GRE

PROJECT ID: WITH: N/A **1225-10-72**

COUNTY: **MANITOWOC**

JANUARY 2025

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 = 434



N

DESIGN DESIGNATION

			IH 43	RA 51	RA 52
A.A.D.T.	2025	=	23,400	360	450
A.A.D.T.	2045	=	26,900	410	520
D.H.V.		=	3,150	-	-
D.D.		=	66/34	-	-
T.		=	16.0%	-	-
DESIGN SPEED		=	70 MPH	25 MPH	25 MPH
ESALS		=	N/A	2,500,000	3,200,000

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'FR')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MANITOWOC - GREEN BAY

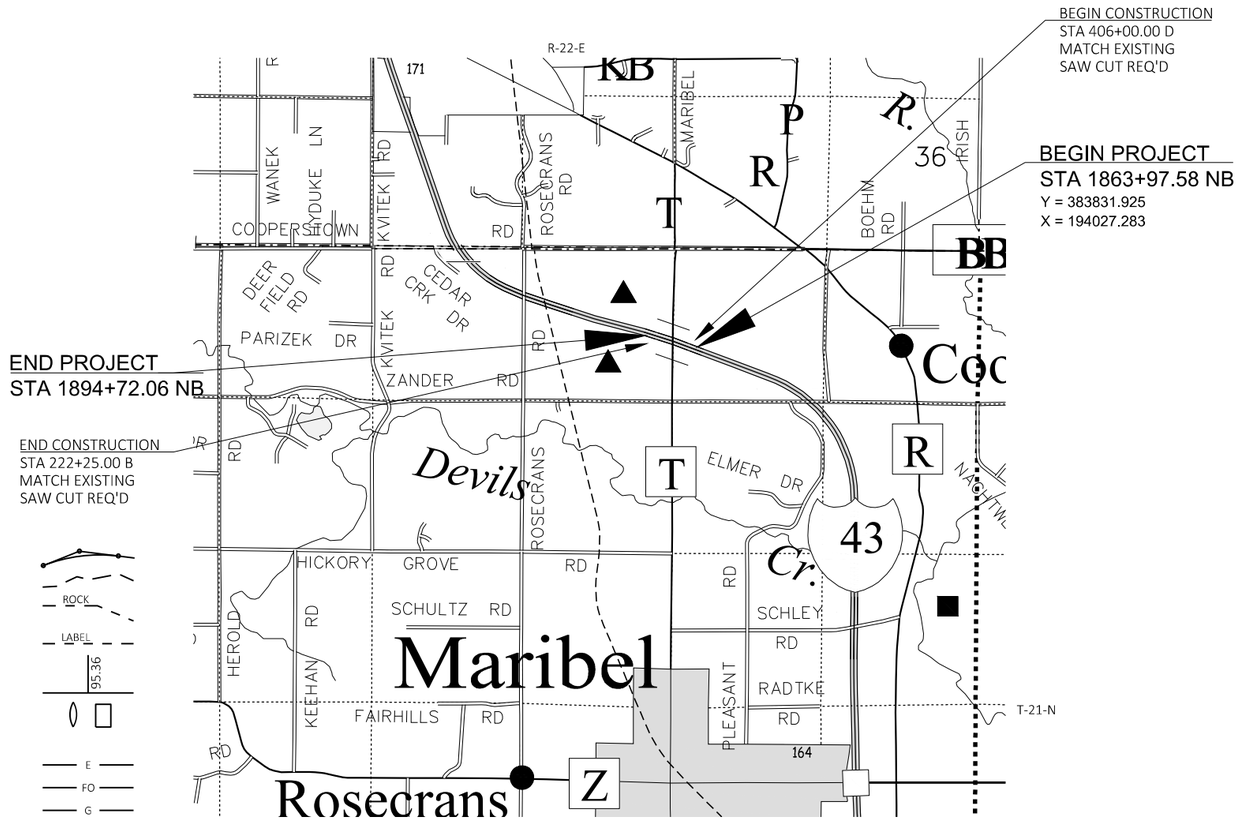
SRA 51 MARIBEL/SRA 52 DENMARK

IH 43

MANITOWOC COUNTY

STATE PROJECT NUMBER
1225-10-72

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1225-10-72	WISC 2025144	1



LAYOUT

SCALE 0 0.5 MI

TOTAL NET LENGTH OF CENTERLINE = 0.000 MI.

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), MANITOWOC COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18

ORIGINAL PLANS PREPARED BY

Mead & Hunt

Mead and Hunt, Inc.
2440 Deming Way
Middleton, WI 53562
phone: 608-273-6380

WISCONSIN PROFESSIONAL ENGINEER
SCOTT A. HASBURGH
E-33329
BARNEVELD, WI

DATE: JULY 24, 2024 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	MEAD & HUNT, INC.
Designer	MEAD & HUNT, INC.
Project Manager	JOSEPH COUGHLIN, PE
Regional Examiner	
Regional Supervisor	THOMAS DEWINTER, PE

APPROVED FOR THE DEPARTMENT

DATE: 07/30/2024 (Signature)

E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\010101-TI.DWG PLOT DATE : 7/23/2024 12:46 PM PLOT BY : DAVID YAHNKE PLOT NAME :

GENERAL NOTES

ALL RADII DIMENSIONS WITH OR WITHOUT CURB AND GUTTER ARE MEASURED TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

ALL GRADES PROVIDED ALONG RADII ARE ALONG THE EDGE OF PAVEMENT.

RIGHT OF WAY LINES SHOWN ON THE CROSS SECTIONS ARE APPROXIMATE.

TEMPORARY STORAGE OF ANY EXCAVATION MATERIAL WILL NOT BE PERMITTED IN WETLANDS OR WATERWAYS.

EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.

WHEN THE QUANTITY OF THE ITEMS OF BASE AGGREGATE, SUBBASE OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

CONSTRUCT INSIDE EDGE OF SIDEWALK 0.04' HIGHER THAN TOP OF CURB WHEN THEY ARE ADJACENT TO EACH OTHER.

INLET GRATE ELEVATIONS REFERRED TO ON INLET NOTES ARE GRATE FLOW LINE ELEVATIONS.

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.

STANDARD ABBREVIATIONS

AADT	ANNUAL AVERAGE DAILY TRAFFIC
ADT	AVERAGE DAILY TRAFFIC
AGG	AGGREGATE
ASPH	ASPHALTIC
BM	BENCH MARK
BOC	BACK OF CURB
C&G	CURB AND GUTTER
CABC	CRUSHED AGGREGATE BASE COURSE
CE	COMMERCIAL ENTRANCE
CL	CENTERLINE
CONC	CONCRETE
COR	CORNER
CP	CULVERT PIPE
CPRC	CONCRETE PIPE REINFORCED CONCRETE
CWT	HUNDRED WEIGHT
CY	CUBIC YARD
DIA	DIAMETER
DHV	DESIGN HOURLY VOLUME
DWY	DRIVEWAY
EL	ELEVATION
EX	EXISTING
EXC	EXCAVATION
EW	ENDWALL
FT	FOOT
FTG	FOOTING
HYD	HYDRANT
INL	INLET
INV	INVERT
LB	POUND
LF	LINEAR FOOT
LHF	LEFT-HAND FORWARD
LS	LUMP SUM
LT	LEFT
Mgal	MEGAGALLON
MH	MANHOLE
M/L	MAINLINE
N	NORTH
NB	NORTHBOUND
NO	NUMBER
PAVT	PAVEMENT
PE	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
PP	POWER POLE
QTY	QUANTITY
R	RADIUS
RHF	RIGHT-HAND FORWARD
RT	RIGHT
R/L	REFERENCE LINE
R/W	RIGHT-OF-WAY
SALV	SALVAGED
SE	SUPERELEVATION
SF	SQUARE FOOT
SHLDR	SHOULDER
SS	STORM SEWER
STA	STATION
SW	SIDEWALK
SY	SQUARE YARD
T	TRUCKS (PERCENT OF)
TEL	TELEPHONE
TLE	TEMPORARY LIMITED EASEMENT
TYP	TYPICAL
UG	UNDERGROUND CABLE
VAR	VARIABLE
VC	VERTICAL CURVE
VPC	VERTICAL POINT OF CURVE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
WM	WATER MAIN
WV	WATER VALVE

UTILITY CONTACTS

COMMUNICATIONS

BRIGHTSPEED OF CENTRAL WISCONSIN LLC - COMMUNICATION LINE
SCOTT HEINZELMAN
144 N. PEARL ST.
BERLIN, WI 54923
PHONE: (608)716-5964
EMAIL: SCOTT.HEINZELMAN@BRIGHTSPEED.COM

COMMUNICATIONS

LUMEN - COMMUNICATION LINE
RYAN BIRDSALL
19 W FOND DU LAC ST
RIPON, WI 54971
PHONE: (608)658-2899
EMAIL: RELOCATIONS@LUMEN.COM

ELECTRIC

WISCONSIN PUBLIC SERVICE CORPORATION - ELECTRICITY
CHUCK WINDUS
227 W. CALUMET ST.
CHILITON, WI 53014
PHONE: (920)617-5281
CELL: (920)606-1141
EMAIL: CHARLES.WINDUS@WISCONSINPUBLICSERVICE.COM

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 95.97 ACRES
TOTAL EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 27.30 ACRES

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
REMOVAL DETAILS
PLAN DETAILS
PAVING GRADE DETAILS
CURB RAMP DETAILS
CONTOUR MAP
EARTHWORK MATCHLINES
EROSION CONTROL PLAN
STORM SEWER PLAN
SANITARY SEWER PLAN
WATER SCHEMATIC
ELECTRICAL POWER LAYOUT PLAN
COMMUNICATIONS LAYOUT PLAN
INFORMATIONAL BUILDING PLANS
SIGNING REMOVAL DETAILS
PERMANENT SIGNING AND PAVEMENT MARKING PLAN
LIGHTING PLAN
PLAZA FEATURES
PLANTING PLAN
PLANTING CONSTRUCTION DETAILS
FTMS
TRAFFIC CONTROL
STAGING
ALIGNMENT DETAILS
SOIL BORINGS

WISDOT BHM CONTACT

WISCONSIN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY MAINTENANCE
ATTN: JOSEPH COUGHLIN
482 MADISON YARDS WAY
MADISON, WI. 53705
PHONE: (608)261-8975
EMAIL: JOSEPH.COUGHLIN@DOT.WI.GOV

WISDOT NE REGION CONTACT

WISCONSIN DEPARTMENT OF TRANSPORTATION
NE REGION
ATTN: BRIAN HAEN
944 VAN DER PERREN WAY
GREEN BAY, WI. 54304
PHONE: (920)366-4788
EMAIL: BRIAN.HAEN@DOT.WI.GOV

CONSULTANT CONTACT

MEAD & HUNT, INC.
ATTN: SCOTT HASBURGH
2440 DEMING WAY
MIDDLETON, WI. 53562
PHONE: (608)443-0436
EMAIL: SCOTT.HASBURGH@MEADHUNT.COM

DNR LIAISON

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
NORTHEAST REGION
ATTN: MATT SCHAEVE
2984 SHAWANO AVE.
GREEN BAY, WI 54313
PHONE: (920)366-1544
EMAIL: MATTHEW.SHAEVE@WISCONSIN.GOV

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

2

2

N

R/W

SI

205+00 B

210+00 B

215+00 B

220+00 B

225+00 B

CONC

REST AREA 51

BEGIN CONSTRUCTION
STA 107+50.00 A

END CONSTRUCTION
STA 222+25.00 B

CTH T

DEVIL RIVER STATE TRAIL

ROSECRANS RD

105+00 A

110+00 A

115+00 A

305+00 C

310+00 C

315+00 C

IH 43 SB

1850+00 SB
1855+00 SB
1860+00 SB
1865+00 SB
1870+00 SB
1875+00 SB
1880+00 SB
1885+00 SB
1890+00 SB
1895+00 SB
1900+00 SB
1905+00 SB
1910+00 SB

1850+00 NB
1855+00 NB
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1865+00 NB
1870+00 NB
1875+00 NB
1880+00 NB
1885+00 NB
1890+00 NB
1895+00 NB
1900+00 NB
1905+00 NB
1910+00 NB

IH 43 NB

405+00 D

410+00 D

415+00 D

420+00 D

425+00 D

430+00 D

505+00 E

510+00 E

515+00 E

519+00 E

605+00 F

610+00 F

615+00 F

BEGIN PROJECT
STA 1863+97.58 NB
Y = 383831.925
X = 194027.283

BEGIN CONSTRUCTION
STA 406+00.00 D

REST AREA 52

END CONSTRUCTION
STA 509+50.00 E

END PROJECT
STA 1894+72.06 NB

COOPERSTOWN RD

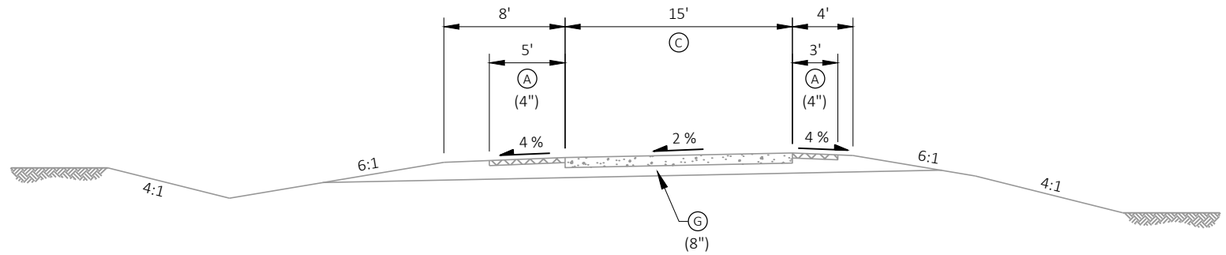
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\020201-PO.DWG
LAYOUT NAME - 020201-po

PLOT DATE : 11/26/2024 11:15 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:400 FT

WISDOT/CADDS SHEET 42

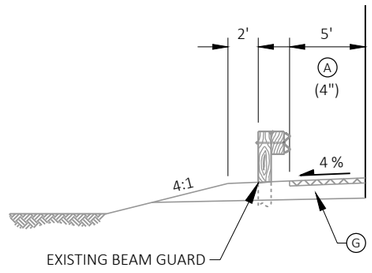
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NOTE: STA 107+50A TO STA 107+87A
AND STA 221+69B TO 222+25B
CONSISTS OF 2" HMA PAVEMENT
OVER 8" CONCRETE PAVEMENT

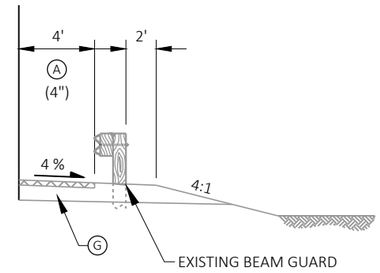
EXISTING TYPICAL SECTION

RAMP A STA 107+50A - STA 117+06A
RAMP B STA 200+00B - STA 201+95B
RAMP B STA 209+21B - STA 222+25B



BEAM GUARD

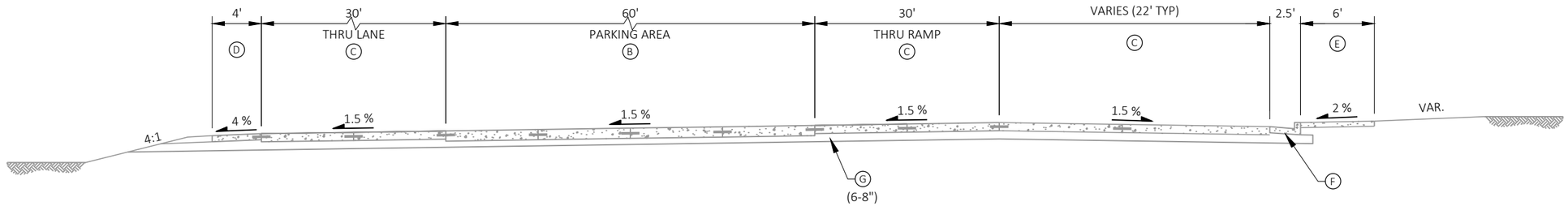
RAMP B STA 209+20B - STA 219+18B



BEAM GUARD

RAMP B STA 217+98B - STA 219+16B

(A) EXISTING ASPHALTIC CONCRETE SHOULDER (DEPTH NOTED)
(B) EXISTING 10" CONCRETE PAVEMENT
(C) EXISTING 8" CONCRETE PAVEMENT
(D) EXISTING 6" CONCRETE SHOULDER
(E) EXISTING 5" CONCRETE SIDEWALK
(F) EXISTING CONCRETE CURB & GUTTER
(G) EXISTING BASE AGGREGATE (DEPTH NOTED)
(H) EXISTING 4"-6" ASPHALTIC CONCRETE PAVEMENT

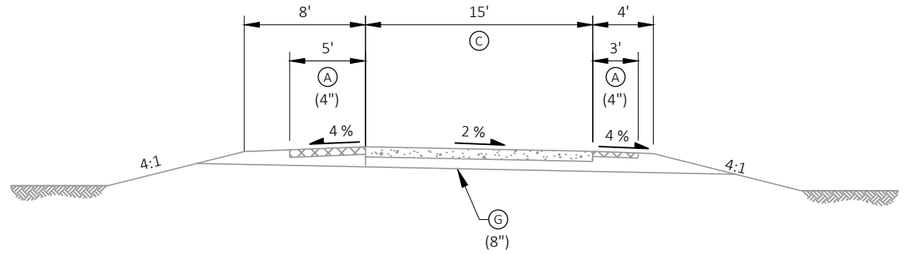


EXISTING TYPICAL SECTION

RAMP B STA 201+95B - STA 209+21B

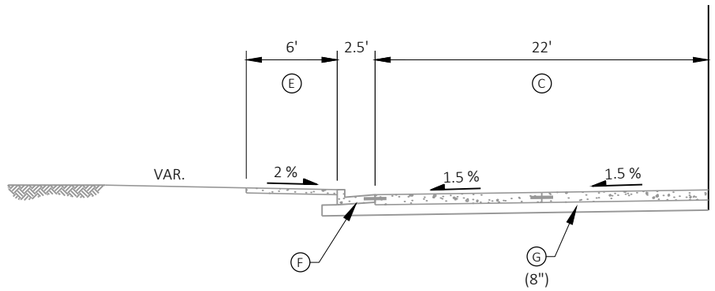
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 4	E

2



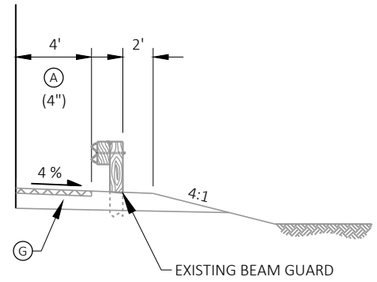
EXISTING TYPICAL SECTION

RAMP C STA 302+20C - STA 315+20C



CAR PARKING

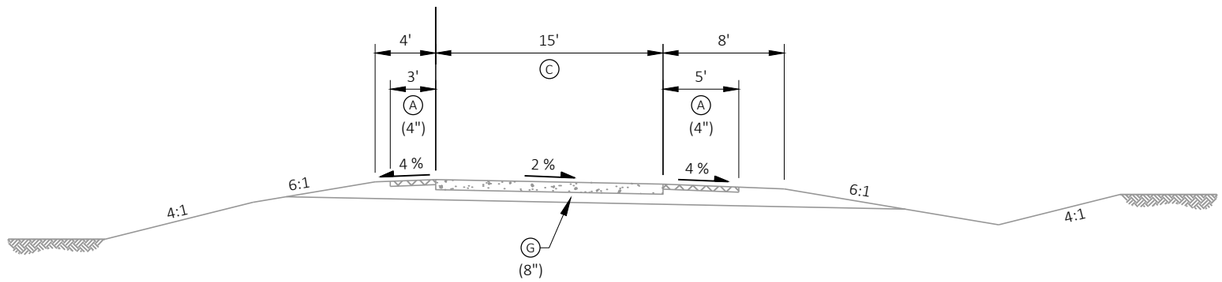
RAMP C STA 304+68C - STA 310+40C



BEAM GUARD

RAMP C STA 310+64C - STA 317+97C

- (A) EXISTING ASPHALTIC CONCRETE SHOULDER (DEPTH NOTED)
- (B) EXISTING 10" CONCRETE PAVEMENT
- (C) EXISTING 8" CONCRETE PAVEMENT
- (D) EXISTING 6" CONCRETE SHOULDER
- (E) EXISTING 5" CONCRETE SIDEWALK
- (F) EXISTING CONCRETE CURB & GUTTER
- (G) EXISTING BASE AGGREGATE (DEPTH NOTED)
- (H) EXISTING 4"-6" ASPHALTIC CONCRETE PAVEMENT

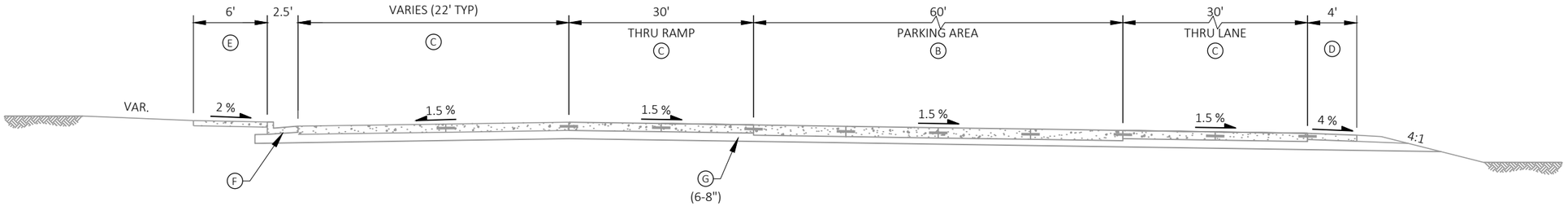


NOTE: STA 406+00D TO STA 406+68D
AND STA 508+80E TO 509+50E
CONSISTS OF 2" HMA PAVEMENT
OVER 8" CONCRETE PAVEMENT

EXISTING TYPICAL SECTION

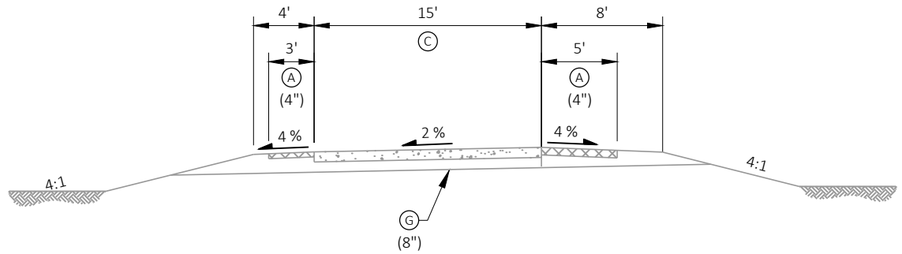
RAMP D STA 400+06D - STA 420+76D
RAMP D STA 427+13D - STA 430+37D
RAMP E STA 500+00E - STA 517+70E

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 5	E



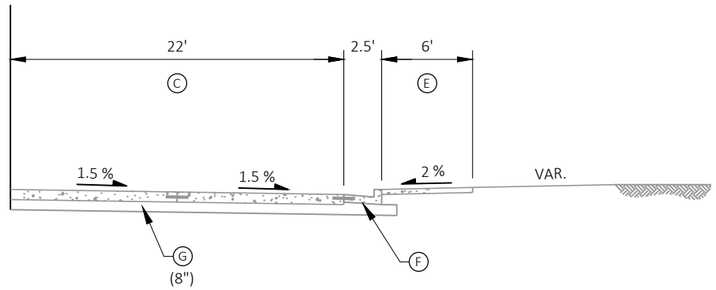
EXISTING TYPICAL SECTION

RAMP D STA 420+76D - STA 427+26D



EXISTING TYPICAL SECTION

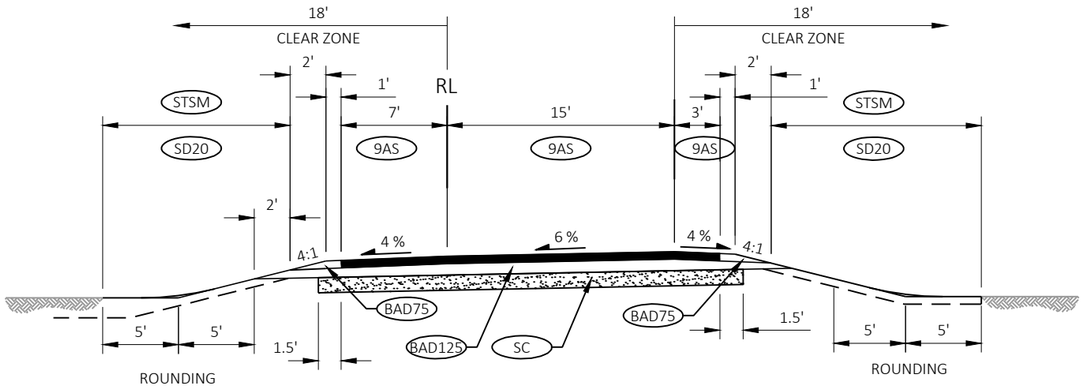
RAMP F STA 600+00F - STA 617+03F



CAR PARKING

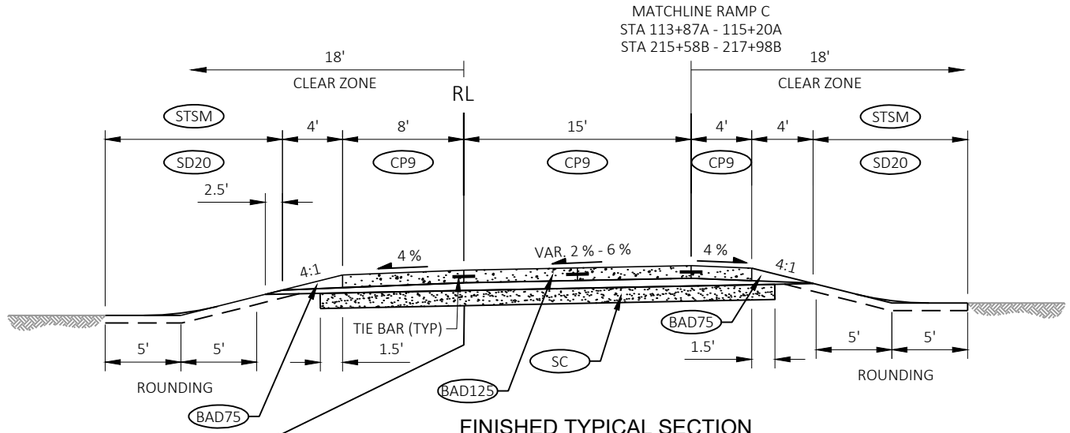
RAMP F STA 606+44F - STA 612+35F

- A EXISTING ASPHALTIC CONCRETE SHOULDER (DEPTH NOTED)
- B EXISTING 10" CONCRETE PAVEMENT
- C EXISTING 8" CONCRETE PAVEMENT
- D EXISTING 6" CONCRETE SHOULDER
- E EXISTING 5" CONCRETE SIDEWALK
- F EXISTING CONCRETE CURB & GUTTER
- G EXISTING BASE AGGREGATE (DEPTH NOTED)
- H EXISTING 4"-6" ASPHALTIC CONCRETE PAVEMENT



FINISHED TYPICAL SECTION

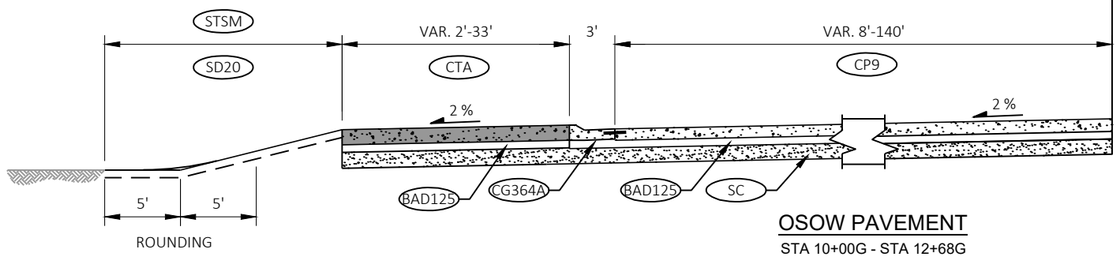
RAMP A STA. 107+50A - STA. 108+00A
RAMP B STA. 221+75B - STA. 222+25B



FINISHED TYPICAL SECTION

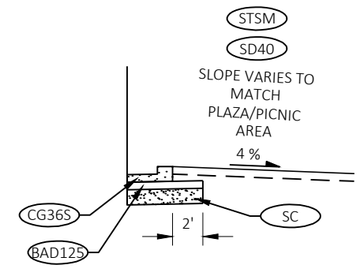
RAMP A STA. 108+00A - STA. 117+06A
RAMP B STA. 213+42B - STA. 221+75B

		MAX UPPER LAYER	MAX LOWER LAYER
9AS	9" ASPHALTIC SURFACE	2.5" 5 MT 58-34 V	3.5" 5 MT 58-34 V



OSOW PAVEMENT

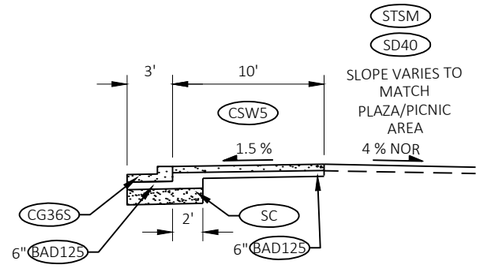
STA 10+00G - STA 12+68G



CURB

RAMP A STA. 115+20A - STA. 116+43A

CG36S	CONCRETE CURB AND GUTTER 36-INCH TYPE A SPECIAL
CG364A	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
CP8	CONCRETE PAVEMENT 8-INCH
CP9	CONCRETE PAVEMENT 9-INCH
CTA	CONCRETE TRUCK APRON 12-INCH
STSM	SALVAGED TOPSOIL AND EROSION MAT CLASS 1, URBAN TYPE B
SD40	SEEDING MIXTURE NO 40, SEEDING TEMPORARY, FERTILIZER TYPE B
9AS	9" ASPHALTIC TIC SURFACE
AS	4" ASPHALTIC SURFACE
CSW5	CONCRETE SIDEWALK 5-INCH
BAD75	BASE AGGREGATE DENSE ¾-INCH
BAD125	6" BASE AGGREGATE DENSE 1¼-INCH
SC	12" SELECT CRUSHED MATERIAL OVER GEOGRID TYPE SR
SD20	SEEDING MIXTURE NO 20, SEEDING TEMPORARY, FERTILIZER TYPE B

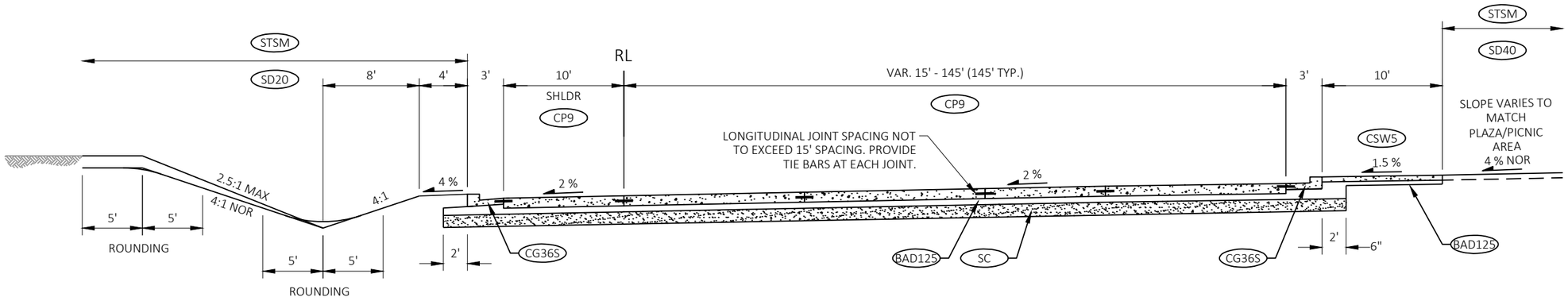


CURB & SIDEWALK

RAMP A STA. 116+43A - STA. 117+06A

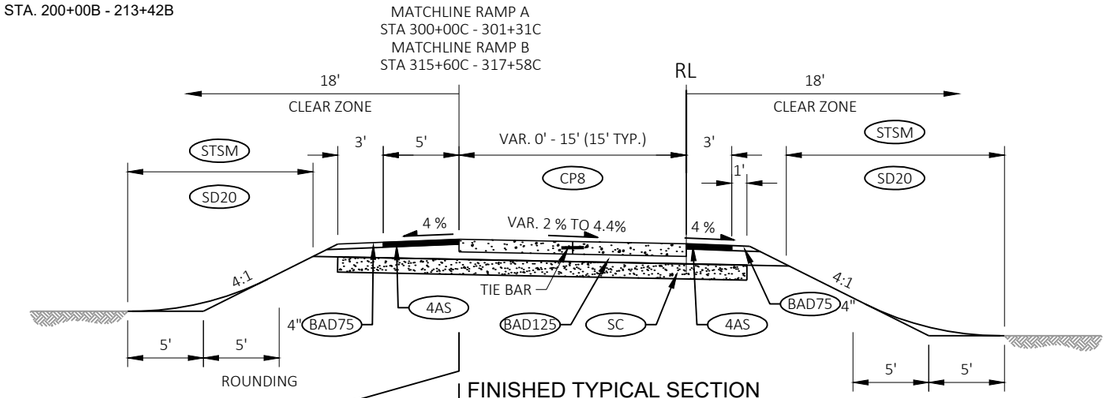
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 7	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\020301-TS_PRPOSED TYPICAL SECTIONS.DWG
LAYOUT NAME - 020304-ts_Proposed
PLOT DATE : 11/26/2024 11:16 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:10 FT



FINISHED TYPICAL SECTION

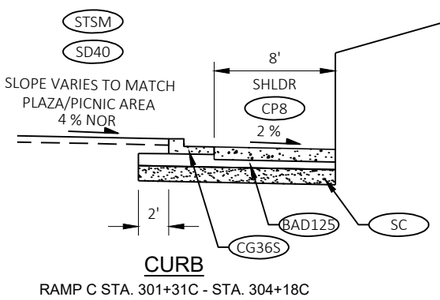
RAMP B STA. 200+00B - 213+42B



FINISHED TYPICAL SECTION

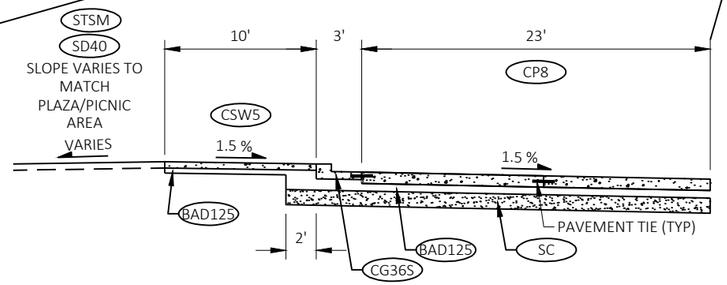
RAMP C STA. 300+00C - STA. 317+59C

		MIN UPPER LAYER	MAX LOWER LAYER
AS	4" ASPHALTIC SURFACE	1.75" 5 MT 58-34 V	2.25" 5 MT 58-34 V



CURB

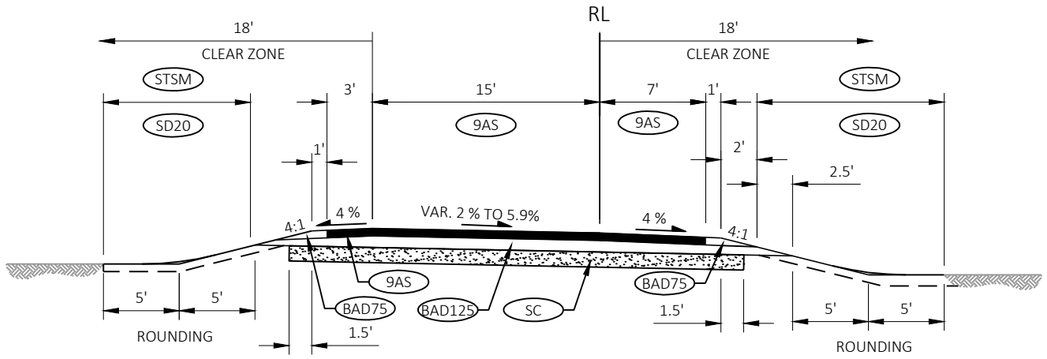
RAMP C STA. 301+31C - STA. 304+18C



CAR PARKING

RAMP C STA. 304+18C - STA. 310+03C

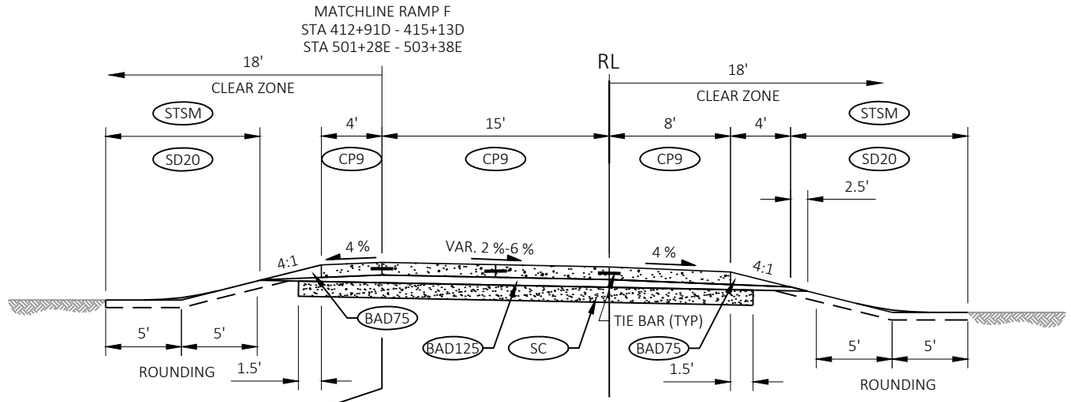
CG36S	CONCRETE CURB AND GUTTER 36-INCH TYPE A SPECIAL	9AS	9" ASPHALTIC TIC SURFACE
CG364A	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A	AS	4" ASPHALTIC SURFACE
CP8	CONCRETE PAVEMENT 8-INCH	CSW5	CONCRETE SIDEWALK 5-INCH
CP9	CONCRETE PAVEMENT 9-INCH	BAD75	BASE AGGREGATE DENSE ¾-INCH
CTA	CONCRETE TRUCK APRON 12-INCH	BAD125	6" BASE AGGREGATE DENSE 1¼-INCH
STSM	SALVAGED TOPSOIL AND EROSION MAT CLASS 1, URBAN TYPE B	SC	12" SELECT CRUSHED MATERIAL OVER GEOGRID TYPE SR
SD40	SEEDING MIXTURE NO 40, SEEDING TEMPORARY, FERTILIZER TYPE B	SD20	SEEDING MIXTURE NO 20, SEEDING TEMPORARY, FERTILIZER TYPE B



FINISHED TYPICAL SECTION

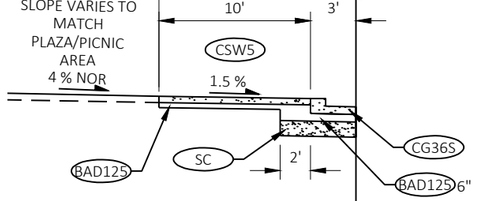
RAMP D STA. 406+00D - STA. 406+50D
RAMP E STA. 509+00E - STA. 509+50E

MATCHLINE RAMP F
STA 412+91D - 415+13D
STA 501+28E - 503+38E



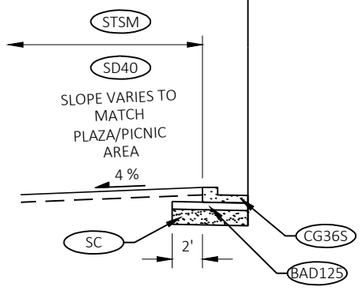
FINISHED TYPICAL SECTION

RAMP D STA. 406+50D - STA. 416+38D
RAMP E STA. 500+00E - STA. 509+00E



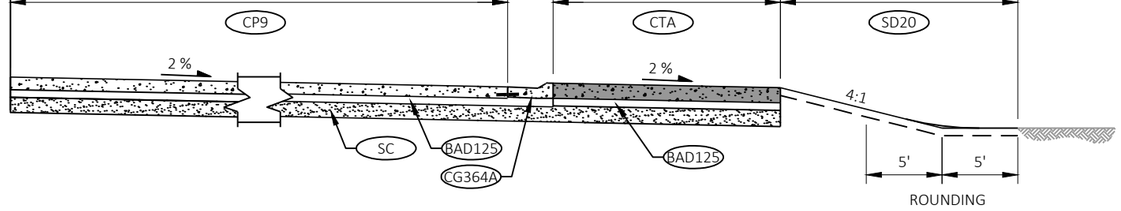
CURB & SIDEWALK

RAMP E STA. 500+00E - STA. 500+68E



CURB

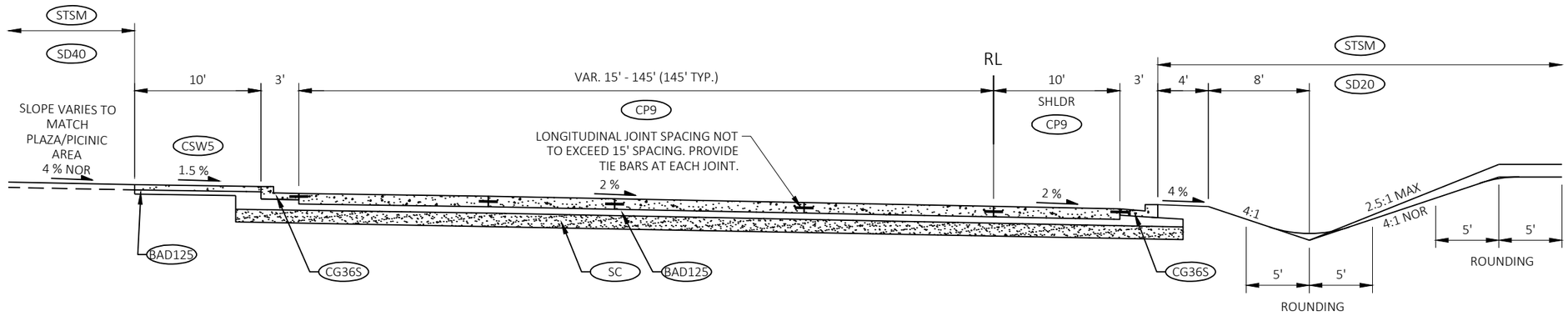
RAMP E STA. 500+68E - STA. 501+28E



OSOW PAVEMENT

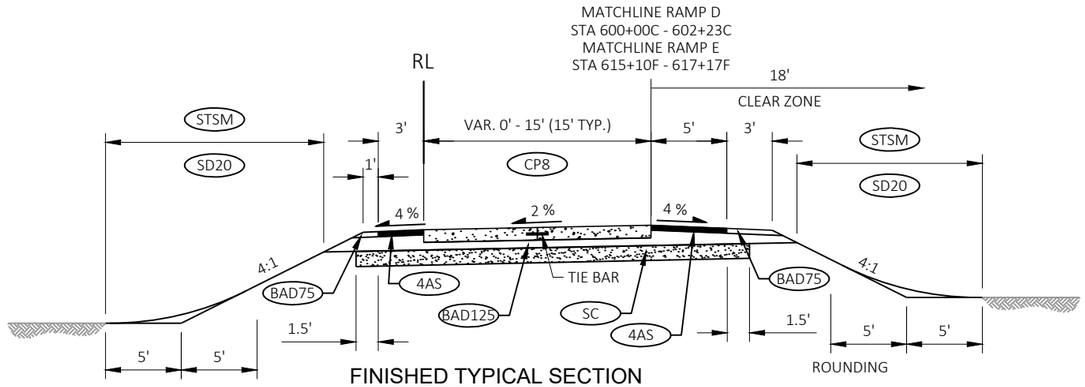
STA. 40+33K - STA. 43+31K

CG36S	CONCRETE CURB AND GUTTER 36-INCH TYPE A SPECIAL	9AS	9" ASPHALTIC TIC SURFACE
CG364A	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A	AS	4" ASPHALTIC SURFACE
CP8	CONCRETE PAVEMENT 8-INCH	CSW5	CONCRETE SIDEWALK 5-INCH
CP9	CONCRETE PAVEMENT 9-INCH	BAD75	BASE AGGREGATE DENSE ¾-INCH
CTA	CONCRETE TRUCK APRON 12-INCH	BAD125	6" BASE AGGREGATE DENSE 1¼-INCH
STSM	SALVAGED TOPSOIL AND EROSION MAT CLASS 1, URBAN TYPE B	SC	12" SELECT CRUSHED MATERIAL OVER GEOGRID TYPE SR
SD40	SEEDING MIXTURE NO 40, SEEDING TEMPORARY, FERTILIZER TYPE B	SD20	SEEDING MIXTURE NO 20, SEEDING TEMPORARY, FERTILIZER TYPE B



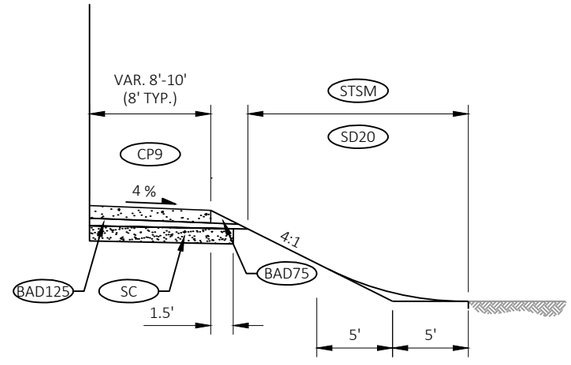
FINISHED TYPICAL SECTION

RAMP D STA. 416+38D - 430+37D



FINISHED TYPICAL SECTION

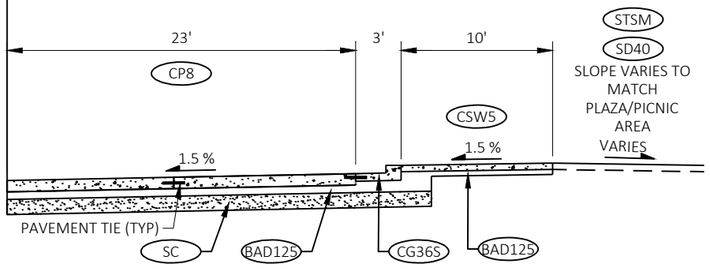
RAMP F STA. 600+00F - STA. 617+16F



SHOULDER

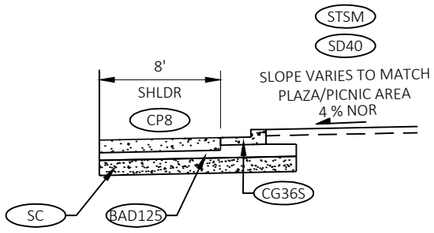
RAMP D STA. 416+38D - STA. 417+33D

		MIN UPPER LAYER	MAX LOWER LAYER
AS	4" ASPHALTIC SURFACE	1.75" 5 MT 58-34 V	2.25" 5 MT 58-34 V



CAR PARKING

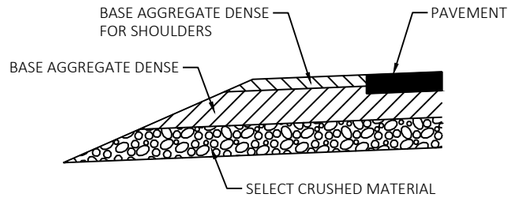
RAMP F STA. 606+24F - STA. 612+23F



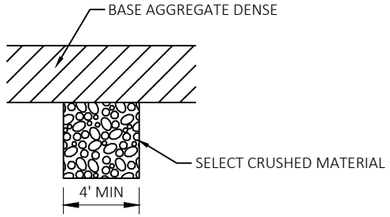
CURB

RAMP F STA. 612+23F - STA. 615+10F

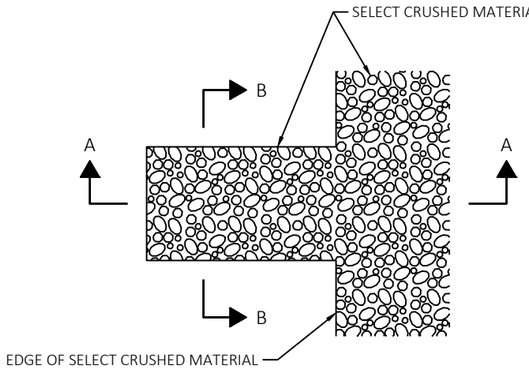
CG36S	CONCRETE CURB AND GUTTER 36-INCH TYPE A SPECIAL	9AS	9" ASPHALTIC TIC SURFACE
CG364A	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A	AS	4" ASPHALTIC SURFACE
CP8	CONCRETE PAVEMENT 8-INCH	CSW5	CONCRETE SIDEWALK 5-INCH
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CTA	CONCRETE TRUCK APRON 12-INCH	BAD125	6" BASE AGGREGATE DENSE 1¼-INCH
STSM	SALVAGED TOPSOIL AND EROSION MAT CLASS 1, URBAN TYPE B	SC	12" SELECT CRUSHED MATERIAL OVER GEOGRID TYPE SR
SD40	SEEDING MIXTURE NO 40, SEEDING TEMPORARY, FERTILIZER TYPE B	SD20	SEEDING MIXTURE NO 20, SEEDING TEMPORARY, FERTILIZER TYPE B



SECTION A-A



SECTION B-B

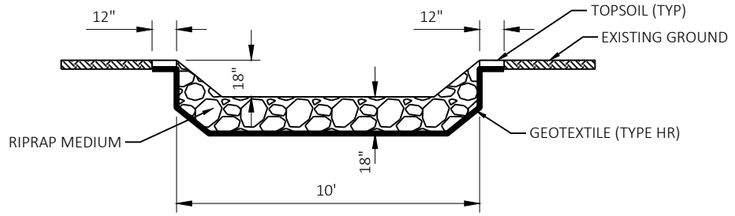


DETAIL OF FRENCH DRAINS

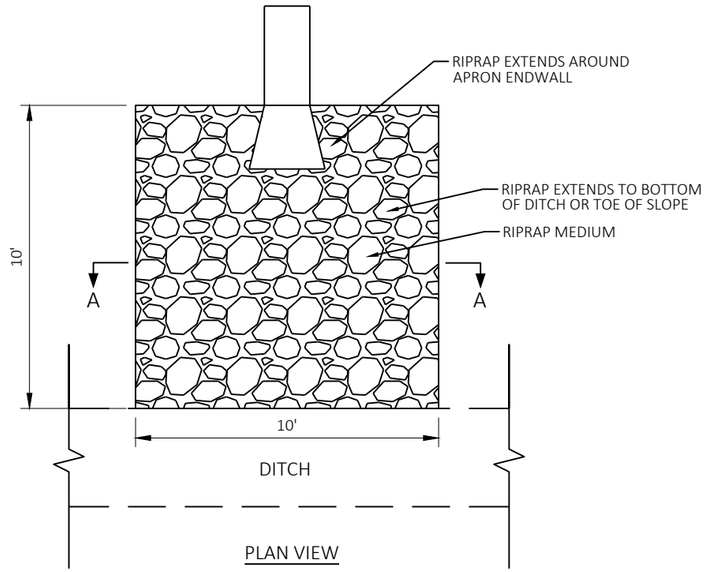
DRAINS ARE TO BE CONSTRUCTED AT LEAST EVERY 250'
AND AT EACH SAG VERTICAL CURVE IN THE PROFILE.

LOCATIONS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

EXCAVATION REQUIRED TO CONSTRUCT FRENCH DRAINS SHALL BE CONSIDERED INCIDENTAL TO THE ITEM SELECT CRUSHED MATERIAL.

