPTION	X	X	X	X	X	X		X	X	X	X	X					CALL OPTION
DELAY TIME																	DELAY TIME
EXTENTION OPTION	X	X	X	X	X	X	X	X	X	X	X	X					EXTENTION OPTION
EXTEND TIME							X										EXTEND TIME
USE ADDED INITIAL			X	X						X							USE ADDED INITIAL
CROSS SWITCH PHASE									6		8						CROSS SWITCH PHASE

STH 164 & CTH ES
VILLAGE OF BIG BEND
WAUKESHA COUNTY

SIGNAL NO: S67-0397 CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE
DATE: 1/19 PAGE NUMBER: 4 OF 4

FILE NAME: \\dotwkefile1p\N3PUBLIC\SPO\Operations\Signals\Projects\2718-15-00_70 - STH 164\Plans\S67-0397\Permanent Signal\TS2-S_E_FYA_EFGH_Econolite_SEQ.xlsx PLOT DATE: 1/28/2019 PLOT NAME: TS2-S_E_FYA_EFGH_Ecor PLOT BY: _____ PLOT SCALE: 1:1

PROJECT ID:	2718-15-70
INTERSECTION:	STH 164 & CTH ES

Signal Wire Color Coding	BLK - black	RED - red	GRN - green
	WHT - white	BLU - blue	ORG - orange

CB1 TO	AWG14 # OF CONDUCTORS	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	FUTURE APS
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING YELLOW>	D/WALK	WALK		
SB1	12	20	RED	ORG	GRN								
		21	RED	ORG	GRN								
		32								BLK	BLU		
		B										WHT/BLK	
SB2	12	5				RED	ORG	GRN					
		7	RED/BLK	ORG/BLK	GRN/BLK								
		25								BLK	BLU		
		B										WHT/BLK	
SB3	12	6				RED	ORG	GRN					
		10				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB4	7	26								BLK	BLU		
		B										WHT/BLK	
SB5	15	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
		17				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		19	RED/WHT	BLU/WHT	GRN/WHT								
		27								BLK	BLU		
		B										WHT/BLK	
SB6	12	18				RED	ORG	GRN	BLK/WHT				
		22				RED/BLK	ORG/BLK	GRN/BLK					
SB7	7	28								BLK	BLU		
		B										WHT/BLK	
SB8	15	1	RED	ORG	GRN								
		11				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		14	RED/WHT	BLU/WHT	GRN/WHT								
		15	RED/WHT	BLU/WHT	GRN/WHT								
		29								BLK	BLU		
		B										WHT/BLK	
SB9	12	4				RED	ORG	GRN					
		12				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB10	7	30								BLK	BLU		
		B										WHT/BLK	
SB11	15	8	RED	ORG	GRN								
		9	RED	ORG	GRN								
		13	RED/BLK	ORG/BLK	GRN/BLK								
		23				RED/WHT	BLU/WHT	GRN/WHT					
		31								BLK	BLU		
		B										WHT/BLK	
SB12	12	16				RED	ORG	GRN	BLK/WHT				
		24				RED/BLK	ORG/BLK	GRN/BLK					

*Use the white conductor in the cable assembly as the grounded conductor for all traffic signal indications
*Ensure the grounded conductor in the feeder cable and the pole cables are both 18" longer than the ungrounded conductors.
*Reconnect the grounding conductors wherever the circuit has been interrupted to ensure the grounding circuit is complete.

FILE NAME : N:\PDS\C3D\CAD\27181500\SIG\S67-0397\S67-0397_F_cr.pptx PLOT DATE : 10/16/2018 PLOT BY : DOTCMV PLOT NAME : S67-0397_F_cr.pdf PLOT SCALE : 1:1

Equipment Grounding Conductor 10 AWG Green XLP	
From	To
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	CB1

Pull Box Bonding Jumper 10 AWG Green XLP	
From	To
PB1	CB1
PB4	SB1
PB5	SB3
PB7	SB3
PB8	SB5
PB10	SB5
PB11	SB6
PB13	SB8
PB14	SB8
PB15	SB9
PB18	SB9
PB19	SB11
PB22	SB11
PB23	SB12
PB24	CB1

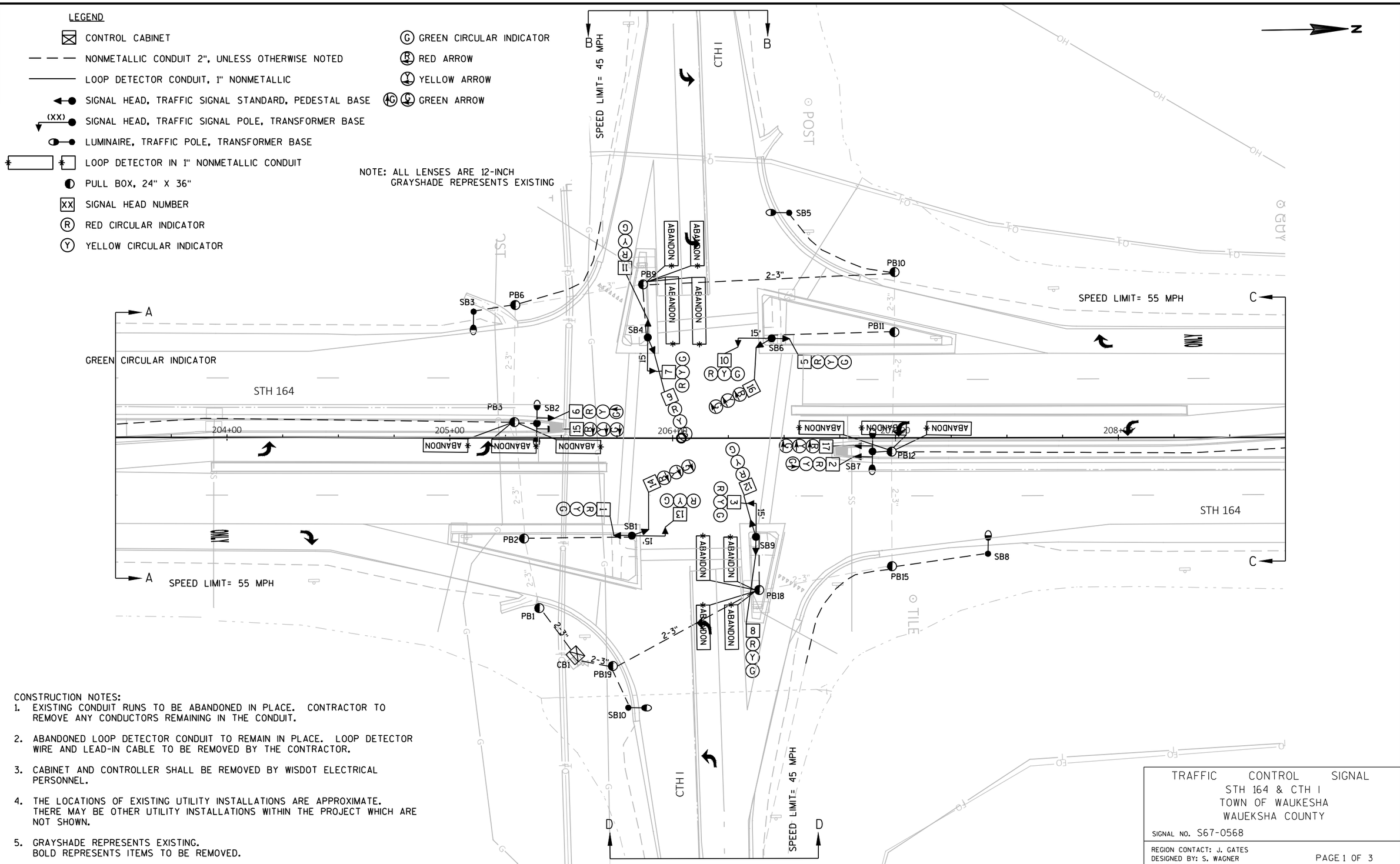
Lighting UF 2-10 AWG Grounded	
From	To
CB1	SB13
SB13	SB3
SB3	SB14
SB14	SB6
SB6	SB15
CB1	SB12
SB12	SB16
SB16	SB9

2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT, 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- XX SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (Y) YELLOW ARROW
- (G) GREEN ARROW

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



CONSTRUCTION NOTES:

1. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRE AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.
3. CABINET AND CONTROLLER SHALL BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.
4. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
5. GRAYSHADE REPRESENTS EXISTING.
   BOLD REPRESENTS ITEMS TO BE REMOVED.

TRAFFIC CONTROL SIGNAL
STH 164 & CTH I
TOWN OF WAUKESHA
WAUEKSHA COUNTY

SIGNAL NO. S67-0568

REGION CONTACT: J. GATES
DESIGNED BY: S. WAGNER
REVISED BY:

PAGE 1 OF 3

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 142	E

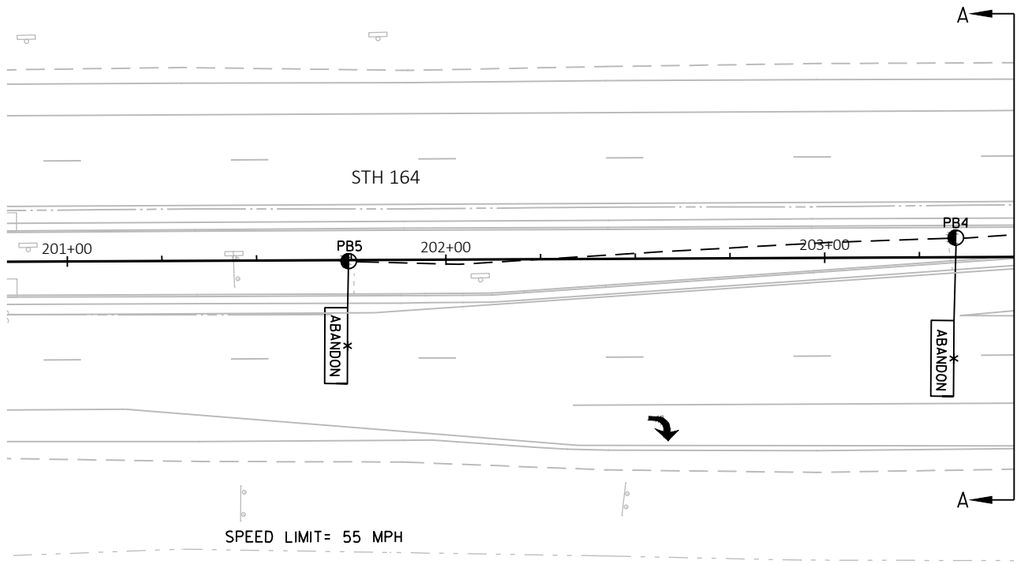
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LAYOUT NAME - S67-0568_REM_pg1

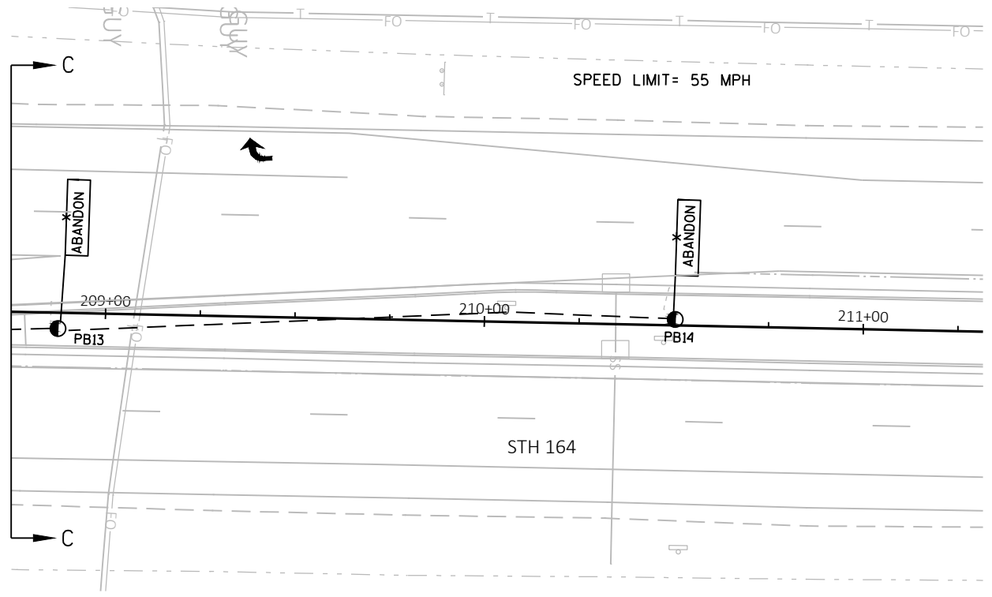
PLOT DATE : 1/31/2019 2:30 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N





TRAFFIC CONTROL SIGNAL
STH 164 & CTH I
TOWN OF WAUKESHA
WAUEKSHA COUNTY

SIGNAL NO. S67-0568

REGION CONTACT: J. GATES
DESIGNED BY: S. WAGNER
REVISED BY:

PAGE 2 OF 3

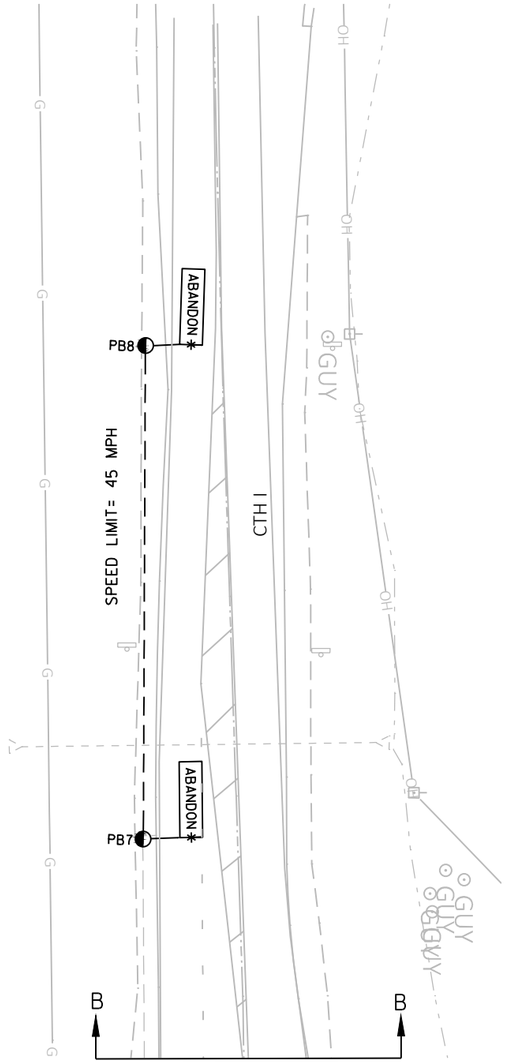
PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 143	E

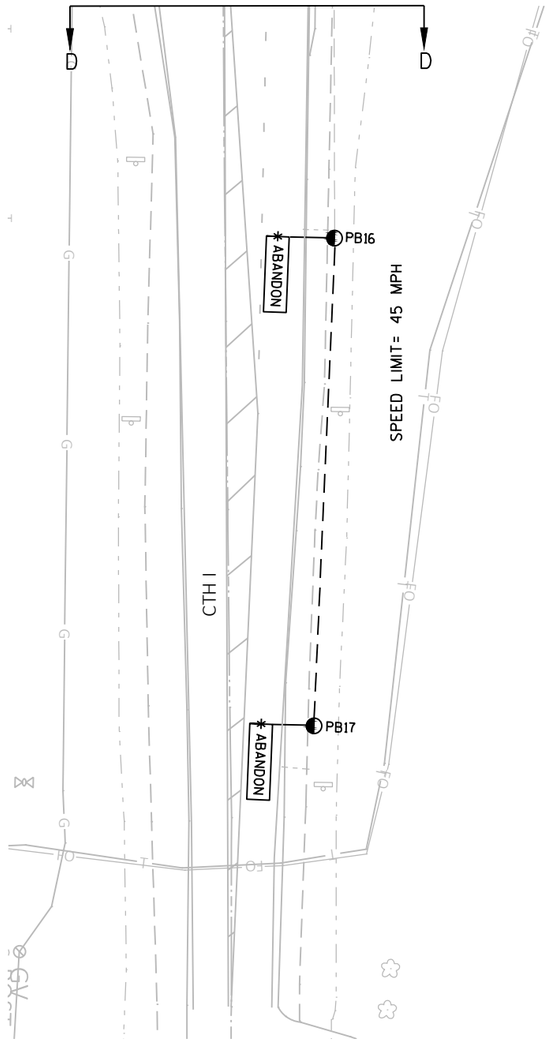
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LAYOUT NAME - S67-0568_PG2

PLOT DATE : 1/31/2019 2:30 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

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TRAFFIC CONTROL SIGNAL
STH 164 & CTH I
TOWN OF WAUKESHA
WAUKESHA COUNTY

SIGNAL NO. S67-0568

REGION CONTACT: J. GATES
DESIGNED BY: S. WAGNER
REVISED BY:

PAGE 3 OF 3

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 144	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIG\S67-0568\S67-0568_REM_16.DWG
LAYOUT NAME - S67-0568_PG3

PLOT DATE : 1/31/2019 2:31 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

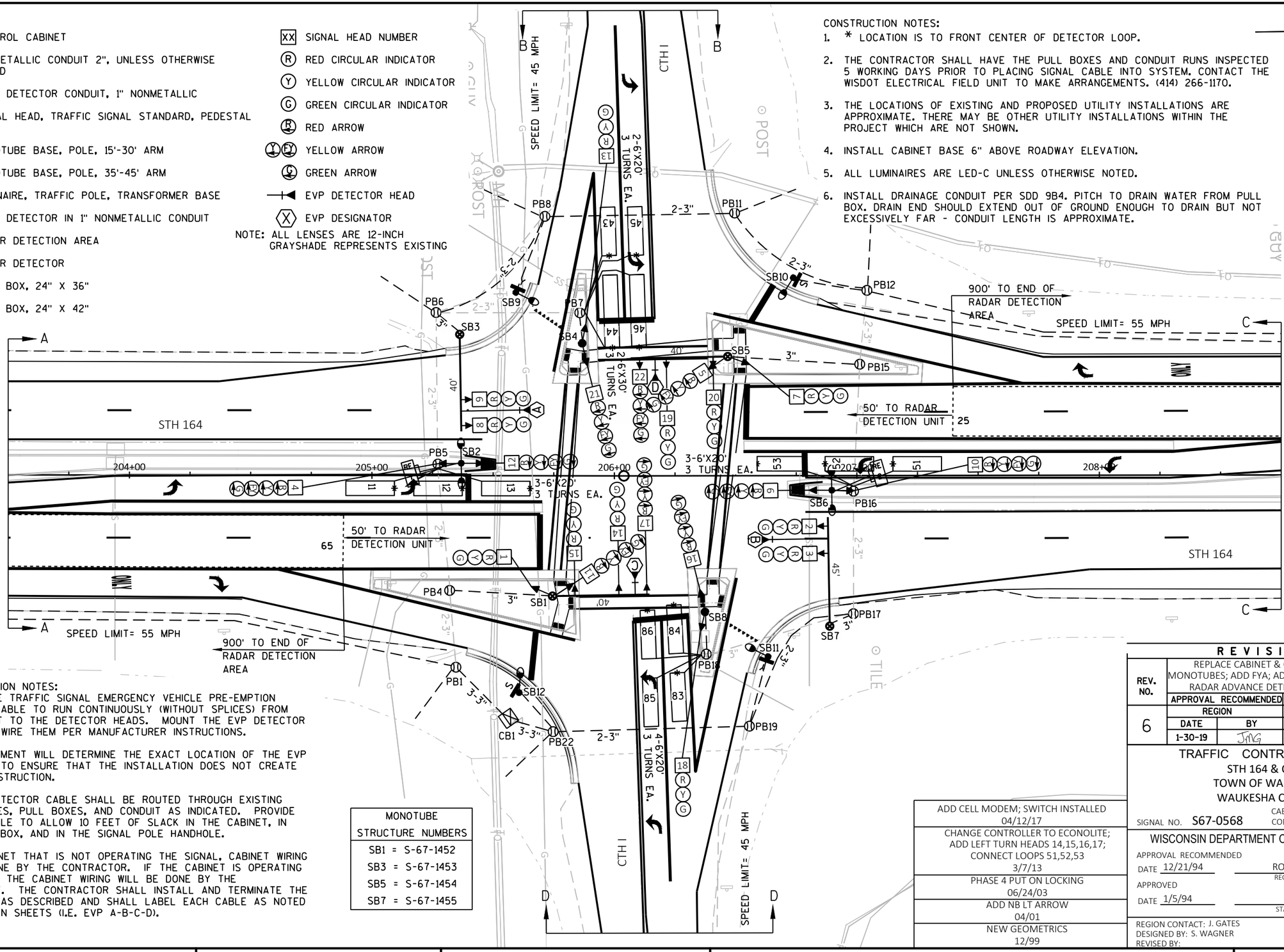
LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT, 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-45' ARM
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- RADAR DETECTION AREA
- RE x RADAR DETECTOR
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY YELLOW ARROW
- G GREEN ARROW
- EVP DETECTOR HEAD
- X EVP DESIGNATOR

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (414) 266-1170.
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. INSTALL CABINET BASE 6" ABOVE ROADWAY ELEVATION.
5. ALL LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.
6. INSTALL DRAINAGE CONDUIT PER SDD 9B4. PITCH TO DRAIN WATER FROM PULL BOX. DRAIN END SHOULD EXTEND OUT OF GROUND ENOUGH TO DRAIN BUT NOT EXCESSIVELY FAR - CONDUIT LENGTH IS APPROXIMATE.



EVP CONSTRUCTION NOTES:

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT THE EVP DETECTOR HEADS AND WIRE THEM PER MANUFACTURER INSTRUCTIONS.
2. THE DEPARTMENT WILL DETERMINE THE EXACT LOCATION OF THE EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ALL EVP DETECTOR CABLE SHALL BE ROUTED THROUGH EXISTING SIGNAL BASES, PULL BOXES, AND CONDUIT AS INDICATED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. FOR A CABINET THAT IS NOT OPERATING THE SIGNAL, CABINET WIRING WILL BE DONE BY THE CONTRACTOR. IF THE CABINET IS OPERATING THE SIGNAL, THE CABINET WIRING WILL BE DONE BY THE DEPARTMENT. THE CONTRACTOR SHALL INSTALL AND TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED ON THE PLAN SHEETS (I.E. EVP A-B-C-D).

MONOTUBE STRUCTURE NUMBERS
SB1 = S-67-1452
SB3 = S-67-1453
SB5 = S-67-1454
SB7 = S-67-1455

ADD CELL MODEM; SWITCH INSTALLED 04/12/17
CHANGE CONTROLLER TO ECONOLITE; ADD LEFT TURN HEADS 14,15,16,17; CONNECT LOOPS 51,52,53 3/7/13
PHASE 4 PUT ON LOCKING 06/24/03
ADD NB LT ARROW 04/01
NEW GEOMETRICS 12/99

REVISION

REV. NO.	REVISION			
	REPLACE CABINET & CONTROLLER; INSTALL MONOTUBES; ADD FYA; ADD LOOPS; ADD EVP; INSTALL RADAR ADVANCE DETECTION FOR NB AND SB			
	APPROVAL RECOMMENDED		APPROVED	
6	REGION		CENTRAL OFFICE	
	DATE	BY	DATE	BY
	1-30-19	JMG	1-31-19	JRJ

TRAFFIC CONTROL SIGNAL
STH 164 & CTH I
TOWN OF WAUKESHA
WAUKESHA COUNTY

SIGNAL NO. S67-0568
CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 12/21/94 — RONALD C. SONTAG, REGION TRAFFIC ENGINEER

APPROVED
DATE 1/5/94 — R. I. MOE, STATE TRAFFIC ENGINEER

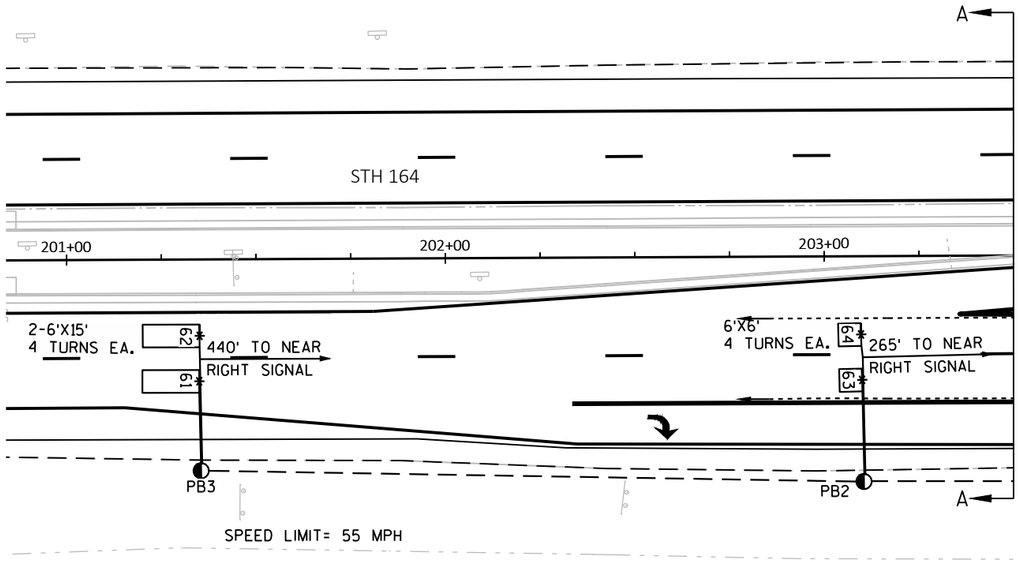
REGION CONTACT: J. GATES
DESIGNED BY: S. WAGNER
REVISED BY:

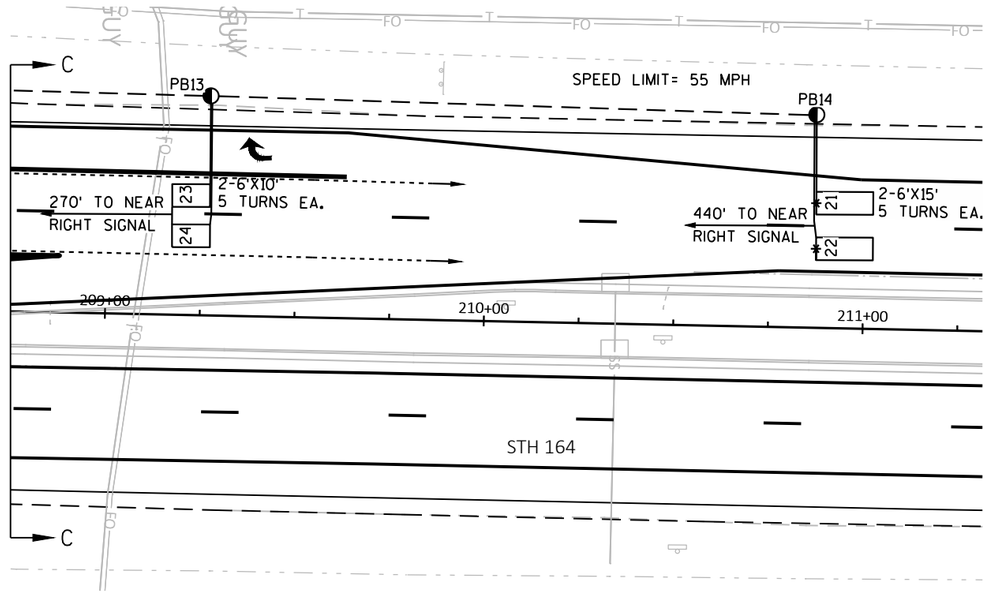
PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 145 E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIG\S67-0568\S67-0568_16.DWG
LAYOUT NAME - S67-0568_pg1
PLOT DATE : 1/31/2019 10:01 AM
PLOT BY : VANDE LEEST, CYNTHIA
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

N





TRAFFIC CONTROL SIGNAL
STH 164 & CTH I
TOWN OF WAUKESHA
WAUEKSHA COUNTY

SIGNAL NO. S67-0568

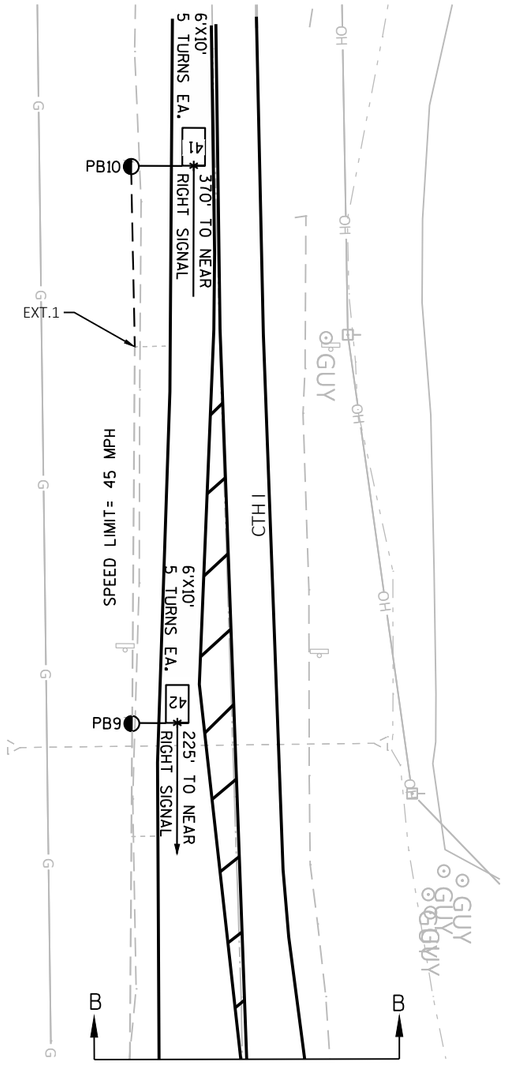
REGION CONTACT: J. GATES
DESIGNED BY: S. WAGNER
REVISED BY:

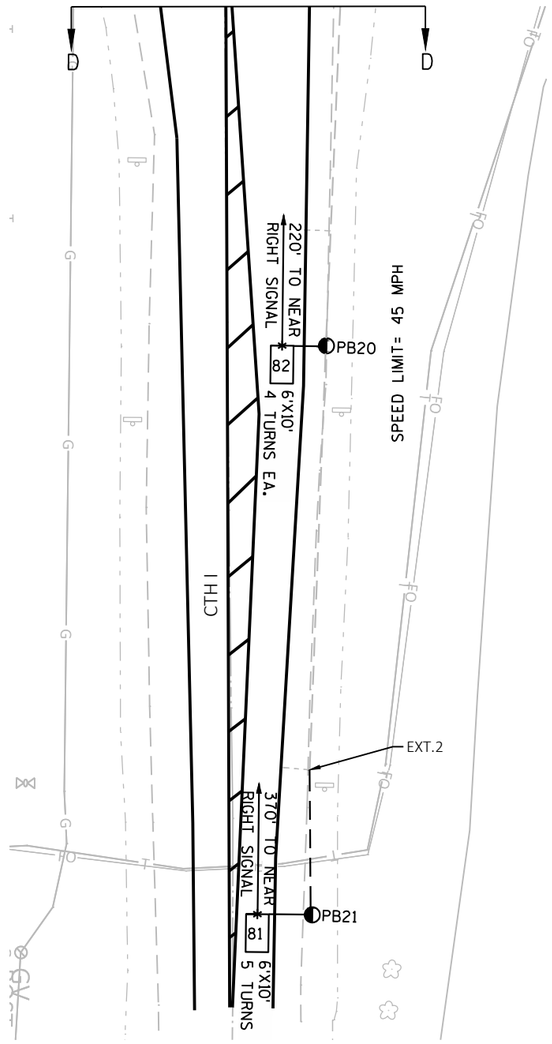
PAGE 2 OF 4

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 146	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIG\S67-0568\S67-0568_16.DWG
LAYOUT NAME - S67-0568_PG2

PLOT DATE : 1/31/2019 10:02 AM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT





N

TRAFFIC CONTROL SIGNAL
STH 164 & CTH I
TOWN OF WAUKESHA
WAUKESHA COUNTY

SIGNAL NO. S67-0568

REGION CONTACT: J. GATES
DESIGNED BY: S. WAGNER
REVISED BY:

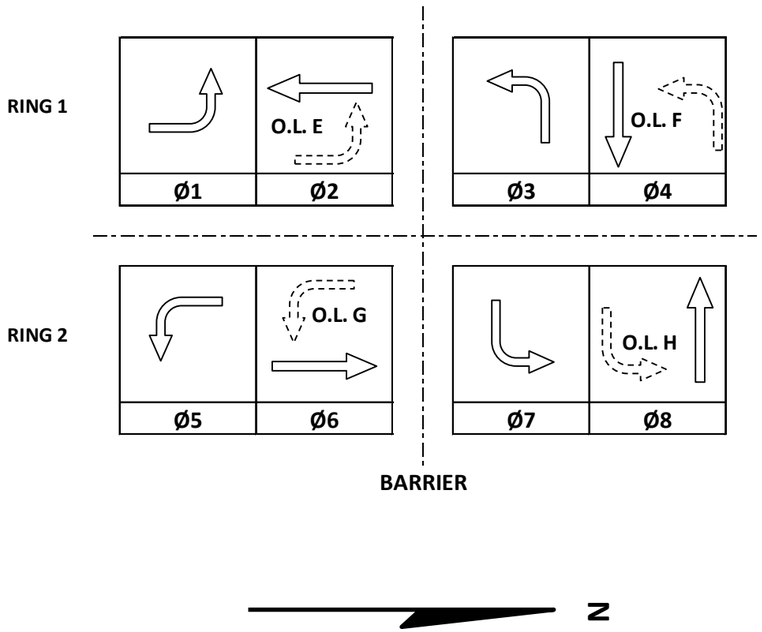
PAGE 3 OF 4

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 147	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIG\S67-0568\S67-0568_16.DWG
LAYOUT NAME - S67-0568_PG3

PLOT DATE : 1/31/2019 10:02 AM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

	HEAD NUMBERS	FLASH
Ø1	4,5,6	R ←
Ø2	7,8,9	R
Ø3	21,22	R ←
Ø4	13,14,15	R
Ø5	10,11,12	R ←
Ø6	1,2,3	R
Ø7	16,17	R ←
Ø8	18,19,20	R
Ø2P		
Ø4P		
Ø6P		
Ø8P		
OLE	4,5,6	-
OLF	21,22	-
OLG	10,11,12	-
OLH	16,17	-



CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE	2+5	6+1	4+7	8+3

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8.

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	X

TYPE OF COORDINATION	
NONE	X
TBC	
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO: S-	
SIGNAL SYSTEM NO: SS-	

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

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	
TOMAR	X
HARDWIRE	
OTHER	
CONFIRMATION LIGHTS	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27		51	49
PLAN LOOP DETECTOR*(S)	11	13	42	44	46	52	81	83	85	21	23	61	63			25
CALLED PHASE	1	1	4	4	4	5	8	8	8	COUNT	COUNT	COUNT	COUNT			2
CALL OPTION	X	X		X	X	X		X	X							X
DELAY TIME					X				X							
EXTENTION OPTION	X	X	X	X	X	X	X	X	X							X
EXTEND TIME			X				X									
USE ADDED INITIAL																
CROSS SWITCH PHASE	2	2				6										

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28		52	50
PLAN LOOP DETECTOR*(S)	12	41	43	45	51	53	82	84	86	22	24	62	64			65
CALLED PHASE	1	4	4	4	5	5	8	8	8	COUNT	COUNT	COUNT	COUNT			6
CALL OPTION	X		X	X	X	X		X	X							X
DELAY TIME				X					X							
EXTENTION OPTION	X	X	X	X	X	X	X	X	X							X
EXTEND TIME		X					X									
USE ADDED INITIAL																
CROSS SWITCH PHASE	2				6	6										

GENERAL NOTES:

1. PHASES 3 & 7 ARE OMITTED DURING NORMAL OPERATION AND ONLY ACTIVATE AS PART OF EVP SEQUENCES C AND D
2.
3.
4.

STH 164 & CTH I
TOWN OF WAUKESHA
WAUKESHA COUNTY
SIGNAL NO: S67-0568 CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE
DATE: 1/19 PAGE NUMBER: 4 OF 4

FILE NAME: \\dotwkefile1p\N3PUBLIC\SPO\Operations\Signals\Projects\2718-15-00_70 - STH 164\Plans\S67-0568\Permanent Signal\TS2-S_E_FYA_EFGH_Econolite_SEQ.xlsx PLOT DATE: 1/29/2019 PLOT NAME: TS2-S_E_FYA_EFGH_Ecor PLOT BY: _____ PLOT SCALE: 1:1

PROJECT ID:	2718-15-70
INTERSECTION:	STH 164 & CTH I

Signal Wire Color Coding	BLK - black	RED - red	GRN - green
	WHT - white	BLU - blue	ORG - orange

CB1 TO	AWG14 # OF CONDUCTORS	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	FUTURE APS
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING YELLOW>	D/WALK	WALK		
SB1	21	1	RED	ORG	GRN								
		11				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		14	GRN/WHT	ORG/RED	RED/WHT								
		15	GRN/WHT	ORG/RED	RED/WHT								
		17				RED/GRN	ORG/GRN	BLU/RED	BLK/RED				
SB2	12	4				RED	ORG	GRN	BLK/WHT				
		12				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
SB3	7	8	RED	ORG	GRN								
		9	RED	ORG	GRN								
SB4	12	13	RED	ORG	GRN								
		21				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB5	21	5				RED	ORG	GRN	BLK/WHT				
		7	RED/BLK	ORG/BLK	GRN/BLK								
		19	GRN/WHT	ORG/RED	RED/WHT								
		20	GRN/WHT	ORG/RED	RED/WHT								
		22				RED/GRN	ORG/GRN	BLU/RED	BLK/RED				
SB6	12	6				RED	ORG	GRN	BLK/WHT				
		10				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
SB7	7	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
SB8	12	16				RED	ORG	GRN	BLK/WHT				
		18	RED/BLK	ORG/BLK	GRN/BLK								

Equipment Grounding Conductor 10 AWG Green XLP	
From	To
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	CB1

Pull Box Bonding Jumper 10 AWG Green XLP	
From	To
PB1	CB1
PB4	SB1
PB5	SB2
PB6	SB3
PB7	SB4
PB8	SB3
PB11	SB5
PB12	SB5
PB15	SB5
PB16	SB6
PB17	SB7
PB18	SB8
PB19	SB7
PB22	CB1

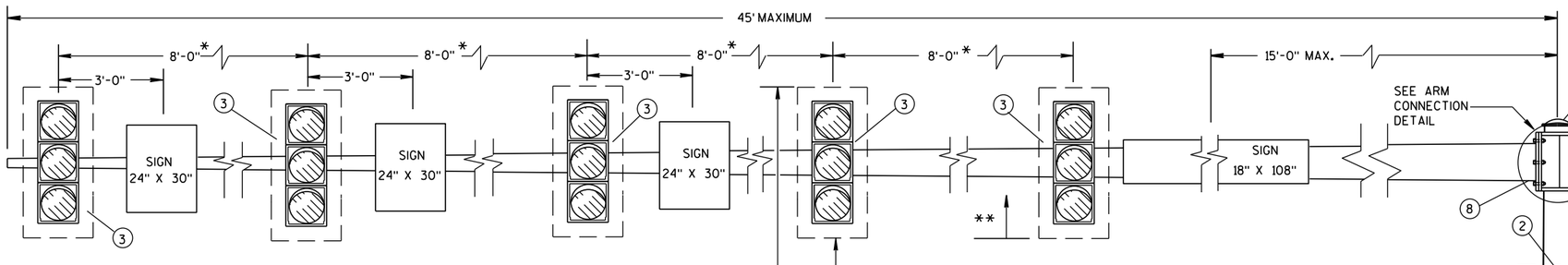
Lighting UF 2-10 AWG Grounded	
From	To
CB1	SB2
SB2	SB9
SB9	SB10
CB1	SB12
SB12	SB11
SB11	SB6

Emergency Vehicle Preemption	
From	To
CB1	SB3 (HEAD A)
CB1	SB7 (HEAD B)
CB1	SB1 (HEAD C)
CB1	SB5 (HEAD D)

Radar Detection Cable	
From	To
CB1	SB2 (RA1)
CB1	SB6 (RA2)

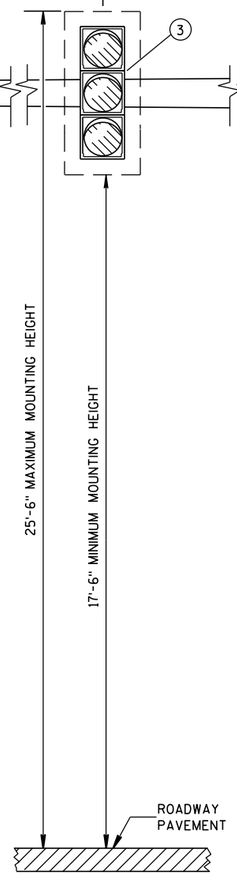
*Use the white conductor in the cable assembly as the grounded conductor for all traffic signal indications
*Ensure the grounded conductor in the feeder cable and the pole cables are both 18" longer than the ungrounded conductors.
*Reconnect the grounding conductors wherever the circuit has been interrupted to ensure the grounding circuit is complete.

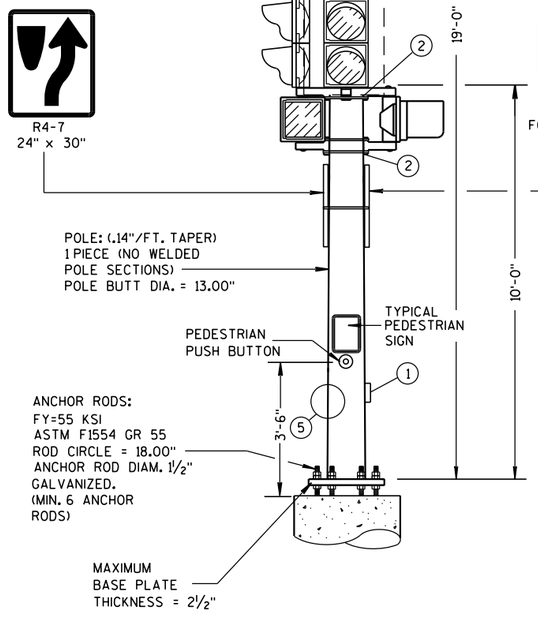
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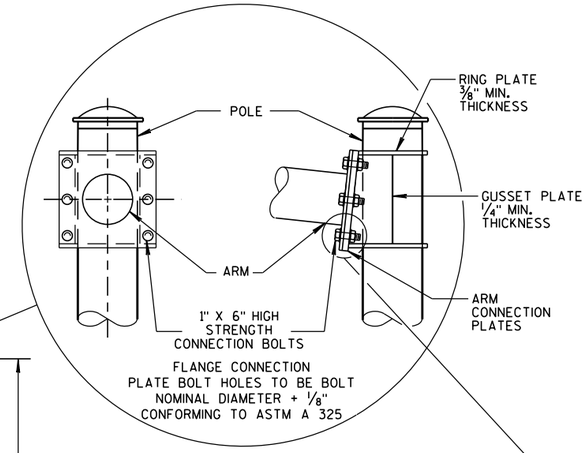


* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

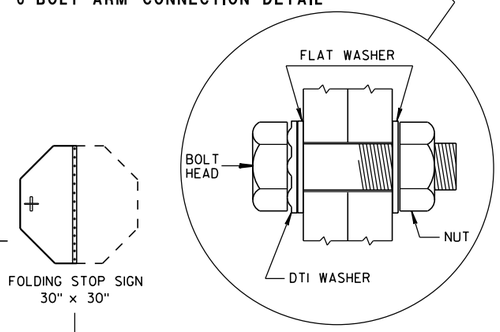
** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.



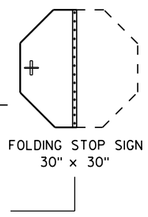


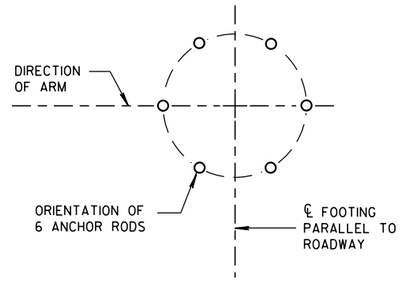


6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL





ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 9 SPECIAL POLE
35'- 45' MONOTUBE ARM

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TYPE 9 & 10 SPECIAL TRAFFIC SIGNAL POLE DETAILS	SHEET 150	E

GENERAL NOTES

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

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THIER OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZE AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF THE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

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

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTOR FITTINGS, UL LISTED FOR ELECTRICAL USE, SHALL BE USED.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

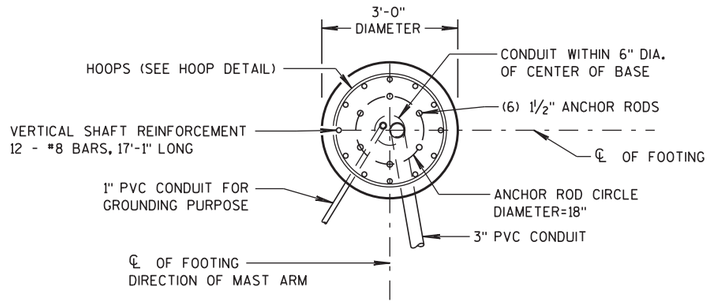
THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1-INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4-FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS.

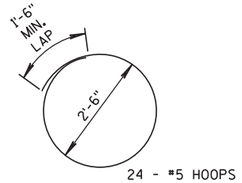
THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVEL WAY SHALL BE 24-INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18-INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36-INCHES, (GREATER THAN 36-INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH THE WRITTEN APPROVAL OF THE ENGINEER.

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

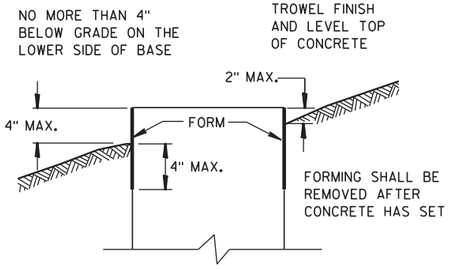
CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATIONS	fy=55,000 p.s.i.
TEMPLATES, ASTM A709 GRADE 36	fy=36,000 p.s.i.



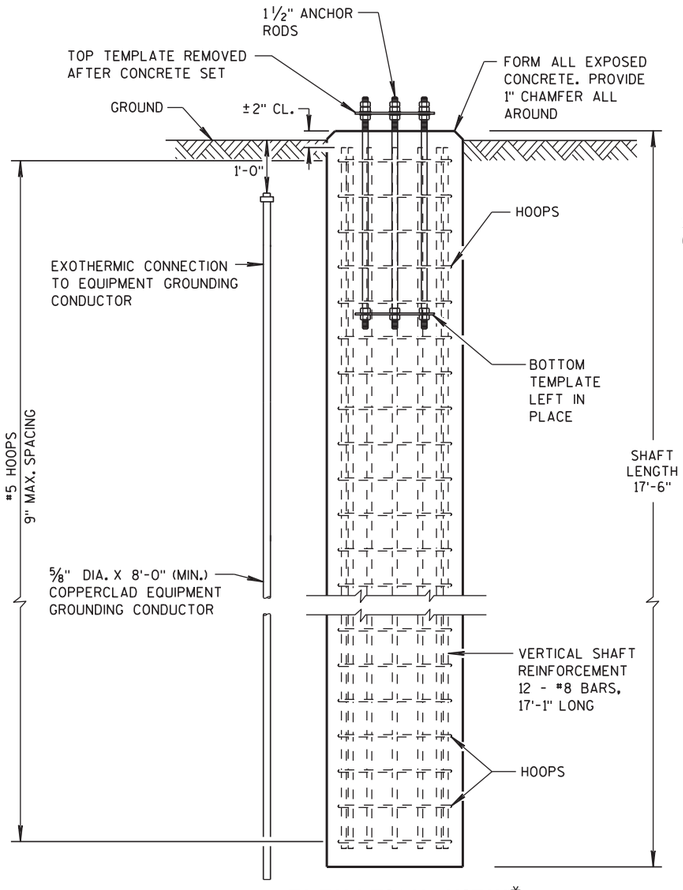
PLAN VIEW



HOOP DETAIL

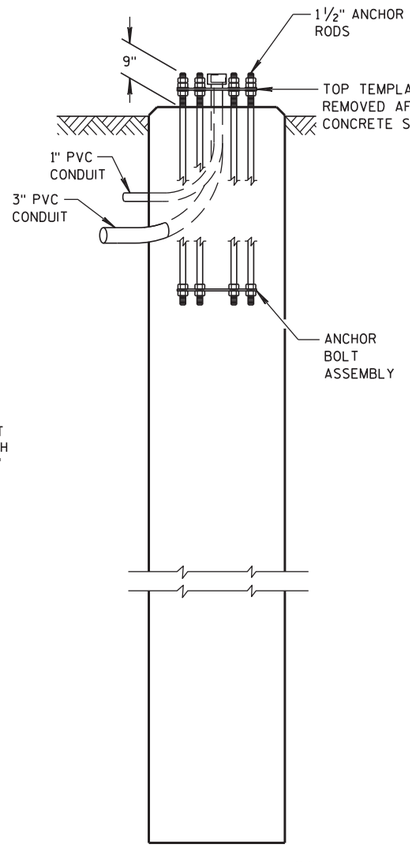


FORMING DETAIL



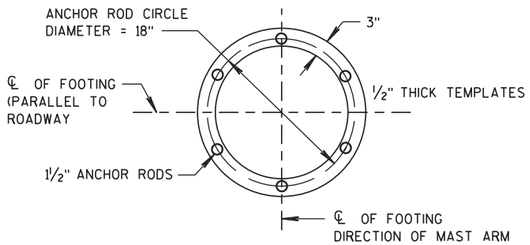
ELEVATION VIEW*

* CONDUITS ARE NOT SHOWN ON THIS VIEW FOR CLARITY

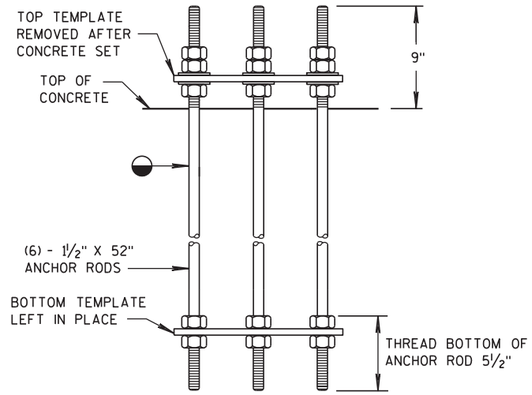


SIDE VIEW**

** HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

(FOR TYPE 9 & 10 SPECIAL POLES)

CONCRETE = 4.6 C.Y.
H.S. REINFORCEMENT = 779 LBS.

TO BE USED WHEN GROUND ELEVATION, AT BASE, EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.

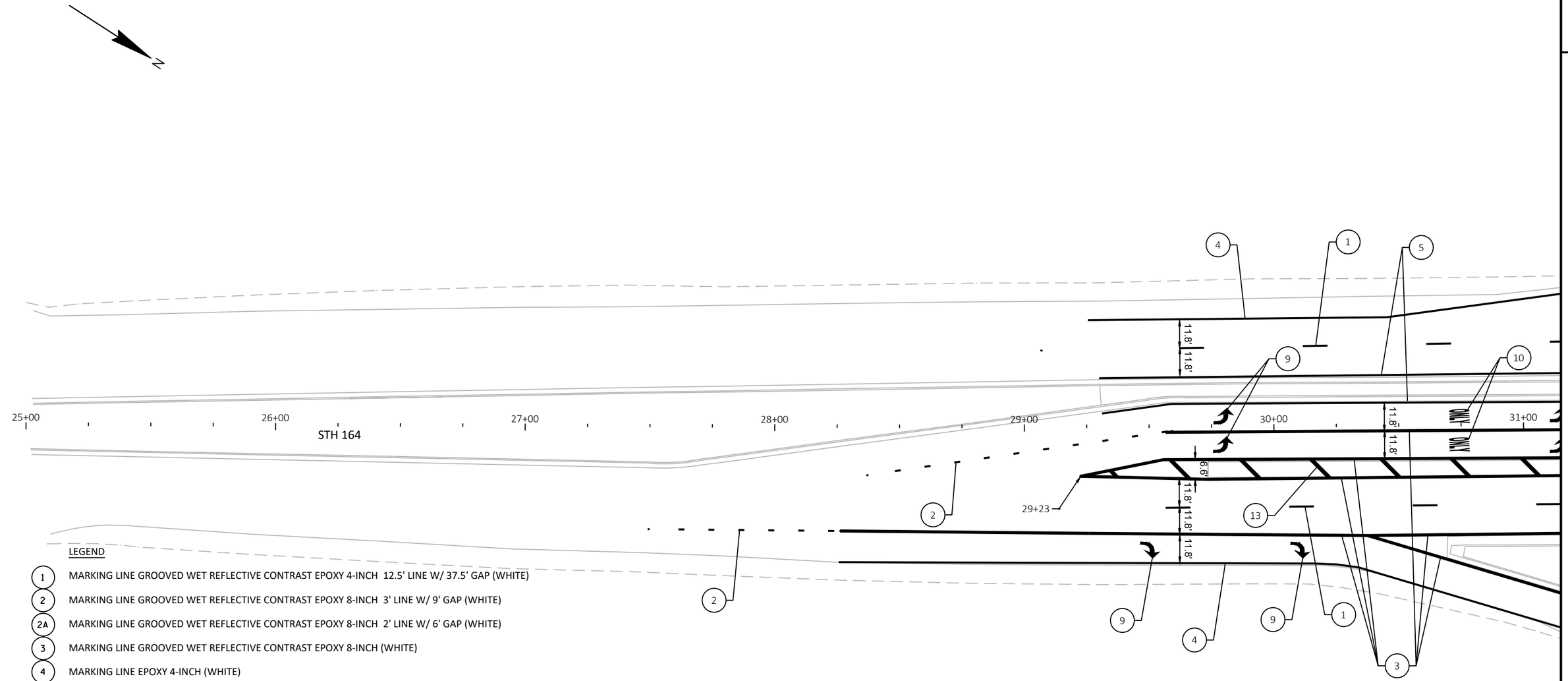
CONCRETE BASE ANCHOR ASSEMBLY

◒ THREAD TOP 9" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5½" FOR 2 NUTS PER ANCHOR ROD. HOT-DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR RODS (ASTM A123) AND HOT-DIP NUTS AND WASHERS (ASTM A153). USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TYPE 9&10 SPECIAL TRAFFIC SIGNAL BASE DETAILS	SHEET E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIG\Construction_Details\T10 Special Base - Construction Detail 20181019.dgn PLOT DATE : 25-JUL-2019 11:24 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 3.433873:1 WISDOT/CADDS SHEET --

2

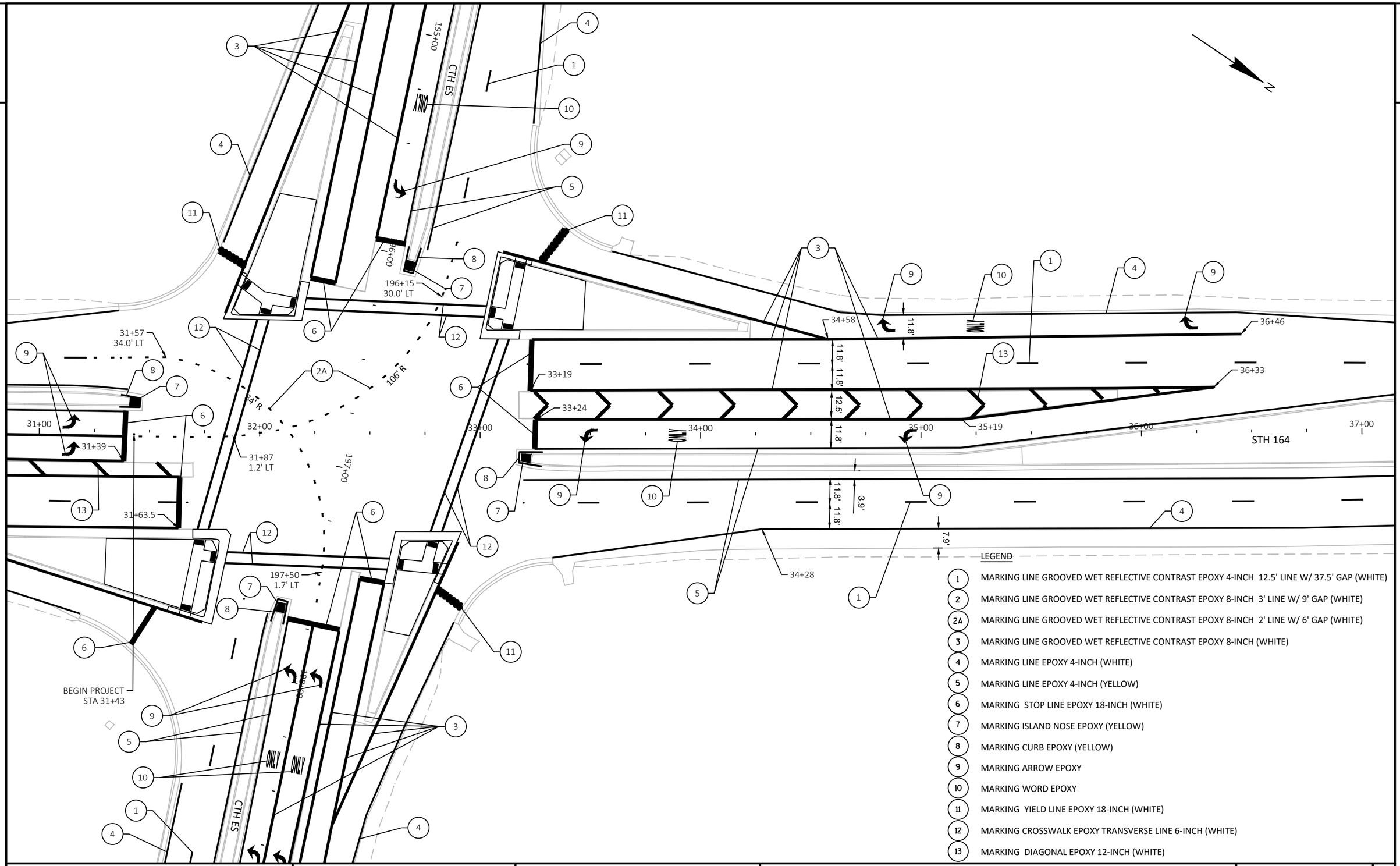


LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
2. MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 3' LINE W/ 9' GAP (WHITE)
2A. MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 2' LINE W/ 6' GAP (WHITE)
3. MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (WHITE)
4. MARKING LINE EPOXY 4-INCH (WHITE)
5. MARKING LINE EPOXY 4-INCH (YELLOW)
6. MARKING STOP LINE EPOXY 18-INCH (WHITE)
7. MARKING ISLAND NOSE EPOXY (YELLOW)
8. MARKING CURB EPOXY (YELLOW)
9. MARKING ARROW EPOXY
10. MARKING WORD EPOXY
11. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
12. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13. MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 152	E

2

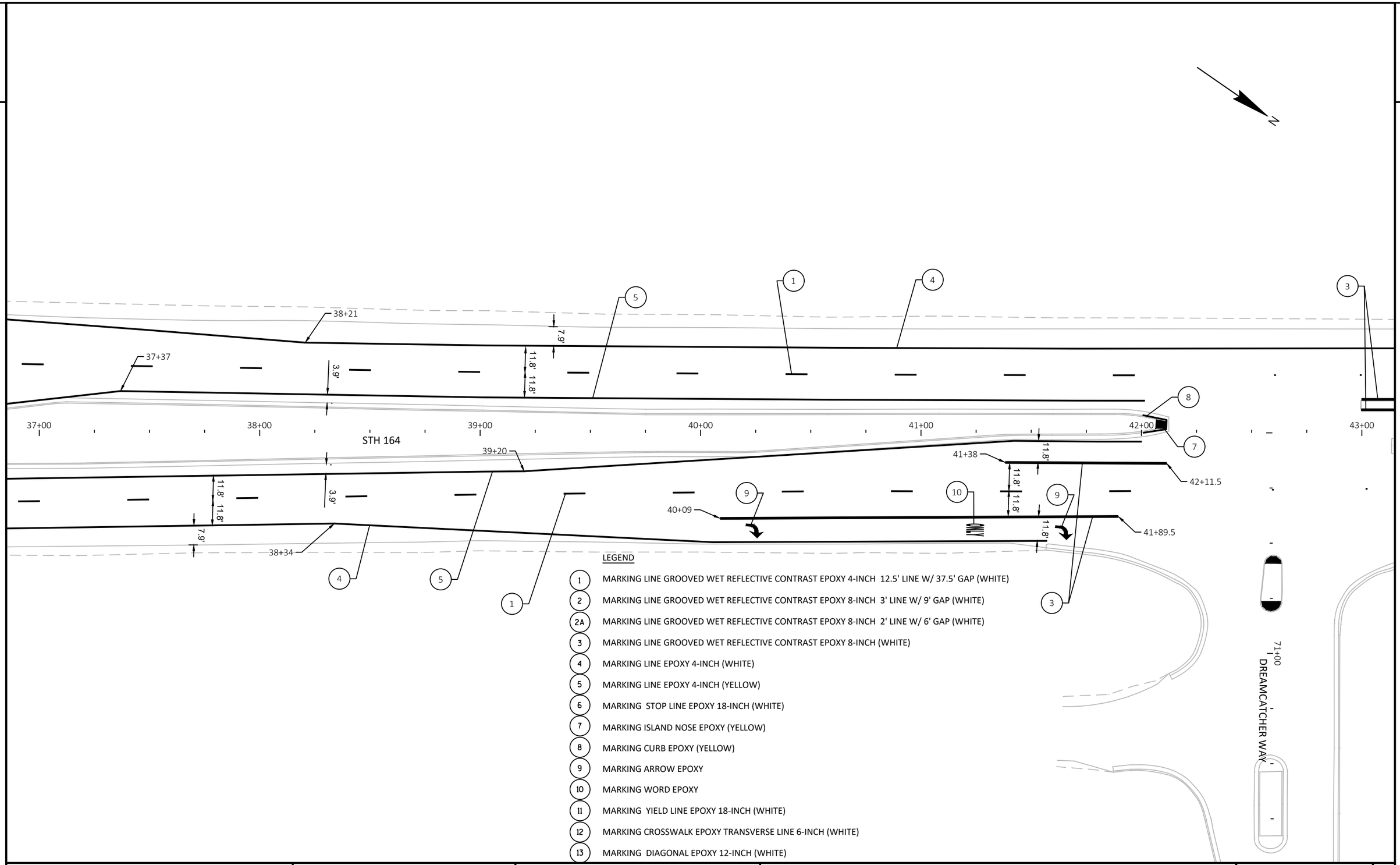


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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 153	E

2

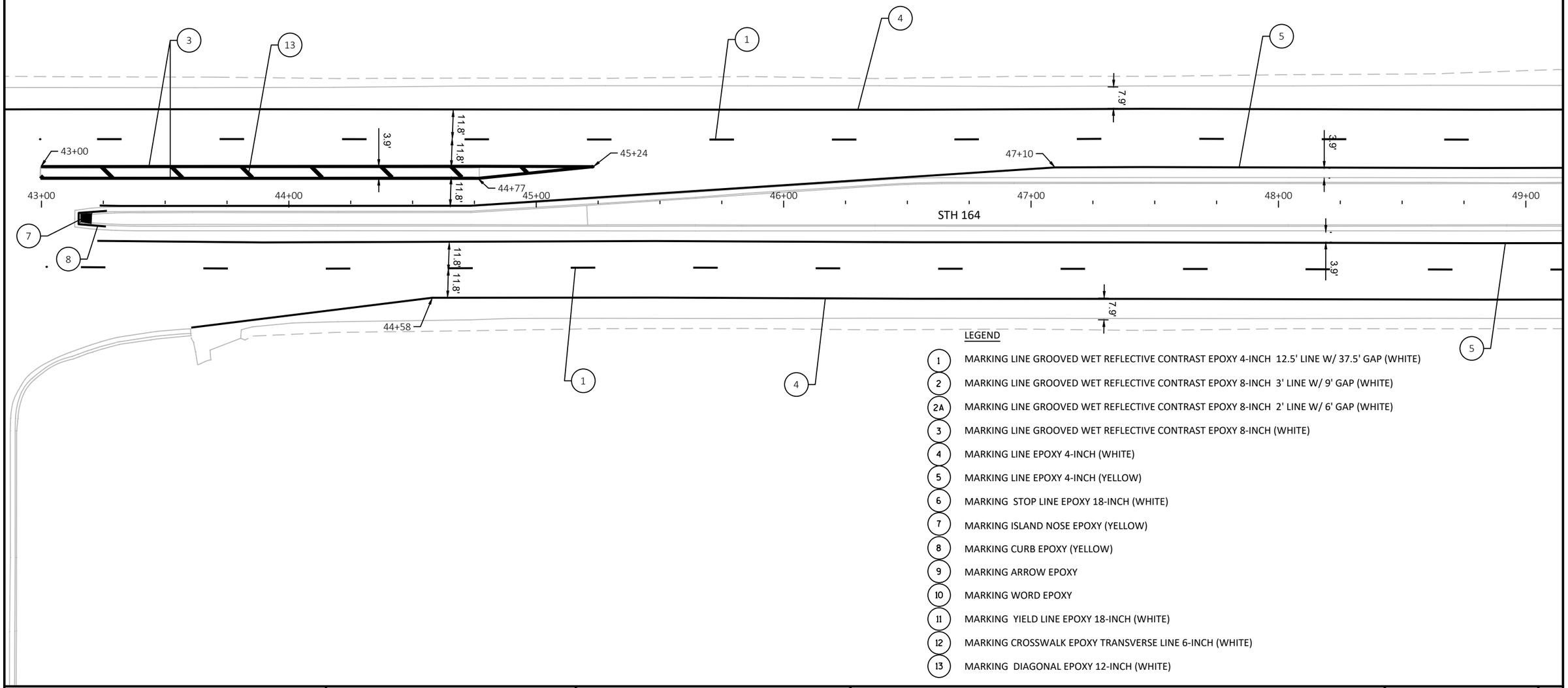


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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 154	E

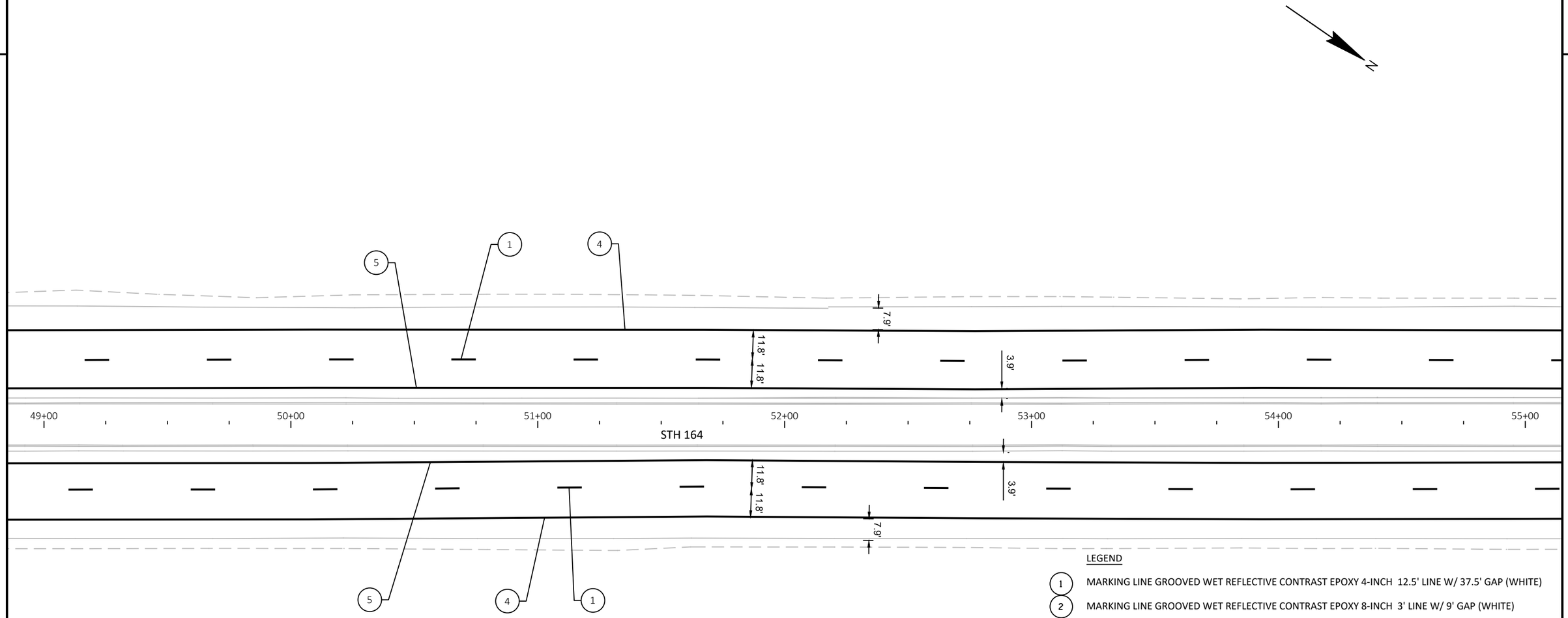
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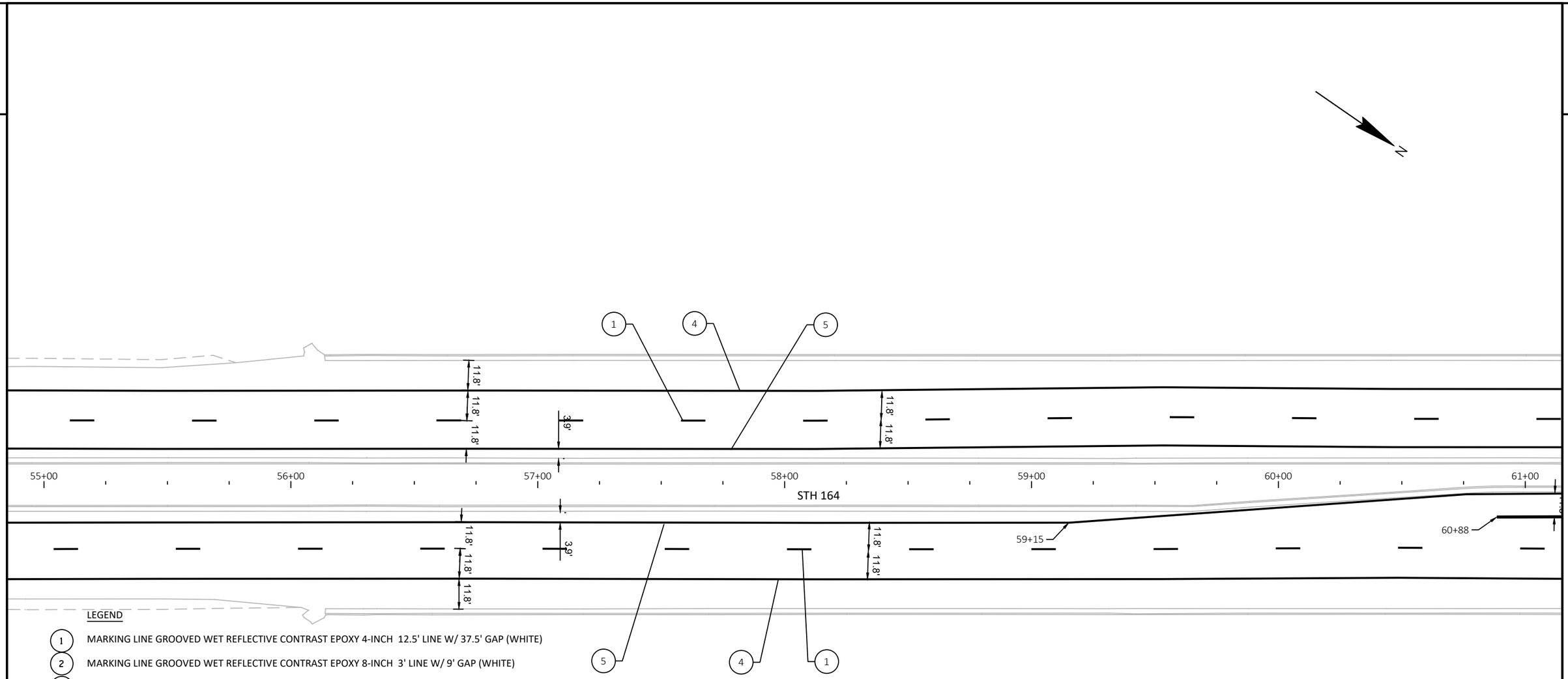
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12	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

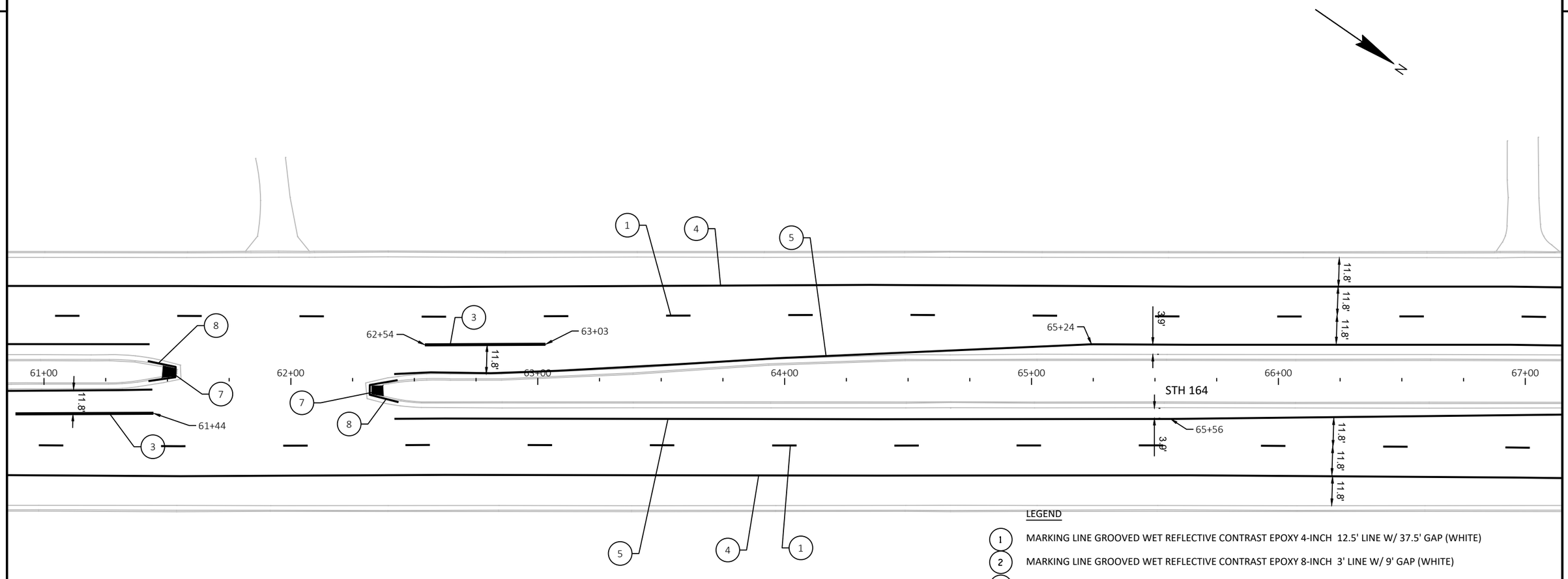
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LEGEND

1	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
2	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 3' LINE W/ 9' GAP (WHITE)
2A	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 2' LINE W/ 6' GAP (WHITE)
3	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (WHITE)
4	MARKING LINE EPOXY 4-INCH (WHITE)
5	MARKING LINE EPOXY 4-INCH (YELLOW)
6	MARKING STOP LINE EPOXY 18-INCH (WHITE)
7	MARKING ISLAND NOSE EPOXY (YELLOW)
8	MARKING CURB EPOXY (YELLOW)
9	MARKING ARROW EPOXY
10	MARKING WORD EPOXY
11	MARKING YIELD LINE EPOXY 18-INCH (WHITE)
12	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

2



LEGEND

1	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
2	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 3' LINE W/ 9' GAP (WHITE)
2A	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 2' LINE W/ 6' GAP (WHITE)
3	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (WHITE)
4	MARKING LINE EPOXY 4-INCH (WHITE)
5	MARKING LINE EPOXY 4-INCH (YELLOW)
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7	MARKING ISLAND NOSE EPOXY (YELLOW)
8	MARKING CURB EPOXY (YELLOW)
9	MARKING ARROW EPOXY
10	MARKING WORD EPOXY
11	MARKING YIELD LINE EPOXY 18-INCH (WHITE)
12	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

2

N

SKYLINE DRIVE

STH 164

67+00
68+00
69+00
70+00
72+00
73+00
69+11
68+88
71+17
72+77
40+61
39+42

3.9'
11.8'
15'
x2

LEGEND

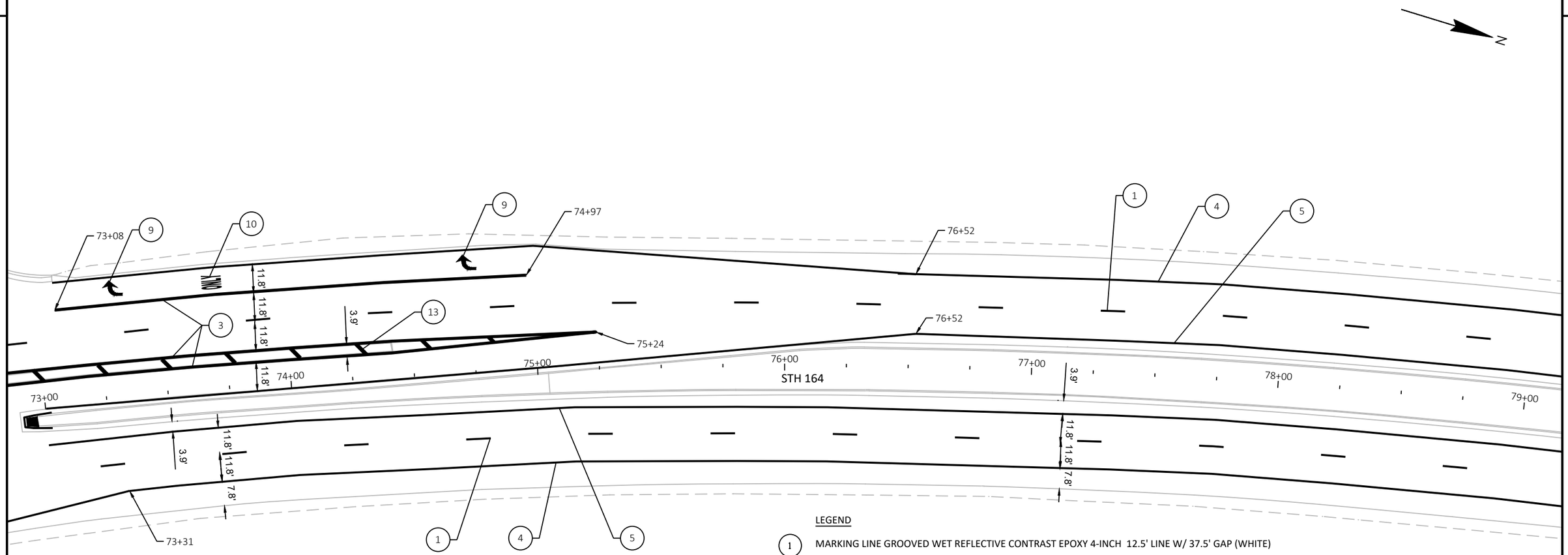
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7	MARKING ISLAND NOSE EPOXY (YELLOW)
8	MARKING CURB EPOXY (YELLOW)
9	MARKING ARROW EPOXY
10	MARKING WORD EPOXY
11	MARKING YIELD LINE EPOXY 18-INCH (WHITE)
12	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 159 E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - PM_7

PLOT DATE : 7/31/2019 5:40 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

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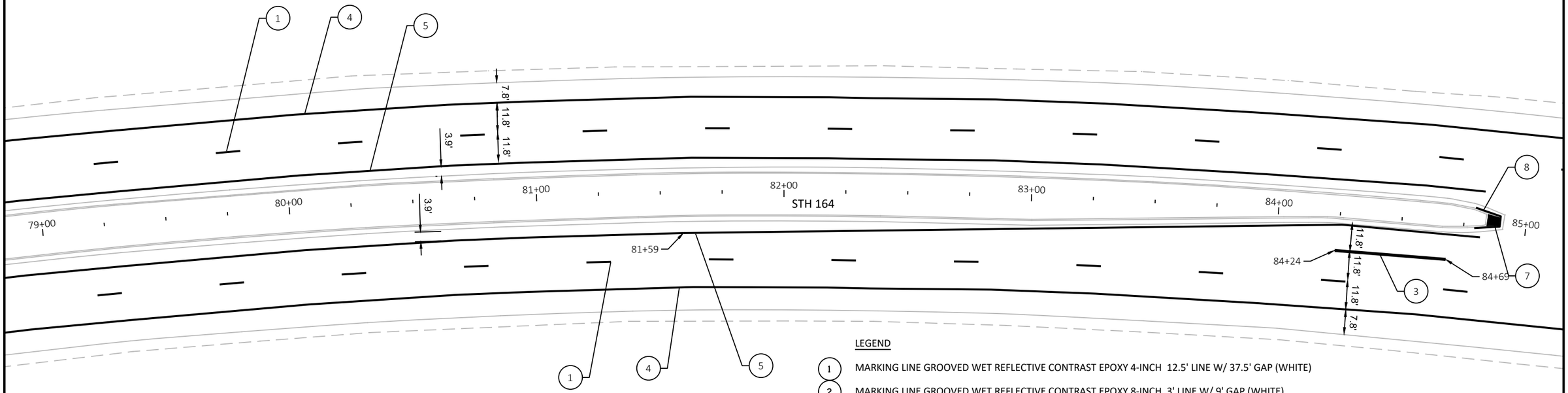


LEGEND

1	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
2	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 3' LINE W/ 9' GAP (WHITE)
2A	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 2' LINE W/ 6' GAP (WHITE)
3	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (WHITE)
4	MARKING LINE EPOXY 4-INCH (WHITE)
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7	MARKING ISLAND NOSE EPOXY (YELLOW)
8	MARKING CURB EPOXY (YELLOW)
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10	MARKING WORD EPOXY
11	MARKING YIELD LINE EPOXY 18-INCH (WHITE)
12	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 160	E

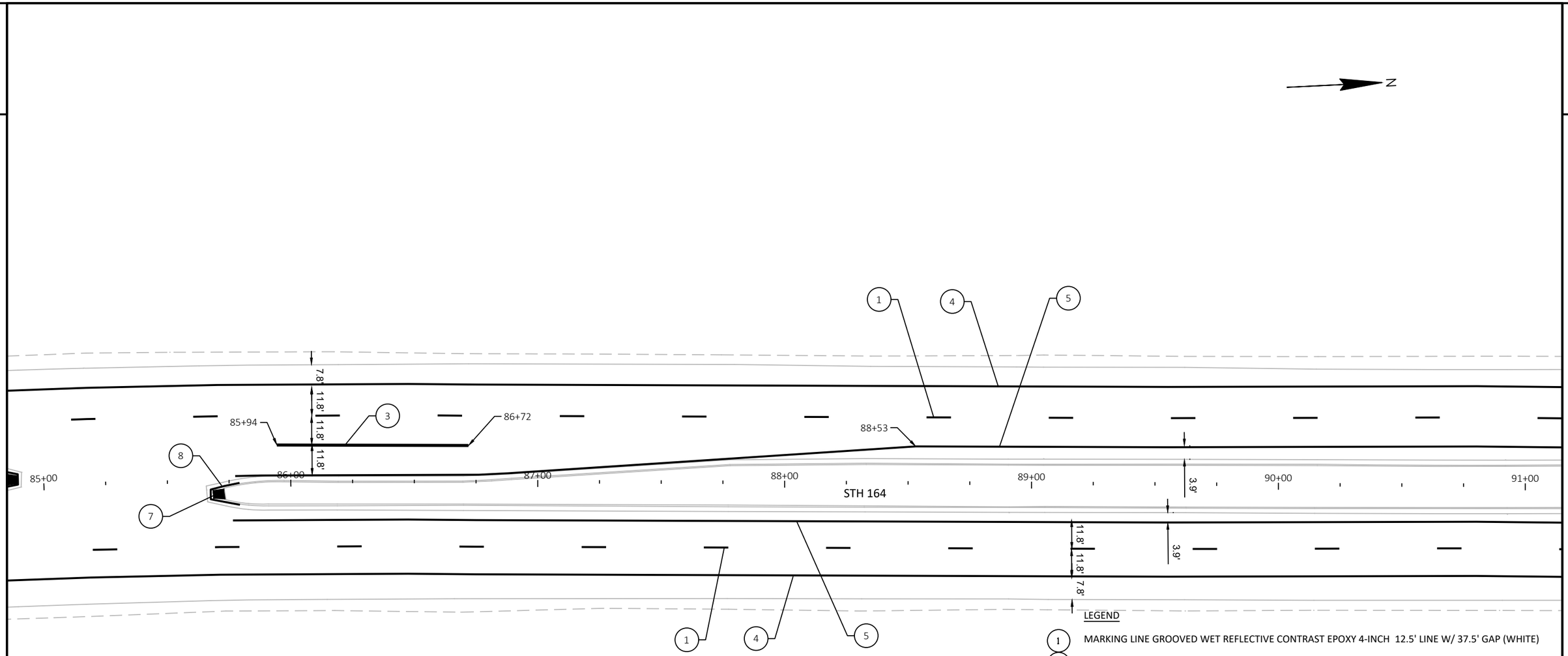
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LEGEND

1	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
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2A	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 2' LINE W/ 6' GAP (WHITE)
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7	MARKING ISLAND NOSE EPOXY (YELLOW)
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10	MARKING WORD EPOXY
11	MARKING YIELD LINE EPOXY 18-INCH (WHITE)
12	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

2



LEGEND

1	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
2	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 3' LINE W/ 9' GAP (WHITE)
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12	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

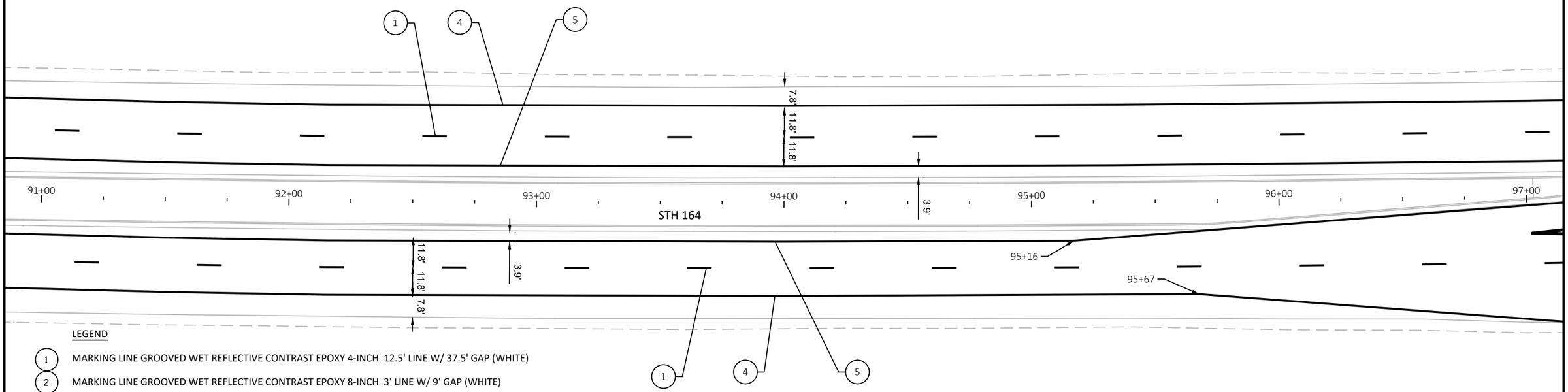
PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 162	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - PM_10
PLOT DATE : 7/31/2019 5:40 PM
PLOT BY : SCHMIDT, JUDENE M
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

N



LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
2. MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 3' LINE W/ 9' GAP (WHITE)
2A. MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 2' LINE W/ 6' GAP (WHITE)
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8. MARKING CURB EPOXY (YELLOW)
9. MARKING ARROW EPOXY
10. MARKING WORD EPOXY
11. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
12. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13. MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 163	E

2

TOWNLINE ROAD

29+00

29+46

5 x2

6

1 4 5

7.8' 11.8' 11.8' 3.9'

98+28

8 7

97+00 98+00 99+00

11.8'

97+02

9 3 10 13

11.8' 11.8' 11.8'

97+16

99+26

9

30+54

6

5 x2

31+00

TOWNLINE ROAD

9 10 9

100+43

11.8' 11.8' 11.8' 3.9'

102+39

3 13

102+56

7 8

100+00 101+00 102+00 103+00

11.8'

STH 164

11.8' 11.8' 11.8'

101+39

1 4 5

N

LEGEND

1 MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)

2 MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 3' LINE W/ 9' GAP (WHITE)

2A MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 2' LINE W/ 6' GAP (WHITE)

3 MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (WHITE)

4 MARKING LINE EPOXY 4-INCH (WHITE)

5 MARKING LINE EPOXY 4-INCH (YELLOW)

6 MARKING STOP LINE EPOXY 18-INCH (WHITE)

7 MARKING ISLAND NOSE EPOXY (YELLOW)

8 MARKING CURB EPOXY (YELLOW)

9 MARKING ARROW EPOXY

10 MARKING WORD EPOXY

11 MARKING YIELD LINE EPOXY 18-INCH (WHITE)

12 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)

13 MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 164	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - PM_12

PLOT DATE : 7/31/2019 5:40 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

1

4

5

103+99

104+32.5

7.8'

11.8'

11.8'

3.9'

103+00

104+00

105+00

106+00

107+00

108+00

109+00

STH 164

11.8'

11.8'

3.9'

7.8'

5

1

4

LEGEND

1 MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)

2 MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 3' LINE W/ 9' GAP (WHITE)

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4 MARKING LINE EPOXY 4-INCH (WHITE)

5 MARKING LINE EPOXY 4-INCH (YELLOW)

6 MARKING STOP LINE EPOXY 18-INCH (WHITE)

7 MARKING ISLAND NOSE EPOXY (YELLOW)

8 MARKING CURB EPOXY (YELLOW)

9 MARKING ARROW EPOXY

10 MARKING WORD EPOXY

11 MARKING YIELD LINE EPOXY 18-INCH (WHITE)

12 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)

13 MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 165	E

2

N

1 4 5

7.8'
11.8'
11.8'
3.9'

109+00 110+00 111+00 112+00

STH 164

8 7

11.8'

111+63 112+15

3

109+97

11.8'
11.8'
7.8'

3

113+58 115+07

11.8'

7

113+00 114+00 115+00

8

3.9'

6

60+50

113+85

4 5 1

5

x2

61+00

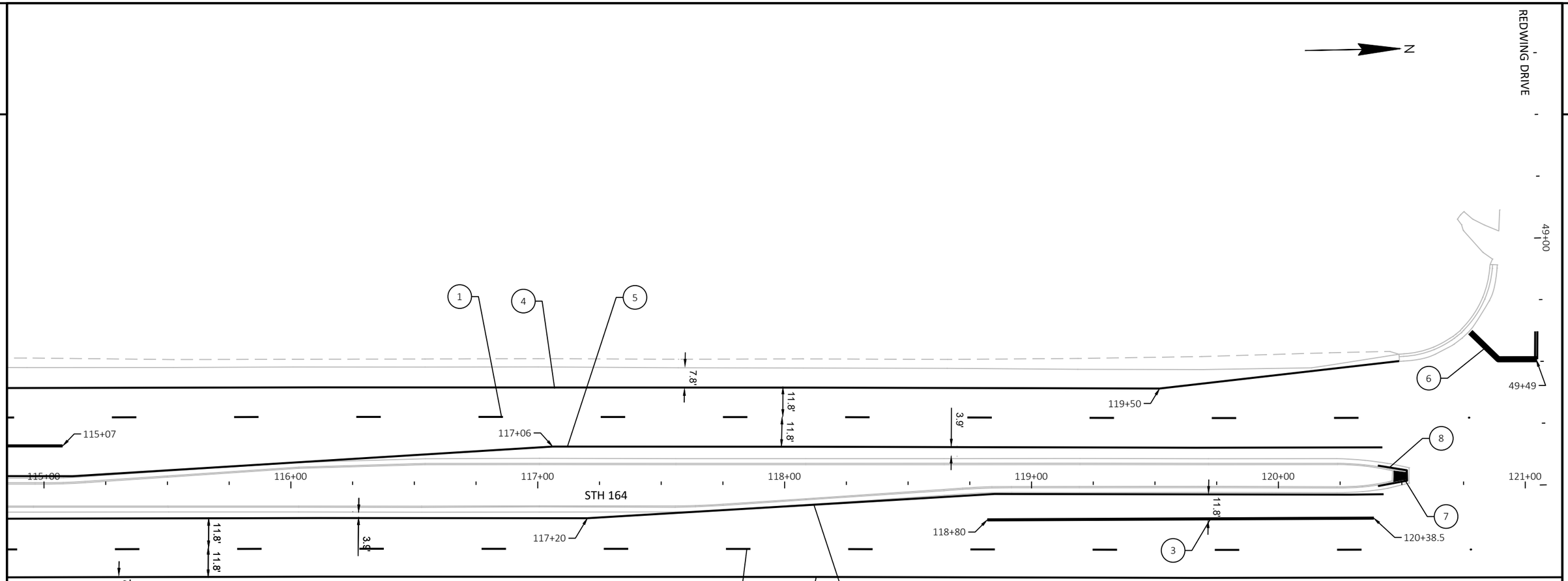
COYOTE CROSSING

LEGEND

1	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
2	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 3' LINE W/ 9' GAP (WHITE)
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10	MARKING WORD EPOXY
11	MARKING YIELD LINE EPOXY 18-INCH (WHITE)
12	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 166	E

2



LEGEND

1	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
2	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 3' LINE W/ 9' GAP (WHITE)
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12	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 167	E

2

REDWING DRIVE

N

49+00

49+49

6

121+80

122+33

3

11.8'

121+00

122+00

123+00

124+00

125+00

126+00

127+00

STH 164

7

8

124+25

124+00

1

4

5

7.8'

11.8'

11.8'

3.9'

11.8'

11.8'

3.9'

7.8'

1

4

5

LEGEND

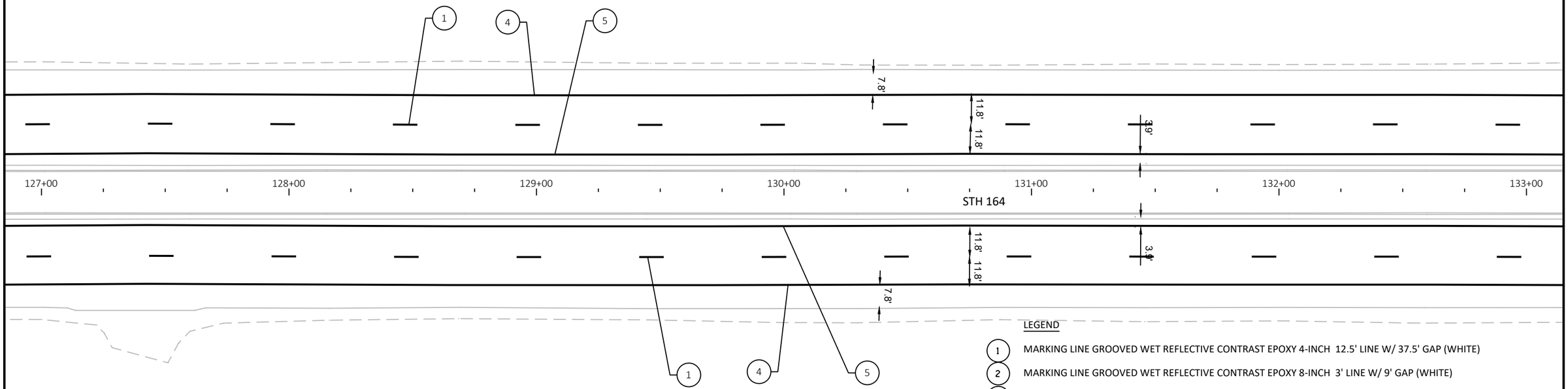
1	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
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12	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 168	E

2

2

N



LEGEND

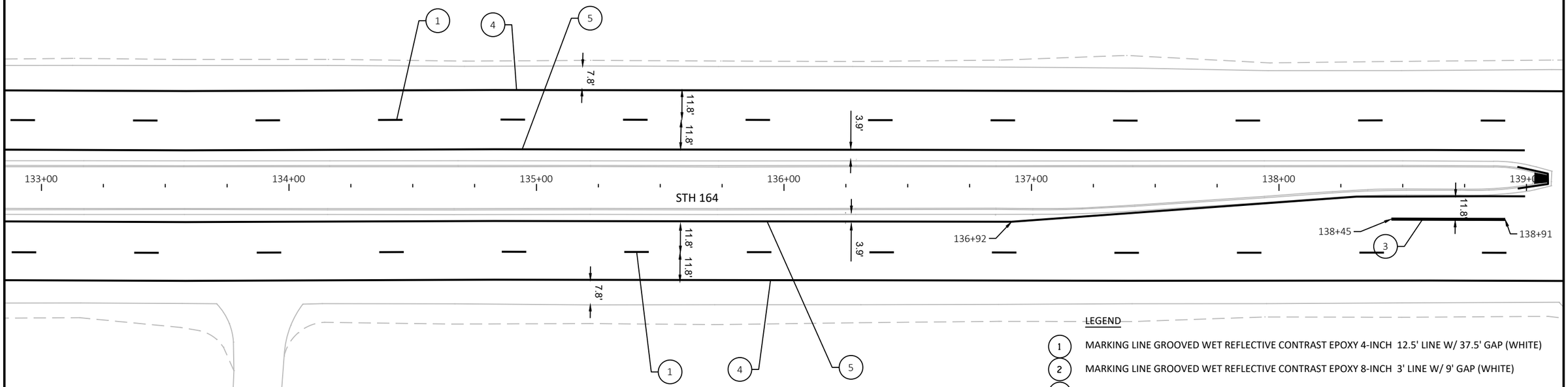
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13. MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 169	E

2

2

N



LEGEND

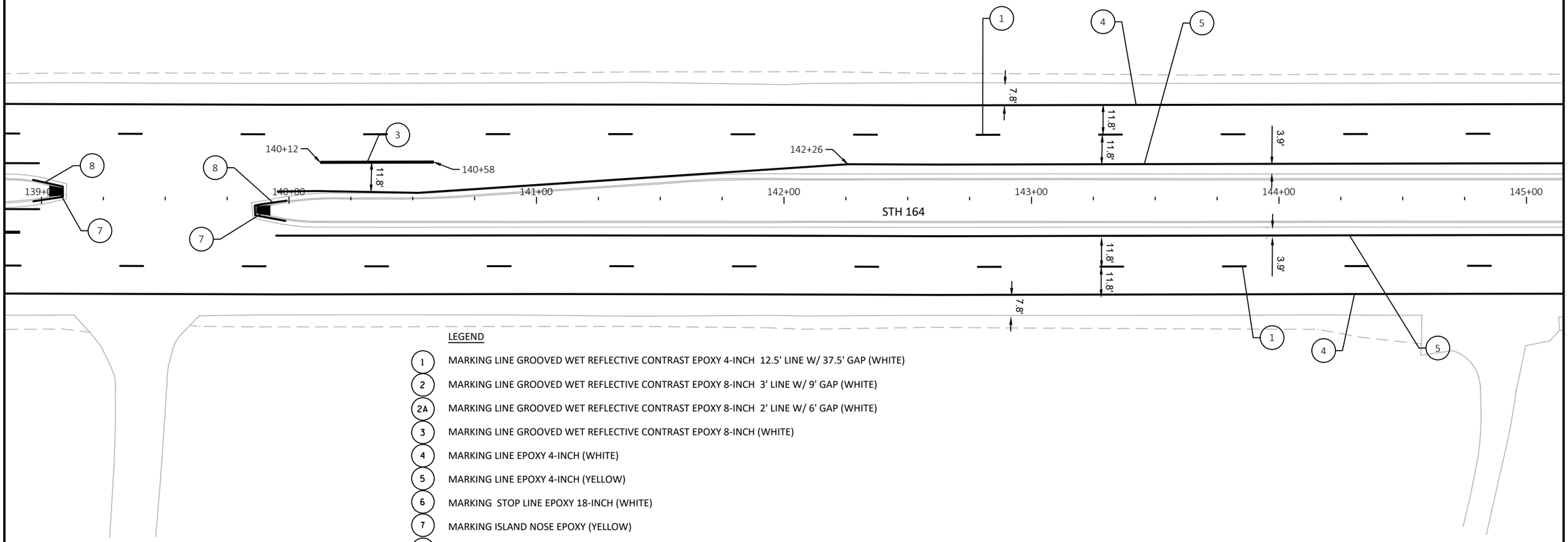
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12. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13. MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 170	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - PM_18
PLOT DATE : 7/31/2019 5:41 PM
PLOT BY : SCHMIDT, JUDENE M
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

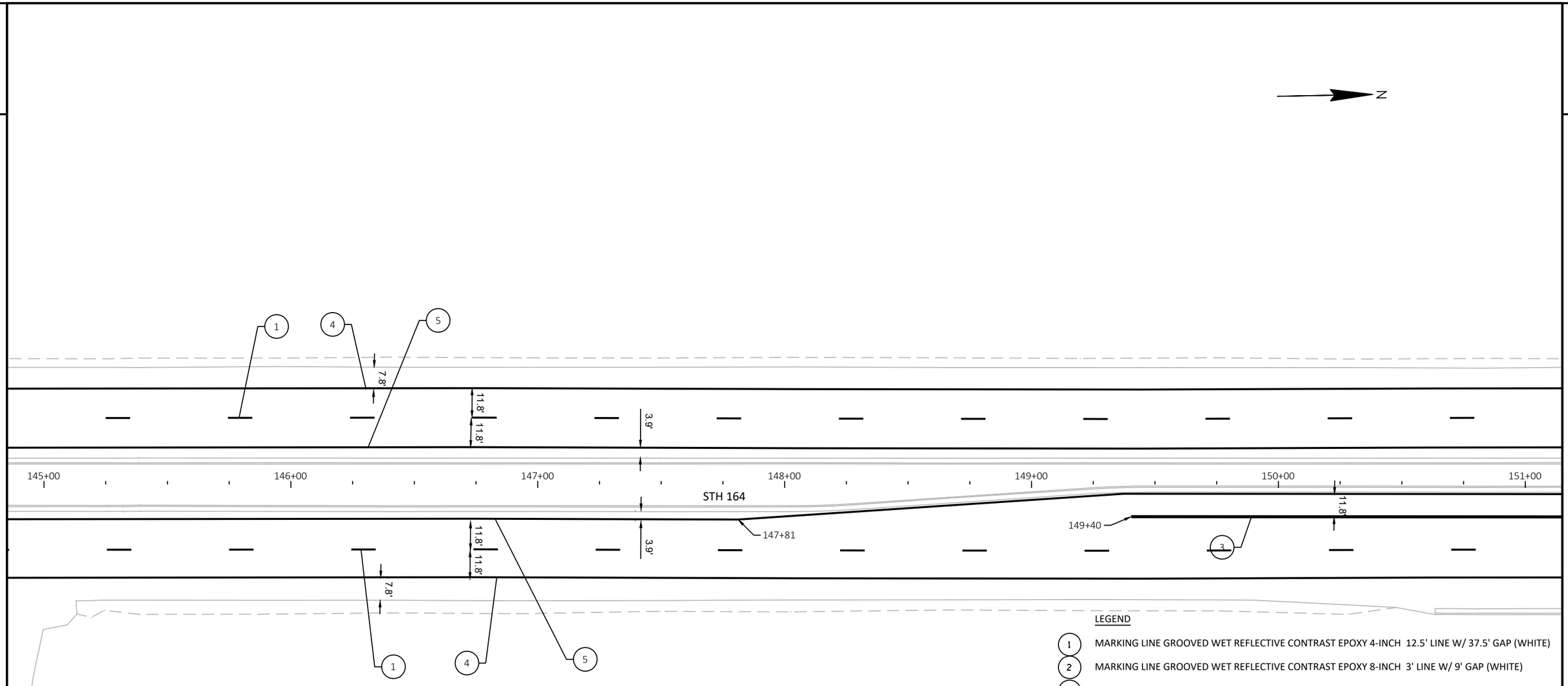


LEGEND

1	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
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13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 171	E

2

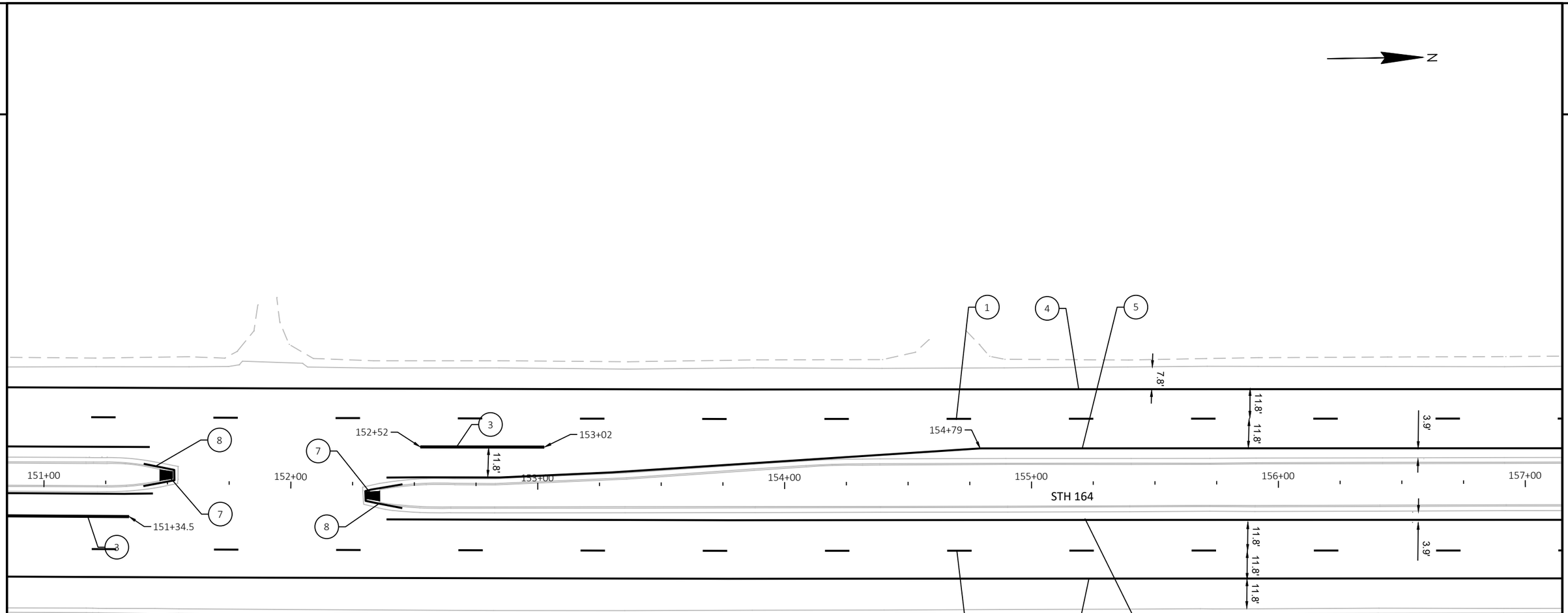


LEGEND

1	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
2	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 3' LINE W/ 9' GAP (WHITE)
2A	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 2' LINE W/ 6' GAP (WHITE)
3	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (WHITE)
4	MARKING LINE EPOXY 4-INCH (WHITE)
5	MARKING LINE EPOXY 4-INCH (YELLOW)
6	MARKING STOP LINE EPOXY 18-INCH (WHITE)
7	MARKING ISLAND NOSE EPOXY (YELLOW)
8	MARKING CURB EPOXY (YELLOW)
9	MARKING ARROW EPOXY
10	MARKING WORD EPOXY
11	MARKING YIELD LINE EPOXY 18-INCH (WHITE)
12	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 172	E

2

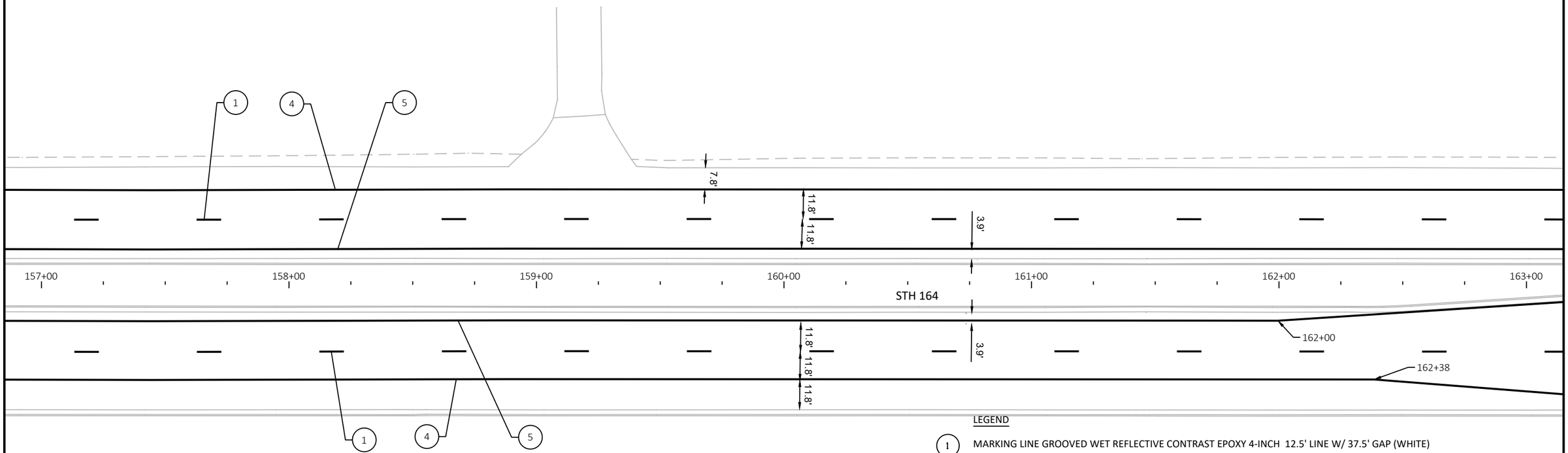


LEGEND

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9. MARKING ARROW EPOXY
10. MARKING WORD EPOXY
11. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
12. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13. MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 173	E

2



LEGEND

1	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
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12	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

2

N

GLENDALE ROAD

2+00

2+46

3+00

3+54

4+00

GLENDALE ROAD

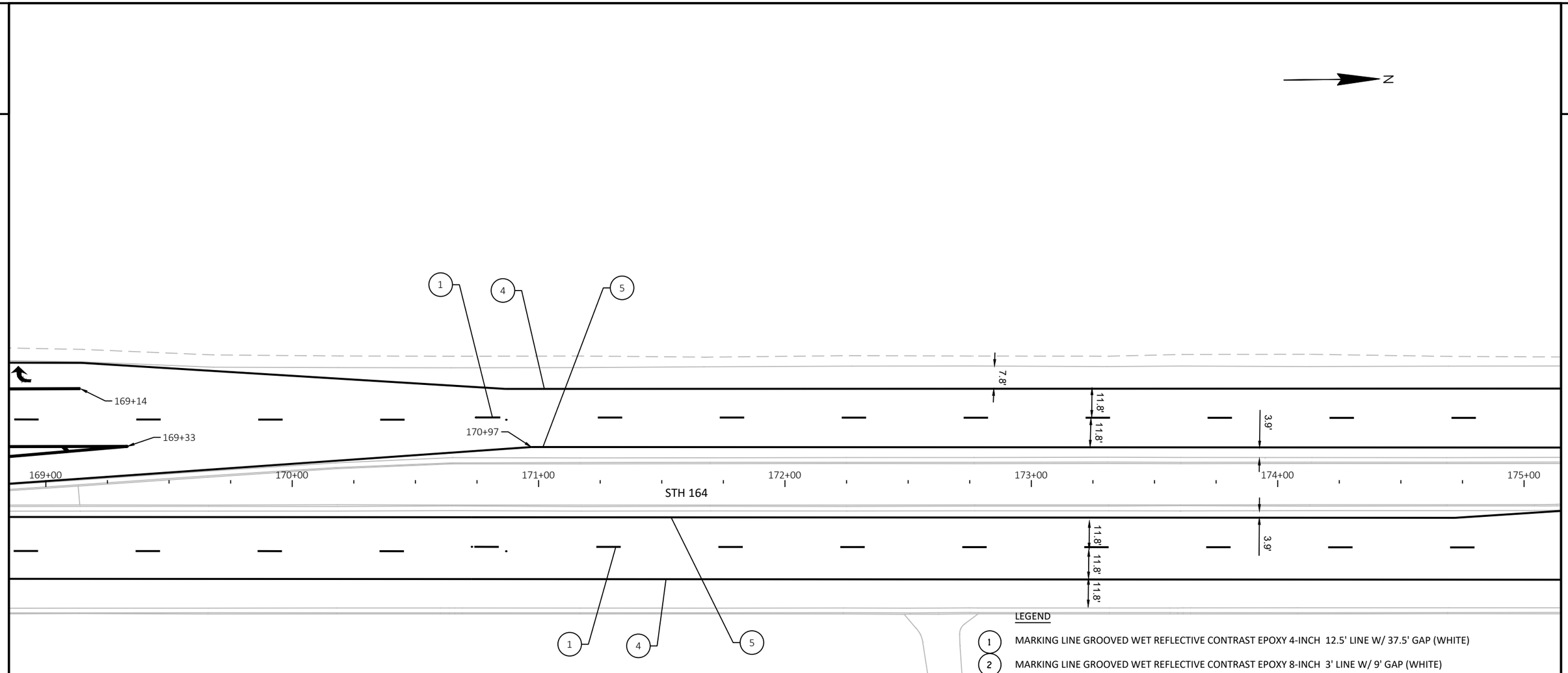
STH 164

163+00 164+00 165+00 166+00 167+00 168+00 169+00

163+70 163+93 164+78 165+87 165+98 166+92 166+95 168+00

11.8' 11.8' 11.8'

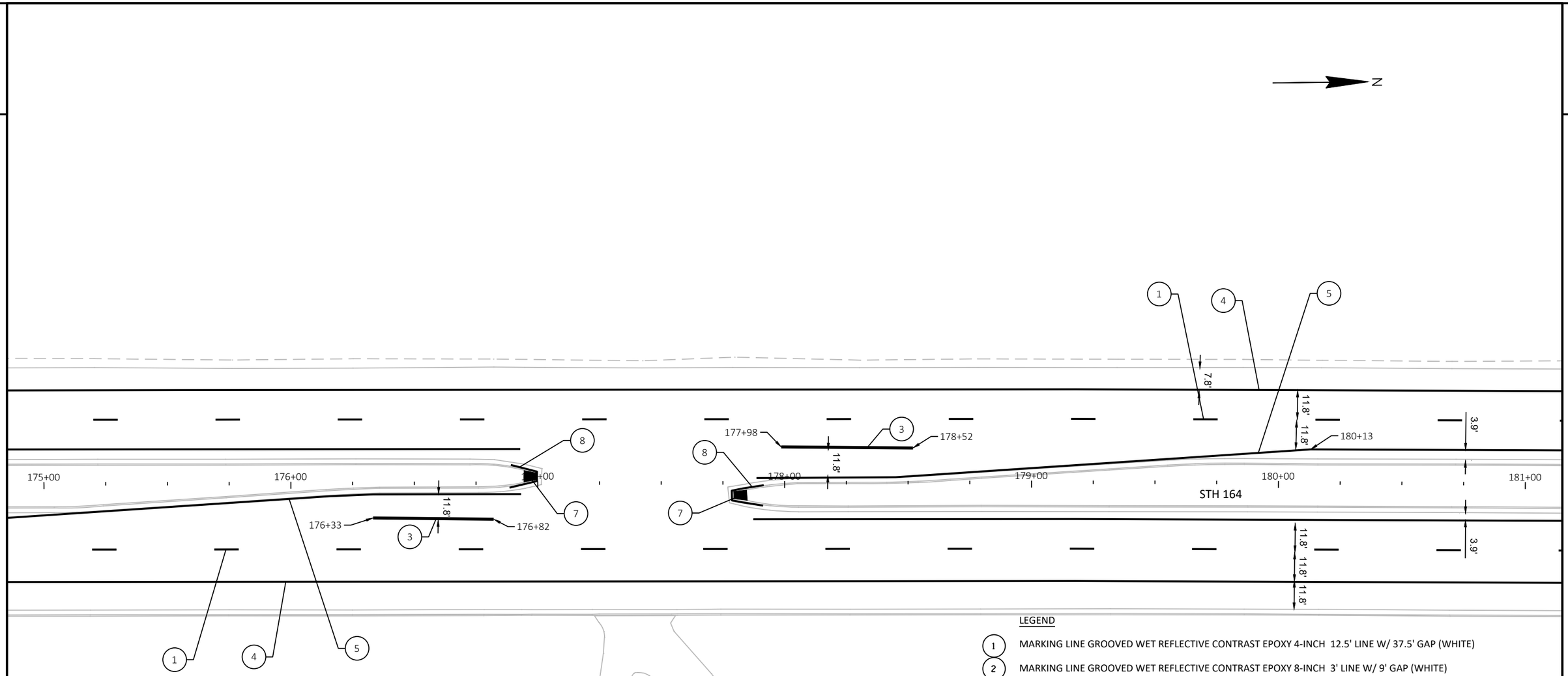
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LEGEND

1	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
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2

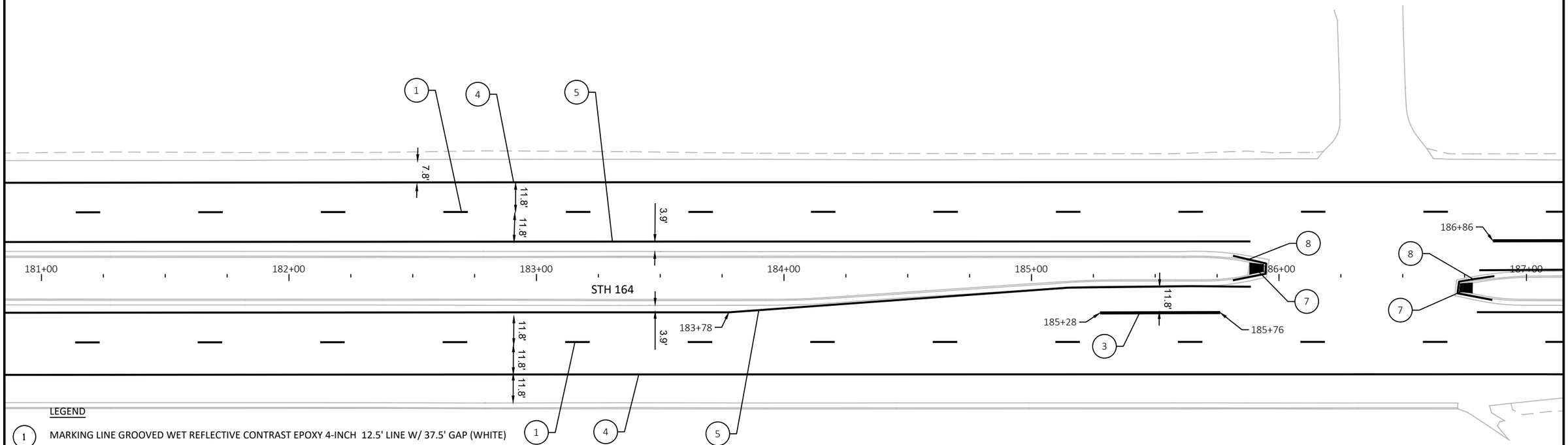


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12	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 177	E

2

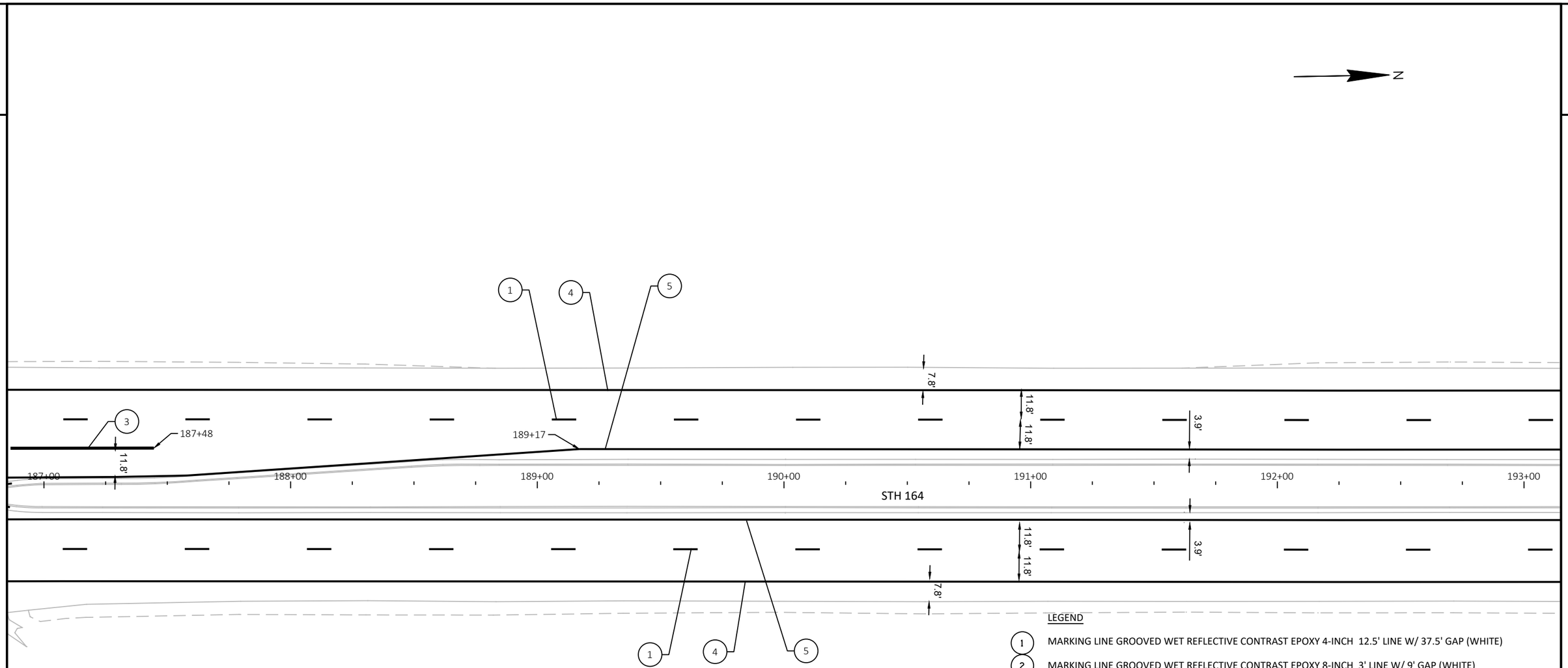


LEGEND

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13. MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 178	E

2



LEGEND

1	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
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13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 179	E

2

N

B-67-0021

1 4 5

7.8'

11.8'

11.8'

3.9'

193+00 194+00 195+00 196+00 197+00 198+00 199+00

STH 164

11.8'

11.8'

3.9'

7.8'

B-67-0021

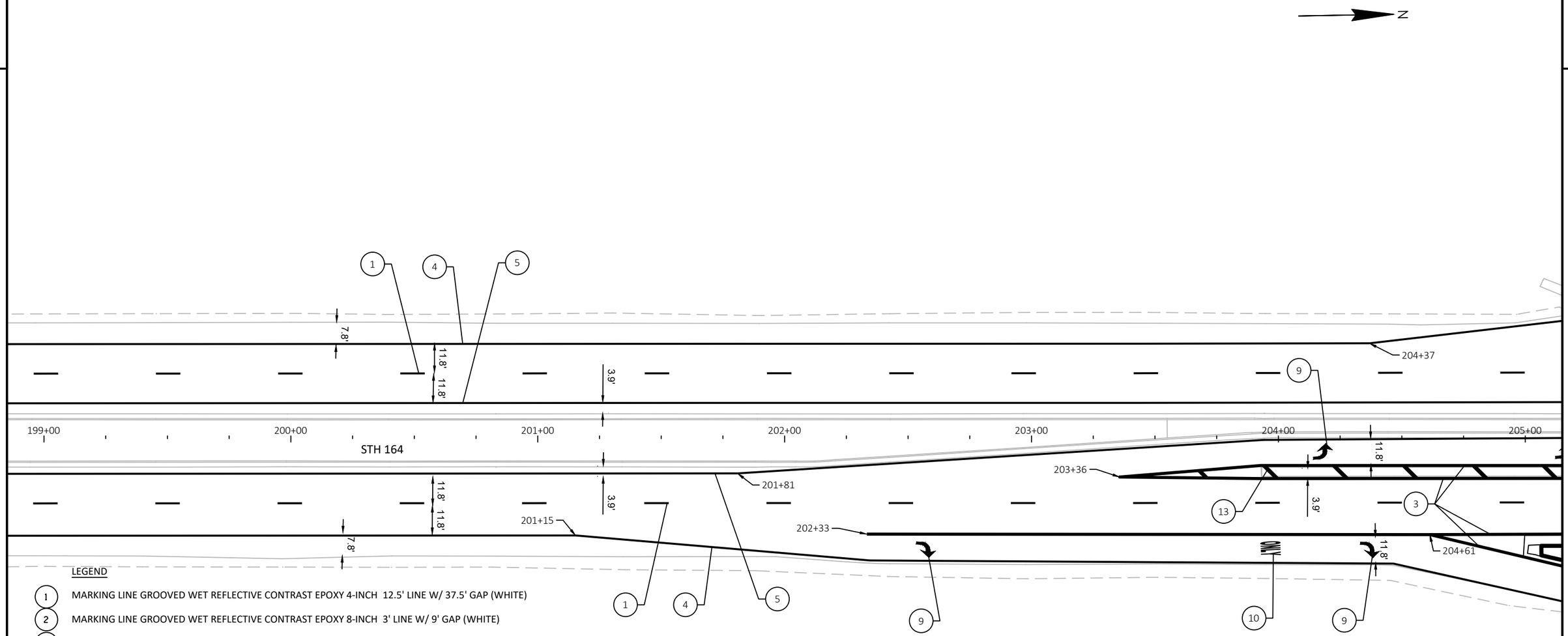
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LEGEND

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2

2

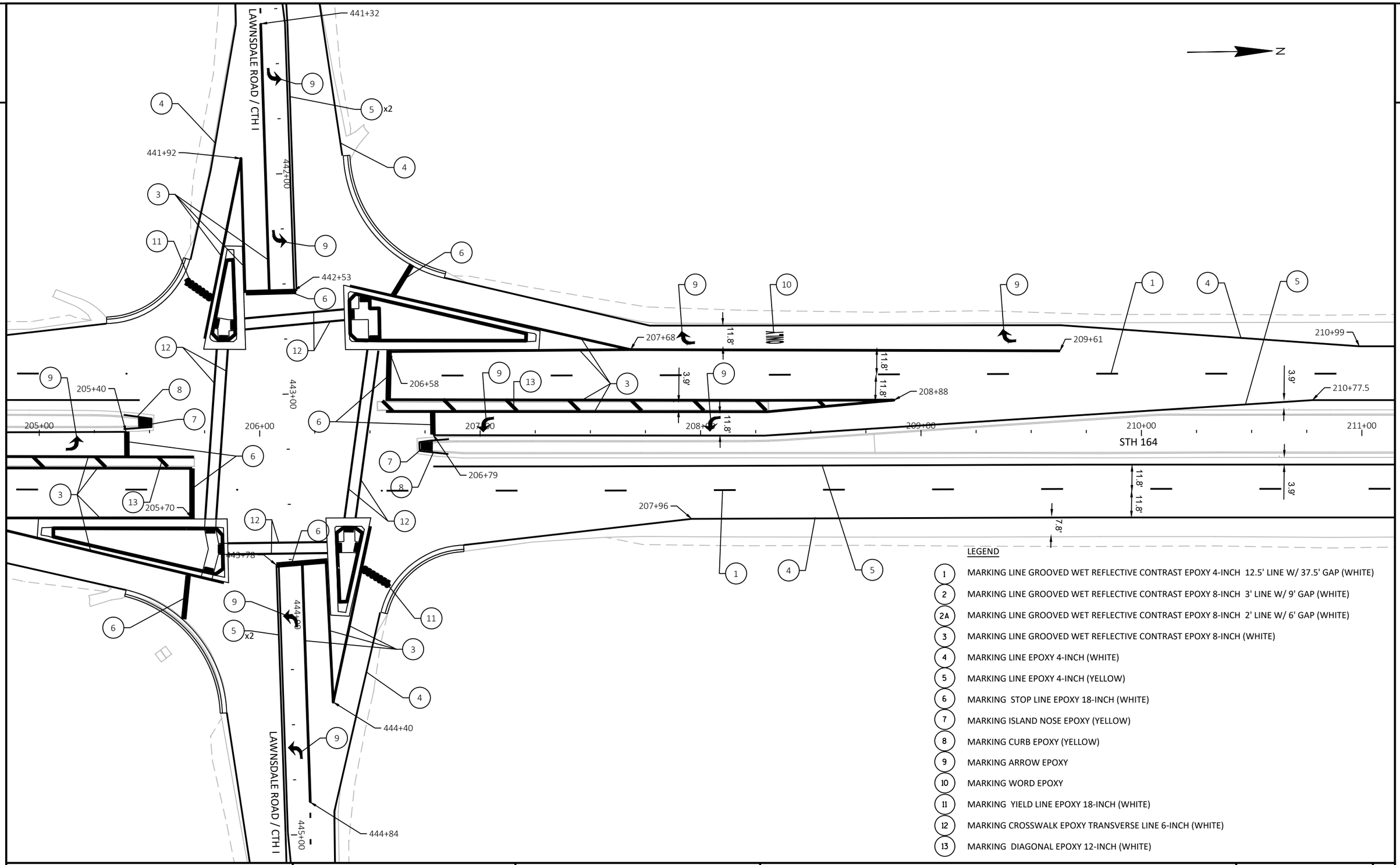


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13. MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 181	E

2



LEGEND

1	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
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13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 182	E

2

2

N

1

4

5

7.8'

11.8'

11.8'

3.9'

210+99

211+00 212+00 213+00 214+00 215+00 216+00 217+00

STH 164

11.8'

11.8'

3.9'

7.8'

1

4

5

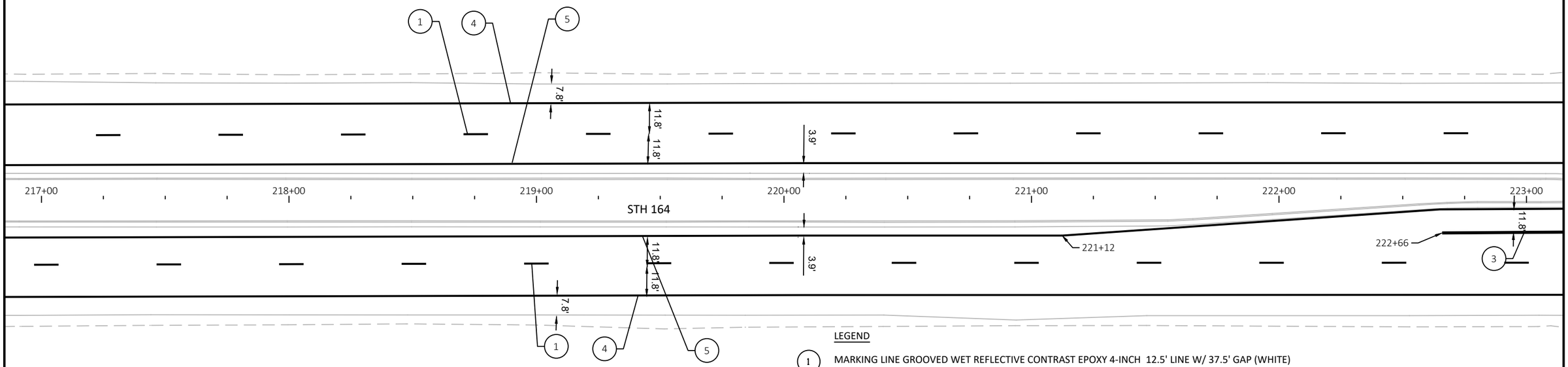
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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 183	E

2

N



LEGEND

1	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
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13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 184	E

2

N

223+00 224+00 225+00 226+00 227+00 228+00 229+00

STH 164

224+37.5 224+92 226+59.5 223+22

11.8' 11.8' 7.8' 3.9'

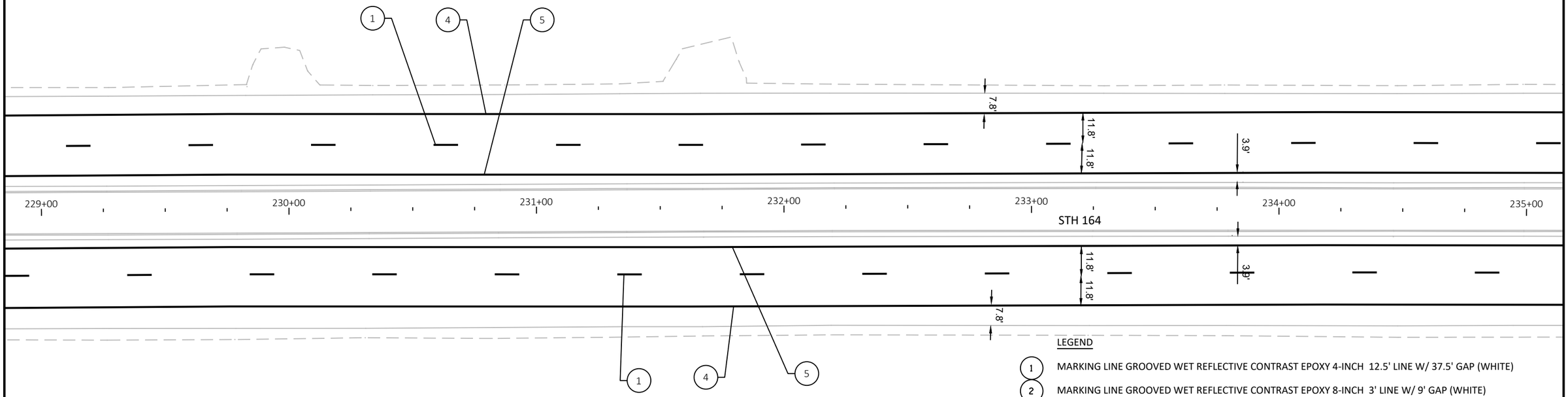
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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 185	E

2

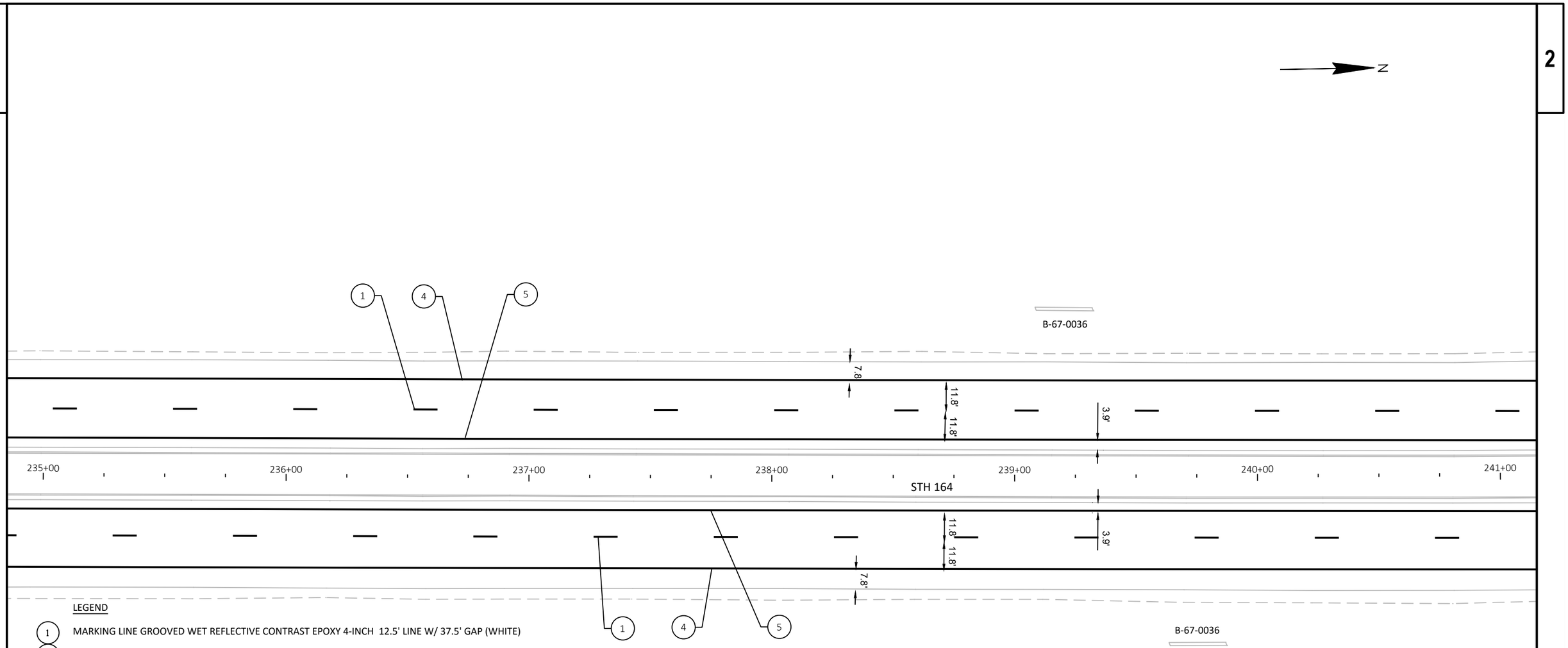
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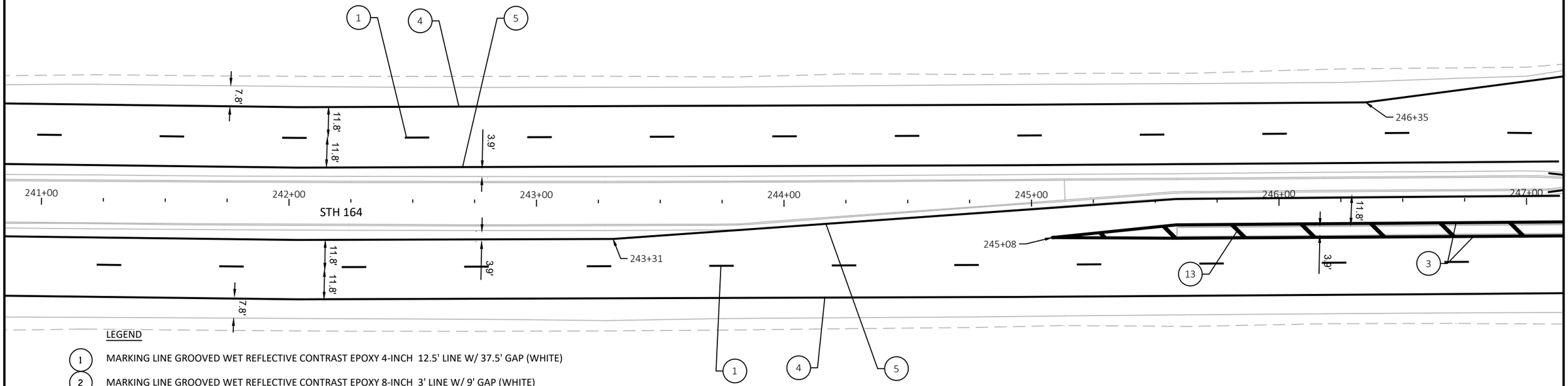
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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 187	E

2

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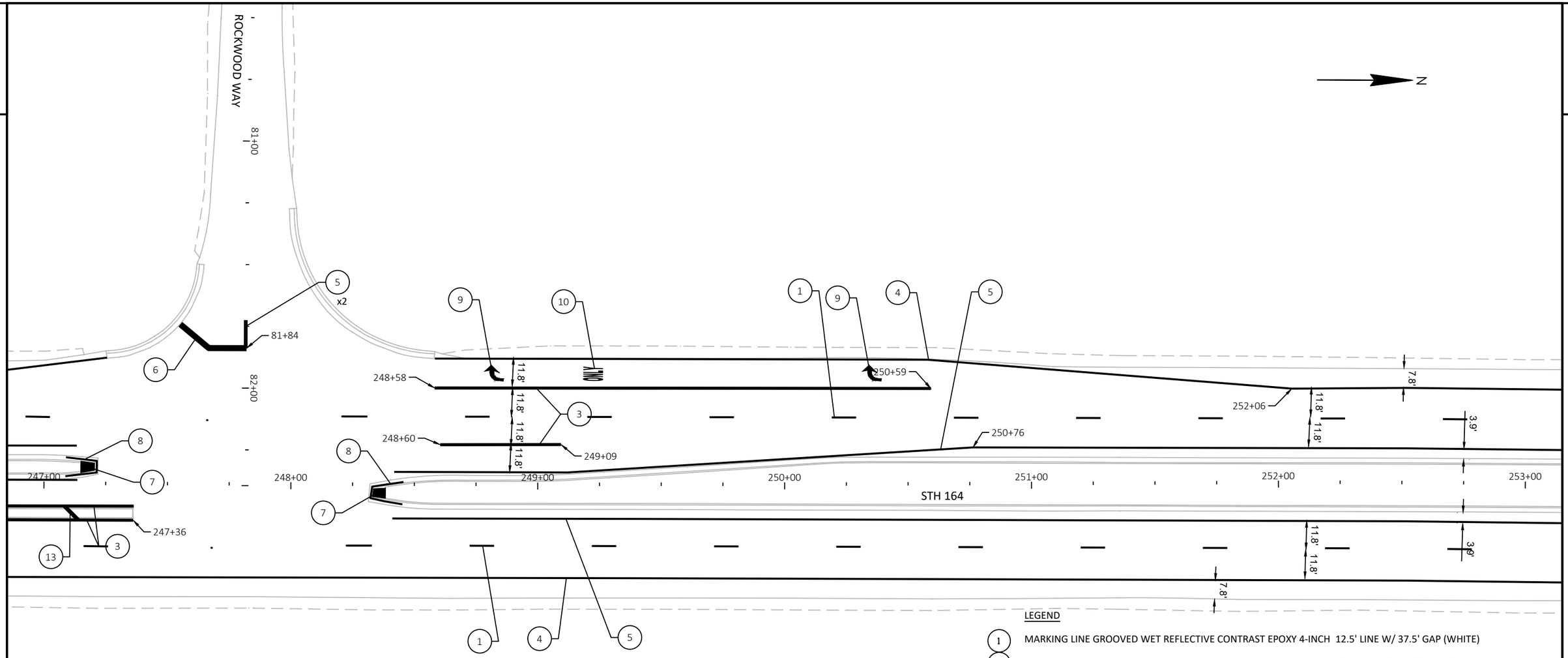


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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 188	E

2

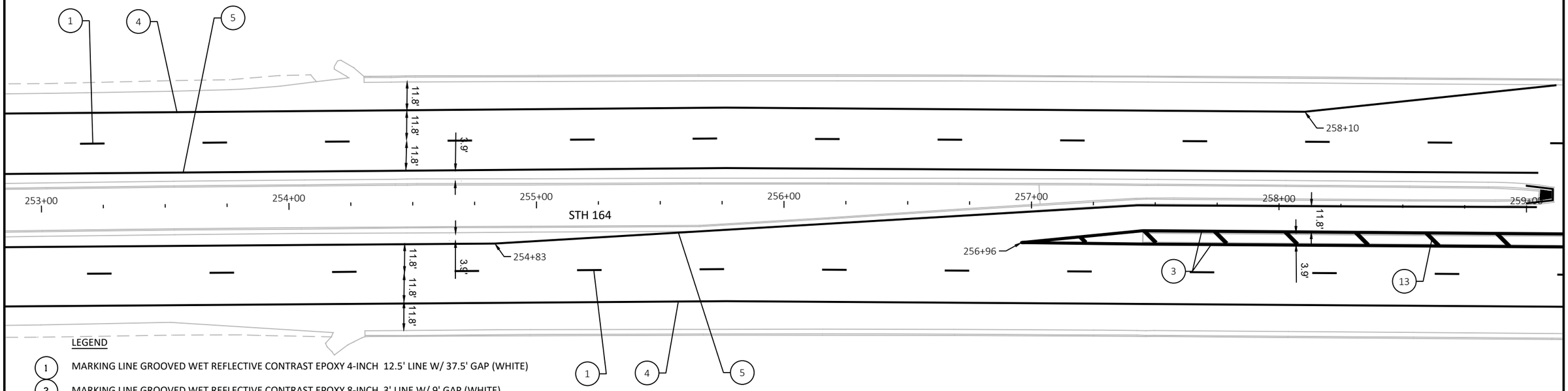


LEGEND

1	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
2	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 3' LINE W/ 9' GAP (WHITE)
2A	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 2' LINE W/ 6' GAP (WHITE)
3	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (WHITE)
4	MARKING LINE EPOXY 4-INCH (WHITE)
5	MARKING LINE EPOXY 4-INCH (YELLOW)
6	MARKING STOP LINE EPOXY 18-INCH (WHITE)
7	MARKING ISLAND NOSE EPOXY (YELLOW)
8	MARKING CURB EPOXY (YELLOW)
9	MARKING ARROW EPOXY
10	MARKING WORD EPOXY
11	MARKING YIELD LINE EPOXY 18-INCH (WHITE)
12	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 189	E

2

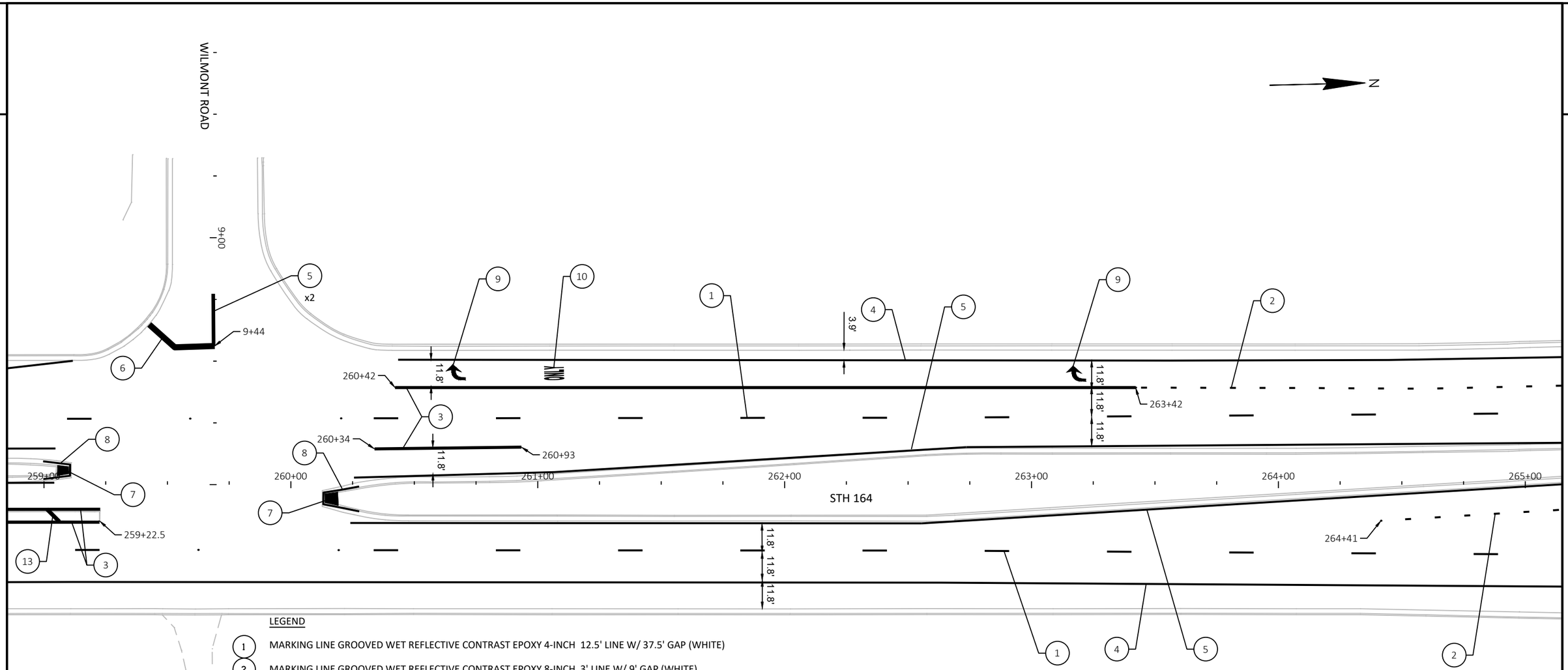


LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
2. MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 3' LINE W/ 9' GAP (WHITE)
2A. MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 2' LINE W/ 6' GAP (WHITE)
3. MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (WHITE)
4. MARKING LINE EPOXY 4-INCH (WHITE)
5. MARKING LINE EPOXY 4-INCH (YELLOW)
6. MARKING STOP LINE EPOXY 18-INCH (WHITE)
7. MARKING ISLAND NOSE EPOXY (YELLOW)
8. MARKING CURB EPOXY (YELLOW)
9. MARKING ARROW EPOXY
10. MARKING WORD EPOXY
11. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
12. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13. MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 190	E

2



LEGEND

1	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
2	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 3' LINE W/ 9' GAP (WHITE)
2A	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 2' LINE W/ 6' GAP (WHITE)
3	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (WHITE)
4	MARKING LINE EPOXY 4-INCH (WHITE)
5	MARKING LINE EPOXY 4-INCH (YELLOW)
6	MARKING STOP LINE EPOXY 18-INCH (WHITE)
7	MARKING ISLAND NOSE EPOXY (YELLOW)
8	MARKING CURB EPOXY (YELLOW)
9	MARKING ARROW EPOXY
10	MARKING WORD EPOXY
11	MARKING YIELD LINE EPOXY 18-INCH (WHITE)
12	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 191	E

2

N

STH 59

STH 164

END PROJECT
STA 266+91

265+00 266+00 267+00 268+00 269+00 270+00 271+00

265+80.5

266+70

266+46

267+94

ONLY

ONLY

3.9'

11.8'

LEGEND

1 MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)

2 MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 3' LINE W/ 9' GAP (WHITE)

2A MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 2' LINE W/ 6' GAP (WHITE)

3 MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (WHITE)

4 MARKING LINE EPOXY 4-INCH (WHITE)

5 MARKING LINE EPOXY 4-INCH (YELLOW)

6 MARKING STOP LINE EPOXY 18-INCH (WHITE)

7 MARKING ISLAND NOSE EPOXY (YELLOW)

8 MARKING CURB EPOXY (YELLOW)

9 MARKING ARROW EPOXY

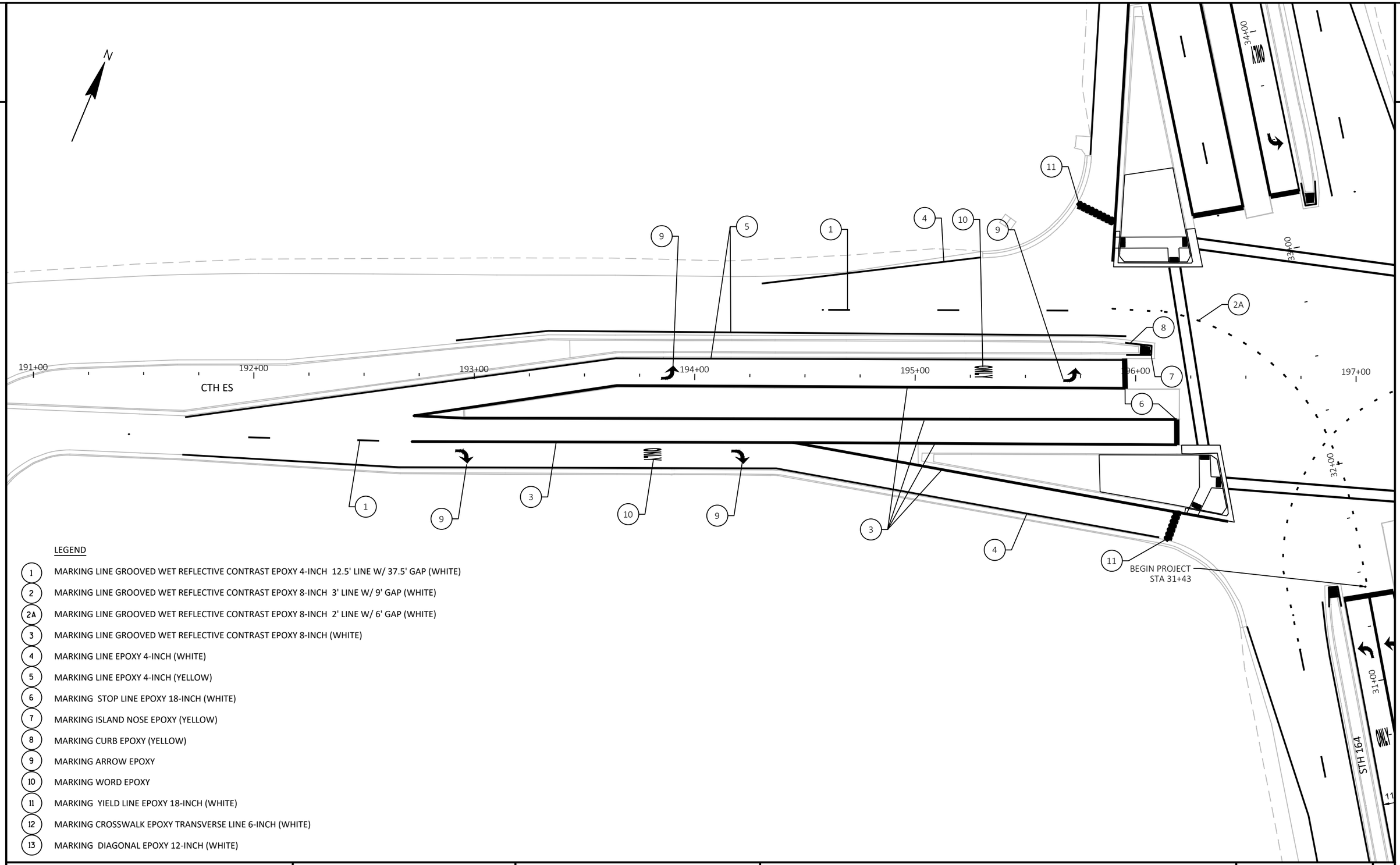
10 MARKING WORD EPOXY

11 MARKING YIELD LINE EPOXY 18-INCH (WHITE)

12 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)

13 MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 192	E

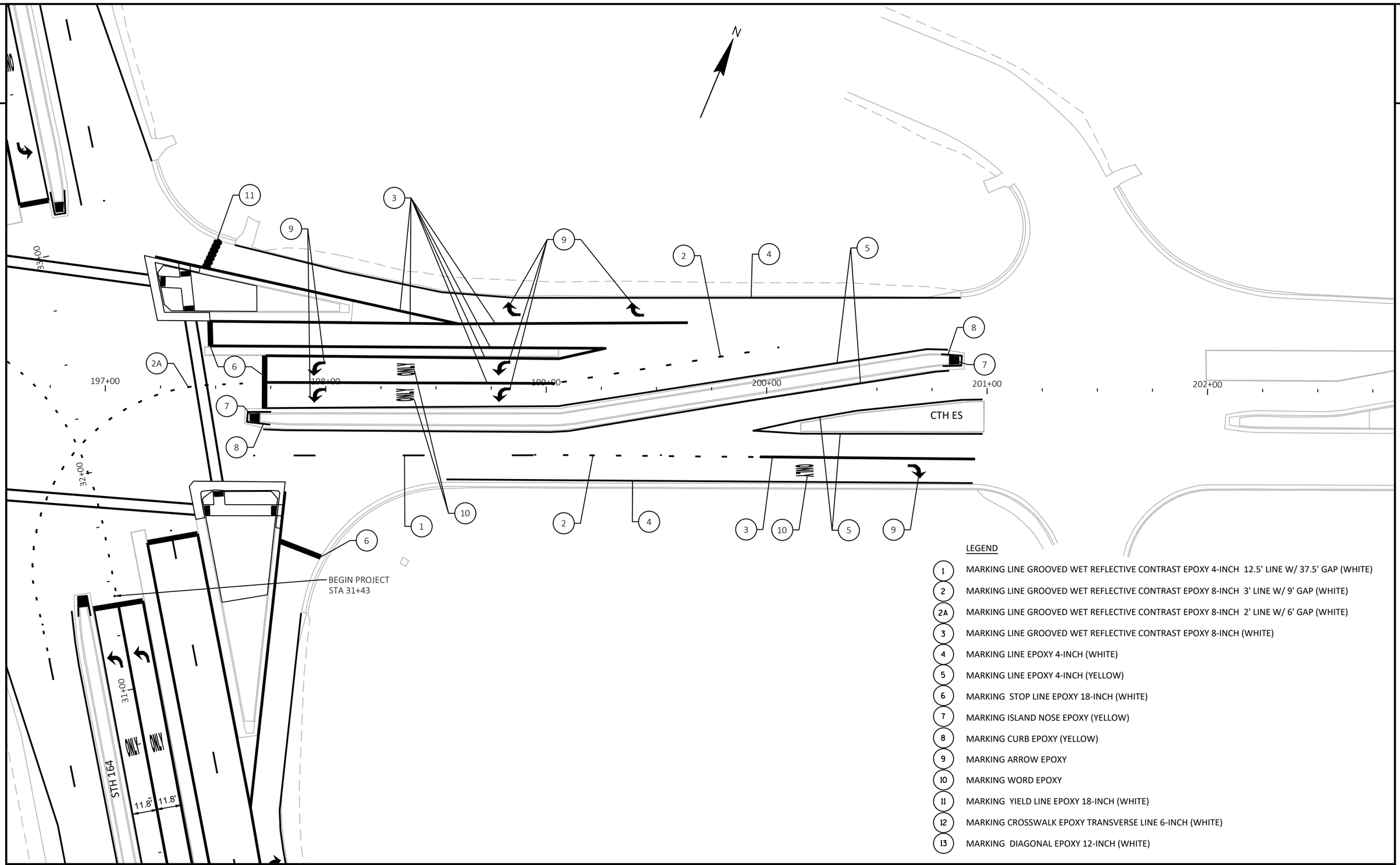


LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
2. MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 3' LINE W/ 9' GAP (WHITE)
2A. MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 2' LINE W/ 6' GAP (WHITE)
3. MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (WHITE)
4. MARKING LINE EPOXY 4-INCH (WHITE)
5. MARKING LINE EPOXY 4-INCH (YELLOW)
6. MARKING STOP LINE EPOXY 18-INCH (WHITE)
7. MARKING ISLAND NOSE EPOXY (YELLOW)
8. MARKING CURB EPOXY (YELLOW)
9. MARKING ARROW EPOXY
10. MARKING WORD EPOXY
11. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
12. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13. MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING - CTH "ES" WEST	SHEET 193 E

2

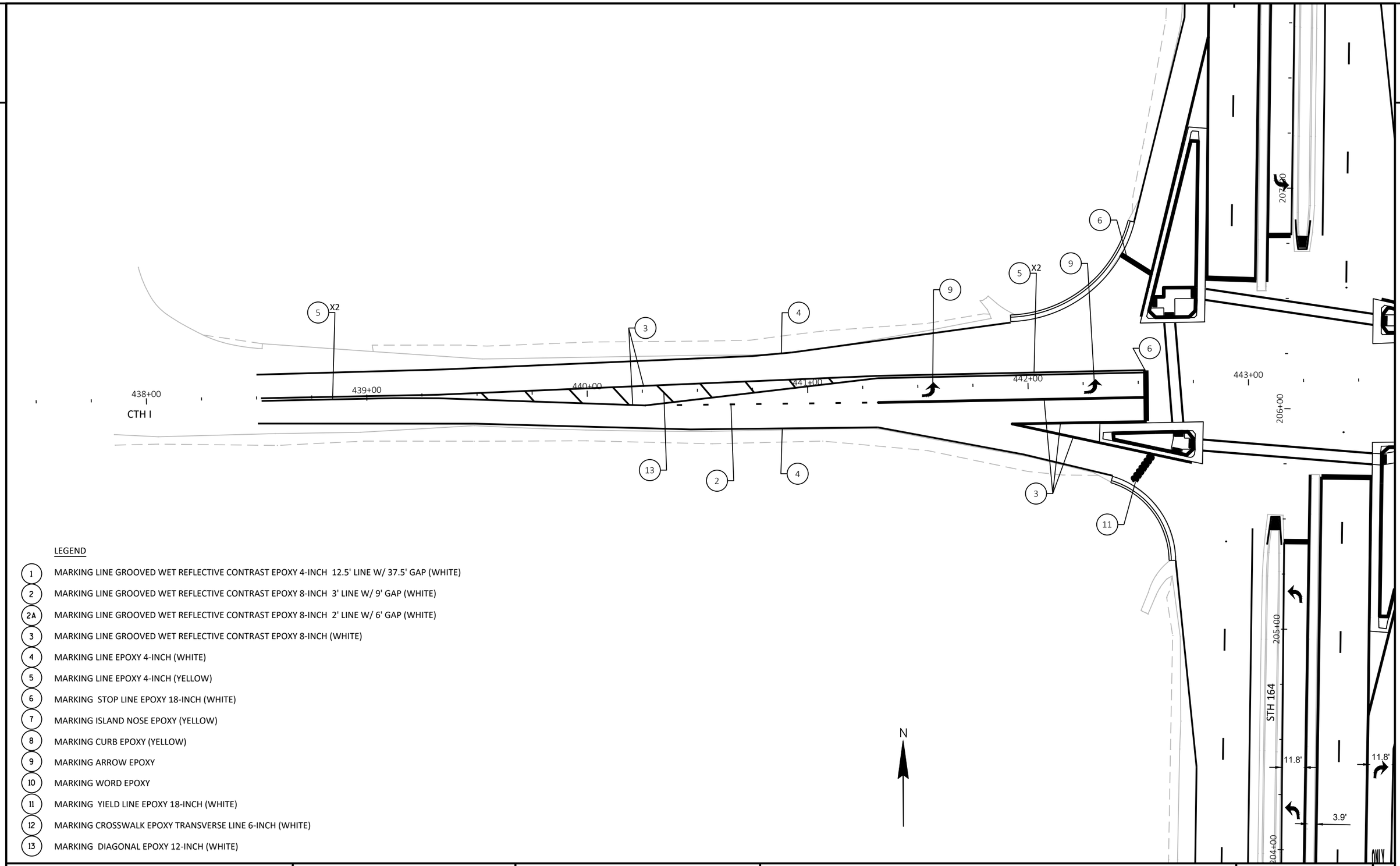


LEGEND

1	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
2	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 3' LINE W/ 9' GAP (WHITE)
2A	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 2' LINE W/ 6' GAP (WHITE)
3	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (WHITE)
4	MARKING LINE EPOXY 4-INCH (WHITE)
5	MARKING LINE EPOXY 4-INCH (YELLOW)
6	MARKING STOP LINE EPOXY 18-INCH (WHITE)
7	MARKING ISLAND NOSE EPOXY (YELLOW)
8	MARKING CURB EPOXY (YELLOW)
9	MARKING ARROW EPOXY
10	MARKING WORD EPOXY
11	MARKING YIELD LINE EPOXY 18-INCH (WHITE)
12	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING - CTH "ES" EAST	SHEET 194	E

2

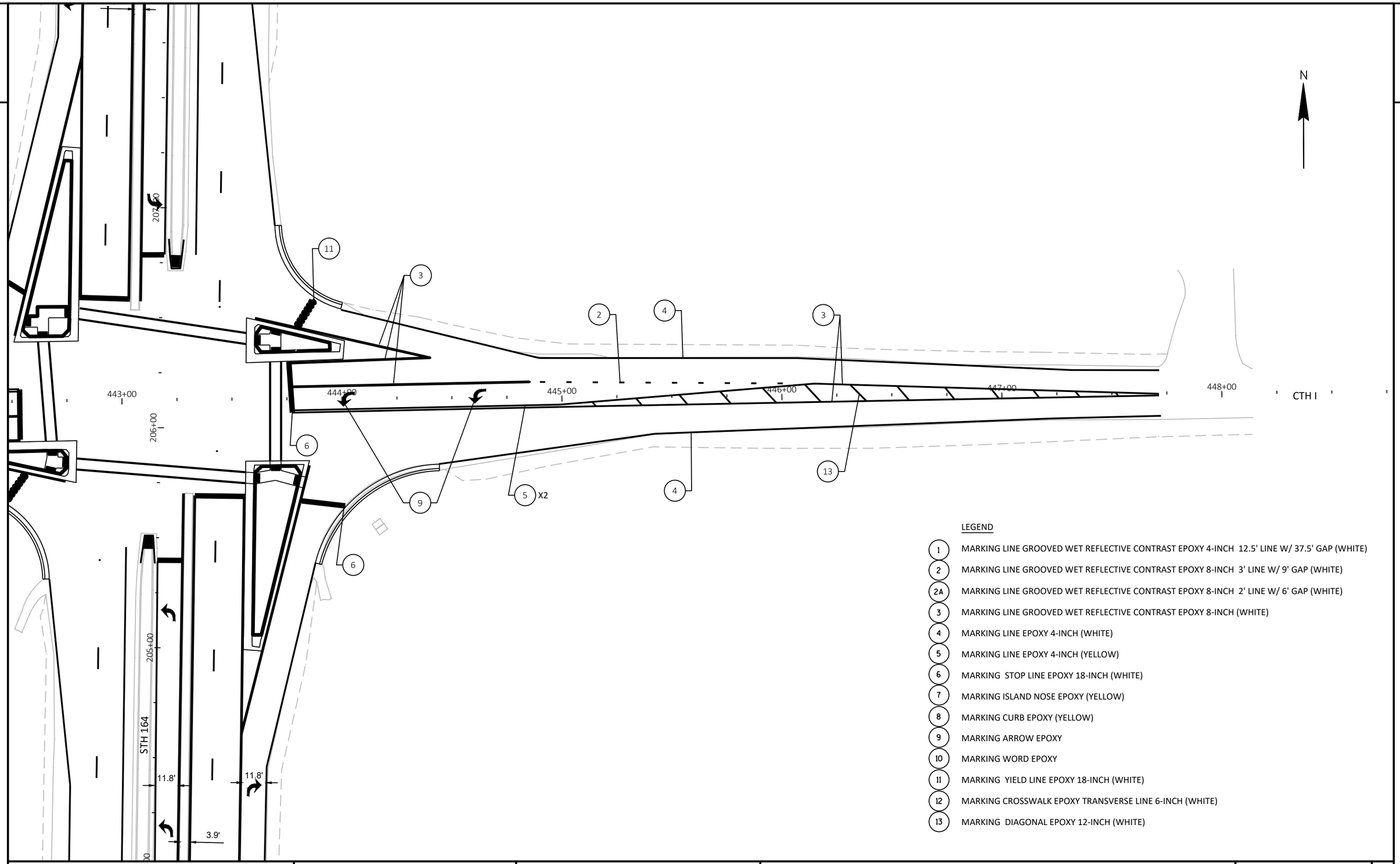


LEGEND

1. MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
2. MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 3' LINE W/ 9' GAP (WHITE)
2A. MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 2' LINE W/ 6' GAP (WHITE)
3. MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (WHITE)
4. MARKING LINE EPOXY 4-INCH (WHITE)
5. MARKING LINE EPOXY 4-INCH (YELLOW)
6. MARKING STOP LINE EPOXY 18-INCH (WHITE)
7. MARKING ISLAND NOSE EPOXY (YELLOW)
8. MARKING CURB EPOXY (YELLOW)
9. MARKING ARROW EPOXY
10. MARKING WORD EPOXY
11. MARKING YIELD LINE EPOXY 18-INCH (WHITE)
12. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13. MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING - CTH "I" WEST	SHEET 195	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - PM_43
PLOT DATE : 7/31/2019 5:45 PM
PLOT BY : SCHMIDT, JUDENE M
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



