WKE

Feb 08, 2022

PROJECT ID: 2718-04-71

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 = 432

15

N

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

W ST PAUL AVENUE

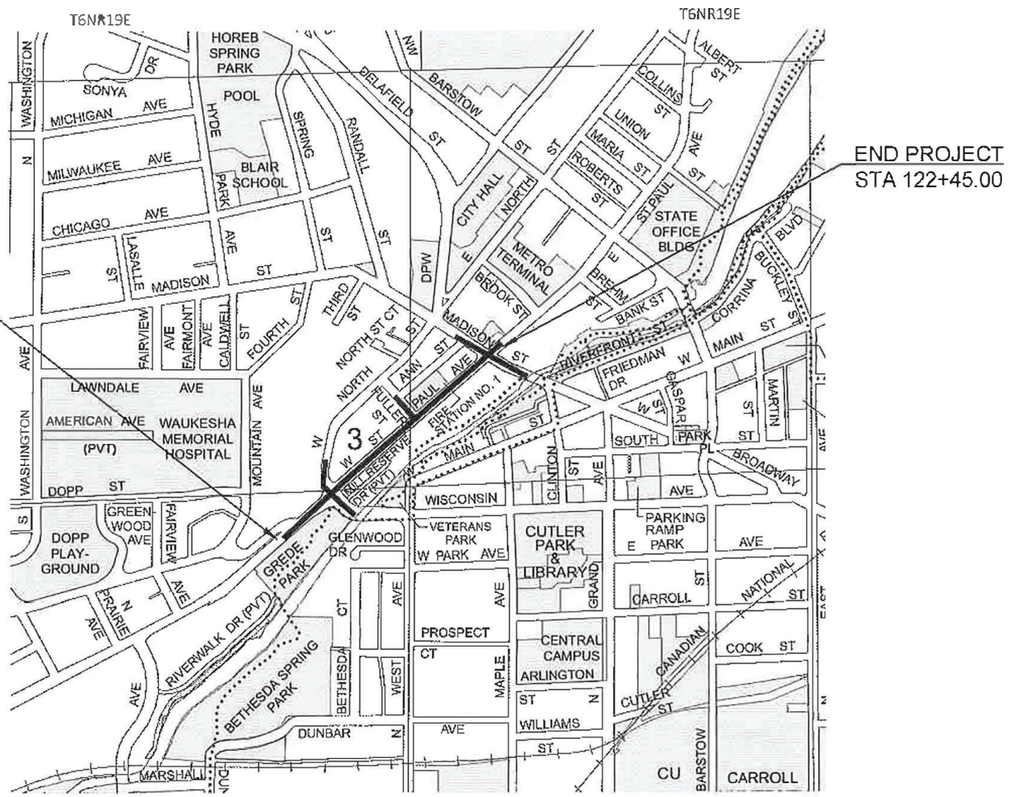
MOUNTAIN AVE TO MADISON ST

LOCAL STREET

WAUKESHA COUNTY

STATE PROJECT NUMBER
2718-04-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2718-04-71	WISC 2022202	1



END PROJECT
STA 122+45.00

BEGIN PROJECT
STA 102+00.00

LAYOUT

SCALE 0 1000 FT

TOTAL NET LENGTH OF CENTERLINE =

DESIGN DESIGNATION

A.A.D.T.	=
A.A.D.T.	=
D.H.V.	=
D.D.	=
T.	=
DESIGN SPEED	=
ESALS	=

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE		ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	95.36
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)	
SLOPE INTERCEPT		UTILITIES	
REFERENCE LINE	SURVEY	ELECTRIC	E
EXISTING CULVERT		FIBER OPTIC	FO
PROPOSED CULVERT (Box or Pipe)		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
		STORM SEWER	SS
MARSH AREA		TELEPHONE	T
		WATER	W
WOODED OR SHRUB AREA		UTILITY PEDESTAL	
		POWER POLE	
		TELEPHONE POLE	

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE STATE PLANE WISCONSIN SOUTH, NAD 1927, IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GROUND COORDINATES, GROUND BEARINGS, AND GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NGVD 1929. GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12B.

ORIGINAL PLANS PREPARED BY
CITY OF WAUKESHA
201 DELAFIELD STREET
WAUKESHA, WI 53188
262-524-3600

WISCONSIN
ALEXANDER E. DAMEN
41014
WAUKESHA, WI
PROFESSIONAL ENGINEER

11/18/21
(Date)

(Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	AYRES ASSOCIATES INC
Designer	CITY OF WAUKESHA
Project Manager	KATHY KRAMER, MBA, P.E.
Regional Examiner	
Regional Supervisor	JEFFREY BOHEN, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 11-18-21

Kathleen Kramer (Signature)

Digitally signed by Kathleen Kramer
Date: 2021.11.18 14:32:52 -06'00'

E

CITY OF WAUKESHA CONTACTS

CITY OF WAUKESHA DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
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CELL: 414-550-7102
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DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

2

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	GENERAL NOTES AND UTILITY CONTACTS	SHEET 2	E

STANDARD ABBREVIAITONS

AEW	APRON ENDWALL	PCC	POINT OF COMPOUND CURVE
AGG	AGGREGATE	PE	PRIVATE ENTRANCE
BAD	BASE AGGREGATE DENSE	PI	POINT OF INTERSECTION
BM	BENCHMARK	PLE	PERMANENT LIMITED EASEMENT
C&G	CURB AND GUTTER	PT	POINT OF TANGENT
CL	CENTER LINE OR CONSTRUCTION LINE	R	RADIUS OF CURBE
CMCP	CULVERT PIPE CORRUGATED METAL	R/L	REFERENCE LINE
CONC	CONCRETE	R/W	RIGHT OF WAY
CP	CULVERT PIPE	RC	REVERSE CROWN
CPRC	CULVERT PIPE REINFORCE CONCRETE	RCAEW	APRON END WALL FOR CULVERT PIPE REINFORCED
CSD	CONCRETE SURFACE DRAIN	RHF	RIGHT HAND FORWARD
CY	CUBIC YARD	RO	RUN OFF LENGTH
D	DEGREE OF CURVE	RRSP	RAILROAD SPIKE
Δ	DELTA	RT	RIGHT
DISCH	DISCHARGE	SLV	SALVAGED
FE	FIELD ENTRANCE	SB	SOUTHBOUND
HMA	HOT MIX ASPHALT	SDD	STANDARD DETAIL DRAWING
INV	INVERT	SE	SUPER ELEVATION
L	LENGTH OF CURVE	SF	SQUARE FOOT
LHF	LEFT HAND FORWARD	STA	STATION
LT	LEFT	SY	SQUARE YARD
MIN	MINIMUM	T	TANGENT LENGTH
M/L	MAINLINE	TLE	TEMPORARY LIMITED EASEMENT
NB	NORTHBOUND	VCL	VERTICAL CURVE LENGTH
NC	NORMAL CROWN	VPC	POINT VERTICAL CURVE
PAVT	PAVEMENT	VPI	POINT OF VERTICAL INTERSECTION
PC	POINT OF CURVE	PVT	POINT OF VERTICAL TANGENT

ORDER OF SECTION 2 SHEETS

Project Overview
Typical Sections
Construction Details
Erosion Control & Drainage
Storm Sewer and Utilities
Planting
Signing
Lighting
Traffic Signals
Pavement Marking
Traffic Control and Construction Staging
Alignment

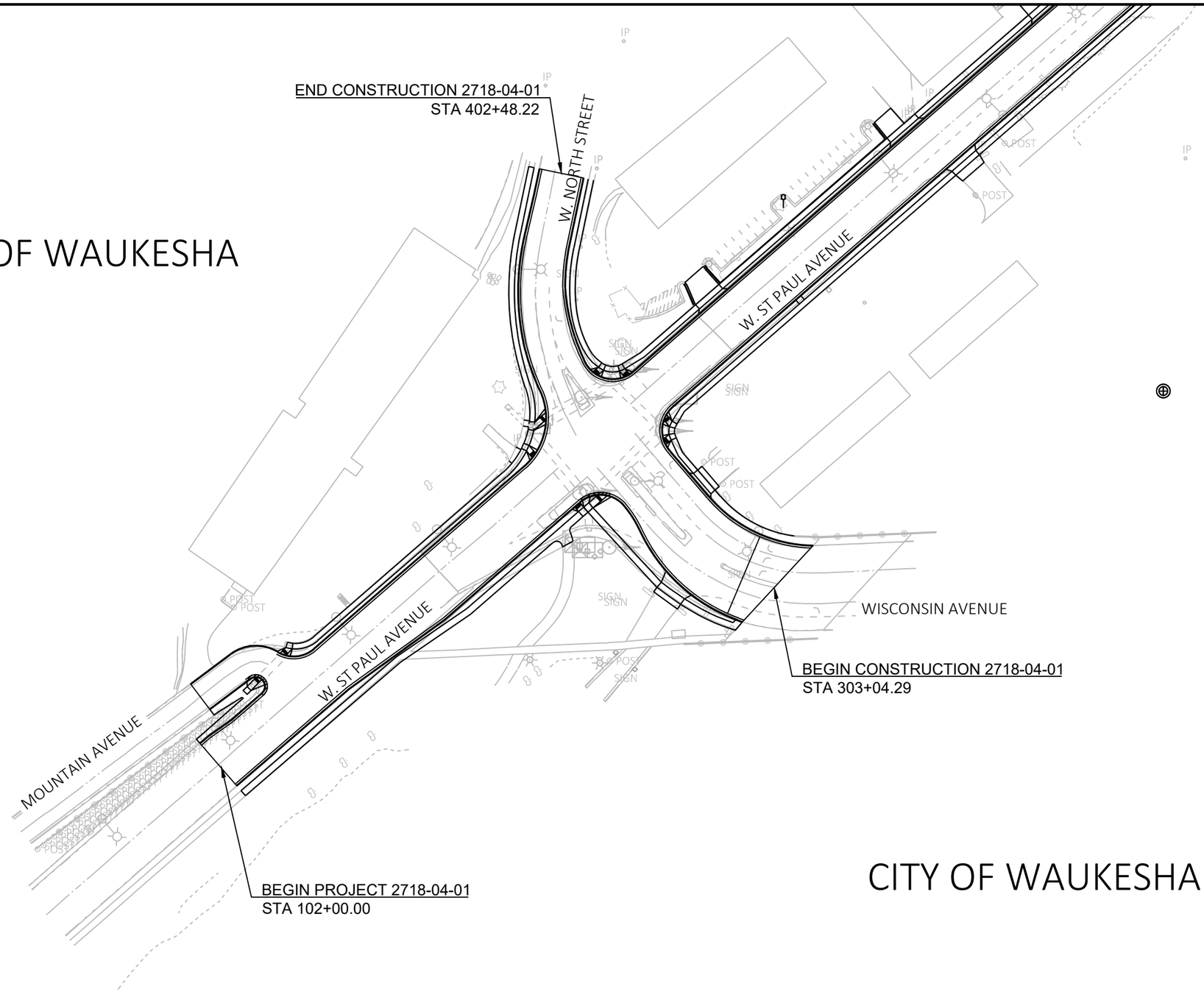
PLAN DETAIL AND TYPICAL SECTION LEGEND	HMA PAVEMENT	TOTAL LAYER PAVEMENT THICKNESS	LAYERS
AP01	5LT58-28S	5"	2" UPPER
	3LT58-28S		3" LOWER

GENERAL NOTES

- NO SHRUBS OR TREES ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER. WITHIN DRIP LINE OF TREES, EXCAVATION BEHIND THE BACK OF CURB IS LIMITED TO 1 FOOT. SEE TYPICAL FINISHED SECTIONS AND PLAN AND PROFILE SHEETS FOR LOCATIONS. CONTACT THE CITY OF WAUKESHA FORESTRY DEPARTMENT - MIKE TALASKA (262) 510-5473 FOR QUESTIONS REGARDING TREES ALONG STREETS.
- EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.
- ANY REINFORCEMENT LOCATED IN EXISTING CONCRETE PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO THE REMOVING PAVEMENT ITEM, AND NO ADDITIONAL COMPENSATION WILL BE GRANTED.
- STATIONING, DISTANCES AND OFFSETS SHOWN ON THE PLANS ARE APPROXIMATE AND THE LOCATIONS OF CONCRETE BASES, AND PVC CONDUIT FOR PROPOSED SIGNS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
- THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.
- WHEN THE QUANTITY OF HMA PAVEMENT OR BASE AGGREGATE IS MEASURED FOR PAYMENT BY THE TON. THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.
- THE LOCATION OF SIDEWALK AND DRIVEWAY REMOVALS ARE APPROXIMATE. FINAL LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD
- EXISTING DRIVEWAYS SHALL BE RESTORED IN KIND AS DIRECTED BY THE ENGINEER IN THE FIELD AND AT THE LOCATION DETERMINED BY THE ENGINEER.
- THE LOCATIONS OF PAVEMENT BEHIND THE PROPOSED WALK THAT IS TO BE REMOVED ARE APPROXIMATE. FINAL LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
- CONTRACTOR SHALL CONTACT DIGGER'S HOTLINE AND ALL UTILITIES LISTED TO VERIFY UTILITY WORK STATUS PRIOR TO BIDDING.
- FINAL LOCATION OF CURB RAMP OPENINGS, SIGNALS, LIGHTING BASES, HYDRANTS AND STORM SEWER INLETS TO BE VERIFIED BY FIELD ENGINEER PRIOR TO INSTALLATION.
- PROVIDE A TYPICAL SIDEWALK CROSS SLOPE OF 1.5% WITH A CONSTRUCTION TOLERANCE OF +/- 0.5%.
- REMOVAL OF EROSION CONTROL DEVICES IS INCLUDED IN THE COST OF THEIR RESPECTIVE BID ITEMS.
- CROSS SECTIONS SHOWN INCLUDE THE THICKNESS OF TOPSOIL WHERE REQUIRED. TOPSOIL SHALL BE REPLACED WITH 6-INCH TYPICAL DEPTH THROUGHOUT THE PROJECT.
- A SAWED JOINT IS REQUIRED WHERE NEW HMA PAVEMENT MEETS EXISTING HMA PAVEMENT.
- RE-TOPSOIL OF GRADED AREAS, AS DESIGNATED BY THE ENGINEER, IMMEDIATELY AFTER GRADING IS COMPLETED WITHIN THOSE AREAS. FERTILIZE AND SOD 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 (5) CALENDAR DAYS, SEED THOSE AREAS WITH TEMPORARY SEED.
- STOCKPILE EXCESS MATERIAL OR SPOILS ON UPLAND AREAS AWAY FROM WETLANDS, FLOOD PLAINS AND WATERWAYS. STOCKPILED WOIL SHALL BE PROTECTED AGAINST EROSION. IMMEDIATELY STABILIZE STOCKPILES AND SURROUND STOCKPILES AS NEEDED WITH SILT FENCE OR PERIMETER CONTROL IF STOCKPILES WILL REMAIN INACTIVE FOR 7 DAYS OR LONGER.
- EROSION CONTROL BMPS ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL BMPS SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE BMP IS NO LONGER NEEDED.
- FERTILIZER SHALL NOT BE USED WITHIN 100' OF NAVIGABLE WATERWAYS OR WETLANDS.
- CONTRACTOR MUST CONTACT THE PROJECT ENGINEER AND THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION (sewrpc) AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY PUBLIC SURVEY MONUMENT.
- SAWCUT ASPHALTIC AND CONCRETE DRIVEWAYS AND/OR PARKING LOTS AT THE MATCH LINE AS SHOWN ON THE PAVING DETAILS OR AS DIRECTED BY THE ENGINEER.
- PROVIDE A CONCRETE JOINT DETAIL PLAN 14 DAYS PRIOR TO PAVING FOR APPROVAL BY THE ENGINEER. 15' MAXIMUM SPACING FOR LONGITUDINAL JOINTS.
- VERIFY EXISTING PAVEMENT ELEVATIONS AT ALL TIE-INS TO EXISTING PAVEMENT PRIOR TO CONSTRUCTION. IF A DISCREPANCY IS FOUND BETWEEN PROPOSED PLAN ELEVATIONS AND EXISTING PAVEMENT ELEVATIONS, CONTRACTOR IS TO NOTIFY ENGINEER.
- EXISTING BUSINESS SIGNS LOCATED WITHIN THE TLE ARE TO REMAIN.

2

CITY OF WAUKESHA



CITY OF WAUKESHA

PROJECT NO: 2418-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PROJECT OVERVIEW	SHEET 4	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 020201-po
PLOT DATE : 11/12/2021 1:16 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

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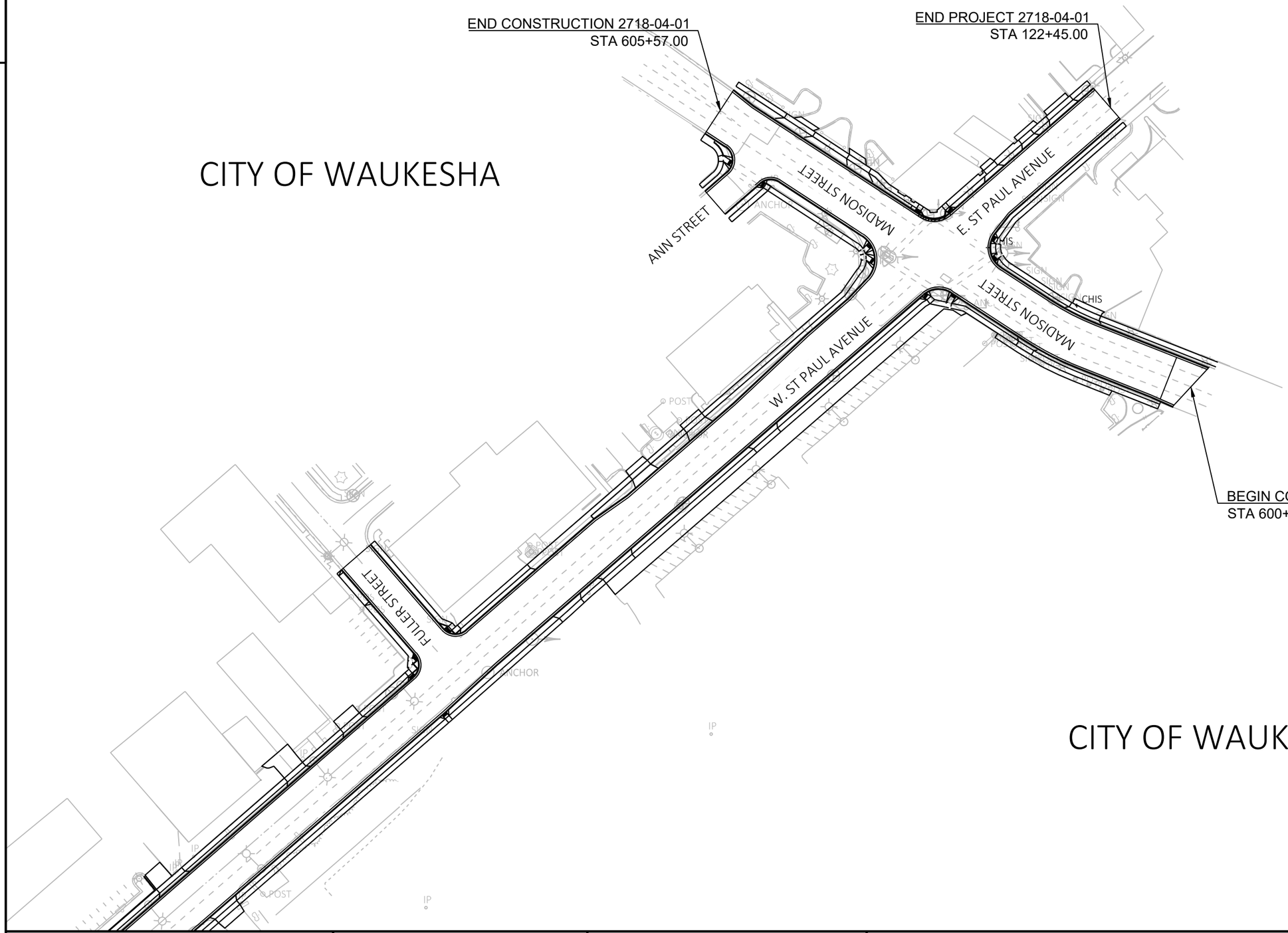
CITY OF WAUKESHA



CITY OF WAUKESHA

PROJECT NO: 2418-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PROJECT OVERVIEW	SHEET 5	E

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PLOT NAME :
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WISDOT/CADDS SHEET 42

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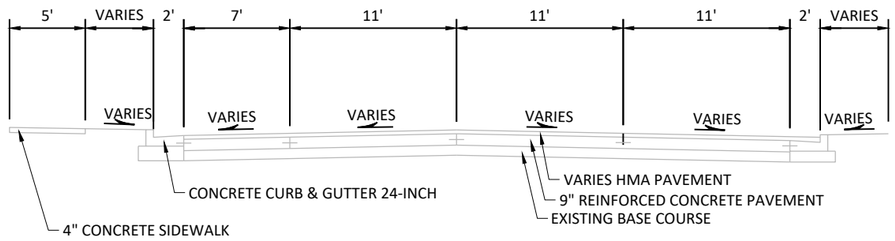
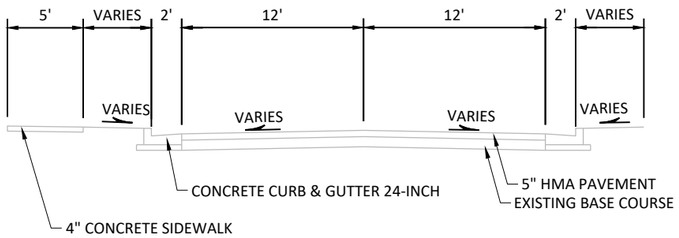


TYPICAL EXISTING SECTION
W. ST PAUL AVENUE



TYPICAL EXISTING SECTION
MOUNTAIN AVENUE

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 6	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020301-ts
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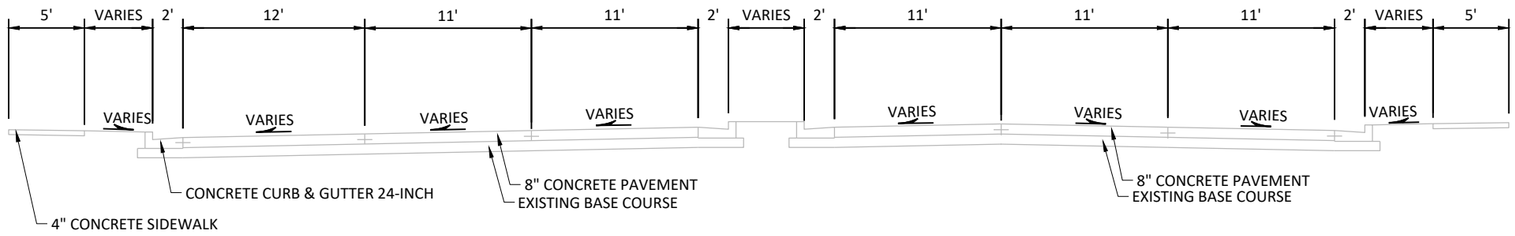
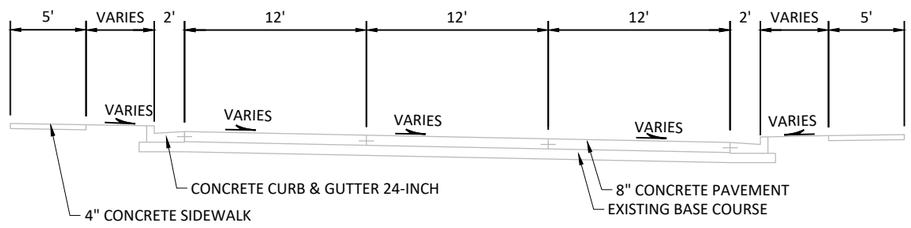
WISDOT/CADDS SHEET 42

2



TYPICAL EXISTING SECTION
WISCONSIN AVENUE



TYPICAL EXISTING SECTION
W. NORTH STREET

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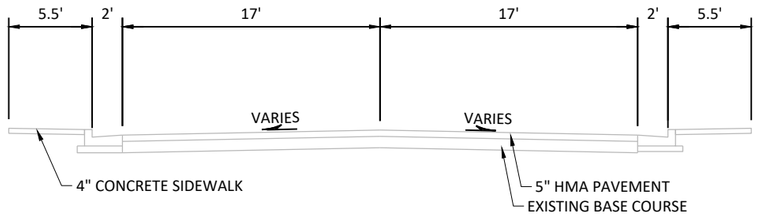
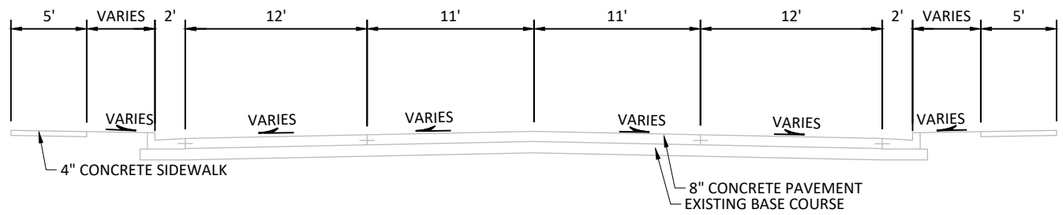


TYPICAL EXISTING SECTION
FULLER STREET



TYPICAL EXISTING SECTION
MADISON STREET

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 8	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020303-ts
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WISDOT/CADDS SHEET 42

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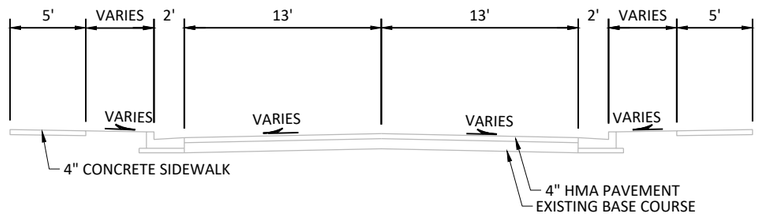

TYPICAL EXISTING SECTION
ANN STREET

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 9	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\020301-TS.DWG
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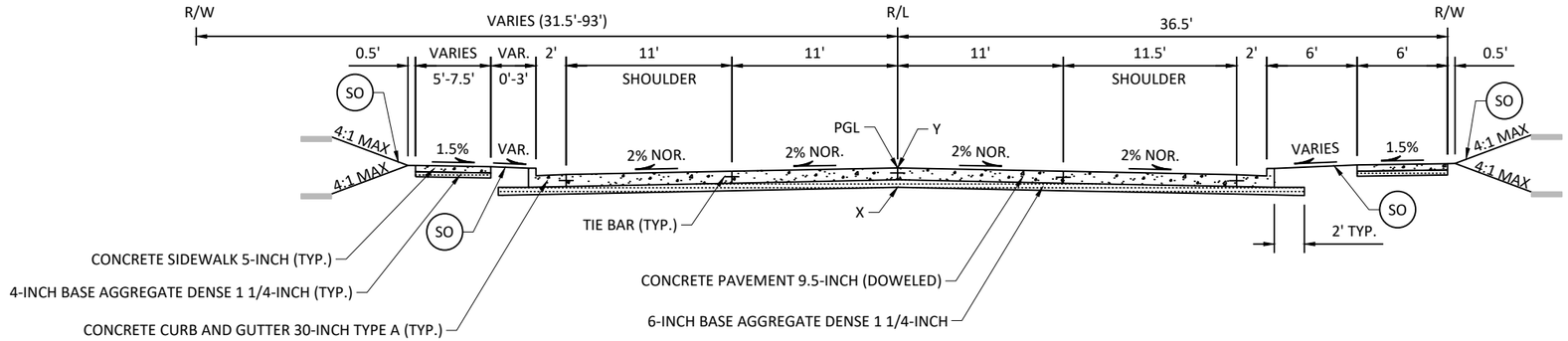
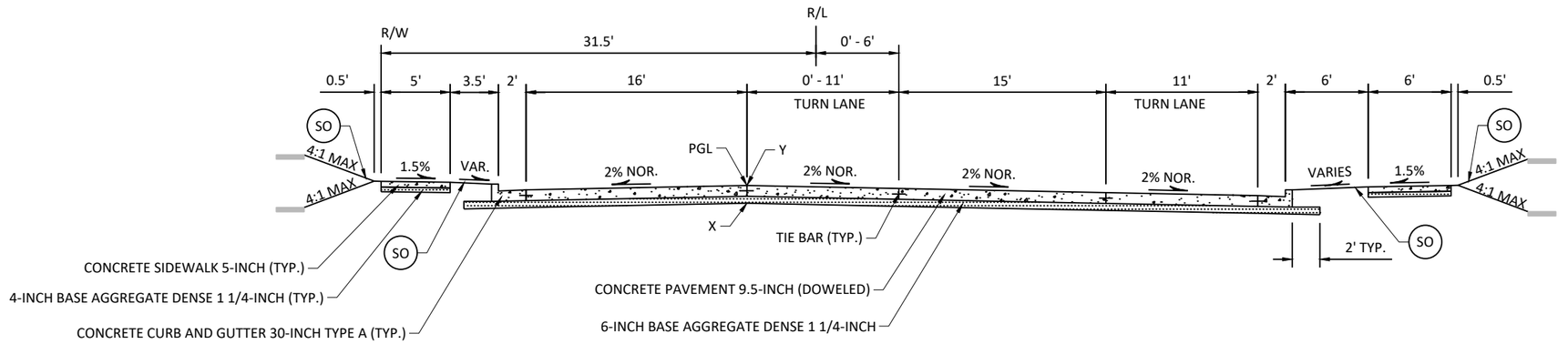


TYPICAL FINISHED SECTION
W. ST PAUL AVENUE
STA. 102+00.00 TO 103+60.00



TYPICAL FINISHED SECTION
W. ST PAUL AVENUE
STA. 103+60.00 TO 106+40.00

(SO) TOPSOIL, SOD AND FERTILIZER

NOTE:
- CROSS SLOPES MAY VARY AT INTERSECTIONS AND ON TURN LANES. SEE PAVING GRADE SHEETS
- "X" = SUBGRADE REFERRED TO ON CROSS SECTIONS
- "Y" = CROWN POINT
- "PGL" = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION
- EXCAVATION BELOW SUBGRADE MAY BE REQUIRED AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAILS.

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 10	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020310-ts
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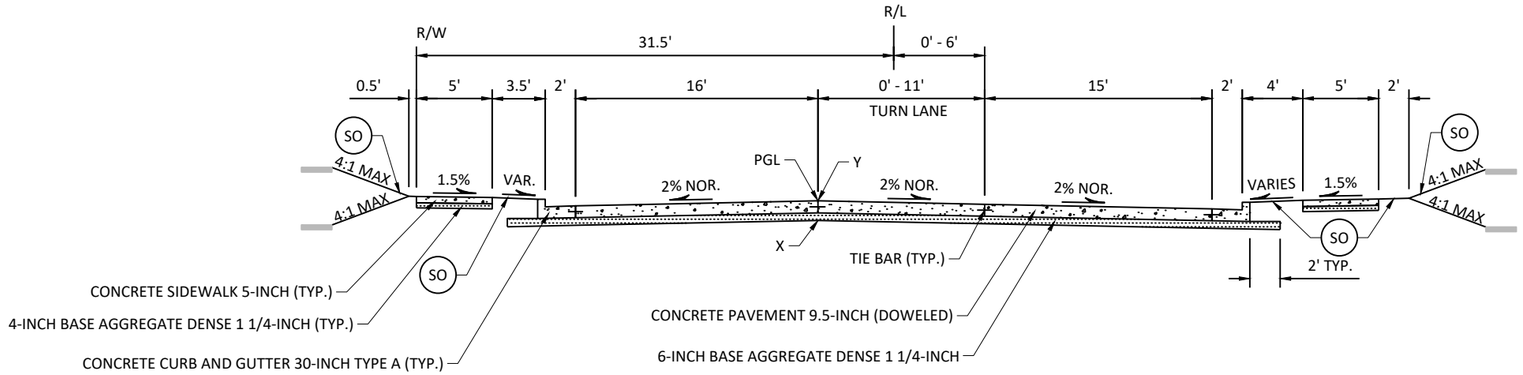
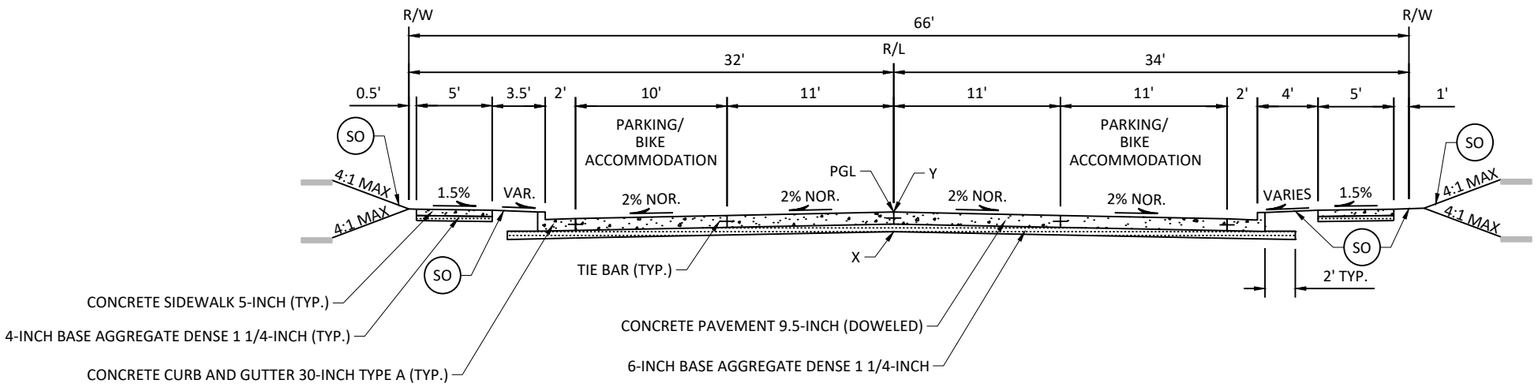
WISDOT/CADDS SHEET 42

2



TYPICAL FINISHED SECTION
W. ST PAUL AVENUE
STA. 103+60.00 TO 106+40.00



TYPICAL FINISHED SECTION
W. ST PAUL AVENUE
STA. 106+40.00 TO 114+21.60

(SO) TOPSOIL, SOD AND FERTILIZER

NOTE:
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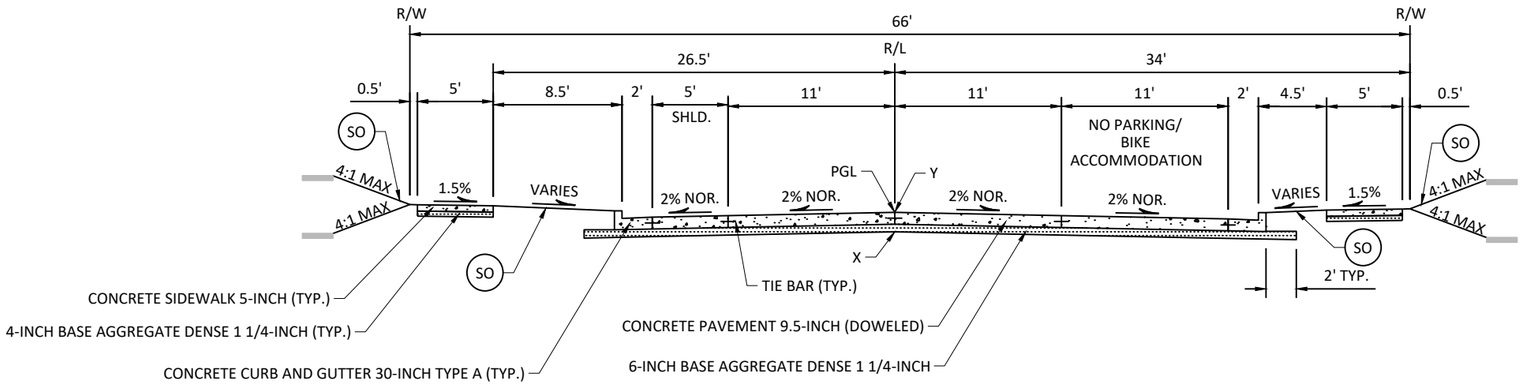
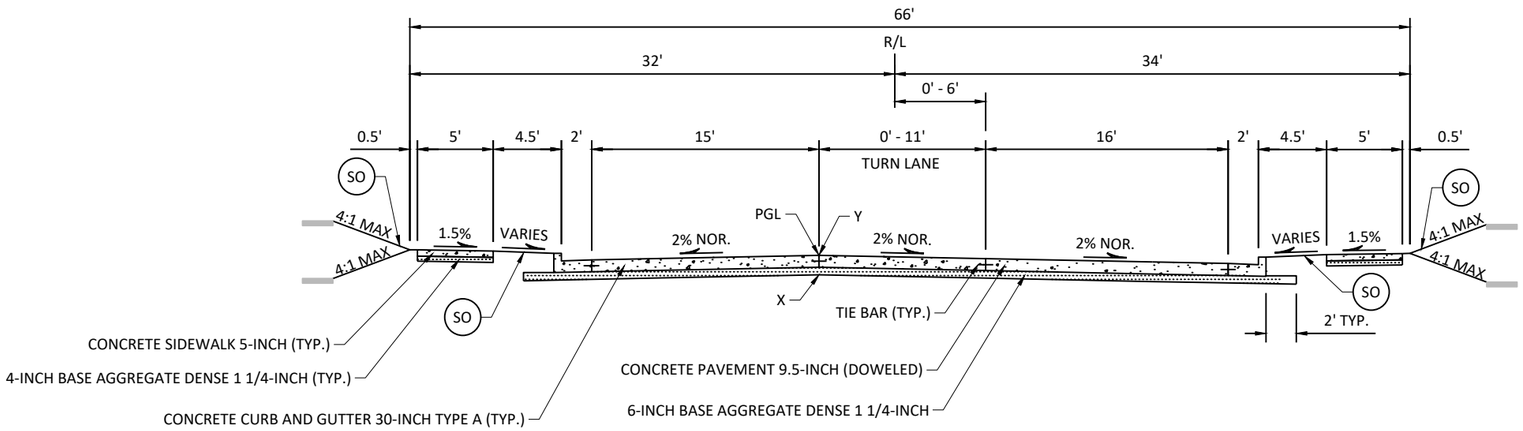
- EXCAVATION BELOW SUBGRADE MAY BE REQUIRED AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAILS.

2



TYPICAL FINISHED SECTION
W. ST PAUL AVENUE
STA. 114+21.60 TO 117+70.00

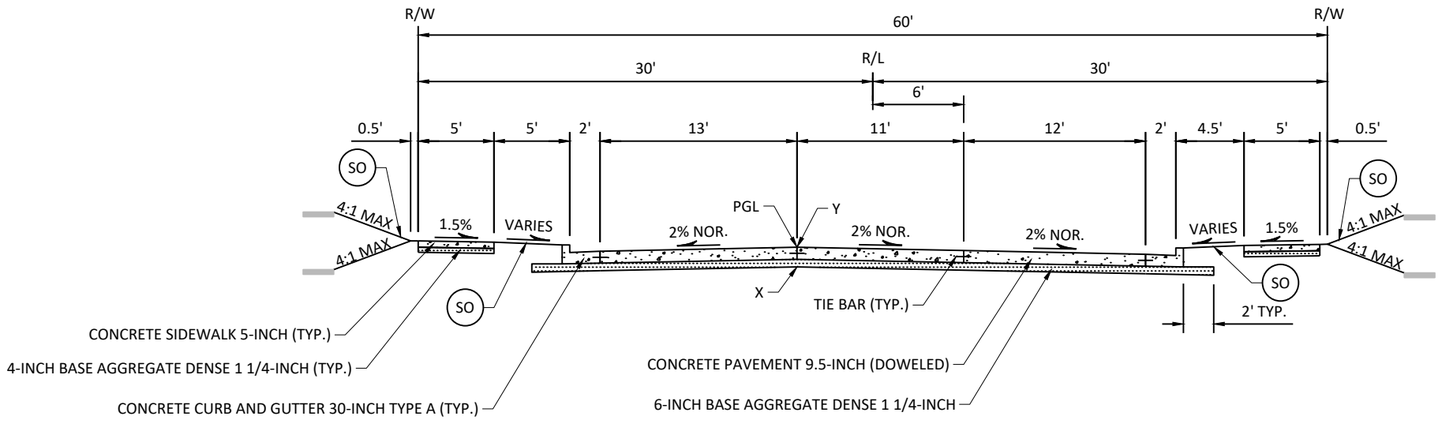


TYPICAL FINISHED SECTION
W. ST PAUL AVENUE
STA. 117+70 TO 120+75.00

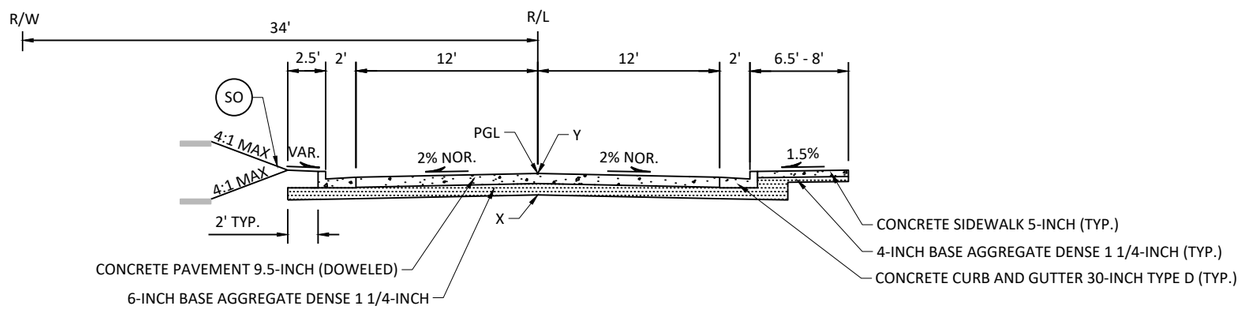
(SO) TOPSOIL, SOD AND FERTILIZER

NOTE:
- CROSS SLOPES MAY VARY AT INTERSECTIONS AND ON TURN LANES. SEE PAVING GRADE SHEETS
- "X" = SUBGRADE REFERRED TO ON CROSS SECTIONS
- "Y" = CROWN POINT
- "PGL" = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION
- EXCAVATION BELOW SUBGRADE MAY BE REQUIRED AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAILS.

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 12	E



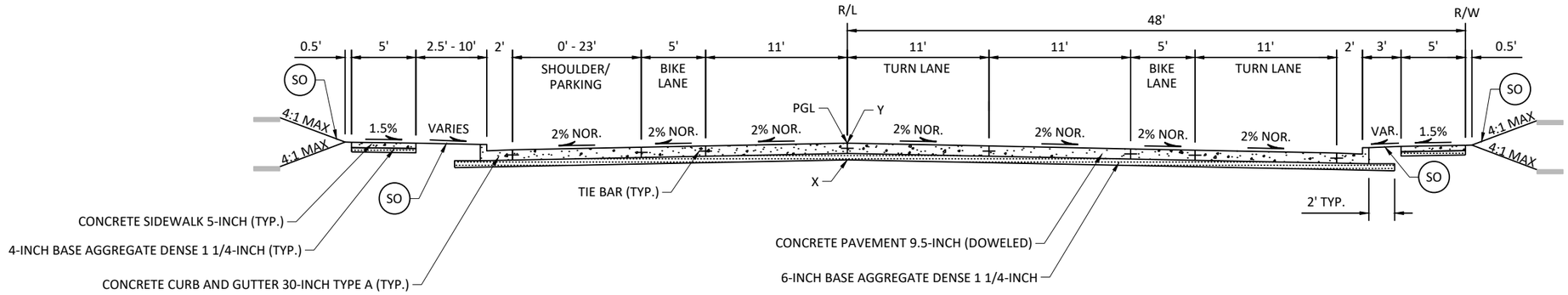
TYPICAL FINISHED SECTION
W. ST PAUL AVENUE
STA. 120+75.00 TO 122+61.19



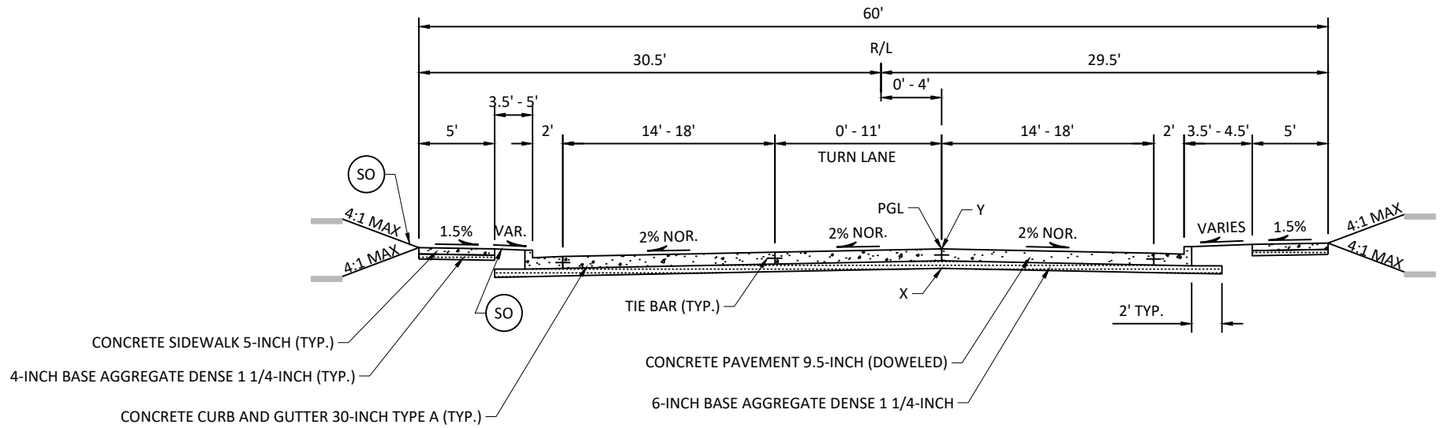
TYPICAL FINISHED SECTION
MOUNTAIN AVENUE
STA. 202+00.00 TO 202+89.19

(SO) TOPSOIL, SOD AND FERTILIZER

NOTE:
- CROSS SLOPES MAY VARY AT INTERSECTIONS AND ON TURN LANES. SEE PAVING GRADE SHEETS
- "X" = SUBGRADE REFERRED TO ON CROSS SECTIONS
- "Y" = CROWN POINT
- "PGL" = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION
- EXCAVATION BELOW SUBGRADE MAY BE REQUIRED AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAILS.



TYPICAL FINISHED SECTION
WISCONSIN AVENUE
STA. 303+03.35 TO 304+64.50



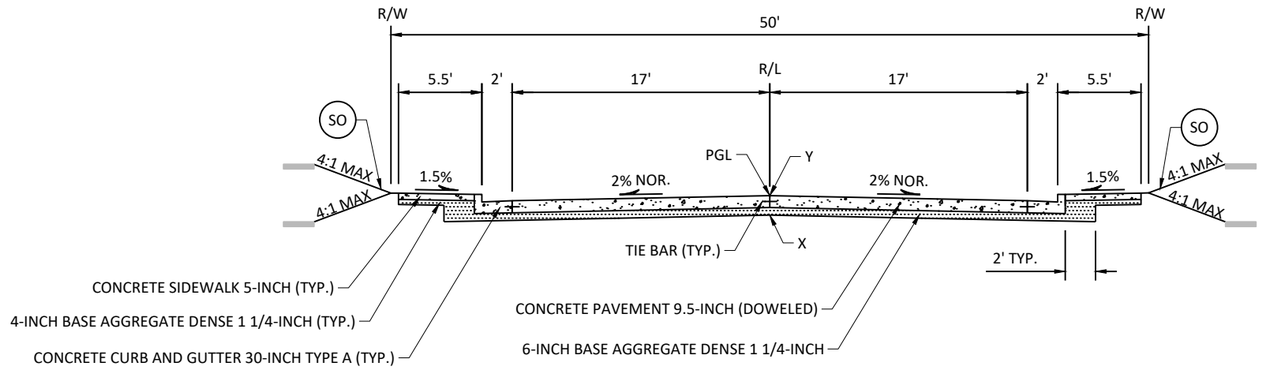
TYPICAL FINISHED SECTION
W. NORTH STREET
STA. 400+44.60 TO 402+48.22

(SO) TOPSOIL, SOD AND FERTILIZER

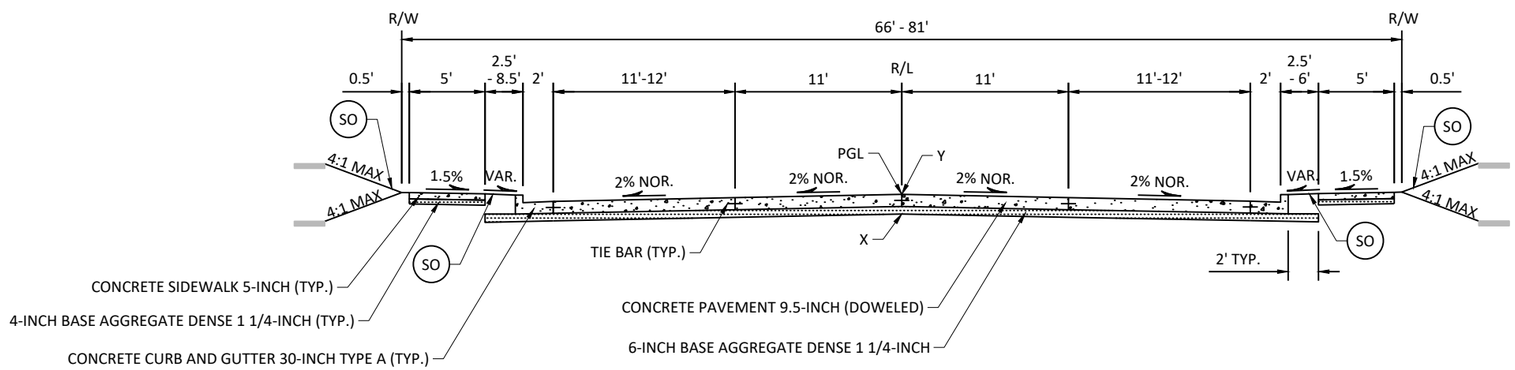
NOTE:
- CROSS SLOPES MAY VARY AT INTERSECTIONS AND ON TURN LANES. SEE PAVING GRADE SHEETS
- "X" = SUBGRADE REFERRED TO ON CROSS SECTIONS
- "Y" = CROWN POINT
- "PGL" = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION
- EXCAVATION BELOW SUBGRADE MAY BE REQUIRED AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAILS.

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 14	E

2



TYPICAL FINISHED SECTION
FULLER STREET
STA. 500+38.20 TO 501+49.12

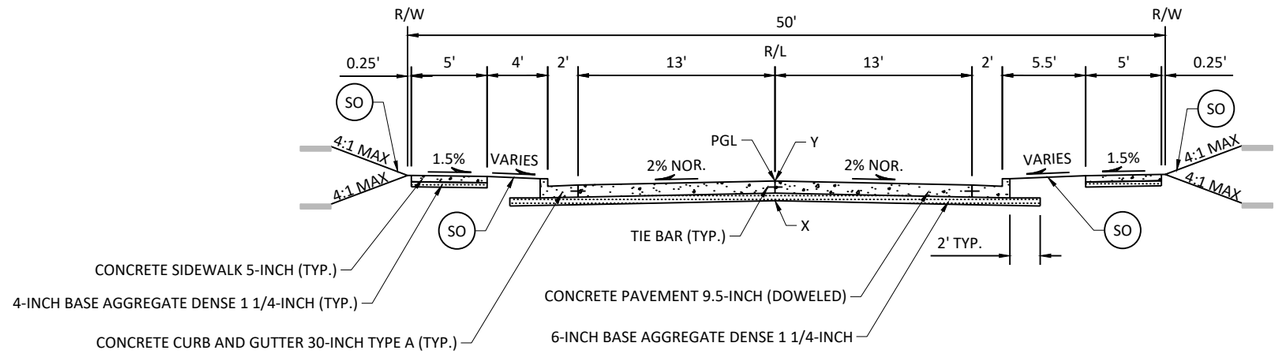


TYPICAL FINISHED SECTION
MADISON STREET
STA. 600+15.88 TO 605+59.97

(SO) TOPSOIL, SOD AND FERTILIZER

NOTE:
- CROSS SLOPES MAY VARY AT INTERSECTIONS AND ON TURN LANES. SEE PAVING GRADE SHEETS
- "X" = SUBGRADE REFERRED TO ON CROSS SECTIONS
- "Y" = CROWN POINT
- "PGL" = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION
- EXCAVATION BELOW SUBGRADE MAY BE REQUIRED AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAILS.

2

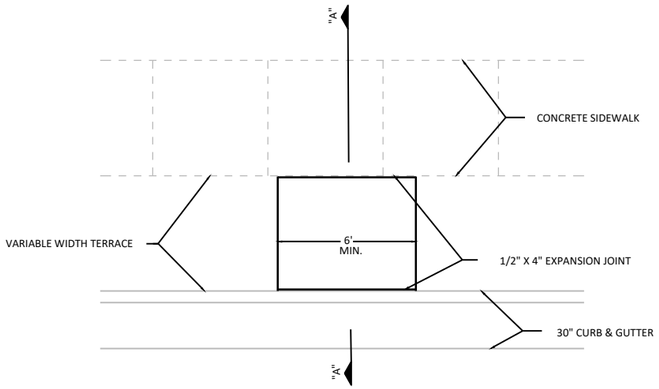


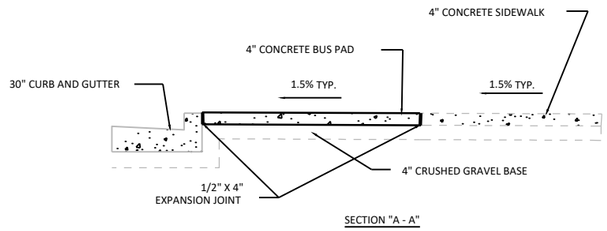
TYPICAL FINISHED SECTION
ANN STREET
STA. 705+00.00 TO 705+28.66

(SO) TOPSOIL, SOD AND FERTILIZER

NOTE:
- CROSS SLOPES MAY VARY AT INTERSECTIONS AND ON TURN LANES. SEE PAVING GRADE SHEETS
- "X" = SUBGRADE REFERRED TO ON CROSS SECTIONS
- "Y" = CROWN POINT
- "PGL" = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION
- EXCAVATION BELOW SUBGRADE MAY BE REQUIRED AS DIRECTED BY THE ENGINEER. SEE CONSTRUCTION DETAILS.

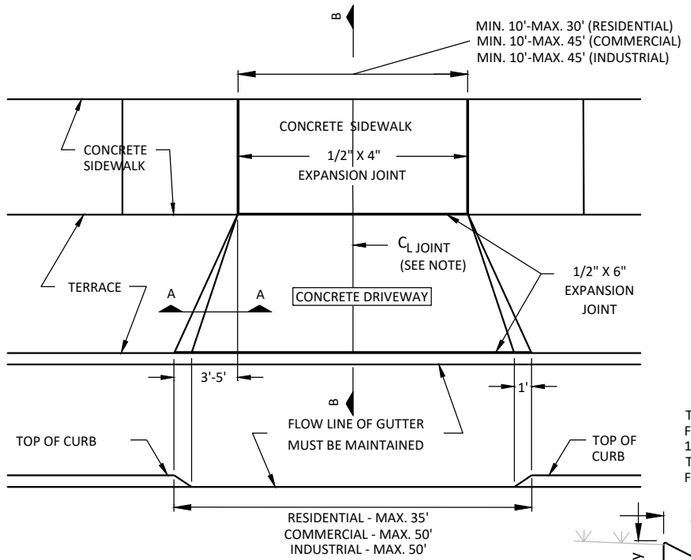
2



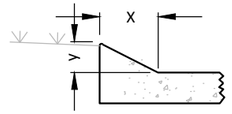


SECTION "A - A"

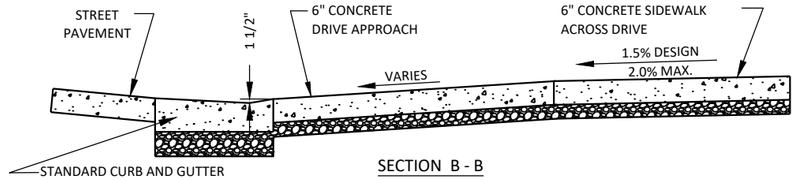
NOTES:
1. MAXIMUM SLOPE ON PAD SHALL BE ± 1.5%
2. PAD WIDTH SHALL BE 6' MIN.
3. NON SLIP SURFACE REQUIRED (BROOM FINISH)
4. ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS-SLOPE. CROSS-SLOPE SHALL NOT EXCEED 2.00%.



THE VALUE FOR X WILL VARY FROM 0" AT THE SIDEWALK TO 1' AT THE CURB.
THE VALUE FOR Y WILL VARY FROM 0" TO 6"



SECTION A - A



SECTION B - B

NOTES:
1. DRIVEWAYS 10' TO 20' WIDE SHALL HAVE ONE ℄ JOINT.
2. DRIVEWAYS 21' TO 30' WIDE SHALL HAVE TWO ℄ JOINTS EQUALLY SPACED.
3. DRIVEWAYS 31-40' WIDE SHALL HAVE THREE ℄ JOINTS EQUALLY SPACED.
4. 1/2" X 6" EXPANSION JOINT AT THE FACE OF WALK AND BACK OF CURB IS REQUIRED ONLY FOR CONCRETE DRIVE APPROACH.
5. FLARE WIDTH = 3' MIN. TO 5' MAX.
6. 8" CONCRETE ALLOWED FOR APPROACH AND SIDEWALK FOR HEAVY TRAFFIC.
7. 4" OF DENSE AGGREGATE BASE (3/4" OR 1-1/4") REQUIRED UNDER APPROACH AND SIDEWALK
8. 6" MINIMUM OF DENSE AGGREGATE BASE (1-1/4") REQUIRED UNDER CURB AND GUTTER.
9. THE ENTIRE CURB AND GUTTER SHALL BE REMOVED AND REPLACED FOR THE WIDTH OF THE DRIVE APPROACH. SAWCUTTING OF THE HEAD (ONLY) IS NOT ALLOWED.
10. MAINTAIN A MIN 5-FEET BETWEEN CURB AND GUTTER JOINTS.

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CONSTRUCTION DETAIL	SHEET 17	E

2

GENERAL NOTES:

1) ALL ITEMS ASSOCIATED WITH LIGHTING REMOVALS ARE SHOWN IN THE LIGHTING PLAN.
2) ALL ITEMS ASSOCIATED WITH STORM SEWER REMOVALS ARE SHOWN IN THE STORM SEWER PLANS.
3) ALL ITEMS ASSOCIATED WITH SANITARY SEWER REMOVALS ARE SHOWN IN THE SANITARY SEWER PLANS.
4) ALL ITEMS ASSOCIATED WITH WATERMAIN REMOVALS ARE SHOWN IN THE WATERMAIN PLANS.
5) ALL ITEMS ASSOCIATED WITH THE TRAFFIC SIGNALS ARE SHOWN IN THE TRAFFIC SIGNAL PLANS.
6) THE LOCATION OF THE EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN, INCLUDING BUILDING SERVICES AND LATERALS.
7) REMOVAL PLANS DO NOT INCLUDE REMOVAL OF TEMPORARY PAVEMENT. SEE THE TRAFFIC CONTROL PLAN.

REMOVAL LEGEND

REMOVING CONCRETE PAVEMENT

REMOVING ASPHALTIC SURFACE

REMOVING CONCRETE SIDEWALK

REMOVING CURB & GUTTER

. XXXX . SAWING PAVEMENT

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	REMOVAL PLANS	SHEET 18	E

2

2

MOUNTAIN AVENUE

W. ST PAUL AVENUE

W. ST PAUL AVENUE

W. NORTH STREET

WISCONSIN AVENUE

WISCONSIN AVENUE

202+00

103+00

104+00

105+00

106+00

107+00

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	REMOVAL PLANS	SHEET 19	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021100-RM.DWG
LAYOUT NAME - 021101-rm

PLOT DATE : 11/12/2021 3:46 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

W. W. NORTH STREET

W. ST PAUL AVENUE

W. ST PAUL AVENUE

108+00 109+00 110+00 111+00 112+00 113+00

XXXX XXXX XXXX XXXX XXXX XXXX

SS OH FO GUY POST WV SIGN OUT IP

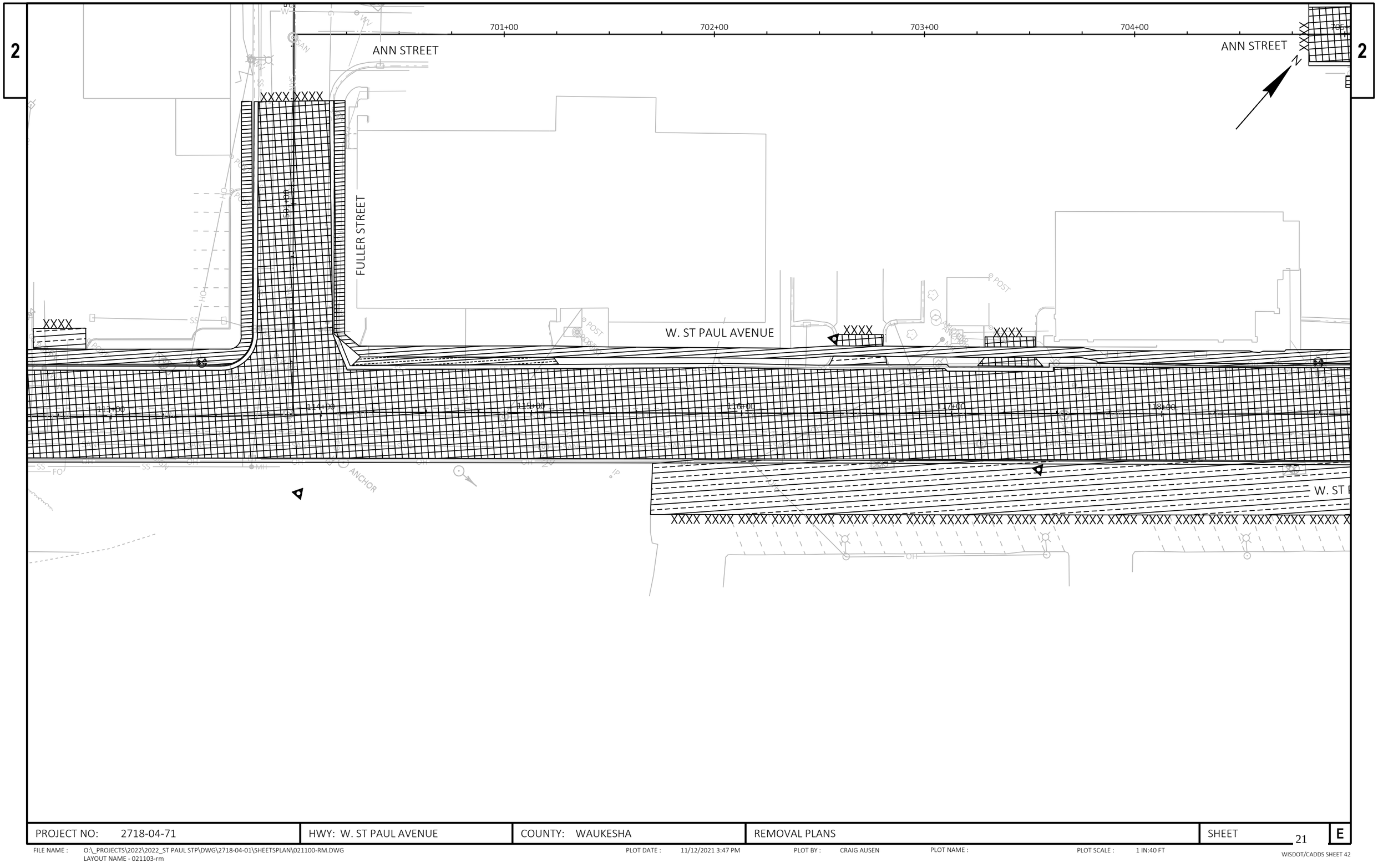
N

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	REMOVAL PLANS	SHEET 20	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021100-RM.DWG
LAYOUT NAME - 021102-rm

PLOT DATE : 11/12/2021 3:46 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42



PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	REMOVAL PLANS	SHEET 21	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021100-RM.DWG
LAYOUT NAME - 021103-rm

PLOT DATE : 11/12/2021 3:47 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

4+00

ANN STREET

105+00

E MADISON STREET

STEPS TO REMAIN

E. ST PAUL AVENUE

XXXX

118+00

119+00

120+00

121+00

122+00

W. ST PAUL AVENUE

XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX

MADISON STREET

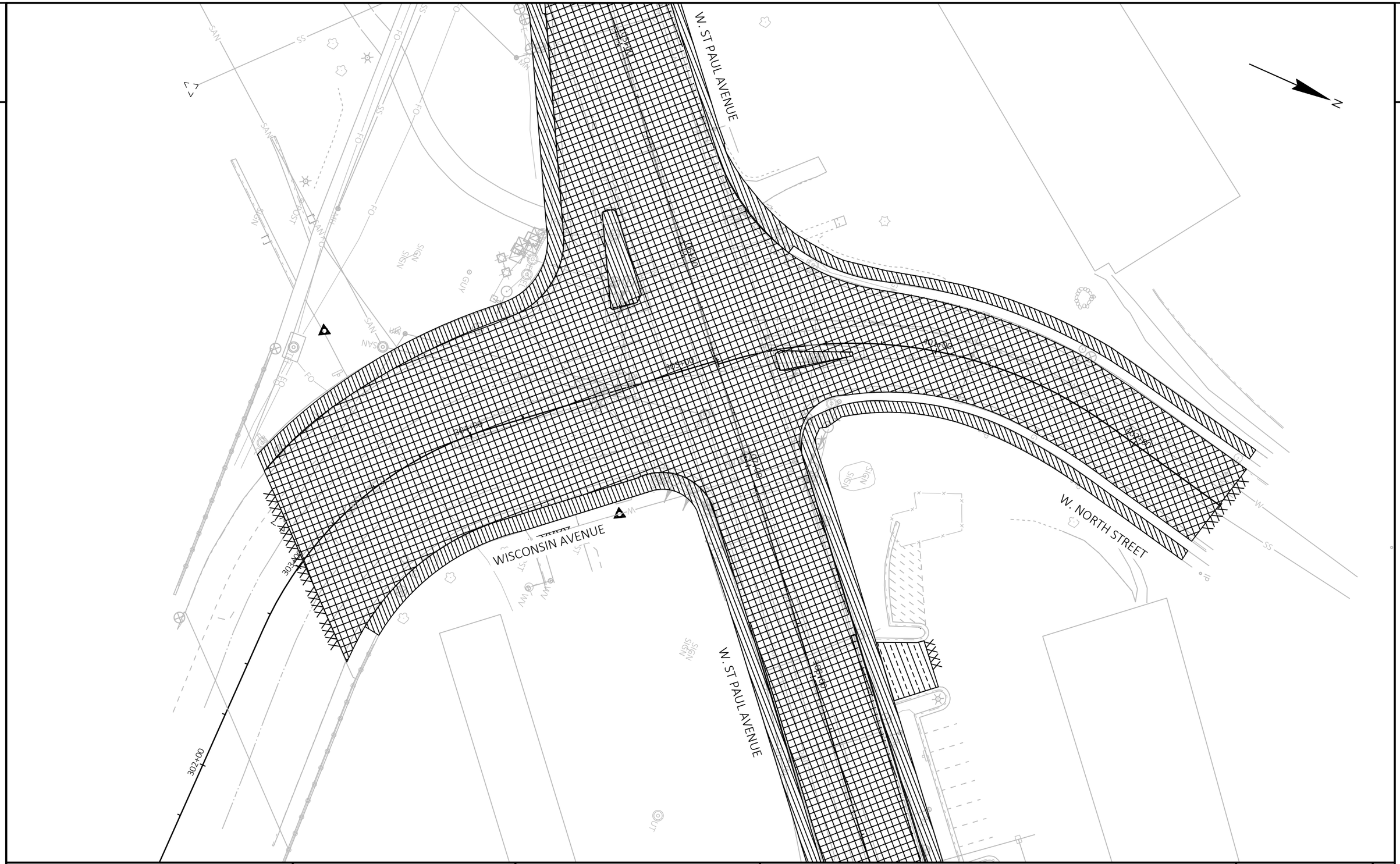
19TH STREET

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	REMOVAL PLANS	SHEET 22	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021100-RM.DWG
LAYOUT NAME - 021104-rm

PLOT DATE : 11/12/2021 3:47 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	REMOVAL PLANS	SHEET 23	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021100-RM.DWG
LAYOUT NAME - 021105-rm

PLOT DATE : 11/12/2021 3:47 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

W ST PAUL AVENUE

ANN STREET

MADISON STREET

MADISON STREET

E. ST PAUL AVENUE

STEPS TO REMAIN

N

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	REMOVAL PLANS	SHEET 24	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021100-RM.DWG
LAYOUT NAME - 021106-rm

PLOT DATE : 11/12/2021 3:48 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

CP01 CONCRETE PAVEMENT 9.5-INCH, DOWELED

AP01 HMA PAVEMENT 3 LT 58-28 S, 3-INCH
HMA PAVEMENT 5 LT 58-28 S, 2-INCH

CG01 CONCRETE CURB AND GUTTER 30-INCH TYPE A
CG02 CONCRETE CURB AND GUTTER 18-INCH TYPE D

CR02 CURB RAMP TYPE 2
CR03 CURB RAMP TYPE 3
CR04 CURB RAMP TYPE 4A
CR05 CURB RAMP TYPE 4B1

PV01 CONCRETE APPROACH SLAB

SW01 CONCRETE SIDEWALK 4-INCH
SW02 BUS STOP - CONCRETE SIDEWALK 4-INCH
SW03 PEDESTRIAN CURB

DW01 CONCRETE DRIVEWAY 7-INCH
DW02 CONCRETE DRIVEWAY 8-INCH

PROPOSED INLET
PROPOSED MANHOLE

PROJECT NO: 2718-04-01	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PLAN DETAILS - LEGEND	SHEET 25	E

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
1	102+70.98 202+58.38	31.47 LT 22.10 RT	10'
2	103+32.39 202+72.68	51.01 LT 42.00 LT	30'

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
4	105+81.89 400+58.75	81.00 LT 81.00 LT	60'
5	107+11.92 400+68.65	51.00 LT 52.00 RT	30'
6	105+98.83 304+53.93	62.00 RT 51.00 LT	30'
7	107+17.83 304+64.60	52.00 RT 68.00 RT	30'

BEGIN CONSTRUCTION
STA 202+00.00

BEGIN PROJECT
STA 102+00.00

MOUNTAIN AVENUE

W. ST PAUL AVENUE

W. NORTH STREET

WISCONSIN AVENUE

EXIST R/W

TLE

SI

CP01 CG01 SW01 CR05 CR03 CR02

202+00 203+00 102+00 103+00 104+00 105+00 106+00 107+00 400+00 401+00 402+00 304+00 305+00

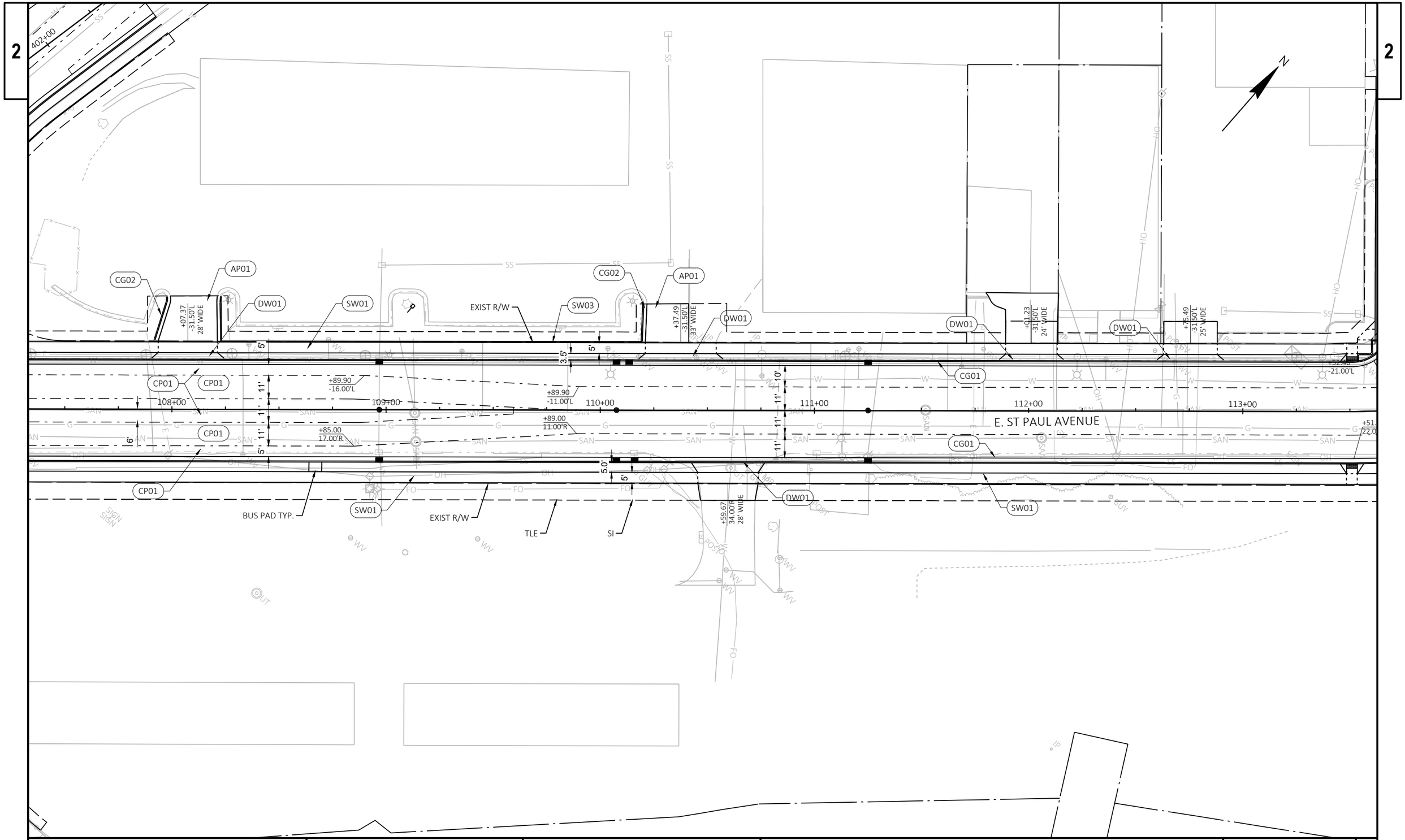
+44.32 -12.00'L
+44.32 12.00'R
+10.00 -23.50'L
+35.00 -21.00'L
+70.95 -21.00'L
+32.80 -21.00'L
+61.49 1.64'R
+32.64 22.50'R
+38.31 -5.00'L
+38.31 6.00'R
+38.20 32.00'R
+81.89 -21.00'L
+98.05 32.01'R
+53.98 -21.00'L
+58.75 -21.00'L
+66.60 22.12'R
+63.83 38.01'R
+11.92 -21.00'L
+18.60 22.01'R

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PLAN DETAILS W. ST PAUL AVENUE	SHEET 26	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021201-pd

PLOT DATE : 10/7/2021 11:01 AM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42



PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PLAN DETAILS W. ST PAUL AVENUE	SHEET 27	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021202-pd

PLOT DATE : 10/7/2021 11:04 AM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

END CONSTRUCTION
STA 501+49.12

701+00 702+00 703+00 704+00 705+00

FULLER STREET

501+00

W. ST PAUL AVENUE

114+00 115+00 116+00 117+00 118+00 119+00

EXIST R/W

SI

TLE

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
1	113+52.73 500+37.71	39.01 LT 35.00 LT	18'
2	114+21.63 500+38.82	38.00 LT 35.00 RT	18'

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PLAN DETAILS W. ST PAUL AVENUE	SHEET 28	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021203-pd

PLOT DATE : 10/7/2021 11:06 AM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

ANN STREET

MADISON STREET

E. ST PAUL AVENUE

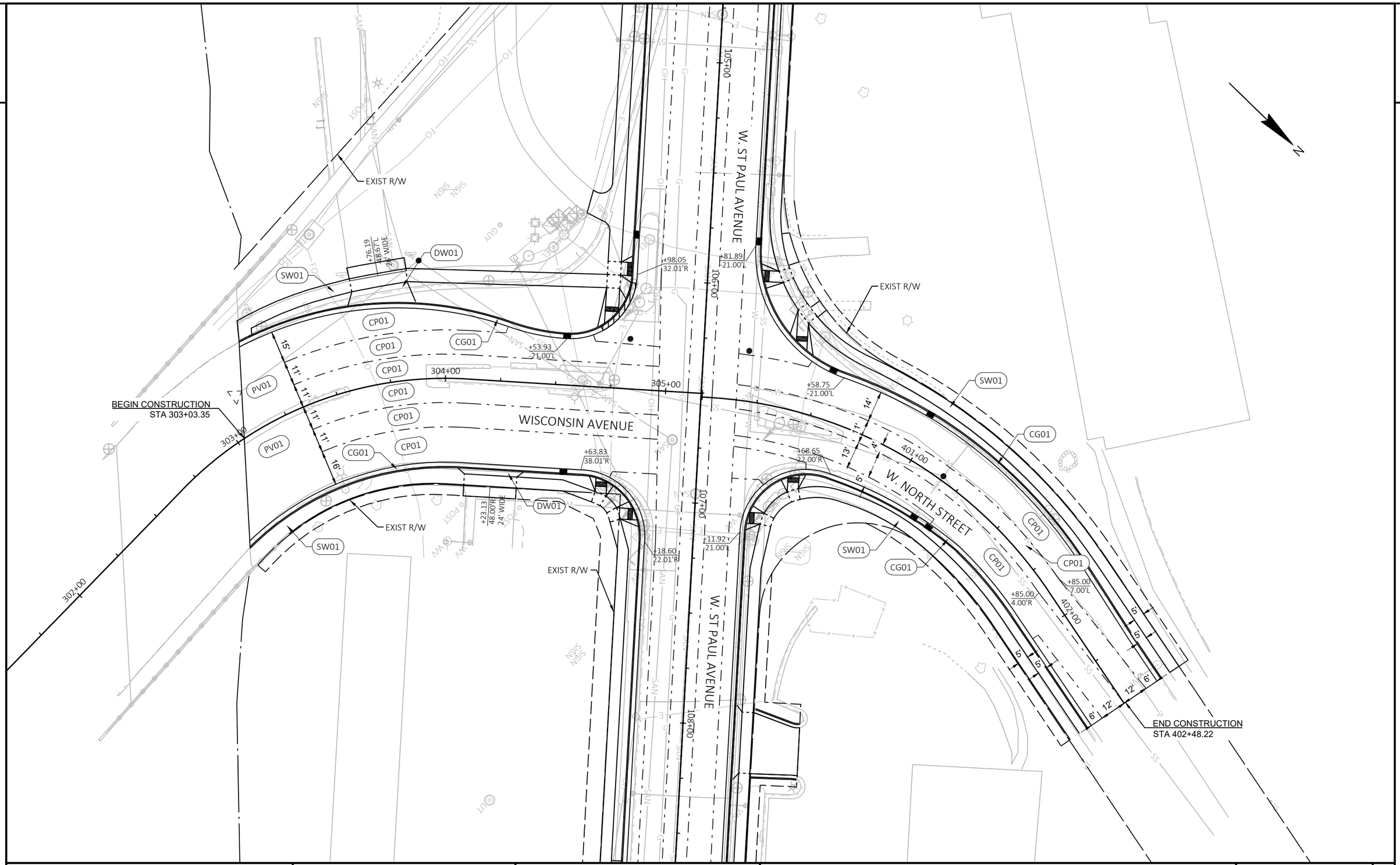
END PROJECT
STA 122+45.00

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
1	119+48.31 603+74.14	52.60 LT 53.00 LT	30'
2	120+55.10 603+35.52	43.00 LT 47.00 RT	25'
3	119+83.08 602+68.82	47.00 RT 47.00 LT	25'
4	120+80.88 602+41.75	47.16 RT 47.00 RT	25'

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PLAN DETAILS W. ST PAUL AVENUE	SHEET 29	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021204-pd
PLOT DATE : 10/7/2021 1:05 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

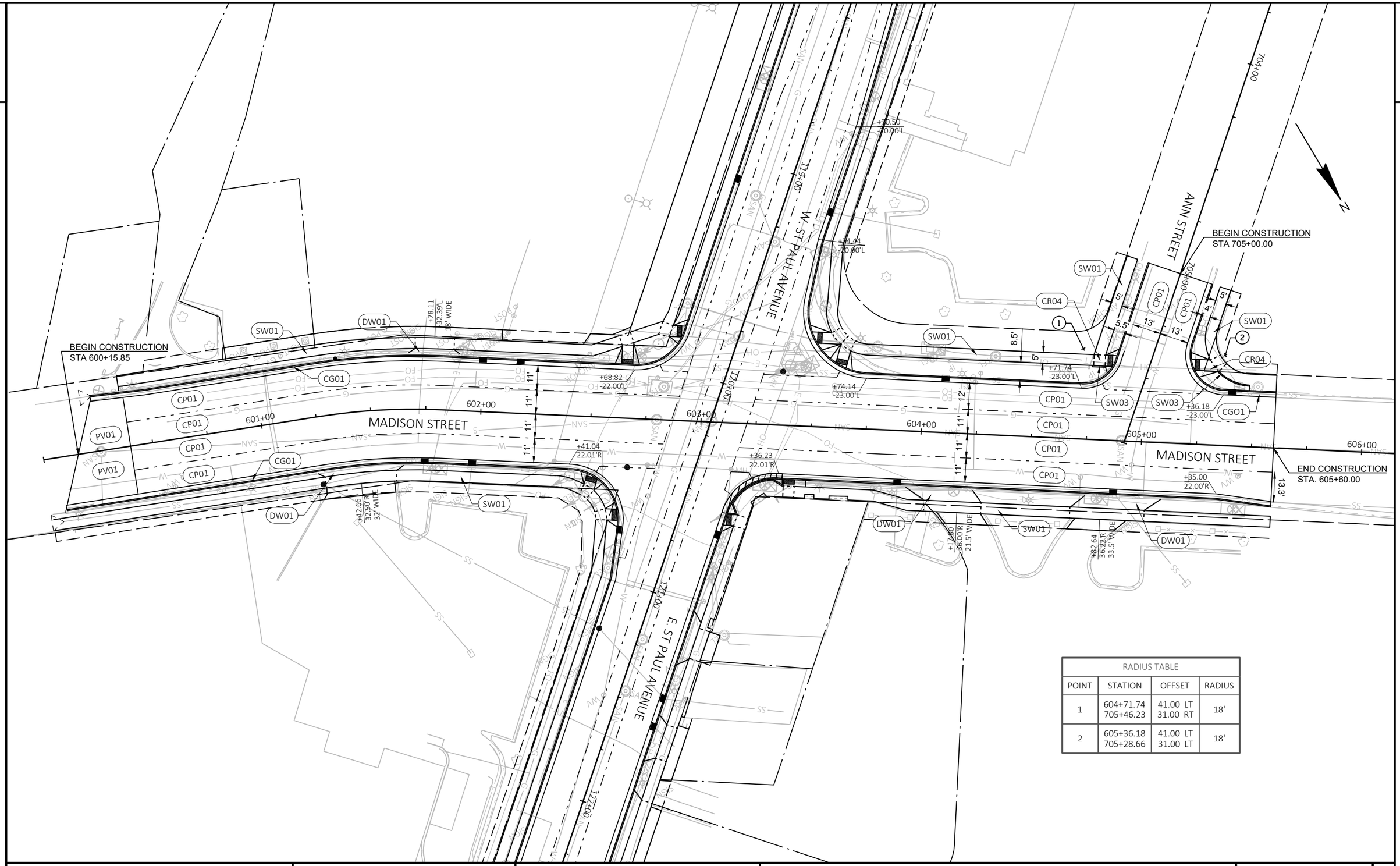
2



PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PLAN DETAILS E. NORTH STREET	SHEET 30	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021205-pd
PLOT DATE : 10/7/2021 1:06 PM
PLOT BY : CRAIG AUSEN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



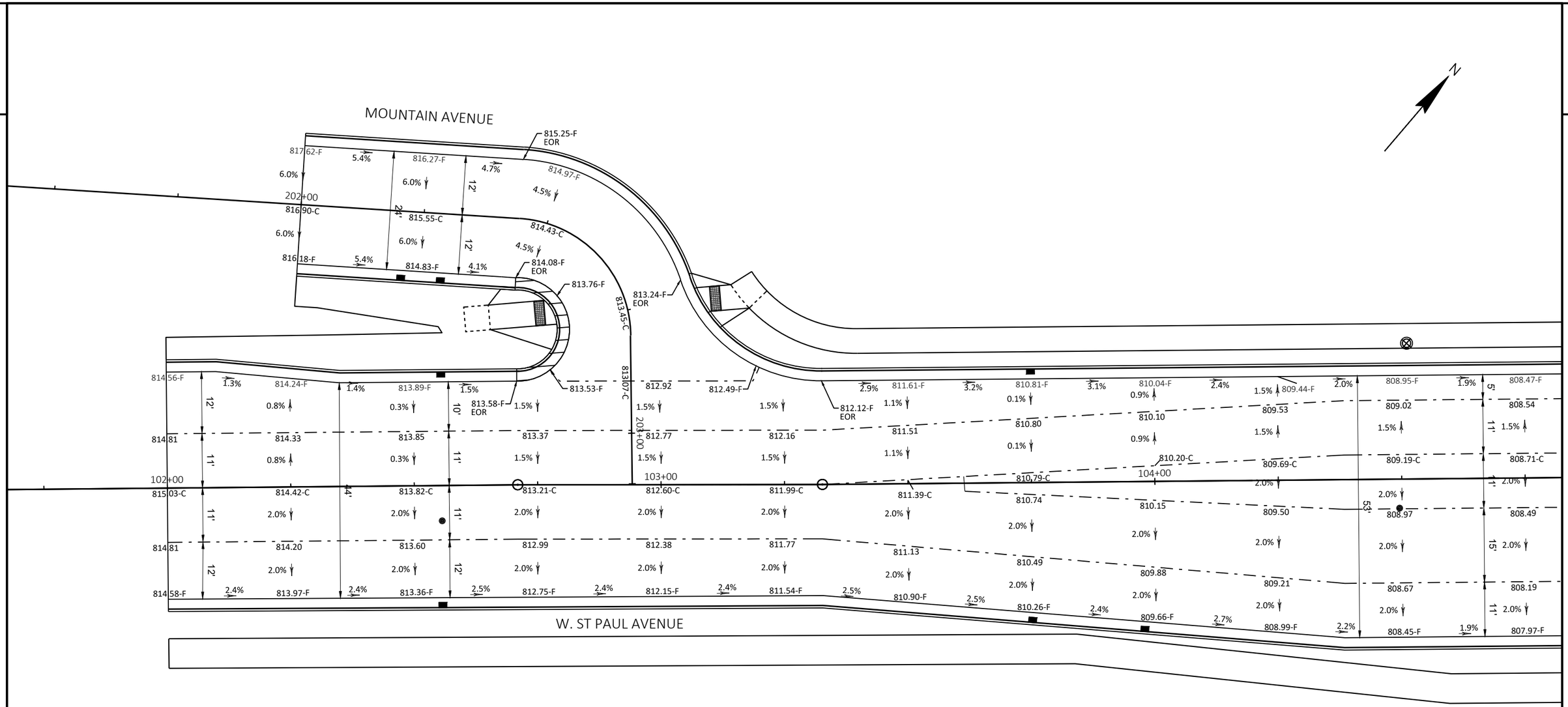
RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
1	604+71.74 705+46.23	41.00 LT 31.00 RT	18'
2	605+36.18 705+28.66	41.00 LT 31.00 LT	18'

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PLAN DETAILS MADISON STREET	SHEET 31	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021206-pd

PLOT DATE : 10/7/2021 1:06 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

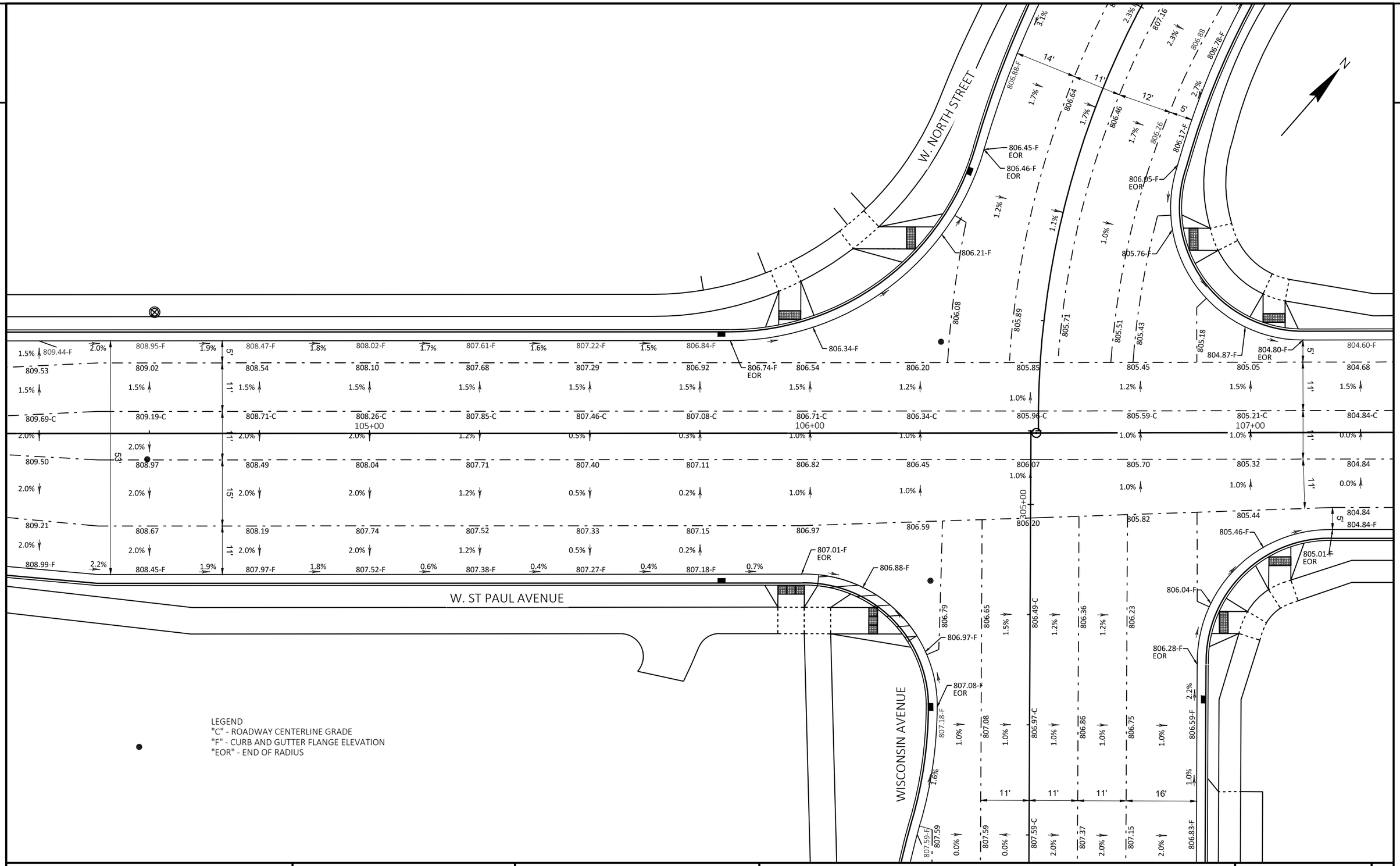
2



LEGEND
"C" - ROADWAY CENTERLINE GRADE
"F" - CURB AND GUTTER FLANGE ELEVATION
"EOR" - END OF RADIUS

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PAVING GRADES	SHEET 32	E

2

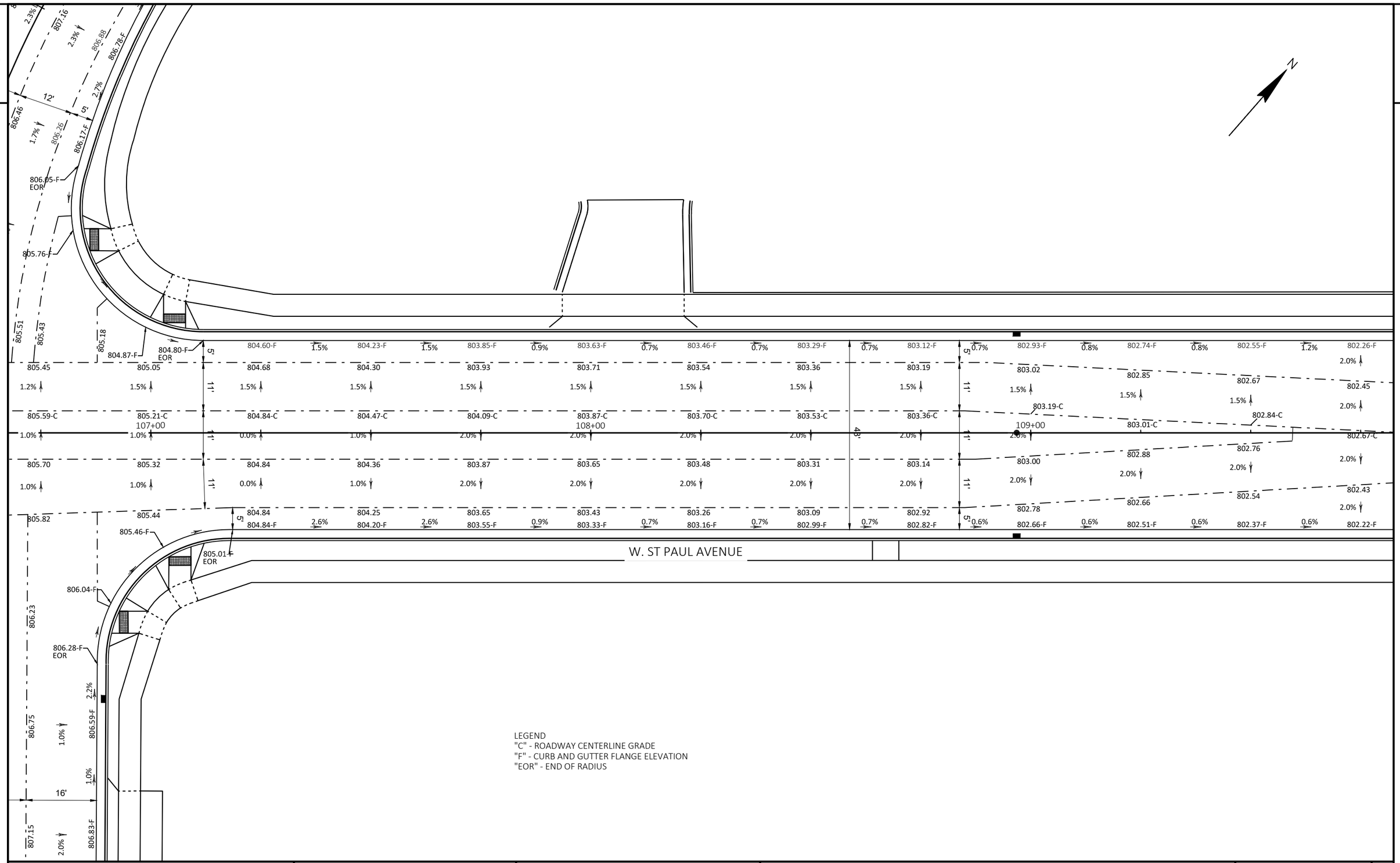


PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PAVING GRADES	SHEET 33	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021250-PG.DWG
LAYOUT NAME - 021252-pg

PLOT DATE : 10/7/2021 1:10 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

2



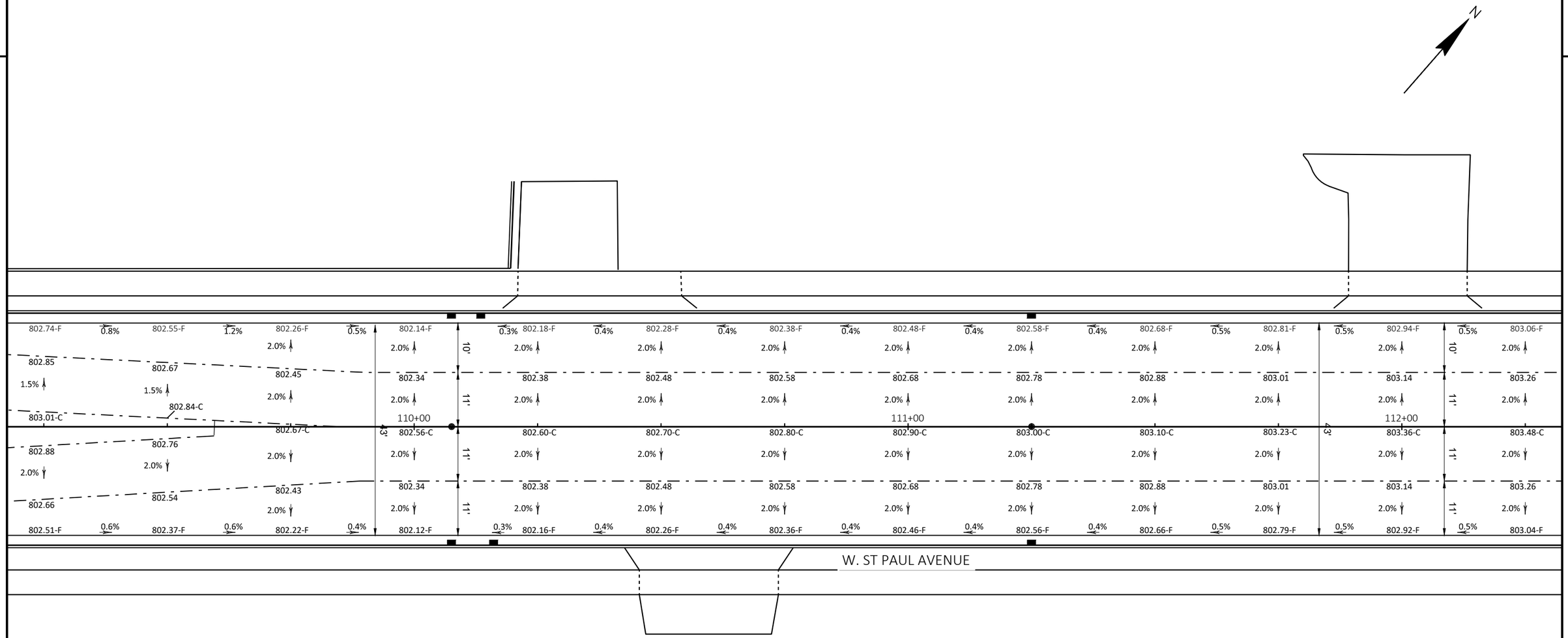
LEGEND
"C" - ROADWAY CENTERLINE GRADE
"F" - CURB AND GUTTER FLANGE ELEVATION
"EOR" - END OF RADIUS

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PAVING GRADES	SHEET 34	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021250-PG.DWG
LAYOUT NAME - 021253-pg

PLOT DATE : 10/7/2021 1:11 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

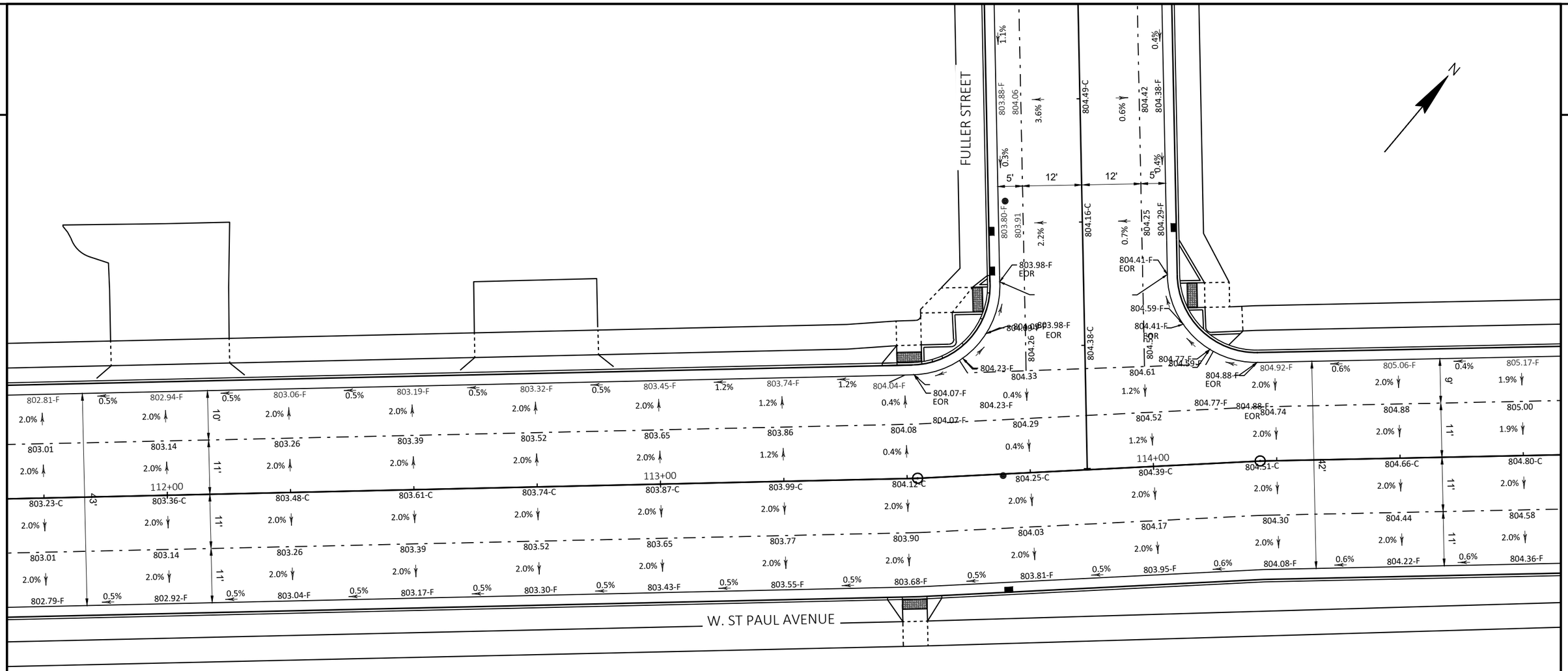
2



LEGEND
"C" - ROADWAY CENTERLINE GRADE
"F" - CURB AND GUTTER FLANGE ELEVATION
"EOR" - END OF RADIUS

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PAVING GRADES	SHEET 35	E

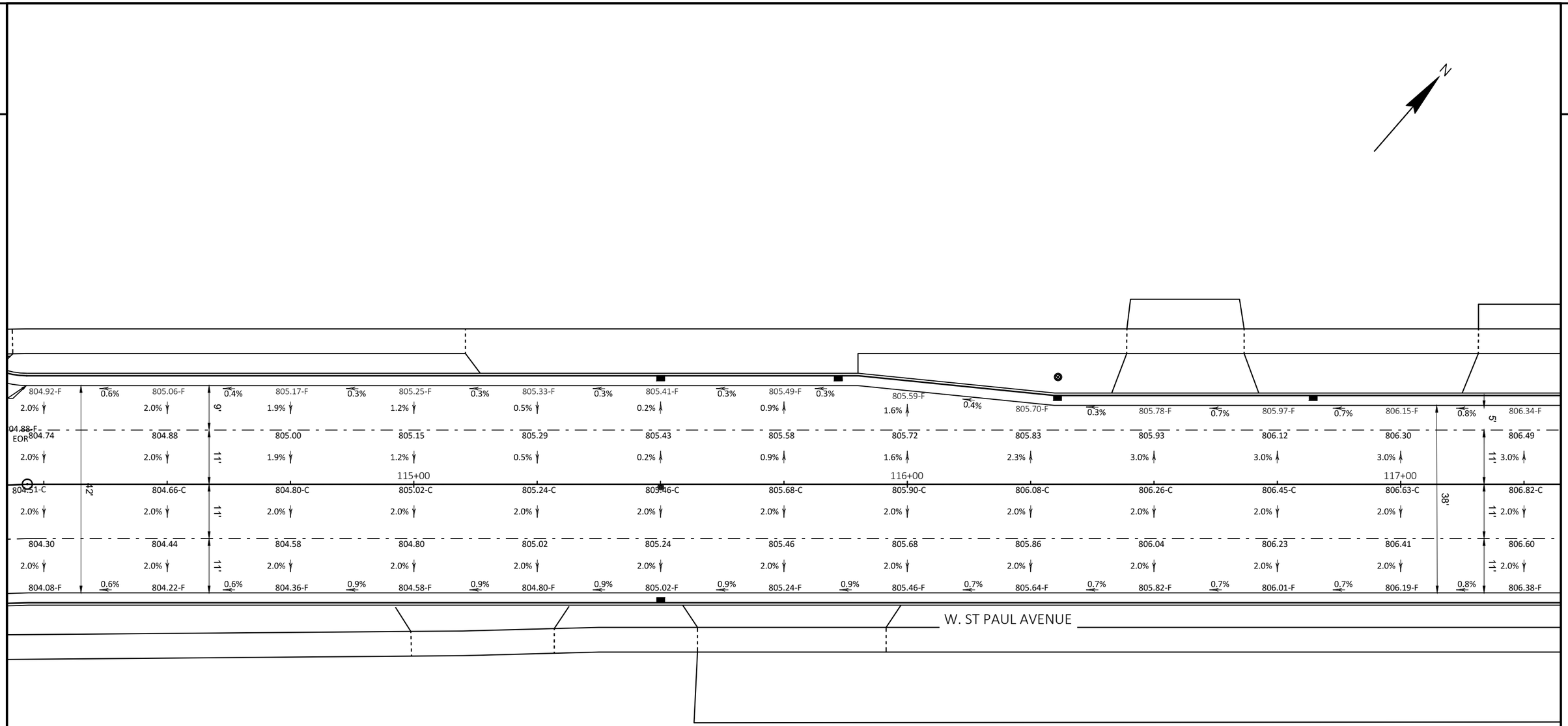
2



LEGEND
"C" - ROADWAY CENTERLINE GRADE
"F" - CURB AND GUTTER FLANGE ELEVATION
"EOR" - END OF RADIUS

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PAVING GRADES	SHEET 36	E

2



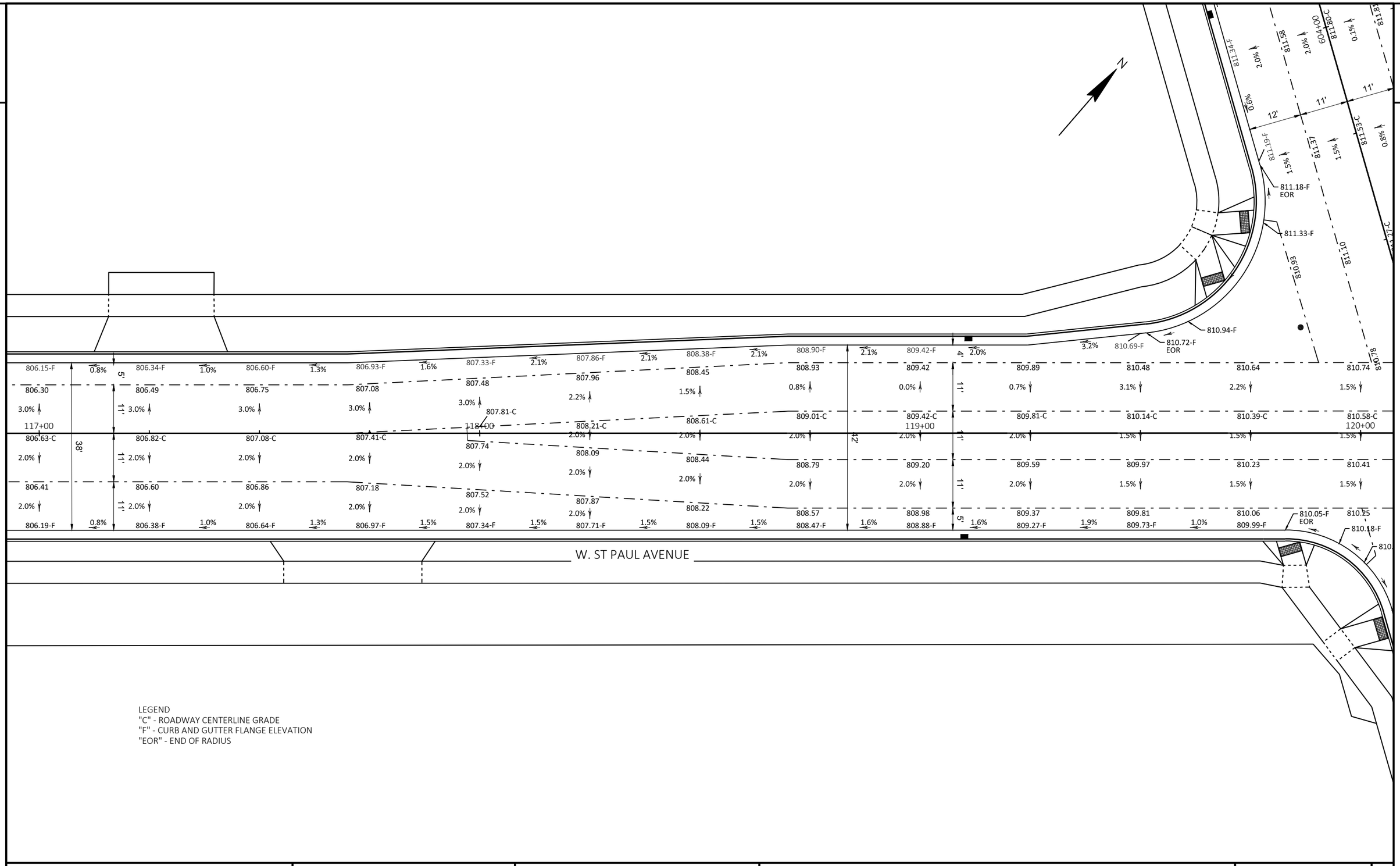
LEGEND
"C" - ROADWAY CENTERLINE GRADE
"F" - CURB AND GUTTER FLANGE ELEVATION
"EOR" - END OF RADIUS

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PAVING GRADES	SHEET 37	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021250-PG.DWG
LAYOUT NAME - 021256-pg

PLOT DATE : 10/7/2021 1:12 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

2



LEGEND
"C" - ROADWAY CENTERLINE GRADE
"F" - CURB AND GUTTER FLANGE ELEVATION
"EOR" - END OF RADIUS

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PAVING GRADES	SHEET 38	E

2

MADISON STREET

E. ST PAUL AVENUE

MADISON STREET

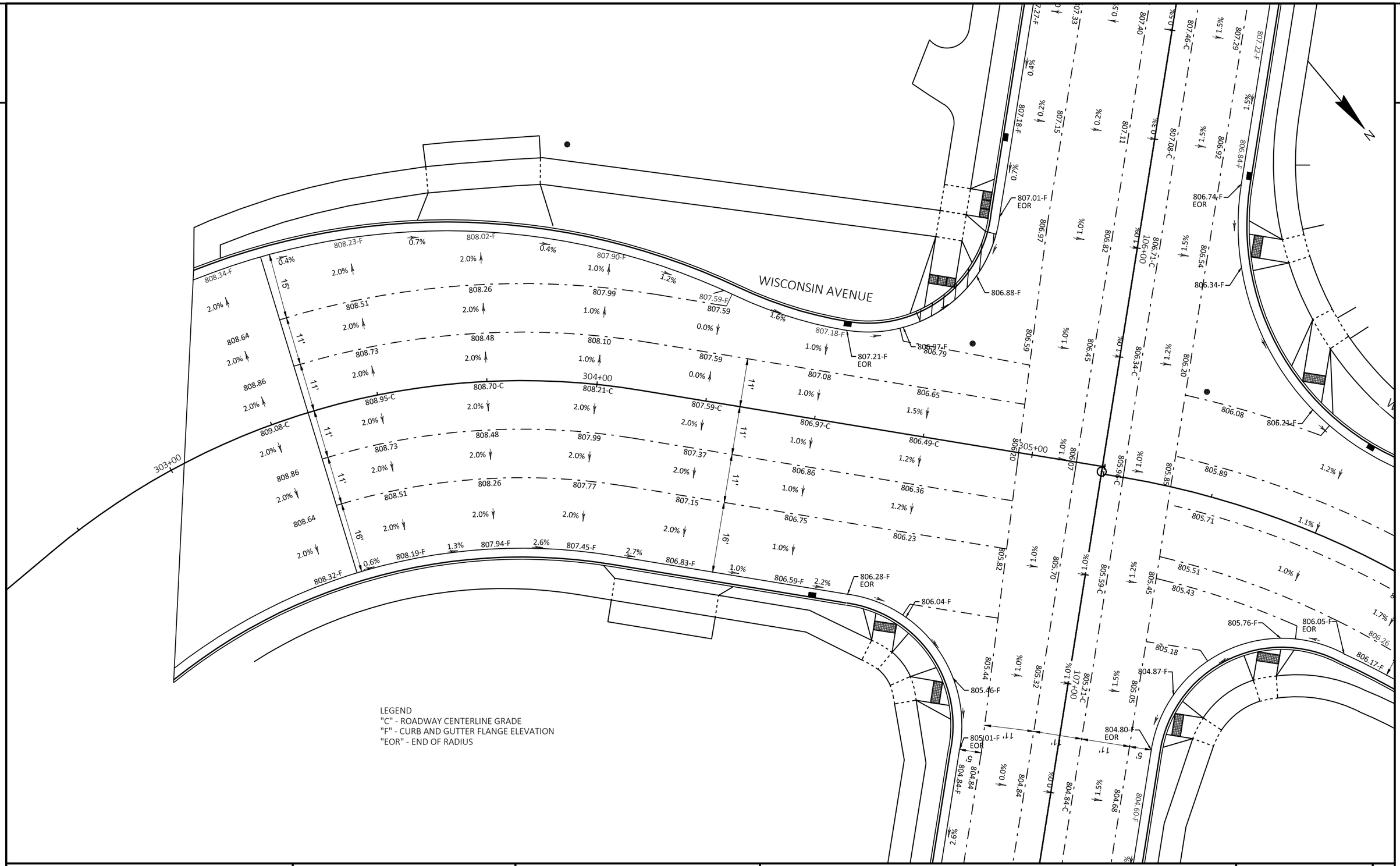
LEGEND
"C" - ROADWAY CENTERLINE GRADE
"F" - CURB AND GUTTER FLANGE ELEVATION
"EOR" - END OF RADIUS

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PAVING GRADES	SHEET 39	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021250-PG.DWG
LAYOUT NAME - 021258-pg

PLOT DATE : 10/7/2021 1:14 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

2



PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PAVING GRADES	SHEET 40	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021250-PG.DWG
LAYOUT NAME - 021259-pg
PLOT DATE : 10/7/2021 1:15 PM
PLOT BY : CRAIG AUSEN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

N

W. NORTH STREET

LEGEND
"C" - ROADWAY CENTERLINE GRADE
"F" - CURB AND GUTTER FLANGE ELEVATION
"EOR" - END OF RADIUS

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PAVING GRADES	SHEET 41	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021250-PG.DWG
LAYOUT NAME - 021260-pg

PLOT DATE : 10/7/2021 1:15 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

W. ST PAUL AVENUE

FULLER STREET

113+00 114+00

501+00 502+00

804.38-C 804.16-C 804.49-C 804.82-C 805.15-C 805.46-C

804.07-F 804.23-F 804.09-F 804.26 803.98-F EOR 804.41-F EOR 804.59-F 804.77-F 804.88-F EOR

803.80-F 803.91 803.88-F 804.06 804.16-F 804.35 804.48-F 804.68 804.80-F 804.99

804.55 804.25 804.42 804.58 804.91 805.22

804.29-F 804.38-F 804.48-F 804.81-F 805.12-F

804.39-C 804.51-C 804.66-C 804.80-C

804.03-F 803.81-F 803.95-F 804.08-F 804.22-F 804.36-F

804.04 804.29 804.33 804.17 804.52 804.61 804.30 804.44 804.58 804.74 804.88 805.00 804.92-F 805.06-F 805.17-F

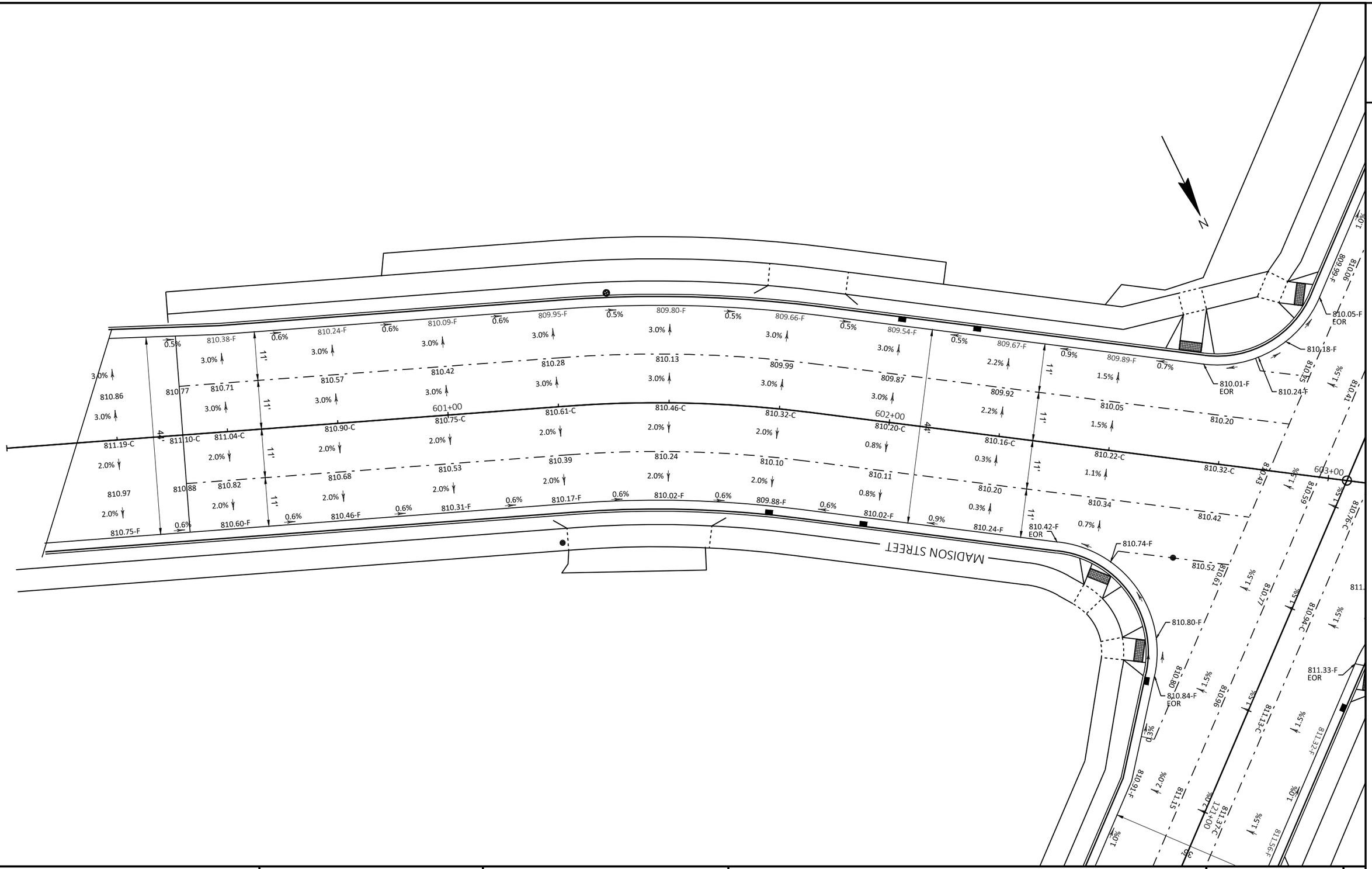
803.65 803.43-F 803.87-C 803.65 803.45-F 803.55-F 803.77 803.99-C 803.86 803.74-F 803.68-F 803.90 804.12-C 804.08 804.25-C

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PAVING GRADES	SHEET 42	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021250-PG.DWG
LAYOUT NAME - 021261-pg

PLOT DATE : 10/7/2021 1:15 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

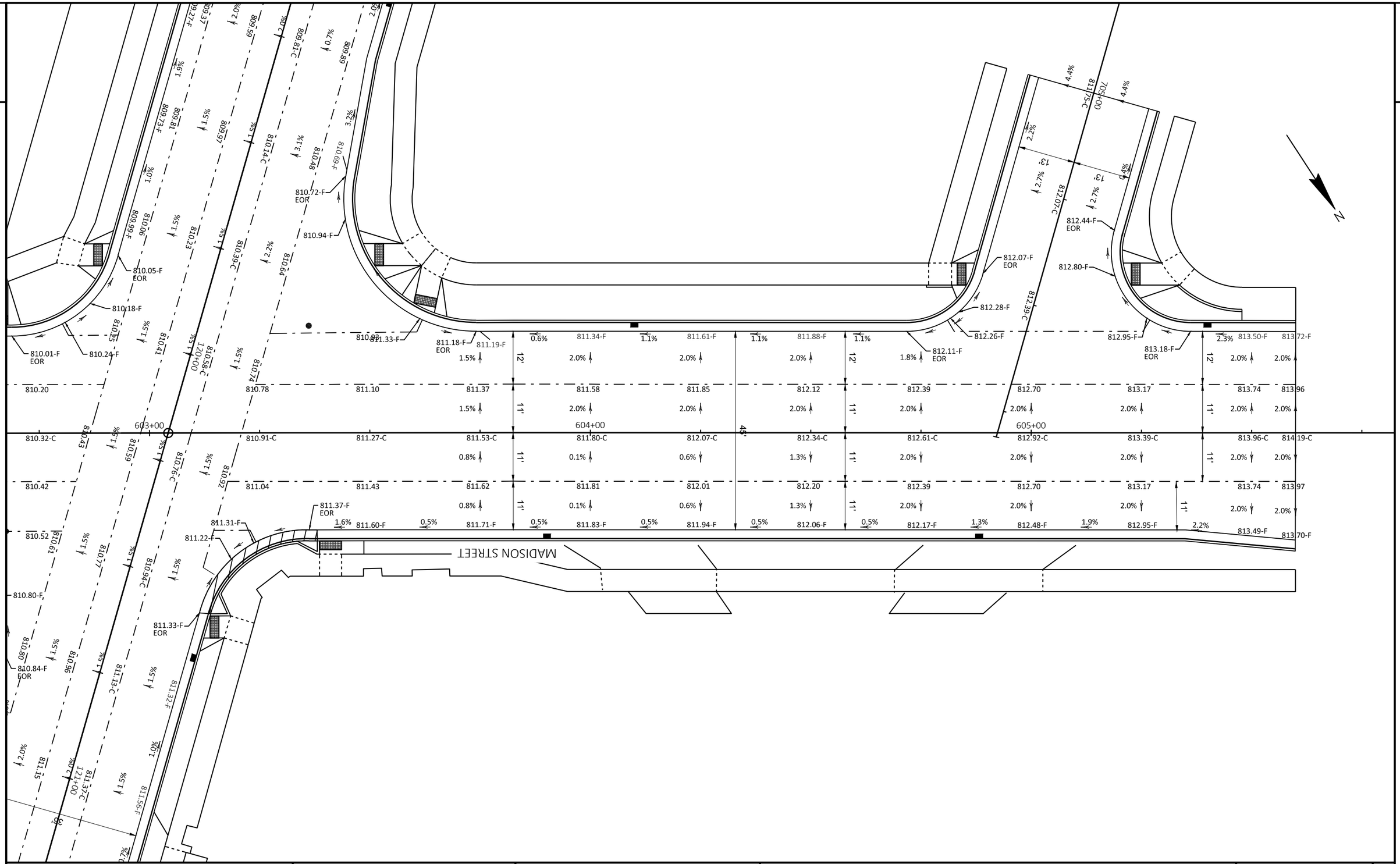


PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PAVING GRADES	SHEET 43	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021250-PG.DWG
LAYOUT NAME - 021262-pg

PLOT DATE : 10/7/2021 1:16 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

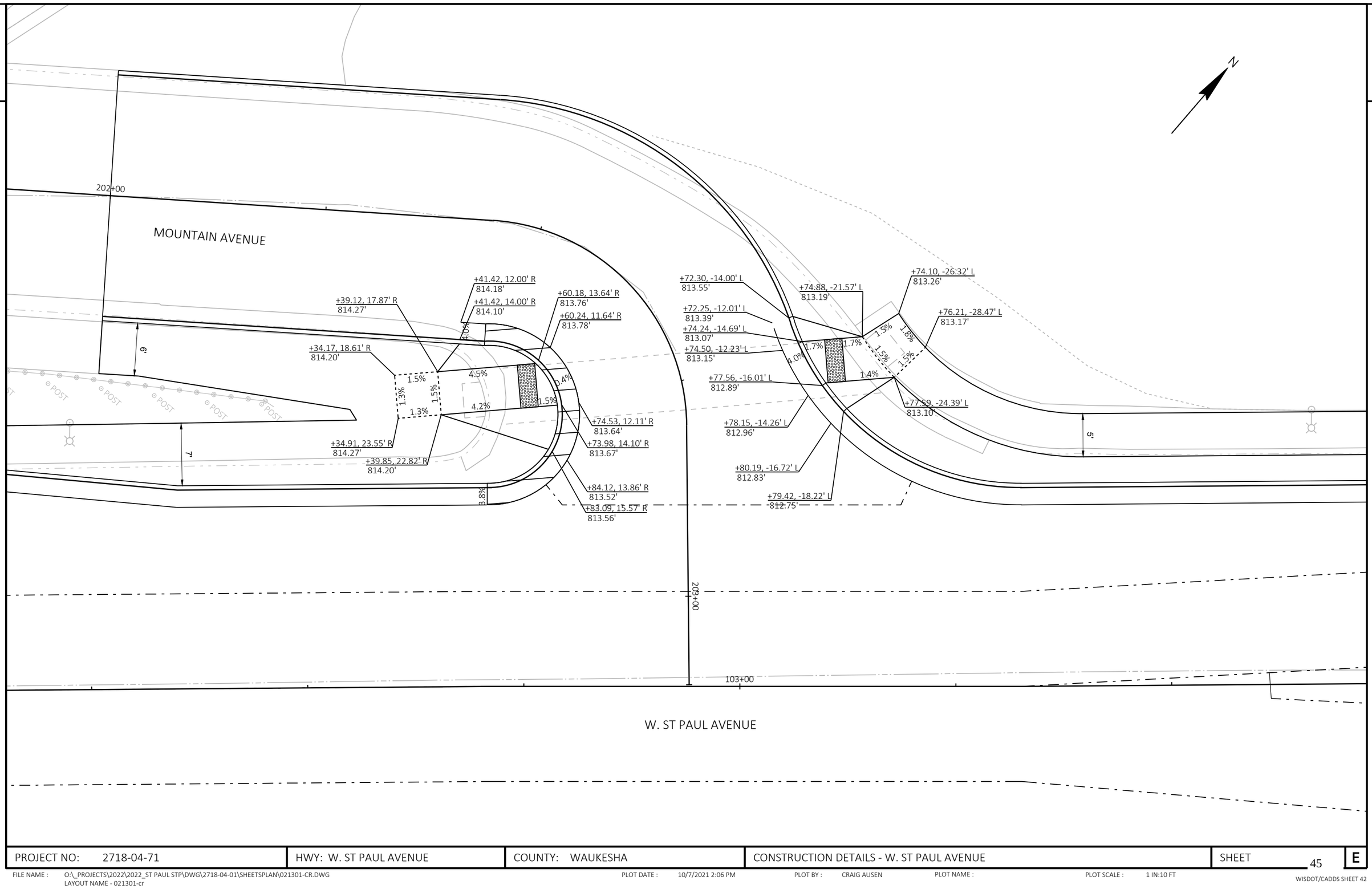


PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PAVING GRADES	SHEET 44	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021250-PG.DWG
LAYOUT NAME - 021263-pg

PLOT DATE : 10/7/2021 1:16 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

2



PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CONSTRUCTION DETAILS - W. ST PAUL AVENUE	SHEET 45 E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 021301-cr

PLOT DATE : 10/7/2021 2:06 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:10 FT

106+00

107+00

W. ST PAUL AVENUE

305+00

WISCONSIN AVENUE

+92.70, 32.00' R
807.05'

+92.70, 34.00' R
806.97'

+89.71, 32.00' R
807.12'

+89.71, 34.00' R
807.01'

+98.68, 32.00' R
807.00'

+98.69, 34.00' R
806.92'

+98.68, 39.50' R
807.26'

+01.95, 32.16' R
806.97'

+01.74, 34.15' R
806.89'

+76.43, -45.26' L
807.20'

+81.78, -39.85' L
806.90'

+79.92, -40.59' L
806.82'

+78.50, -33.79' L
806.90'

+76.86, -34.93' L
806.82'

+70.76, -28.63' L
806.86'

+71.96, -27.03' L
806.94'

+92.68, 39.48' R
807.32'

+92.66, 45.48' R
807.41'

+98.66, 45.49' R
807.35'

+70.43, -51.25' L
807.35'

+70.43, -45.25' L
807.29'

+68.69, -24.88' L
806.96'

+67.71, -26.63' L
806.88'

4.0%
7.0%
6.8%
1.1%
1.0%
1.0%
3.8%
1.5%
1.5%
4.0%
1.1%
1.0%
1.0%
3.3%
1.5%
4.0%
3.8%
6'

+02.88, 25.99' R
805.46'

+03.88, 27.72' R
805.38'

+00.80, 29.77' R
805.51'

+99.58, 28.18' R
805.59'

+08.32, 23.54' R
805.29'

+08.96, 25.44' R
805.21'

+11.60, 22.65' R
805.20'

+12.01, 24.61' R
805.12'

+09.12, 33.45' R
805.64'

+10.72, 38.16' R
805.72'

+06.74, 39.82' R
805.77'

+73.40, 53.68' R
806.13'

+69.45, 52.18' R
806.19'

+70.92, 47.43' R
806.11'

+80.21, 42.38' R
805.95'

+79.17, 44.08' R
805.87'

+76.92, 40.65' R
806.06'

+76.10, 42.47' R
805.98'

+71.46, 38.79' R
806.15'

+71.00, 40.74' R
806.07'

+68.18, 38.21' R
806.21'

+67.95, 40.20' R
806.13'

+04.04, 35.62' R
805.70'

+75.93, 49.37' R
806.05'

4.0%
7.5%
4.2%
1.5%
1.0%
1.5%
1.3%
5.2%
1.5%
7.8%
1.2%
4.0%
0.5%
0.6%
1.0%
1.5%
1.3%
1.6%
6.6%
6.6%
5'
1.0%
1.0%
5'

POST

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CONSTRUCTION DETAILS - W. ST PAUL AVENUE	SHEET 46	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 021302-cr

PLOT DATE : 10/7/2021 2:06 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

N

W. NORTH STREET

5'

+41.61, -44.29' L
806.88'

+43.90, -26.10' L
806.12'

+43.26, -24.24' L
806.20'

+39.18, -40.24' L
806.81'

+40.93, -27.55' L
806.13'

+40.17, -25.75' L
806.21'

+37.09, -48.82' L
806.81'

+35.00, -29.10' L
806.23'

+35.96, -30.77'' L
806.15'

+34.32, -45.18' L
806.73'

+31.91, -31.71' L
806.25'

+32.99, -33.27' L
806.17'

+97.94, -34.47' L
806.94'

+95.69, -38.93' L
807.01'

+91.02, -36.80' L
807.05'

+92.93, -32.12' L
806.82'

+01.07, -26.27' L
806.26'

+01.74, -24.38' L
806.34'

+98.05, -25.30' L
806.30'

+98.60, -23.38' L
806.38'

+89.97, -23.57' L
806.48'

+90.25, -21.59' L
806.56'

+93.00, -24.07' L
806.42'

+93.38, -22.11' L
806.50'

+56.46, 25.77' R
805.73'

+55.73, 23.87' R
805.81'

+53.16, 26.89' R
805.68'

+52.23, 25.07' R
805.76'

+55.21, 33.27' R
805.81'

+58.06, 37.69' R
805.88'

+53.90, 40.02' R
805.83'

+49.87, 36.23' R
805.76'

+46.50, 27.76' R
805.68'

+47.78, 29.44' R
805.60'

+43.11, 29.87' R
805.55'

+44.60, 31.42' R
805.47'

+04.97, -36.04' L
805.25'

+08.83, -34.79' L
805.20'

+02.89, -31.49' L
805.18'

+07.90, -29.88' L
805.12'

+98.80, -24.02' L
804.87'

+99.68, -25.82' L
804.79'

+02.73, -24.55' L
804.77'

+02.07, -22.66' L
804.85'

+10.88, -23.02' L
804.72'

+10.80, -21.02' L
804.80'

+07.82, -23.30' L
804.74'

+07.53, -21.32' L
804.82'

SIGN

SIGN

106+00

107+00

W. ST PAUL AVENUE

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CONSTRUCTION DETAILS - W. ST PAUL AVENUE	SHEET 47	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 021303-cr
PLOT DATE : 10/7/2021 2:07 PM
PLOT BY : CRAIG AUSEN
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

FULLER STREET

114+00

W. ST PAUL STREET

+37.19, -28.89' L
804.17'

+37.20, -22.53' L
804.14'

+37.18, -19.00' L
803.93'

+37.11, -17.00' L
804.01'

+32.92, -33.17' L
804.15'

+54.39, -32.96' L
804.15'

+48.47, -32.00' L
804.14'

+48.47, -24.00' L
804.06'

+31.31, -18.17' L
804.09'

+32.02, -20.04' L
804.01'

+32.19, -26.73' L
804.07'

+26.06, -26.85' L
804.09'

+54.22, -26.99' L
804.13'

+54.17, -23.06' L
???'

+54.35, -21.07' L
???'

+45.47, -23.00' L
803.90'

+45.47, -21.00' L
803.98'

+48.47, -23.00' L
803.81'

+48.47, -21.00' L
803.80'

+47.19, 24.50' R
804.83'

+45.99, 19.50' R
804.75'

+37.19, 24.50' R
804.80'

+37.14, 19.09' R
804.36'

+37.19, 29.50' R
804.88'

+36.93, 17.10' R
804.44'

+32.19, 29.50' R
804.92'

+32.21, 31.97' R
805.06'

+31.13, 18.72' R
804.51'

+31.99, 20.53' R
804.43'

+32.19, 24.50' R
804.85'

+27.25, 32.09' R
804.99'

+27.38, 24.90' R
804.90'

+48.47, 22.00' R
803.61'

+48.47, 24.00' R
803.60'

+45.47, 22.00' R
803.66'

+45.47, 24.00' R
803.58'

+52.81, 21.99' R
803.64'

+52.80, 23.99' R
803.62'

+55.81, 21.99' R
???'

+55.81, 23.99' R
???'

+48.47, 29.02' R
803.91'

+52.67, 29.03' R
803.93'

+48.47, 34.00' R
803.98'

+52.50, 33.89' R
804.00'

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CONSTRUCTION DETAILS - W. ST PAUL AVENUE	SHEET 48	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 021304-cr
PLOT DATE : 10/7/2021 2:07 PM
PLOT BY : CRAIG AUSEN
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

UE

E. ST PAUL AVENUE

120+00

121+00

603+00

W. ST PAUL AVENUE

E. ST PAUL AVENUE

N

+80.89, 22.00' R
810.03'

+80.89, 24.00' R
809.95'

+77.77, 22.00' R
810.01'

+77.77, 24.00' R
809.93'

+86.49, 22.23' R
810.05'

+86.22, 24.21' R
809.97'

+90.19, 23.03' R
810.07'

+89.62, 24.95' R
809.99'

+82.47, 30.00' R
810.76'

+87.65, 29.95' R
810.84'

+82.16, 35.00' R
810.84'

+88.36, 34.94' R
810.91'

+70.95, -24.10' L
809.97'

+71.13, -22.11' L
810.05'

+67.90, -24.00' L
809.93'

+67.90, -22.00' L
810.01'

+67.90, -34.39' L
811.00'

+66.12, -39.06' L
811.07'

+62.88, -22.00' L
809.96'

+62.88, -24.00' L
809.88'

+59.88, -22.00' L
809.93'

+59.88, -24.00' L
809.85'

+61.12, -37.15' L
811.02'

+62.90, -32.48' L
810.95'

+73.47, 23.28' R
810.76'

+74.07, 25.20' R
810.68'

+76.66, 22.52' R
810.77'

+77.04, 24.48' R
810.69'

+68.34, 25.54' R
810.72'

+69.34, 27.27' R
810.64'

+65.44, 27.50' R
810.70'

+66.67, 29.08' R
810.62'

+75.59, 30.48' R
811.17'

+71.03, 32.70' R
811.15'

+77.10, 35.25' R
811.24'

+73.84, 36.83' R
811.19'

+56.99, 29.78' R
810.56'

+58.32, 28.28' R
810.64'

+54.34, 27.76' R
810.54'

+55.44, 26.08' R
810.62'

+52.76, 33.40' R
811.00'

+49.62, 37.29' R
811.05'

+50.35, 23.53' R
810.56'

+49.67, 25.41' R
810.48'

+47.09, 22.58' R
810.51'

+46.66, 24.53' R
810.43'

+46.34, 35.37' R
810.99'

+48.25, 30.75' R
810.92'

MADISON STREET

SIGN

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CONSTRUCTION DETAILS - W. ST PAUL AVENUE	SHEET 49	E

2

MADISON STREET

+67.40, -25.83' L
811.01'
+66.91, -23.88' L
811.09'
+66.32, -35.14' L
811.28'
+64.47, -26.73' L
810.97'
+63.77, -24.85' L
811.05'
+68.32, -39.72' L
811.35'
+61.62, -46.86' L
811.29'
+59.74, -28.99' L
810.89'
+58.71, -27.27' L
810.97'
+58.93, -42.74' L
811.20'
+57.01, -30.85' L
810.83'
+55.79, -29.27' L
810.91'
+66.21, -44.88' L
811.21'
+71.82, -37.40' L
810.74'
+73.50, -36.31' L
810.82'
+62.60, -39.34' L
811.13'
+69.52, -34.33' L
810.68'
+71.04, -33.02' L
810.76'
+62.69, -28.58' L
810.54'
+63.72, -26.86' L
810.62'
+65.35, -30.39' L
810.59'
+66.57, -28.80' L
810.67'

1.5%
2.0%
1.7%
1.3%
1.6%
1.6%
2.1%
1.7%
1.2%
1.5%
4.3%
7.4%

+48.62, 24.50' R
812.00'
+48.62, 27.50' R
812.08'
+48.62, 22.00' R
811.58'
+43.55, 27.50' R
811.73'
+43.55, 32.50' R
811.80'
+43.55, 24.50' R
811.52'
+38.55, 27.50' R
811.71'
+43.54, 22.00' R
811.57'
+38.55, 32.50' R
811.78'
+38.54, 22.01' R
811.52'
+38.55, 24.51' R
811.50'

1.5%
0.2%
1.5%
1.5%
0.2%
2.1%
SIGN

+55.81, -20.01' L
811.22'
+55.80, -18.00' L
811.26'
+64.10, -20.00' L
811.15'
+64.10, -18.00' L
811.23'
+61.01, -20.00' L
811.18'
+61.01, -18.00' L
811.24'

W. ST PAUL AVENUE

120+00

E. ST PAUL AVENUE

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CONSTRUCTION DETAILS - W. ST PAUL AVENUE	SHEET 50	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 021306-cr

PLOT DATE : 10/7/2021 2:09 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

ANN STREET

705+00

605+00

MADISON STREET

N

5'

0.8%

0.8%

+45.86, 20.50' R
812.29'

+47.28, 25.50' R
812.37'

+41.32, 15.00' R
811.94'

+41.32, 13.00' R
812.02'

+44.44, 15.00' R
812.03'

+44.44, 13.00' R
812.11'

0.5%

0.5%

1.5%

7.2%

1.5%

1.5%

0.7%

0.6%

7.0%

+52.08, 24.14' R
812.29'

+50.67, 19.14' R
812.32'

+50.32, 13.47' R
812.17'

+49.87, 15.42' R
812.09'

+54.36, 14.94' R
812.21'

+53.45, 16.72' R
812.13'

4.0%

2.6%

5'

+32.53, -15.47' L
812.40'

+33.01, -13.53' L
812.48'

+35.45, -16.51' L
812.45'

+36.30, -14.70' L
812.53'

+32.86, -25.37' L
812.89'

+29.27, -28.85' L
812.96'

+32.10, -32.83' L
813.06'

+36.57, -30.60' L
812.99'

1.5%

6.0%

1.5%

2.0%

1.5%

1.5%

6.3%

7.6%

4.6%

5'

7'

+41.34, -18.22' L
812.61'

+39.93, -19.64' L
812.53'

+44.00, -21.59' L
812.77'

+42.30, -22.63' L
812.69'

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CONSTRUCTION DETAILS - MADISON STREET	SHEET 51	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 021307-cr
PLOT DATE : 10/7/2021 2:10 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

INLET PROTECTION

SILT FENCE

SOD

MULCHING (MATCH EXISTING LANDSCAPING IN-KIND)

FLOW DIRECTION

PROJECT NO: 2718-04-01	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 52	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - EC0

PLOT DATE : 7/15/2021 4:02 PM PLOT BY : KRISTIAN E. NYSOME PLOT NAME : PLOT SCALE : ##########

2

MULCHING
(MATCH EXISTING
LANDSCAPING IN-KIND)

MOUNTAIN AVENUE

E. NORTH STREET

W. ST. PAUL AVENUE

WISCONSIN AVENUE

EXIST R/W

TYPE A,C

TYPE C

+50

202+00

203+00

102+00

103+00

104+00

105+00

106+00

107+00

401+00

402+00

304+00

305+00

SS

POST

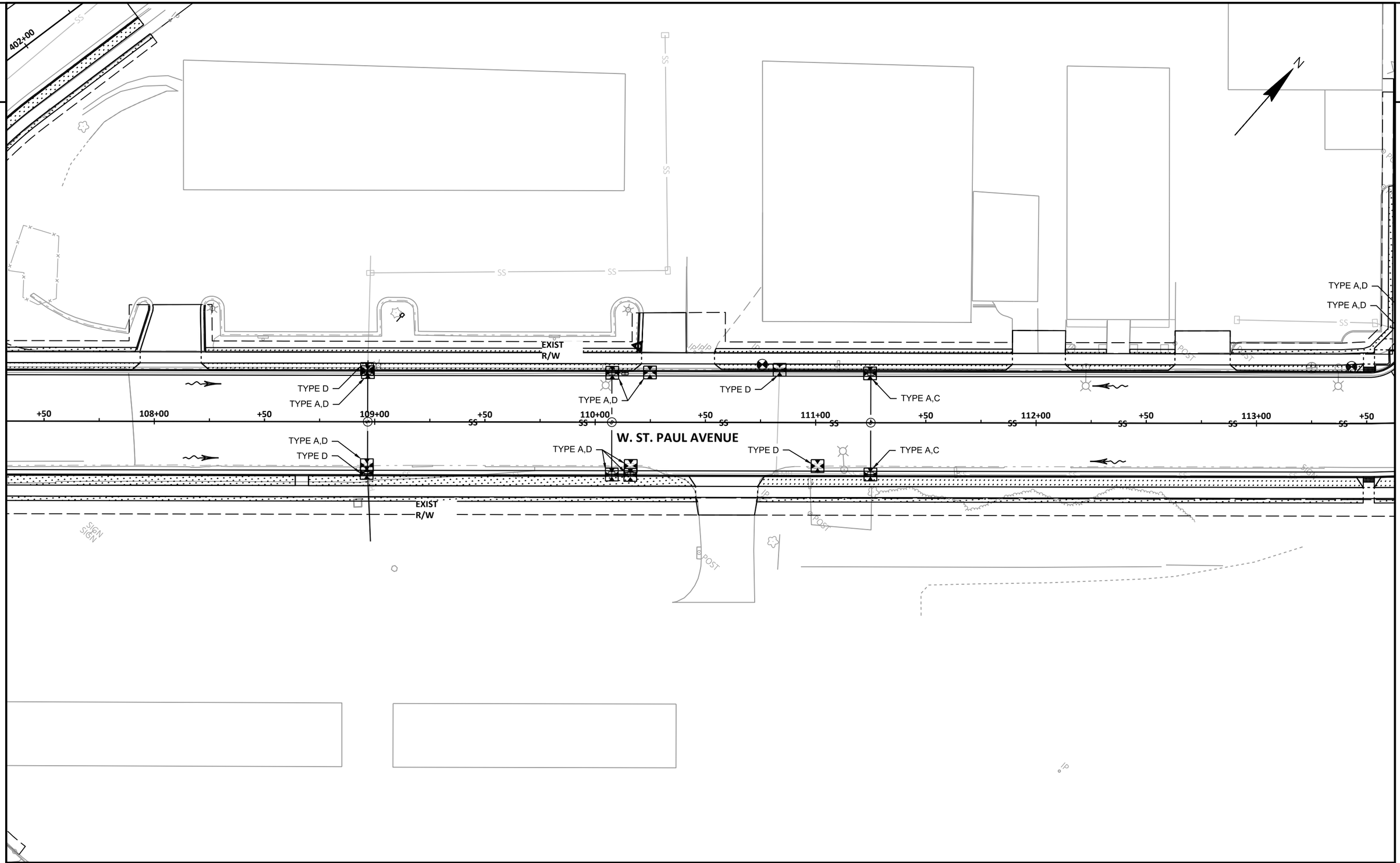
SIGN

PROJECT NO: 2718-04-01	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	EROSION CONTROL	SHEET	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - EC1

PLOT DATE : 7/15/2021 4:02 PM PLOT BY : KRISTIAN E. NYSOME PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42


402+00
EXIST R/W
TYPE D
TYPE A,D
TYPE A,D
TYPE D
TYPE A,C
TYPE A,D
TYPE A,D
+50
108+00
+50
109+00
+50
110+00
+50
111+00
+50
112+00
+50
113+00
+50
W. ST. PAUL AVENUE
TYPE A,D
TYPE D
TYPE A,D
TYPE D
TYPE A,C
EXIST R/W
SIGN
SIGN
POST
POST
SS
SS
SS

2

MULCHING
(MATCH EXISTING
LANDSCAPING IN-KIND)

MULCHING
(MATCH EXISTING
LANDSCAPING IN-KIND)

MULCHING
(MATCH EXISTING
LANDSCAPING IN-KIND)

MULCHING
(MATCH EXISTING
LANDSCAPING IN-KIND)

FULLER STREET

TYPE A,D

TYPE A,D

TYPE C

TYPE A,C

TYPE A,C

EXIST
R/W

TYPE A,C

TYPE A,C

TYPE A,C

TYPE A,C

TYPE C

TYPE C

EXIST
R/W

TYPE C

TYPE A,C

+50

501+00

+50

+50

114+00

+50

115+00

+50

116+00

+50

117+00

+50

118+00

+50

119+00

SS

SS

SS

SS

TYPE C

TYPE A,C

W. ST. PAUL AVENUE

TYPE A,C

W. ST. PAUL AVENUE

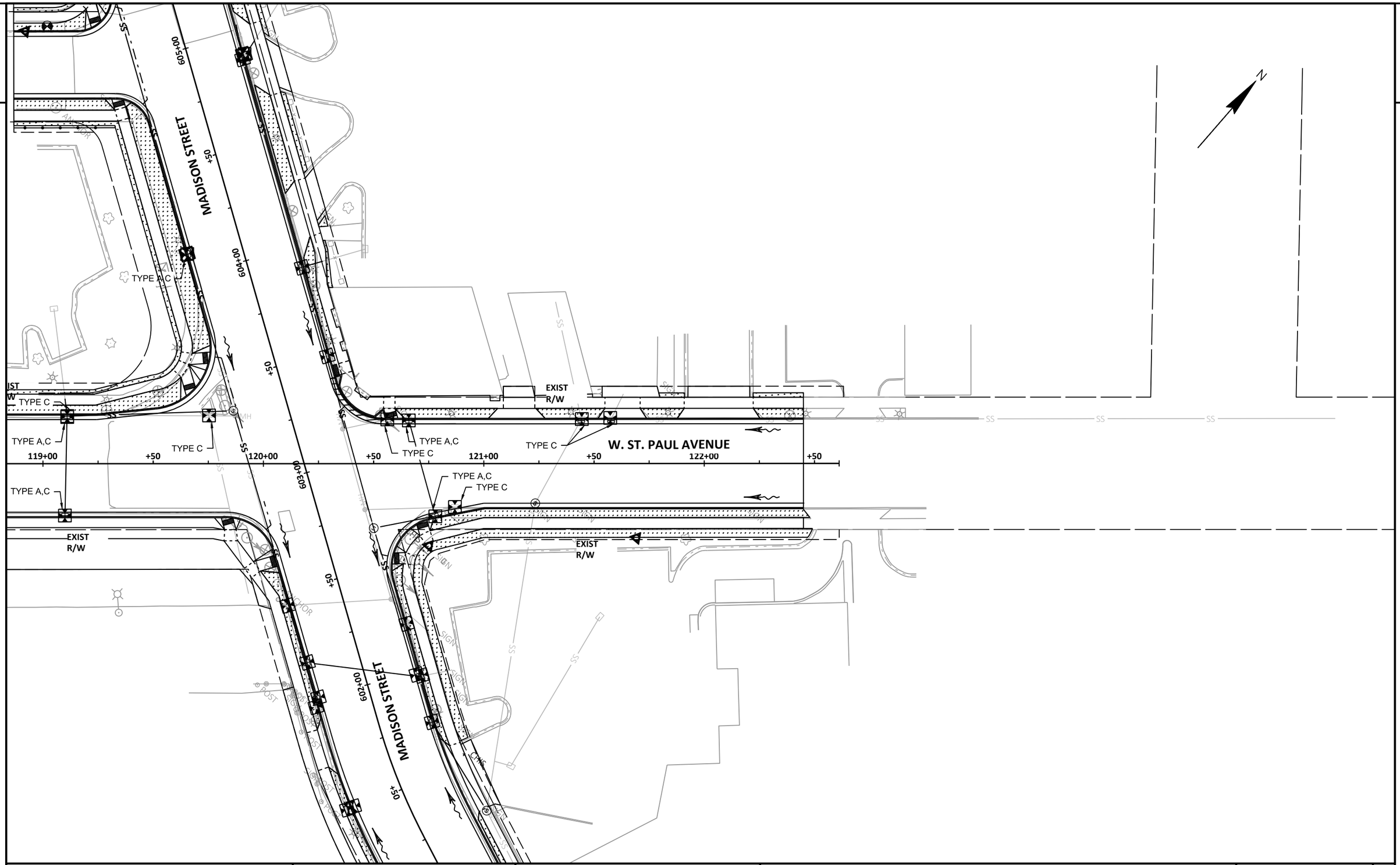
TYPE A,C

EXIST
R/W

EXIST
R/W

PROJECT NO: 2718-04-01	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 55	E

2

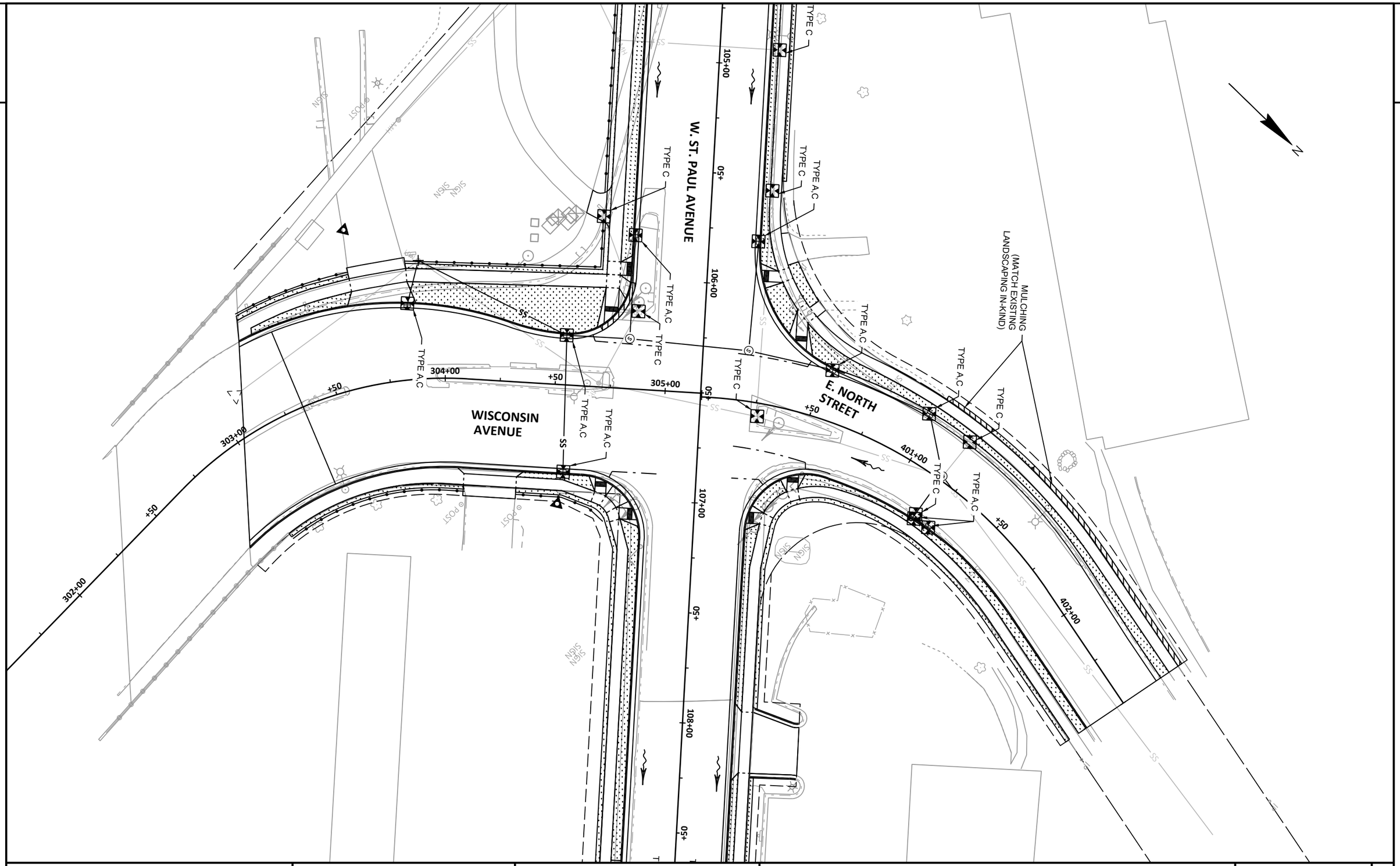


PROJECT NO: 2718-04-01	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	EROSION CONTROL	SHEET	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - EC4

PLOT DATE : 7/15/2021 4:02 PM PLOT BY : KRISTIAN E. NYSOME PLOT NAME : PLOT SCALE : ##########

2



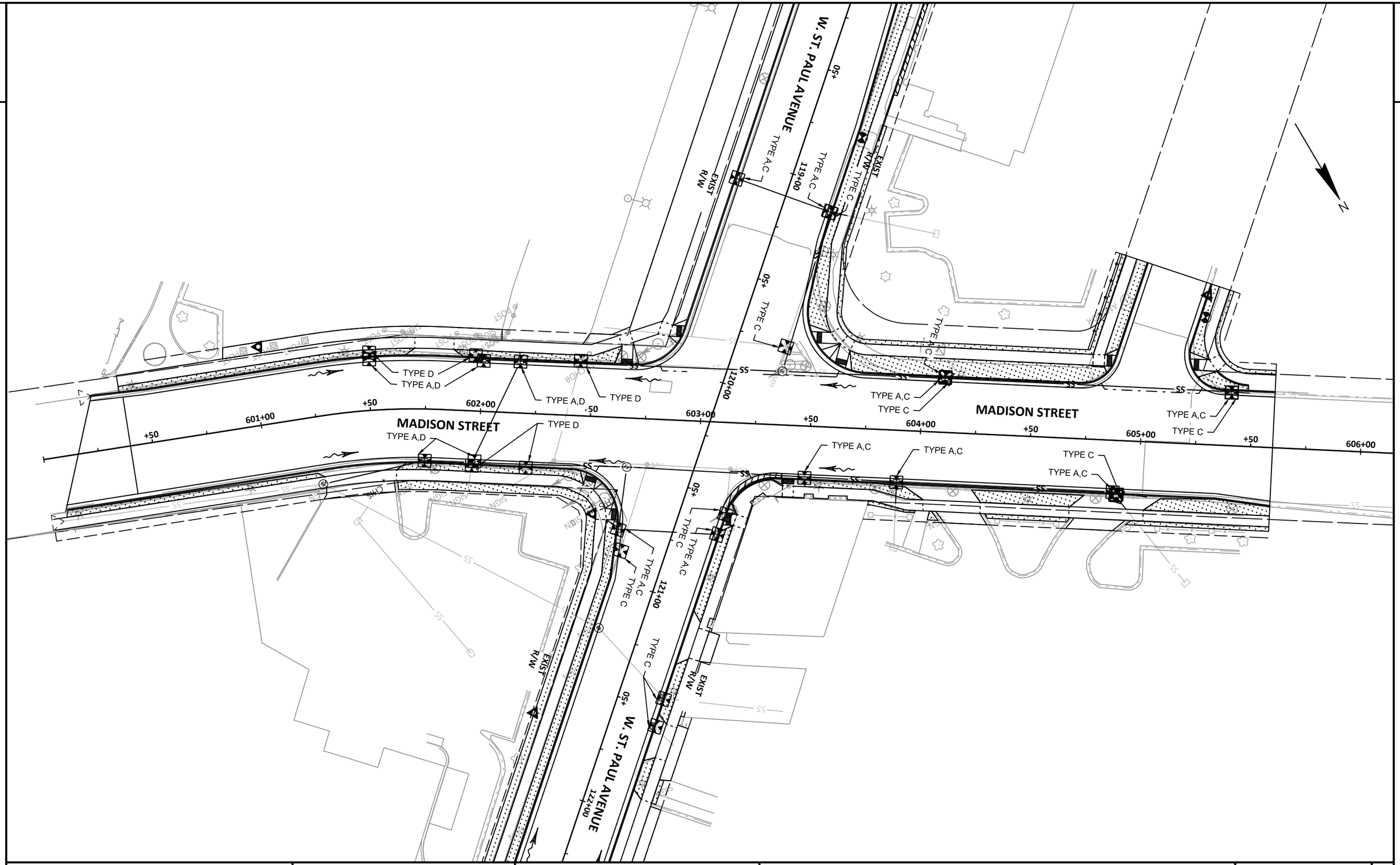
PROJECT NO: 2718-04-01	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 57	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - EC5

PLOT DATE : 7/15/2021 4:03 PM PLOT BY : KRISTIAN E. NYSOME PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2



PROJECT NO: 2718-04-01	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 58	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - EC6

PLOT DATE : 7/15/2021 4:03 PM PLOT BY : KRISTIAN E. NYSOME PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

N

REMOVING STORM SEWER 12-INCH
REMOVING MANHOLES
REMOVING INLETS
REMOVING STORM SEWER 12-INCH
REMOVING STORM SEWER 18-INCH
REMOVING INLETS
REMOVING STORM SEWER 21-INCH
REMOVING STORM SEWER 12-INCH
REMOVING INLETS
REMOVING STORM SEWER 12-INCH
REMOVING MANHOLES
REMOVING STORM SEWER 12-INCH
REMOVING MANHOLES
REMOVING STORM SEWER 15-INCH
REMOVING STORM SEWER 8-INCH
REMOVING STORM SEWER 12-INCH
REMOVING INLETS
REMOVING MANHOLES
EXIST R/W
EXIST 21-INCH PIPE
(TO BE PRESERVED)
EXIST MH 1580
(TO REMAIN.
SEE PROPOSED
STORM SEWER
PLANS)
REMOVING INLETS
REMOVING STORM SEWER 12-INCH
REMOVING MANHOLES
ABANDONING STORM SEWER
(EXISTING 12-INCH PIPE)
EXIST MH 1579
(TO REMAIN)
REMOVING STORM SEWER 12-INCH
REMOVING INLETS
REMOVING STORM SEWER 15-INCH
REMOVING INLETS
REMOVING MANHOLES
REMOVING INLETS
REMOVING MANHOLES
REMOVING STORM SEWER 24-INCH
REMOVING STORM SEWER 12-INCH

MOUNTAIN AVENUE
W. ST. PAUL AVENUE
E. NORTH STREET
WISCONSIN AVENUE

202+00
203+00
102+00
103+00
104+00
105+00
106+00
107+00
108+00
401+00
402+00
304+00
305+00

EXIST R/W
EXIST R/W

PROJECT NO: 2718-04-71	HWY: W ST PAUL AVENUE	COUNTY: WAUKESHA	STORM SEWER REMOVAL PLAN	SHEET 59	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 022501
PLOT DATE : 11/8/2021 2:47 PM
PLOT BY : KRISTIAN E. NYSOME
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

2

N

SS

SS

SS

SS

SS

REMOVING STORM SEWER 12-INCH

REMOVING INLETS

EXIST R/W

REMOVING STORM SEWER 18-INCH

REMOVING INLETS

REMOVING STORM SEWER 15-INCH

REMOVING STORM SEWER 12-INCH

REMOVING STORM SEWER 21-INCH

REMOVING MANHOLES

REMOVING INLETS

REMOVING STORM SEWER 24-INCH

REMOVING MANHOLES

501+00

FULLER STREET

108+00

109+00

110+00

111+00

112+00

113+00

114+00

W. ST. PAUL AVENUE

REMOVING INLETS

REMOVING STORM SEWER 24-INCH

REMOVING INLETS

EXIST R/W

REMOVING STORM SEWER 24-INCH

REMOVING STORM SEWER 30-INCH

REMOVING INLETS

REMOVING MANHOLES

REMOVING MANHOLES

REMOVING STORM SEWER 30-INCH

REMOVING STORM SEWER 12-INCH

REMOVING STORM SEWER 30-INCH

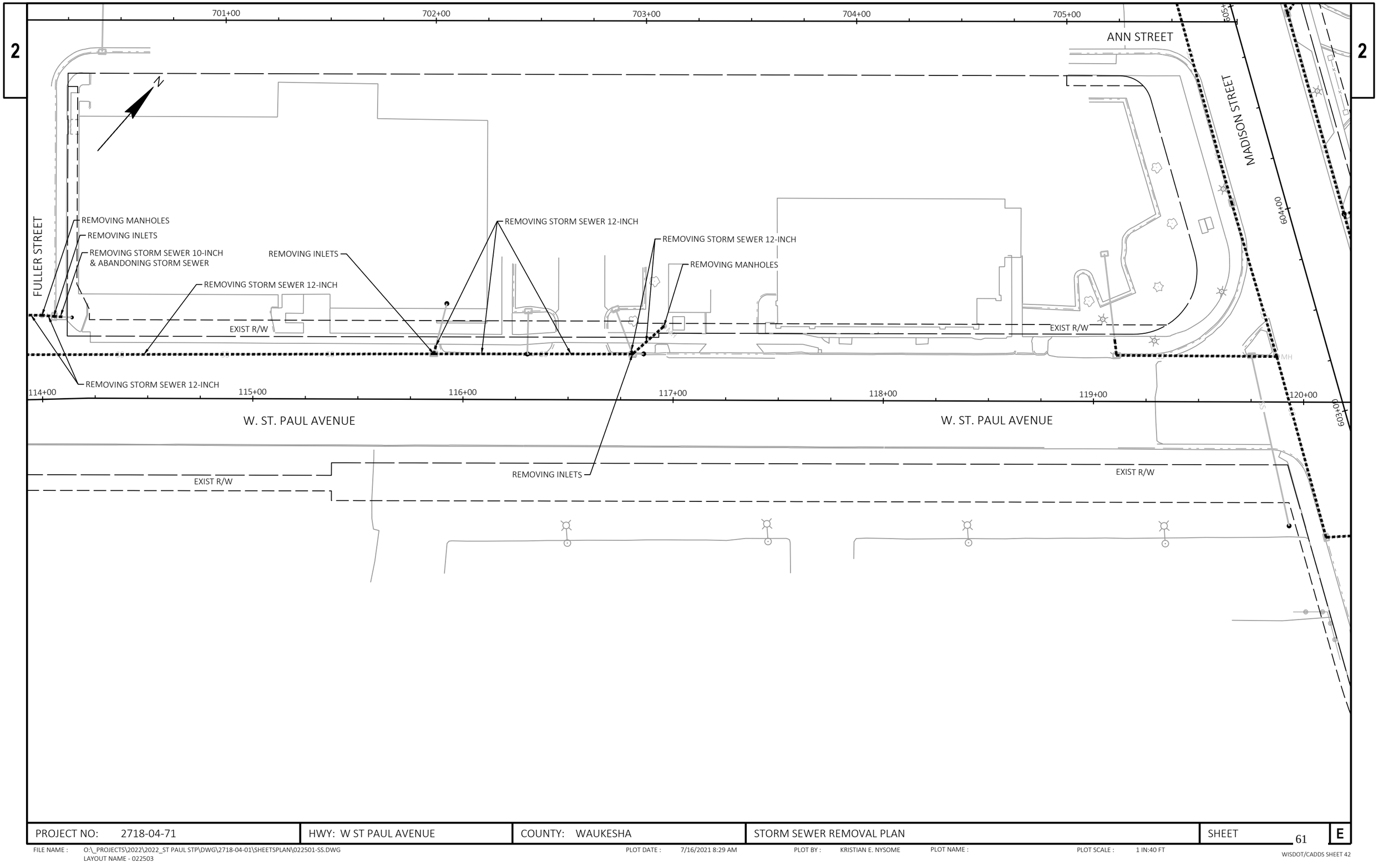
REMOVING INLETS

REMOVING MANHOLES

PROJECT NO: 2718-04-71	HWY: W ST PAUL AVENUE	COUNTY: WAUKESHA	STORM SEWER REMOVAL PLAN	SHEET 60	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 022502

PLOT DATE : 7/16/2021 8:29 AM PLOT BY : KRISTIAN E. NYSOME PLOT NAME : PLOT SCALE : 1 IN:40 FT



PROJECT NO: 2718-04-71	HWY: W ST PAUL AVENUE	COUNTY: WAUKESHA	STORM SEWER REMOVAL PLAN	SHEET 61	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 022503

PLOT DATE : 7/16/2021 8:29 AM PLOT BY : KRISTIAN E. NYSOME PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

W. ST. PAUL AVENUE

EXIST R/W

119+00

120+00

121+00

122+00

MADISON STREET

ANN STREET

601+00

602+00

603+00

604+00

605+00

606+00

704+00

705+00

REMOVING INLETS

REMOVING STORM SEWER 12-INCH

REMOVING MANHOLES

ABANDONING STORM SEWER
(EXISTING 12-INCH PIPE)

REMOVING STORM SEWER 18-INCH

REMOVING STORM SEWER 12-INCH
& ABANDONING STORM SEWER

REMOVING STORM SEWER 10-INCH
& ABANDONING STORM SEWER

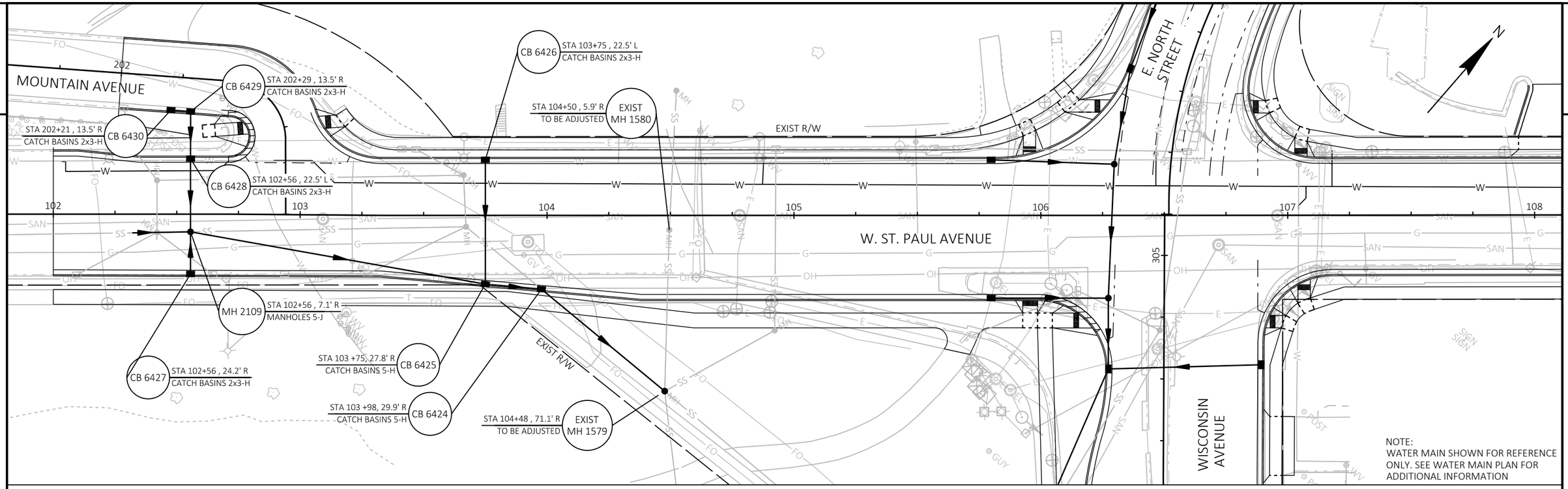
REMOVING STORM SEWER 15-INCH

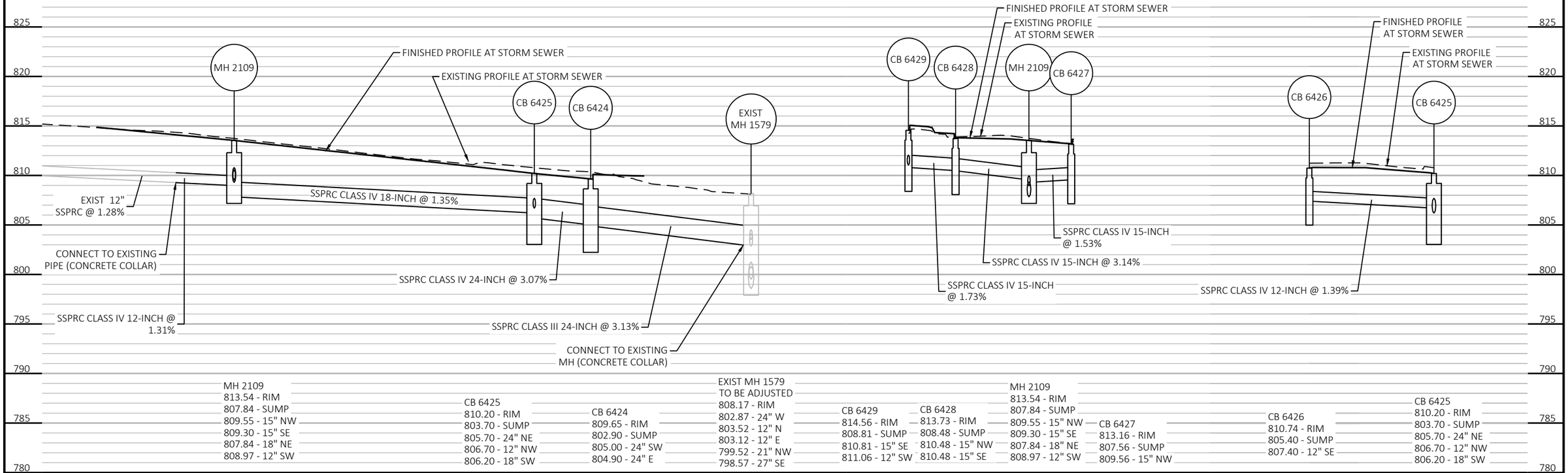
PROJECT NO: 2718-04-71	HWY: W ST PAUL AVENUE	COUNTY: WAUKESHA	STORM SEWER REMOVAL PLAN	SHEET 62	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 022504

PLOT DATE : 7/16/2021 8:29 AM PLOT BY : KRISTIAN E. NYSOME PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42





MH 2109
813.54 - RIM
807.84 - SUMP
809.55 - 15" NW
809.30 - 15" SE
807.84 - 18" NE
808.97 - 12" SW

CB 6425
810.20 - RIM
803.70 - SUMP
805.70 - 24" NE
806.70 - 12" NW
806.20 - 18" SW

CB 6424
809.65 - RIM
802.90 - SUMP
805.00 - 24" SW
804.90 - 24" E

EXIST MH 1579
TO BE ADJUSTED
808.17 - RIM
802.87 - 24" W
803.52 - 12" N
803.12 - 12" E
799.52 - 21" NW
798.57 - 27" SE

CB 6429
814.56 - RIM
808.81 - SUMP
810.81 - 15" SE
811.06 - 12" SW

CB 6428
813.73 - RIM
808.48 - SUMP
810.48 - 15" NW
810.48 - 15" SE

MH 2109
813.54 - RIM
807.84 - SUMP
809.55 - 15" NW
809.30 - 15" SE
807.84 - 18" NE
808.97 - 12" SW

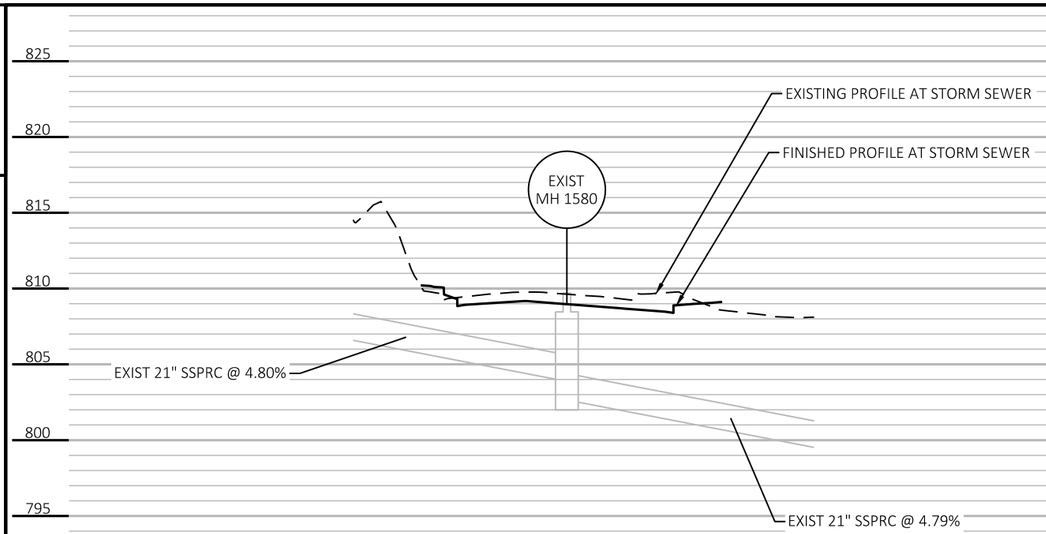
CB 6427
813.16 - RIM
807.56 - SUMP
809.56 - 15" NW

CB 6426
810.74 - RIM
805.40 - SUMP
807.40 - 12" SE

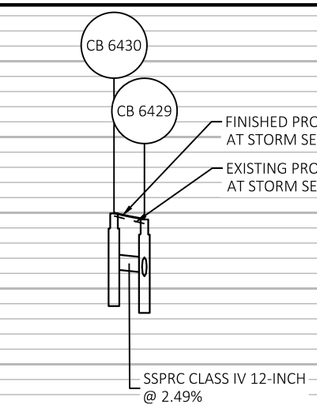
CB 6425
810.20 - RIM
803.70 - SUMP
805.70 - 24" NE
806.70 - 12" NW
806.20 - 18" SW

PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	STORM SEWER	SHEET 63	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\022520-SS.DWG
LAYOUT NAME - 022520-ss
PLOT DATE : 7/16/2021 9:54 AM
PLOT BY : KRISTIAN E. NYSOME
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

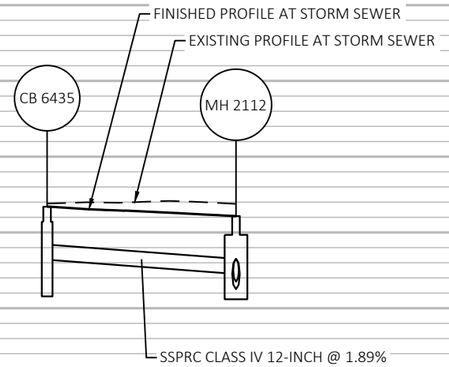


EXIST MH 1580
TO BE ADJUSTED
808.98 - RIM (PROP)
809.70 - RIM (EXIST)
802.65 - SUMP
803.88 - 21" NW
802.65 - 21" SE



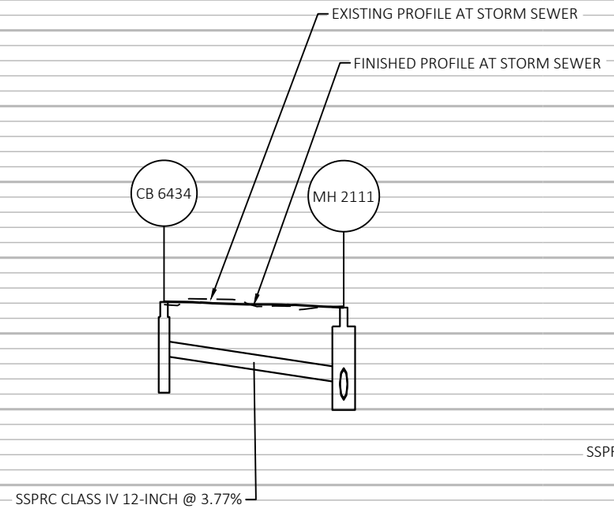
CB 6430
814.96 - RIM
809.26 - SUMP
811.26 - 12" NE

CB 6429
814.56 - RIM
808.81 - SUMP
810.81 - 15" SE
811.06 - 12" SW



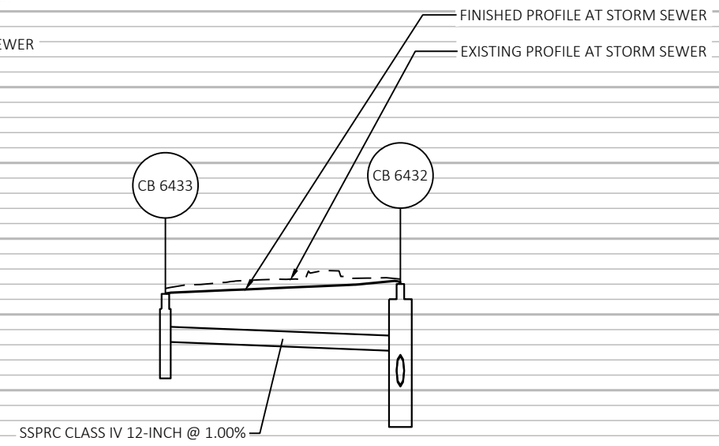
CB 6435
806.70 - RIM
801.20 - SUMP
803.20 - 12" NE

MH 2112
806.08 - RIM
801.26 - SUMP
801.26 - 24" SE
802.26 - 12" SW
801.76 - 18" NW



CB 6434
807.08 - RIM
801.51 - SUMP
803.51 - 12" NE

MH 2111
806.71 - RIM
800.62 - SUMP
801.72 - 12" SW
800.62 - 24" SE
800.72 - 24" NW



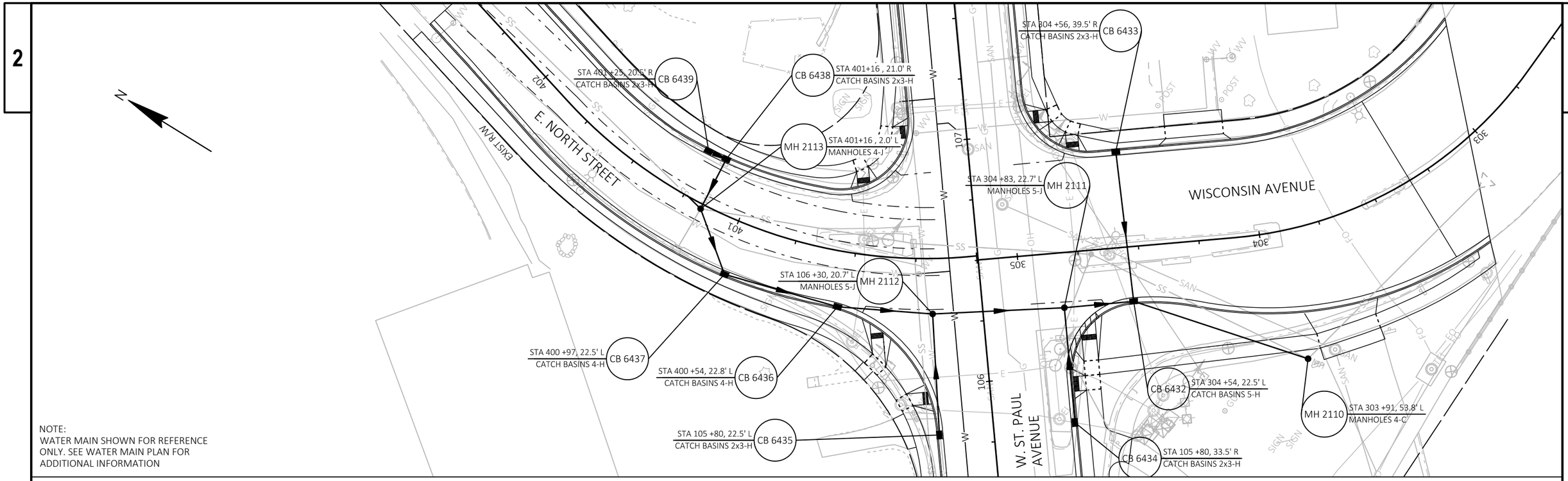
CB 6433
806.36 - RIM
801.20 - SUMP
803.20 - 12" SW

CB 6432
807.01 - RIM
798.24 - SUMP
800.34 - 24" NW
800.24 - 24" S
802.58 - 12" NE

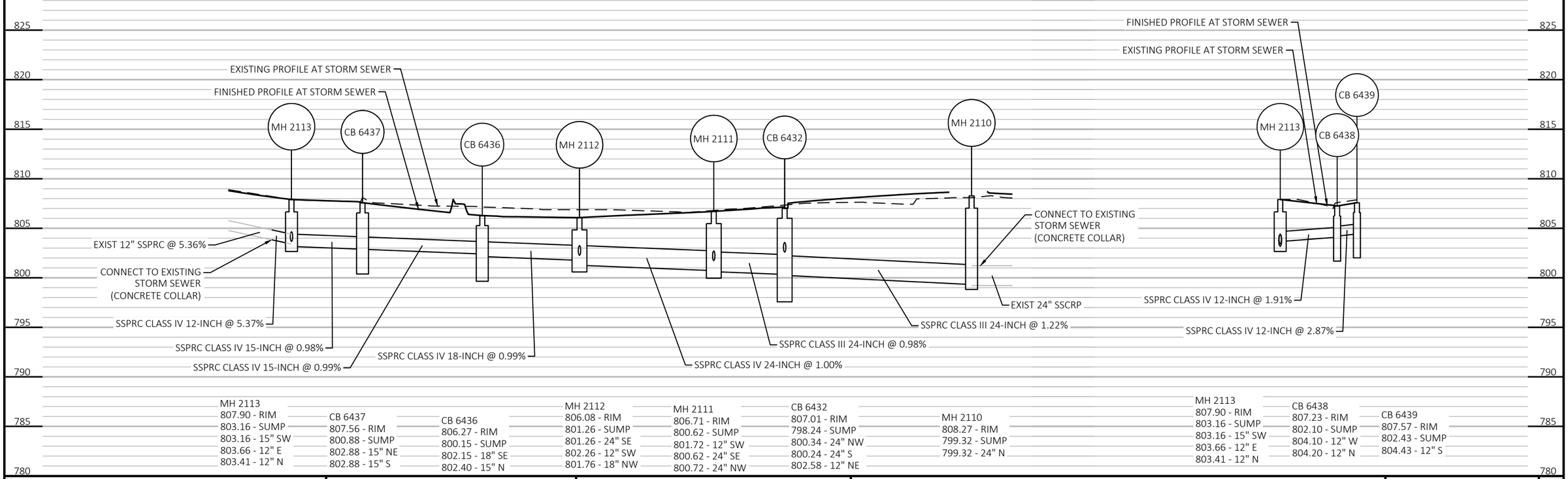
825 820 815 810 805 800 795 790 785 780

PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	STORM SEWER	SHEET 64	E

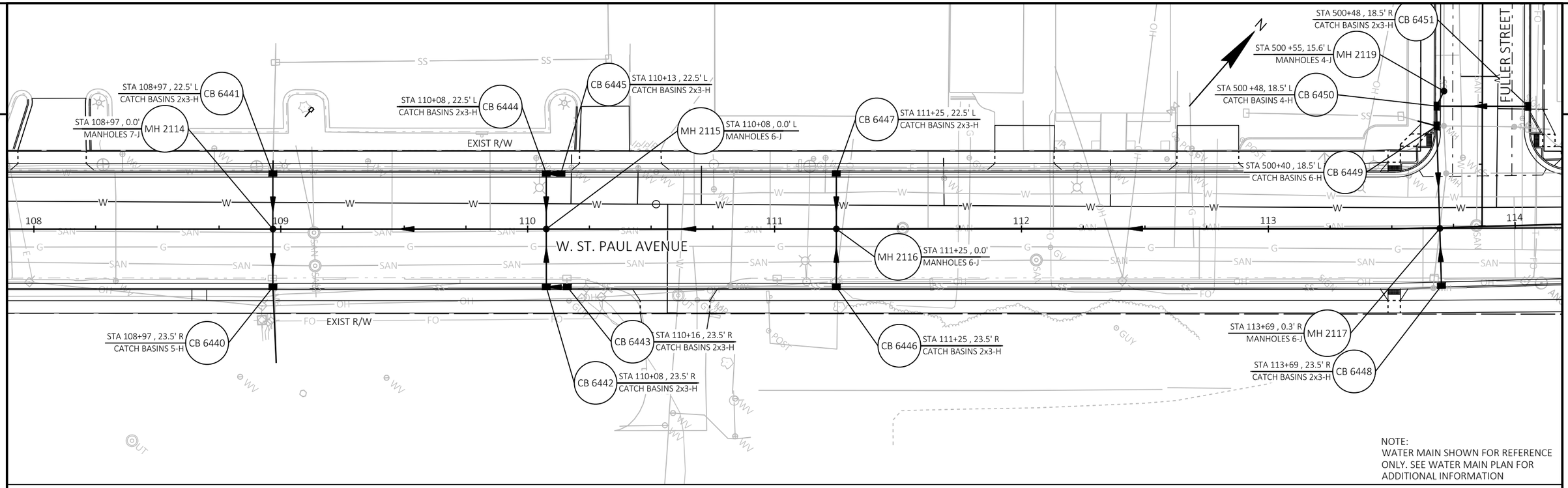
FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\022520-SS.DWG
LAYOUT NAME - 022521-ss
PLOT DATE : 7/16/2021 9:54 AM
PLOT BY : KRISTIAN E. NYSOME
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41



NOTE:
WATER MAIN SHOWN FOR REFERENCE ONLY. SEE WATER MAIN PLAN FOR ADDITIONAL INFORMATION



PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	STORM SEWER	SHEET 65	E

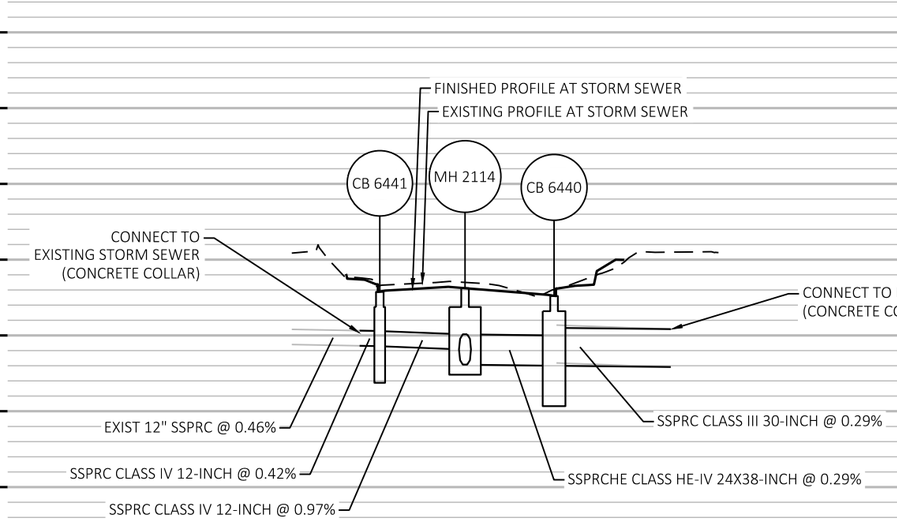


PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	STORM SEWER	SHEET 66	E

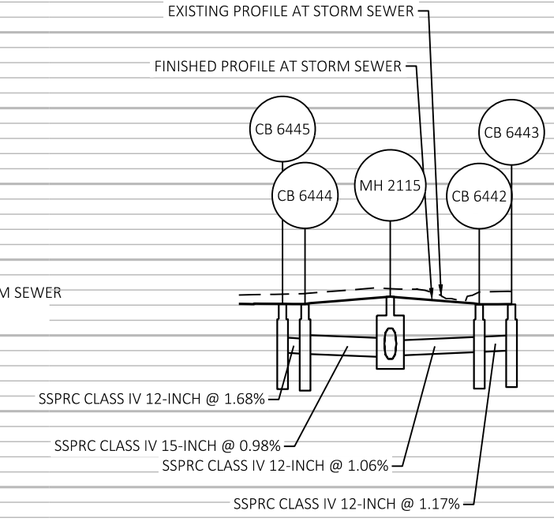
FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\022520-SS.DWG
LAYOUT NAME - 022523-ss

PLOT DATE : 7/16/2021 9:54 AM PLOT BY : KRISTIAN E. NYSOME PLOT NAME : PLOT SCALE : 1 IN:40 FT

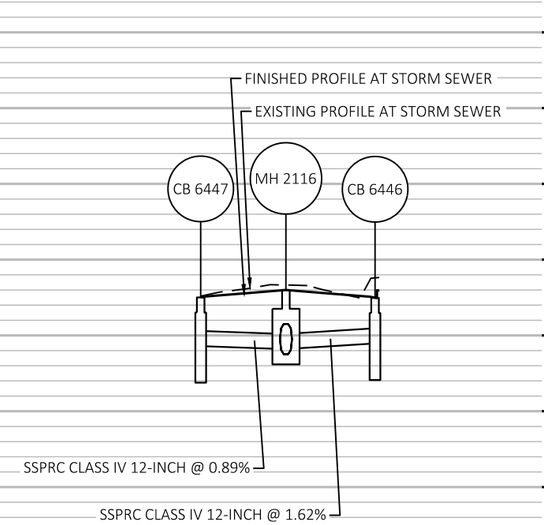
WISDOT/CADDS SHEET 41



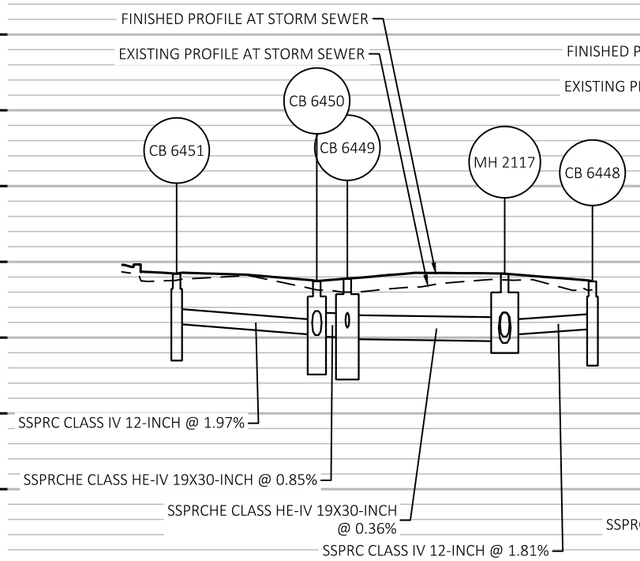
CB 6441	MH 2114	CB 6440
802.88 - RIM	803.12 - RIM	802.60 - RIM
797.29 - SUMP	798.07 - SUMP	796.01 - SUMP
799.29 - 12" SE	799.08 - 12" NW	798.01 - 38" NW
799.29 - 12" NW	798.07 - 38" SE	798.01 - 30" SE
	798.08 - 38" NE	



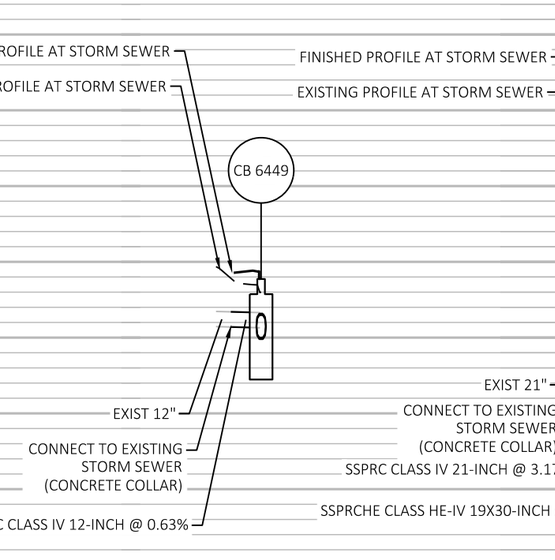
CB 6445	CB 6444	MH 2115	CB 6442	CB 6443
802.07 - RIM	802.06 - RIM	802.56 - RIM	802.04 - RIM	802.05 - RIM
796.88 - SUMP	796.78 - SUMP	798.46 - SUMP	796.91 - SUMP	797.01 - SUMP
798.88 - 12" SW	798.78 - 12" NE	798.46 - 38" NE	798.91 - 12" NE	799.01 - 12" SW
	798.78 - 15" SE	798.46 - 38" SW	798.91 - 12" NW	
		798.56 - 15" NW		
		798.66 - 12" SE		