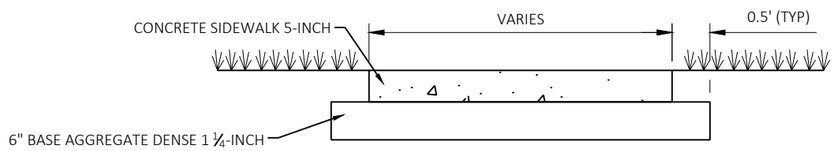


SECTION A-A



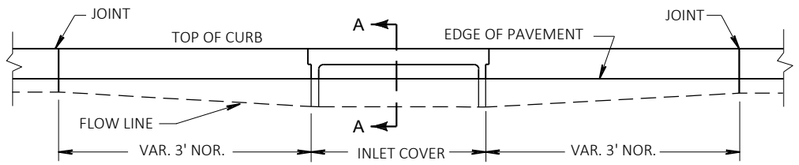
PLAN VIEW

DETAIL OF RIPRAP TREATMENT AT STORM SEWER OUTFALLS

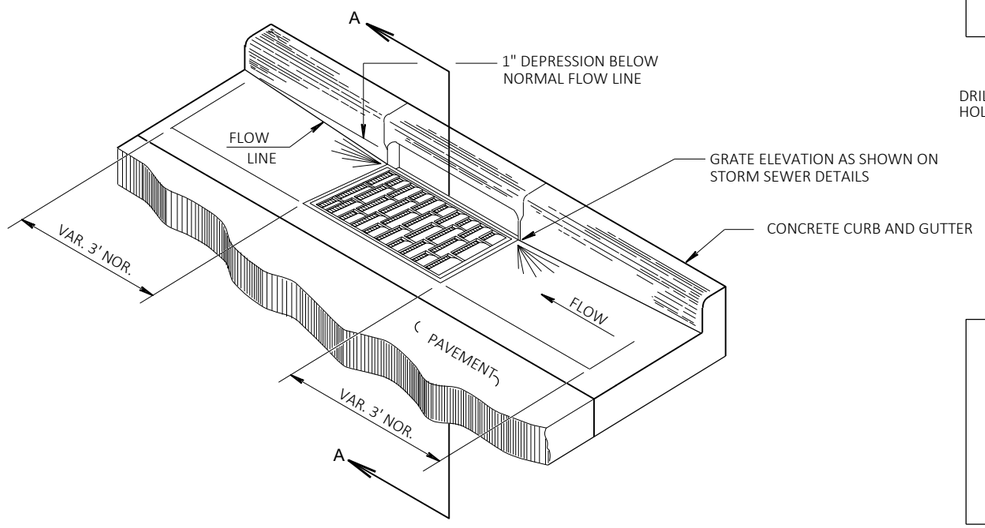


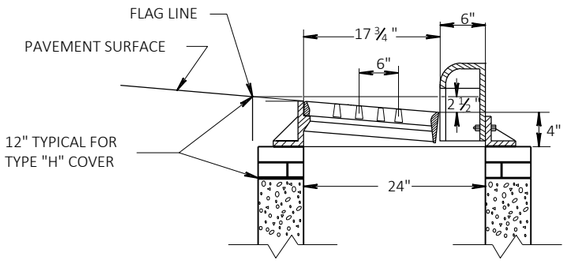
DETAIL OF CONCRETE SIDEWALK

2



ELEVATION

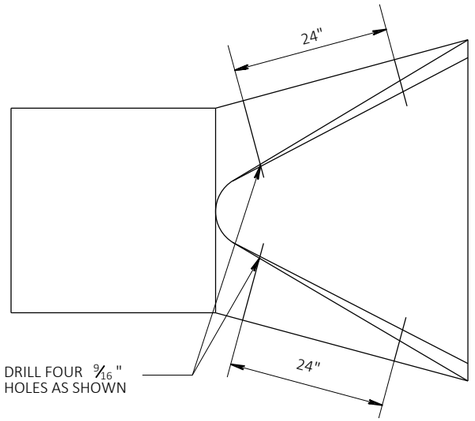


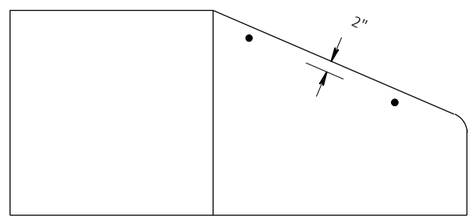


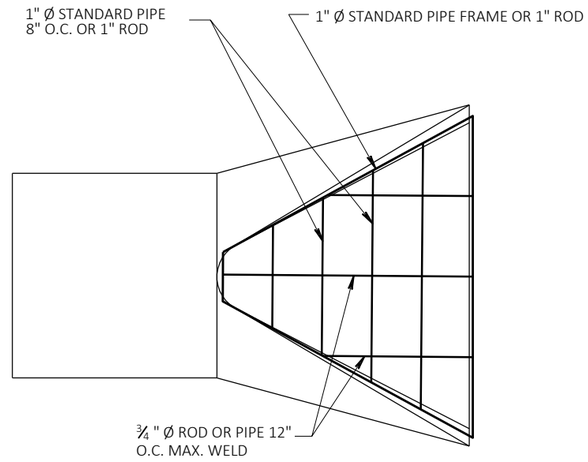
SECTION A-A

DETAIL OF CURB AND GUTTER AT INLETS

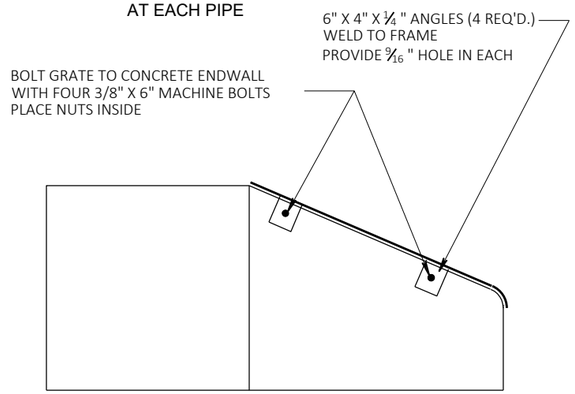
(TYPE 2X3-H INLET SHOWN)

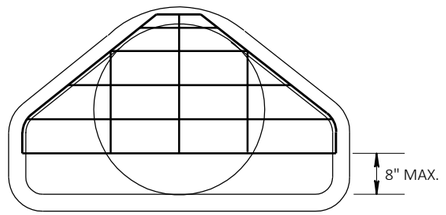






AT EACH PIPE

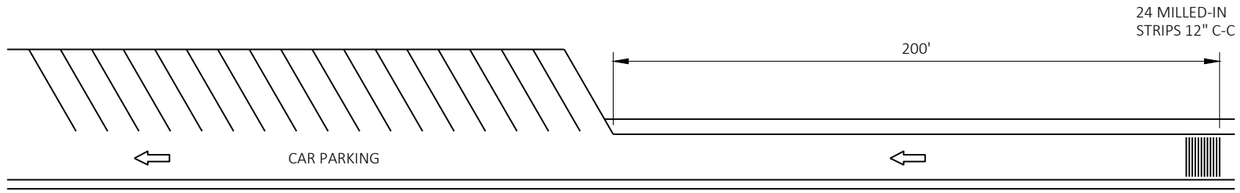




DETAIL OF PIPE GRATE

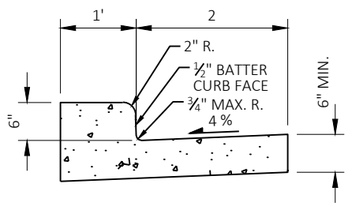
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CONSTRUCTION DETAILS	SHEET 12	E

2

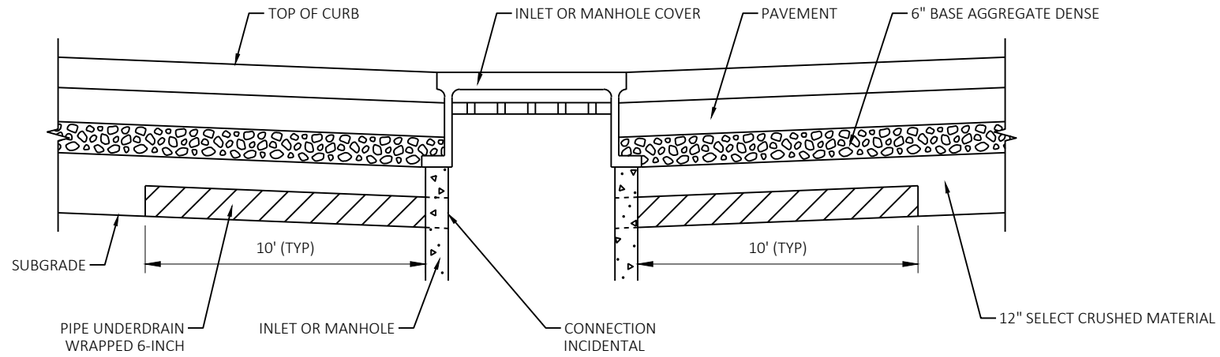


NOTE:
MILLED-IN RUMBLE STRIPS,
CONCRETE PAVEMENT
SEE SDD TRANSVERSE
RUMBLE STRIPS, CONCRETE

DETAIL OF GRINDING RUMBLE STRIPS

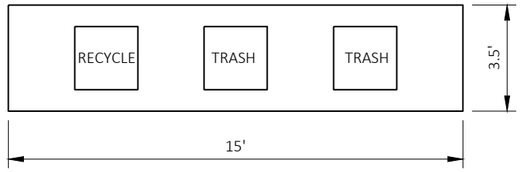


DETAIL OF CONCRETE CURB & GUTTER 36-INCH TYPE A SPECIAL



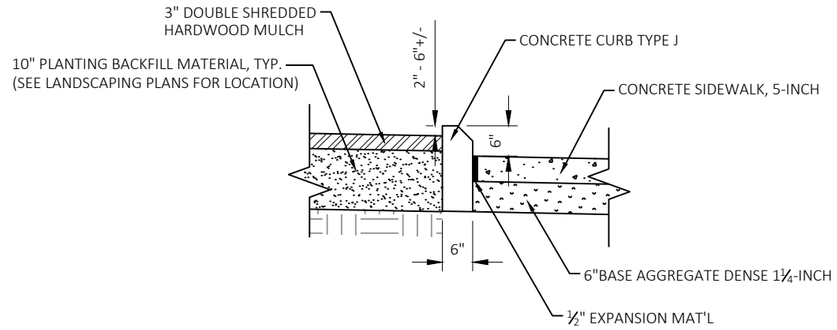
DETAIL OF PIPE UNDERDRAIN

2



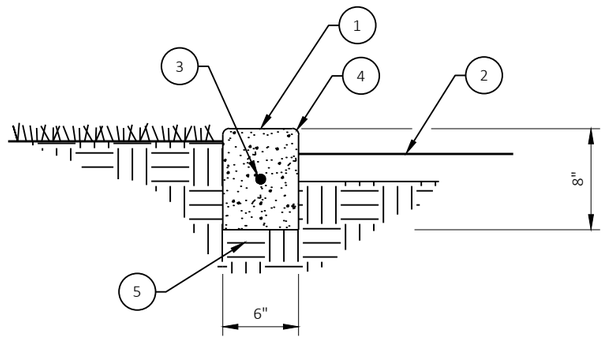
DETAIL OF TRASH/RECYCLE CENTER

(NEW OR SALVAGED RECEPTACLES)



DETAIL OF TYPICAL SECTION AT PLAZA PLANTERS

NTS



LEGEND

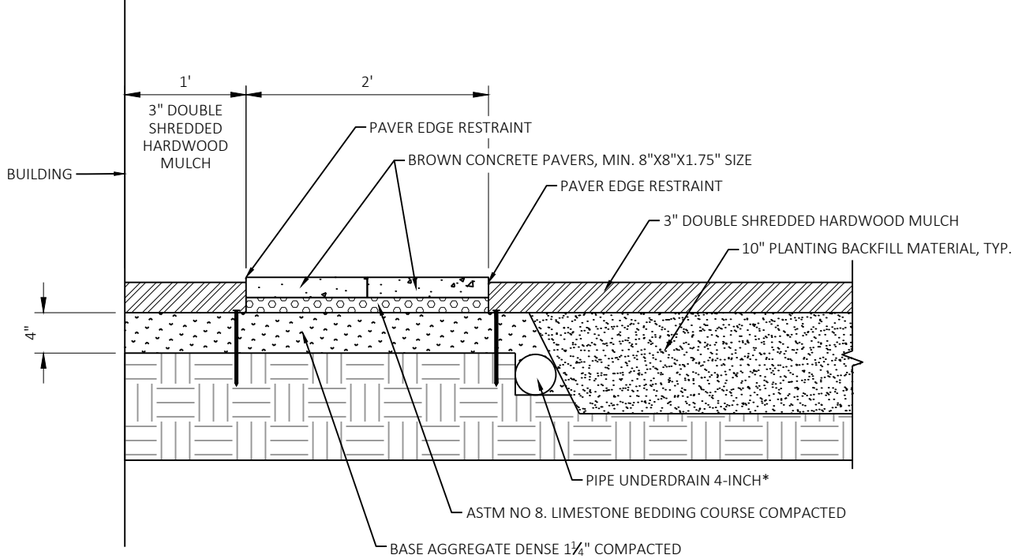
1. MOW CURB WITH MEDIUM BROOM FINISH
2. FINISH GRADE - REFER TO NOTE C
3. #3 REBAR CONTINUOUS WITH 18-INCH LAPS MIN.
4. ½" RADIUS TOOLED EDGE
5. COMPACTED SUBGRADE

DETAIL OF CONCRETE MOW CURB

NTS

NOTES:

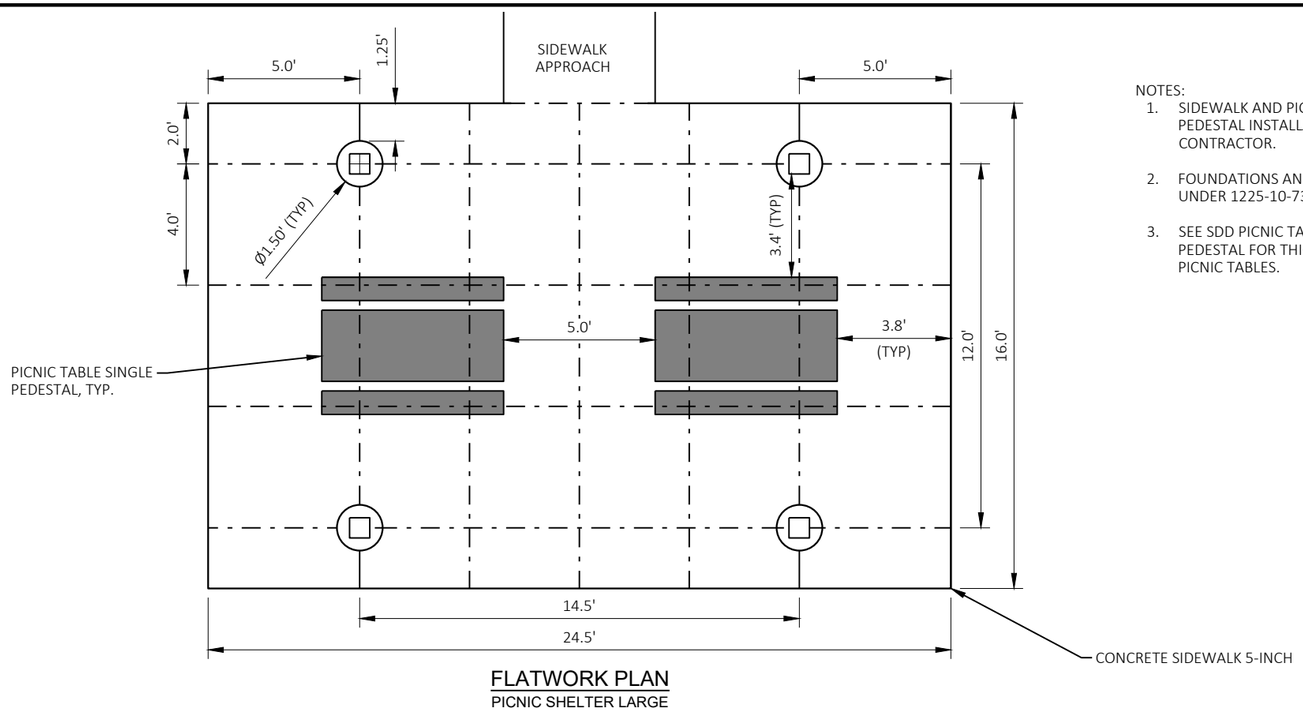
A. TOOLED JOINT - 10 FEET O.C. MAXIMUM. CUT CONCRETE WITH TROWEL EDGE TO DEPTH OF REBAR. TOOL FINISH USING GROOVER WITH 1.5-INCH DEEP BIT.
B. ISOLATION/EXPANSION JOINT - PLACE AT ENDS OF MOW CURB ABUTTING OTHER IMPROVEMENTS.
C. FINISH GRADE SHALL BE 1-INCH IN LAWN AREAS AND 3-INCHES IN PLANTING AREAS (BELOW TOP OF MOW CURB).



*CONNECT PIPE UNDERDRAIN TO NEAREST ROOF DRAIN SYSTEM

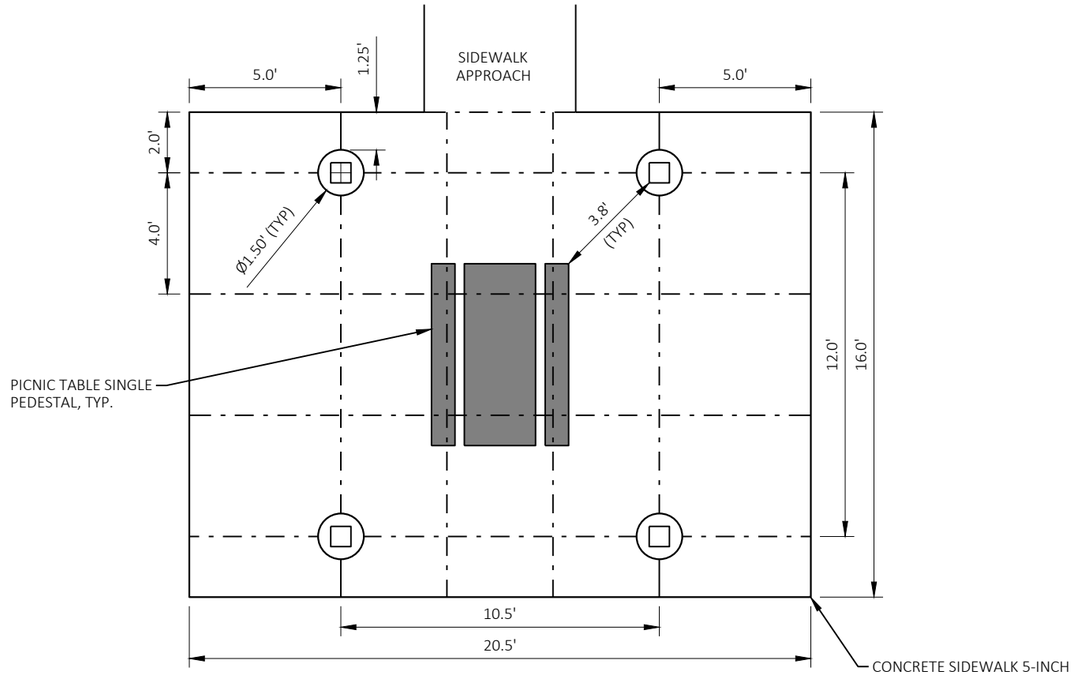
DETAIL OF CONCRETE PAVER WALKWAY

NTS

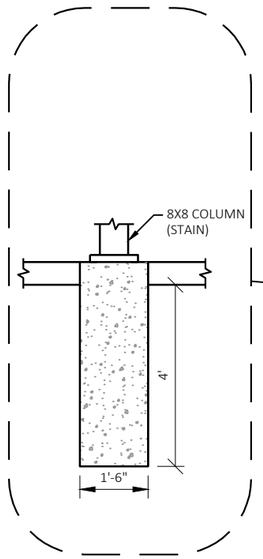


FLATWORK PLAN
PICNIC SHELTER LARGE

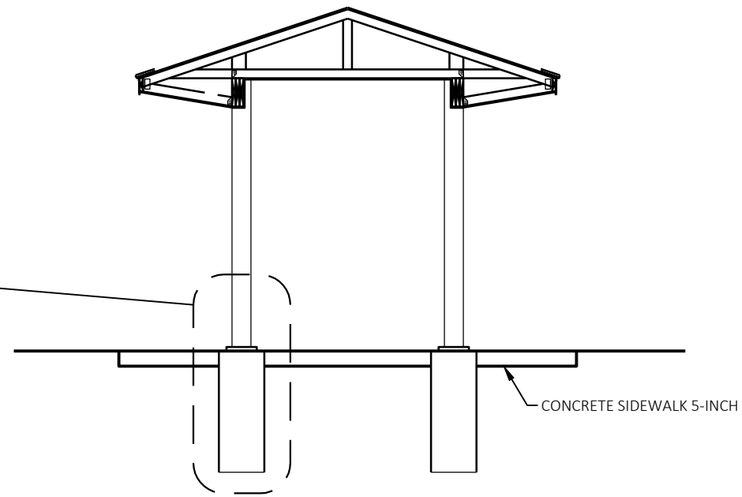
NOTES:
1. SIDEWALK AND PICNIC TABLE SINGLE PEDESTAL INSTALLATION BY CONTRACTOR.
2. FOUNDATIONS AND SHELTERS ARE UNDER 1225-10-73 CONTRACT.
3. SEE SDD PICNIC TABLE, SINGLE PEDESTAL FOR THICKENED SLAB UNDER PICNIC TABLES.



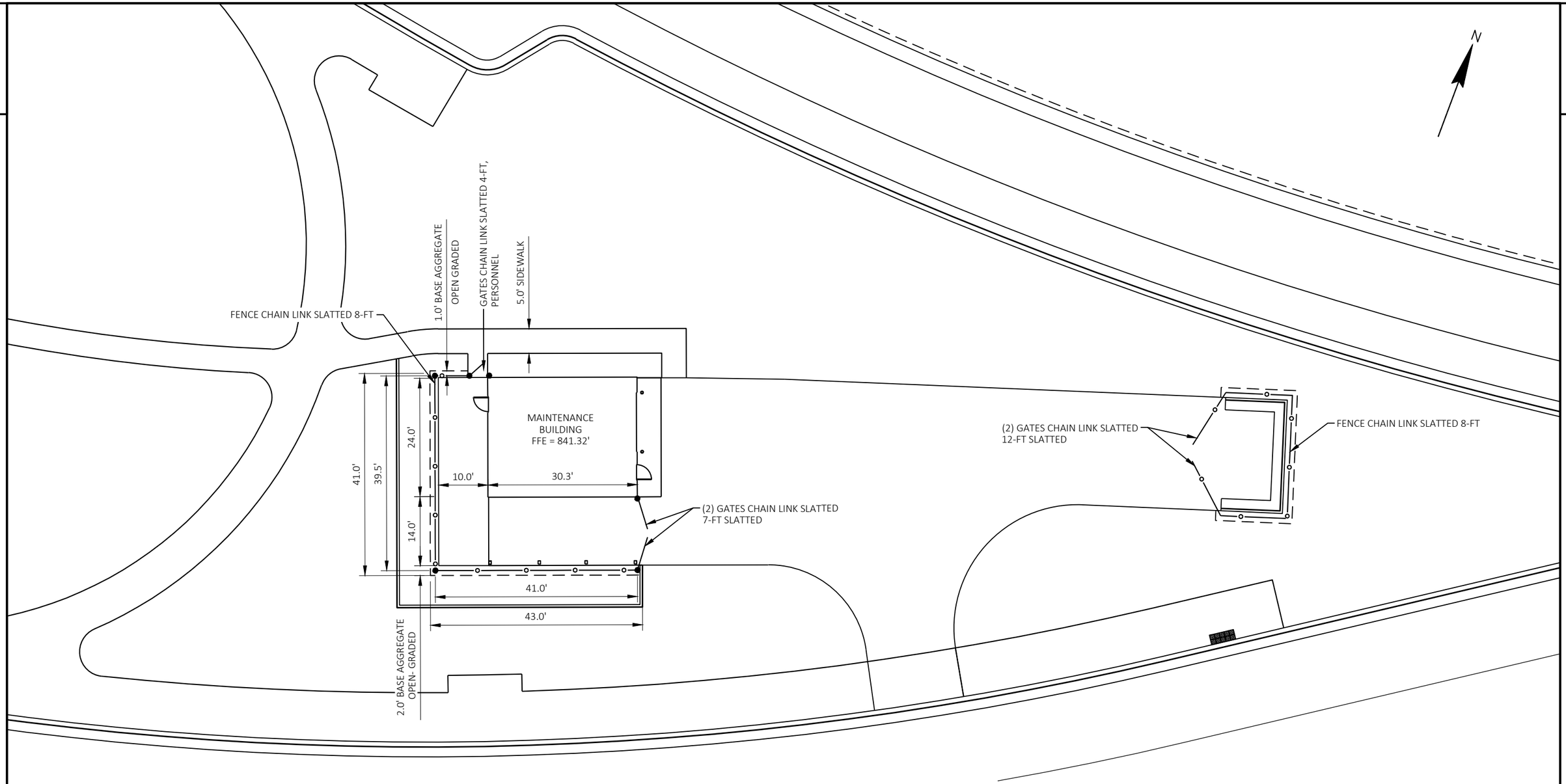
FLATWORK PLAN
PICNIC SHELTER SMALL



POST FOUNDATION DETAIL
CONSTRUCTED UNDER ID 1225-10-73



SECTION

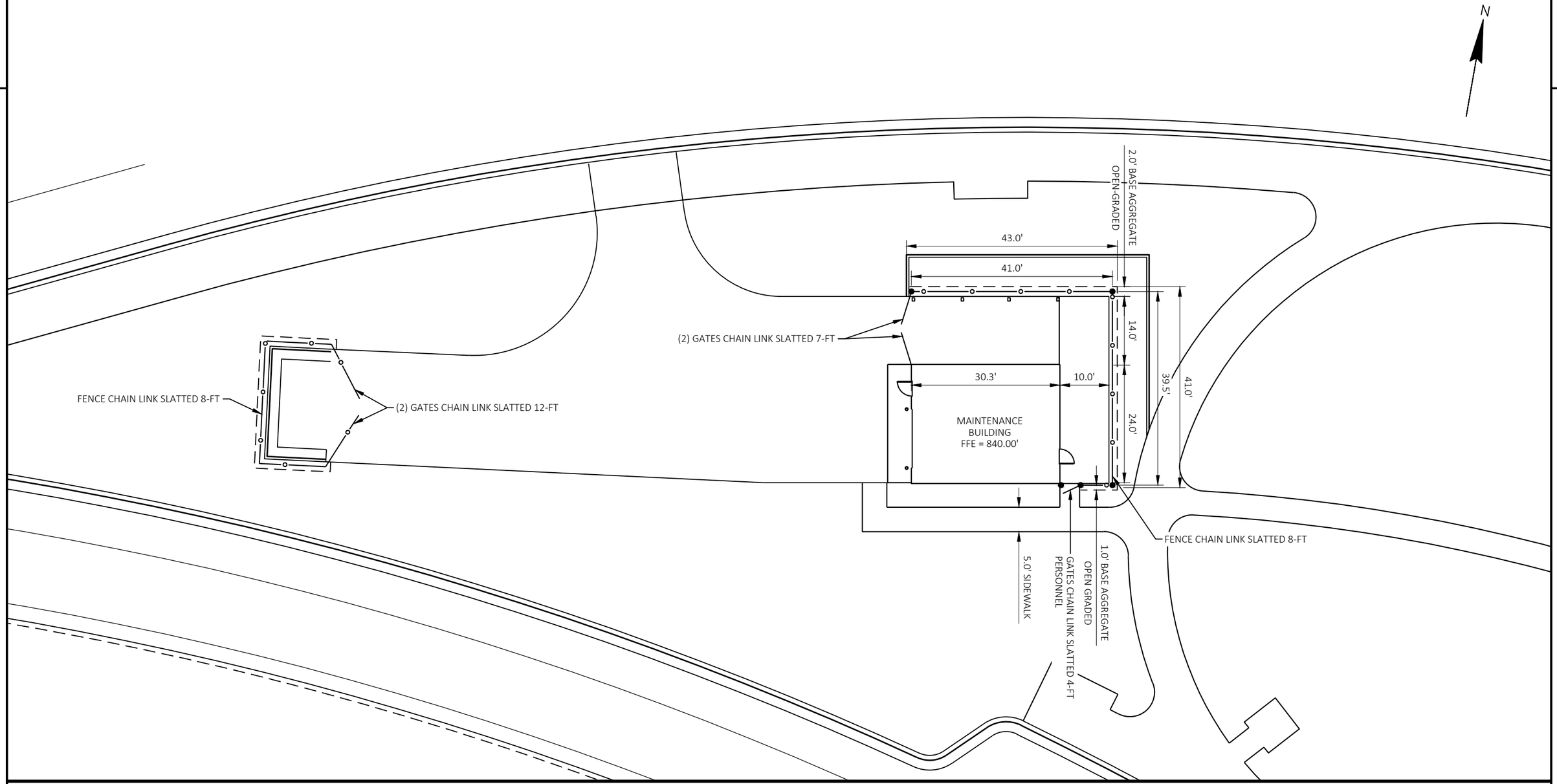


REST AREA 51 MAINTENANCE BUILDING LAYOUT

SEE PLAN DETAILS FOR ADDITIONAL DETAIL

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CONSTRUCTION DETAILS	SHEET 16	E

2



REST AREA 52 MAINTENANCE BUILDING LAYOUT

SEE PLAN DETAILS FOR ADDITIONAL DETAIL

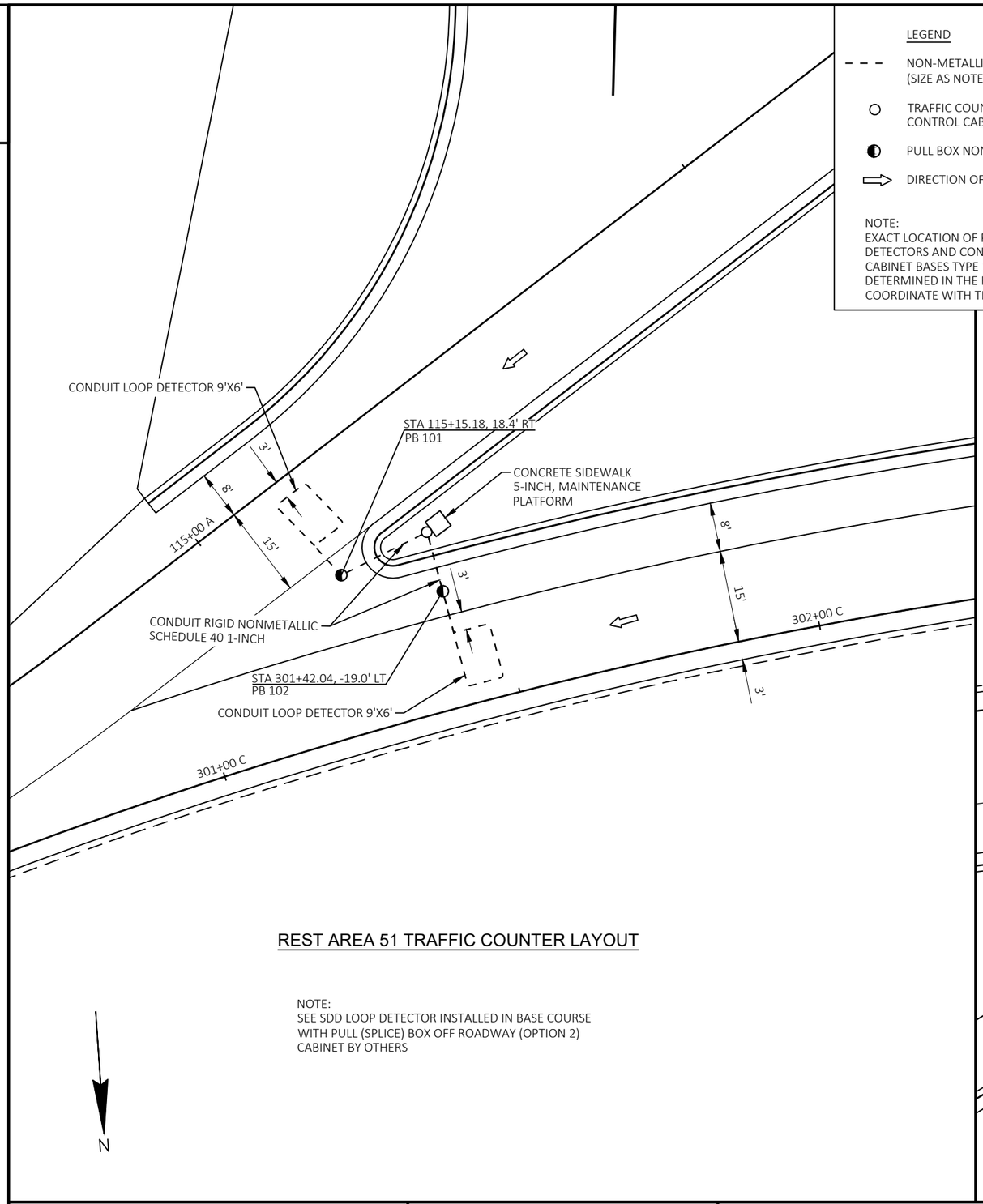
2

LEGEND

- NON-METALLIC CONDUIT (SIZE AS NOTED)
- TRAFFIC COUNTER W/CONCRETE CONTROL CABINET BASES TYPE 10
- PULL BOX NON-CONDUCTIVE 24X36-INCH
- DIRECTION OF TRAFFIC

NOTE:
EXACT LOCATION OF PULL BOXES, LOOP DETECTORS AND CONCRETE CONTROL CABINET BASES TYPE 10 SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER. COORDINATE WITH TPIMS SENSORS.

N



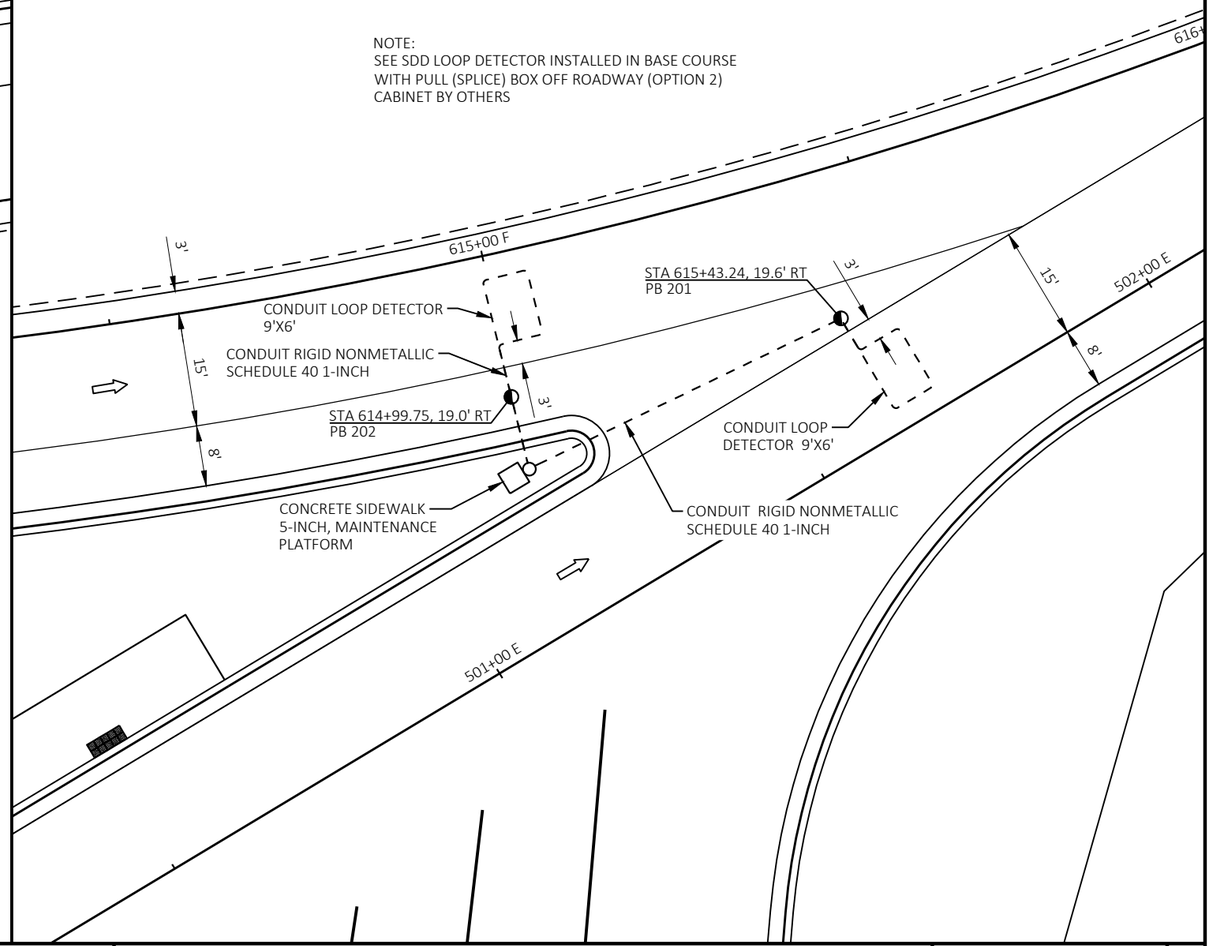
REST AREA 51 TRAFFIC COUNTER LAYOUT

NOTE:
SEE SDD LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2) CABINET BY OTHERS

N

REST AREA 52 TRAFFIC COUNTER LAYOUT

NOTE:
SEE SDD LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2) CABINET BY OTHERS



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CONSTRUCTION DETAILS - TRAFFIC COUNTER AND LOOP DETECTOR DETAILS	SHEET 18	E

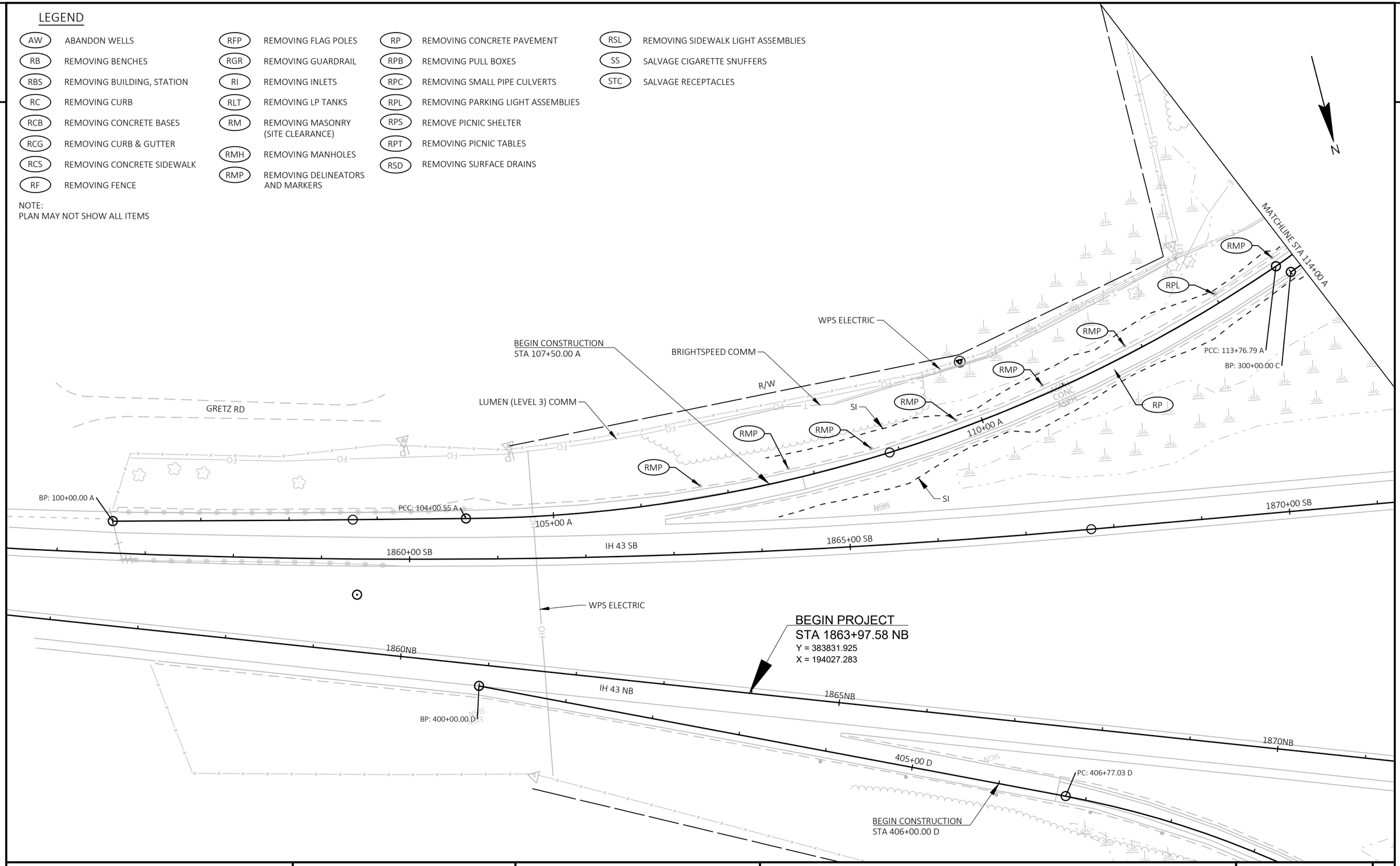
FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021011-CD_TRAFFIC COUNTER & LOOP DETECTORS.DWG
LAYOUT NAME - 021025_cd
PLOT DATE : 11/26/2024 11:18 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- (AW) ABANDON WELLS
- (RB) REMOVING BENCHES
- (RBS) REMOVING BUILDING, STATION
- (RC) REMOVING CURB
- (RCB) REMOVING CONCRETE BASES
- (RCG) REMOVING CURB & GUTTER
- (RCS) REMOVING CONCRETE SIDEWALK
- (RF) REMOVING FENCE
- (RFP) REMOVING FLAG POLES
- (RGR) REMOVING GUARDRAIL
- (RI) REMOVING INLETS
- (RLT) REMOVING LP TANKS
- (RM) REMOVING MASONRY (SITE CLEARANCE)
- (RMH) REMOVING MANHOLES
- (RMP) REMOVING DELINEATORS AND MARKERS
- (RP) REMOVING CONCRETE PAVEMENT
- (RPB) REMOVING PULL BOXES
- (RPC) REMOVING SMALL PIPE CULVERTS
- (RPL) REMOVING PARKING LIGHT ASSEMBLIES
- (RPS) REMOVE PICNIC SHELTER
- (RPT) REMOVING PICNIC TABLES
- (RSD) REMOVING SURFACE DRAINS
- (RSL) REMOVING SIDEWALK LIGHT ASSEMBLIES
- (SS) SALVAGE CIGARETTE SNUFFERS
- (STC) SALVAGE RECEPTACLES

NOTE:
PLAN MAY NOT SHOW ALL ITEMS



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	REMOVAL DETAILS - REST AREA 51	SHEET 19	E

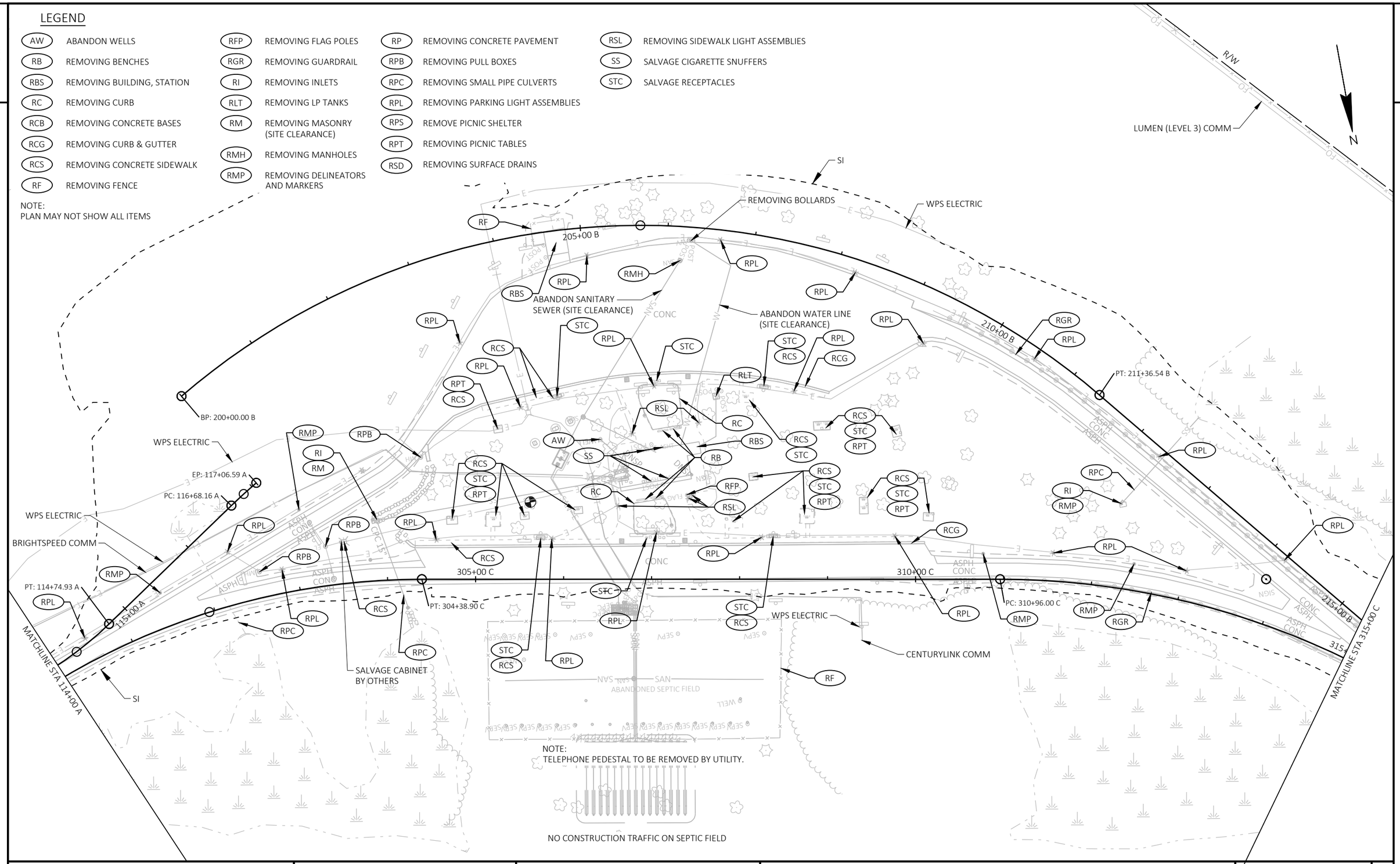
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LAYOUT NAME - 021101-rm
PLOT DATE : 11/27/2024 8:49 AM PLOT BY : JASON KLEIST PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- AW — ABANDON WELLS
- RB — REMOVING BENCHES
- RBS — REMOVING BUILDING, STATION
- RC — REMOVING CURB
- RCB — REMOVING CONCRETE BASES
- RCG — REMOVING CURB & GUTTER
- RCS — REMOVING CONCRETE SIDEWALK
- RF — REMOVING FENCE
- RFP — REMOVING FLAG POLES
- RGR — REMOVING GUARDRAIL
- RI — REMOVING INLETS
- RLT — REMOVING LP TANKS
- RM — REMOVING MASONRY (SITE CLEARANCE)
- RMH — REMOVING MANHOLES
- RMP — REMOVING DELINEATORS AND MARKERS
- RP — REMOVING CONCRETE PAVEMENT
- RPB — REMOVING PULL BOXES
- RPC — REMOVING SMALL PIPE CULVERTS
- RPL — REMOVING PARKING LIGHT ASSEMBLIES
- RPS — REMOVE PICNIC SHELTER
- RPT — REMOVING PICNIC TABLES
- RSD — REMOVING SURFACE DRAINS
- RSL — REMOVING SIDEWALK LIGHT ASSEMBLIES
- SS — SALVAGE CIGARETTE SNUFFERS
- STC — SALVAGE RECEPTACLES

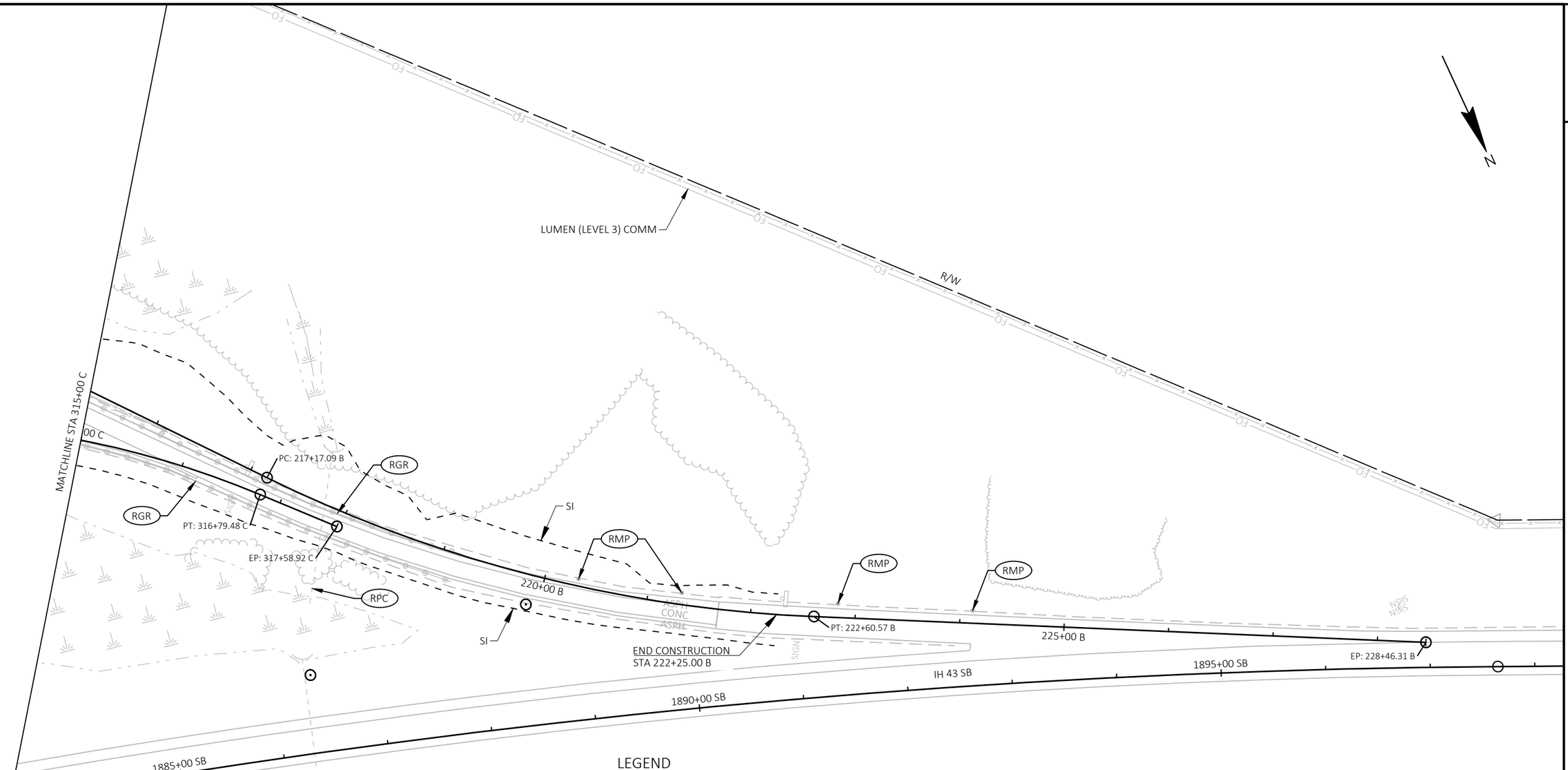
NOTE:
PLAN MAY NOT SHOW ALL ITEMS



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	REMOVAL DETAILS - REST AREA 51	SHEET 20	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021101-RM_RA 51.DWG
LAYOUT NAME - 021102-rm
PLOT DATE : 11/27/2024 8:49 AM
PLOT BY : JASON KLEIST
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



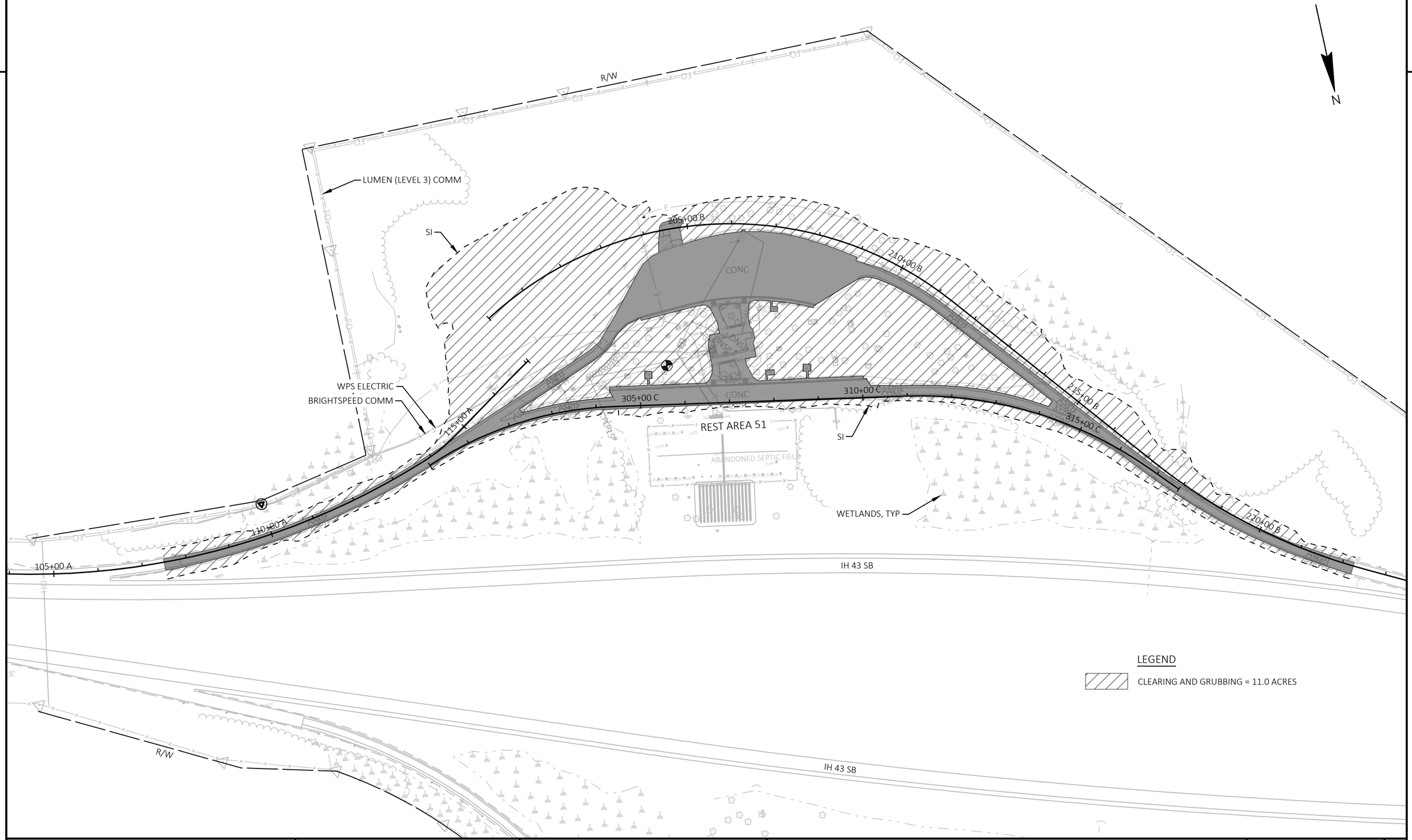
LEGEND

AW	ABANDON WELLS	RFP	REMOVING FLAG POLES	RP	REMOVING CONCRETE PAVEMENT	RSL	REMOVING SIDEWALK LIGHT ASSEMBLIES
RB	REMOVING BENCHES	RGR	REMOVING GUARDRAIL	RPB	REMOVING PULL BOXES	SS	SALVAGE CIGARETTE SNUFFERS
RBS	REMOVING BUILDING, STATION	RI	REMOVING INLETS	RPC	REMOVING SMALL PIPE CULVERTS	STC	SALVAGE RECEPTACLES
RC	REMOVING CURB	RLT	REMOVING LP TANKS	RPL	REMOVING PARKING LIGHT ASSEMBLIES		
RCB	REMOVING CONCRETE BASES	RM	REMOVING MASONRY (SITE CLEARANCE)	RPS	REMOVE PICNIC SHELTER		
RCG	REMOVING CURB & GUTTER	RMH	REMOVING MANHOLES	RPT	REMOVING PICNIC TABLES		
RCS	REMOVING CONCRETE SIDEWALK	RMP	REMOVING DELINEATORS AND MARKERS	RSD	REMOVING SURFACE DRAINS		
RF	REMOVING FENCE						

NOTE:
PLAN MAY NOT SHOW ALL ITEMS

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	REMOVAL DETAILS - REST AREA 51	SHEET 21	E

2

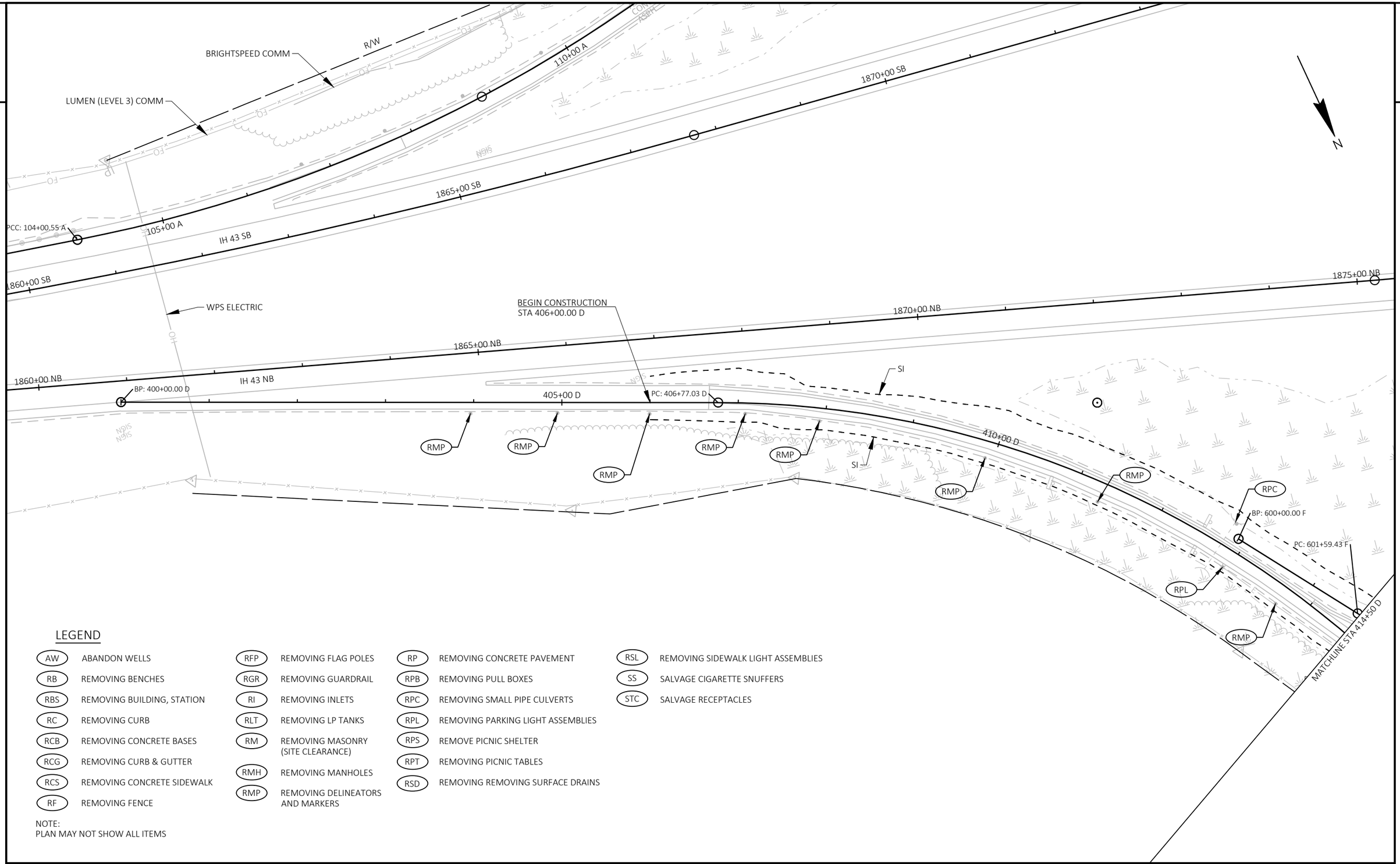


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	REMOVAL DETAILS - REST AREA 51	SHEET 22	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021102-RM_RA51.DWG
LAYOUT NAME - 021104-rm

PLOT DATE : 11/26/2024 11:19 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:200 FT

2



LEGEND

- AW — ABANDON WELLS
- RB — REMOVING BENCHES
- RBS — REMOVING BUILDING, STATION
- RC — REMOVING CURB
- RCB — REMOVING CONCRETE BASES
- RCG — REMOVING CURB & GUTTER
- RCS — REMOVING CONCRETE SIDEWALK
- RF — REMOVING FENCE
- RFP — REMOVING FLAG POLES
- RGR — REMOVING GUARDRAIL
- RI — REMOVING INLETS
- RLT — REMOVING LP TANKS
- RM — REMOVING MASONRY (SITE CLEARANCE)
- RMH — REMOVING MANHOLES
- RMP — REMOVING DELINEATORS AND MARKERS
- RP — REMOVING CONCRETE PAVEMENT
- RPB — REMOVING PULL BOXES
- RPC — REMOVING SMALL PIPE CULVERTS
- RPL — REMOVING PARKING LIGHT ASSEMBLIES
- RPS — REMOVE PICNIC SHELTER
- RPT — REMOVING PICNIC TABLES
- RSD — REMOVING REMOVING SURFACE DRAINS
- RSL — REMOVING SIDEWALK LIGHT ASSEMBLIES
- SS — SALVAGE CIGARETTE SNUFFERS
- STC — SALVAGE RECEPTACLES

NOTE:
PLAN MAY NOT SHOW ALL ITEMS

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	REMOVAL DETAILS - REST AREA 52	SHEET 23	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021104-RM_RA 52.DWG
LAYOUT NAME - 021108-rm
PLOT DATE : 11/27/2024 8:54 AM
PLOT BY : JASON KLEIST
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

LEGEND

AW	ABANDON WELLS
RB	REMOVING BENCHES
RBS	REMOVING BUILDING, STATION
RC	REMOVING CURB
RCB	REMOVING CONCRETE BASES
RCG	REMOVING CURB & GUTTER
RCS	REMOVING CONCRETE SIDEWALK
RF	REMOVING FENCE
RFP	REMOVING FLAG POLES
RGR	REMOVING GUARDRAIL
RI	REMOVING INLETS
RLT	REMOVING LP TANKS
RM	REMOVING MASONRY (SITE CLEARANCE)
RMH	REMOVING MANHOLES
RMP	REMOVING DELINEATORS AND MARKERS
RP	REMOVING CONCRETE PAVEMENT
RPB	REMOVING PULL BOXES
RPC	REMOVING SMALL PIPE CULVERTS
RPL	REMOVING PARKING LIGHT ASSEMBLIES
RPS	REMOVE PICNIC SHELTER
RPT	REMOVING PICNIC TABLES
RSD	REMOVING REMOVING SURFACE DRAINS
RSL	REMOVING SIDEWALK LIGHT ASSEMBLIES
SS	SALVAGE CIGARETTE SNUFFERS
STC	SALVAGE RECEPTACLES

NOTE:
PLAN MAY NOT SHOW ALL ITEMS

MATCHLINE STA 414+50 D

415+00 D

PT: 414+96.93 D

SI

605+00 F

PT: 605+99.57 F

BRIGHTSPEED COMM

WPS ELECTRIC

SALVAGE CABINET BY OTHERS

PC: 611+91.22 F

610+00 F

615+00 F

MATCHLINE STA 502+00 E

PC: 417+33.16 D

BP: 500+00.00 E

EP: 430+37.11 D

430+00 D

425+00 D

FENCE TO REMAIN

ABANDON SANITARY SEWER (SITE CLEARANCE)

ABANDON WATER LINE (SITE CLEARANCE)

REMOVE HYDRANTS AND BOLLARDS

NO CONSTRUCTION TRAFFIC ON SEPTIC FIELD

ABANDONED SEPTIC FIELD

R/W

NOTE:
TELEPHONE PEDESTAL TO BE REMOVED BY OTHERS.