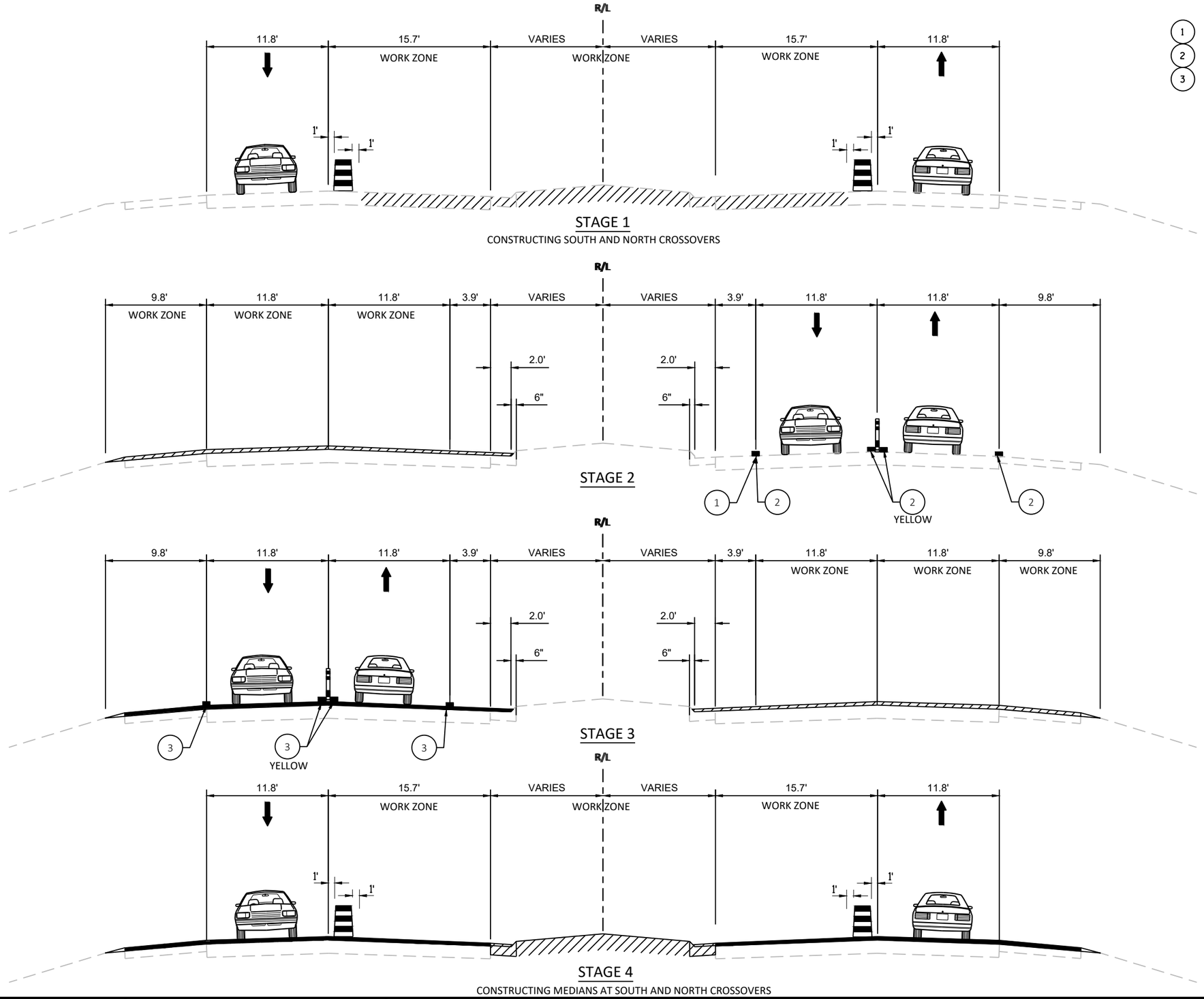
LEGEND

1	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 12.5' LINE W/ 37.5' GAP (WHITE)
2	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 3' LINE W/ 9' GAP (WHITE)
2A	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 2' LINE W/ 6' GAP (WHITE)
3	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (WHITE)
4	MARKING LINE EPOXY 4-INCH (WHITE)
5	MARKING LINE EPOXY 4-INCH (YELLOW)
6	MARKING STOP LINE EPOXY 18-INCH (WHITE)
7	MARKING ISLAND NOSE EPOXY (YELLOW)
8	MARKING CURB EPOXY (YELLOW)
9	MARKING ARROW EPOXY
10	MARKING WORD EPOXY
11	MARKING YIELD LINE EPOXY 18-INCH (WHITE)
12	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
13	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	PAVEMENT MARKING - CTH "I" EAST	SHEET 196	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - PM_44
PLOT DATE : 7/31/2019 5:45 PM
PLOT BY : SCHMIDT, JUDENE M
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



LEGEND

1. REMOVING PAVEMENT MARKING
2. TEMPORARY PAVEMENT MARKING PAINT
3. TEMPORARY PAVEMENT MARKING TAPE

2

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL TYPICAL SECTIONS	SHEET 197	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\025001_TC.DWG
LAYOUT NAME - 01_TC
PLOT DATE : 7/31/2019 2:55 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

2

LEGEND

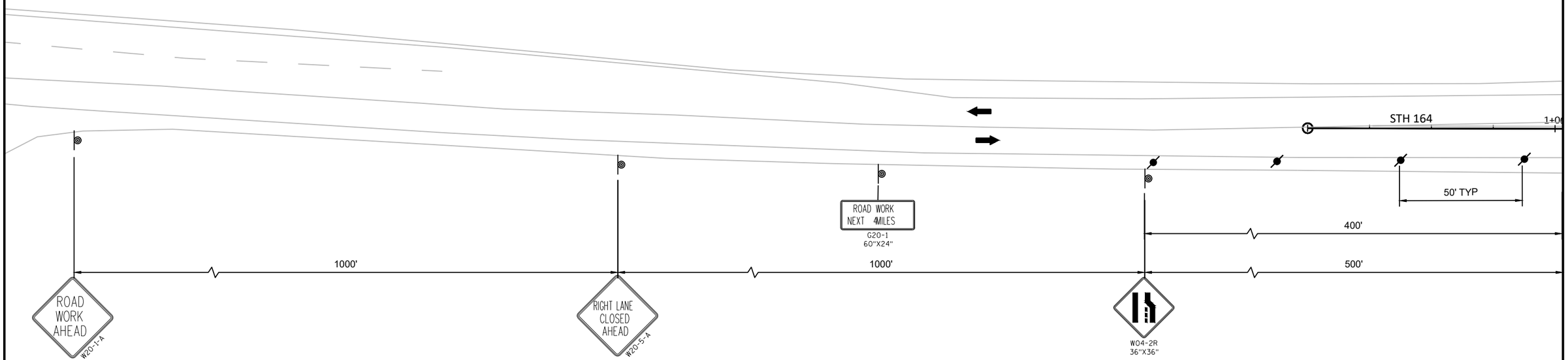
- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH



NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 198	E

2

2

LEGEND

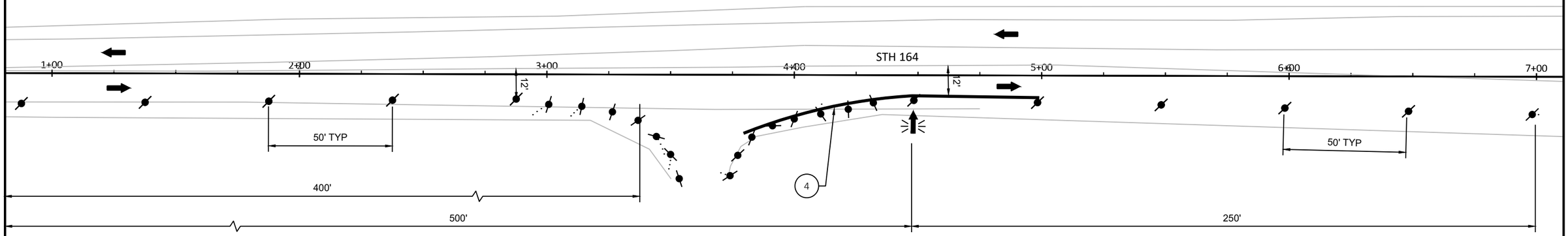
- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH



NOTES:

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INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

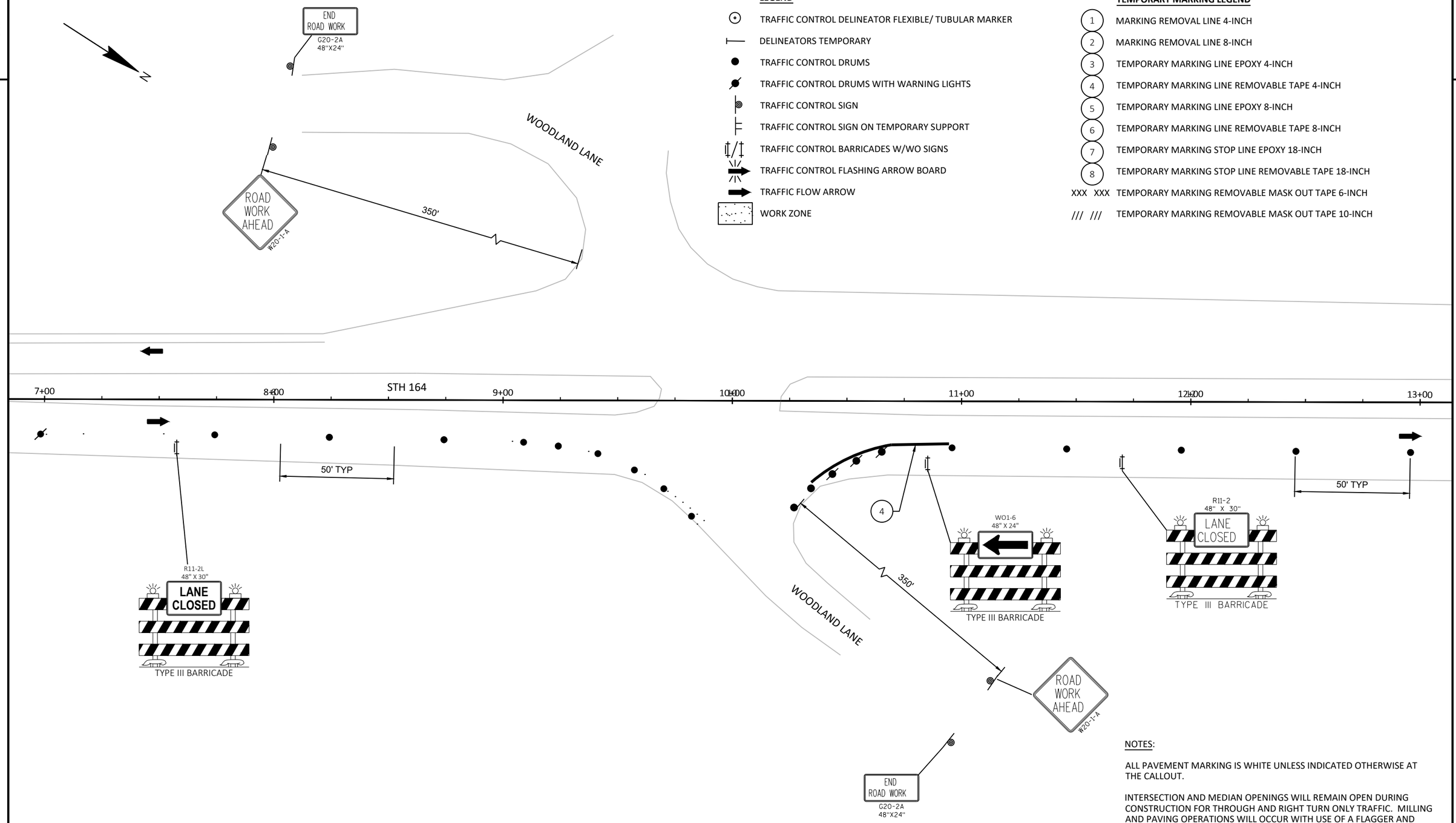
2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH



NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 200	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026401_S1.DWG
LAYOUT NAME - S1_0000
PLOT DATE : 12/5/2019 8:30 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

LEGEND

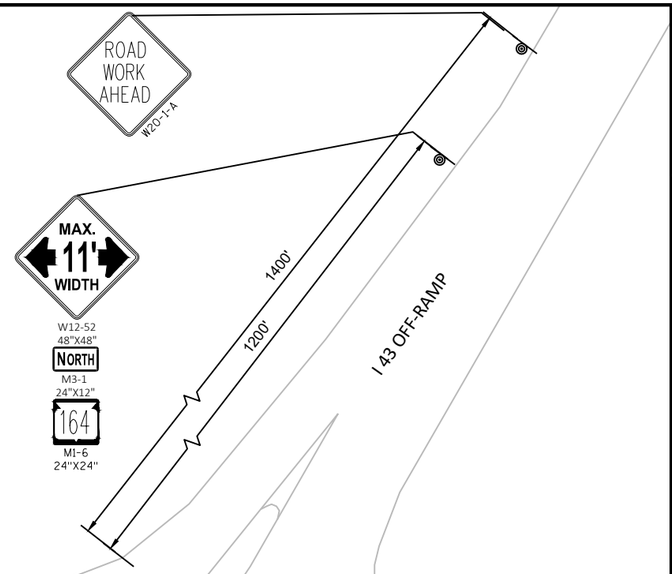
- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

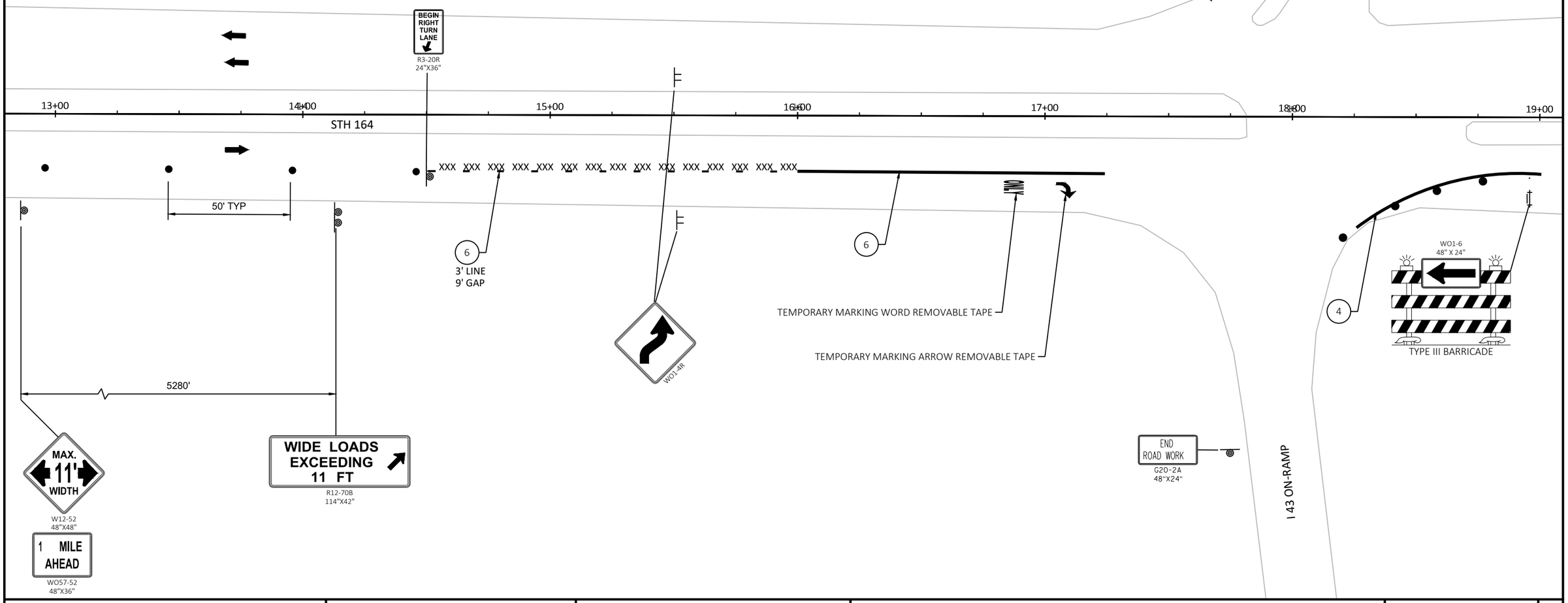
TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH





PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 201	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026401_S1.DWG
LAYOUT NAME - S1_000

PLOT DATE : 12/5/2019 8:31 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

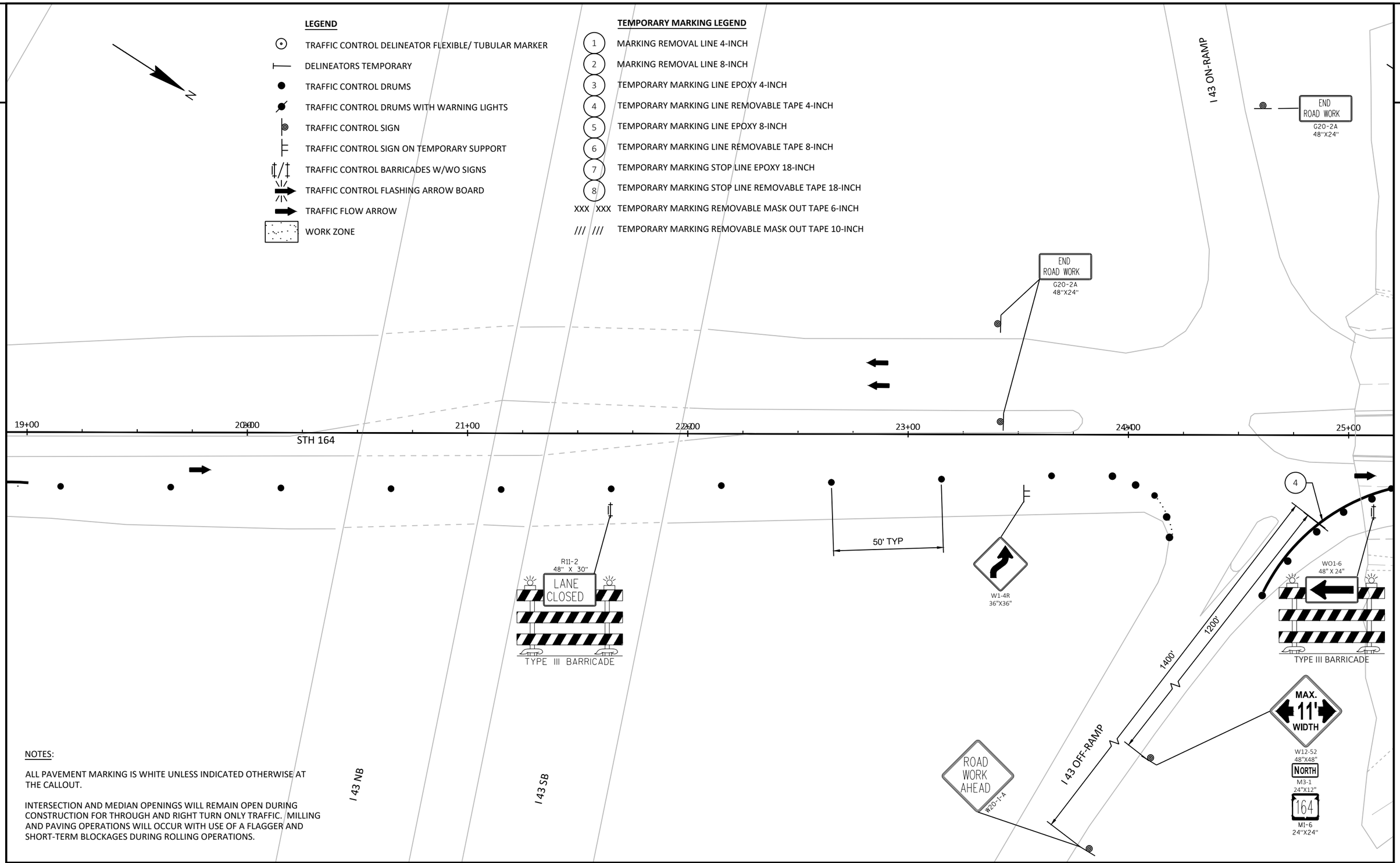
- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH



NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 202	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026401_S1.DWG
LAYOUT NAME - S1_00

PLOT DATE : 12/5/2019 8:31 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

BEGIN LEFT TURN LANE
R3-20L
24"X36"

YELLOW
4

25+00 26+00 27+00 28+00 29+00 30+00 31+00

STH 164

11.5'

XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX

16'

12'

12'

50' TYP

WO1-6
48" X 24"
TYPE III BARRICADE

BEGIN RIGHT TURN LANE
R3-20RR
24"X36"

6

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 203	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026401_S1.DWG
LAYOUT NAME - S1_0

PLOT DATE : 12/5/2019 8:31 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

MAX. 11' WIDTH
W12-52
48"X48"

ROAD WORK AHEAD
W20-1-A

NORTH
M3-1
24"X12"

164
M1-6
24"X24"

500'

STOP
R1-1
30"X30"

COVERING SIGN TYPE 2 (YIELD)

BEGIN PROJECT
STA 31+43

CTH ES

195+00

196+00

197+00

198+00

END ROAD WORK
G20-2A
48"X24"

WO1-6
48" X 24"

TYPE III BARRICADE

BEGIN LEFT TURN LANE
R3-20L
24"X36"

SEE PLAN DETAILS
FOR LOCATION OF CURB AND GUTTER
TO BE CONSTRUCTED IN STAGE 4

+61.65, -10.33' LT

+30.69, -6.86' LT

25'

31+00

32+00

33+00

34+00

35+00

36+00

37+00

STH 164

BEGIN CROSSOVER CONSTRUCTION

+39.97, 19.70' RT

50' TYP

14'

R11-2
48" X 30"
LANE CLOSED

TYPE III BARRICADE

R11-2
48" X 30"
LANE CLOSED

TYPE III BARRICADE

STOP
R1-1
30"X30"

COVERING SIGN TYPE 2 (YIELD)

500'

ROAD WORK AHEAD
W20-1-A

NORTH
M3-1
24"X12"

164
M1-6
24"X24"

MAX. 11' WIDTH
W12-52
48"X48"

END ROAD WORK
G20-2A
48"X24"

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 204	E

2

LEGEND

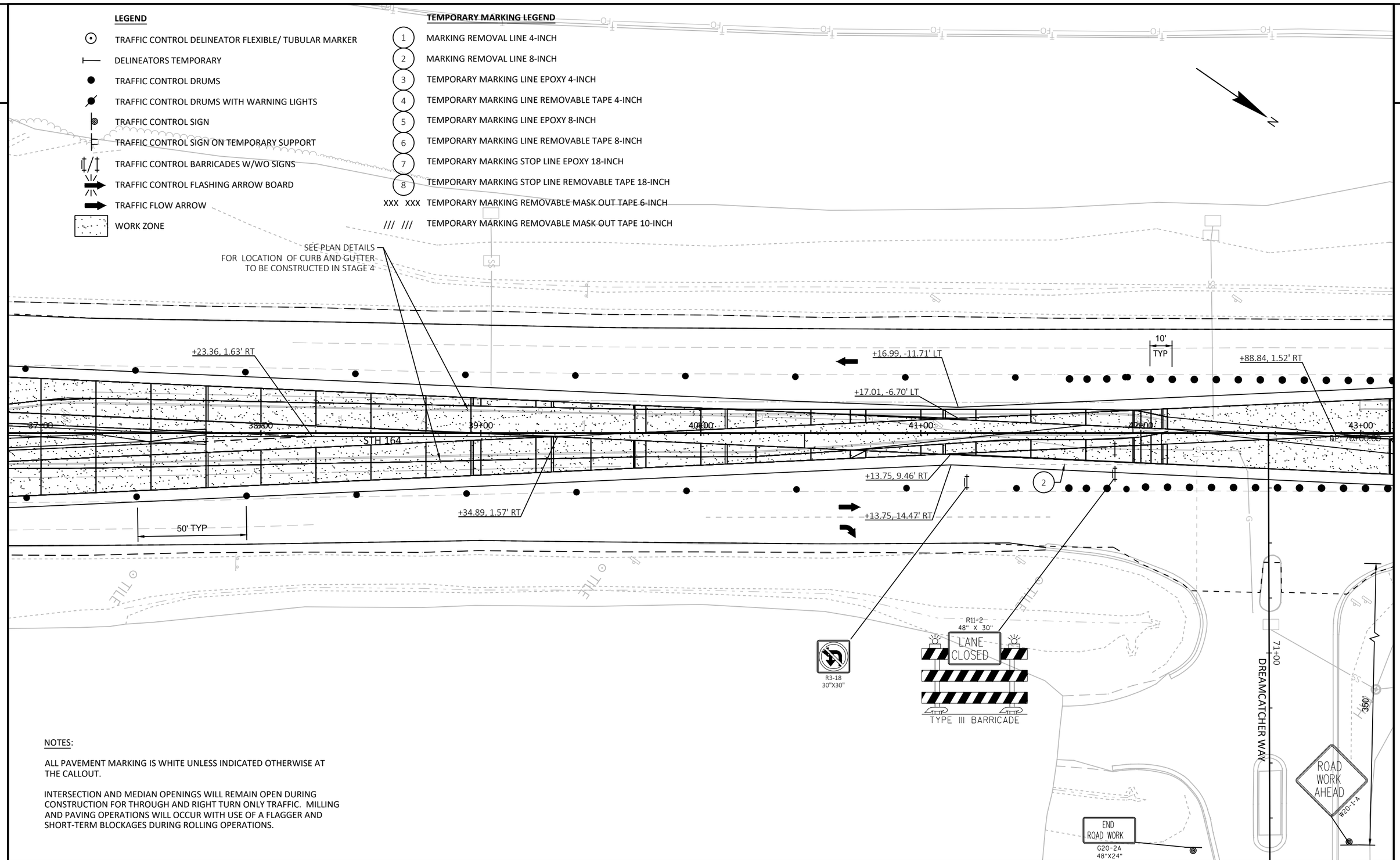
- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH



NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 205	E

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R3-2
24"X24"

SEE PLAN DETAILS
FOR LOCATION OF CURB AND GUTTER
TO BE CONSTRUCTED IN STAGE 4

10'
TYP

+98.87, 1.54' RT

+84.91, -7.37' LT

2

43+00 44+00 45+00 46+00 47+00 48+00 49+00

BL 2010.00

STH 164

50' TYP

+59.98, 13.76' RT

ONLY
R3-5OR
30"X36"

END
ROAD WORK
G20-2A
48"X24"

DREAMCATCHER WAY

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

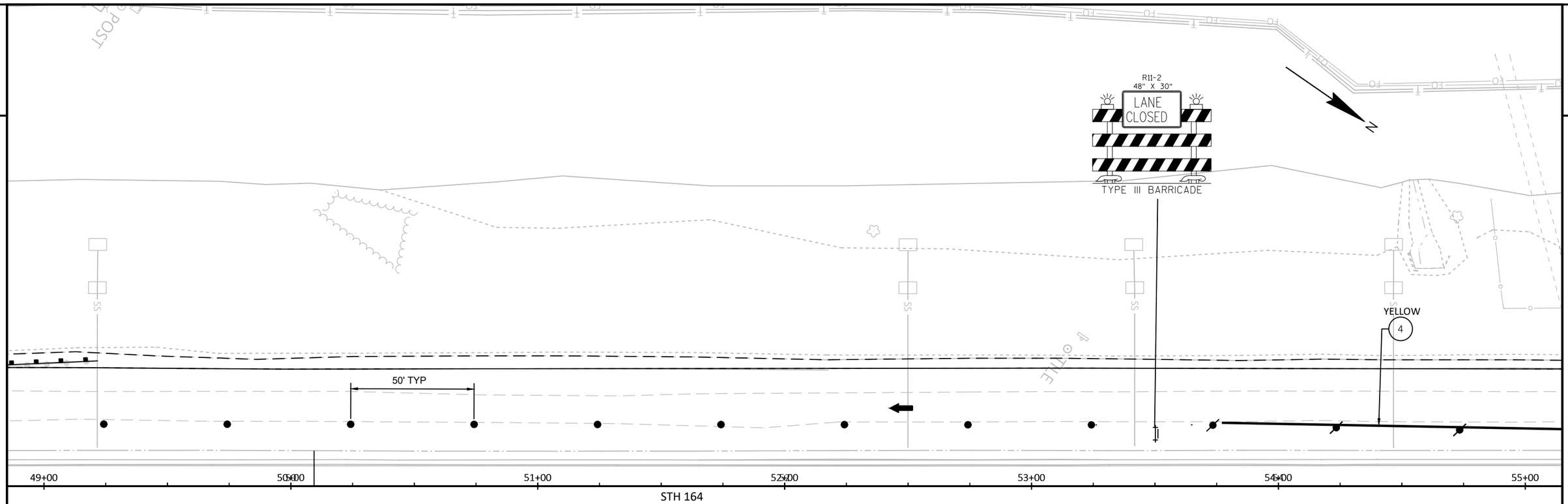
1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 206	E

2



NOTES:

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LEGEND

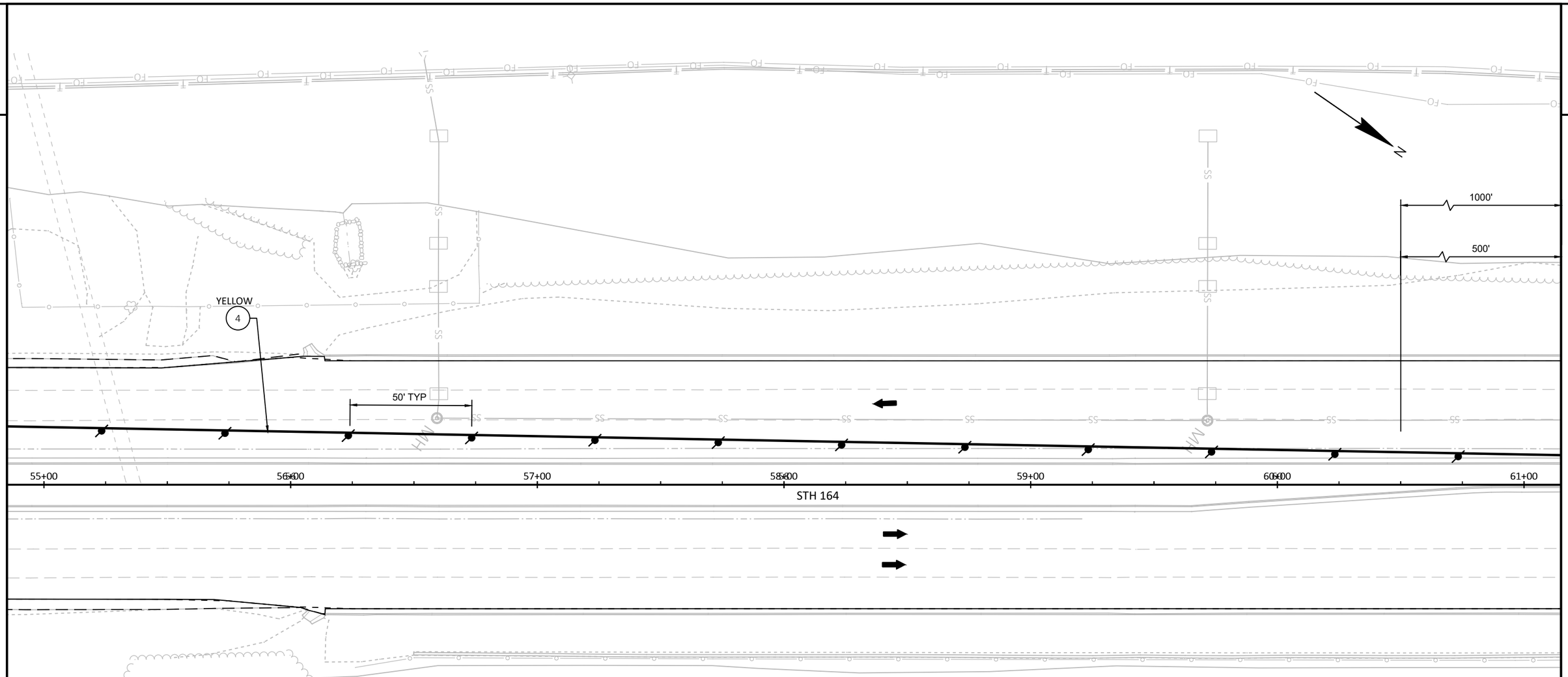
- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 207	E

2



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

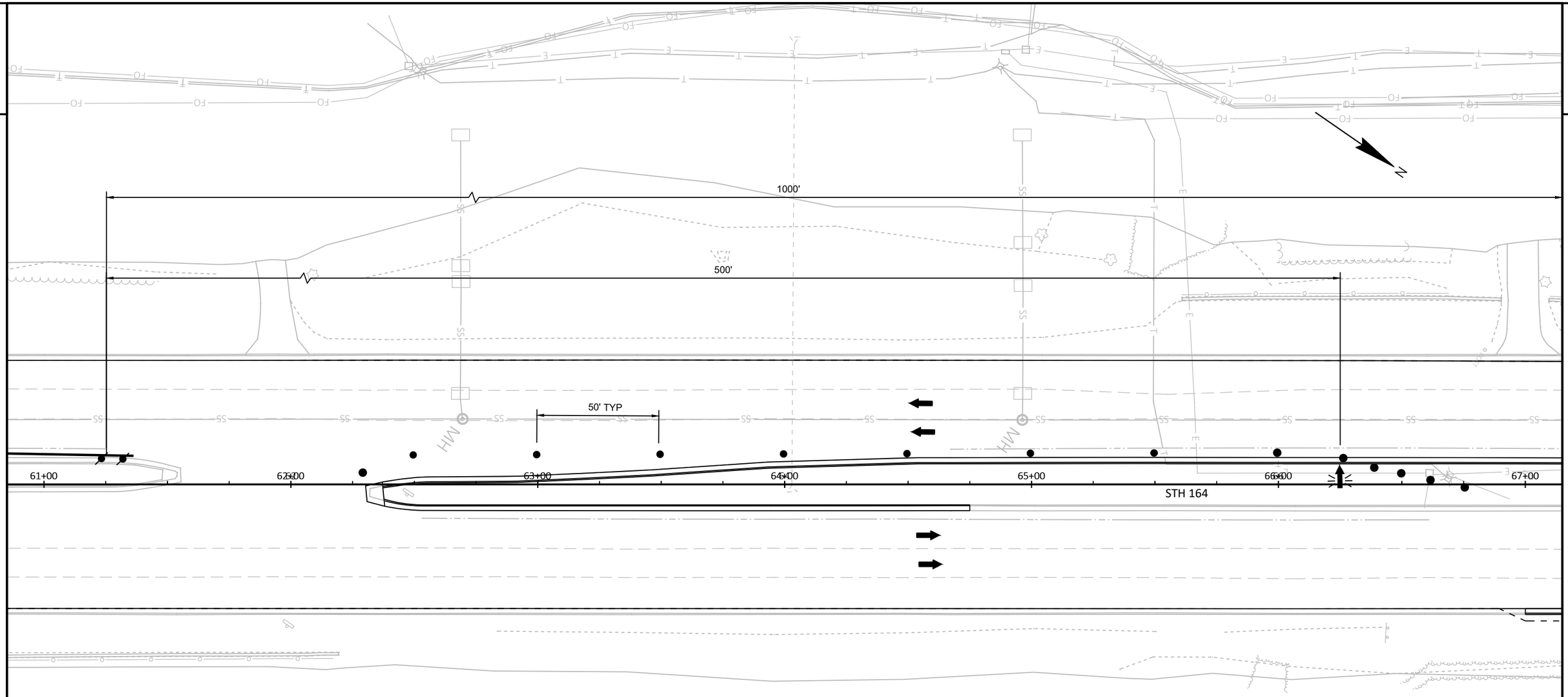
/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

2



NOTES:

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LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

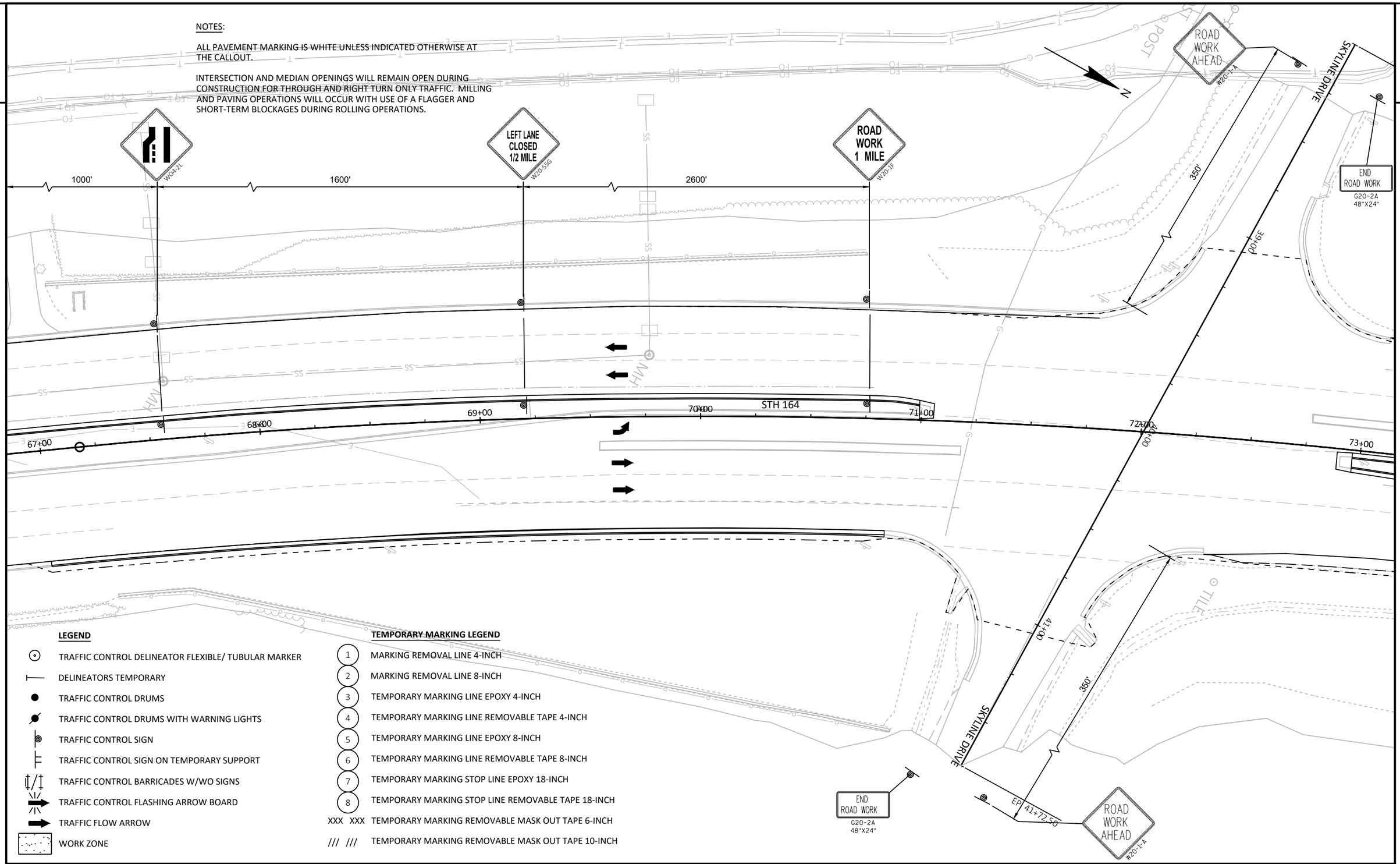
PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1	SHEET 209	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026401_S1.DWG
LAYOUT NAME - S1_6
PLOT DATE : 12/5/2019 8:33 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1	SHEET 210	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026401_S1.DWG
LAYOUT NAME - S1_7
PLOT DATE : 12/5/2019 8:33 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

LEGEND

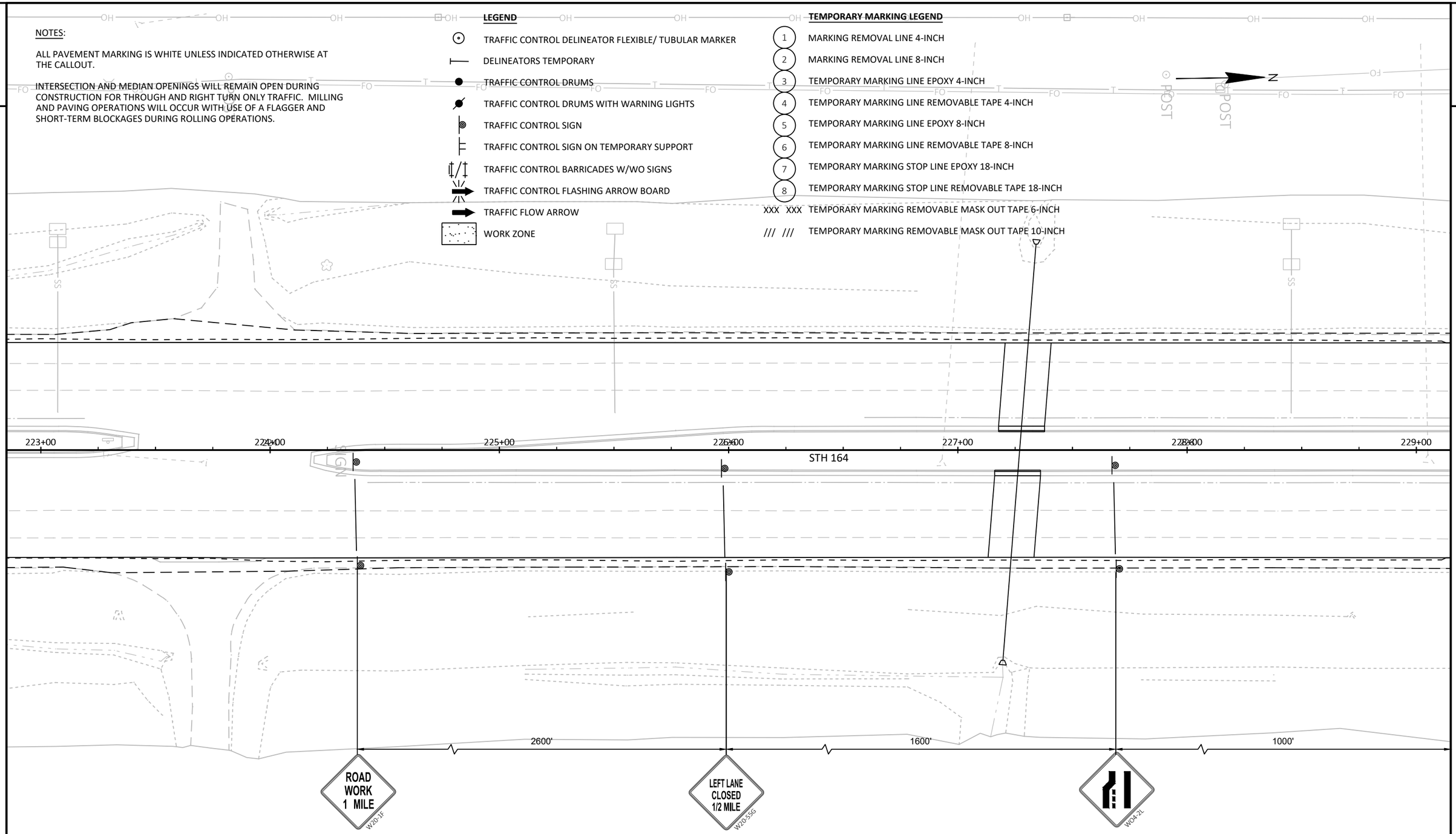
- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH



PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 211	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026401_S1.DWG
LAYOUT NAME - S1_33

PLOT DATE : 12/5/2019 8:33 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

N

229+00 230+00 231+00 232+00 233+00 234+00 235+00

STH 164

TILE

TILE

1000'

2

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 212	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026401_S1.DWG
LAYOUT NAME - S1_34

PLOT DATE : 12/5/2019 8:33 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

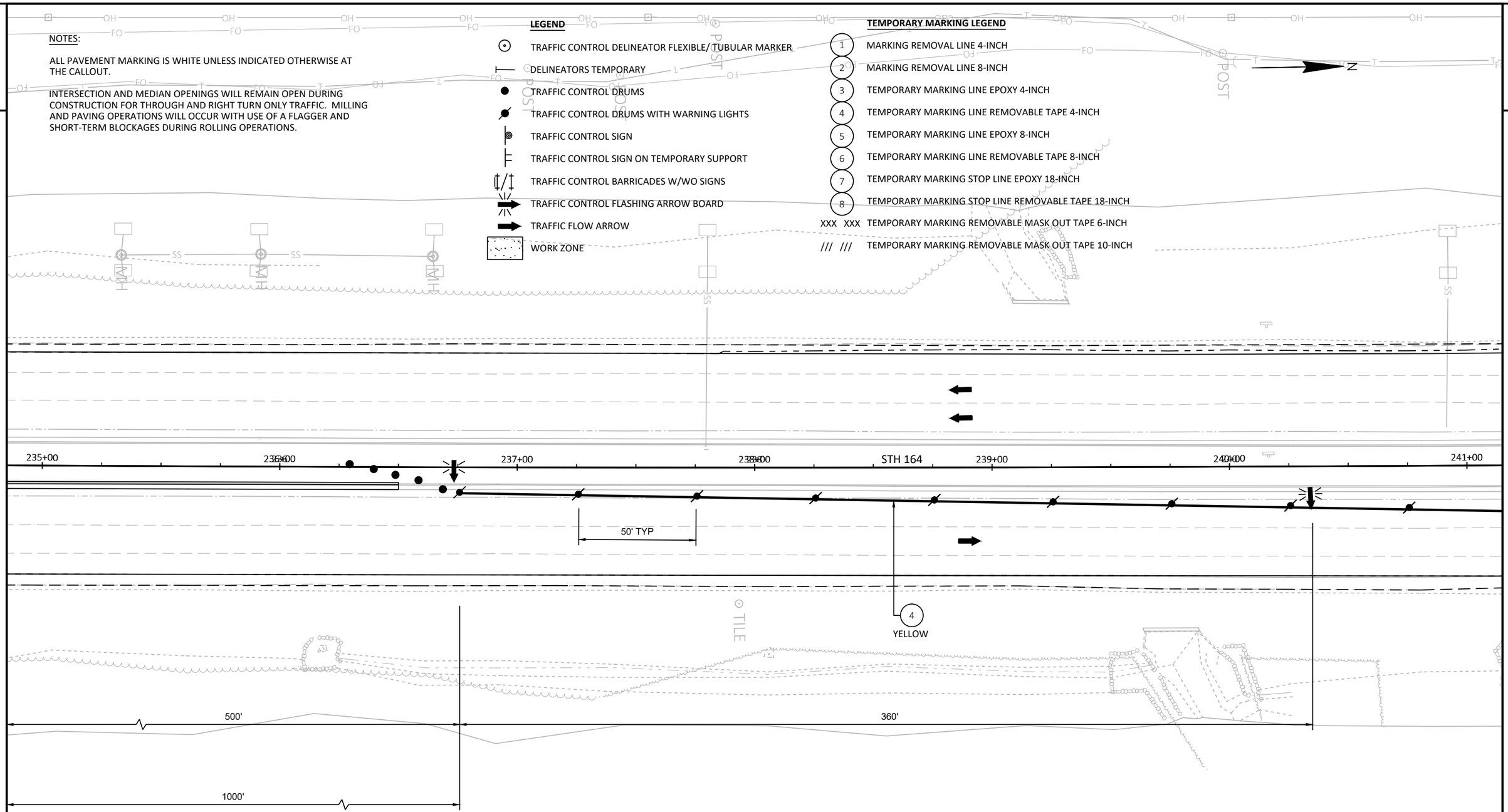
INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH



PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 213 E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026401_S1.DWG
LAYOUT NAME - S1_35

PLOT DATE : 12/5/2019 8:34 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

241+00 242+00 243+00 STH 164 244+00 245+00 246+00 247+00

50' TYP

4 YELLOW

BEGIN LEFT TURN LANE

R3-20L 24"X36"

R11-2 48" X 30"

LANE CLOSED

TYPE III BARRICADE

50' TYP

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 214	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026401_S1.DWG
LAYOUT NAME - S1_36

PLOT DATE : 12/5/2019 8:34 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

ROAD WORK AHEAD
W20-1-A

END ROAD WORK
G20-2A
48"X24"

ROCKWOOD WAY

350'

81+00

82+00

PT: 81+58.49

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

N

END ROAD WORK
G20-2A
48"X24"

247+00 248+00 249+00 250+00 251+00 252+00 253+00

EP: 82+39.47

STH 164

50' TYP

WO1-6
48" X 24"

TYPE III BARRICADE

1100' BUFFER

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 215	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026401_S1.DWG
LAYOUT NAME - S1_37
PLOT DATE : 12/5/2019 8:34 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

LEGEND

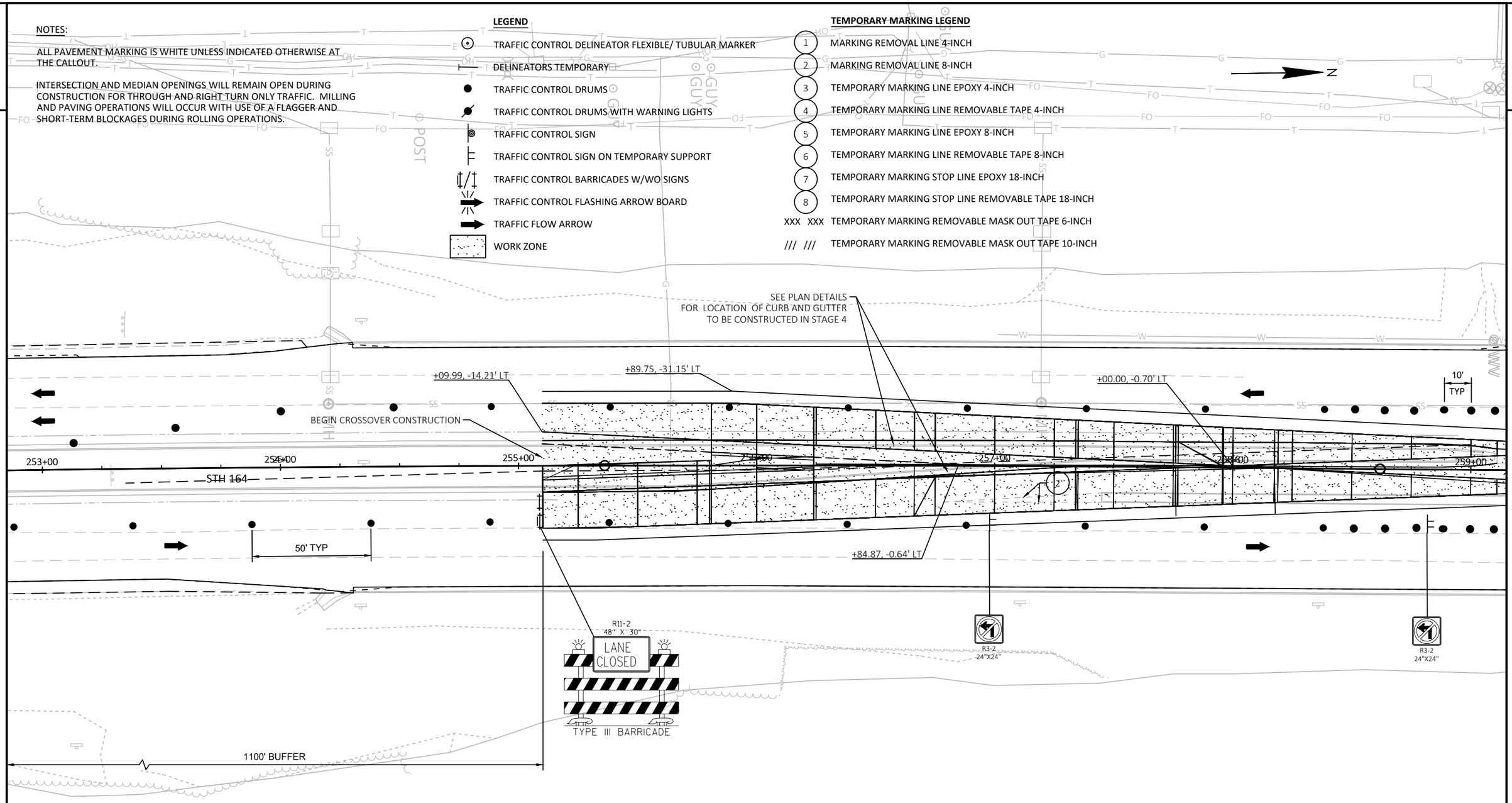
- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH



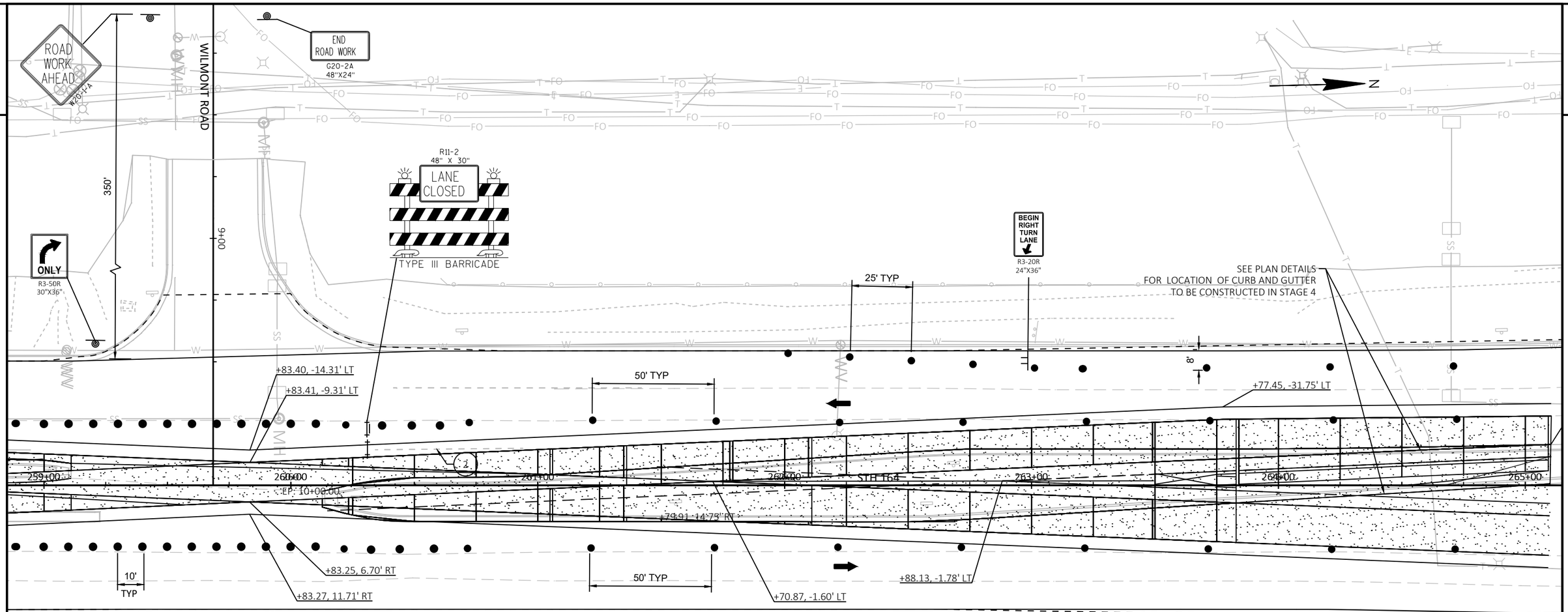
PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 216	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026401_S1.DWG
LAYOUT NAME - S1_38

PLOT DATE : 12/5/2019 8:34 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 217	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026401_S1.DWG
LAYOUT NAME - S1_39
PLOT DATE : 12/5/2019 8:35 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

STH 59

MAX. 11' WIDTH
W12-52
48"X48"

ROAD WORK AHEAD
W20-1-A

SOUTH
M3-3
24"X12"

164
M1-6
24"X24"

STOP
R1-1
30"X30"

500'

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

SEE PLAN DETAILS
FOR LOCATION OF CURB AND GUTTER
TO BE CONSTRUCTED IN STAGE 4

COVERING SIGN TYPE 2 (YIELD)

50' TYP

8'
16'
3'

+10.30, -16.48' LT

STH 164

XXX XXX XXX XXX XXX XXX XXX

YELLOW

265+00 266+00 267+00 268+00 269+00 270+00 271+00

25'

END PROJECT
STA 266+91

W01-6
48" X 24"
TYPE III BARRICADE

POST

BEGIN LEFT TURN LANE
R3-20L
24"X36"

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 218	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026401_S1.DWG
LAYOUT NAME - S1_40
PLOT DATE : 12/5/2019 8:35 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

STH 59

END ROAD WORK
G20-2A
48"X24"

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

50' TYP

4

6

YELLOW
4

25' TYP

S EAST AVE

271+00 272+00 273+00 274+00 275+00 276+00 277+00

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

600'

MAX. 11' WIDTH
W12-52
48"X48"

ROAD WORK AHEAD
W20-1-A

SOUTH
M3-3
24"X12"

164
M1-6
24"X24"

STH 164 / STH 59

END ROAD WORK
G20-2A
48"X24"

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 219	E

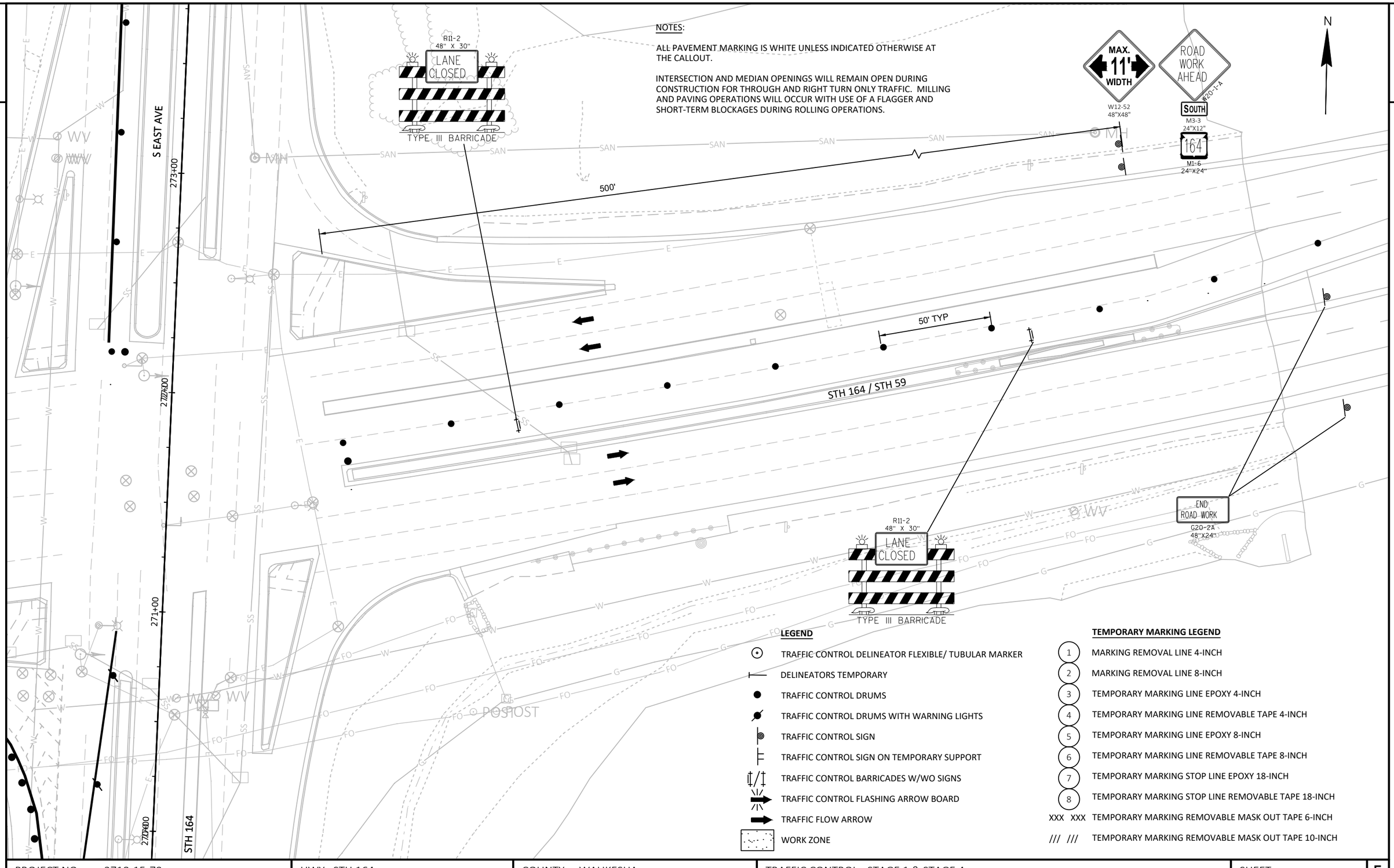
FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026401_S1.DWG
LAYOUT NAME - S1_41
PLOT DATE : 12/5/2019 8:35 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

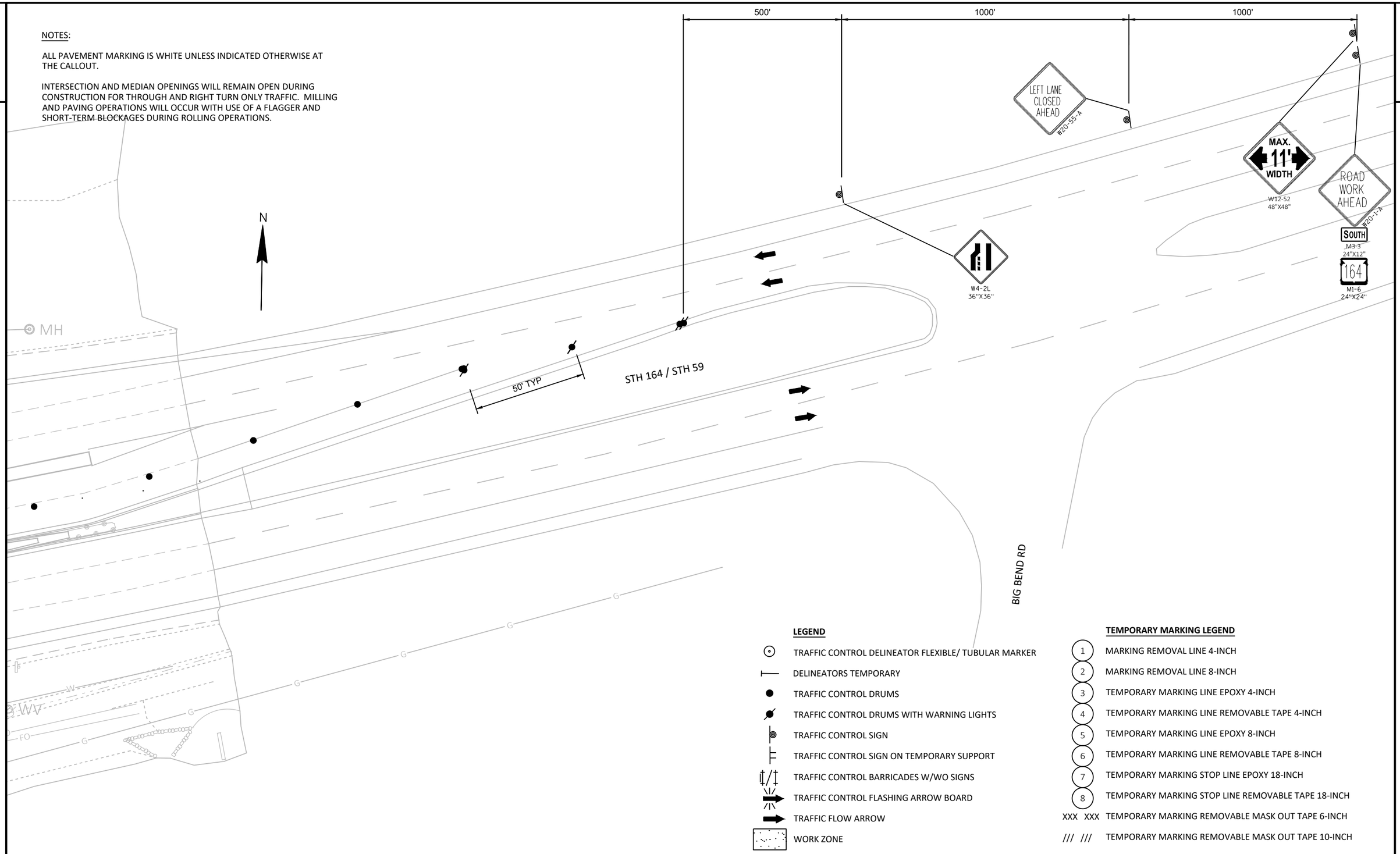
PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 220	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026401_S1.DWG
LAYOUT NAME - S1_42
PLOT DATE : 12/5/2019 8:35 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

2

N



SOUTHEAST AVE



R3-20L
24"X36"

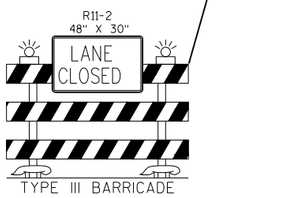
YELLOW 4

YELLOW 4

50' TYP

277+00 278+00 279+00 280+00 281+00 282+00 283+00

S EAST AVE



TYPE III BARRICADE

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

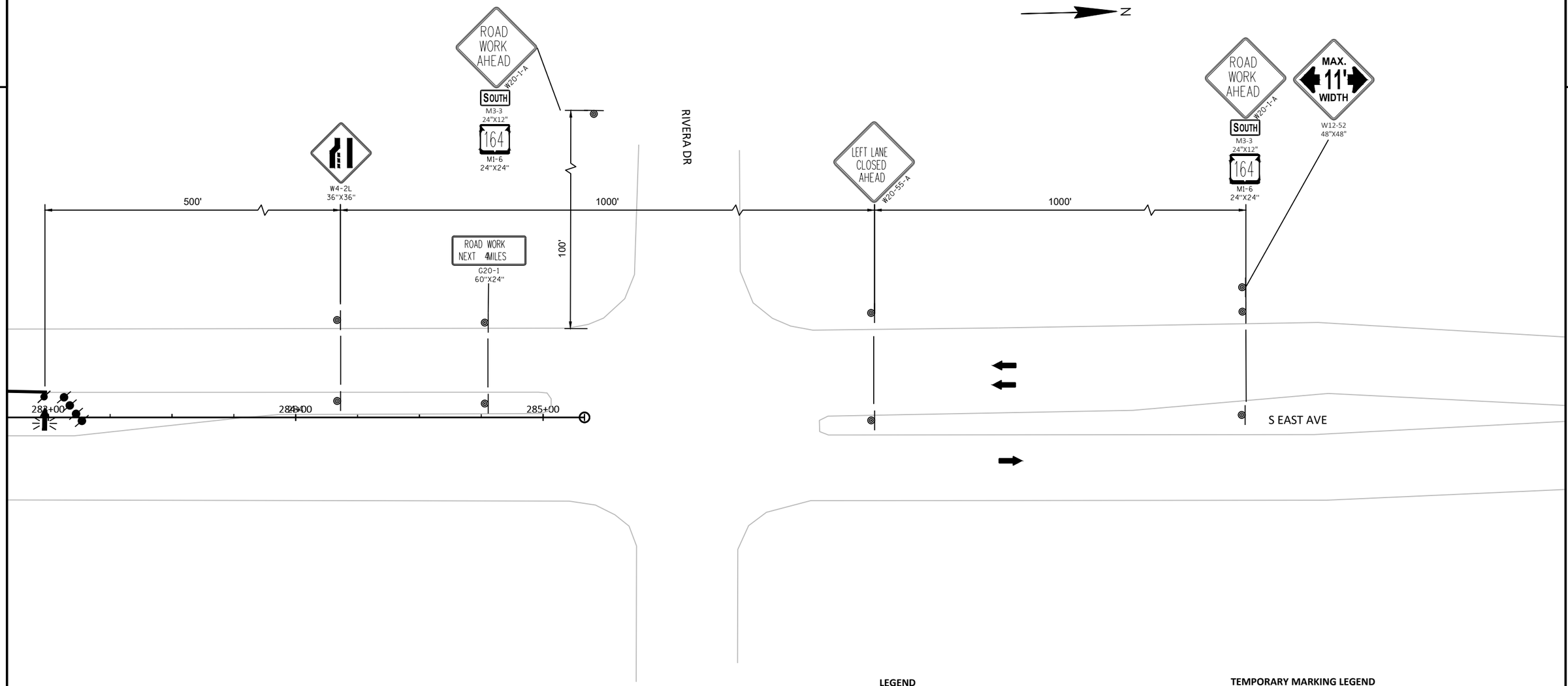
ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 222	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026401_S1.DWG
LAYOUT NAME - S1_43
PLOT DATE : 12/5/2019 8:36 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 & STAGE 4	SHEET 223	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026401_S1.DWG
LAYOUT NAME - S1_44
PLOT DATE : 12/5/2019 8:36 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

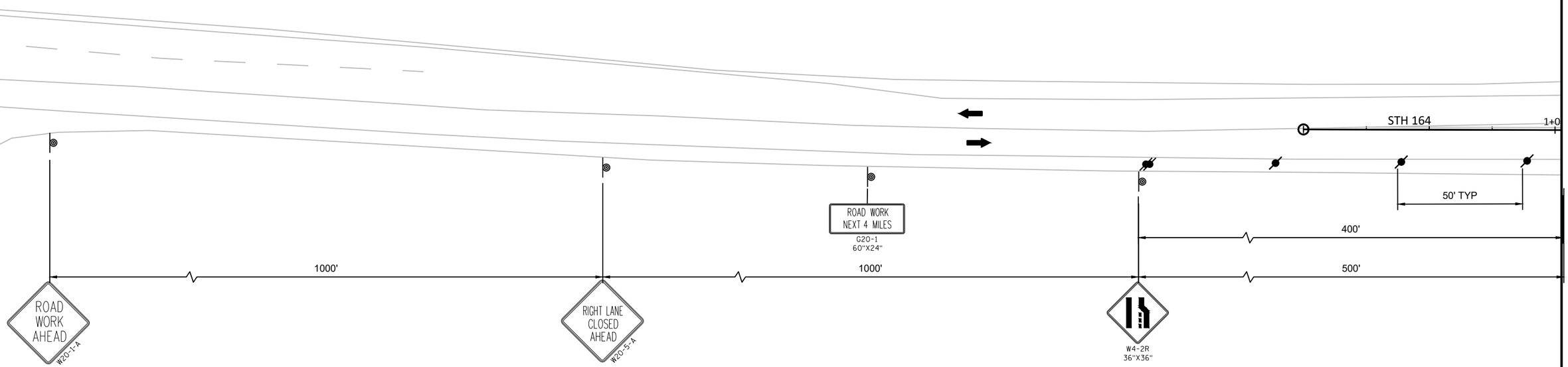
2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

- (1) MARKING REMOVAL LINE 4-INCH
- (2) MARKING REMOVAL LINE 8-INCH
- (3) TEMPORARY MARKING LINE EPOXY 4-INCH
- (4) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
- (5) TEMPORARY MARKING LINE EPOXY 8-INCH
- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
- (7) TEMPORARY MARKING STOP LINE EPOXY 18-INCH
- (8) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
- XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
- /// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH



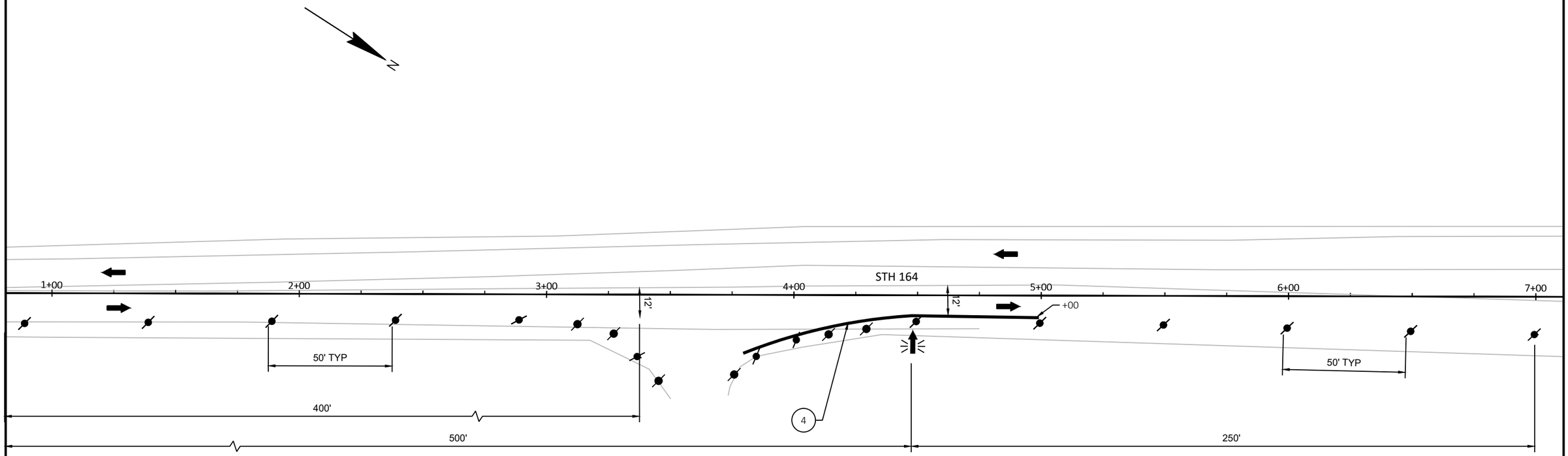
NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 224	E

2



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

- 1 MARKING REMOVAL LINE 4-INCH
- 2 MARKING REMOVAL LINE 8-INCH
- 3 TEMPORARY MARKING LINE EPOXY 4-INCH
- 4 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
- 5 TEMPORARY MARKING LINE EPOXY 8-INCH
- 6 TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
- 7 TEMPORARY MARKING STOP LINE EPOXY 18-INCH
- 8 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
- XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
- /// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

2

2

LEGEND

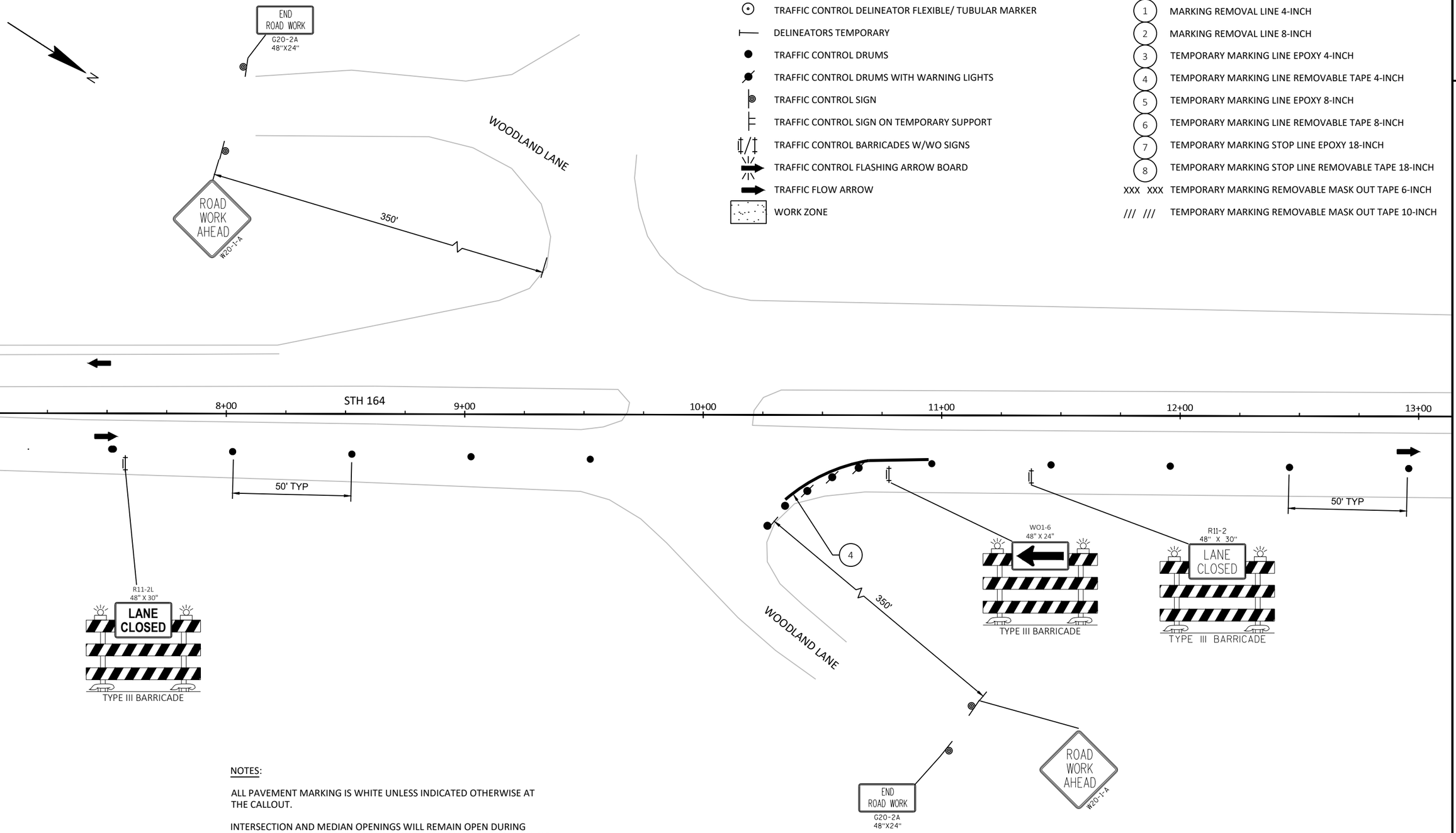
- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH



NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 226	E

2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

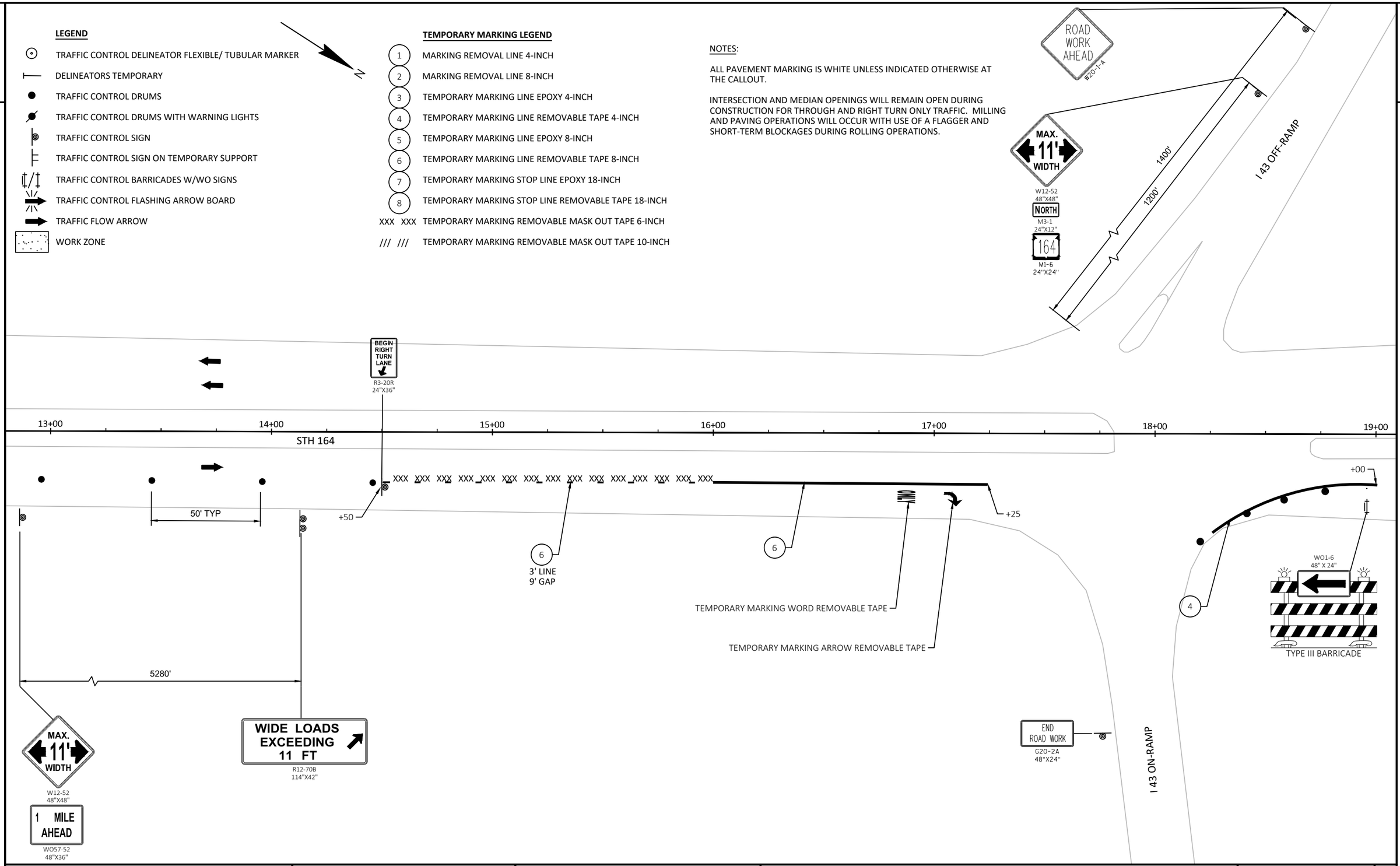
TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.



PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 227	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_000
PLOT DATE : 12/5/2019 8:40 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

I 43 ON-RAMP

END ROAD WORK
G20-2A
48"X24"

END ROAD WORK
G20-2A
48"X24"

19+00 20+00 21+00 22+00 23+00 24+00 25+00

STH 164

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

50' TYP

W1-4R
36"X36"

4

WO1-6
48" X 24"
TYPE III BARRICADE

1400'

1200'

MAX. 11' WIDTH
W12-52
48"X48"
NORTH
M3-1
24"X12"
164
M1-6
24"X24"

ROAD WORK AHEAD
W20-1-4

I 43 OFF-RAMP

I 43 NB

I 43 SB

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 228	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_00

PLOT DATE : 12/5/2019 8:40 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

BEGIN LEFT TURN LANE
R3-20L
24"X36"

25+00 26+00 27+00 28+00 29+00 30+00 31+00

STH 164

12'

XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX

16'

4

50' TYP

+94

12'

12'

+25

WO1-6
48" X 24"
TYPE III BARRICADE

BEGIN RIGHT TURN LANE
R3-20RR
24"X36"

4

6

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 229	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_0

PLOT DATE : 12/5/2019 8:40 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

MAX. 11' WIDTH
W12-52
48"X48"

ROAD WORK AHEAD
W20-1-A

NORTH
M3-1
24"X12"

164
M1-6
24"X24"

STOP
R1-1
30"X30"

500'

COVERING SIGN TYPE 2 (YIELD)

8

BEGIN PROJECT STA 31+43

CTH ES

195+00

196+00

197+00

198+00

END ROAD WORK
G20-2A
48"X24"

BEGIN LEFT TURN LANE
R3-20L
24"X36"

YELLOW
4

10'

31+00 32+00 33+00 34+00 35+00 36+00 37+00

STH 164

50' TYP

50' TYP

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

END ROAD WORK
G20-2A
48"X24"

CTH ES

198+00

8

COVERING SIGN TYPE 2 (YIELD)

500'

STOP
R1-1
30"X30"

WO1-6
48" X 24"
TYPE III BARRICADE

ROAD WORK AHEAD
W20-1-A

NORTH
M3-1
24"X12"

164
M1-6
24"X24"

MAX. 11' WIDTH
W12-52
48"X48"

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 230	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_1

PLOT DATE : 12/5/2019 8:40 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

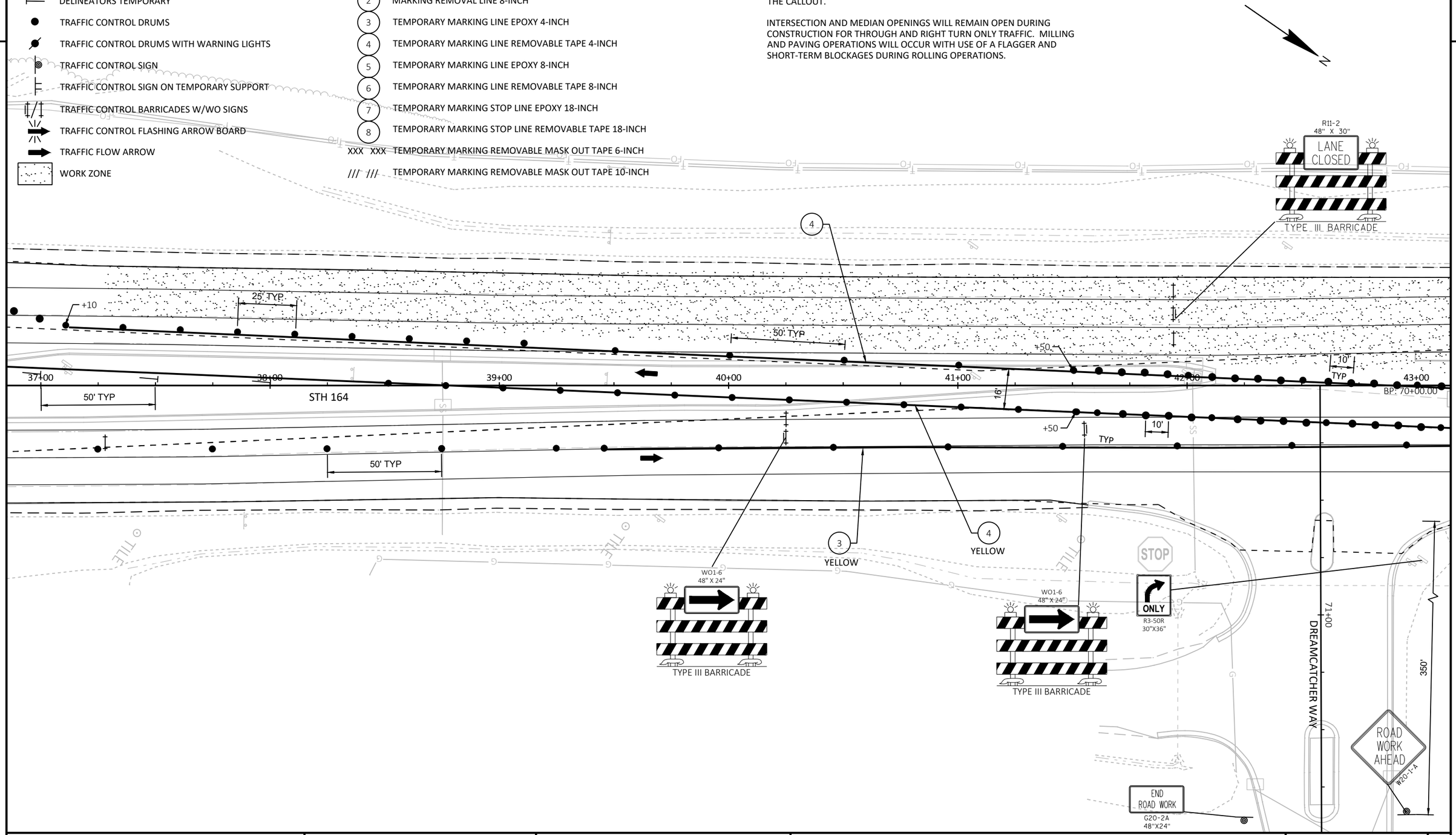
XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.



PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 231	E

2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

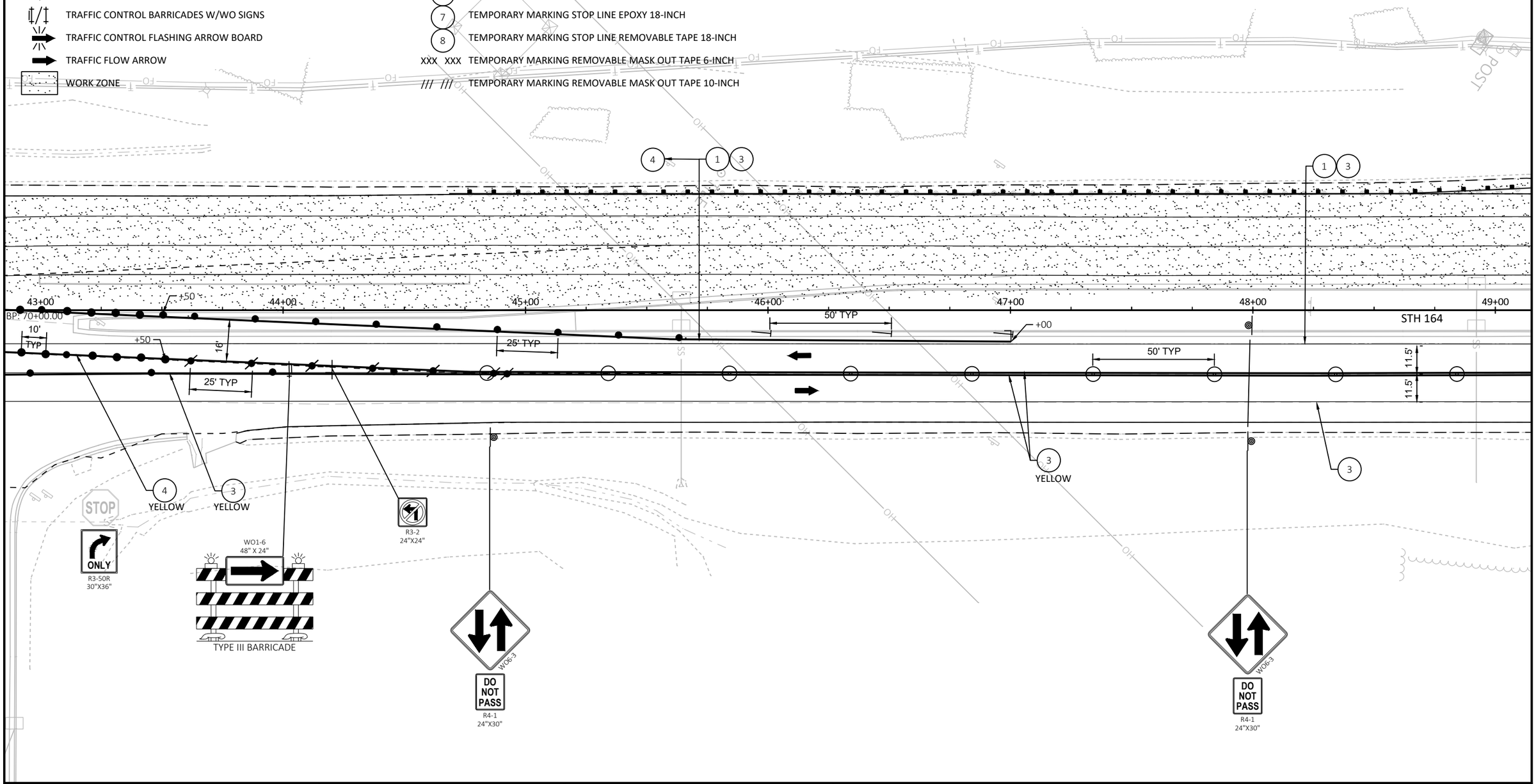
XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.



PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 232	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_3

PLOT DATE : 12/5/2019 8:41 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

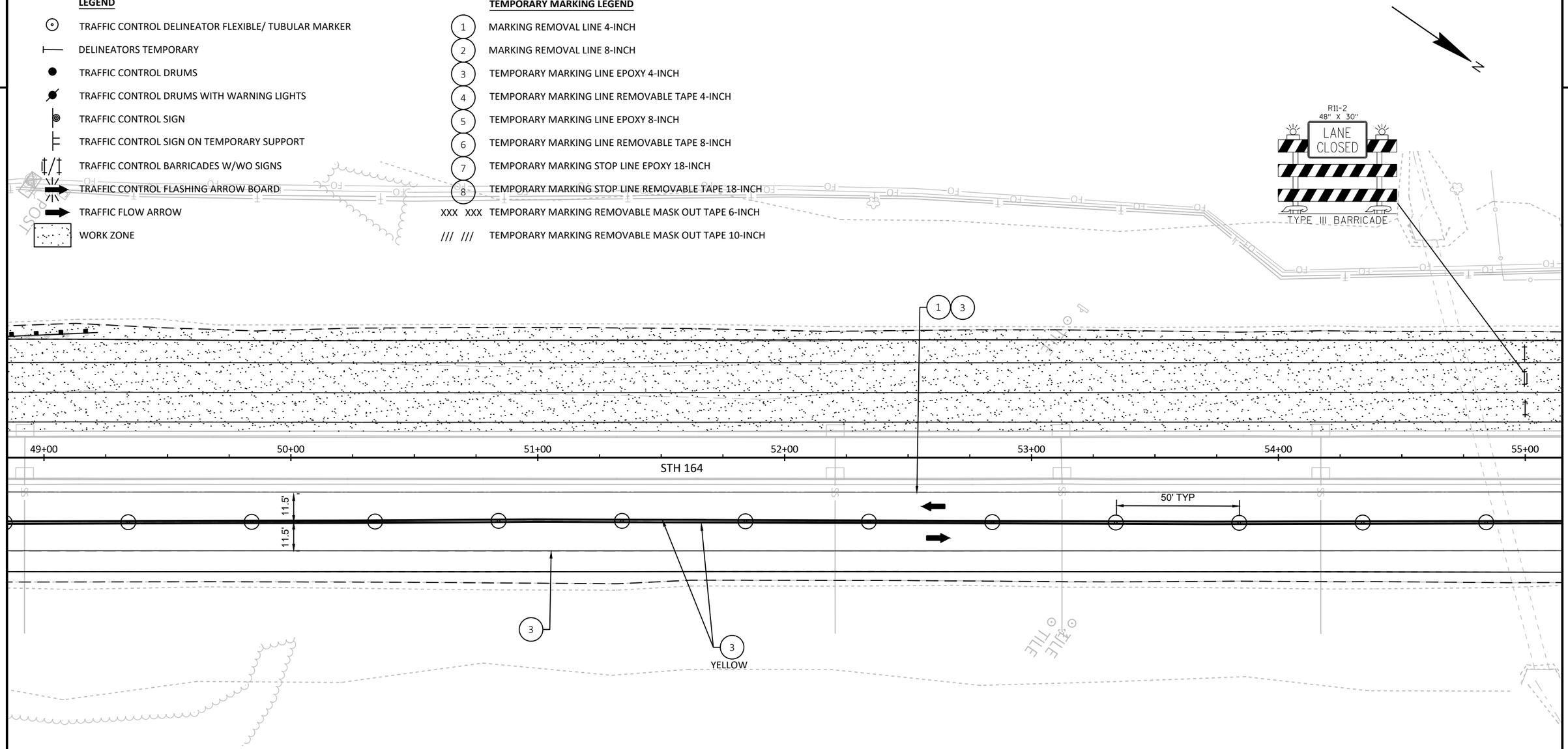
- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH



NOTES:

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INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 233	E

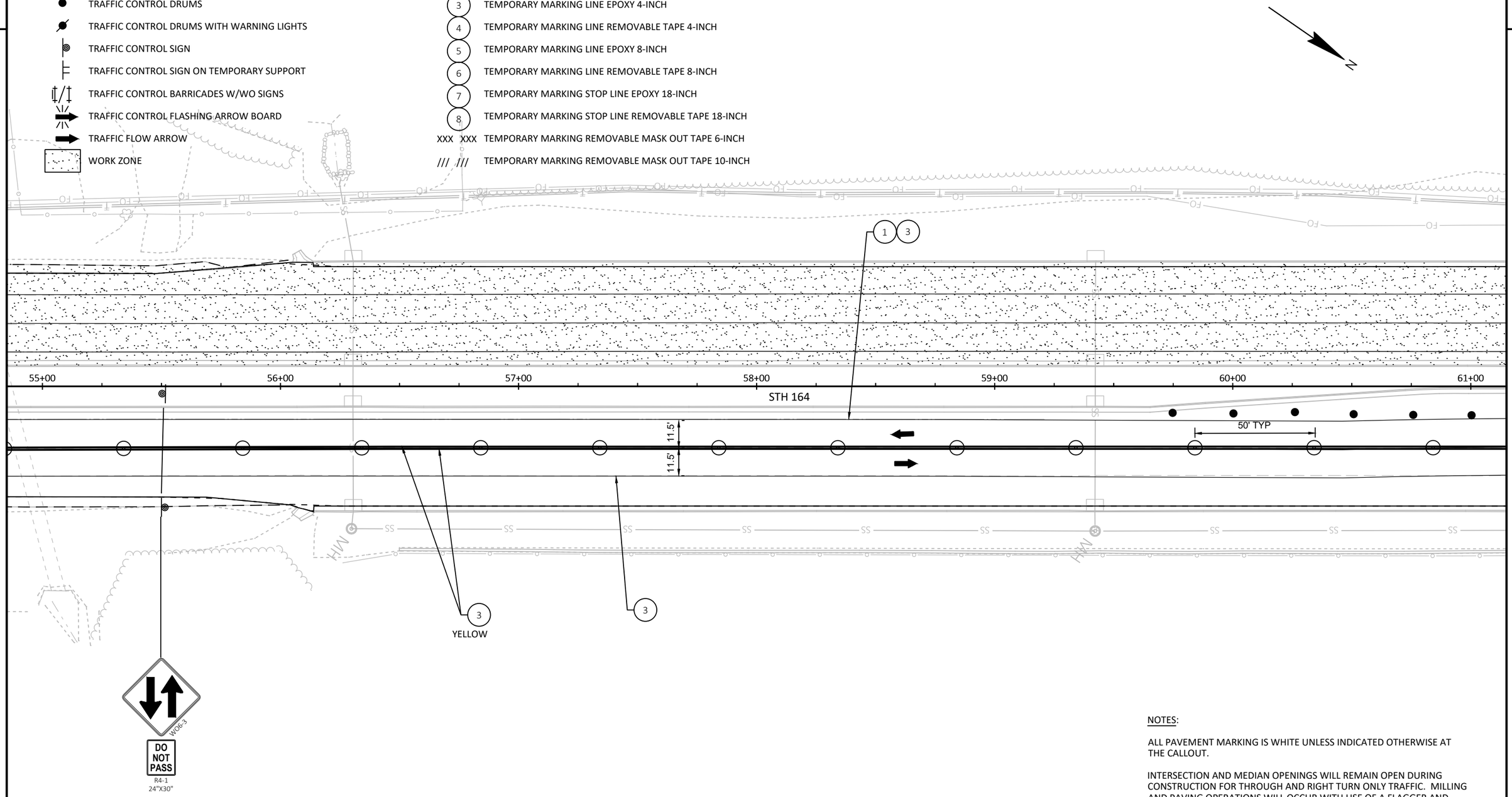
2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

- 1 MARKING REMOVAL LINE 4-INCH
- 2 MARKING REMOVAL LINE 8-INCH
- 3 TEMPORARY MARKING LINE EPOXY 4-INCH
- 4 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
- 5 TEMPORARY MARKING LINE EPOXY 8-INCH
- 6 TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
- 7 TEMPORARY MARKING STOP LINE EPOXY 18-INCH
- 8 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
- XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
- /// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH



NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

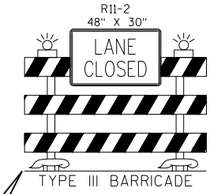
INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

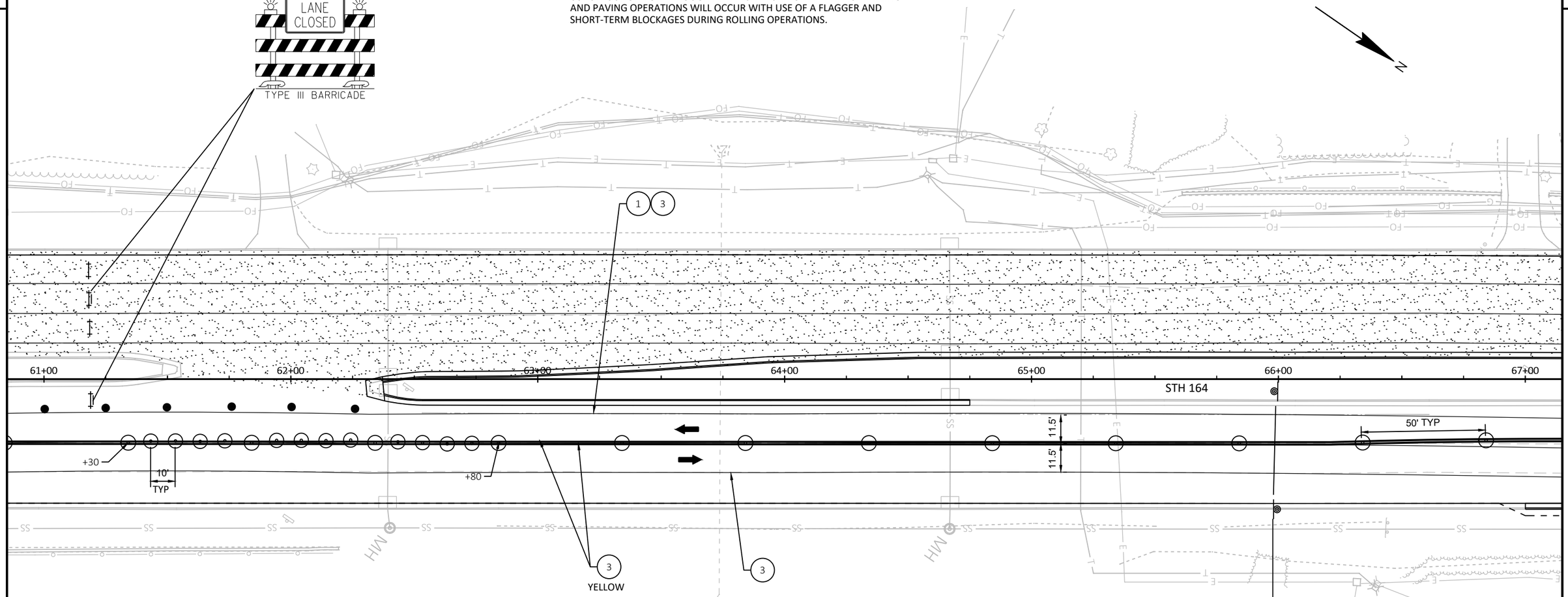
2

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.







LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

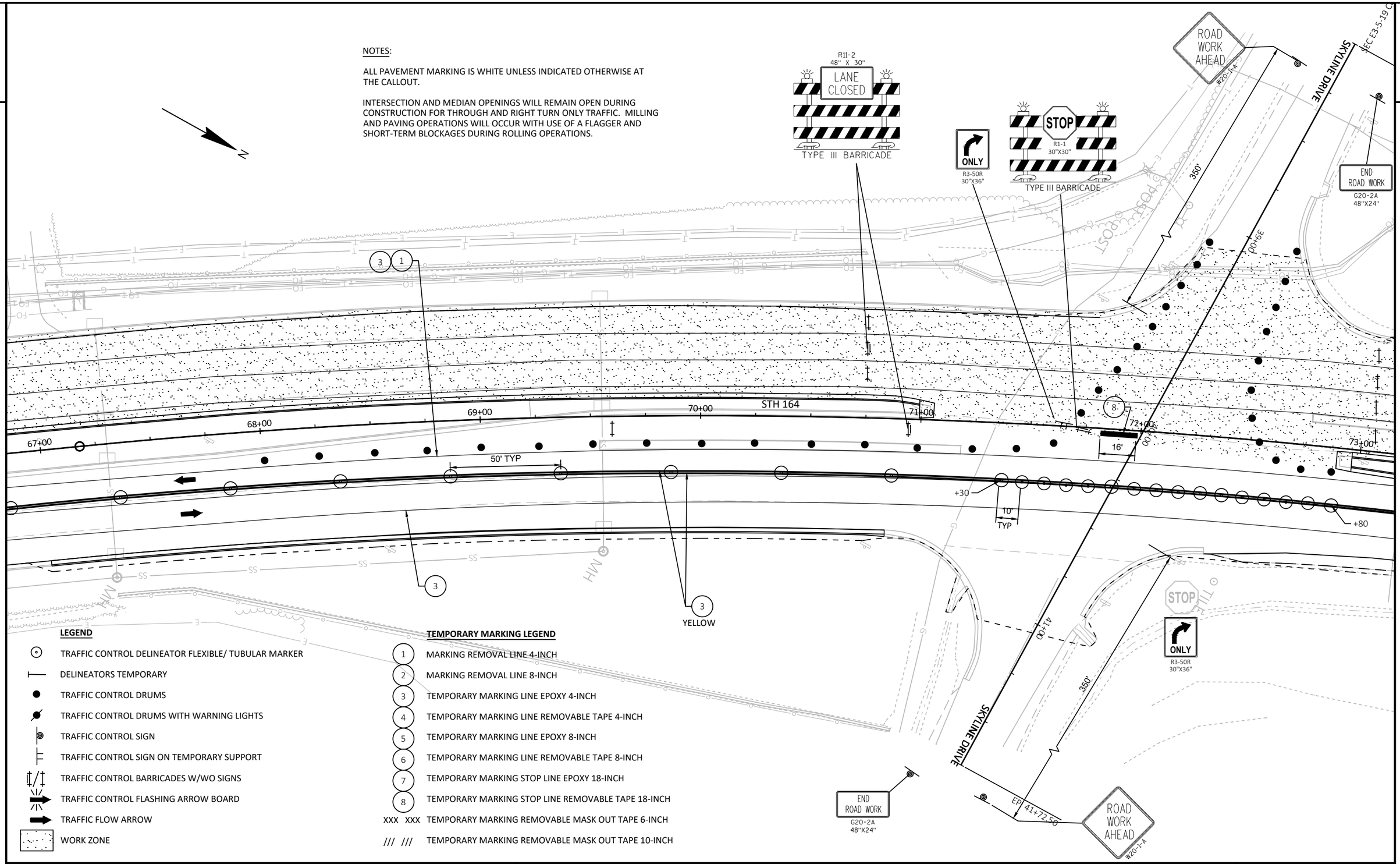
PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 235	E

2

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

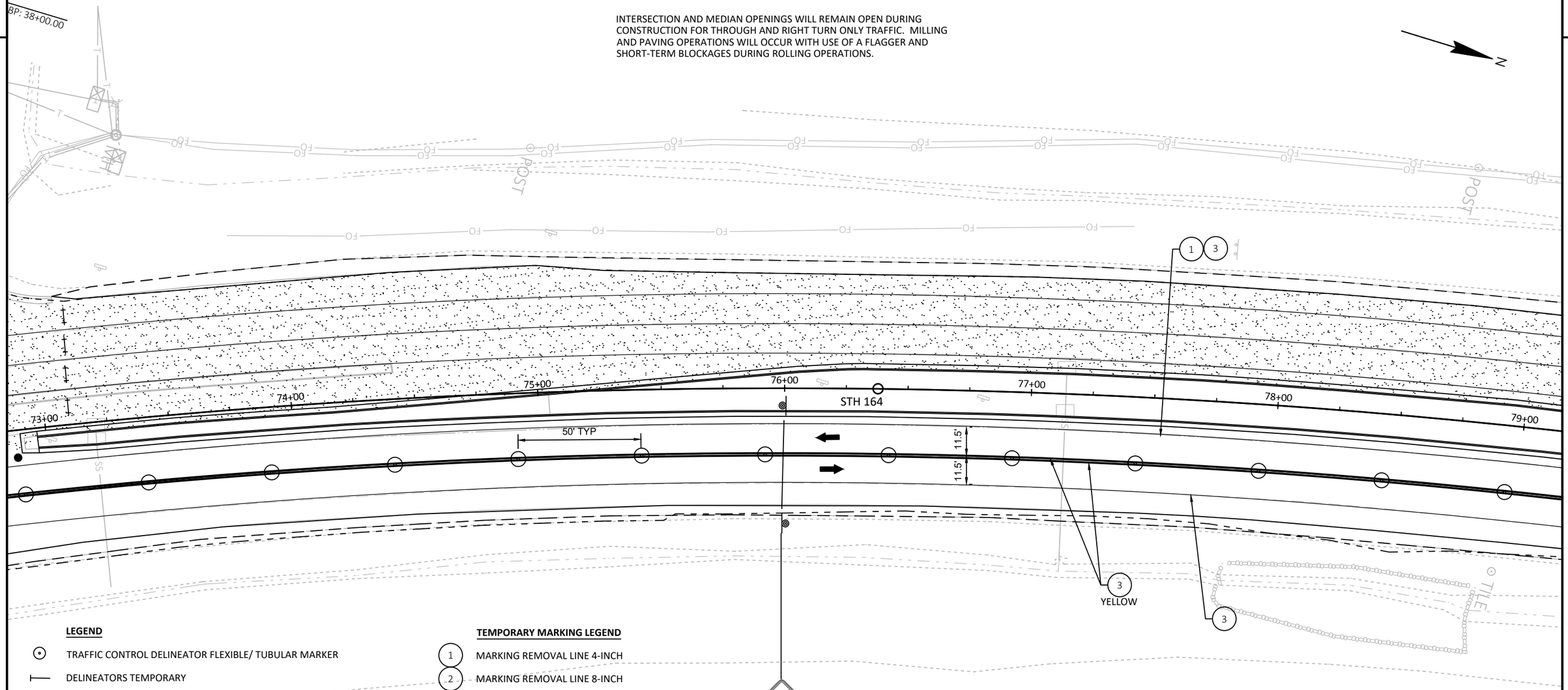
PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 236	E

2

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.



LEGEND

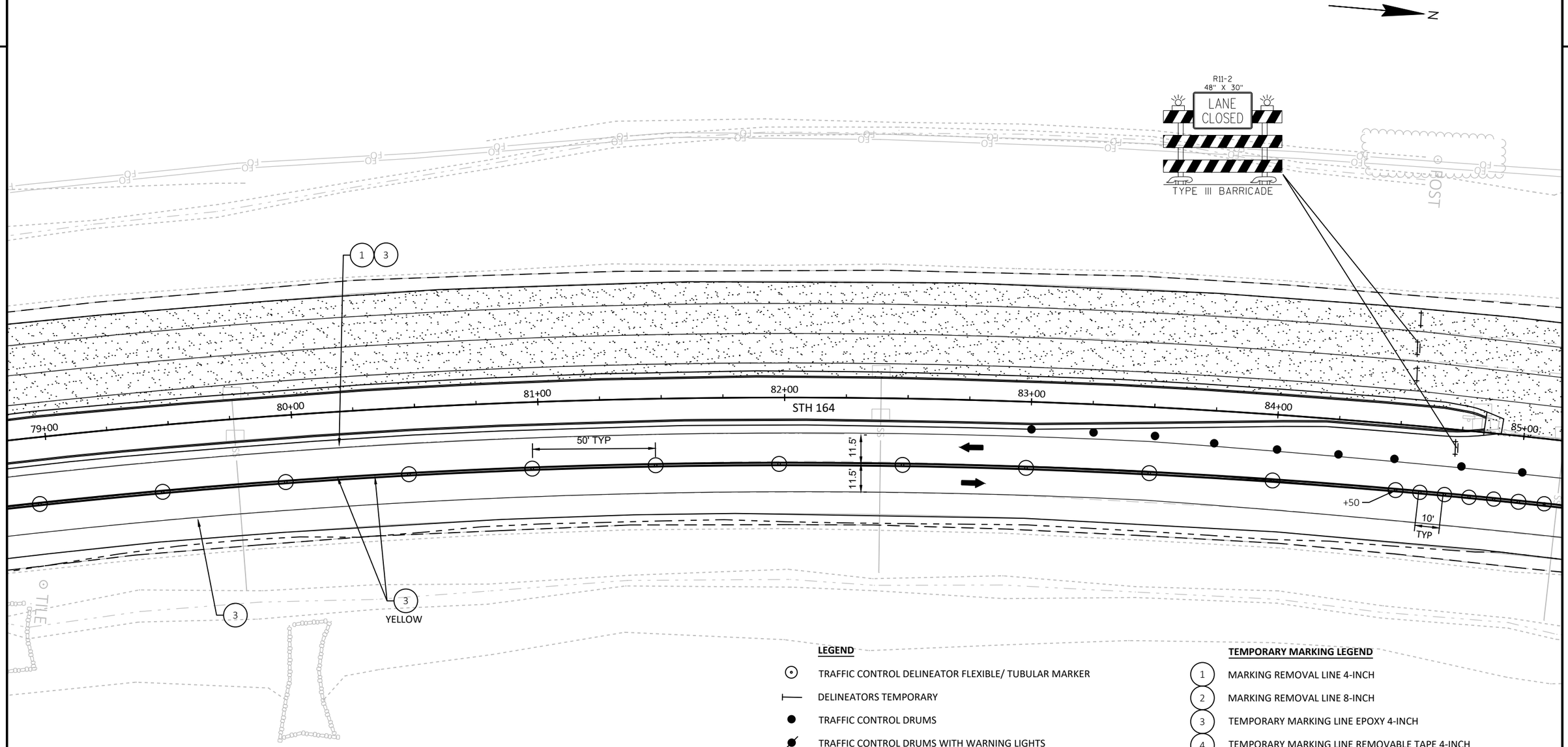
- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 237	E

2



NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 238	E

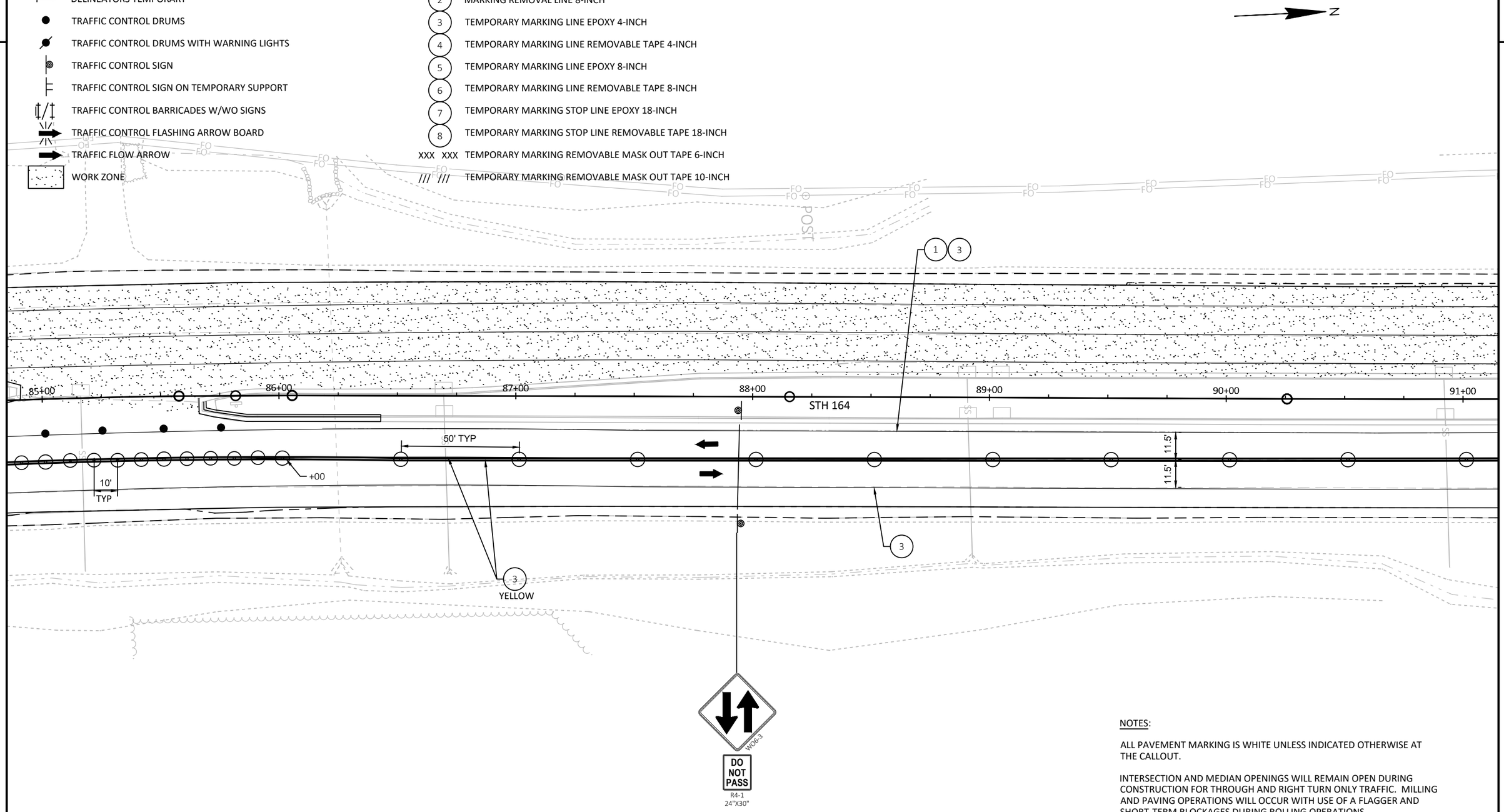
2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

- (1) MARKING REMOVAL LINE 4-INCH
- (2) MARKING REMOVAL LINE 8-INCH
- (3) TEMPORARY MARKING LINE EPOXY 4-INCH
- (4) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
- (5) TEMPORARY MARKING LINE EPOXY 8-INCH
- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
- (7) TEMPORARY MARKING STOP LINE EPOXY 18-INCH
- (8) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
- XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
- /// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH



NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 239	E

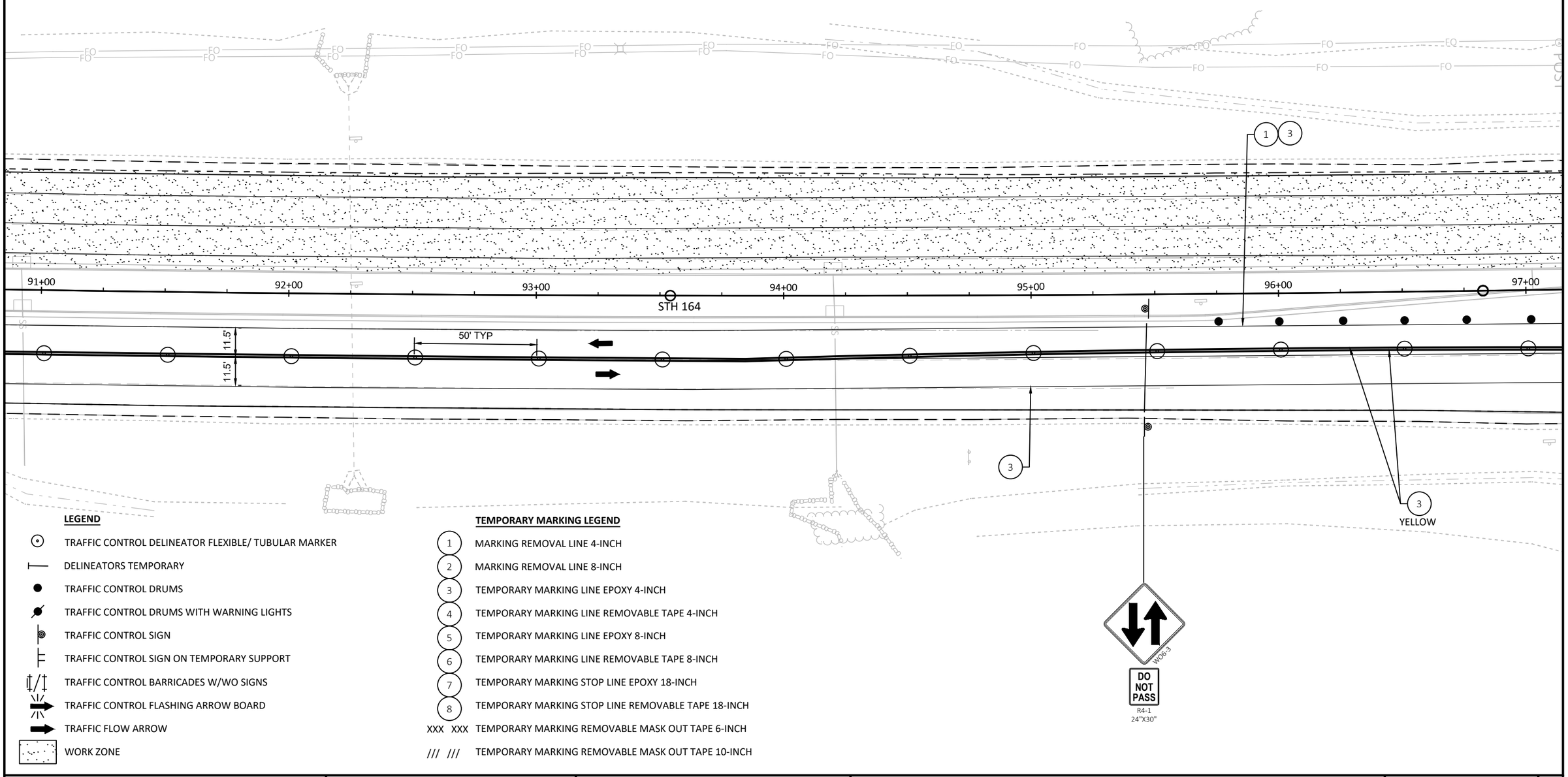
FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_10
PLOT DATE : 12/5/2019 8:42 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

N



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 240	E

2

ROAD WORK AHEAD
W20-1-A

END ROAD WORK
G20-2A
48"X24"

TOWNLINE ROAD

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

ONLY
R3-50R
30"X36"

STOP
R1-1
30"X30"
TYPE III BARRICADE

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

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97+00 98+00 99+00 100+00 101+00 102+00 103+00

PI: 30+00.00

STH 164

29+00

350'

16'

30'

50' TYP

11.5'

11.5'

+00

+50

10' TYP

SECTION CORNER SEE PLAN DETAIL

SEC SE34-6-19 CONC MON BRASS CAP 5-19 619165

31+00

350'

TOWNLINE ROAD

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1-A

EP: 31+84.24

STOP
ONLY
R3-50R
30"X36"

YELLOW

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 241	E

2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

N

2

103+00 104+00 105+00 106+00 107+00 108+00 109+00

STH 164

11.5'

11.5'

50' TYP

1 3

3

3 YELLOW

TILE

W0G-3

DO NOT PASS

R4-1

24"X30"

NOTES:

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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 242	E

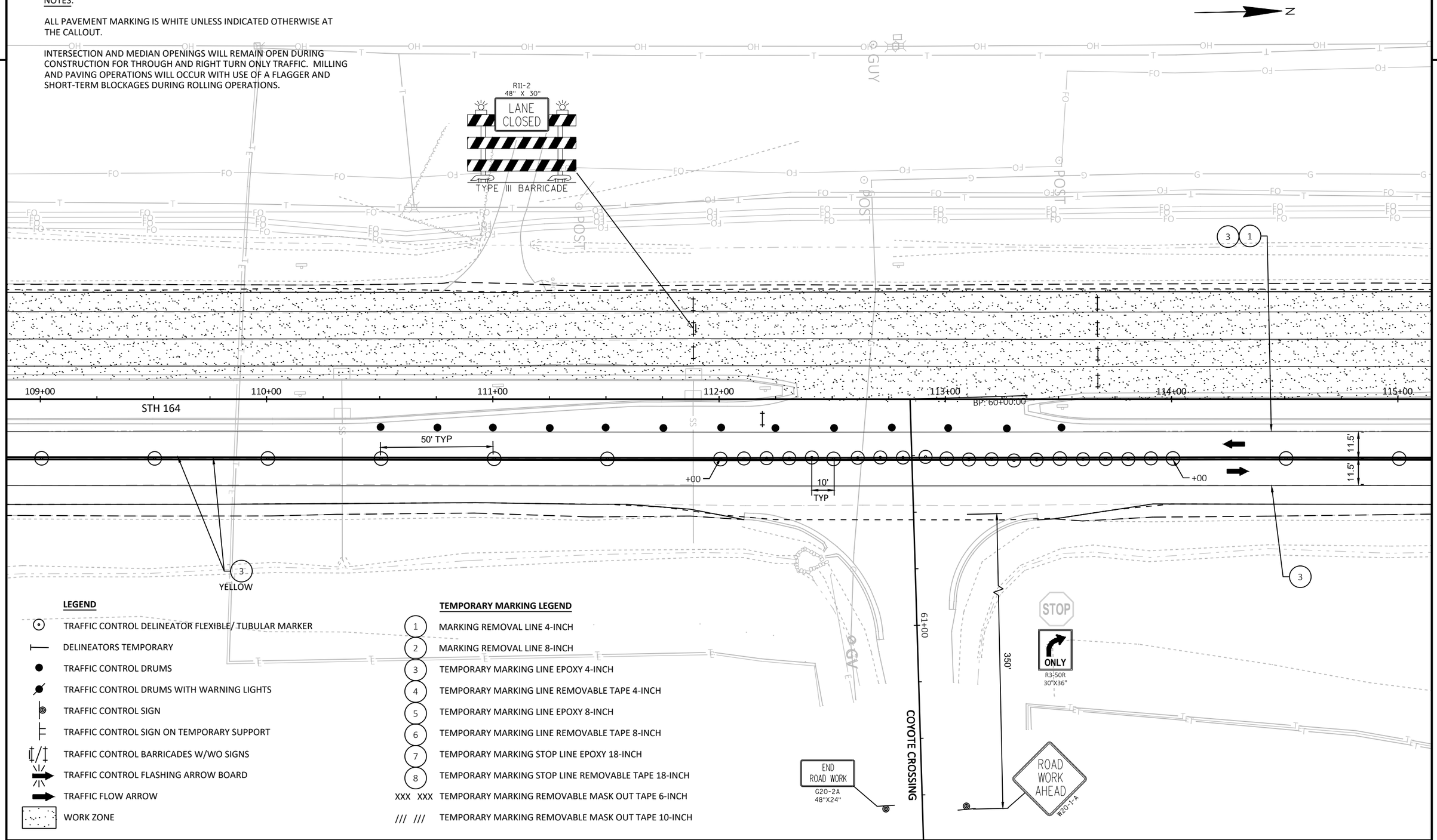
FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_13

PLOT DATE : 12/5/2019 8:42 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

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LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 243	E

LEGEND

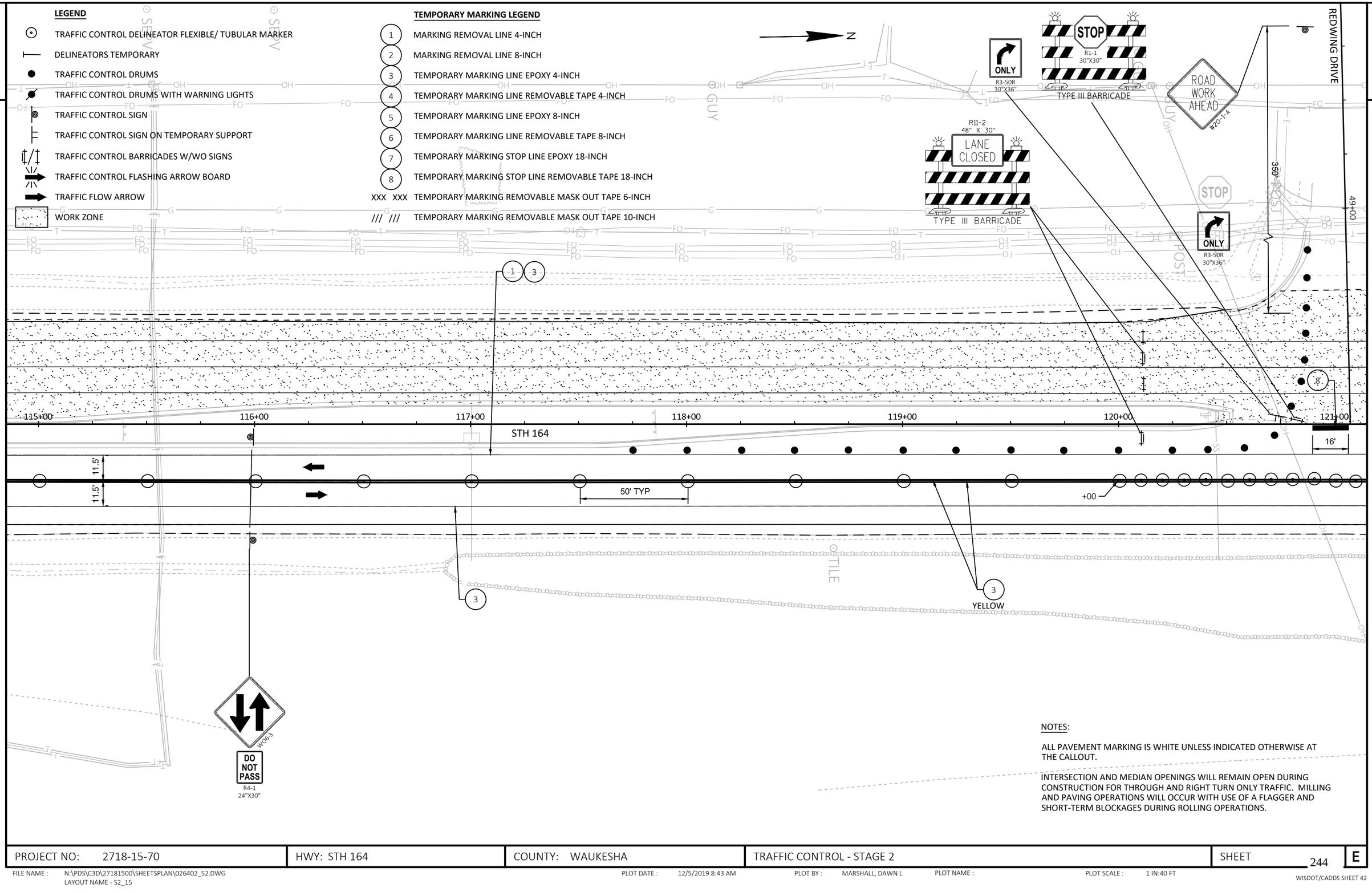
- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH



NOTES:

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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 244	E

2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

END ROAD WORK
G20-2A
48"X24"

REDWING DRIVE

STH 164

121+00 122+00 123+00 124+00 125+00 126+00 127+00

EP: 50+00.00

+00

10' TYP

50' TYP

11.5'

11.5'

SECTION CORNER SEE PLAN DETAIL

SEC E34-6-19 CONC MON BRASS CAP 619152

YELLOW

NOTES:

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W06-3

DO NOT PASS
R4-1
24"X30"

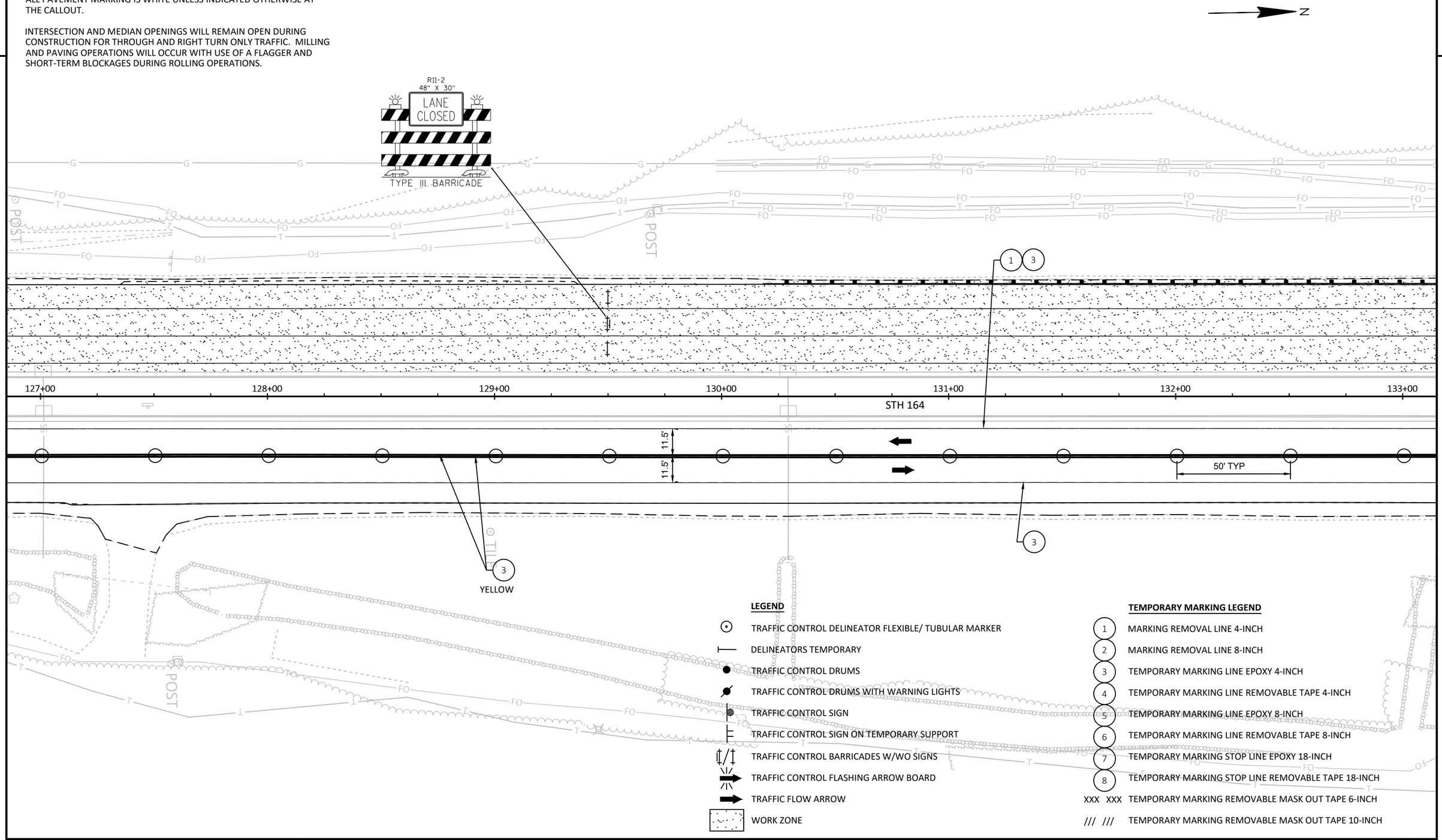
PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 245	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_16
PLOT DATE : 12/5/2019 8:43 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 246	E

2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

N

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

POST

3 1

133+00 134+00 135+00 136+00 137+00 138+00 139+00

STH 164

50' TYP

11.5'
11.5'

+50

10'
TYP

TILE

3
YELLOW

W06-3

DO NOT PASS
R4-1
24"X30"

NOTES:

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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 247	E

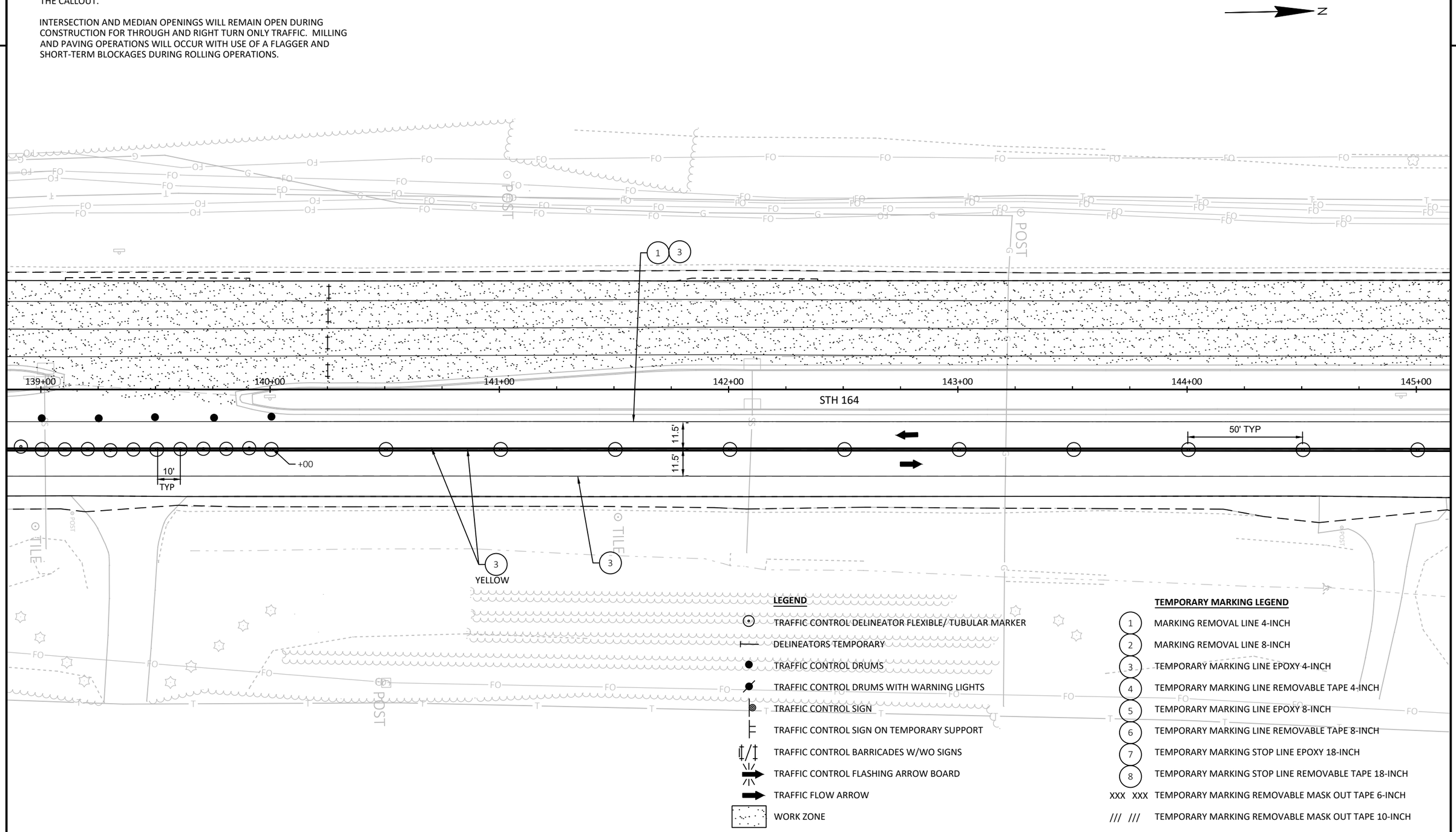
FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_18

PLOT DATE : 12/5/2019 8:43 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.



PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 248	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_19
PLOT DATE : 12/5/2019 8:44 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

N

145+00 146+00 147+00 148+00 149+00 150+00 151+00

STH 164

11.5'

11.5'

50' TYP

1 3

3

YELLOW

3

W06-3

DO NOT PASS

R4-1
24"X30"

NOTES:

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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 249	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_20

PLOT DATE : 12/5/2019 8:44 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

SECTION CORNER
SEE PLAN DETAIL

SEC SE27-6-19 CONC MON BOX CAP
1653139

151+00 152+00 153+00 154+00 155+00 156+00 157+00

STH 164

+00 +50

10' TYP

50' TYP

11.5' 11.5'

1 3

3 YELLOW

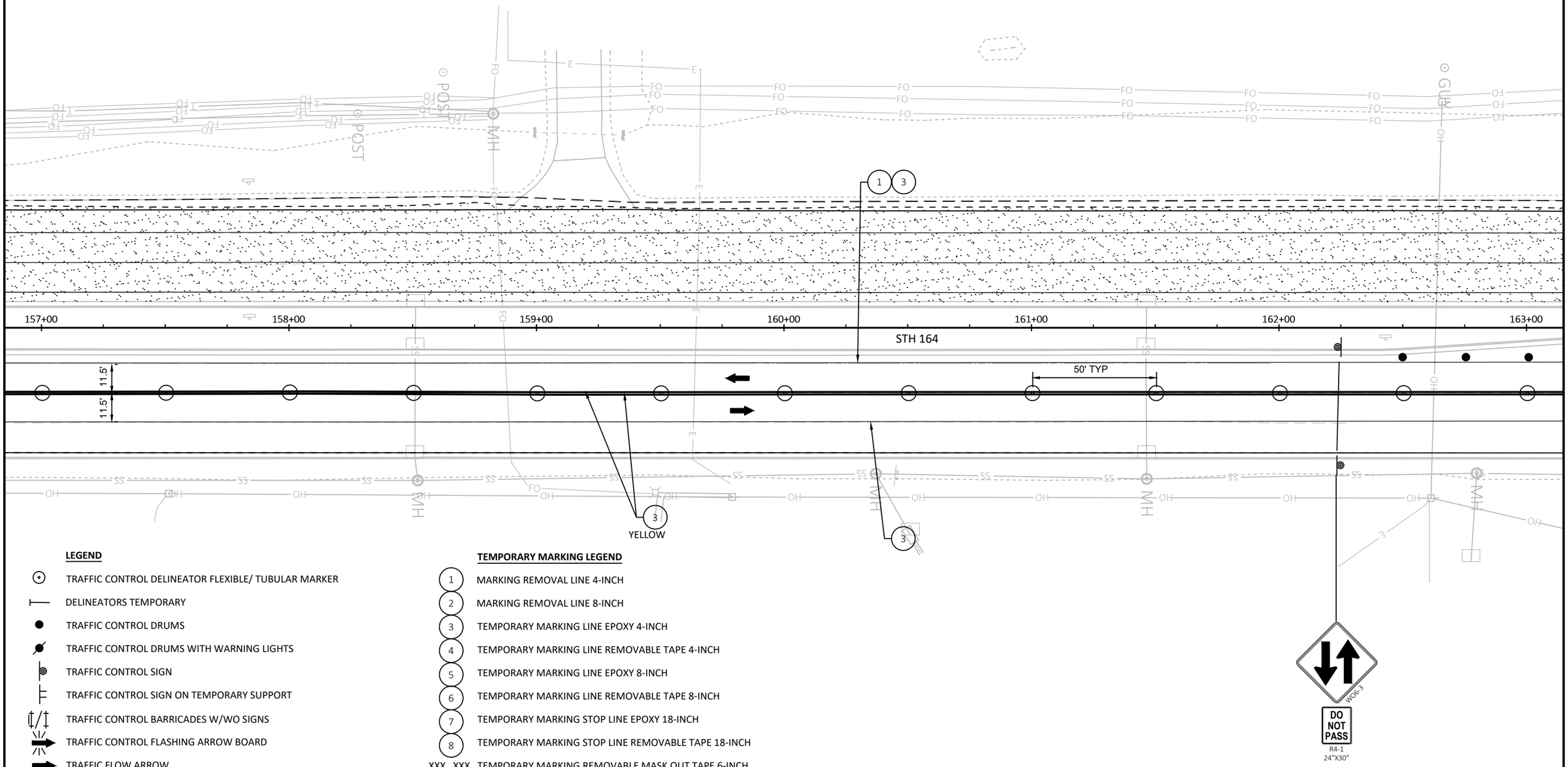
3

W GUY GUY GUY

NOTES:

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LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 251	E

2

2

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

N

ROAD WORK AHEAD
W20-1-4

END ROAD WORK
G20-2A
48"X24"

GLENDALE ROAD

R11-2
48" X 30"
LANE CLOSED

TYPE III BARRICADE

ONLY
R3-50R
30"X36"

STOP
R1-1
30"X30"

TYPE III BARRICADE

350'

2+00

3 1

8

163+00 164+00 165+00 166+00 167+00 168+00 169+00

STH 164

16'

50' TYP

50' TYP

+50

+50

10'
TYP

11.5'

11.5'

3

YELLOW

R11-2
48" X 30"
LANE CLOSED

TYPE III BARRICADE

4+00

STOP

ONLY
R3-50R
30"X36"

350'

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1-4

LEGEND

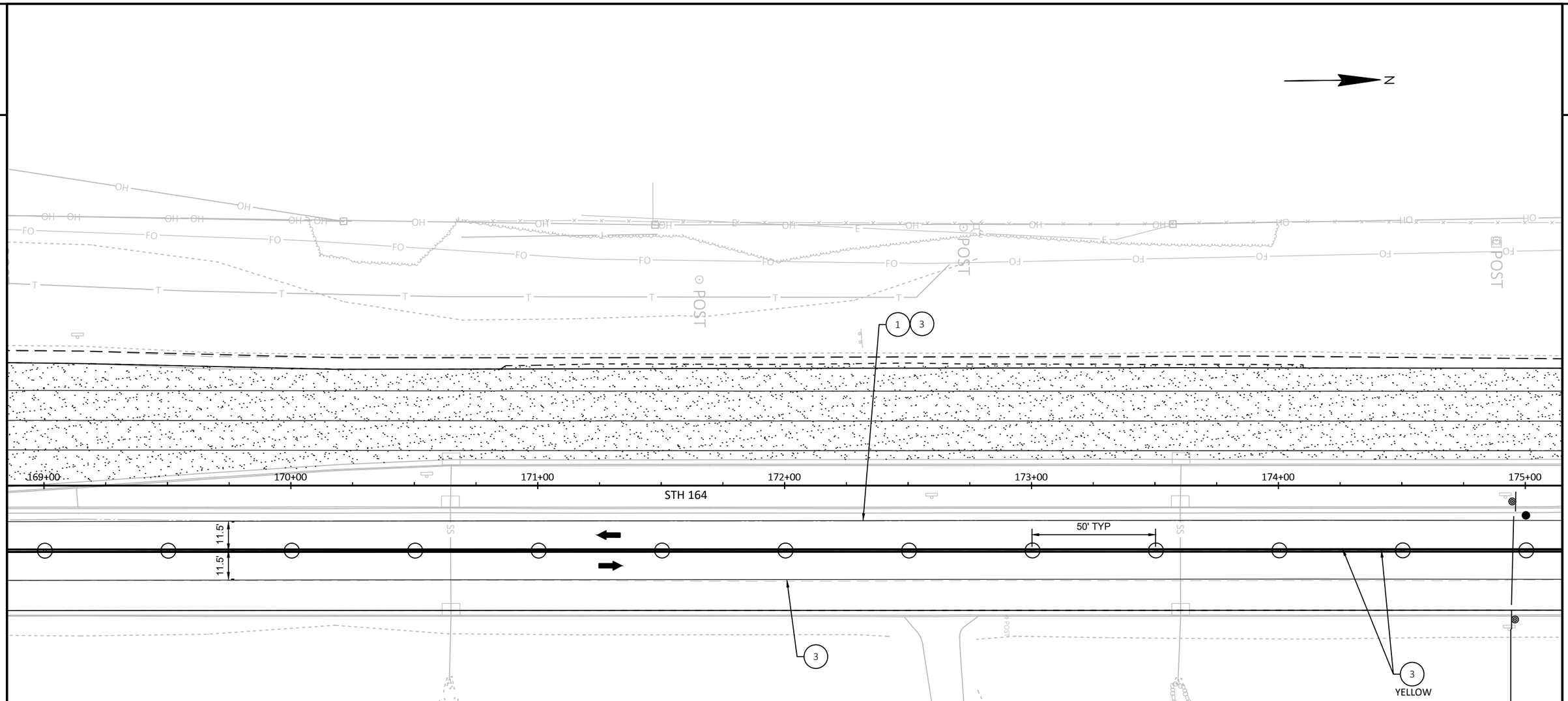
- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 252	E

2



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 253	E

2

N

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

POST

POST

SECTION CORNER
SEE PLAN DETAIL

175+00 176+00 177+00 178+00 179+00 180+00 181+00

STH 164

50' TYP

+50

+00

10'
TYP

SEC E27-6-19 CONC MON BOX CAP
619126

11.5'
11.5'

1 3

3

YELLOW

3

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 254	E

2

N

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

181+00 182+00 183+00 184+00 185+00 186+00 187+00

STH 164

50' TYP

11.5'
11.5'

+50 +00

10'
TYP

1 3

3
YELLOW

W06-3
DO NOT PASS
R4-1
24"X30"

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 255	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_26
PLOT DATE : 12/5/2019 8:45 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

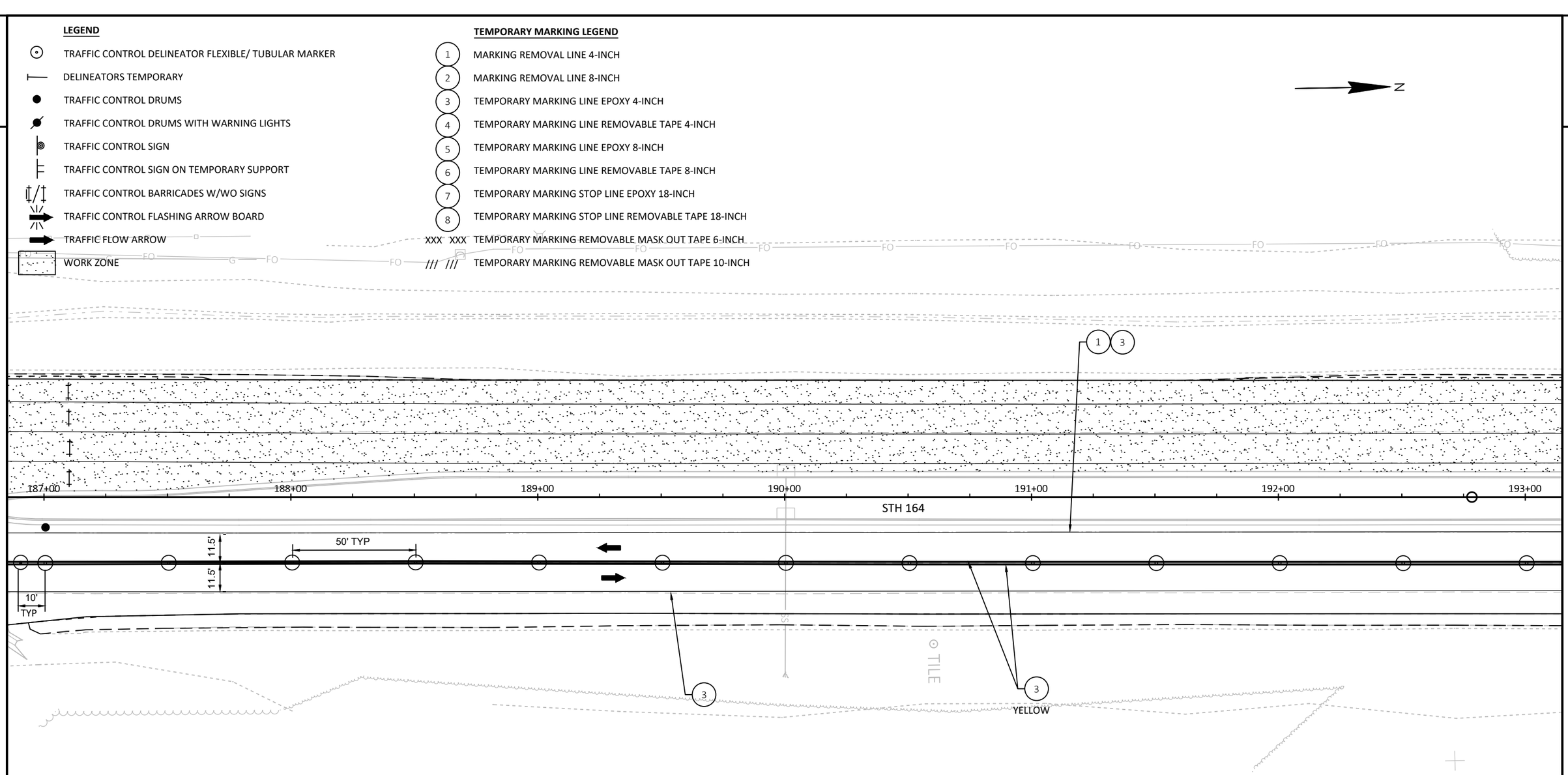
- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH



NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

N

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

B-67-0021

1 3

193+00 194+00 195+00 196+00 197+00 198+00 199+00

STH 164

11.5'
11.5'

50' TYP

B-67-0021

3

3
YELLOW

W06-3

DO NOT PASS
R4-1
24"X30"

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 257	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_28

PLOT DATE : 12/5/2019 8:46 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

- 1 MARKING REMOVAL LINE 4-INCH
- 2 MARKING REMOVAL LINE 8-INCH
- 3 TEMPORARY MARKING LINE EPOXY 4-INCH
- 4 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
- 5 TEMPORARY MARKING LINE EPOXY 8-INCH
- 6 TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
- 7 TEMPORARY MARKING STOP LINE EPOXY 18-INCH
- 8 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
- XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
- /// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

N

199+00 200+00 201+00 202+00 203+00 204+00 205+00

STH 164

11.5' 11.5'

50' TYP

1 3

3

3
YELLOW

W06-3
DO NOT PASS
R4-1
24"X30"

NOTES:

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INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 258	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_29

PLOT DATE : 12/5/2019 8:46 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

N

ROAD WORK AHEAD W20-1-A

164 M1-6 24"X24"

END ROAD WORK G20-2A 48"X24"

STOP R1-1 30"X30"

ONLY R3-5OR 30"X36"

R11-2 48" X 30" LANE CLOSED

TYPE III BARRICADE

COVERING SIGN TYPE 2 (YIELD)

500'

LAWNSDALE ROAD / CTH I

442+00

443+00

444+00

445+00

PI 442+91.25

SECTION CORNER SEE PLAN DETAIL

SEC SE 27-6-19 ONC MON BRASS CAP

16'

11.5'

10' TYP

50' TYP

205+00

206+00

207+00

208+00

209+00

210+00

211+00

STH 164

+00

1

3

YELLOW

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 259	E

2

N

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

211+00 212+00 213+00 214+00 215+00 216+00 217+00

STH 164

50' TYP

11.5'
11.5'

3
3
YELLOW

W06-3
DO NOT PASS
R4-1
24"X30"

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

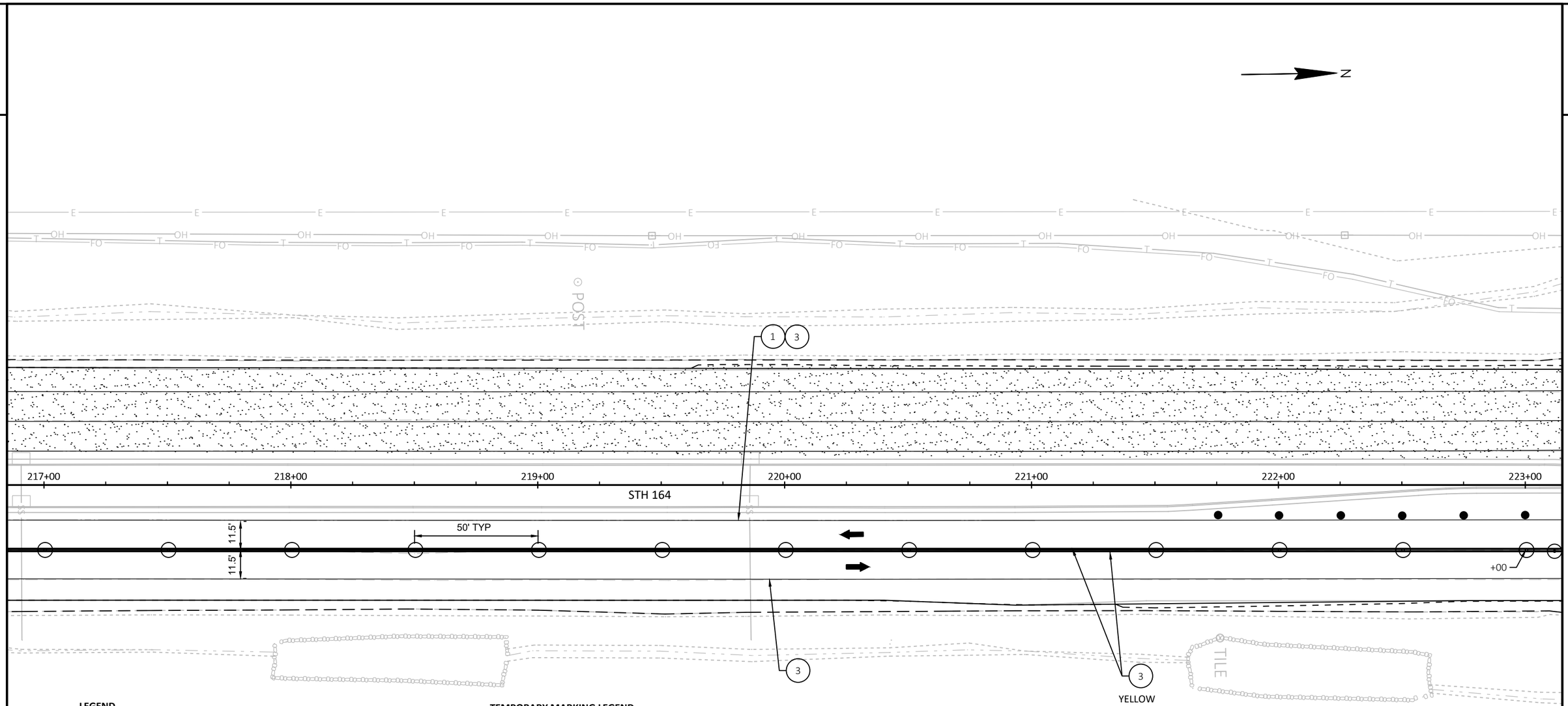
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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 260	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_31
PLOT DATE : 12/5/2019 8:46 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 261	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_32
PLOT DATE : 12/5/2019 8:46 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

N

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

223+00 224+00 225+00 226+00 227+00 228+00 229+00

STH 164

50' TYP

+00 +50

10' TYP

11.5' 11.5'

3 YELLOW

3

3

W06-3
DO NOT PASS
R4-1
24"X30"

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 262	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_33
PLOT DATE : 12/5/2019 8:47 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

229+00 230+00 231+00 232+00 233+00 234+00 235+00

STH 164

50' TYP

SECTION CORNER
SEE PLAN DETAIL

SEE E22-6-19 CONC MON BOX CAP
6190

11.5'
11.5'

TILE

3
YELLOW

3

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 263	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_34
PLOT DATE : 12/5/2019 8:47 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

N

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

POST
POST
POST
B-67-0036

1 3

235+00 236+00 237+00 238+00 239+00 240+00 241+00

STH 164

11.5'
11.5'

50' TYP

B-67-0036

3
YELLOW

3

W06-3
DO NOT PASS
R4-1
24"X30"

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 264	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_35

PLOT DATE : 12/5/2019 8:47 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

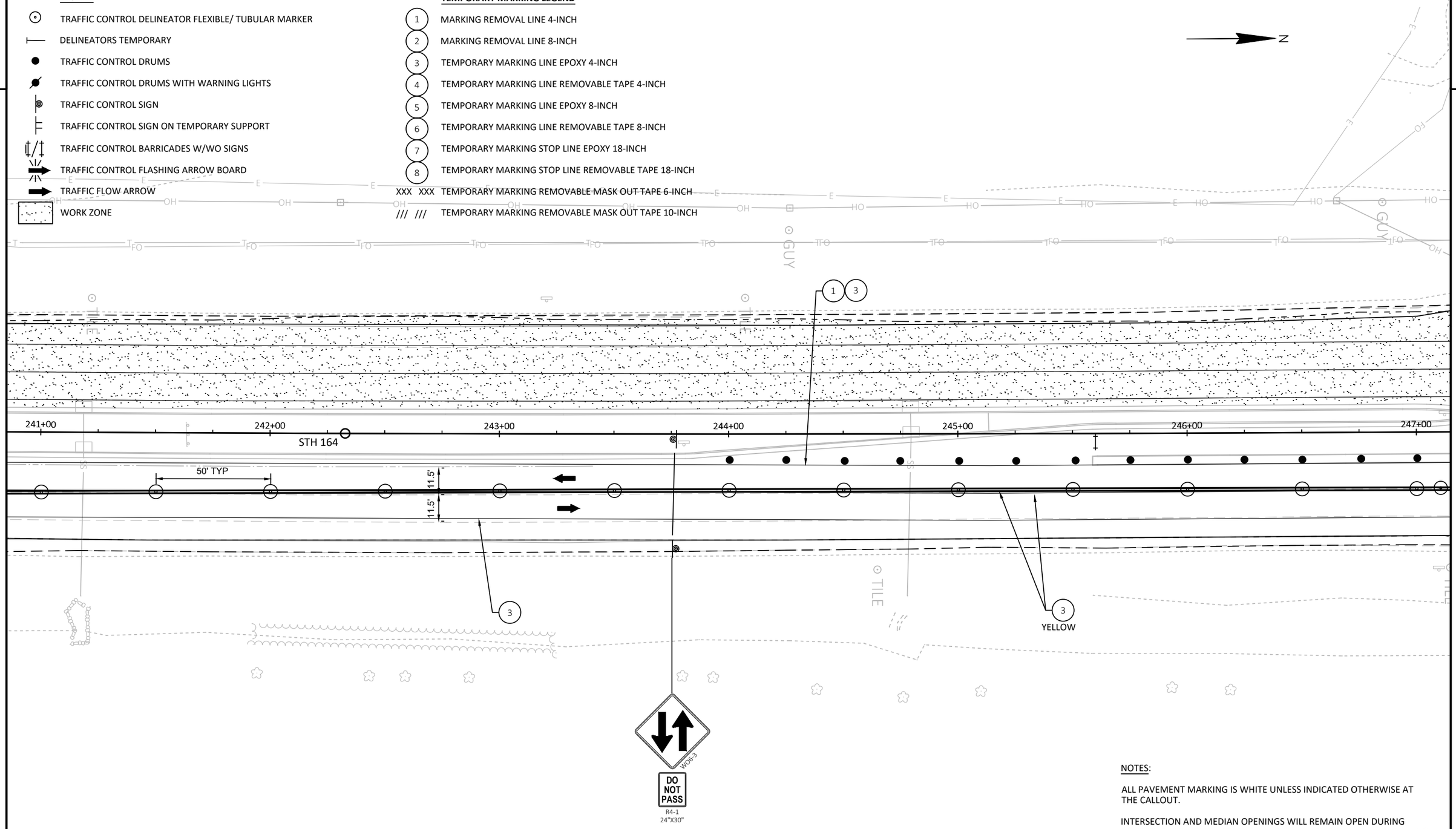
- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH



NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 265	E

2

ROAD WORK AHEAD
W20-1-A

END ROAD WORK
G20-2A
48"X24"

R11-2
48" X 30"
LANE CLOSED

TYPE III BARRICADE

350'

ROCKWOOD WAY

81+00

ONLY
R3-50R
30"X36"

STOP
R1-1
30"X30"

TYPE III BARRICADE

PT: 81+58.49

82+00

N

1 3

247+00 248+00 249+00 250+00 251+00 252+00 253+00

STH 164

EP: 82+39.47

16'

11.5'

11.5'

50' TYP

+00

10'
TYP

+50

3
YELLOW

3

W16-3

DO NOT PASS
R4-1
24"X30"

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 266	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_37

PLOT DATE : 12/5/2019 8:47 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

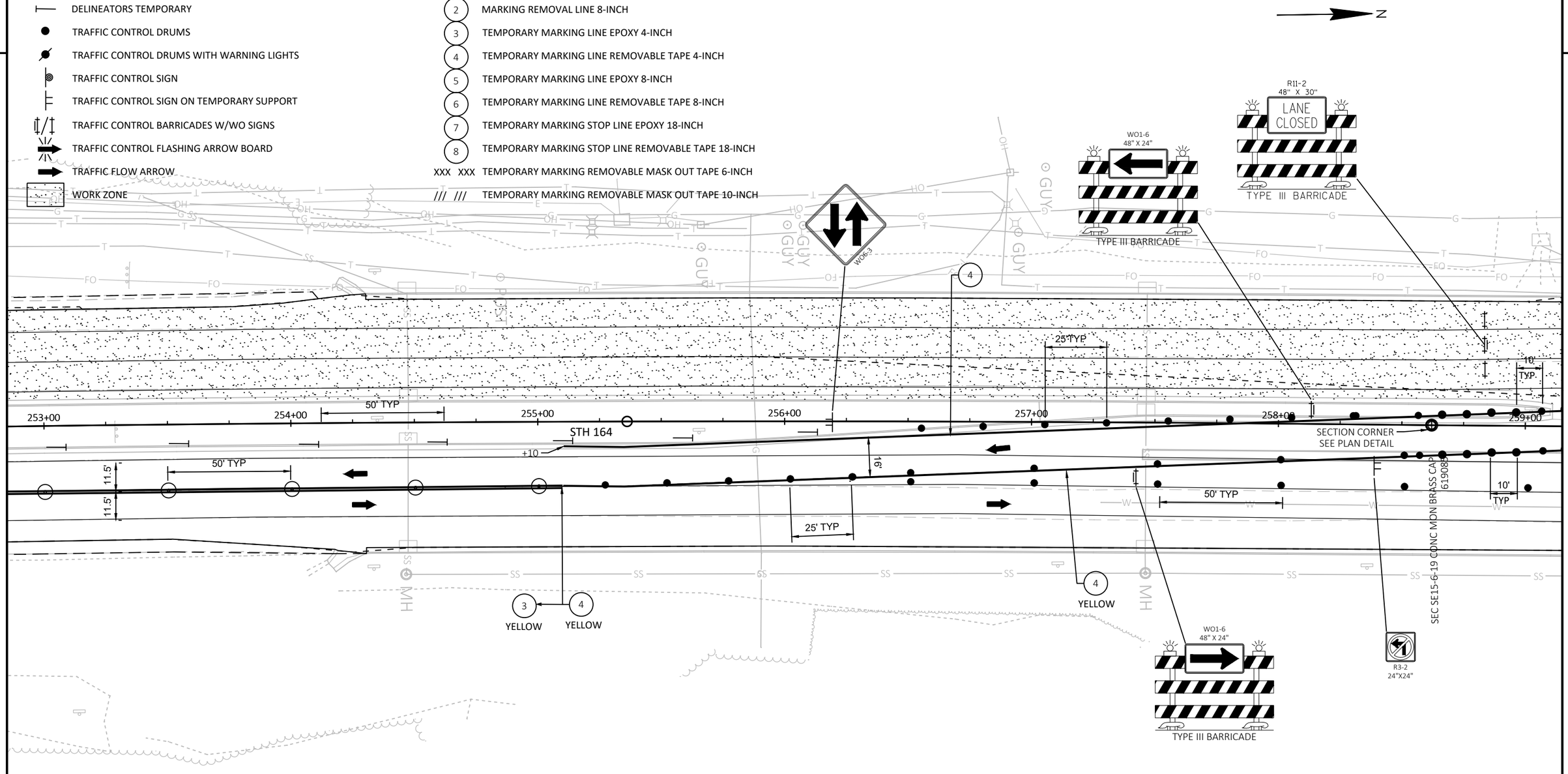
2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

- 1 MARKING REMOVAL LINE 4-INCH
- 2 MARKING REMOVAL LINE 8-INCH
- 3 TEMPORARY MARKING LINE EPOXY 4-INCH
- 4 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
- 5 TEMPORARY MARKING LINE EPOXY 8-INCH
- 6 TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
- 7 TEMPORARY MARKING STOP LINE EPOXY 18-INCH
- 8 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
- XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
- /// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH



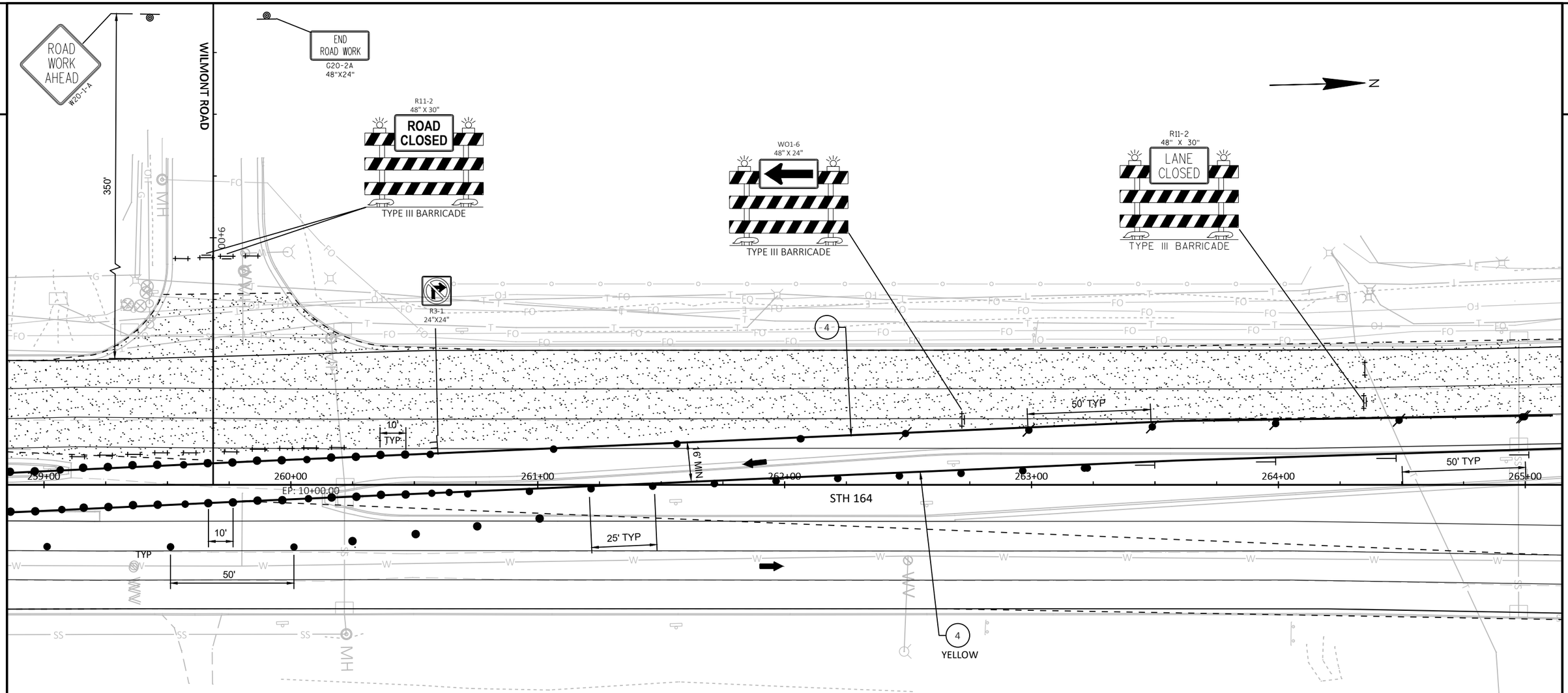
NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 267	E

2



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 268	E

2

N

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

WO1-6
48" X 24"
TYPE III BARRICADE

MAX.
11'
WIDTH
W12-52
48"X48"

ROAD WORK AHEAD
W20-1-A
SOUTH
M3-3
24"X12"
164
M1-6
24"X24"

STOP
R1-1
30"X30"

500'

COVERING SIGN TYPE 2 (YIELD)

COVERING SIGN TYPE 1

4

50' TYP

50' TYP

STH 164

STH 59

265+00 266+00 267+00 268+00 269+00 270+00 271+00

4
YELLOW

END PROJECT
STA 266+91

8

XXX XXX XXX XXX XXX XXX XXX

POST

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 269	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_40
PLOT DATE : 12/5/2019 8:48 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

N

STH 59

END ROAD WORK
G20-2A
48"X24"

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

4

+00

BEGIN RIGHT TURN LANE
R3-20R
24"X36"

+73

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

4

50' TYP

S EAST AVE

271+00 272+00 273+00 274+00 275+00 276+00 277+00

END ROAD WORK
G20-2A
48"X24"

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

500'

MAX. 11' WIDTH
W12-52
48"X48"

ROAD WORK AHEAD
W20-1-4

SOUTH
M3-3
24"X12"

164
M1-6
24"X24"

STH 164 / STH 59

END ROAD WORK
G20-2A
48"X24"

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 270	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_41
PLOT DATE : 12/5/2019 8:48 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

MAX. 11' WIDTH
W12-52
48"X48"

ROAD WORK AHEAD
W20-1-A
SOUTH
M3-3
24"X12"

164
M1-6
24"X24"

500'

50' TYP

STH 164 / STH 59

S EAST AVE

273+00

272+00

271+00

270+00

STH 164

END ROAD WORK
G20-2A
48"X24"

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

N

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

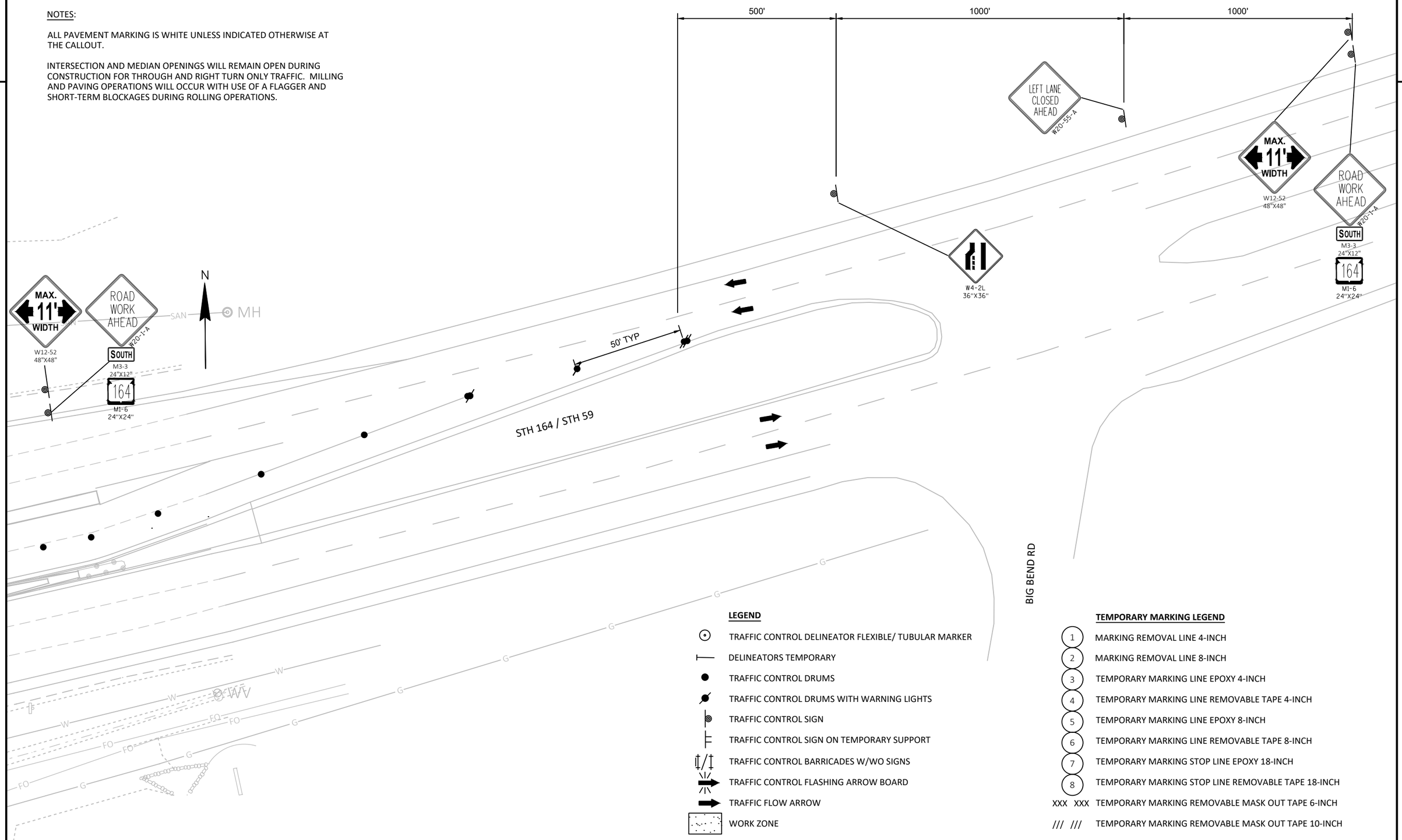
PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 271	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026402_S2.DWG
LAYOUT NAME - S2_42
PLOT DATE : 12/5/2019 8:48 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

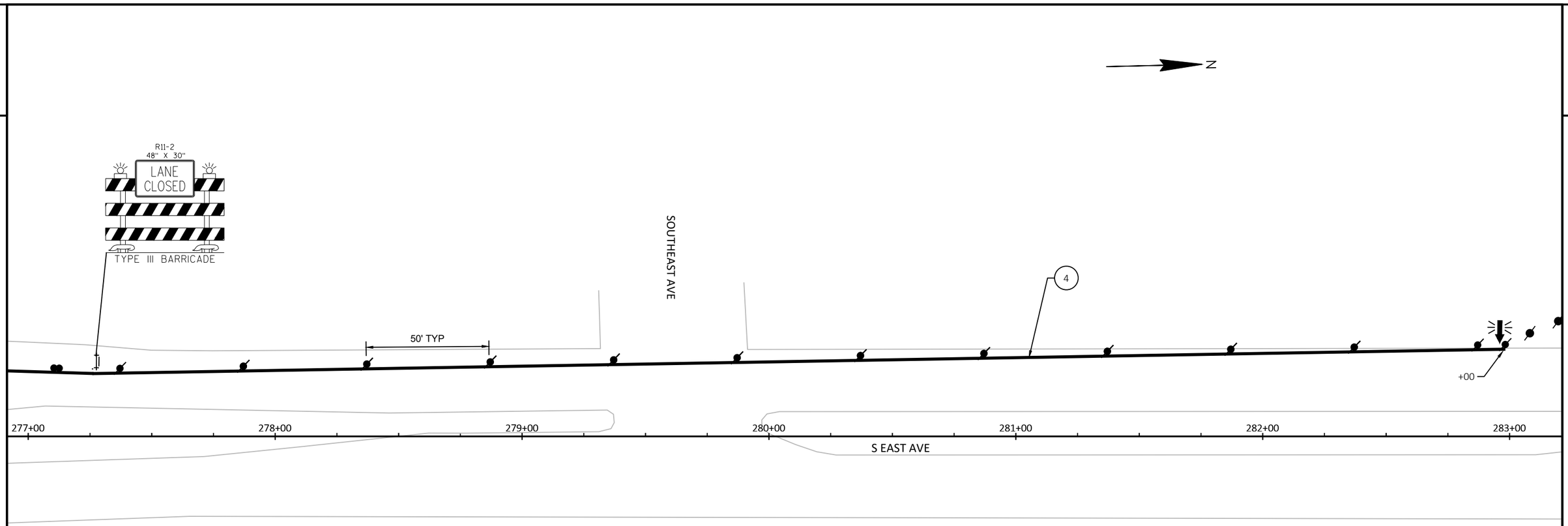
TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

2



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

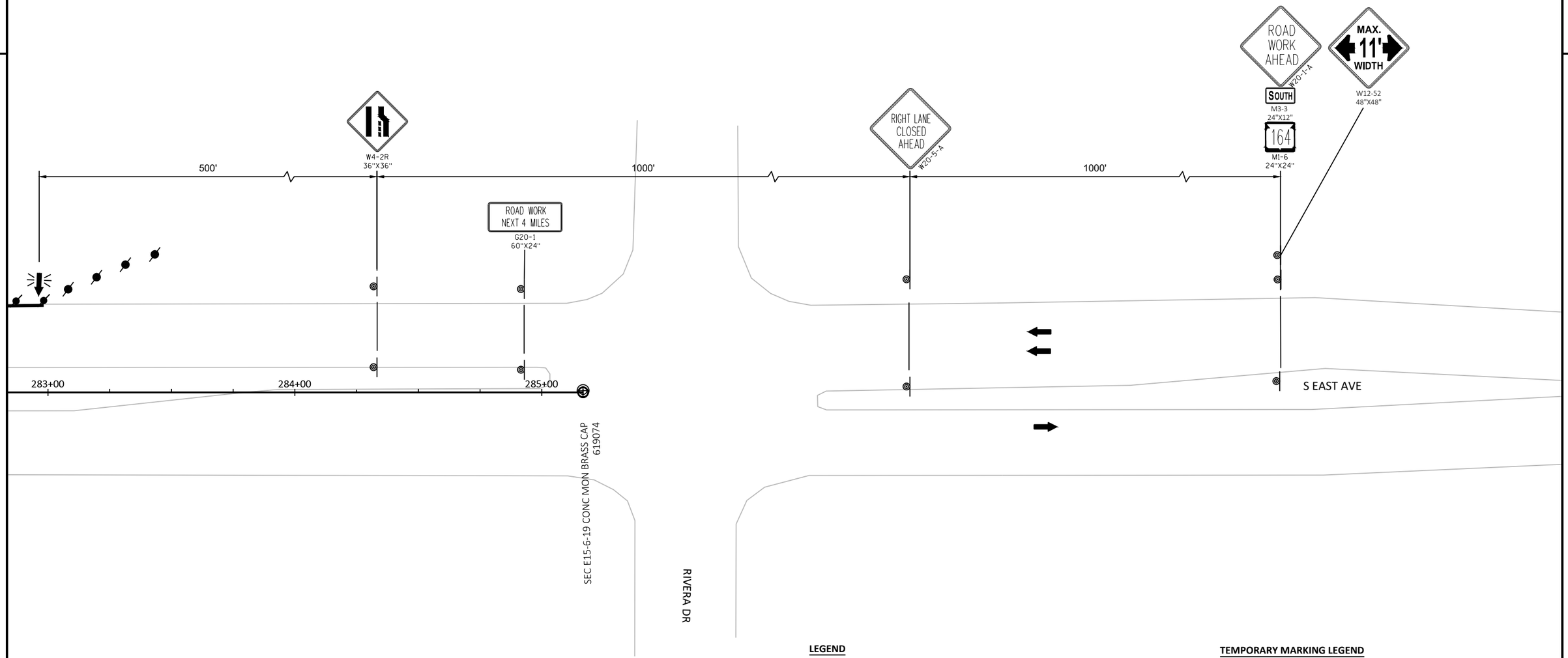
1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

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INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

2



NOTES:

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INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2	SHEET 274	E

2

2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

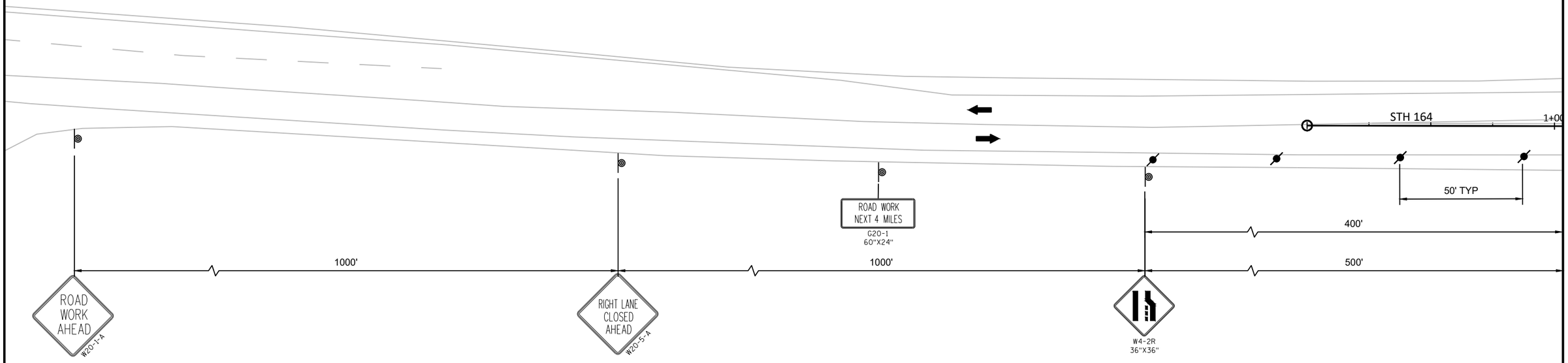
XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

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INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.



PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 275	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026403_S3.DWG
LAYOUT NAME - S3_000000

PLOT DATE : 12/5/2019 8:52 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

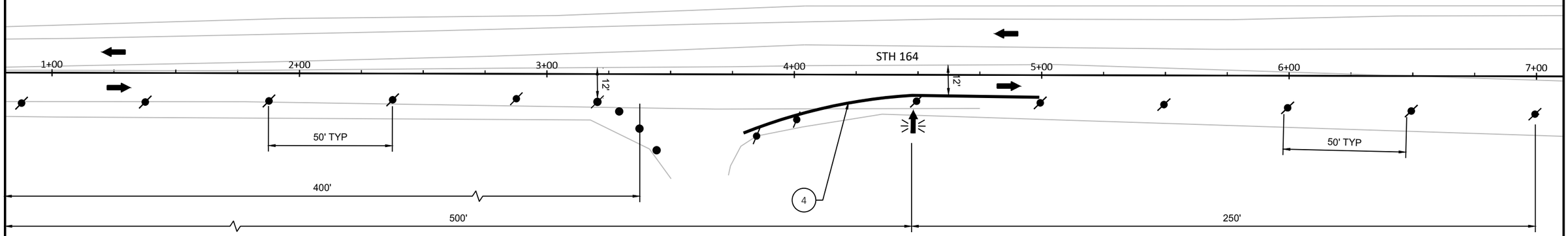
XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 276	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026403_S3.DWG
LAYOUT NAME - S3_00000

PLOT DATE : 12/5/2019 8:52 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

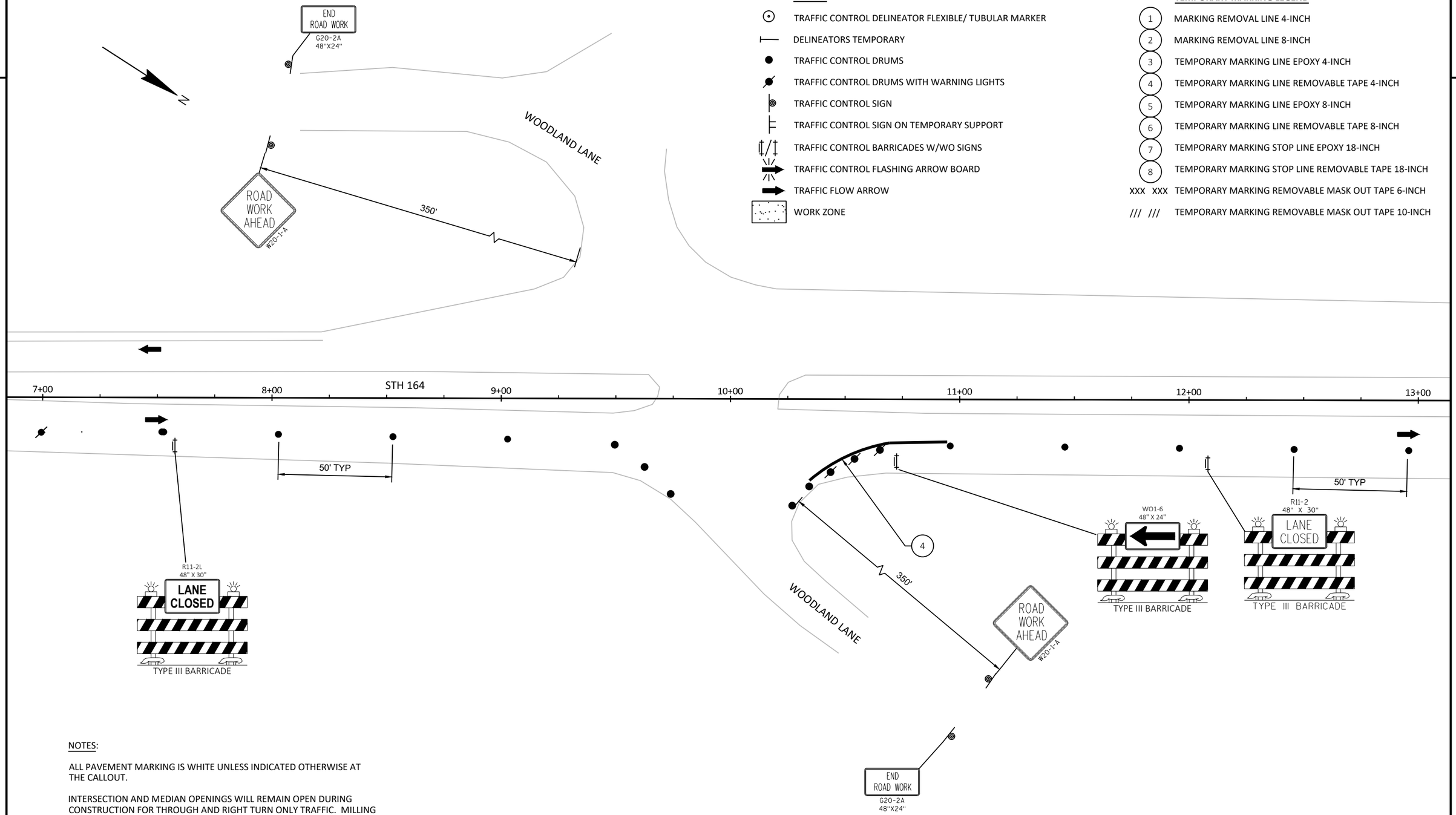
2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH



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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 277	E

2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

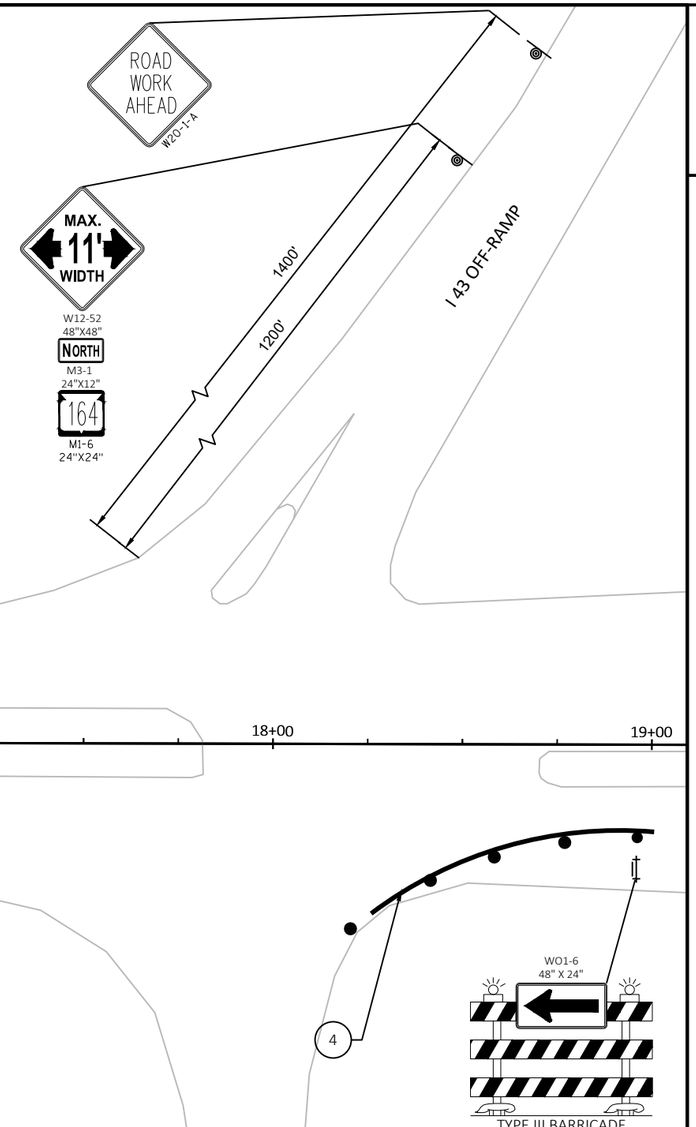
TEMPORARY MARKING LEGEND

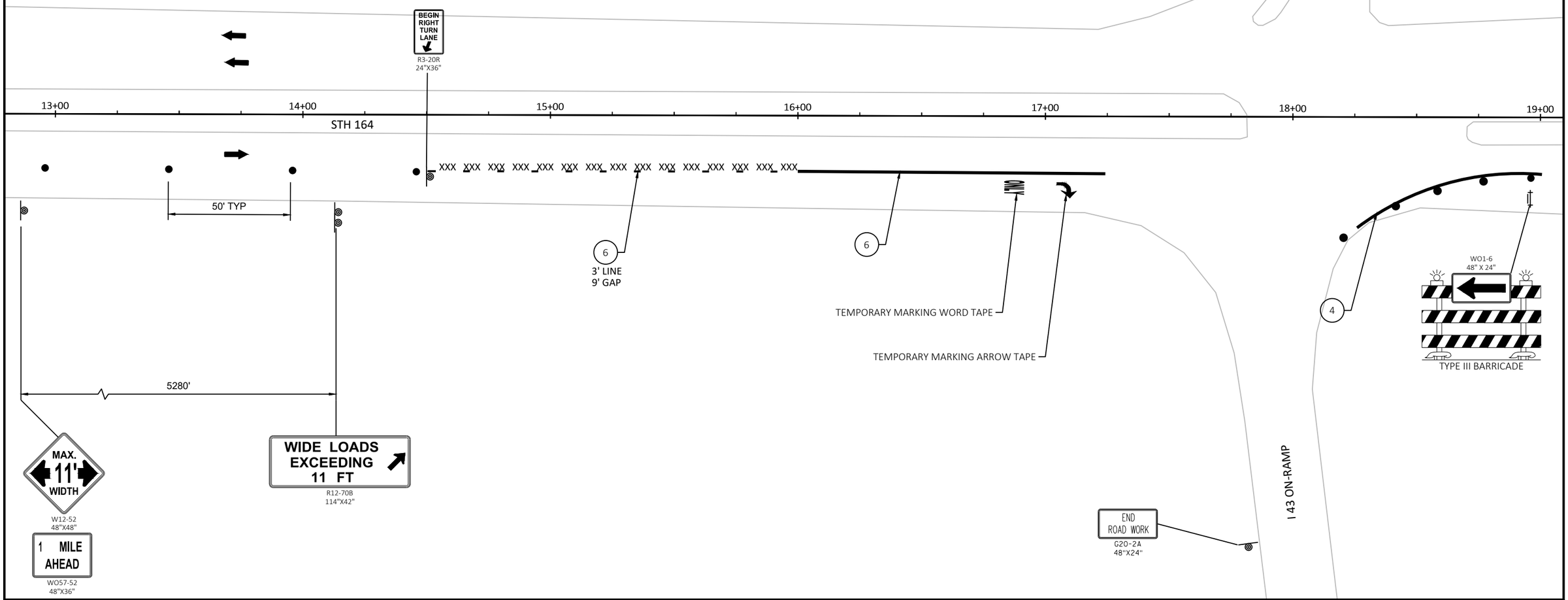
1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 278	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026403_S3.DWG
LAYOUT NAME - S3_000
PLOT DATE : 12/5/2019 8:52 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
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6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

I 43 ON-RAMP

END ROAD WORK
G20-2A
48"X24"

END ROAD WORK
G20-2A
48"X24"

19+00 20+00 21+00 22+00 23+00 24+00 25+00

STH 164

50' TYP

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

W1-4R
36"X36"

4

WO1-6
48" X 24"
TYPE III BARRICADE

1400'

1200'

MAX.
11'
WIDTH

W12-52
48"X48"
NORTH
M3-1
24"X12"
164
M1-6
24"X24"

ROAD WORK AHEAD
W20-1-A

I 43 OFF-RAMP

I 43 NB

I 43 SB

NOTES:

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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 279	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026403_S3.DWG
LAYOUT NAME - S3_00

PLOT DATE : 12/5/2019 8:52 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
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5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

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25+00 26+00 27+00 28+00 29+00 30+00 31+00

STH 164

+50 +00 +75

50' TYP

4

W01-6
48" X 24"
TYPE III BARRICADE

BEGIN RIGHT TURN LANE
R3-20R
24"X36"

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 280	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026403_S3.DWG
LAYOUT NAME - S3_0

PLOT DATE : 12/5/2019 8:52 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

NOTES:

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MAX. 11' WIDTH
W12-52
48"X48"

ROAD WORK AHEAD
W20-1-A

NORTH
M3-1
24"X12"

164
M1-6
24"X24"

STOP
R1-1
30"X30"

500'

COVERING SIGN TYPE 2 (YIELD)

BEGIN PROJECT
STA 31+43

END ROAD WORK
G20-2A
48"X24"

CTH ES

195+00

196+00

197+00

198+00

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

31+00 32+00 33+00 34+00 35+00 36+00 37+00

50' TYP

STH 164

18"

+00 +50 +09.5

50' TYP

20' TYP

WO1-6
48" X 24"

YELLOW

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 281	E

2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

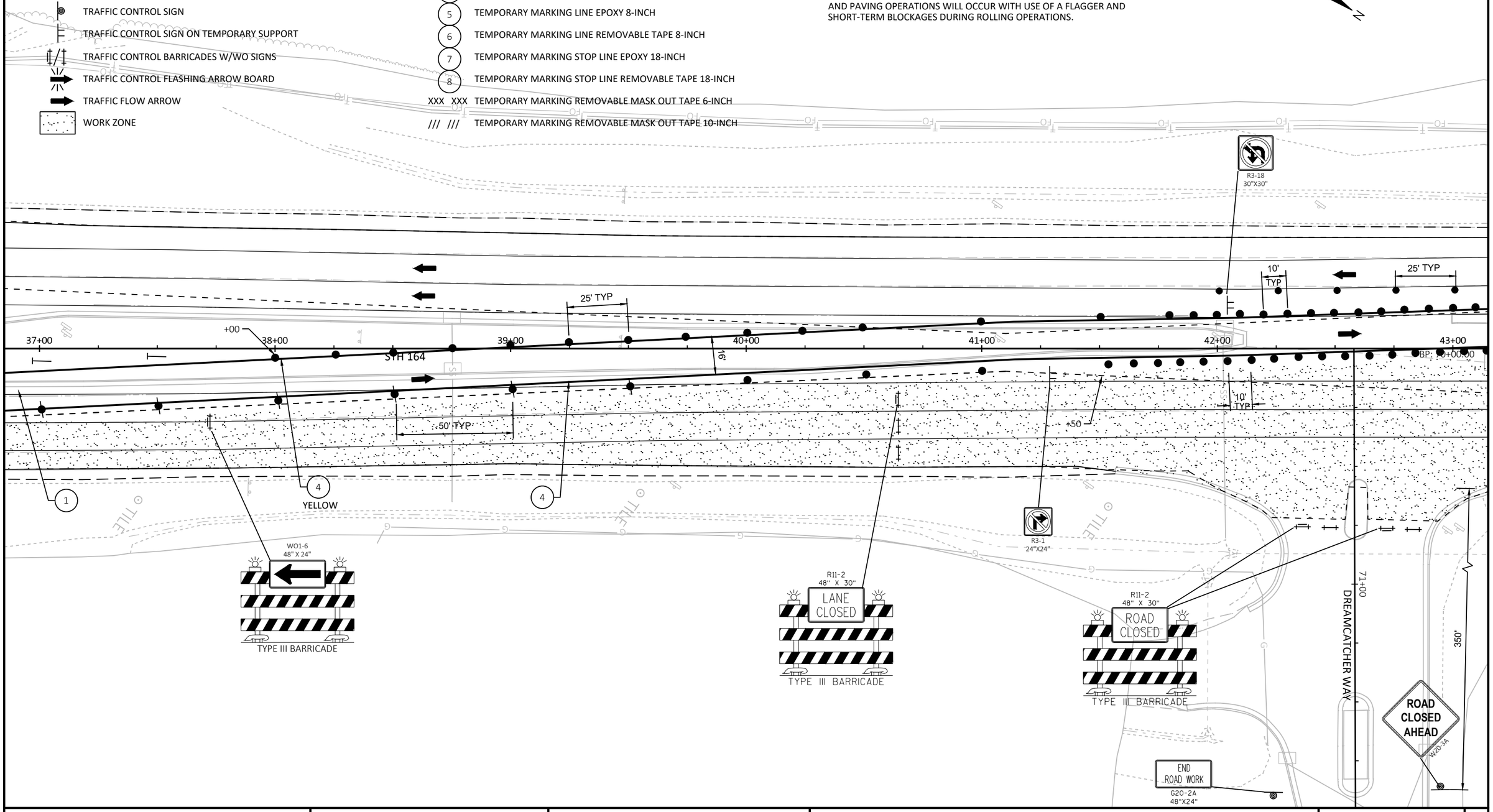
XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 282	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026403_S3.DWG
LAYOUT NAME - S3_2

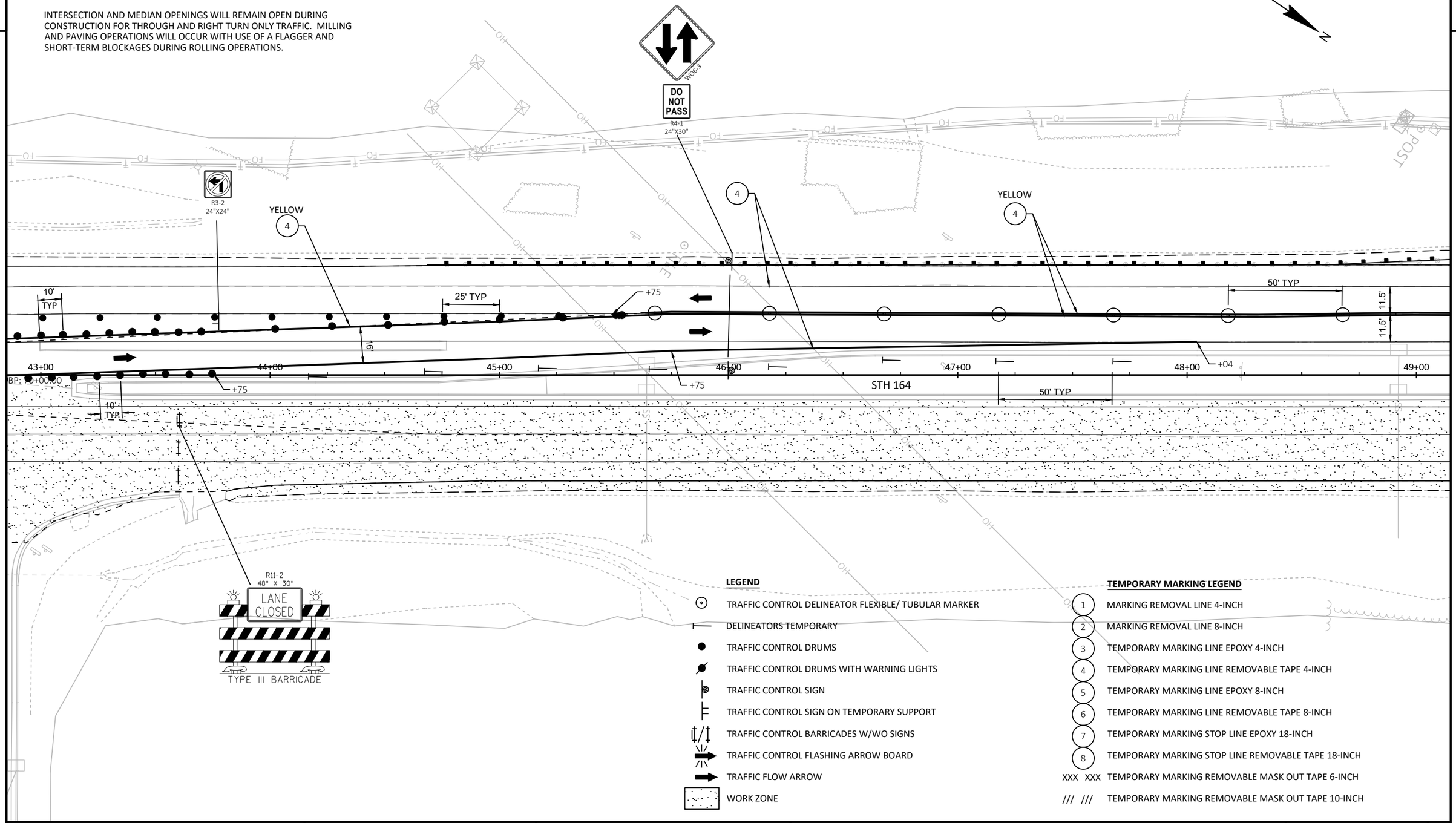
PLOT DATE : 12/5/2019 8:53 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTES:

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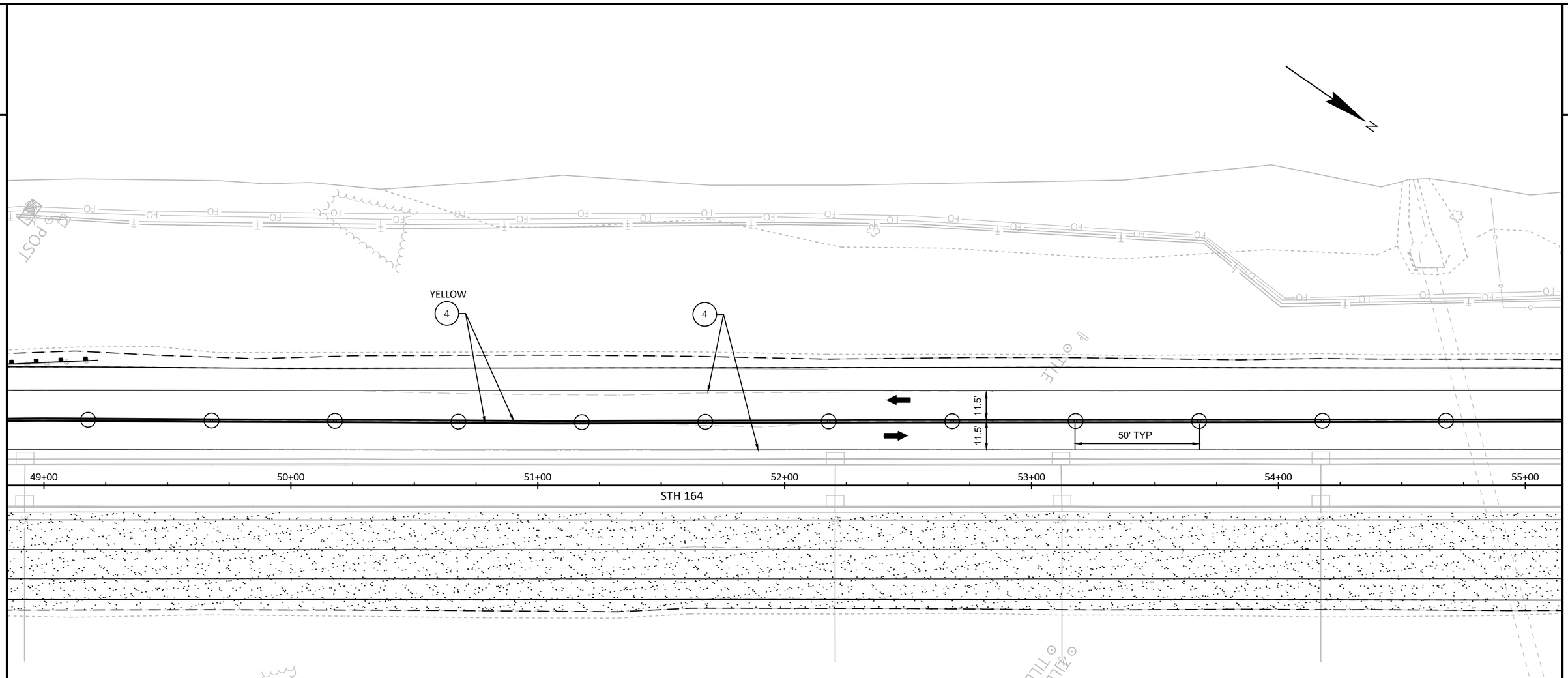
LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

2



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
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- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

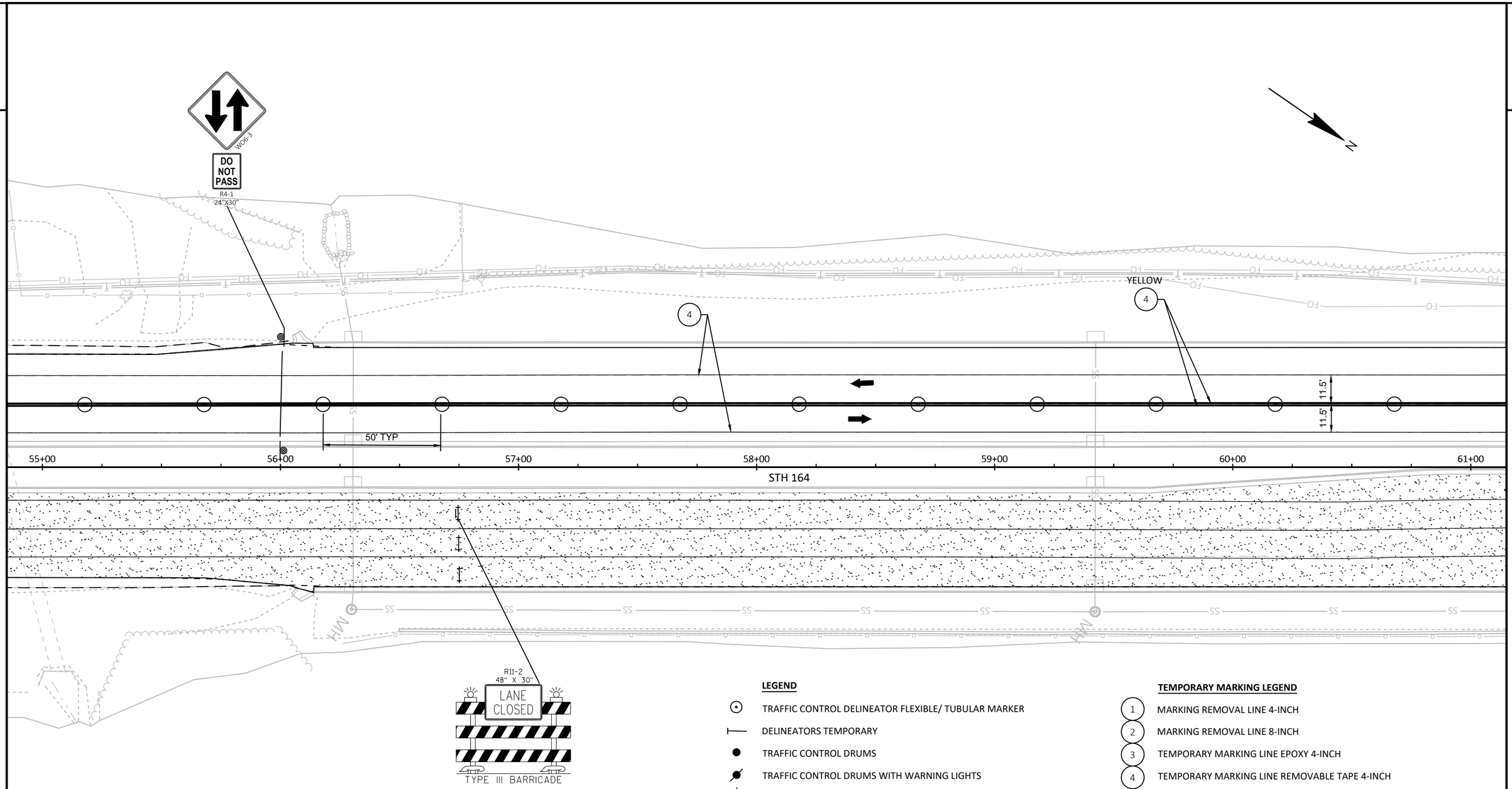
1	MARKING REMOVAL LINE 4-INCH
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2



NOTES:

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LEGEND

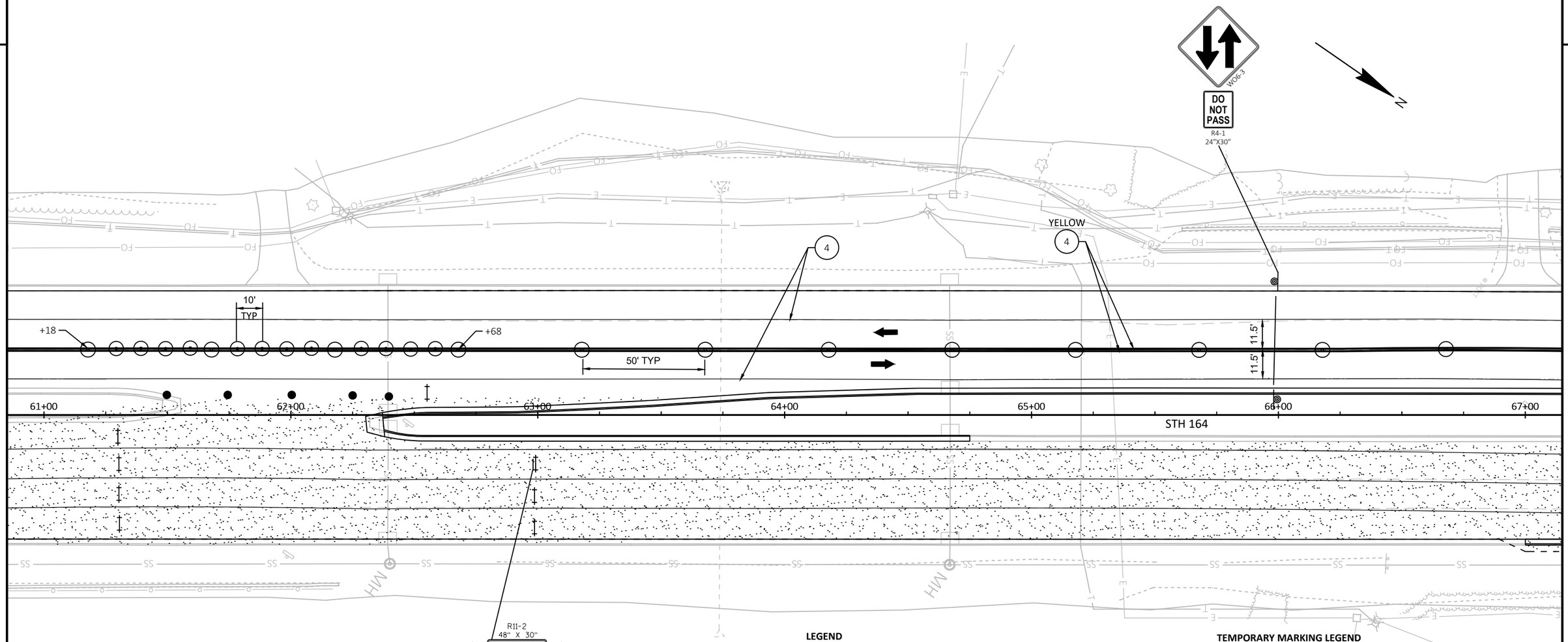
- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
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6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
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8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 285	E

2



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
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4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
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6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

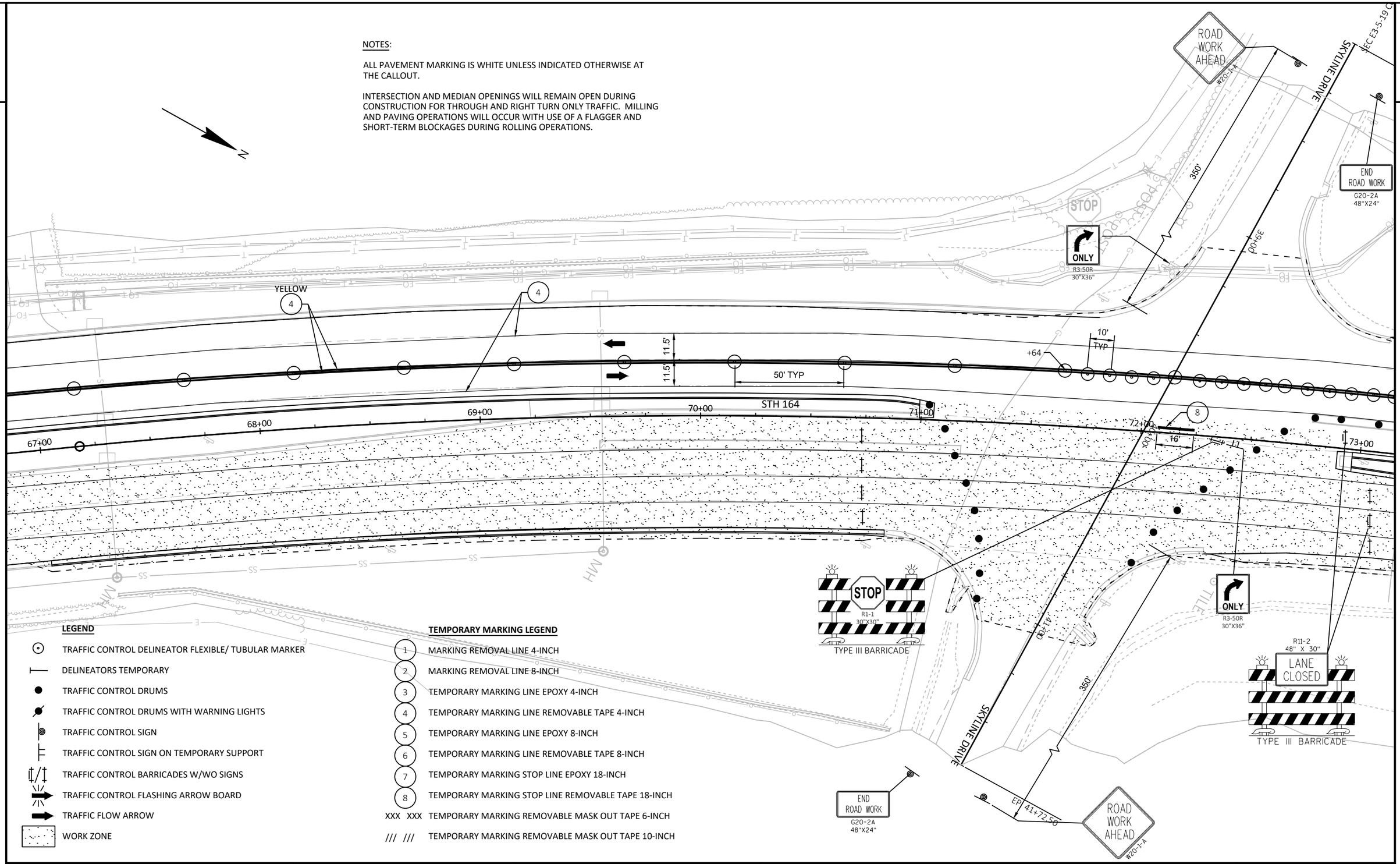
INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 286	E

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 287	E

2

BP: 38+00.00



DO NOT PASS
R4-1
24"X30"

N

YELLOW
4

4

11.5'
11.5'

50' TYP

+14

73+00
74+00
75+00
76+00
77+00
78+00
79+00

STH 164

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

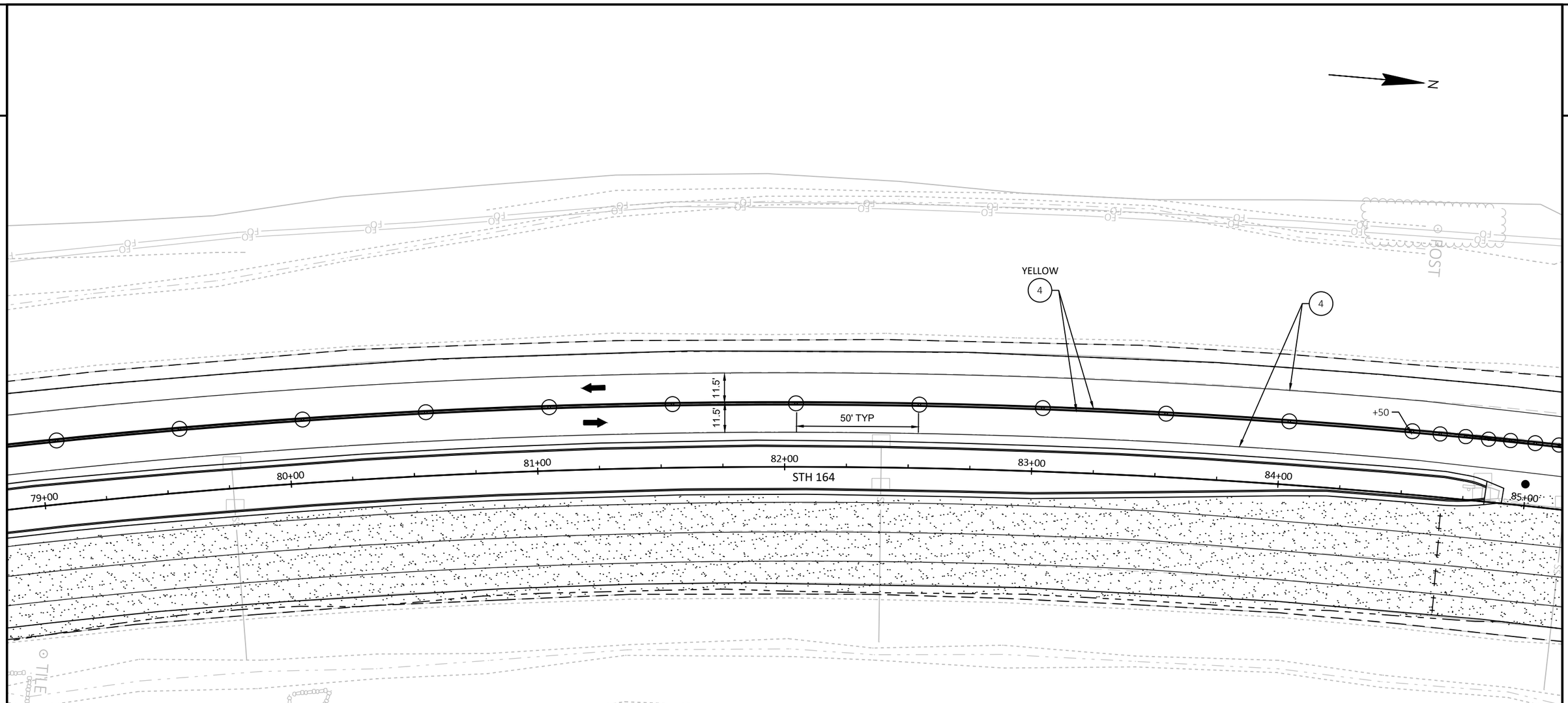
1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

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2



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

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2

N

W06-3

DO NOT PASS

R4-1

24"X30"

YELLOW

4

4

POST

10' TYP

+00

11.5'

11.5'

50' TYP

85+00

86+00

87+00

88+00

89+00

90+00

91+00

STH 164

R11-2

48" X 30"

LANE CLOSED

TYPE III BARRICADE

NOTES:

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LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 290	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026403_S3.DWG
LAYOUT NAME - S3_10

PLOT DATE : 12/5/2019 8:54 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N



DO NOT PASS
R4-1
24"X30"

YELLOW
4
4

11.5'
11.5'
50' TYP

91+00 92+00 93+00 94+00 95+00 96+00 97+00

STH 164

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
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4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

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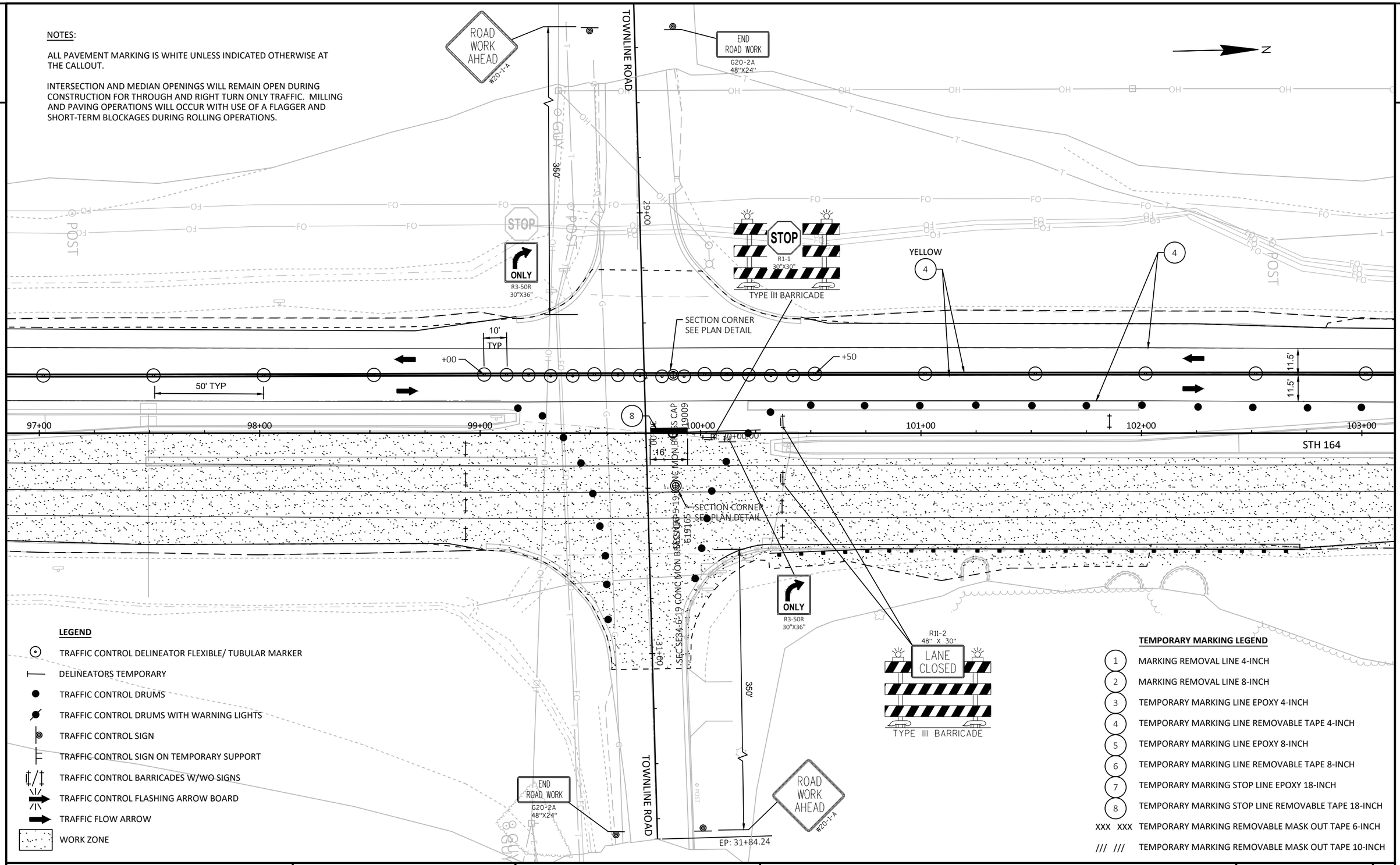
INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 291	E

NOTES:

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LEGEND

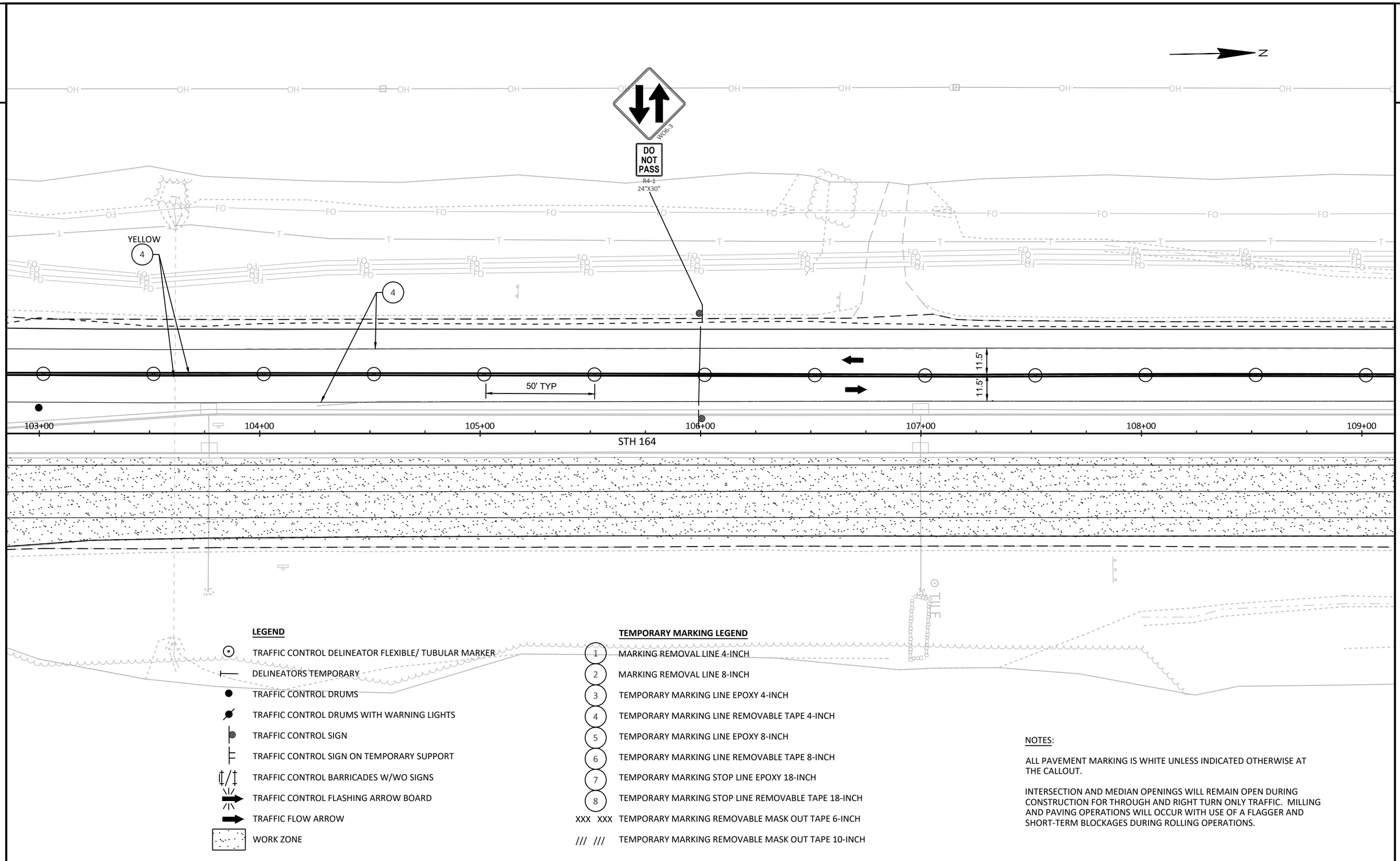
- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 292	E

2



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
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7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

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2

2

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
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6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

N

YELLOW

4

4

11.5'

11.5'

50' TYP

10'

TYP

+00

+00

8

109+00

110+00

111+00

112+00

113+00

114+00

115+00

STH 164

BH 60+00.00

16'

61+00

350'

STOP

R1-1

30"X30"

TYPE III BARRICADE

ONLY

R3-50R

30"X36"

R11-2

48" X 30"

LANE CLOSED

TYPE III BARRICADE

COYOTE CROSSING

END ROAD WORK

G20-2A

48"X24"

ROAD WORK AHEAD

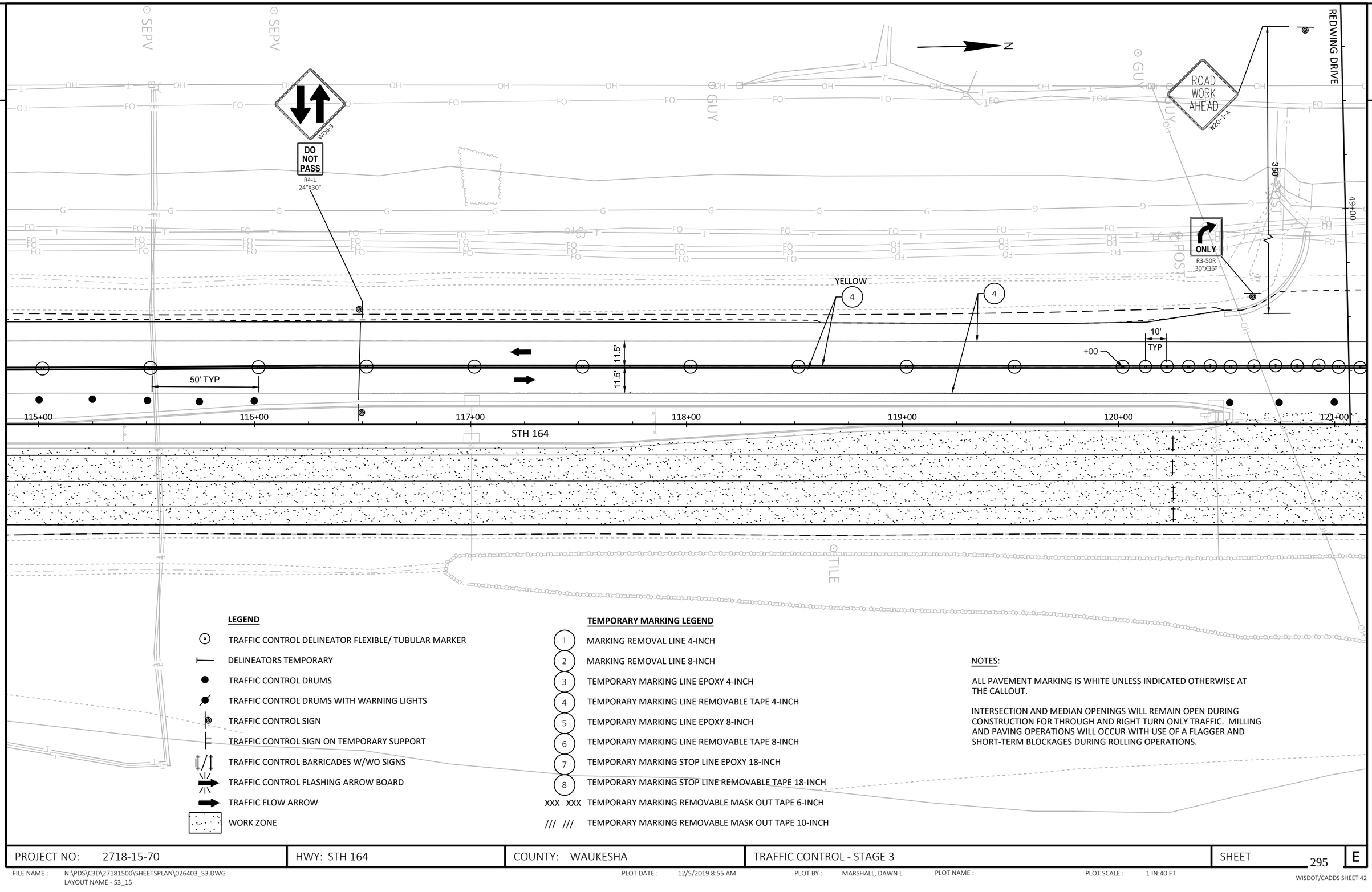
W20-1-A

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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 294	E



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

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2

REDWING DRIVE

END ROAD WORK
G20-2A
48"X24"

N

DO NOT PASS
R4-1
24"X30"
W06-3

YELLOW

4

4

10'
TYP

+00

11.5'

11.5'

50' TYP

121+00

122+00

123+00

124+00

125+00

126+00

127+00

EP: 50+00.00

STH 164

SECTION CORNER
SEE PLAN DETAIL

SEC E34-6-19 CONC MON BRASS CAP
619152

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

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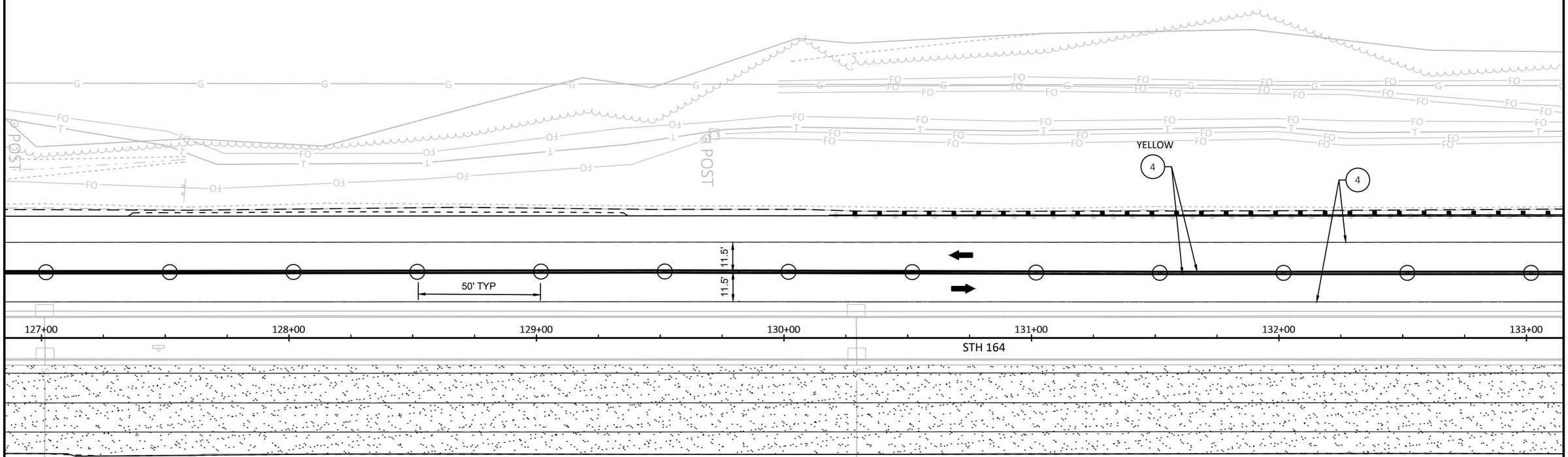
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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 296	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026403_S3.DWG
LAYOUT NAME - S3_16
PLOT DATE : 12/5/2019 8:56 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 297	E

2

N

W06-3

DO NOT PASS
R4-1
24"X30"

YELLOW

4

4

50' TYP

11.5'

11.5'

10'
TYP

+50

POST

POST

133+00 134+00 135+00 136+00 137+00 138+00 139+00

STH 164

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

TILE

TILE

POST

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 298	E

2

N

YELLOW

4

4

10'
TYP

+50

50' TYP

11.5'

11.5'

139+00 140+00 141+00 142+00 143+00 144+00 145+00

STH 164

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
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- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

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4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 299	E

2



N

YELLOW

4

4

11.5'

11.5'

50' TYP

+00

145+00

146+00

147+00

148+00

149+00

150+00

151+00

STH 164

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 300	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026403_S3.DWG
LAYOUT NAME - S3_20

PLOT DATE : 12/5/2019 8:56 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

N

W06-3

DO NOT PASS
R4-1
24"X30"

YELLOW
4

4

10'
TYP

+00

SECTION CORNER
SEE PLAN DETAIL

+00

50' TYP

11.5'

11.5'

151+00 152+00 153+00 154+00 155+00 156+00 157+00

STH 164

SEC SE 27-6-19 CONC MON BRASS CAP
1449139

R11-2
48" X 30"
LANE CLOSED

TYPE III BARRICADE

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

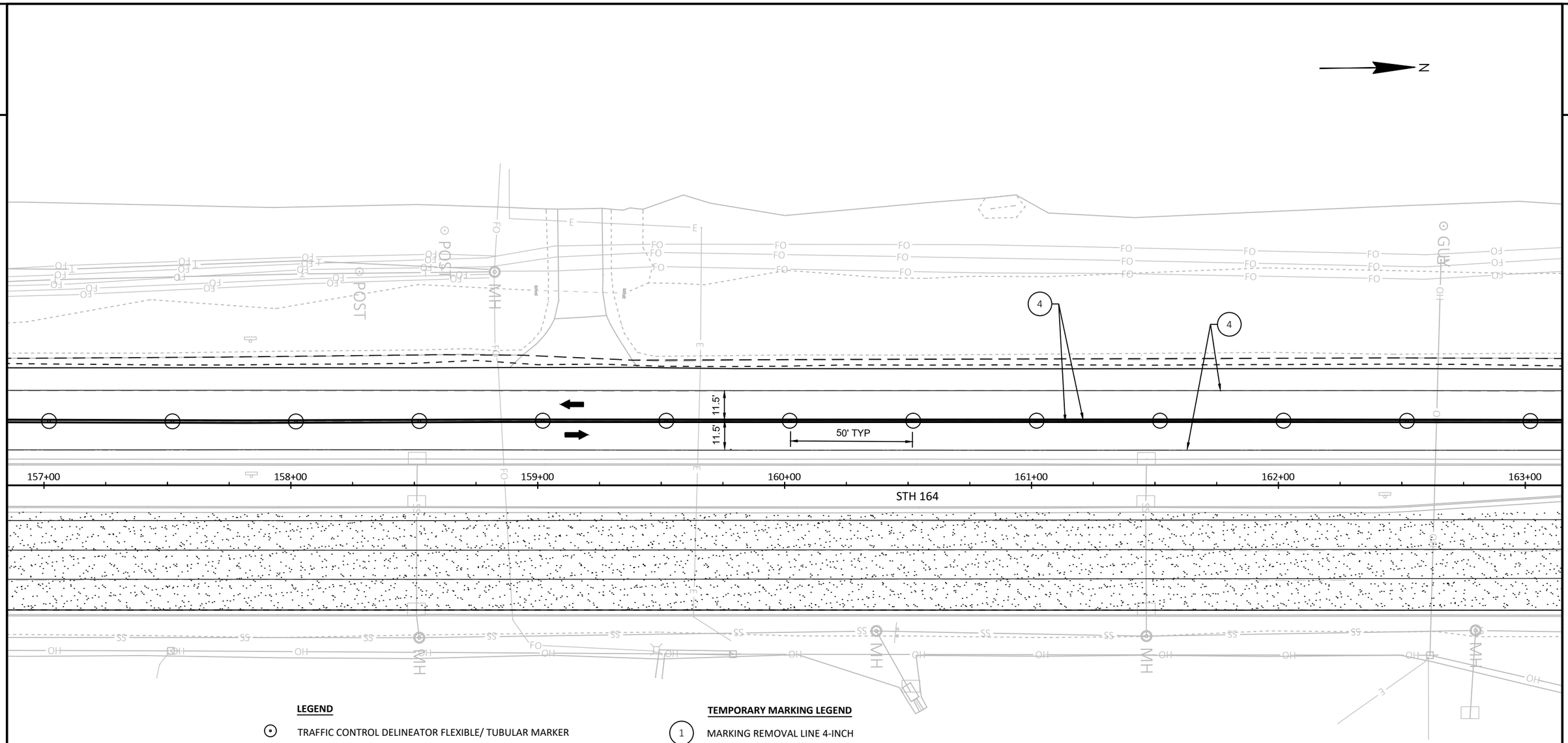
1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 301	E

2



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 302	E

2

N

ROAD WORK AHEAD
W20-1-A

W06-3

DO NOT PASS
R4-1
24"X30"

350'

GLENDALE ROAD

2+00

END ROAD WORK
G20-2A
48"X24"

ONLY
R3-50R
30"X36"

YELLOW

4

10'
TYP

+50

11.5'
11.5'

50' TYP

163+00 164+00 165+00 166+00 167+00 168+00 169+00

8

16'

STH 164

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

STOP
R1-1
30"X30"
TYPE III BARRICADE

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

4+00

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1-A

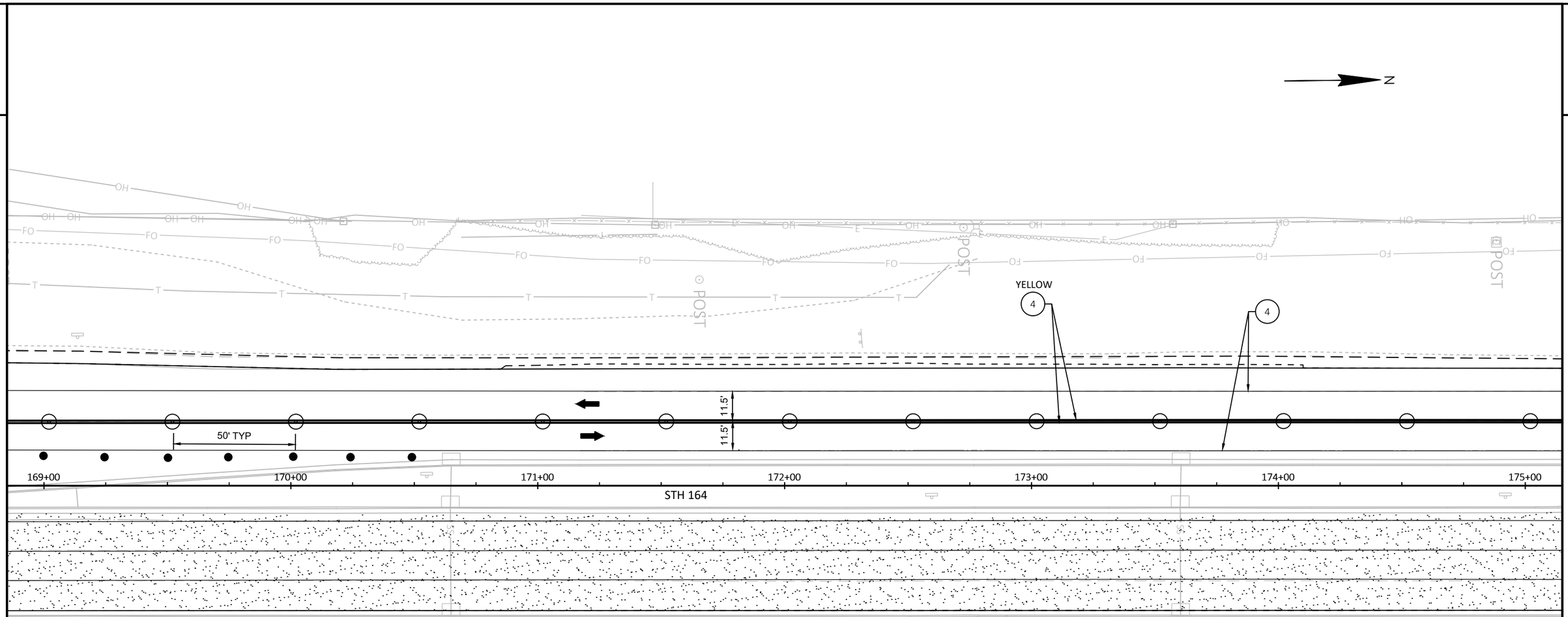
PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 303	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026403_S3.DWG
LAYOUT NAME - S3_23

PLOT DATE : 12/5/2019 8:57 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

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INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 304	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026403_S3.DWG
LAYOUT NAME - S3_24
PLOT DATE : 12/5/2019 8:57 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

W06-3

DO NOT PASS

R4-1
24"X30"

YELLOW

4

4

POST

POST

10'
TYP

50' TYP

+50

+50

SECTION CORNER
SEE PLAN DETAIL

11.5'

11.5'

SEC E27 6-19 CONC MON BRASS CAP
619126

175+00

176+00

177+00

178+00

179+00

180+00

181+00

STH 164

R11-2
48" X 30"

LANE
CLOSED

TYPE III BARRICADE

NOTES:

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LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 305	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026403_S3.DWG
LAYOUT NAME - S3_25

PLOT DATE : 12/5/2019 8:57 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

W06-3

DO NOT PASS

R4-1
24"X30"

YELLOW

4

4

50' TYP

11.5'

11.5'

+50

10'
TYP

181+00 182+00 183+00 184+00 185+00 186+00 187+00

STH 164

R11-2
48" X 30"

LANE CLOSED

TYPE III BARRICADE

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

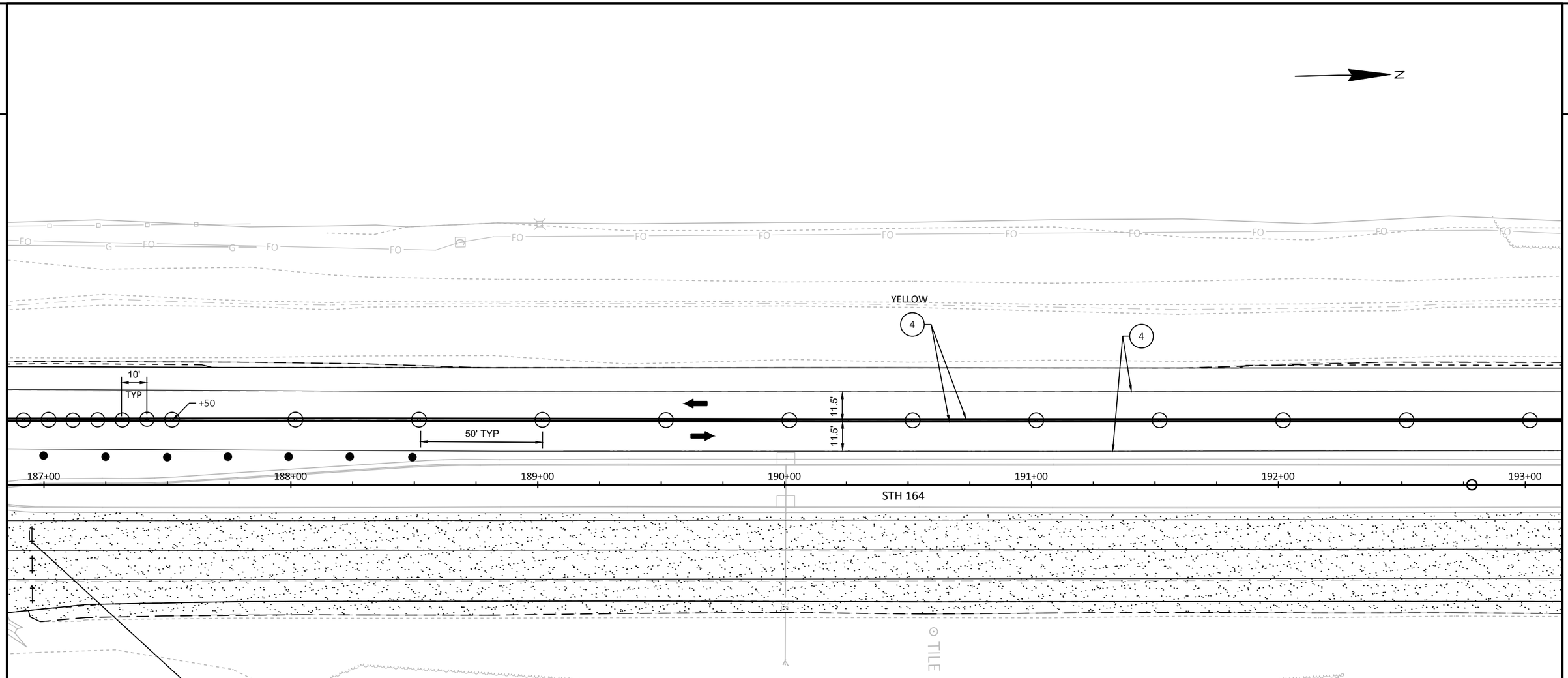
NOTES:

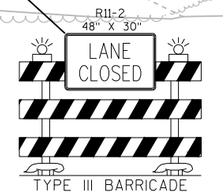
ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 306	E

2





LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 307	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026403_S3.DWG
LAYOUT NAME - S3_27
PLOT DATE : 12/5/2019 8:58 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

DO NOT PASS
R4-1
24"X30"
W06-3

B-67-0021

POST

POST

YELLOW

4

4

11.5'

11.5'

50' TYP

193+00 194+00 195+00 196+00 197+00 198+00 199+00

STH 164

B-67-0021

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 308	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026403_S3.DWG
LAYOUT NAME - S3_28
PLOT DATE : 12/5/2019 8:58 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

W06-3

DO NOT PASS
R4-1
24"X30"

YELLOW

4

4

FO

11.5'

11.5'

50' TYP

199+00 200+00 201+00 202+00 203+00 204+00 205+00

STH 164

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 309	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026403_S3.DWG
LAYOUT NAME - S3_29

PLOT DATE : 12/5/2019 8:58 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

N

ROAD WORK AHEAD
W20-1-A
164
M1-6
24"X24"

END ROAD WORK
G20-2A
48"X24"

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

LAWNSDALE ROAD / CTH I

COVERING SIGN TYPE 2 (YIELD)

STOP
R1-1
30"X30"

ONLY
R3-50R
30"X36"

SECTION CORNER SEE PLAN DETAIL

TYP

YELLOW

10'

500'

442+00

443+00

444+00

445+00

+00

205+00

206+00

207+00

208+00

209+00

210+00

211+00

11.5'

11.5'

50' TYP

STH 164

16'

MONUMENT BOX CAP SECTION 9, T6N, R19E

LEGEND

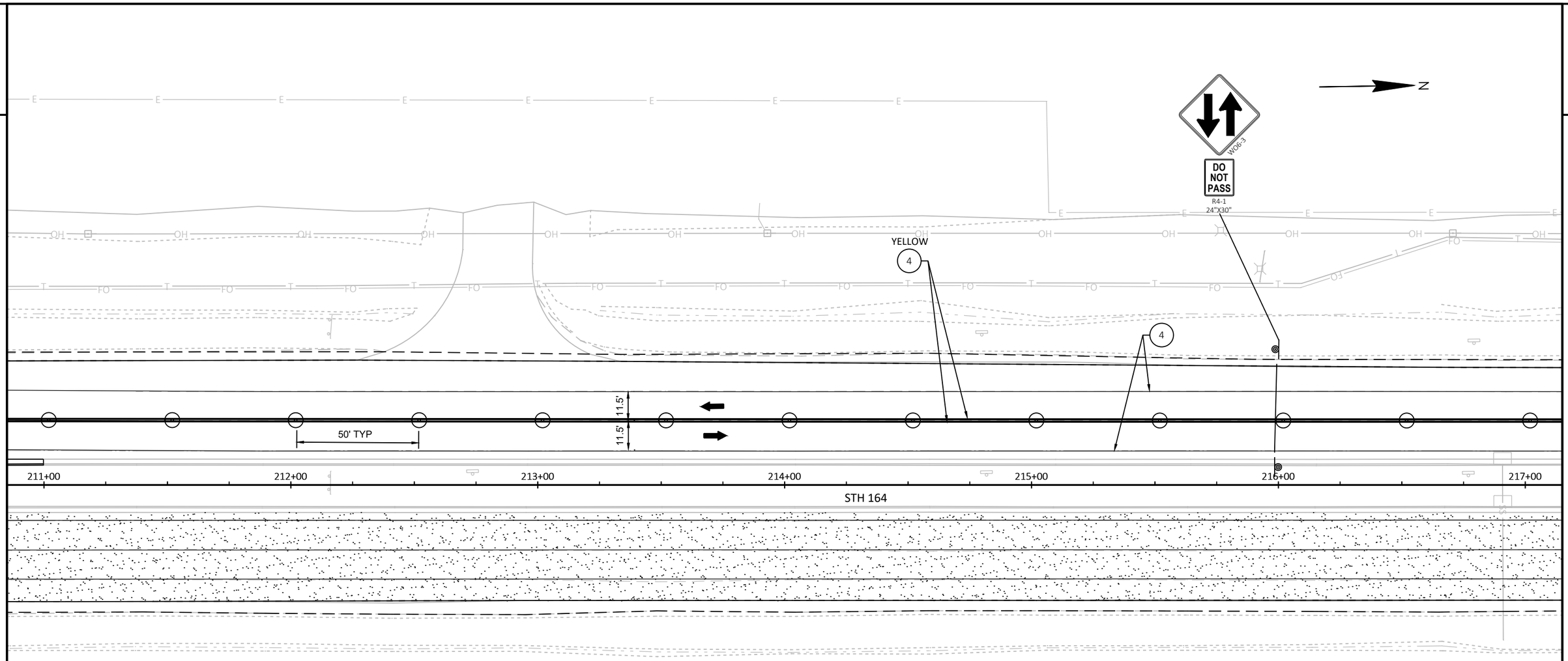
- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 310	E

2



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

2

N

YELLOW

4

4

POST

11.5'

11.5'

50' TYP

+00

217+00 218+00 219+00 220+00 221+00 222+00 223+00

STH 164

TILE

R11-2
48" X 30"

LANE CLOSED

TYPE III BARRICADE

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 312	E

2

N

W1G6-3

DO NOT PASS

R4-1
24"X30"

YELLOW

4

4

POST

POST

POST

10'
TYP

+00

+50

11.5'

11.5'

50' TYP

223+00

224+00

225+00

226+00

227+00

228+00

229+00

STH 164

R11-2
48" X 30"

LANE CLOSED

TYPE III BARRICADE

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
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/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 313	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026403_S3.DWG
LAYOUT NAME - S3_33

PLOT DATE : 12/5/2019 8:59 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

YELLOW

4

4

SECTION CORNER
SEE PLAN DETAIL

11.5'
11.5'

50' TYP

POST

POST

POST

229+00 230+00 231+00 232+00 233+00 234+00 235+00

STH 164

SEE E22-6-19 CONC MON BRASS CAP 619094

TILE

TILE

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1	MARKING REMOVAL LINE 4-INCH
2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
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/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 314	E

2

N

W6-3

DO NOT PASS

R4-1
24"X30"

POST

POST

POST

B-67-0036

YELLOW

4

4

11.5'

11.5'

50' TYP

235+00 236+00 237+00 238+00 239+00 240+00 241+00

STH 164

TILE

B-67-0036

R11-2
48" X 30"

LANE CLOSED

TYPE III BARRICADE

NOTES:

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LEGEND

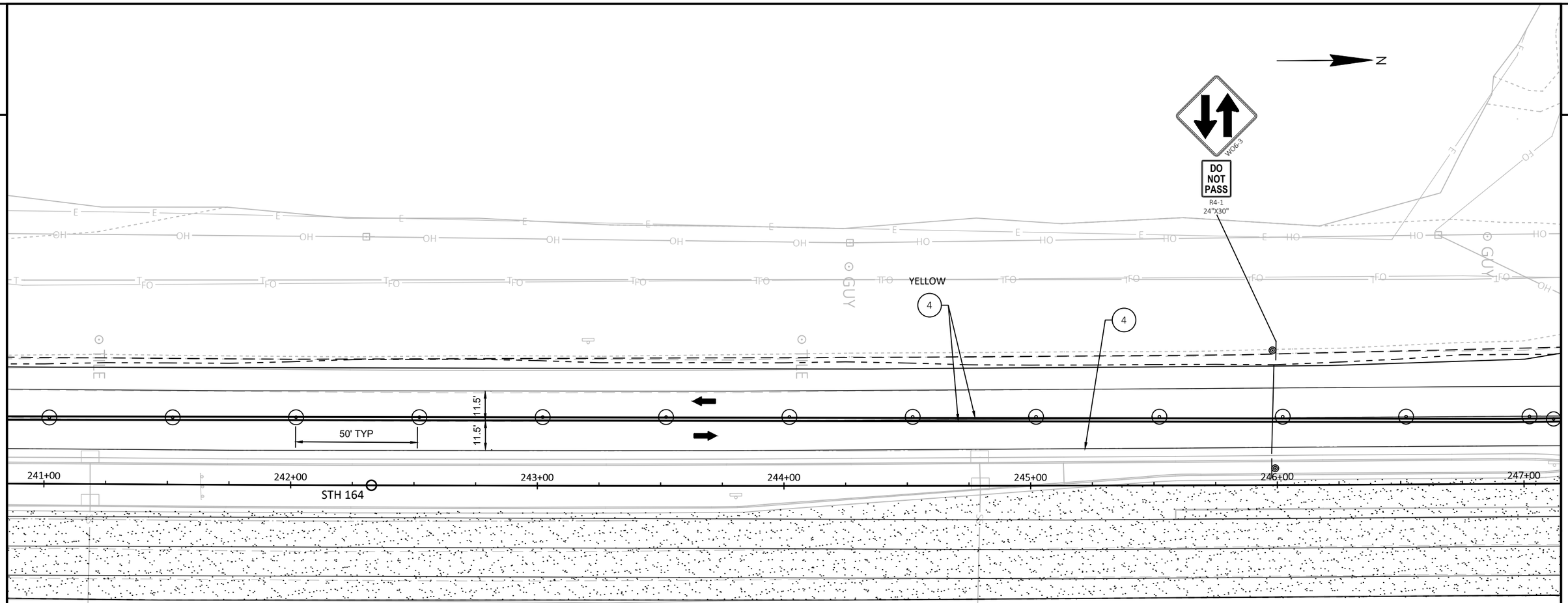
- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

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6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 315	E

2



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

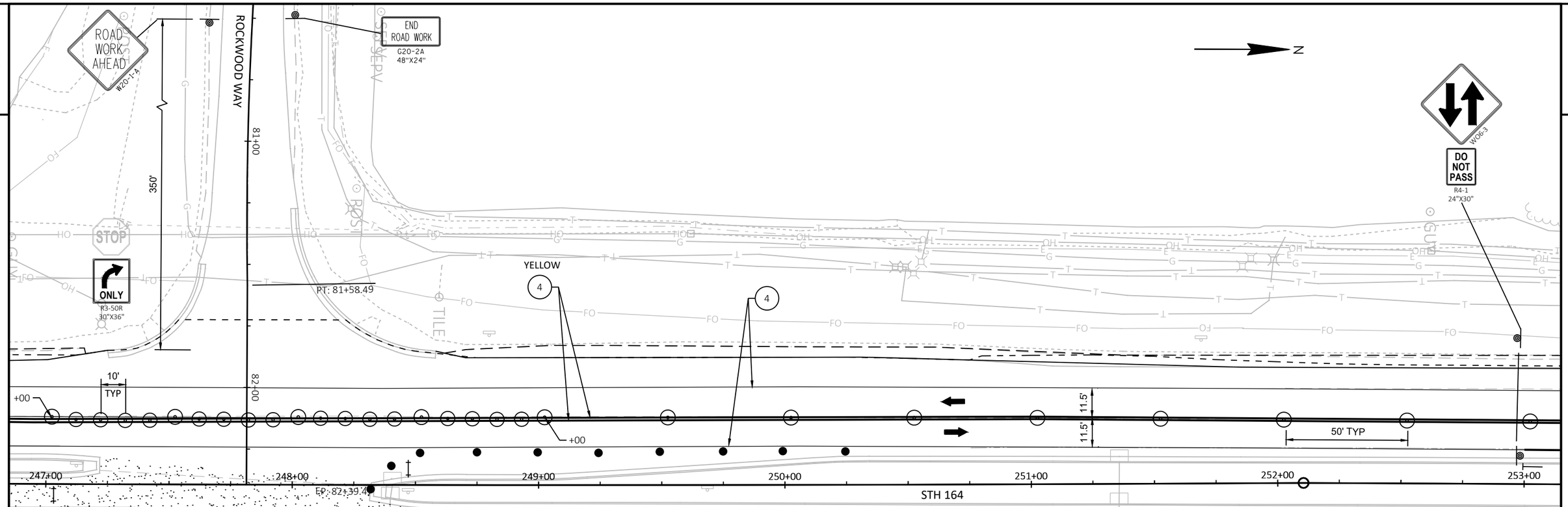
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2	MARKING REMOVAL LINE 8-INCH
3	TEMPORARY MARKING LINE EPOXY 4-INCH
4	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5	TEMPORARY MARKING LINE EPOXY 8-INCH
6	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7	TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

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2



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
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- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
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- TRAFFIC FLOW ARROW
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8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

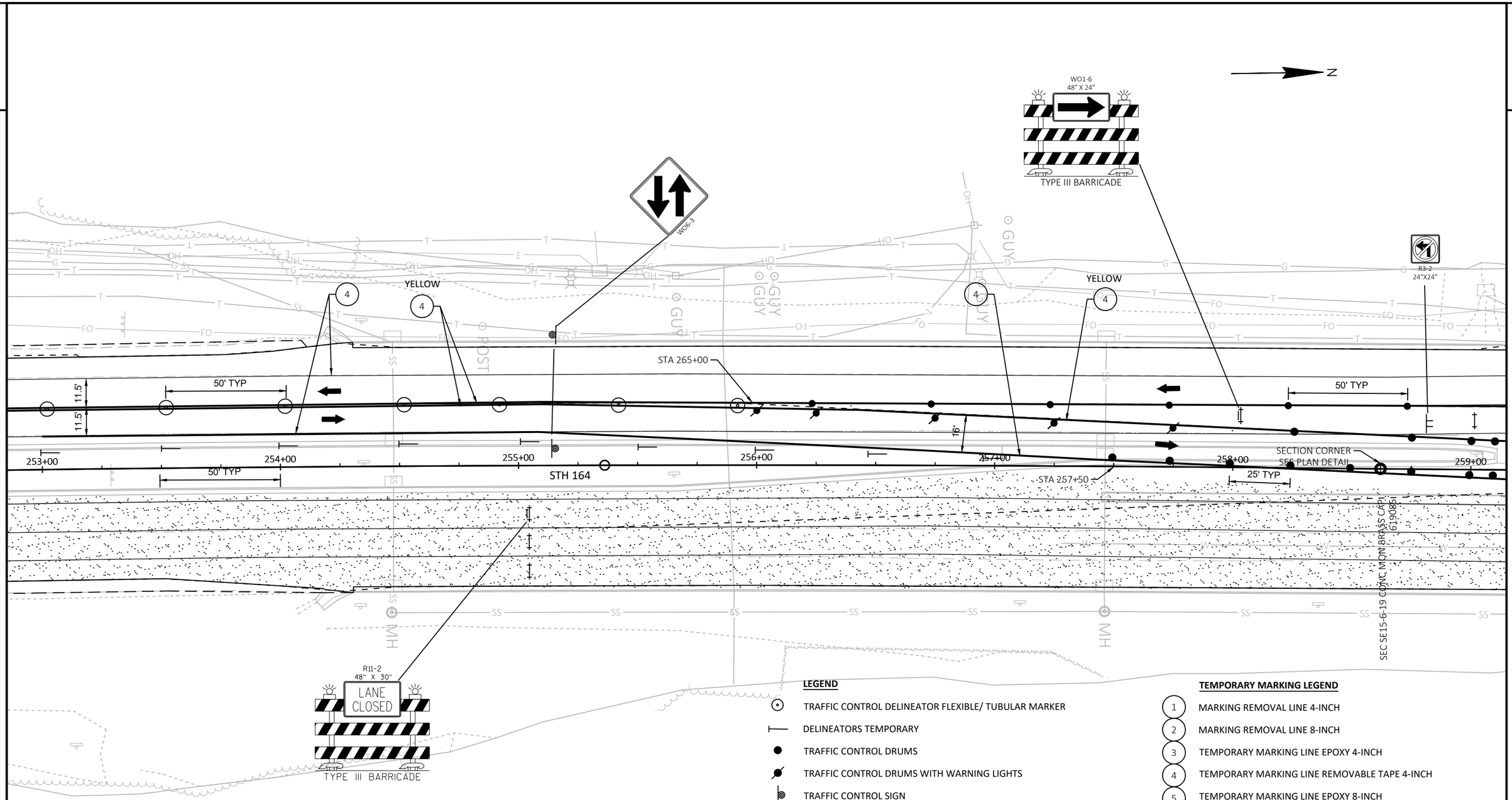
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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 317	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026403_S3.DWG
LAYOUT NAME - S3_37
PLOT DATE : 12/5/2019 9:00 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



NOTES:

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LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

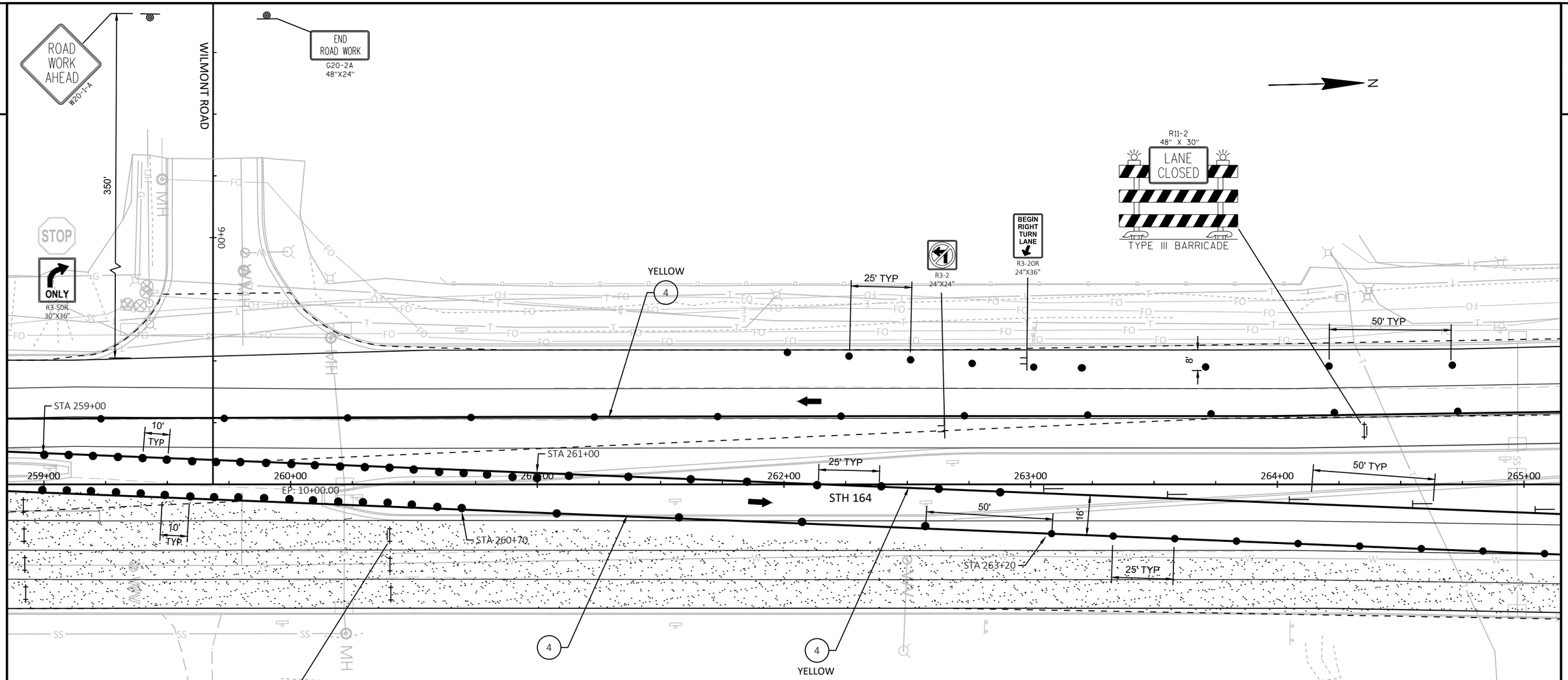
TEMPORARY MARKING LEGEND

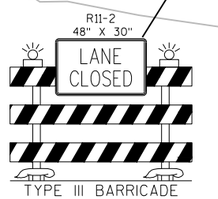
1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
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7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

2





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- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
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- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

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8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 319	E

2

N

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

WO1-6
48" X 24"
TYPE III BARRICADE

MAX. 11' WIDTH
W12-52
48"X48"

ROAD WORK AHEAD
W20-1-A
SOUTH
M3-3
24"X12"
164
M1-6
24"X24"

STOP
R1-1
30"X30"

500'

COVERING SIGN TYPE 2 (YIELD)

STH 59

YELLOW

4

COVERING SIGN TYPE 1

50' TYP

8"

16"

3"

STH 164

265+00 266+00 267+00 268+00 269+00 270+00 271+00

END PROJECT
STA 266+91

25' TYP

10'

8

XXX XXX XXX XXX XXX XXX XXX

YELLOW

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
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- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
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8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 320	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026403_S3.DWG
LAYOUT NAME - S3_40
PLOT DATE : 12/5/2019 9:01 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTES:

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N

STH 59

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

50' TYP

+53

4

6

+26

25' TYP

4

S EAST AVE

271+00 272+00 273+00 274+00 275+00 276+00 277+00

+09.5

END ROAD WORK
G20-2A
48"X24"

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

500'

MAX. 11' WIDTH
W12-52
48"X48"

ROAD WORK AHEAD
W20-1-4

SOUTH
M3-3
24"X12"

164
M1-6
24"X24"

END ROAD WORK
G20-2A
48"X24"

STH 164 / STH 59

LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 321 E

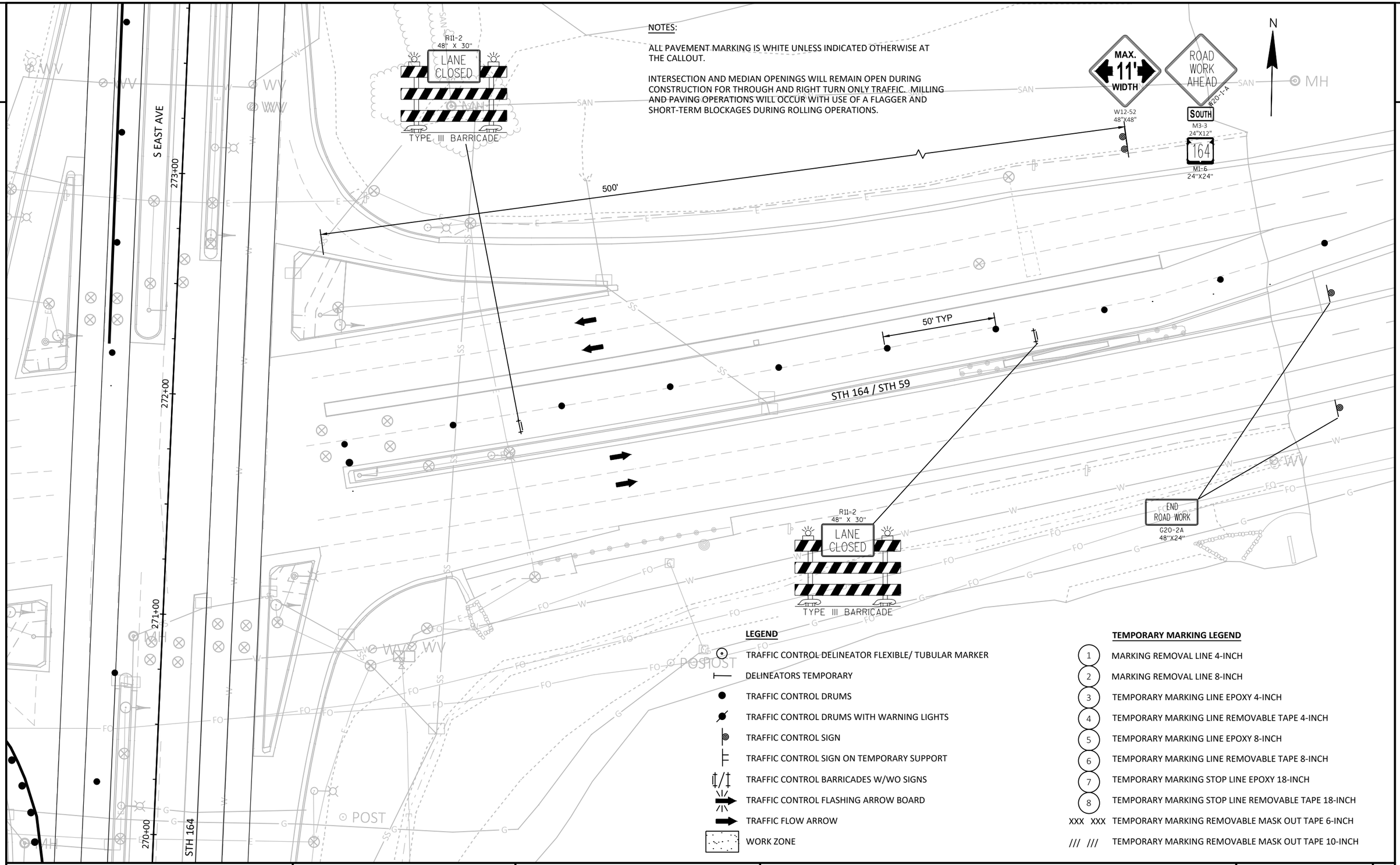
FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\026403_S3.DWG
LAYOUT NAME - S3_41
PLOT DATE : 12/5/2019 9:01 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

NOTES:

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- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
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- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

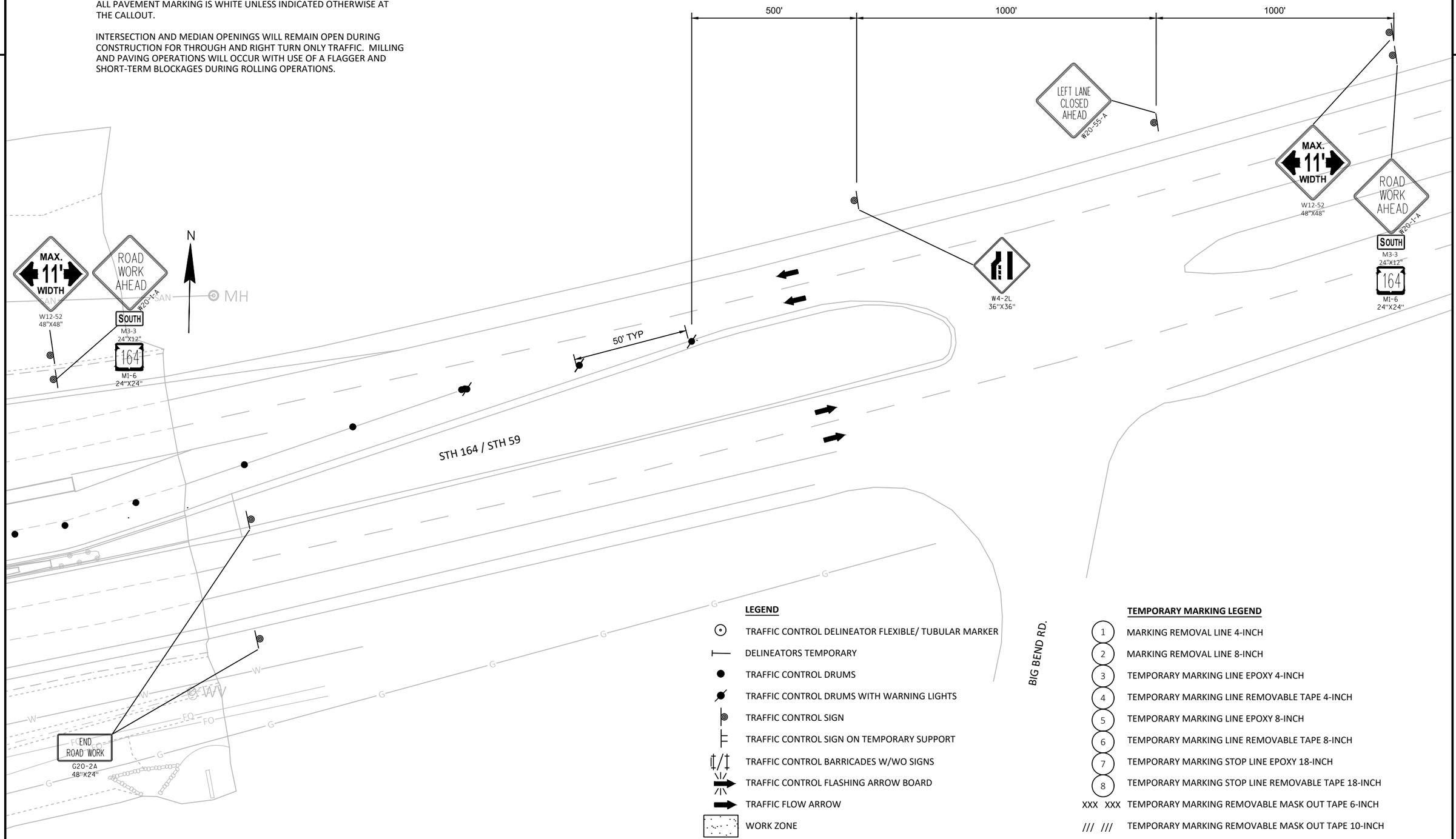
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8	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
XXX XXX	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
/// ///	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3	SHEET 322	E

NOTES:

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- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
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- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
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- TRAFFIC FLOW ARROW
- WORK ZONE

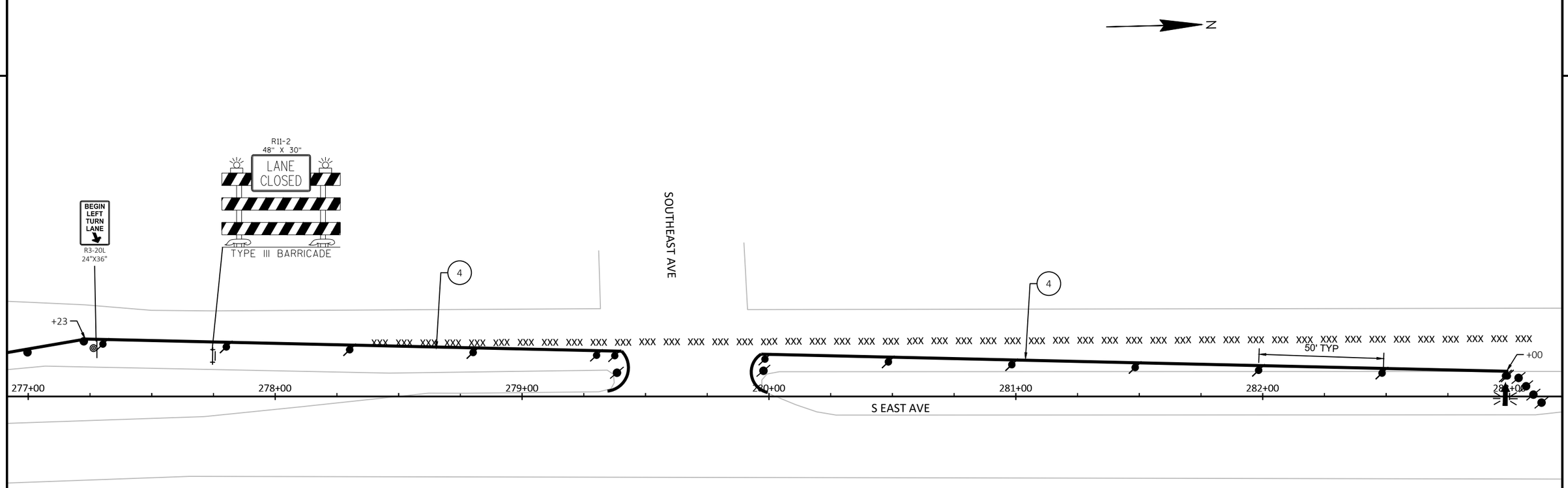
TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
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XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

2



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
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2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

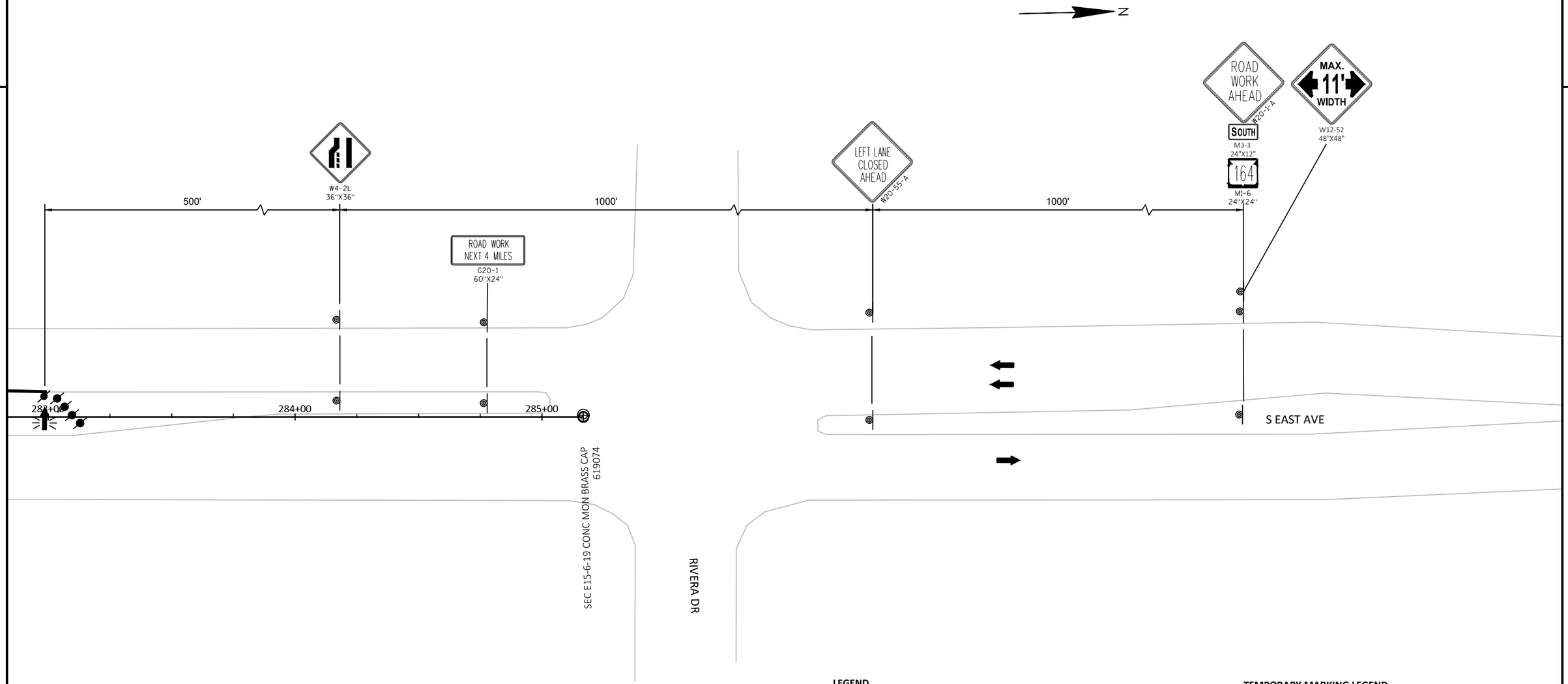
/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

NOTES:

ALL PAVEMENT MARKING IS WHITE UNLESS INDICATED OTHERWISE AT THE CALLOUT.

INTERSECTION AND MEDIAN OPENINGS WILL REMAIN OPEN DURING CONSTRUCTION FOR THROUGH AND RIGHT TURN ONLY TRAFFIC. MILLING AND PAVING OPERATIONS WILL OCCUR WITH USE OF A FLAGGER AND SHORT-TERM BLOCKAGES DURING ROLLING OPERATIONS.

2



LEGEND

- TRAFFIC CONTROL DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL DRUMS
- TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS
- TRAFFIC CONTROL SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL BARRICADES W/WO SIGNS
- TRAFFIC CONTROL FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW
- WORK ZONE

TEMPORARY MARKING LEGEND

1. MARKING REMOVAL LINE 4-INCH
2. MARKING REMOVAL LINE 8-INCH
3. TEMPORARY MARKING LINE EPOXY 4-INCH
4. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
5. TEMPORARY MARKING LINE EPOXY 8-INCH
6. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH
7. TEMPORARY MARKING STOP LINE EPOXY 18-INCH
8. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

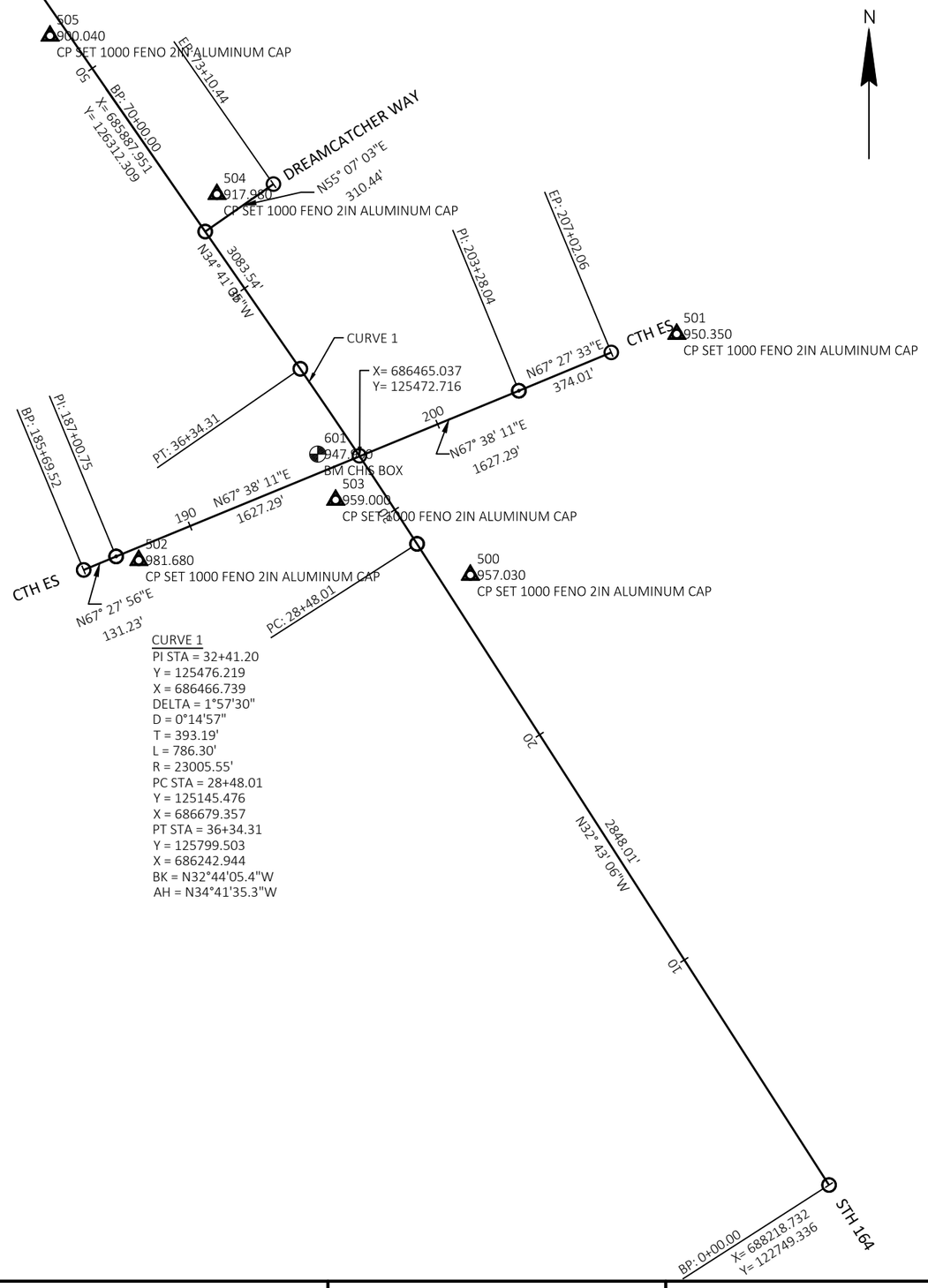
XXX XXX TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH

/// /// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH

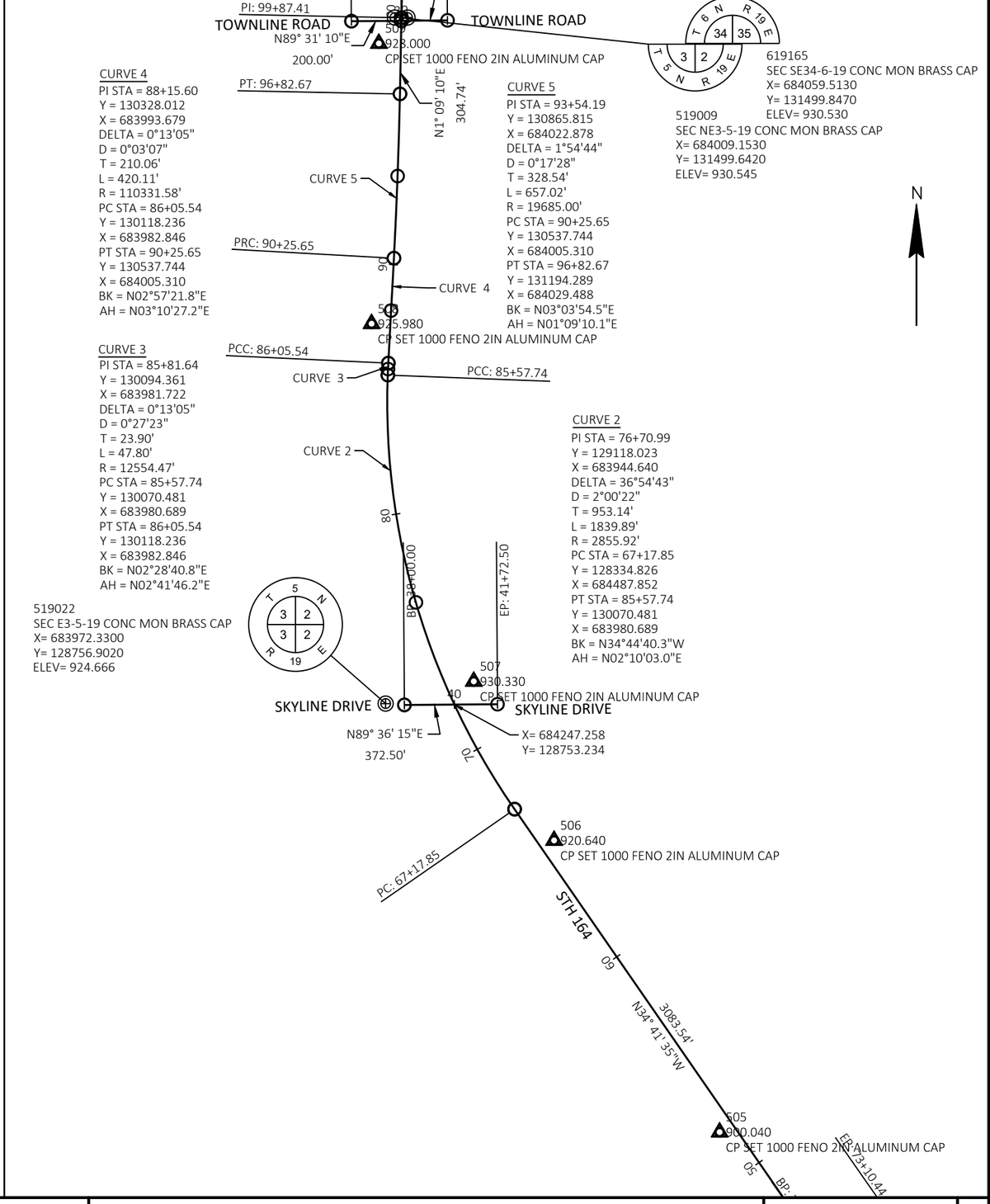
NOTES:

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CURVE 1
PI STA = 32+41.20
Y = 125476.219
X = 686466.739
DELTA = 1°57'30"
D = 0°14'57"
T = 393.19'
L = 786.30'
R = 23005.55'
PC STA = 28+48.01
Y = 125145.476
X = 686679.357
PT STA = 36+34.31
Y = 125799.503
X = 686242.944
BK = N32°44'05.4"W
AH = N34°41'35.3"W



CURVE 4
PI STA = 88+15.60
Y = 130328.012
X = 683993.679
DELTA = 0°13'05"
D = 0°03'07"
T = 210.06'
L = 420.11'
R = 110331.58'
PC STA = 86+05.54
Y = 130118.236
X = 683982.846
PT STA = 90+25.65
Y = 130537.744
X = 684005.310
BK = N02°57'21.8"E
AH = N03°10'27.2"E

CURVE 5
PI STA = 93+54.19
Y = 130865.815
X = 684022.878
DELTA = 1°54'44"
D = 0°17'28"
T = 328.54'
L = 657.02'
R = 19685.00'
PC STA = 90+25.65
Y = 130537.744
X = 684005.310
PT STA = 96+82.67
Y = 131194.289
X = 684029.488
BK = N03°03'54.5"E
AH = N01°09'10.1"E

CURVE 3
PI STA = 85+81.64
Y = 130094.361
X = 683981.722
DELTA = 0°13'05"
D = 0°27'23"
T = 23.90'
L = 47.80'
R = 12554.47'
PC STA = 85+57.74
Y = 130070.481
X = 683980.689
PT STA = 86+05.54
Y = 130118.236
X = 683982.846
BK = N02°28'40.8"E
AH = N02°41'46.2"E

CURVE 2
PI STA = 76+70.99
Y = 129118.023
X = 683944.640
DELTA = 36°54'43"
D = 2°00'22"
T = 953.14'
L = 1839.89'
R = 2855.92'
PC STA = 67+17.85
Y = 128334.826
X = 684487.852
PT STA = 85+57.74
Y = 130070.481
X = 683980.689
BK = N34°44'40.3"W
AH = N02°10'03.0"E

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	ALIGNMENT LAYOUT	SHEET 326	E

2

N

STH 164

513
844.980
CP SET 1000 FENO 2IN ALUMINUM CAP

140

N1° 08' 41"E
5304.60'

512
882.970
CP SET 1000 FENO 2IN ALUMINUM CAP

619152
SEC E34-6-19 CONC MON BRASS CAP
X= 684078.7080
Y= 134149.4400
ELEV= 912.675

130

BP: 48+00.00
EP: 50+00.00
X= 684077.969
Y= 133618.389

511
926.550
CP SET 1000 FENO 2IN ALUMINUM CAP

REDWING DRIVE

N89° 49' 08"E
200.00'

120

BP: 60+00.00
X= 684061.530
Y= 132795.694
EP: 62+00.00

COYOTE CROSSING

N89° 23' 56"E
200.00'

510
936.410
CP SET 1000 FENO 2IN ALUMINUM CAP

110

619165
SEC SE34-6-19 CONC MON BRASS CAP
X= 684059.5130
Y= 131499.8470
ELEV= 930.530

519009
SEC NE3-5-19 CONC MON BRASS CAP
X= 684009.1530
Y= 131499.6420
ELEV= 930.545

BP: 28+00.00
PI: 30+00.00
X= 684035.373
Y= 131486.777
EP: 31+84.24

X= 684035.618
Y= 131498.970
PI: 99+87.41

N89° 31' 10"E
184.24'

TOWNLINE ROAD

TOWNLINE ROAD

N89° 31' 10"E
200.00'

509
928.000
CP SET 1000 FENO 2IN ALUMINUM CAP

Y = 142113.755
X = 684222.397
BK = N01°02'04.1"E
AH = N01°04'22.5"E

CURVE 6

CURVE 6
PI STA = 192+78.37
Y = 140788.458
X = 684197.577
DELTA = 0°02'18"
D = 0°00'05"
T = 1325.53'
L = 2651.06'
R = 3951027.82'
PC STA = 179+52.84
Y = 139463.145
X = 684173.646
PT STA = 206+03.90
Y = 142113.755
X = 684222.397
BK = N01°02'04.1"E
AH = N01°04'22.5"E

190

517
832.090
CP SET 1000 FENO 2IN ALUMINUM CAP

180

PC: 179+52.84

619126
SEC E27-6-19 CONC MON BRASS CAP
X= 684147.3320
Y= 139463.6220
ELEV= 835.917

834.690
CP SET 1000 FENO 2IN ALUMINUM CAP

BP: 0+00.00
EP: 6+19.52

170

GLENDALE ROAD

GLENDALE ROAD

N89° 06' 07"E
619.52'

X= 684157.903
Y= 138156.350

515
835.750
CP SET 1000 FENO 2IN ALUMINUM CAP

160

N0° 41' 25"E
2660.83'

X= 684141.594
Y= 136802.508
PI: 152+92.01

619139
SEC SE27-6-19 CONC MON BRASS CAP
X= 684115.1920
Y= 136803.0640
ELEV= 836.733

514
836.600
CP SET 1000 FENO 2IN ALUMINUM CAP

150

STH 164

2

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	ALIGNMENT LAYOUT	SHEET 327	E

2

X = 684282.784
BK = N01°38'56.8"E
AH = N00°31'18.0"W

STH 164

N

PC: 232+55.04

619094
SEC E22-6-19 CONC MON BRASS CAP
X= 684237.3760
Y= 144765.1310
ELEV= 818.483

T 6 N
R 19 E
22 23
22 23

230

520
818.190
CP SET 1000 FENO 2IN ALUMINUM CAP

N0° 53' 22"E
2651.14'

220

4984
840.450
HMOD WAUKESHA GPS

BP: 432+41.38

210

EP: 450+00.01

519
840.280
CP SET 1000 FENO 2IN ALUMINUM CAP

LAWNSDALE ROAD / CTH I

N89° 11' 29"E
1049.87'

PT: 206+03.90

440

N89° 49' 26"E
708.76'

450

LAWNSDALE ROAD / CTH I

X= 684222.525
Y= 142121.947

619113
SEC SE22-6-19 CONC MON BRASS CAP
X= 684196.1760
Y= 142114.2370
ELEV= 831.685

T 6 N
R 19 E
22 23
27 26

CURVE 6
PI STA = 192+78.37
Y = 140788.458
X = 684197.577
DELTA = 0°02'18"
D = 0°00'05"
T = 1325.53'
L = 2651.06'
R = 3951027.82'
PC STA = 179+52.84
Y = 139463.145
X = 684173.646
PT STA = 206+03.90
Y = 142113.755
X = 684222.397
BK = N01°02'04.1"E
AH = N01°04'22.5"E

200

528
818.280
CP SET 1000 FENO 2IN ALUMINUM CAP

CURVE 6

EP: 285+16.72
X= 684356.092
Y= 150025.186

S EAST AVE

619074
SEC E15-6-19 CONC MON BRASS CAP
X= 684355.3920
Y= 150025.2030
ELEV= 832.011

T 6 N
R 19 E
15 14
15 14

N

280

N1° 23' 26"E
2654.85'

526
826.840
CP SET 1000 FENO 2IN ALUMINUM CAP

600
825.980
BM CHIS BOX

527
841.990
CP SET 1000 FENO 2IN ALUMINUM CAP

270

BP: 8+00.00

EP: 10+00.00

S88° 35' 21"E
200.00'

523
857.140
CP SET 1000 FENO 2IN ALUMINUM CAP

WILMONT ROAD

260

PT: 258+61.87

X= 684294.228
Y= 147477.738

619085
SEC SE15-6-19 CONC MON BRASS CAP
X= 684291.6730
Y= 147371.3140
ELEV= 848.998

T 6 N
R 19 E
15 14
22 23

CURVE 8

CURVE 8
PI STA = 255+36.19
Y = 147045.513
X = 684282.594
DELTA = 1°37'48"
D = 0°15'01"
T = 325.73'
L = 651.41'
R = 22897.27'
PC STA = 252+10.46
Y = 146719.784
X = 684282.784
PT STA = 258+61.87
Y = 147371.115
X = 684291.669
BK = N00°02'00.7"W
AH = N01°35'47.4"E

CURVE 9
PI STA = 80+79.31
Y = 146289.410
X = 684124.630
DELTA = 5°41'33"
D = 3°35'30"
T = 79.31'
L = 158.49'
R = 1595.22'
PC STA = 80+00.00
Y = 146295.828
X = 684045.582
PT STA = 81+58.49
Y = 146290.865
X = 684203.925
BK = S85°21'30.8"E
AH = N88°56'56.6"E

PRC: 252+10.46

BP: 80+00.00

PT: 81+58.49

EP: 82+39.47

522
830.330
CP SET 1000 FENO 2IN ALUMINUM CAP

250

X= 684284.907
Y= 146290.748

ROCKWOOD WAY

CURVE 9

S89° 55' 02"E
80.98'

CURVE 7

CURVE 7
PI STA = 242+32.87
Y = 145742.000
X = 684291.687
DELTA = 2°10'15"
D = 0°06'40"
T = 977.82'
L = 1955.42'
R = 51611.89'
PC STA = 232+55.04
Y = 144764.580
X = 684263.547
PT STA = 252+10.46
Y = 146719.784
X = 684282.784
BK = N01°38'56.8"E
AH = N00°31'18.0"W

521
816.280
CP SET 1000 FENO 2IN ALUMINUM CAP

240

STH 164

2

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	ALIGNMENT LAYOUT	SHEET 328	E

2718-15-70

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	3.000	3.000
0004	201.0205	Grubbing	STA	3.000	3.000
0006	204.0110	Removing Asphaltic Surface	SY	83.000	83.000
0008	204.0115	Removing Asphaltic Surface Butt Joints	SY	5,722.000	5,722.000
0010	204.0120	Removing Asphaltic Surface Milling	SY	217,391.000	217,391.000
0012	204.0150	Removing Curb & Gutter	LF	10,628.000	10,628.000
0014	204.0155	Removing Concrete Sidewalk	SY	1,383.000	1,383.000
0016	204.0195	Removing Concrete Bases	EACH	28.000	28.000
0018	204.9105.S	Removing (item description) 01. Traffic Signals - STH 164 at CTH ES	LS	1.000	1.000
0020	204.9105.S	Removing (item description) 02. Traffic Signals - STH 164 at CTH I	LS	1.000	1.000
0022	204.9105.S	Removing (item description) 03. Loop Detector Wire & Lead-in Cable STH 164 at CTH ES	LS	1.000	1.000
0024	204.9105.S	Removing (item description) 04. Loop Detector Wire & Lead-in Cable STH 164 at CTH I	LS	1.000	1.000
0026	205.0100	Excavation Common	CY	2,041.000	2,041.000
0028	209.0200.S	Backfill Controlled Low Strength	CY	403.000	403.000
0030	213.0100	Finishing Roadway (project) 01. 2718-15-70	EACH	1.000	1.000
0032	305.0110	Base Aggregate Dense 3/4-Inch	TON	107.000	107.000
0034	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	679.000	679.000
0036	390.0201	Base Patching Asphaltic	TON	765.000	765.000
0038	416.0610	Drilled Tie Bars	EACH	853.000	853.000
0040	450.4000	HMA Cold Weather Paving	TON	11,871.000	11,871.000
0042	455.0605	Tack Coat	GAL	30,438.000	30,438.000
0044	460.2005	Incentive Density PWL HMA Pavement	DOL	29,369.000	29,369.000
0046	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	47,096.000	47,096.000
0048	460.2010	Incentive Air Voids HMA Pavement	DOL	49,099.930	49,099.930
0050	460.6223	HMA Pavement 3 MT 58-28 S	TON	25,361.000	25,361.000
0052	460.6224	HMA Pavement 4 MT 58-28 S	TON	23,739.000	23,739.000
0054	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	70.000	70.000
0056	465.0315	Asphaltic Flumes	SY	83.000	83.000
0058	522.0436	Culvert Pipe Reinforced Concrete Class IV 36-Inch	LF	168.000	168.000
0060	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	2.000	2.000
0062	601.0553	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D	LF	10,701.000	10,701.000
0064	602.0410	Concrete Sidewalk 5-Inch	SF	11,537.000	11,537.000
0066	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	240.000	240.000
0068	606.0100	Riprap Light	CY	10.000	10.000
0070	611.0430	Reconstructing Inlets	EACH	12.000	12.000
0072	611.0530	Manhole Covers Type J	EACH	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
0074	611.8110	Adjusting Manhole Covers	EACH	1.000	1.000
0076	611.8115	Adjusting Inlet Covers	EACH	166.000	166.000
0078	611.8120.S	Cover Plates Temporary	EACH	2.000	2.000
0080	614.0920	Salvaged Rail	LF	1,496.000	1,496.000
0082	614.0925	Salvaged Guardrail End Treatments	EACH	6.000	6.000
0084	614.2300	MGS Guardrail 3	LF	1,338.000	1,338.000
0086	614.2610	MGS Guardrail Terminal EAT	EACH	3.000	3.000
0088	614.2620	MGS Guardrail Terminal Type 2	EACH	3.000	3.000
0090	619.1000	Mobilization	EACH	1.000	1.000
0092	620.0300	Concrete Median Sloped Nose	SF	1,350.000	1,350.000
0094	625.0100	Topsoil	SY	2,333.000	2,333.000
0096	628.1504	Silt Fence	LF	699.000	699.000
0098	628.1520	Silt Fence Maintenance	LF	699.000	699.000
0100	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0102	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0104	628.2004	Erosion Mat Class I Type B	SY	2,283.000	2,283.000
0106	628.7010	Inlet Protection Type B	EACH	222.000	222.000
0108	628.7020	Inlet Protection Type D	EACH	11.000	11.000
0110	628.7555	Culvert Pipe Checks	EACH	18.000	18.000
0112	628.7570	Rock Bags	EACH	9.000	9.000
0114	629.0210	Fertilizer Type B	CWT	2.000	2.000
0116	630.0130	Seeding Mixture No. 30	LB	41.100	41.100
0118	630.0200	Seeding Temporary	LB	8.000	8.000
0120	630.0500	Seed Water	MGAL	53.000	53.000
0122	633.1100	Delineators Temporary	EACH	50.000	50.000
0124	633.5200	Markers Culvert End	EACH	60.000	60.000
0126	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	21.000	21.000
0128	637.2210	Signs Type II Reflective H	SF	177.000	177.000
0130	637.2230	Signs Type II Reflective F	SF	9.000	9.000
0132	638.2102	Moving Signs Type II	EACH	52.000	52.000
0134	638.2602	Removing Signs Type II	EACH	8.000	8.000
0136	638.3000	Removing Small Sign Supports	EACH	23.000	23.000
0138	642.5401	Field Office Type D	EACH	1.000	1.000
0140	643.0300	Traffic Control Drums	DAY	79,452.000	79,452.000
0142	643.0420	Traffic Control Barricades Type III	DAY	14,577.000	14,577.000
0144	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	1,225.000	1,225.000
0146	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	1,225.000	1,225.000
0148	643.0705	Traffic Control Warning Lights Type A	DAY	29,594.000	29,594.000
0150	643.0715	Traffic Control Warning Lights Type C	DAY	13,520.000	13,520.000
0152	643.0800	Traffic Control Arrow Boards	DAY	871.000	871.000

2718-15-70

Line	Item	Item Description	Unit	Total	Qty
0154	643.0900	Traffic Control Signs	DAY	37,734.000	37,734.000
0156	643.0910	Traffic Control Covering Signs Type I	EACH	1.000	1.000
0158	643.0920	Traffic Control Covering Signs Type II	EACH	5.000	5.000
0160	643.1050	Traffic Control Signs PCMS	DAY	140.000	140.000
0162	643.1070	Traffic Control Cones 42-Inch	DAY	220,431.000	220,431.000
0164	643.5000	Traffic Control	EACH	1.000	1.000
0166	646.1020	Marking Line Epoxy 4-Inch	LF	93,495.000	93,495.000
0168	646.1545	Marking Line Grooved Wet Ref Contrast Epoxy 4-Inch	LF	12,374.000	12,374.000
0170	646.3545	Marking Line Grooved Wet Ref Contrast Epoxy 8-Inch	LF	13,311.000	13,311.000
0172	646.5020	Marking Arrow Epoxy	EACH	19.000	19.000
0174	646.5120	Marking Word Epoxy	EACH	14.000	14.000
0176	646.6120	Marking Stop Line Epoxy 18-Inch	LF	417.000	417.000
0178	646.6220	Marking Yield Line Epoxy 18-Inch	EACH	5.000	5.000
0180	646.7120	Marking Diagonal Epoxy 12-Inch	LF	761.000	761.000
0182	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	853.000	853.000
0184	646.8120	Marking Curb Epoxy	LF	740.000	740.000
0186	646.8220	Marking Island Nose Epoxy	EACH	37.000	37.000
0188	646.9000	Marking Removal Line 4-Inch	LF	16,461.000	16,461.000
0190	646.9100	Marking Removal Line 8-Inch	LF	387.000	387.000
0192	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	82,564.000	82,564.000
0194	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	100,918.000	100,918.000
0196	649.0220	Temporary Marking Line Epoxy 8-Inch	LF	115.000	115.000
0198	649.0250	Temporary Marking Line Removable Tape 8-Inch	LF	1,021.000	1,021.000
0200	649.0520	Temporary Marking Arrow Epoxy	EACH	1.000	1.000
0202	649.0620	Temporary Marking Word Epoxy	EACH	1.000	1.000
0204	649.0850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	287.000	287.000
0206	649.0960	Temporary Marking Removable Mask Out Tape 6-Inch	LF	934.000	934.000
0208	649.0970	Temporary Marking Removable Mask Out Tape 10-Inch	LF	1,214.000	1,214.000
0210	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	11,044.000	11,044.000
0212	650.6000	Construction Staking Pipe Culverts	EACH	2.000	2.000
0214	650.8000	Construction Staking Resurfacing Reference	LF	47,096.000	47,096.000
0216	650.8500	Construction Staking Electrical Installations (project) 01. 2718-15-70	LS	1.000	1.000
0218	650.9000	Construction Staking Curb Ramps	EACH	24.000	24.000
0220	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	2,233.000	2,233.000
0222	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	1,339.000	1,339.000
0224	652.0615	Conduit Special 3-Inch	LF	803.000	803.000
0226	652.0700.S	Install Conduit into Existing Item	EACH	1.000	1.000
0228	652.0800	Conduit Loop Detector	LF	3,790.000	3,790.000
0230	653.0135	Pull Boxes Steel 24x36-Inch	EACH	15.000	15.000

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Line	Item	Item Description	Unit	Total	Qty
0232	653.0140	Pull Boxes Steel 24x42-Inch	EACH	28.000	28.000
0234	653.0905	Removing Pull Boxes	EACH	36.000	36.000
0236	654.0101	Concrete Bases Type 1	EACH	6.000	6.000
0238	654.0102	Concrete Bases Type 2	EACH	6.000	6.000
0240	654.0105	Concrete Bases Type 5	EACH	8.000	8.000
0242	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	2.000	2.000
0244	655.0230	Cable Traffic Signal 5-14 AWG	LF	1,267.000	1,267.000
0246	655.0240	Cable Traffic Signal 7-14 AWG	LF	1,673.000	1,673.000
0248	655.0260	Cable Traffic Signal 12-14 AWG	LF	3,067.000	3,067.000
0250	655.0270	Cable Traffic Signal 15-14 AWG	LF	1,135.000	1,135.000
0252	655.0290	Cable Traffic Signal 21-14 AWG	LF	566.000	566.000
0254	655.0320	Cable Type UF 2-10 AWG Grounded	LF	2,829.000	2,829.000
0256	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	5,122.000	5,122.000
0258	655.0610	Electrical Wire Lighting 12 AWG	LF	2,364.000	2,364.000
0260	655.0700	Loop Detector Lead In Cable	LF	14,265.000	14,265.000
0262	655.0800	Loop Detector Wire	LF	13,640.000	13,640.000
0264	655.0900	Traffic Signal EVP Detector Cable	LF	865.000	865.000
0266	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. STH 164 at CTH ES	LS	1.000	1.000
0268	656.0200	Electrical Service Meter Breaker Pedestal (location) 02. STH 164 at CTH I	LS	1.000	1.000
0270	657.0100	Pedestal Bases	EACH	6.000	6.000
0272	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	14.000	14.000
0274	657.0310	Poles Type 3	EACH	6.000	6.000
0276	657.0322	Poles Type 5-Aluminum	EACH	8.000	8.000
0278	657.0355	Poles Type 12	EACH	8.000	8.000
0280	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	1.000	1.000
0282	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	2.000	2.000
0284	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	3.000	3.000
0286	657.0609	Luminaire Arms Single Member 4-Inch Clamp 6-FT	EACH	8.000	8.000
0288	657.0610	Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	EACH	10.000	10.000
0290	658.0173	Traffic Signal Face 3S 12-Inch	EACH	30.000	30.000
0292	658.0174	Traffic Signal Face 4S 12-Inch	EACH	16.000	16.000
0294	658.0416	Pedestrian Signal Face 16-Inch	EACH	8.000	8.000
0296	658.0500	Pedestrian Push Buttons	EACH	8.000	8.000
0298	658.5069	Signal Mounting Hardware (location) 01. STH 164 & CTH ES	LS	1.000	1.000
0300	658.5069	Signal Mounting Hardware (location) 02. STH 164 & CTH I	LS	1.000	1.000
0302	659.1125	Luminaires Utility LED C	EACH	20.000	20.000
0304	661.0200	Temporary Traffic Signals for Intersections (location) 01.	LS	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
		STH 164 & CTH ES			
0306	677.0200	Install Camera Assembly	EACH	1.000	1.000
0308	690.0150	Sawing Asphalt	LF	7,683.000	7,683.000
0310	690.0250	Sawing Concrete	LF	481.000	481.000
0312	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,000.000	2,000.000
0314	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	3,600.000	3,600.000
0316	SPV.0060	Special 02. Concrete Base Monotube Type 9 & 10 Special Pole	EACH	8.000	8.000
0318	SPV.0060	Special 03. Transport and Install Poles Type 9 Special	EACH	8.000	8.000
0320	SPV.0060	Special 04. Transport and Install Monotube Arms 35-FT	EACH	1.000	1.000
0322	SPV.0060	Special 05. Transport and Install Monotube Arms 40-ft	EACH	3.000	3.000
0324	SPV.0060	Special 06. Transport and Install Monotube Arms 45-FT	EACH	4.000	4.000
0326	SPV.0090	Special 01. Concrete Curb & Gutter Modified Pan Special	LF	343.000	343.000
0328	SPV.0105	Special 01. Cleaning Box Culvert B-67-0021	LS	1.000	1.000
0330	SPV.0105	Special 02. Cleaning Box Culvert B-67-0036	LS	1.000	1.000
0332	SPV.0105	Special 03. Trans. & Inst. State Furn. Traffic Sig. Cabinet STH 164 & CTH ES	LS	1.000	1.000
0334	SPV.0105	Special 04. Trans. & Inst. State Furn. Traffic Sig. Cabinet STH 164 & CTH I	LS	1.000	1.000
0336	SPV.0105	Special 05. Trans. & Inst. State Furn. Radar Detection Sys. STH 164 & CTH I	LS	1.000	1.000
0338	SPV.0105	Special 06. Trans. & Inst. State Furn. EVP Detector Heads STH 164 & CTH I	LS	1.000	1.000
0340	SPV.0105	Special 07. Removing Tree Well	LS	1.000	1.000

3

LOCATION	CLEARING 201.0105 STA	GUBBING 201.0205 STA
194+00 TO 195+00 LT	1	1
238+00 TO 240+00 LT	2	2
	3	3

LOCATION	EXCAVATION COMMON 205.0100 CY
36+15 TO 42+50	956
255+10 TO 72+00	1085
TOTAL	2041

LOCATION	REMOVING ASPHALTIC SURFACE 204.0110 SY	REMOVING ASPHALTIC SURFACE BUTT JOINTS 204.0115 SY	REMOVING ASPHALTIC SURFACE MILLING 204.0120 SY	REMOVING CURB AND GUTTER 204.0150 LF	REMOVING CONCRETE SIDEWALK 204.0155 SY
31+43 TO 42+50	11	2,500	14,242	1,403	228
42+50 TO 72+00	23	167	26,887	2,065	215
72+00 TO 99+75	9	333	24,888	2,574	117
99+75 TO 112+75	--	356	12,030	48	--
112+75 TO 121+00	--	89	7,620	8	--
121+00 TO 166+50	4	89	40,158	252	111
166+50 TO 206+00	29	356	36,349	1,192	349
206+00 TO 247+75	7	444	36,826	1,250	248
247+75 TO 259+75	--	100	11,142	947	--
259+75 TO 266+91	--	1,288	7,249	889	115
TOTALS	83	5,722	217,391	10,628	1,383

3

LOCATION	MOBILIZATION 619.1000 EACH
PROJECT	1
	1

LOCATION	REMOVING TREE WELL SPV.0105.07 LS
PROJECT	1
	1

LOCATION	FINISHING ROADWAY 2718-15-70 213.0100 EACH
PROJECT	1
	1

LOCATION	BASE AGGREGATE DENSE 3/4-INCH 305.0110 TON	BASE AGGREGATE DENSE 1 1/4-INCH 305.0120 TON
31+43 TO 42+50	--	81
42+50 TO 72+00	--	144
72+00 TO 99+75	33	180
99+75 TO 112+75	7	4
112+75 TO 121+00	6	1
121+00 TO 166+50	23	19
166+50 TO 206+00	15	59
206+00 TO 247+75	19	63
247+75 TO 259+75	4	66
259+75 TO 266+91	--	62
TOTALS	107	679

LOCATION			BASE PATCHING ASPHALTIC 390.0201 TON	HMA COLD WEATHER PAVING 450.4000 TON	TACK COAT 455.0605 GAL	HMA PAVEMENT 3 MT 58-28 S 460.6223 TON	HMA PAVEMENT 4 MT 58-28 S 460.6224 TON	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES 465.0120 TON	ASPHALTIC FLUMES 465.0315 SY
31+43	TO	42+50	256	764	1,994	1,827	1,528	--	11
42+50	TO	72+00	--	1,455	3,764	3,108	2,910	--	23
72+00	TO	99+75	--	1,348	3,484	2,869	2,695	4	9
99+75	TO	112+75	--	651	1,684	1,394	1,302	5	--
112+75	TO	121+00	--	412	1,067	883	824	--	--
121+00	TO	166+50	--	2,176	5,622	4,616	4,351	44	4
166+50	TO	206+00	75	2,007	5,089	4,208	4,014	10	29
206+00	TO	247+75	75	2,035	5,156	4,233	4,071	--	7
247+75	TO	259+75	--	603	1,560	1,292	1,205	--	--
259+75	TO	266+91	--	420	1,018	930	840	--	--
UNDISTRIBUTED			359	--	--	--	--	7	--
		TOTALS	765	11,871	30,438	25,361	23,739	70	83

LOCATION			DRILLED TIE BARS 416.0610 EACH	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D 601.0533 LF	CONCRETE SIDEWALK 5-INCH 602.0410 SF	CURB RAMP DETECTABLE WARNING FIELD YELLOW 602.0505 SF	CONCRETE MEDIAN SLOPED NOSE 620.0300 SF	CONCRETE CURB & GUTTER MODIFIED PAN SPECIAL SPV.0090.01 LF
31+43	TO	42+50	24	1,263	2,249	120	312	116
42+50	TO	72+00	116	2,145	1,664	--	112	--
72+00	TO	99+75	60	2,534	907	--	168	--
99+75	TO	112+75	56	96	--	--	--	--
112+75	TO	121+00	24	32	--	--	--	--
121+00	TO	166+50	176	404	860	--	--	--
166+50	TO	206+00	168	1,199	2,871	60	327	113
206+00	TO	247+75	116	1,152	2,096	60	319	114
247+75	TO	259+75	48	979	--	--	56	--
259+75	TO	266+91	24	897	890	--	56	--
UNDISTRIBUTED			41	--	--	--	--	--
		TOTALS	853	10,701	11,537	240	1,350	343

LOCATION	RECONSTRUCTING INLETS 611.0430 EACH	MANHOLE COVERS TYPE J 611.0530 EACH	ADJUSTING MANHOLE COVERS 611.8110 EACH	ADJUSTING INLET COVERS 611.8115 EACH	COVER PLATES TEMPORARY 611.8120.S EACH
31+43 TO 42+50	--	--	--	--	--
42+50 TO 72+00	--	--	--	25	--
72+00 TO 99+75	--	--	--	11	--
99+75 TO 112+75	--	--	--	12	--
112+75 TO 121+00	--	--	--	4	--
121+00 TO 166+50	1	--	--	38	--
166+50 TO 206+00	--	--	--	36	--
206+00 TO 247+75	--	1	--	25	--
247+75 TO 259+75	--	--	--	10	--
259+75 TO 266+91	1	--	1	5	--
UNDISTRIBUTED	10	--	--	--	2
TOTALS	12	1	1	166	2

LOCATION	BACKFILL CONTROLLED LOW STRENGTH 209.0200.S CY
227+00 TO 227+50 UNDER PVMT	403
TOTAL	403

3

LOCATION	SALVAGED RAIL 614.0920 LF	SALVAGED GUARDRAIL END TREATMENTS 614.0925 EACH	MGS GUARDRAIL 3 614.2300 LF	MGS GUARDRAIL TERMINAL EAT 614.2610 EACH	MGS GUARDRAIL TERMINAL TYPE 2 614.2620 EACH
44+68 TO 49+22 LT	453	2	400	1	1
99+75 TO 102+74 RT	315	2	262.5	1	1
130+18 TO 137+46 LT	728	2	675	1	1
TOTALS	1,496	6	1,338	3	3

LOCATION			TOPSOIL 625.0100 SY	SILT FENCE 628.1504 LF	SILT FENCE MAINTENANCE 628.1520 LF	MOBILIZATIONS EROSION CONTROL 628.1905 EA	MOBILIZATIONS EMERGENCY EROSION CONTROL 628.1910 EA	EROSION MAT CLASS I TYPE B 628.2004 SY	INLET PROTECTION TYPE B 628.7010 EA	INLET PROTECTION TYPE D 628.7020 EA	CULVERT PIPE CHECKS 628.7555 EA	ROCK BAGS 628.7570 EA	FERTILIZER TYPE B 629.0210 CWT	SEEDING MIXTURE NO. 30 630.0130 LB	SEEDING TEMPORARY 630.0200 LB	SEED WATER 630.0500 MGAL
31+43	TO	42+50	33	392	392	--	--	33	21	--	9	--	--	0.6	--	1
42+50	TO	72+00	44	--	--	--	--	44	32	2	--	--	--	0.8	--	1
72+00	TO	99+75	89	--	--	--	--	89	21	2	--	--	0.1	1.6	--	2
99+75	TO	112+75	556	--	--	--	--	556	12	--	--	--	0.4	10	--	12
112+75	TO	121+00	67	--	--	--	--	67	4	--	--	--	--	1.2	--	1
121+00	TO	166+50	889	--	--	--	--	889	36	3	--	--	0.6	16	--	20
166+50	TO	206+00	333	161	161	--	--	333	39	2	3	--	0.2	6	--	7
206+00	TO	247+75	167	146	146	--	--	167	32	2	6	--	0.1	3	--	4
247+75	TO	259+75	89	--	--	--	--	89	13	--	--	--	0.1	1.6	--	2
259+75	TO	266+91	16	--	--	--	--	16	12	--	--	--	--	0.3	--	0
UNDISTRIBUTED			50	--	--	3	4	--	--	--	--	9	--	--	8	2
		TOTALS	2,333	699	699	3	4	2,283	222	11	18	9	2	41	8	53

LOCATION			MARKERS CULVERT END 633.5200 EACH
31+43	TO	42+50	1
42+50	TO	72+00	2
72+00	TO	99+75	4
99+75	TO	112+75	2
112+75	TO	121+00	2
121+00	TO	166+50	12
166+50	TO	206+00	13
206+00	TO	247+75	18
247+75	TO	259+75	--
259+75	TO	266+91	--
UNDISTRIBUTED			6
			60

LOCATION			RIPRAP LIGHT 606.0100 CY
194+25	TO	195+61 LT	10
			10

LOCATION	CLEANING BOX CULVERT B-67-0021 SPV.0105.01 LS
PROJECT	1
	1

LOCATION	CLEANING BOX CULVERT B-67-0036 SPV.0105.02 LS
PROJECT	1
	1

			TRAFFIC CONTROL												
				BARRICADES	WARNING LIGHTS		ARROW		COVERING	COVERING	SIGNS	CONES	DELINEATORS	FLEXIBLE TUBULAR MARKER	
			DRUMS	TYPE III	TYPE A	TYPE C	BOARDS	SIGNS	SIGNS TYPE I	SIGNS TYPE II	PCMS	42-INCH	TEMPORARY	POSTS	BASES
			643.0300	643.0420	643.0705	643.0715	643.0800	643.0900	643.0910	643.0920	643.1050	643.1070	633.1100	643.0500	643.0600
			DAY	DAY	DAY	DAY	DAY	DAY	EACH	EACH	DAY	DAY	EACH	EACH	EACH
STAGE 1															
SOUTH LIMIT	TO	42+50	4,940	456	912	760	38	1,786	--	1	56	1,748	--	--	--
42+50	TO	72+00	2622	114	228	570	76	608	--	1	14	5,244	--	--	--
72+00	TO	99+75	--	--	--	--	--	--	--	--	--	5,016	--	--	--
99+75	TO	112+75	--	--	--	--	--	--	--	--	--	2,508	--	--	--
112+75	TO	121+00	--	--	--	--	--	--	--	--	--	1,482	--	--	--
121+00	TO	166+50	--	--	--	--	--	--	--	--	--	8,018	--	--	--
166+50	TO	206+00	--	--	--	--	--	--	--	1	14	7,258	--	--	--
206+00	TO	247+75	1330	38	76	570	76	342	--	1	14	7,220	--	--	--
247+75	TO	259+75	1862	152	304	--	--	266	--	--	--	2,280	--	--	--
259+75	TO	NORTH LIMIT	4,788	342	684	950	76	1,292	1	1	42	1,292	--	--	--
		STAGE 1 SUBTOTAL	15,542	1,102	2,204	2,850	266	4,294	1	5	140	42,066	--	--	--
STAGE 2															
SOUTH LIMIT	TO	42+50	8,965	770	1,540	1045	55	2,585	--	--	--	2,970	4	--	--
42+50	TO	72+00	2145	440	880	385	--	1,265	--	--	--	6,985	3	70	70
72+00	TO	99+75	--	495	990	--	--	1,210	--	--	--	7,425	--	84	84
99+75	TO	112+75	--	220	440	--	--	495	--	--	--	3,575	--	39	39
112+75	TO	121+00	--	220	440	--	--	660	--	--	--	1,925	--	34	34
121+00	TO	166+50	--	880	1,760	--	--	1,650	--	--	--	10,670	--	130	130
166+50	TO	206+00	--	880	1,760	--	--	1,540	--	--	--	9,900	--	110	110
206+00	TO	247+75	385	1,045	2,090	385	--	1,815	--	--	--	9,790	--	110	110
247+75	TO	259+75	2750	275	550	--	--	440	--	--	--	3,300	7	20	20
259+75	TO	NORTH LIMIT	5,940	550	1,100	1,430	55	2,035	--	--	--	2,200	7	--	--
		STAGE 2 SUBTOTAL	20,185	5,775	11,550	3,245	110	13,695	--	--	--	58,740	21	597	597
STAGE 3															
SOUTH LIMIT	TO	42+50	7,590	935	1,870	1430	55	2,585	--	--	--	2,530	4	--	--
42+50	TO	72+00	2310	495	990	--	--	1,045	--	--	--	7,590	8	70	70
72+00	TO	99+75	--	495	990	--	--	1,210	--	--	--	7,260	--	81	81
99+75	TO	112+75	--	275	550	--	--	605	--	--	--	3,630	--	39	39
112+75	TO	121+00	--	275	550	--	--	605	--	--	--	2,145	--	35	35
121+00	TO	166+50	--	825	1,650	--	--	1,485	--	--	--	11,605	--	139	139
166+50	TO	206+00	330	935	1,870	330	--	1,870	--	--	--	10,505	--	128	128
206+00	TO	247+75	--	880	1,760	--	--	1,485	--	--	--	10,450	--	110	110
247+75	TO	259+75	1870	440	880	275	--	550	--	--	--	3,300	9	26	26
259+75	TO	NORTH LIMIT	9,130	550	1,540	1,265	55	2,090	--	--	--	1,870	8	--	--
		STAGE 3 SUBTOTAL	21,230	6,105	12,650	3,300	110	13,530	--	--	--	60,885	29	628	628
STAGE 4															
SOUTH LIMIT	TO	42+50	7,150	660	1,320	1100	55	2,585	--	--	--	2,970	--	--	--
42+50	TO	72+00	3795	165	330	825	110	880	--	--	--	6,985	--	--	--
72+00	TO	99+75	--	--	--	--	--	--	--	--	--	7,425	--	--	--
99+75	TO	112+75	--	--	--	--	--	--	--	--	--	3,575	--	--	--
112+75	TO	121+00	--	--	--	--	--	--	--	--	--	1,925	--	--	--
121+00	TO	166+50	--	--	--	--	--	--	--	--	--	10,670	--	--	--
166+50	TO	206+00	--	--	--	--	--	--	--	--	--	9,900	--	--	--
206+00	TO	247+75	1925	55	110	825	110	495	--	--	--	9,790	--	--	--
247+75	TO	259+75	2695	220	440	--	--	385	--	--	--	3,300	--	--	--
259+75	TO	NORTH LIMIT	6,930	495	990	1,375	110	1,870	--	--	--	2,200	--	--	--
		STAGE 4 SUBTOTAL	22,495	1,595	3,190	4,125	385	6,215	--	--	--	58,740	--	--	--
		TOTAL	79,452	14,577	29,594	13,520	871	37,734	1	5	140	220,431	50	1,225	1,225