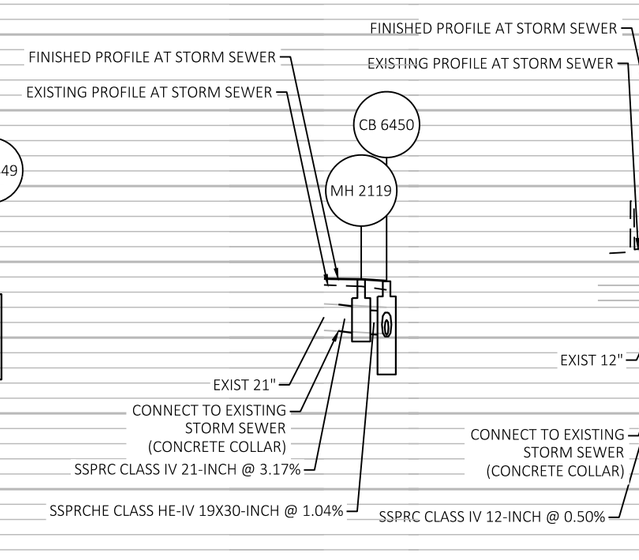
CB 6447	MH 2116	CB 6446
802.51 - RIM	803.00 - RIM	802.48 - RIM
797.30 - SUMP	798.76 - SUMP	797.48 - SUMP
799.30 - 12" SE	799.10 - 12" NW	799.48 - 12" NW
	799.10 - 12" SE	
	798.76 - 38" NE	
	798.76 - 38" SW	



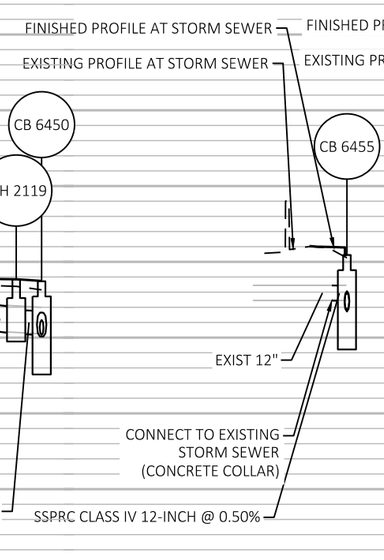
CB 6451	CB 6450	CB 6449	MH 2117	CB 6448
804.21 - RIM	803.72 - RIM	803.87 - RIM	804.22 - RIM	803.71 - RIM
798.90 - SUMP	798.07 - SUMP	797.90 - SUMP	799.65 - SUMP	798.57 - SUMP
800.90 - 12" SW	800.17 - 30" N	799.90 - 30" SE	800.07 - 30" NE	800.57 - 12" NW
	800.07 - 30" SE	800.00 - 30" NW	799.65 - 38" SW	
	800.17 - 12" NE	800.65 - 12" SW	800.15 - 12" SE	
			799.75 - 30" NW	



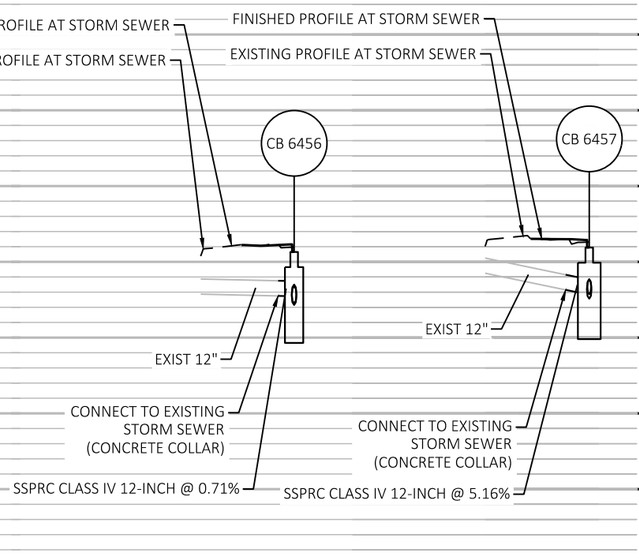
CB 6449
803.87 - RIM
797.90 - SUMP
799.90 - 30" SE
800.00 - 30" NW
800.65 - 12" SW



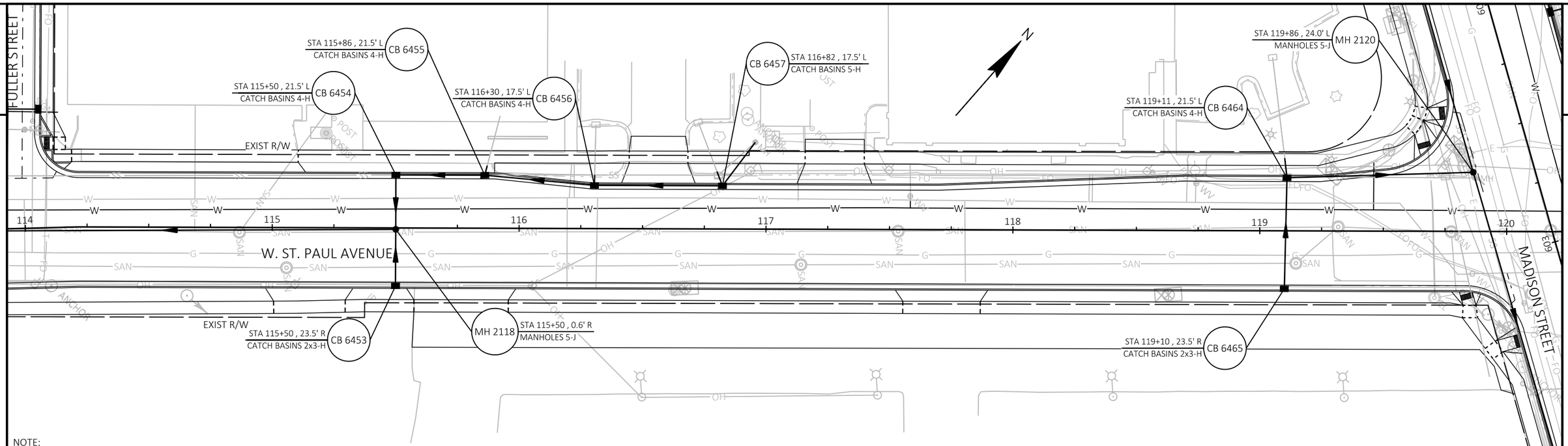
MH 2119	CB 6450
803.85 - RIM	803.72 - RIM
800.24 - SUMP	798.07 - SUMP
800.24 - 30" S	800.17 - 30" N
800.24 - 21" NW	800.07 - 30" SE
	800.17 - 12" NE



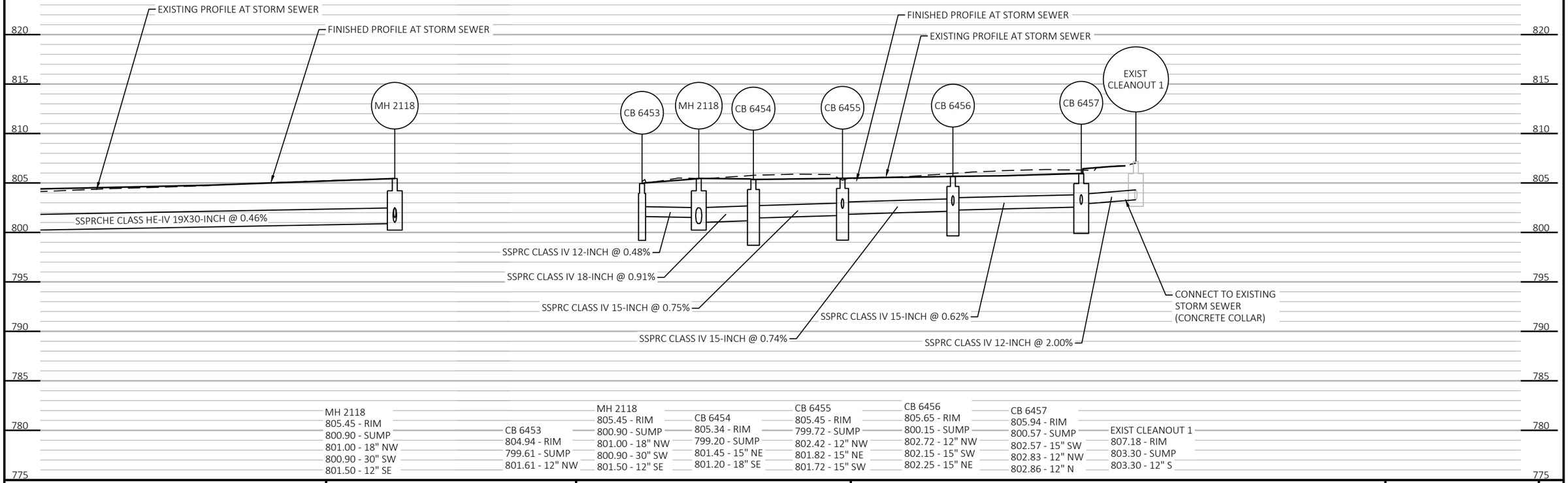
CB 6455
805.45 - RIM
799.72 - SUMP
802.42 - 12" NW
801.82 - 15" NE
801.72 - 15" SW



CB 6456	CB 6457
805.65 - RIM	805.94 - RIM
800.15 - SUMP	800.57 - SUMP
802.72 - 12" NW	802.57 - 15" SW
802.15 - 15" SW	802.83 - 12" NW
802.25 - 15" NE	802.86 - 12" N



NOTE:
WATER MAIN SHOWN FOR REFERENCE ONLY. SEE WATER MAIN PLAN FOR ADDITIONAL INFORMATION



MH 2118
805.45 - RIM
800.90 - SUMP
801.00 - 18" NW
800.90 - 30" SW
801.50 - 12" SE

CB 6453
804.94 - RIM
799.61 - SUMP
801.61 - 12" NW

MH 2118
805.45 - RIM
800.90 - SUMP
801.00 - 18" NW
800.90 - 30" SW
801.50 - 12" SE

CB 6454
805.34 - RIM
799.20 - SUMP
801.45 - 15" NE
801.20 - 18" SE

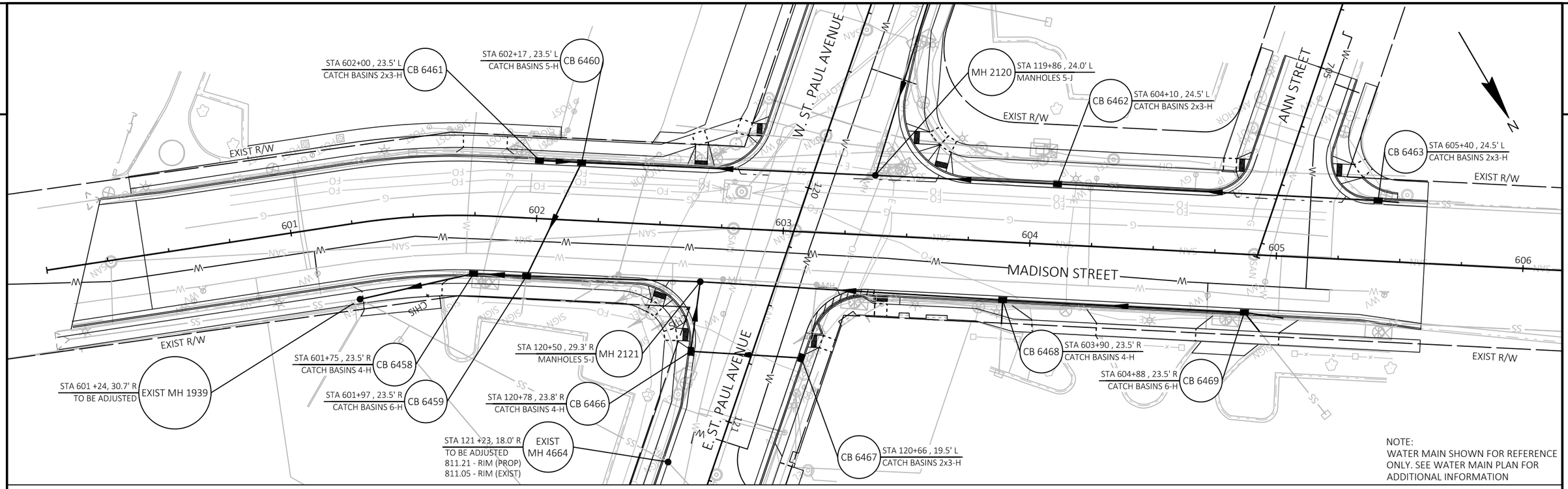
CB 6455
805.45 - RIM
799.72 - SUMP
802.42 - 12" NW
801.82 - 15" NE
801.72 - 15" SW

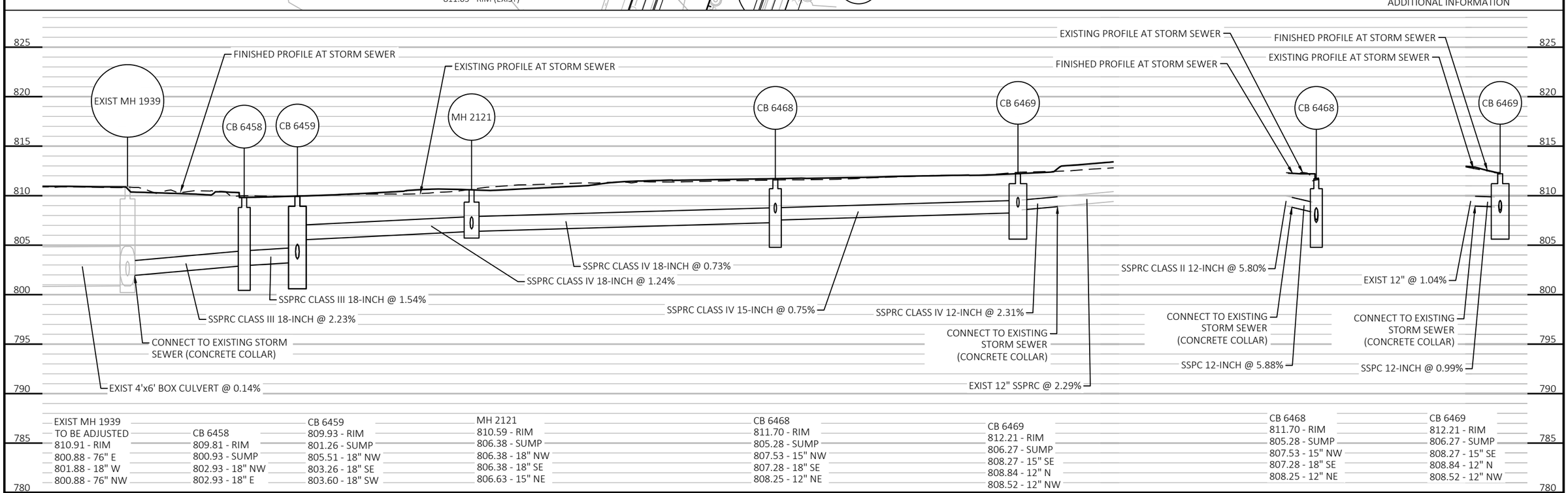
CB 6456
805.65 - RIM
800.15 - SUMP
802.72 - 12" NW
802.15 - 15" SW
802.25 - 15" NE

CB 6457
805.94 - RIM
800.57 - SUMP
802.57 - 15" SW
802.83 - 12" NW
802.86 - 12" N

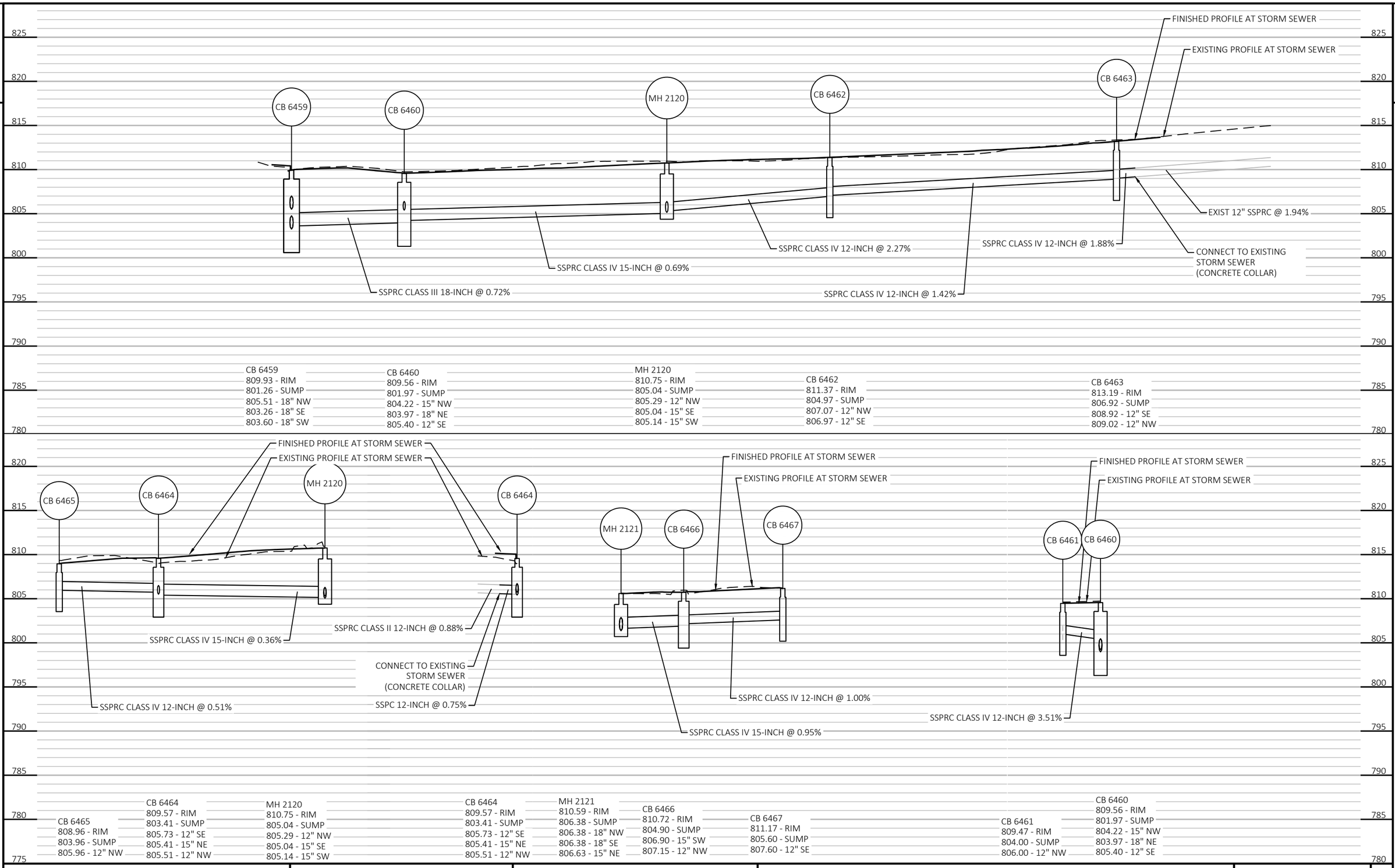
EXIST CLEANOUT 1
807.18 - RIM
803.30 - SUMP
803.30 - 12" S

PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	STORM SEWER	SHEET 68	E





PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	STORM SEWER	SHEET 69	E



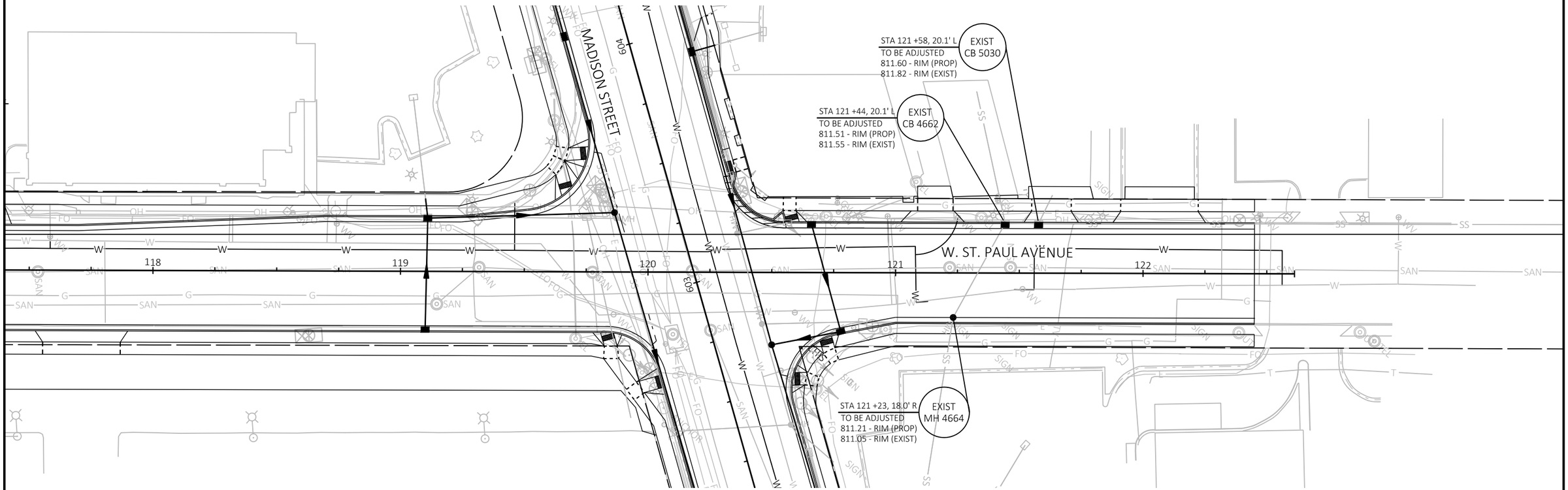
PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	STORM SEWER	SHEET 70	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\022520-SS.DWG
LAYOUT NAME - 022527-ss

PLOT DATE : 7/16/2021 9:55 AM PLOT BY : KRISTIAN E. NYSOME PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41

2

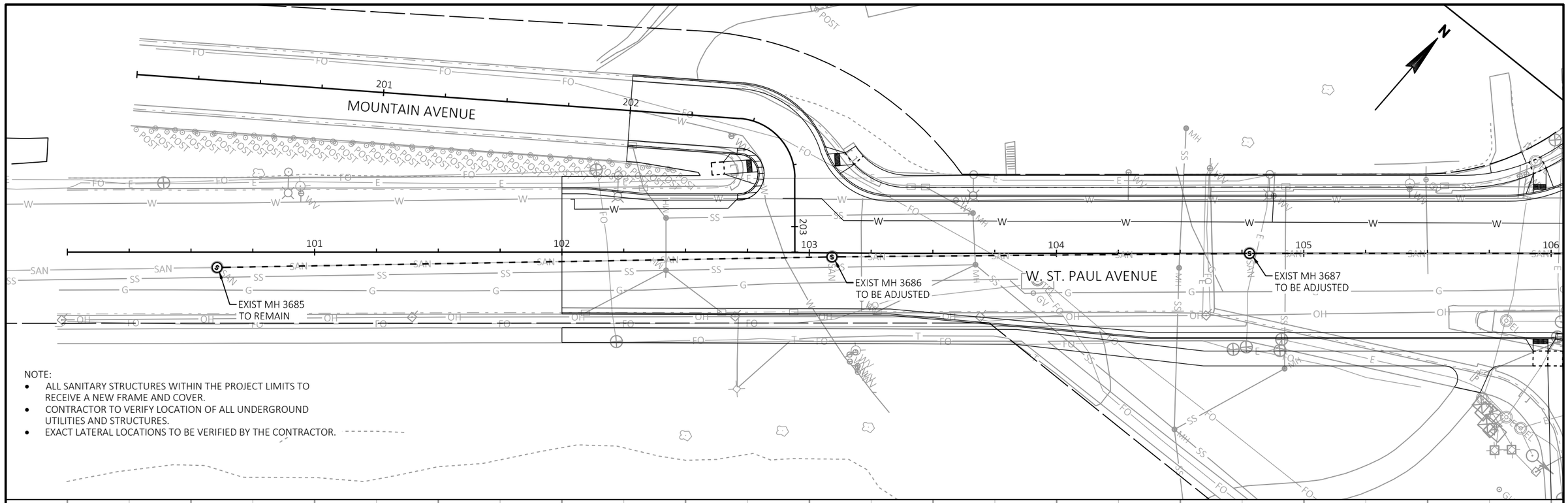


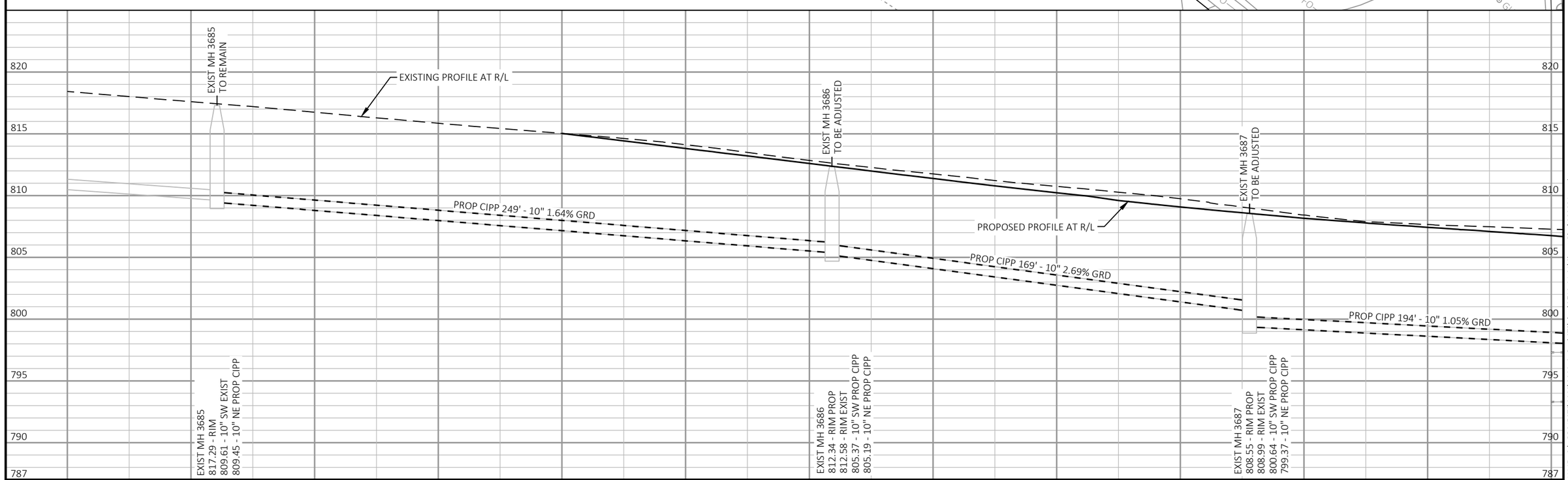
NOTE:
WATER MAIN SHOWN FOR REFERENCE ONLY. SEE WATER MAIN PLAN FOR ADDITIONAL INFORMATION

PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	STORM SEWER	SHEET 71	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\022520-SS.DWG
LAYOUT NAME - 022528-ss

PLOT DATE : 7/16/2021 9:55 AM PLOT BY : KRISTIAN E. NYSOME PLOT NAME : PLOT SCALE : 1 IN:40 FT

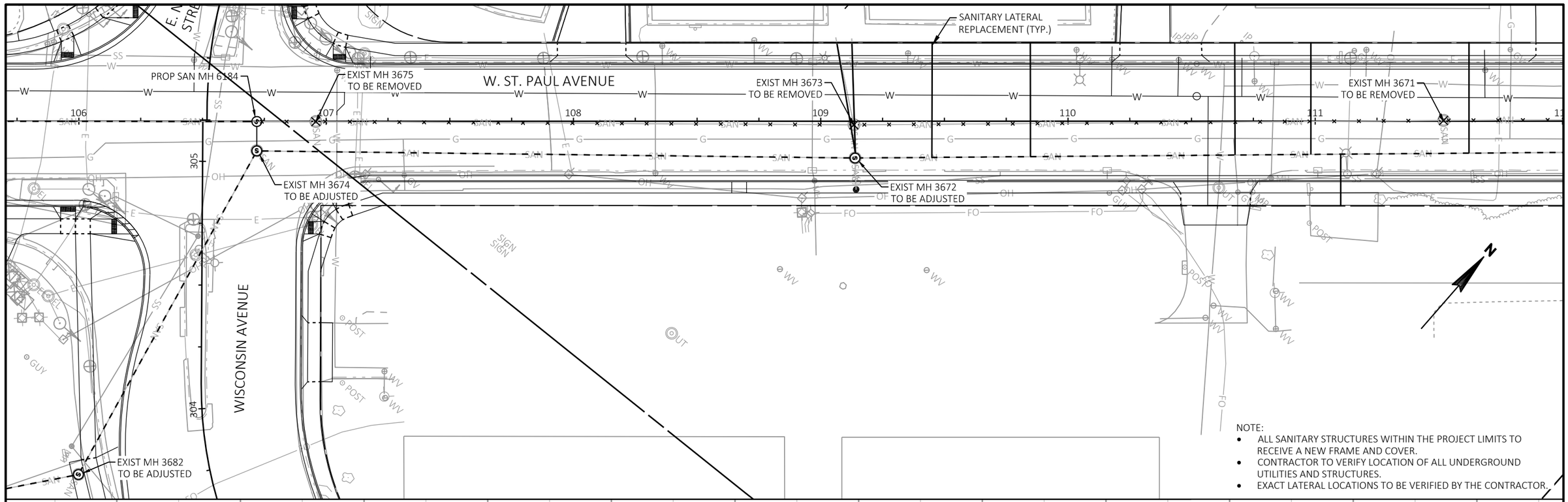


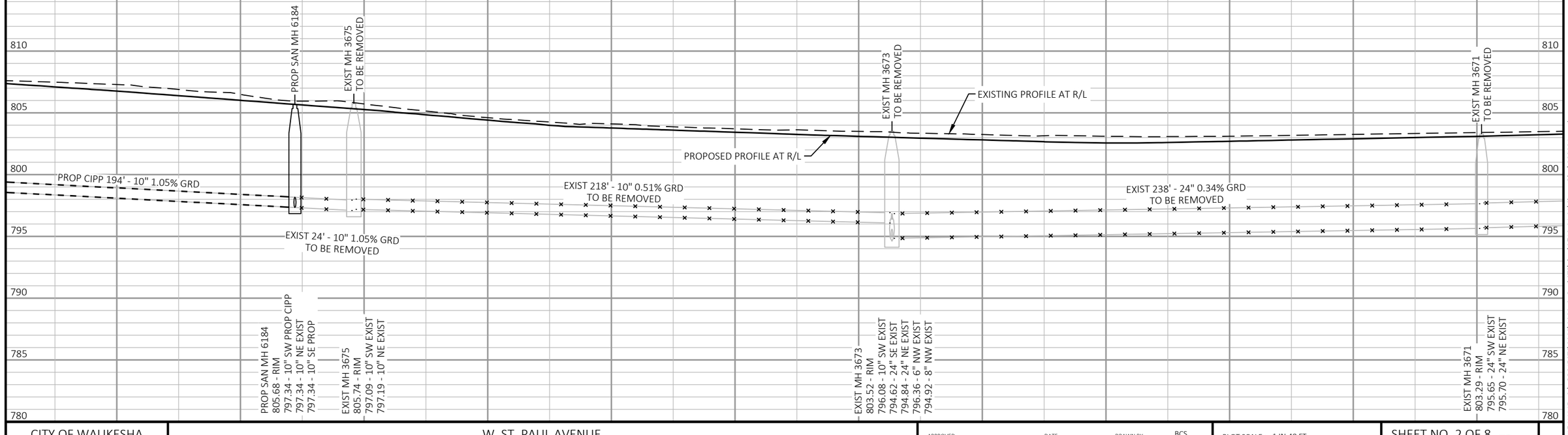


CITY OF WAUKESHA DEPARTMENT OF PUBLIC WORKS	W. ST. PAUL AVENUE SANITARY SEWER	APPROVED: ____ DATE: ____ DRAWN BY: BCS APPROVED: ____ DATE: ____ CHECKED BY: ____	PLOT SCALE : 1 IN:40 FT PLOT DATE : 10/7/2021 2:15 PM	SHEET NO. 1 OF 8 72 PROJECT NO: 2022-ST. PAUL AVENUE

LAYOUT NAME - 023001-up

FILE NAME : O:_PROJECTS\2022\2022_St Paul STP\dwg\2718-04-01\Sheets\Plan\023001-up.dwg





CITY OF WAUKESHA
DEPARTMENT OF PUBLIC WORKS

W. ST. PAUL AVENUE
SANITARY SEWER

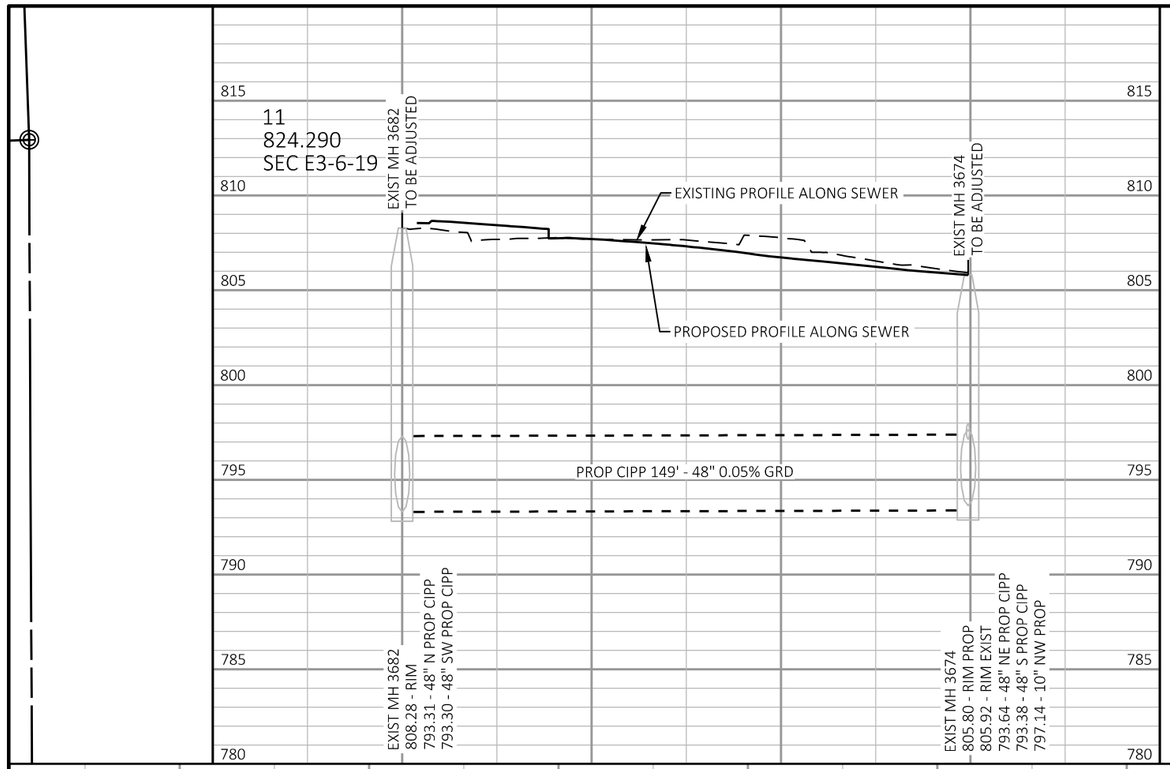
APPROVED: _____ DATE: _____ DRAWN BY: BCS
APPROVED: _____ DATE: _____ CHECKED BY: _____

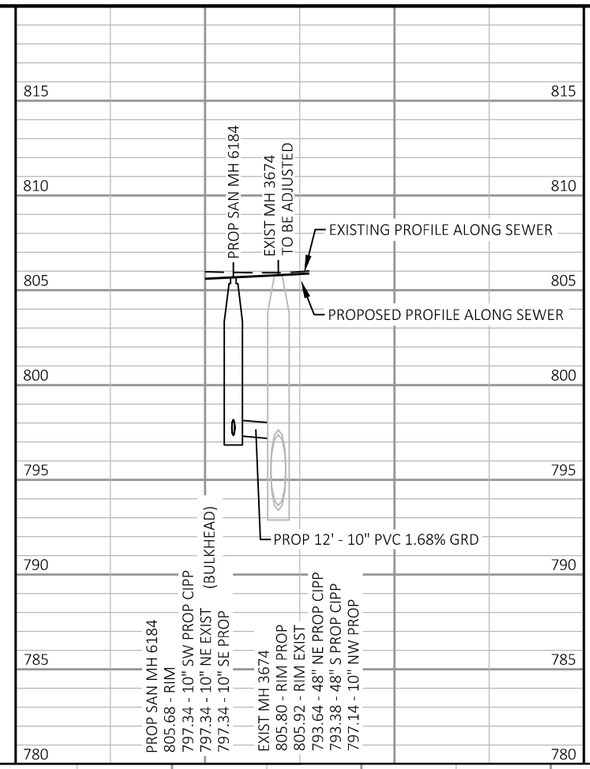
PLOT SCALE : 1 IN:40 FT
PLOT DATE : 10/7/2021 2:16 PM

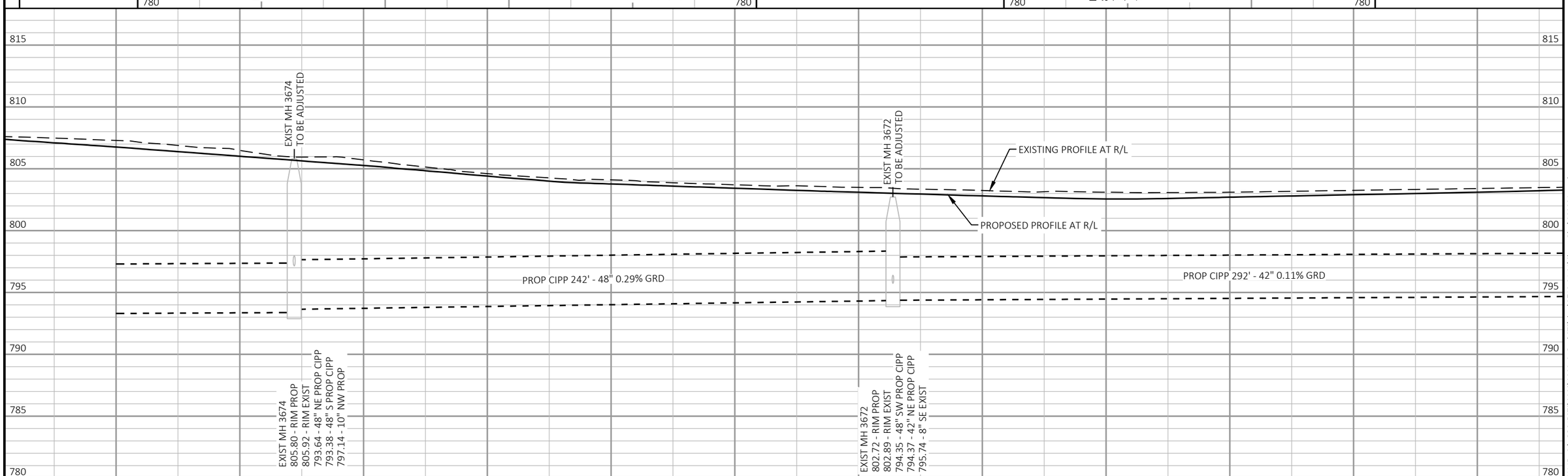
SHEET NO. 2 OF 8
PROJECT NO: 2022-ST. PAUL AVENUE

LAYOUT NAME - 023002-up

FILE NAME : O:_PROJECTS\2022\2022_St Paul STP\dwg\2718-04-01\SheetsPlan\023001-up.dwg







CITY OF WAUKESHA
DEPARTMENT OF PUBLIC WORKS

W. ST. PAUL AVENUE
SANITARY SEWER

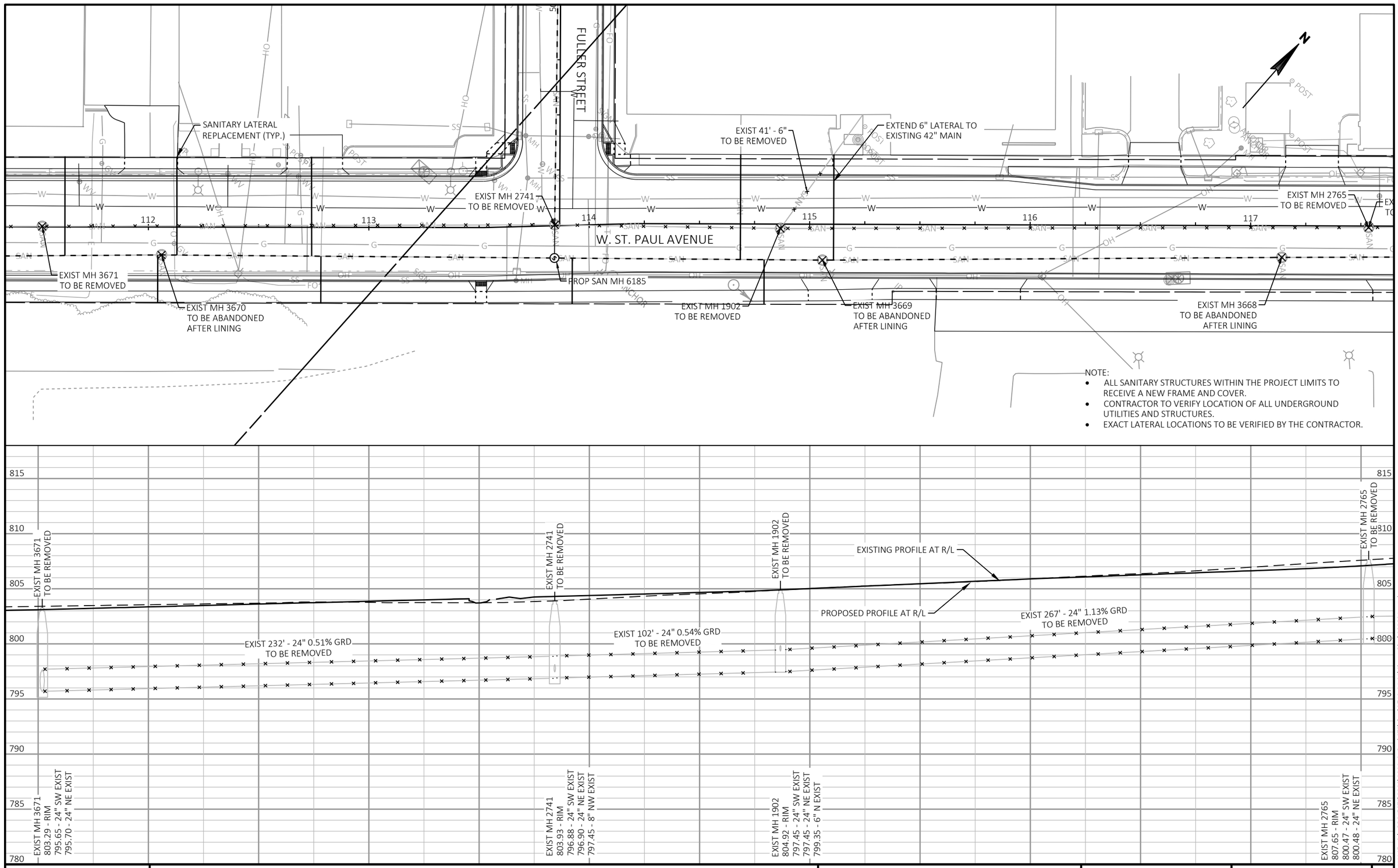
APPROVED: _____ DATE: _____ DRAWN BY: BCS
APPROVED: _____ DATE: _____ CHECKED BY: _____

PLOT SCALE : 1 IN:40 FT
PLOT DATE : 10/7/2021 2:16 PM

SHEET NO. 3 OF 8 74
PROJECT NO: 2022-ST. PAUL AVENUE

LAYOUT NAME - 023003-up

FILE NAME - O:_PROJECTS\2022\2022_St Paul STP\dwg\2718-04-01\SheetsPlan\023001-up.dwg



CITY OF WAUKESHA
DEPARTMENT OF PUBLIC WORKS

W. ST. PAUL AVENUE
SANITARY SEWER

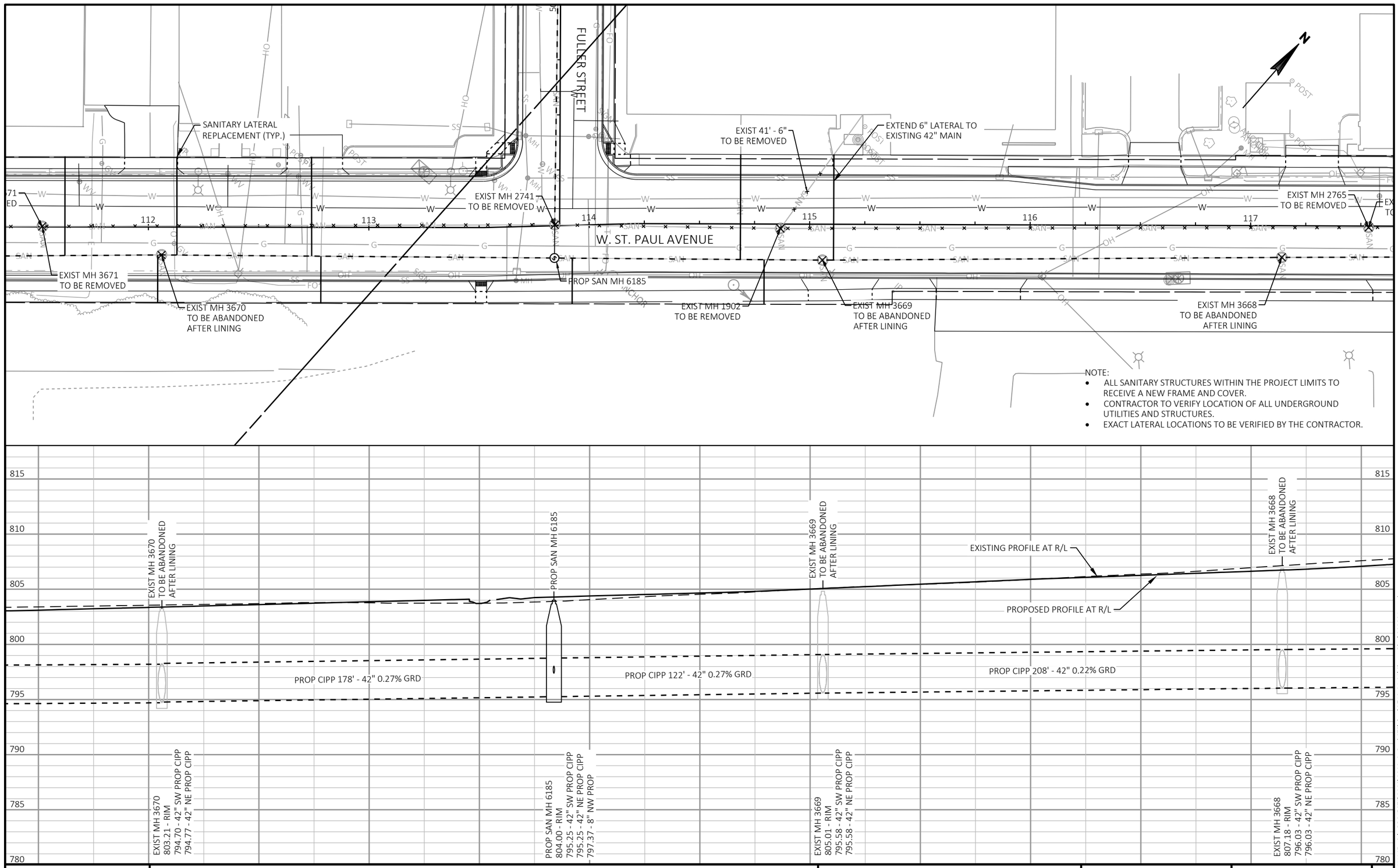
APPROVED: _____ DATE: _____ DRAWN BY: BCS
APPROVED: _____ DATE: _____ CHECKED BY: _____

PLOT SCALE : 1 IN:40 FT
PLOT DATE : 10/7/2021 2:16 PM

SHEET NO. 4 OF 8 75
PROJECT NO: 2022-ST. PAUL AVENUE

LAYOUT NAME - 023004-up

FILE NAME : O:_PROJECTS\2022\2022_St Paul STP\dwg\2718-04-01\SheetsPlan\023001-up.dwg



CITY OF WAUKESHA
DEPARTMENT OF PUBLIC WORKS

W. ST. PAUL AVENUE
SANITARY SEWER

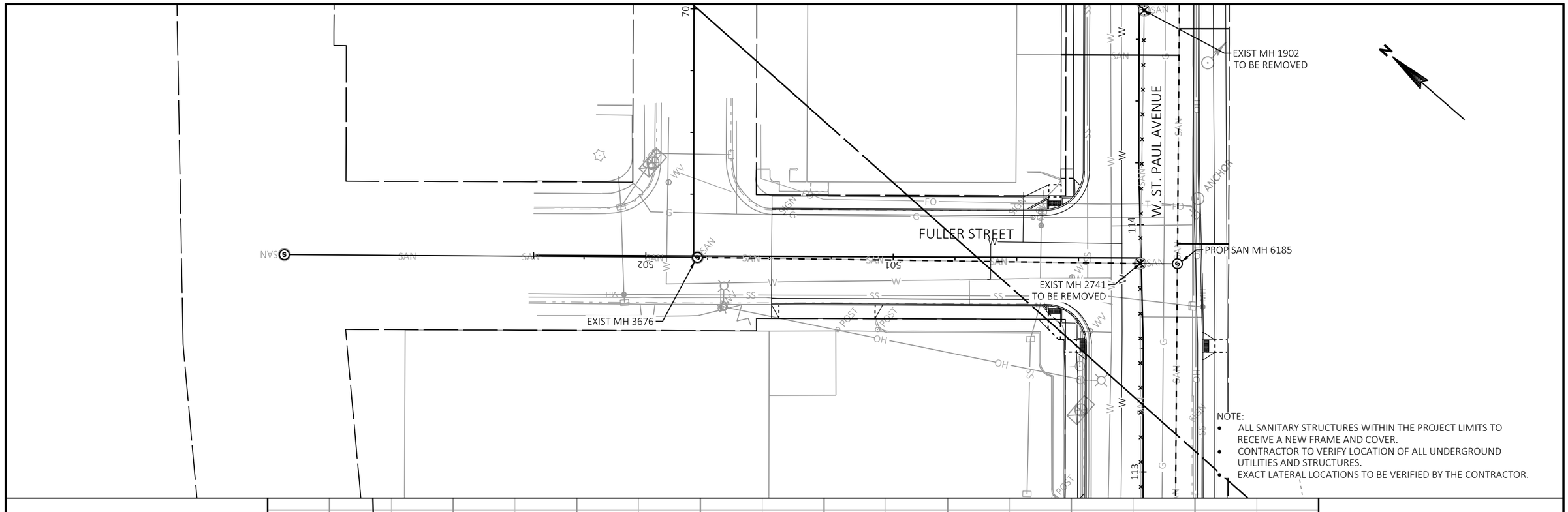
APPROVED: _____ DATE: _____ DRAWN BY: BCS
APPROVED: _____ DATE: _____ CHECKED BY: _____

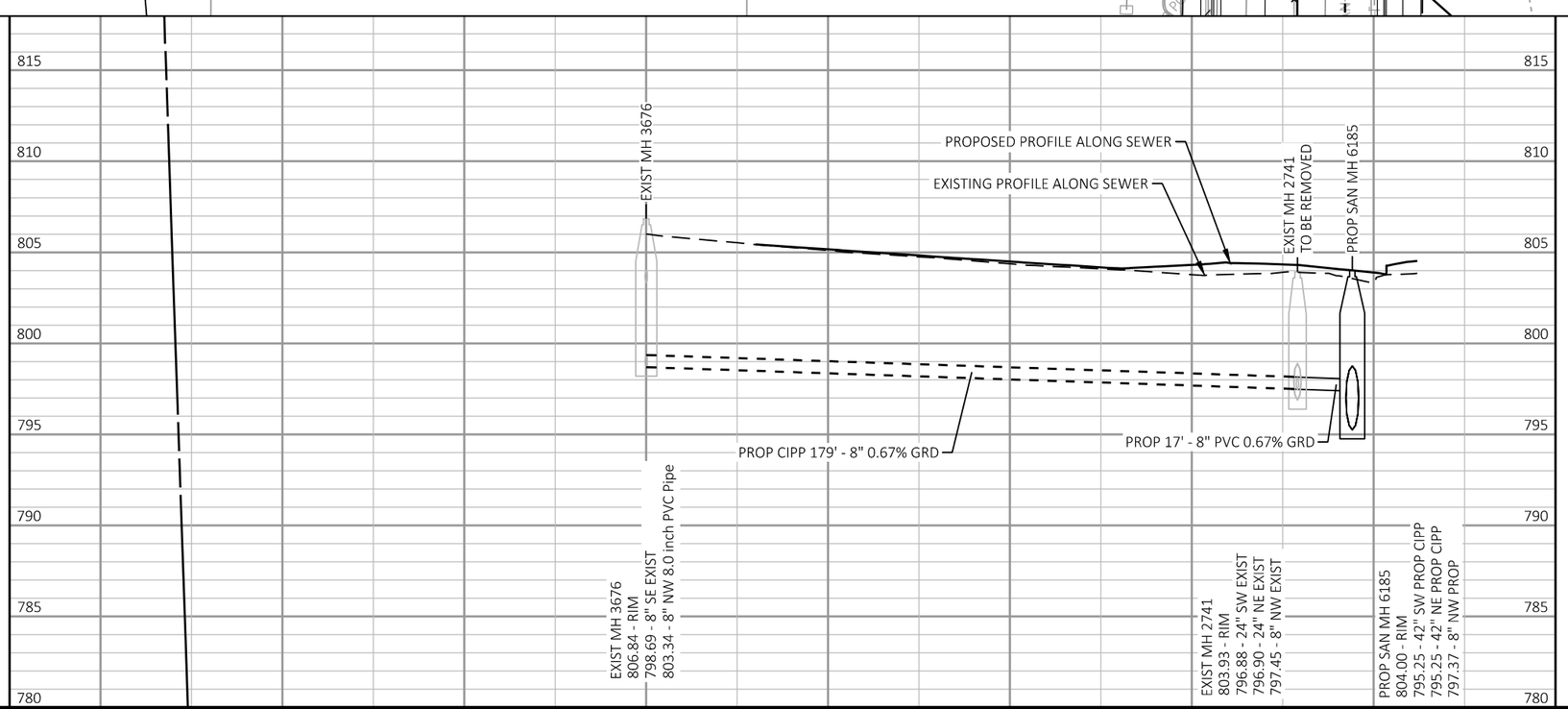
PLOT SCALE : ##########
PLOT DATE : 10/7/2021 2:17 PM

SHEET NO. 5 OF 8 76
PROJECT NO: 2022-ST. PAUL AVENUE

LAYOUT NAME - 023005-up

FILE NAME : O:_PROJECTS\2022\2022_St Paul STP\dwg\2718-04-01\SheetsPlan\023001-up.dwg

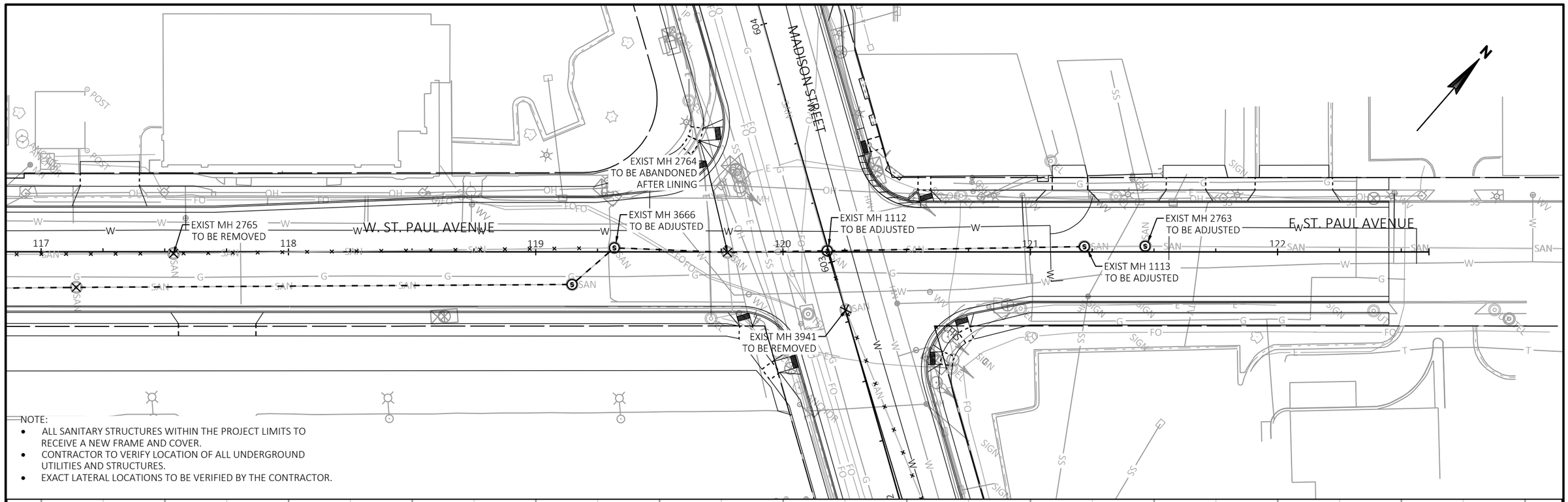




CITY OF WAUKESHA DEPARTMENT OF PUBLIC WORKS	W. ST. PAUL AVENUE SANITARY SEWER	APPROVED: ____ DATE: ____ DRAWN BY: BCS APPROVED: ____ DATE: ____ CHECKED BY: ____	PLOT SCALE : 1 IN:40 FT PLOT DATE : 10/7/2021 2:17 PM	SHEET NO. 4 OF 8 77 PROJECT NO: 2022-ST. PAUL AVENUE

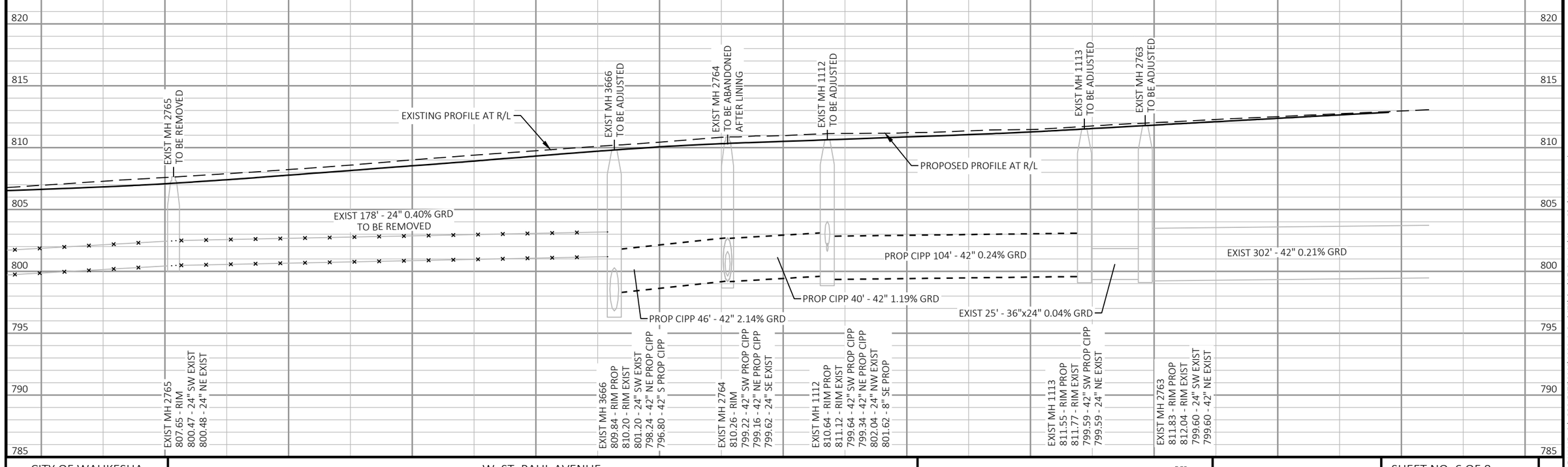
LAYOUT NAME - 023006-up

FILE NAME - O:_PROJECTS\2022\2022_St Paul STP\dwg\2718-04-01\SheetsPlan\023001-up.dwg



NOTE:

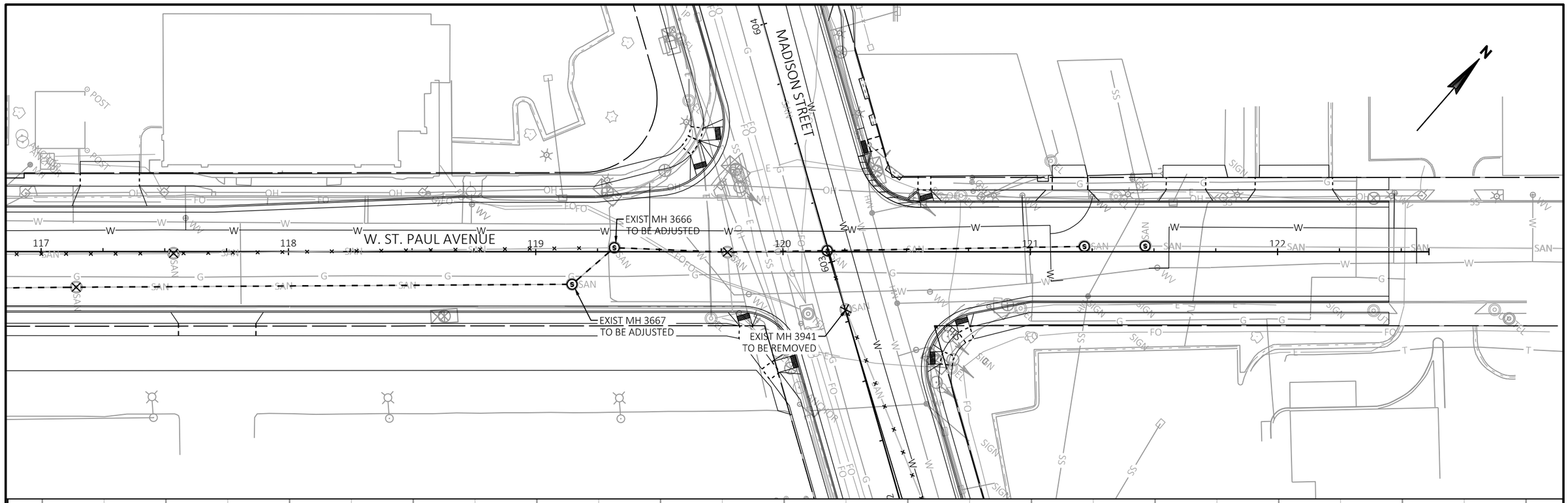
- ALL SANITARY STRUCTURES WITHIN THE PROJECT LIMITS TO RECEIVE A NEW FRAME AND COVER.
- CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES.
- EXACT LATERAL LOCATIONS TO BE VERIFIED BY THE CONTRACTOR.

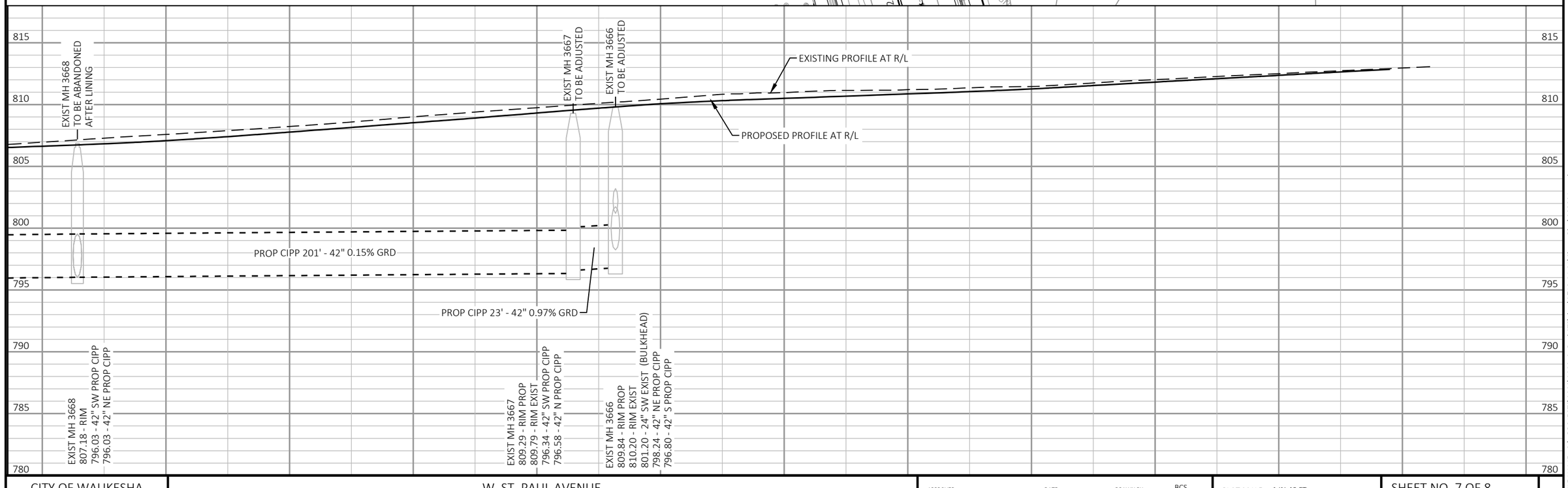


CITY OF WAUKESHA DEPARTMENT OF PUBLIC WORKS	W. ST. PAUL AVENUE SANITARY SEWER	APPROVED: _____ DATE: _____ DRAWN BY: BCS APPROVED: _____ DATE: _____ CHECKED BY: _____	PLOT SCALE : 1 IN:40 FT PLOT DATE : 10/7/2021 2:17 PM	SHEET NO. 6 OF 8 78 PROJECT NO: 2022-ST. PAUL AVENUE

LAYOUT NAME - 023007-up

FILE NAME : O:_PROJECTS\2022\2022_St Paul STP\dwg\2718-04-01\SheetsPlan\023001-up.dwg

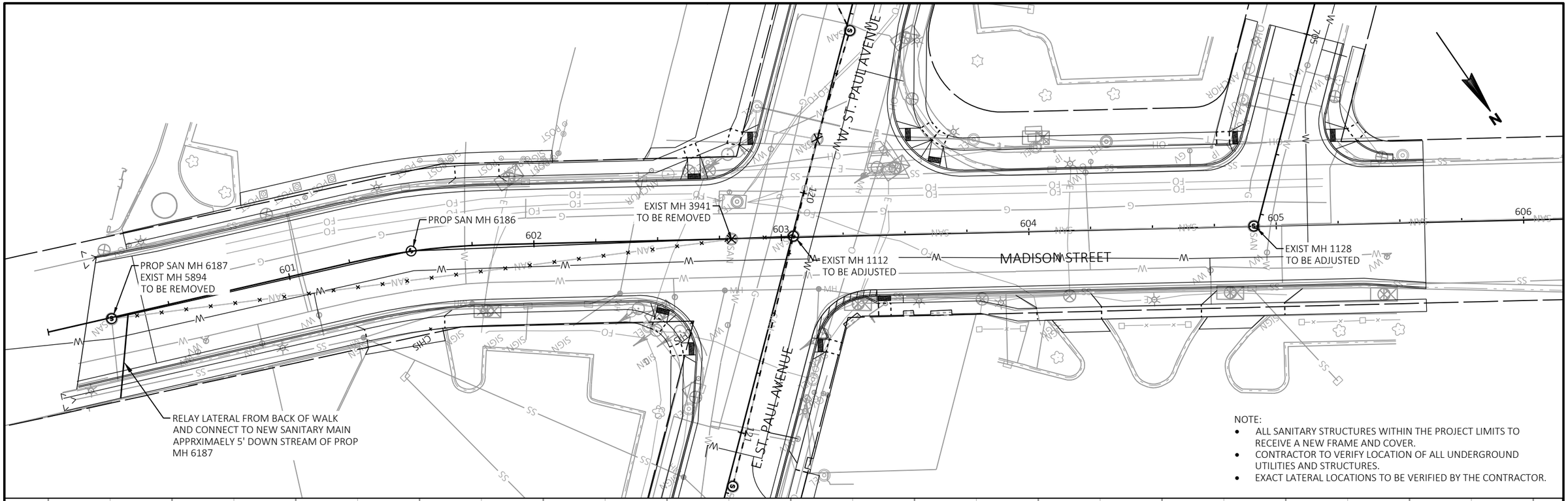


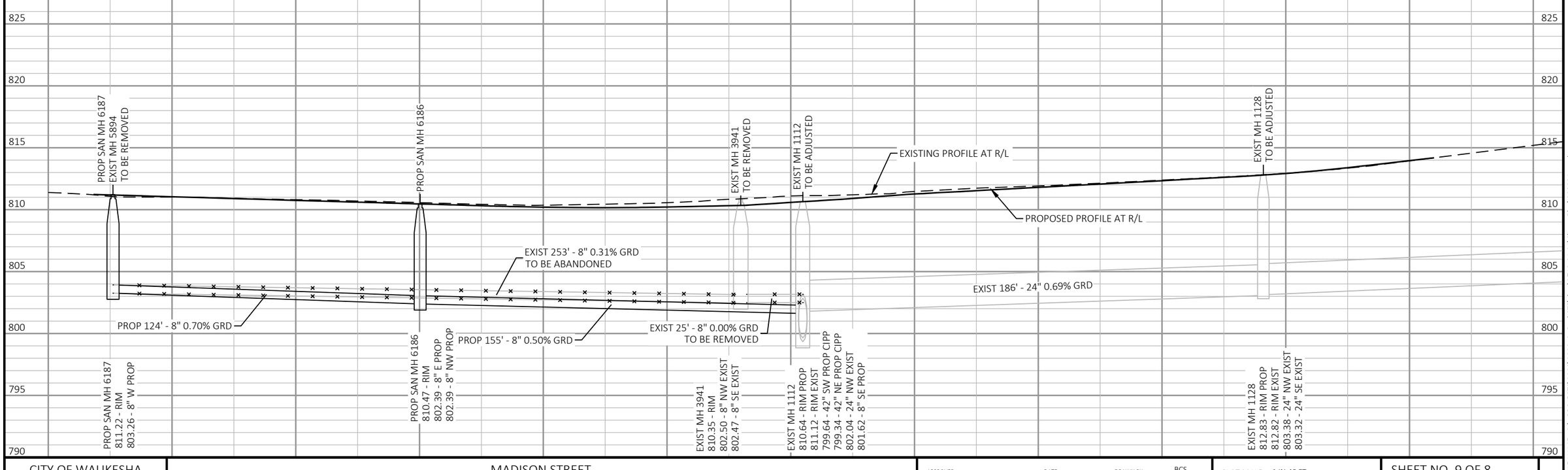


CITY OF WAUKESHA DEPARTMENT OF PUBLIC WORKS	W. ST. PAUL AVENUE SANITARY SEWER	APPROVED: ____ DATE: ____ DRAWN BY: BCS APPROVED: ____ DATE: ____ CHECKED BY: ____	PLOT SCALE : 1 IN:40 FT PLOT DATE : 10/7/2021 2:18 PM	SHEET NO. 7 OF 8 79 PROJECT NO: 2022-ST. PAUL AVENUE

LAYOUT NAME - 02.3008-up

FILE NAME : O:_PROJECTS\2022\2022_St Paul STP\dwg\2718-04-01\SheetsPlan\023001-up.dwg

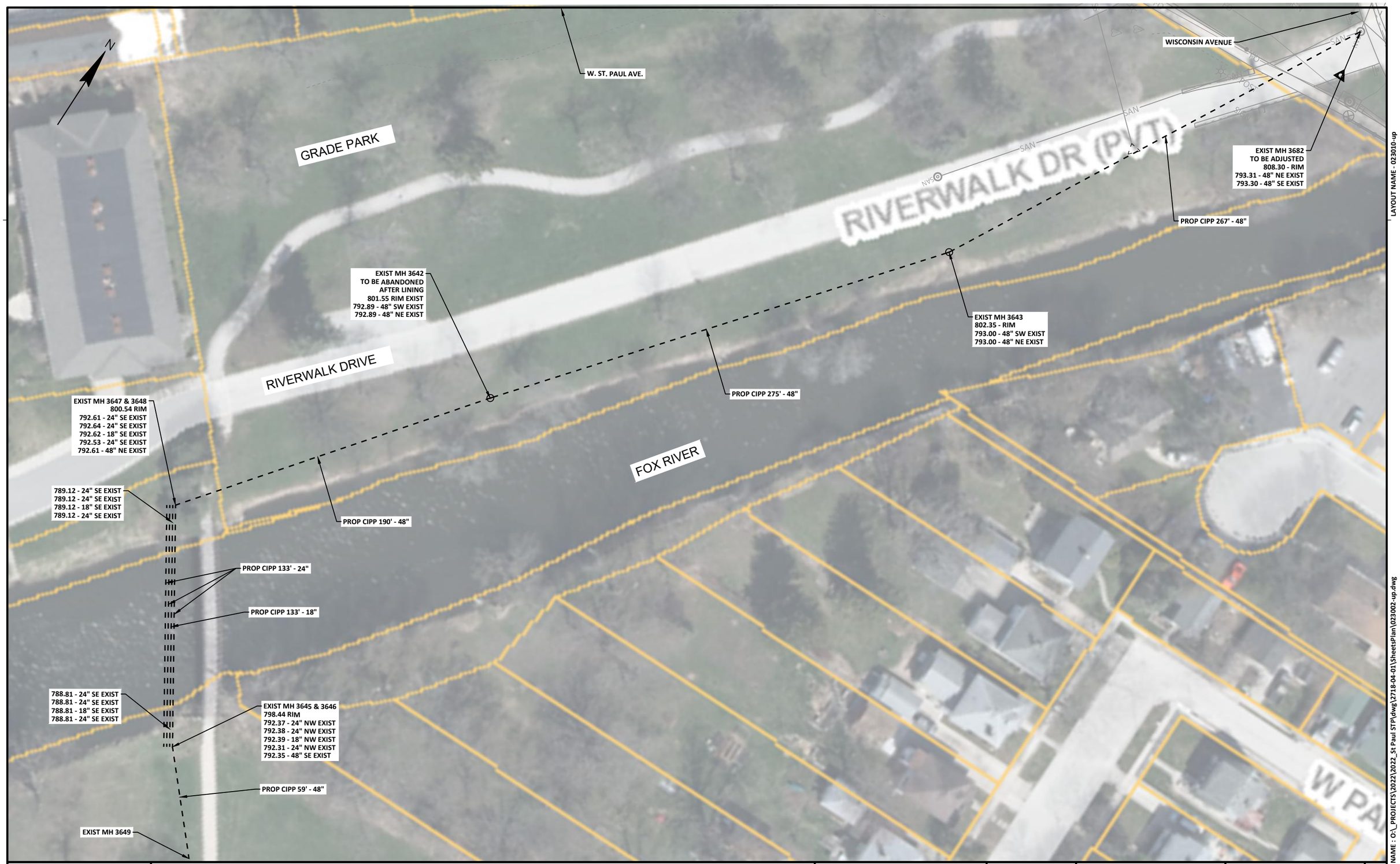




CITY OF WAUKESHA DEPARTMENT OF PUBLIC WORKS	MADISON STREET SANITARY SEWER	APPROVED: ____ DATE: ____ DRAWN BY: BCS APPROVED: ____ DATE: ____ CHECKED BY: ____	PLOT SCALE : 1 IN:40 FT PLOT DATE : 10/28/2021 12:27 PM	SHEET NO. 9 OF 8 80 PROJECT NO: 2022-ST. PAUL AVENUE

LAYOUT NAME - 023009-up

FILE NAME : O:_PROJECTS\2022\2022_St Paul STP\dwg\2718-04-01\SheetsPlan\023001-up.dwg



CITY OF WAUKESHA DEPARTMENT OF PUBLIC WORKS	**RIVERWALK DRIVE** **SANITARY SEWER**	APPROVED: _____ DATE: _____ APPROVED: _____ DATE: _____	DRAWN BY: KEN CHECKED BY: _____	PLOT SCALE : 1 IN:50 FT PLOT DATE : 10/7/2021 2:21 PM	SHEET NO. 10 OF 81 PROJECT NO: 2022-ST. PAUL AVENUE

LAYOUT NAME - 023010-up

FILE NAME : O:_PROJECTS\2022\2022_St Paul STP\dwg\3718-04-01\SheetsPlan\023002-up.dwg

2

2

W. ST. PAUL AVENUE

E. NORTH STREET

WISCONSIN AVENUE

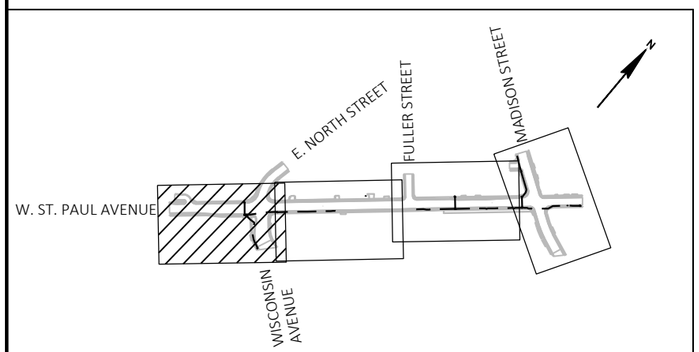
105+72.00, -25.8' LT
CV 01

105+72.00, 37.0' RT
CV 02

CONNECT TO TRAFFIC
SIGNAL PULL BOX

107+34.00, 25.8' RT
CV 04

303+30.00, -41.0' LT
CV 03



LEGEND

- PROPOSED COMMUNICATIONS VAULT QUAZITE 24x36x36 INCH
- PROPOSED HDPE DUCT 3 INCH, COMMUNICATIONS EMPTY W/#10 GREEN TRACER WIRE
- STUBOUT

PROJECT NO: 2718-04-01	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PROPOSED FIBER COMMUNICATION	SHEET 82	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023020-UP.DWG
LAYOUT NAME - 023020-up

PLOT DATE : 10/7/2021 4:07 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

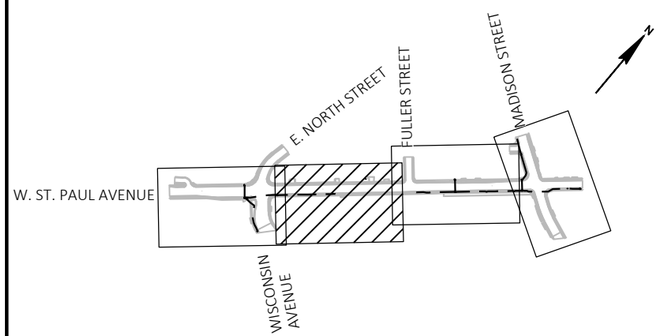
W. ST. PAUL AVENUE

108 109 110 111 112 113

STRUCTURE TO BE INSTALLED BY OTHERS

110+25.00, 26.2' RT
CV 05

FIBER TO BE INSTALLED BY OTHERS



LEGEND

V	PROPOSED COMMUNICATIONS VAULT QUAZITE 24x36x36 INCH
– – –	PROPOSED HDPE DUCT 3 INCH, COMMUNICATIONS EMPTY W/#10 GREEN TRACER WIRE
E– –	STUBOUT

PROJECT NO: 2718-04-01	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PROPOSED FIBER COMMUNICATION	SHEET 83	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023020-UP.DWG
LAYOUT NAME - 023021-up

PLOT DATE : 10/7/2021 4:08 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

701+00 702+00 703+00 704+00 705+00

501+00 502+00

FULLER STREET

W. ST. PAUL AVENUE

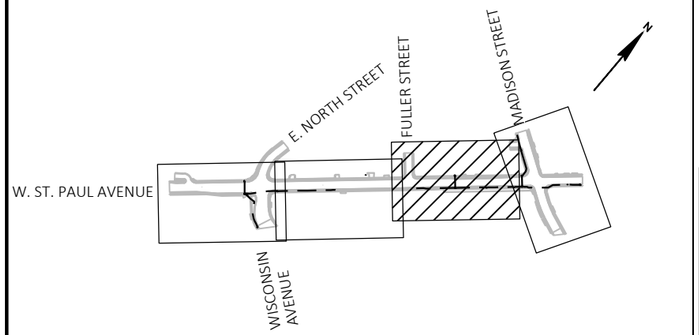
116+14.00, -24.2' LT
CV 08

114+16.01, 26.3' RT
CV 06

116+14.00, 27.3' RT
CV 07

FIBER TO BE INSTALLED BY OTHERS

STRUCTURE TO BE INSTALLED BY OTHERS



LEGEND

- V — PROPOSED COMMUNICATIONS VAULT QUAZITE 24x36x36 INCH
- PROPOSED HDPE DUCT 3 INCH, COMMUNICATIONS EMPTY W/#10 GREEN TRACER WIRE
- STUBOUT

PROJECT NO: 2718-04-01	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PROPOSED FIBER COMMUNICATION	SHEET 84	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023020-UP.DWG
LAYOUT NAME - 023022-up

PLOT DATE : 10/7/2021 4:10 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

119+45.00, 26.1' RT
CV 09

119+44.93, -26.9' LT
CV 10

604+72.00, -31.0' LT
CV 11

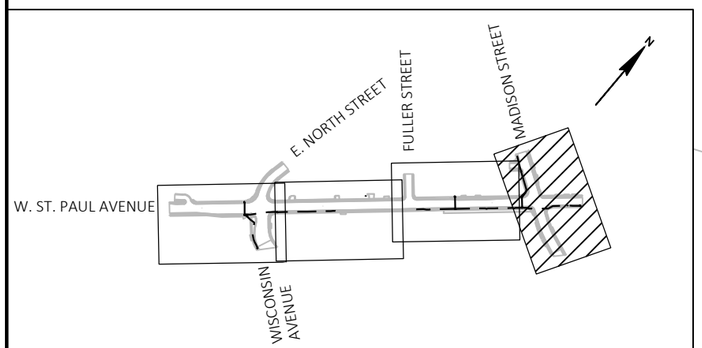
CONNECT TO TRAFFIC SIGNAL PULL BOX

ANN STREET

MADISON STREET

W. ST. PAUL AVENUE

122+33.00, 22.0' RT
CV 12



LEGEND

- V — PROPOSED COMMUNICATIONS VAULT QUAZITE 24x36x36 INCH
- PROPOSED HDPE DUCT 3 INCH, COMMUNICATIONS EMPTY W/#10 GREEN TRACER WIRE
- STUBOUT

PROJECT NO: 2718-04-01	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PROPOSED FIBER COMMUNICATION	SHEET 85	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023020-UP.DWG
LAYOUT NAME - 023023-up

PLOT DATE : 10/7/2021 4:11 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

THE CONTRACTOR SHALL PROVIDE THE NECESSARY MATERIALS, EXCAVATION, BACKFILL, COMPACTION AND MAINTENANCE OF DITCHES FOR THE FOLLOWING WORK, AFTER THE BACTI SAMPLE RESULTS ARE SAFE ON THE NEW WATER MAIN.

SLO EXISTING SERVICE LATERAL WILL NOT BE CONNECTED TO THE NEW WATER MAIN. THE WAUKESHA WATER UTILITY WILL REMOVE THE CURB BOX. (NO WORK IS REQUIRED FOR THESE SERVICE LATERALS)

SL3 EXISTING 6" SERVICE LATERAL TO BE CONNECTED TO THE NEW WATER MAIN WITH A 12"x6" ANCHOR TEE, A 6" GATE VALVE & BOX, ~10' OF 6" D.I. (CLASS 52) OR PVC (DR-14) PIPE AND A 6" SOLID SLEEVE OR 6" - 45° BENDS (2).

REMOVE EXIST. WATER MAIN DURING PROP. WATER MAIN INSTALLATION

CONNECT TO EXISTING 12" OFFSET (MJ) (FIELD VERIFY DEPTH)

CONNECT TO EXISTING 8" SOLID SLEEVE (FIELD VERIFY DEPTH)

MOUNTAIN AVENUE

ABANDON VALVE BOX

PROP. 12" GATE VALVE & BOX

PROP. 12" CAP

ABANDON VALVE BOX

EXIST. 12" C.I. WATER MAIN (TO BE ABANDONED)

ABANDON HYDRANT & VALVE BOX

PROP. 12" SOLID SLEEVE OR 12" BENDS (2) (CONNECTION TO BE MADE AFTER SAFE BACTI SAMPLE)

ABANDON VALVE & VALVE BOX

PROP. 12" CAP

W. NORTH STREET

(SEE SHEET 2)

PROP. 12" CAP

PROP. 12" GATE VALVE & BOX

W. ST. PAUL AVENUE

PROP. 8" GATE VALVE & BOX

PROP. 8" CAP

PROP. 8" - 45° BENDS (2) (CONNECTION TO BE MADE AFTER SAFE BACTI SAMPLE - TEMP. 2" STANDPIPE FOR FLUSHING)

PROP. 12" - 45° BENDS (2)

PROP. 12" WATER MAIN

PROP. 12"x12" TEE, 12" FOSTER ADAPTER & 12" GATE VALVE & BOX

WISCONSIN AVENUE

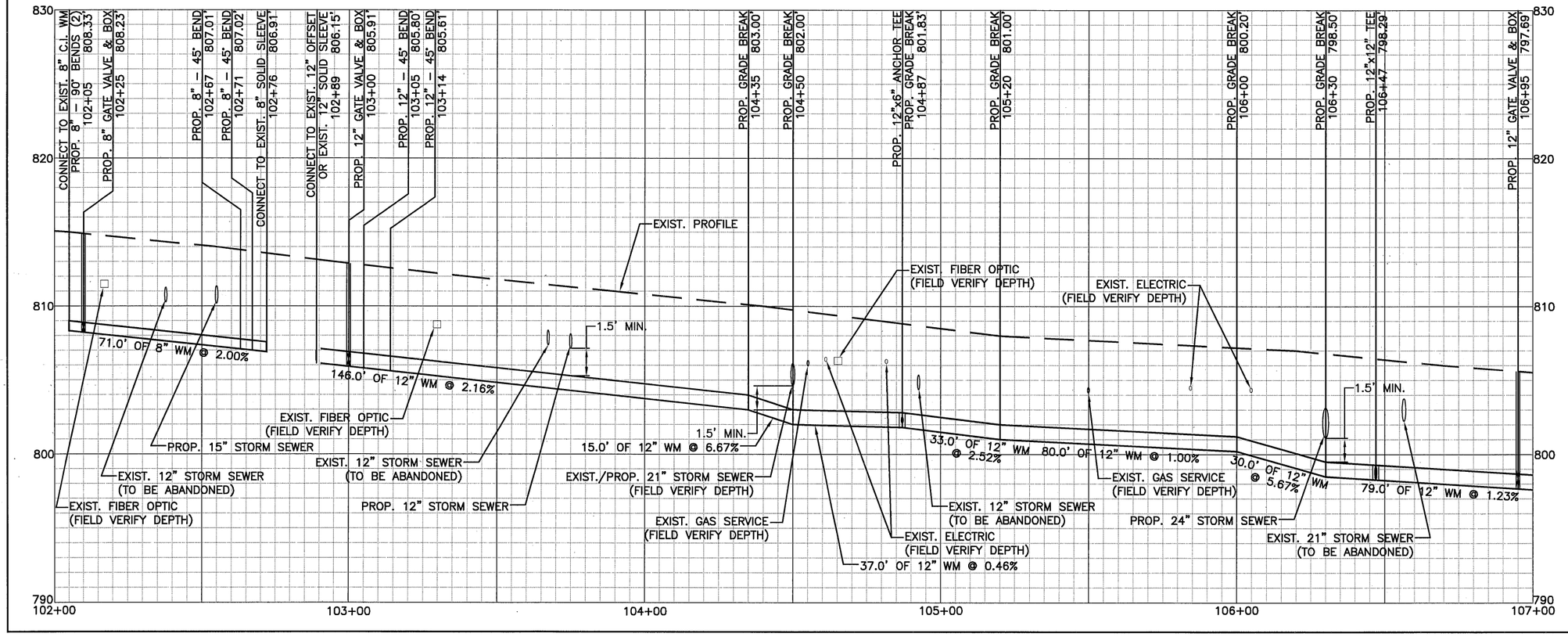
PROP. 8" - 90° BENDS (2)

4'

15'

102 103 104 105 106 107

202 203 304 305 401



LEGEND

- EXIST. WATER MANHOLE
- EXIST. WATER VALVE
- EXIST. HYDRANT
- PROP. WATER VALVE
- PROP. HYDRANT
- POWER POLE
- LIGHT POLE
- GAS VALVE BOX
- SEWER MANHOLE
- STORM INLET
- TELEPHONE MANHOLE
- TREE
- EXIST. WATER MAIN
- PROP. WATER MAIN
- SANITARY SEWER
- STORM SEWER
- GAS MAIN
- STREET CONDUIT OR ELECTRIC
- TELEPHONE DUCT PACKAGE
- FIBER OPTIC
- OVER HEAD WIRE
- PROP. CURB & GUTTER
- PROP. STORM SEWER
- PROP. SANITARY SEWER

Waukesha Water Utility

115 Delafield Street
Waukesha, WI 53188
Phone 262-521-5272
Fax 262-521-5265

REVISIONS

description	by	date

WISCONSIN
CHRISTOPHER J. WALTER
E-39783
WEST BEND, WI
PROFESSIONAL ENGINEER
10/27/21

Water Main Replacement
ST. PAUL AVENUE
FROM: MOUNTAIN AVENUE
TO: MADISON STREET

SCALE:	1" = 20'
	1" = 4' (VERT)
DATE:	10-8-2021
drawn by :	TAK
checked :	CJW
project :	M00546
file :	/St. Paul Ave

86

SHEET 1 of 7

THE CONTRACTOR SHALL PROVIDE THE NECESSARY MATERIALS, EXCAVATION, BACKFILL, COMPACTION AND MAINTENANCE OF DITCHES FOR THE FOLLOWING WORK, AFTER THE BACTI SAMPLE RESULTS ARE SAFE ON THE NEW WATER MAIN.

SL0 EXISTING SERVICE LATERAL WILL NOT BE CONNECTED TO THE NEW WATER MAIN. THE WAUKESHA WATER UTILITY WILL REMOVE THE CURB BOX. (NO WORK IS REQUIRED FOR THESE SERVICE LATERALS)

SL1 EXISTING SERVICE LATERAL TO BE CONNECTED TO THE NEW WATER MAIN WITH A 12"x1" TAPPING SADDLE, A 1" CORPORATION, ~20.0' OF 1" PE(CTS) PIPE, A 1" CURB STOP, BOX AND ROD AND A 1"x3/4" STRAIGHT COUPLING.

SL2 EXISTING 4" SERVICE LATERAL TO BE CONNECTED TO THE NEW WATER MAIN WITH A 12"x6" ANCHOR TEE, A 6" GATE VALVE & BOX, ~20' OF 6" D.I. (CLASS 52) OR PVC (DR-14) PIPE AND A 6"x4" REDUCER (6" – 45° BENDS (2) IF NEEDED)

SL3 EXISTING 6" SERVICE LATERAL TO BE CONNECTED TO THE NEW WATER MAIN WITH A 12"x6" ANCHOR TEE, A 6" GATE VALVE & BOX, ~15' OF 6" D.I. (CLASS 52) OR PVC (DR-14) PIPE AND A 6" SOLID SLEEVE OR 6" – 45° BENDS (2).

W. NORTH STREET

W. ST. PAUL AVENUE

WISCONSIN AVENUE

(SEE SHEET 1)

(SEE SHEET 3)

(SEE SHEET 7)

ABANDON VALVE BOX

PROP. 12"x8" ANCHOR TEE & 8" GATE VALVE & BOX

PROP. HYDRANT (7.5' BURY DEPTH)

EXIST. 12" C.I. WATER MAIN (TO BE ABANDONED)

ABANDON VALVE BOX

PROP. 12"x12" TEE

PROP. HYDRANT (6.5' BURY DEPTH)

ABANDON HYDRANT & VALVE BOX

EXIST. 8" C.I. WATER MAIN (TO BE ABANDONED)

PROP. 12"x6" ANCHOR TEE & 6" GATE VALVE & BOX

PROP. 8" 45° BENDS (2)

PROP. 12" WATER MAIN

PROP. 12"x6" ANCHOR TEE & 6" GATE VALVE & BOX

PROP. 12" GATE VALVE & BOX

PROP. 12" CAP OR PLUG (IF NEEDED FOR PROP. WM OR HYDRANT INSTALLATION)

PROP. 12"x6" ANCHOR TEE & 6" GATE VALVE & BOX

PROP. 12" CAPS (2) (IF NEEDED FOR PROP. WM INSTALLATION)

331–321

307–301

222–18

216

310

305

107 108 109 110 111 112

LEGEND

- W – EXIST. WATER MANHOLE
- ⊕ – EXIST. WATER VALVE
- EXIST. HYDRANT
- PROP. WATER VALVE
- PROP. HYDRANT
- POWER POLE
- LIGHT POLE
- GAS VALVE BOX
- S – SEWER MANHOLE
- STORM INLET
- T – TELEPHONE MANHOLE
- TREE
- W – EXIST. WATER MAIN
- PROP. WATER MAIN
- SAN – SANITARY SEWER
- STM – STORM SEWER
- GAS – GAS MAIN
- E – STREET CONDUIT OR ELECTRIC
- TEL – TELEPHONE DUCT PACKAGE
- FO – FIBER OPTIC
- OHW – OVER HEAD WIRE
- PROP. CURB & GUTTER
- PSTM – PROP. STORM SEWER
- PSAN – PROP. SANITARY SEWER

PROP. 12"x8" ANCHOR TEE PROP. GRADE BREAK 797.53' 107+08

PROP. 12"x6" ANCHOR TEE 797.48' 107+18

PROP. GRADE BREAK 797.00' 108+20

PROP. 12"x6" ANCHOR TEE PROP. GRADE BREAK 797.00' 110+13

PROP. 12"x6" ANCHOR TEE PROP. GRADE BREAK 798.00' 110+44

PROP. 12" GATE VALVE & BOX 798.00' 110+52

PROP. 12"x12" TEE 798.00' 110+57

PROP. 12"x6" ANCHOR TEE PROP. GRADE BREAK 798.00' 110+70

PROP. GRADE BREAK 797.00' 110+80

EXIST. PROFILE

EXIST. ELECTRIC (FIELD VERIFY DEPTH)

112.0' OF 12" WM @ 0.47%

EXIST. ELECTRIC (FIELD VERIFY DEPTH)

PROP. 12" STORM SEWER

EXIST. 8" WATER MAIN (FIELD VERIFY DEPTH)

EXIST. WATER LATERAL (FIELD VERIFY DEPTH)

WL

193.0' OF 12" WM @ 0.00%

EXIST./PROP. 12" STORM SEWER

PROP. 15" STORM SEWER

26.0' OF 12" WM @ 0.00%

31.0' OF 12" WM @ 3.23%

EXIST. 12" WATER MAIN (FIELD VERIFY DEPTH)

10.0' OF 12" WM @ 2.57%

EXIST. 15" STORM SEWER (TO BE ABANDONED)

312.0' OF 12" WM @ 0.00%

PROP. 12" STORM SEWER

EXIST. GAS SERVICE (FIELD VERIFY DEPTH)

830 820 810 800 790

107+00 108+00 109+00 110+00 111+00 112+00

Waukesha Water Utility

115 Delafield Street
Waukesha, WI 53188

Phone 262-521-5272
Fax 262-521-5265

REVISIONS

description	by	date

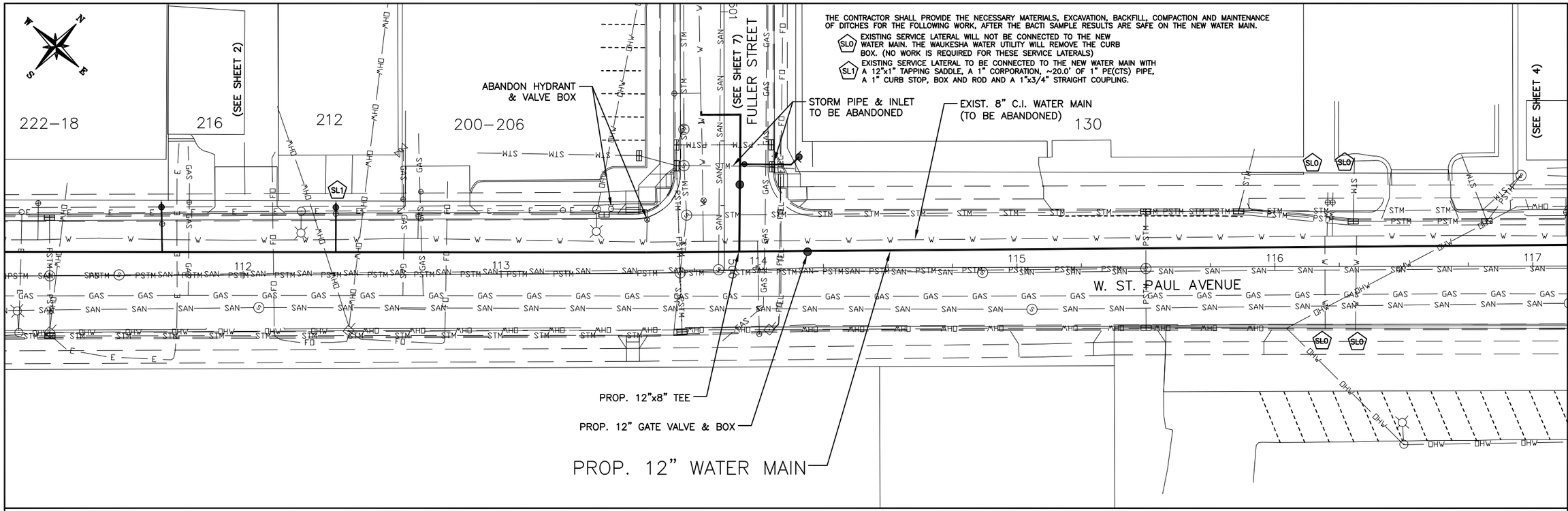
Water Main Replacement
ST. PAUL AVENUE
FROM: MOUNTAIN AVENUE
TO: MADISON STREET

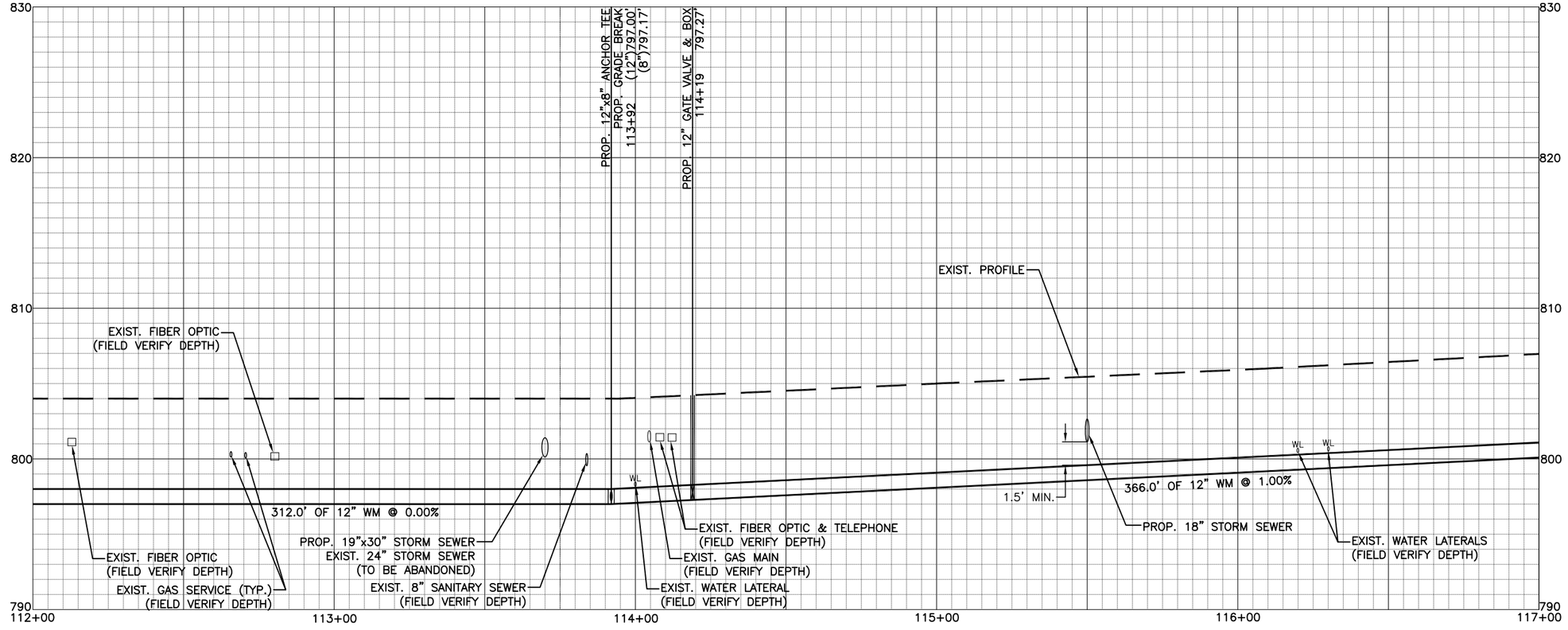
SCALE:	1" = 20' 1" = 4' (VERT)
DATE:	10-8-2021
drawn by :	TAK
checked :	CJW
project :	M00546
file 87	2/St. Paul Ave.

THE CONTRACTOR SHALL PROVIDE THE NECESSARY MATERIALS, EXCAVATION, BACKFILL, COMPACTION AND MAINTENANCE OF DITCHES FOR THE FOLLOWING WORK, AFTER THE BACTI SAMPLE RESULTS ARE SAFE ON THE NEW WATER MAIN.

SL0 EXISTING SERVICE LATERAL WILL NOT BE CONNECTED TO THE NEW WATER MAIN. THE WAUKESHA WATER UTILITY WILL REMOVE THE CURB BOX. (NO WORK IS REQUIRED FOR THESE SERVICE LATERALS)

SL1 EXISTING SERVICE LATERAL TO BE CONNECTED TO THE NEW WATER MAIN WITH A 12"x1" TAPPING SADDLE, A 1" CORPORATION, ~20.0' OF 1" PE(CTS) PIPE, A 1" CURB STOP, BOX AND ROD AND A 1"x3/4" STRAIGHT COUPLING.





LEGEND

- EXIST. WATER MANHOLE
- EXIST. WATER VALVE
- EXIST. HYDRANT
- PROP. WATER VALVE
- PROP. HYDRANT
- POWER POLE
- LIGHT POLE
- GAS VALVE BOX
- SEWER MANHOLE
- STORM INLET
- TELEPHONE MANHOLE
- TREE
- W — EXIST. WATER MAIN
- PROP. WATER MAIN
- SAN — SANITARY SEWER
- STM — STORM SEWER
- GAS — GAS MAIN
- E — STREET CONDUIT OR ELECTRIC
- TEL — TELEPHONE DUCT PACKAGE
- FO — FIBER OPTIC
- OHW — OVER HEAD WIRE
- PROP. CURB & GUTTER
- PSTM — PROP. STORM SEWER
- PSAN — PROP. SANITARY SEWER

Waukesha Water Utility
115 Delafield Street
Waukesha, WI 53188
Phone 262-521-5272
Fax 262-521-5265

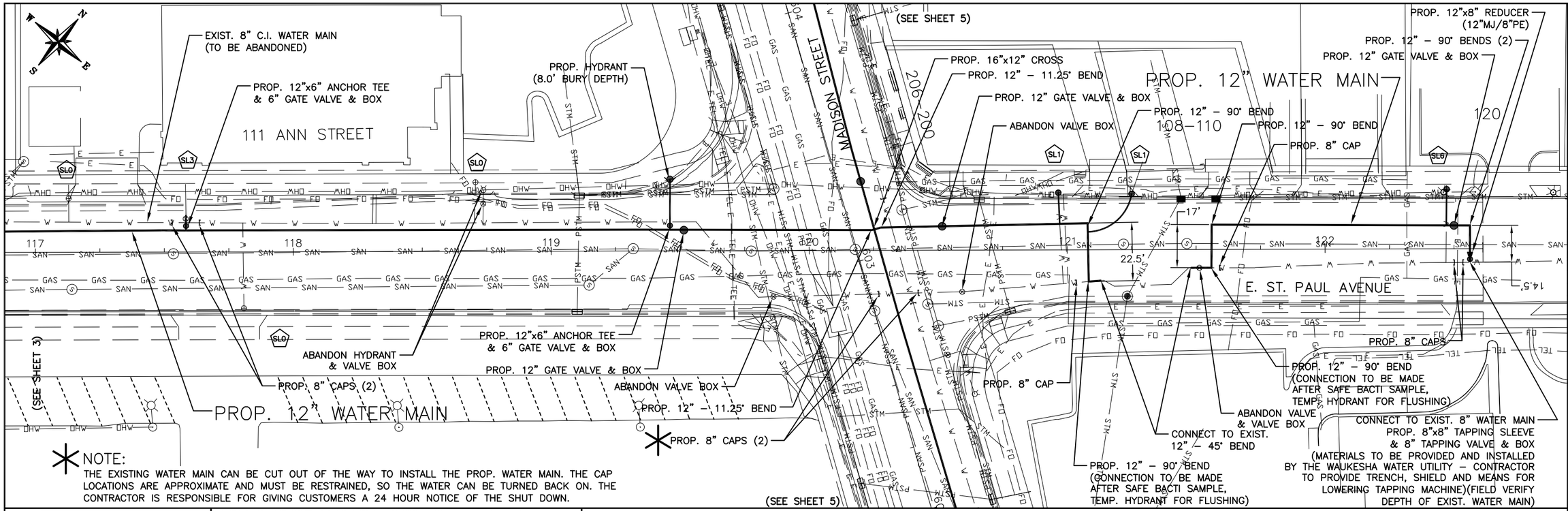
REVISIONS

description	by	date

Water Main Replacement
ST. PAUL AVENUE
FROM: MOUNTAIN AVENUE
TO: MADISON STREET

SCALE:	1" = 20'
	1" = 4' (VERT)
DATE:	10-8-2021
drawn by :	TAK
checked :	CJW
project :	M00546
file 88	2/St. Paul Ave.

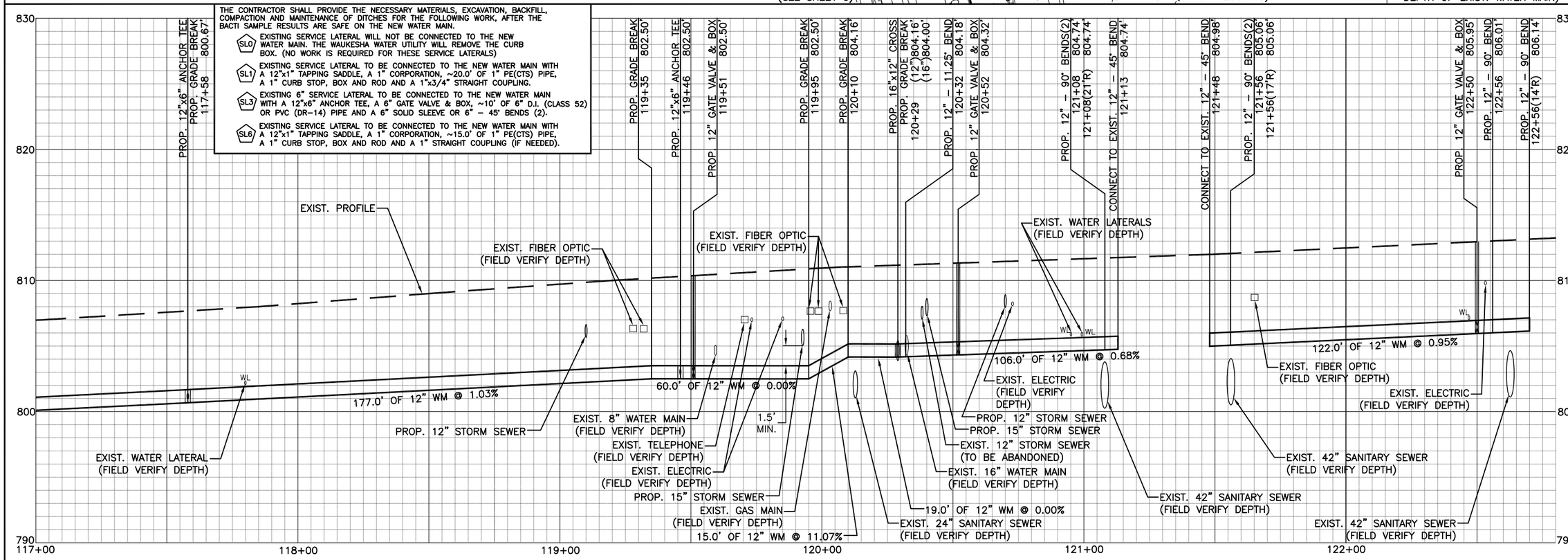
SHEET 3 of 7



NOTE:
THE EXISTING WATER MAIN CAN BE CUT OUT OF THE WAY TO INSTALL THE PROP. WATER MAIN. THE CAP LOCATIONS ARE APPROXIMATE AND MUST BE RESTRAINED, SO THE WATER CAN BE TURNED BACK ON. THE CONTRACTOR IS RESPONSIBLE FOR GIVING CUSTOMERS A 24 HOUR NOTICE OF THE SHUT DOWN.

THE CONTRACTOR SHALL PROVIDE THE NECESSARY MATERIALS, EXCAVATION, BACKFILL, COMPACTION AND MAINTENANCE OF DITCHES FOR THE FOLLOWING WORK, AFTER THE BACTI SAMPLE RESULTS ARE SAFE ON THE NEW WATER MAIN.

- SL0 EXISTING SERVICE LATERAL WILL NOT BE CONNECTED TO THE NEW WATER MAIN. THE WAUKESHA WATER UTILITY WILL REMOVE THE CURB BOX. (NO WORK IS REQUIRED FOR THESE SERVICE LATERALS)
- SL1 EXISTING SERVICE LATERAL TO BE CONNECTED TO THE NEW WATER MAIN WITH A 12"x1" TAPPING SADDLE, A 1" CORPORATION, ~20.0' OF 1" PE(CTS) PIPE, A 1" CURB STOP, BOX AND ROD AND A 1"x3/4" STRAIGHT COUPLING.
- SL3 EXISTING 6" SERVICE LATERAL TO BE CONNECTED TO THE NEW WATER MAIN WITH A 12"x6" ANCHOR TEE, A 6" GATE VALVE & BOX, ~10' OF 6" D.I. (CLASS 52) OR PVC (DR–14) PIPE AND A 6" SOLID SLEEVE OR 6" – 45° BENDS (2).
- SL6 EXISTING SERVICE LATERAL TO BE CONNECTED TO THE NEW WATER MAIN WITH A 12"x1" TAPPING SADDLE, A 1" CORPORATION, ~15.0' OF 1" PE(CTS) PIPE, A 1" CURB STOP, BOX AND ROD AND A 1" STRAIGHT COUPLING (IF NEEDED).



Waukesha Water Utility
115 Delafield Street
Waukesha, WI 53188
Phone 262–521–5272
Fax 262–521–5265

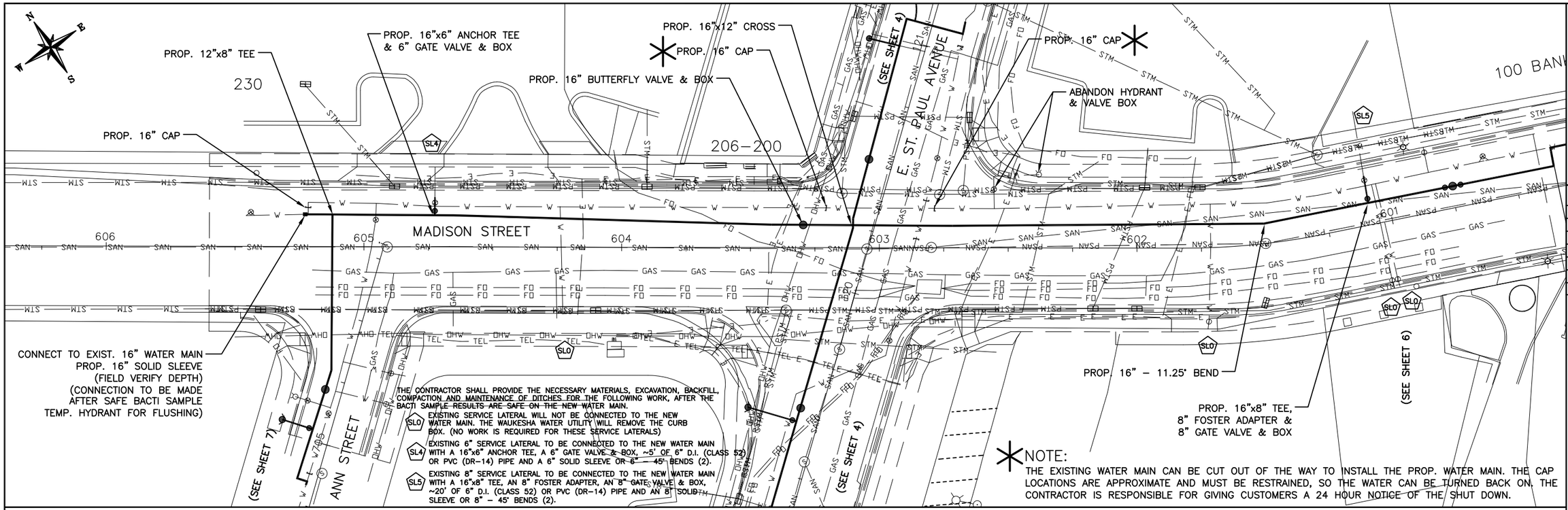
REVISIONS

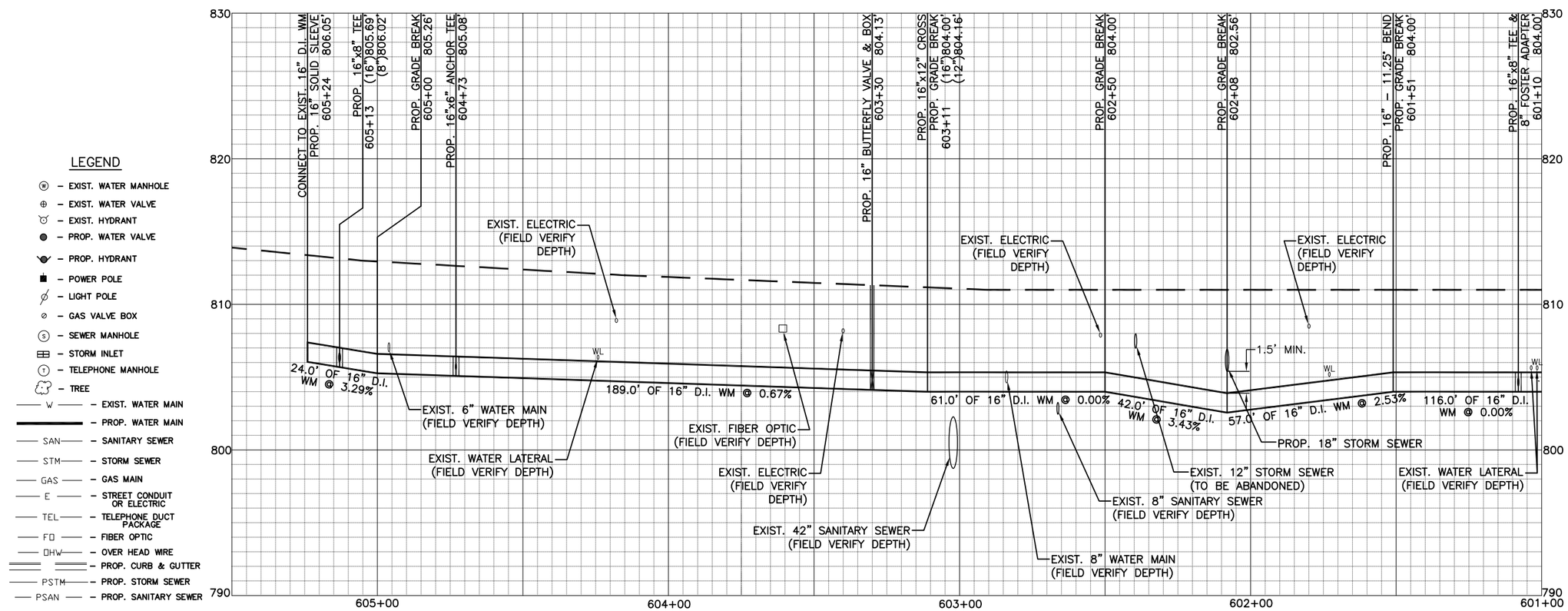
description	by	date

Water Main Replacement
ST. PAUL AVENUE
FROM: MOUNTAIN AVENUE
TO: MADISON STREET

SCALE:	1" = 20'
	1" = 4' (VERT)
DATE:	10–8–2021
drawn by :	TAK
checked :	CJW
project :	M00546
file 89	2/St. Paul Ave.

SHEET 4 of 7





LEGEND

- EXIST. WATER MANHOLE
- EXIST. WATER VALVE
- EXIST. HYDRANT
- PROP. WATER VALVE
- PROP. HYDRANT
- POWER POLE
- LIGHT POLE
- GAS VALVE BOX
- SEWER MANHOLE
- STORM INLET
- TELEPHONE MANHOLE
- TREE
- W — EXIST. WATER MAIN
- PROP. WATER MAIN
- SAN — SANITARY SEWER
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- GAS — GAS MAIN
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Waukesha Water Utility
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Waukesha, WI 53188
Phone 262-521-5272
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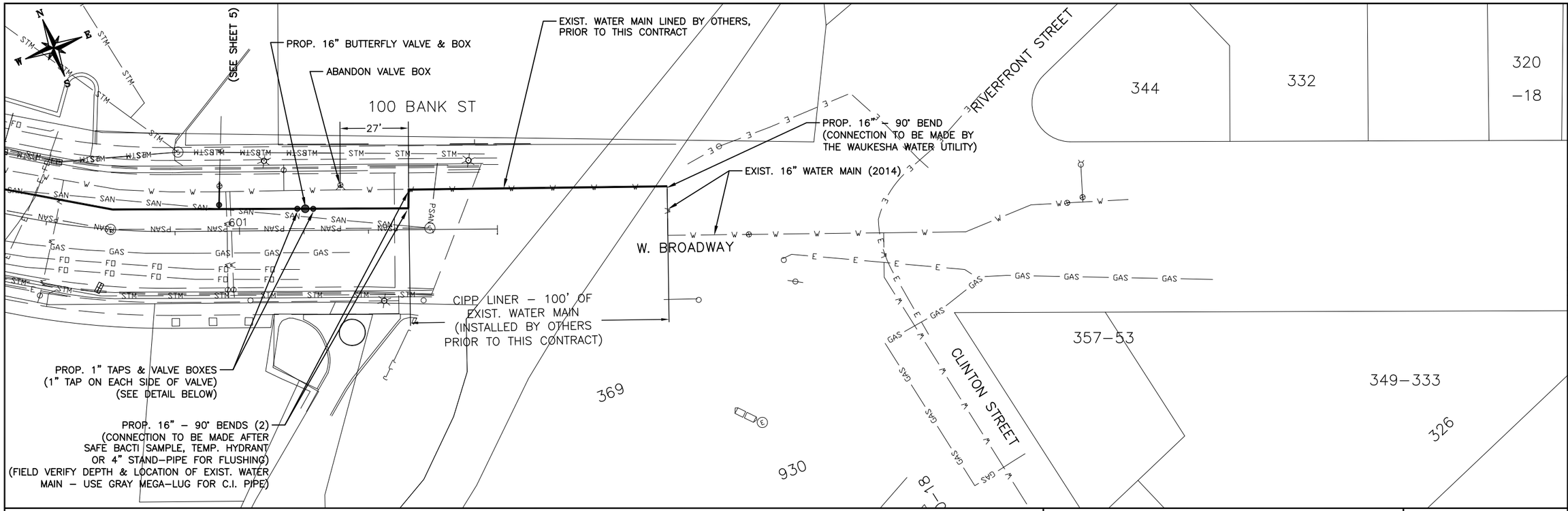
REVISIONS

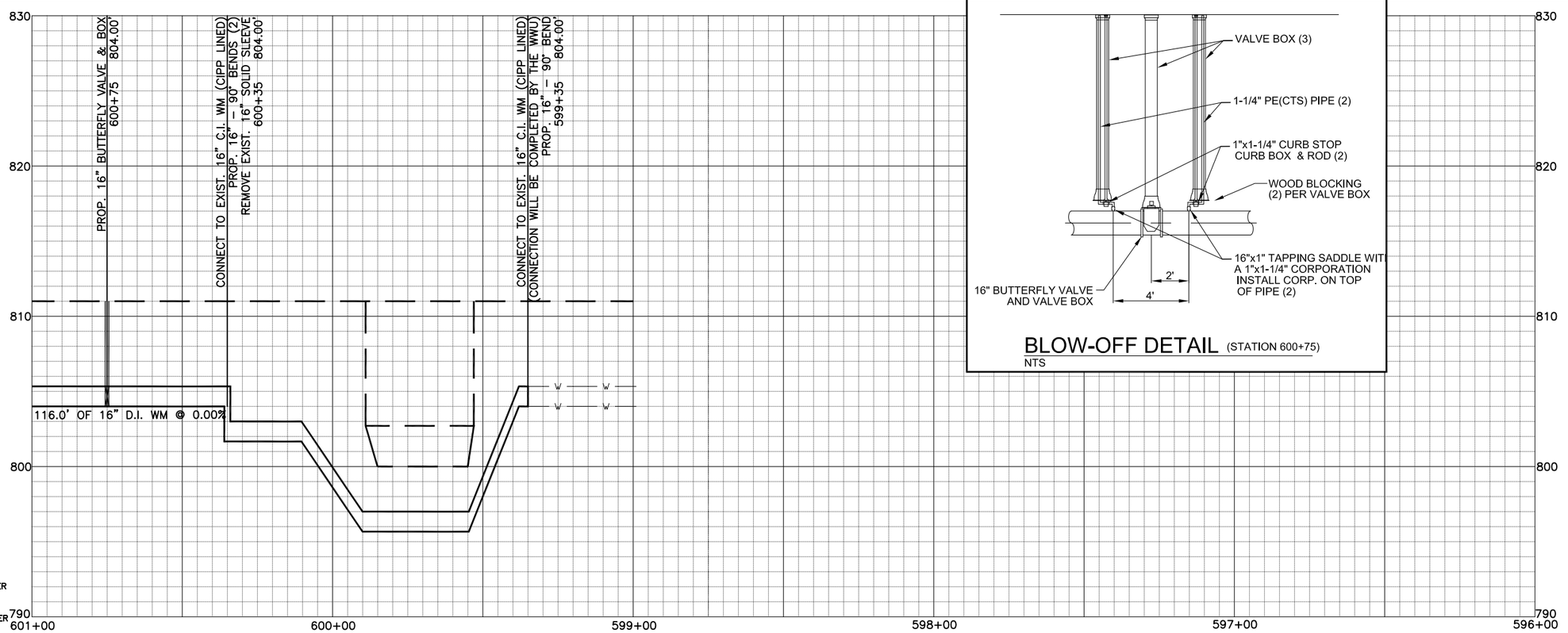
description	by	date

Water Main Replacement
ST. PAUL AVENUE
FROM: MOUNTAIN AVENUE
TO: MADISON STREET

SCALE:	1" = 20'
	1" = 4' (VERT)
DATE:	10-8-2021
drawn by :	TAK
checked :	CJW
project :	M00546
file 90	2/St. Paul Ave.

SHEET 5 of 7





BLOW-OFF DETAIL (STATION 600+75)
NTS

LEGEND

- W – EXIST. WATER MANHOLE
- ⊕ – EXIST. WATER VALVE
- EXIST. HYDRANT
- PROP. WATER VALVE
- PROP. HYDRANT
- POWER POLE
- LIGHT POLE
- GAS VALVE BOX
- (S) – SEWER MANHOLE
- STORM INLET
- (T) – TELEPHONE MANHOLE
- TREE
- W – EXIST. WATER MAIN
- PROP. WATER MAIN
- SAN – SANITARY SEWER
- STM – STORM SEWER
- GAS – GAS MAIN
- E – STREET CONDUIT OR ELECTRIC
- TEL – TELEPHONE DUCT PACKAGE
- FO – FIBER OPTIC
- OHW – OVER HEAD WIRE
- PROP. CURB & GUTTER
- PSTM – PROP. STORM SEWER
- PSAN – PROP. SANITARY SEWER

Waukesha Water Utility
115 Delafield Street
Waukesha, WI 53188
Phone 262–521–5272
Fax 262–521–5265

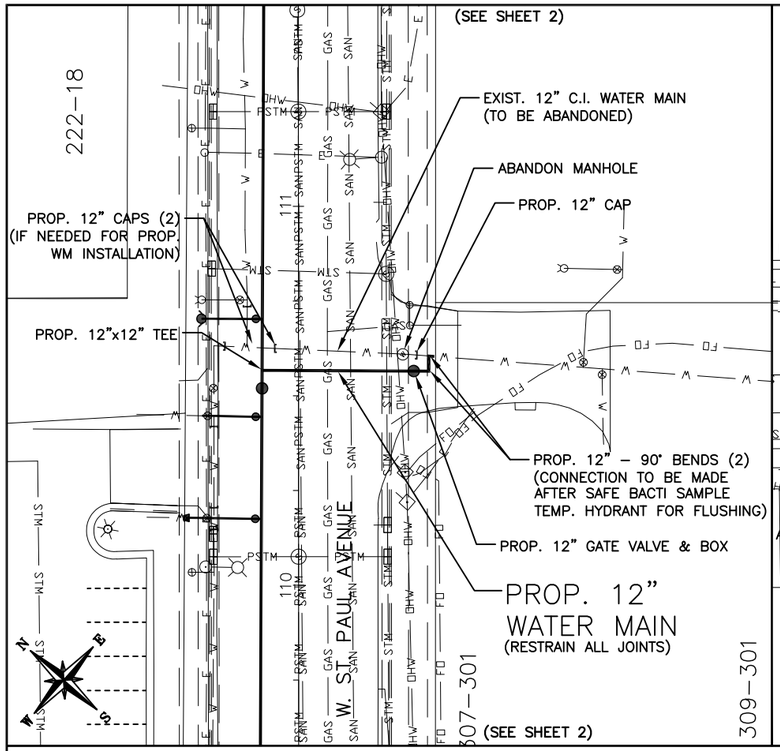
REVISIONS

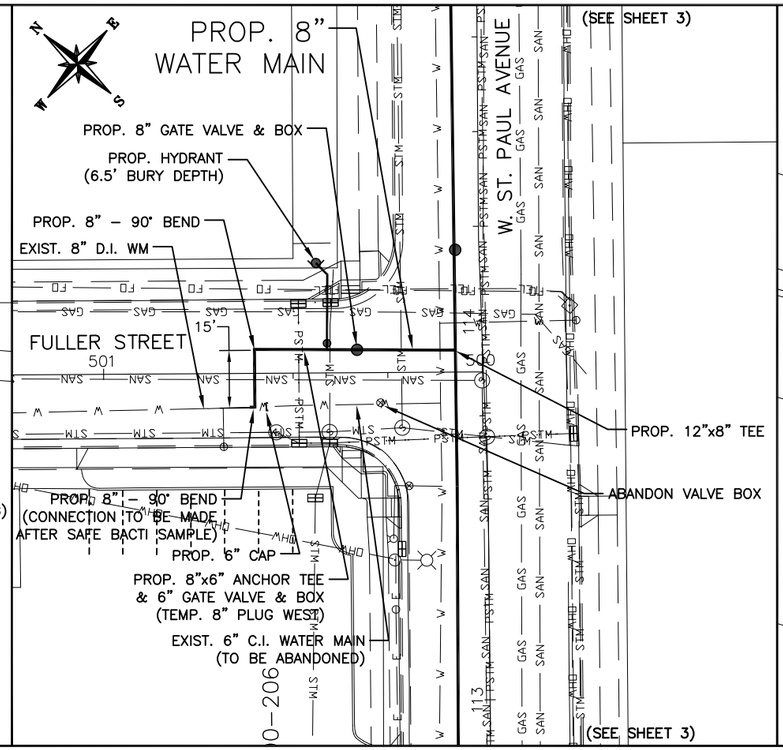
description	by	date

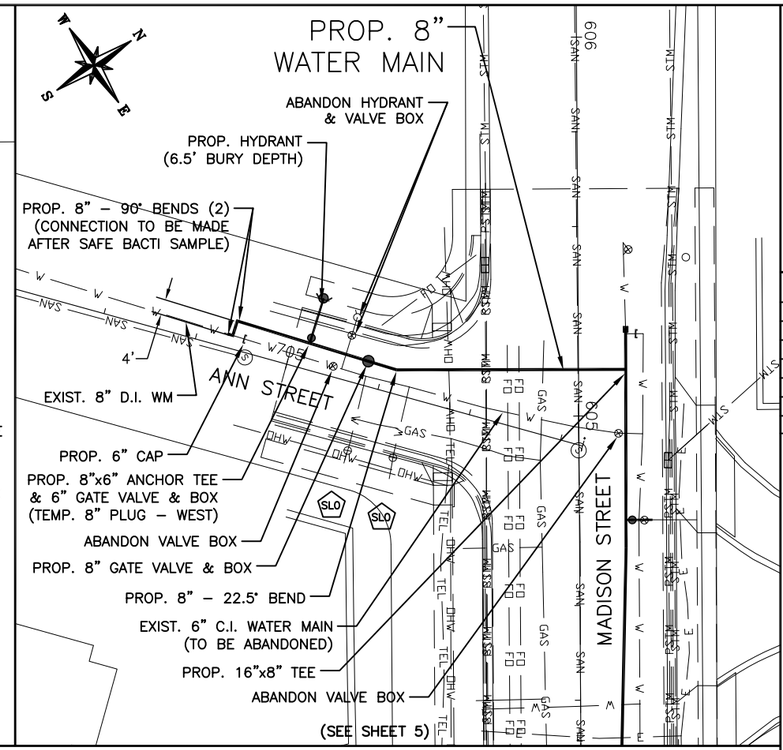
Water Main Replacement
ST. PAUL AVENUE
FROM: MOUNTAIN AVENUE
TO: MADISON STREET

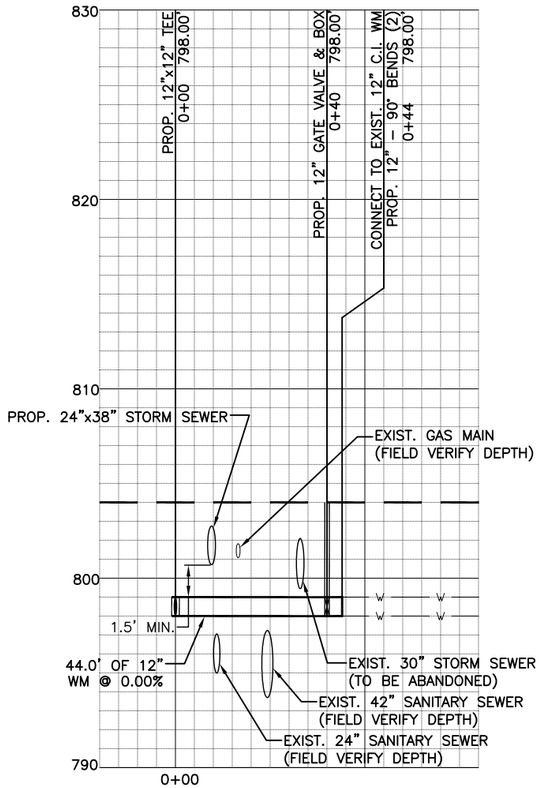
SCALE:	1" = 20'
	1" = 4' (VERT)
DATE:	10–8–2021
drawn by :	TAK
checked :	CJW
project :	M00546
file 91	2/St. Paul Ave.

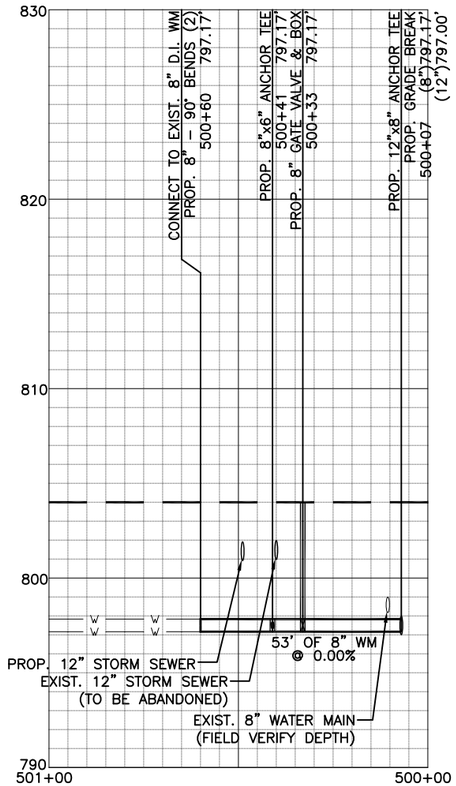
SHEET 6 of 7











LEGEND

- W — EXIST. WATER MANHOLE
- ⊕ — EXIST. WATER VALVE
- EXIST. HYDRANT
- PROP. WATER VALVE
- PROP. HYDRANT
- POWER POLE
- LIGHT POLE
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- S — SEWER MANHOLE
- STORM INLET
- T — TELEPHONE MANHOLE
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- W — EXIST. WATER MAIN
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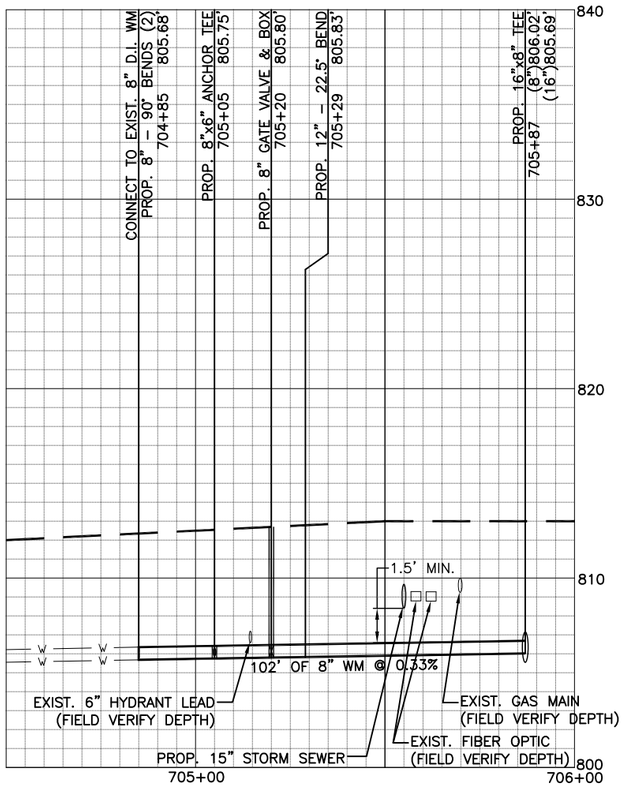
- SAN — SANITARY SEWER
- STM — STORM SEWER
- GAS — GAS MAIN
- E — STREET CONDUIT OR ELECTRIC
- TEL — TELEPHONE DUCT PACKAGE
- FO — FIBER OPTIC
- OHW — OVER HEAD WIRE
- PROP. CURB & GUTTER
- PSTM — PROP. STORM SEWER
- PSAN — PROP. SANITARY SEWER



Waukesha Water Utility

115 Delafield Street
Waukesha, WI 53188

Phone 262-521-5272
Fax 262-521-5265

REVISIONS

description	by	date

Water Main Replacement
ST. PAUL AVENUE
FROM: MOUNTAIN AVENUE
TO: MADISON STREET

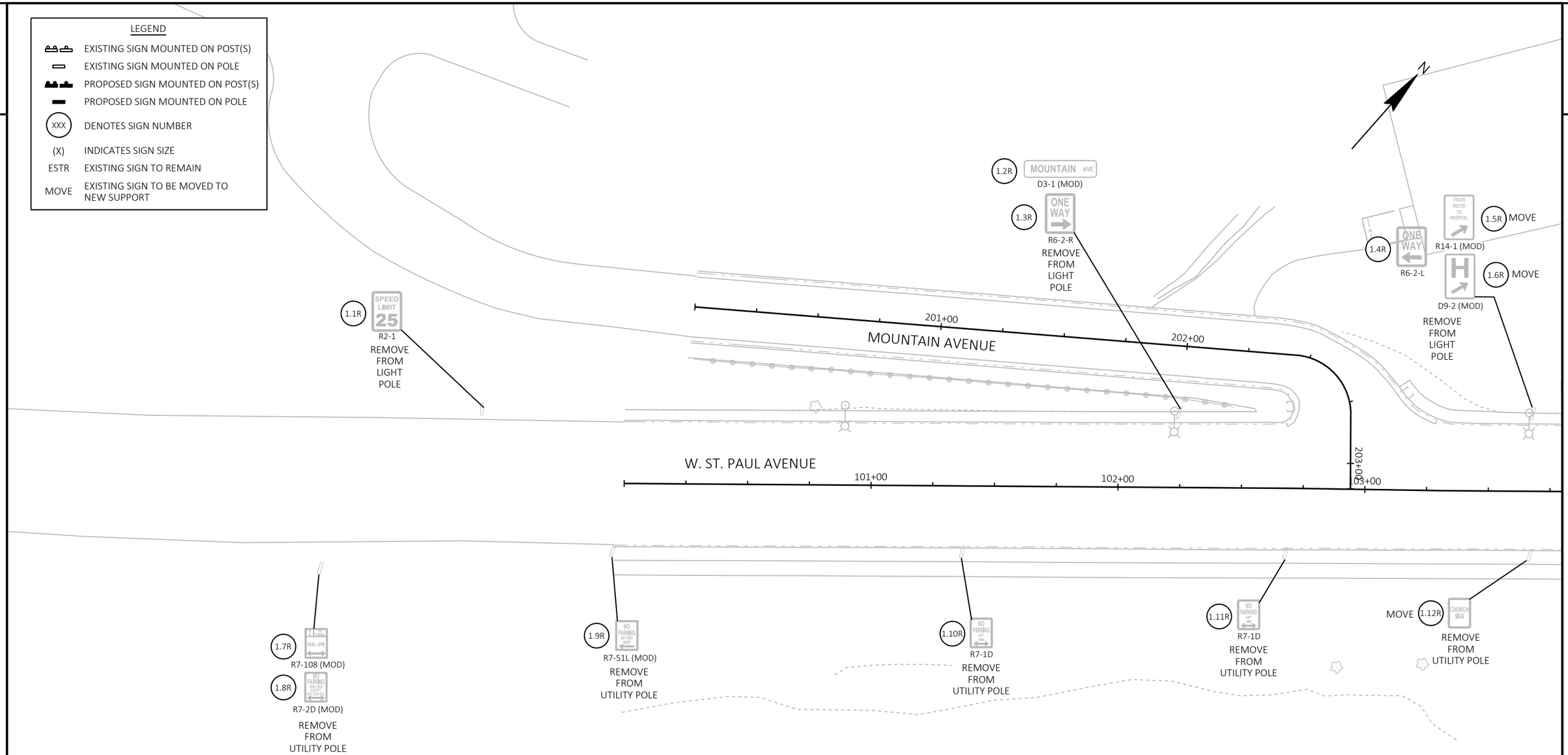
SCALE:	1" = 20' 1" = 4' (VERT)
DATE:	10-8-2021
drawn by :	TAK
checked :	CJW
project :	M00546
file 92	2/St. Paul Ave.

SHEET 7 of 7

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POLE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- MOVE — EXISTING SIGN TO BE MOVED TO NEW SUPPORT



PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET 93	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - 023201-ps

PLOT DATE : 6/30/2021 10:56 AM PLOT BY : BRANDON SCHWENN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POLE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- MOVE — EXISTING SIGN TO BE MOVED TO NEW SUPPORT

2.1R R7-1D (MOD) REMOVE FROM LIGHT POLE

MOVE 2.2R R9-2 (MOD) REMOVE FROM SIGNAL POLE

2.3R R1-1F (MOD) REMOVE FROM SIGNAL POLE

2.4R R3-7R

2.5R MOVE CITY BUS STOP

2.6R R14-1 (MOD)

2.7R R1-1F (MOD) REMOVE FROM SIGNAL POLE

2.8R

2.9R R3-8LAR

2.10R 2.11R W ST PAUL AVE / W NORTH ST D3-1 (MOD)

2.12R R3-8AR REMOVE

MOVE 2.14R CITY OF WAUKESHA WAYFINDING SIGN

2.13R R7-1D REMOVE FROM LIGHT POLE

2.15R R5-1a REMOVE

2.16R R7-1L REMOVE

2.17R R5-1a

2.18R R3-7L

2.19R M5-1L

2.20R M3-2 EAST

REMOVE FROM LIGHT POLE

2.21R R7-1D REMOVE

2.22R R6-2L

2.23R R6-2R REMOVE

2.24R R1-1F (MOD) REMOVE FROM SIGNAL POLE

2.25R R7-108 (MOD) REMOVE FROM LIGHT POLE

2.26R MOVE

2.27R MOVE CITY OF WAUKESHA WAYFINDING SIGN REMOVE FROM UTILITY POLE

2.28R R1-2 REMOVE

MOVE 2.29R CITY BUS STOP

2.30R R3-2 REMOVE FROM SIGNAL POLE

2.31R 2.32R R1-1F (MOD) REMOVE FROM SIGNAL POLE

2.33R R4-7

2.34R R9-2 (MOD) REMOVE FROM SIGNAL POLE

2.35R 2.36R W ST PAUL AVE / WISCONSIN AVE D3-1 (MOD)

2.37R R1-1F (MOD) REMOVE FROM SIGNAL POLE

2.38R R7-1D REMOVE FROM UTILITY POLE

2.39R R7-1D REMOVE FROM UTILITY POLE

W. NORTH STREET

W. ST. PAUL AVENUE

WISCONSIN AVENUE

402+00 401+00 104+00 105+00 106+00 107+00 108+00 109+00 305+00

PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET 94	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - 023202-ps

PLOT DATE : 6/30/2021 10:56 AM PLOT BY : BRANDON SCHWENN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POLE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- MOVE — EXISTING SIGN TO BE MOVED TO NEW SUPPORT

MOVE 3.1R — HISTORIC DOWNTOWN
CITY OF WAUKESHA WAYFINDING SIGN
REMOVE FROM LIGHT POLE

3.2R — NO PARKING ANY TIME PERMIT PARKING ONLY
R7-1D (MOD)
REMOVE

3.3R — 2 HR PARKING 8AM-5PM EXCEPT SAT SUN HOL
R7-108 (MOD)
REMOVE FROM LIGHT POLE

3.6R — Fuller St
3.5R — W St Paul Ave
D3-1 (MOD)

3.4R — STOP
R1-1
REMOVE

110+00 111+00 112+00 113+00

W. ST. PAUL AVENUE

502+00
501+00

FULLER STREET

701+00 702

3.10R MOVE — NO PARKING PM-7AM
R7-2D
REMOVE

3.9R MOVE — R5-2

3.8R MOVE — OVER 3 TONS
R14-1 (MOD)

3.7R — NO PARKING PM-7AM
R7-2D
REMOVE

114+00 115+00

3.11R — NO PARKING ANY TIME
R7-2D
REMOVE FROM UTILITY POLE

3.13R — NO PARKING ANY TIME
R7-2D
REMOVE FROM LIGHT POLE

3.14R — W11-8
REMOVE

3.15R — NO PARKING ANY TIME
R7-2D
REMOVE FROM UTILITY POLE

3.17R MOVE — BUS
CITY BUS STOP

3.16R — NO PARKING 7AM-7PM
R7-2D
REMOVE

ANCHOR

3.18R — NO PARKING ANY TIME
R7-2D
REMOVE FROM UTILITY POLE

MOVE 3.12R — Mill Reserve Dr
D3-1 (MOD)
PRIVATE SIGN

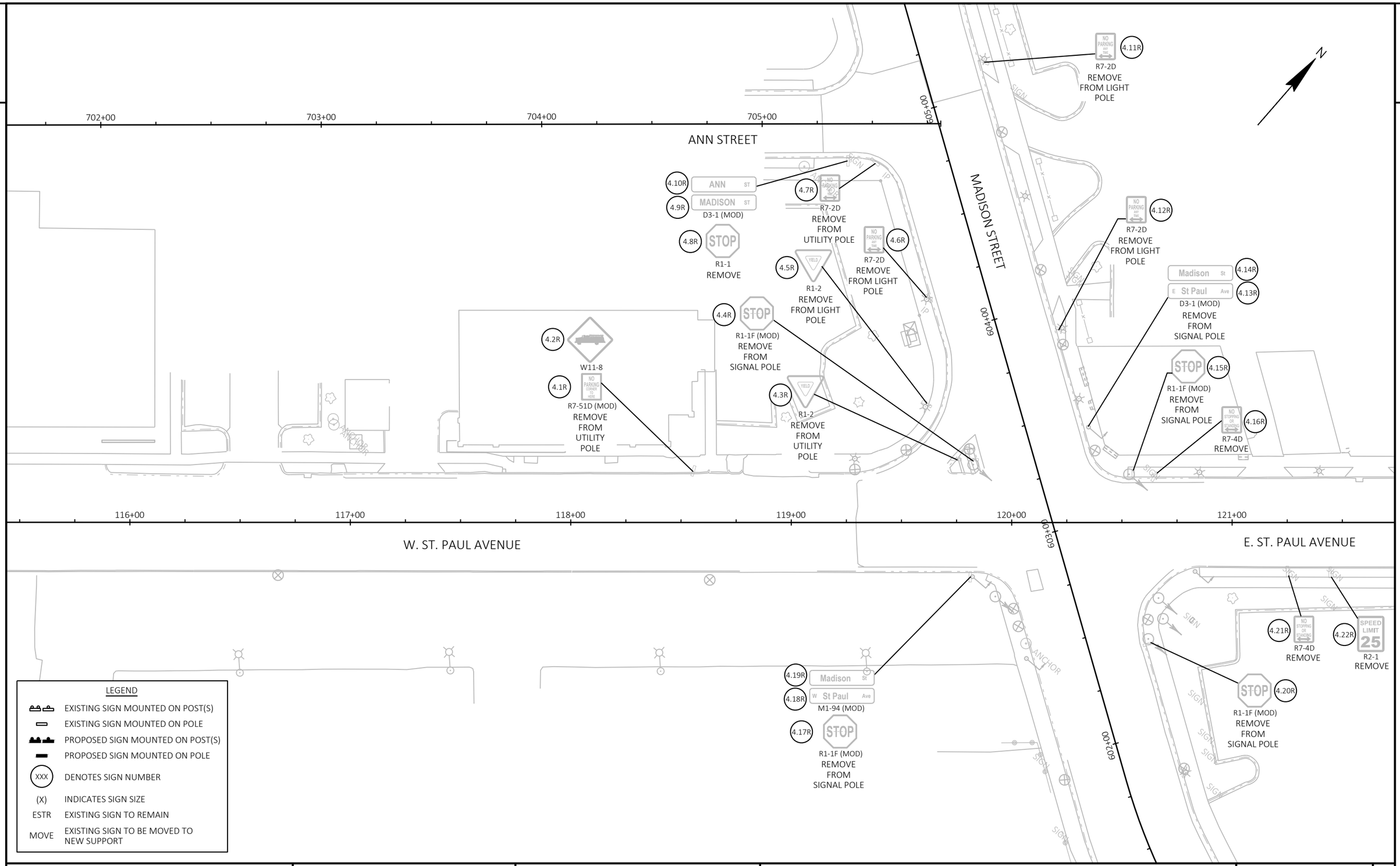
PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET 95	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - 023203-ps

PLOT DATE : 6/30/2021 10:56 AM PLOT BY : BRANDON SCHWENN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2



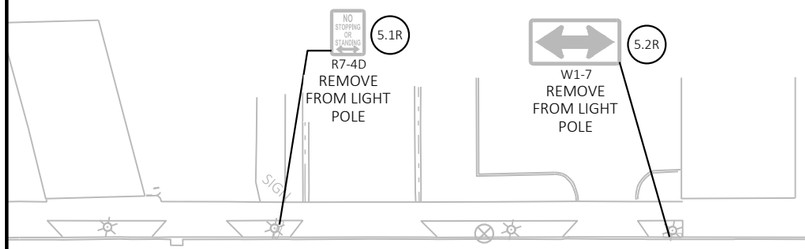
PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET 96	E

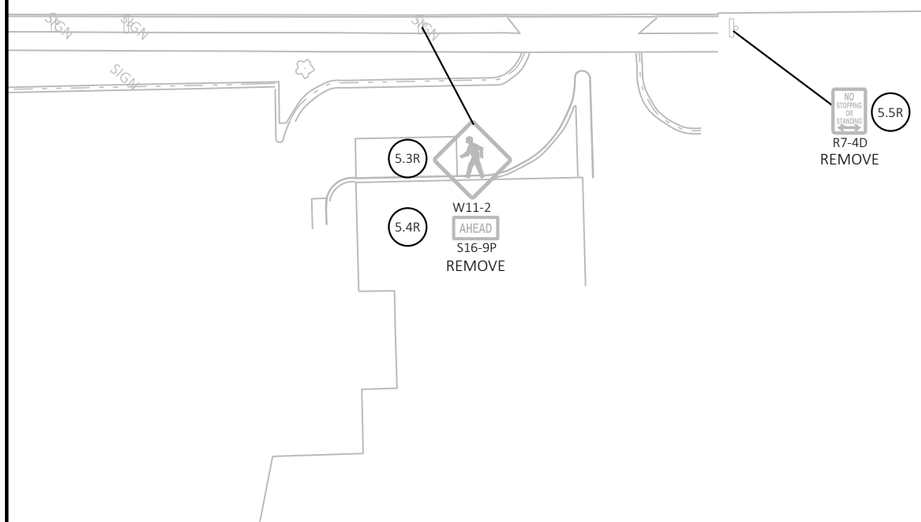
FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - 023204-ps
PLOT DATE : 6/30/2021 10:56 AM
PLOT BY : BRANDON SCHWENN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

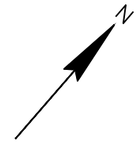
2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POLE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- MOVE — EXISTING SIGN TO BE MOVED TO NEW SUPPORT







2

PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET 97	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - 023205-ps

PLOT DATE : 6/30/2021 10:56 AM PLOT BY : BRANDON SCHWENN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POLE
- XXX — DENOTES SIGN NUMBER
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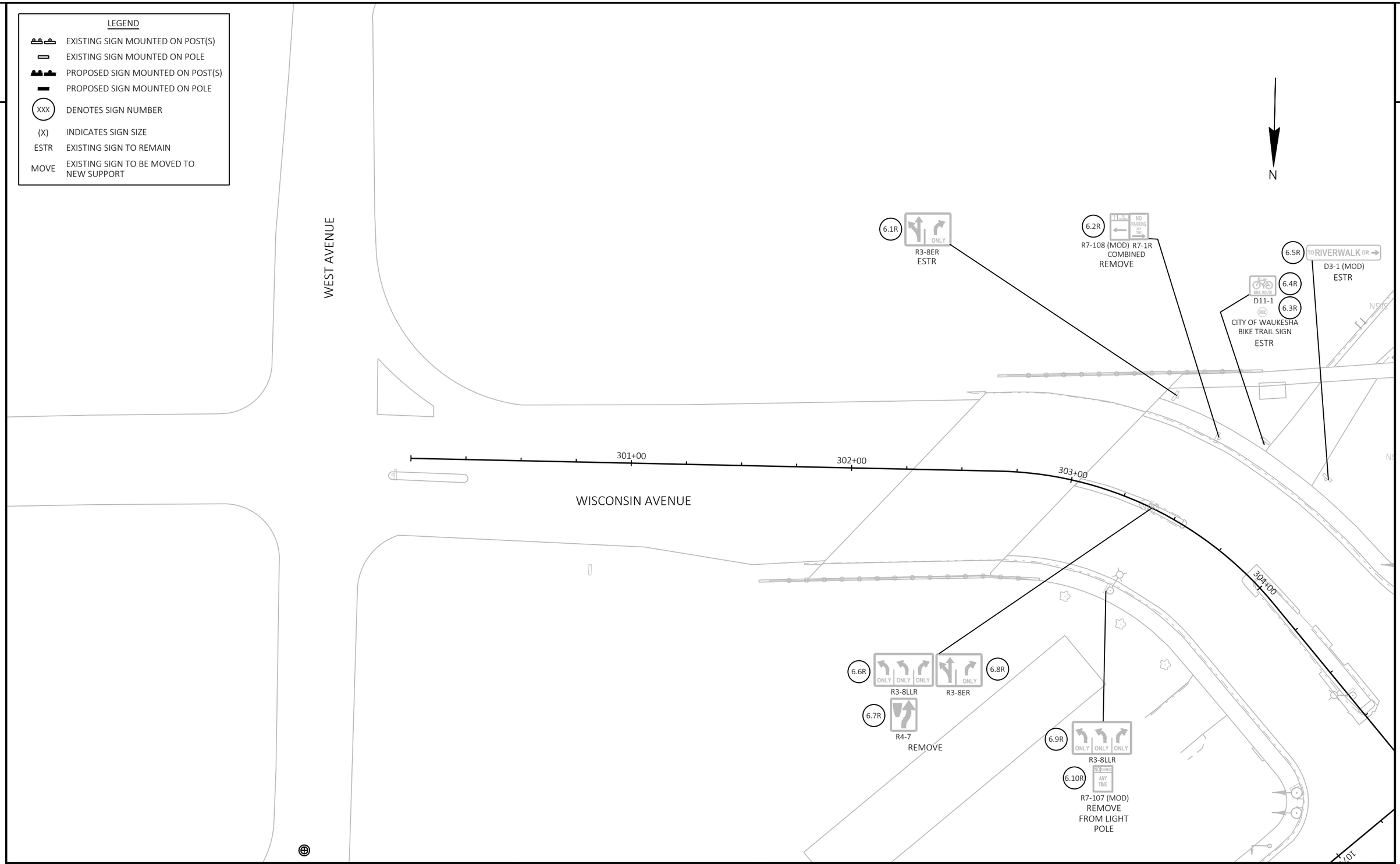
- ESTR — EXISTING SIGN TO REMAIN
- MOVE — EXISTING SIGN TO BE MOVED TO NEW SUPPORT



PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET 98	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - 023210-ps

PLOT DATE : 6/30/2021 10:56 AM PLOT BY : BRANDON SCHWENN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POLE
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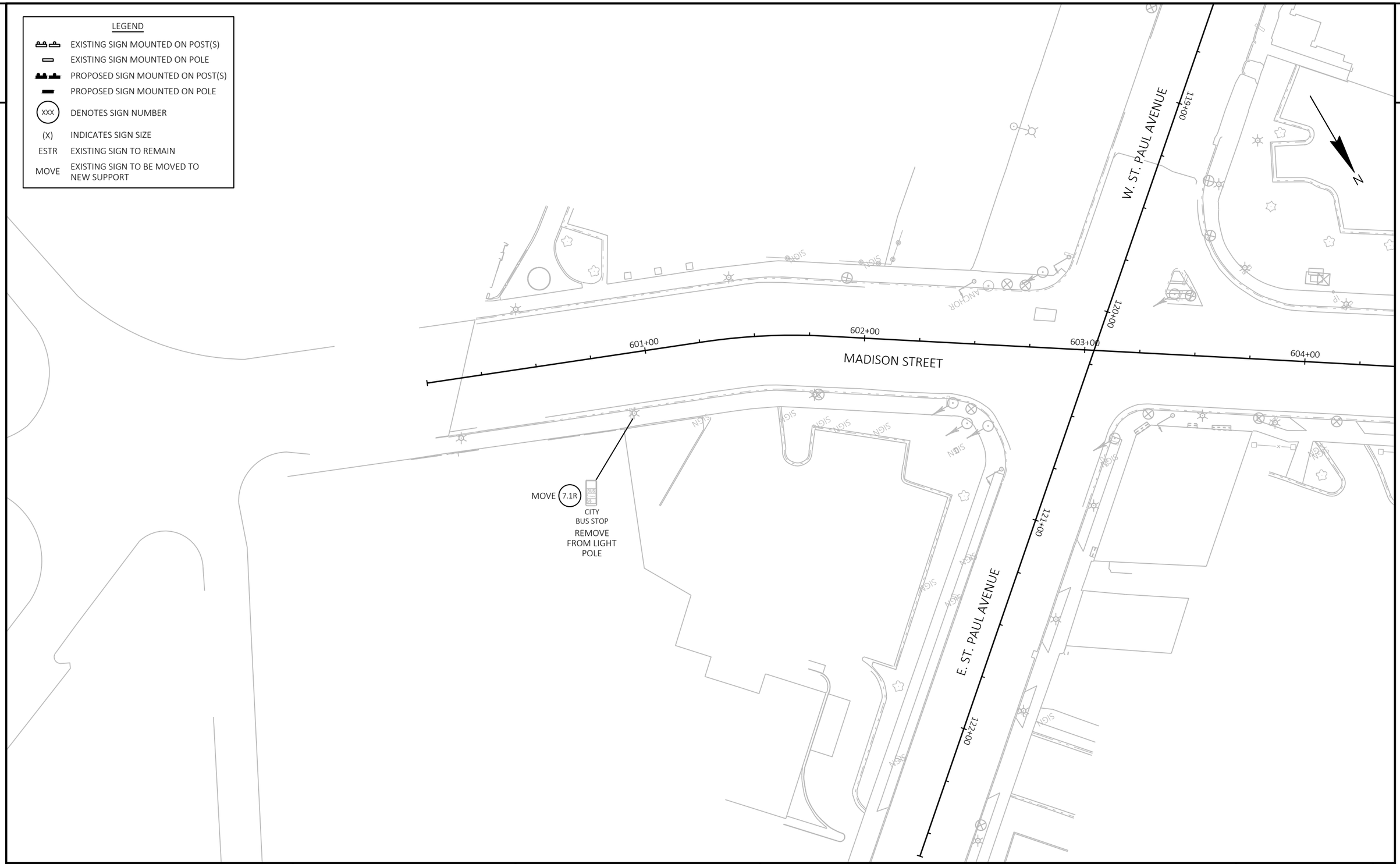

2

PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET 99	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - 023215-ps

PLOT DATE : 6/30/2021 10:56 AM PLOT BY : BRANDON SCHWENN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON POLE
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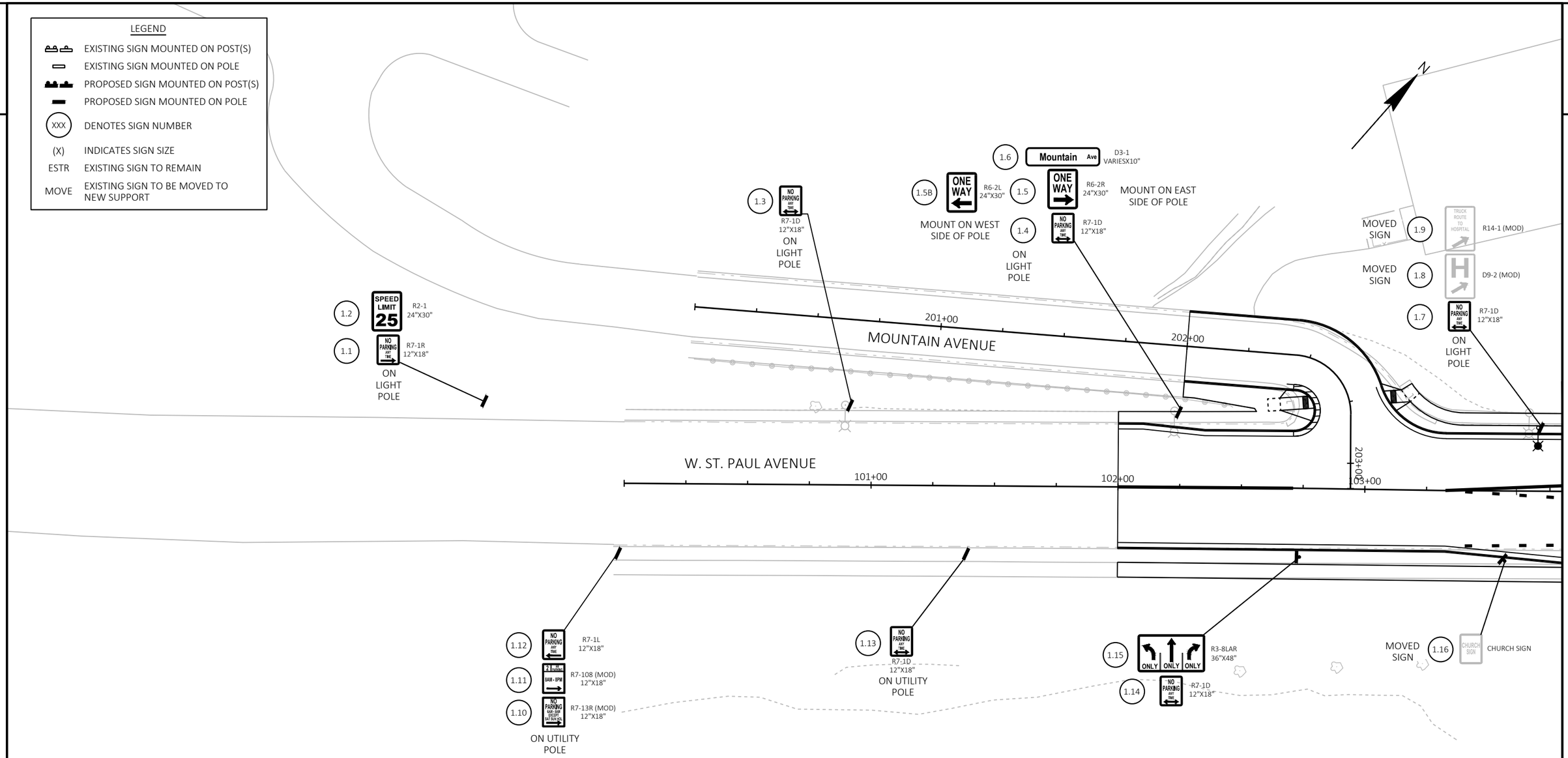


PROJECT NO: 2718-04-72	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 100	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023230-PS.DWG
LAYOUT NAME - 023230-ps

PLOT DATE : 7/19/2021 11:39 AM PLOT BY : BRANDON SCHWENN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POLE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- MOVE — EXISTING SIGN TO BE MOVED TO NEW SUPPORT

N

W. NORTH STREET

402+00

401+00

2.12 R3-8ER 36"X30"

2.11 R7-1D 12"X18"

MOVED SIGN 2.10 CITY OF WAUKESHA WAYFINDING SIGN

2.9 R7-1D 18"X24" ON LIGHT POLE

2.8 R3-8ER 36"X30"

2.7 R7-1D 12"X18"

MOVED SIGN 2.6 CITY BUS STOP

MOVED SIGN 2.4

2.3 STOP R1-1F 30"X30" ON SIGNAL POLE

2.2 Wisconsin Ave / W North St — M1-94H (COMBINED) VARIESX36" ON MONOTUBE MAST ARM

2.1 R7-1D 12"X18" ON LIGHT POLE

W St. Paul Ave 2.15 — M1-94H VARIESX18" ON MONOTUBE MAST ARM

2.16 STOP R1-1F 30"X30" ON SIGNAL POLE

W6-3 30"X30" 2.14

R7-1D 12"X18" 2.13

2.19 D9-2 24"X24"

2.18 D9-2A 24"X6"

2.17 R7-1D 12"X18"

2.20A CITY OF WAUKESHA WAYFINDING SIGN

2.20 R7-1D 12"X18"

30'

W. ST. PAUL AVENUE

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

305+00

WISCONSIN AVENUE

MOVED SIGN 2.23

MOVED SIGN 2.22

2.21 R7-1D 12"X18"

CITY OF WAUKESHA WAYFINDING SIGN

MOVED SIGN 2.25 CITY BUS STOP

2.24 STOP R1-1F 30"X30" ON SIGNAL POLE

2.28 D9-2 24"X24"

2.27 D9-2A 24"X6" ON SIGNAL POLE

W St. Paul Ave 2.29 — M1-94H VARIESX18" ON MONOTUBE MAST ARM

2.26 R7-1D 12"X18"

2.26B BIKE LANE R3-17 30"X24" ON LIGHT POLE

2.30 STOP R1-1F 30"X30" ON SIGNAL POLE

W North St / Wisconsin Ave 2.31 — M1-94H (COMBINED) VARIESX36" ON MONOTUBE MAST ARM

2.32 R7-1D 12"X18" ON LIGHT POLE

PROJECT NO: 2718-04-72	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 101	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023230-PS.DWG
LAYOUT NAME - 023231-ps

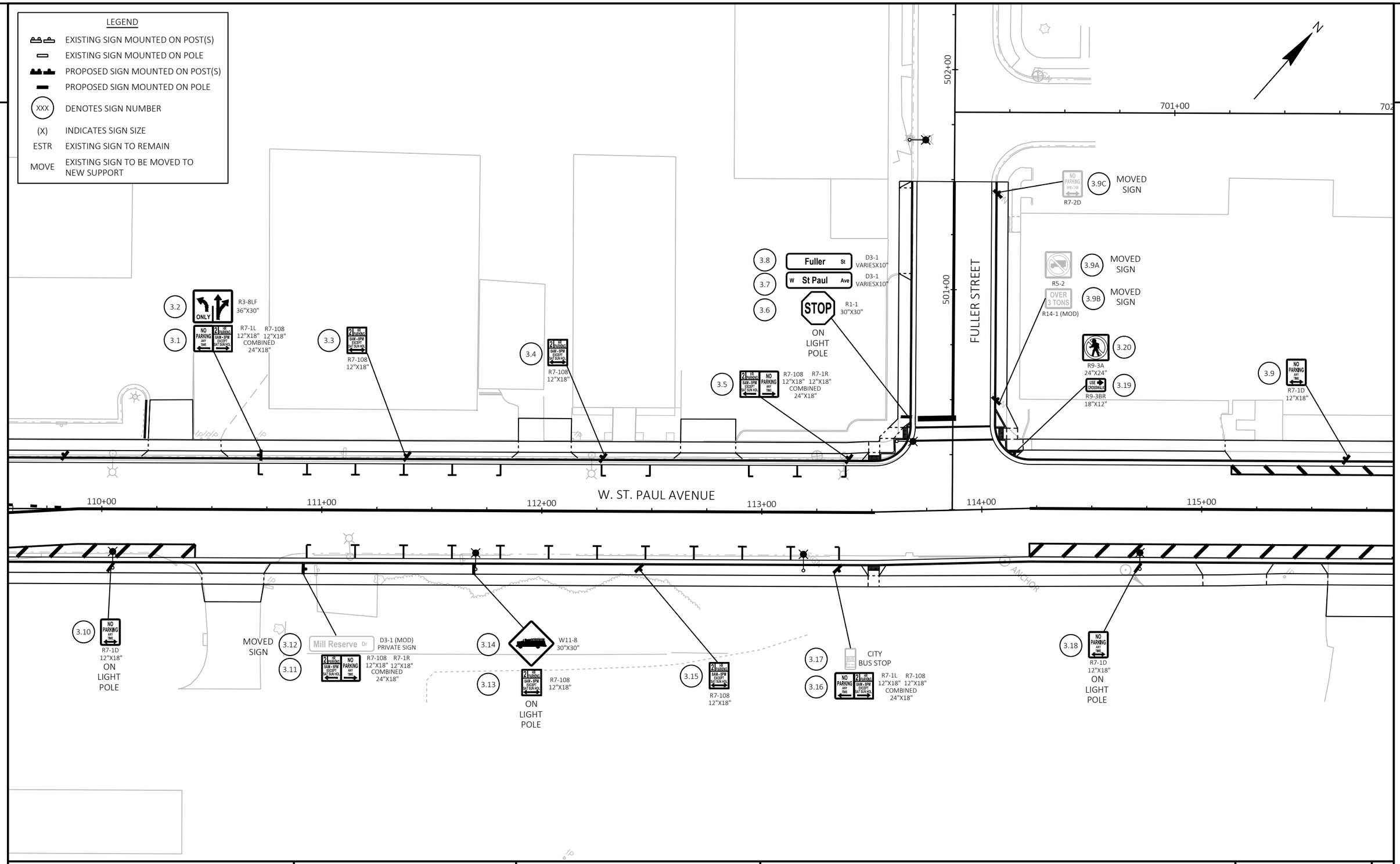
PLOT DATE : 7/19/2021 11:39 AM PLOT BY : BRANDON SCHWENN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POLE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- MOVE — EXISTING SIGN TO BE MOVED TO NEW SUPPORT



PROJECT NO: 2718-04-72	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 102	E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POLE
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- ESTR — EXISTING SIGN TO REMAIN
- MOVE — EXISTING SIGN TO BE MOVED TO NEW SUPPORT

703+00 704+00 705+00 ANN STREET

4.31 R9-3A 24"X24"
4.30 R9-3BL 18"X12"
4.9 Ann St D3-1 VARIESX10"
4.8 Madison St D3-1 VARIESX10"
4.7 STOP R1-1 30"X30" ON LIGHT POLE
4.29 R9-3A 24"X24"
4.28 R9-3BR 18"X12"
4.6 NO PARKING ANY TIME R7-1D 12"X18" ON LIGHT POLE
4.5 STOP R1-1F 30"X30" ON SIGNAL POLE
4.10 NO PARKING ANY TIME R7-1D 12"X18" ON LIGHT POLE
4.11 NO PARKING ANY TIME R7-1D 12"X18" ON LIGHT POLE
4.12 NO PARKING ANY TIME R7-1D 12"X18" ON LIGHT POLE
4.13 E St Paul Ave M1-94H VARIESX18" ON MONOTUBE MAST ARM
4.14 STOP R1-1F 30"X30" ON SIGNAL POLE
4.15 NO STOPPING OR STANDING R7-4D 12"X18" ON LIGHT POLE
4.3 W11-8 30"X30"
4.2 NO PARKING ANY TIME R7-1D 12"X18"
4.4 Madison St M1-94H VARIESX18" ON MONOTUBE MAST ARM
4.1 NO PARKING ANY TIME R7-1D 12"X18"
MADISON STREET
604+00
603+00
602+00
25'
30'
116+00 117+00 118+00 119+00 120+00 121+00
W. ST. PAUL AVENUE
E. ST. PAUL AVENUE
4.17 ONLY R3-8LF 36"X30"
4.16 NO PARKING ANY TIME R7-1D 12"X18" ON LIGHT POLE
4.18 NO PARKING ANY TIME R7-1D 12"X18" ON LIGHT POLE
4.19 NO PARKING ANY TIME R7-1D 12"X18"
4.20 STOP R1-1F 30"X30" ON SIGNAL POLE
4.21 W St Paul Ave M1-94H VARIESX18" ON MONOTUBE MAST ARM
4.22 NO PARKING ANY TIME R7-1D 12"X18" ON LIGHT POLE
4.23 NO PARKING ANY TIME R7-1D 12"X18" ON LIGHT POLE
4.24 STOP R1-1F 30"X30" ON SIGNAL POLE
4.25 Madison St M1-94H VARIESX18" ON MONOTUBE MAST ARM
4.27 SPEED LIMIT 25 R2-1 24"X30"
4.26 NO STOPPING OR STANDING R7-4D 12"X18" ON LIGHT POLE

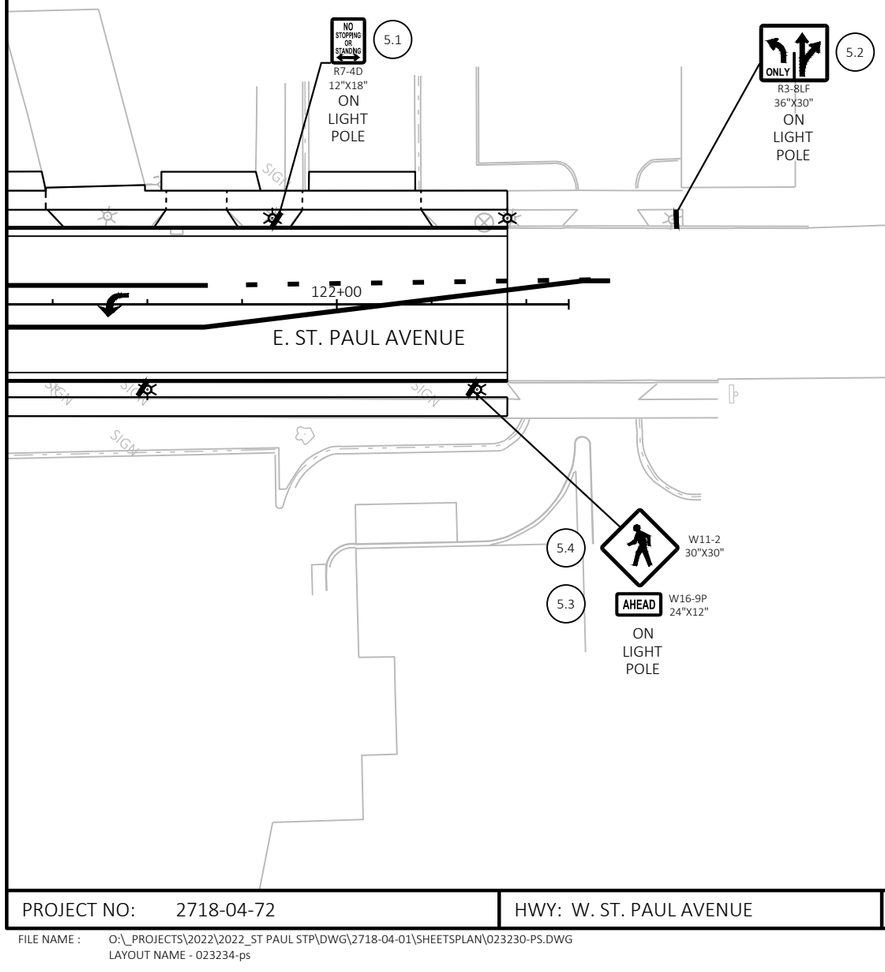
PROJECT NO: 2718-04-72	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 103	E

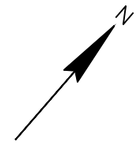
FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023230-PS.DWG
LAYOUT NAME - 023233-ps
PLOT DATE : 7/19/2021 11:39 AM PLOT BY : BRANDON SCHWENN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- MOVE EXISTING SIGN TO BE MOVED TO NEW SUPPORT





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PROJECT NO: 2718-04-72	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 104	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023230-PS.DWG
LAYOUT NAME - 023234-ps

PLOT DATE : 7/19/2021 11:39 AM PLOT BY : BRANDON SCHWENN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POLE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- MOVE — EXISTING SIGN TO BE MOVED TO NEW SUPPORT

N

WEST AVENUE

ONLY

301+00

302+00

303+00

304+00

WISCONSIN AVENUE

6.1 — R7-108 12"X18" / R7-1R 18"X24" COMBINED 24"X18" ON LIGHT POLE

6.2 — BIKE LANE — R3-17 30"X24" ON LIGHT POLE

6.3 — NO PARKING ANY TIME — R7-1D 12"X18" ON LIGHT POLE

6.5 — ONLY ONLY ONLY — R3-8LAR 36"X48"

6.4 — NO PARKING ANY TIME — R7-1D 12"X18" ON LIGHT POLE

NO PARKING

80'

SEE W. ST. PAUL AVENUE SHEETS FOR SIGN DETAILS

PROJECT NO: 2718-04-72	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 105	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023230-PS.DWG
LAYOUT NAME - 023240-ps

PLOT DATE : 7/19/2021 11:39 AM PLOT BY : BRANDON SCHWENN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POLE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- ESTR — EXISTING SIGN TO REMAIN
- MOVE — EXISTING SIGN TO BE MOVED TO NEW SUPPORT

7.1 NO PARKING ANY TIME R7-1D 12"X18" ON LIGHT POLE

7.2 NO PARKING ANY TIME R7-1D 12"X18" ON LIGHT POLE

7.3 NO PARKING ANY TIME R7-1D 12"X18" ON LIGHT POLE

7.4 NO PARKING ANY TIME R7-1D 12"X18" ON LIGHT POLE

7.5 CITY BUS STOP

MADISON STREET

601+00

602+00

604+00

W. ST. PAUL AVENUE

E. ST. PAUL AVENUE

120+00

122+00

SEE OTHER SIGNING SHEETS FOR SIGN DETAILS

30'

25'

152'

N

2

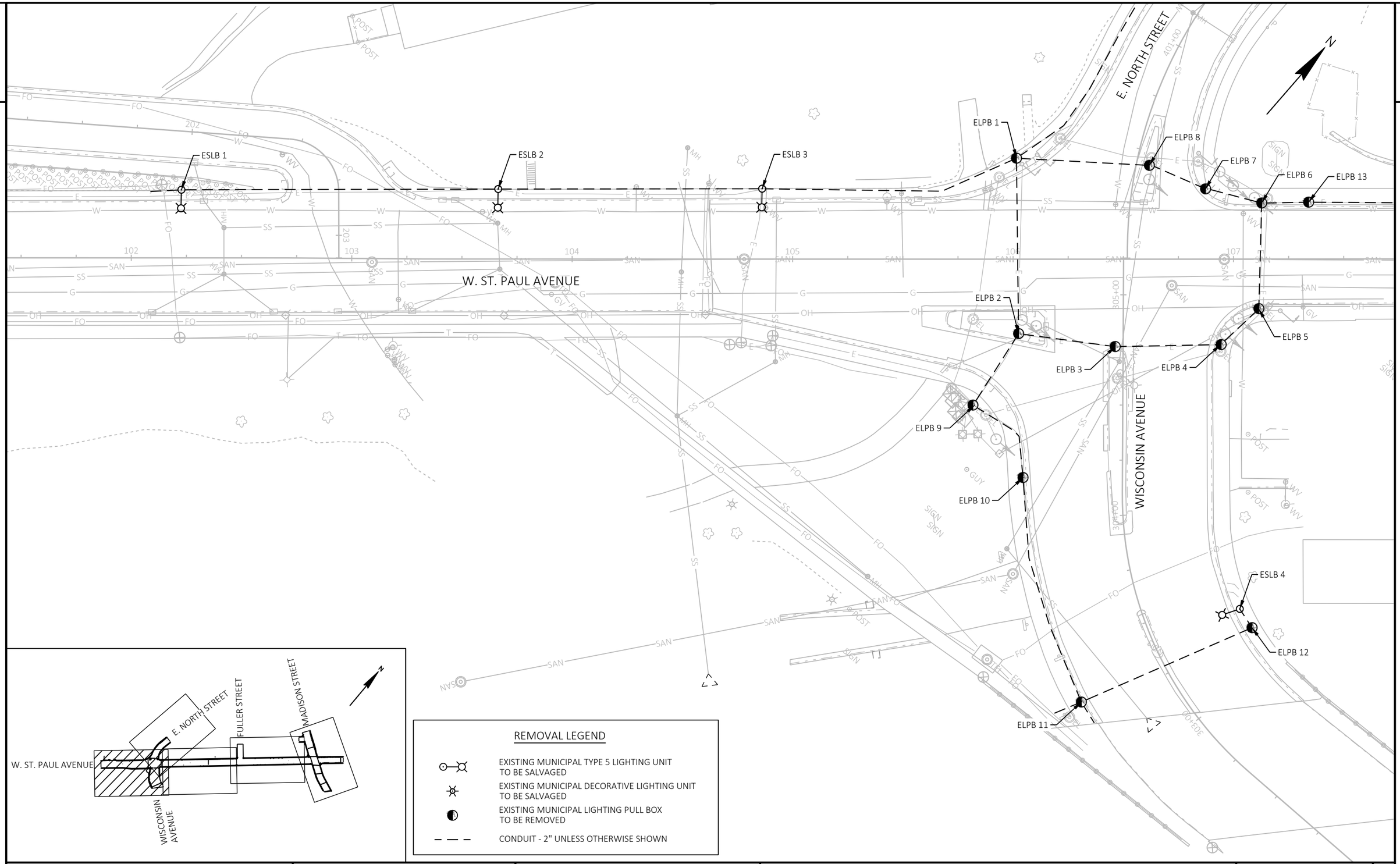
PROJECT NO: 2718-04-72	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 106	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023230-PS.DWG
LAYOUT NAME - 023245-ps

PLOT DATE : 7/19/2021 11:39 AM PLOT BY : BRANDON SCHWENN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



REMOVAL LEGEND

- EXISTING MUNICIPAL TYPE 5 LIGHTING UNIT TO BE SALVAGED
- EXISTING MUNICIPAL DECORATIVE LIGHTING UNIT TO BE SALVAGED
- EXISTING MUNICIPAL LIGHTING PULL BOX TO BE REMOVED
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	LIGHTING PLANS - REMOVALS	SHEET 107	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023610-LP.DWG
LAYOUT NAME - 023610-lp

PLOT DATE : 2/23/2021 10:49 AM PLOT BY : BRANDON SCHWENN PLOT NAME : PLOT SCALE : 1 IN:40 FT

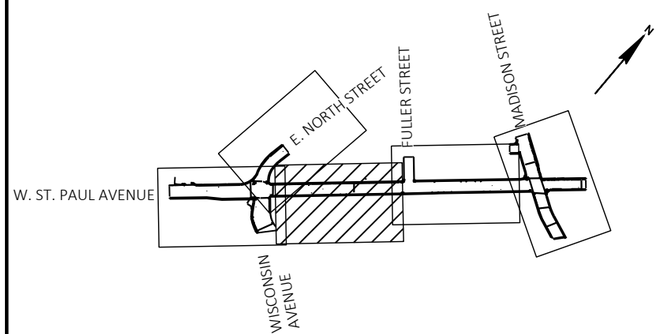
2

2

ELPB 13
ELPB 14
ELPB 15
ELPB 16
ESLB 5
ESLB 6
ELPB 17
ESLB 8
ESLB 9
ELPB 18
ESLB 7

W. ST. PAUL AVENUE

108 109 110 111 112 113



REMOVAL LEGEND

- EXISTING MUNICIPAL TYPE 5 LIGHTING UNIT TO BE SALVAGED
- EXISTING MUNICIPAL DECORATIVE LIGHTING UNIT TO BE SALVAGED
- EXISTING MUNICIPAL LIGHTING PULL BOX TO BE REMOVED
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	LIGHTING PLANS - REMOVALS	SHEET 108	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023610-LP.DWG
LAYOUT NAME - 023611-lp

PLOT DATE : 2/23/2021 10:49 AM PLOT BY : BRANDON SCHWENN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

ESLB 10

REMOVE OVERHEAD STREET LIGHT WIRE

ELPB 18

ESLB 9

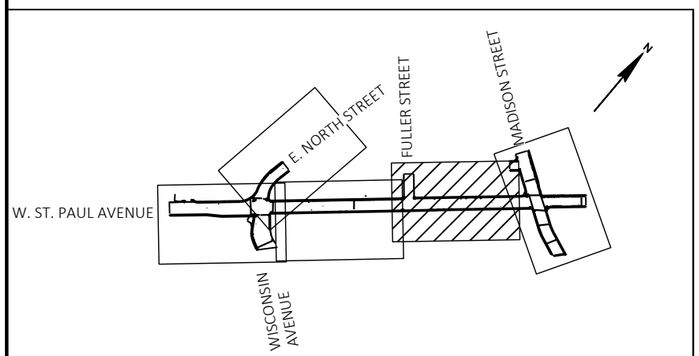
FULLER STREET

W. ST. PAUL AVENUE

701+00 702+00 703+00 704+00 705+00

501+00 502+00

114 115 116 117 118 119



REMOVAL LEGEND

- EXISTING MUNICIPAL TYPE 5 LIGHTING UNIT TO BE SALVAGED
- EXISTING MUNICIPAL DECORATIVE LIGHTING UNIT TO BE SALVAGED
- EXISTING MUNICIPAL LIGHTING PULL BOX TO BE REMOVED
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	LIGHTING PLANS - REMOVALS	SHEET 109	E

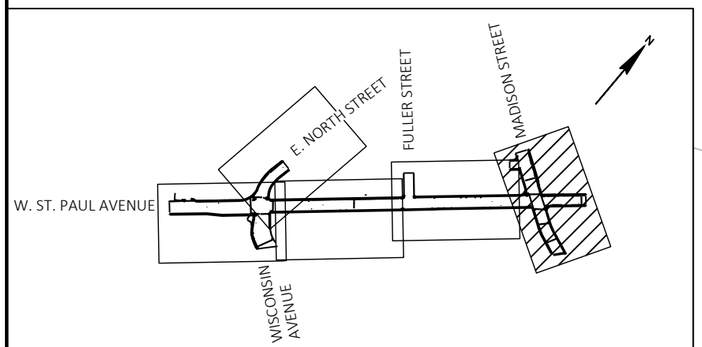
FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023610-LP.DWG
LAYOUT NAME - 023612-lp

PLOT DATE : 2/23/2021 10:49 AM PLOT BY : BRANDON SCHWENN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

ESLB 11
ELPB 19
ESLB 12
ESLB 24
ELPB 23
ELPB 24
ELPB 20
ESLB 18
ELPB 28
ESLB 20
ELPB 29
ESLB 21
ELPB 30
ESLB 19
ESLB 17
ELPB 22
ELPB 25
ELPB 31
ELPB 21
ESLB 22
ESLB 23
ELPB 32
ESLB 25
ELPB 33
ESLB 26
EXISTING LIGHTING PULL BOX TO REMAIN
ESLB 13
ESLB 14
ESLB 15
ELPB 26
ELPB 27
ESLB 16

ANN STREET
MADISON STREET
W. ST. PAUL AVENUE



REMOVAL LEGEND

- EXISTING MUNICIPAL TYPE 5 LIGHTING UNIT TO BE SALVAGED
- EXISTING MUNICIPAL DECORATIVE LIGHTING UNIT TO BE SALVAGED
- EXISTING MUNICIPAL LIGHTING PULL BOX TO BE REMOVED
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	LIGHTING PLANS - REMOVALS	SHEET 110	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023610-LP.DWG
LAYOUT NAME - 023615-lp
PLOT DATE : 2/23/2021 10:49 AM PLOT BY : BRANDON SCHWENN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

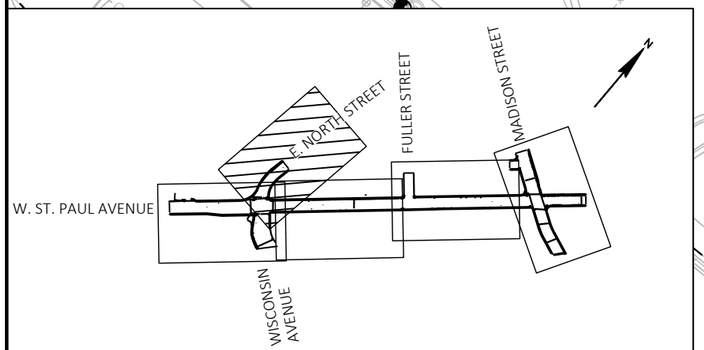
ESLB 27

ELPB 34

E. NORTH STREET

SEE ST. PAUL AVENUE
SHEETS FOR REMOVALS

W. ST. PAUL AVENUE



REMOVAL LEGEND

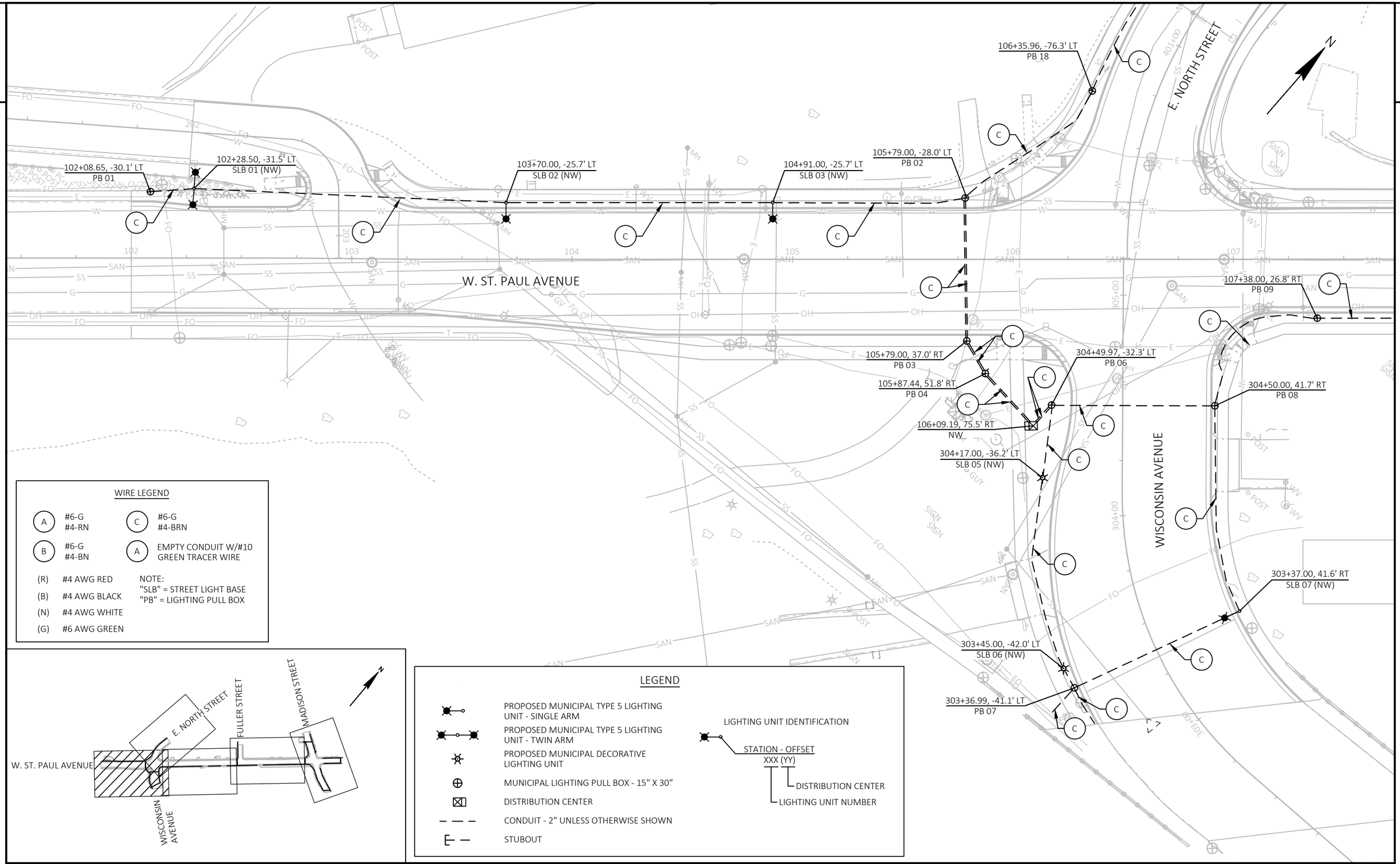
- EXISTING MUNICIPAL TYPE 5 LIGHTING UNIT TO BE SALVAGED
- EXISTING MUNICIPAL DECORATIVE LIGHTING UNIT TO BE SALVAGED
- EXISTING MUNICIPAL LIGHTING PULL BOX TO BE REMOVED
- CONDUIT - 2" UNLESS OTHERWISE SHOWN

PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	LIGHTING PLANS - REMOVALS	SHEET 111	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023610-LP.DWG
LAYOUT NAME - 023618-lp

PLOT DATE : 2/23/2021 10:49 AM PLOT BY : BRANDON SCHWENN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



WIRE LEGEND

A	#6-G #4-RN	C	#6-G #4-BRN
B	#6-G #4-BN	A	EMPTY CONDUIT W/#10 GREEN TRACER WIRE

(R) #4 AWG RED
(B) #4 AWG BLACK
(N) #4 AWG WHITE
(G) #6 AWG GREEN

NOTE:
"SLB" = STREET LIGHT BASE
"PB" = LIGHTING PULL BOX

LEGEND

- PROPOSED MUNICIPAL TYPE 5 LIGHTING UNIT - SINGLE ARM
- PROPOSED MUNICIPAL TYPE 5 LIGHTING UNIT - TWIN ARM
- PROPOSED MUNICIPAL DECORATIVE LIGHTING UNIT
- MUNICIPAL LIGHTING PULL BOX - 15" X 30"
- DISTRIBUTION CENTER
- CONDUIT - 2" UNLESS OTHERWISE SHOWN
- STUBOUT

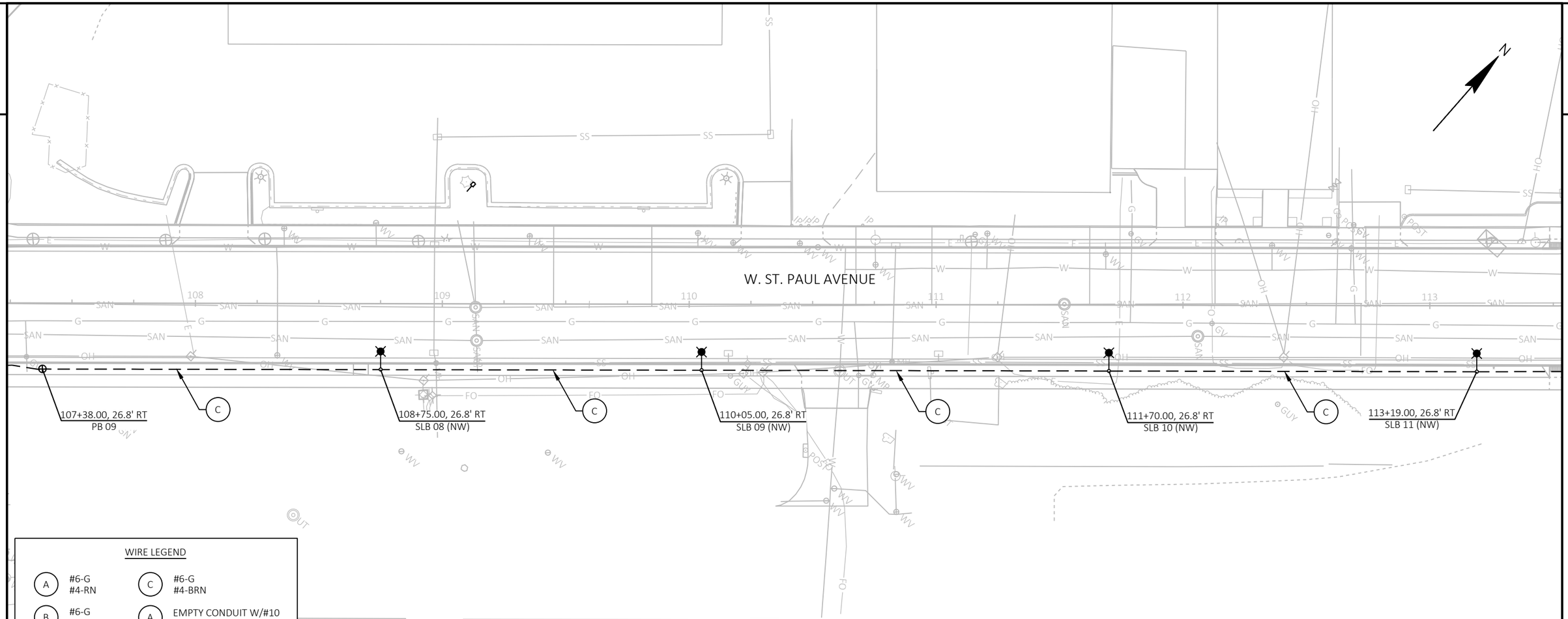
LIGHTING UNIT IDENTIFICATION

STATION - OFFSET
XXX (YY)
- DISTRIBUTION CENTER
- LIGHTING UNIT NUMBER

PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	LIGHTING PLANS - FINAL	SHEET 112	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023630-LP.DWG
LAYOUT NAME - 023630-lp
PLOT DATE : 11/18/2021 1:21 PM
PLOT BY : CRAIG AUSEN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



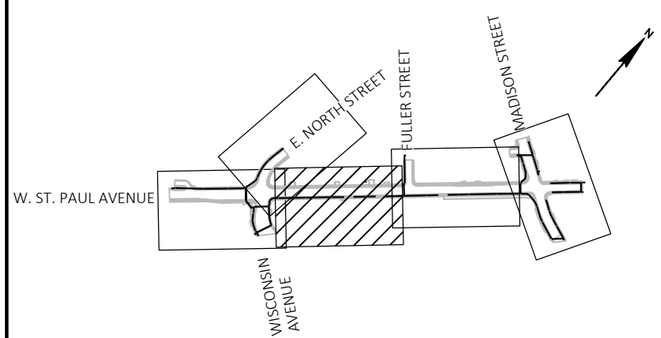
2

WIRE LEGEND

A	#6-G #4-RN	C	#6-G #4-BRN
B	#6-G #4-BN	A	EMPTY CONDUIT W/#10 GREEN TRACER WIRE

(R) #4 AWG RED
(B) #4 AWG BLACK
(N) #4 AWG WHITE
(G) #6 AWG GREEN

NOTE:
"SLB" = STREET LIGHT BASE
"PB" = LIGHTING PULL BOX



LEGEND

- PROPOSED MUNICIPAL TYPE 5 LIGHTING UNIT - SINGLE ARM
- PROPOSED MUNICIPAL TYPE 5 LIGHTING UNIT - TWIN ARM
- PROPOSED MUNICIPAL DECORATIVE LIGHTING UNIT
- MUNICIPAL LIGHTING PULL BOX - 15" X 30"
- DISTRIBUTION CENTER
- CONDUIT - 2" UNLESS OTHERWISE SHOWN
- STUBOUT

LIGHTING UNIT IDENTIFICATION

STATION - OFFSET
XXX (YY)
- DISTRIBUTION CENTER
- LIGHTING UNIT NUMBER

PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	LIGHTING PLANS - FINAL	SHEET 113	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023630-LP.DWG
LAYOUT NAME - 023631-lp
PLOT DATE : 11/18/2021 1:22 PM
PLOT BY : CRAIG AUSEN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

701+00 702+00 703+00 704+00 705+00

501+48.00, -20.5' LT
SLB 12 (NW)

500+36.62, -21.2' LT
SLB 12 (NW)

FULLER STREET

W. ST. PAUL AVENUE

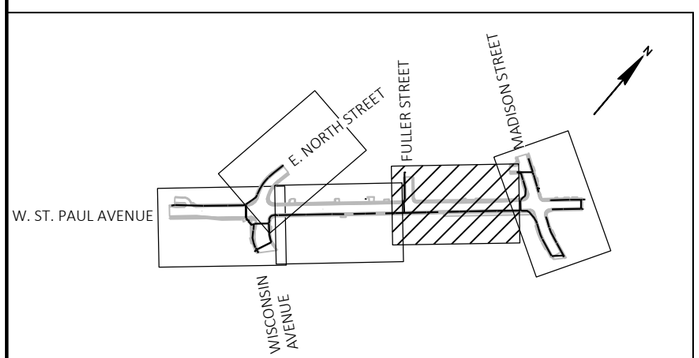
113+19.00, 26.8' RT
SLB 11 (NW)

113+61.50, 26.8' RT
PB 10

114+72.00, 27.3' RT
SLB 14 (NW)

116+35.00, 26.7' RT
SLB 15 (NW)

118+21.00, 26.7' RT
SLB 16 (NW)



LEGEND

- PROPOSED MUNICIPAL TYPE 5 LIGHTING UNIT - SINGLE ARM
- PROPOSED MUNICIPAL TYPE 5 LIGHTING UNIT - TWIN ARM
- PROPOSED MUNICIPAL DECORATIVE LIGHTING UNIT
- MUNICIPAL LIGHTING PULL BOX - 15" X 30"
- DISTRIBUTION CENTER
- CONDUIT - 2" UNLESS OTHERWISE SHOWN
- STUBOUT

LIGHTING UNIT IDENTIFICATION

STATION - OFFSET
XXX (YY)
- DISTRIBUTION CENTER
- LIGHTING UNIT NUMBER

WIRE LEGEND

A	#6-G #4-RN	C	#6-G #4-BRN
B	#6-G #4-BN	A	EMPTY CONDUIT W/#10 GREEN TRACER WIRE

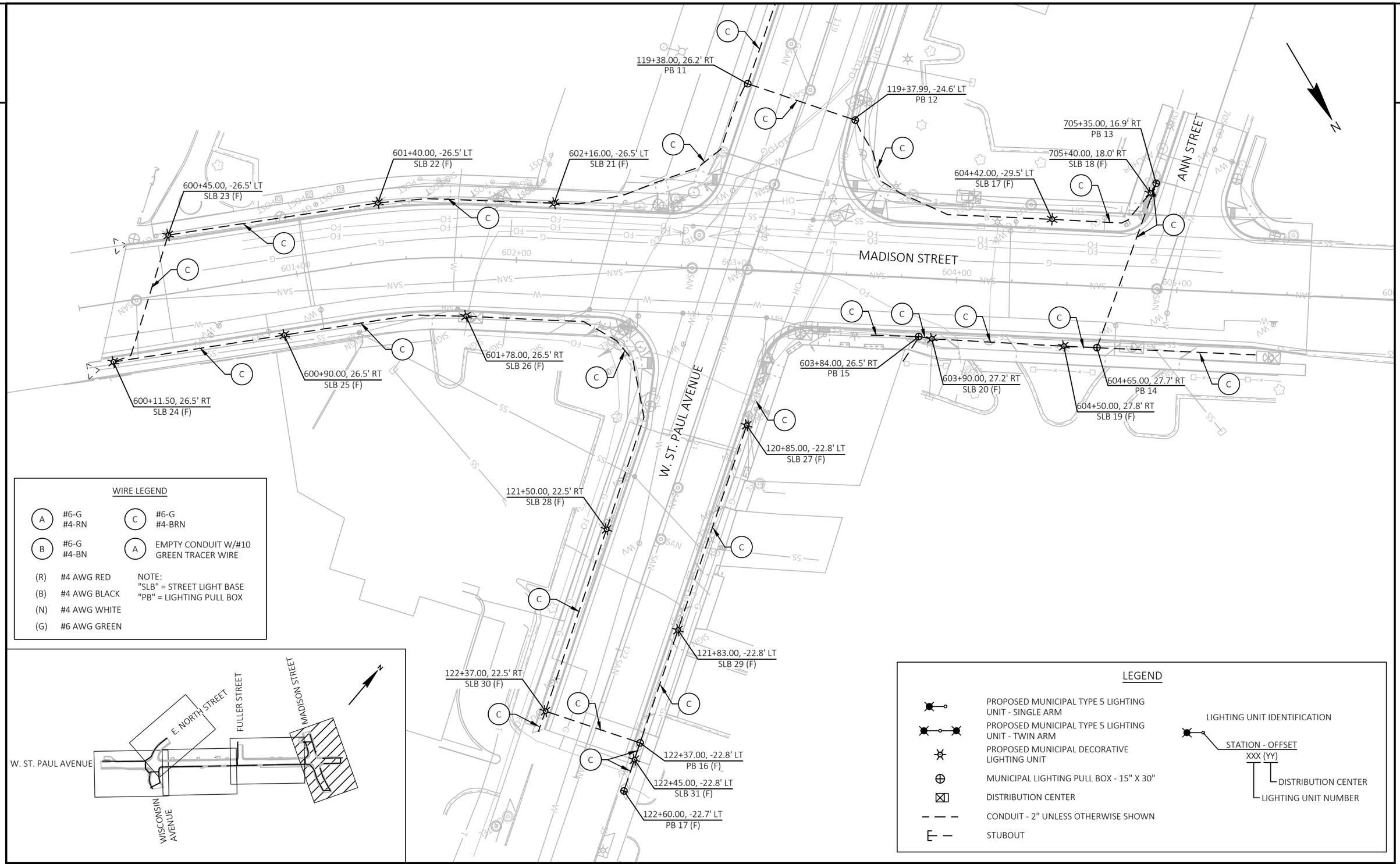
(R) #4 AWG RED
(B) #4 AWG BLACK
(N) #4 AWG WHITE
(G) #6 AWG GREEN

NOTE:
"SLB" = STREET LIGHT BASE
"PB" = LIGHTING PULL BOX

PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	LIGHTING PLANS - FINAL	SHEET 114	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023630-LP.DWG
LAYOUT NAME - 023632-lp
PLOT DATE : 11/18/2021 1:23 PM
PLOT BY : CRAIG AUSEN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



WIRE LEGEND

A	#6-G #4-RN	C	#6-G #4-BRN
B	#6-G #4-BN	A	EMPTY CONDUIT W/#10 GREEN TRACER WIRE

(R) #4 AWG RED
(B) #4 AWG BLACK
(N) #4 AWG WHITE
(G) #6 AWG GREEN

NOTE:
"SLB" = STREET LIGHT BASE
"PB" = LIGHTING PULL BOX

LEGEND

- PROPOSED MUNICIPAL TYPE 5 LIGHTING UNIT - SINGLE ARM
- PROPOSED MUNICIPAL TYPE 5 LIGHTING UNIT - TWIN ARM
- PROPOSED MUNICIPAL DECORATIVE LIGHTING UNIT
- MUNICIPAL LIGHTING PULL BOX - 15" X 30"
- DISTRIBUTION CENTER
- CONDUIT - 2" UNLESS OTHERWISE SHOWN
- STUBOUT

LIGHTING UNIT IDENTIFICATION

STATION - OFFSET
XXX (YY)
- DISTRIBUTION CENTER
- LIGHTING UNIT NUMBER

PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	LIGHTING PLANS - FINAL	SHEET 115	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023630-LP.DWG
LAYOUT NAME - 023635-lp
PLOT DATE : 11/18/2021 1:23 PM
PLOT BY : CRAIG AUSEN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

401+59.00, -24.1' LT
SLB 4 (NW)

???, ???' ???T
PB 19

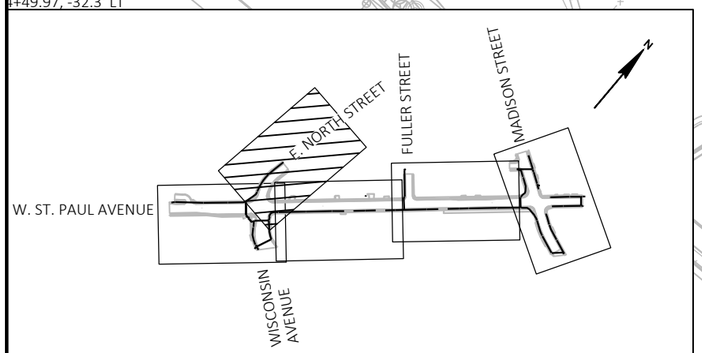
400+68.00, -28.0' LT
PB 18

E. NORTH STREET

SEE ST. PAUL AVENUE
SHEETS FOR REMOVALS

W. ST. PAUL AVENUE

1+49.97, -32.3' LT



WIRE LEGEND

A	#6-G #4-RN	C	#6-G #4-BRN
B	#6-G #4-BN	A	EMPTY CONDUIT W/#10 GREEN TRACER WIRE

(R) #4 AWG RED
(B) #4 AWG BLACK
(N) #4 AWG WHITE
(G) #6 AWG GREEN

NOTE:
"SLB" = STREET LIGHT BASE
"PB" = LIGHTING PULL BOX

LEGEND

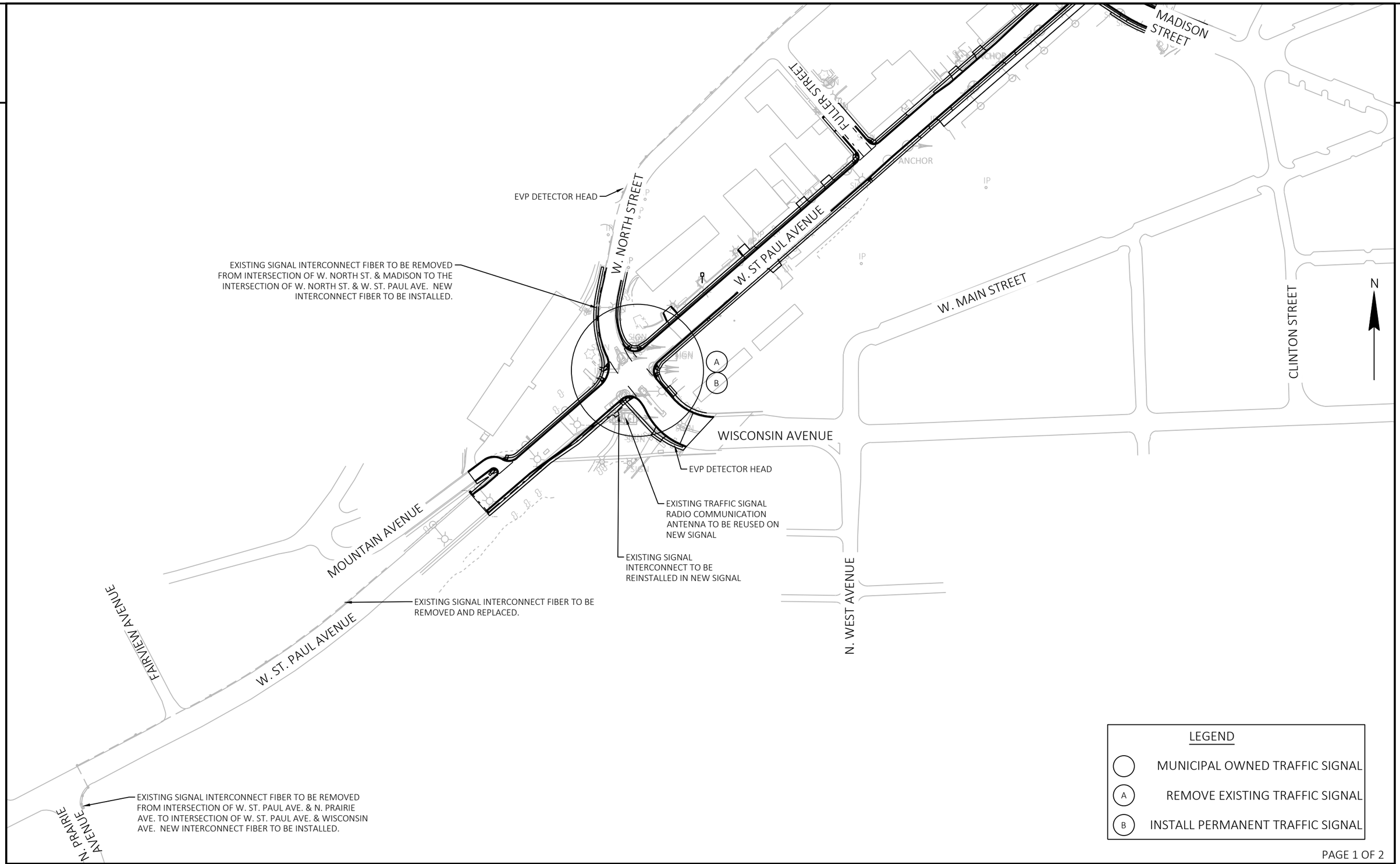
- PROPOSED MUNICIPAL TYPE 5 LIGHTING UNIT - SINGLE ARM
- PROPOSED MUNICIPAL TYPE 5 LIGHTING UNIT - TWIN ARM
- PROPOSED MUNICIPAL DECORATIVE LIGHTING UNIT
- MUNICIPAL LIGHTING PULL BOX - 15" X 30"
- DISTRIBUTION CENTER
- CONDUIT - 2" UNLESS OTHERWISE SHOWN
- STUBOUT

LIGHTING UNIT IDENTIFICATION
STATION - OFFSET
XXX (YY)
DISTRIBUTION CENTER
LIGHTING UNIT NUMBER

PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	LIGHTING PLANS - FINAL	SHEET 116	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\023630-LP.DWG
LAYOUT NAME - 023638-lp
PLOT DATE : 11/18/2021 1:23 PM
PLOT BY : CRAIG AUSEN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



LEGEND

- ○ MUNICIPAL OWNED TRAFFIC SIGNAL
- (A) REMOVE EXISTING TRAFFIC SIGNAL
- (B) INSTALL PERMANENT TRAFFIC SIGNAL

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC SIGNALS AND SIGNAL INTERCONNECT - PROJECT OVERVIEW	SHEET 117	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024101-SP-PO.DWG
LAYOUT NAME - 024101-sp-po
PLOT DATE : 7/21/2021 10:59 AM PLOT BY : MICHAEL GRULKE PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

2

EXISTING SIGNAL INTERCONNECT FIBER TO BE REMOVED FROM INTERSECTION OF E. ST. PAUL AVE. & N.W. BARSTOW AVE. TO INTERSECTION OF E. ST. PAUL AVE. & MADISON ST. NEW INTERCONNECT FIBER TO BE INSTALLED.