N

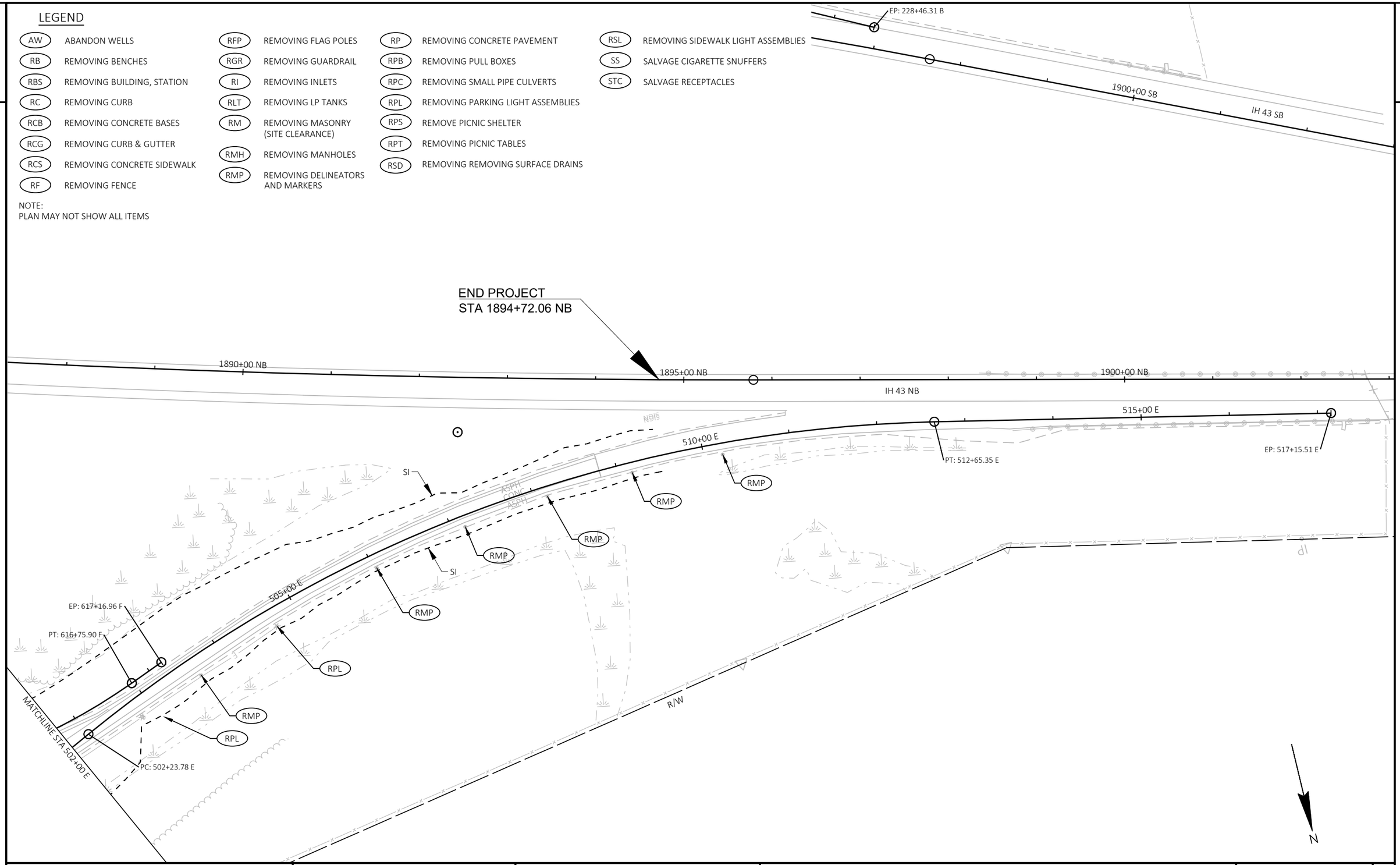
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	REMOVAL DETAILS - REST AREA 52	SHEET 24	E

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LAYOUT NAME - 021109-rm
PLOT DATE : 11/27/2024 8:54 AM PLOT BY : JASON KLEIST PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

LEGEND

AW	ABANDON WELLS
RB	REMOVING BENCHES
RBS	REMOVING BUILDING, STATION
RC	REMOVING CURB
RCB	REMOVING CONCRETE BASES
RCG	REMOVING CURB & GUTTER
RCS	REMOVING CONCRETE SIDEWALK
RF	REMOVING FENCE
RFP	REMOVING FLAG POLES
RGR	REMOVING GUARDRAIL
RI	REMOVING INLETS
RLT	REMOVING LP TANKS
RM	REMOVING MASONRY (SITE CLEARANCE)
RMH	REMOVING MANHOLES
RMP	REMOVING DELINEATORS AND MARKERS
RP	REMOVING CONCRETE PAVEMENT
RPB	REMOVING PULL BOXES
RPC	REMOVING SMALL PIPE CULVERTS
RPL	REMOVING PARKING LIGHT ASSEMBLIES
RPS	REMOVE PICNIC SHELTER
RPT	REMOVING PICNIC TABLES
RSD	REMOVING REMOVING SURFACE DRAINS
RSL	REMOVING SIDEWALK LIGHT ASSEMBLIES
SS	SALVAGE CIGARETTE SNUFFERS
STC	SALVAGE RECEPTACLES

NOTE:
PLAN MAY NOT SHOW ALL ITEMS



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	REMOVAL DETAILS - REST AREA 52	SHEET 25 E

2

IH 43 SB

IH 43 SB

405+00 D

410+00 D

SI

REST AREA 52

BRIGHTSPEED COMM

WPS ELECTRIC

415+00 D

605+00 F

610+00 F

615+00 F

505+00 E

510+00 E

420+00 D

425+00 D

430+00 D

SI

WETLAND, TYP

R/W

ABANDONED SEPTIC

CONC

ASPH

LEGEND

CLEARING AND GRUBBING = 10.0 ACRES

N

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	REMOVAL DETAILS - REST AREA 52	SHEET 26	E

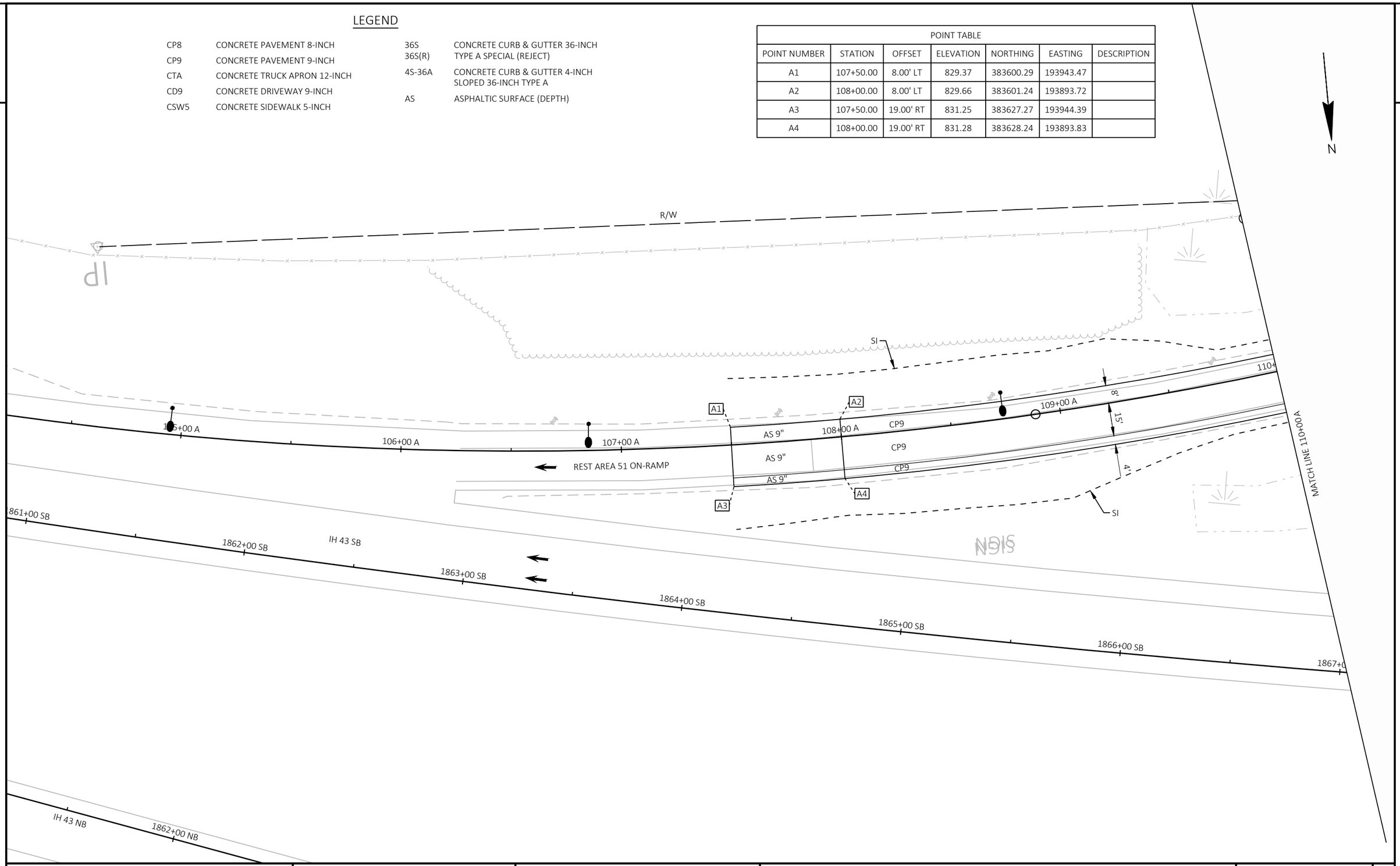
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LAYOUT NAME - 021111-rm

PLOT DATE : 11/26/2024 11:19 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:200 FT

LEGEND

CP8	CONCRETE PAVEMENT 8-INCH
CP9	CONCRETE PAVEMENT 9-INCH
CTA	CONCRETE TRUCK APRON 12-INCH
CD9	CONCRETE DRIVEWAY 9-INCH
CSW5	CONCRETE SIDEWALK 5-INCH
36S	CONCRETE CURB & GUTTER 36-INCH
36S(R)	TYPE A SPECIAL (REJECT)
4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
AS	ASPHALTIC SURFACE (DEPTH)

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
A1	107+50.00	8.00' LT	829.37	383600.29	193943.47	
A2	108+00.00	8.00' LT	829.66	383601.24	193893.72	
A3	107+50.00	19.00' RT	831.25	383627.27	193944.39	
A4	108+00.00	19.00' RT	831.28	383628.24	193893.83	



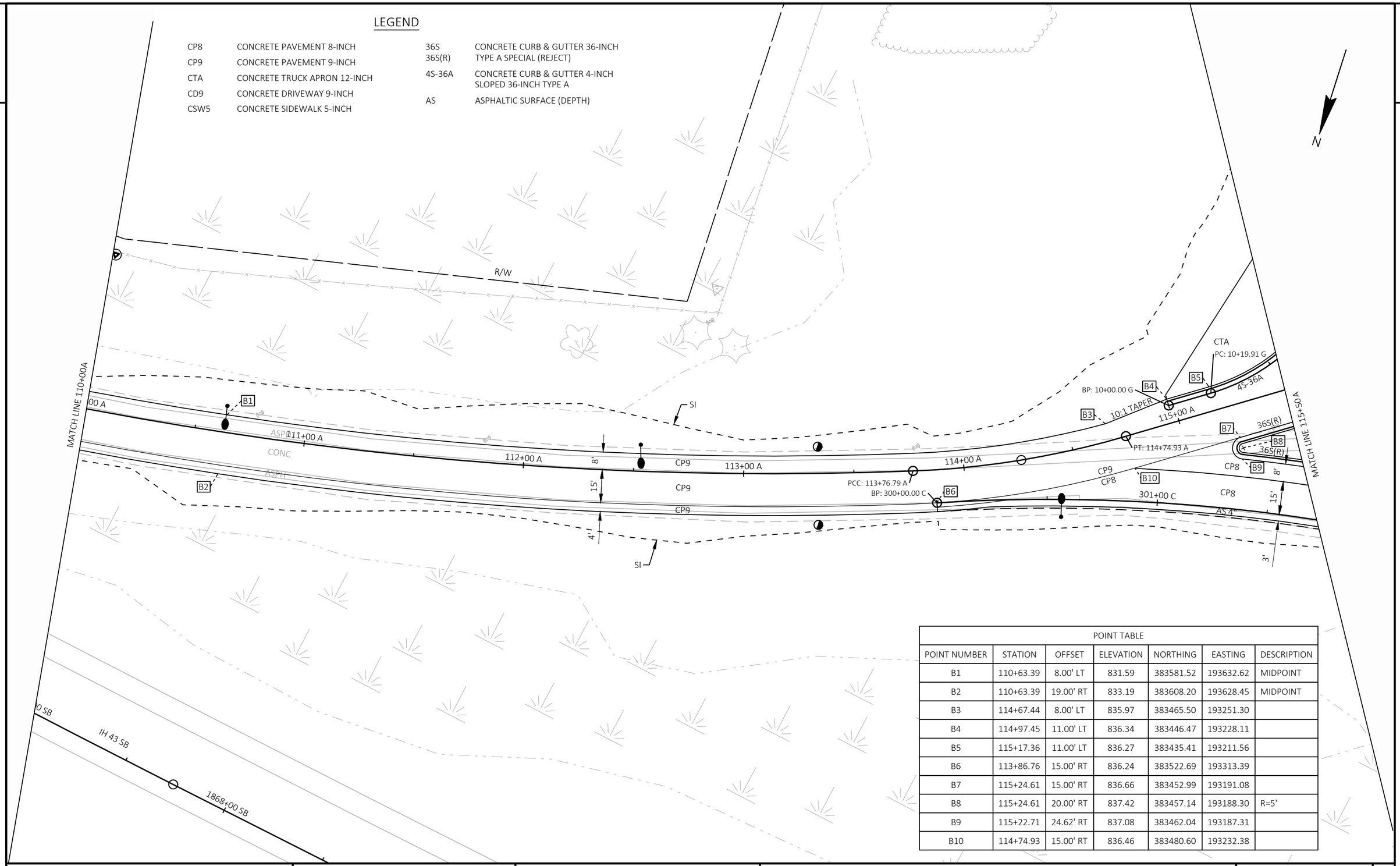
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - REST AREA 51	SHEET 27	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021201-PD_RA 51.DWG
LAYOUT NAME - 021202-pd
PLOT DATE : 11/26/2024 11:20 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

CP8	CONCRETE PAVEMENT 8-INCH	36S 36S(R)	CONCRETE CURB & GUTTER 36-INCH TYPE A SPECIAL (REJECT)
CP9	CONCRETE PAVEMENT 9-INCH	4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
CTA	CONCRETE TRUCK APRON 12-INCH	AS	ASPHALTIC SURFACE (DEPTH)
CD9	CONCRETE DRIVEWAY 9-INCH		
CSW5	CONCRETE SIDEWALK 5-INCH		



POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
B1	110+63.39	8.00' LT	831.59	383581.52	193632.62	MIDPOINT
B2	110+63.39	19.00' RT	833.19	383608.20	193628.45	MIDPOINT
B3	114+67.44	8.00' LT	835.97	383465.50	193251.30	
B4	114+97.45	11.00' LT	836.34	383446.47	193228.11	
B5	115+17.36	11.00' LT	836.27	383435.41	193211.56	
B6	113+86.76	15.00' RT	836.24	383522.69	193313.39	
B7	115+24.61	15.00' RT	836.66	383452.99	193191.08	
B8	115+24.61	20.00' RT	837.42	383457.14	193188.30	R=5'
B9	115+22.71	24.62' RT	837.08	383462.04	193187.31	
B10	114+74.93	15.00' RT	836.46	383480.60	193232.38	

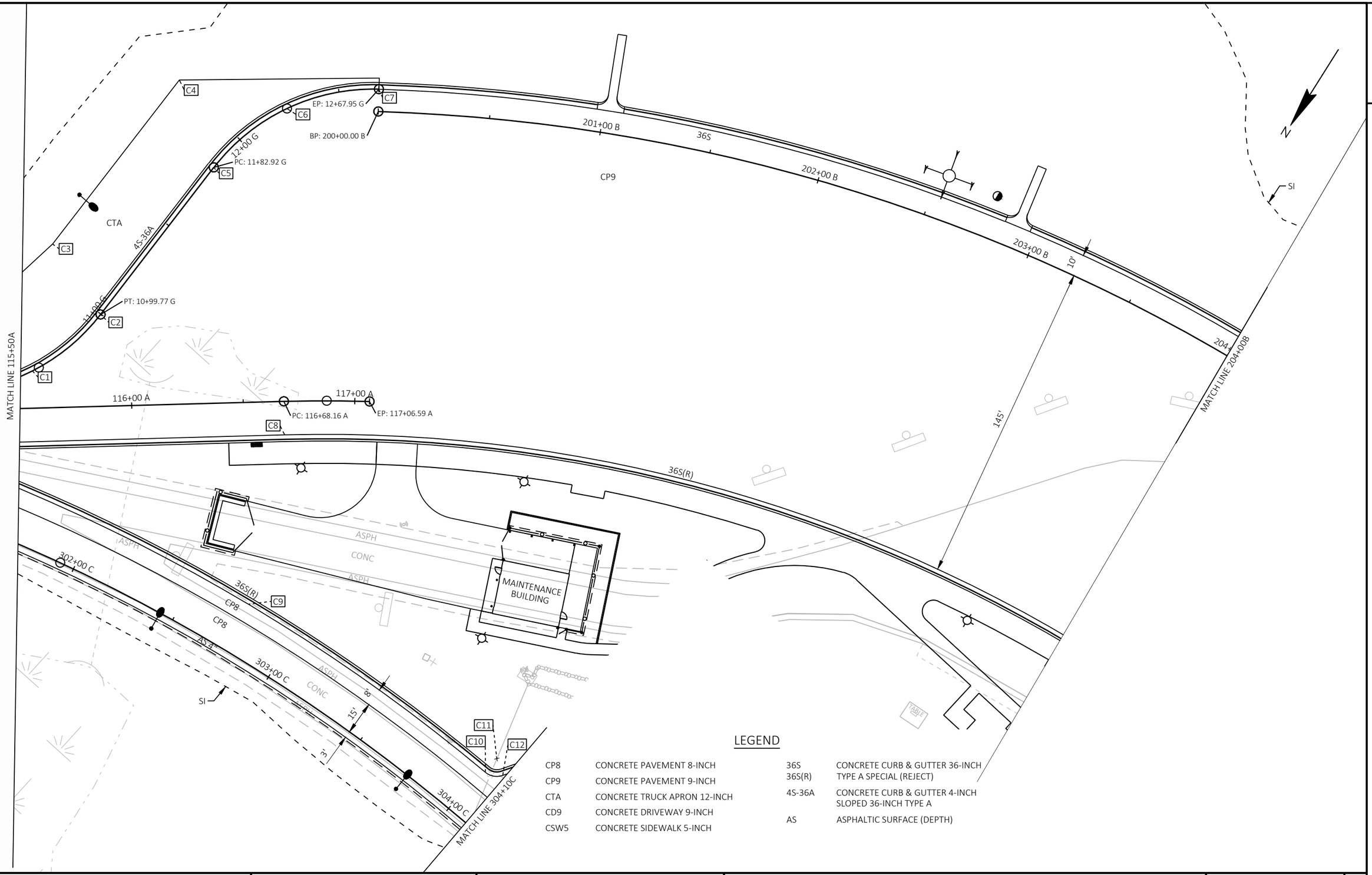
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - REST AREA 51	SHEET 28	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021201-PD_RA 51.DWG
LAYOUT NAME - 021203-pd

PLOT DATE : 11/26/2024 11:20 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



LEGEND

CP8	CONCRETE PAVEMENT 8-INCH
CP9	CONCRETE PAVEMENT 9-INCH
CTA	CONCRETE TRUCK APRON 12-INCH
CD9	CONCRETE DRIVEWAY 9-INCH
CSW5	CONCRETE SIDEWALK 5-INCH
36S	CONCRETE CURB & GUTTER 36-INCH TYPE A SPECIAL (REJECT)
4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
AS	ASPHALTIC SURFACE (DEPTH)

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - REST AREA 51	SHEET 29 E

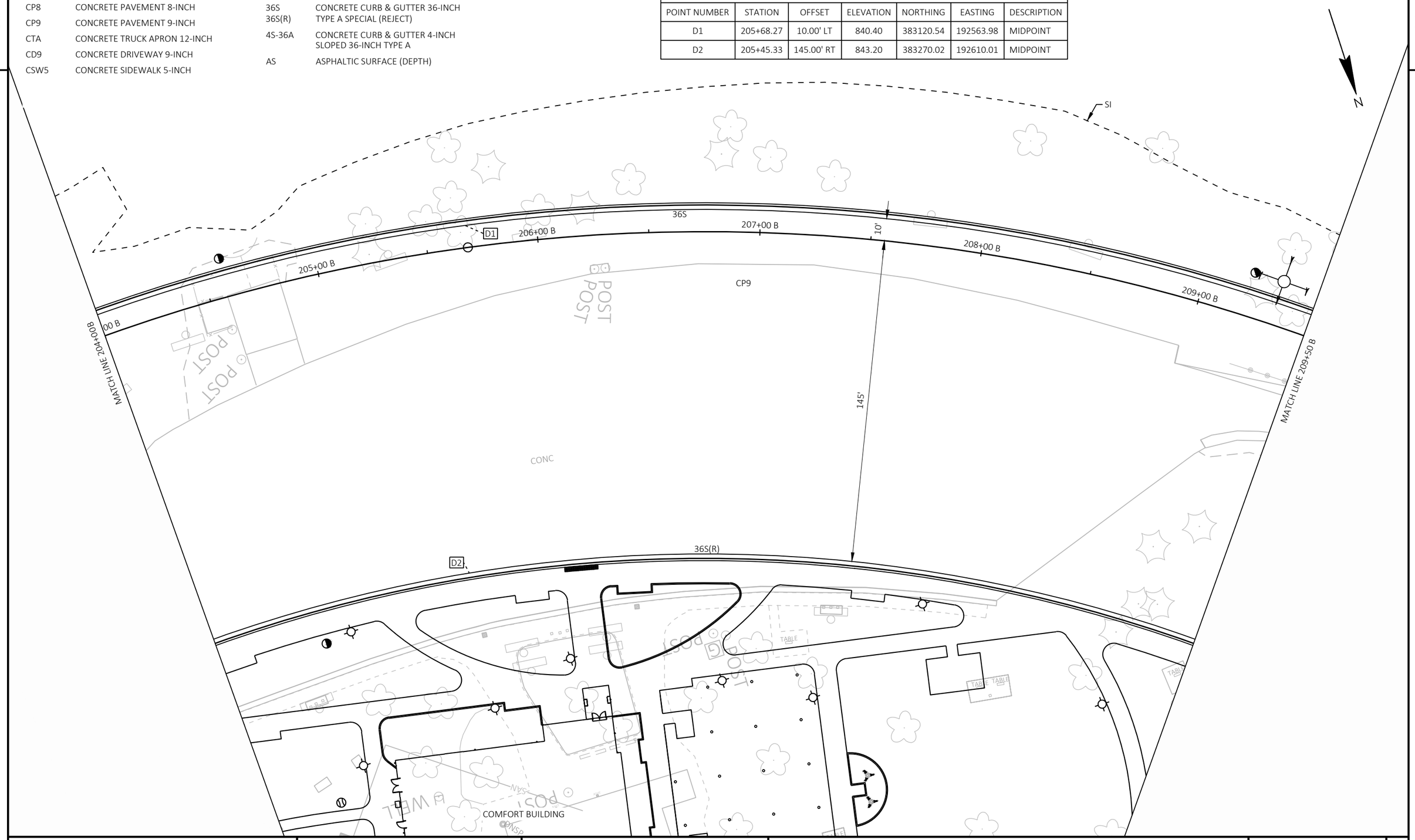
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LAYOUT NAME - 021204-pd

PLOT DATE : 11/26/2024 11:20 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

CP8	CONCRETE PAVEMENT 8-INCH
CP9	CONCRETE PAVEMENT 9-INCH
CTA	CONCRETE TRUCK APRON 12-INCH
CD9	CONCRETE DRIVEWAY 9-INCH
CSW5	CONCRETE SIDEWALK 5-INCH
36S 36S(R)	CONCRETE CURB & GUTTER 36-INCH TYPE A SPECIAL (REJECT)
4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
AS	ASPHALTIC SURFACE (DEPTH)

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
D1	205+68.27	10.00' LT	840.40	383120.54	192563.98	MIDPOINT
D2	205+45.33	145.00' RT	843.20	383270.02	192610.01	MIDPOINT



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - REST AREA 51	SHEET 30	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021201-PD_RA 51.DWG
LAYOUT NAME - 021205-pd

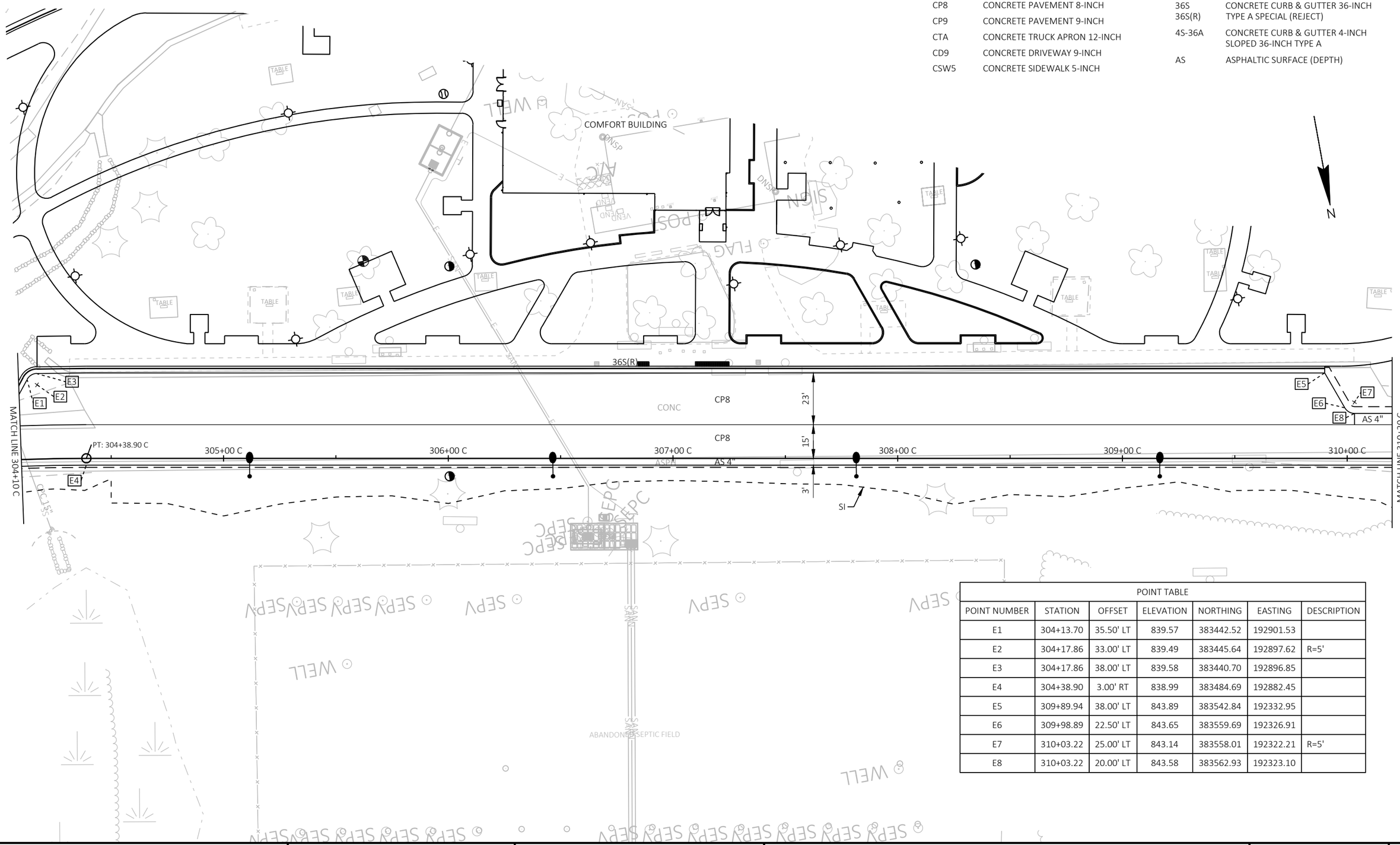
PLOT DATE : 11/26/2024 11:20 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

CP8	CONCRETE PAVEMENT 8-INCH
CP9	CONCRETE PAVEMENT 9-INCH
CTA	CONCRETE TRUCK APRON 12-INCH
CD9	CONCRETE DRIVEWAY 9-INCH
CSW5	CONCRETE SIDEWALK 5-INCH
36S 36S(R)	CONCRETE CURB & GUTTER 36-INCH TYPE A SPECIAL (REJECT)
4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
AS	ASPHALTIC SURFACE (DEPTH)



POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
E1	304+13.70	35.50' LT	839.57	383442.52	192901.53	
E2	304+17.86	33.00' LT	839.49	383445.64	192897.62	R=5'
E3	304+17.86	38.00' LT	839.58	383440.70	192896.85	
E4	304+38.90	3.00' RT	838.99	383484.69	192882.45	
E5	309+89.94	38.00' LT	843.89	383542.84	192332.95	
E6	309+98.89	22.50' LT	843.65	383559.69	192326.91	
E7	310+03.22	25.00' LT	843.14	383558.01	192322.21	R=5'
E8	310+03.22	20.00' LT	843.58	383562.93	192323.10	

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - REST AREA 51	SHEET 31	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021201-PD_RA 51.DWG
LAYOUT NAME - 021206-pd

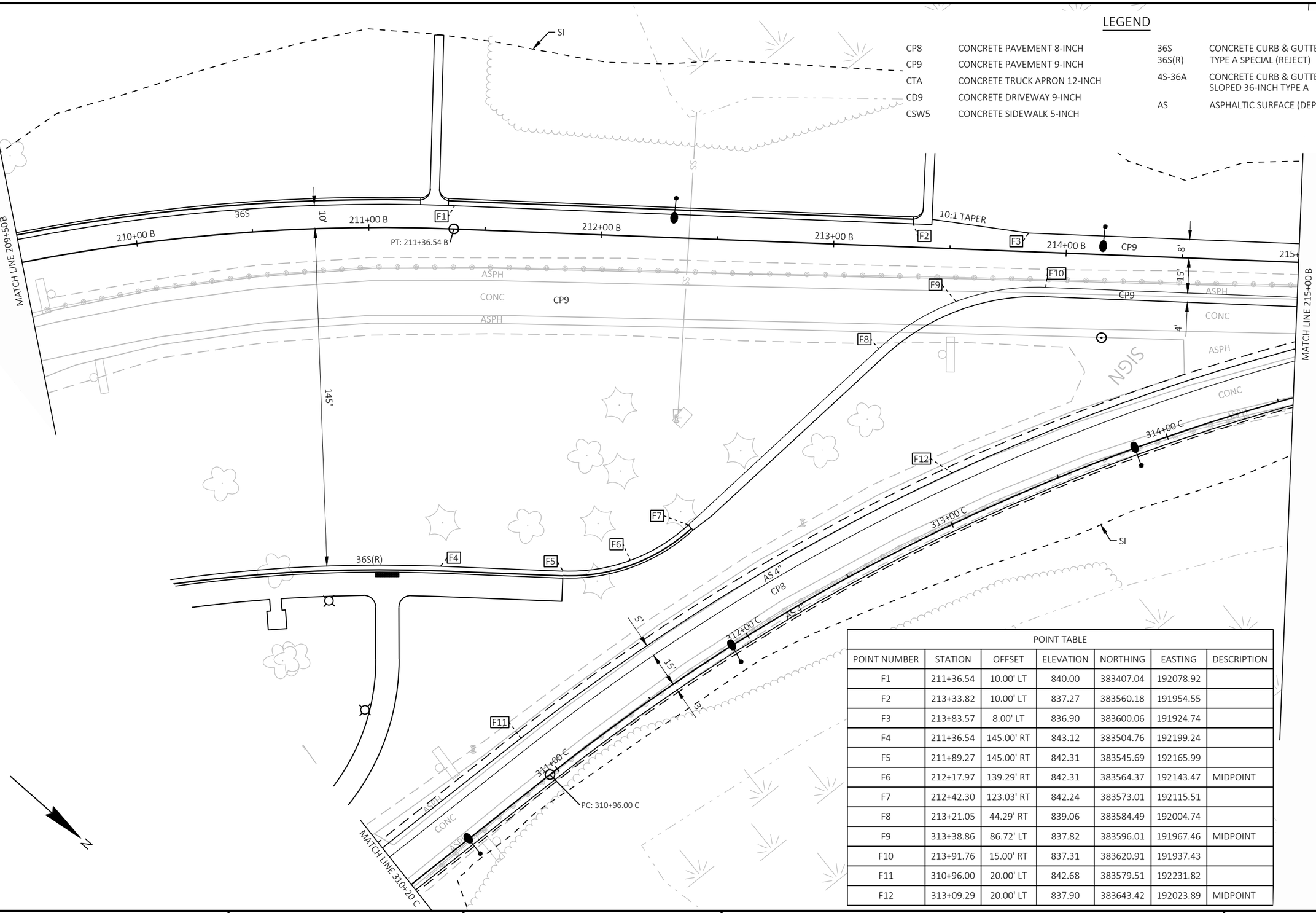
PLOT DATE : 11/26/2024 11:20 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

CP8	CONCRETE PAVEMENT 8-INCH	36S	CONCRETE CURB & GUTTER 36-INCH TYPE A SPECIAL (REJECT)
CP9	CONCRETE PAVEMENT 9-INCH	36S(R)	
CTA	CONCRETE TRUCK APRON 12-INCH	4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
CD9	CONCRETE DRIVEWAY 9-INCH	AS	ASPHALTIC SURFACE (DEPTH)
CSW5	CONCRETE SIDEWALK 5-INCH		



POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
F1	211+36.54	10.00' LT	840.00	383407.04	192078.92	
F2	213+33.82	10.00' LT	837.27	383560.18	191954.55	
F3	213+83.57	8.00' LT	836.90	383600.06	191924.74	
F4	211+36.54	145.00' RT	843.12	383504.76	192199.24	
F5	211+89.27	145.00' RT	842.31	383545.69	192165.99	
F6	212+17.97	139.29' RT	842.31	383564.37	192143.47	MIDPOINT
F7	212+42.30	123.03' RT	842.24	383573.01	192115.51	
F8	213+21.05	44.29' RT	839.06	383584.49	192004.74	
F9	313+38.86	86.72' LT	837.82	383596.01	191967.46	MIDPOINT
F10	213+91.76	15.00' RT	837.31	383620.91	191937.43	
F11	310+96.00	20.00' LT	842.68	383579.51	192231.82	
F12	313+09.29	20.00' LT	837.90	383643.42	192023.89	MIDPOINT

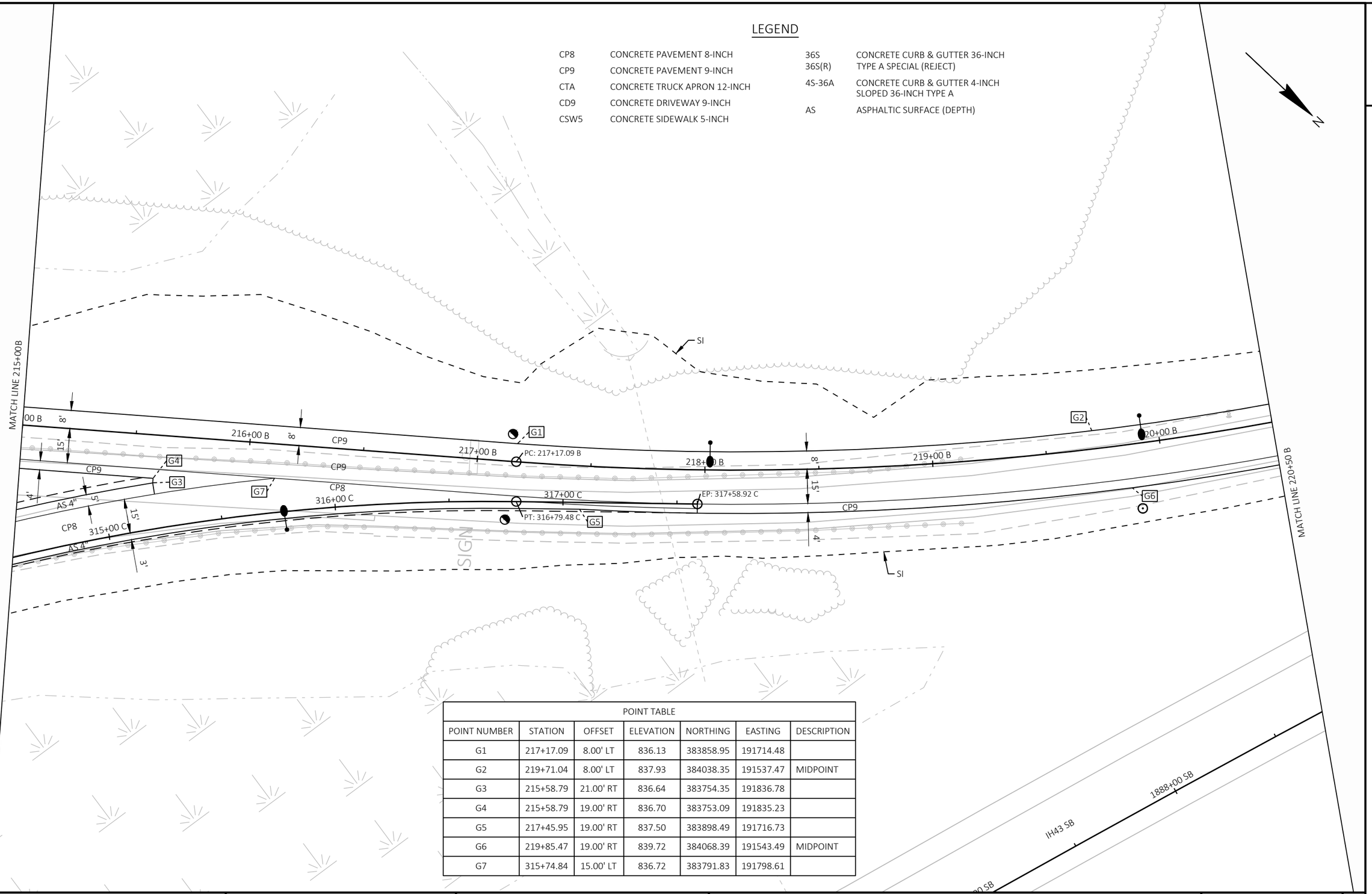
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - REST AREA 51	SHEET 32 E

2

2

LEGEND

CP8	CONCRETE PAVEMENT 8-INCH
CP9	CONCRETE PAVEMENT 9-INCH
CTA	CONCRETE TRUCK APRON 12-INCH
CD9	CONCRETE DRIVEWAY 9-INCH
CSW5	CONCRETE SIDEWALK 5-INCH
36S	CONCRETE CURB & GUTTER 36-INCH
36S(R)	TYPE A SPECIAL (REJECT)
4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
AS	ASPHALTIC SURFACE (DEPTH)



POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
G1	217+17.09	8.00' LT	836.13	383858.95	191714.48	
G2	219+71.04	8.00' LT	837.93	384038.35	191537.47	MIDPOINT
G3	215+58.79	21.00' RT	836.64	383754.35	191836.78	
G4	215+58.79	19.00' RT	836.70	383753.09	191835.23	
G5	217+45.95	19.00' RT	837.50	383898.49	191716.73	
G6	219+85.47	19.00' RT	839.72	384068.39	191543.49	MIDPOINT
G7	315+74.84	15.00' LT	836.72	383791.83	191798.61	

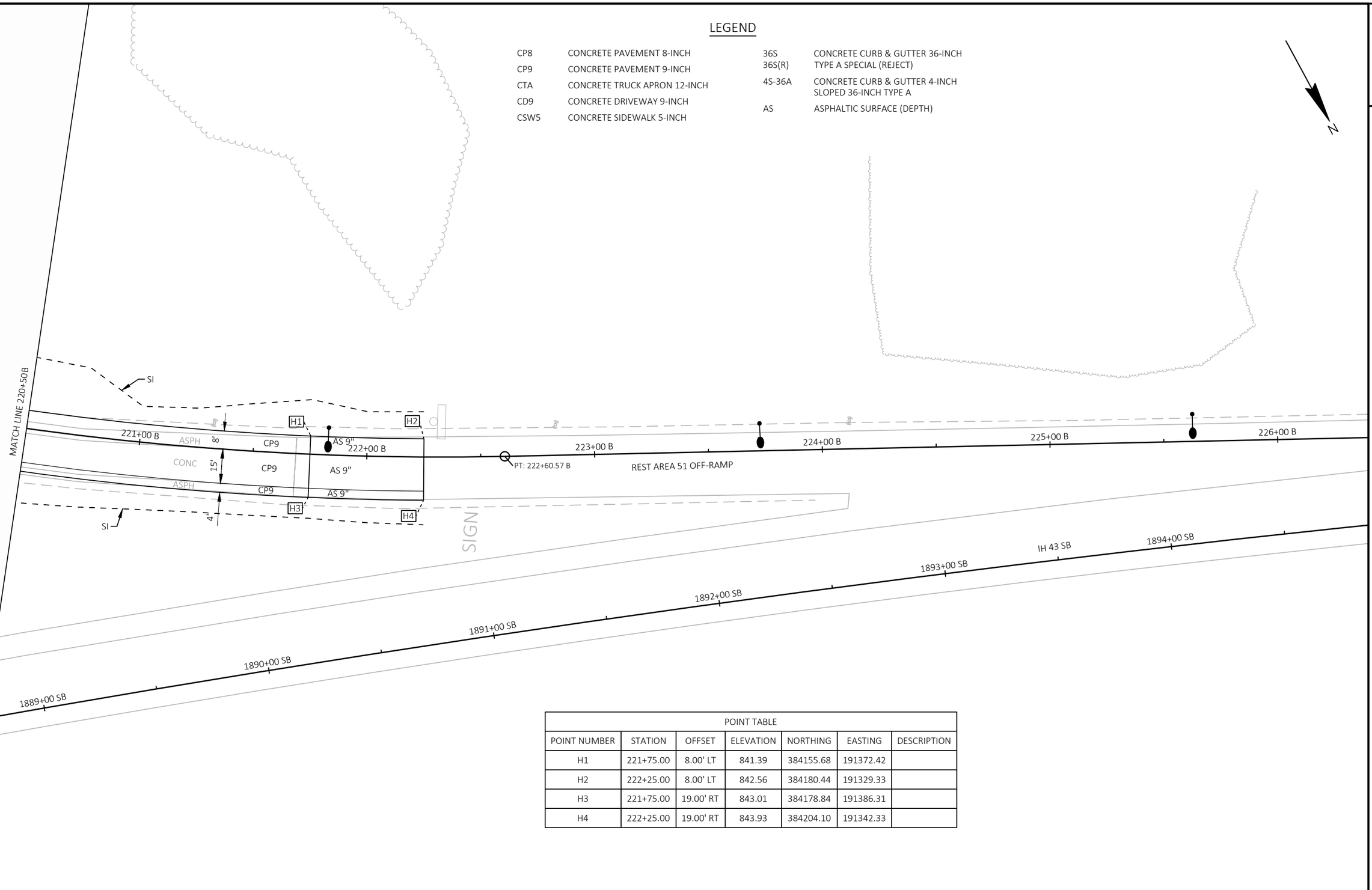
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - REST AREA 51	SHEET 33 E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021201-PD_RA 51.DWG
LAYOUT NAME - 021208-pd
PLOT DATE : 11/26/2024 11:20 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

CP8	CONCRETE PAVEMENT 8-INCH
CP9	CONCRETE PAVEMENT 9-INCH
CTA	CONCRETE TRUCK APRON 12-INCH
CD9	CONCRETE DRIVEWAY 9-INCH
CSW5	CONCRETE SIDEWALK 5-INCH
36S 36S(R)	CONCRETE CURB & GUTTER 36-INCH TYPE A SPECIAL (REJECT)
4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
AS	ASPHALTIC SURFACE (DEPTH)



POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
H1	221+75.00	8.00' LT	841.39	384155.68	191372.42	
H2	222+25.00	8.00' LT	842.56	384180.44	191329.33	
H3	221+75.00	19.00' RT	843.01	384178.84	191386.31	
H4	222+25.00	19.00' RT	843.93	384204.10	191342.33	

2

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
C1	10+59.84	0.00'	835.90	383409.18	193182.62	MIDPOINT
C2	10+99.77	0.00'	835.57	383371.54	193170.31	
C3	11+11.70	36.26' LT	835.06	383356.25	193205.30	
C4	11+98.25	37.95' LT	834.36	383263.77	193196.40	
C5	11+82.92	0.00'	834.92	383288.75	193162.50	
C6	12+25.44	0.00'	834.62	383248.91	193148.84	MIDPOINT
C7	12+67.95	0.00'	834.30	383219.64	193118.55	
C8	116+68.16	15.00' RT	837.24	383373.20	193071.74	
C9	116+49.79	90.43' RT	838.81	383446.11	193045.09	MIDPOINT
C10	304+02.24	23.00' LT	839.39	383453.22	192915.04	
C11	304+02.24	31.00' LT	840.03	383445.30	192913.97	R=5'
C12	304+08.88	26.92' LT	839.44	383450.29	192907.72	

2

LEGEND

CP8	CONCRETE PAVEMENT 8-INCH	36S(R)	TYPE A SPECIAL (REJECT)
CP9	CONCRETE PAVEMENT 9-INCH	4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
CTA	CONCRETE TRUCK APRON 12-INCH	6J	CONCRETE CURB TYPE J
CD9	CONCRETE DRIVEWAY 9-INCH	AS	ASPHALTIC SURFACE (DEPTH)
CSW5	CONCRETE SIDEWALK 5-INCH	MC	CONCRETE MOW CURB
CSW6	CONCRETE SIDEWALK 6-INCH		
36S	CONCRETE CURB & GUTTER 36-INCH		

N

BP: 200+00.00 B

BP: 50+00.00 L

SI

51+00 L

52+00 L

53+00 L

54+00 L

EP: 117+06.59 A

117+00 A

PC: 116+68.16 A

116+00 A

115+00 A

302+00 C

303+00 C

304+00 C

PT: 304+38.90 C

MATCHLINE STA 54+40 L

SI

J1 J2 J3 J4 J5 J6 J7 J8 J9 J10 J11 J12 J13 J14 J15 J16 J17 J18 J19 J20 J21 J22 J23 J24 J25 J26 J27 J28 J29 J30 J31 J32 J33 J34 J35 J36 J37 J38 J39 J40 J41 J42 J43 J44 J45 J46 J47 J48 J49 J50 J51 J52 J53 J54 J55 J56 J57 J58 J59 J60 J61 J62 J63 J64 J65 J66 J67 J68 J69

CD9 18'

CD9

CSW5

CSW5 10'

CSW5 8'

CSW5 5'

CSW5 5'

CSW5

CSW5 10'

MC

36S(R)

23'

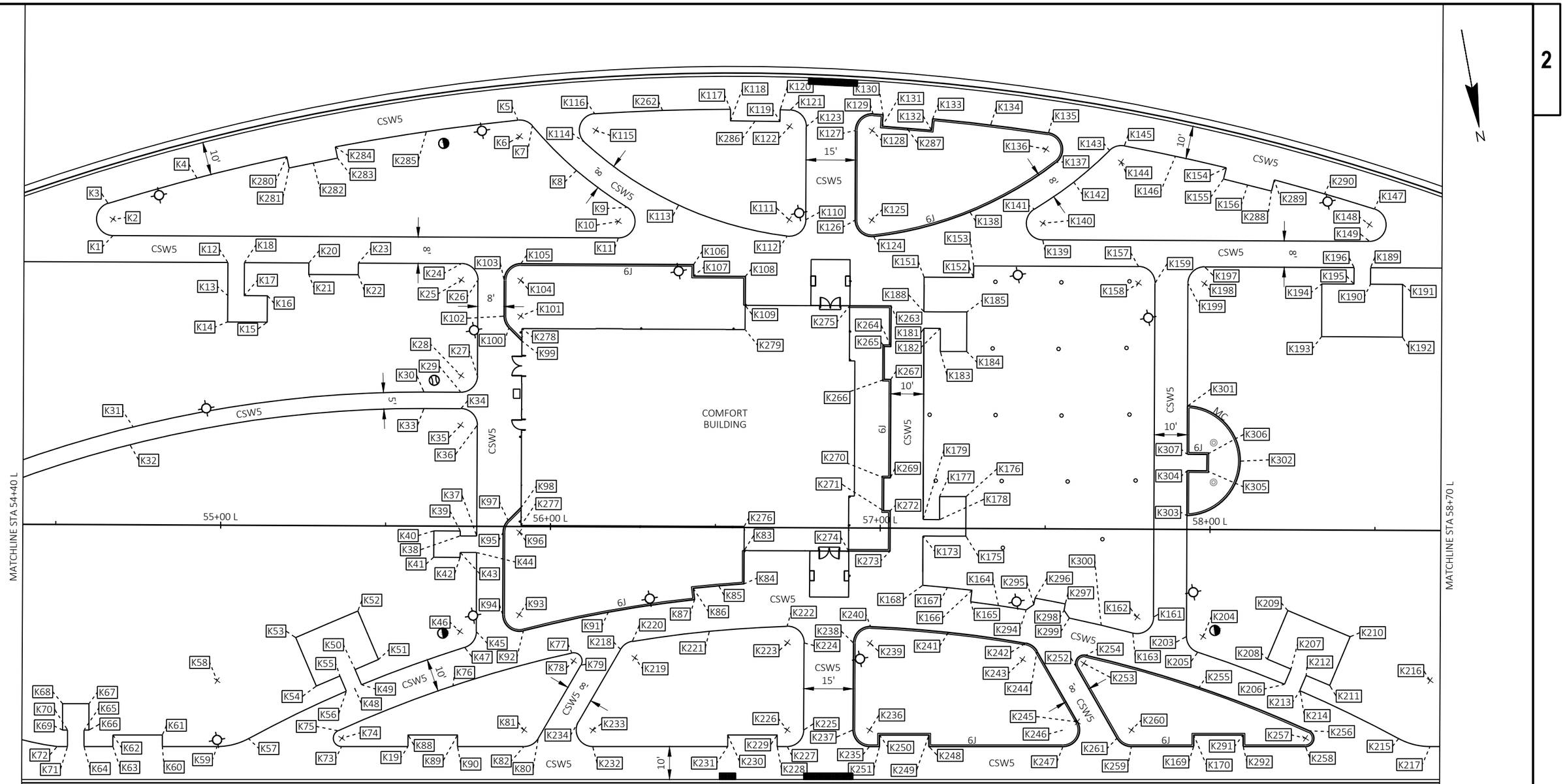
38'

MAINTENANCE BUILDING

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - RA 51 PLAZA	SHEET 36	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021201-PD_RA 51-PLAZA.DWG
LAYOUT NAME - 021214_pd-Plaza
PLOT DATE : 11/26/2024 11:21 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2



LEGEND

CP8	CONCRETE PAVEMENT 8-INCH	36S(R)	TYPE A SPECIAL (REJECT)
CP9	CONCRETE PAVEMENT 9-INCH	4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
CTA	CONCRETE TRUCK APRON 12-INCH	6J	CONCRETE CURB TYPE J
CD9	CONCRETE DRIVEWAY 9-INCH	AS	ASPHALTIC SURFACE (DEPTH)
CSW5	CONCRETE SIDEWALK 5-INCH	MC	CONCRETE MOW CURB
CSW6	CONCRETE SIDEWALK 6-INCH		
36S	CONCRETE CURB & GUTTER 36-INCH		

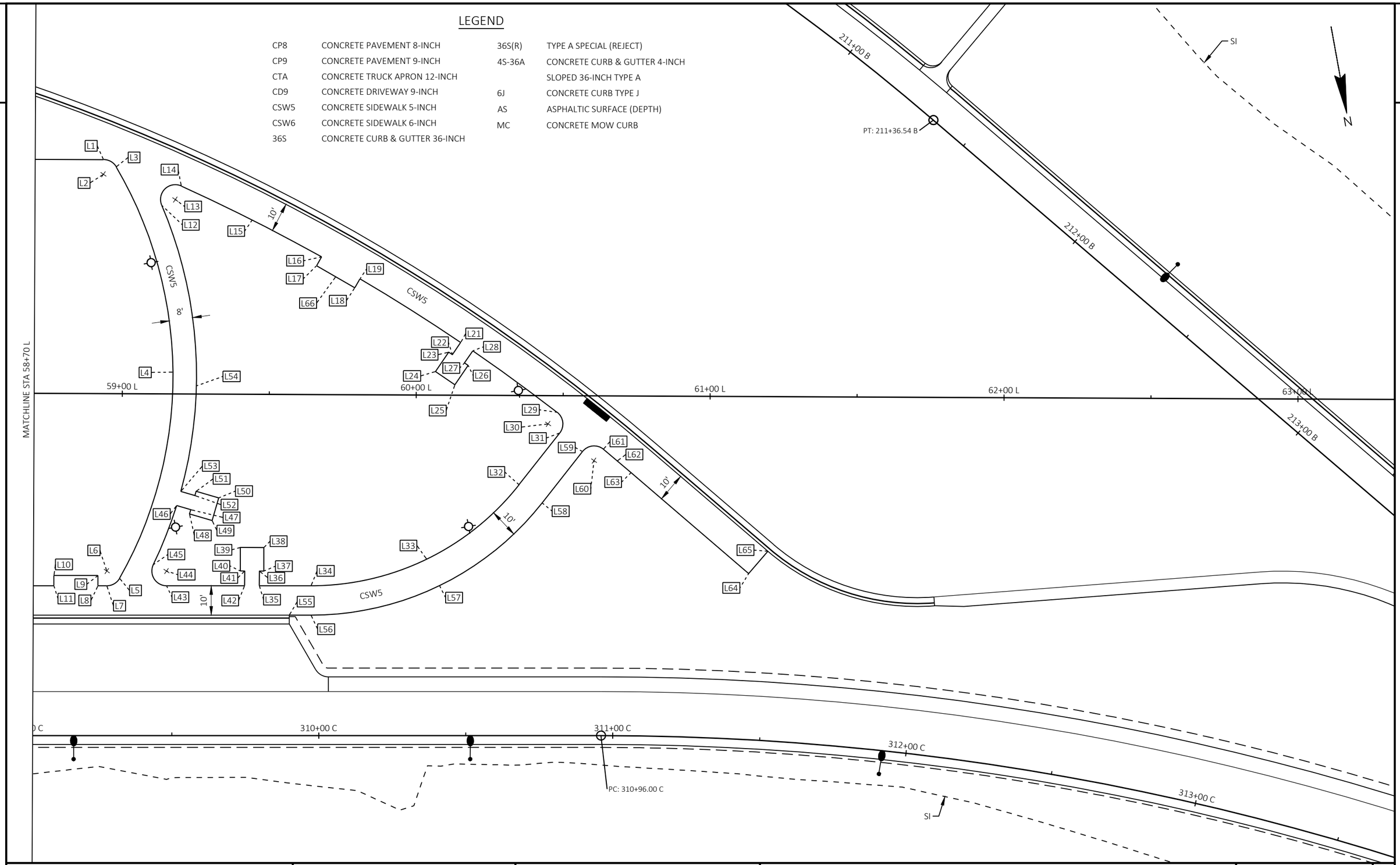
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - RA 51 PLAZA	SHEET 37	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021201-PD_RA 51-PLAZA.DWG
LAYOUT NAME - 021215-pd-Plaza