LOCATION			MARKING LINE 4-INCH WHITE 646.1020 LF	MARKING LINE 4-INCH YELLOW 646.1020 LF	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH 646.1545 LF	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH 646.3545 LF	MARKING ARROW EPOXY 646.5020 EACH	MARKING WORD EPOXY 646.5120 EACH	MARKING STOP LINE EPOXY 18-INCH 646.6120 LF	MARKING YIELD LINE EPOXY 18-INCH 646.6220 EACH	MARKING DIAGONAL EPOXY 12-INCH 646.7120 LF	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH 646.7420 LF	MARKING CURB EPOXY 646.8120 LF	MARKING ISLAND NOSE EPOXY 646.8220 EACH
South End	TO	32+50	407	418	113	1,032	4	4	47	--	80	274	20	1
CTH ES EAST AND WEST			1,158	1,273	257	1,885	10	7	59	2	--	312	60	3
32+50	TO	42+50	1,750	1,761	475	732	--	--	35	1	--	267	40	2
42+50	TO	72+00	5,626	5,502	1,488	1,190	--	--	15	--	200	--	80	4
72+00	TO	99+75	5,289	5,329	1,400	1,466	--	--	31	--	94	--	80	4
99+75	TO	112+75	2,434	2,609	650	719	--	--	23	--	63	--	40	2
112+75	TO	121+00	1,498	1,452	425	306	--	--	17	--	--	--	40	2
121+00	TO	166+50	8,904	8,693	2,300	1,039	--	--	18	--	57	--	120	6
166+50	TO	206+00	7,862	7,773	2,000	2,107	2	1	78	1	101	--	120	6
206+00	TO	247+75	8,341	8,240	2,100	1,730	2	1	76	1	113	--	80	4
247+75	TO	259+75	2,256	2,245	600	703	--	--	18	--	53	--	40	2
259+75	TO	266+91	1,343	1,332	567	402	1	1	--	--	--	--	20	1
			46,868	46,627										
TOTALS			93,495		12,374	13,311	19	14	417	5	761	853	740	37

LOCATION	TRAFFIC CONTROL 643.5000 EACH
PROJECT	1
	1

LOCATION	FIELD OFFICE TYPE D 642.5401 EACH
PROJECT	1
	1

			MARKING REMOVAL LINE		TEMPORARY MARKING LINE				TEMPORARY MARKING			TEMPORARY MARKING	
					EPOXY	REMOVABLE TAPE	EPOXY	REMOVABLE TAPE	ARROW	WORD	STOP LINE REMOVABLE	REMOVABLE MASK OUT	REMOVABLE MASK OUT
			4-INCH	8-INCH	4-INCH	4-INCH	8-INCH	8-INCH	EPOXY	EPOXY	TAPE 18-INCH	TAPE 6-INCH	TAPE 10-INCH
			646.9000	646.9100	649.0120	649.0150	649.0220	649.0250	649.0520	649.0620	649.0850	649.0960	649.0970
			LF	LF	LF	LF	LF	LF	EACH	EACH	LF	LF	LF
+	TO	10+00	--	--	--	122	--	--	--	--	--	--	--
10+00	TO	32+50	--	--	--	2,796	--	887	1	1	15	397	488
32+50	TO	42+50	356	60	514	2,915	--	--	--	--	15	--	--
42+50	TO	72+00	1,955	134	10,500	12,833	--	--	--	--	16	--	--
72+00	TO	99+75	2,000	--	10,675	10,750	--	--	--	--	32	--	--
99+75	TO	112+75	1,025	--	5,000	5,050	--	--	--	--	16	--	--
112+75	TO	121+00	450	--	3,200	3,150	--	--	--	--	32	--	--
121+00	TO	166+50	3,475	--	17,900	17,800	--	--	--	--	16	--	--
166+50	TO	206+00	3,050	--	15,500	15,400	--	--	--	--	67	--	--
206+00	TO	247+75	3,475	--	16,425	17,779	115	--	--	--	50	--	--
247+75	TO	259+75	675	133	2,850	5,111	--	--	--	--	--	--	--
259+75	TO	285+00	--	60	--	7,334	--	134	--	--	28	537	726
		TOTALS	16,461	387	82,564	100,918	115	1,021	1	1	287	934	1,214

3

LOCATION			SAWING ASPHALT 690.0150 LF	SAWING CONCRETE 690.0250 LF
31+43	TO	42+50	1786	18
42+50	TO	72+00	1008	67
72+00	TO	99+75	1309	60
99+75	TO	112+75	126	28
112+75	TO	121+00	64	13
121+00	TO	166+50	336	81
166+50	TO	206+00	1504	86
206+00	TO	247+75	1286	78
247+75	TO	259+75	118	28
259+75	TO	266+91	146	24
			7683	481

3

			CONSTRUCTION STAKING			
			CURB GUTTER AND CURB & GUTTER 650.5500	PIPE CULVERTS 650.6000	RESURFACING REFERENCE 650.8000	CURB RAMPS 650.9000
LOCATION			LF	EACH	LF	EACH
31+43	TO	42+50	1,379	--	2,214	12
42+50	TO	72+00	2,145	--	5,900	--
72+00	TO	99+75	2,534	--	5,550	--
99+75	TO	112+75	96	--	2,600	--
112+75	TO	121+00	32	--	1,650	--
121+00	TO	166+50	404	2	9,100	--
166+50	TO	206+00	1,312	--	7,900	6
206+00	TO	247+75	1,266	--	8,350	6
247+75	TO	259+75	979	--	2,400	--
259+75	TO	266+91	897	--	1,432	--
			11,044	2	47,096	24

LOCATION	CULVERT PIPE REINFORCED CONCRETE CLASS IV 36-INCH LF 522.0436	APRON ENDWALLS FOR CULVERT PIPE REINFORCED EACH 522.1036
STATION 227+27	168	2
TOTAL	168	2

LOCATION	CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS 2718-15-70 650.8500 LS
PROJECT	1
STATION 227+20, 95' RT	--
STATION 227+34, 89' LT	--
	1

3

STATE FURNISHED MATERIALS SUMMARY

EACH	DESCRIPTION
1	TRAFFIC SIGNAL CONTROLLER, FULLY ACTUATED, 8 PHASE
1	TRAFFIC SIGNAL CABINET
1	ETHERNET SWITCH
1	CELL MODEM
4	POLES TYPE 9
1	MONOTUBE ARM 35 FT
3	MONOTUBE ARMS 45 FT

STATE FURNISHED FOR INFORMATION ONLY

SIGNAL BASE NO.	POLE TYPE 9 EACH	MONO 35' ARM EACH	MONO 45 FT EACH
SB 1	1	1	
SB 5	1		1
SB 8	1		1
SB 11	1		1
TOTAL	4	1	3

REMOVE TRAFFIC SIGNALS

LOCATION	204.9105.S.01 REMOVING TRAFFIC SIGNALS L.S.
STH 164 & CTH ES	1
TOTAL	1

REMOVING CONCRETE BASES

SIGNAL BASE NO.	204.0195 REMOVING CONCRETE BASES EACH
CB 1	1
SB 1	1
SB 2	1
SB 3	1
SB 4	1
SB 5	1
SB 6	1
SB 7	1
SB 8	1
SB 9	1
SB 10	1
SB 11	1
SB 12	1
SB 13	1
SB 14	1
SB 15	1
SB 16	1
TOTAL	17 *

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN

REMOVE LOOP DETECTOR WIRE AND LEAD-IN CABLE

LOCATION	204.9105.S.03 REMOVING LOOP DETECTOR WIRE & LEAD-IN CABLE L.S.
STH 164 & CTH ES	1
TOTAL	1

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CONDUIT

FROM	TO		652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.	652.0615 CONDUIT SPECIAL 3-INCH L.F.
CB1	PB1			90	
PB1	PB2		200		
PB2	PB3		150		
PB5	PB6		15		
PB5	PB7				110
PB7	PB8			136	
PB8	PB9		205		
PB8	PB10				41
PB8	PB11				158
PB11	PB12		16		
PB11	PB13				112
PB18	PB19			76	
PB19	PB22				68
PB24	CB1			24	
PB1	SB13		14		
PB4	SB1			32	
PB4	SB2		20		
PB5	SB3		4		
PB8	SB14		19		
PB10	SB4		29		
PB10	SB5			17	
PB12	SB6		6		
PB14	SB7		39		
PB14	SB8			27	
PB15	SB9		8		
PB19	SB16		4		
PB20	EXT1		28		
PB21	EXT2		49		
PB22	SB10		49		
PB22	SB11			33	
PB1	DITCH		27		
PB7	DITCH		27		
PB8	DITCH		27		
PB13	DITCH		27		
PB18	DITCH		26		
PB19	DITCH		27		
PB24	DITCH		27		
		TOTAL	1043 *	435 *	489 *

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN

INSTALL CONDUIT INTO EXISTING ITEM

STRUCTURE NO.		652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EACH
PB15		1
	TOTAL	1

STH 164 & CTH ES
WAUKESHA COUNTY
CATEGORY 0020
S67-0397

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TRAFFIC DETECTOR LOOPS

LOOP NO.	HOME RUN PB	LOCATION**	SIZE (FT)x(FT)	NO. OF TURNS	PAVEMENT TYPE	SDD INSTALLATION REFERENCE	652.0800 CONDUIT LOOP DETECTOR L.F.	655.0700 LOOP DETECTOR LEAD IN CABLE L.F.	655.0800 LOOP DETECTOR WIRE L.F.
21	PB3	36+93.8, 37.1 LT	6'x6'	5		9F15-4A - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	66	394	330
22	PB3	36+93.8, 25.3' LT	6'x6'	5		9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	66	394	330
23	PB2	35+43.6, 38.3' LT	6'x6'	4		9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	244	288
24	PB2	35+43.6, 26.5' LT	6'x6'	4		9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	244	376
31	PB12	32+26.9, 107.1 RT	6'x20'	3		9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	92	372	276
32	PB12	32+32.4, 79.6' RT	6'x20'	3		9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	92	372	276
33	PB12	32+15.2, 104.7' RT	6'x20'	3		9F15-4A - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	70	372	210
34	PB12	32+20.6, 77.3' RT	6'x20'	3		9F15-4A - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	70	372	210
41	PB21	192+48.9, 24.6' RT	6'x10'	5		9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	530	350
42	PB20	193+98.9, 24.5' RT	6'x10'	4		9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	380	280
43	PB22	32+32.9, 93.2' LT	6'x20'	3		9F15-4A - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE(BOX OFF ROADWAY (OPTION 1)	90	143	270
44	PB22	32+27.5, 65.7' LT	6'x20'	3		9F15-4A - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE(BOX OFF ROADWAY (OPTION 1)	98	143	294
51	PB6	33+49.0, 0.0' RT	6'x20'	3		9F15-4A - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	68	169	204
52	PB6	33+210, 0.0' RT	6'x20'	3		9F15-4A - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	70	169	210
71	PB23	32+62.3, 104.0' LT.	6'x20'	3		9F15-4A - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	70	75	210
72	PB23	32+56.1, 75.1 LT.	6'x20'	3		9F15-4A - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	116	75	348
81	PB9	199+97.3, 25.5' LT.	6'x10'	5		9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	82	482	410
82	PB10	32+46.5, 89.8' RT.	6'x20'	3		9F15-4A - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	88	318	264
83	PB10	32+52.2, 62.4' RT.	6'x20'	3		9F15-4A - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	80	318	240
						TOTAL	1524 *	5566 *	5376 *

* ADDIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN
** LOCATION IS TO FRONT CENTER OF DETECTOR LOOP
*** FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

3

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PULL BOXES

PULL BOX NO.	LOCATION**	653.0135 PULL BOXES STEEL 24x36-INCH EACH	653.0140 PULL BOXES STEEL 24x42-INCH EACH
PB1	33+44.7, 97.7' LT.		1
PB2	35+42.0, 65.0' LT.	1	
PB3	36+92.3, 61.1' LT.	1	
PB4	33+42.1, 58.1' LT.		1
PB5	33+29.9, 112' RT.		1
PB6	33+43.8, 113' RT.	1	
PB7	33+23.3, 65.3' RT.		1
PB8	32+80.8, 118.6' RT.		1
PB9	199+97.2, 53.3' LT.	1	
PB10	32+64.8, 812' RT.		1
PB11	32+02.7, 114.3' RT.		1
PB12	32+05.5, 98.8' RT.	1	
PB13	31+47.3, 111.4' RT.		1
PB14	31+37.6, 62.2' RT.		1
PB15	31+58.7, 67.4' LT.		1
PB19	31+78.4, 99.9' LT.		1
PB20	193+98.9, 46.8' RT.	1	
PB21	192+48.9, 46.6' RT.	1	
PB22	32+12.7, 102.4' LT.		1
PB23	32+77.7, 122.8' LT.		1
PB24	33+30.7, 132.2' LT.		1
	TOTAL	7 *	14 *

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN

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

REMOVE PULL BOXES

PULL BOX NO.	653.0905 REMOVING PULL BOXES EACH
PB1	1
PB2	1
PB3	1
PB4	1
PB5	1
PB6	1
PB7	1
PB8	1
PB9	1
PB10	1
PB11	1
PB15	1
PB16	1
PB17	1
PB18	1
PB19	1
PB20	1
TOTAL	17 *

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN

3

CONCRETE BASES

SIGNAL BASE NO.	LOCATION**	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	654.0105 CONCRETE BASES TYPE 5 EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH	SPV.0060.02 CONCRETE BASE MONOTUBE TYPE 9 & 10 SPECIAL POLE EACH
CB 1	33+36.6, 126.6' LT.				1	
SB 1	33+10.0, 60.6' LT.					1
SB 2	33+22.9, 52.4' LT.	1				
SB 3	33+33.5, 11.1' RT.		1			
SB 4	32+73.3, 53.6 RT.	1				
SB 5	32+67.2, 64.0 RT.					1
SB 6	32+06.9, 92.4' RT.		1			
SB 7	31+76.0, 60.9' RT.	1				
SB 8	31+63.2, 53.6' RT.					1
SB 9	31+26.3, 14.8' LT.		1			
SB 10	31+93.7, 57.4' LT.	1				
SB 11	32+11.2, 69.2' LT.					1
SB 12	32+71.7, 93.1' LT.		1			
SB 13	33+55.5, 89.9' LT.			1		
SB 14	32+88.5, 100.7' RT.			1		
SB 15	31+20.4, 90.4' RT.			1		
SB 16	31+80.8, 96.5' LT.			1		
	TOTAL	4 *	4 *	4 *	1*	4*

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN
** FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0270 CABLE TRAFFIC SIGNAL 15-14 AWG L.F.	655.0320 CABLE TYPE UF 2-10 AWG GROUNDED L.F.
CB 1	SB 1		145		
CB 1	SB 2		133		
CB 1	SB 3		203		
CB 1	SB 4		440		
CB 1	SB 5			428	
CB 1	SB 6		487		
CB 1	SB 7	498			
CB 1	SB 8			486	
CB 1	SB 9		374		
CB 1	SB 10	237			
CB 1	SB 11			221	
CB 1	SB 12		134		
CB 1	SB 13				71
SB 13	SB 3				184
SB 3	SB 14				202
SB 14	SB 6				176
SB 6	SB 15				169
CB 1	SB 12				134
SB 12	SB 16				192
SB 16	SB 9				164
	TOTAL	735 *	1916 *	1135	1292 *

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN

STH 164 & CTH ES
WAUKESHA COUNTY
CATEGORY 0020
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TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.
CB 1	SB 1	145
SB 1	SB 2	76
SB 2	SB 3	134
SB 3	SB 4	269
SB 4	SB 5	70
SB 5	SB 6	231
SB 6	SB 7	239
SB 7	SB 8	90
SB 8	SB 9	152
SB 9	SB 10	259
SB 10	SB 11	106
SB 11	SB 12	171
SB 12	CB 1	134
PB 1	CB 1	53
PB 4	SB 1	52
PB 5	SB 3	24
PB 7	SB 3	95
PB 8	SB 5	94
PB 10	SB 5	37
PB 11	SB 6	58
PB 13	SB 8	113
PB 14	SB 8	47
PB 15	SB 9	28
PB 18	SB 9	102
PB 19	SB 11	103
PB 22	SB 11	53
PB 23	SB 12	50
PB 24	CB 1	31
	TOTAL	3016 *

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.
SB 1	HEAD 20	60	
SB 1	HEAD 21	45	
SB 1	HEAD 32	15	
SB 2	HEAD 5	19	
SB 2	HEAD 7	19	
SB 2	HEAD 25	15	
SB 3	HEAD 6	19	
SB 3	HEAD 10		22
SB 4	HEAD 26	15	
SB 5	HEAD 2	70	
SB 5	HEAD 3	52	
SB 5	HEAD 17		22
SB 5	HEAD 19	19	
SB 5	HEAD27	15	
SB 6	HEAD 18		22
SB 6	HEAD 22	19	
SB 7	HEAD 28	15	
SB 8	HEAD 1	19	
SB 8	HEAD 11		22
SB 8	HEAD 14	70	
SB 8	HEAD 15	55	
SB 8	HEAD 29	15	
SB 9	HEAD 4	19	
SB 9	HEAD 12		22
SB 10	HEAD 30	15	
SB 11	HEAD 8	70	
SB 11	HEAD 9	55	
SB 11	HEAD 13	19	
SB 11	HEAD 23	19	
SB 11	HEAD 31	15	
SB 12	HEAD 16		22
SB 12	HEAD 24	19	
	TOTAL	787 *	132 *

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.
SB 3	LUMIN. (2)	234
SB 6	LUMIN. (2)	234
SB 9	LUMIN. (2)	234
SB 12	LUMIN. (2)	234
SB 13	LUMIN.	117
SB 14	LUMIN.	117
SB 15	LUMIN.	117
SB 16	LUMIN.	117
	TOTAL	1404 *

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN

3

STH 164 & CTH ES
WAUKESHA COUNTY
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ELECTRICAL SERVICE METER BREAKER PEDESTAL

LOCATION*	656.0200.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL L.S.
STH 164 & CTH ES	1
TOTAL	1

*FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

POLES

SIGNAL BASE NO.	657.0100 PEDESTAL BASES EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0310 POLES TYPE 3 EACH	657.0322 POLES TYPE 5 ALUMINUM EACH	657.0355 POLES TYPE 12 EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH	657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT EACH	657.0609 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FT EACH	657.0610 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH	659.1125 LUMINAIRES UTILITY LED C EACH	SPV.0060.03 TRASNPORT AND INSTALL POLES TYPE 9 SPECIAL EACH	SPV.0060.04 TRANSPORT AND INSTALL MONOTUBE ARMS 35-FT EACH	SPV.0060.06 TRANSPORT AND INSTALL MONOTUBE ARMS 45-FT EACH
SB1					1					1		1	1	
SB2	1					1				1				
SB3		1	1					2			2			
SB4	1						1			1				
SB5					1					1		1		1
SB6		1	1					2			2			
SB7	1						1			1				
SB8					1					1		1		1
SB9		1	1					2			2			
SB10	1						1			1				
SB11					1					1		1		1
SB12		1	1					2			2			
SB13		1		1					1		1			
SB14		1		1					1		1			
SB15		1		1					1		1			
SB16		1		1					1		1			
TOTAL	4*	8*	4*	4*	4*	1*	3	8*	4*	8	12*	4*	1*	3*

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN

STH 164 & CTH ES
WAUKESHA COUNTY
CATEGORY 0020
S67-0397

FACES

SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH
1	SB 8	1		
2	SB 5	1		
3	SB 5	1		
4	SB 9	1		
5	SB 2	1		
6	SB 3	1		
7	SB 2	1		
8	SB 11	1		
9	SB 11	1		
10	SB 3		1	
11	SB 8		1	
12	SB 9		1	
13	SB 11	1		
14	SB 8	1		
15	SB 8	1		
16	SB 12		1	
17	SB 5		1	
18	SB 6		1	
19	SB 5	1		
20	SB 1	1		
21	SB 1	1		
22	SB 6	1		
23	SB 11	1		
24	SB 12	1		
25	SB 2			1
26	SB 4			1
27	SB 5			1
28	SB 7			1
29	SB 8			1
30	SB 10			1
31	SB 11			1
32	SB 1			1
	TOTAL	18 *	6 *	8

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN

SIGNAL MOUNTING HARDWARE

LOCATION	658.5069.01 SIGNAL MOUNTING HARDWARE L.S.
STH 164 & CTH ES	1
TOTAL	1

TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS

LOCATION	661.0200.01 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS L.S.	677.0200 INSTALL CAMERA ASSEMBLY EACH
STH 164 & CTH ES	1	1
TOTAL	1	1

TRANSPORT AND INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET

LOCATION	SPV.0105.03 TRANSPORT AND INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET L.S.
STH 164 & CTH ES	1
TOTAL	1

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STATE FURNISHED MATERIALS SUMMARY

EACH	DESCRIPTION
1	TRAFFIC SIGNAL CONTROLLER, FULLY ACTUATED, 8 PHASE
1	TRAFFIC SIGNAL CABINET
4	EVP DETECTOR HEADS
1	CELLULAR MODEM
1	EVP DISCRIMINATOR
1	RADAR DETECTION SYSTEM
4	POLES TYPE 9
3	MONOTUBE ARMS 40 FT
1	MONOTUBE ARMS 45 FT

STATE FURNISHED FOR INFORMATION ONLY

SIGNAL BASE NO.	POLES TYPE 9 EACH	MONO 40' ARM EACH	MONO 45' ARM EACH
SB1	1	1	
SB3	1	1	
SB5	1	1	
SB7	1		1
TOTAL	4	3	1

REMOVING CONCRETE BASES

SIGNAL BASE NO.	204.0195 REMOVING CONCRETE BASES EACH
CB1	1
SB1	1
SB2	1
SB3	1
SB4	1
SB5	1
SB6	1
SB7	1
SB8	1
SB9	1
SB10	1
TOTAL	11*

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN

REMOVE TRAFFIC SIGNALS

LOCATION	204.9105.S.02 REMOVE TRAFFIC SIGNALS L.S.
STH 164 & CTH I	1
TOTAL	1

REMOVE LOOP DETECTOR WIRE AND LEAD-IN CABLE

LOCATION	204.9105.S.04 REMOVING LOOP DETECTOR WIRE & LEAD-IN CABLE L.S.
STH 164 & CTH I	1
TOTAL	1

STH 164 & CTH I
WAUKESHA COUNTY
CATEGORY 0020
S67-0568

CONDUIT

FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.	652.0615 CONDUIT SPECIAL 3-INCH L.F.
CB1	PB1		90	
PB1	PB2	226		
PB2	PB3	175		
PB6	PB8		126	
EXT 1	PB10	48		
PB8	PB11			152
PB11	PB12		130	
PB12	PB13	208		
PB13	PB14	167		
PB17	PB19		138	
PB19	PB22			162
EXT 2	PB21	38		
PB22	CB1		57	
PB4	SB1		126	
PB5	SB2	10		
PB6	SB3		39	
PB7	SB4	13		
PB15	SB5		165	
PB16	SB6	9		
PB17	SB7		33	
PB18	SB8	17		
PB8	SB9	34		
PB12	SB10	31		
PB19	SB11	30		
PB22	SB12	22		
PB1	DITCH	27		
PB6	DITCH	27		
PB8	DITCH	27		
PB11	DITCH	27		
PB12	DITCH	27		
PB22	DITCH	27		
	TOTAL	1190*	904*	314*

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN

TRAFFIC DETECTOR LOOPS

LOOP NO.	HOME RUN PB	LOCATION*	SIZE (FT)x(FT)	NO. OF TURNS	SDD INSTALLATION REFERENCE	652.0800 CONDUIT LOOP DETECTOR L.F.	655.0700 LOOP DETECTOR LEAD IN CABLE L.F.	655.0800 LOOP DETECTOR WIRE L.F.
11	PB5	1177+16.5, 5.2' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	90	128	270
12	PB5	1177+44.5, 5.3' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	76	128	228
13	PB5	177+72.5, 5.3' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	90	128	270
21	PB14	1182+94.4, 32.9' LT	6'X15'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	82	692	410
22	PB14	1182+94.5, 20.9' LT	6'X15'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	106	692	530
23	PB13	1181+34.0, 57.9' LT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	542	390
24	PB13	1181+34.0, 57.9' LT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	100	542	500

3

41	PB10	438+89.4, 5.7' RT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	58	575	290
42	PB9	440+36.4, 11.7' RT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	50	428	250
43	PB7	1178+04.9, 90.8' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	102	249	306
44	PB7	1178+06.3, 52.9' LT	6'X30'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	108	249	324
45	PB7	1178+16.4, 91.0' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	126	249	378
46	PB7	1178+17.5, 53.0' LT	6'X30'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	136	249	408
51	PB16	1179+22.1, 4.8' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	88	234	264
52	PB16	1178+94.1, 4.9' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	80	234	240
53	PB16	1178+66.1, 4.9' LT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	94	234	282

61	PB3	1173+42.1, 32.1' RT	6'X15'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	84	445	336
62	PB3	1173+42.2, 20.0' RT	6'X15'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	108	445	432
63	PB2	1175+17.4, 59.4' RT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	270	288
64	PB2	1175+17.4, 59.4' RT	6'X6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	270	384
81	PB21	447+46.8, 6.7' LT	6'X10'	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	54	441	270
82	PB20	445+96.7, 11.9' LT	6'X10'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	50	291	200
83	PB18	1178+33.0, 81.3' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	76	246	228
84	PB18	1178+31.6, 53.3' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	70	246	210
85	PB18	1178+21.6, 83.4' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	98	246	294
86	PB18	1178+20.8, 55.5' RT	6'X20'	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	246	282
					TOTAL	2266*	8699*	8264*

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN
* LOCATION IS TO FRONT CENTER OF DETECTOR LOOP
* * FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

FILE NAME : N:\PDS\C3D\CAD\27181500\SIG\S67-0568\S67-0568_mq.pptx PLOT DATE : 12/2/2019 PLOT BY : DOTSHW PLOT NAME : S67-0568_mq.pdf PLOT SCALE : 1:1

3

PULL BOXES

PULL BOX NO.	LOCATION*	653.0135 PULL BOXES STEEL 24x36-INCH EACH	653.0140 PULL BOXES STEEL 24x42-INCH EACH
PB1	1177+41.9, 79.0' RT		1
PB2	1175+17.4, 59.4' RT	1	
PB3	1173+42.5, 55.6' RT	1	
PB4	1177+39.3, 47.4' RT		1
PB5	1177+34.4, 4.7' LT		1
PB6	1177+33.5, 67.3' LT		1
PB7	1177+92.8, 67.3' LT		1
PB8	1177+78.4, 107.0' LT		1
PB9	440+36.3, 23.7' RT	1	
PB10	438+89.5, 22.2' RT	1	
PB11	1178+56.9, 108.4' LT		1
PB12	1179+11.4, 76.3' LT		1
PB13	1181+27.2, 57.7' LT	1	
PB14	1182+94.0, 56.2' LT	1	
PB15	1179+08.5, 45.9' LT		1
PB16	1179+05.7, 6.4' RT		1
PB17	1179+05.7, 57.0' RT		1
PB18	1178+45.0, 73.6' RT		1
PB19	1178+62.7, 103.3' RT		1
PB20	445+96.6, 23.6' LT	1	
PB21	447+46.8, 21.2' LT	1	
PB22	1177+82.1, 105.6' RT		1
	TOTAL	8*	14*

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN
* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

REMOVE PULL BOXES

PULL BOX NO.	653.0905 REMOVING PULL BOXES EACH
PB1	1
PB2	1
PB3	1
PB4	1
PB5	1
PB6	1
PB7	1
PB8	1
PB9	1
PB10	1
PB11	1
PB12	1
PB13	1
PB14	1
PB15	1
PB16	1
PB17	1
PB18	1
PB19	1
TOTAL	19*

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN

CONCRETE BASES

SIGNAL BASE NO.	LOCATION*	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	654.0105 CONCRETE BASES TYPE 5 EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH	SPV.0060.02 CONCRETE BASE MONOTUBE TYPE 9 & 10 SPECIAL POLE EACH
CB1	1177+64.5, 99.5' RT				1	
SB1	1177+81.7, 49.7' RT					1
SB2	1177+44.0, 4.9' LT		1			
SB3	1177+43.3, 58.3' LT					1
SB4	1177+93.8, 54.7' LT	1				
SB5	1178+54.0, 49.1' LT					1
SB6	1178+96.8, 6.0' RT		1			
SB7	1178+95.9, 62.1' RT					1
SB8	1178+44.5, 56.2' RT	1				
SB9	1177+66.5, 75.6' LT			1		
SB10	1178+81.1, 81.7' LT			1		
SB11	1178+70.4, 74.6' RT			1		
SB12	1177+68.1, 89.6' RT			1		
	TOTAL	2*	2*	4*	1*	4*

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN
* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

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STH 164 & CTH I
WAUKESHA COUNTY
CATEGORY 0020
S67-0568

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO		655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0290 CABLE TRAFFIC SIGNAL 21-14 AWG L.F.	655.0320 CABLE TYPE UF 2-10 AWG GROUNDED L.F.
CB1	SB1				147	
CB1	SB2			183		
CB1	SB3		264			
CB1	SB4			339		
CB1	SB5				419	
CB1	SB6			305		
CB1	SB7		239			
CB1	SB8			324		
CB1	SB1					147
SB1	SB2					144
SB2	SB3					125
SB3	SB4					125
SB4	SB5					274
SB5	SB6					156
SB6	SB7					111
SB7	SB8					131
SB8	CB1					324
		TOTAL	503*	1151*	566	1537*

* ADDITONAL QUANTITIES SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.
CB1	SB2	183
SB2	SB9	225
SB9	SB10	264
CB1	SB12	68
SB12	SB11	173
SB11	SB6	215
PB1	CB1	53
PB4	SB1	62
PB5	SB2	30
PB6	SB3	33
PB7	SB4	33
PB8	SB3	112
PB11	SB5	203
PB12	SB5	122
PB15	SB5	75
PB16	SB6	29
PB17	SB7	31
PB18	SB8	37
PB19	SB7	116
PB22	CB1	42
	TOTAL	2106*

* ADDITONAL QUANTITIES SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.
SB1	HEAD 1	19	
SB1	HEAD 11		22
SB1	HEAD 14	52	
SB1	HEAD 15	35	
SB1	HEAD 17		65
SB2	HEAD 4		22
SB2	HEAD 12		22
SB3	HEAD 8	63	
SB3	HEAD 9	52	
SB4	HEAD 13	19	
SB4	HEAD 21		22
SB5	HEAD 5		22
SB5	HEAD 7	19	
SB5	HEAD 19	50	
SB5	HEAD 20	31	
SB5	HEAD 22		62
SB6	HEAD 6		22
SB6	HEAD 10		22
SB7	HEAD 2	66	
SB7	HEAD 3	55	
SB8	HEAD 16		22
SB8	HEAD 18	19	
	TOTAL	480*	303*

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.
SB2	LUMIN. (2)	246
SB6	LUMIN. (2)	246
SB9	LUMIN.	117
SB10	LUMIN.	117
SB11	LUMIN.	117
SB12	LUMIN.	117
	TOTAL	960*

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL EVP DETECTOR CABLE

FROM	TO	655.0900 TRAFFIC SIGNAL EVP DETECTOR CABLE L.F.
CB1	SB3 (HEAD A)	334
CB1	SB7 (HEAD B)	314
CB1	SB1 (HEAD C)	217
CB1	SB5 (HEAD D)	488
	TOTAL	865

ELECTRICAL SERVICE METER BREAKER PEDESTAL

LOCATION*	656.0200.02 ELECTRICAL SERVICE METER BREAKER PEDESTAL L.S.
STH 164 & CTH I	1
TOTAL	1

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET: 355	E

FILE NAME : N:\PDS\C3D\CAD\27181500\SIG\S67-0568\S67-0568_mq.pptx PLOT DATE : 12/2/2019 PLOT BY : DOTSHW PLOT NAME : S67-0568_mq.pdf PLOT SCALE : 1:1

STH 164 & CTH I
WAUKESHA COUNTY
CATEGORY 0020
S67-0568

POLES

SIGNAL BASE NO.	657.0100 PEDESTAL BASES EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0310 POLES TYPE 3 EACH	657.0322 POLES TYPE 5 ALUMINUM EACH	657.0355 POLES TYPE 12 EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.0610 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT EACH	659.1125 LUMINAIRES UTILITY LED C EACH	SPV.0060.03 TRANSPORT AND INSTALL POLES TYPE 9 SPECIAL EACH	SPV.0060.05 TRANSPORT AND INSTALL MONOTUBE ARMS 40-FT EACH	SPV.0060.06 TRANSPORT AND INSTALL MONOTUBE ARMS 45-FT EACH
SB1					1				1	1	
SB2		1	1				1	2			
SB3					1				1	1	
SB4	1					1					
SB5					1				1	1	
SB6		1	1				1	2			
SB7					1				1		1
SB8	1					1					
SB9		1		1			1	1			
SB10		1		1			1	1			
SB11		1		1			1	1			
SB12		1		1			1	1			
TOTAL	2*	6*	2*	4*	4*	2	6*	8*	4*	3	1*

* ADDITONAL QUANTITIES SHOWN ELSEWHERE ON PLAN

FACES

SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH
1	SB1	1	
2	SB7	1	
3	SB7	1	
4	SB2		1
5	SB5		1
6	SB6		1
7	SB5	1	
8	SB3	1	
9	SB3	1	
10	SB6		1
11	SB1		1
12	SB2		1
13	SB4	1	
14	SB1	1	
15	SB1	1	
16	SB8		1
17	SB1		1
18	SB8	1	
19	SB5	1	
20	SB5	1	
21	SB4		1
22	SB5		1
	TOTAL	12*	10*

\ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON PLAN

SIGNAL MOUNTING HARDWARE

LOCATION	658.5069.02 SIGNAL MOUNTING HARDWARE L.S.
STH 164 & CTH I	1
TOTAL	1

TRANSPORT AND INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET

LOCATION	SPV.0105.04 TRANSPORT AND INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET L.S.
STH 164 & CTH I	1
TOTAL	1

TRANSPORT AND INSTALL STATE FURNISHED RADAR DETECTION SYSTEM

LOCATION	SPV.0105.05 TRANSPORT AND INSTALL STATE FURNISHED RADAR DETECTION SYSTEM L.S.
STH 164 & CTH I	1
TOTAL	1

TRNSPORT AND INSTALL STATE FURNISHED EVP DETECTOR HEADS

LOCATION	SPV.0105.06 EVP DETECTOR HEAD INSTALLATION L.S.
STH 164 & CTH I	1
TOTAL	1

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2102 MOVE SIGNS TYPE II [EA]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X6"x18' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
1	R10-50L(2S)	--	30	x	36	7.500	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
2	R6-2L(2M)	--	30	x	36	7.500	--	--	--	--	1	--	--
3	R1-2	--	--	x	--	--	--	1	--	1	1	--	--
4	R1-1F	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
5	R1-1F	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
6	R4-7	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
7	M1-94S	[ES] NATIONAL AVE	108	x	18	13.500	--	--	--	--	--	--	MOUNT ON MAST ARM
8	R5-1	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
9	R4-7	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
10	R6-2L(2M)	--	30	x	36	7.500	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
11	R1-2	--	--	x	--	--	--	1	--	--	1	--	--
12	R5-1	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
13	R1-1F	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
14	R1-1F	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
15	R5-1	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
16	R4-7	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
17	R6-2L(2M)	--	30	x	36	7.500	--	--	--	--	1	--	--
18	R1-2	--	--	x	--	--	--	1	--	1	1	--	--
19	R1-1F	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
20	R1-1F	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
21	M1-94S	[ES] NATIONAL AVE	108	x	18	13.500	--	--	--	--	--	--	MOUNT ON MAST ARM
22	R4-7	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
23	R5-1	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
24	R6-2L(2M)	--	30	x	36	7.500	--	--	--	--	1	--	--
25	R10-50L(2S)	--	30	x	36	7.500	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
26	R1-1	--	--	x	--	--	--	1	--	1	1	--	--
27	R1-1	--	--	x	--	--	--	1	--	1	1	--	--
28	R1-1F	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
29	R1-1F	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
30	J1-1	--	--	x	--	--	--	1	--	1	1	--	--

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2102 MOVE SIGNS TYPE II [EA]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
31	R2-1	--	--	x	--	--	--	1	--	1	1	--	--
32	W3-5(3)	45 MPH	36	x	36	--	9.000	--	--	--	1	--	--
33	R1-1	--	--	x	--	--	--	1	--	1	1	--	--
34	R6-3	--	--	x	--	--	--	1	--	--	--	#33	--
35	R6-2L	--	--	x	--	--	--	--	1	1	--	--	REMOVE SIGN
36	R6-1L(2S)	--	36	x	12	3.000	--	--	--	--	--	#33	MOUNT ABOVE STOP SIGN
37	R1-1	--	--	x	--	--	--	1	--	1	1	--	--
38	R6-3	--	--	x	--	--	--	1	--	--	--	#37	--
39	R6-1L(2S)	--	36	x	12	3.000	--	--	--	--	--	#37	MOUNT ABOVE STOP SIGN
40	R6-2L	--	--	x	--	--	--	--	1	1	--	--	REMOVE SIGN
41	R1-1	--	--	x	--	--	--	1	--	1	1	--	--
42	R6-3	--	--	x	--	--	--	1	--	--	--	#41	--
43	R6-1L(2S)	--	36	x	12	3.000	--	--	--	--	--	#41	MOUNT ABOVE STOP SIGN
44	R6-2L	--	--	x	--	--	--	--	1	1	--	--	REMOVE SIGN
45	R1-1	--	--	x	--	--	--	1	1	1	--	--	--
46	R6-3	--	--	x	--	--	--	1	--	--	--	#45	--
47	R6-1L(2S)	--	36	x	12	3.000	--	--	--	--	--	#45	MOUNT ABOVE STOP SIGN
48	R6-2L	--	--	x	--	--	--	--	1	1	--	--	REMOVE SIGN
49	R6-3A(2S)	--	30	x	24	5.000	--	--	--	--	--	--	MOUNT BELOW EXISTING STOP SIGN
50	R1-1	--	--	x	--	--	--	1	1	1	--	--	--
51	R6-3	--	--	x	--	--	--	1	--	--	--	#50	--
52	R6-2L	--	--	x	--	--	--	--	1	--	--	--	REMOVE SIGN
53	R6-1L(2S)	--	36	x	12	3.000	--	--	--	--	--	--	MOUNT ABOVE STOP SIGN
54	R1-1	--	--	x	--	--	--	1	--	1	1	--	--
55	R6-3	--	--	x	--	--	--	1	--	--	--	#54	--
56	R6-1L(2S)	--	36	x	12	3.000	--	--	--	--	--	#54	MOUNT ABOVE STOP SIGN
57	R6-2L	--	--	x	--	--	--	--	1	1	--	--	REMOVE SIGN
58	J3-1	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
59	M1-94S	[I] LAWNSDALE RD	108	x	18	13.500	--	--	--	--	--	--	MOUNT ON MAST ARM
60	R6-2L(2M)	--	30	x	36	7.500	--	--	--	--	--	--	MOUNT ON SIGNAL POLE

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2102 MOVE SIGNS TYPE II [EA]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X6"x18' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
61	R1-2	--	--	x	--	--	--	1	--	1	1	--	--
62	R4-7	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
63	R6-3(2S)	--	30	x	24	5.000	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
64	R1-1F	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
65	R1-1	--	--	x	--	--	--	1	--	1	1	--	--
66	R1-1F	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
67	J3-1	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
68	R4-7	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
69	J3-1	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
70	R1-1F	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
71	M1-94S	[I] LAWNSDALE RD	108	x	18	13.500	--	--	--	--	--	--	MOUNT ON MAST ARM
72	R6-2L(2M)	--	30	x	36	7.500	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
73	R1-2	--	--	x	--	--	--	1	--	1	1	--	--
74	R1-1F	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
75	R6-3(2S)	--	30	x	24	5.000	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
76	R1-1	--	--	x	--	--	--	1	--	1	1	--	--
77	R1-1F	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
78	R1-1F	--	--	x	--	--	--	1	--	--	--	--	MOUNT ON SIGNAL POLE
79	R2-1	--	--	x	--	--	--	1	--	1	1	--	--
80	R2-1	--	--	x	--	--	--	1	--	1	1	--	--
81	R10-50L(2M)	--	30	x	36	7.500	--	--	--	--	--	--	SHEET 12A-MOUNT ON MAST ARM
82	R10-50L(2M)	--	30	x	36	7.500	--	--	--	--	--	--	SHEET 12A-MOUNT ON MAST ARM
83	R10-50L(2M)	--	30	x	36	7.500	--	--	--	--	--	--	SHEET 12A-MOUNT HIGH ON SIG POLE
84	R10-50L(2M)	--	30	x	36	7.500	--	--	--	--	--	--	SHEET 12A-MOUNT HIGH ON SIG POLE
TOTALS						177.000	9.000	52	8	23	21		

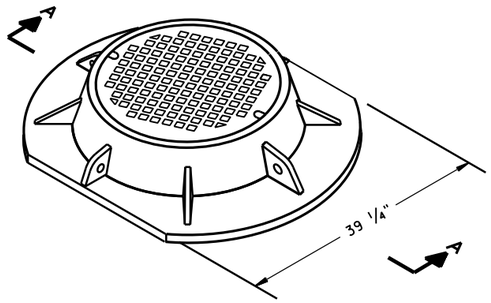
Standard Detail Drawing List

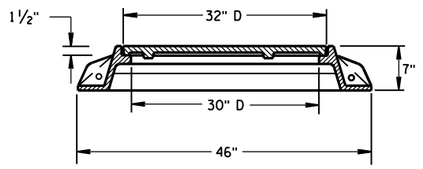
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D20-01	DRIVEWAYS WITH CURB & GUTTER RETURNS
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
09B02-10	CONDUIT
09B04-11	PULL BOX
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09E01-15B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E01-15D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-06	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-06	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09E08-08A	TYPE 9 POLE 15'-30' MONOTUBE ARM
09E08-08C	TYPE 12 POLE 35'-55' MONOTUBE ARM
09E08-08E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
09F01-04	DETAILS FOR THE INSTALLATION OF TEMPORARY TRAFFIC SIGNAL LOOP DETECTOR WIRES IN ANY EXISTING PAVEMENT
09F10-04	LOOP DETECTOR INSTALLED IN EXISTING OR NEW ASPHALTIC PAVEMENT WITH NEW ASPHALTIC OVERLAY
09F13-04	LOOP DETECTOR INSTALLED IN EXISTING ASPHALTIC PAVEMENT
09G01-04B	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04C	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04D	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04E	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04F	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04G	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
10A18-05A	LUMINAIRE ARMS, SINGLE MEMBER 6-INCH CLAMP
10A18-05B	LUMINAIRE ARMS, TRUSS TYPE 6-INCH CLAMP
11B02-02	CONCRETE MEDIAN NOSE
14B42-06A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B43-04A	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-04B	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-04C	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B47-02A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-14B	PAVEMENT MARKING WORDS
15C07-14C	PAVEMENT MARKING ARROWS
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C08-19B	PAVEMENT MARKING (TURN LANES)
15C08-19C	PAVEMENT MARKING (TURN LANES)
15C11-07A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

6

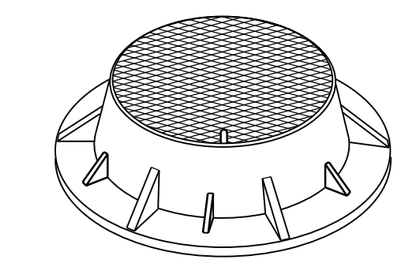
Standard Detail Drawing List

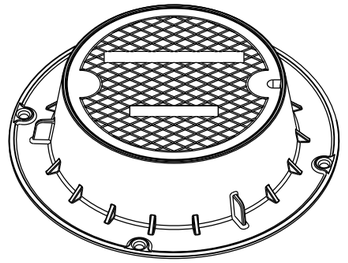
15C27-03B	PAVEMENT MARKING (ISLANDS)
15C33-03	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-03A	PAVEMENT MARKING (INTERSECTIONS)
15D12-07A	TRAFFIC CONTROL, LANE CLOSURE
15D20-04	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-06A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-06B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D22-03	TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D23-06A	TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE
15D23-06B	TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS

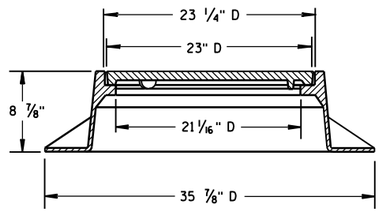


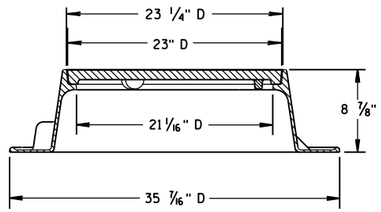


SECTION A-A
TYPE "K"









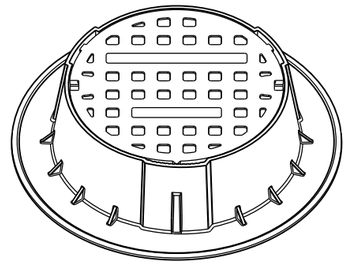
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

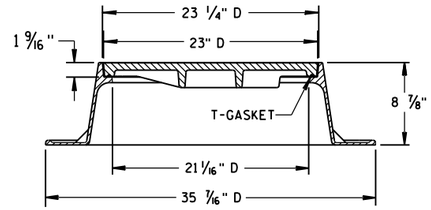
GENERAL NOTES

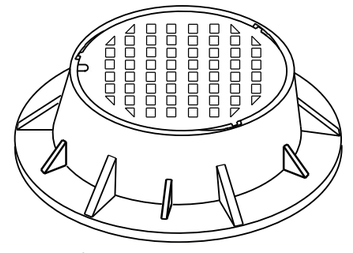
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

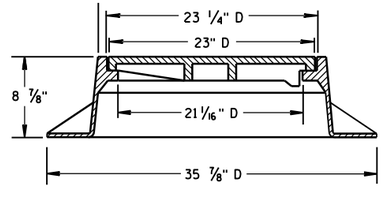
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

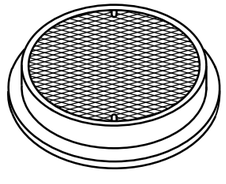


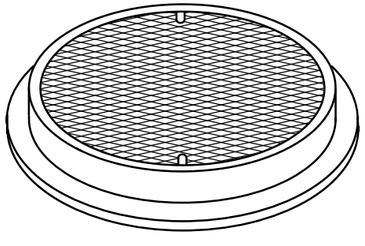


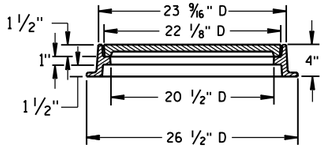




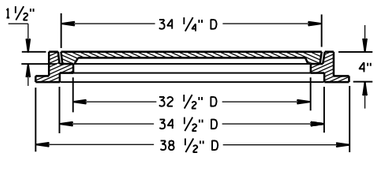
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



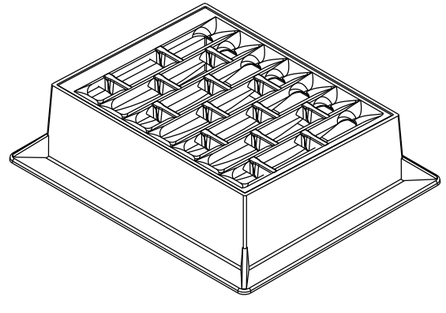


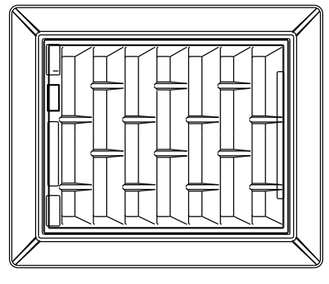


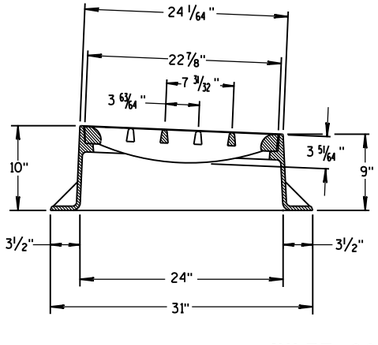
TYPE "L"

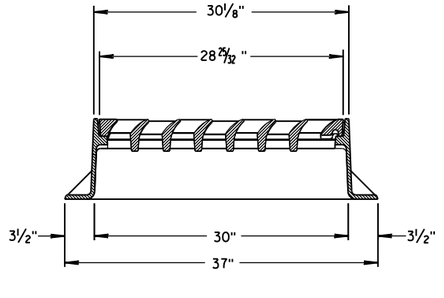


TYPE "M"









INLET COVER TYPE "BW"

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

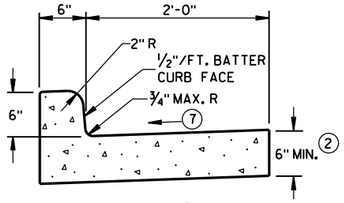
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

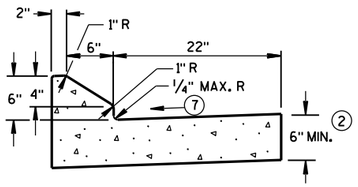
S.D.D. 8 A 5-19d

6

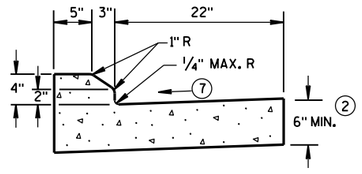
S.D.D. 8 A 5-19d



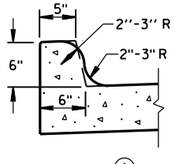
TYPES A (1) & D



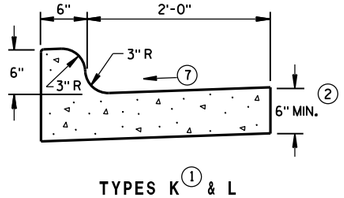
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

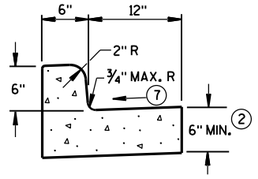


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



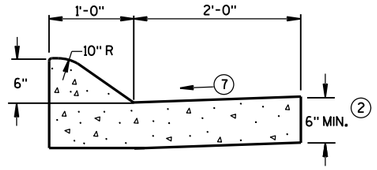
TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

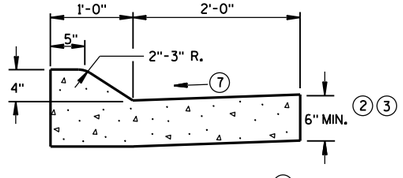


TYPES A (1) & D

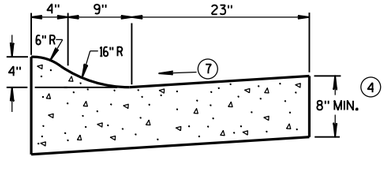
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

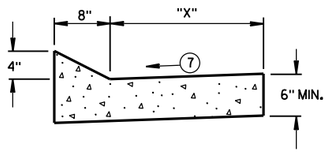


4" SLOPED CURB TYPES A (1) & D



4" SLOPED CURB TYPES R (1) & T (5)

CONCRETE CURB & GUTTER 36"



TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

(5) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

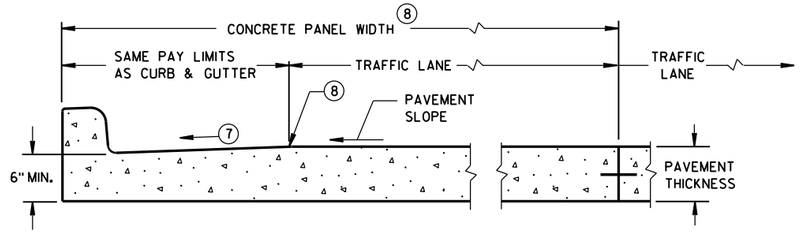
(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

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

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

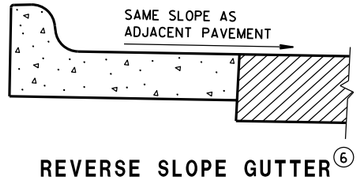
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB & GUTTER

* BIKE LANE IS NOT SHOWN.



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

CONCRETE CURB & GUTTER

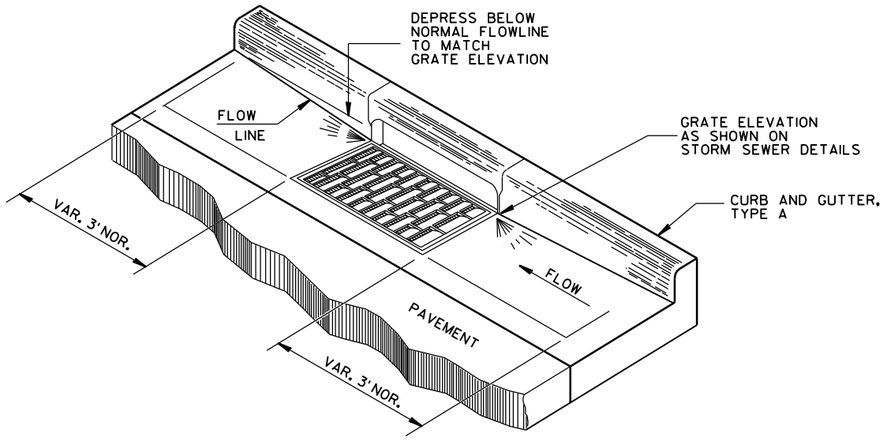
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 8 D 1-20a

6

S.D.D. 8 D 1-20a



DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

GENERAL NOTES

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

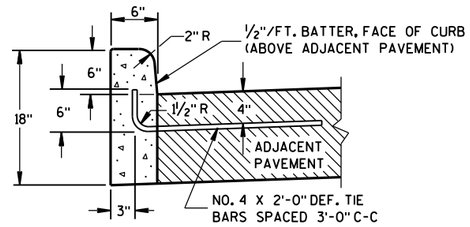
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

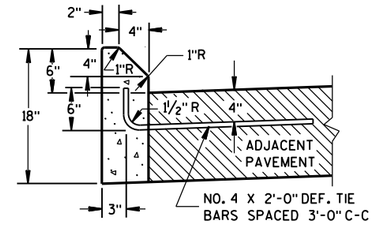
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

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

(9) REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

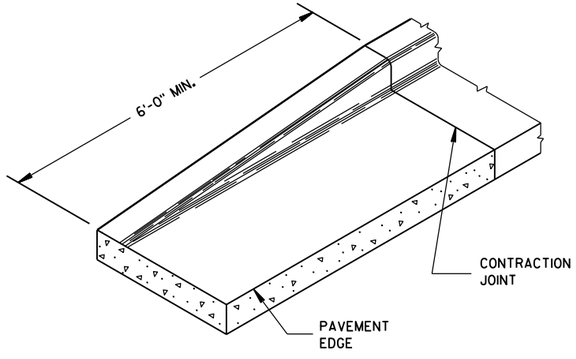


TYPES A (1) & D

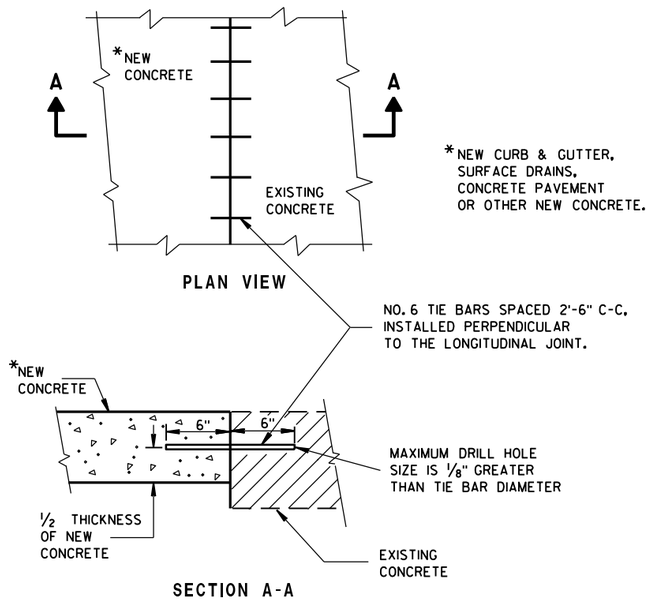


TYPES G (1) & J

CONCRETE CURB



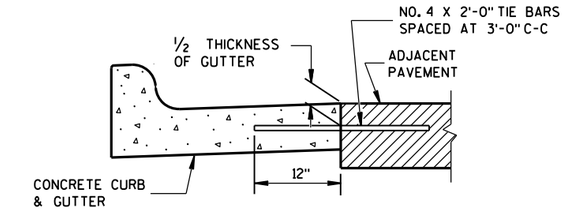
END SECTION CURB & GUTTER



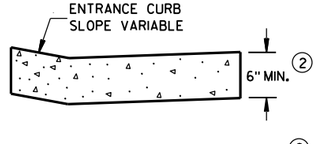
PLAN VIEW

SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

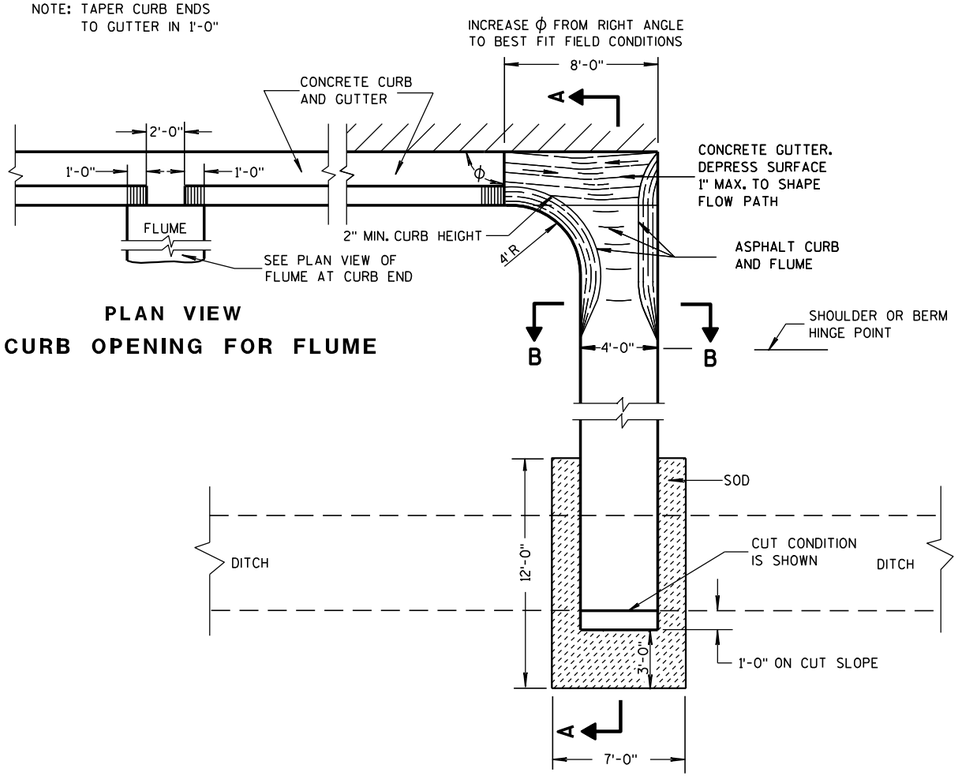
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS 364 UNIT SUPERVISOR — ENT
FHWA

6

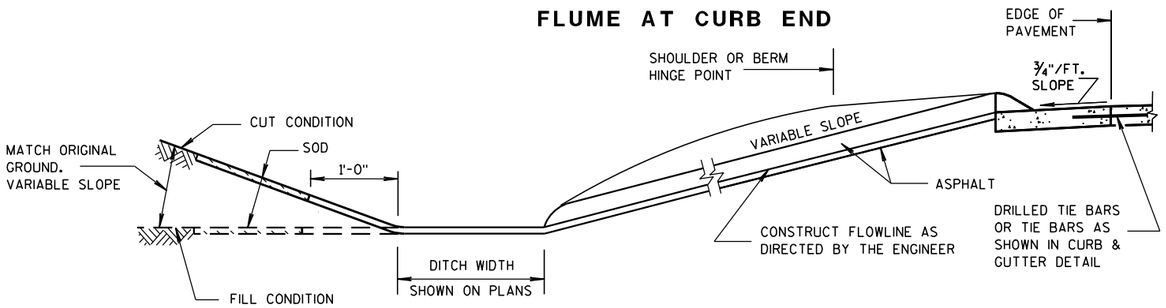
S.D.D. 8 D 1-20b

ASPHALTIC FLUME

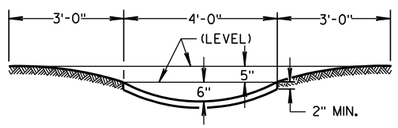


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

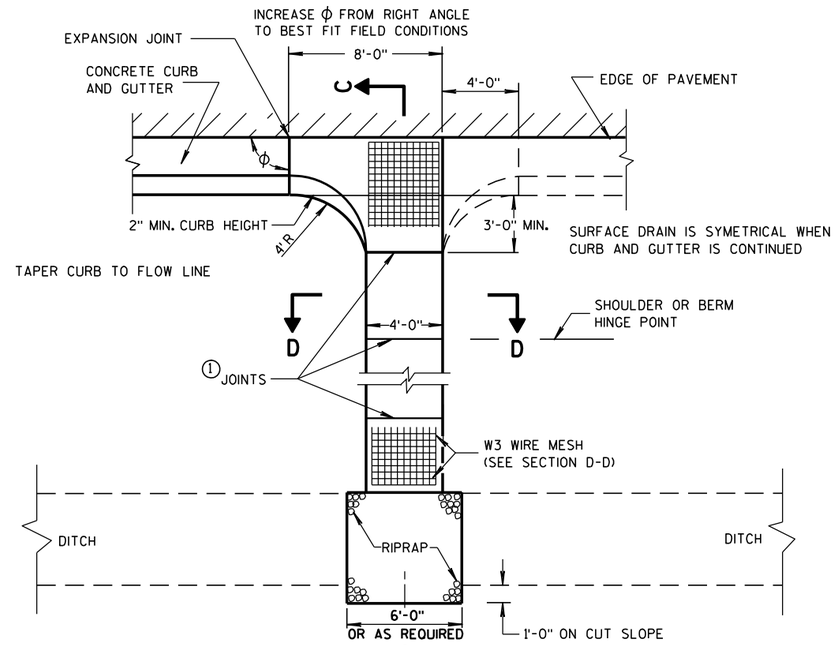
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

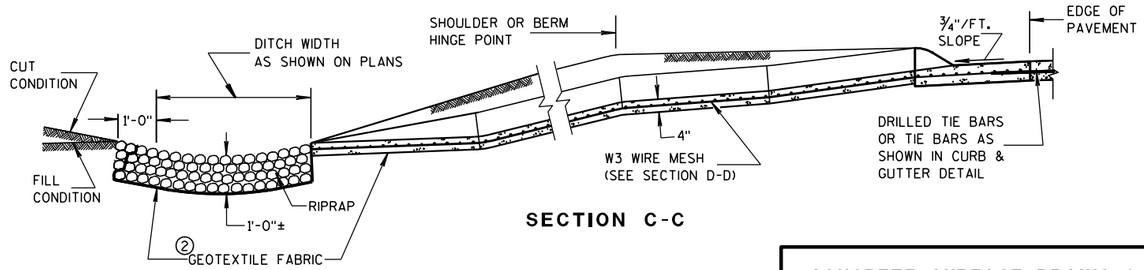
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

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

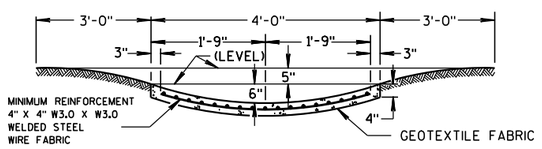
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

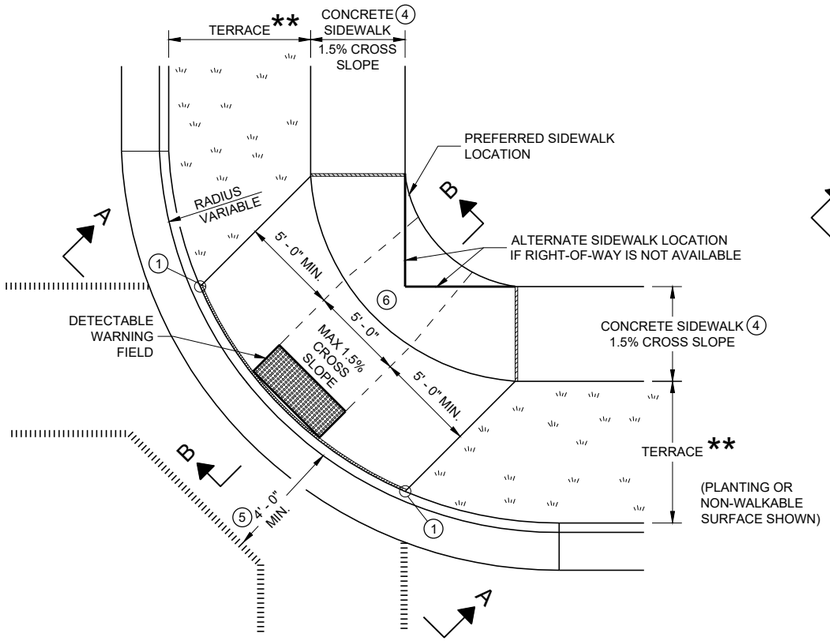
APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
365
MENT
FHWA

6

S.D.D. 8 D 4-5

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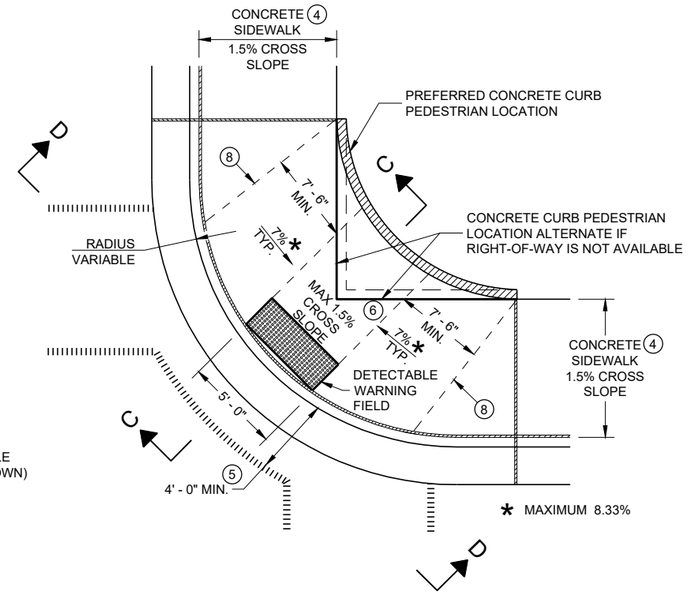
S.D.D. 8 D 4-5



PLAN VIEW

CURB RAMP TYPE 1

(CENTER OF CORNER RADIUS)



PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

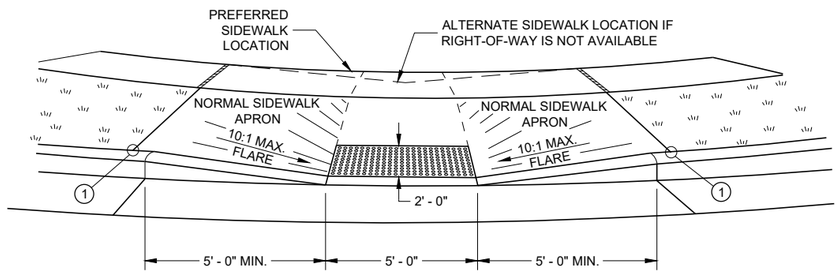
(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

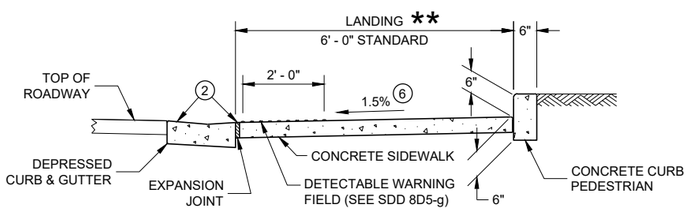
(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

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

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



VIEW A - A FOR TYPE 1

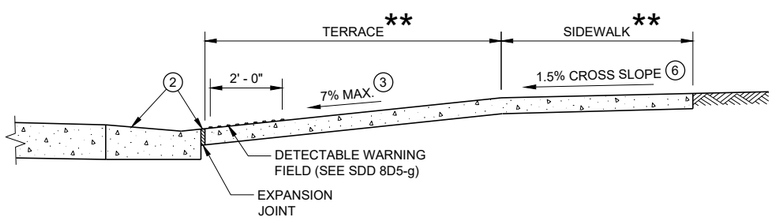


SECTION C - C FOR TYPE 1 - A

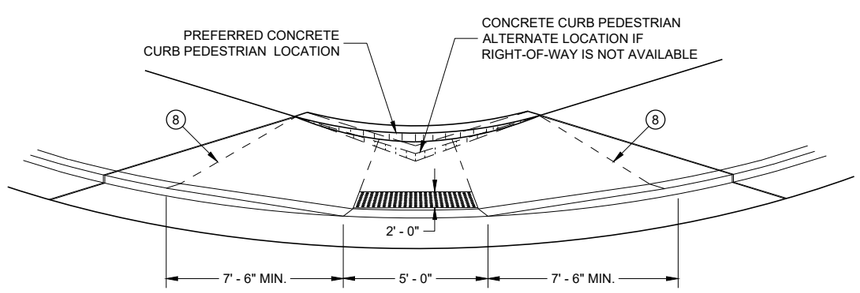
LEGEND

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

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



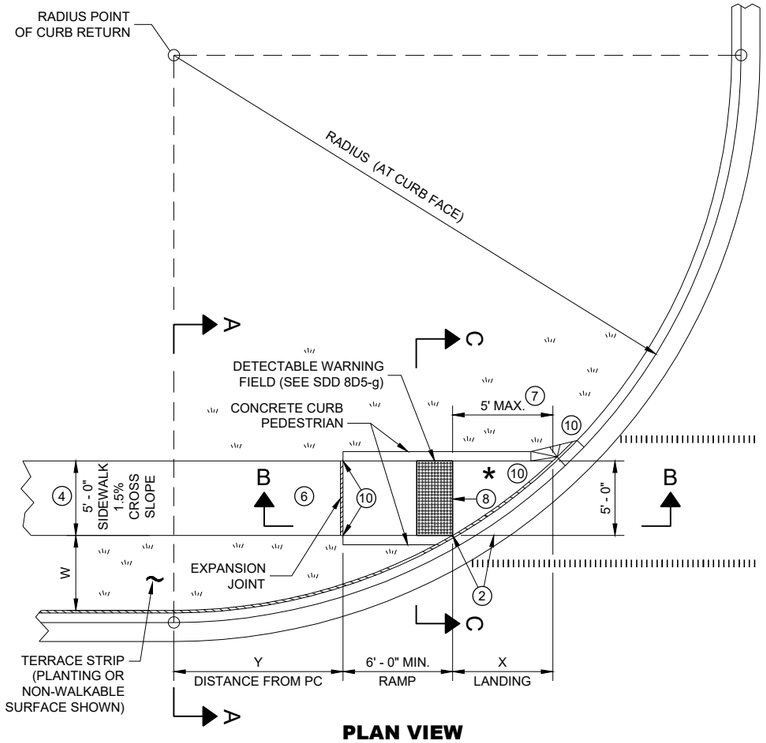
VIEW D - D FOR TYPE 1 - A

CURB RAMPS
TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20a



PLAN VIEW

CURB RAMP TYPE 4B

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

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

SECTION C - C FOR TYPE 4B

LEGEND

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

GENERAL NOTES

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

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

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

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

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

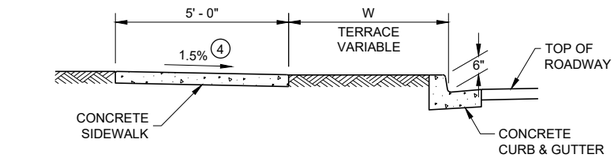
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

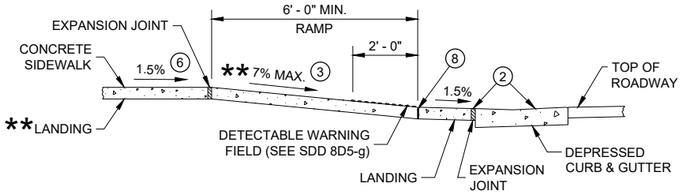
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

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

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

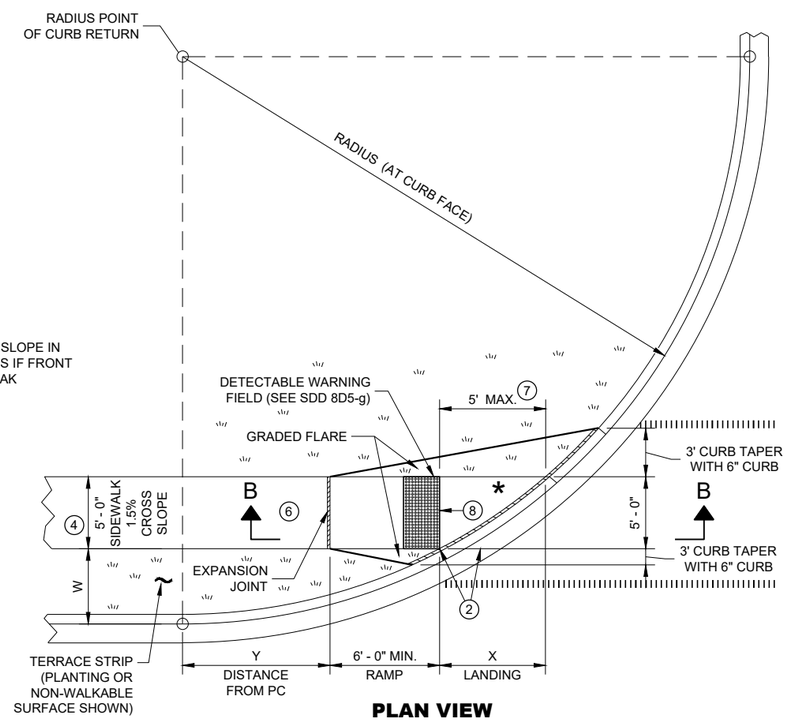


SECTION A - A FOR TYPE 4B



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

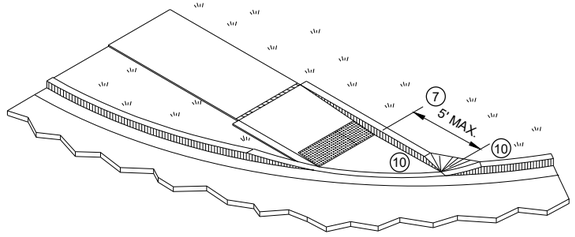
SECTION B - B FOR TYPE 4B AND TYPE 4B1



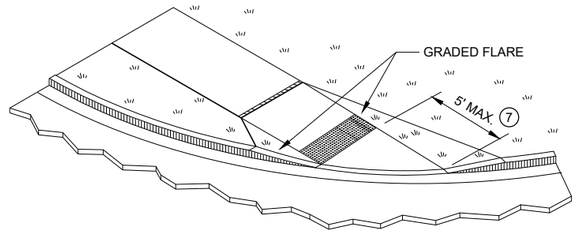
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

PLAN VIEW

CURB RAMP TYPE 4B1



ISOMETRIC VIEW FOR TYPE 4B

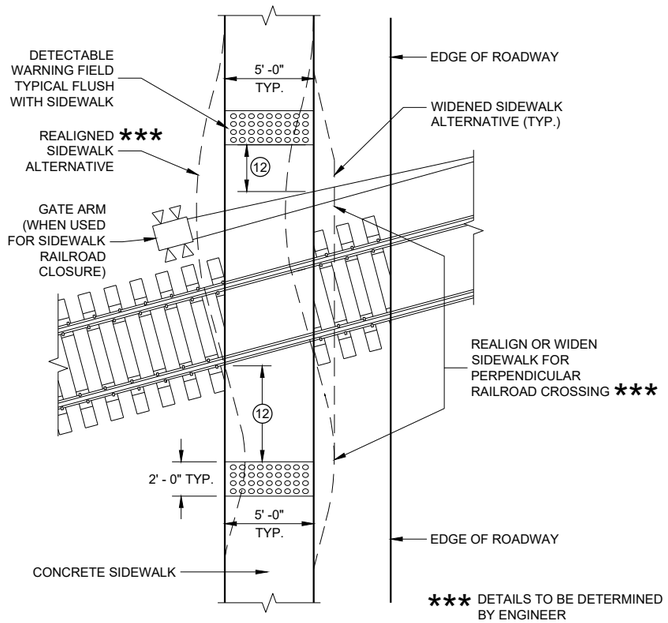


ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

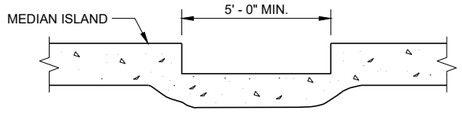
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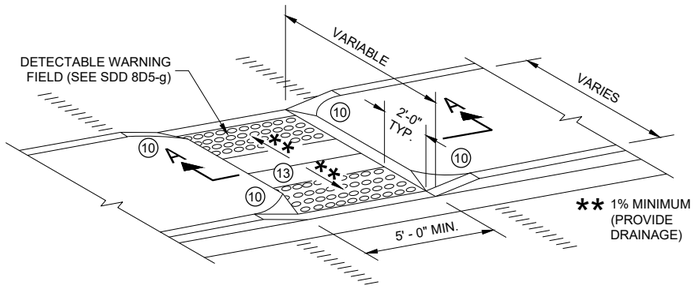


CURB RAMP TYPE 8

DETECTABLE WARNINGS AT RAILROAD CROSSING



SECTION A - A FOR TYPE 5



CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

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

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

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

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

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

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

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

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

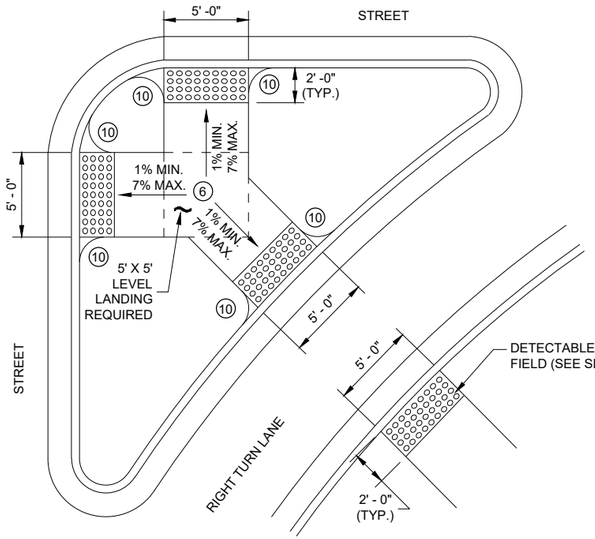
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

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

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

LEGEND

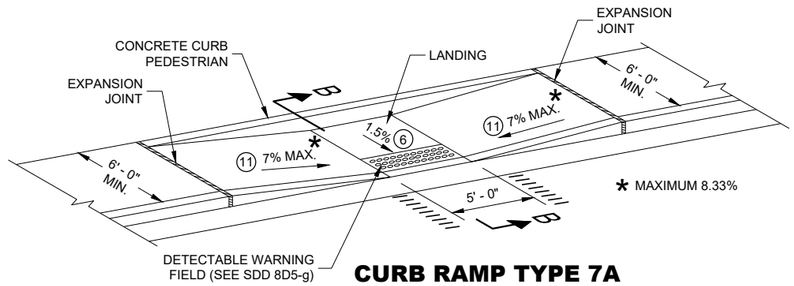
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

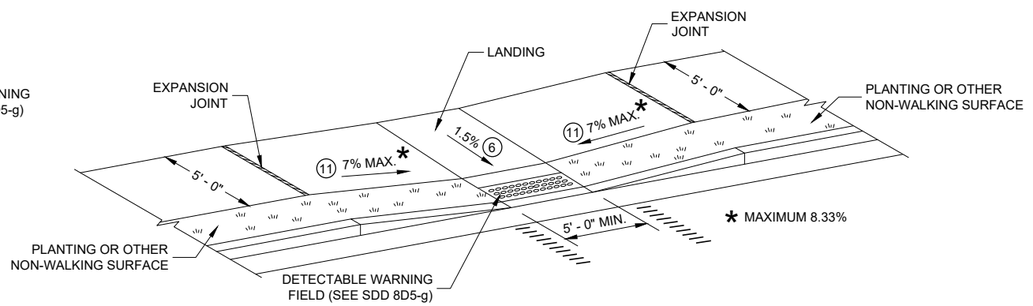
DETECTABLE WARNING AT ISLANDS

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



CURB RAMP TYPE 7A

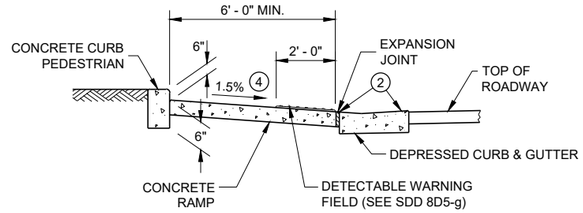
MID BLOCK CROSSING



CURB RAMP TYPE 7B

MID BLOCK CROSSING

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



SECTION B - B FOR TYPE 7A

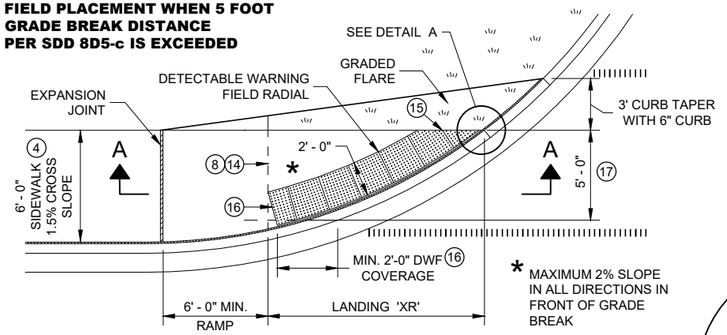
CURB RAMPS TYPE 5, 6, 7A, 7B & 8

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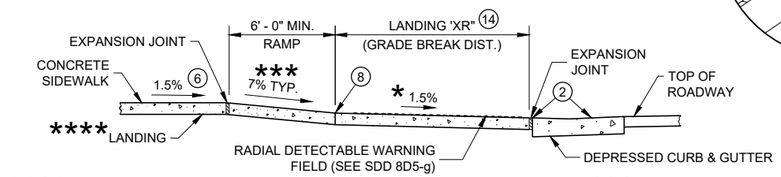
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



PLAN VIEW

CURB RAMP TYPE 4A1

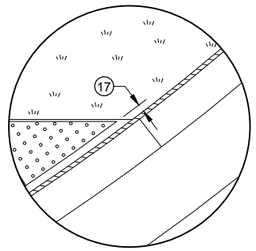
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



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

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1



DETAIL A

LEGEND

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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

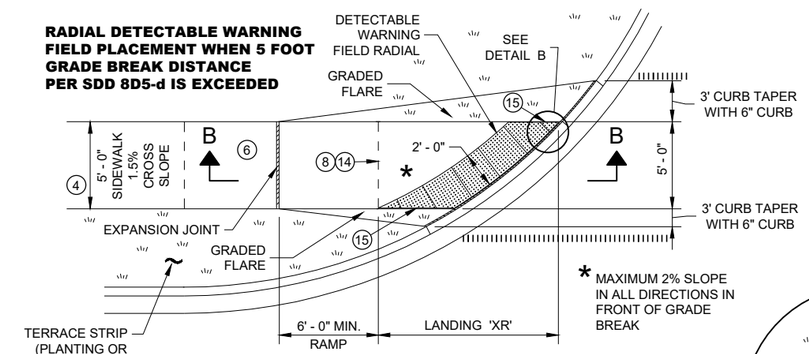
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

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

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

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

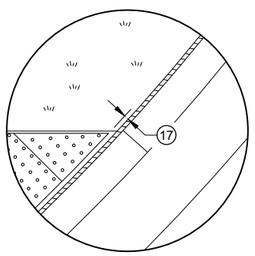
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



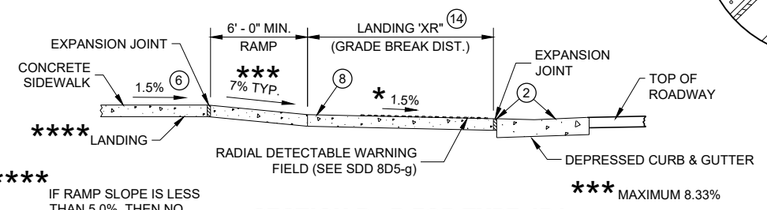
PLAN VIEW

CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B

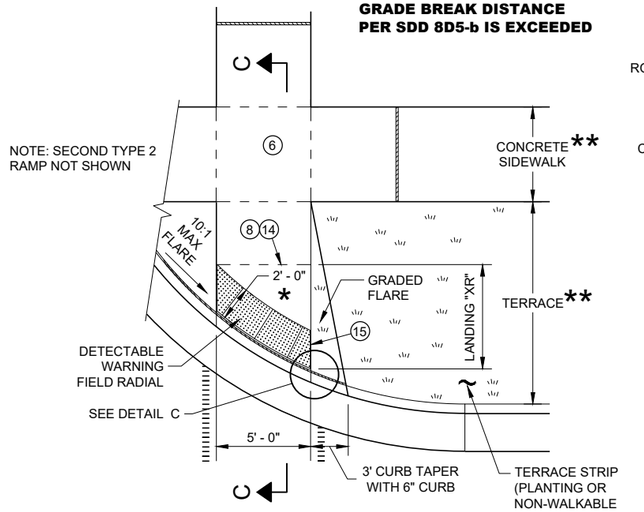


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION B - B FOR TYPE 4B1

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

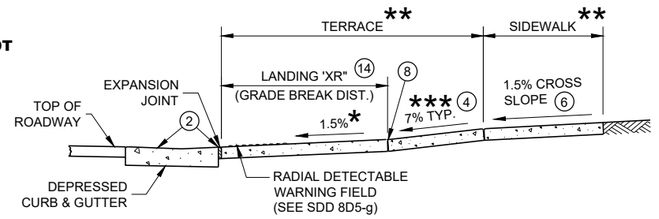


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

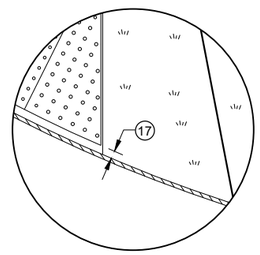


SECTION C - C FOR TYPE 2

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

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



DETAIL C

CURB RAMPS
RADIAL DETECTABLE WARNING FIELD APPLICATIONS

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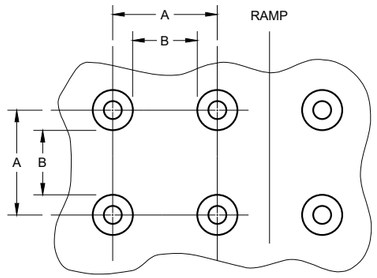
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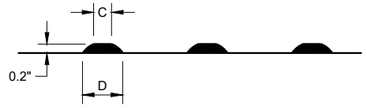
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	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

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

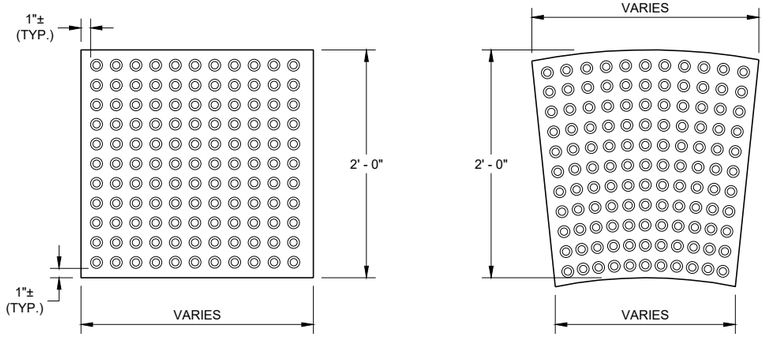


PLAN VIEW



ELEVATION VIEW

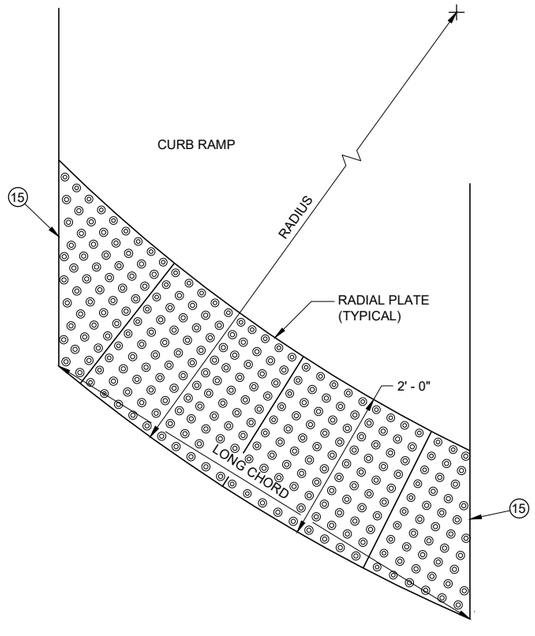
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES

GENERAL NOTES

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

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

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

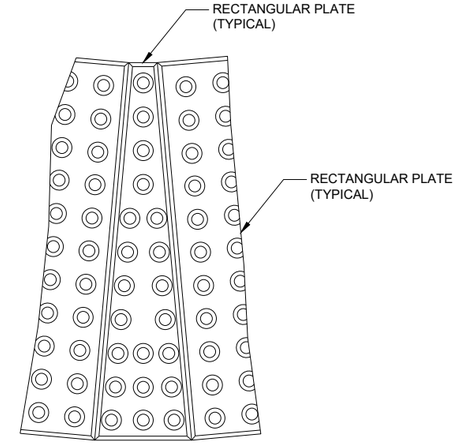
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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

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



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

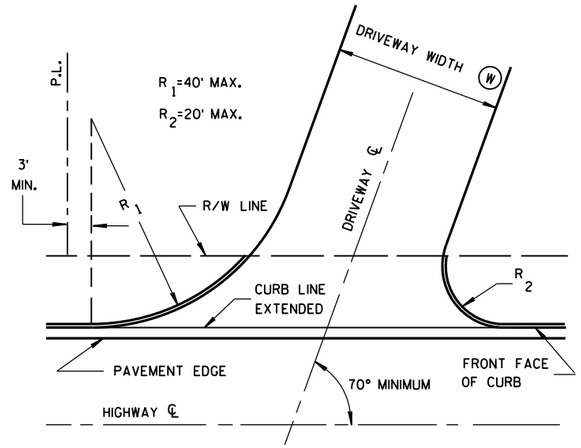
CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

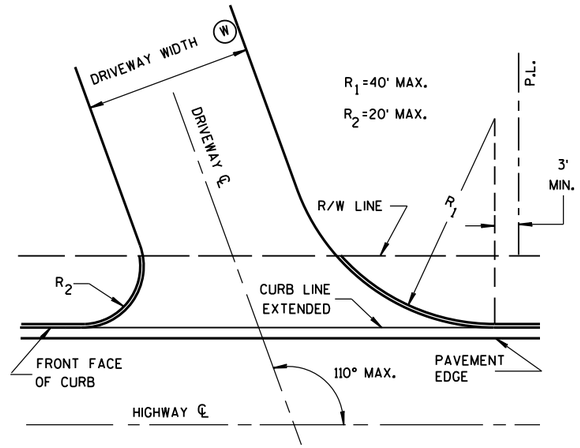
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

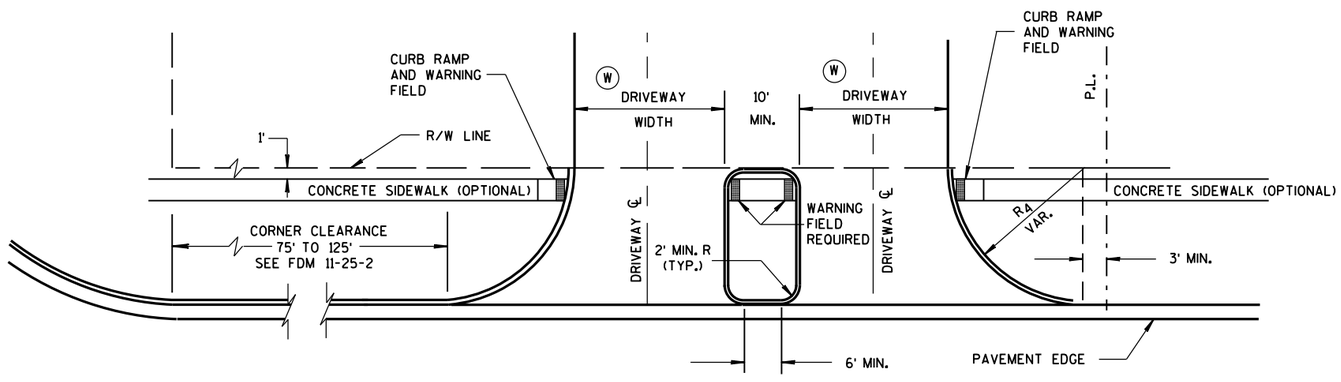
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SKEWED DRIVEWAY DETAILS
(COMMERCIAL AND NON-COMMERCIAL)

SIDEWALK NOT SHOWN



DRIVEWAY LOCATION AND SPACING DETAILS

SIDEWALK SHOWN

NOTES

A MAXIMUM RADIUS OF 10 FEET SHALL BE USED FOR NON-COMMERCIAL PRIVATE ENTRANCES. RADII FOR COMMERCIAL DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER BASED ON TRAFFIC AND DRIVEWAY PERMIT RESTRICTIONS.

THE MINIMUM ANGLE OF INTERSECTION BETWEEN THE DRIVEWAY AND HIGHWAY CENTERLINES SHALL BE 70°.

ALL CURVILINEAR PRIVATE ENTRANCE OUTLINES SHALL BE CONTAINED WITHIN THE HIGHWAY R/W.

NO DRIVEWAY SHALL BE BUILT WITHIN 3 FEET OF THE PROPERTY LINE EXCEPT FOR EXISTING JOINT DRIVEWAY SHARED BY TWO OWNERS.

Ⓦ DRIVEWAY WIDTHS:

COMMERCIAL - 35' MAX., 16' MIN.

RESIDENTIAL AND NON-COMMERCIAL - 24' MAX., 12' MIN.

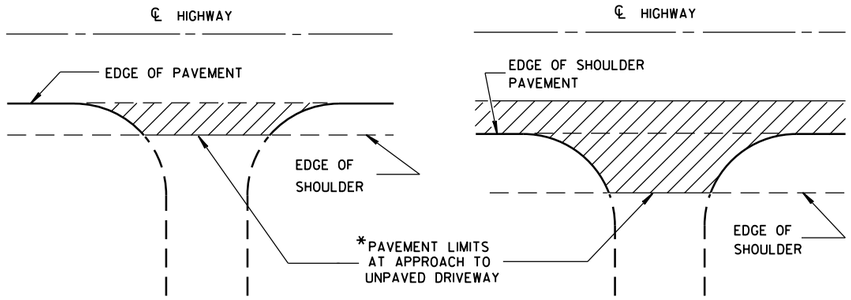
DRIVEWAYS WITH CURB & GUTTER RETURNS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERV
ENT
FHWA

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S.D.D. 8 D 20-1

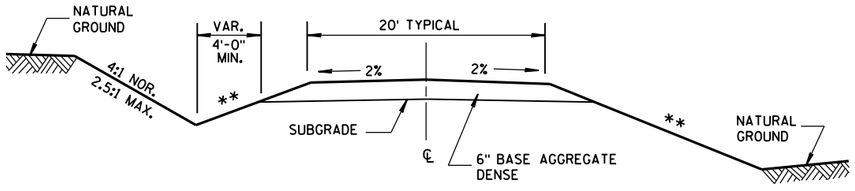


*WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED TO MATCH DRIVEWAY PAVEMENT.

PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB & GUTTER OR SIDEWALK)

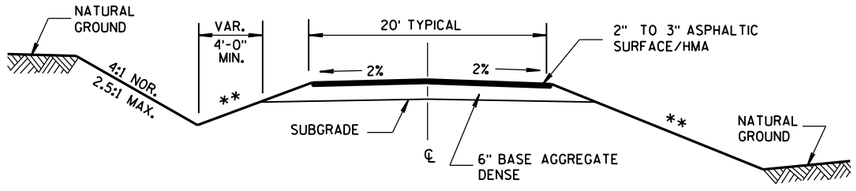


IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

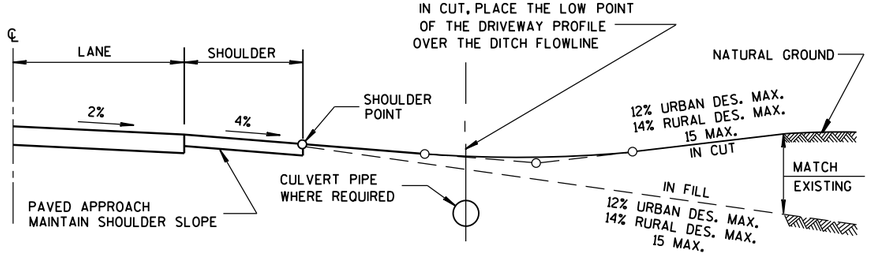
** SLOPE CAN VARY WITH SPEED. SEE 11-45-2.6.2.

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥35 TO <60	6:1
≥60	10:1



IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE



TYPICAL DRIVEWAY PROFILES

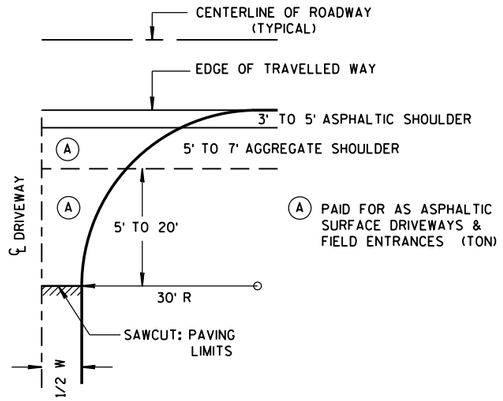
DRIVEWAYS WITHOUT CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS UNIT SUPERV
FHWA

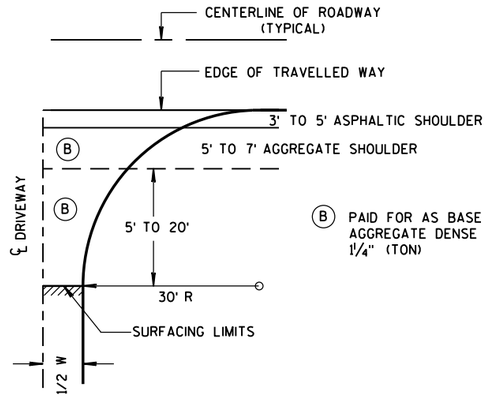
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S.D.D. 8 D 21-1



PLAN VIEW
HALF SECTION

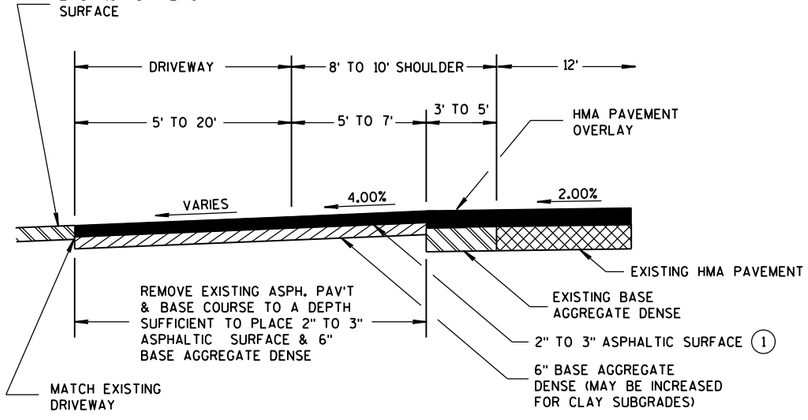
W MIN. = 16'
W MAX. = 24'



PLAN VIEW
HALF SECTION

GENERAL NOTES

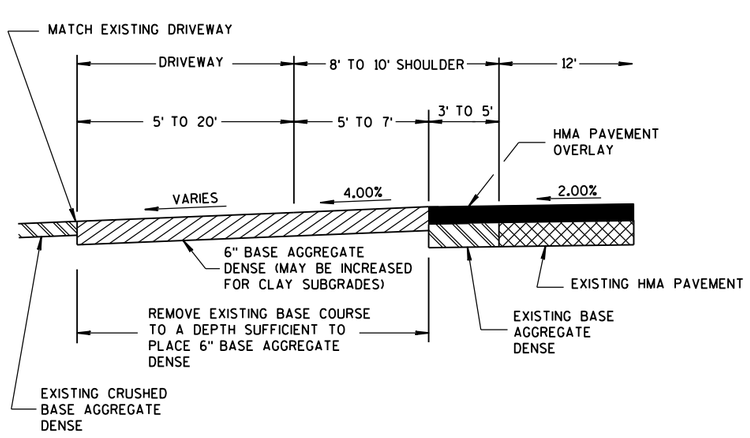
(1) DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.



PROFILE VIEW

RURAL ENTRANCE WITH ASPHALTIC SURFACE

RESURFACING PROJECTS



PROFILE VIEW

RURAL ENTRANCE WITH AGGREGATE SURFACE

6" BASE AGGREGATE DENSE
RESURFACING PROJECTS

DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

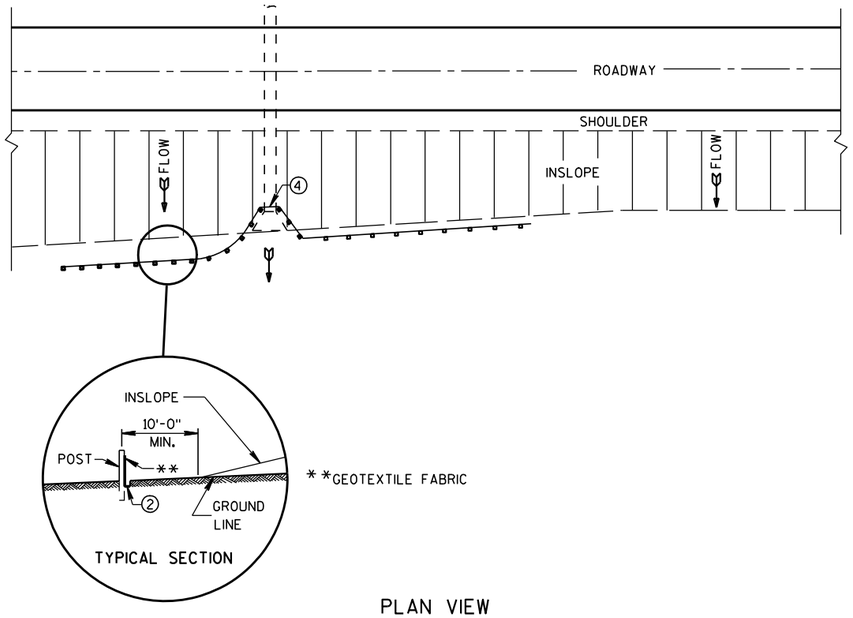
APPROVED
December, 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERV
ENT
FHWA

6

S.D.D. 8 D 22-1

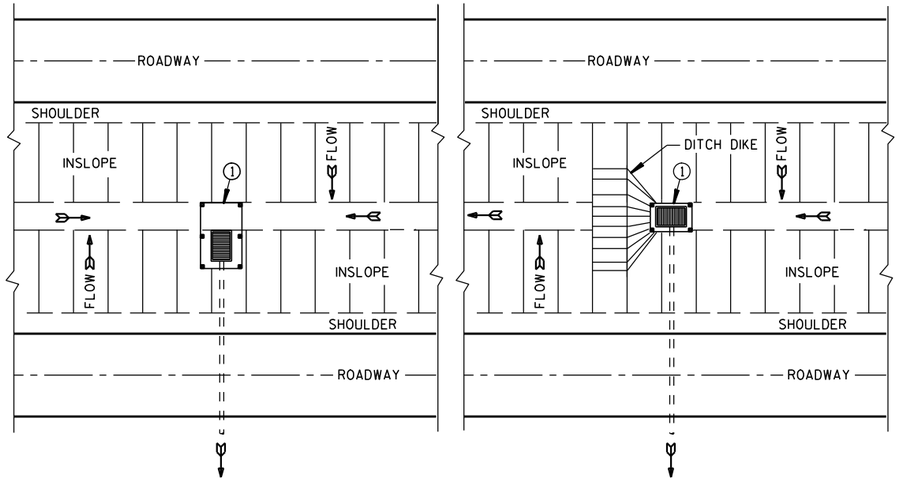
6

S.D.D. 8 D 22-1



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

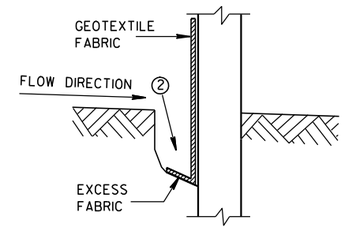
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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

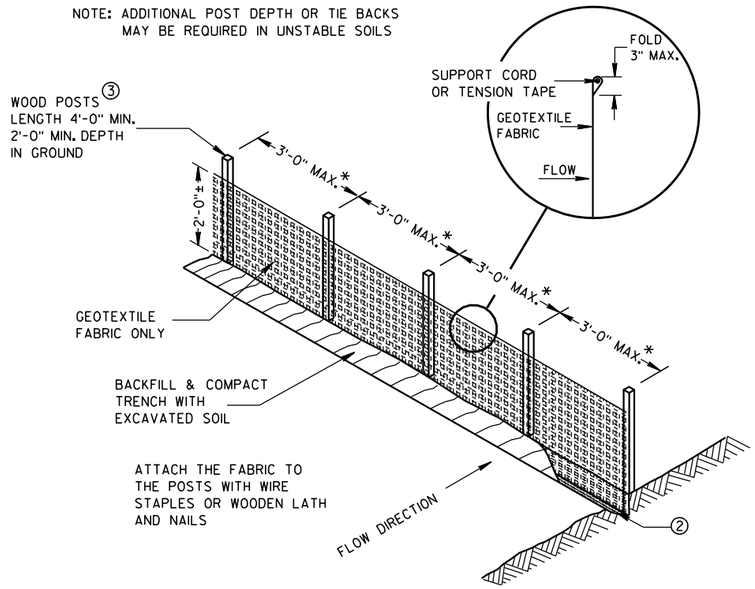
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

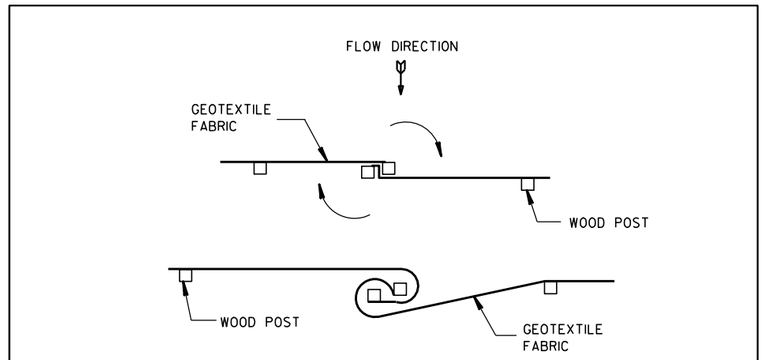
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



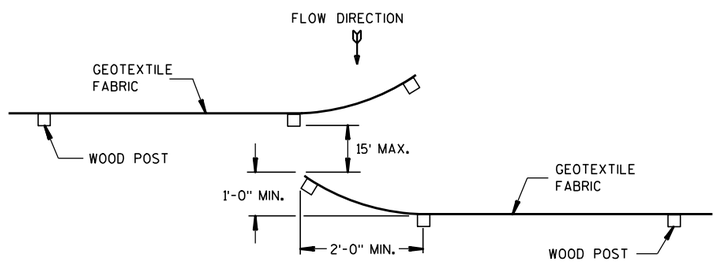
TRENCH DETAIL



SILT FENCE

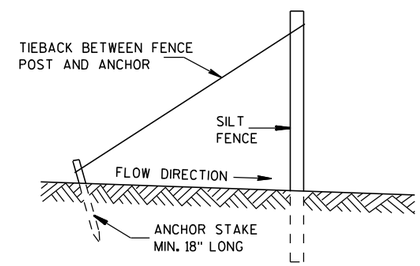


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

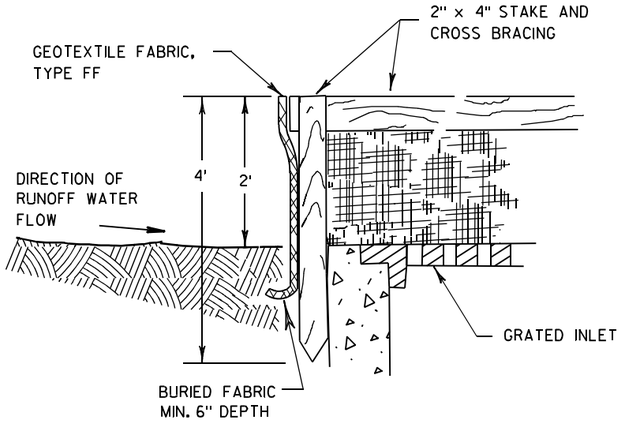
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

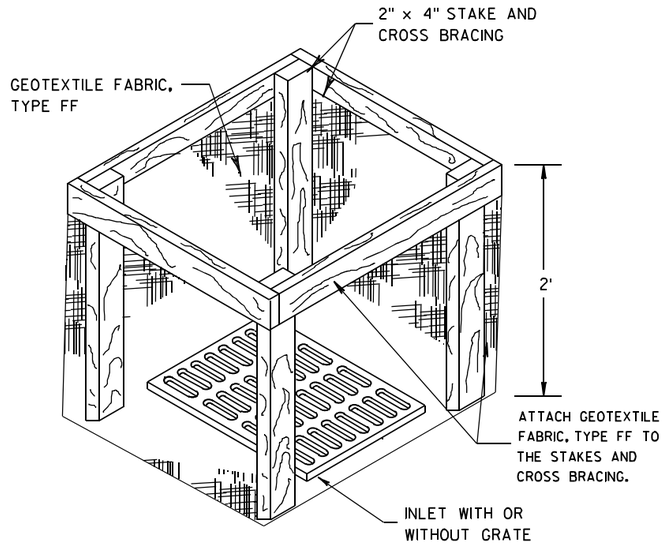
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S.D.D. 8 E 9-6

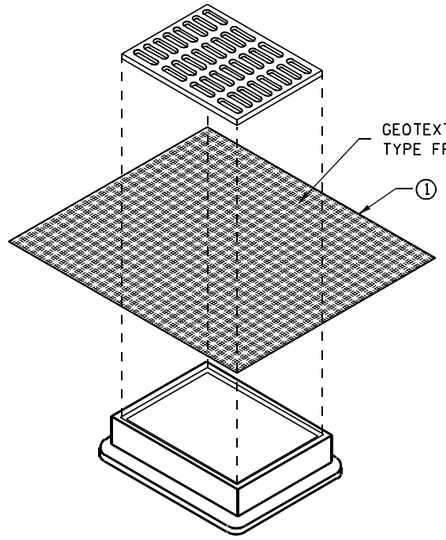
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S.D.D. 8 E 9-6



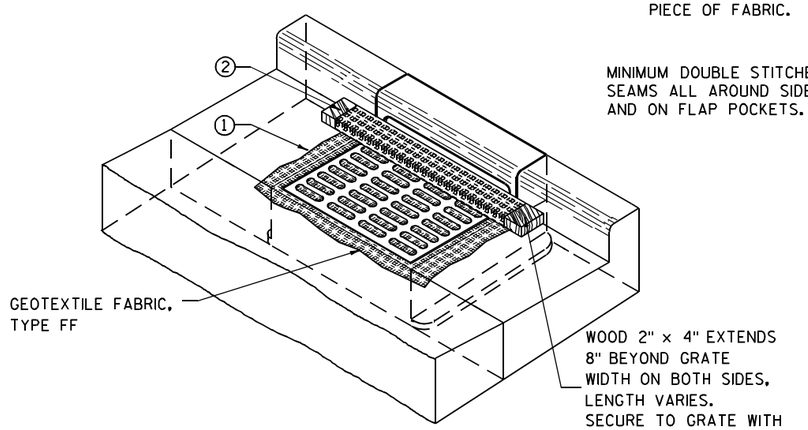


INLET PROTECTION, TYPE A

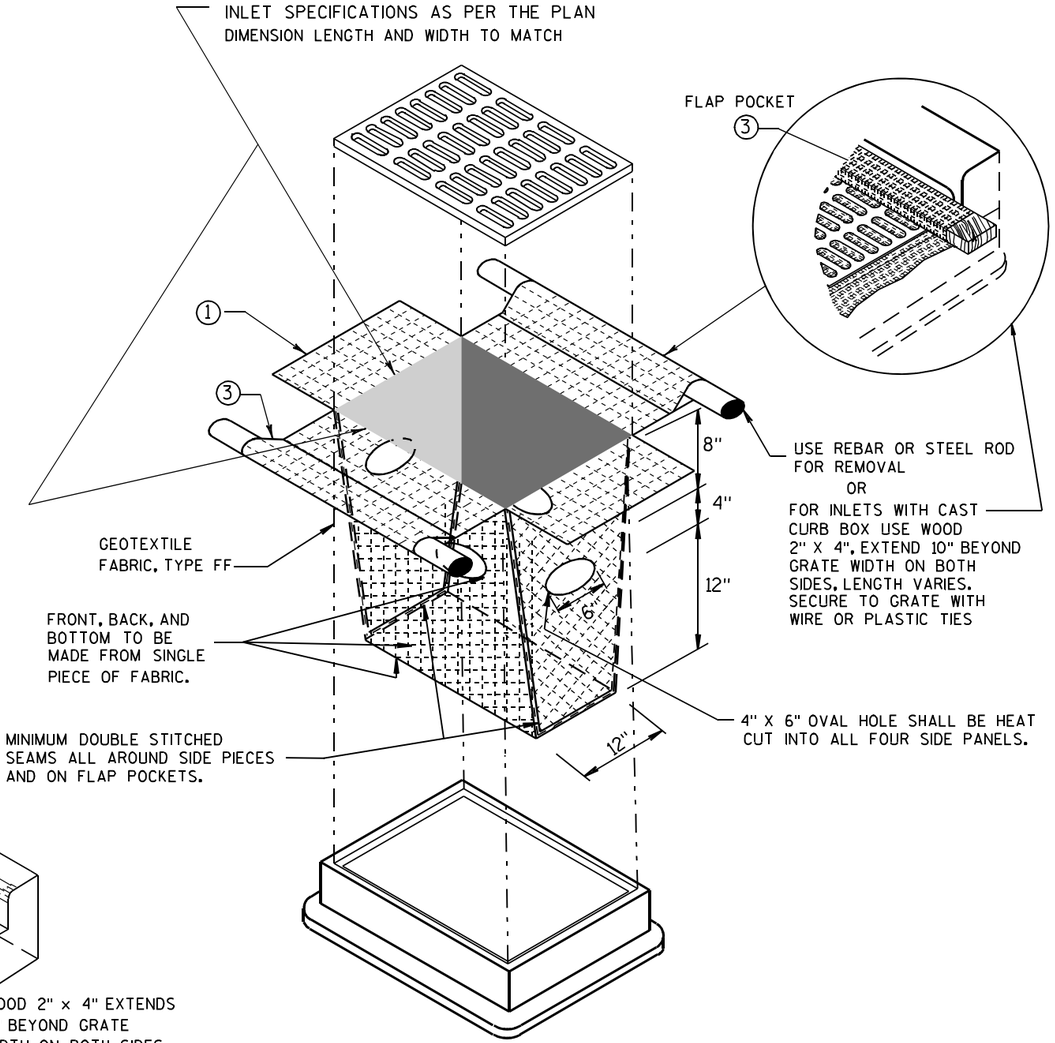


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

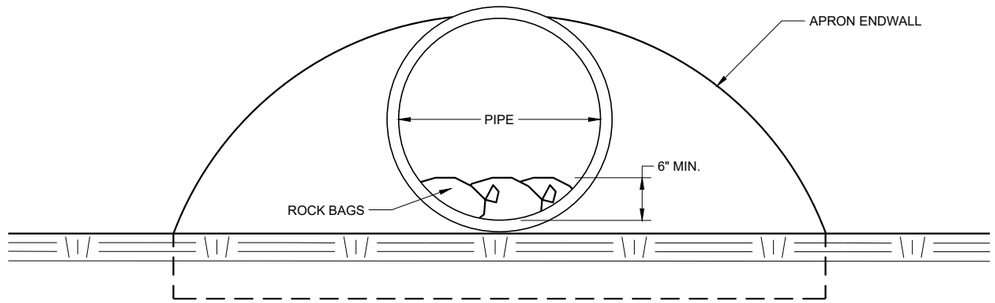
FHWA

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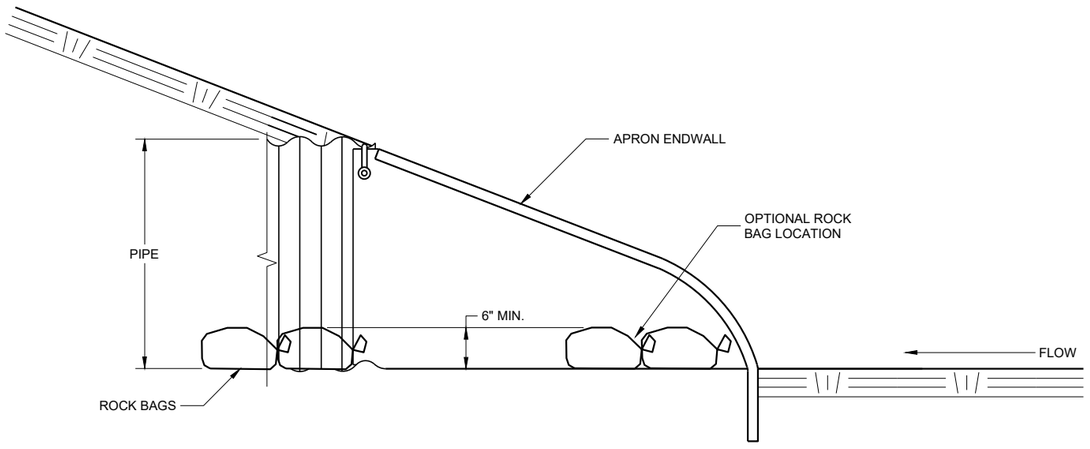
S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA

6

SDD 08E15 - 01

6

SDD 08E15 - 01

METAL APRON ENDWALLS

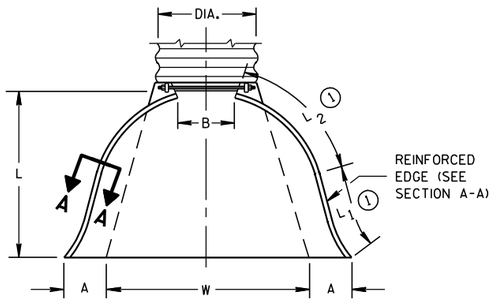
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

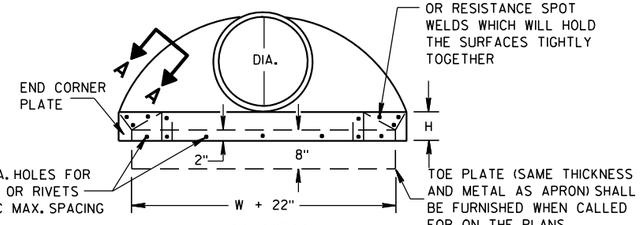
REINFORCED CONCRETE APRON ENDWALLS

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

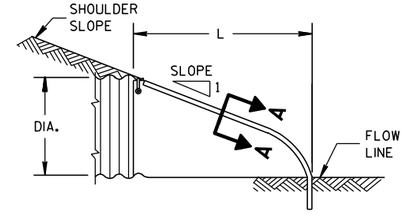
*MINIMUM
**MAXIMUM



PLAN VIEW

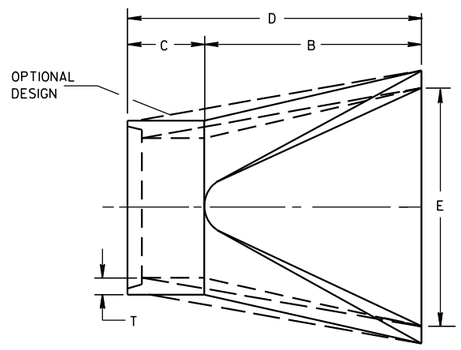


END VIEW

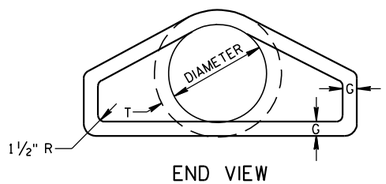


SIDE ELEVATION

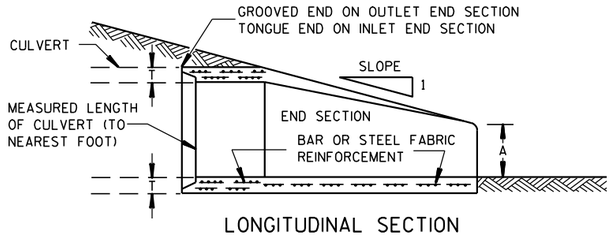
METAL ENDWALLS



PLAN

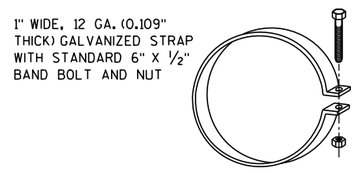


END VIEW



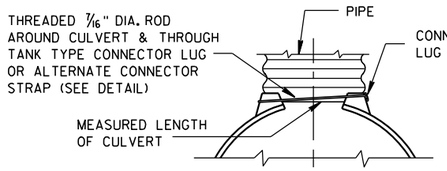
LONGITUDINAL SECTION

CONCRETE ENDWALLS

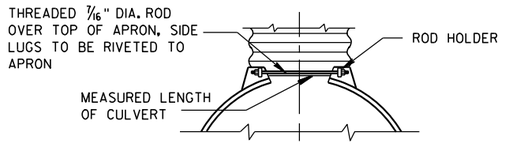


ALTERNATE FOR TYPE 1 CONNECTION

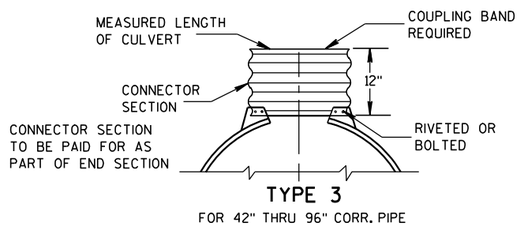
END SECTION CONNECTOR STRAP



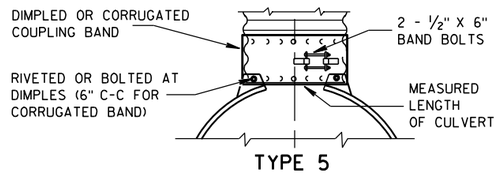
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

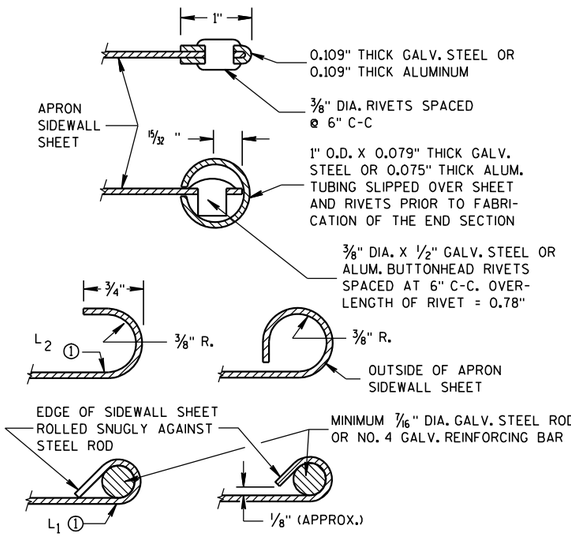
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

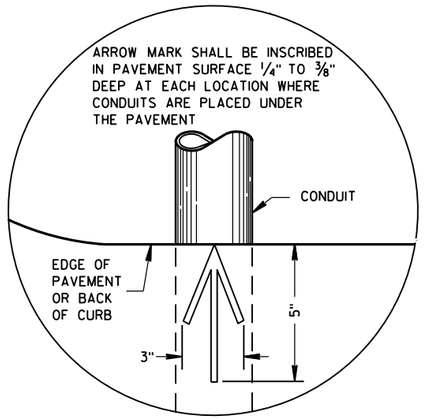
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

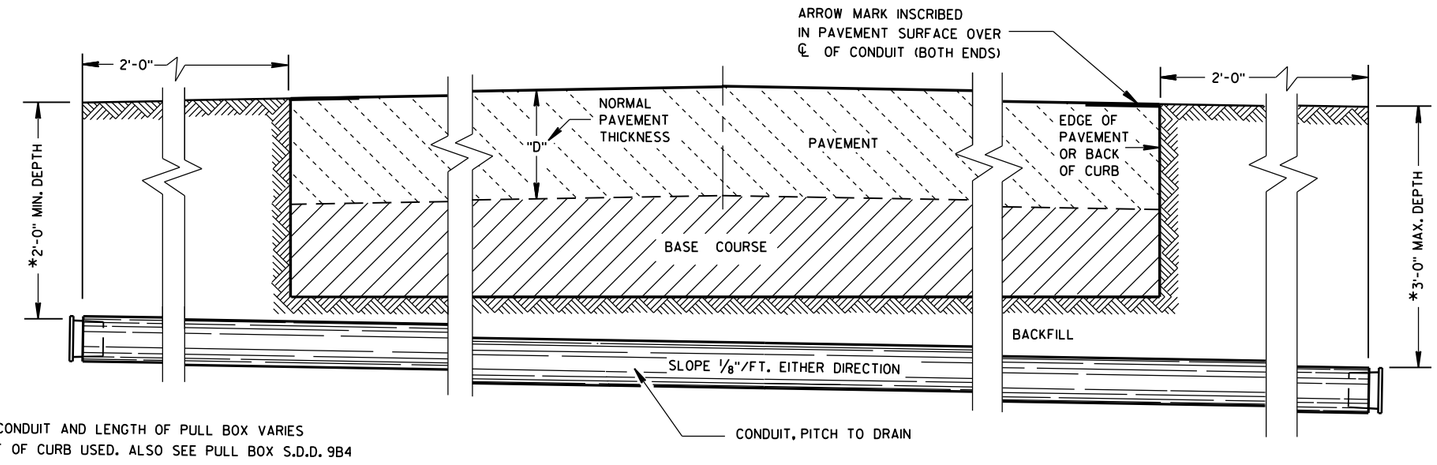
APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith 377
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

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

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

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

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

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

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

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

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

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

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

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

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

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

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

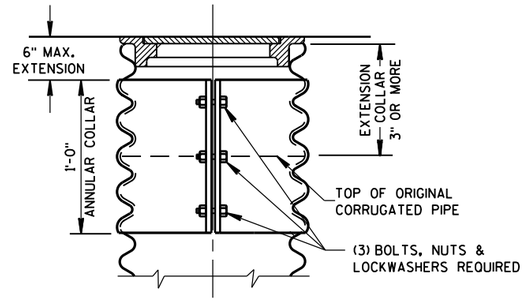
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

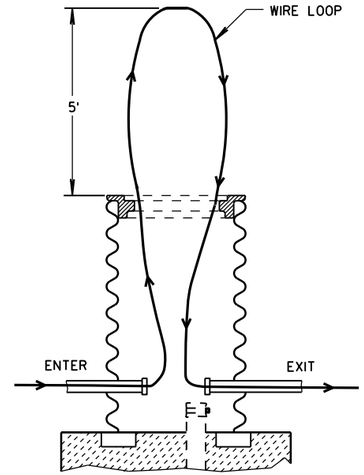
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2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

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

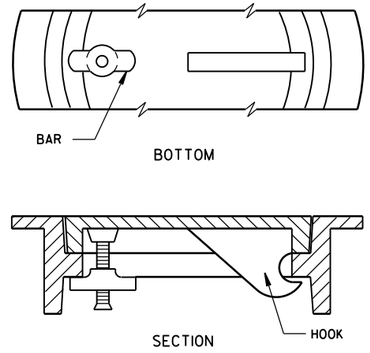
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

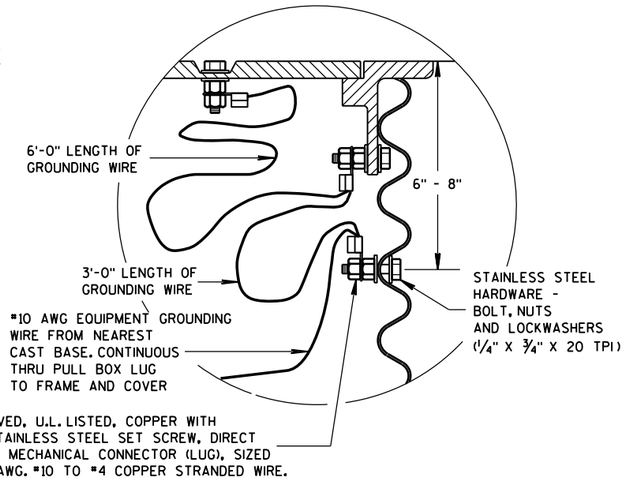


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

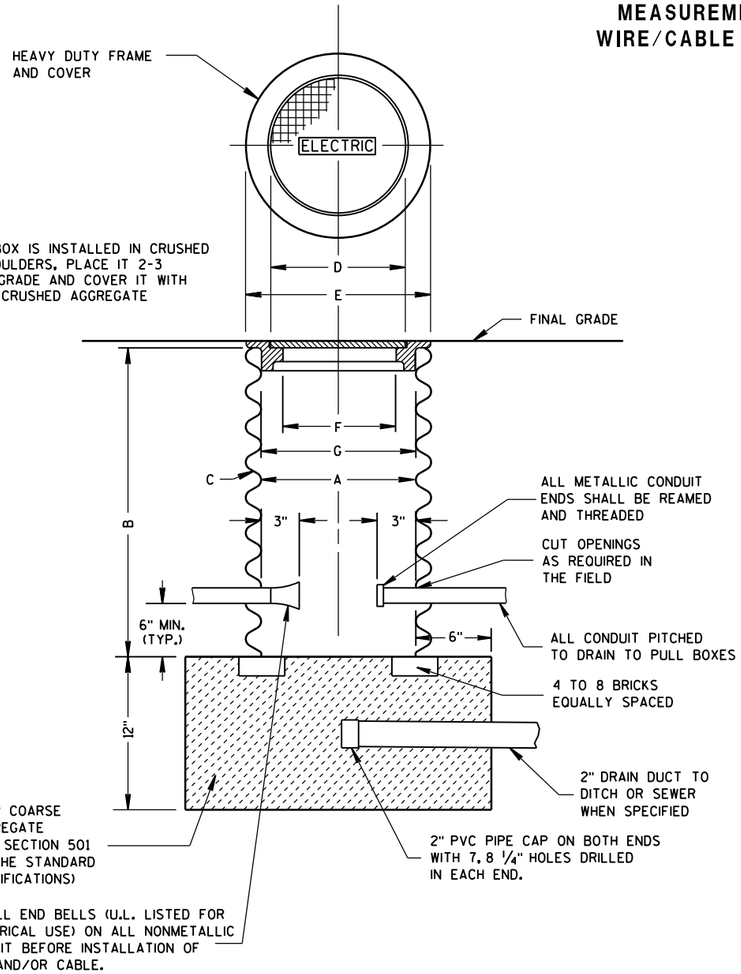


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

GENERAL NOTES

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

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

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

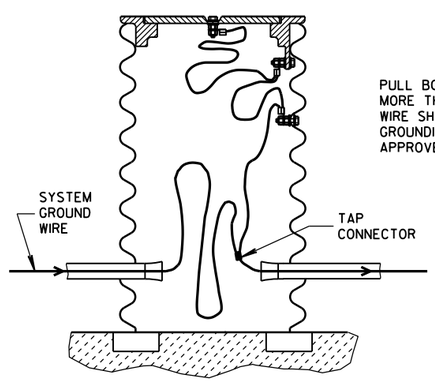
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

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

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

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

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



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

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

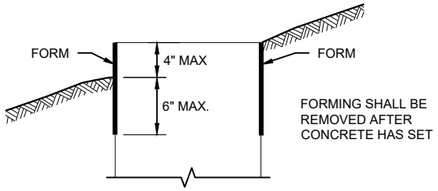
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL 379
FHWA

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S.D.D. 9 B 4-11

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL BENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

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

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

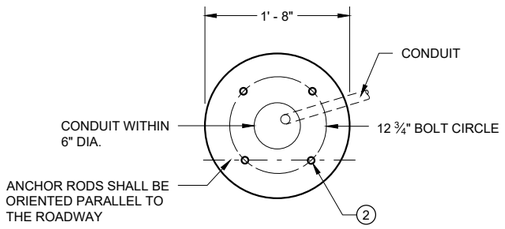
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

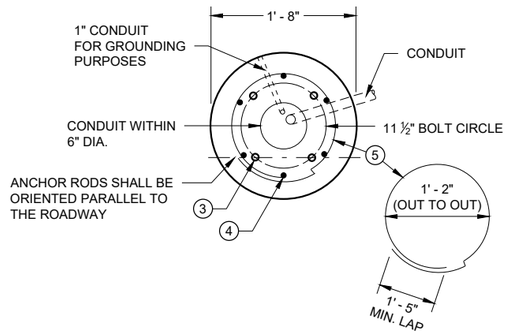
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

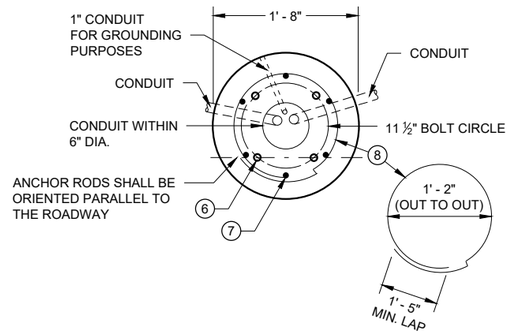
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).







1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.

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

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

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

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

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

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

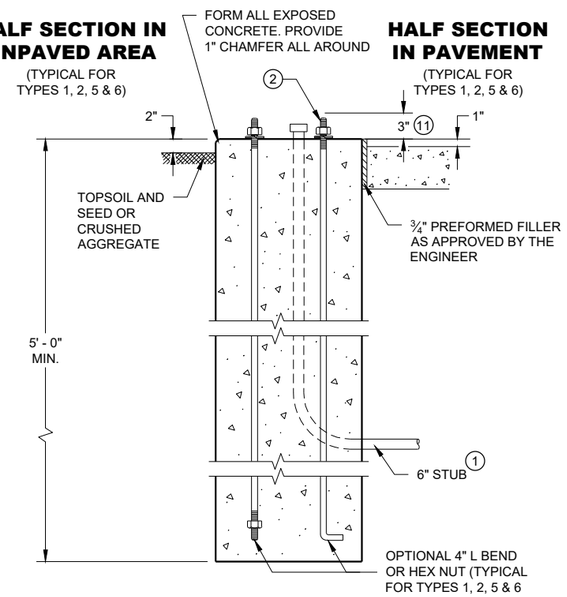
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

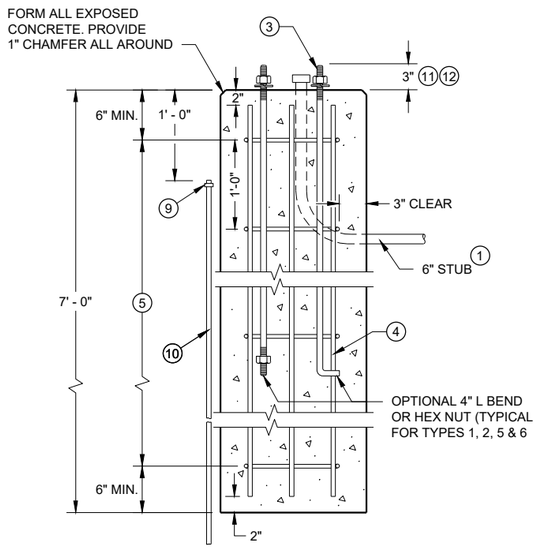
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

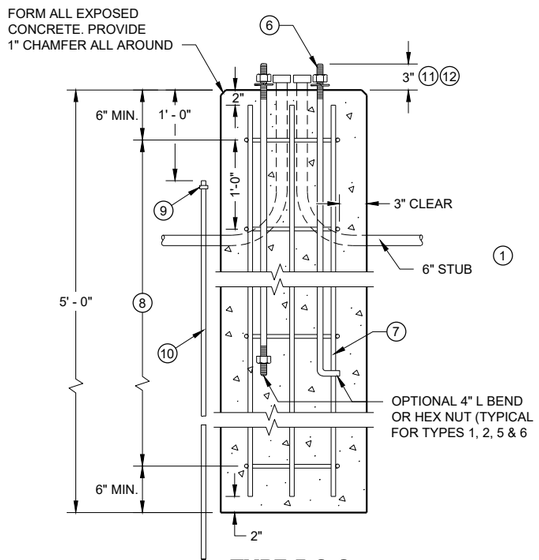
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 380

FHWA

GENERAL NOTES

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

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

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

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

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

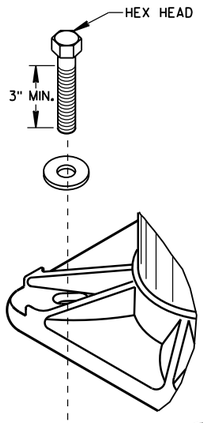
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

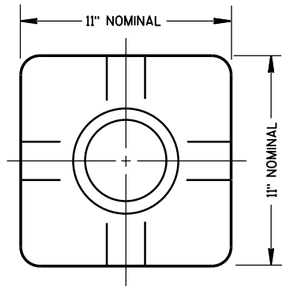
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

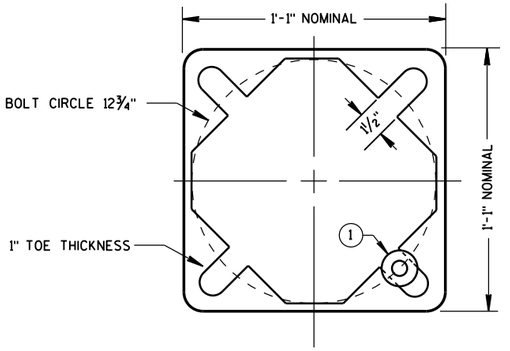
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

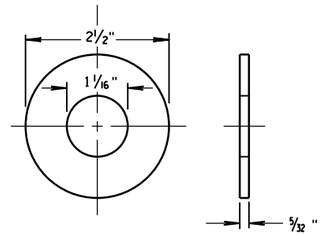




TOP VIEW
(PEDESTAL BASE)

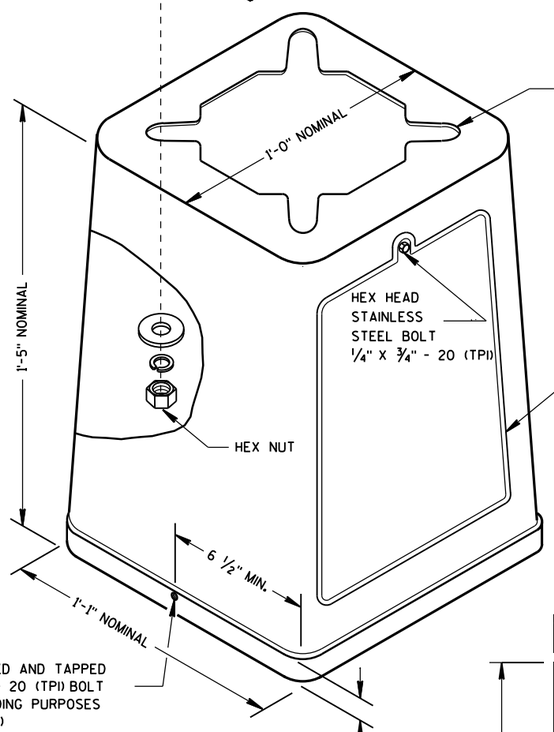


BOTTOM VIEW
(PEDESTAL BASE)

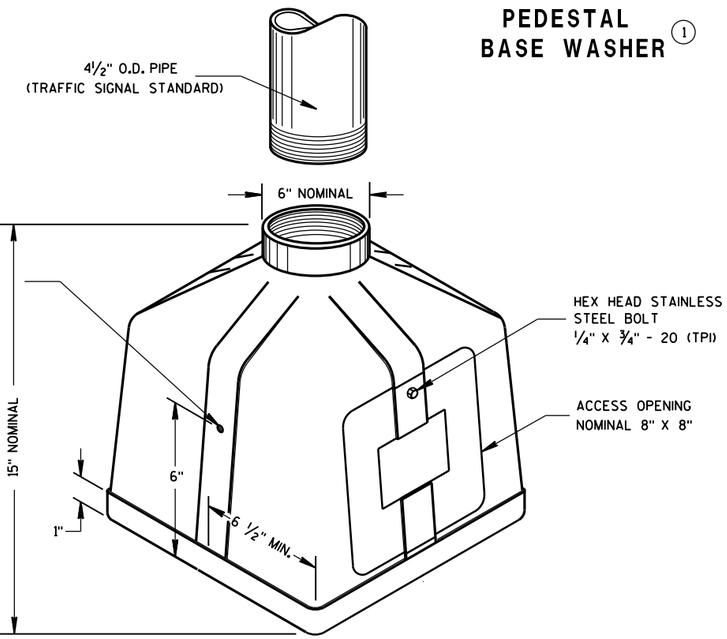


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

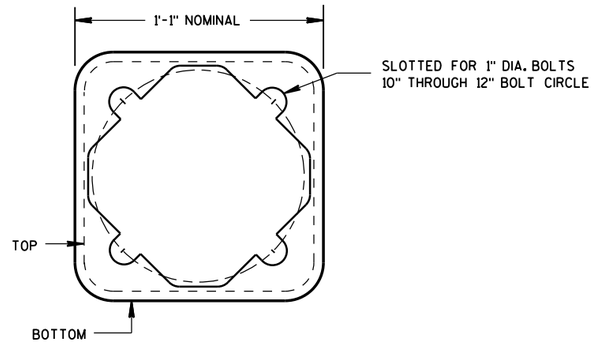


ISOMETRIC VIEW

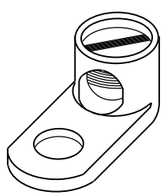


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

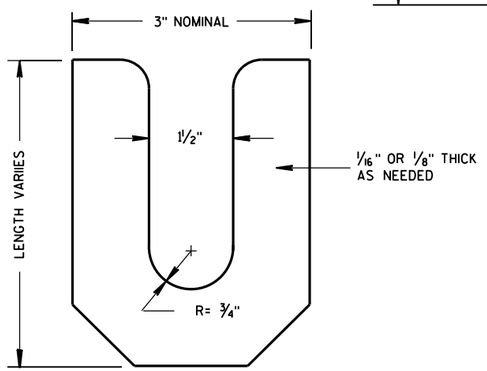


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

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



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

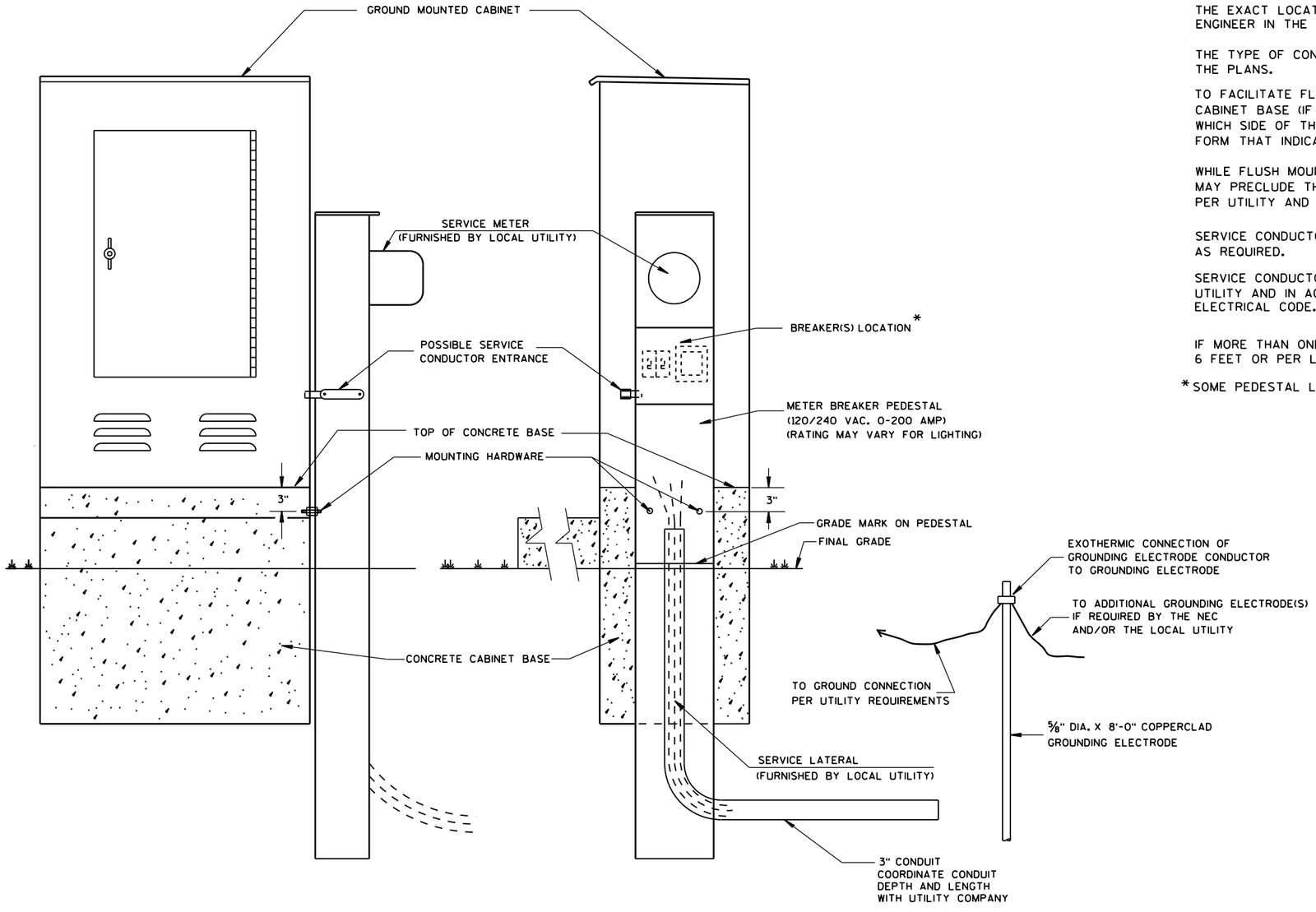
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 C 3-4

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TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

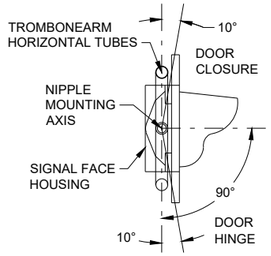
*SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

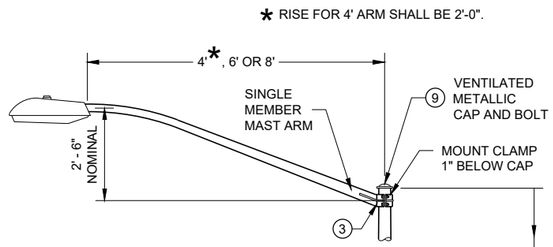
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

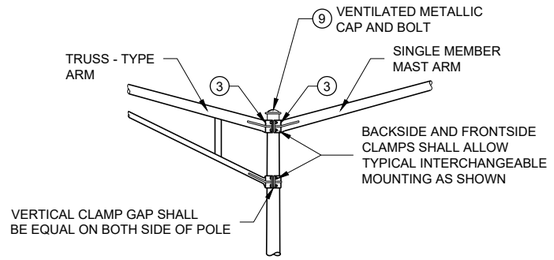
APPROVED
Sept. 2014 — DATE
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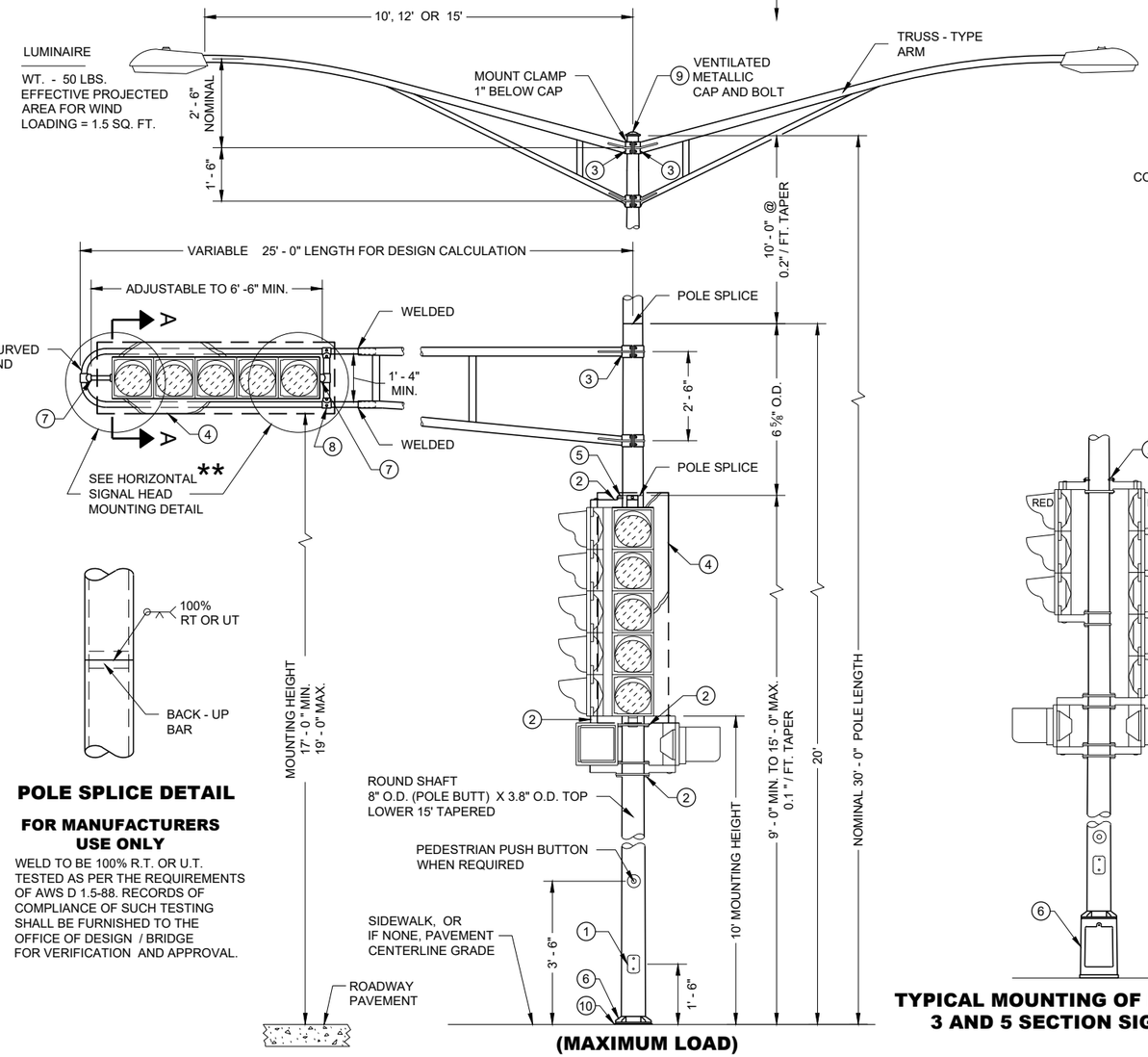


SECTION A-A





INTERCHANGEABLE MOUNTING DETAIL

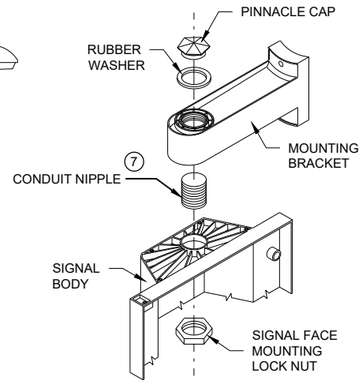


(MAXIMUM LOAD)

POLE SPLICE DETAIL

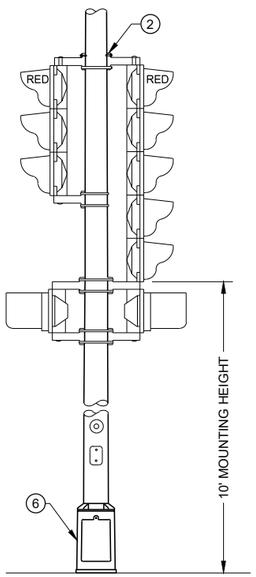
FOR MANUFACTURERS USE ONLY

WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN / BRIDGE FOR VERIFICATION AND APPROVAL.

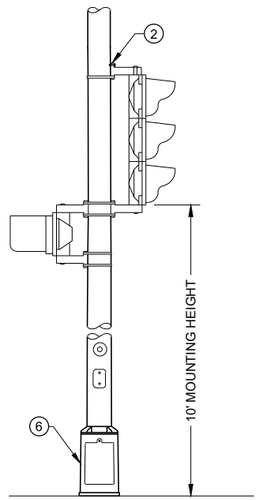


SIGNAL FACE MOUNTING DETAIL

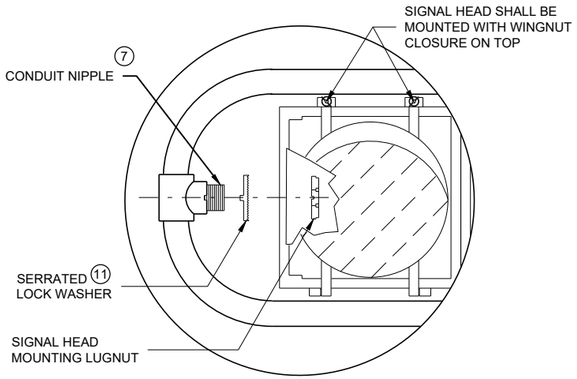
(BANDED)



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



HORIZONTAL SIGNAL HEAD ** MOUNTING DETAIL

** SIGNAL HEAD ATTACHMENT ALSO APPLIES TO MOUNTING AT CROSS BAR

GENERAL NOTES

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

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED. UNDER MAX LOADING, TYPE 3 POLE SHALL BE MOUNTED DIRECTLY TO ITS CONCRETE BASE.

(7) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.

(9) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

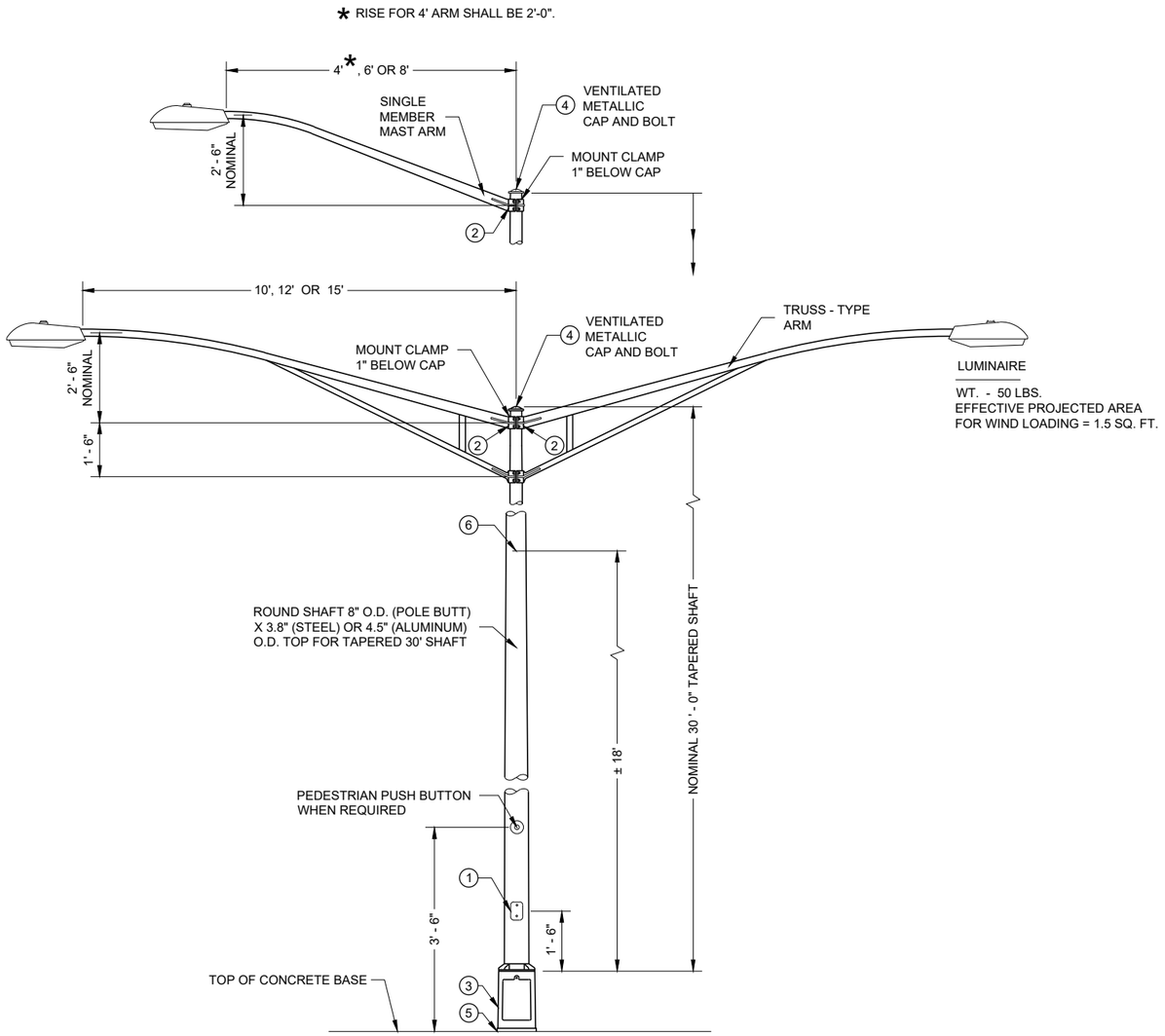
TYPE 3 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS TYPE 3 (HEAVY DUTY)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 09E01 - 15b



TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

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

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

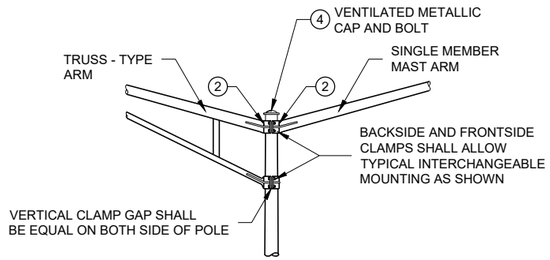
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.

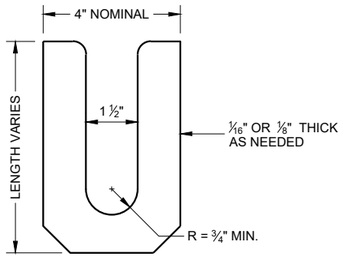


INTERCHANGEABLE MOUNTING DETAIL

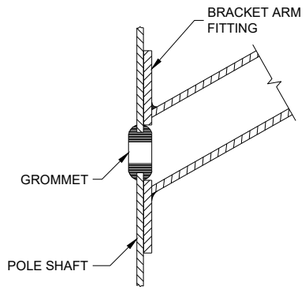
POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

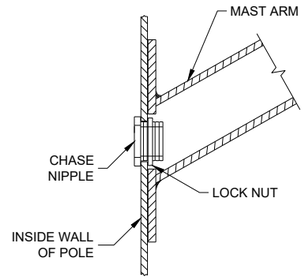
SDD 09E01 - 15d



LEVELING SHIM (1)
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

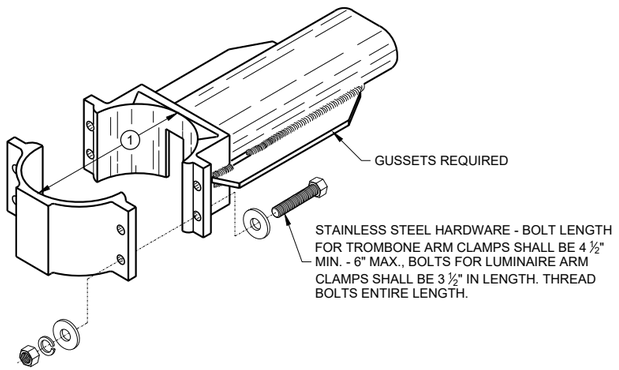
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(2) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

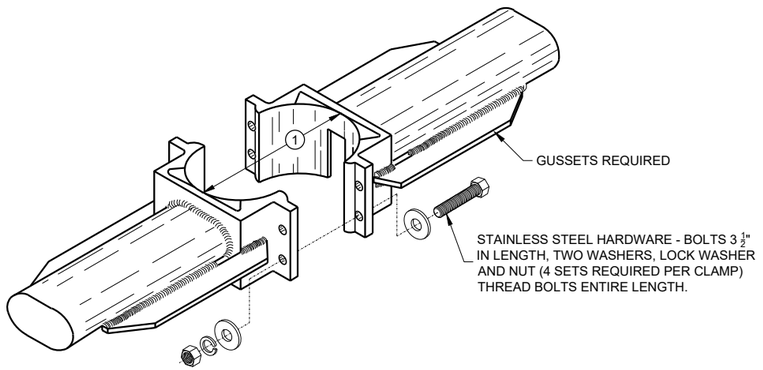
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(4) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

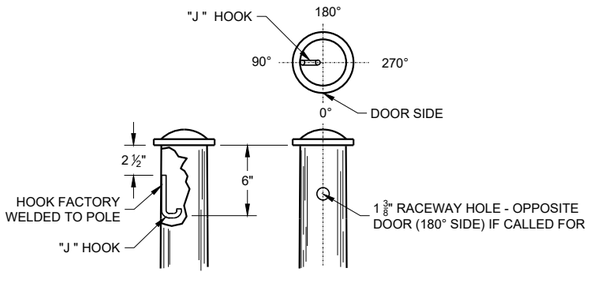
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



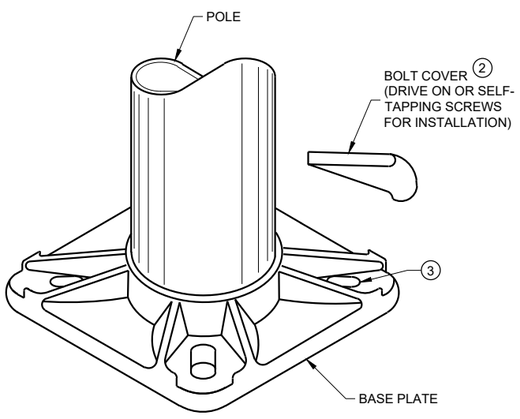
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



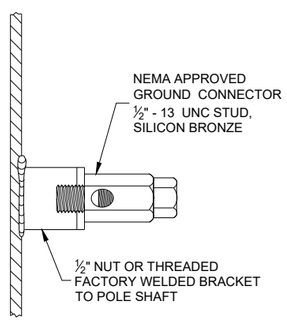
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

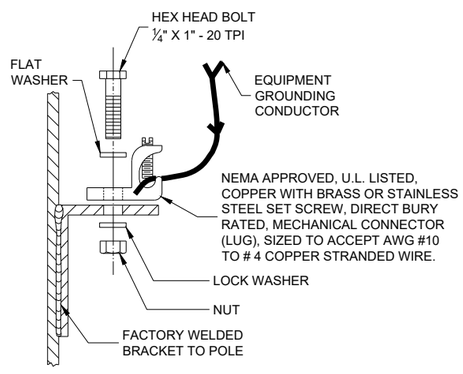


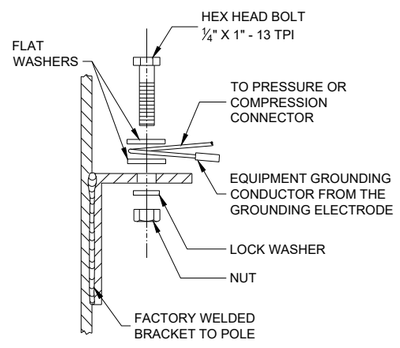
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 385

FHWA

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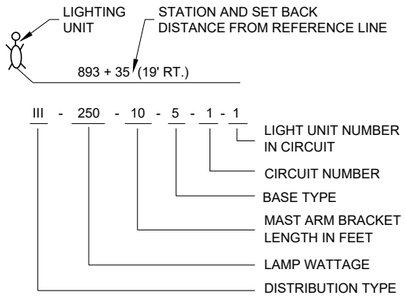
SDD 09A01 - 15g

GENERAL NOTES

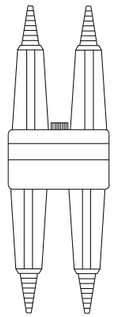
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

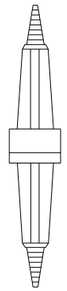
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.