EXISTING SIGNAL INTERCONNECT FIBER TO BE REMOVED FROM INTERSECTION OF W. NORTH ST. & MADISON TO THE INTERSECTION OF W. ST. PAUL AVE. & MADISON ST. NEW INTERCONNECT FIBER TO BE INSTALLED.

EXISTING SIGNAL INTERCONNECT FIBER TO BE REMOVED FROM INTERSECTION OF W. NORTH ST. & MADISON TO THE INTERSECTION OF W. NORTH ST. & W. ST. PAUL AVE. NEW INTERCONNECT FIBER TO BE INSTALLED.

EXISTING SIGNAL INTERCONNECT FIBER TO BE REMOVED AND REPLACED.

EXISTING SIGNAL INTERCONNECT FIBER TO BE REMOVED AND REPLACED.

EXISTING SIGNAL INTERCONNECT FIBER TO BE REMOVED AND REPLACED.

EVP DETECTOR HEAD

EXISTING SIGNAL INTERCONNECT FIBER TO BE REMOVED FROM INTERSECTION OF E. ST. PAUL AVE. & N.W. BARSTOW AVE. TO INTERSECTION OF E. ST. PAUL AVE. & MADISON ST. NEW INTERCONNECT FIBER TO BE INSTALLED.

DELAFIELD STREET
E. NORTH STREET
BROOK STREET
NW BARSTOW STREET
BREHM STREET
MADISON STREET
E. ST PAUL AVENUE
W. NORTH STREET
MADISON STREET
FULLER STREET
W. ST PAUL AVENUE
W. MAIN STREET
WISCONSIN AVENUE
ANCHOR
IP
SIGN

N

LEGEND

- MUNICIPAL OWNED TRAFFIC SIGNAL
- (A) REMOVE EXISTING TRAFFIC SIGNAL
- (B) INSTALL PERMANENT TRAFFIC SIGNAL

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC SIGNALS - OVERVIEW	SHEET 118	E

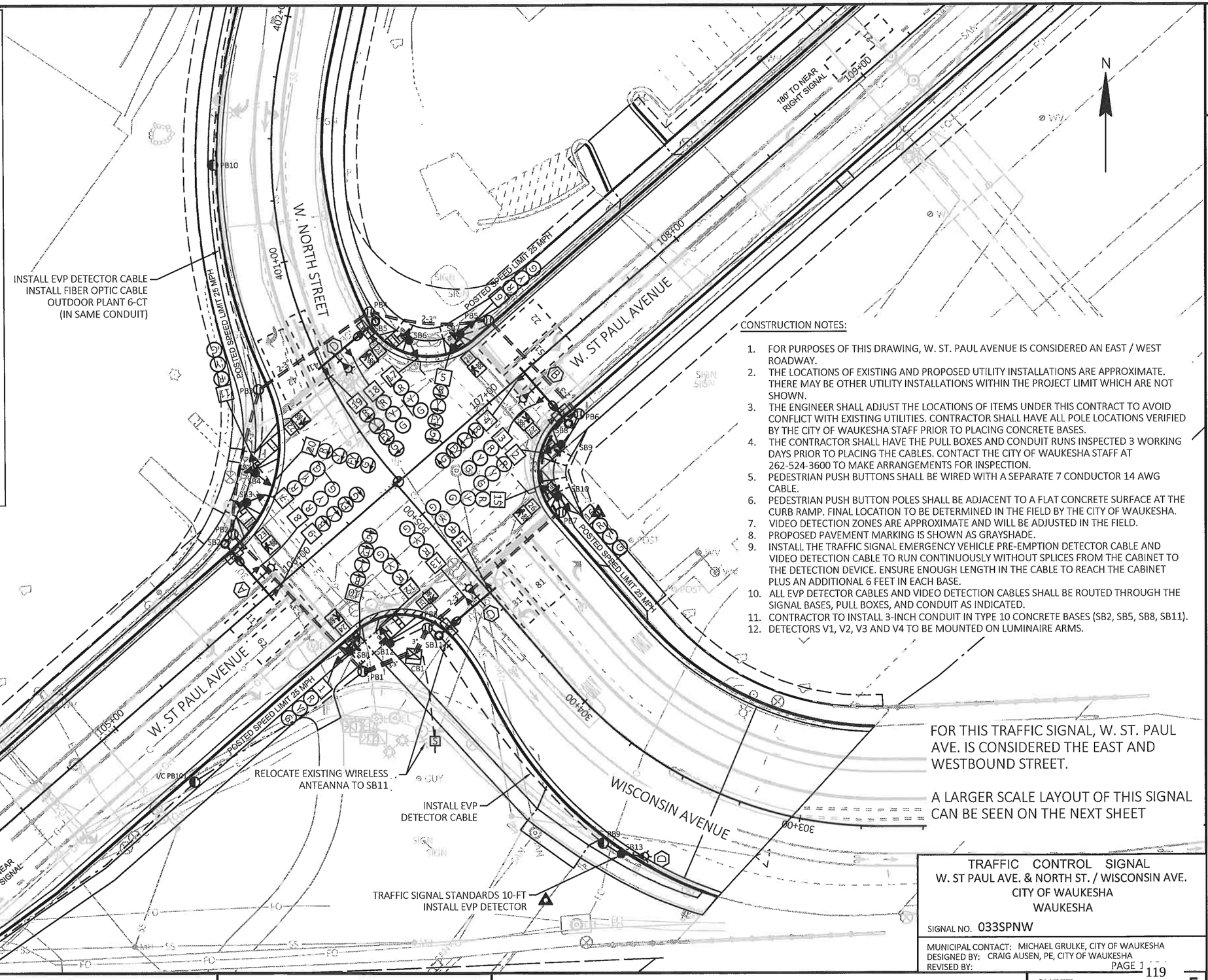
FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024101-SP-PO.DWG
LAYOUT NAME - 024102-sp-po
PLOT DATE : 7/21/2021 11:02 AM PLOT BY : MICHAEL GRULKE PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- CONTROL CABINET
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- PEDESTRIAN HEAD
- ACCESSIBLE PEDESTRIAN PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- CONFIRMATION LIGHT
- EVP DETECTOR HEAD
- EVP DESIGNATOR
- XX SIGNAL HEAD NUMBER
- XX SIGNAL HEAD NUMBER
- VIDEO DETECTION AREA
- VX VIDEO DETECTION CAMERA
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- SERVICE POLE
- RADIO COMMUNICATION ANTENNA

NOTE: GRAYSHADE REPRESENTS EXISTING



CONSTRUCTION NOTES:

1. FOR PURPOSES OF THIS DRAWING, W. ST. PAUL AVENUE IS CONSIDERED AN EAST / WEST ROADWAY.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT LIMIT WHICH ARE NOT SHOWN.
3. THE ENGINEER SHALL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITIES. CONTRACTOR SHALL HAVE ALL POLE LOCATIONS VERIFIED BY THE CITY OF WAUKESHA STAFF PRIOR TO PLACING CONCRETE BASES.
4. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 3 WORKING DAYS PRIOR TO PLACING THE CABLES. CONTACT THE CITY OF WAUKESHA STAFF AT 262-524-3600 TO MAKE ARRANGEMENTS FOR INSPECTION.
5. PEDESTRIAN PUSH BUTTONS SHALL BE WIRED WITH A SEPARATE 7 CONDUCTOR 14 AWG CABLE.
6. PEDESTRIAN PUSH BUTTON POLES SHALL BE ADJACENT TO A FLAT CONCRETE SURFACE AT THE CURB RAMP. FINAL LOCATION TO BE DETERMINED IN THE FIELD BY THE CITY OF WAUKESHA.
7. VIDEO DETECTION ZONES ARE APPROXIMATE AND WILL BE ADJUSTED IN THE FIELD.
8. PROPOSED PAVEMENT MARKING IS SHOWN AS GRAYSHADE.
9. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE AND VIDEO DETECTION CABLE TO RUN CONTINUOUSLY WITHOUT SPLICES FROM THE CABINET TO THE DETECTION DEVICE. ENSURE ENOUGH LENGTH IN THE CABLE TO REACH THE CABINET PLUS AN ADDITIONAL 6 FEET IN EACH BASE.
10. ALL EVP DETECTOR CABLES AND VIDEO DETECTION CABLES SHALL BE ROUTED THROUGH THE SIGNAL BASES, PULL BOXES, AND CONDUIT AS INDICATED.
11. CONTRACTOR TO INSTALL 3-INCH CONDUIT IN TYPE 10 CONCRETE BASES (SB2, SB5, SB8, SB11).
12. DETECTORS V1, V2, V3 AND V4 TO BE MOUNTED ON LUMINAIRE ARMS.

FOR THIS TRAFFIC SIGNAL, W. ST. PAUL AVE. IS CONSIDERED THE EAST AND WESTBOUND STREET.

A LARGER SCALE LAYOUT OF THIS SIGNAL CAN BE SEEN ON THE NEXT SHEET

WISCONSIN
MICHAEL F. GRULKE
35260-006
WAUKESHA, WI
PROFESSIONAL ENGINEER

10-22-21

Plus next 3 sheets

TRAFFIC CONTROL SIGNAL
W. ST PAUL AVE. & NORTH ST. / WISCONSIN AVE.
CITY OF WAUKESHA
WAUKESHA

SIGNAL NO. 033SPNW

MUNICIPAL CONTACT: MICHAEL GRULKE, CITY OF WAUKESHA
DESIGNED BY: CRAIG AUSEN, PE, CITY OF WAUKESHA
REVISED BY:

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 119 E

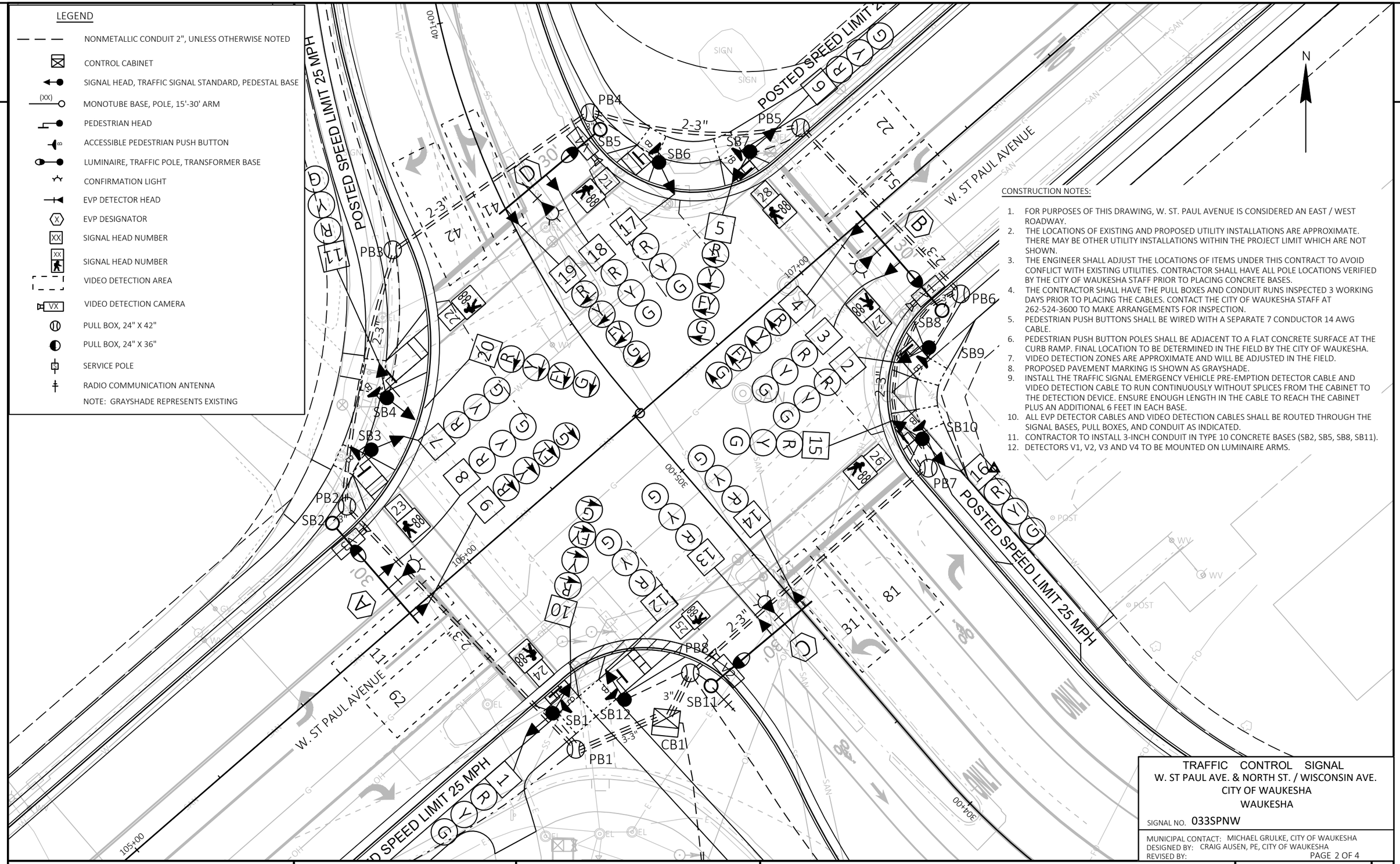
FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024210-sp
PLOT DATE : 10/22/2021 3:35 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- CONTROL CABINET
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- PEDESTRIAN HEAD
- ACCESSIBLE PEDESTRIAN PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- CONFIRMATION LIGHT
- EVP DETECTOR HEAD
- X EVP DESIGNATOR
- XX SIGNAL HEAD NUMBER
- XX SIGNAL HEAD NUMBER
- VIDEO DETECTION AREA
- VX VIDEO DETECTION CAMERA
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- SERVICE POLE
- RADIO COMMUNICATION ANTENNA

NOTE: GRAYSHADE REPRESENTS EXISTING



CONSTRUCTION NOTES:

1. FOR PURPOSES OF THIS DRAWING, W. ST. PAUL AVENUE IS CONSIDERED AN EAST / WEST ROADWAY.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT LIMIT WHICH ARE NOT SHOWN.
3. THE ENGINEER SHALL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITIES. CONTRACTOR SHALL HAVE ALL POLE LOCATIONS VERIFIED BY THE CITY OF WAUKESHA STAFF PRIOR TO PLACING CONCRETE BASES.
4. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 3 WORKING DAYS PRIOR TO PLACING THE CABLES. CONTACT THE CITY OF WAUKESHA STAFF AT 262-524-3600 TO MAKE ARRANGEMENTS FOR INSPECTION.
5. PEDESTRIAN PUSH BUTTONS SHALL BE WIRED WITH A SEPARATE 7 CONDUCTOR 14 AWG CABLE.
6. PEDESTRIAN PUSH BUTTON POLES SHALL BE ADJACENT TO A FLAT CONCRETE SURFACE AT THE CURB RAMP. FINAL LOCATION TO BE DETERMINED IN THE FIELD BY THE CITY OF WAUKESHA.
7. VIDEO DETECTION ZONES ARE APPROXIMATE AND WILL BE ADJUSTED IN THE FIELD.
8. PROPOSED PAVEMENT MARKING IS SHOWN AS GRAYSHADE.
9. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE AND VIDEO DETECTION CABLE TO RUN CONTINUOUSLY WITHOUT SPLICES FROM THE CABINET TO THE DETECTION DEVICE. ENSURE ENOUGH LENGTH IN THE CABLE TO REACH THE CABINET PLUS AN ADDITIONAL 6 FEET IN EACH BASE.
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11. CONTRACTOR TO INSTALL 3-INCH CONDUIT IN TYPE 10 CONCRETE BASES (SB2, SB5, SB8, SB11).
12. DETECTORS V1, V2, V3 AND V4 TO BE MOUNTED ON LUMINAIRE ARMS.

TRAFFIC CONTROL SIGNAL
W. ST PAUL AVE. & NORTH ST. / WISCONSIN AVE.
CITY OF WAUKESHA
WAUKESHA

SIGNAL NO. 033SPNW

MUNICIPAL CONTACT: MICHAEL GRULKE, CITY OF WAUKESHA
DESIGNED BY: CRAIG AUSEN, PE, CITY OF WAUKESHA
REVISED BY:
PAGE 2 OF 4

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 120	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024211-sp
PLOT DATE : 10/22/2021 3:36 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

CONSTRUCTION NOTES:

1. FOR PURPOSES OF THIS DRAWING, W. ST. PAUL AVENUE IS CONSIDERED AN EAST / WEST ROADWAY.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT LIMIT WHICH ARE NOT SHOWN.
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7. VIDEO DETECTION ZONES ARE APPROXIMATE AND WILL BE ADJUSTED IN THE FIELD.
8. PROPOSED PAVEMENT MARKING IS SHOWN AS GRAYSHADE.
9. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE AND VIDEO DETECTION CABLE TO RUN CONTINUOUSLY WITHOUT SPLICES FROM THE CABINET TO THE DETECTION DEVICE. ENSURE ENOUGH LENGTH IN THE CABLE TO REACH THE CABINET PLUS AN ADDITIONAL 6 FEET IN EACH BASE.
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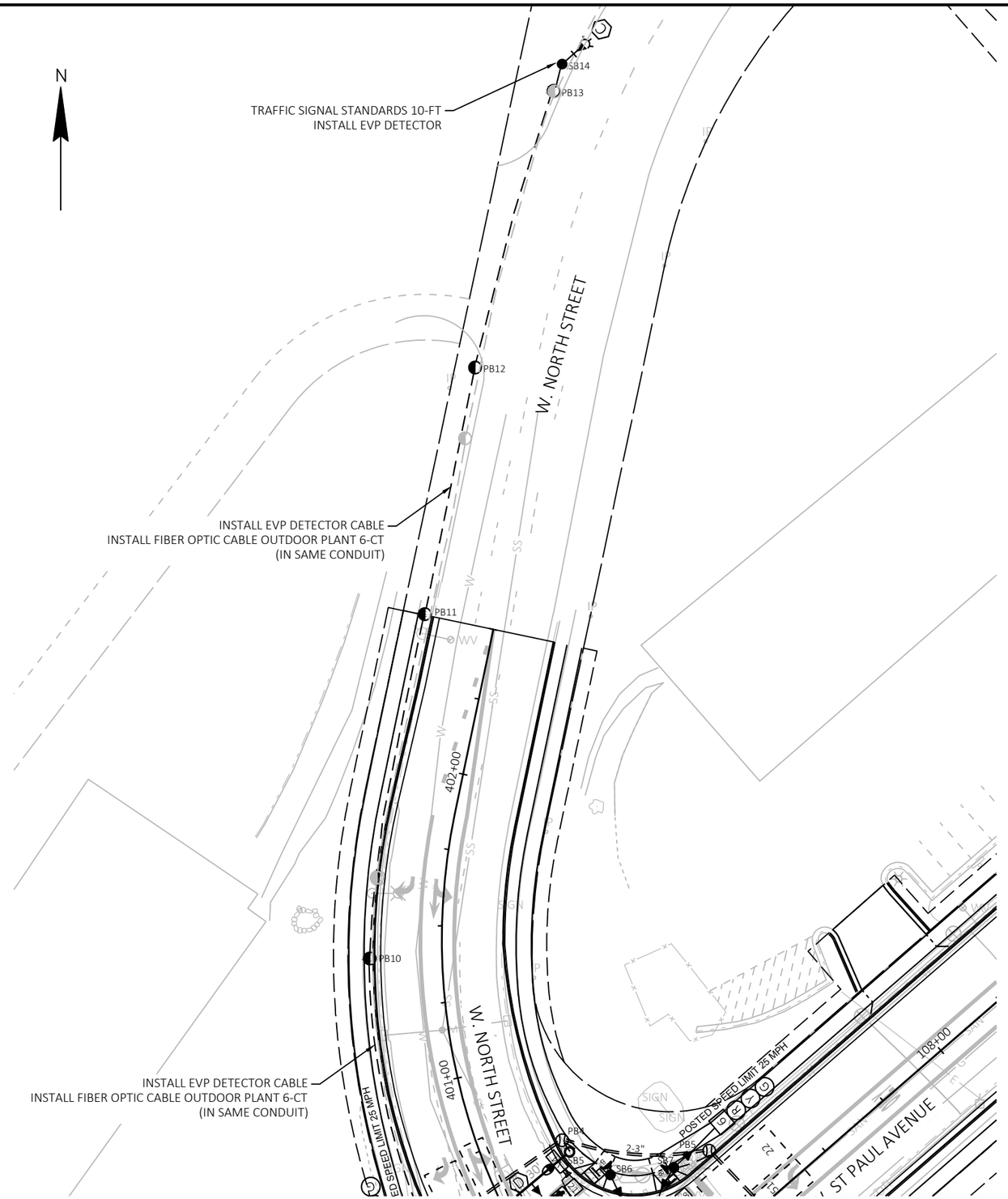
11. CONTRACTOR TO INSTALL 3-INCH CONDUIT IN TYPE 10 CONCRETE BASES (SB2, SB5, SB8, SB11).
12. DETECTORS V1, V2, V3 AND V4 TO BE MOUNTED ON LUMINAIRE ARMS.

LEGEND

- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- CONTROL CABINET
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- PEDESTRIAN HEAD
- ACCESSIBLE PEDESTRIAN PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- CONFIRMATION LIGHT
- EVP DETECTOR HEAD
- X EVP DESIGNATOR
- XX SIGNAL HEAD NUMBER
- XX SIGNAL HEAD NUMBER
- VIDEO DETECTION AREA
- VX VIDEO DETECTION CAMERA
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- SERVICE POLE
- RADIO COMMUNICATION ANTENNA
- NOTE: GRAYSHADE REPRESENTS EXISTING



TRAFFIC CONTROL SIGNAL
W. ST PAUL AVE. & NORTH ST. / WISCONSIN AVE.
CITY OF WAUKESHA
WAUKESHA

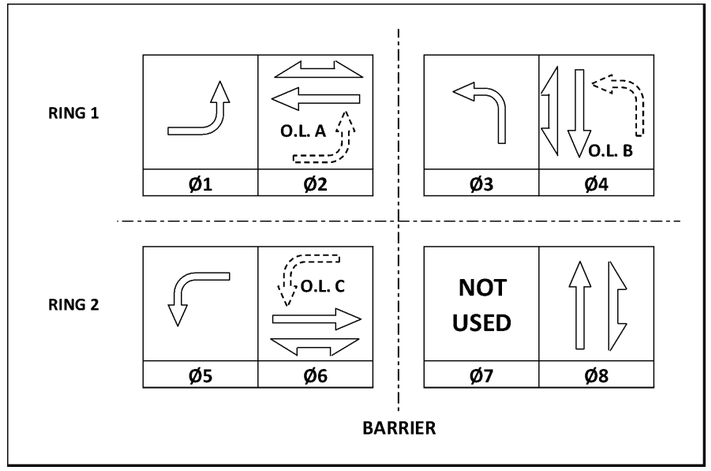
SIGNAL NO. 033SPNW

MUNICIPAL CONTACT: MICHAEL GRULKE, CITY OF WAUKESHA
DESIGNED BY: CRAIG AUSEN, PE, CITY OF WAUKESHA
REVISED BY:

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC SIGNALS PLAN	SHEET 121	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024212-sp
PLOT DATE : 7/21/2021 11:23 AM PLOT BY : MICHAEL GRULKE PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	4, 5	-
Ø2	6, 7, 8	R
Ø3	19, 20	-
Ø4	11, 12, 13, 14, 15	R
Ø5	9, 10	-
Ø6	1, 2, 3	R
Ø7		
Ø8	16, 17, 18	R
Ø2P	21, 22	
Ø4P	23, 24	
Ø6P	25, 26	
Ø8P	27, 28	
OLA	4, 5	R ←
OLB	19, 20	R ←
OLC	9, 10	R ←
OLD		



CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE	2+5	6+1	4+8	8+3

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

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

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	
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	X
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NON-CONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL.
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGHETHER DUE TO PERMISSIVE LEFT TURN CLONFLICT.
4. THE SIGNAL CONTRACTOR OR VENDOR SHALL BE RESPONSIBLE TO DEVELOP THE VIDEO DETECTOR LOGIC AND ALL ASSOCIATED CONNECTIONS.

TRAFFIC CONTROL SIGNAL
W. ST PAUL AVE. & NORTH ST. / WISCONSIN AVE.
CITY OF WAUKESHA
WAUKESHA

SIGNAL NO. 033SPNW

MUNICIPAL CONTACT: MICHAEL GRULKE, CITY OF WAUKESHA
DESIGNED BY: CRAIG AUSEN, PE, CITY OF WAUKESHA
REVISED BY:

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC SIGNAL SEQUENCE OF OPERATIONS	SHEET 122	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024213-sp
PLOT DATE : 7/21/2021 11:24 AM PLOT BY : MICHAEL GRULKE PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

PROJECT ID:	2718-04-71
INTERSECTION:	W. ST. PAUL & W. NORTH / WISCONSIN

SIGNAL WIRE COLOR CODING	BLK-BLACK	RED-RED	GRN-GREEN
	WHT-WHITE	BLU-BLUE	ORG-ORANGE

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

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN 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
CB1	SB13
CB1	SB14

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
CB1	PB1
SB2	PB2
SB4	PB3
SB5	PB4
SB7	PB5
SB8	PB6
SB10	PB7
CB1	PB8
SB13	PB9
SB14	PB13, 12, 11, 10

LIGHTING UF 10 AWG W/GROUND	
FROM	TO
CB1	SB2
SB2	SB5
CB1	SB11
SB11	SB8

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN BUTTONS TO THE COLOR INDICATED IN THE CHART.
   CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. "OTHER" COLUMN MAY INCLUDE SHADOW BOX (BLANK OUT) SIGN.

PEDESTRIAN PUSH BUTTONS 1 14 AWG 7 CONDUCTOR			IMSA 20
FROM	TO	PHASE	PED BUTTON
CB1	SB1	4	GRN
SB1	SB3	4	GRN
SB3	SB4	2	ORG
SB4	SB6	2	ORG
SB6	SB7	8	RED
SB7	SB9	8	RED
SB9	SB10	6	BLU
SB10	SB12	6	BLU
SB12	CB1		

EMERGENCY VEHICLE PREEMPTION	
FROM	TO
CB1	PB1, 2, SB2 (HEAD A)
CB1	PB8, 7, 6, SB8 (HEAD B)
CB1	PB8, SB11 (HEAD C-1)
CB1	PB1, 2, 3, 10, SB14 (HEAD C-2)
CB1	PB1, 2, 3, 4, SB5 (HEAD D-1)
CB1	PB8, 9, SB13 (HEAD D-2)

VIDEO DETECTION CABLE	
FROM	TO
CB1	PB8, 7, 6, SB8 (VDC1)
CB1	PB8, SB11 (VDC2)
CB1	PB1, 2, SB2 (VDC3)
CB1	PB1, 2, 3, 4, SB5 (VDC4)

CONSTRUCTION NOTES:

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2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT LIMIT WHICH ARE NOT SHOWN.
3. THE ENGINEER SHALL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITIES. CONTRACTOR SHALL HAVE ALL POLE LOCATIONS VERIFIED BY THE CITY OF WAUKESHA STAFF PRIOR TO PLACING CONCRETE BASES.
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6. PEDESTRIAN PUSH BUTTON POLES SHALL BE ADJACENT TO A FLAT CONCRETE SURFACE AT THE CURB RAMP. FINAL LOCATION TO BE DETERMINED IN THE FIELD BY THE CITY OF WAUKESHA.
7. VIDEO DETECTION ZONES ARE APPROXIMATE AND WILL BE ADJUSTED IN THE FIELD.
8. PROPOSED PAVEMENT MARKING IS SHOWN AS GRAYSHADE.
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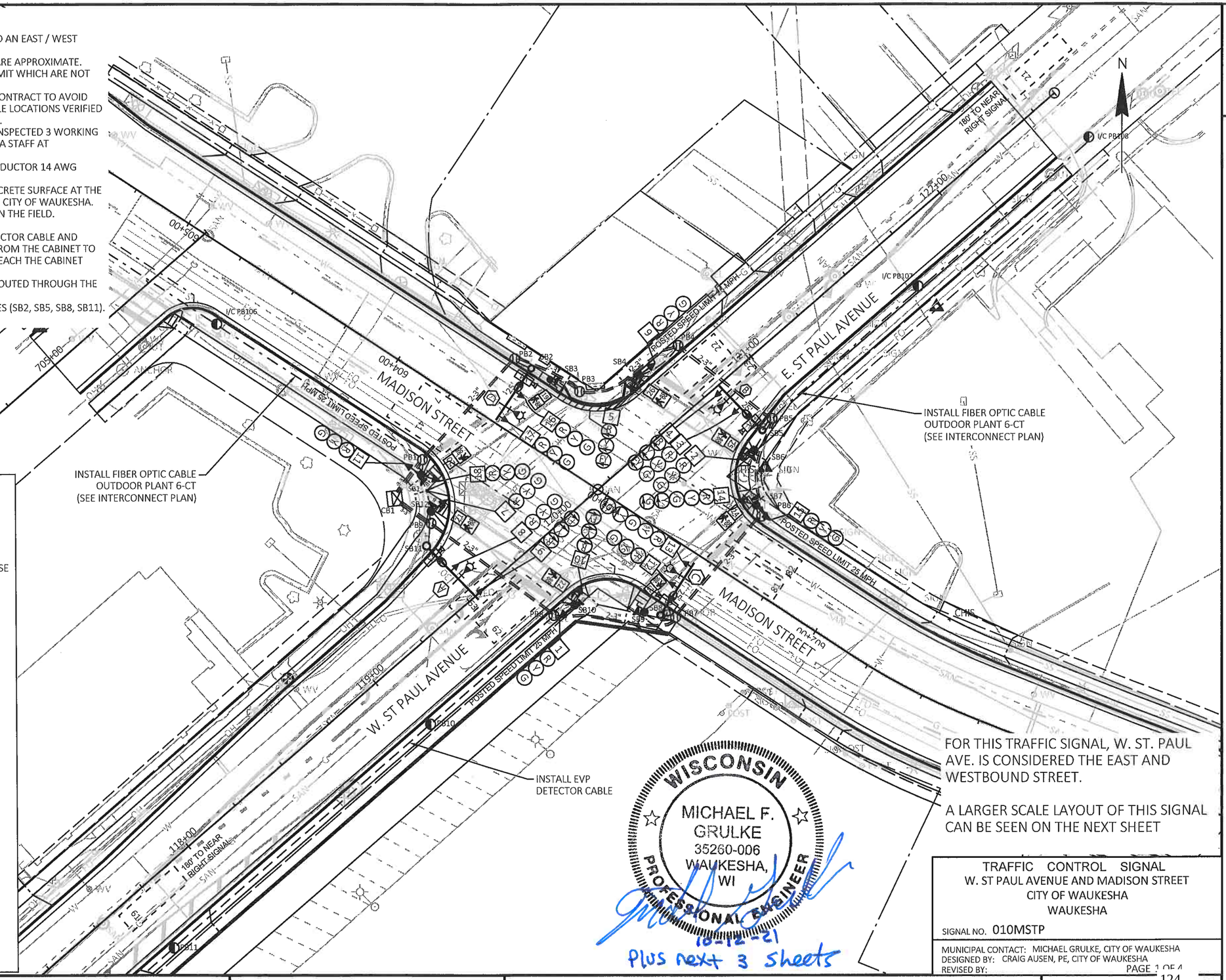
10. ALL EVP DETECTOR CABLES AND VIDEO DETECTION CABLES SHALL BE ROUTED THROUGH THE SIGNAL BASES, PULL BOXES, AND CONDUIT AS INDICATED.
11. CONTRACTOR TO INSTALL 3-INCH CONDUIT IN TYPE 10 CONCRETE BASES (SB2, SB5, SB8, SB11).
12. DETECTORS V1, V2, V3 AND V4 TO BE MOUNTED ON LUMINAIRE ARMS.

LEGEND

- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- CONTROL CABINET
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- PEDESTRIAN HEAD
- ACCESSIBLE PEDESTRIAN PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- CONFIRMATION LIGHT
- EVP DETECTOR HEAD
- X EVP DESIGNATOR
- XX SIGNAL HEAD NUMBER
- XX SIGNAL HEAD NUMBER
- VIDEO DETECTION AREA
- VX VIDEO DETECTION CAMERA
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- SERVICE POLE
- RADIO COMMUNICATION ANTENNA

NOTE: GRAYSHADE REPRESENTS EXISTING



FOR THIS TRAFFIC SIGNAL, W. ST. PAUL AVE. IS CONSIDERED THE EAST AND WESTBOUND STREET.

A LARGER SCALE LAYOUT OF THIS SIGNAL CAN BE SEEN ON THE NEXT SHEET

WISCONSIN
MICHAEL F. GRULKE
35260-006
WAUKESHA, WI
PROFESSIONAL ENGINEER
10-12-21
Plus next 3 sheets

TRAFFIC CONTROL SIGNAL
W. ST PAUL AVENUE AND MADISON STREET
CITY OF WAUKESHA
WAUKESHA

SIGNAL NO. 010MSTP

MUNICIPAL CONTACT: MICHAEL GRULKE, CITY OF WAUKESHA
DESIGNED BY: CRAIG AUSEN, PE, CITY OF WAUKESHA
REVISED BY:

PAGE 1 OF 4

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC SIGNALS PLAN	SHEET 124 E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024220-sp
PLOT DATE : 7/21/2021 11:44 AM
PLOT BY : MICHAEL GRULKE
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES:

1. FOR PURPOSES OF THIS DRAWING, W. ST. PAUL AVENUE IS CONSIDERED AN EAST / WEST ROADWAY.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT LIMIT WHICH ARE NOT SHOWN.
3. THE ENGINEER SHALL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITIES. CONTRACTOR SHALL HAVE ALL POLE LOCATIONS VERIFIED BY THE CITY OF WAUKESHA STAFF PRIOR TO PLACING CONCRETE BASES.
4. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 3 WORKING DAYS PRIOR TO PLACING THE CABLES. CONTACT THE CITY OF WAUKESHA STAFF AT 262-524-3600 TO MAKE ARRANGEMENTS FOR INSPECTION.
5. PEDESTRIAN PUSH BUTTONS SHALL BE WIRED WITH A SEPARATE 7 CONDUCTOR 14 AWG CABLE.
6. PEDESTRIAN PUSH BUTTON POLES SHALL BE ADJACENT TO A FLAT CONCRETE SURFACE AT THE CURB RAMP. FINAL LOCATION TO BE DETERMINED IN THE FIELD BY THE CITY OF WAUKESHA.
7. VIDEO DETECTION ZONES ARE APPROXIMATE AND WILL BE ADJUSTED IN THE FIELD.
8. PROPOSED PAVEMENT MARKING IS SHOWN AS GRAYSHADE.
9. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE AND VIDEO DETECTION CABLE TO RUN CONTINUOUSLY WITHOUT SPLICES FROM THE CABINET TO THE DETECTION DEVICE. ENSURE ENOUGH LENGTH IN THE CABLE TO REACH THE CABINET PLUS AN ADDITIONAL 6 FEET IN EACH BASE.
10. ALL EVP DETECTOR CABLES AND VIDEO DETECTION CABLES SHALL BE ROUTED THROUGH THE SIGNAL BASES, PULL BOXES, AND CONDUIT AS INDICATED.
11. CONTRACTOR TO INSTALL 3-INCH CONDUIT IN TYPE 10 CONCRETE BASES (SB2, SB5, SB8, SB11).
12. DETECTORS V1, V2, V3 AND V4 TO BE MOUNTED ON LUMINAIRE ARMS.

LEGEND

- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- CONTROL CABINET
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- PEDESTRIAN HEAD
- ACCESSIBLE PEDESTRIAN PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- CONFIRMATION LIGHT
- EVP DETECTOR HEAD
- X EVP DESIGNATOR
- XX SIGNAL HEAD NUMBER
- XX SIGNAL HEAD NUMBER
- VIDEO DETECTION AREA
- VX VIDEO DETECTION CAMERA
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- SERVICE POLE
- RADIO COMMUNICATION ANTENNA

NOTE: GRAYSHADE REPRESENTS EXISTING

TRAFFIC CONTROL SIGNAL
W. ST PAUL AVENUE AND MADISON STREET
CITY OF WAUKESHA
WAUKESHA

SIGNAL NO. 010MSTP

MUNICIPAL CONTACT: MICHAEL GRULKE, CITY OF WAUKESHA
DESIGNED BY: CRAIG AUSEN, PE, CITY OF WAUKESHA
REVISED BY:
PAGE 2 OF 4

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC SIGNALS PLAN	SHEET 125	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024221-sp
PLOT DATE : 7/21/2021 1:10 PM PLOT BY : MICHAEL GRULKE PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES:

1. FOR PURPOSES OF THIS DRAWING, W. ST. PAUL AVENUE IS CONSIDERED AN EAST / WEST ROADWAY.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT LIMIT WHICH ARE NOT SHOWN.
3. THE ENGINEER SHALL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITIES. CONTRACTOR SHALL HAVE ALL POLE LOCATIONS VERIFIED BY THE CITY OF WAUKESHA STAFF PRIOR TO PLACING CONCRETE BASES.
4. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 3 WORKING DAYS PRIOR TO PLACING THE CABLES. CONTACT THE CITY OF WAUKESHA STAFF AT 262-524-3600 TO MAKE ARRANGEMENTS FOR INSPECTION.
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6. PEDESTRIAN PUSH BUTTON POLES SHALL BE ADJACENT TO A FLAT CONCRETE SURFACE AT THE CURB RAMP. FINAL LOCATION TO BE DETERMINED IN THE FIELD BY THE CITY OF WAUKESHA.
7. VIDEO DETECTION ZONES ARE APPROXIMATE AND WILL BE ADJUSTED IN THE FIELD.
8. PROPOSED PAVEMENT MARKING IS SHOWN AS GRAYSHADE.
9. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE AND VIDEO DETECTION CABLE TO RUN CONTINUOUSLY WITHOUT SPLICES FROM THE CABINET TO THE DETECTION DEVICE. ENSURE ENOUGH LENGTH IN THE CABLE TO REACH THE CABINET PLUS AN ADDITIONAL 6 FEET IN EACH BASE.
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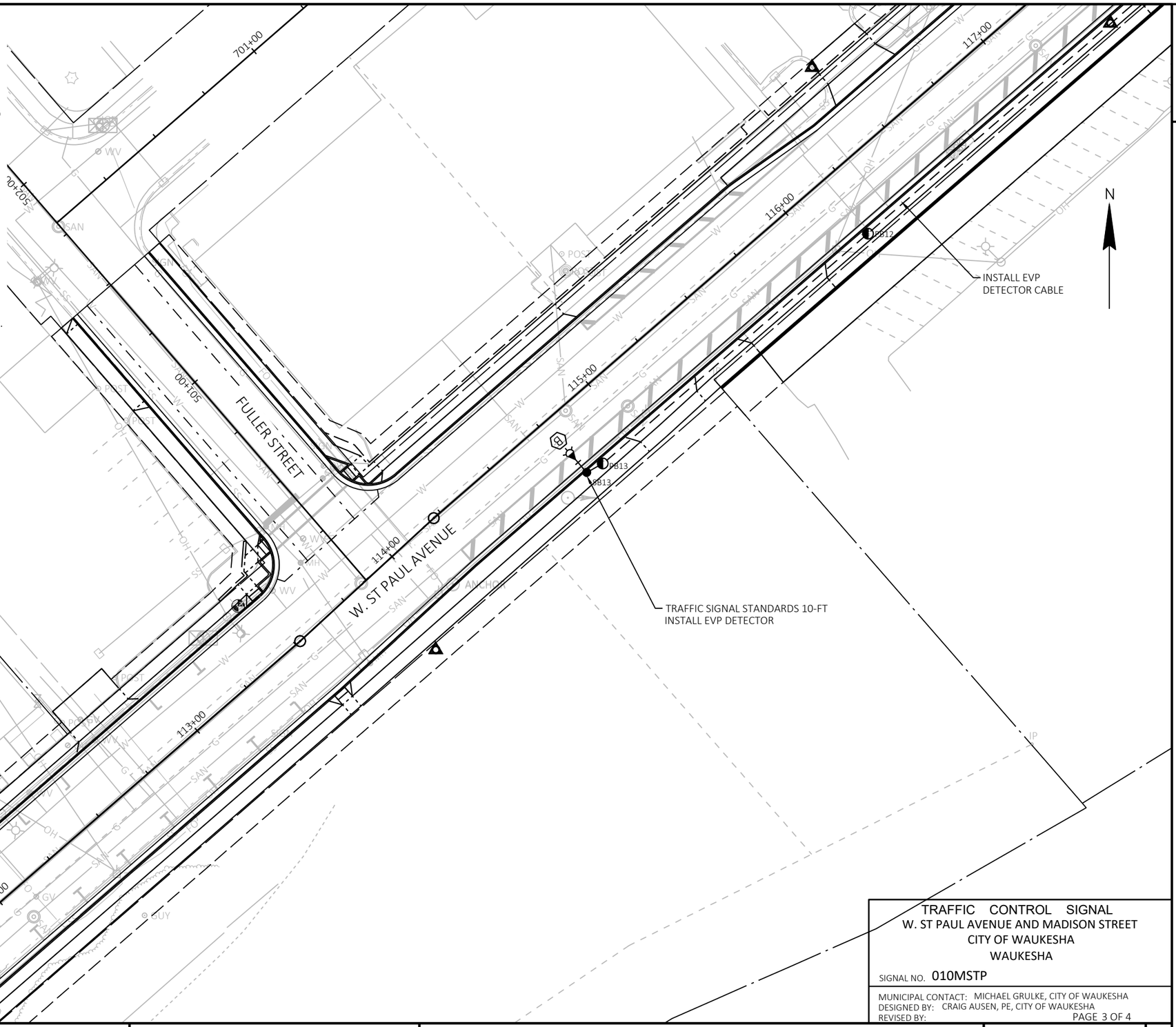
12. DETECTORS V1, V2, V3 AND V4 TO BE MOUNTED ON LUMINAIRE ARMS.

LEGEND

- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- CONTROL CABINET
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- PEDESTRIAN HEAD
- ACCESSIBLE PEDESTRIAN PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- CONFIRMATION LIGHT
- EVP DETECTOR HEAD
- X EVP DESIGNATOR
- XX SIGNAL HEAD NUMBER
- XX SIGNAL HEAD NUMBER
- VIDEO DETECTION AREA
- VX VIDEO DETECTION CAMERA
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- SERVICE POLE
- RADIO COMMUNICATION ANTENNA

NOTE: GRAYSHADE REPRESENTS EXISTING



TRAFFIC CONTROL SIGNAL
W. ST PAUL AVENUE AND MADISON STREET
CITY OF WAUKESHA
WAUKESHA

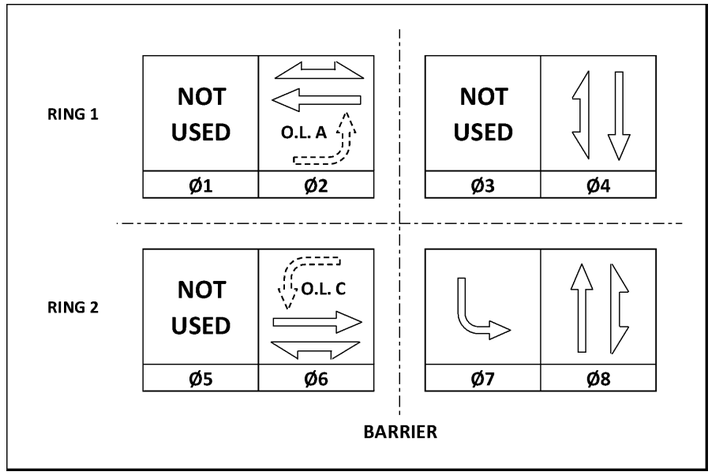
SIGNAL NO. 010MSTP

MUNICIPAL CONTACT: MICHAEL GRULKE, CITY OF WAUKESHA
DESIGNED BY: CRAIG AUSEN, PE, CITY OF WAUKESHA
REVISED BY:

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC SIGNALS PLAN	SHEET 126	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024222-sp
PLOT DATE : 7/21/2021 1:13 PM
PLOT BY : MICHAEL GRULKE
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1		
Ø2	6, 7, 8	R
Ø3		
Ø4	11, 12, 13, 14	R
Ø5		
Ø6	1, 2, 3	R
Ø7	13, 14	-
Ø8	15, 16, 17, 18	R
Ø2P	19, 20	
Ø4P	21, 22	
Ø6P	23, 24	
Ø8P	25, 26	
OLA	4, 5	R ←
OLB		
OLC	9, 10	R ←
OLD		



CONTROLLER LOGIC

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

AFTER PREEMPTION SEQUENCE 2+6, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+4, CONTROLLER SHALL RETURN TO PHASES 4+8.

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

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	
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	X
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NON-CONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL.
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGHETHER DUE TO PERMISSIVE LEFT TURN CLONFLICT.
4. THE SIGNAL CONTRACTOR OR VENDOR SHALL BE RESPONSIBLE TO DEVELOP THE VIDEO DETECTOR LOGIC AND ALL ASSOCIATED CONNECTIONS.

TRAFFIC CONTROL SIGNAL
W. ST PAUL AVENUE AND MADISON STREET
CITY OF WAUKESHA
WAUKESHA

SIGNAL NO. 010MSTP

MUNICIPAL CONTACT: MICHAEL GRULKE, CITY OF WAUKESHA
DESIGNED BY: CRAIG AUSEN, PE, CITY OF WAUKESHA
REVISED BY:

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024223-sp
PLOT DATE : 7/21/2021 1:13 PM PLOT BY : MICHAEL GRULKE PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

PROJECT ID:	2718-04-71
INTERSECTION:	W. ST. PAUL & MADISON ST

SIGNAL WIRE COLOR CODING	BLK-BLACK	RED-RED	GRN-GREEN
	WHT-WHITE	BLU-BLUE	ORG-ORANGE

CB1 TO	JUMPER	# OF COND. AWG 14	HEAD NO.	SIGNAL PHASE	SIGNAL INDICATION WIRE COLOR								PED BUTTON	OTHER
					RED	YELLOW	GREEN	<RED	<YELLOW>	<FL YELLOW>	<GREEN>	D/WALK	WALK	
SB1		12	11	4	RED	ORG	GRN								
			18	8	RED/BLK	ORG/BLK	GRN/BLK								
			20	2								BLK	BLU		
SB2		12	16	8	RED	ORG	GRN								
	JUMPER	12	17	8	RED	ORG	GRN								
SB3		7	19	2								BLK	BLU		
SB4		12	6	2	RED	ORG	GRN								
			5	6				RED/BLK	ORG/BLK	BLK/WHT					
			26	8								BLK	BLU		
SB5		12	3	6	RED	ORG	GRN								
			4	6				RED/BLK	ORG/BLK	BLK/WHT					
SB6		12	2	6	RED	ORG	GRN								
			25	8								BLK	BLU		
SB7		12	15	8	RED	ORG	GRN								
		12	14	7	RED	ORG	GRN		ORG/BLK		GRN/BLK				
			24	6								BLK	BLU		
SB8		12	12	4	RED	ORG	GRN								
		12	13	7	RED	ORG	GRN		ORG/BLK		GRN/BLK				
SB9		7	23	6								BLK	BLU		
SB10		12	1	6	RED	ORG	GRN								
			10	2				RED/BLK	ORG/BLK	BLK/WHT					
			22	4								BLK	BLU		
SB11		12	8	2	RED	ORG	GRN								
			9	2				RED/BLK	ORG/BLK	BLK/WHT					
SB12		12	7	2	RED	ORG	GRN								
			21	4								BLK	BLU		

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN 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
CB1	SB13

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
CB1	PB1
SB2	PB2
SB3	PB3
SB4	PB4
SB5	PB5
SB7	PB6
SB8	PB7
SB10	PB8
CB1	PB9
SB13	PB13, 12, 11, 10

LIGHTING UF 10 AWG W/GROUND	
FROM	TO
CB1	SB2
SB2	SB5
CB1	SB11
SB11	SB8

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN BUTTONS TO THE COLOR INDICATED IN THE CHART.
   CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. "OTHER" COLUMN MAY INCLUDE SHADOW BOX (BLANK OUT) SIGN.

PEDESTRIAN PUSH BUTTONS 1 14 AWG 7 CONDUCTOR			IMSA 20-
FROM	TO	PHASE	PED BUTTON
CB1	SB1	2	ORG
SB1	SB3	2	ORG
SB3	SB4	8	RED
SB4	SB6	8	RED
SB6	SB7	6	BLU
SB7	SB9	6	BLU
SB9	SB10	4	GRN
SB10	SB12	4	GRN
SB12	CB1		

EMERGENCY VEHICLE PREEMPTION	
FROM	TO
CB1	PB9, SB11 (HEAD A)
CB1	PB9, 8, 7, 6, 5, SB5 (HEAD B-1)
CB1	PB9, 8, 10 to 13, SB13 (HEAD B-2)
CB1	PB9, 8, 7, SB8 (HEAD C)
CB1	PB1, 2, SB2 (HEAD D)

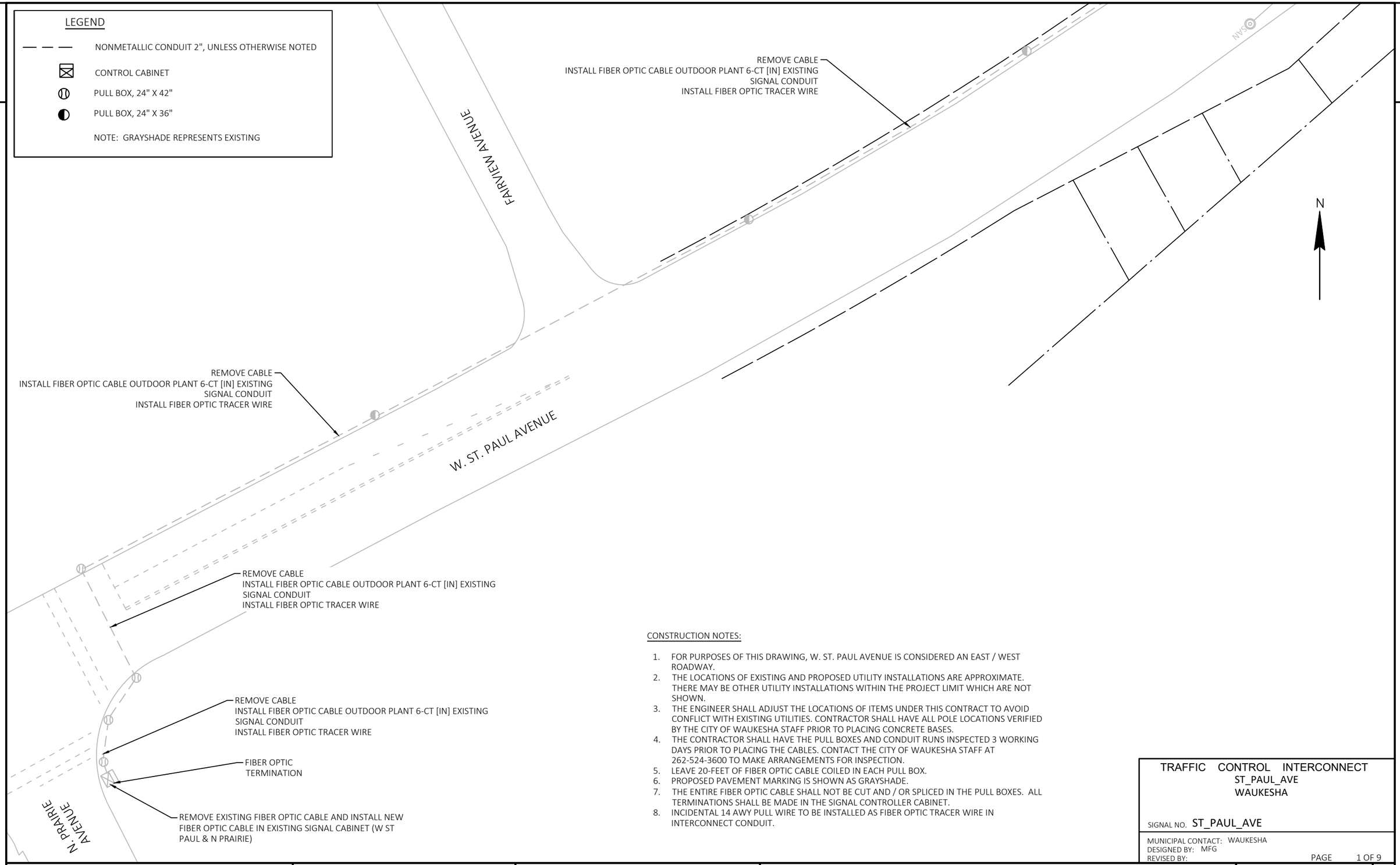
VIDEO DETECTION CABLE	
FROM	TO
CB1	PB9, 8, 7, 6, 5, SB5 (VDC1)
CB1	PB9, 8, 7, SB8 (VDC2)
CB1	PB9, SB11 (VDC3)
CB1	PB1, 2, SB2 (VDC4)

2

LEGEND

- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- CONTROL CABINET
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"

NOTE: GRAYSHADE REPRESENTS EXISTING



CONSTRUCTION NOTES:

1. FOR PURPOSES OF THIS DRAWING, W. ST. PAUL AVENUE IS CONSIDERED AN EAST / WEST ROADWAY.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT LIMIT WHICH ARE NOT SHOWN.
3. THE ENGINEER SHALL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITIES. CONTRACTOR SHALL HAVE ALL POLE LOCATIONS VERIFIED BY THE CITY OF WAUKESHA STAFF PRIOR TO PLACING CONCRETE BASES.
4. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 3 WORKING DAYS PRIOR TO PLACING THE CABLES. CONTACT THE CITY OF WAUKESHA STAFF AT 262-524-3600 TO MAKE ARRANGEMENTS FOR INSPECTION.
5. LEAVE 20-FEET OF FIBER OPTIC CABLE COILED IN EACH PULL BOX.
6. PROPOSED PAVEMENT MARKING IS SHOWN AS GRAYSHADE.
7. THE ENTIRE FIBER OPTIC CABLE SHALL NOT BE CUT AND / OR SPLICED IN THE PULL BOXES. ALL TERMINATIONS SHALL BE MADE IN THE SIGNAL CONTROLLER CABINET.
8. INCIDENTAL 14 AWY PULL WIRE TO BE INSTALLED AS FIBER OPTIC TRACER WIRE IN INTERCONNECT CONDUIT.

TRAFFIC CONTROL INTERCONNECT
ST_PAUL_AVE
WAUKESHA

SIGNAL NO. ST_PAUL_AVE

MUNICIPAL CONTACT: WAUKESHA
DESIGNED BY: MFG
REVISED BY:

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET 129	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024230-sp
PLOT DATE : 7/21/2021 1:17 PM PLOT BY : MICHAEL GRULKE PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- CONTROL CABINET
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"

NOTE: GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

1. FOR PURPOSES OF THIS DRAWING, W. ST. PAUL AVENUE IS CONSIDERED AN EAST / WEST ROADWAY.
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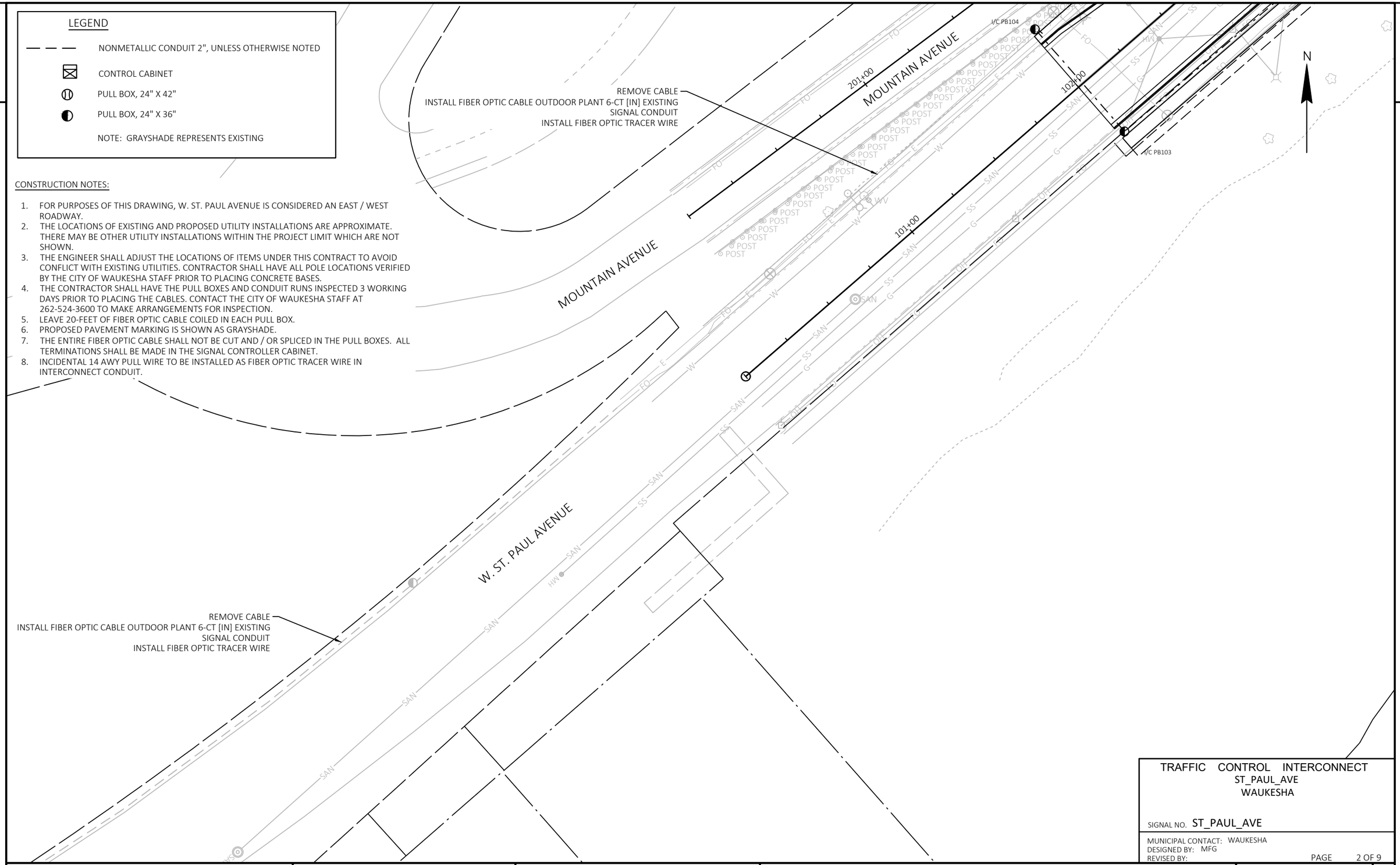

TRAFFIC CONTROL INTERCONNECT
ST_PAUL_AVE
WAUKESHA

SIGNAL NO. ST_PAUL_AVE

MUNICIPAL CONTACT: WAUKESHA
DESIGNED BY: MFG
REVISED BY:

PAGE 2 OF 9

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET 130	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024231-sp

PLOT DATE : 7/21/2021 1:18 PM PLOT BY : MICHAEL GRULKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED

CONTROL CABINET

PULL BOX, 24" X 42"

PULL BOX, 24" X 36"

NOTE: GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

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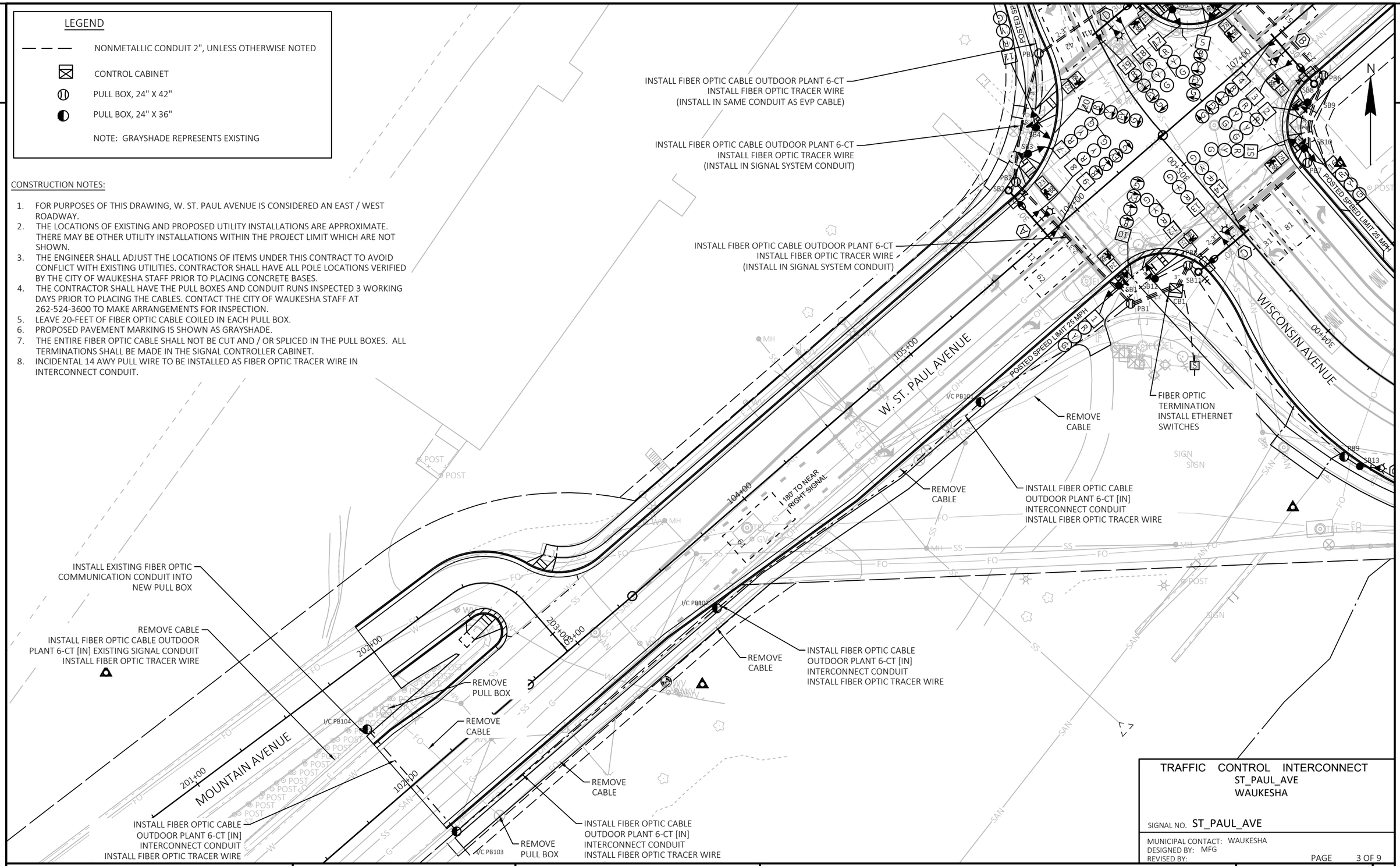


TRAFFIC CONTROL INTERCONNECT
ST_PAUL_AVE
WAUKESHA

SIGNAL NO. ST_PAUL_AVE

MUNICIPAL CONTACT: WAUKESHA
DESIGNED BY: MFG
REVISED BY:

PAGE 3 OF 9

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET 131	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024232-sp

PLOT DATE : 7/21/2021 1:19 PM PLOT BY : MICHAEL GRULKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

REMOVE CABLE
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT [IN] EXISTING SIGNAL CONDUIT
INSTALL FIBER OPTIC TRACER WIRE

SB14

PB13

REMOVE PULL BOX

INSTALL EXISTING FIBER OPTIC COMMUNICATION CONDUIT INTO NEW PULL BOX

INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT
INSTALL FIBER OPTIC TRACER WIRE
(INSTALL IN SAME CONDUIT AS EVP CABLE)

REMOVE CABLE

PB12

REMOVE CABLE

REMOVE PULL BOX

W. NORTH STREET

INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT
INSTALL FIBER OPTIC TRACER WIRE
(INSTALL IN SAME CONDUIT AS EVP CABLE)

PB11

REMOVE CABLE

402+00

REMOVE PULL BOX

PB10

401+00

INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT
INSTALL FIBER OPTIC TRACER WIRE
(INSTALL IN SAME CONDUIT AS EVP CABLE)

REMOVE CABLE

SPEED LIMIT 25 MPH

PB9

PB5

SB6

2-3"

SIGN

POSTED SPEED LIMIT 25 MPH

CONSTRUCTION NOTES:

1. FOR PURPOSES OF THIS DRAWING, W. ST. PAUL AVENUE IS CONSIDERED AN EAST / WEST ROADWAY.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT LIMIT WHICH ARE NOT SHOWN.
3. THE ENGINEER SHALL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITIES. CONTRACTOR SHALL HAVE ALL POLE LOCATIONS VERIFIED BY THE CITY OF WAUKESHA STAFF PRIOR TO PLACING CONCRETE BASES.
4. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 3 WORKING DAYS PRIOR TO PLACING THE CABLES. CONTACT THE CITY OF WAUKESHA STAFF AT 262-524-3600 TO MAKE ARRANGEMENTS FOR INSPECTION.
5. LEAVE 20-FEET OF FIBER OPTIC CABLE COILED IN EACH PULL BOX.
6. PROPOSED PAVEMENT MARKING IS SHOWN AS GRAYSHADE.
7. THE ENTIRE FIBER OPTIC CABLE SHALL NOT BE CUT AND / OR SPLICED IN THE PULL BOXES. ALL TERMINATIONS SHALL BE MADE IN THE SIGNAL CONTROLLER CABINET.
8. INCIDENTAL 14 AWY PULL WIRE TO BE INSTALLED AS FIBER OPTIC TRACER WIRE IN INTERCONNECT CONDUIT.

LEGEND

- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- CONTROL CABINET
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"

NOTE: GRAYSHADE REPRESENTS EXISTING

N

111+00

110+00

109+00

108+00

180' TO NEAR RIGHT SIGNAL

W. ST. PAUL AVENUE

TRAFFIC CONTROL INTERCONNECT
ST_PAUL_AVE
WAUKESHA

SIGNAL NO. ST_PAUL_AVE

MUNICIPAL CONTACT: WAUKESHA
DESIGNED BY: MFG
REVISED BY:

PAGE 4 OF 9

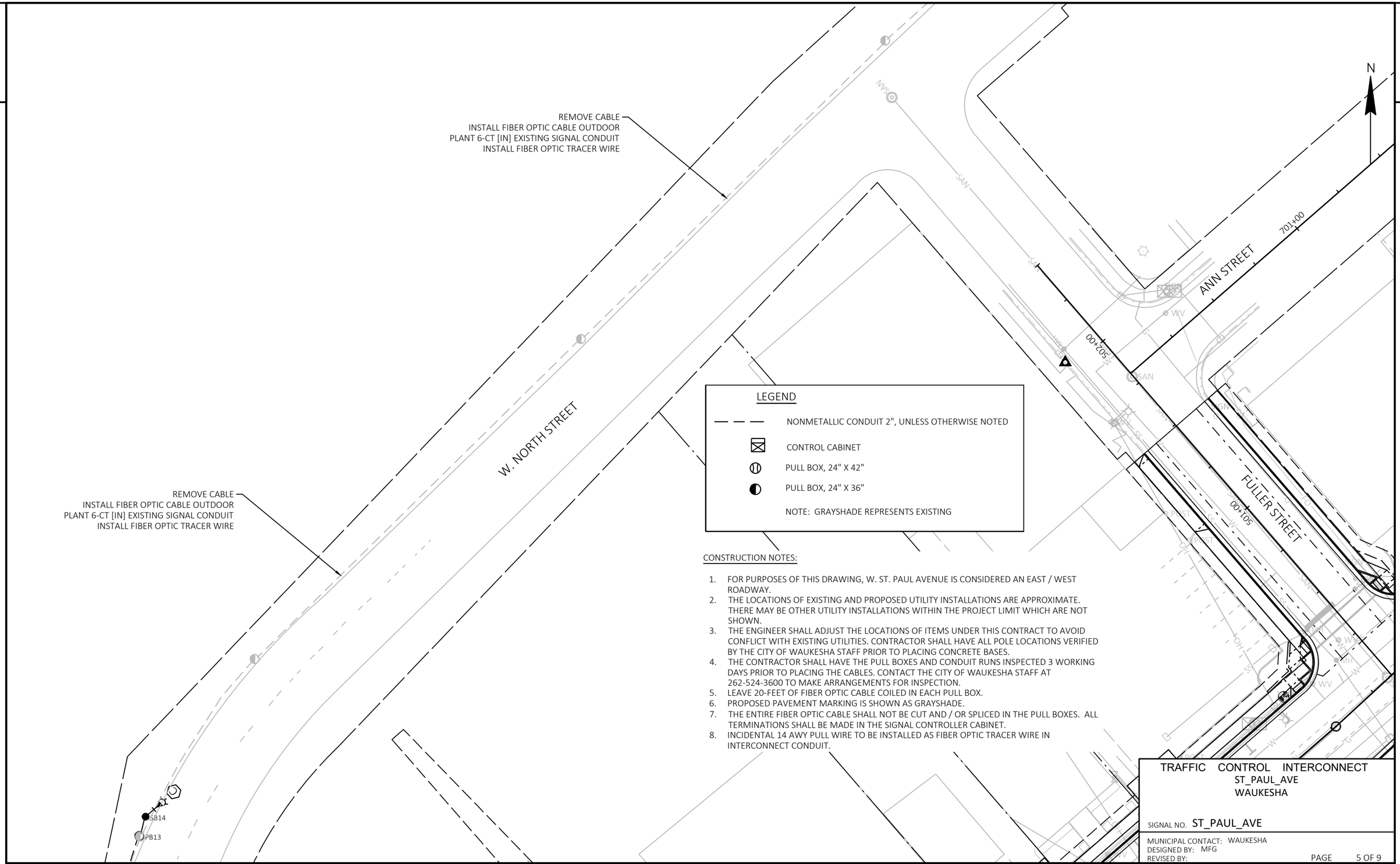
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET 132	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024233-sp

PLOT DATE : 7/21/2021 1:20 PM PLOT BY : MICHAEL GRULKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



CONSTRUCTION NOTES:

1. FOR PURPOSES OF THIS DRAWING, W. ST. PAUL AVENUE IS CONSIDERED AN EAST / WEST ROADWAY.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT LIMIT WHICH ARE NOT SHOWN.
3. THE ENGINEER SHALL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITIES. CONTRACTOR SHALL HAVE ALL POLE LOCATIONS VERIFIED BY THE CITY OF WAUKESHA STAFF PRIOR TO PLACING CONCRETE BASES.
4. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 3 WORKING DAYS PRIOR TO PLACING THE CABLES. CONTACT THE CITY OF WAUKESHA STAFF AT 262-524-3600 TO MAKE ARRANGEMENTS FOR INSPECTION.
5. LEAVE 20-FEET OF FIBER OPTIC CABLE COILED IN EACH PULL BOX.
6. PROPOSED PAVEMENT MARKING IS SHOWN AS GRAYSHADE.
7. THE ENTIRE FIBER OPTIC CABLE SHALL NOT BE CUT AND / OR SPLICED IN THE PULL BOXES. ALL TERMINATIONS SHALL BE MADE IN THE SIGNAL CONTROLLER CABINET.
8. INCIDENTAL 14 AWY PULL WIRE TO BE INSTALLED AS FIBER OPTIC TRACER WIRE IN INTERCONNECT CONDUIT.

TRAFFIC CONTROL INTERCONNECT
ST_PAUL_AVE
WAUKESHA

SIGNAL NO. ST_PAUL_AVE

MUNICIPAL CONTACT: WAUKESHA
DESIGNED BY: MFG
REVISED BY:

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET 133	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024234-sp
PLOT DATE : 7/21/2021 1:21 PM
PLOT BY : MICHAEL GRULKE
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

— — — NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED

CONTROL CABINET

PULL BOX, 24" X 42"

PULL BOX, 24" X 36"

NOTE: GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

1. FOR PURPOSES OF THIS DRAWING, W. ST. PAUL AVENUE IS CONSIDERED AN EAST / WEST ROADWAY.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT LIMIT WHICH ARE NOT SHOWN.
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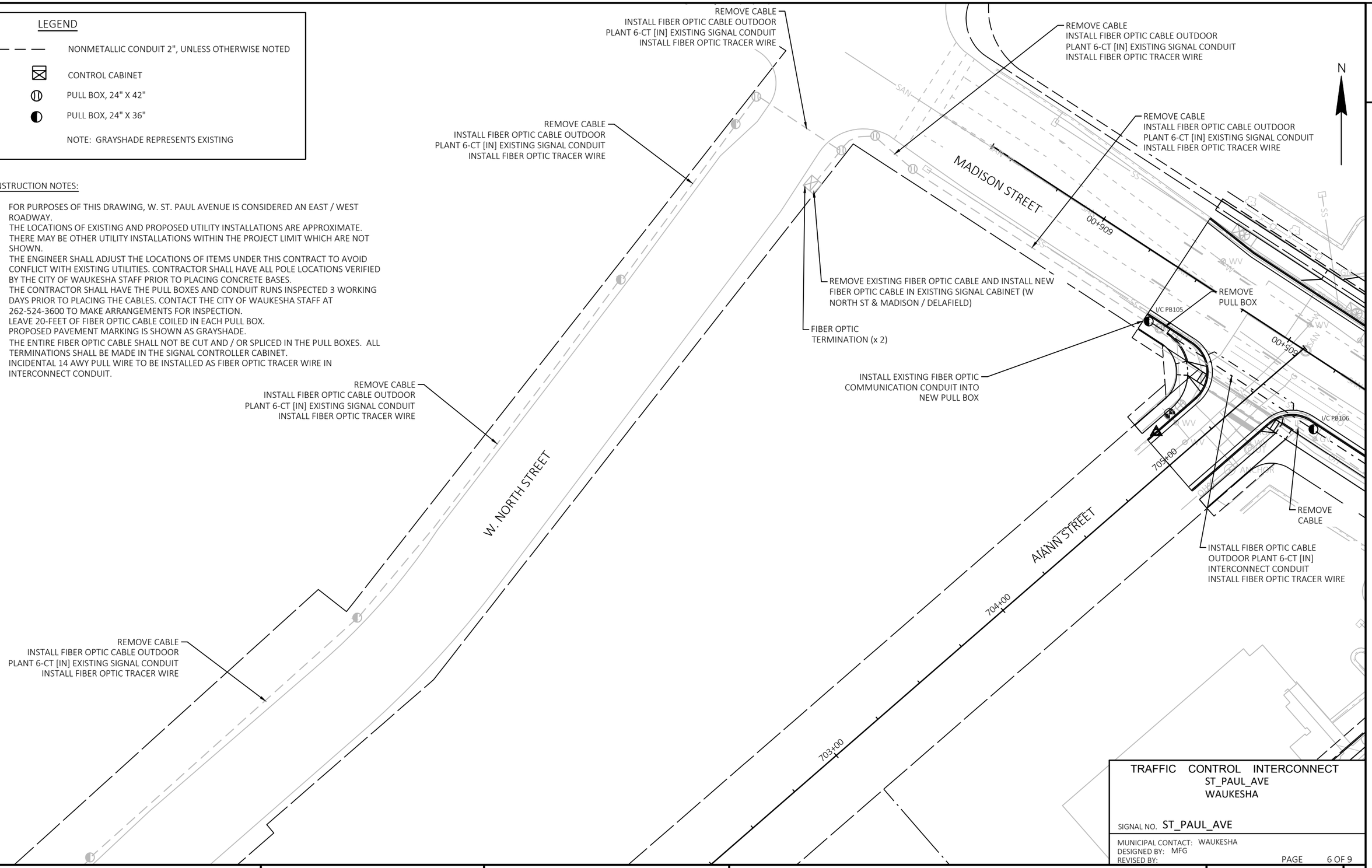
6. PROPOSED PAVEMENT MARKING IS SHOWN AS GRAYSHADE.
7. THE ENTIRE FIBER OPTIC CABLE SHALL NOT BE CUT AND / OR SPLICED IN THE PULL BOXES. ALL TERMINATIONS SHALL BE MADE IN THE SIGNAL CONTROLLER CABINET.
8. INCIDENTAL 14 AWY PULL WIRE TO BE INSTALLED AS FIBER OPTIC TRACER WIRE IN INTERCONNECT CONDUIT.



TRAFFIC CONTROL INTERCONNECT
ST_PAUL_AVE
WAUKESHA

SIGNAL NO. ST_PAUL_AVE

MUNICIPAL CONTACT: WAUKESHA
DESIGNED BY: MFG
REVISED BY:

PAGE 6 OF 9

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET 134	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024235-sp

PLOT DATE : 7/21/2021 1:22 PM PLOT BY : MICHAEL GRULKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED

CONTROL CABINET

PULL BOX, 24" X 42"

PULL BOX, 24" X 36"

NOTE: GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

1. FOR PURPOSES OF THIS DRAWING, W. ST. PAUL AVENUE IS CONSIDERED AN EAST / WEST ROADWAY.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT LIMIT WHICH ARE NOT SHOWN.
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6. PROPOSED PAVEMENT MARKING IS SHOWN AS GRAYSHADE.
7. THE ENTIRE FIBER OPTIC CABLE SHALL NOT BE CUT AND / OR SPLICED IN THE PULL BOXES. ALL TERMINATIONS SHALL BE MADE IN THE SIGNAL CONTROLLER CABINET.
8. INCIDENTAL 14 AWY PULL WIRE TO BE INSTALLED AS FIBER OPTIC TRACER WIRE IN INTERCONNECT CONDUIT.

N

REMOVE CABLE
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT [IN] EXISTING SIGNAL CONDUIT
INSTALL FIBER OPTIC TRACER WIRE

INSTALL EXISTING FIBER OPTIC COMMUNICATION CONDUIT INTO NEW PULL BOX

REMOVE PULL BOX

REMOVE CABLE

INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT [IN] INTERCONNECT CONDUIT INSTALL FIBER OPTIC TRACER WIRE

REMOVE CABLE

REMOVE PULL BOX

INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT INSTALL FIBER OPTIC TRACER WIRE (INSTALL IN SIGNAL SYSTEM CONDUIT)

INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT INSTALL FIBER OPTIC TRACER WIRE (INSTALL IN SIGNAL SYSTEM CONDUIT)

INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT [IN] INTERCONNECT CONDUIT INSTALL FIBER OPTIC TRACER WIRE

FIBER OPTIC TERMINATION (x2)
INSTALL ETHERNET SWITCHES (x2)

INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT INSTALL FIBER OPTIC TRACER WIRE (INSTALL IN SIGNAL SYSTEM CONDUIT)

INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT INSTALL FIBER OPTIC TRACER WIRE (INSTALL IN SIGNAL SYSTEM CONDUIT)

TRAFFIC CONTROL INTERCONNECT
ST_PAUL_AVE
WAUKESHA

SIGNAL NO. ST_PAUL_AVE

MUNICIPAL CONTACT: WAUKESHA
DESIGNED BY: MFG
REVISED BY:

PAGE 7 OF 9

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET 135	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024236-sp

PLOT DATE : 7/21/2021 1:23 PM PLOT BY : MICHAEL GRULKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED

CONTROL CABINET

PULL BOX, 24" X 42"

PULL BOX, 24" X 36"

NOTE: GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

1. FOR PURPOSES OF THIS DRAWING, W. ST. PAUL AVENUE IS CONSIDERED AN EAST / WEST ROADWAY.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT LIMIT WHICH ARE NOT SHOWN.
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4. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 3 WORKING DAYS PRIOR TO PLACING THE CABLES. CONTACT THE CITY OF WAUKESHA STAFF AT 262-524-3600 TO MAKE ARRANGEMENTS FOR INSPECTION.
5. LEAVE 20-FEET OF FIBER OPTIC CABLE COILED IN EACH PULL BOX.
6. PROPOSED PAVEMENT MARKING IS SHOWN AS GRAYSHADE.
7. THE ENTIRE FIBER OPTIC CABLE SHALL NOT BE CUT AND / OR SPLICED IN THE PULL BOXES. ALL TERMINATIONS SHALL BE MADE IN THE SIGNAL CONTROLLER CABINET.
8. INCIDENTAL 14 AWY PULL WIRE TO BE INSTALLED AS FIBER OPTIC TRACER WIRE IN INTERCONNECT CONDUIT.

PLE FOR SIDEWALK
DOC. 3818382

N

REMOVE CABLE
INSTALL FIBER OPTIC CABLE OUTDOOR
PLANT 6-CT [IN] EXISTING SIGNAL CONDUIT
INSTALL FIBER OPTIC TRACER WIRE

BREHM STREET

E. ST. PAUL AVENUE

BROOK STREET

REMOVE CABLE
INSTALL FIBER OPTIC CABLE OUTDOOR
PLANT 6-CT [IN] EXISTING SIGNAL CONDUIT
INSTALL FIBER OPTIC TRACER WIRE

REMOVE CABLE
INSTALL FIBER OPTIC CABLE OUTDOOR
PLANT 6-CT [IN] EXISTING SIGNAL CONDUIT
INSTALL FIBER OPTIC TRACER WIRE

I/C PB108

TRAFFIC CONTROL INTERCONNECT
ST_PAUL_AVE
WAUKESHA

SIGNAL NO. ST_PAUL_AVE

MUNICIPAL CONTACT: WAUKESHA
DESIGNED BY: MFG
REVISED BY:

PAGE 8 OF 9

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET 136	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024237-sp

PLOT DATE : 7/21/2021 1:24 PM PLOT BY : MICHAEL GRULKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

REMOVE EXISTING FIBER OPTIC CABLE AND INSTALL NEW FIBER OPTIC CABLE IN EXISTING SIGNAL CABINET (E ST PAUL & NW BARSTOW)

FIBER OPTIC TERMINATION

REMOVE CABLE
INSTALL FIBER OPTIC CABLE OUTDOOR
PLANT 6-CT [IN] EXISTING SIGNAL CONDUIT
INSTALL FIBER OPTIC TRACER WIRE

NW BARSTOW STREET

REMOVE CABLE
INSTALL FIBER OPTIC CABLE OUTDOOR
PLANT 6-CT [IN] EXISTING SIGNAL CONDUIT
INSTALL FIBER OPTIC TRACER WIRE

E. ST. PAUL AVENUE

REMOVE CABLE
INSTALL FIBER OPTIC CABLE OUTDOOR
PLANT 6-CT [IN] EXISTING SIGNAL CONDUIT
INSTALL FIBER OPTIC TRACER WIRE

PLE FOR SIDEWALK
DOC. 3818382

LEGEND

- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- CONTROL CABINET
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"

NOTE: GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

1. FOR PURPOSES OF THIS DRAWING, W. ST. PAUL AVENUE IS CONSIDERED AN EAST / WEST ROADWAY.
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8. INCIDENTAL 14 AWY PULL WIRE TO BE INSTALLED AS FIBER OPTIC TRACER WIRE IN INTERCONNECT CONDUIT.

TRAFFIC CONTROL INTERCONNECT
ST-PAUL-AVE
WAUKESHA

SIGNAL NO. ST_PAUL_AVE

MUNICIPAL CONTACT: WAUKESHA
DESIGNED BY: MFG
REVISED BY:

PAGE 9 OF 9

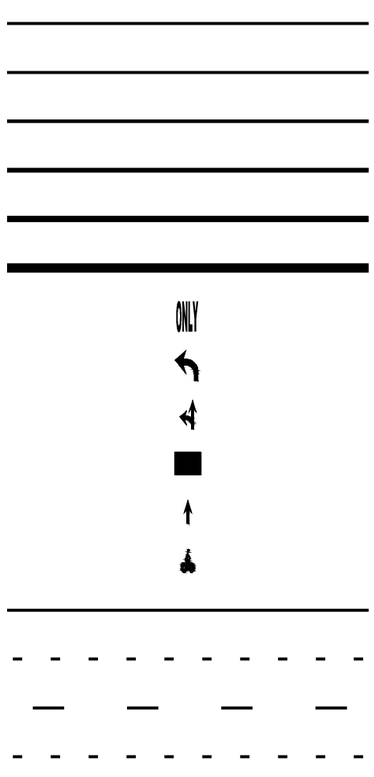
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET 137	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024238-sp

PLOT DATE : 7/21/2021 1:24 PM PLOT BY : MICHAEL GRULKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



1 PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

2 PAVEMENT MARKING EPOXY 4-INCH (WHITE)

3 PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)

4 PAVEMENT MARKING EPOXY 8-INCH (WHITE)

5 PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE)

6 PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)

7 PAVEMENT MARKING WORDS EPOXY (WHITE)

8 PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)

9 PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)

10 PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

11 PAVEMENT MARKING ARROWS BIKE LANE EPOXY (WHITE)

12 PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY (WHITE)

13 PAVEMENT MARKING PARKING STALL EPOXY 4-INCH (WHITE)

14 PAVEMENT MARKING EPOXY 8-INCH (DOT PATTERN WHITE)
(3 FT LINE 9 FT SKIP)

15 PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE)
(10 FT LINE 30 FT SKIP)

16 PAVEMENT MARKING EPOXY 4-INCH (DOT PATTERN WHITE)
(3 FT LINE 9 FT SKIP)

PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	PAVEMENT MARKINGS LEGEND	SHEET 138	E

2

2

MOUNTAIN AVENUE

W. ST. PAUL AVENUE

201+00

202+00

101+00

102+00

103+00

105+00

+00.0

+71.0

+32.6

+38.3

23'

23'

1 DOUBLE

1 DOUBLE

1 DOUBLE

16'

11'

15'

11'

14

8

4

8

POST

SIGN

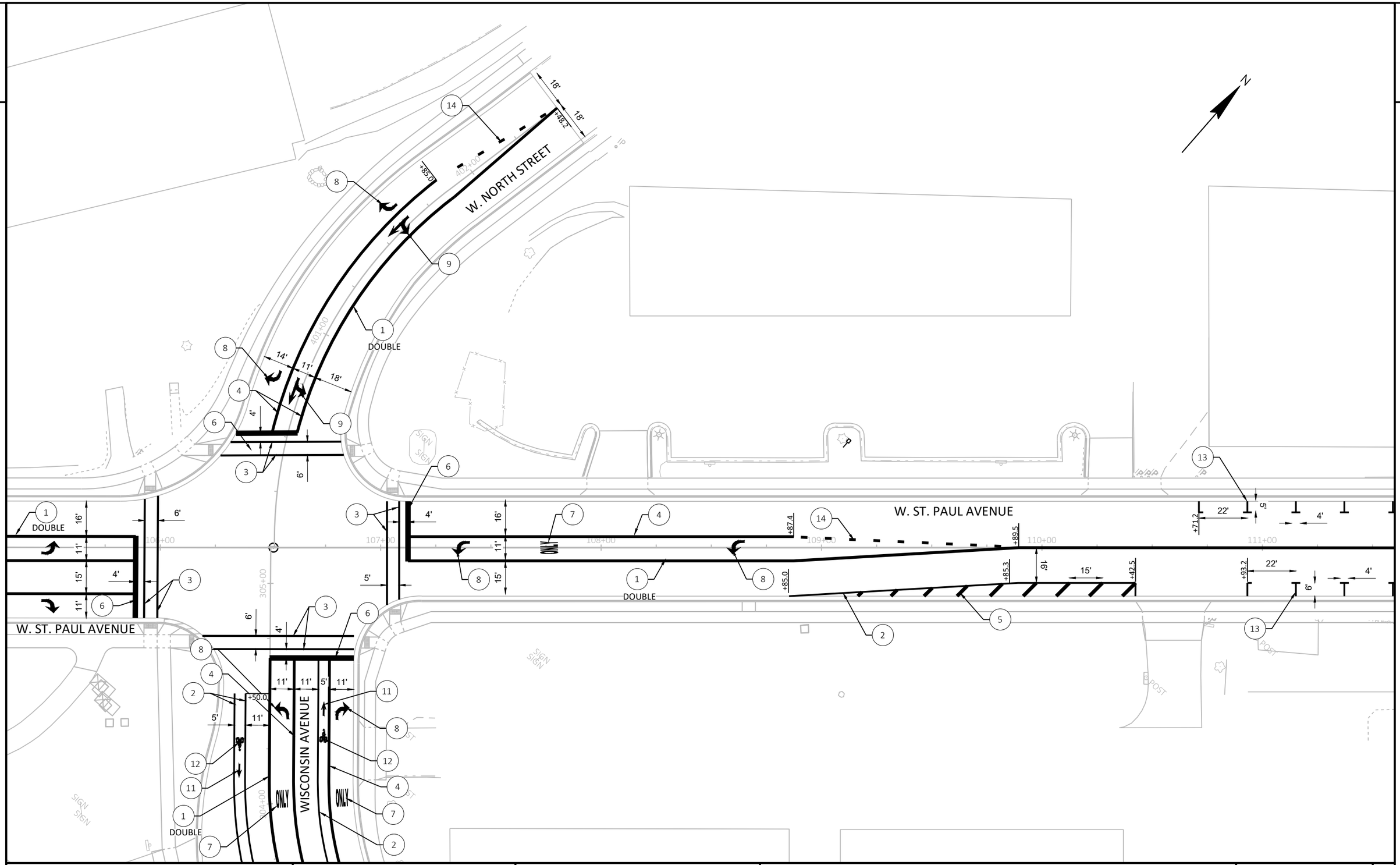
PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	PAVEMENT MARKINGS	SHEET 139	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024501-pm

PLOT DATE : 7/13/2021 9:46 AM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	PAVEMENT MARKINGS	SHEET 140	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024502-pm

PLOT DATE : 7/13/2021 9:49 AM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

701+00 702+00 703+00

FULLER STREET

501+00

1 DOUBLE

6

17' 17'

4'

6'

3

POST

POST

POST

4' 22' 5'

13

+81.2

1 DOUBLE

+27.1

+49.1

+94.0

16'

+38.0

112+00 113+00 114+00 115+00 116+00 117+00

1 DOUBLE

16'

W. ST. PAUL AVENUE

4' 22'

13

6'

16'

+35.2

6'

+21.3

2

15'

16'

5

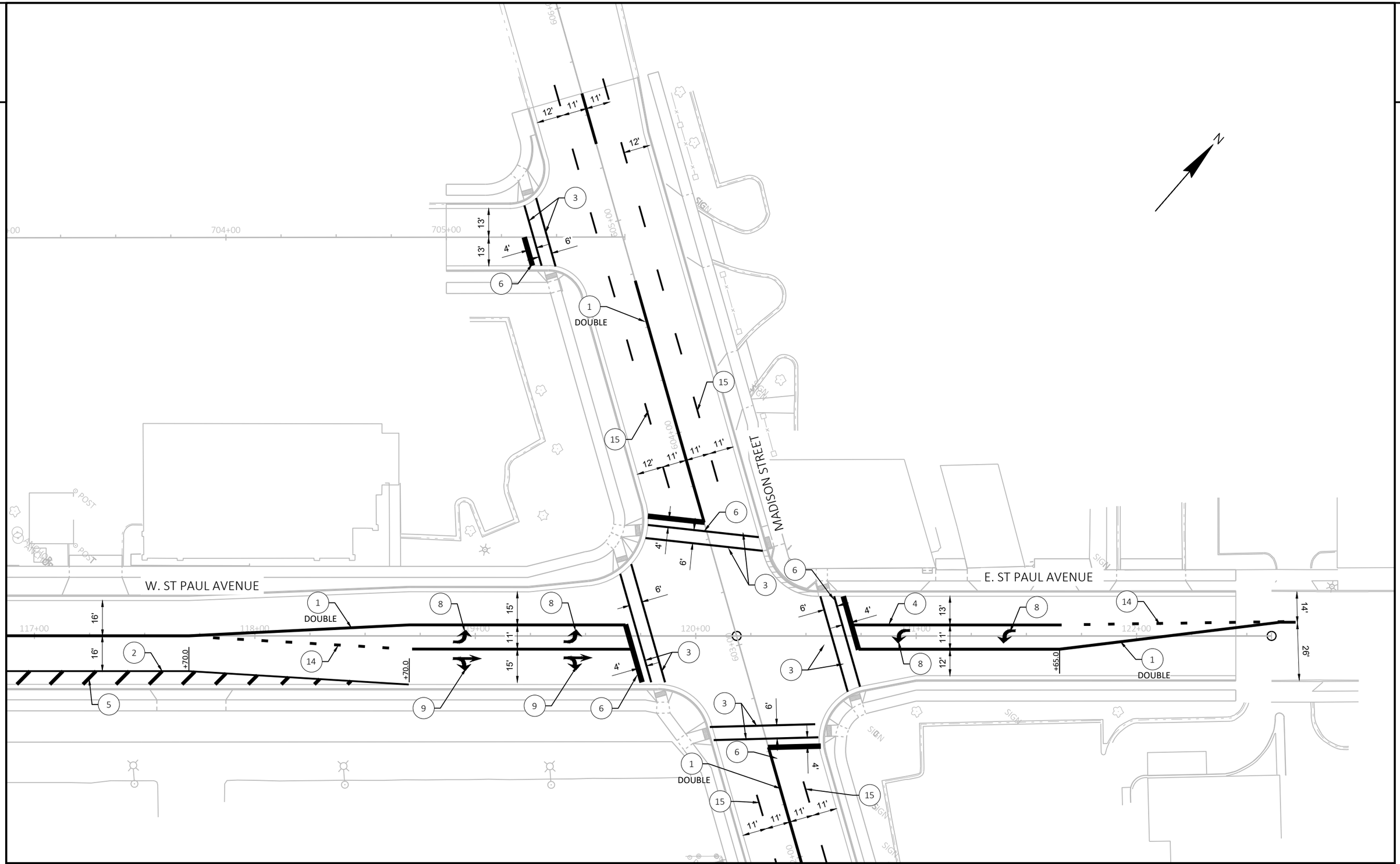
PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	PAVEMENT MARKINGS	SHEET 141	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024503-pm

PLOT DATE : 7/13/2021 9:50 AM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

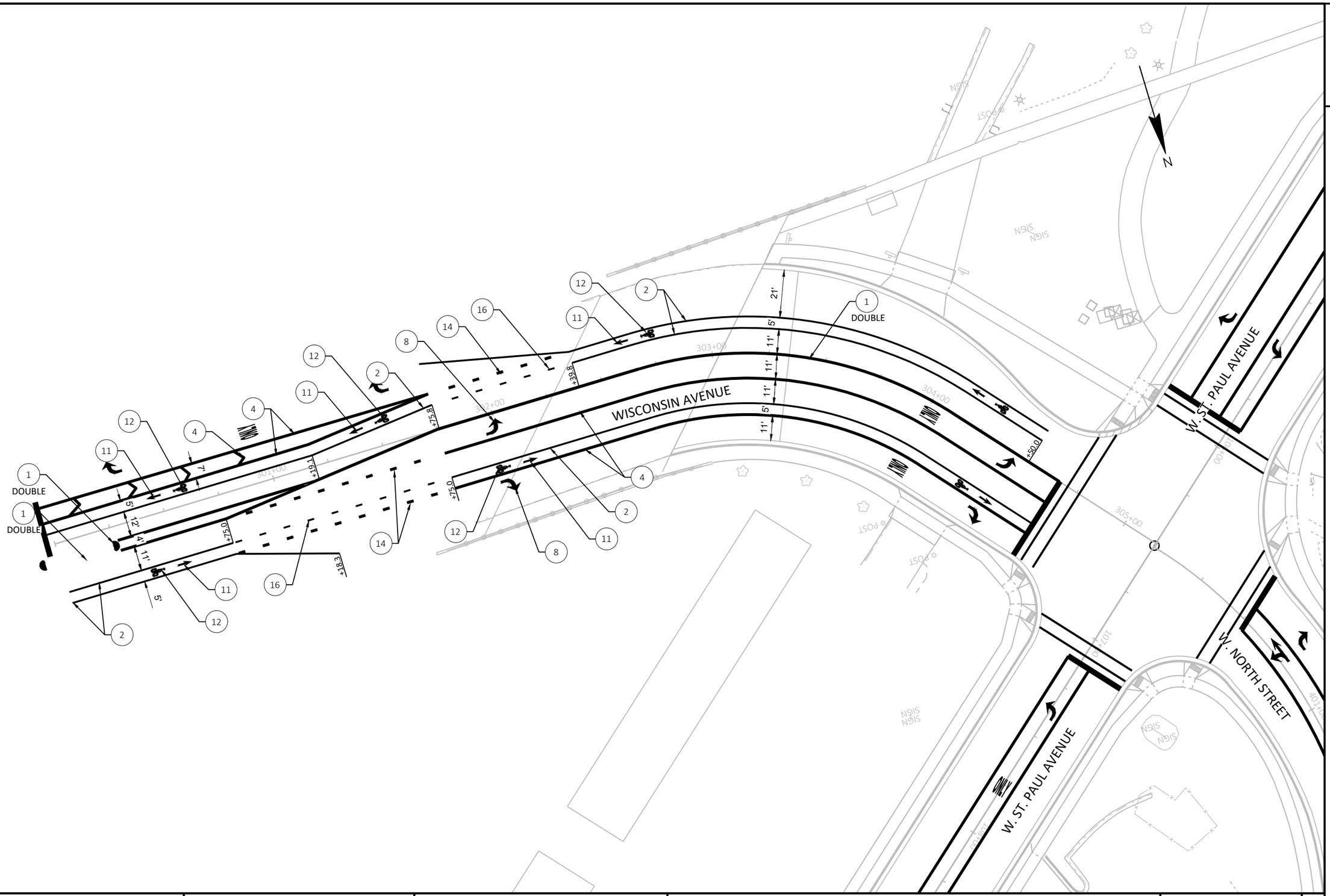


PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	PAVEMENT MARKINGS	SHEET 142	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024504-pm

PLOT DATE : 7/14/2021 8:22 AM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

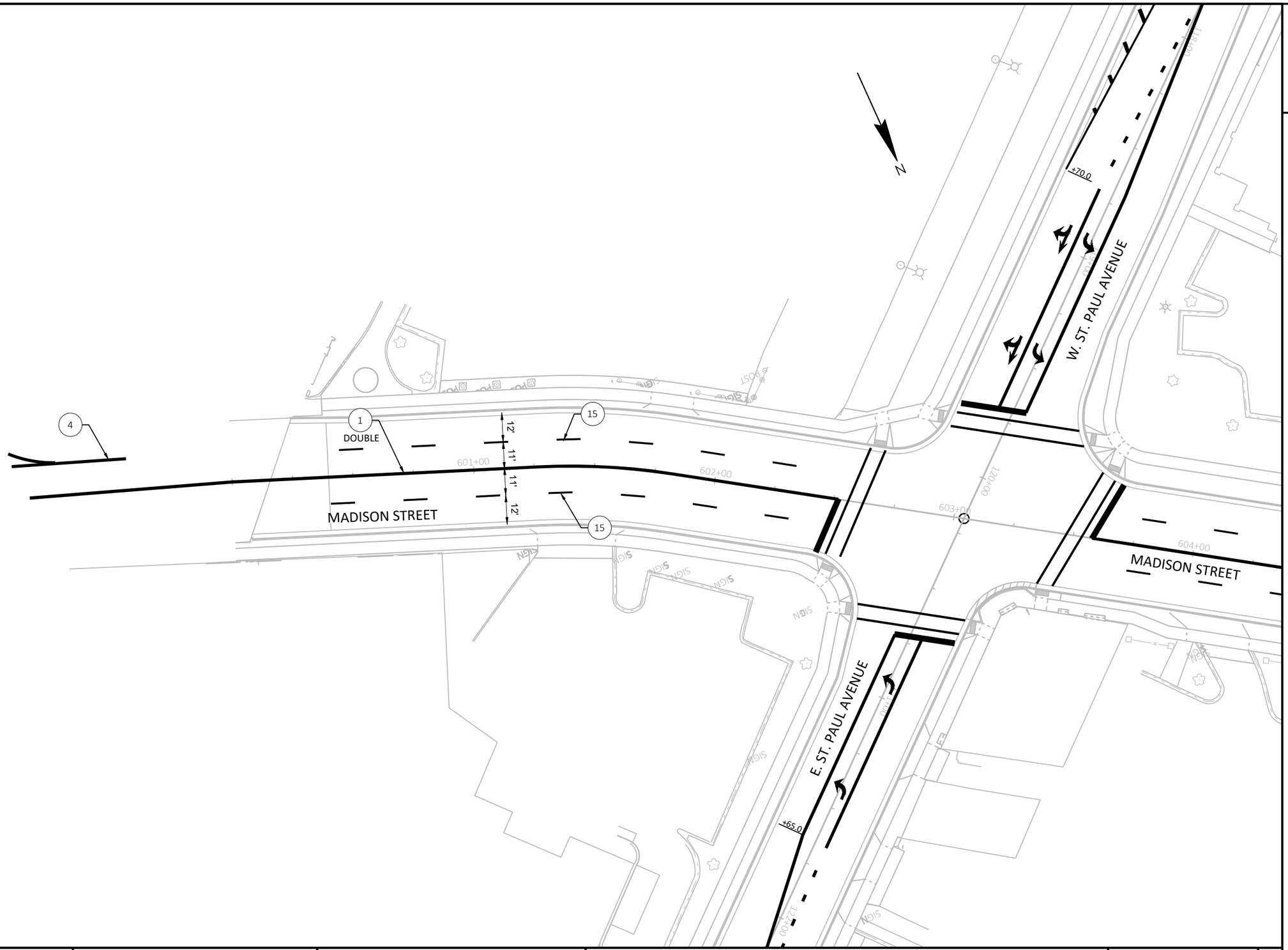


PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	PAVEMENT MARKINGS	SHEET 143	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024505-pm

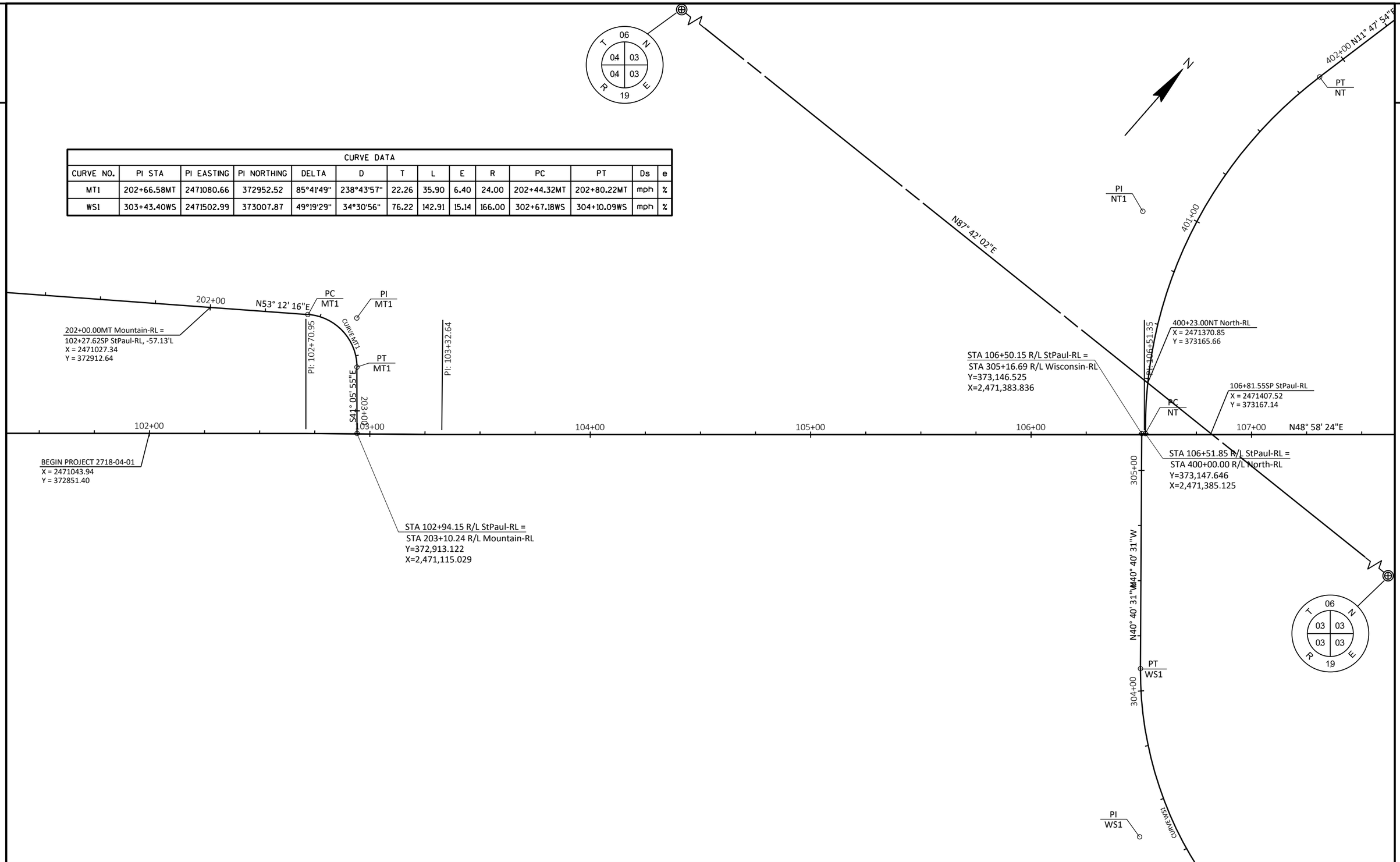
PLOT DATE : 7/13/2021 2:23 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	PAVEMENT MARKINGS	SHEET 144	E

2



PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	ALIGNMENT LAYOUT	SHEET 145	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 027201-ad
PLOT DATE : 7/26/2021 12:36 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

CURVE DATA												
CURVE NO.	PI STA	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC	PT	Ds	e
WS1	303+43.40WS	2471502.99	373007.87	49°19'29"	34°30'56"	76.22	142.91	15.14	166.00	302+67.18WS	304+10.09WS	mph	%

PI NT1

R/L NT

401+00

402+00 N11° 47' 54"E

PT NT

400+23.00NT North-RL
X = 2471370.85
Y = 373165.66

106+51.35

STA 106+51.86 R/L StPaul-RL =
STA 400+00.02 R/L North-RL
Y=373,147.662
X=2,471,385.113

PC NT

107+00

N48° 58' 24"E

108+00

109+00

110+00

111+00

112+00

305+00

STA 106+50.15 R/L StPaul-RL =
STA 305+16.69 R/L Wisconsin-RL
Y=373,146.525
X=2,471,383.836

N40° 40' 31"W

R/L SP

N87° 42' 02"E

S0° 33' 13"W

PT WS1

304+00

R/L WS

CURVE WS1

PI WS1

06 T N 03 03 03 03 R E 19

06 T N 03 03 03 03 R E 19

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	ALIGNMENT LAYOUT	SHEET 146	E

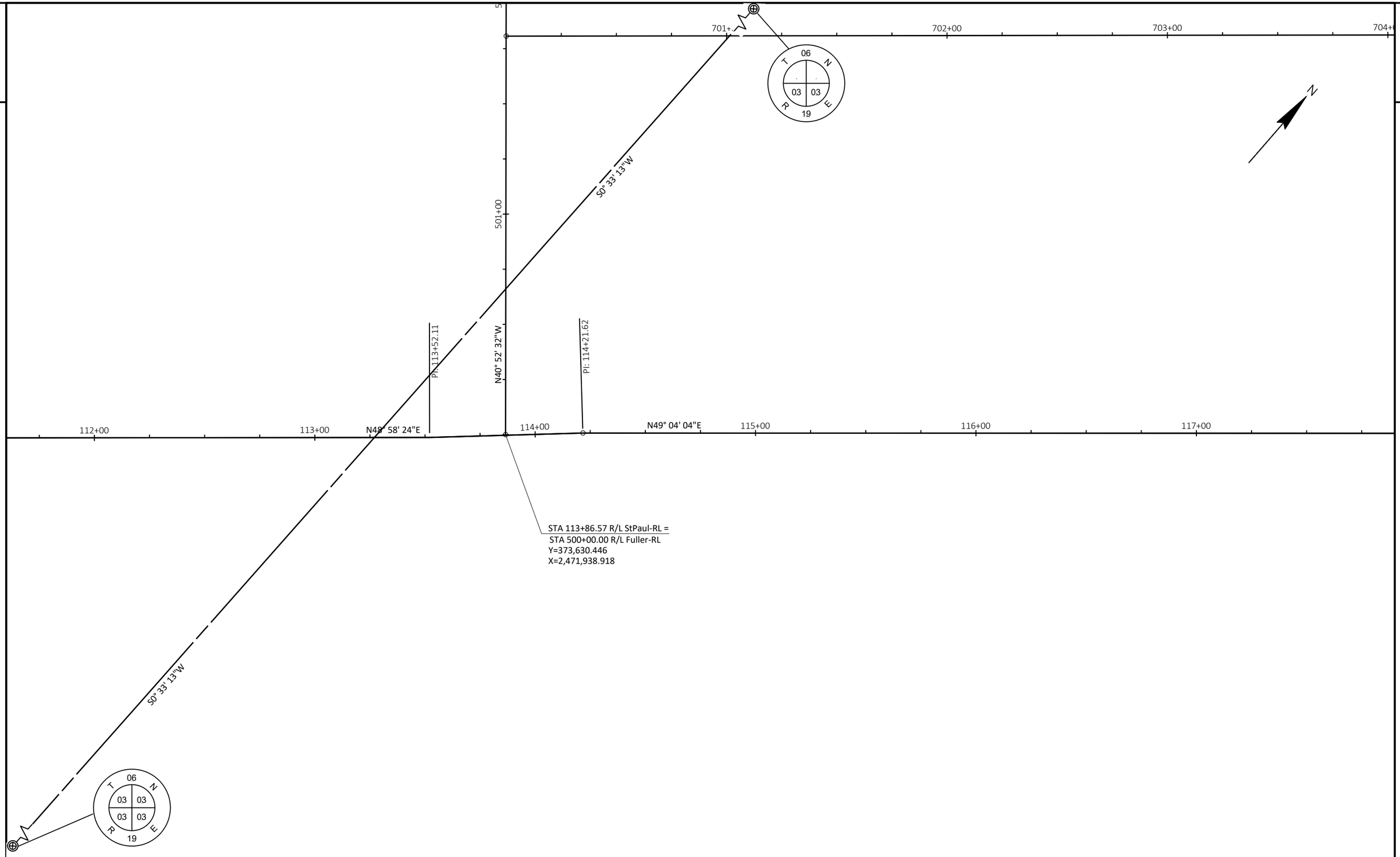
FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 027202-ad

PLOT DATE : 7/26/2021 12:36 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2



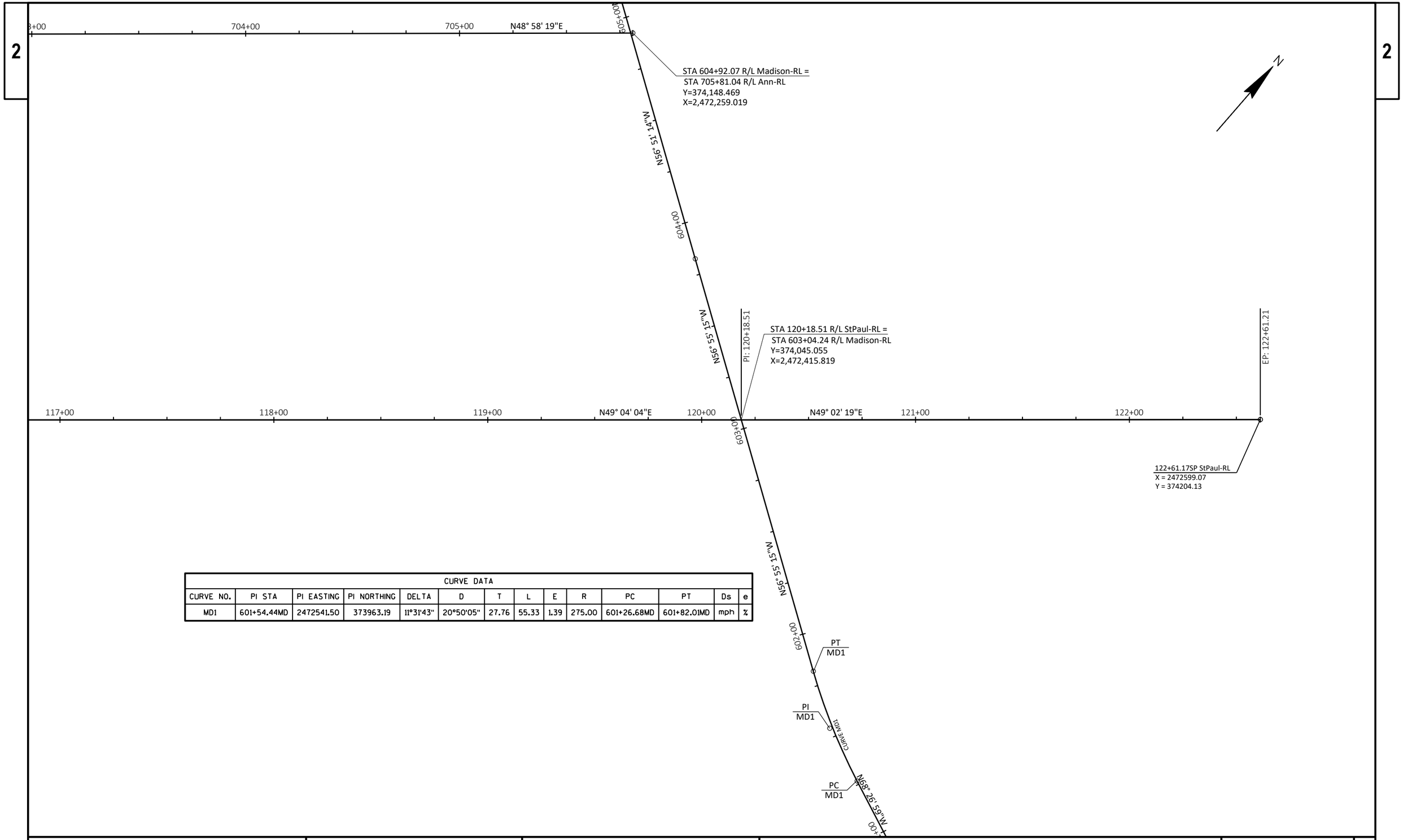
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	ALIGNMENT LAYOUT	SHEET 147	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 027203-ad

PLOT DATE : 7/26/2021 12:36 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



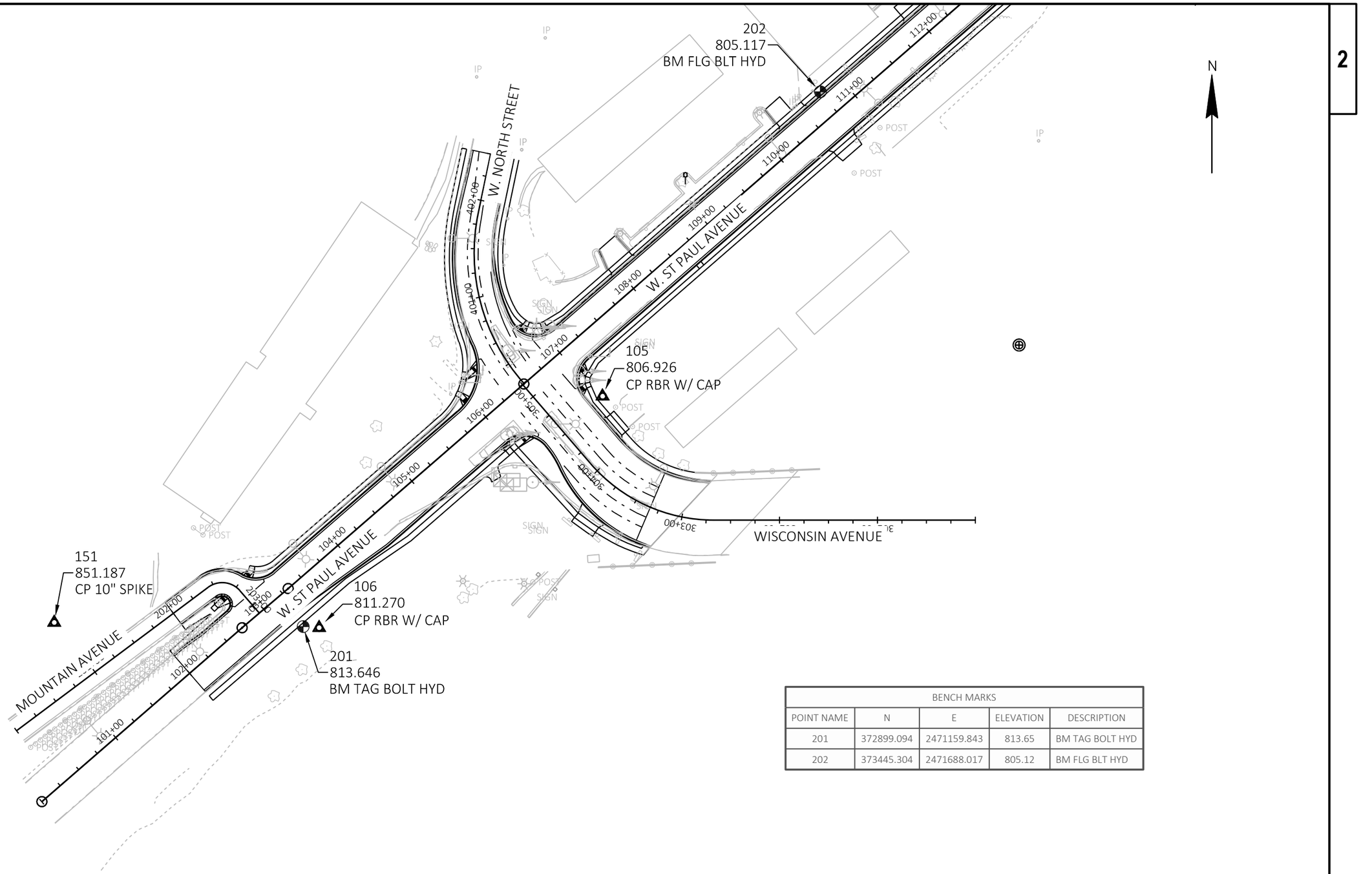
CURVE DATA													
CURVE NO.	PI STA	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC	PT	Ds	e
MD1	601+54.44MD	2472541.50	373963.19	11°31'43"	20°50'05"	27.76	55.33	1.39	275.00	601+26.68MD	601+82.01MD	mph	%

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	ALIGNMENT LAYOUT	SHEET 148 E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 027204-ad

PLOT DATE : 7/26/2021 12:37 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



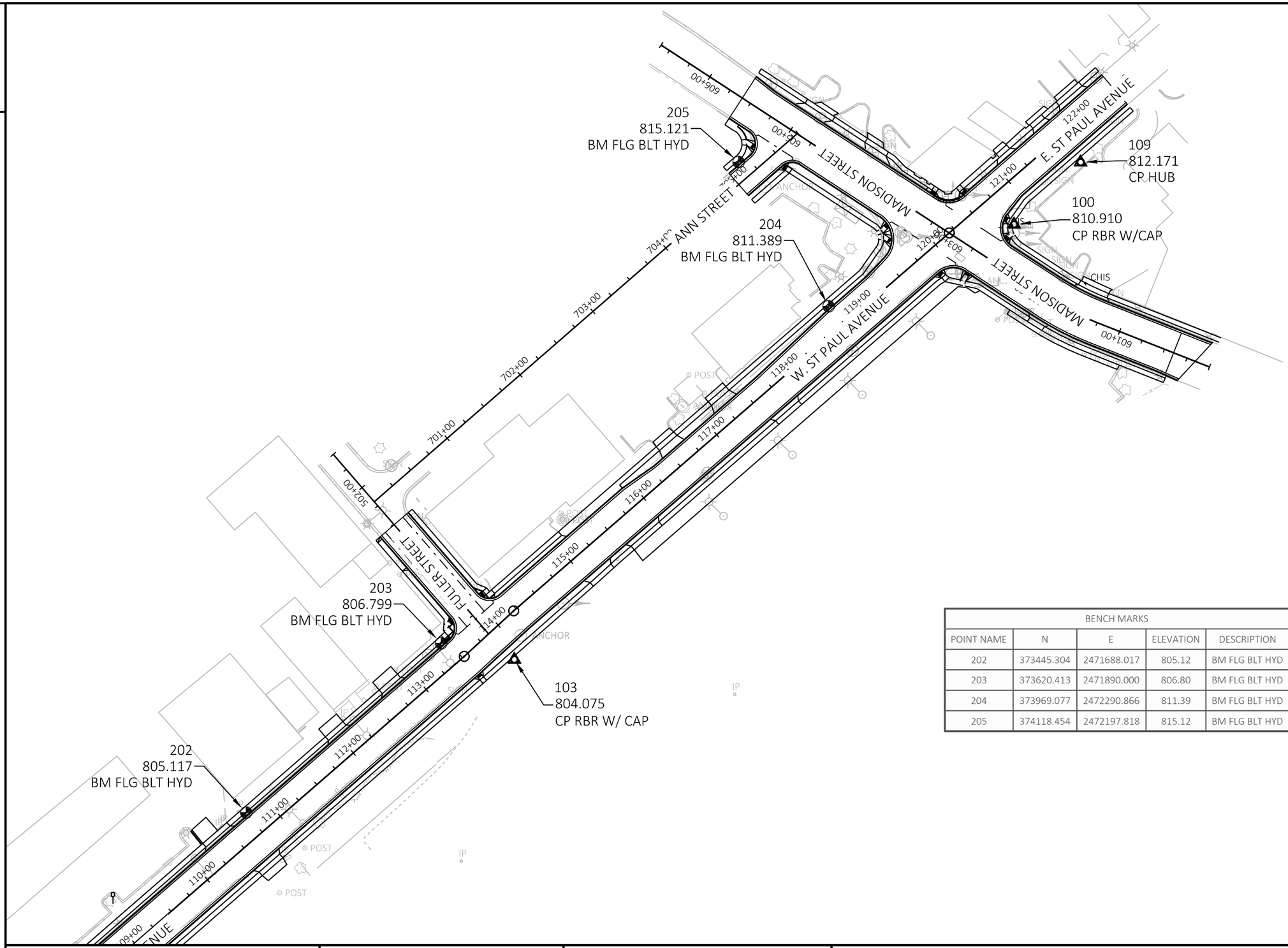
BENCH MARKS				
POINT NAME	N	E	ELEVATION	DESCRIPTION
201	372899.094	2471159.843	813.65	BM TAG BOLT HYD
202	373445.304	2471688.017	805.12	BM FLG BLT HYD

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	ALIGNMENT LAYOUT - SURVEY CONTROL OVERVIEW	SHEET 149	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\027205-AD.DWG
LAYOUT NAME - 027205-ad

PLOT DATE : 7/12/2021 1:22 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



BENCH MARKS				
POINT NAME	N	E	ELEVATION	DESCRIPTION
202	373445.304	2471688.017	805.12	BM FLG BLT HYD
203	373620.413	2471890.000	806.80	BM FLG BLT HYD
204	373969.077	2472290.866	811.39	BM FLG BLT HYD
205	374118.454	2472197.818	815.12	BM FLG BLT HYD

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	ALIGNMENT LAYOUT - SURVEY CONTROL OVERVIEW	SHEET 150	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\027205-AD.DWG
LAYOUT NAME - 027206-ad

PLOT DATE : 7/12/2021 1:23 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

CP151
CP 10" SPIKE
N=372903.2400
E=2470905.6580
ELEV. 851.187

MOUNTAIN AVENUE

201+00

POST

POST

POST

POST

POST

CP105
CP RBR W/ CAP
N=373134.3610
E=2471465.5940
ELEV. 806.926

WISCONSIN AVENUE

POST

POST

W. ST PAUL AVENUE

CP106
CP RBR W/ CAP
N=372897.9980
E=2471176.2030
ELEV. 811.270

114+00

W. ST PAUL AVENUE

ANCHOR

CP103
CP RBR W/ CAP
N=373603.6830
E=2471965.6690
ELEV. 804.075

N

122+00

121+00

E. ST PAUL AVENUE

SIGN

SIGN

SIGN

SIGN

SIGN

SIGN

SIGN

SIGN

CHIS

CP109
CP HUB
N=374118.3490
E=2472551.6970
ELEV. 812.171

CP100
CP RBR W/CAP
N=374053.9810
E=2472482.9190
ELEV. 810.910

MADISON STREET

2

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	ALIGNMENT LAYOUT - SURVEY CONTROL	SHEET 151	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\027210-AD.DWG
LAYOUT NAME - 027210-ad

PLOT DATE : 7/12/2021 1:27 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : ##########

2

CP110
CP MAG NAIL
N=373771.9710
E=2471790.9460
ELEV. 806.630

ANN STREET

FULLER STREET

502+00

SIGN

CP102
CP MAG NAIL
N=373826.5170
E=2472109.7180
ELEV. 806.656

ANCHOR
ANCHOR

W. ST PAUL AVENUE

117+00

N

W. ST PAUL AVENUE

CP108
CP MAG NAIL
N=373843.4280
E=2472223.8850
ELEV. 807.475

2

121+00

E. ST PAUL AVENUE

SIGN

CP109
CP HUB
N=374118.3490
E=2472551.6970
ELEV. 812.171

CP100
CP RBR W/CAP
N=374053.9810
E=2472482.9190
ELEV. 810.910

MADISON STREET

SIGN

MADISON STREET

601+00

CP107
CP MAG NAIL
N=373911.7290
E=2472575.3180
ELEV. 810.595

POST
POST
POST

MADISON STREET

605+00

CP101
CP MAG NAIL
N=374110.2920
E=2472191.7820
ELEV. 812.853

ANN STREET

709+00

SIGN

IP

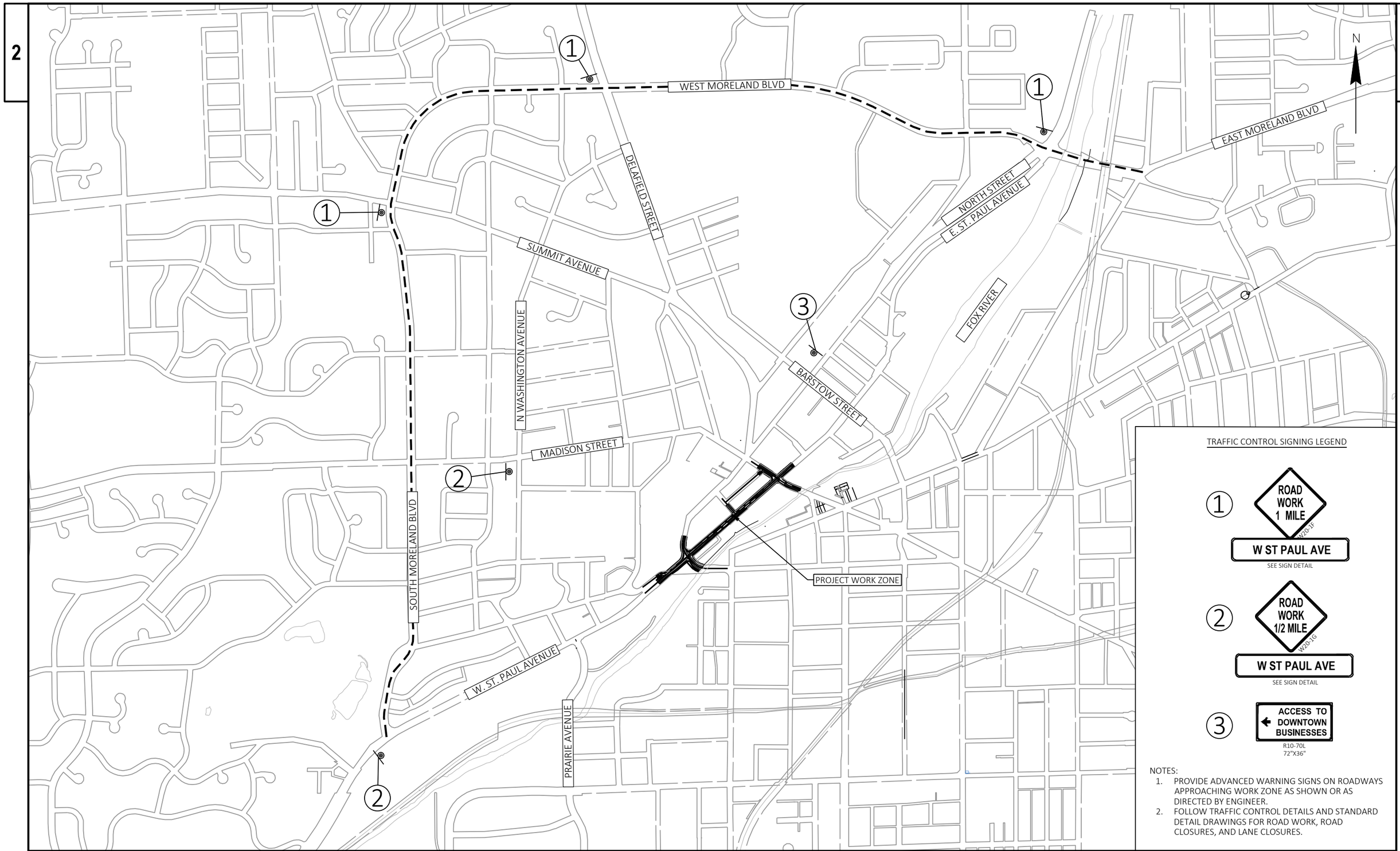
ANCHOR

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	ALIGNMENT LAYOUT - SURVEY CONTROL	SHEET 152	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\027210-AD.DWG
LAYOUT NAME - 027211-ad

PLOT DATE : 8/2/2020 11:52 AM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42



TRAFFIC CONTROL SIGNING LEGEND

1 — ROAD WORK 1 MILE (W20-1F)
W ST PAUL AVE
SEE SIGN DETAIL

2 — ROAD WORK 1/2 MILE (W20-1G)
W ST PAUL AVE
SEE SIGN DETAIL

3 — ACCESS TO DOWNTOWN BUSINESSES
R10-70L
72"X36"

NOTES:
1. PROVIDE ADVANCED WARNING SIGNS ON ROADWAYS APPROACHING WORK ZONE AS SHOWN OR AS DIRECTED BY ENGINEER.
2. FOLLOW TRAFFIC CONTROL DETAILS AND STANDARD DETAIL DRAWINGS FOR ROAD WORK, ROAD CLOSURES, AND LANE CLOSURES.

PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL - ADVANCED SIGNING OVERVIEW	SHEET 153	E

STAGE 1 - W. ST. PAUL AVENUE

CONSTRUCTION

- SANITARY SEWER LATERALS AND WATER ALONG W. ST PAUL AVENUE FROM WISCONSIN AVENUE TO MADISON STREET
- SANITARY SEWER SPOT RELAY SECTIONS ALONG W. ST. PAUL AVENUE FROM WISCONSIN AVENUE TO MADISON STREET
- SANITARY SEWER ABANDONMENT ALONG W. ST. PAUL AVENUE FROM WISCONSIN AVENUE TO MADISON STREET

TRAFFIC

- W. ST. PAUL AVENUE CLOSED TO THROUGH TRAFFIC FROM WISCONSIN AVENUE TO MADISON STREET
- W. ST. PAUL AVENUE/WISCONSIN AVENUE INTERSECTION SIGNAL REMAINS IN OPERATION
- W. ST. PAUL AVENUE/MADISON STREET INTERSECTION SIGNAL REMAINS IN OPERATION
- MAINTAIN PAVED ACCESS FOR FIRE DEPARTMENT FROM DRIVEWAY ON W. ST. PAUL AVENUE THROUGH THE MADISON STREET INTERSECTION AT ALL TIMES
- MAINTAIN AND PROVIDE DRIVEWAY ACCESS TO ALL BUSINESSES
- MAINTAIN ONE LANE OF TRAVEL AT ALL TIMES WITH FLAGGING OPERATIONS

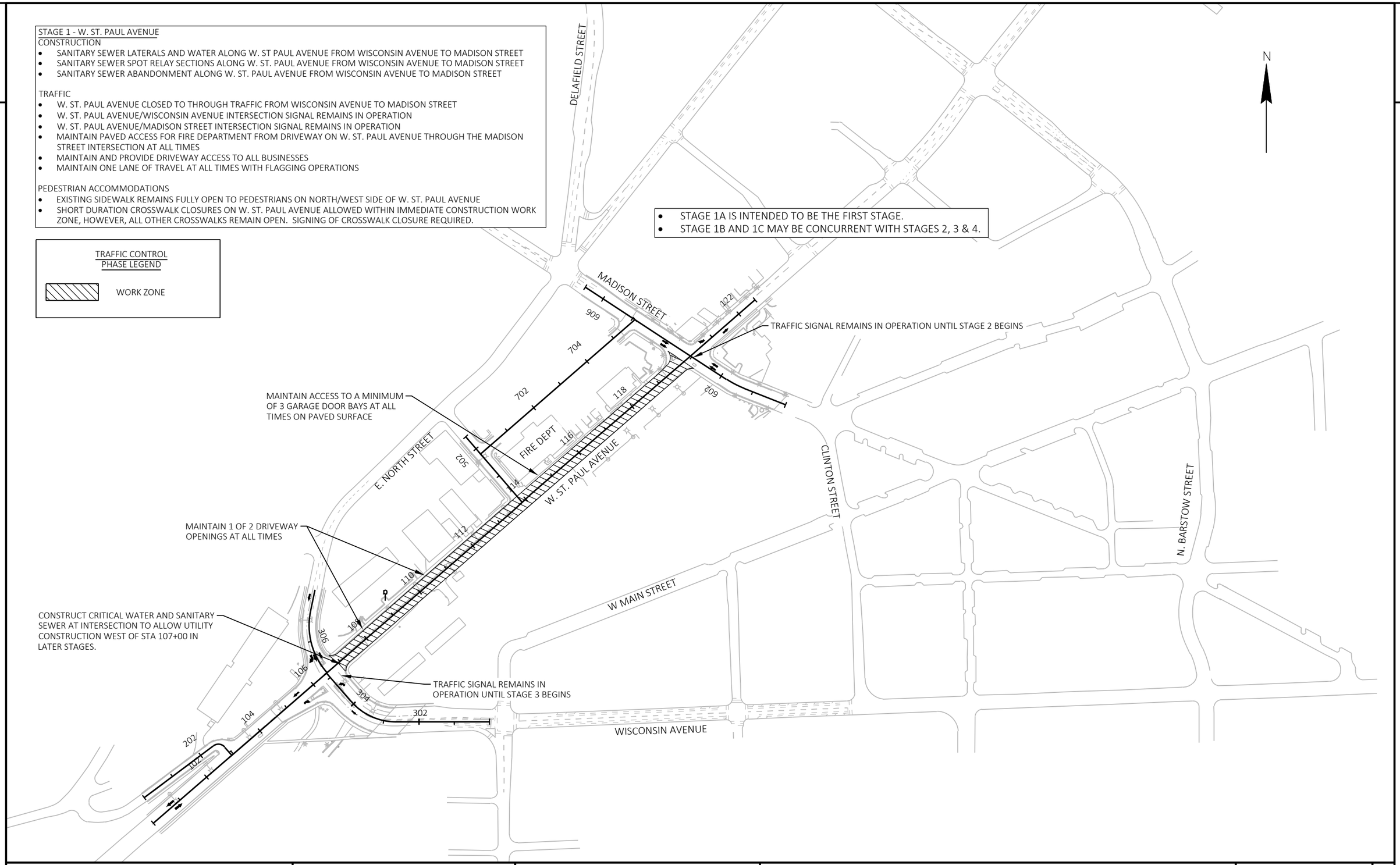
PEDESTRIAN ACCOMMODATIONS

- EXISTING SIDEWALK REMAINS FULLY OPEN TO PEDESTRIANS ON NORTH/WEST SIDE OF W. ST. PAUL AVENUE
- SHORT DURATION CROSSWALK CLOSURES ON W. ST. PAUL AVENUE ALLOWED WITHIN IMMEDIATE CONSTRUCTION WORK ZONE, HOWEVER, ALL OTHER CROSSWALKS REMAIN OPEN. SIGNING OF CROSSWALK CLOSURE REQUIRED.

TRAFFIC CONTROL PHASE LEGEND

WORK ZONE

- STAGE 1A IS INTENDED TO BE THE FIRST STAGE.
- STAGE 1B AND 1C MAY BE CONCURRENT WITH STAGES 2, 3 & 4.



PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL OVERVIEW - STAGE 1	SHEET 154	E

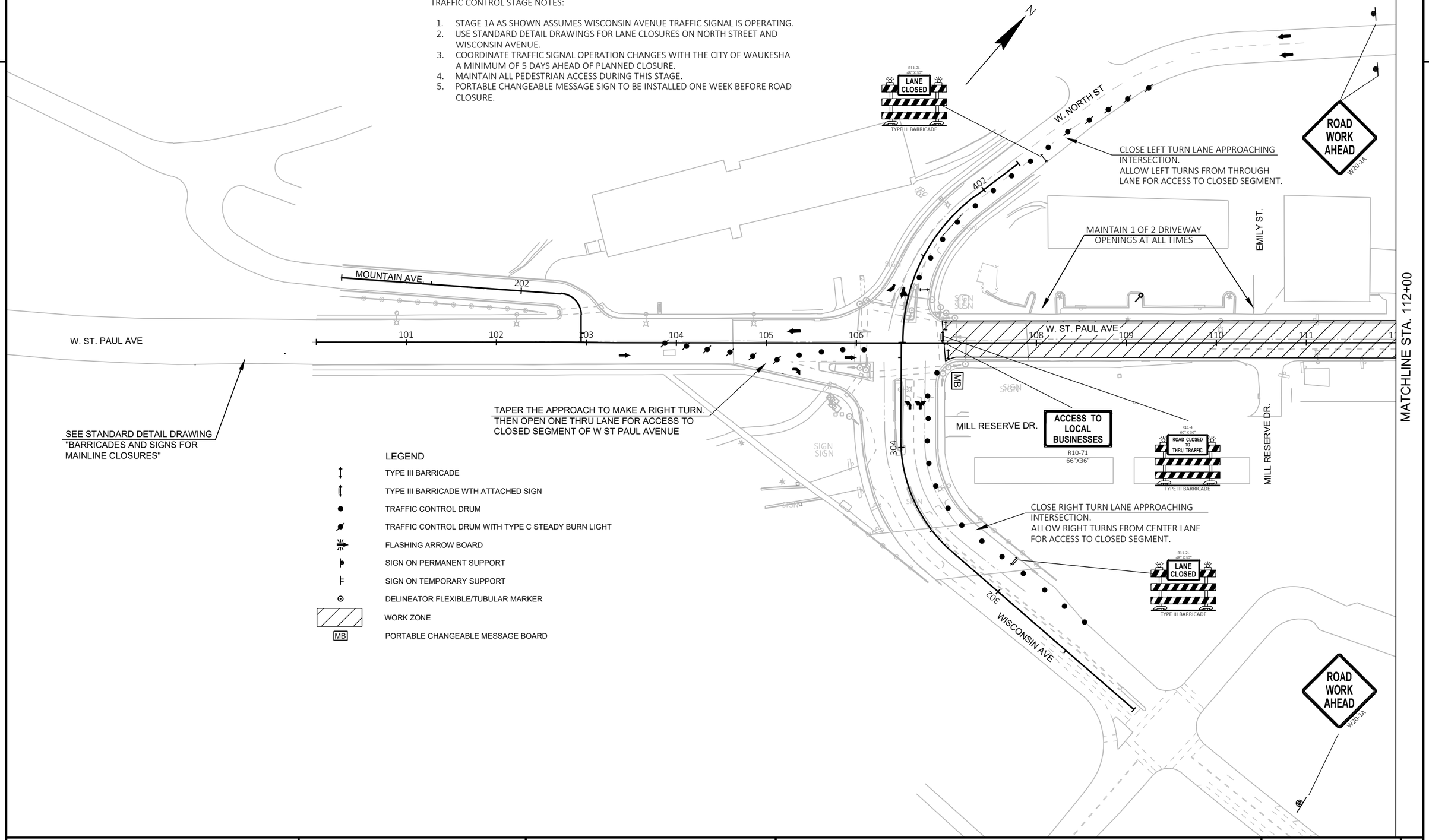
FILE NAME : I:\24\WAUKESHA CITY OF\240336.12 ST PAUL AVE TTC STAGING\C3D\SHEETSPLAN\026001-S01 AYRES.DWG
LAYOUT NAME - 026000-s01

PLOT DATE : 7/13/2021 2:13 PM PLOT BY : ROWELL, ANDREW PLOT NAME : PLOT SCALE : 1 IN:250 FT

WISDOT/CADDS SHEET 42

TRAFFIC CONTROL STAGE NOTES:

1. STAGE 1A AS SHOWN ASSUMES WISCONSIN AVENUE TRAFFIC SIGNAL IS OPERATING.
2. USE STANDARD DETAIL DRAWINGS FOR LANE CLOSURES ON NORTH STREET AND WISCONSIN AVENUE.
3. COORDINATE TRAFFIC SIGNAL OPERATION CHANGES WITH THE CITY OF WAUKESHA A MINIMUM OF 5 DAYS AHEAD OF PLANNED CLOSURE.
4. MAINTAIN ALL PEDESTRIAN ACCESS DURING THIS STAGE.
5. PORTABLE CHANGEABLE MESSAGE SIGN TO BE INSTALLED ONE WEEK BEFORE ROAD CLOSURE.



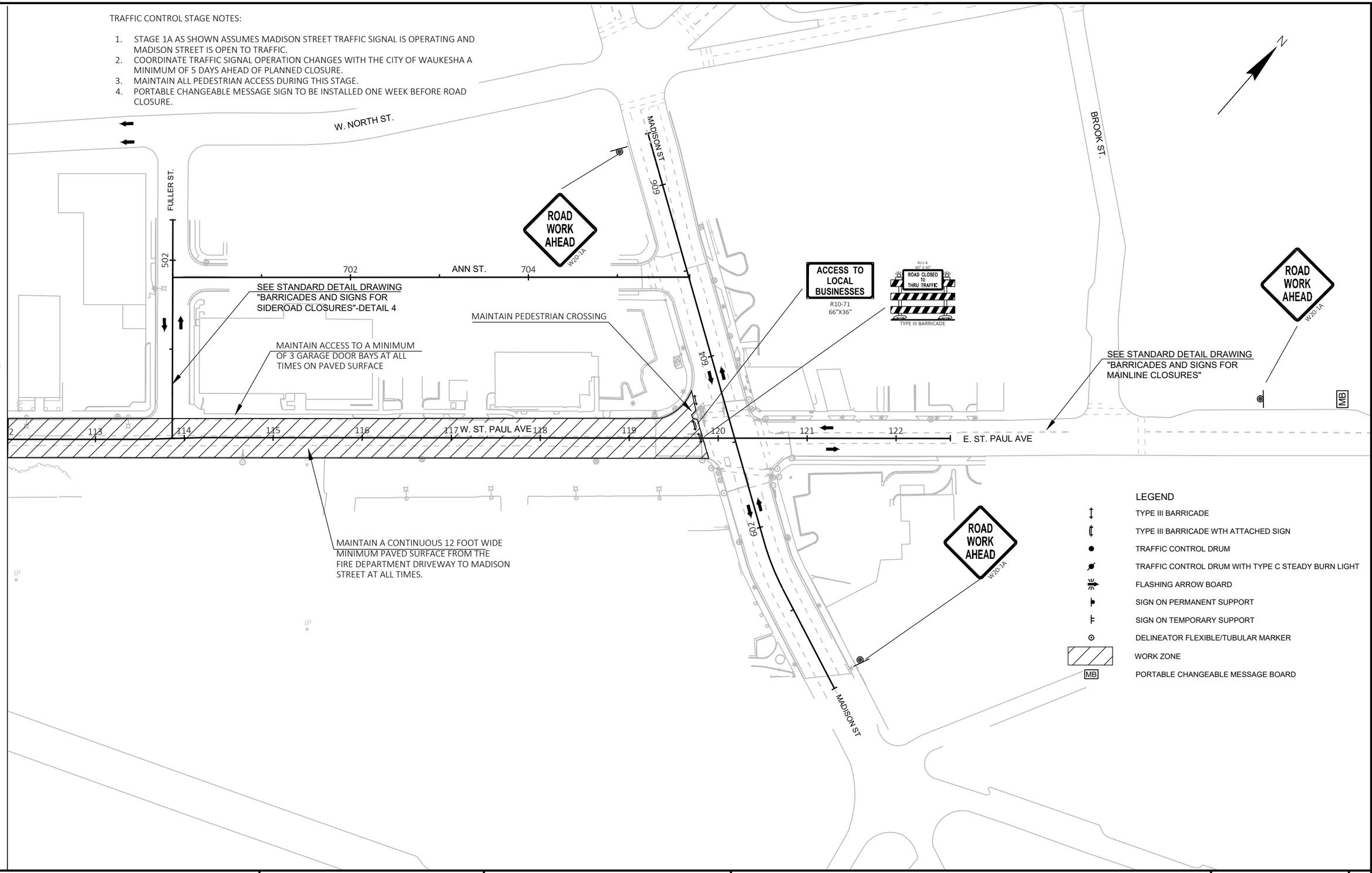
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK ZONE
- MB — PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1A	SHEET 155	E

TRAFFIC CONTROL STAGE NOTES:

1. STAGE 1A AS SHOWN ASSUMES MADISON STREET TRAFFIC SIGNAL IS OPERATING AND MADISON STREET IS OPEN TO TRAFFIC.
2. COORDINATE TRAFFIC SIGNAL OPERATION CHANGES WITH THE CITY OF WAUKESHA A MINIMUM OF 5 DAYS AHEAD OF PLANNED CLOSURE.
3. MAINTAIN ALL PEDESTRIAN ACCESS DURING THIS STAGE.
4. PORTABLE CHANGEABLE MESSAGE SIGN TO BE INSTALLED ONE WEEK BEFORE ROAD CLOSURE.



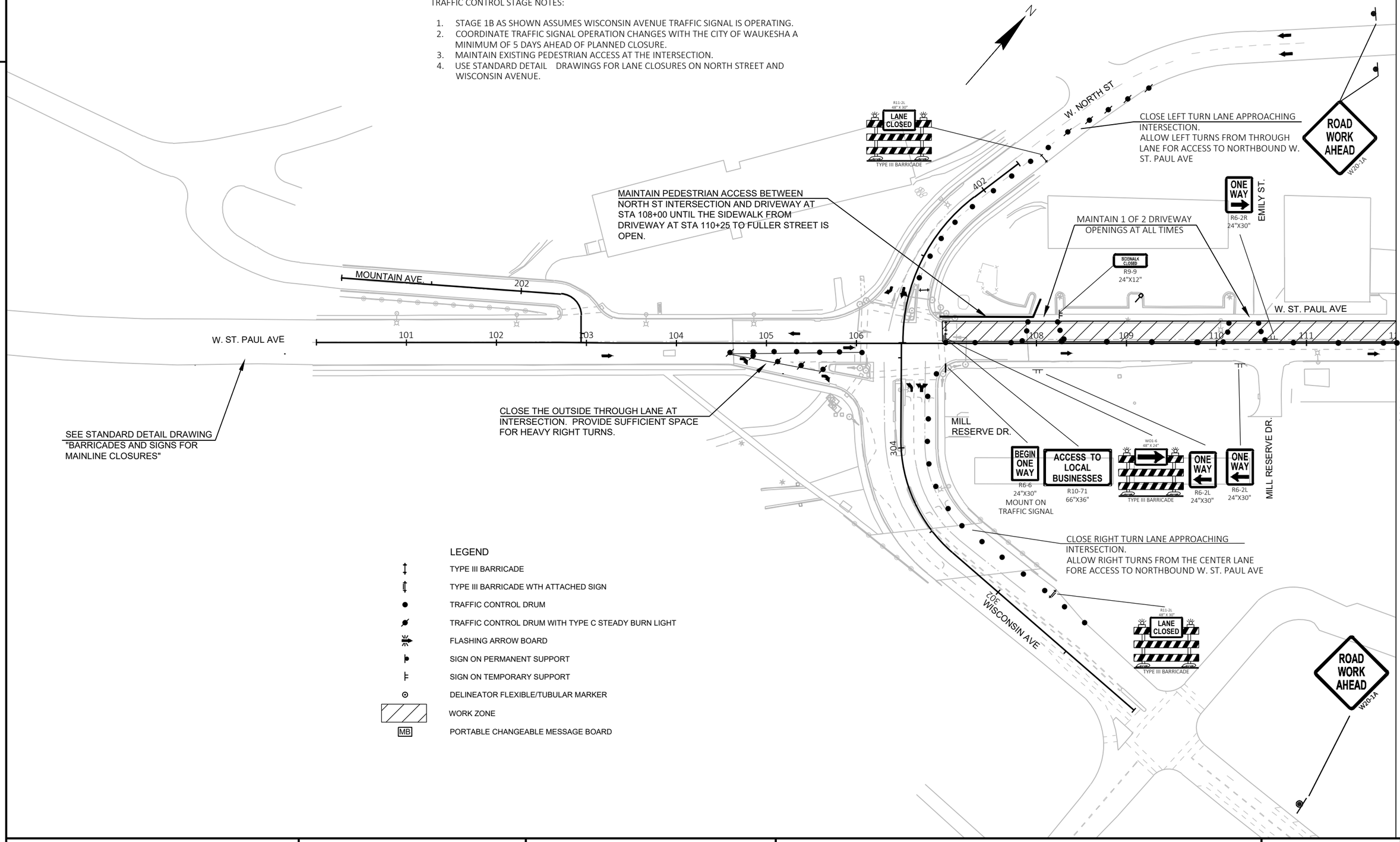
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1A	SHEET 156	E

FILE NAME : I:\24\WAUKESHA CITY OF\240336.12 ST PAUL AVE TTC STAGING\C3D\SHEETSPLAN\026001-S1A AYRES.DWG
LAYOUT NAME - 026002-s1A

PLOT DATE : 7/13/2021 2:14 PM PLOT BY : ROWELL, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

TRAFFIC CONTROL STAGE NOTES:

1. STAGE 1B AS SHOWN ASSUMES WISCONSIN AVENUE TRAFFIC SIGNAL IS OPERATING.
2. COORDINATE TRAFFIC SIGNAL OPERATION CHANGES WITH THE CITY OF WAUKESHA A MINIMUM OF 5 DAYS AHEAD OF PLANNED CLOSURE.
3. MAINTAIN EXISTING PEDESTRIAN ACCESS AT THE INTERSECTION.
4. USE STANDARD DETAIL DRAWINGS FOR LANE CLOSURES ON NORTH STREET AND WISCONSIN AVENUE.



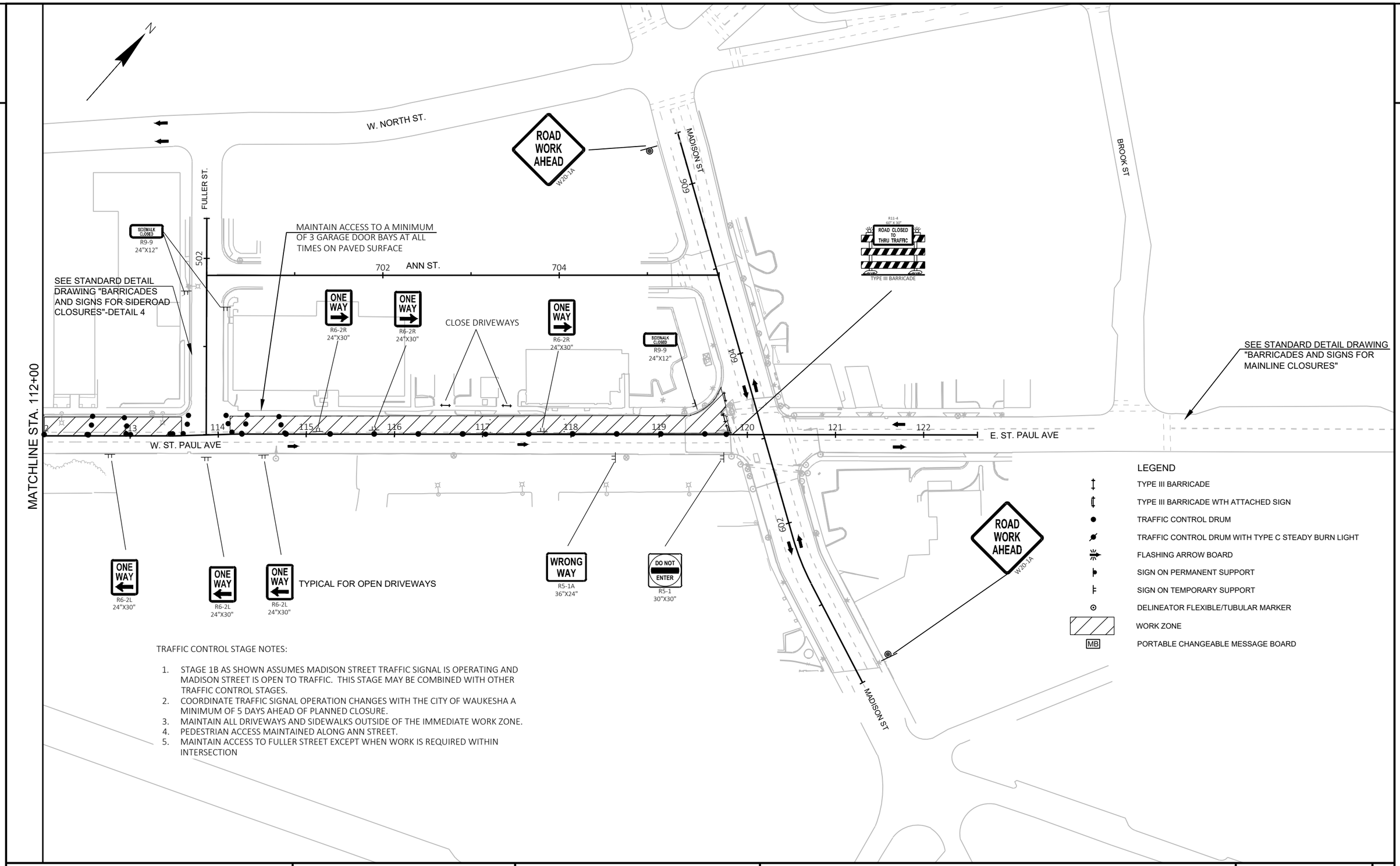
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK ZONE
- MB — PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1B	SHEET 157	E

FILE NAME : I:\24\WAUKESHA CITY OF\240336.12 ST PAUL AVE TTC STAGING\C3D\SHEETSPLAN\026001-S1B AYRES.DWG
LAYOUT NAME - 026003-s1B
PLOT DATE : 7/13/2021 2:14 PM
PLOT BY : ROWELL, ANDREW
PLOT NAME :
WISDOT/CADDS SHEET 42

2



TRAFFIC CONTROL STAGE NOTES:

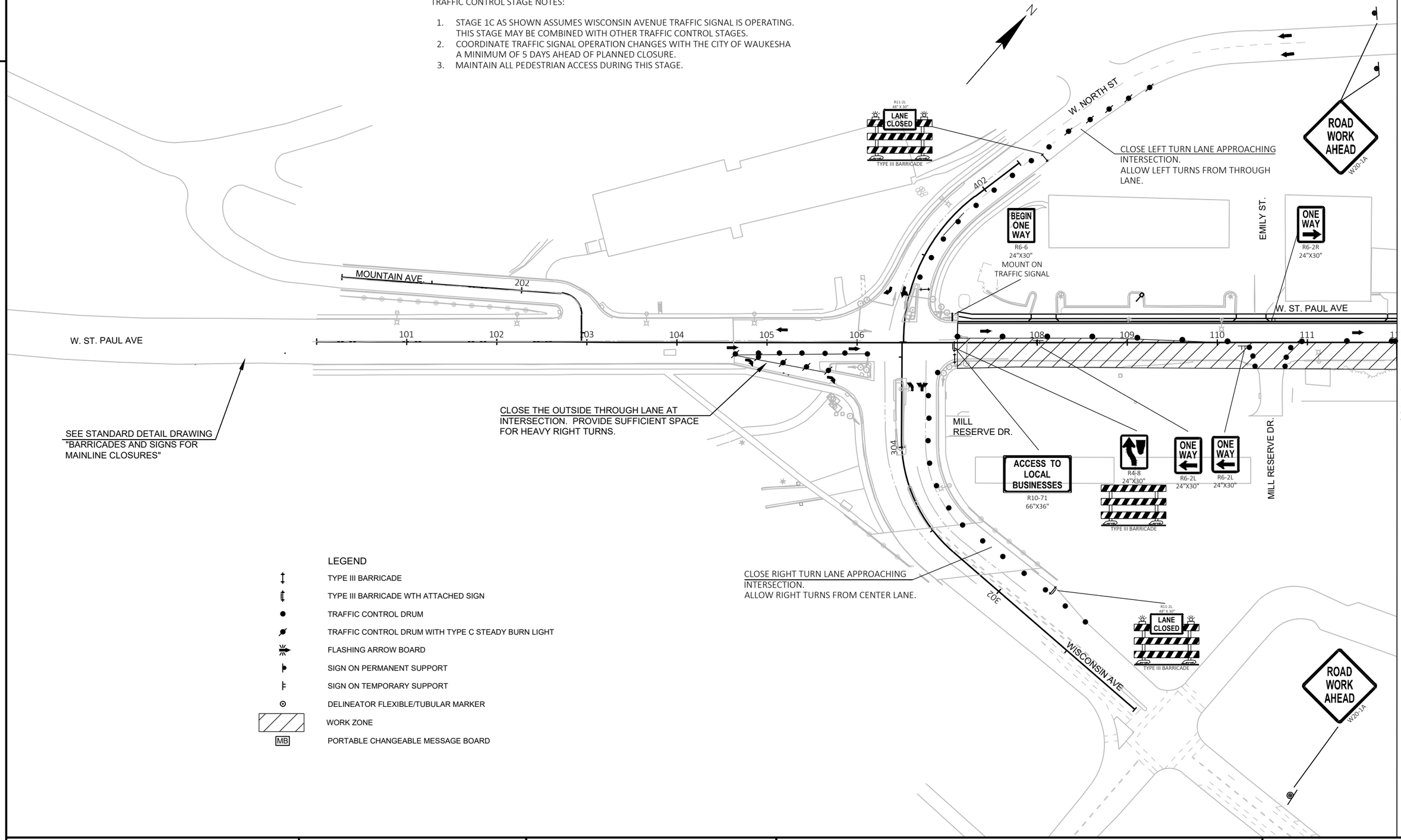
1. STAGE 1B AS SHOWN ASSUMES MADISON STREET TRAFFIC SIGNAL IS OPERATING AND MADISON STREET IS OPEN TO TRAFFIC. THIS STAGE MAY BE COMBINED WITH OTHER TRAFFIC CONTROL STAGES.
2. COORDINATE TRAFFIC SIGNAL OPERATION CHANGES WITH THE CITY OF WAUKESHA A MINIMUM OF 5 DAYS AHEAD OF PLANNED CLOSURE.
3. MAINTAIN ALL DRIVEWAYS AND SIDEWALKS OUTSIDE OF THE IMMEDIATE WORK ZONE.
4. PEDESTRIAN ACCESS MAINTAINED ALONG ANN STREET.
5. MAINTAIN ACCESS TO FULLER STREET EXCEPT WHEN WORK IS REQUIRED WITHIN INTERSECTION

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1B	SHEET 158	E

FILE NAME : I:\24\WAUKESHA CITY OF\240336.12 ST PAUL AVE TTC STAGING\C3D\SHEETSPLAN\026001-S1B AYRES.DWG
LAYOUT NAME - 026004-s1B
PLOT DATE : 7/13/2021 2:14 PM
PLOT BY : ROWELL, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

TRAFFIC CONTROL STAGE NOTES:

1. STAGE 1C AS SHOWN ASSUMES WISCONSIN AVENUE TRAFFIC SIGNAL IS OPERATING. THIS STAGE MAY BE COMBINED WITH OTHER TRAFFIC CONTROL STAGES.
2. COORDINATE TRAFFIC SIGNAL OPERATION CHANGES WITH THE CITY OF WAUKESHA A MINIMUM OF 5 DAYS AHEAD OF PLANNED CLOSURE.
3. MAINTAIN ALL PEDESTRIAN ACCESS DURING THIS STAGE.

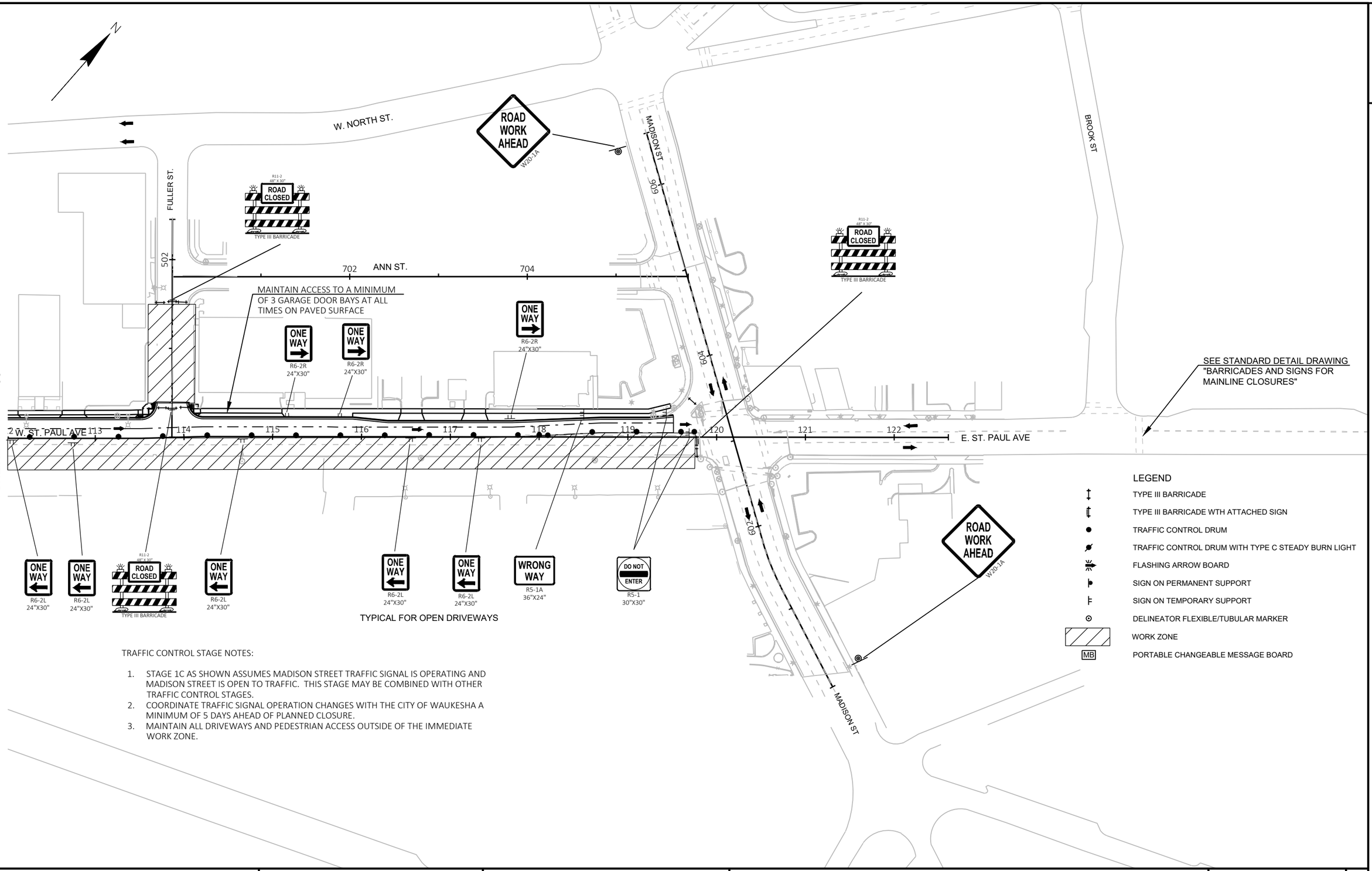


LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK ZONE
- MB — PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1C	SHEET 159	E

2



TRAFFIC CONTROL STAGE NOTES:

1. STAGE 1C AS SHOWN ASSUMES MADISON STREET TRAFFIC SIGNAL IS OPERATING AND MADISON STREET IS OPEN TO TRAFFIC. THIS STAGE MAY BE COMBINED WITH OTHER TRAFFIC CONTROL STAGES.
2. COORDINATE TRAFFIC SIGNAL OPERATION CHANGES WITH THE CITY OF WAUKESHA A MINIMUM OF 5 DAYS AHEAD OF PLANNED CLOSURE.
3. MAINTAIN ALL DRIVEWAYS AND PEDESTRIAN ACCESS OUTSIDE OF THE IMMEDIATE WORK ZONE.

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1C	SHEET 160	E

FILE NAME : I:\24\WAUKESHA CITY OF\240336.12 ST PAUL AVE TTC STAGING\C3D\SHEETSPLAN\026001-S1C AYRES.DWG
LAYOUT NAME - 026006-s1C
PLOT DATE : 7/13/2021 2:14 PM PLOT BY : ROWELL, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

STAGE 2 - MADISON STREET INTERSECTION AREA

CONSTRUCTION

- TRAFFIC SIGNAL REMOVAL AT MADISON STREET INTERSECTION
- UTILITIES AND STORM SEWER ALONG E. ST. PAUL AVENUE FROM MADISON STREET TO EAST LIMITS
- UTILITIES AND STORM SEWER ALONG MADISON STREET
- COORDINATE CONSTRUCTION WITH W. ST. PAUL AVENUE STAGE 1B OR 1C ACTIVITIES
- COORDINATE CONSTRUCTION WITH ADJACENT BRIDGE PROJECT (BY OTHERS)

TRAFFIC

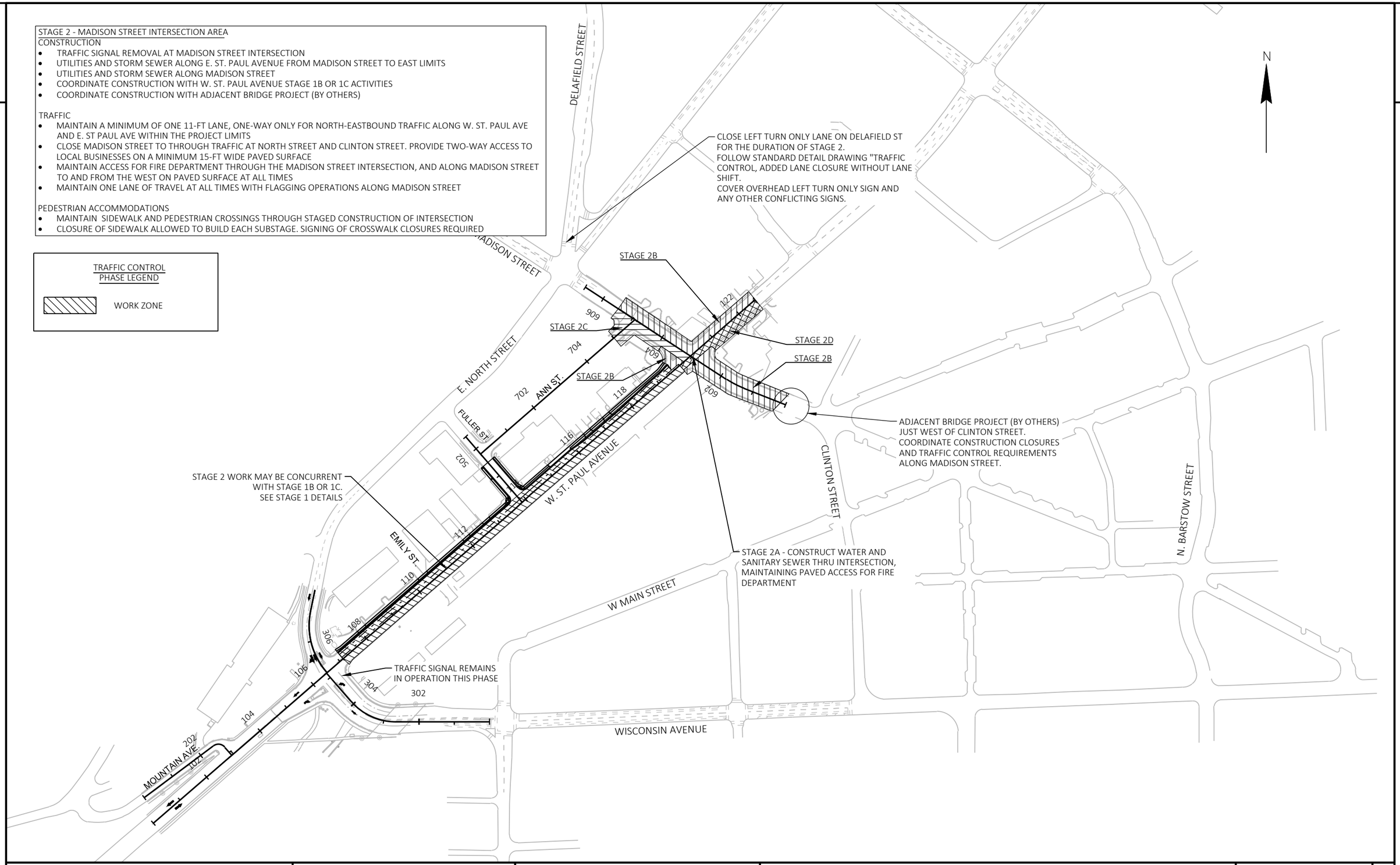
- MAINTAIN A MINIMUM OF ONE 11-FT LANE, ONE-WAY ONLY FOR NORTH-EASTBOUND TRAFFIC ALONG W. ST. PAUL AVE AND E. ST PAUL AVE WITHIN THE PROJECT LIMITS
- CLOSE MADISON STREET TO THROUGH TRAFFIC AT NORTH STREET AND CLINTON STREET. PROVIDE TWO-WAY ACCESS TO LOCAL BUSINESSES ON A MINIMUM 15-FT WIDE PAVED SURFACE
- MAINTAIN ACCESS FOR FIRE DEPARTMENT THROUGH THE MADISON STREET INTERSECTION, AND ALONG MADISON STREET TO AND FROM THE WEST ON PAVED SURFACE AT ALL TIMES
- MAINTAIN ONE LANE OF TRAVEL AT ALL TIMES WITH FLAGGING OPERATIONS ALONG MADISON STREET

PEDESTRIAN ACCOMMODATIONS

- MAINTAIN SIDEWALK AND PEDESTRIAN CROSSINGS THROUGH STAGED CONSTRUCTION OF INTERSECTION
- CLOSURE OF SIDEWALK ALLOWED TO BUILD EACH SUBSTAGE. SIGNING OF CROSSWALK CLOSURES REQUIRED

TRAFFIC CONTROL PHASE LEGEND

WORK ZONE



PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL OVERVIEW - STAGE 2	SHEET 161	E

2

TRAFFIC CONTROL STAGE NOTES:

1. STAGE 2A AS SHOWN ASSUMES W. ST. PAUL AVENUE IS CLOSED TO ONE LANE OF TRAFFIC NORTHBOUND ON EXISTING NORTHBOUND LANES.
2. SEE STAGE 1B OR 1C FOR DETAILS FOR W. ST. PAUL AVENUE.
3. MAINTAIN ALL DRIVEWAYS OUTSIDE OF THE IMMEDIATE WORK ZONE.
4. MAINTAIN 12' PAVED ACCESS FROM ANN STREET TO ST. PAUL AVENUE FOR EMERGENCY VEHICLES.
5. PORTABLE CHANGEABLE MESSAGE SIGN TO BE INSTALLED ONE WEEK BEFORE ROAD CLOSURE.

MATCHLINE STA. 112+00

W. NORTH ST.

E. NORTH ST.

MADISON ST

DELAFIELD ST.

FULLER ST.

ANN ST.

BROOK ST.

E. ST. PAUL AVE

BANK ST.

CLINTON ST.

W. BROADWAY

R11-4 60" X 30" ROAD CLOSED TO THRU TRAFFIC — TYPE III BARRICADE

R11-2 48" X 30" ROAD CLOSED — TYPE III BARRICADE

R11-3 60" X 30" ROAD CLOSED LOCAL TRAFFIC ONLY — TYPE III BARRICADE

R9-11 24"X12" SIDEWALK CLOSED AHEAD USE OTHER SIDE

R9-9 24"X12" SIDEWALK CLOSED

R9-10 24"X12" SIDEWALK CLOSED USE OTHER SIDE

R1-1 30"X30" STOP — R1-3P 18"X6" ALL WAY

R5-1A 36"X24" WRONG WAY

R5-1 30"X30" DO NOT ENTER

R6-2L 24"X30" ONE WAY

MB PORTABLE CHANGEABLE MESSAGE BOARD

906 · 704 · 502 · 602

702 · 704

113 · 114 · 115 · 116 · 117 · 118 · 119 · 120 · 121 · 122

ALLOW SOUTHBOUND TRAFFIC TO DRIVEWAY

SEE STANDARD DETAIL DRAWING "BARRICADES AND SIGNS FOR MAINLINE CLOSURES"

MAINTAIN PEDESTRIAN CROSSINGS

TRAFFIC CONTROL SIGNING WILL BE IN COORDINATION WITH THE CONSTRUCTION OF THE MADISON STREET BRIDGE

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK ZONE
- MB PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2A	SHEET 162	E

FILE NAME : I:\24\WAUKESHA CITY OF\240336.12 ST PAUL AVE TTC STAGING\C3D\SHEETSPLAN\026020-S2A AYRES.DWG
LAYOUT NAME - 026010-s2A
PLOT DATE : 7/13/2021 2:15 PM PLOT BY : ROWELL, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

MATCHLINE STA. 112+00

W. NORTH ST.

MADISON ST

DELAFIELD ST.

E. NORTH ST.

FULLER ST.

ANN ST.

W. ST. PAUL AVE

E. ST. PAUL AVE

BROOK ST.

BANK ST.

CLINTON ST.

W. BROADWAY

MADISON ST

ROAD CLOSED TO THRU TRAFFIC
TYPE III BARRICADE

ROAD CLOSED
TYPE III BARRICADE

ROAD CLOSED
LOCAL TRAFFIC ONLY
TYPE III BARRICADE

R9-11
24"X12"

SIDEWALK CLOSED
R9-9
24"X12"

SIDEWALK CLOSED
R9-10
24"X12"

STOP
R1-1
30"X30"
ALL WAY
R1-3P
18"X6"

TRAFFIC CONTROL STAGE NOTES:

1. STAGE 2B AS SHOWN ASSUMES W. ST. PAUL AVENUE IS CLOSED TO ONE LANE OF TRAFFIC NORTHBOUND ON THE EXISTING NORTHBOUND LANES, AND MADISON STREET BRIDGE IS CLOSED.
2. SEE STAGE 1B OR 1C FOR DETAILS FOR W. ST. PAUL AVENUE.
3. MAINTAIN ALL DRIVEWAYS AND SIDEWALKS OUTSIDE OF THE IMMEDIATE WORK ZONE.

ALLOW SOUTHBOUND TRAFFIC TO DRIVEWAY

SEE STANDARD DETAIL DRAWING "BARRICADES AND SIGNS FOR MAINLINE CLOSURES"

WRONG WAY
R5-1A
36"X24"

DO NOT ENTER
R5-1
30"X30"

ONE WAY
R6-2L
24"X30"

MAINTAIN PEDESTRIAN CROSSING AND ACCESS TO AND FROM PARKING LOT IN SOUTHEAST QUADRANT OF INTERSECTION. PROVIDE TEMPORARY PEDESTRIAN RAMP AT NORTHEAST CORNER TO ALLOW CONSTRUCTION OF PROPOSED CURB RAMPS ON MADISON ST TO BE USED IN NEXT STAGE.

TRAFFIC CONTROL SIGNING WILL BE IN COORDINATION WITH THE CONSTRUCTION OF THE MADISON STREET BRIDGE

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK ZONE
- MB PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2B	SHEET 163	E

FILE NAME : I:\24\WAUKESHA CITY OF\240336.12 ST PAUL AVE TTC STAGING\C3D\SHEETSPLAN\026020-S2B AYRES.DWG
LAYOUT NAME - 026011-s2B

PLOT DATE : 7/13/2021 2:15 PM PLOT BY : ROWELL, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

MATCHLINE STA. 112+00

N

W. NORTH ST.

MADISON ST

DELAFIELD ST.

E. NORTH ST.

FULLER ST.