PLOT DATE : 11/26/2024 11:21 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : ##########

LEGEND

CP8	CONCRETE PAVEMENT 8-INCH	36S(R)	TYPE A SPECIAL (REJECT)
CP9	CONCRETE PAVEMENT 9-INCH	4S-36A	CONCRETE CURB & GUTTER 4-INCH
CTA	CONCRETE TRUCK APRON 12-INCH		SLOPED 36-INCH TYPE A
CD9	CONCRETE DRIVEWAY 9-INCH	6J	CONCRETE CURB TYPE J
CSW5	CONCRETE SIDEWALK 5-INCH	AS	ASPHALTIC SURFACE (DEPTH)
CSW6	CONCRETE SIDEWALK 6-INCH	MC	CONCRETE MOW CURB
36S	CONCRETE CURB & GUTTER 36-INCH		



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - RA 51 PLAZA	SHEET 38 E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021201-PD_RA 51-PLAZA.DWG
LAYOUT NAME - 021216-pd Plaza
PLOT DATE : 11/26/2024 11:21 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : ##########

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
J1	51+83.91	66.33' RT	837.68	383389.67	193090.97	
J2	51+90.89	73.48' RT	837.53	383397.98	193085.42	
J3	52+38.73	28.38' RT	838.12	383362.40	193030.13	
J4	52+32.29	20.90' RT	837.97	383353.87	193035.09	
J5	52+46.32	9.17' RT	838.13	383344.91	193019.15	
J6	52+52.63	16.94' RT	838.28	383353.69	193014.37	
J7	52+54.17	18.84' RT	838.41	383355.85	193013.20	
J8	52+69.70	6.23' RT	838.64	383346.29	192995.63	R=20'
J9	52+80.05	23.34' RT	840.05	383365.01	192988.58	
J10	53+02.72	9.62' RT	841.11	383355.68	192963.79	
J11	53+18.12	44.72' RT	841.22	383393.00	192955.08	
J12	53+13.84	47.31' RT	841.14	383394.76	192959.75	
J13	52+96.55	57.36' RT	840.72	383401.48	192978.59	
J14	52+18.08	100.28' RT	840.27	383429.30	193063.60	
J15	52+07.10	106.27' RT	840.40	383433.18	193075.49	
J16	51+96.09	86.07' RT	840.59	383411.31	193082.61	
J17	52+07.06	80.09' RT	840.46	383407.43	193070.73	
J18	52+31.74	66.63' RT	839.90	383398.72	193044.00	
J19	52+19.77	44.68' RT	837.71	383374.95	193051.75	R=25'
J20	52+57.21	13.25' RT	838.33	383350.91	193009.19	MIDPOINT
J21	53+84.19	65.72' LT	839.67	383296.53	192869.90	
J22	53+86.32	61.20' LT	840.06	383301.37	192868.63	R=5'
J23	53+90.39	58.30' LT	840.36	383304.96	192865.15	
J24	53+76.54	26.65' LT	840.97	383333.54	192884.57	MIDPOINT
J25	53+76.23	6.89' RT	841.52	383366.46	192891.01	
J26	53+71.53	8.89' RT	841.46	383367.57	192896.00	R=5'
J27	53+74.84	12.65' RT	841.61	383371.86	192893.44	
J28	53+63.77	22.38' RT	841.38	383379.40	192906.11	
J29	53+43.96	0.15' LT	841.20	383353.62	192921.45	R=30'
J30	53+19.02	55.86' RT	840.99	383404.12	192956.23	
J31	53+73.00	20.92' RT	841.43	383379.66	192896.77	
J32	53+76.30	24.68' RT	841.31	383383.96	192894.21	R=5'
J33	53+80.93	22.80' RT	841.44	383382.96	192889.31	
J34	53+92.21	42.54' RT	841.10	383404.43	192881.84	MIDPOINT
J35	54+08.31	58.58' RT	840.76	383423.15	192868.95	
J36	54+05.28	62.56' RT	840.53	383426.51	192872.65	R=5'
J37	54+05.31	67.56' RT	840.37	383431.43	192873.54	
J38	53+84.14	64.44' RT	840.28	383424.48	192893.78	
J39	53+84.20	77.95' RT	840.07	383437.77	192896.20	MIDPOINT
J40	54+10.94	50.47' RT	840.92	383415.66	192864.88	

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
J41	53+86.53	14.84' RT	841.64	383376.16	192882.34	
J42	53+91.29	13.28' RT	841.50	383375.50	192877.39	R=5'
J43	53+88.87	8.90' RT	841.72	383370.75	192878.96	
J44	53+90.42	2.37' RT	841.77	383364.61	192876.24	
J45	53+88.06	2.04' LT	841.53	383359.85	192877.75	R=5'
J46	53+83.09	1.54' LT	841.54	383359.42	192882.73	
J47	53+92.34	46.39' LT	840.65	383317.03	192865.42	MIDPOINT
J48	54+25.42	78.05' LT	840.13	383291.96	192827.10	
J49	54+32.10	64.62' LT	840.08	383306.38	192823.00	R=15'
J50	54+32.10	79.62' LT	840.19	383291.64	192820.25	
J51	53+59.49	25.51' RT	841.17	383381.70	192910.88	
J52	53+20.71	48.99' RT	841.14	383397.68	192953.31	
J53	53+22.47	42.25' RT	841.31	383391.37	192950.34	
J54	53+09.89	21.47' RT	841.32	383368.64	192958.91	
J55	53+35.81	5.78' RT	841.32	383357.97	192930.56	
J56	53+48.38	26.56' RT	841.32	383380.70	192922.00	
J57	53+62.08	29.79' RT	841.09	383386.38	192909.12	
J58	53+67.07	26.14' RT	841.31	383383.70	192903.55	
J59	53+99.15	67.62' RT	840.33	383430.35	192879.61	
J60	53+99.14	64.12' RT	840.38	383426.91	192878.98	
J61	53+09.57	24.36' LT	838.91	383323.52	192950.83	
J62	53+11.43	21.40' LT	839.20	383326.78	192949.54	
J63	53+17.76	25.42' LT	839.26	383323.98	192942.58	MIDPOINT
J64	53+24.13	29.38' LT	839.30	383321.26	192935.59	
J65	53+22.27	32.34' LT	839.04	383318.01	192936.88	
J66	53+52.77	49.88' LT	839.35	383306.35	192903.68	MIDPOINT
J67	53+54.32	28.65' RT	841.17	383383.83	192916.54	
J68	53+50.90	30.72' RT	841.16	383385.24	192920.29	
J69	53+05.74	23.98' RT	841.07	383370.35	192963.45	
K1	54+66.94	87.62' LT	841.04	383290.15	192784.53	
K2	54+66.94	92.62' LT	840.61	383285.24	192783.61	R=5'
K3	54+65.45	97.40' LT	840.52	383280.28	192784.21	
K4	54+92.35	105.19' LT	840.94	383277.54	192756.34	MIDPOINT
K5	55+89.63	123.18' LT	843.01	383277.67	192657.41	
K6	55+90.15	118.21' LT	842.97	383282.65	192657.80	R=5'
K7	55+93.96	121.45' LT	843.09	383280.16	192653.46	
K8	56+07.40	108.02' LT	843.60	383295.83	192642.72	MIDPOINT
K9	56+22.80	96.90' LT	844.16	383309.58	192629.61	
K10	56+20.20	92.62' LT	844.24	383313.31	192632.95	R=5'
K11	56+20.20	87.62' LT	844.57	383318.23	192633.86	

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
K12	55+01.85	79.62' LT	842.15	383304.41	192751.68	
K13	55+01.85	69.62' LT	842.10	383314.24	192753.51	
K14	55+01.85	61.62' LT	842.06	383322.11	192754.98	
K15	55+13.85	61.62' LT	842.17	383324.31	192743.18	
K16	55+13.85	69.62' LT	842.21	383316.44	192741.72	
K17	55+06.85	69.62' LT	842.24	383315.16	192748.60	
K18	55+06.85	79.62' LT	842.29	383305.33	192746.77	
K19	55+57.13	66.88' RT	842.15	383458.56	192724.17	
K20	55+26.38	79.62' LT	842.84	383308.91	192727.56	
K21	55+26.38	76.12' LT	842.81	383312.35	192728.20	
K22	55+41.38	76.12' LT	843.23	383315.09	192713.45	
K23	55+41.38	79.62' LT	843.27	383311.65	192712.81	
K24	55+72.67	79.62' LT	844.15	383317.38	192682.06	
K25	55+72.67	74.62' LT	844.24	383322.30	192682.98	R=5'
K26	55+77.67	74.62' LT	844.41	383323.21	192678.06	
K27	55+77.67	45.62' LT	844.86	383351.72	192683.37	
K28	55+72.67	45.62' LT	844.72	383350.81	192688.29	R=5'
K29	55+72.67	40.62' LT	844.65	383355.72	192689.20	
K30	55+61.50	40.62' LT	844.47	383353.68	192700.18	
K31	54+73.31	29.65' LT	843.12	383348.31	192788.88	MIDPOINT
K32	54+72.38	24.26' LT	843.10	383353.45	192790.79	MIDPOINT
K33	55+61.50	35.62' LT	844.48	383358.59	192701.09	
K34	55+72.67	35.62' LT	844.63	383360.64	192690.12	
K35	55+72.67	30.62' LT	844.57	383365.55	192691.03	R=5'
K36	55+77.67	30.62' LT	844.86	383366.47	192686.12	
K37	55+77.67	2.94' RT	844.46	383399.47	192692.27	
K38	55+72.67	2.94' RT	844.43	383398.56	192697.18	
K39	55+72.67	1.44' RT	844.43	383397.08	192696.91	
K40	55+64.67	1.44' RT	844.39	383395.62	192704.77	
K41	55+64.67	9.44' RT	844.16	383403.48	192706.24	
K42	55+72.67	9.44' RT	844.20	383404.95	192698.37	
K43	55+72.67	7.94' RT	844.20	383403.47	192698.10	
K44	55+77.67	7.94' RT	844.23	383404.39	192693.18	
K45	55+77.67	31.96' RT	843.12	383428.00	192697.58	
K46	55+72.67	31.96' RT	843.02	383427.08	192702.50	R=5'
K47	55+74.17	36.73' RT	842.87	383432.04	192701.89	
K48	55+40.78	49.11' RT	842.19	383438.10	192736.99	MIDPOINT
K49	55+42.94	48.19' RT	842.23	383437.59	192734.69	
K50	55+40.96	43.60' RT	842.21	383432.72	192735.80	
K51	55+48.07	40.53' RT	842.21	383431.00	192728.25	

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POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
K52	55+41.71	25.84' RT	842.15	383415.40	192731.81	
K53	55+22.90	33.98' RT	841.95	383419.96	192751.79	
K54	55+29.26	48.67' RT	842.11	383435.56	192748.23	
K55	55+36.37	45.59' RT	842.11	383433.83	192740.68	
K56	55+38.35	50.16' RT	842.14	383438.69	192739.57	
K57	55+08.74	64.68' RT	841.50	383447.54	192771.34	
K58	54+99.13	47.14' RT	841.37	383428.53	192777.57	MIDPOINT
K59	54+99.22	67.14' RT	841.32	383448.21	192781.14	
K60	54+82.63	67.21' RT	841.11	383445.25	192797.47	
K61	54+82.62	63.71' RT	841.07	383441.80	192796.84	
K62	54+67.62	63.78' RT	840.89	383439.12	192811.60	
K63	54+67.63	67.28' RT	840.93	383442.57	192812.22	
K64	54+58.88	67.32' RT	840.84	383441.00	192820.84	
K65	54+58.85	62.32' RT	840.81	383436.08	192819.94	
K66	54+60.35	62.31' RT	840.81	383436.35	192818.47	
K67	54+60.32	54.31' RT	840.77	383428.48	192817.04	
K68	54+52.32	54.35' RT	840.72	383427.05	192824.91	
K69	54+52.35	62.35' RT	840.76	383434.92	192826.34	
K70	54+53.85	62.34' RT	840.76	383435.19	192824.86	
K71	54+53.88	67.34' RT	840.79	383440.11	192825.76	
K72	54+50.70	67.36' RT	840.75	383439.54	192828.88	
K73	55+36.98	66.97' RT	841.85	383454.96	192743.99	
K74	55+36.97	64.47' RT	841.89	383452.50	192743.54	R=5'
K75	55+35.93	62.20' RT	841.87	383450.08	192744.15	
K76	55+70.68	48.39' RT	842.58	383442.87	192707.46	
K77	56+06.70	38.31' RT	843.37	383439.55	192670.21	
K78	56+07.24	40.74' RT	843.30	383442.05	192670.11	R=5'
K79	56+09.41	41.99' RT	843.34	383443.68	192668.21	
K80	55+96.58	64.22' RT	842.71	383463.17	192684.90	
K81	55+92.25	61.72' RT	842.66	383459.92	192688.70	R=5'
K82	55+92.27	66.72' RT	842.66	383464.84	192689.59	
K83	56+58.76	7.00' RT	845.06	383418.31	192613.29	
K84	56+58.76	17.09' RT	844.91	383428.23	192615.14	
K85	56+51.07	17.71' RT	844.60	383427.43	192622.81	MIDPOINT
K86	56+43.40	18.49' RT	844.28	383426.79	192630.50	
K87	56+43.79	21.97' RT	844.23	383430.28	192630.75	
K88	55+57.11	63.38' RT	842.11	383455.12	192723.55	
K89	55+72.11	63.31' RT	842.33	383457.80	192708.79	
K90	55+72.13	66.81' RT	842.37	383461.24	192709.41	
K91	56+17.69	25.85' RT	843.73	383429.32	192657.12	MIDPOINT

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
K92	55+91.93	31.60' RT	843.22	383430.26	192683.49	
K93	55+90.67	26.76' RT	843.50	383425.27	192683.85	R=5'
K94	55+85.67	26.76' RT	843.48	383424.35	192688.77	
K95	55+85.67	1.72' RT	844.63	383399.73	192684.18	
K96	55+90.67	1.72' RT	844.89	383400.65	192679.26	R=5'
K97	55+87.13	1.82' LT	844.82	383396.52	192682.09	
K98	55+91.09	5.78' LT	845.06	383393.36	192677.47	
K99	55+91.09	56.24' LT	845.06	383343.74	192668.23	
K100	55+87.13	60.20' LT	844.90	383339.13	192671.40	
K101	55+90.67	63.74' LT	844.91	383336.30	192667.27	R=5'
K102	55+85.67	63.74' LT	844.80	383335.38	192672.19	
K103	55+85.67	74.62' LT	844.53	383324.68	192670.20	
K104	55+90.67	74.62' LT	844.59	383325.60	192665.28	R=5'
K105	55+90.67	79.62' LT	844.45	383320.68	192664.36	
K106	56+43.04	79.62' LT	844.86	383330.27	192612.88	
K107	56+43.04	76.12' LT	844.91	383333.71	192613.52	
K108	56+58.76	76.12' LT	844.93	383336.59	192598.07	
K109	56+58.76	67.33' LT	845.06	383345.23	192599.68	
K110	56+76.99	93.37' LT	844.63	383322.98	192576.99	
K111	56+71.99	93.37' LT	844.67	383322.06	192581.90	R=5'
K112	56+71.39	88.41' LT	844.75	383326.83	192583.40	
K113	56+38.41	97.67' LT	844.65	383311.69	192614.12	MIDPOINT
K114	56+09.83	116.54' LT	843.61	383287.90	192638.77	
K115	56+13.19	120.24' LT	843.64	383284.88	192634.78	R=5'
K116	56+12.85	125.22' LT	843.49	383279.91	192634.21	
K117	56+54.02	126.77' LT	844.20	383285.94	192593.45	
K118	56+54.04	123.27' LT	844.23	383289.38	192594.07	
K119	56+69.04	123.17' LT	844.45	383292.23	192579.34	
K120	56+69.10	126.67' LT	844.42	383288.80	192578.64	
K121	56+72.10	126.61' LT	844.35	383289.41	192575.70	
K122	56+71.99	121.61' LT	844.35	383294.30	192576.73	R=5'
K123	56+76.99	121.61' LT	844.12	383295.22	192571.82	
K124	56+97.57	88.39' LT	844.75	383331.64	192557.66	
K125	56+96.99	93.36' LT	845.17	383326.65	192557.33	R=5'
K126	56+91.99	93.36' LT	844.63	383325.74	192562.24	
K127	56+91.99	120.55' LT	844.21	383299.01	192557.26	
K128	56+96.99	120.55' LT	845.04	383299.92	192552.35	R=5'
K129	56+97.30	125.54' LT	844.52	383295.07	192551.13	
K130	57+00.29	125.34' LT	844.71	383295.81	192548.22	
K131	57+00.06	121.85' LT	844.77	383299.20	192549.09	

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
K132	57+15.01	120.67' LT	845.02	383303.10	192534.61	
K133	57+15.32	124.16' LT	844.97	383299.73	192533.66	
K134	57+32.93	122.32' LT	845.18	383304.76	192516.69	MIDPOINT
K135	57+50.47	120.00' LT	845.38	383310.26	192499.87	
K136	57+49.75	115.05' LT	845.87	383314.99	192501.49	R=5'
K137	57+52.82	111.11' LT	845.40	383319.43	192499.18	
K138	57+26.75	95.96' LT	845.00	383329.54	192527.59	MIDPOINT
K139	57+48.89	87.62' LT	845.05	383341.79	192507.35	
K140	57+48.89	92.62' LT	844.88	383336.88	192506.44	R=5'
K141	57+46.29	96.90' LT	845.11	383332.20	192508.20	
K142	57+58.20	105.16' LT	845.28	383326.26	192494.99	MIDPOINT
K143	57+69.02	114.81' LT	845.49	383318.76	192482.59	
K144	57+72.57	111.28' LT	845.13	383322.87	192479.74	R=5'
K145	57+73.47	116.20' LT	845.65	383318.20	192477.95	
K146	57+89.00	113.15' LT	845.83	383324.05	192463.25	MIDPOINT
K147	58+49.42	97.40' LT	846.28	383350.60	192406.73	
K148	58+47.93	92.62' LT	846.04	383355.02	192409.07	R=5'
K149	58+47.93	87.62' LT	845.99	383359.93	192409.99	
K151	57+12.98	76.12' LT	844.88	383346.52	192544.76	
K152	57+27.98	76.12' LT	844.94	383349.27	192530.02	
K153	57+27.98	79.62' LT	844.98	383345.83	192529.37	
K154	58+04.44	109.72' LT	845.98	383330.25	192448.69	
K155	58+03.60	106.32' LT	845.94	383333.44	192450.14	
K156	58+10.89	104.56' LT	846.01	383336.50	192443.30	MIDPOINT
K157	57+77.98	79.62' LT	845.45	383354.99	192480.22	
K158	57+77.98	74.62' LT	845.28	383359.90	192481.14	R=5'
K159	57+82.98	74.62' LT	845.60	383360.82	192476.22	
K161	57+82.98	26.64' RT	844.88	383460.37	192494.77	
K162	57+77.98	26.64' RT	844.80	383459.46	192499.68	R=5'
K163	57+76.72	31.48' RT	844.79	383463.99	192501.81	
K164	57+35.94	23.31' RT	844.81	383448.48	192540.41	MIDPOINT
K165	57+27.50	22.22' RT	844.82	383445.86	192548.50	
K166	57+27.91	18.74' RT	844.78	383442.52	192547.46	
K167	57+20.45	17.94' RT	844.82	383440.36	192554.64	MIDPOINT
K168	57+12.98	17.28' RT	844.86	383438.35	192561.87	
K169	57+95.35	65.81' RT	844.39	383501.14	192489.78	
K170	57+95.33	62.31' RT	844.42	383497.70	192489.16	
K173	57+12.98	2.34' RT	844.91	383423.67	192559.13	
K175	57+25.98	2.34' RT	844.82	383426.05	192546.35	
K176	57+25.98	9.66' LT	844.82	383414.25	192544.16	

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POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
K177	57+17.98	9.66' LT	844.86	383412.78	192552.02	
K178	57+17.98	2.66' LT	844.86	383419.67	192553.30	
K179	57+12.98	2.66' LT	844.91	383418.75	192558.22	
K181	57+12.98	60.64' LT	844.89	383361.75	192547.60	
K182	57+17.98	60.64' LT	844.84	383362.66	192542.68	
K183	57+17.98	53.64' LT	844.84	383369.54	192543.96	
K184	57+25.98	53.64' LT	844.76	383371.01	192536.10	
K185	57+25.98	65.64' LT	844.80	383359.21	192533.90	
K188	57+12.98	65.64' LT	844.89	383356.83	192546.68	
K189	58+48.33	79.62' LT	846.12	383367.87	192411.06	
K190	58+48.33	74.62' LT	846.04	383372.79	192411.98	
K191	58+58.08	74.62' LT	846.19	383374.57	192402.39	
K192	58+58.08	58.62' LT	845.95	383390.30	192405.32	
K193	58+33.58	58.62' LT	845.61	383385.82	192429.41	
K194	58+33.58	74.62' LT	845.85	383370.09	192426.48	
K195	58+43.33	74.62' LT	845.99	383371.87	192416.89	
K196	58+43.33	79.62' LT	846.07	383366.96	192415.98	
K197	57+97.98	79.62' LT	845.64	383358.65	192460.56	
K198	57+97.98	74.62' LT	845.48	383363.57	192461.47	R=5'
K199	57+92.98	74.62' LT	845.60	383362.65	192466.39	
K203	57+92.98	32.45' RT	844.81	383467.92	192486.00	
K204	57+97.98	32.45' RT	844.76	383468.83	192481.09	R=5'
K205	57+96.45	37.21' RT	844.72	383473.23	192483.46	
K206	58+22.81	46.81' RT	844.68	383487.49	192459.30	
K207	58+24.73	42.20' RT	844.63	383483.31	192456.58	
K208	58+17.57	39.23' RT	844.63	383479.08	192463.07	
K209	58+23.69	24.45' RT	844.55	383465.67	192454.34	
K210	58+42.63	32.29' RT	844.55	383476.85	192437.16	
K211	58+36.50	47.08' RT	844.63	383490.26	192445.89	
K212	58+29.34	44.11' RT	844.63	383486.04	192452.39	
K213	58+27.43	48.73' RT	844.68	383490.23	192455.11	
K214	58+27.55	48.78' RT	844.68	383490.30	192455.01	MIDPOINT
K215	58+57.47	63.11' RT	844.58	383509.87	192428.22	
K216	58+66.92	45.48' RT	844.51	383494.27	192415.70	R=20'
K217	58+67.01	65.48' RT	844.57	383513.95	192419.28	
K218	56+21.45	37.14' RT	843.67	383441.11	192655.49	
K219	56+25.78	39.64' RT	843.61	383444.36	192651.69	R=5'
K220	56+24.94	34.71' RT	843.75	383439.36	192651.61	
K221	56+48.33	31.54' RT	844.15	383440.52	192628.04	MIDPOINT
K222	56+71.87	29.91' RT	844.69	383443.24	192604.60	

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
K223	56+72.05	34.91' RT	844.43	383448.18	192605.34	R=5'
K224	56+77.05	34.91' RT	844.56	383449.10	192600.42	
K225	56+77.05	61.36' RT	843.47	383475.10	192605.27	
K226	56+72.05	61.36' RT	843.53	383474.19	192610.18	R=5'
K227	56+72.07	66.36' RT	843.35	383479.11	192611.08	
K228	56+69.07	66.37' RT	843.46	383478.57	192614.03	
K229	56+69.05	62.87' RT	843.51	383475.13	192613.40	
K230	56+54.05	62.94' RT	843.06	383472.44	192628.16	
K231	56+54.07	66.44' RT	843.01	383475.89	192628.79	
K232	56+13.11	66.63' RT	842.97	383468.57	192669.09	
K233	56+13.09	61.63' RT	843.04	383463.65	192668.20	R=5'
K234	56+08.76	59.13' RT	843.07	383460.40	192671.99	
K235	56+97.07	66.25' RT	843.69	383483.57	192586.48	
K236	56+97.05	61.25' RT	844.26	383478.65	192585.58	R=5'
K237	56+92.05	61.25' RT	843.55	383477.74	192590.50	
K238	56+92.05	34.91' RT	844.57	383451.85	192585.68	
K239	56+97.05	34.91' RT	845.14	383452.76	192580.76	R=5'
K240	56+97.23	29.91' RT	844.79	383447.88	192579.67	
K241	57+20.80	31.54' RT	844.75	383453.80	192556.79	MIDPOINT
K242	57+44.21	34.72' RT	844.70	383461.22	192534.36	
K243	57+43.38	39.65' RT	845.13	383465.91	192536.08	R=5'
K244	57+47.71	37.15' RT	844.67	383464.24	192531.37	
K245	57+60.02	58.48' RT	844.40	383487.47	192523.17	R=5'
K246	57+55.69	60.98' RT	844.84	383489.14	192527.88	R=5'
K247	57+55.71	65.98' RT	844.28	383494.06	192528.78	
K248	57+15.07	66.17' RT	844.05	383486.79	192568.77	
K249	57+15.05	62.67' RT	844.10	383483.35	192568.14	
K250	57+00.05	62.73' RT	843.84	383480.67	192582.90	
K251	57+00.07	66.23' RT	843.78	383484.11	192583.53	
K252	57+59.75	42.01' RT	844.68	383471.22	192520.42	
K253	57+61.91	40.76' RT	845.17	383470.39	192518.06	R=5'
K254	57+62.46	38.32' RT	844.66	383468.09	192517.08	
K255	57+96.93	47.89' RT	844.59	383483.81	192484.95	MIDPOINT
K256	58+30.26	60.87' RT	844.52	383502.68	192454.56	
K257	58+29.24	63.15' RT	845.00	383504.74	192455.98	R=5'
K258	58+29.25	65.65' RT	844.47	383507.20	192456.43	
K259	57+76.45	65.89' RT	844.34	383497.76	192508.38	
K260	57+76.42	60.89' RT	844.92	383492.84	192507.49	R=5'
K261	57+72.09	63.39' RT	844.40	383494.51	192512.20	
K262	56+33.42	126.33' LT	843.86	383282.60	192613.78	

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
K263	57+02.98	67.33' LT	845.04	383353.33	192556.20	
K264	57+02.98	55.08' LT	845.04	383365.38	192558.45	
K265	57+00.98	55.08' LT	845.07	383365.02	192560.41	
K266	57+00.98	45.08' LT	845.07	383374.85	192562.25	
K267	57+02.98	45.08' LT	845.04	383375.22	192560.28	
K268	57+02.98	15.26' LT	845.05	383404.53	192565.74	
K269	57+02.98	15.26' LT	845.05	383404.53	192565.74	
K270	57+00.98	15.26' LT	845.08	383404.16	192567.71	
K271	57+00.98	5.26' LT	845.09	383413.99	192569.54	
K272	57+02.98	5.26' LT	845.06	383414.36	192567.57	
K273	57+02.98	7.00' RT	845.06	383426.41	192569.82	
K274	56+90.42	7.00' RT	845.06	383424.11	192582.16	
K275	56+90.42	67.33' LT	845.06	383351.03	192568.55	
K276	56+58.75	0.32' LT	845.06	383411.11	192611.96	
K277	55+91.08	0.32' LT	845.06	383398.72	192678.48	
K278	55+91.08	60.01' LT	845.06	383340.04	192667.55	
K279	56+58.76	60.00' LT	845.06	383352.44	192601.02	
K280	55+19.56	111.80' LT	841.46	383276.03	192728.37	
K281	55+20.28	108.37' LT	841.43	383279.53	192728.30	
K282	55+27.61	109.94' LT	841.59	383279.33	192720.80	MIDPOINT
K283	55+34.96	111.42' LT	841.75	383279.22	192713.30	
K284	55+34.25	114.85' LT	841.78	383275.72	192713.37	
K285	55+61.85	119.62' LT	842.39	383276.08	192685.37	MIDPOINT
K286	56+61.54	123.26' LT	844.34	383290.76	192586.70	MIDPOINT
K287	57+07.54	121.31' LT	844.90	383301.11	192541.84	MIDPOINT
K288	58+18.16	102.71' LT	846.07	383339.65	192436.49	
K289	58+19.00	106.11' LT	846.10	383336.46	192435.04	
K290	58+34.27	101.94' LT	846.20	383343.36	192420.80	MIDPOINT
K291	58+10.33	62.24' RT	844.46	383500.38	192474.40	
K292	58+10.35	65.74' RT	844.43	383503.82	192475.02	
K294	57+44.35	24.61' RT	844.80	383451.29	192532.37	
K295	57+46.68	23.00' RT	844.77	383450.14	192529.79	
K296	57+47.04	21.03' RT	844.76	383448.28	192529.07	
K297	57+56.22	22.73' RT	844.74	383451.62	192520.36	
K298	57+55.86	24.69' RT	844.75	383453.49	192521.08	
K299	57+57.46	27.02' RT	844.78	383456.07	192519.93	
K300	57+67.12	29.12' RT	844.76	383459.91	192510.81	
K301	57+92.98	37.40' LT	845.33	383399.24	192473.21	
K302	58+09.03	20.80' LT	845.21	383418.51	192460.47	MIDPOINT
K303	57+92.98	4.19' LT	845.08	383431.89	192479.29	

2

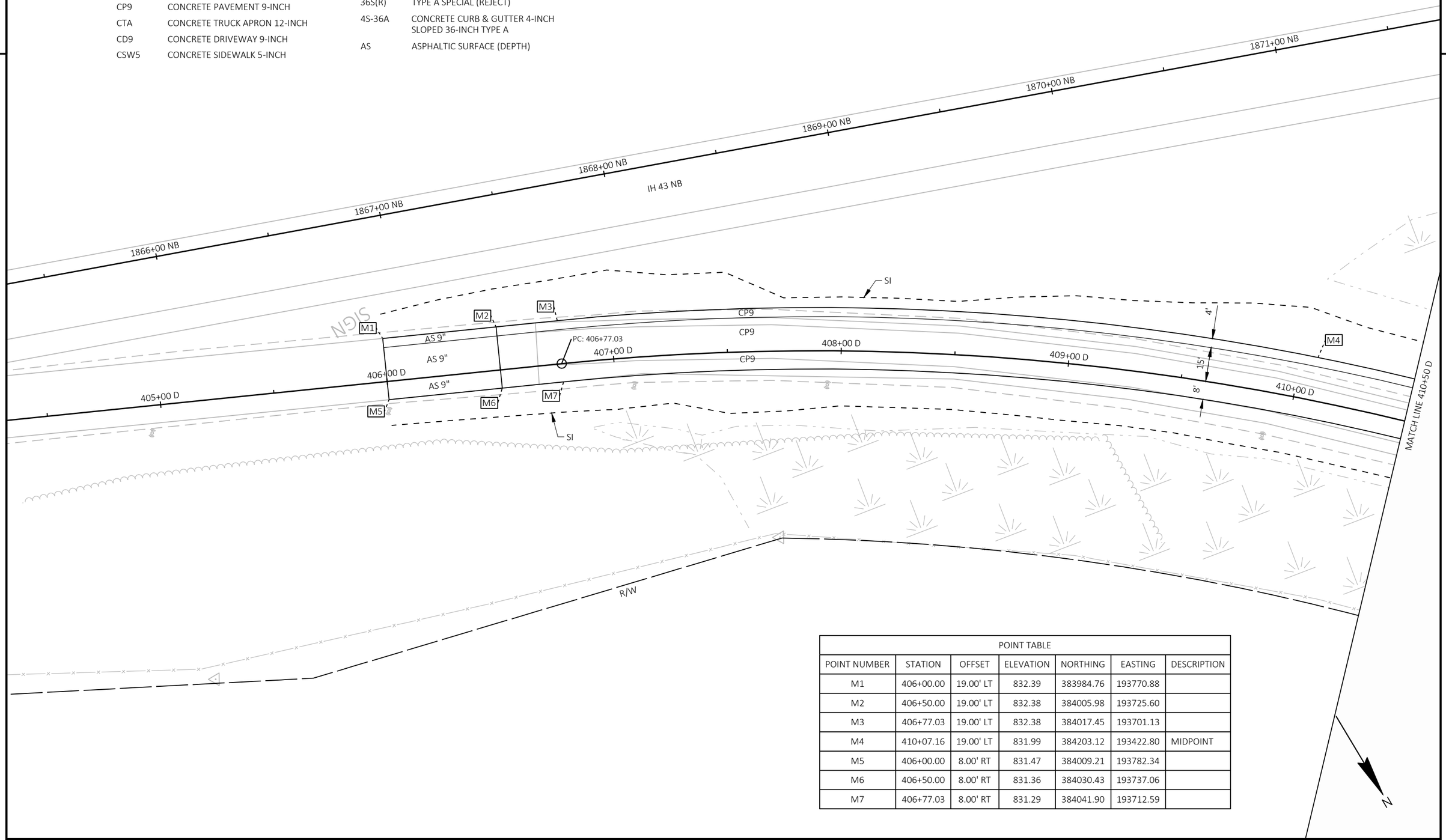
POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
K304	57+92.98	17.80' LT	845.18	383418.52	192476.80	
K305	57+98.98	17.80' LT	845.27	383419.62	192470.90	
K306	57+98.98	22.80' LT	845.31	383414.70	192469.98	
K307	57+92.98	22.80' LT	845.22	383413.60	192475.88	
L1	58+93.25	79.62' LT	846.36	383376.10	192366.90	
L2	58+93.25	74.62' LT	846.39	383381.01	192367.82	R=5'
L3	58+97.55	77.18' LT	846.36	383379.29	192363.12	
L4	59+17.20	7.43' LT	844.52	383451.46	192356.57	MIDPOINT
L5	58+99.36	62.80' RT	844.70	383517.24	192386.98	
L6	58+95.00	60.36' RT	844.63	383514.03	192390.82	R=5'
L7	58+95.02	65.36' RT	844.64	383518.95	192391.72	
L8	58+92.02	65.37' RT	844.63	383518.42	192394.67	
L9	58+92.00	61.87' RT	844.60	383514.97	192394.04	
L10	58+77.00	61.94' RT	844.56	383512.29	192408.80	
L11	58+77.02	65.44' RT	844.59	383515.74	192409.43	
L12	59+13.14	64.19' LT	845.92	383394.92	192350.18	
L13	59+17.73	66.17' LT	845.87	383393.81	192345.30	R=5'
L14	59+19.77	70.73' LT	846.25	383389.70	192342.46	
L15	59+43.92	59.31' LT	846.09	383405.35	192320.81	MIDPOINT
L16	59+67.57	46.89' LT	845.86	383421.89	192299.83	
L17	59+65.88	43.83' LT	845.82	383424.59	192302.05	
L18	59+78.93	36.43' LT	845.65	383434.26	192290.58	
L19	59+80.69	39.45' LT	845.69	383431.61	192288.29	
L21	60+15.04	17.96' LT	845.12	383459.03	192258.47	MIDPOINT
L22	60+12.24	13.82' LT	845.03	383462.59	192261.98	
L23	60+10.99	14.66' LT	845.03	383461.53	192263.05	
L24	60+06.51	8.03' LT	844.99	383467.23	192268.67	
L25	60+13.14	3.55' LT	844.95	383472.85	192262.97	
L26	60+17.62	10.17' LT	844.99	383467.15	192257.35	
L27	60+16.38	11.02' LT	844.99	383466.10	192258.42	
L28	60+19.18	15.16' LT	845.04	383462.54	192254.91	
L29	60+47.96	5.66' RT	844.15	383488.28	192230.43	
L30	60+44.92	9.63' RT	844.00	383491.62	192234.15	R=5'
L31	60+48.86	12.70' RT	843.80	383495.37	192230.83	
L32	60+35.11	30.35' RT	843.94	383510.20	192247.58	
L33	60+03.81	55.82' RT	844.23	383529.50	192283.02	MIDPOINT
L34	59+64.52	65.05' RT	844.52	383531.38	192323.34	
L35	59+46.91	65.12' RT	844.60	383528.23	192340.65	
L36	59+46.91	60.12' RT	844.55	383523.31	192339.74	
L37	59+48.41	60.12' RT	844.55	383523.59	192338.26	

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
L38	59+48.41	52.12' RT	844.51	383515.72	192336.80	
L39	59+40.41	52.12' RT	844.53	383514.26	192344.66	
L40	59+40.41	60.12' RT	844.57	383522.12	192346.13	
L41	59+41.91	60.12' RT	844.57	383522.40	192344.65	
L42	59+41.91	65.12' RT	844.62	383527.31	192345.57	
L43	59+15.33	65.27' RT	844.65	383522.58	192371.73	
L44	59+15.30	60.27' RT	844.58	383517.66	192370.84	R=5'
L45	59+10.79	58.11' RT	844.57	383514.72	192374.88	
L46	59+18.66	37.95' RT	844.48	383496.34	192363.45	
L47	59+23.46	39.33' RT	844.43	383498.58	192358.99	
L48	59+23.05	40.78' RT	844.43	383499.92	192359.66	
L49	59+30.73	43.00' RT	844.39	383503.51	192352.51	
L50	59+32.95	35.31' RT	844.37	383496.36	192348.92	
L51	59+25.27	33.09' RT	844.41	383492.77	192356.07	
L52	59+24.85	34.53' RT	844.41	383494.11	192356.74	
L53	59+20.05	33.14' RT	844.46	383491.87	192361.21	
L54	59+25.19	2.78' LT	844.36	383457.49	192349.57	MIDPOINT
L55	59+57.15	75.08' RT	844.42	383539.89	192332.41	
L56	59+64.56	75.05' RT	844.14	383541.21	192325.12	
L57	60+08.22	64.79' RT	844.08	383539.13	192280.33	MIDPOINT
L58	60+43.00	36.50' RT	843.79	383517.68	192240.95	
L59	60+56.65	18.97' RT	843.65	383502.96	192224.32	
L60	60+60.60	22.04' RT	843.49	383506.70	192221.00	R=5'
L61	60+63.76	18.17' RT	843.89	383503.47	192217.18	
L62	60+68.51	22.09' RT	843.91	383508.20	192213.23	MIDPOINT
L63	60+73.22	26.06' RT	843.81	383512.96	192209.33	
L64	61+13.40	60.21' RT	843.00	383553.89	192176.09	
L65	61+19.87	52.59' RT	842.85	383547.58	192168.32	
L66	59+72.43	40.17' LT	845.74	383429.39	192296.29	

2

LEGEND

CP8	CONCRETE PAVEMENT 8-INCH
CP9	CONCRETE PAVEMENT 9-INCH
CTA	CONCRETE TRUCK APRON 12-INCH
CD9	CONCRETE DRIVEWAY 9-INCH
CSW5	CONCRETE SIDEWALK 5-INCH
36S	CONCRETE CURB & GUTTER 36-INCH
36S(R)	TYPE A SPECIAL (REJECT)
4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
AS	ASPHALTIC SURFACE (DEPTH)

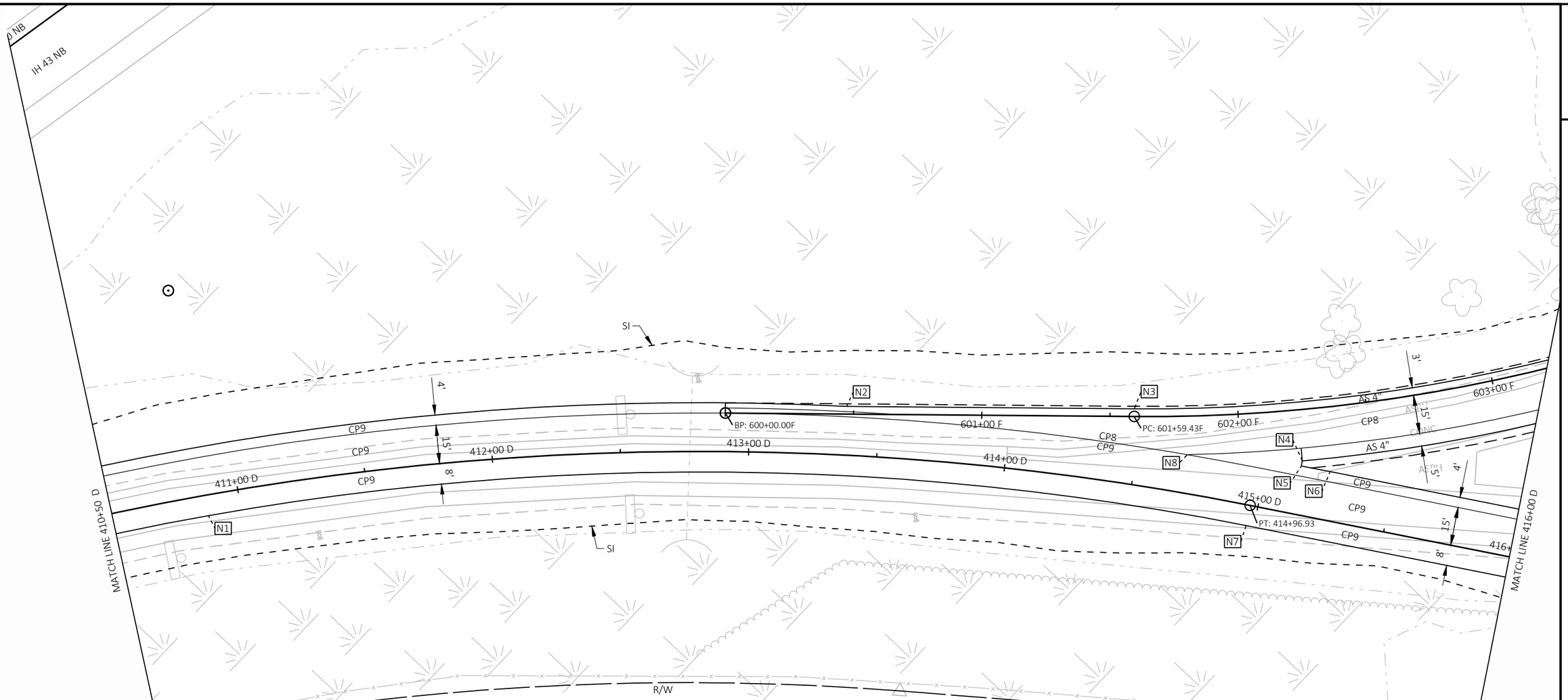


POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
M1	406+00.00	19.00' LT	832.39	383984.76	193770.88	
M2	406+50.00	19.00' LT	832.38	384005.98	193725.60	
M3	406+77.03	19.00' LT	832.38	384017.45	193701.13	
M4	410+07.16	19.00' LT	831.99	384203.12	193422.80	MIDPOINT
M5	406+00.00	8.00' RT	831.47	384009.21	193782.34	
M6	406+50.00	8.00' RT	831.36	384030.43	193737.06	
M7	406+77.03	8.00' RT	831.29	384041.90	193712.59	

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - REST AREA 52	SHEET 43 E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021211-PD_RA 52.DWG
LAYOUT NAME - 021221-pd
PLOT DATE : 11/26/2024 11:22 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



LEGEND

CP8	CONCRETE PAVEMENT 8-INCH	36S	CONCRETE CURB & GUTTER 36-INCH
CP9	CONCRETE PAVEMENT 9-INCH	36S(R)	TYPE A SPECIAL (REJECT)
CTA	CONCRETE TRUCK APRON 12-INCH	4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
CD9	CONCRETE DRIVEWAY 9-INCH	AS	ASPHALTIC SURFACE (DEPTH)
CSW5	CONCRETE SIDEWALK 5-INCH		

POINT TABLE

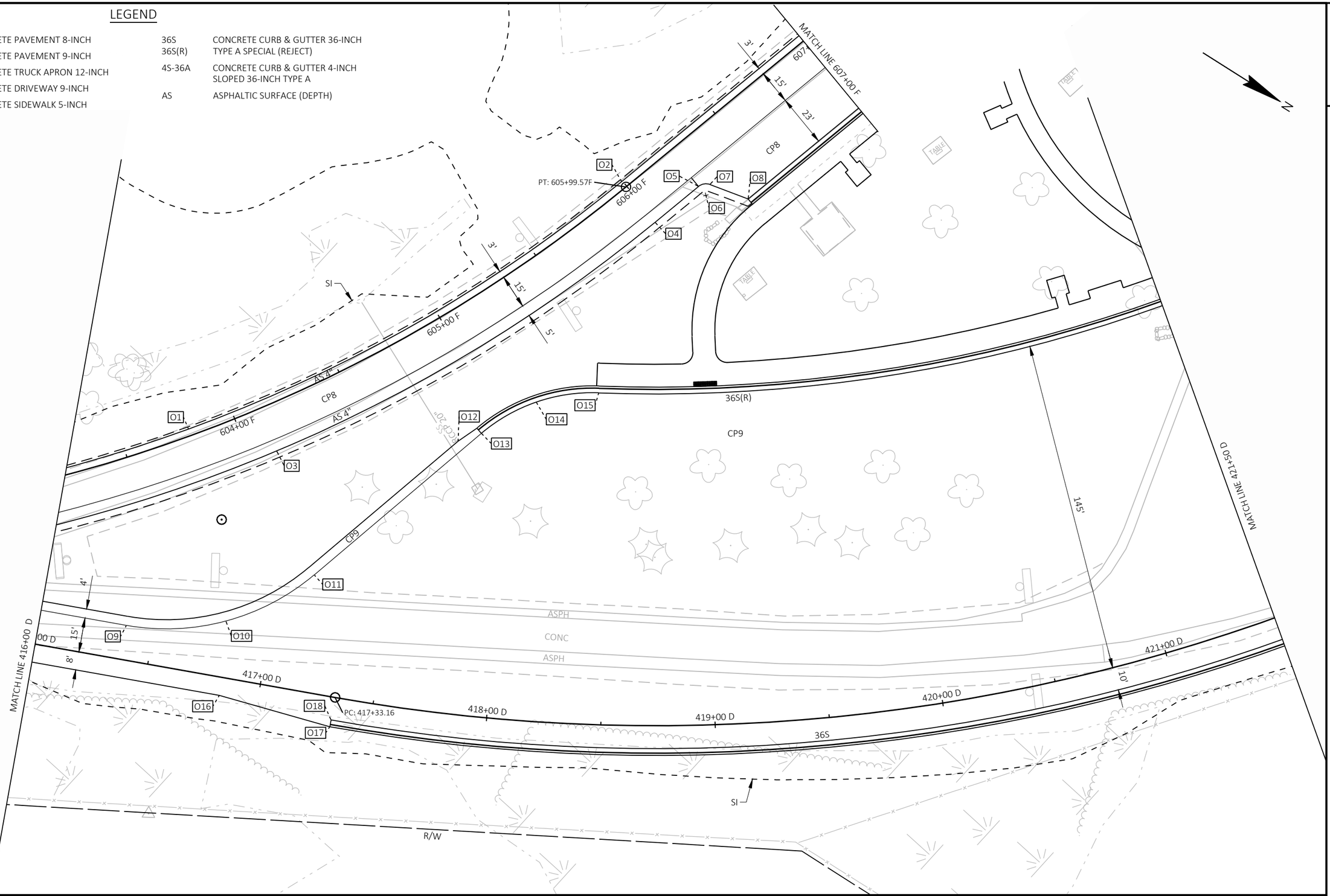
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
N1	410+86.98	8.00' RT	830.21	384278.50	193384.35	MIDPOINT
N2	600+47.30	3.00' LT	831.26	384462.77	193211.80	
N3	601+59.43	3.00' LT	831.53	384556.90	193150.85	
N4	602+23.27	20.00' RT	830.54	384622.79	193131.74	
N5	415+13.53	18.94' LT	830.42	384623.56	193133.59	
N6	415+24.95	19.00' LT	830.21	384634.12	193129.22	
N7	414+96.93	8.00' RT	829.42	384618.37	193164.80	
N8	414+69.44	15.00' LT	830.57	384584.01	193154.35	

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - REST AREA 52	SHEET 44	E

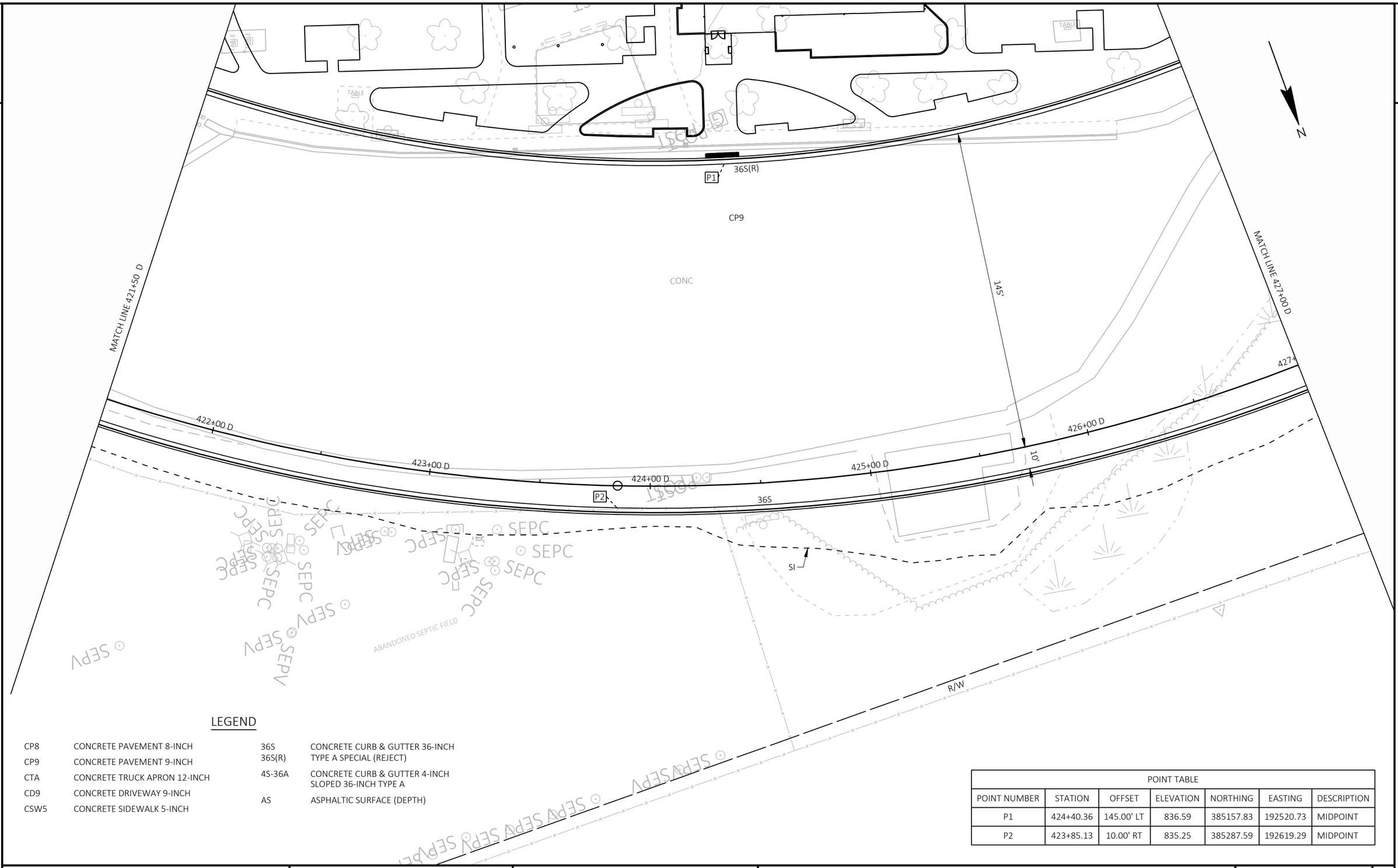
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LAYOUT NAME - 021222-pd
PLOT DATE : 11/26/2024 11:22 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

CP8	CONCRETE PAVEMENT 8-INCH
CP9	CONCRETE PAVEMENT 9-INCH
CTA	CONCRETE TRUCK APRON 12-INCH
CD9	CONCRETE DRIVEWAY 9-INCH
CSW5	CONCRETE SIDEWALK 5-INCH
36S 36S(R)	CONCRETE CURB & GUTTER 36-INCH TYPE A SPECIAL (REJECT)
4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
AS	ASPHALTIC SURFACE (DEPTH)



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - REST AREA 52	SHEET 45 E



LEGEND

CP8	CONCRETE PAVEMENT 8-INCH
CP9	CONCRETE PAVEMENT 9-INCH
CTA	CONCRETE TRUCK APRON 12-INCH
CD9	CONCRETE DRIVEWAY 9-INCH
CSW5	CONCRETE SIDEWALK 5-INCH
36S	CONCRETE CURB & GUTTER 36-INCH
36S(R)	TYPE A SPECIAL (REJECT)
4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
AS	ASPHALTIC SURFACE (DEPTH)

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
P1	424+40.36	145.00' LT	836.59	385157.83	192520.73	MIDPOINT
P2	423+85.13	10.00' RT	835.25	385287.59	192619.29	MIDPOINT

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - REST AREA 52	SHEET 46	E

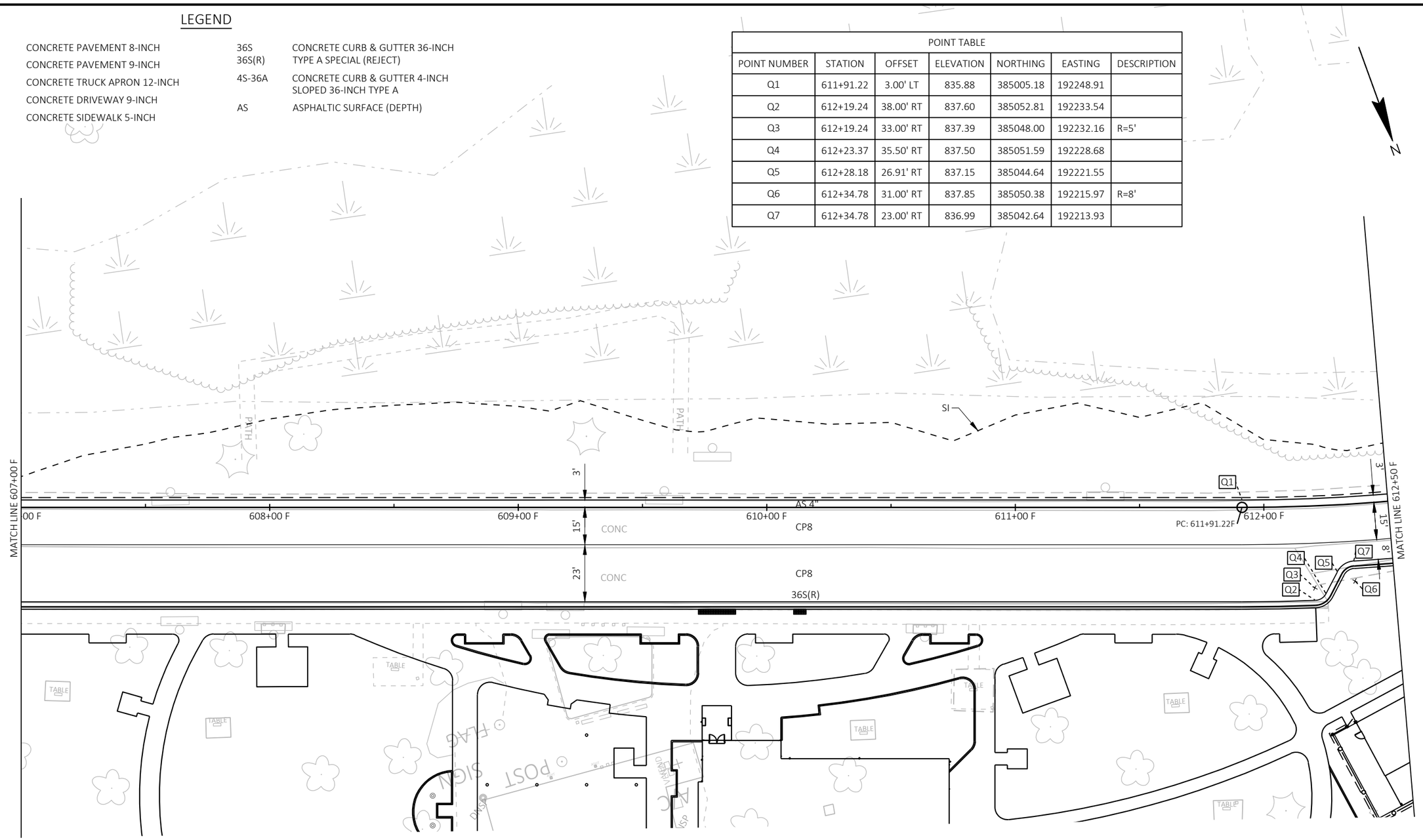
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LAYOUT NAME - 021224-pd
PLOT DATE : 11/26/2024 11:22 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