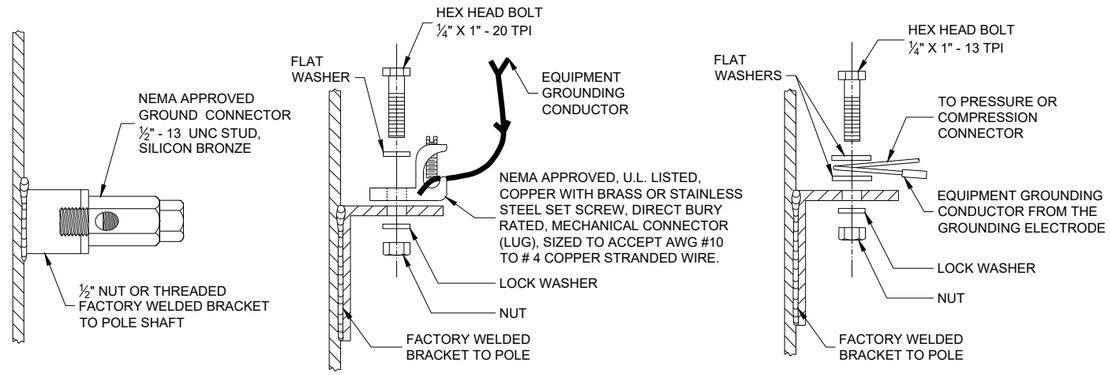
LIGHTING UNIT CODE
(TYPICAL)



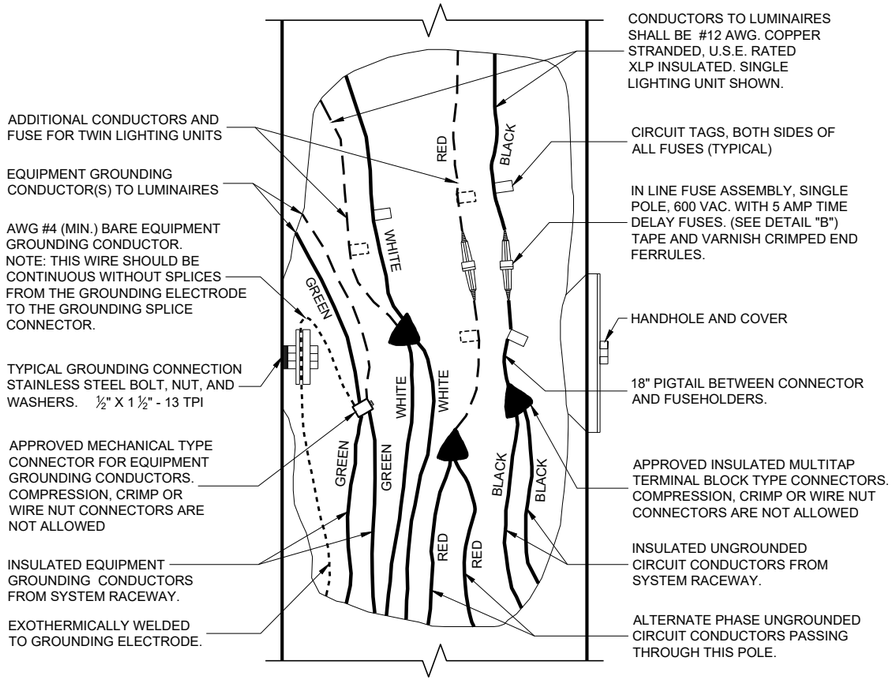
DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



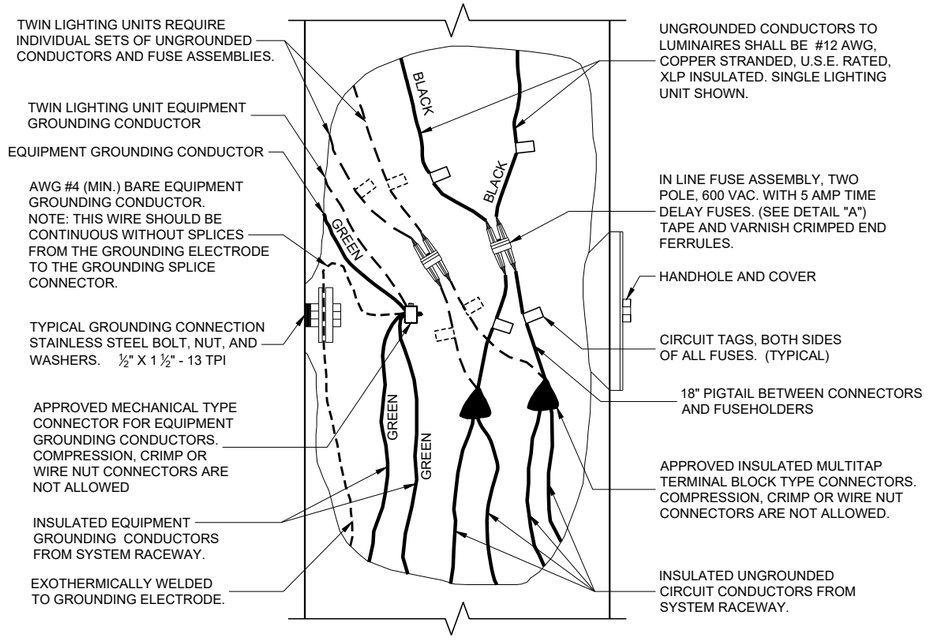
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH GROUNDING CONDUCTOR AND EQUIPMENT GROUNDING CONDUCTOR



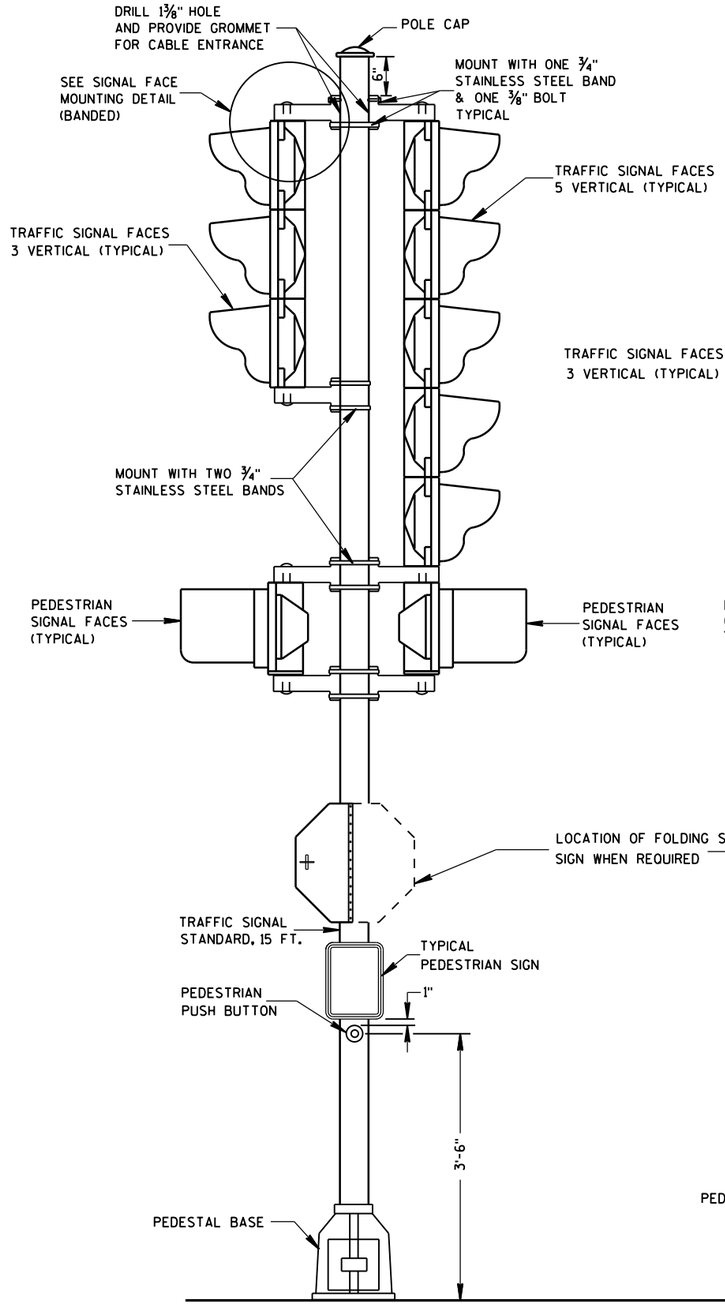
2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

NON - FREEWAY LIGHTING UNIT POLE WIRING

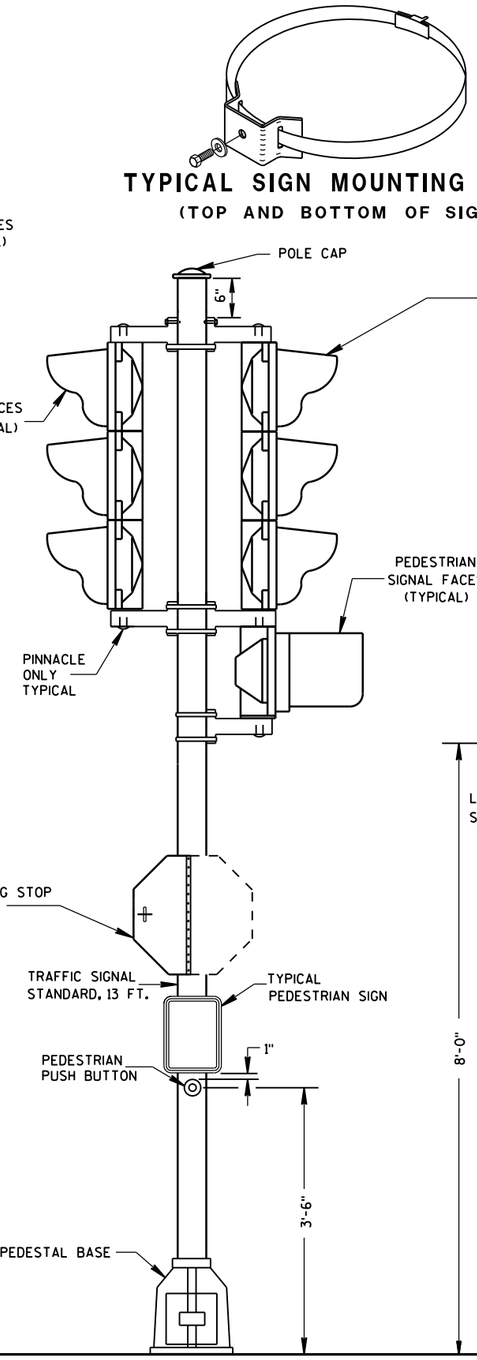
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 386

FHWA

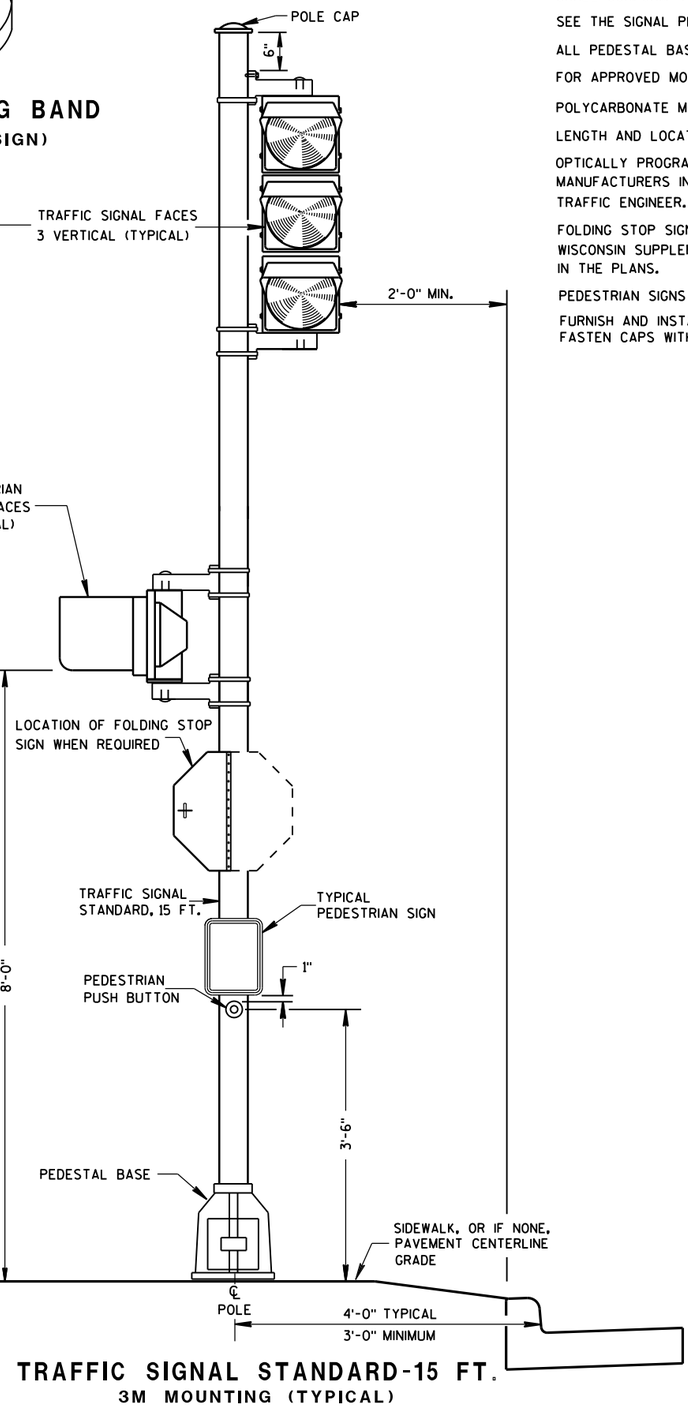


TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.

TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

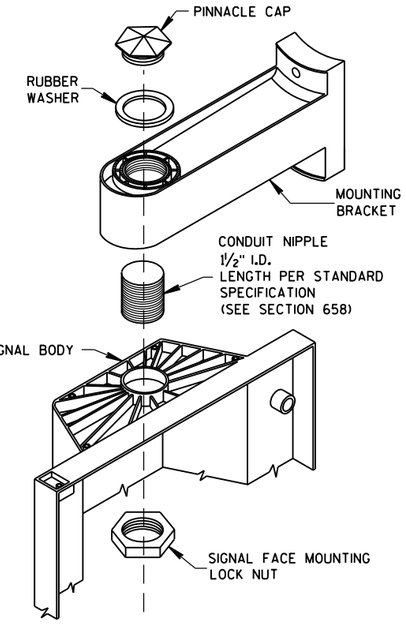
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

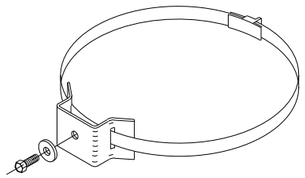


SIGNAL FACE MOUNTING DETAIL
(BANDED)

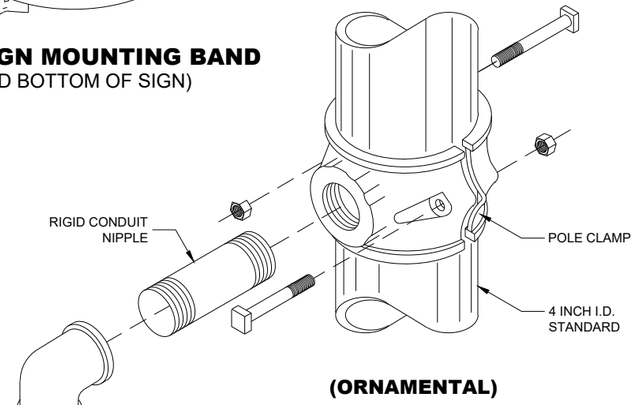
TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 2/28/2013 — DATE /S/ Ahmet Demirbilek — STATE ELECTRICAL FHWA

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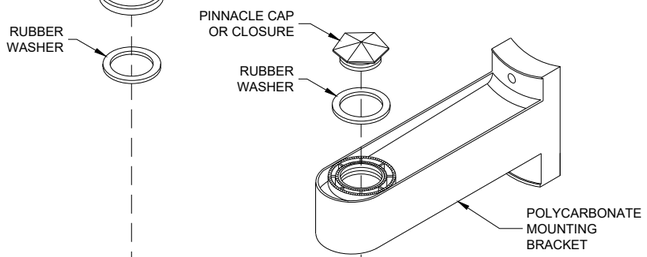
S.D.D. 9 E 6-5



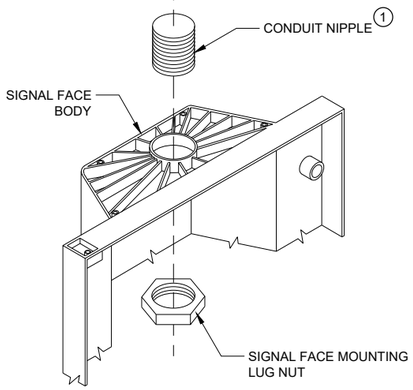
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



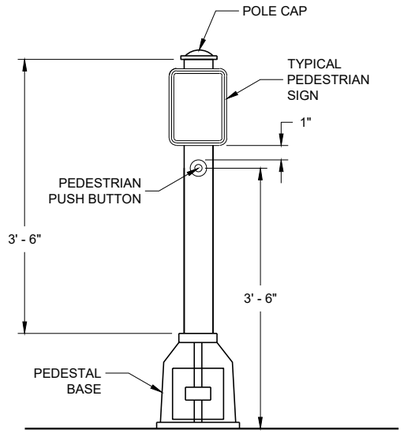
(ORNAMENTAL)



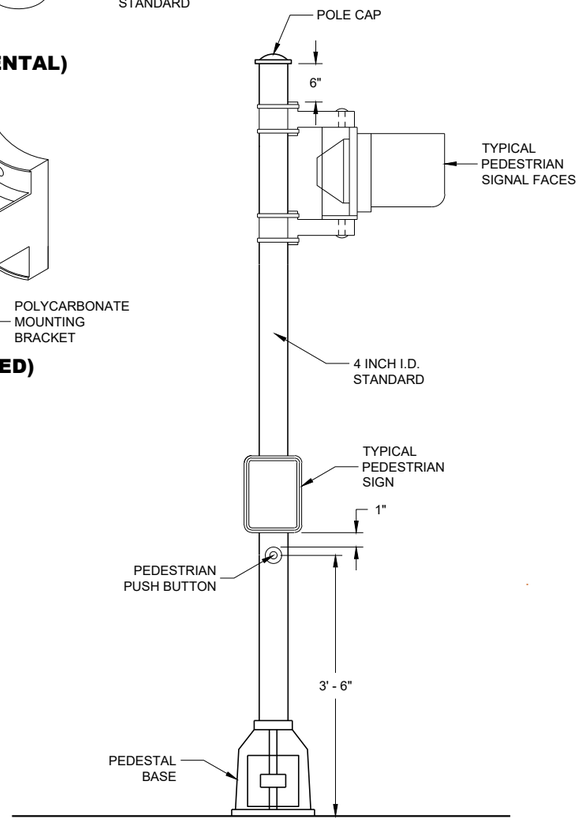
(BANDED)



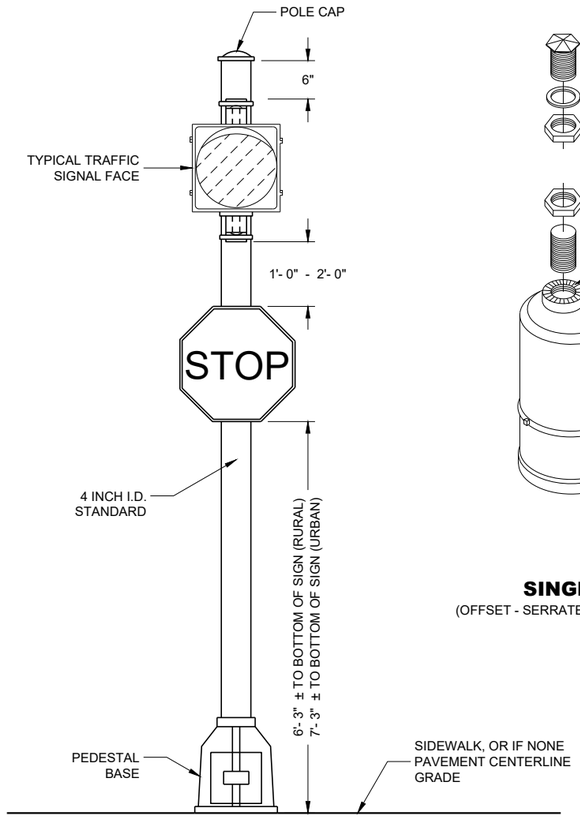
SIGNAL FACE MOUNTING DETAILS



PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING



PEDESTRIAN FACE STANDARD - 10 FT.
(WALK - DON'T WALK)



STANDARD FLASHER
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS, UNLESS APPROVED BY THE ENGINEER IN THE FIELD.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

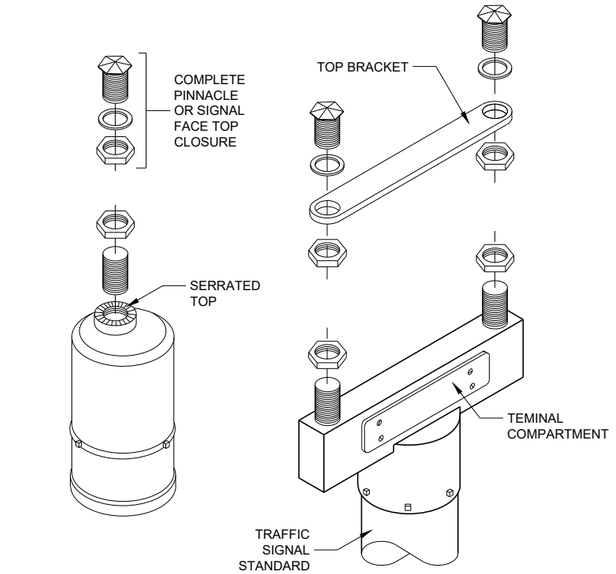
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE REGION TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(1) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACESAND BRACKET ENDS.



SINGLE
(OFFSET - SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

TRAFFIC SIGNAL STANDARD
PEDESTRIAN AND FLASHER
TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

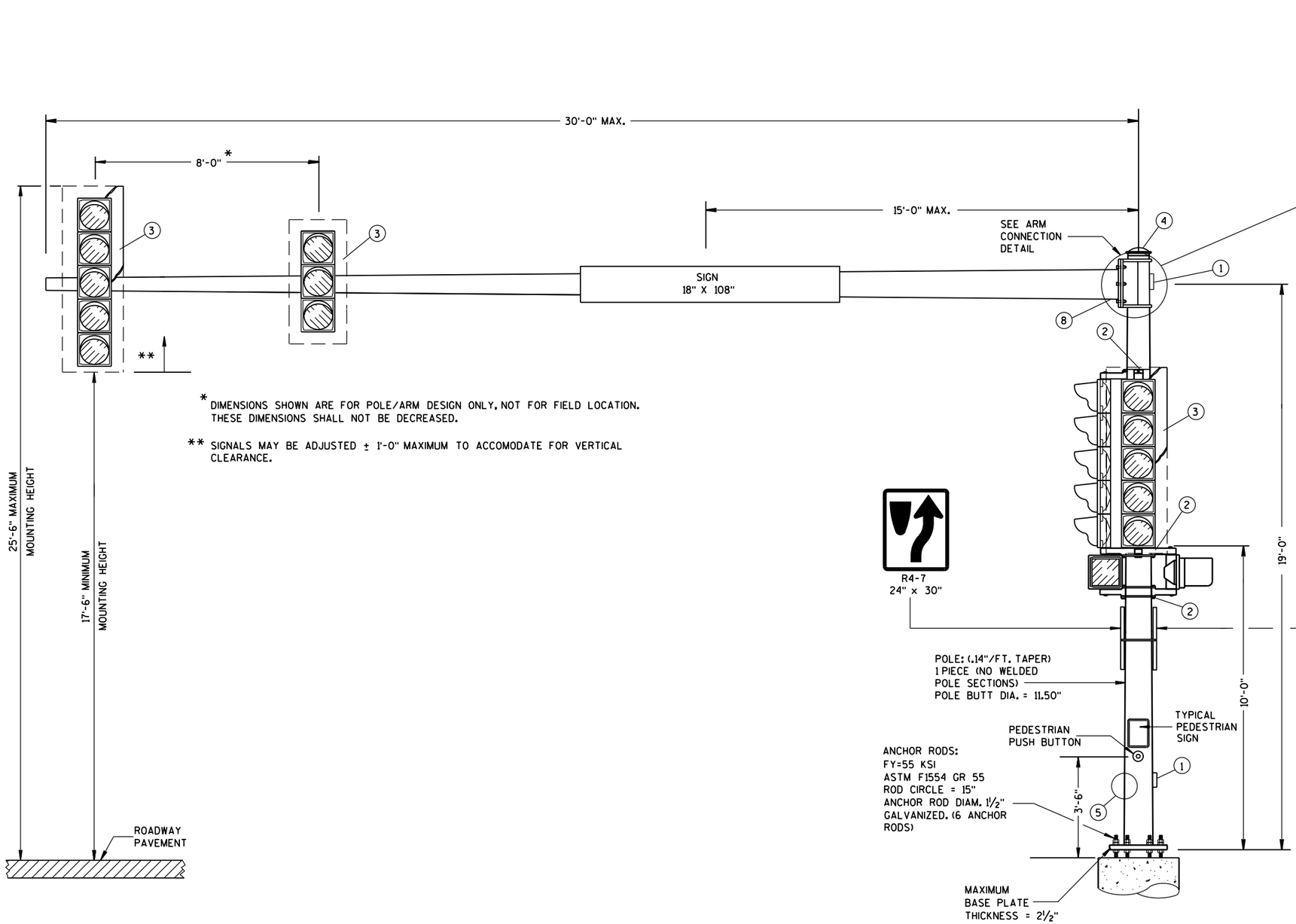
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November 2018
DATE

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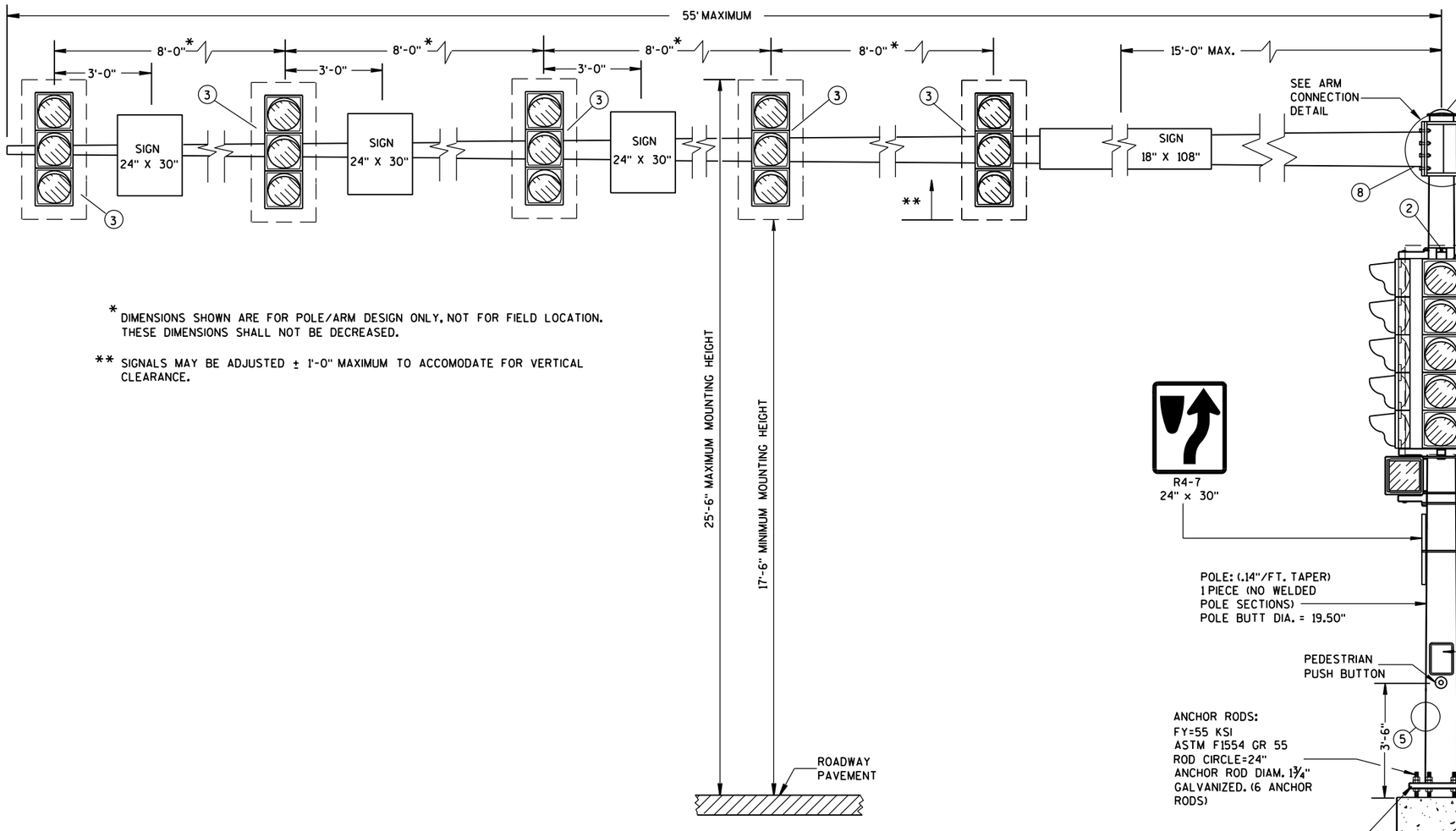


(MAXIMUM LOAD)

TYPE 9 POLE 15'- 30' MONOTUBE ARM

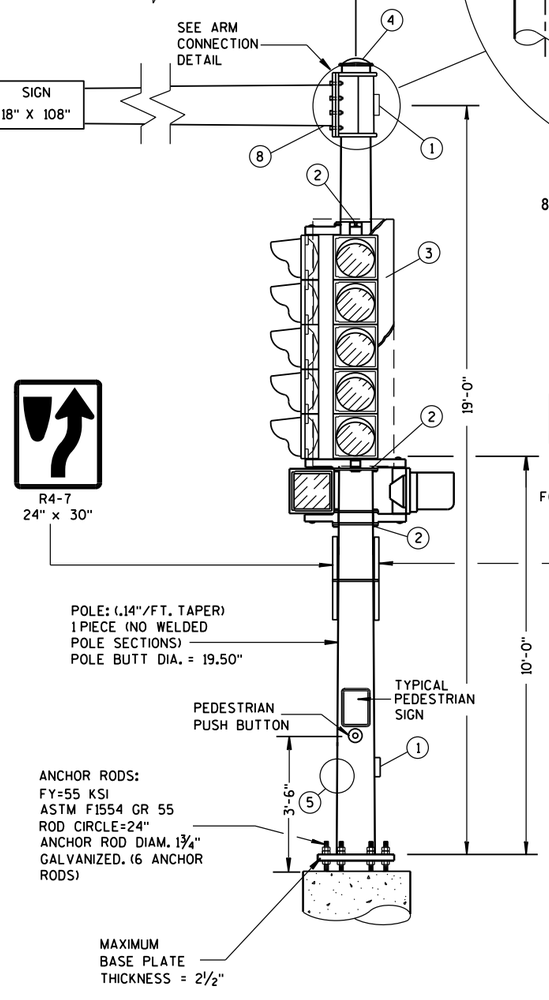
TYPE 9 POLE 15' - 30' MONOTUBE ARM	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May, 2016 DATE FHWA	/S/ Ahmet Demirbilek STATE ELECTRICAL

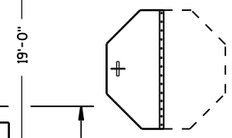
S.D.D. 9 E 8-8a

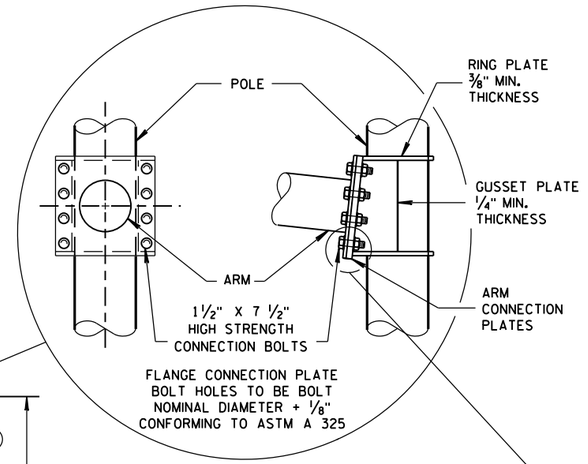


* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

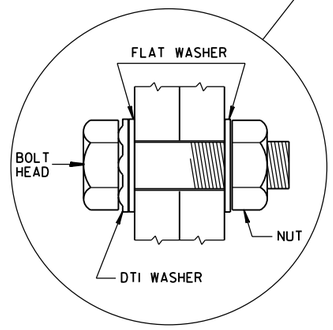
** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.



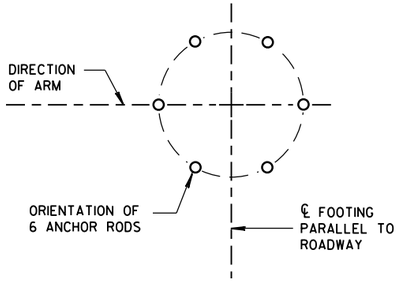




8 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL



ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 12 POLE 35'- 55' MONOTUBE ARM

TYPE 12 POLE 35' - 55' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May, 2015
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL 390

FHWA

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S.D.D. 9 E 8-8c

GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO 2013 6TH EDITION AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

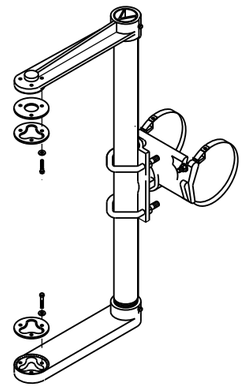
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

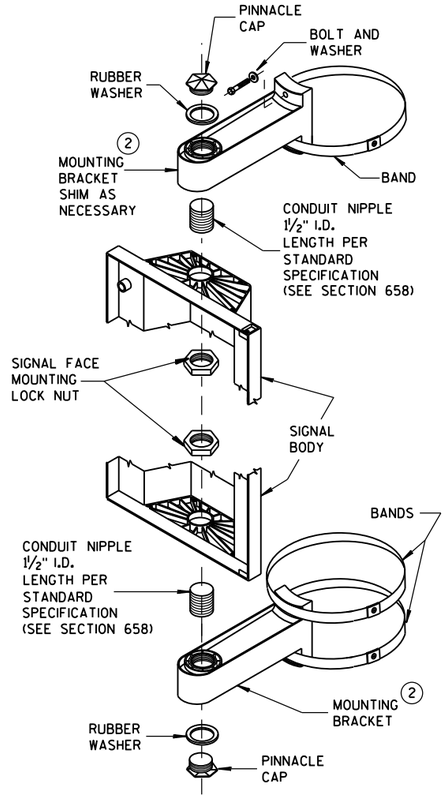
MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

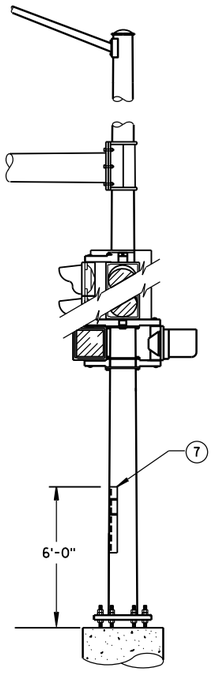


SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

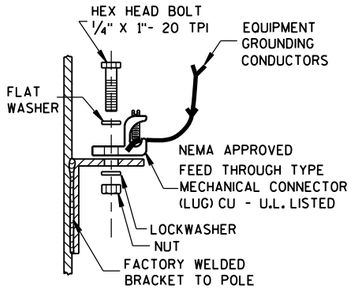
(MOUNT PER MANUFACTURER'S RECOMMENDATION)



SIGNAL FACE VERTICAL MOUNTING DETAIL

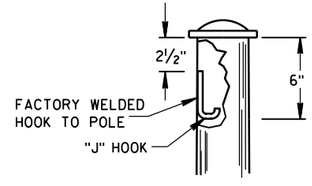


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



"J" HOOK WIRE SUPPORT (6)

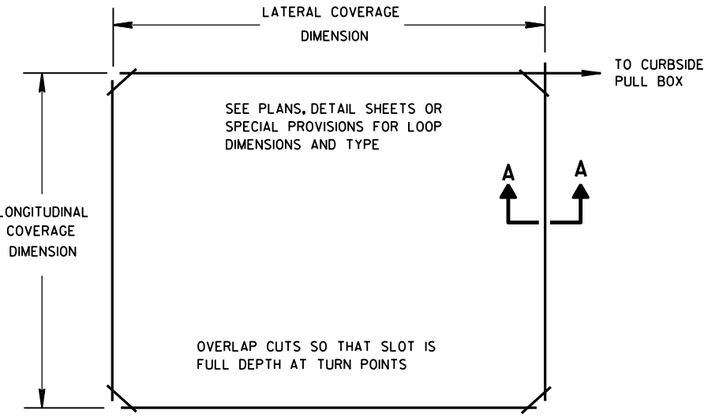
GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

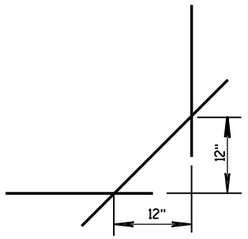
APPROVED
May 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

S.D.D. 9 E 8-8e

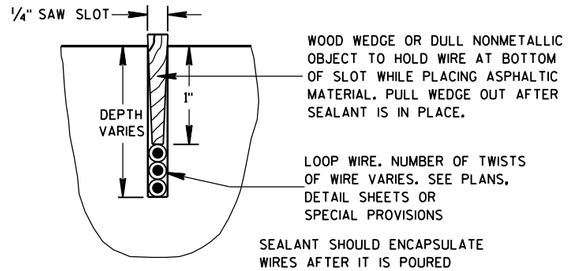
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LOOP WIRE SLOT CONSTRUCTION

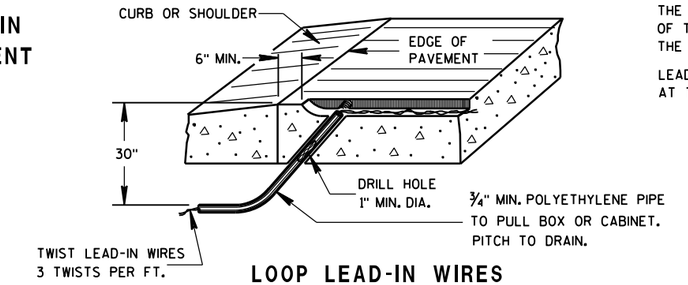


EXPANDED VIEW
SAW CUT CORNERS



SECTION A-A

LOOP AND LEAD-IN
WIRES IN PAVEMENT



LOOP LEAD-IN WIRES
THROUGH PAVEMENT

GENERAL NOTES

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

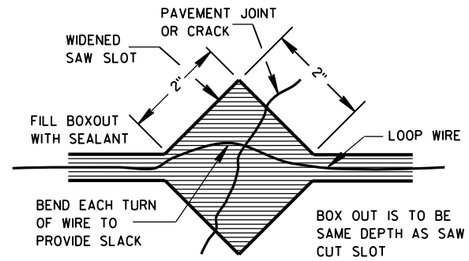
THE SLOTS IN THE PAVEMENT SHALL BE CUT TO DIMENSION WITH A SAW. THE SLOTS SHALL BE CLEANED FREE OF DIRT, DUST, MOISTURE AND DEBRIS PRIOR TO INSTALLATION OF THE WIRE.

AFTER PLACING THE WIRE IN THE SLOT, FILL THE SLOT WITH AN ASPHALTIC MATERIAL IN ACCORDANCE WITH THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D6690".

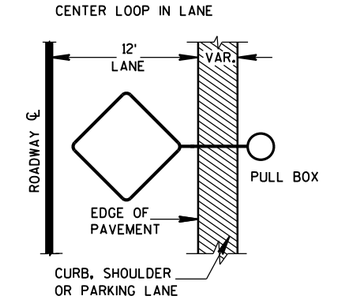
IN THE EVENT ASPHALTIC MATERIAL IS UNAVAILABLE, A FLEXIBLE TYPE EPOXY MAY BE USED AS A LOOP SLOT FILLER. THE LOOP SLOT SHALL BE CLEAN AND DRY BEFORE EPOXY IS INSTALLED. EPOXY USE SHALL BE APPROVED BY THE DISTRICT TRAFFIC ENGINEER AND THE FURNISHED EPOXY SHALL BE INSTALLED ONLY AFTER WRITTEN APPROVAL BY THE BY THE PROJECT ENGINEER.

THE TWO SINGLE CONDUCTOR LOOP WIRES SHALL BE TWISTED TOGETHER AT A RATE OF THREE TWISTS PER FOOT FROM THE PAVEMENT EDGE TO THE SPLICE CONNECTION WITH THE LOOP LEAD-IN CABLE.

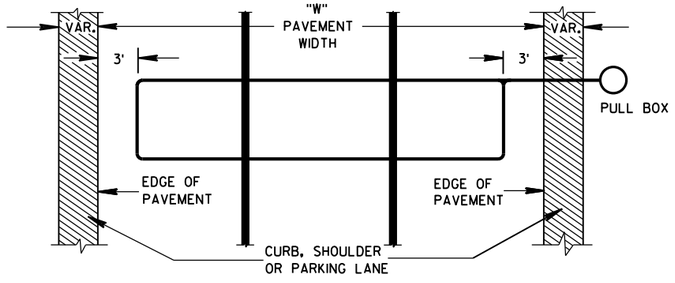
LEAD-IN CABLES AND LOOP LEAD-IN WIRES SHALL BOTH BE CUT TO 6 FEET IN LENGTH AT THE SPLICING PULL BOX.



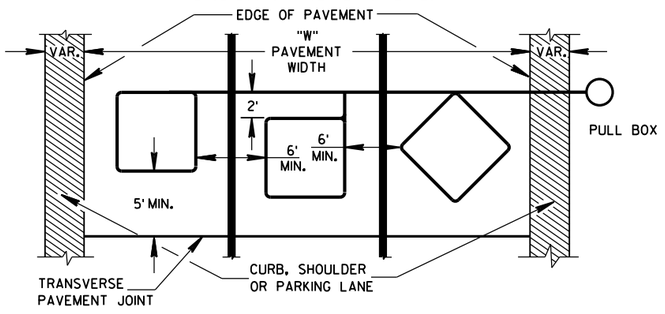
PLAN VIEW



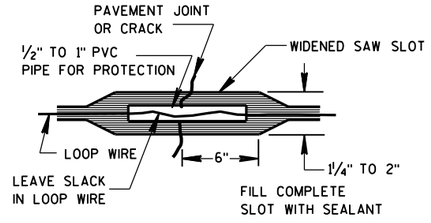
LOOP WIRE SLOT PLAN



LOOP WIRE SLOT PLAN

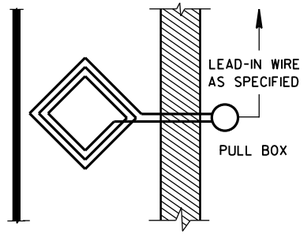


LOOP WIRE SLOT PLAN



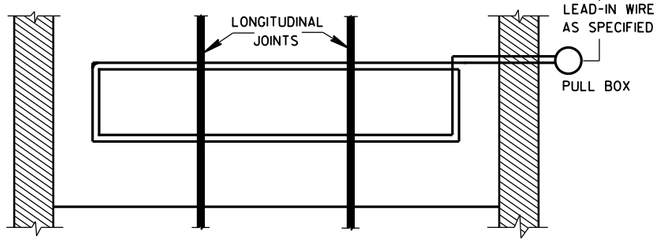
FRONT VIEW

LOOP WIRE INSTALLATION ACROSS
PAVEMENT JOINT OR CRACK



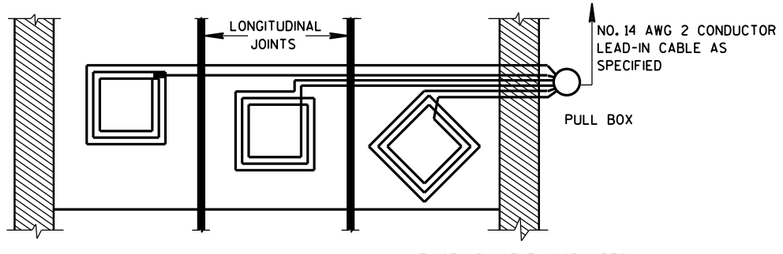
LOOP WIRE LAY
CONSTRUCTION DETAILS

SINGLE LANE LOOP DETECTION



LOOP WIRE LAY
CONSTRUCTION DETAILS

MULTIPLE LANE MASS LOOP DETECTION



LOOP WIRE LAY
CONSTRUCTION DETAILS

MULTIPLE LANE DETECTION BY
INDIVIDUAL LANES, TYPICAL TYPE LOOPS

DETAILS FOR THE INSTALLATION OF TEMPORARY TRAFFIC SIGNAL LOOP DETECTOR WIRES IN ANY EXISTING PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

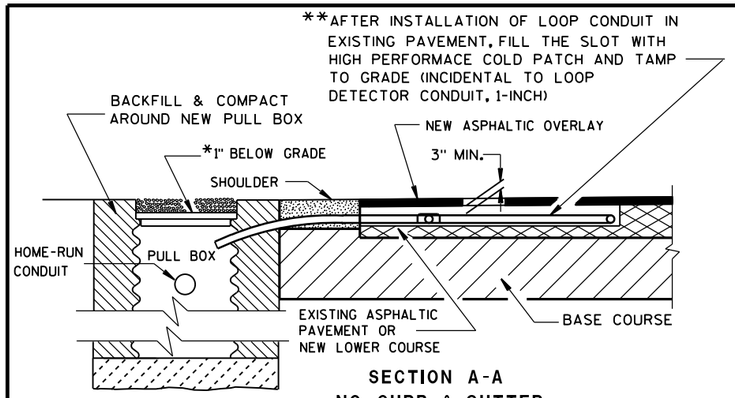
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June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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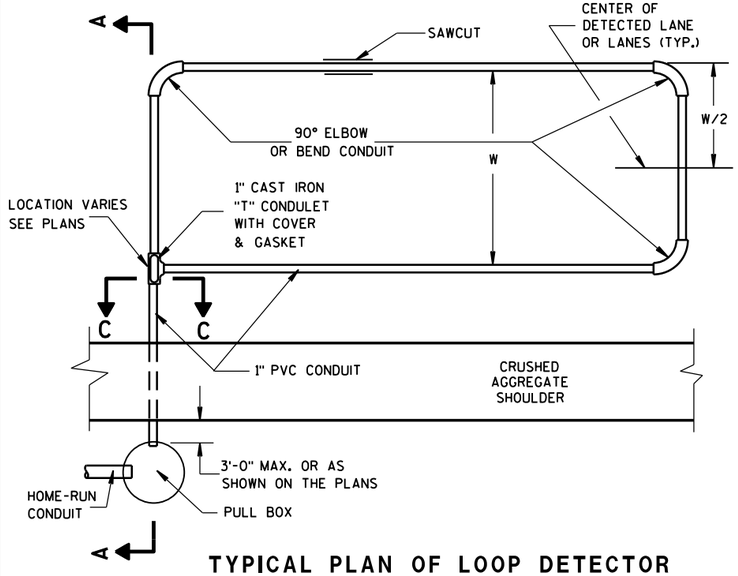


SECTION A-A

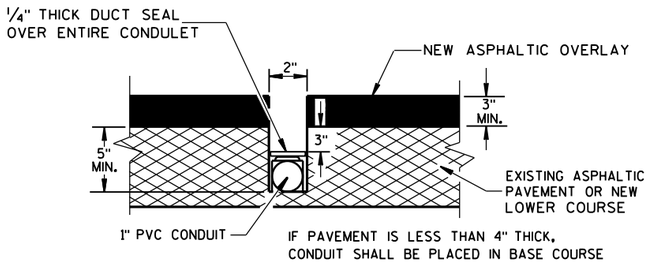
NO CURB & GUTTER

LOOP DETECTOR 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



SIDE VIEW

SECTION C-C

LOOP DETECTOR SLOT DETAIL

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 LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER 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.

BEFORE PLACING THE 1 INCH CONDUIT IN THE CLEANED OUT SLOT, PLACE SOME OF THE TAR OR EPOXY SEALANT IN THE SLOT TO A DEPTH OF APPROXIMATELY ½ INCH. IF THE CONDUIT MUST BE PLACED IN THE BASE COURSE, DO NOT PLACE THE TAR OR EPOXY SEALANT IN THE SLOT.

ONCE THE 2" LOOP SLOT HAS BEEN CHIPPED OUT, THE LOOP INSTALLATION SHALL BE COMPLETED PRIOR TO OPENING THE LANE(S) TO TRAFFIC.

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.

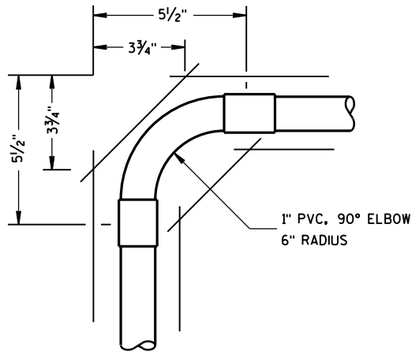
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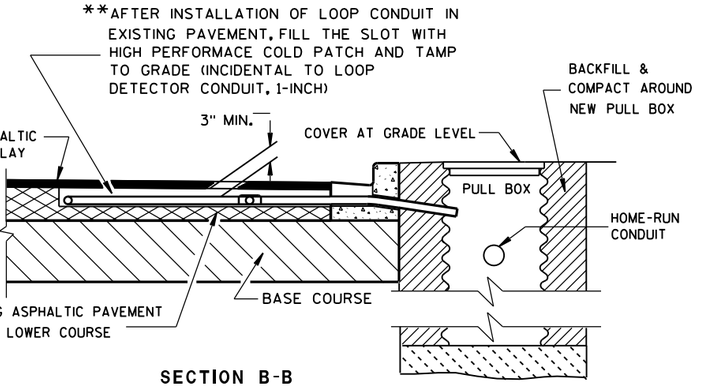
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TOP VIEW

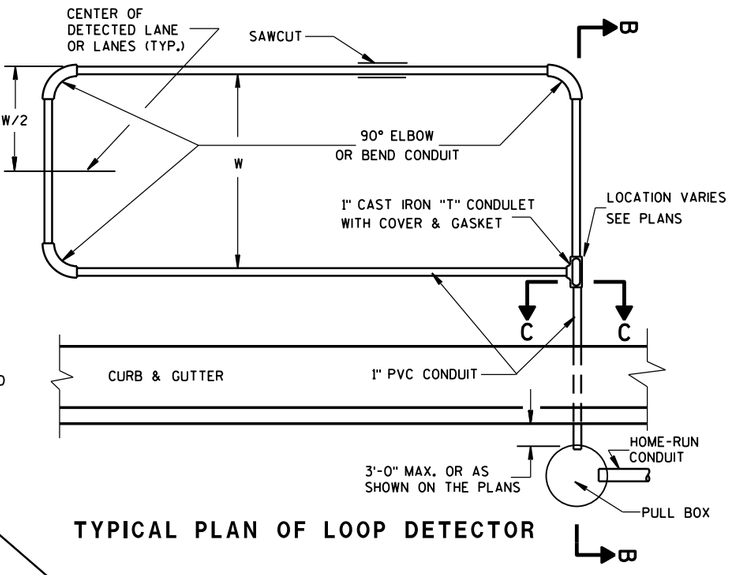
CORNER SAW SLOT DETAIL



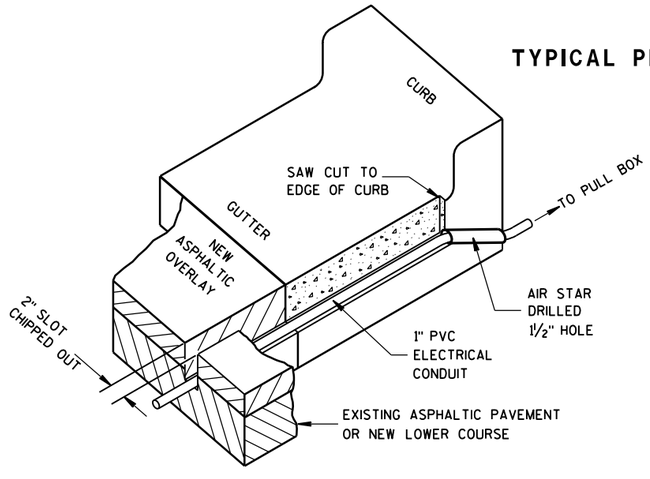
SECTION B-B

CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL



TYPICAL PLAN OF LOOP DETECTOR



ISOMETRIC VIEW

TYPICAL SAW CUT DETAIL FOR LEAD-IN CONDUIT

LOOP DETECTOR INSTALLED IN EXISTING OR NEW ASPHALTIC PAVEMENT WITH NEW ASPHALTIC OVERLAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

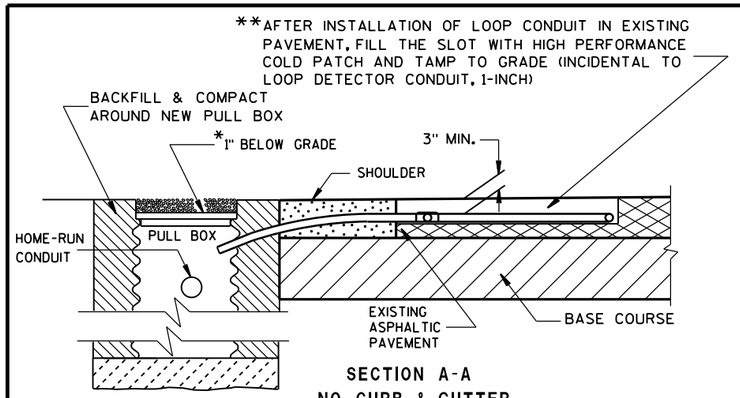
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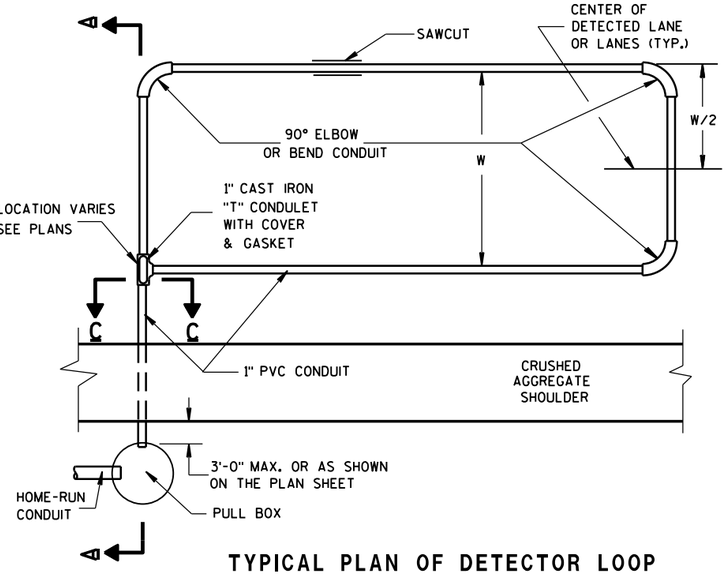
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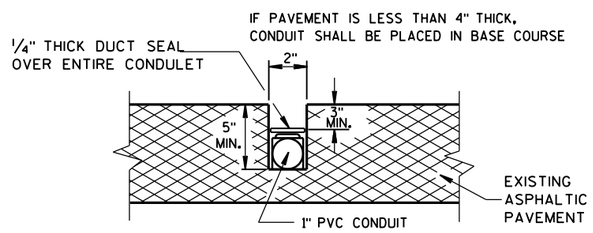
SECTION A-A
NO CURB & GUTTER

TYPICAL PLAN OF LOOP DETECTOR

*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 DETECTOR LOOP



SIDE VIEW
SECTION C-C

LOOP DETECTOR SLOT DETAIL

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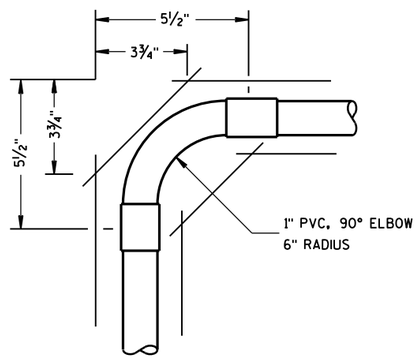
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IN THE EVENT THAT THE EXISTING PAVEMENT IS MORE THAN 5 INCHES THICK, AND THEREFORE , THE 1 INCH CONDUIT DOES NOT REQUIRE INSTALLATION BELOW THE PAVEMENT INTO THE BASE COURSE, PLACE SOME OF THE TAR OR EPOXY SEALANT IN THE SLOT TO A DEPTH OF APPROXIMATELY 1/2 INCH BEFORE INSTALLATION OF THE CONDUIT. IF THE CONDUIT MUST BE PLACED IN THE BASE COURSE, DO NOT PLACE THE TAR OR EPOXY SEALANT IN THE SLOT.

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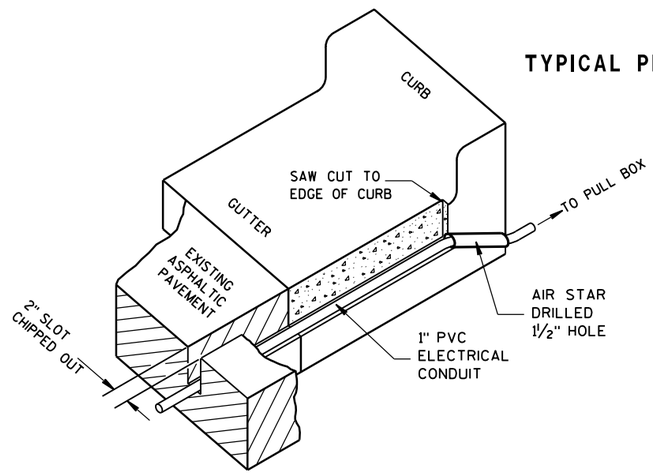
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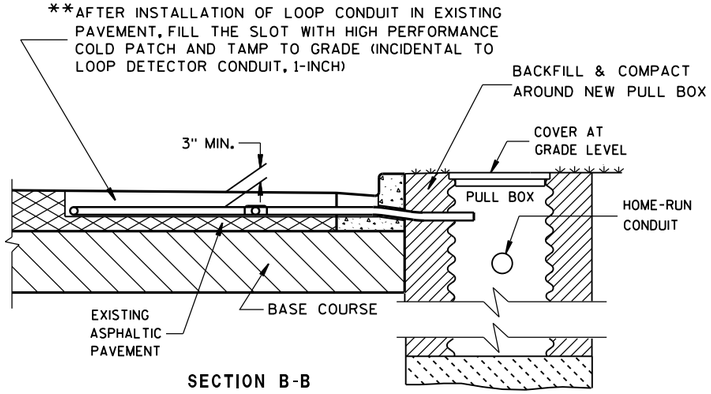
TOP VIEW

CORNER SAW SLOT DETAIL



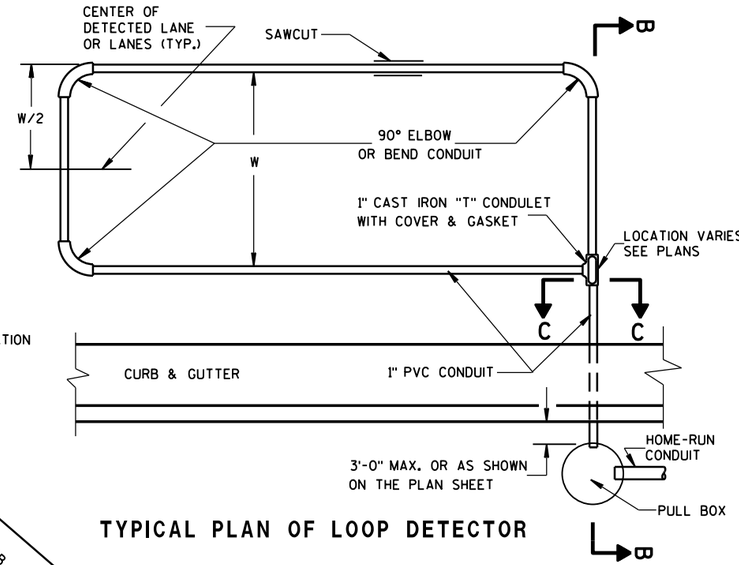
ISOMETRIC VIEW

TYPICAL SAW CUT DETAIL FOR LEAD-IN CONDUIT



SECTION B-B
CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL



TYPICAL PLAN OF LOOP DETECTOR

LOOP DETECTOR INSTALLED IN EXISTING ASPHALTIC PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 394
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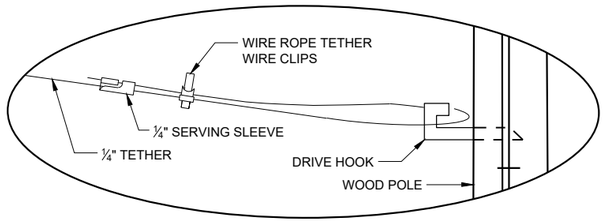
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MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

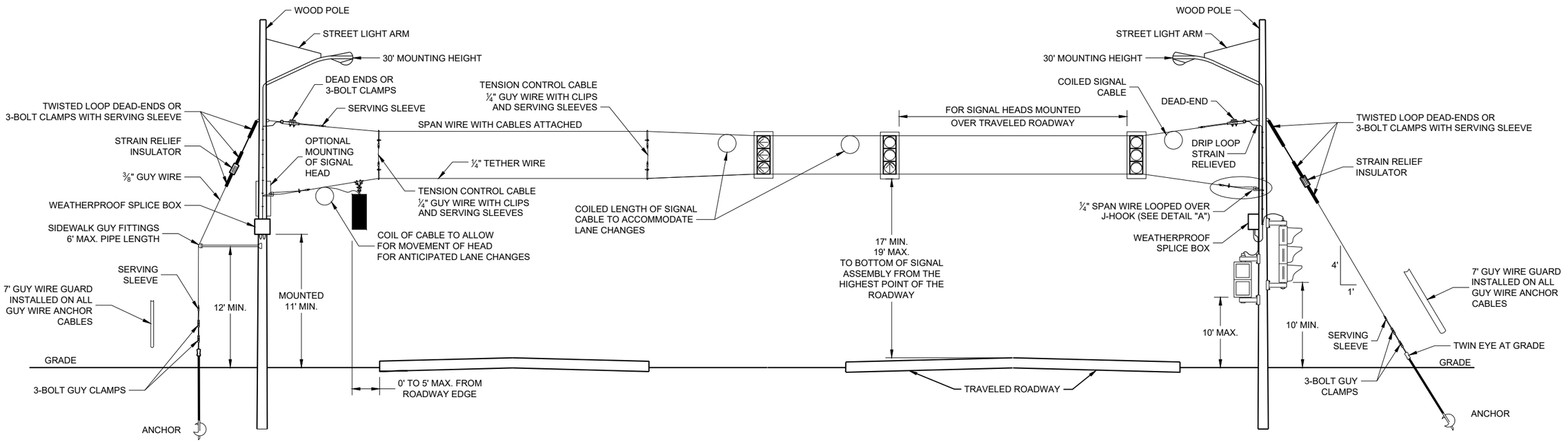


DETAIL "A"

GENERAL NOTES

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1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.
2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBLY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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June 2015
DATE
/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI 395
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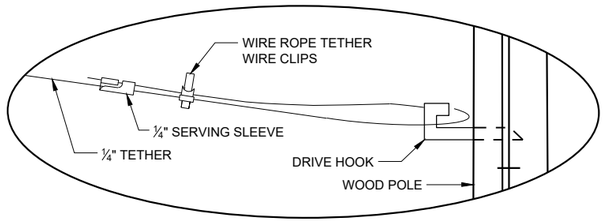
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MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
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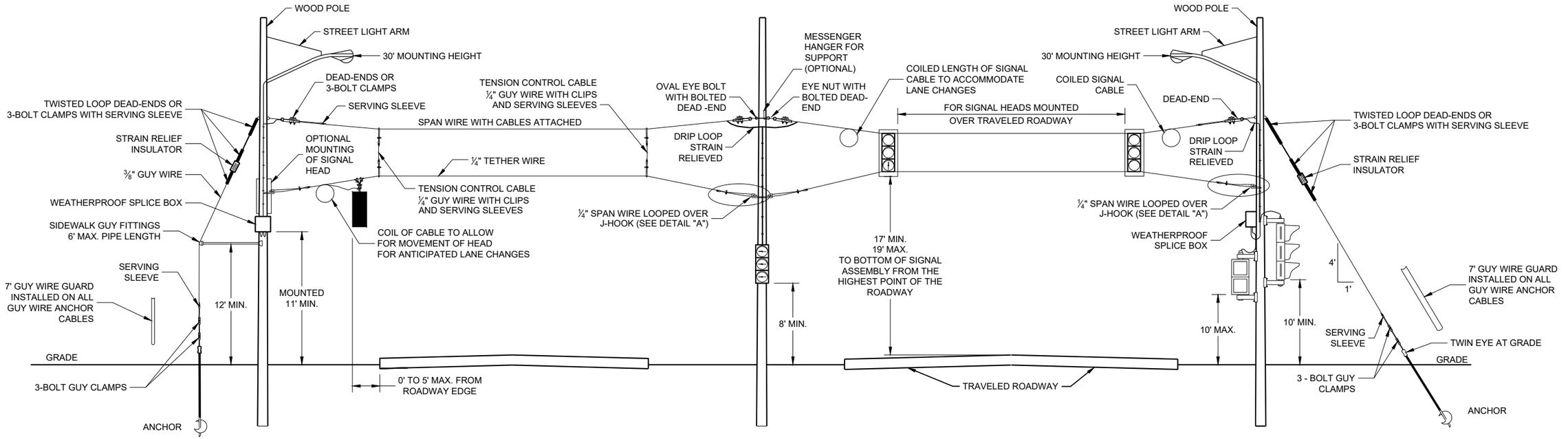


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SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

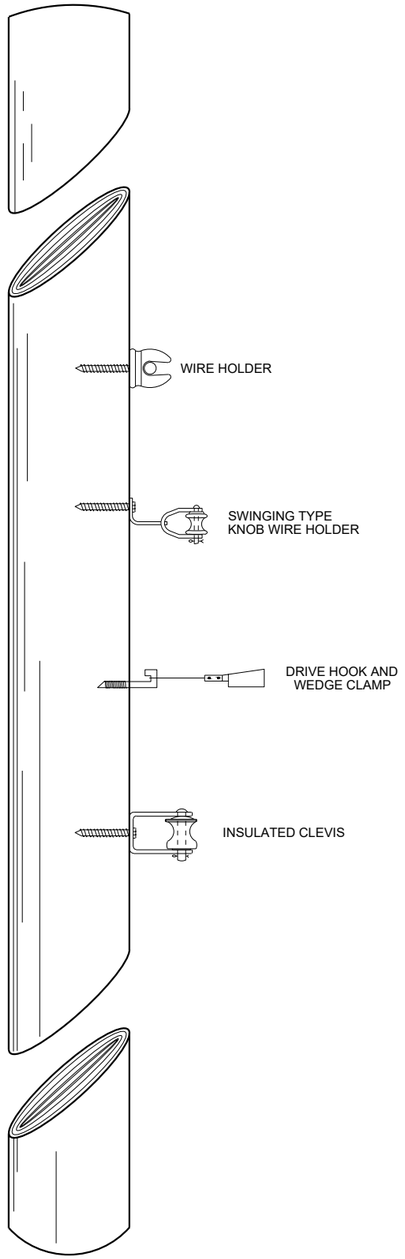
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

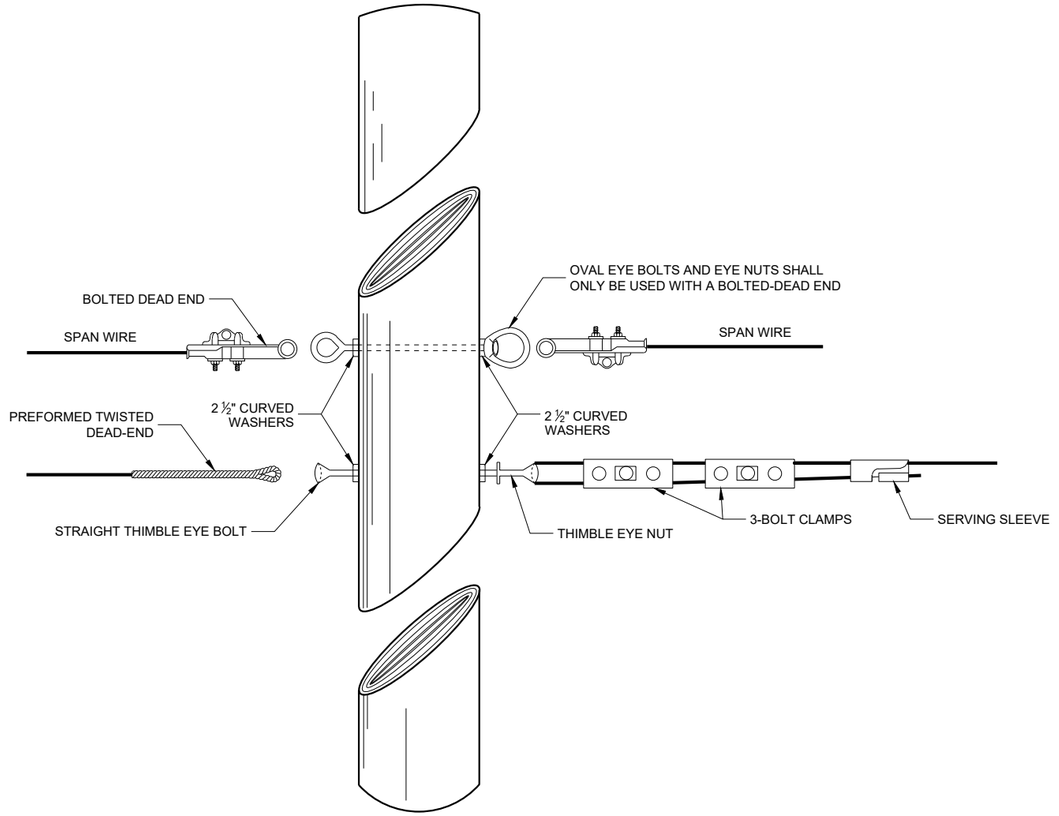
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June 2015
DATE
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SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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June 2015
DATE

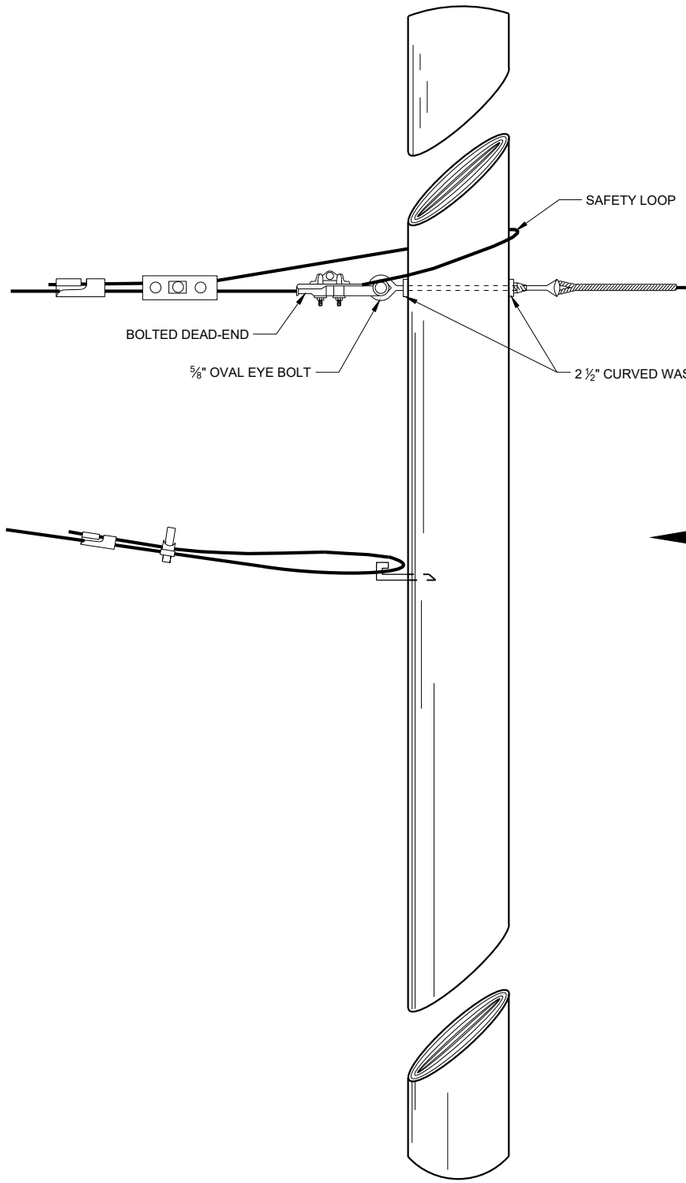
/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

FHWA

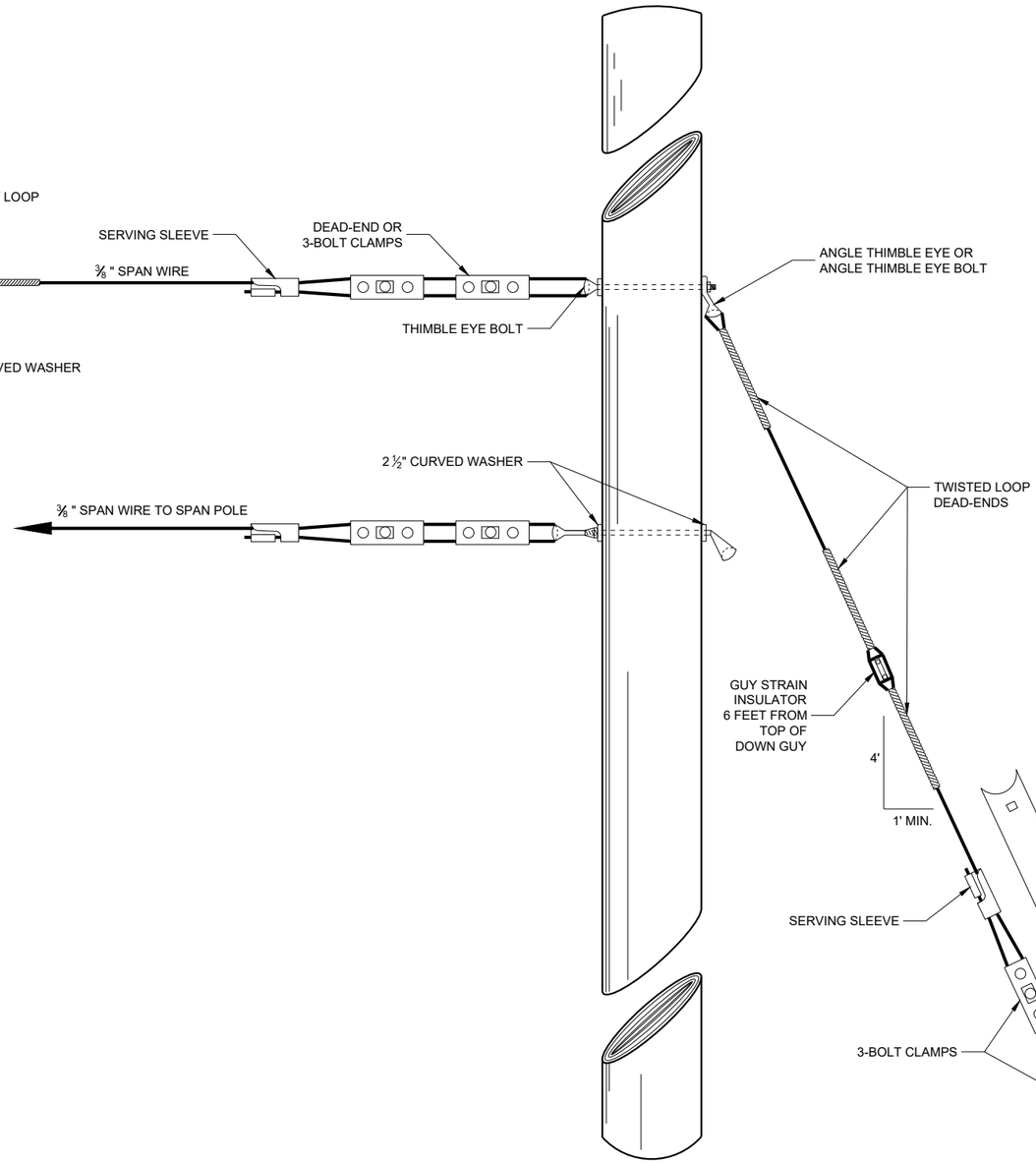
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GENERAL NOTES

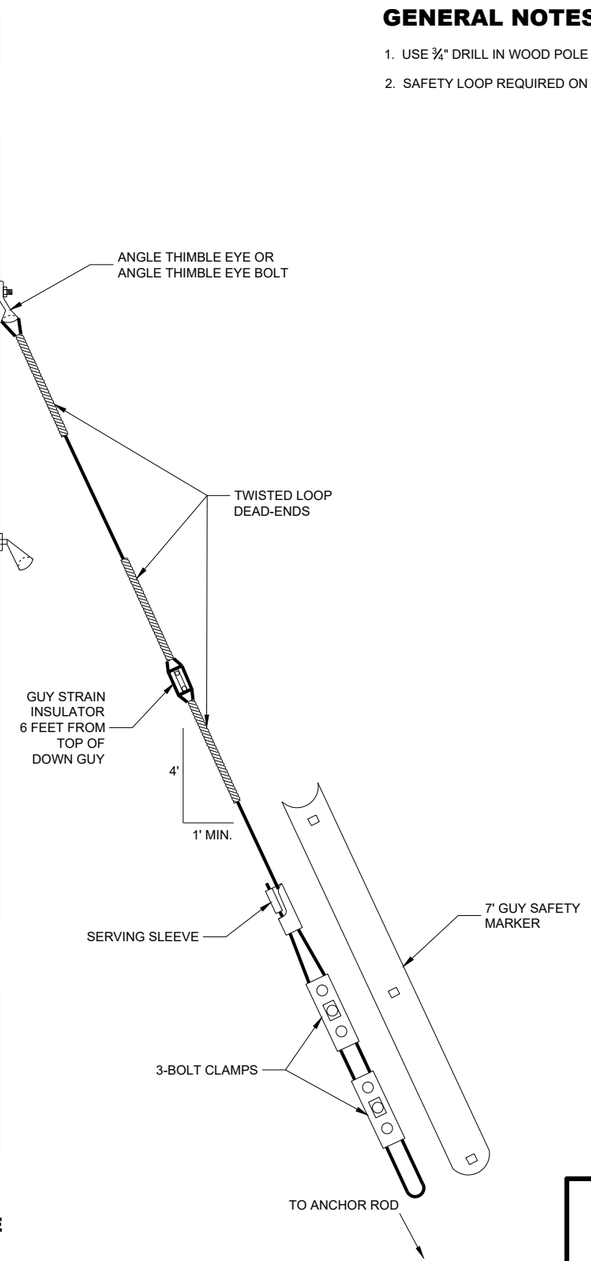
1. USE ¾" DRILL IN WOOD POLE TO PROVIDE FOR ⅝" BOLTS.
2. SAFETY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.



SPAN WIRE POLE



GUY POLE



TYPICAL DEAD-ENDINGS OR GUYING

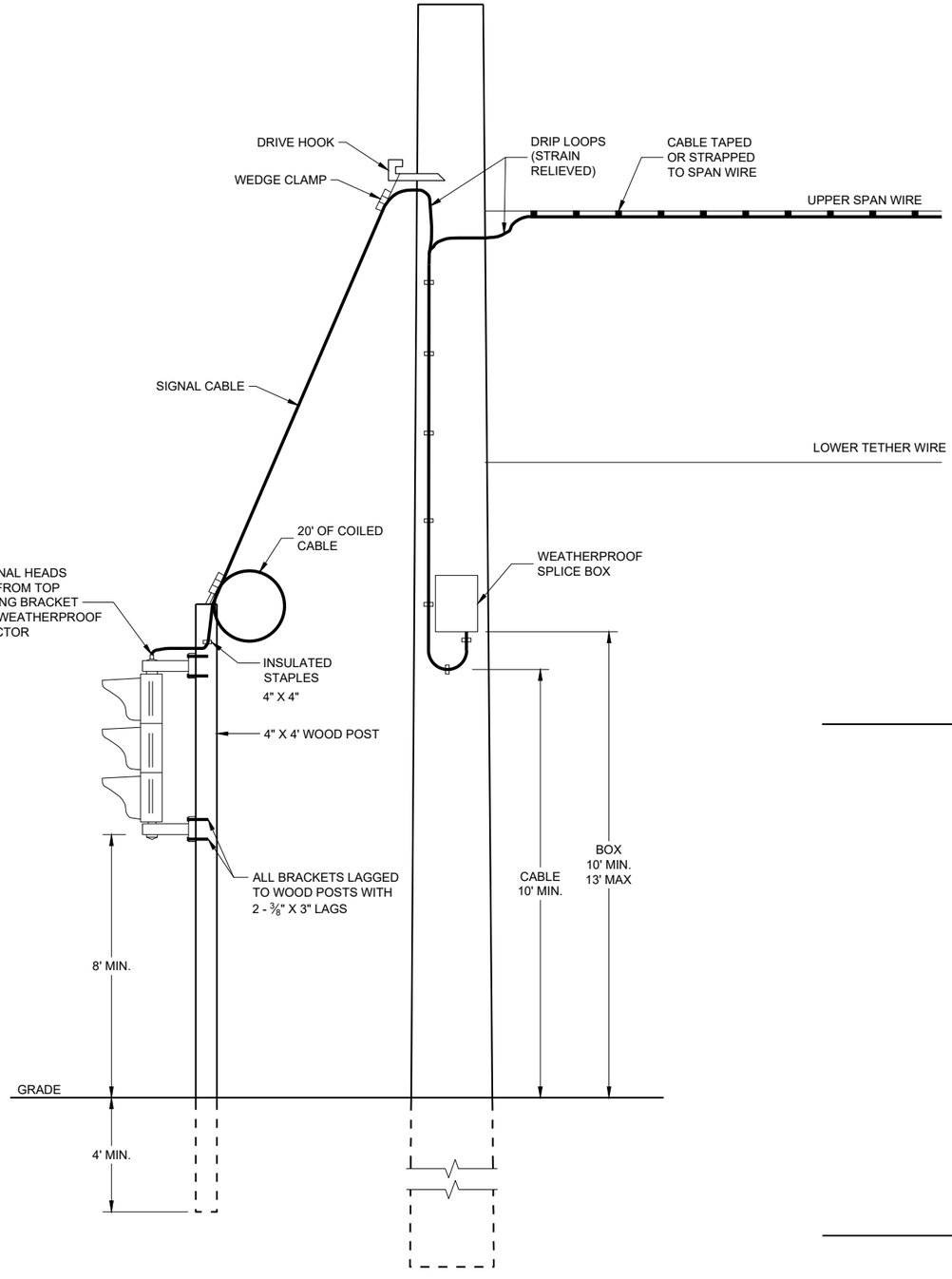
SPAN WIRE TEMPORARY TRAFFIC SIGNAL

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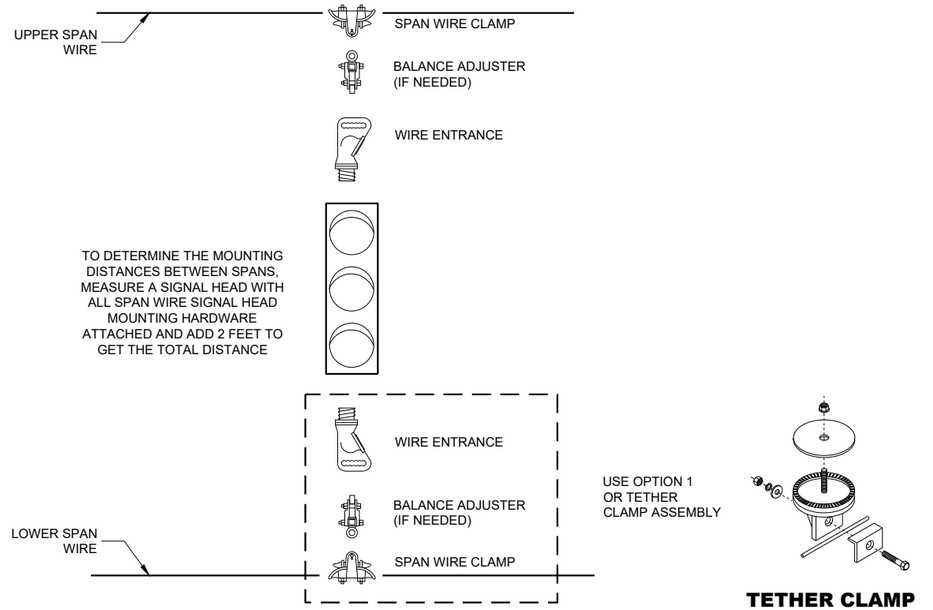
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June 2015 — DATE
/S/ Ahmet Demerbilek — ROADWAY STANDARDS DEVE ENGINEER
FHWA

6

SDD 09G01 - 4e



TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL

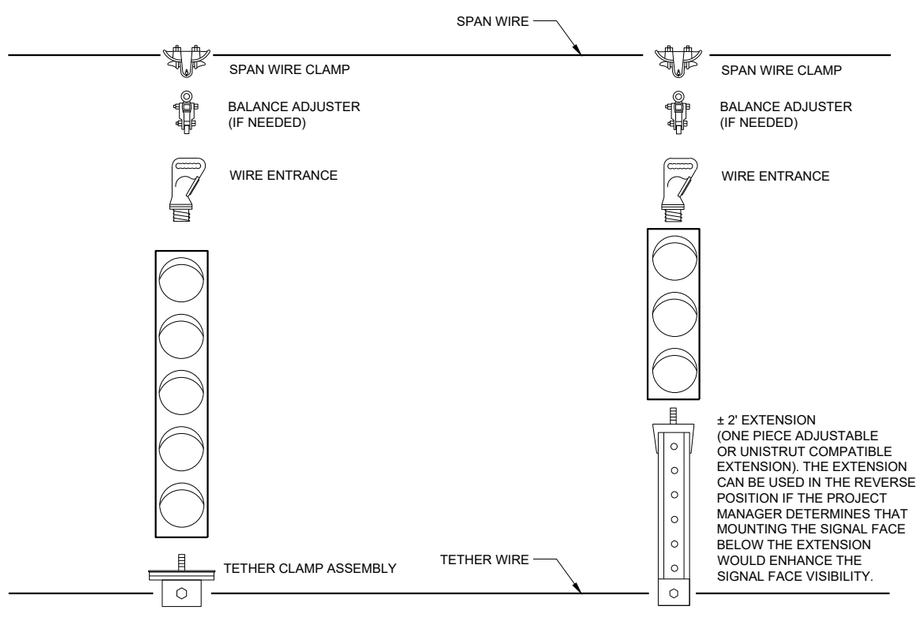


OPTION 1

USE OPTION 1 OR TETHER CLAMP ASSEMBLY

TETHER CLAMP ASSEMBLY OPTION

TYPICAL SPAN WIRE MOUNTING HARDWARE



5 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN WIRE

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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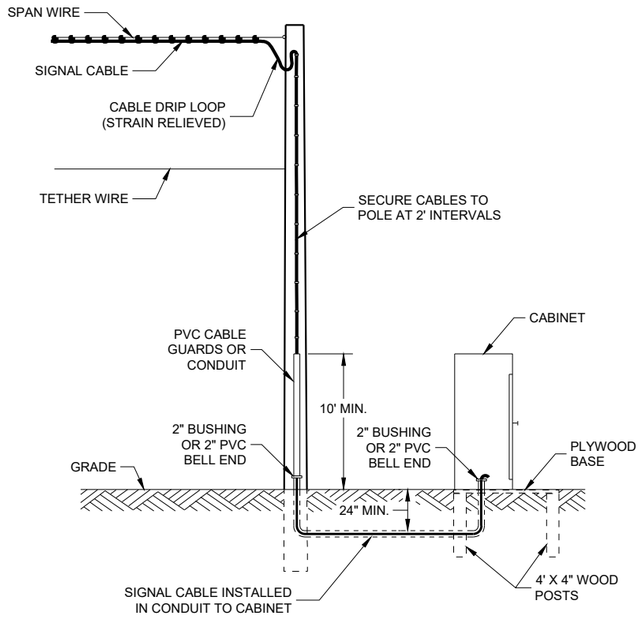
June 2015
DATE

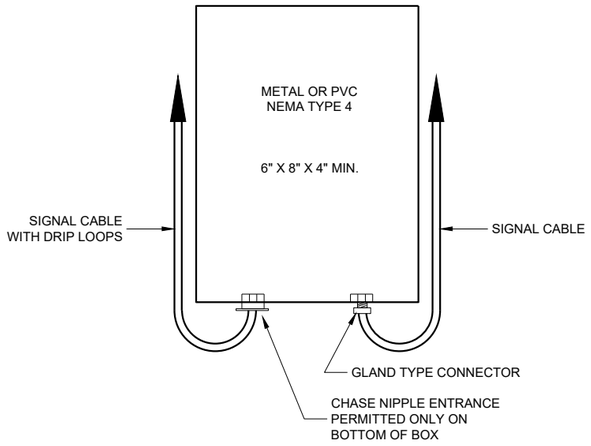
/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

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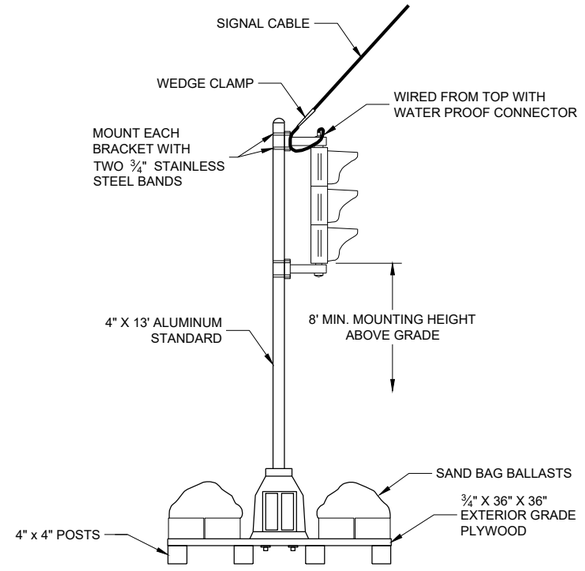
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SDD 09G01 - 4f

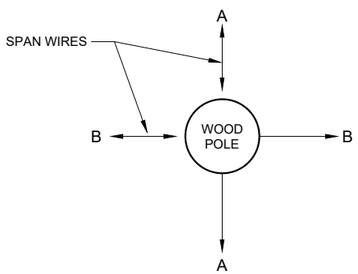




SPLICE BOX

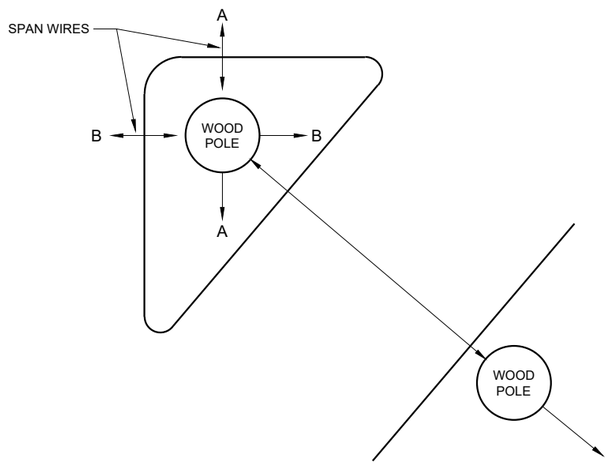


TYPICAL SKID TYPE TEMPORARY

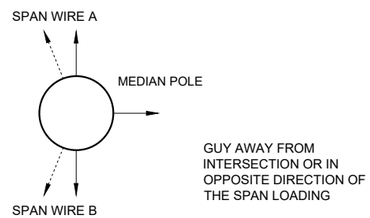


ALL DOWN OR SIDEWALK GUYS
SHALL BE INSTALLED IN THE
OPOSITE DIRECTION OF THE
STRAIN OF THE SPAN WIRE

CORNER POLES



ISLAND POLES



GUY AWAY FROM
INTERSECTION OR IN
OPPOSITE DIRECTION OF
THE SPAN LOADING

MEDIAN POLES

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
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APPROVED
June 2015
DATE

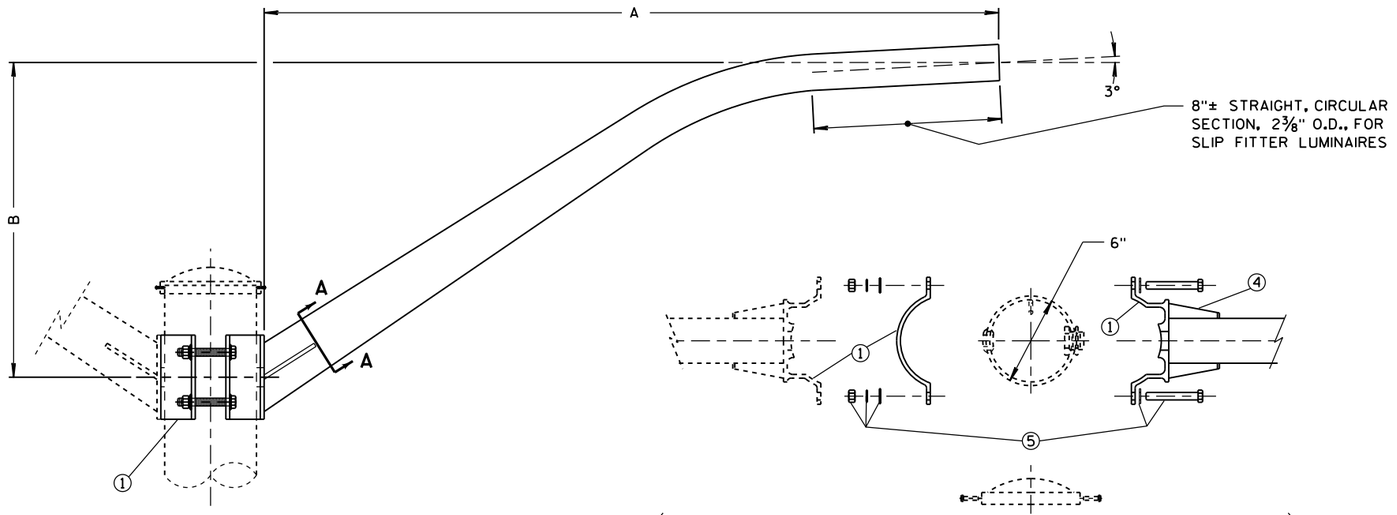
/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

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400

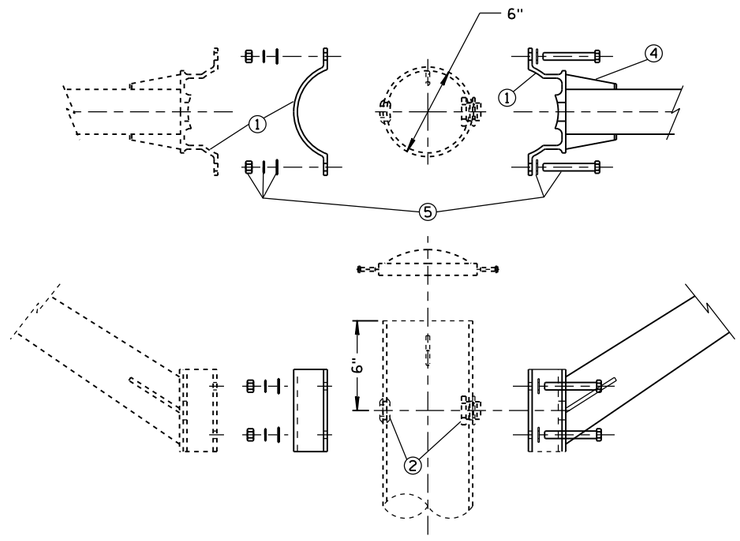
6

SDD 09G01 - 4g



LUMINAIRE ARMS, SINGLE MEMBER, 6-INCH CLAMP - FOR POLES, TYPE 7, A OR E

VARIOUS LENGTHS (SEE TABLE)



CLAMP ASSEMBLY

SINGLE MEMBER CLAMP SHOWN

TYPE	DIM. A NOMINAL ARM LENGTH (FT)	DIM. B APPROX. RISE (FT)
SINGLE MEMBER	4.0	2.0
SINGLE MEMBER	8.0	3.0
SINGLE MEMBER	10.0	3.0
SINGLE MEMBER	15.0	3.0

GENERAL NOTES

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

ARMS AND CLAMP EXTRUSIONS SHALL BE CONSTRUCTED OF NATURAL FINISH 6063-T6 ALUMINUM.

HEAT TREATMENT OF WELDS IN STRUCTURAL AREAS IS REQUIRED.

ALL THREADED FASTENER COMPONENTS SHALL BE STAINLESS STEEL. NUTS SHALL BE HEX NUTS. BOLTS SHALL BE HEX HEAD. ALL THREADED SURFACES SHALL BE COATED WITH ANTI-SEIZE COMPOUND PRIOR TO INSTALLATION.

LUMINAIRE LOADING FOR DESIGN CALCULATION SHALL BE 50 LBS. IN WEIGHT AND 1.5 SQ. FT. FOR E.P.A..

① CLAMPS SHALL BE EXTRUDED ALUMINUM.

② RACE WAY: 1 3/8" FIELD DRILLED HOLE WITH 1" CHASE NIPPLE AND NUT (OR NEOPRENE GROMMET) PER EACH REQUIRED LUMINAIRE ARM. PROVIDE 1 1/2" HOLE IN CLAMP EXTRUSION TO CONTINUE RACEWAY.

③ STIFFENER

④ GUSSETS REQUIRED.

⑤ CLAMP BOLT ASSEMBLY (BOLT - 1/2"-13 UNC, 2 EACH - FLAT WASHER, LOCK WASHER, NUT) - 4 EACH PER CLAMP.

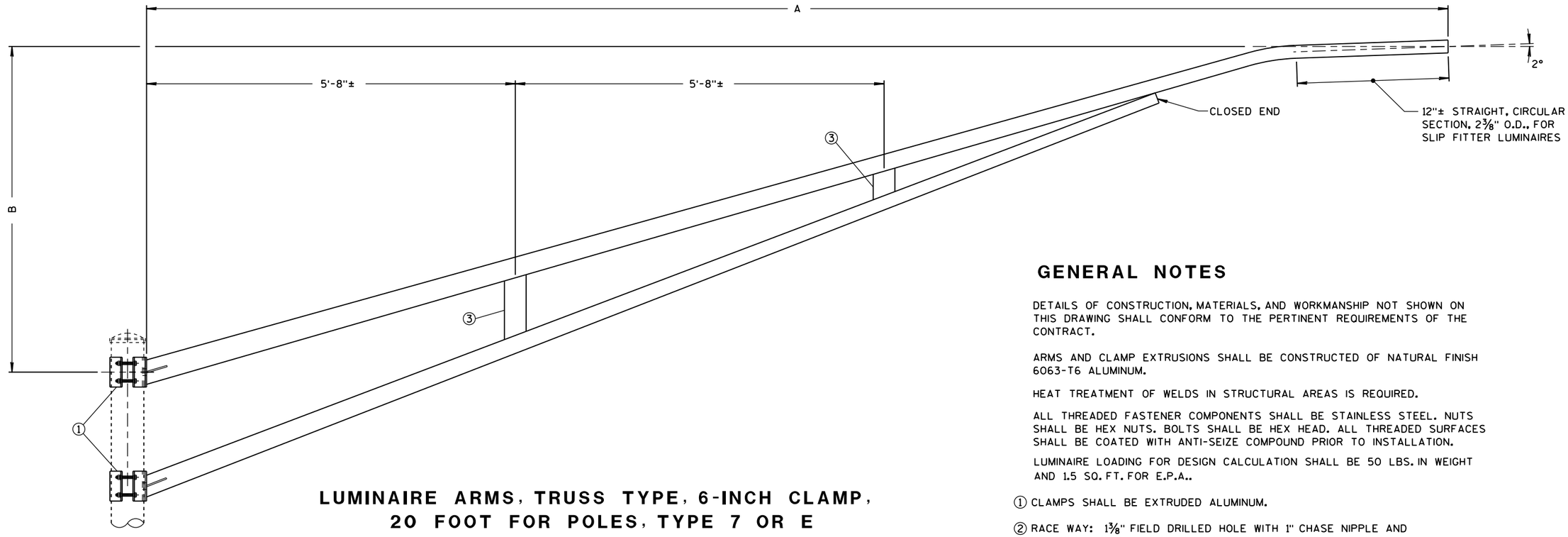
LUMINAIRE ARMS, SINGLE MEMBER 6-INCH CLAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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S.D.D. 10 A 18-5a



LUMINAIRE ARMS, TRUSS TYPE, 6-INCH CLAMP, 20 FOOT FOR POLES, TYPE 7 OR E

UPPER AND LOWER TRUSS CHORD CLAMPS SIMILIAR

TYPE	DIM. A NOMINAL ARM LENGTH (FT)	DIM. B APPROX. RISE (FT)
TRUSS TYPE	20.0	5.0

GENERAL NOTES

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

ARMS AND CLAMP EXTRUSIONS SHALL BE CONSTRUCTED OF NATURAL FINISH 6063-T6 ALUMINUM.

HEAT TREATMENT OF WELDS IN STRUCTURAL AREAS IS REQUIRED.

ALL THREADED FASTENER COMPONENTS SHALL BE STAINLESS STEEL. NUTS SHALL BE HEX NUTS. BOLTS SHALL BE HEX HEAD. ALL THREADED SURFACES SHALL BE COATED WITH ANTI-SEIZE COMPOUND PRIOR TO INSTALLATION.

LUMINAIRE LOADING FOR DESIGN CALCULATION SHALL BE 50 LBS. IN WEIGHT AND 1.5 SQ. FT. FOR E.P.A..

① CLAMPS SHALL BE EXTRUDED ALUMINUM.

② RACE WAY: 1⅜" FIELD DRILLED HOLE WITH 1" CHASE NIPPLE AND NUT (OR NEOPRENE GROMMET) PER EACH REQUIRED LUMINAIRE ARM. PROVIDE 1½" HOLE IN CLAMP EXTRUSION TO CONTINUE RACEWAY. NOTE: NO RACEWAY ON LOWER TRUSS CORD CLAMP. FOR INFORMATION ONLY.

③ STIFFENER.

④ GUSSETS REQUIRED.

⑤ CLAMP BOLT ASSEMBLY (BOLT - ½"-13 UNC, 2 EACH - FLAT WASHER, LOCK WASHER, NUT) - 4 EACH PER CLAMP.

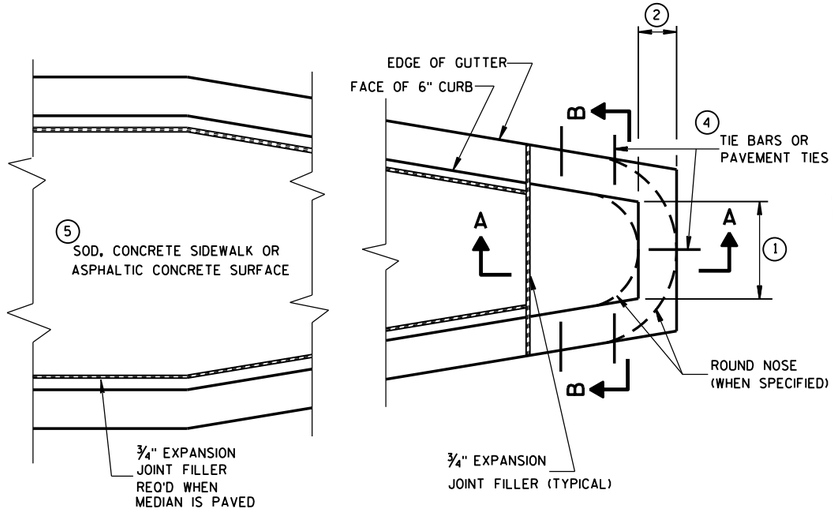
LUMINAIRE ARMS, TRUSS TYPE 6-INCH CLAMP

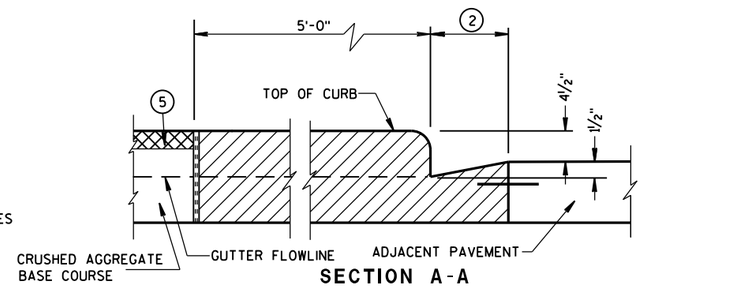
STATE OF WISCONSIN
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Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 10 A 18-5b





CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

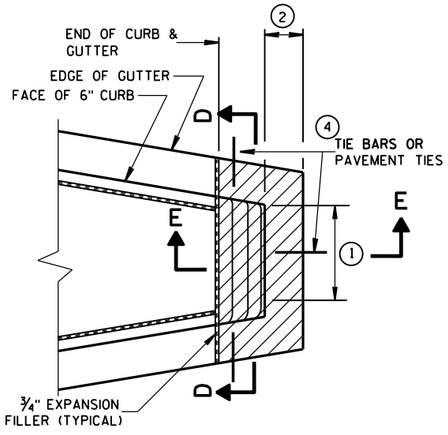
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

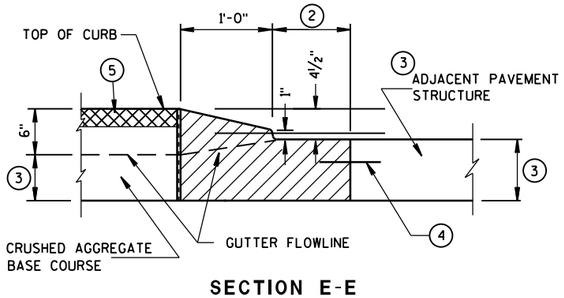
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

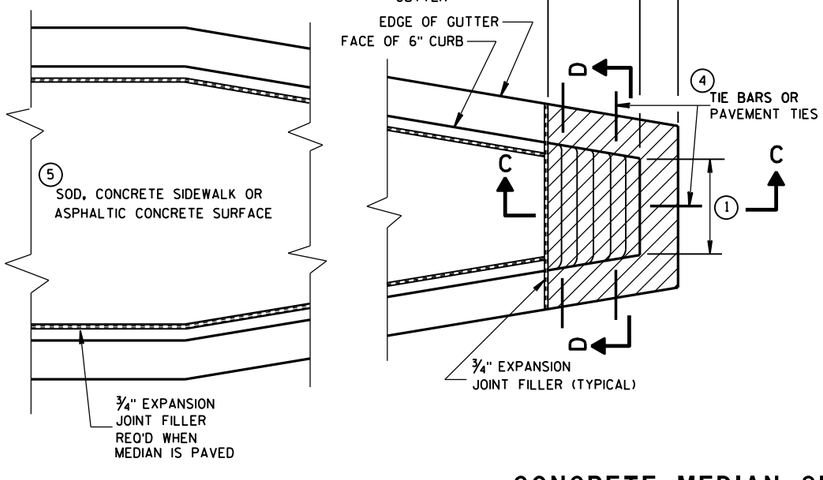
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

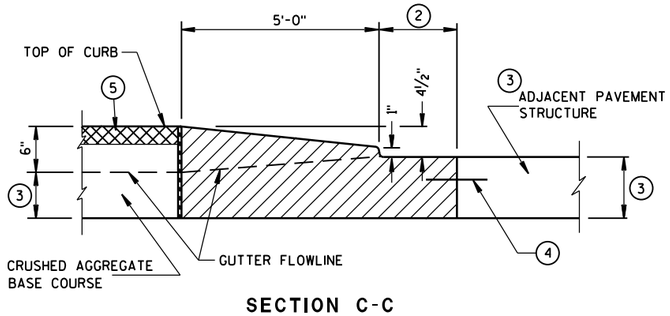




SECTION E-E

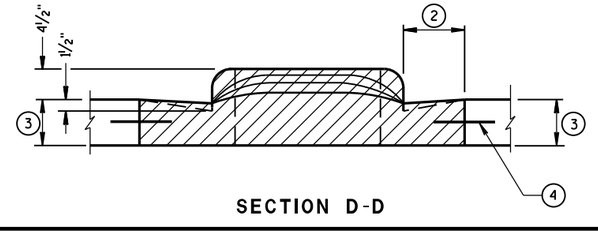
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE

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6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER
FHWA

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S.D.D. 11 B 2-2

6

S.D.D. 11 B 2-2

(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.

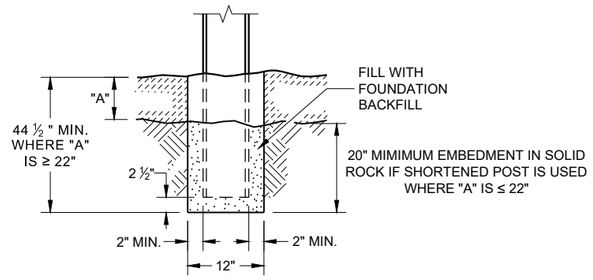
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL 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).

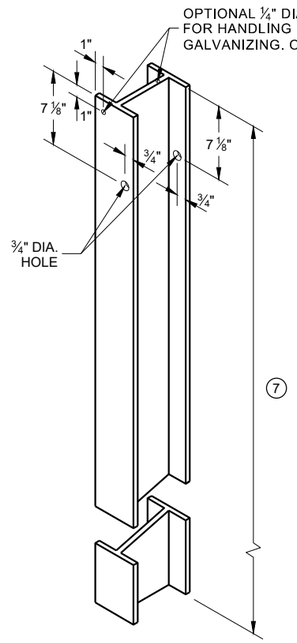
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS +1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

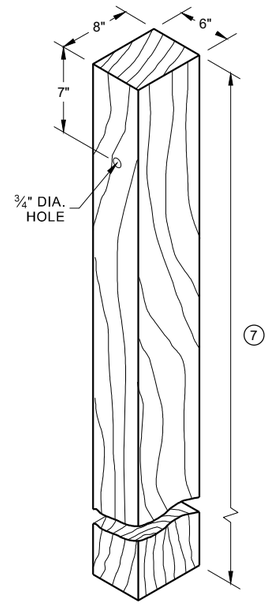
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



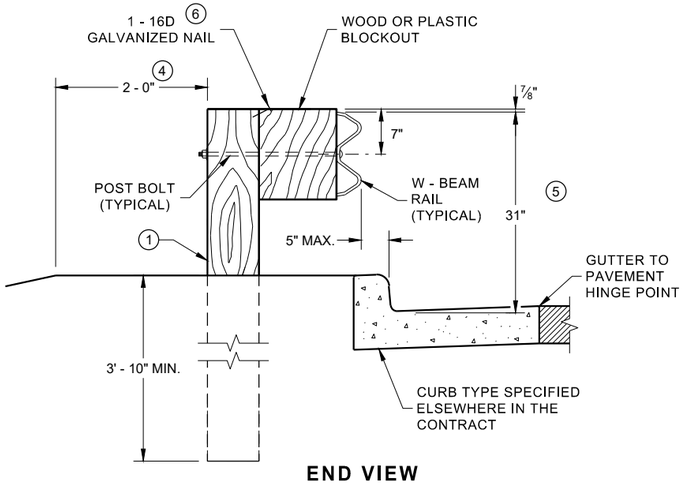
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



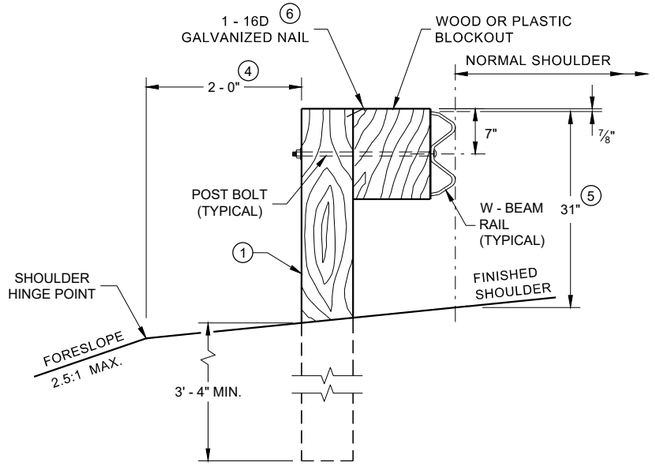
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



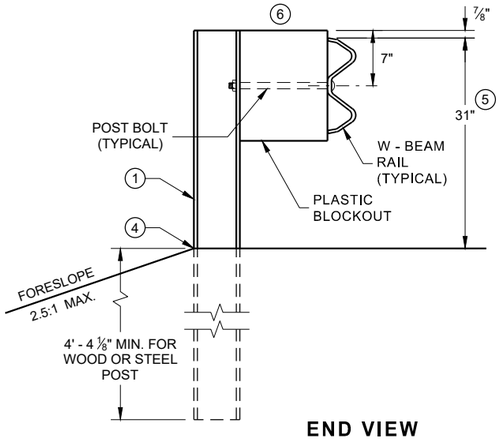
WOOD POST (6" X 8") NOMINAL (1)



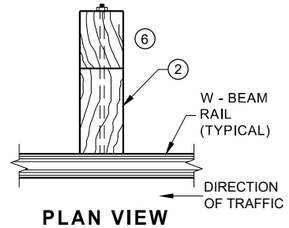
END VIEW
LOCATED ALONG A CURBED ROADWAY



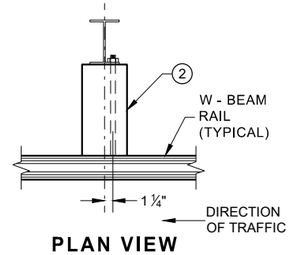
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



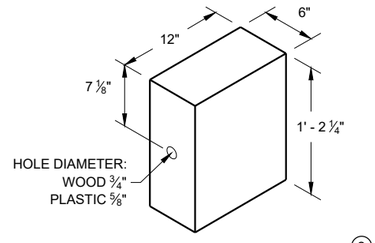
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

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DEPARTMENT OF TRANSPORTATION

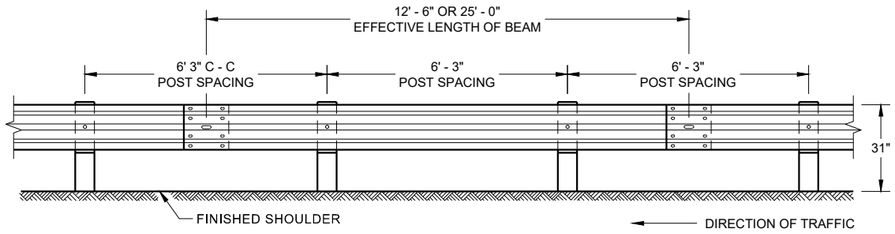
404

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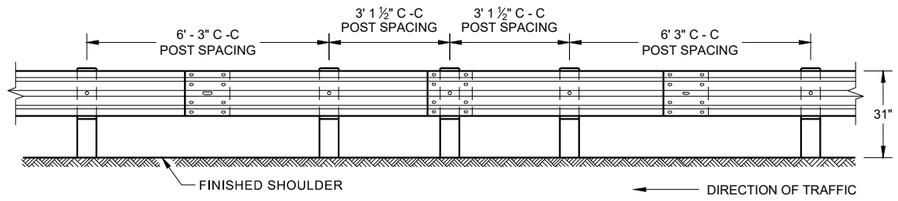
SDD 14B42 - 06a

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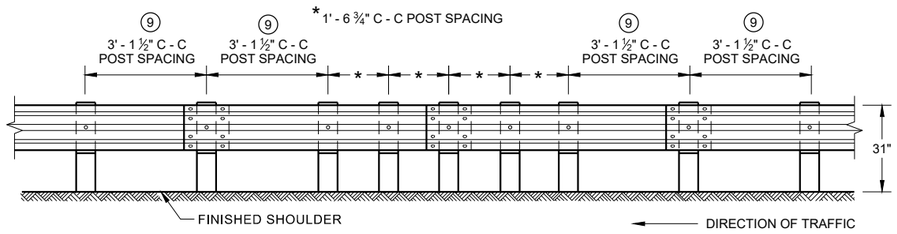
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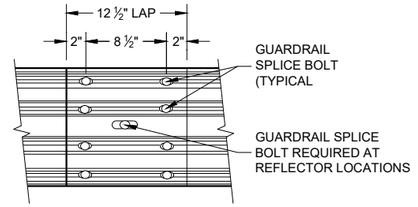
FRONT VIEW
POST SPACING STANDARD INSTALLATION



FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

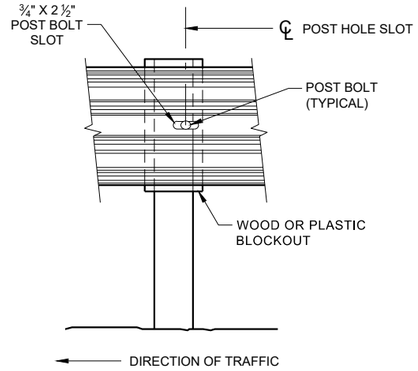
GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.

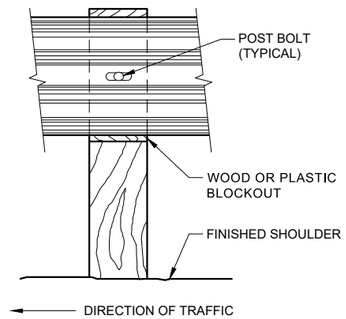
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ¾" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

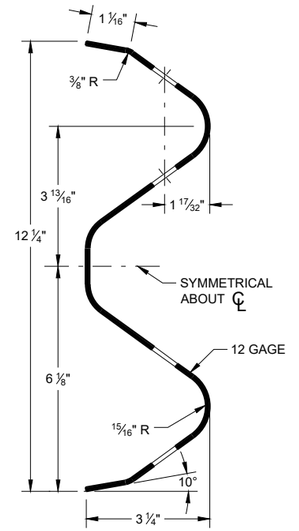
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



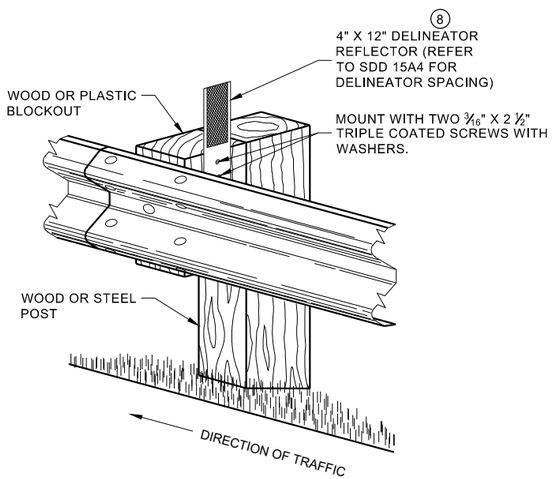
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



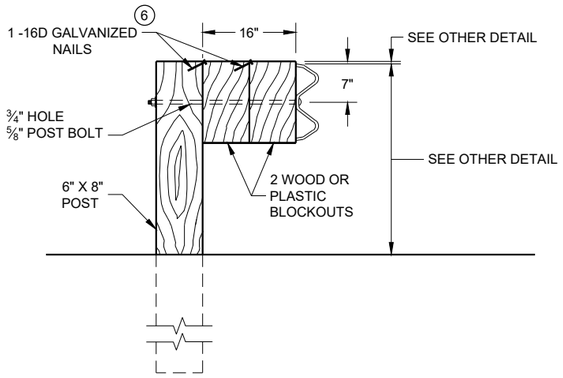
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B42 - 06b

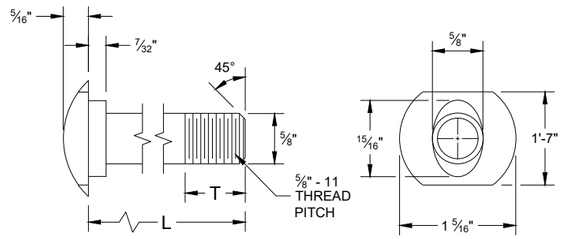


DETAIL FOR 16" BLOCKOUT DEPTH

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.

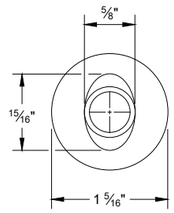
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3⁄16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

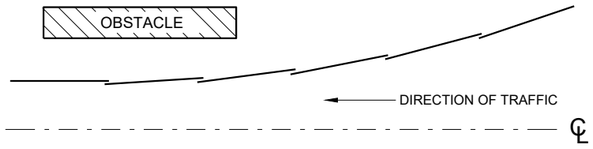


POST BOLT TABLE

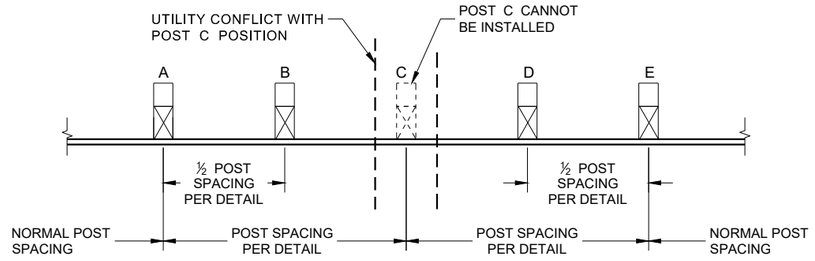
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



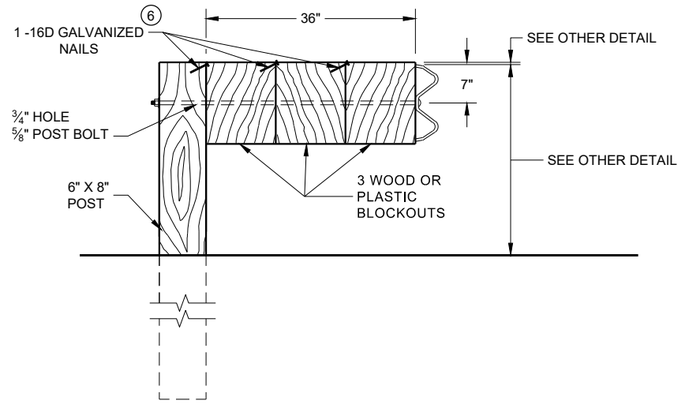
ALTERNATE BOLT HEAD



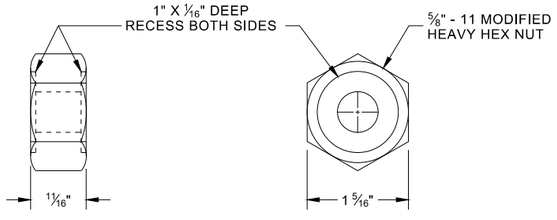
PLAN VIEW
BEAM LAPPING DETAIL



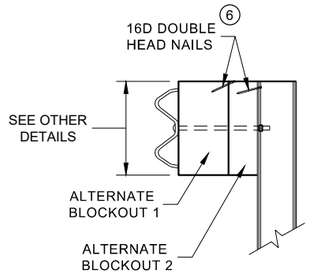
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



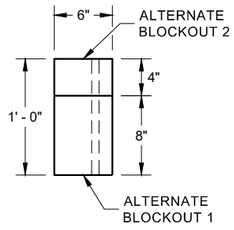
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

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.

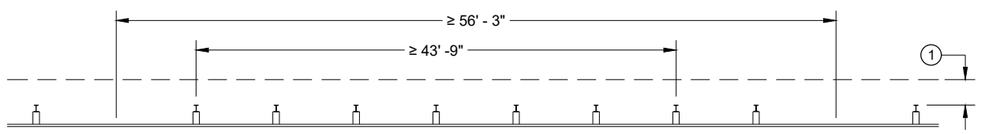
(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

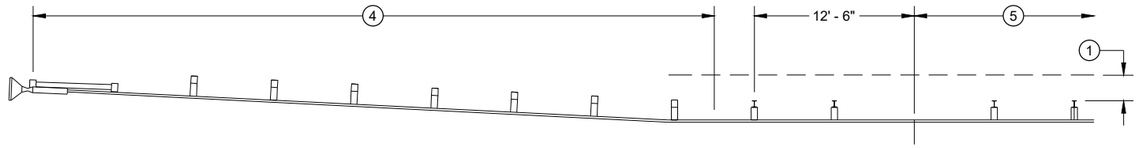
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

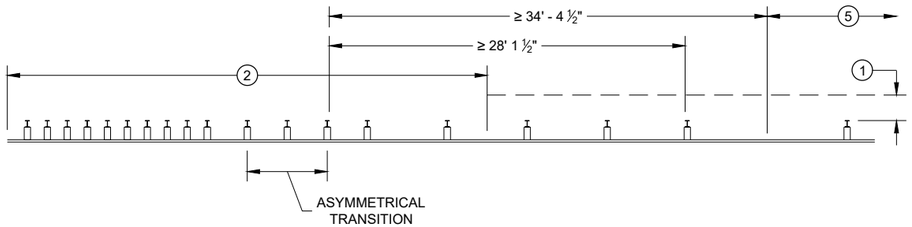
SDD 14B42 - 06c



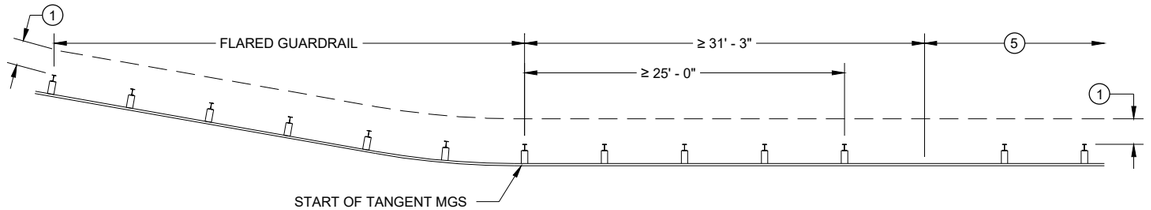
MISSING POST IN NORMAL BEAM GUARD RUN



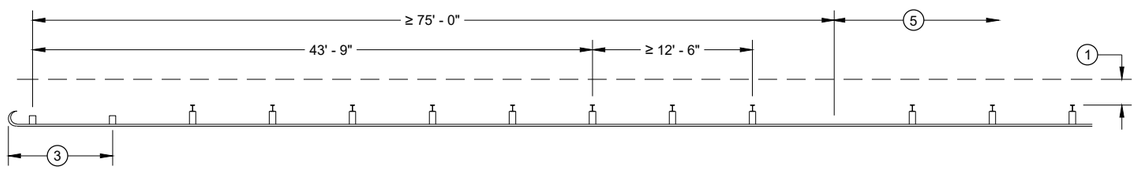
MISSING POST IN NORMAL BEAM GUARD RUN NEAR EAT



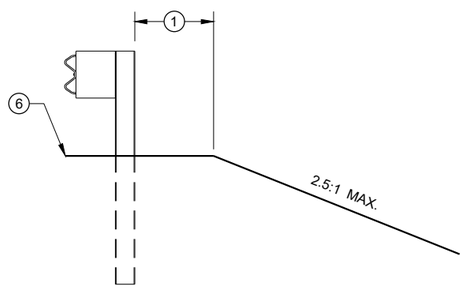
MISSING POST NEAR APPROACH THRIE BEAM TRANSITION



MISSING POST IN NORMAL BEAM GUARD RUN NEAR FLARED BEAM GUARD



MISSING POST IN NORMAL BEAM GUARD RUN NEAR TYPE 2 TERMINAL



CROSS SECTION VIEW

1. MINIMUM OF 2 FEET OF GRADING BEHIND POST.
2. SEE SDD 14B45 FOR MORE DETAILS.
3. SEE SDD 14B47 FOR MORE DETAILS.
4. SEE SDD 14B44 FOR MORE DETAILS.
5. SEE MISSING POST IN NORMAL BEAM GUARD RUN FOR DISTANCE TO NEXT MISSING POST AND AREA FOR WELL DRAINED, COMPACTED SOILS.
6. SEE PLAN FOR SHOULDER DESIGN.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR
FHWA

6

SDD 14B42 - 06d

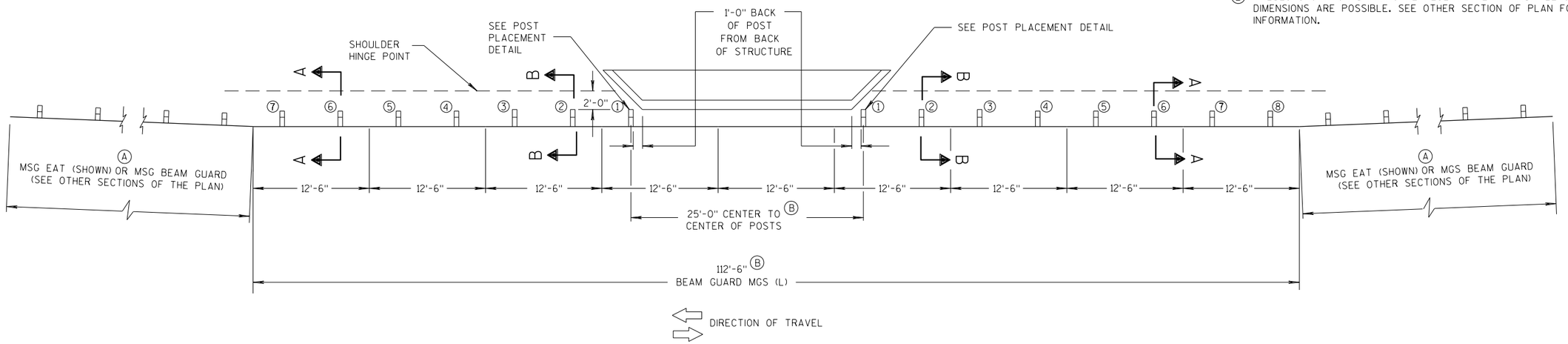
GENERAL NOTES

POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

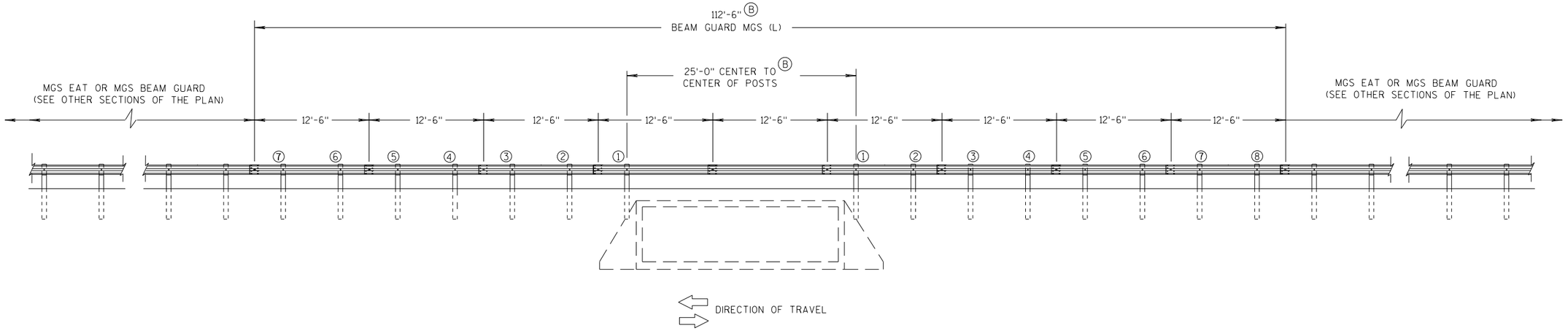
SEE SDD 14 B 42 FOR MORE DETAILS.

(A) FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.

(B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) TWO-WAY TRAFFIC

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	408

6
S.D.D. 14 B 43-4a

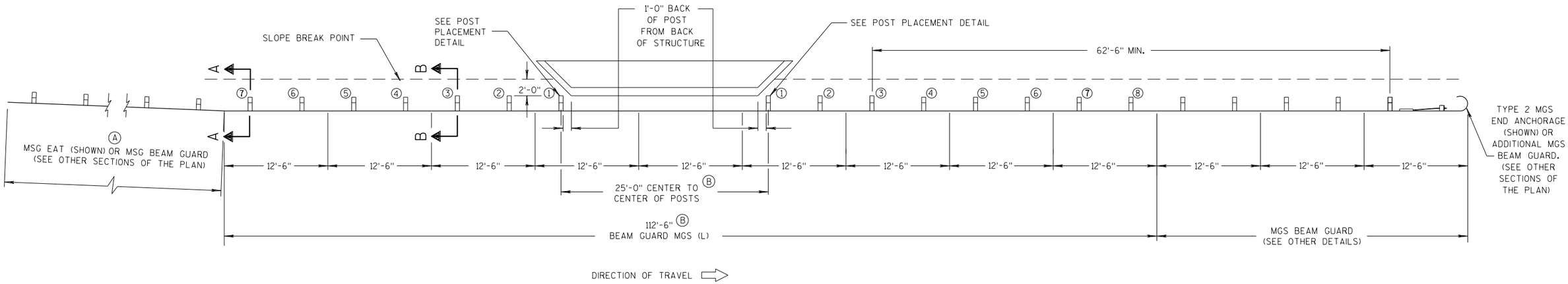
GENERAL NOTES

POSTS 1 THROUGH 3 ARE CRT POSTS.
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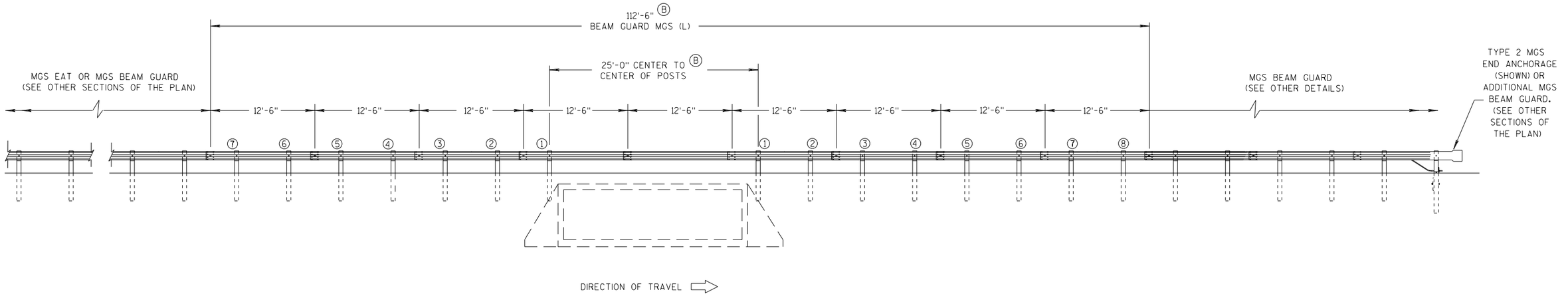
SEE SDD 14 B 42 FOR MORE DETAILS.

(A) FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.

(B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) ONE-WAY TRAFFIC

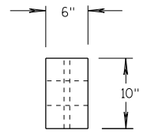
MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	409

6

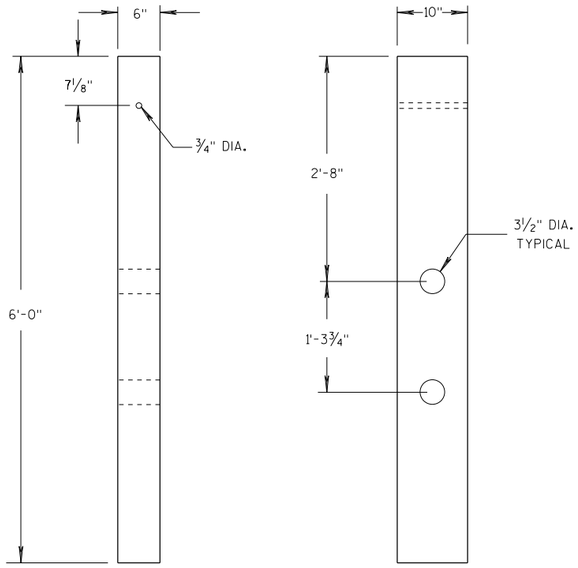
S.D.D. 14 B 43-4b

6

S.D.D. 14 B 43-4b

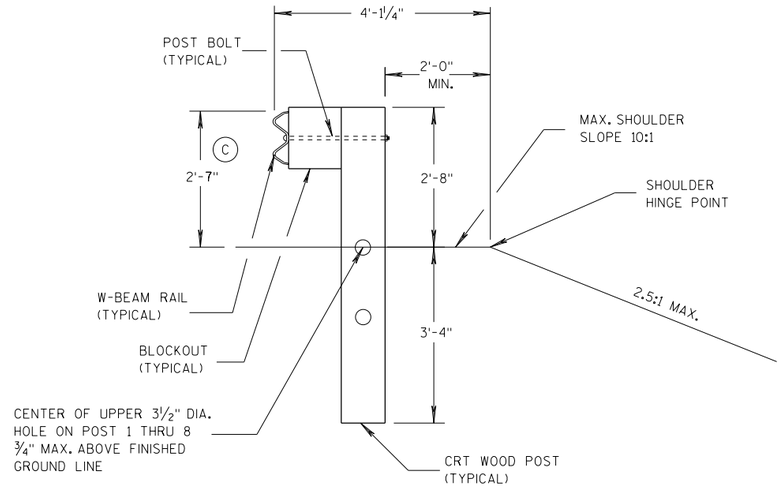


PLAN VIEW



FRONT VIEW SIDE VIEW

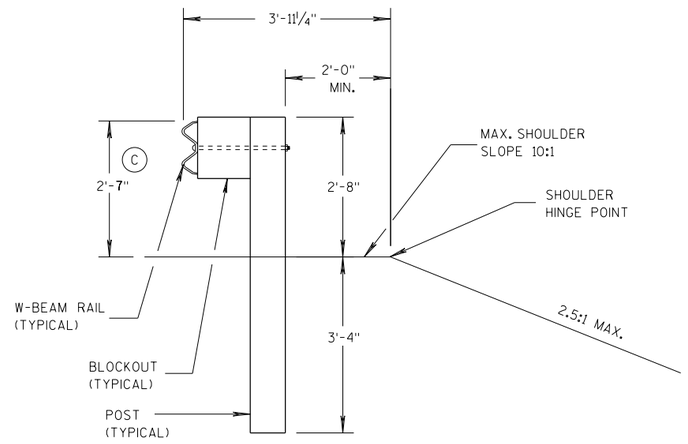
CRT WOOD POST



SECTION B-B

POSTS NO. 1-3

SEE OTHER DETAILS



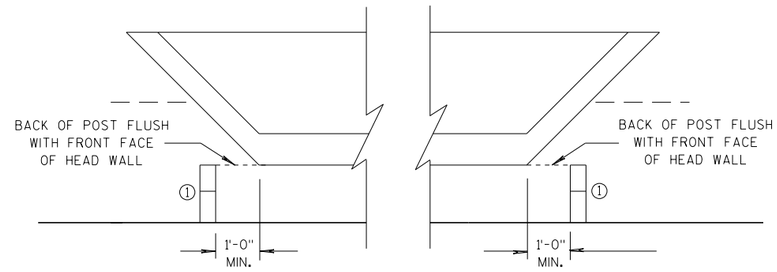
SECTION A-A

POSTS NO. 4-8

SEE OTHER DETAILS

GENERAL NOTES

(C) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



POST PLACEMENT DETAIL

MIDWEST GUARDRAIL SYSTEM
LONG SPAN MGS (L)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS DIRECTOR
ENGINEER

S.D.D. 14 B 43-4c

6

S.D.D. 14 B 43-4c

6

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

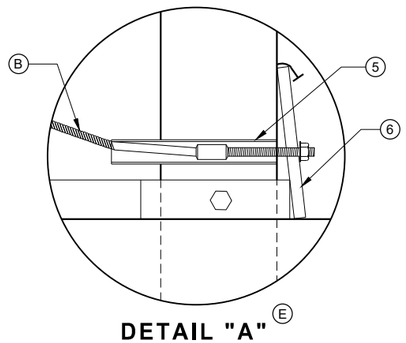
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

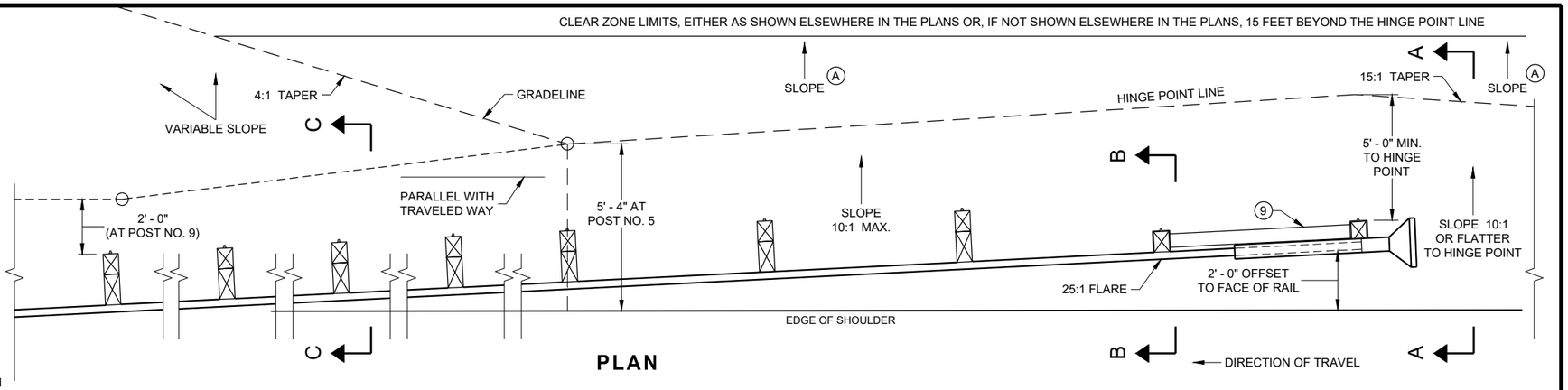
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

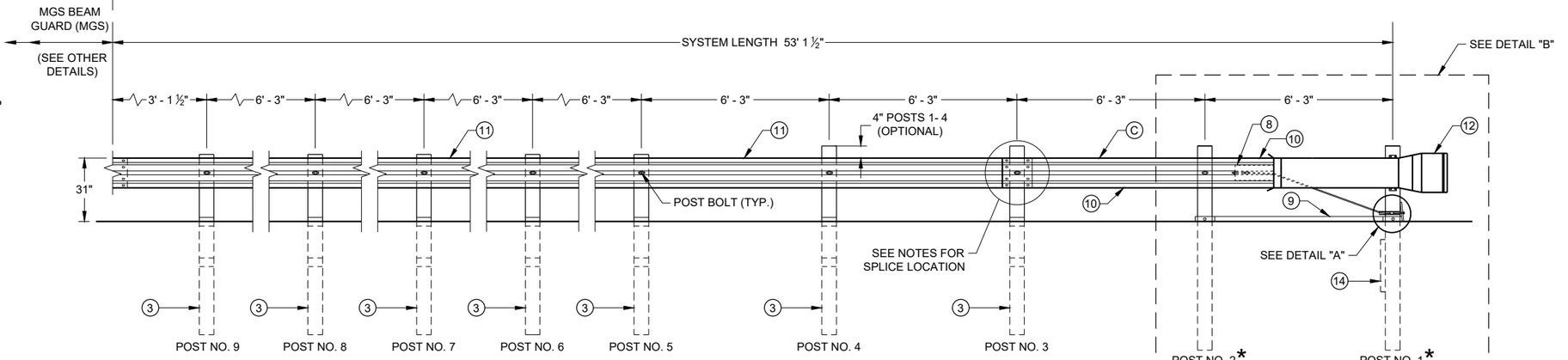
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



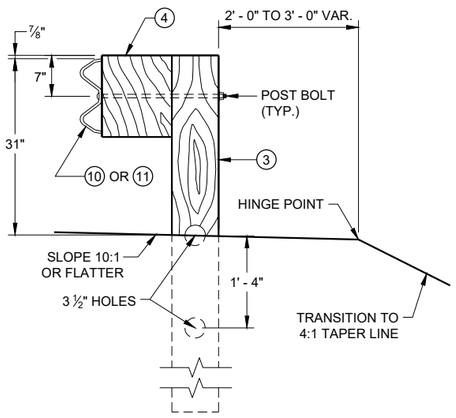
DETAIL "A" (E)



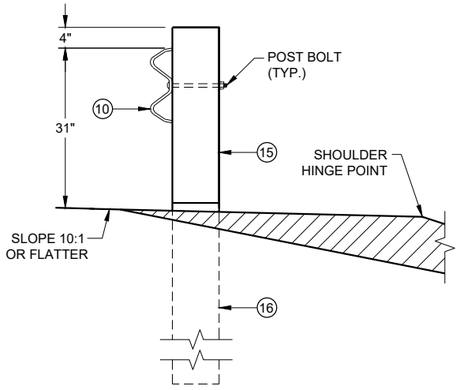
PLAN



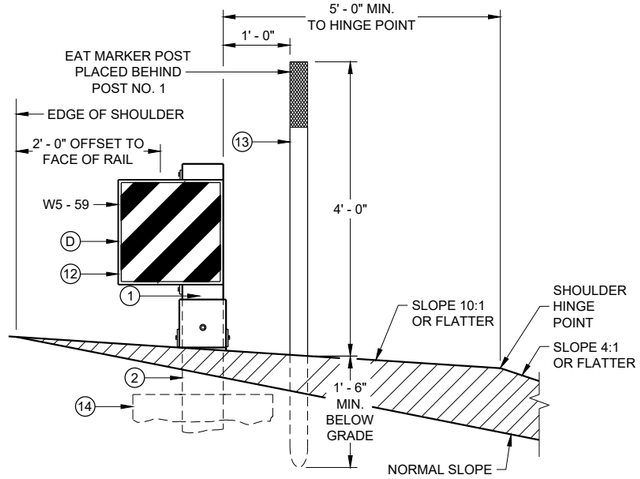
ELEVATION



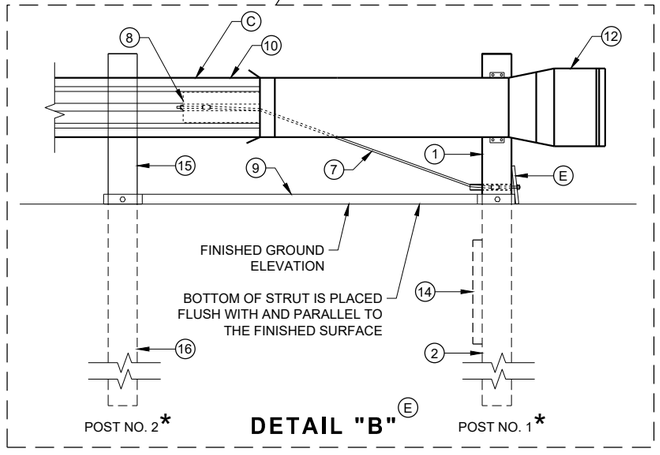
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

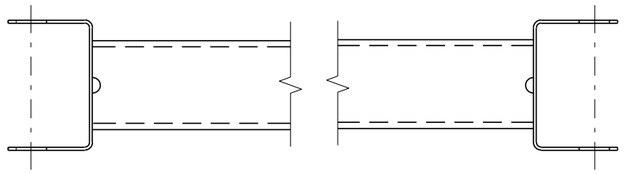
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

SDD 14B44 - 04a

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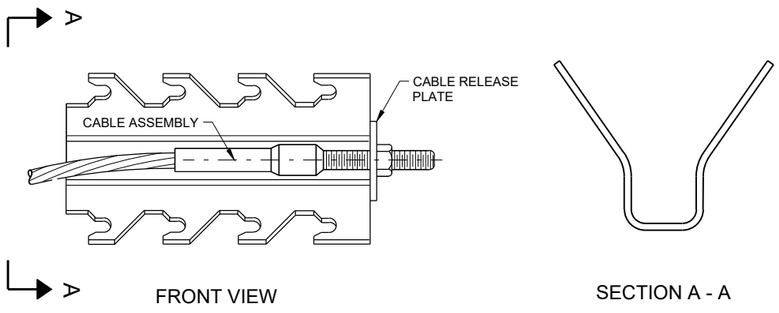
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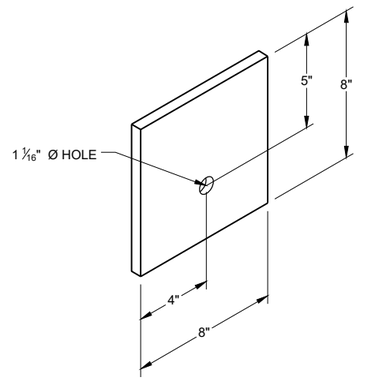
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
①	UPPER POST NO. 1 6" X 6" TUBE
②	LOWER POST NO. 1
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.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	IMPACT HEAD
⑬	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
⑭	SOIL PLATE
⑮	UPPER POST NO. 2
⑯	LOWER POST NO. 2



GENERIC ANCHOR CABLE BOX ⑨ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

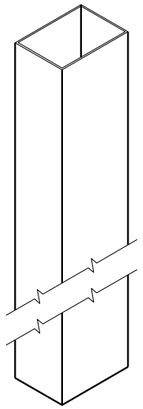
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SDD 14B44 - 04b

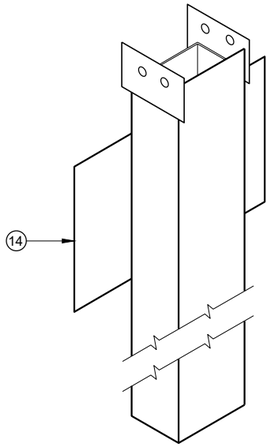
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

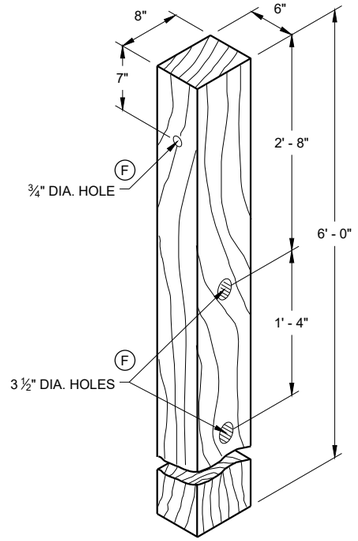
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



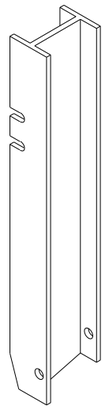
UPPER POST NO. 1 (1) (E)



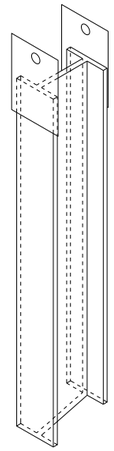
LOWER POST NO. 1 (2) (E)



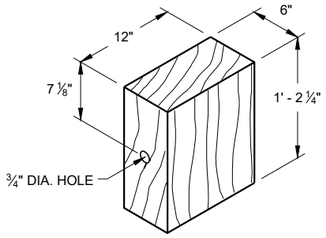
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



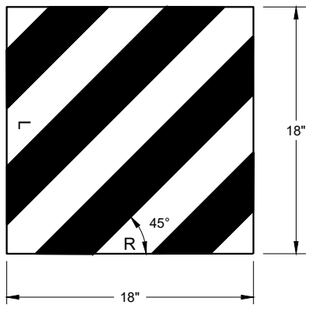
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

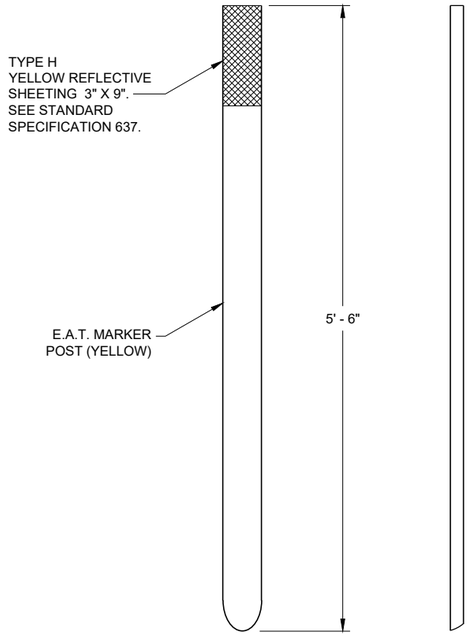


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



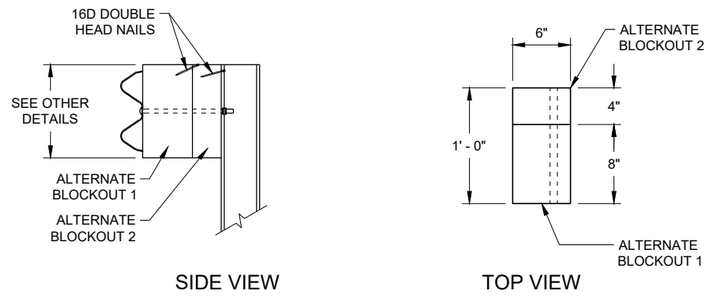
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

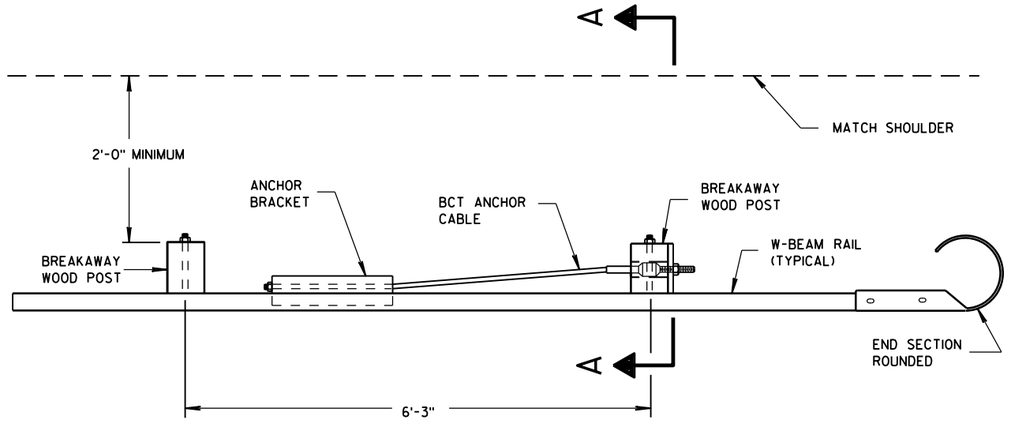
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

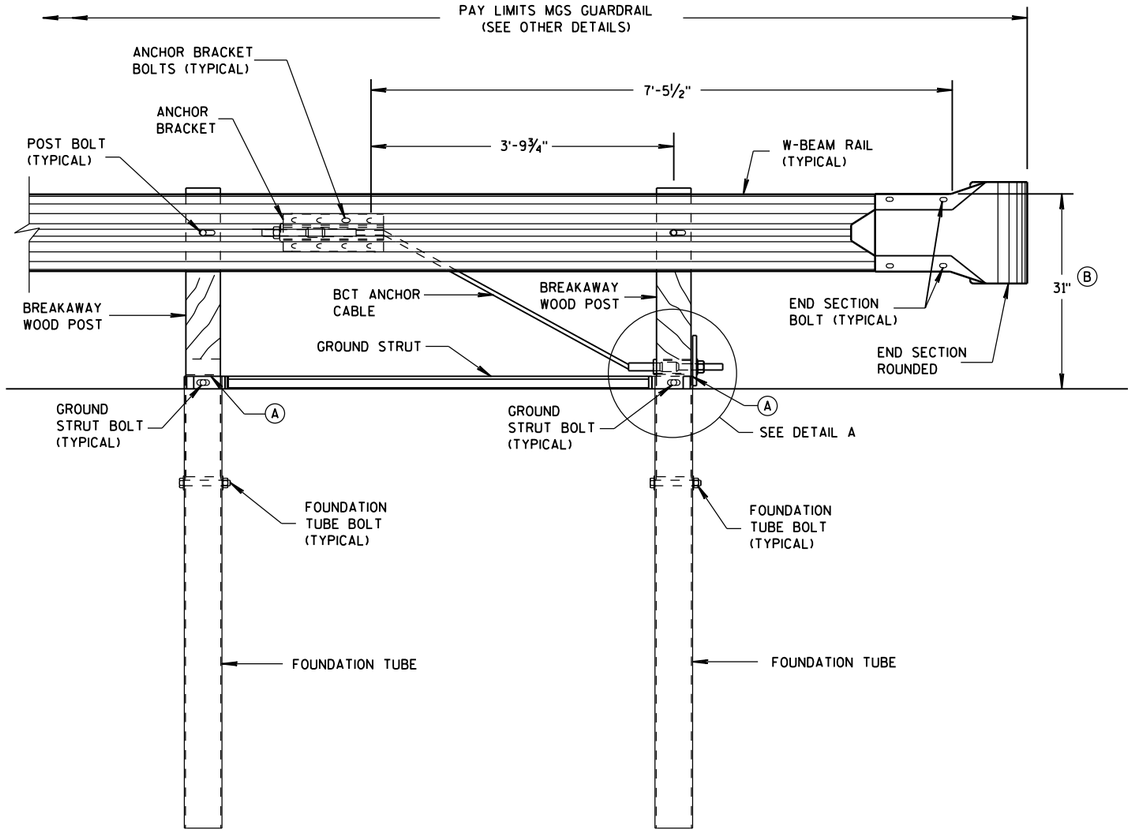
FHWA

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SDD 14B44 - 04c

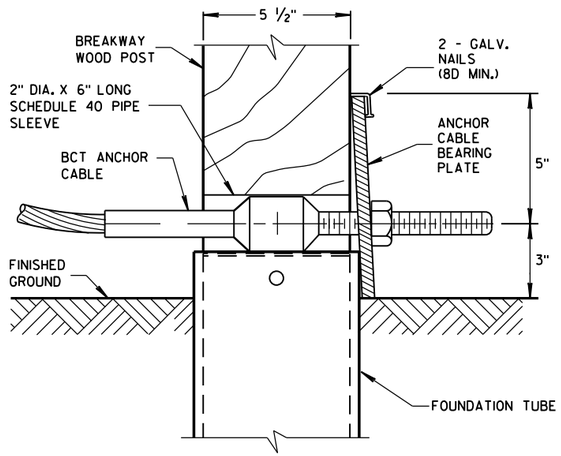


PLAN VIEW



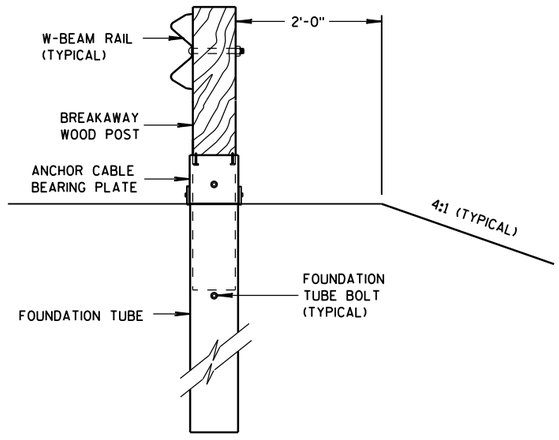
FRONT VIEW

END RAIL DETAIL



DETAIL A

POST NO. 1
GROUNG STRUT NOT SHOWN FOR CLARITY.



SECTION A-A

GENERAL NOTES

SEE SDD 14 B 42 FOR MORE INFORMATION.

END SECTION BOLTS AND NUTS HAVE THE SAME MATERIAL REQUIREMENTS AS SPLICE BOLTS.

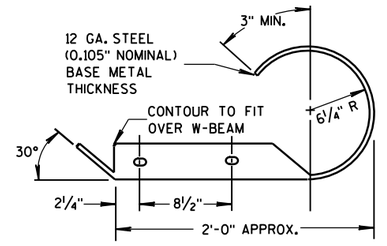
FOUNDATION TUBE BOLTS ARE ⅞" DIAMETER ASTM A307 HEX HEAD BOLT. FOUNDATION TUBE BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅞" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

ANCHOR BRACKET AND GROUND STRUT BOLTS ARE A ⅝" DIAMETER ASTM A307 HEX HEAD BOLT. ANCHOR BRACKET BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅝" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

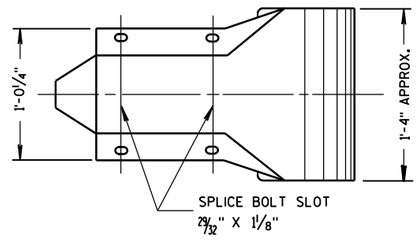
W-BEAM END SECTION ROUNDED HAS THE SAME MATERIAL PROPERTIES AS STANDARD STEEL RAIL.

(A) TOP OF FOUNDATION TUBE SHALL BE NO MORE THAN 3" ABOVE FINISHED GROUND.

(B) FOR NEW CONSTRUCTION TOP OF RAIL IS 31" ± 1".
FOR EXISTING INSTALLATIONS TOP OF RAIL IS BETWEEN 27¾" TO 32" ± 1".



PLAN VIEW



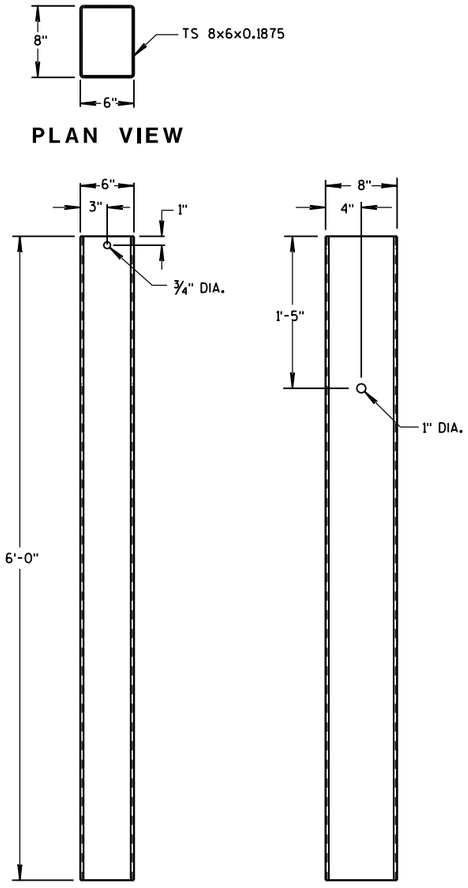
FRONT VIEW

W BEAM END SECTION ROUNDED

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

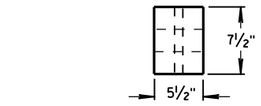
6
S.D.D. 14 B 47-2a



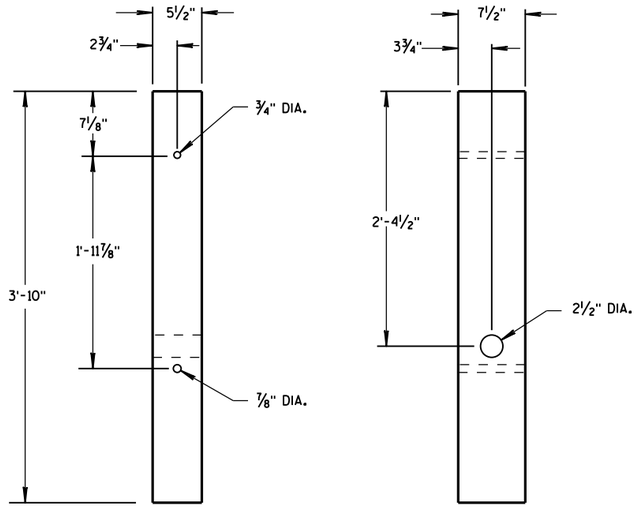
PLAN VIEW

FRONT VIEW SIDE VIEW

FOUNDATION TUBE



PLAN VIEW

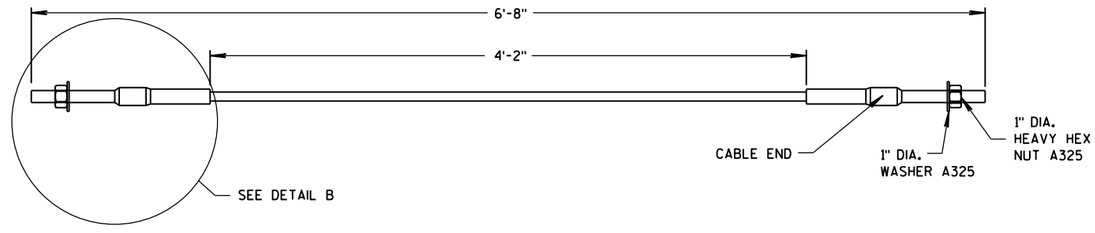


FRONT VIEW SIDE VIEW

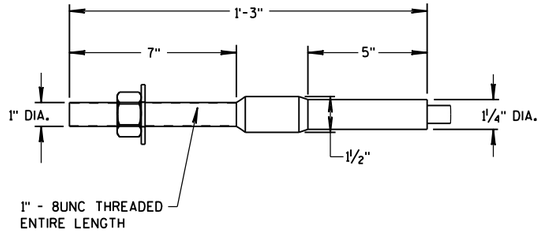
BREAKAWAY WOOD POST

GENERAL NOTES

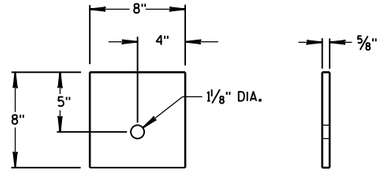
BCT ANCHOR CABLE IS A ¾" DIAMETER 6X19 IWRC IPS GALVANIZED WIRE ROPE. THE SWAGED FITTINGS AND STUD ARE REQUIRED. END FITTING SHALL BE MACHINED FROM HOT-ROLLED CARBON STEEL CONFORMING TO ASTM A576 GRADE 1035 AND GALVANIZED ACCORDING TO ASTM A123. TREADED STUD SHALL CONFORM TO ASTM A325 OR SAE GRADE 5. MINIMUM BREAKING STRENGTH OF WIRE ROPE IS 43,000 LB. WIRE ROPE IS TO BE TAUT.