ROAD CLOSED TO THRU TRAFFIC
TYPE III BARRICADE

ROAD CLOSED AHEAD
W20-3A

SEE STANDARD DETAIL DRAWING
"BARRICADES AND SIGNS FOR SIDEROAD CLOSURES, DETAIL 1"

R9-11
24"X12"

SIDEWALK CLOSED
R9-9
24"X12"

ANN ST.

STOP
R1-1
30"X30"
ALL WAY
R1-3P
18"X6"

TRAFFIC CONTROL STAGE NOTES:

1. STAGE 2C AS SHOWN ASSUMES W. ST. PAUL AVENUE IS CLOSED TO ONE LANE OF TRAFFIC NORTHBOUND ON EXISTING NORTHBOUND LANE, AND MADISON STREET BRIDGE IS CLOSED.
2. SEE STAGE 1B OR 1C FOR DETAILS FOR W. ST. PAUL AVENUE.
3. MAINTAIN ALL DRIVEWAYS AND SIDEWALKS OUTSIDE OF THE IMMEDIATE WORK ZONE.

ROAD CLOSED
TYPE III BARRICADE

ROAD CLOSED
LOCAL TRAFFIC ONLY
TYPE III BARRICADE

MAINTAIN PEDESTRIAN CROSSING OF NORTHEAST AND SOUTHEAST ROADWAY APPROACHES

ALLOW SOUTHBOUND TRAFFIC TO DRIVEWAY

BROOK ST.

SEE STANDARD DETAIL DRAWING
"BARRICADES AND SIGNS FOR MAINLINE CLOSURES"

E. ST. PAUL AVE

W. ST. PAUL AVE

LANE CLOSED
TYPE III BARRICADE

STOP
R1-1
30"X30"
ALL WAY
R1-3P
18"X6"

R9-11
24"X12"

STOP
R1-1
30"X30"
ALL WAY
R1-3P
18"X6"

WRONG WAY
R5-1A
36"X24"

DO NOT ENTER
R5-1
30"X30"

ONE WAY
R6-2L
24"X30"

MADISON ST

BANK ST.

CLINTON ST.

W. BROADWAY

TRAFFIC CONTROL SIGNING WILL BE IN COORDINATION WITH THE CONSTRUCTION OF THE MADISON STREET BRIDGE

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK ZONE
- MB — PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2C	SHEET 164	E

FILE NAME : I:\24\WAUKESHA CITY OF\240336.12 ST PAUL AVE TTC STAGING\C3D\SHEETSPLAN\026020-S2C AYRES.DWG
LAYOUT NAME - 026012-s2C

PLOT DATE : 7/13/2021 2:16 PM PLOT BY : ROWELL, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

TRAFFIC CONTROL STAGE NOTES:

1. STAGE 2D AS SHOWN ASSUMES W. ST. PAUL AVENUE IS CLOSED TO ONE LANE OF TRAFFIC NORTHBOUND USING THE SOUTHBOUND LANES, AND MADISON STREET BRIDGE IS CLOSED.
2. SEE STAGE 1B OR 1C FOR DETAILS FOR W. ST. PAUL AVENUE.
3. MAINTAIN ALL DRIVEWAYS AND SIDEWALKS OUTSIDE OF THE IMMEDIATE WORK ZONE.

MATCHLINE STA. 112+00

W. NORTH ST.

MADISON ST

DELAFIELD ST.

E. NORTH ST.

FULLER ST.

ANN ST.

W. ST. PAUL AVE

E. ST. PAUL AVE

BROOK ST.

MADISON ST

BANK ST.

CLINTON ST.

W. BROADWAY

ROAD CLOSED TO THRU TRAFFIC
TYPE III BARRICADE

ROAD CLOSED
TYPE III BARRICADE

STOP
R1-1
30"X30"
ALL WAY
R1-3P
18"X6"

LANE CLOSED
TYPE III BARRICADE

WRONG WAY
R5-1A
36"X24"

DO NOT ENTER
R5-1
30"X30"

SIDEWALK CLOSED
R9-9
24"X12"

ONE WAY
R6-2L
24"X30"

PAVING GAP REQ'D.
FOR ROAD AND
CROSS WALK ACCESS

SEE STANDARD DETAIL DRAWING
"BARRICADES AND SIGNS FOR
MAINLINE CLOSURES"

ONLY ALLOW RIGHT TURN
OUT OF DRIVEWAY.
NO ENTRANCE DURING
THIS STAGE

MAINTAIN BOTH CROSSWALKS
FOR MADISON ST. MAINTAIN
MINIMUM OF ONE OF THE
CROSSWALKS FOR W. ST.
PAUL AVE AT ALL TIMES.

TRAFFIC CONTROL SIGNING
WILL BE IN COORDINATION
WITH THE CONSTRUCTION OF
THE MADISON STREET BRIDGE

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK ZONE
- MB — PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2D	SHEET 165	E

FILE NAME : I:\24\WAUKESHA CITY OF\240336.12 ST PAUL AVE TTC STAGING\C3D\SHEETSPLAN\026020-S2D AYRES.DWG
LAYOUT NAME - 026013-s2D
PLOT DATE : 7/13/2021 2:16 PM PLOT BY : ROWELL, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

STAGE 3 - UNDERGROUND WORK FOR WISCONSIN-NORTH INTERSECTION AREA

CONSTRUCTION

- TRAFFIC SIGNAL REMOVALS AT THE WISCONSIN AVENUE INTERSECTION
- UTILITIES AND STORM SEWER ALONG W. ST PAUL AVENUE FROM WESTERN PROJECT LIMITS TO WISCONSIN AVENUE
- UTILITIES AND STORM SEWER ON WISCONSIN AVENUE
- UTILITIES AND STORM SEWER ON NORTH STREET
- COORDINATE CONSTRUCTION WITH STAGE 1B OR 1C ACTIVITIES

TRAFFIC

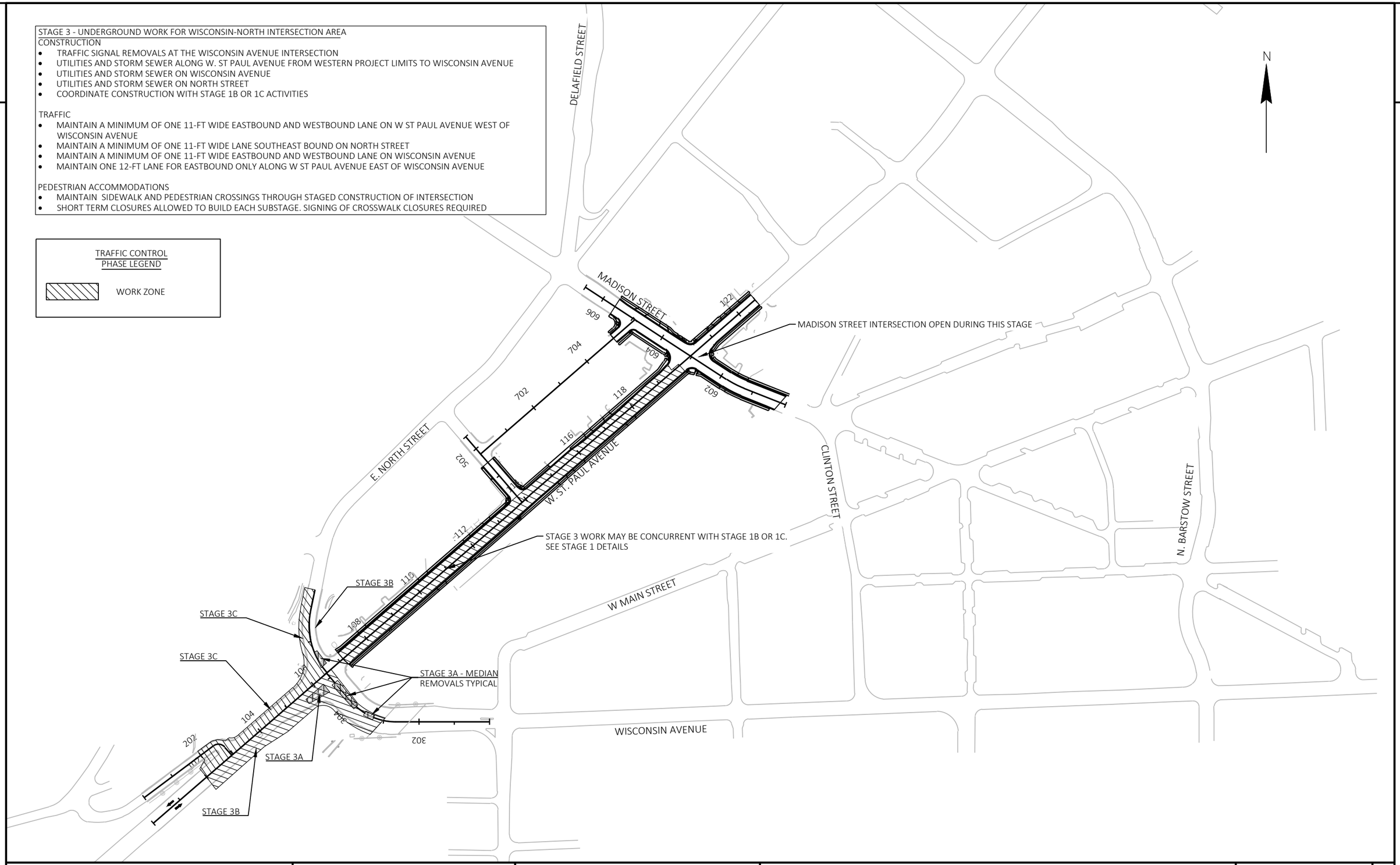
- MAINTAIN A MINIMUM OF ONE 11-FT WIDE EASTBOUND AND WESTBOUND LANE ON W ST PAUL AVENUE WEST OF WISCONSIN AVENUE
- MAINTAIN A MINIMUM OF ONE 11-FT WIDE LANE SOUTHEAST BOUND ON NORTH STREET
- MAINTAIN A MINIMUM OF ONE 11-FT WIDE EASTBOUND AND WESTBOUND LANE ON WISCONSIN AVENUE
- MAINTAIN ONE 12-FT LANE FOR EASTBOUND ONLY ALONG W ST PAUL AVENUE EAST OF WISCONSIN AVENUE

PEDESTRIAN ACCOMMODATIONS

- MAINTAIN SIDEWALK AND PEDESTRIAN CROSSINGS THROUGH STAGED CONSTRUCTION OF INTERSECTION
- SHORT TERM CLOSURES ALLOWED TO BUILD EACH SUBSTAGE. SIGNING OF CROSSWALK CLOSURES REQUIRED

TRAFFIC CONTROL
PHASE LEGEND

WORK ZONE



2

PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL OVERVIEW - STAGE 3	SHEET 166	E

FILE NAME : I:\24\WAUKESHA CITY OF\240336.12 ST PAUL AVE TTC STAGING\C3D\SHEETSPLAN\026030-S03 AYRES.DWG
LAYOUT NAME - 026030-s03

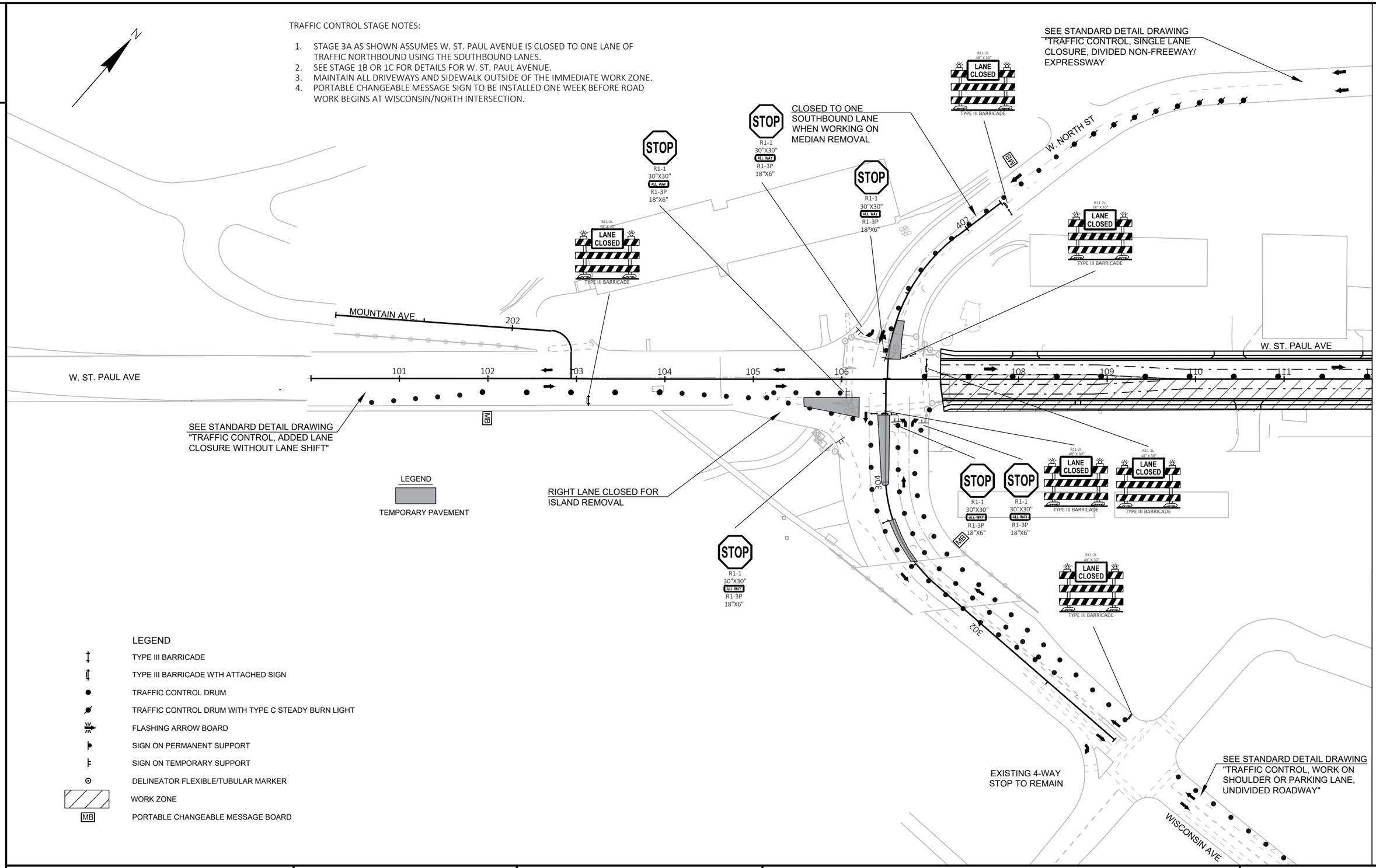
PLOT DATE : 7/13/2021 2:17 PM PLOT BY : ROWELL, ANDREW PLOT NAME : PLOT SCALE : 1 IN:250 FT

WISDOT/CADDS SHEET 42

2

TRAFFIC CONTROL STAGE NOTES:

1. STAGE 3A AS SHOWN ASSUMES W. ST. PAUL AVENUE IS CLOSED TO ONE LANE OF TRAFFIC NORTHBOUND USING THE SOUTHBOUND LANES.
2. SEE STAGE 1B OR 1C FOR DETAILS FOR W. ST. PAUL AVENUE.
3. MAINTAIN ALL DRIVEWAYS AND SIDEWALK OUTSIDE OF THE IMMEDIATE WORK ZONE.
4. PORTABLE CHANGEABLE MESSAGE SIGN TO BE INSTALLED ONE WEEK BEFORE ROAD WORK BEGINS AT WISCONSIN/NORTH INTERSECTION.



LEGEND

TEMPORARY PAVEMENT

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK ZONE
- MB — PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3A	SHEET 167	E

FILE NAME : I:\24\WAUKESHA CITY OF\240336.12 ST PAUL AVE TTC STAGING\C3D\SHEETSPLAN\026030-S3A AYRES.DWG
LAYOUT NAME - 026030-s3A

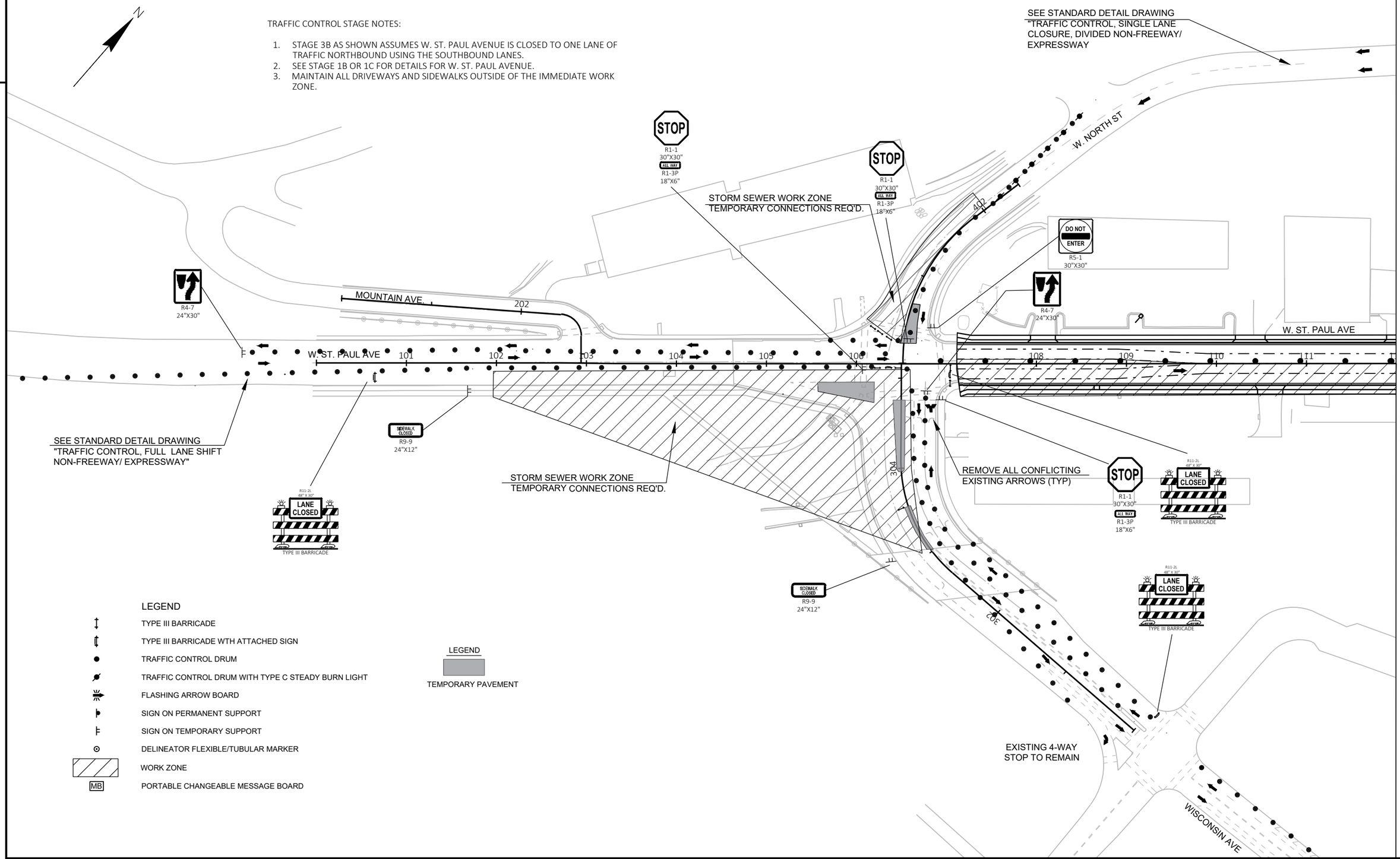
PLOT DATE : 7/13/2021 2:17 PM PLOT BY : ROWELL, ANDREW PLOT NAME :

WISDOT/CADDS SHEET 42

2

TRAFFIC CONTROL STAGE NOTES:

1. STAGE 3B AS SHOWN ASSUMES W. ST. PAUL AVENUE IS CLOSED TO ONE LANE OF TRAFFIC NORTHBOUND USING THE SOUTHBOUND LANES.
2. SEE STAGE 1B OR 1C FOR DETAILS FOR W. ST. PAUL AVENUE.
3. MAINTAIN ALL DRIVEWAYS AND SIDEWALKS OUTSIDE OF THE IMMEDIATE WORK ZONE.



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK ZONE
- MB — PORTABLE CHANGEABLE MESSAGE BOARD

LEGEND

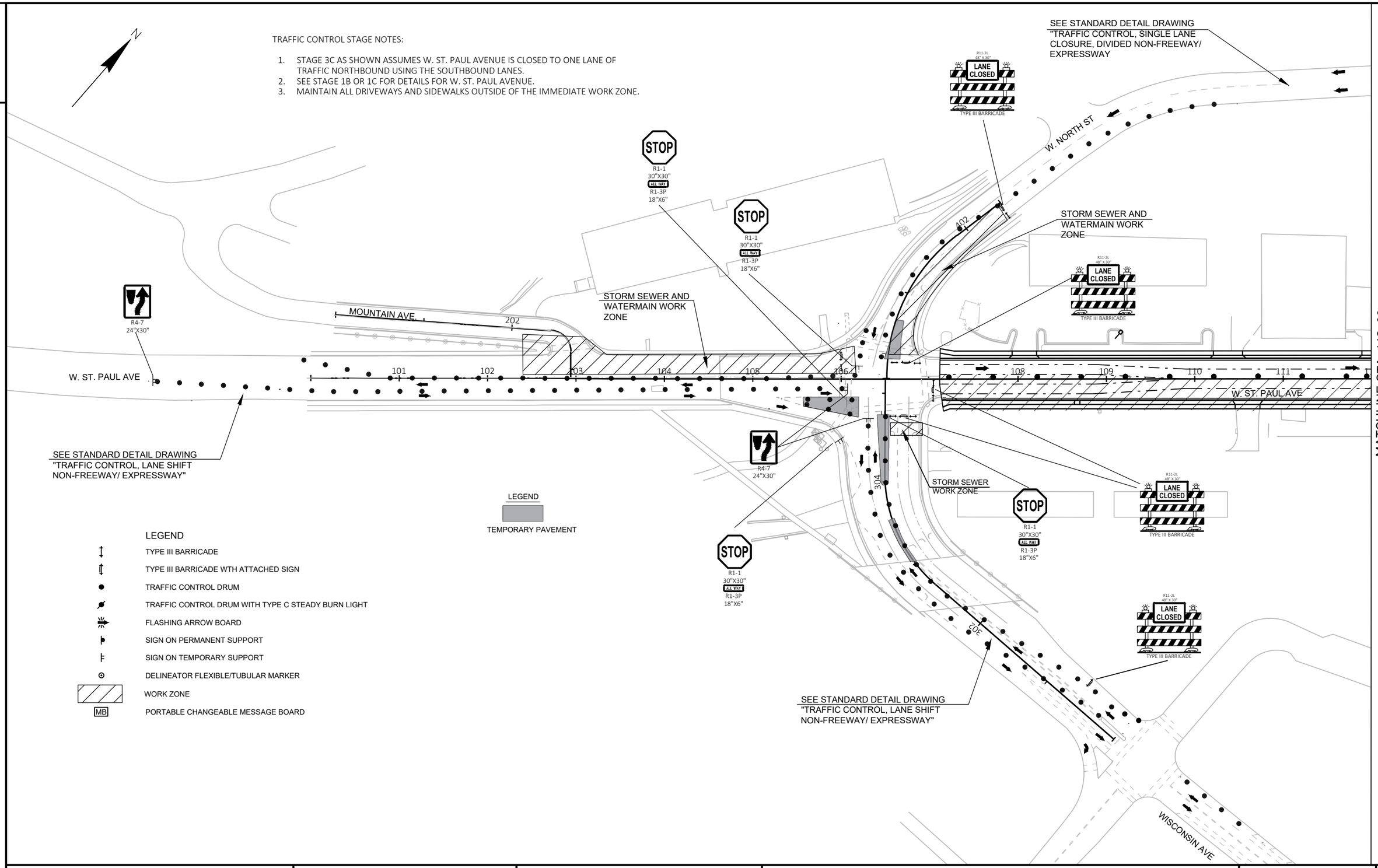
TEMPORARY PAVEMENT

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3B	SHEET 168	E

FILE NAME : I:\24\WAUKESHA CITY OF\240336.12 ST PAUL AVE TTC STAGING\C3D\SHEETSPLAN\026030-S3B AYRES.DWG
LAYOUT NAME - 026032-s3B
PLOT DATE : 7/13/2021 2:17 PM PLOT BY : ROWELL, ANDREW PLOT NAME :

TRAFFIC CONTROL STAGE NOTES:

1. STAGE 3C AS SHOWN ASSUMES W. ST. PAUL AVENUE IS CLOSED TO ONE LANE OF TRAFFIC NORTHBOUND USING THE SOUTHBOUND LANES.
2. SEE STAGE 1B OR 1C FOR DETAILS FOR W. ST. PAUL AVENUE.
3. MAINTAIN ALL DRIVEWAYS AND SIDEWALKS OUTSIDE OF THE IMMEDIATE WORK ZONE.



LEGEND

TEMPORARY PAVEMENT

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK ZONE
- MB — PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 3C	SHEET 169	E

FILE NAME : I:\24\WAUKESHA CITY OF\240336.12 ST PAUL AVE TTC STAGING\C3D\SHEETSPLAN\026030-S3C AYRES.DWG
LAYOUT NAME - 026033-s3C
PLOT DATE : 7/13/2021 2:18 PM PLOT BY : ROWELL, ANDREW PLOT NAME :

2

STAGE 4 - WISCONSIN-NORTH INTERSECTION AREA

CONSTRUCTION

- ROADWAY AND SIDEWALK ALONG W. ST PAUL AVENUE FROM WESTERN PROJECT LIMITS TO WISCONSIN STREET
- ROADWAY AND SIDEWALK ALONG WISCONSIN AVENUE
- ROADWAY AND SIDEWALK ALONG NORTH STREET
- MOUNTAIN AVENUE APPROACH
- TRAFFIC SIGNALS AT W ST PAUL AVE/WISCONSIN AVE, LIGHTING AND INCIDENTAL CONSTRUCTION
- COORDINATE CONSTRUCTION WITH STAGE 1B OR 1C ACTIVITIES

TRAFFIC

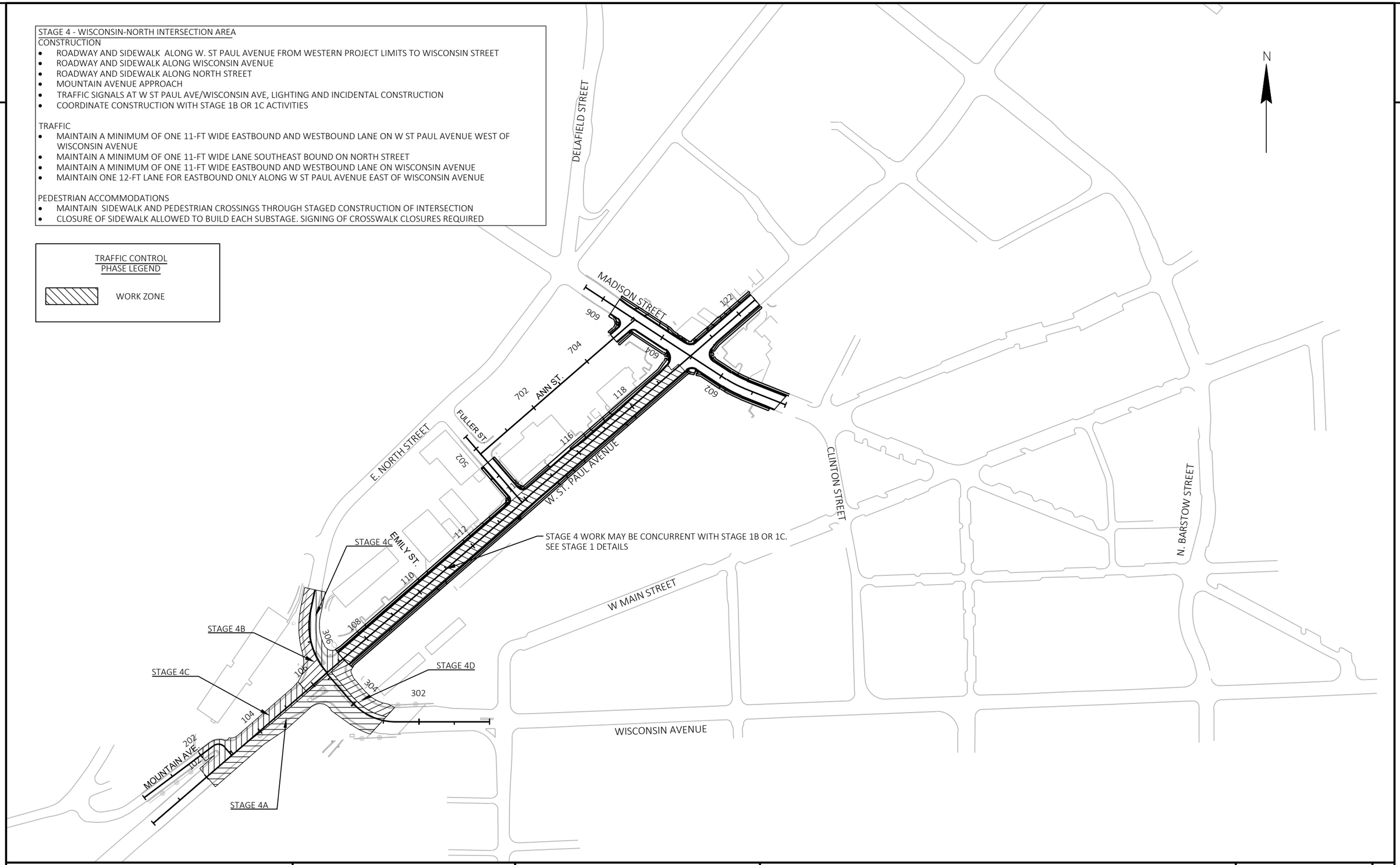
- MAINTAIN A MINIMUM OF ONE 11-FT WIDE EASTBOUND AND WESTBOUND LANE ON W ST PAUL AVENUE WEST OF WISCONSIN AVENUE
- MAINTAIN A MINIMUM OF ONE 11-FT WIDE LANE SOUTHEAST BOUND ON NORTH STREET
- MAINTAIN A MINIMUM OF ONE 11-FT WIDE EASTBOUND AND WESTBOUND LANE ON WISCONSIN AVENUE
- MAINTAIN ONE 12-FT LANE FOR EASTBOUND ONLY ALONG W ST PAUL AVENUE EAST OF WISCONSIN AVENUE

PEDESTRIAN ACCOMMODATIONS

- MAINTAIN SIDEWALK AND PEDESTRIAN CROSSINGS THROUGH STAGED CONSTRUCTION OF INTERSECTION
- CLOSURE OF SIDEWALK ALLOWED TO BUILD EACH SUBSTAGE. SIGNING OF CROSSWALK CLOSURES REQUIRED

TRAFFIC CONTROL PHASE LEGEND

WORK ZONE



PROJECT NO: 2718-04-71	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL OVERVIEW - STAGE 4	SHEET 170	E

FILE NAME : I:\24\WAUKESHA CITY OF\240336.12 ST PAUL AVE TTC STAGING\C3D\SHEETSPLAN\026040-S04 AYRES.DWG
LAYOUT NAME - 026040-s04

PLOT DATE : 7/13/2021 2:18 PM PLOT BY : ROWELL, ANDREW PLOT NAME : PLOT SCALE : 1 IN:250 FT

WISDOT/CADDS SHEET 42

TRAFFIC CONTROL STAGE NOTES:

1. STAGE 4A AS SHOWN ASSUMES W. ST. PAUL AVENUE IS CLOSED TO ONE LANE OF TRAFFIC NORTHBOUND USING THE SOUTHBOUND LANES.
2. SEE STAGE 1B OR 1C FOR DETAILS FOR W. ST. PAUL AVENUE.
3. MAINTAIN ALL DRIVEWAYS AND SIDEWALKS OUTSIDE OF THE IMMEDIATE WORK ZONE.

2

2

MATCHLINE STA. 112+00

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/ EXPRESSWAY

PREP FOR STAGE 4B PAVING

TEMPORARY CENTERLINE MARKING. 11-FOOT WIDE LANES MINIMUM.

MOUNTAIN AVE

W. ST. PAUL AVE

W. NORTH ST

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, FULL LANE SHIFT NON-FREEWAY/ EXPRESSWAY"

DO NOT INSTALL CURB. TEMPORARY PAVEMENT NEEDED FOR LANE WIDTH IN NEXT STAGE

PAVING EXISTING EASTBOUND LANES OF W. ST. PAUL AVENUE AND PAVING SOUTHBOUND LANES OF WISCONSIN AVENUE WORK ZONE

TEMPORARY CENTERLINE MARKING. 11-FOOT WIDE LANES MINIMUM.

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, LANE SHIFT NON-FREEWAY/ EXPRESSWAY"

EXISTING 4-WAY STOP TO REMAIN

WISCONSIN AVE

R4-7 24"X30"

STOP R1-1 30"X30" ALL WAY R1-3P 18"X6"

SIDEWALK CLOSED R9-9 24"X12"

SIDEWALK CLOSED TO STOP HERE R9-10 24"X12"

LANE CLOSED R11-2L 48"X30" TYPE III BARRICADE

202 302 402

101 102 103 104 105 106 108 109 110 111

LEGEND

TEMPORARY PAVEMENT

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK ZONE
- MB PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 4A	SHEET 171	E

FILE NAME : I:\24\WAUKESHA CITY OF\240336.12 ST PAUL AVE TTC STAGING\C3D\SHEETSPLAN\026040-S4A AYRES.DWG
LAYOUT NAME - 026040-s4A

PLOT DATE : 7/13/2021 2:19 PM PLOT BY : ROWELL, ANDREW PLOT NAME :

WISDOT/CADDS SHEET 42

TRAFFIC CONTROL STAGE NOTES:

1. STAGE 4B AS SHOWN ASSUMES W. ST. PAUL AVENUE PAVEMENT IS CLOSED TO ONE LANE OF TRAFFIC NORTHBOUND USING THE NORTHBOUND LANES.
2. SEE STAGE 1B OR 1C FOR DETAILS FOR W. ST. PAUL AVENUE.
3. MAINTAIN ALL DRIVEWAYS AND SIDEWALKS OUTSIDE OF THE IMMEDIATE WORK ZONE.

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/ EXPRESSWAY

PAVING EXISTING WESTERLY LANE OF W. NORTH ST. AND THE NORTHWEST QUADRANT OF THE INTERSECTION WORK ZONE

MAINTAIN ACCESS TO DRIVEWAY

MAINTAIN 1 OF 2 DRIVEWAY OPENINGS AT ALL TIMES

PREP FOR STAGE 4C PAVING

TEMPORARY PAVEMENT FOR LANE WIDTH

TEMPORARY CENTERLINE MARKING. 11-FOOT WIDE LANES MINIMUM.

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, LANE SHIFT NON-FREEWAY/ EXPRESSWAY"

EXISTING 4-WAY STOP TO REMAIN

W. ST. PAUL AVE

MOUNTAIN AVE

W. NORTH ST

WISCONSIN AVE

MATCHLINE STA. 112+00

R4-7 24"X30"

SIDEWALK CLOSED R9-9 24"X12"

STOP R1-1 30"X30" ALL WAY R1-3P 18"X6"

R11-2L 48"X 30" LANE CLOSED TYPE III BARRICADE

202 302 304

101 102 103 104 105 106 108 109 110 111

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK ZONE
- MB PORTABLE CHANGEABLE MESSAGE BOARD

LEGEND

TEMPORARY PAVEMENT

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 4B	SHEET 172 E

FILE NAME : I:\24\WAUKESHA CITY OF\240336.12 ST PAUL AVE TTC STAGING\C3D\SHEETSPLAN\026040-S4B AYRES.DWG
LAYOUT NAME - 026042-s4B

PLOT DATE : 7/13/2021 2:19 PM PLOT BY : ROWELL, ANDREW PLOT NAME :

WISDOT/CADDS SHEET 42

TRAFFIC CONTROL STAGE NOTES:

1. STAGE 4C AS SHOWN ASSUMES W. ST. PAUL AVENUE IS CLOSED TO ONE LANE OF TRAFFIC NORTHBOUND USING NORTHBOUND LANES.
2. SEE STAGE 1B OR 1C FOR DETAILS FOR W. ST. PAUL AVENUE.
3. MAINTAIN ALL DRIVEWAYS AND SIDEWALKS OUTSIDE OF THE IMMEDIATE WORK ZONE.

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/ EXPRESSWAY

W. NORTH ST

PAVING WESTBOUND LANES AND EASTBOUND W. ST. PAUL AVENUE WORK ZONE

PAVING REMAINING LANES OF W. NORTH ST. WORK ZONE

MAINTAIN ACCESS TO DRIVEWAY

MAINTAIN 1 OF 2 DRIVEWAY OPENINGS AT ALL TIMES

MOUNTAIN AVE

W. ST. PAUL AVE

W. ST. PAUL AVE

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, LANE SHIFT NON-FREEWAY/ EXPRESSWAY"

TEMPORARY PAVEMENT FOR LANE WIDTH

TEMPORARY CENTERLINE MARKING. 11-FOOT WIDE LANES MINIMUM.

PREP FOR STAGE 4D PAVING

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, LANE SHIFT NON-FREEWAY/ EXPRESSWAY"

EXISTING 4-WAY STOP TO REMAIN

WISCONSIN AVE

MATCHLINE STA. 112+00

R4-7 24"X30"
SIDEWALK CLOSED R9-9 24"X12"
R11-2L 48" X 30" LANE CLOSED TYPE III BARRICADE
STOP R1-1 30"X30" ALL WAY R1-3P 18"X6"

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK ZONE
- MB PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 4C	SHEET 173	E

FILE NAME : I:\24\WAUKESHA CITY OF\240336.12 ST PAUL AVE TTC STAGING\C3D\SHEETSPLAN\026040-S4C AYRES.DWG
LAYOUT NAME - 026043-s4C
PLOT DATE : 7/13/2021 2:20 PM PLOT BY : ROWELL, ANDREW PLOT NAME :

WISDOT/CADDS SHEET 42

TRAFFIC CONTROL STAGE NOTES:

1. STAGE 4D AS SHOWN ASSUMES W. ST. PAUL AVENUE IS CLOSED TO ONE LANE OF TRAFFIC NORTHBOUND USING THE SOUTHBOUND LANES..
2. SEE STAGE 1B OR 1C FOR DETAILS FOR W. ST. PAUL AVENUE.
3. MAINTAIN ALL DRIVEWAYS AND SIDEWALKS OUTSIDE OF THE IMMEDIATE WORK ZONE.

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/ EXPRESSWAY

R11-2L 48" X 30" LANE CLOSED TYPE III BARRICADE

W. NORTH ST

STOP R1-1 30"X30" ALL WAY R1-3P 18"X6"

MAINTAIN 1 OF 2 DRIVEWAY OPENINGS AT ALL TIMES

SIDEWALK CLOSED USE OTHER SIDE R9-10 24"X12"

MOUNTAIN AVE

202

W. ST. PAUL AVE

101 102 103 104 105 106 108 109 110 111

SIDEWALK CLOSED R9-9 24"X12"

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, LANE SHIFT NON-FREEWAY/ EXPRESSWAY"

SIDEWALK CLOSED USE OTHER SIDE R9-10 24"X12"

STOP R1-1 30"X30" ALL WAY R1-3P 18"X6"

PAVE REMAINING WISCONSIN AVENUE LANES AND SOUTHEAST QUADRANT OF INTERSECTION

SIDEWALK CLOSED R9-9 24"X12"

30'

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, LANE SHIFT NON-FREEWAY/ EXPRESSWAY"

EXISTING 4-WAY STOP TO REMAIN

WISCONSIN AVE

MATCHLINE STA. 112+00

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK ZONE
- MB PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 4D	SHEET 174	E

FILE NAME : I:\24\WAUKESHA CITY OF\240336.12 ST PAUL AVE TTC STAGING\C3D\SHEETSPLAN\026040-S4D AYRES.DWG
LAYOUT NAME - 026044-s4D

PLOT DATE : 7/13/2021 2:20 PM PLOT BY : ROWELL, ANDREW PLOT NAME :

WISDOT/CADDS SHEET 42

2718-04-71

Line	Item	Item Description	Unit	Total	Qty
0002	204.0100	Removing Concrete Pavement	SY	16,725.000	16,725.000
0004	204.0110	Removing Asphaltic Surface	SY	2,486.000	2,486.000
0006	204.0150	Removing Curb & Gutter	LF	3,406.000	3,406.000
0008	204.0155	Removing Concrete Sidewalk	SY	3,354.000	3,354.000
0010	204.0195	Removing Concrete Bases	EACH	49.000	49.000
0012	204.0210	Removing Manholes	EACH	19.000	19.000
0014	204.0220	Removing Inlets	EACH	38.000	38.000
0016	204.0245	Removing Storm Sewer (size) 01. 8-Inch	LF	125.000	125.000
0018	204.0245	Removing Storm Sewer (size) 02. 10-Inch	LF	17.000	17.000
0020	204.0245	Removing Storm Sewer (size) 03. 12-Inch	LF	1,789.000	1,789.000
0022	204.0245	Removing Storm Sewer (size) 04. 15-Inch	LF	293.000	293.000
0024	204.0245	Removing Storm Sewer (size) 05. 18-Inch	LF	240.000	240.000
0026	204.0245	Removing Storm Sewer (size) 06. 21-Inch	LF	94.000	94.000
0028	204.0245	Removing Storm Sewer (size) 07. 24-Inch	LF	172.000	172.000
0030	204.0245	Removing Storm Sewer (size) 08. 30-Inch	LF	500.000	500.000
0032	204.9060.S	Removing (item description) 01. Monotube Concrete Bases	EACH	4.000	4.000
0034	204.9060.S	Removing (item description) 02. Sanitary Sewer Manholes	EACH	8.000	8.000
0036	204.9060.S	Removing (item description) 03. Existing Traffic Signal W St Paul & Wisconsin	EACH	1.000	1.000
0038	204.9060.S	Removing (item description) 04. Existing Traffic Signal W St Paul & Madison	EACH	1.000	1.000
0040	204.9090.S	Removing (item description) 01. Sanitary Sewer 6-inch	LF	41.000	41.000
0042	204.9090.S	Removing (item description) 02. Sanitary Sewer 8-inch	LF	25.000	25.000
0044	204.9090.S	Removing (item description) 03. Sanitary Sewer 10-inch	LF	242.000	242.000
0046	204.9090.S	Removing (item description) 04. Sanitary Sewer 24-inch	LF	1,017.000	1,017.000
0048	205.0100	Excavation Common	CY	16,599.000	16,599.000
0050	205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON	1,600.000	1,600.000
0052	209.2500	Backfill Granular Grade 2	TON	2,281.000	2,281.000
0054	213.0100	Finishing Roadway (project) 01. 2718-04-71	EACH	1.000	1.000
0056	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	8,956.000	8,956.000
0058	305.0130	Base Aggregate Dense 3-Inch	TON	1,900.000	1,900.000
0060	415.0095	Concrete Pavement 9 1/2-Inch	SY	15,635.000	15,635.000
0062	415.0410	Concrete Pavement Approach Slab	SY	380.000	380.000
0064	415.4100	Concrete Pavement Joint Filling	SY	15,635.000	15,635.000
0066	416.0170	Concrete Driveway 7-Inch	SY	5,225.000	5,225.000
0068	416.0180	Concrete Driveway 8-Inch	SY	835.000	835.000
0070	416.0620	Drilled Dowel Bars	EACH	86.000	86.000
0072	455.0605	Tack Coat	GAL	86.000	86.000
0074	460.2000	Incentive Density HMA Pavement	DOL	488.000	488.000
0076	460.5223	HMA Pavement 3 LT 58-28 S	TON	291.000	291.000
0078	460.5225	HMA Pavement 5 LT 58-28 S	TON	197.000	197.000
0080	465.0125	Asphaltic Surface Temporary	TON	580.000	580.000
0082	520.8000	Concrete Collars for Pipe	EACH	18.000	18.000
0084	601.0407	Concrete Curb & Gutter 18-Inch Type D	LF	62.000	62.000
0086	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	3,600.000	3,600.000
0088	601.0600	Concrete Curb Pedestrian	LF	138.000	138.000
0090	602.0405	Concrete Sidewalk 4-Inch	SF	28,515.000	28,515.000
0092	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	244.000	244.000
0094	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	119.000	119.000
0096	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	170.000	170.000
0098	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	31.000	31.000

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Line	Item	Item Description	Unit	Total	Qty
0100	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	857.000	857.000
0102	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	619.000	619.000
0104	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	375.000	375.000
0106	608.0421	Storm Sewer Pipe Reinforced Concrete Class IV 21-Inch	LF	6.000	6.000
0108	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	77.000	77.000
0110	608.2419	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	LF	238.000	238.000
0112	608.2424	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 24x38-Inch	LF	496.000	496.000
0114	608.6012	Storm Sewer Pipe Composite 12-Inch	LF	28.000	28.000
0116	611.1004	Catch Basins 4-FT Diameter	EACH	10.000	10.000
0118	611.1005	Catch Basins 5-FT Diameter	EACH	6.000	6.000
0120	611.1006	Catch Basins 6-FT Diameter	EACH	3.000	3.000
0122	611.1230	Catch Basins 2x3-FT	EACH	25.000	25.000
0124	611.2004	Manholes 4-FT Diameter	EACH	3.000	3.000
0126	611.2005	Manholes 5-FT Diameter	EACH	6.000	6.000
0128	611.2006	Manholes 6-FT Diameter	EACH	3.000	3.000
0130	611.2007	Manholes 7-FT Diameter	EACH	1.000	1.000
0132	611.8105	Adjusting Catch Basin Covers	EACH	2.000	2.000
0134	611.8110	Adjusting Manhole Covers	EACH	4.000	4.000
0136	619.1000	Mobilization	EACH	1.000	1.000
0138	623.0200	Dust Control Surface Treatment	SY	16,000.000	16,000.000
0140	624.0100	Water	MGAL	8,000.000	8,000.000
0142	625.0100	Topsoil	SY	3,370.000	3,370.000
0144	627.0200	Mulching	SY	91.000	91.000
0146	628.1504	Silt Fence	LF	957.000	957.000
0148	628.1520	Silt Fence Maintenance	LF	957.000	957.000
0150	628.1905	Mobilizations Erosion Control	EACH	21.000	21.000
0152	628.1910	Mobilizations Emergency Erosion Control	EACH	14.000	14.000
0154	628.7005	Inlet Protection Type A	EACH	43.000	43.000
0156	628.7015	Inlet Protection Type C	EACH	70.000	70.000
0158	628.7020	Inlet Protection Type D	EACH	23.000	23.000
0160	628.7560	Tracking Pads	EACH	8.000	8.000
0162	631.0300	Sod Water	MGAL	103.000	103.000
0164	631.1000	Sod Lawn	SY	3,370.000	3,370.000
0166	634.0816	Posts Tubular Steel 2x2-Inch X 16-FT	EACH	24.000	24.000
0168	637.2210	Signs Type II Reflective H	SF	313.250	313.250
0170	637.2215	Signs Type II Reflective H Folding	SF	50.000	50.000
0172	637.2230	Signs Type II Reflective F	SF	27.000	27.000
0174	638.2102	Moving Signs Type II	EACH	13.000	13.000
0176	638.2602	Removing Signs Type II	EACH	88.000	88.000
0178	638.3000	Removing Small Sign Supports	EACH	18.000	18.000
0180	642.5201	Field Office Type C	EACH	1.000	1.000
0182	643.0300	Traffic Control Drums	DAY	26,625.000	26,625.000
0184	643.0420	Traffic Control Barricades Type III	DAY	5,925.000	5,925.000
0186	643.0705	Traffic Control Warning Lights Type A	DAY	11,850.000	11,850.000
0188	643.0715	Traffic Control Warning Lights Type C	DAY	5,050.000	5,050.000
0190	643.0800	Traffic Control Arrow Boards	DAY	95.000	95.000
0192	643.0900	Traffic Control Signs	DAY	11,070.000	11,070.000
0194	643.0920	Traffic Control Covering Signs Type II	EACH	4.000	4.000
0196	643.1000	Traffic Control Signs Fixed Message	SF	20.000	20.000

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Line	Item	Item Description	Unit	Total	Qty
0198	643.1050	Traffic Control Signs PCMS	DAY	56.000	56.000
0200	643.5000	Traffic Control	EACH	1.000	1.000
0202	644.1601	Temporary Pedestrian Curb Ramp	DAY	25.000	25.000
0204	645.0220	Geogrid Type SR	SY	2,000.000	2,000.000
0206	646.1020	Marking Line Epoxy 4-Inch	LF	8,255.000	8,255.000
0208	646.3020	Marking Line Epoxy 8-Inch	LF	2,778.000	2,778.000
0210	646.5020	Marking Arrow Epoxy	EACH	27.000	27.000
0212	646.5120	Marking Word Epoxy	EACH	3.000	3.000
0214	646.5220	Marking Symbol Epoxy	EACH	7.000	7.000
0216	646.6120	Marking Stop Line Epoxy 18-Inch	LF	307.000	307.000
0218	646.7120	Marking Diagonal Epoxy 12-Inch	LF	335.000	335.000
0220	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	1,095.000	1,095.000
0222	646.8220	Marking Island Nose Epoxy	EACH	2.000	2.000
0224	646.8320	Marking Parking Stall Epoxy	LF	205.000	205.000
0226	646.9000	Marking Removal Line 4-Inch	LF	300.000	300.000
0228	646.9300	Marking Removal Special Marking	EACH	13.000	13.000
0230	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	4,000.000	4,000.000
0232	650.4000	Construction Staking Storm Sewer	EACH	60.000	60.000
0234	650.4500	Construction Staking Subgrade	LF	3,250.000	3,250.000
0236	650.5000	Construction Staking Base	LF	3,250.000	3,250.000
0238	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	62.000	62.000
0240	650.7000	Construction Staking Concrete Pavement	LF	3,250.000	3,250.000
0242	650.8500	Construction Staking Electrical Installations (project) 01. 2718-04-71	LS	1.000	1.000
0244	650.9000	Construction Staking Curb Ramps	EACH	24.000	24.000
0246	650.9910	Construction Staking Supplemental Control (project) 01. 2718-04-71	LS	1.000	1.000
0248	650.9920	Construction Staking Slope Stakes	LF	3,250.000	3,250.000
0250	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	1,969.000	1,969.000
0252	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	1,837.000	1,837.000
0254	653.0135	Pull Boxes Steel 24x36-Inch	EACH	35.000	35.000
0256	653.0140	Pull Boxes Steel 24x42-Inch	EACH	17.000	17.000
0258	653.0905	Removing Pull Boxes	EACH	64.000	64.000
0260	654.0101	Concrete Bases Type 1	EACH	19.000	19.000
0262	654.0110	Concrete Bases Type 10	EACH	8.000	8.000
0264	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	2.000	2.000
0266	654.0230	Concrete Control Cabinet Bases Type L30	EACH	1.000	1.000
0268	655.0240	Cable Traffic Signal 7-14 AWG	LF	2,474.000	2,474.000
0270	655.0260	Cable Traffic Signal 12-14 AWG	LF	4,456.000	4,456.000
0272	655.0320	Cable Type UF 2-10 AWG Grounded	LF	1,087.000	1,087.000
0274	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	9,810.000	9,810.000
0276	655.0615	Electrical Wire Lighting 10 AWG	LF	4,039.000	4,039.000
0278	655.0625	Electrical Wire Lighting 6 AWG	LF	4,534.000	4,534.000
0280	655.0630	Electrical Wire Lighting 4 AWG	LF	13,664.000	13,664.000
0282	655.0900	Traffic Signal EVP Detector Cable	LF	3,065.000	3,065.000
0284	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. W. St. Paul Ave. & W. North / Wisconsin Ave	LS	1.000	1.000
0286	656.0200	Electrical Service Meter Breaker Pedestal (location) 02. W. St. Paul Ave. & Madison St.	LS	1.000	1.000
0288	656.0400	Electrical Service Main Lugs Only Meter Pedestal (location) 01. 106+09.19	LS	1.000	1.000
0290	657.0100	Pedestal Bases	EACH	19.000	19.000
0292	657.0350	Poles Type 10	EACH	8.000	8.000

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Line	Item	Item Description	Unit	Total	Qty
0294	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	17.000	17.000
0296	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	2.000	2.000
0298	657.0525	Monotube Arms 25-FT	EACH	3.000	3.000
0300	657.0530	Monotube Arms 30-FT	EACH	5.000	5.000
0302	657.0808	Luminaire Arms Steel 8-FT	EACH	8.000	8.000
0304	658.0173	Traffic Signal Face 3S 12-Inch	EACH	26.000	26.000
0306	658.0174	Traffic Signal Face 4S 12-Inch	EACH	6.000	6.000
0308	658.0175	Traffic Signal Face 5S 12-Inch	EACH	2.000	2.000
0310	658.0416	Pedestrian Signal Face 16-Inch	EACH	16.000	16.000
0312	658.5069	Signal Mounting Hardware (location) 01. W. St. Paul Ave. & W. North / Wisconsin Ave	LS	1.000	1.000
0314	658.5069	Signal Mounting Hardware (location) 02. W. St. Paul Ave. & Madison St.	LS	1.000	1.000
0316	671.0112	Conduit HDPE 1-Duct 2-Inch	LF	3,965.000	3,965.000
0318	671.0122	Conduit HDPE 2-Duct 2-Inch	LF	121.000	121.000
0320	674.0300	Remove Cable	LF	5,220.000	5,220.000
0322	678.0006	Install Fiber Optic Cable Outdoor Plant 6-CT	LF	4,196.000	4,196.000
0324	678.0400	Fiber Optic Termination	EACH	7.000	7.000
0326	678.0500	Communication System Testing	LS	1.000	1.000
0328	678.0600	Install Ethernet Switches	EACH	2.000	2.000
0330	690.0150	Sawing Asphalt	LF	619.000	619.000
0332	690.0250	Sawing Concrete	LF	91.000	91.000
0334	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	1,592.000	1,592.000
0336	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	3,000.000	3,000.000
0338	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	4,320.000	4,320.000
0340	SPV.0060	Special 01. Remove and Salvage Existing Street Lighting Unit	EACH	27.000	27.000
0342	SPV.0060	Special 02. Remove and Dispose of Existing Street Light Controller	EACH	1.000	1.000
0344	SPV.0060	Special 03. Lighting Control Cabinet	EACH	1.000	1.000
0346	SPV.0060	Special 04. Install City Furnished Pole & 8-Foot Arm LED Luminaire	EACH	14.000	14.000
0348	SPV.0060	Special 05. Install City Furnished Post Top Pole LED Luminaire	EACH	14.000	14.000
0350	SPV.0060	Special 06. Install City-Furnished Street Light Luminaire on Traffic Signal	EACH	8.000	8.000
0352	SPV.0060	Special 07. Install Existing Fiber Optic Communication Conduit into New Pull Box	EACH	3.000	3.000
0354	SPV.0060	Special 08. Communications Vault 24x36	EACH	12.000	12.000
0356	SPV.0060	Special 09. Traffic Signal Controller Programming W St Paul Ave & Wisconsin Ave	EACH	1.000	1.000
0358	SPV.0060	Special 10. Traffic Signal Controller Programming W St Paul Ave & Madison St	EACH	1.000	1.000
0360	SPV.0060	Special 11. Abandoning Sanitary Sewer Manholes	EACH	4.000	4.000
0362	SPV.0060	Special 12. Adjusting Sanitary Sewer Manholes	EACH	11.000	11.000
0364	SPV.0060	Special 13. Sanitary Manhole 48-Inch	EACH	3.000	3.000
0366	SPV.0060	Special 14. Sanitary Manhole 72-Inch	EACH	1.000	1.000
0368	SPV.0060	Special 15. Televise Sanitary Lateral	EACH	17.000	17.000
0370	SPV.0060	Special 16. Construction Staking Sanitary Sewer	EACH	27.000	27.000
0372	SPV.0060	Special 17. Construction Staking Fiber Optic	EACH	12.000	12.000
0374	SPV.0060	Special 18. Install Manhole Covers	EACH	17.000	17.000
0376	SPV.0060	Special 19. Install Inlet Covers	EACH	46.000	46.000
0378	SPV.0060	Special 23. Furnish and Install Gate Valve and Valve Box 8-inch	EACH	4.000	4.000
0380	SPV.0060	Special 24. Furnish and Install Gate Valve and Valve Box 12-inch	EACH	9.000	9.000
0382	SPV.0060	Special 25. Furnish and Install Butterfly Valve and Valve Box 16-inch	EACH	2.000	2.000
0384	SPV.0060	Special 26. Reconnect 3/4-inch Copper Water Service Type SL1	EACH	4.000	4.000
0386	SPV.0060	Special 27. Reconnect 4-inch Water Service Type SL2	EACH	1.000	1.000
0388	SPV.0060	Special 28. Reconnect 6-inch Water Service Type SL3	EACH	3.000	3.000
0390	SPV.0060	Special 29. Reconnect 6-inch Water Service Type SL4	EACH	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
0392	SPV.0060	Special 30. Reconnect 8-inch Water Service Type SL5	EACH	1.000	1.000
0394	SPV.0060	Special 31. Reconnect 1-inch Copper Water Service Type SL6	EACH	1.000	1.000
0396	SPV.0060	Special 32. Hydrant Assembly	EACH	5.000	5.000
0398	SPV.0060	Special 33. Abandon Hydrant	EACH	6.000	6.000
0400	SPV.0060	Special 34. Abandon Valve Boxes and Manholes	EACH	13.000	13.000
0402	SPV.0060	Special 35. Remove and Replace Fiber Optic Cable W St Paul & N Prairie Ave	EACH	1.000	1.000
0404	SPV.0060	Special 36. Remove and Replace Fiber Optic Cable W North St & Madison / Delafield St	EACH	1.000	1.000
0406	SPV.0060	Special 37. Remove and Replace Fiber Optic Cable E St Paul & NW Barstow St	EACH	1.000	1.000
0408	SPV.0060	Special 38. Furnish and Install Traffic Signal Controller and Cabinet W St Paul Ave & Wi	EACH	1.000	1.000
0410	SPV.0060	Special 39. Furnish and Install Traffic Signal Controller and Cabinet W St Paul Ave & Ma	EACH	1.000	1.000
0412	SPV.0060	Special 40. Furnish and Install Audible Pedestrian Push Button System W St Paul Ave & Wi	EACH	1.000	1.000
0414	SPV.0060	Special 41. Furnish and Install Audible Pedestrian Push Button System W St Paul Ave & Ma	EACH	1.000	1.000
0416	SPV.0060	Special 42. Furnish and Install Emergency Vehicle Preemption System W St Paul Ave & Wisc	EACH	1.000	1.000
0418	SPV.0060	Special 43. Furnish and Install Emergency Vehicle Preemption System W St Paul Ave & Madi	EACH	1.000	1.000
0420	SPV.0060	Special 44. Relocate Existing Wireless Communication Antenna	EACH	1.000	1.000
0422	SPV.0060	Special 45. Furnish and Install Vehicle Video Detection System W St Paul Ave & Wisconsin	EACH	1.000	1.000
0424	SPV.0060	Special 46. Furnish and Install Vehicle Video Detection System W St Paul Ave & Madison S	EACH	1.000	1.000
0426	SPV.0060	Special 47. Temporary Street Lighting	EACH	1.000	1.000
0428	SPV.0090	Special 01. Remove and Dispose of Existing Wire and Abandon Conduit In Place	LF	4,050.000	4,050.000
0430	SPV.0090	Special 02. Abandoning Storm Sewer	LF	196.000	196.000
0432	SPV.0090	Special 03. Abandoning Sanitary Sewer Pipe	LF	253.000	253.000
0434	SPV.0090	Special 04. CIPP Sanitary Sewer Pipe 8-inch	LF	179.000	179.000
0436	SPV.0090	Special 05. CIPP Sanitary Sewer Pipe 10-inch	LF	612.000	612.000
0438	SPV.0090	Special 06. CIPP Sanitary Sewer Pipe 18-inch	LF	133.000	133.000
0440	SPV.0090	Special 07. CIPP Sanitary Sewer Pipe 24-inch	LF	399.000	399.000
0442	SPV.0090	Special 08. CIPP Sanitary Sewer Pipe 42-inch	LF	1,214.000	1,214.000
0444	SPV.0090	Special 09. CIPP Sanitary Sewer Pipe 48-inch	LF	1,182.000	1,182.000
0446	SPV.0090	Special 10. PVC Sanitary Sewer Pipe 8-inch	LF	296.000	296.000
0448	SPV.0090	Special 11. PVC Sanitary Sewer Pipe 10-inch	LF	12.000	12.000
0450	SPV.0090	Special 12. Sanitary Sewer Lateral Replacement 6-inch	LF	648.000	648.000
0452	SPV.0090	Special 13. Furnish and Install Water Main and Fittings 8-inch	LF	270.000	270.000
0454	SPV.0090	Special 14. Furnish and Install Water Main and Fittings 12-inch	LF	2,055.000	2,055.000
0456	SPV.0090	Special 15. Furnish and Install Water Main and Fittings 16-inch Class 52	LF	490.000	490.000
0458	SPV.0090	Special 16. Clean and Televise Sanitary Sewer	LF	1,075.000	1,075.000
0460	SPV.0090	Special 16. Construction Staking Watermain	LF	2,755.000	2,755.000
0462	SPV.0090	Special 17. Clean and Televise Storm Sewer	LF	5,000.000	5,000.000
0464	SPV.0090	Special 19. Conduit HDPE 1-Duct 3-Inch	LF	1,911.000	1,911.000

REMOVING PAVEMENT

STAGE	ROADWAY	STATION	TO	STATION	204.0100 REMOVING CONCRETE PAVEMENT SY
	PROJECT ID 2718-04-71				
	W ST PAUL AVENUE				
		102+00	-	122+62	11,335
	MOUNTAIN AVENUE				
		202+00	-	202+80	265
	WISCONSIN AVENUE				
		303+03	-	304+54	1,285
	W NORTH STREET				
		400+63	-	402+49	780
	FULLER STREET				
		500+25	-	501+50	430
	MADISON STREET				
		600+15	-	602+63	1,290
		603+41	-	605+60	1,235
	ANN STREET				
		705+00	-	705+36	105
	CONTRACT TOTAL				16,725

REMOVING ASPHALTIC SURFACE

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	204.0110 REMOVING ASPHALTIC SURFACE SY	COMMENT
5	**PROJECT ID 2718-04-71**						
	MAINLINE						
	FULLER STREET						
		500+38	-	501+49		430	
	W. ST PAUL AVENUE						
		107+93.49	-	108+21.13	LT	65	
		110+21.74	-	11054.01	LT	70	
		110+45.63	-	110+74.47	RT	26	
		111+89.29	-	112+13.28	LT	27	
		112+63.01	-	112+88.03	LT	28	
		115+57.25	-	119+89.28	RT	1,160	
		116+44.54	-	116+68.32	LT	16	
		117+15.83	-	117+39.74	LT	14	
		121+08.91	-	121+23.19	LT	8	
		121+55.02	-	121+71.01	LT	10	
		121+90.98	-	122+22.25	LT	18	
	WISCONSIN AVENUE						
		304+11.15	-	304+35.00	RT	14	
	MADISON STREET						
		601+24.80	-	601+60.61	RT	20	
		604+02.75	-	604+28.55	RT	15	
		604+68.90	-	605+02.60	RT	20	
		600+50	-	602+50	LT	115	
	CONTRACT TOTAL					2,486	

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

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REMOVING CURB & GUTTER

STAGE	ROADWAY	FROM STATION	FROM OFFSET	TO STATION	TO OFFSET	204.0150 REMOVING CURB & GUTTER LF
2	**PROJECT ID 2718-04-71**					
	W ST PAUL AVENUE					
		102+00	RT	104+65	RT	265
		102+00	LT	102+71	LT	34
		103+21	LT	104+65	LT	144
		107+65	RT	119+35	RT	1,170
		107+65	LT	113+66	LT	601
		115+88	LT	119+35	LT	347
		120+80	RT	122+61	RT	181
		120+80	LT	122+61	LT	181
	MOUNTAIN AVENUE					
		202+00	RT	202+48	RT	50
		202+00	LT	202+80	LT	107
	FULLER STREET					
		500+38	RT	501+50	RT	112
		500+30	LT	501+49	LT	120
	ANN STREET					
		705+00	RT	705+53	RT	52
		705+00	LT	705+40	LT	42
CONTRACT TOTAL						3,406

REMOVING SIDEWALK

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	204.0155 REMOVING CONCRETE SIDEWALK SY
	PROJECT ID 2718-04-71					
	W. ST PAUL AVENUE					
		102+00	-	105+90	RT	285
		102+00	-	102+70	LT	38
		103+13	-	106+13	LT	165
		107+00	-	109+73	RT	172
		106+88	-	113+67	LT	548
		114+11	-	119+65	LT	375
		120+63	-	122+61	RT	125
		120+41	-	122+61	LT	172
	MOUNTAIN AVENUE					
		202+00	-	202+45	RT	34
	WISCONSIN AVENUE					
		302+94	-	304+91	RT	138
		303+21	-	304+53	LT	125
	W NORTH STREET					
		400+37	-	402+49	RT	110
		400+37	-	402+49	LT	130
	FULLER STREET					
		500+35	-	501+50	RT	68
		500+33	-	501+49	LT	68
	MADISON STREET					
		600+05	-	602+60	RT	205
		600+26	-	602+90	LT	212
		603+21	-	605+60	RT	182
		603+62	-	604+79	LT	90
		605+25	-	605+60	LT	32
	ANN STREET					
		705+00	-	705+54	RT	50
		705+00	-	705+31	LT	30
CONTRACT TOTAL						3,354

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ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

SAWING

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	COMMENTS
	PROJECT ID 2718-04-71							
	W. ST PAUL AVENUE							
		WEST LIMITS				--	50	
		EAST LIMITS				--	41	
		107+93.49	-	108+21.13	LT	28	--	DRIVEWAY MATCH
		110+21.74	-	11054.01	LT	33	--	DRIVEWAY MATCH
		110+45.63	-	110+74.47	RT	29	--	DRIVEWAY MATCH
		111+89.29	-	112+13.28	LT	24	--	DRIVEWAY MATCH
		112+63.01	-	112+88.03	LT	25	--	DRIVEWAY MATCH
		115+57.25	-	119+89.28	RT	432	--	DRIVEWAY MATCH
		116+44.54	-	116+68.32	LT	24	--	DRIVEWAY MATCH
		117+15.83	-	117+39.74	LT	24	--	DRIVEWAY MATCH
		121+08.91	-	121+23.19	LT	14	--	DRIVEWAY MATCH
		121+55.02	-	121+71.01	LT	16	--	DRIVEWAY MATCH
		121+90.98	-	122+22.25	LT	31	--	DRIVEWAY MATCH
	MOUNTAIN AVENUE							
		WEST LIMITS				25		
	WISCONSIN AVENUE							
		EAST LIMITS					74	
		304+11.15	-	304+35.00	RT	24		DRIVEWAY MATCH
	W NORTH STREET							
		NORTH LIMITS					38	
	FULLER STREET	NORHT LIMITS				34		
	MADISON STREET							
		EAST LIMITS					45	
		WEST LIMITS					48	
		601+24.80	-	601+60.61	RT	32		DRIVEWAY MATCH
		604+02.75	-	604+28.55	RT	26		DRIVEWAY MATCH
		604+68.90	-	605+02.60	RT	34		DRIVEWAY MATCH
	ANN STREET							
		WEST LIMITS				26		
	CONTRACT TOTAL					619	91	

MOBILIZATION

STAGE	LOCATION	619.1000 MOBILIZATION EACH
ALL	**PROJECT ID 2718-04-71**	1
	CONTRACT TOTAL	1

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

SURVEY PROJECT

STAGE	LOCATION	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	650.7000 CONSTRUCTION STAKING PAVEMENT LF	650.8500 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS LS
ALL	**PROJECT**	60	3250	3250	62	3250	1
	CONTRACT TOTAL	60	3,250	3,250	62	3,250	1

SURVEY PROJECT

LOCATION	650.9000 CONSTRUCTION STAKING CURB RAMPS EACH	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL LS	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
PROJECT	24	1	3250
CONTRACT TOTAL	24	1	3,250

SURVEY PROJECT

CATEGORY 0020 SPV.0060.16 CONSTRUCTION STAKING SANITARY SEWER EACH	CATEGORY 0020 SPV.0060.17 CONSTRUCTION STAKING FIBER OPTIC EACH	CATEGORY 0030 SPV.0090.18 CONSTRUCTION STAKING WATERMAIN LF
27	12	2755
27	12	2,755

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

BASE AGGREGATE ITEMS

STAGE	ROADWAY	STATION	TO	STATION	* 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	305.0130 BASE AGGREGATE DENSE 3-INCH TON
1	**PROJECT ID 2718-04-71**					
	W. ST PAUL AVENUE					
		102+00	-	122+61	4,900	1,000
	MOUNTAIN AVENUE					
		202+00	-	202+89	150	50
	WISCONSIN AVENUE					
		303+03	-	304+88	720	200
	W. NORTH STREET					
		400+20	-	402+48	550	100
	FULLER STREET					
		500+20	-	501+50	250	100
	MADISON STREET					
		600+15	-	602+81	675	200
		603+25	-	605+60	620	200
	ANN STREET					
		705+00	-	705+56	100	50
CONTRACT TOTAL					7,965	1,900

CONCRETE PAVEMENT ITEMS

STAGE	ROADWAY	STATION	TO	STATION	415.0095 CONCRETE PAVEMENT 9 1/2-INCH SY	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY	415.4100 CONCRETE PAVEMENT JOINT FILLING SY
2	**PROJECT ID 2718-04-71**						
	W. ST PAUL AVENUE						
		102+00	-	122+62	9,900	--	9,900
					--	--	
	MOUNTAIN AVENUE				--	--	
		202+00	-	202+90	260	--	260
					--	--	
	WISCONSIN AVENUE				--	--	
		303+00	-	303+34	--	260	
		303+34	-	304+89	1,200	--	1,200
	W NORTH STREET						
		400+20	-	402+49	1,100	--	1,100
	FULLER STREET					--	
		500+20	-	501+50	510	--	510
	MADISON STREET				--	--	
		600+15	-	600+40		120	
		600+40	-	602+82	1,225		1,225
		603+25	-	605+60	1,250		1,250
	ANN STREET						
		705+00	-	705+56	190		190
CONTRACT TOTAL					15,635	380	15,635

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

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CONCRETE SIDEWALK

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	* 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF
2	**PROJECT ID 2718-04-71**							
	W. ST PAUL AVENUE							
		102+00	-	106+00	RT	75	2,630	12
		102+00	-	102+75	LT	25	890	10
		103+00	-	106+00	LT	50	1800	20
		107+00	-	120+00	RT	170	6100	30
		107+00	-	113+75	LT	85	3,000	20
		115+00	-	120+00	LT	75	2,570	10
		120+50	-	122+62	RT	30	1,035	10
		120+50	-	122+62	LT	30	950	10
	WISCONSIN AVENUE							
		303+00	-	304+75	RT	20	730	10
		303+00	-	304+75	LT	25	900	12
	W. NORTH STREET							
		400+25	-	402+50	RT	25	900	10
		400+25	-	402+50	LT	35	1,170	10
	FULLER STREET							
		500+25	-	501+50	RT	20	650	10
		500+25	-	501+50	LT	20	680	10
	MADISON STREET							
		600+25	-	602+75	RT	35	1,120	10
		600+25	-	602+75	LT	35	1,240	10
		603+25	-	605+60	RT	25	875	10
		603+25	-	605+60	LT	25	875	30
	ANN STREET							
		705+00	-	705+50	RT	8	235	-
		705+00	-	705+50	LT	5	165	-
	CONTRACT TOTAL					818	28,515	244

DRIVEWAYS

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	* 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	416.017 CONCRETE DRIVEWAY 7-INCH SY	416.018 CONCRETE DRIVEWAY 8-INCH SY
2	**PROJECT ID 2718-04-71**							
	W ST PAUL AVENUE							
		107+93.49	-	108+21.13	LT	7	235	
		110+21.74	-	110+54.01	LT	8	280	
		110+45.63	-	110+74.47	RT	8	285	
		111+89.29	-	112+13.28	LT	6	205	
		112+63.01	-	112+88.03	LT	6	215	
		114+25	-	115+10	LT	25		835
		115+57.25	-	119+89.28	RT	9	310	
		115+75	-	115+95		11	380	
		116+44.54	-	116+68.32	LT	10	335	
		117+15.83	-	117+39.74	LT	10	335	
		117+55	-	117+87	RT	9	310	
		121+08.91	-	121+23.19	LT	5	170	
		121+55.02	-	121+71.01	LT	5	170	
		121+90.98	-	122+22.25	LT	9	310	
	WISCONSIN AVENUE							
		303+66	-	303+86	LT	10	365	
		304+11	-	304+35	RT	5	190	
	MADISON STREET							
		604+24	-	604+61	RT	8	270	
		604+70	-	604+87	LT	4	160	
		604+02	-	604+28	RT	8	310	
		604+68	-	605+02	RT	10	390	
	CONTRACT TOTAL					173	5,225	835

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

3

DRILLED BAR ITEMS

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	416.0620 DRILLED DOWEL BARS EACH
2	**PROJECT ID 2718-04-71**					
	W. ST PAUL AVENUE					
				EAST LIMIT		40
	MADISON STREET					
				WEST LIMIT		46
	CONTRACT TOTAL					86

FINISHING ROADWAY 2718-04-71

STAGE	LOCATION	213.0100 FINISHING ROADWAY 2718-04- EACH
ALL	PROJECT	1
	CONTRACT TOTAL	1

FIELD OFFICE TYPE C

STAGE	LOCATION	642.5201 FIELD OFFICE TYPE C EACH
ALL	PROJECT	1
	CONTRACT TOTAL	1

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

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ASPHALTIC ITEMS

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	455.0605 TACK COAT GAL	460.5223 HMA PAVEMENT 3LT 58-28S TON	460.5225 HMA PAVEMENT 5LT 58-28S TON	COMMENTS
1	**PROJECT ID 2718-04-71**								
	MAINLINE								
	W. ST PAUL AVENUE								
		107+93.49	-	108+21.13	LT	4	12	8	DRIVEWAY
		110+21.74	-	110+54.01	LT	4	12	8	DRIVEWAY
		110+45.63	-	110+74.47	RT	1	5	3	DRIVEWAY
		111+89.29	-	112+13.28	LT	2	5	3	DRIVEWAY
		112+63.01	-	112+88.03	LT	2	5	3	DRIVEWAY
		115+57.25	-	119+89.28	RT	58	205	140	PARKING LOT
		116+44.54	-	116+68.32	LT	1	3	2	DRIVEWAY
		117+15.83	-	117+39.74	LT	1	3	2	DRIVEWAY
		121+08.91	-	121+23.19	LT	1	2	1	DRIVEWAY
		121+55.02	-	121+71.01	LT	1	2	1	DRIVEWAY
2		121+90.98	-	122+22.25	LT	1	3	2	DRIVEWAY
	WISCONSIN AVENUE								
		304+11.15	-	304+35.00	RT	1	3	2	DRIVEWAY
	MADISON STREET								
		601+24.80	-	601+60.61	RT	1	4	3	DRIVEWAY
		604+02.75	-	604+28.55	RT	1	3	2	DRIVEWAY
		604+68.90	-	605+02.60	RT	1	4	3	DRIVEWAY
		600+50	-	602+50	LT	6	20	14	PARKING LOT
	CONTRACT TOTAL					86	291	197	

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

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CONCRETE CURB & GUTTER

STAGE	ROADWAY	STATION	TO	STATION	OFFSET	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A LF	601.0407 CONCRETE CURB & GUTTER 18-INCH TYPE D LF	601.0600 CONCRETE CURB PEDESTRIAN LF
1	**PROJECT ID 2718-04-71**							
	W. ST PAUL AVENUE							
		102+00	-	122+62	LT/RT	3600		--
		108+00	-	108+22	LT		42	
		110+20	-	110+20	LT		20	
		113+50	-	113+70	LT	--		30
		114+05	-	114+20	LT	--		35
		120+30	-	120+55	LT	--		45
	WISCONSIN AVENUE							
		303+00	-	304+75	LT/RT	350		--
	W. NORTH STREET							
		400+25	-	402+50	LT/RT	510		--
	FULLER STREET							
		500+25	-	501+50	LT/RT	280		--
	MADISON STREET							
		600+25	-	602+75	LT/RT	510		--
		603+25	-	605+60	LT/RT	440		--
		604+75	-	604+80	LT			8
		605+33	-	605+50	LT			20
	ANN STREET							
		705+00	-	705+50	LT/RT	135		--
	CONTRACT TOTAL					3,600	62	138

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

3

WATER

STAGE	LOCATION	624.0100 WATER MGAL
ALL	PROJECT	8,000
	CONTRACT TOTAL	8,000

DUST CONTROL SURFACE TREATMENT

STAGE	LOCATION	623.0200 SY
ALL	PROJECT	16,000
	CONTRACT TOTAL	16,000

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

3

PAVEMENT MARKING ITEMS

LOCATION	STATION	TO	STATION	646.1020 MARKING LINE EPOXY 4-INCH 10 FT LINE 20 FT SKIP WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH 10 FT LINE 20 FT SKIP YELLOW LF	646.3020 MARKING LINE EPOXY 8-INCH 3FT LINE 9 FT SKIP WHITE LF	646.3020 MARKING LINE EPOXY 8-INCH 3FT LINE 9 FT SKIP WHITE LF	646.6120 MARKING STOP LINE EPOXY 18-INCH WHITE LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH WHITE LF	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH WHITE LF
PROJECT 2718-04-71										
W. ST PAUL AVENUE										
	102+00	-	106+50	--	--	655	300	27	38	--	110
	106+50	-	114+00	165	--	1,300	175	27	30	65	95
	114+00	-	120+00	460	--	1,100	100	27	30	230	110
	120+00	-	122+62	400	--	--	100	27	30	--	90
				--	--	--	--	--	--	--	--
WISCONSIN AVENUE				--	--	--	--	--	--	--	--
				1270	120	970	910	--	65	40	135
W. NORTH STREET				--	--	--	--	--	--	--	--
				--	--	390	1070	15	30	--	110
FULLER STREET				--	--	--	--	--	--	--	--
				--	--	230	--	--	18	--	80
MADISON STREET				--	--	--	--	--	--	--	--
	600+15	-	603+00	--	140	505	--	--	25	--	100
	603+00	-	605+60	--	140	410	--	--	26	--	110
ANN STREET				--	--	--	--	--	--	--	--
				--	--	--	--	--	15	--	65
				--	--	--	--	--	--	--	--
CONTRACT TOTAL				2,295	400	5,560	2,655	123	307	335	1,095

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

PAVEMENT MARKING ITEMS

LOCATION	STATION	TO	STATION	646.8320 MARKING PARKING STALL EPOXY 4-inch WHITE LF	646.5020 MARKING ARROW EPOXY TYPE 1 WHITE EACH	646.5020 MARKING ARROW EPOXY TYPE 2 WHITE EACH	646.5020 MARKING ARROW EPOXY TYPE 3 WHITE EACH	646.5120 MARKING WORD EPOXY WHITE EACH	646.5220 MARKING SYMBOL BIKE LANE EPOXY WHITE EACH	646.8220 MARKING ISLAND NOSE EPOXY YELLOW EACH
PROJECT 2718-04-71										
W. ST PAUL AVENUE										
	102+00	-	106+50	--	--	4	--	--	--	--
	106+50	-	114+00	205	--	2		1	--	--
	114+00	-	120+00	--	--	2	2	--	--	--
	120+00	-	122+62	--	--	2	--	--	--	--
				--	--	--	--	--	--	--
WISCONSIN AVENUE				--	--	--	--	--	--	--
				--	7	4	--	2	7	2
W. NORTH STREET				--	--	--	--	--	--	--
				--	--	2	2	--	--	--
FULLER STREET				--	--	--	--	--	--	--
				--	--	--	--	--	--	--
MADISON STREET				--	--	--	--	--	--	--
	600+15	-	603+00	--	--	--	--	--	--	--
	603+00	-	605+60	--	--	--	--	--	--	--
ANN STREET				--	--	--	--	--	--	--
				--	--	--	--	--	--	--
				--	--	--	--	--	--	--
CONTRACT TOTAL				205	7	16	4	3	7	2

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

3

3

GEOTEXTILE FABRIC LINER

STAGE	LOCATION	645.0220 GEOGRID TYPE SR SY
ALL	UNDISTRIBUTED	2,000
	CONTRACT TOTAL	2,000

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

3

3

EROSION CONTROL

ROADWAY	STATION	TO	STATION	628.7005 INLET PROTECTION TYPE A EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
W ST PAUL AVE	102+00	-	105+75	7	17	--	350	350	3	2
	105+75	-	108+00	2	4	--	138	138	--	--
	108+00	-	113+50	2	8	11	--	--	3	2
	113+50	-	119+50	8	12	--	--	--	3	2
	119+50	-	122+00	2	7	--	--	--	3	2
MOUNTAIN AVE	202+00	-	202+00	2	3	--	--	--	--	--
E NORTH ST	400+00	-	401+25	3	5	--	151	151	3	2
WISCONSIN AVE	303+00	-	305+00	3	3	--	270	270	3	2
FULLER ST	500+00	-	501+00	4	3	2	--	--	--	--
MADISON ST	601+00	-	606+00	10	8	10	48	48	3	2
	TOTAL			43	70	23	957	957	21	14

EROSION CONTROL (CONT.)

ROADWAY	STATION	TO	STATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	628.7560 TRACKING PADS EACH	631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY
W ST PAUL AVE	102+00	-	106+00	464	--	1	11	464
	107+00	-	113+50	720	--	--	16	720
	113+50	-	119+50	393	25	--	9	393
	119+50	-	122+61	246	--	1	6	246
MOUNTAIN AVE	202+00	-	202+00	17	--	1	1	17
E NORTH ST	400+00	-	402+50	251	31	1	31	251
WISCONSIN AVE	303+00	-	305+00	248	--	1	6	248
FULLER ST	500+00	-	501+00	16	25	1	1	16
MADISON ST	600+25	-	602+50	163	--	1	4	163
	603+50	-	606+00	311	--	1	7	311
UNDISTRIBUTED				540	10	--	12	540
	TOTAL			3,370	91	8	103	3,370

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1) CUT (2)	205.0100 COMMON EXCAVATION (1) EBS EXCAVATION (3)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.25	MASS ORDINATE +/- (14)	WASTE
DIVISION 1										
QR-ANN	705+00/705+55		116	10	22	94	0	0	94	94
QR-FULLER	500+25/501+49.02		263	91	57	206	0	0	206	206
QR-MADISON	600+18.376/605+60		1,573	492	0	1,573	3	4	1,569	1,569
QR-MOUNTAIN	202+00/202+80		134	0	35	99	0	0	99	99
QR-NORTH	400+25/402+48.22		643	235	0	643	0	0	643	643
QR-STPAUL	102+00/122+50		7,557	4,262	783	6,774	20	25	6,749	6,749
QR-WISCONSIN	03+03.348/305+16.688		1,001	222	0	1,001	2	3	999	999
DIVISION 1 SUBTOTAL			11,287	5,312	897	10,390	25	31	10,359	10,359
GRAND TOTAL			11,287	5,312	897	10,390	25	31	10,359	10,359
TOTAL COMMON EXC			16,599							

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN EXCAVATION COMMON.
(3) SALVAGED/UNUSABLE PAVEMENT MATERIAL INCLUDES PAVEMENT, ASPHALT, CURB AND GUTTER AND SIDEWALKS. ASPHALT DRIVEWAYS AND PARKING LOTS WERE ESTIMATED AT 4" DEPTH AND SIDEWALK AT 4" DEPTH
(4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(5) EXPANDED FILL FACTOR = 1.25
(6) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
THE MASS ORDINATE IS = EXCAVATION COMMON-SALVAGED/UNUSABLE PAVEMENT MATERIAL-EXPANDED FILL

EXCAVATION, HAULING, AND DISPOSAL OF PETROLEMUM CONTAMINATED SOIL

STAGE	LOCATION	205.0501.S EXCAVATION, HAULING, AND DISPOSAL OF PETROLEMUM CONTAMINATED SOIL TON
ALL	UNDISTRIBUTED	1,600
	CONTRACT TOTAL	1,600

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

3

3

REMOVING STORM SEWER

ROADWAY	STATION	TO	STATION	204.021 REMOVING MANHOLES EACH	204.022 REMOVING INLETS EACH	204.0245.01 8-INCH LF	204.0245.02 10-INCH LF	204.0245.03 12-INCH LF	204.0245.04 15-INCH LF	204.0245.05 18-INCH LF	204.0245.06 21-INCH LF	204.0245.07 24-INCH LF	204.0245.08 30-INCH LF	209.2500 BACKFILL GRANULAR GRADE 2 TON
						REMOVING STORM SEWER (SIZE)								
W ST PAUL AVE	102+00	-	105+50	5	8	125	--	320	230	--	--	--	--	599
	105+50	-	108+00	--	4	--	--	186	--	--	74	--	--	451
	108+00	-	113+50	2	5	--	--	11	48	44	--	5	500	536
	113+50	-	120+00	2	4	--	--	436	--	--	--	68	--	263
	120+00	-	122+00	3	3	--	--	231	--	--	--	--	--	--
MOUNTAIN AVE	202+00	-	202+00	--	1	--	--	--	--	--	--	--	--	--
E NORTH ST	400+00	-	401+25	1	2	--	--	49	--	89	--	--	--	--
WISCONSIN AVE	303+75	-	305+00	2	--	--	--	--	--	--	--	99	--	--
FULLER ST	500+00	-	501+00	2	2	--	4	46	--	--	20	--	--	--
MADISON ST	600+25	-	602+50	2	5	--	13	103	--	107	--	--	--	235
	603+50	-	606+00	--	4	--	--	407	15	--	--	--	--	197
	TOTAL			19	38	125	17	1,789	293	240	94	172	500	2,281

PIPE ABANDONMENT (STORM SEWER)

ROADWAY	STORM / SANITARY	FROM	TO	SPV.0090.02 ABANDONING STORM SEWER LF
W ST PAUL AVE	STORM	STA 104+47, 71' RT	STA 104+92, 46' RT	51
FULLER ST	STORM	STA 500+39, 23' RT	STA 500+39, 23' RT	5
W ST PAUL AVE	STORM	STA 601+51, 26' LT	STA 600+26, 25' LT	130
	STORM	STA 602+25, 26' RT	STA 602+25, 26' RT	5
	STORM	STA 601+96, 30' RT	STA 601+96, 30' RT	5
			TOTAL	196

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

STORM SEWER PIPES

FROM	-	TO	520.8000 CONCRETE COLLARS FOR PIPE EA	608.0318 PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0415 PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF	608.0418 PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	608.0421 PIPE REINFORCED CONCRETE CLASS IV 21-INCH LF	608.0424 PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	608.2419 STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 19X30-INCH LF	608.2424 STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 24X38-INCH LF	608.6012 STORM SEWER PIPE COMPOSITE 12-INCH LF
CB 6424	-	EXIST MH 1579	1	--	65	--	--	--	--	--	--	--	--	--
CB 6425	-	CB 6424	--	--	--	--	--	--	--	--	23	--	--	--
CB 6426	-	CB 6425	--	--	--	--	50	--	--	--	--	--	--	--
CB 6427	-	MH 2109	--	--	--	--	--	17	--	--	--	--	--	--
CB 6428	-	MH 2109	--	--	--	--	--	30	--	--	--	--	--	--
CB 6429	-	CB 6428	--	--	--	--	--	19	--	--	--	--	--	--
CB 6430	-	CB 6429	--	--	--	--	8	--	--	--	--	--	--	--
CB 6431	-	MH 2110	--	--	--	--	21	--	--	--	--	--	--	--
CB 6432	-	MH 2110	--	--	76	--	--	--	--	--	--	--	--	--
CB 6433	-	CB 6432	--	--	--	--	62	--	--	--	--	--	--	--
CB 6434	-	MH 2111	--	--	--	--	47	--	--	--	--	--	--	--
CB 6435	-	MH 2112	--	--	--	--	50	--	--	--	--	--	--	--
CB 6436	-	MH 2112	--	--	--	--	--	--	39	--	--	--	--	--
CB 6437	-	CB 6436	--	--	--	--	--	48	--	--	--	--	--	--
CB 6438	-	MH 2113	--	--	--	--	23	--	--	--	--	--	--	--
CB 6439	-	CB 6438	--	--	--	--	8	--	--	--	--	--	--	--
CB 6440	-	EXIST PIPE	1	--	--	31	--	--	--	--	--	--	--	--
CB 6441	-	MH 2114	--	--	--	--	23	--	--	--	--	--	--	--
CB 6442	-	MH 2115	--	--	--	--	24	--	--	--	--	--	--	--
CB 6443	-	CB 6442	--	--	--	--	9	--	--	--	--	--	--	--
CB 6444	-	MH 2115	--	--	--	--	--	23	--	--	--	--	--	--
CB 6445	-	CB 6444	--	--	--	--	17	--	--	--	--	--	--	--
CB 6446	-	MH 2116	--	--	--	--	24	--	--	--	--	--	--	--
CB 6447	-	MH 2116	--	--	--	--	23	--	--	--	--	--	--	--
CB 6448	-	MH 2117	--	--	--	--	23	--	--	--	--	--	--	--
CB 6449	-	MH 2117	--	--	--	--	--	--	--	--	--	42	--	--
CB 6450	-	CB 6449	--	--	--	--	--	--	--	--	--	8	--	--
CB 6451	-	CB 6450	--	--	--	--	37	--	--	--	--	--	--	--
CB 6453	-	MH 2118	--	--	--	--	23	--	--	--	--	--	--	--
CB 6454	-	MH 2118	--	--	--	--	--	--	22	--	--	--	--	--
CB 6455	-	CB 6454	--	--	--	--	--	36	--	--	--	--	--	--
CB 6456	-	CB 6455	--	--	--	--	--	45	--	--	--	--	--	--
CB 6457	-	CB 6456	--	--	--	--	--	52	--	--	--	--	--	--
CB 6458	-	EXIST MH 1939	1	47	--	--	--	--	--	--	--	--	--	--
CB 6459	-	CB 6458	--	21	--	--	--	--	--	--	--	--	--	--
CB 6460	-	CB 6459	--	51	--	--	--	--	--	--	--	--	--	--
CB 6461	-	CB 6460	--	--	--	--	17	--	--	--	--	--	--	--
CB 6462	-	MH 2120	--	--	--	--	74	--	--	--	--	--	--	--
CB 6463	-	CB 6462	--	--	--	--	130	--	--	--	--	--	--	--
CB 6464	-	MH 2120	--	--	--	--	--	75	--	--	--	--	--	--
CB 6465	-	CB 6464	--	--	--	--	45	--	--	--	--	--	--	--
CB 6466	-	MH 2121	--	--	--	--	--	28	--	--	--	--	--	--
CB 6467	-	CB 6466	--	--	--	--	45	--	--	--	--	--	--	--
CB 6468	-	MH 2121	--	--	--	--	--	--	123	--	--	--	--	--
CB 6469	-	CB 6468	--	--	--	--	--	98	--	--	--	--	--	--
EXIST PIPE	-	CB 6456	1	--	--	--	4	--	--	--	--	--	--	--
EXIST PIPE	-	CB 6455	1	--	--	--	4	--	--	--	--	--	--	--
EXIST PIPE	-	CB 6441	1	--	--	--	5	--	--	--	--	--	--	--
EXIST PIPE	-	MH 2109	1	--	--	--	24	--	--	--	--	--	--	--

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

STORM SEWER PIPES (CONT.)

FROM	-	TO	520.8000 CONCRETE COLLARS FOR PIPE EA	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0415 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF	608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	608.0421 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 21-INCH LF	608.0424 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	608.2419 STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 19X30-INCH LF	608.2424 STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 24X38-INCH LF	608.6012 STORM SEWER PIPE COMPOSITE 12-INCH LF
EXIST PIPE	-	MH 2110	1	--	--	--	--	--	--	--	--	--	--	--
EXIST PIPE	-	MH 2113	1	--	--	--	8	--	--	--	--	--	--	--
EXIST PIPE	-	CB 6449	1	--	--	--	8	--	--	--	--	--	--	--
EXIST PIPE	-	CB 6464	1	--	--	--	--	--	--	--	--	--	--	8
EXIST PIPE	-	CB 6468	1	--	--	--	--	--	--	--	--	--	--	10
EXIST PIPE	-	CB 6463	1	--	--	--	9	--	--	--	--	--	--	--
EXIST PIPE	-	MH 2119	1	--	--	--	--	--	--	6	--	--	--	--
EXIST PIPE N	-	CB 6457	1	--	--	--	22	--	--	--	--	--	--	--
EXIST PIPE N	-	CB 6469	1	--	--	--	--	--	--	--	--	--	--	10
EXIST PIPE NW	-	CB 6457	1	--	--	--	6	--	--	--	--	--	--	--
EXIST PIPE W	-	CB 6469	1	--	--	--	16	--	--	--	--	--	--	--
MH 2109	-	CB 6425	--	--	--	--	--	--	121	--	--	--	--	--
MH 2111	-	CB 6432	--	--	29	--	--	--	--	--	--	--	--	--
MH 2112	-	MH 2111	--	--	--	--	--	--	--	--	54	--	--	--
MH 2113	-	CB 6437	--	--	--	--	--	29	--	--	--	--	--	--
MH 2114	-	CB 6440	--	--	--	--	--	--	--	--	--	--	24	--
MH 2115	-	MH 2114	--	--	--	--	--	--	--	--	--	--	111	--
MH 2116	-	MH 2115	--	--	--	--	--	--	--	--	--	--	117	--
MH 2117	-	MH 2116	--	--	--	--	--	--	--	--	--	--	244	--
MH 2118	-	MH 2117	--	--	--	--	--	--	--	--	--	181	--	--
MH 2119	-	CB 6450	--	--	--	--	--	--	--	--	--	7	--	--
MH 2120	-	CB 6460	--	--	--	--	--	119	--	--	--	--	--	--
MH 2121	-	CB 6459	--	--	--	--	--	--	70	--	--	--	--	--
		TOTALS	18	119	170	31	857	619	375	6	77	238	496	28

CLEAN AND TELEVISE STORM SEWER

SPV.0090.17

CLEAN AND TELEVISE STORM SEWER

STAGE	LOCATION	LF
ALL	PROJECT	5,000
	CONTRACT TOTAL	5,000

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

STORM SEWER STRUCTURES

STRUCTURE	STATION	OFFSET*	LOCATION	SPV.0060.18 INSTALL MANHOLE COVERS EACH	SPV.0060.19 INSTALL INLET COVERS EACH	611.1004 CATCH BASINS 4-FT DIAMETER EACH	611.1005 CATCH BASINS 5-FT DIAMETER EACH	611.1006 CATCH BASINS 6-FT DIAMETER EACH	611.1230 CATCH BASINS 2X3-FT EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.2007 MANHOLES 7-FT DIAMETER EACH	611.8105 ADJUSTING CATCH BASIN COVERS EACH	611.8110 ADJUSTING MANHOLE COVERS EACH	RIM ELEVATION	INVERT** ELEVATION	DEPTH*** FT
CB 6424	103+97.71	29.86' RT	W ST PAUL AVE	--	1	--	1	--	--	--	--	--	--	--	--	809.65	802.90	5.75
CB 6425	103+75.00	27.82' RT	W ST PAUL AVE	--	1	--	1	--	--	--	--	--	--	--	--	810.20	803.70	5.50
CB 6426	103+75.00	22.50' LT	W ST PAUL AVE	--	1	--	--	--	1	--	--	--	--	--	--	810.74	805.40	4.34
CB 6427	102+55.58	24.21' RT	W ST PAUL AVE	--	1	--	--	--	1	--	--	--	--	--	--	813.16	807.56	4.60
CB 6428	102+55.58	22.50' LT	W ST PAUL AVE	--	1	--	--	--	1	--	--	--	--	--	--	813.73	808.48	4.25
CB 6429	202+29.09	13.50' RT	MOUNTAIN AVE	--	1	--	--	--	1	--	--	--	--	--	--	814.56	808.81	4.75
CB 6430	202+21.06	13.50' RT	MOUNTAIN AVE	--	1	--	--	--	1	--	--	--	--	--	--	814.96	809.26	4.70
CB 6432	304+53.93	22.50' LT	WISCONSIN AVE	--	1	--	1	--	--	--	--	--	--	--	--	807.01	798.24	7.77
CB 6433	304+55.93	39.50' RT	WISCONSIN AVE	--	1	--	--	--	1	--	--	--	--	--	--	806.36	801.20	4.16
CB 6434	105+79.89	33.50' RT	W ST PAUL AVE	--	1	--	--	--	1	--	--	--	--	--	--	807.08	801.51	4.57
CB 6435	105+79.89	22.50' LT	W ST PAUL AVE	--	1	--	--	--	1	--	--	--	--	--	--	806.70	801.20	4.50
CB 6436	400+53.69	22.84' LT	E NORTH ST	--	1	1	--	--	--	--	--	--	--	--	--	806.27	800.15	5.12
CB 6437	400+97.23	22.50' LT	E NORTH ST	--	1	1	--	--	--	--	--	--	--	--	--	807.56	800.88	5.68
CB 6438	401+16.20	20.97' RT	E NORTH ST	--	1	--	--	--	1	--	--	--	--	--	--	807.23	802.10	4.13
CB 6439	401+25.12	20.49' RT	E NORTH ST	--	1	--	--	--	1	--	--	--	--	--	--	807.57	802.43	4.14
CB 6440	108+96.79	23.50' RT	W ST PAUL AVE	--	1	--	1	--	--	--	--	--	--	--	--	802.60	796.01	5.59
CB 6441	108+96.79	22.50' LT	W ST PAUL AVE	--	1	--	--	--	1	--	--	--	--	--	--	802.88	797.29	4.59
CB 6442	110+08	23.5' RT	W ST PAUL AVE	--	1	--	--	--	1	--	--	--	--	--	--	802.04	796.91	4.13
CB 6443	110+16	23.5' RT	W ST PAUL AVE	--	1	--	--	--	1	--	--	--	--	--	--	802.05	797.01	4.04
CB 6444	110+08	22.5' LT	W ST PAUL AVE	--	1	--	--	--	1	--	--	--	--	--	--	802.06	796.78	4.28
CB 6445	110+13	22.5' LT	W ST PAUL AVE	--	1	--	--	--	1	--	--	--	--	--	--	802.07	796.88	4.19
CB 6446	111+25.00	23.50' RT	W ST PAUL AVE	--	1	--	--	--	1	--	--	--	--	--	--	802.48	797.48	4.00
CB 6447	111+25.00	22.50' LT	W ST PAUL AVE	--	1	--	--	--	1	--	--	--	--	--	--	802.51	797.30	4.21
CB 6448	113+69.44	23.49' RT	W ST PAUL AVE	--	1	--	--	--	1	--	--	--	--	--	--	803.71	798.57	4.14
CB 6449	500+40.42	18.50' LT	FULLER ST	--	1	--	--	1	--	--	--	--	--	--	--	803.87	797.90	4.97
CB 6450	500+48.48	18.50' LT	FULLER ST	--	1	1	--	--	--	--	--	--	--	--	--	803.72	798.07	4.65
CB 6451	500+48.48	18.50' RT	FULLER ST	--	1	--	--	--	1	--	--	--	--	--	--	804.21	798.90	4.31
CB 6453	115+50.01	23.50' RT	W ST PAUL AVE	--	1	--	--	--	1	--	--	--	--	--	--	804.94	799.61	4.33
CB 6454	115+50.01	21.50' LT	W ST PAUL AVE	--	1	1	--	--	--	--	--	--	--	--	--	805.34	799.20	5.14
CB 6455	115+86.02	21.50' LT	W ST PAUL AVE	--	1	1	--	--	--	--	--	--	--	--	--	805.45	799.72	4.73
CB 6456	116+30.44	17.50' LT	W ST PAUL AVE	--	1	1	--	--	--	--	--	--	--	--	--	805.65	800.15	4.50
CB 6457	116+82.29	17.50' LT	W ST PAUL AVE	--	1	--	1	--	--	--	--	--	--	--	--	805.94	800.57	4.37
CB 6458	601+75.00	23.50' RT	MADISON ST	--	1	1	--	--	--	--	--	--	--	--	--	809.81	800.93	7.88
CB 6459	601+97.08	23.50' RT	MADISON ST	--	1	--	--	1	--	--	--	--	--	--	--	809.93	801.26	7.67
CB 6460	602+17.08	23.50' LT	MADISON ST	--	1	--	1	--	--	--	--	--	--	--	--	809.56	801.97	6.59
CB 6461	602+00.00	23.50' LT	MADISON ST	--	1	--	--	--	1	--	--	--	--	--	--	809.47	804.00	4.47
CB 6462	604+10.00	24.50' LT	MADISON ST	--	1	--	--	--	1	--	--	--	--	--	--	811.37	804.97	5.40
CB 6463	605+40.00	24.50' LT	MADISON ST	--	1	--	--	--	1	--	--	--	--	--	--	813.19	806.92	5.27
CB 6464	119+10.95	21.50' LT	W ST PAUL AVE	--	1	1	--	--	--	--	--	--	--	--	--	809.57	803.41	5.16
CB 6465	119+10.01	23.50' RT	W ST PAUL AVE	--	1	--	--	--	1	--	--	--	--	--	--	808.96	803.96	4.00
CB 6466	120+77.93	23.80' RT	W ST PAUL AVE	--	1	1	--	--	--	--	--	--	--	--	--	810.72	804.90	4.82
CB 6467	120+66.01	19.50' LT	W ST PAUL AVE	--	1	--	--	--	1	--	--	--	--	--	--	811.17	805.60	4.57
CB 6468	603+90.18	23.50' RT	MADISON ST	--	1	1	--	--	--	--	--	--	--	--	--	811.70	805.28	5.42
CB 6469	604+88.20	23.51' RT	MADISON ST	--	1	--	--	1	--	--	--	--	--	--	--	812.21	806.27	4.94
EXIST CB 4662	121+44.24	19.50' LT	W ST PAUL AVE	--	1	--	--	--	--	--	--	--	--	1	--	811.78	--	--
EXIST CB 5030	121+57.75	19.50' LT	W ST PAUL AVE	--	1	--	--	--	--	--	--	--	--	1	--	811.83	--	--
EXIST MH 1579	104+47.63	71.14' RT	W ST PAUL AVE	1	--	--	--	--	--	--	--	--	--	--	1	808.17	--	--
EXIST MH 1580	104+49.51	5.88' RT	W ST PAUL AVE	1	--	--	--	--	--	--	--	--	--	--	1	808.98	--	--

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

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STORM SEWER STRUCTURES (CONT.)

STRUCTURE	STATION	OFFSET*	LOCATION	SPV.0060.18 INSTALL MANHOLE COVERS EACH	SPV.0060.19 INSTALL INLET COVERS EACH	611.1004 CATCH BASINS 4-FT DIAMETER EACH	611.1005 CATCH BASINS 5-FT DIAMETER EACH	611.1006 CATCH BASINS 6-FT DIAMETER EACH	611.1230 CATCH BASINS 2X3-FT EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.2007 MANHOLES 7-FT DIAMETER EACH	611.8105 ADJUSTING CATCH BASIN COVERS	611.8110 ADJUSTING MANHOLE COVERS	RIM ELEVATION	INVERT** ELEVATION	DEPTH*** FT
EXIST MH 1939	601+23.62	30.73' RT	MADISON ST	1	--	--	--	--	--	--	--	--	--	--	1	810.91	--	--
EXIST MH 4664	121+23	18.0' RT	W ST PAUL AVE	1	--	--	--	--	--	--	--	--	--	--	1	811.14	--	--
MH 2109	102+55.58	7.15' RT	W ST PAUL AVE	1	--	--	--	--	--	--	1	--	--	--	--	813.54	807.84	4.67
MH 2110	303+90.72	53.76' LT	WISCONSIN AVE	1	--	--	--	--	--	1	--	--	--	--	--	808.27	799.32	7.96
MH 2111	304+82.57	22.66' LT	WISCONSIN AVE	1	--	--	--	--	--	--	1	--	--	--	--	806.71	800.62	5.10
MH 2112	106+29.72	20.70' LT	W ST PAUL AVE	1	--	--	--	--	--	--	1	--	--	--	--	806.08	801.26	3.83
MH 2113	401+16.22	2.03' LT	E NORTH ST	1	--	--	--	--	--	1	--	--	--	--	--	807.90	803.16	3.69
MH 2114	108+96.78	0.00' RT	W ST PAUL AVE	1	--	--	--	--	--	--	--	--	1	--	--	803.12	798.07	4.12
MH 2115	110+07.54	0.00' LT	W ST PAUL AVE	1	--	--	--	--	--	--	--	1	--	--	--	802.56	798.46	3.17
MH 2116	111+25.00	0.00' RT	W ST PAUL AVE	1	--	--	--	--	--	--	--	1	--	--	--	803.00	798.76	3.31
MH 2117	113+69.45	0.32' RT	W ST PAUL AVE	1	--	--	--	--	--	--	--	1	--	--	--	804.22	799.65	3.64
MH 2118	115+50.01	0.57' RT	W ST PAUL AVE	1	--	--	--	--	--	--	1	--	--	--	--	805.45	800.90	3.58
MH 2119	500+54.53	15.60' LT	FULLER ST	1	--	--	--	--	--	1	--	--	--	--	--	803.85	800.24	2.64
MH 2120	119+86.36	23.96' LT	W ST PAUL AVE	1	--	--	--	--	--	--	1	--	--	--	--	810.75	805.04	4.66
MH 2121	120+50.02	29.25' RT	W ST PAUL AVE	1	--	--	--	--	--	--	1	--	--	--	--	810.59	806.38	3.18
			TOTALS	17	46	10	6	3	25	3	6	3	1	2	4			

REMARKS

* STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

** FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE

*** DEPTH = RIM ELEV - TOP OF STRUCTURE BASE ELEV - COVER HEIGHT - 6 -INCH ADJUSTMENT RING HEIGHT

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

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TRAFFIC CONTROL SUMMARY

LOCATION	APPROX. SERVICE DAYS	643.0300 DRUMS NO. IN SERVICE	643.0300 DRUMS DAYS	643.0420 BARRICADES TYPE III NO. IN SERVICE	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A NO. IN SERVICE	643.0705 WARNING LIGHTS TYPE A DAYS	643.0715 WARNING LIGHTS TYPE C NO. IN SERVICE	643.0715 WARNING LIGHTS TYPE C DAYS	643.0800 ARROW BOARDS NO. IN SERVICE	643.0800 ARROW BOARDS DAYS	643.0900 SIGNS NO. IN SERVICE	643.0900 SIGNS DAYS	643.0920 COVERING SIGNS TYPE II # OF CYCLES	643.0920 COVERING SIGNS TYPE II EACH	643.1000 SIGNS FIXED MESSAGE SF	COMMENTS
OVERVIEW																	
ADVANCED SIGNING	175	-	-	-	-	-	-	-	-	-	-	6	1,050	-	-	20	SEE TTC OVERVIEW
STAGE 1																	
SUBSTAGE 1A	15	60	900	25	375	50	750	20	300	-	-	20	300	-	-	-	
SUBSTAGE 1B	75	100	7,500	20	1,500	40	3,000	20	1,500	-	-	30	2,250	-	-	-	SUBSTAGE EXPECTED TO BE CONCURRENT WITH STAGE 2
SUBSTAGE 1C	75	85	6,375	20	1,500	40	3,000	20	1,500	-	-	30	2,250	-	-	-	SUBSTAGE EXPECTED TO BE CONCURRENT WITH STAGE 3 AND 4
STAGE 1 SUBTOTAL			14,775		3,375		6,750		3,300		-		4,800		-	-	
STAGE 2																	
SUBSTAGE 2A	15	40	600	16	240	32	480	10	150	-	-	30	450	1	4	-	COVERING SIGNS AT DELAFIELD INTERSECTION
SUBSTAGE 2B	25	40	1,000	16	400	32	800	10	250	-	-	34	850	-	-	-	
SUBSTAGE 2C	20	40	800	20	400	40	800	10	200	-	-	36	720	-	-	-	
SUBSTAGE 2D	20	60	1,200	16	320	32	640	10	200	-	-	32	640	-	-	-	
STAGE 2 SUBTOTAL			3,600		1,360		2,720		800		-		2,660		4	-	
STAGE 3																	
SUBSTAGE 3A	5	60	300	8	40	16	80	10	50	1	5	24	120	-	-	-	ARROW BOARD FOR NORTH AVENUE LANE CLOSURE
SUBSTAGE 3B	5	90	450	8	40	16	80	10	50	1	5	24	120	-	-	-	
SUBSTAGE 3C	10	90	900	12	120	24	240	10	100	1	10	28	280	-	-	-	
STAGE 3 SUBTOTAL			1,650		200		400		200		20		520		-	-	
STAGE 4																	
SUBSTAGE 4A	25	80	2,000	10	250	20	500	10	250	1	25	24	600	-	-	-	ARROW BOARD FOR NORTH AVENUE LANE CLOSURE
SUBSTAGE 4B	15	80	1,200	16	240	32	480	10	150	1	15	28	420	-	-	-	
SUBSTAGE 4C	20	80	1,600	16	320	32	640	10	200	1	20	28	560	-	-	-	
SUBSTAGE 4D	15	80	1,200	12	180	24	360	10	150	1	15	24	360	-	-	-	
STAGE 4 SUBTOTAL			6,000		990		1,980		750		75		1,940		-	-	
UNDISTRIBUTED																	
UNDISTRIBUTED	10	60	600	-	-	-	-	-	-	-	-	10	100	-	-	-	LANE CLOSURES NEEDED FOR INCIDENTAL CONSTRUCTION
PROJECT TOTALS			26,625		5,925		11,850		5,050		95		11,070	-	4	20	

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

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TRAFFIC CONTROL SIGNS PCMS

LOCATION	APPROX. SERVICE DAYS	643.1050 QUANTITY NO. IN SERVICE	643.1050 QUANTITY DAYS	COMMENTS
STAGE 1				
W ST PAUL AVE	7	2	14	BEFORE STAGE 1A ROADWAY CLOSURE
STAGE 2				
MADISON STREET	7	2	14	BEFORE MADISON ST ROADWAY CLOSURE
W ST PAUL AVE	7	1	7	BEFORE E ST PAUL WESTBOUND CLOSURE
STAGE 3				
W ST PAUL AVE	7	1	7	BEFORE START OF LANE CLOSURES
NORTH STREET	7	1	7	BEFORE START OF LANE CLOSURES
WISCONSIN AVENUE	7	1	7	BEFORE START OF LANE CLOSURES
TOTAL			56	

ASPHALTIC SURFACE TEMPORARY

LOCATION	STAGE INSTALLED	465.0125 ASPHALTIC SURFACE TEMPORARRY TON
W ST PAUL AVE, STA 106+60 TO STA 119+75	STAGE 1A	200
MADISON STREET AND E ST PAUL AVE	STAGE 2A	40
W ST PAUL AVE & WISCONSIN INTERSECTION	STAGE 3A	60
W ST PAUL AVE & WISCONSIN INTERSECTION	STAGE 3B	90
W ST PAUL AVE & WISCONSIN INTERSECTION	STAGE 3C	110
W ST PAUL AVE, STA 102 TO 103+75	STAGE 4A	20
UNDISTRIBUTED		60
TOTALS		580

MARKING REMOVAL

LOCATION	STAGE REMOVED	646.9000 LINE 4-INCH LF	646.9300 SPECIAL MARKING EACH	COMMENTS
WISCONSIN AVENUE	STAGE 3	300	9	WESTBOUND APPROACHING ST PAUL
DELAFIELD STREET	STAGE 2		2	ARROW MODIFICATIONS FOR MADISON ST CLOSURE
E NORTH STRTEET	STAGE 2		2	ARROW MODIFICATIONS FOR MADISON ST CLOSURE
TOTALS		300	13	

TEMPORARY MARKING REMOVABLE TAPE

LOCATION	STAGE INSTALLED	649.0150 4-INCH YELLOW LF
W ST PAUL AVE	STAGE 4A	1,600
WISCONSIN AVE	STAGE 4A	600
W ST PAUL AVE	STAGE 4B	1,200
WISCONSIN AVE	STAGE 4C	600
TOTALS		4,000

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

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TEMPORARY PEDESTRIAN FACILITIES

LOCATION	APPROX. SERVICE DAYS	644.1601 TEMPORARY PEDESTRIAN CURB RAMP DAYS	COMMENTS
STAGE 2 - SUBSTAGE 2B			
E ST PAUL AVE & MADISON ST, NE QUADRANT	25	25	FOLLOW STANDARD DETAIL DRAWINGS FOR PEDESTRIAN ACCOMDATIONS
TOTAL		25	

TRAFFIC CONTROL

STAGE	LOCATION	643.5000 TRAFFIC CONTROL EACH
ALL	PROJECT	1
	CONTRACT TOTAL	1

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

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SIGN REMOVAL ITEMS

PROJECT ID 2718-04-71

STAGE	SIGN NO.	SIGN CODE & (SIZE)	SIGN MESSAGE	638.2602 REMOVE SIGNS TYPE II EA	638.3000 REMOVE SMALL SIGN SUPPORT EA	REMARKS / NEW SIGN LOCATION
ALL						
	1.1R	R2-1	[EXISTING] SPEED LIMIT	1		REMOVE FROM LIGHT POLE
	1.2R	D3-1	STREET NAME SIGN	1		REMOVE FROM LIGHT POLE
	1.3R	R6-2	ONE WAY	1		REMOVE FROM LIGHT POLE
	1.4R	R6-2	ONE WAY	1		REMOVE FROM LIGHT POLE
	1.5R		HOSPITAL TRUCK ROUTE SIGN			SIGN TO BE MOVED TO NEW LIGHT POLE. SEE PERMANENT SIGNING PLAN 1.9
	1.6R		HOSPITAL SIGN W/ ARROW			SIGN TO BE MOVED TO NEW LIGHT POLE. SEE PERMANENT SIGNING PLAN 1.8
	1.7R	R7-X	2 HR PARKING	1		REMOVE FROM UTILITY POLE
	1.8R	R7-X	NO PARKING	1		REMOVE FROM UTILITY POLE
	1.9R	R7-X	NO PARKING	1		REMOVE FROM UTILITY POLE
	1.10R	R7-X	NO PARKING	1		REMOVE FROM UTILITY POLE
	1.11R	R7-X	NO PARKING	1		REMOVE FROM UTILITY POLE
	1.12R		CHURCH SIGN			SIGN TO BE MOVED TO NEW LIGHT POLE. SEE PERMQANENT SIGNING PLAN 1.16
	2.1R	R7-X	NO PARKING	1		REMOVE FROM LIGHT POLE
	2.2R		HOSPITAL SIGN WITH ARROW			SIGN TO BE MOVED TO NEW SIGNAL POLE. SEE PERMANENT SIGNING PLAN 2.4
	2.3R	R1-1F	FOLDING STOP	1		REMOVE FROM SIGNAL POLE
	2.4R	R3-7R	RIGHT LANE MUST TURN RIGHT	1		REMOVE FROM SIGNAL POLE
	2.5R		BUS STOP SIGN			SIGN TO BE MOVED TO NEW SIGNAL POLE. SEE PERMANENT SIGNING PLAN 2.6
	2.6R		HOSPITAL TRUCK ROUTE SIGN	1		REMOVE FROM SIGNAL POLE
	2.7R	R1-1F	FOLDING STOP	1		REMOVE FROM SIGNAL POLE
	2.8R		DO NOT ENTER	1		REMOVE FROM SIGNAL POLE
	2.9R	R3-8	LANE USE SIGN	1		REMOVE FROM SIGNAL POLE
	2.10R	D3-1	STREET NAME SIGN	1		REMOVE FROM SIGNAL POLE
	2.11R	D3-1	STREET NAME SIGN	1		REMOVE FROM SIGNAL POLE
	2.12R	R3-8	LANE USE SIGN	1	1	
	2.13R	R7-X	NO PARKING	1		REMOVE FROM SIGNAL POLE
	2.14R		CITY WAY FINDING SIGN			SIGN TO BE MOVED TO NEW SIGNAL POLE. SEE PERMANENT SIGNING PLAN 2.10
	2.15R	R5-1a	WRONG WAY	1	1	
	2.16R	R7-X	NO PARKING	1	1	
	2.17R	R5-1a	WRONG WAY	1		REMOVE FROM LIGHT POLE
	2.18R	R3-7L	LEFT LANE MUST TURN LEFT	1		REMOVE FROM LIGHT POLE
	2.19R	M5-1L	ARROW	1		REMOVE FROM LIGHT POLE
	2.20R	M3-2	EAST	1		REMOVE FROM LIGHT POLE

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

SIGN REMOVAL ITEMS (CON'T)

PROJECT ID 2718-04-71

STAGE	SIGN NO.	SIGN CODE & (SIZE)	SIGN MESSAGE	638.2602 REMOVE SIGNS TYPE II EA	638.3000 REMOVE SMALL SIGN SUPPORT EA	REMARKS / NEW SIGN LOCATION
ALL						
	2.21R	R7-X	NO PARKING	1	1	
	2.22R	R6-2L	ONE WAY	1		REMOVE FROM SIGNAL POLE
	2.23R	R6-2R	ONE WAY	1		REMOVE FROM SIGNAL POLE
	2.24R	R1-1F	FOLDING STOP	1		REMOVE FROM SIGNAL POLE
	2.25R	R7-X	2 HR PARKING	1		REMOVE FROM LIGHT POLE
	2.26R		CITY WAY FINDING SIGN			SIGN TO BE MOVED TO NEW SIGN SUPPORT. SEE PERMANENT SIGNING PLAN 2.22
	2.27R		CITY WAY FINDING SIGN			SIGN TO BE MOVED TO NEW SIGN SUPPORT. SEE PERMANENT SIGNING PLAN 2.23
	2.28R	R1-2	YIELD SIGN	1	1	
	2.29R		BUS STOP SIGN			SIGN TO BE MOVED TO NEW SIGNAL POLE. SEE PERMANENT SIGNING PLAN 2.25
	2.30R	R3-2	NO LEFT TURN	1		REMOVE FROM SIGNAL POLE
	2.31R	R1-1F	FOLDING STOP	1		REMOVE FROM SIGNAL POLE
	2.32R	R1-1F	FOLDING STOP	1		REMOVE FROM SIGNAL POLE
	2.33R	R4-7	KEEP RIGHT SIGN	1		REMOVE FROM SIGNAL POLE
	2.34R		HOSPITAL SIGN WITH ARROW	1		REMOVE FROM SIGNAL POLE
	2.35R	D3-1	STREET NAME SIGN	1		REMOVE FROM SIGNAL POLE
	2.36R	D3-1	STREET NAME SIGN	1		REMOVE FROM SIGNAL POLE
	2.37R	R1-1F	FOLDING STOP	1		REMOVE FROM SIGNAL POLE
	2.38R	R7-X	NO PARKING	1		REMOVE FROM UTILITY POLE
	2.39R	R7-X	NO PARKING	1		REMOVE FROM UTILITY POLE
	3.1R					SIGN TO BE MOVED TO NEW SIGN POST. SEE PERMANENT SIGNING PLAN 2.20A
	3.2R	R7-X	NO PARKING	1	1	
	3.3R	R7-X	2 HR PARKING	1		REMOVE FROM LIGHT POLE
	3.4R	R1-1	STOP	1	1	
	3.5R	D3-1	STREET NAME SIGN	1		
	3.6R	D3-1	STREET NAME SIGN	1		
	3.7R	R7-X	NO PARKING	1	1	
	3.8R	R14-1	OVER 3 TONS			SIGN TO BE MOVED TO NEW SIGN POST. SEE PERMANENT SIGNING PLAN 3.9A
	3.9R	R5-2	NO TRUCKS			SIGN TO BE MOVED TO NEW SIGN POST. SEE PERMANENT SIGNING PLAN 3.9B
	3.10R	R7-X	NO PARKING		1	SIGN TO BE MOVED TO NEW SIGN POST. SEE PERMANENT SIGNING PLAN 3.9C
	3.11R	R7-X	NO PARKING	1		REMOVE FROM UTILITY POLE
	3.12R	D3-1	STREET NAME SIGN	1		

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

SIGN REMOVAL ITEMS (CON'T)

PROJECT ID 2718-04-71

STAGE	SIGN NO.	SIGN CODE & (SIZE)	SIGN MESSAGE	638.2602 REMOVE SIGNS TYPE II EA	638.3000 REMOVE SMALL SIGN SUPPORT EA	REMARKS / NEW SIGN LOCATION
ALL						
	3.13R	R7-X	NO PARKING	1		REMOVE FROM UTILITY POLE
	3.14R	W11-8	FIRE TRUCK SIGN	1	1	
	3.15R	R7-X	NO PARKING	1		REMOVE FROM UTILITY POLE
	3.16R	R7-X	NO PARKING	1		
	3.17R		BUS STOP SIGN			SIGN TO BE MOVED TO NEW SIGN POST. SEE PERMANENT SIGNING PLAN 3.17
	3.18R	R7-X	NO PARKING	1		REMOVE FROM UTILITY POLE
	4.1R	R7-X	NO PARKING	1		REMOVE FROM UTILITY POLE
	4.2R	W11-8	FIRE TRUCK SIGN	1		REMOVE FROM UTILITY POLE
	4.3R	R1-2	YIELD SIGN	1		REMOVE FROM UTILITY POLE
	4.4R	R1-1F	FOLDING STOP	1		REMOVE FROM SIGNAL POLE
	4.5R	R1-2	YIELD SIGN	1		REMOVE FROM LIGHT POLE
	4.6R	R7-X	NO PARKING	1		REMOVE FROM LIGHT POLE
	4.7R	R7-X	NO PARKING	1		REMOVE FROM UTILITY POLE
	4.8R	R1-1	STOP	1	1	
	4.9R	D3-1	STREET NAME SIGN	1		
	4.10R	D3-1	STREET NAME SIGN	1		
	4.11R	R7-X	NO PARKING	1		REMOVE FROM LIGHT POLE
	4.12R	R7-X	NO PARKING	1		REMOVE FROM LIGHT POLE
	4.13R	D3-1	STREET NAME SIGN	1		REMOVE FROM SIGNAL POLE
	4.14R	D3-1	STREET NAME SIGN	1		REMOVE FROM SIGNAL POLE
	4.15R	R1-1F	FOLDING STOP	1		REMOVE FROM SIGNAL POLE
	4.16R	R7-X	NO PARKING	1	1	
	4.17R	R1-1F	FOLDING STOP	1		REMOVE FROM SIGNAL POLE
	4.18R	D3-1	STREET NAME SIGN	1		REMOVE FROM SIGNAL POLE
	4.19R	D3-1	STREET NAME SIGN	1		REMOVE FROM SIGNAL POLE
	4.20R	R1-1F	FOLDING STOP	1		REMOVE FROM SIGNAL POLE
	4.21R	R7-X	NO PARKING	1	1	
	4.22R	R2-1	25 MPH SPEED LIMIT	1	1	
	5.1R	R7-X	NO PARKING	1		REMOVE FROM LIGHT POLE
	5.2R	W1-7	ARROW SIGN	1		REMOVE FROM LIGHT POLE
	5.3R	W11-2	PED SIGN	1	1	
	5.4R	S18-9P	AHEAD	1		
	5.5R	R7-X	NO PARKING	1	1	

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

SIGN REMOVAL ITEMS (CON'T)

PROJECT ID 2718-04-71

STAGE	SIGN NO.	SIGN CODE & (SIZE)	SIGN MESSAGE	638.2602 REMOVE SIGNS TYPE II EA	638.3000 REMOVE SMALL SIGN SUPPORT EA	REMARKS / NEW SIGN LOCATION
ALL						
	6.1R		EXISTING SIGN TO REMAIN			
	6.2R	R7-X	NO PARKING (COMBINED SIGN)	1	1	
	6.3R		EXISTING SIGN TO REMAIN			
	6.4R		EXISTING SIGN TO REMAIN			
	6.5R		EXISTING SIGN TO REMAIN			
	6.6R	R3-8LLR	LANE USE SIGN	1	1	
	6.7R	R3-8ER	LANE USE SIGN	1		
	6.8R	R4-7	KEEP RIGHT SIGN	1		
	6.9R	R7-X	NO PARKING	1		REMOVE FROM LIGHT POLE
	6.10R	R3-8LLR	LANE USE SIGN	1		REMOVE FROM LIGHT POLE
	7.1R		BUS STOP SIGN			SIGN TO BE MOVED TO NEW LIGHT POLE. SEE PERMANENT SIGNING PLAN 7.5
TOTALS				88	18	

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

PERMANENT SIGNING ITEMS

PROJECT ID 2718-04-71

STAGE	SIGN NO.	SIGN CODE & (SIZE)	SIGN MESSAGE	SIGN SIZE W [IN.]	X	SIGN SIZE H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2102 MOVING SIGNS TYPE II EA	634.0816 POSTS TUBULAR STEEL 2" X 2" X 16' EA	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
ALL													
	1.1	R7-1R	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	1.2	R2-1 (2S)	SPEED LIMIT	24	X	30	5.00						MOUNT ON LIGHT POLE
	1.3	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	1.4	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	1.5	R6-2R	ONE WAY RIGHT	24	X	30	5.00					1.4	MOUNT ON LIGHT POLE
	1.5B	R6-2R	ONE WAY LEFT	24	X	30	5.00					1.4	MOUNT ON LIGHT POLE
	1.6	D3-1	STREET NAME SIGN	36	X	10	2.50					1.4	MOUNT ON LIGHT POLE
	1.7	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	1.8		HOSPITAL SIGN W/ ARROW							1		1.7	RELOCATED SIGN. MOUNT ON LIGHT POLE
	1.9		HOSPITAL TRUCK ROUTE SIGN							1		1.7	RELOCATED SIGN. MOUNT ON LIGHT POLE
	1.10	R7-1L	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON UTILITY POLE
	1.11	R7-108	2 HR PARKING	12	X	18	1.50					1.10	MOUNT ON UTILITY POLE
	1.12	R7-13R	NO PARKING (TIMES)	12	X	18	1.50					1.10	MOUNT ON UTILITY POLE
	1.13	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON UTILITY POLE
	1.14	R7-1D	NO PARKING ANY TIME	12	X	18	1.50				1		
	1.15	R3-8LAR	LANE USE SIGNS	48	X	36	12.00					1.14	
	1.16		CHURCH SIGN								1		SIGN SIZE IS 36 IN X 24 IN
	2.1	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	2.2	D3-1	STREET NAME SIGN	96	X	36	24.00						MOUNT ON MONOTUBE ARM
	2.3	R1-1F	FOLDING STOP (VERTICAL)	30	X	30		6.25					MOUNT ON SIGNAL POLE
	2.4									1		2.3	RELOCATED SIGN. MOUNT ON SIGNAL POLE
	2.5		SIGN NO. NOT USED										SIGN NO. NOT USED
	2.6		BUS STOP SIGN							1		2.3	RELOCATED SIGN. MOUNT ON SIGNAL POLE
	2.7	R7-1D	NO PARKING ANY TIME	12	X	18	1.50				1		
	2.8	R3-8ER	LANE USE SIGN	36	X	30	7.50					2.7	
	2.9	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	2.10		CITY WAY FINDING SIGN							1		2.9	RELOCATED SIGN. MOUNT ON LIGHT POLE

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

PERMANENT SIGNING ITEMS (CON'T)

PROJECT ID 2718-04-71

STAGE	SIGN NO.	SIGN CODE & (SIZE)	SIGN MESSAGE	SIGN SIZE W [IN.]	X	SIGN SIZE H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2102 MOVING SIGNS TYPE II EA	634.0816 POSTS TUBULAR STEEL 2" X 2" X 16' EA	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
ALL													
	2.11	R7-1D	NO PARKING ANY TIME	12	X	18	1.50				1		
	2.12	R3-8ER	LANE USE SIGN	36	X	30	7.50					2.11	
	2.13	R7-1D	NO PARKING ANY TIME	12	X	18	1.50				1		
	2.14	W6-3	TWO WAY NO MEDIAN	30	X	30			6.25			2.13	
	2.15	D3-1	STREET NAME SIGN	72	X	18	9.00						MOUNT ON MONOTUBE ARM
	2.16	R1-1F	FOLDING STOP (VERTICAL)	30	X	30		6.25					MOUNT ON SIGNAL POLE
	2.17	R7-1D	NO PARKING ANY TIME	12	X	18	1.50				1		
	2.18	D9-2A	ARROW UP	24	X	6	1.00					2.17	
	2.19	D9-2	HOSPITAL	24	X	24	4.00					2.17	
	2.20	R7-1D	NO PARKING ANY TIME	12	X	18	1.50				2		2 POSTS REQUIRED. MOUNT NO PARKING TO JUST ONE STREET-SIDE POST.
	2.21A		CITY WAY FINDING SIGN							1		2.20	MOUNT ON NEW POSTS
	2.21	R7-1D	NO PARKING ANY TIME	12	X	18	1.50				2		STREET-SIDE POST.
	2.22		CITY WAY FINDING SIGN							1		2.21	MOUNT ON NEW POSTS
	2.23		CITY WAY FINDING SIGN							1		2.21	MOUNT ON NEW POSTS
	2.24	R1-1F	FOLDING STOP (VERTICAL)	30	X	30		6.25					MOUNT ON SIGNAL POLE
	2.25		BUS STOP SIGN							1		2.24	RELOCATED SIGN. MOUNT ON SIGNAL POLE.
	2.26	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	2.26B	R3-7	BIKE LANE	30	X	24	5.00					2.26	MOUNT ON LIGHT POLE
	2.27	D9-2A	ARROW UP	24	X	6	1.00						MOUNT ON SIGNAL POLE
	2.28	D9-2	HOSPITAL	24	X	24	4.00						MOUNT ON SIGNAL POLE
	2.29	D3-1	STREET NAME SIGN	72	X	18	9.00						MOUNT ON MONOTUBE ARM
	2.30	R1-1F	FOLDING STOP (VERTICAL)	30	X	30		6.25					MOUNT ON SIGNAL POLE
	2.31	D3-1	STREET NAME SIGN	96	X	36	24.00						MOUNT ON MONOTUBE ARM
	2.32	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	3.1	R7-108 MOD	COMBINATION PARKING SIGNS	24	X	18	3.00				1		
	3.2	R3-8LF	LANE USE SIGN	36	X	30	7.50					3.1	
	3.3	R7-108	2 HR PARKING	12	X	18	1.50				1		
	3.4	R7-108	2 HR PARKING	12	X	18	1.50				1		
	3.5	R7-108 MOD	COMBINATION PARKING SIGNS	24	X	18	3.00				1		

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

PERMANENT SIGNING ITEMS (CON'T)

PROJECT ID 2718-04-71

STAGE	SIGN NO.	SIGN CODE & (SIZE)	SIGN MESSAGE	SIGN SIZE W [IN.]	X	SIGN SIZE H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2102 MOVING SIGNS TYPE II EA	634.0816 POSTS TUBULAR STEEL 2" X 2" X 16' EA	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
ALL													
	3.6	R1-1	STOP	30	X	30	6.25				1		
	3.7	D3-1	STREET NAME SIGN	42	X	10	2.92					3.6	
	3.8	D3-1	STREET NAME SIGN	42	X	10	2.92					3.6	
	3.9	R7-1D	NO PARKING ANY TIME	12	X	18	1.50				1		
	3.9A	R14-1	OVER 3 TONS							1	1		
	3.9B	R5-2	NO TRUCKS							1		3.9A	
	3.9C	R7-X	NO PARKING							1	1		
	3.10	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	3.11	R7-108 MOD	COMBINATION PARKING SIGNS	24	X	18	3.00				1		
	3.12	D3-1	STREET NAME SIGN	42	X	10	2.92					3.11	
	3.13	R7-108	2 HR PARKING	12	X	18	1.50						MOUNT ON LIGHT POLE
	3.14	W11-8	FIRE STATION WARNING SIGN	30	X	30			6.25			2.13	MOUNT ON LIGHT POLE
	3.15	R7-108	2 HR PARKING	12	X	18	1.50				1		
	3.16	R7-108 MOD	COMBINATION PARKING SIGNS	24	X	18	3.00				1		
	3.17		BUS STOP SIGN									3.16	
	3.18	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	4.1	R7-1D	NO PARKING ANY TIME	12	X	18	1.50				1		
	4.2	R7-1D	NO PARKING ANY TIME	12	X	18	1.50				1		
	4.3	W11-8	FIRE STATION WARNING SIGN	30	X	30			6.25				
	4.4	D3-1	STREET NAME SIGN	60	X	18	7.50						MOUNT ON MONOTUBE ARM
	4.5	R1-1F	FOLDING STOP (VERTICAL)	30	X	30		6.25					MOUNT ON SIGNAL POLE
	4.6	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	4.7	R1-1	STOP	30	X	30	6.25						MOUNT ON LIGHT POLE
	4.8	D3-1	STREET NAME SIGN	36	X	10	2.50					3.6	MOUNT ON LIGHT POLE
	4.9	D3-1	STREET NAME SIGN	36	X	10	2.50					3.6	MOUNT ON LIGHT POLE
	4.10	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	4.11	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	4.12	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	4.13	D3-1	STREET NAME SIGN	72	X	18	9.00						MOUNT ON MONOTUBE ARM
	4.14	R1-1F	FOLDING STOP (VERTICAL)	30	X	30		6.25					MOUNT ON SIGNAL POLE
	4.15	R7-4D	NO STOPPING OR STANDING	12	X	18	1.50						MOUNT ON LIGHT POLE
	4.16	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

PERMANENT SIGNING ITEMS (CON'T)

PROJECT ID 2718-04-71

STAGE	SIGN NO.	SIGN CODE & (SIZE)	SIGN MESSAGE	SIGN SIZE W [IN.]	X	SIGN SIZE H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2102 MOVING SIGNS TYPE II EA	634.0816 POSTS TUBULAR STEEL 2" X 2" X 16' EA	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
ALL													
	4.17	R3-8LF	LANE USE SIGN	36	X	30	7.50					4.16	
	4.18	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	4.19	R7-1D	NO PARKING ANY TIME	12	X	18	1.50				1		
	4.20	R1-1F	FOLDING STOP (VERTICAL)	30	X	30		6.25					MOUNT ON SIGNAL POLE
	4.21	D3-1	STREET NAME SIGN	72	X	18	9.00						MOUNT ON MONOTUBE ARM
	4.22	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	4.23	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	4.24	R1-1F	FOLDING STOP (VERTICAL)	30	X	30		6.25					MOUNT ON SIGNAL POLE
	4.25	D3-1	STREET NAME SIGN	60	X	18	7.50						MOUNT ON MONOTUBE ARM
	4.26	R7-4D	NO STOPPING OR STANDING	12	X	18	1.50						MOUNT ON LIGHT POLE
	4.27	R2-1	25 MPH SPEED LIMIT	24	X	30	5.00					4.26	
	5.1	R7-4D	NO STOPPING OR STANDING	12	X	18	1.50						MOUNT ON LIGHT POLE
	5.2	R3-8LF	LANE USE SIGN	36	X	30	7.50						MOUNT ON LIGHT POLE
	5.3	W1-9P	AHEAD	24	X	12			2.00				MOUNT ON LIGHT POLE
	5.4	W11-2	PEDESTRIAN	30	X	30			6.25			5.4	
	6.1	R7-108 MOD	COMBINATION PARKING SIGNS	24	X	18	3.00						MOUNT ON LIGHT POLE
	6.2	R3-7	BIKE LANE	30	X	24	5.00						MOUNT ON LIGHT POLE
	6.3	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	6.4	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	6.5	R3-8LAR	LANE USE SIGN	48	X	36	12.00					6.4	
	7.1	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	7.2	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	7.3	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	7.4	R7-1D	NO PARKING ANY TIME	12	X	18	1.50						MOUNT ON LIGHT POLE
	7.5		BUS STOP SIGN							1		7.4	RELOCATED SIGN. MOUNT ON SIGNAL POLE.
	TOTALS						313.25	50.00	27.00	13.00	24.00		

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

3

REMOVALS OF EXISTING STREET LIGHT POLE AND CONCRETE BASES

LABEL	SYSTEM CIRCUIT	*204.0195 REMOVE CONCRETE BASES EACH	SPV.0060.01 REMOVE AND SALVAGE OF EXISTING STREET LIGHTING UNIT EACH
PROJECT NO 2718-04-71			
ESLB 01	NW	1	1
ESLB 02	NW	1	1
ESLB 03	NW	1	1
ESLB 04	NW	1	1
ESLB 05	NW	1	1
ESLB 06	NW	1	1
ESLB 07	NW	1	1
ESLB 08	NW	1	1
ESLB 09	NW	1	1
ESLB 10	NW	1	1
ESLB 27	NW	1	1
ESLB 11	F	1	1
ESLB 12	F	1	1
ESLB 13	F	1	1
ESLB 14	F	1	1
ESLB 15	F	1	1
ESLB 16	F	1	1
ESLB 17	F	1	1
ESLB 18	F	1	1
ESLB 19	F	1	1
ESLB 20	F	1	1
ESLB 21	F	1	1
ESLB 22	F	1	1
ESLB 23	F	1	1
ESLB 24	F	1	1
ESLB 25	F	1	1
ESLB 26	F	1	1
2718-04-71 TOTALS		27	27

*ADDITIONAL QUANTITIES ELSEWHERE

REMOVALS OF EXISTING STREET LIGHTING PULL BOXES

LABEL	SYSTEM CIRCUIT	*653.0905 REMOVE PULL BOX EACH
PROJECT NO 2718-04-71		
ELPB 01	NW	1
ELPB 02	NW	1
ELPB 03	NW	1
ELPB 04	NW	1
ELPB 05	NW	1
ELPB 06	NW	1
ELPB 07	NW	1
ELPB 08	NW	1
ELPB 09	NW	1
ELPB 10	NW	1
ELPB 11	NW	1
ELPB 12	NW	1
ELPB 13	NW	1
ELPB 14	NW	1
ELPB 15	NW	1
ELPB 16	NW	1
ELPB 17	NW	1
ELPB 18	NW	1
ELPB 34	NW	1
ELPB 19	F	1
ELPB 20	F	1
ELPB 21	F	1
ELPB 22	F	1
ELPB 23	F	1
ELPB 24	F	1
ELPB 25	F	1
ELPB 26	F	1
ELPB 27	F	1
ELPB 28	F	1
ELPB 29	F	1
ELPB 30	F	1
ELPB 31	F	1
ELPB 32	F	1
ELPB 33	F	1
2718-04-71 TOTALS		34

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

3

REMOVAL OF EXISTING STREET LIGHT CONTROLLER

	SYSTEM CIRCUIT	SPV.0060.02 REMOVE AND DISPOSE OF EXISTING STREET LIGHT CONTROLLER EACH
PROJECT NO 2718-04-71		
ST PAUL & WISCONSIN	NW	1
2718-04-71 TOTALS		1

REMOVAL OF EXISTING WIRE AND ABANDON

	SYSTEM CIRCUIT	SPV.0090.01 REMOVE AND DISPOSE OF EXISTING WIRE AND ABANDON CONDUIT IN PLACE LF
PROJECT NO 2718-04-71		
102+00 to 114+00	NW	2,400
600+00 to 605+50	F	1,200
120+25 to 122+50	F	450
2718-04-71 TOTALS		4,050

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LIGHTING CONTROLLER QUANTITIES

LOCATION	SYSTEM	LABEL	654.0230 CONCRETE CONTROL CABINET BASE TYPE L30 EACH	656.0400 ELECTRIC SERVICE MAIN LUGS ONLY METER PEDESTAL EACH	SPV.0060.03 11302 LIGHTING CONTROL CABINET EACH
PROJECT 2718-04-71					
106+09.19, 75.5' RT	NW	NW	1	1	1
2718-04-71 TOTALS			1	1	1

TEMPORARY STREEET LIGHTING

LOCATION	SPV.0060.47 TEMPORARY STREET LIGHTING EACH
PROJECT NO 2718-04-71	
PROJECT	1
2718-04-71 TOTALS	1

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

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LIGHTING PULL BOX QUANTITIES

LOCATION	LABEL	653.0135 PULL BOXES STEEL 24X36-INCH EACH
PROJECT NO 2718-04-71		
102+08.65, -30.1' LT	PB 1	1
105+79.00, -28.00' LT	PB 2	1
105+79.00, 37.00' RT	PB 3	1
105+87.44, 51.8' RT	PB 4	1
	PB 5	
304+49.97, -32.3' LT	PB 6	1
303+36.99, -41.1' LT	PB 7	1
304+50.00, 41.7' RT	PB 8	1
107+38.00, 26.8' RT	PB 9	1
113+61.50, 26.8' RT	PB 10	1
119+38.00, 26.2' RT	PB 11	1
119+37.99, -24.06' LT	PB 12	1
705+35.00, 16.9' RT	PB 13	1
604+65.00, 27.7' RT	PB 14	1
603+84.00, 26.5' RT	PB 15	1
122+37.00, -22.8' LT	PB 16	1
122.60.00, -22.7' LT	PB 17	1
400+68.00, -28.0' LT	PB 18	1
401+15.51, -24.1 LT	PB 19	1
2718-04-71 TOTALS		**18**

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

CONDUIT AND WIRE QUANTITIES

LOCATION TO LOCATION	SYSTEM (CIRCUIT)	671.0112 CONDUIT HDPE 1-DUCT 2-INCH LF	671.0122 CONDUIT HDPE 2-DUCT 2-INCH LF	655.0625 ELECTRICAL WIRE 6 AWG LF	655.0630 ELECTRICAL WIRE 4 AWG LF	655.0615 ELECTRICAL WIRE 10 AWG LF
PROJECT NO 2718-04-71						
PB-01 TO SLB-01	NW	20		40	120	
SLB-01 TO SLB-02	NW	141		161	483	
SLB-02 TO SLB-03	NW	121		141	423	
SLB-03 TO PB-02	NW	88		97	291	
PB-02 TO PB-03	NW		64	148	404	
PB-03 TO PB-04	NW		17	54	122	
PB-04 TO T.S. PULL BOX	NW	2				10
PB-04 TO CONTROLLER	NW		30	80	200	
CONTROLLER TO PB-06	NW		10	40	80	
PB-06 TO SLB-05	NW	33				
SLB-05 TO SLB-06	NW	88		108	648	
SLB-06 TO PB-07	NW	9		26	78	
PB-07 TO SLB-07	NW	82		102	204	
PB-08 TO SLB-07	NW	87				107
PB-06 TO PB-08	NW	75		95	285	
PB-07 TO PB-09	NW	77		97	291	
PB-09 TO SLB-08	NW	132		152	456	
SLB-08 TO SLB-9	NW	133		153	459	
SLB-9 TO SLB-10	NW	165		185	555	
SLB-10 TO SLB-11	NW	149		169	507	
SLB-11 TO PB-10	NW	44		64	192	
PB-10 TO SLB-12	NW	64		84	252	
SLB-12 TO SLB-13	NW	132		152	456	
PB-10 TO SLB-14	NW	112		132	396	
SLB-14 TO SLB-15	NW	166		186	558	
SLB-15 TO SLB-16	NW	187		207	621	
SLB16 TO PB-11	NW	120				140
PB-11 TO PB-12	F	49		69	207	
PB-12 TO SLB-17	F	128		148	444	
SLB-17 TO SLB-18	F	51		71	213	
SLB-18 TO PB-13	F	5		25	75	
PB-13 TO PB-14	F	81		101	303	
PB-14 TO SLB-19	F	13		33	99	
SLB-19 TO SLB-20	F	60		80	240	

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

CONDUIT AND WIRE QUANTITIES (CON'T)

LOCATION TO LOCATION	SYSTEM (CIRCUIT)	671.0112 CONDUIT HDPE 1-DUCT 2-INCH LF	671.0122 CONDUIT HDPE 2-DUCT 2-INCH LF	655.0625 ELECTRICAL WIRE 6 AWG LF	655.0630 ELECTRICAL WIRE 4 AWG LF	655.0615 ELECTRICAL WIRE 10 AWG LF
PROJECT NO 2718-04-71						
SLB-20 TO PB-15	F	7		27	81	
PB-15 TO TRAFFIC SIGNAL PULL BOX	F	35				60
PB-11 TO SLB-21	F	116		136	408	
SLB-21 TO SLB-22	F	77		97	291	
SLB-22 TO SLB-23	F	95		115	345	
SLB-23 TO SLB-24	F	63		83	249	
SLB-24 TO SLB-25	F	77		97	291	
SLB-25 TO SLB-26	F	82		102	306	
SLB-26 TO SLB-28	F	162		182	546	
SLB-28 TO SLB-30	F	89		106	318	
SLB-30 TO PB-16	F	46		66	198	
PB-16 TO SLB-29	F	53		73	219	
SLB-29 TO SLB-27	F	95		115	345	
SLB-27 TO TRAFFIC SIGNAL PULL BOX	F	2				22
SLB-29 TO PB-16	F	53		73	219	
PB-16 TO SLB-31	F	7		27	81	
SLB-31 TO PB-17	F	15		35	105	
PB-02 TO PB-18	F	77				
PB-18 TO SLB-04	F	103				
SLB-04 TO PB-19	F	97				
2718-04-71 TOTALS		3,965	121	4,534	13,664	668

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

LIGHTING UNIT QUANTITIES

LOCATION	SYSTEM (CIRCUIT)	LABEL	LUMINAIRE VOLTAGE	SPV.0060.04 INSTALL CITY FURNISHED POLE & 8-FOOT ARM LED LUMINAIRE EACH	SPV.0060.05 INSTALL CITY FURNISHED POST TOP POLE LED LUMINAIRE Each
PROJECT 2718-04-71					
102+28.50, -31.5' LT	NW	SLB 1	240	1	
103+70.00, -25.7' LT	NW	SLB 2	240	1	
104+91.00, -25.7 LT	NW	SLB 3	240	1	
401+59.00, -24.1' LT	NW	SLB 4	240	1	
304+17.00, -36.02' LT	NW	SLB 5	240		1
303+45.00, 42.0' LT	NW	SLB 6	240		1
303+37.00, 41.6' RT	NW	SLB 7	240	1	
108+75.00, 26.8' RT	NW	SLB 8	240	1	
110+05.00, 26.8' RT	NW	SLB 9	240	1	
111+70.00, 26.8' RT	NW	SLB 10	240	1	
113+19.00, 26.8' RT	NW	SLB 11	240	1	
500+36.62, -21.2' LT	NW	SLB 12	240	1	
501+48.00, -20.5' LT	NW	SLB 13	240	1	
114+72.00, 27.3' RT	NW	SLB 14	240	1	
116+35.00, 26.7' RT	NW	SLB 15	240	1	
118+21.00, 26.7' RT	NW	SLB 16	240	1	
604+42.00, -29.5' LT	F	SLB 17	240		1
705+40.00, 18.0' RT	F	SLB 18	240		1
604+50.00, 2.8' RT	F	SLB 19	240		1
603+90.00, 27.2' RT	F	SLB 20	240		1
602+16.00, -26.5' LT	F	SLB 21	240		1
601+40.00, -26.5' LT	F	SLB 22	240		1
600+45.00, -26.5' LT	F	SLB 23	240		1
600+11.50, 26.5' RT	F	SLB 24	240		1
600+90.00, 26.5' RT	F	SLB 25	240		1
601+78.00, 26.5' RT	F	SLB 26	240		1
120+85.00, -22.8' LT	F	SLB 27	240		1
121+50.00, 22.5' RT	F	SLB 28	240		1
121+83.00, -22.8' LT	F	SLB 29	240		1
122+37.00, 22.5' RT	F	SLB 30	240		1
122+45.00, -22.8' LT	F	SLB 31	240		1
2718-04-71 TOTALS				14	14

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

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TRAFFIC SIGNAL REMOVAL ITEMS

STAGE	ROADWAY	STATION			OFFSET	204.0195 REMOVING CONCRETE BASES EACH	653.0905 * REMOVING PULL BOXES EACH	204.9060.S.01 REMOVING MONOTUBE CONCRETE BASES EACH	204.9060.S.03 REMOVE EXISTING TRAFFIC SIGNAL W ST PAUL & WISCONSIN EACH	204.9060.S.04 REMOVE EXISTING TRAFFIC SIGNAL W ST PAUL & MADISON EACH
ALL	PROJECT ID 2718-04-71									
	W. ST. PAUL & W. NORTH / WISCONSIN									
		106+10			RT	2	4		1	
		106+10			LT	2	1			
		106+90			RT	2	2			
		106+90			LT	2	2			
		107+10			LT	1	1			
		304+30			LT	1				
		304+70			CENTER	1	1			
		400+40			CENTER	1	1			
		400+50			RT	1	1			
		400+50	TO	404+40	LT	1	3			
ALL	W. ST. PAUL & MADISON ST									
		119+70			RT		1	1		1
		119+80			LT	1	1			
		119+95			RT	1				
		120+70			RT	2				
		120+85			LT	1				
		120+85			RT		1	1		
		602+60			RT	2	1			
		602+60			LT		1	1		
		603+30			RT	1	1			
		603+40			RT			1		
		603+75			LT		1			
		604+00			LT		1			
SUBTOTALS						22	24	4	1	1

* OTHER QUANTITIES SHOWN ELSEWHERE. SEE SIGNAL INTERCONNECT REMOVALS.

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

TRAFFIC SIGNAL CONDUIT

STAGE	ROADWAY	FROM	TO	652.0225 * CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.
ALL	PROJECT ID 2718-04-71				
	W. ST. PAUL & W. NORTH ST / WISCONSIN				
		CB1	PB1		66
		PB1	SB1	10	
		PB1	PB2		160
		PB2	SB2		10
		PB2	SB3	15	
		PB2	PB3		110
		PB3	SB4	30	
		PB3	PB4		110
		PB4	SB5		10
		PB4	SB6	20	
		PB4	PB5		96
		PB5	SB7	15	
		PB5	PB6		102
		PB6	SB8		10
		PB6	SB9	15	
		PB6	PB7		74
		PB7	SB10	10	
		PB7	PB8		142
		PB8	SB11		10
		PB8	SB12	15	
		PB8	CB1		36
		PB8	PB9	115	
		PB9	SB13	10	
		PB3	PB10	92	
		PB10	PB11	113	
		PB11	PB12	83	
		PB12	PB13	93	
		PB13	SB14	10	
SUBTOTALS				646	936

TRAFFIC SIGNAL CONDUIT

STAGE	ROADWAY	FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.
ALL	PROJECT ID 2718-04-71				
	W. ST. PAUL & MADISON ST.				
		CB1	PB1		54
		PB1	SB1	10	
		PB1	PB2		106
		PB2	SB2		10
		PB2	PB3		60
		PB2	SB3	15	
		PB3	PB4		86
		PB4	SB4	20	
		PB4	PB5		96
		PB5	SB5		10
		PB5	SB6	15	
		PB5	PB6		78
		PB6	SB7	10	
		PB6	PB7		104
		PB7	SB8		10
		PB7	SB9	15	
		PB7	PB8		100
		PB8	SB10	10	
		PB8	PB9		124
		PB9	SB11		15
		PB9	SB12	10	
		PB9	CB1		48
		PB8	PB10	65	
		PB10	PB11	138	
		PB11	PB12	151	
		PB12	PB13	133	
		PB13	SB13	10	
SUBTOTALS				602	901

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

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TRAFFIC SIGNAL CONDUIT SUMMARY

	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.
W. ST. PAUL & W. NORTH ST / WISCONSIN	646	936
W. ST. PAUL & MADISON ST.	602	901
SIGNAL TOTALS	1,248	1,837

* OTHER QUANTITIES SHOWN ELSEWHERE. SEE SIGNAL INTERCONNECT ITEMS.

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

3

TRAFFIC SIGNAL PULL BOX

STAGE	STATION	OFFSET		653.0135 * PULL BOXES STEEL 24 X 36-INCH EACH	653.0140 PULL BOXES STEEL 24 X 42-INCH EACH
ALL	PROJECT ID 2718-04-71				
	W. ST. PAUL & W. NORTH ST / WISCONSIN				
PB1	105+90.3	48.1	FT - RT		1
PB2	105+87.0	32.3	FT - LT		1
PB3	400+57.7	27.2	FT - LT		1
PB4	400+68.2	26.4	FT - RT		1
PB5	107+21.3	24.9	FT - LT		1
PB6	107+24.3	27.4	FT - RT		1
PB7	304+64.0	42.8	FT - RT		1
PB8	304+63.9	28.6	FT - LT		1
PB9	303+62.5	39.8	FT - LT	1	
PB10	401+40.0	23.6	FT - LT	1	
PB11	402+48.0	23	FT - LT	1	
PB12	403+38.0	23	FT - LT	1	
PB13	404+32.0	23	FT - LT	1	
SUBTOTALS				5	8

TRAFFIC SIGNAL PULL BOX

STAGE	STATION	OFFSET		653.0135 * PULL BOXES STEEL 24 X 36-INCH EACH	653.0140 PULL BOXES STEEL 24 X 42-INCH EACH
ALL	PROJECT ID 2718-04-71				
	W. ST. PAUL & MADISON ST.				
PB1	603+69.9	28.4	FT - LT		1
PB2	603+60.9	28.4	FT - RT		1
PB3	603+31.9	28.9	FT - RT		1
PB4	120+80.7	22.6	FT - LT		1
PB5	120+90	24.3	FT - RT		1
PB6	602+43.3	27	FT - RT		1
PB7	602+50.2	26	FT - LT		1
PB8	119+71.9	26.5	FT - RT		1
PB9	119+58.9	33.7	FT - LT		1
PB10	119+06	27	FT - RT	1	
PB11	117+68.7	26.9	FT - RT	1	
PB12	116+18.5	26.7	FT - RT	1	
PB13	114+85	26.5	FT - RT	1	
SUBTOTALS				4	9

	653.0135 * PULL BOXES STEEL 24 X 36-INCH EACH	653.0140 PULL BOXES STEEL 24 X 42-INCH EACH
W. ST. PAUL & W. NORTH ST / WISCONSIN	5	8
W. ST. PAUL & MADISON ST.	4	9
SIGNAL TOTALS	9	17

* OTHER QUANTITIES SHOWN ELSEWHERE. SEE SIGNAL INTERCONNECT ITEMS.

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

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TRAFFIC SIGNAL CONCRETE BASES

STAGE	SIGNAL BASE NO.	LOCATION STA	OFFSET		654.0101 CONCRETE BASES TYPE 1 EACH	654.0110 CONCRETE BASES TYPE 10 EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
ALL	PROJECT ID 2718-04-71						
	W. ST. PAUL & W. NORTH ST / WISCONSIN						
	CB1	106+11.6	56.3	FT - RT			1
	SB1	105+91.7	38.5	FT - RT	1		
	SB2	105+82.2	26.9	FT - LT		1	
	SB3	105+99.5	34.1	FT - LT	1		
	SB4	400+33.9	41.3	FT - LT	1		
	SB5	400+63.1	27.1	FT - RT		1	
	SB6	400+48.2	35.9	FT - RT	1		
	SB7	107+07.9	28.5	FT - LT	1		
	SB8	107+17.7	27.5	FT - RT		1	
	SB9	107+10.7	31.9	FT - RT	1		
	SB10	304+69.9	46.1	FT - RT	1		
	SB11	304+58.6	26.9	FT - LT		1	
	SB12	106+06.0	46.9	FT - RT	1		
	SB13	303+56.7	39.8	FT - LT	1		
	SB14	404+30.0	22.9	FT - LT	1		
	SUBTOTALS				10	4	1

TRAFFIC SIGNAL CONCRETE BASES

STAGE	SIGNAL BASE NO.	LOCATION STA	OFFSET		654.0101 CONCRETE BASES TYPE 1 EACH	654.0110 CONCRETE BASES TYPE 10 EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
ALL	PROJECT ID 2718-04-71						
	W. ST. PAUL & MADISON ST.						
	CB1	603+69.8	47.2	FT - LT			1
	SB1	603+67.1	33.8	FT - LT	1		
	SB2	603+53.3	26.2	FT - RT		1	
	SB3	603+44.2	26.4	FT - RT	1		
	SB4	120+61.1	23.8	FT - LT	1		
	SB5	120+84.0	25.3	FT - RT		1	
	SB6	120+76.3	29.3	FT - RT	1		
	SB7	602+47.5	29.4	FT - RT	1		
	SB8	602+55.7	28.5	FT - LT		1	
	SB9	602+61.8	31.0	FT - LT	1		
	SB10	119+81.1	28.7	FT - RT	1		
	SB11	119+51.6	28.1	FT - LT		1	
	SB12	119+62.0	37.4	FT - LT	1		
	SB13	114+77.3	25.1	FT - RT	1		
	SUBTOTALS				9	4	1

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	654.0101 CONCRETE BASES TYPE 1 EACH	654.0110 CONCRETE BASES TYPE 10 EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
W. ST. PAUL & W. NORTH ST / WISCONSIN	10	4	1
W. ST. PAUL & MADISON ST.	9	4	1
SIGNAL TOTALS	19	8	2

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

TRAFFIC SIGNAL CABLE AND WIRE

STAGE	ROADWAY	FROM	TO	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0900 TRAFFIC SIGNAL EVP DETECTOR CABLE L.F.
ALL	PROJECT ID 2718-04-71					
	W. ST. PAUL & W. NORTH ST / WISCONSIN					
		CB1	SB1		57	
		SB1	HEAD 1		15	
		SB1	HEAD 10		15	
		SB1	HEAD 24	15		
		CB1	SB2		140	
		SB2	HEAD 8		44	
		SB2	HEAD 9		50	
		SB2	EVP DETECTOR A			190
		CB1	SB3		145	
		SB3	HEAD 7		15	
		SB3	HEAD 23	15		
		CB1	SB4		225	
		SB4	HEAD 11		15	
		SB4	HEAD 20		15	
		SB4	HEAD 22	15		
		CB1	PB8, 7, 6, 5, SB5		275	
		SB5	HEAD 18		44	
		SB5	HEAD 19		50	
		SB5	EVP DETECTOR D-1			325
		CB1	SB6		289	
		SB6	HEAD 17		15	
		SB6	HEAD 21	15		
		CB1	SB7		231	
		SB7	HEAD 5		15	
		SB7	HEAD 6		15	
		SB7	HEAD 28	15		
		CB1	SB8		164	
		SB8	HEAD 3		44	
		SB8	HEAD 4		50	
		SB8	EVP DETECTOR B			214

TRAFFIC SIGNAL CABLE AND WIRE

STAGE	ROADWAY	FROM	TO	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0900 TRAFFIC SIGNAL EVP DETECTOR CABLE L.F.
ALL	PROJECT ID 2718-04-71					
	W. ST. PAUL & MADISON ST.					
		CB1	SB1		49	
		SB1	HEAD 11		15	
		SB1	HEAD 18		15	
		SB1	HEAD 20	15		
		CB1	SB2		112	
		SB2	HEAD 16		44	
		SB2	HEAD 17 (JUMPER)		10	
		SB2	EVP DETECTOR D			162
		CB1	SB3	146		
		SB3	HEAD 19	15		
		CB1	SB4		207	
		SB4	HEAD 5		15	
		SB4	HEAD 6		15	
		SB4	HEAD 26	15		
		CB1	PB9, 8, 7, 6, 5, SB5		273	
		SB5	HEAD 3		44	
		SB5	HEAD 4		50	
		SB5	EVP DETECTOR B-1			323
		CB1	SB6		280	
		SB6	HEAD 2		15	
		SB6	HEAD 25	15		
		CB1	SB7		227	
		SB7	HEAD 14		15	
		SB7	HEAD 15		15	
		SB7	HEAD 24	15		
		CB1	SB8		171	
		SB8	HEAD 12		44	
		SB8	HEAD 13		50	
		SB8	EVP DETECTOR C			221
		CB1	SB9	178		

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

TRAFFIC SIGNAL CABLE AND WIRE (CON'T)

STAGE	ROADWAY	FROM	TO	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0900 TRAFFIC SIGNAL EVP DETECTOR CABLE L.F.
ALL	PROJECT ID 2718-04-71					
	W. ST. PAUL & W. NORTH ST / WISCONSIN					
		CB1	SB9		173	
		SB9	HEAD 2		15	
		SB9	HEAD 27	15		
		CB1	SB10		120	
		SB10	HEAD 15		15	
		SB10	HEAD 16		15	
		SB10	HEAD 26	15		
		CB1	SB11		45	
		SB11	HEAD 13		44	
		SB11	HEAD 14 (JUMPER)		10	
		SB11	EVP DETECTOR C-1			95
		CB1	SB12		54	
		SB12	HEAD 12		15	
		SB12	HEAD 25	15		
		CB1	SB13			161
		SB13	EVP DETECTOR D-2			15
		CB1	SB14			606
		SB14	EVP DETECTOR C-2			15
	PUSH BUTTON WIRING					
		CB1	SB1	56		
		SB1	SB3	121		
		SB3	SB4	129		
		SB4	SB6	134		
		SB6	SB7	111		
		SB7	SB9	110		
		SB9	SB10	89		
		SB10	SB12	125		
		SB12	CB1	53		
	SUBTOTALS			1,048	2,434	1,621

TRAFFIC SIGNAL CABLE AND WIRE (CON'T)

STAGE	ROADWAY	FROM	TO	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0900 TRAFFIC SIGNAL EVP DETECTOR CABLE L.F.
ALL	PROJECT ID 2718-04-71					
	W. ST. PAUL & MADISON ST.					
		SB9	HEAD 23	15		
		CB1	SB10		118	
		SB10	HEAD 1		15	
		SB10	HEAD 10		15	
		SB10	HEAD 22	15		
		CB1	SB11		51	
		SB11	HEAD 8		44	
		SB11	HEAD 9		50	
		SB11	EVP DETECTOR A			101
		CB1	SB12		48	
		SB12	HEAD 7		15	
		SB12	HEAD 21	15		
		CB1	SB13			622
		SB13	EVP DETECTOR B-2			15
	PUSH BUTTON WIRING					
		CB1	SB1	52		
		SB1	SB3	152		
		SB3	SB4	197		
		SB4	SB6	119		
		SB6	SB7	92		
		SB7	SB9	104		
		SB9	SB10	111		
		SB10	SB12	107		
		SB12	CB1	48		
	SUBTOTALS			1,426	2,022	1,444

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

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TRAFFIC SIGNAL CABLE AND WIRE SUMMARY

	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0900 TRAFFIC SIGNAL EVP DETECTOR CABLE L.F.
W. ST. PAUL & W. NORTH ST / WISCONSIN	1,048	2,434	1,621
W. ST. PAUL & MADISON ST.	1,426	2,022	1,444
SIGNAL TOTALS	2,474	4,456	3,065

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

TRAFFIC SIGNAL CABLE AND WIRE

STAGE	ROADWAY	FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG (WHITE) L.F.	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG (GREEN) L.F.	655.0515 * ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG (TOTAL) L.F.
ALL	PROJECT ID 2718-04-71					
	W. ST. PAUL & W. NORTH ST / WISCONSIN					
		CB1	SB1	56	56	112
		SB1	SB2	128	128	256
		SB2	SB3	45	45	90
		SB3	SB4	129	129	258
		SB4	SB5	119	119	238
		SB5	SB6	49	49	98
		SB6	SB7	112	112	224
		SB7	SB8	100	100	200
		SB8	SB9	45	45	90
		SB9	SB10	90	90	180
		SB10	SB11	113	113	226
		SB11	SB12	46	46	92
		SB12	CB1	52	52	104
		CB1	SB13	162	162	324
		CB1	SB14	605	605	1210
		CB1	PB1	56	56	112
		SB2	PB2	25	25	50
		SB4	PB3	45	45	90
		SB5	PB4	25	25	50
		SB7	PB5	30	30	60
		SB8	PB6	25	25	50
		SB10	PB7	25	25	50
		CB1	PB8	25	25	50
		SB13	PB9	25	25	50
		SB14	PB13	25	25	50
		PB13	PB12	113	113	226
		PB12	PB11	93	93	186
		PB11	PB10	122	122	244
	SUBTOTALS					4,970

TRAFFIC SIGNAL CABLE AND WIRE

STAGE	ROADWAY	FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG (WHITE) L.F.	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG (GREEN) L.F.	655.0515 * ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG (TOTAL) L.F.
ALL	PROJECT ID 2718-04-71					
	W. ST. PAUL & MADISON ST.					
		CB1	SB1	50	50	100
		SB1	SB2	98	98	196
		SB2	SB3	52	52	104
		SB3	SB4	143	143	286
		SB4	SB5	105	105	210
		SB5	SB6	45	45	90
		SB6	SB7	45	45	90
		SB7	SB8	90	90	180
		SB8	SB9	94	94	188
		SB9	SB10	47	47	94
		SB10	SB11	105	105	210
		SB11	SB12	110	110	220
		SB12	CB1	47	47	94
		CB1	SB13	622	622	1244
		CB1	PB1	35	35	70
		SB2	PB2	25	25	50
		SB3	PB3	64	64	128
		SB4	PB4	35	35	70
		SB5	PB5	25	25	50
		SB7	PB6	25	25	50
		SB8	PB7	25	25	50
		SB10	PB8	25	25	50
		CB1	PB9	30	30	60
		SB13	PB13	25	25	50
		PB13	PB12	144	144	288
		PB12	PB11	161	161	322
		PB11	PB10	148	148	296
	SUBTOTALS					4,840

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

3

3

TRAFFIC SIGNAL CABLE AND WIRE SUMMARY

	655.0515 * ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG (TOTAL) L.F.
W. ST. PAUL & W. NORTH ST / WISCONSIN	4,970
W. ST. PAUL & MADISON ST.	4,840
SIGNAL TOTAL	9,810

* OTHER QUANTITIES SHOWN ELSEWHERE. SEE STREET LIGHTING.

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

TRAFFIC SIGNAL CABLE AND WIRE

STAGE	ROADWAY	FROM	TO	655.0320 CABLE TYPE UF 2-10 AWG GROUNDED L.F.	655.0615* ELECTRICAL WIRE LIGHTING 10 AWG L.F.
ALL	PROJECT ID 2718-04-71				
	W. ST. PAUL & W. NORTH ST / WISCONSIN				
		CB1	SB2	139	150
		SB2	SB5	146	150
		CB1	SB11	45	150
		SB11	SB8	158	150
	SUBTOTALS			488	600

TRAFFIC SIGNAL CABLE AND WIRE

STAGE	ROADWAY	FROM	TO	655.0320 CABLE TYPE UF 2-10 AWG GROUNDED L.F.	655.0615* ELECTRICAL WIRE LIGHTING 10 AWG L.F.
ALL	PROJECT ID 2718-04-71				
	W. ST. PAUL & MADISON ST.				
		CB1	SB2	109	150
		SB2	SB5	178	150
		CB1	SB11	171	150
		SB11	SB8	141	150
	SUBTOTALS			599	600

TRAFFIC SIGNAL CABLE AND WIRE SUMMARY

	655.0320 CABLE TYPE UF 2-10 AWG GROUNDED L.F.	655.0615 * ELECTRICAL WIRE LIGHTING 10 AWG L.F.
W. ST. PAUL & W. NORTH ST / WISCONSIN	488	600
W. ST. PAUL & MADISON ST.	599	600
SIGNAL TOTAL	1,087	1,200

* OTHER QUANTITIES SHOWN ELSEWHERE. SEE STREET LIGHTING AND SIGNAL ELECTRICAL WIRING TABLES.

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

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3

ELECTRICAL SERVICE METER BREAKER PEDESTAL

LOCATION	656.0200.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL L.S.
W. ST. PAUL AVE. & W. NORTH / WISCONSIN AVE	1
TOTAL	1

ELECTRICAL SERVICE METER BREAKER PEDESTAL

LOCATION	656.0200.02 ELECTRICAL SERVICE METER BREAKER PEDESTAL L.S.
W. ST. PAUL AVE. & MADISON ST.	1
TOTAL	1

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

TRAFFIC SIGNAL POLES AND ARMS

STAGE	ROADWAY	SIGNAL BASE NO.	657.0100 PEDESTAL BASES EACH	657.0350 POLES TYPE 10 EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT EACH	657.0525 MONOTUBE ARMS 25-FT EACH	657.0530 MONOTUBE ARMS 30-FT EACH	657.0808 LUMINAIRE ARMS STEEL 8-FT EACH	SPV.0060.06 INSTALL CITY-FURNISHED STREET LIGHT LUMINAIRE ON TRAFFIC SIGNAL LUMINAIRE ARM EACH
ALL	PROJECT ID 2718-04-71									
	W. ST. PAUL & W. NORTH ST / WISCONSIN									
		SB1	1		1					
		SB2		1				1	1	1
		SB3	1		1					
		SB4	1		1					
		SB5		1				1	1	1
		SB6	1		1					
		SB7	1		1					
		SB8		1				1	1	1
		SB9	1		1					
		SB10	1		1					
		SB11		1				1	1	1
		SB12	1		1					
		SB13	1		1					
		SB14	1		1					
ALL	PROJECT ID 2718-04-71									
	W. ST. PAUL & MADISON ST.									
		SB1	1		1					
		SB2		1			1		1	1
		SB3	1			1				
		SB4	1		1					
		SB5		1			1		1	1
		SB6	1		1					
		SB7	1		1					
		SB8		1			1		1	1
		SB9	1			1				
		SB10	1		1					
		SB11		1				1	1	1
		SB12	1		1					
		SB13	1		1					
	PROJECT TOTAL		19	8	17	2	3	5	8	8

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

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3

SIGNAL MOUNTING HARDWARE

LOCATION	658.5069.01 SIGNAL MOUNTING HARDWARE L.S.
W. ST. PAUL AVE. & W. NORTH / WISCONSIN AVE	1
TOTAL	1

SIGNAL MOUNTING HARDWARE

LOCATION	658.5069.02 SIGNAL MOUNTING HARDWARE L.S.
W. ST. PAUL AVE. & MADISON ST.	1
TOTAL	1

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

3

TRAFFIC SIGNAL FACES

STAGE	ROADWAY	SIGNAL HEAD NO.	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH	658.0175 TRAFFIC SIGNAL FACE 5S 12-INCH EACH	LED MODULES 12-INCH RED BALL EACH	LED MODULES 12-INCH YELLOW BALL EACH	LED MODULES 12-INCH GREEN BALL EACH	LED MODULES 12-INCH RED ARROW EACH	LED MODULES 12-INCH YELLOW ARROW EACH	LED MODULES 12-INCH GREEN ARROW EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH
ALL	PROJECT ID 2718-04-71											
	W. ST. PAUL & W. NORTH ST / WISCONSIN											
		HEAD 1	1			1	1	1				
		HEAD 2	1			1	1	1				
		HEAD 3	1			1	1	1				
		HEAD 4		1					1	2	1	
		HEAD 5		1					1	2	1	
		HEAD 6	1			1	1	1				
		HEAD 7	1			1	1	1				
		HEAD 8	1			1	1	1				
		HEAD 9		1					1	2	1	
		HEAD 10		1					1	2	1	
		HEAD 11	1			1	1	1				
		HEAD 12	1			1	1	1				
		HEAD 13	1			1	1	1				
		HEAD 14	1			1	1	1				
		HEAD 15	1			1	1	1				
		HEAD 16	1			1	1	1				
		HEAD 17	1			1	1	1				
		HEAD 18	1			1	1	1				
		HEAD 19		1					1	2	1	
		HEAD 20		1					1	2	1	
		HEAD 21										1
		HEAD 22										1
		HEAD 23										1
		HEAD 24										1
		HEAD 25										1
		HEAD 26										1
		HEAD 27										1
		HEAD 28										1

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\030601-MQ.DWG
LAYOUT NAME - 030615-mq
PLOT DATE : 11/18/2021 8:32 AM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1" = 1'
WISDOT/CADDS SHEET 42

3

TRAFFIC SIGNAL FACES CON'T

STAGE	ROADWAY	SIGNAL HEAD NO.	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH	658.0175 TRAFFIC SIGNAL FACE 5S 12-INCH EACH	LED MODULES 12-INCH RED BALL EACH	LED MODULES 12-INCH YELLOW BALL EACH	LED MODULES 12-INCH GREEN BALL EACH	LED MODULES 12-INCH RED ARROW EACH	LED MODULES 12-INCH YELLOW ARROW EACH	LED MODULES 12-INCH GREEN ARROW EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH
ALL	PROJECT ID 2718-04-71											
	W. ST. PAUL & MADISON ST.											
		HEAD 1	1			1	1	1				
		HEAD 2	1			1	1	1				
		HEAD 3	1			1	1	1				
		HEAD 4							1	1	1	
		HEAD 5							1	1	1	
		HEAD 6	1			1	1	1				
		HEAD 7	1			1	1	1				
		HEAD 8	1			1	1	1				
		HEAD 9							1	1	1	
		HEAD 10							1	1	1	
		HEAD 11	1			1	1	1				
		HEAD 12	1			1	1	1				
		HEAD 13			1	1	1	1		1	1	
		HEAD 14			1	1	1	1		1	1	
		HEAD 15	1			1	1	1				
		HEAD 16	1			1	1	1				
		HEAD 17	1			1	1	1				
		HEAD 18	1			1	1	1				
		HEAD 19										1
		HEAD 20										1
		HEAD 21										1
		HEAD 22										1
		HEAD 23										1
		HEAD 24										1
		HEAD 25										1
		HEAD 26										1
	PROJECT TOTAL		26	6	2	28	28	28	10	18	12	16

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

SIGNAL INTERCONNECT REMOVAL ITEMS

STAGE	ROADWAY	STATION			OFFSET	653.0905 * REMOVING PULL BOXES EACH	674.0300 REMOVE CABLE LF	SPV.0060.35 REMOVE EXISTING FIBER OPTIC CABLE AND INSTALL NEW FIBER OPTIC CABLE W. ST. PAUL & N. PRAIRIE AVE EACH	SPV.0060.36 REMOVE EXISTING FIBER OPTIC CABLE AND INSTALL NEW FIBER OPTIC CABLE W. NORTH ST & MADISON / DELAFIELD ST EACH	SPV.0060.37 REMOVE EXISTING FIBER OPTIC CABLE AND INSTALL NEW FIBER OPTIC CABLE E. ST. PAUL & N.W. BARSTOW ST EACH
ALL	PROJECT ID 2718-04-71									
	CORRIDOR									
	W. ST. PAUL & N. PRAIRIE AVE TO									
	W. ST. PAUL & W. NORTH ST / WISCONSIN									
	INTERSECTION OF W. ST. PAUL AND N. PRAIRIE	TO	STA. 102+00				1250	1		
	102+20				LT	1				
	102+20				RT	1				
	10475				RT	2				
	STA. 102+00	TO	STA. 105+75				480			
	CORRIDOR									
	W. ST. PAUL & W. NORTH ST / WISCONSIN TO									
	W. NORTH ST & MADISON / DELAFIELD									
	INTERSECTION OF W. ST. PAUL AND N. PRAIRIE	TO	STA. 402+50				399			
	401+60				LT	1				
	STA. 402+50 TO INTERSECTION OF W. NORTH ST & MADISON / DELAFIELD						1243			
	CORRIDOR									
	W. NORTH ST & MADISON / DELAFIELD TO									
	W. ST. PAUL & MADISON ST									
	INTERSECTION OF W. NORTH ST & MADISON / DELAFIELD	TO	STA. 604+00				394		1	
	605+50				LT	1				
	CORRIDOR									
	W. ST. PAUL & MADISON ST TO									
	E. NORTH ST & N.W. BARSTOW ST									
	INTERSECTION OF W. NORTH ST & MADISON / DELAFIELD	TO	STA. 122+60				431			
	STA. 122+60 TO INTERSECTION OF E. ST. PAUL & N.W. BARSTOW ST						1023			1
	SUBTOTALS					6	5,220	1	1	1

* OTHER QUANTITIES SHOWN ELSEWHERE. SEE TRAFFIC SIGNAL REMOVALS.

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

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TRAFFIC SIGNAL INTERCONNECT ITEMS

STAGE	ROADWAY	STATION			OFFSET		652.0225 * CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	678.0006 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT LF	653.0135 * PULL BOXES STEEL 24 X 36-INCH EACH	678.0400 FIBER OPTIC TERMINATION EA	678.0600 INSTALL ETHERNET SWITCHES EA	SPV.0060.07 INSTALL EXISTING FIBER OPTIC COMMUNICATION CONDUIT INTO NEW PULL BOX EA
ALL	PROJECT ID 2718-04-71											
	CORRIDOR											
	W. ST. PAUL & N. PRAIRIE AVE TO											
	W. ST. PAUL & W. NORTH ST / WISCONSIN											
	ICPB104	STA. 102+03			32	FT - LT			1			1
	ICPB103	STA. 102+03			29	FT - RT			1			
	ICPB102	STA. 103+58			29	FT - RT			1			
	ICPB101	STA. 105+09			36	FT - RT			1			
	INTERSECTION OF W. ST. PAUL AND N. PRAIRIE		TO	STA. 102+03	32	FT - LT		1251				
		ICPB104	TO	ICPB103			60	70				
		ICPB103	TO	ICPB102			156	167				
		ICPB102	TO	ICPB101			150	162				
		ICPB101	TO	CB1				124				
	ST. PAUL & PRAIRIE CONTROLLER CABINET									1		
	W. ST. PAUL & W. NORTH ST / WISCONSIN CB1									1		1
	CORRIDOR											
	W. ST. PAUL & W. NORTH ST / WISCONSIN TO											
	W. NORTH ST & MADISON / DELAFIELD											
	W. ST. PAUL & W. NORTH ST / WISCONSIN CB1								1			
	W. ST. PAUL & W. NORTH ST / WISCONSIN CB1		TO	PB11 (STA. 402+50)				417				
	PB11 (STA. 402+50)		TO	PB13				206				
	PB13		TO	W. NORTH ST. & MADISON ST. CONTROLLER CABINET				2012				
	W. NORTH ST. & MADISON ST. CONTROLLER CABINET									1		

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

TRAFFIC SIGNAL INTERCONNECT ITEMS CON'T

STAGE	ROADWAY	STATION			OFFSET		652.0225 * CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	678.0006 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT LF	653.0135 * PULL BOXES STEEL 24 X 36-INCH EACH	678.0400 FIBER OPTIC TERMINATION EA	678.0600 INSTALL ETHERNET SWITCHES EA	SPV.0060.07 INSTALL EXISTING FIBER OPTIC COMMUNICATION CONDUIT INTO NEW PULL BOX EA
ALL	PROJECT ID 2718-04-71											
	CORRIDOR											
	W. NORTH ST & MADISON / DELAFIELD TO											
	W. ST. PAUL & MADISON ST											
	ICPB105	STA. 605+58			28	FT - LT			1			1
	ICPB106	STA. 604+68			28	FT - LT			1			
	W. NORTH ST. & MADISON ST. CONTROLLER CABINET									1		
	W. ST. PAUL & MADISON ST. CONTROLLER CABINET		TO	CB1 (STA 603+70)	47	FT - LT		474				
	ICPB105		TO	ICPB106			90					
	ICPB106		TO	PB1			100					
	W. ST. PAUL & MADISON ST. CONTROLLER CABINET									1	1	
	CORRIDOR											
	W. ST. PAUL & MADISON ST TO											
	E. NORTH ST & N.W. BARSTOW ST											
	ICPB107	STA. 121+69			24	FT - RT			1			
	ICPB108	STA. 122+61			24	FT - RT			1			1
	W. ST. PAUL & MADISON ST. CONTROLLER CABINET									1		
	W. ST. PAUL & MADISON ST. CONTROLLER CABINET		TO	PB7 (STA 602+49)	26	FT - LT		156				
	PB7 (STA 602+49)		TO	ICPB108				318				
	ICPB108		TO	W. ST. PAUL & BARSTOW ST. CONTROLLER CABINET				1057				
	PB5		TO	ICPB107			75					
	ICPB107		TO	ICPB108			90					
	W. ST. PAUL & BARSTOW ST. CONTROLLER CABINET									1		
	TOTALS						721	4,196	8	7	2	3

* OTHER QUANTITIES SHOWN ELSEWHERE. SEE SIGNAL CONDUIT ITEMS.

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

3

INTERCONNECT SYSTEM TESTING

LOCATION	678.0500 COMMUNICATION SYSTEM TESTING L.S.
ST. PAUL / NORTH ST/ MADISON ST CORRIDORS	1
TOTAL	1

SIGNAL CONTROLLER PROGRAMMING

LOCATION	SPV.0060.09 TRAFFIC SIGNAL CONTROLLER PROGRAMMING W. ST. PAUL AVE & WISCONSIN AVE EACH	SPV.0060.10 TRAFFIC SIGNAL CONTROLLER PROGRAMMING W. ST. PAUL AVE & MADISON ST EACH
	1	1
TOTAL	1	1

TRAFFIC SIGNAL CABINET

LOCATION	SPV.0060.38 FURNISH AND INSTALL TRAFFIC SIGNAL CONTROLLER AND CABINET W ST PAUL AVE & WISCONSIN AVE EACH
W. ST. PAUL AVE. & W. NORTH / WISCONSIN AVE.	1
TOTAL	1

TRAFFIC SIGNAL CABINET

LOCATION	SPV.0060.39 FURNISH AND INSTALL TRAFFIC SIGNAL CONTROLLER AND CABINET W ST PAUL AVE & MADISON ST EACH
W. ST. PAUL AVE. & MADISON ST.	1
TOTAL	1

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

3

AUDIBLE PEDESTRIAN PUSH BUTTON SYSTEM

LOCATION	SPV.0060.40 FURNISH AND INSTALL AUDIBLE PEDESTRIAN PUSH BUTTON SYSTEM EACH
W. ST. PAUL AVE. & W. NORTH / WISCONSIN AVE.	1
TOTAL	1

AUDIBLE PEDESTRIAN PUSH BUTTON SYSTEM

LOCATION	SPV.0060.41 FURNISH AND INSTALL AUDIBLE PEDESTRIAN PUSH BUTTON SYSTEM EACH
W. ST. PAUL AVE. & MADISON ST.	1
TOTAL	1

EMERGENCY VEHICLE PREEMPTION SYSTEM

LOCATION	SPV.0060.42 FURNISH AND INSTALL EMERGENCY VEHICLE PREEMPTION SYSTEM EACH
W. ST. PAUL AVE. & W. NORTH / WISCONSIN AVE.	1
TOTAL	1

EMERGENCY VEHICLE PREEMPTION SYSTEM

LOCATION	SPV.0060.43 FURNISH AND INSTALL EMERGENCY VEHICLE PREEMPTION SYSTEM EACH
W. ST. PAUL AVE. & MADISON ST.	1
TOTAL	1

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

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3

WIRELESS COMMUNICATION ANTENNA

SPV.0060.44

RELOCATE EXISTING

WIRELESS COMMUNICATION

ANTENNA

LOCATION	EACH
W. ST. PAUL AVE. & W. NORTH / WISCONSIN AVE.	1
TOTAL	1

SIGNAL VIDEO DETECTION SYSTEM

SPV.0060.45

FURNISH AND INSTALL

VEHICLE VIDEO

DETECTION SYSTEM

LOCATION	EACH
W. ST. PAUL AVE. & W. NORTH / WISCONSIN AVE.	1
TOTAL	1

SIGNAL VIDEO DETECTION SYSTEM

SPV.0060.46

FURNISH AND INSTALL

VEHICLE VIDEO

DETECTION SYSTEM

LOCATION	EACH
W. ST. PAUL AVE. & MADISON ST.	1
TOTAL	1

ALL CATEGORY 0010 UNLESS OTHERWISE NOTED

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PIPE ABANDONMENT (SANITARY SEWER)

ROADWAY	STORM / SANITARY	FROM	TO	SPV.0090.03 ABANDONING SANITARY SEWER PIPE LF
MADISON ST	SANITARY	EXIST MH 5894	EXIST MH 3941	253
			TOTAL	253

SANITARY SEWER REMOVALS

ROADWAY	FROM	TO	204.9090.S.01 REMOVING 6 INCH SANITARY SEWER LF	204.9090.S.02 REMOVING 8-INCH SANITARY SEWER LF	204.9090.S.03 REMOVING 10-INCH SANITARY SEWER LF	204.9090.S.04 REMOVING 24-INCH SANITARY SEWER LF
W ST PAUL AVE	PROP SAN MH 6184	EXIST MH 3675	--	--	24	--
	EXIST MH 3675	EXIST MH 3673	--	--	218	--
	EXIST MH 3673	EXIST MH 3671	--	--	--	238
	EXIST MH 3671	EXIST MH 2741	--	--	--	232
	EXIST MH 2741	EXIST MH 1902	--	--	--	102
	EXIST MH 1902	RIGHT OF WAY	41	--	--	--
	EXIST MH 1902	EXIST MH 2765	--	--	--	267
	EXIST MH 2765	EXIST MH 3666	--	--	--	178
MADISON ST	EXIST MH 3941	EXIST MH 1112	--	25	--	--
	TOTAL		41	25	242	1017

ALL CATEGORY 0020 UNLESS OTHERWISE NOTED

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SANITARY SEWER STRUCTURES

ROADWAY	STRUCTURE ID	STA	OFFSET	SPV.0060.11 ABANDONING SANITARY SEWER MANHOLES EA	204.9060.S.02 REMOVING SANITARY SEWER MANHOLES EA	SPV.0060.12 ADJUSTING SANITARY SEWER MANHOLES EA	SPV.0060.13 48 INCH DIA SANITARY MANHOLE EA	SPV.0060.14 72 INCH DIA SANITARY MANHOLE EA
W ST PAUL AVE	EXIST MH 3686	STA 103+09.18	1.6' RT	--	--	1	--	--
	EXIST MH 3687	STA 104+78.01	0.1' RT	--	--	1	--	--
	PROP SAN MH 6184	STA 106+71.79	0.2' LT	--	--	--	1	--
	EXIST MH 3675	STA 106+95.84	0.1' RT	--	1	--	--	--
	EXIST MH 3673	STA 109+13.42	1.5' RT	--	1	--	--	--
	EXIST MH 3671	STA 111+51.88	0.3' LT	--	1	--	--	--
	EXIST MH 2741	STA 113+84.34	0.4' LT	--	1	--	--	--
	EXIST MH 1902	STA 114+86.70	2.0' RT	--	1	--	--	--
	EXIST MH 2765	STA 117+53.51	0.7' RT	--	1	--	--	--
	EXIST MH 3666	STA 119+31.75	1.6' LT	--	--	1	--	--
	EXIST MH 2764	STA 119+77.54	0.2' RT	1	--	--	--	--
	EXIST MH 1112	STA 120+17.87	0.5' LT	--	--	1	--	--
	EXIST MH 1113	STA 121+21.85	2.2' LT	--	--	1	--	--
	EXIST MH 2763	STA 121+46.44	2.3' LT	--	--	1	--	--
WISCONSIN AVE	EXIST MH 3682	STA 303+81.86	52.6' LT	--	--	1	--	--
	EXIST MH 3674	STA 305+04.34	21.9' RT	--	--	1	--	--
W ST PAUL AVE	EXIST MH 3672	STA 109+13.89	14.9' RT	--	--	1	--	--
	EXIST MH 3670	STA 112+06.01	12.6' RT	1	--	--	--	--
	PROP SAN MH 6185	STA 113+83.83	14.6' RT	--	--	--	--	1
	EXIST MH 3669	STA 115+05.82	16.3' RT	1	--	--	--	--
	EXIST MH 3668	STA 117+14.16	14.4' RT	1	--	--	--	--
	EXIST MH 3667	STA 119+14.67	13.2' RT	--	--	1	--	--
MADISON ST	EXIST MH 5894	STA 600+26.18	0.4' RT	--	1	--	--	--
	PROP SAN MH 6187	STA 600+26.18	0.4' RT	--	--	--	1	--
	PROP SAN MH 6186	STA 601+50.28	0.1' LT	--	--	--	1	--
	EXIST MH 3941	STA 602+79.72	0.0' LT/RT	--	1	--	--	--
	EXIST MH 1128	STA 604+90.95	0.1' LT	--	--	1	--	--
	TOTAL			4	8	11	3	1

ALL CATEGORY 0020 UNLESS OTHERWISE NOTED

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			SANITARY SEWER MAIN							
			SPV.0090.04	SPV.0090.05	SPV.0090.06	SPV.0090.07	SPV.0090.08	SPV.0090.09	SPV.0090.10	SPV.0090.11
			8 INCH CIPP	10 INCH CIPP	18 INCH CIPP	24 INCH CIPP	42 INCH CIPP	48 INCH CIPP	8 INCH PVC	10 INCH PVC
	FROM	TO	SANITARY SEWER PIPE	SANITARY SEWER PIPE	SANITARY SEWER PIPE	SANITARY SEWER PIPE	SANITARY SEWER PIPE	SANITARY SEWER PIPE	SANITARY SEWER PIPE	SANITARY SEWER PIPE
ROADWAY	STRUCTURE	STRUCTURE	LF	LF	LF	LF	LF	LF	LF	LF
W ST PAUL AVE	EXIST MH 3685	EXIST MH 3686	--	249	--	--	--	--	--	--
	EXIST MH 3686	EXIST MH 3687	--	169	--	--	--	--	--	--
	EXIST MH 3687	PROP SAN MH 6184	--	194	--	--	--	--	--	--
	PROP SAN MH 6184	EXIST MH 3674	--	--	--	--	--	--	--	12
	EXIST MH 3666	EXIST MH 2764	--	--	--	--	46	--	--	--
	EXIST MH 2764	EXIST MH 1112	--	--	--	--	40	--	--	--
	EXIST MH 1112	EXIST MH 1113	--	--	--	--	104	--	--	--
WISCONSIN AVE	EXIST MH 3682	EXIST MH 3674	--	--	--	--	--	149	--	--
W ST PAUL AVE	EXIST MH 3674	EXIST MH 3672	--	--	--	--	--	242	--	--
	EXIST MH 3672	EXIST MH 3670	--	--	--	--	292	--	--	--
	EXIST MH 3670	PROP SAN MH 6185	--	--	--	--	178	--	--	--
	PROP SAN MH 6185	EXIST MH 3669	--	--	--	--	122	--	--	--
	EXIST MH 3669	EXIST MH 3668	--	--	--	--	208	--	--	--
	EXIST MH 3668	EXIST MH 3667	--	--	--	--	201	--	--	--
	EXIST MH 3667	EXIST MH 3666	--	--	--	--	23	--	--	--
FULLER ST	PROP SAN MH 6185	EXIST MH 2741	--	--	--	--	--	--	17	--
	EXIST MH 2741	EXIST MH 3676	179	--	--	--	--	--	--	--
MADISON ST	PROP SAN MH 6187	PROP SAN MH 6186	--	--	--	--	--	--	124	--
	PROP SAN MH 6186	EXIST MH 1112	--	--	--	--	--	--	155	--
RIVERWALK DR	EXIST MH 3682	EXIST MH 3643	--	--	--	--	--	267	--	--
	EXIST MH 3643	EXIST MH 3642	--	--	--	--	--	275	--	--
	EXIST MH 3642	EXIST MH 3647/8	--	--	--	--	--	190	--	--
	EXIST MH 3647/8	EXIST MH 3645/6	--	--	133	399	--	--	--	--
	EXIST MH 3645/6	EXIST MH 3649	--	--	--	--	--	59	--	--
	TOTAL		179	612	133	399	1,214	1,182	296	12

ALL CATEGORY 0020 UNLESS OTHERWISE NOTED

SANITARY SEWER LATERALS

ROADWAY	STATION	LATERAL DIRECTION	SPV.0090.12 6 INCH SANITARY SEWER LATERAL REPLACEMENT (OPEN CUT) LF
W ST PAUL AVE	109+14	NW	45
	109+14	NW	45
	109+45	NW	46
	109+85	NW	47
	110+68	NW	46
	110+99	NW	46
	111+10	SE	21
	111+62	NW	45
	112+04	SE	22
	112+13	NW	45
	112+74	NW	45
	112+78	SE	22
	113+92	SE	21
	114+69	NW	48
	114+79	SE	21
	115+11	NW	48
MADISON ST	600+33	NE	35
	TOTAL		648

CLEAN AND TELEVISE SANITARY SEWER

STAGE	LOCATION	SPV.0090.16 CLEAN AND TELEVISE SANITARY SEWER LF
ALL	PROJECT	1,075
	CONTRACT TOTAL	1,075

TELEVISE SANITARY LATERAL

STAGE	LOCATION	SPV.0060.15 TELEVISE SANITARY LATERAL EACH
ALL	PROJECT	17
	CONTRACT TOTAL	17

FIBER PULL BOX QUANTITIES

LOCATION	LABEL	SPV.0060.08 COMMUNICATIONS VAULT 24X36 EACH
PROJECT NO 2718-04-71		
105+72.00, -25.8' LT	CV 01	1
105+72.00, 37.0' RT	CV 02	1
303+30.00, -41.0' LT	CV 03	1
107+34.00, 25.8' RT	CV 04	1
110+25.00, 26.2' RT	CV 05	1
114+16.01, 26.3' RT	CV 06	1
116+14.00, 27.3' RT	CV 07	1
116+14.00, -24.2' LT	CV 08	1
119+45.00, 26.1' RT	CV 09	1
119+44.93, -26.9 LT	CV 10	1
604+72.00, -31.0' LT	CV 11	1
122+33.00, 22.0' RT	CV 12	1
2718-04-71 TOTALS		12

CONDUIT AND WIRE QUANTITIES

LOCATION TO LOCATION	SYSTEM (CIRCUIT)	SPV.0090.19 CONDUIT HDPE 1-DUCT 3-INCH LF	655.0615* ELECTRICAL WIRE 10 AWG LF
PROJECT NO 2718-04-71			
CV 01 TO CV 02	FIBER	62	82
CV 02 TO SIGNAL PULL BOX	FIBER	20	40
CV 02 TO CV 03	FIBER	195	215
CV 02 TO CV 04	FIBER	162	182
CV 04 TO CV 05	FIBER	295	315
CV 06 TO CV 07	FIBER	200	220
CV 07 TO CV 08	FIBER	62	82
CV 07 TO CV 09	FIBER	335	355
CV 09 TO CV 10	FIBER	55	75
CV 10 TO CV 11	FIBER	140	160
CV 11 TO SIGNAL PULL BOX	FIBER	5	25
CV 11 TO EXISTING FIBER VAULT	FIBER	80	100
CV 09 TO CV 12	FIBER	300	320
2718-04-71 TOTALS		1911	2171

*ADDITIONAL QUANTITIES ELSEWHERE

ALL CATEGORY 0020 UNLESS OTHERWISE NOTED

FURNISH AND INSTALL GATE VALVE AND VALVE BOX 8-INCH

STATION	LOCATION	SPV.0060.23 FURNISH AND INSTALL GATE VALVE AND VALVE BOX 8-INCH EACH
102+10	W. ST. PAUL AVENUE, 17.14 LT	1
107+08	W. ST. PAUL AVENUE, 7.71 LT	1
500+33	FULLER STREET, 6.08' RT	1
705+20	ANN STREET, 7.14' LT	1
TOTAL		4

FURNISH AND INSTALL GATE VALVE AND VALVE BOX 12-INCH

STATION	LOCATION	SPV.0060.24 FURNISH AND INSTALL GATE VALVE AND VALVE BOX 12-INCH EACH
103+00	W. ST. PAUL AVENUE, 21.25' LT	1
106+47	W. NORTH STREET, 12.34' LT	1
106+95	W. ST. PAUL AVENUE, 9.99' LT	1
110+52	W. ST. PAUL AVENUE, 8.27' LT	1
110+57	W. ST. PAUL AVENUE, 31.75' RT	1
114+19	W. ST. PAUL AVENUE, 6.85' LT	1
119+51	W. ST. PAUL AVENUE, 8.66' LT	1
120+52	W. ST. PAUL AVENUE, 9.91' LT	1
122+56	W. ST. PAUL AVENUE, 9.69' LT	1
TOTAL		9

ALL CATEGORY 0030 UNLESS OTHERWISE NOTED

3

FURNISH AND INSTALL BUTTERFLY VALVE AND VALVE BOX 16-INCH

STATION	LOCATION	SPV.0060.25 FURNISH AND INSTALL BUTTERFLY VALVE AND VALVE BOX 16-INCH EACH
539+05	S. EAST AVE, 7.18' RT	1
542+27	S. EAST AVE, 13.01' RT	1
TOTAL		2

RECONNECT 3/4" COPPER WATER SERVICE - TYPE SL1

STATION	LOCATION	SPV.0060.26 RECONNECT 3/4" COPPER WATER SERVICE (SL1) EACH
111+69	216 W. ST. PAUL AVENUE	1
112+36	212 W. ST. PAUL AVENUE	1
120+98	200-206 MADISON STREET	1
121+25	108-110 E. ST. PAUL AVENUE	1
TOTAL		4

ALL CATEGORY 0030 UNLESS OTHERWISE NOTED

3

RECONNECT 4" WATER SERVICE - TYPE SL2

STATION	LOCATION	SPV.0060.27 RECONNECT 4" WATER SERVICE (SL2) EACH
110+13	310 W. ST. PAUL AVENUE	1
TOTAL		1

RECONNECT 6" WATER SERVICE - TYPE SL3

STATION	LOCATION	SPV.0060.28 RECONNECT 6" WATER SERVICE (SL3) EACH
104+87	304 W. NORTH STREET	1
110+44	218-222 W. ST. PAUL AVENUE	1
117+58	111 ANN STREET	1
TOTAL		3

ALL CATEGORY 0030 UNLESS OTHERWISE NOTED

3

RECONNECT 6" WATER SERVICE - TYPE SL4

STATION	LOCATION	SPV.0060.29 RECONNECT 6" WATER SERVICE (SL4) EACH
604+73	230 MADISON STREET	1
TOTAL		1

RECONNECT 8" WATER SERVICE - TYPE SL5

STATION	LOCATION	SPV.0060.30 RECONNECT 8" WATER SERVICE (SL5) EACH
601+10	100 BANK STREET	1
TOTAL		1

ALL CATEGORY 0030 UNLESS OTHERWISE NOTED

3

RECONNECT 1" WATER SERVICE - TYPE SL6

STATION	LOCATION	SPV.0060.31 RECONNECT 1" COPPER WATER SERVICE (SL6) EACH
122+47	120 E. ST. PAUL AVENUE	1
TOTAL		1

HYDRANT ASSEMBLY

STATION	LOCATION	SPV.0060.32 HYDRANT ASSEMBLY EACH
107+00	W. ST. PAUL AVENUE, 33.16' LT	1
110+70	W. ST. PAUL AVENUE, 24.00' LT	1
119+46	W. ST. PAUL AVENUE, 35.74' LT	1
500+33	FULLER STREET, 26.45' RT	1
705+05	ANN STREET, 18.63' LT	1
TOTAL		5

ALL CATEGORY 0030 UNLESS OTHERWISE NOTED

3

ABANDON HYDRANT

STATION	LOCATION	SPV.0060.33 ABANDON HYDRANT EACH
105+43	W. ST. PAUL AVENUE, 27.60' LT	1
110+75	W. ST. PAUL AVENUE, 24.17' LT	1
113+43	W. ST. PAUL AVENUE, 23.71' LT	1
118+73	W. ST. PAUL AVENUE, 24.36' LT	1
602+38	MADISON STREET, 28.5 LT	1
705+14	ANN STREET, 17.52' LT	1
TOTAL		6

8-INCH WATER MAIN

STATION TO STATION	LOCATION	SPV.0090.13 FURNISH AND INSTALL WATER MAIN AND FITTINGS 8-INCH LF
102+05 TO 102+76	W. ST. PAUL AVENUE	80
107+08 - 0' TO 10' LT	W. ST. PAUL AVENUE	10
500+07 TO 500+60	FULLER STREET	70
704+85 TO 705+87	ANN STREET	110
TOTAL		270

ALL CATEGORY 0030 UNLESS OTHERWISE NOTED

3

12-INCH WATER MAIN

STATION TO STATION	LOCATION	SPV.0090.14 FURNISH AND INSTALL WATER MAIN AND FITTINGS 12-INCH LF
102+89 TO 121+13	W. ST. PAUL AVENUE	1850
121+48 TO 122+56	E. ST. PAUL AVENUE	140
106+47 - 12' LT TO 27' LT	W. NORTH STREET	15
110+57 - 8' LT TO 36' RT	W. ST. PAUL AVENUE	50
TOTAL		2055

16-INCH D.I. WATER MAIN (CLASS 50)

STATION TO STATION	LOCATION	SPV.0090.15 FURNISH AND INSTALL WATER MAIN AND FITTINGS 12-INCH CLASS 52 LF
601+00 TO 605+24	MADISON STREET	490
TOTAL		490

ALL CATEGORY 0030 UNLESS OTHERWISE NOTED

3

3

ABANDON VALVE BOXES & MANHOLES

STATION	LOCATION	SPV.0060.34 ABANDON VALVE BOX EACH
102+58	W. ST. PAUL AVENUE, 21.10' LT	1
103+59	W. ST. PAUL AVENUE, 21.57' LT	1
106+46	W. ST. PAUL AVENUE, 24.14' LT	1
107+04	W. ST. PAUL AVENUE, 20.00' LT	1
110+52	W. ST. PAUL AVENUE, 22.47' LT	1
110+62	W. ST. PAUL AVENUE, 27.54' RT	1
119+86	W. ST. PAUL AVENUE, 17.84' RT	1
120+59	W. ST. PAUL AVENUE, 16.12' RT	1
121+51	W. ST. PAUL AVENUE, 7.10' RT	1
500+27	FULLER STREET, 7.94' LT	1
600+61	MADISON STREET, 17.42' RT	1
604+95	MADISON STREET, 10.59' RT	1
705+12	ANN STREET, 2.74' LT	1
TOTAL		13

ALL CATEGORY 0030 UNLESS OTHERWISE NOTED

201

TRANSPORTATION PROJECT PLAT NO: 2718-04-21 - 4.01 AMENDMENT NO: 2

AMENDS TRANSPORTATION PROJECT PLAT NO: 2718-04-21 - 4.01 RECORDED AS DOCUMENT NUMBER 4547359 BY UPDATING STATUES AND AUTHORITY IN RELOCATION ORDER AND SIGNATURE BLOCK, UPDATING NOTES, ADDING BASIS OF R/W TABLE, AND UPDATING TITLE ON SHEET 2 OF 2.