CP8	CONCRETE PAVEMENT 8-INCH	36S 36S(R)	CONCRETE CURB & GUTTER 36-INCH TYPE A SPECIAL (REJECT)
CP9	CONCRETE PAVEMENT 9-INCH	4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
CTA	CONCRETE TRUCK APRON 12-INCH	AS	ASPHALTIC SURFACE (DEPTH)
CD9	CONCRETE DRIVEWAY 9-INCH		
CSW5	CONCRETE SIDEWALK 5-INCH		

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
Q1	611+91.22	3.00' LT	835.88	385005.18	192248.91	
Q2	612+19.24	38.00' RT	837.60	385052.81	192233.54	
Q3	612+19.24	33.00' RT	837.39	385048.00	192232.16	R=5'
Q4	612+23.37	35.50' RT	837.50	385051.59	192228.68	
Q5	612+28.18	26.91' RT	837.15	385044.64	192221.55	
Q6	612+34.78	31.00' RT	837.85	385050.38	192215.97	R=8'
Q7	612+34.78	23.00' RT	836.99	385042.64	192213.93	



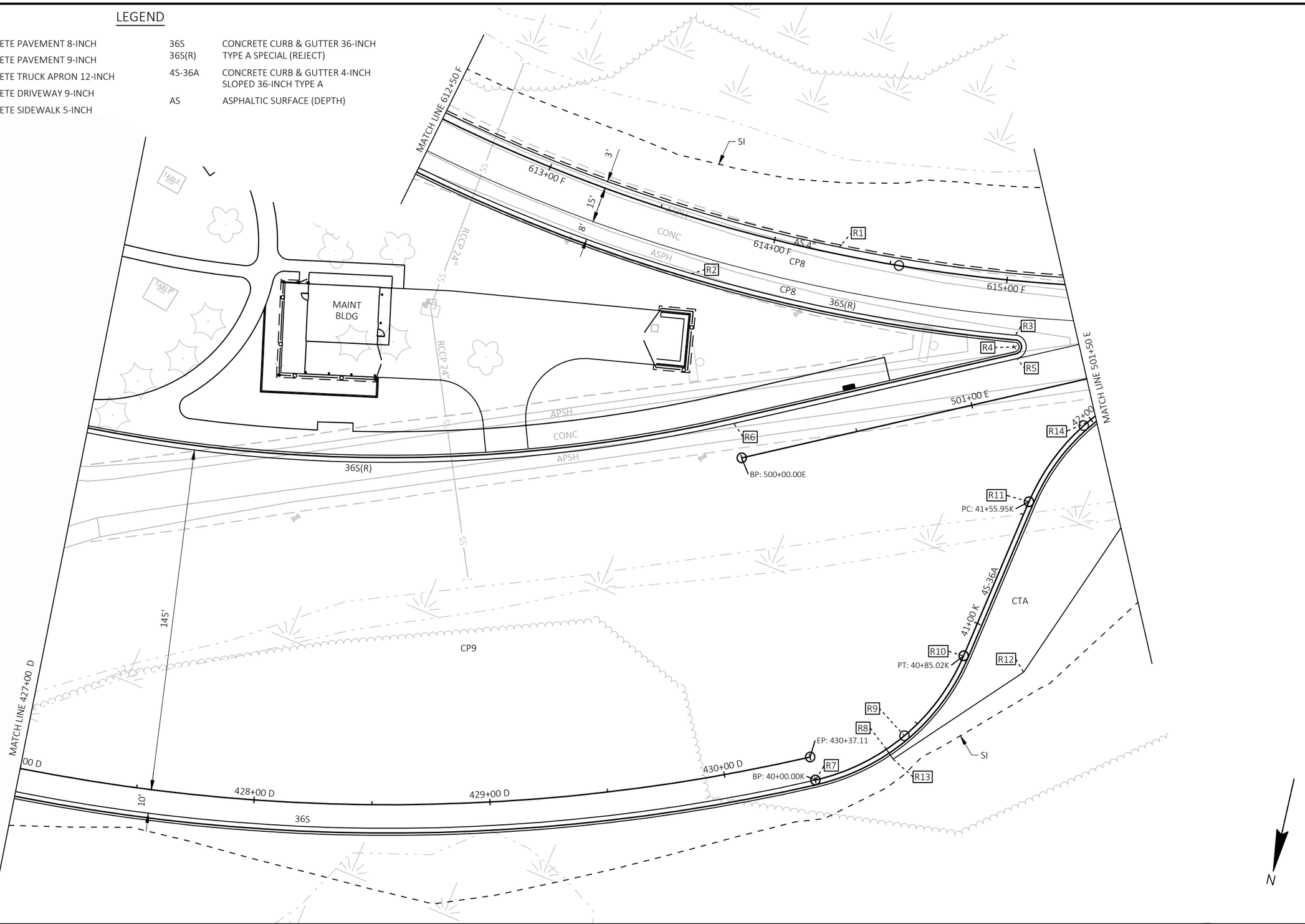
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - REST AREA 52	SHEET 47	E

2

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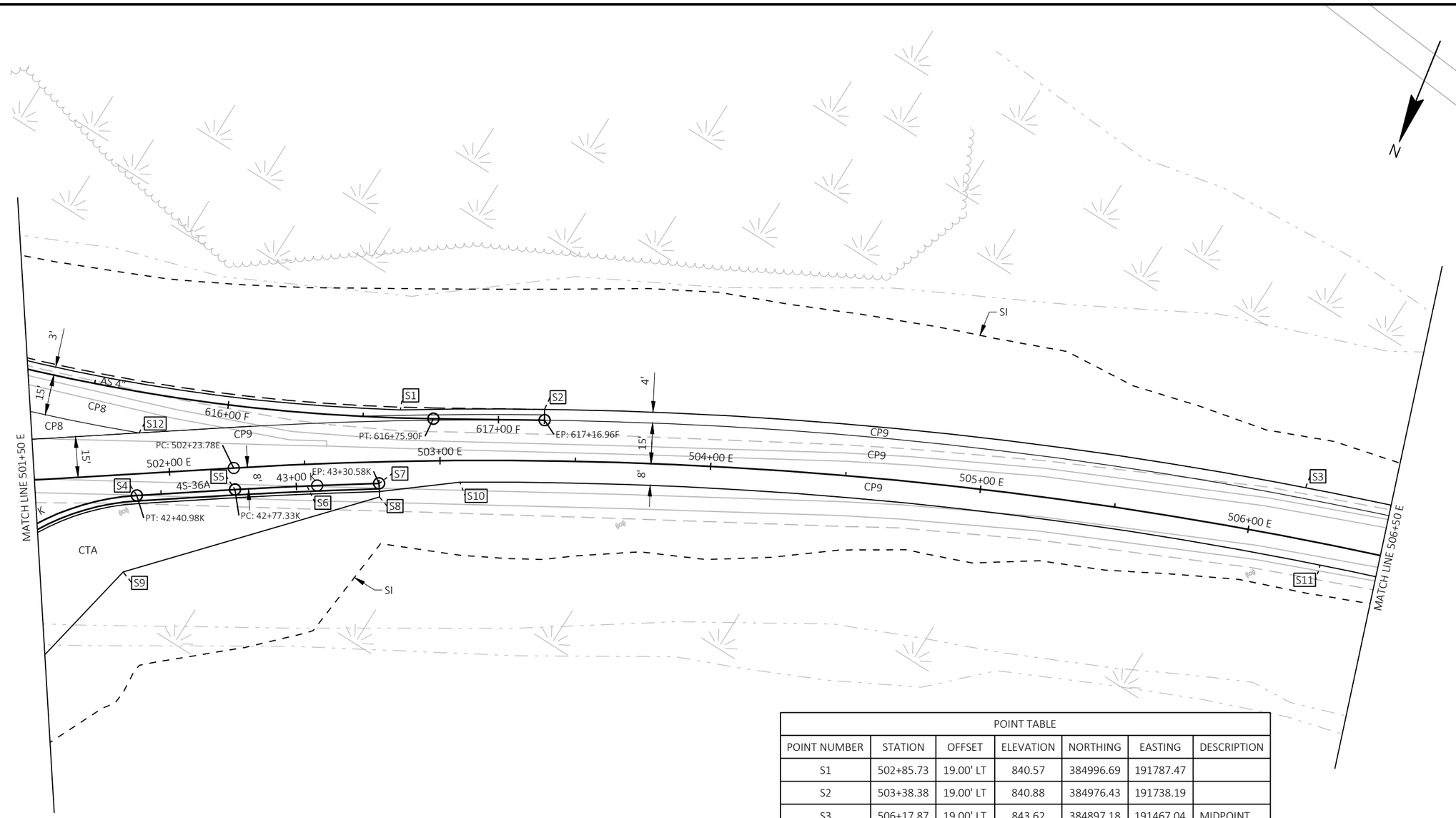
LEGEND

CP8	CONCRETE PAVEMENT 8-INCH
CP9	CONCRETE PAVEMENT 9-INCH
CTA	CONCRETE TRUCK APRON 12-INCH
CD9	CONCRETE DRIVEWAY 9-INCH
CSW5	CONCRETE SIDEWALK 5-INCH
36S	CONCRETE CURB & GUTTER 36-INCH
36S(R)	TYPE A SPECIAL (REJECT)
4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
AS	ASPHALTIC SURFACE (DEPTH)



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - REST AREA 52	SHEET 48 E

2



LEGEND

CP8	CONCRETE PAVEMENT 8-INCH	36S 36S(R)	CONCRETE CURB & GUTTER 36-INCH TYPE A SPECIAL (REJECT)
CP9	CONCRETE PAVEMENT 9-INCH	4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
CTA	CONCRETE TRUCK APRON 12-INCH	AS	ASPHALTIC SURFACE (DEPTH)
CD9	CONCRETE DRIVEWAY 9-INCH		
CSW5	CONCRETE SIDEWALK 5-INCH		

POINT TABLE

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
S1	502+85.73	19.00' LT	840.57	384996.69	191787.47	
S2	503+38.38	19.00' LT	840.88	384976.43	191738.19	
S3	506+17.87	19.00' LT	843.62	384897.18	191467.04	MIDPOINT
S4	42+40.98	0.00'	838.70	385062.68	191865.69	
S5	42+77.33	0.00'	838.79	385046.99	191832.90	
S6	43+03.96	0.00'	838.87	385035.70	191808.78	MIDPOINT
S7	43+30.58	0.00'	838.94	385024.83	191784.48	
S8	43+30.58	5.00' RT	838.27	385029.41	191782.48	
S9	42+31.36	27.50' RT	838.34	385090.69	191859.68	
S10	503+07.33	8.00' RT	839.12	385013.12	191756.99	
S11	506+28.66	8.00' RT	842.17	384921.62	191451.25	MIDPOINT
S12	615+69.20	15.00' RT	839.31	385040.98	191873.61	

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - REST AREA 52	SHEET 49	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021211-PD_RA 52.DWG
LAYOUT NAME - 021227-pd
PLOT DATE : 11/26/2024 11:23 AM
PLOT BY : DAVID YAHNKE
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

CP8	CONCRETE PAVEMENT 8-INCH	36S 36S(R)	CONCRETE CURB & GUTTER 36-INCH TYPE A SPECIAL (REJECT)
CP9	CONCRETE PAVEMENT 9-INCH	4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
CTA	CONCRETE TRUCK APRON 12-INCH	AS	ASPHALTIC SURFACE (DEPTH)
CD9	CONCRETE DRIVEWAY 9-INCH		
CSW5	CONCRETE SIDEWALK 5-INCH		

N

1892+00 NB
1893+00 NB
IH 43 NB
1894+00 NB
1895+00 NB
1896+00 NB
1897+00 NB
510+00 E
511+00 E
512+00 E
MATCH LINE 506+50 E
507+00 E
508+00 E
509+00 E
SI
SIGN
4'
15'
8'
ASPH
CONC
CP 9
AS 9"
T1
T2
T3
T4

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
T1	509+00.00	19.00' LT	848.61	384867.16	191183.46	
T2	509+50.00	19.00' LT	850.03	384867.18	191132.85	
T3	509+50.00	8.00' RT	848.33	384894.17	191133.29	
T4	509+00.00	8.00' RT	847.02	384894.16	191183.04	

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - REST AREA 52	SHEET 50 E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021211-PD_RA 52.DWG
LAYOUT NAME - 021228-pd
PLOT DATE : 11/26/2024 11:23 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
O1	603+79.50	3.00' LT	831.11	384717.31	193003.23	MIDPOINT
O2	605+99.57	3.00' LT	831.75	384819.59	192810.70	
O3	604+11.42	20.00' RT	832.18	384754.98	192990.76	
O4	605+99.57	20.00' RT	832.57	384841.43	192817.92	
O5	606+24.20	20.00' RT	832.53	384849.16	192794.53	
O6	606+24.20	25.00' RT	832.20	384853.91	192796.10	R=5'
O7	606+28.53	22.50' RT	832.59	384852.89	192791.20	
O8	606+37.47	37.98' RT	832.73	384870.39	192787.57	
O9	416+37.83	15.00' LT	829.61	384740.15	193090.30	
O10	416+80.35	24.49' LT	829.68	384775.94	193065.46	MIDPOINT
O11	417+14.80	51.16' LT	830.31	384797.77	193027.75	
O12	417+72.29	118.90' LT	831.69	384819.72	192944.76	
O13	417+83.72	123.47' LT	831.64	384826.52	192936.48	
O14	418+10.74	139.36' LT	831.75	384839.52	192912.12	MIDPOINT
O15	418+43.61	145.00' LT	831.86	384860.45	192894.12	
O16	416+83.16	8.00' RT	829.00	384790.81	193094.48	
O17	417+33.16	13.00' RT	829.11	384839.00	193080.23	
O18	417+33.16	10.00' RT	828.80	384837.86	193077.45	

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
R1	614+27.43	3.00' LT	837.20	385040.23	192017.47	MIDPOINT
R2	613+70.22	23.00' RT	837.67	385064.90	192076.05	MIDPOINT
R3	615+05.66	23.00' RT	839.09	385060.24	191936.45	
R4	615+05.66	28.00' RT	839.23	385065.20	191935.80	
R5	501+23.09	15.00' LT	838.84	385069.71	191933.65	
R6	500+00.00	15.00' LT	838.14	385122.84	192044.68	
R7	40+00.00	0.00'	835.04	385262.65	191977.77	
R8	40+32.99	0.00'	835.54	385243.33	191951.25	
R9	40+42.51	0.00'	835.69	385236.09	191945.09	MIDPOINT
R10	40+85.02	0.00'	836.34	385197.56	191928.07	
R11	41+55.95	0.00'	837.43	385127.78	191915.39	
R12	40+88.59	26.05' RT	836.19	385198.71	191901.80	
R13	40+33.01	5.00' RT	835.76	385246.76	191947.61	

2

604+00 F

605+00 F

PT: 605+99.57

606+00 F

607+00

SI

417+00 D

PC: 417+33.16

61+00 M

62+00 M

63+00 M

64+00 M

SI

418+00 D

419+00 D

U1 U2 U3 U4 U5 U6 U7 U8 U9 U10 U11 U12 U13 U14 U15 U16 U17 U18 U19 U20 U21 U22 U23 U24

CSW5

10'

MATCHLINE STA 64+80 M

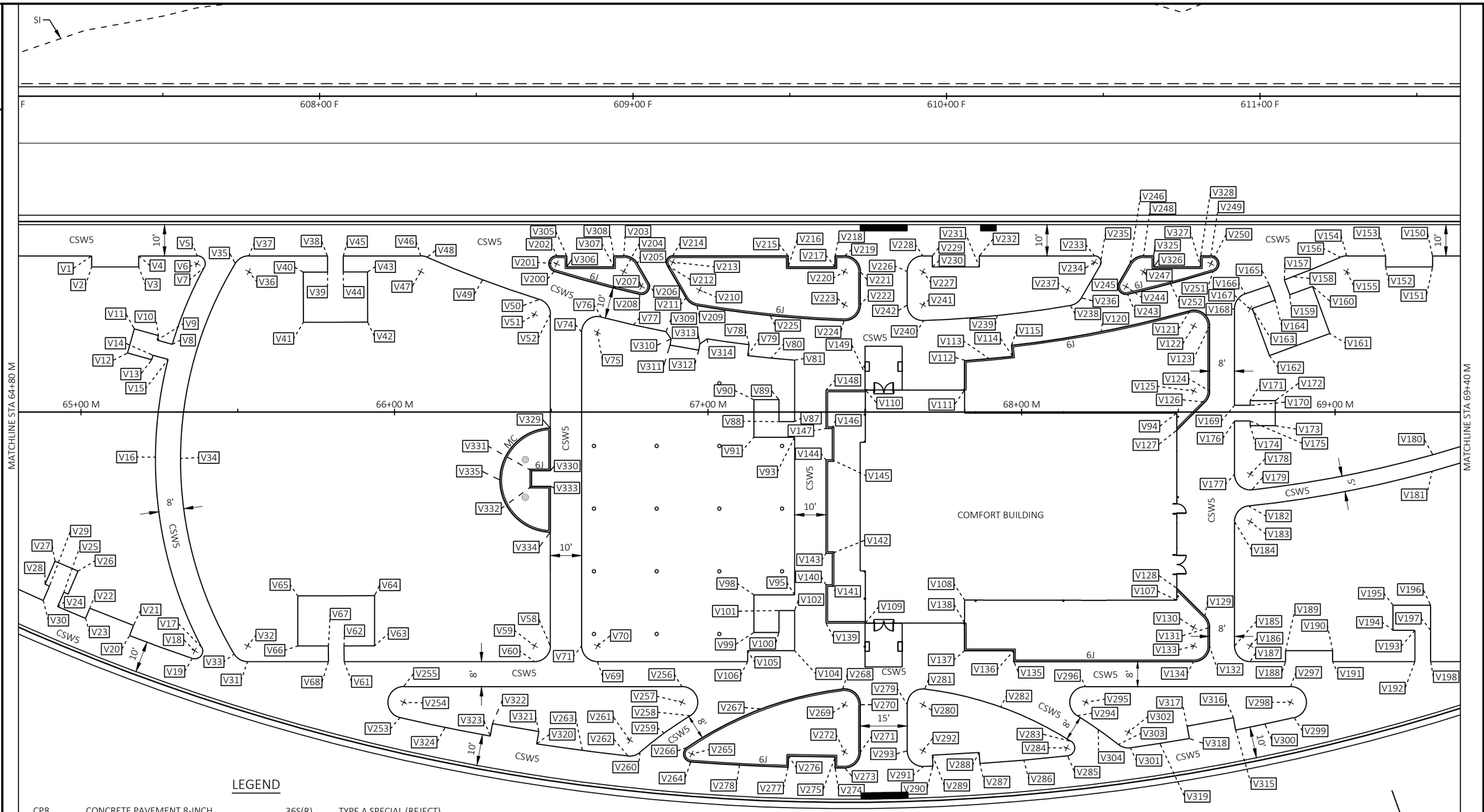
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LEGEND

CP8	CONCRETE PAVEMENT 8-INCH	36S(R)	TYPE A SPECIAL (REJECT)
CP9	CONCRETE PAVEMENT 9-INCH	4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
CTA	CONCRETE TRUCK APRON 12-INCH	6J	CONCRETE CURB TYPE J
CD9	CONCRETE DRIVEWAY 9-INCH	AS	ASPHALTIC SURFACE (DEPTH)
CSW5	CONCRETE SIDEWALK 5-INCH	MC	CONCRETE MOW CURB
CSW6	CONCRETE SIDEWALK 6-INCH		
36S	CONCRETE CURB & GUTTER 36-INCH		

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - RA 52 PLAZA	SHEET 52	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021211-PD_RA 52 - PLAZA.DWG
LAYOUT NAME - 021230-pd-Plaza
PLOT DATE : 11/26/2024 11:23 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:30
WISDOT/CADDS SHEET 42

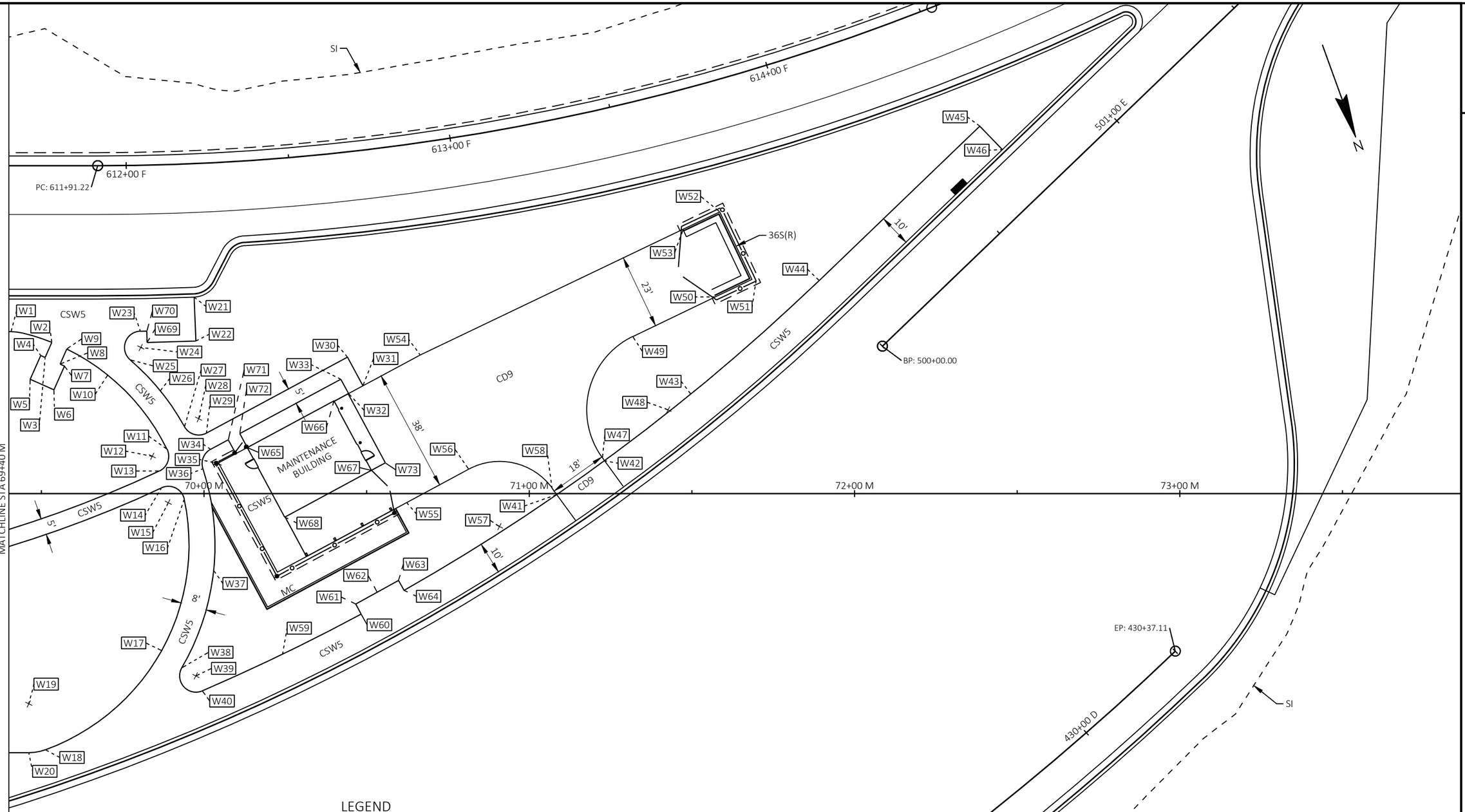


LEGEND

CP8	CONCRETE PAVEMENT 8-INCH	36S(R)	TYPE A SPECIAL (REJECT)
CP9	CONCRETE PAVEMENT 9-INCH	4S-36A	CONCRETE CURB & GUTTER 4-INCH
CTA	CONCRETE TRUCK APRON 12-INCH		SLOPED 36-INCH TYPE A
CD9	CONCRETE DRIVEWAY 9-INCH	6J	CONCRETE CURB TYPE J
CSW5	CONCRETE SIDEWALK 5-INCH	AS	ASPHALTIC SURFACE (DEPTH)
CSW6	CONCRETE SIDEWALK 6-INCH	MC	CONCRETE MOW CURB
36S	CONCRETE CURB & GUTTER 36-INCH		

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - RA 52 PLAZA	SHEET 53	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021211-PD_RA 52 - PLAZA.DWG
LAYOUT NAME - 021231-pd-Plaza
PLOT DATE : 11/26/2024 11:23 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:30



LEGEND

CP8	CONCRETE PAVEMENT 8-INCH	36S(R)	TYPE A SPECIAL (REJECT)
CP9	CONCRETE PAVEMENT 9-INCH	4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
CTA	CONCRETE TRUCK APRON 12-INCH	6J	CONCRETE CURB TYPE J
CD9	CONCRETE DRIVEWAY 9-INCH	AS	ASPHALTIC SURFACE (DEPTH)
CSW5	CONCRETE SIDEWALK 5-INCH	MC	CONCRETE MOW CURB
CSW6	CONCRETE SIDEWALK 6-INCH		
36S	CONCRETE CURB & GUTTER 36-INCH		

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - RA 52 PLAZA	SHEET 54	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021211-PD_RA 52 - PLAZA.DWG
LAYOUT NAME - 021232-pd-Plaza
PLOT DATE : 11/26/2024 11:23 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:30
WISDOT/CADDS SHEET 42

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
U1	63+10.51	41.74' LT	832.40	384858.08	192892.03	
U2	63+17.17	49.20' LT	832.55	384853.09	192883.37	
U3	63+45.21	25.62' LT	832.89	384884.28	192864.14	
U4	63+48.32	29.53' LT	832.66	384881.54	192859.96	R=5'
U5	63+52.31	26.52' LT	832.81	384885.65	192857.12	
U6	63+81.12	52.47' LT	833.05	384870.04	192821.62	MIDPOINT
U7	64+12.30	59.80' LT	833.25	384872.87	192789.71	
U8	64+13.53	59.80' LT	833.26	384873.25	192788.54	
U9	64+60.26	49.80' LT	833.58	384897.41	192747.31	
U10	64+60.26	44.80' LT	833.51	384902.15	192748.87	
U11	64+61.76	44.80' LT	833.51	384902.62	192747.45	
U12	64+61.76	36.80' LT	833.43	384910.22	192749.96	
U13	64+53.76	36.80' LT	833.40	384907.71	192757.56	
U14	64+53.76	44.80' LT	833.48	384900.11	192755.05	
U15	64+55.26	44.80' LT	833.48	384900.59	192753.62	
U16	64+55.26	49.80' LT	833.55	384895.84	192752.05	
U17	64+12.30	49.80' LT	833.40	384882.36	192792.85	
U18	63+85.57	43.52' LT	833.20	384879.94	192820.20	MIDPOINT
U19	63+64.44	25.99' LT	833.01	384889.96	192845.76	
U20	63+60.19	20.36' LT	832.96	384893.97	192851.56	
U21	63+64.18	17.35' LT	833.00	384898.08	192848.72	R=5'
U22	63+61.19	13.33' LT	833.07	384900.96	192852.81	
U23	64+28.82	30.65' RT	836.02	384963.94	192802.39	MIDPOINT
U24	63+31.39	36.90' LT	832.77	384869.24	192873.72	MIDPOINT
V1	65+03.38	49.80' LT	833.91	384910.93	192706.37	
V2	65+03.38	46.30' LT	833.86	384914.25	192707.47	
V3	65+18.38	46.30' LT	834.01	384918.96	192693.22	
V4	65+18.38	49.80' LT	834.06	384915.63	192692.12	
V5	65+37.06	49.80' LT	834.25	384921.50	192674.38	
V6	65+37.06	47.30' LT	834.32	384923.87	192675.16	R=5'
V7	65+39.26	46.11' LT	834.20	384925.69	192673.45	
V8	65+29.11	21.60' LT	835.16	384945.78	192690.78	
V9	65+24.28	22.94' LT	835.09	384942.99	192694.95	
V10	65+24.68	24.38' LT	835.09	384941.75	192694.11	
V11	65+16.98	26.54' LT	835.01	384937.28	192700.74	
V12	65+14.82	18.84' LT	835.15	384943.91	192705.21	
V13	65+22.52	16.68' LT	835.23	384948.38	192698.58	
V14	65+22.92	18.12' LT	835.23	384947.14	192697.74	
V15	65+27.78	16.78' LT	835.30	384949.94	192693.56	
V16	65+23.74	14.38' RT	836.19	384978.26	192707.16	MIDPOINT

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
V17	65+38.47	75.07' RT	837.97	385040.51	192712.22	
V18	65+36.25	76.23' RT	838.07	385040.92	192714.68	R=5'
V19	65+35.44	78.60' RT	838.23	385042.90	192716.20	
V26	64+99.03	50.73' RT	838.02	385005.02	192742.02	
V27	64+91.68	47.59' RT	837.93	384999.73	192748.02	
V28	64+88.53	54.94' RT	838.01	385005.73	192753.32	
V29	64+89.91	55.53' RT	838.01	385006.72	192752.19	
V30	64+87.94	60.11' RT	838.08	385010.45	192755.50	
V31	65+53.11	79.62' RT	838.21	385049.42	192699.74	
V32	65+53.11	74.62' RT	838.17	385044.67	192698.17	R=5'
V33	65+48.81	77.19' RT	838.29	385045.76	192703.05	
V34	65+31.74	14.84' RT	836.32	384981.21	192699.71	MIDPOINT
V35	65+49.21	47.39' LT	834.40	384927.60	192663.60	
V36	65+53.49	44.80' LT	834.44	384931.40	192660.35	R=5'
V37	65+53.49	49.80' LT	834.42	384926.65	192658.78	
V38	65+78.61	49.67' LT	834.68	384934.66	192634.97	
V39	65+78.62	44.67' LT	834.63	384939.41	192636.53	
V40	65+70.87	44.65' LT	834.63	384936.99	192643.89	
V41	65+70.91	28.65' LT	834.47	384952.20	192648.88	
V42	65+91.41	28.70' LT	834.52	384958.58	192629.40	
V43	65+91.37	44.70' LT	834.68	384943.38	192624.41	
V44	65+83.62	44.68' LT	834.68	384940.96	192631.78	
V45	65+83.61	49.68' LT	834.73	384936.21	192630.22	
V46	66+08.36	49.80' LT	834.99	384943.86	192606.68	
V47	66+08.36	44.80' LT	834.97	384948.61	192608.25	R=5'
V48	66+10.36	49.38' LT	835.02	384944.88	192604.91	
V49	66+28.10	42.19' LT	835.34	384957.28	192590.33	MIDPOINT
V50	66+46.18	35.93' LT	835.61	384968.89	192575.12	
V51	66+44.68	31.17' LT	835.52	384972.94	192578.04	R=5'
V52	66+49.68	31.17' LT	835.72	384974.51	192573.30	
V58	66+49.68	74.62' RT	837.50	385074.96	192606.48	
V59	66+44.68	74.62' RT	837.42	385073.40	192611.23	R=5'
V60	66+44.68	79.62' RT	837.62	385078.14	192612.80	
V61	65+83.91	79.61' RT	838.03	385059.07	192670.49	
V62	65+83.90	74.61' RT	837.98	385054.32	192668.94	
V63	65+93.65	74.59' RT	837.98	385057.36	192659.67	
V64	65+93.61	58.59' RT	837.82	385042.15	192654.69	
V65	65+69.11	58.65' RT	837.86	385034.52	192677.97	
V66	65+69.15	74.65' RT	838.02	385049.73	192682.95	
V67	65+78.90	74.63' RT	838.02	385052.76	192673.69	

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
V68	65+78.91	79.62' RT	838.07	385057.51	192675.25	
V69	66+64.68	79.63' RT	837.40	385084.42	192593.81	
V70	66+64.68	74.63' RT	837.22	385079.67	192592.24	R=5'
V71	66+59.68	74.63' RT	837.48	385078.10	192596.98	
V74	66+59.68	25.45' LT	835.94	384983.08	192565.59	
V75	66+64.68	25.45' LT	835.82	384984.65	192560.85	R=5'
V76	66+65.91	30.29' LT	835.88	384980.43	192558.15	
V77	66+76.21	27.82' LT	836.01	384986.01	192549.15	MIDPOINT
V78	67+13.10	21.50' LT	836.50	385003.58	192516.11	
V79	67+12.68	18.03' LT	836.47	385006.75	192517.59	
V80	67+20.14	17.22' LT	836.59	385009.86	192510.76	MIDPOINT
V81	67+27.61	16.56' LT	836.70	385012.83	192503.87	
V87	67+27.61	3.06' RT	836.77	385031.46	192510.03	
V88	67+22.61	3.06' RT	836.72	385029.89	192514.78	
V89	67+22.61	3.94' LT	836.72	385023.25	192512.58	
V90	67+14.61	3.94' LT	836.64	385020.74	192520.18	
V91	67+14.61	8.06' RT	836.66	385032.13	192523.94	
V93	67+27.61	8.06' RT	836.79	385036.21	192511.60	
V94	68+49.51	0.32' RT	837.04	385067.10	192393.42	
V95	67+27.61	58.33' RT	836.98	385083.94	192527.36	
V98	67+14.61	58.33' RT	836.85	385079.86	192539.71	
V99	67+14.61	70.33' RT	836.87	385091.25	192543.47	
V100	67+22.61	70.33' RT	836.95	385093.76	192535.88	
V101	67+22.61	63.33' RT	836.95	385087.11	192533.68	
V102	67+27.61	63.33' RT	837.00	385088.68	192528.93	
V104	67+27.61	76.12' RT	837.04	385100.84	192532.95	
V105	67+12.61	76.12' RT	836.91	385096.13	192547.19	
V106	67+12.61	79.63' RT	836.86	385099.45	192548.29	
V107	68+49.51	60.01' RT	837.04	385123.77	192412.14	
V108	67+81.83	60.00' RT	837.04	385102.53	192476.40	
V109	67+50.17	67.33' RT	837.04	385099.56	192508.77	
V110	67+50.17	7.00' LT	837.04	385028.98	192485.46	
V111	67+81.83	7.00' LT	837.04	385038.91	192455.39	
V112	67+82.26	16.39' LT	837.03	385030.13	192452.04	
V113	67+89.73	17.01' LT	837.08	385031.89	192444.75	MIDPOINT
V114	67+97.19	17.77' LT	837.13	385033.50	192437.43	
V115	67+96.80	21.25' LT	837.08	385030.08	192436.71	
V120	68+25.41	25.63' LT	837.18	385034.89	192408.17	MIDPOINT
V121	68+53.71	32.31' LT	837.28	385037.43	192379.20	
V122	68+54.92	27.45' LT	837.26	385042.42	192379.57	R=5'

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POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
V123	68+59.92	27.45' LT	837.27	385043.99	192374.82	
V124	68+59.92	6.72' LT	837.06	385063.68	192381.33	
V125	68+54.92	6.72' LT	837.09	385062.11	192386.07	R=5'
V126	68+58.46	3.18' LT	837.03	385066.57	192383.83	
V127	68+49.50	5.78' RT	837.05	385072.27	192395.14	
V128	68+49.51	56.25' RT	837.05	385120.20	192410.97	
V129	68+58.46	65.20' RT	836.93	385131.51	192405.28	
V130	68+54.92	68.74' RT	836.94	385133.75	192409.74	R=5'
V131	68+59.92	68.74' RT	836.91	385135.32	192405.00	
V132	68+59.92	74.62' RT	836.87	385140.91	192406.84	
V133	68+54.92	74.62' RT	836.88	385139.35	192411.59	R=5'
V134	68+54.92	79.62' RT	836.81	385144.09	192413.16	
V135	67+97.55	79.62' RT	836.95	385126.10	192467.64	
V136	67+97.55	76.12' RT	836.98	385122.77	192466.54	
V137	67+81.83	76.13' RT	837.01	385117.84	192481.46	
V138	67+81.83	67.33' RT	837.04	385109.50	192478.70	
V139	67+37.61	67.33' RT	837.11	385095.62	192520.69	
V140	67+37.61	55.08' RT	837.12	385083.99	192516.85	
V141	67+39.61	55.08' RT	837.15	385084.61	192514.95	
V142	67+39.61	45.08' RT	837.11	385075.12	192511.81	
V143	67+37.61	45.08' RT	837.08	385074.49	192513.71	
V144	67+37.61	15.26' RT	836.97	385046.18	192504.36	
V145	67+39.61	15.26' RT	837.00	385046.80	192502.46	
V146	67+39.61	5.26' RT	836.96	385037.31	192499.32	
V147	67+37.61	5.26' RT	836.93	385036.68	192501.22	
V148	67+37.61	7.00' LT	836.88	385025.04	192497.38	
V149	67+49.59	13.33' LT	836.95	385022.79	192484.02	
V150	69+31.13	49.78' LT	837.32	385045.12	192300.21	
V151	69+31.12	46.28' LT	837.27	385048.44	192301.31	
V152	69+16.12	46.29' LT	837.26	385043.73	192315.55	
V153	69+16.13	49.79' LT	837.31	385040.41	192314.45	
V154	69+03.72	49.80' LT	837.30	385036.51	192326.23	
V155	69+03.72	44.80' LT	837.40	385041.25	192327.80	R=5'
V156	69+01.72	49.38' LT	837.31	385036.28	192328.26	
V157	68+83.84	42.13' LT	837.36	385037.55	192347.51	
V158	68+86.66	43.20' LT	837.44	385037.42	192344.50	
V159	68+85.56	37.42' LT	837.31	385042.56	192347.36	
V160	68+92.84	40.08' LT	837.31	385042.32	192339.61	
V161	68+98.32	25.05' LT	837.15	385058.31	192339.12	
V162	68+79.06	18.02' LT	837.17	385058.94	192359.61	

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
V163	68+73.58	33.05' LT	837.33	385042.95	192360.10	
V164	68+80.86	35.71' LT	837.33	385042.71	192352.36	
V165	68+79.14	40.41' LT	837.38	385037.72	192352.51	
V166	68+71.34	37.70' LT	837.35	385037.84	192360.77	
V167	68+72.92	32.96' LT	837.32	385042.84	192360.75	R=5'
V168	68+67.92	32.96' LT	837.29	385041.27	192365.50	
V169	68+67.92	2.14' LT	836.88	385070.53	192375.17	
V170	68+72.92	2.14' LT	836.83	385072.10	192370.42	
V171	68+72.92	3.64' LT	836.83	385070.68	192369.95	
V172	68+80.92	3.64' LT	836.75	385073.19	192362.35	
V173	68+80.92	4.36' RT	836.68	385080.78	192364.86	
V174	68+72.92	4.36' RT	836.76	385078.27	192372.46	
V175	68+72.92	2.86' RT	836.76	385076.85	192371.99	
V176	68+67.92	2.86' RT	836.81	385075.28	192376.74	
V177	68+67.92	19.85' RT	836.77	385091.41	192382.06	
V178	68+72.92	19.85' RT	836.81	385092.98	192377.32	R=5'
V179	68+73.47	24.82' RT	836.83	385097.87	192378.36	
V180	69+31.18	13.62' RT	838.16	385105.34	192320.05	
V181	69+30.98	18.87' RT	838.20	385110.26	192321.88	
V182	68+72.40	29.96' RT	836.87	385102.42	192380.98	
V183	68+72.92	34.93' RT	836.56	385107.30	192382.05	R=5'
V184	68+67.92	34.93' RT	836.77	385105.73	192386.79	
V185	68+67.92	74.63' RT	836.80	385143.42	192399.25	
V186	68+72.92	74.63' RT	836.73	385144.99	192394.50	R=5'
V187	68+72.92	79.63' RT	836.69	385149.74	192396.07	
V188	68+84.23	79.63' RT	836.60	385153.29	192385.33	
V189	68+84.23	76.13' RT	836.65	385149.96	192384.23	
V190	68+99.23	76.13' RT	836.52	385154.67	192369.99	
V191	68+99.23	79.63' RT	836.47	385157.99	192371.09	
V192	69+25.48	79.63' RT	836.24	385166.22	192346.16	
V193	69+25.49	69.63' RT	836.14	385156.73	192343.02	
V194	69+18.49	69.62' RT	836.14	385154.53	192349.66	
V195	69+18.49	61.62' RT	836.06	385146.94	192347.15	
V196	69+30.49	61.63' RT	836.02	385150.71	192335.76	
V197	69+30.49	69.63' RT	836.10	385158.30	192338.27	
V198	69+30.48	79.63' RT	836.20	385167.80	192341.42	
V200	66+50.97	44.91' LT	835.49	384961.86	192567.76	
V201	66+51.71	47.30' LT	835.97	384959.83	192566.31	R=5'
V202	66+51.71	49.80' LT	835.44	384957.46	192565.52	
V203	66+73.13	49.80' LT	835.66	384964.17	192545.18	

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
V204	66+73.13	44.80' LT	836.20	384968.92	192546.75	R=5'
V205	66+77.46	47.30' LT	835.67	384967.91	192541.86	
V206	66+80.91	41.31' LT	835.80	384974.68	192540.45	
V207	66+78.75	40.06' LT	836.33	384975.18	192542.90	R=5'
V208	66+78.20	37.62' LT	835.86	384977.33	192544.19	
V209	66+96.45	34.01' LT	836.11	384986.49	192527.99	
V210	66+97.29	38.94' LT	836.57	384982.07	192525.64	R=5'
V211	66+92.96	36.44' LT	836.03	384983.08	192530.54	
V212	66+86.98	46.80' LT	835.87	384971.37	192532.97	
V213	66+88.71	47.80' LT	836.36	384970.96	192531.01	R=5'
V214	66+88.71	49.80' LT	835.83	384969.06	192530.38	
V215	67+25.54	49.80' LT	836.18	384980.62	192495.41	
V216	67+25.54	46.30' LT	836.23	384983.94	192496.51	
V217	67+40.54	46.30' LT	836.30	384988.65	192482.27	
V218	67+40.54	49.80' LT	836.25	384985.32	192481.17	
V219	67+43.54	49.80' LT	836.11	384986.26	192478.32	
V220	67+43.54	44.80' LT	836.76	384991.01	192479.89	R=5'
V221	67+48.54	44.80' LT	836.07	384992.58	192475.14	
V222	67+48.54	34.18' LT	836.58	385002.66	192478.47	
V223	67+43.54	34.18' LT	837.13	385001.09	192483.22	R=5'
V224	67+43.36	29.19' LT	836.73	385005.78	192484.96	
V225	67+19.83	30.82' LT	836.42	384996.85	192506.79	MIDPOINT
V226	67+63.54	44.80' LT	836.10	384997.28	192460.90	
V227	67+68.54	44.80' LT	836.42	384998.85	192456.15	R=5'
V228	67+68.54	49.80' LT	836.31	384994.10	192454.58	
V229	67+71.54	49.80' LT	836.50	384995.05	192451.73	
V230	67+71.54	46.30' LT	836.55	384998.37	192452.83	
V231	67+86.54	46.30' LT	836.22	385003.07	192438.59	
V232	67+86.54	49.80' LT	836.17	384999.75	192437.49	
V233	68+23.32	49.80' LT	836.93	385011.29	192402.57	
V234	68+23.32	47.80' LT	836.94	385013.19	192403.20	R=5'
V235	68+25.05	46.80' LT	836.95	385014.68	192401.87	
V236	68+19.07	36.43' LT	836.98	385022.65	192410.80	
V237	68+14.74	38.93' LT	836.94	385018.92	192414.13	R=5'
V238	68+15.58	34.00' LT	837.00	385023.86	192414.88	
V239	67+92.23	30.81' LT	836.91	385019.56	192438.05	MIDPOINT
V240	67+68.72	29.19' LT	836.83	385013.73	192460.88	
V241	67+68.54	34.18' LT	836.57	385008.93	192459.48	R=5'
V242	67+63.54	34.18' LT	836.51	385007.37	192464.23	
V243	68+33.83	37.61' LT	837.07	385026.16	192396.41	

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
V244	68+33.28	40.05' LT	837.59	385023.67	192396.17	R=5'
V245	68+31.11	41.30' LT	837.07	385021.80	192397.84	
V246	68+34.58	47.30' LT	837.07	385017.19	192392.66	
V247	68+38.91	44.80' LT	837.60	385020.92	192389.34	R=5'
V248	68+38.91	49.80' LT	837.04	385016.18	192387.77	
V249	68+60.37	49.80' LT	837.16	385022.91	192367.39	
V250	68+60.37	47.30' LT	837.68	385025.28	192368.17	R=5'
V251	68+61.12	44.91' LT	837.17	385027.78	192368.21	
V252	68+47.55	40.99' LT	837.12	385027.25	192382.33	MIDPOINT
V253	66+01.75	97.50' RT	838.21	385081.65	192659.16	
V254	66+02.86	92.62' RT	837.87	385077.37	192656.58	R=5'
V255	66+02.86	87.62' RT	837.78	385072.62	192655.01	
V256	66+91.70	87.62' RT	836.65	385100.49	192570.65	
V257	66+91.70	92.63' RT	836.65	385105.24	192572.22	R=5'
V258	66+94.29	96.90' RT	836.72	385110.11	192571.10	
V259	66+86.05	102.39' RT	837.55	385112.73	192580.65	
V260	66+78.29	108.54' RT	837.81	385116.14	192589.95	
V261	66+75.02	104.75' RT	837.13	385111.52	192591.86	R=5'
V262	66+74.48	109.72' RT	837.87	385116.07	192593.94	
V263	66+59.89	107.96' RT	837.97	385109.82	192607.24	MIDPOINT
V264	66+94.54	111.60' RT	837.72	385124.15	192575.48	
V265	66+94.73	109.11' RT	838.14	385121.84	192574.52	R=5'
V266	66+93.32	107.05' RT	837.58	385119.44	192575.21	
V267	67+17.01	94.72' RT	836.86	385115.16	192548.85	
V268	67+42.95	88.40' RT	836.89	385117.30	192522.23	
V269	67+43.54	93.36' RT	837.51	385122.20	192523.23	R=5'
V270	67+48.54	93.36' RT	836.92	385123.77	192518.48	
V271	67+48.54	108.54' RT	836.86	385138.18	192523.24	
V272	67+43.54	108.54' RT	837.74	385136.61	192527.99	R=5'
V273	67+43.54	113.54' RT	837.19	385141.35	192529.56	
V274	67+40.54	113.53' RT	837.40	385140.40	192532.41	
V275	67+40.56	110.03' RT	837.45	385137.09	192531.29	
V276	67+25.64	109.76' RT	837.56	385132.16	192545.37	
V277	67+25.54	113.26' RT	837.50	385135.45	192546.56	
V278	67+10.03	112.62' RT	837.61	385129.97	192561.09	MIDPOINT
V279	67+63.54	93.36' RT	836.92	385128.48	192504.24	
V280	67+68.54	93.36' RT	836.95	385130.04	192499.49	R=5'
V281	67+69.13	88.40' RT	836.89	385125.51	192497.37	
V282	67+93.40	94.10' RT	836.93	385138.54	192476.11	
V283	68+15.79	105.08' RT	836.85	385155.98	192458.30	

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
V284	68+14.44	107.18' RT	836.87	385157.56	192460.24	R=5'
V285	68+14.72	109.67' RT	836.86	385160.01	192460.76	
V286	68+00.73	111.06' RT	836.97	385156.94	192474.48	MIDPOINT
V287	67+86.71	112.14' RT	837.07	385153.57	192488.13	
V288	67+86.48	108.64' RT	837.01	385150.18	192487.25	
V289	67+71.58	109.46' RT	837.12	385146.28	192501.65	
V290	67+71.73	112.95' RT	837.17	385149.64	192502.61	
V291	67+68.73	113.07' RT	837.01	385148.82	192505.49	
V292	67+68.54	108.08' RT	837.03	385144.01	192504.10	R=5'
V293	67+63.54	108.08' RT	836.86	385142.45	192508.85	
V294	68+17.79	96.90' RT	836.74	385148.85	192453.84	
V295	68+20.39	92.63' RT	836.56	385145.60	192450.03	R=5'
V296	68+20.39	87.63' RT	836.73	385140.86	192448.46	
V297	68+85.83	87.63' RT	836.46	385161.38	192386.32	
V298	68+85.83	92.63' RT	836.41	385166.13	192387.89	R=5'
V299	68+86.94	97.50' RT	836.35	385171.11	192388.37	
V300	68+77.63	99.55' RT	836.41	385170.13	192397.85	MIDPOINT
V301	68+34.70	107.15' RT	836.72	385163.88	192440.99	
V302	68+34.00	102.20' RT	836.35	385158.96	192440.11	R=5'
V303	68+30.86	106.08' RT	836.71	385161.67	192444.31	
V304	68+24.48	101.27' RT	836.71	385155.10	192448.86	
V305	66+54.92	49.80' LT	835.47	384958.46	192562.47	
V306	66+54.92	46.30' LT	835.53	384961.79	192563.57	
V307	66+69.92	46.30' LT	835.68	384966.49	192549.33	
V308	66+69.92	49.80' LT	835.63	384963.17	192548.23	
V309	66+86.58	25.65' LT	836.15	384991.33	192539.99	
V310	66+88.20	23.33' LT	836.14	384994.04	192539.17	
V311	66+87.86	21.36' LT	836.13	384995.80	192540.12	
V312	66+97.05	19.75' LT	836.30	385000.21	192531.89	
V313	66+97.39	21.72' LT	836.31	384998.45	192530.95	
V314	66+99.71	23.34' LT	836.32	384997.63	192528.24	
V315	68+68.29	101.46' RT	836.48	385169.02	192407.32	
V316	68+67.56	97.52' RT	836.42	385165.05	192406.77	
V317	68+52.81	100.25' RT	836.53	385163.01	192421.63	
V318	68+53.54	104.18' RT	836.59	385166.98	192422.18	
V319	68+44.13	105.73' RT	836.66	385165.50	192431.60	
V320	66+45.34	105.86' RT	838.08	385103.26	192620.39	
V321	66+46.00	101.91' RT	838.02	385099.72	192618.53	
V322	66+31.21	99.43' RT	838.10	385092.72	192631.79	
V323	66+30.55	103.37' RT	838.16	385096.26	192633.66	

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
V324	66+16.11	100.60' RT	838.20	385089.10	192646.50	
V325	68+42.14	49.80' LT	837.06	385017.19	192384.70	
V326	68+42.14	46.30' LT	837.11	385020.51	192385.80	
V327	68+57.14	46.30' LT	837.20	385025.22	192371.55	
V328	68+57.14	49.80' LT	837.14	385021.90	192370.46	
V329	66+49.68	5.11' RT	836.33	385008.96	192584.68	
V330	66+49.68	18.72' RT	836.56	385021.88	192588.94	
V331	66+43.68	18.72' RT	836.30	385019.99	192594.64	
V332	66+43.68	23.72' RT	836.38	385024.74	192596.21	
V333	66+49.68	23.72' RT	836.64	385026.62	192590.51	
V334	66+49.68	38.32' RT	836.89	385040.49	192595.09	
V335	66+33.62	21.72' RT	835.91	385019.69	192605.13	MIDPOINT
W1	69+40.71	49.78' LT	837.32	385048.13	192291.11	
W2	69+53.23	46.48' LT	837.41	385055.18	192280.25	
W3	69+51.18	41.84' LT	837.36	385058.95	192283.66	
W4	69+49.81	42.45' LT	837.36	385057.94	192284.78	
W5	69+46.57	35.13' LT	837.28	385063.88	192290.14	
W6	69+53.89	31.89' LT	837.36	385069.24	192284.21	
W7	69+57.12	39.21' LT	837.44	385063.31	192278.84	
W8	69+55.75	39.82' LT	837.44	385062.31	192279.96	
W9	69+57.81	44.46' LT	837.49	385058.54	192276.55	
W10	69+70.42	36.45' LT	838.12	385070.11	192267.08	MIDPOINT
W11	69+88.61	13.66' LT	839.51	385097.45	192256.96	
W12	69+84.12	11.47' LT	839.45	385098.12	192261.91	R=5'
W13	69+86.25	6.94' LT	839.49	385103.09	192261.31	
W14	69+86.93	1.74' LT	839.53	385108.24	192262.29	
W15	69+89.04	2.79' RT	839.34	385113.21	192261.71	R=5'
W16	69+93.93	1.75' RT	839.52	385113.75	192256.74	
W17	69+87.01	48.22' RT	837.34	385155.71	192277.89	MIDPOINT
W18	69+51.27	78.73' RT	836.03	385173.46	192321.40	
W19	69+46.15	64.63' RT	836.12	385158.46	192321.83	R=15'
W20	69+46.15	79.63' RT	836.06	385172.71	192326.54	
W21	69+96.96	60.39' LT	838.19	385055.69	192234.37	
W22	69+97.50	46.90' LT	837.71	385068.67	192238.09	
W23	69+80.47	49.92' LT	837.55	385060.47	192253.31	
W24	69+80.56	44.92' LT	837.88	385065.25	192254.80	R=5'
W25	69+77.30	41.12' LT	838.10	385067.82	192259.08	
W26	69+86.57	31.60' LT	838.81	385079.77	192253.27	
W27	69+94.01	20.60' LT	839.47	385092.56	192249.65	
W28	69+98.39	23.02' LT	839.33	385091.63	192244.74	R=5'

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
W29	70+00.76	18.62' LT	839.75	385096.55	192243.87	
W30	70+44.11	41.94' LT	839.70	385088.00	192195.38	
W31	70+48.85	33.14' LT	839.85	385097.85	192193.65	
W32	70+44.45	30.77' LT	839.92	385098.72	192198.57	
W33	70+42.08	35.17' LT	839.85	385093.80	192199.44	
W34	70+02.04	13.63' LT	839.81	385101.69	192244.22	
W35	70+04.41	9.23' LT	839.90	385106.61	192243.35	R=5'
W36	69+99.66	7.67' LT	839.78	385106.61	192248.35	
W37	70+02.99	23.63' RT	838.68	385137.37	192255.00	MIDPOINT
W38	69+93.19	53.54' RT	837.15	385162.69	192273.69	
W39	69+97.51	56.05' RT	837.22	385166.44	192270.38	R=5'
W40	69+99.49	60.64' RT	836.79	385171.42	192269.93	
W41	71+08.45	0.30' RT	838.18	385148.29	192147.55	
W42	71+23.13	10.12' LT	838.29	385143.01	192130.34	
W43	71+49.68	30.61' LT	838.50	385131.88	192098.70	MIDPOINT
W44	71+89.13	65.51' LT	838.83	385111.11	192050.29	
W45	72+38.51	112.95' LT	839.22	385081.56	191988.53	
W46	72+45.44	105.74' LT	839.07	385090.58	191984.21	
W47	71+22.49	10.99' LT	838.30	385141.98	192130.67	
W48	71+42.67	25.75' LT	838.45	385134.30	192106.88	R=25'
W49	71+31.83	48.27' LT	838.96	385109.51	192110.11	
W50	71+57.15	60.46' LT	839.38	385105.88	192082.24	
W51	71+69.73	65.45' LT	839.51	385105.09	192068.74	
W52	71+58.50	86.68' LT	839.79	385081.40	192072.74	
W53	71+47.30	81.13' LT	839.61	385083.16	192085.11	
W54	70+66.47	42.61' LT	839.55	385094.38	192173.95	
W55	70+62.32	2.77' RT	839.71	385136.17	192192.12	
W56	70+81.38	7.49' LT	839.07	385132.41	192170.81	
W57	70+90.86	10.13' RT	838.11	385152.11	192167.33	R=20'
W58	71+07.00	1.68' LT	838.23	385145.96	192148.30	
W59	70+24.16	49.36' RT	837.38	385168.44	192242.97	MIDPOINT
W60	70+48.32	37.03' RT	837.74	385164.31	192216.16	
W61	70+46.67	33.94' RT	837.79	385160.86	192216.76	
W62	70+53.25	30.35' RT	837.83	385159.52	192209.38	MIDPOINT
W63	70+59.80	26.69' RT	837.88	385158.09	192202.02	
W64	70+61.53	29.73' RT	837.83	385161.52	192201.33	
W65	70+13.30	14.18' LT	840.00	385104.70	192233.35	
W66	70+39.98	28.53' LT	840.00	385099.44	192203.52	
W67	70+51.49	7.13' LT	840.00	385123.37	192199.30	
W68	70+24.81	7.22' RT	840.00	385128.63	192229.13	

POINT TABLE						
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	DESCRIPTION
W69	69+82.51	46.45' LT	837.78	385064.40	192252.46	
W70	69+82.44	49.95' LT	837.56	385061.05	192251.43	
W71	70+07.48	16.55' LT	839.89	385100.62	192238.13	
W72	70+11.00	18.45' LT	839.95	385099.92	192234.19	
W73	70+55.76	9.43' LT	839.82	385122.52	192194.52	

2

2

2

N

R/W

SI

105+00 A

106+00 A

107+00 A

108+00 A

109+00 A

110+

829.66 829.78 829.92 830.08 830.24 830.42 830.62 830.82 831.02

830.14 830.26 830.40 830.56 830.72 830.90 831.10 831.30 831.50

831.04 831.16 831.30 831.46 831.62 831.80 832.00 832.20 832.40

831.28 831.40 831.54 831.70 831.86 832.04 832.24 832.44 832.6

REST AREA 51 ON-RAMP

MATCH LINE 110+00 A

SI

1861+00 SB

1862+00 SB

IH 43 SB

1863+00 SB

1864+00 SB

1865+00 SB

1866+00 SB

1867+0

IH 43 NB

1862+00 NB

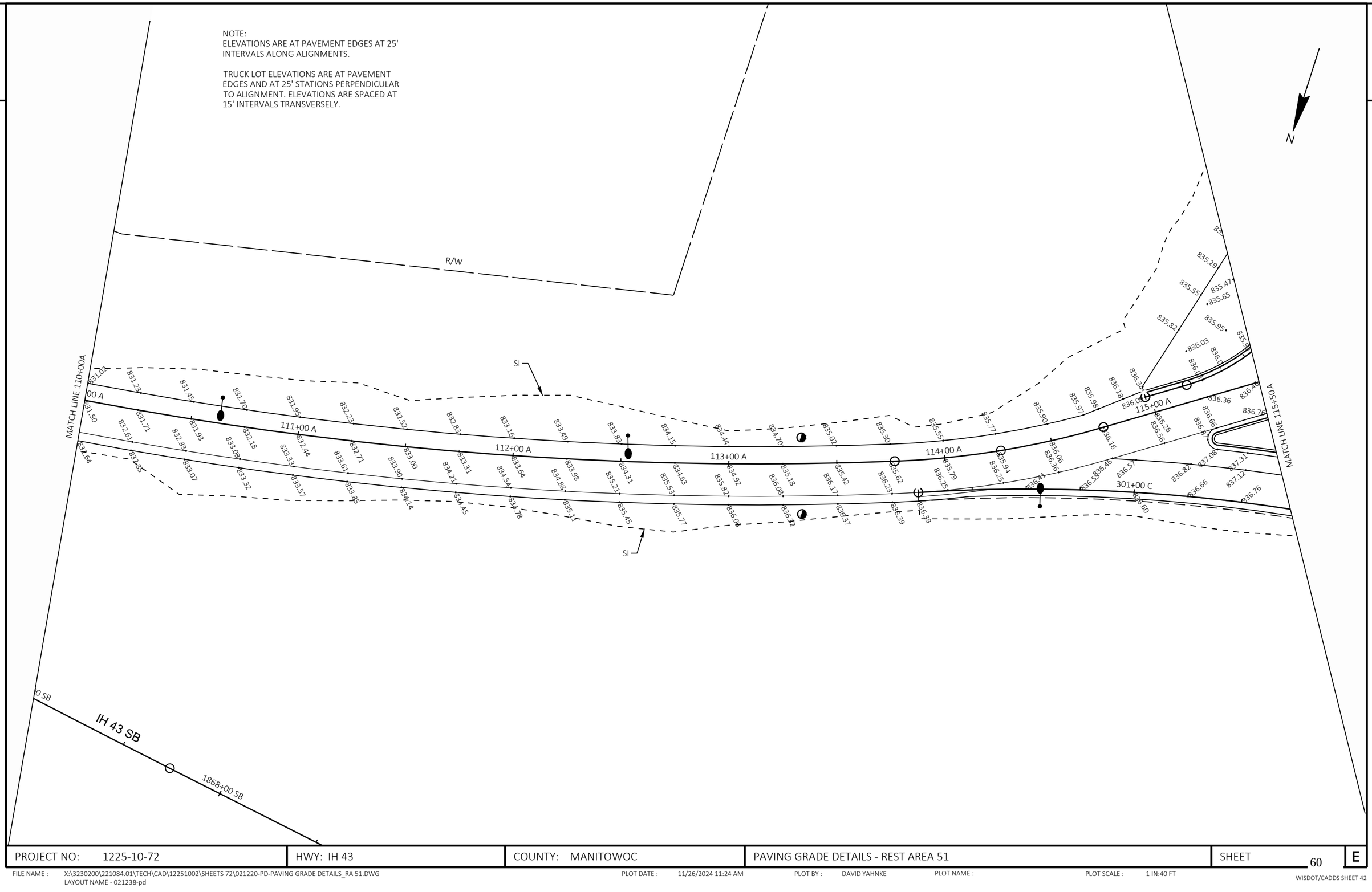
NOTE:
ELEVATIONS ARE AT PAVEMENT EDGES AT 25' INTERVALS ALONG ALIGNMENTS.