BCT ANCHOR CABLE



DETAIL B



SIDE VIEW FRONT VIEW

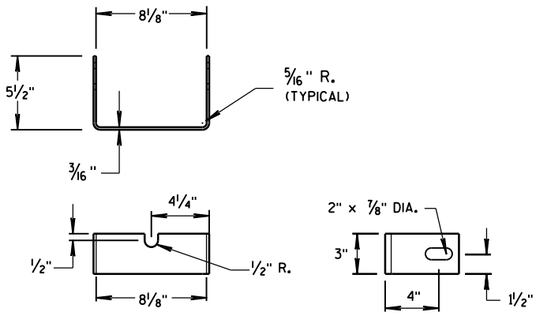
ANCHOR CABLE
BEARING PLATE

MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

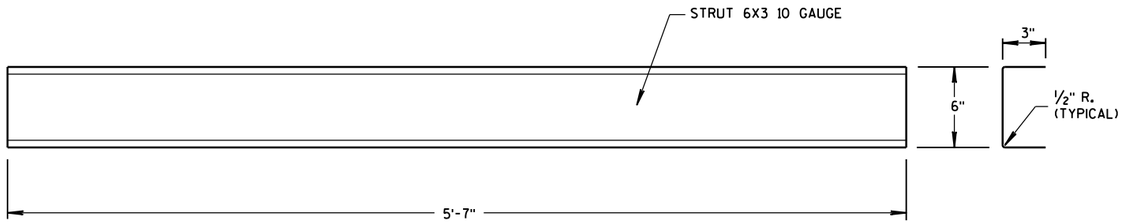
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

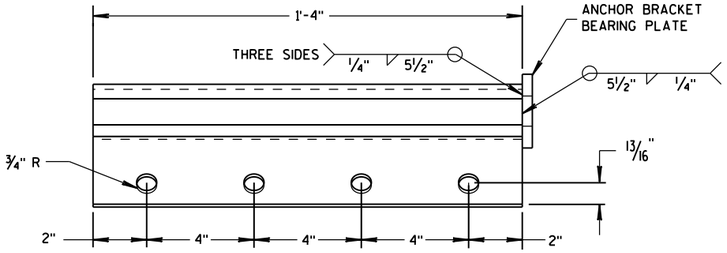
S.D.D. 14 B 47-2b

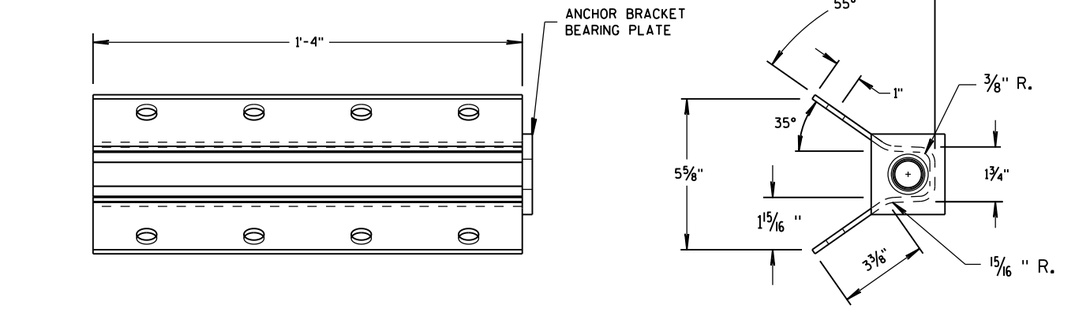


YOKE DETAIL

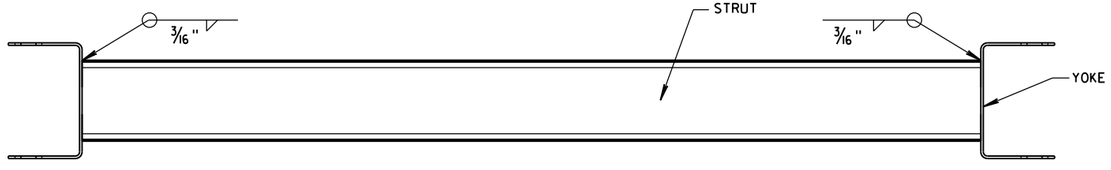


STRUT DETAIL

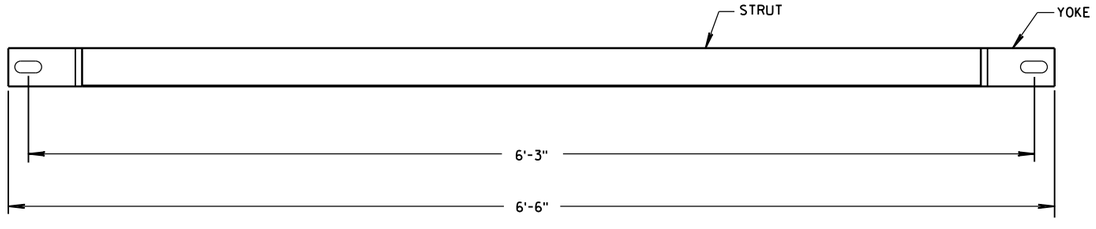




ANCHOR BRACKET

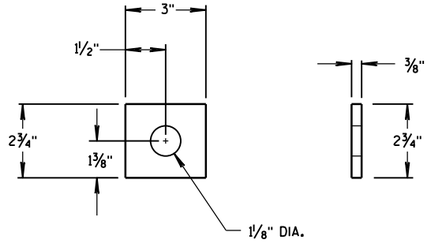


PLAN VIEW



FRONT VIEW

GROUND STRUT DETAIL



ANCHOR BRACKET BEARING PLATE

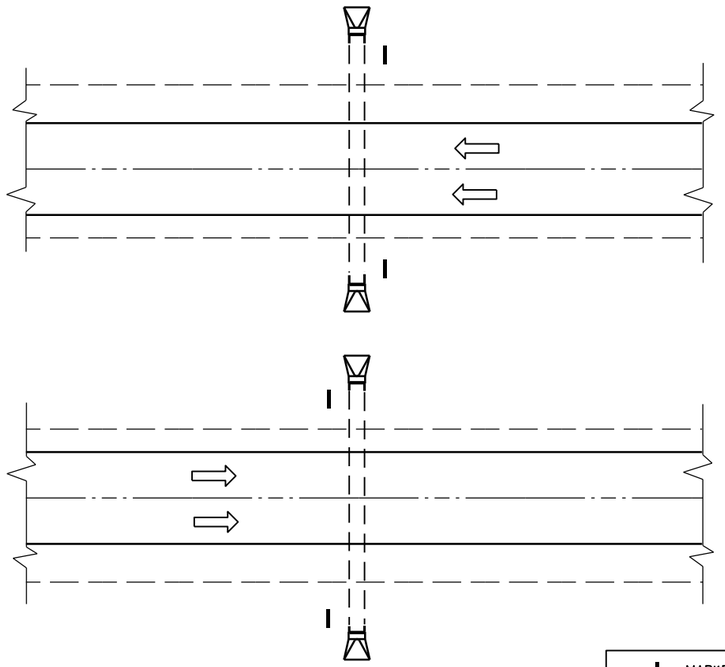
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

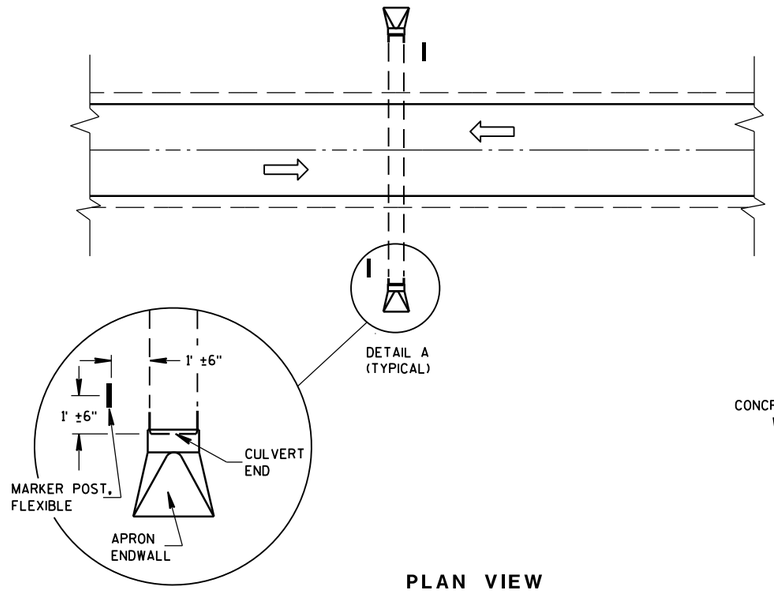
6

S.D.D. 14 B 47-2c



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

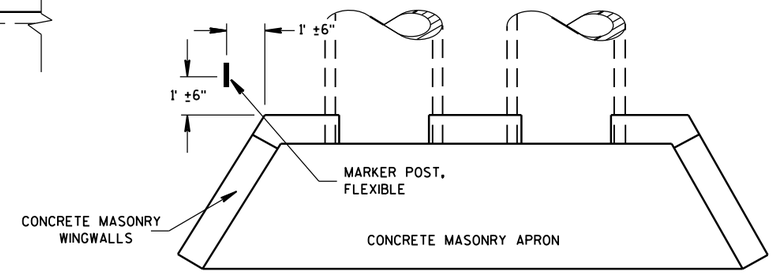
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

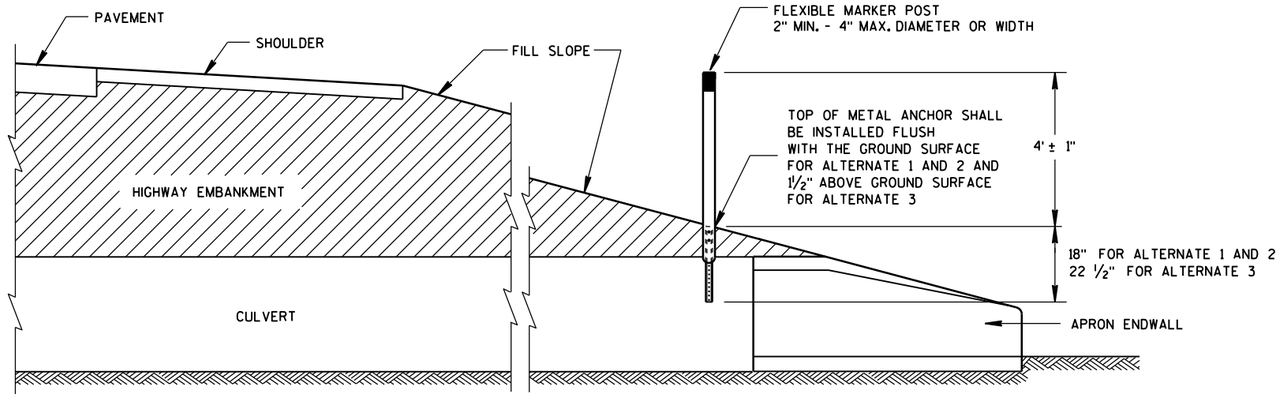
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

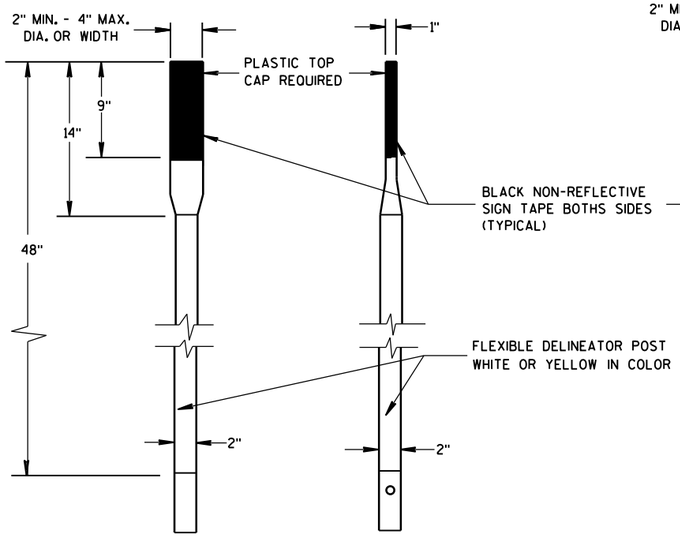
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

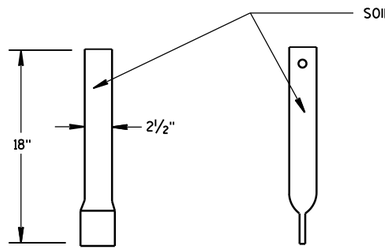
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S.D.D. 15 A 3-2a

6

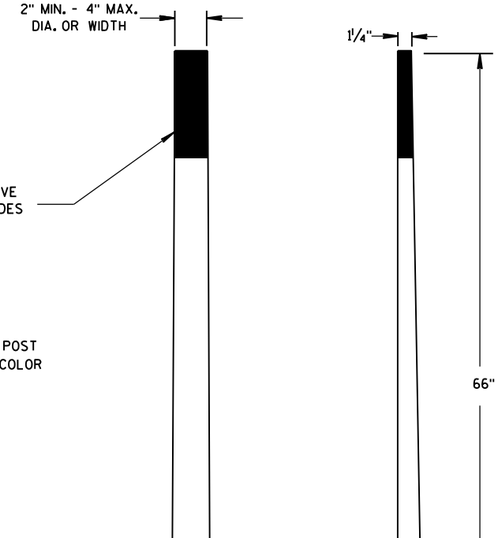
S.D.D. 15 A 3-2a





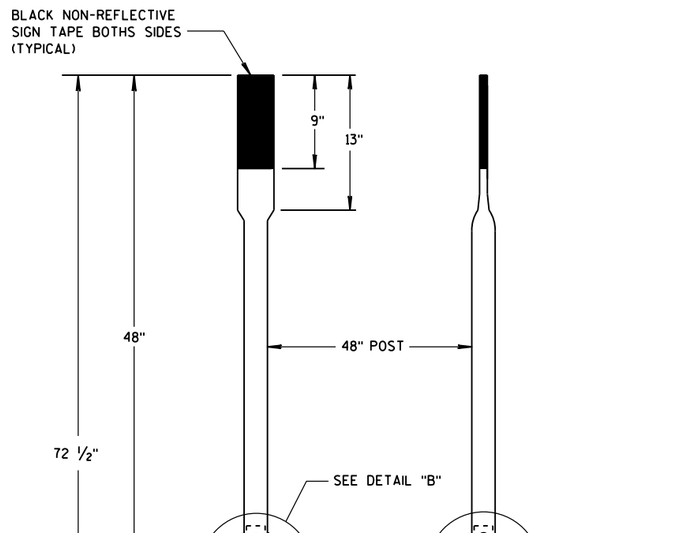
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

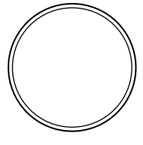
ALTERNATE 2



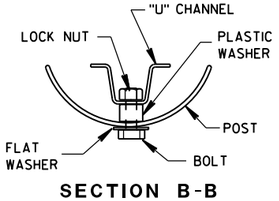
FRONT VIEW SIDE VIEW

ALTERNATE 3

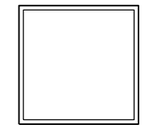
FLEXIBLE MARKER POSTS



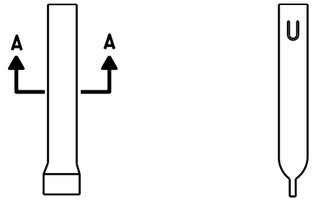
SECTION A-A



SECTION B-B

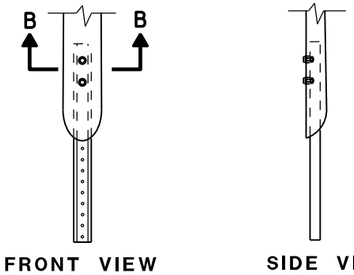


SECTION C-C



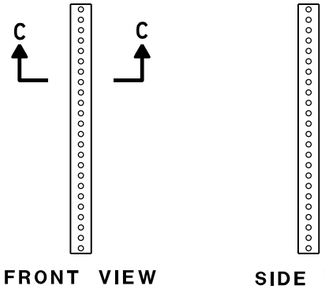
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

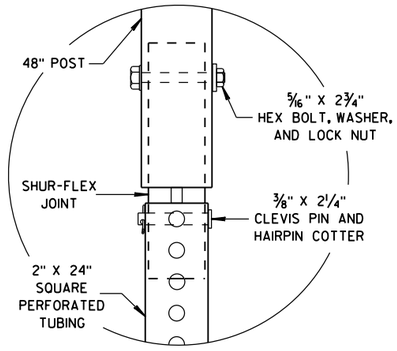
ALTERNATE 2



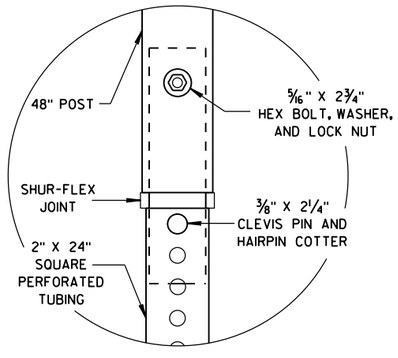
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

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

6

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

GENERAL NOTES

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

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

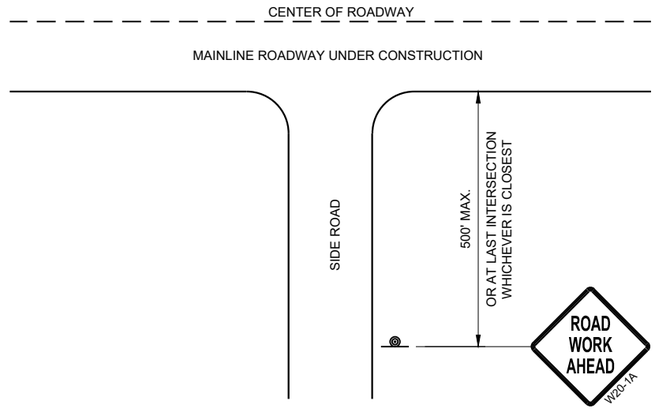
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

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

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



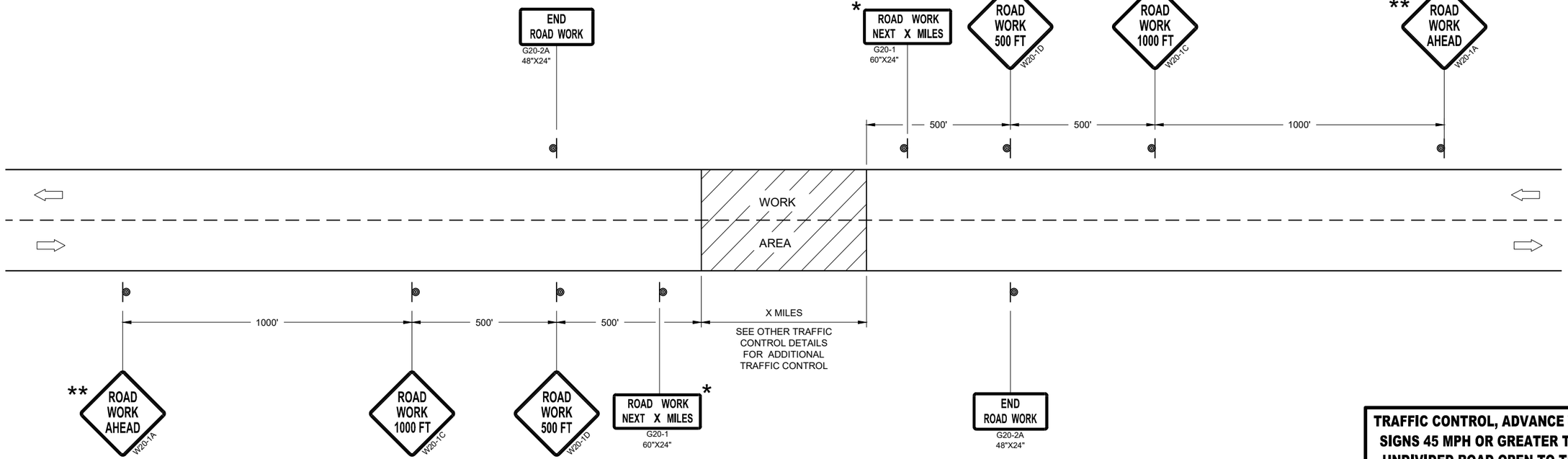
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C04 - 05

GENERAL NOTES

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

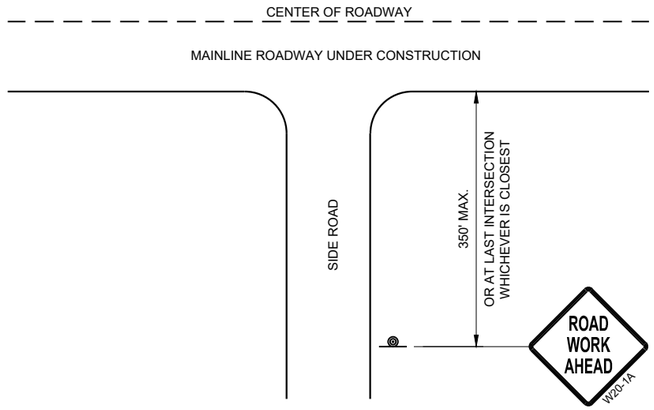
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

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



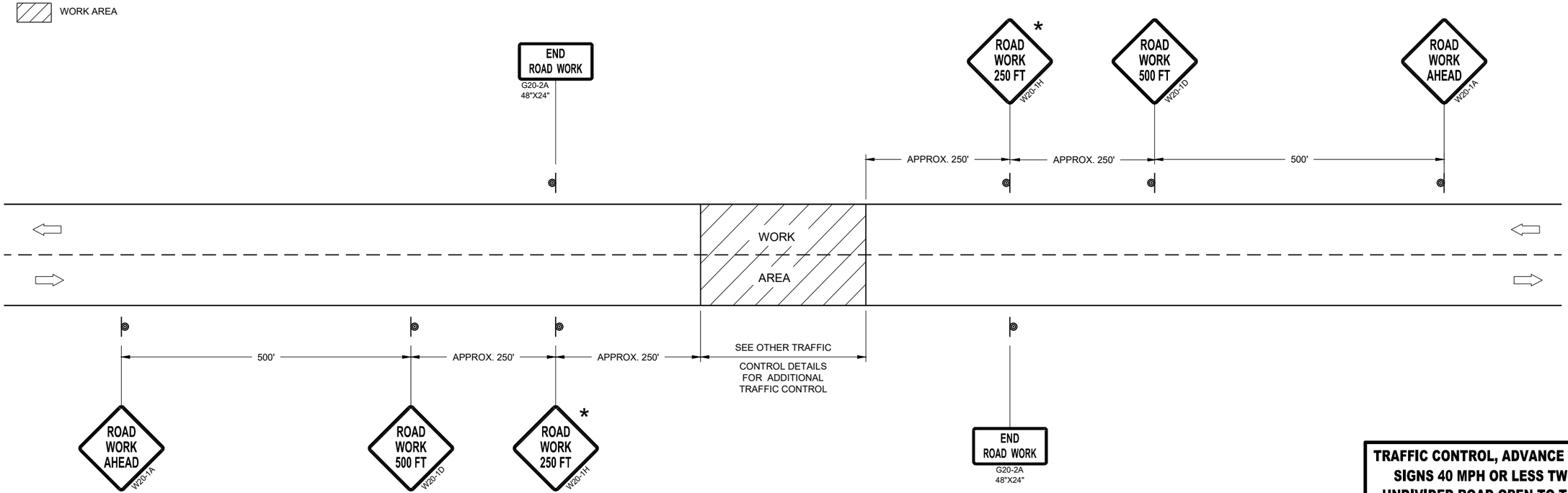
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

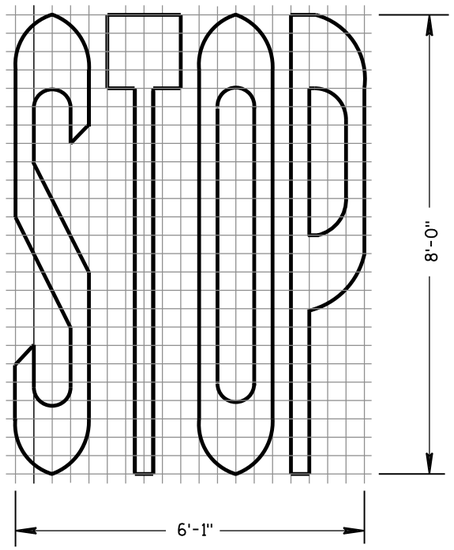
FHWA

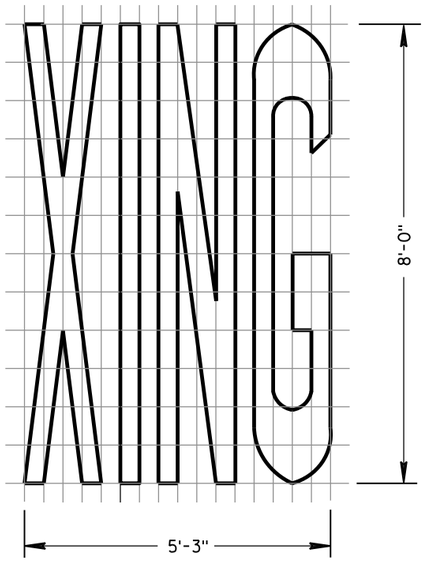
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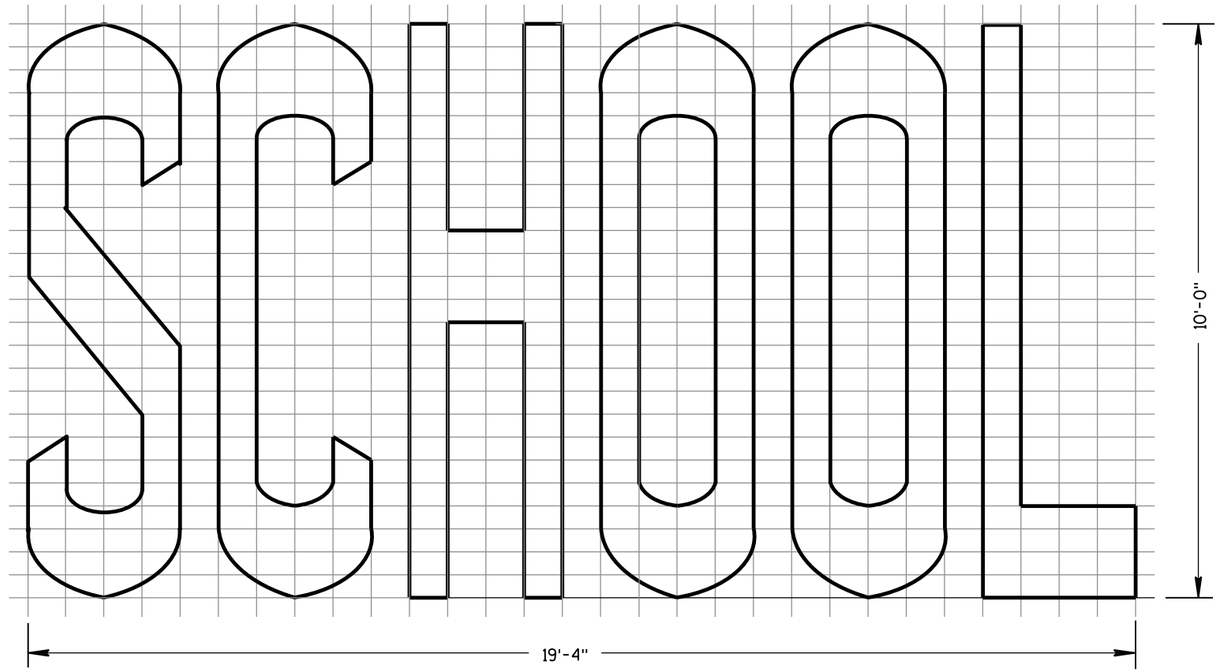
SDD 15C05 - 05

GENERAL NOTES

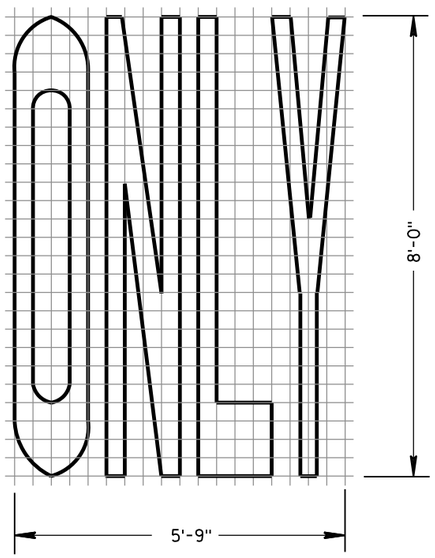
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

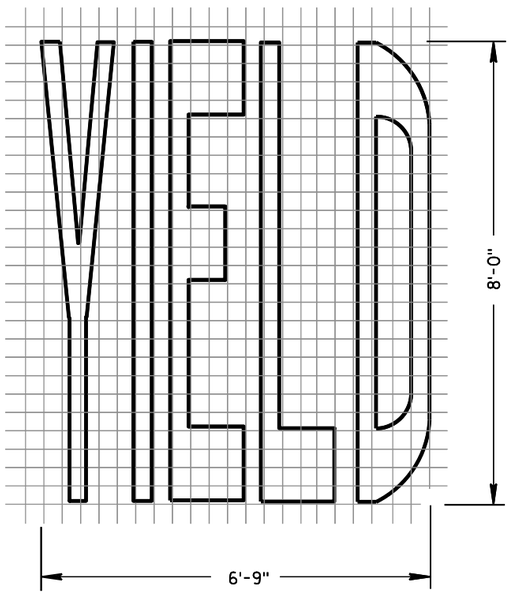


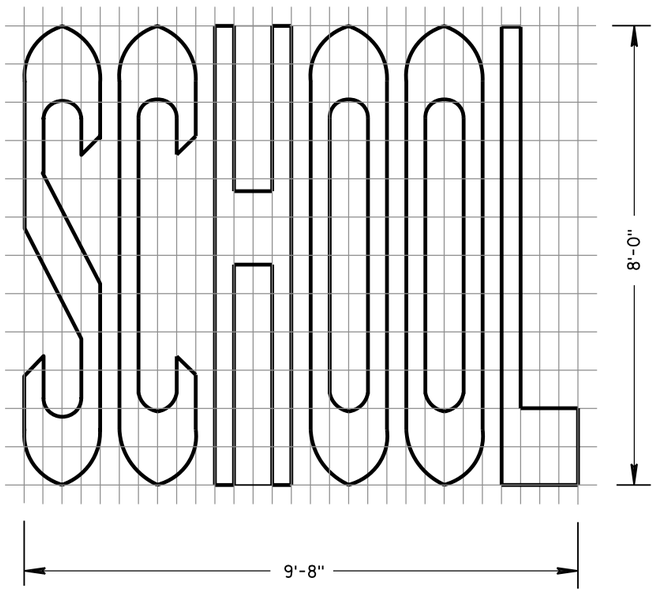




TWO-LANE







SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

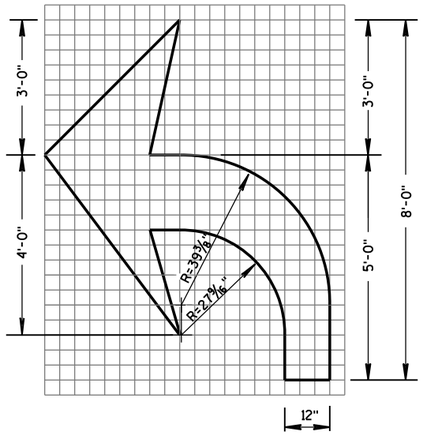
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARK
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FHWA

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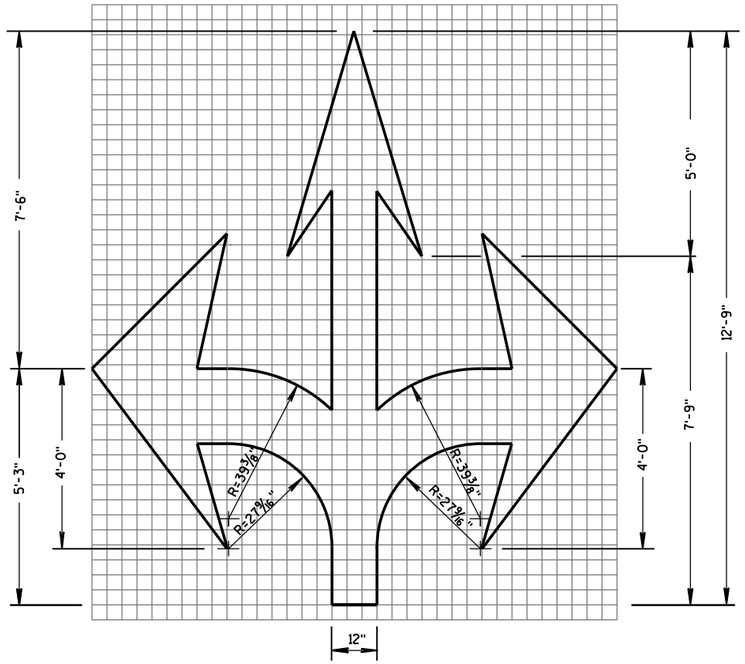
S.D.D. 15 C 7-14b

GENERAL NOTES

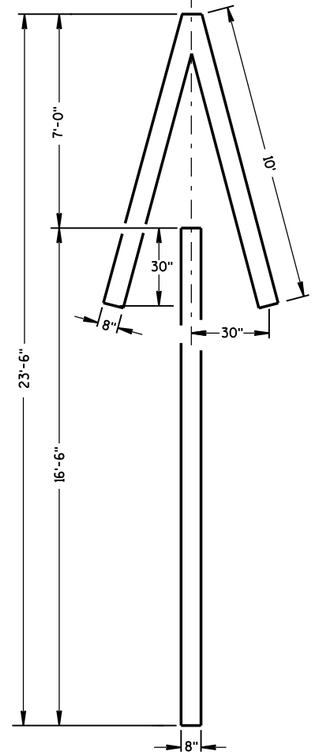
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



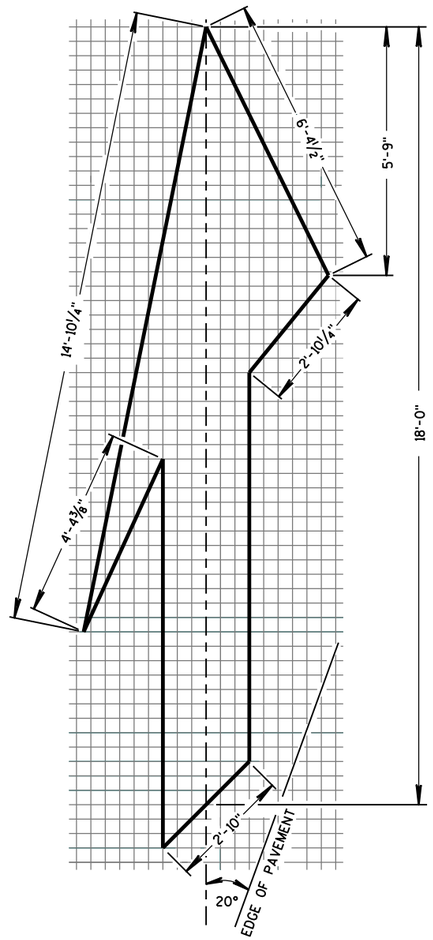
TYPE 2



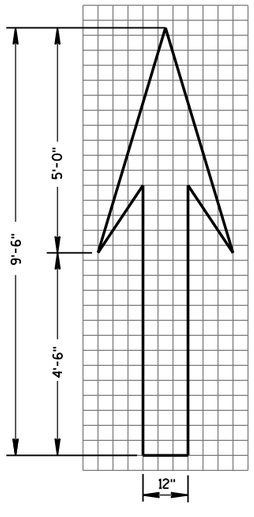
TYPE 6



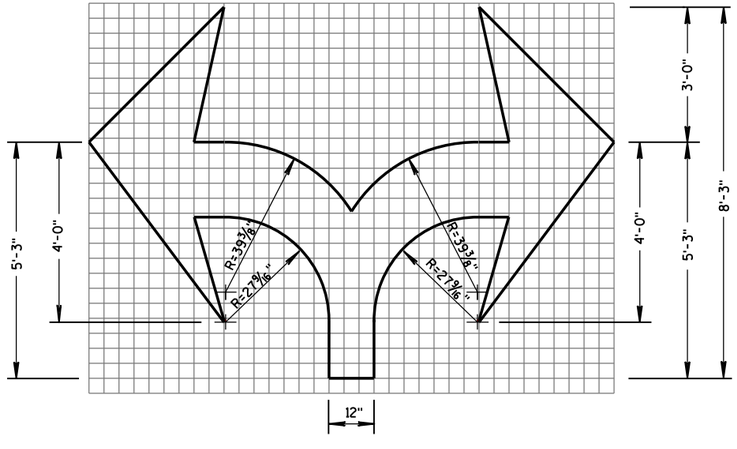
TYPE 4



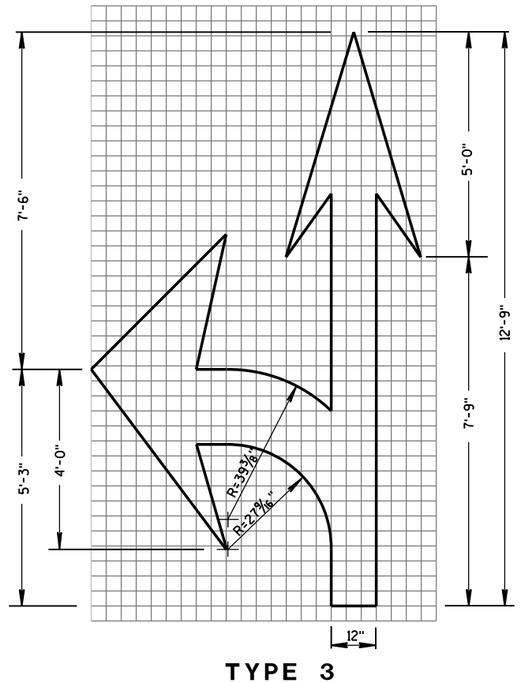
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

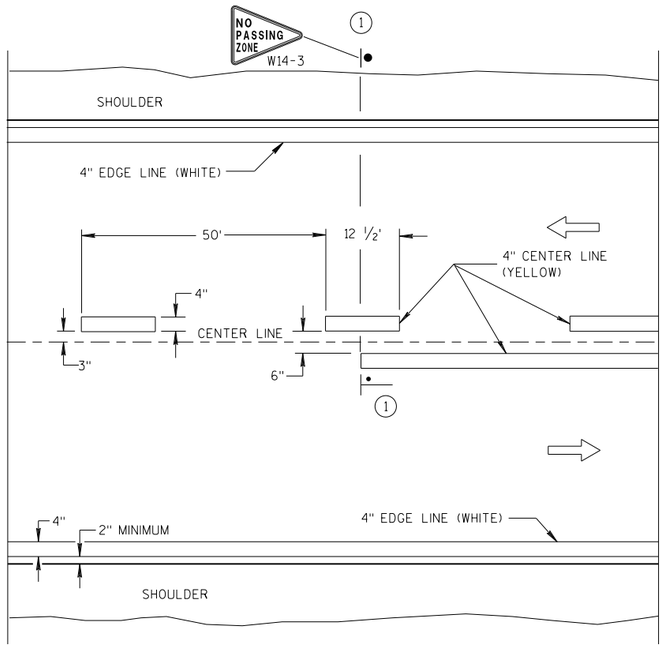
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
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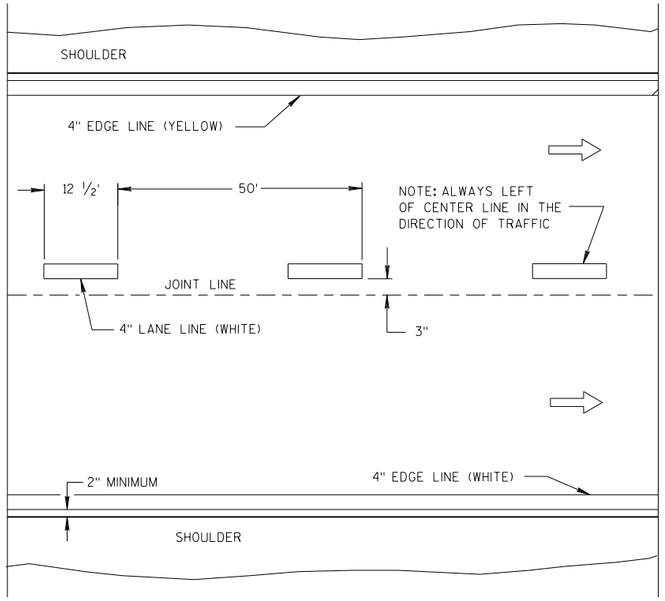
S.D.D. 15 C 7-14c

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S.D.D. 15 C 7-14c



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

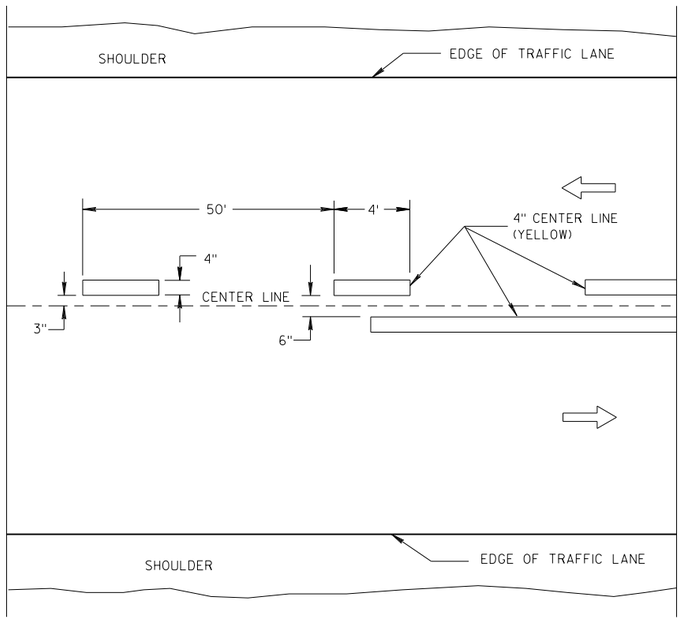
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

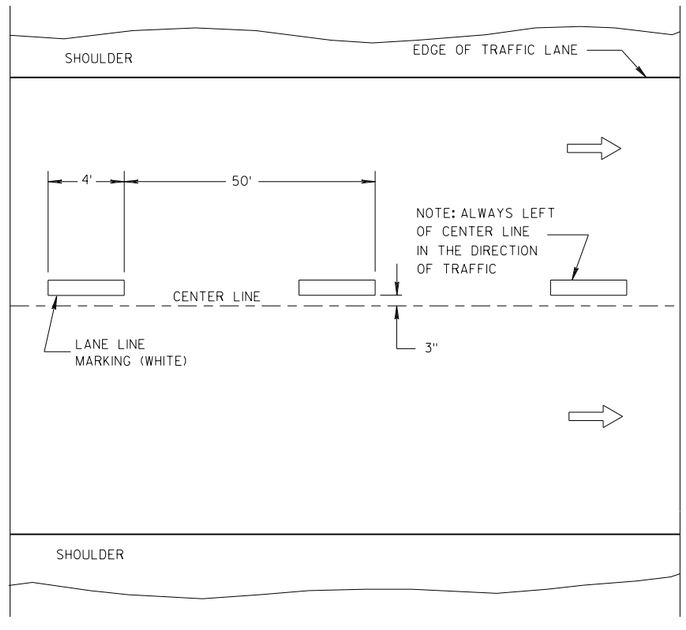
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER

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S.D.D. 15 C 8-19a

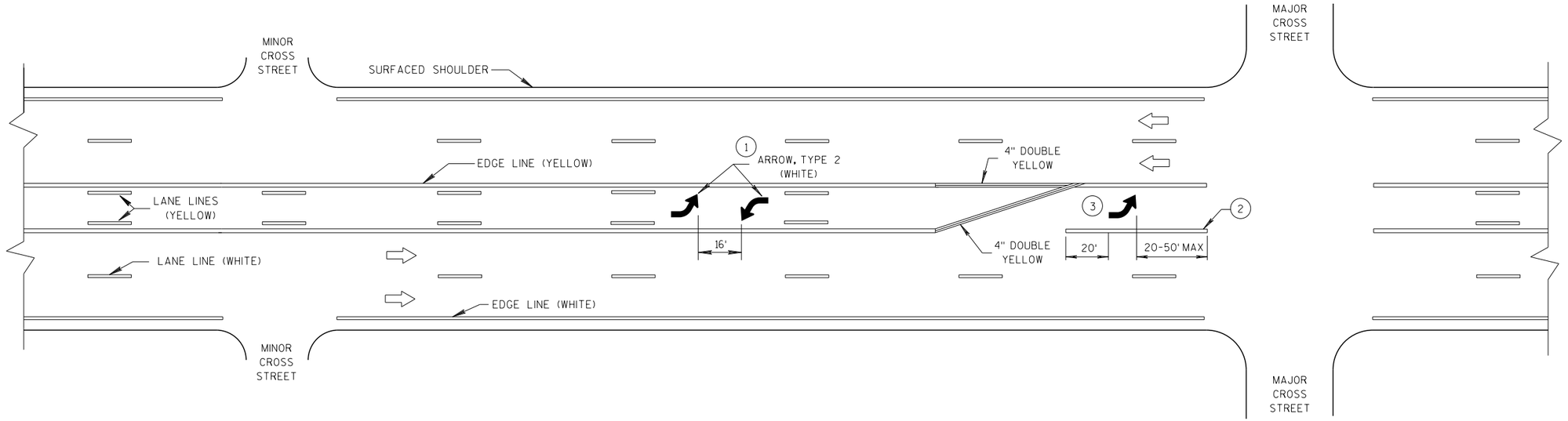
6

S.D.D. 15 C 8-19a

GENERAL NOTES

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

DIRECTION OF TRAFFIC



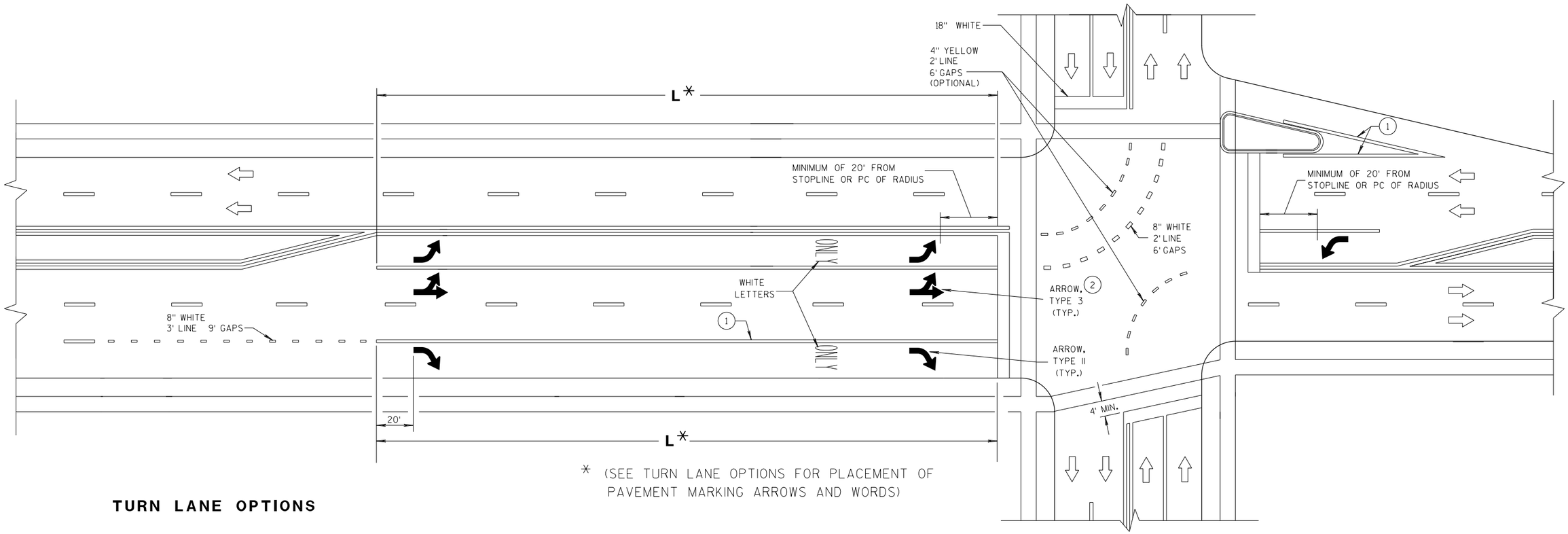
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

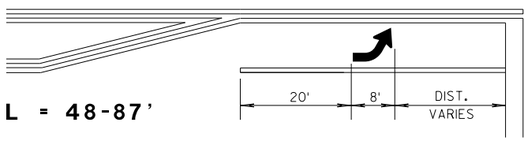
S.D.D. 15 C 8-19b



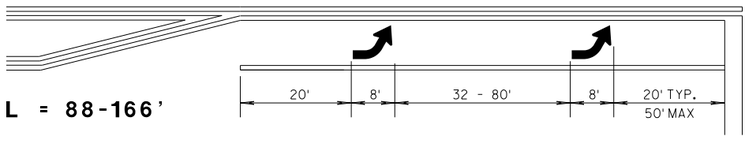
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

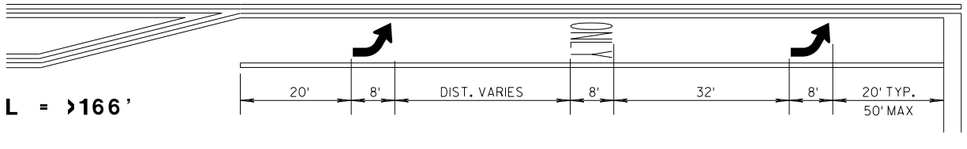
LENGTH OF TURN BAY (**L**) OF 0-47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48-87'



L = 88-166'



L = >166'

GENERAL NOTES

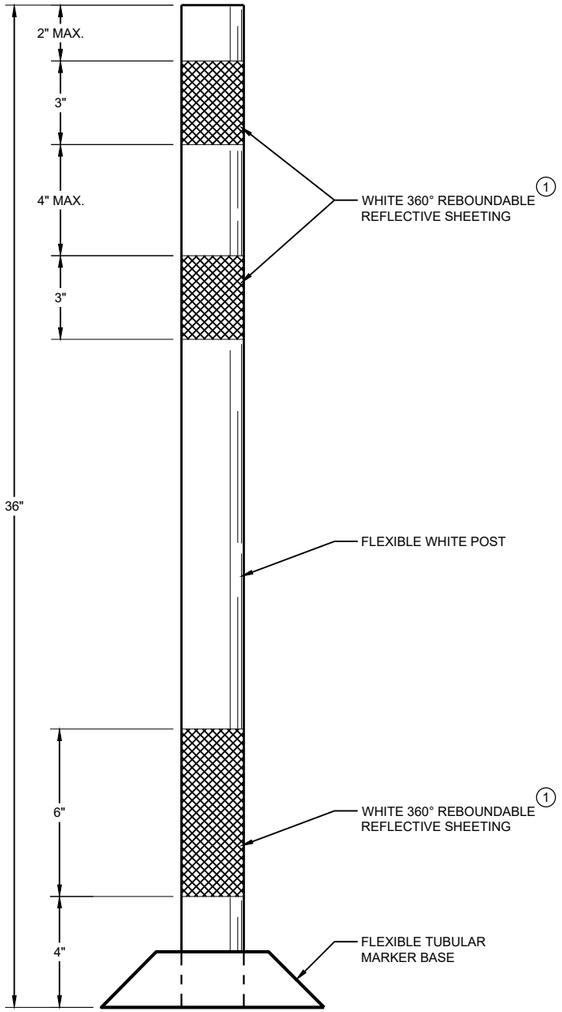
(1) 8" WHITE

(2) QUANTITY AND LOCATION OF TYPE 3 ARROW ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION, THE ARROWS AND ONLY MARKING ARE ELIMINATED.

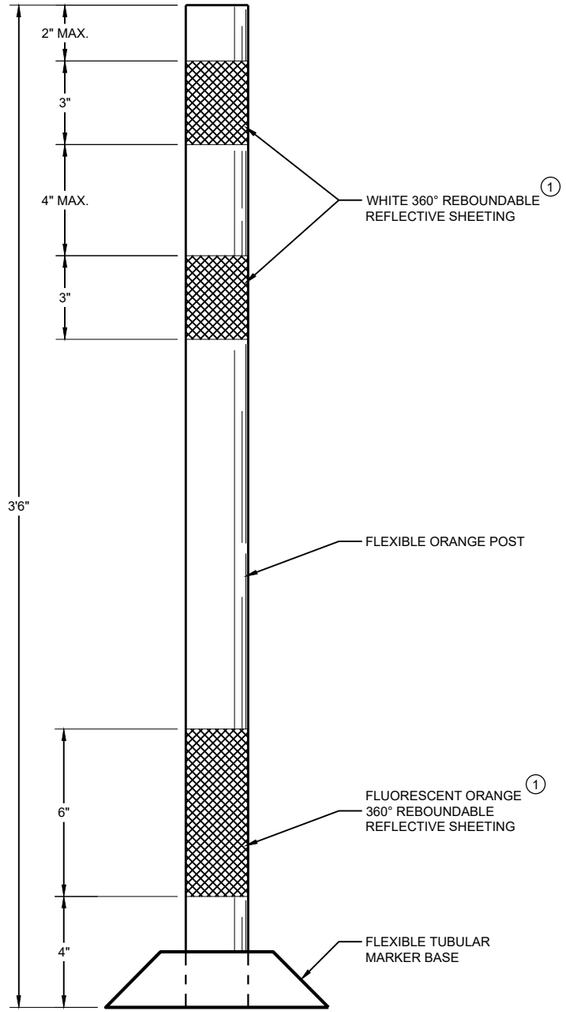
⇨ DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)



FLEXIBLE TUBULAR MARKER POST PERMANENT CROSSOVER



FLEXIBLE TUBULAR MARKER POST WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

6

SDD 15C11 - 07a

CHANNELIZING DEVICES
FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

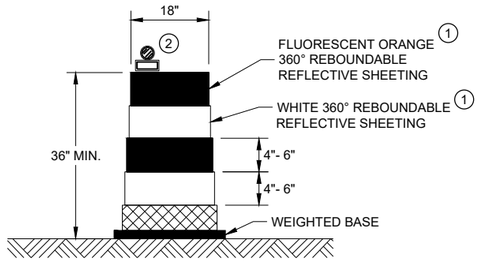
FHWA

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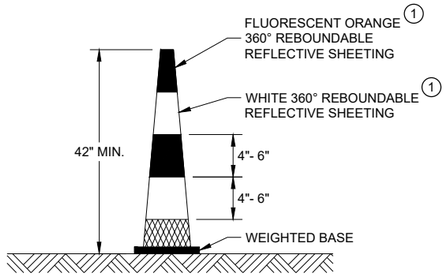
SDD 15C11 - 07a

GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

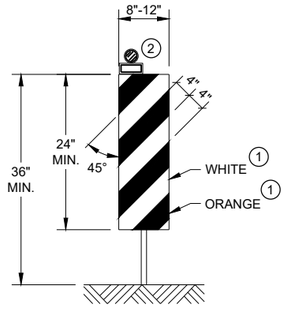


DRUM



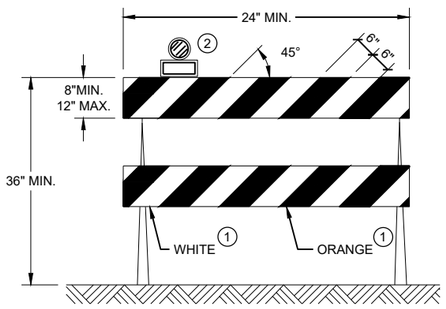
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



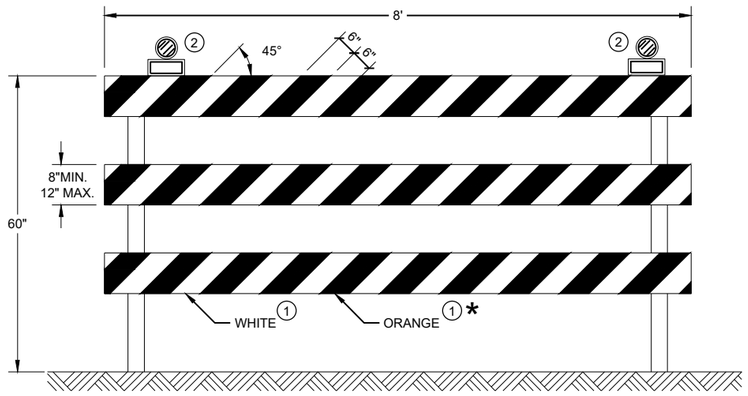
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C11 - 07b

6

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LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

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

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

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

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

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

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

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

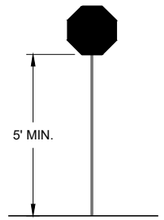
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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



STOP/SLOW PADDLE ON SUPPORT STAFF

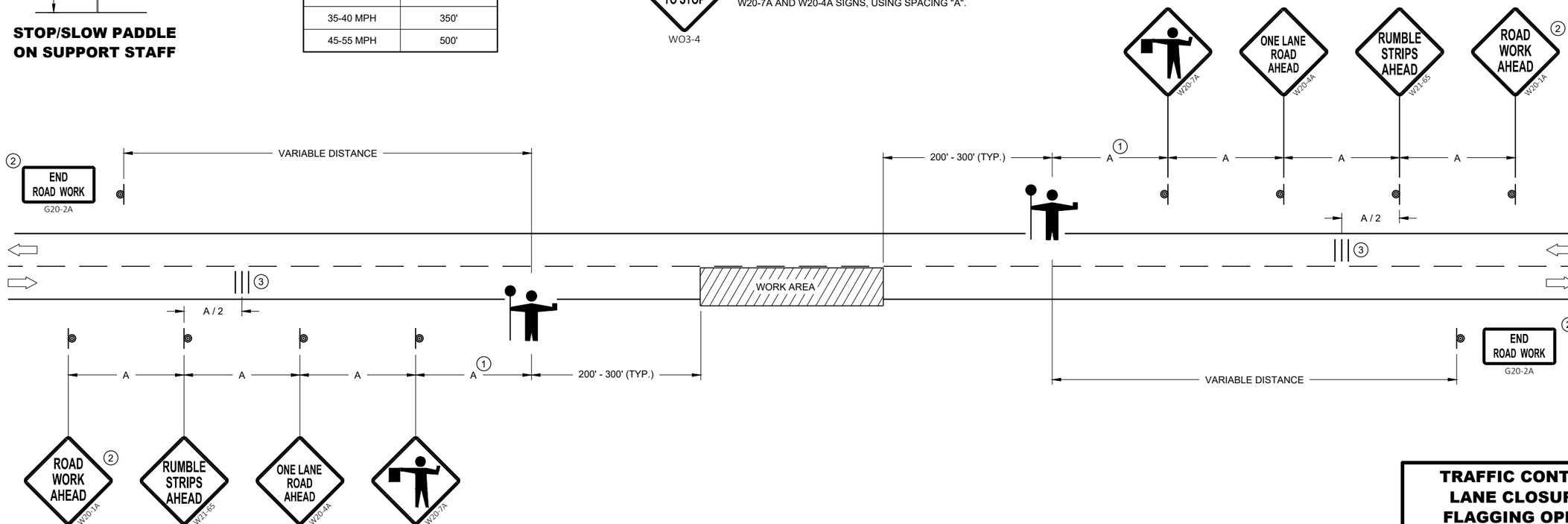
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



WO3-4

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



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

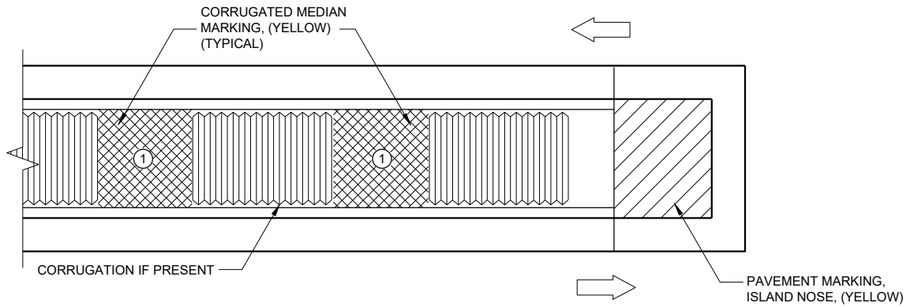
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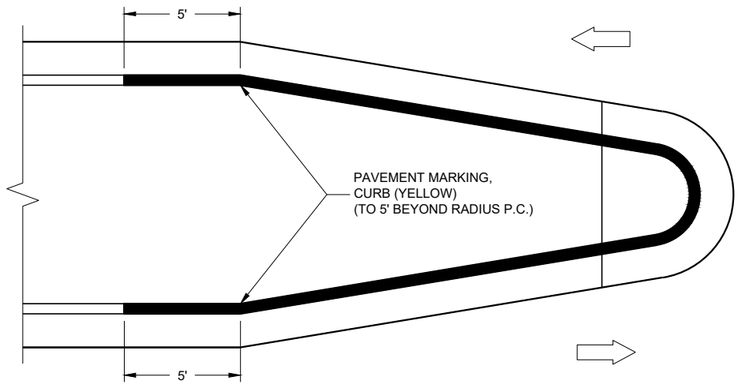
SDD 15C12 - 07

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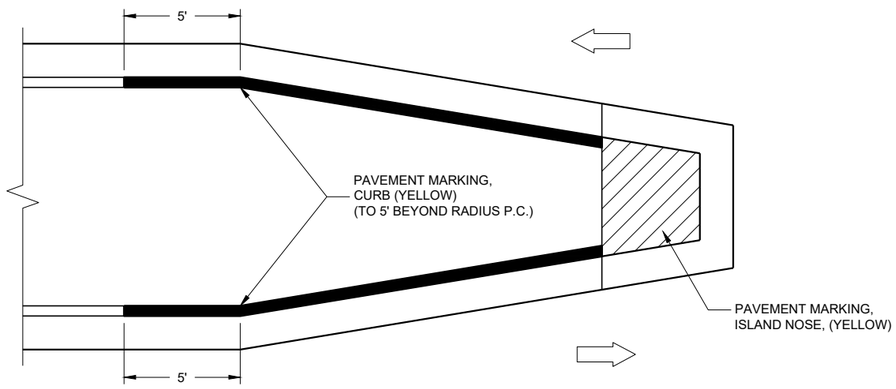
SDD 15C12 - 07



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

**TYPICAL PLACEMENT OF
PAVEMENT MARKING ON MEDIAN ISLANDS**

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

**PAVEMENT MARKINGS
(ISLANDS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAF
ENGINEER

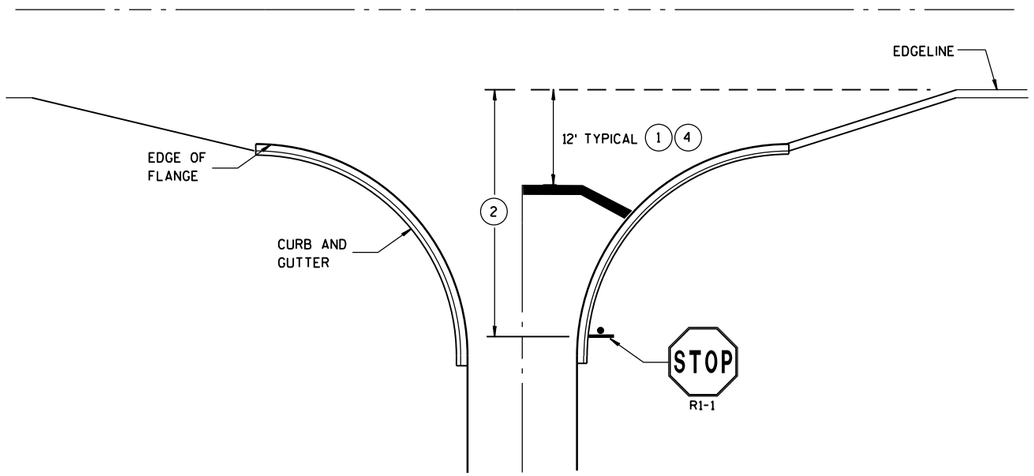
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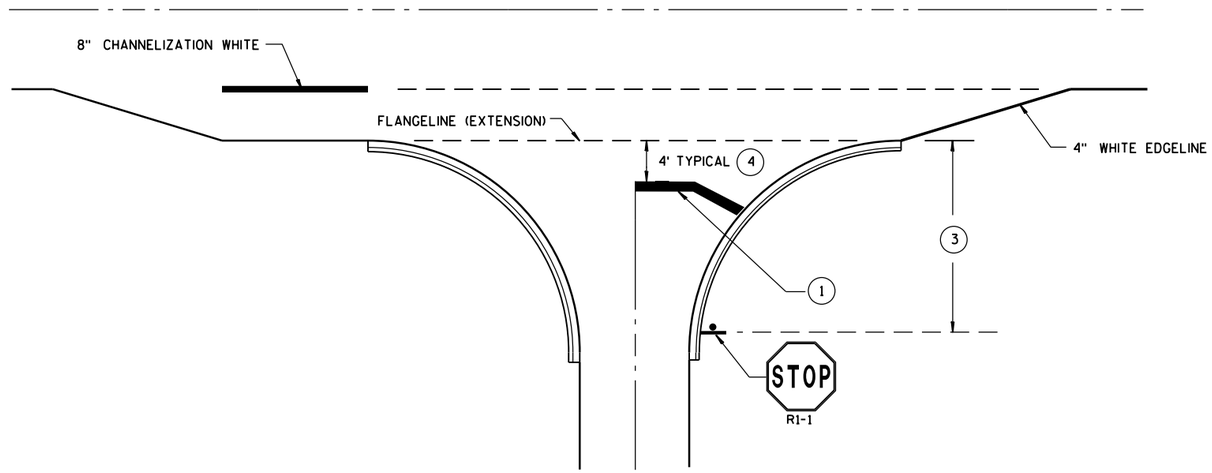
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SDD 15C27 - 03b

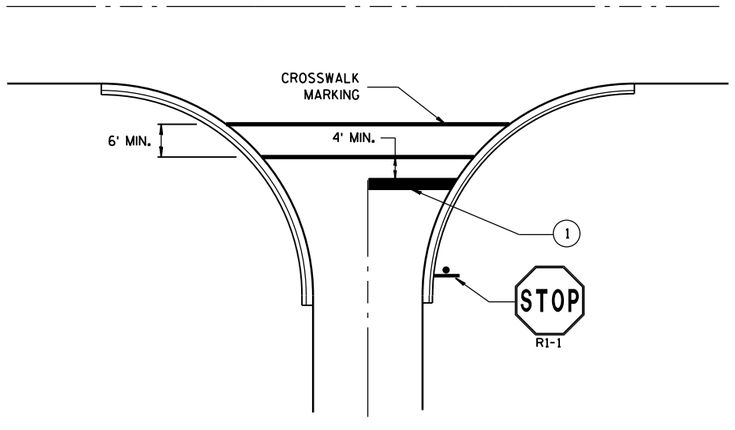
SDD15C27 - 03b



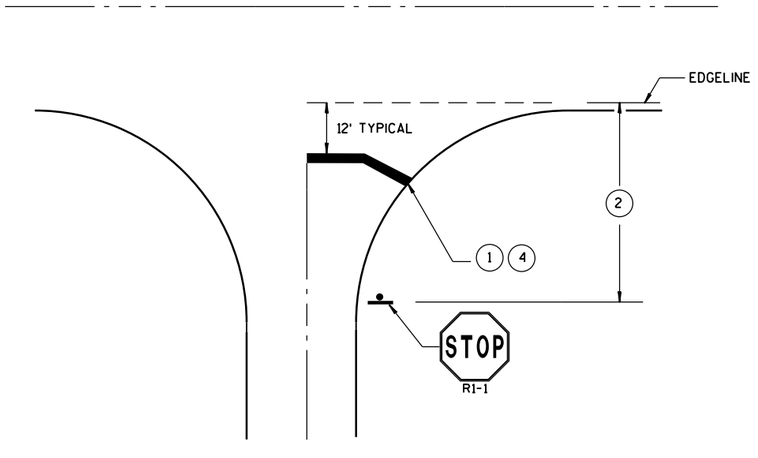
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

(1) 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.

(2) IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.

(3) IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.

(4) MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

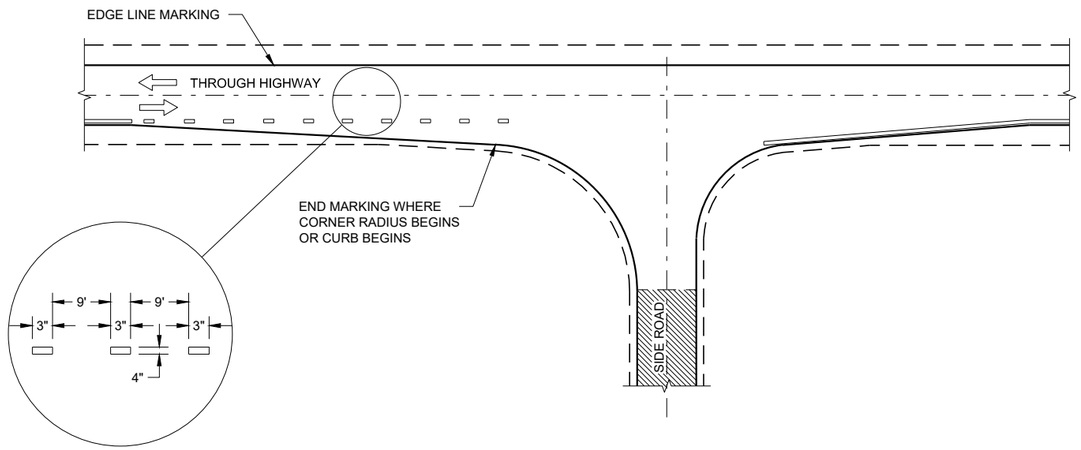
Sept., 2017 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MAR 430 NEER

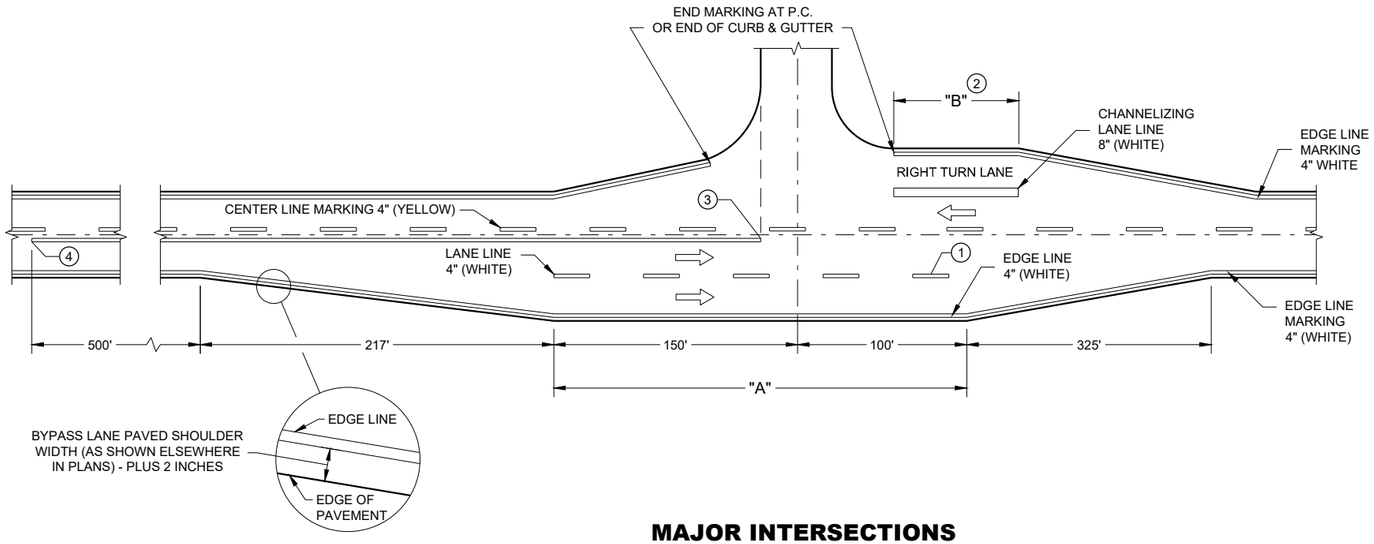
FHWA

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S.D.D. 15 C 33-3



MINOR INTERSECTION



MAJOR INTERSECTIONS

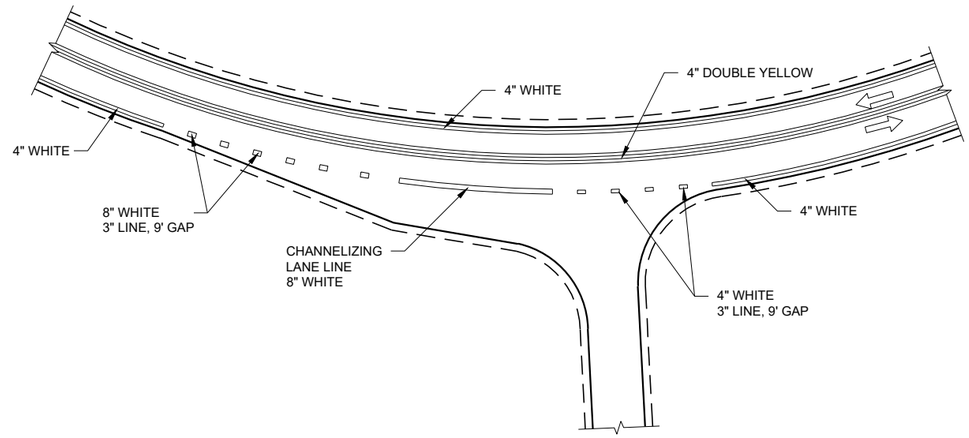
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

GENERAL NOTES

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

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

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35 - 03a

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SDD 15C35 - 03a

GENERAL NOTES

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

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

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

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

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

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

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

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

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

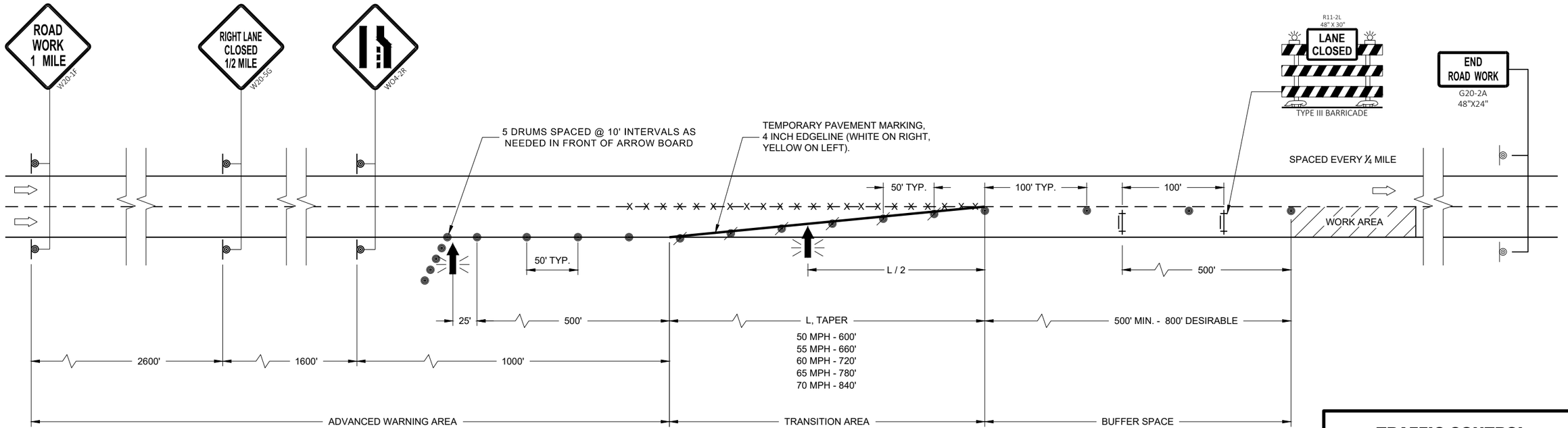
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

LEGEND

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



TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

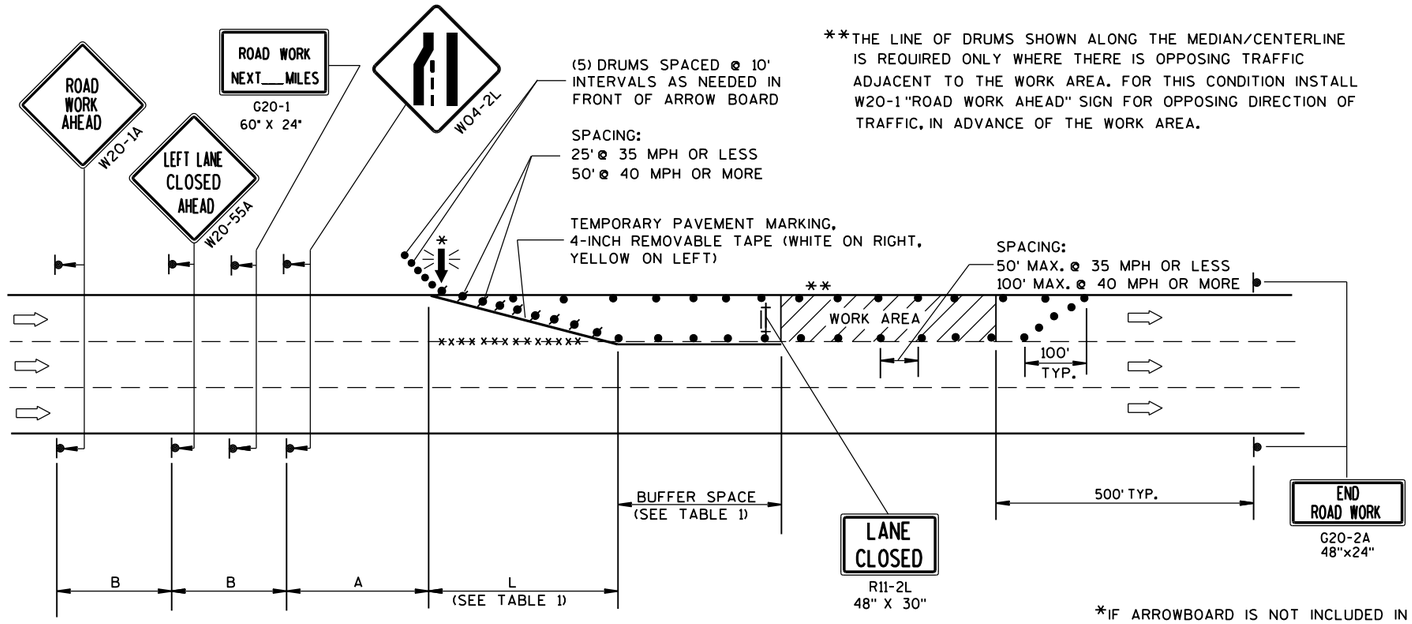
FHWA

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SDD 15D12 - 07a

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SDD 15D12 - 07a



**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

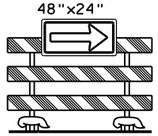


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

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

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

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
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

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"x48" 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.

W20-1A, G20-1 AND G20-2A 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
June 2016 — DATE
FHWA

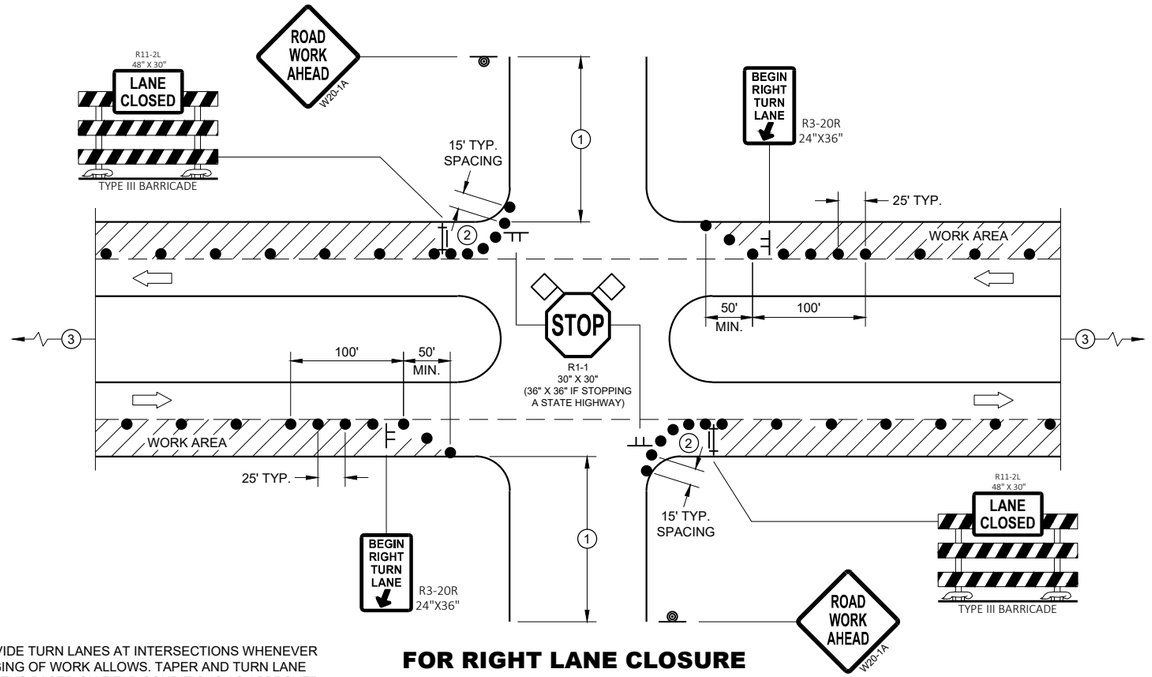
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER

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S.D.D. 15 D 20-4

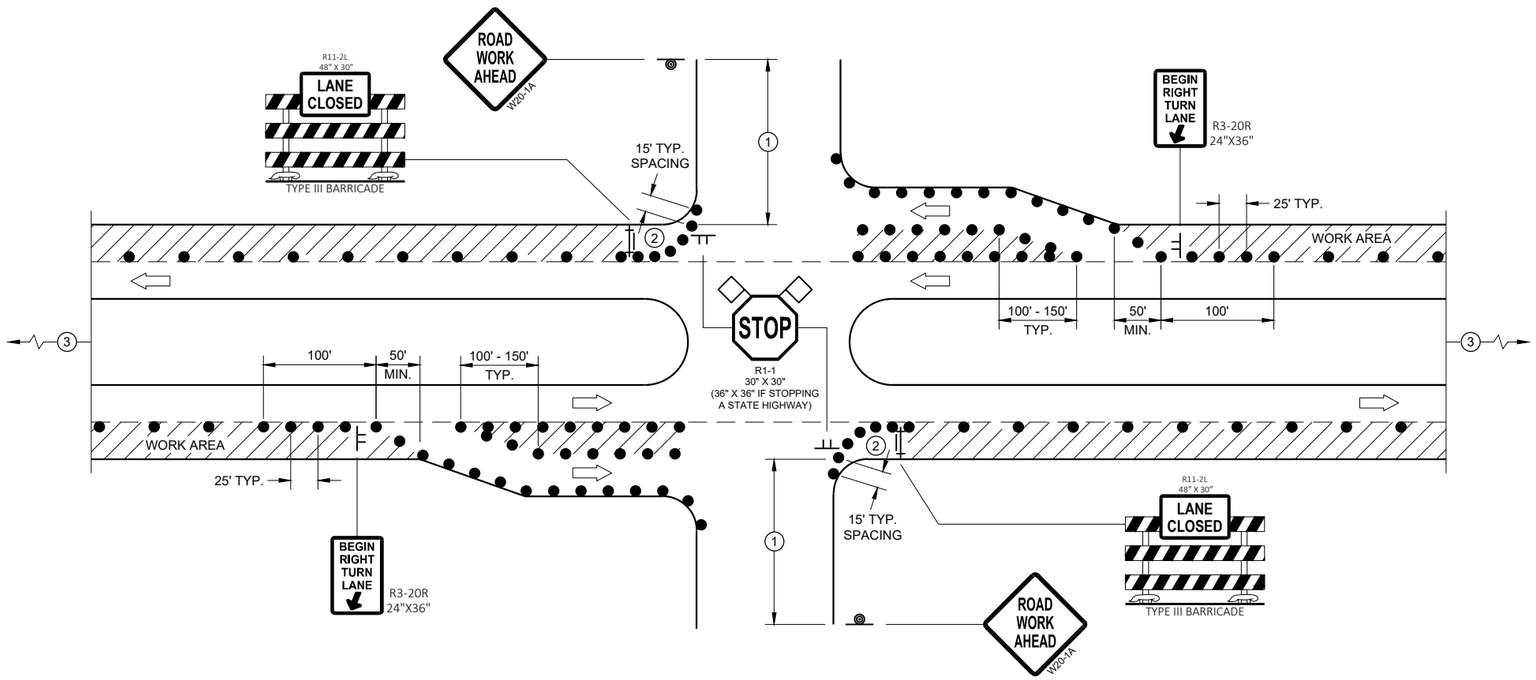
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S.D.D. 15 D 20-4



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR RIGHT LANE CLOSURE AT INTERSECTION



FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

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

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

6

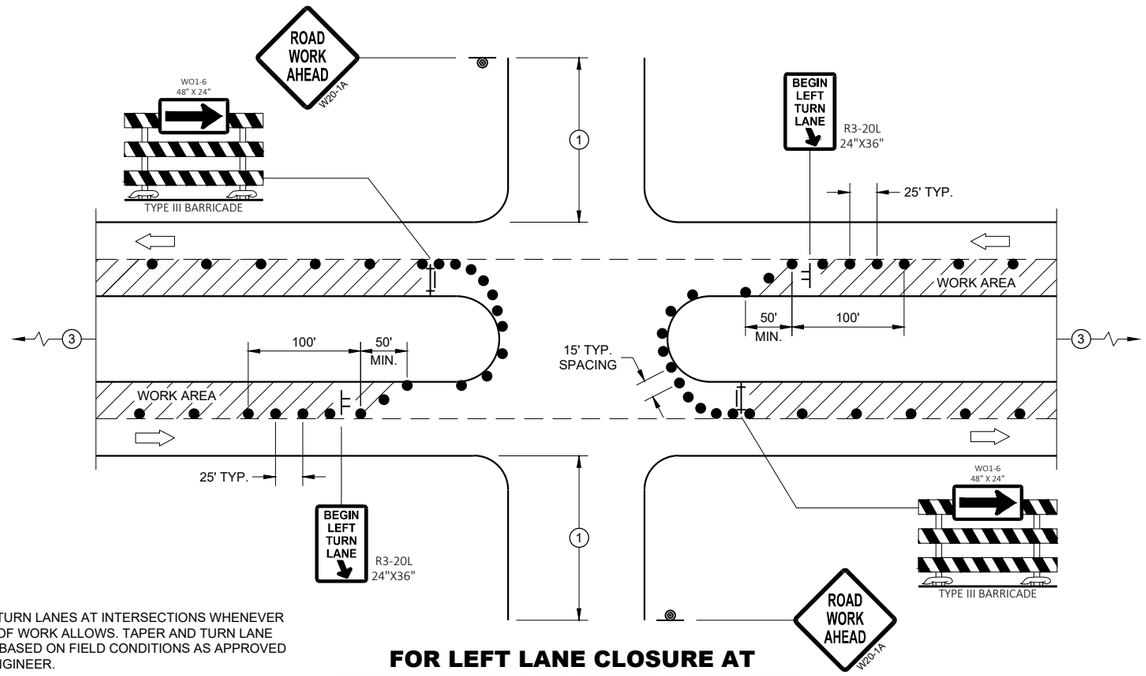
SDD 15D21 - 06a

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 15D21 - 06a



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

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

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

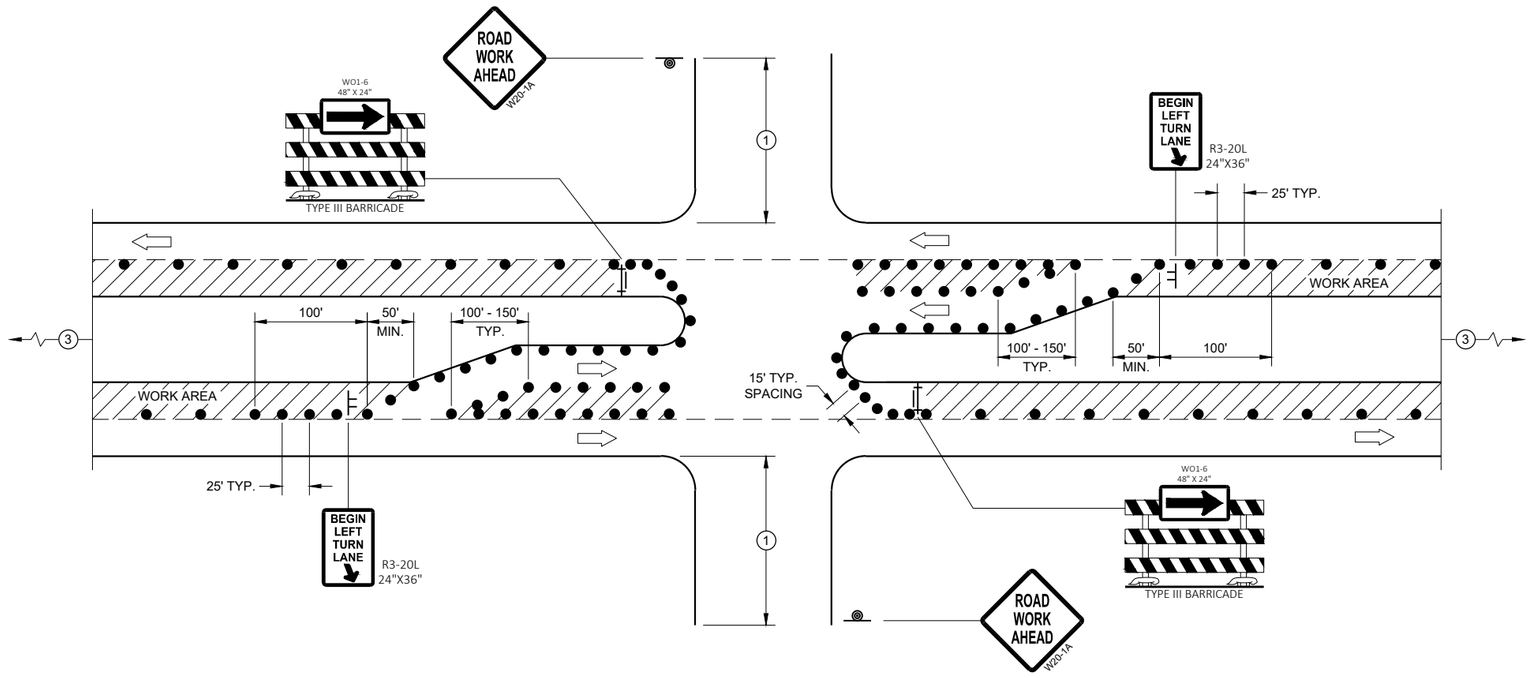
(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

SDD 15D21 - 06b

SDD 15D21 - 06b

TABLE 1
TAPER AND BUFFER SPACE
FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

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

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES. FOR CLOSING THE LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE 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.

W20-1A, G20-1 AND G20-2A 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.

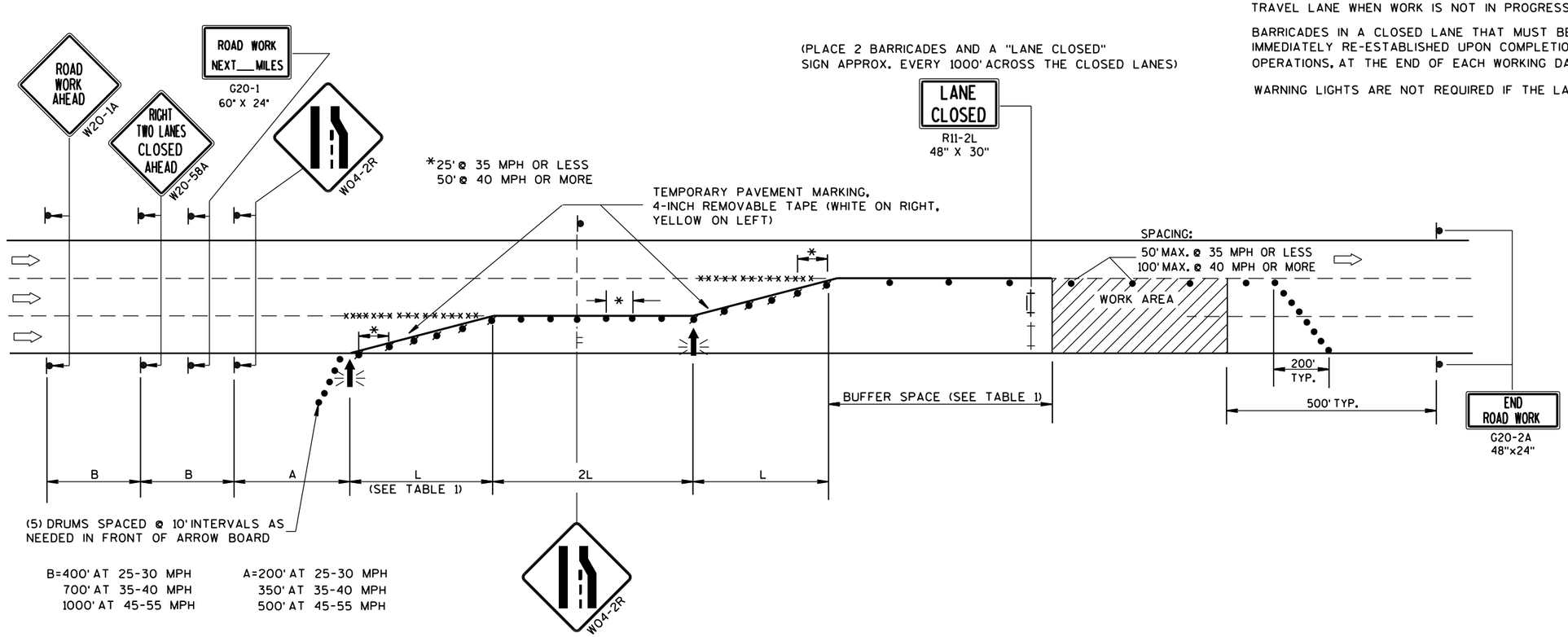
CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO LOCATE THE ARROWBOARD AS SHOWN, PLACE THE ARROWBOARD IN THE LANE CLOSURE TAPER AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE TAPER.

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.



B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

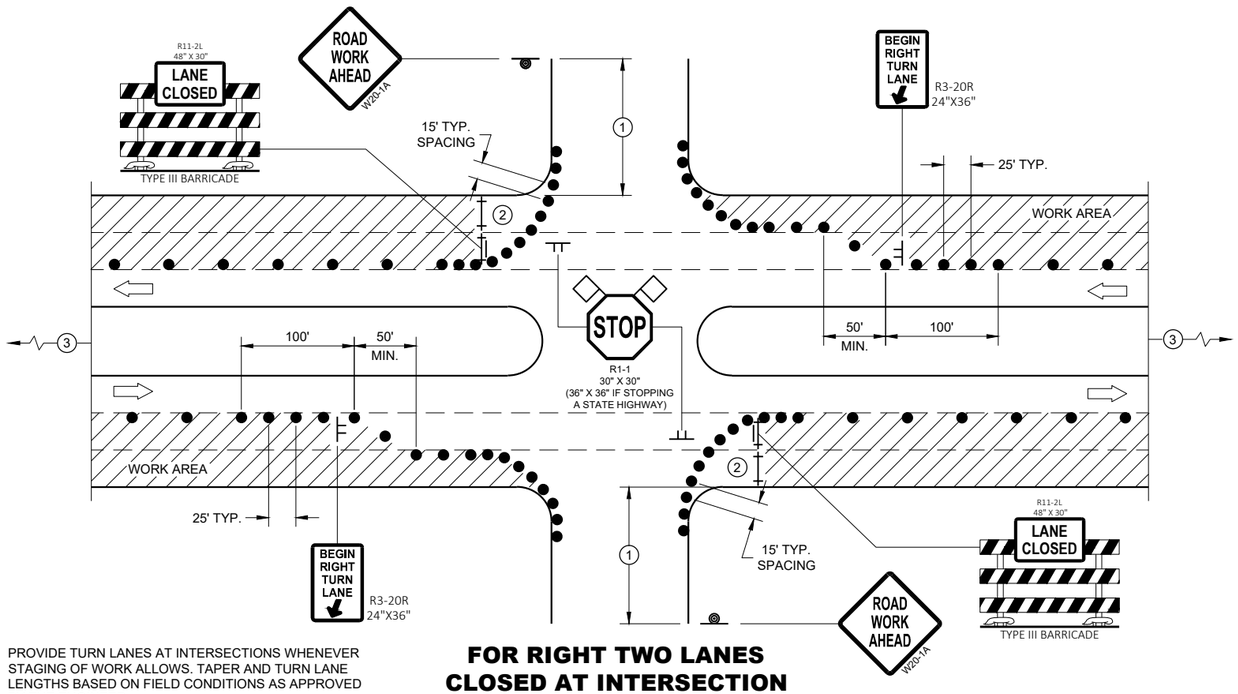
TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

S.D.D. 15 D 22-3

S.D.D. 15 D 22-3



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR RIGHT TWO LANES CLOSED AT INTERSECTION

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

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

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

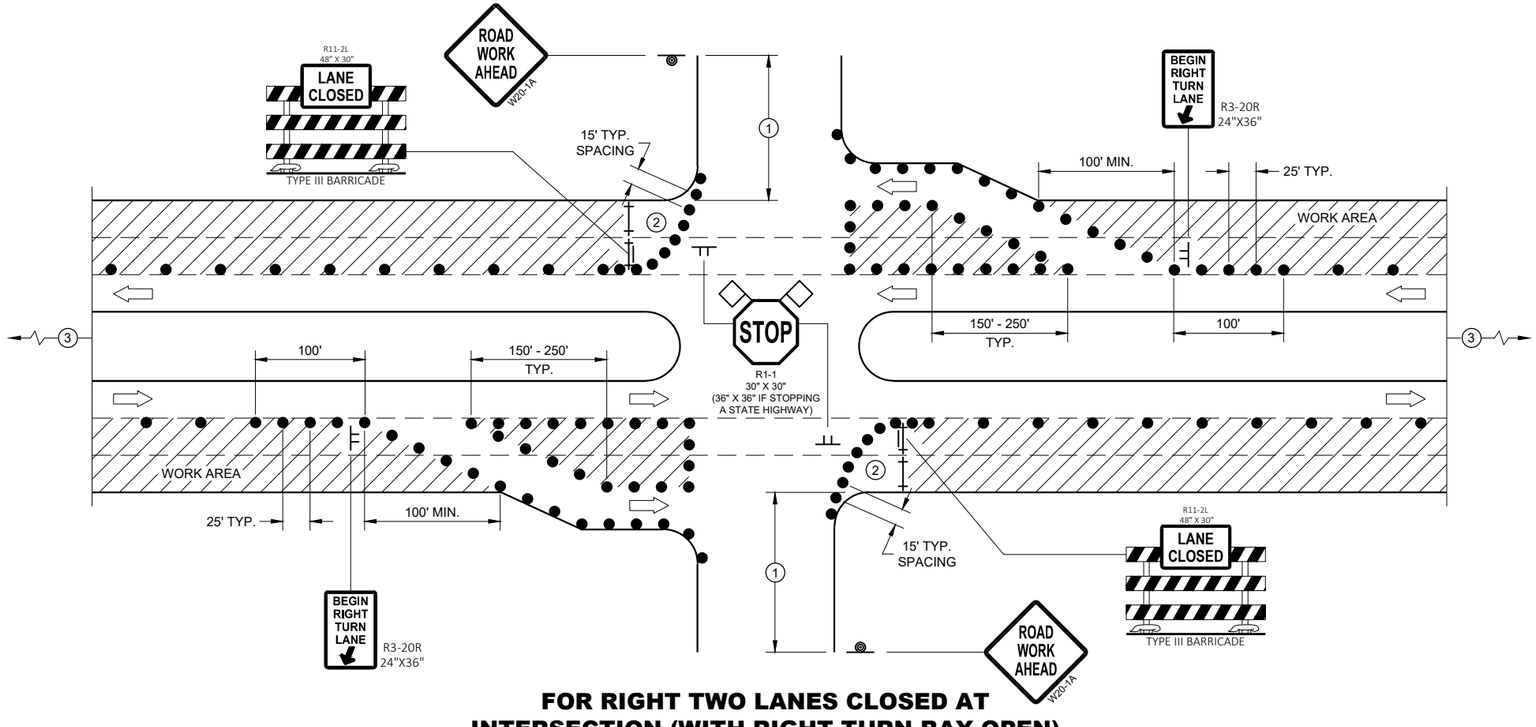
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.



FOR RIGHT TWO LANES CLOSED AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN TWO RIGHT LANE CLOSURE

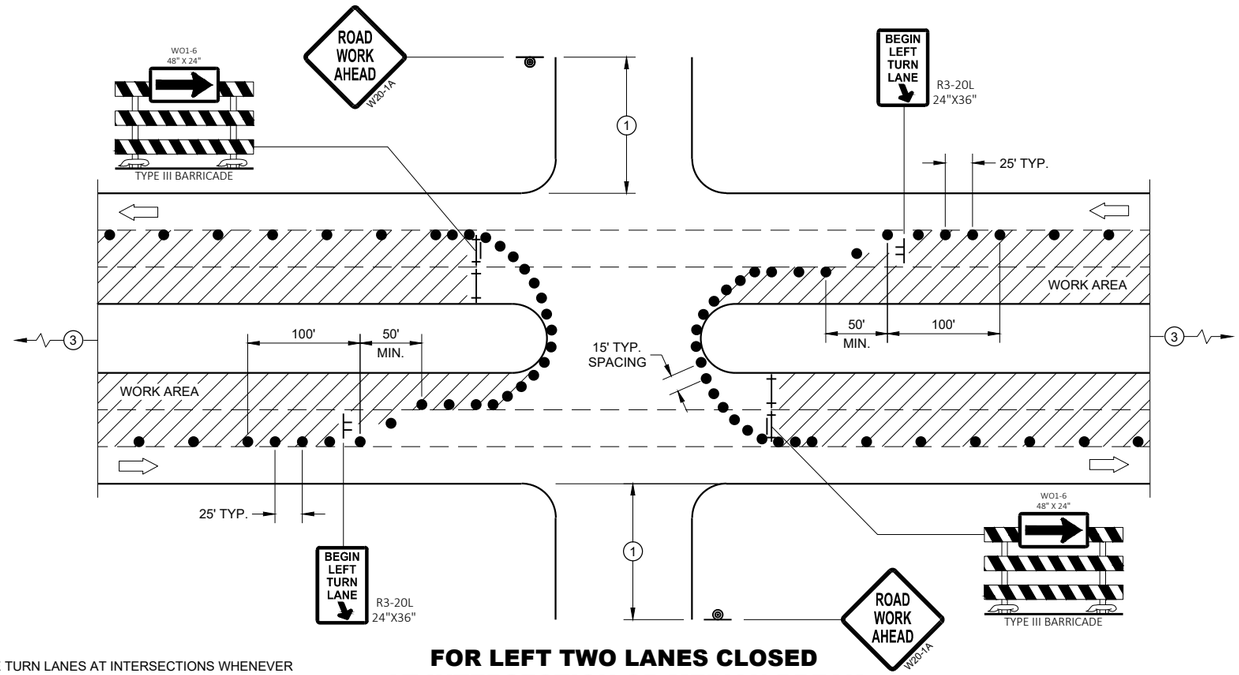
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D23 - 06a

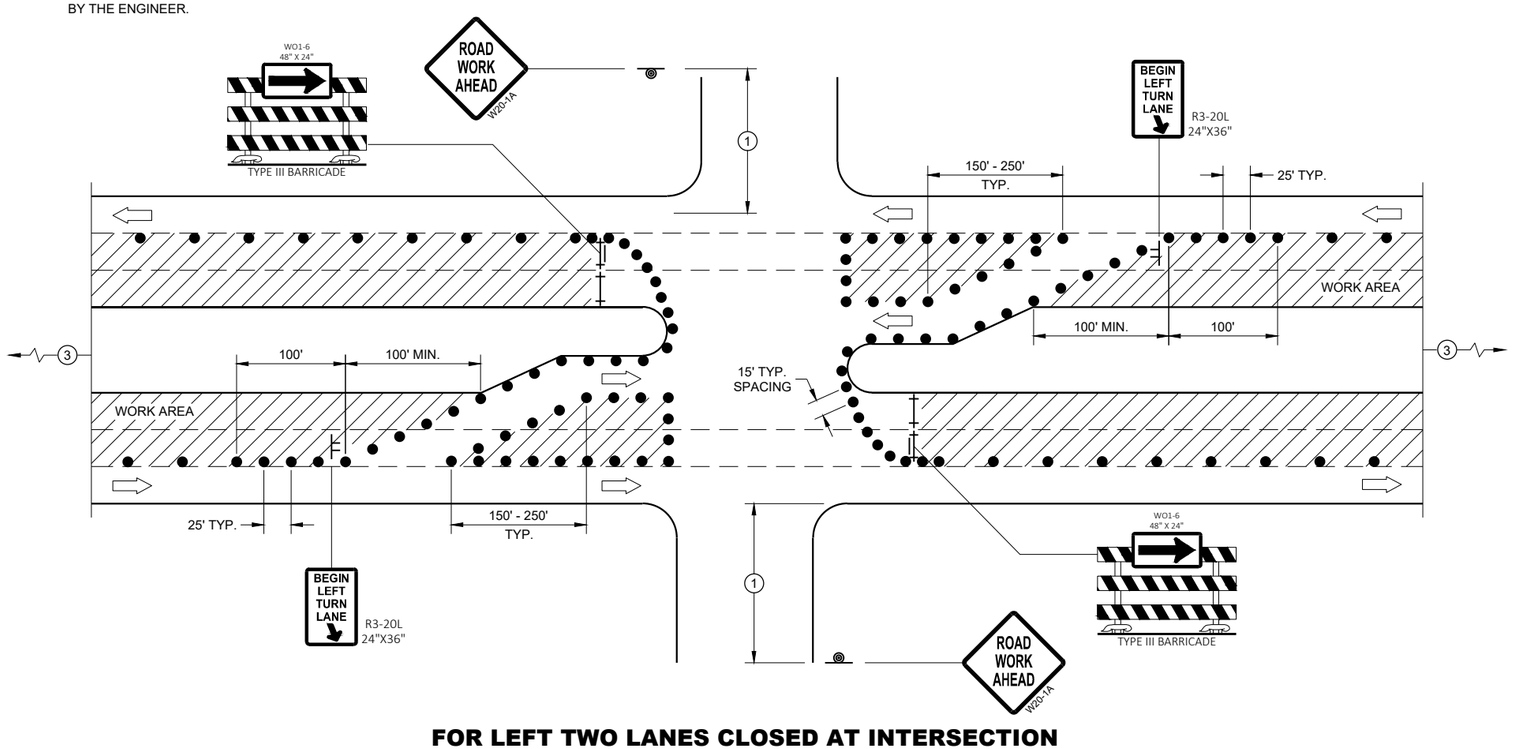
6

SDD 15D23 - 06a



FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK (WITH LEFT TURN BAY OPEN)

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

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

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN TWO LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 — DATE
/S/ Amdrew Heidtke — WORK ZONE ENGINEE
FHWA

SDD 15D23 - 06b

6

SDD 15D23 - 06b

LEGEND

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

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

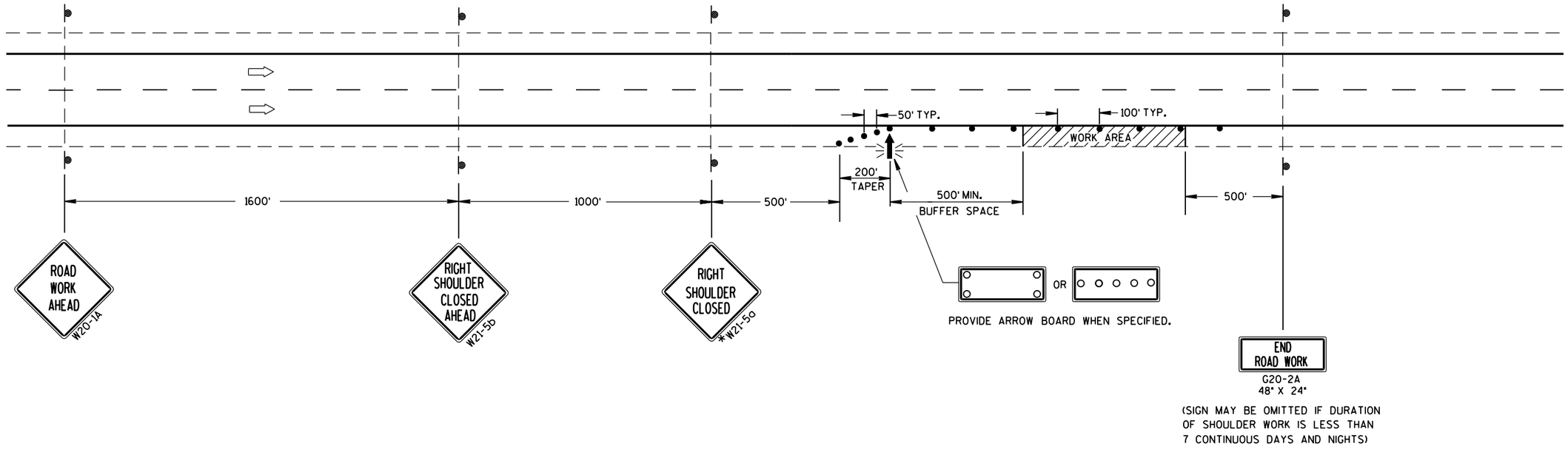
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

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

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

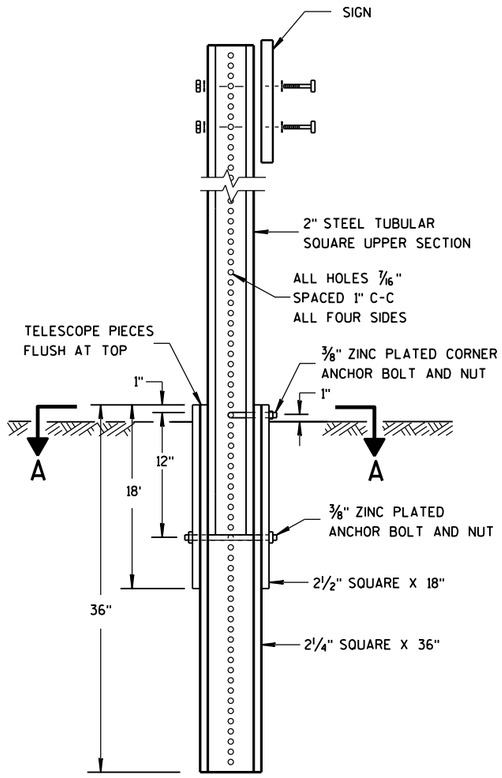
June 2016 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

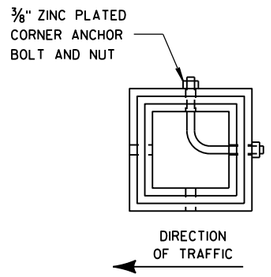
FHWA

6

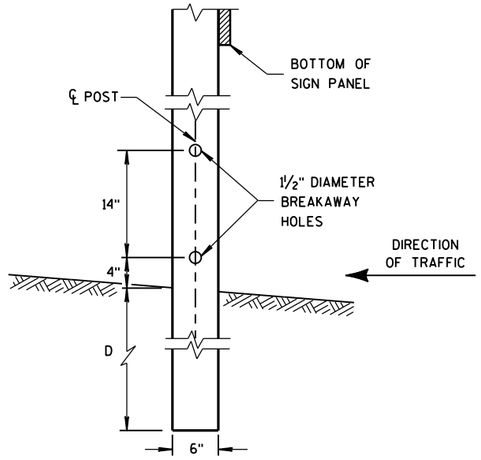
S.D.D. 15 D 27-3



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



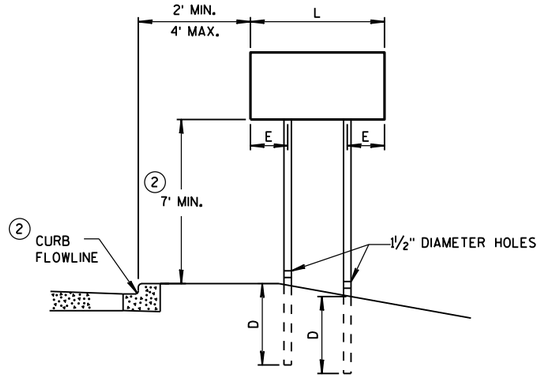
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

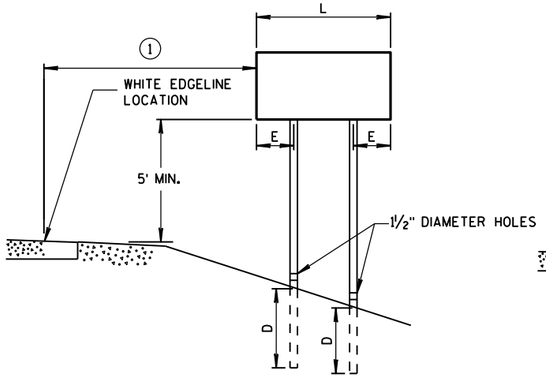
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

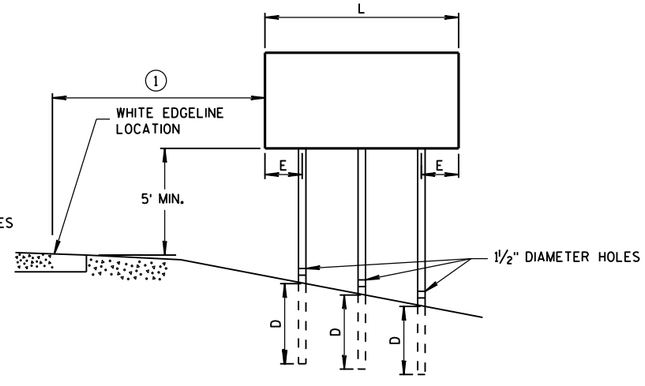
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL 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).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

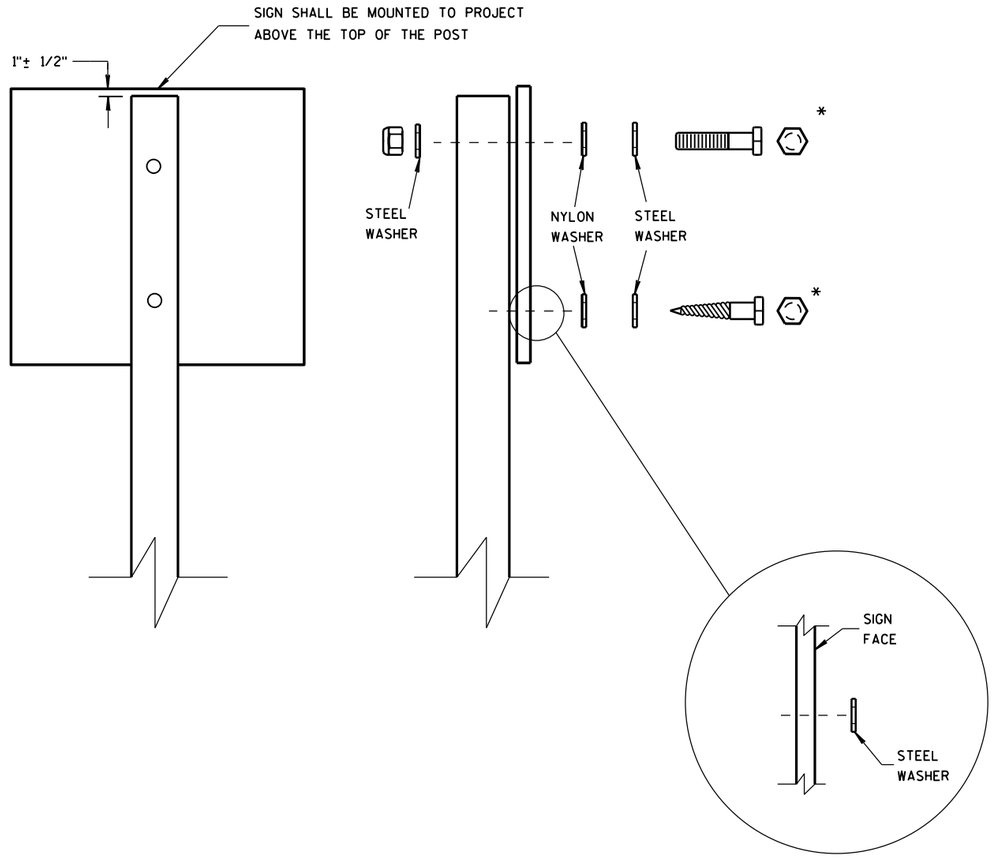
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 D 38-2a



WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

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

WASHERS (ALL POSTS) -

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

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

6

S.D.D. 15 D 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

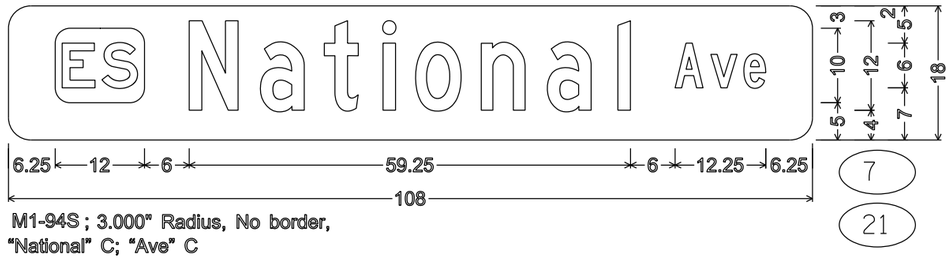
June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

FHWA

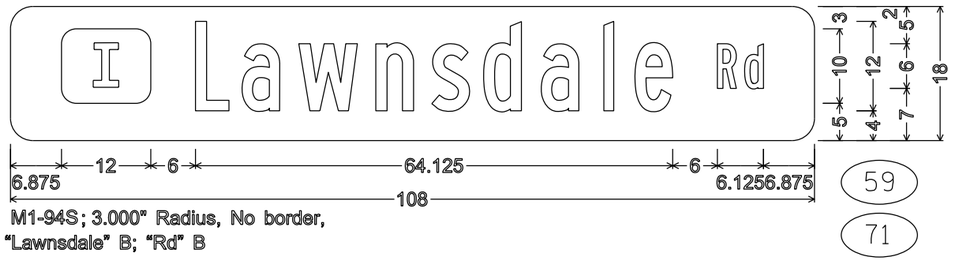
NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - As noted



7
21

M1-94S ; 3.000" Radius, No border,
"National" C; "Ave" C



59
71

M1-94S; 3.000" Radius, No border,
"Lawnsdale" B; "Rd" B

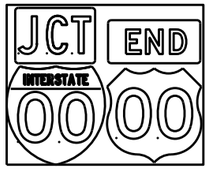
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7

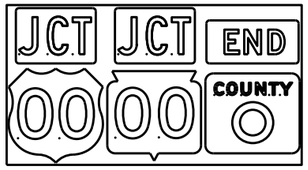
TYPICAL ASSEMBLIES



J1-1



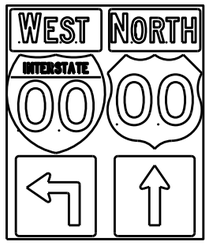
J1-2



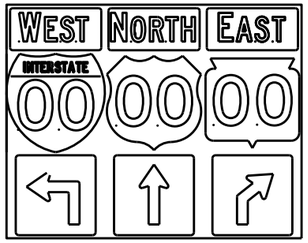
J1-3



J2-1



J2-2

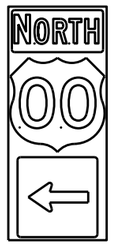


J2-3

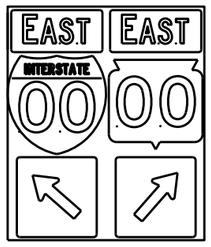


JV

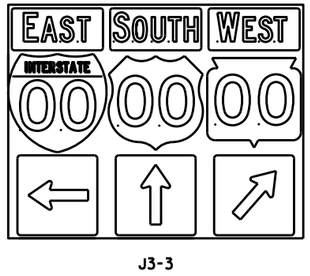
(Typical Vertical J-Assembly
See Note 10 and 11)



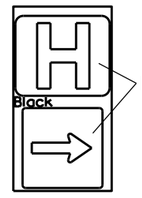
J3-1



J3-2



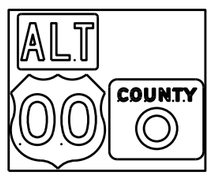
J3-3



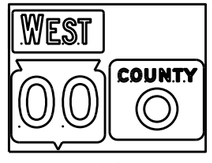
JH-1



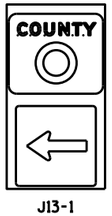
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

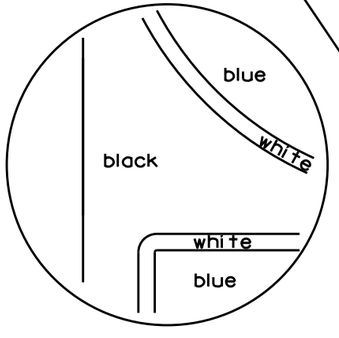


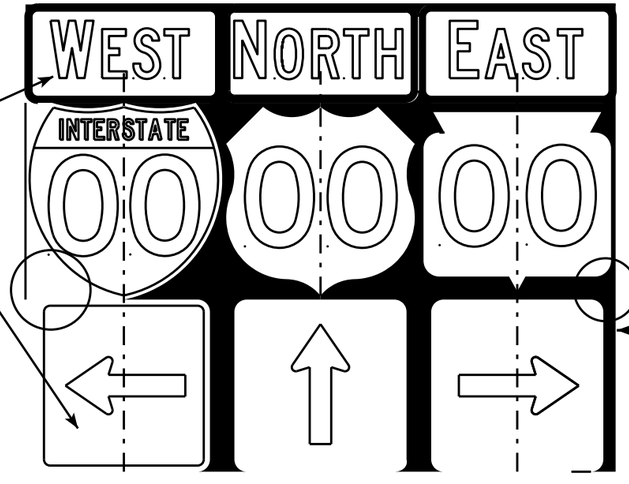
J23-1

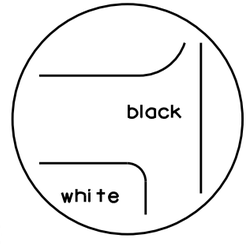


J22-1

[blue background with interstate]







[black background]

NOTES

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

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

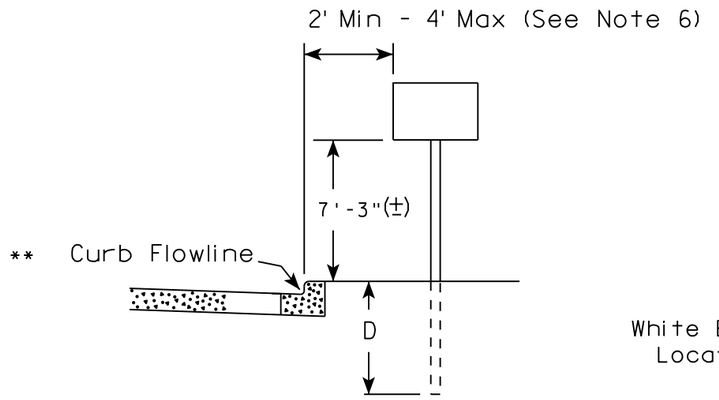
APPROVED Matthew R Rauch
for State Traffic Engineer

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

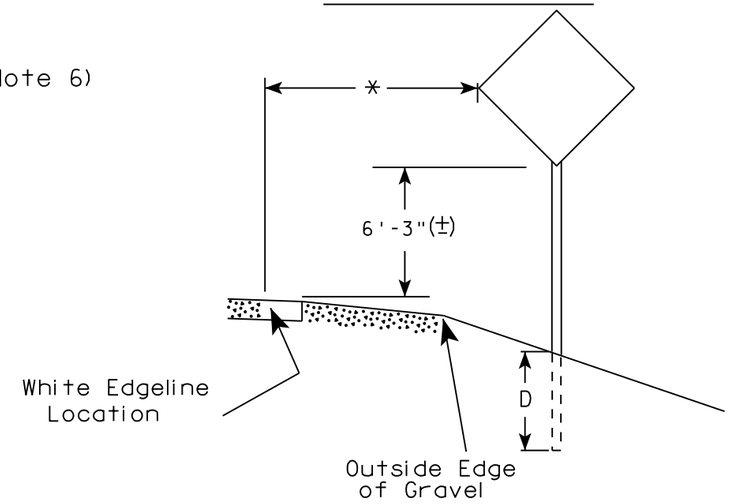
PROJECT NO: | SHEET NO: E

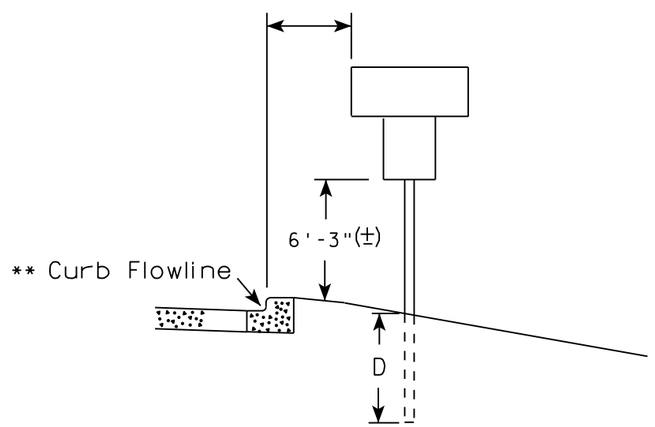
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WISDOT/CADDS SHEET 42

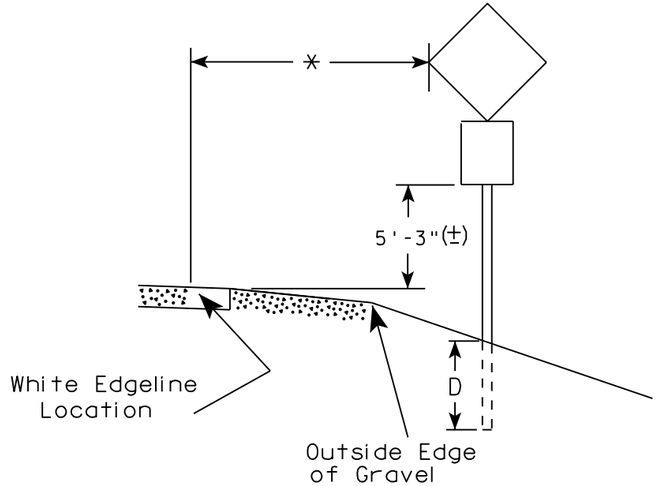
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

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

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

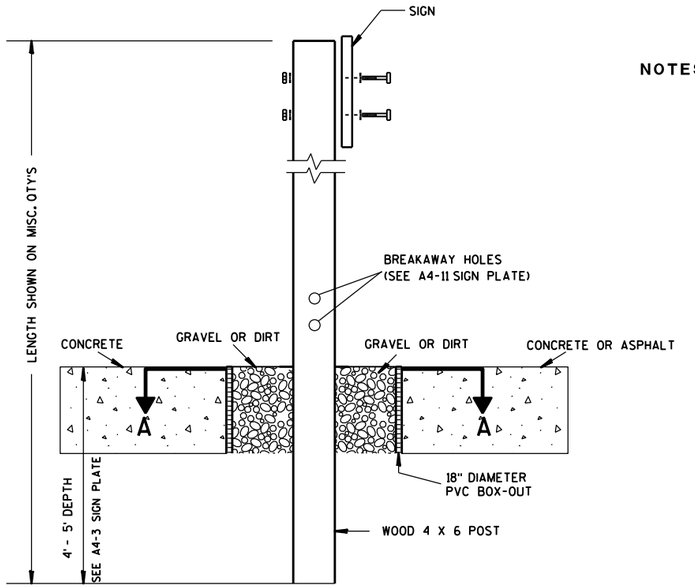
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

7 7

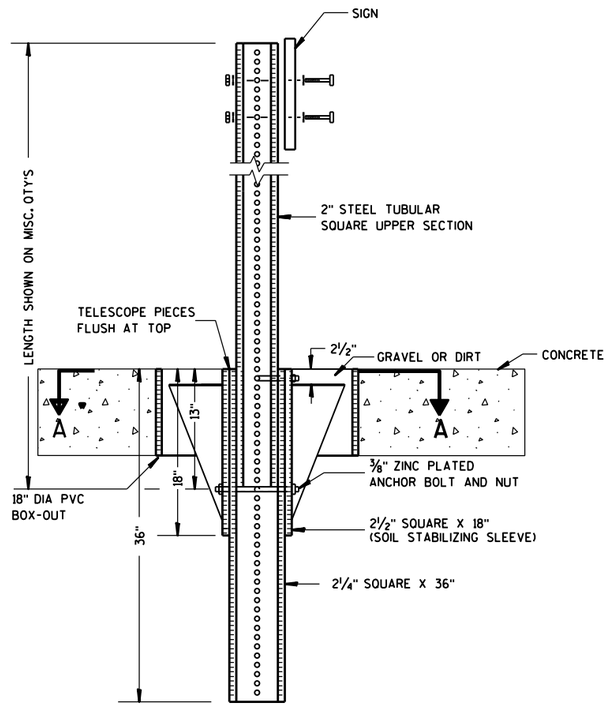
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 444	E



ELEVATION VIEW

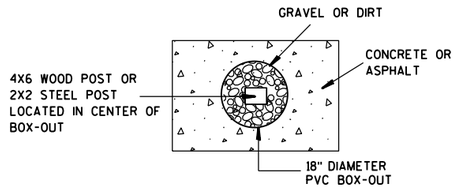
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

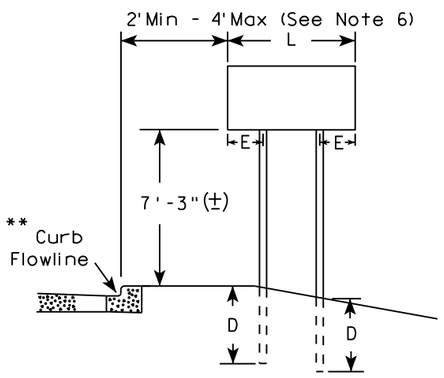
APPROVED Matthew R Rauch
for State Traffic Engineer

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

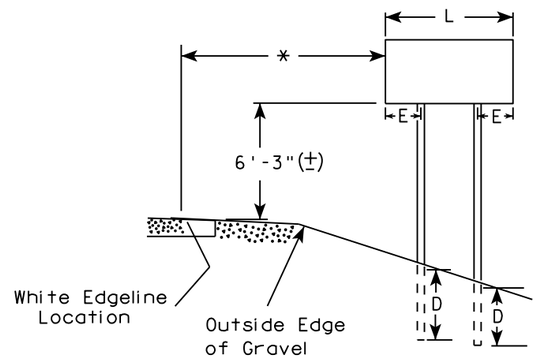
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

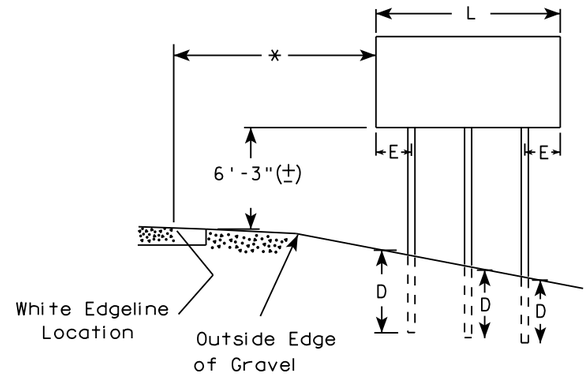
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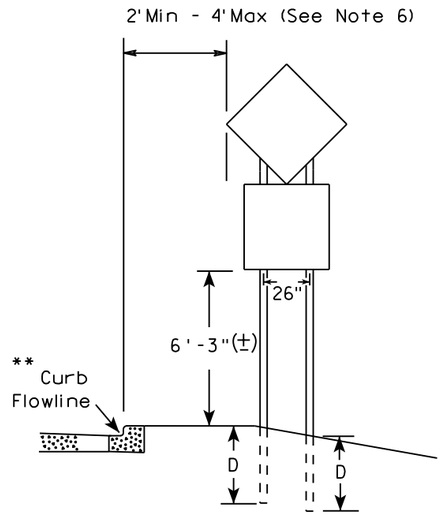
URBAN AREA



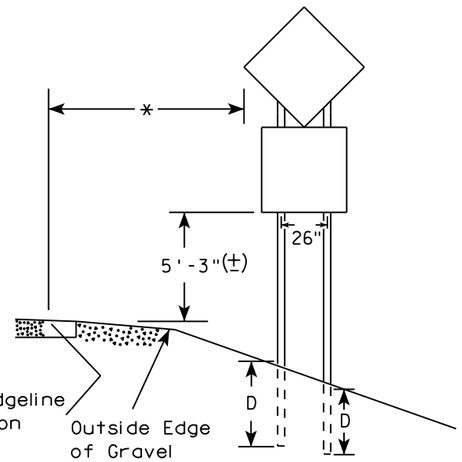
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

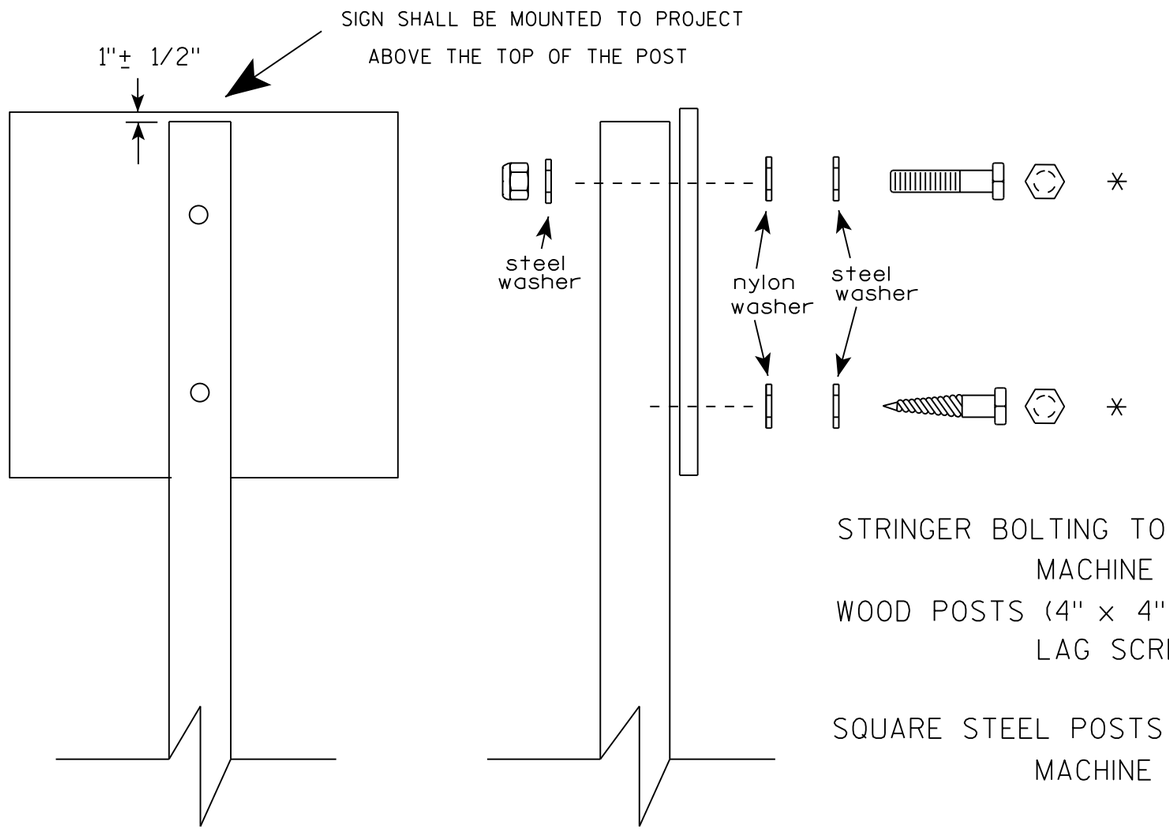
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 446	E



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

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

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

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

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

WOOD POSTS (4" x 4" or 4" x 6")

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

SQUARE STEEL POSTS (2" x 2")

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

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

WASHERS (ALL POSTS) -

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

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

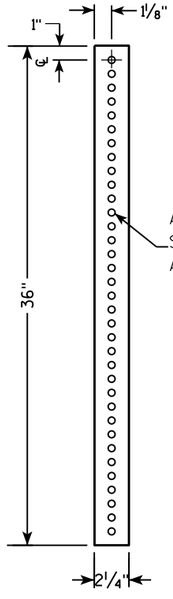
DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: SHEET NO: E

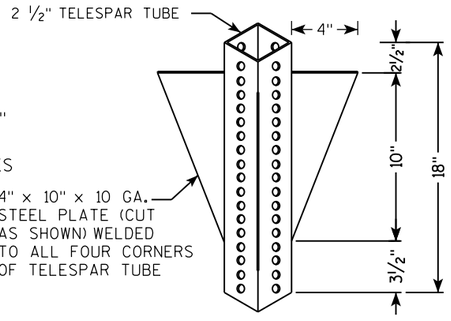
FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

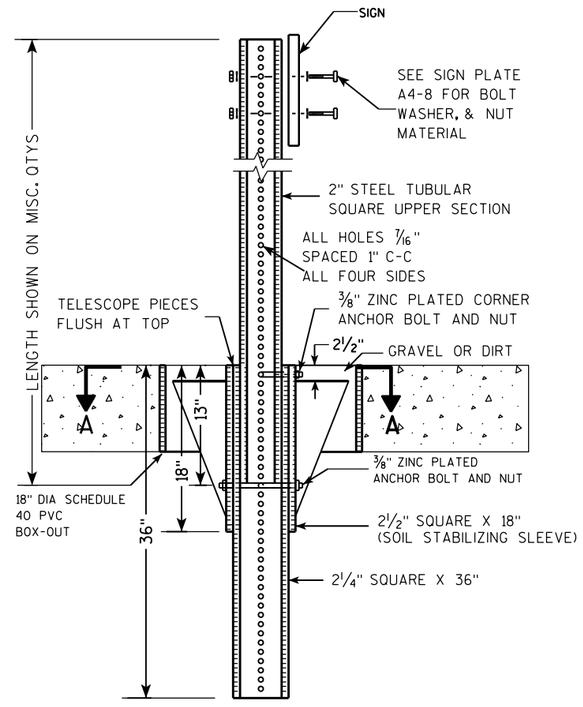
2 ¼ " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



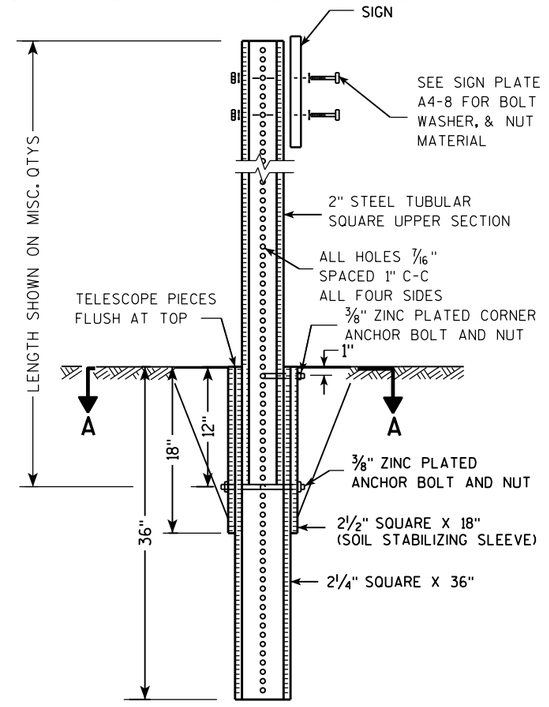
2 ½ " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

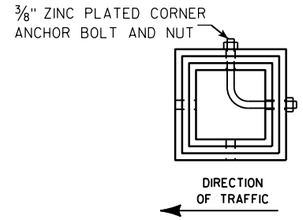


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

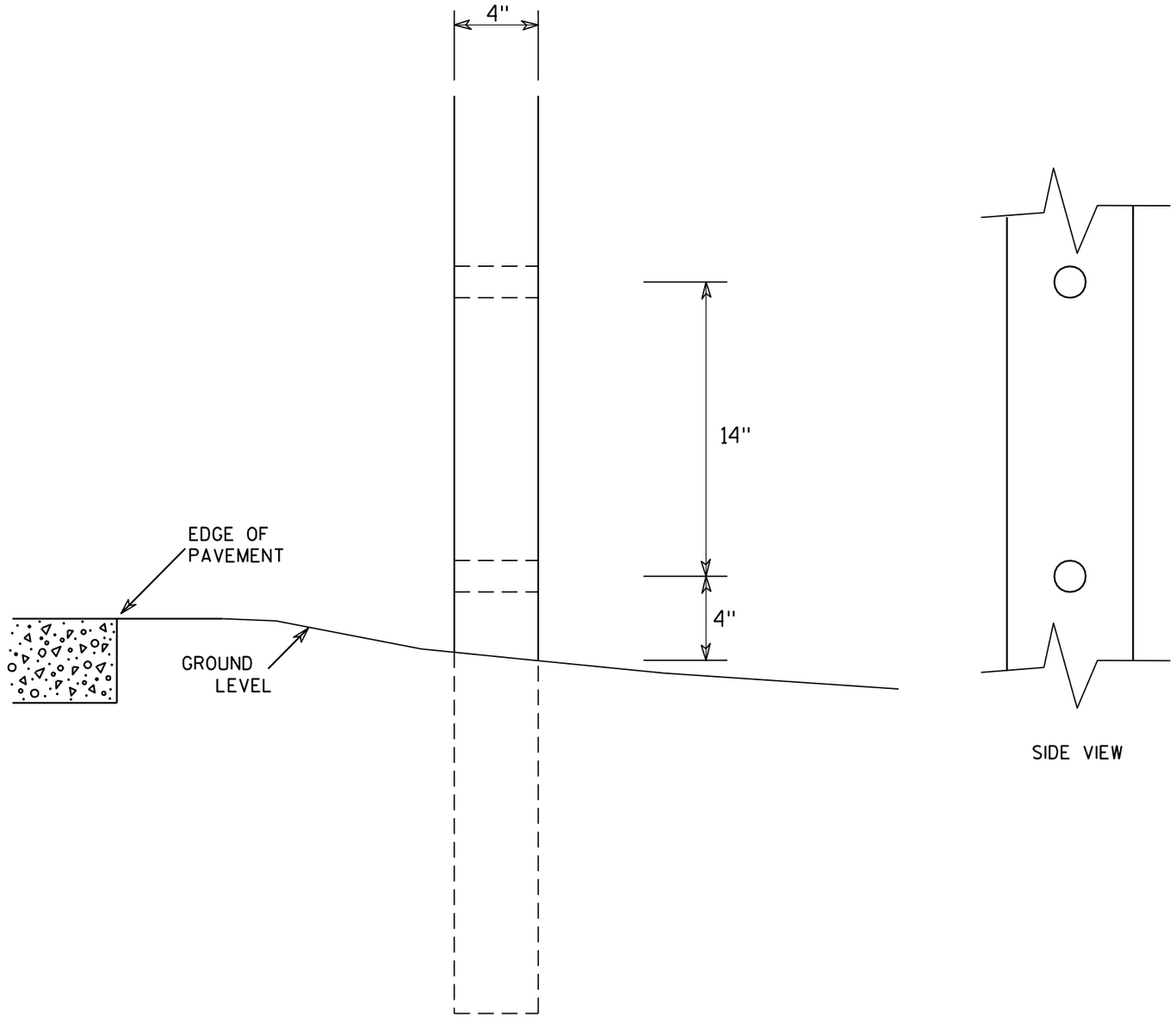
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 448 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

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WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

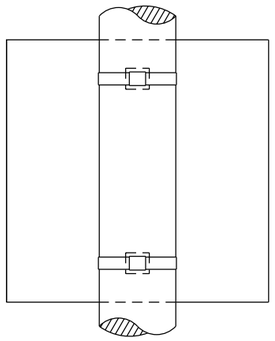
APPROVED Chester J Spang for State Traffic Engineer

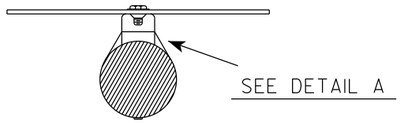
DATE 3/27/97 PLATE NO. A4-11.2

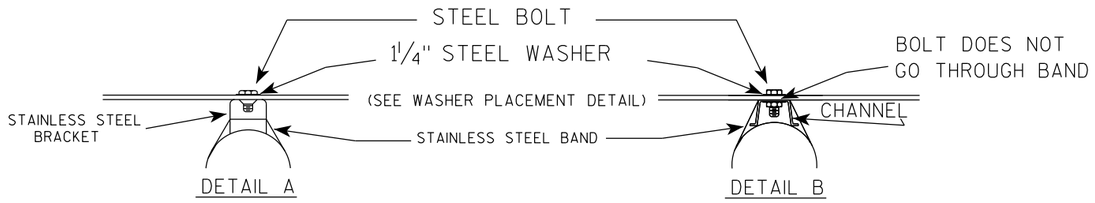
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 449	E

BANDING

SINGLE SIGN



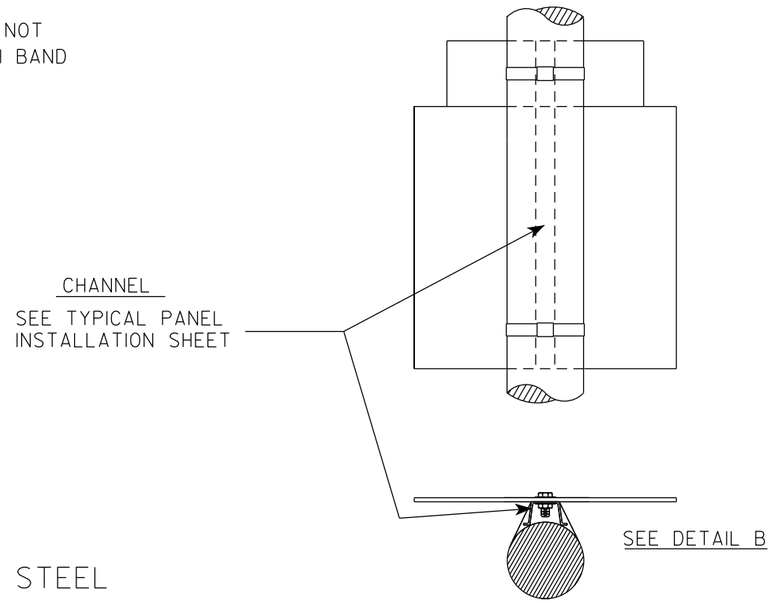




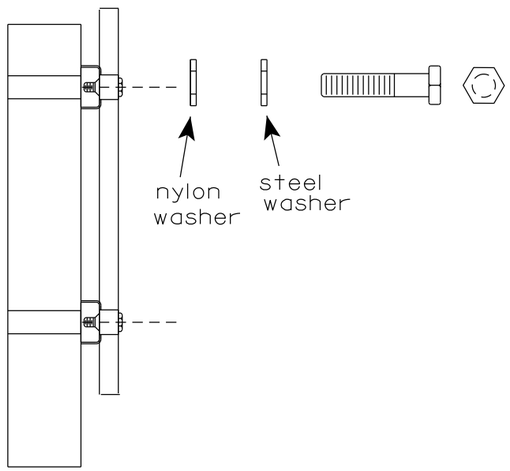
GENERAL NOTES

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

"J" ASSEMBLY



WASHER PLACEMENT



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

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

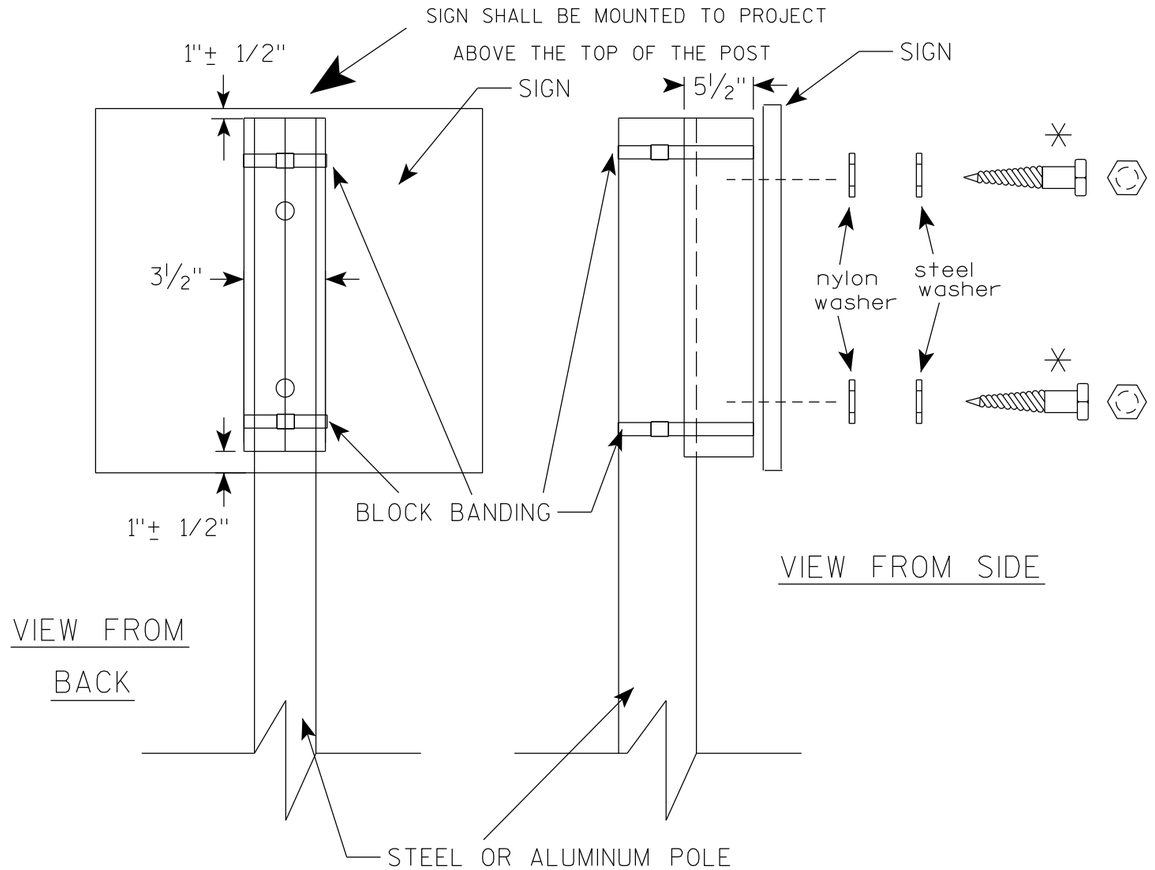
DATE 6/10/19 PLATE NO. A5-9.4

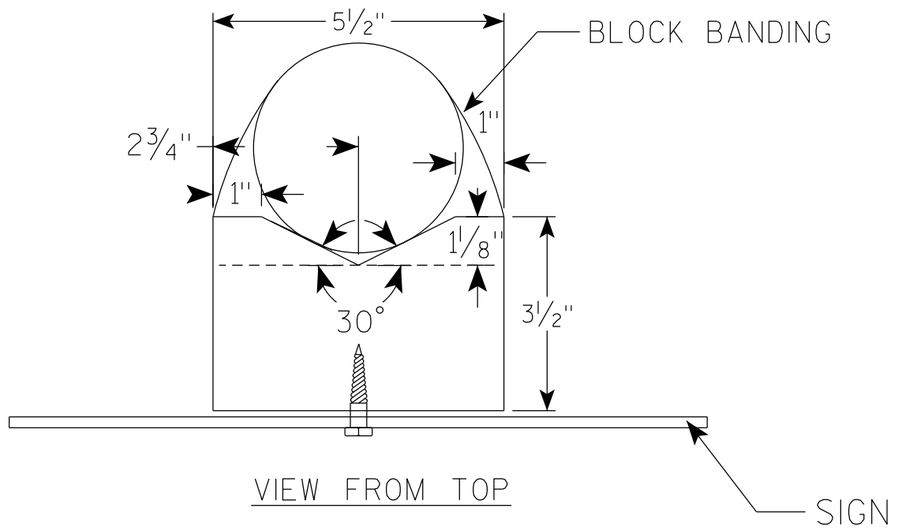
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 450	E

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

7

7





GENERAL NOTES

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

✳ LAG BOLTS SHALL BE ⅜" X 2½"

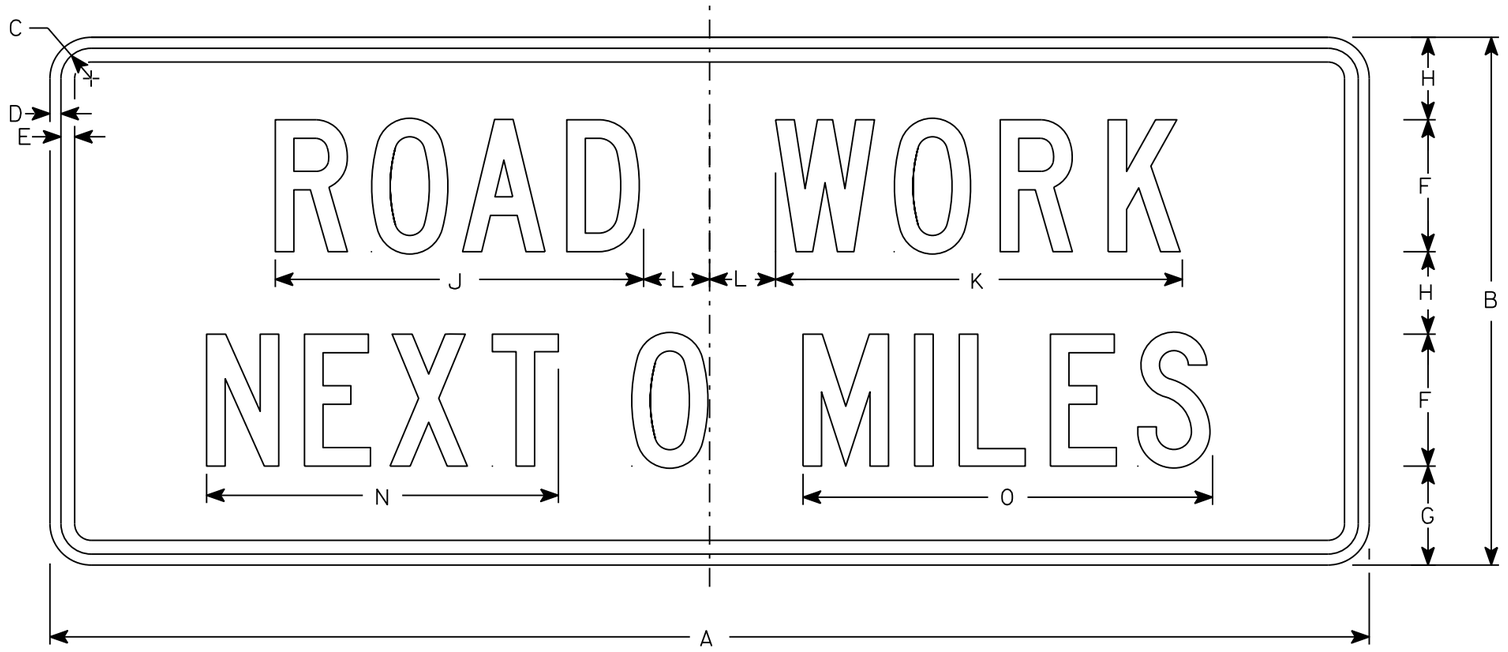
BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO:				SHEET NO: 451	E



G20-1

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Round distance to nearest whole Mile and substitute appropriate numerals and optically adjust spacing to achieve proper balance

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10
3																											
4	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10
5																											

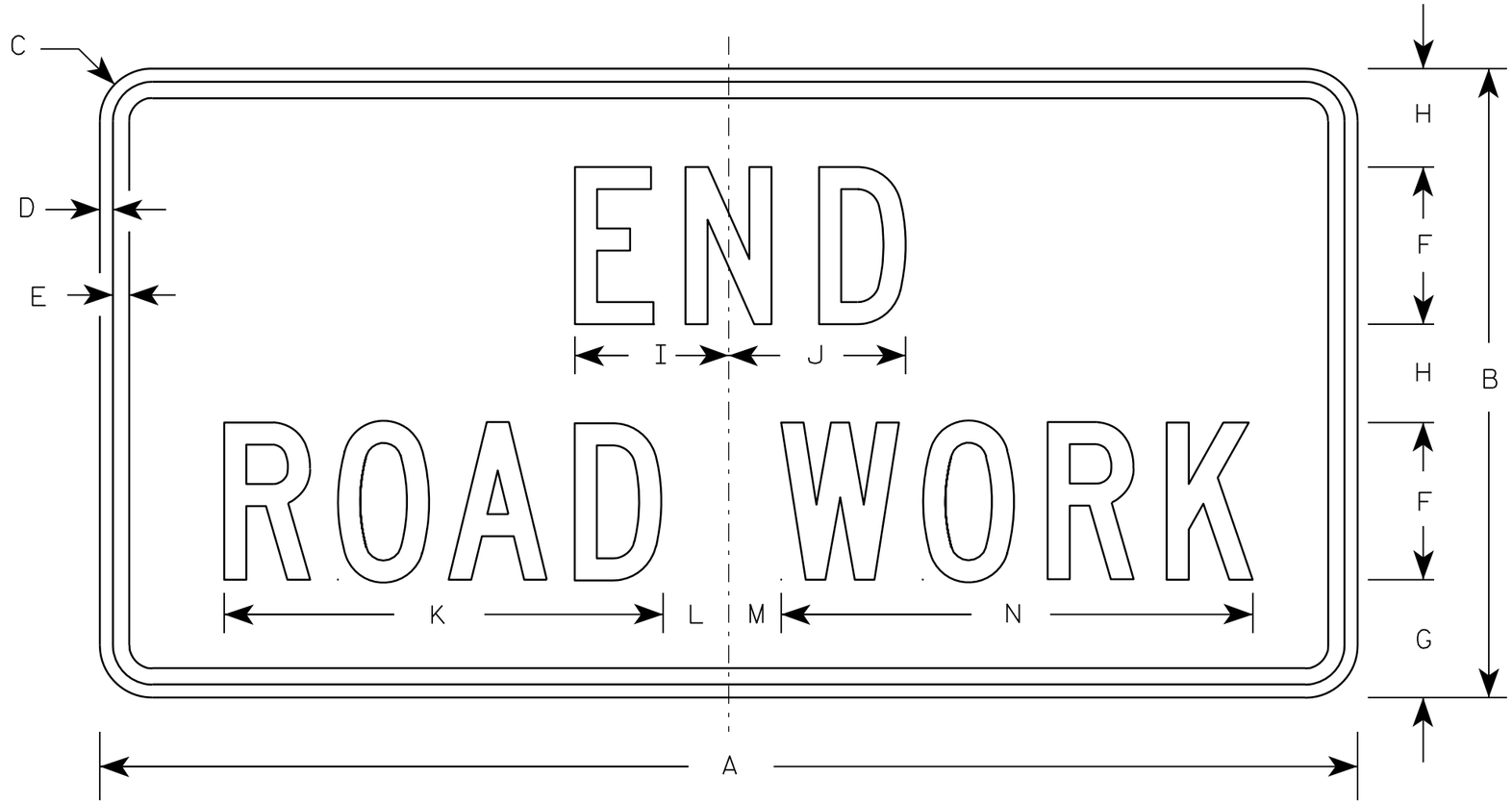
STANDARD SIGN
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/14/17 PLATE NO. G20-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 452	E



G20-2A

NOTES

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

Metric equivalent for this sign is:

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

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

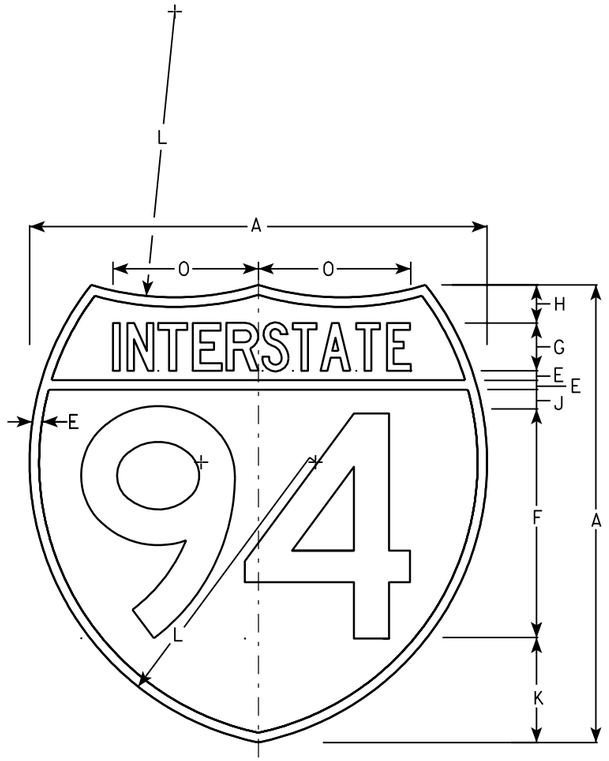
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

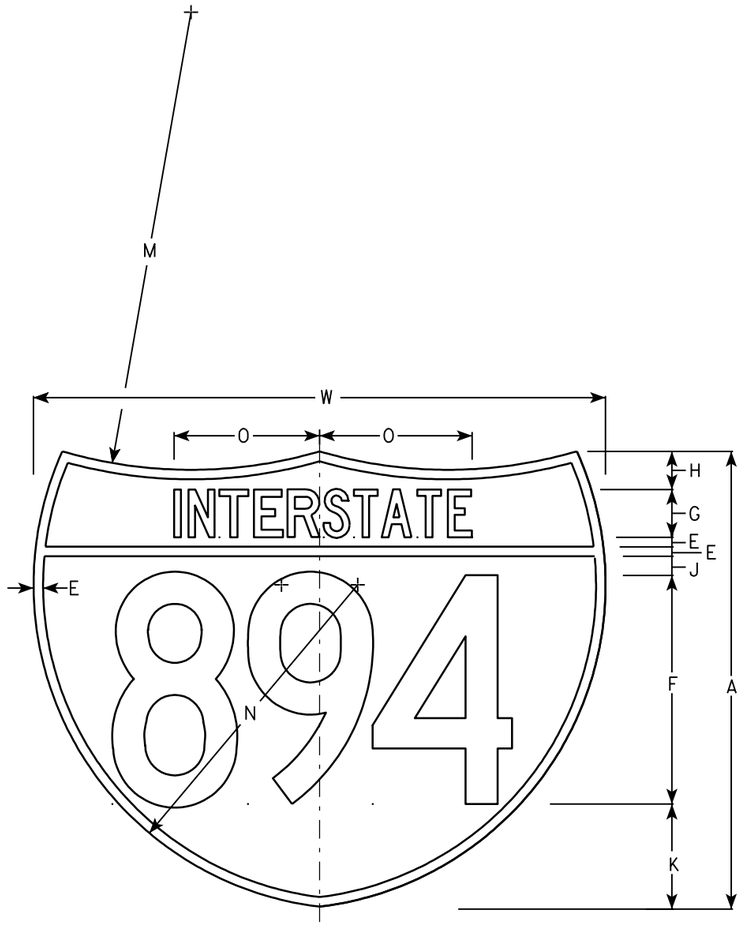
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 453	E



M1-1



M1-1A

NOTES

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

Metric equivalent for these signs are:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

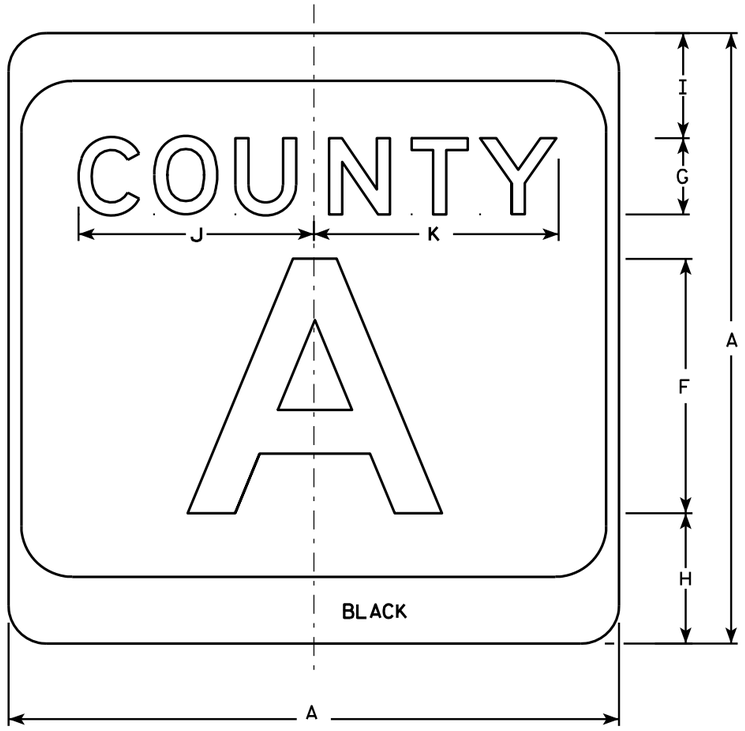
INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

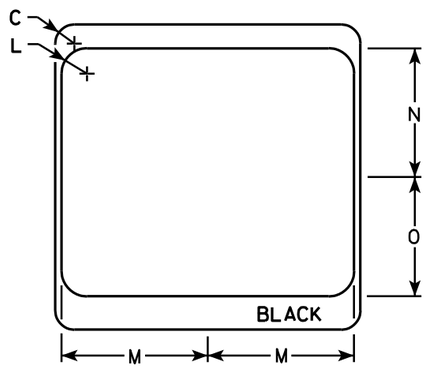
APPROVED Matthew R Rauch
for State Traffic Engineer

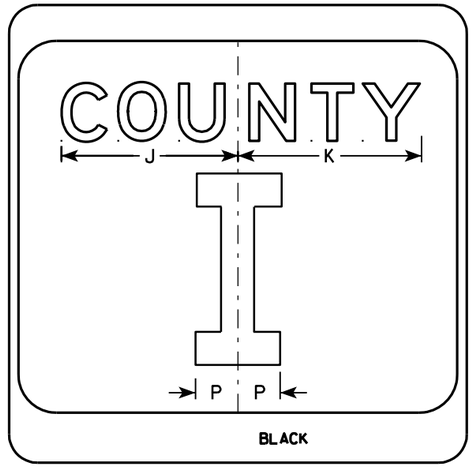
DATE 08/23/05 PLATE NO. M1-1.8

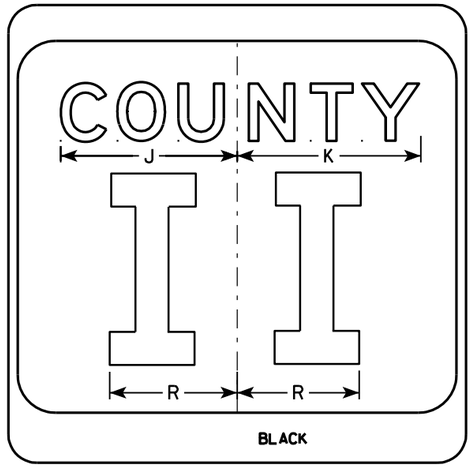
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 454	E