THAT PART OF NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 3, TOWNSHIP 6 NORTH, RANGE 19 EAST, CITY OF WAUKESHA, WAUKESHA COUNTY, WISCONSIN

RELOCATION ORDER W. ST PAUL AVE., MOUNTAIN AVE. - MADISON ST. WAUKESHA COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 66.22, WISCONSIN STATUTES, THE CITY OF WAUKESHA HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF WAUKESHA, PURSUANT TO THE PROVISIONS OF SECTION 66.22 (1), WISCONSIN STATUTES.

NOTES:

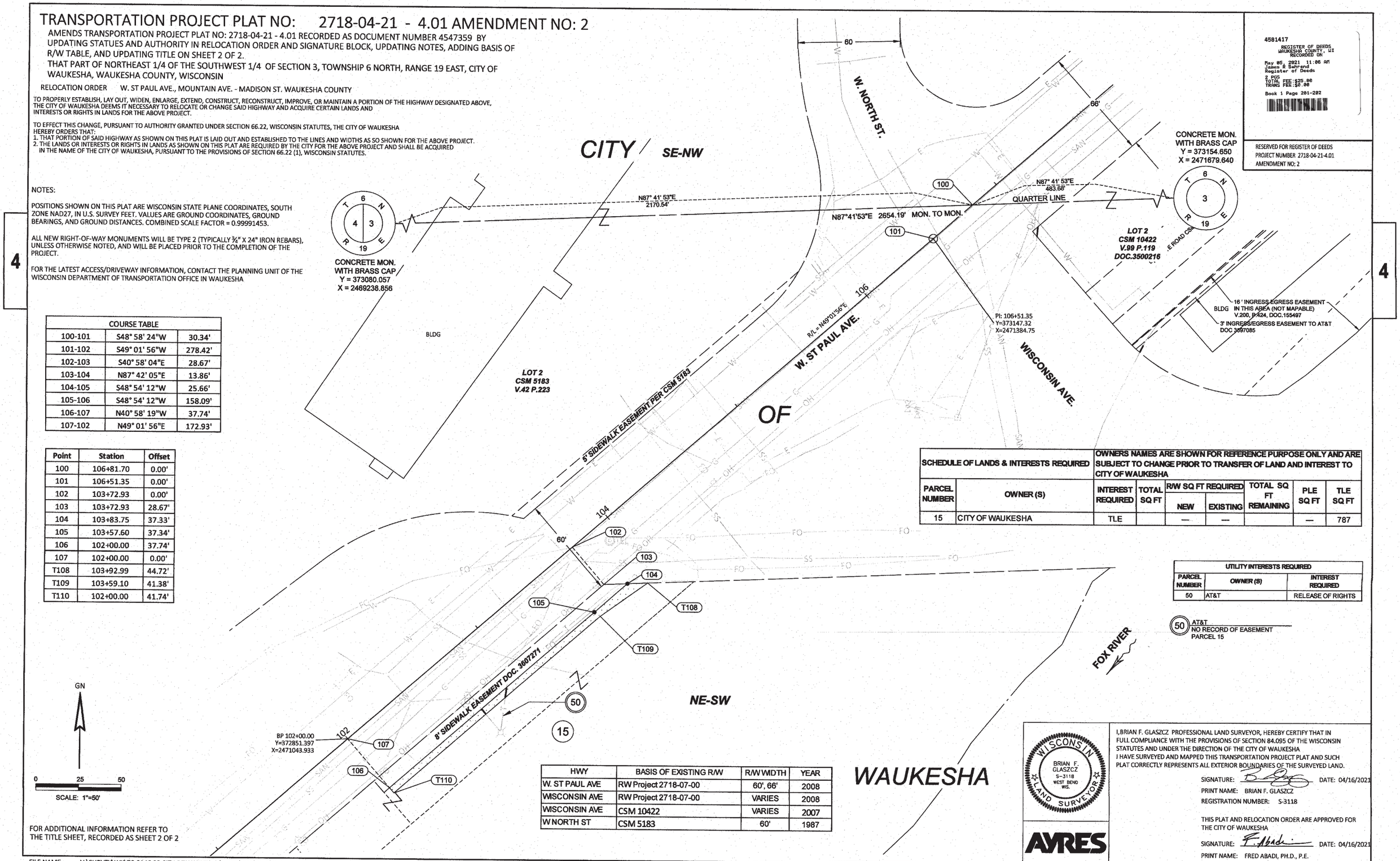
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN STATE PLANE COORDINATES, SOUTH ZONE NAD27, IN U.S. SURVEY FEET. VALUES ARE GROUND COORDINATES, GROUND BEARINGS, AND GROUND DISTANCES. COMBINED SCALE FACTOR = 0.99991453.

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

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

COURSE TABLE		
100-101	S48° 58' 24"W	30.34'
101-102	S49° 01' 56"W	278.42'
102-103	S40° 58' 04"E	28.67'
103-104	N87° 42' 05"E	13.86'
104-105	S48° 54' 12"W	25.66'
105-106	S48° 54' 12"W	158.09'
106-107	N40° 58' 19"W	37.74'
107-102	N49° 01' 56"E	172.93'

Point	Station	Offset
100	106+81.70	0.00'
101	106+51.35	0.00'
102	103+72.93	0.00'
103	103+72.93	28.67'
104	103+83.75	37.33'
105	103+57.60	37.34'
106	102+00.00	37.74'
107	102+00.00	0.00'
T108	103+92.99	44.72'
T109	103+59.10	41.38'
T110	102+00.00	41.74'



SCHEDULE OF LANDS & INTERESTS REQUIRED		OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTEREST TO CITY OF WAUKESHA						
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	TOTAL SQ FT	R/W SQ FT REQUIRED NEW	R/W SQ FT REQUIRED EXISTING	TOTAL SQ FT REMAINING	PLE SQ FT	TLE SQ FT
15	CITY OF WAUKESHA	TLE		—	—		—	787

UTILITY INTERESTS REQUIRED		
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED
50	AT&T	RELEASE OF RIGHTS

(50) AT&T
NO RECORD OF EASEMENT
PARCEL 15

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
W. ST PAUL AVE	RW Project 2718-07-00	60', 66'	2008
WISCONSIN AVE	RW Project 2718-07-00	VARIES	2008
WISCONSIN AVE	CSM 10422	VARIES	2007
W NORTH ST	CSM 5183	60'	1987

WISCONSIN BRIAN F. GLASZCZ S-3118 WEST BEND WIS. LAND SURVEYOR

AYRES

I, BRIAN F. GLASZCZ PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY OF WAUKESHA I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: _____ DATE: 04/16/2021
PRINT NAME: BRIAN F. GLASZCZ
REGISTRATION NUMBER: S-3118

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF WAUKESHA

SIGNATURE: _____ DATE: 04/16/2021
PRINT NAME: FRED ABADI, PH.D., P.E.

FILE NAME : V:\SURVEY\WK\76-0146.00 CITY OF WAUKESHA\CADD\C3D\SHEETSPLAN\27180421_4.01_A2.DWG
APPRAISAL PLAT DATE : _____
PLOT DATE : 4/16/2021 3:04 PM PLOT BY : LARSON, BENJAMIN PLOT NAME : PLOT SCALE : 1 IN:50 FT

202

STATE OF WISCONSIN
CITY OF WAUKESHA
TRANSPORTATION PROJECT PLAT TITLE SHEET
PROJECT NO. 2718-04-21

MOUNTAIN AVE - MADISON ST

W. ST PAUL AVE
WAUKESHA COUNTY

CONVENTIONAL SYMBOLS

SECTION LINE	SECTION CORNER SYMBOL	R/W MONUMENT (TO BE SET)	
QUARTER LINE		NON-MONUMENTED R/W POINT	
SIXTEENTH LINE	SECTION CORNER MONUMENT	FOUND IRON PIN (1-INCH UNLESS NOTED)	IP
NEW REFERENCE LINE	GEODETIC SURVEY MONUMENT		
NEW R/W LINE	SIXTEENTH CORNER MONUMENT		
EXISTING R/W OR HE LINE	SIGN	OFF-PREMISE SIGN	
PROPERTY LINE			
LOT, TIE & OTHER MINOR LINES			
SLOPE INTERCEPT			
CORPORATE LIMITS			
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)			
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)			
TEMPORARY LIMITED EASEMENT AREA			
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)			
TRANSMISSION STRUCTURES			
BUILDING TO BE REMOVED			
BRIDGE			

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

ACCESS RESTRICTED BY ACQUISITION	
NO ACCESS (BY STATUTORY AUTHORITY)	
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)	
NO ACCESS (NEW HIGHWAY)	
PARCEL NUMBER (25)	UTILITY NUMBER (40)
PARALLEL OFFSETS	

CONVENTIONAL ABBREVIATIONS

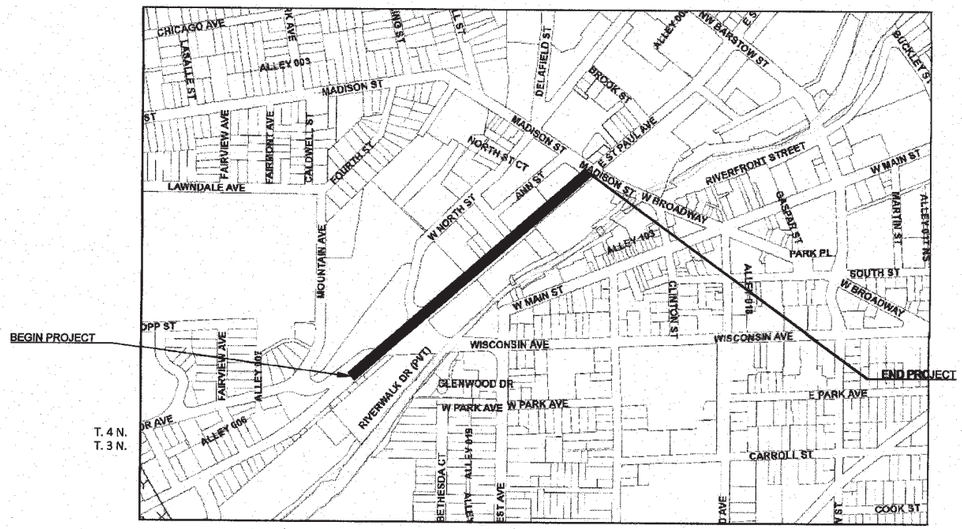
ACCESS RIGHTS	AR	POINT OF INTERSECTION	PI
ACRES	AC	PROPERTY LINE	PL
AHEAD	AH	RECORDED AS	(100')
ALUMINUM	ALUM	REEL / IMAGE	R/I
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
CENTERLINE	C/L	RIGHT	RT
CERTIFIED SURVEY MAP	CSM	RIGHT OF WAY	R/W
CONCRETE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

CURVE DATA

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

CONVENTIONAL UTILITY SYMBOLS

W	WATER
G	GAS
T	TELEPHONE
OH	OVERHEAD TRANSMISSION LINES
E	ELECTRIC
TV	CABLE TELEVISION
FO	FIBER OPTIC
SAN	SANITARY SEWER
SS	STORM SEWER



THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 2718-04-21

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN STATE PLANE COORDINATES, SOUTH ZONE NAD27, IN U.S. SURVEY FEET. VALUES ARE GROUND COORDINATES, GROUND BEARINGS, AND GROUND DISTANCES.

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

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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

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

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

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

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

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE CITY OF WAUKESHA

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

PROJECT NUMBER	2718-04-21	4.01
SHEET	2 OF 2	
AMENDMENT NO:	2	

FILE NAME : V:\SURVEY\WK\76-0146.00 CITY OF WAUKESHA\CADD\C3D\SHEETSPLAN\27180421_4.01_TS.DWG
LAYOUT NAME: TPP Title 34x22

PLOT DATE : 9/16/2015 3:04 PM PLOT BY : LARSON, BENJAMIN PLOT NAME : _____

APPRAISAL PLAT DATE : _____

203

TRANSPORTATION PROJECT PLAT NO: 2718-04-21 - 4.02 AMENDMENT NO: 2

AMENDS TRANSPORTATION PROJECT PLAT NO: 2718-04-21 - 4.02 RECORDED AS DOCUMENT NUMBER 4547360, BY UPDATING STATUES AND AUTHORITY IN RELOCATION ORDER AND SIGNATURE BLOCK, ADDING CONDENSABLE UTILITY INFORMATION, UPDATING PARCEL 3, ADDING PARCEL 8, UPDATING NOTES, AND ADDING BASIS OF R/W TABLE.

THAT PART OF LOT 15 OF BLOCK L OF THE NORTHWEST ADDITION TO PRAIREVILLE, THAT PART OF LOT 2 OF CSM 5183 LOCATED IN THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 AND THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4, THAT PART OF LOT 1 AND LOT 2 OF CSM 10422 LOCATED IN THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 AND THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4, AND THAT PART OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4, THE ALL LOCATED IN SECTION 3, TOWNSHIP 6 NORTH, RANGE 19 EAST, CITY OF WAUKESHA, WAUKESHA COUNTY, WISCONSIN.

RELOCATION ORDER W. ST PAUL AVE., MOUNTAIN AVE. - MADISON ST. WAUKESHA COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 66.22, WISCONSIN STATUTES, THE CITY OF WAUKESHA HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF WAUKESHA, PURSUANT TO THE PROVISIONS OF SECTION 66.22 (1), WISCONSIN STATUTES.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN STATE PLANE COORDINATES, SOUTH ZONE NAD27, IN U.S. SURVEY FEET. VALUES ARE GROUND COORDINATES, GROUND BEARINGS, AND GROUND DISTANCES. COMBINED SCALE FACTOR = 0.99991453.

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

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

UTILITY INTERESTS REQUIRED		
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED
50	AT&T	RELEASE OF RIGHTS
51	SPECTRUM	RELEASE OF RIGHTS
52	WE ENERGIES ELECTRIC	RELEASE OF RIGHTS
53	WINDSTREAM	RELEASE OF RIGHTS
54	MIDWEST FIBER	RELEASE OF RIGHTS

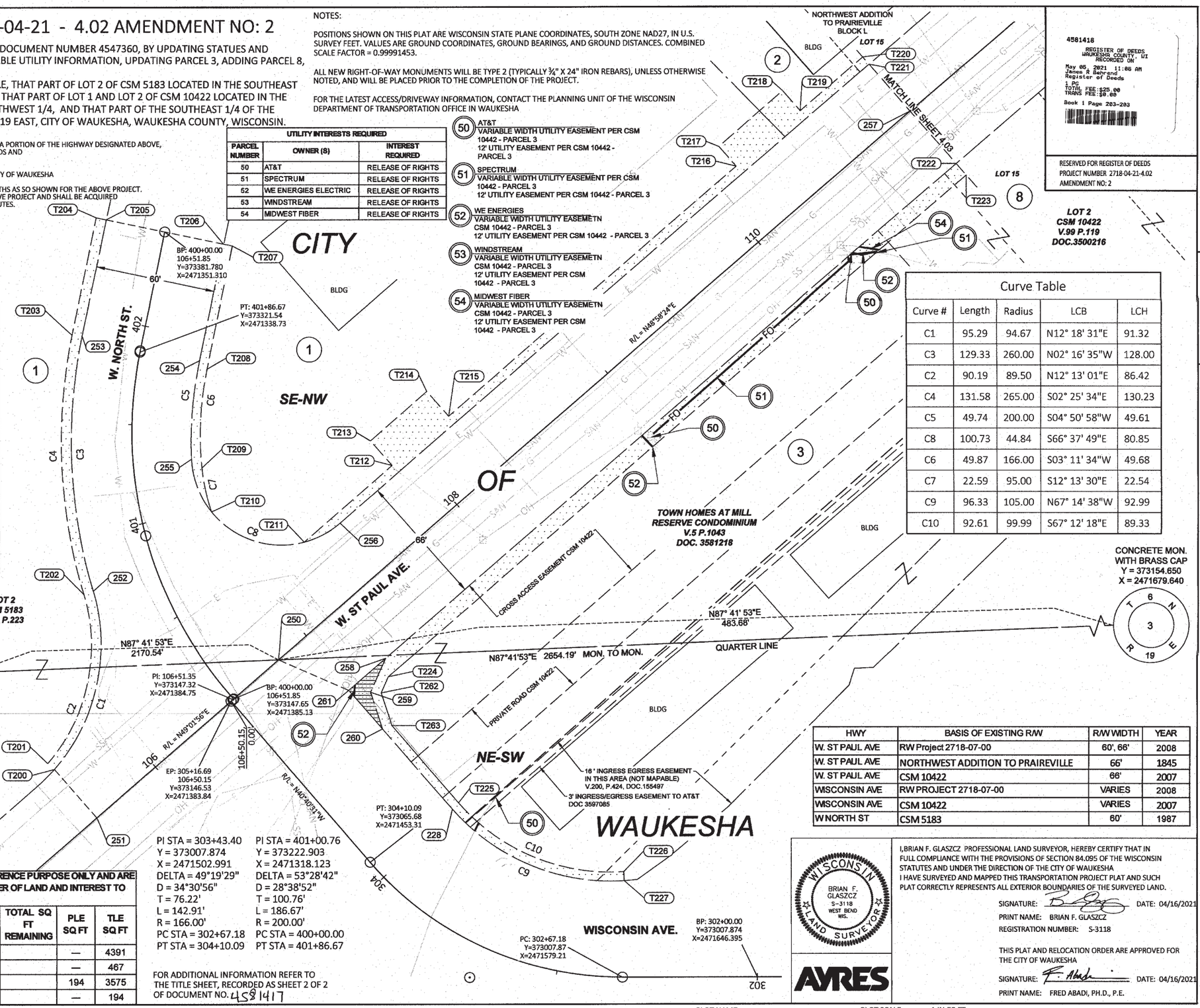
50 AT&T
VARIABLE WIDTH UTILITY EASEMENT PER CSM 10442 - PARCEL 3
12' UTILITY EASEMENT PER CSM 10442 - PARCEL 3

51 SPECTRUM
VARIABLE WIDTH UTILITY EASEMENT PER CSM 10442 - PARCEL 3
12' UTILITY EASEMENT PER CSM 10442 - PARCEL 3

52 WE ENERGIES
VARIABLE WIDTH UTILITY EASEMETN CSM 10442 - PARCEL 3
12' UTILITY EASEMENT PER CSM 10442 - PARCEL 3

53 WINDSTREAM
VARIABLE WIDTH UTILITY EASEMETN CSM 10442 - PARCEL 3
12' UTILITY EASEMENT PER CSM 10442 - PARCEL 3

54 MIDWEST FIBER
VARIABLE WIDTH UTILITY EASEMETN CSM 10442 - PARCEL 3
12' UTILITY EASEMENT PER CSM 10442 - PARCEL 3



Point	Station	Offset
T200	105+61.04	-32.30'
T201	105+60.42	-36.78'
T202	400+76.39	-38.32'
T203	401+88.06	-35.00'
T204	402+48.22	-35.00'
T205	402+48.20	-30.00'
T206	402+48.22	30.00'
T207	402+48.22	34.50'
T208	401+84.80	34.49'
T209	401+24.63	34.01'
T210	400+97.40	34.94'
T211	107+30.07	-36.00'
T212	107+88.50	-36.00'
T213	107+88.53	-52.36'
T214	108+26.08	-52.54'
T215	108+26.18	-36.00'
T216	110+16.71	-36.00'
T217	110+16.71	-49.08'
T218	110+58.97	-49.41'
T219	110+58.97	-36.00'
T220	111+00.03	-36.00'
T221	111+00.03	-31.14'
T222	110+99.97	34.86'
T223	110+99.96	42.50'
T224	107+17.54	42.51'
T225	304+00.84	52.82'
T226	302+66.42	52.96'
T227	302+66.13	48.44'
228	304+00.66	48.40'
250	106+81.70	0.00'
251	105+61.04	0.00'
252	400+76.49	-33.40'
253	401+88.66	-30.00'
254	401+88.47	30.00'
255	401+30.35	29.28'
256	107+49.88	-31.37'
257	111+00.00	0.00'
258	107+22.65	34.61'
259	107+05.72	42.47'
260	106+98.11	60.20'
261	106+98.13	34.59'
T262	107+09.55	46.24'
T263	107+02.76	62.03'

COURSE TABLE		
250-251	S49° 01' 03"W	120.66'
251-T200	N40° 58' 04"W	32.30'
T200-252	SEE C1 IN CURVE TABLE	
252-253	SEE C3 IN CURVE TABLE	
253-T205	N11° 47' 41"E	59.55'
T205-T206	S78° 12' 58"E	60.00'
T206-254	S11° 47' 43"W	59.75'
254-255	SEE C5 IN CURVE TABLE	
255-256	SEE C8 IN CURVE TABLE	
256-T221	N49° 00' 39"E	350.15'
T221-257	S40° 58' 17"E	31.14'
257-T222	S40° 58' 17"E	34.86'
T222-258	S49° 00' 39"W	377.32'
258-259	S24° 03' 54"W	18.67'
259-260	S17° 47' 31"E	19.32'
260-261	N40° 57' 42"W	25.63'
261-250	N66° 26' 06"W	38.30'
T227-228	SEE C9 IN CURVE TABLE	
228-260	N40° 57' 42"W	53.35

Curve Table				
Curve #	Length	Radius	LCB	LCH
C1	95.29	94.67	N12° 18' 31"E	91.32
C3	129.33	260.00	N02° 16' 35"W	128.00
C2	90.19	89.50	N12° 13' 01"E	86.42
C4	131.58	265.00	S02° 25' 34"E	130.23
C5	49.74	200.00	S04° 50' 58"W	49.61
C8	100.73	44.84	S66° 37' 49"E	80.85
C6	49.87	166.00	S03° 11' 34"W	49.68
C7	22.59	95.00	S12° 13' 30"E	22.54
C9	96.33	105.00	N67° 14' 38"W	92.99
C10	92.61	99.99	S67° 12' 18"E	89.33

PI STA = 303+43.40
Y = 373007.874
X = 2471502.991
DELTA = 49°19'29"
D = 34°30'56"
T = 76.22'
L = 142.91'
R = 166.00'
PC STA = 302+67.18
PT STA = 304+10.09

PI STA = 401+00.76
Y = 373222.903
X = 2471318.123
DELTA = 53°28'42"
D = 28°38'52"
T = 100.76'
L = 186.67'
R = 200.00'
PC STA = 400+00.00
PT STA = 401+86.67

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOCUMENT NO. 4581417

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
W. ST PAUL AVE	RW Project 2718-07-00	60', 66'	2008
W. ST PAUL AVE	NORTHWEST ADDITION TO PRAIREVILLE	66'	1845
W. ST PAUL AVE	CSM 10422	66'	2007
WISCONSIN AVE	RW PROJECT 2718-07-00	VARIES	2008
WISCONSIN AVE	CSM 10422	VARIES	2007
W NORTH ST	CSM 5183	60'	1987

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTEREST TO CITY OF WAUKESHA

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	TOTAL SQ FT	R/W SQ FT REQUIRED		TOTAL SQ FT REMAINING	PLE SQ FT	TLE SQ FT
				NEW	EXISTING			
1	AXIOM WAUKESHA	TLE		—	—		—	4391
2	ST. PAUL PLACE PARTNERS LLP	TLE		—	—		—	467
3	MILL RESERVE LLC	PLE/TLE		—	—		194	3575
8	MILL RESERVE LLC	TLE		—	—		—	194

4581418
REGISTER OF DEEDS WAUKESHA COUNTY, WI
RECORDED ON
May 05 2021 11:06 AM
James R Behrend
Register of Deeds
1 PG
TOTAL FEE:$25.00
TRANS FEE:$0.00
Book I Page 203-203

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2718-04-21-4.02
AMENDMENT NO: 2

I, BRIAN F. GLASZCZ PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY OF WAUKESHA I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: _____ DATE: 04/16/2021
PRINT NAME: BRIAN F. GLASZCZ
REGISTRATION NUMBER: S-3118

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF WAUKESHA

SIGNATURE: _____ DATE: 04/16/2021
PRINT NAME: FRED ABADI, PH.D., P.E.

WISCONSIN BRIAN F. GLASZCZ S-3118 WEST BEND WIS. LAND SURVEYOR

AYRES

FILE NAME : V:\SURVEY\WK\76-0146.00 CITY OF WAUKESHA\CADD\C3D\SHEETSPLAN\27180421_4.02_A2.DWG
APPRAISAL PLAT DATE : _____
PLOT DATE : 4/16/2021 3:11 PM
PLOT BY : LARSON, BENJAMIN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT

2718-04-21 - 4.02 AMENDMENT NO: 2

204

TRANSPORTATION PROJECT PLAT NO: 2718-04-21 - 4.03 AMENDMENT NO: 2

AMENDS PARCEL 15 OF TRANSPORTATION PROJECT PLAT NO: 2718-04-21 - 4.03 RECORDED AS DOCUMENT NUMBER 4547361 BY UPDATING STATUES AND AUTHORITY IN RELOCATION ORDER AND SIGNATURE BLOCK, CHANGING PARCEL 3 TO PARCEL 8, UPDATING PARCEL 15, AND UPDATING NOTES.

THAT PART OF LOTS 6-15 OF BLOCK L OF NORTHWEST ADDITION TO PRAIRIEVILLE LOCATED IN THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 AND THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4, AND LOTS 1 AND 2 OF CSM 10422 AND LOT 2 OF CSM 3708 LOCATED IN THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 AND THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4, ALL IN SECTION 3, TOWNSHIP 6 NORTH, RANGE 19 EAST, CITY OF WAUKESHA, WAUKESHA COUNTY, WISCONSIN.

RELOCATION ORDER W. ST PAUL AVE., MOUNTAIN AVE. - MADISON ST. WAUKESHA COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF WAUKESHA HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF WAUKESHA, PURSUANT TO THE PROVISIONS OF SECTION 62.22 (1) WISCONSIN STATUTES.

Point	Station	Offset
300	113+27.47	0.00'
301	111+00.00	0.00'
302	111+00.03	-31.14'
303	113+39.17	-30.99'
304	113+39.11	-32.03'
305	113+53.14	-32.50'
306	113+53.17	-34.12'
307	113+62.79	-43.30'
308	114+12.99	-51.86'
309	114+17.65	-41.97'
310	114+17.54	-32.48'
311	116+93.31	-32.50'
312	116+93.32	-29.77'
313	116+93.34	0.00'
314	116+93.36	30.23'
315	116+93.36	34.23'
316	115+37.75	34.38'
317	115+37.76	36.38'
318	110+99.97	34.86'
319	116+08.60	-32.46'
320	116+08.55	-35.96'
321	116+19.37	-35.97'
322	116+19.41	-32.47'
T350	111+00.03	-36.00'
T351	111+89.25	-36.00'
T352	111+89.25	-41.46'
T353	112+13.32	-41.38'
T354	112+13.31	-36.00'
T355	112+62.94	-36.00'
T356	112+62.94	-41.39'
T357	112+87.99	-41.45'
T358	112+87.99	-36.00'
T359	113+49.18	-36.50'
T360	113+57.55	-43.83'
T361	501+49.12	-30.00
T362	501+28.90	-24.86'
T363	116+93.37	48.18'
T364	115+37.77	48.34'
T365	115+37.76	43.74'
T366	110+99.96	42.50'
T367	116+83.07	-36.50'
T368	116+83.07	-37.50'
T369	116+93.31	-36.50'
371	113+62.51	-30.76'
372	114+12.50	-29.70'
T373	501+49.12	25.12'
T374	501+49.12	29.50'
T375	114+17.33	-54.38'
T376	114+22.11	-42.27'
T377	114+22.10	-37.39'

COURSE TABLE		
300-301	S48° 58' 24"W	227.47'
301-302	N40° 58' 17"W	31.14'
302-303	N49° 00' 39"E	239.13'
303-304	N43° 53' 21"W	1.05'
304-305	N46° 54' 39"E	13.36'
305-306	N41° 01' 36"W	1.62'
306-307	N04° 06' 44"E	13.29'
307-308	N38° 06' 46"E	50.93'
308-309	S67° 26' 26"E	10.93'
309-310	S41° 32' 31"E	9.49'
310-373	N49° 02' 38"E	191.78'
373-374	N41° 39' 21"W	3.50'
374-375	N49° 02' 38"E	10.81'
375-376	S41° 39' 09"E	3.50'
376-311	N49° 02' 38"E	73.91'
311-312	S40° 58' 17"E	2.73'
312-313	S40° 58' 17"E	29.77'
313-314	S40° 58' 17"E	30.23'
314-315	S40° 58' 17"E	4.00'
315-316	S49° 00' 39"W	155.61'
316-317	S40° 59' 21"E	2.00'
317-318	S49° 00' 39"W	437.72'
318-301	N40° 58' 17"W	34.86'

UTILITY INTERESTS REQUIRED		
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED
52	WE ENERGIES ELECTRIC	RELEASE OF RIGHTS

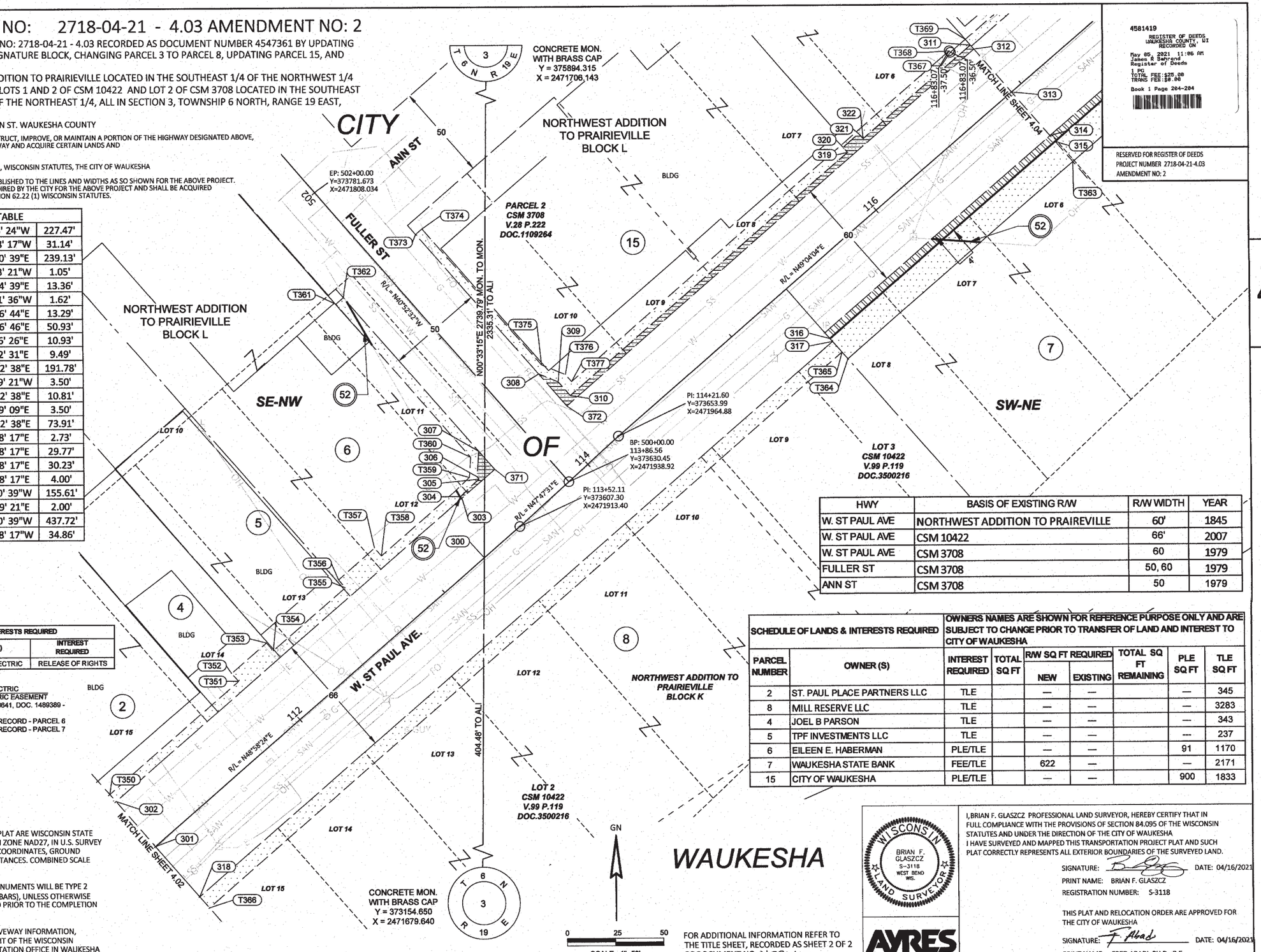
52 WE ENERGIES ELECTRIC
OVERHEAD ELECTRIC EASEMENT
REEL 1018, IMAGE 0841, DOC. 1489389 - PARCEL 5
NO EASEMENT OF RECORD - PARCEL 6
NO EASEMENT OF RECORD - PARCEL 7

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN STATE PLANE COORDINATES, SOUTH ZONE NAD27, IN U.S. SURVEY FEET. VALUES ARE GROUND COORDINATES, GROUND BEARINGS, AND GROUND DISTANCES. COMBINED SCALE FACTOR = 0.99991453.

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

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



HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
W. ST PAUL AVE	NORTHWEST ADDITION TO PRAIREVILLE	60'	1845
W. ST PAUL AVE	CSM 10422	66'	2007
W. ST PAUL AVE	CSM 3708	60	1979
FULLER ST	CSM 3708	50, 60	1979
ANN ST	CSM 3708	50	1979

SCHEDULE OF LANDS & INTERESTS REQUIRED		OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTEREST TO CITY OF WAUKESHA						
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	TOTAL SQ FT	R/W SQ FT REQUIRED NEW	R/W SQ FT REQUIRED EXISTING	TOTAL SQ FT REMAINING	PLE SQ FT	TLE SQ FT
2	ST. PAUL PLACE PARTNERS LLC	TLE		—	—		—	345
8	MILL RESERVE LLC	TLE		—	—		—	3283
4	JOEL B PARSON	TLE		—	—		—	343
5	TPF INVESTMENTS LLC	TLE		—	—		—	237
6	EILEEN E. HABERMAN	PLE/TLE		—	—		91	1170
7	WAUKESHA STATE BANK	FEE/TLE		622	—		—	2171
15	CITY OF WAUKESHA	PLE/TLE		—	—		900	1833

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOCUMENT NO. 4581417

I, BRIAN F. GLASZCZ PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY OF WAUKESHA I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: _____ DATE: 04/16/2021
PRINT NAME: BRIAN F. GLASZCZ
REGISTRATION NUMBER: S-3118

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF WAUKESHA

SIGNATURE: _____ DATE: 04/16/2021
PRINT NAME: FRED ABADI, PH.D., P.E.

AYRES

4581419
REGISTER OF DEEDS WAUKESHA COUNTY, WI
RECORDED ON
May 05, 2021 11:06 AM
James A Behrend
Register of Deeds
1 PG
TOTAL FEE:$25.00
TRANS FEE:$0.00
Book 1 Page 204-204

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2718-04-21-4.03
AMENDMENT NO: 2

FILE NAME : V:\SURVEY\WK\76-0146.00 CITY OF WAUKESHA\CADD\C3D\SHEETSPLAN\27180421_4.03_A2.DWG
APPRAISAL PLAT DATE : _____
PLOT DATE : 4/16/2021 3:11 PM
PLOT BY : LARSON, BENJAMIN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT

2718-04-21 - 4.03 AMENDMENT NO: 2

205

TRANSPORTATION PROJECT PLAT NO: 2718-04-21 - 4.04 AMENDMENT NO: 2

AMENDS TRANSPORTATION PROJECT PLAT NO: 2718-04-21 - 4.04 RECORDED AS DOCUMENT NUMBER 4547362 BY UPDATING STATUES AND AUTHORITY IN RELOCATION ORDER AND SIGNATURE BLOCK, ADDING BASIS OF R/W TABLE, AND UPDATING NOTES .

THAT PART OF LOTS 1-5 BLOCK K AND LOTS 1-3 BLOCK P OF NORTHWEST ADDITION TO PRAIREVILLE, LOTS 9-11 OF KIMBALLS PLAT OF SUBDIVISION OF A PART OF BLOCK O IN THE NORTHWEST ADDITION TO PRAIRIEVILLE, LOTS 1-4 OF KIMBALLS SECOND SUBDIVISION OF PART OF MILL RESERVE, MADISON HOUSE CONDOMINIUM PLAT, PARCEL 1 OF CSM 10385, PARCEL 1 AND 2 OF CSM 8828, ALL BEING PART OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 ALL LOCATED IN SECTION 3, TOWNSHIP 6 NORTH, RANGE 19 EAST, CITY OF WAUKESHA. WAUKESHA COUNTY, WISCONSIN

RELOCATION ORDER W. ST PAUL AVE., MOUNTAIN AVE. - MADISON ST. WAUKESHA COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22 WISCONSIN STATUTES, THE CITY OF WAUKESHA HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF WAUKESHA, PURSUANT TO THE PROVISIONS OF SECTION 62.22 (1) WISCONSIN STATUTES.

Point	Station	Offset
400	118+00.00	0.00'
401	116+93.34	0.00'
402	116+93.32	-31.77'
403	119+19.33	-31.99'
404	603+91.10	-48.28'
405	604+67.87	-48.40'
406	604+82.28	-59.30'
407	604+89.33	-84.07'
408	605+37.48	-70.43'
409	605+26.81	-33.11'
413	605+60.01	-33.17'
414	605+59.98	0.00'
415	605+59.96	32.83'
416	605+59.97	36.83'
417	603+94.67	37.09'
418	603+77.25	33.11'
419	120+44.35	-30.08'
420	122+63.15	29.97'
421	122+62.17	0.00'
422	122+61.19	30.03'
423	120+98.23	29.95'
424	120+77.40	36.19'
425	120+71.18	40.97'
426	120+68.15	53.59'
427	601+68.32	32.74'
428	600+00.05	33.62'
429	600+25.85	0.00'
430	600+50.25	-31.80'
431	600+50.71	-33.50'
432	601+26.68	-33.50'
434	601+65.64	-33.50'
435	120+02.15	62.73'
436	119+77.05	33.95'
437	116+93.36	34.23'
438	116+93.36	30.23'
T450	116+93.31	-36.50'
T451	119+35.13	-36.50'

Point	Station	Offset
T452	604+74.66	-50.04'
T453	604+84.52	-85.44'
T454	605+42.07	-69.12'
T455	605+37.22	-52.00'
T456	605+47.80	-38.00'
T457	605+60.00	-38.00'
T458	605+59.97	40.83'
T459	120+38.57	-79.32'
T460	121+08.86	-30.05'
T461	121+08.86	-35.05'
T462	121+21.38	-35.04'
T463	121+22.63	-30.04'
T464	121+49.86	-30.02'
T465	121+48.41	-35.02'
T466	121+78.23	-35.01'
T467	121+79.64	-30.01'
T468	121+91.26	-30.01'
T469	121+91.24	-35.01'
T470	122+63.16	34.97'
T471	122+61.19	34.53'
T472	121+00.46	34.50'
T473	120+79.72	40.72'
T474	601+82.01	37.54'
T475	601+26.68	37.50'
T476	600+00.00	37.50'
T477	600+51.80	-37.50'
T478	601+26.68	-37.50'
T479	601+82.01	-37.46'
T480	119+95.17	54.73'
T481	119+89.24	47.94'
T484	119+92.73	29.93'
T485	120+61.37	29.93'
T487	116+94.19	48.21'
T488	120+73.08	54.46'
T489	120+75.63	43.86'
491	120+61.37	29.93'
492	119+92.73	29.93'

Curve Table				
Curve #	Length	Radius	LCB	LCH
C1	55.48	29.99	N03° 56' 41"W	47.90
C2	19.38	15.00	S86° 02' 33"W	18.06
C3	20.32	11.00	N03° 56' 27"W	17.55
C4	43.71	308.29	N64° 23' 21"W	43.67

COURSE TABLE		
400-401	S49° 04' 03"W	106.66'
401-402	N40° 58' 17"W	31.77'
402-403	N49° 00' 39"E	226.01'
403-404	SEE C1 IN TABLE	
404-405	N56° 56' 37"W	76.77'
405-406	SEE C2 IN TABLE	
406-407	S49° 01' 43"W	25.76'
407-408	N41° 01' 10"W	50.00'
408-409	N49° 01' 43"E	38.79'
409-413	N56° 56' 37"W	33.20'
413-414	N33° 11' 29"E	33.17'
414-415	N33° 11' 29"E	32.83'
415-416	N32° 57' 46"E	4.00'
416-417	S56° 56' 37"E	165.30'
417-418	S43° 58' 48"E	17.83'
418-419	S56° 56' 37"E	51.20'
419-420	N49° 04' 03"E	218.80'
420-421	S39° 05' 25"E	29.99'

COURSE TABLE		
421-422	S39° 05' 35"E	30.05'
422-423	S49° 04' 04"W	162.96'
423-424	S32° 20' 33"W	21.74'
424-425	S11° 34' 10"W	7.84'
425-426	S27° 28' 18"E	12.98'
426-427	S56° 57' 01"E	69.12'
427-428	S67° 47' 01"E	163.18'
428-429	S59° 03' 19"W	42.38'
429-430	S59° 03' 19"W	40.09'
430-431	S36° 44' 01"W	1.76'
431-432	N68° 26' 59"W	75.96'
432-434	SEE C4 IN TABLE	
434-435	N56° 57' 01"W	84.78'
435-436	N82° 01 14"W	38.19'
436-437	S49° 00' 39"W	283.69'
437-438	N40° 58' 17"W	4.00'
438-400	N40° 58' 17"W	30.23'

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOCUMENT NO. 4581417

SCHEDULE OF LANDS & INTERESTS REQUIRED		OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTEREST TO CITY OF WAUKESHA						
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	TOTAL SQ FT	R/W SQ FT REQUIRED NEW	R/W SQ FT REQUIRED EXISTING	TOTAL SQ FT REMAINING	PLE SQ FT	TLE SQ FT
7	WAUKESHA STATE BANK	FEE/PLE/TLE		1442	---		421	6528
9	WARREN REAL ESTATE VENTURE	TLE		---	---		---	1259
10	E&J PROPERTY MANAGEMENT INC	TLE		---	---		---	387
11	GARY L. SCHLEI AND KAREN F. SCHLEI	TLE		---	---		---	66
12	SHELL-B LLC	TLE		---	---		---	149
13	EXCHANGERIGHT NET LEASED PORTFOLIO 17	PLE/TLE		---	---		617	804
14	KISH ENTERPRISES	TLE		---	---		---	157
15	CITY OF WAUKESHA	PLE/TLE		---	---		152	383

UTILITY INTERESTS REQUIRED		
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED
50	AT&T	RELEASE OF RIGHTS
52	WE ENERGIES ELECTRIC	RELEASE OF RIGHTS
53	UNKNOWN FIBER OPTIC	RELEASE OF RIGHTS

4581420
REGISTER OF DEEDS
WAUKESHA COUNTY, WI
RECORDED ON
May 05, 2021 11:06 AM
James A Bohren
Register of Deeds
1 PG
TOTAL FEE:$25.00
TRANS FEE:$0.00
Book 1 Page 205-205

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2718-04-21-4.04
AMENDMENT NO: 2

50 AT&T
NO RECORD OF EASEMENT - PARCEL 15
10' UNDERGROUND TELEPHONE EASEMENT DOC 1587861 - PARCEL 7
12' UNDERGROUND TELEPHONE EASEMENT DOC 901203 - PARCEL 7
VARIABLE WIDTH FIBER OPTIC EASEMENT DOC 1459211 - PARCEL 7
10' FIBER OPTIC EASEMENT DOC 1642883 - PARCEL 7

52 WE ENERGIES ELECTRIC
12' UNDERGROUND ELECTRIC EASEMENT DOC. 3581605 - PARCEL 9
5' UNDERGROUN ELECTRIC EASEMENT DOC 3954099 - PARCEL 9
10' UNDERGROUND ELECTRIC EASEMENT REEL 1209, IMAGE 905, DOC. 1596519 - PARCEL 7

53 UNKNOWN FIBER OPTIC
NO EASEMENT OF RECORD - PARCEL 10

SCALE: 1"=50'

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN STATE PLANE COORDINATES, SOUTH ZONE NAD27, IN U.S. SURVEY FEET. VALUES ARE GROUND COORDINATES, GROUND BEARINGS, AND GROUND DISTANCES. COMBINED SCALE FACTOR = 0.99991453.
ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.
FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA

CONCRETE MON. WITH BRASS CAP
Y = 375894.315
X = 2471706.143

CONCRETE MON. WITH BRASS CAP
Y = 373154.650
X = 2471679.640

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
W. ST PAUL AVE	NORTHWEST ADDITION TO PRAIREVILLE	60'	1845
W. ST PAUL AVE	CSM 10385	60'	2007
W. ST PAUL AVE	CSM 8828	60'	1999
ANN ST	MADISON ST CONDOMINIUM PLAT	50'	1980
ANN ST	CSM 10385	50'	2007
MADISON ST	CSM 10385	66'	2007
MADISON ST	MADISON ST CONDOMINIUM PLAT	66'	1980
MADISON ST	CSM 8828	66'	1999
MADISON ST	NORTHWEST ADDITION TO PRAIREVILLE	66'	1845
MADISON ST	KIMBALLS SECOND SUBDIVISION OF PART OF MILL RESERVE	66'	1868

I, BRIAN F. GLASZCZ PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY OF WAUKESHA I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: _____ DATE: 04/16/2021
PRINT NAME: BRIAN F. GLASZCZ
REGISTRATION NUMBER: S-3118

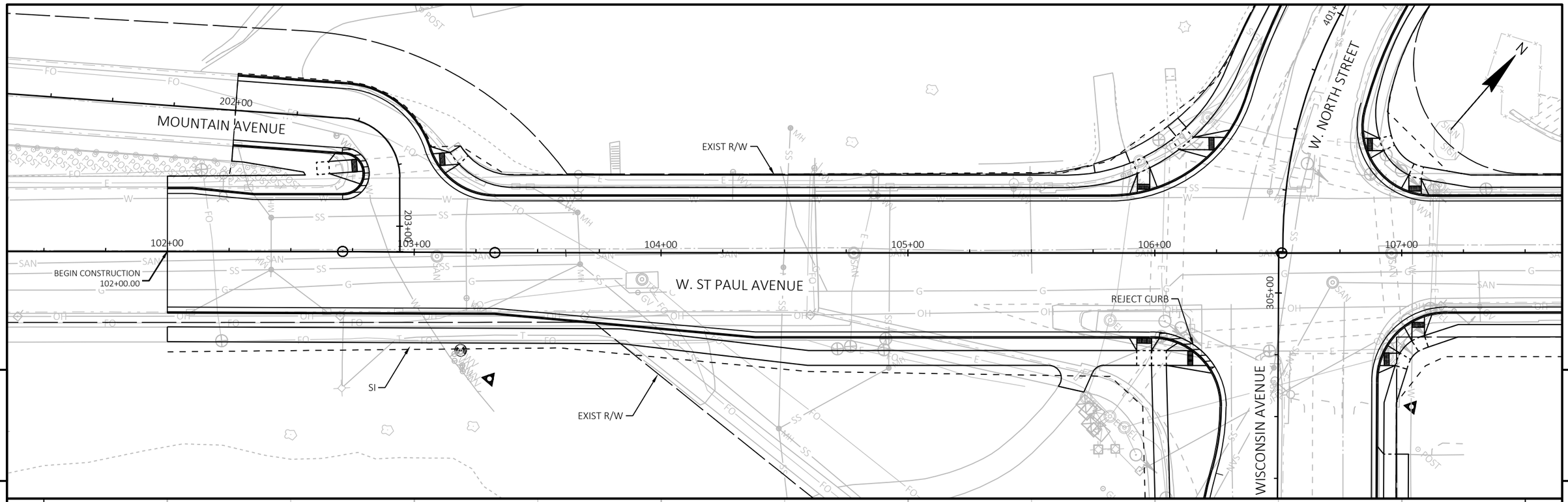
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF WAUKESHA

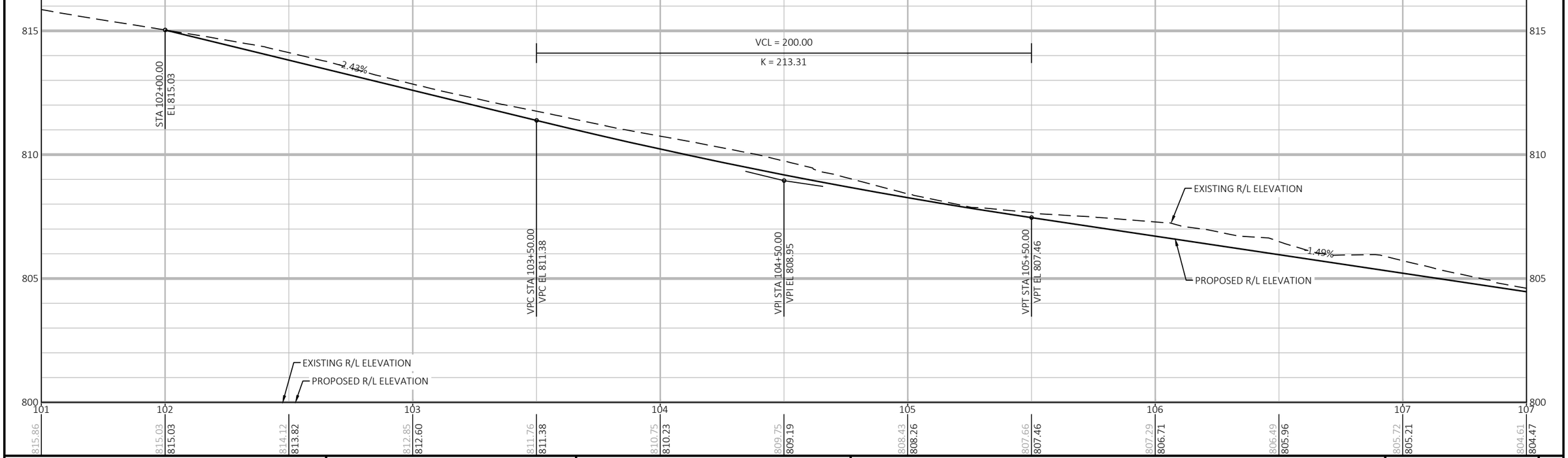
SIGNATURE: _____ DATE: 04/16/2021
PRINT NAME: FRED ABADI, PH.D., P.E.

AYRES

FILE NAME : V:\SURVEY\WK\76-0146.00 CITY OF WAUKESHA\CADD\C3D\SHEETSPLAN\27180421_4.04_A2.DWG
APPRAISAL PLAT DATE : _____
PLOT DATE : 4/16/2021 3:12 PM
PLOT BY : LARSON, BENJAMIN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT

2718-04-21 - 4.04 AMENDMENT NO: 2

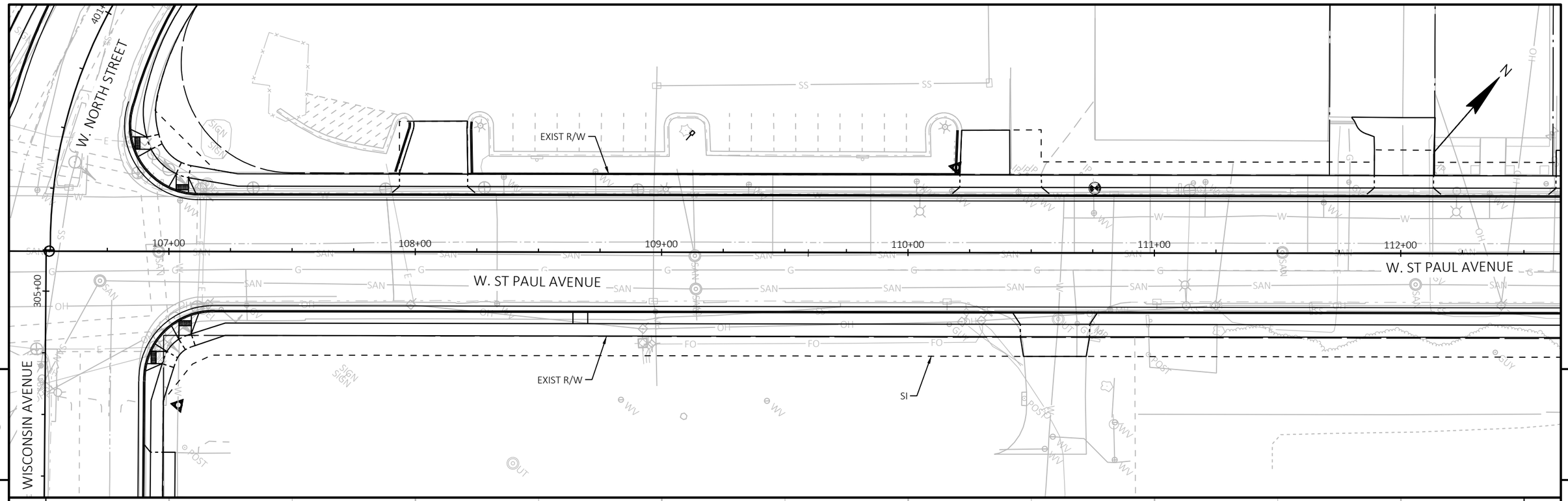


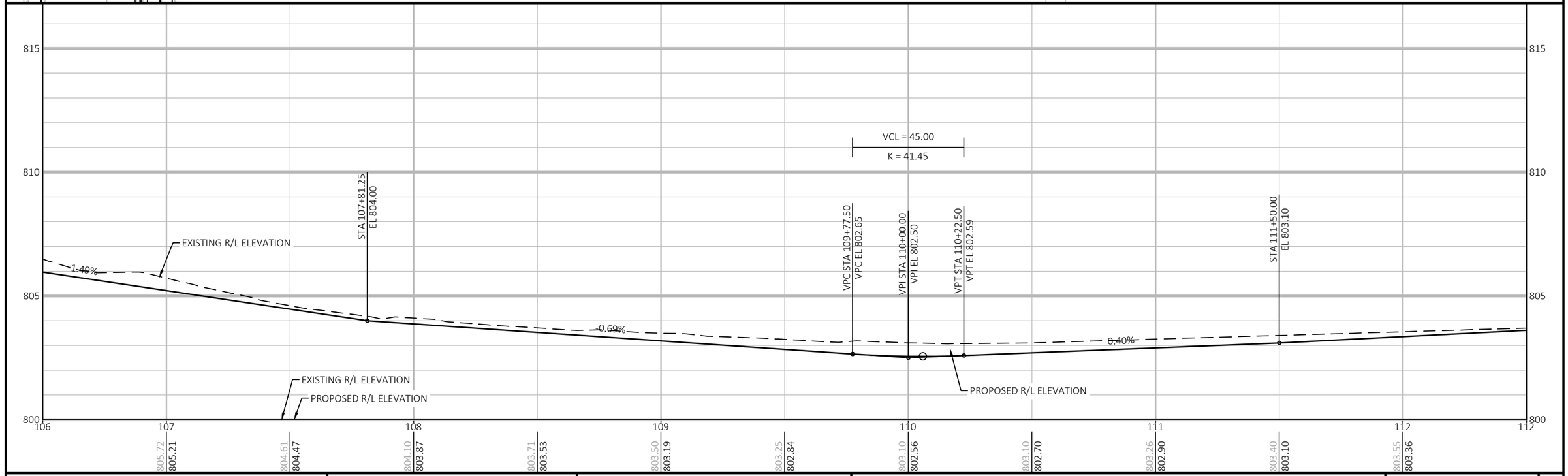


PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PLAN AND PROFILE: W. ST PAUL AVENUE	SHEET 256	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp

PLOT DATE : 10/7/2021 2:42 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT



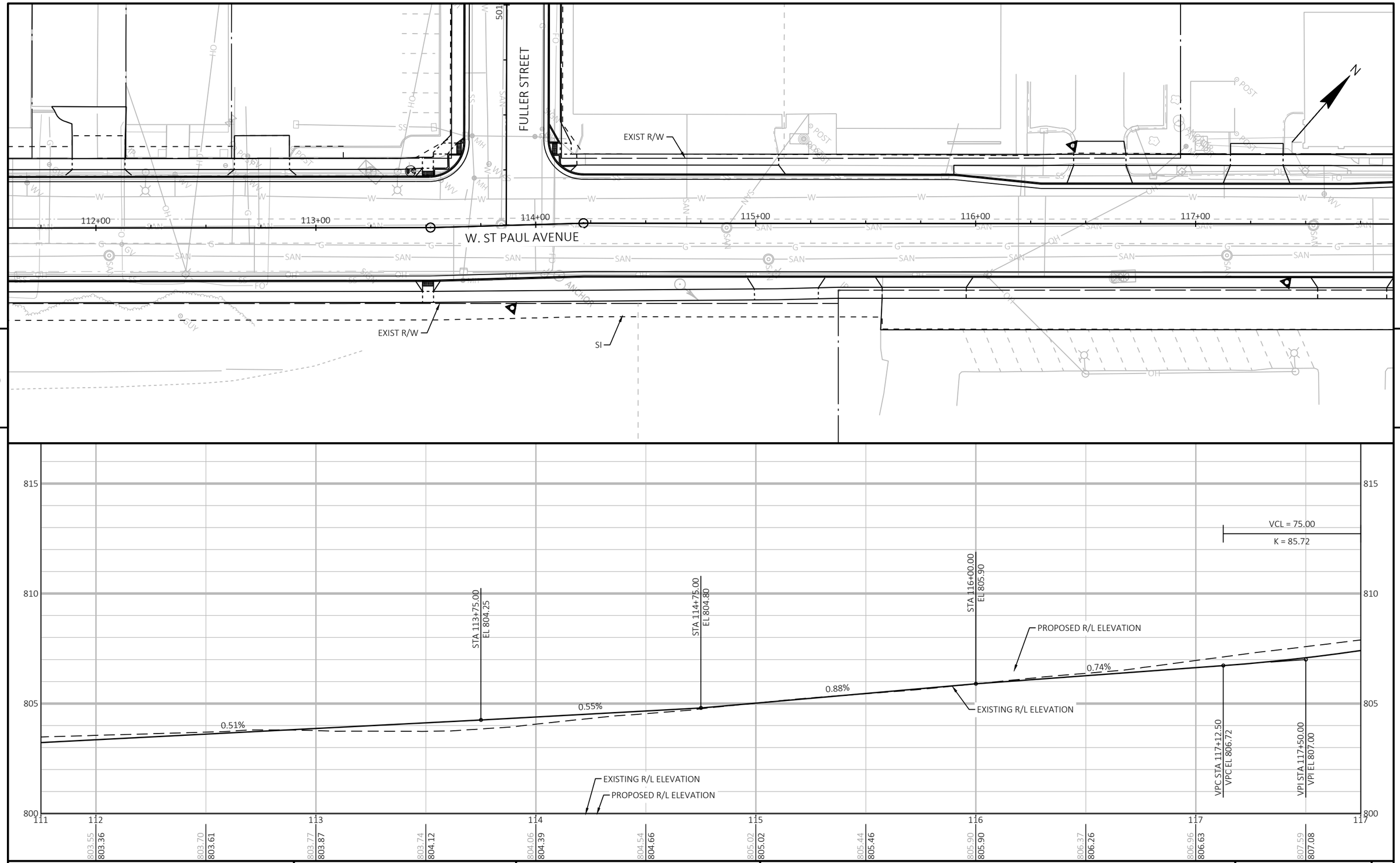


PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PLAN AND PROFILE: W. ST PAUL AVENUE	SHEET 257	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050102-pp

PLOT DATE : 10/7/2021 2:42 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

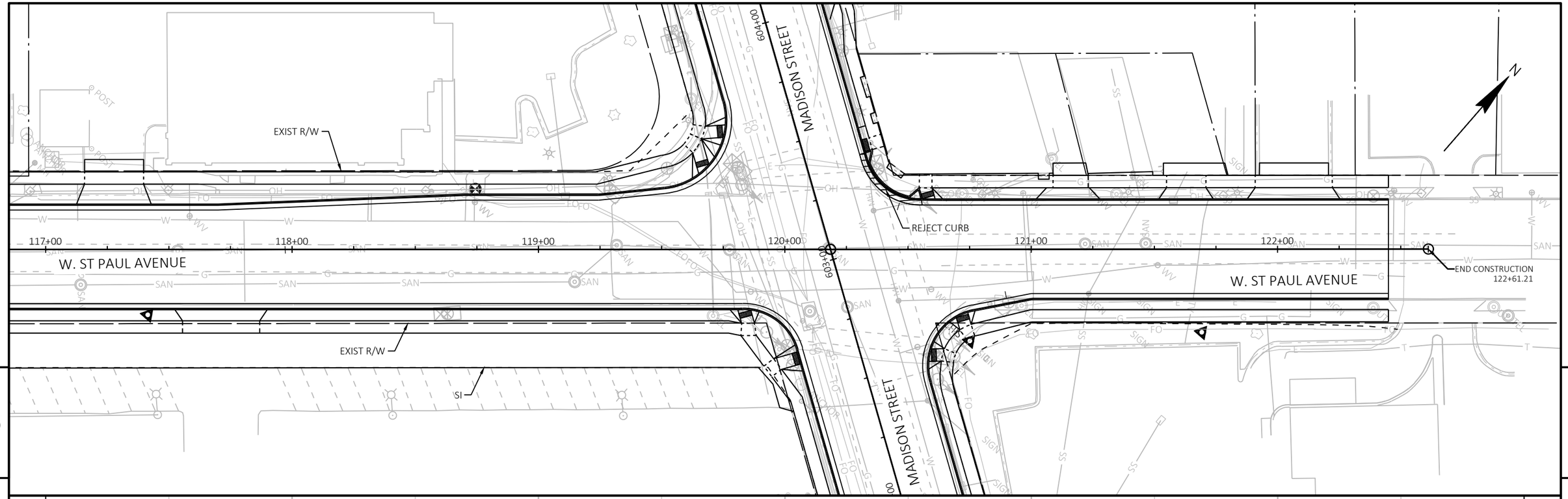
WISDOT/CADDS SHEET 44

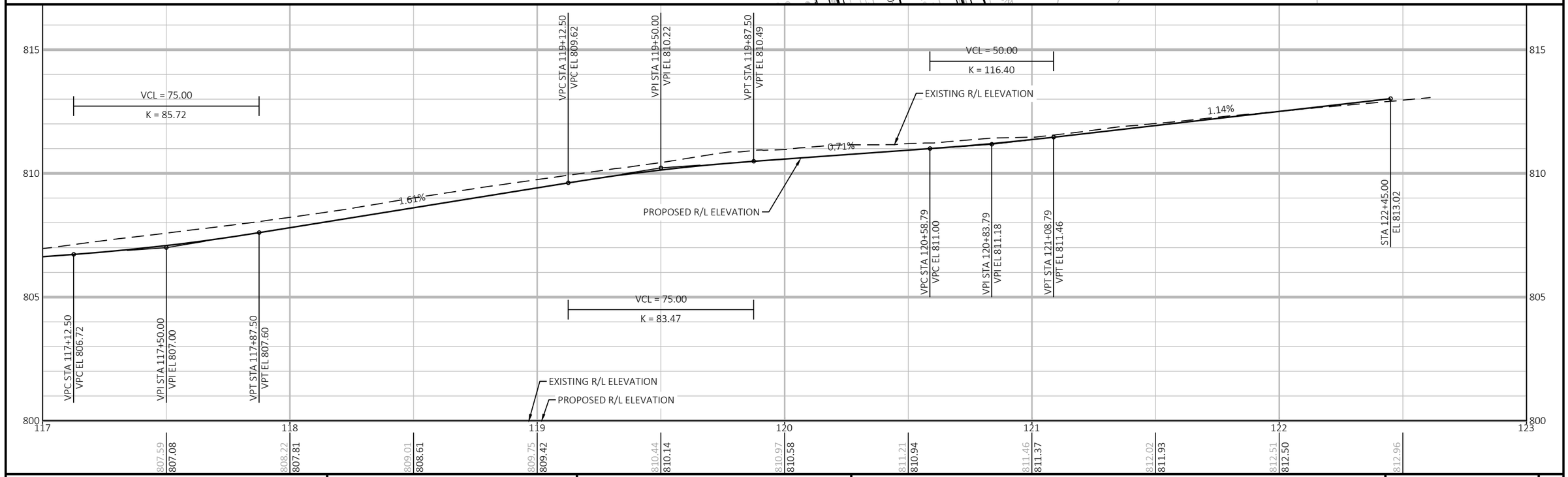


PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PLAN AND PROFILE: W. ST PAUL AVENUE	SHEET 258	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050103-pp

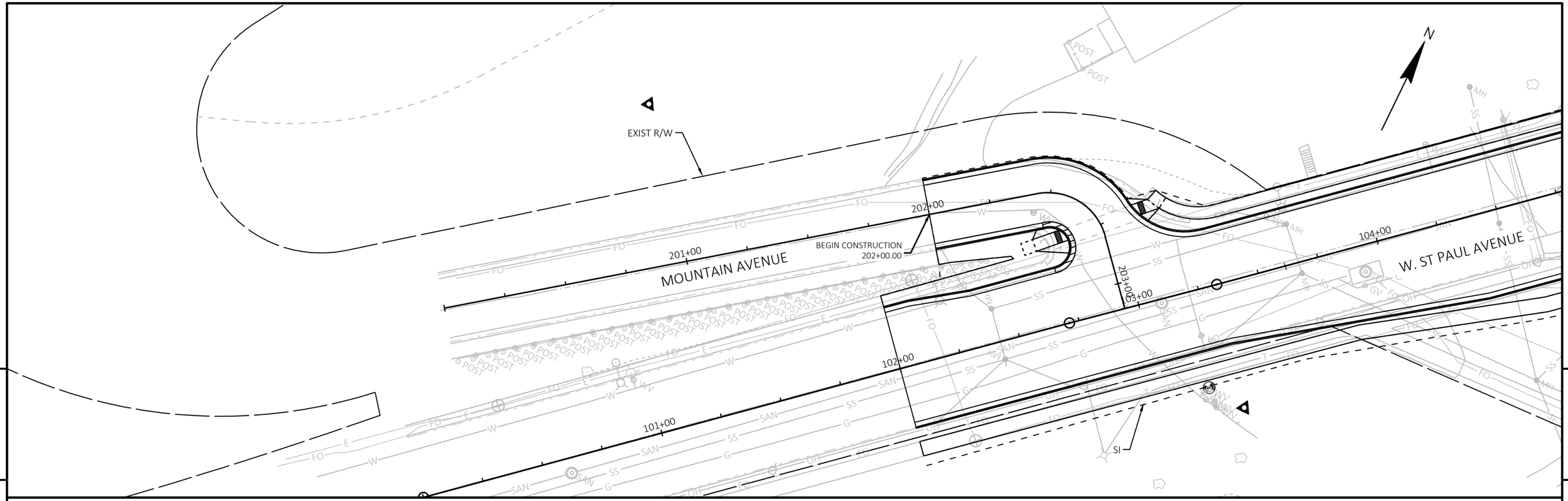
PLOT DATE : 10/7/2021 2:42 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT





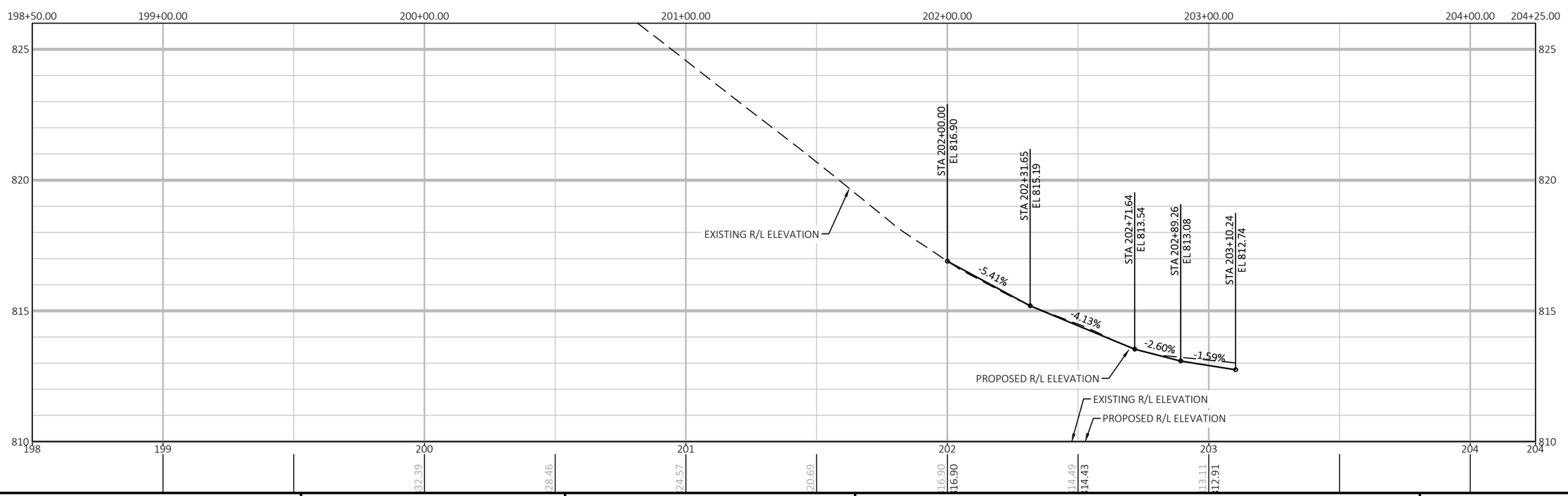
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PLAN AND PROFILE: W. ST PAUL AVENUE	SHEET 259	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050104-pp
PLOT DATE : 10/7/2021 2:43 PM
PLOT BY : CRAIG AUSEN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



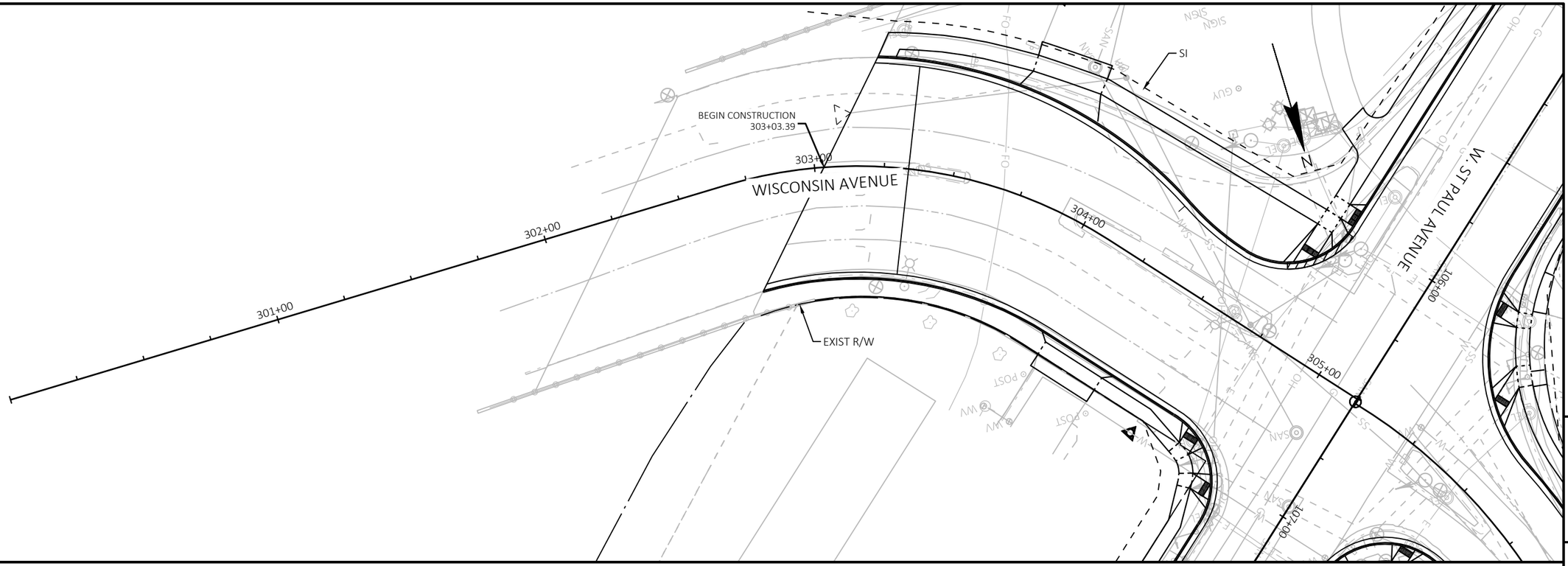
5

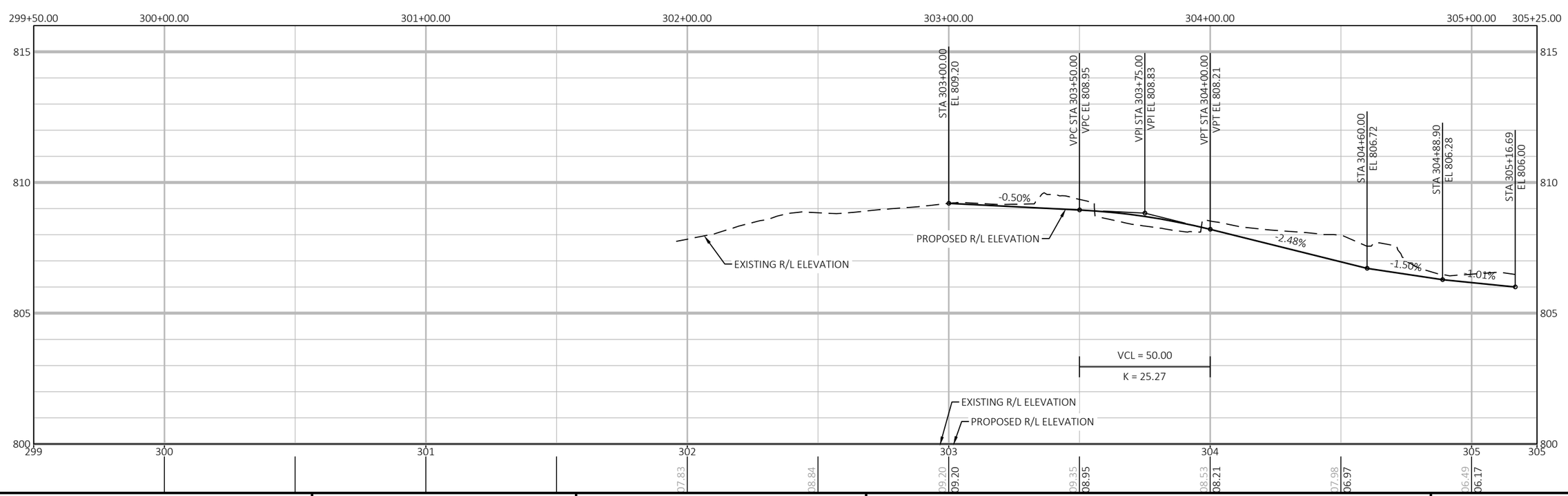
5



PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PLAN AND PROFILE: MOUNTAIN AVENUE	SHEET 260	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050105-pp
PLOT DATE : 10/7/2021 2:43 PM
PLOT BY : CRAIG AUSEN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



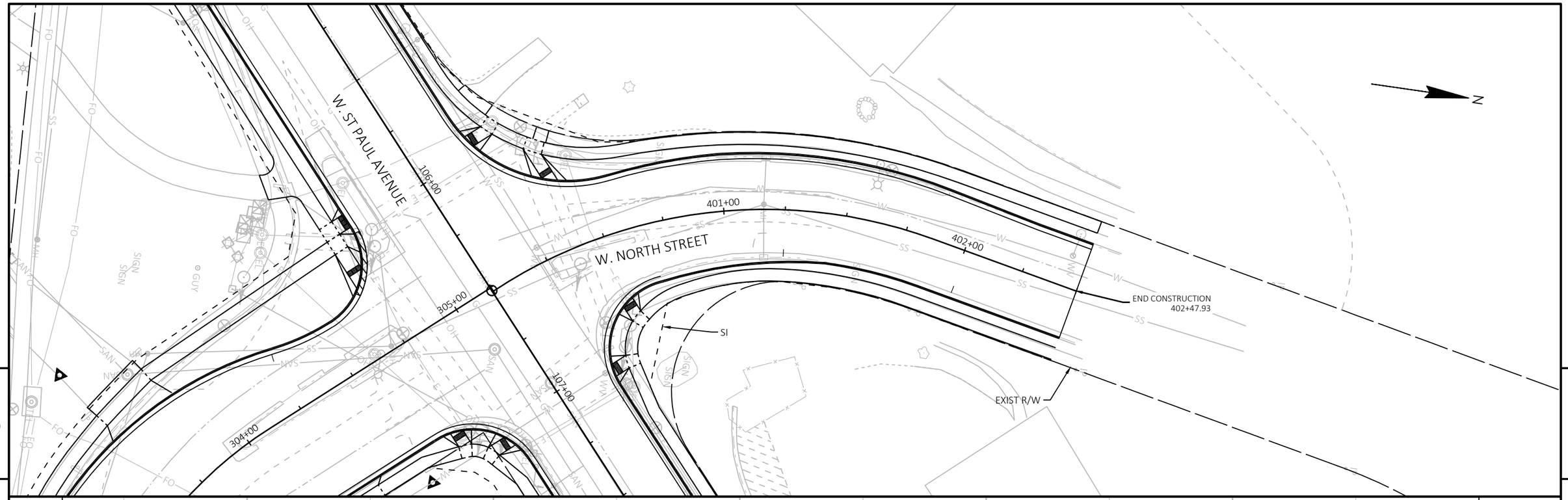


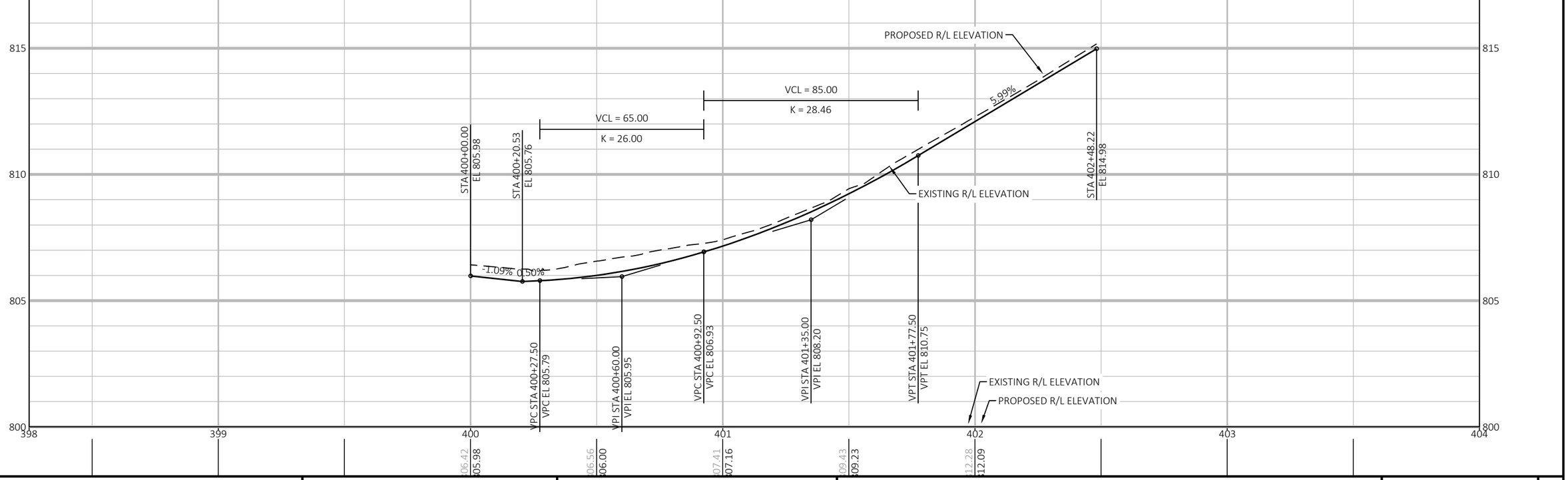
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PLAN AND PROFILE: WISCONSIN AVENUE	SHEET 261	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050106-pp

PLOT DATE : 10/7/2021 2:44 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

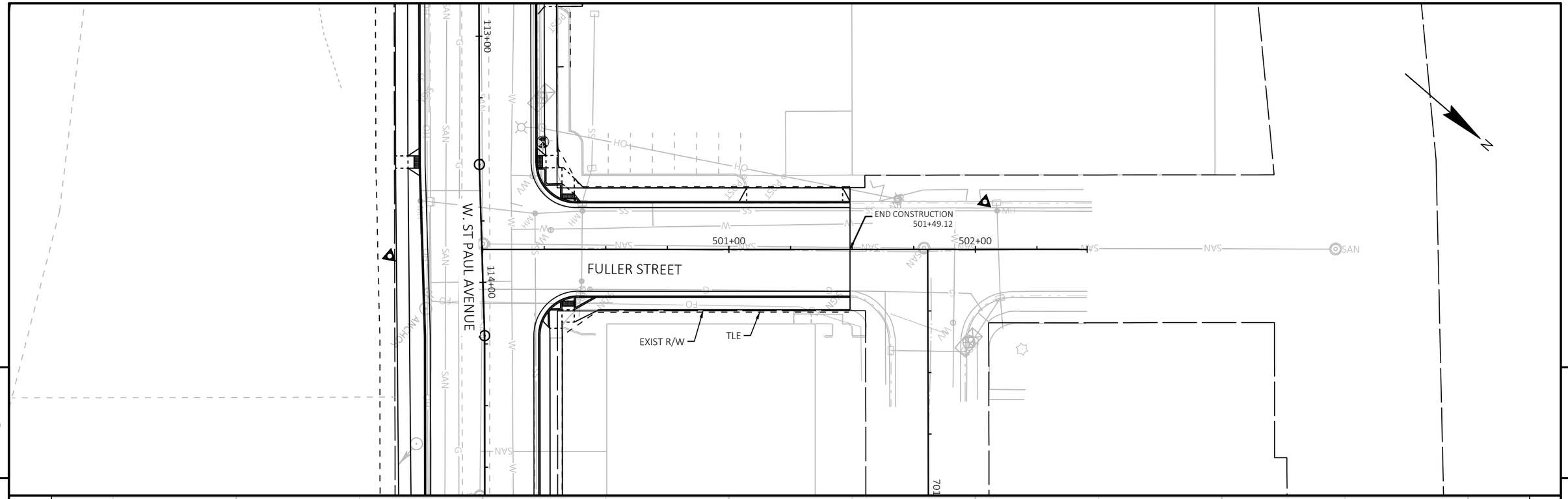


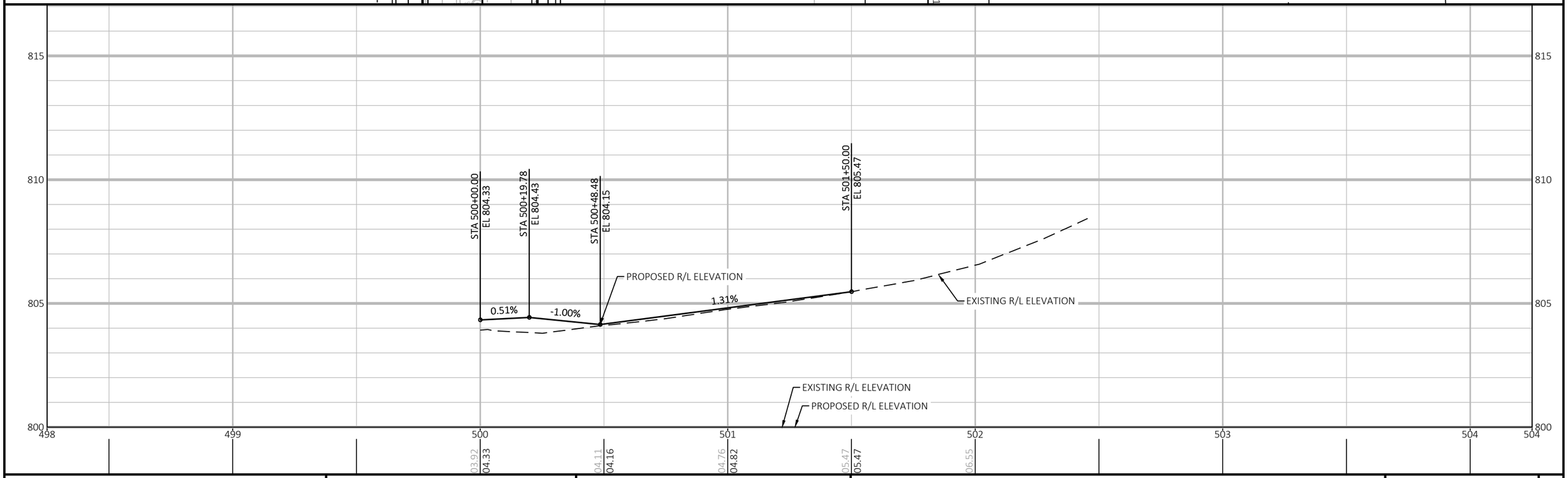


PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PLAN AND PROFILE: W. NORTH STREET	SHEET 262	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050107-pp

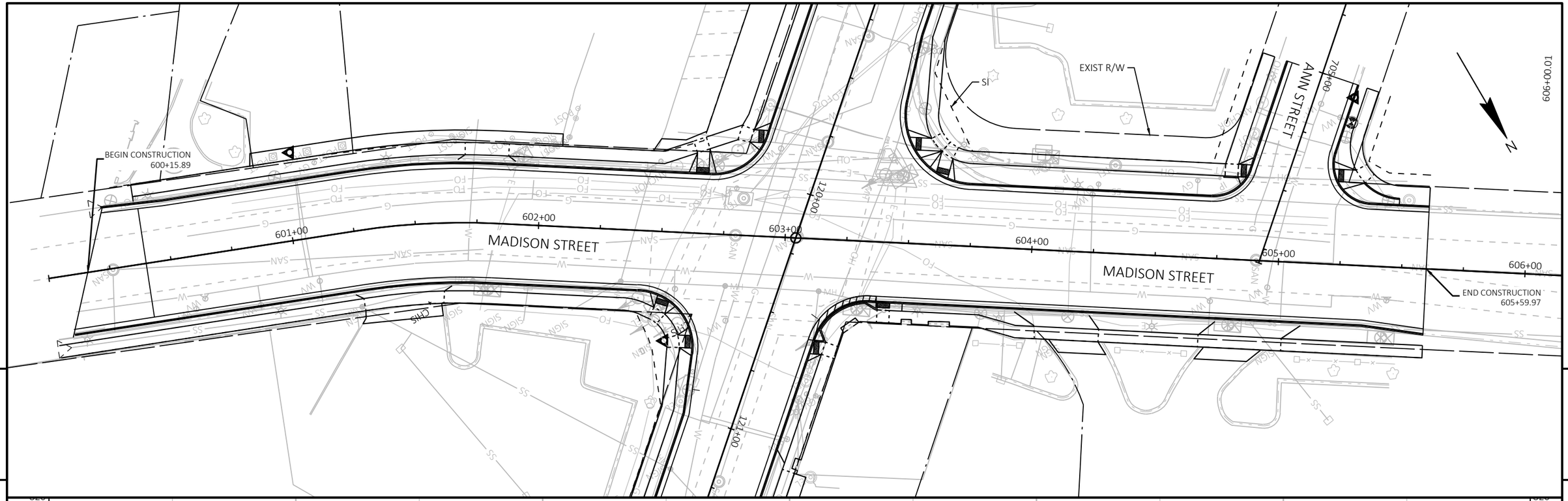
PLOT DATE : 10/7/2021 2:44 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT

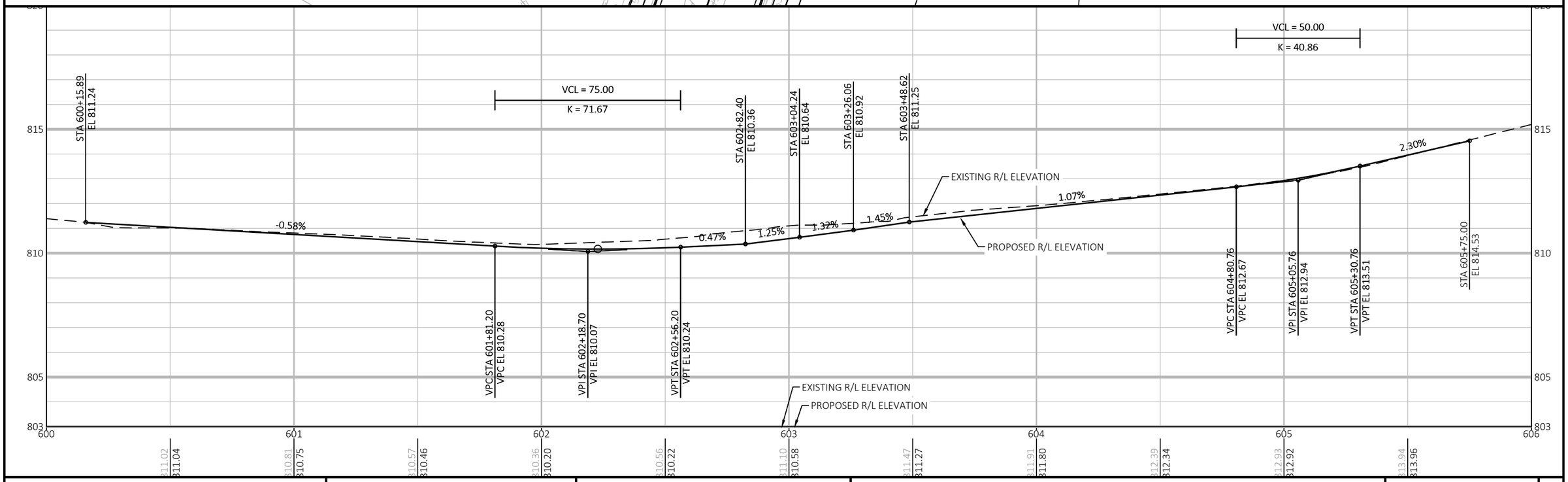




PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PLAN AND PROFILE: FULLER STREET	SHEET 263	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050108-pp
PLOT DATE : 10/7/2021 2:46 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



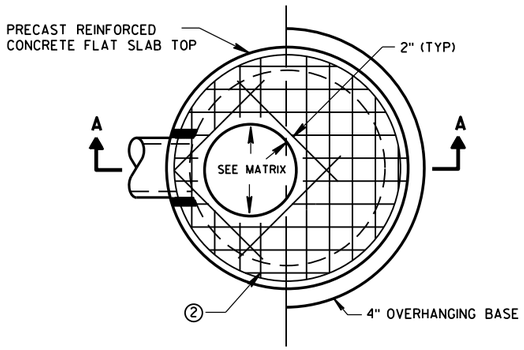


PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	PLAN AND PROFILE: MADISON STREET	SHEET 264 E

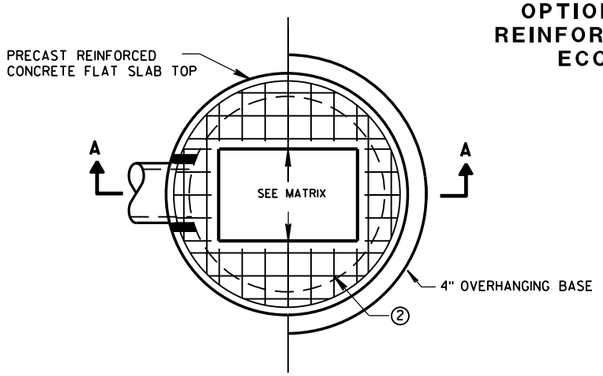
Standard Detail Drawing List

08A08-02	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08A09-02	CATCH BASINS 2X3-FT AND 2.5X3-FT
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
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
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	CONDUIT
09B04-11	PULL BOX
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C11-10	CONCRETE BASE TYPE 10
09C13-02	CONCRETE BASE TYPE 10 & TYPE 13 EXTENSION
09C14-03	CONCRETE CONTROL CABINET BASE, TYPE L
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09D04-03	LIGHTING CONTROL CABINET 120/240 VOLT
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
09E08-09E	TYPE 10 POLE 15'-30' MONOTUBE ARM
09E08-09K	GENERAL NOTES,HARDWARE DETAILS FOR TYPE 9/10,9/10 SPECIAL,12 & 13 POLES W/MONOTUBE ARMS
09H16-01	INSTALL WIRELESS ANTENNA
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-09	URBAN DOWELED CONCRETE PAVEMENT
13C18-07A	CONCRETE PAVEMENT JOINTING
13C18-07B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-07C	CONCRETE PAVEMENT JOINT TYPES
13C18-07D	CONCRETE PAVEMENT JOINT TYPES AT UTILITY FIXTURES
13C19-03	HMA LONGITUDINAL JOINTS
15C07-15A	PAVEMENT MARKING SYMBOLS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-09A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C18-05A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15C36-01	PARKING STALL MARKING
15D30-06A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-06B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-06C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

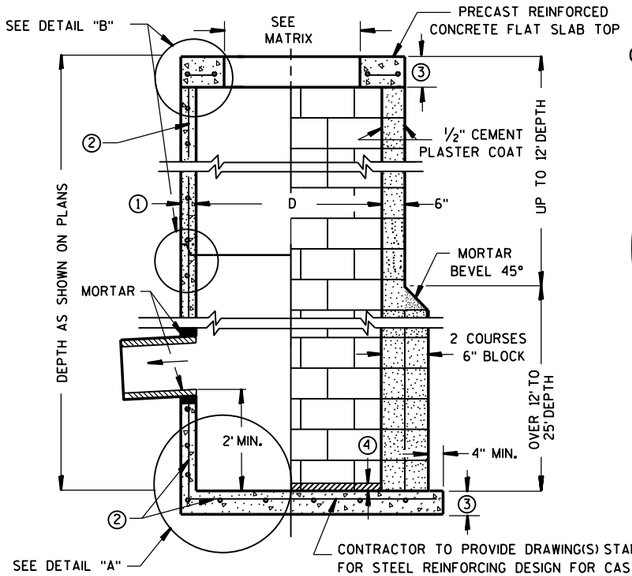
6



PLAN VIEW CIRCULAR OPENING



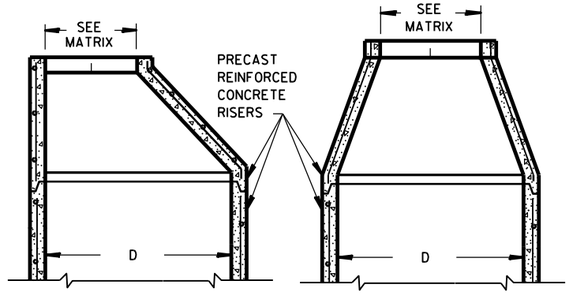
PLAN VIEW RECTANGULAR OPENING



SECTION A-A

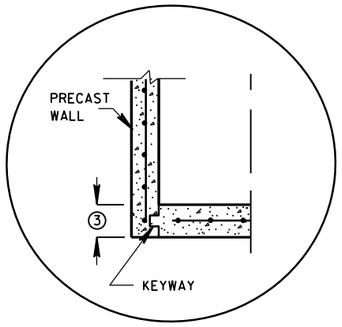
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

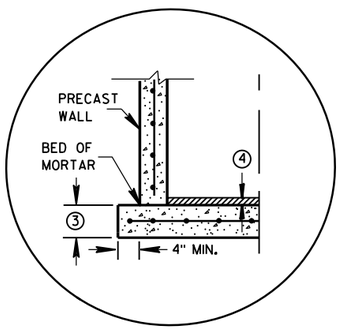


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

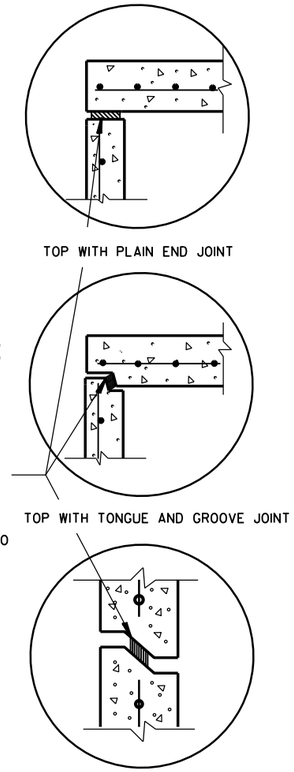


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



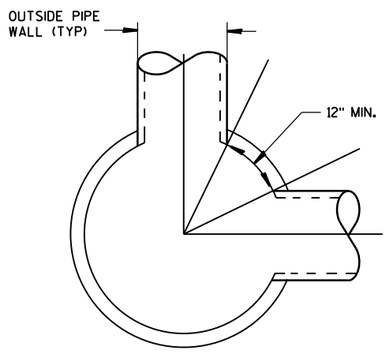
SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



DETAIL "C"

GENERAL NOTES

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

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

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

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

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

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

④ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER OPENING MATRIX

CATCH BASIN SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT)											
3-FT	2X2	X	X					X		X		
	2 DIA.				X							X
4-FT-6-FT	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3					X						

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

STATE OF WISCONSIN
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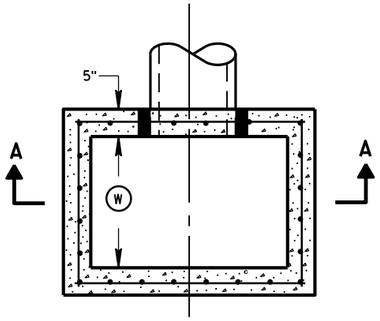
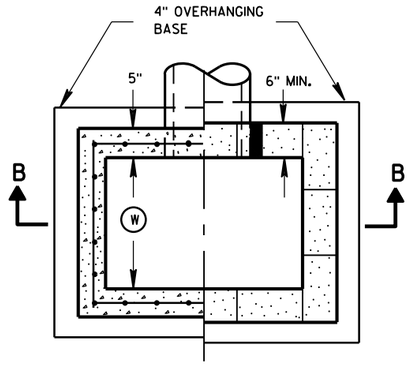
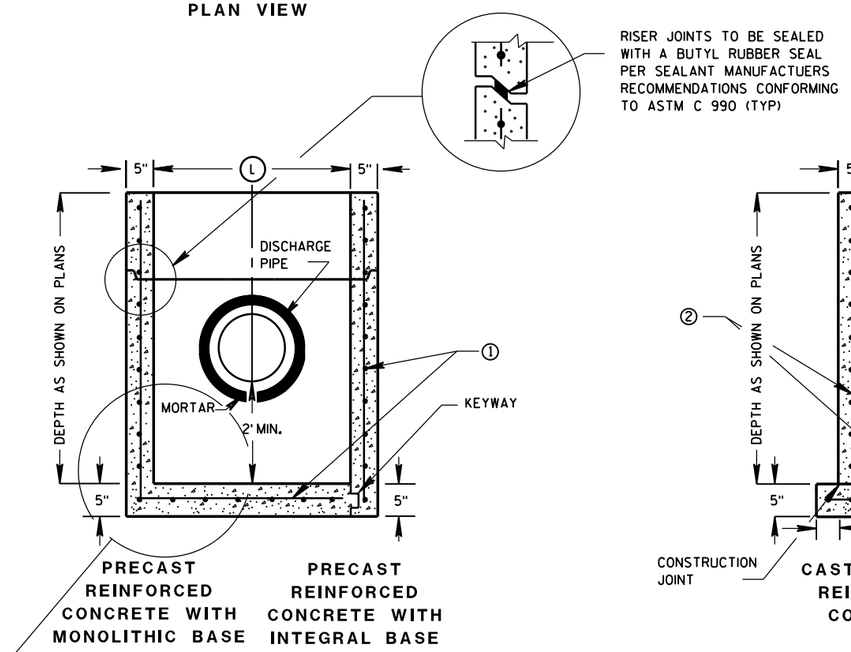
APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA



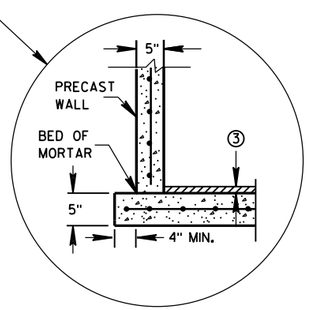
PLAN VIEW



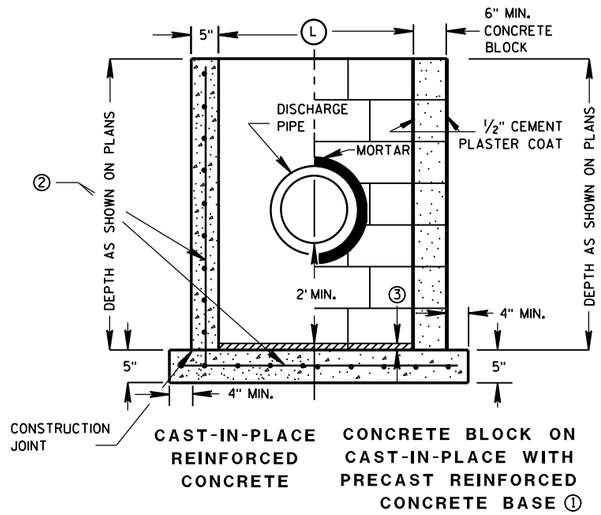
PLAN VIEW



SECTION A-A



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION



SECTION B-B

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

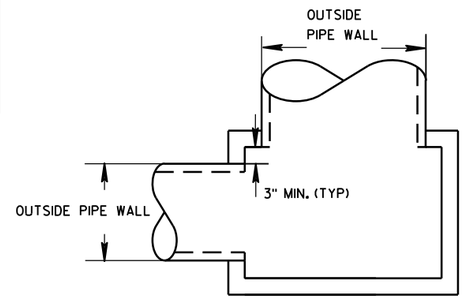
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE		INLET COVER TYPE	F	ALL H'S
	WIDTH (W) (FT)	LENGTH (L) (FT)		
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

CATCH BASINS 2X3-FT AND 2.5X3-FT

CATCH BASINS 2X3-FT AND 2.5X3-FT

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FHWA

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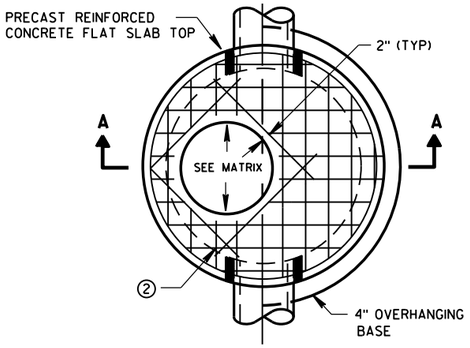
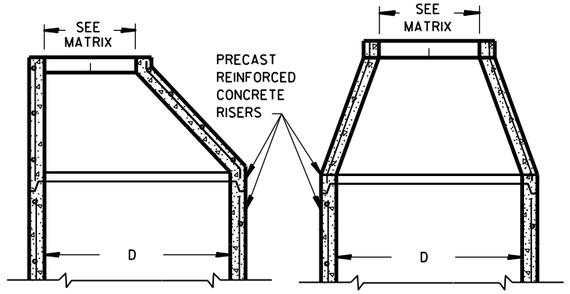
S.D.D. 8 A 9-2

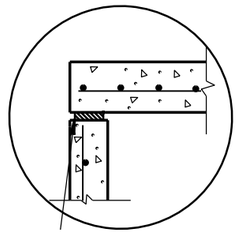


PLAN VIEW CIRCULAR OPENING

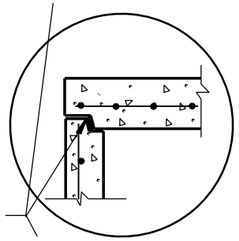


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

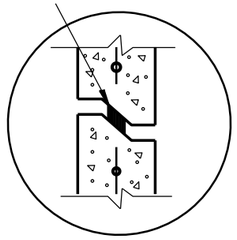


TOP WITH PLAIN END JOINT



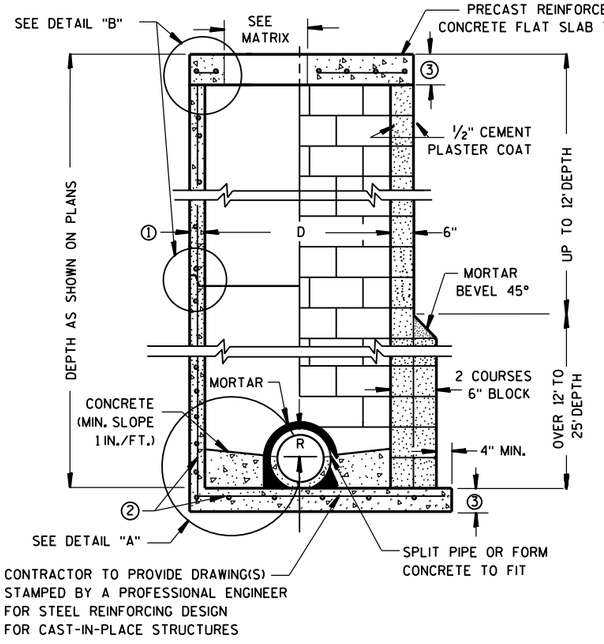
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



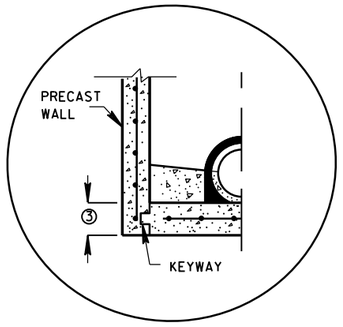
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

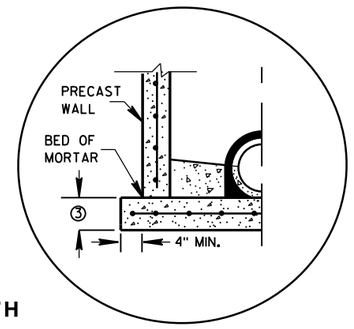


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

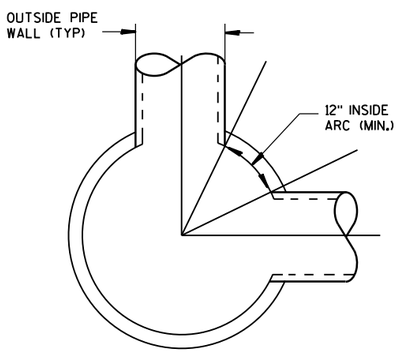


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

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

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

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

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2016
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERV

FHWA

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

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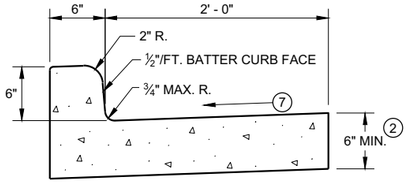
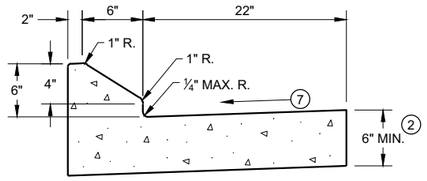
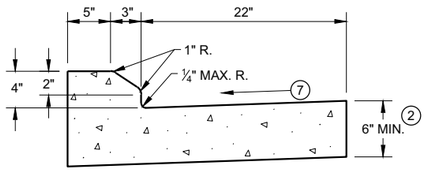


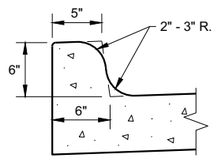
TYPES A (1) & D



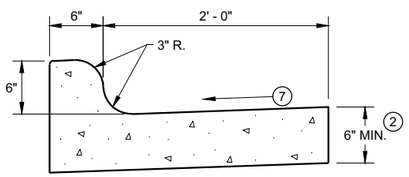
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

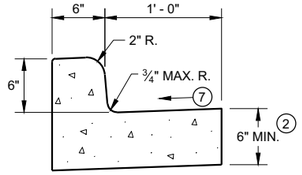


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



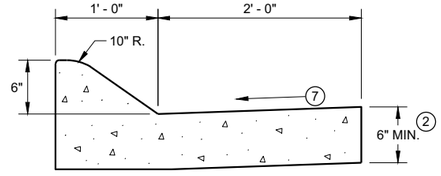
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

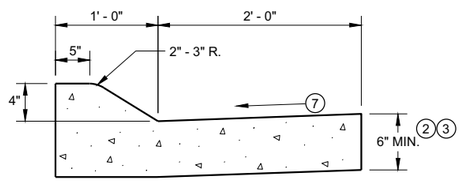


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

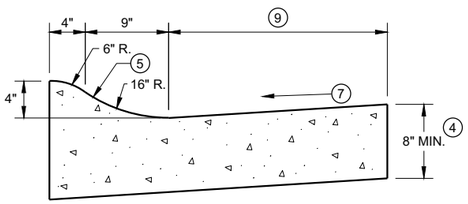


6" SLOPED CURB TYPES A (1) & D



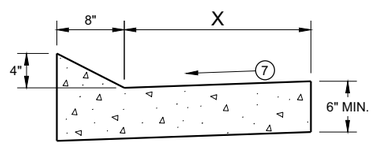
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

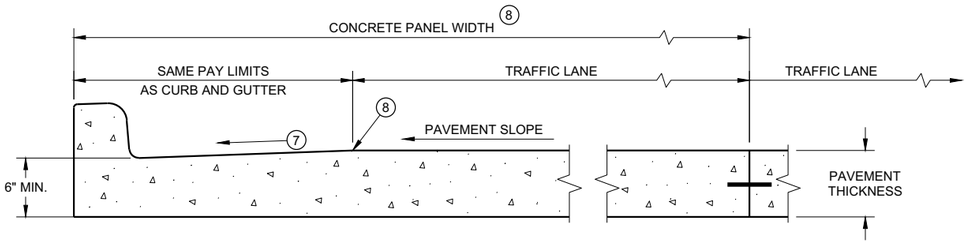


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

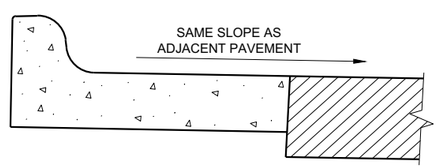
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION 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 AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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 GUTTERS 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) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES 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.

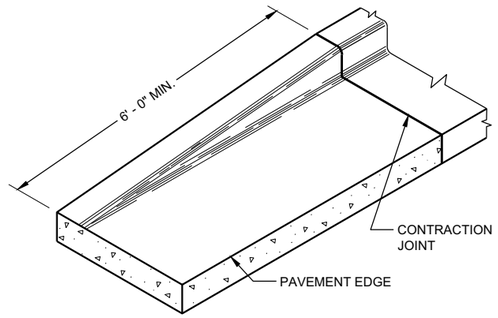
(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

CONCRETE CURB AND GUTTER

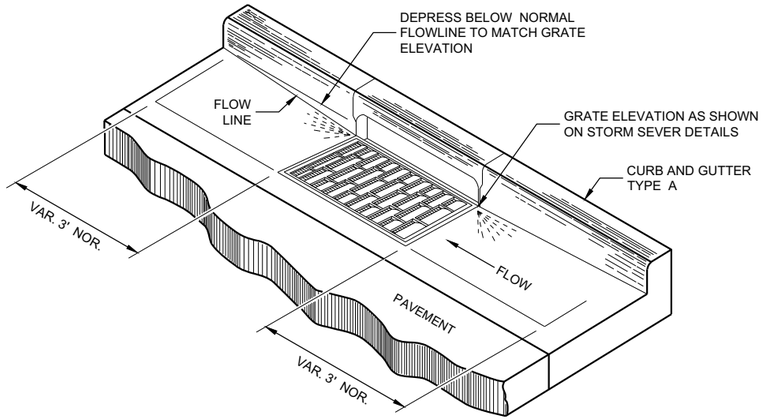
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D01 - 22a



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS
(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

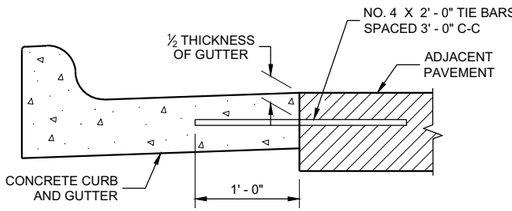
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

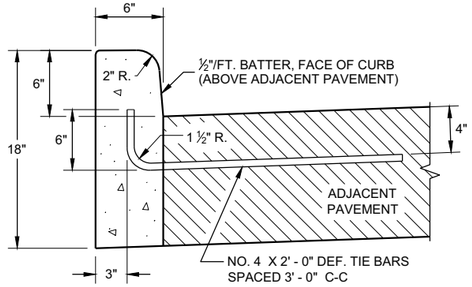
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(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.

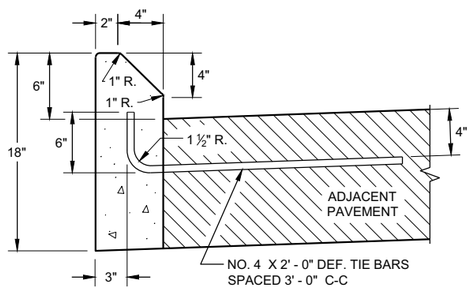
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

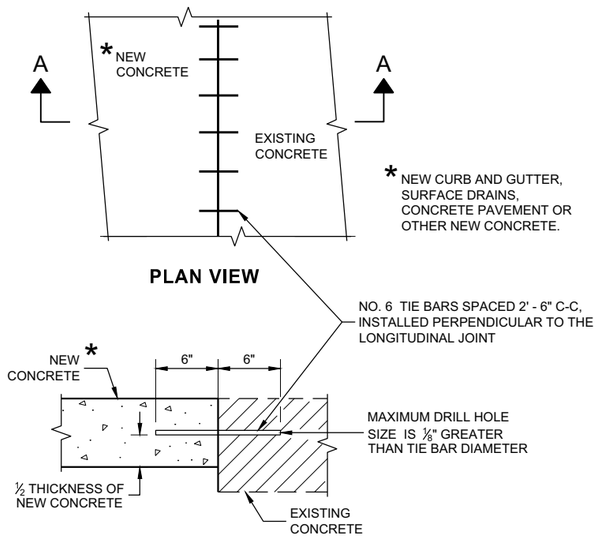


TYPES A (1) & D



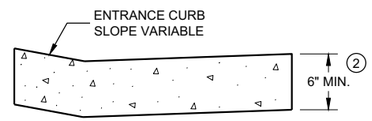
TYPES G (1) & J

CONCRETE CURB



SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

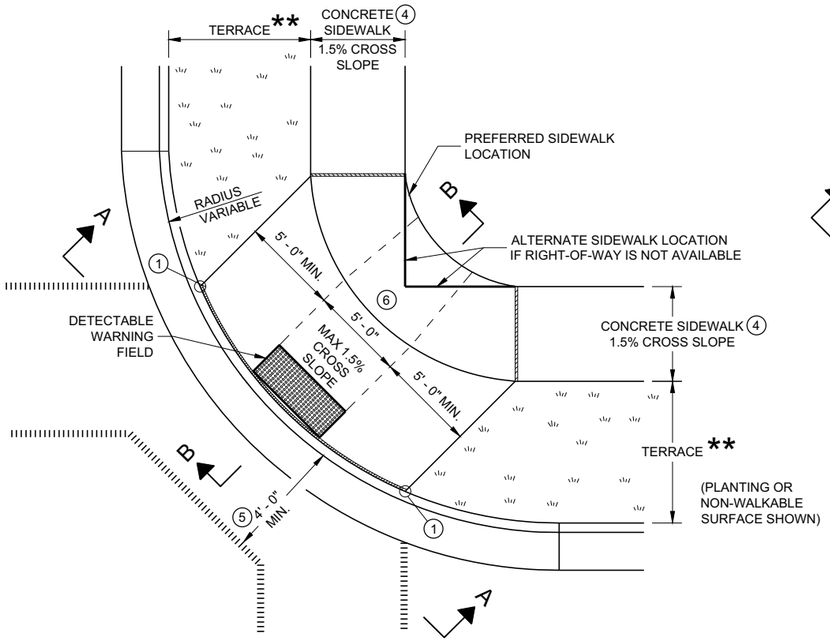
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

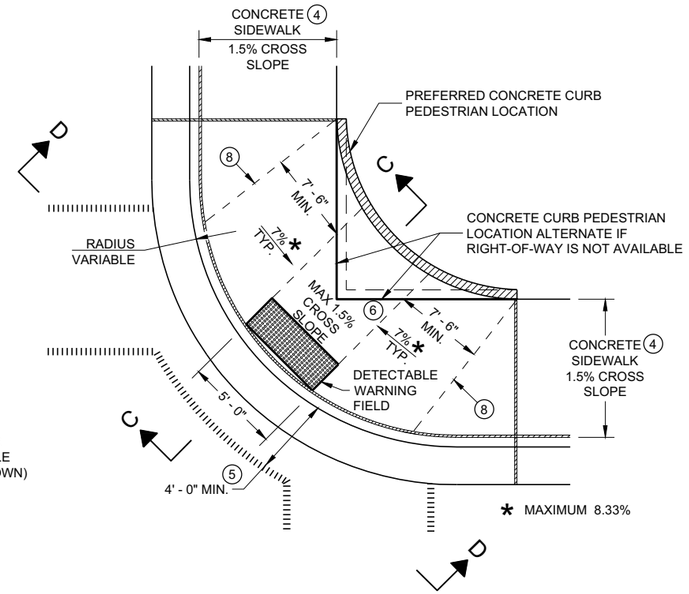
SDD08D01 - 22b



PLAN VIEW

CURB RAMP TYPE 1

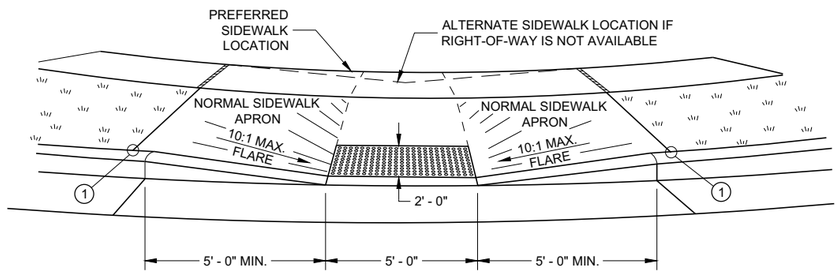
(CENTER OF CORNER RADIUS)



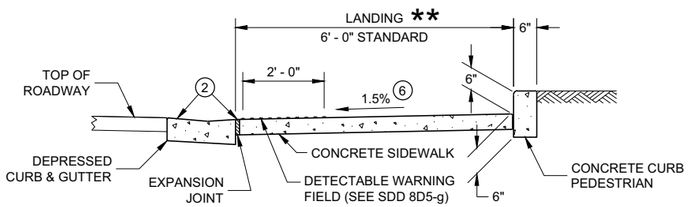
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

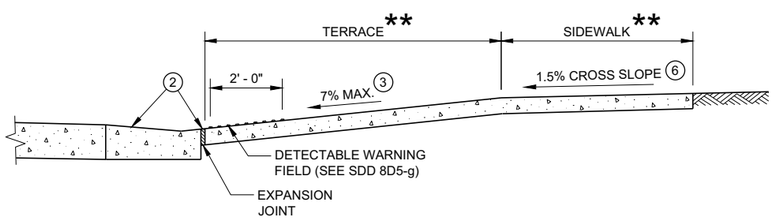


VIEW A - A FOR TYPE 1

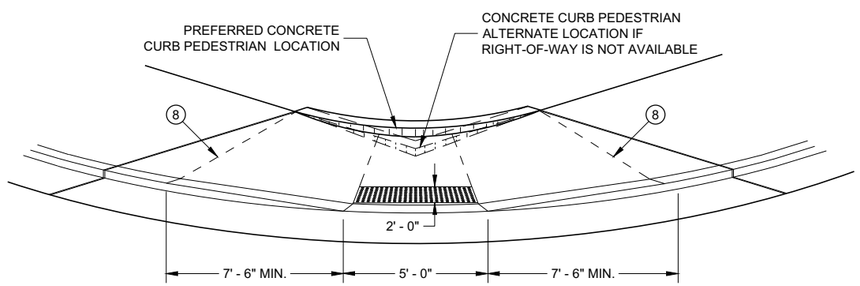


SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

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.

LEGEND

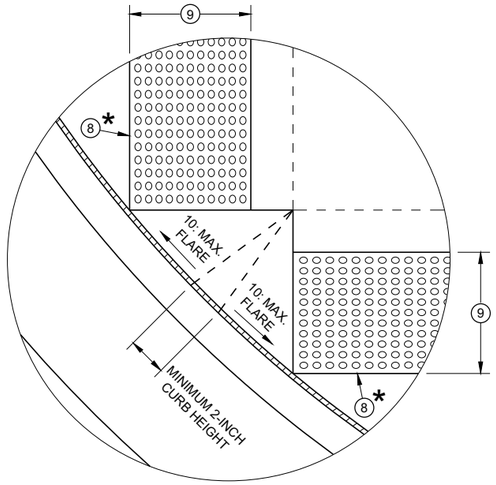
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 1 AND 1-A

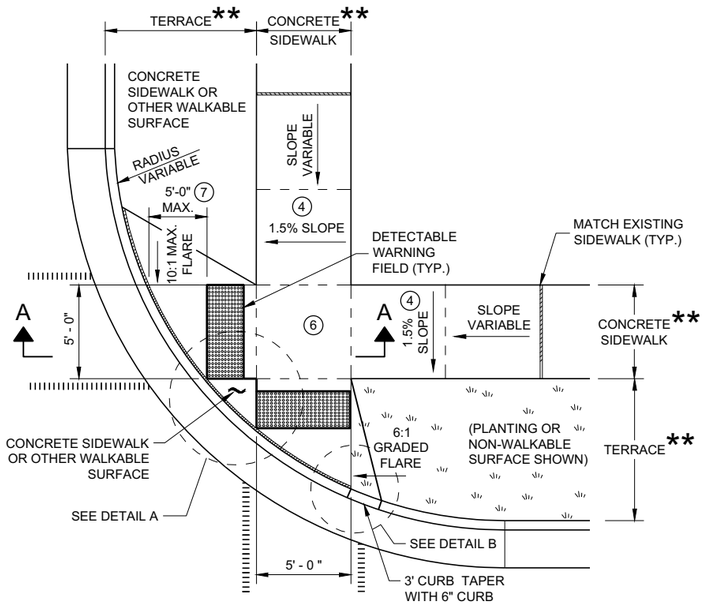
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20a



DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)

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 (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

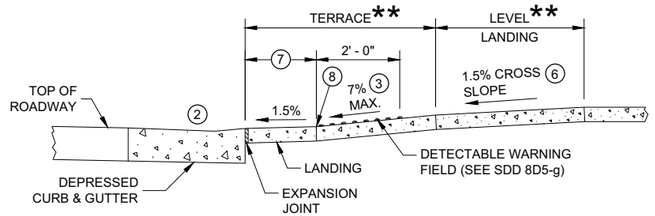
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

(7) WHEN 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.

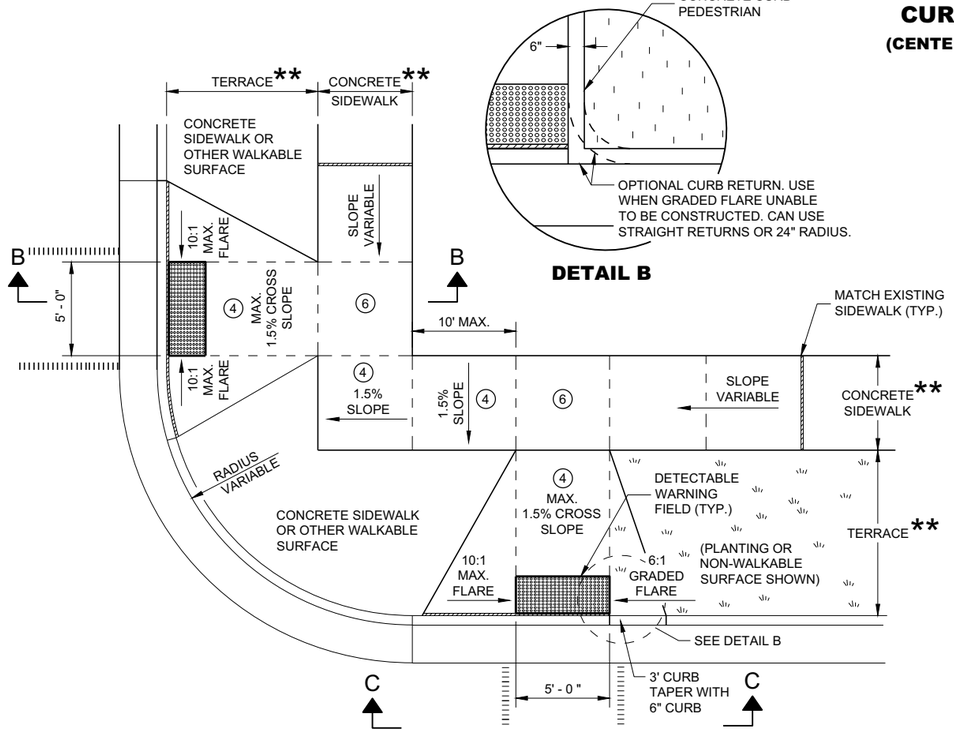
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



SECTION A - A FOR TYPE 2

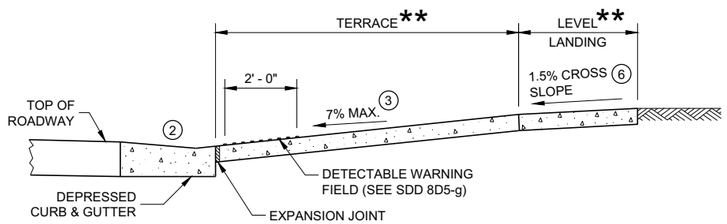
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS



DETAIL B

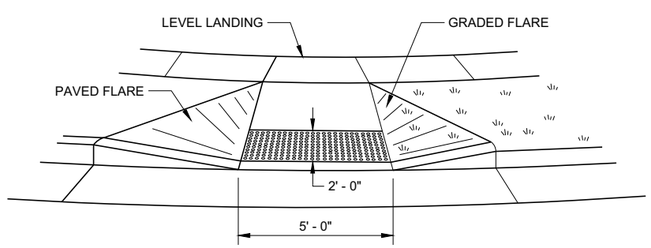
PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



SECTION B - B FOR TYPE 3

LEGEND

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



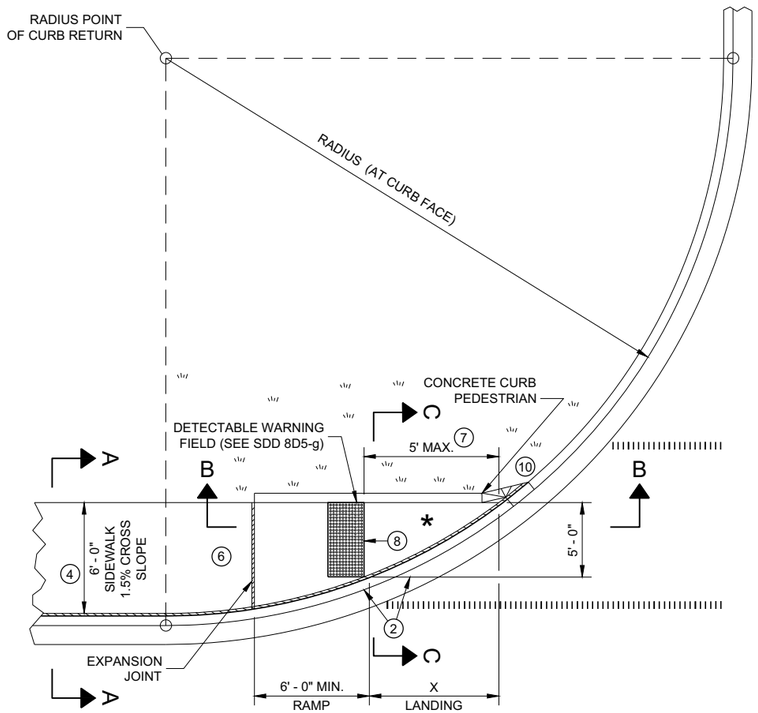
VIEW C - C FOR TYPE 3

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20b

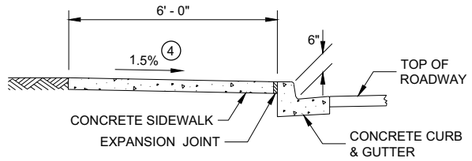


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

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.

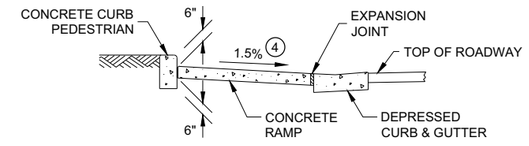
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

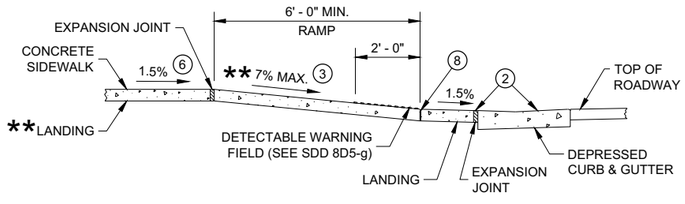
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



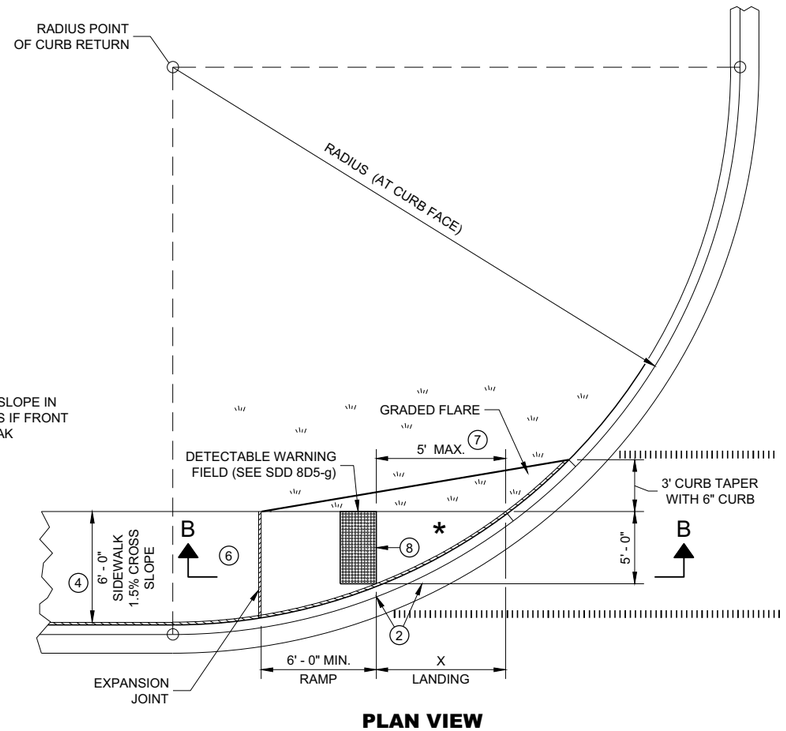
SECTION C - C FOR TYPE 4A



** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

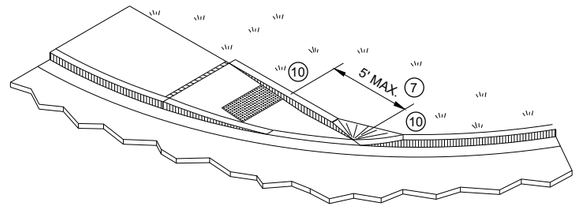
SECTION B - B FOR TYPE 4A AND TYPE 4A1

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

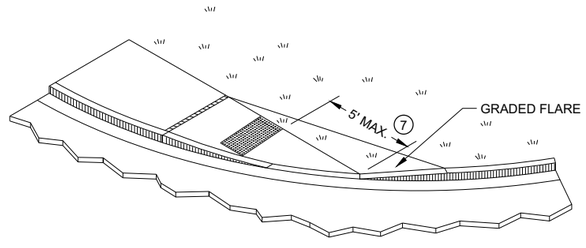


PLAN VIEW

CURB RAMP TYPE 4A1



ISOMETRIC VIEW FOR TYPE 4A



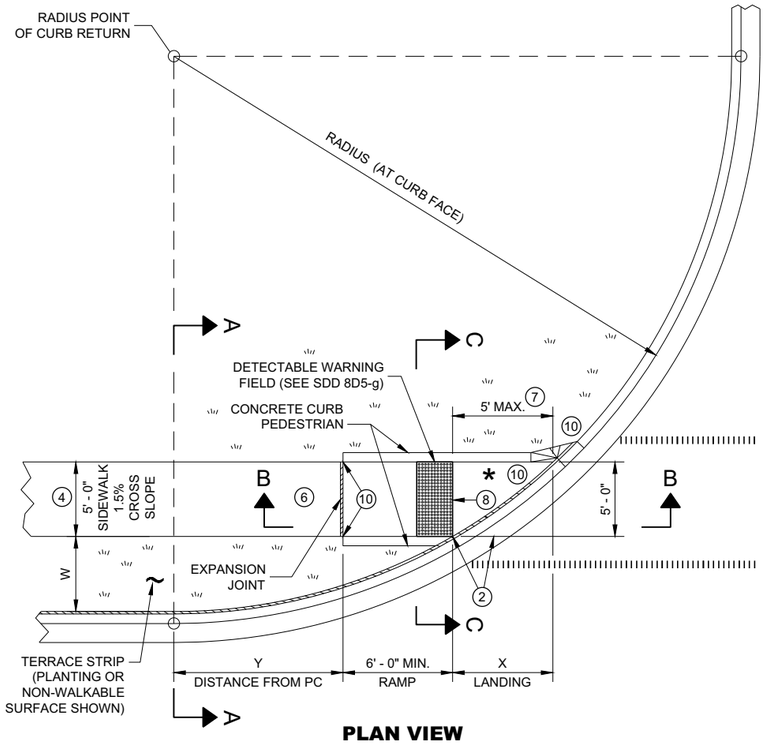
ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20c



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

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.

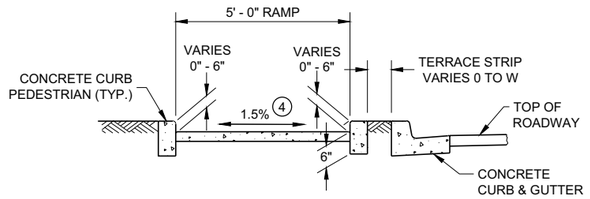
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

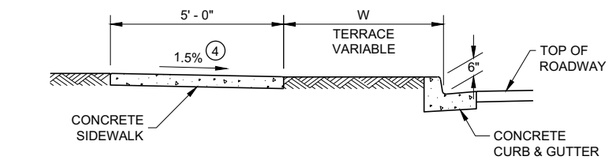
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

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

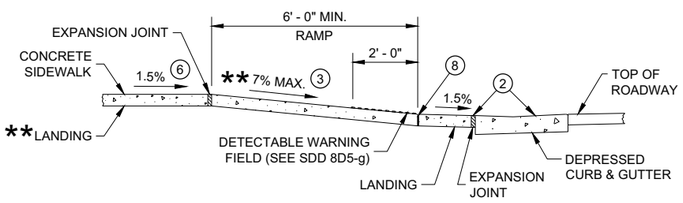
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



SECTION C - C FOR TYPE 4B



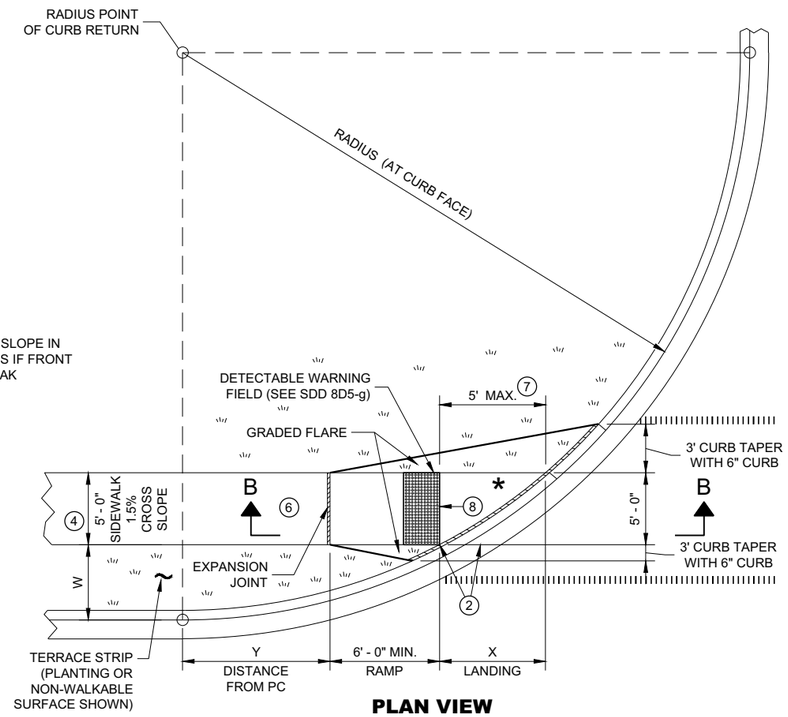
SECTION A - A FOR TYPE 4B



SECTION B - B FOR TYPE 4B AND TYPE 4B1

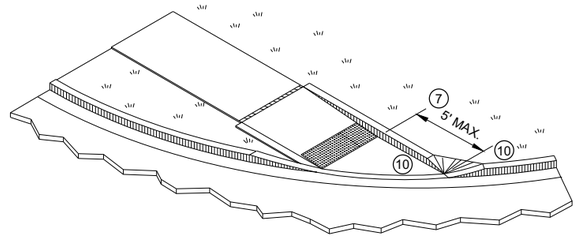
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

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

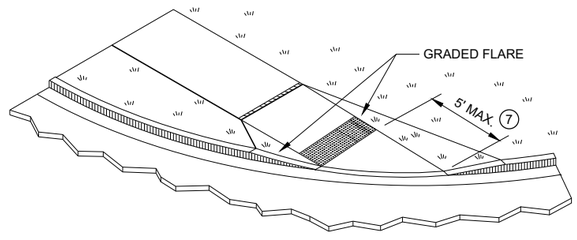


PLAN VIEW

CURB RAMP TYPE 4B1



ISOMETRIC VIEW FOR TYPE 4B



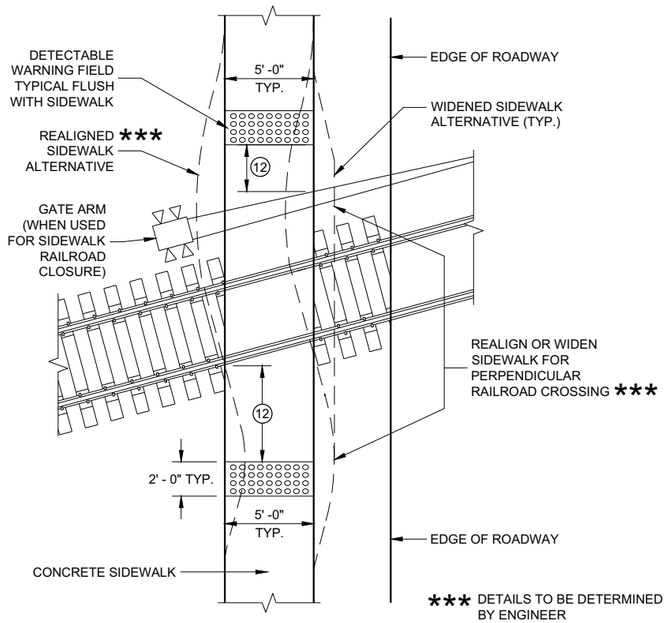
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

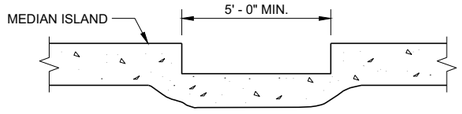
6

SDD 08D05 - 20d

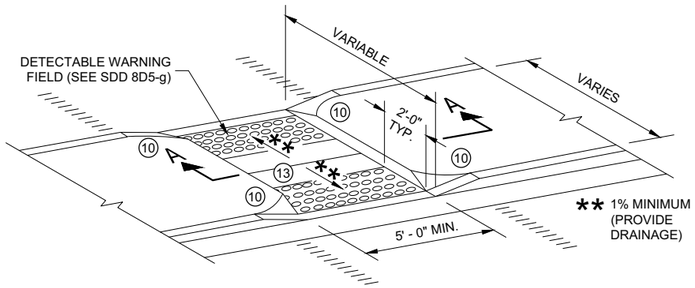


CURB RAMP TYPE 8

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.

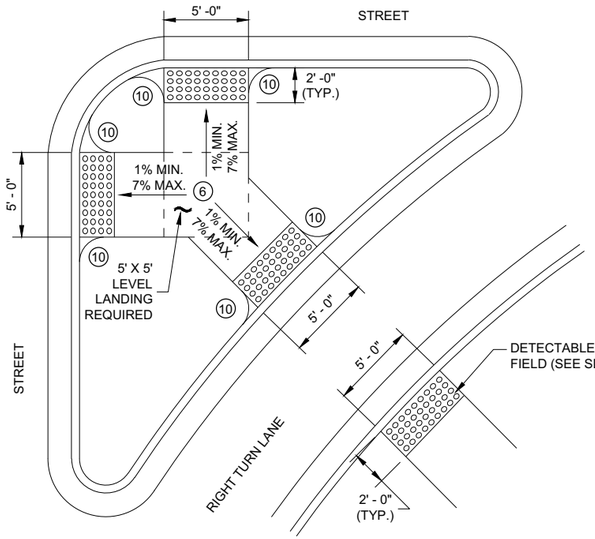
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(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

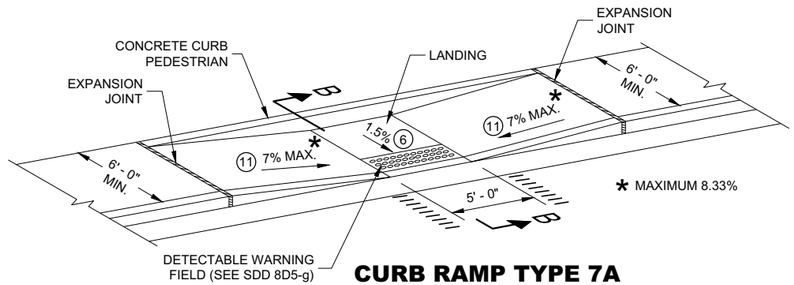
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

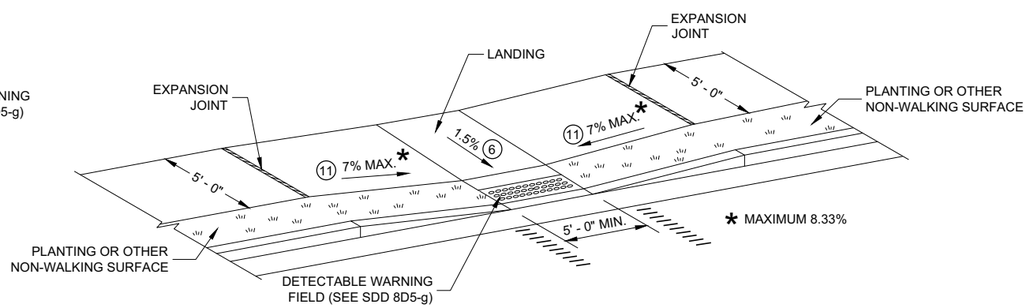
DETECTABLE WARNING AT ISLANDS

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



CURB RAMP TYPE 7A

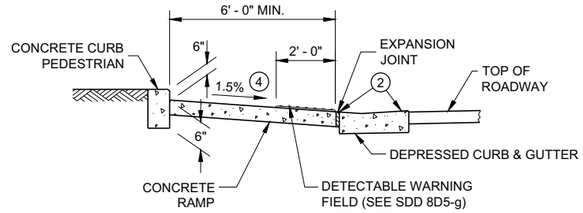
MID BLOCK CROSSING



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

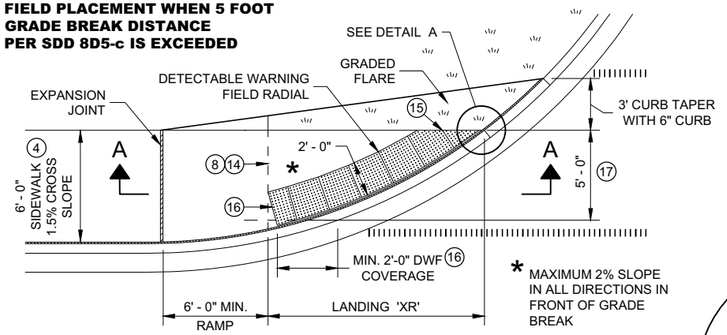
CURB RAMPS TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20e

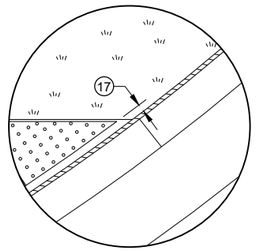
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



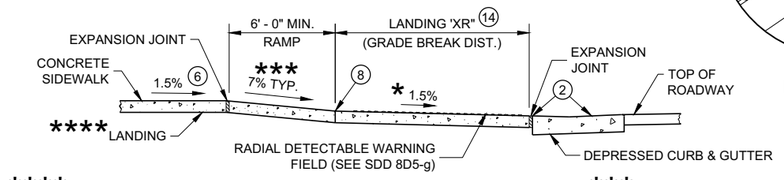
PLAN VIEW

CURB RAMP TYPE 4A1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL A

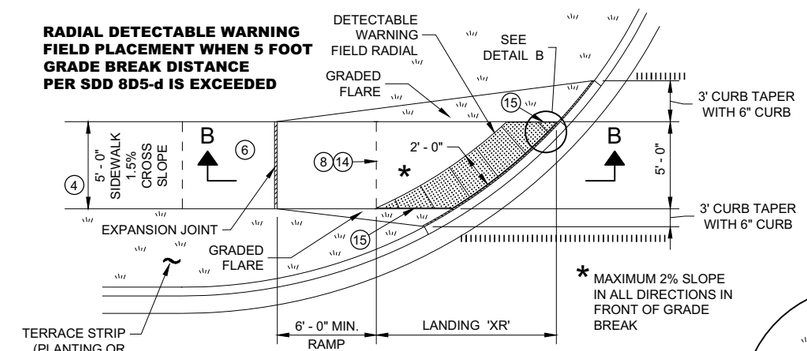


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1

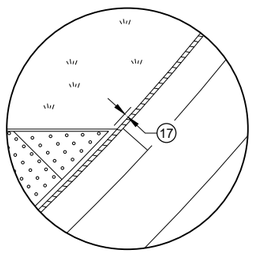
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



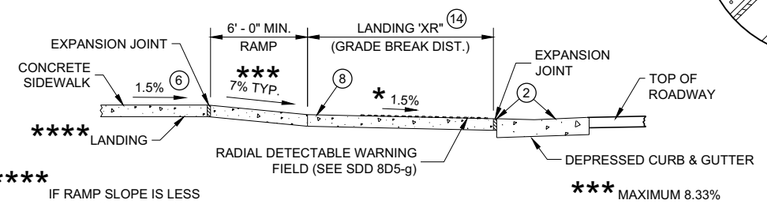
PLAN VIEW

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

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.

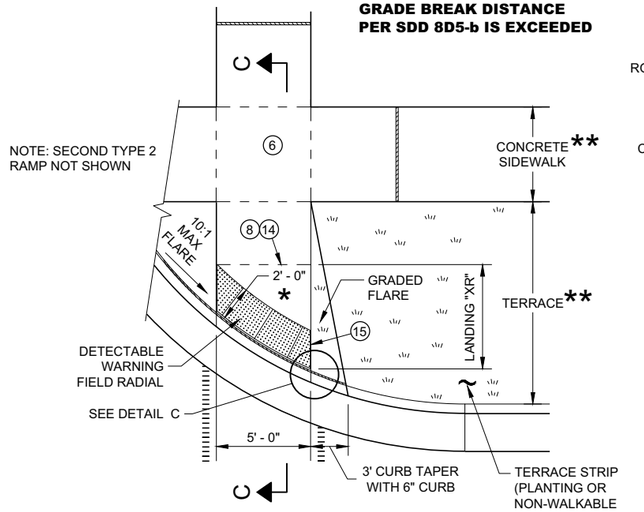
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(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-b IS EXCEEDED

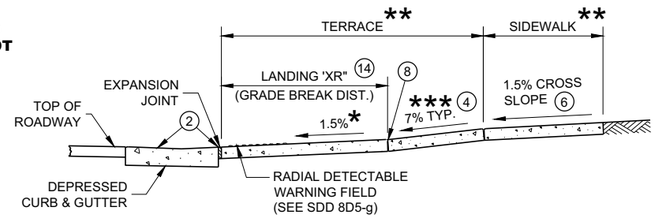


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

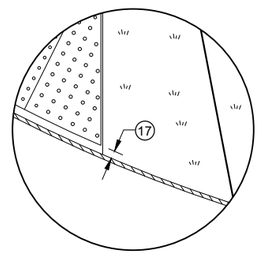


SECTION C - C FOR TYPE 2

* 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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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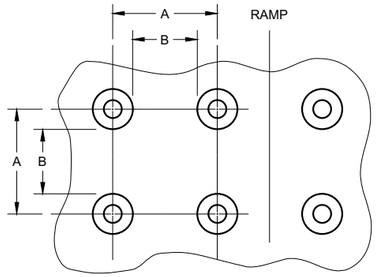
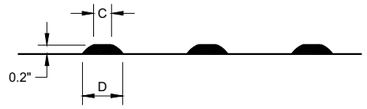
SDD 08D05 - 20f

	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.

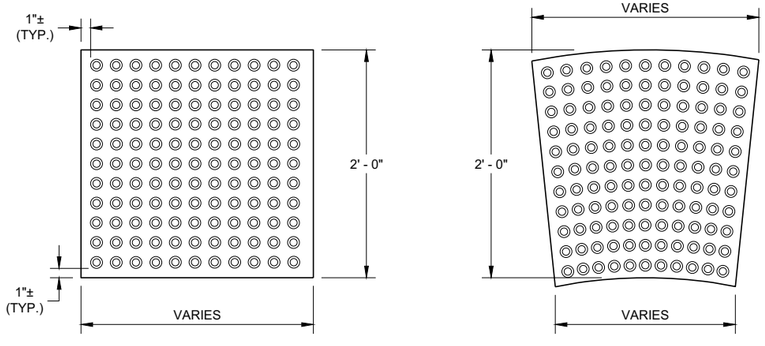


PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)

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.

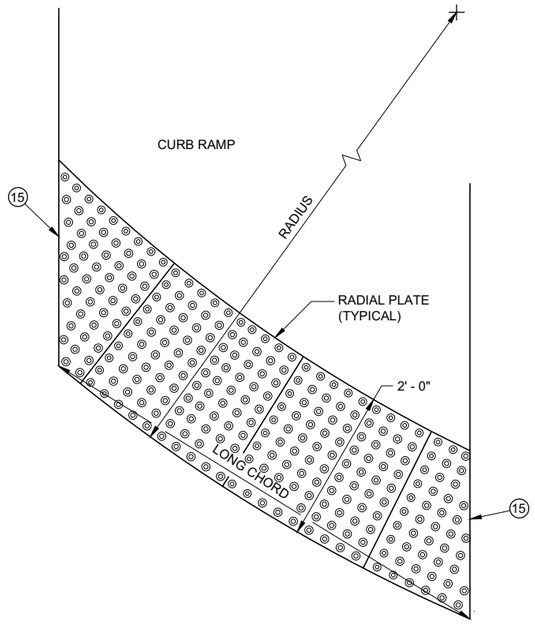
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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.

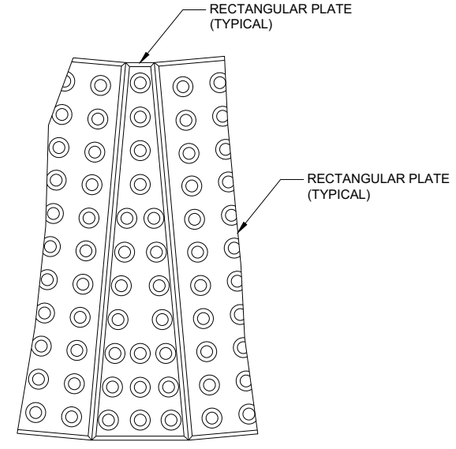
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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 DETECTABLE WARNING FIELD ATTRIBUTES



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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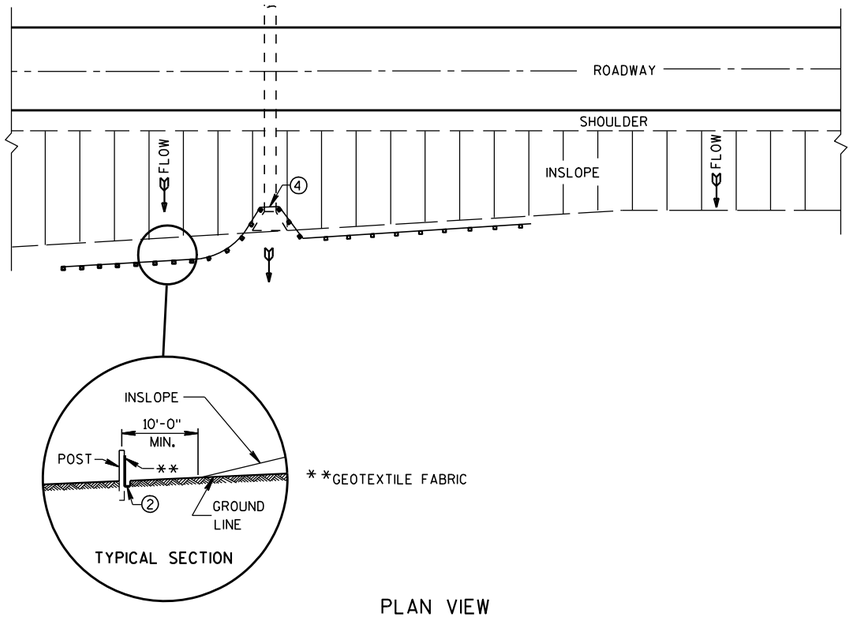
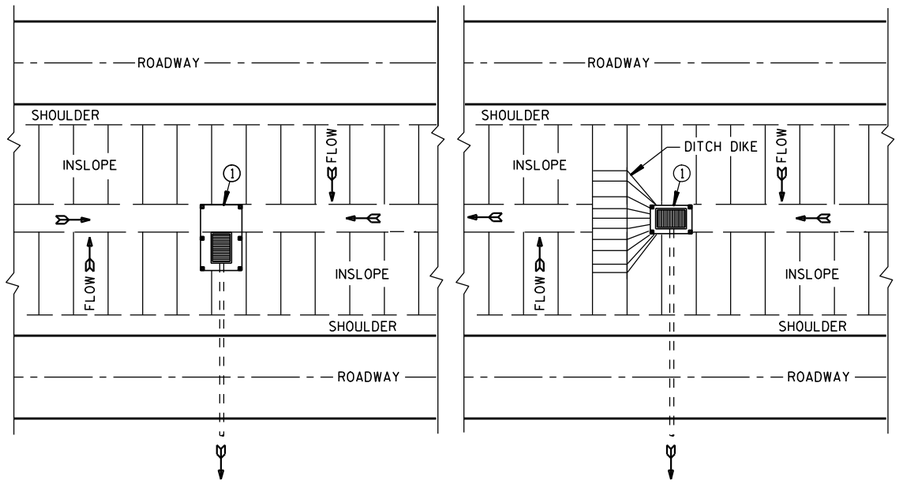
SDD 08D05 - 20g



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



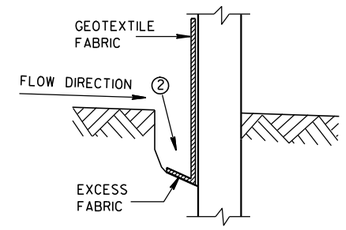
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

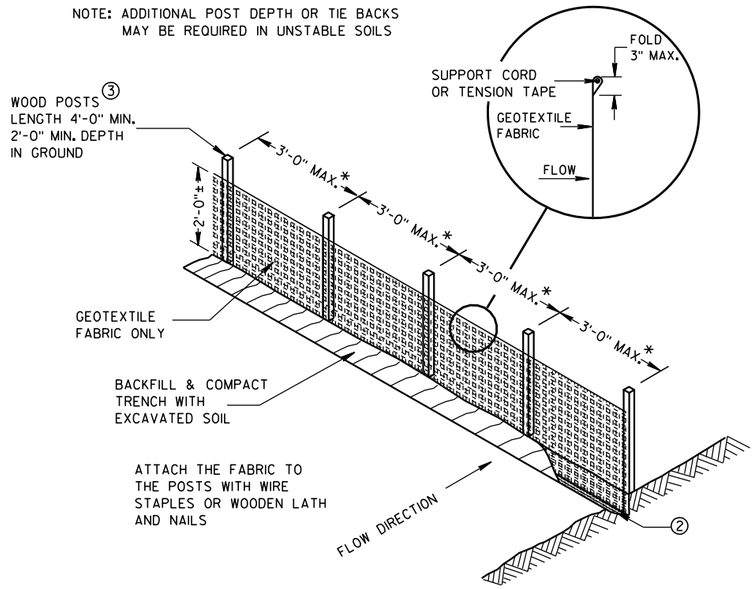
GENERAL NOTES

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.

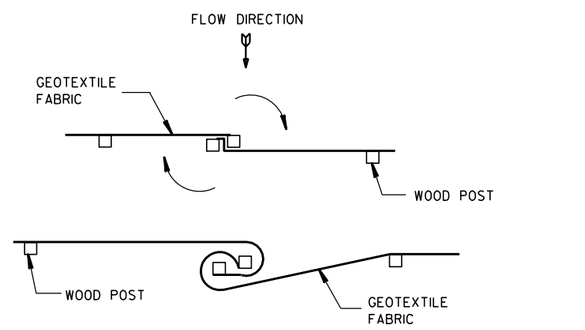


TRENCH DETAIL

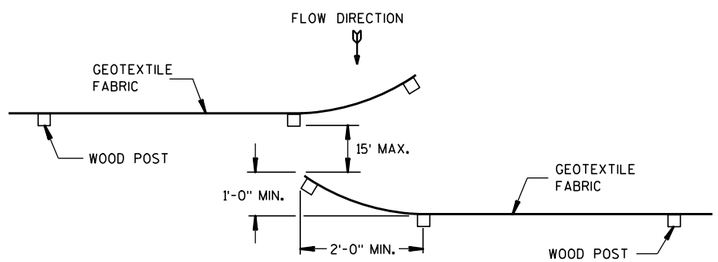


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

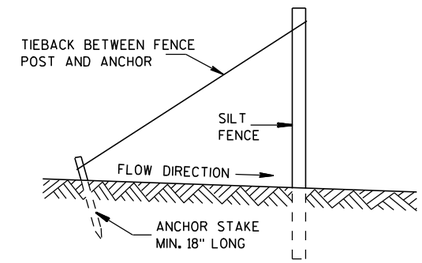


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 8 E 9-6

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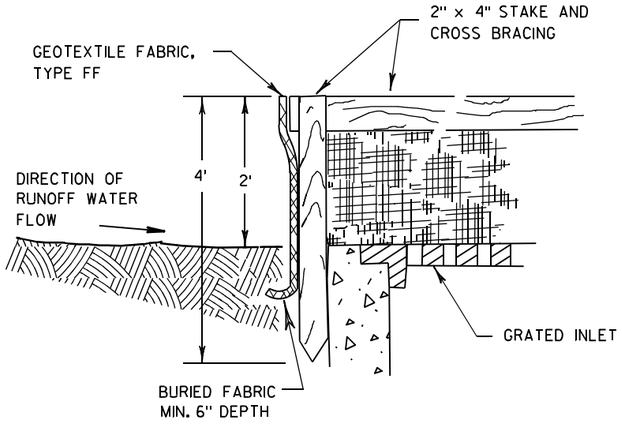
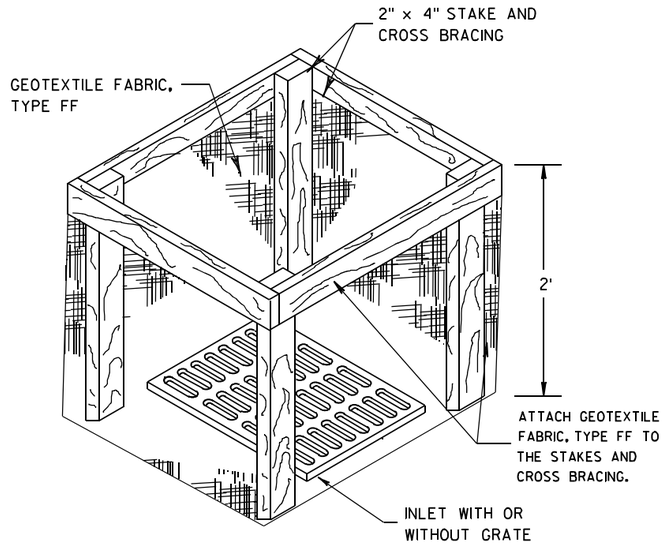
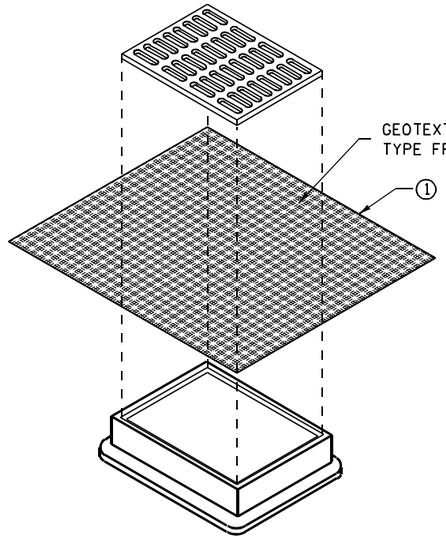
S.D.D. 8 E 9-6



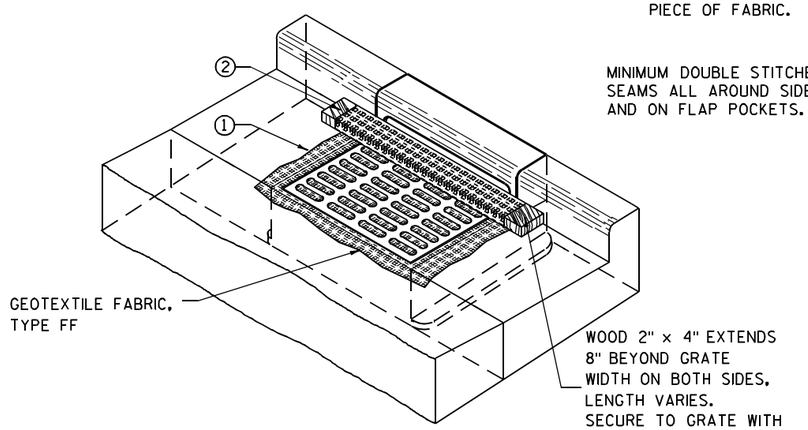


INLET PROTECTION, TYPE A

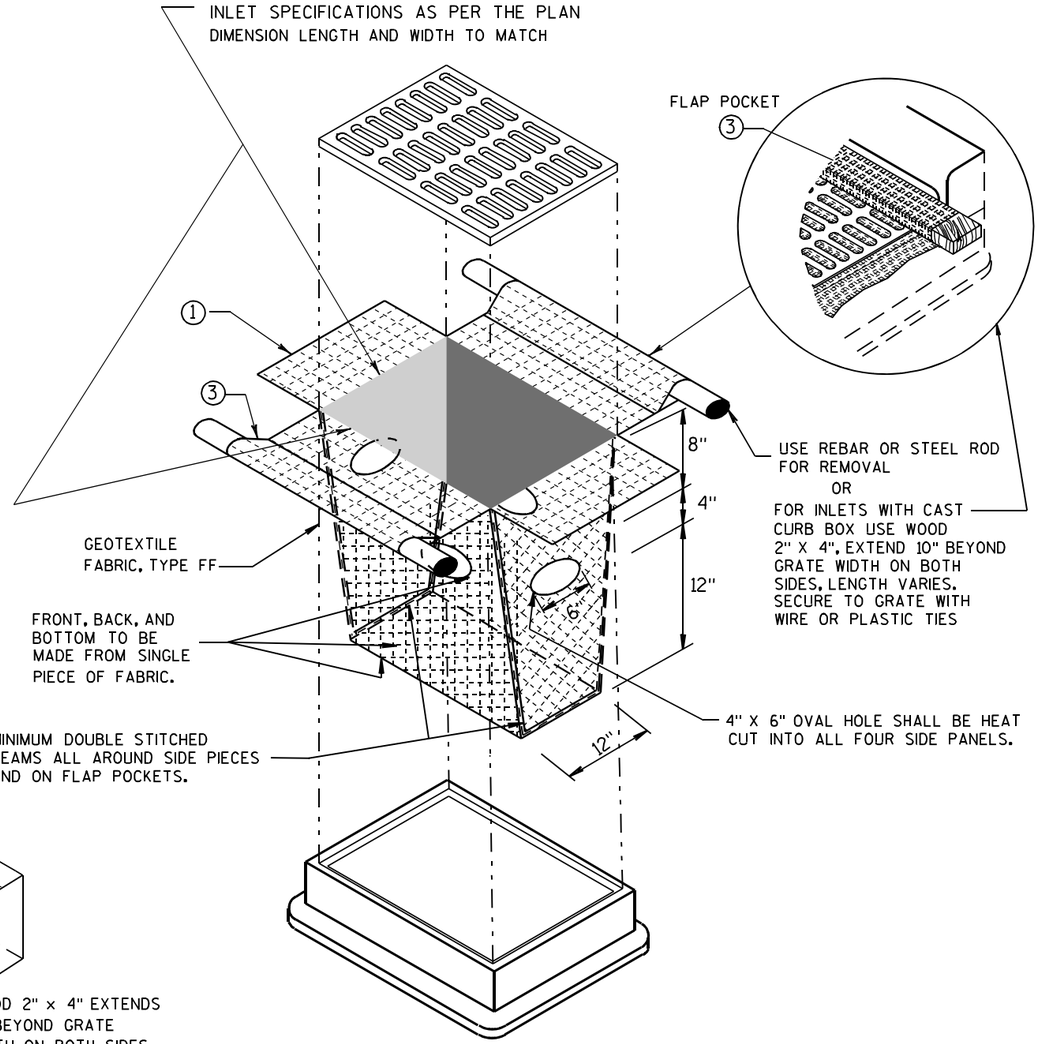


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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

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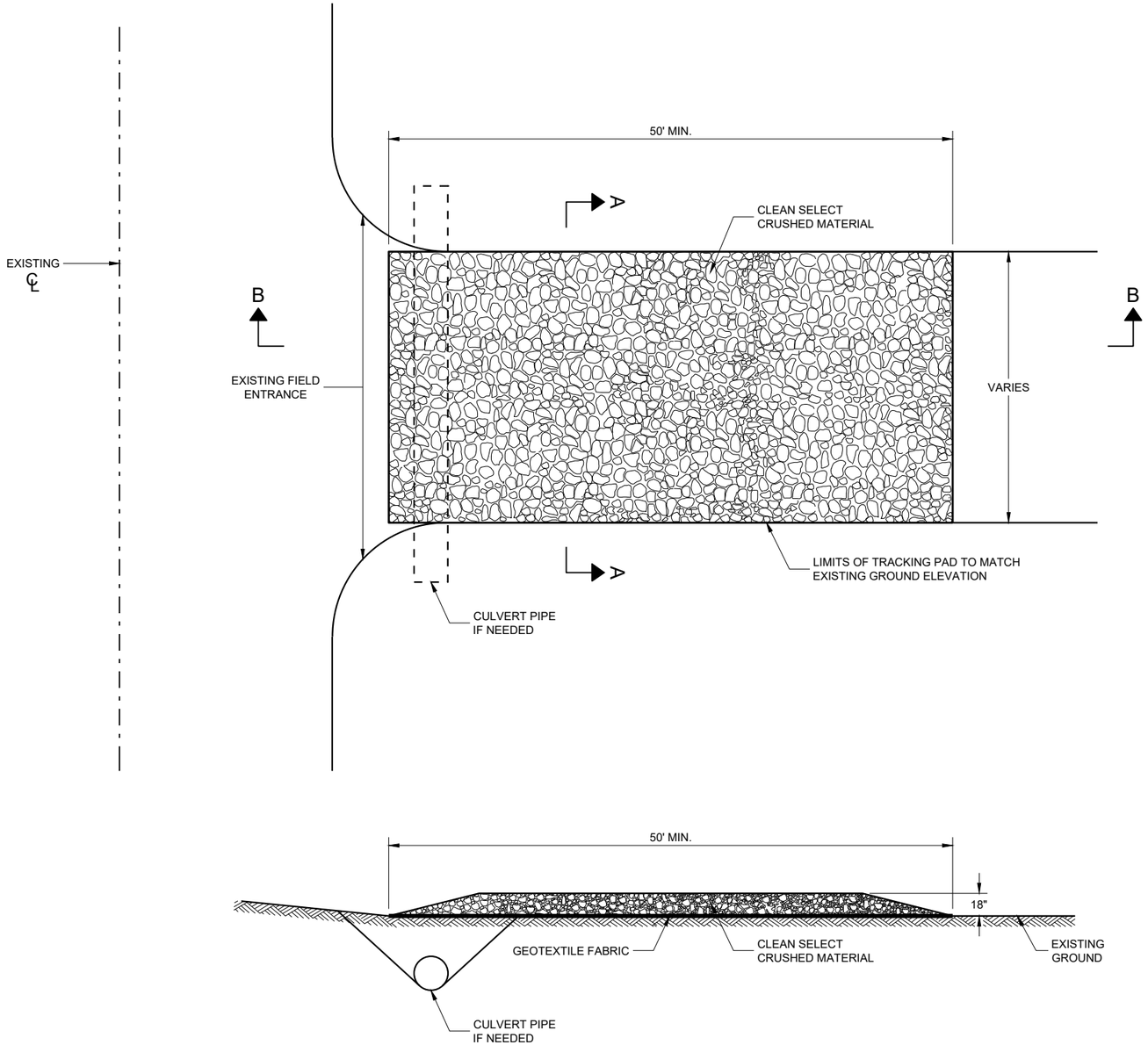
S.D.D. 8 E 10-2



SECTION B - B

GENERAL NOTES

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

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

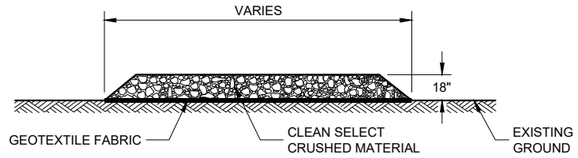
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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

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

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

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



SECTION A - A

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SDD 08E14 - 01

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/24/2011
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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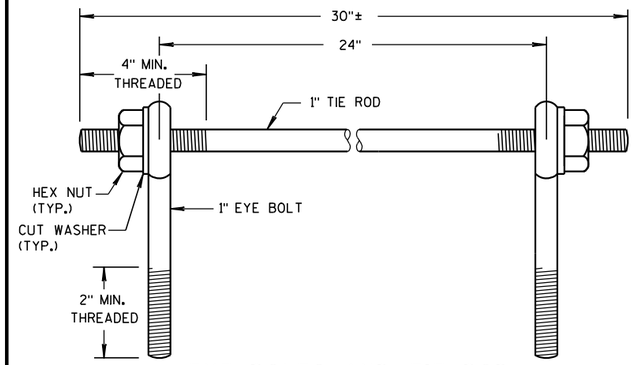
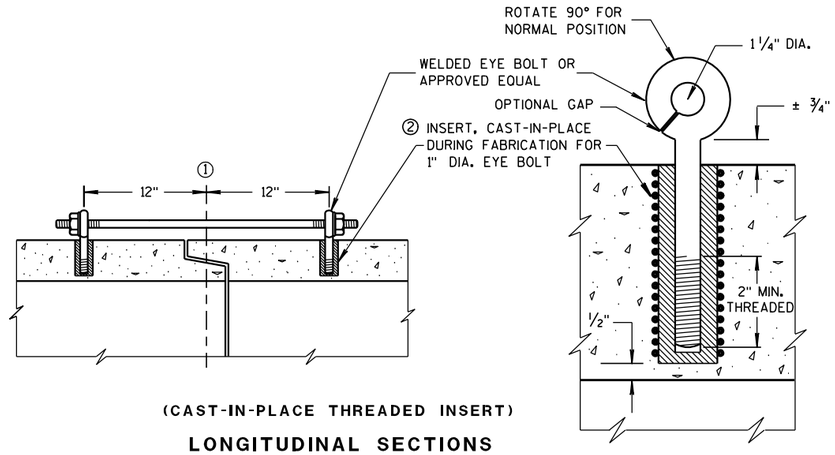
SDD 08E14 - 01



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

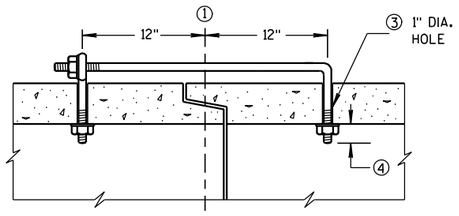
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

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

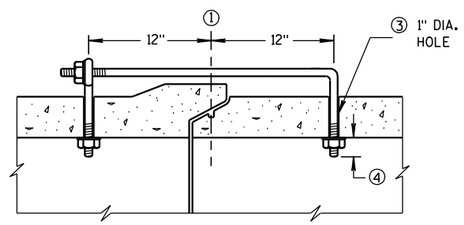
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

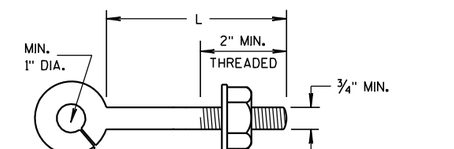


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

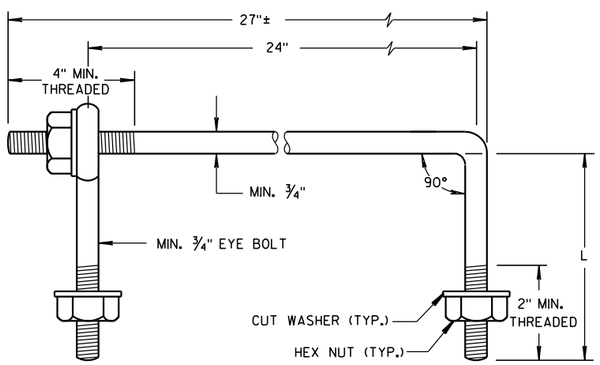
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

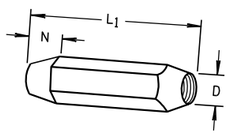
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES



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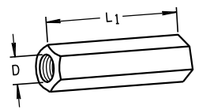
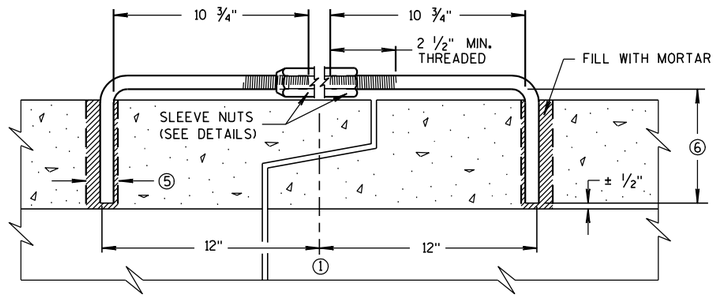


PLAIN

RIGHT AND LEFT THREADS

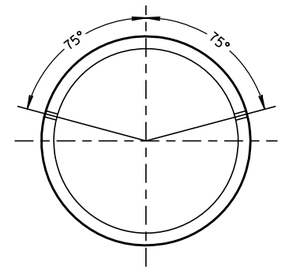
SLEEVE NUTS



LONGITUDINAL SECTION

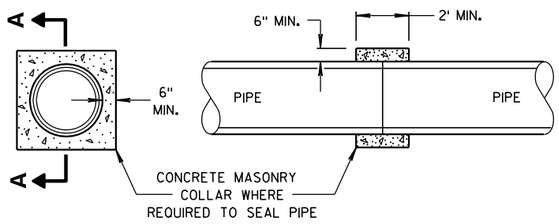
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

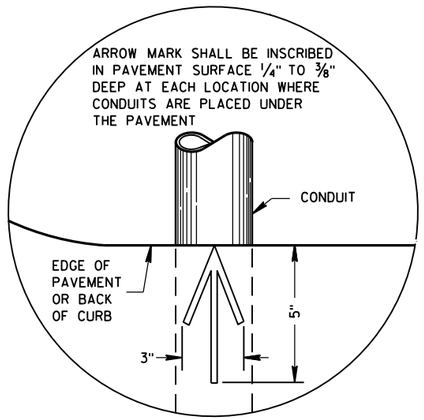
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

281

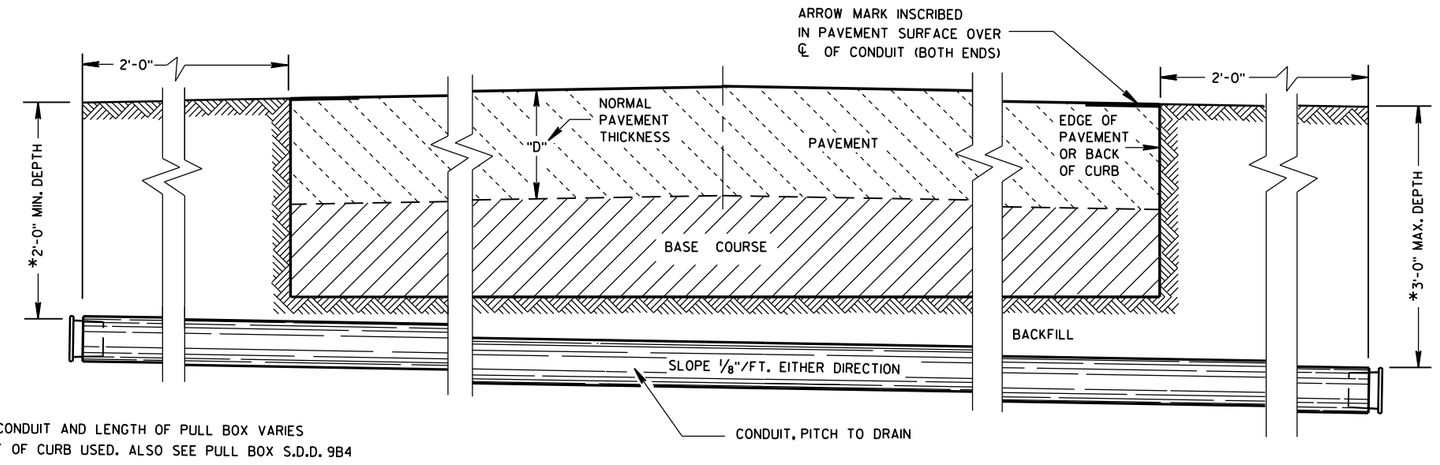
6

S.D.D. 8 F 4-7



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

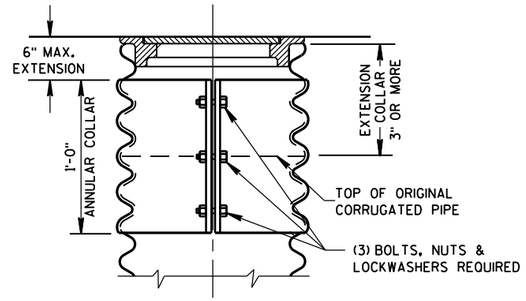
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

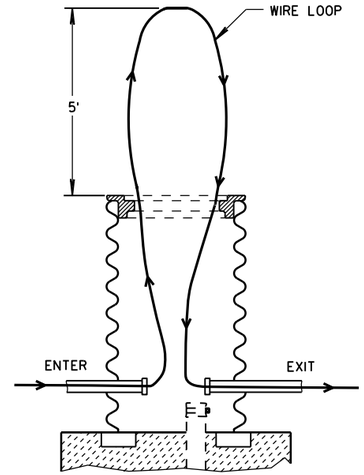
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	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.

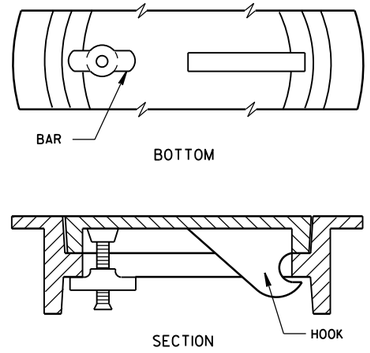
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

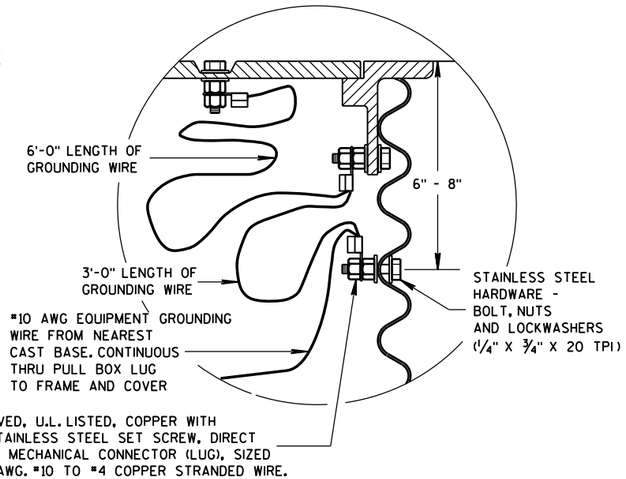


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

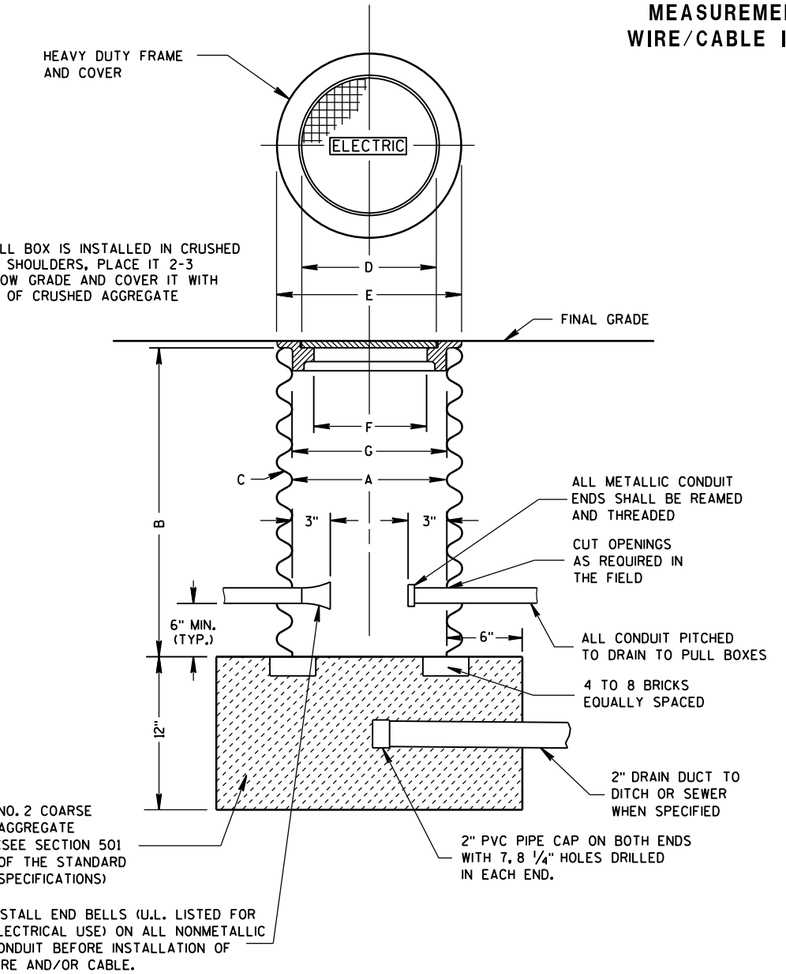


ALTERNATE COVER (LOCKING)

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.

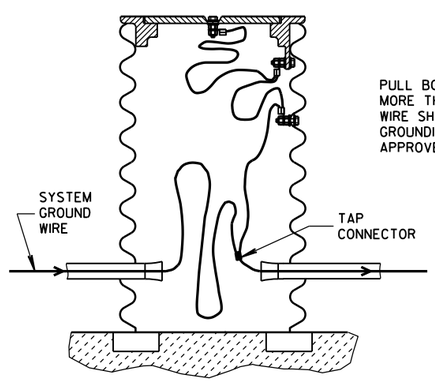
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

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

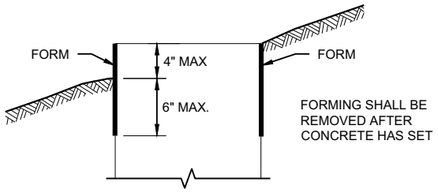
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

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 ENDS 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.

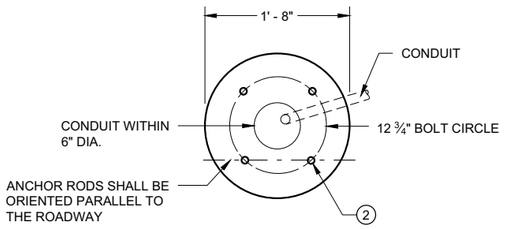
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

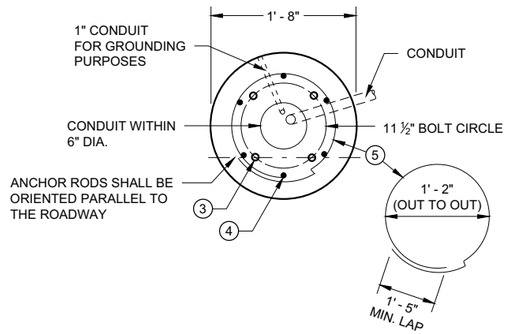
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

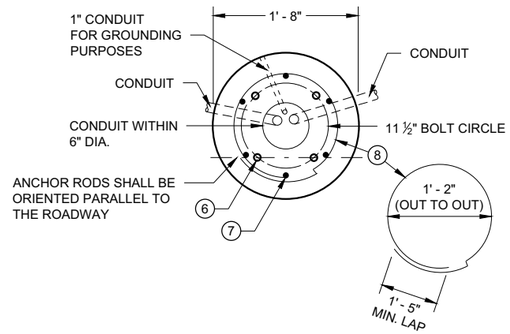
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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

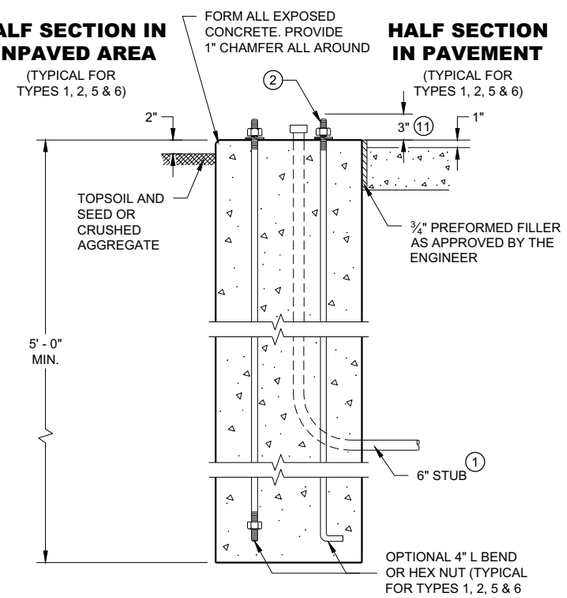
(10) ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

(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.