TRUCK LOT ELEVATIONS ARE AT PAVEMENT EDGES AND AT 25' STATIONS PERPENDICULAR TO ALIGNMENT. ELEVATIONS ARE SPACED AT 15' INTERVALS TRANSVERSELY.

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PAVING GRADE DETAILS - REST AREA 51	SHEET 59	E

NOTE:
ELEVATIONS ARE AT PAVEMENT EDGES AT 25' INTERVALS ALONG ALIGNMENTS.

TRUCK LOT ELEVATIONS ARE AT PAVEMENT EDGES AND AT 25' STATIONS PERPENDICULAR TO ALIGNMENT. ELEVATIONS ARE SPACED AT 15' INTERVALS TRANSVERSELY.



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PAVING GRADE DETAILS - REST AREA 51	SHEET 60	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021220-PD-PAVING GRADE DETAILS_RA 51.DWG
LAYOUT NAME - 021238-pd
PLOT DATE : 11/26/2024 11:24 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTE:
ELEVATIONS ARE AT PAVEMENT EDGES AT 25' INTERVALS ALONG ALIGNMENTS.

TRUCK LOT ELEVATIONS ARE AT PAVEMENT EDGES AND AT 25' STATIONS PERPENDICULAR TO ALIGNMENT. ELEVATIONS ARE SPACED AT 15' INTERVALS TRANSVERSELY.

MATCH LINE 115+50A

MATCH LINE 204+00B

MATCH LINE 304+10C

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PAVING GRADE DETAILS - REST AREA 51	SHEET 61	E

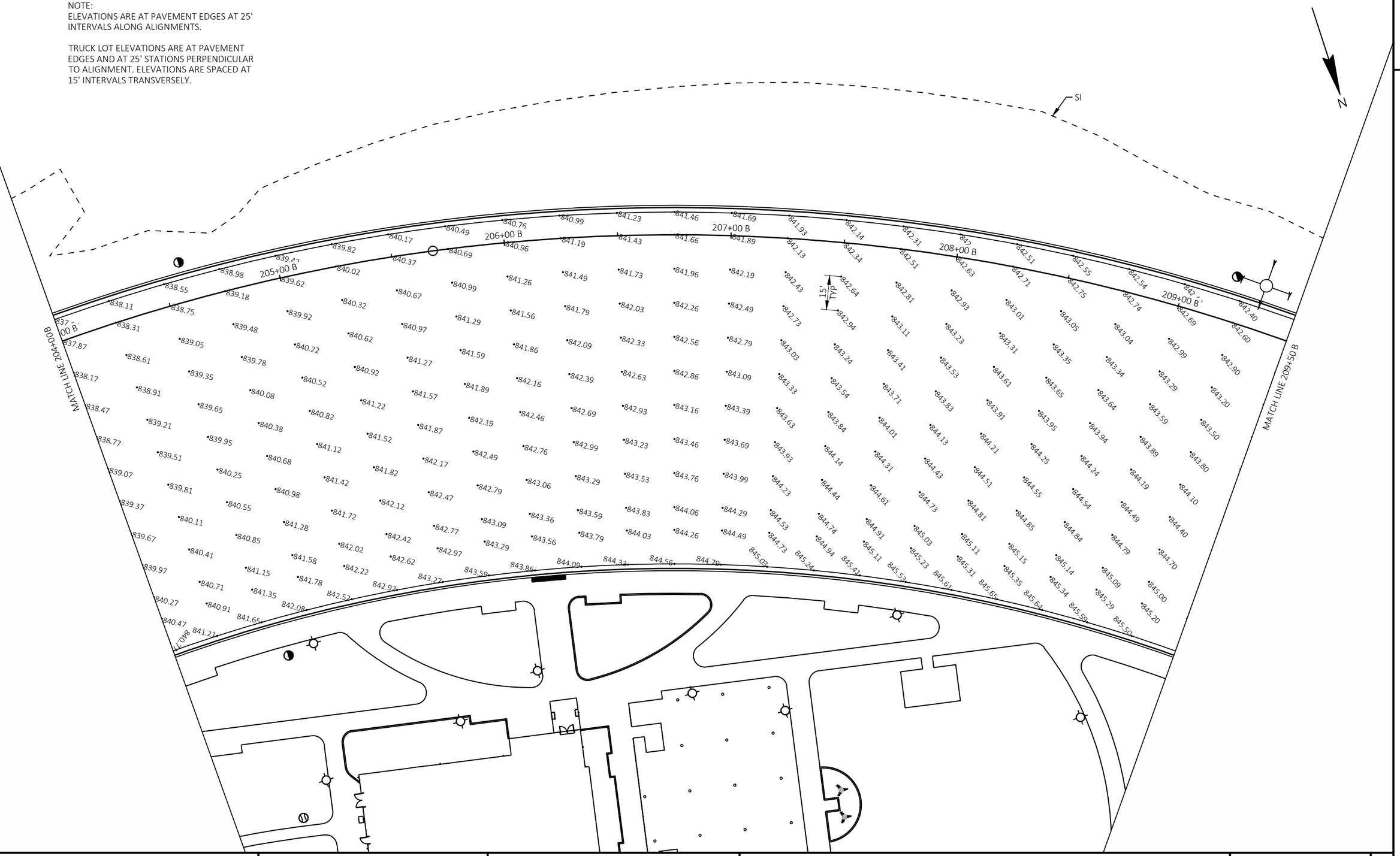
FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021220-PD-PAVING GRADE DETAILS_RA 51.DWG
LAYOUT NAME - 021239-pd

PLOT DATE : 11/26/2024 11:24 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTE:
ELEVATIONS ARE AT PAVEMENT EDGES AT 25' INTERVALS ALONG ALIGNMENTS.

TRUCK LOT ELEVATIONS ARE AT PAVEMENT EDGES AND AT 25' STATIONS PERPENDICULAR TO ALIGNMENT. ELEVATIONS ARE SPACED AT 15' INTERVALS TRANSVERSELY.

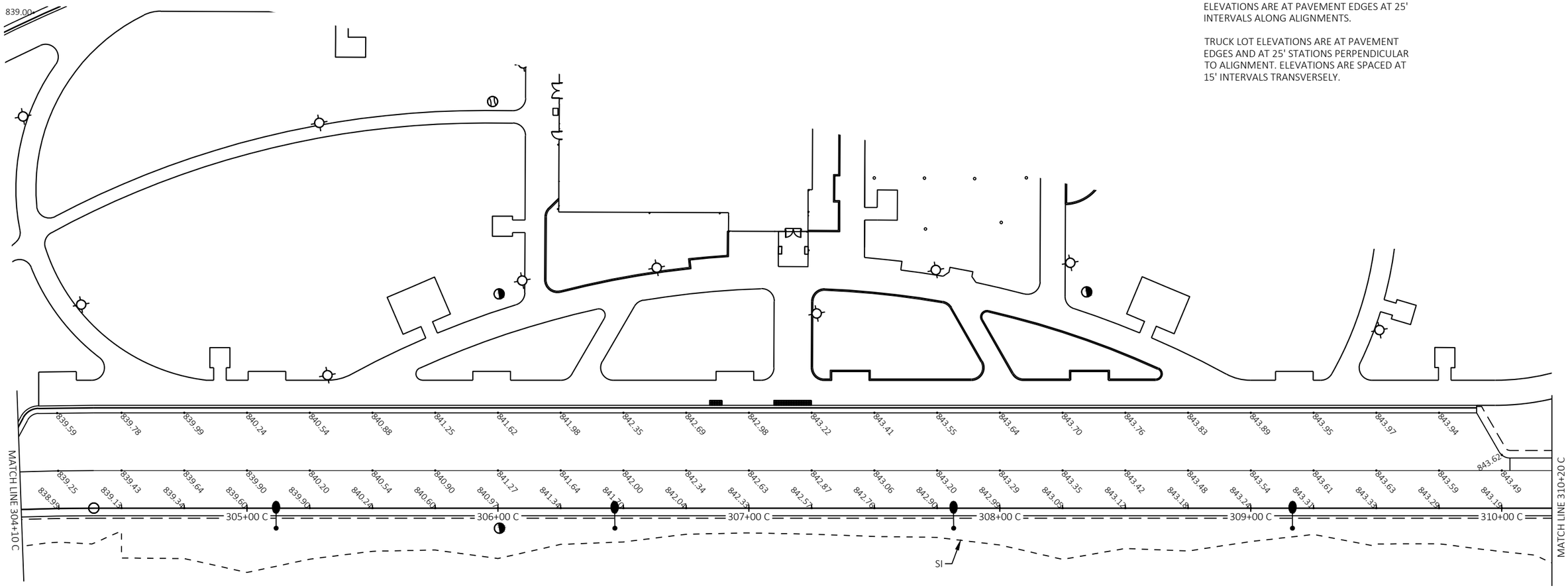


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PAVING GRADE DETAILS - REST AREA 51	SHEET 62	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021220-PD-PAVING GRADE DETAILS_RA 51.DWG
LAYOUT NAME - 021240-pd
PLOT DATE : 11/26/2024 11:24 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTE:
ELEVATIONS ARE AT PAVEMENT EDGES AT 25' INTERVALS ALONG ALIGNMENTS.

TRUCK LOT ELEVATIONS ARE AT PAVEMENT EDGES AND AT 25' STATIONS PERPENDICULAR TO ALIGNMENT. ELEVATIONS ARE SPACED AT 15' INTERVALS TRANSVERSELY.



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PAVING GRADE DETAILS - REST AREA 51	SHEET 63	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021220-PD-PAVING GRADE DETAILS_RA 51.DWG
LAYOUT NAME - 021241-pd
PLOT DATE : 11/26/2024 11:25 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

NOTE:
ELEVATIONS ARE AT PAVEMENT EDGES AT 25' INTERVALS ALONG ALIGNMENTS.

TRUCK LOT ELEVATIONS ARE AT PAVEMENT EDGES AND AT 25' STATIONS PERPENDICULAR TO ALIGNMENT. ELEVATIONS ARE SPACED AT 15' INTERVALS TRANSVERSELY.

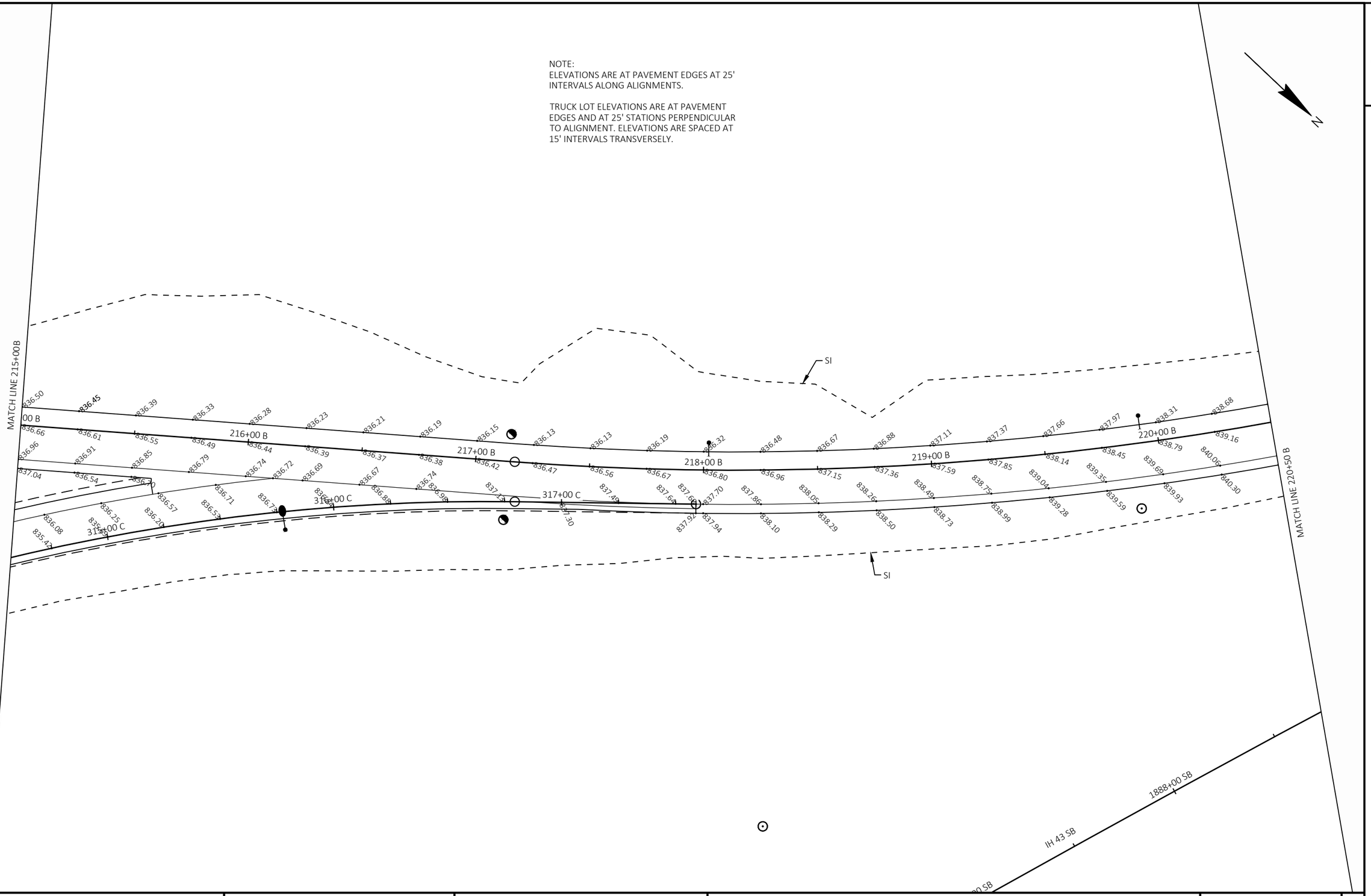
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PAVING GRADE DETAILS - REST AREA 51	SHEET 64	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021220-PD-PAVING GRADE DETAILS_RA 51.DWG
LAYOUT NAME - 021242-pd
PLOT DATE : 11/26/2024 11:25 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

NOTE:
ELEVATIONS ARE AT PAVEMENT EDGES AT 25' INTERVALS ALONG ALIGNMENTS.

TRUCK LOT ELEVATIONS ARE AT PAVEMENT EDGES AND AT 25' STATIONS PERPENDICULAR TO ALIGNMENT. ELEVATIONS ARE SPACED AT 15' INTERVALS TRANSVERSELY.



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PAVING GRADE DETAILS - REST AREA 51	SHEET 65	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021220-PD-PAVING GRADE DETAILS_RA 51.DWG
LAYOUT NAME - 021243-pd
PLOT DATE : 11/26/2024 11:25 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

NOTE:
ELEVATIONS ARE AT PAVEMENT EDGES AT 25' INTERVALS ALONG ALIGNMENTS.

TRUCK LOT ELEVATIONS ARE AT PAVEMENT EDGES AND AT 25' STATIONS PERPENDICULAR TO ALIGNMENT. ELEVATIONS ARE SPACED AT 15' INTERVALS TRANSVERSELY.

N

MATCH LINE 220+50B

SI

839.06 839.48 839.92 840.38 840.87 841.39

221+00 B

839.54 839.96 840.40 840.86 841.35 841.87

222+00 B

840.44 840.86 841.30 841.76 842.25 842.77

840.68 841.10 841.54 842.00 842.49 843.01

SI

223+00 B

224+00 B

225+00 B

226+00 B

REST AREA 51 OFF-RAMP

1889+00 SB

1890+00 SB

1891+00 SB

1892+00 SB

1893+00 SB

IH 43 SB

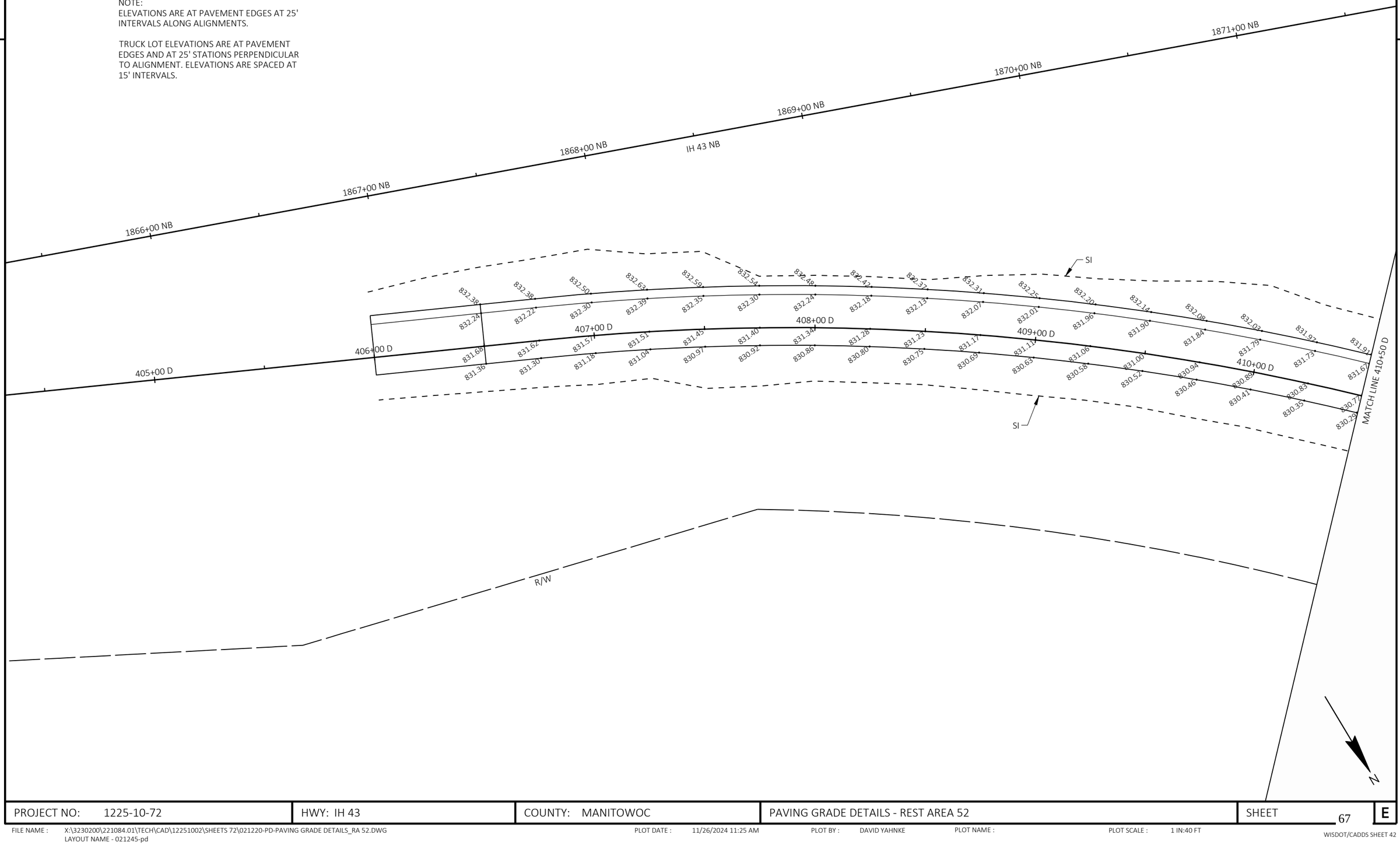
1894+00 SB

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PAVING GRADE DETAILS - REST AREA 51	SHEET 66	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021220-PD-PAVING GRADE DETAILS_RA 51.DWG
LAYOUT NAME - 021244-pd
PLOT DATE : 11/26/2024 11:25 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTE:
ELEVATIONS ARE AT PAVEMENT EDGES AT 25' INTERVALS ALONG ALIGNMENTS.

TRUCK LOT ELEVATIONS ARE AT PAVEMENT EDGES AND AT 25' STATIONS PERPENDICULAR TO ALIGNMENT. ELEVATIONS ARE SPACED AT 15' INTERVALS.



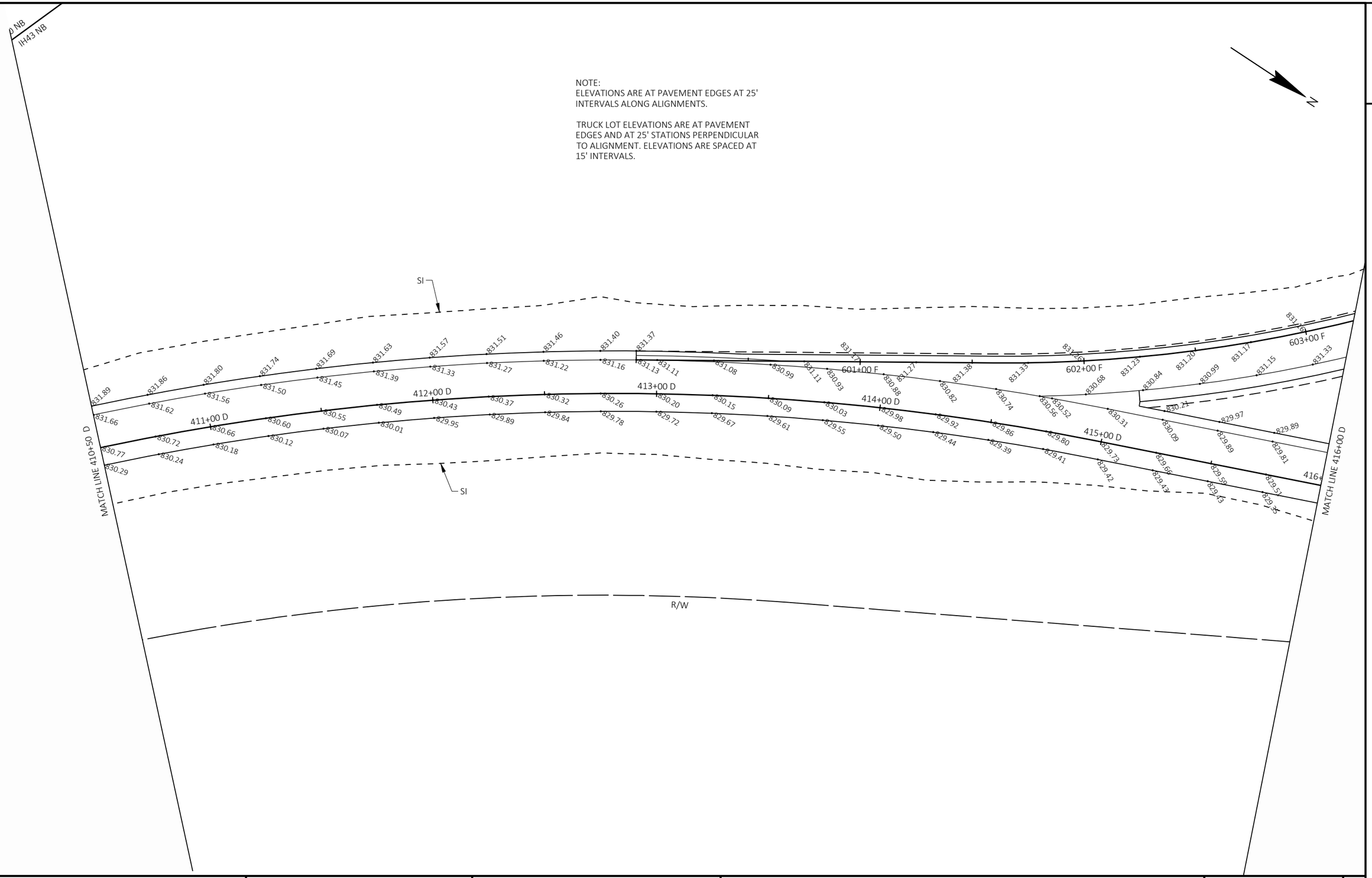
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PAVING GRADE DETAILS - REST AREA 52	SHEET 67	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021220-PD-PAVING GRADE DETAILS_RA 52.DWG
LAYOUT NAME - 021245-pd
PLOT DATE : 11/26/2024 11:25 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

NOTE:
ELEVATIONS ARE AT PAVEMENT EDGES AT 25' INTERVALS ALONG ALIGNMENTS.

TRUCK LOT ELEVATIONS ARE AT PAVEMENT EDGES AND AT 25' STATIONS PERPENDICULAR TO ALIGNMENT. ELEVATIONS ARE SPACED AT 15' INTERVALS.

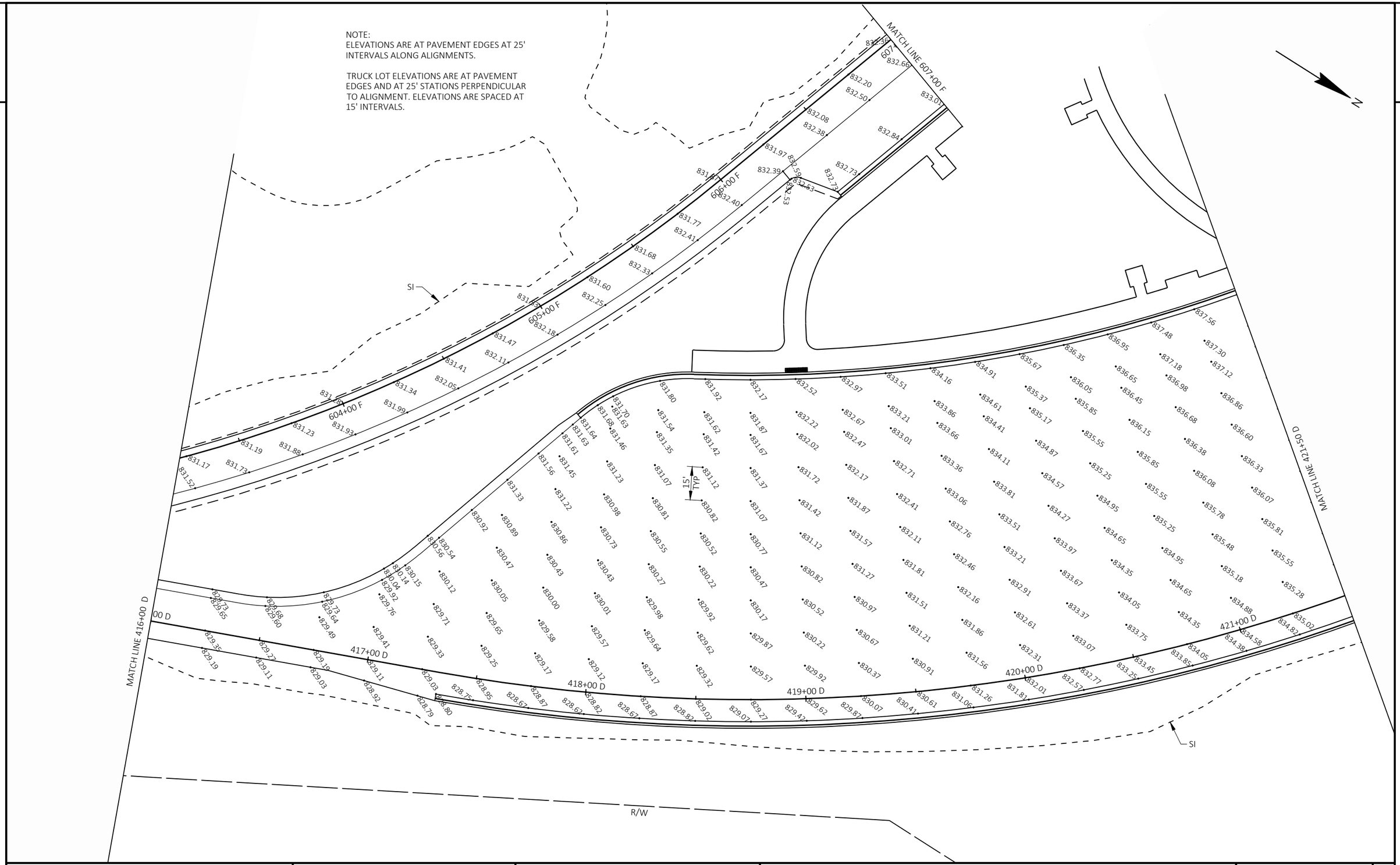


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PAVING GRADE DETAILS - REST AREA 52	SHEET 68	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021220-PD-PAVING GRADE DETAILS_RA 52.DWG
LAYOUT NAME - 021246-pd
PLOT DATE : 11/26/2024 11:25 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTE:
ELEVATIONS ARE AT PAVEMENT EDGES AT 25' INTERVALS ALONG ALIGNMENTS.

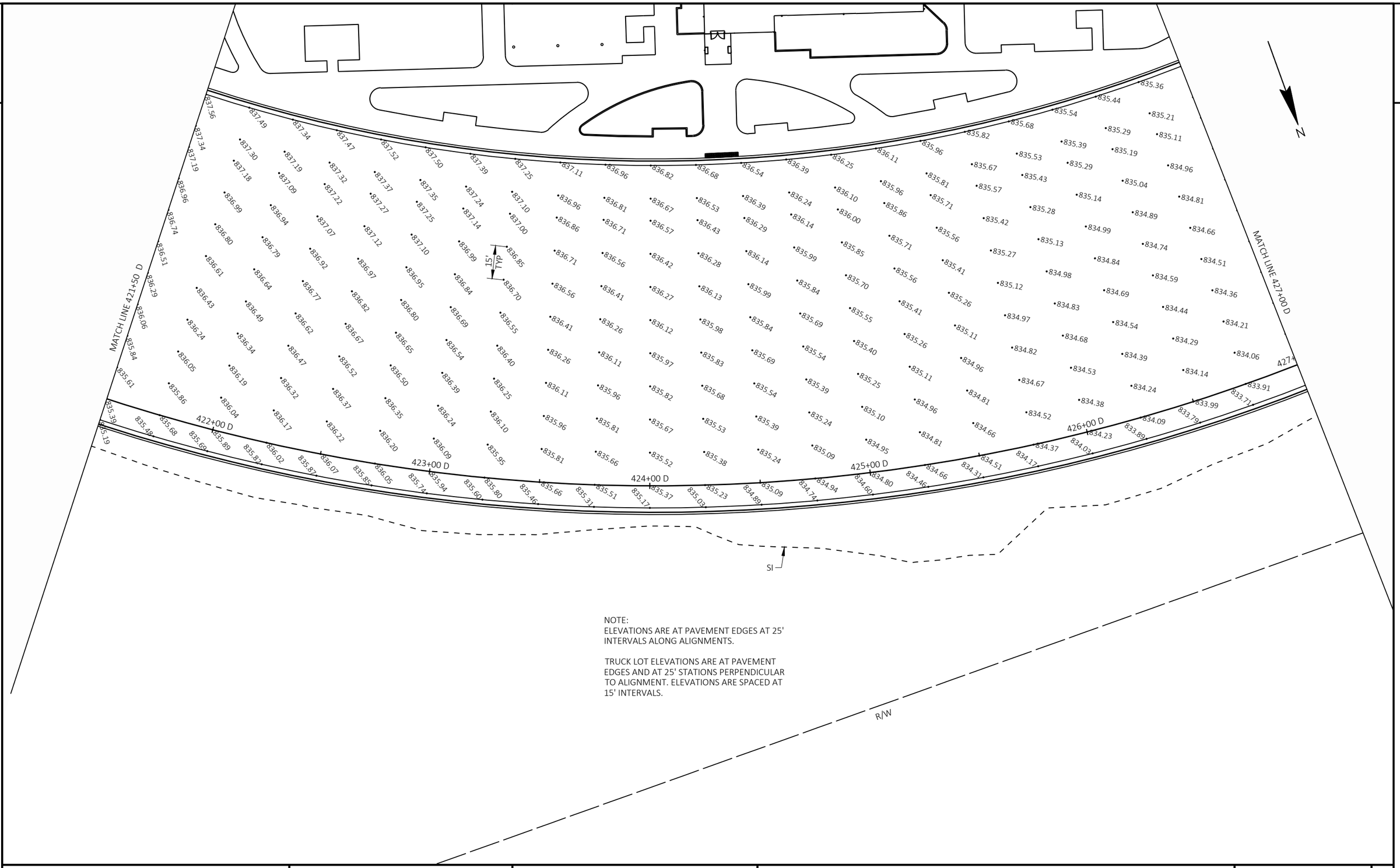
TRUCK LOT ELEVATIONS ARE AT PAVEMENT EDGES AND AT 25' STATIONS PERPENDICULAR TO ALIGNMENT. ELEVATIONS ARE SPACED AT 15' INTERVALS.



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PAVING GRADE DETAILS - REST AREA 52	SHEET 69	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021220-PD-PAVING GRADE DETAILS_RA 52.DWG
LAYOUT NAME - 021247-pd
PLOT DATE : 11/26/2024 11:25 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



NOTE:
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TRUCK LOT ELEVATIONS ARE AT PAVEMENT EDGES AND AT 25' STATIONS PERPENDICULAR TO ALIGNMENT. ELEVATIONS ARE SPACED AT 15' INTERVALS.

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PAVING GRADE DETAILS - REST AREA 52	SHEET 70	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021220-PD-PAVING GRADE DETAILS_RA 52.DWG
LAYOUT NAME - 021248-pd

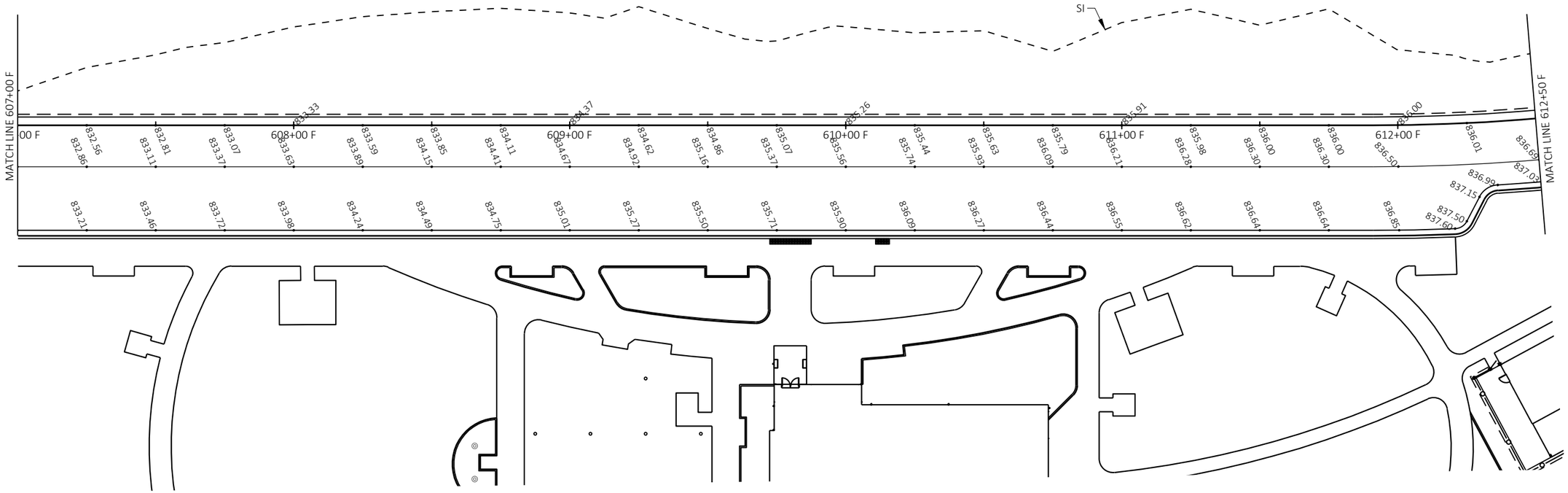
PLOT DATE : 11/26/2024 11:26 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

NOTE:
ELEVATIONS ARE AT PAVEMENT EDGES AT 25' INTERVALS ALONG ALIGNMENTS.

TRUCK LOT ELEVATIONS ARE AT PAVEMENT EDGES AND AT 25' STATIONS PERPENDICULAR TO ALIGNMENT. ELEVATIONS ARE SPACED AT 15' INTERVALS.

N



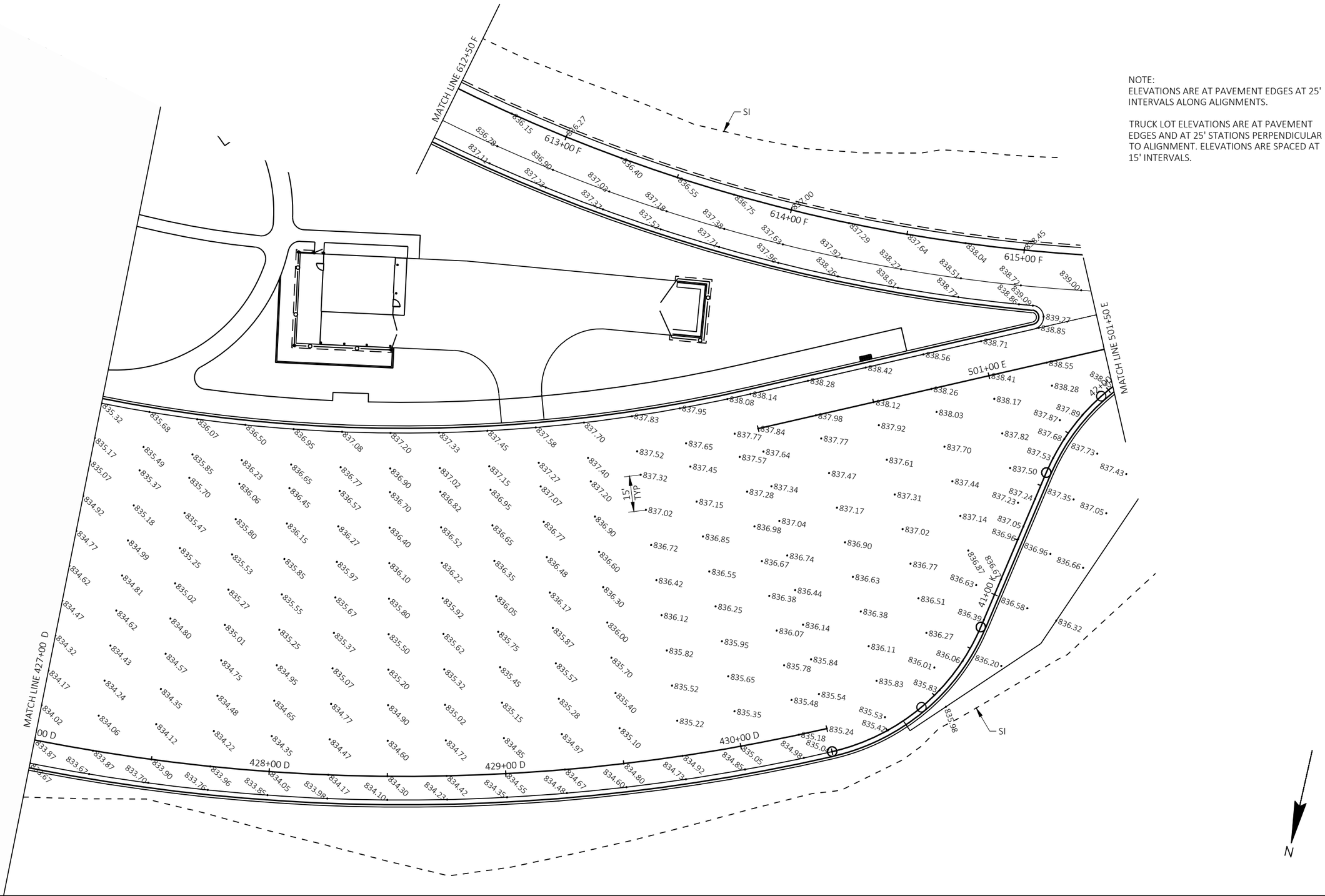
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PAVING GRADE DETAILS - REST AREA 52	SHEET 71	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021220-PD-PAVING GRADE DETAILS_RA 52.DWG
LAYOUT NAME - 021249-pd
PLOT DATE : 11/26/2024 11:26 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

NOTE:
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TRUCK LOT ELEVATIONS ARE AT PAVEMENT EDGES AND AT 25' STATIONS PERPENDICULAR TO ALIGNMENT. ELEVATIONS ARE SPACED AT 15' INTERVALS.



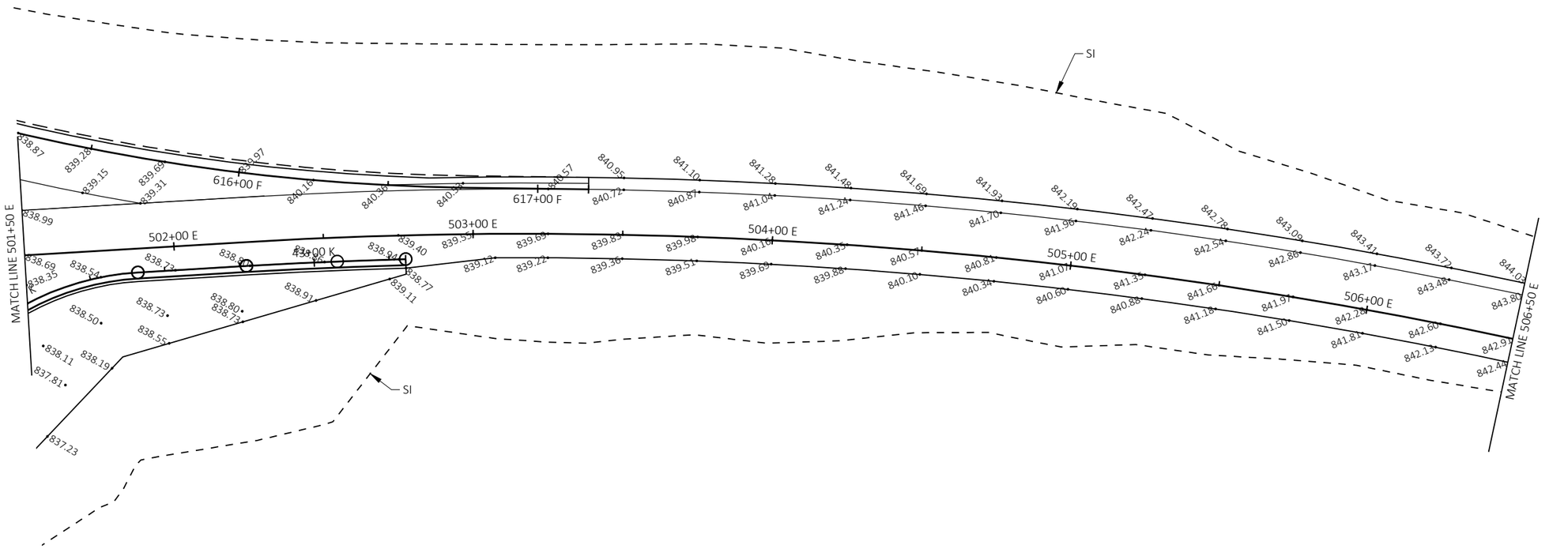
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PAVING GRADE DETAILS - REST AREA 52	SHEET 72	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021220-PD-PAVING GRADE DETAILS_RA 52.DWG
LAYOUT NAME - 021250-pd

PLOT DATE : 11/26/2024 11:26 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTE:
ELEVATIONS ARE AT PAVEMENT EDGES AT 25' INTERVALS ALONG ALIGNMENTS.

TRUCK LOT ELEVATIONS ARE AT PAVEMENT EDGES AND AT 25' STATIONS PERPENDICULAR TO ALIGNMENT. ELEVATIONS ARE SPACED AT 15' INTERVALS.



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PAVING GRADE DETAILS - REST AREA 52	SHEET 73	E

2

NOTE:
ELEVATIONS ARE AT PAVEMENT EDGES AT 25' INTERVALS ALONG ALIGNMENTS.

TRUCK LOT ELEVATIONS ARE AT PAVEMENT EDGES AND AT 25' STATIONS PERPENDICULAR TO ALIGNMENT. ELEVATIONS ARE SPACED AT 15' INTERVALS.

N

1892+00 NB

1893+00 NB

IH 43 NB

1894+00 NB

1895+00 NB

1896+00 NB

1897+00 NB

SI

MATCH LINE 506+50 E

844.35 844.66 845.02 845.41 845.84 846.31 846.83 847.38 847.98 848.61

844.11 844.43 844.78 845.17 845.60 846.08 846.59 847.14 847.74 848.37

507+00 E

508+00 E

509+00 E

843.23 843.58 843.89 844.25 844.72 845.15 845.70 846.26 846.85 847.49

842.75 843.07 843.42 843.81 844.25 844.72 845.23 845.79 846.38 847.02

SI

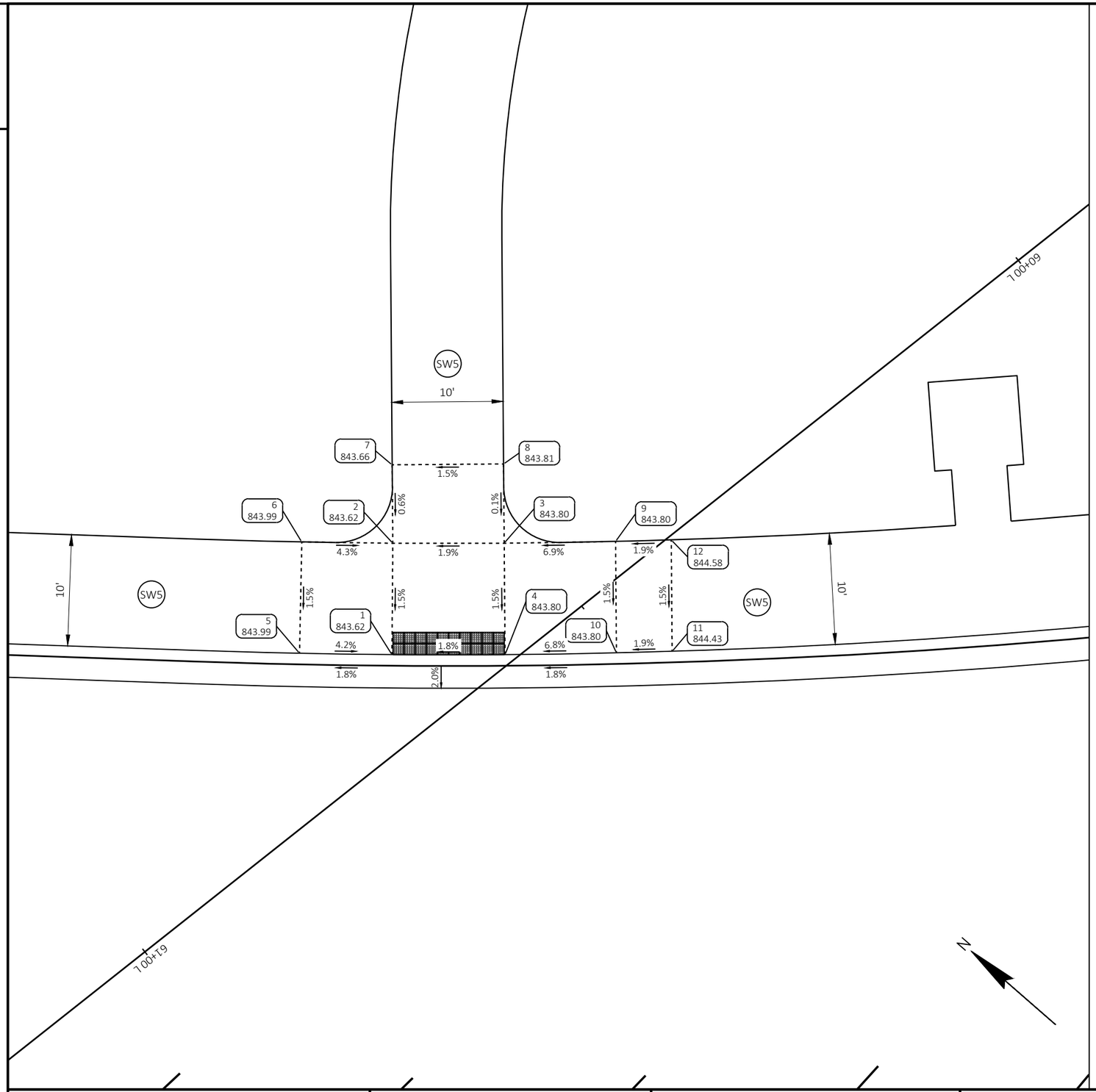
510+00 E

511+00 E

512+00 E

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PAVING GRADE DETAILS - REST AREA 52	SHEET 74	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021220-PD-PAVING GRADE DETAILS_RA 52.DWG
LAYOUT NAME - 021252-pd
PLOT DATE : 11/26/2024 11:26 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



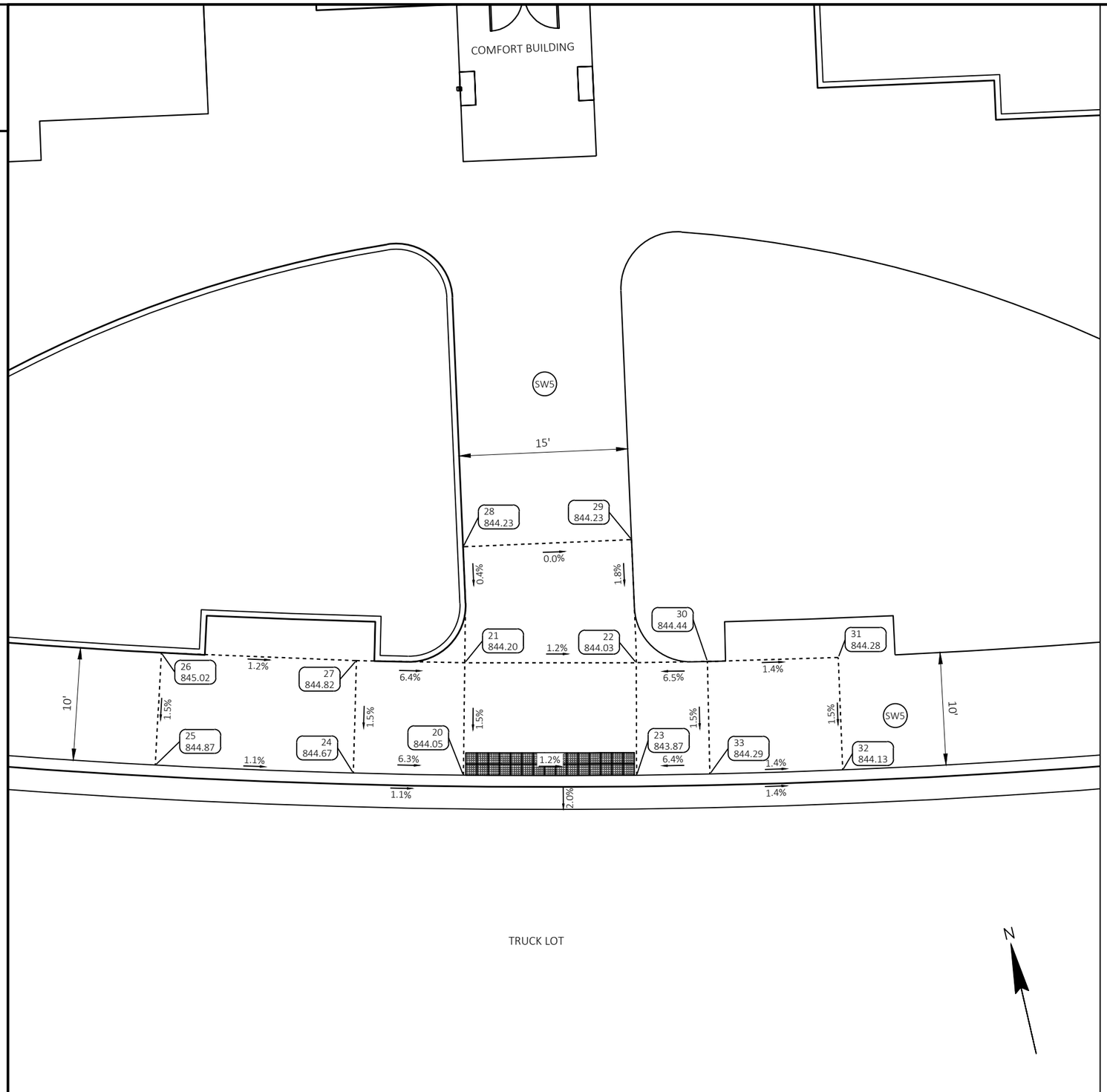
LEGEND

SW5 CONCRETE SIDEWALK 5-INCH

XX YYY.Y POINT NUMBER & ELEVATION

CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

REST AREA 51					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	60+66.05	7.16' RT	843.62	383493.06	192212.91
2	60+59.79	14.95' RT	843.62	383499.58	192220.50
3	60+51.95	8.74' RT	843.80	383492.04	192227.07
4	60+58.09	0.85' RT	843.80	383485.41	192219.59
5	60+72.49	12.40' RT	843.99	383499.39	192207.55
6	60+66.12	20.11' RT	843.99	383505.81	192215.22
7	60+55.46	20.50' RT	843.66	383504.24	192225.77
8	60+47.57	14.36' RT	843.81	383496.76	192232.40
9	60+44.01	2.66' RT	843.80	383484.60	192233.76
10	60+50.15	5.23' LT	843.80	383477.97	192226.27
11	60+46.15	8.23' LT	844.43	383474.29	192229.66
12	60+40.00	0.34' LT	844.58	383480.92	192237.15