M1-5A







NOTES

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

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

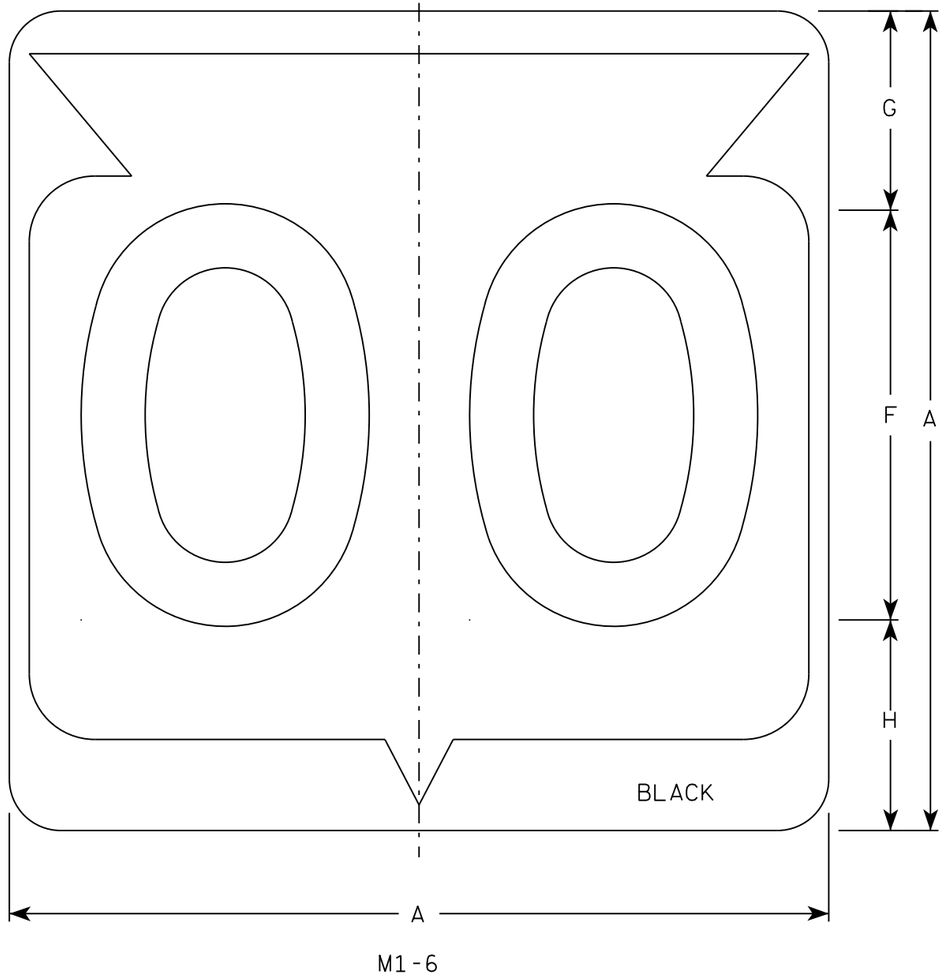
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

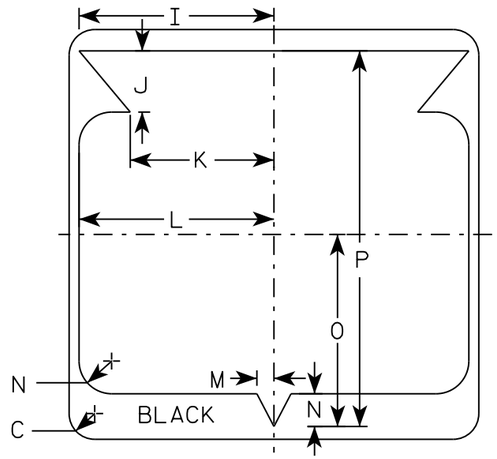
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 455	E



M1-6

NOTES

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



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

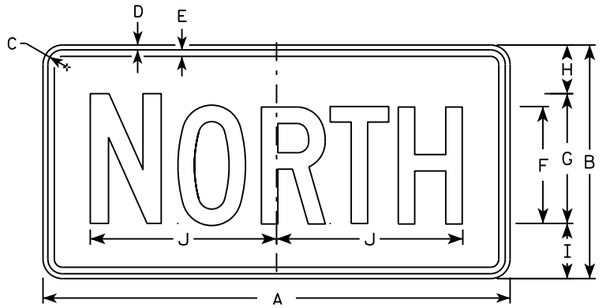
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

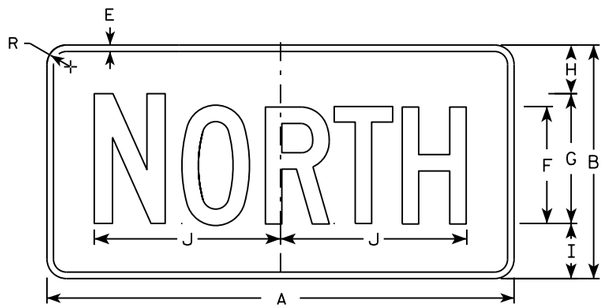
APPROVED Matthew R Rauch for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 456	E



M3-1
MM3-1
MP3-1



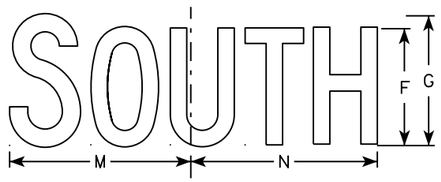
MB3-1
MK3-1
MN3-1



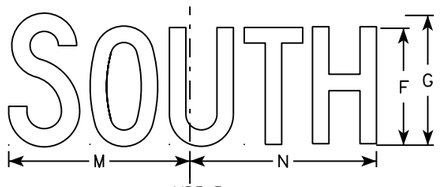
M3-2
MM3-2
MP3-2



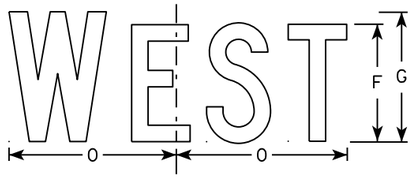
MB3-2
MK3-2
MN3-2



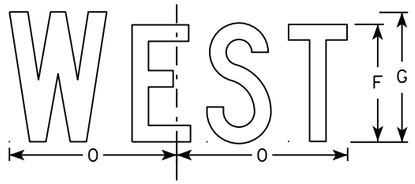
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

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

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

STANDARD SIGNS
M3-1 thur M3-4
SERIES

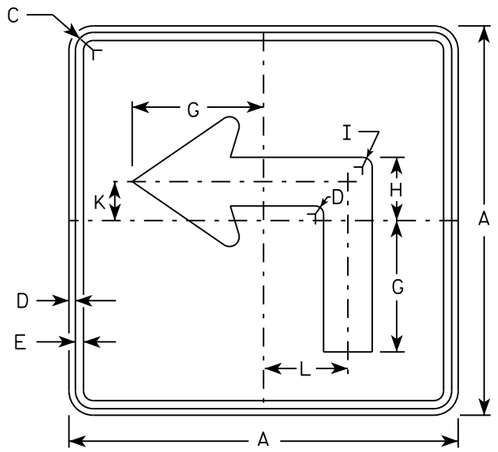
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

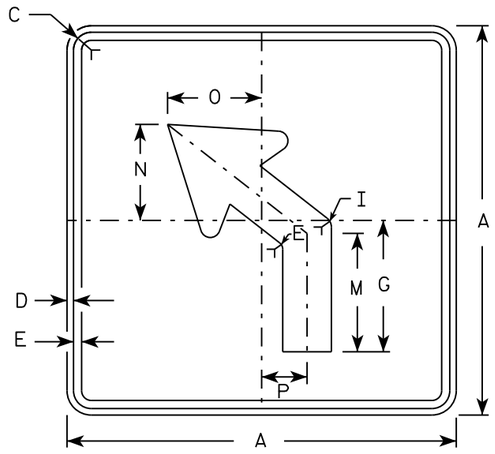
DATE 10/15/15 PLATE NO M3-1.14

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

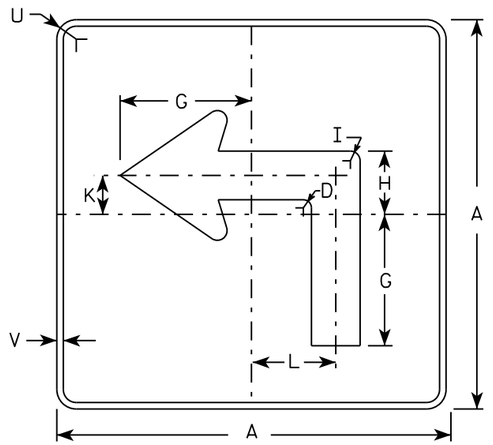
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



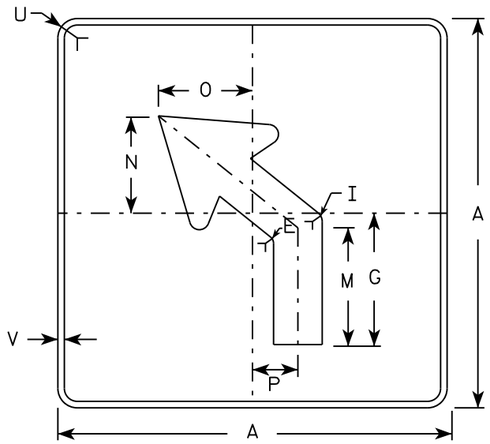
M5-1L
MM5-1L
MO5-1L
MP5-1L



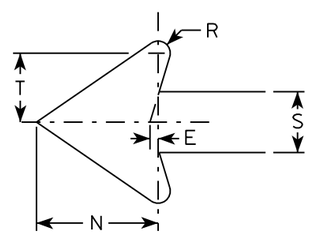
M5-2L
MM5-2L
MO5-2L
MP5-2L



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



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



NOTES

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

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

STANDARD SIGN
M5-1 & M5-2

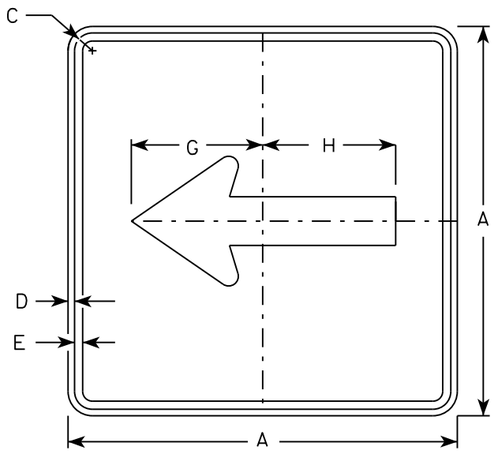
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

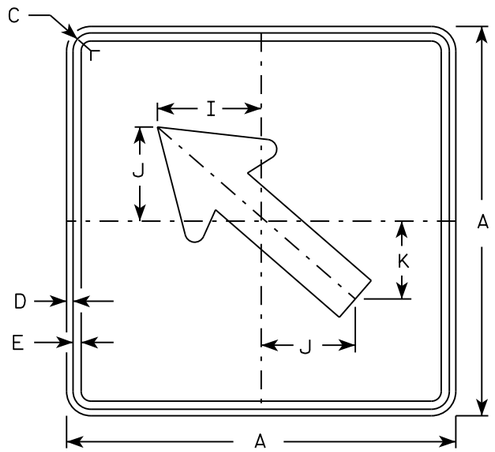
DATE 10/15/15 PLATE NO. M5-1.13

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



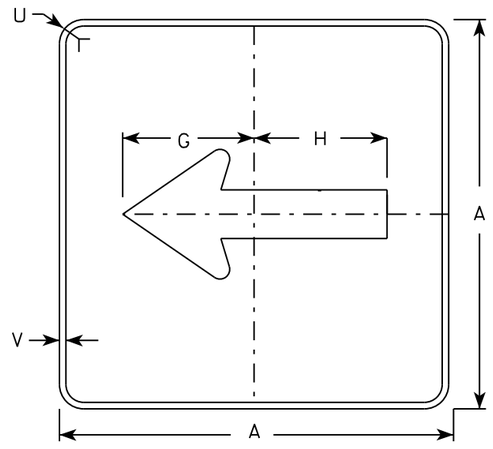
M6-1
MM6-1
MO6-1
MP6-1



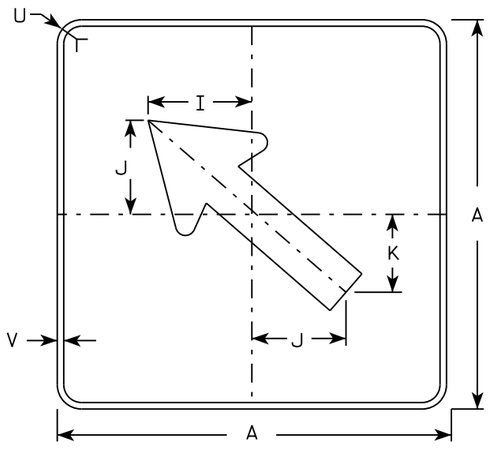
M6-2
MM6-2
MO6-2
MP6-2

NOTES

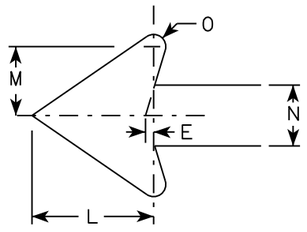
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background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



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



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



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

STANDARD SIGN M6-1 & M6-2 SERIES

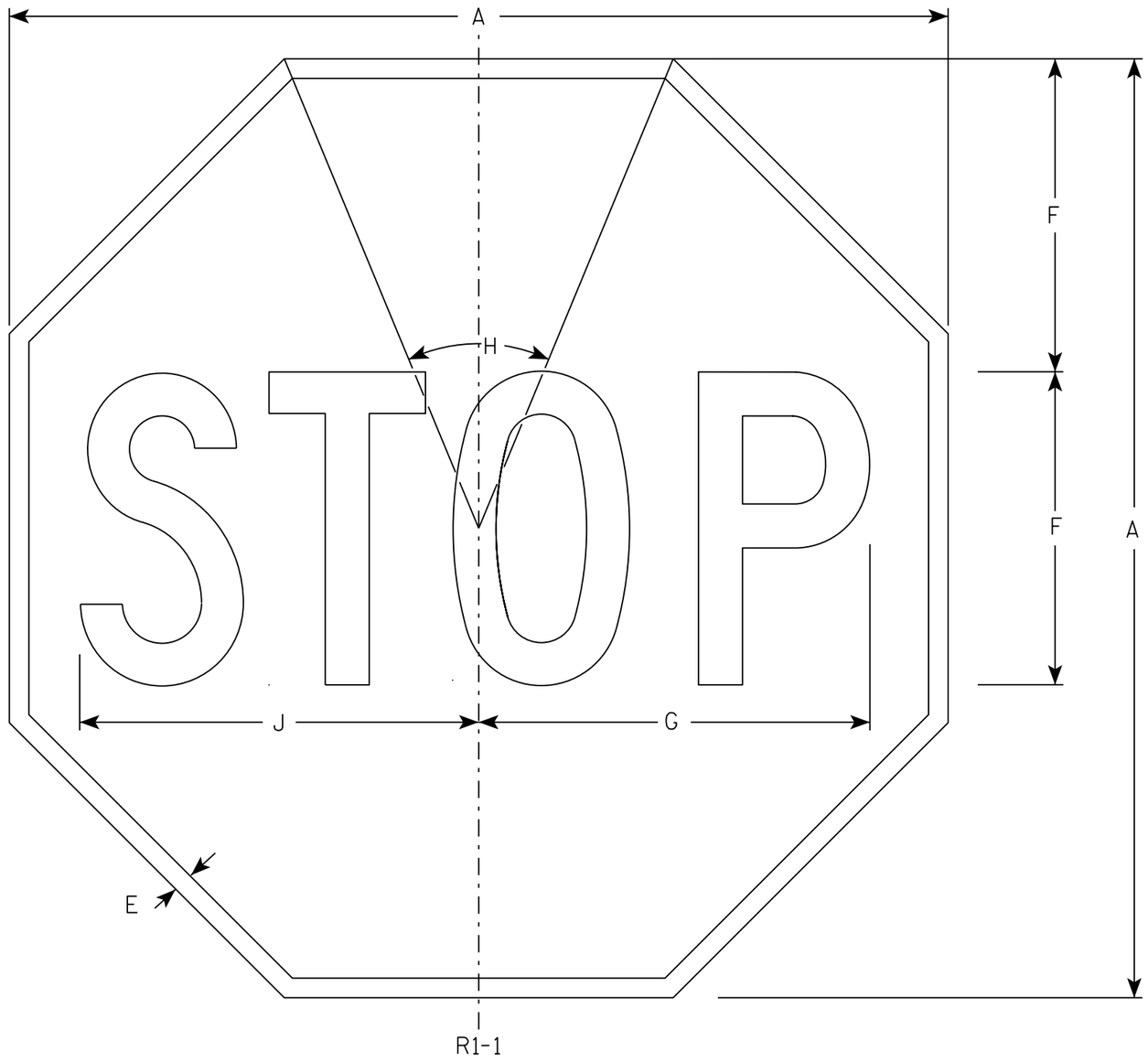
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 459 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



NOTES

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

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

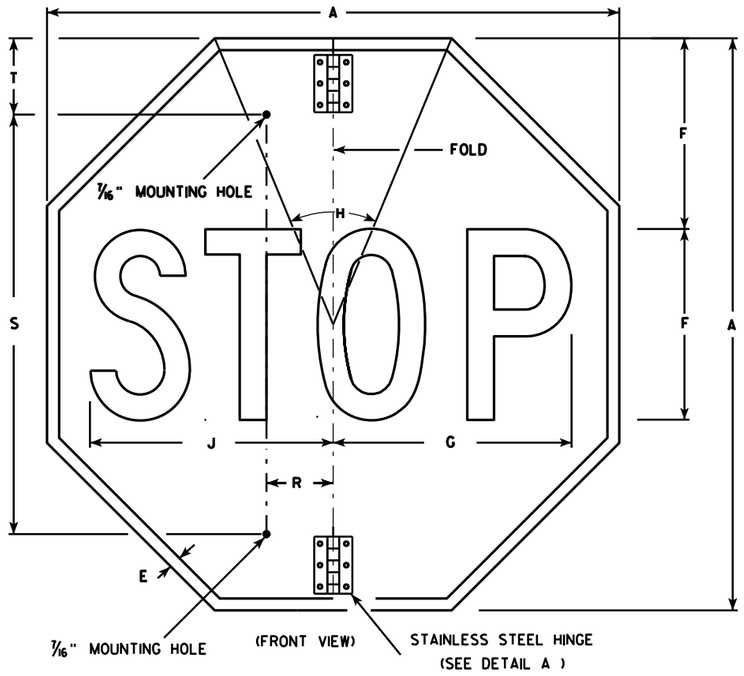
STANDARD SIGN
R1-1

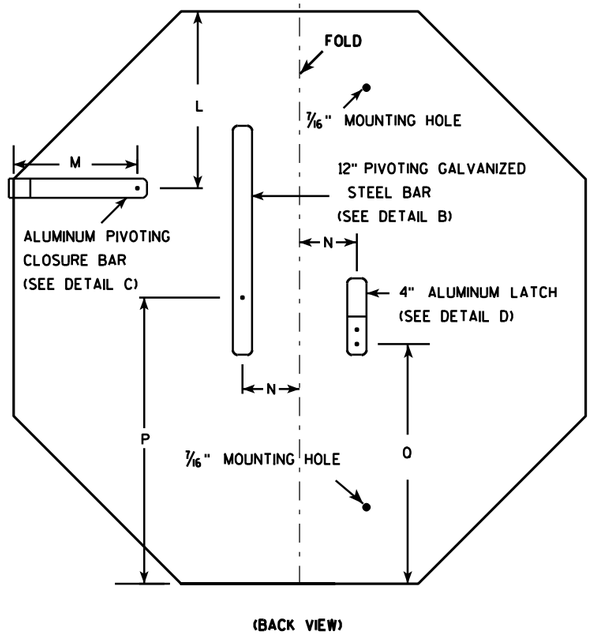
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

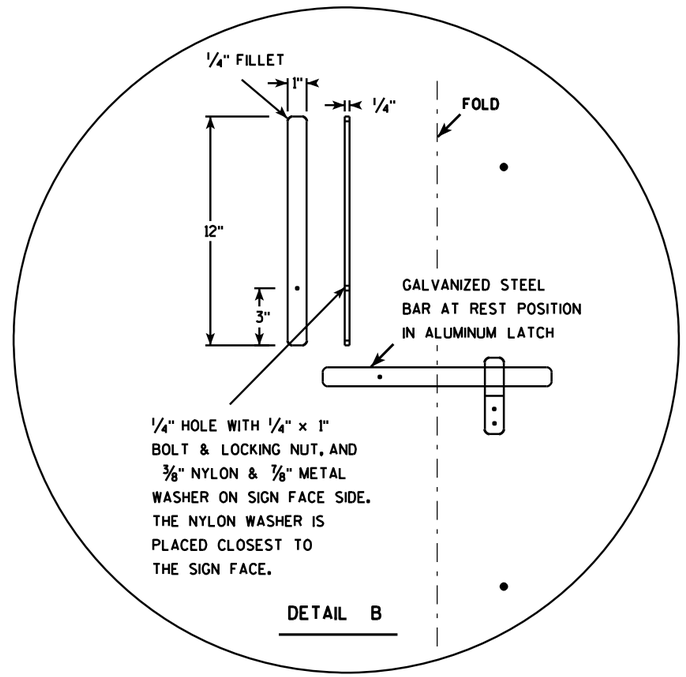
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 460	E



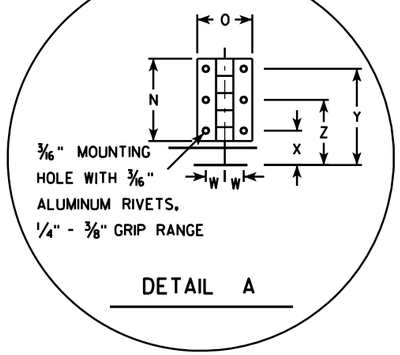


NOTES

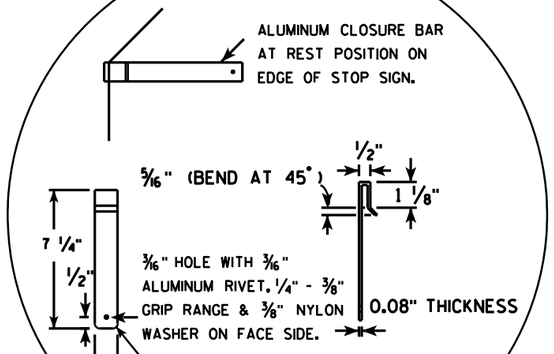
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



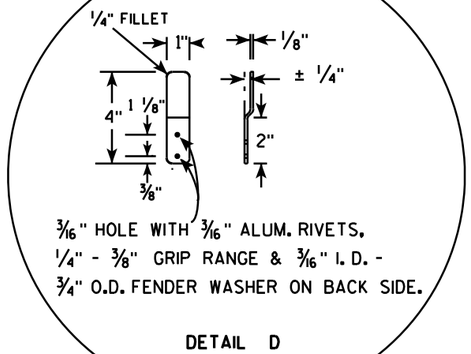
DETAIL B



DETAIL A



DETAIL C



DETAIL D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

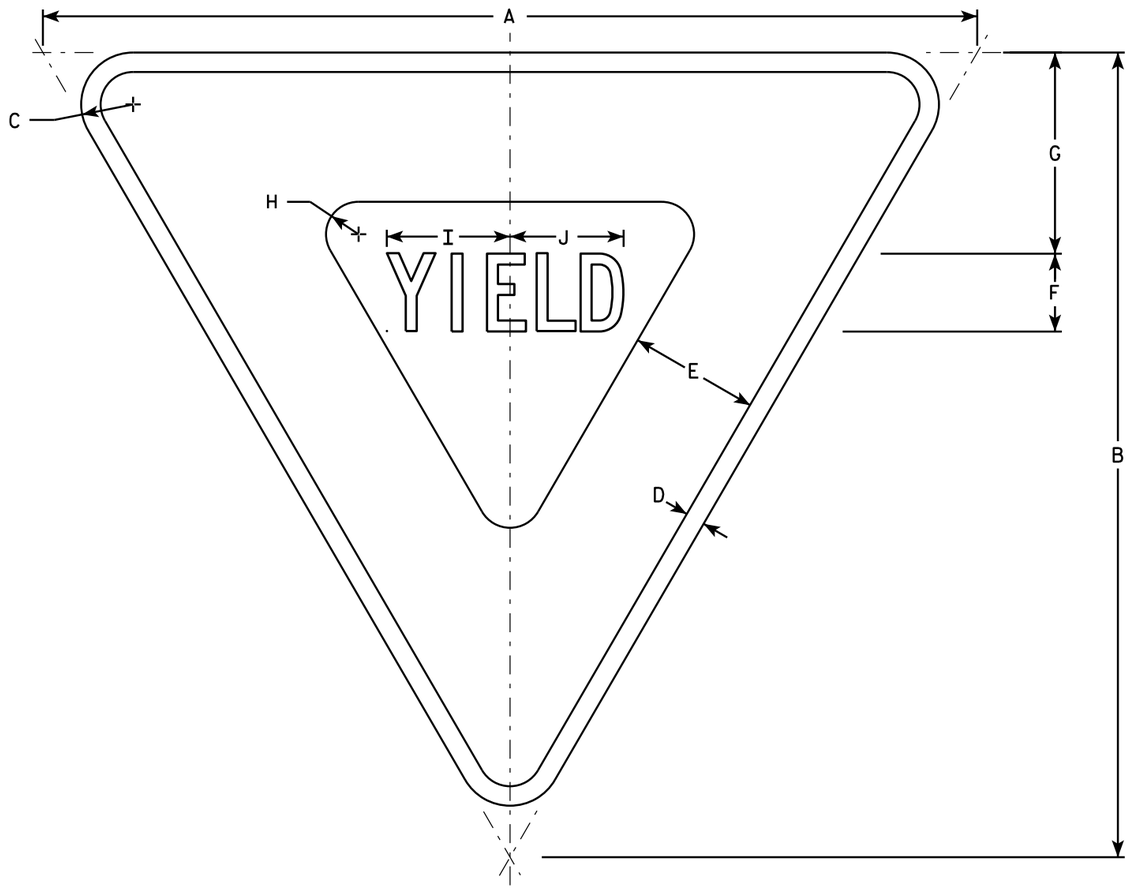
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 461	E



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 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. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

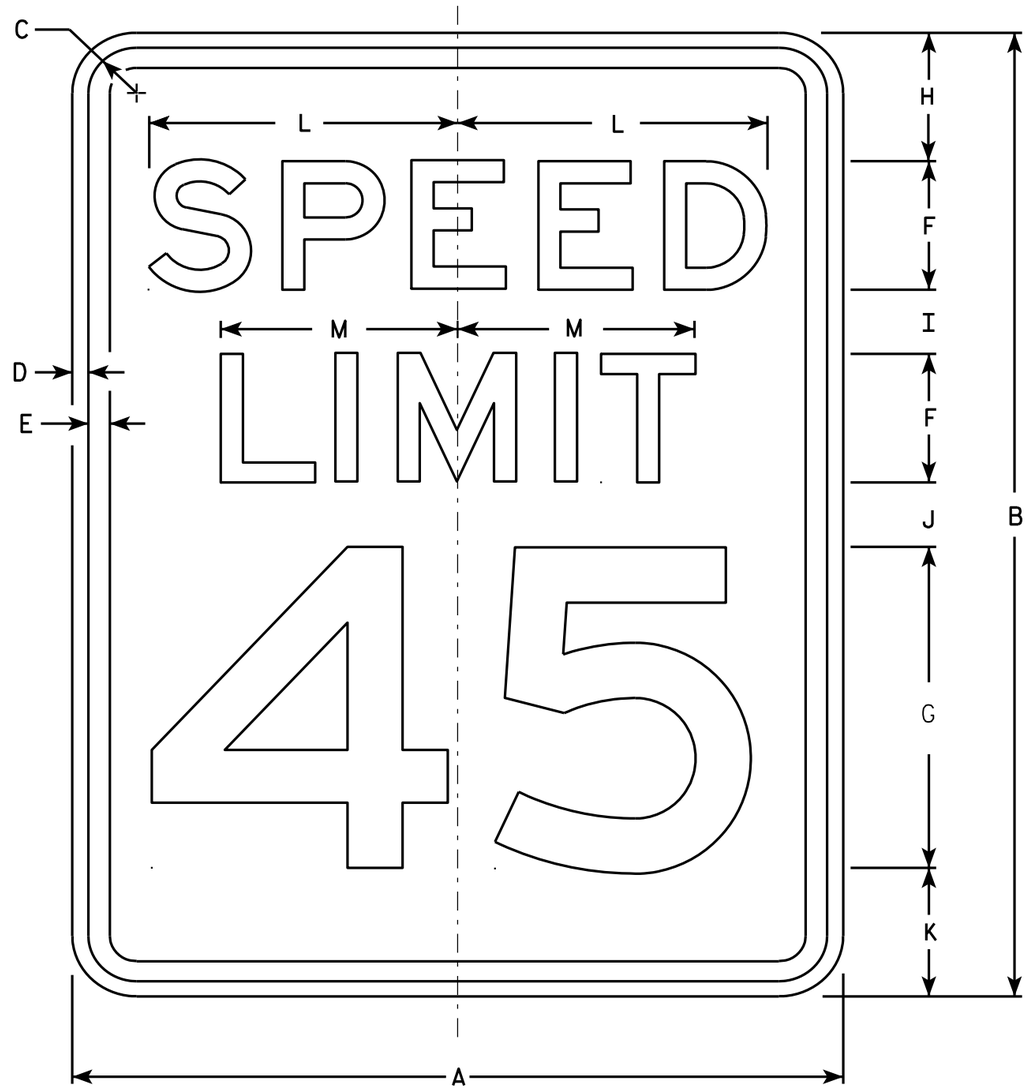
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE R1-2.12

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



R2-1

NOTES

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

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

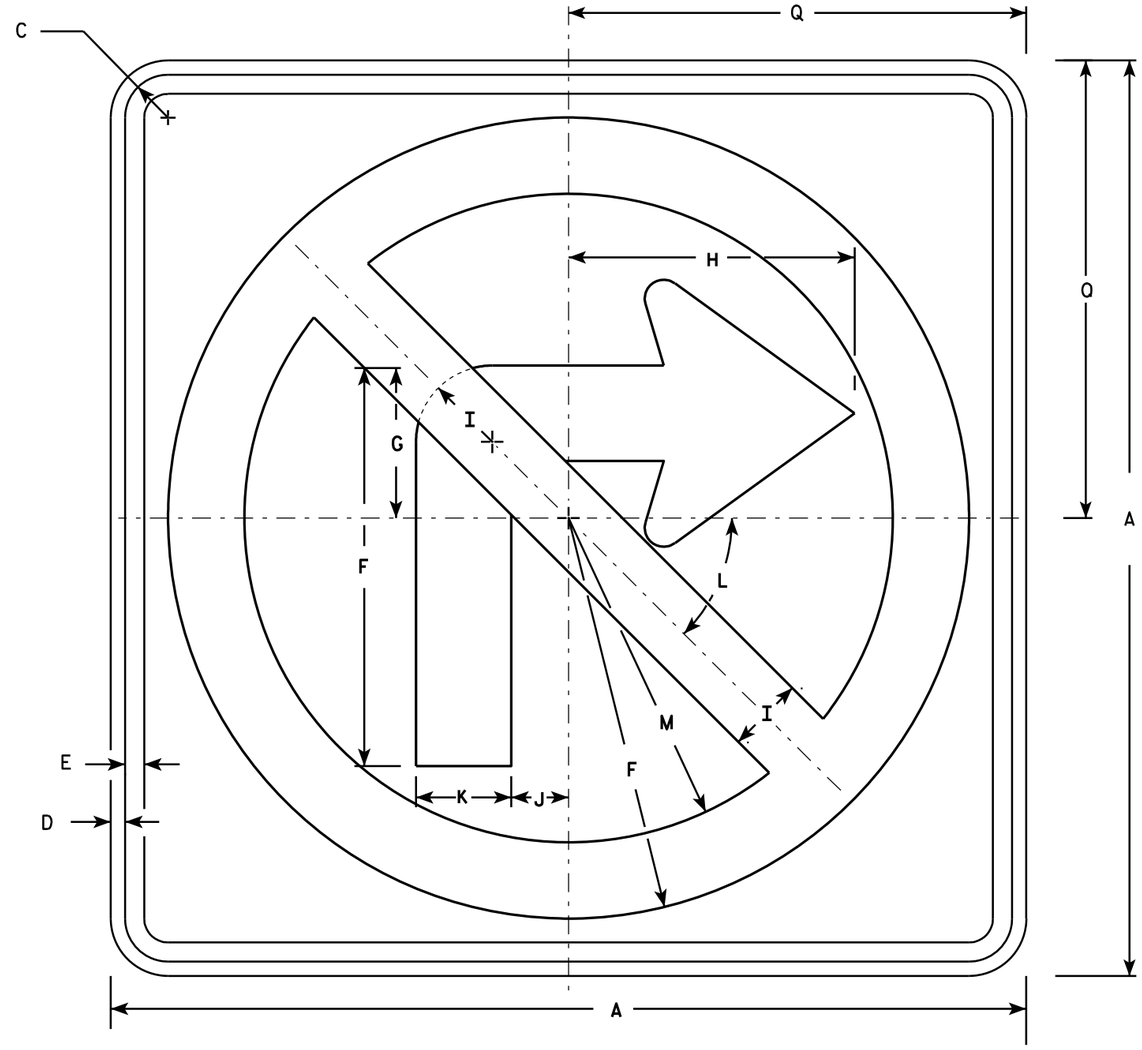
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

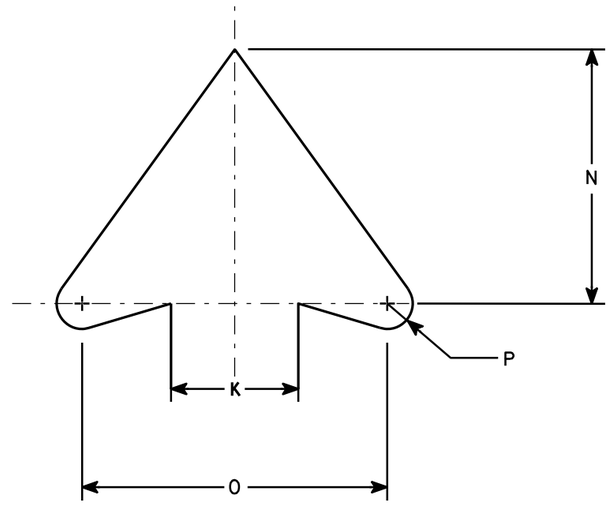
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 463 | E



R3-1

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

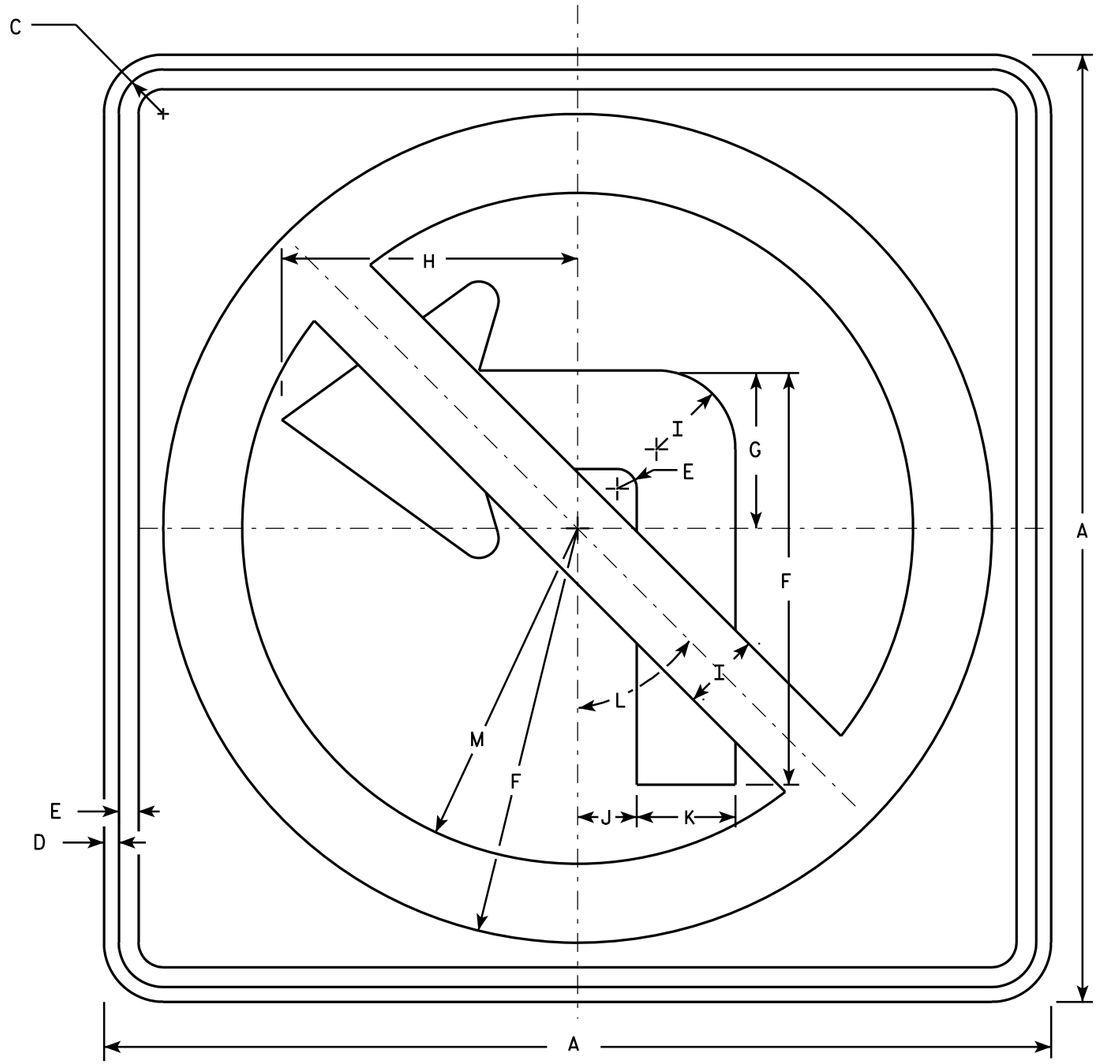
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

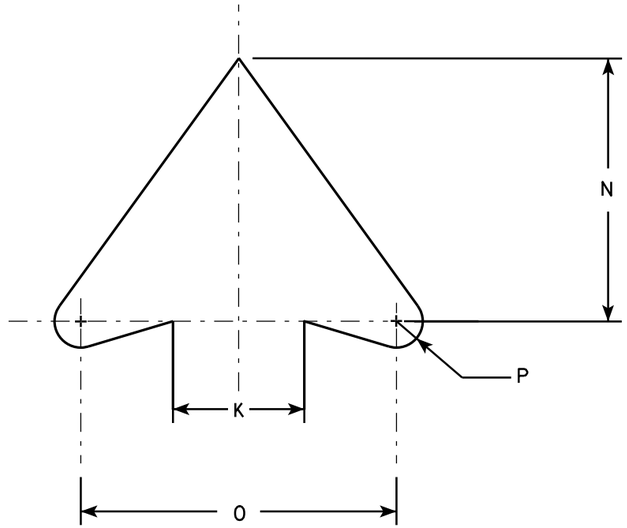
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 464 | E



R3-2

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

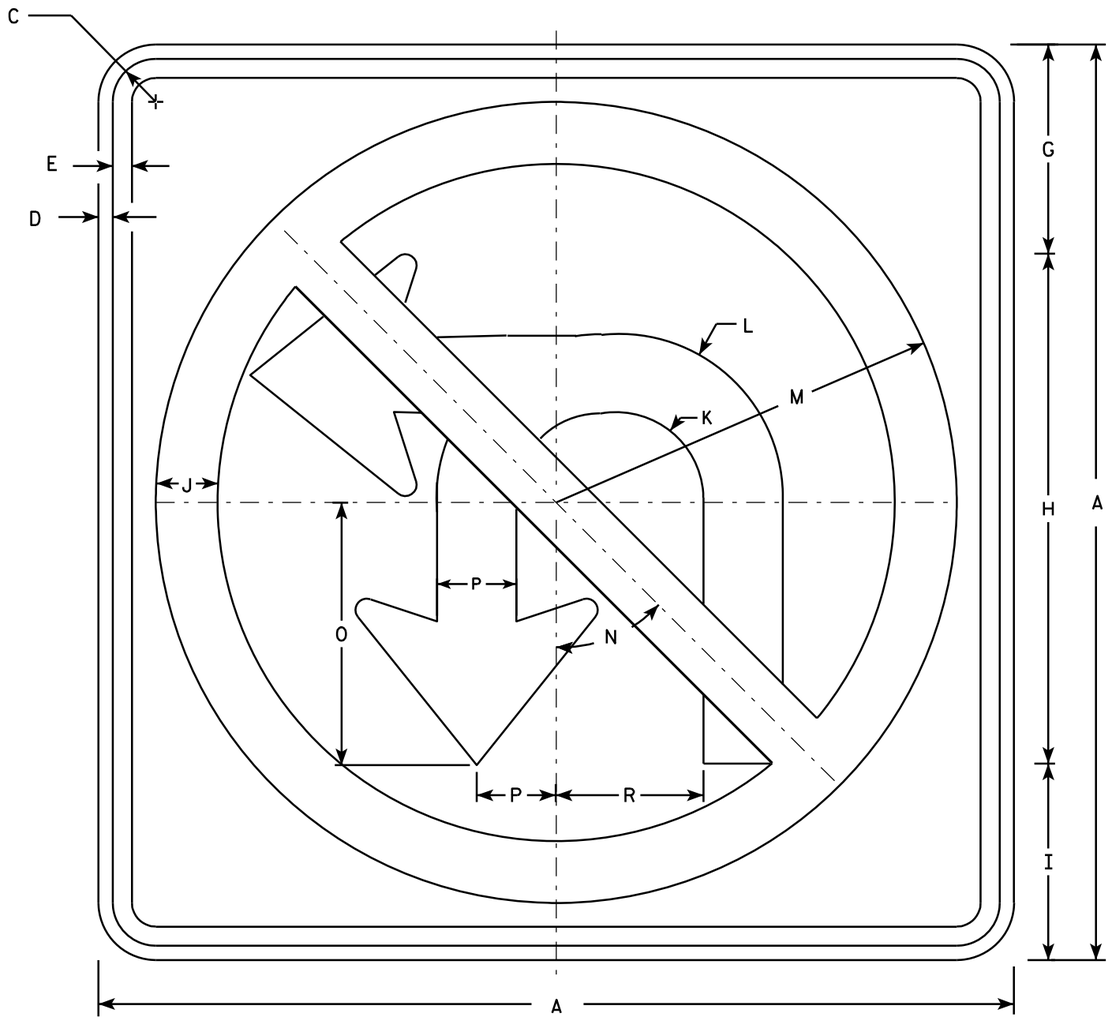
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 465 | E



R3-18

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		5 1/2	13 3/8	5 1/8	1 5/8	2 1/4	4 1/4	10 1/2	45°	6 7/8	2 1/8		3 7/8									4.0
2M	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45°	10 3/8	3 1/8		5 3/4									9.0
3	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45	10 3/8	3 1/8		5 3/4									9.0
4	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45	10 3/8	3 1/8		5 3/4									9.0
5	48		2 1/4	3/4	1		11	26 3/4	10 1/4	3 1/4	4 5/8	8 5/8	21	45°	13 3/4	4 1/8		7 3/4									16.0

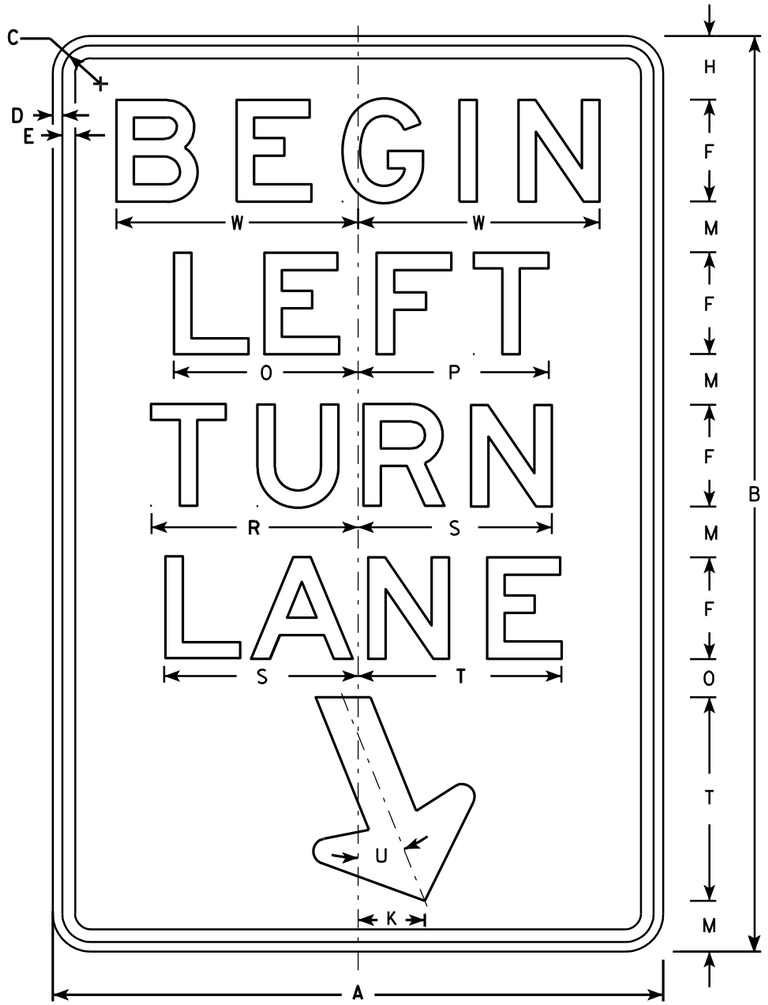
STANDARD SIGN
R3-18

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/10 PLATE NO. R3-18.2

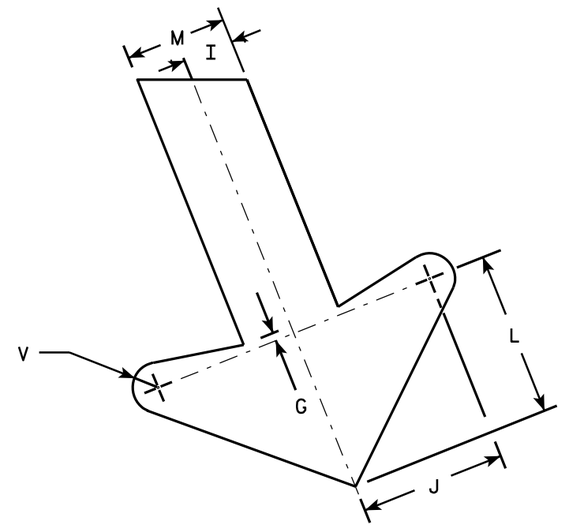
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 466	E



R3-20L

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	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 7/8	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 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

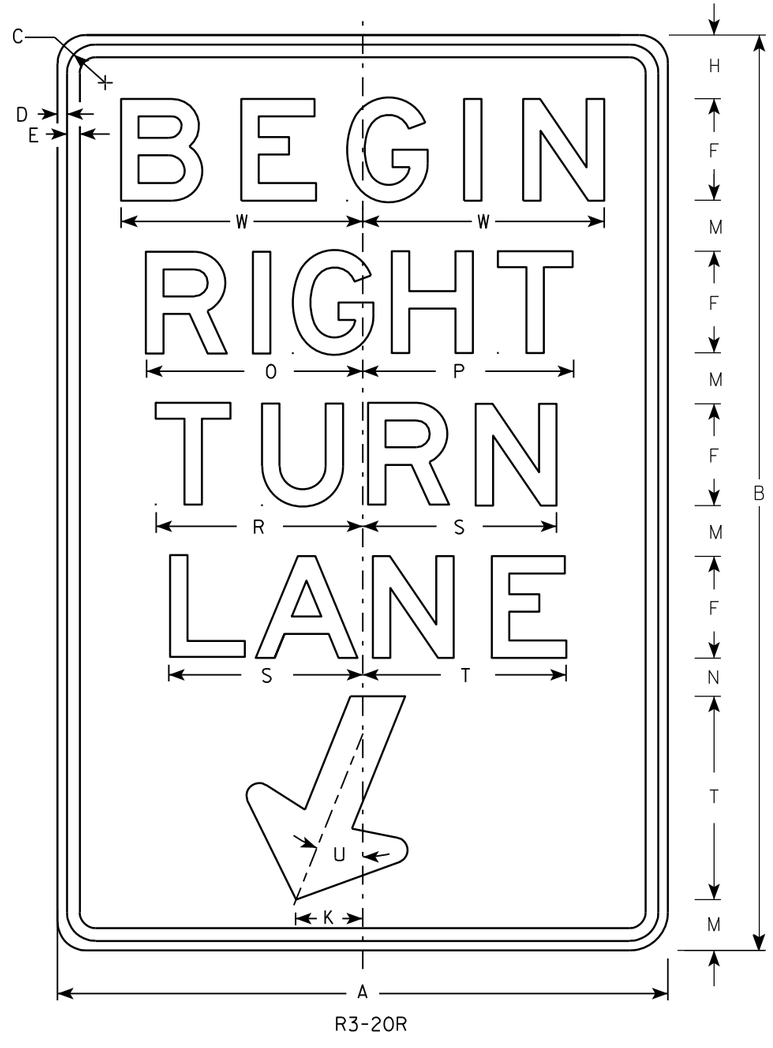
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

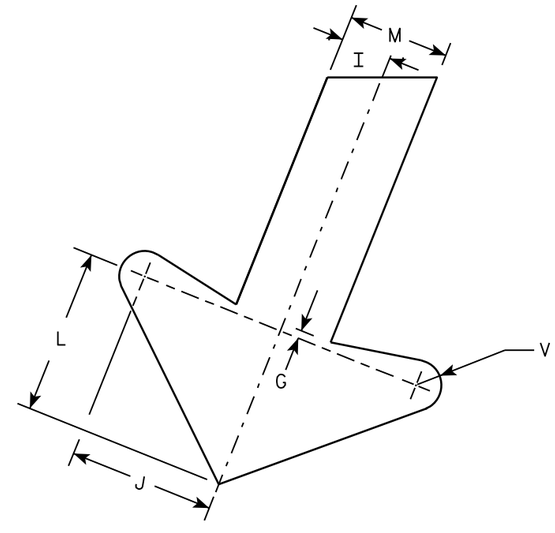
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 467 | E



R3-20R

NOTES

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



ARROW DETAIL

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

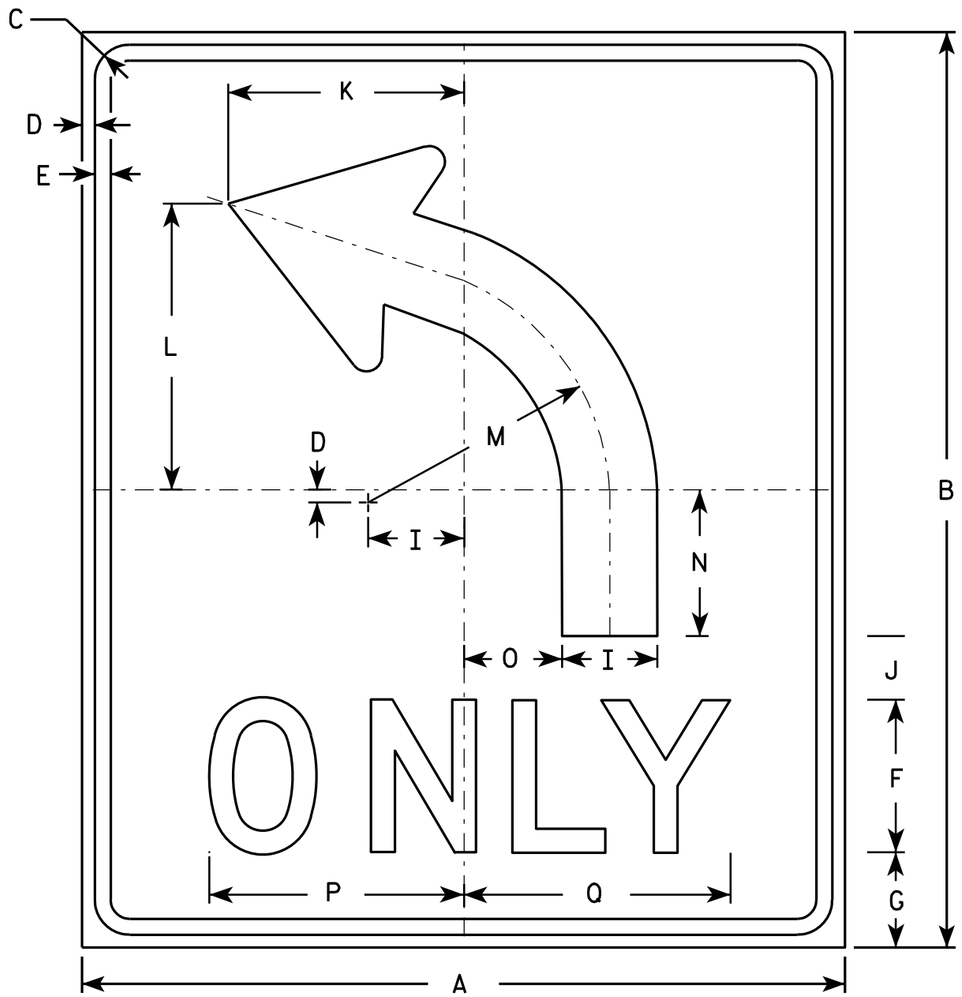
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

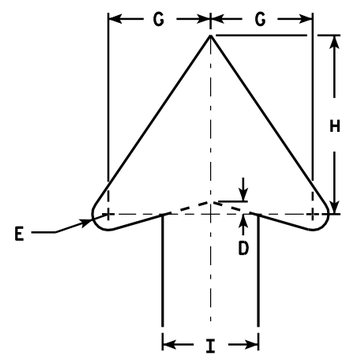
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 468 | E



R3-50L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R3-50R is the same as R3-50L except curved portion of arrow points right.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	6	4	7	3 3/4	2 1/2	9 1/4	11 1/4	9 1/2	5 3/4	3 7/8	10	10 1/2										7.5
2M	30	36	1 3/8	1/2	5/8	6	4	7	3 3/4	2 1/2	9 1/4	11 1/4	9 1/2	5 3/4	3 7/8	10	10 1/2										7.5
3																											
4																											
5																											

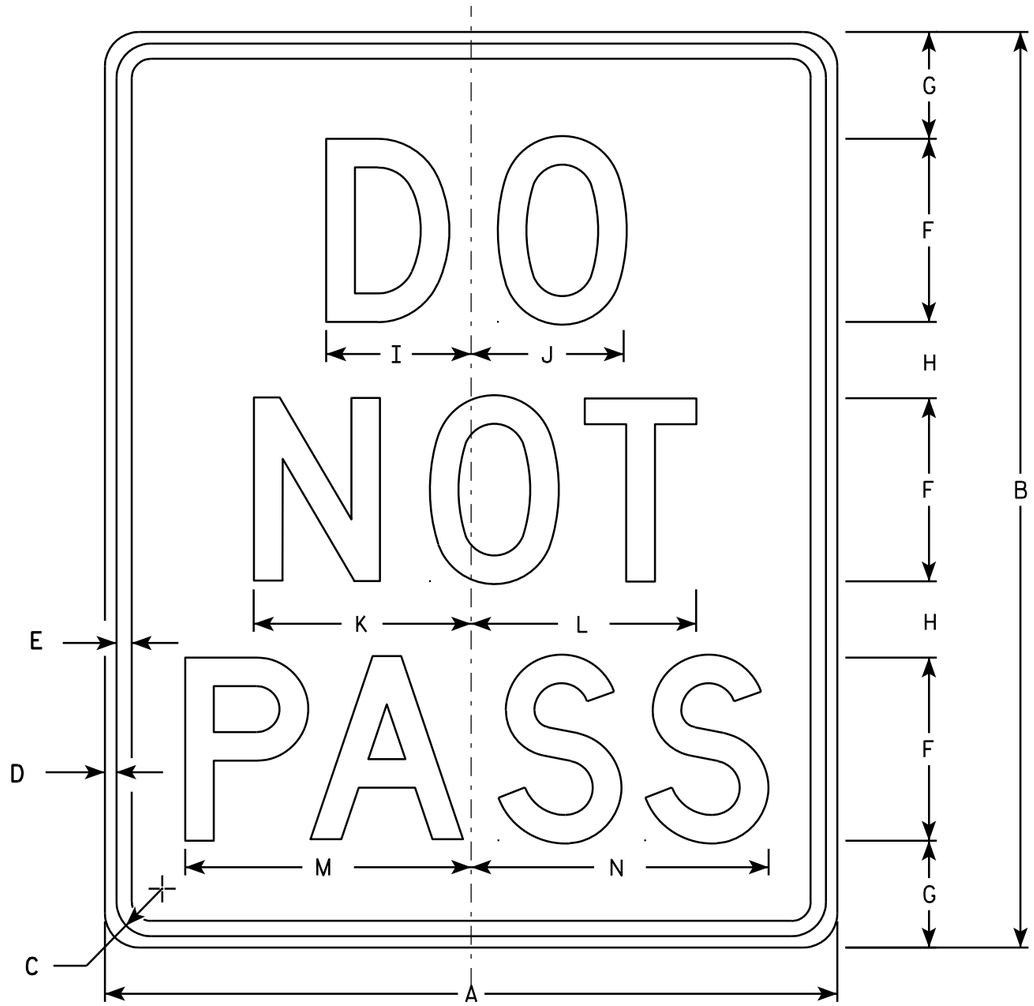
STANDARD SIGN
R3-50

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-50.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 469	E



R4-1

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	4	3 1/2	2 1/2	3 1/8	3 1/4	4 3/4	4 7/8	6 1/4	6 1/2													3.0
2S	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
2M	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
3																											
4	36	48	1 5/8	5/8	3/4	8	7	5	6 1/4	6 5/8	9 1/2	9 3/4	12 1/2	13													12.0
5	48	60	2 1/4	3/4	1	10	8	7	7 3/4	8 3/8	11 7/8	12 1/4	15 5/8	16 1/4													20.0

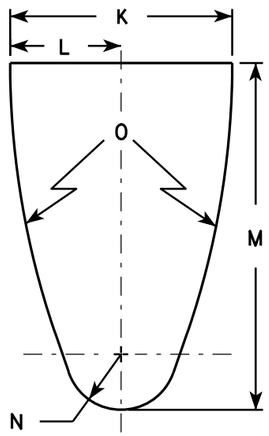
STANDARD SIGN
R4-1

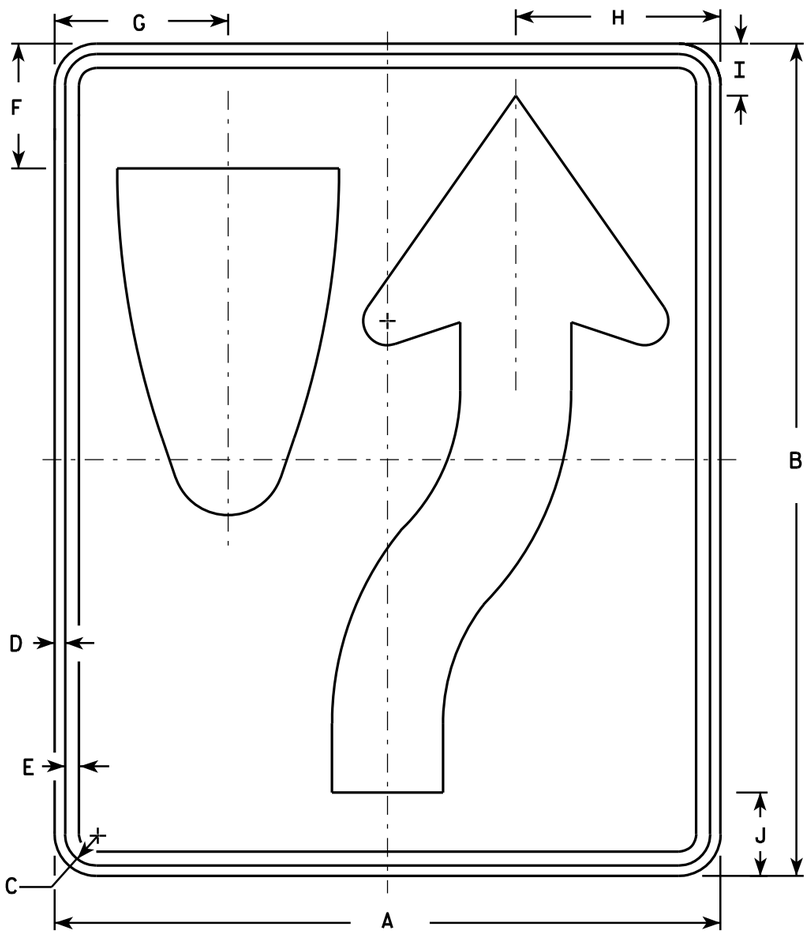
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-1.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 470 | E

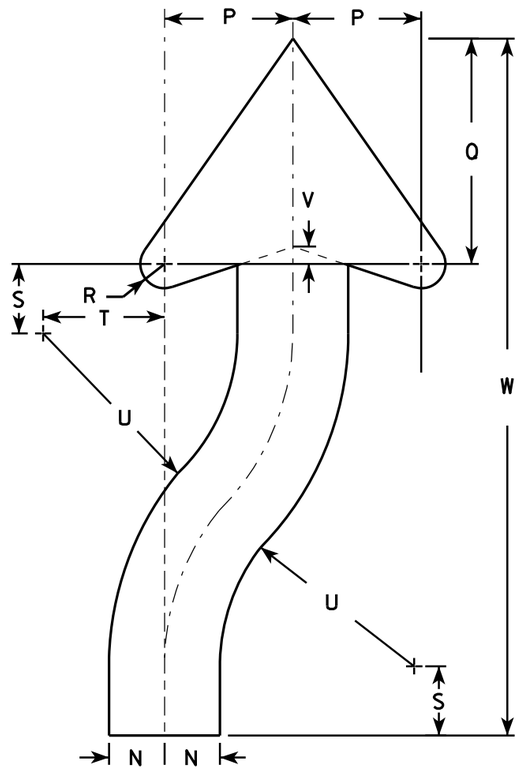




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

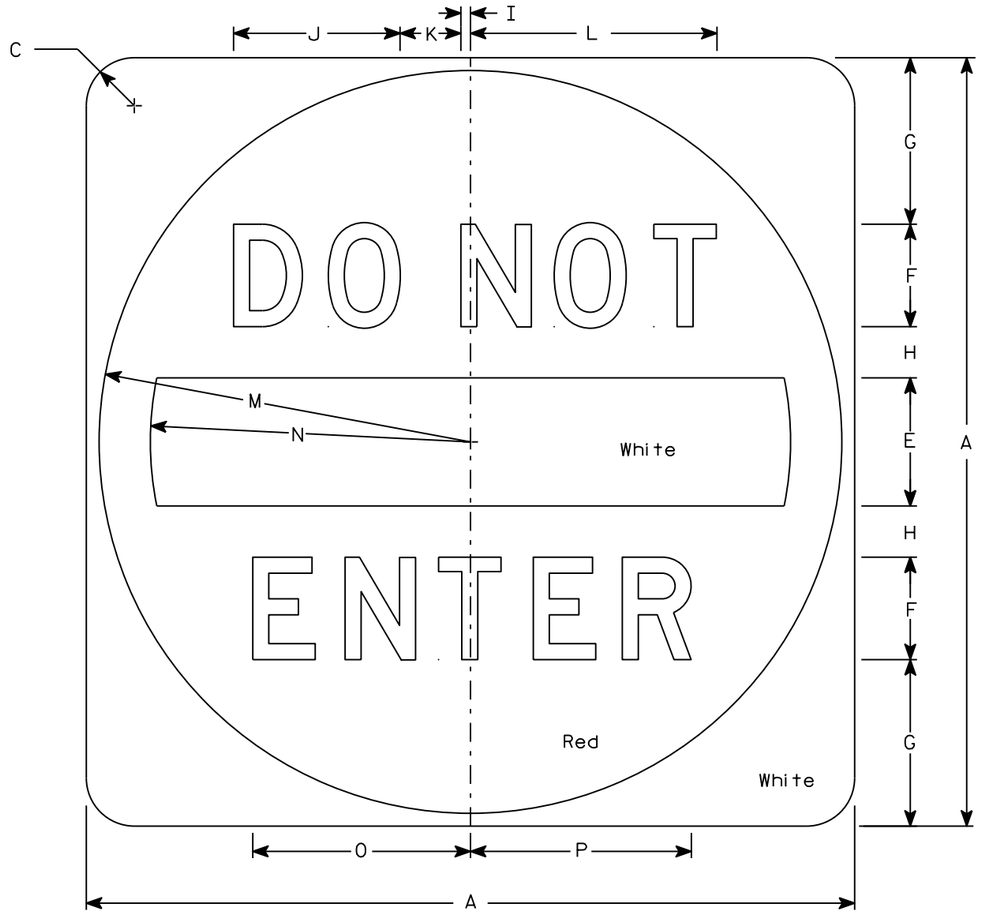
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 471	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See detail
   Message - White
3. Message Series - D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.25
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

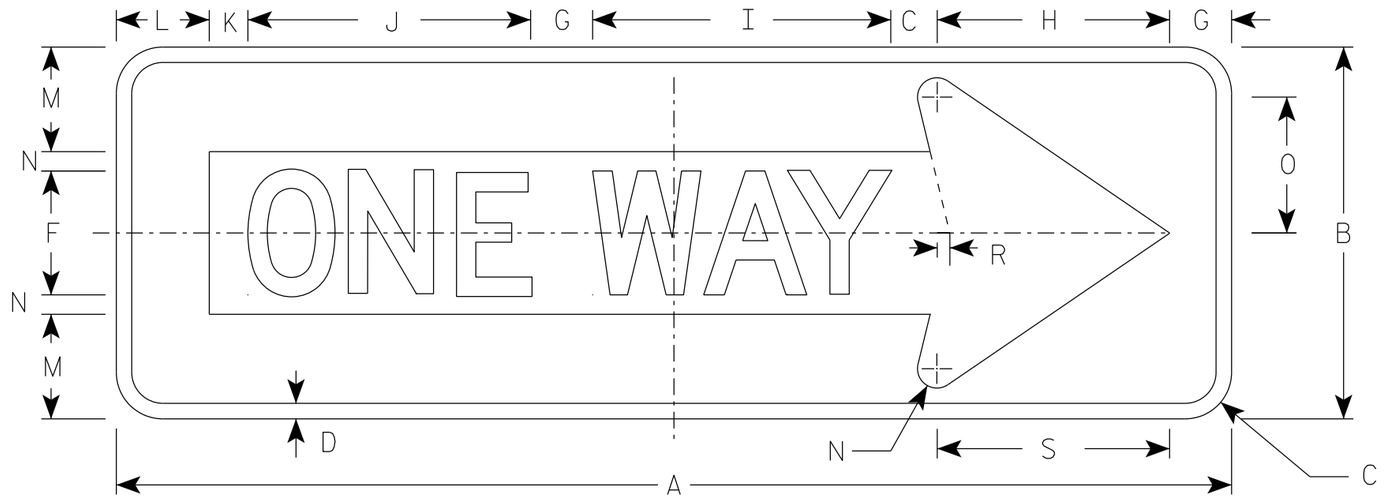
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

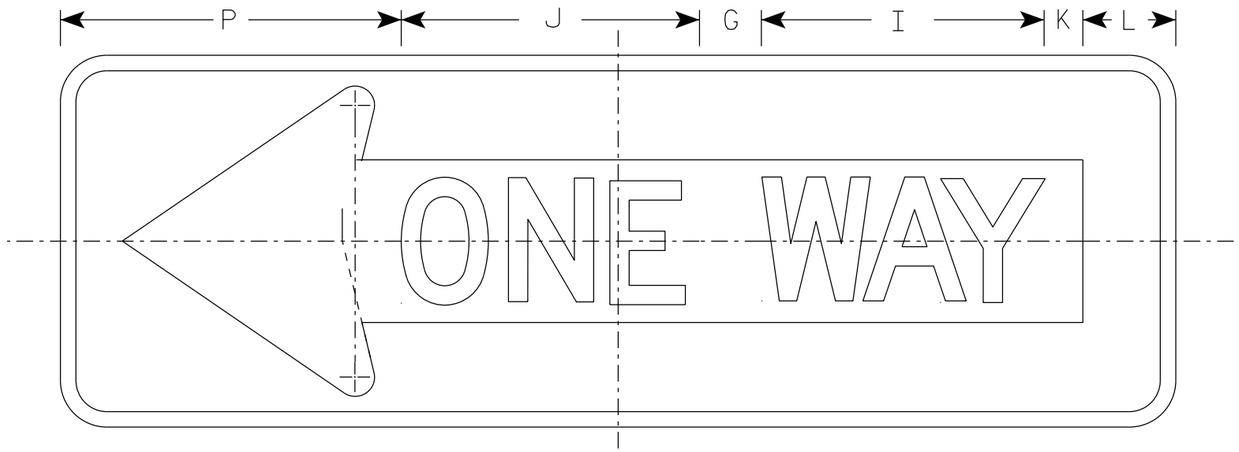
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 472 | E



R6-1R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - BLACK
   Message - BLACK LEGEND & WHITE ARROW & BORDER
3. Message Series - D



R6-1L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	12	1 1/2	1/2		4	2	7 1/2	9 5/8	9 1/8	1 1/4	3	3 3/8	5/8	4 3/8	11		3/8	7 1/2								3.0
2M	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
3	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
4	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
5																											

STANDARD SIGN
R6-1 L & R

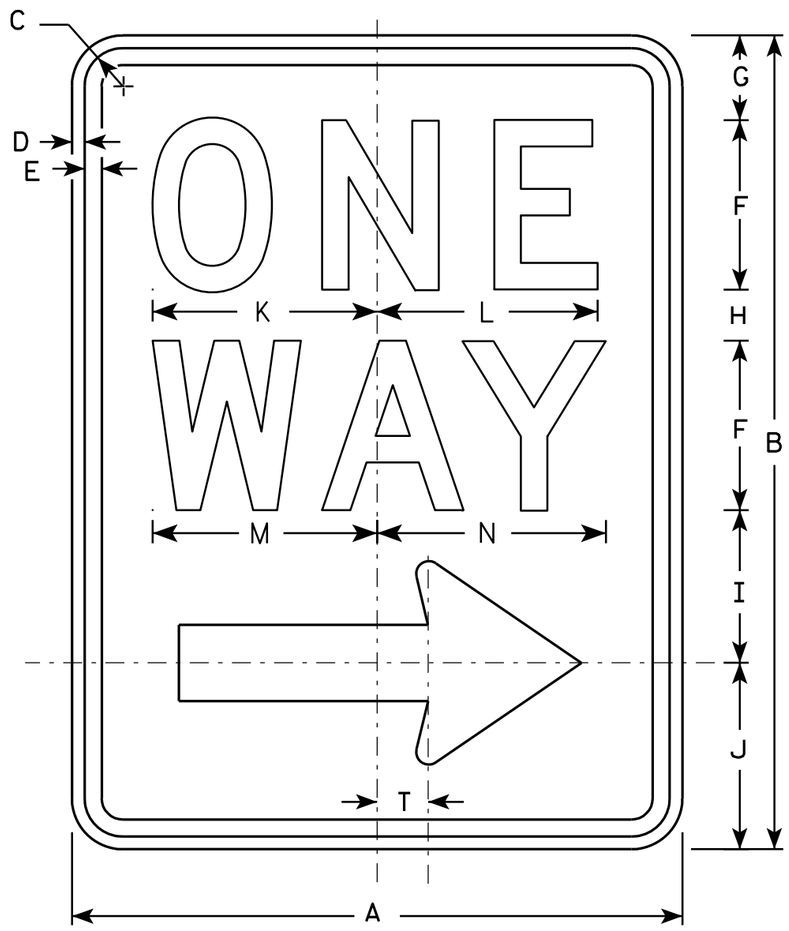
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 07/11/18 PLATE NO. R6-1.3

PROJECT NO:

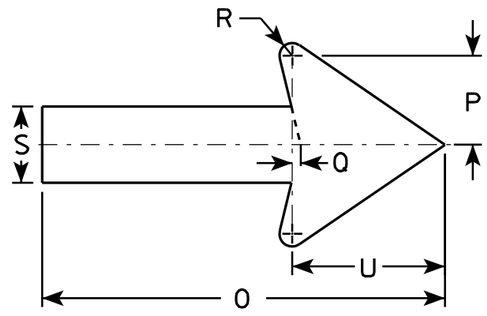
SHEET NO: 473 E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

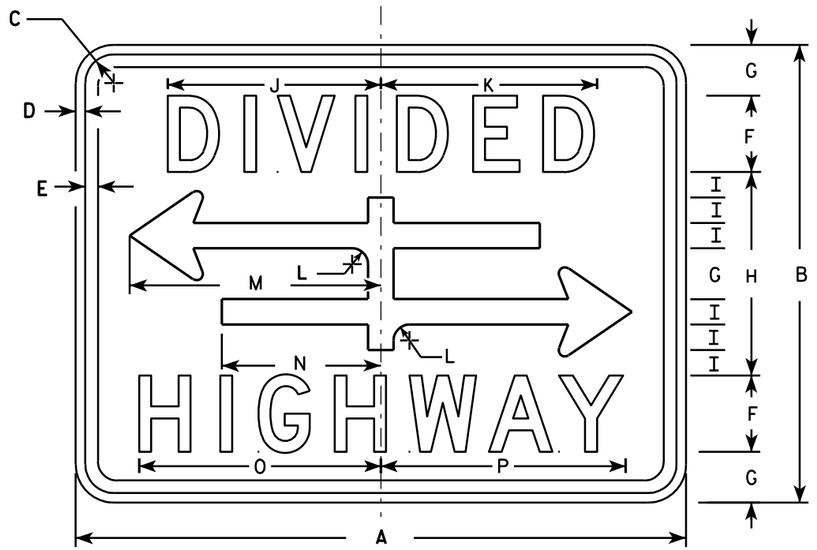
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

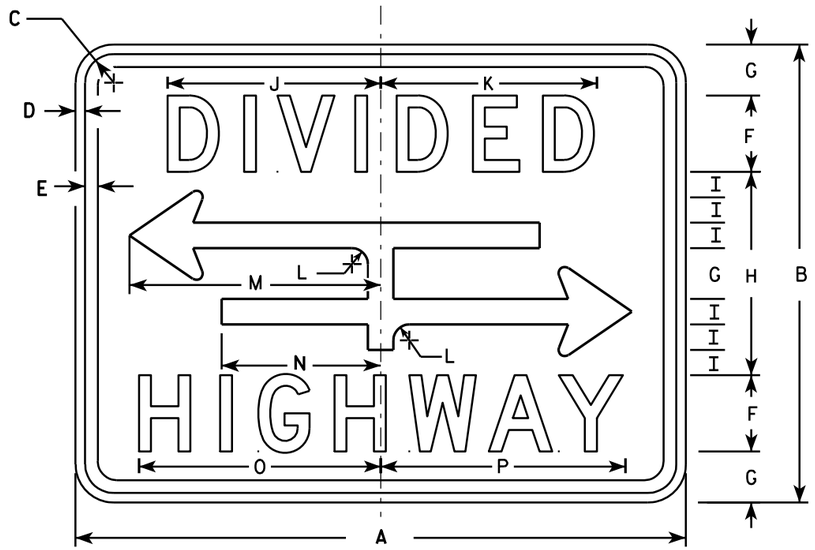
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 474	E



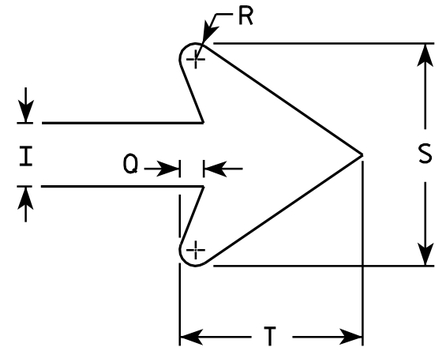
R6-3

NOTES

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



R6-3A



ARROW DETAIL

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

STANDARD SIGN
R6-3 & R6-3A

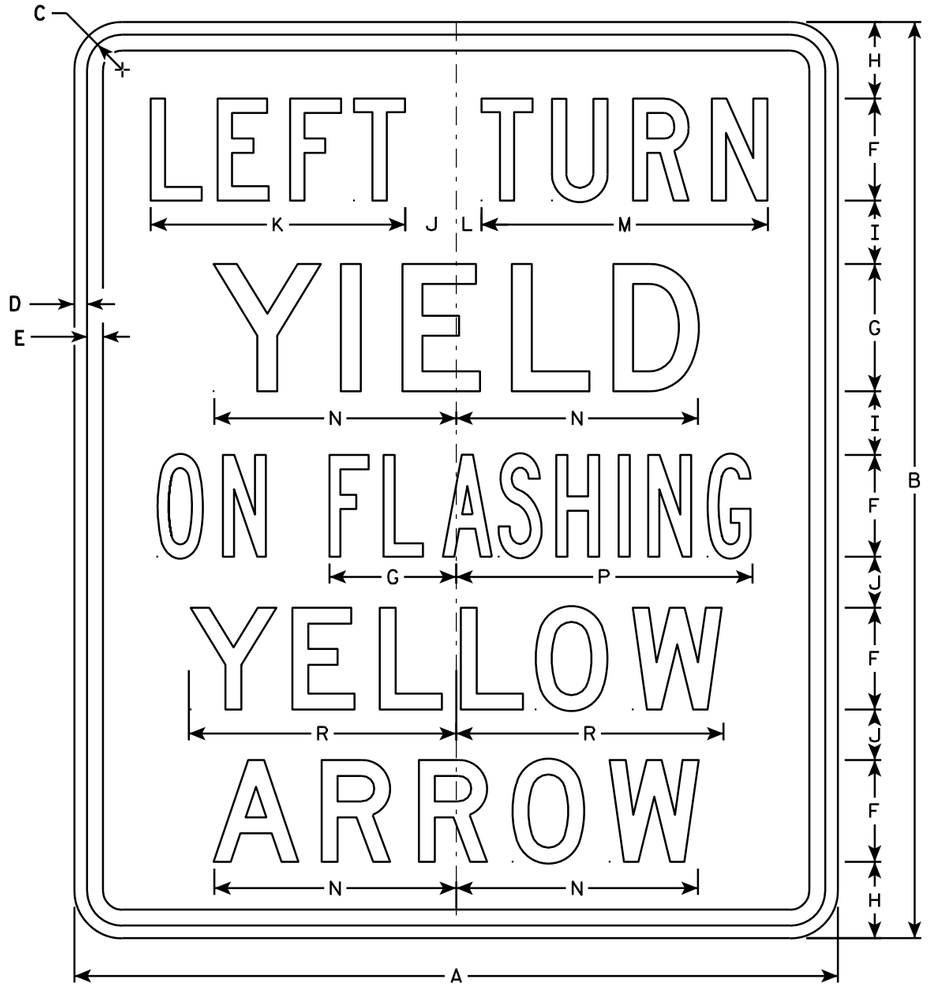
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R6-3.5

PROJECT NO:

SHEET NO: 475 E

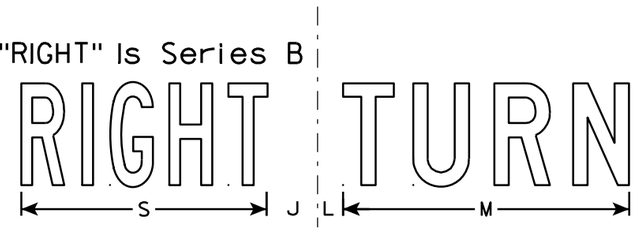


R10-50L

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 - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series C.
   Lines 2, 4 and 5 are Series D.
   Line 3 is Series B.

"RIGHT" Is Series B



R10-50R

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
2M	30	36	1 3/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
3																											
4																											
5																											

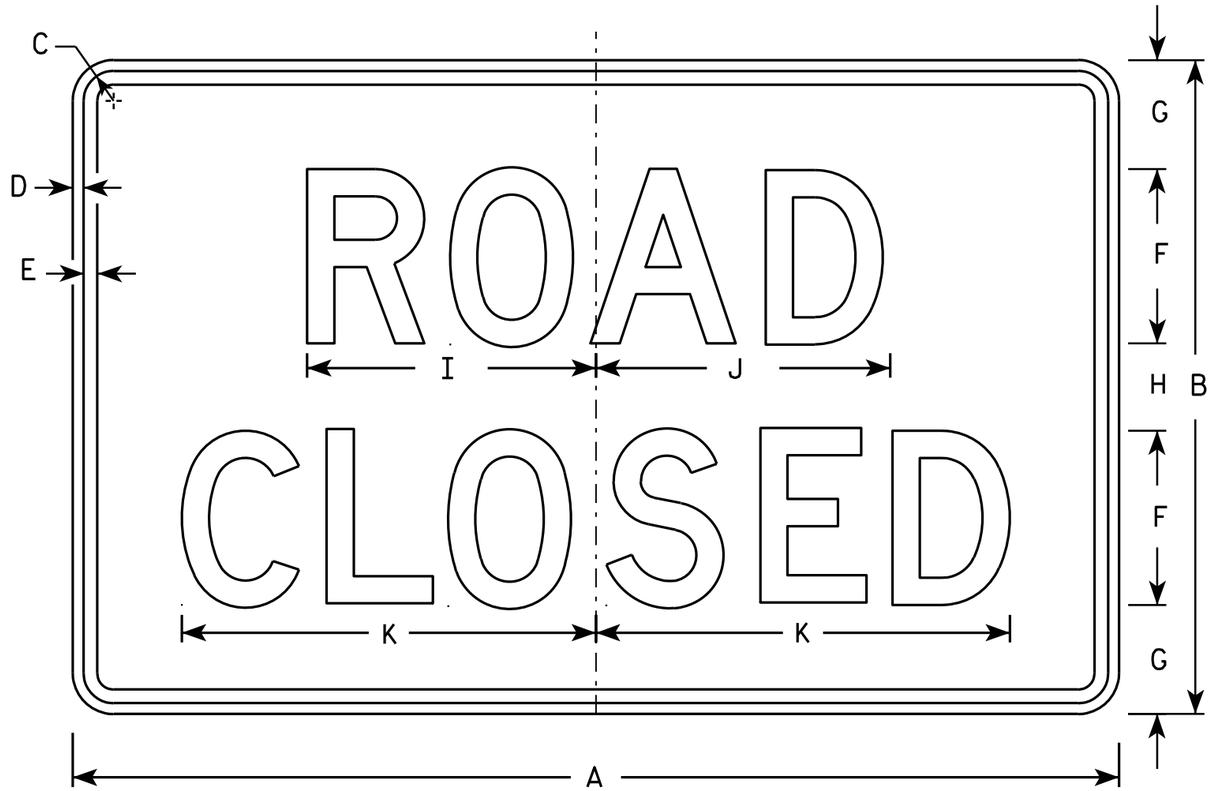
STANDARD SIGN
R10-50

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/11/13 PLATE NO. R10-50.2

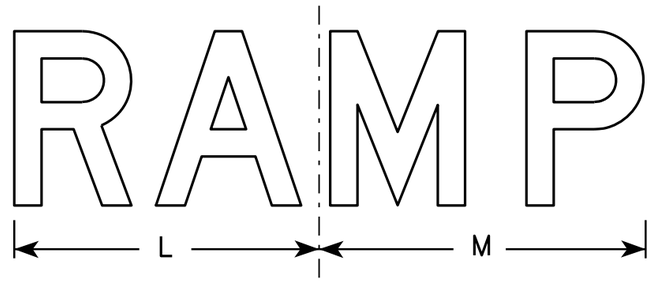
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 476	E



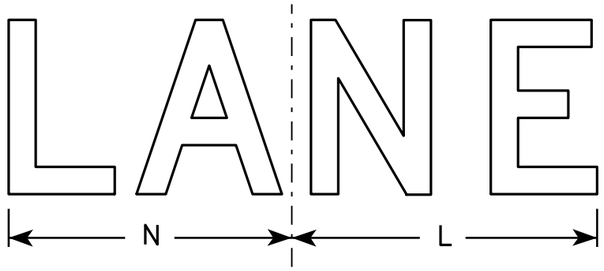
R11-2

NOTES

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



R11-2R



R11-2L

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

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

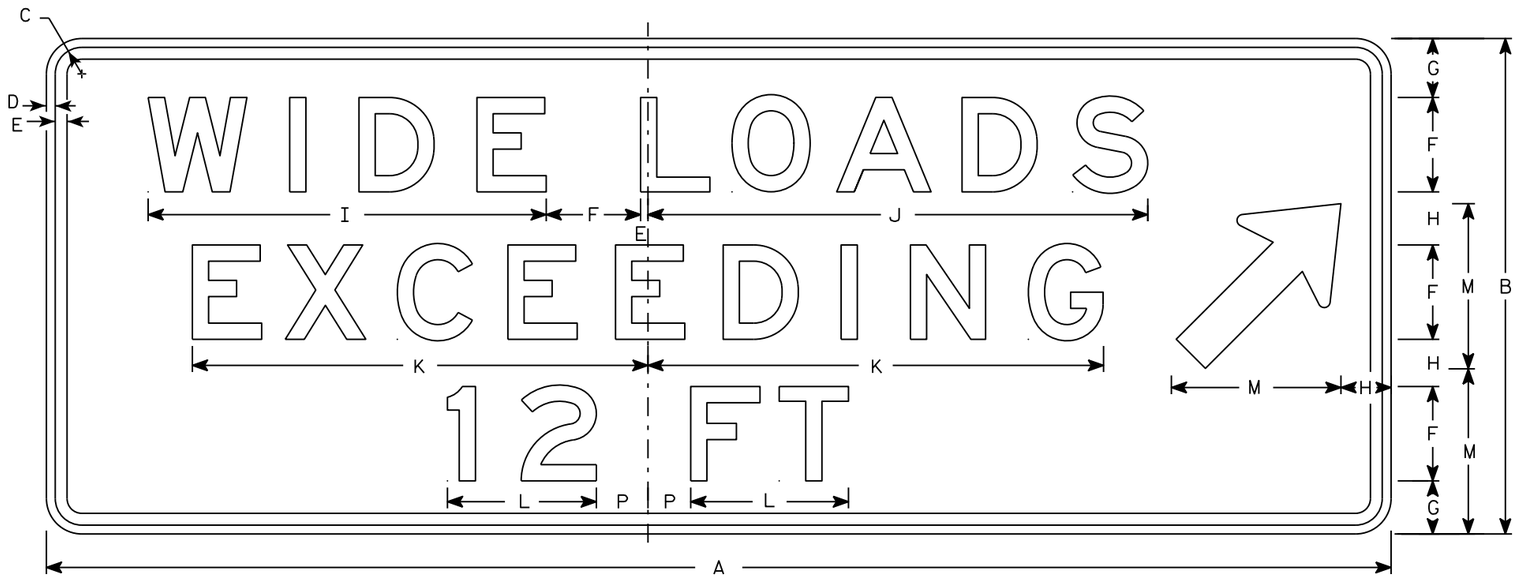
DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 477	E

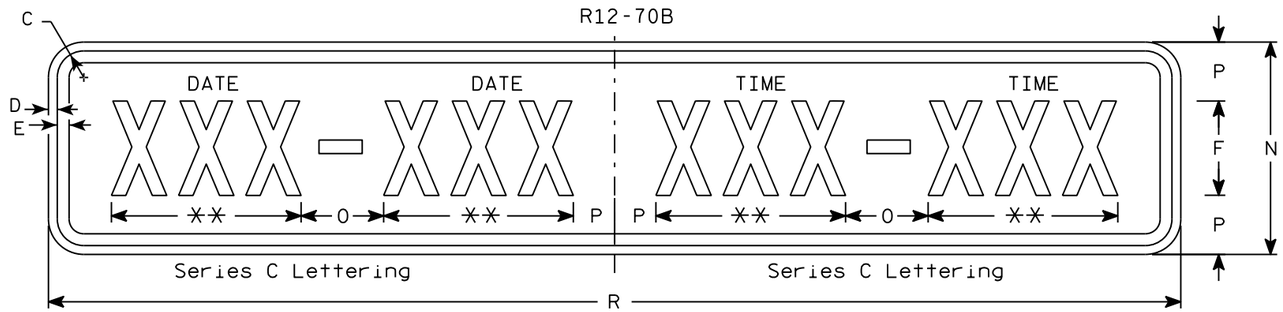
NOTES

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

** Substitute appropriate message, optically center message



R12-70B



R12-70C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	R12-70 Area sq. ft.	R12-70C Area sq. ft.
1																												
2S	90	36	2 1/4	1/2	5/8	6	4	5	20 7/8	28 3/8	24 5/8	8 1/8	12	12	6	3		66									22.5	5.5
2M	90	36	2 1/4	1/2	5/8	6	4	5	20 7/8	28 3/8	24 5/8	8 1/8	12	12	6	3		66									22.5	5.5
3																												
4	114	42	2 1/4	3/4	1	8	5	4	34	42	39	13	14	18	7	3 1/2		96									36.75	12.0
5	114	42	2 1/4	3/4	1	8	5	4	34	42	39	13	14	18	7	3 1/2		96									36.75	12.0

TYPICAL SIGN
R12-70B

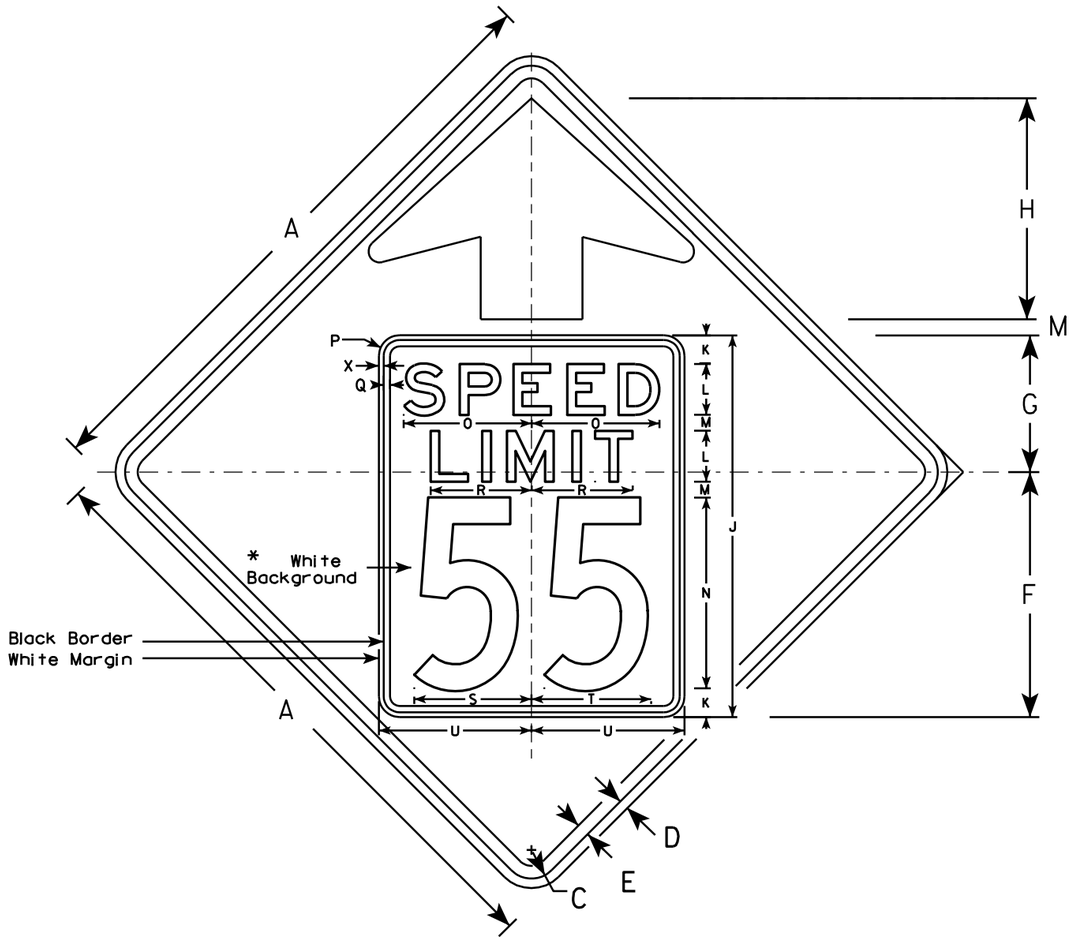
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/15 PLATE NO R12-70B.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R1270B.DGN PLOT DATE : 01-DEC-2015 18:10 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 12.842555:1.000000

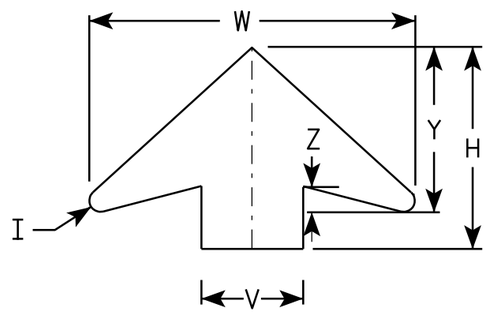


W3-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
   Background - YELLOW*
   Message - BLACK
3. Message Series - 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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5/8	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 5/8	9.0
2M	36		1 5/8	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 5/8	9.0
3	36		1 5/8	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 5/8	9.0
4	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
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

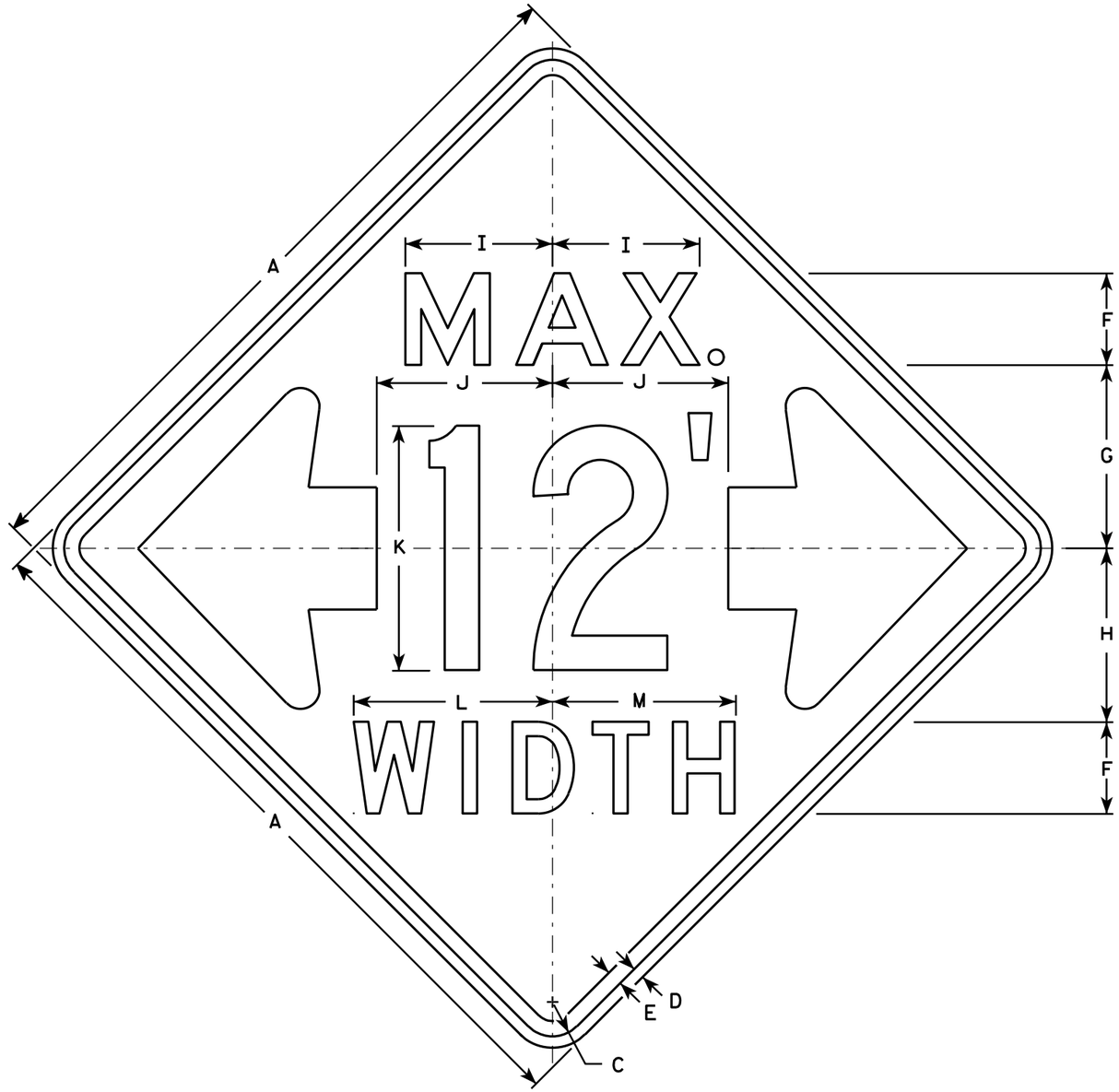
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

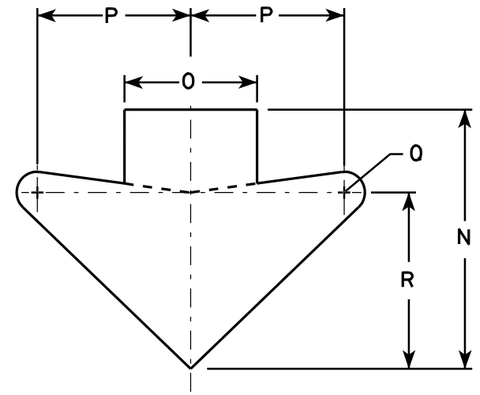
SHEET NO: 479 E



W12-52

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The top line is series E, the numerals are series C, and the bottom line is series D.
6. Substitute appropriate numerals and adjust spacing as required.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
2M	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
3																											
4																											
5																											

STANDARD SIGN
W12-52

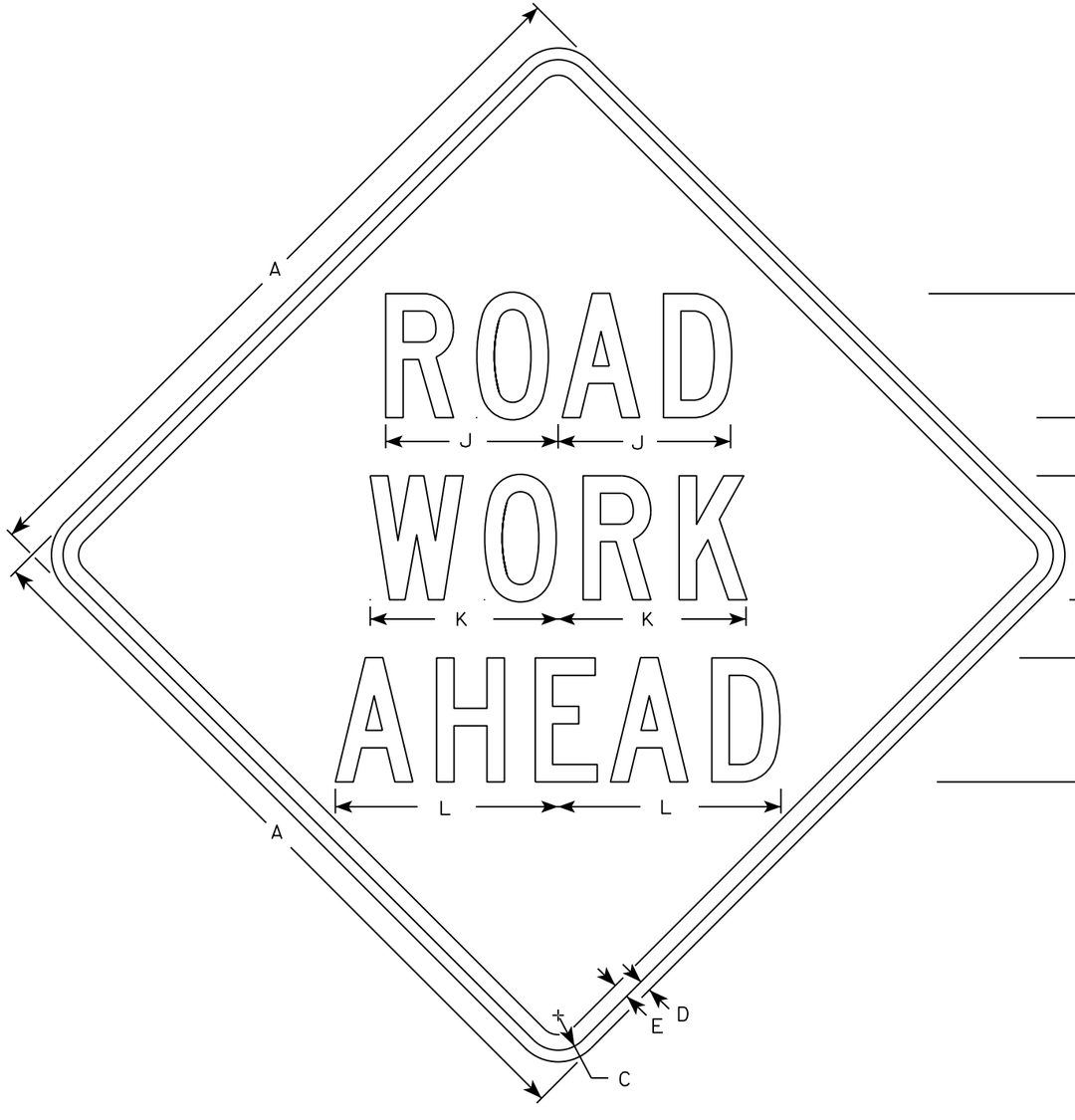
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

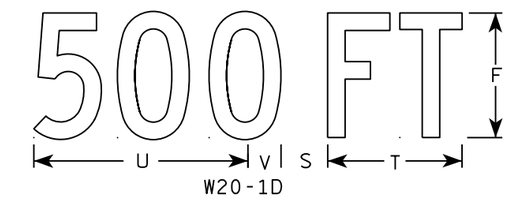
DATE 3/16/11 PLATE NO. W12-52.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 480 | E

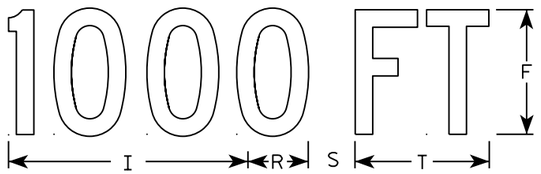
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W1252.DGN PLOT DATE : 16-MAR-2011 14:45 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.137199:1.000000
WISDOT/CADDS SHEET 42



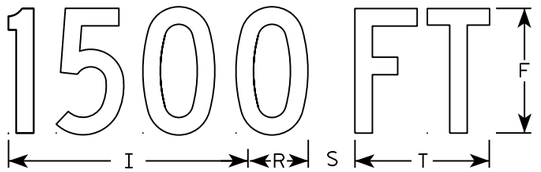
W20-1A



W20-1D



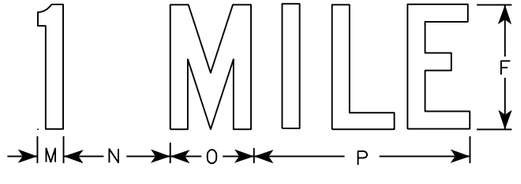
W20-1C



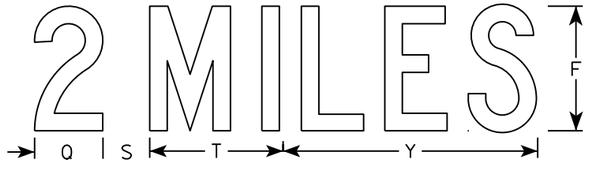
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

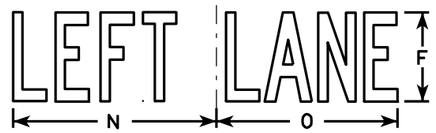
PROJECT NO:

SHEET NO: E

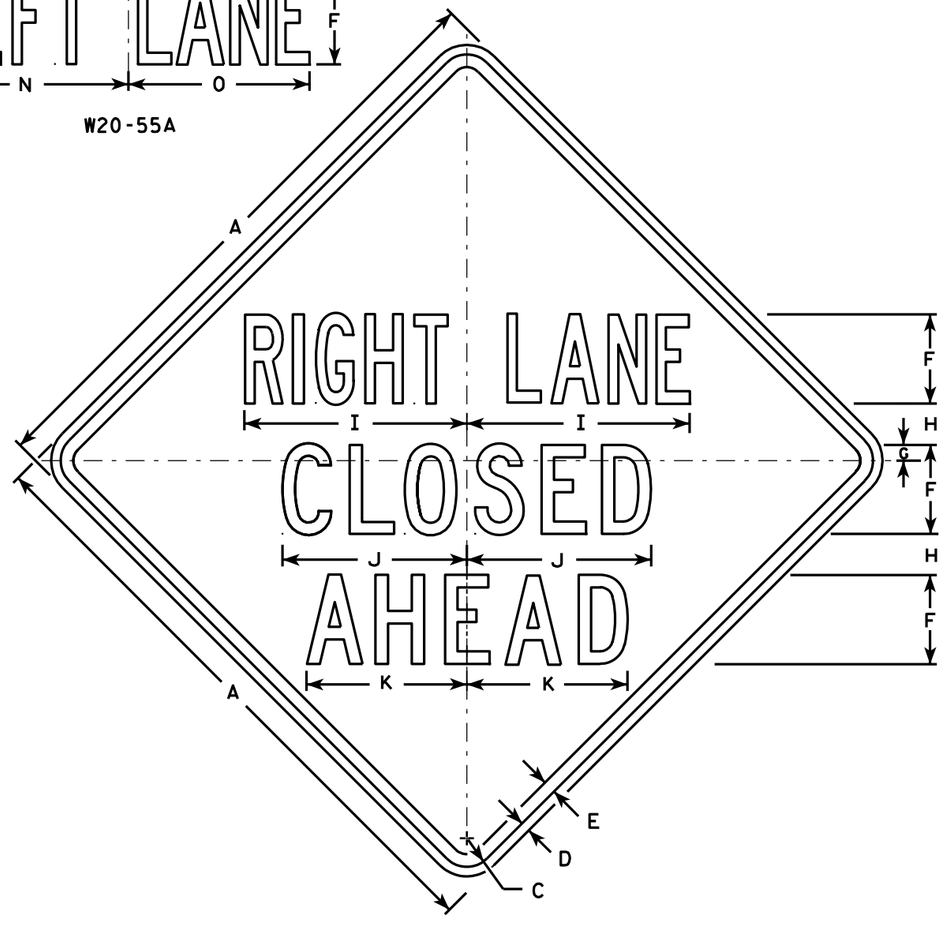
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$



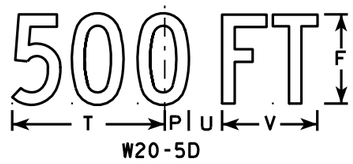
W20-56A



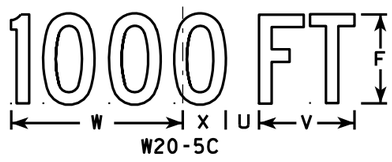
W20-55A



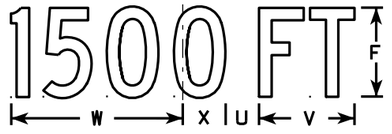
W20-5A



W20-5D



W20-5C



W20-5B



W20-5G



W20-5F

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

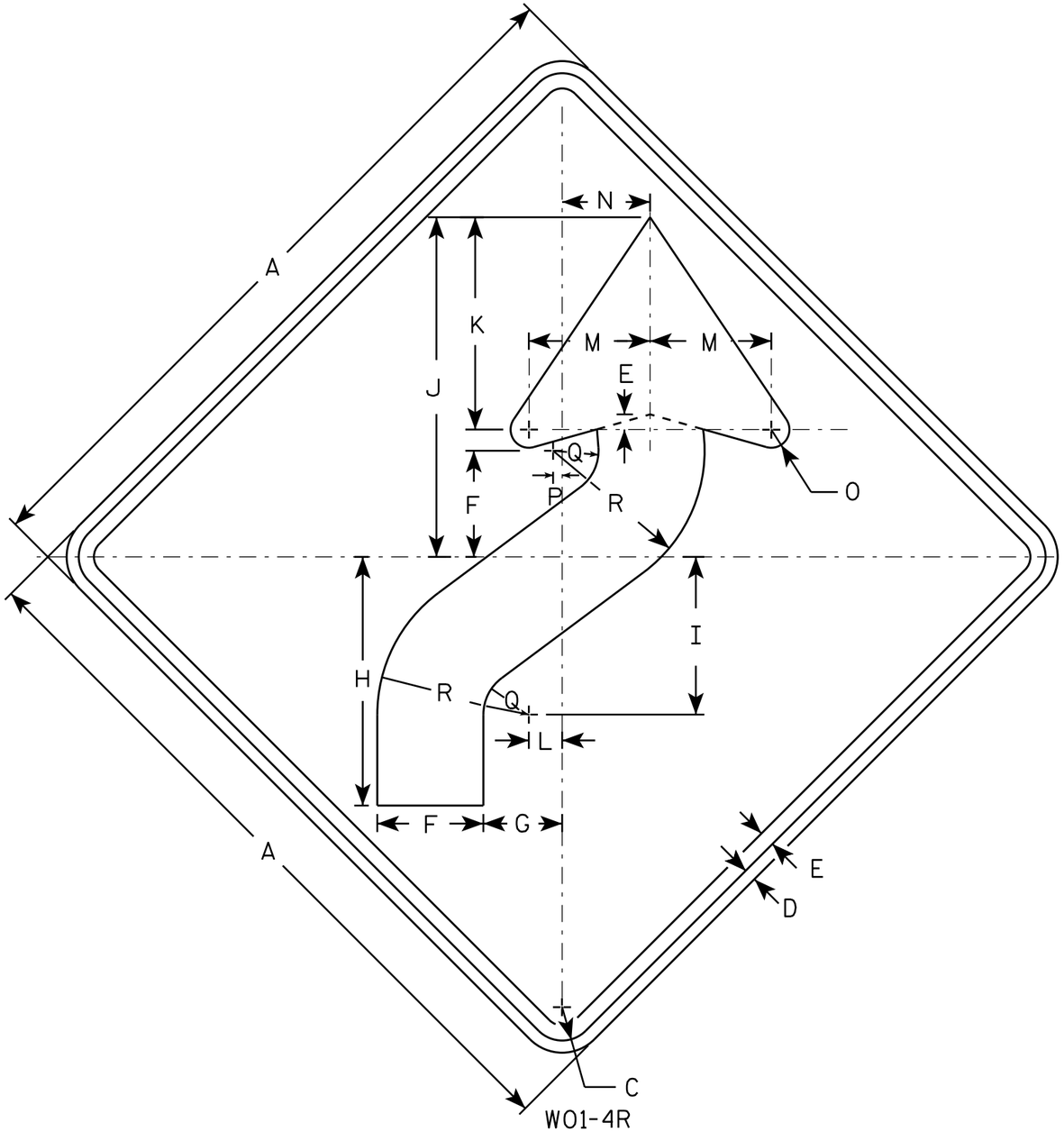
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 482 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

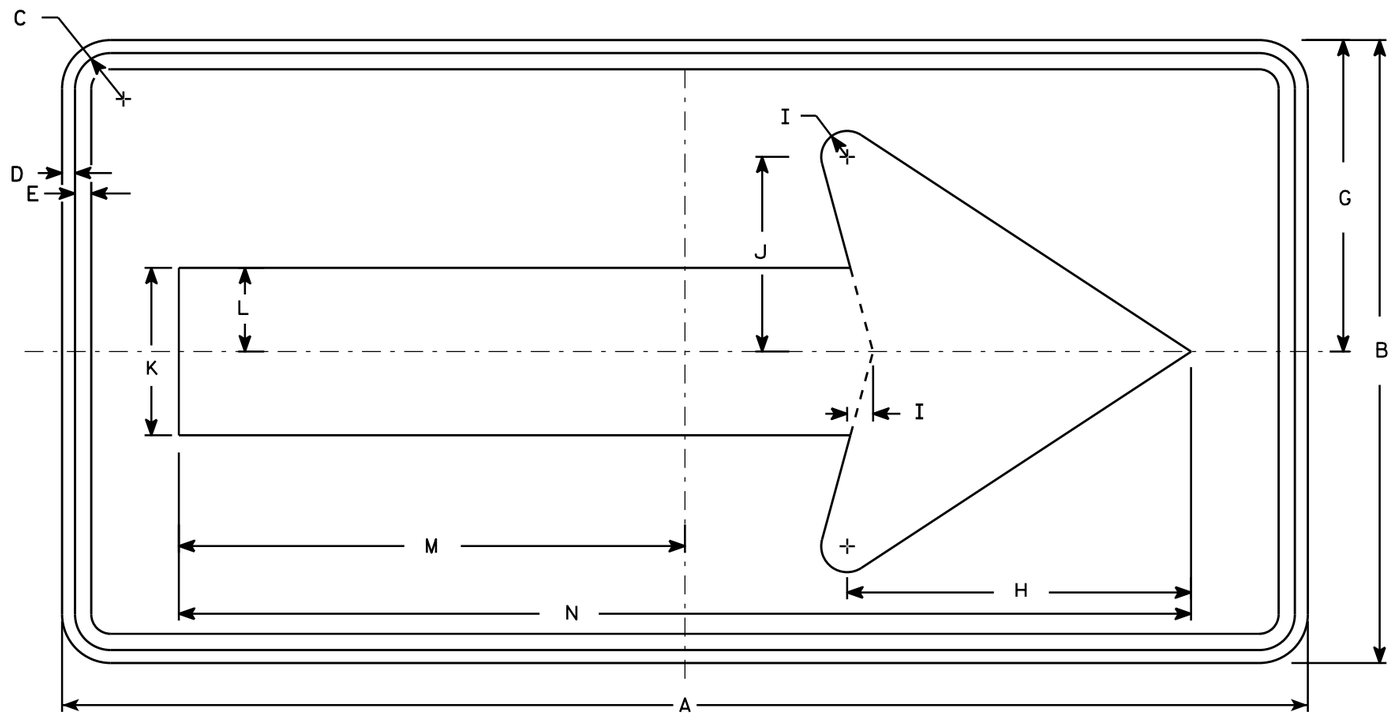
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000 WISDOT/CADDS SHEET 42



W01-6

NOTES

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

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

STANDARD SIGN
W01-6

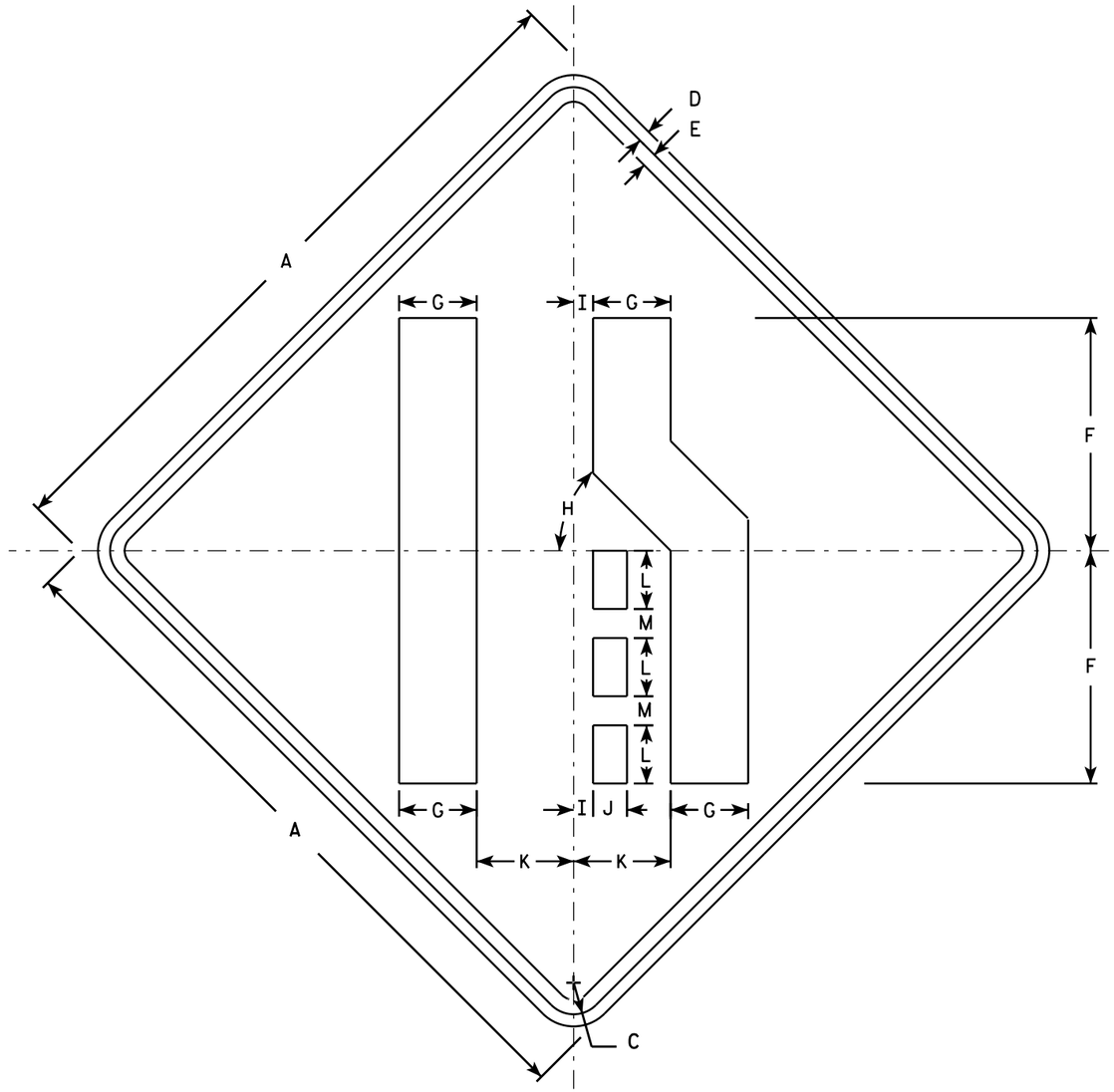
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	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
2M	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
3	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
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 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

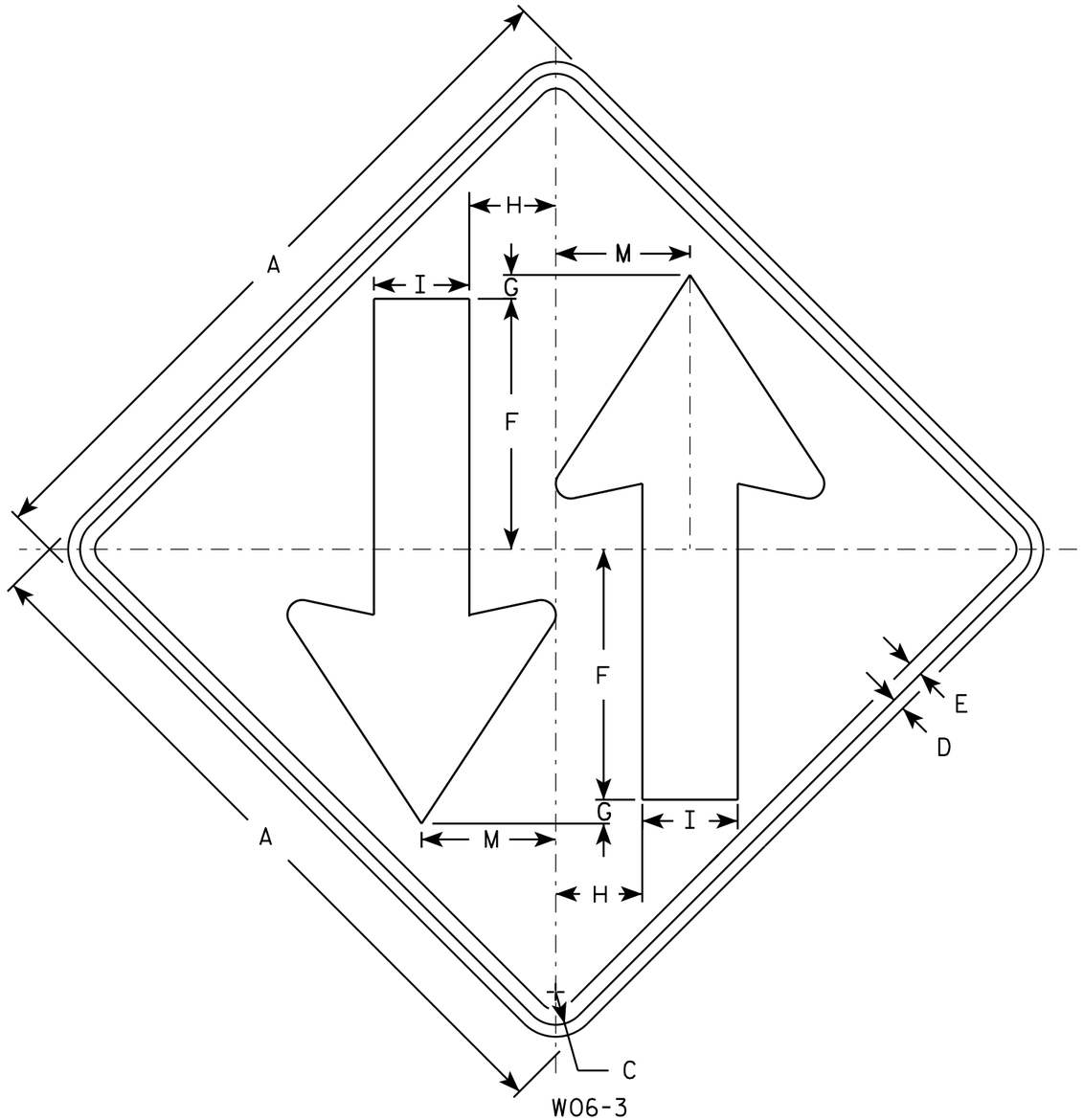
STANDARD SIGN
W04-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 485 W04-2.1

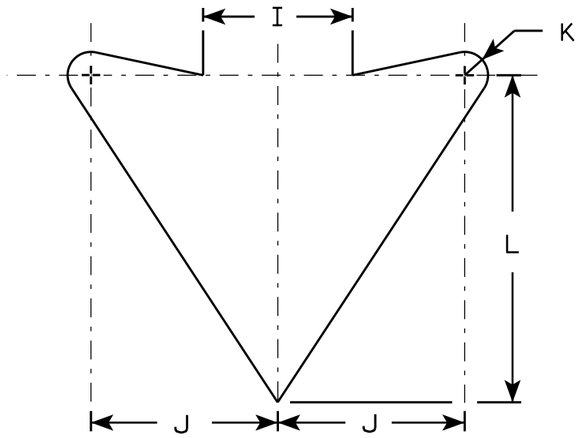
PROJECT NO: | SHEET NO: E



W06-3

NOTES

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



ARROW DETAIL

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

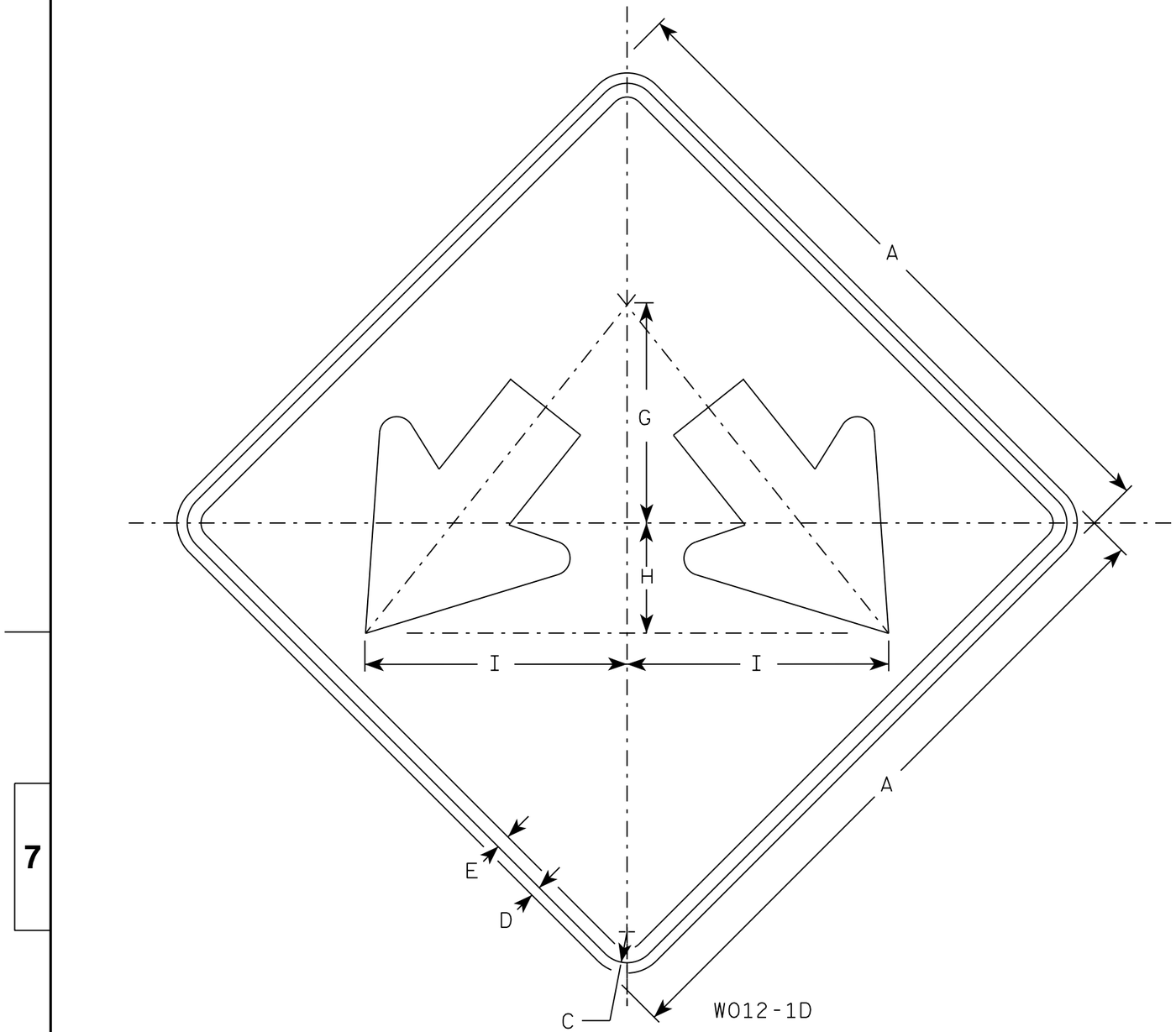
STANDARD SIGN
W06-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 486 W06-3.1

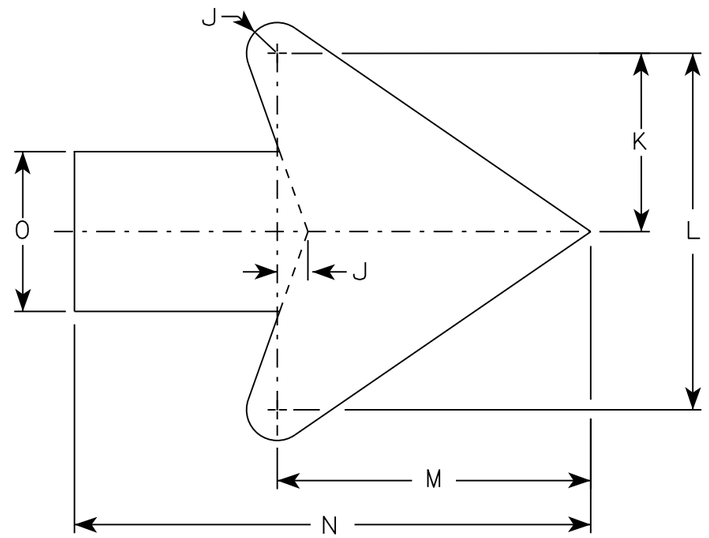
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W012-1D

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0

STANDARD SIGN
W012-1D

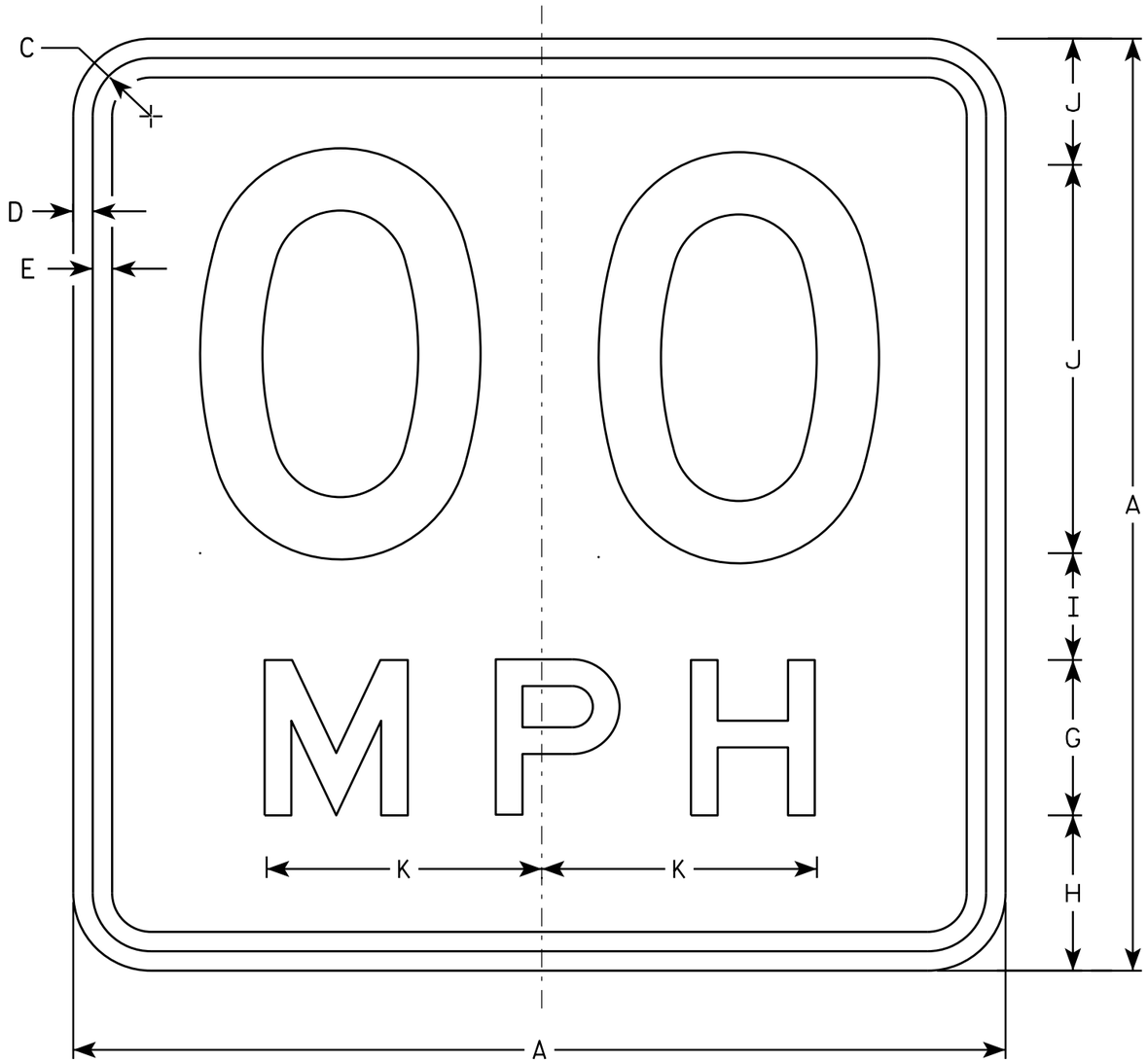
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/28/16 PLATE NO W012-1D.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CADfiles\Projects\tr_stdplate\W0121D.DGN PLOT DATE : 11-AUG-2016 11:28 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.621375:1.000000



W013-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	7 1/8																4.00
2S	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
2M	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
3	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

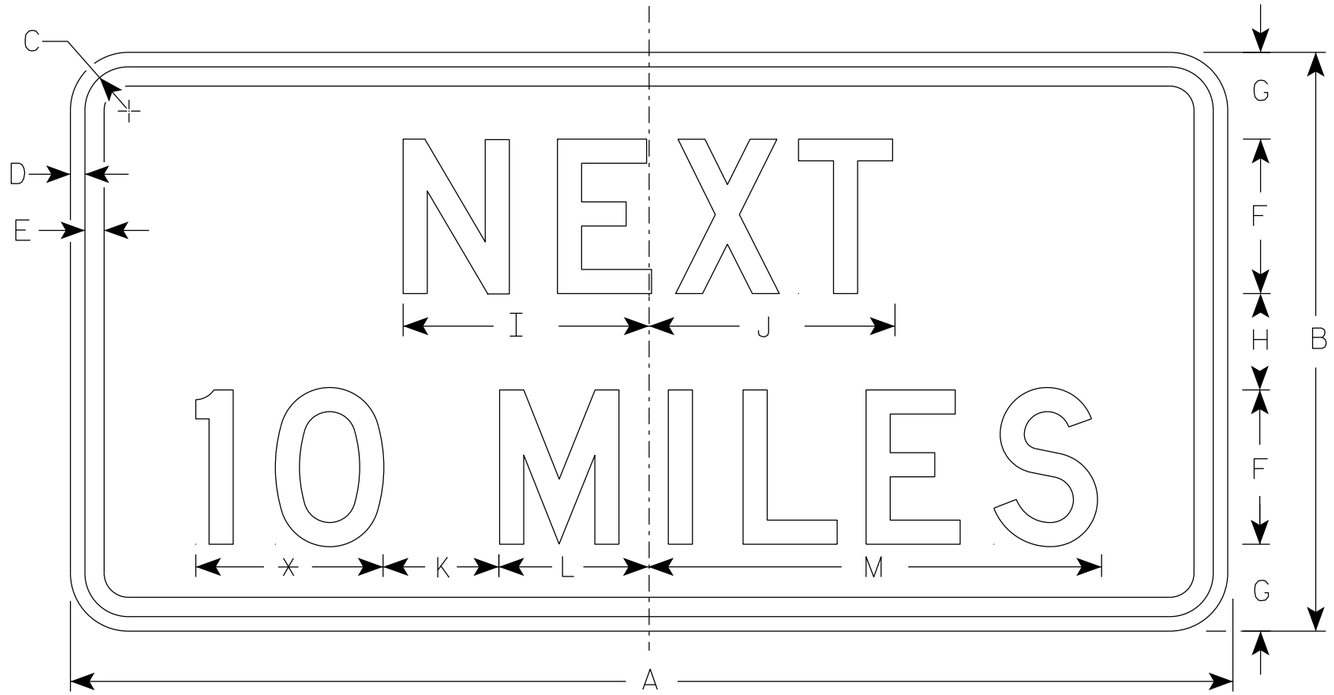
STANDARD SIGN
W013-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/13 PLATE 488 W013-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W057-51

* See note 5

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   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. Round distance to the nearest whole Mile and substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	1/2	5	2 3/4	2 1/2	7 7/8	8	5	4 1/8	15 3/8														4.5
2S	48	24	1 3/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0
2M	48	24	1 3/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0
3	48	24	1 3/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0
4	48	24	1 3/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0
5	48	24	1 3/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0

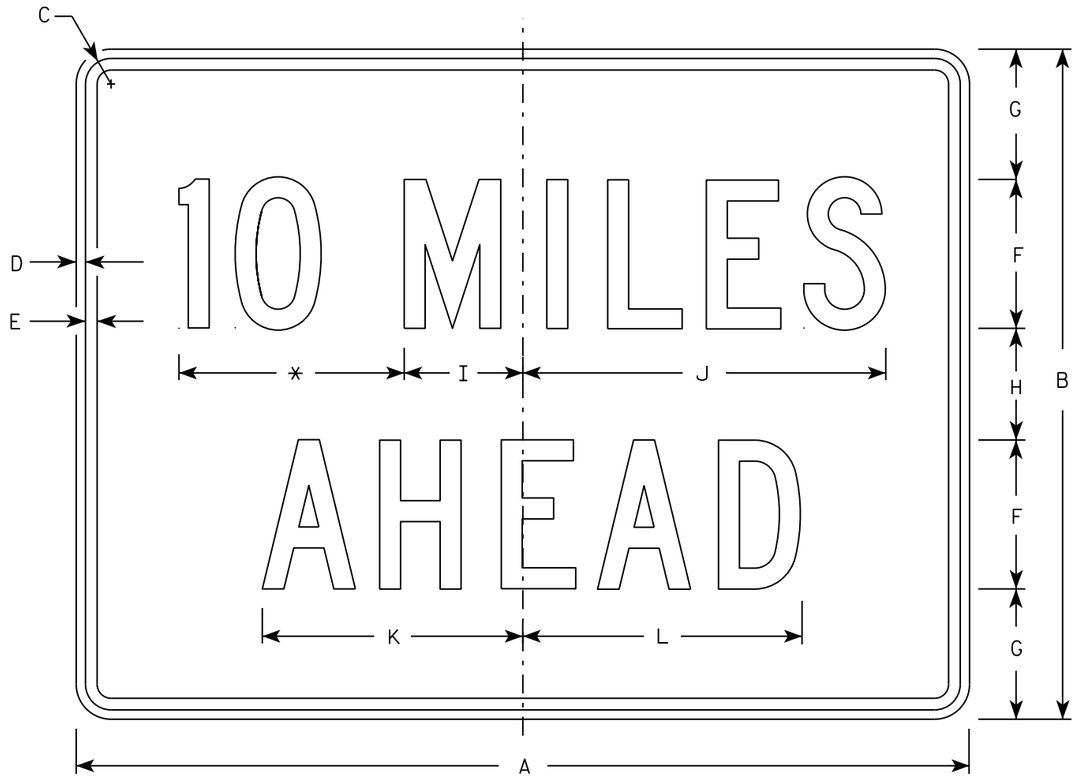
STANDARD SIGN
W057-51

WISCONSIN DEPT OF TRANSPORTATION

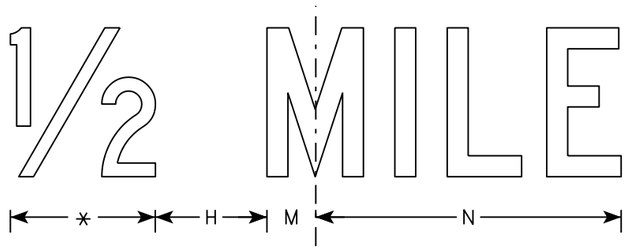
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/1/19 PLATE NO. W057-51.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 489	E



W057-52



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to the nearest quarter mile and optically adjust spacing to achieve proper balance.

* See note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	12													6.0
2S	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
2M	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
3	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
4	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
5	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0

STANDARD SIGN
W057-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W057-52.2

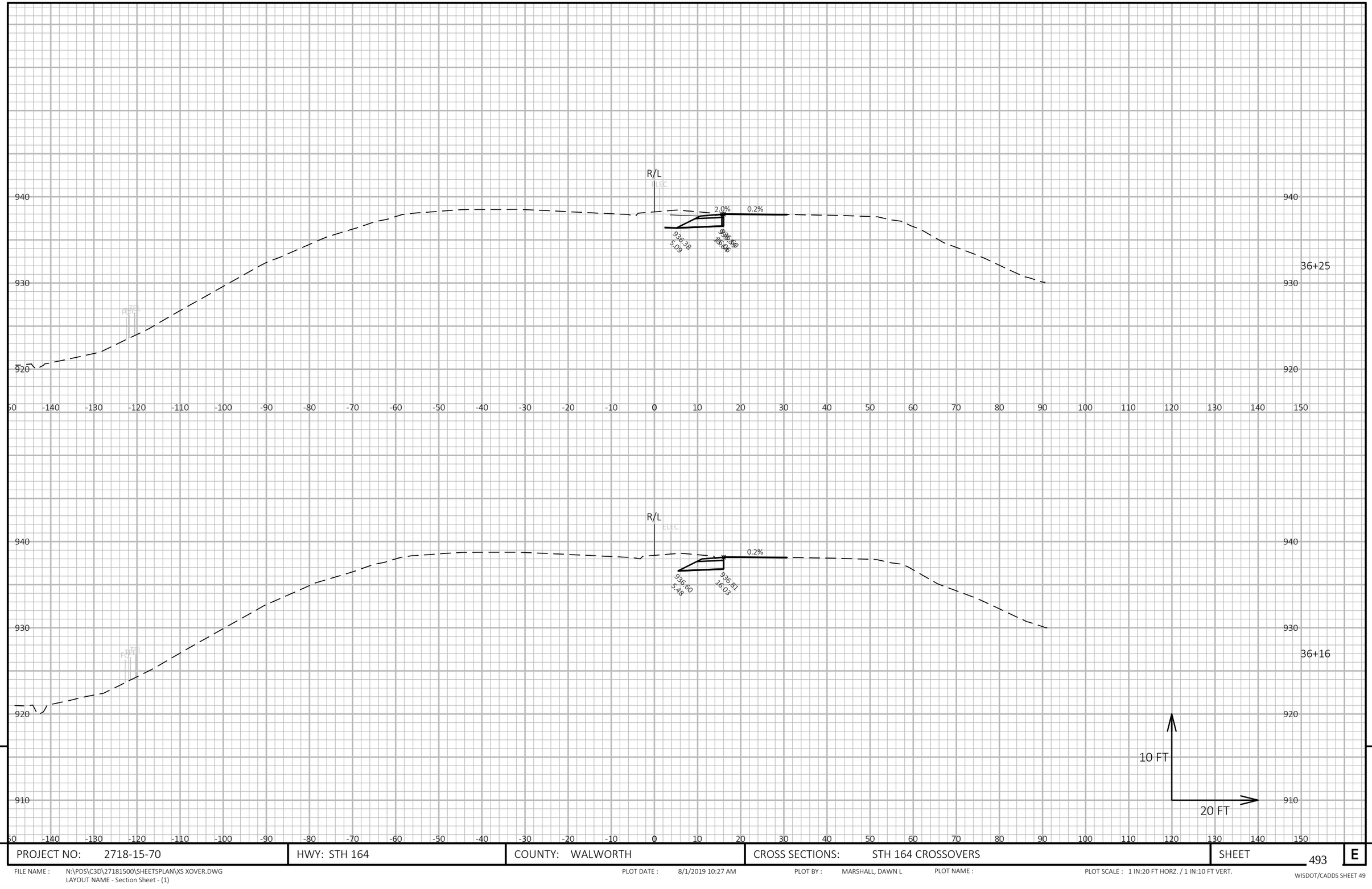
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 490	E

CROSS OVER CONSTRUCTION

			AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
				Salvaged/Unusable				Salvaged/Unusable				Expanded	Expanded	
STATION	Real Station	Distance	Cut	Pavement Material	Fill	EBS	Cut	Pavement Material	Fill	EBS	Cut	Fill	EBS Backfill	Mass Ordinate
											1.00	1.25		
							Note 1	Note 2	Note 3		Note 1		Note 5	Note 8
36+15.85	3615.85	0.00	17.96	0.00	0.00	0.00	0	0	0	0	0	0	0	0
36+25	3625.00	9.15	24.32	0.00	0.00	0.00	7	0	0	0	7	0	0	7
36+50	3650.00	25.00	29.69	0.00	0.00	0.00	25	0	0	0	32	0	0	32
36+75	3675.00	25.00	51.61	0.00	0.00	0.00	38	0	0	0	70	0	0	70
37+00	3700.00	25.00	57.03	0.00	0.00	0.00	50	0	0	0	120	0	0	120
37+25	3725.00	25.00	60.36	0.00	0.00	0.00	54	0	0	0	174	0	0	174
37+50	3750.00	25.00	58.73	0.00	0.00	0.00	55	0	0	0	230	0	0	230
37+75	3775.00	25.00	57.21	0.00	0.00	0.00	54	0	0	0	283	0	0	283
38+00	3800.00	25.00	52.29	0.00	0.00	0.00	51	0	0	0	334	0	0	334
38+25	3825.00	25.00	49.34	0.00	0.00	0.00	47	0	0	0	381	0	0	381
38+50	3850.00	25.00	48.16	0.00	0.00	0.00	45	0	0	0	426	0	0	426
38+75	3875.00	25.00	46.53	0.00	0.00	0.00	44	0	0	0	470	0	0	470
39+00	3900.00	25.00	43.41	0.00	0.00	0.00	42	0	0	0	512	0	0	512
39+25	3925.00	25.00	41.73	0.00	0.00	0.00	39	0	0	0	551	0	0	551
39+50	3950.00	25.00	39.38	0.00	0.00	0.00	38	0	0	0	589	0	0	589
39+75	3975.00	25.00	37.86	0.00	0.00	0.00	36	0	0	0	624	0	0	624
40+00	4000.00	25.00	37.34	0.00	0.00	0.00	35	0	0	0	659	0	0	659
40+25	4025.00	25.00	36.61	0.00	0.00	0.00	34	0	0	0	693	0	0	693
40+50	4050.00	25.00	32.14	0.00	0.00	0.00	32	0	0	0	725	0	0	725
40+75	4075.00	25.00	28.35	0.00	0.00	0.00	28	0	0	0	753	0	0	753
41+00	4100.00	25.00	24.27	0.00	0.00	0.00	24	0	0	0	778	0	0	778
41+25	4125.00	25.00	19.86	0.00	0.00	0.00	20	0	0	0	798	0	0	798
41+50	4150.00	25.00	15.37	0.00	0.00	0.00	16	0	0	0	814	0	0	814
41+75	4175.00	25.00	10.98	0.00	0.00	0.00	12	0	0	0	827	0	0	827
42+00	4200.00	25.00	10.60	0.00	0.00	0.00	10	0	0	0	837	0	0	837
42+25	4225.00	25.00	7.45	0.00	0.00	0.00	8	0	0	0	845	0	0	845
42+50	4250.00	25.00	7.44	0.00	0.00	0.00	7	0	0	0	852	0	0	852
42+75	4275.00	25.00	7.77	0.00	0.00	0.00	7	0	0	0	859	0	0	859
43+00	4300.00	25.00	8.50	0.00	0.00	0.00	8	0	0	0	866	0	0	866
43+25	4325.00	25.00	10.55	0.00	0.00	0.00	9	0	0	0	875	0	0	875
43+50	4350.00	25.00	9.29	0.00	0.00	0.00	9	0	0	0	884	0	0	884
43+75	4375.00	25.00	11.31	0.00	0.00	0.00	10	0	0	0	894	0	0	894
44+00	4400.00	25.00	13.13	0.00	0.00	0.00	11	0	0	0	905	0	0	905
44+25	4425.00	25.00	15.24	0.00	0.00	0.00	13	0	0	0	918	0	0	918
44+50	4450.00	25.00	18.12	0.00	0.00	0.00	15	0	0	0	934	0	0	934
44+75	4475.00	25.00	17.32	0.00	0.00	0.00	16	0	0	0	950	0	0	950
44+93.77	4493.77	18.77	0.01	0.00	0.00	0.00	6	0	0	0	956	0	0	956
255+10.02	25510.02	0.00	17.53	0.00	0.00	0.00	0	0	0	0	0	0	0	0
255+25	25525.00	14.98	21.23	0.00	0.00	0.00	11	0	0	0	11	0	0	11
255+50	25550.00	25.00	22.42	0.00	0.00	0.00	20	0	0	0	31	0	0	31
255+75	25575.00	25.00	22.62	0.00	0.00	0.00	21	0	0	0	52	0	0	52
256+00	25600.00	25.00	34.43	0.00	0.00	0.00	26	0	0	0	78	0	0	78
256+25	25625.00	25.00	31.34	0.00	0.00	0.00	30	0	0	0	109	0	0	109
256+50	25650.00	25.00	26.67	0.00	0.00	0.00	27	0	0	0	136	0	0	136
256+75	25675.00	25.00	24.44	0.00	0.00	0.00	24	0	0	0	159	0	0	159
257+00	25700.00	25.00	22.02	0.00	0.00	0.00	22	0	0	0	181	0	0	181
257+25	25725.00	25.00	20.72	0.00	0.00	0.00	20	0	0	0	200	0	0	200
257+50	25750.00	25.00	19.02	0.00	0.00	0.00	18	0	0	0	219	0	0	219
257+75	25775.00	25.00	17.50	0.00	0.00	0.00	17	0	0	0	236	0	0	236
258+00	25800.00	25.00	16.33	0.00	0.00	0.00	16	0	0	0	251	0	0	251
258+25	25825.00	25.00	16.14	0.00	0.00	0.00	15	0	0	0	266	0	0	266
258+50	25850.00	25.00	18.09	0.00	0.00	0.00	16	0	0	0	282	0	0	282
258+75	25875.00	25.00	20.10	0.00	0.00	0.00	18	0	0	0	300	0	0	300
259+00	25900.00	25.00	21.56	0.00	0.00	0.00	19	0	0	0	319	0	0	319
259+25	25925.00	25.00	20.16	0.00	0.00	0.00	19	0	0	0	339	0	0	339
259+50	25950.00	25.00	20.28	0.00	0.00	0.00	19	0	0	0	357	0	0	357
259+75	25975.00	25.00	18.72	0.00	0.00	0.00	18	0	0	0	375	0	0	375
260+00	26000.00	25.00	19.69	0.00	0.00	0.00	18	0	0	0	393	0	0	393
260+25	26025.00	25.00	26.18	0.00	0.00	0.00	21	0	0	0	414	0	0	414
260+50	26050.00	25.00	31.64	0.00	0.00	0.00	27	0	0	0	441	0	0	441
260+75	26075.00	25.00	30.91	0.00	0.00	0.00	29	0	0	0	470	0	0	470
261+00	26100.00	25.00	31.00	0.00	0.00	0.00	29	0	0	0	499	0	0	499
261+25	26125.00	25.00	34.47	0.00	0.00	0.00	30	0	0	0	529	0	0	529
261+50	26150.00	25.00	37.87	0.00	0.00	0.00	33	0	0	0	563	0	0	563
261+75	26175.00	25.00	40.73	0.00	0.00	0.00	36	0	0	0	599	0	0	599
262+00	26200.00	25.00	44.02	0.00	0.00	0.00	39	0	0	0	638	0	0	638
262+25	26225.00	25.00	48.60	0.00	0.00	0.00	43	0	0	0	681	0	0	681
262+50	26250.00	25.00	52.19	0.00	0.00	0.00	47	0	0	0	728	0	0	728
262+75	26275.00	25.00	54.23	0.00	0.00	0.00	49	0	0	0	777	0	0	777
263+00	26300.00	25.00	50.82	0.00	0.00	0.00	49	0	0	0	826	0	0	826
263+25	26325.00	25.00	46.83	0.00	0.00	0.00	45	0	0	0	871	0	0	871
263+50	26350.00	25.00	45.25	0.00	0.00	0.00	43	0	0	0	914	0	0	914
263+75	26375.00	25.00	41.00	0.00	0.00	0.00	40	0	0	0	953	0	0	953
264+00	26400.00	25.00	26.42	0.00	0.00	0.00	31	0	0	0	985	0	0	985
264+25	26425.00	25.00	27.24	0.00	0.00	0.00	25	0	0	0	1,010	0	0	1,010
264+50	26450.00	25.00	27.81	0.00	0.00	0.00	25	0	0	0	1,035	0	0	1,035
264+75	26475.00	25.00	23.50	0.00	0.00	0.00	24	0	0	0	1,059	0	0	1,059
265+00	26500.00	25.00	19.29	0.00	0.00	0.00	20	0	0	0	1,079	0	0	1,079
265+09.28	26509.28	9.28	17.72	0.00	0.00	0.00	6	0	0	0	1,085	0	0	1,085

CROSS OVER REMOVAL

			AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
STATION	Real Station	Distance	Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut 1.00 Note 1	Salvaged/Unusable Pavement Material Note 2	Fill 1.25 Note 3	EBS	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded EBS Backfill Note 5	Mass Ordinate Note 8
36+15.85	3615.85	0.00	0.00	0.00	17.96	0.00	0	0	0	0	0	0	0	0
36+25	3625.00	9.15	0.00	0.00	24.32	0.00	0	0	7	0	0	9	0	-9
36+50	3650.00	25.00	0.00	0.00	29.69	0.00	0	0	25	0	0	40	0	-40
36+75	3675.00	25.00	0.00	0.00	51.61	0.00	0	0	38	0	0	87	0	-87
37+00	3700.00	25.00	0.00	0.00	57.03	0.00	0	0	50	0	0	150	0	-150
37+25	3725.00	25.00	0.00	0.00	60.36	0.00	0	0	54	0	0	218	0	-218
37+50	3750.00	25.00	0.00	0.00	58.73	0.00	0	0	55	0	0	287	0	-287
37+75	3775.00	25.00	0.00	0.00	57.21	0.00	0	0	54	0	0	354	0	-354
38+00	3800.00	25.00	0.00	0.00	52.29	0.00	0	0	51	0	0	417	0	-417
38+25	3825.00	25.00	0.00	0.00	49.34	0.00	0	0	47	0	0	476	0	-476
38+50	3850.00	25.00	0.00	0.00	48.16	0.00	0	0	45	0	0	533	0	-533
38+75	3875.00	25.00	0.00	0.00	46.53	0.00	0	0	44	0	0	588	0	-588
39+00	3900.00	25.00	0.00	0.00	43.41	0.00	0	0	42	0	0	640	0	-640
39+25	3925.00	25.00	0.00	0.00	41.73	0.00	0	0	39	0	0	689	0	-689
39+50	3950.00	25.00	0.00	0.00	39.38	0.00	0	0	38	0	0	736	0	-736
39+75	3975.00	25.00	0.00	0.00	37.86	0.00	0	0	36	0	0	780	0	-780
40+00	4000.00	25.00	0.00	0.00	37.34	0.00	0	0	35	0	0	824	0	-824
40+25	4025.00	25.00	0.00	0.00	36.61	0.00	0	0	34	0	0	867	0	-867
40+50	4050.00	25.00	0.00	0.00	32.14	0.00	0	0	32	0	0	907	0	-907
40+75	4075.00	25.00	0.00	0.00	28.35	0.00	0	0	28	0	0	942	0	-942
41+00	4100.00	25.00	0.00	0.00	24.27	0.00	0	0	24	0	0	972	0	-972
41+25	4125.00	25.00	0.00	0.00	19.86	0.00	0	0	20	0	0	998	0	-998
41+50	4150.00	25.00	0.00	0.00	15.37	0.00	0	0	16	0	0	1,018	0	-1,018
41+75	4175.00	25.00	0.00	0.00	10.98	0.00	0	0	12	0	0	1,033	0	-1,033
42+00	4200.00	25.00	0.00	0.00	10.60	0.00	0	0	10	0	0	1,046	0	-1,046
42+25	4225.00	25.00	0.00	0.00	7.45	0.00	0	0	8	0	0	1,056	0	-1,056
42+50	4250.00	25.00	0.00	0.00	7.44	0.00	0	0	7	0	0	1,065	0	-1,065
42+75	4275.00	25.00	0.00	0.00	7.77	0.00	0	0	7	0	0	1,074	0	-1,074
43+00	4300.00	25.00	0.00	0.00	8.50	0.00	0	0	8	0	0	1,083	0	-1,083
43+25	4325.00	25.00	0.00	0.00	10.55	0.00	0	0	9	0	0	1,094	0	-1,094
43+50	4350.00	25.00	0.00	0.00	9.29	0.00	0	0	9	0	0	1,105	0	-1,105
43+75	4375.00	25.00	0.00	0.00	11.31	0.00	0	0	10	0	0	1,117	0	-1,117
44+00	4400.00	25.00	0.00	0.00	13.13	0.00	0	0	11	0	0	1,132	0	-1,132
44+25	4425.00	25.00	0.00	0.00	15.24	0.00	0	0	13	0	0	1,148	0	-1,148
44+50	4450.00	25.00	0.00	0.00	18.12	0.00	0	0	15	0	0	1,167	0	-1,167
44+75	4475.00	25.00	0.00	0.00	17.32	0.00	0	0	16	0	0	1,188	0	-1,188
44+93.77	4493.77	18.77	0.00	0.00	0.01	0.00	0	0	6	0	0	1,195	0	-1,195
255+10.02	25510.02	0.00	0.00	0.00	17.53	0.00	0	0	0	0	0	0	0	0
255+25	25525.00	14.98	0.00	0.00	21.23	0.00	0	0	11	0	0	13	0	-13
255+50	25550.00	25.00	0.00	0.00	22.42	0.00	0	0	20	0	0	39	0	-39
255+75	25575.00	25.00	0.00	0.00	22.62	0.00	0	0	21	0	0	65	0	-65
256+00	25600.00	25.00	0.00	0.00	34.43	0.00	0	0	26	0	0	98	0	-98
256+25	25625.00	25.00	0.00	0.00	31.34	0.00	0	0	30	0	0	136	0	-136
256+50	25650.00	25.00	0.00	0.00	26.67	0.00	0	0	27	0	0	169	0	-169
256+75	25675.00	25.00	0.00	0.00	24.44	0.00	0	0	24	0	0	199	0	-199
257+00	25700.00	25.00	0.00	0.00	22.02	0.00	0	0	22	0	0	226	0	-226
257+25	25725.00	25.00	0.00	0.00	20.72	0.00	0	0	20	0	0	251	0	-251
257+50	25750.00	25.00	0.00	0.00	19.02	0.00	0	0	18	0	0	274	0	-274
257+75	25775.00	25.00	0.00	0.00	17.50	0.00	0	0	17	0	0	295	0	-295
258+00	25800.00	25.00	0.00	0.00	16.33	0.00	0	0	16	0	0	314	0	-314
258+25	25825.00	25.00	0.00	0.00	16.14	0.00	0	0	15	0	0	333	0	-333
258+50	25850.00	25.00	0.00	0.00	18.09	0.00	0	0	16	0	0	353	0	-353
258+75	25875.00	25.00	0.00	0.00	20.10	0.00	0	0	18	0	0	375	0	-375
259+00	25900.00	25.00	0.00	0.00	21.56	0.00	0	0	19	0	0	399	0	-399
259+25	25925.00	25.00	0.00	0.00	20.16	0.00	0	0	19	0	0	423	0	-423
259+50	25950.00	25.00	0.00	0.00	20.28	0.00	0	0	19	0	0	447	0	-447
259+75	25975.00	25.00	0.00	0.00	18.72	0.00	0	0	18	0	0	469	0	-469
260+00	26000.00	25.00	0.00	0.00	19.69	0.00	0	0	18	0	0	491	0	-491
260+25	26025.00	25.00	0.00	0.00	26.18	0.00	0	0	21	0	0	518	0	-518
260+50	26050.00	25.00	0.00	0.00	31.64	0.00	0	0	27	0	0	551	0	-551
260+75	26075.00	25.00	0.00	0.00	30.91	0.00	0	0	29	0	0	588	0	-588
261+00	26100.00	25.00	0.00	0.00	31.00	0.00	0	0	29	0	0	624	0	-624
261+25	26125.00	25.00	0.00	0.00	34.47	0.00	0	0	30	0	0	661	0	-661
261+50	26150.00	25.00	0.00	0.00	37.87	0.00	0	0	33	0	0	703	0	-703
261+75	26175.00	25.00	0.00	0.00	40.73	0.00	0	0	36	0	0	749	0	-749
262+00	26200.00	25.00	0.00	0.00	44.02	0.00	0	0	39	0	0	798	0	-798
262+25	26225.00	25.00	0.00	0.00	48.60	0.00	0	0	43	0	0	851	0	-851
262+50	26250.00	25.00	0.00	0.00	52.19	0.00	0	0	47	0	0	910	0	-910
262+75	26275.00	25.00	0.00	0.00	54.23	0.00	0	0	49	0	0	971	0	-971
263+00	26300.00	25.00	0.00	0.00	50.82	0.00	0	0	49	0	0	1,032	0	-1,032
263+25	26325.00	25.00	0.00	0.00	46.83	0.00	0	0	45	0	0	1,089	0	-1,089
263+50	26350.00	25.00	0.00	0.00	45.25	0.00	0	0	43	0	0	1,142	0	-1,142
263+75	26375.00	25.00	0.00	0.00	41.00	0.00	0	0	40	0	0	1,192	0	-1,192
264+00	26400.00	25.00	0.00	0.00	26.42	0.00	0	0	31	0	0	1,231	0	-1,231
264+25	26425.00	25.00	0.00	0.00	27.24	0.00	0	0	25	0	0	1,262	0	-1,262
264+50	26450.00	25.00	0.00	0.00	27.81	0.00	0	0	25	0	0	1,294	0	-1,294
264+75	26475.00	25.00	0.00	0.00	23.50	0.00	0	0	24	0	0	1,323	0	-1,323
265+00	26500.00	25.00	0.00	0.00	19.29	0.00	0	0	20	0	0	1,348	0	-1,348
265+09.28	26509.28	9.28	0.00	0.00	17.72	0.00	0	0	6	0	0	1,356	0	-1,356



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 493	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (1)

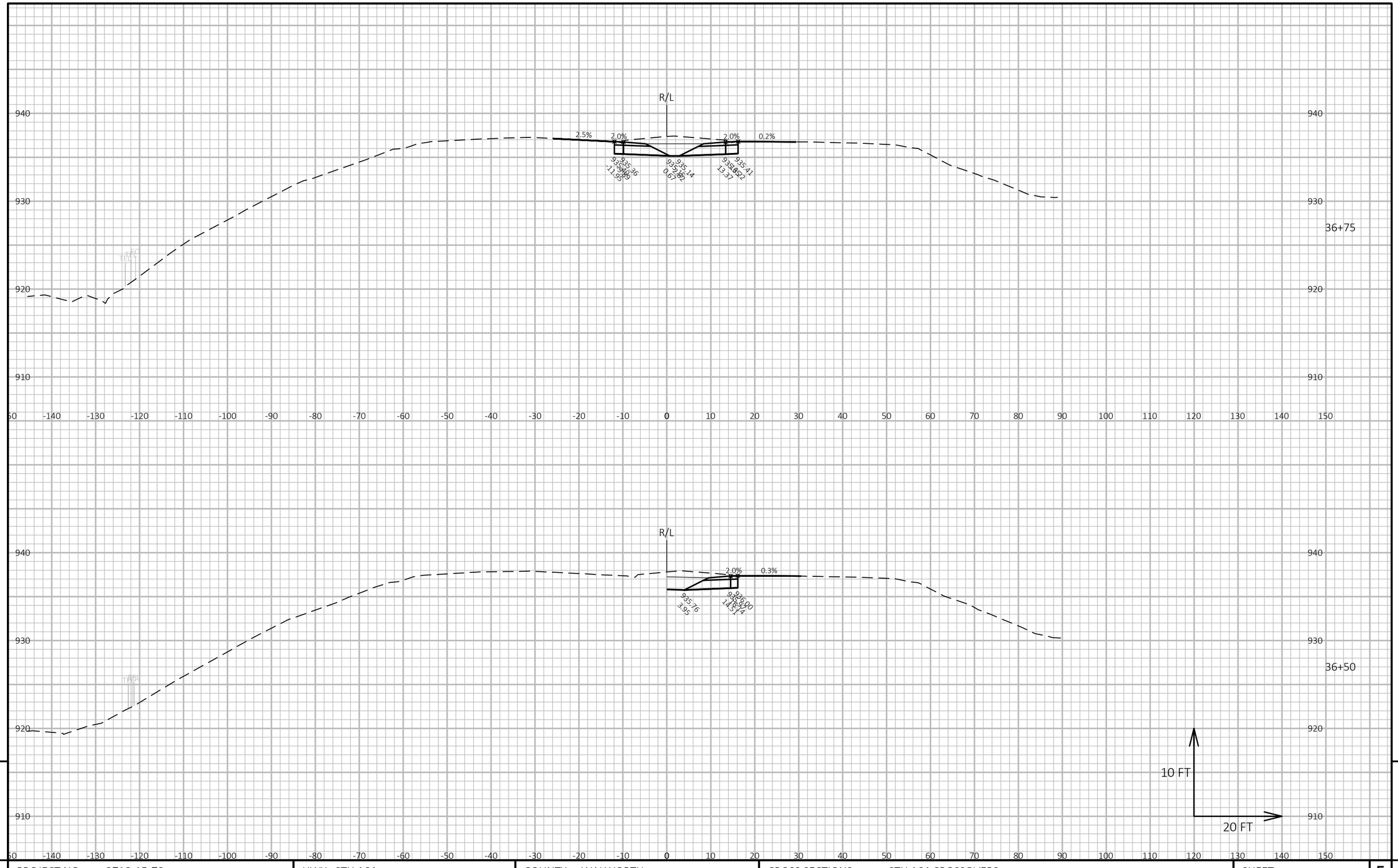
PLOT DATE : 8/1/2019 10:27 AM

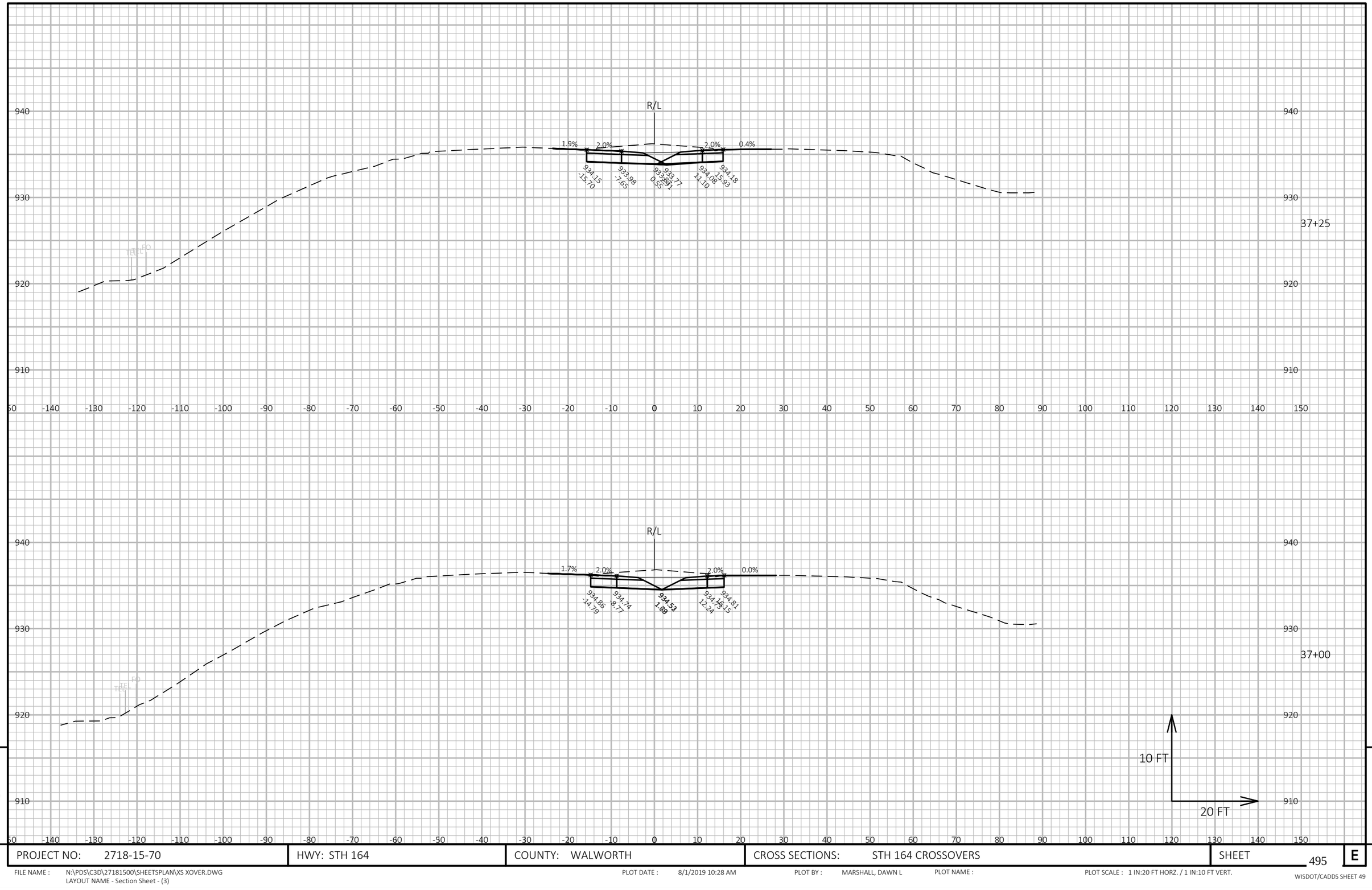
PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49