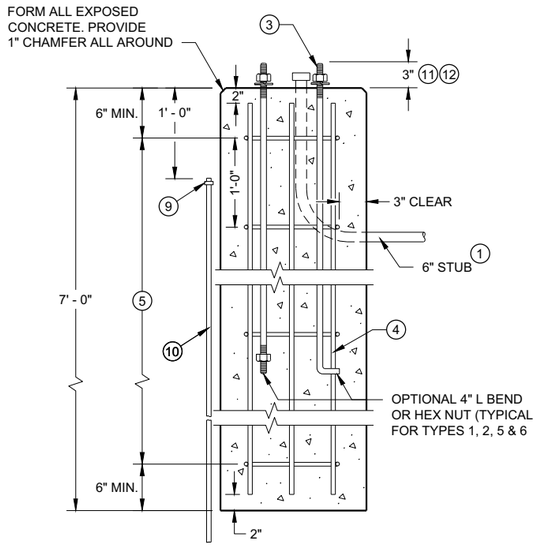
(12) FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

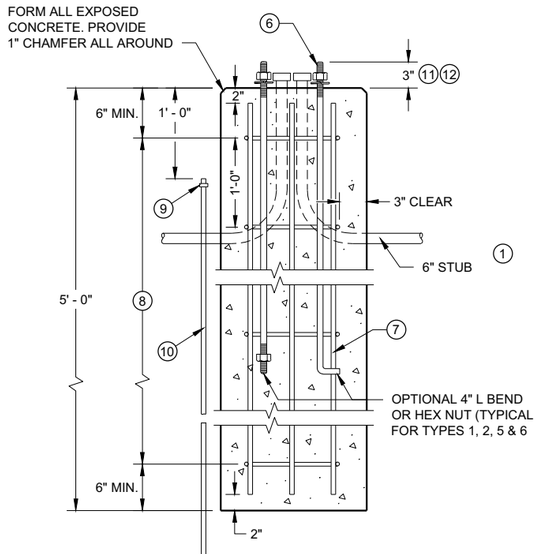
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



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

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 531.2.2 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.

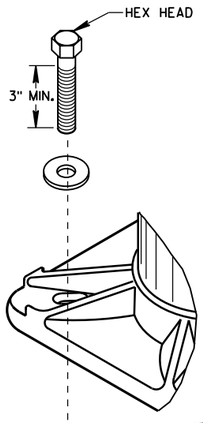
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

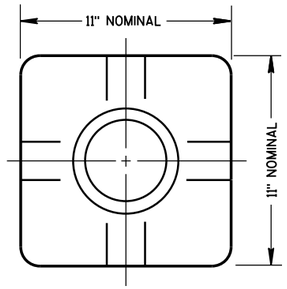
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

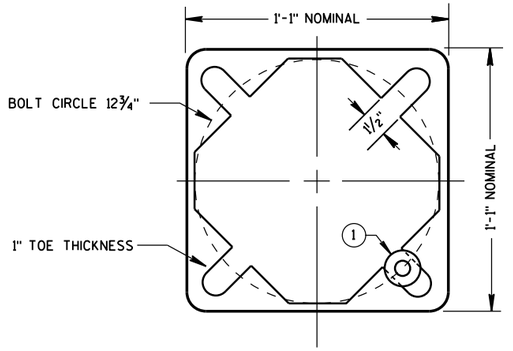
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

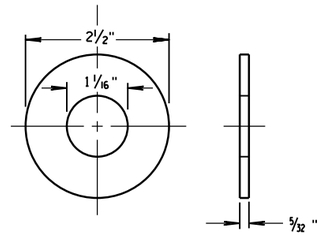




TOP VIEW
(PEDESTAL BASE)

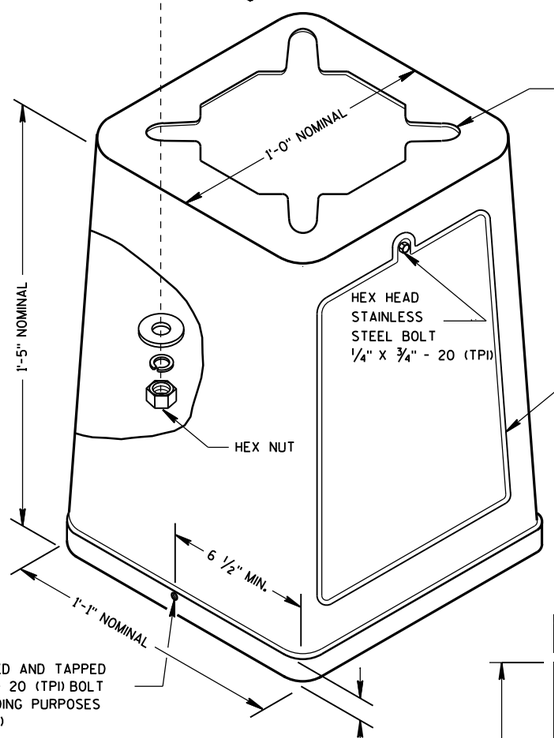


BOTTOM VIEW
(PEDESTAL BASE)

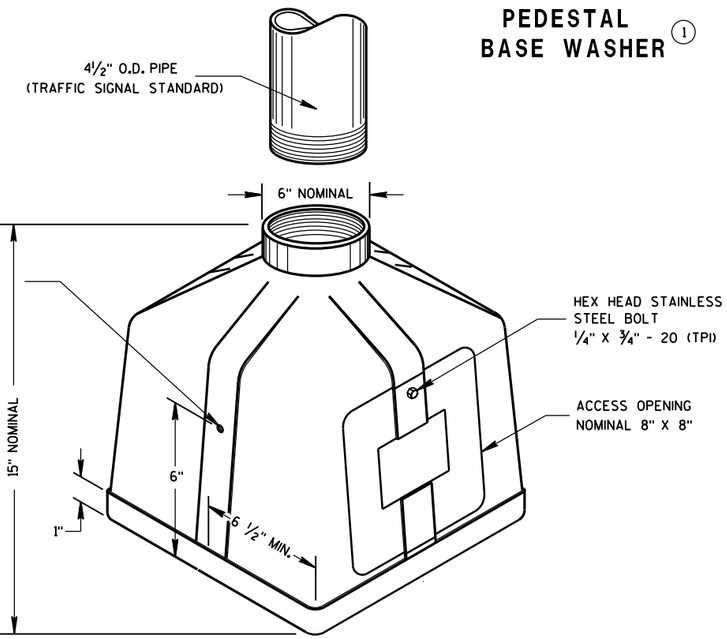


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

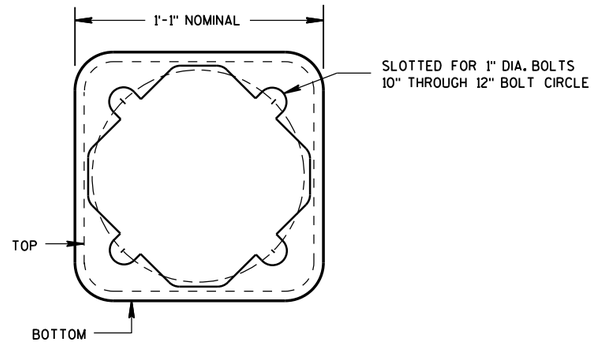


ISOMETRIC VIEW

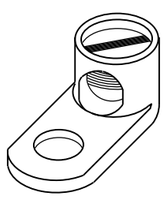


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

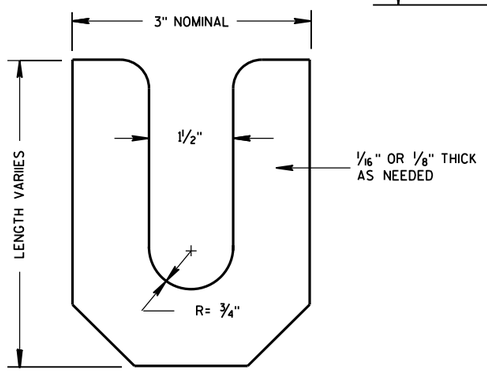


TYPICAL MECHANICAL CONNECTOR LUG

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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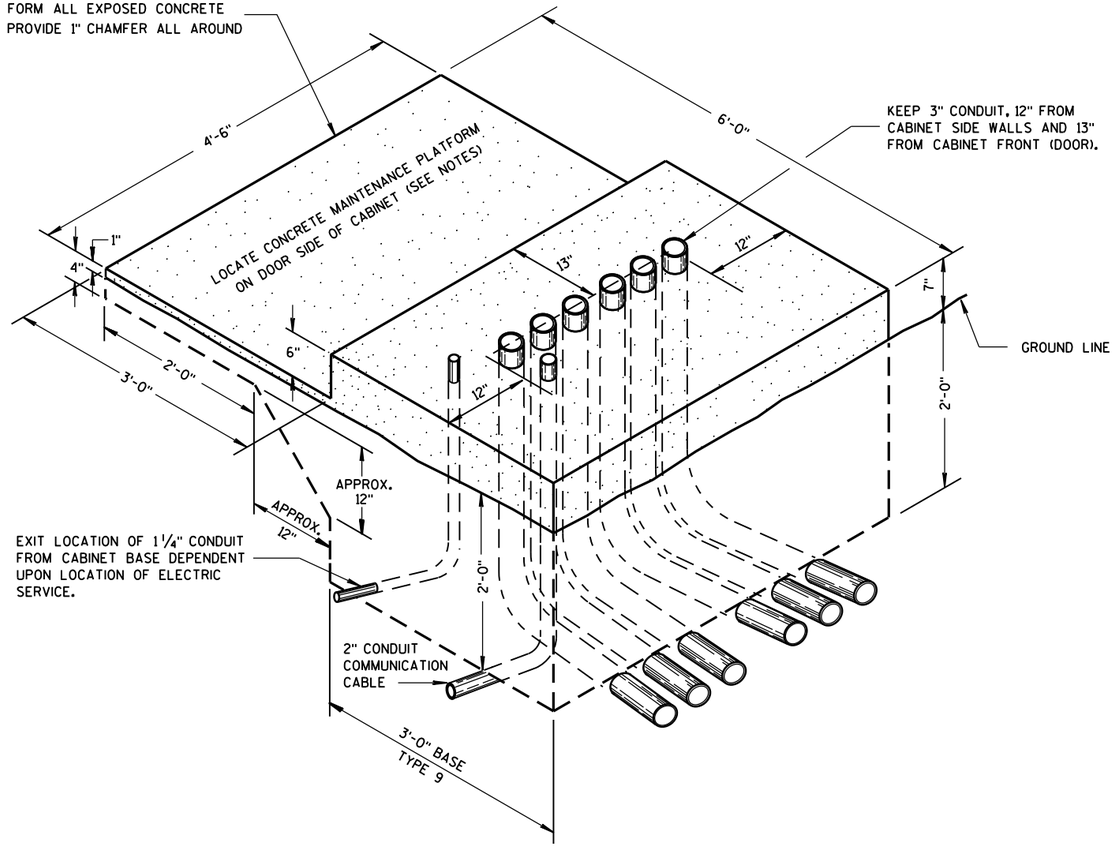
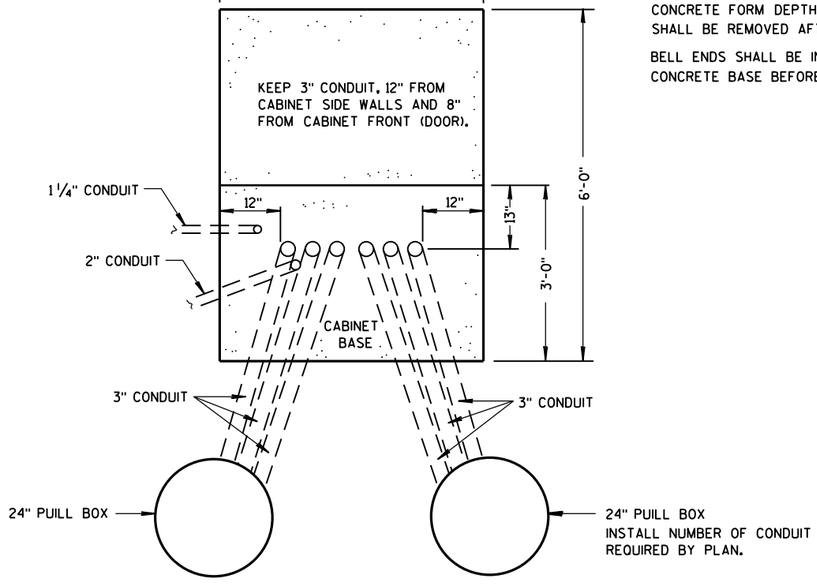
S.D.D. 9 C 3-4



ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

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

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

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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

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

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

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

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

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

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

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

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

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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S.D.D. 9 C 6-7

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL END INSTALLED. ALL CONDUIT SHALL BE SLOPED TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUIT 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.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

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

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL 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.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

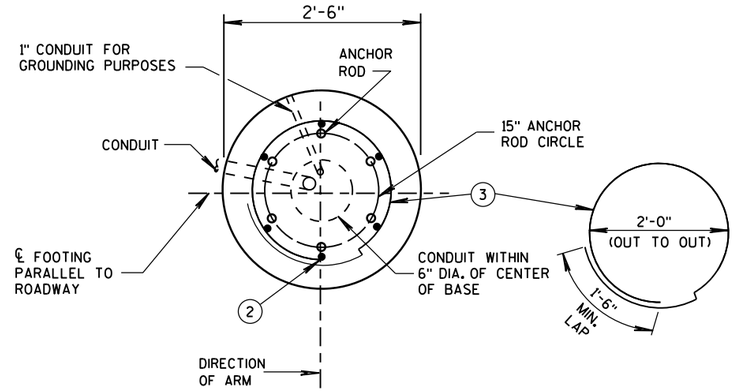
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

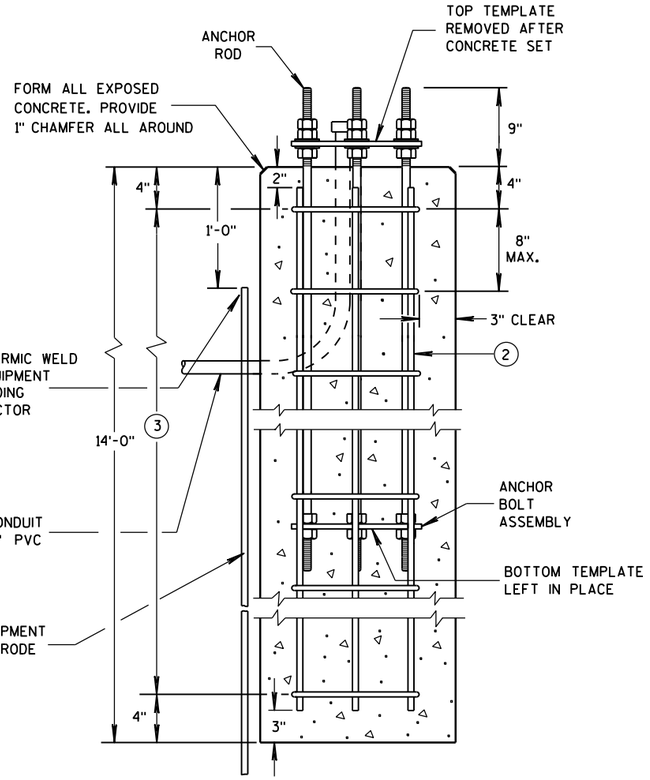
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES. (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (6) NO. 6 X 13'-7" BAR STEEL REINFORCEMENT.

(3) (21) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

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 531.2.2 OF THE STANDARD SPECIFICATION)	fy=55,000 p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy=36,000 p.s.i.

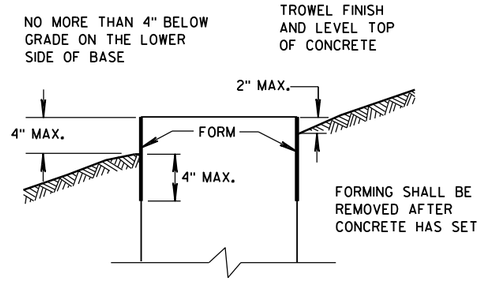




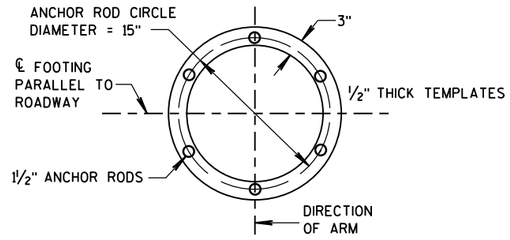
CONCRETE BASE TYPE 10

(FOR TYPE 9 & 10 & OVER HEIGHT (OH) POLES)

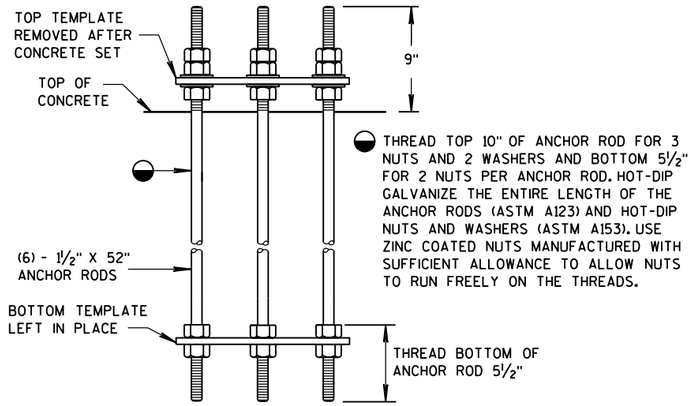
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 10 ANCHOR ASSEMBLY

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	172
LBS. OF VERTICAL BAR STEEL	122

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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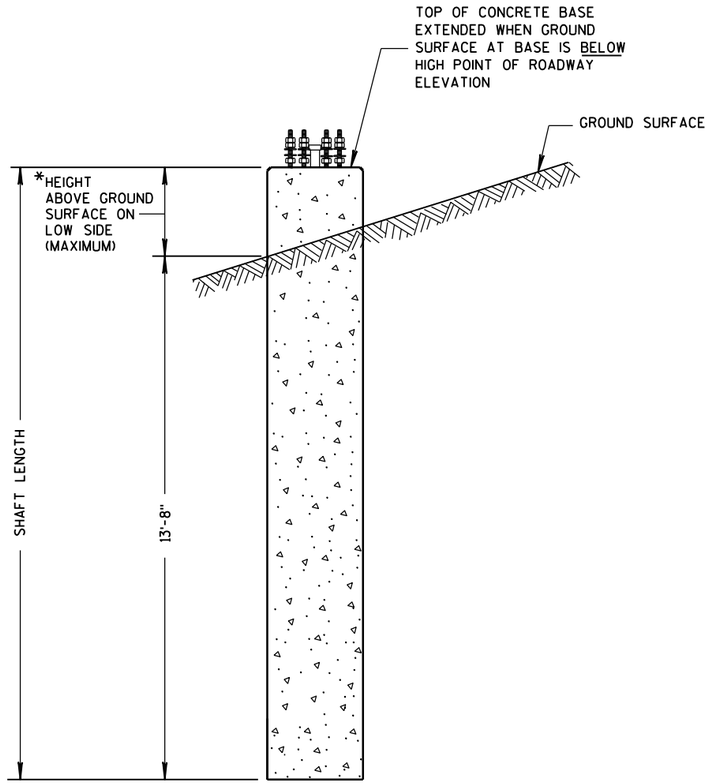
S.D.D. 9 C 11-10

REINFORCEMENT AND CONCRETE QUANTITIES
ADJUSTED FOR EXTENDED TYPE 10 CONCRETE BASE

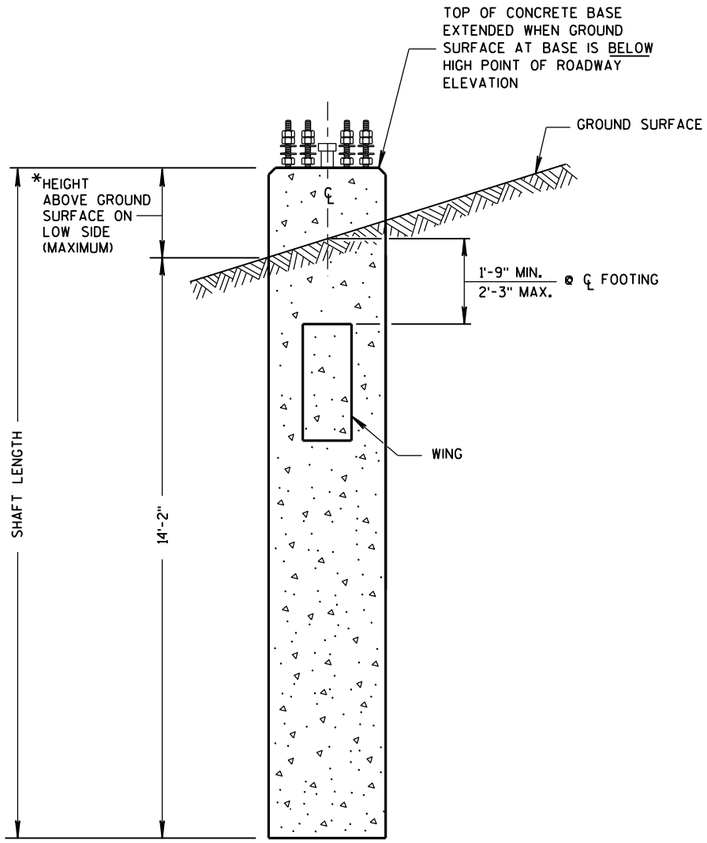
HEIGHT INCREASE REQUIRED	* HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAXIMUM)	SHAFT LENGTH	LENGTH OF #6 VERTICAL REINF.	NO. OF #4 HOOPS	C.Y. OF CONCRETE	LBS. OF HOOP BAR STEEL	LBS. OF VERTICAL BAR STEEL
>0" TO 6"	10"	14'-6"	14'-1"	16	2.6	78	127
>6" TO 1'-0"	1'-4"	15'-0"	14'-7"	16	2.7	78	131
>1'-0" TO 1'-6"	1'-10"	15'-6"	15'-1"	17	2.8	83	136
>1'-6" TO 2'-0"	2'-4"	16'-0"	15'-7"	17	2.9	83	141



CONCRETE BASE TYPE 10 (EXTENDED)

REINFORCEMENT AND CONCRETE QUANTITIES
ADJUSTED FOR EXTENDED TYPE 13 CONCRETE BASE

HEIGHT INCREASE REQUIRED	* HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAXIMUM)	SHAFT LENGTH	LENGTH OF #6 VERTICAL REINF.	NO. OF #4 HOOPS	C.Y. OF CONCRETE	LBS. OF H.S. BAR STEEL
>0" TO 6"	10"	15'-0"	14'-7"	16	6.5	447
>6" TO 1'-0"	1'-4"	15'-6"	15'-1"	16	6.6	454
>1'-0" TO 1'-6"	1'-10"	16'-0"	15'-7"	17	6.8	469
>1'-6" TO 2'-0"	2'-4"	16'-6"	16'-1"	17	7.0	476



CONCRETE BASE TYPE 13 (EXTENDED)

CONCRETE BASE
TYPE 10 & TYPE 13 EXTENSION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11-26-2013 DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
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S.D.D. 9 C 13-2

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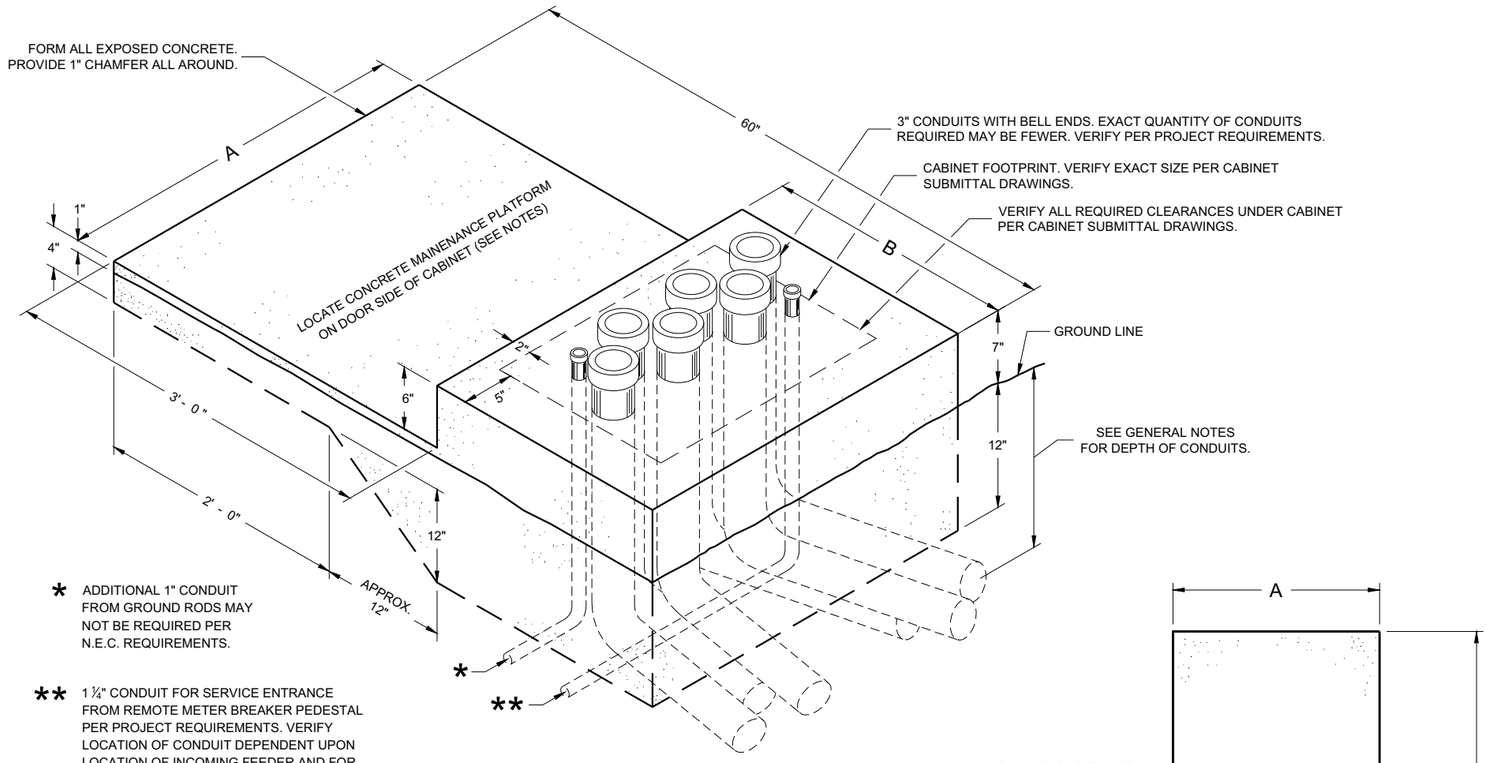
S.D.D. 9 C 13-2



* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

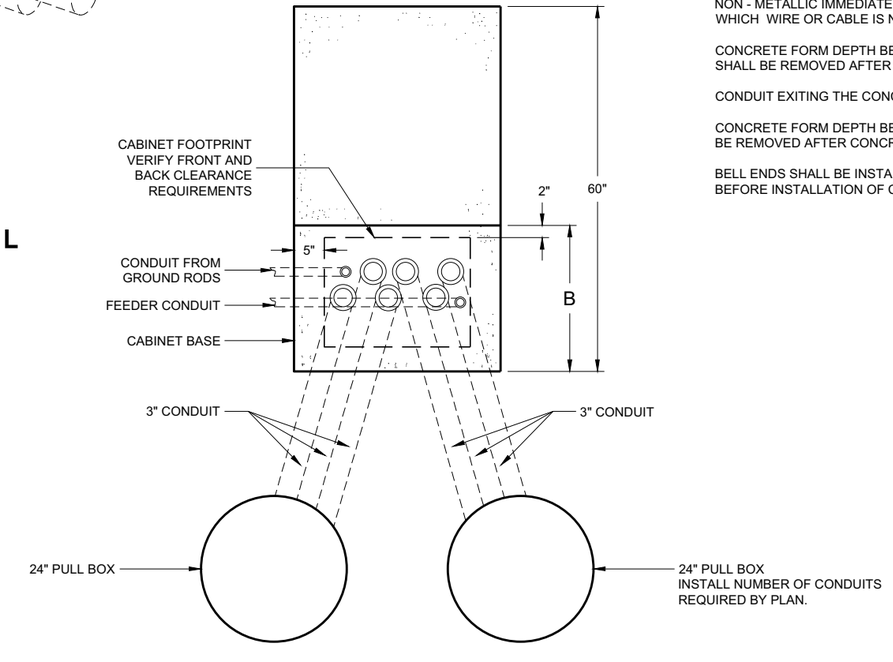
** 1 ¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

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

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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

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

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

LOCATIONS SHALL BE AS SHOWN ON THE PLANS UNLESS DETERMINED BY THE ENGINEER IN THE FIELD.

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

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND LEVEL.

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

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NON - METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

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 BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

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

CONDUIT EXITING THE CONCRETE BASE SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

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

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

CONCRETE CONTROL CABINET BASE, TYPE L

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 289

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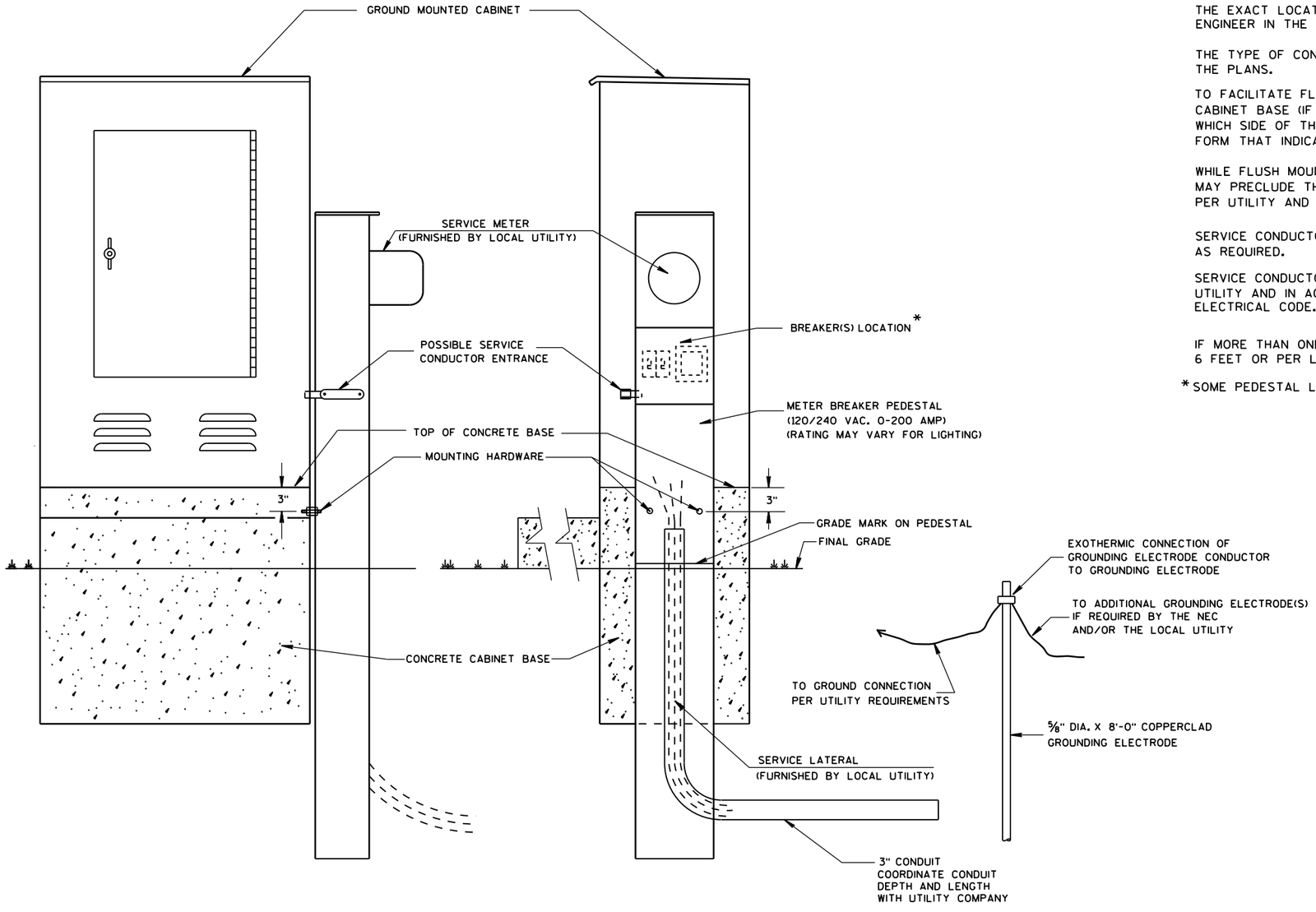
SDD 09C14 - 03



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.

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S.D.D. 9 D 1-5

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S.D.D. 9 D 1-5

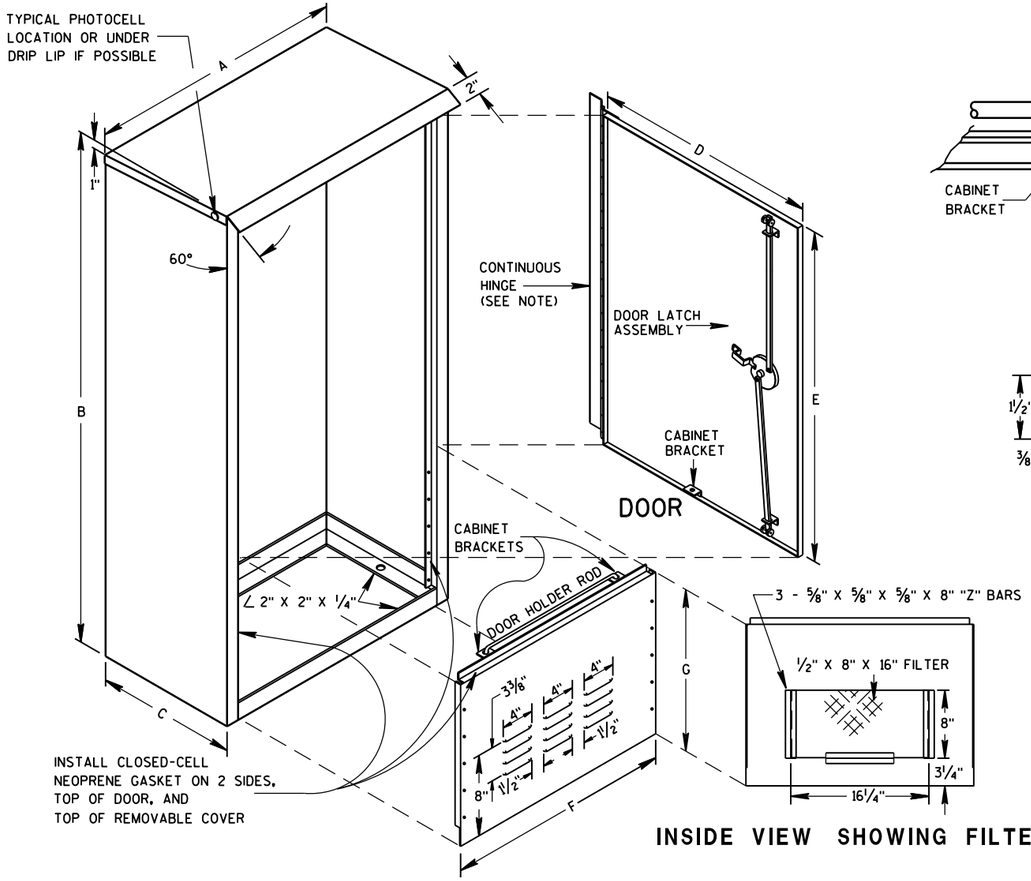
CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

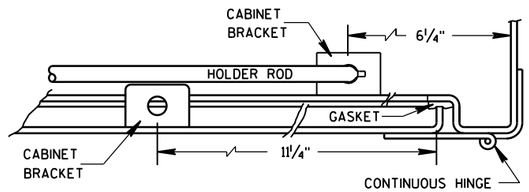
/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA

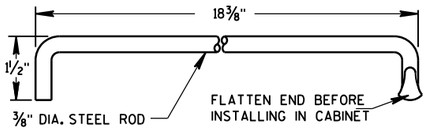


REMOVABLE COVER

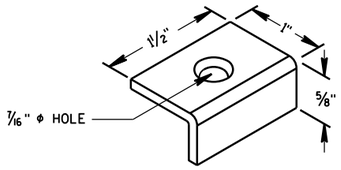
INSIDE VIEW SHOWING FILTER



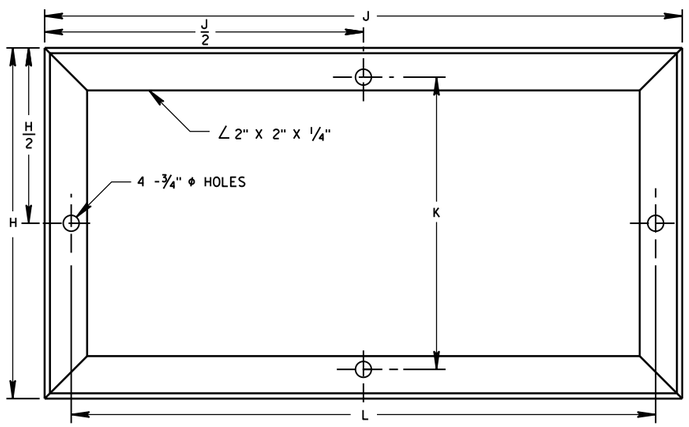
HINGE & DOOR HOLDER



HOLDER ROD



CABINET BRACKET



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2

GENERAL NOTES

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

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

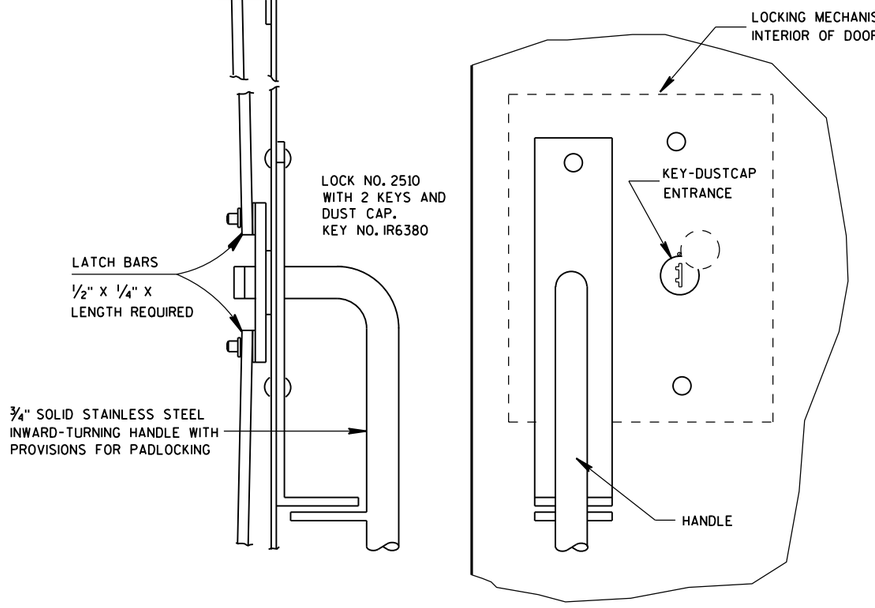
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

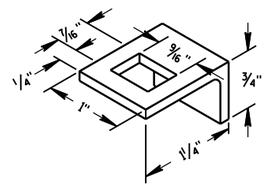
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY



LATCH BAR GUIDE

SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

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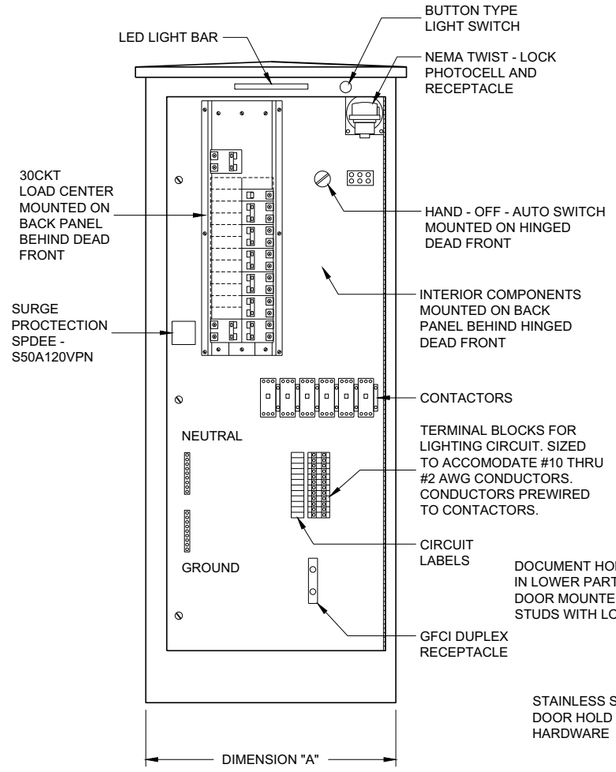
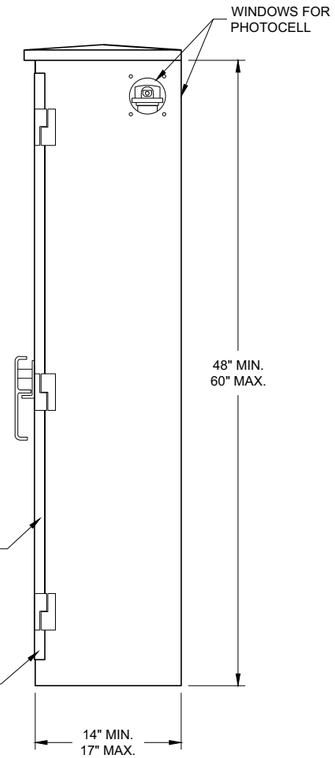
FRONT INTERIOR ELEVATION



SIDE VIEW



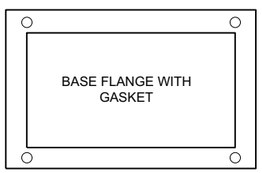
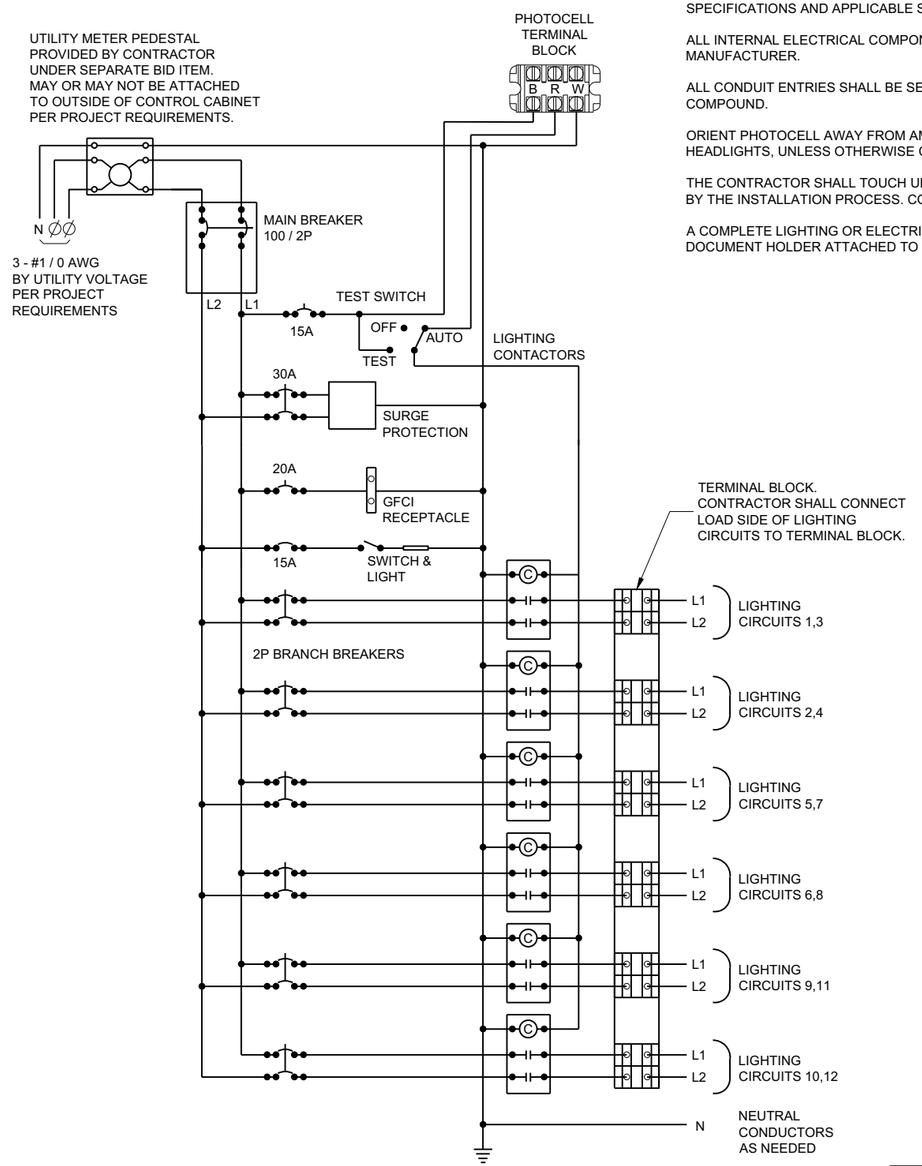


TABLE OF DIMENSIONS (INCHES)		
CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"

LIGHTING CONTROL CABINET



CONTROL CABINET SCHEMATIC

GENERAL NOTES

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

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE - WIRED BY THE CABINENT MANUFACTURER.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS, UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISION.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

LIGHTING CONTROL CABINET
120 / 240 VOLT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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November 2018
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/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 292

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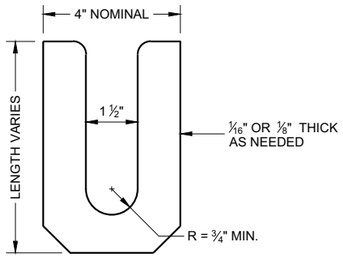
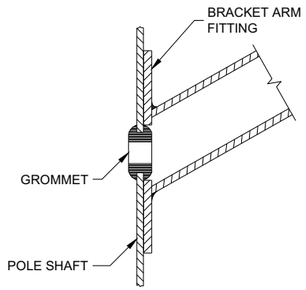
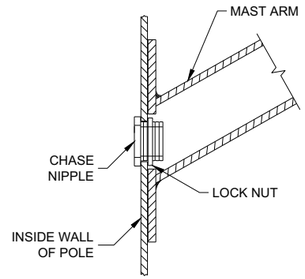


LEVELING SHIM (1)
SHALL BE ALUMINUM



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.

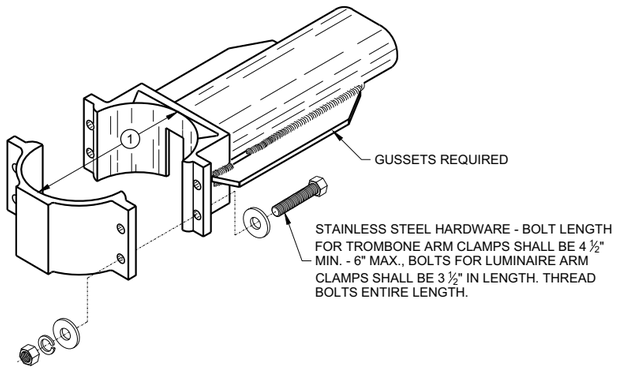
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(2) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

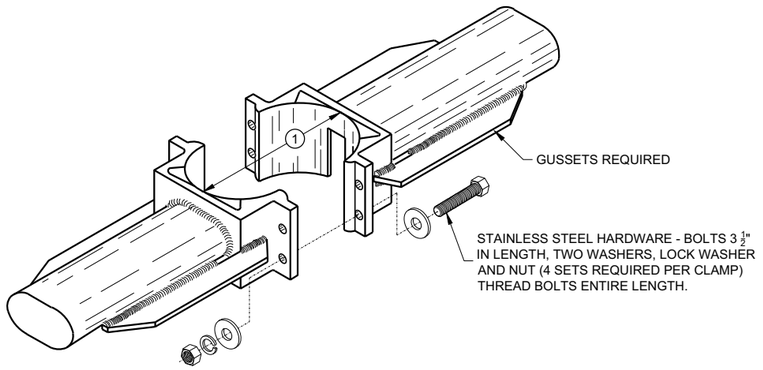
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(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.

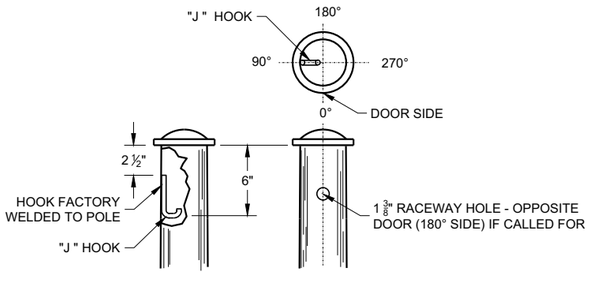
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



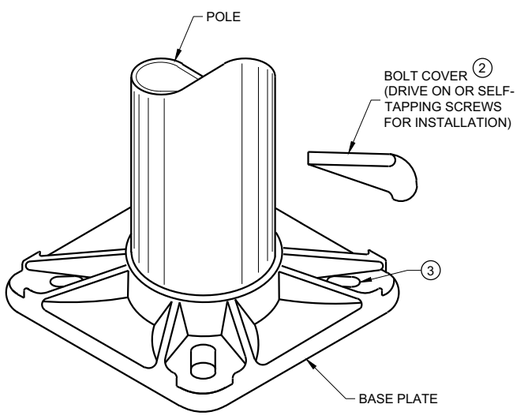
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



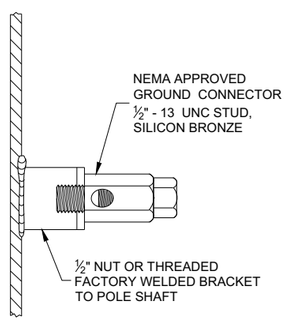
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

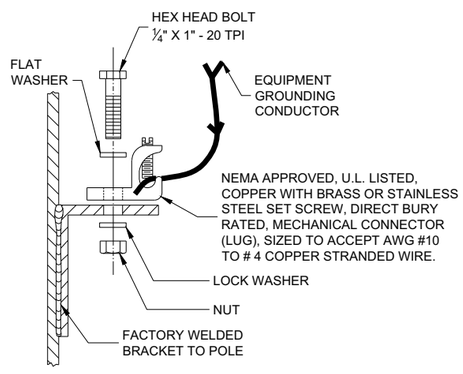


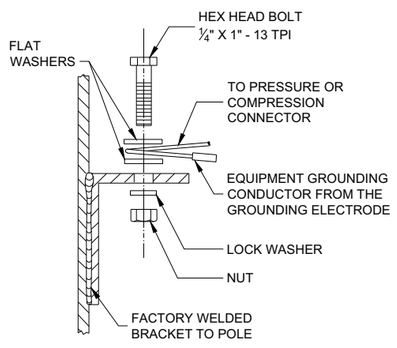
TYPICAL "J" HOOK LOCATION



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 293

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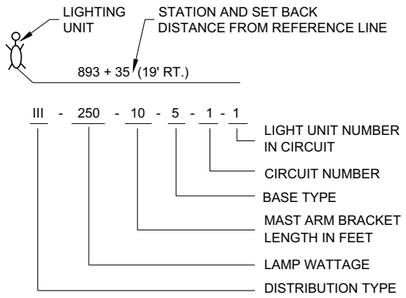
GENERAL NOTES

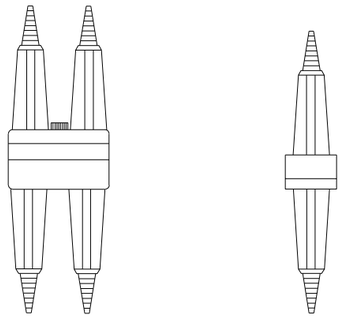
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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.

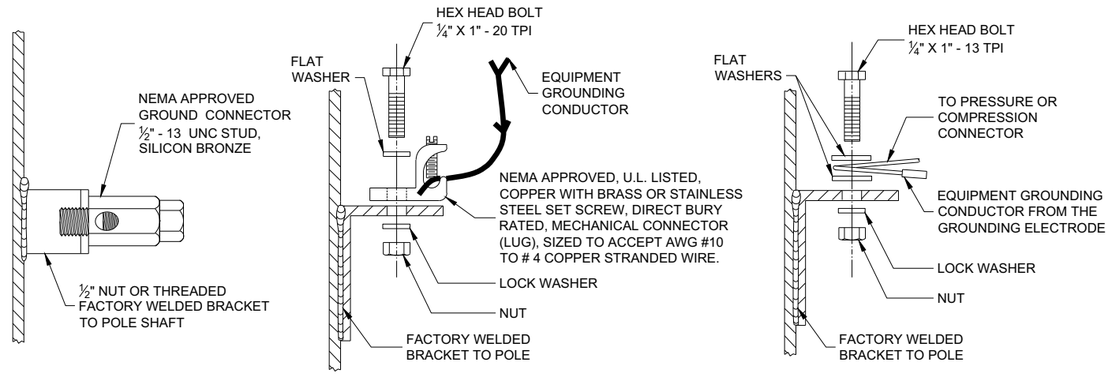


LIGHTING UNIT CODE
(TYPICAL)

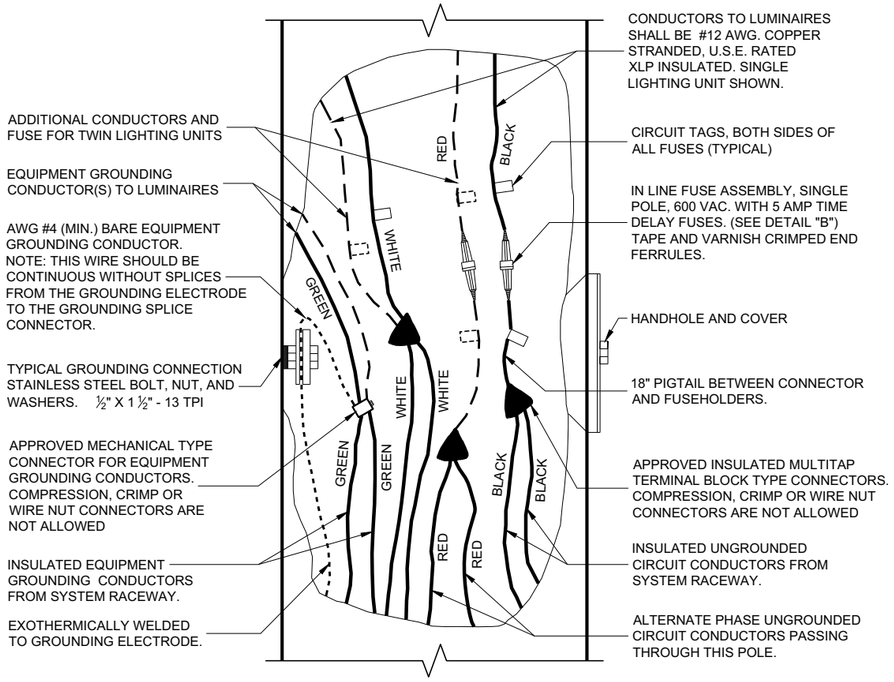


DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT

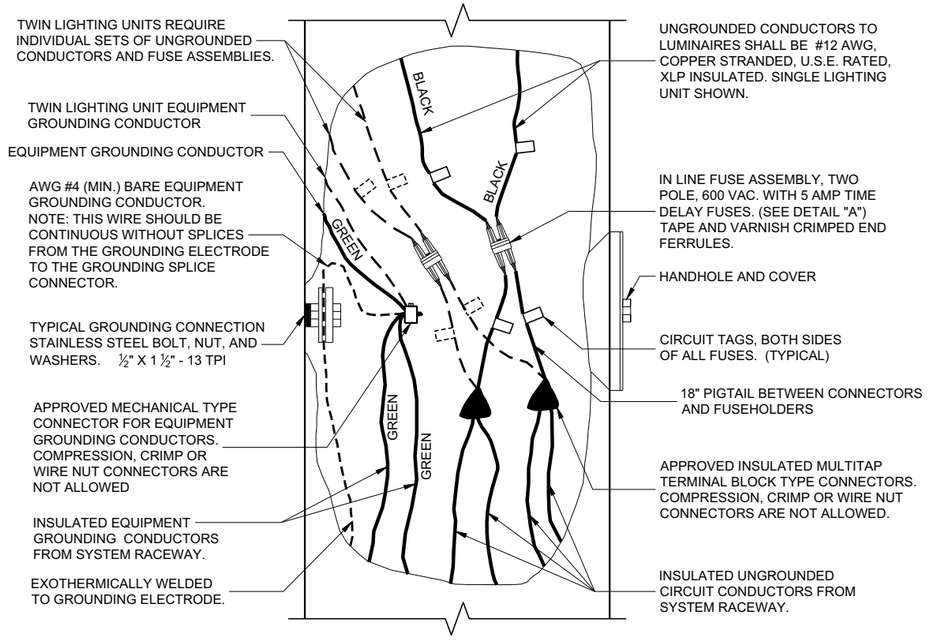
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



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
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STATE ELECTRICAL ENGI 294

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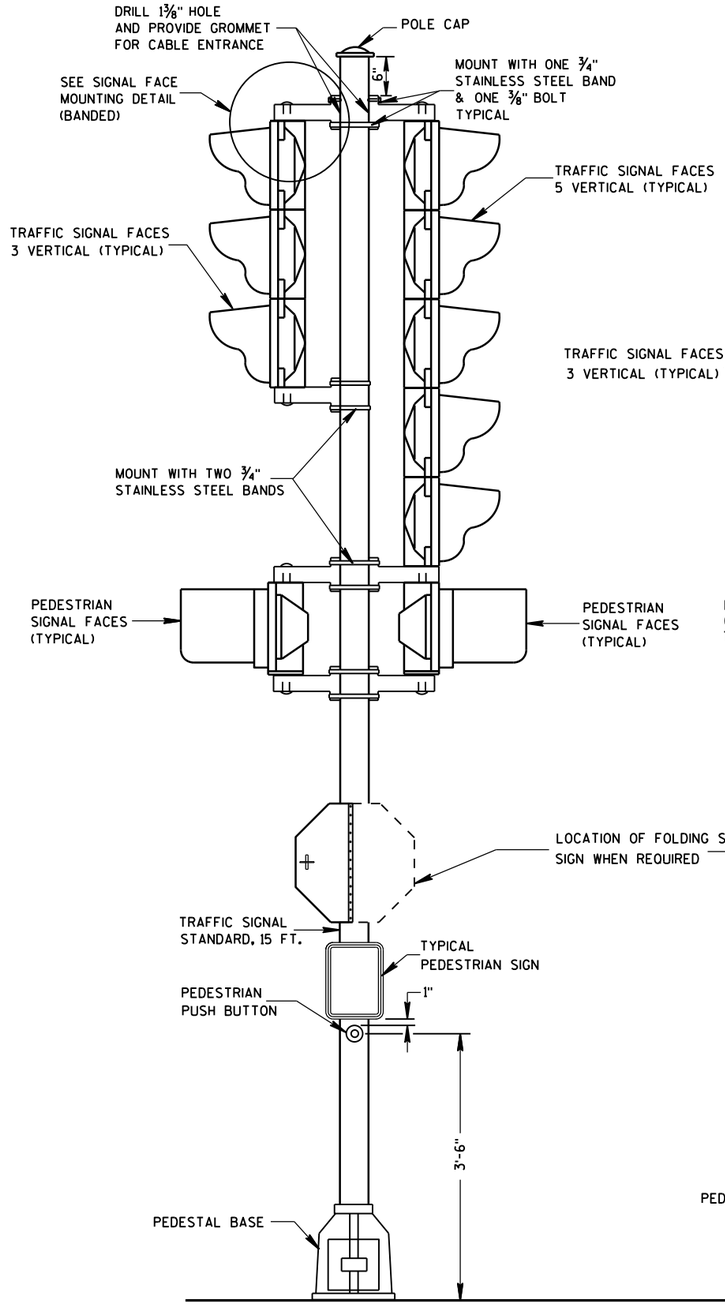
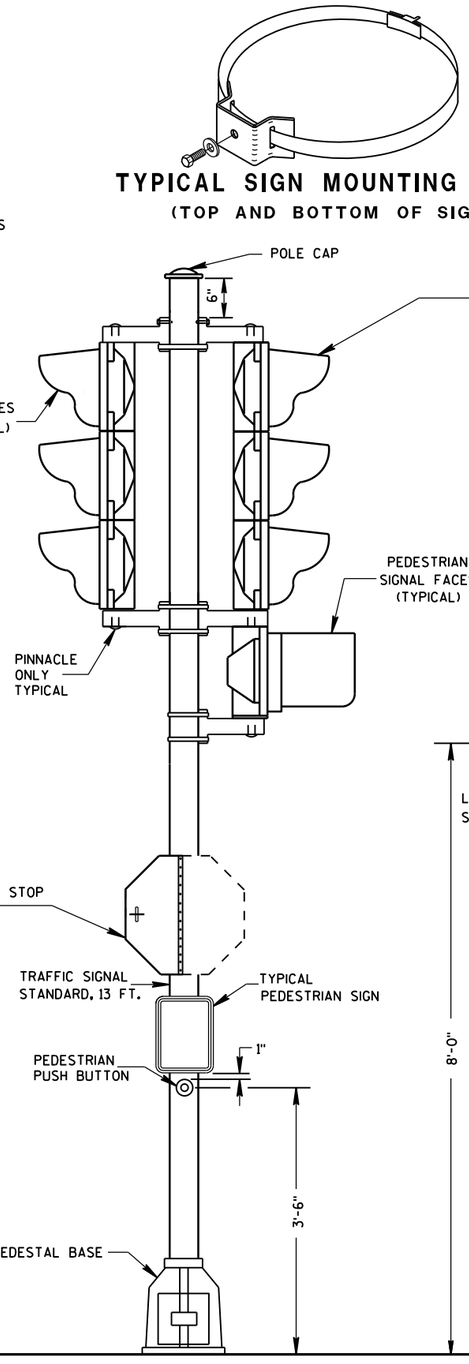
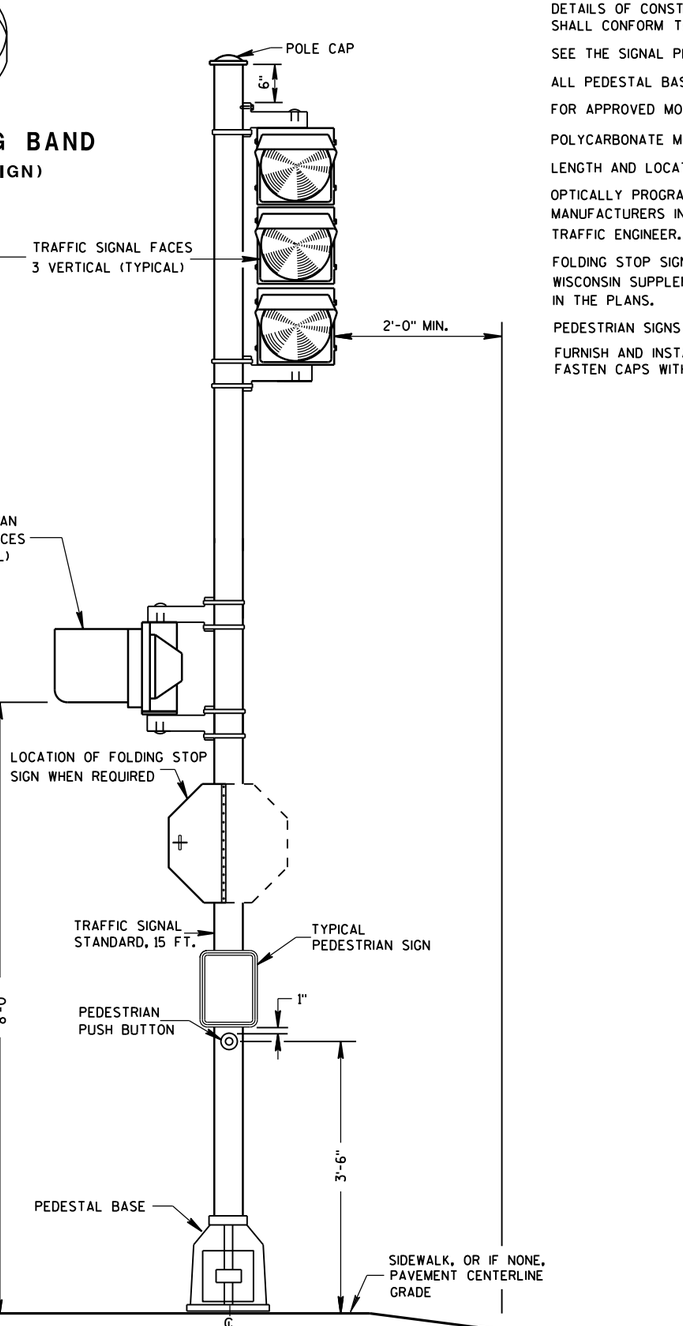


TRAFFIC SIGNAL STANDARD-15 FT.



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.

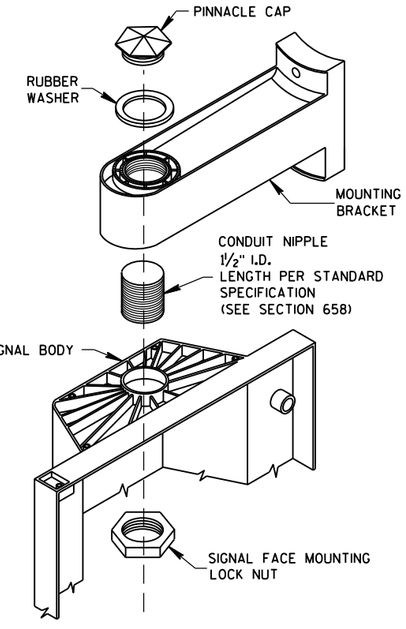
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

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
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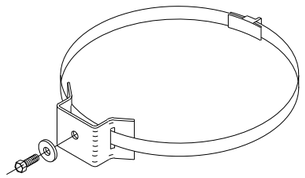
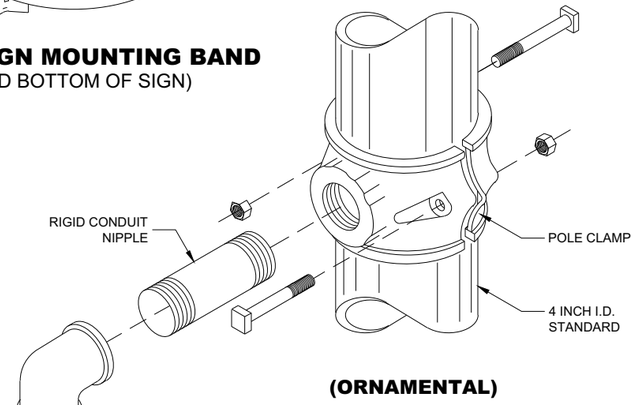
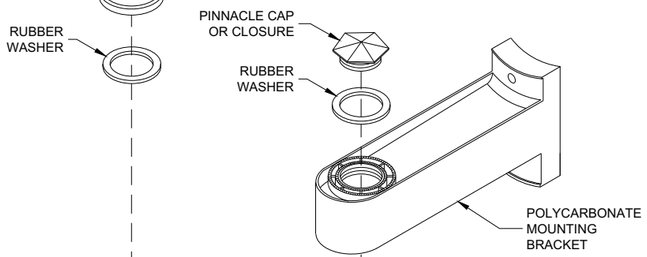


TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



(ORNAMENTAL)



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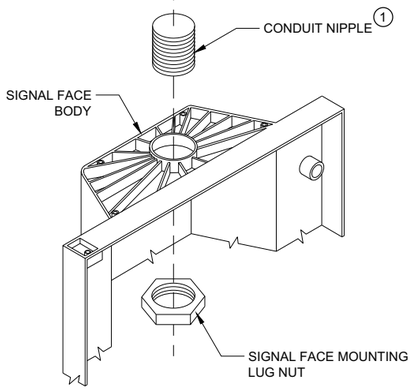
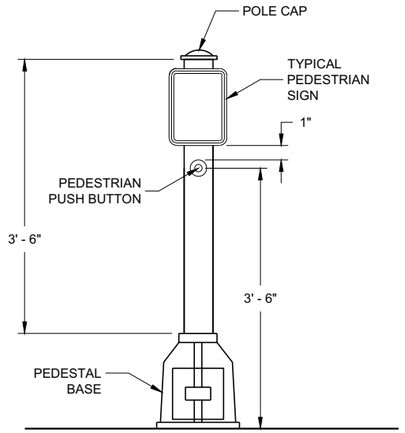


SIGNAL FACE MOUNTING DETAILS



PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING

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.

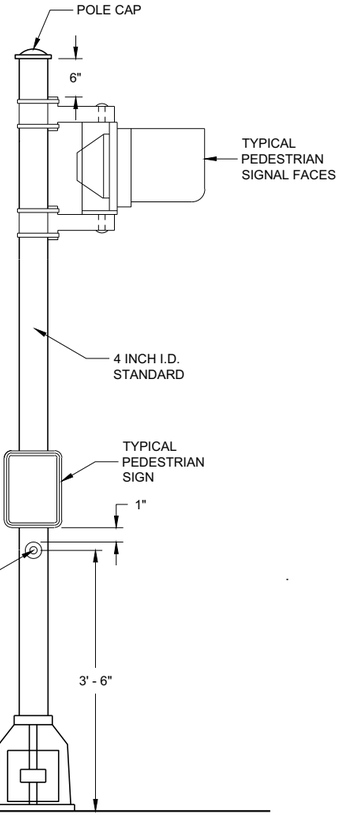
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE REGION TRAFFIC ENGINEER).

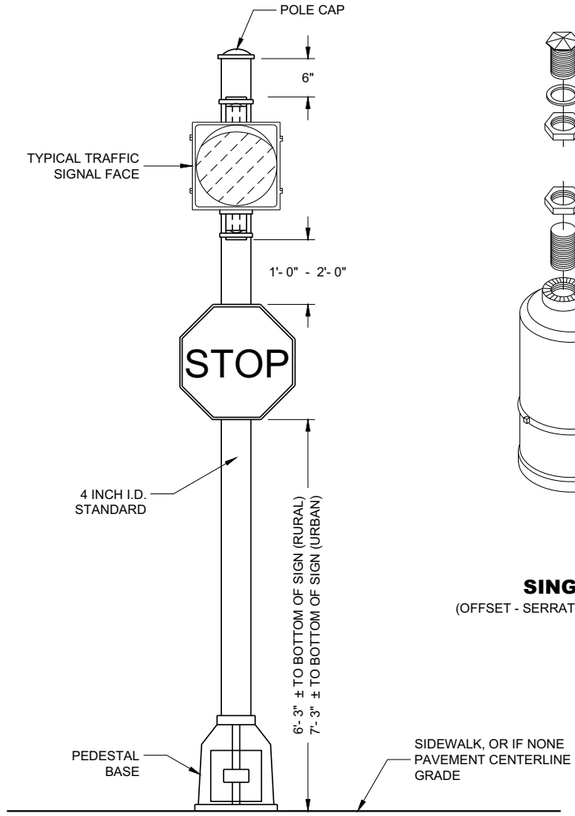
PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

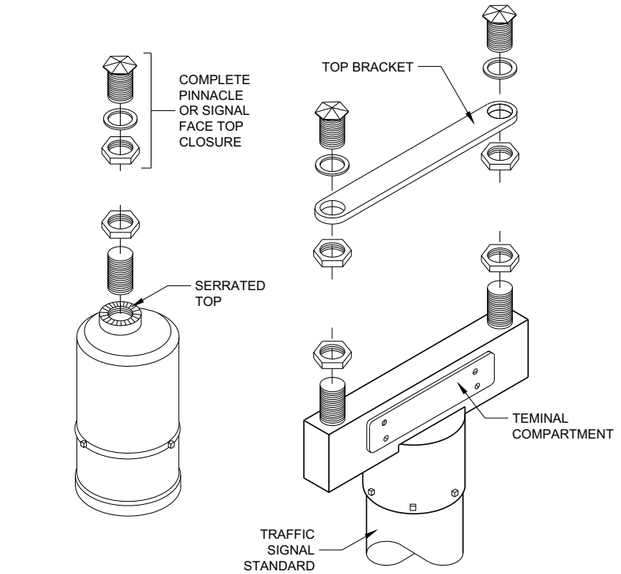
(1) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACESAND BRACKET ENDS.



PEDESTRIAN FACE STANDARD - 10 FT.
(WALK - DON'T WALK)



STANDARD FLASHER
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED



SINGLE
(OFFSET - SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

TRAFFIC SIGNAL STANDARD
PEDESTRIAN AND FLASHER
TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 296

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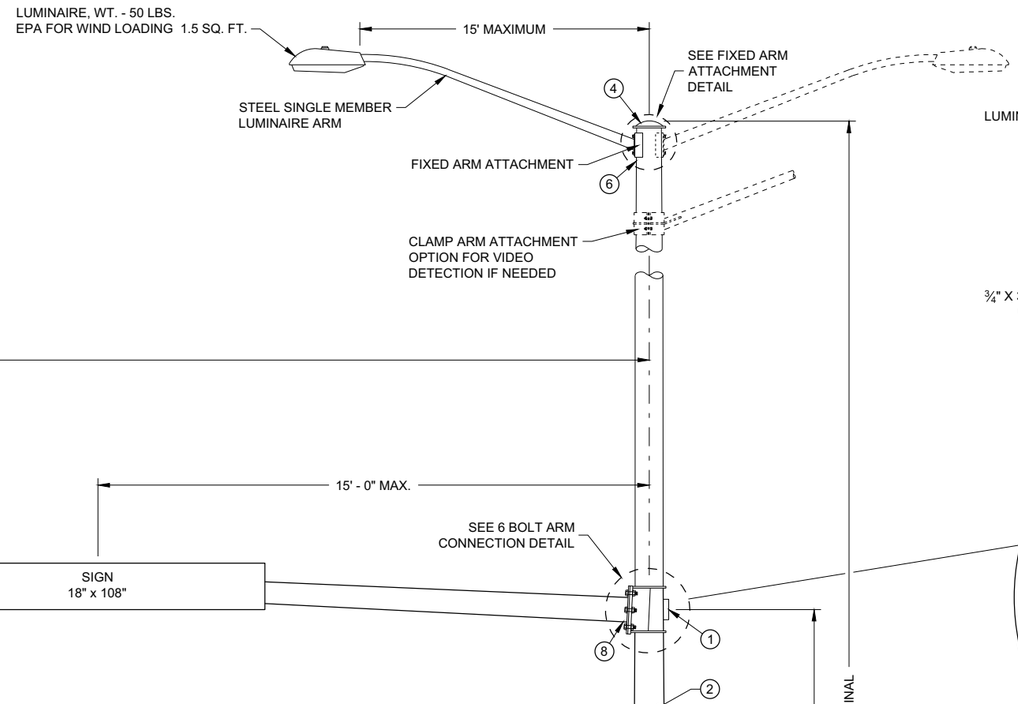
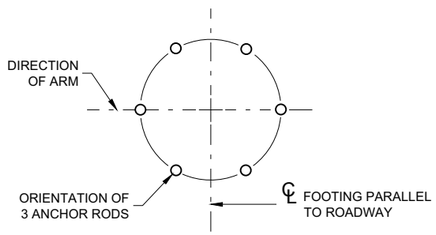
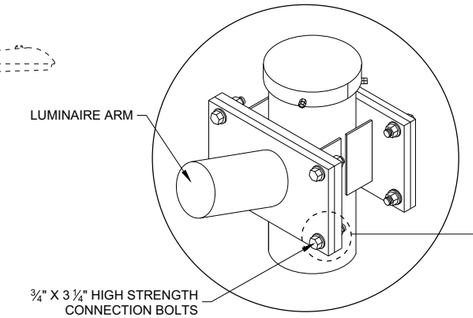


* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

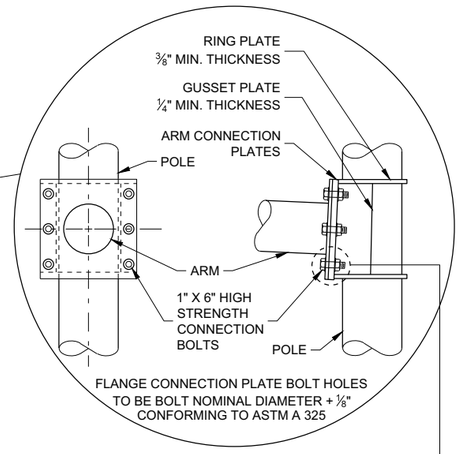
** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE



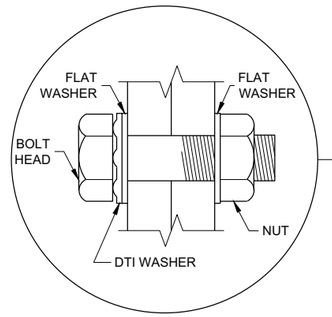
ANCHOR ROD LOCATION



FIXED ARM ATTACHMENT DETAIL



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 POLE
15' - 30' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 10 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 297

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SDD 09E08 - 09e

GENERAL NOTES

DETAILS OF CONSTRUCTION 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 9 SPECIAL AND 10 SPECIAL ARE FOR ARM LENGTHS 35 FOOT, 40 FOOT, AND 45 FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35 FOOT TO 55 FOOT.

MONOTUBE POLES AND ARMS SHALL BE GALVANIZED STEEL.

RING STIFFENED BUILT UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3% ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATION 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 "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNAL 2015 1ST EDITION (INCLUDING INTERIM REVISIONS)" AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR THE LIGHTING STRUCTURES 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 TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 SPECIAL AND TYPE 10 SPECIAL STRUCTURES. IN LIEU OF DESIGNING FOR GALLOPING, A VIBRATION DAMPER MITIGATION DEVICE IS REQUIRED TO BE SUPPLIED AND INSTALLED AT THE END OF THE MAST ARM.

CATEGORY II FATIGUE FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE12 AND TYPE 13 STRUCTURES.

115 MPH (700 YEAR MRI BASIC WIND SPEED).

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" STAINLESS STEEL 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 A S DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEAD 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 HAND HOLE 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 SPECIFICATION SECTION 658).

(3) SECURELY MOUNT BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND 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 HAND HOLD, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

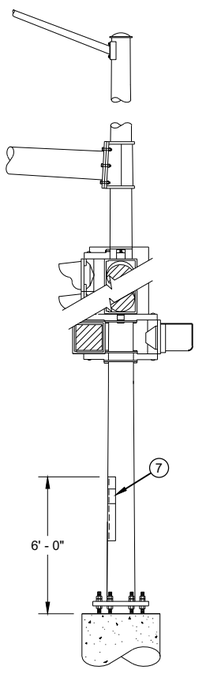
(6) FACTORY WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

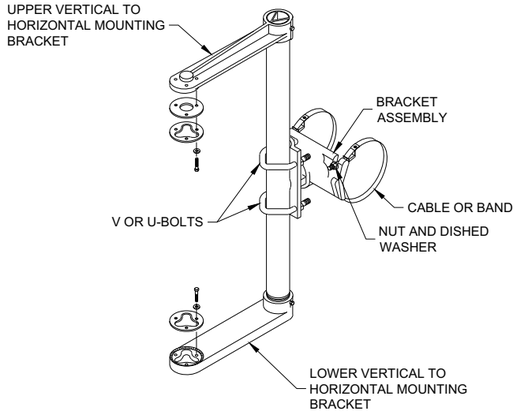
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

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.

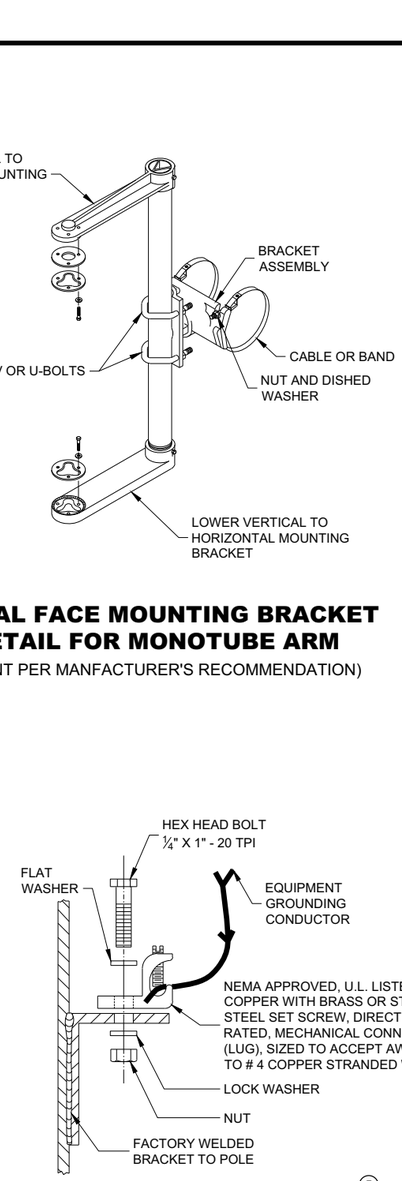


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



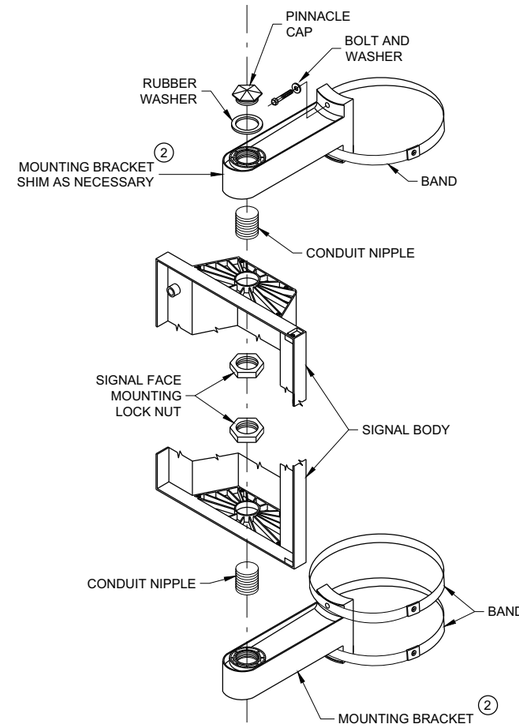
SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANFACTURER'S RECOMMENDATION)

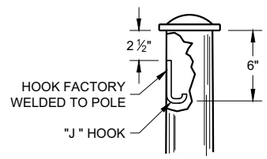


TYPICAL GROUNDING (5) CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



TYPICAL "J" HOOK (6) WIRE SUPPORT

GENERAL NOTES AND HARDWARE FOR TYPES 9,10, 9/10 SPECIAL, 12 AND 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER

FHWA

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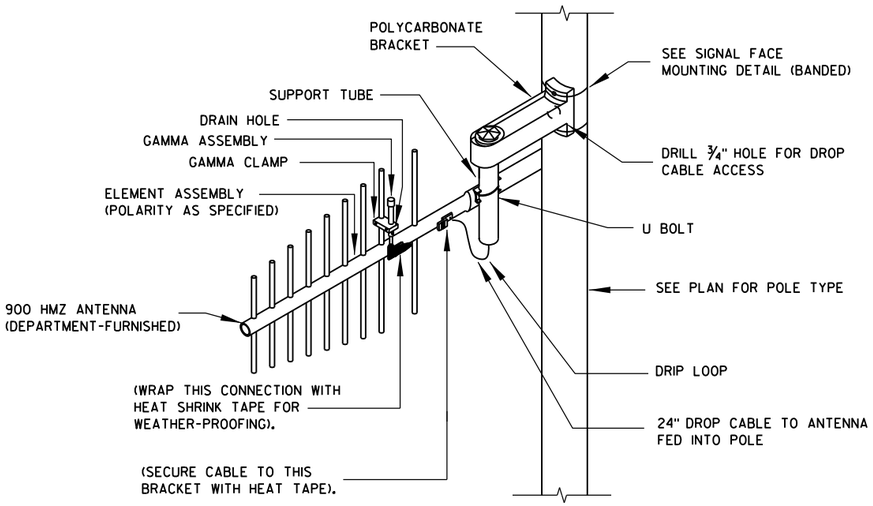
SDD 09E08 - 09k

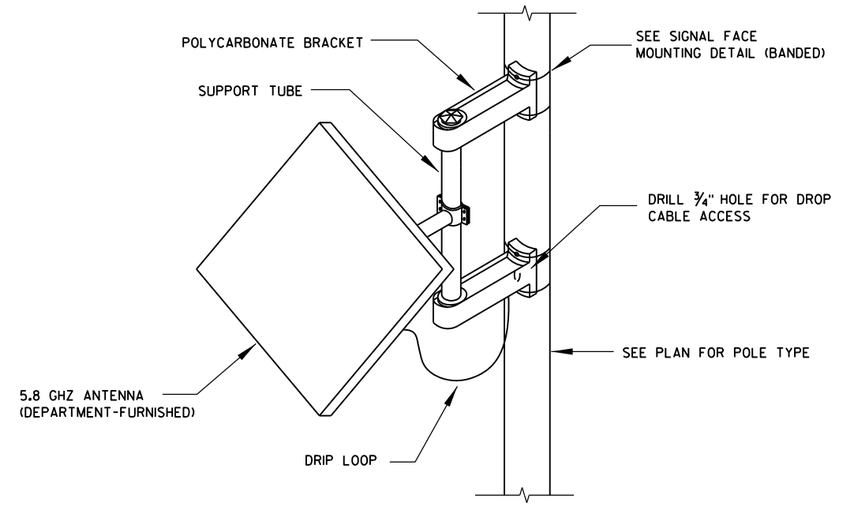
GENERAL NOTES

INSTALL DRIP LOOPS ON LOOSE CABLES TO PREVENT WATER FROM FLOWING ON CABLE AND ENTERING POLES/ENCLOSURES.

ALL MOUNTING EQUIPMENT REQUIRED IS INCIDENTIAL TO BID ITEM "INSTALL WIRELESS ANTENNA".



900 MHZ ANTENNA



5.8 GHZ ANTENNA

INSTALL WIRELESS ANTENNA

INSTALL WIRELESS ANTENNA	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
May 2017 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL
FHWA	

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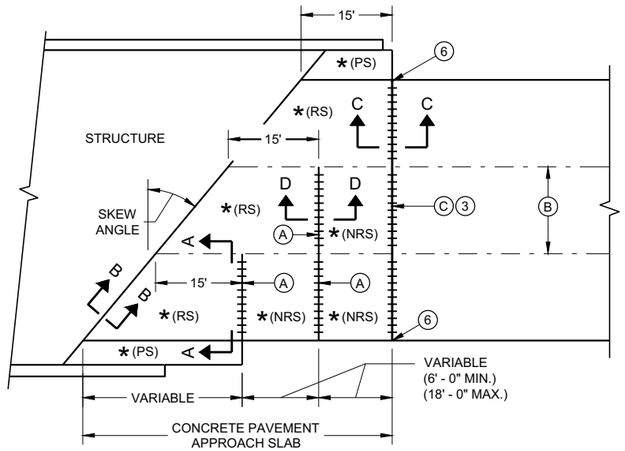
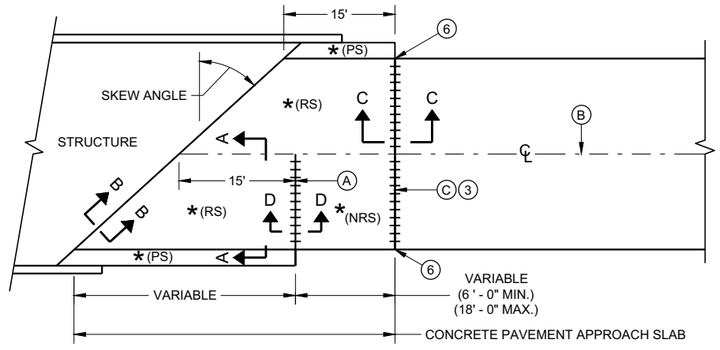
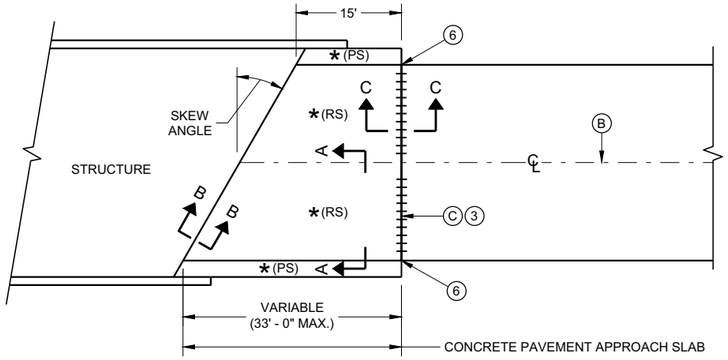


SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)



SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

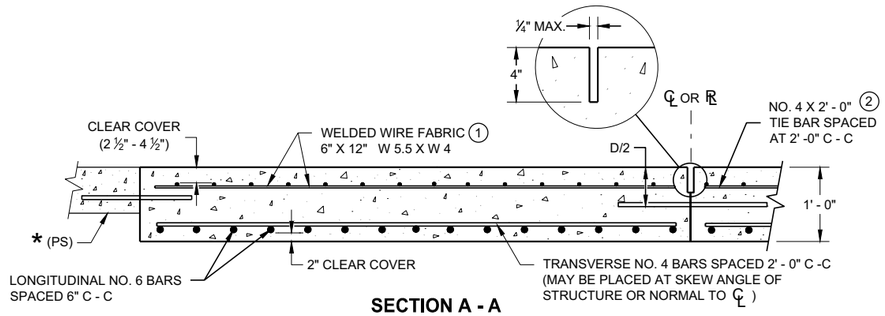
APPROACH SLAB AND ADJACENT PAVEMENT

* (RS) = REINFORCED CONCRETE SLAB

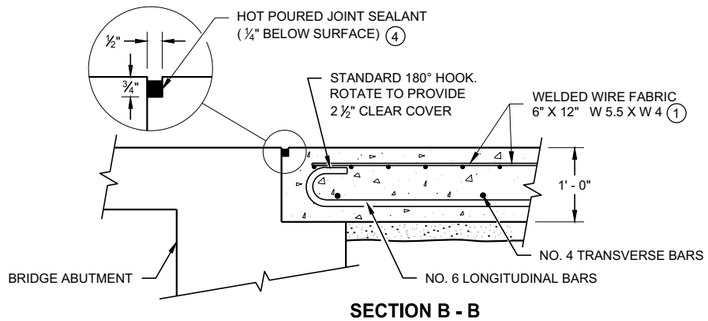
* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

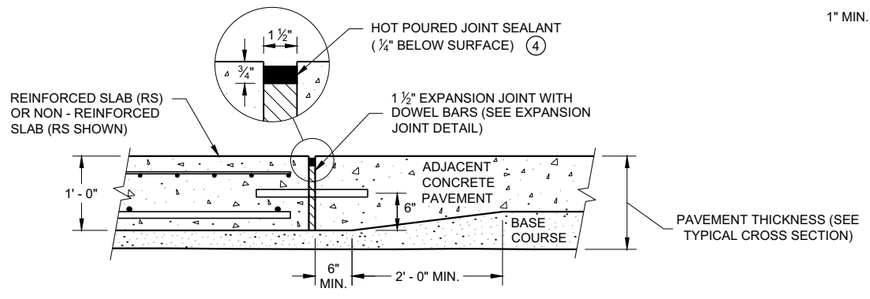
*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



SECTION A - A
REINFORCEMENT POSITIONING DETAIL



SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT



SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

GENERAL NOTES

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

(1) THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2' - 0 " C - C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

(2) THE CONTRACTOR MAY OMIT THE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

(3) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

(4) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

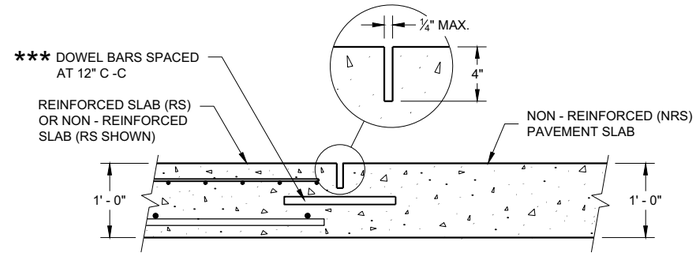
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

(6) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

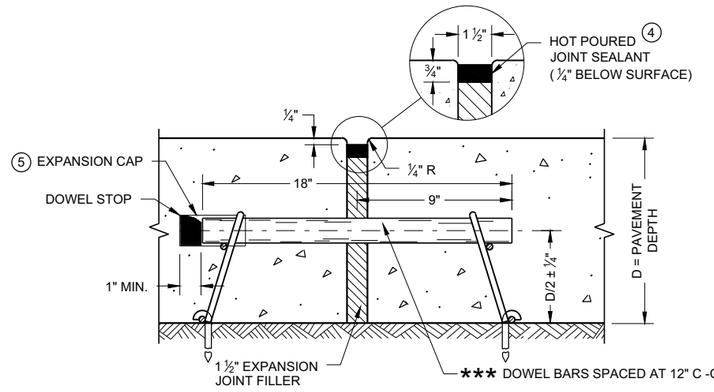
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.

(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞ .



SECTION D - D
CONTRACTION JOINT



EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVIS

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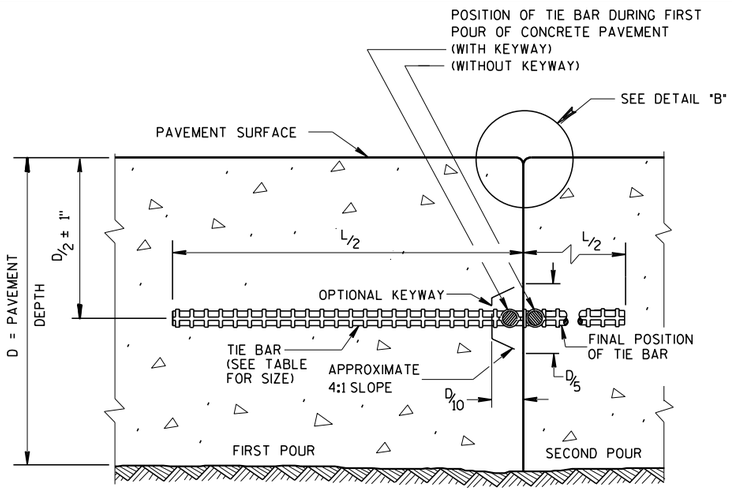
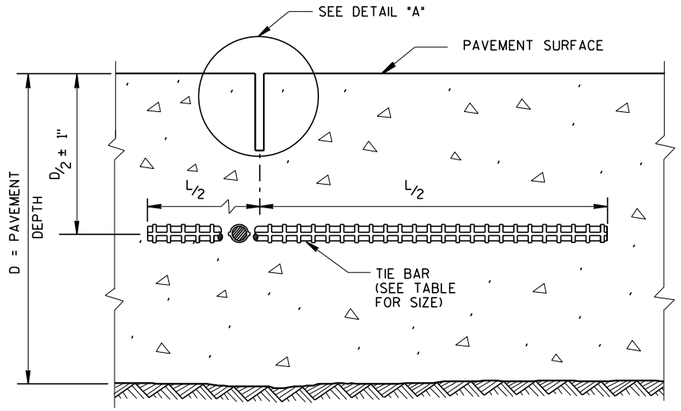


CONSTRUCTION JOINT



SAWED JOINT

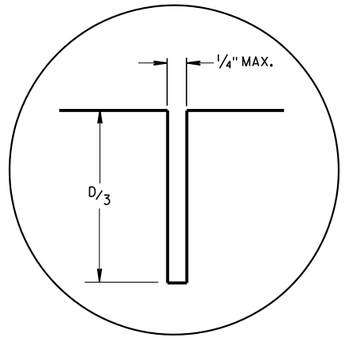
GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

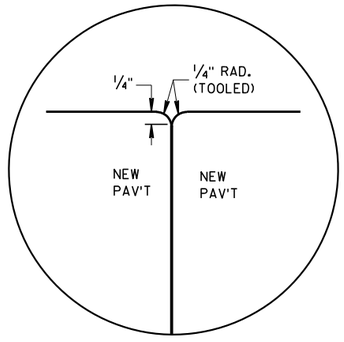
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

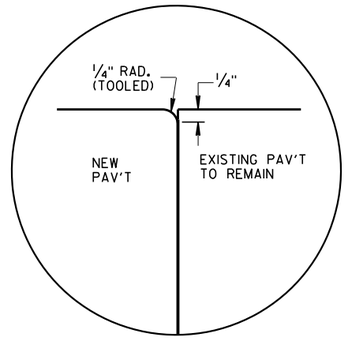
(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



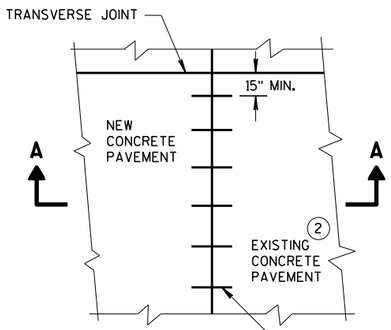
DETAIL "A"



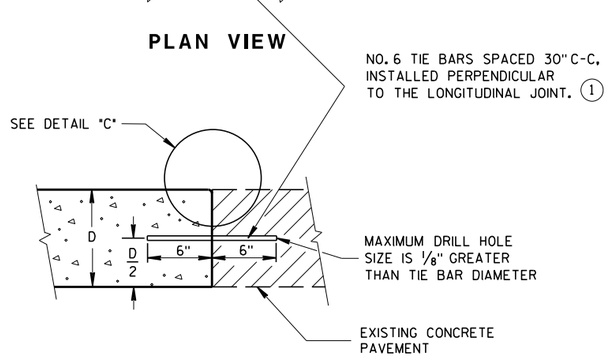
DETAIL "B"



DETAIL "C"



PLAN VIEW



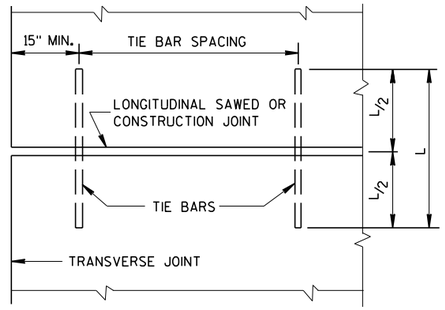
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp PE — PAVEMENT SUPE
FHWA

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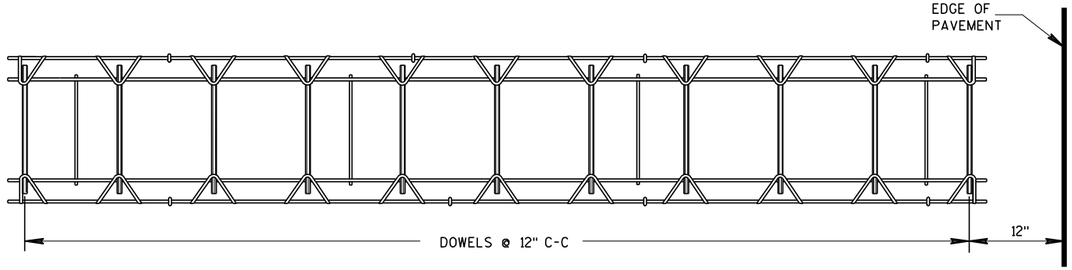


PLAN VIEW

SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

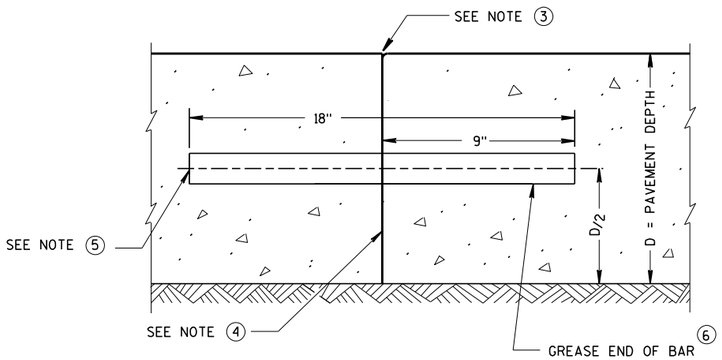
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

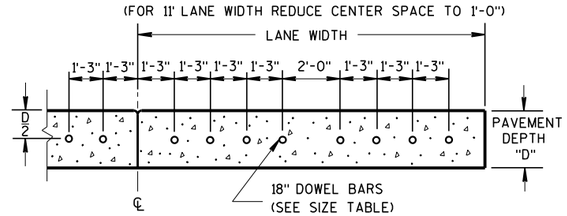
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

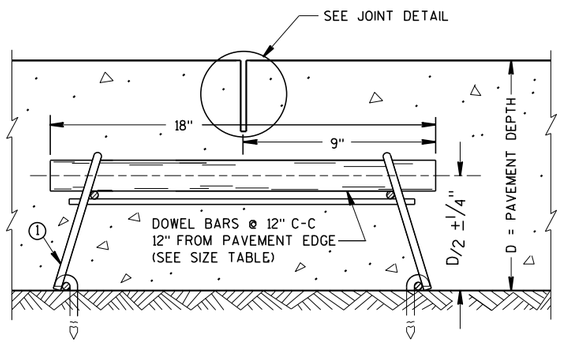
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



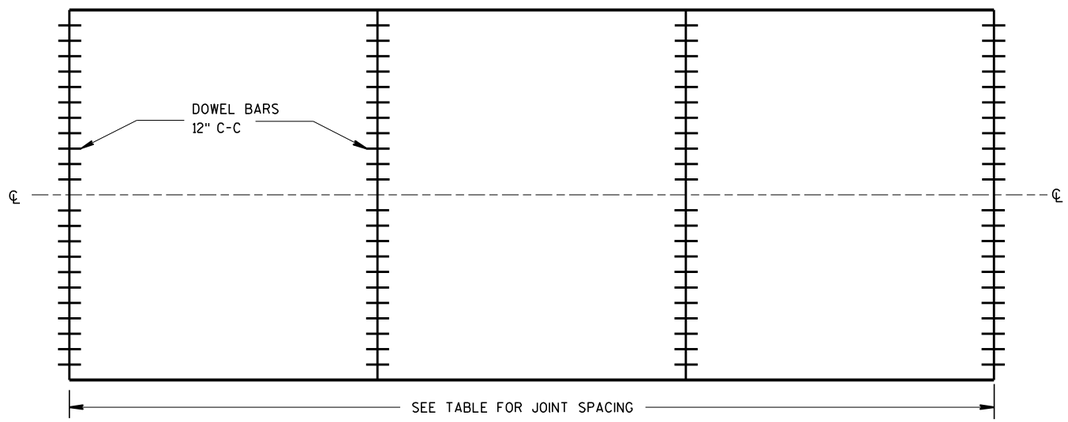
TRANSVERSE CONSTRUCTION JOINT



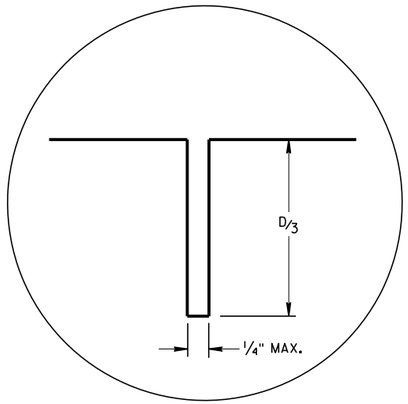
DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



DOWELED CONTRACTION JOINT



CONTRACTION JOINT LOCATIONS

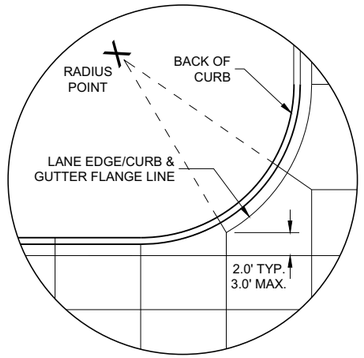


JOINT DETAIL

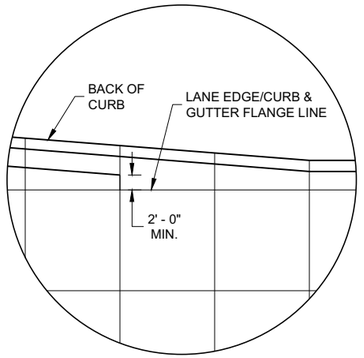
URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUP
FHWA



DETAIL "A"



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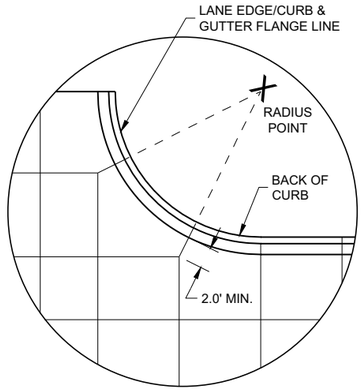

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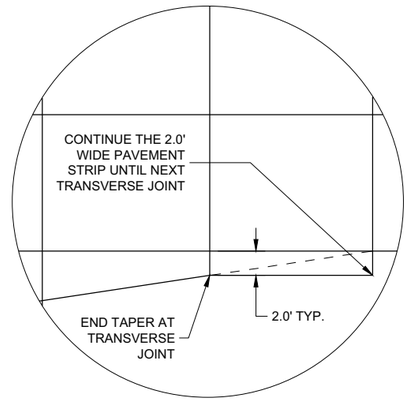


DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

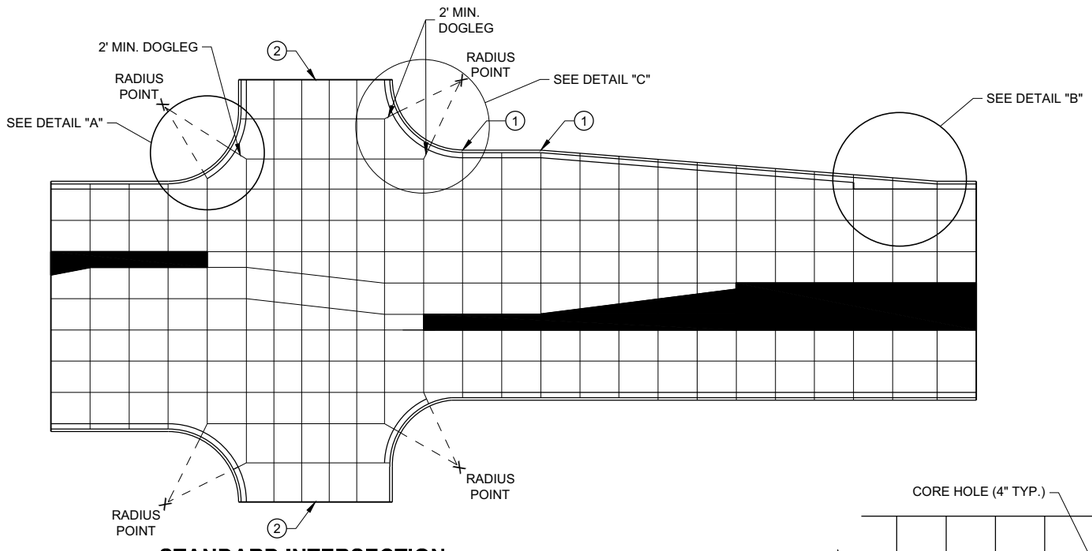
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.

(2) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITHEDGE OF RADIUS.

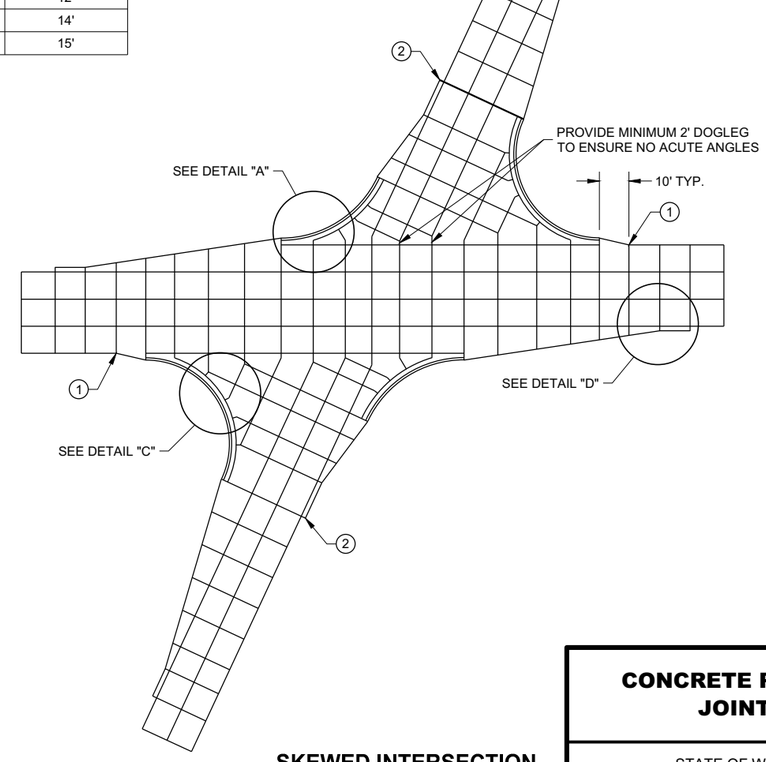
(3) THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



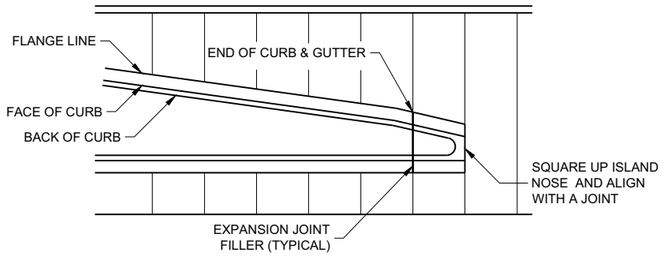
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

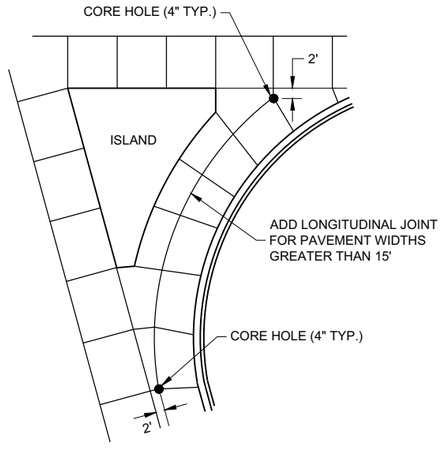
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 07a

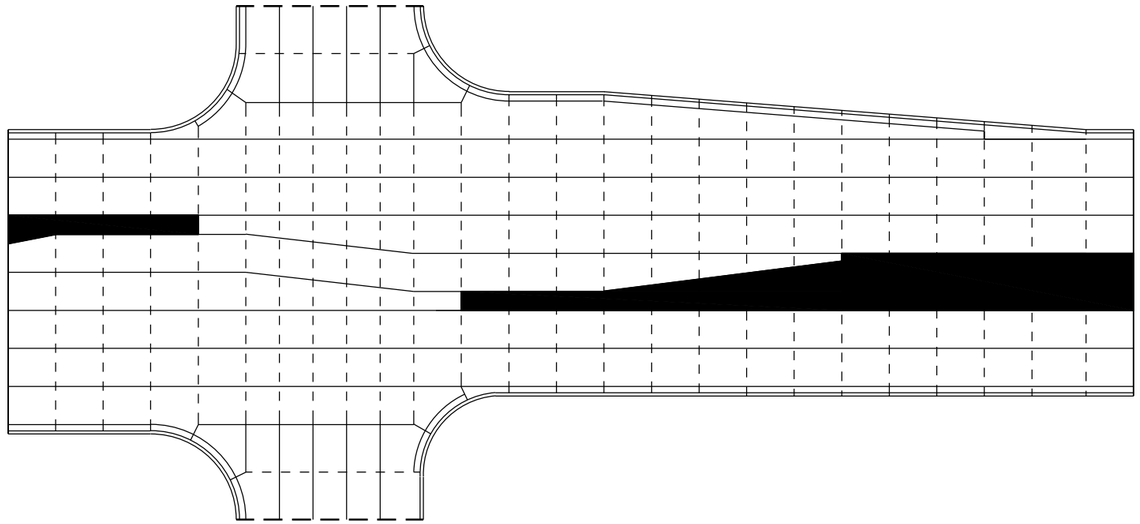
SDD 13C18 - 07a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

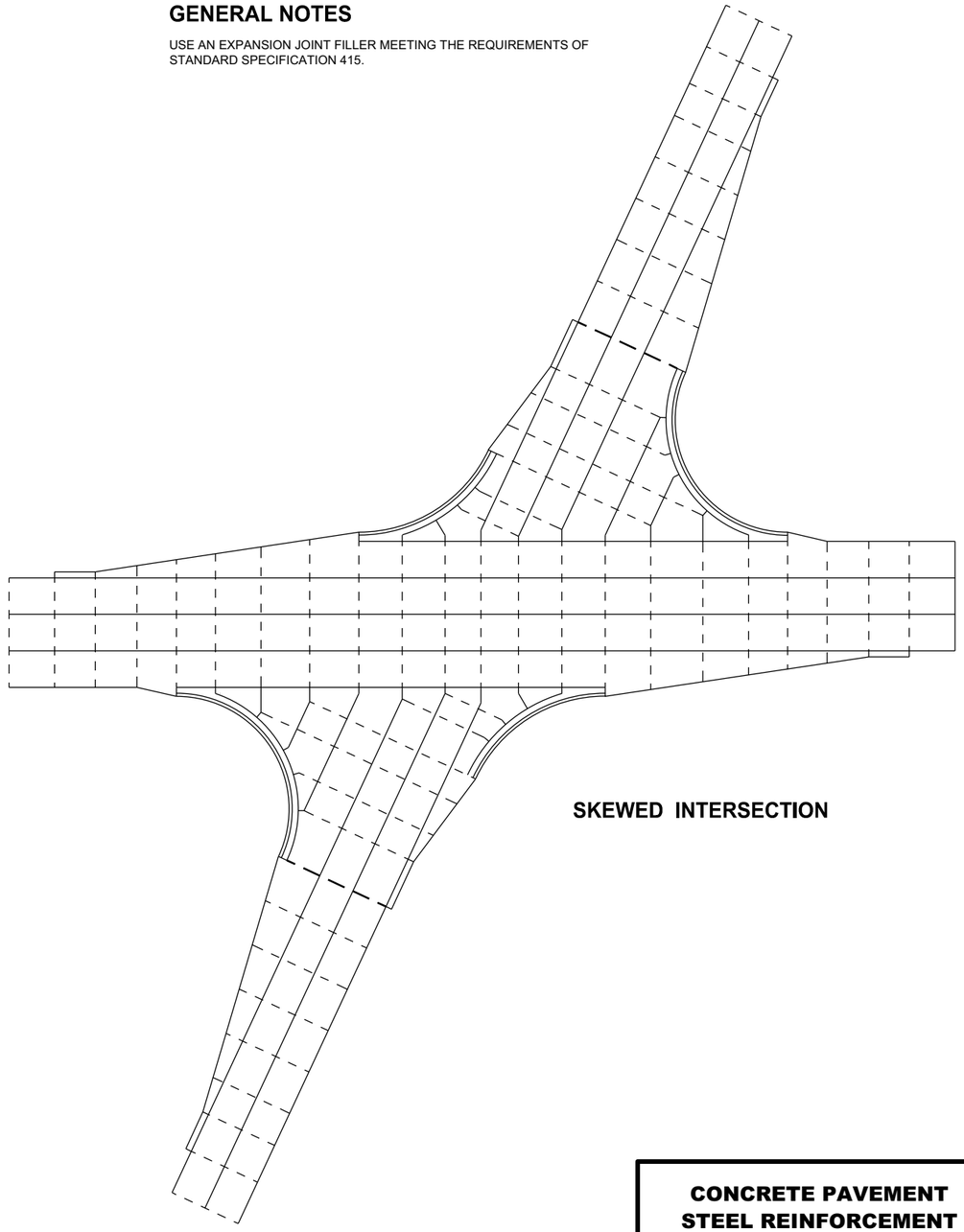
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

6

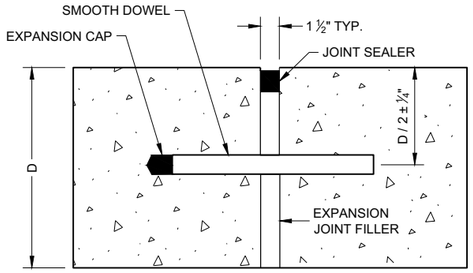
SDD 13C18 - 07b

CONCRETE PAVEMENT STEEL REINFORCEMENT

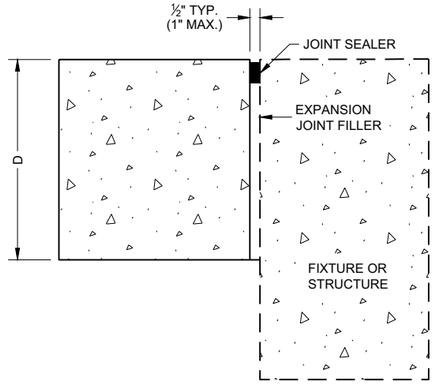
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 07b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

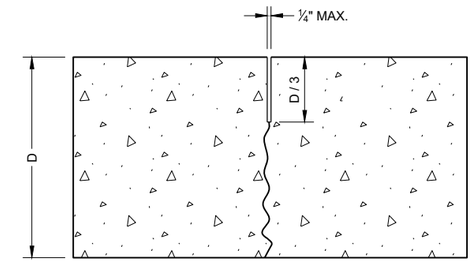
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

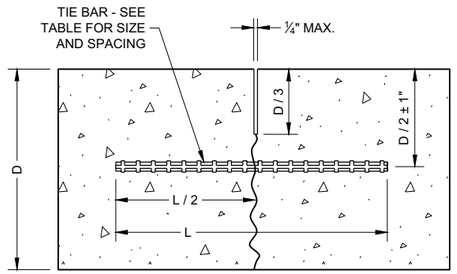
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

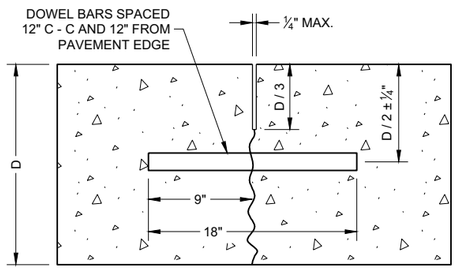
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



UNDOWELED TRANSVERSE

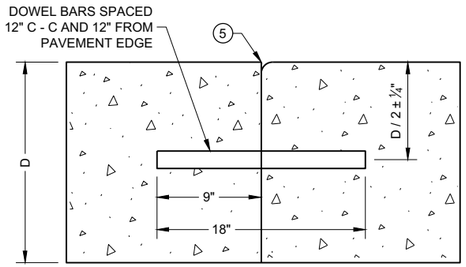


TIED LONGITUDINAL

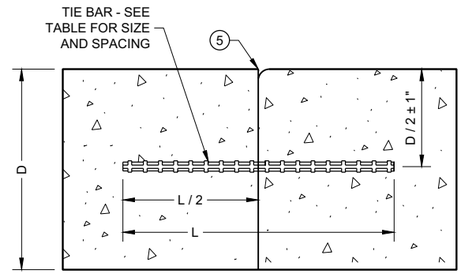


DOWELED TRANSVERSE

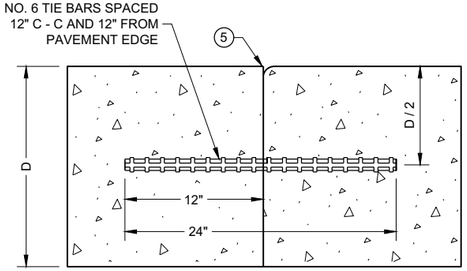
CONTRACTION JOINTS (2)



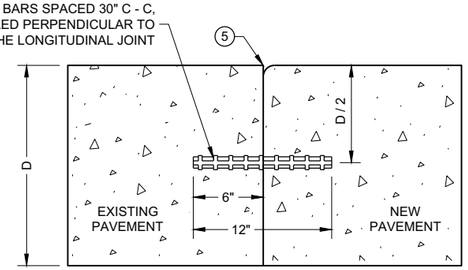
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS (4)

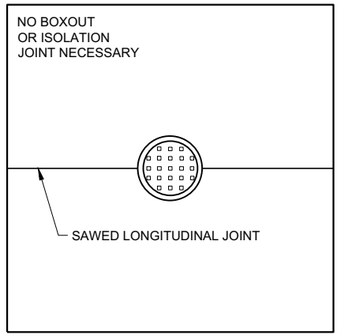
CONCRETE PAVEMENT JOINT TYPES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

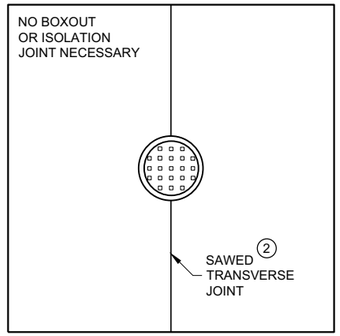
6

SDD 13C18 - 07c

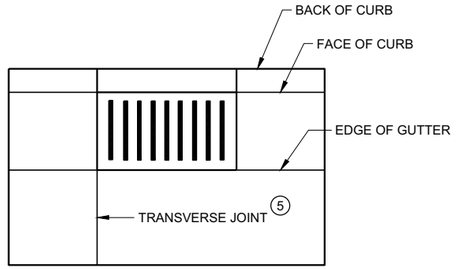
SDD 13C18 - 07c



MANHOLE WITH LONGITUDINAL JOINT



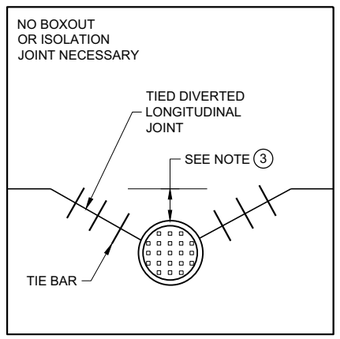
MANHOLE WITH TRANSVERSE JOINT



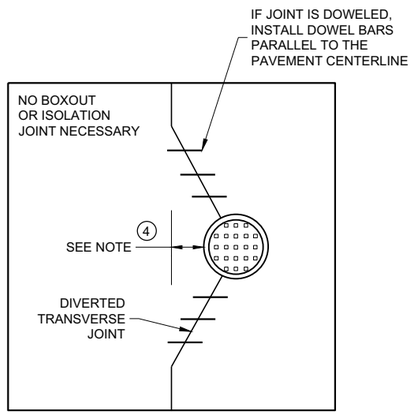
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

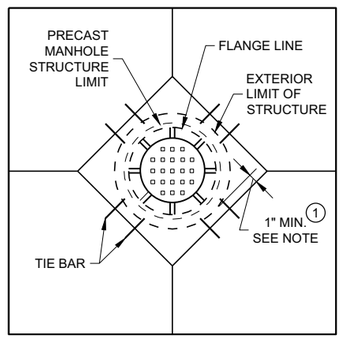
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

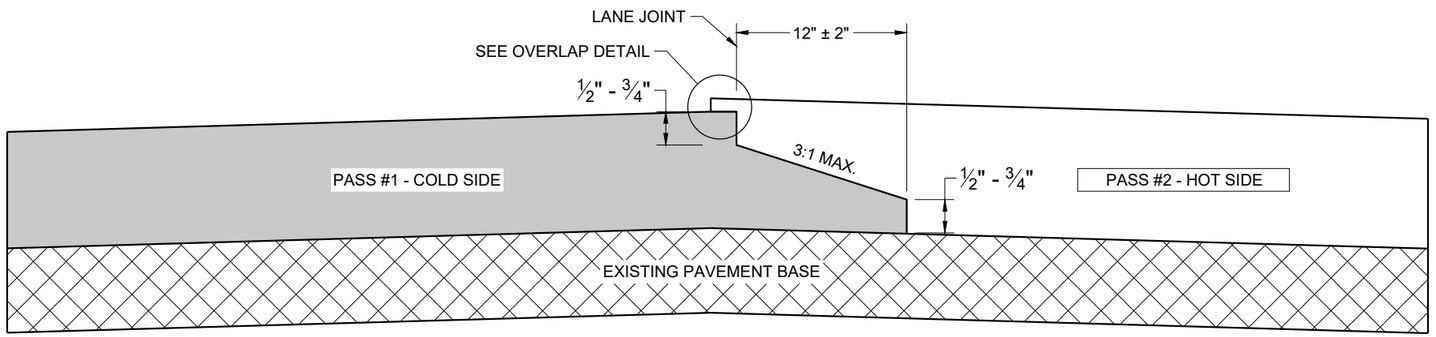
CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

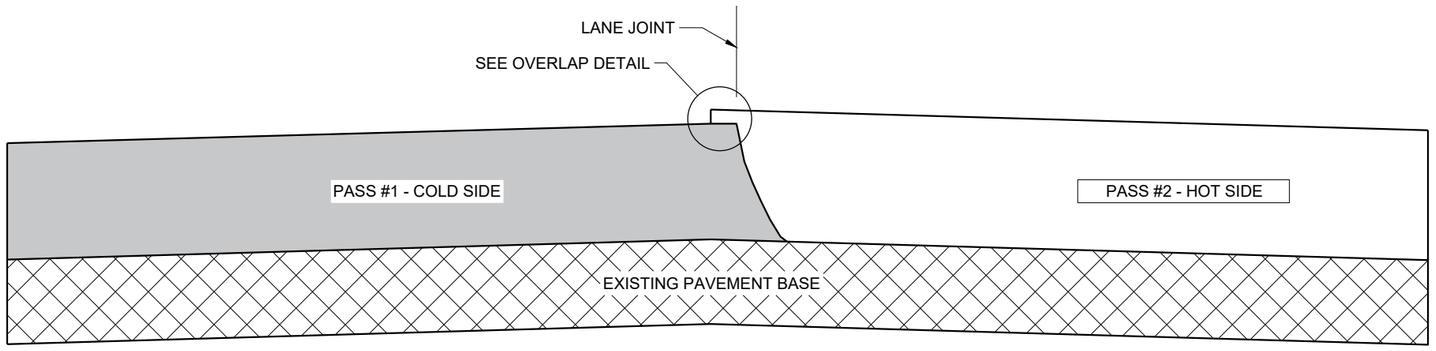
APPROVED
November 2018
DATE
/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS
FHWA

6

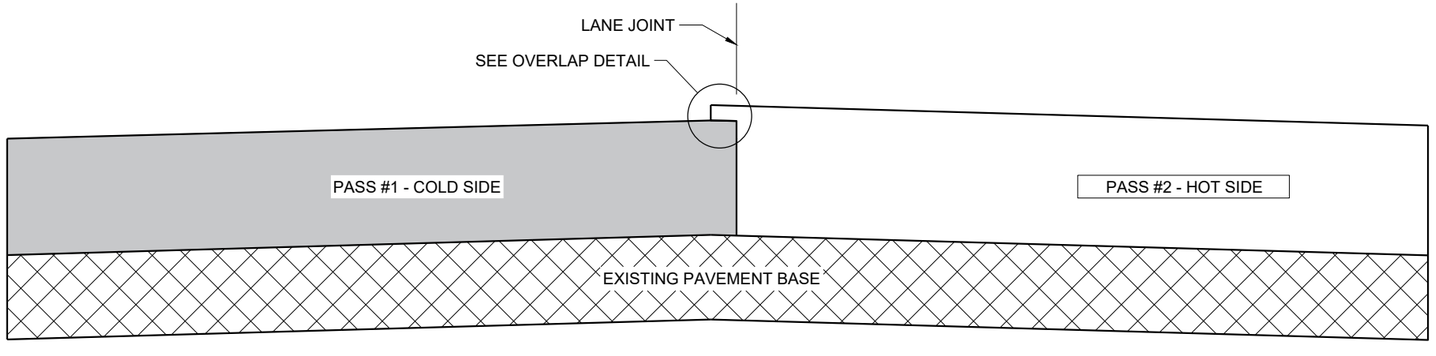
SDD 13C18 - 07d
SDD 13C18 - 07d



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

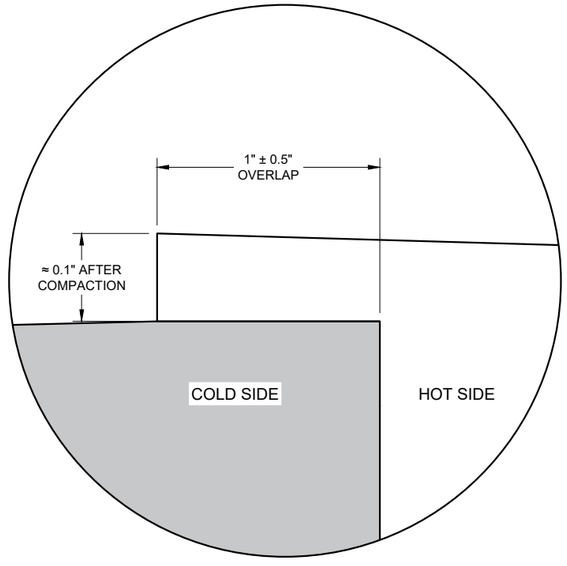
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

6

6

SDD 13C19 - 03

SDD 13C19 - 03

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

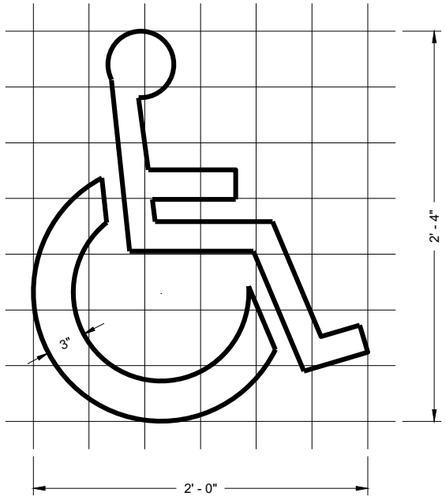
APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

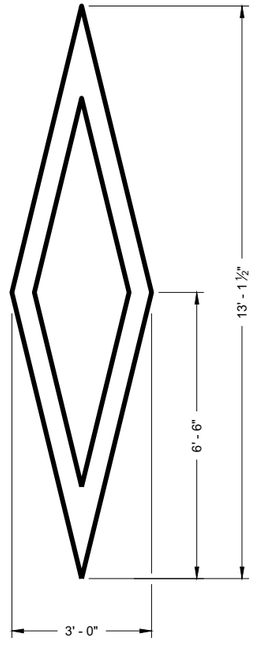
FHWA

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.



HANDICAP SYMBOL



PREFERENTIAL LANE SYMBOL

6

6

SDD 15C07 - 15a

SDD 15C07 - 15a

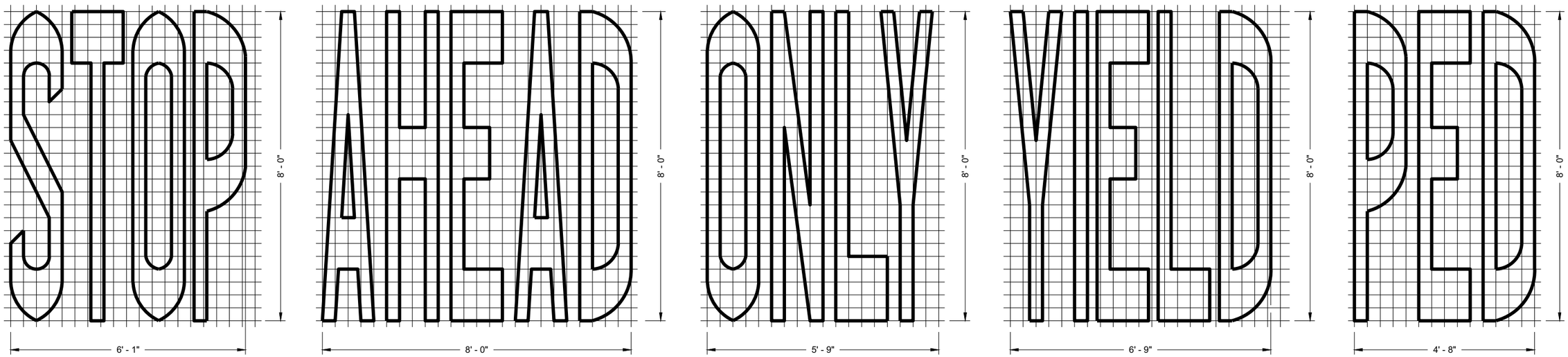
PAVEMENT MARKING SYMBOLS

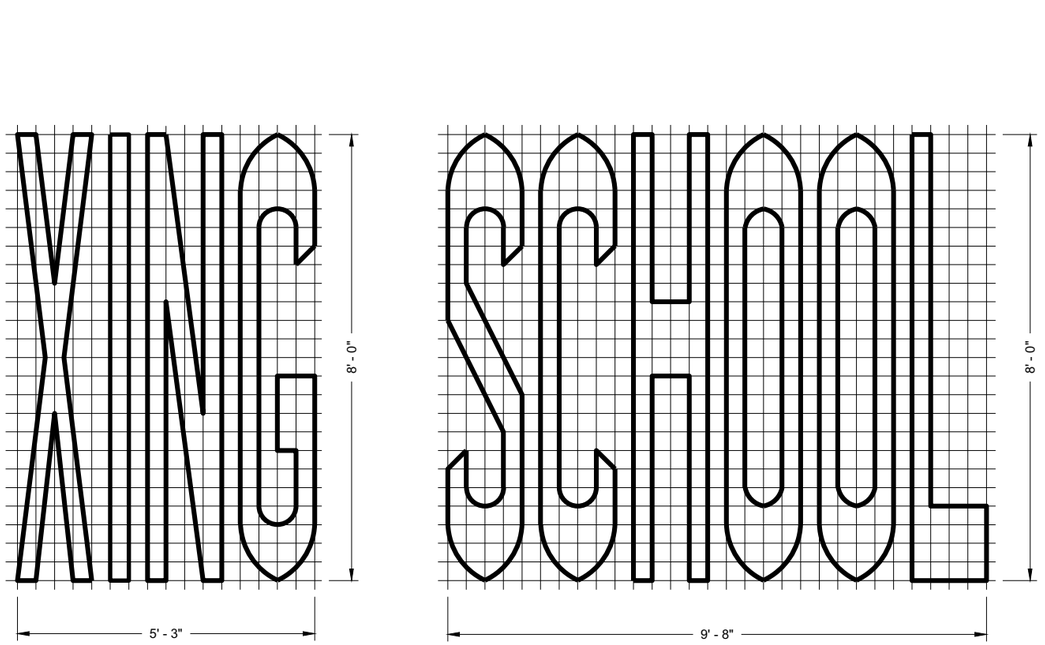
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

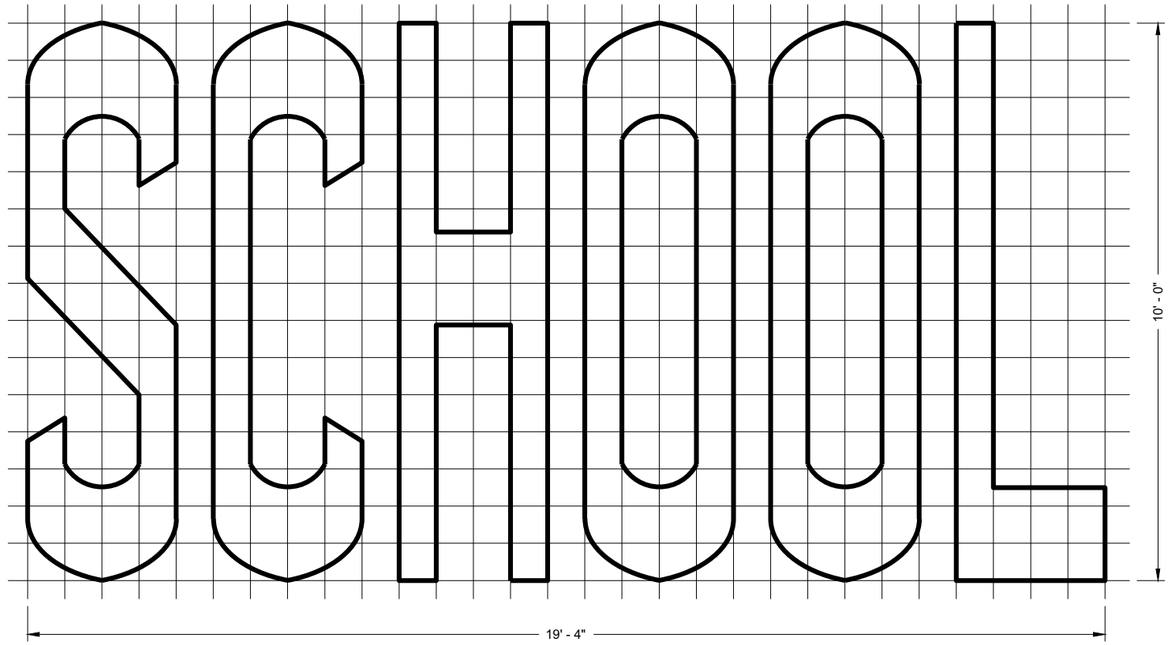
/S/ Matthew Rauch
STATE SIGNING AND MAR ENGINEER

FHWA





SINGLE LANE



TWO - LANE

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.

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

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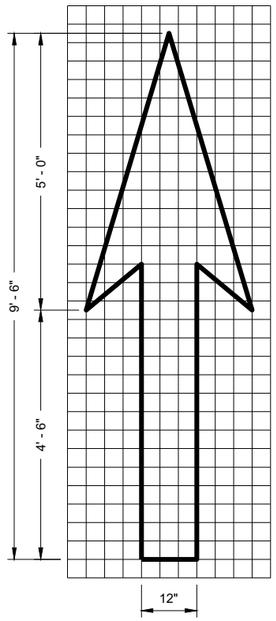
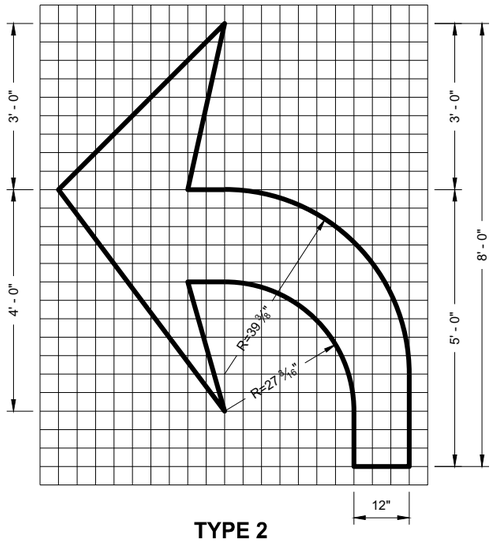
SDD 15C07 - 15b

SDD 15C07 - 15b



TYPE 1



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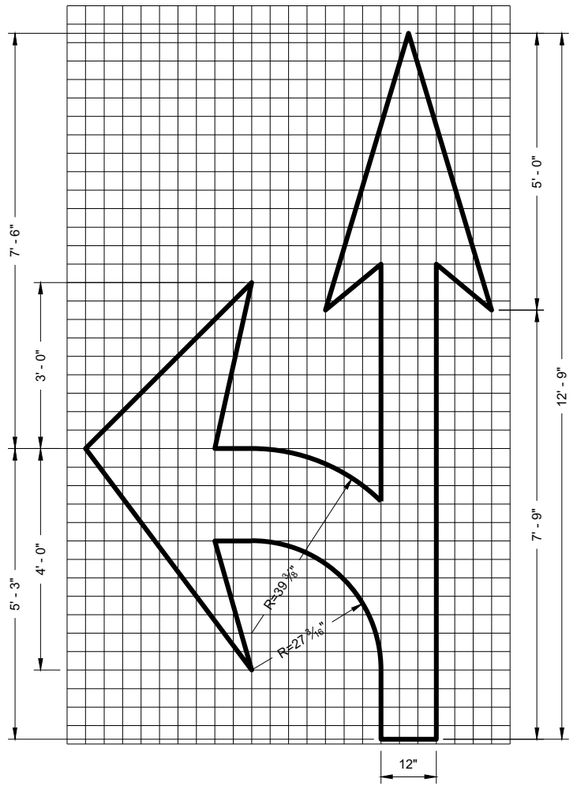
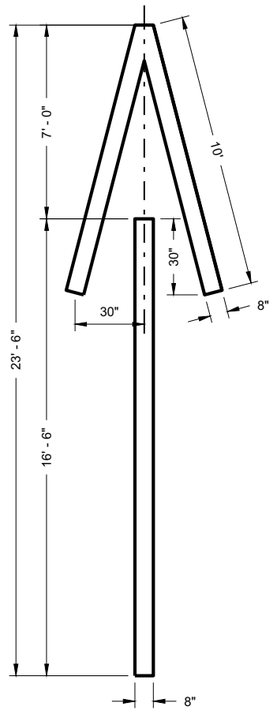


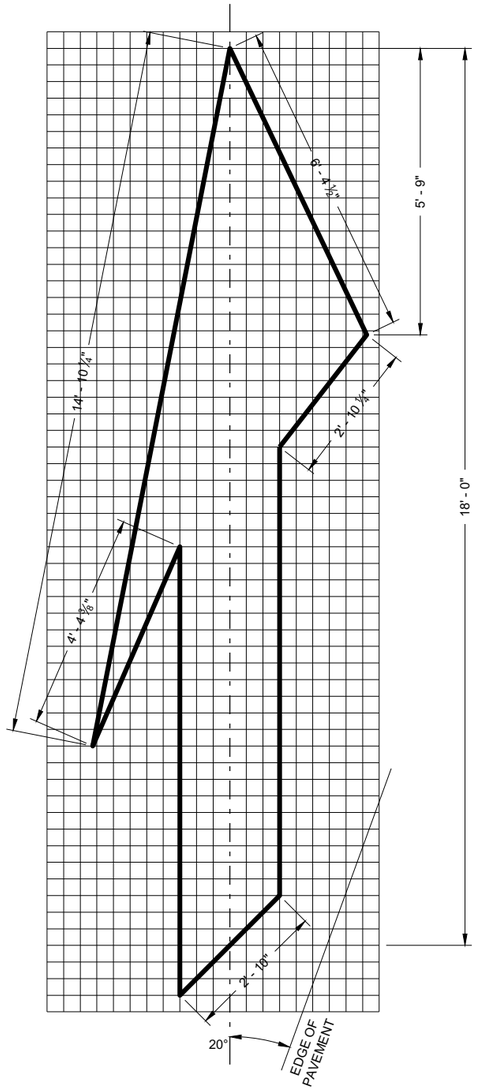
TYPE 3

GENERAL NOTES

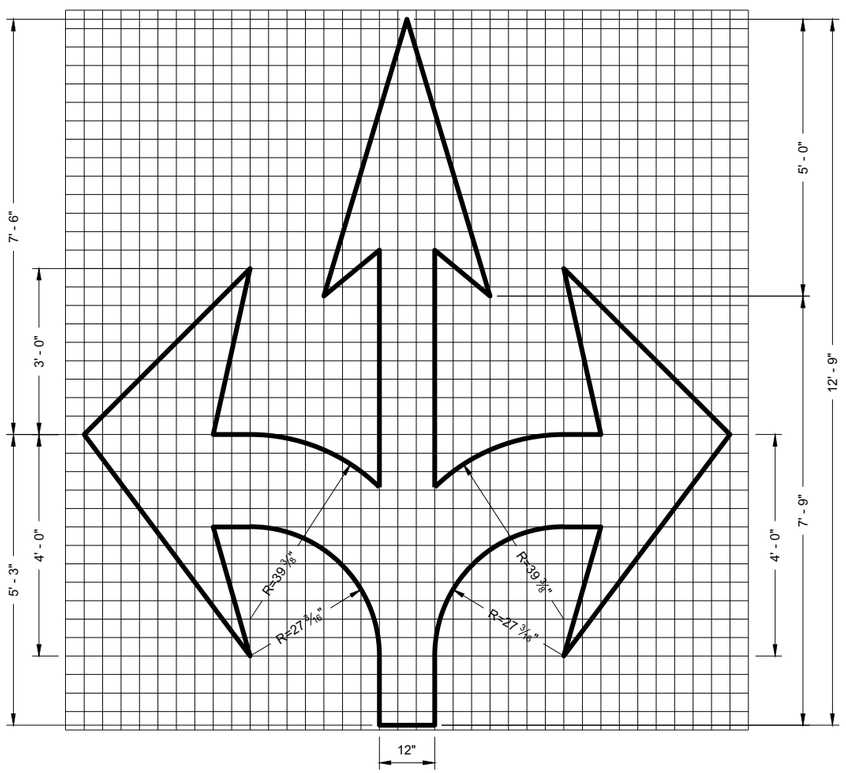
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



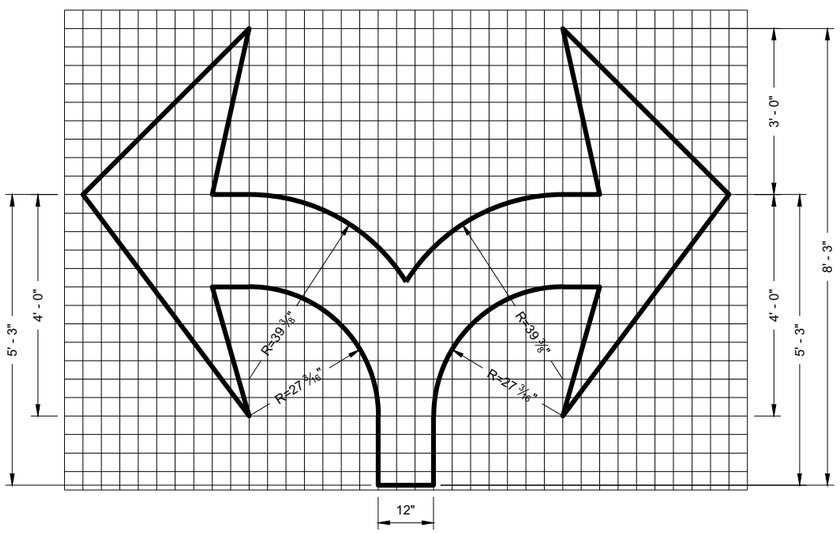
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

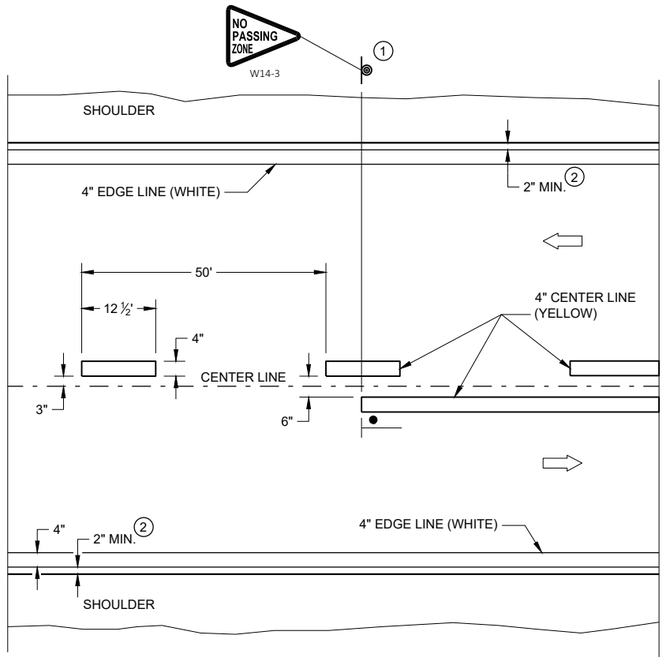
FHWA

6

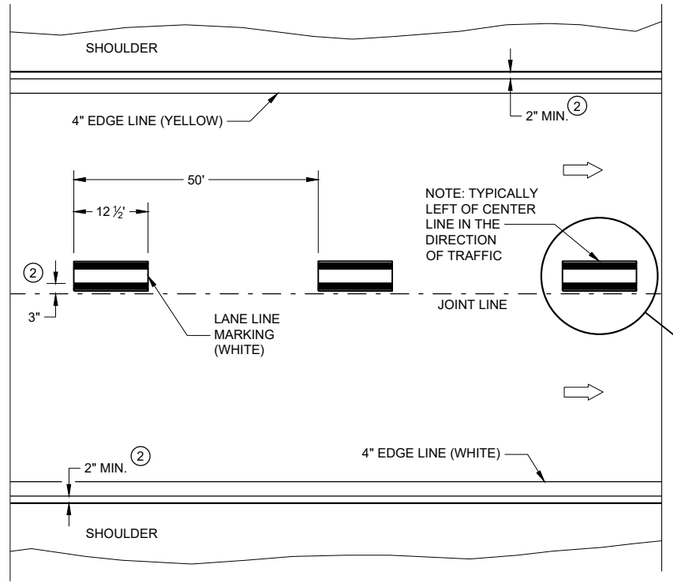
SDD 15C07 - 15c

6

SDD 15C07 - 15c

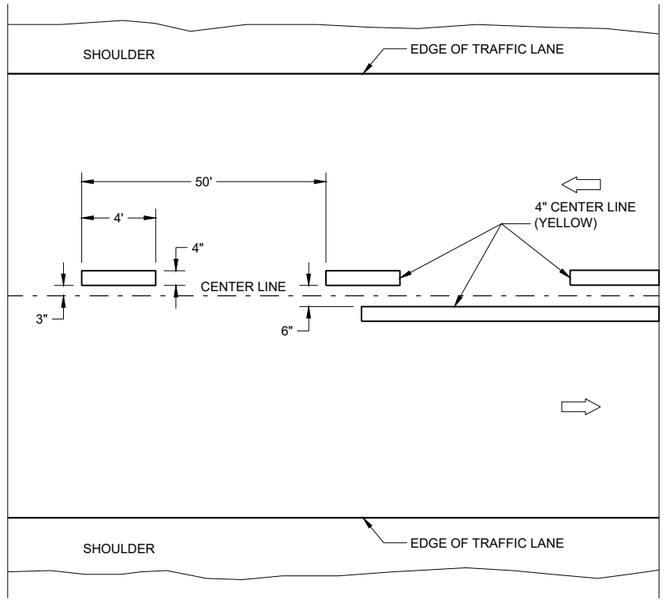


TWO WAY TRAFFIC

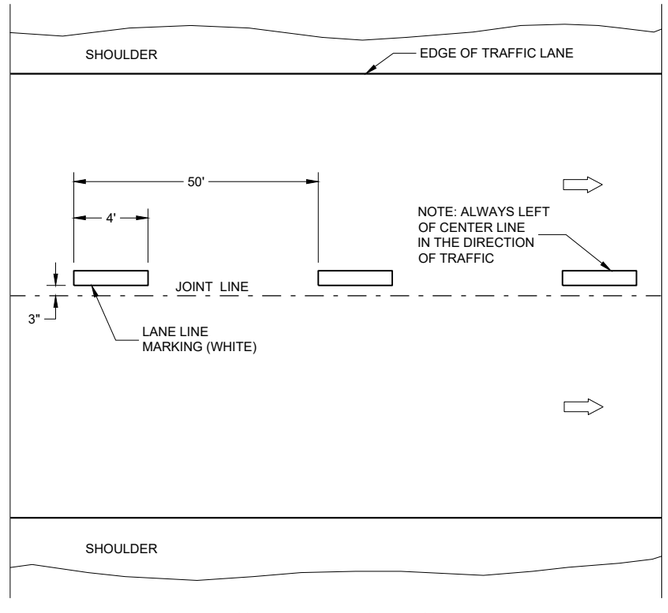


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

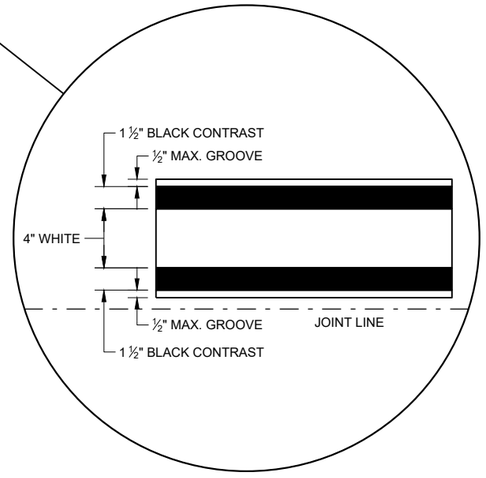
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

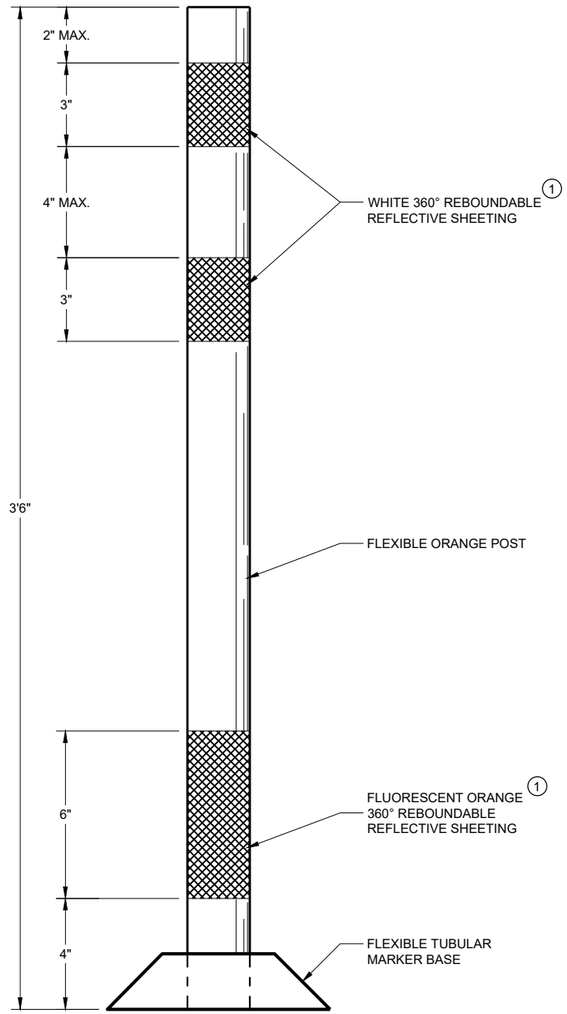
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Matthew Rauch
STATEWIDE SIGNING AND M ENGINEER

FHWA

SDD 15C08 - 20a

SDD 15C08 - 20a



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

CHANNELIZING DEVICES
FLEXIBLE TUBULAR
MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2021
DATE

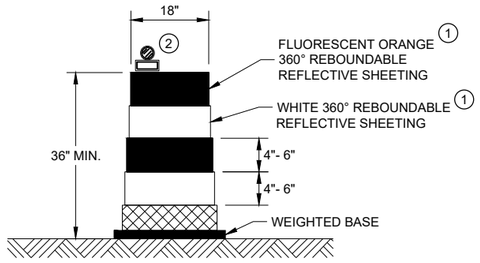
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

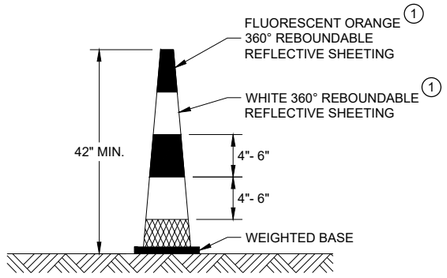
SDD 15C11 - 09a

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.

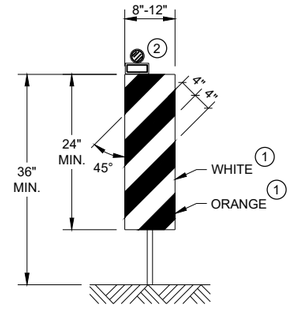


DRUM



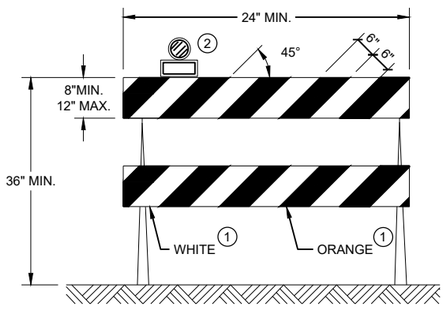
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



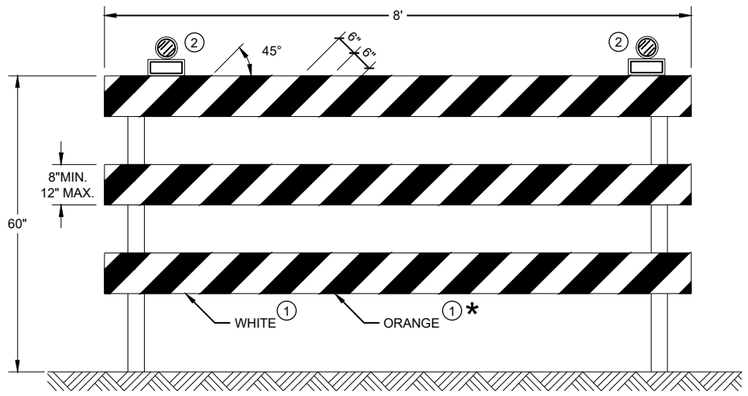
VERTICAL PANEL

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

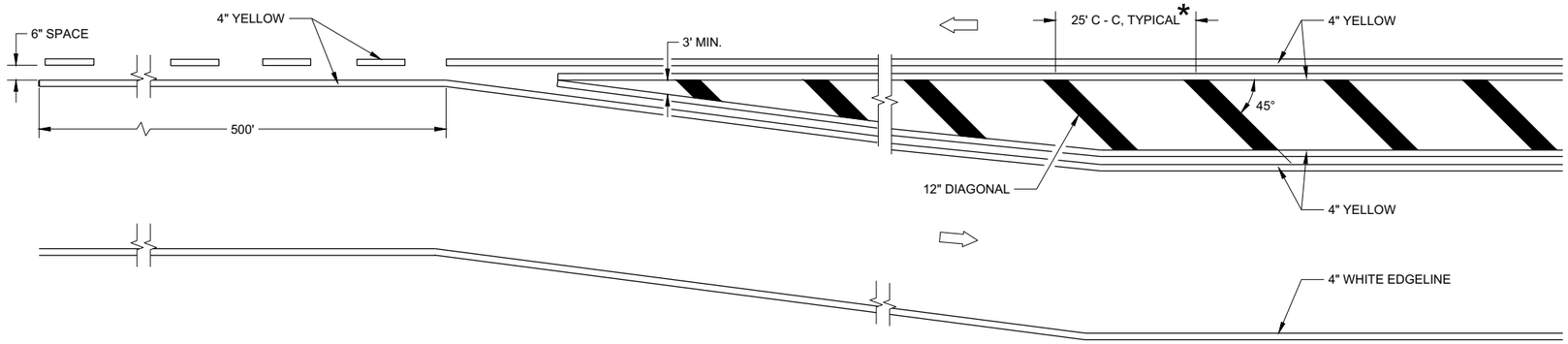
APPROVED
May 2021 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15C11 - 09b

6

SDD 15C11 - 09b

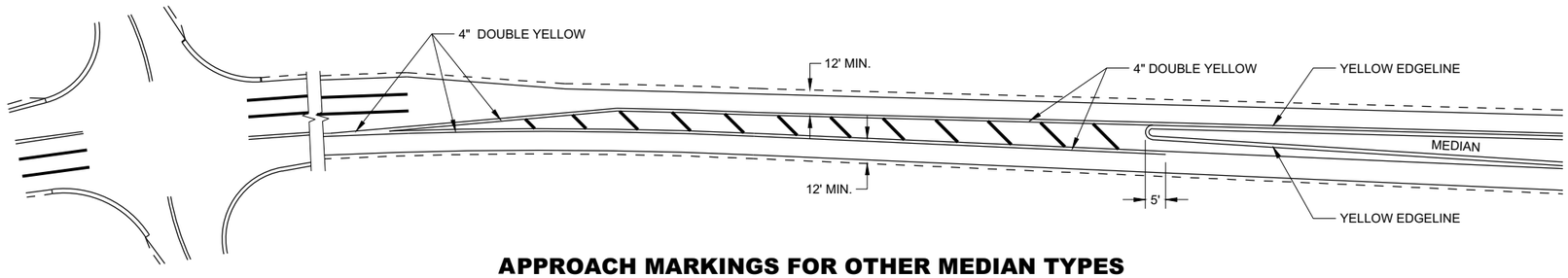


MEDIAN ISLAND DETAIL

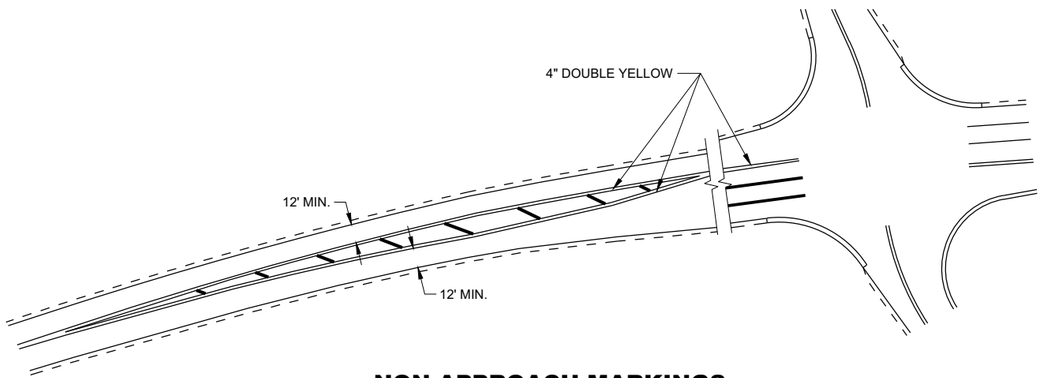
GENERAL NOTES

DIAGONALS ARE OPTIONAL WHEN PAINED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

DIRECTION OF TRAVEL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2021
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

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SDD 15C18 - 05a

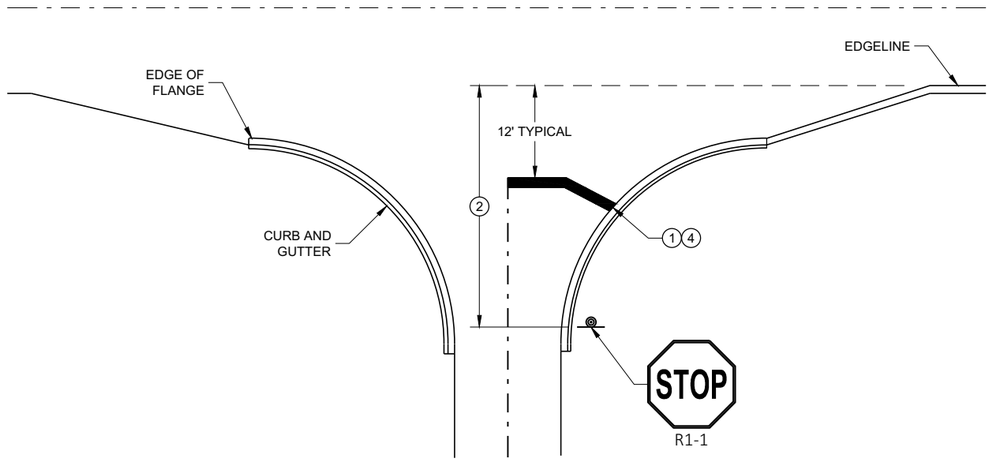
6

SDD 15C18 - 05a

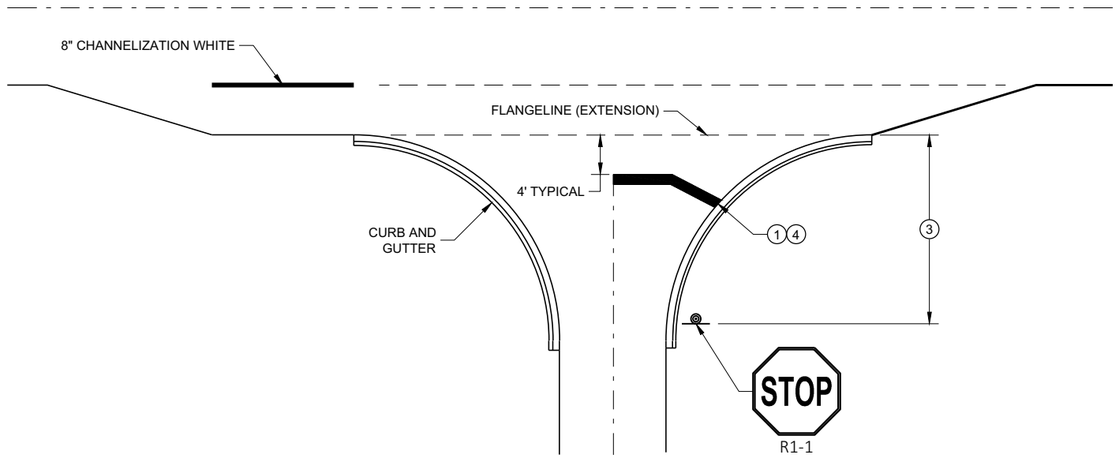
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

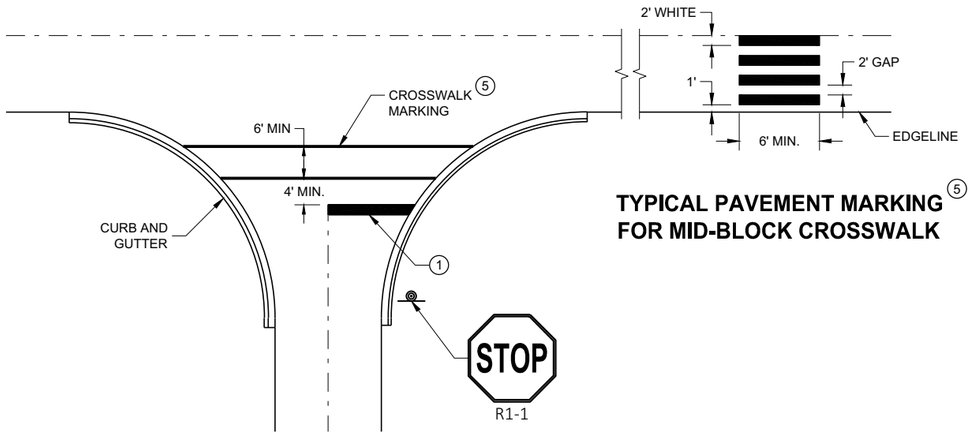
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

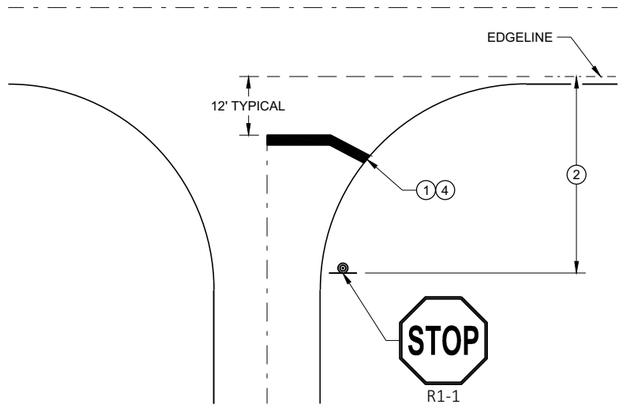


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

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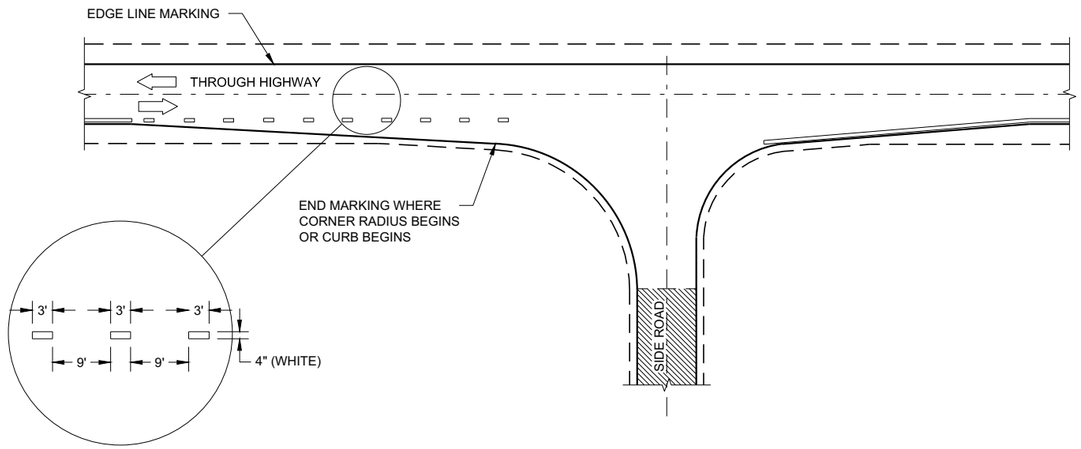
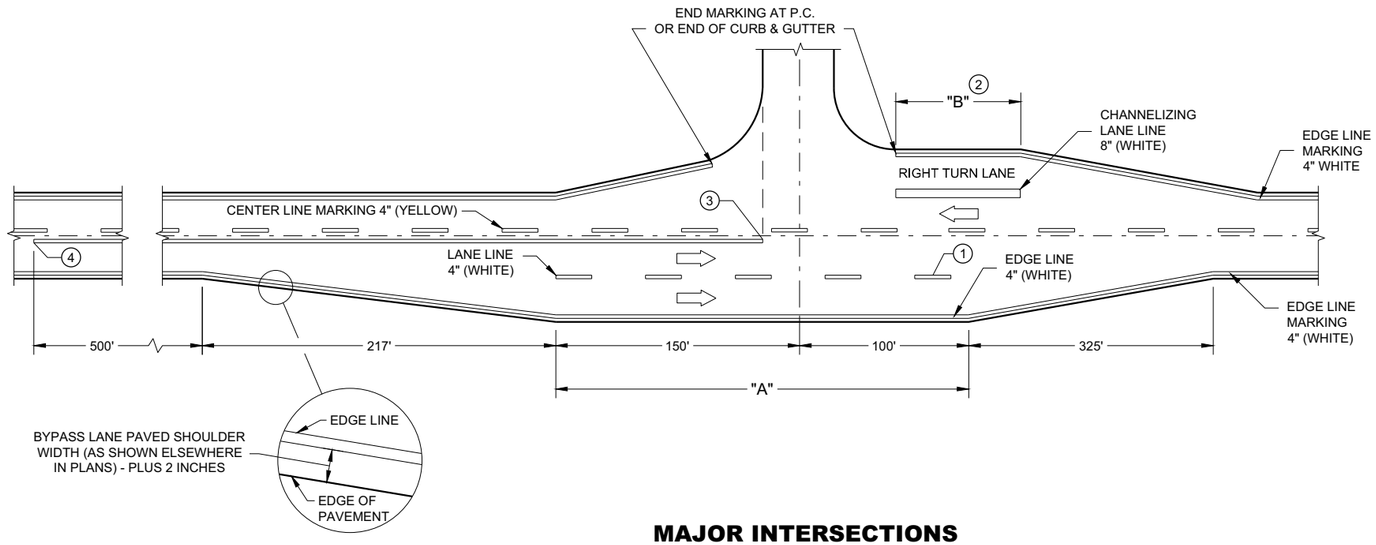
SDD 15C33 - 04

6

SDD 15C33 - 04



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

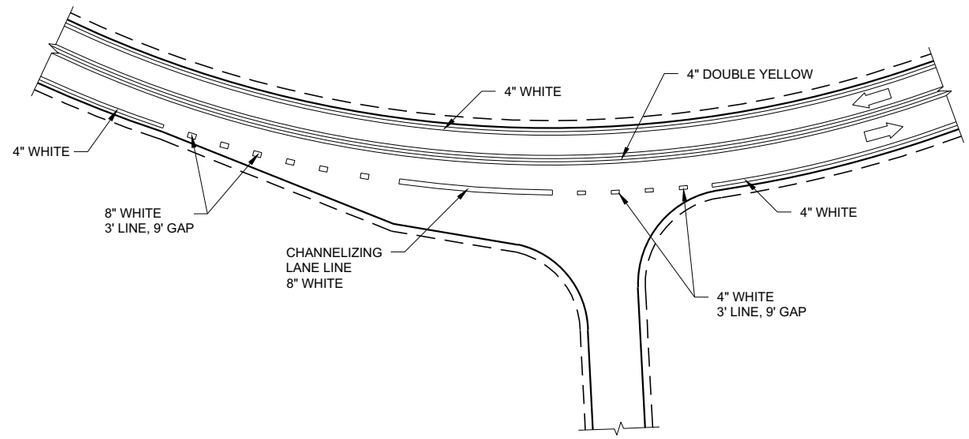
GENERAL NOTES

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.

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

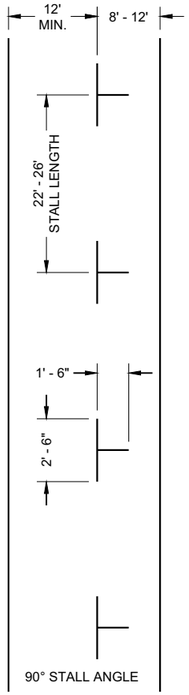
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

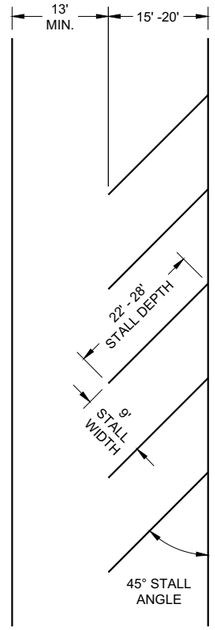
SDD 15C35 - 04a

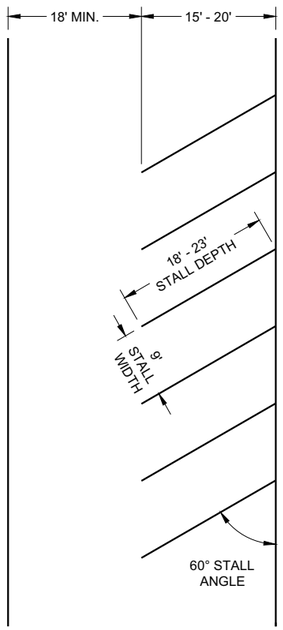
6

SDD 15C35 - 04a



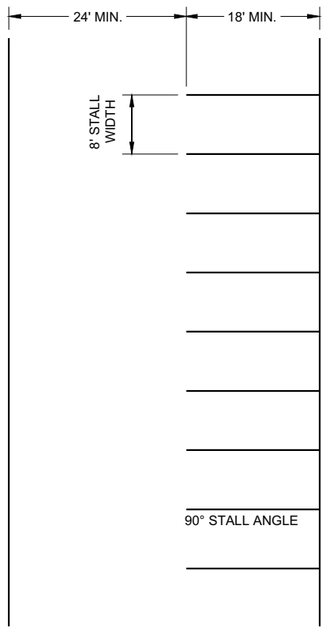
PARALLEL PARKING





ANGLED PARKING

(ANGLED PARKING IS NOT ALLOWED ON STATE HIGHWAYS UNLESS A DESIGN JUSTIFICATION HAS BEEN COMPLETED.)



PARKING LOTS

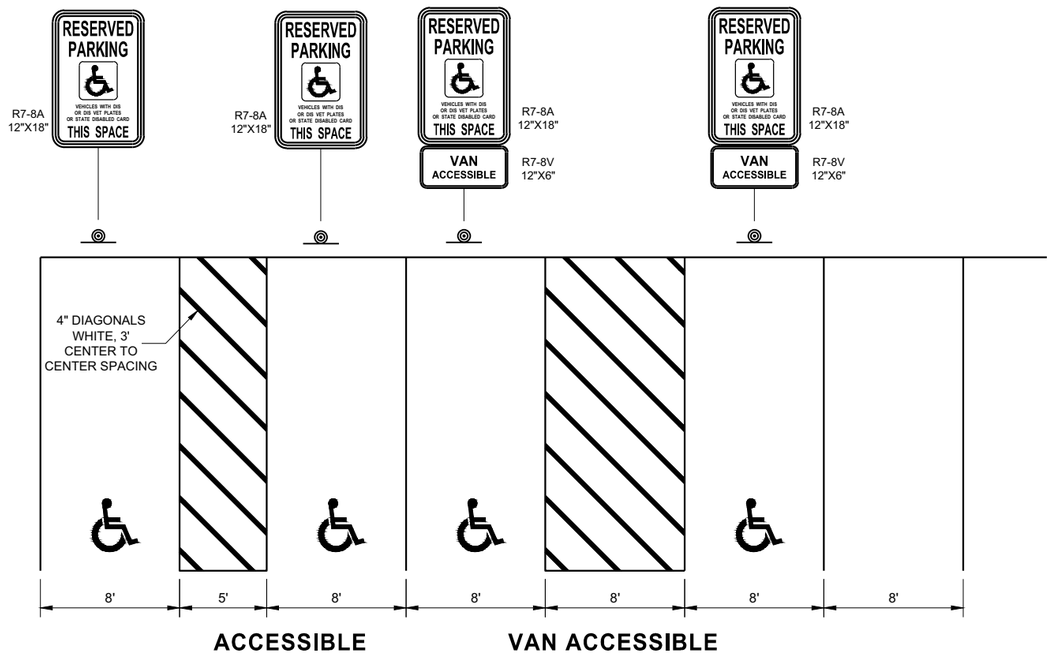
GENERAL NOTES

ALL LINES 4" WHITE (UNLESS OTHERWISE NOTED)

LAST PARKING STALL IS A MINIMUM OF 15' FROM THE CROSSWALK.

LEGEND

SIGN ON PERMANENT SUPPORT



ACCESSIBLE

VAN ACCESSIBLE

PARKING STALL MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

FHWA

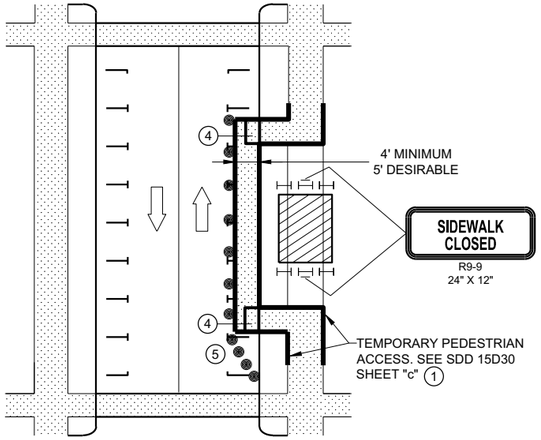
SDD 15C36 - 01

SDD 15C36 - 01

6

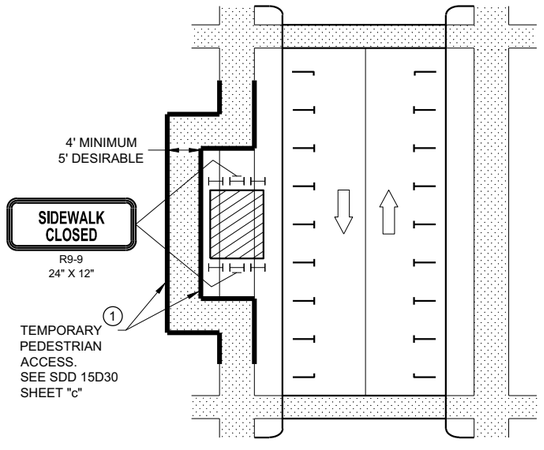
6

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

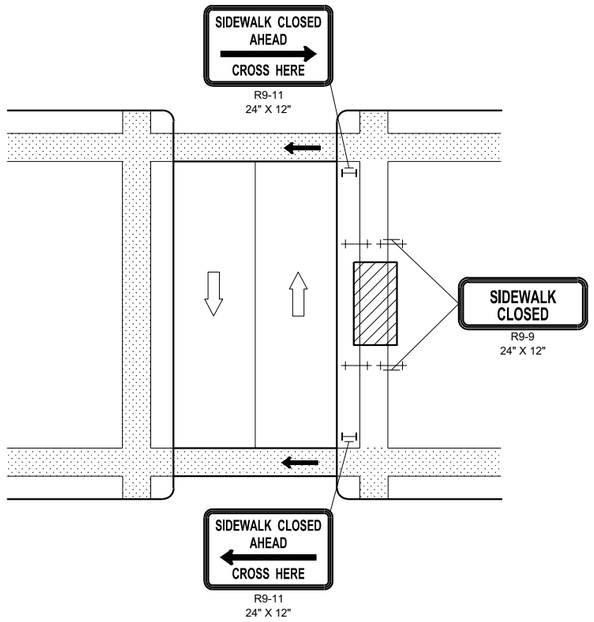


MID-BLOCK SIDEWALK SIDEWALK CLOSURE IN PARKING LANE

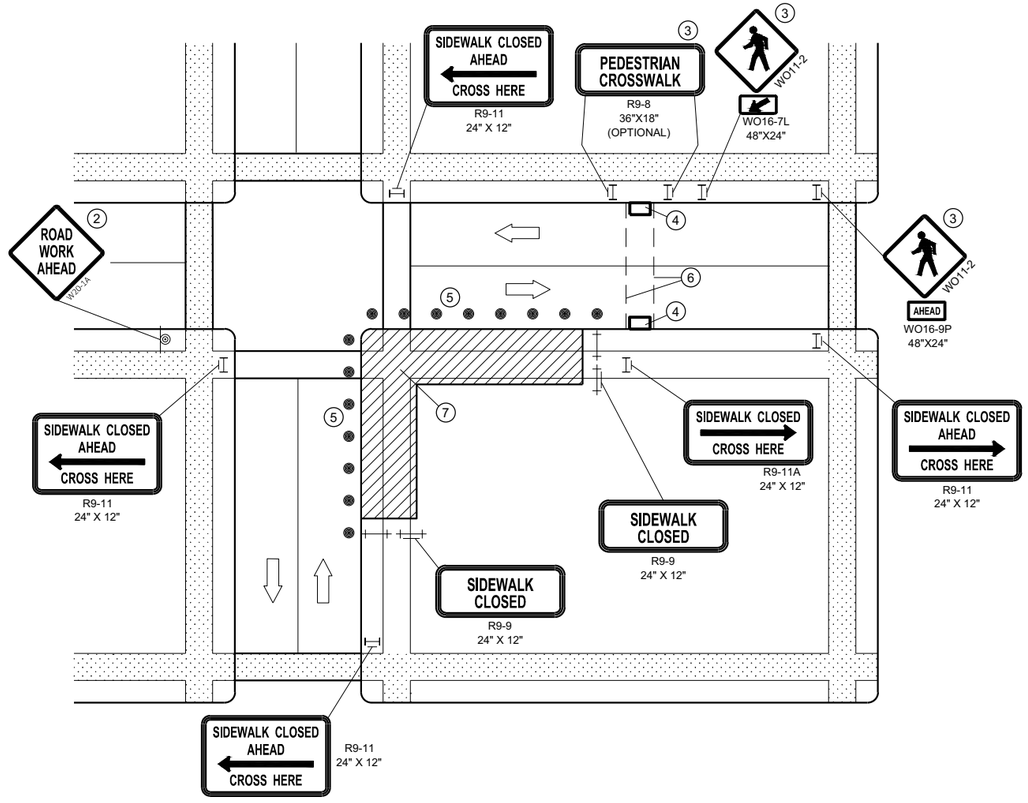
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

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

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

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

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

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

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

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

1. IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE
2. "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.
3. IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND WO11-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.
4. TEMPORARY CURB RAMPS. SEE SDD 15D30 SHEET "b'.
5. DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.
6. TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.
7. LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

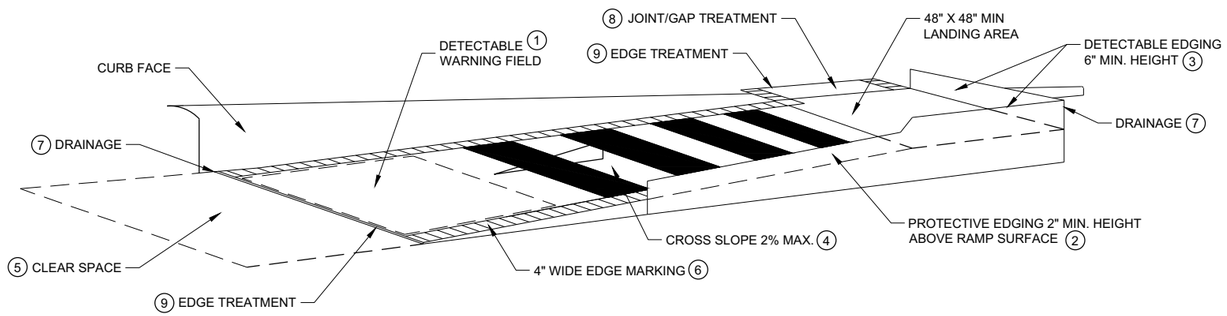
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW INTENSITY FLASHING)
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN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

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

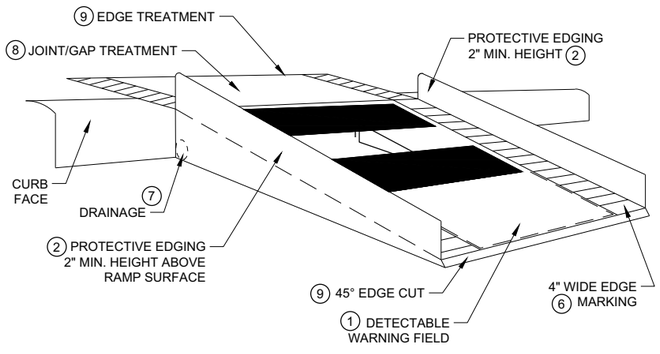
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

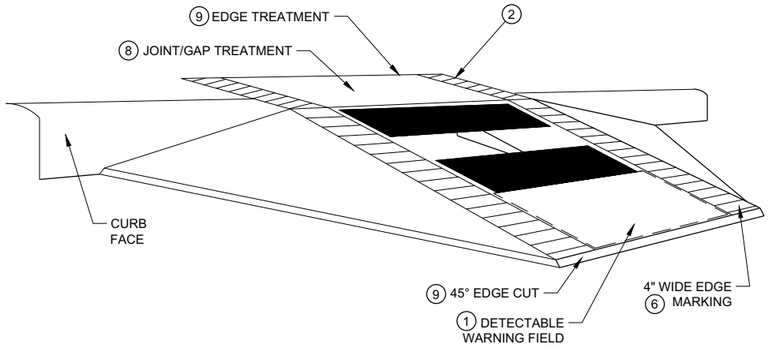
SDD15D30 - 06a



TEMPORARY CURB RAMP PARALLEL TO CURB



WITH PROTECTIVE EDGE



WITH SIDE APRON

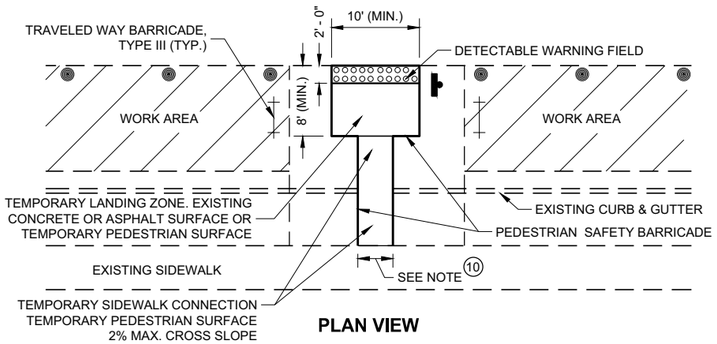
TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

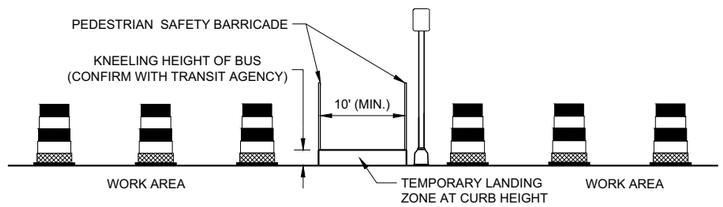
NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

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

1. CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 08D05, SHEET "e".
2. PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
3. DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.
5. CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
6. THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.
7. DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
8. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.
9. CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES SHALL BE VERTICAL UP TO ¼" HIGH AND BEVELED AT 1:2 BETWEEN ¼" AND ½".
10. 5" WIDE MIN. WITH PEDESTRIAN SAFETY BARRICADE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY BARRICADE.