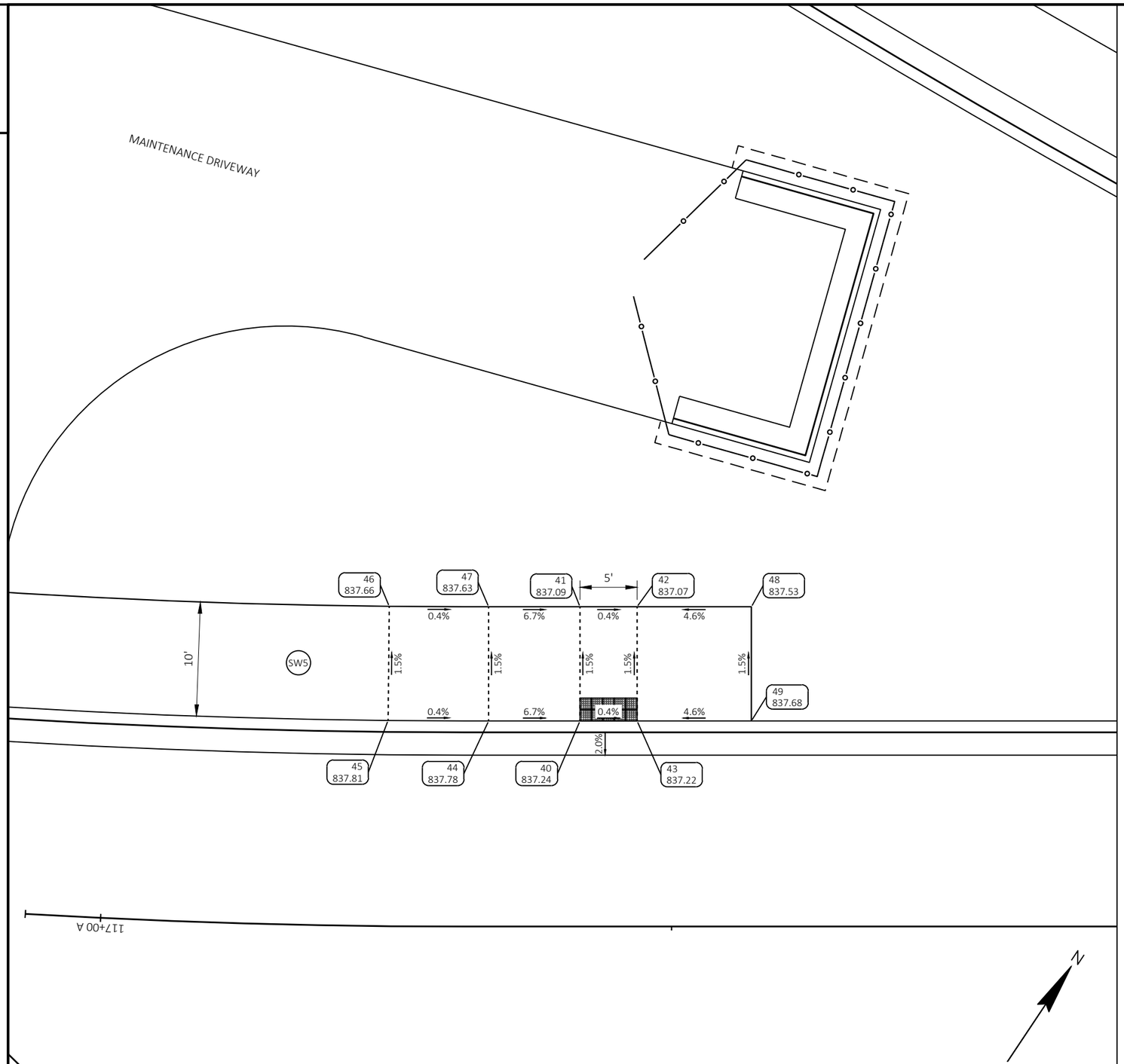
LEGEND

SW5 — CONCRETE SIDEWALK 5-INCH

XX / YYY.Y — POINT NUMBER & ELEVATION

CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

REST AREA 51					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
20	56+92.81	135.81' LT	844.05	383284.15	192553.66
21	56+92.27	125.83' LT	844.20	383293.87	192556.02
22	56+77.03	126.48' LT	844.03	383290.44	192570.88
23	56+77.43	136.47' LT	843.87	383280.69	192568.66
24	57+02.57	135.21' LT	844.67	383286.53	192544.17
25	57+20.13	133.75' LT	844.87	383291.18	192527.18
26	57+19.17	123.80' LT	845.02	383300.79	192529.94
27	57+01.88	125.23' LT	844.82	383296.21	192546.68
28	56+91.98	115.53' LT	844.23	383303.94	192558.19
29	56+77.00	115.53' LT	844.23	383301.19	192572.92
30	56+70.71	126.64' LT	844.44	383289.12	192577.06
31	56+59.08	126.77' LT	844.28	383286.86	192588.47
32	56+59.10	136.77' LT	844.13	383277.03	192586.62
33	56+70.92	136.64' LT	844.29	383279.33	192575.03



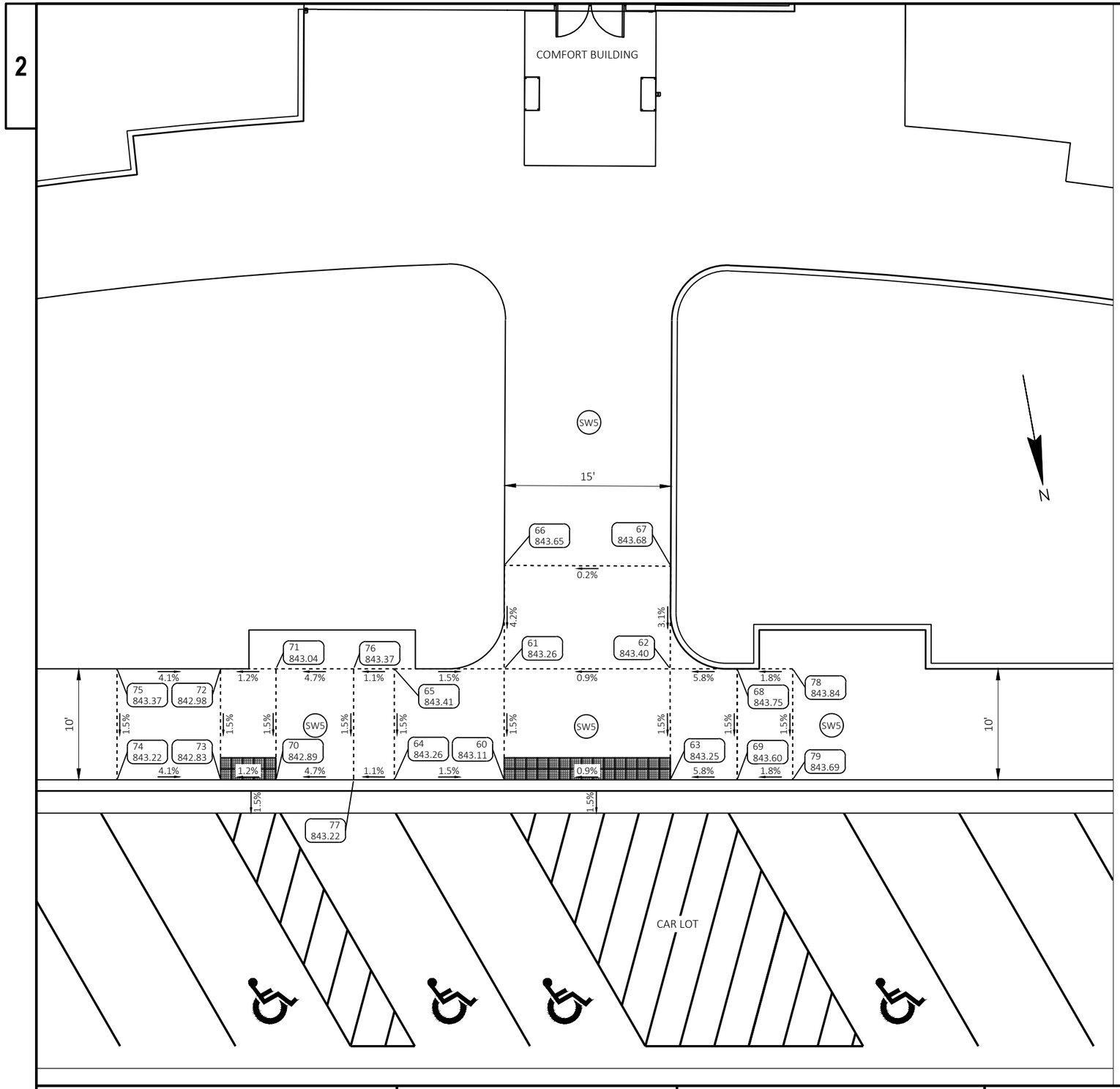
LEGEND

SW5 CONCRETE SIDEWALK 5-INCH

XX YYY.Y POINT NUMBER & ELEVATION

CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

REST AREA 51					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
40	116+58.02	18.00' RT	837.24	383381.33	193078.51
41	116+58.02	28.00' RT	837.09	383389.64	193072.95
42	116+53.02	28.00' RT	837.07	383392.42	193077.10
43	116+53.02	18.00' RT	837.22	383384.11	193082.66
44	116+66.02	18.00' RT	837.78	383376.88	193071.85
45	116+75.00	18.00' RT	837.81	383372.02	193064.52
46	116+75.00	28.00' RT	837.66	383380.39	193059.05
47	116+66.02	28.00' RT	837.63	383385.19	193066.30
48	116+43.02	28.00' RT	837.53	383397.98	193085.42
49	116+43.02	18.00' RT	837.68	383389.67	193090.97



LEGEND

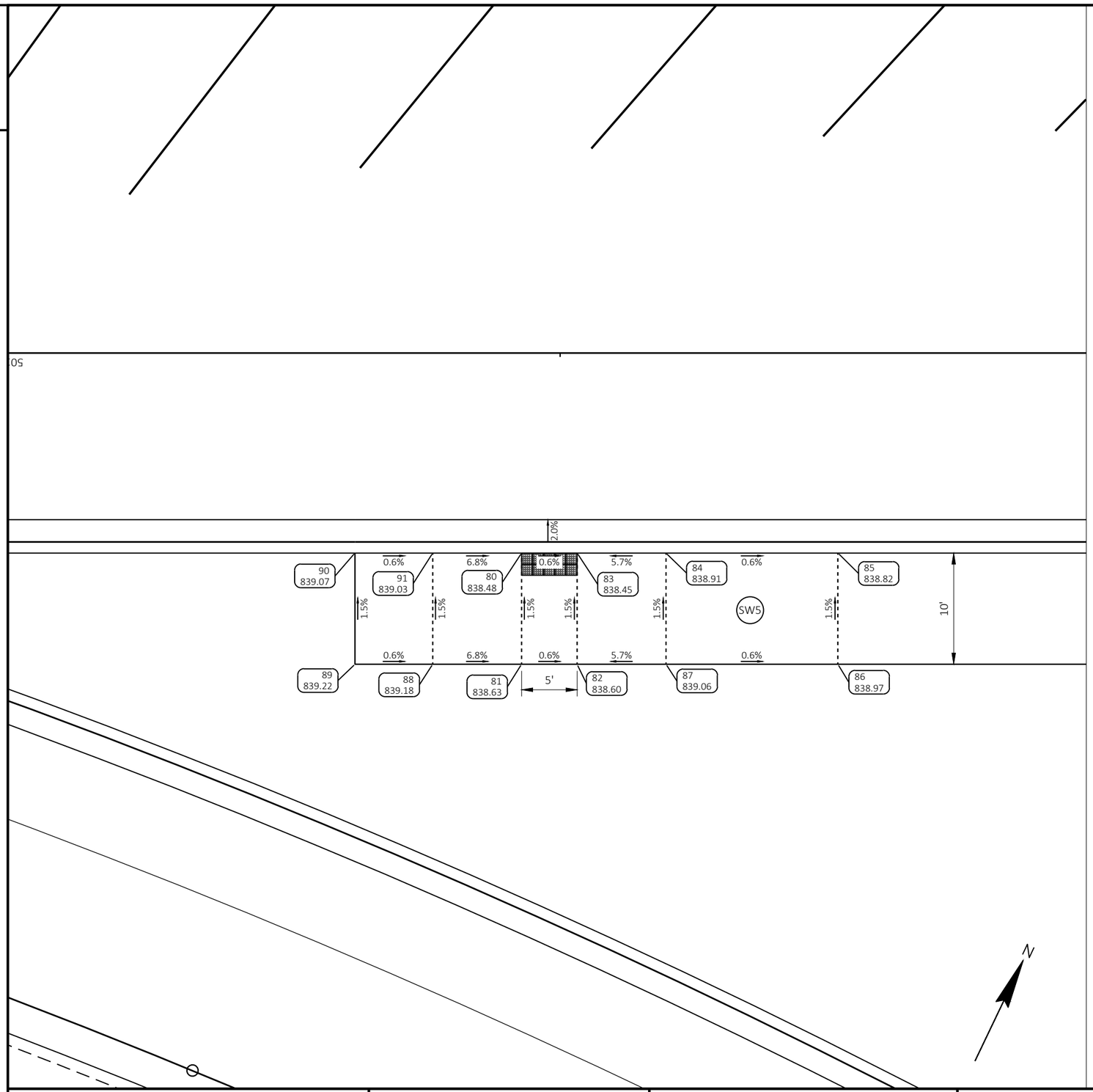
SW5 CONCRETE SIDEWALK 5-INCH

XX YYY.Y POINT NUMBER & ELEVATION

CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

REST AREA 51					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
60	307+09.90	41.00' LT	843.11	383489.84	192607.95
61	307+09.90	50.99' LT	843.26	383480.01	192606.16
62	307+24.87	51.00' LT	843.40	383482.67	192591.43
63	307+24.88	41.00' LT	843.25	383492.51	192593.21
64	307+00.00	41.00' LT	843.26	383488.07	192617.69
65	307+00.00	51.00' LT	843.41	383478.23	192615.90
66	307+09.92	60.31' LT	843.65	383470.84	192604.47
67	307+24.92	60.24' LT	843.68	383473.59	192589.73
68	307+30.90	51.00' LT	843.75	383483.75	192585.50
69	307+30.90	41.00' LT	843.60	383493.59	192587.28
70	306+89.33	41.01' LT	842.89	383486.15	192628.18
71	306+89.33	51.00' LT	843.04	383476.32	192626.39
72	306+84.33	50.99' LT	842.98	383475.44	192631.31
73	306+84.33	41.01' LT	842.83	383485.26	192633.10
74	306+75.00	41.00' LT	843.22	383483.60	192642.28
75	306+75.00	51.00' LT	843.37	383473.76	192640.50
76	306+96.33	50.99' LT	843.37	383477.58	192619.51
77	306+96.33	41.01' LT	843.22	383487.40	192621.29
78	307+35.91	51.00' LT	843.84	383484.65	192580.57
79	307+35.91	41.00' LT	843.69	383494.49	192582.35

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CURB RAMP DETAILS - REST AREA 51	SHEET 78	E



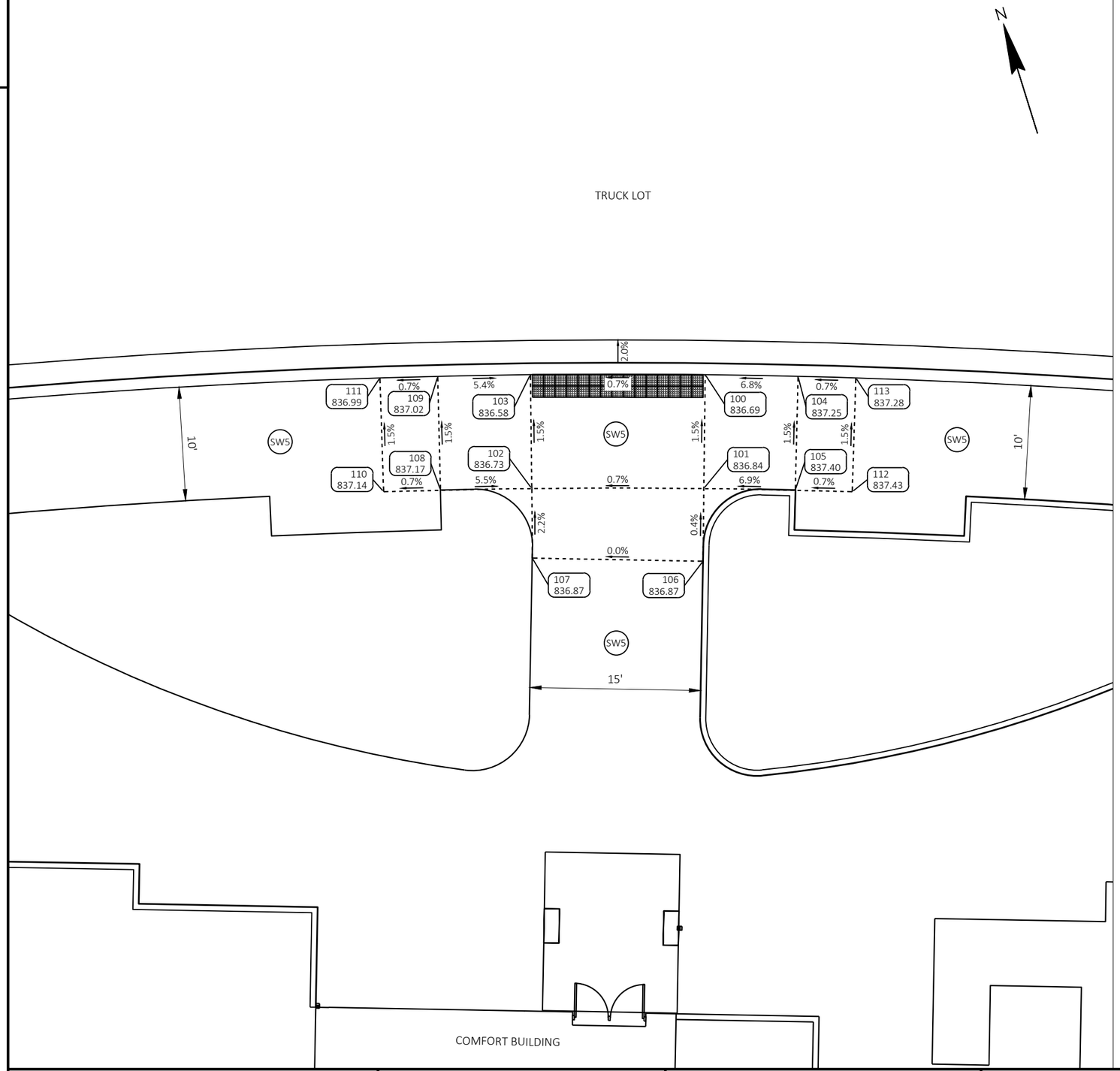
LEGEND

SW5 CONCRETE SIDEWALK 5-INCH

XX YYY.Y POINT NUMBER & ELEVATION

CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

REST AREA 51					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
80	500+53.47	18.00' LT	838.48	385097.05	191997.74
81	500+53.47	28.00' LT	838.63	385088.03	192002.06
82	500+48.47	28.00' LT	838.60	385090.19	192006.57
83	500+48.47	18.00' LT	838.45	385099.21	192002.25
84	500+40.47	18.00' LT	838.91	385102.66	192009.47
85	500+25.00	18.00' LT	838.82	385109.34	192023.42
86	500+25.00	28.00' LT	838.97	385100.32	192027.74
87	500+40.47	28.00' LT	839.06	385093.64	192013.79
88	500+61.47	28.00' LT	839.18	385084.58	191994.84
89	500+68.47	28.00' LT	839.22	385081.56	191988.53
90	500+68.47	18.00' LT	839.07	385090.58	191984.21
91	500+61.47	18.00' LT	839.03	385093.60	191990.53



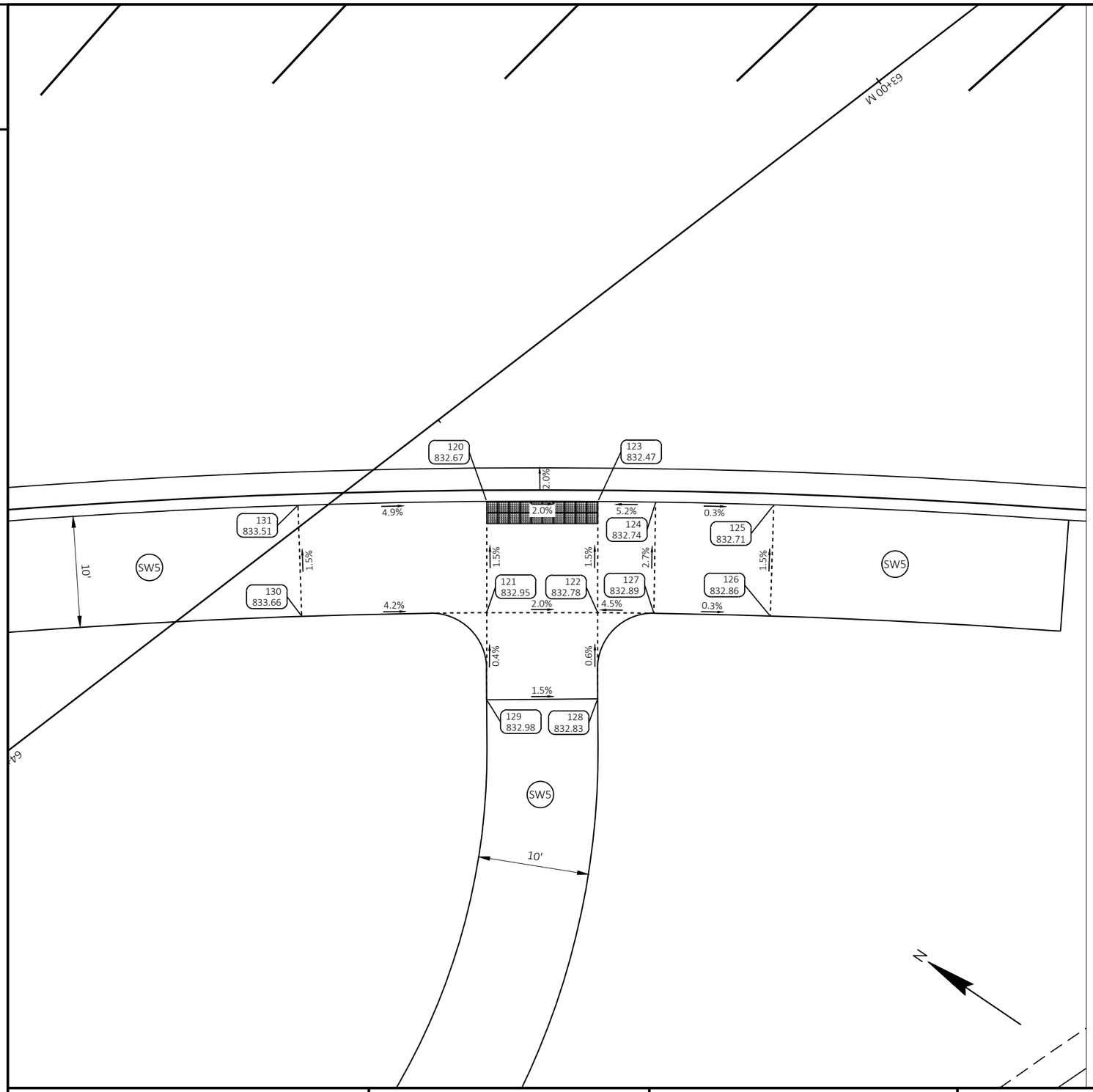
LEGEND

SW5 — CONCRETE SIDEWALK 5-INCH

XX / YYY.Y — POINT NUMBER & ELEVATION

CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

REST AREA 52					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
100	67+48.65	123.52' RT	836.69	385152.44	192527.84
101	67+48.59	113.52' RT	836.84	385142.93	192524.76
102	67+63.70	113.24' RT	836.73	385147.40	192510.32
103	67+64.00	123.24' RT	836.58	385156.99	192513.17
104	67+40.49	123.53' RT	837.25	385149.88	192535.59
105	67+40.55	113.53' RT	837.40	385140.41	192532.40
106	67+48.54	107.12' RT	836.87	385136.84	192522.80
107	67+63.54	107.12' RT	836.87	385141.54	192508.55
108	67+71.72	112.95' RT	837.17	385149.64	192502.62
109	67+72.14	122.94' RT	837.02	385159.26	192505.35
110	67+76.71	112.72' RT	837.14	385150.98	192497.81
111	67+77.21	122.71' RT	836.99	385160.63	192500.46
112	67+35.55	113.48' RT	837.43	385138.79	192537.13
113	67+35.41	123.48' RT	837.28	385148.24	192540.39



LEGEND

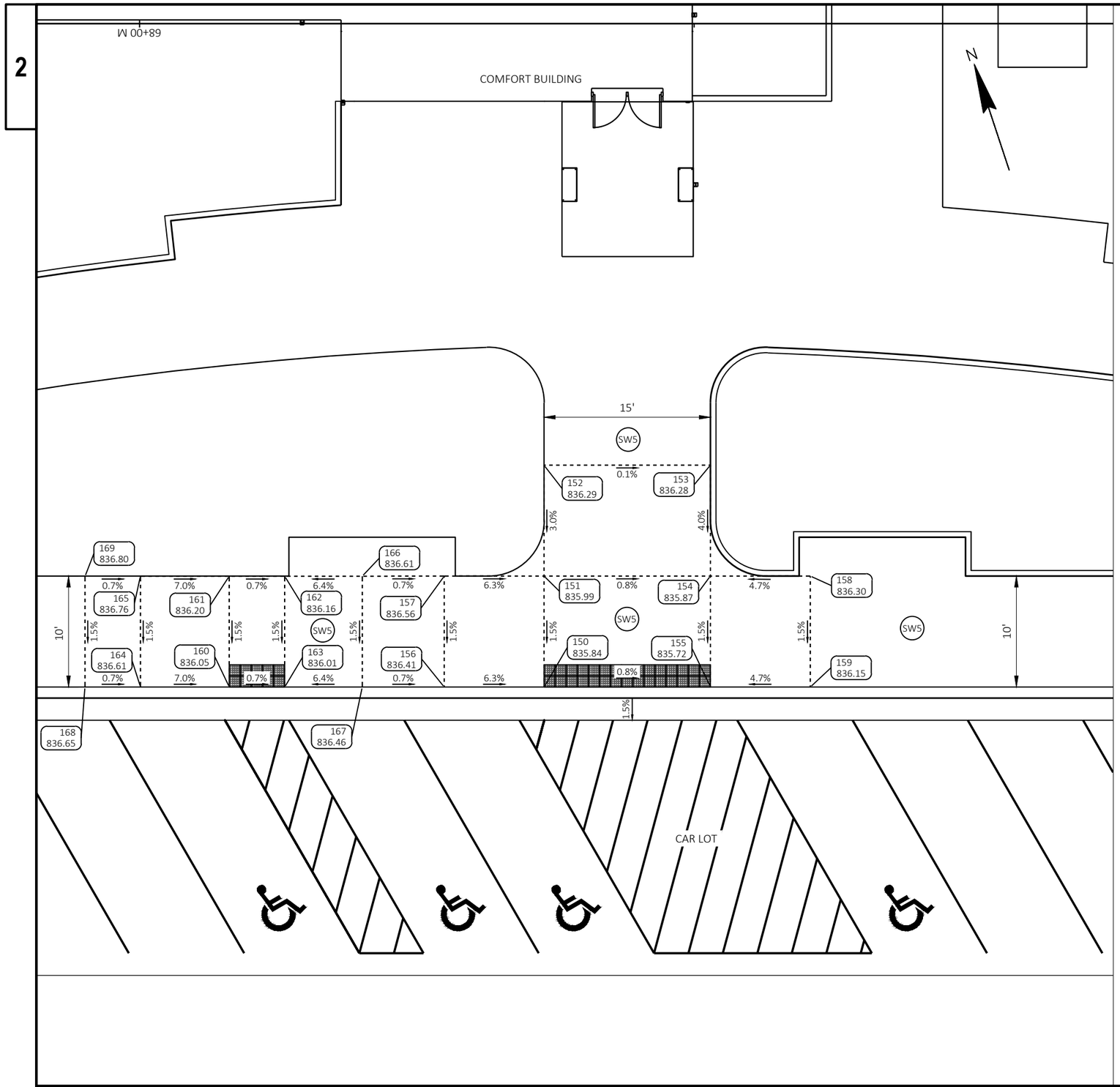
SW5 CONCRETE SIDEWALK 5-INCH

XX YYY.Y POINT NUMBER & ELEVATION

CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

REST AREA 52					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
120	63+51.00	8.47' LT	832.67	384902.38	192864.01
121	63+57.10	16.41' LT	832.95	384896.75	192855.73
122	63+49.19	22.49' LT	832.78	384888.49	192861.34
123	63+43.08	14.57' LT	832.47	384894.10	192869.63
124	63+38.99	17.78' LT	832.74	384889.77	192872.50
125	63+30.71	24.47' LT	832.71	384880.82	192878.26
126	63+37.06	32.20' LT	832.86	384875.47	192869.82
127	63+45.21	25.62' LT	832.89	384884.28	192864.14
128	63+53.92	28.65' LT	832.83	384884.13	192854.92
129	63+61.89	22.62' LT	832.98	384892.36	192849.24
130	63+70.51	6.52' LT	833.66	384910.35	192846.10
131	63+64.70	1.60' RT	833.51	384916.24	192854.17

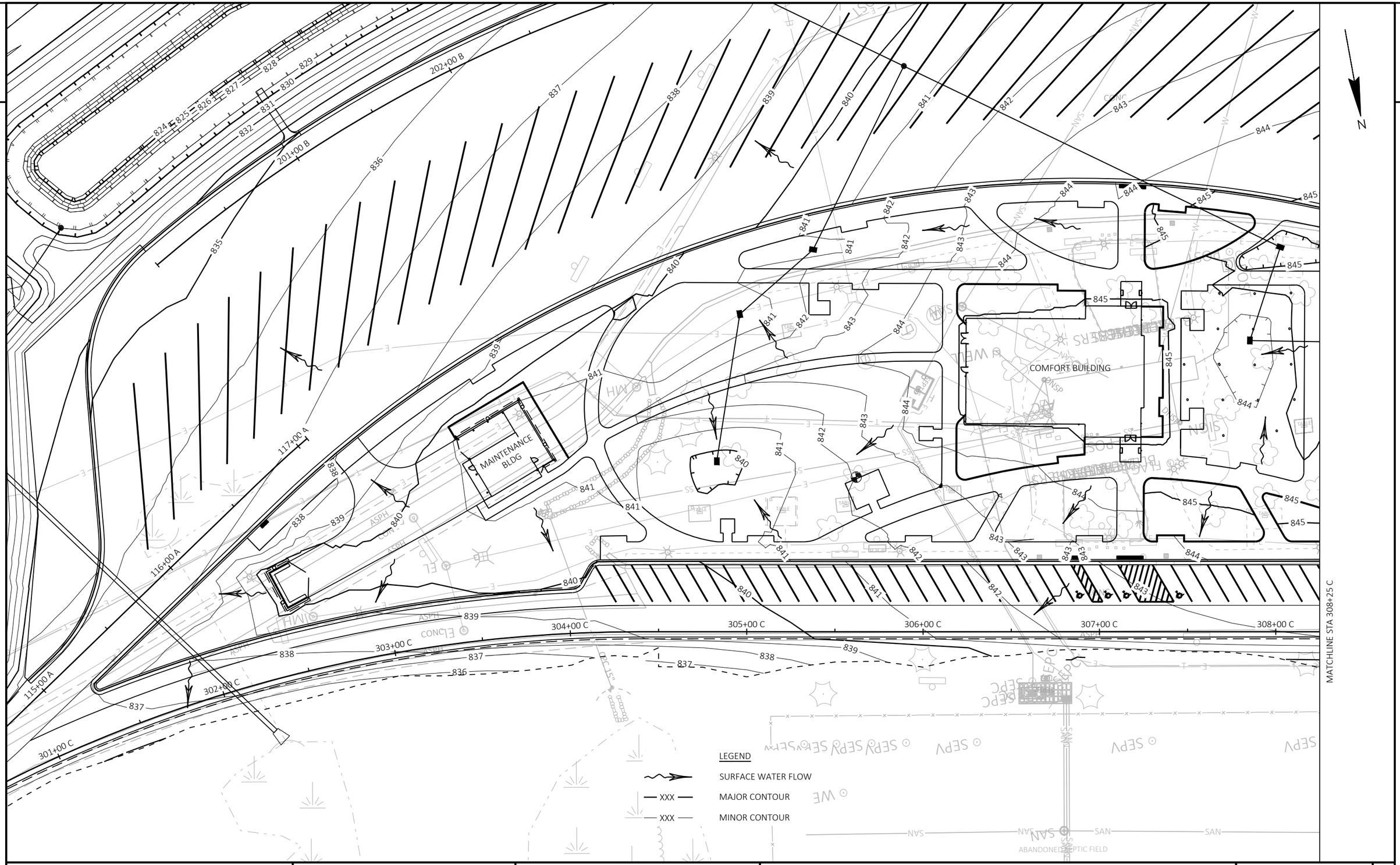
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CURB RAMP DETAILS - REST AREA 52	SHEET 81	E



LEGEND

- SW5 — CONCRETE SIDEWALK 5-INCH
- XX / YYY.Y — POINT NUMBER & ELEVATION
- CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

REST AREA 52					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
150	609+87.45	41.00' RT	835.84	384983.04	192456.19
151	609+87.45	51.00' RT	835.99	384992.54	192459.33
152	609+87.45	61.00' RT	836.29	385002.03	192462.47
153	609+72.45	61.00' RT	836.28	384997.33	192476.71
154	609+72.45	51.00' RT	835.87	384987.83	192473.57
155	609+72.45	41.00' RT	835.72	384978.34	192470.44
156	609+96.45	41.00' RT	836.41	384985.86	192447.65
157	609+96.45	51.00' RT	836.56	384995.36	192450.79
158	609+63.45	51.00' RT	836.30	384985.01	192482.12
159	609+63.45	41.00' RT	836.15	384975.51	192478.99
160	610+15.83	41.00' RT	836.05	384991.94	192429.25
161	610+15.83	50.99' RT	836.20	385001.43	192432.38
162	610+10.83	50.99' RT	836.16	384999.86	192437.13
163	610+10.83	41.00' RT	836.01	384990.37	192433.99
164	610+23.83	41.00' RT	836.61	384994.45	192421.65
165	610+23.83	50.99' RT	836.76	385003.94	192424.78
166	610+03.83	50.99' RT	836.61	384997.66	192443.77
167	610+03.83	41.00' RT	836.46	384988.18	192440.64
168	610+28.83	41.00' RT	836.65	384996.02	192416.90
169	610+28.83	50.99' RT	836.80	385005.51	192420.04



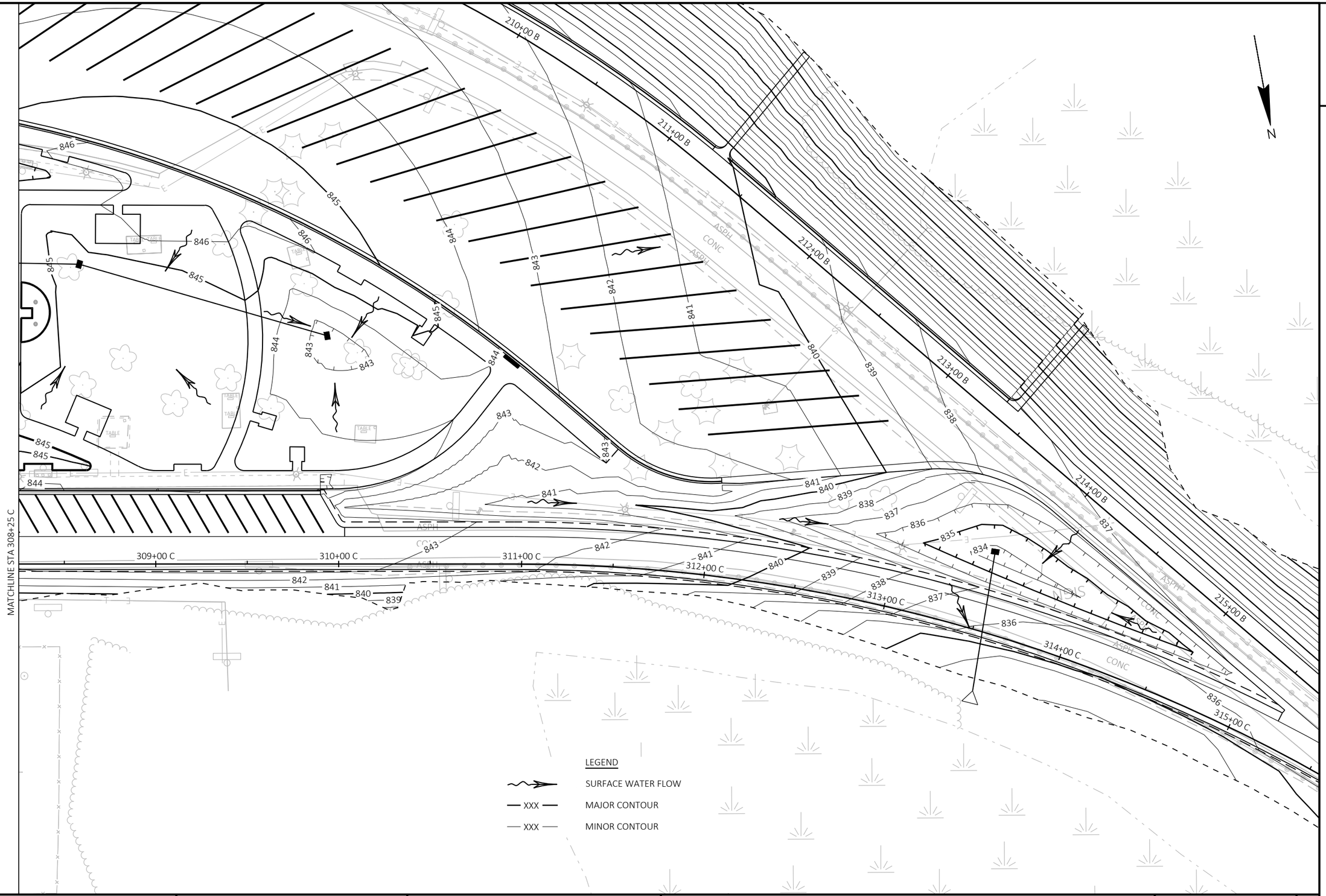
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CONTOUR MAP - REST AREA 51 PLAZA	SHEET 83	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021701-CM.DWG
LAYOUT NAME - 021701-cm

PLOT DATE : 11/26/2024 11:27 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CONTOUR MAP - REST AREA 51 PLAZA	SHEET 84	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021701-CM.DWG
LAYOUT NAME - 021702-cm

PLOT DATE : 11/26/2024 11:27 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

LEGEND

SURFACE WATER FLOW

XXX MAJOR CONTOUR

XXX MINOR CONTOUR

N

MATCHLINE STA 609+75 F

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CONTOUR MAP - REST AREA 52 PLAZA	SHEET 85 E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021702-CM.DWG
LAYOUT NAME - 021703-cm

PLOT DATE : 11/26/2024 11:28 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

SURFACE WATER FLOW

XXX MAJOR CONTOUR

XXX MINOR CONTOUR

MATCHLINE STA 609+75 F

MAINTENANCE BUILDING

COMFORT BUILDING

610+00 F

611+00 F

612+00 F

613+00 F

614+00 F

615+00 F

616+00 F

501+00 E

502+00 E

503+00 E

430+00 D

429+00 D

428+00 D

N

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CONTOUR MAP - REST AREA 52 PLAZA	SHEET 86	E

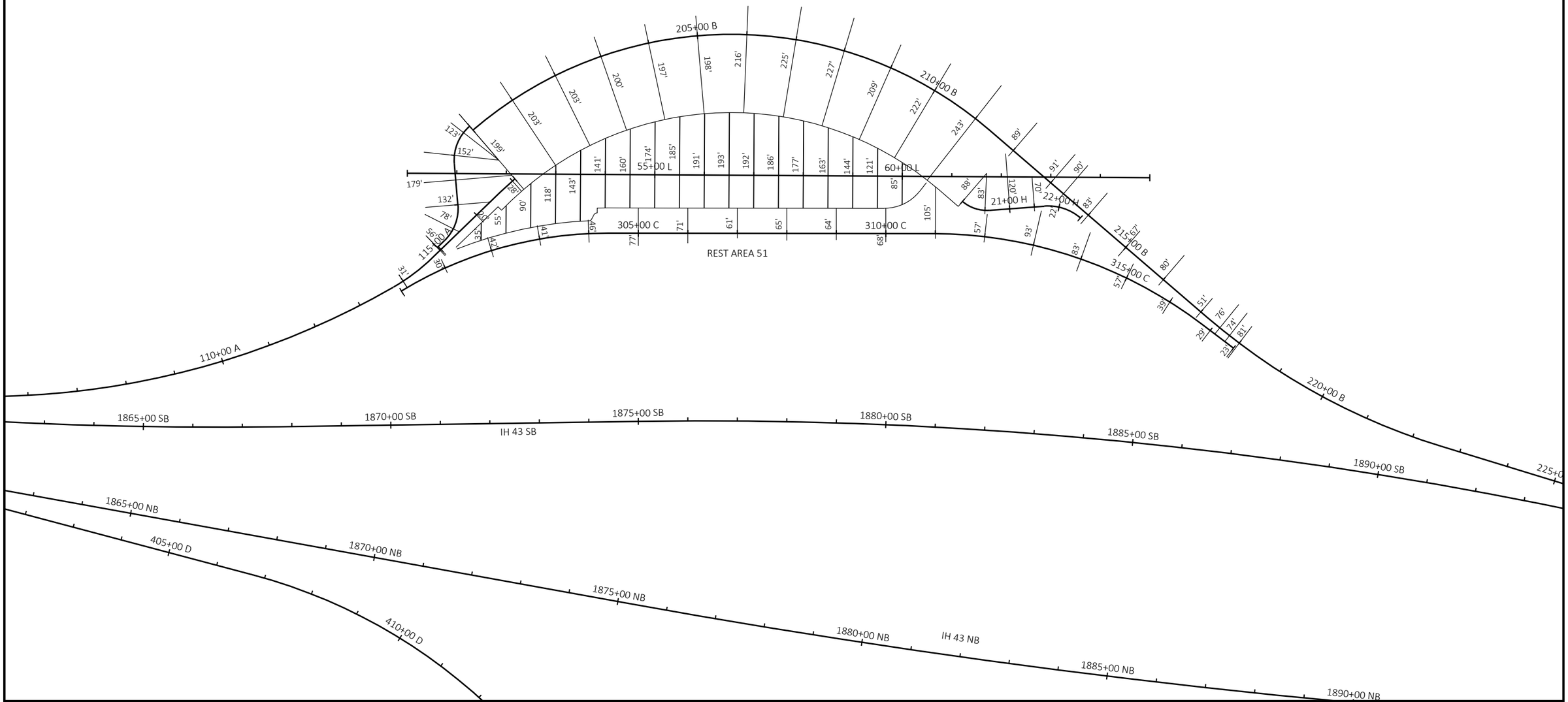
FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021702-CM.DWG
LAYOUT NAME - 021704-cm

PLOT DATE : 11/26/2024 11:28 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

N



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	EARTHWORK MATCHLINES - REST AREA 51	SHEET 87	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021801-XM.DWG
LAYOUT NAME - 021801-xm

PLOT DATE : 11/26/2024 11:28 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

110+00 A

1870+00 SB

IH 43 SB

1875+00 SB

1880+00 SB

1885+00 SB

1890+00 SB

1895+00 SB

225+00 B

1870+00 NB

1875+00 NB

1880+00 NB

IH 43 NB

1885+00 NB

1890+00 NB

1895+00 NB

+00 D

410+00 D

415+00 D

420+00 D

425+00 D

605+00 F

610+00 F

615+00 F

31+00 J

32+00 J

65+00 M

70+00 M

41+00 K

42+00 K

43+00 K

430+00 D

505+00

510+00

REST AREA 52

N

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	EARTHWORK MATCHLINES - REST AREA 52	SHEET 88	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021801-XM.DWG
LAYOUT NAME - 021802-xm

PLOT DATE : 11/26/2024 11:28 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:200 FT

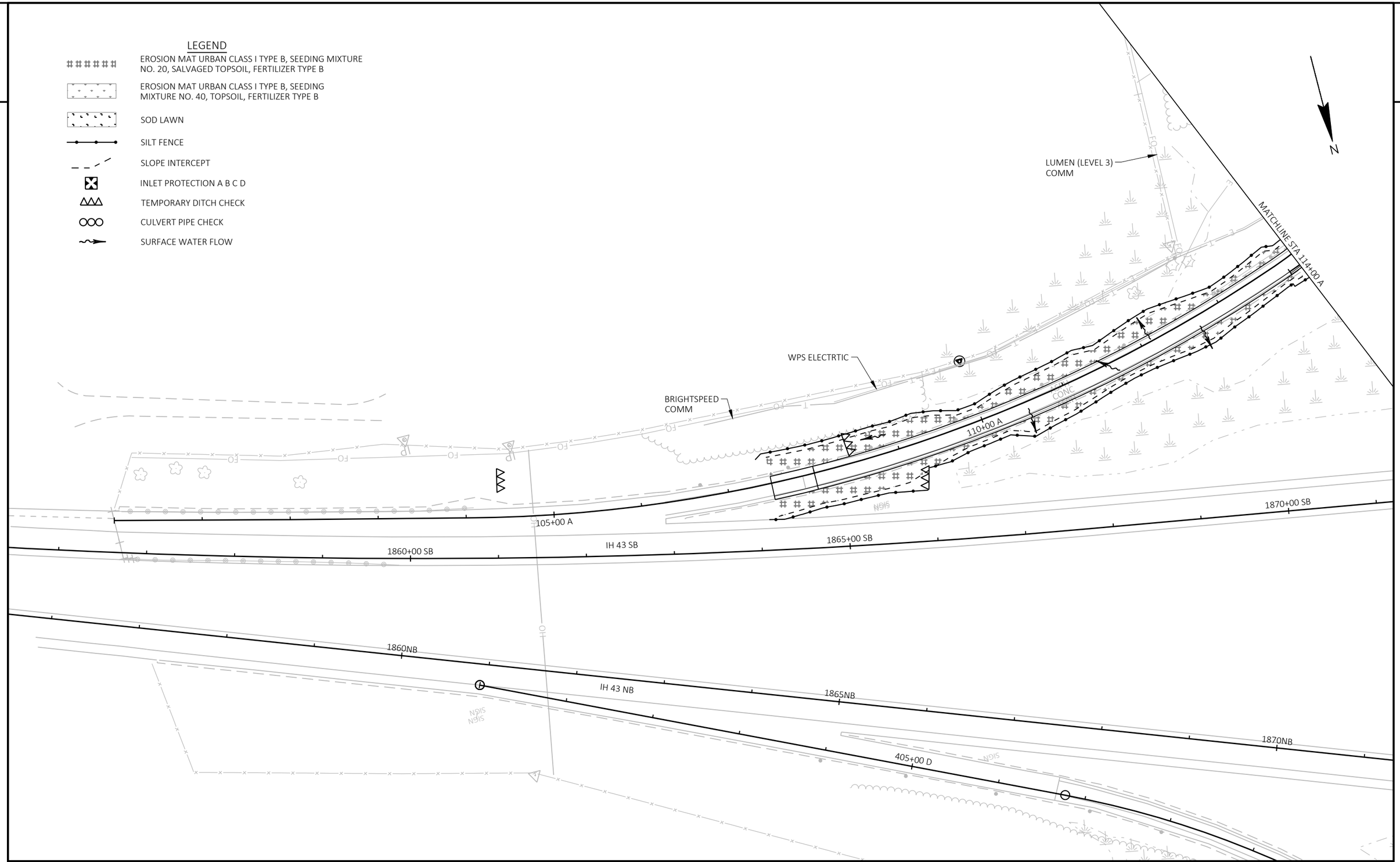
WISDOT/CADDS SHEET 42

2

2

LEGEND

- EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 20, SALVAGED TOPSOIL, FERTILIZER TYPE B
- EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 40, TOPSOIL, FERTILIZER TYPE B
- SOD LAWN
- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION A B C D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	EROSION CONTROL - REST AREA 51	SHEET 89	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\022001-EC_RA51.DWG
LAYOUT NAME - 022001-ec

PLOT DATE : 11/26/2024 11:29 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 20, SALVAGED TOPSOIL, FERTILIZER TYPE B
- EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 40, TOPSOIL, FERTILIZER TYPE B
- SOD LAWN
- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION A B C D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

LUMEN (LEVEL 3)
COMM

10'X10' RIP RAP MEDIUM,
GEOTEXTILE TYPE HR

6'X6' RIP RAP MEDIUM,
GEOTEXTILE TYPE HR

6'X6' RIP RAP MEDIUM,
GEOTEXTILE TYPE HR

205+00 B

210+00 B

6'X6' RIP RAP MEDIUM,
GEOTEXTILE TYPE HR

6'X6' RIP RAP MEDIUM,
GEOTEXTILE TYPE HR

10'X10' RIP RAP MEDIUM,
GEOTEXTILE TYPE HR

305+00 C

310+00 C

215+00 B

315

MATCHLINE STA 114+00 A

115+00 A

10'X10' RIP RAP MEDIUM,
GEOTEXTILE TYPE HR

ABANDONED SEPTIC FIELD

10'X10' RIP RAP MEDIUM,
GEOTEXTILE TYPE HR

MATCHLINE STA 315+00 C

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	EROSION CONTROL - REST AREA 51	SHEET 90	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\022001-EC_RA51.DWG
LAYOUT NAME - 022002-ec

PLOT DATE : 11/26/2024 11:29 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 20, SALVAGED TOPSOIL, FERTILIZER TYPE B
- EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 40, TOPSOIL, FERTILIZER TYPE B
- SOD LAWN
- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION A B C D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

LUMEN (LEVEL 3) COMM

MATCHLINE STA 315+00 C

00 C

220+00 B

ASPH

CONC

WASH

10'X10' RIP RAP MEDIUM, GEOTEXTILE TYPE HR

225+00 B

IH 43 SB

1895+00 SB

1890+00 SB

1885+00 SB

N

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	EROSION CONTROL - REST AREA 51	SHEET 91	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\022001-EC_RA51.DWG
LAYOUT NAME - 022003-ec

PLOT DATE : 11/26/2024 11:29 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

WPS ELECTRIC

BRIGHTSPEED COMM

LUMEN (LEVEL 3) COMM

110+00 A

1870+00 SB

1865+00 SB

PCC: 104+00.55 A

105+00 A

IH 43 SB

1860+00 SB

WPS ELECTRIC

1875+00 NB

1870+00 NB

1865+00 NB

1860+00 NB

405+00 D

410+00 D

10'X10' RIP RAP MEDIUM, GEOTEXTILE TYPE HR

MATCHLINE STA 414+00 D

N

LEGEND

- EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 20, SALVAGED TOPSOIL, FERTILIZER TYPE B
- EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 40, TOPSOIL, FERTILIZER TYPE B
- SOD LAWN
- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION A B C D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	EROSION CONTROL - REST AREA 52	SHEET 92	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\022001-EC_RA52.DWG
LAYOUT NAME - 022004-ec

PLOT DATE : 11/26/2024 11:30 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 20, SALVAGED TOPSOIL, FERTILIZER TYPE B

EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 40, TOPSOIL, FERTILIZER TYPE B

SOD LAWN

SILT FENCE

SLOPE INTERCEPT

INLET PROTECTION A B C D

TEMPORARY DITCH CHECK

CULVERT PIPE CHECK

SURFACE WATER FLOW

N

10'X10' RIP RAP MEDIUM, GEOTEXTILE TYPE HR

10'X10' RIP RAP MEDIUM, GEOTEXTILE TYPE HR

MATCHLINE STA 414+00 D

415+00 D

605+00 F

610+00 F

615+00 F

MATCHLINE STA 502+00 E

CENTURY LINK COMM

WPS ELECTRIC

CONC

ASPH

COMFORT BUILDING

MAINTENANCE BUILDING

420+00 D

425+00 D

430+00 D

ABANDONED SEPTIC FIELD

SAN

SEPV

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	EROSION CONTROL - REST AREA 52	SHEET 93	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\022001-EC_RA52.DWG
LAYOUT NAME - 022005-ec

PLOT DATE : 11/26/2024 11:30 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

1900+00 SB

IH 43 SB

1890+00 NB

1895+00 NB

1900+00 NB

IH 43 NB

515+00 E

510+00 E

505+00 E

10'X10' RIP RAP MEDIUM,
GEOTEXTILE TYPE HR

MATCHLINE STA 502+00 E

N

LEGEND

EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 20, SALVAGED TOPSOIL, FERTILIZER TYPE B

EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 40, TOPSOIL, FERTILIZER TYPE B

SOD LAWN

SILT FENCE

SLOPE INTERCEPT

INLET PROTECTION A B C D

TEMPORARY DITCH CHECK

CULVERT PIPE CHECK

SURFACE WATER FLOW

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	EROSION CONTROL - REST AREA 52	SHEET 94	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\022001-EC_RA52.DWG
LAYOUT NAME - 022006-ec

PLOT DATE : 11/26/2024 11:30 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

WORK TO BE COMPLETED UNDER
PROJECT ID 1225-10-73

LUMEN (LEVEL 3) COMM

N

SI

200

205+00 B

P-200

BASIN

201

P-101

P-201

CONC

210+00 B

325

P-325

326

WPS ELECTRIC

104

P-103

103

202

P-202

P-203

P-204

205

ROOF DRAIN
(BY OTHERS)

COMFORT
BUILDING

203

204

ROOF DRAIN
(BY OTHERS)

BRIGHTSPEED COMM

WPS ELECTRIC

P-102

102

ASPH
CONC

CONC

305+00 C

310+00 C

302

115+00 A

SI

WPS ELECTRIC

CENTURYLINK COMM

P-301

301

SAN

ABANDONED SEPTIC FIELD

IH 43 SB

102	STA 304+83 C, 96.6' LT INLETS MEDIAN 1G-MS
103	STA 304+96 C, 180.1' LT INLETS MEDIAN 1G-MS
104	STA 305+38 C, 216.7' LT INLETS MEDIAN 1G-MS
200	STA 304+24, 403.7' LT APRON ENDWALLS FOR CPRC 18-INCH
201	STA 204+60, 74.6' RT MANHOLES 5-J
202	STA 308+03 C, 218.1' LT INLETS MEDIAN 1G-MS
203	STA 307+85 C, 165.2' LT INLETS MEDIAN 1G-MS
204	STA 308+58 C, 163.8' LT INLETS MEDIAN 1G-MS
205	STA 309+94 C, 124.8' LT INLETS MEDIAN 1G-MS
301	STA 313+60 C, 32.4' RT APRON ENDWALLS FOR CPRC 18-INCH
302	STA 313+50 C, 44.0' LT INLETS MEDIAN 1G-MS
325	STA 116+85 A, 182.1' LT MANHOLES 5x5 SPECIAL
326	STA 116+50 A, 173.5' LT APRON ENDWALLS FOR CPRC 18-INCH

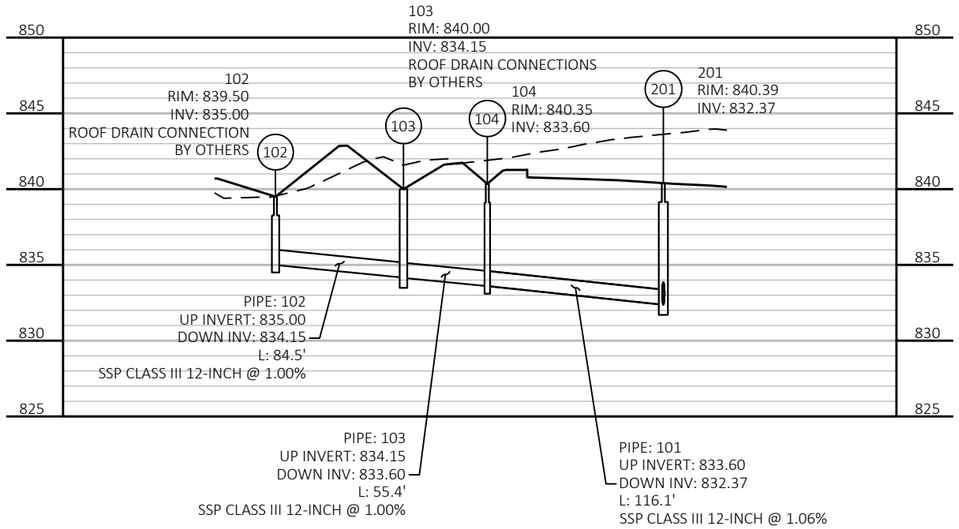
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	STORM SEWER PLAN - REST AREA 51	SHEET 95	E

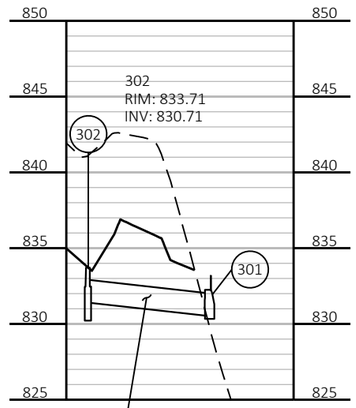
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LAYOUT NAME - 022501-ss