R/L
2.5%
2.0%
2.0%
0.2%
935.41
935.22
935.14
935.02
935.00
935.36
935.26
935.16
935.06
935.00
935.00
935.00



PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 495	E

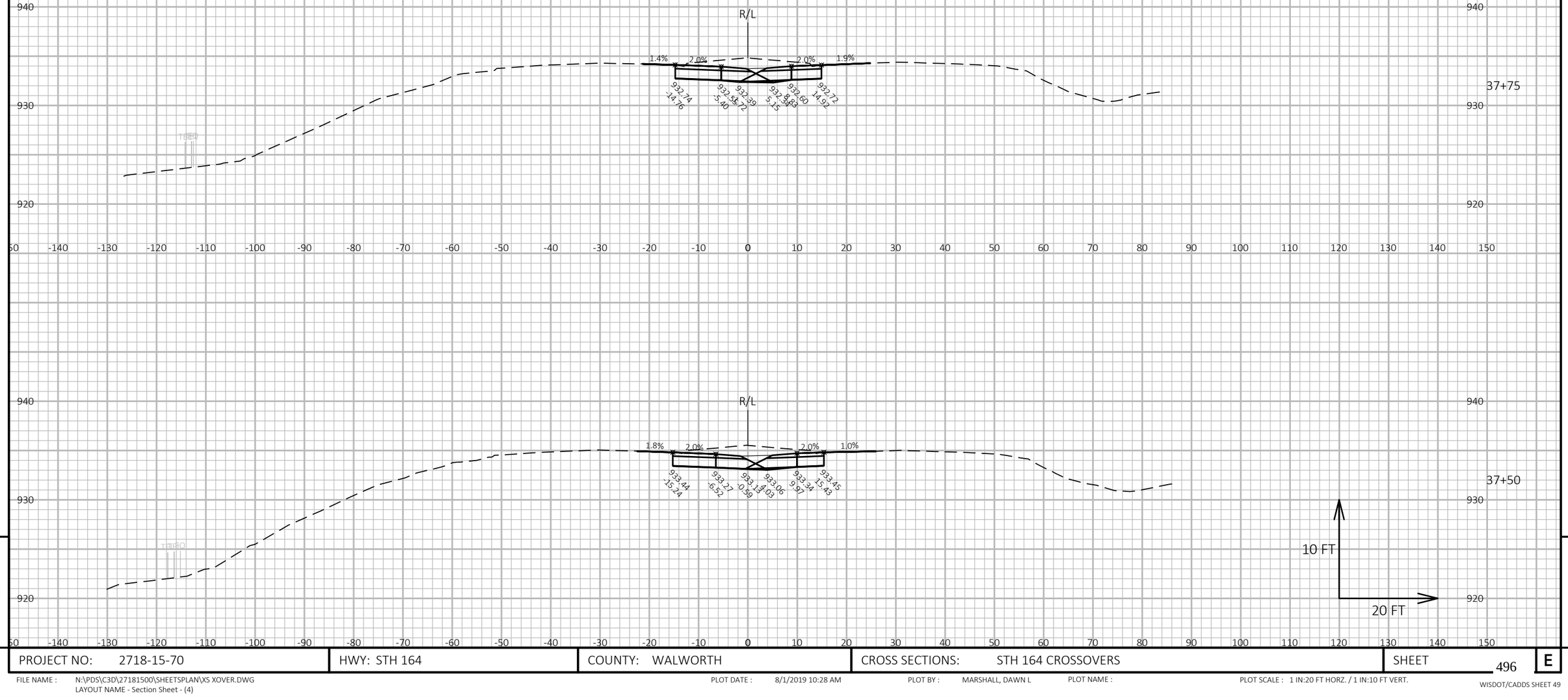
FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (3)

PLOT DATE : 8/1/2019 10:28 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 496	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (4)

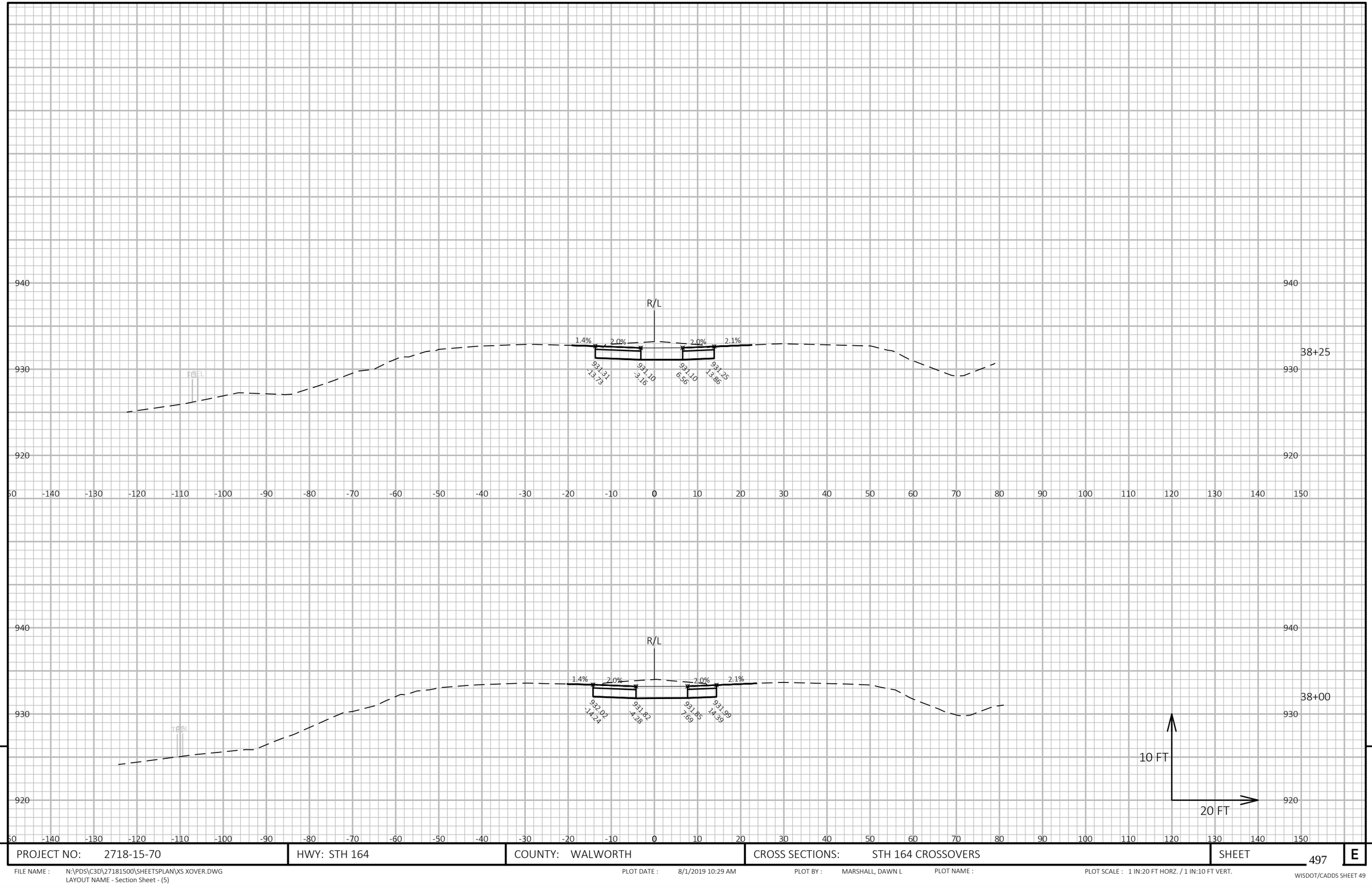
PLOT DATE : 8/1/2019 10:28 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 497	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (5)

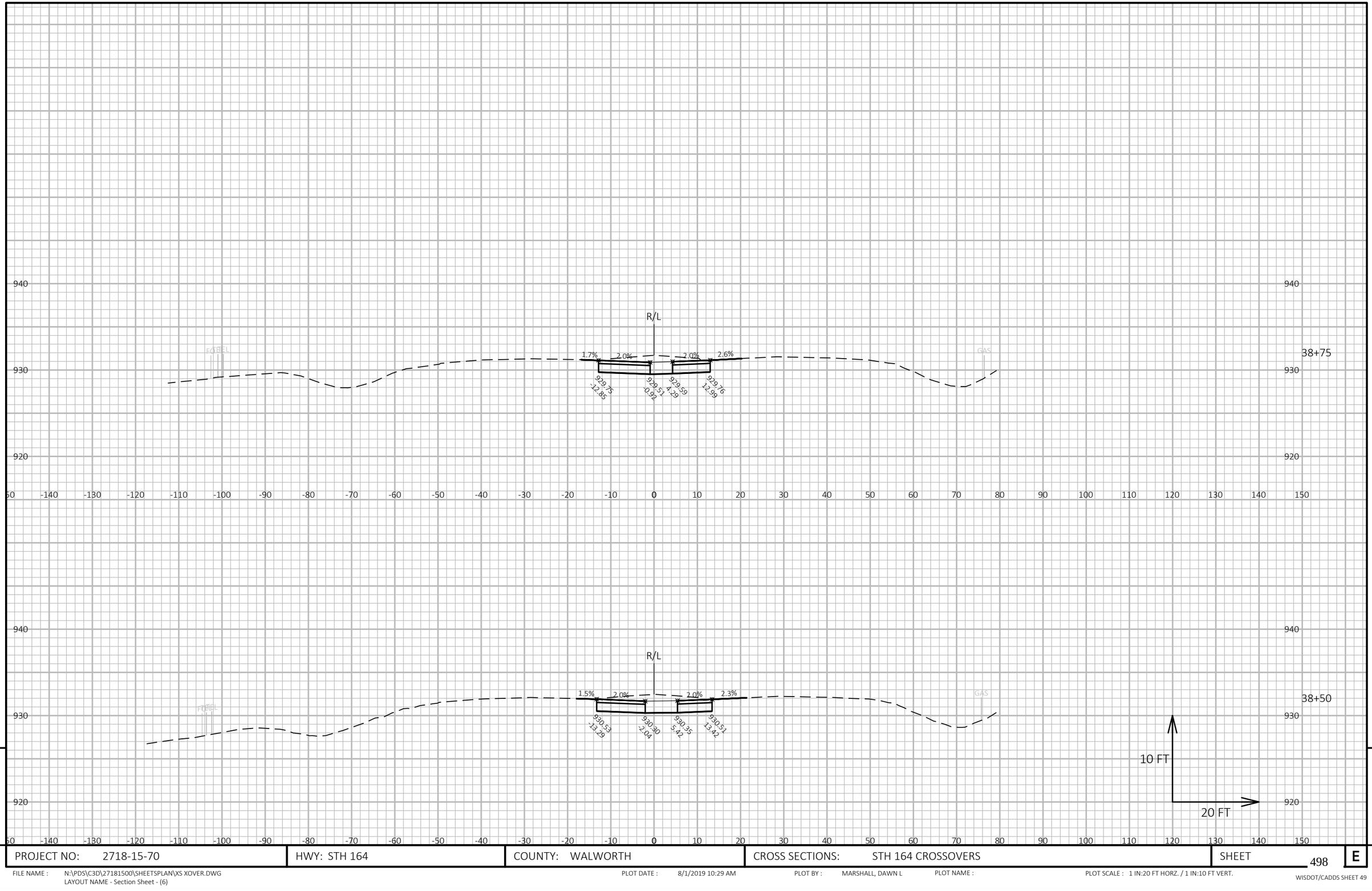
PLOT DATE : 8/1/2019 10:29 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



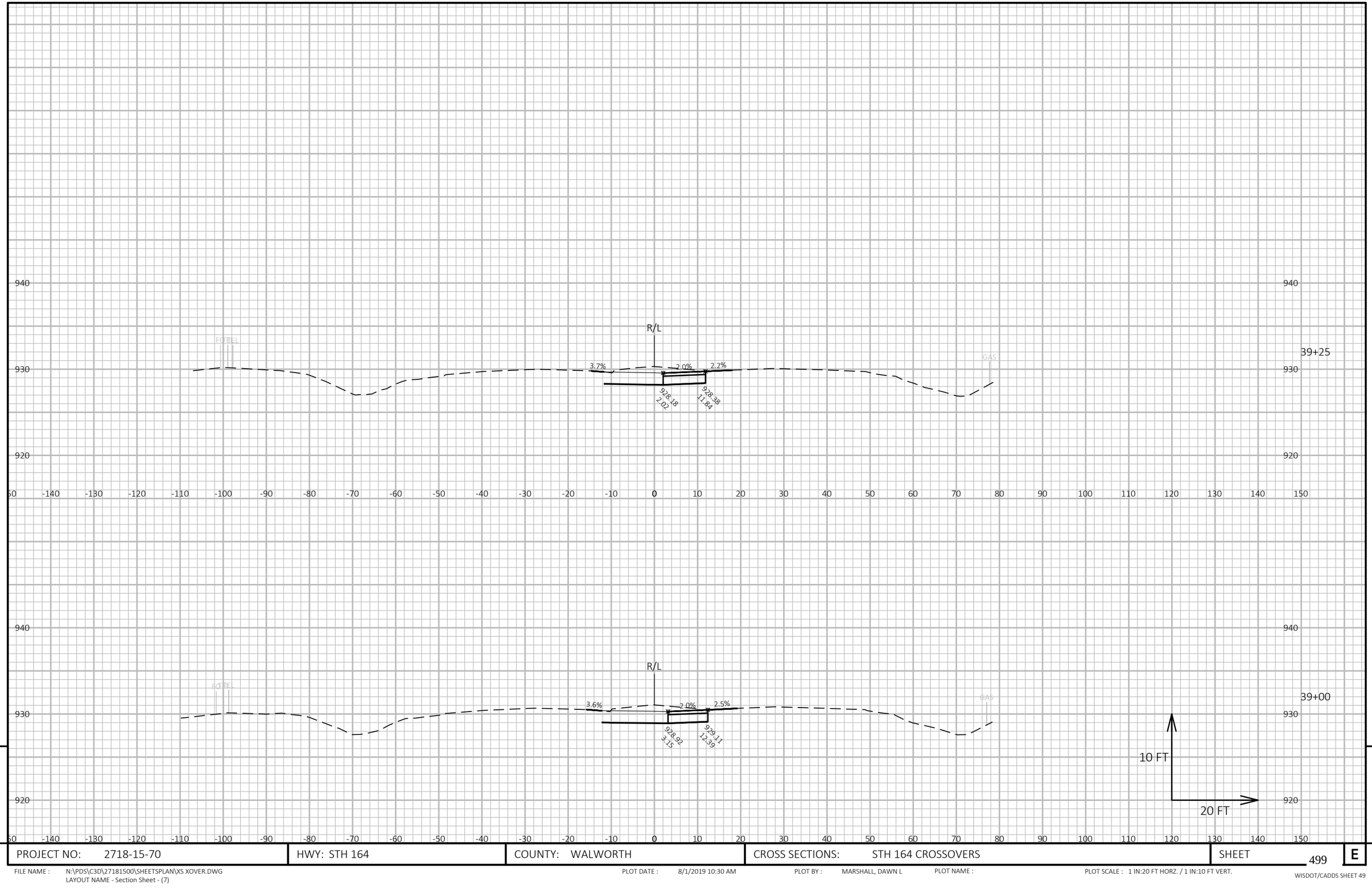
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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 498	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (6)

PLOT DATE : 8/1/2019 10:29 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

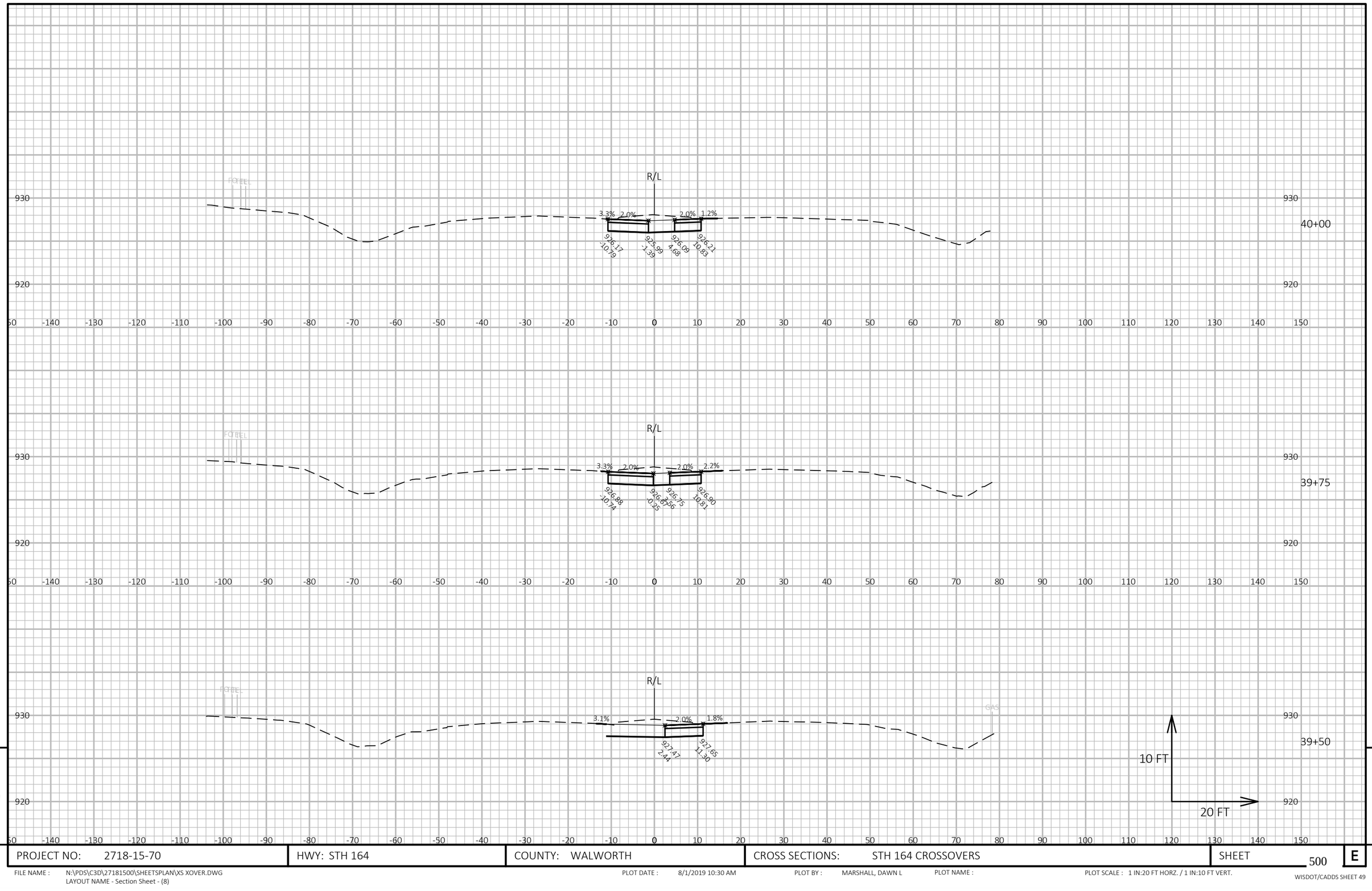
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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 499	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (7)

PLOT DATE : 8/1/2019 10:30 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 500	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (8)

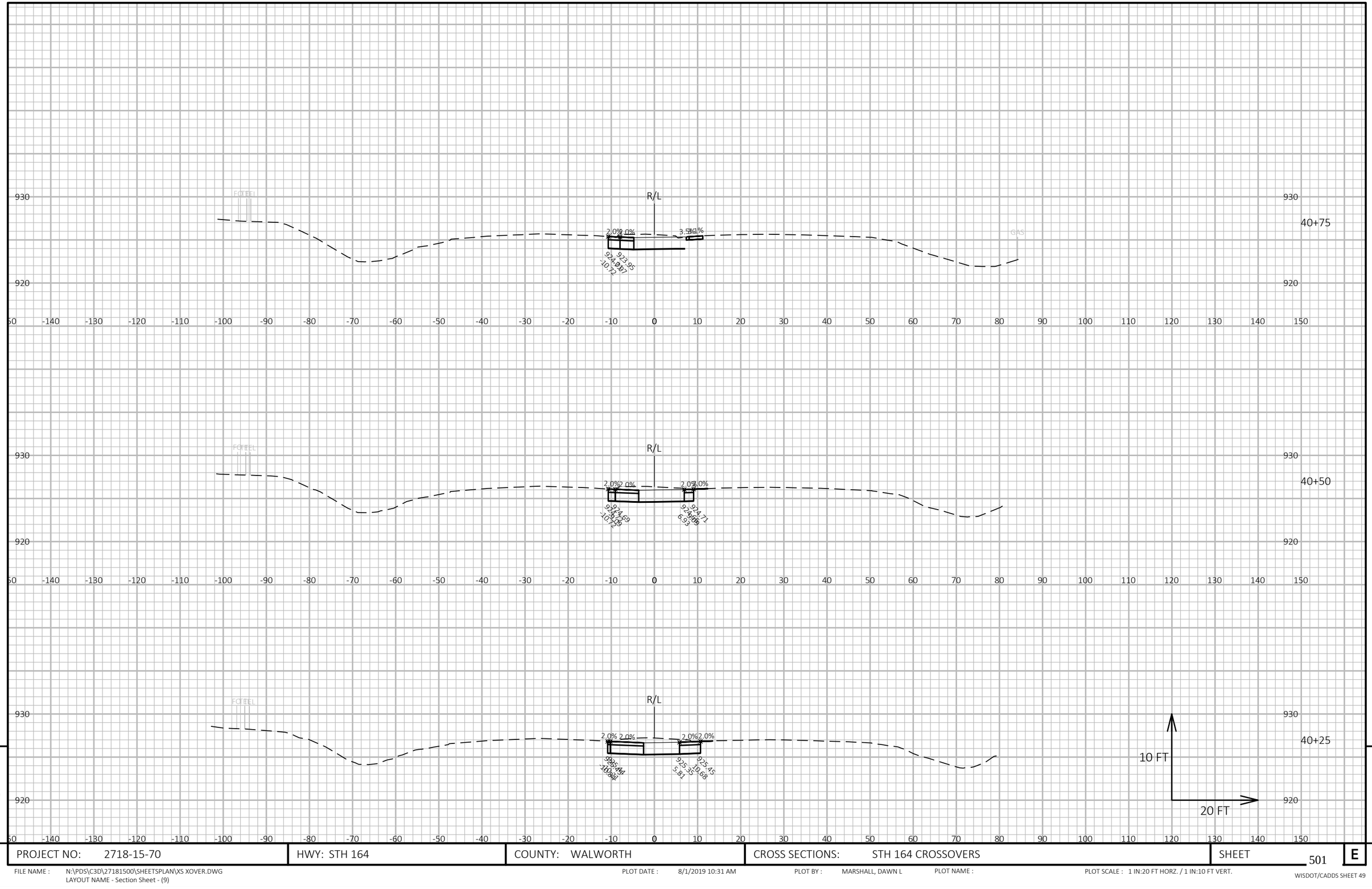
PLOT DATE : 8/1/2019 10:30 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



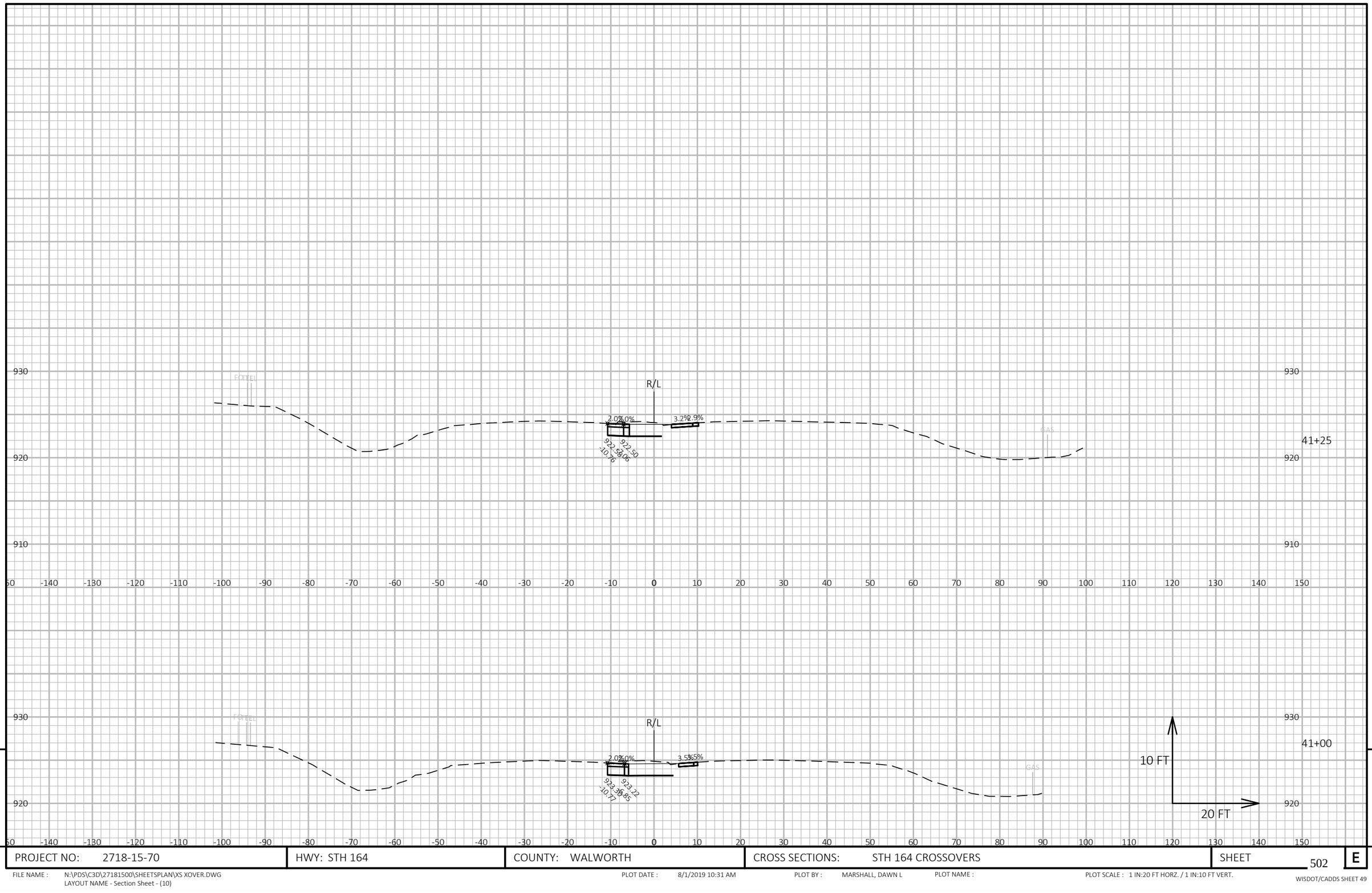
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9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 501	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (9)

PLOT DATE : 8/1/2019 10:31 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

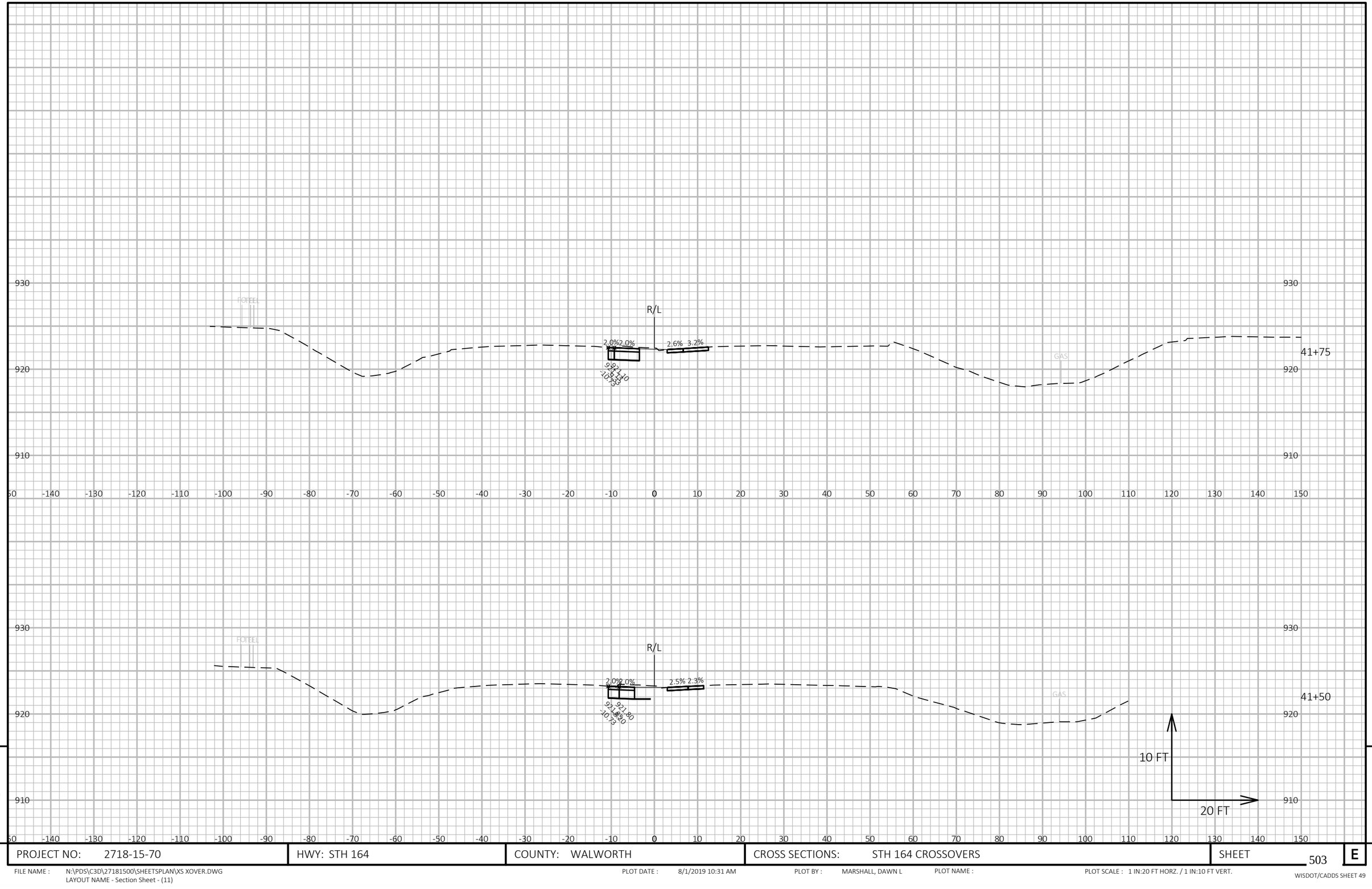
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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 502	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (10)

PLOT DATE : 8/1/2019 10:31 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 503	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (11)

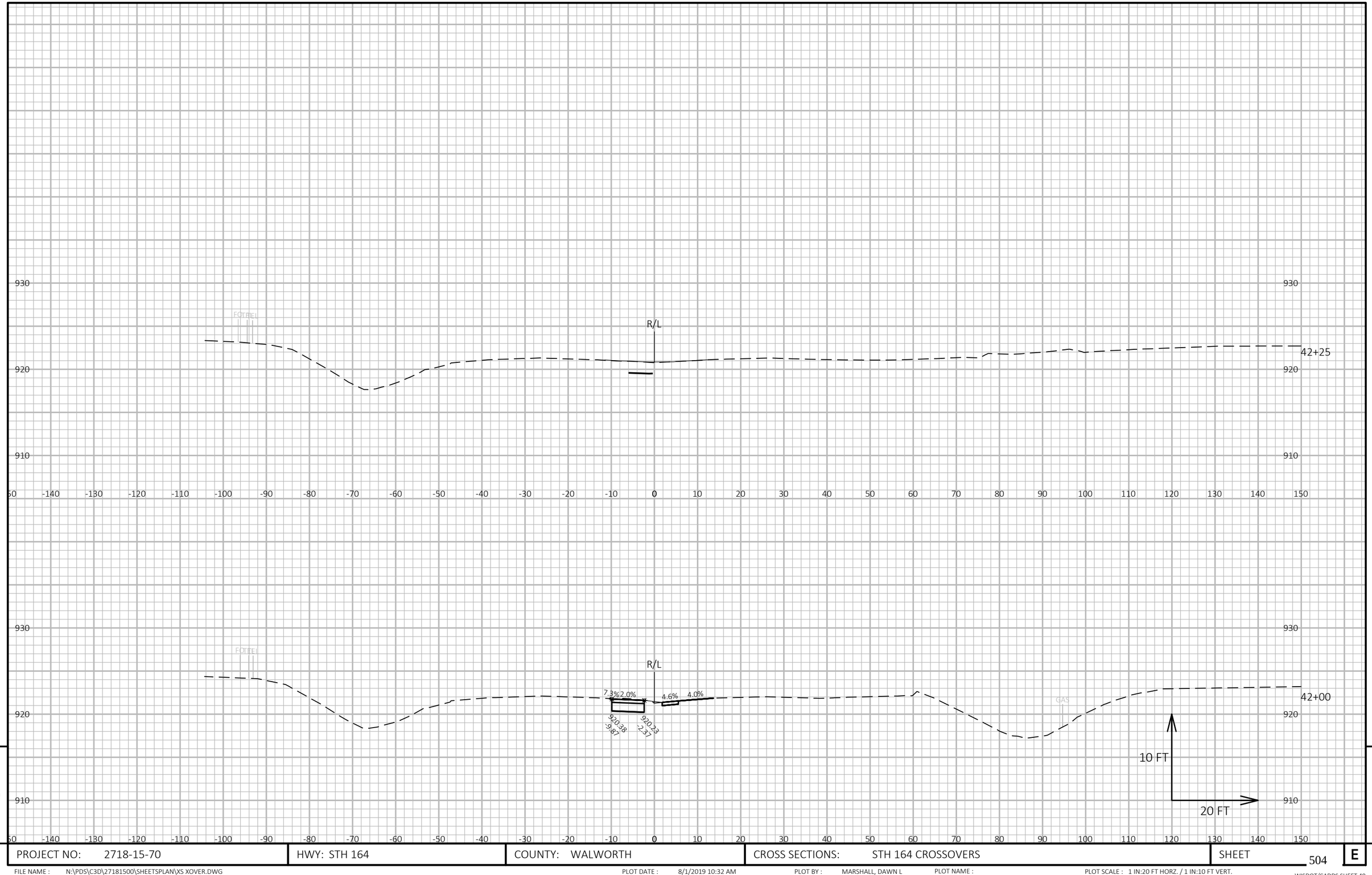
PLOT DATE : 8/1/2019 10:31 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 504	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (12)

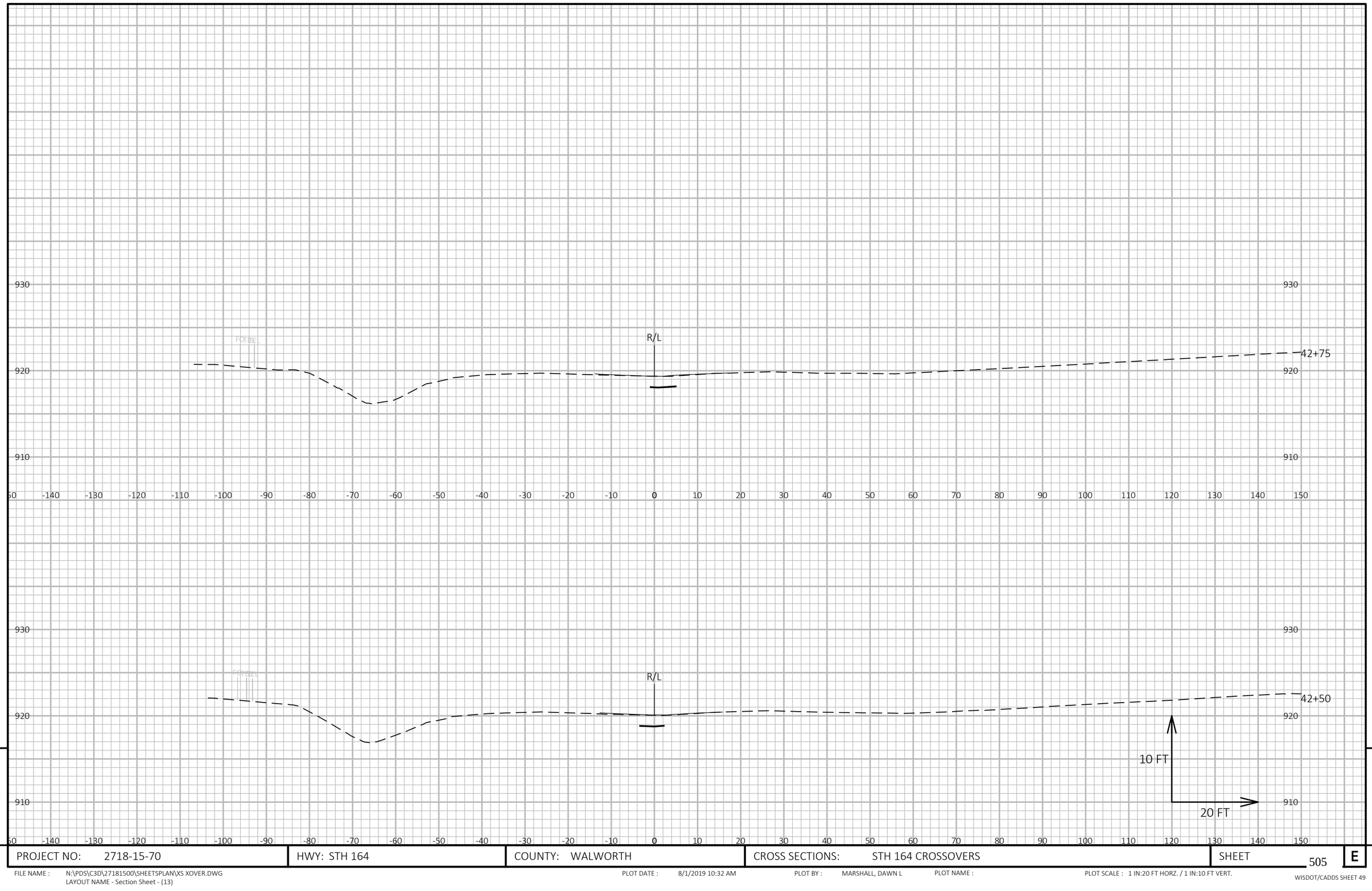
PLOT DATE : 8/1/2019 10:32 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 505	E

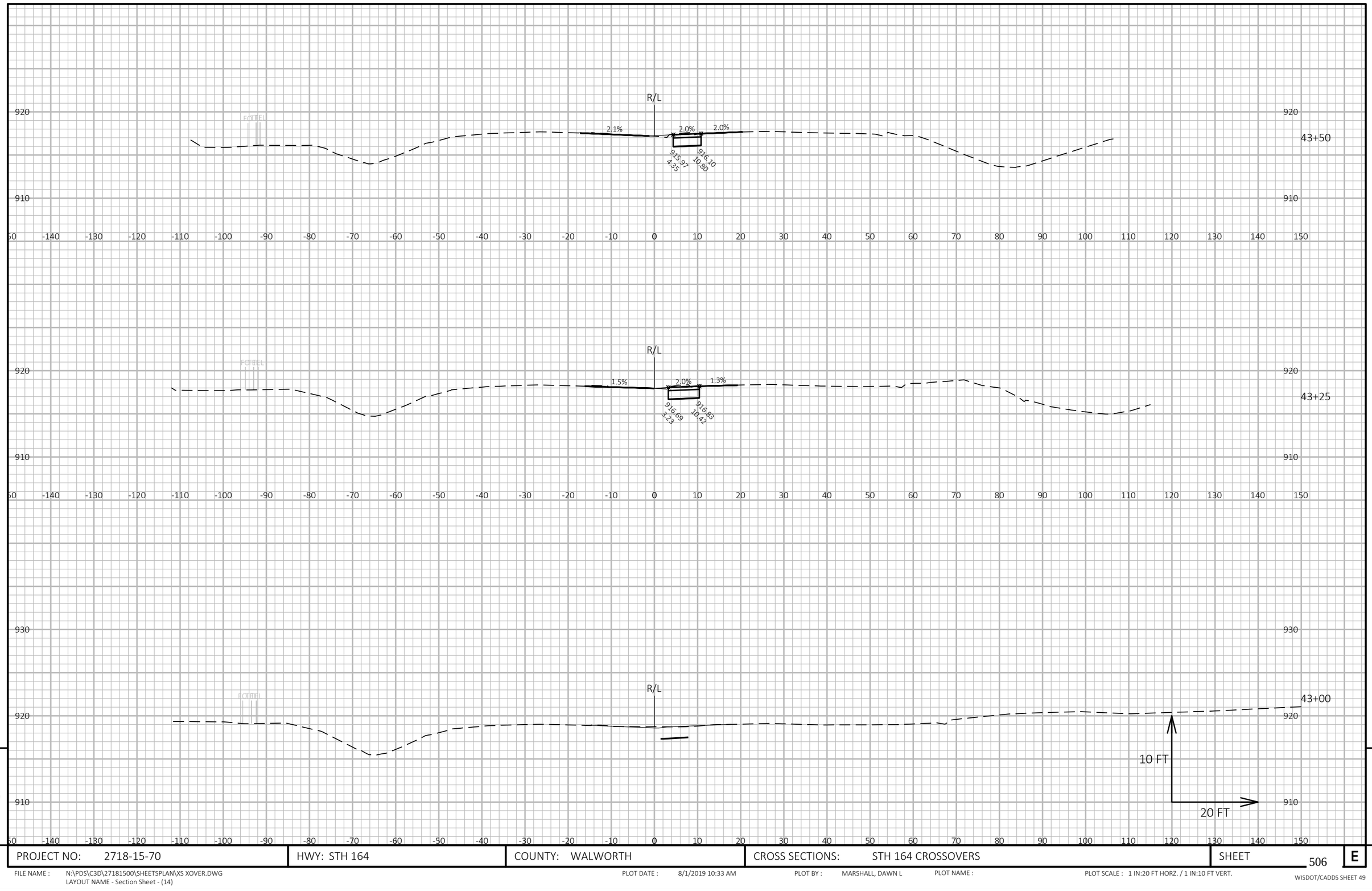
FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (13)

PLOT DATE : 8/1/2019 10:32 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

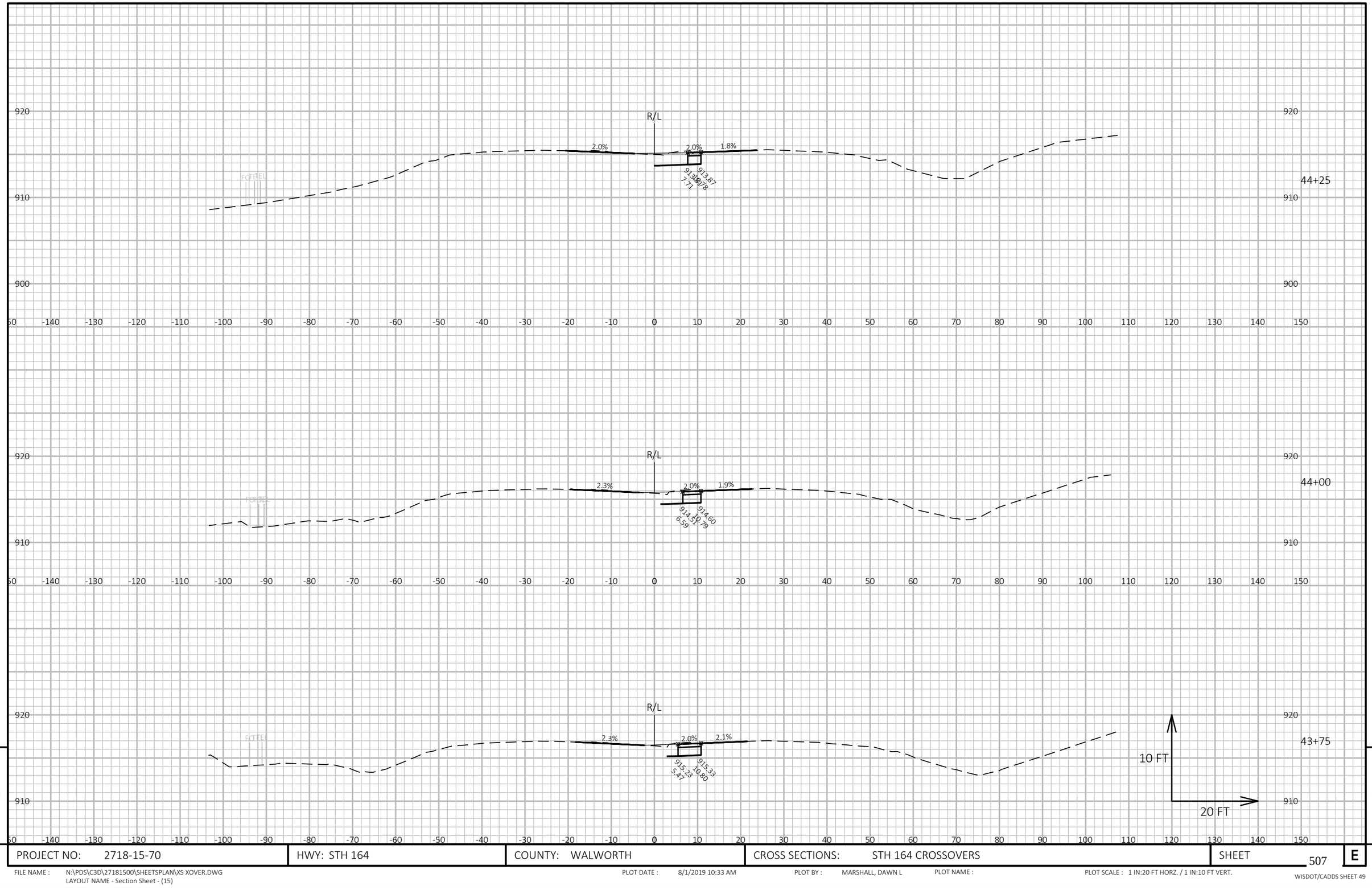


PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 506	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (14)

PLOT DATE : 8/1/2019 10:33 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 507	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (15)

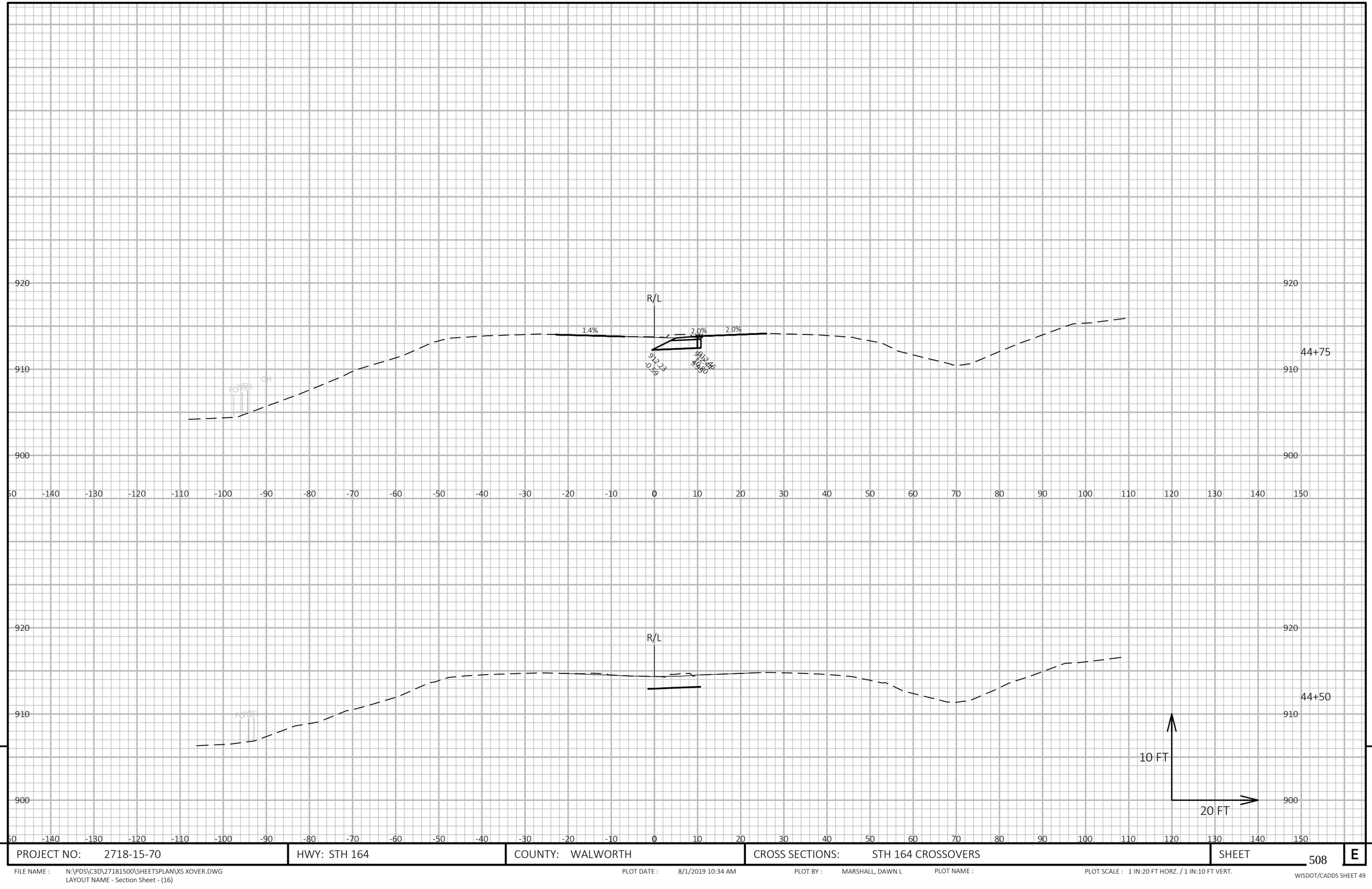
PLOT DATE : 8/1/2019 10:33 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 508	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (16)

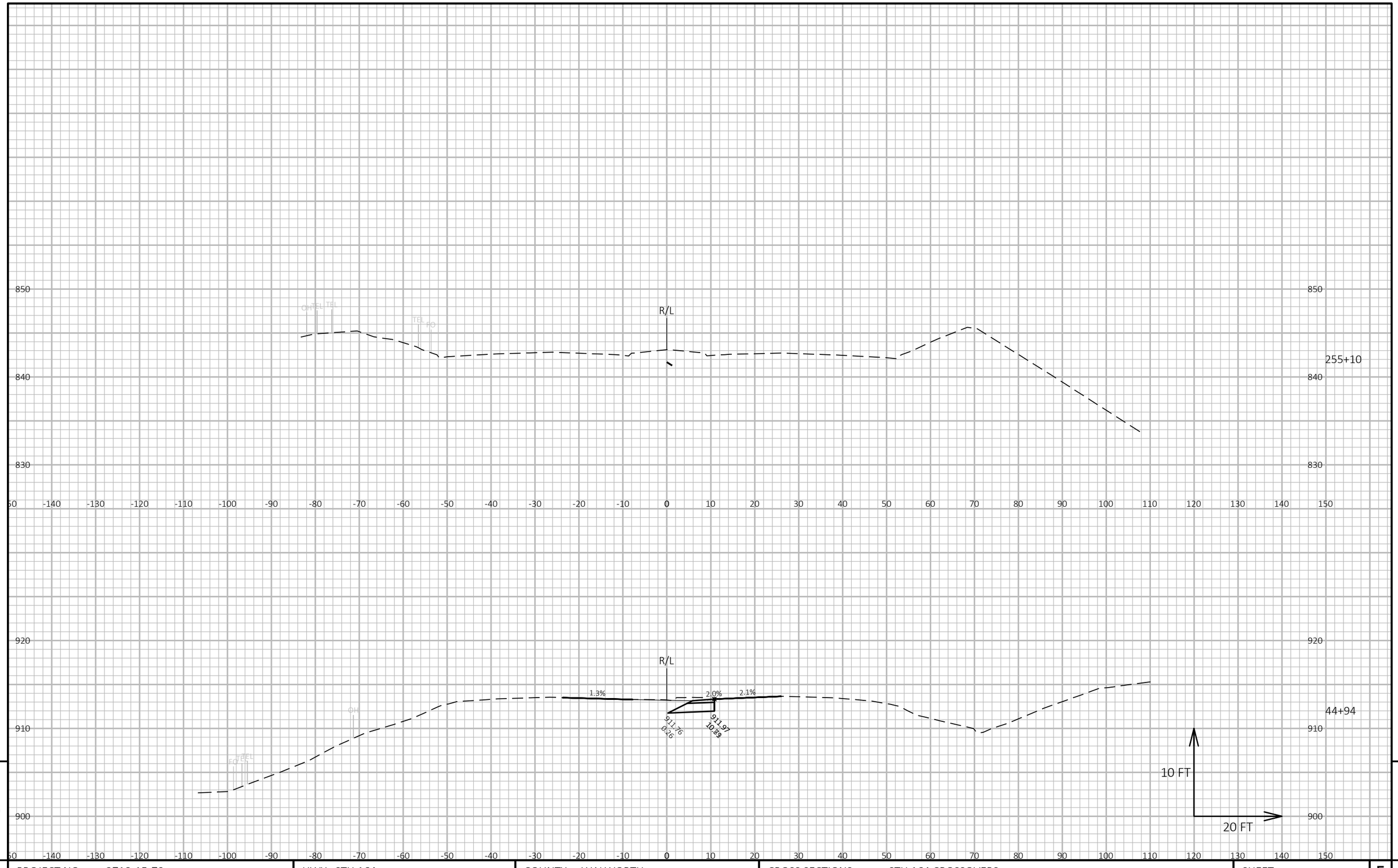
PLOT DATE : 8/1/2019 10:34 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 509	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (17)

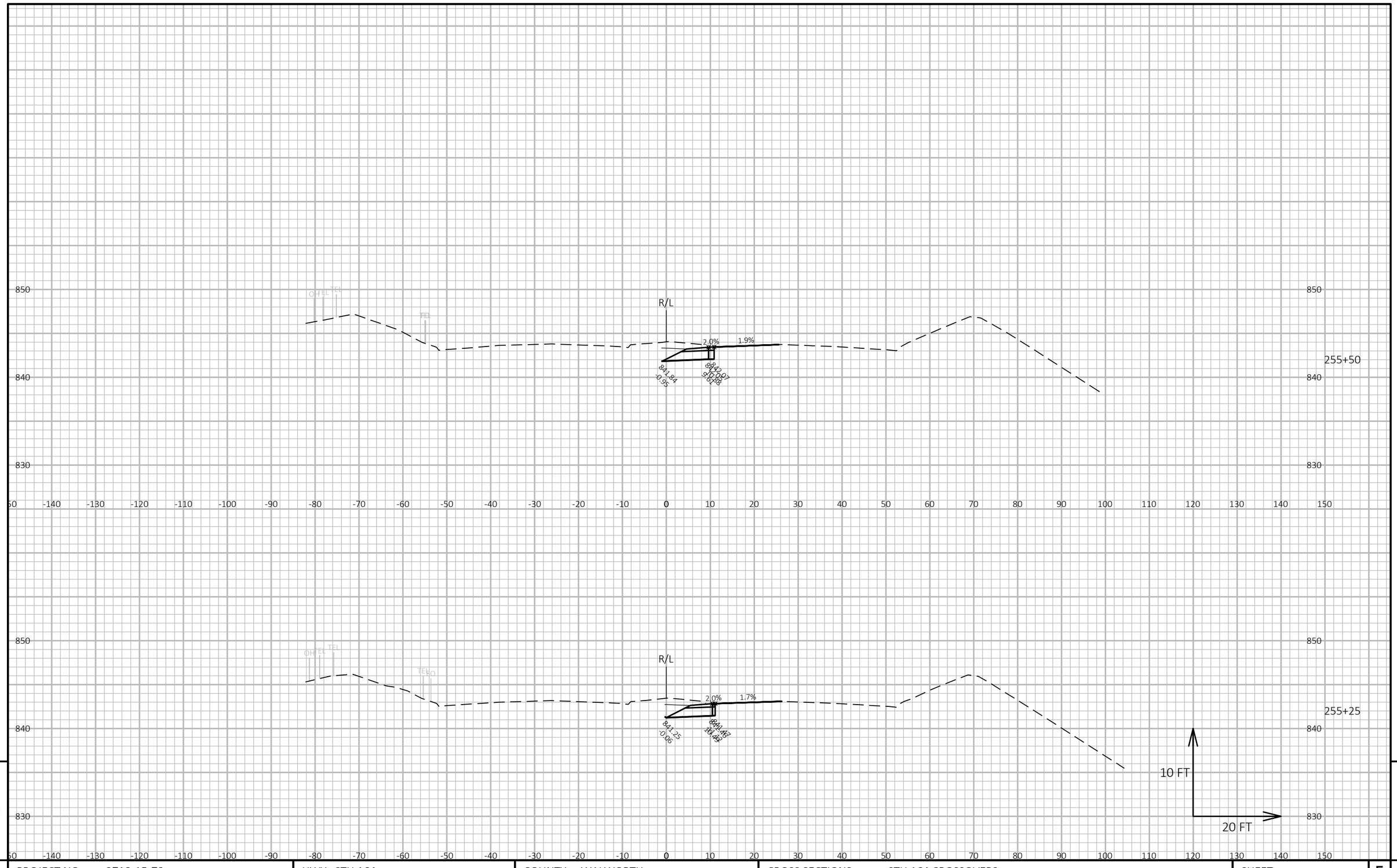
PLOT DATE : 8/1/2019 10:34 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 510	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (18)

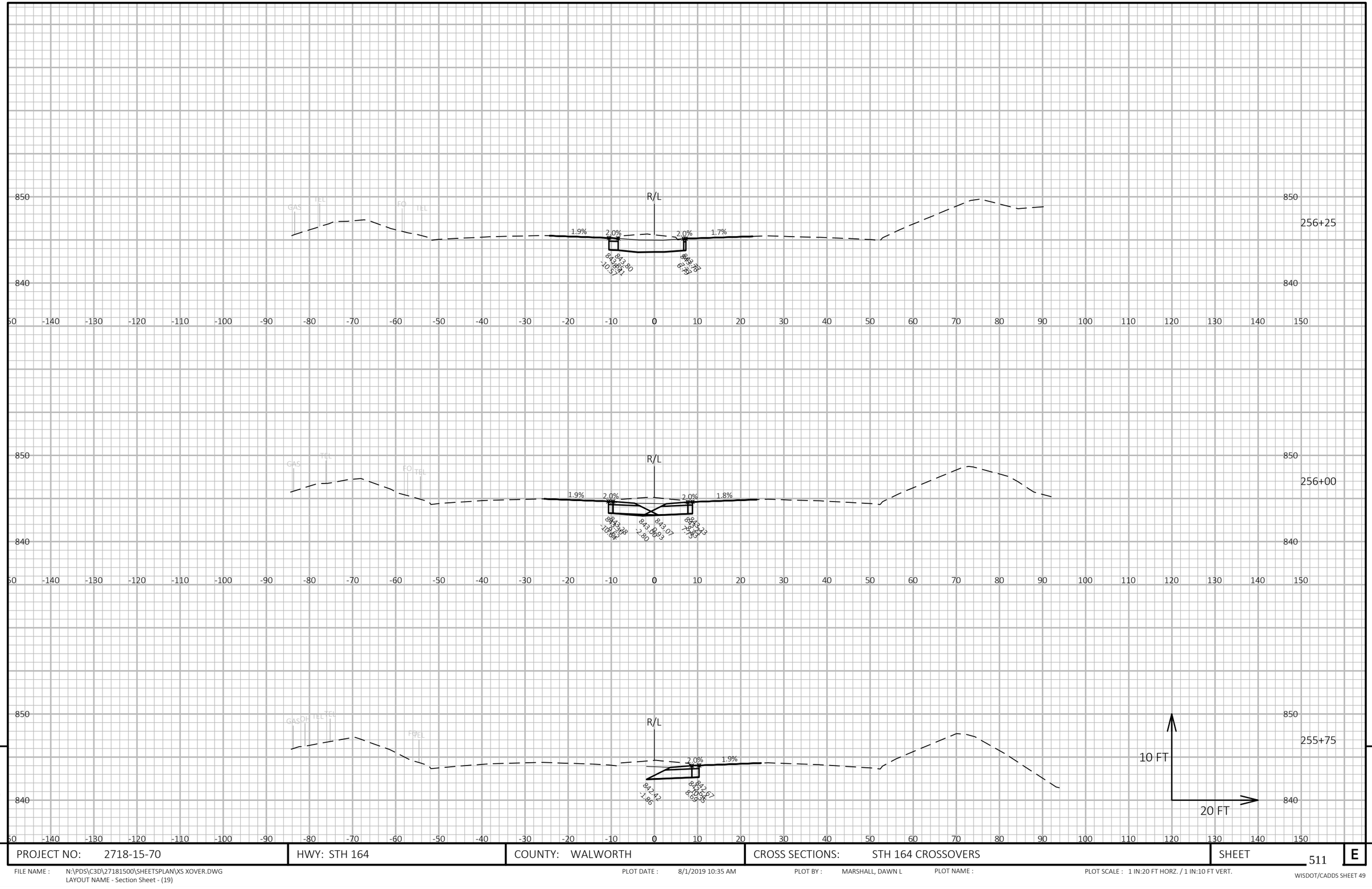
PLOT DATE : 8/1/2019 10:34 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 511	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (19)

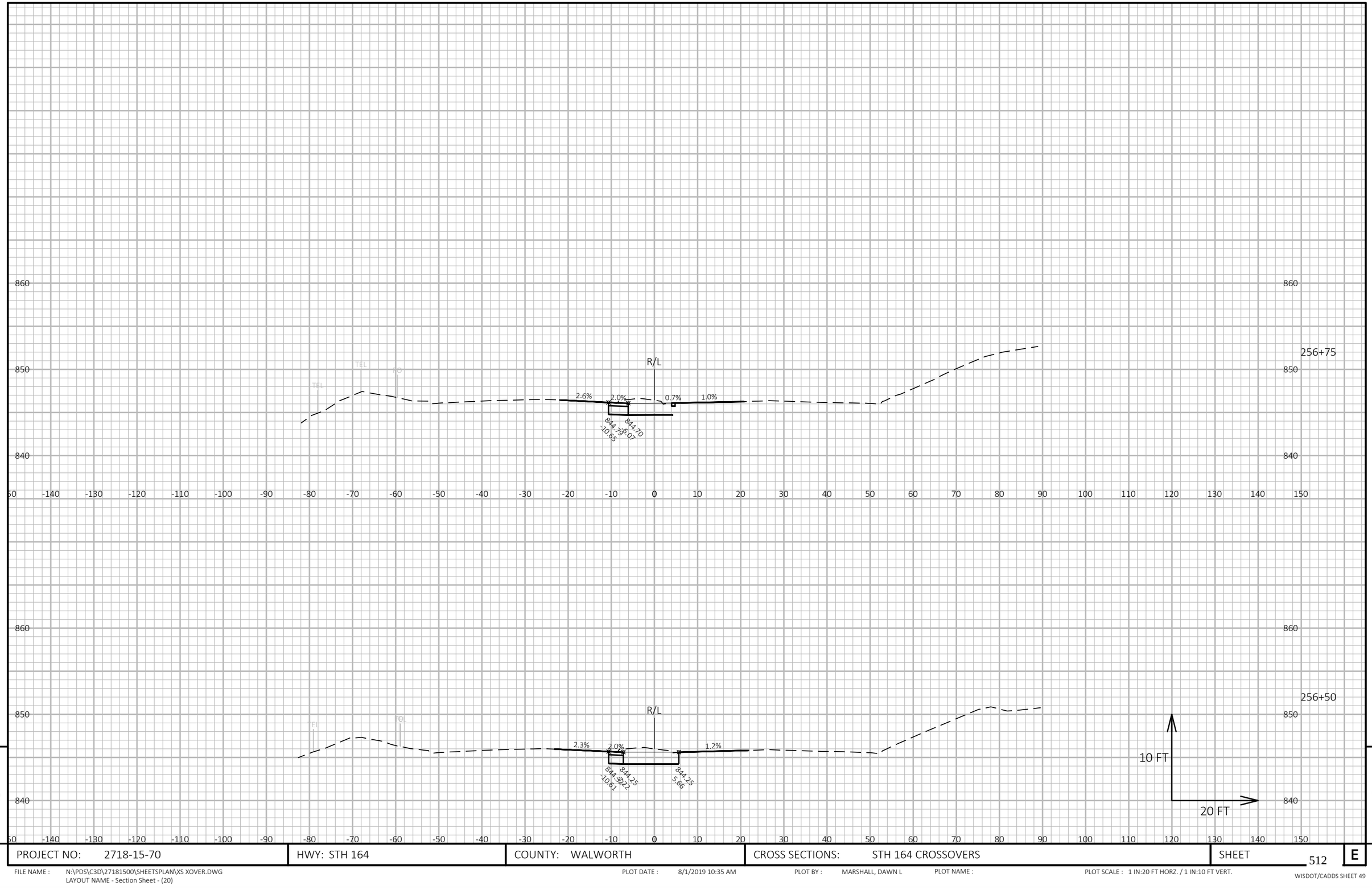
PLOT DATE : 8/1/2019 10:35 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

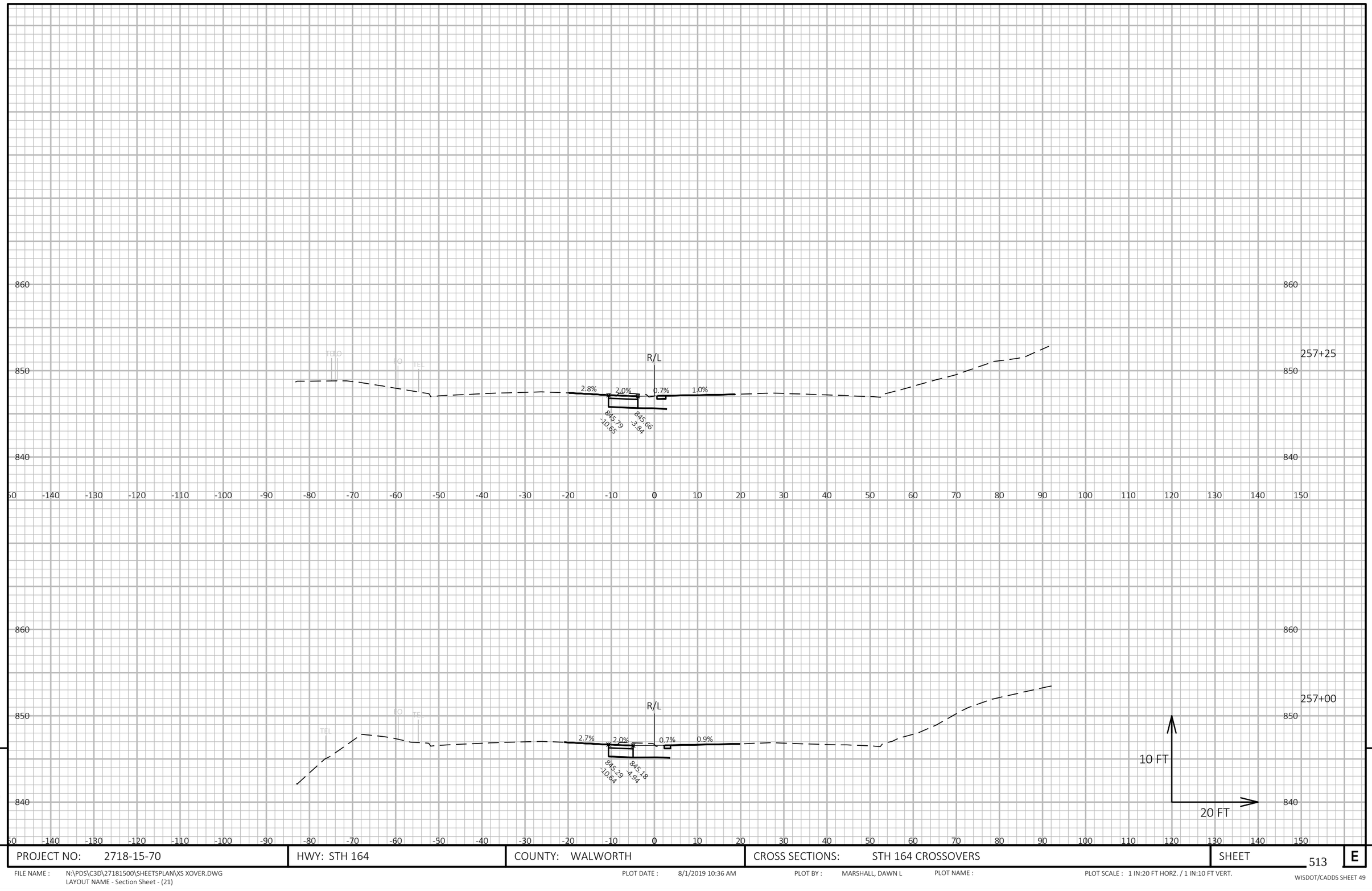
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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 512	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (20)

PLOT DATE : 8/1/2019 10:35 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 513	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (21)

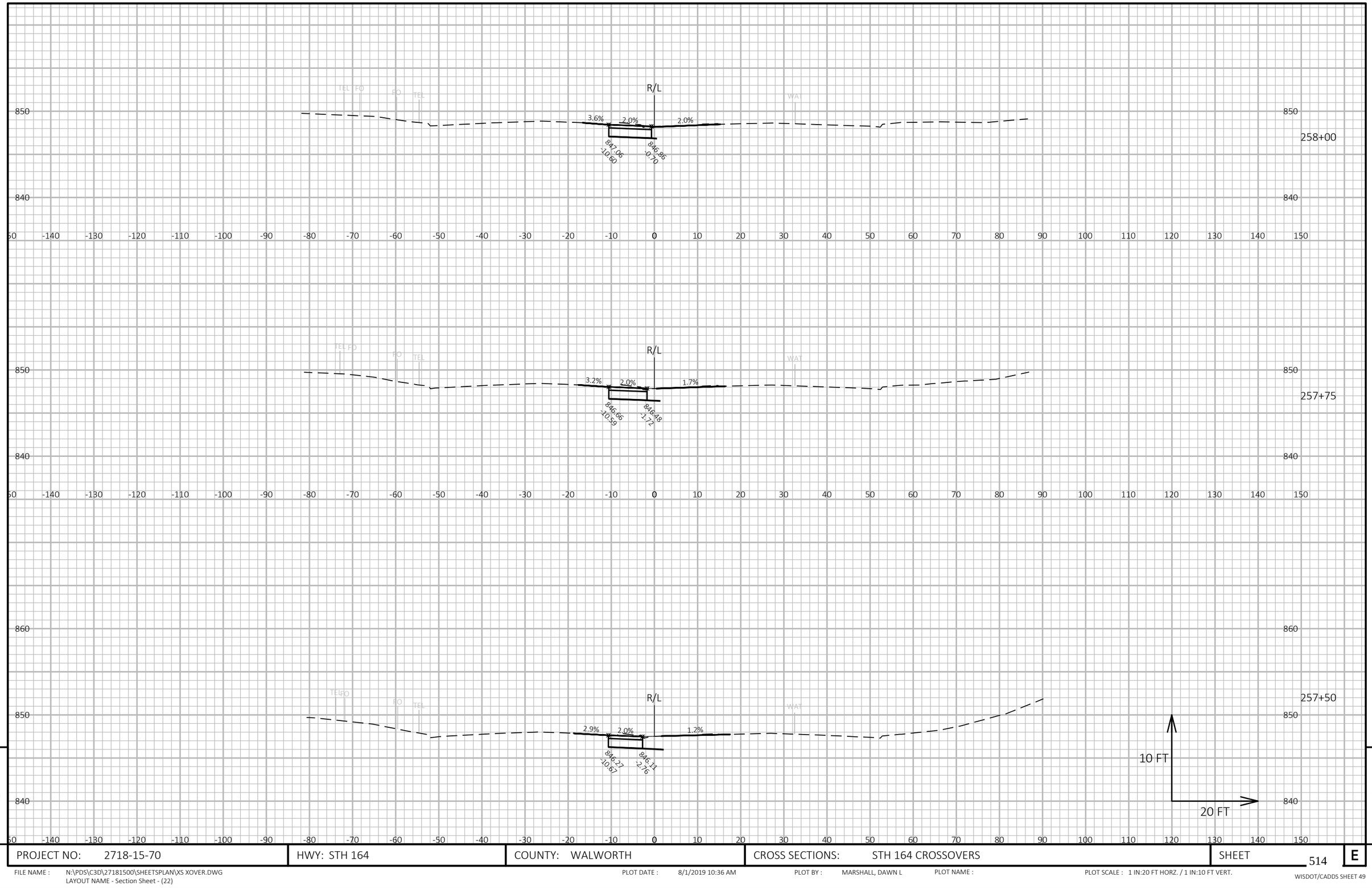
PLOT DATE : 8/1/2019 10:36 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 514	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (22)

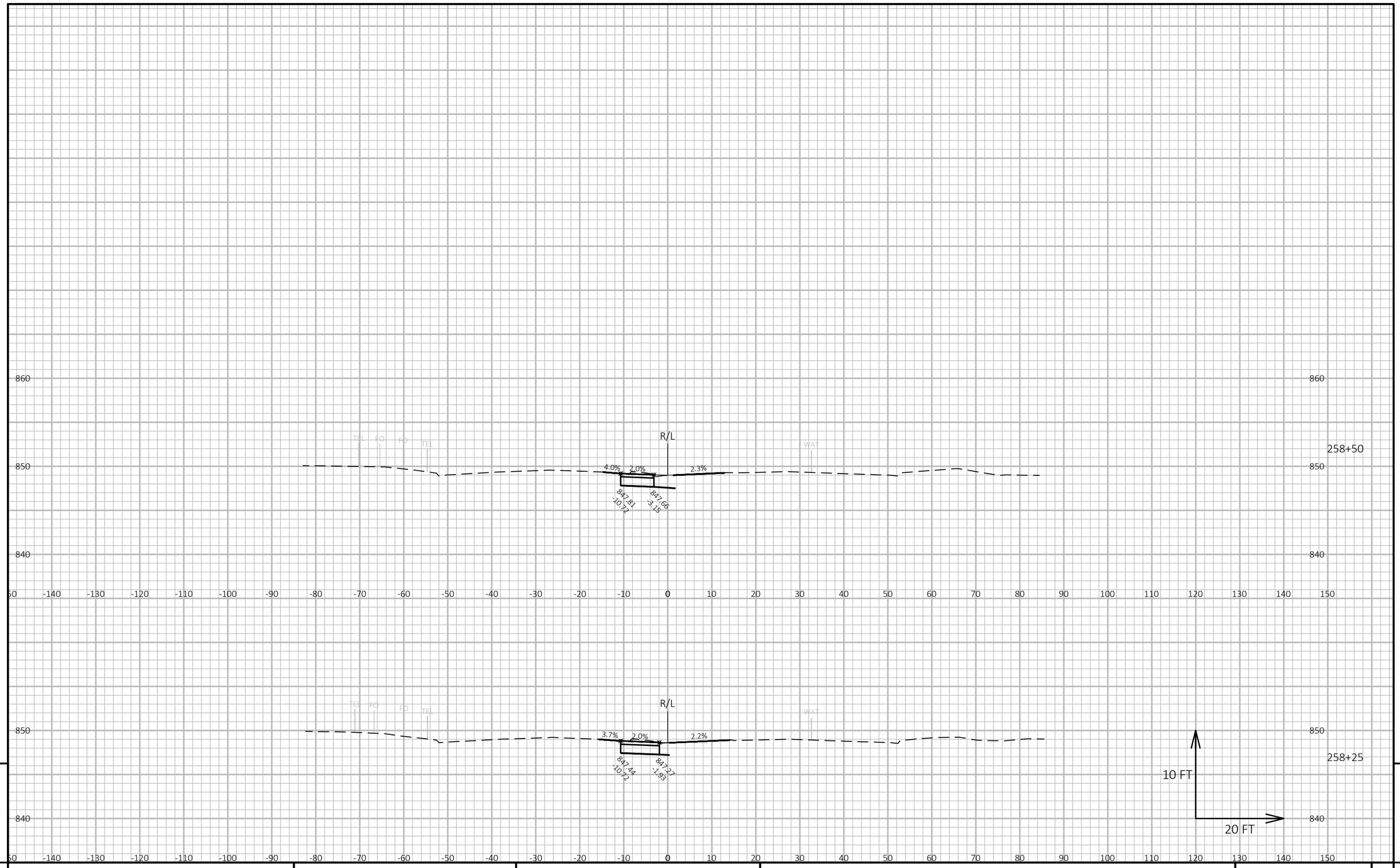
PLOT DATE : 8/1/2019 10:36 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



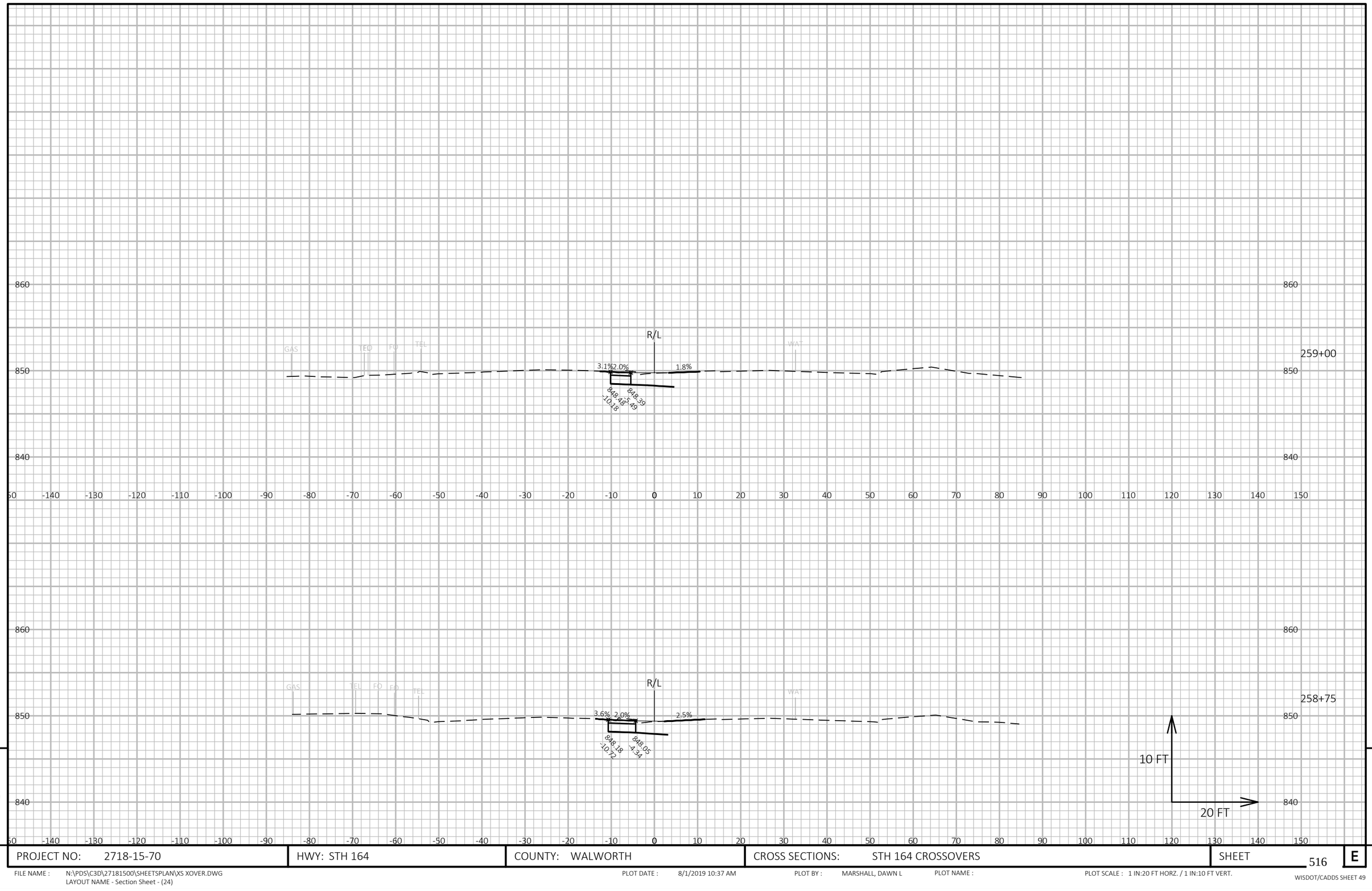
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9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 515	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (23)

PLOT DATE : 8/1/2019 10:37 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 516	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (24)

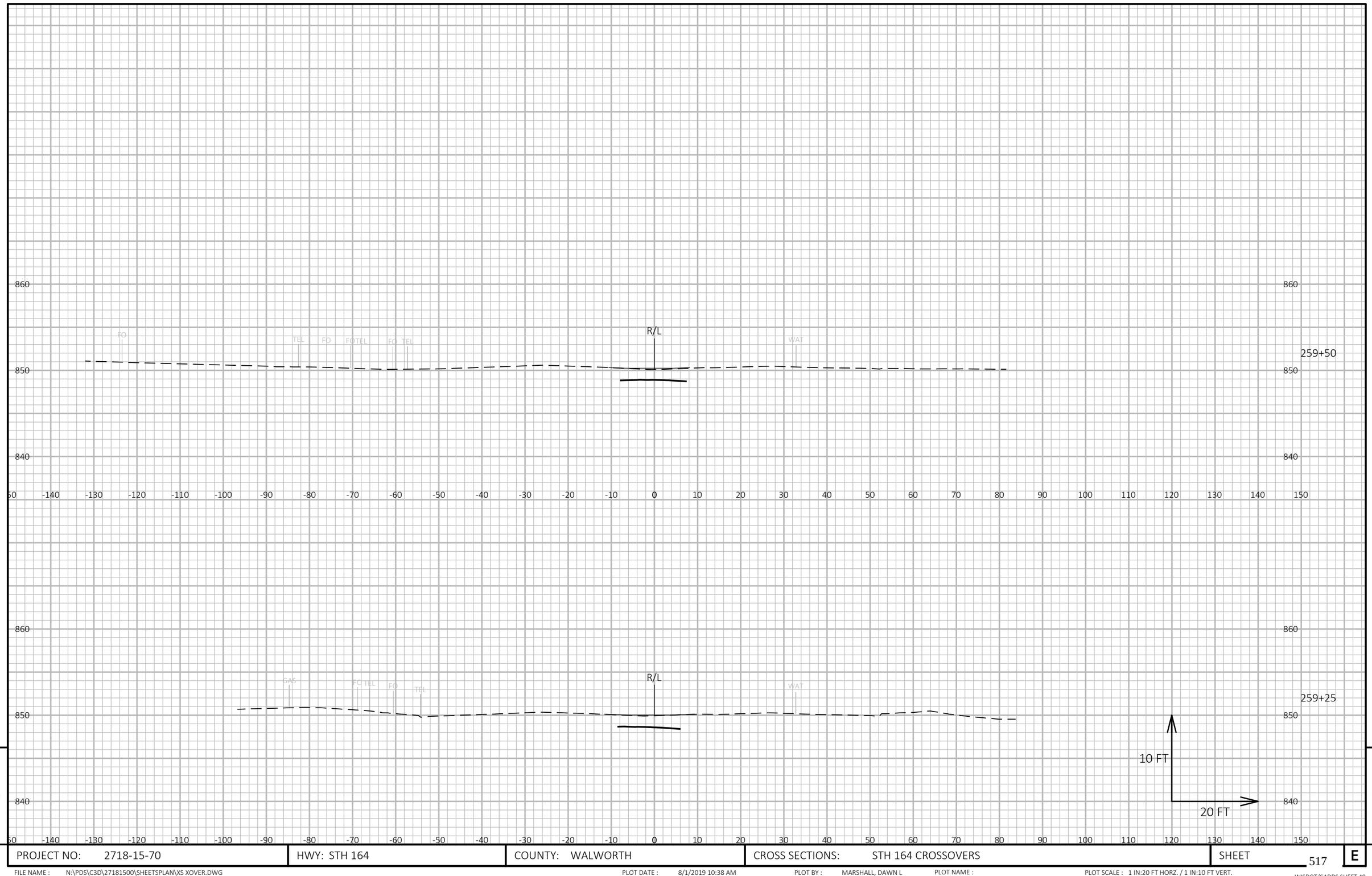
PLOT DATE : 8/1/2019 10:37 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 517	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (25)

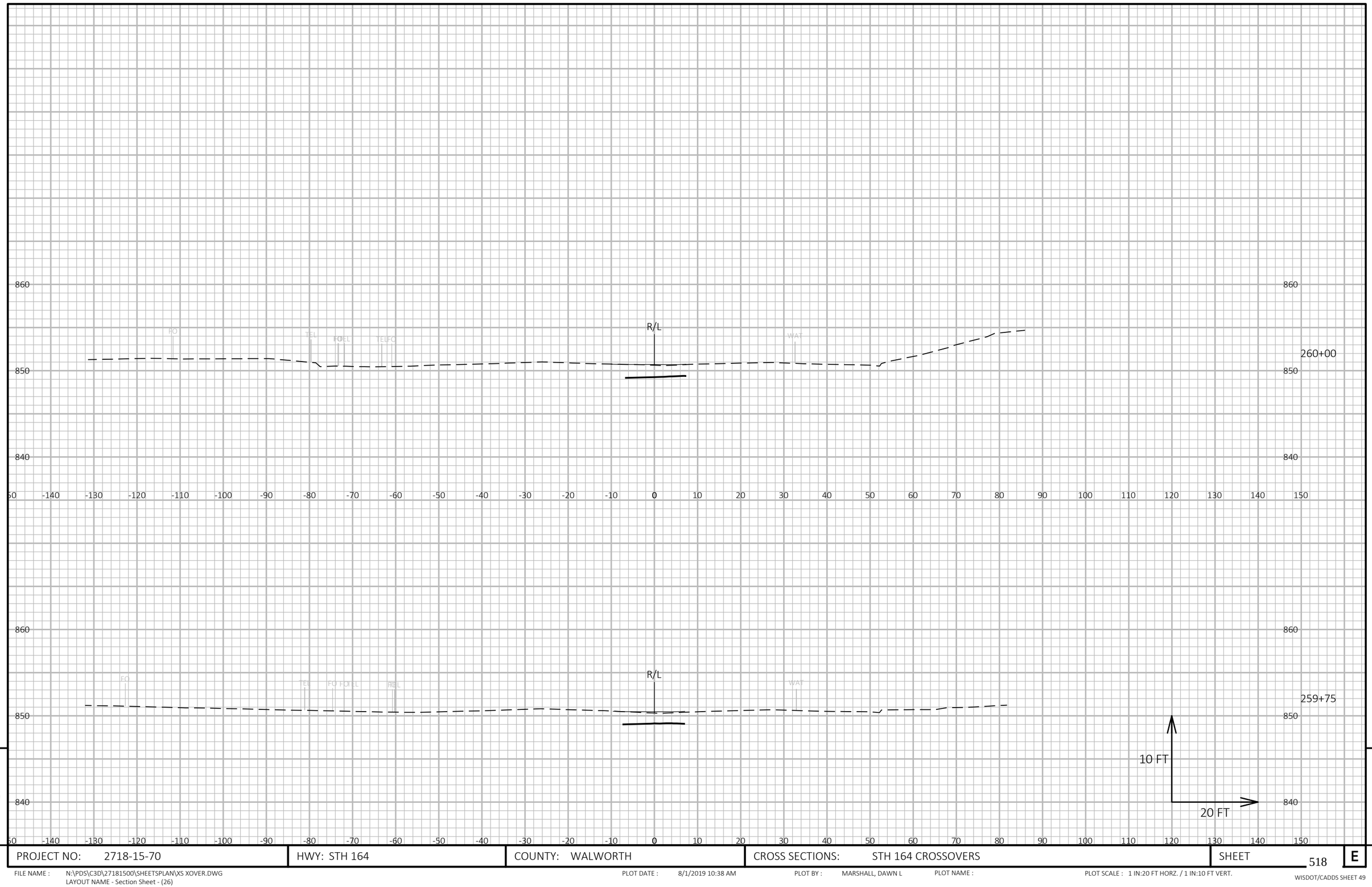
PLOT DATE : 8/1/2019 10:38 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



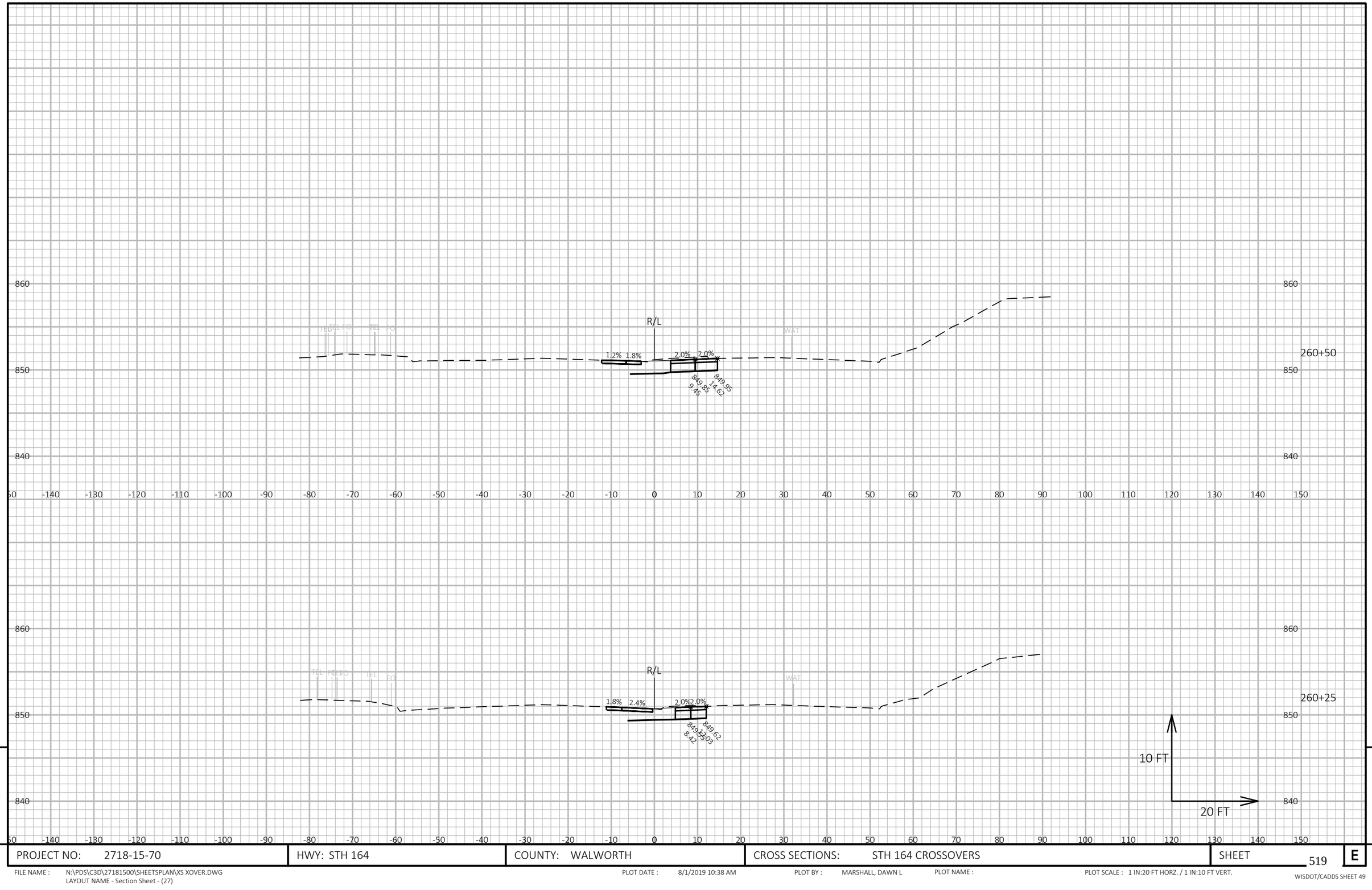
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9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 518	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (26)

PLOT DATE : 8/1/2019 10:38 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 519	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (27)

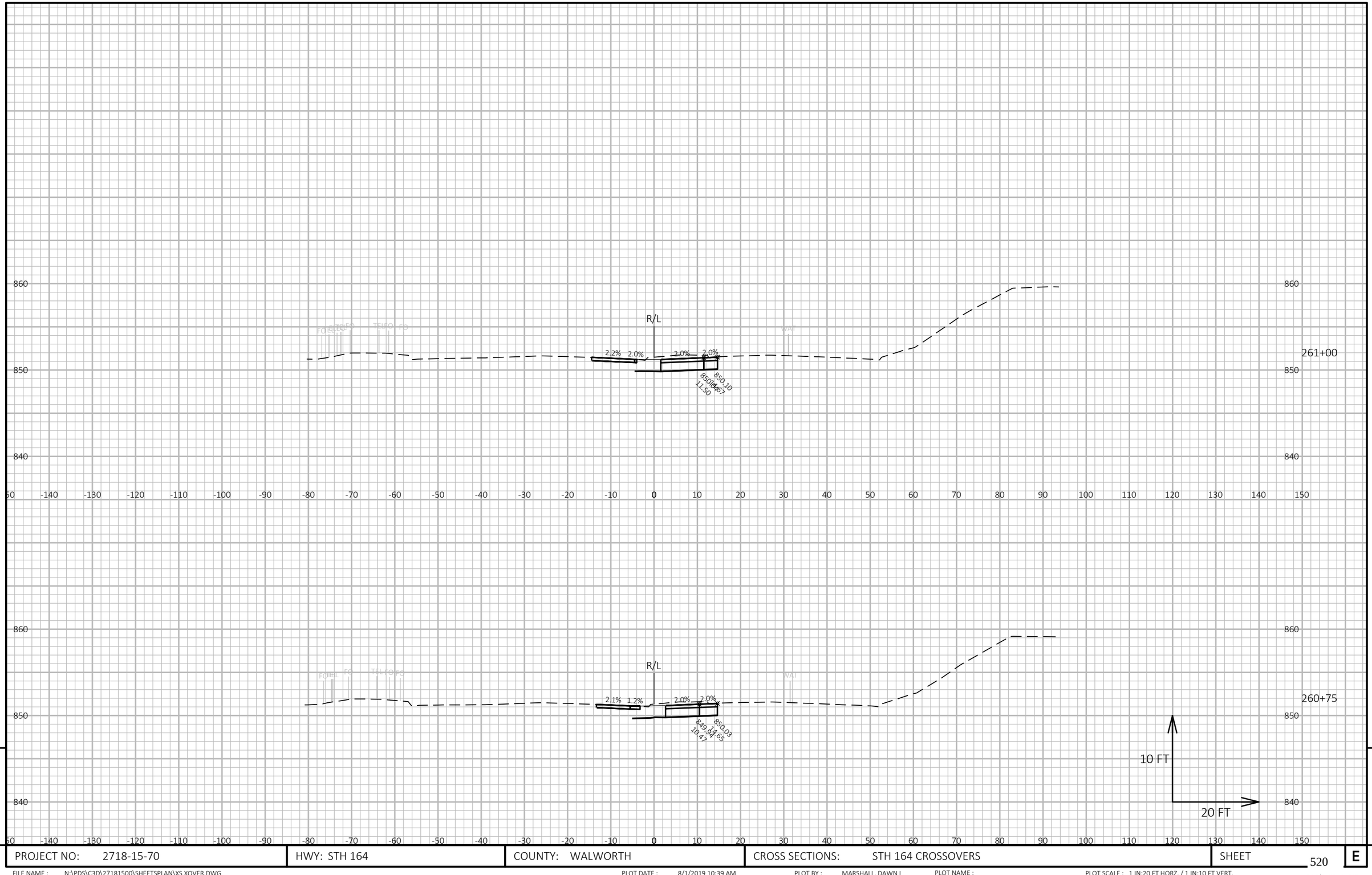
PLOT DATE : 8/1/2019 10:38 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 520	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (28)

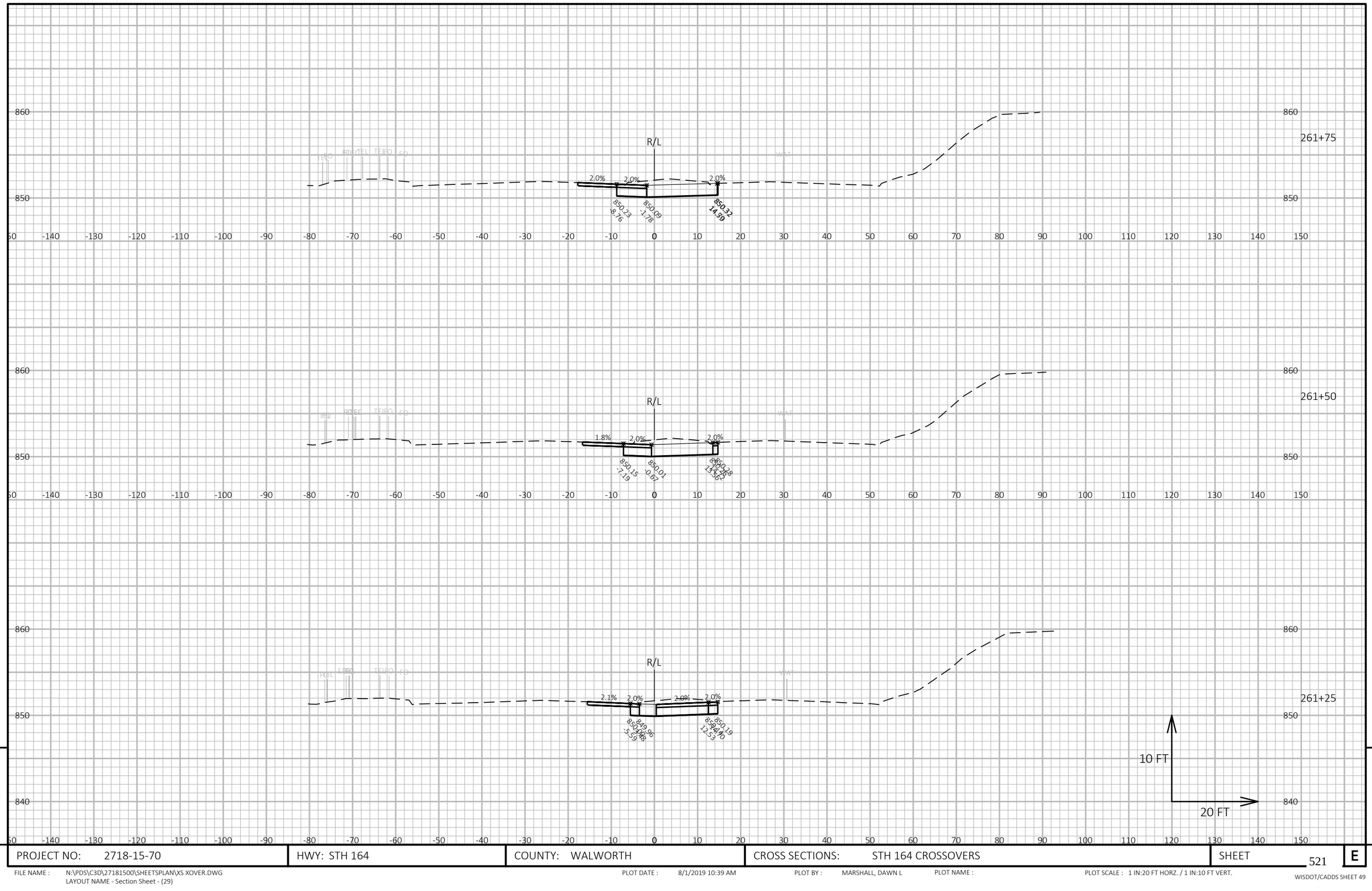
PLOT DATE : 8/1/2019 10:39 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

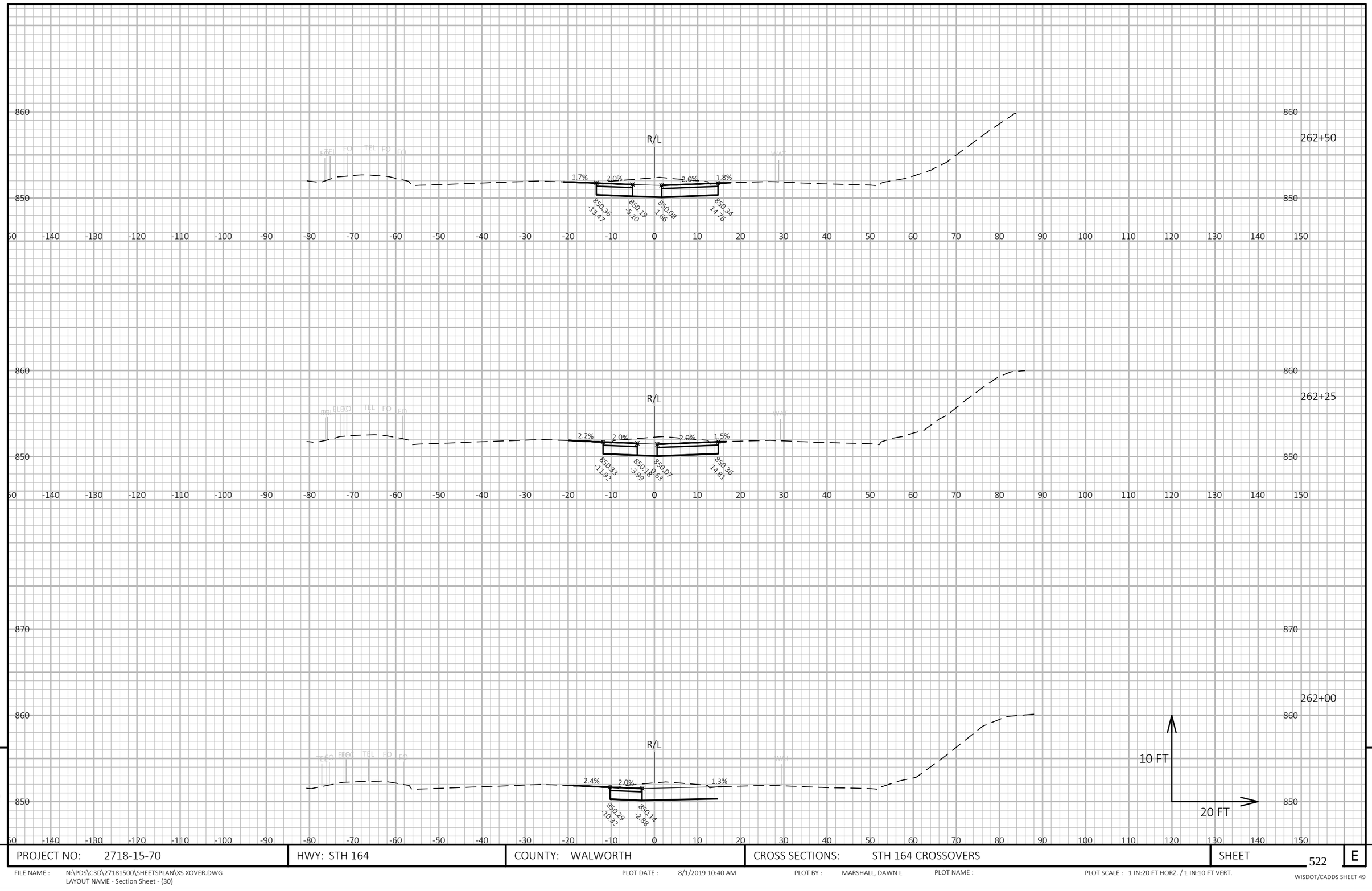
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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 521	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (29)

PLOT DATE : 8/1/2019 10:39 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

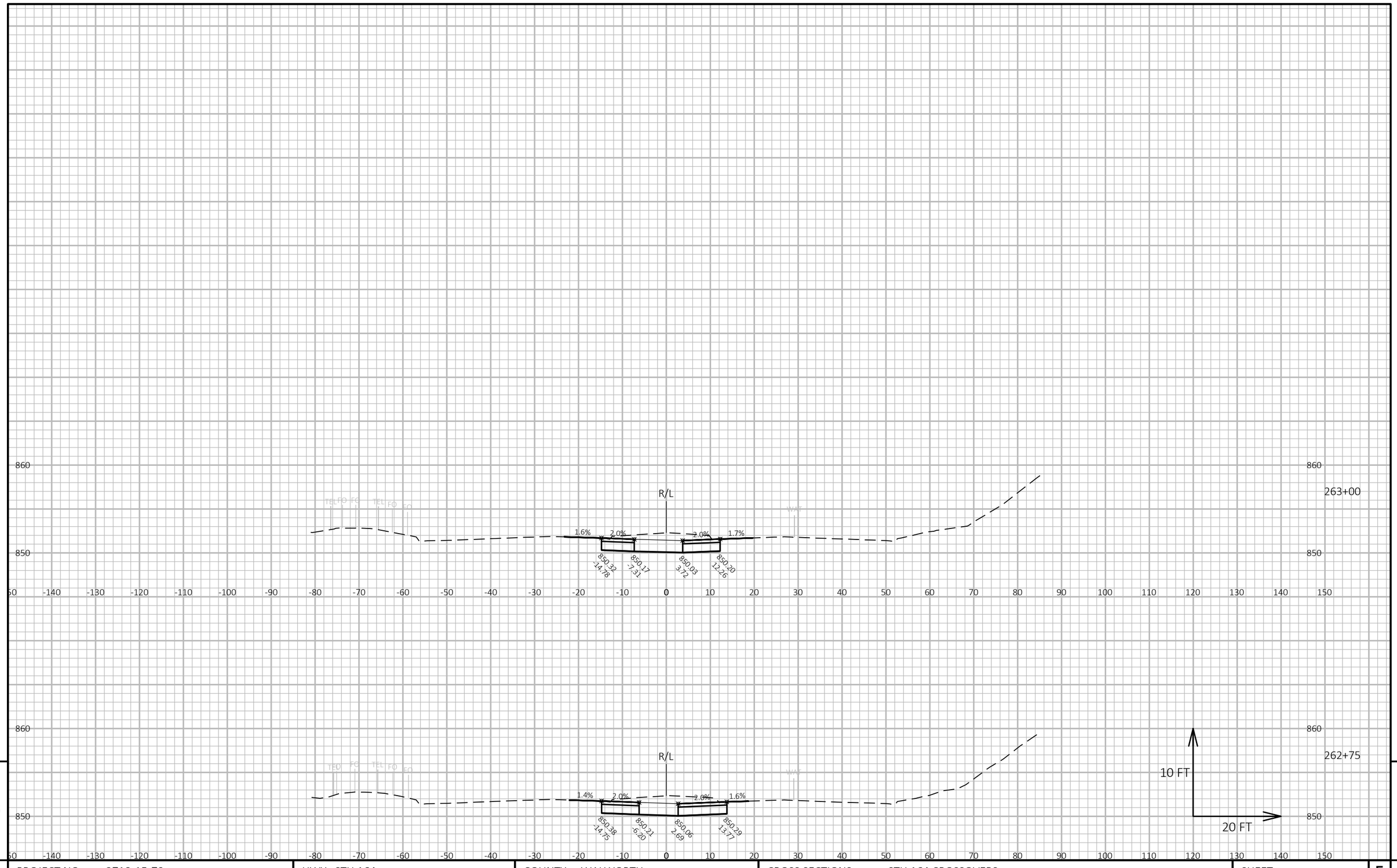
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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 522	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (30)

PLOT DATE : 8/1/2019 10:40 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 523	E

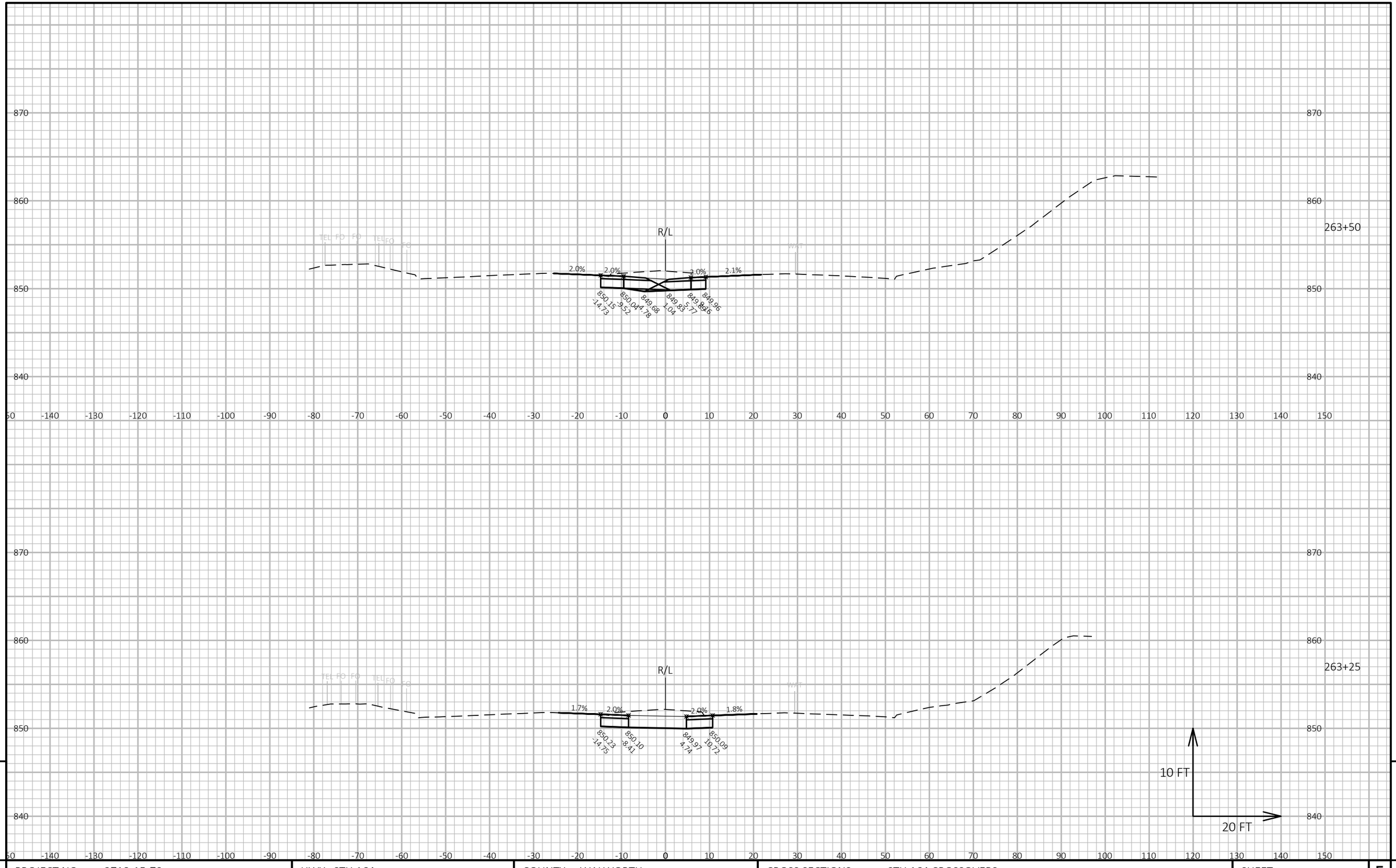
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LAYOUT NAME - Section Sheet - (31)

PLOT DATE : 8/1/2019 10:40 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 524	E

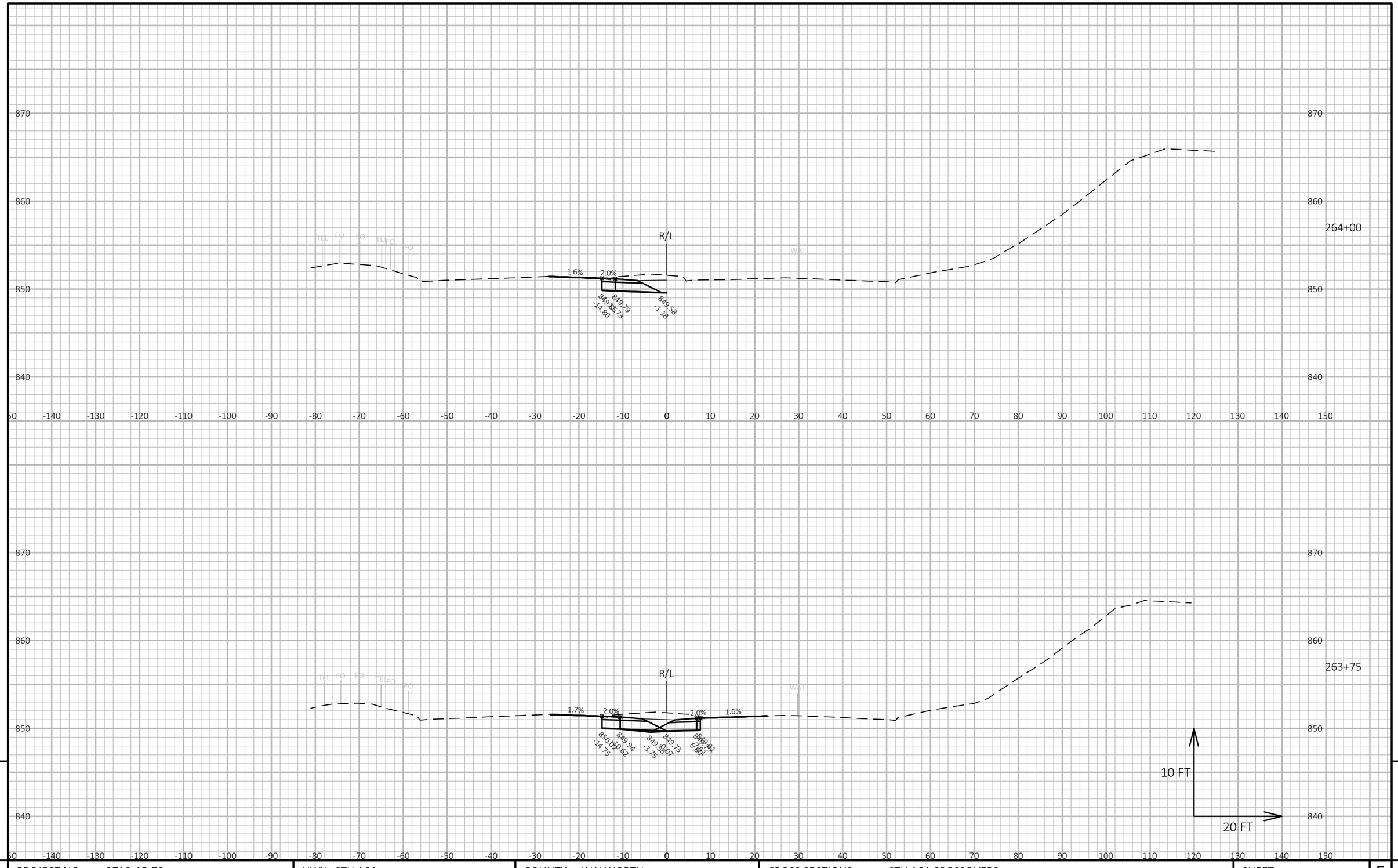
FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (32)

PLOT DATE : 8/1/2019 10:41 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 525	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (33)

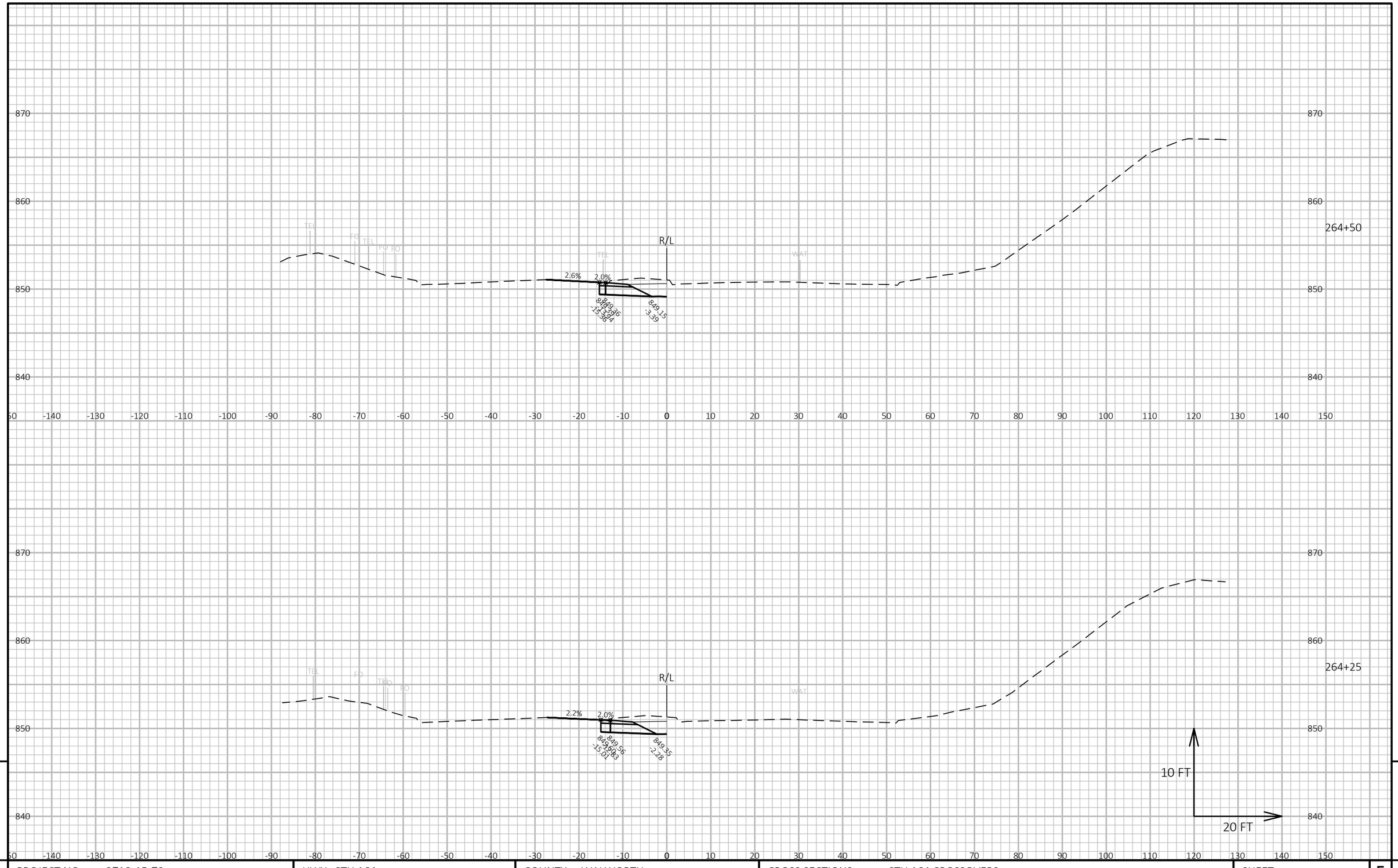
PLOT DATE : 8/1/2019 10:41 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 526	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (34)

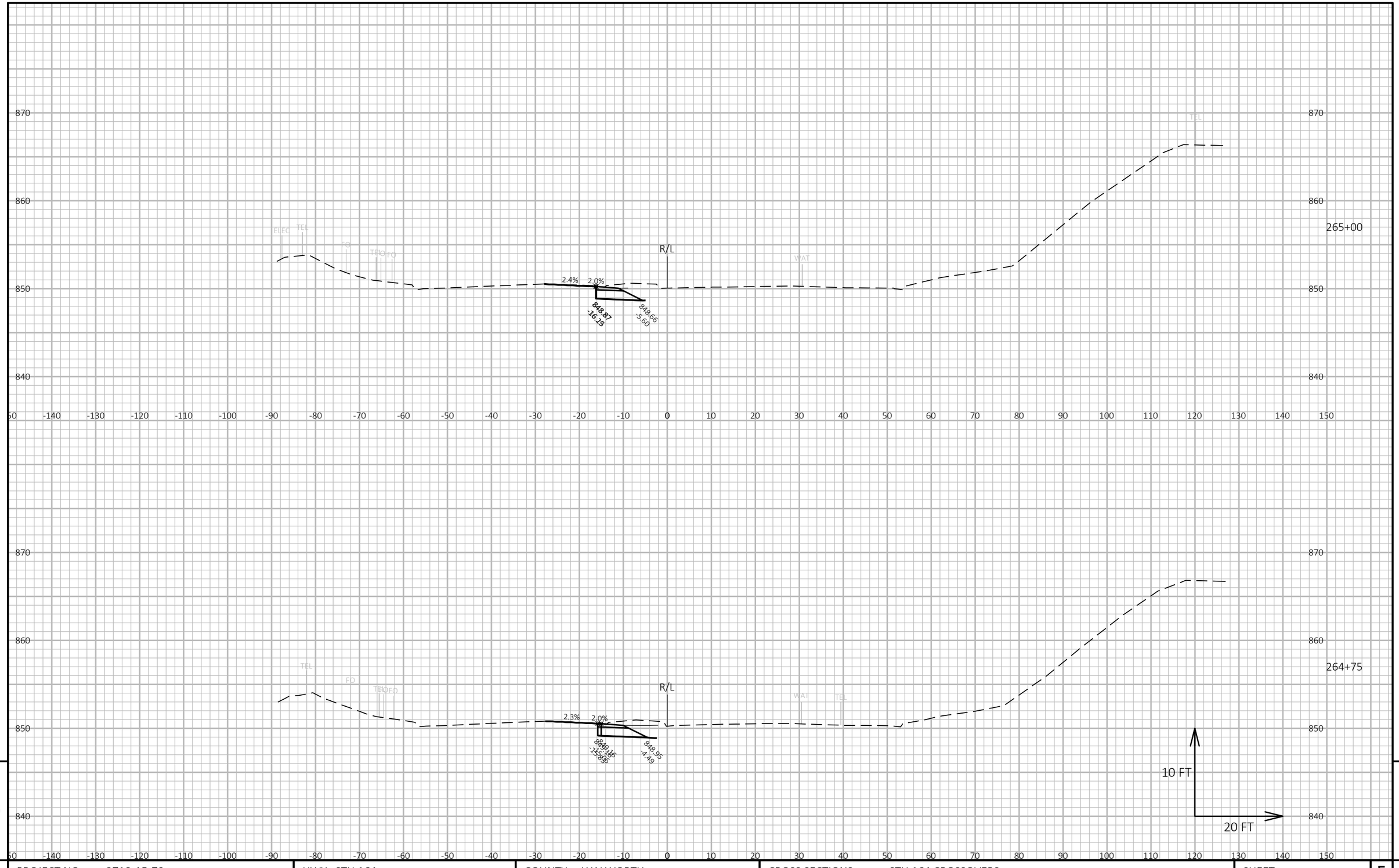
PLOT DATE : 8/1/2019 10:42 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 527	E

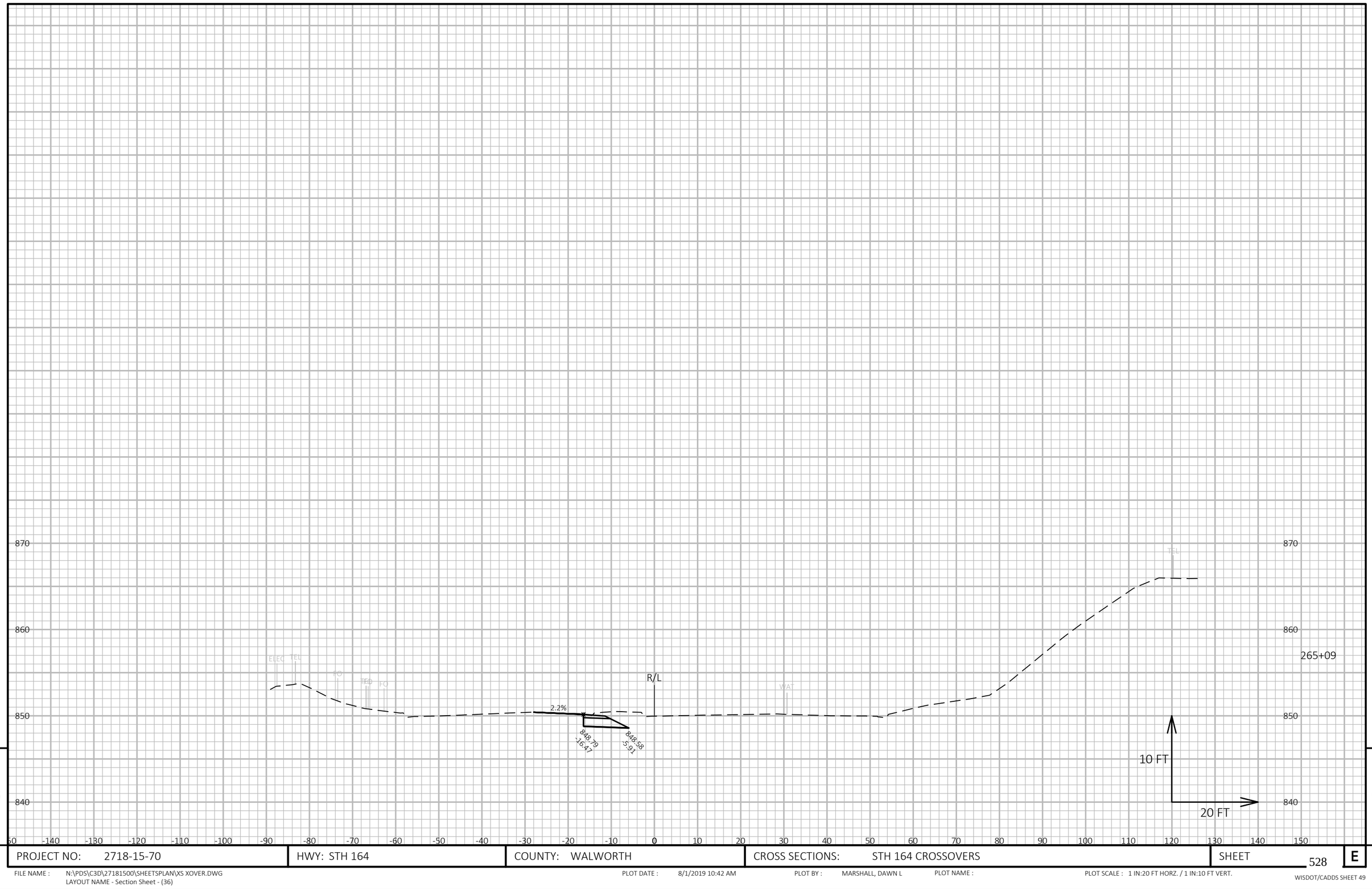
FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (35)

PLOT DATE : 8/1/2019 10:42 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WALWORTH	CROSS SECTIONS: STH 164 CROSSOVERS	SHEET 528	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSPLAN\XS XOVER.DWG
LAYOUT NAME - Section Sheet - (36)

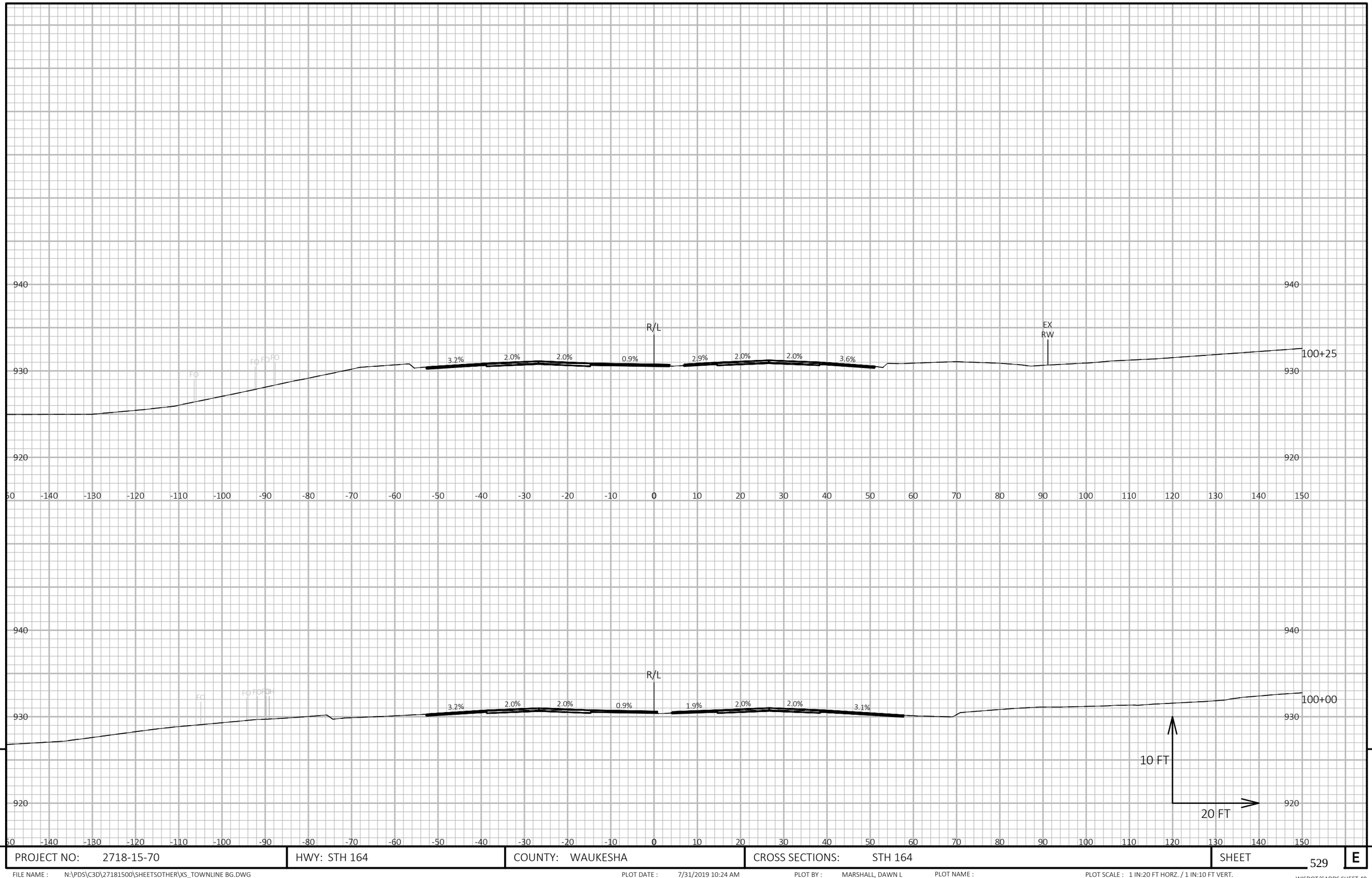
PLOT DATE : 8/1/2019 10:42 AM

PLOT BY : MARSHALL, DAWN L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



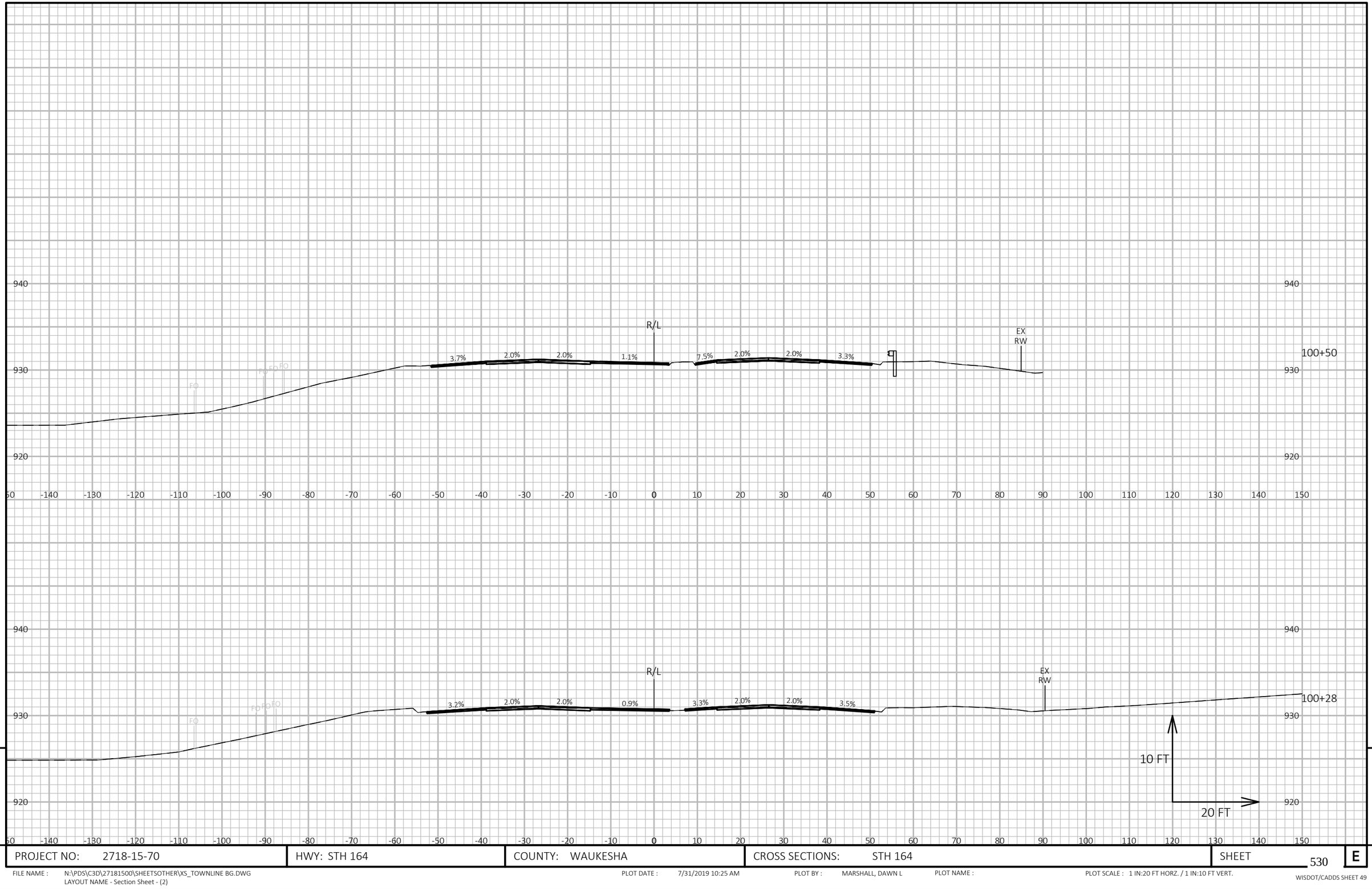
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9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	CROSS SECTIONS: STH 164	SHEET 529	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSOTHER\XS_TOWNLINE BG.DWG
LAYOUT NAME - Section Sheet - (1)

PLOT DATE : 7/31/2019 10:24 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



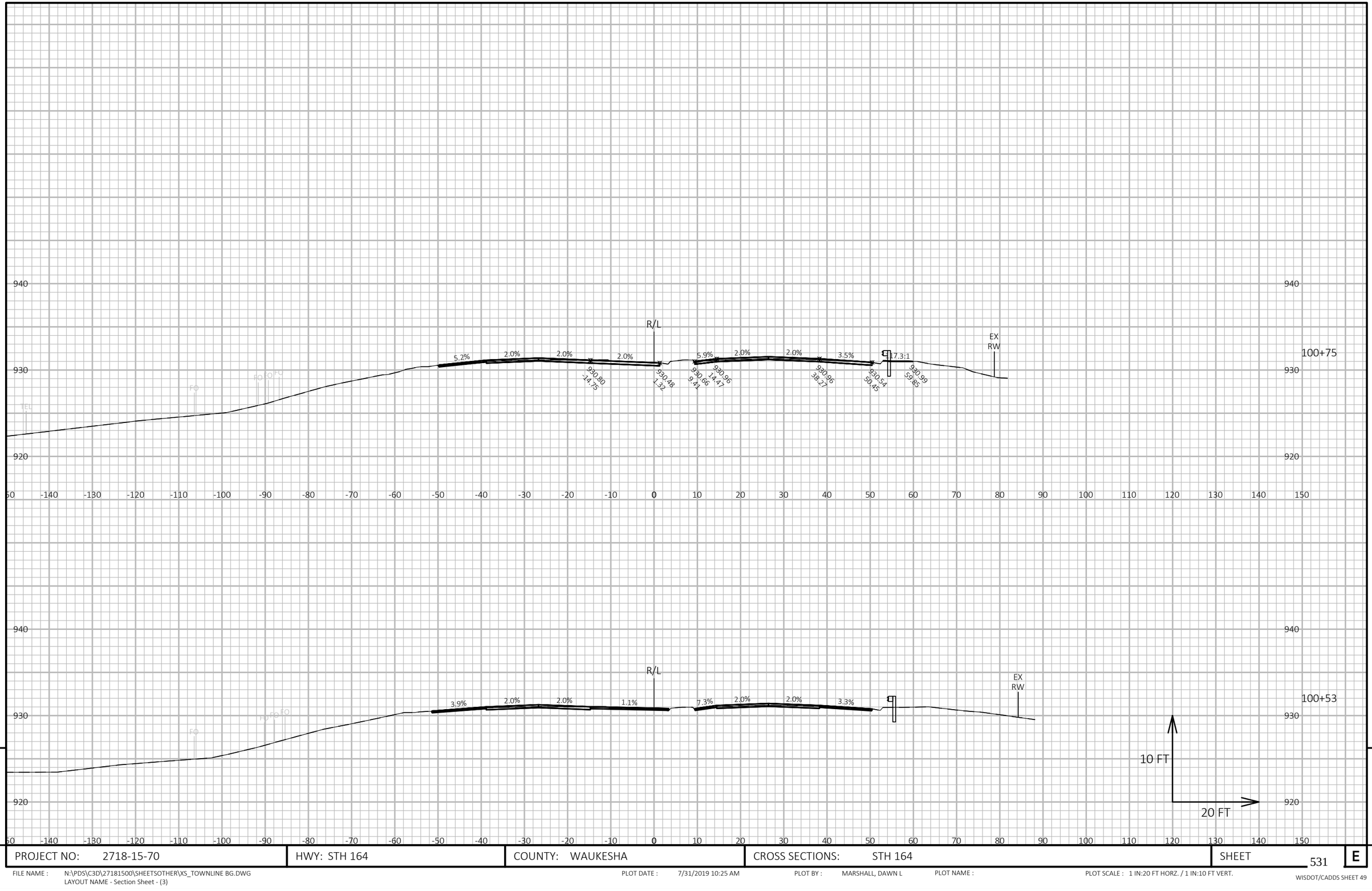
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9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	CROSS SECTIONS: STH 164	SHEET 530	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSOTHER\XS_TOWNLINE BG.DWG
LAYOUT NAME - Section Sheet - (2)

PLOT DATE : 7/31/2019 10:25 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

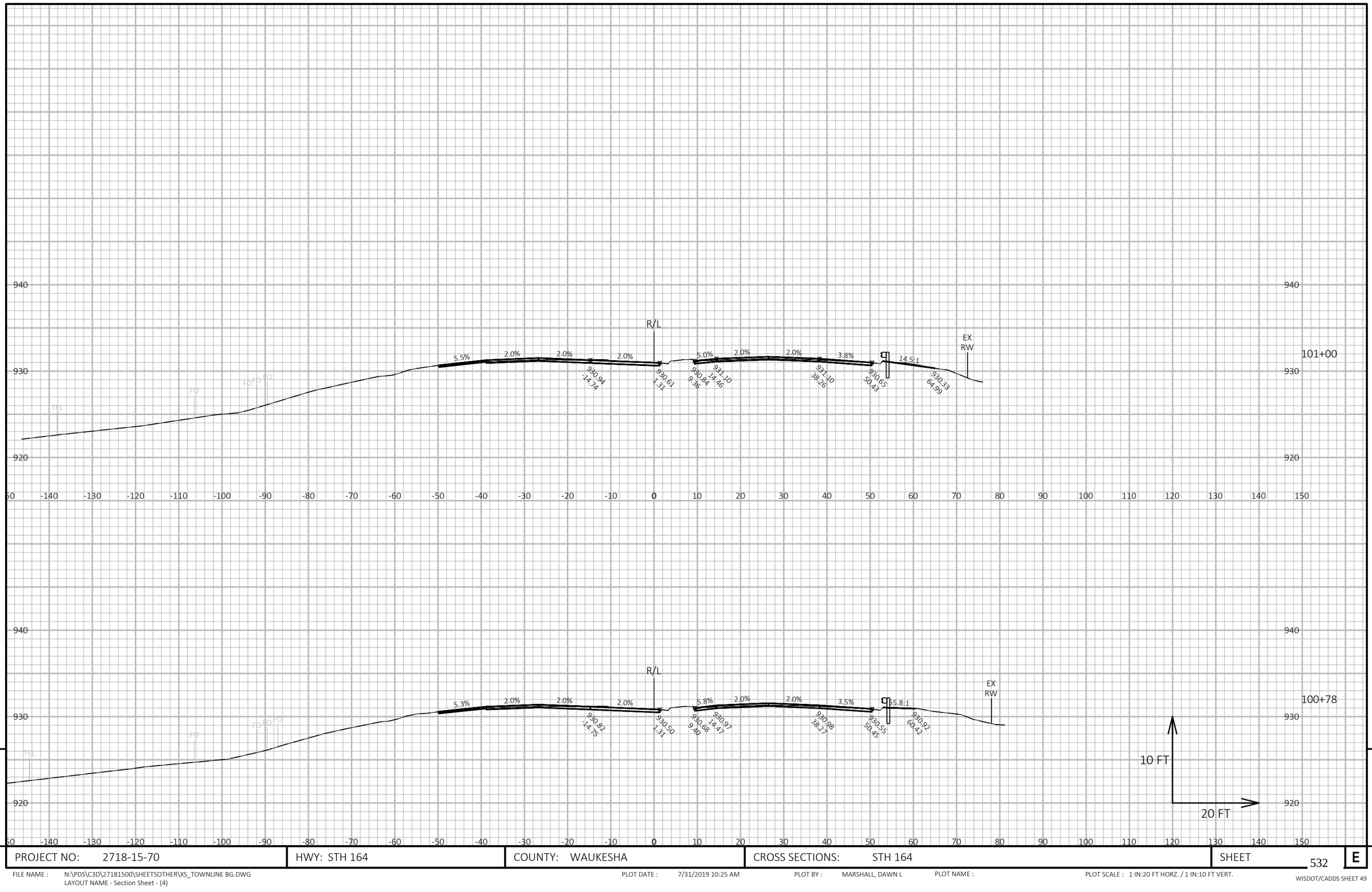
9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	CROSS SECTIONS: STH 164	SHEET 531	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSOTHER\XS_TOWNLINE BG.DWG
LAYOUT NAME - Section Sheet - (3)

PLOT DATE : 7/31/2019 10:25 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

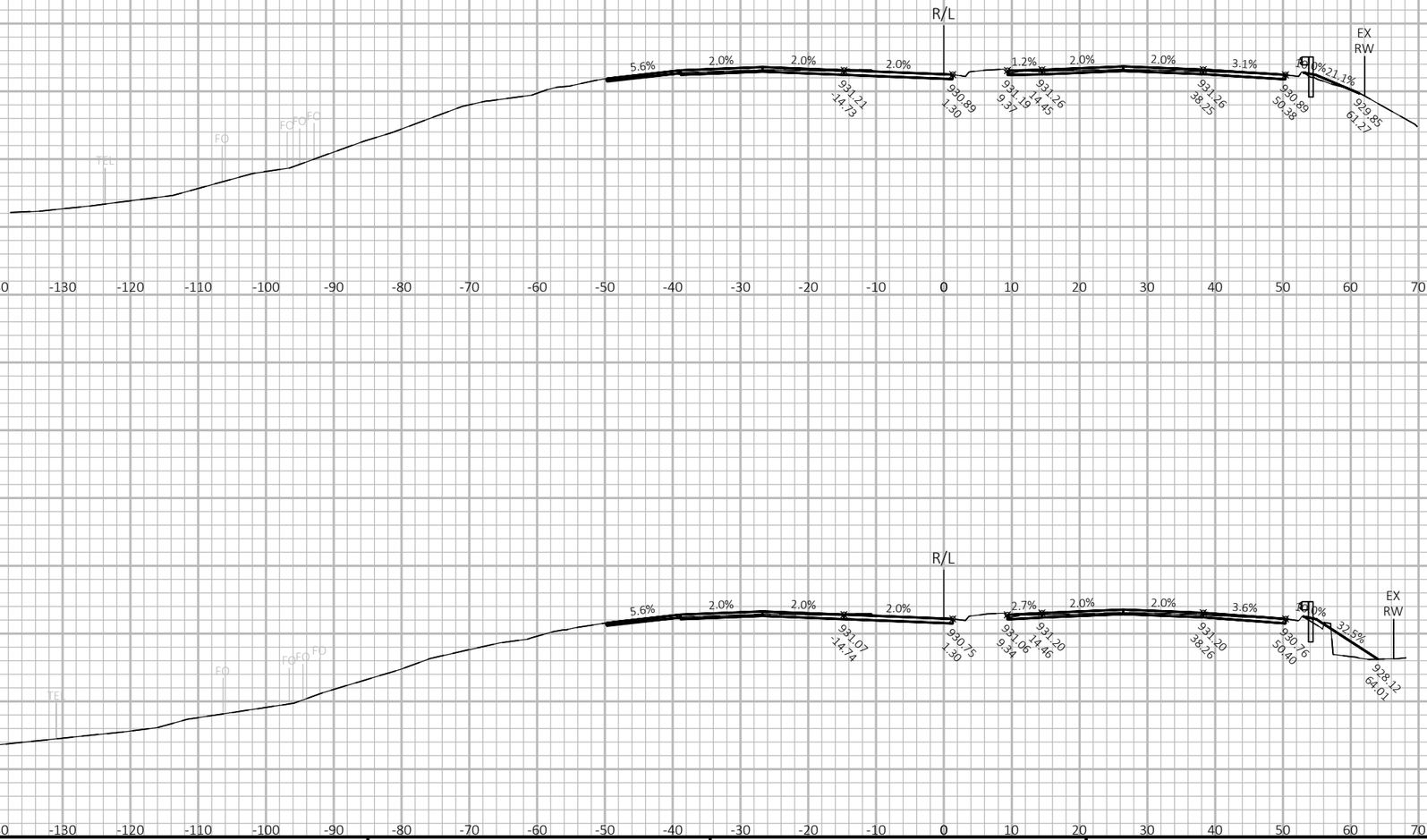
WISDOT/CADDS SHEET 49



9 9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	CROSS SECTIONS: STH 164	SHEET 532	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSOTHER\XS_TOWNLINE BG.DWG
LAYOUT NAME - Section Sheet - (4)
PLOT DATE : 7/31/2019 10:25 AM
PLOT BY : MARSHALL, DAWN L
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



9

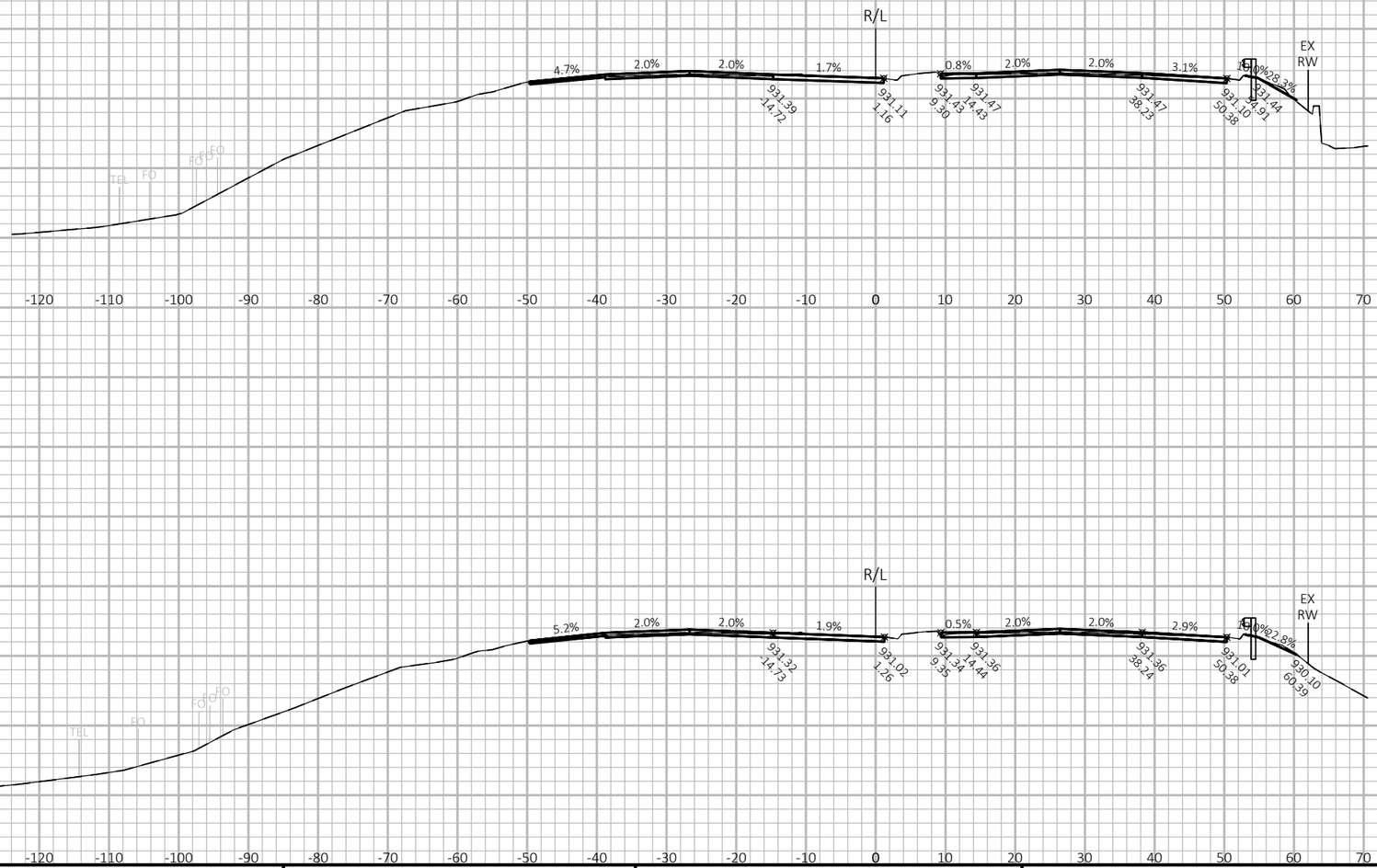
9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	CROSS SECTIONS: STH 164	SHEET 533	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSOTHER\XS_TOWNLINE BG.DWG
LAYOUT NAME - Section Sheet - (5)

PLOT DATE : 7/31/2019 10:26 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

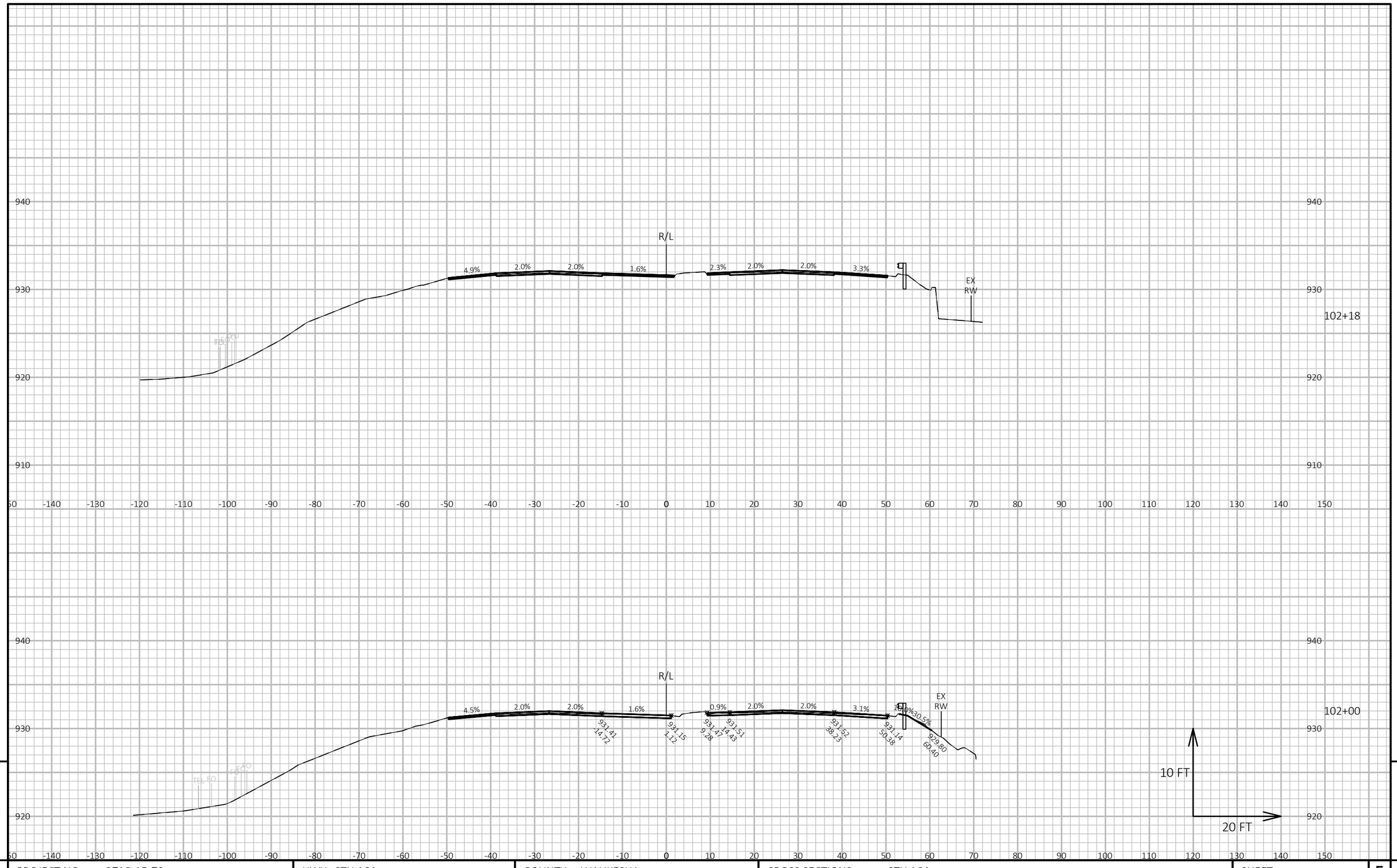
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PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	CROSS SECTIONS: STH 164	SHEET 534	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSOTHER\XS_TOWNLINE BG.DWG
LAYOUT NAME - Section Sheet - (6)

PLOT DATE : 7/31/2019 10:26 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

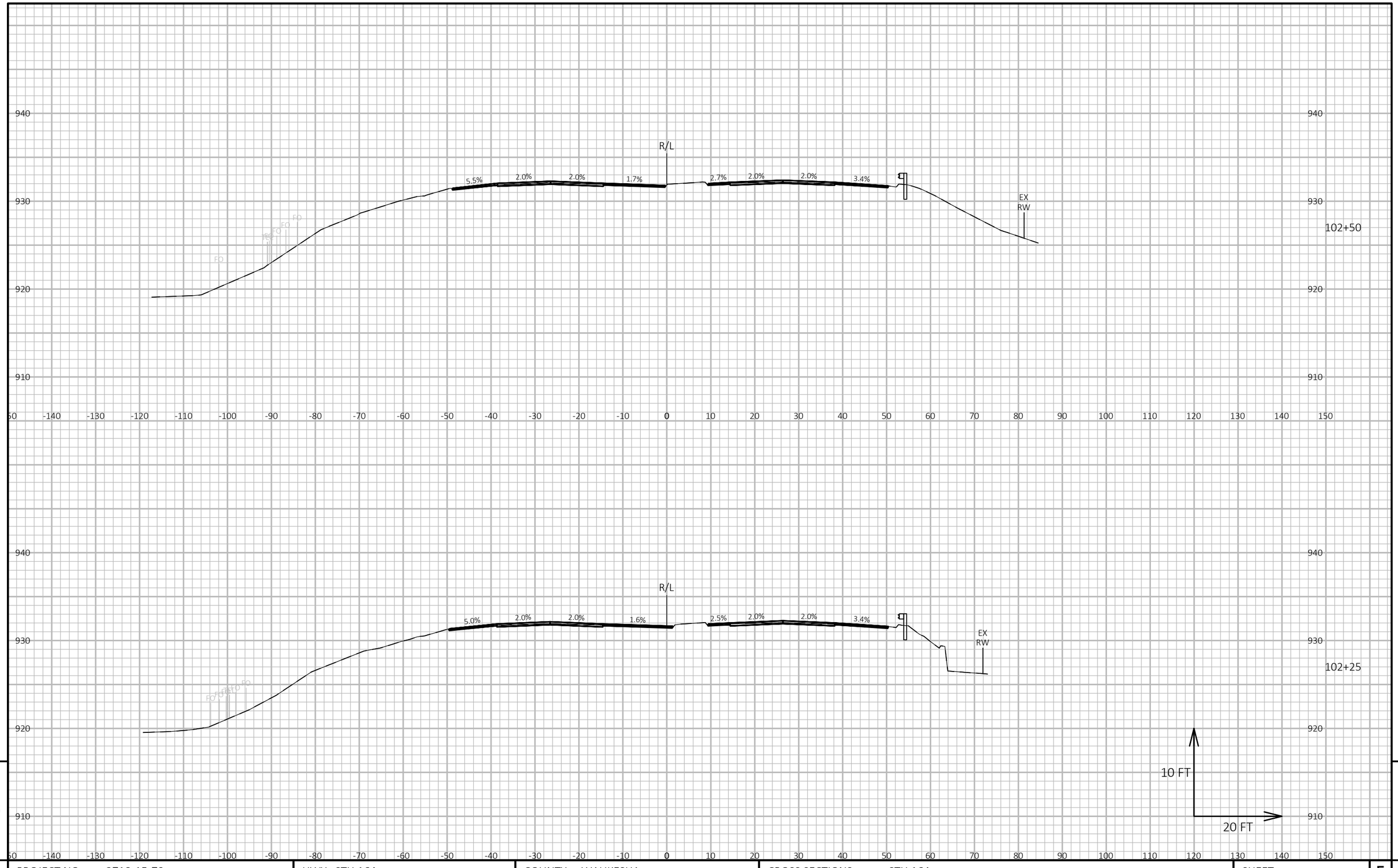


9 9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	CROSS SECTIONS: STH 164	SHEET 535	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSOTHER\XS_TOWNLINE BG.DWG
LAYOUT NAME - Section Sheet - (7)

PLOT DATE : 7/31/2019 10:27 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

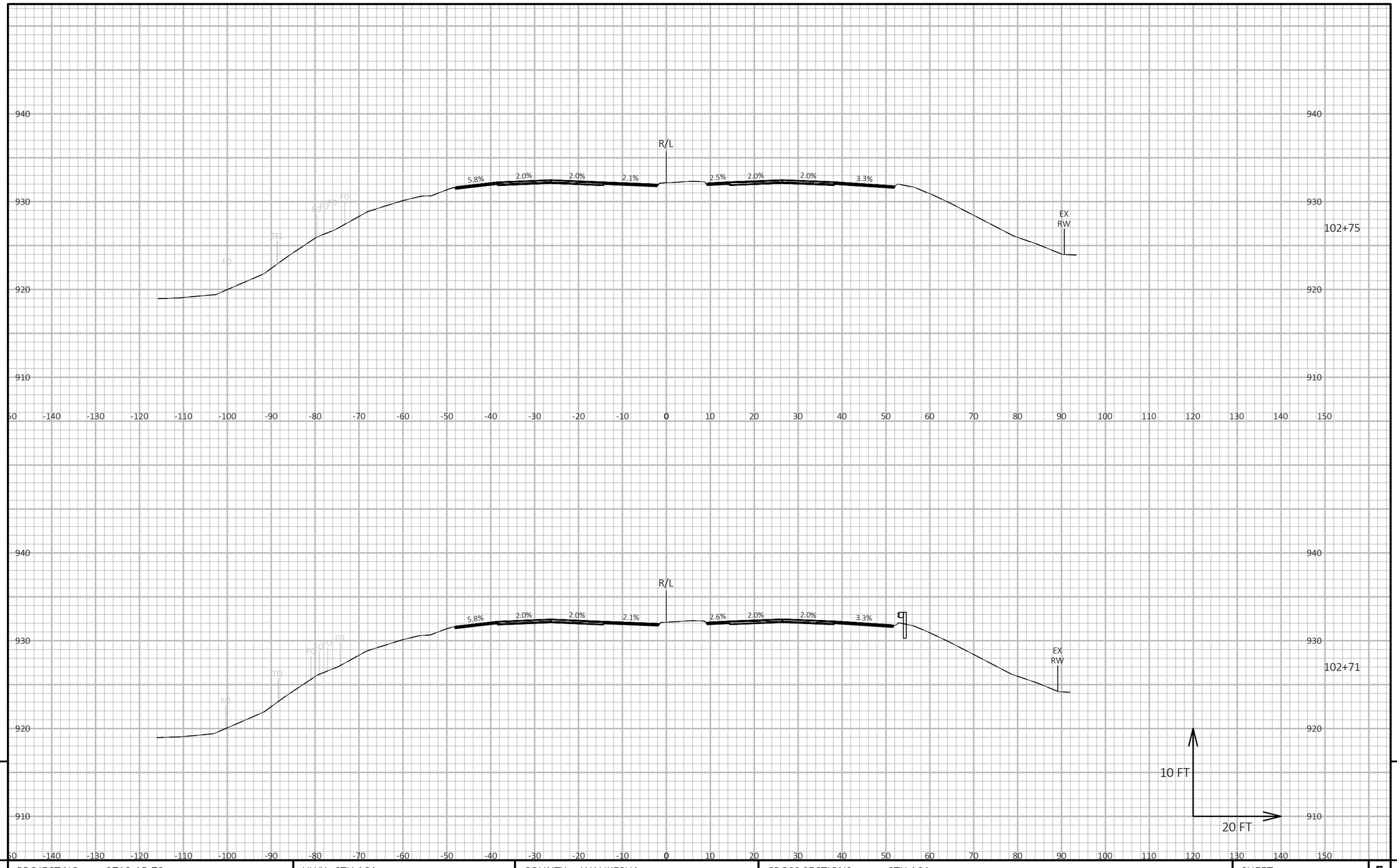


9 9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	CROSS SECTIONS: STH 164	SHEET 536	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSOTHER\XS_TOWNLINE BG.DWG
LAYOUT NAME - Section Sheet - (8)

PLOT DATE : 7/31/2019 10:27 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



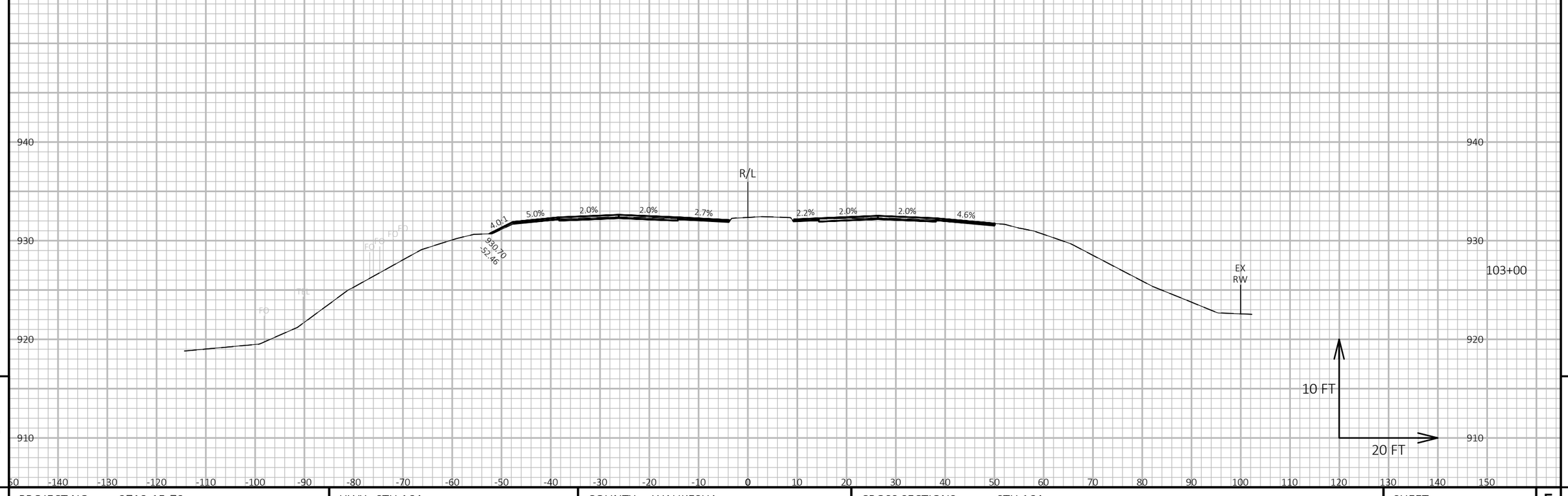
9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	CROSS SECTIONS: STH 164	SHEET 537	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSOTHER\XS_TOWNLINE BG.DWG
LAYOUT NAME - Section Sheet - (9)

PLOT DATE : 7/31/2019 10:28 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

9

PROJECT NO: 2718-15-70	HWY: STH 164	COUNTY: WAUKESHA	CROSS SECTIONS: STH 164	SHEET 538	E

FILE NAME : N:\PDS\C3D\27181500\SHEETSOTHER\XS_TOWNLINE BG.DWG
LAYOUT NAME - Section Sheet - (10)

PLOT DATE : 7/31/2019 10:28 AM PLOT BY : MARSHALL, DAWN L PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

Notes

Wisconsin Department of Transportation

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