PLAN VIEW



PROFILE VIEW

TEMPORARY BUS STOP PAD

LEGEND

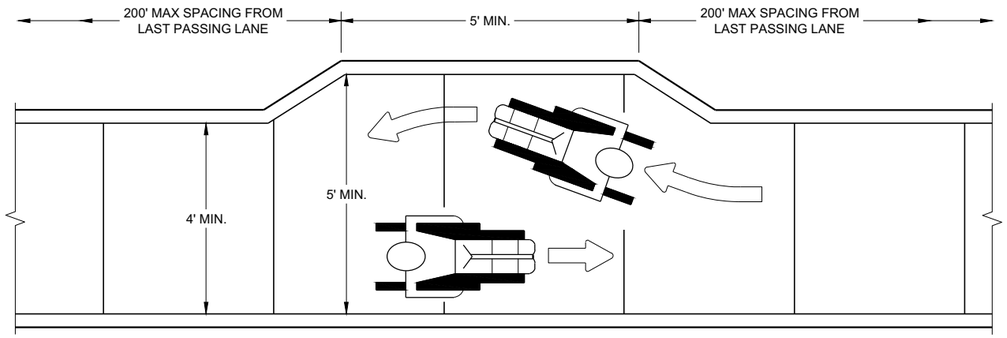
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- WORK AREA

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

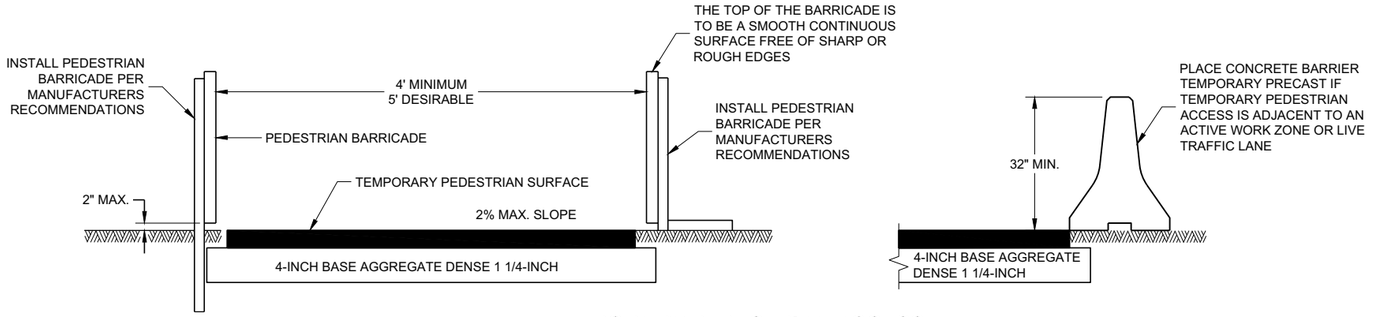
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

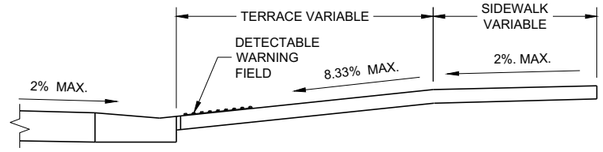
SDD 15D30 - 06b



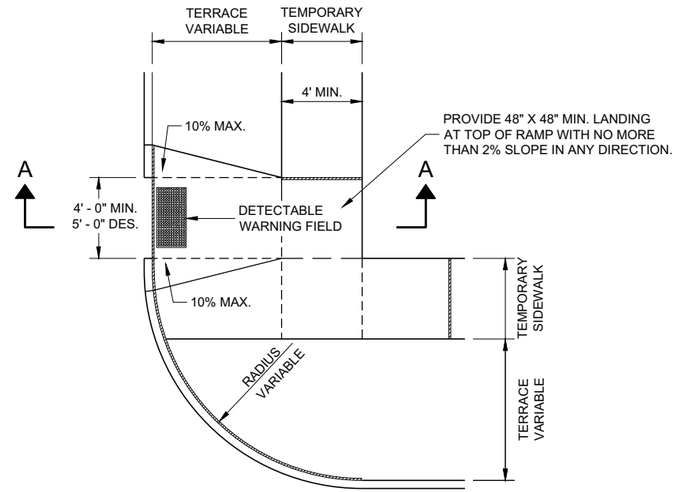
NARROW SIDEWALK PASSING DETAIL



TEMPORARY PEDESTRIAN ACCESS



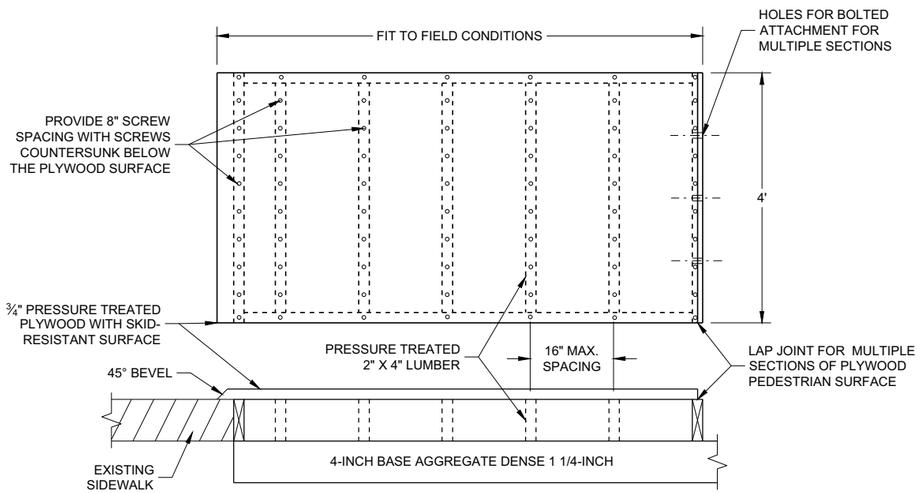
SECTION A - A



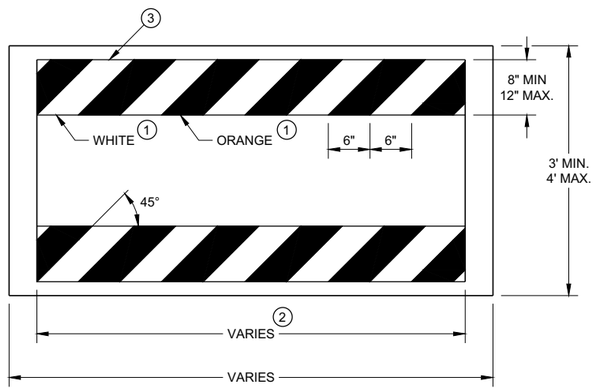
PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



TEMPORARY PEDESTRIAN BARRICADE *

GENERAL NOTES

BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE 320

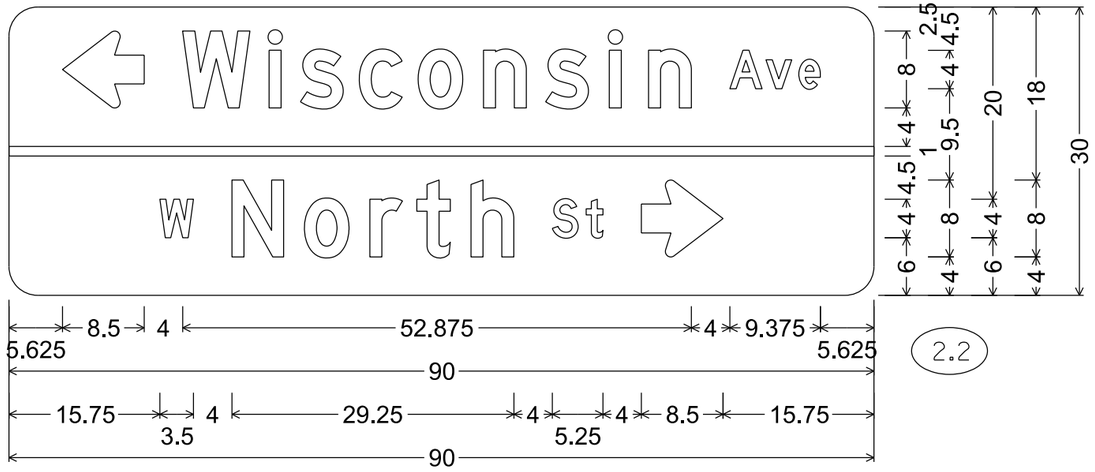
FHWA

6

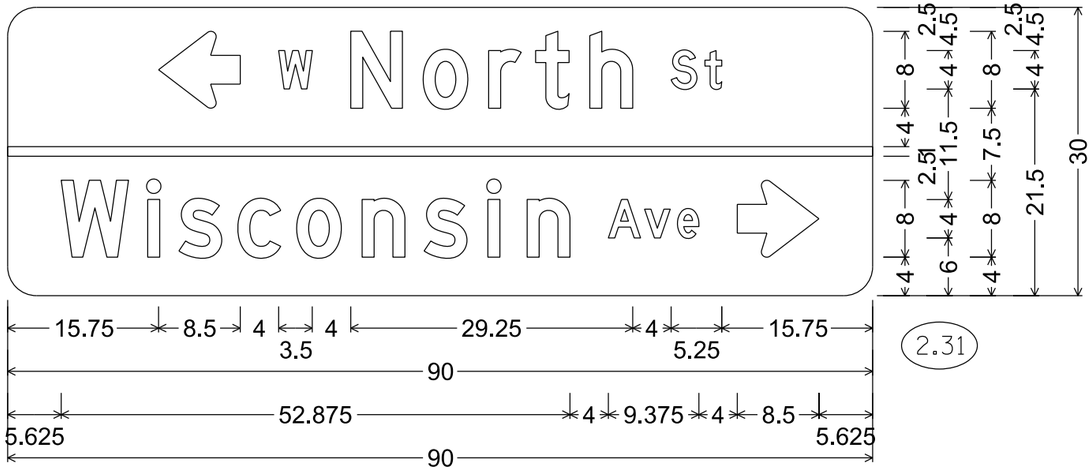
SDD 15D30 - 06c

NOTES

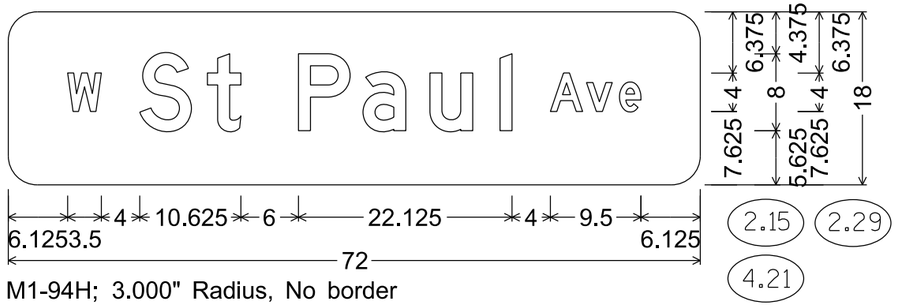
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - D



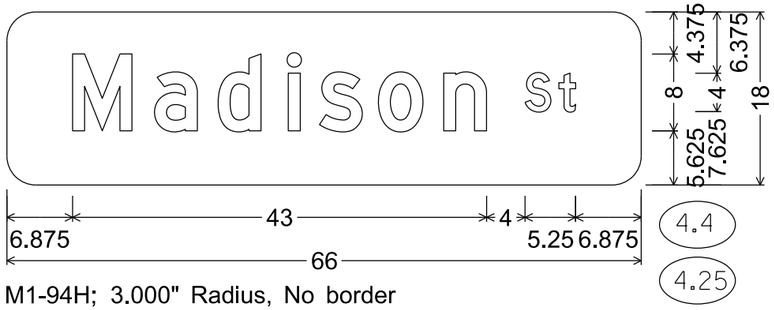
M1-94H; 3.000" Radius, No border



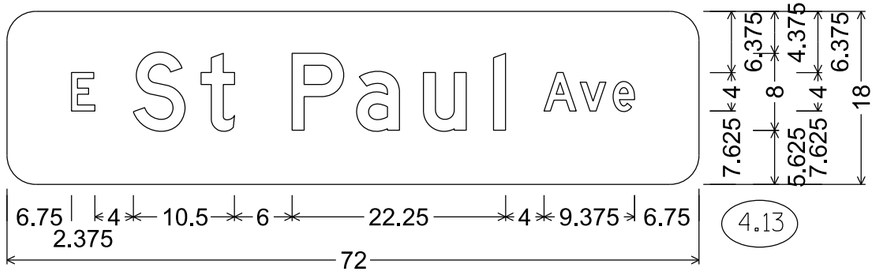
M1-94H; 3.000" Radius, No border



M1-94H; 3.000" Radius, No border



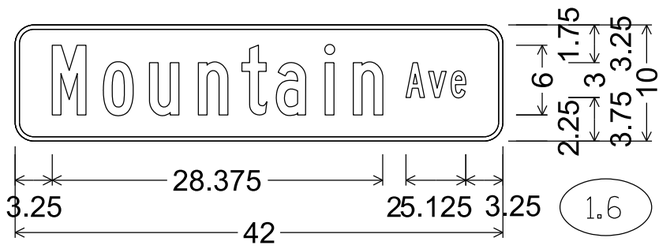
M1-94H; 3.000" Radius, No border



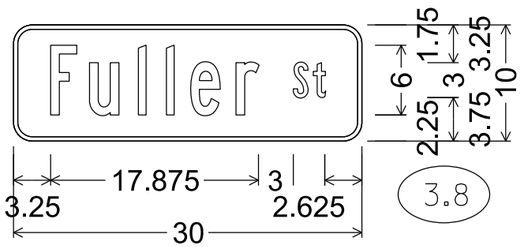
M1-94H; 3.000" Radius, No border

NOTES

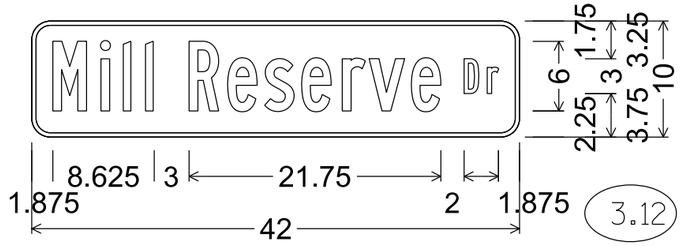
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - B



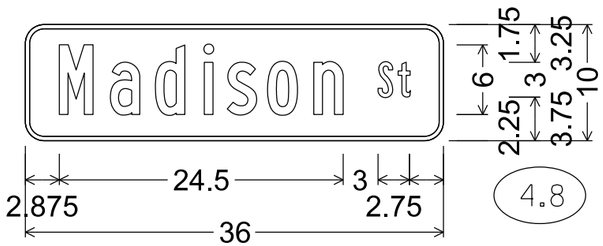
M1-94H; 1.625" Radius, 0.375" Border



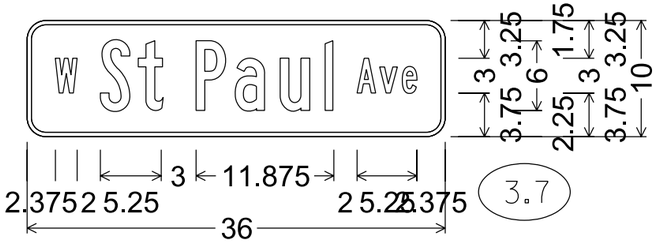
M1-94H; 1.625" Radius, 0.375" Border



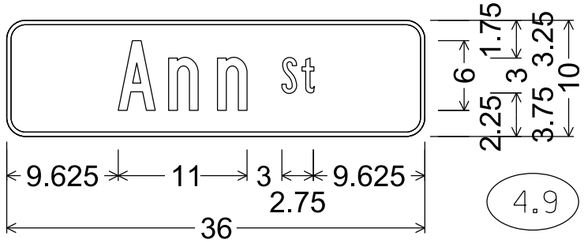
M1-94H; 1.625" Radius, 0.375" Border



M1-94H; 1.625" Radius, 0.375" Border



M1-94H; 1.625" Radius, 0.375" Border



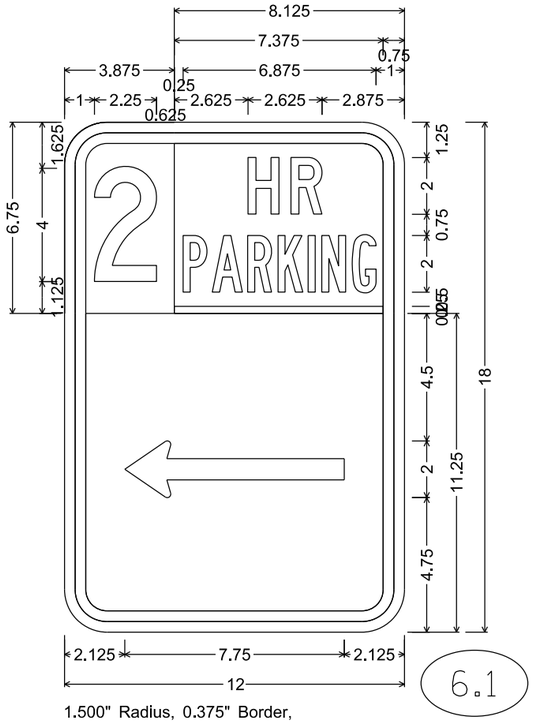
M1-94H; 1.625" Radius, 0.375" Border

7

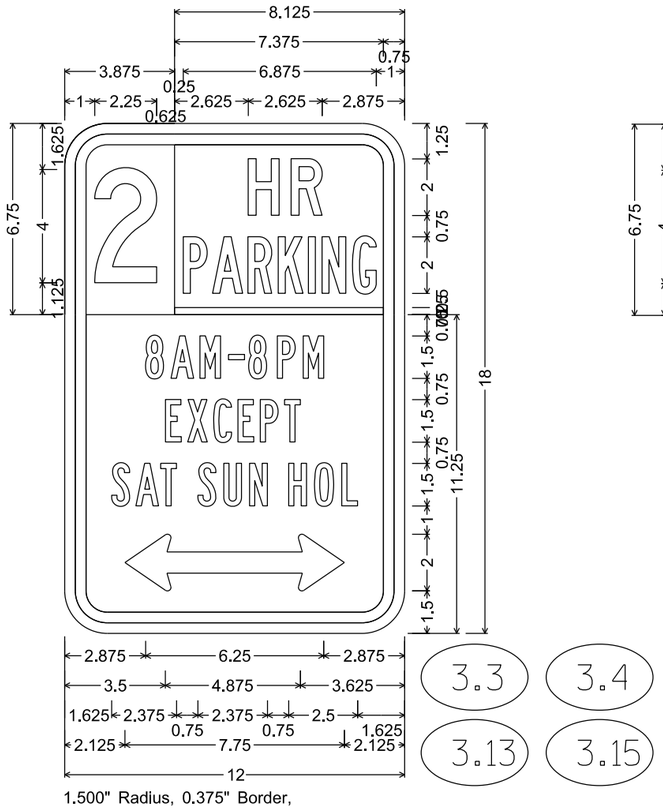
7

NOTES

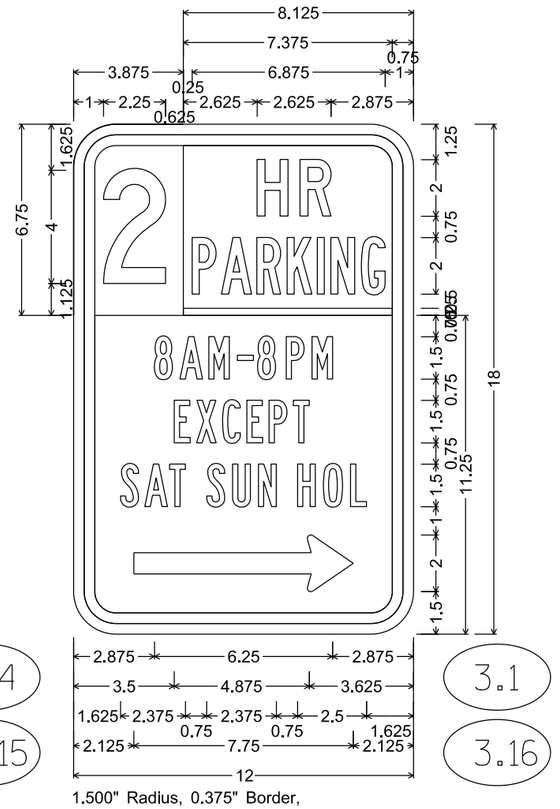
1. All Signs Type II - Type H Reflective
2. Color:
   Background - White
   Message - Green
3. Message Series - As noted



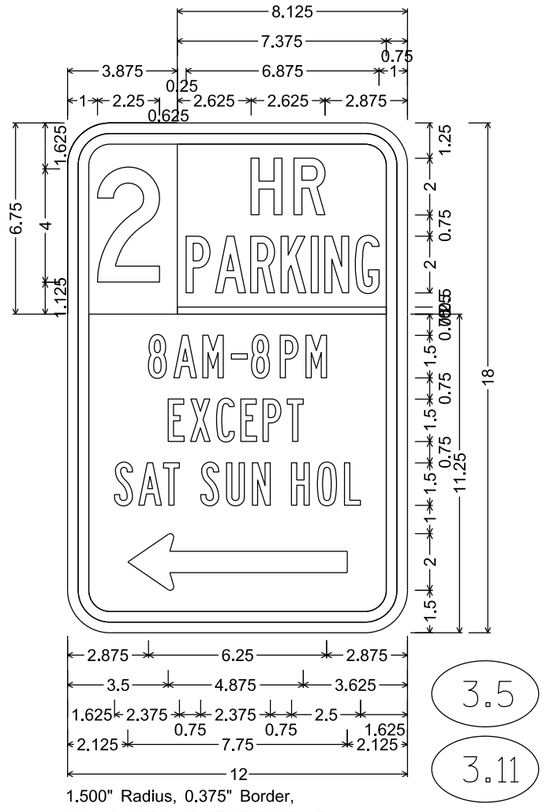
1.500" Radius, 0.375" Border,
"2", C; "HR", C; "PARKING", B



1.500" Radius, 0.375" Border,
"2", C; "HR", C; "PARKING", B;
"8AM-8PM", B; "EXCEPT", B; "SAT SUN HOL", B



1.500" Radius, 0.375" Border,
"2", C; "HR", C; "PARKING", B;
"8AM-8PM", B; "EXCEPT", B; "SAT SUN HOL", B



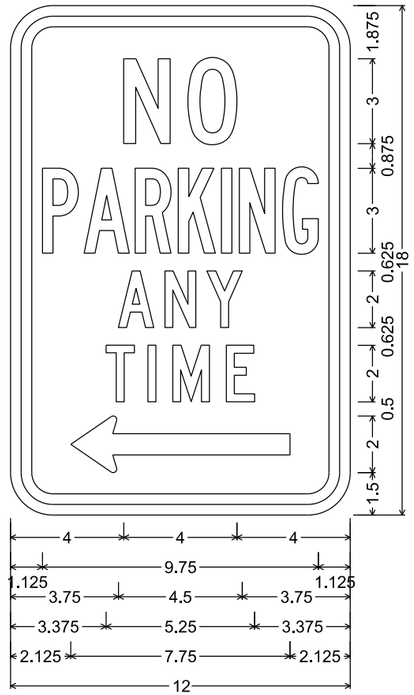
1.500" Radius, 0.375" Border,
"2", C; "HR", C; "PARKING", B;
"8AM-8PM", B; "EXCEPT", B; "SAT SUN HOL", B

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - White
   Message - Red
3. Message Series - As noted

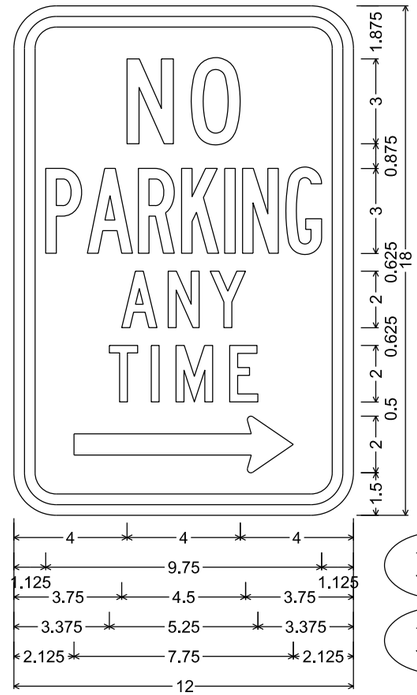
1.10

1.500" Radius, 0.375" Border, 0.375" Indent,
"NO", C; "PARKING", B;
"6AM-8AM", B; "EXCEPT", B; "SAT SUN HOL", B



3.1
3.16

R7-1_12x18; 1.500" Radius, 0.375" Border, 0.375" Indent,
"NO", C; "PARKING", B; "ANY", C; "TIME", C



3.5
3.11
6.1

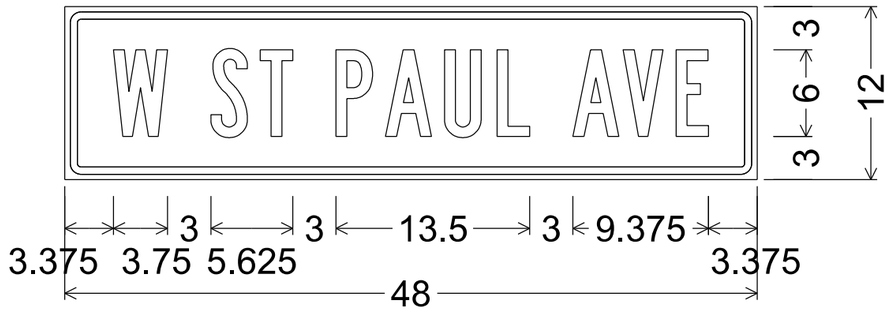
R7-1_12x18; 1.500" Radius, 0.375" Border, 0.375" Indent,
"NO", C; "PARKING", B; "ANY", C; "TIME", C

7

7

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B



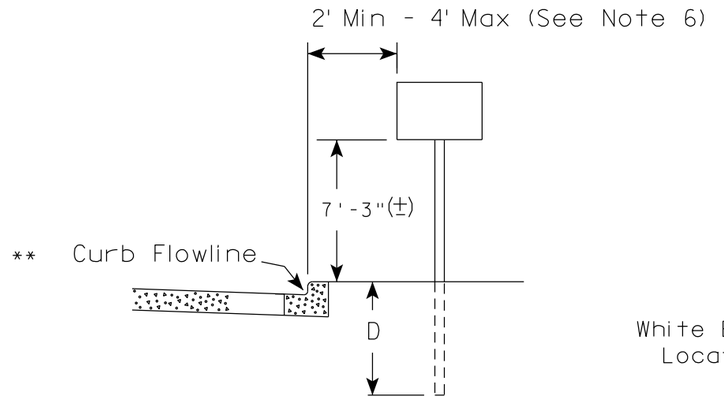
1.125" Radius, 0.500" Border, 0.375" Indent

7

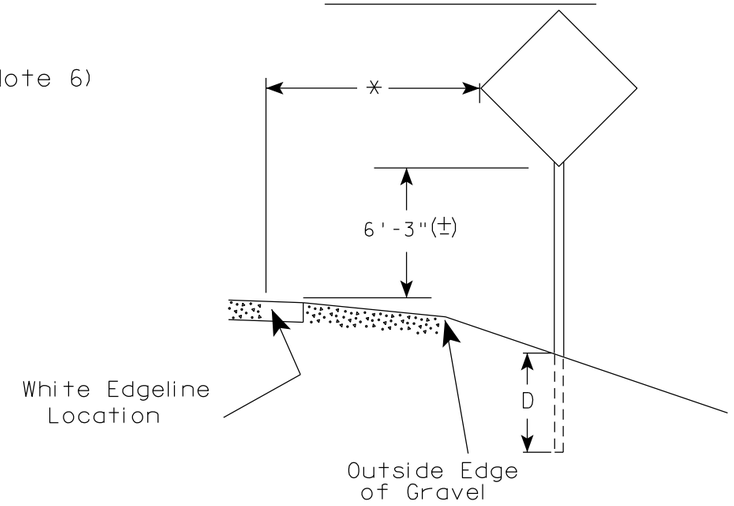
7

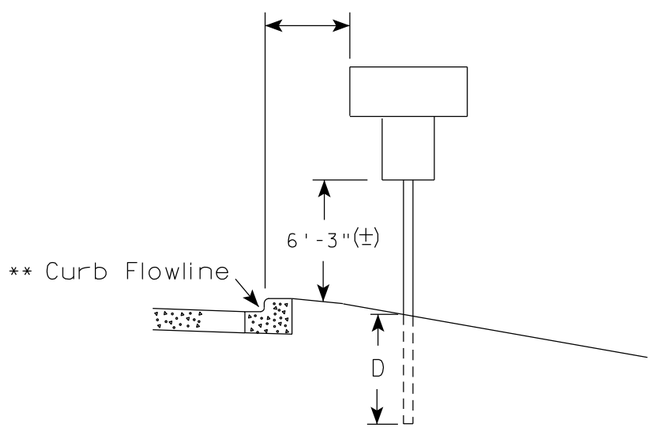
PROJECT NO:2718-04-72	HWY: W. ST. PAUL AVENUE	COUNTY: WAUKESHA	TEMPORARY SIGNING	SHEET NO: 325	E

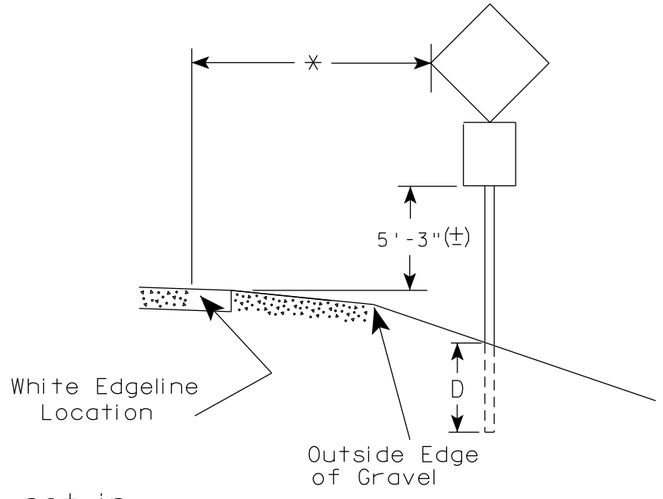
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) 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" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

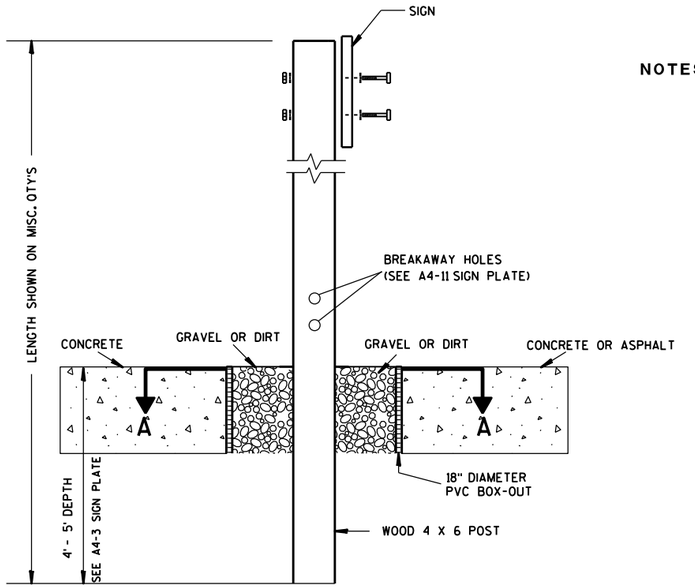
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

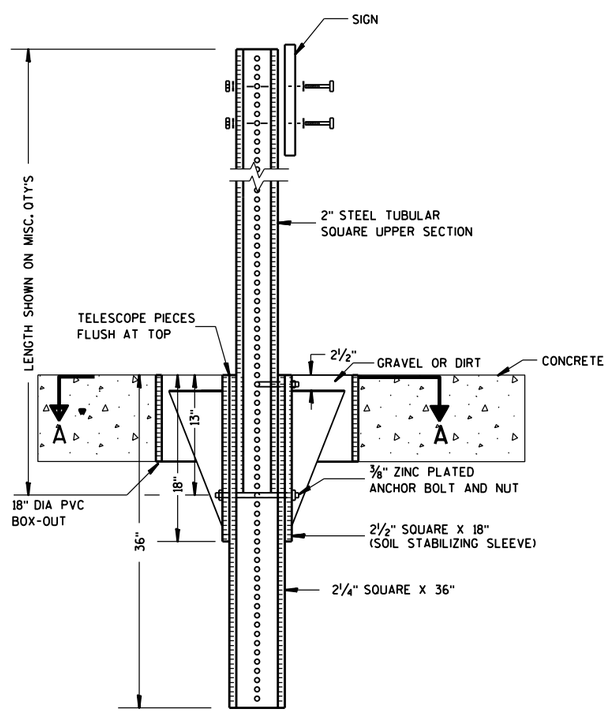
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 326	E



ELEVATION VIEW

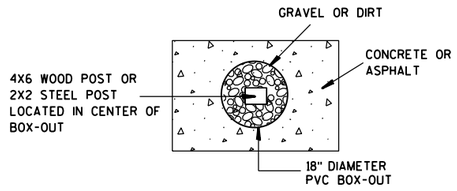
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

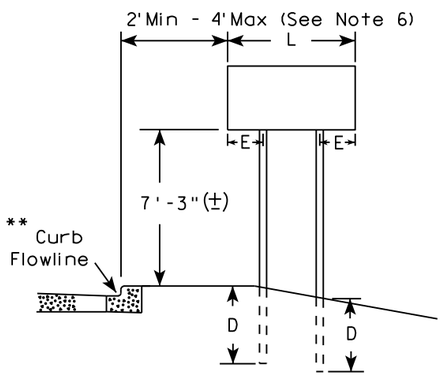
APPROVED Matthew R Rauch
for State Traffic Engineer

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

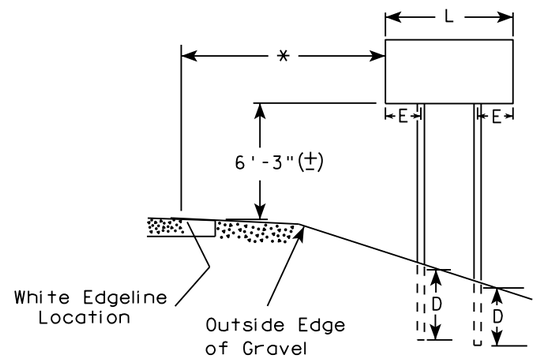
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

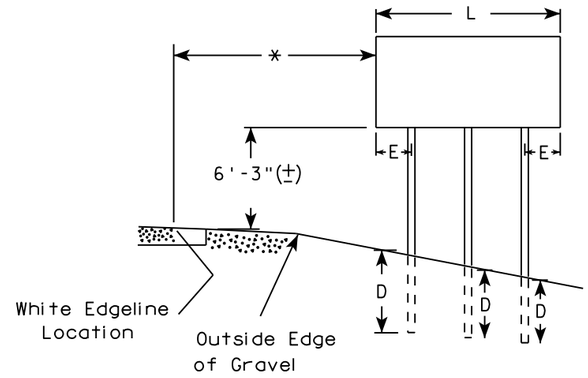
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

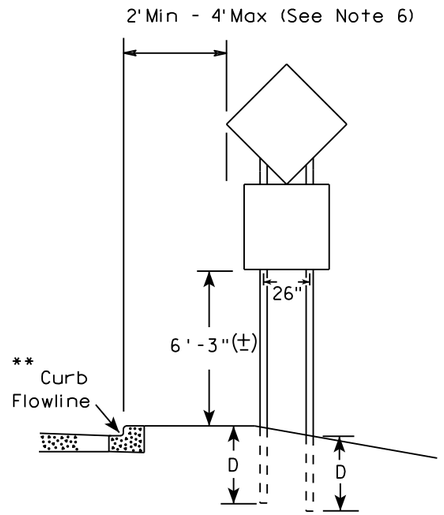
URBAN AREA



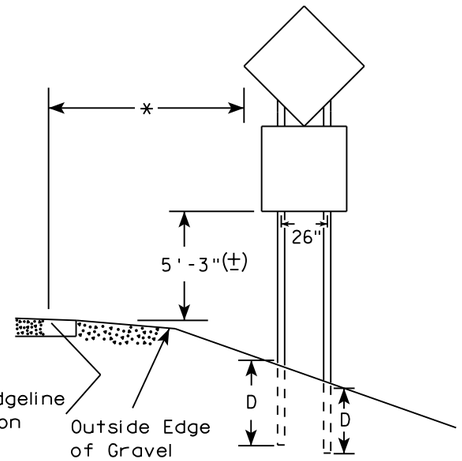
RURAL AREA (See Note 3)







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'

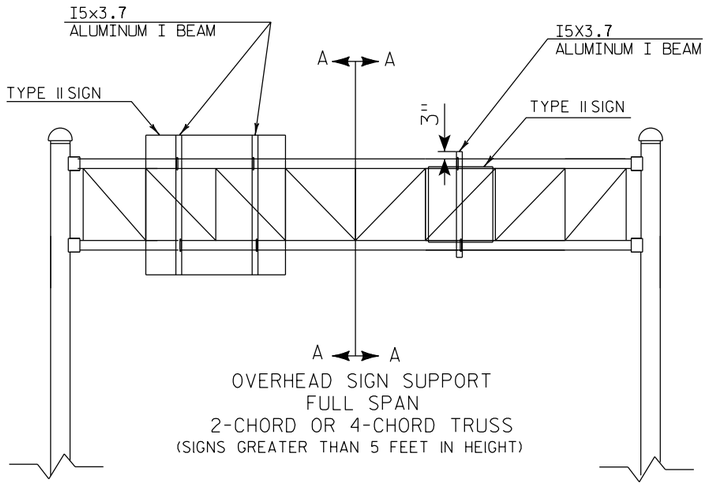
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

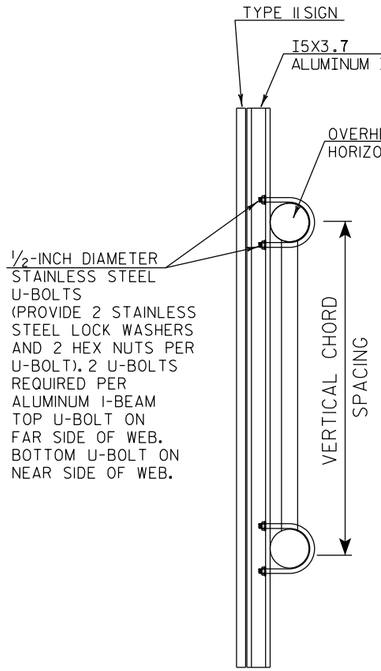
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

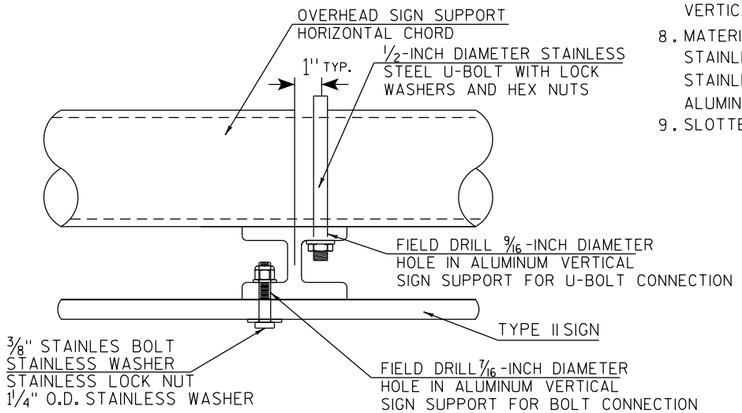
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 328	E



OVERHEAD SIGN SUPPORT
FULL SPAN
2-CHORD OR 4-CHORD TRUSS
(SIGNS GREATER THAN 5 FEET IN HEIGHT)



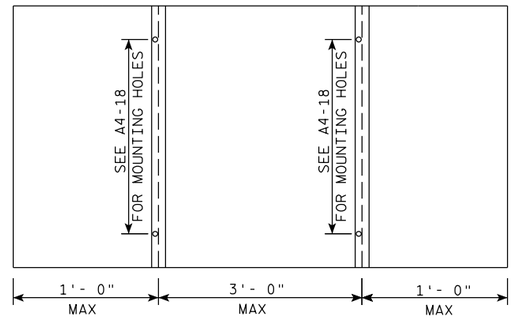
CUT SECTION A-A



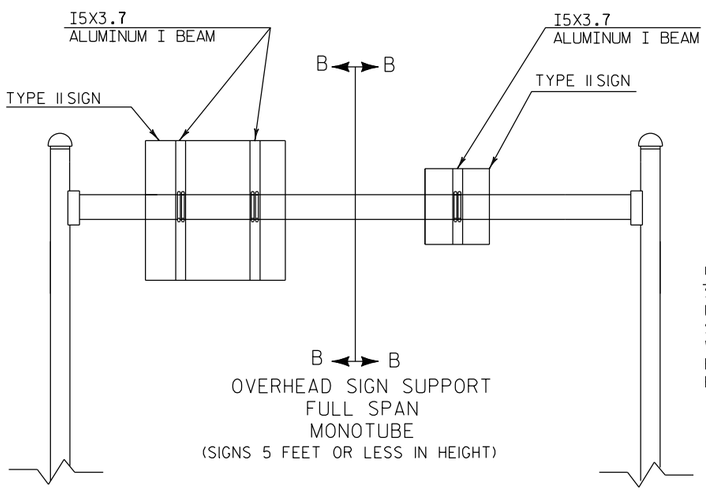
TYPICAL SIGN CONNECTION FOR
2-CHORD OR 4-CHORD TRUSS
PLAN VIEW

GENERAL NOTES

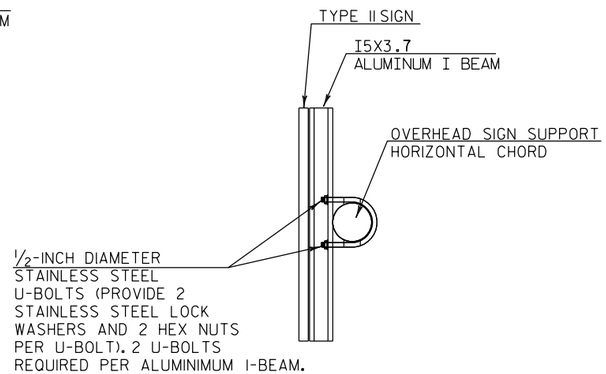
1. USE STAINLESS STEEL U-BOLTS, WASHERS, AND NUTS.
2. USE STAINLESS BOLTS AT BOLT HOLES IN SIGN PANEL PER SIGN PLATE A4-18.
3. USE ALUMINUM VERTICAL SIGN SUPPORT BEAMS HAVING A 5 INCH BEAM DEPTH AND WEIGHT OF 3.7 LBS PER FOOT.
4. U-BOLTS SHALL BE STAINLESS STEEL AND MANUFACTURED TO THE PROPER SIZE TO FIT THE CHORDS OF THE OVERHEAD SIGN STRUCTURE.
5. DIAMETER OF U-BOLTS SHALL BE AS SHOWN.
6. THE LENGTH OF THE ALUMINUM VERTICAL SIGN SUPPORT BEAMS SHALL BE THE SAME AS THE HEIGHT OF THE SIGN THEY ARE SUPPORTING. BEAM LENGTHS MAY BE LONGER FOR PROPER ATTACHMENT TO CHORDS.
7. SEE DETAIL BELOW FOR SPACING OF ALUMINUM VERTICAL SIGN SUPPORTS
8. MATERIAL NOTES:
   STAINLESS STEEL U-BOLTS, BOLTS, AND LOCKWASHERS ASTM 304.
   STAINLESS STEEL HEX NUTS ASTM A276.
   ALUMINUM I-BEAMS ARE 6061-T6.
9. SLOTTED HOLES IN I-BEAMS ARE NOT ALLOWED



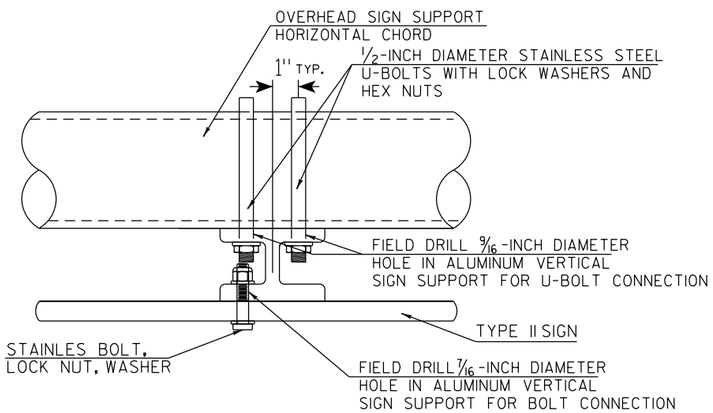
SPACING OF I5X3.7 ALUMINUM
MULTIPLE VERTICAL SIGN SUPPORTS



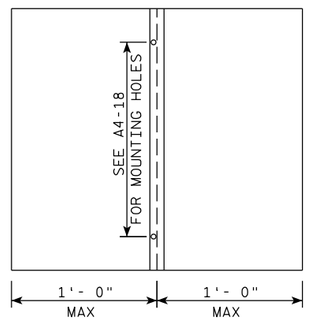
OVERHEAD SIGN SUPPORT
FULL SPAN
MONOTUBE
(SIGNS 5 FEET OR LESS IN HEIGHT)



CUT SECTION B-B



TYPICAL SIGN CONNECTION FOR
MONOTUBE
PLAN VIEW



SPACING OF I5X3.7 ALUMINUM
SINGLE VERTICAL SIGN SUPPORT

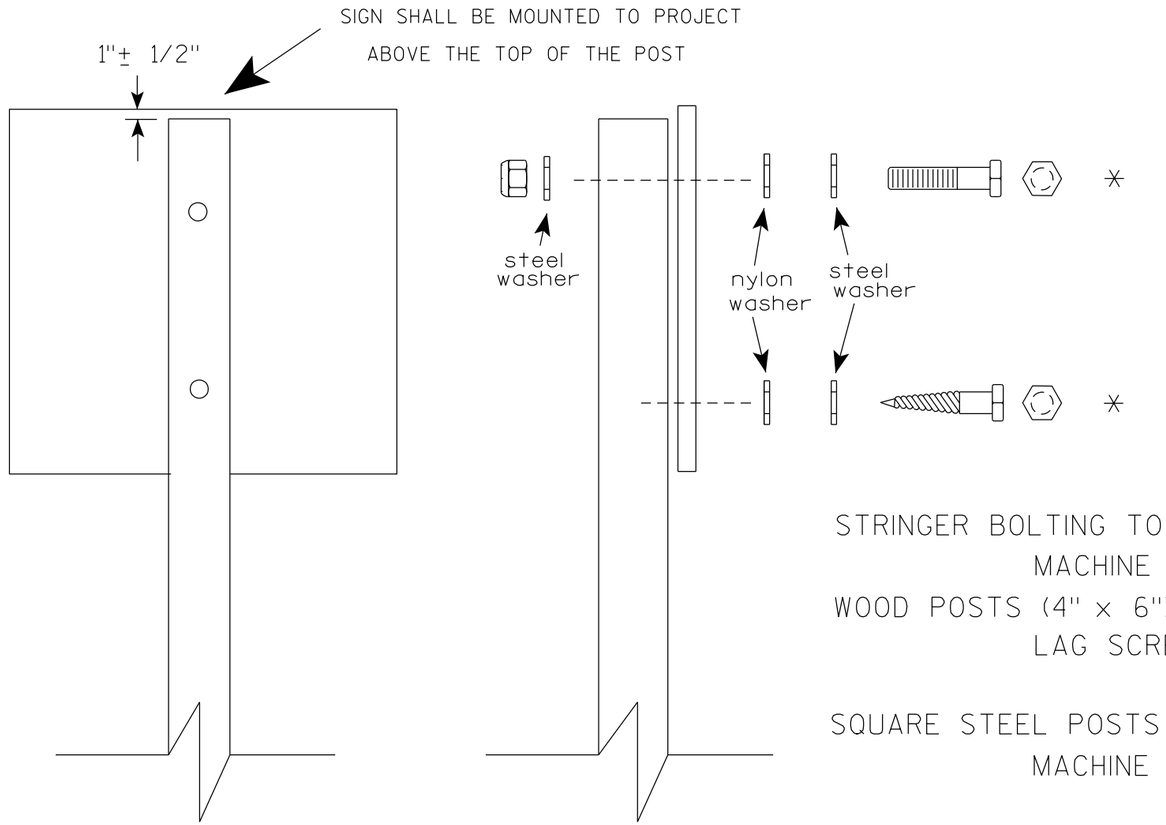
TYPE II SIGN CONNECTION
TO OVERHEAD SIGN SUPPORT

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/07/20 PLATE NO. A4-7B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 329	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 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

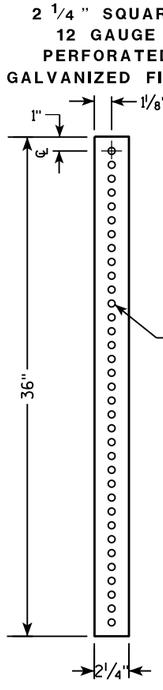
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

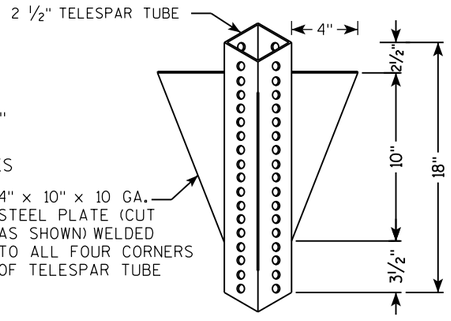
SHEET NO: 330 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

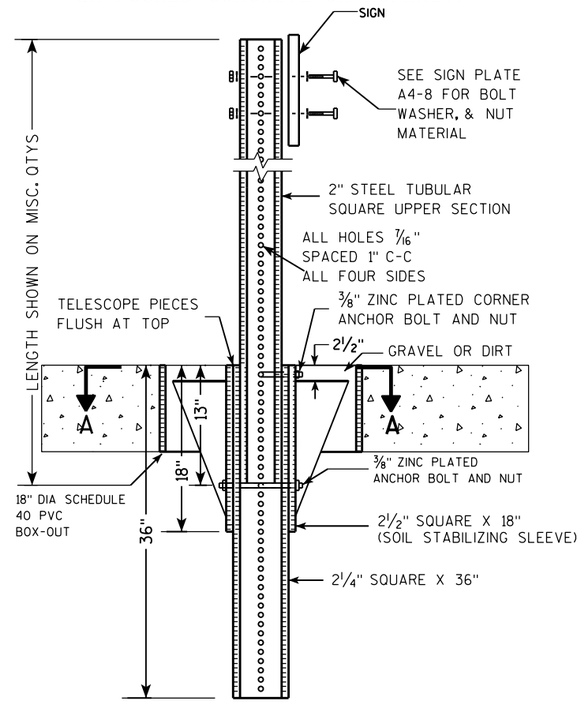
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



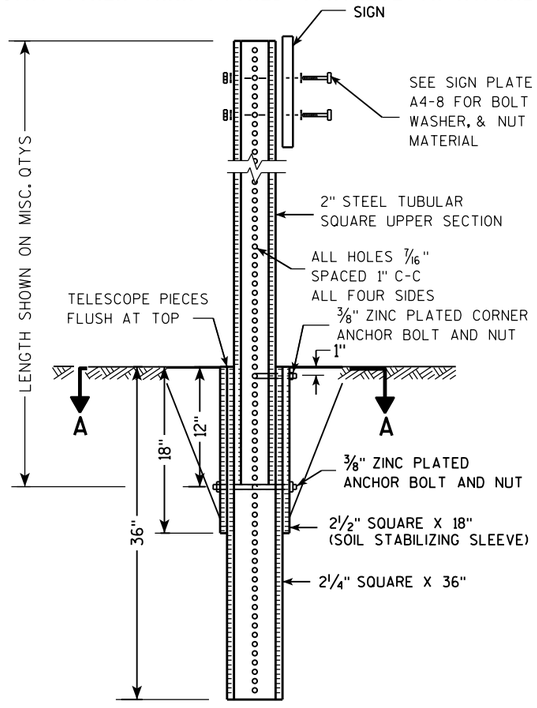
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

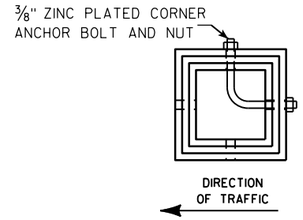


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

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

TUBULAR STEEL
SIGN POST
A4-9

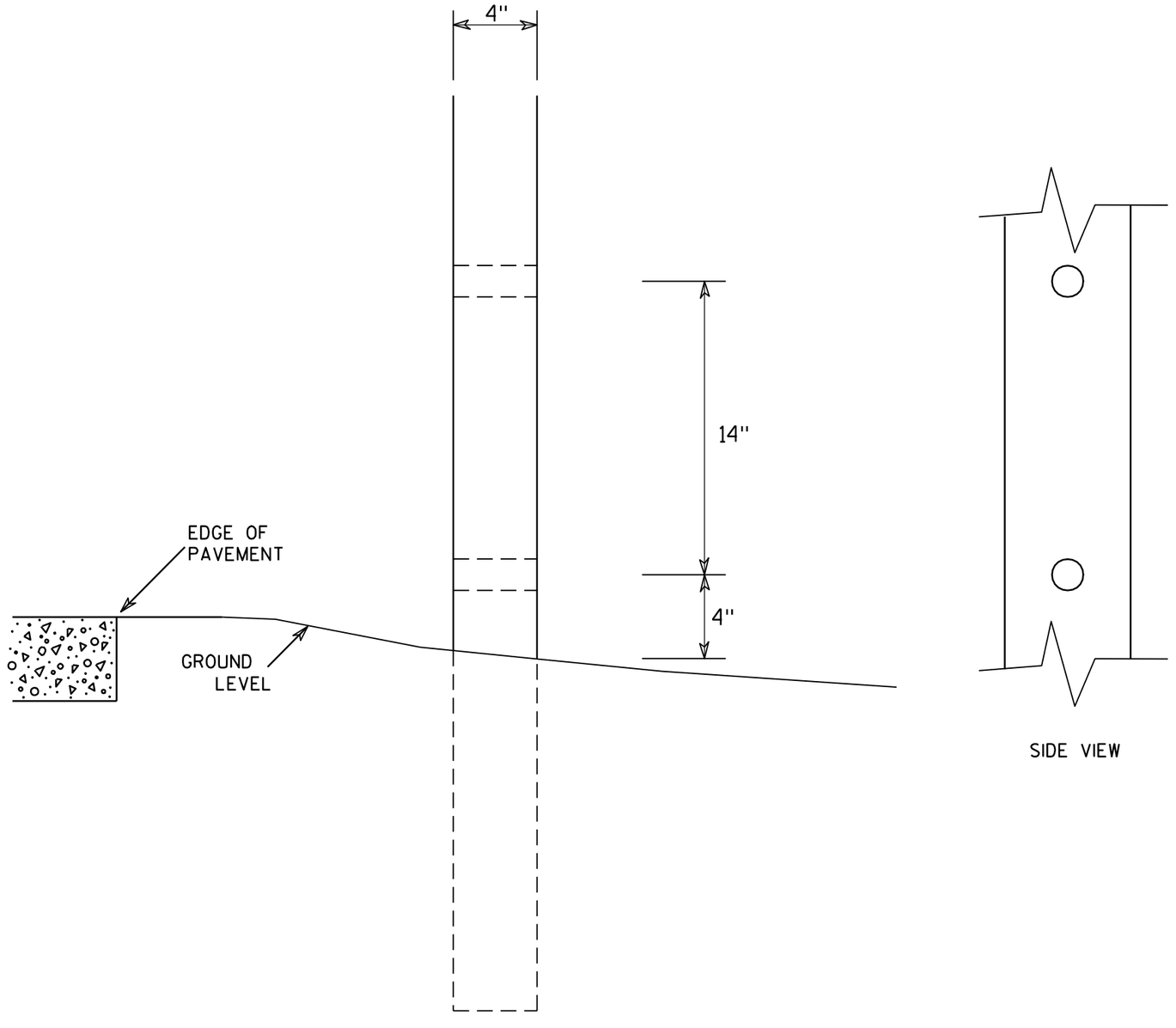
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000
WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

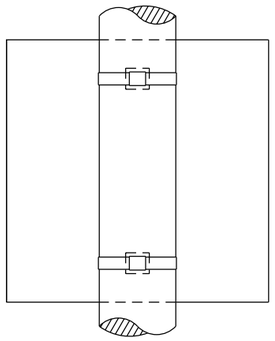
APPROVED Chester J Spang for State Traffic Engineer

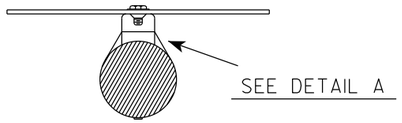
DATE 3/27/97 PLATE NO. A4-11.2

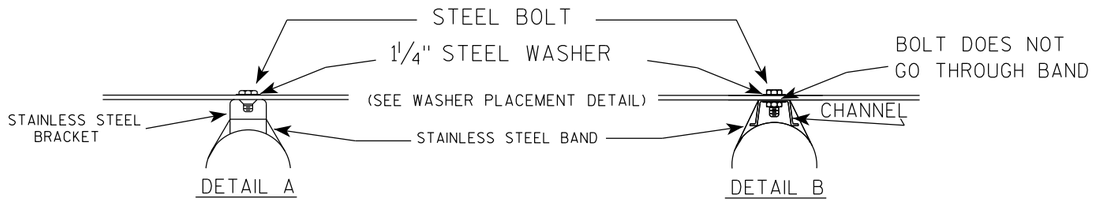
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 332	E

BANDING

SINGLE SIGN



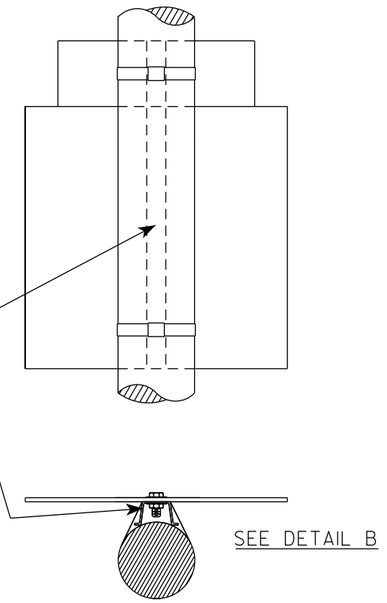




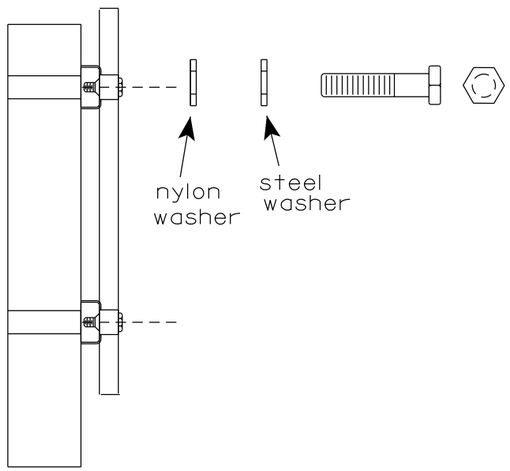
GENERAL NOTES

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

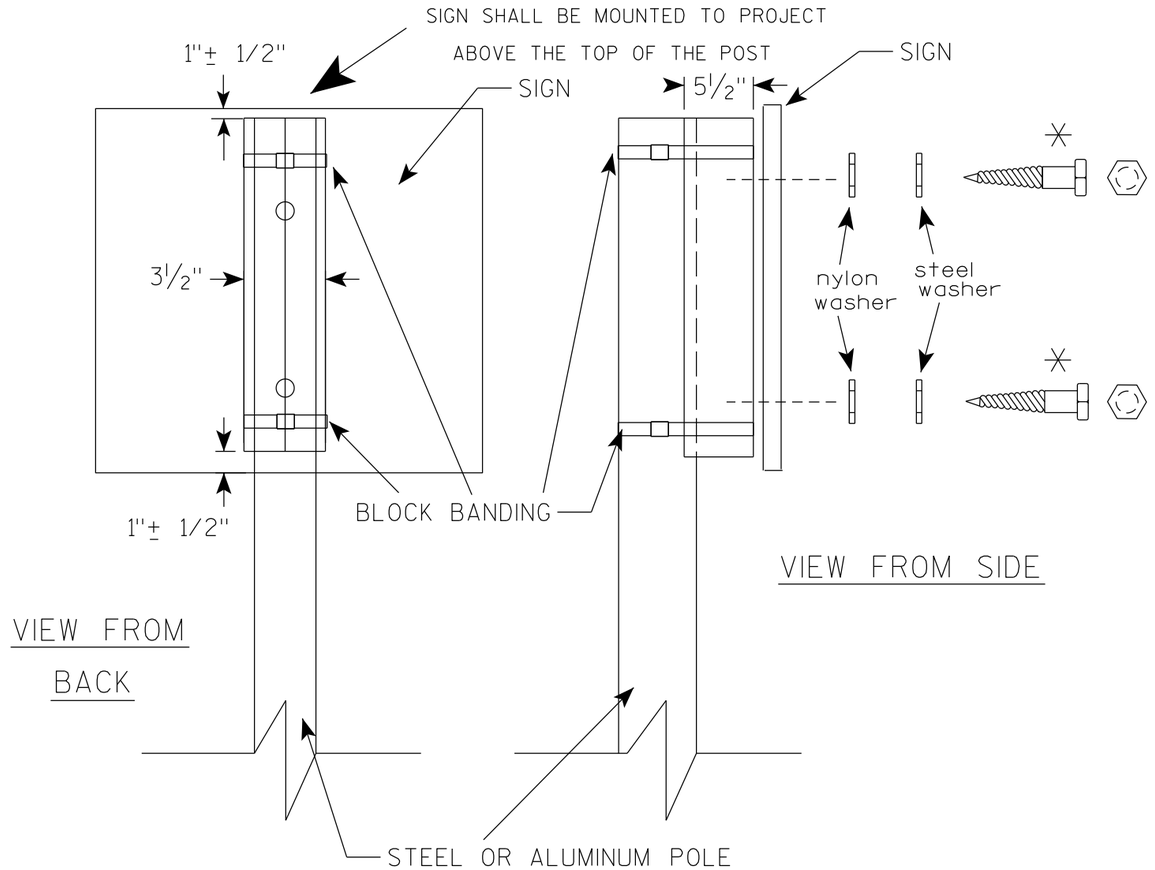
DATE 6/10/19 PLATE NO. A5-9.4

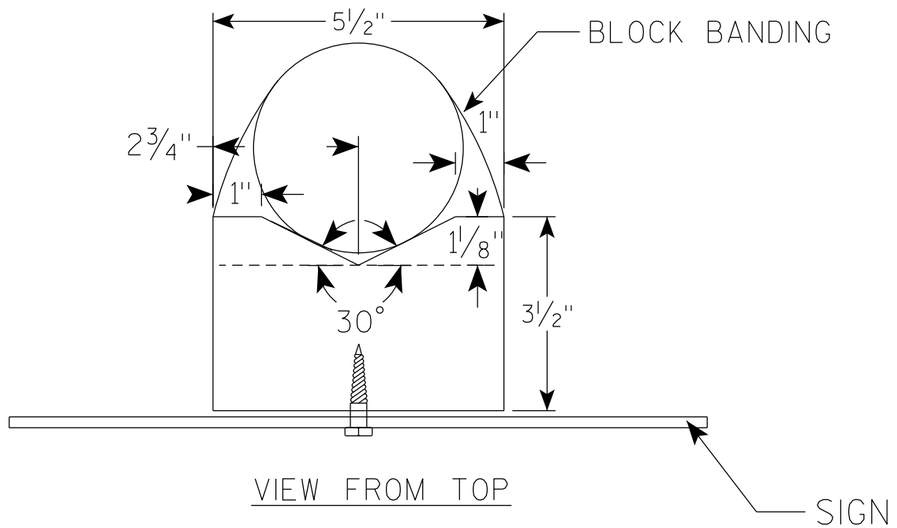
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 333	E

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

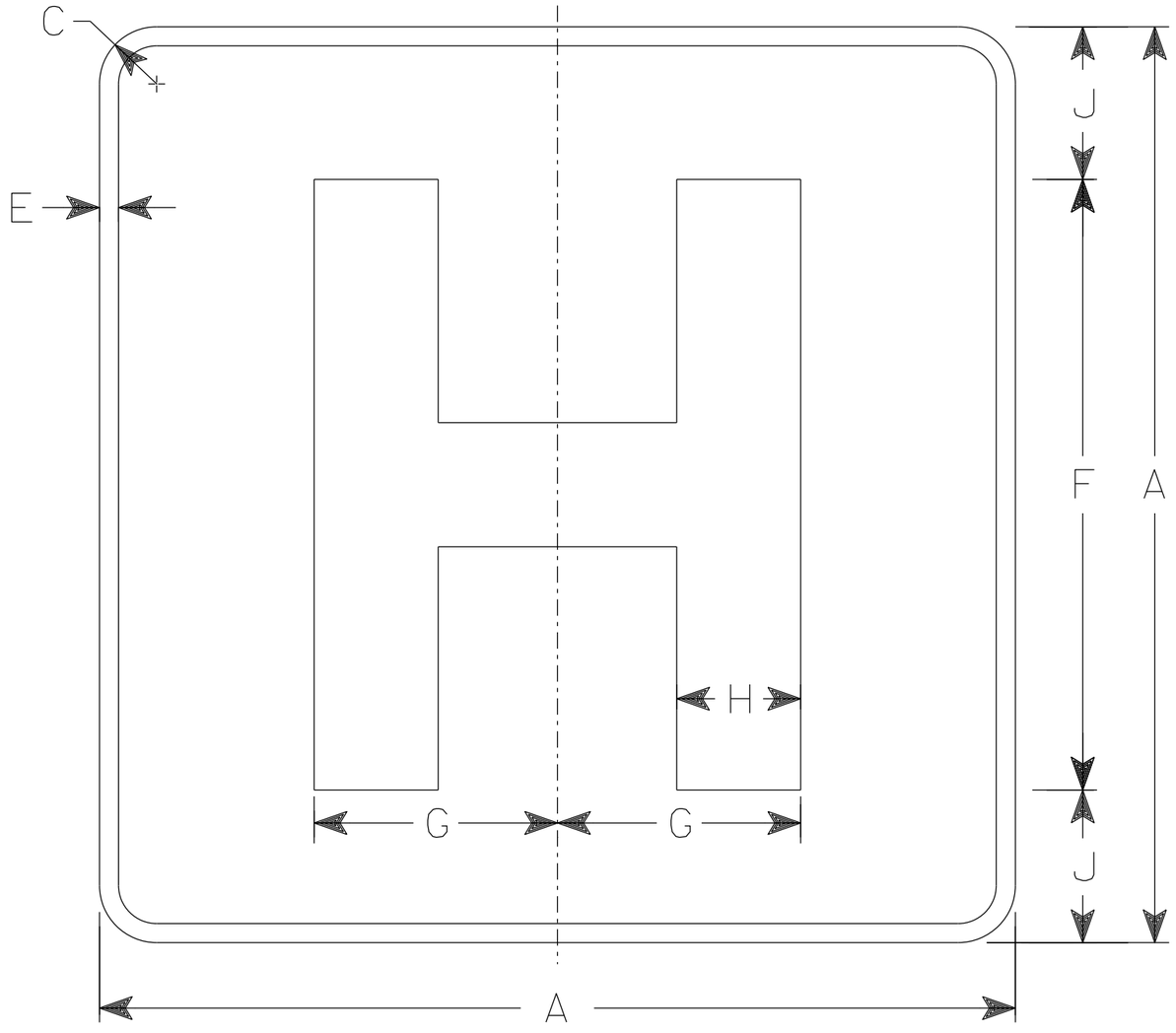
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO: | SHEET NO: 334 | E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A510.dgn PLOT DATE : 10-JUN 2019 4:15 PLOT BY : mscj9h

WISDOT/CADDS SHEET 42



D9-2

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Blue
   Message - White
3. Message Series - E Modified
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		1 1/8		1/2	12	4 3/4	2 3/8		3																	2.25
2S	24		1 1/2		1/2	16	6 3/8	3 1/4		4																	4.0
2M	24		1 1/2		1/2	16	6 3/8	3 1/4		4																	4.0
3	36		2 1/4		3/4	24	9 1/2	4 7/8		6																	9.0
4																											
5																											

STANDARD SIGN
D9-2

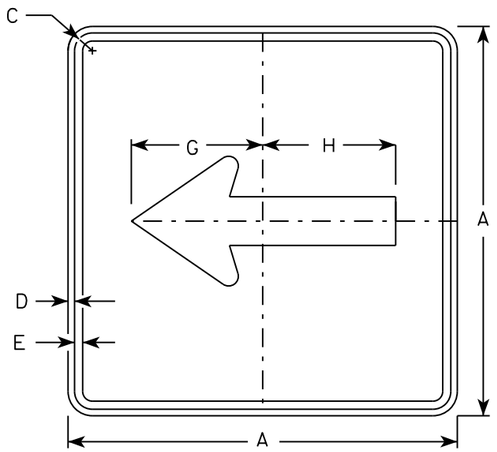
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

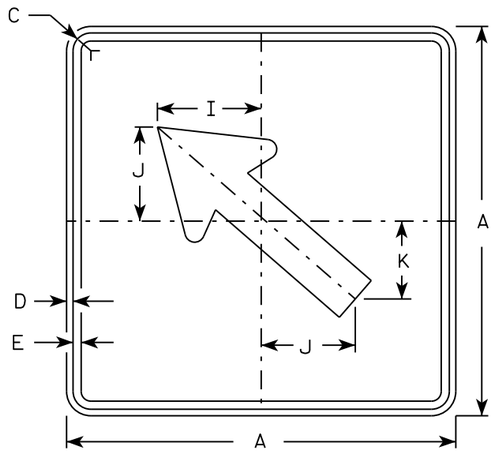
DATE 1/28/21 PLATE NO. D9-2.5

PROJECT NO:

SHEET NO: 335 E



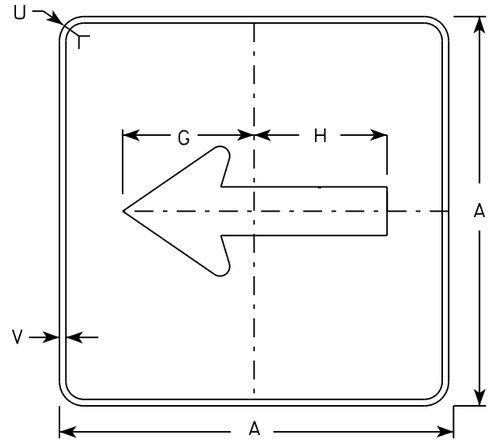
M6-1
MM6-1
MO6-1
MP6-1



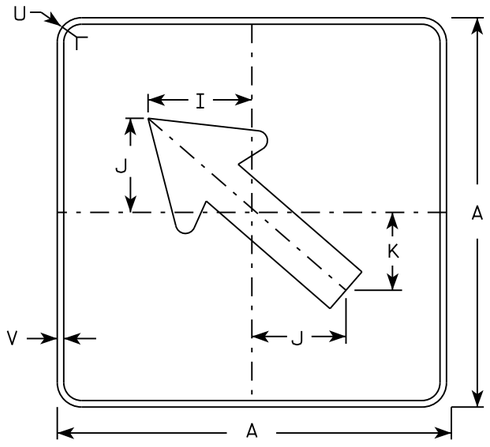
M6-2
MM6-2
MO6-2
MP6-2

NOTES

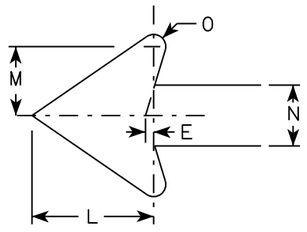
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - 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

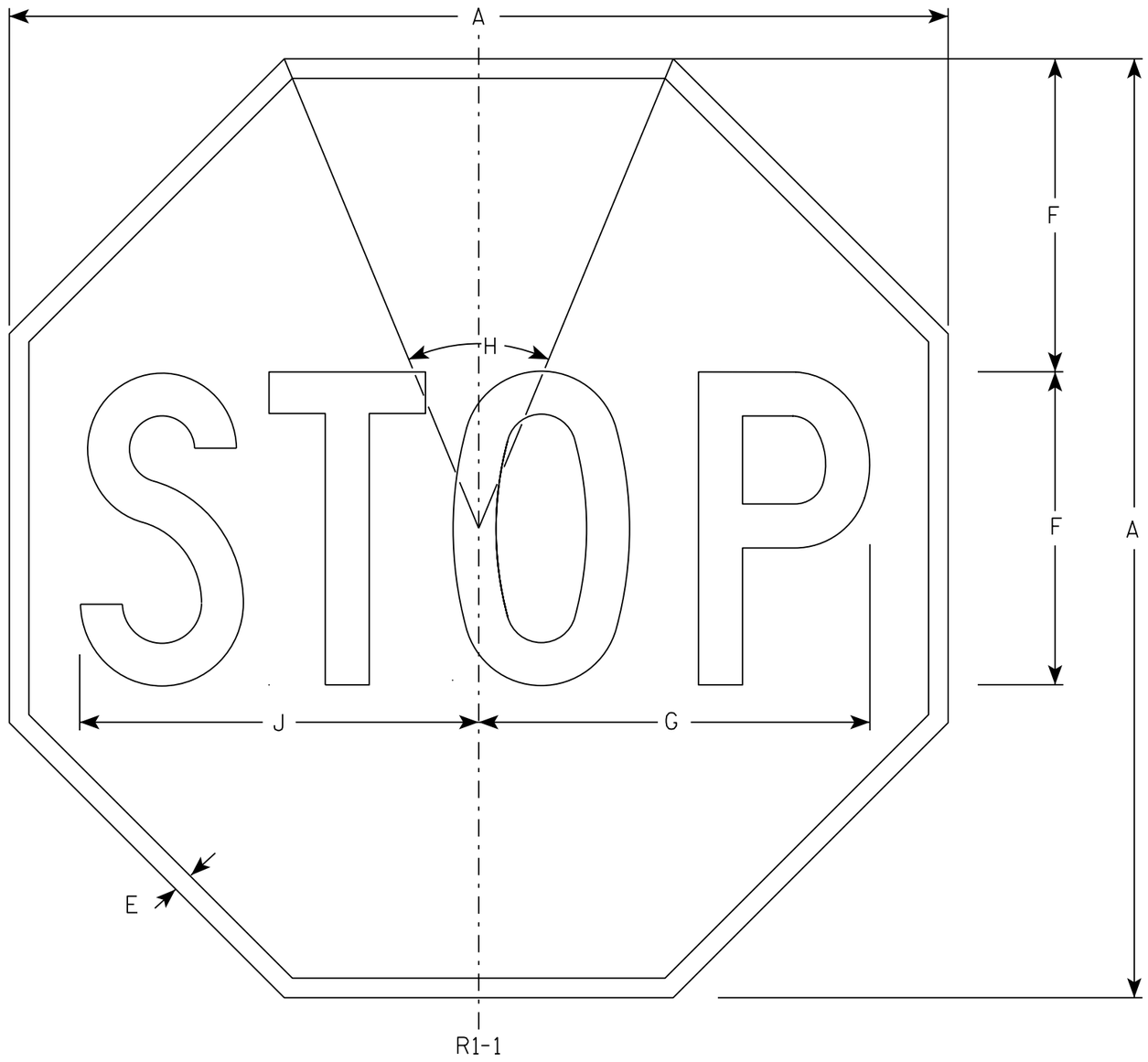
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 336 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

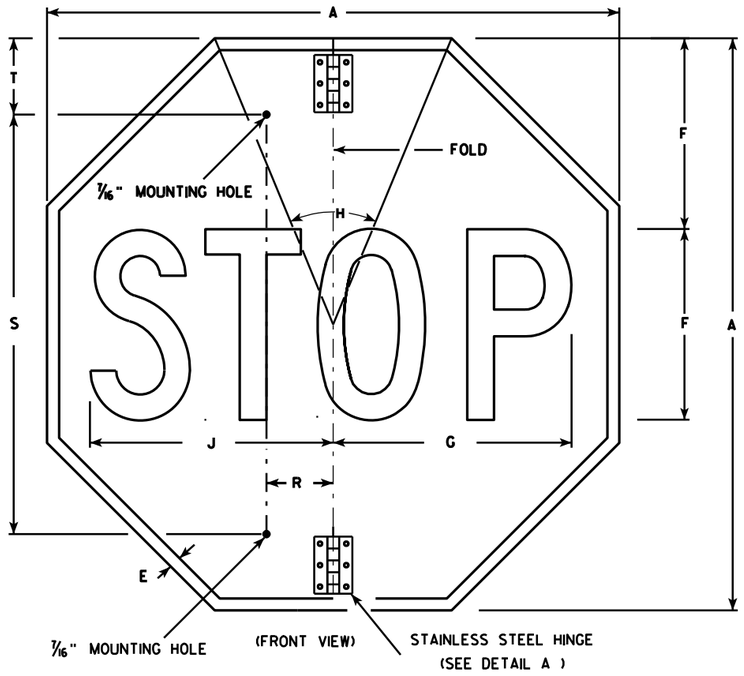
STANDARD SIGN
R1-1

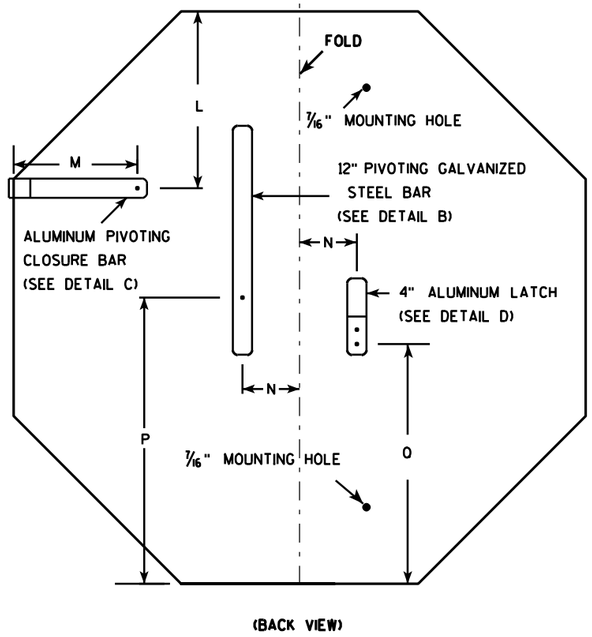
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

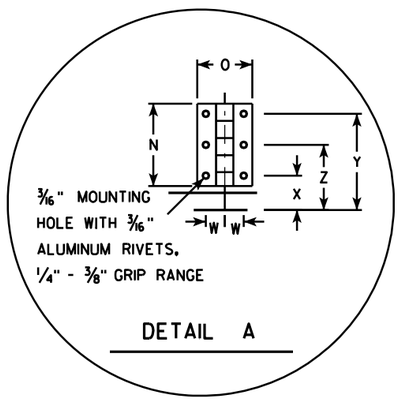
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 337	E



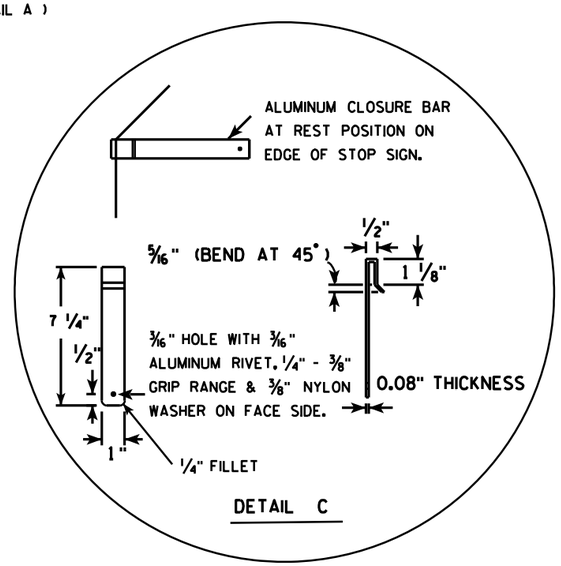


NOTES

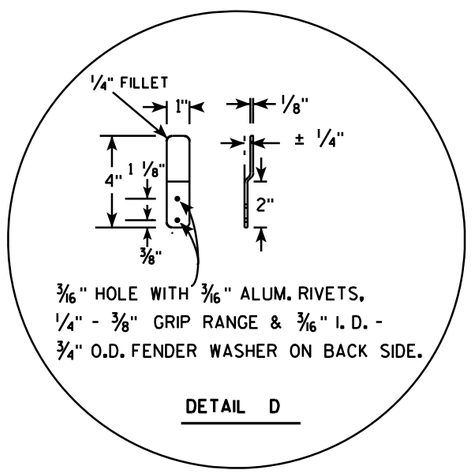
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



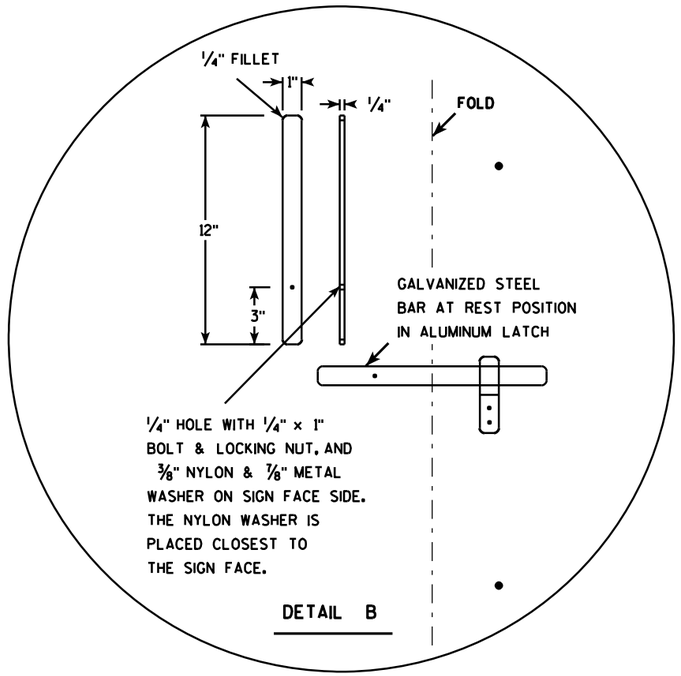
DETAIL A



DETAIL C



DETAIL D



DETAIL B

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																											

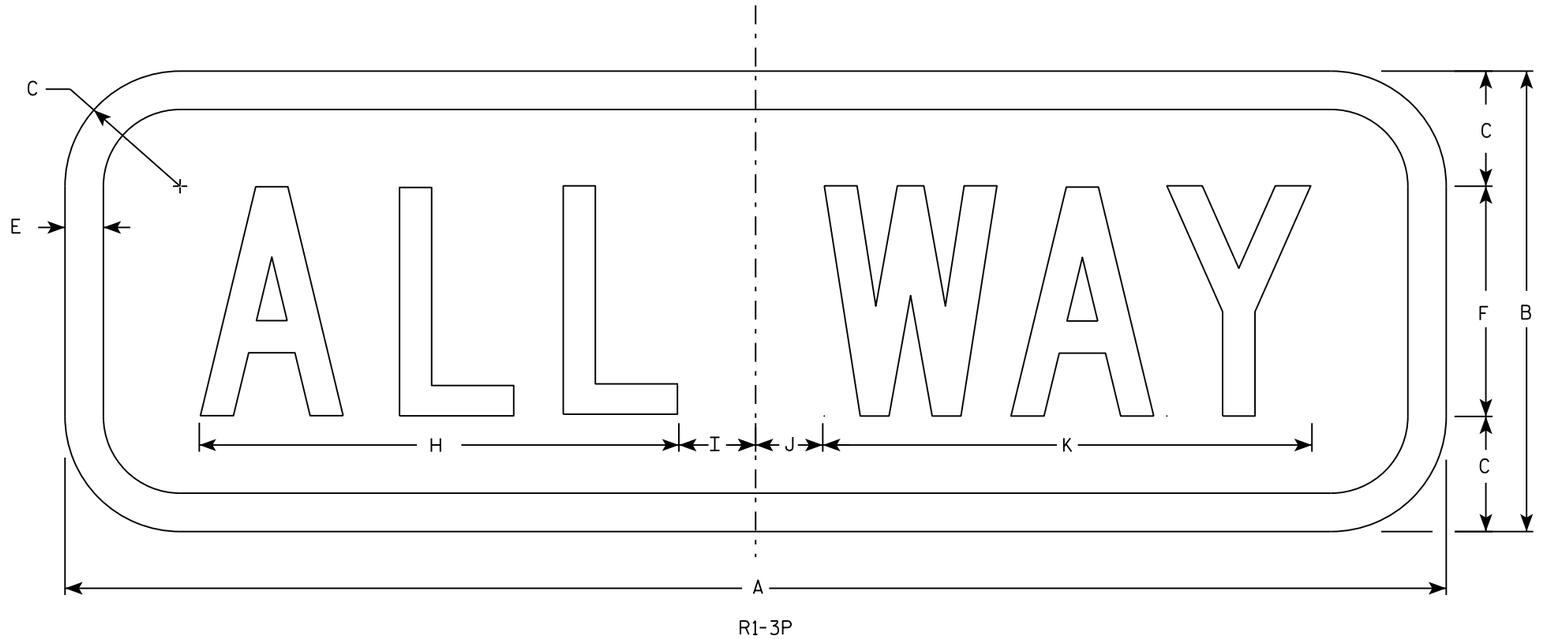
STANDARD SIGN
R1-1F

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: 338 | E



R1-3P

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. For 30"x30" R1-1 use 18"x6" R1-3P sign
   For 36"x36" R1-1 use 24"x9" R1-3P sign
   For 48"x48" R1-1 use 30"x12" R1-3P sign

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	6	1 ½		½	3		6 ¼	1 ¼	⅞	6 ⅜																0.75
2S	18	6	1 ½		½	3		6 ¼	1 ¼	⅞	6 ⅜																1.5
2M	24	9	1 ½		½	5		9 ¼	1 ¼	¾	9 ¾																1.5
3	24	9	1 ½		½	5		9 ¼	1 ¼	¾	9 ¾																1.5
4	30	12	2 ¼		⅝	6		11	2 ¼	1 ½	11 ¾																2.5
5	30	12	2 ¼		⅝	6		11	2 ¼	1 ½	11 ¾																2.5

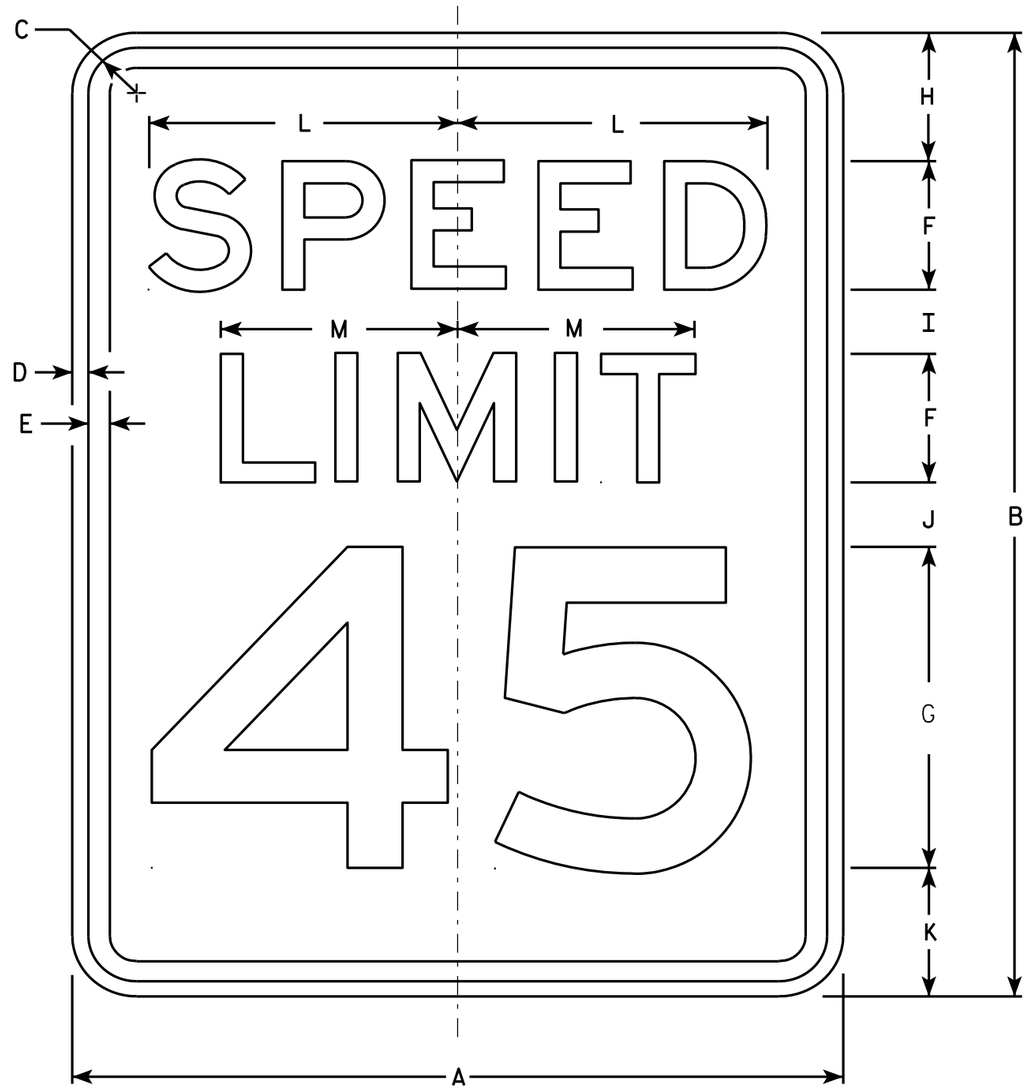
STANDARD SIGN
R1-3P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/29/16 PLATE NO. R1-3P.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 339 | E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

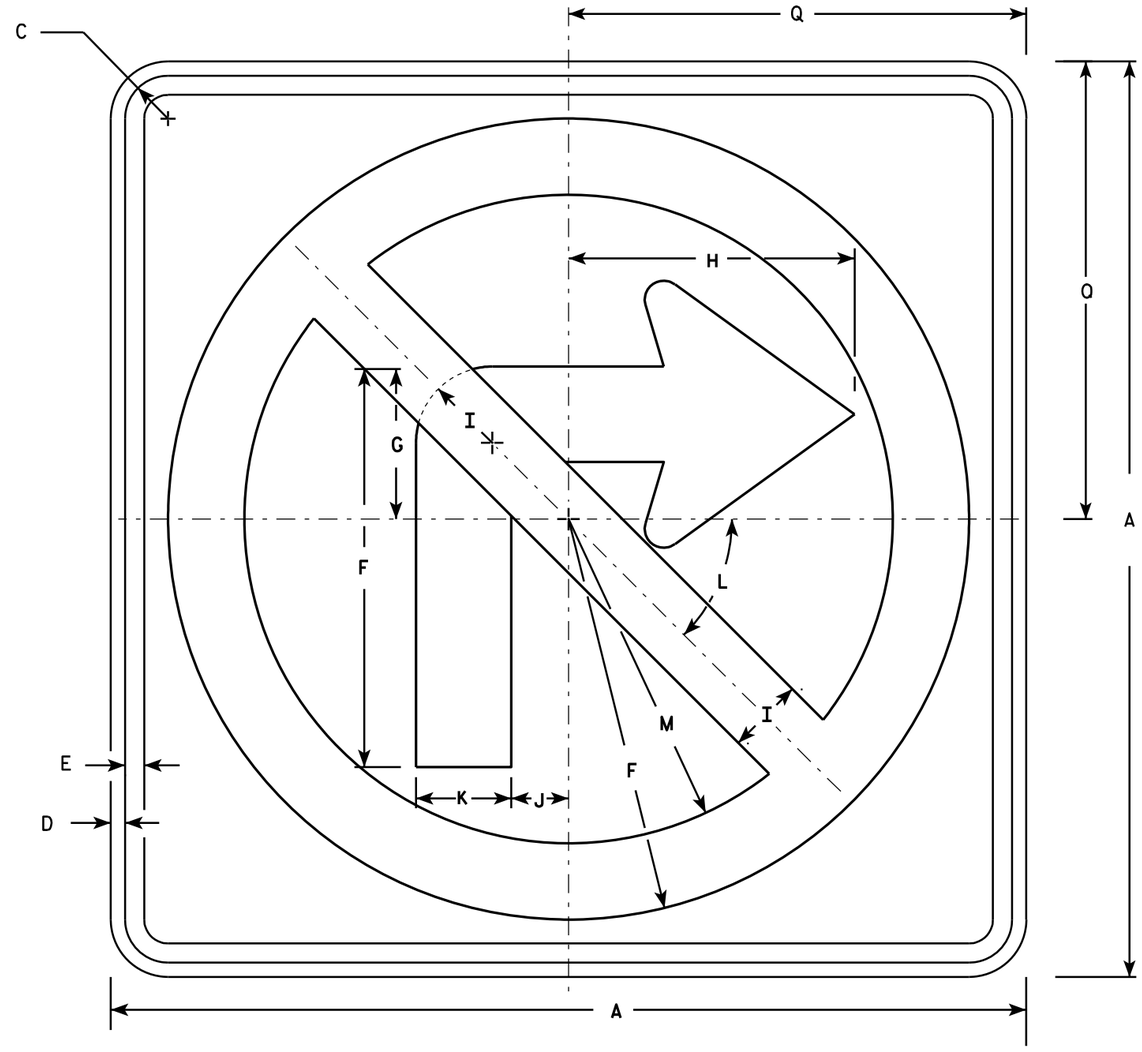
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

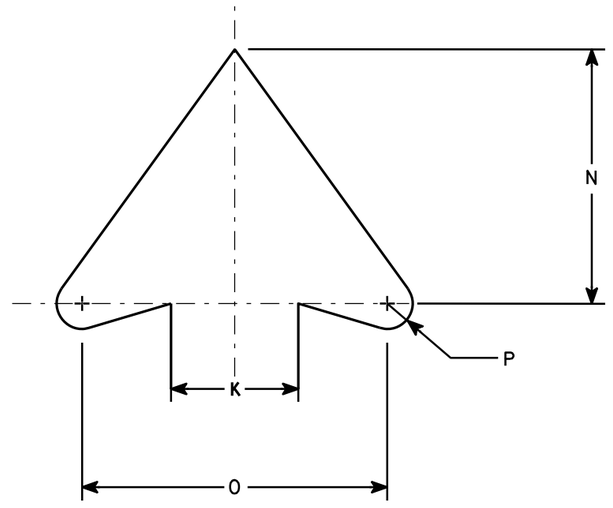
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 340 | E



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

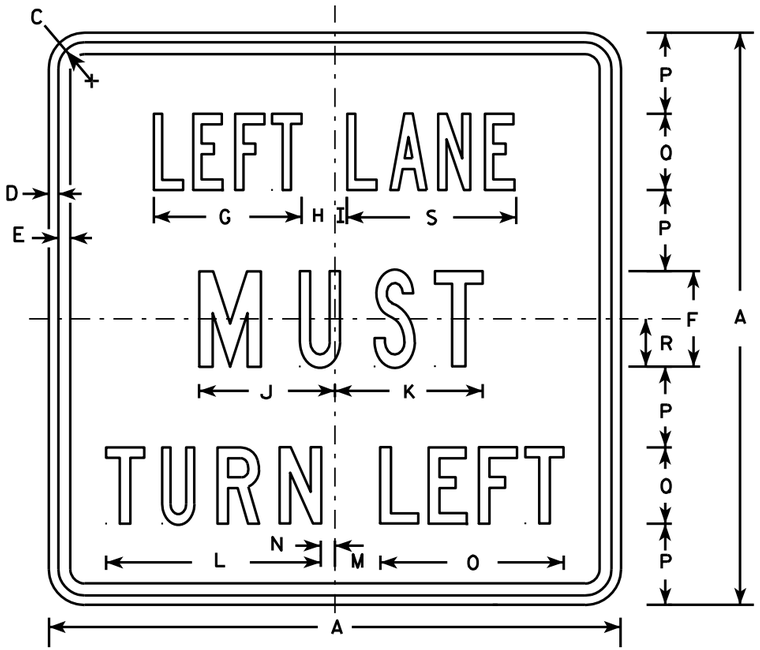
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

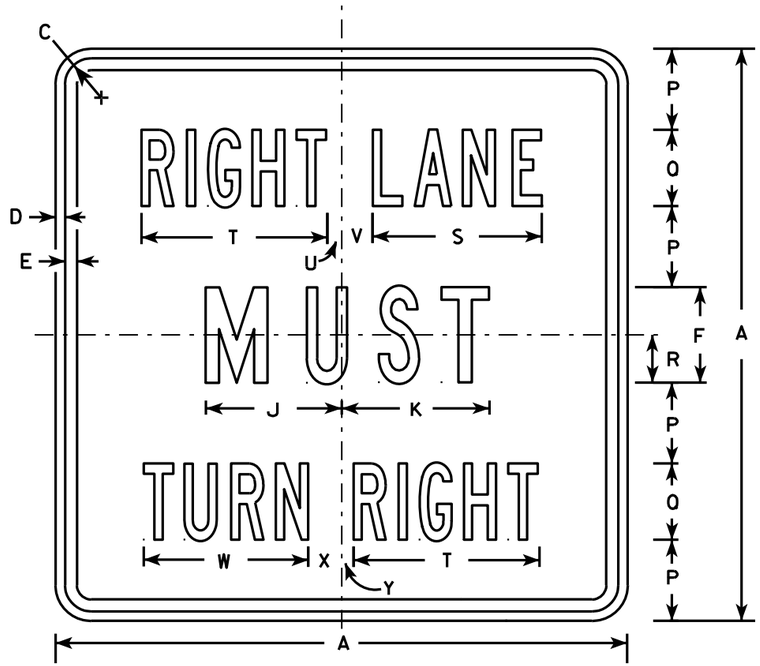
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 341	E



R3-7L



R3-7R

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 - Line 1 is Series B.
   Line 2 is Series C.
   Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2S	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2M	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
3	36		1 5/8	5/8	3/4	6	9 5/8	2	1 1/8	8 3/4	9	13 1/2	3 7/8	1 1/2	12 1/2	5	5	3	10 5/8	12	7/8	2 1/4	10 5/8	2 1/8	1		9.00
4	48		2 1/4	3/4	1	8	13 1/2	2 3/8	1 1/2	11 1/2	11 7/8	17 3/4	3 5/8	2 1/2	16 3/8	6 1/2	7	4	14 3/8	16 7/8	5/8	3 1/4	15 1/8	2 3/4	1 1/8		16.00
5																											

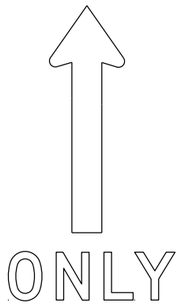
STANDARD SIGN
R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

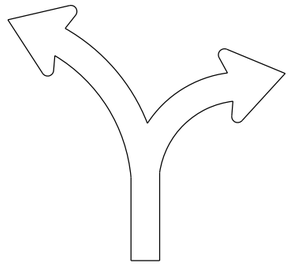
DATE 3/18/2011 PLATE NO. R3-7.3

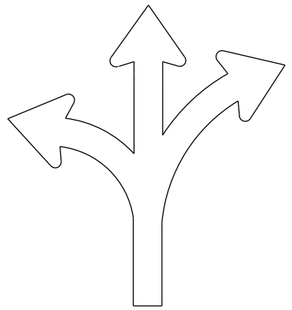
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 342 | E

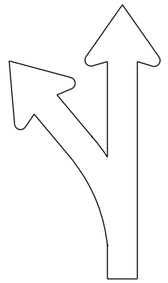


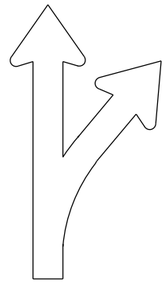
(A)

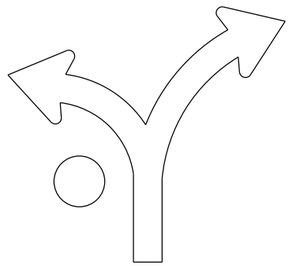
(B)

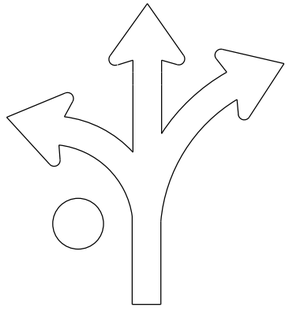

(C)

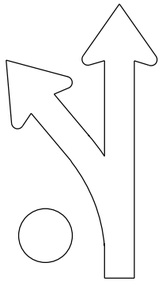

(D)


(E)

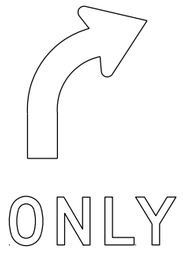

(F)


(G)

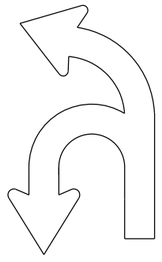

(H)


(I)

(L)



(R)


(U)

NOTES

1. Sigs are Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Use appropriate Letter for Sign Code
   Each letter added makes sign wider. Example R3-8EAR
5. Square footage of sign varies by letters

1	Letter =	3.75 sq ft for Size 2
		6.0 sq ft for Size 3
		10.0 sq ft for Size 4 or 5
2	Letters =	7.5 sq ft for Size 2
		12.0 sq ft for Size 3
		20.0 sq ft for Size 4 or 5
3	Letters =	11.25 sq ft for Size 2
		18.0 sq ft for Size 3
		30.0 sq ft for Size 4 or 5
4	Letters =	15.0 sq ft for Size 2
		24.0 sq ft for Size 3
		40.0 sq ft for Size 4 or 5
5	Letters =	18.75 sq ft for Size 2
		30.0 sq ft for Size 3
		50.0 sq ft for Size 4 or 5
6	Letters =	22.5 sq ft for Size 2
		36.0 sq ft for Size 3
		60.0 sq ft for Size 4 or 5

6. When letters C,D,G,H are used on the Left or Right end of the sign the Sq. Ft. changes.
   Add the amounts when these letters are used:
   1.25 sq ft for Size 2
   1.5 sq ft for Size 3
   2.0 sq ft for Size 4 or 5

STANDARD SIGN
R3-8 Series

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

7

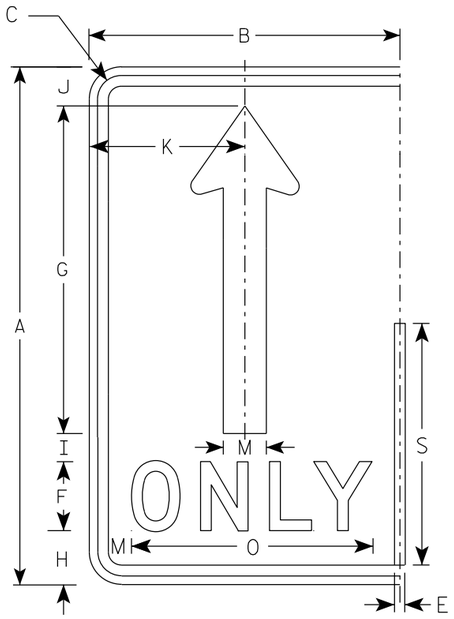
PROJECT NO:

SHEET NO: 343 E

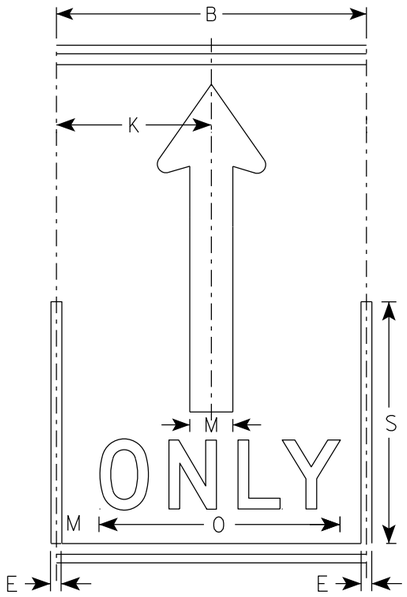
FILE NAME : C:\CAEfiles\Projects\stdplate_R38.dgn
PLOT DATE : 21-MAY 2019 4:37
PLOT BY : mscj9h
PLOT NAME :
WISDOT/CADDS SHEET 42

NOTES

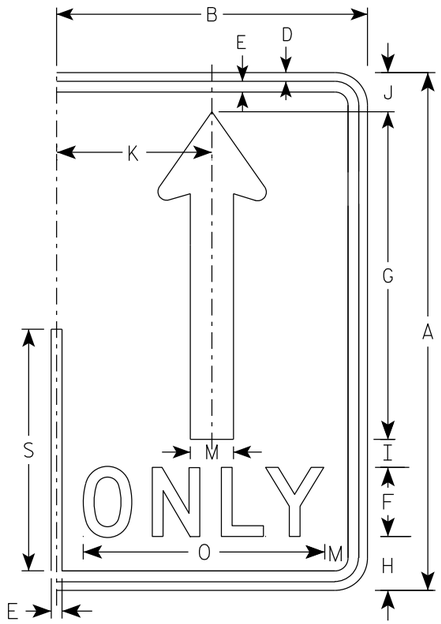
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



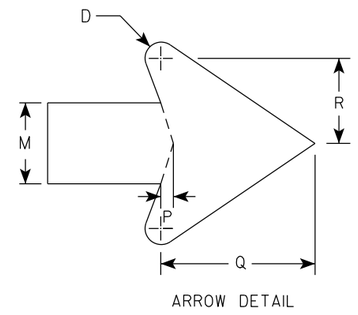
(A)



(A)



(A)



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	18	1 3/8	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 3/8	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 3/8	1/2	5/8	5	22 3/4	3 3/4	1 3/4	2 3/4	12		3		17 5/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (A) Arrow

WISCONSIN DEPT OF TRANSPORTATION

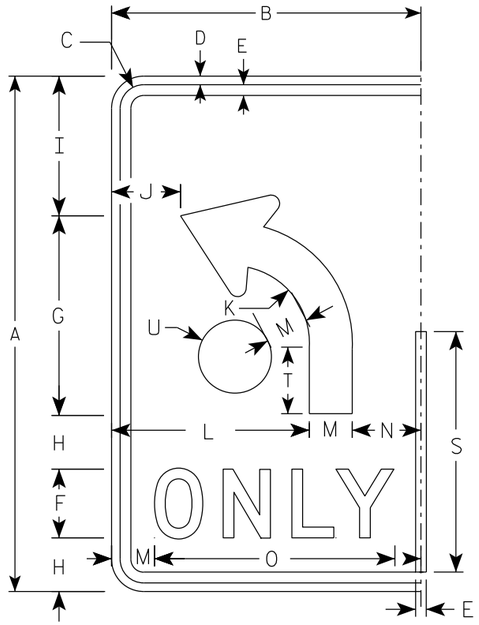
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

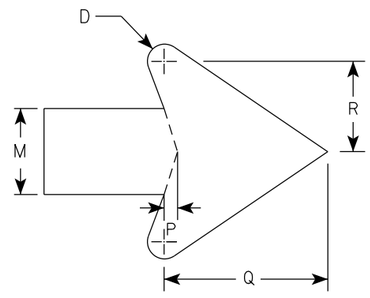
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 344 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
   Message Series - D



(B)



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	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
2M	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
3	36	24	1 3/8	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8	2 1/2						6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0

STANDARD SIGN

R3-8 (B) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

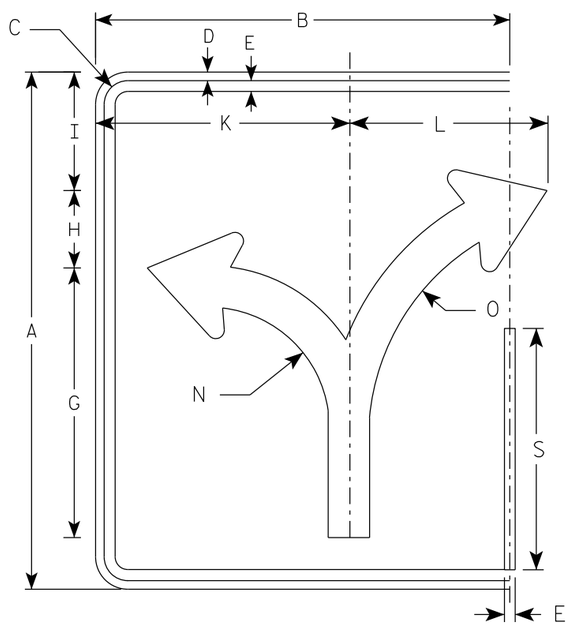
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

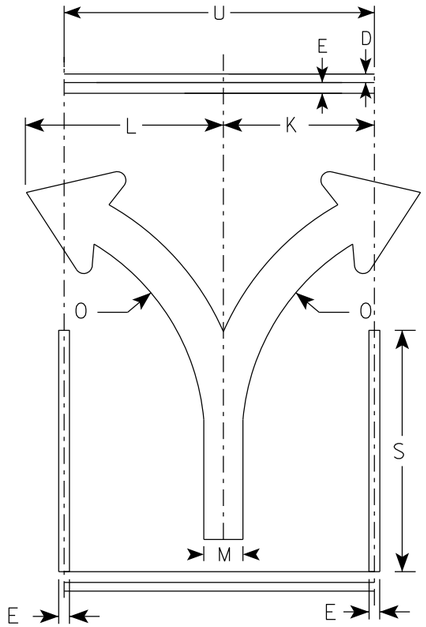
SHEET NO: 345 E

NOTES

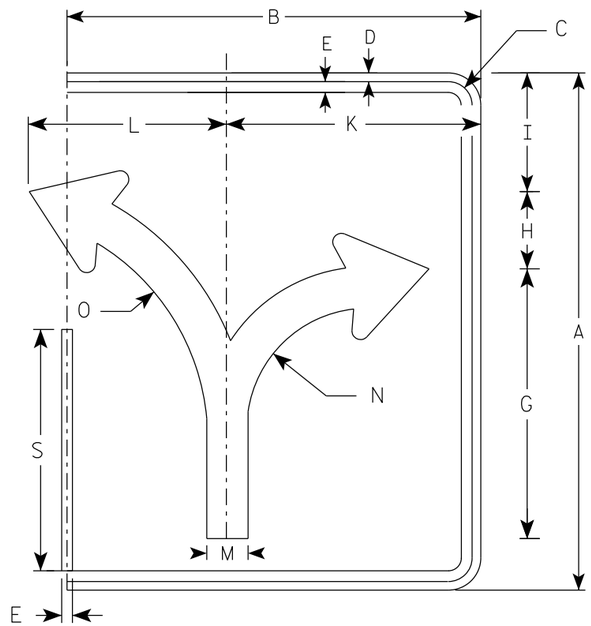
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



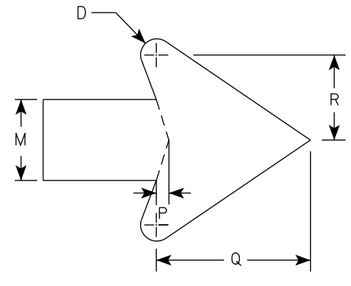
(C)



(C)



(C)



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	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (C) Arrow

WISCONSIN DEPT OF TRANSPORTATION

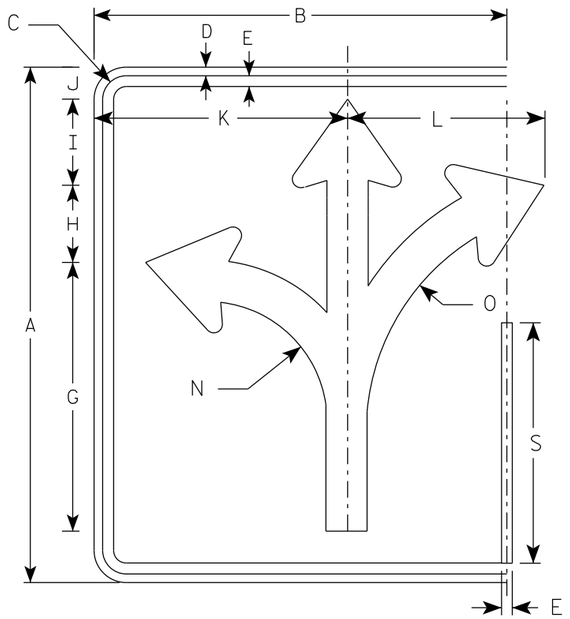
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

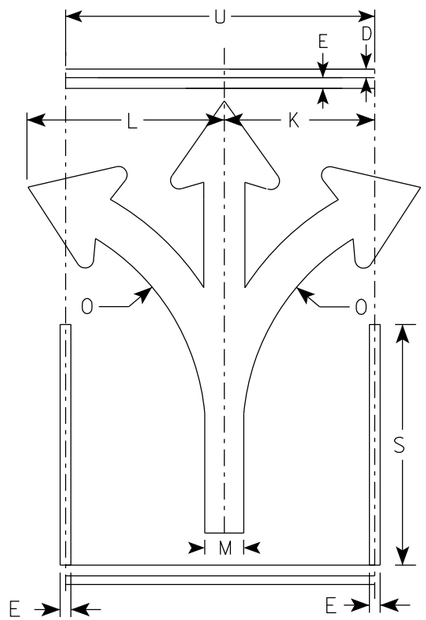
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 346 | E

NOTES

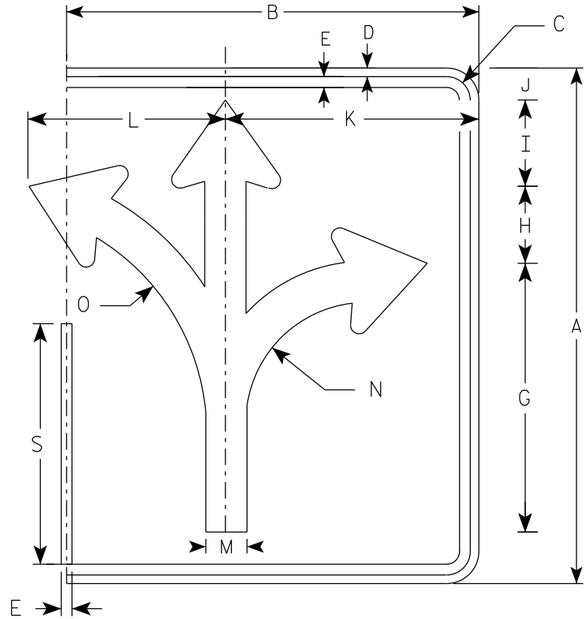
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



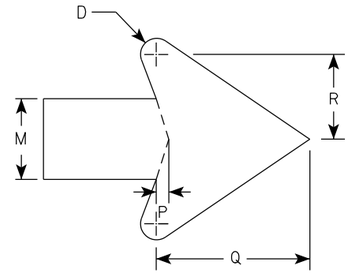
(D)



(D)



(D)



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	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	6	2 1/4	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (D) Arrow

WISCONSIN DEPT OF TRANSPORTATION

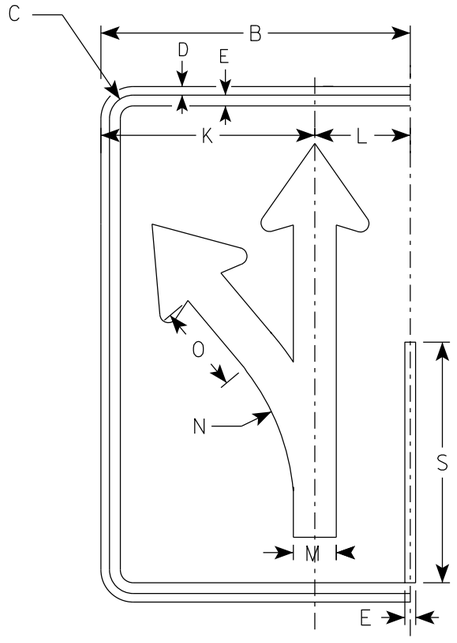
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

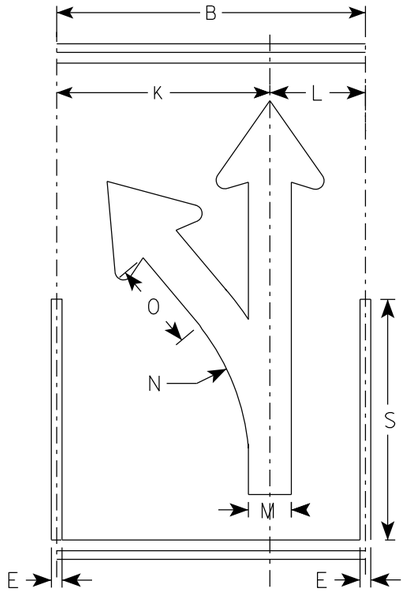
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 347 | E

NOTES

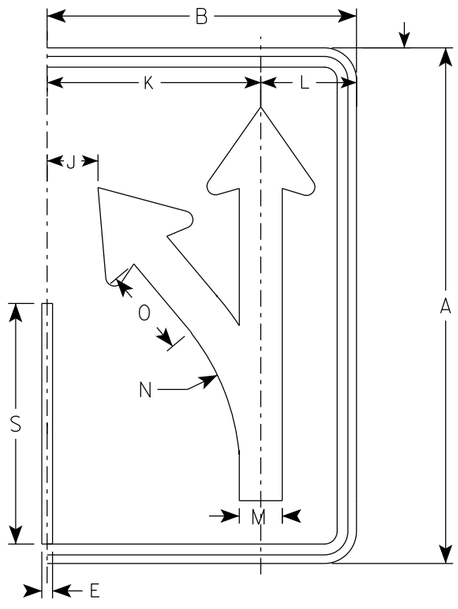
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



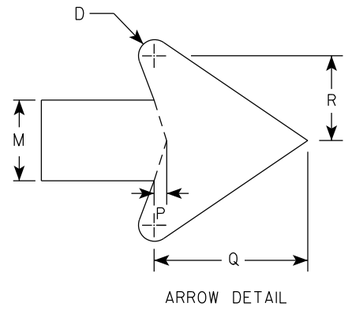
(E)



(E)



(E)



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	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 3/8	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (E) Arrow

WISCONSIN DEPT OF TRANSPORTATION

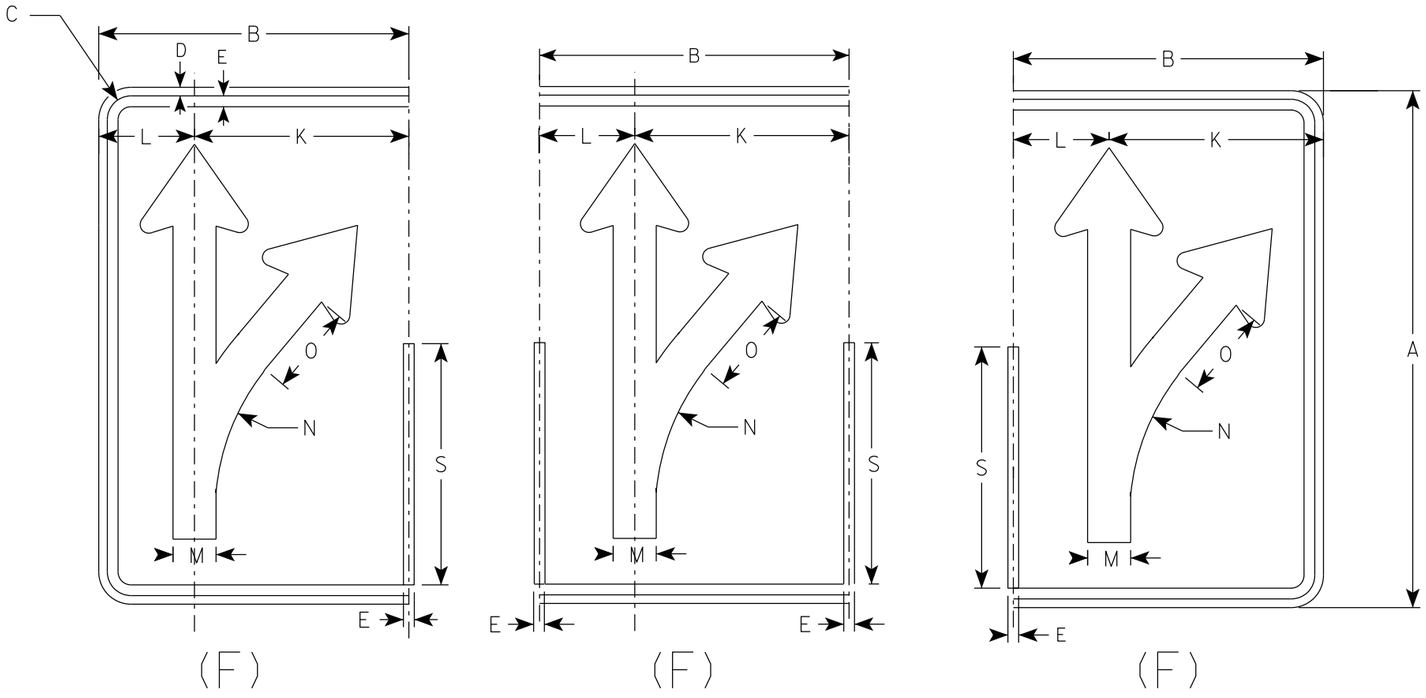
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

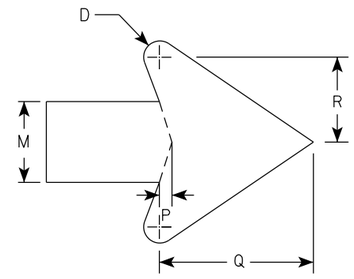
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 348 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(F) (F) (F)



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	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 3/8	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (F) Arrow

WISCONSIN DEPT OF TRANSPORTATION

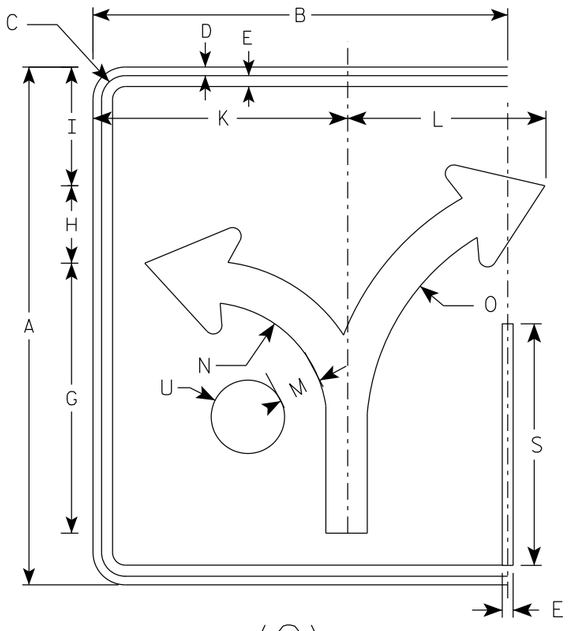
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

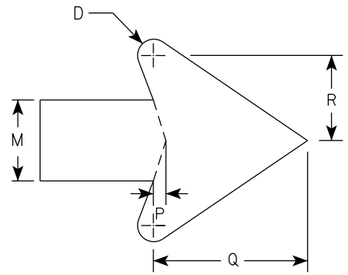
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 349 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(G)



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	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (G) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

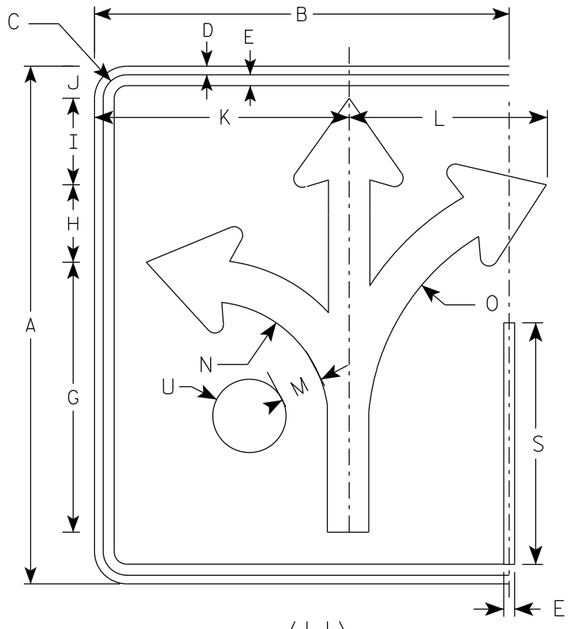
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 350	E

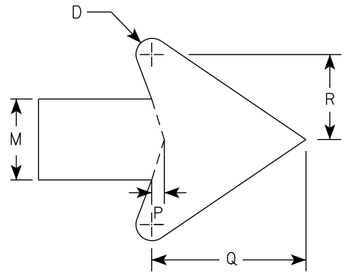
FILE NAME : C:\CAEfiles\Projects\stdplate_R38.dgn PLOT DATE : 21-MAY 2019 4:38 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(H)



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	24	1 3/8	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	6	3 1/8	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (H) Arrow

WISCONSIN DEPT OF TRANSPORTATION

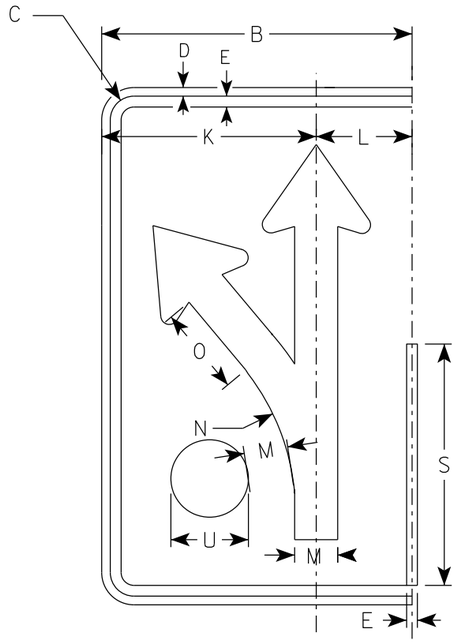
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

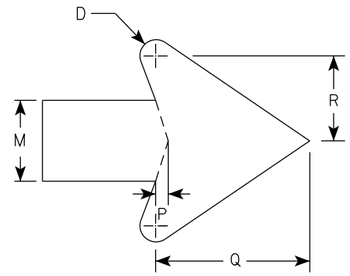
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 351	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(I)



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	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
2M	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
3	36	24	1 3/8	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4		2 1/2						6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0

STANDARD SIGN
R3-8 (I) Arrow

WISCONSIN DEPT OF TRANSPORTATION

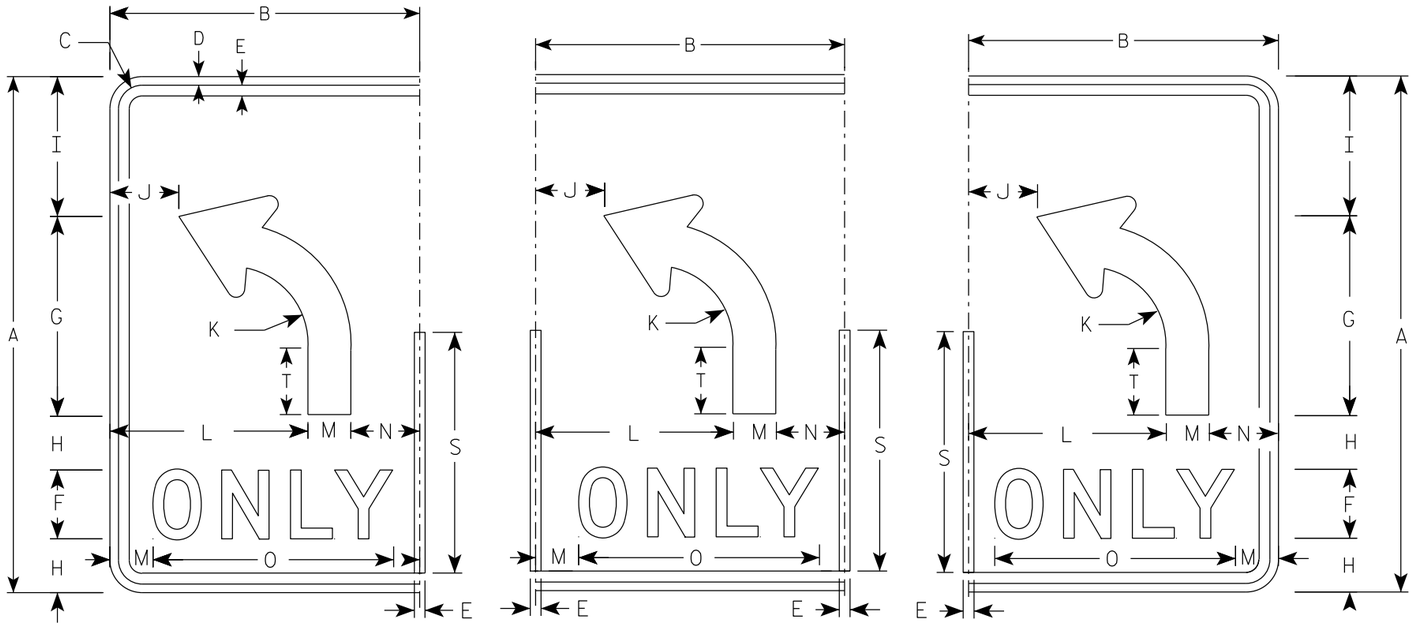
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

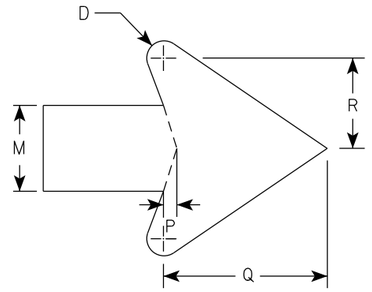
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 352 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



(L) (L) (L)



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	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
2M	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
3	36	24	1 3/8	1/2	5/8	5	14	3 1/2	9 3/4		5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8							6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0

STANDARD SIGN

R3-8 (L) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

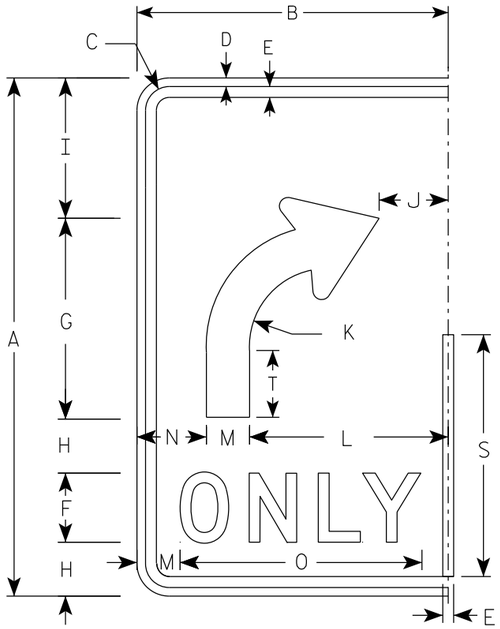
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

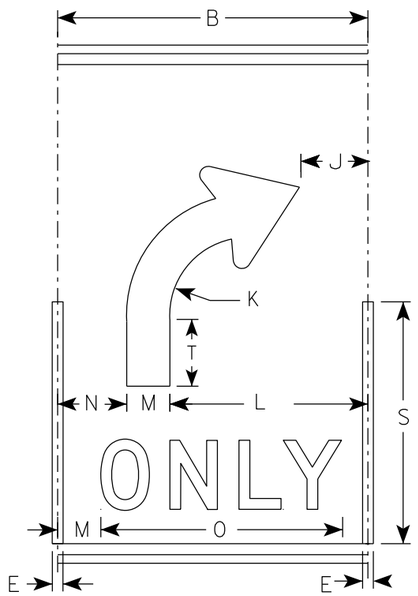
SHEET NO: 353 E

NOTES

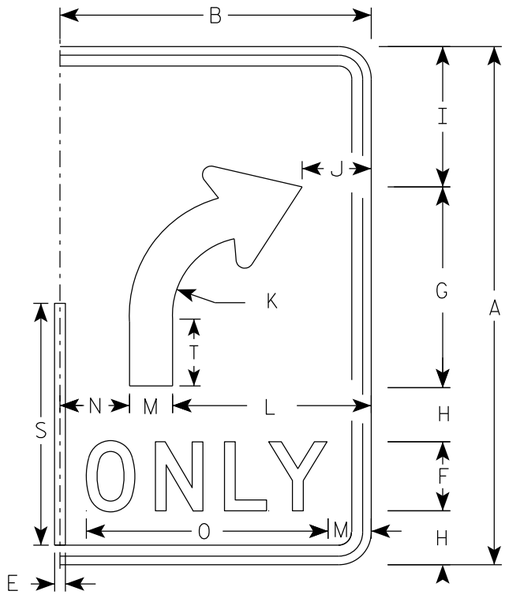
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



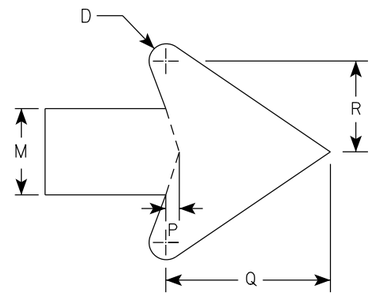
(R)



(R)



(R)



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	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
2M	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
3	36	24	1 3/8	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8							6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0

STANDARD SIGN
R3-8 (R) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

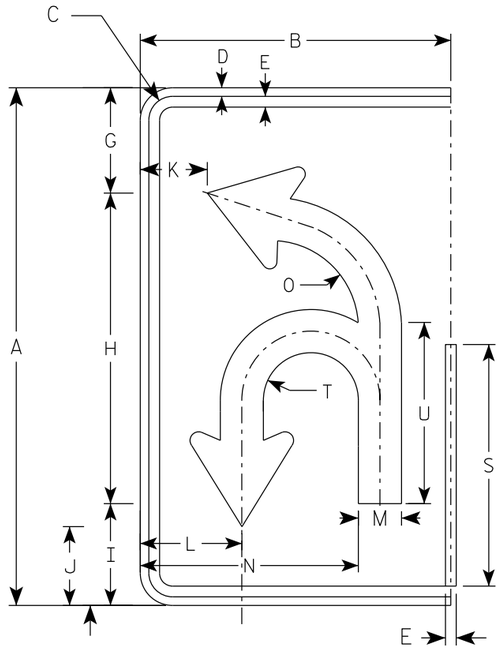
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

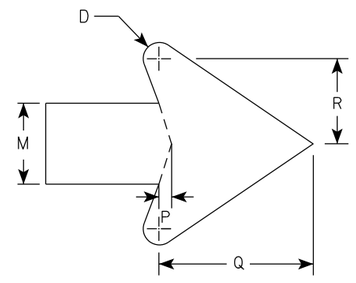
SHEET NO: 354 **E**

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(U)



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	18	1 3/8	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
2M	30	18	1 3/8	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
3	36	24	1 3/8	1/2	5/8		21 7/8	21 5/8	7 1/8	5 1/2	5 7/8	8 1/4	3	16 3/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4	3 1/4	12 5/8						6.0
4	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0
5	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0

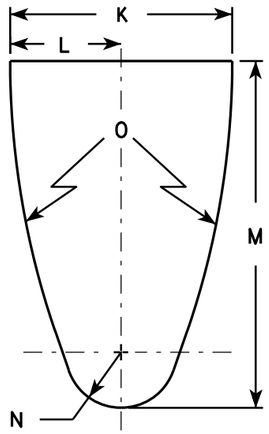
STANDARD SIGN
R3-8 (U) Arrow

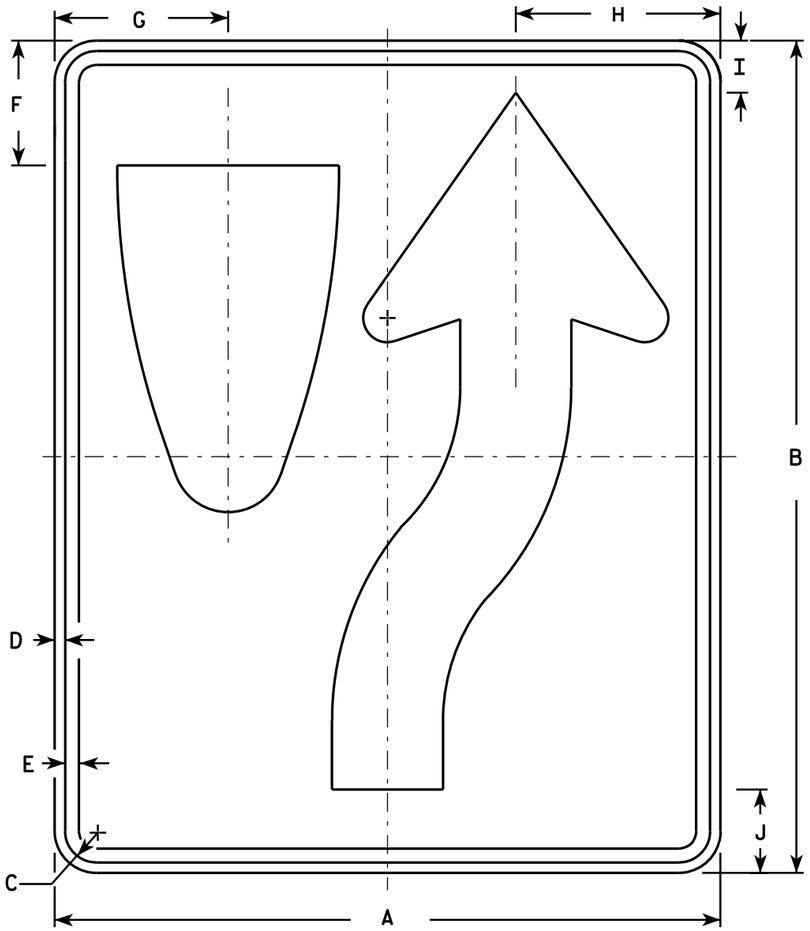
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 355 | E

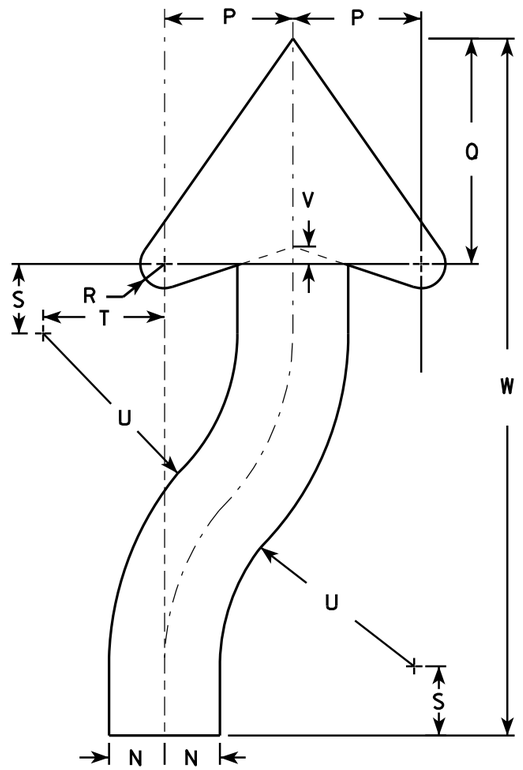




R4-7

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

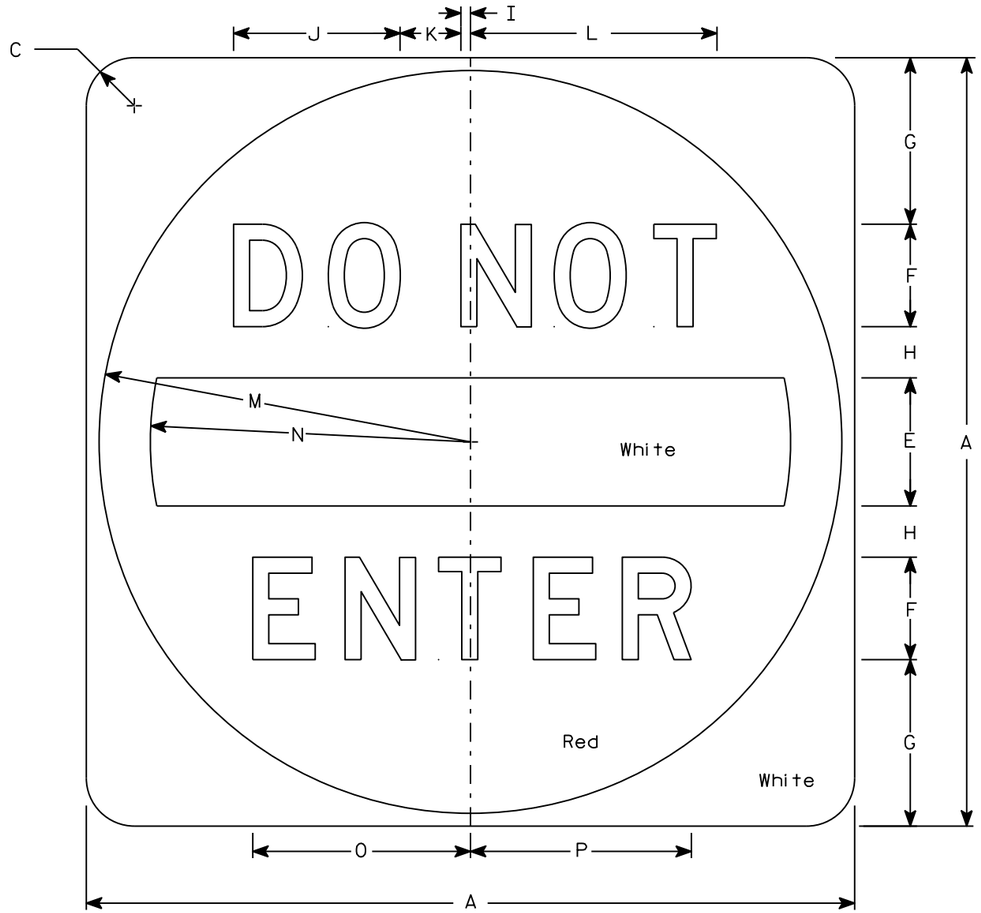
STANDARD SIGN
R4-7 & R4-8

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: 356	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

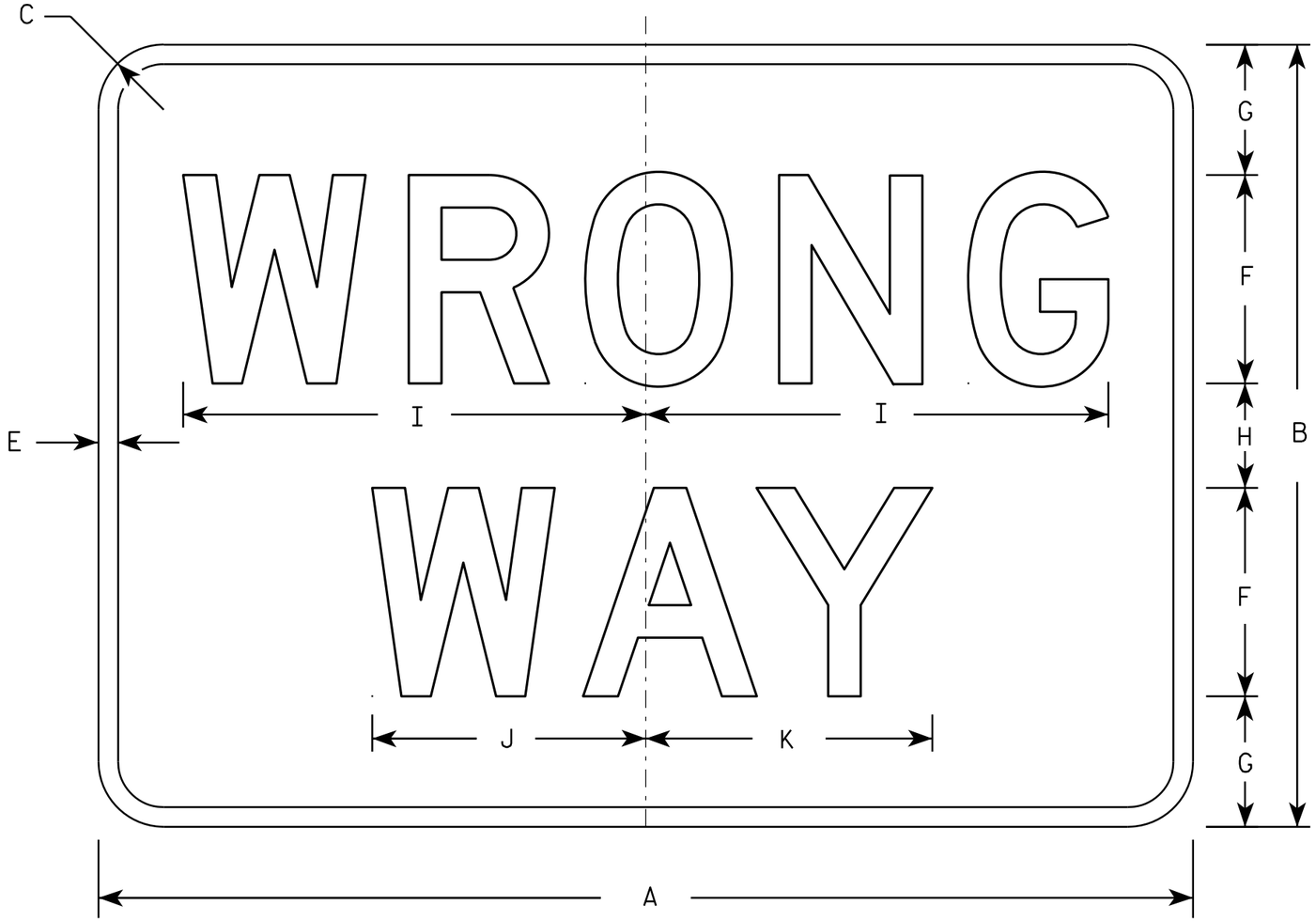
STANDARD SIGN
R5-1

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: 357 | E



R5-1A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

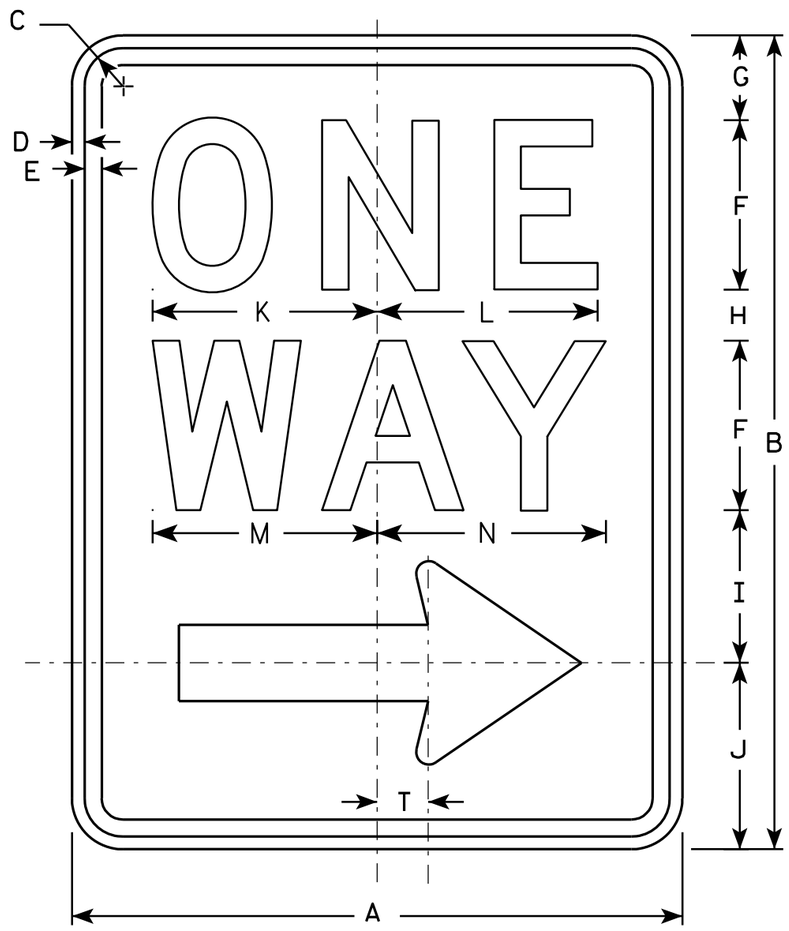
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

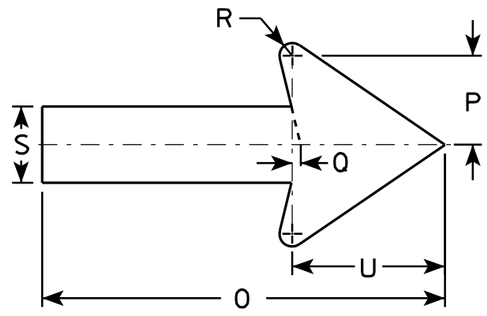
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 358	E



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: 359	E

R6-6

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D except Line 1 is 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
1																										
2S	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	9 1/8	8 1/8	8 1/2															
2M	30	36	1 3/8	1/2	5/8	8	3 1/4	2 3/4	12 1/4	10 1/2	11 1/2															
3	36	48	1 3/8	1/2	5/8	10	5 1/4	3 1/4	15 1/4	12 3/4	13 3/8															
4	36	48	1 3/8	1/2	5/8	10	5 1/4	3 1/4	15 1/4	12 3/4	13 3/8															
5																										

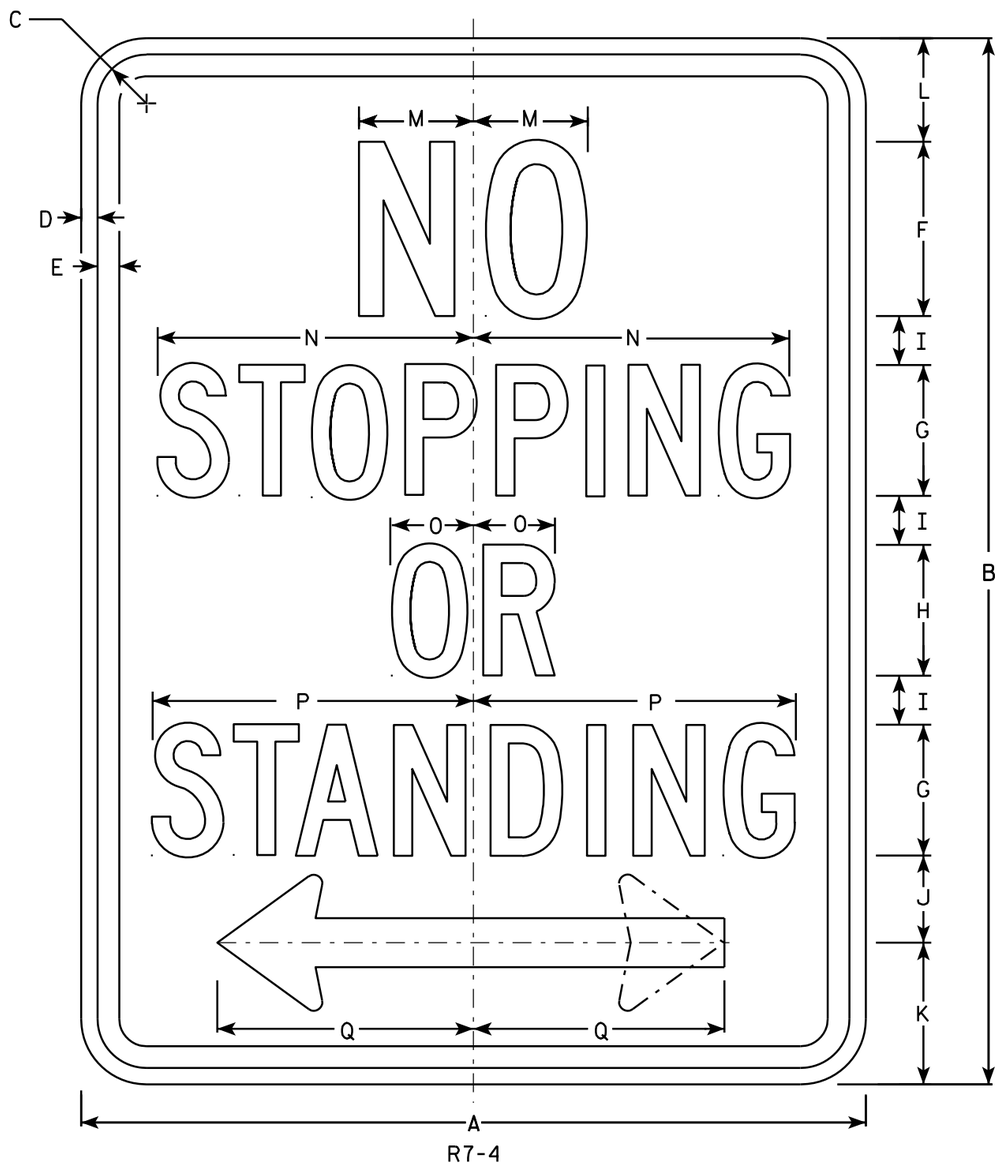
STANDARD SIGN
R6-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-6.1

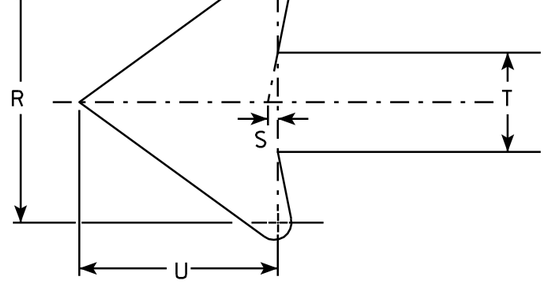
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 360	E



R7-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
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. R7-4L (left arrow)
   R7-4R (right arrow)
   R7-4D (double arrow)



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	12	18	1 1/8	3/8	3/8	3	2	2	1	1 1/2	2 1/2	2	2	4 7/8	1 1/4	4 7/8	3 7/8	1 3/4	1/8	3/4	1 1/2						1.5
2S	18	24	1 1/8	3/8	1/2	4	3	3	1 1/8	2	3 1/4	2 3/8	2 5/8	7 1/4	1 1/8	7 3/8	5 7/8	2 5/8	1/4	1 1/8	2 1/4						3.0
2M	24	30	1 1/8	3/8	1/2	5	4	3	1 1/2	3	4	2 1/2	3 3/8	10	2 1/2	10 1/4	7 3/4	3 1/2	1/4	1 1/2	3						5.0
3	24	30	1 1/8	3/8	1/2	5	4	3	1 1/2	3	4	2 1/2	3 3/8	10	2 1/2	10 1/4	7 3/4	3 1/2	1/4	1 1/2	3						5.0
4																											
5																											

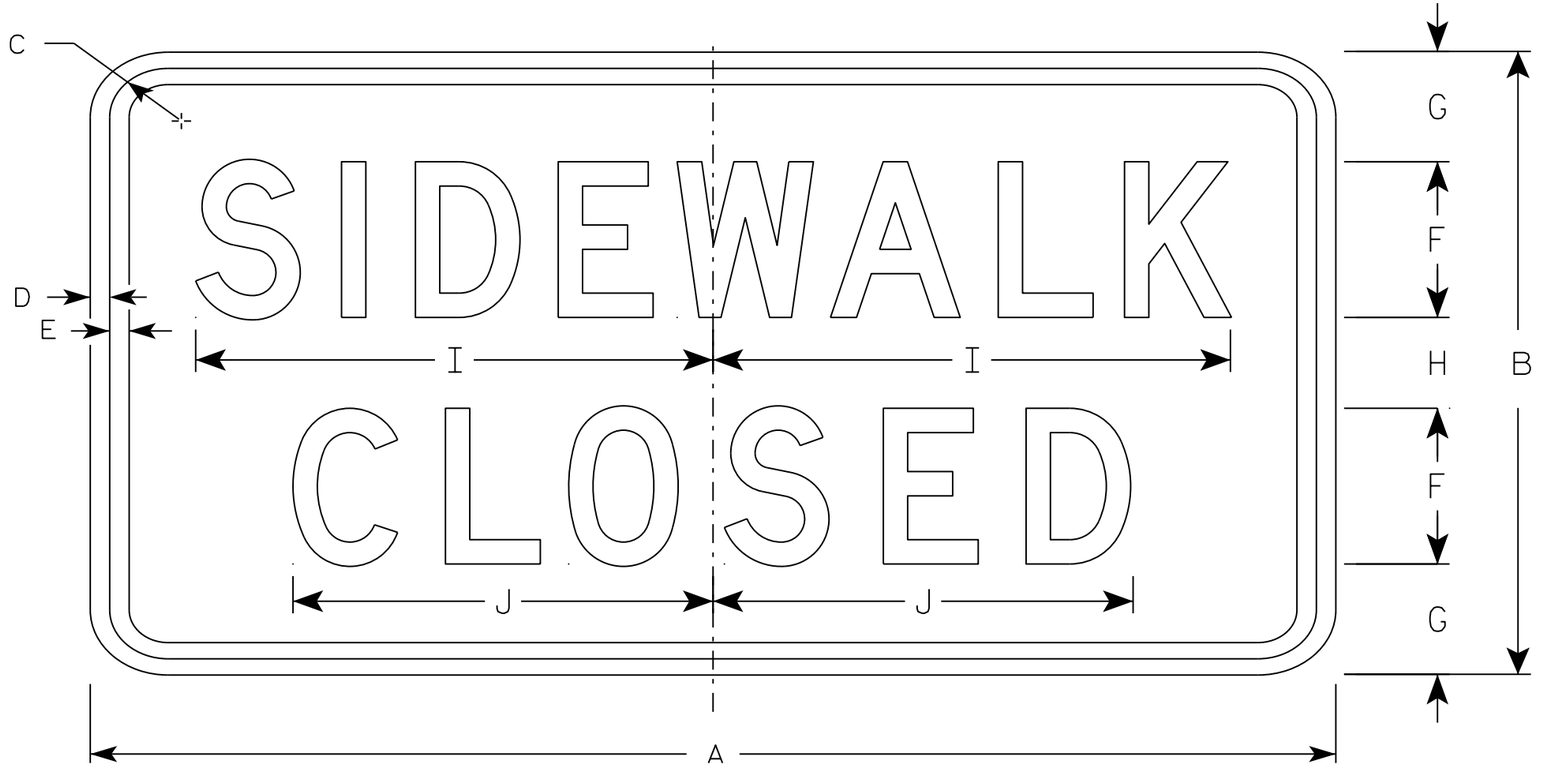
STANDARD SIGN
R7-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-4.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 361	E



R9-9

NOTES

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

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

STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

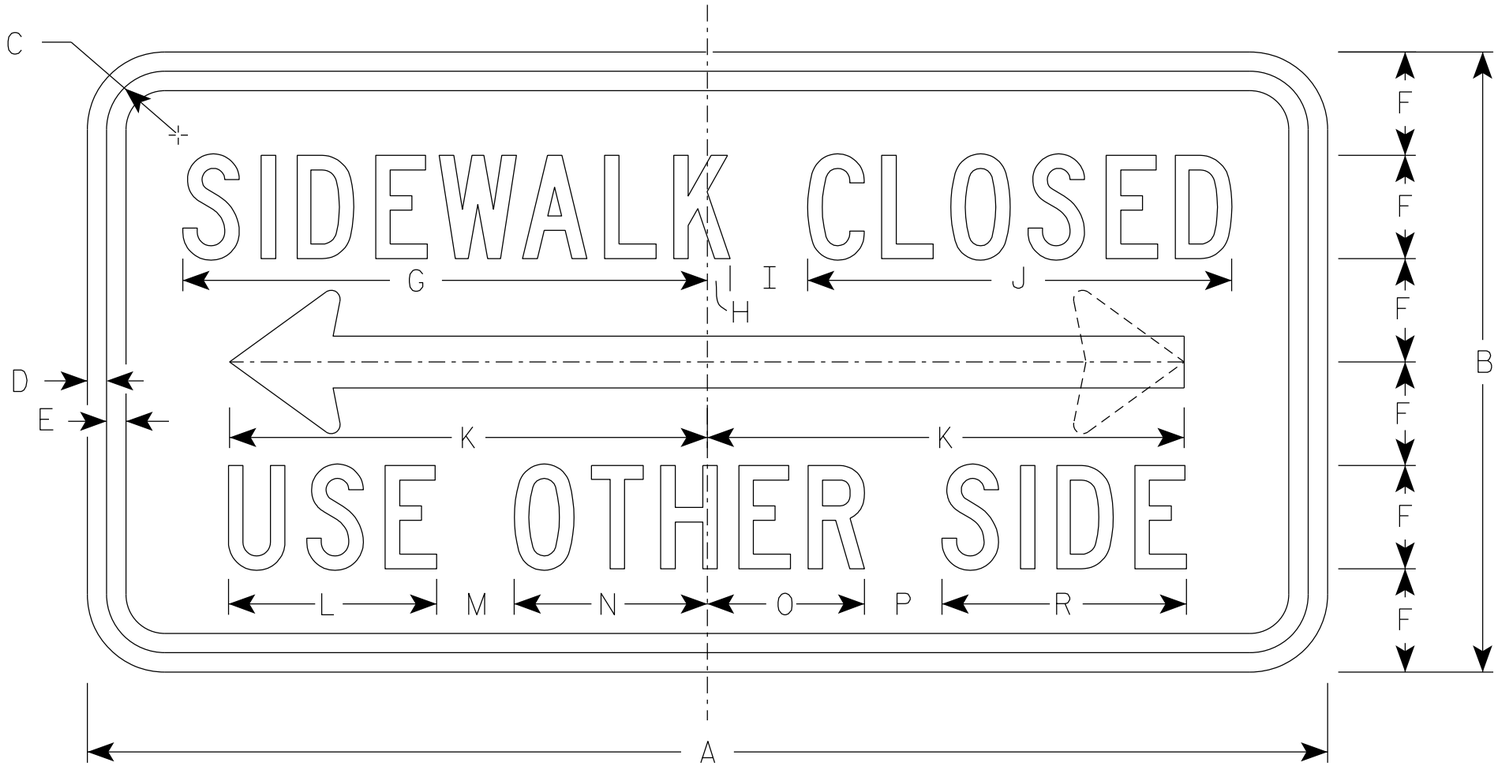
DATE 8/11/16 PLATE 362 R9-9.6

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

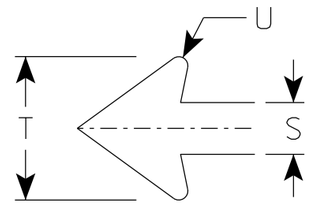
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for sidewalks. Use Size 3 for paths and trails.



R9-10



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	12	1 1/8	3/8	3/8	2	10 1/8	1/2	1 1/2	8 1/4	9 1/4	4	1 1/2	3 3/4	3	1 1/2		4 3/4	1	2 3/4	1/8						2.0
2M	24	12	1 1/8	3/8	3/8	2	10 1/8	1/2	1 1/2	8 1/4	9 1/4	4	1 1/2	3 3/4	3	1 1/2		4 3/4	1	2 3/4	1/8						2.0
3	30	15	1 1/8	3/8	1/2	2 1/2	12 3/4	1/2	2	10 1/4	12 3/8	5	2	4 5/8	3 3/4	2		5 7/8	1 1/4	3 5/8	1/4						3.125
4																											
5																											

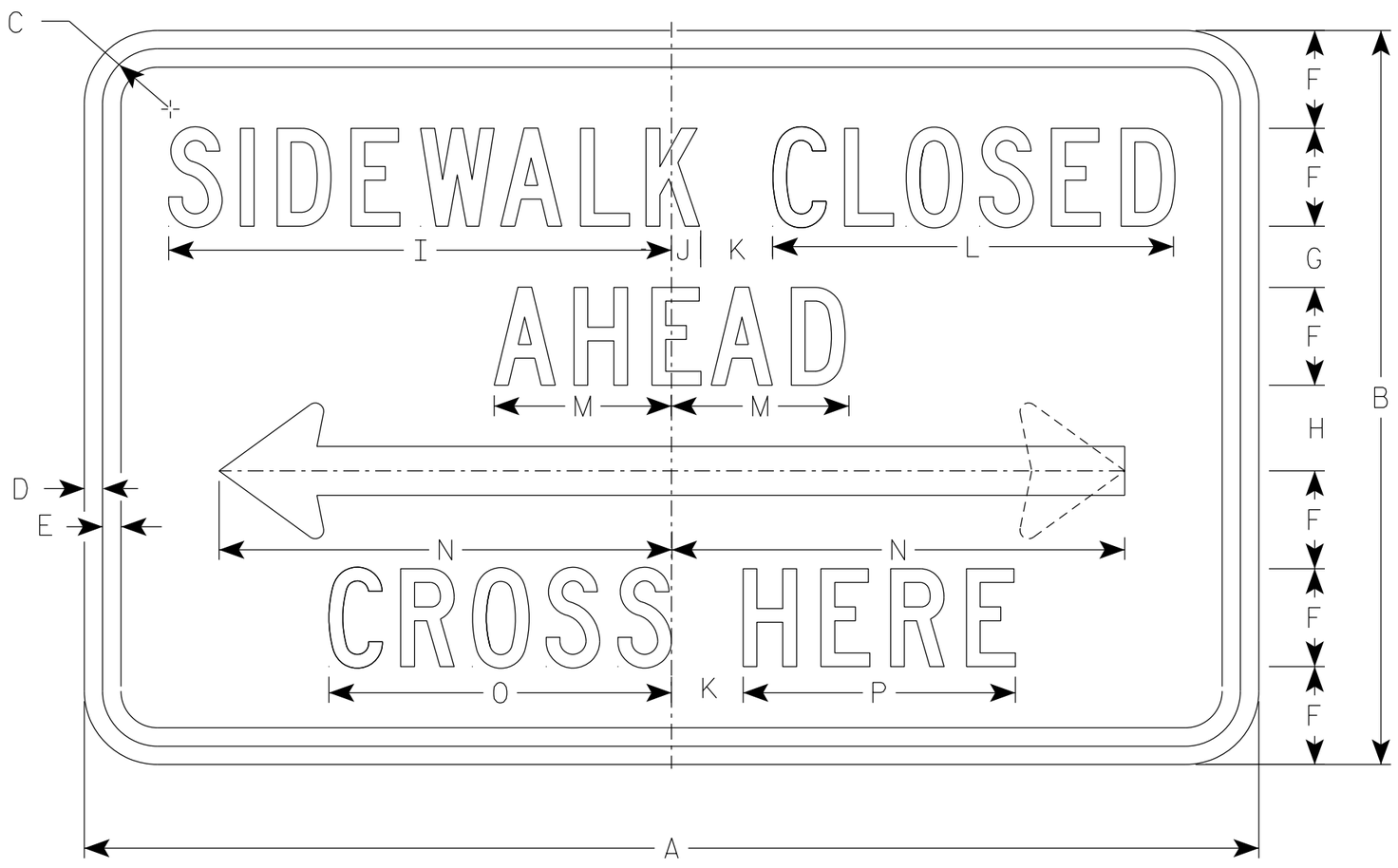
STANDARD SIGN
R9-10

WISCONSIN DEPT OF TRANSPORTATION

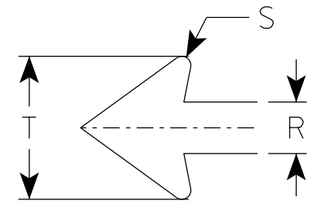
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/7/2020 PLATE NO. R9-10.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 363	E



R9-11



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C except Size 1 is Series D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.
6. R9-11 D (double arrow)
   R9-11 L (left arrow)
   R9-11 R (right arrow)

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
2M	24	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
3	30	15	1 1/8	3/8	1/2	2	1 1/2	1 1/2	13	3/4	2	10 1/4	4 5/8	12 3/8	8 7/8	6 7/8		1 1/4	1/4	3 5/8							3.125
4																											
5																											

STANDARD SIGN
R9-11

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 3/30/2021 PLATE NO. R9-11.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 364 | E

R10-70

R10-70L

NOTES

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

R10-70R

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	R10-70L&R Area sq. ft.	R10-70 Area sq. ft.
1																												
2S	36	72	2 1/4	3/4	1	6	5	4	18	17 1/2	14 1/8	9 1/8	8 1/2	6	16 3/4	30	23 3/4	66	2 3/8	23 7/8	23 7/8	8 3/4	23 1/4	23 1/2	26 7/8	27	18.0	16.5
2M	36	72	2 1/4	3/4	1	6	5	4	18	17 1/2	14 1/8	9 1/8	8 1/2	6	16 3/4	30	23 3/4	66	2 3/8	23 7/8	23 7/8	8 3/4	23 1/4	23 1/2	26 7/8	27	18.0	16.5
3																												
4																												
5																												

STANDARD SIGN
R10-70

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/4/11 PLATE NO. R10-70.2

PROJECT NO:

SHEET NO: 365 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R1070.DGN PLOT DATE : 04-APR-2011 14:41 PLOT BY : mscj9h PLOT NAME :

WISDOT/CADDS SHEET 42

7

7

R10-71

R10-71L

NOTES

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

R10-71R

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	R10-71L&R Area sq. ft.	R10-71 Area sq. ft.
1																												
2S	72	36	2 1/4	3/4	1	18	5	4	6	20 5/8	11 3/4	9 1/8	8 1/2	12 7/8	9 7/8	16 1/8	23 7/8	30	5 5/8	26 3/4	66	23 5/8	8 3/4	13	26 7/8	27	18.0	16.5
2M	72	36	2 1/4	3/4	1	18	5	4	6	20 5/8	11 3/4	9 1/8	8 1/2	12 7/8	9 7/8	16 1/8	23 7/8	30	5 5/8	26 3/4	66	23 5/8	8 3/4	13	26 7/8	27	18.0	16.5
3																												
4																												
5																												

STANDARD SIGN
R10-71

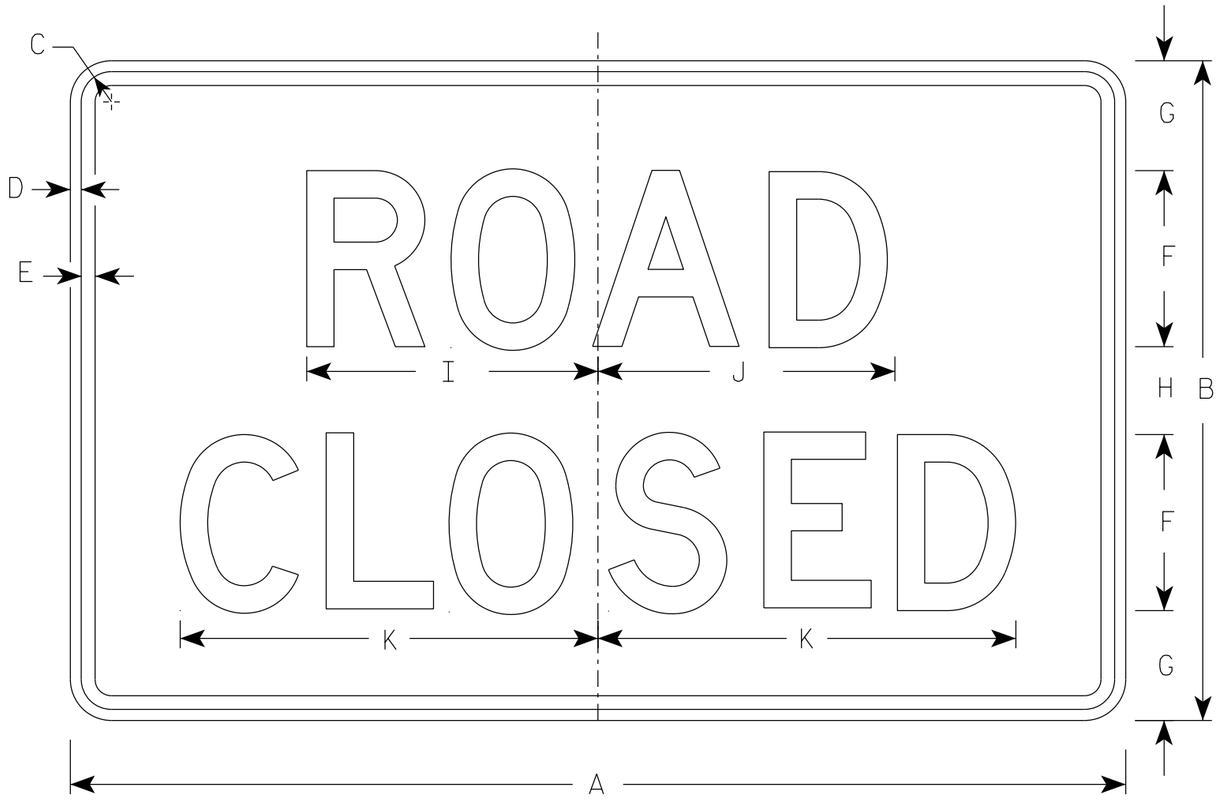
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/4/11 PLATE NO. R10-71.3

PROJECT NO:

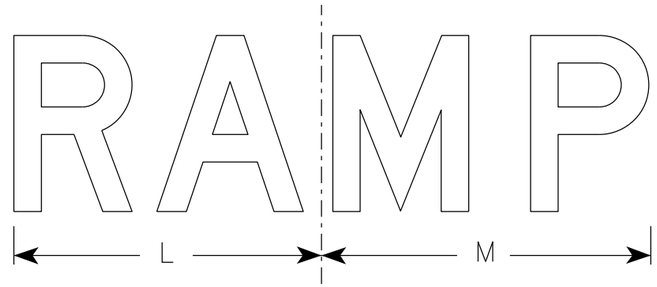
SHEET NO: 366 E



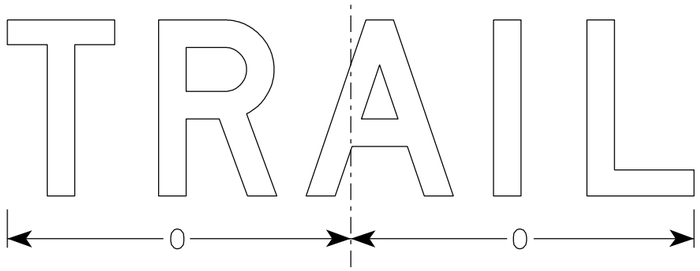
R11-2

NOTES

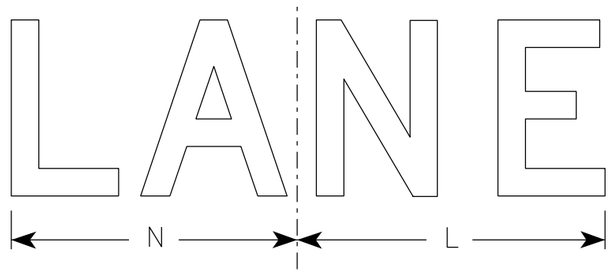
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



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	15 5/8												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	15 5/8												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	15 5/8												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	15 5/8												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	15 5/8												10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

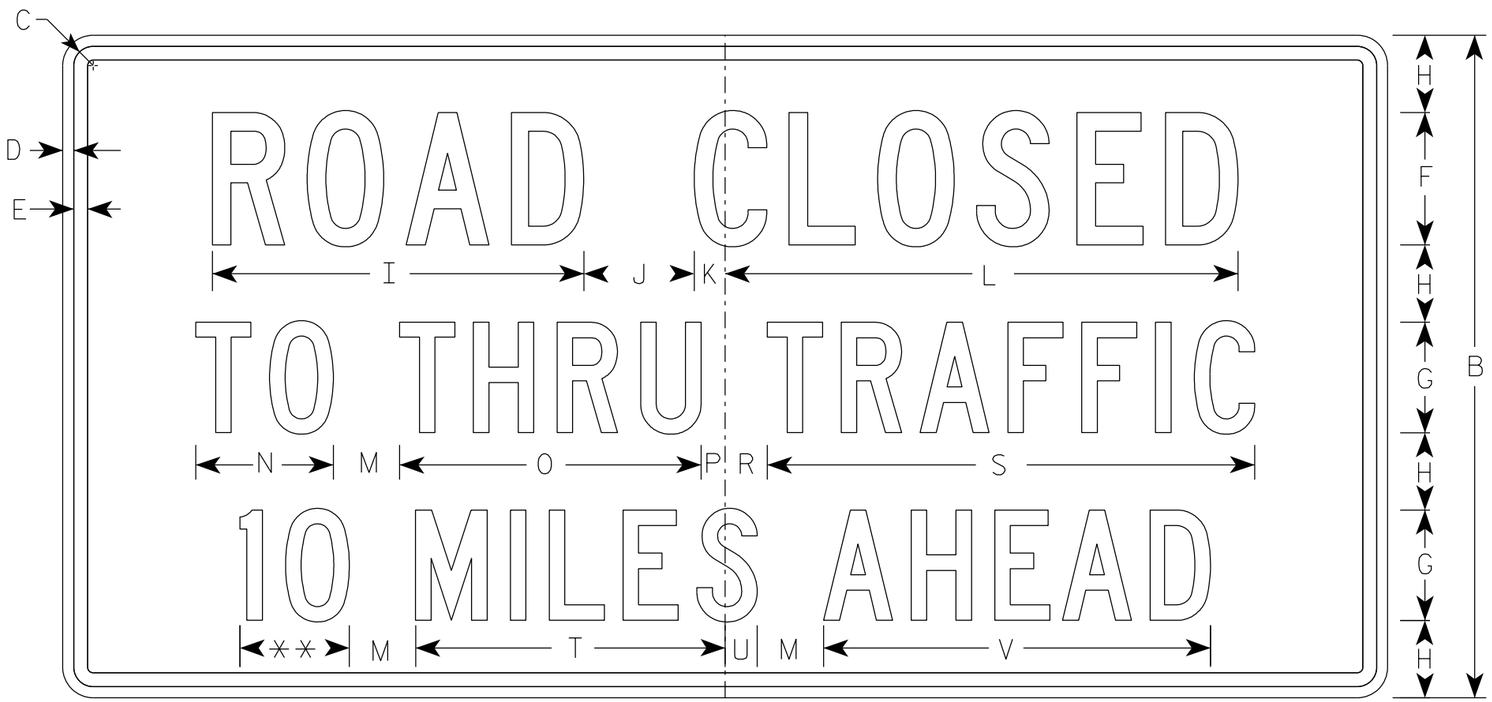
DATE 3/29/2021 PLATE NO. R11-2.11

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

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112.dgn PLOT DATE : 29-MAR 2021 8:15 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

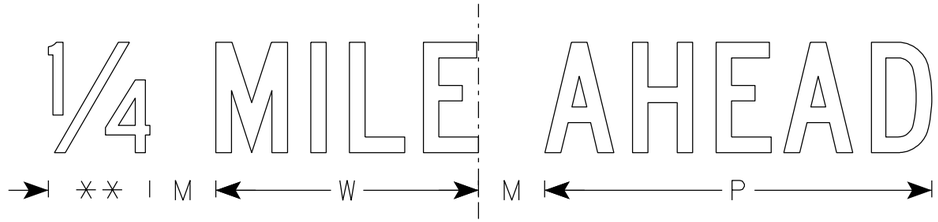
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



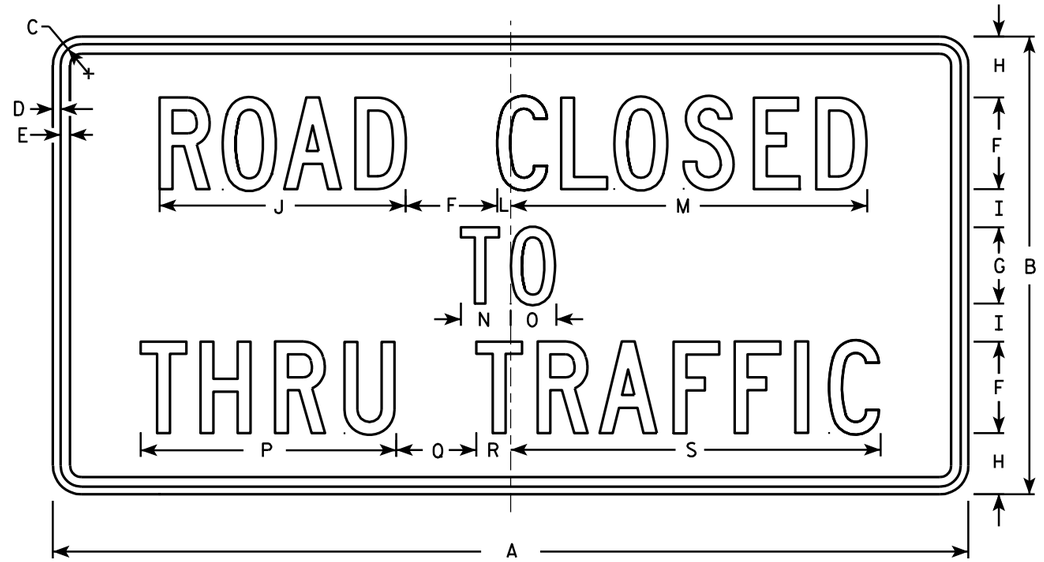
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/4	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 6/14/2021 PLATE NO. R11-3.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 368	E



R11-4

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

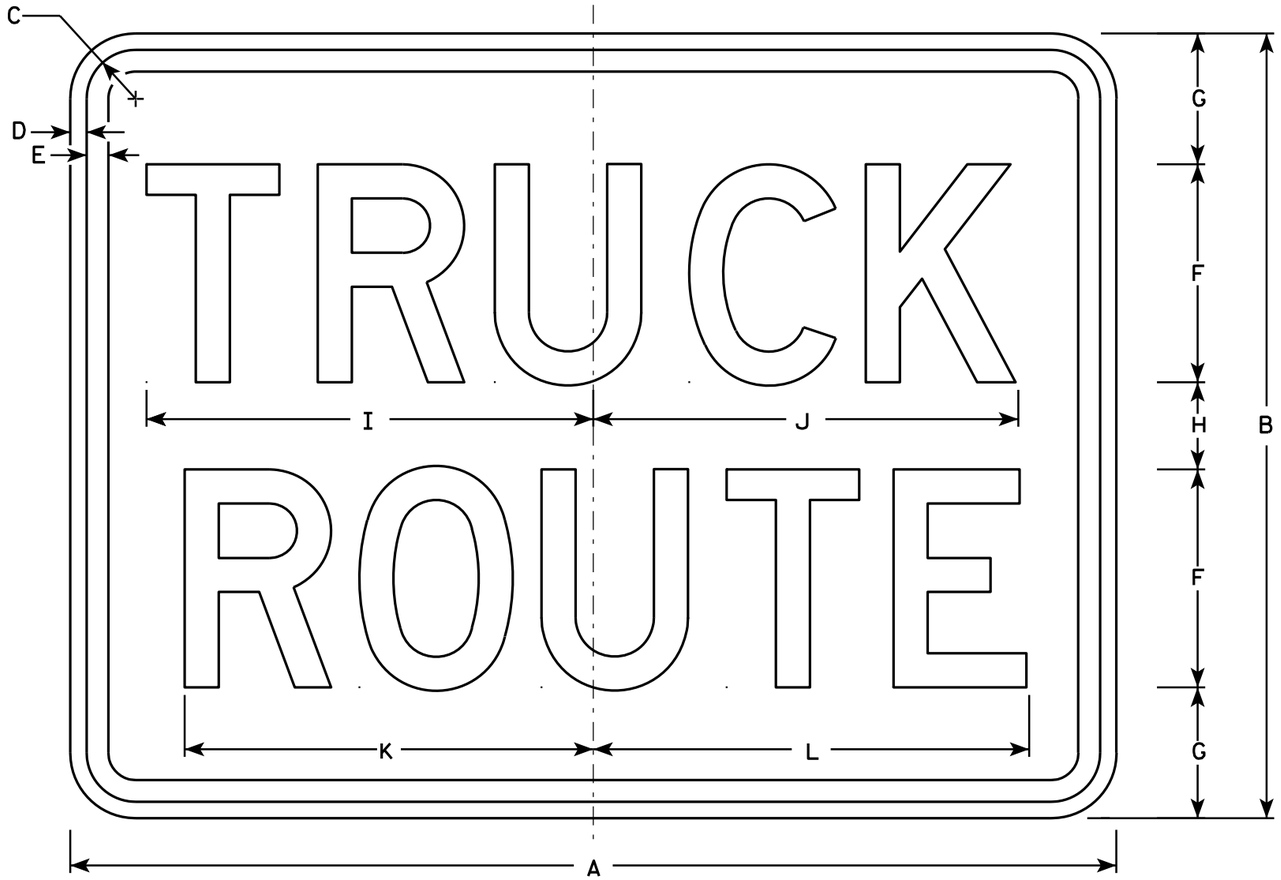
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 369	E



R14-1

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																											
2	24	18	1 1/8	3/8	1/2	5	3	2	10 1/4	9 3/4	9 3/8	10															3.0
2	24	18	1 1/8	3/8	1/2	5	3	2	10 1/4	9 3/4	9 3/8	10															3.0
3	30	24	1 1/8	3/8	1/2	6	4	4	12 1/4	11 3/4	11 1/4	12															5.0
4																											
5																											

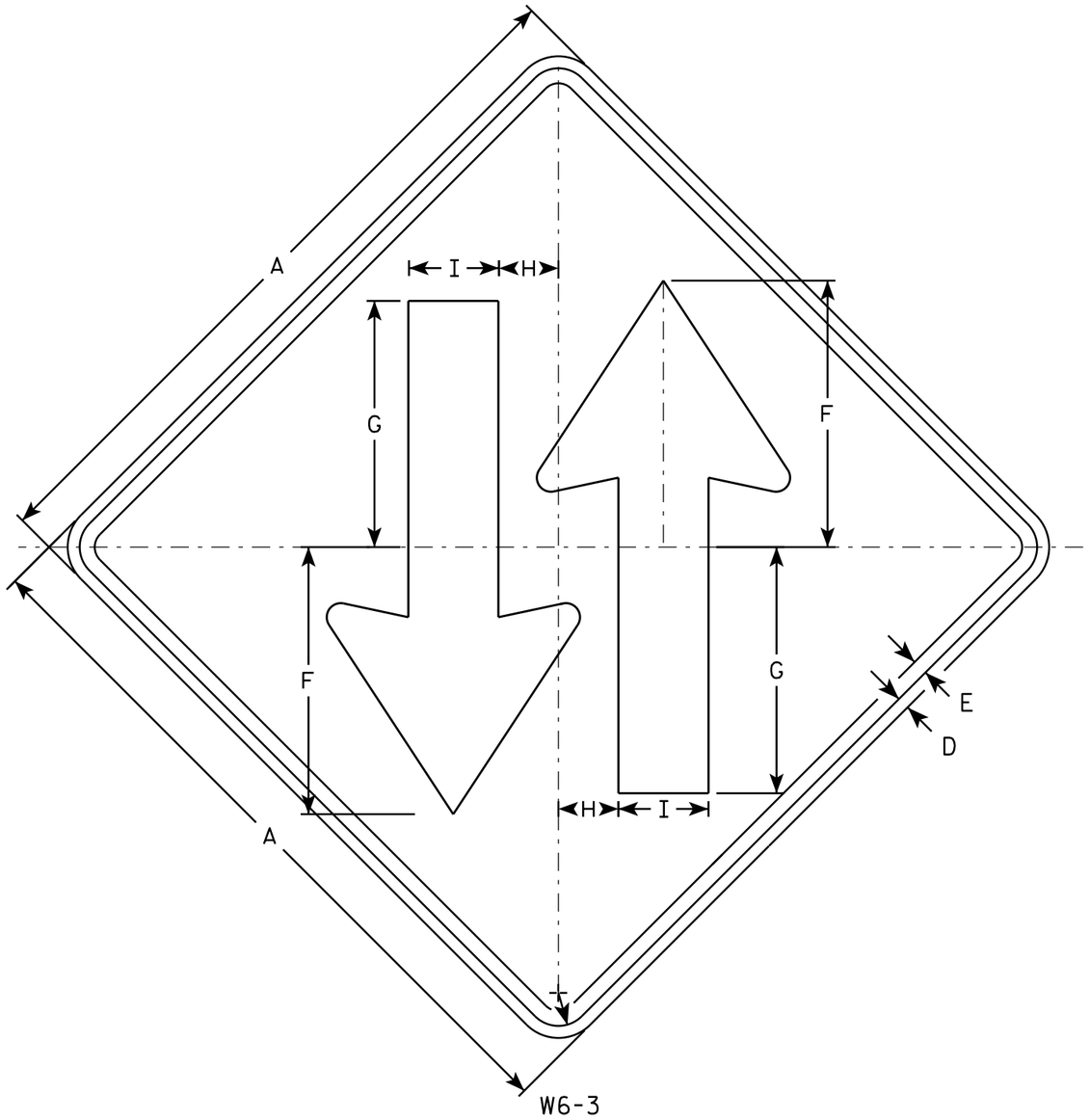
STANDARD SIGN
R14-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R14-1.6

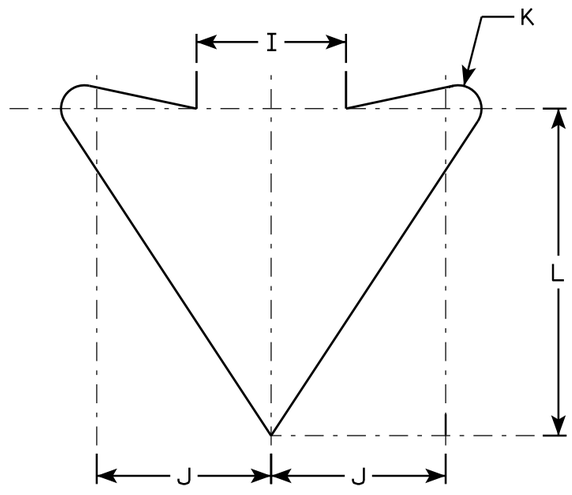
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 370	E



W6-3

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	11 1/8	10 1/4	2 1/2	3 3/4	4 3/8	5/8	8 1/4															6.25
2S	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
2M	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
3																											
4	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0
5	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0

STANDARD SIGN
W6-3

WISCONSIN DEPT OF TRANSPORTATION

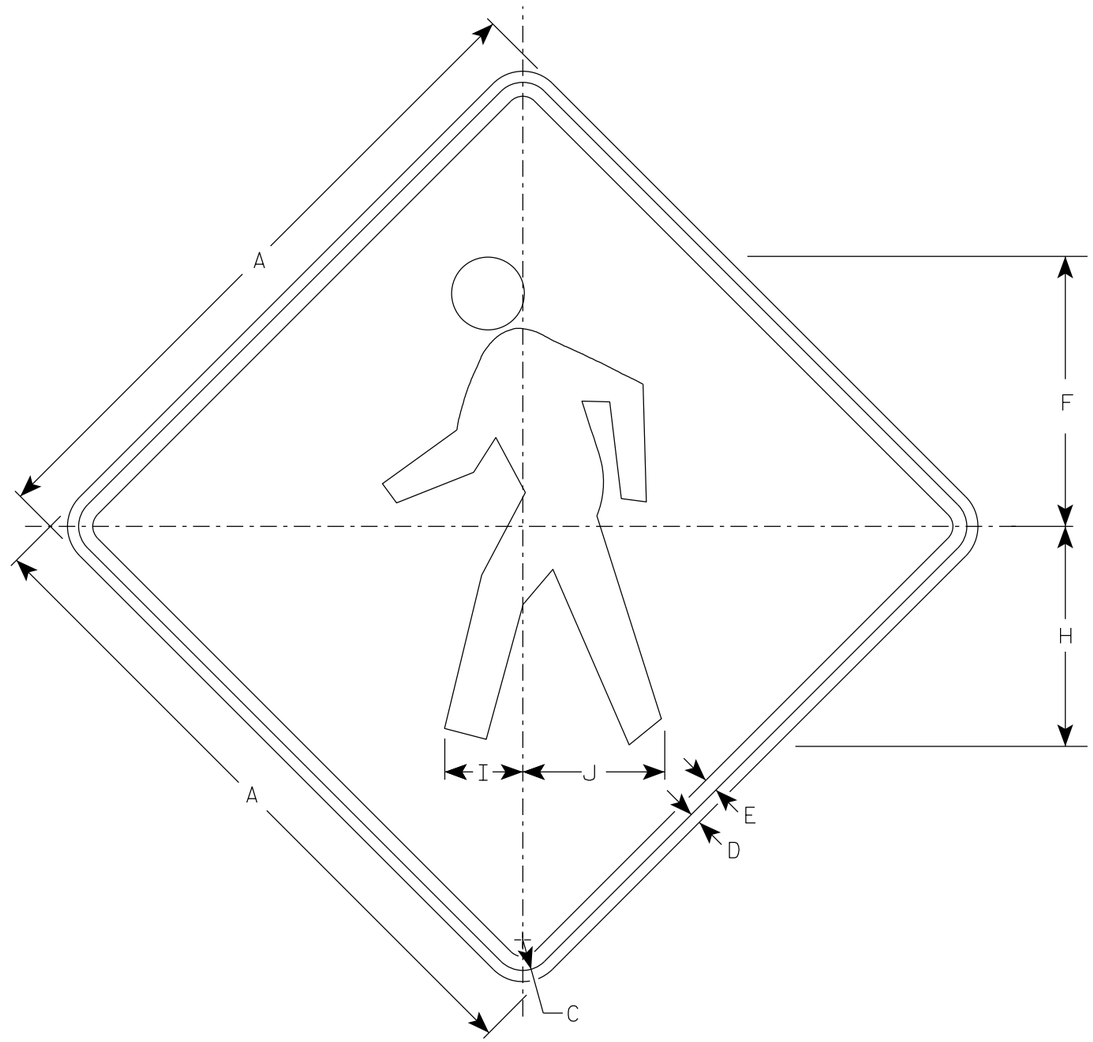
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/10/16 PLATE W6-3.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W63.DGN PLOT DATE : 10-MAR-2016 14:01 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.080757:1.000000
WISDOT/CADDS SHEET 42



W11-2

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black

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

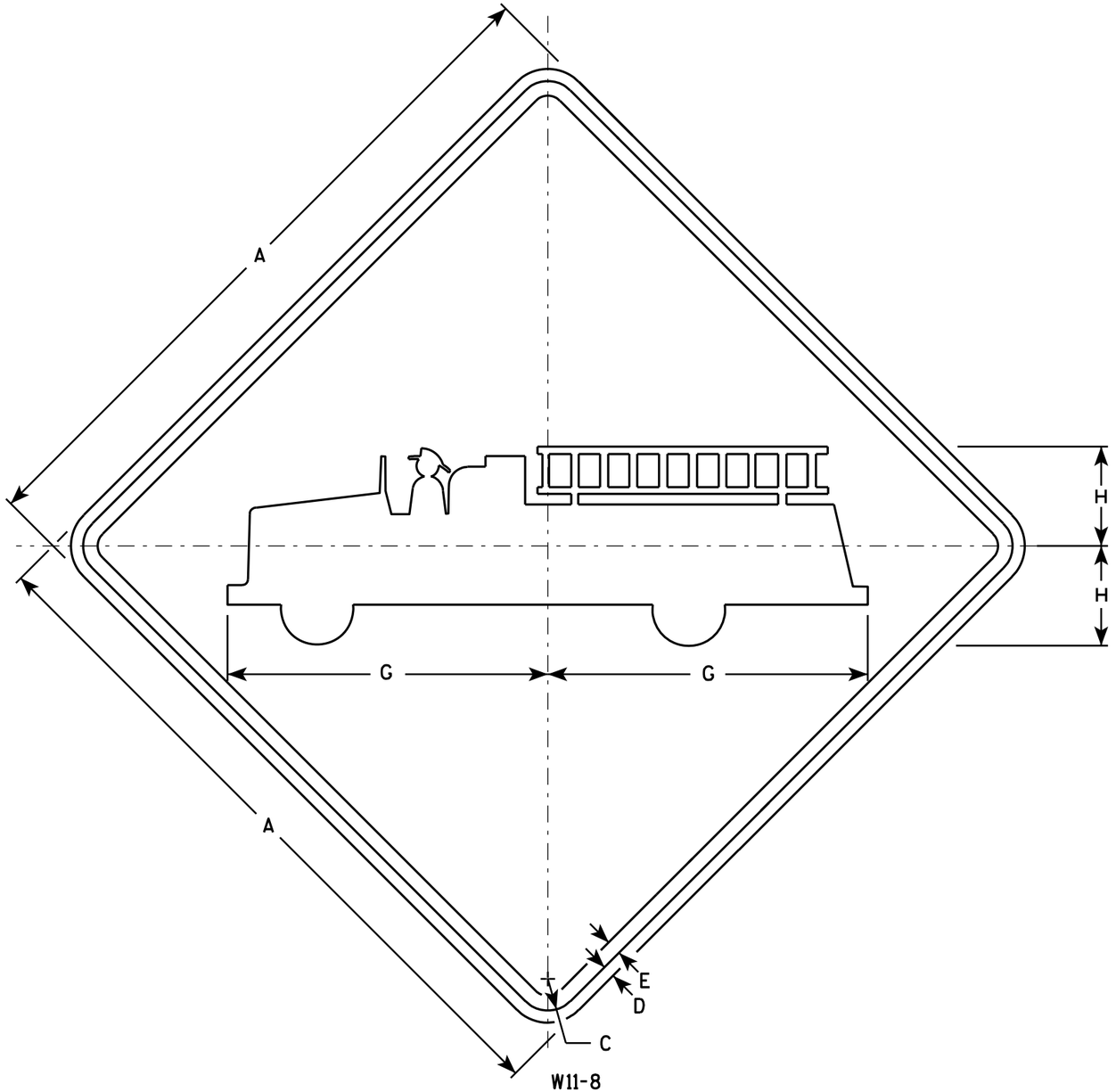
STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/8/2020 PLATE NO. W11-2.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 372	E



W11-8

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		11	3 3/8																			4.0
2S	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
2M	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
3	36		1 5/8	5/8	3/4		16 1/2	5 1/4																			9.0
4	48		2 1/4	3/4	1		22	7																			16.0
5																											

STANDARD SIGN
W11-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

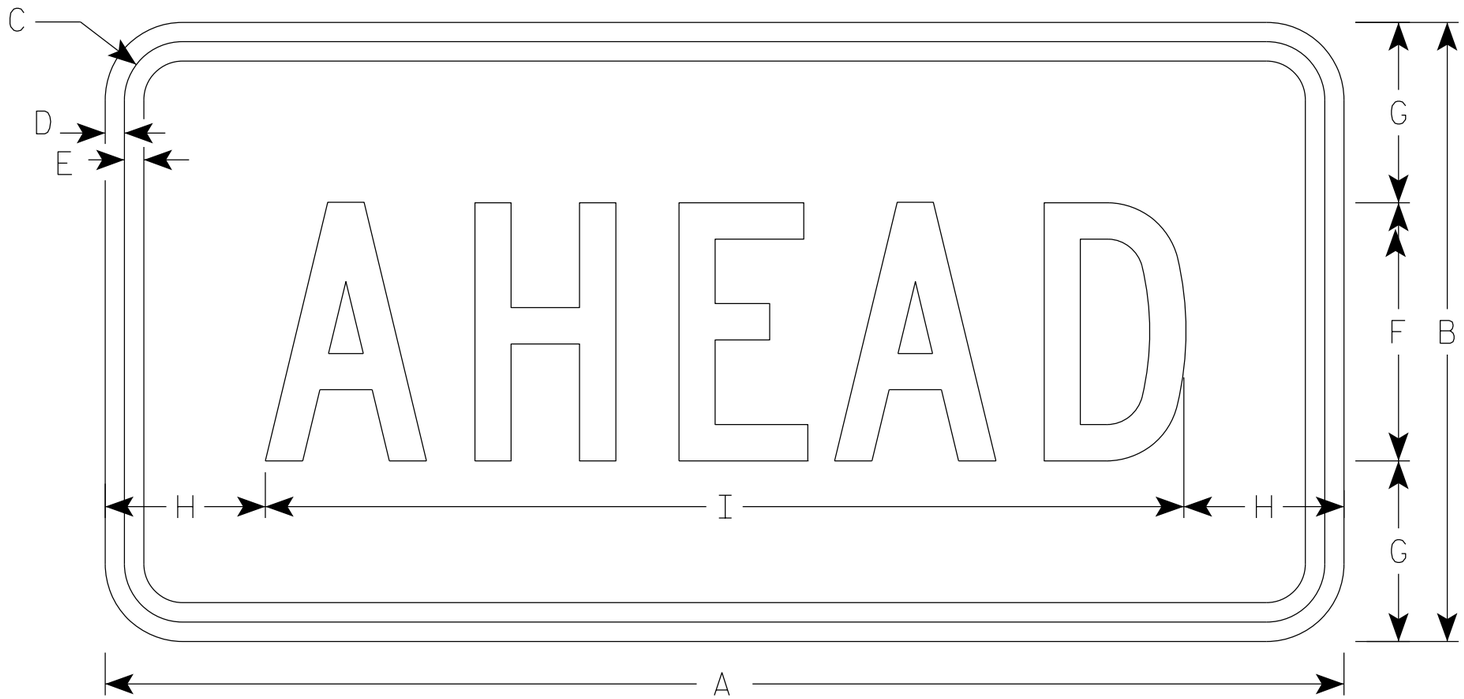
DATE 3/13/13 PLATE NO. W11-8.7

PROJECT NO:

SHEET NO: 373 E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - C



W16-9P

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

STANDARD SIGN
W16-9P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/7/19 PLATE NO. W16-9P.7

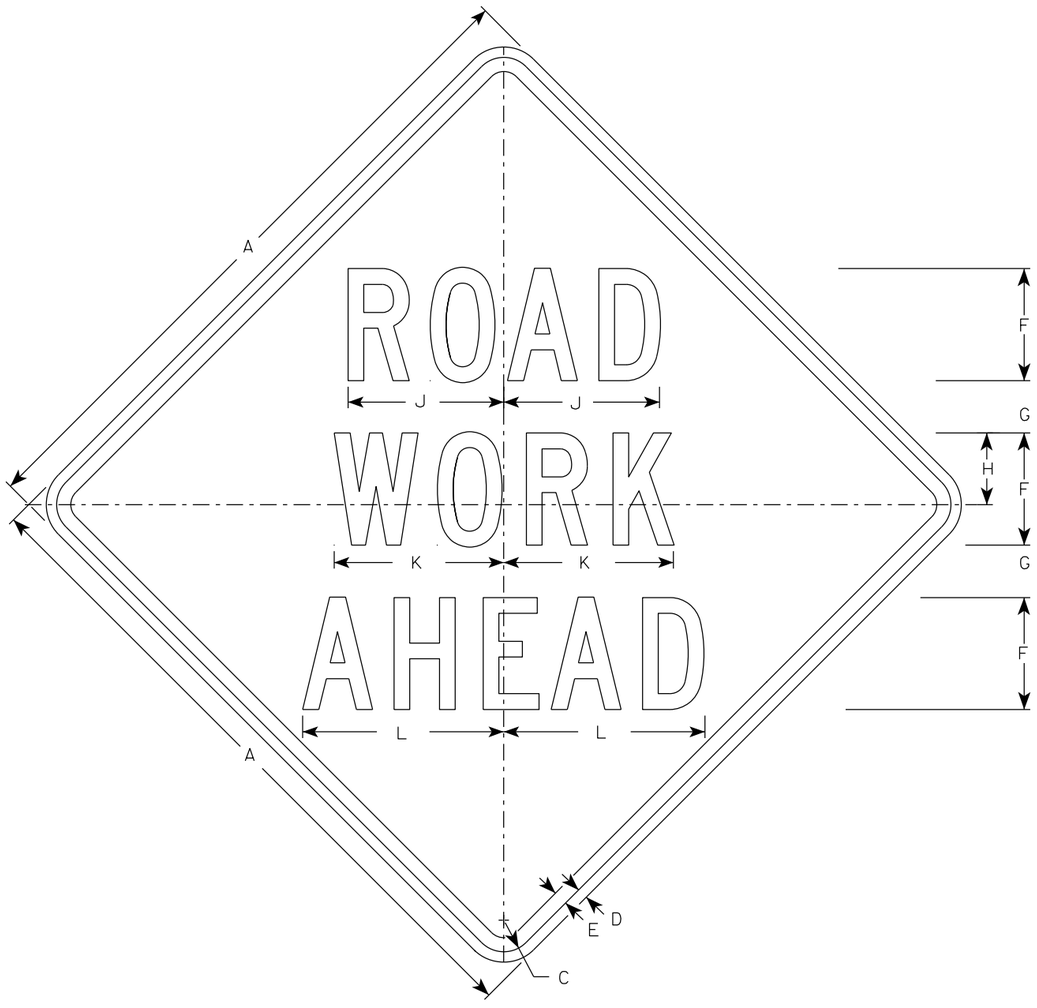
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 374 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W169P.DGN PLOT DATE : 07-MAR-2019 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

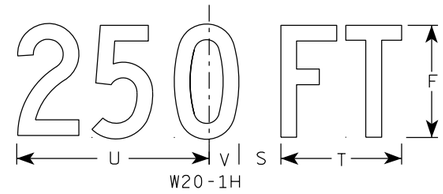
7

NOTES

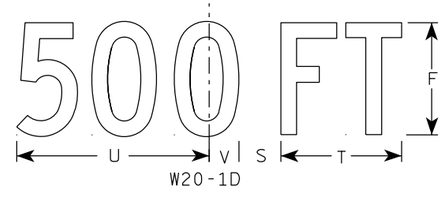
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1A

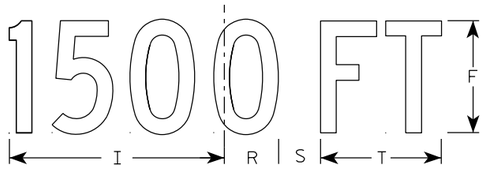


W20-1H

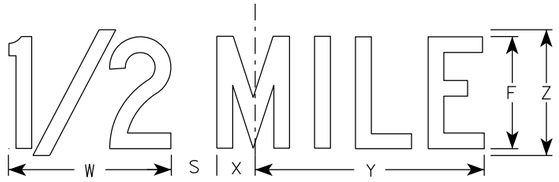


W20-1D

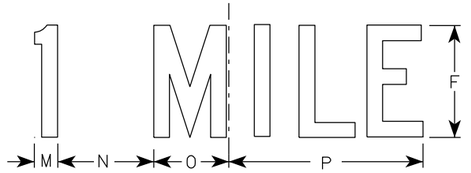
W20-1C



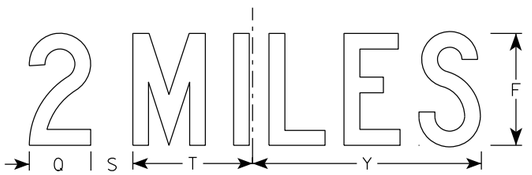
W20-1B



W20-1G



W20-1F



W20-1E

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	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	3 1/4	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, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2020 PLATE NO. W20-1.11

PROJECT NO:

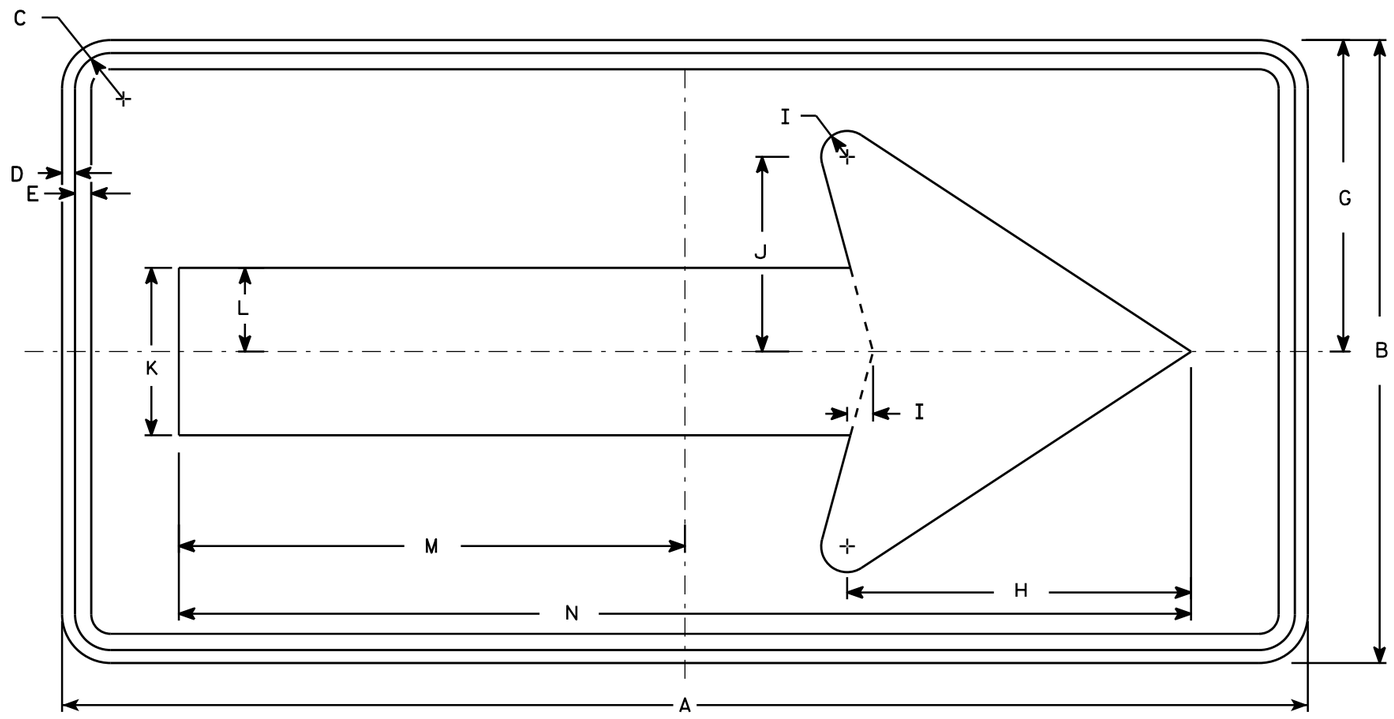
SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 25-MARCH-2020 PLOT BY : dotc4c

WISDOT/CADDS SHEET 42

7

7



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

STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
							NOTE 1	NOTE 2	NOTE 3		1.00 NOTE 1	1.25	1.30 NOTE 5	0.80 NOTE 7	NOTE 8
102+00	10200.00	0.00	0.00	10.00	0.00	0.00	0	0	0	0	0	0	0	0	0
102+50	10250.00	50.00	95.20	10.00	0.00	75.00	88	19	0	69	88	0	90	55	138
102+70.95	10270.95	20.95	94.09	10.00	0.00	31.43	73	8	0	41	161	0	143	88	244
102+75	10275.00	4.05	98.93	10.00	0.00	6.07	14	1	0	3	175	0	147	90	260
102+80	10280.00	5.00	99.39	10.00	0.00	7.50	18	2	0	1	193	0	148	91	277
102+85	10285.00	5.00	99.07	10.00	0.00	7.50	18	2	0	1	211	0	150	92	294
102+90	10290.00	5.00	98.96	10.00	0.00	7.50	18	2	0	1	229	0	151	93	311
102+95	10295.00	5.00	98.92	10.00	0.00	7.50	18	2	0	1	247	0	152	94	328
103+00	10300.00	5.00	99.76	10.00	0.00	7.50	18	2	0	1	265	0	153	94	345
103+05	10305.00	5.00	100.55	10.00	0.00	7.50	19	2	0	1	284	0	155	95	363
103+10	10310.00	5.00	100.37	10.00	0.00	7.50	19	2	0	1	303	0	156	96	381
103+15	10315.00	5.00	99.71	10.00	0.00	7.50	19	2	0	1	322	0	157	97	399
103+20	10320.00	5.00	98.66	10.00	0.00	7.50	18	2	0	1	340	0	159	98	416
103+25	10325.00	5.00	97.36	10.00	0.00	7.50	18	2	0	1	358	0	160	98	433
103+30	10330.00	5.00	96.34	10.00	0.00	7.50	18	2	0	1	376	0	161	99	450
103+32.469	10332.47	2.47	93.33	10.00	0.08	3.70	9	1	0	1	385	0	163	100	459
103+50	10350.00	17.53	99.29	10.00	0.00	26.30	63	6	0	10	448	0	176	108	526
104+00	10400.00	50.00	126.30	10.00	0.00	75.00	209	19	0	94	657	0	298	183	810
104+50	10450.00	50.00	145.43	10.00	0.00	75.00	252	19	0	139	909	0	478	294	1,182
105+00	10500.00	50.00	132.12	10.00	0.07	75.00	257	19	0	139	1,166	0	659	406	1,559
105+50	10550.00	50.00	97.73	10.00	0.76	75.00	213	19	1	139	1,379	1	840	517	1,891
105+81.887	10581.89	31.89	102.71	10.00	3.48	47.83	118	12	3	73	1,497	4	935	575	2,066
105+85	10585.00	3.11	110.14	10.00	1.11	4.67	12	1	0	3	1,509	0	939	578	2,080
105+90	10590.00	5.00	125.11	10.00	0.74	7.50	22	2	0	1	1,531	0	940	578	2,101
105+95	10595.00	5.00	146.40	10.00	0.00	7.50	25	2	0	1	1,556	0	941	579	2,125
106+00	10600.00	5.00	161.17	10.00	0.00	7.50	28	2	0	1	1,584	0	943	580	2,152
106+05	10605.00	5.00	157.23	10.00	0.00	7.50	29	2	0	1	1,613	0	944	581	2,180
106+10	10610.00	5.00	162.76	10.00	0.00	7.50	30	2	0	1	1,643	0	945	582	2,209
106+15	10615.00	5.00	161.15	10.00	0.00	7.50	30	2	0	1	1,673	0	946	582	2,238
106+20	10620.00	5.00	157.18	10.00	0.00	7.50	29	2	0	1	1,702	0	948	583	2,266
106+25	10625.00	5.00	148.49	10.00	0.00	7.50	28	2	0	1	1,730	0	949	584	2,293
106+30	10630.00	5.00	138.82	10.00	0.00	7.50	27	2	0	1	1,757	0	950	585	2,319
106+35	10635.00	5.00	127.98	10.00	0.00	7.50	25	2	0	1	1,782	0	952	586	2,343
106+40	10640.00	5.00	117.04	10.00	0.00	7.50	23	2	0	1	1,805	0	953	586	2,365
106+45	10645.00	5.00	104.54	10.00	0.00	7.50	21	2	0	1	1,826	0	954	587	2,385
106+50	10650.00	5.00	92.44	10.00	0.00	7.50	18	2	0	1	1,844	0	956	588	2,402
106+55	10655.00	5.00	94.71	10.00	0.00	7.50	17	2	0	1	1,861	0	957	589	2,418
106+60	10660.00	5.00	103.35	10.00	0.00	7.50	18	2	0	1	1,879	0	958	590	2,435
106+65	10665.00	5.00	112.07	10.00	0.00	7.50	20	2	0	1	1,899	0	959	590	2,454
106+70	10670.00	5.00	119.23	10.00	0.00	7.50	21	2	0	1	1,920	0	961	591	2,474

STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
							NOTE 1	NOTE 2	NOTE 3		1.00 NOTE 1	1.25	1.30 NOTE 5	0.80 NOTE 7	NOTE 8
106+75	10675.00	5.00	127.55	10.00	0.00	7.50	23	2	0	1	1,943	0	962	592	2,496
106+80	10680.00	5.00	135.98	10.00	0.00	7.50	24	2	0	1	1,967	0	963	593	2,519
106+85	10685.00	5.00	146.66	10.00	0.00	7.50	26	2	0	1	1,993	0	965	594	2,544
106+90	10690.00	5.00	155.32	10.00	0.00	7.50	28	2	0	1	2,021	0	966	594	2,571
106+95	10695.00	5.00	160.22	10.00	0.00	7.50	29	2	0	1	2,050	0	967	595	2,599
107+00	10700.00	5.00	147.57	10.00	0.00	7.50	28	2	0	1	2,078	0	968	596	2,626
107+05	10705.00	5.00	127.09	10.00	0.00	7.50	25	2	0	1	2,103	0	970	597	2,650
107+10	10710.00	5.00	107.58	10.00	0.00	7.50	22	2	0	1	2,125	0	971	598	2,671
107+14.009	10714.01	4.01	96.62	10.00	0.00	6.01	15	1	0	1	2,140	0	972	598	2,686
107+50	10750.00	35.99	83.82	10.00	0.00	53.99	120	13	0	40	2,260	0	1,024	630	2,833
108+00	10800.00	50.00	107.07	10.00	0.00	75.00	177	19	0	119	2,437	0	1,179	726	3,110
108+50	10850.00	50.00	111.71	10.00	0.00	75.00	203	19	0	139	2,640	0	1,360	837	3,433
109+00	10900.00	50.00	115.59	10.00	0.00	75.00	210	19	0	139	2,850	0	1,541	948	3,763
109+50	10950.00	50.00	129.54	10.00	0.00	75.00	227	19	0	139	3,077	0	1,721	1,059	4,110
110+00	11000.00	50.00	145.19	10.00	0.00	75.00	254	19	0	139	3,331	0	1,902	1,170	4,484
110+50	11050.00	50.00	124.16	10.00	0.00	75.00	249	19	0	139	3,580	0	2,083	1,282	4,853
111+00	11100.00	50.00	118.79	10.00	0.00	75.00	225	19	0	139	3,805	0	2,263	1,393	5,198
111+50	11150.00	50.00	0.00	10.00	0.00	75.00	110	19	0	139	3,915	0	2,444	1,504	5,428
112+00	11200.00	50.00	107.30	10.00	0.00	75.00	99	19	0	139	4,014	0	2,625	1,615	5,647
112+50	11250.00	50.00	102.53	10.00	0.03	75.00	194	19	0	139	4,208	0	2,805	1,726	5,961
113+00	11300.00	50.00	88.60	10.00	0.49	75.00	177	19	0	139	4,385	0	2,986	1,838	6,258
113+50	11350.00	50.00	54.02	10.00	1.06	75.00	132	19	1	139	4,517	1	3,167	1,949	6,509
113+51.88	11351.88	1.88	52.14	10.00	1.43	2.82	4	1	0	3	4,521	0	3,171	1,951	6,515
113+55	11355.00	3.12	49.07	10.00	2.39	4.68	6	1	0	0	4,527	0	3,171	1,951	6,520
113+60	11360.00	5.00	45.07	10.00	2.55	7.50	9	2	0	1	4,536	0	3,172	1,952	6,528
113+65	11365.00	5.00	44.63	10.00	3.19	7.50	8	2	1	1	4,544	1	3,173	1,953	6,534
113+70	11370.00	5.00	45.36	10.00	5.37	7.50	8	2	1	1	4,552	1	3,175	1,954	6,539
113+75	11375.00	5.00	47.68	10.00	3.84	7.50	9	2	1	1	4,561	1	3,176	1,954	6,546
113+80	11380.00	5.00	47.80	10.00	2.44	7.50	9	2	1	1	4,570	1	3,177	1,955	6,553
113+85	11385.00	5.00	46.03	10.00	2.58	7.50	9	2	0	1	4,579	0	3,179	1,956	6,561
113+90	11390.00	5.00	47.15	10.00	2.53	7.50	9	2	0	1	4,588	0	3,180	1,957	6,569
113+95	11395.00	5.00	50.27	10.00	2.44	7.50	9	2	0	1	4,597	0	3,181	1,958	6,577
114+00	11400.00	5.00	54.51	10.00	2.37	7.50	10	2	0	1	4,607	0	3,182	1,958	6,586
114+05	11405.00	5.00	59.02	10.00	2.17	7.50	11	2	0	1	4,618	0	3,184	1,959	6,596
114+10	11410.00	5.00	65.10	10.00	1.95	7.50	11	2	0	1	4,629	0	3,185	1,960	6,606
114+15	11415.00	5.00	66.60	10.00	2.52	7.50	12	2	0	1	4,641	0	3,186	1,961	6,617
114+20	11420.00	5.00	68.98	10.00	3.52	7.50	13	2	1	1	4,654	1	3,188	1,962	6,628
114+20.804	11420.80	0.80	68.03	10.00	3.61	1.21	2	0	0	0	4,656	0	3,188	1,962	6,630
114+50	11450.00	29.20	71.84	10.00	1.87	43.79	76	11	3	24	4,732	4	3,219	1,981	6,715
115+00	11500.00	50.00	84.16	10.00	1.03	75.00	144	19	3	110	4,876	4	3,362	2,069	6,946

STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
							NOTE 1	NOTE 2	NOTE 3		1.00 NOTE 1	1.25	1.30 NOTE 5	0.80 NOTE 7	NOTE 8
115+50	11550.00	50.00	90.34	10.00	0.20	75.00	162	19	1	139	5,038	1	3,543	2,180	7,227
116+00	11600.00	50.00	92.95	10.00	0.00	75.00	170	19	0	139	5,208	0	3,723	2,291	7,517
116+50	11650.00	50.00	110.01	10.00	0.00	75.00	188	19	0	139	5,396	0	3,904	2,402	7,825
117+00	11700.00	50.00	112.79	10.00	0.00	75.00	206	19	0	139	5,602	0	4,085	2,514	8,151
117+50	11750.00	50.00	116.37	10.00	0.00	75.00	212	19	0	139	5,814	0	4,265	2,625	8,483
118+00	11800.00	50.00	118.26	10.00	0.00	75.00	217	19	0	139	6,031	0	4,446	2,736	8,820
118+50	11850.00	50.00	110.64	10.00	0.00	75.00	212	19	0	139	6,243	0	4,627	2,847	9,152
119+00	11900.00	50.00	99.07	10.00	0.00	75.00	194	19	0	139	6,437	0	4,807	2,958	9,466
119+50	11950.00	50.00	97.46	10.00	2.35	75.00	182	19	2	139	6,619	3	4,988	3,070	9,765
119+51.361	11951.36	1.36	98.12	10.00	2.50	2.04	5	1	0	2	6,624	0	4,991	3,071	9,771
119+55	11955.00	3.64	100.47	10.00	2.34	5.46	13	1	0	1	6,637	0	4,992	3,072	9,784
119+60	11960.00	5.00	104.33	10.00	1.83	7.50	19	2	0	1	6,656	0	4,993	3,073	9,802
119+65	11965.00	5.00	110.26	10.00	0.59	7.50	20	2	0	1	6,676	0	4,995	3,074	9,821
119+70	11970.00	5.00	117.41	10.00	0.00	7.50	21	2	0	1	6,697	0	4,996	3,074	9,841
119+75	11975.00	5.00	119.52	10.00	0.32	7.50	22	2	0	1	6,719	0	4,997	3,075	9,862
119+80	11980.00	5.00	120.24	10.00	0.22	7.50	22	2	0	1	6,741	0	4,999	3,076	9,883
119+85	11985.00	5.00	118.55	10.00	1.24	7.50	22	2	0	1	6,763	0	5,000	3,077	9,904
119+90	11990.00	5.00	124.17	10.00	1.09	7.50	22	2	0	1	6,785	0	5,001	3,078	9,925
119+95	11995.00	5.00	130.94	10.00	0.00	7.50	24	2	0	1	6,809	0	5,002	3,078	9,948
120+00	12000.00	5.00	128.71	10.00	0.00	7.50	24	2	0	1	6,833	0	5,004	3,079	9,971
120+05	12005.00	5.00	118.17	10.00	0.00	7.50	23	2	0	1	6,856	0	5,005	3,080	9,993
120+10	12010.00	5.00	107.08	10.00	0.00	7.50	21	2	0	1	6,877	0	5,006	3,081	10,013
120+15	12015.00	5.00	100.02	10.00	0.00	7.50	19	2	0	1	6,896	0	5,008	3,082	10,031
120+20	12020.00	5.00	99.74	10.00	0.00	7.50	18	2	0	1	6,914	0	5,009	3,082	10,048
120+25	12025.00	5.00	99.37	10.00	0.00	7.50	18	2	0	1	6,932	0	5,010	3,083	10,065
120+30	12030.00	5.00	110.19	10.00	0.00	7.50	19	2	0	1	6,951	0	5,012	3,084	10,083
120+35	12035.00	5.00	110.28	10.00	0.00	7.50	20	2	0	1	6,971	0	5,013	3,085	10,102
120+40	12040.00	5.00	109.46	10.00	0.00	7.50	20	2	0	1	6,991	0	5,014	3,086	10,121
120+45	12045.00	5.00	100.48	10.00	0.00	7.50	19	2	0	1	7,010	0	5,015	3,086	10,139
120+50	12050.00	5.00	98.93	10.00	0.00	7.50	18	2	0	1	7,028	0	5,017	3,087	10,156
120+55	12055.00	5.00	102.19	10.00	0.00	7.50	19	2	0	1	7,047	0	5,018	3,088	10,174
120+60	12060.00	5.00	104.11	10.00	0.00	7.50	19	2	0	1	7,066	0	5,019	3,089	10,192
120+65	12065.00	5.00	99.18	10.00	0.00	7.50	19	2	0	1	7,085	0	5,021	3,090	10,210
120+70	12070.00	5.00	92.47	10.00	1.08	7.50	18	2	0	1	7,103	0	5,022	3,090	10,227
120+75	12075.00	5.00	87.59	10.00	1.58	7.50	17	2	0	1	7,120	0	5,023	3,091	10,243
120+76.132	12076.13	1.13	87.11	10.00	1.49	1.70	4	0	0	0	7,124	0	5,023	3,091	10,247
121+00	12100.00	23.87	77.37	10.00	0.33	35.80	73	9	1	17	7,197	1	5,045	3,105	10,327
121+50	12150.00	50.00	79.13	10.00	0.00	75.00	145	19	0	103	7,342	0	5,179	3,187	10,556
122+00	12200.00	50.00	76.90	10.00	0.00	75.00	144	19	0	139	7,486	0	5,360	3,298	10,820
122+50	12250.00	50.00	0.00	10.00	0.00	75.00	71	19	0	139	7,557	0	5,541	3,410	11,011
					COLUMN TOTALS		7,557	783	20	4,262					

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE P	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - EXPANDED MARSH BACKFILL	
	EXPANDED FILL FACTOR - 1.25 EXPANDED FILL=UNEXPANDED FILL*FILL FACTOR
	A SOIL EXPANSION FACTOR OF 1.25 WAS USED TO GENERATE ESTIAMTED EARTHWORK QUANTITIES. DUE TO POTENTIAL SOIL VARIABLITY, ACTUAL QUANTITIES MAY VARY
	NO QUANTITY ADJUSTMENTS WILL BE MADE FOR DIFFERING SOIL EXPANSION FACTORS ENCOUNTERED IN THE FIELD.

STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
							NOTE 1	NOTE 2	NOTE 3		1.00 NOTE 1	1.25	1.30 NOTE 5	0.80 NOTE 7	NOTE 8
202+00	20200.00	0.00	37.46	12.50	0.00	0.00	0	0	0	0	0	0	0	0	0
202+50	20250.00	50.00	51.38	12.50	0.00	0.00	82	23	0	0	82	0	0	0	59
202+55	20255.00	5.00	50.38	12.50	0.00	0.00	9	2	0	0	91	0	0	0	66
202+60	20260.00	5.00	49.01	12.50	0.00	0.00	9	2	0	0	100	0	0	0	73
202+65	20265.00	5.00	47.59	12.50	0.00	0.00	9	2	0	0	109	0	0	0	80
202+70	20270.00	5.00	47.35	12.50	0.00	0.00	9	2	0	0	118	0	0	0	87
202+75	20275.00	5.00	57.97	12.50	0.00	0.00	10	2	0	0	128	0	0	0	95
202+80	20280.00	5.00	8.25	12.50	0.00	0.00	6	2	0	0	134	0	0	0	99
					COLUMN TOTALS		134	35	0	0					

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE P.	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - EXPANDED MARSH BACKFILL	
	EXPANDED FILL FACTOR - 1.25 EXPANDED FILL=UNEXPANDED FILL*FILL FACTOR
	A SOIL EXPANSION FACTOR OF 1.25 WAS USED TO GENERATE ESTIAMTED EARTHWORK QUANTITIES. DUE TO POTENTIAL SOIL VARIABLITY, ACTUAL QUANTITIES MAY VARY
	NO QUANTITY ADJUSTMENTS WILL BE MADE FOR DIFFERING SOIL EXPANSION FACTORS ENCOUNTERED IN THE FIELD.

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PROJECT NO: 2718-04-71 | HWY: W. ST PAUL AVENUE | COUNTY: WAUKESHA | EARTHWORK | SHEET 380 | E

STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
							NOTE 1	NOTE 2	NOTE 3		1.00 NOTE 1	1.25	1.30 NOTE 5	0.80 NOTE 7	NOTE 8
303+03.348	30303.35	0.00	140.33	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0
303+50	30350.00	46.65	134.93	0.00	0.00	41.05	238	0	0	35	238	0	46	28	273
304+00	30400.00	50.00	122.25	0.00	0.11	44.00	238	0	0	79	476	0	148	91	590
304+50	30450.00	50.00	150.49	0.00	2.54	44.00	253	0	2	81	729	3	254	156	922
304+53.928	30453.93	3.93	150.86	0.00	1.46	3.46	22	0	0	3	751	0	257	158	947
304+55	30455.00	1.07	150.84	0.00	0.68	0.94	6	0	0	0	757	0	257	158	953
304+60	30460.00	5.00	154.07	0.00	0.01	4.40	28	0	0	0	785	0	257	158	981
304+65	30465.00	5.00	148.64	0.00	0.00	4.40	28	0	0	1	813	0	259	159	1,010
304+70	30470.00	5.00	124.31	0.00	0.00	4.40	25	0	0	1	838	0	260	160	1,036
304+75	30475.00	5.00	89.47	0.00	0.00	4.40	20	0	0	1	858	0	261	161	1,057
304+80	30480.00	5.00	55.49	0.00	0.00	4.40	13	0	0	1	871	0	263	162	1,071
304+85	30485.00	5.00	22.09	0.00	0.00	4.40	7	0	0	1	878	0	264	162	1,079
305+16.688	30516.69	31.69	187.57	0.00	0.00	27.89	123	0	0	19	1,001	0	289	178	1,221
					COLUMN TOTALS		1,001	0	2	222					

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE P.	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - EXPANDED MARSH BACKFILL	
	EXPANDED FILL FACTOR - 1.25 EXPANDED FILL=UNEXPANDED FILL*FILL FACTOR
	A SOIL EXPANSION FACTOR OF 1.25 WAS USED TO GENERATE ESTIAMTED EARTHWORK QUANTITIES. DUE TO POTENTIAL SOIL VARIABLITY, ACTUAL QUANTITIES MAY VARY
	NO QUANTITY ADJUSTMENTS WILL BE MADE FOR DIFFERING SOIL EXPANSION FACTORS ENCOUNTERED IN THE FIELD.

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STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
							NOTE 1	NOTE 2	NOTE 3		1.00 NOTE 1	1.25	1.30 NOTE 5	0.80 NOTE 7	NOTE 8
400+25	40025.00	0.00	26.41	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0
400+30	40030.00	5.00	61.52	0.00	0.00	4.40	8	0	0	0	8	0	0	0	8
400+35	40035.00	5.00	94.92	0.00	0.00	4.40	14	0	0	1	22	0	1	1	23
400+40	40040.00	5.00	126.39	0.00	0.00	4.40	20	0	0	1	42	0	3	2	44
400+45	40045.00	5.00	137.07	0.00	0.00	4.40	24	0	0	1	66	0	4	2	69
400+50	40050.00	5.00	147.17	0.00	0.00	4.40	26	0	0	1	92	0	5	3	96
400+55	40055.00	5.00	141.08	0.00	0.00	4.40	27	0	0	1	119	0	7	4	124
400+60	40060.00	5.00	127.90	0.00	0.00	4.40	25	0	0	1	144	0	8	5	150
400+65	40065.00	5.00	119.50	0.00	0.00	4.40	23	0	0	1	167	0	9	6	174
400+70	40070.00	5.00	110.43	0.00	0.00	4.40	21	0	0	1	188	0	10	6	196
400+75	40075.00	5.00	106.76	0.00	0.00	4.40	20	0	0	1	208	0	12	7	217
400+78.857	40078.86	3.86	101.29	0.00	0.00	3.39	15	0	0	1	223	0	13	8	233
401+00	40100.00	21.14	84.20	0.00	0.00	18.61	73	0	0	9	296	0	25	15	315
401+50	40150.00	50.00	74.01	0.00	0.00	44.00	146	0	0	58	442	0	100	62	519
402+00	40200.00	50.00	73.15	0.00	0.00	44.00	136	0	0	81	578	0	205	126	736
402+48.22	40248.22	48.22	0.00	0.00	0.00	42.43	65	0	0	77	643	0	306	188	878
					COLUMN TOTALS		643	0	0	235					

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
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	EXPANDED FILL FACTOR - 1.25 EXPANDED FILL=UNEXPANDED FILL*FILL FACTOR
	A SOIL EXPANSION FACTOR OF 1.25 WAS USED TO GENERATE ESTIAMTED EARTHWORK QUANTITIES. DUE TO POTENTIAL SOIL VARIABLITY, ACTUAL QUANTITIES MAY VARY
	NO QUANTITY ADJUSTMENTS WILL BE MADE FOR DIFFERING SOIL EXPANSION FACTORS ENCOUNTERED IN THE FIELD.

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STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
											1.00	1.25	1.30	0.80	
							NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
500+25	50025.00	0.00	13.77	12.50	0.00	0.00	0	0	0	0	0	0	0	0	0
500+30	50030.00	5.00	28.65	12.50	0.00	3.00	4	2	0	0	4	0	0	0	2
500+35	50035.00	5.00	43.12	12.50	0.10	3.00	7	2	0	1	11	0	1	1	8
500+38.601	50038.60	3.60	43.84	12.50	0.60	2.16	6	2	0	0	17	0	1	1	12
500+50	50050.00	11.40	50.98	12.50	0.02	6.84	20	5	0	2	37	0	4	2	29
501+00	50100.00	50.00	63.78	12.50	0.00	30.00	106	23	0	34	143	0	48	30	146
501+49.02	50149.02	49.02	68.71	12.50	0.00	29.41	120	23	0	54	263	0	118	73	297
					COLUMN TOTALS		263	57	0	91					

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE P.	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - EXPANDED MARSH BACKFILL	
	EXPANDED FILL FACTOR - 1.25 EXPANDED FILL=UNEXPANDED FILL*FILL FACTOR
	A SOIL EXPANSION FACTOR OF 1.25 WAS USED TO GENERATE ESTIAMTED EARTHWORK QUANTITIES. DUE TO POTENTIAL SOIL VARIABLITY, ACTUAL QUANTITIES MAY VARY
	NO QUANTITY ADJUSTMENTS WILL BE MADE FOR DIFFERING SOIL EXPANSION FACTORS ENCOUNTERED IN THE FIELD.

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STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
							NOTE 1	NOTE 2	NOTE 3		1.00 NOTE 1	1.25	1.30 NOTE 5	0.80 NOTE 7	NOTE 8
600+18.376	60018.38	0.00	41.36	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0
600+50	60050.00	31.62	84.94	0.00	0.01	29.09	74	0	0	17	74	0	22	14	91
601+00	60100.00	50.00	88.31	0.00	0.00	46.00	160	0	0	70	234	0	113	70	321
601+50	60150.00	50.00	90.39	0.00	0.00	46.00	165	0	0	85	399	0	224	138	571
602+00	60200.00	50.00	92.14	0.00	0.04	46.00	169	0	0	85	568	0	334	206	825
602+41.039	60241.04	41.04	88.15	0.00	1.07	37.76	137	0	1	64	705	1	417	257	1,025
602+45	60245.00	3.96	89.71	0.00	0.97	3.64	13	0	0	3	718	0	421	259	1,041
602+50	60250.00	5.00	92.50	0.00	0.44	4.60	17	0	0	1	735	0	423	260	1,059
602+55	60255.00	5.00	91.78	0.00	0.21	4.60	17	0	0	1	752	0	424	261	1,077
602+60	60260.00	5.00	91.49	0.00	0.00	4.60	17	0	0	1	769	0	425	262	1,095
602+65	60265.00	5.00	87.07	0.00	0.00	4.60	17	0	0	1	786	0	426	262	1,113
602+70	60270.00	5.00	67.02	0.00	0.00	4.60	14	0	0	1	800	0	428	263	1,128
602+75	60275.00	5.00	37.49	0.00	0.00	4.60	10	0	0	1	810	0	429	264	1,139
602+80	60280.00	5.00	6.83	0.00	0.00	4.60	4	0	0	1	814	0	430	265	1,144
603+30	60330.00	50.00	21.70	0.00	0.00	46.00	26	0	0	47	840	0	491	302	1,217
603+35	60335.00	5.00	42.03	0.00	0.00	4.60	6	0	0	5	846	0	498	306	1,228
603+40	60340.00	5.00	58.73	0.00	0.00	4.60	9	0	0	1	855	0	499	307	1,238
603+45	60345.00	5.00	74.63	0.00	0.00	4.60	12	0	0	1	867	0	501	308	1,251
603+50	60350.00	5.00	80.74	0.00	0.00	4.60	14	0	0	1	881	0	502	309	1,266
603+55	60355.00	5.00	87.37	0.00	0.00	4.60	16	0	0	1	897	0	503	310	1,283
603+60	60360.00	5.00	90.04	0.00	0.08	4.60	16	0	0	1	913	0	504	310	1,300
603+65	60365.00	5.00	88.01	0.00	0.20	4.60	16	0	0	1	929	0	506	311	1,317
603+70	60370.00	5.00	85.47	0.00	0.59	4.60	16	0	0	1	945	0	507	312	1,334
603+75	60375.00	5.00	83.60	0.00	2.04	4.60	16	0	0	1	961	0	508	313	1,351
604+00	60400.00	25.00	90.11	0.00	0.00	23.00	80	0	1	13	1,041	1	525	323	1,443
604+50	60450.00	50.00	91.54	0.00	0.73	46.00	168	0	1	64	1,209	1	608	374	1,673
604+54.452	60454.45	4.45	91.52	0.00	0.60	4.10	15	0	0	4	1,224	0	614	378	1,692
604+55	60455.00	0.55	91.43	0.00	0.54	0.50	2	0	0	0	1,226	0	614	378	1,694
604+60	60460.00	5.00	90.63	0.00	1.34	4.60	17	0	0	0	1,243	0	614	378	1,711
604+65	60465.00	5.00	88.29	0.00	1.84	4.60	17	0	0	1	1,260	0	615	378	1,729
604+70	60470.00	5.00	86.54	0.00	1.12	4.60	16	0	0	1	1,276	0	616	379	1,746
604+75	60475.00	5.00	90.32	0.00	0.11	4.60	16	0	0	1	1,292	0	618	380	1,763
604+80	60480.00	5.00	94.70	0.00	0.00	4.60	17	0	0	1	1,309	0	619	381	1,781
604+85	60485.00	5.00	93.90	0.00	0.00	4.60	17	0	0	1	1,326	0	620	382	1,799
604+90	60490.00	5.00	90.05	0.00	0.00	4.60	17	0	0	1	1,343	0	621	382	1,817
604+95	60495.00	5.00	83.42	0.00	0.00	4.60	16	0	0	1	1,359	0	623	383	1,834
605+00	60500.00	5.00	76.97	0.00	0.00	4.60	15	0	0	1	1,374	0	624	384	1,850
605+05	60505.00	5.00	81.33	0.00	0.00	4.60	15	0	0	1	1,389	0	625	385	1,866
605+10	60510.00	5.00	88.55	0.00	0.00	4.60	16	0	0	1	1,405	0	627	386	1,883
605+15	60515.00	5.00	95.29	0.00	0.00	4.60	17	0	0	1	1,422	0	628	386	1,901

STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
							NOTE 1	NOTE 2	NOTE 3		1.00 NOTE 1	1.25	1.30 NOTE 5	0.80 NOTE 7	NOTE 8
605+20	60520.00	5.00	101.09	0.00	0.00	4.60	18	0	0	1	1,440	0	629	387	1,920
605+25	60525.00	5.00	106.38	0.00	0.00	4.60	19	0	0	1	1,459	0	631	388	1,940
605+30	60530.00	5.00	109.58	0.00	0.00	4.60	20	0	0	1	1,479	0	632	389	1,961
605+35	60535.00	5.00	107.55	0.00	0.00	4.60	20	0	0	1	1,499	0	633	390	1,982
605+40	60540.00	5.00	96.76	0.00	0.00	4.60	19	0	0	1	1,518	0	634	390	2,002
605+45	60545.00	5.00	91.54	0.00	0.00	4.60	17	0	0	1	1,535	0	636	391	2,020
605+50	60550.00	5.00	82.51	0.00	0.00	4.60	16	0	0	1	1,551	0	637	392	2,037
605+55	60555.00	5.00	80.91	0.00	0.00	4.60	15	0	0	1	1,566	0	638	393	2,053
605+60	60560.00	5.00	0.00	0.00	0.00	4.60	7	0	0	1	1,573	0	640	394	2,061
					COLUMN TOTALS		1,573	0	3	492					

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE P	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - EXPANDED MARSH BACKFILL	
	EXPANDED FILL FACTOR - 1.25 EXPANDED FILL=UNEXPANDED FILL*FILL FACTOR
	A SOIL EXPANSION FACTOR OF 1.25 WAS USED TO GENERATE ESTIAMTED EARTHWORK QUANTITIES. DUE TO POTENTIAL SOIL VARIABLITY, ACTUAL QUANTITIES MAY VARY
	NO QUANTITY ADJUSTMENTS WILL BE MADE FOR DIFFERING SOIL EXPANSION FACTORS ENCOUNTERED IN THE FIELD.

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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	EARTHWORK	SHEET 385	E

STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
											1.00	1.25	1.30	0.80	
							NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
705+00	70500.00	0.00	0.00	12.50	0.00	0.00	0	0	0	0	0	0	0	0	0
705+00.512	70500.51	0.51	44.50	12.50	0.00	0.31	0	0	0	0	0	0	0	0	0
705+05	70505.00	4.49	72.27	12.50	0.00	2.69	10	2	0	0	10	0	0	0	8
705+10	70510.00	5.00	72.69	12.50	0.24	3.00	13	2	0	1	23	0	1	1	20
705+15	70515.00	5.00	68.50	12.50	0.37	3.00	13	2	0	1	36	0	3	2	32
705+20	70520.00	5.00	70.28	12.50	0.56	3.00	13	2	0	1	49	0	4	2	44
705+25	70525.00	5.00	76.39	12.50	0.43	3.00	14	2	0	1	63	0	5	3	57
705+30	70530.00	5.00	73.16	12.50	0.00	3.00	14	2	0	1	77	0	7	4	70
705+35	70535.00	5.00	63.70	12.50	0.00	3.00	13	2	0	1	90	0	8	5	82
705+40	70540.00	5.00	50.70	12.50	0.00	3.00	11	2	0	1	101	0	9	6	92
705+45	70545.00	5.00	33.95	12.50	0.00	3.00	8	2	0	1	109	0	10	6	99
705+50	70550.00	5.00	19.26	12.50	0.00	3.00	5	2	0	1	114	0	12	7	103
705+55	70555.00	5.00	3.92	12.50	0.00	3.00	2	2	0	1	116	0	13	8	104
					COLUMN TOTALS		116	22	0	10					

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE P.	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - EXPANDED MARSH BACKFILL	
	EXPANDED FILL FACTOR - 1.25 EXPANDED FILL=UNEXPANDED FILL*FILL FACTOR
	A SOIL EXPANSION FACTOR OF 1.25 WAS USED TO GENERATE ESTIAMTED EARTHWORK QUANTITIES. DUE TO POTENTIAL SOIL VARIABLITY, ACTUAL QUANTITIES MAY VARY
	NO QUANTITY ADJUSTMENTS WILL BE MADE FOR DIFFERING SOIL EXPANSION FACTORS ENCOUNTERED IN THE FIELD.

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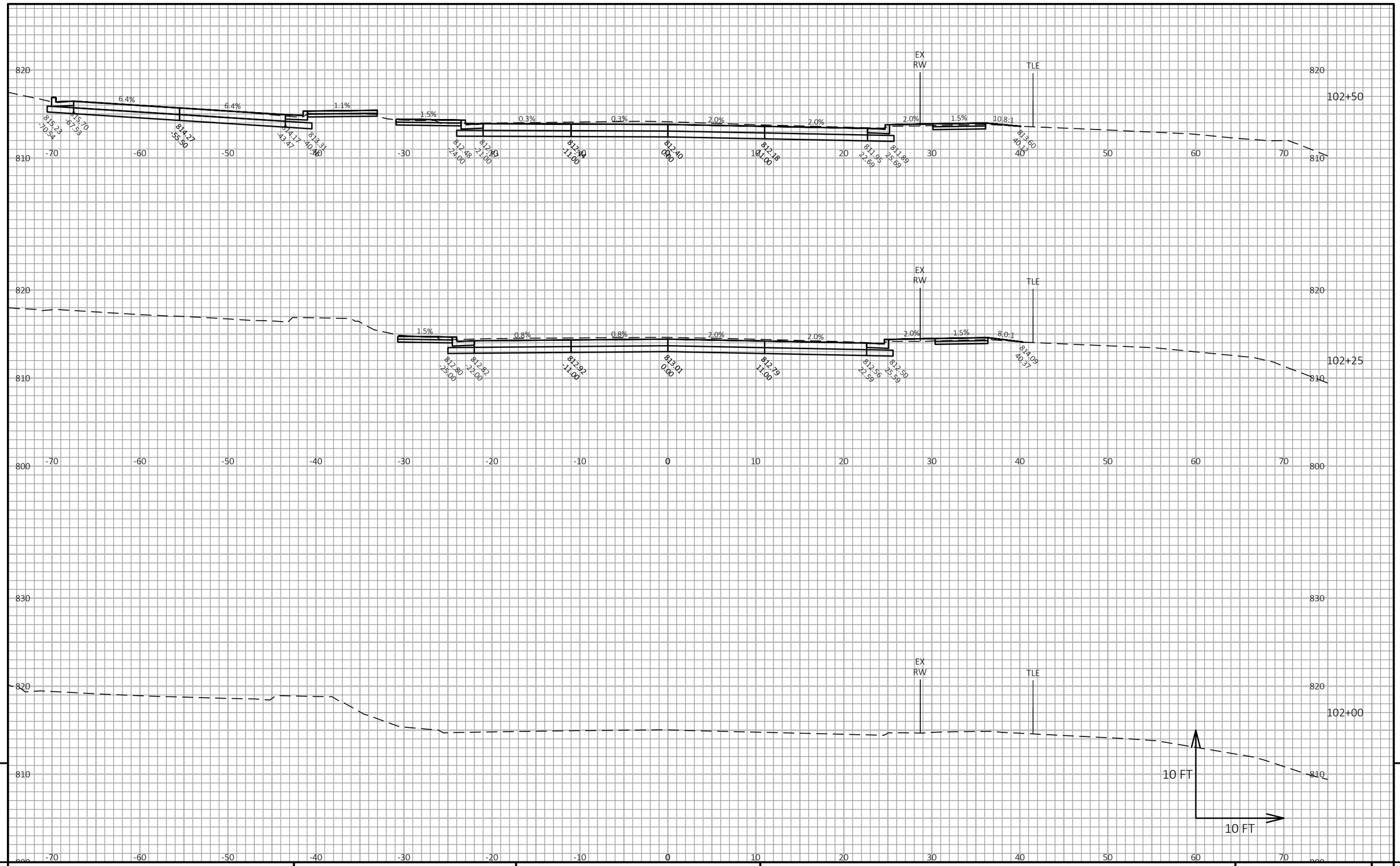

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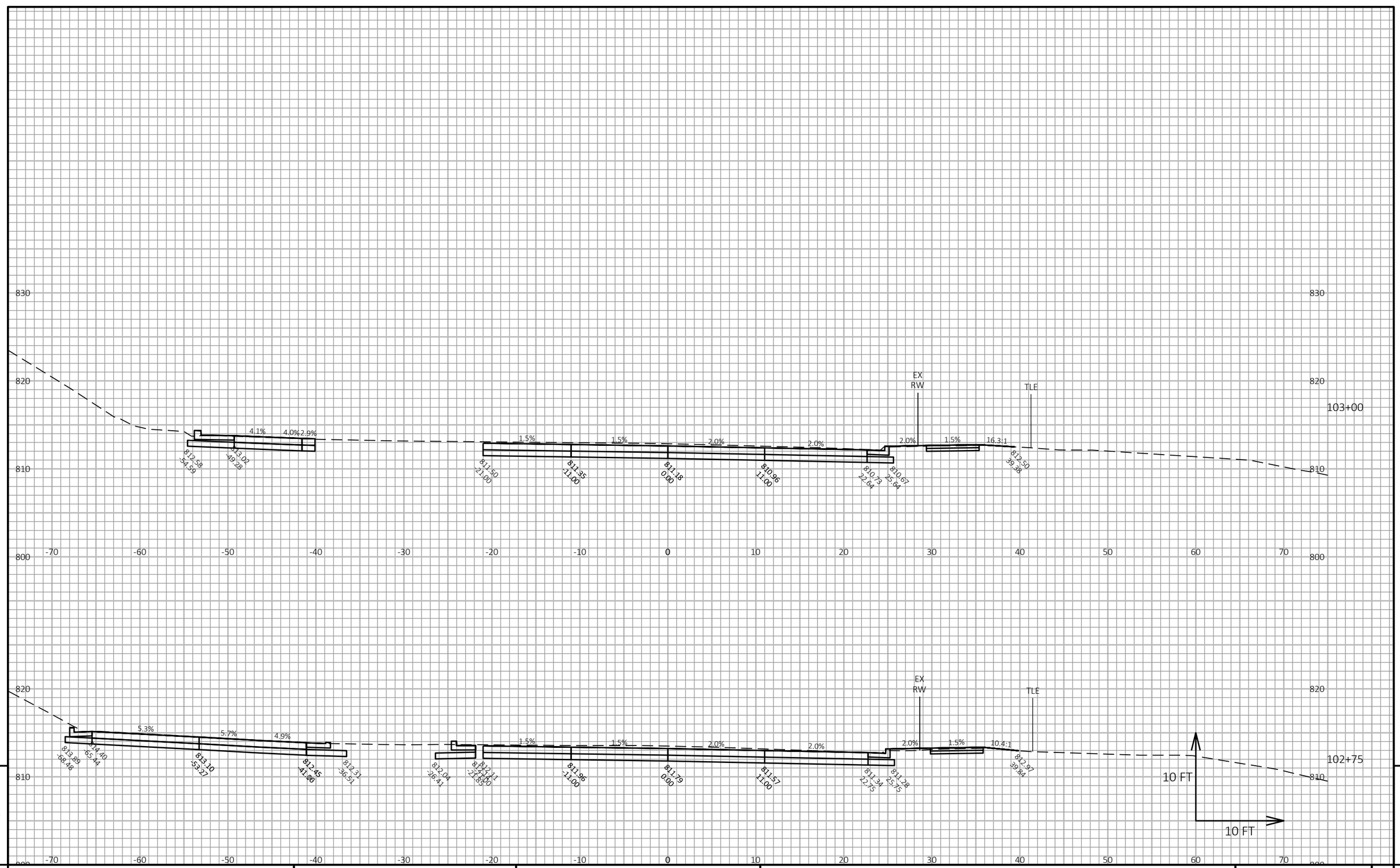
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 387	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090201-xs

PLOT DATE : 10/7/2021 2:52 PM PLOT BY : CRAIG AUSEN PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 388	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090202-xs

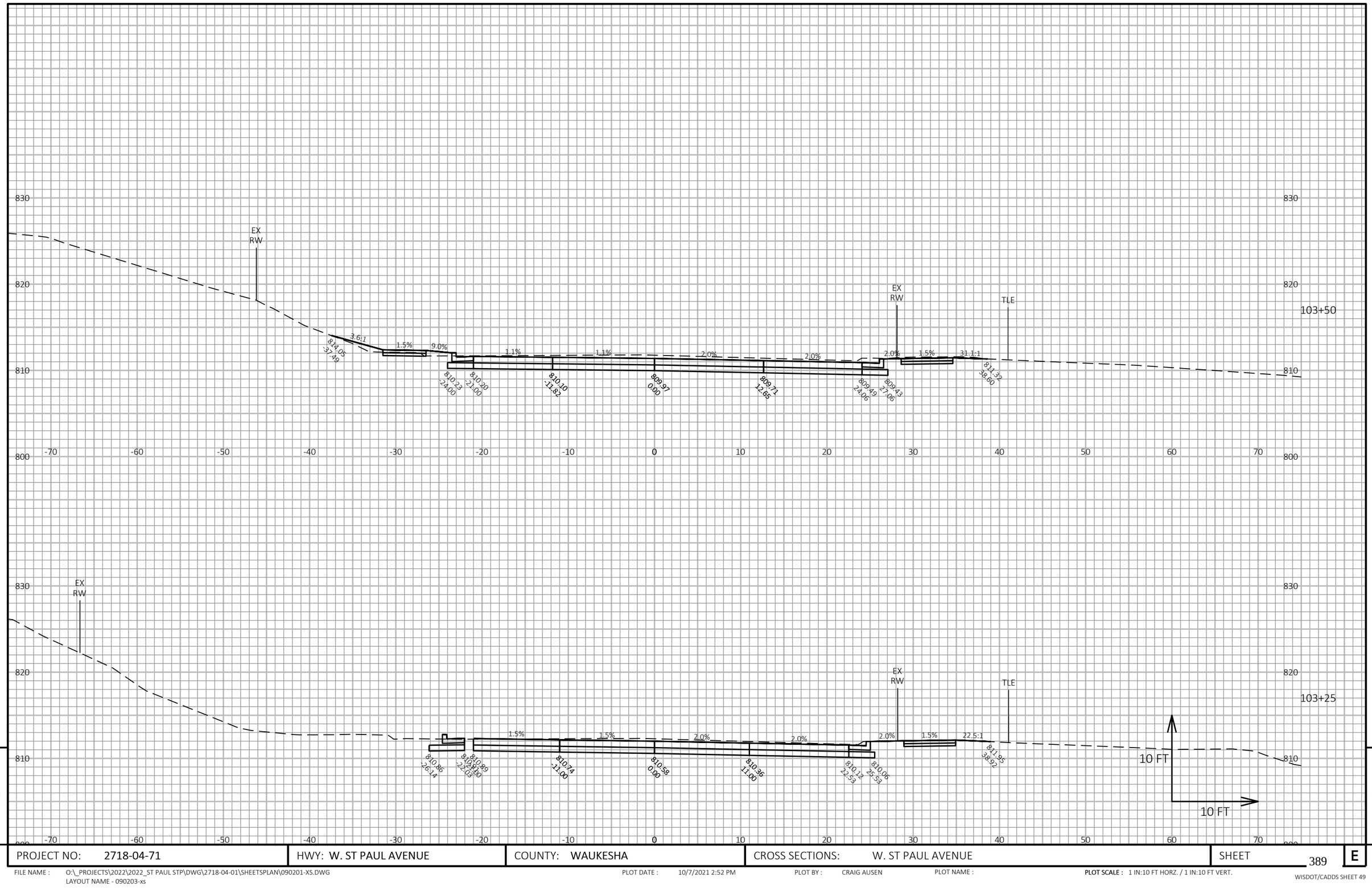
PLOT DATE : 10/7/2021 2:52 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 389	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090203-xs

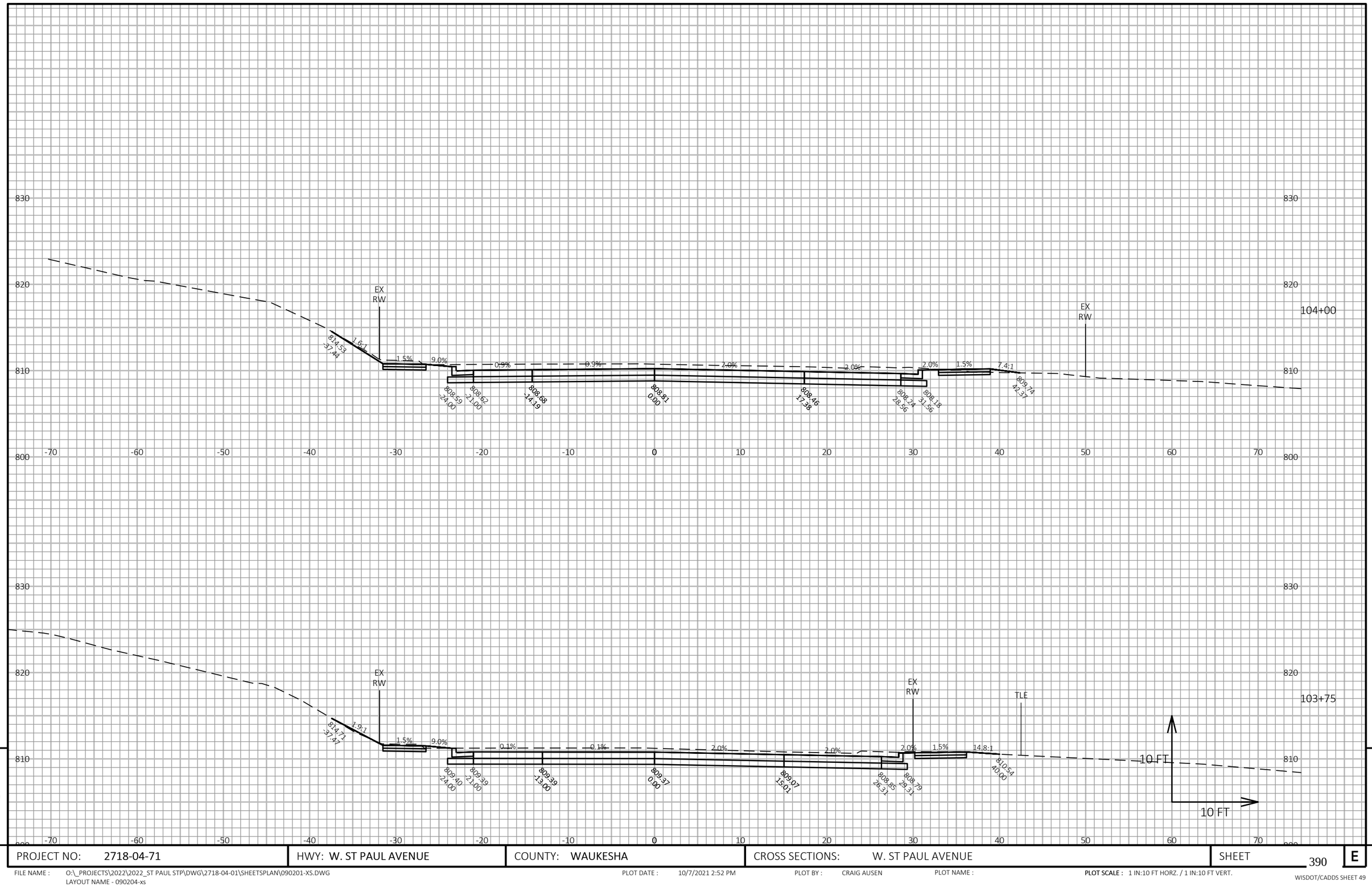
PLOT DATE : 10/7/2021 2:52 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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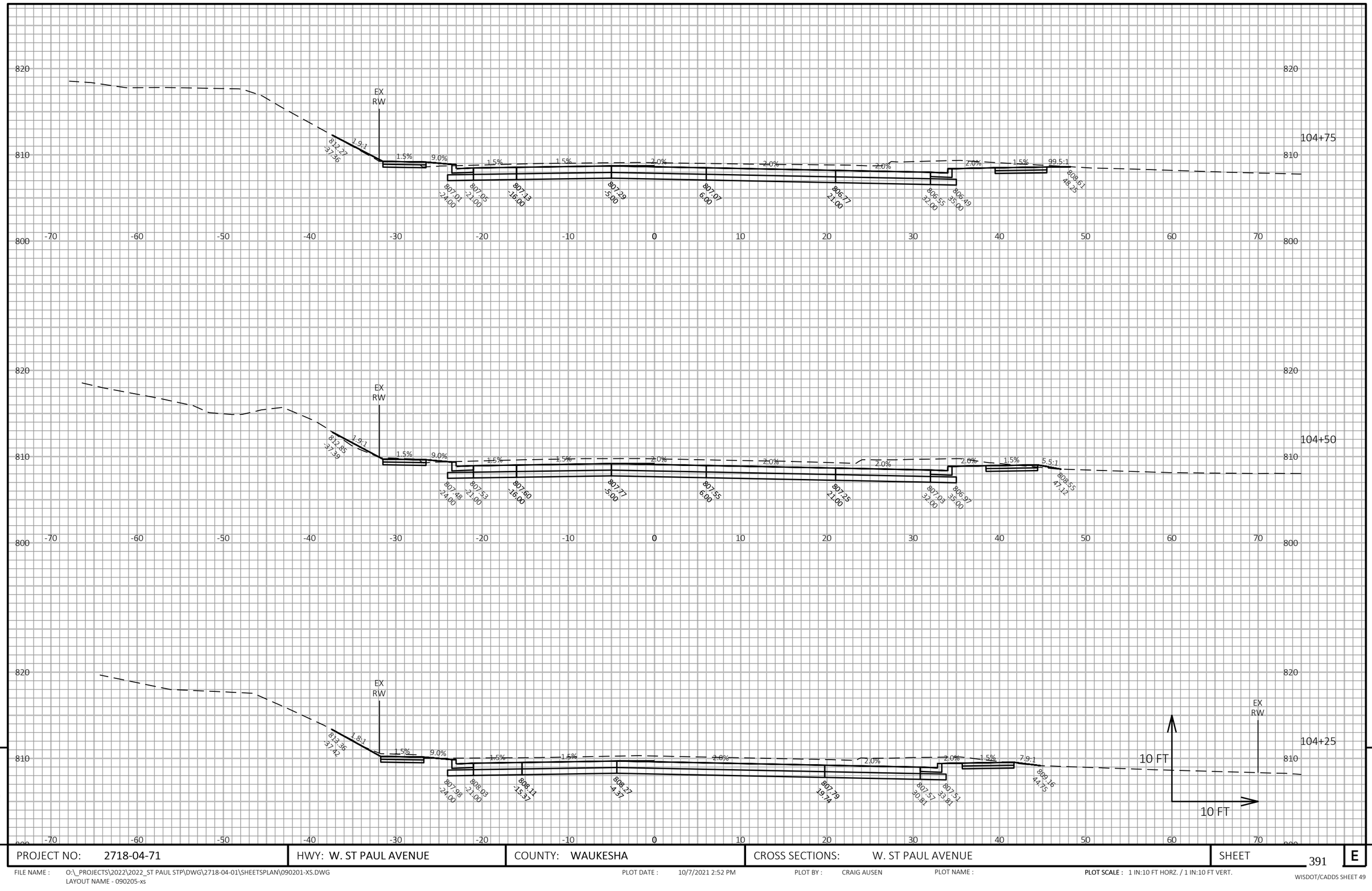
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 390	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090204-xs

PLOT DATE : 10/7/2021 2:52 PM PLOT BY : CRAIG AUSEN PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 391	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090205-xs

PLOT DATE : 10/7/2021 2:52 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 392	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090206-xs

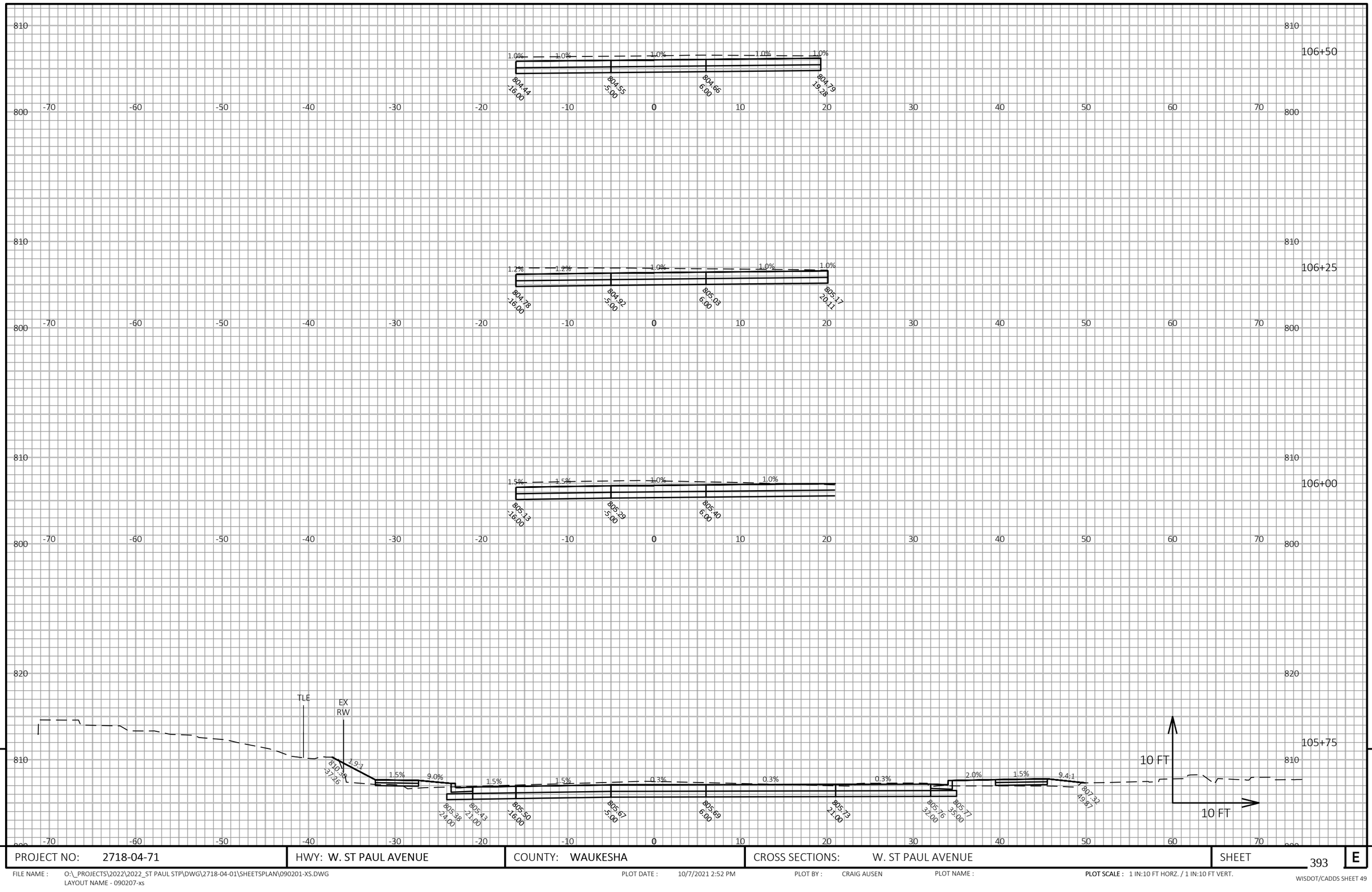
PLOT DATE : 10/7/2021 2:52 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 393 E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090207-xs

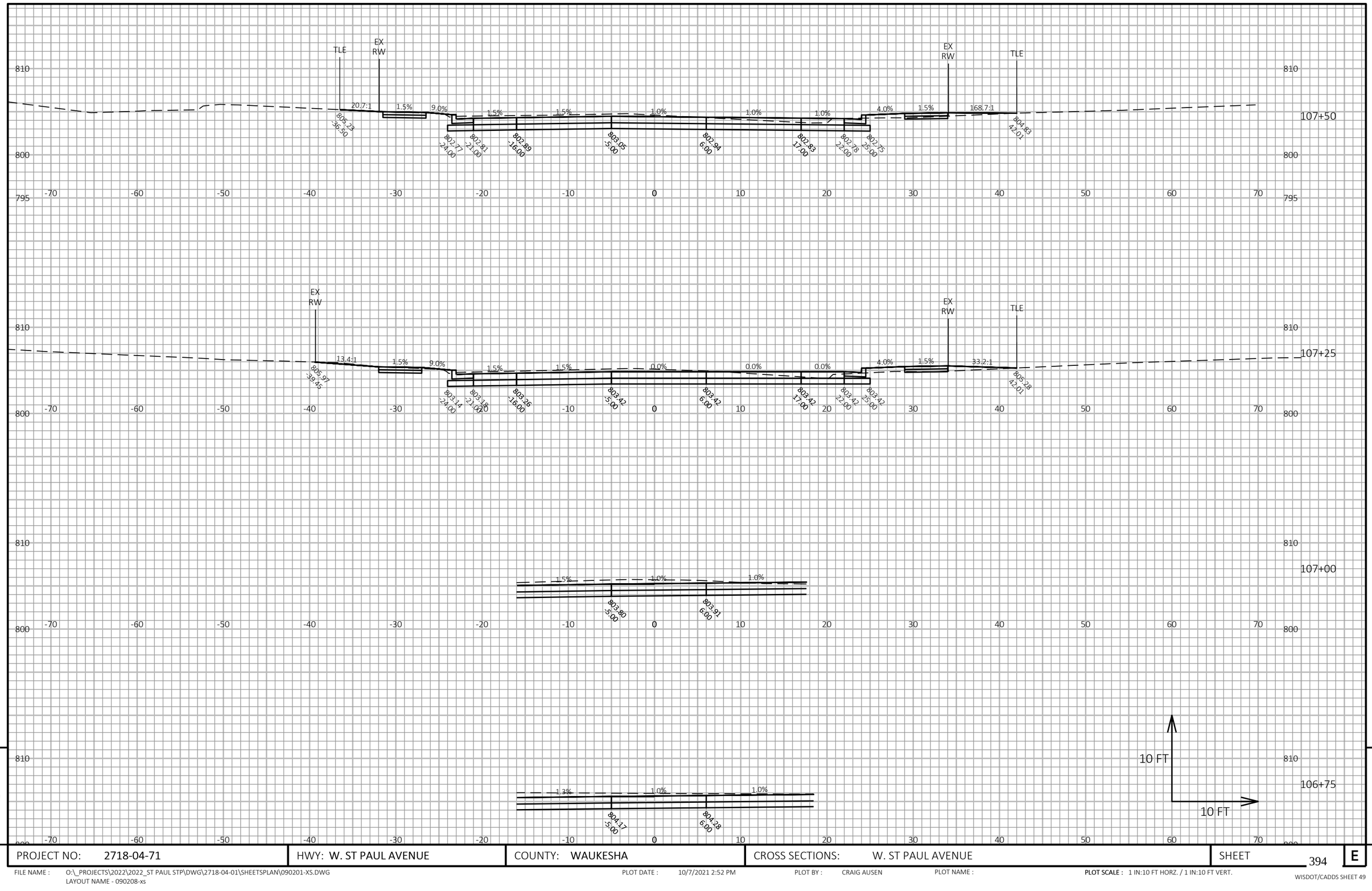
PLOT DATE : 10/7/2021 2:52 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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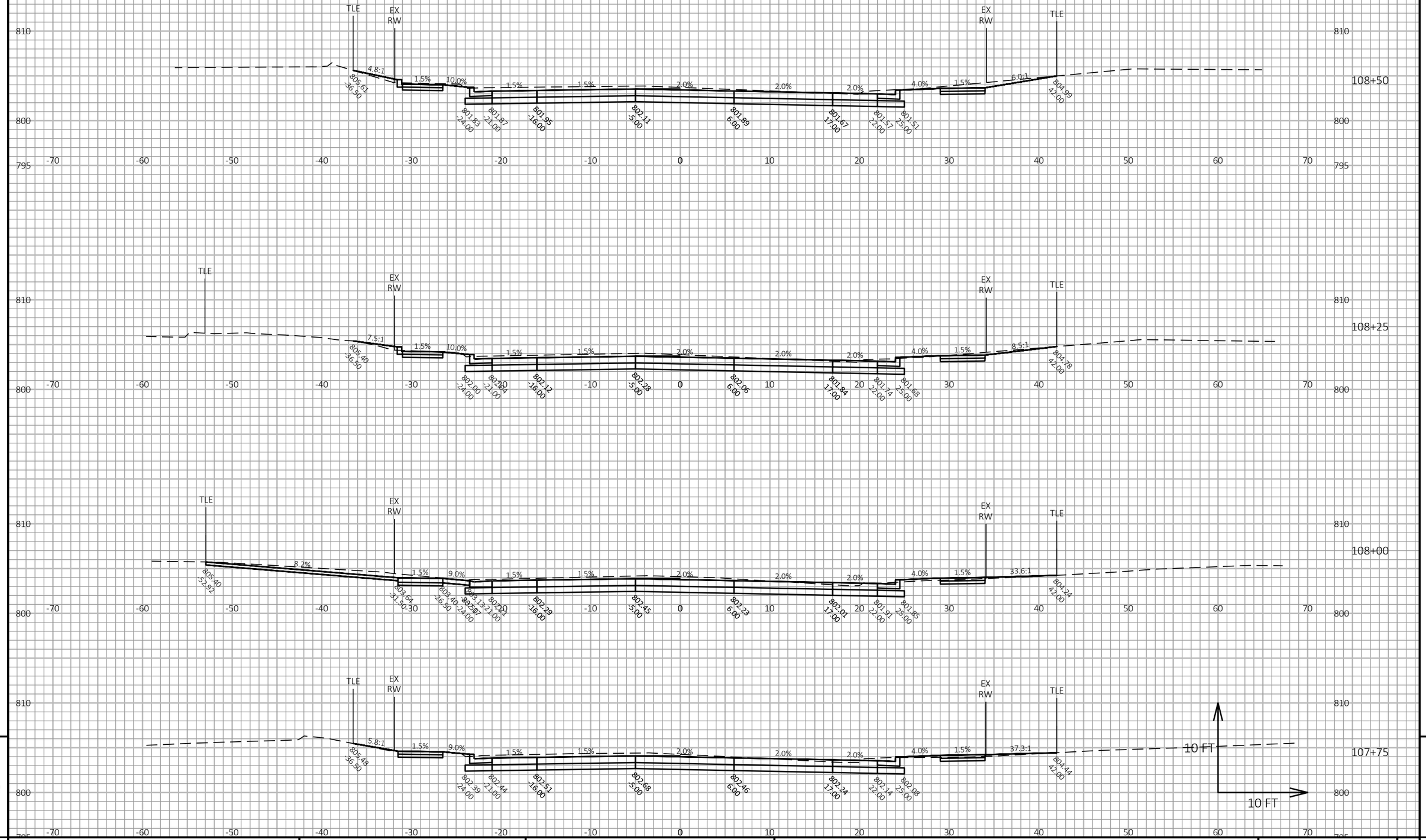
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 394	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090208-xs

PLOT DATE : 10/7/2021 2:52 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 395	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090209-xs

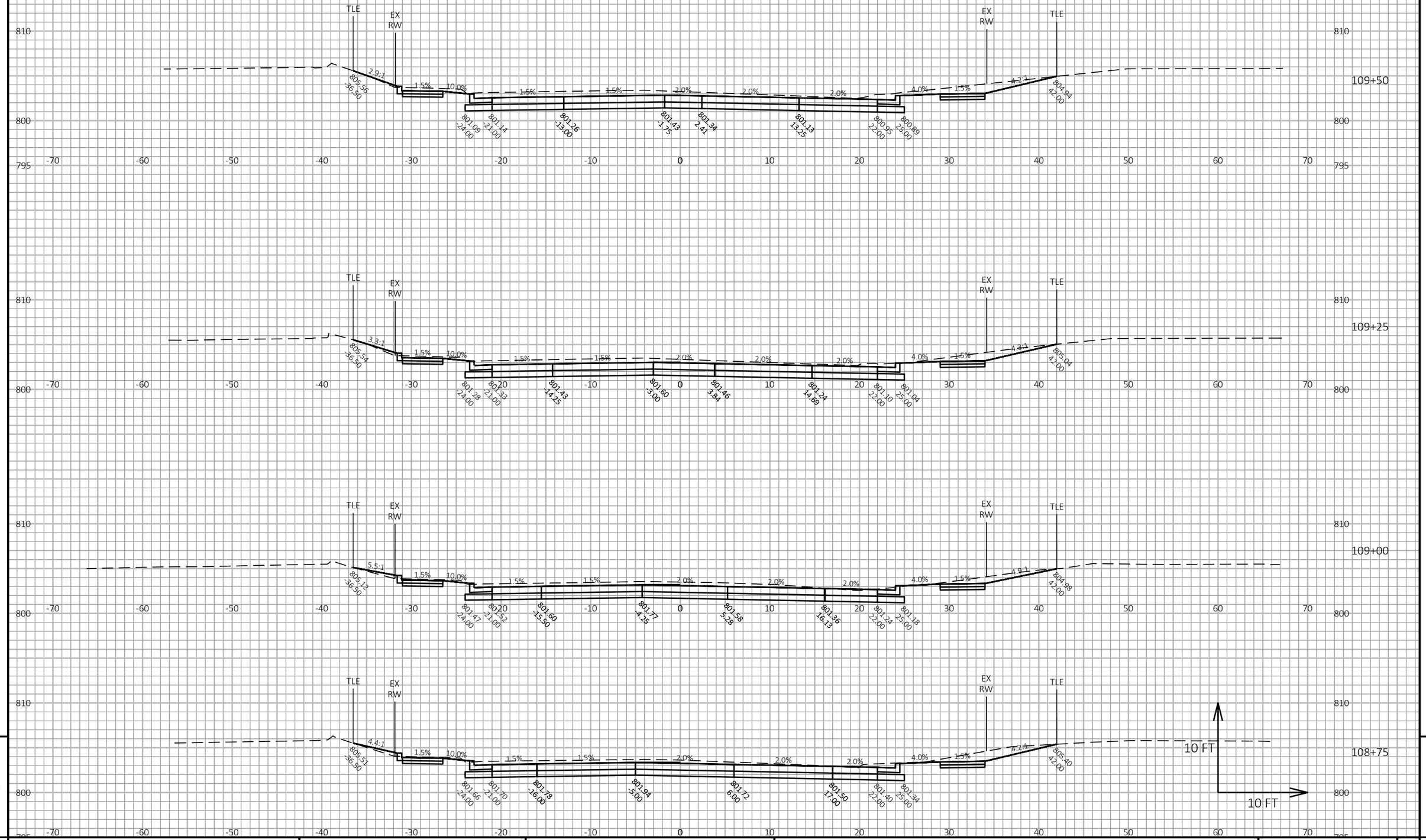
PLOT DATE : 10/7/2021 2:52 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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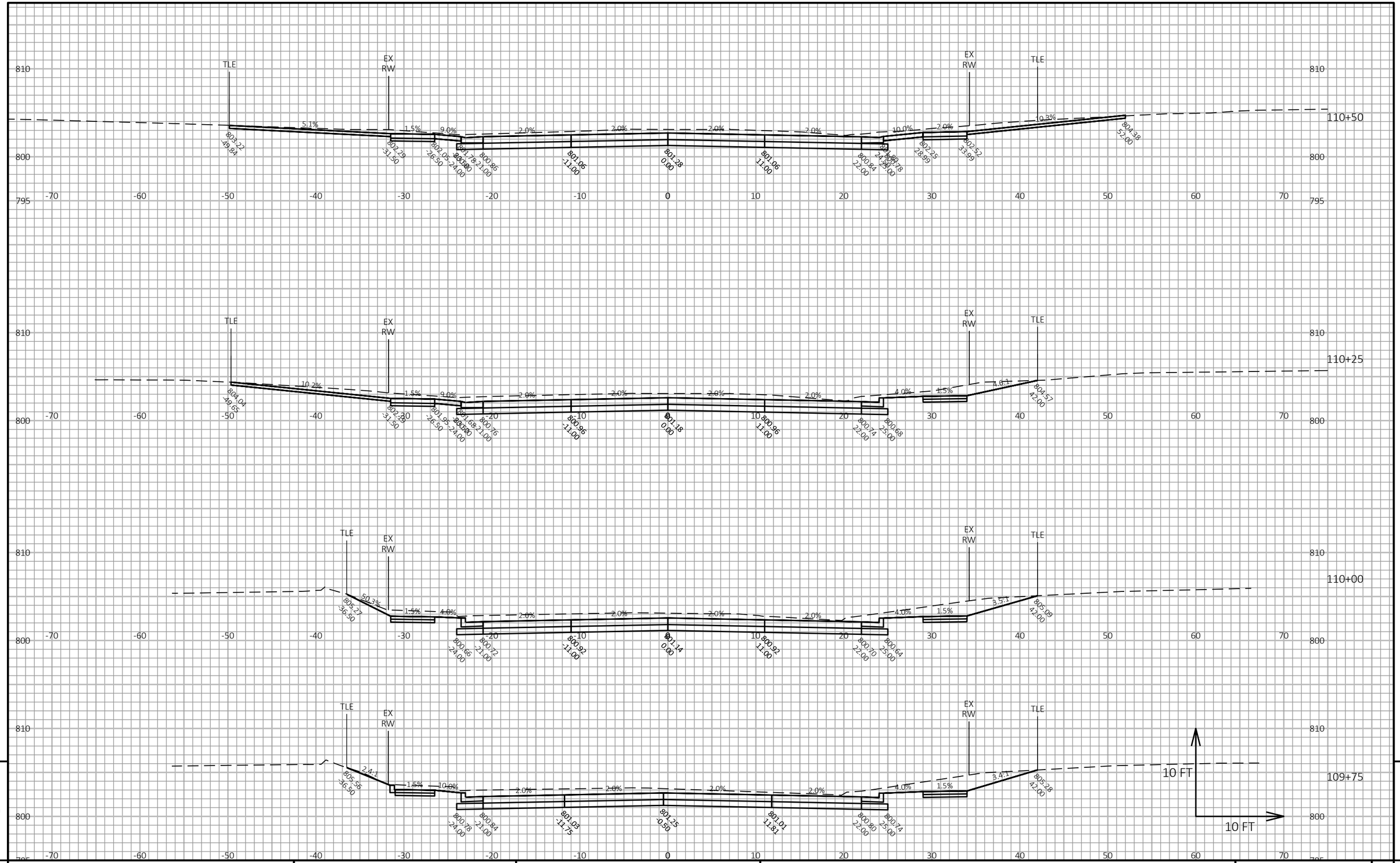
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 396	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090210-xs

PLOT DATE : 10/7/2021 2:52 PM PLOT BY : CRAIG AUSEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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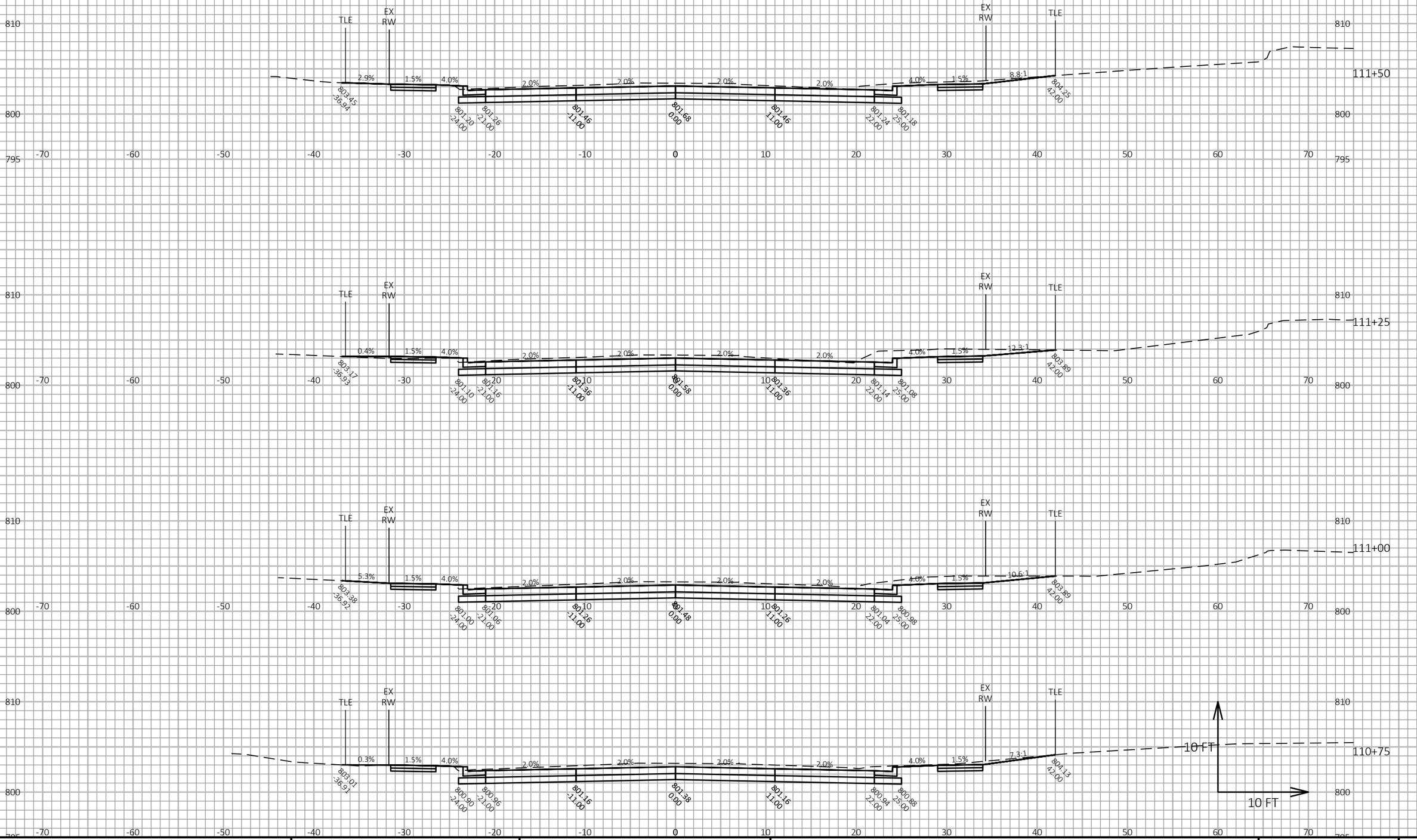
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 397	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090211-xs

PLOT DATE : 10/7/2021 2:53 PM PLOT BY : CRAIG AUSEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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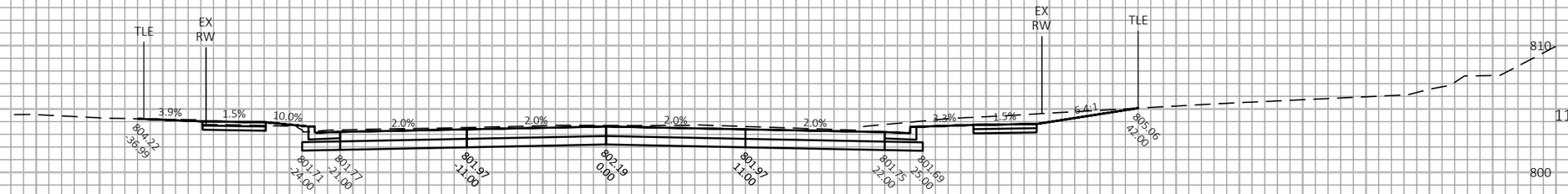
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 398	E

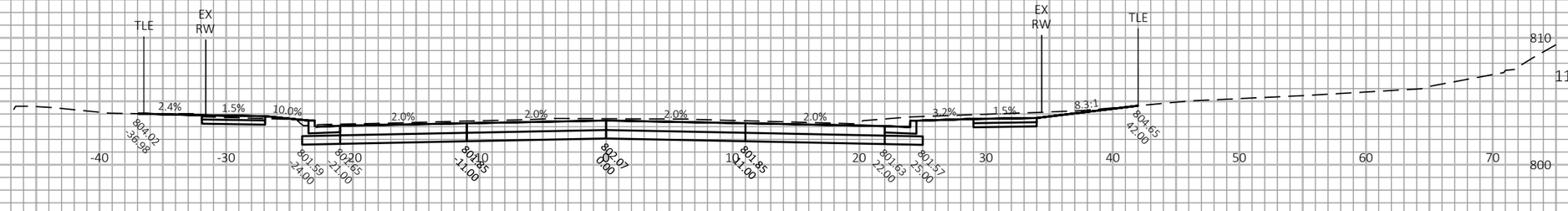
FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090212-xs

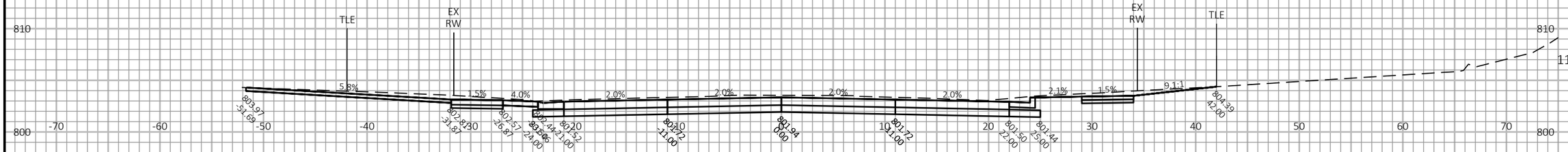
PLOT DATE : 10/7/2021 2:53 PM PLOT BY : CRAIG AUSEN PLOT NAME :

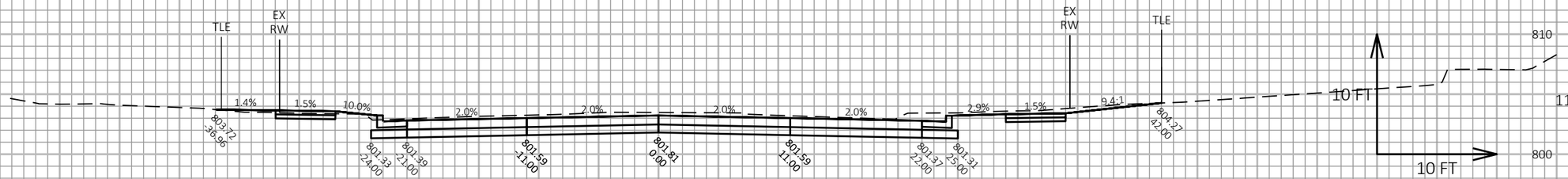
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49









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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 399	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090213-xs

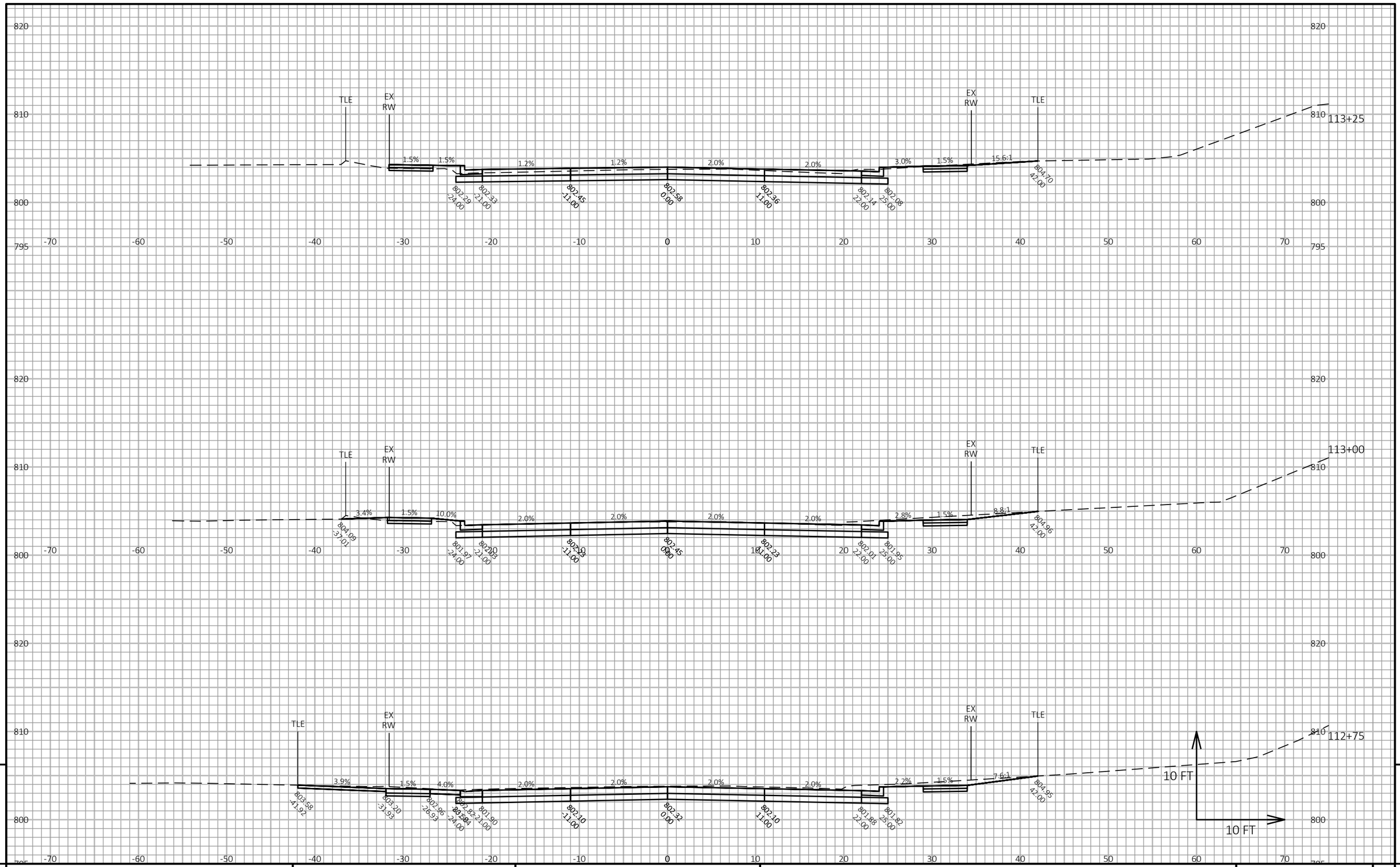
PLOT DATE : 10/7/2021 2:53 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 400	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090214-xs

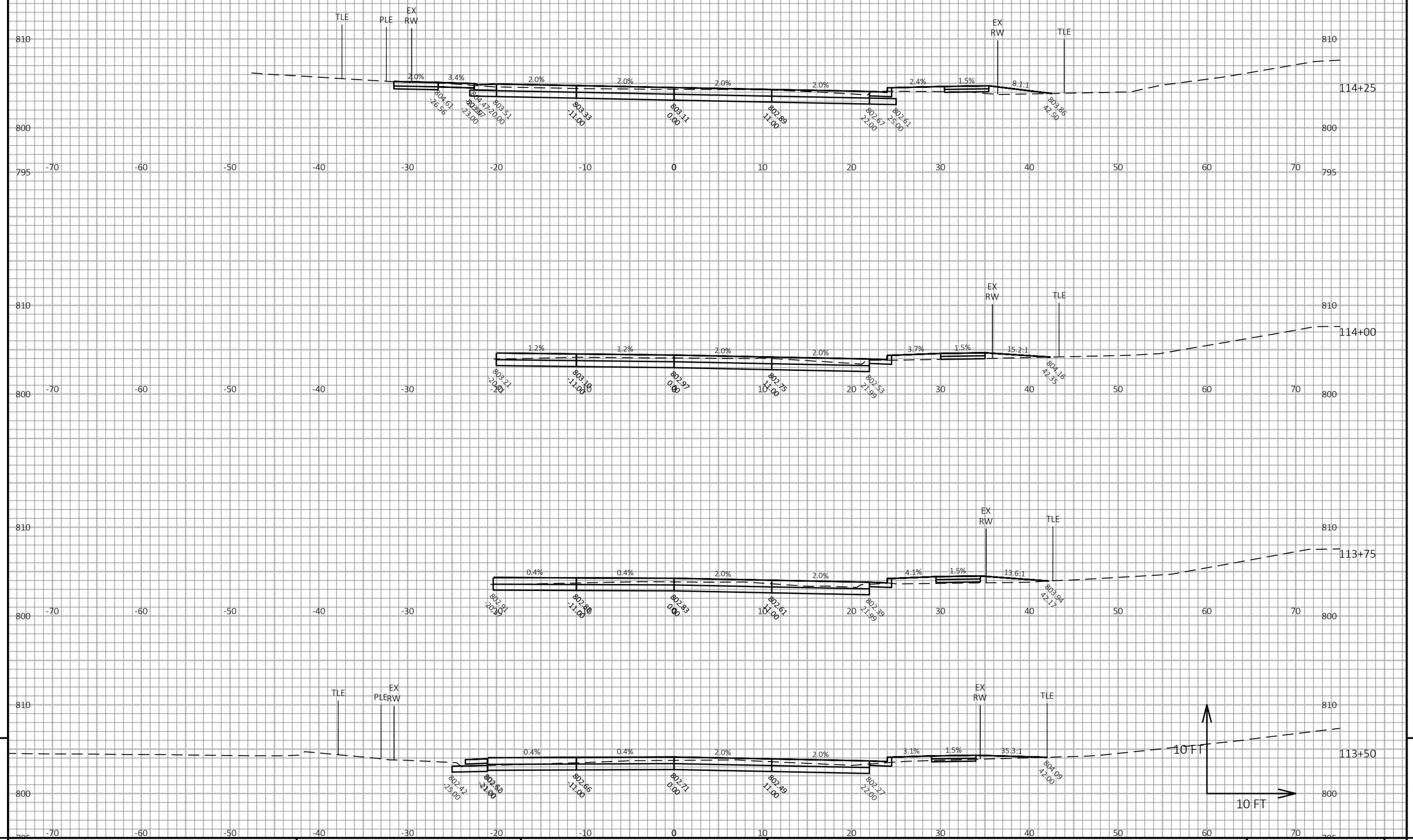
PLOT DATE : 10/7/2021 2:53 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 401	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090215-xs

PLOT DATE : 10/7/2021 2:53 PM PLOT BY : CRAIG AUSEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

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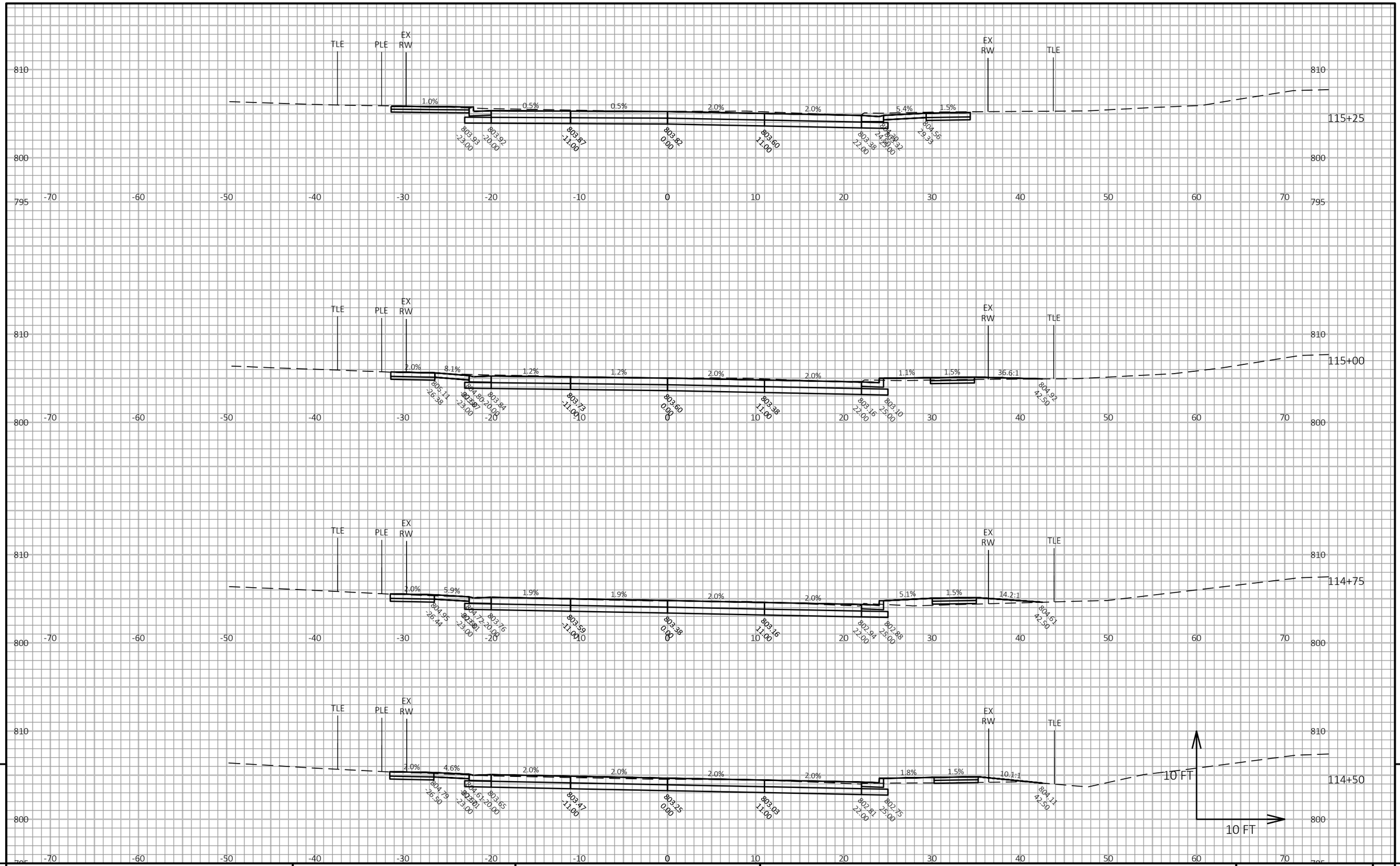
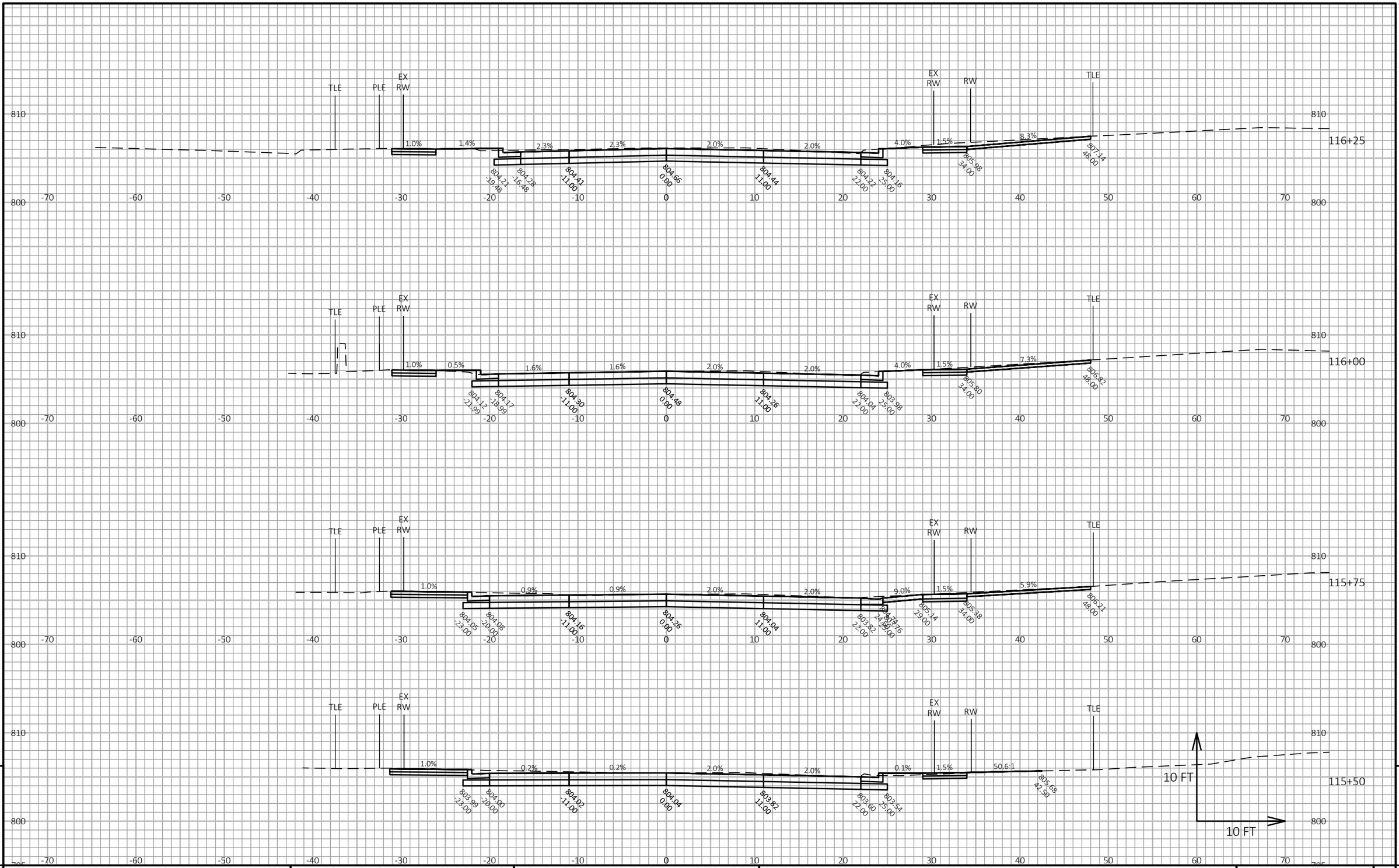


PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 402	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090216-xs

PLOT DATE : 10/7/2021 2:53 PM PLOT BY : CRAIG AUSEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 403	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090217-xs

PLOT DATE : 10/7/2021 2:53 PM PLOT BY : CRAIG AUSEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

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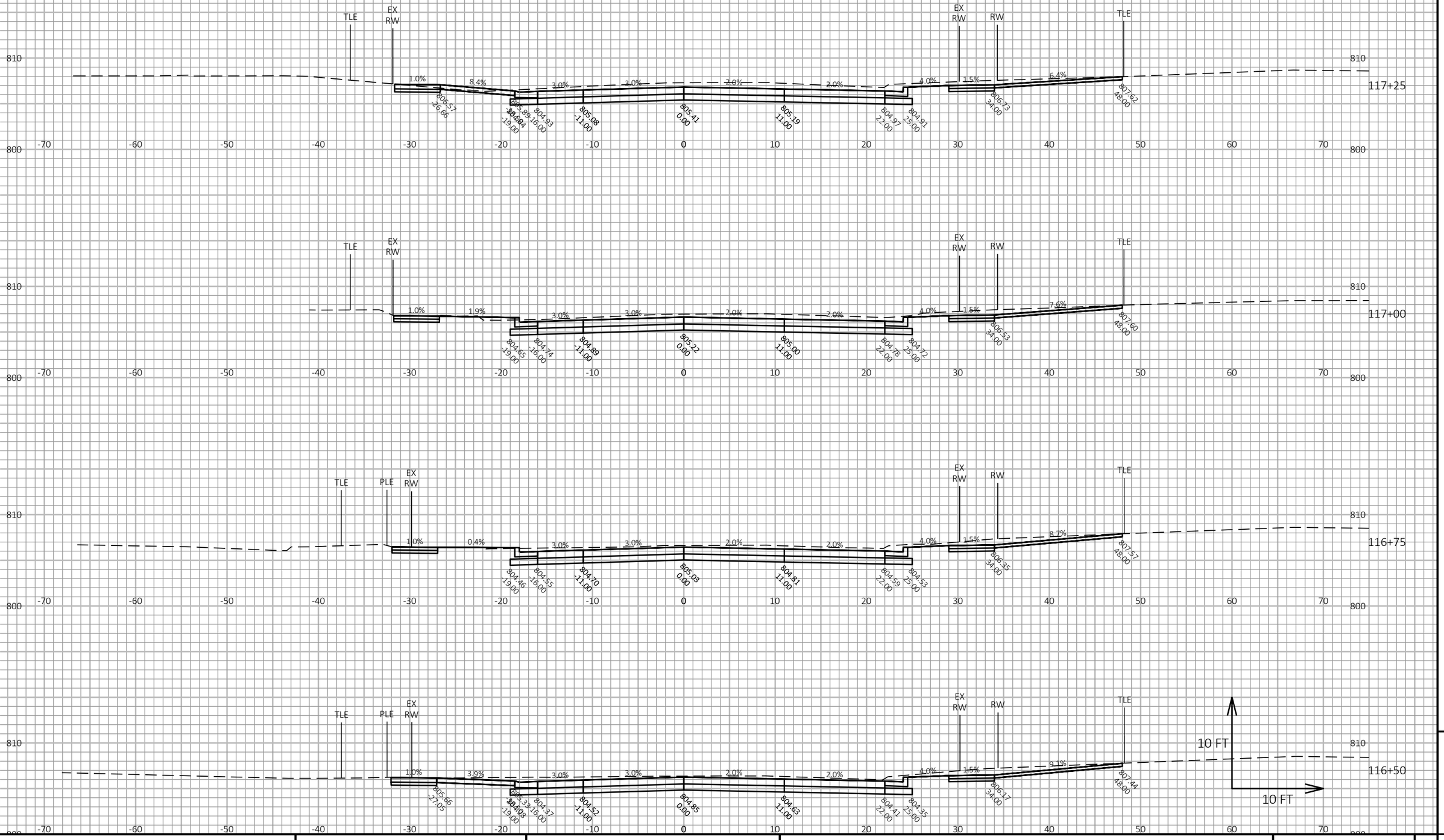

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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 404	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090218-xs

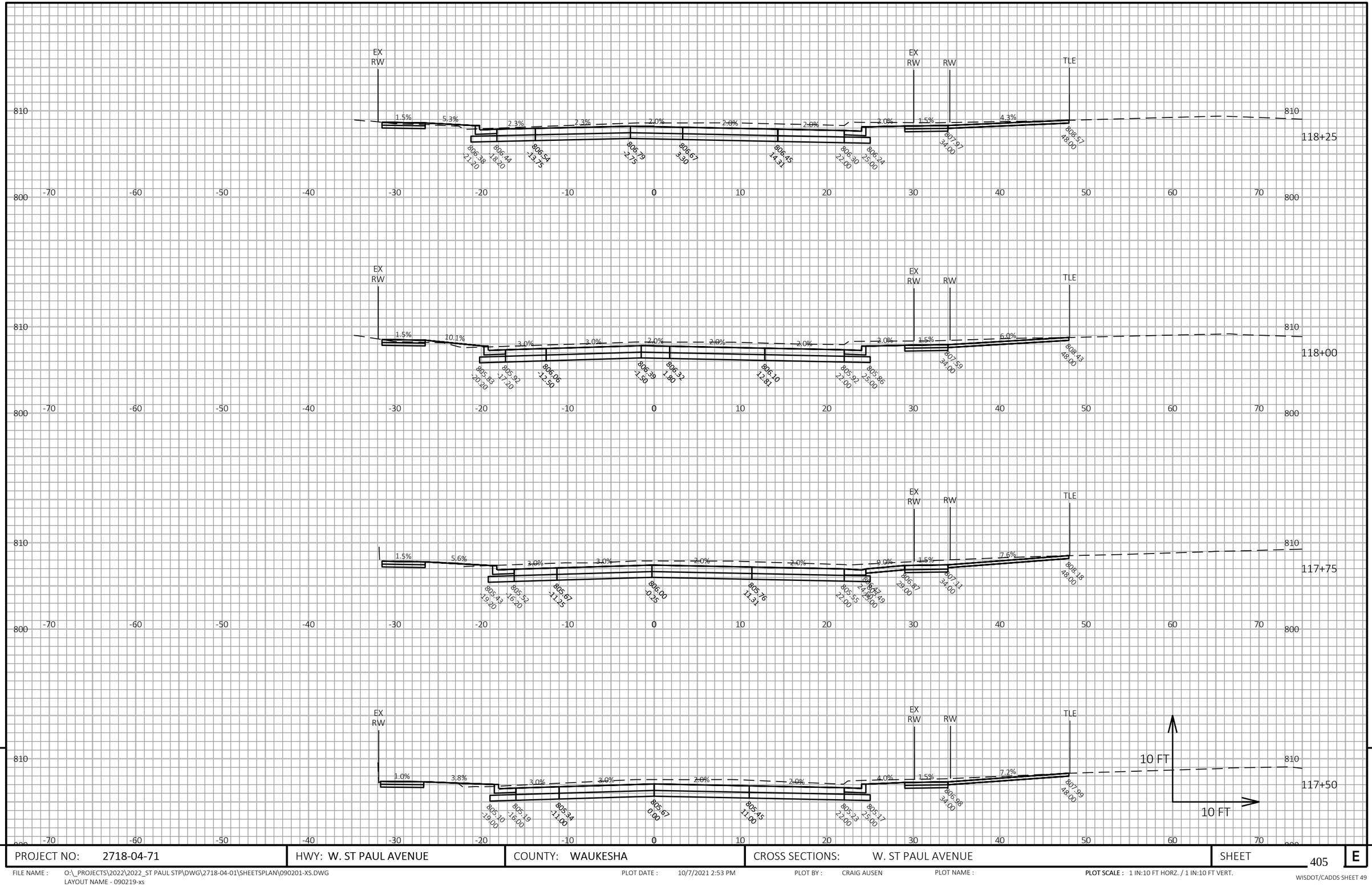
PLOT DATE : 10/7/2021 2:53 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 405	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090219-xs

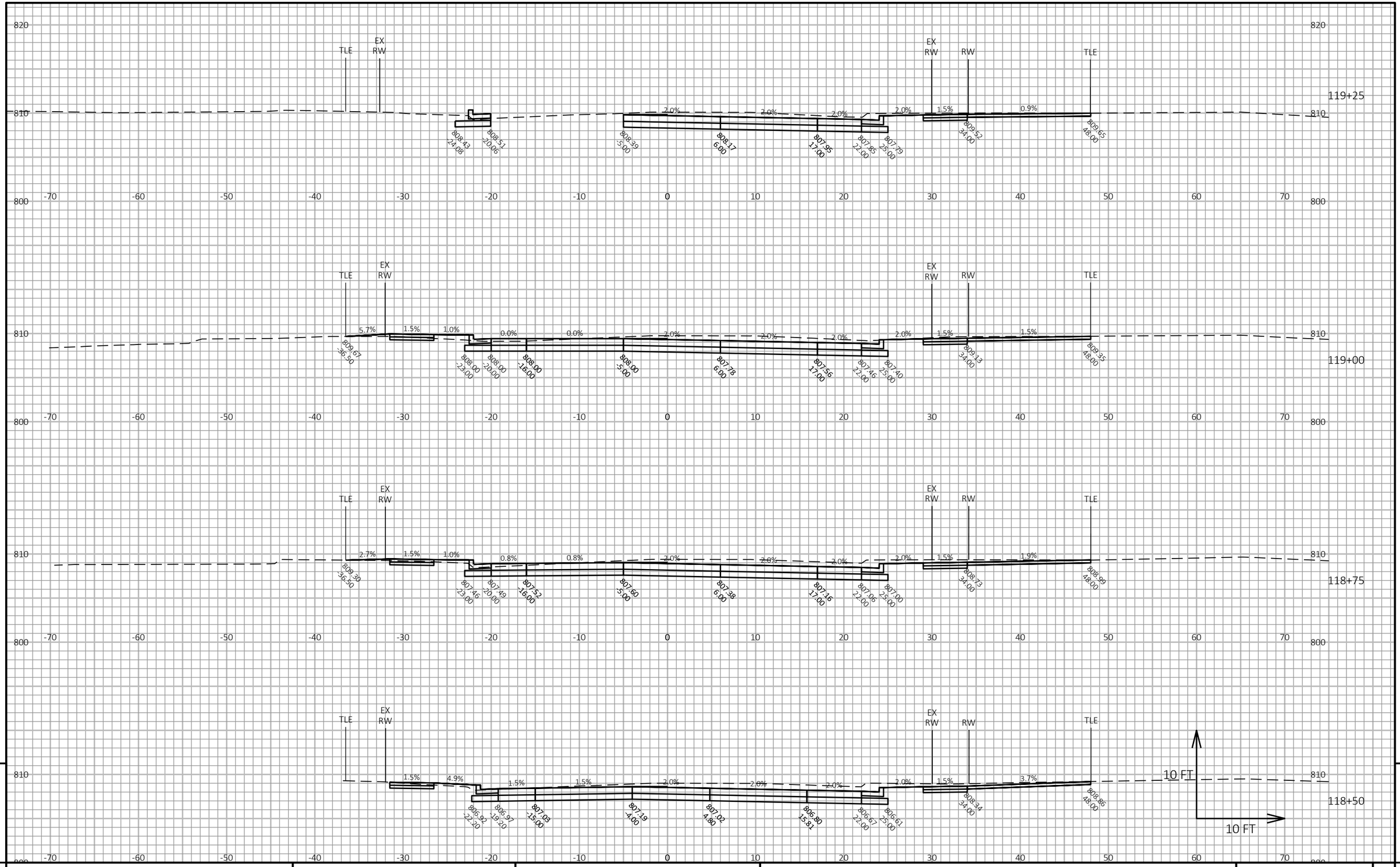
PLOT DATE : 10/7/2021 2:53 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 406	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090220-xs

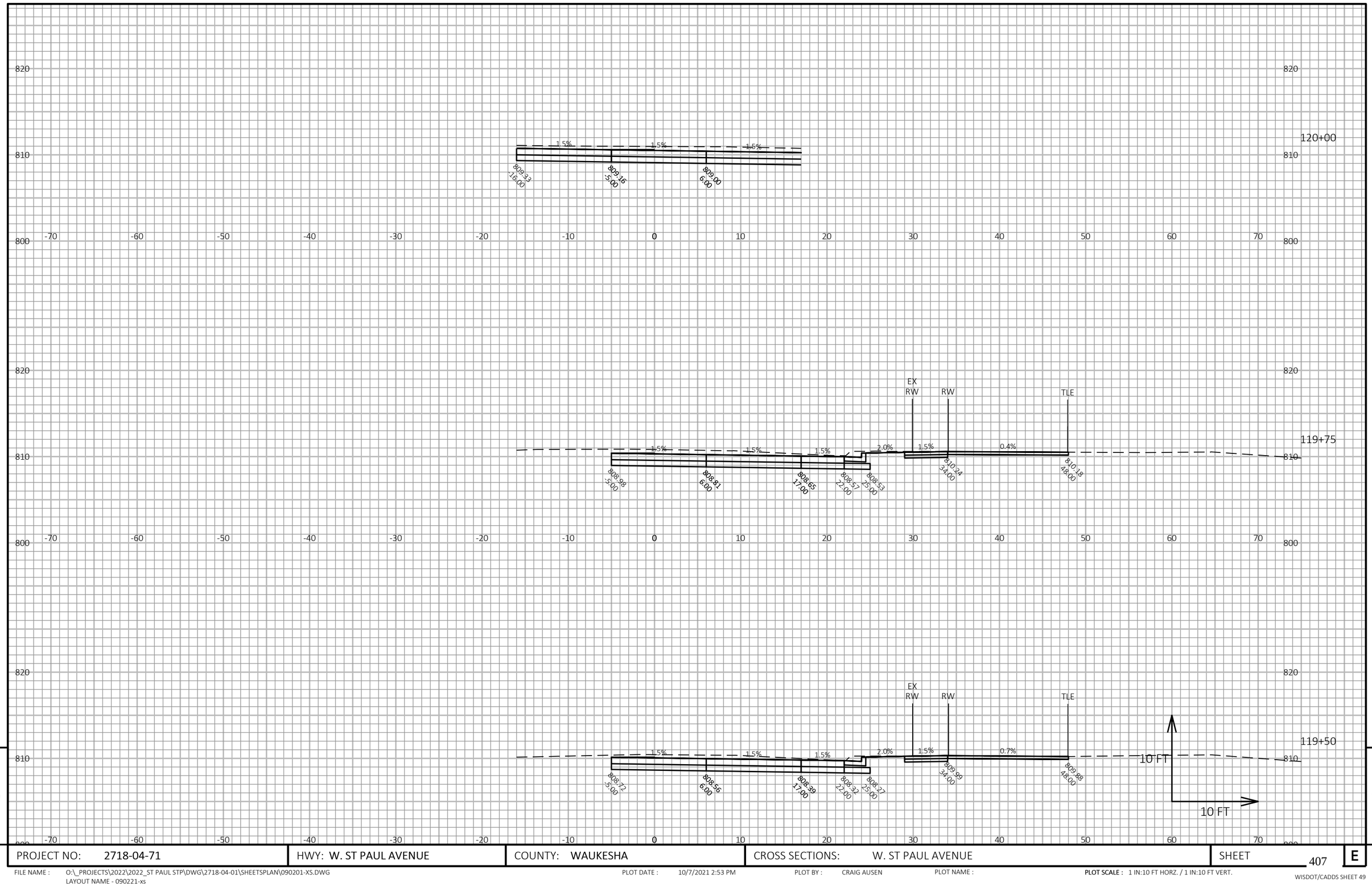
PLOT DATE : 10/7/2021 2:53 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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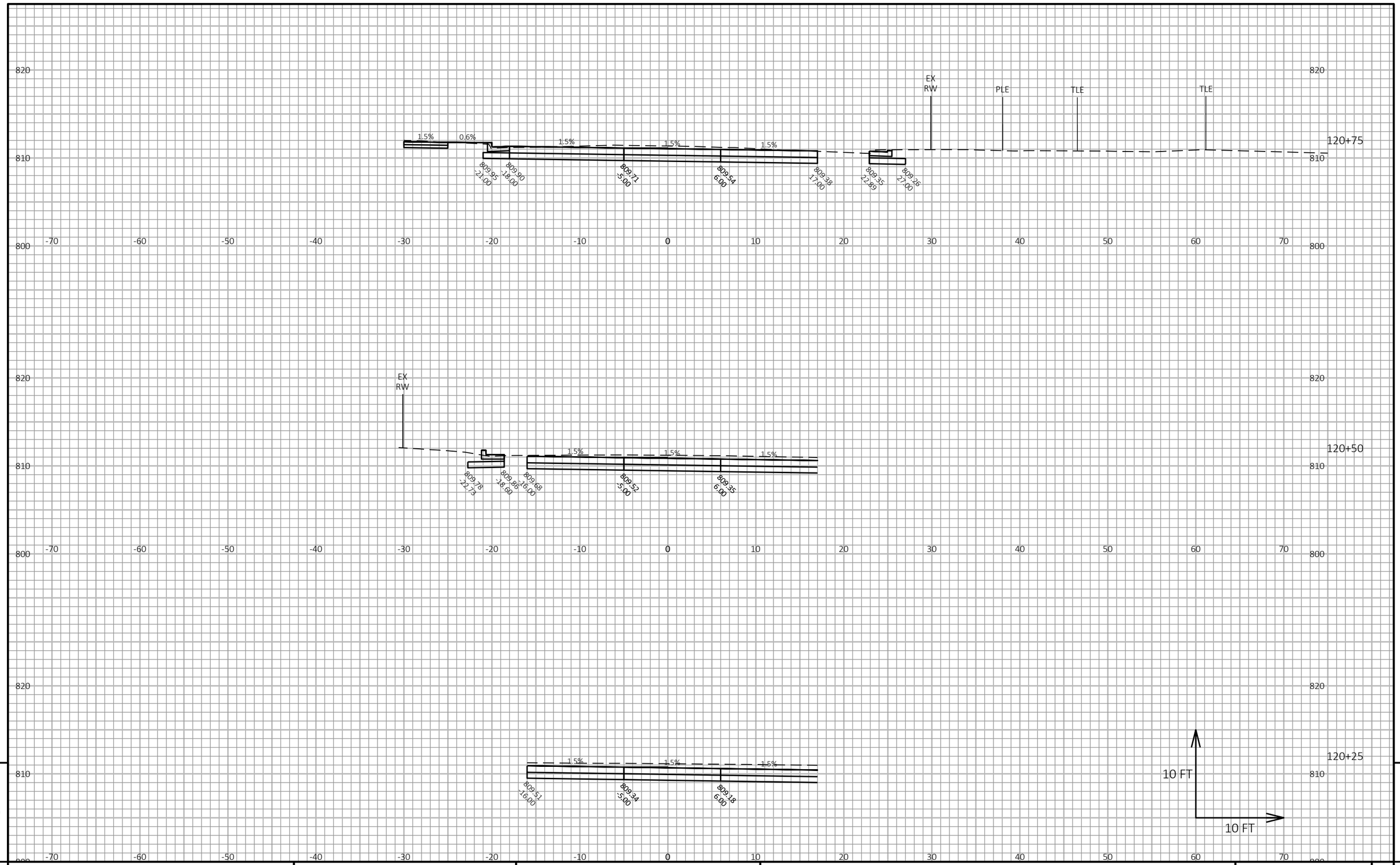
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 407	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090221-xs

PLOT DATE : 10/7/2021 2:53 PM PLOT BY : CRAIG AUSEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 408	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090222-xs

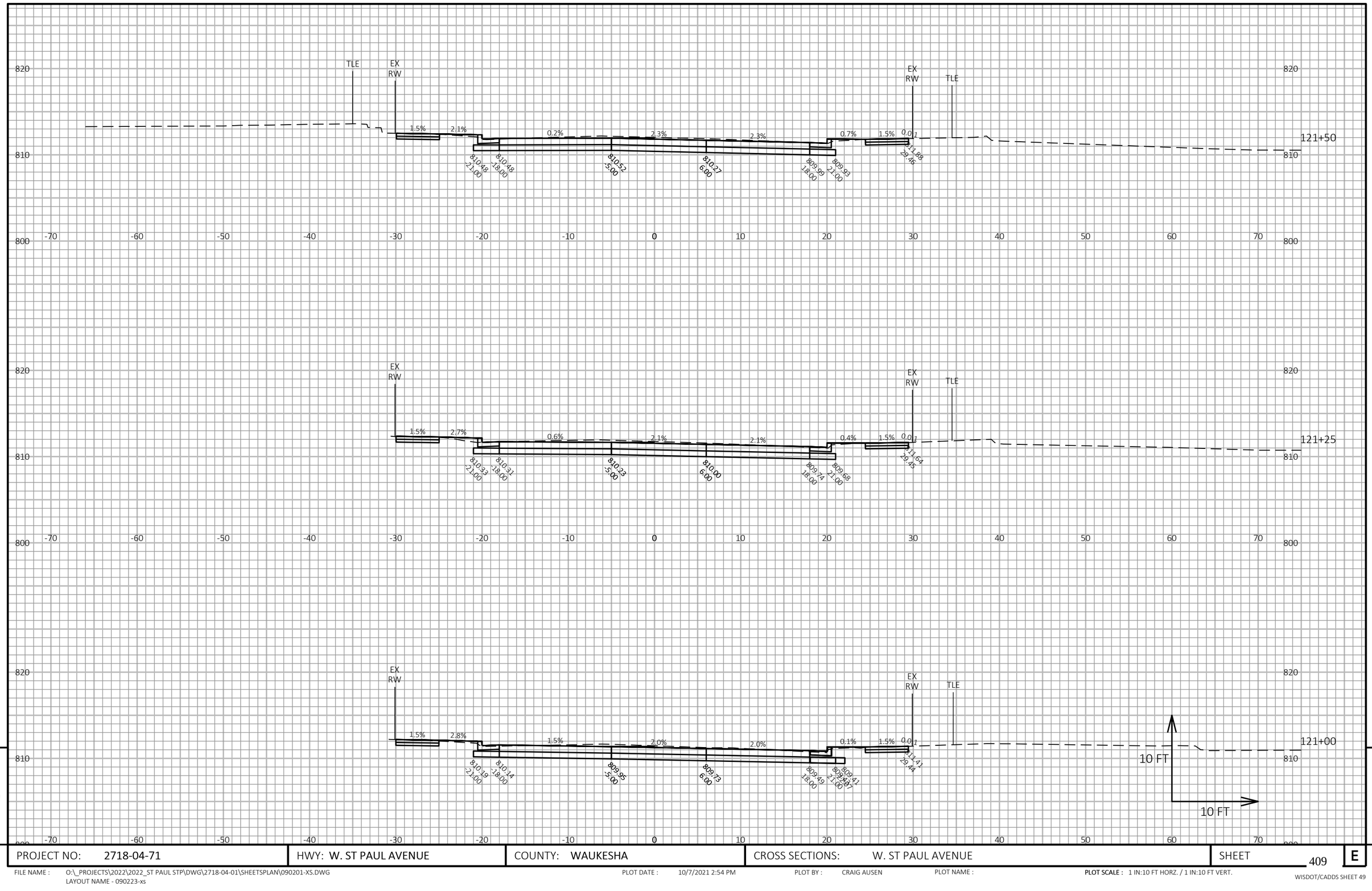
PLOT DATE : 10/7/2021 2:53 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 409	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090223-xs

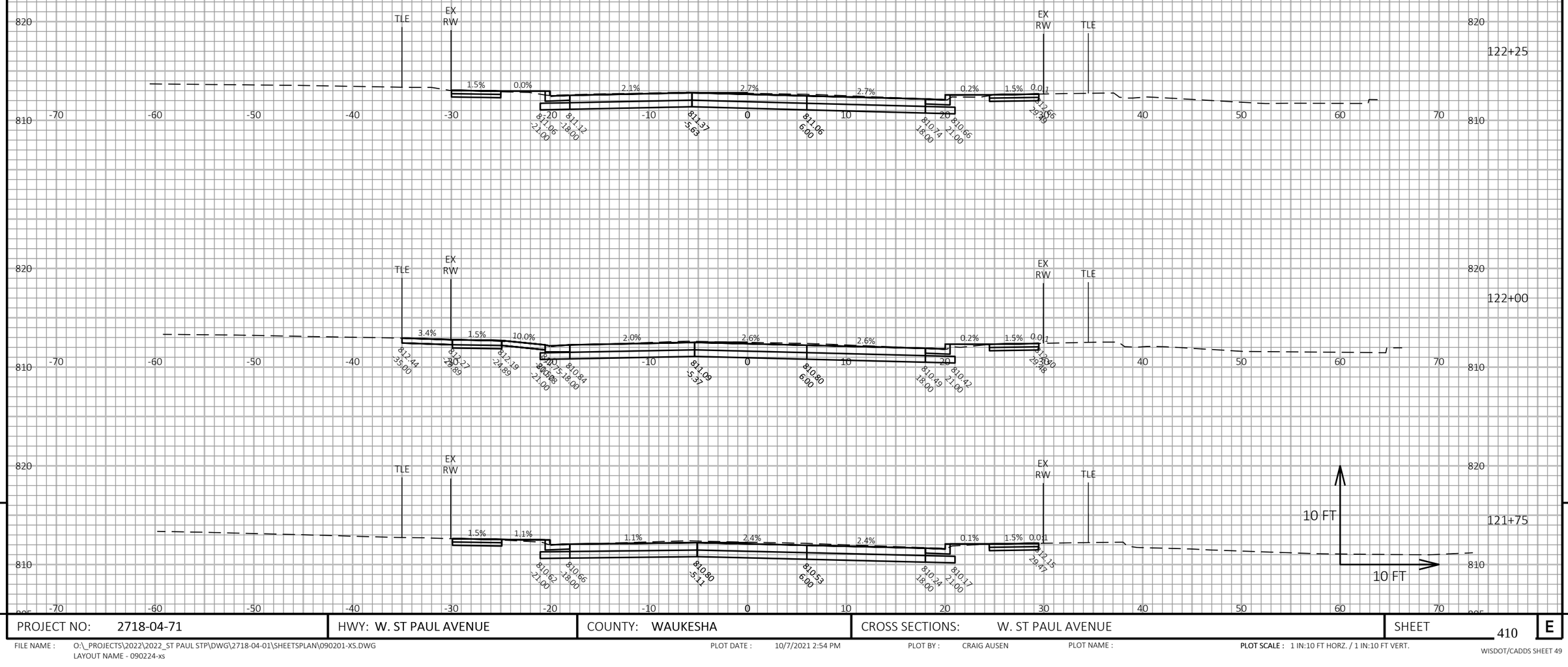
PLOT DATE : 10/7/2021 2:54 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 410	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090224-xs

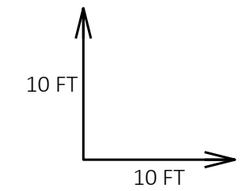
PLOT DATE : 10/7/2021 2:54 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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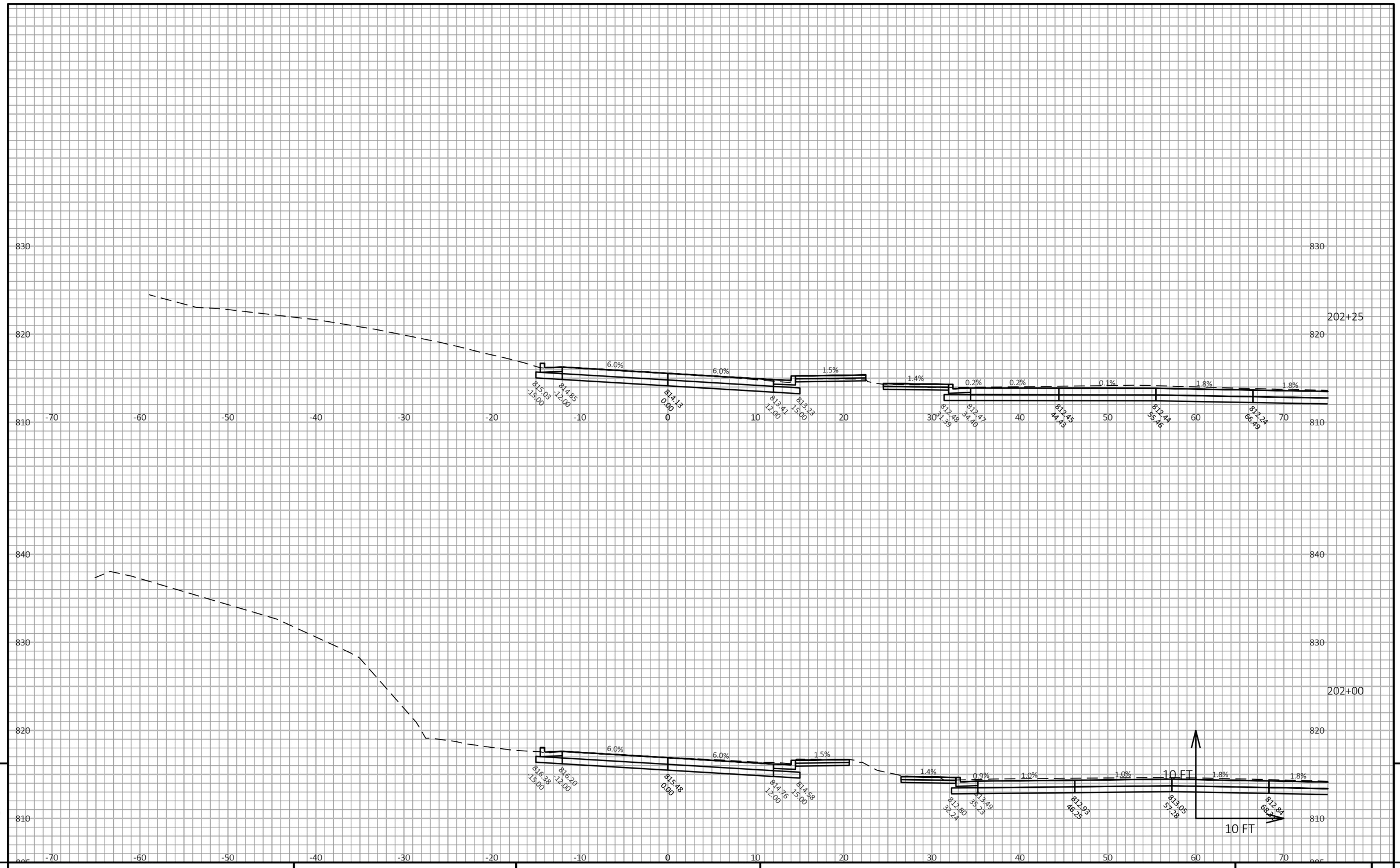
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. ST PAUL AVENUE	SHEET 411	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090225-xs

PLOT DATE : 10/7/2021 2:54 PM PLOT BY : CRAIG AUSEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

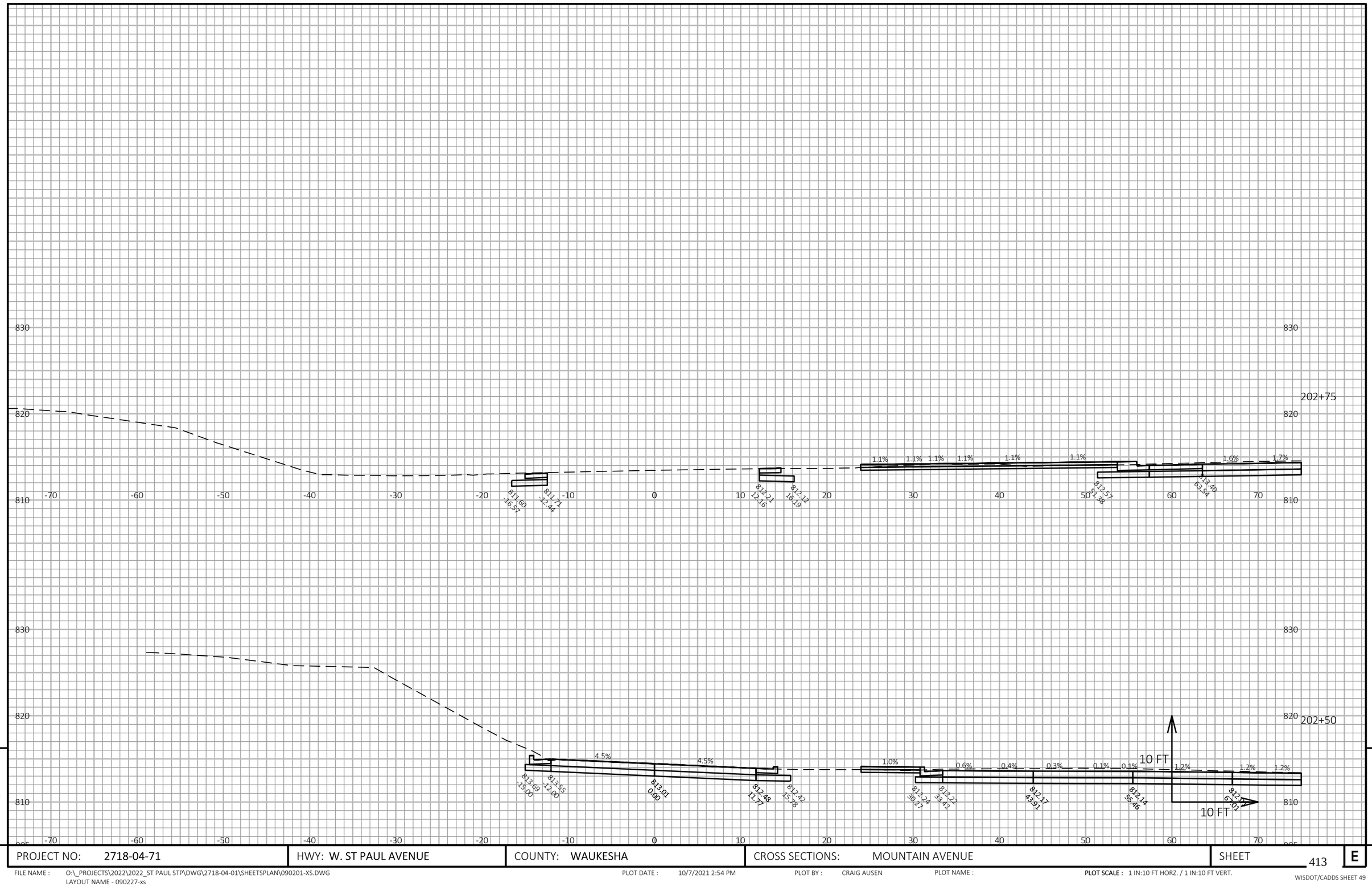
WISDOT/CADDS SHEET 49



PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: MOUNTAIN AVENUE	SHEET 412	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090226-xs

PLOT DATE : 10/7/2021 2:54 PM PLOT BY : CRAIG AUSEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: MOUNTAIN AVENUE	SHEET 413	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090227-xs

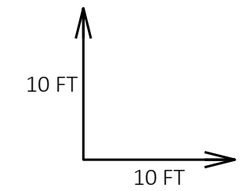
PLOT DATE : 10/7/2021 2:54 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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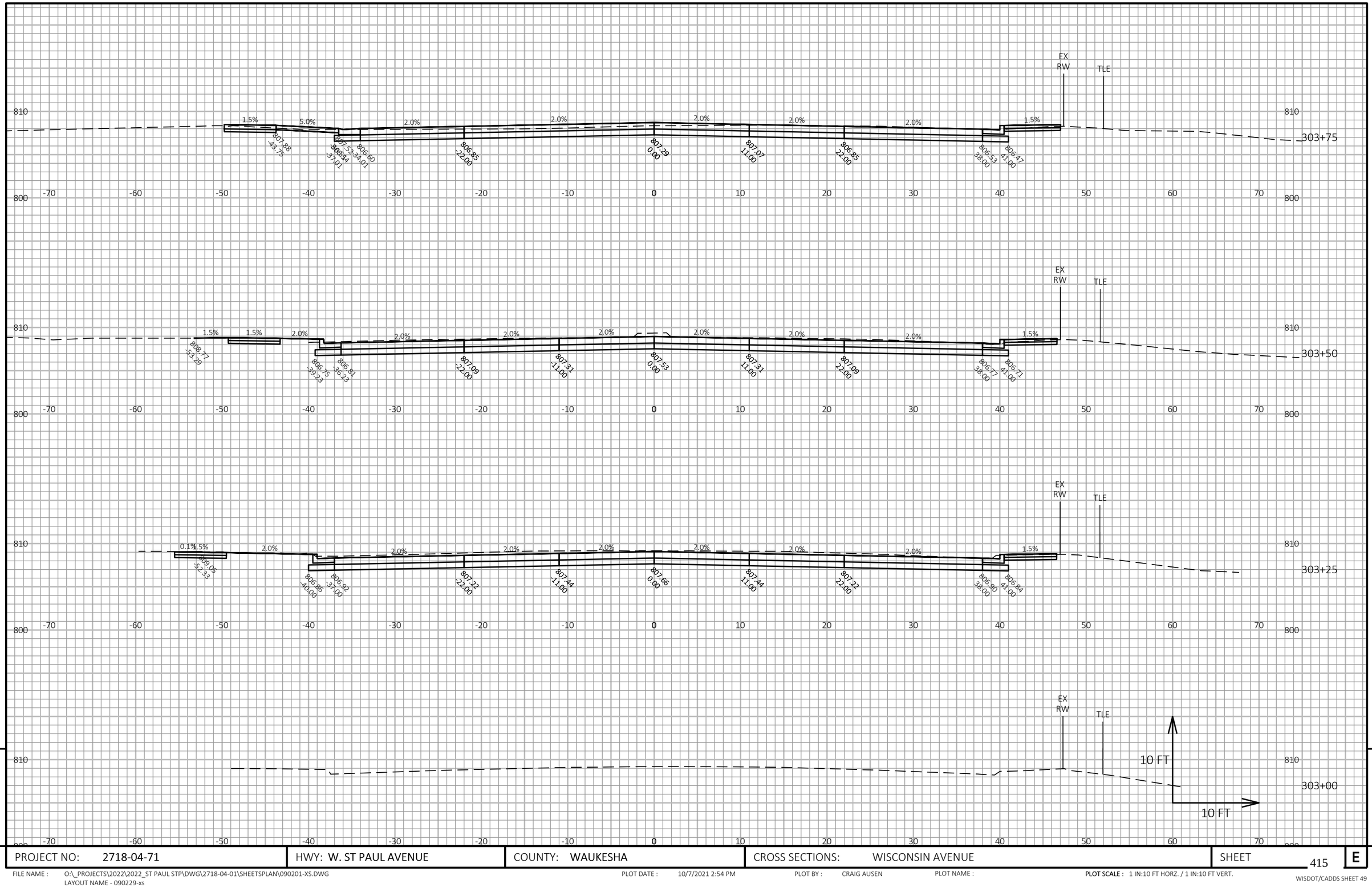
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: MOUNTAIN AVENUE	SHEET 414	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090228-xs

PLOT DATE : 10/7/2021 2:54 PM PLOT BY : CRAIG AUSEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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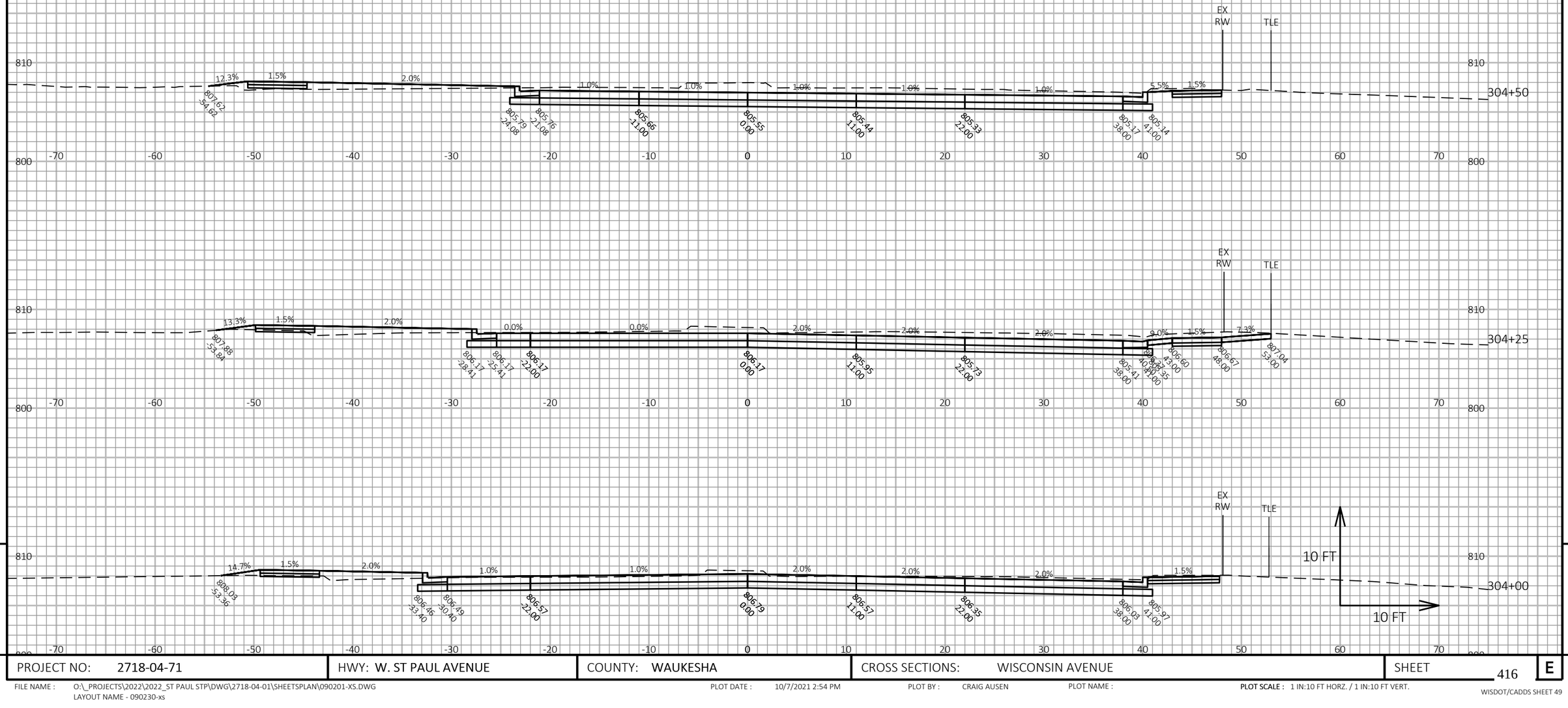
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: WISCONSIN AVENUE	SHEET 415	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090229-xs

PLOT DATE : 10/7/2021 2:54 PM PLOT BY : CRAIG AUSEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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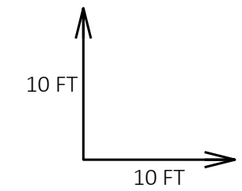
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: WISCONSIN AVENUE	SHEET 416	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090230-xs

PLOT DATE : 10/7/2021 2:54 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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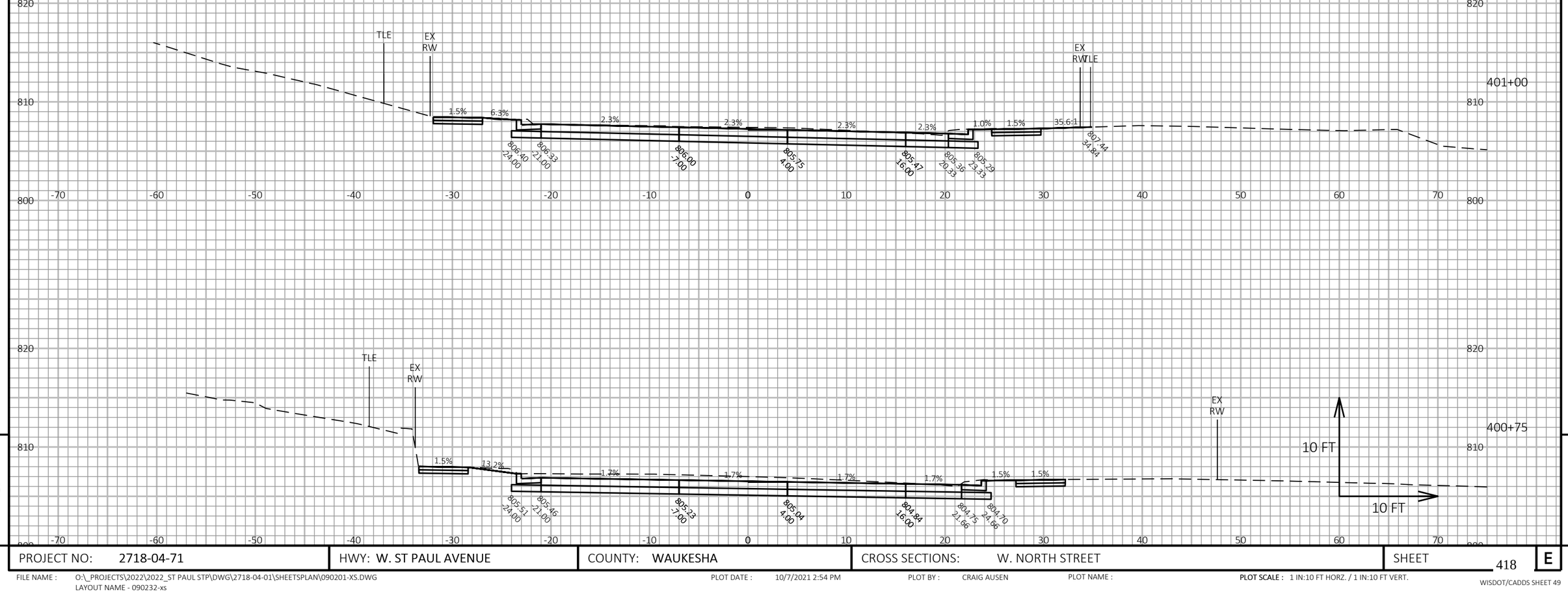
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: WISCONSIN AVENUE	SHEET 417	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090231-xs

PLOT DATE : 10/7/2021 2:54 PM PLOT BY : CRAIG AUSEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. NORTH STREET	SHEET 418	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090232-xs

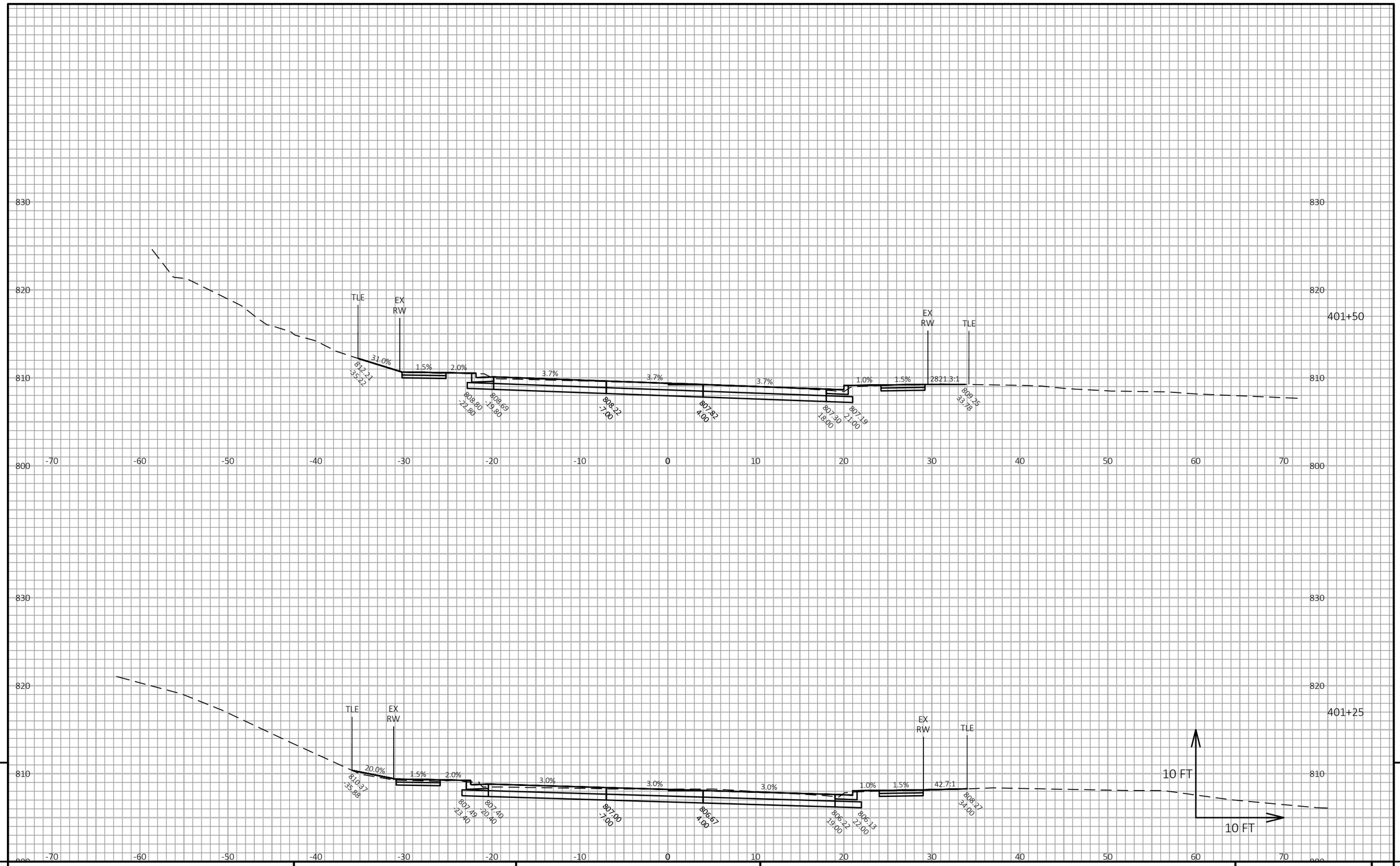
PLOT DATE : 10/7/2021 2:54 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. NORTH STREET	SHEET 419	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090233-xs

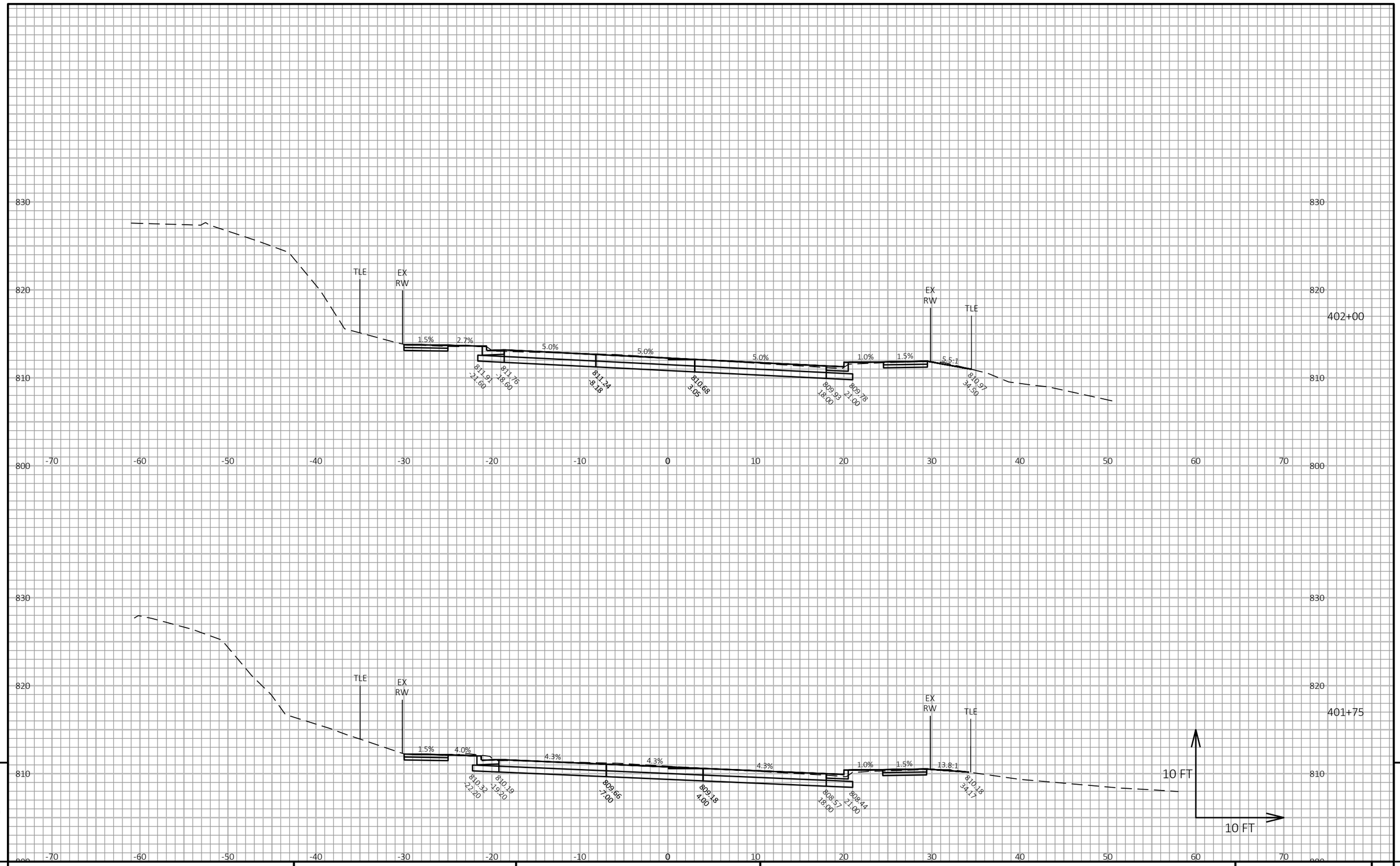
PLOT DATE : 10/7/2021 2:54 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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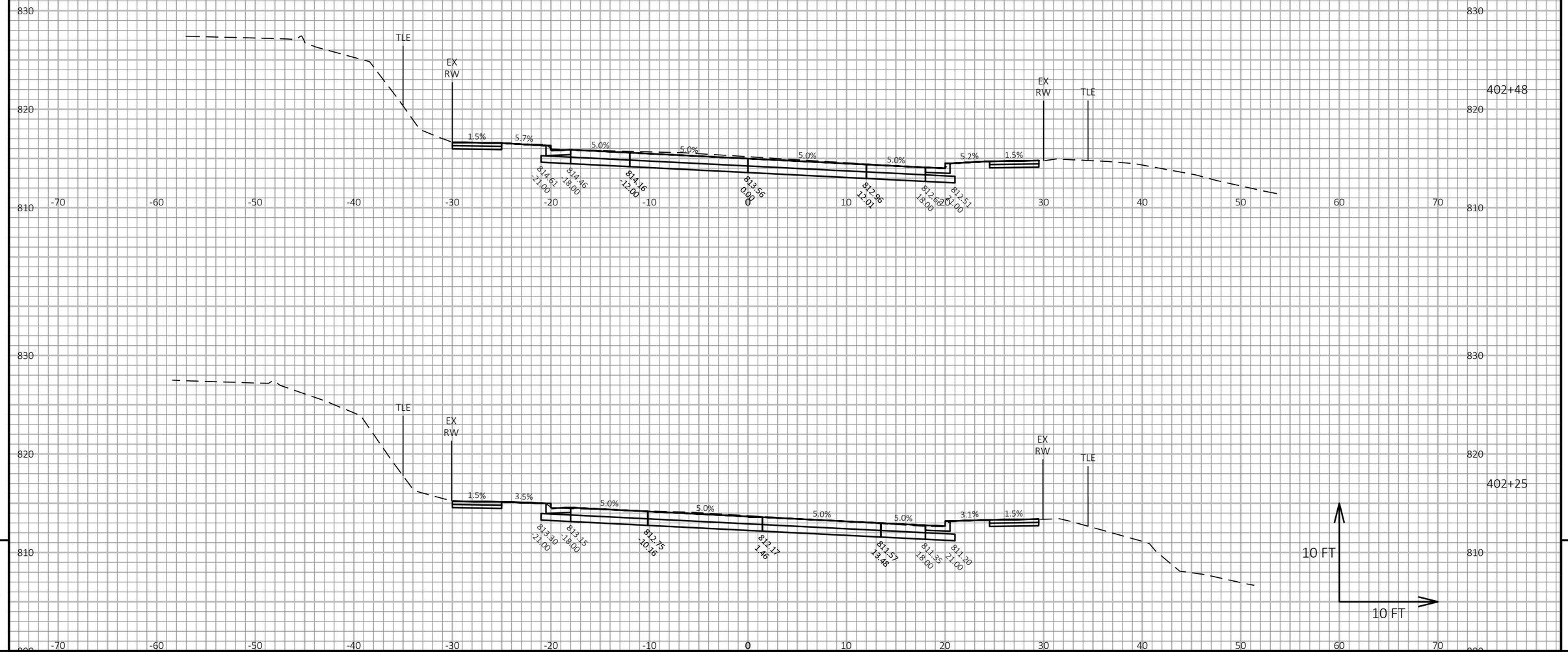
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. NORTH STREET	SHEET 420	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090234-xs

PLOT DATE : 10/7/2021 2:54 PM PLOT BY : CRAIG AUSEN PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. NORTH STREET	SHEET 421	E

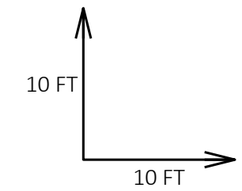
FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090235-xs

PLOT DATE : 10/7/2021 2:55 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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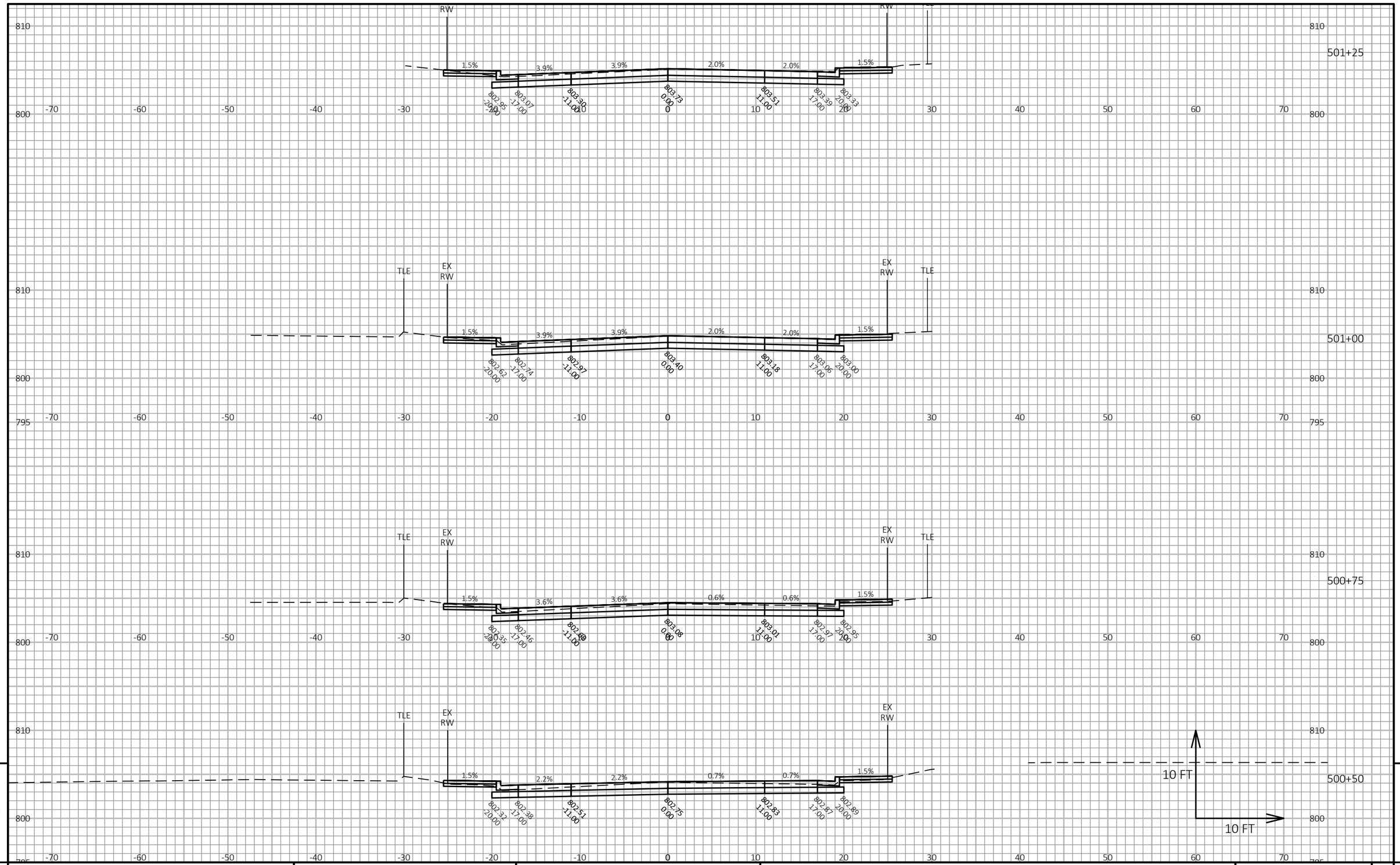
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: W. NORTH STREET	SHEET 422	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090236-xs

PLOT DATE : 10/7/2021 2:55 PM PLOT BY : CRAIG AUSEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: FULLER STREET	SHEET 423	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090237-xs

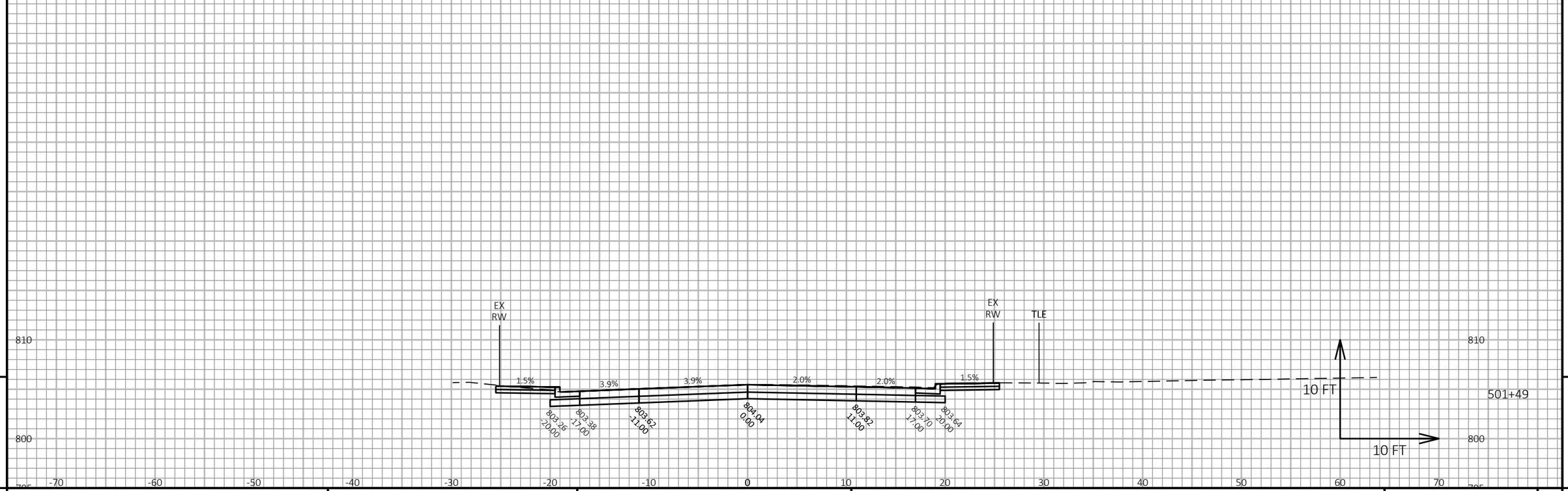
PLOT DATE : 10/7/2021 2:55 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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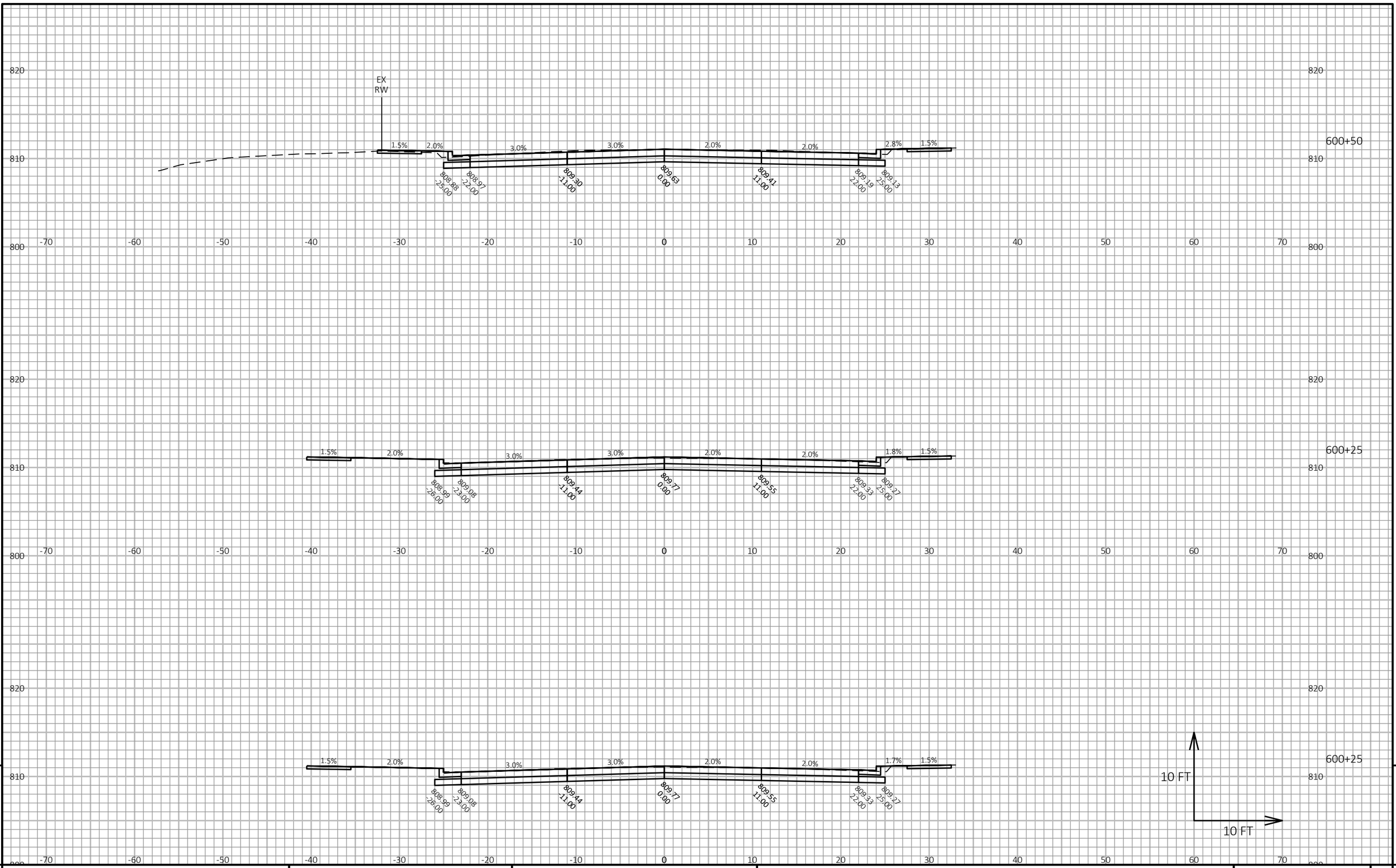
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: FULLER STREET	SHEET 424	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090238-xs

PLOT DATE : 10/7/2021 2:55 PM PLOT BY : CRAIG AUSEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: MADISON STREET	SHEET 425	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090239-xs

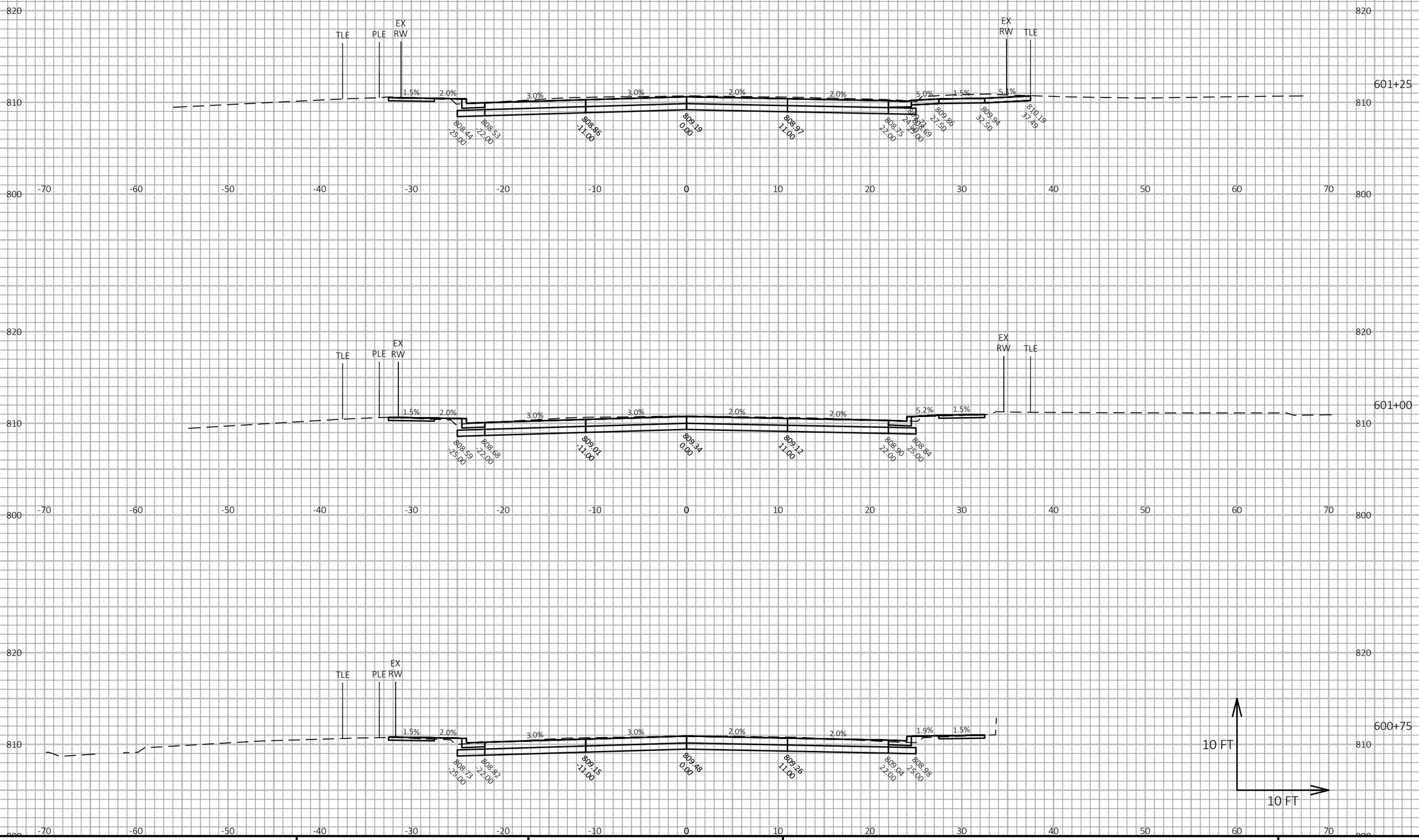
PLOT DATE : 10/7/2021 2:55 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

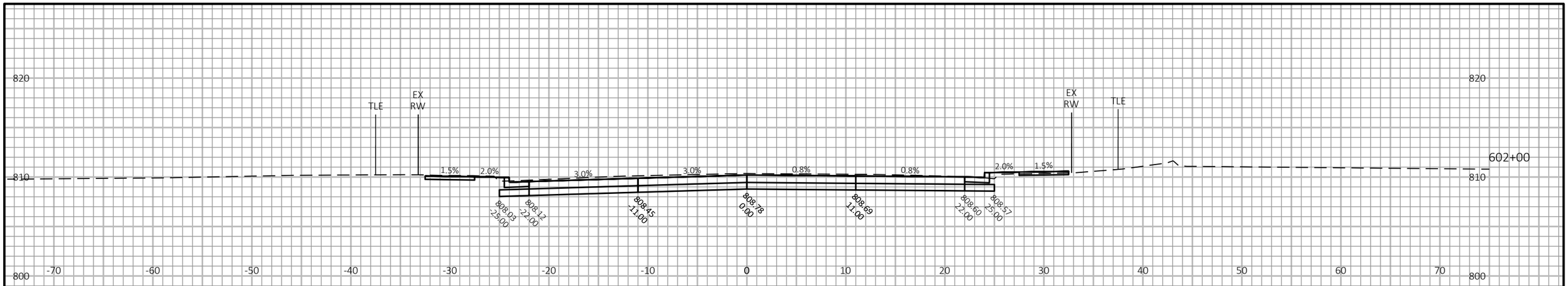


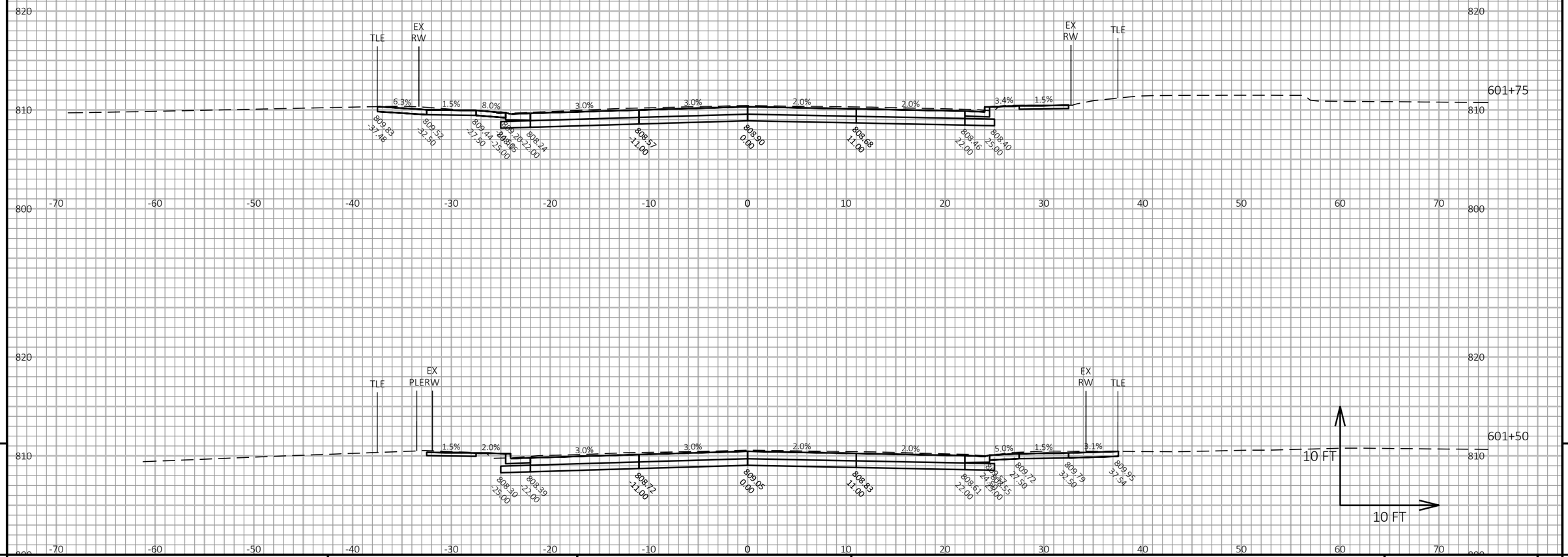
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: MADISON STREET	SHEET 426 E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090240-xs

PLOT DATE : 10/7/2021 2:55 PM PLOT BY : CRAIG AUSEN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: MADISON STREET	SHEET 427	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090241-xs

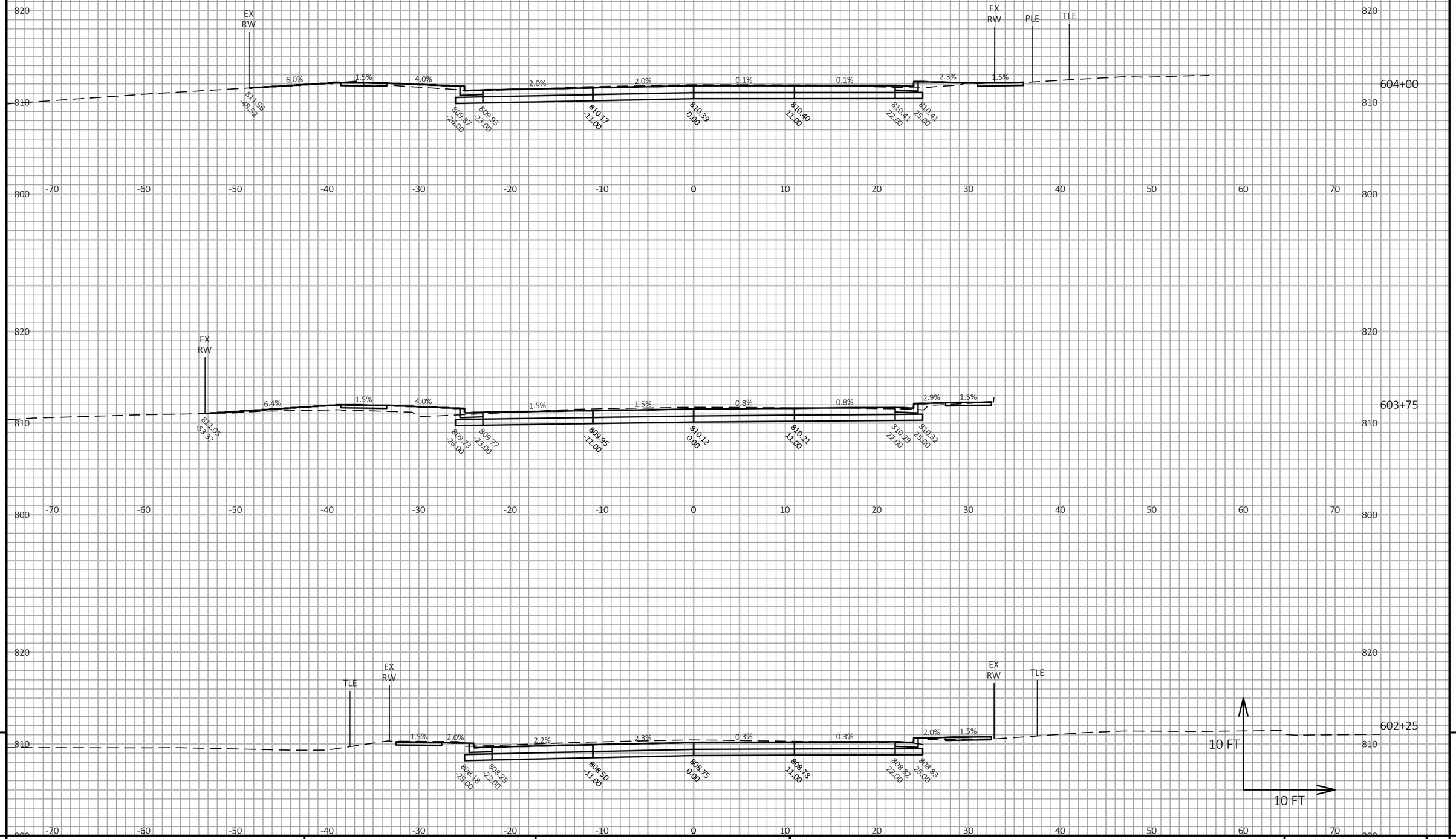
PLOT DATE : 10/7/2021 2:55 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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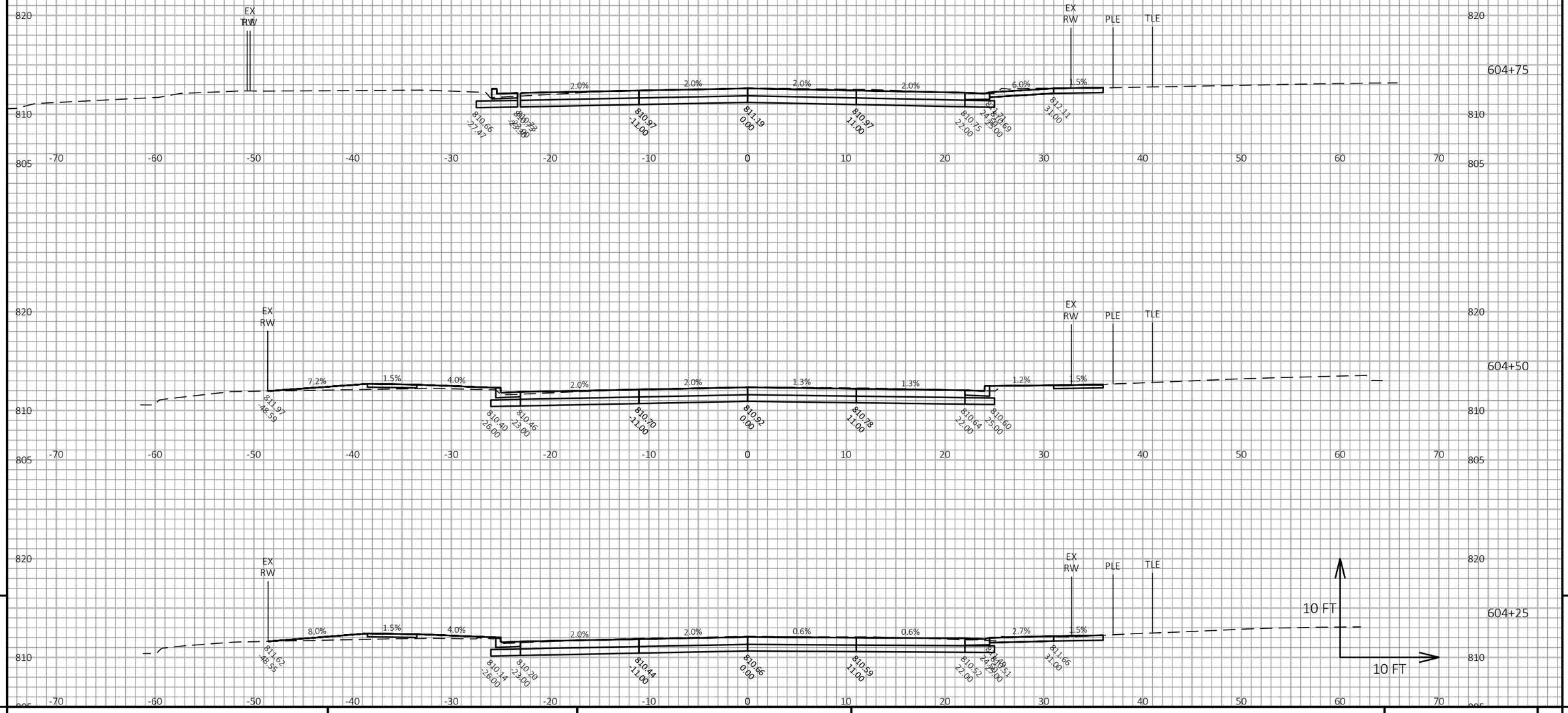
PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: MADISON STREET	SHEET 428	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090242-xs

PLOT DATE : 10/7/2021 2:55 PM PLOT BY : CRAIG AUSEN PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: MADISON STREET	SHEET 429	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090243-xs

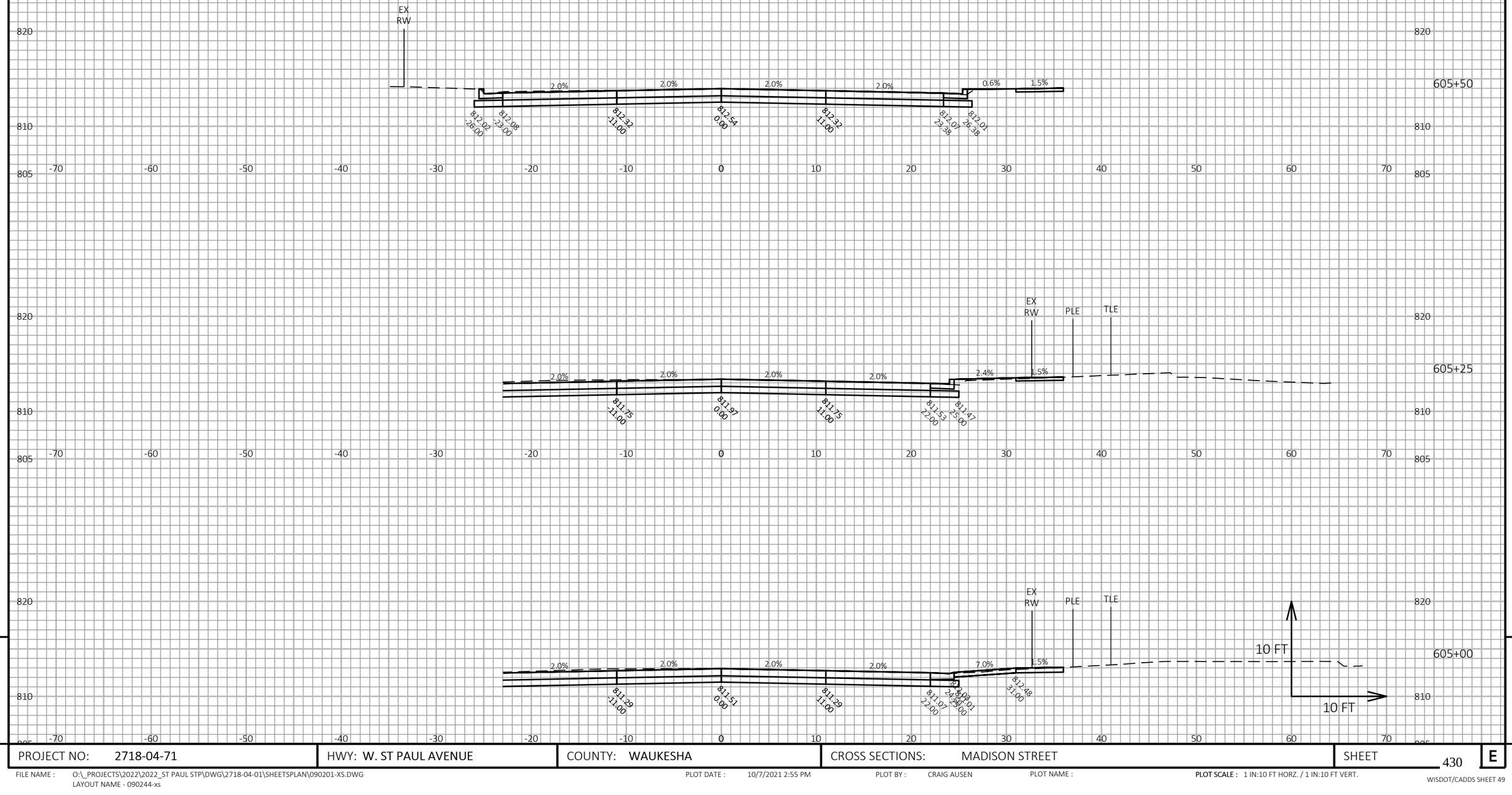
PLOT DATE : 10/7/2021 2:55 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: MADISON STREET	SHEET 430	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090244-xs

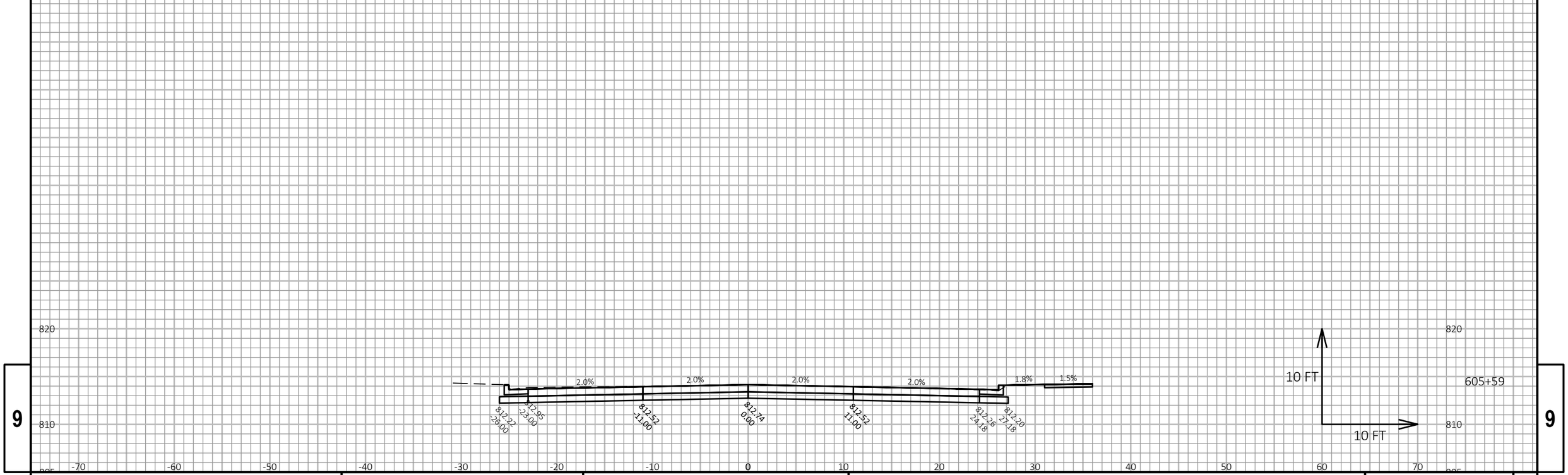
PLOT DATE : 10/7/2021 2:55 PM

PLOT BY : CRAIG AUSEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2718-04-71	HWY: W. ST PAUL AVENUE	COUNTY: WAUKESHA	CROSS SECTIONS: MADISON STREET	SHEET 431	E

FILE NAME : O:_PROJECTS\2022\2022_ST PAUL STP\DWG\2718-04-01\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090245-xs

PLOT DATE : 10/7/2021 2:55 PM PLOT BY : CRAIG AUSEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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through innovation and exceptional service.

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