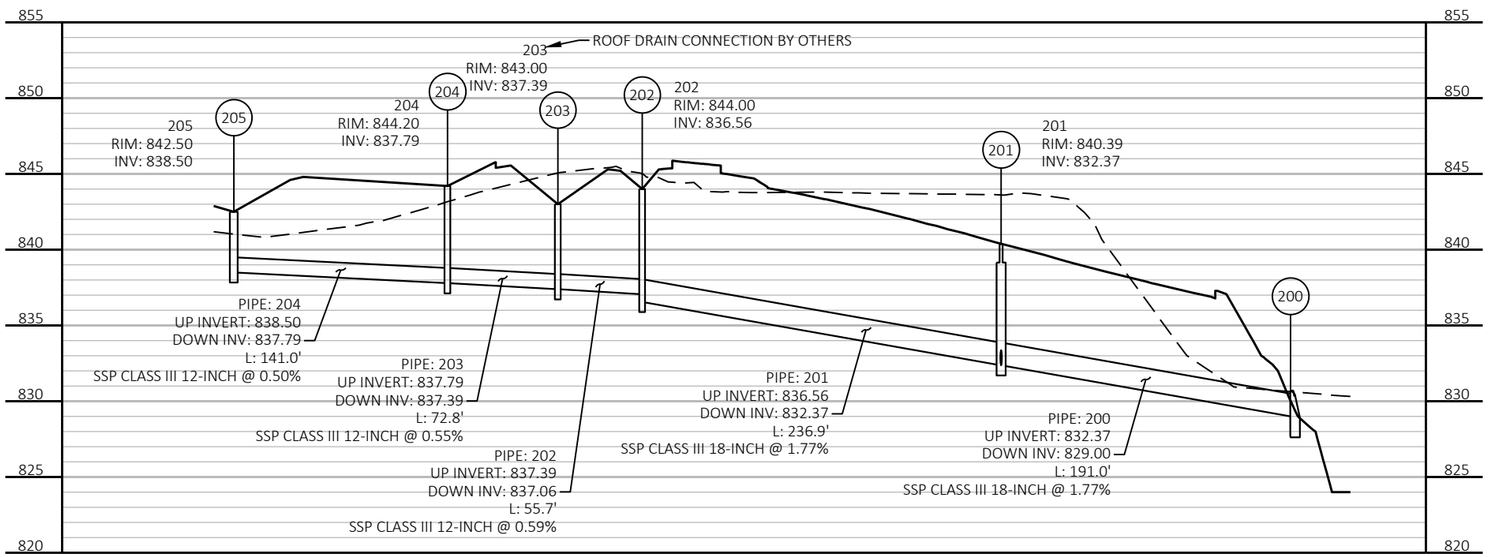
PLOT DATE : 11/26/2024 11:30 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

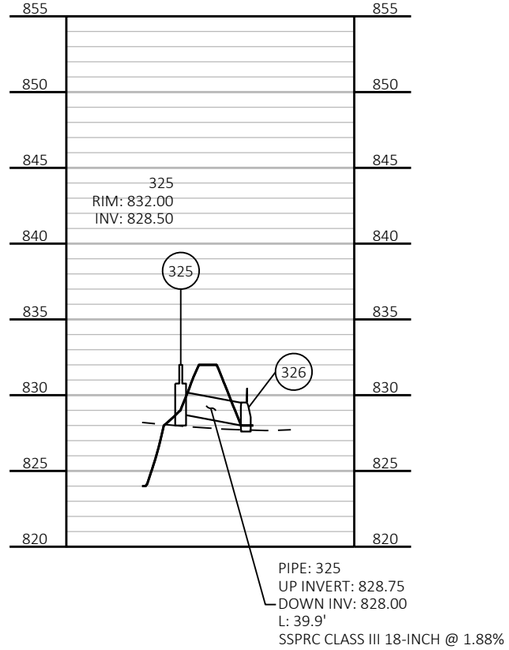
WISDOT/CADDS SHEET 42

2









PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	STORM SEWER PLAN - REST AREA 51	SHEET 96	E

WORK TO BE COMPLETED UNDER PROJECT ID 1225-10-73

LEGEND

SURFACE WATER FLOW

XXX MAJOR CONTOUR

XXX MINOR CONTOUR

POINT TABLE			
POINT NAME	Y	X	ELEVATION
P-1	383177.652	193182.660	829.00
P-2	383139.245	193174.759	829.00
P-3	383079.533	193056.174	829.00
P-4	383077.774	193051.622	829.00
P-5	383019.608	192842.218	829.00
P-6	383036.641	192811.983	829.00
P-7	383038.883	192811.312	829.00
P-8	383064.718	192818.639	829.00
P-9	383074.951	192830.132	829.00
P-10	383080.765	192841.710	829.00
P-11	383087.561	192874.685	829.00
P-12	383094.537	192902.817	829.00
P-13	383100.466	192924.276	829.00
P-14	383111.171	192957.810	829.00
P-15	383119.909	192982.269	829.00
P-16	383133.047	193015.393	829.00
P-17	383146.718	193045.880	829.00
P-18	383154.794	193062.575	829.00
P-19	383171.279	193093.908	829.00
P-20	383197.483	193138.928	829.00
P-21	383191.954	193170.648	829.00

BASIN

NWL EL 829.0

EL 824.0

R25'

WPS ELECTRIC

BRIGHTSPEED COMM

ROOF DRAIN (BY OTHERS)

P-200

P-101

P-102

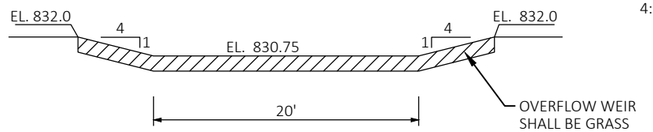
P-103

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	STORM WATER BASIN - REST AREA 51	SHEET 97	E

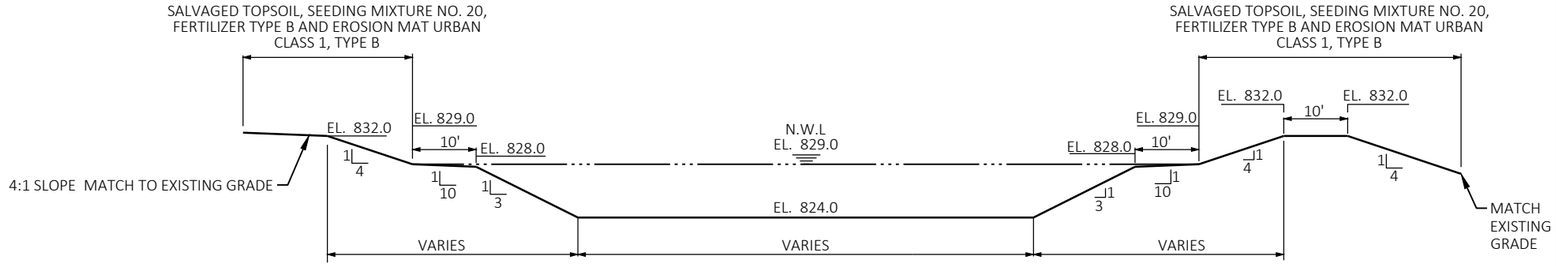
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LAYOUT NAME - 022503-ss Basin

PLOT DATE : 11/26/2024 11:30 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:50 FT

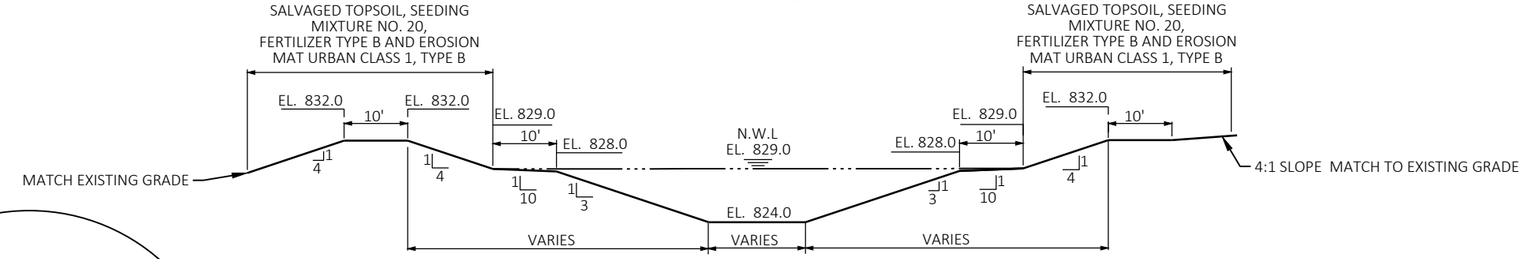
WISDOT/CADDS SHEET 42



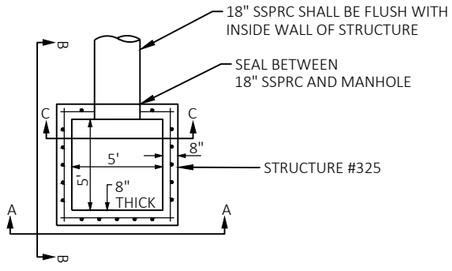
SECTION C-C
EMERGENCY OVERFLOW WEIR



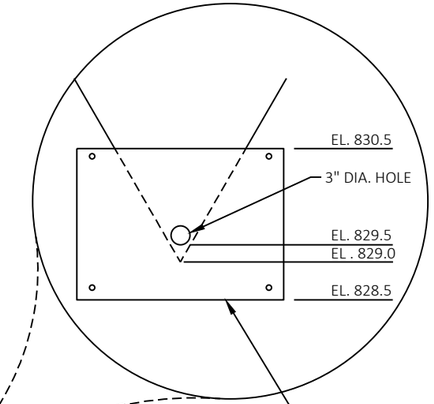
SECTION A-A
NOT TO SCALE



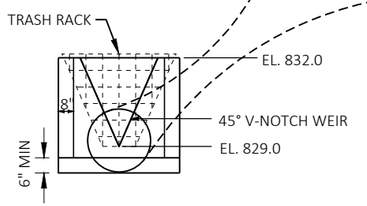
SECTION B-B
NOT TO SCALE



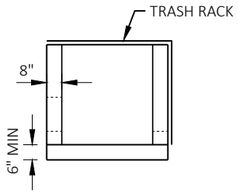
PLAN VIEW



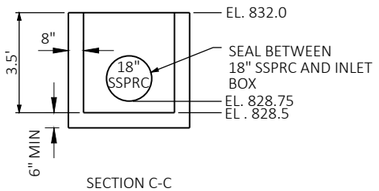
ATTACH TRASH RACK TO CONCRETE STRUCTURE WITH 6 ½" X 3" ANCHOR BOLTS AND CLIPS. GRATING SHALL BE 4" O.C. VERTICAL AND 7" O.C. HORIZONTAL TRASH RACK SHALL BE CONSTRUCTED OF GALVANIZED #4 REBAR.
TRASH RACK TO ALSO COVER WEIR.
TRASH RACK INCIDENTAL TO MANHOLE 5X5-FT SPECIAL.



SECTION A-A



SECTION B-B

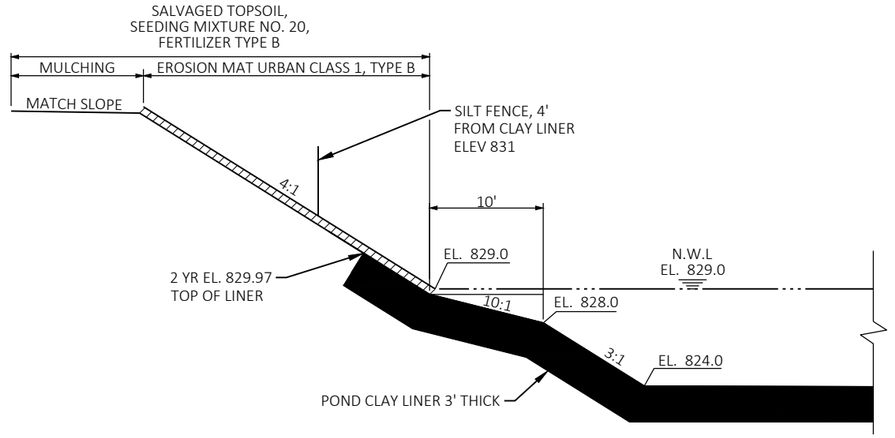


SECTION C-C

NOTES:

1. CONSTRUCT MANHOLES 5X5-FT, SPECIAL IN ACCORDANCE WITH STANDARD SPEC 611 AND SDD 08B10. DETAILS NOT SHOWN HEREIN, REFER TO SDD.
2. FLAT SLAB TOP AND CASTING NOT REQUIRED.
3. TEMPORARY STEEL PLATE TO BE IN PLACE DURING CONSTRUCTION AND UNTIL VEGETATION IS ESTABLISHED. REMOVE JUST PRIOR TO PROJECT COMPLETION.

MANHOLE 5x5-FT SPECIAL (STRUCTURE #325)
NOT TO SCALE



TYPICAL SECTION THROUGH BASIN
NOT TO SCALE

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	STORM WATER BASIN DETAILS - REST AREA 51	SHEET 98	E

IH 43 NB

401 STA 605+51 F, 90.2' LT
APRON ENDWALLS FOR CPRC 36-INCH

402 STA 605+74 F, 33.3' RT
MANHOLES 6-C

416 STA 603+74 F, 52.7' RT
INLETS MEDIAN 1G-MS

417 STA 418+00 D, 10.0' RT
INLETS 2x3-H

418 STA 418+10 D, 10.0' RT
INLETS 2x3-H

415 STA 419+33 D, 10.0' RT
INLETS 2x3-H

403 STA 606+42 F, 66.1' RT
MANHOLES 5-C

404 STA 608+18 F, 82.7' RT
MANHOLES 5-C

405 STA 610+64 F, 56.5' RT
MANHOLES 4-J

406 STA 611+10 F, 92.1' RT
MANHOLES 4-C

407 STA 611+21 F, 154.3' RT
MANHOLES 5-C

408 STA 426+97 D, 9.9' RT
INLETS 2x3-H

409 STA 427+17 D, 9.9' RT
INLETS 2x3-H

410 STA 428+91 D, 10.0' RT
INLETS 2x3-H

411 STA 424+84 D, 10.0' RT
INLETS 2x3-H

412 STA 610+71 F, 197.6' RT
INLETS MEDIAN 1G-MS

413 STA 609+17 F, 131.5' RT
INLETS MEDIAN 1G-MS

414 STA 608+96 F, 197.9' RT
INLETS MEDIAN 1G-MS

419 STA 426+95 D, 2.1' RT
MANHOLES 5-J

501 STA 606+79 F, 311.9' LT
APRON ENDWALLS FOR CPRC 18-INCH

502 STA 606+48 F, 268.3' LT
MANHOLES 5x5 SPECIAL

LEGEND

SURFACE WATER FLOW

N

BASIN

COMFORT BUILDING

ROOF DRAIN (BY OTHERS)

ROOF DRAIN (BY OTHERS)

ABANDONED SEPTIC FIELD

415+00 D

420+00 D

425+00 D

430+00 D

605+00 F

610+00 F

615+00 F

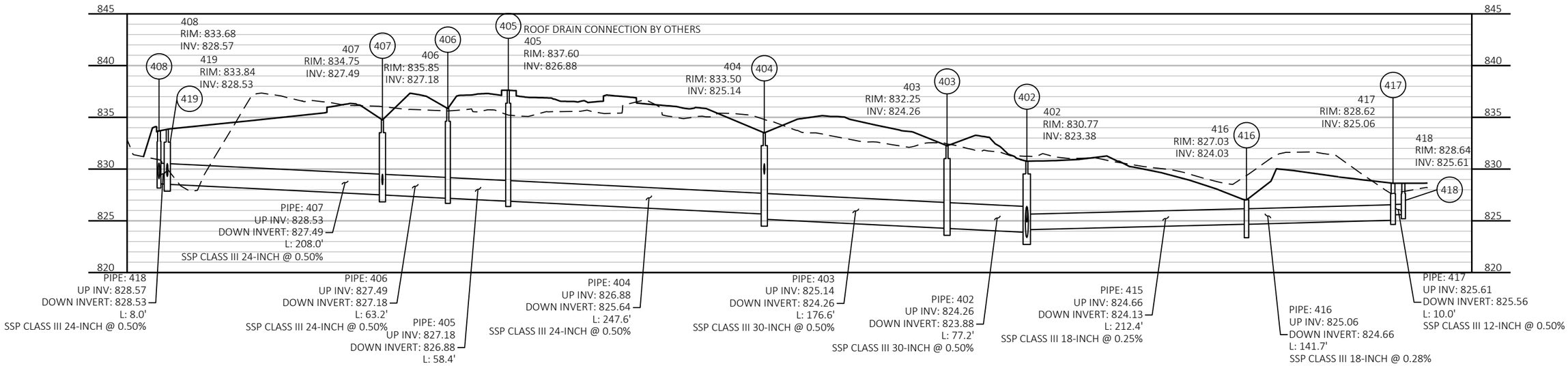
P-401 P-402 P-403 P-404 P-405 P-406 P-407 P-408 P-409 P-410 P-411 P-412 P-413 P-414 P-415 P-416 P-417 P-418 P-501

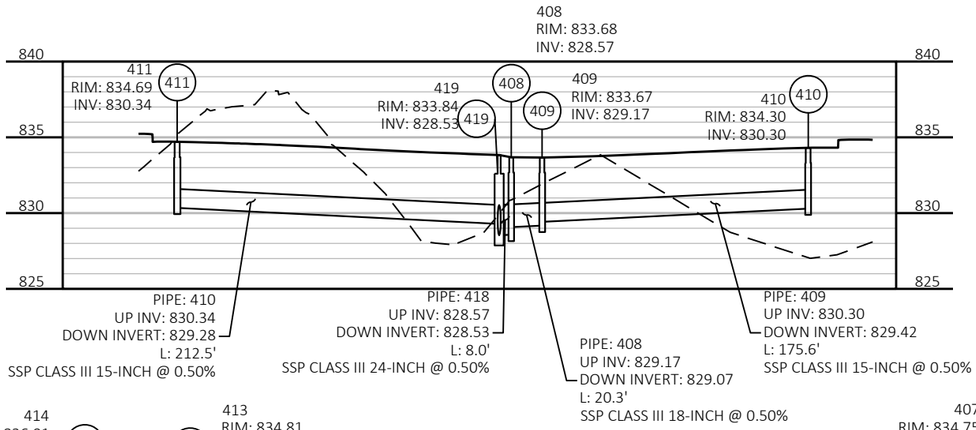
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	STORM SEWER PLAN - REST AREA 52	SHEET 99	E

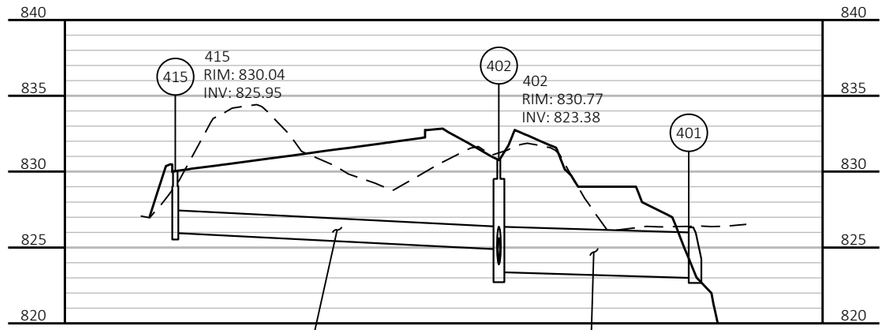
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LAYOUT NAME - 022503-ss

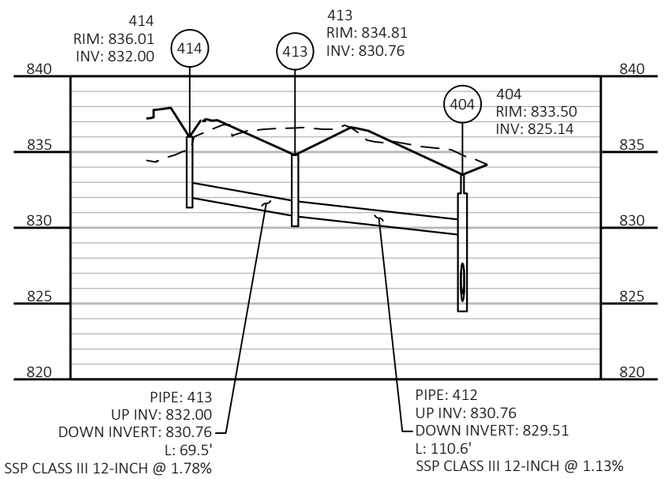
PLOT DATE : 11/26/2024 11:31 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

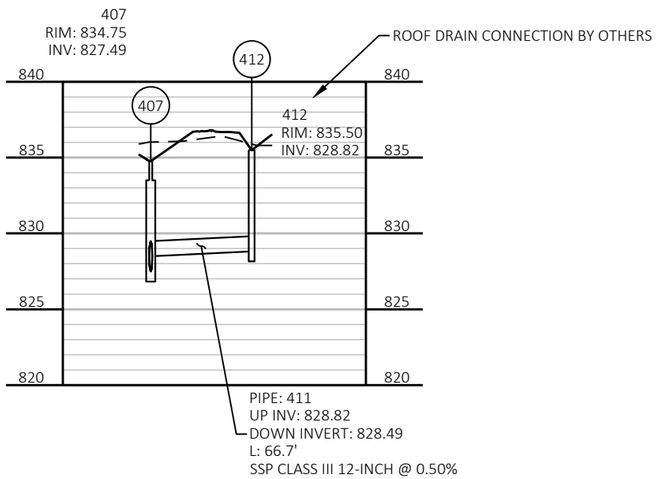
WISDOT/CADDS SHEET 42

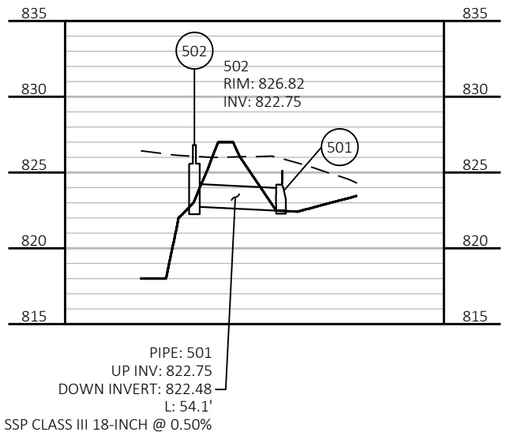








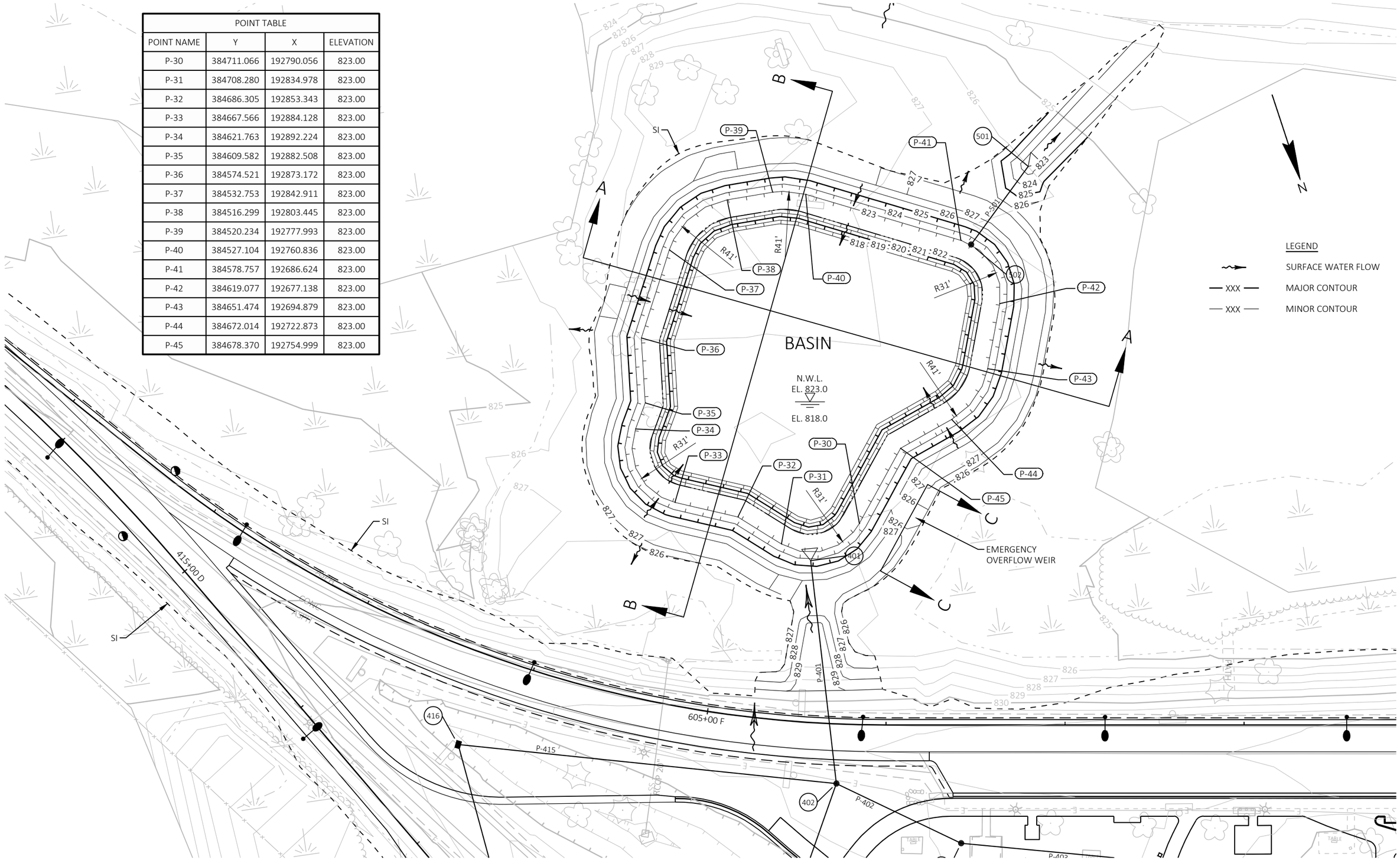




PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	STORM SEWER PLAN - REST AREA 52	SHEET 100	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\022501-SS_RA52.DWG
LAYOUT NAME - 022504-ss
PLOT DATE : 11/26/2024 11:31 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : ############
WISDOT/CADDS SHEET 42

POINT TABLE			
POINT NAME	Y	X	ELEVATION
P-30	384711.066	192790.056	823.00
P-31	384708.280	192834.978	823.00
P-32	384686.305	192853.343	823.00
P-33	384667.566	192884.128	823.00
P-34	384621.763	192892.224	823.00
P-35	384609.582	192882.508	823.00
P-36	384574.521	192873.172	823.00
P-37	384532.753	192842.911	823.00
P-38	384516.299	192803.445	823.00
P-39	384520.234	192777.993	823.00
P-40	384527.104	192760.836	823.00
P-41	384578.757	192686.624	823.00
P-42	384619.077	192677.138	823.00
P-43	384651.474	192694.879	823.00
P-44	384672.014	192722.873	823.00
P-45	384678.370	192754.999	823.00

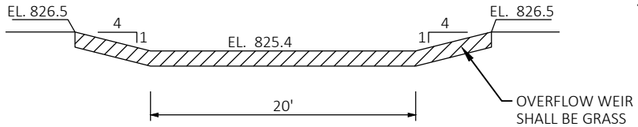


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	STORM WATER BASIN - REST AREA 52	SHEET 101	E

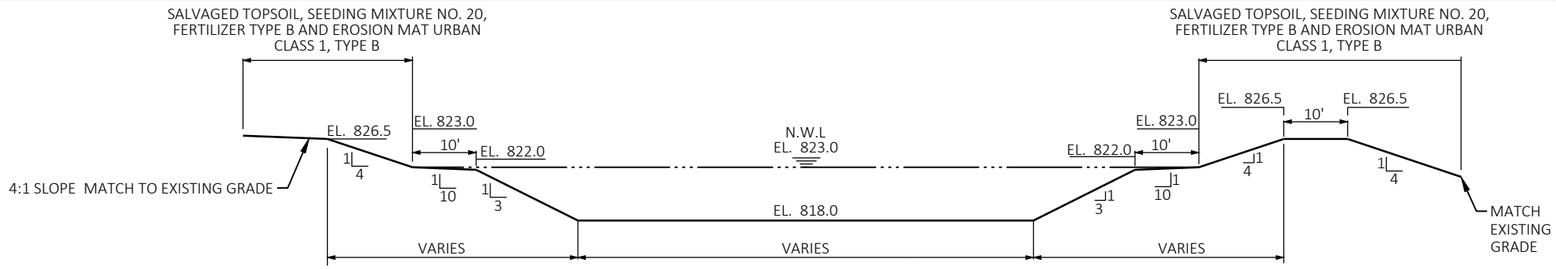
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LAYOUT NAME - 022505-ss

PLOT DATE : 11/26/2024 11:31 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:50 FT

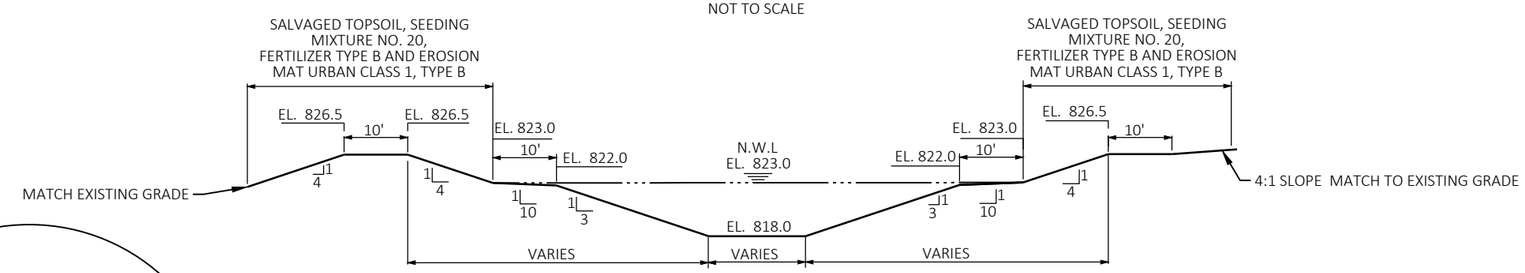
WISDOT/CADDS SHEET 42



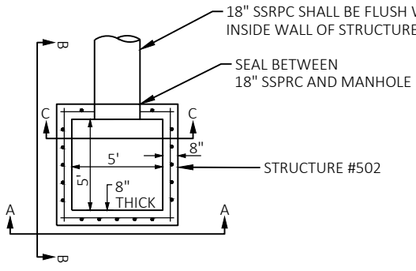
SECTION C-C
EMERGENCY OVERFLOW WEIR



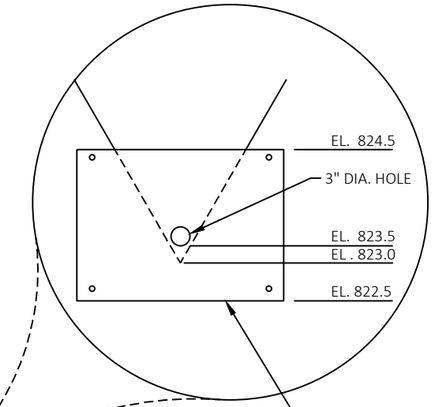
SECTION A-A
NOT TO SCALE



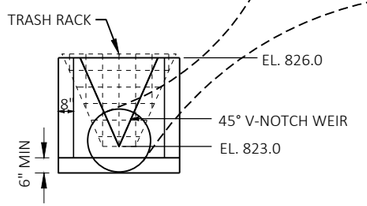
SECTION B-B
NOT TO SCALE



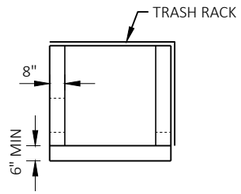
PLAN VIEW



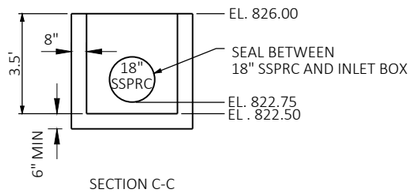
ATTACH TRASH RACK TO CONCRETE STRUCTURE WITH 6 ½" X 3" ANCHOR BOLTS AND CLIPS. GRATING SHALL BE 4" O.C. VERTICAL AND 7" O.C. HORIZONTAL TRASH RACK SHALL BE CONSTRUCTED OF GALVANIZED #4 REBAR.
TRASH RACK TO ALSO COVER WEIR.
TRASH RACK INCIDENTAL TO MANHOLE 5X5-FT SPECIAL.



SECTION A-A



SECTION B-B

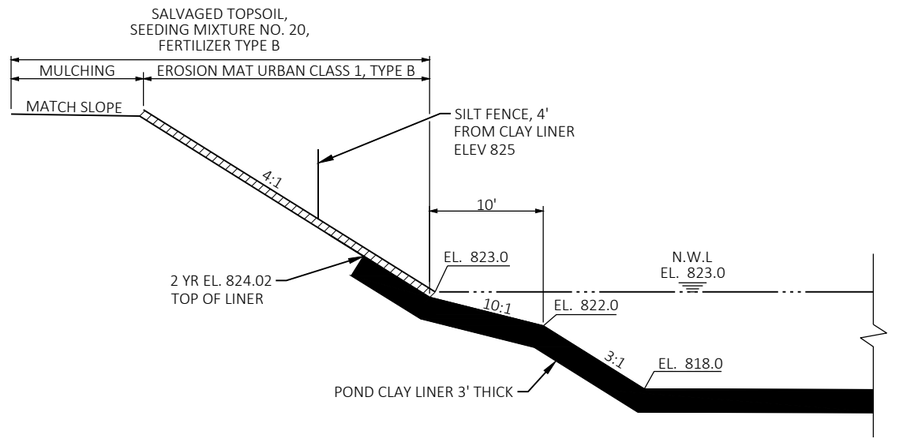


SECTION C-C

NOTES:

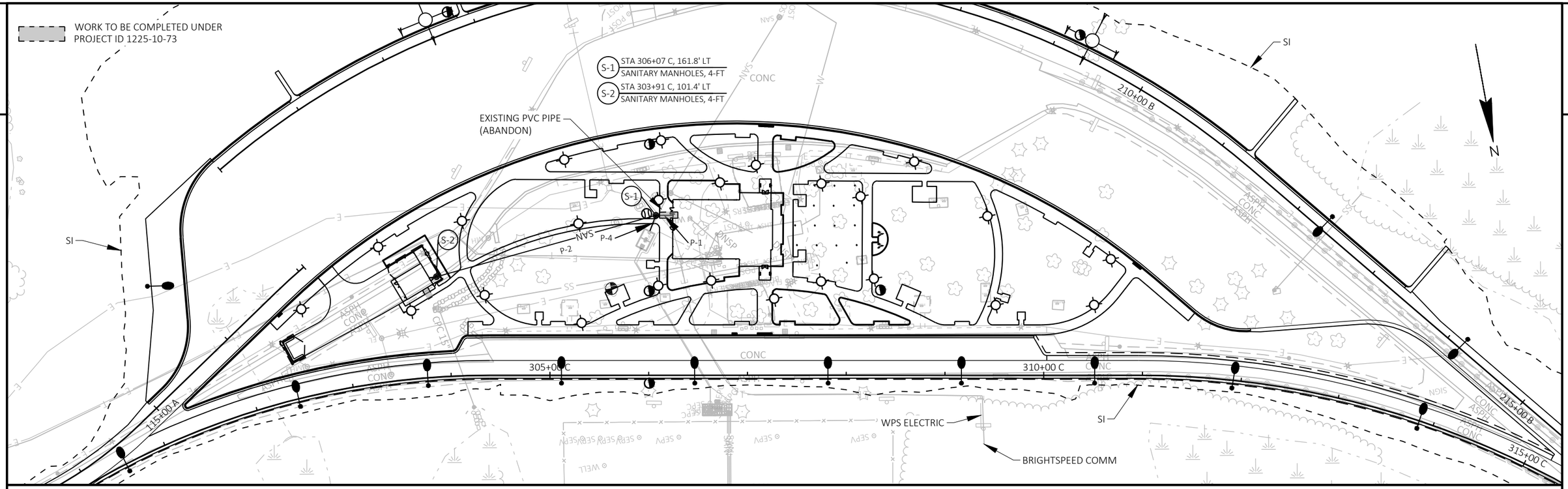
1. CONSTRUCT MANHOLES 5X5-FT, SPECIAL IN ACCORDANCE WITH STANDARD SPEC 611 AND SDD 08B10. DETAILS NOT SHOWN HEREIN, REFER TO SDD.
2. FLAT SLAB TOP AND CASTING NOT REQUIRED.
3. TEMPORARY STEEL PLATE TO BE IN PLACE DURING CONSTRUCTION AND UNTIL VEGETATION IS ESTABLISHED. REMOVE JUST PRIOR TO PROJECT COMPLETION.

MANHOLE 5x5-FT SPECIAL (STRUCTURE #502)
NOT TO SCALE

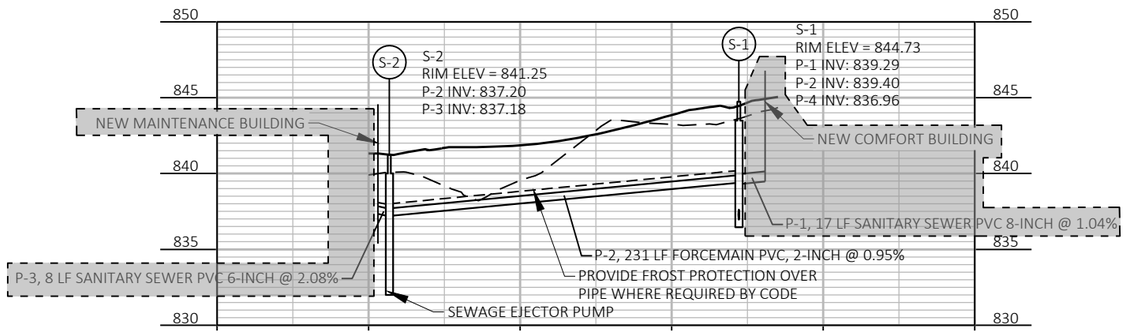


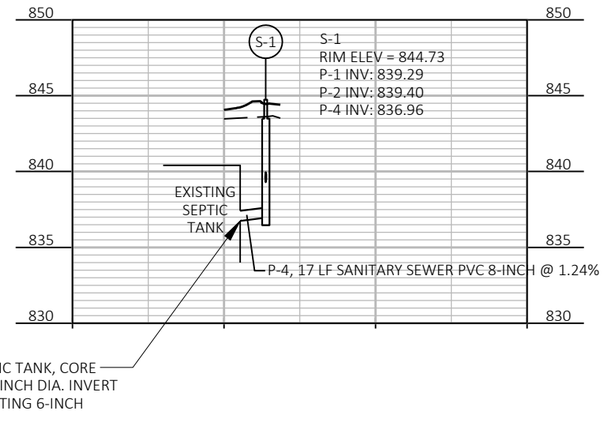
TYPICAL SECTION THROUGH BASIN
NOT TO SCALE

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	STORM WATER BASIN DETAILS - REST AREA 52	SHEET 102	E



WORK TO BE COMPLETED UNDER
PROJECT ID 1225-10-73

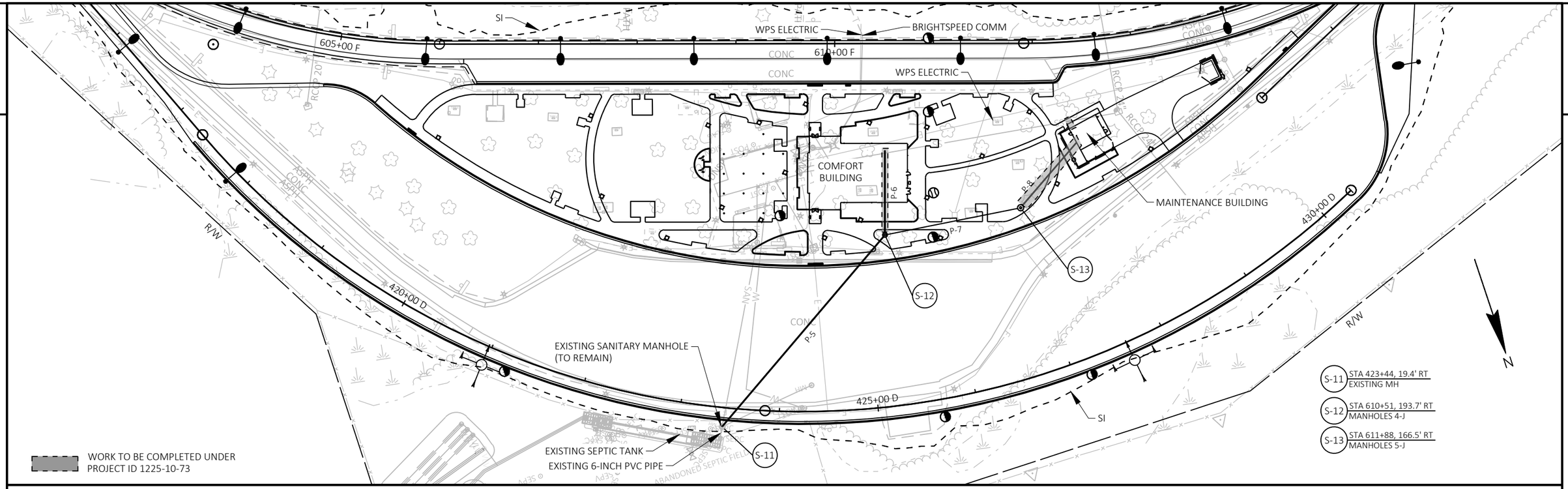


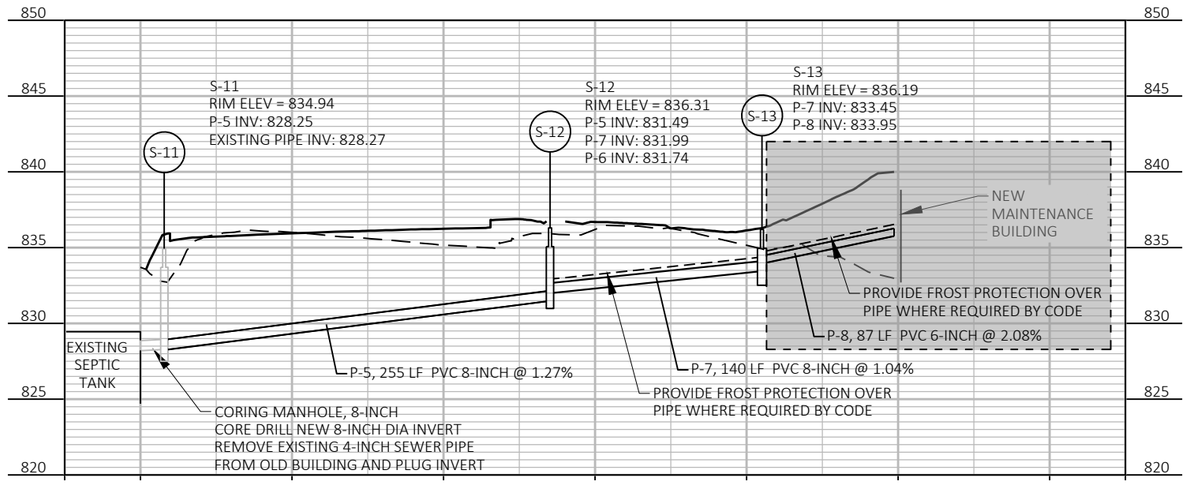


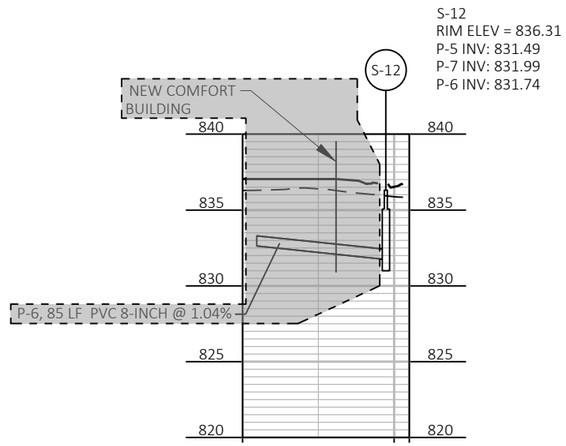
WISCONSIN
DAVID M.
SIMON
E-28713
MADISON,
WI
PROFESSIONAL ENGINEER

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	SANITARY SEWER - REST AREA 51	SHEET 103	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023001-UP_RA51_SAN.DWG
LAYOUT NAME - 023001-up
PLOT DATE : 7/23/2024 3:19 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : ############
WISDOT/CADDS SHEET 42



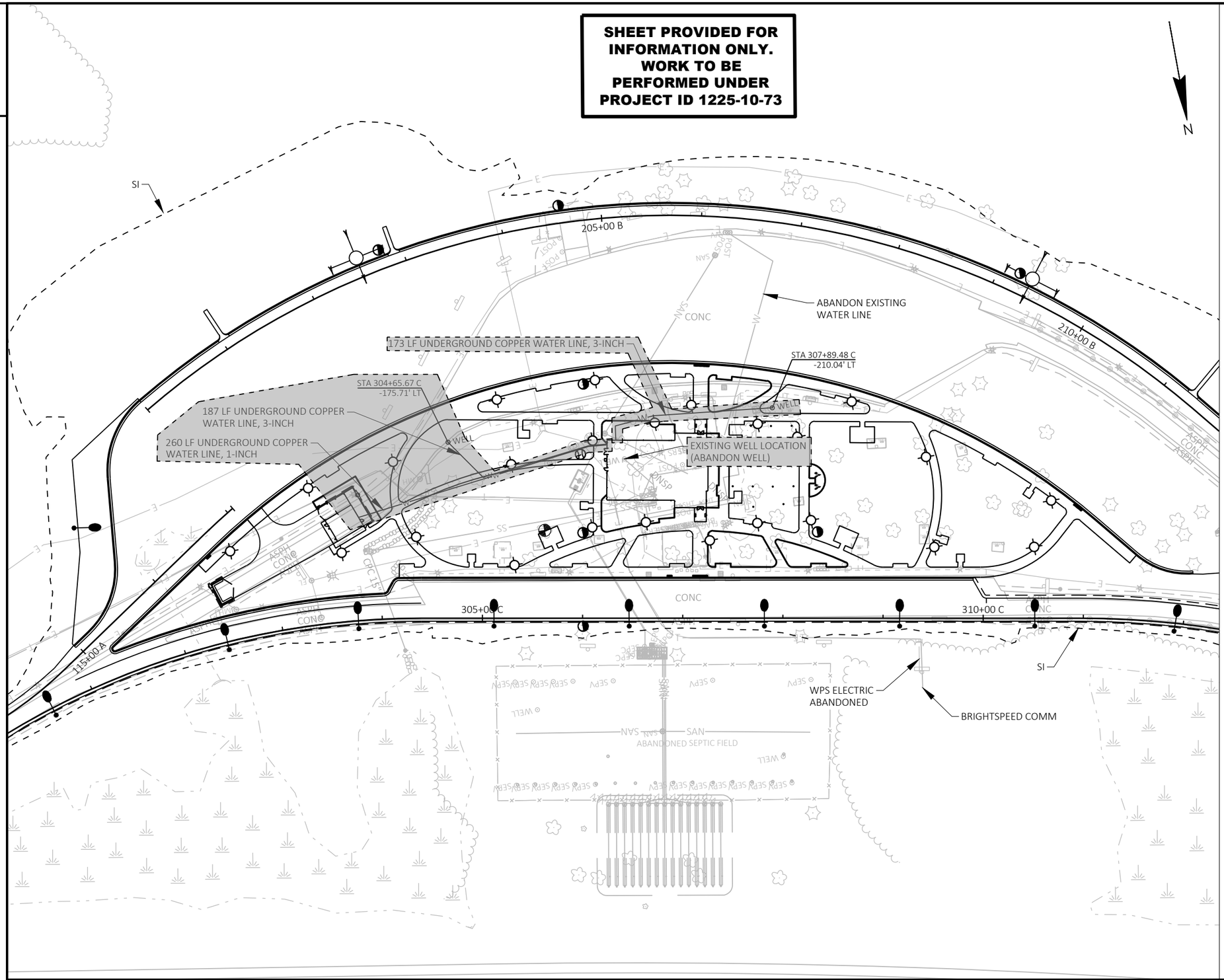


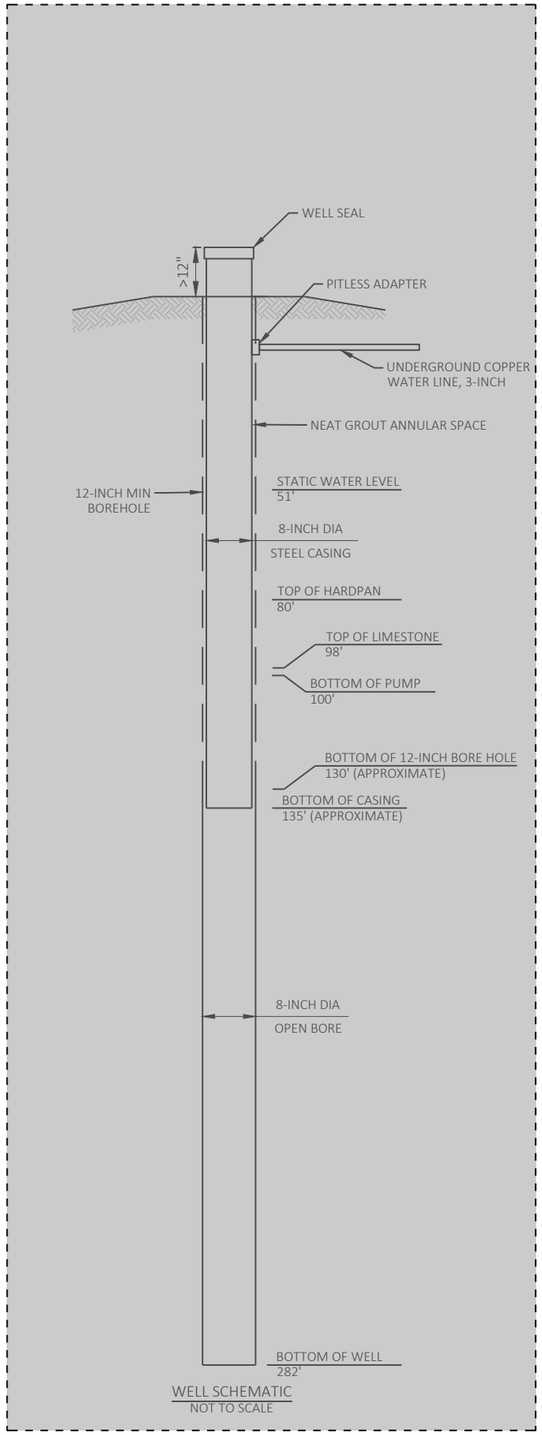


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	SANITARY SEWER - REST AREA 52	SHEET 104	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023001-UP_RA52_SAN.DWG
LAYOUT NAME - 023002-up
PLOT DATE : 11/26/2024 11:32 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-73





WELL SCHEMATIC
NOT TO SCALE

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	WATER SCHEMATIC - REST AREA 51	SHEET 105	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023002-UP_RA51_WATER.DWG
LAYOUT NAME - 023003-up

PLOT DATE : 11/26/2024 11:33 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-73

WORK TO BE COMPLETED UNDER PROJECT ID 1225-10-73

N

BRIGHTSPEED COMM

WPS ELECTRIC ABANDONED

SI

605+00 F

610+00 F

615+00 F

CONC

CONC

STA 611+24.92 F
115.04' RT

STA 607+78.35 F
170.42' RT

176 LF UNDERGROUND COPPER WATER LINE, 1-INCH

70 LF UNDERGROUND COPPER WATER LINE, 3-INCH

281 LF UNDERGROUND COPPER WATER LINE, 3-INCH

420+00 D

430+00 D

425+00 D

CONC

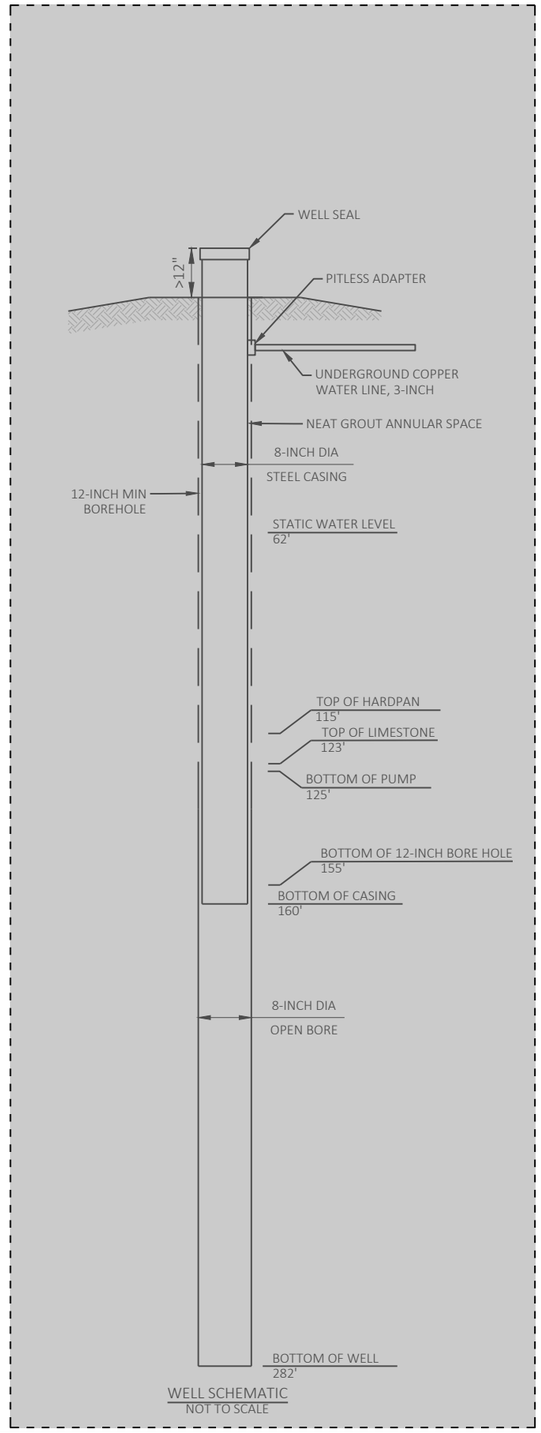
ABANDON EXISITING WATER LINE

EXISTING WELL LOCATION (ABANDON WELL)

SI

ABANDONED SEPTIC FIELD

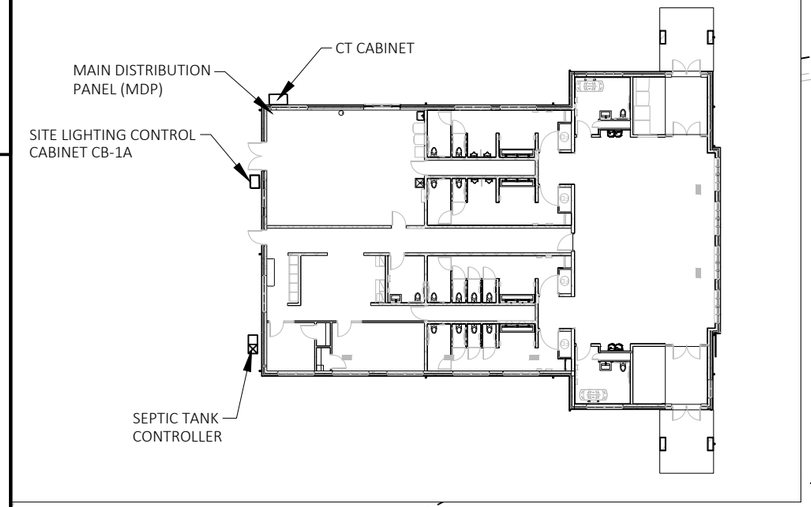
R/W



WELL SCHEMATIC
NOT TO SCALE

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	WATER SCHEMATIC - REST AREA 52	SHEET 106	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023002-UP_RA52_WATER.DWG
LAYOUT NAME - 023004-up
PLOT DATE : 11/26/2024 11:33 AM
PLOT BY : DAVID YAHNKE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



ELECTRICAL PLAN NOTES:
-COORDINATE (2) 1" CONDUIT FROM EXISTING SEPTIC TANK TO NEW TANK CONTROLLER ON BUILDING. WORK TO BE COMPLETED BY OTHERS.

-OUTAGES TO BE COORDINATED WITH WPS FOR CROSSOVER OF ELECTRICAL SERVICE.

WORK TO BE COMPLETED UNDER PROJECT ID 1225-10-73

LUMEN (LEVEL 3) COMM

WPS ELECTRIC

SI

ELECTRICAL SERVICE FEEDING COMFORT BUILDING PROVIDED BY WPS

WPS TRANSFORMER WITH PRIMARY FED TO THE SPLICE BOX AND SECONDARY TERMINATED IN CT CABINET ON THE BUILDING EXTERIOR. PROVIDE BY WPS

CT CABINET

MAIN ELECTRICAL PANEL

3#3, #8GND, 1-2" C

WELL PUMP

ELECTRICAL SERVICE FEEDING MAINTENANCE BUILDING 3#1/0, 1#6G, 2"C

MAINTENANCE BUILDING

WPS ELECTRIC SERVICE LOCATION

COMFORT BUILDING

10#8, #8GND, 1-1/2" C AND 1" C. FOR CONTROLS BY OTHERS

WPS ELECTRIC ABANDONED

BRIGHTSPEED COMM

ABANDONED SEPTIC FIELD

205+00 B

210+00 B

215+00 B

115+00 A

305+00 C

310+00 C

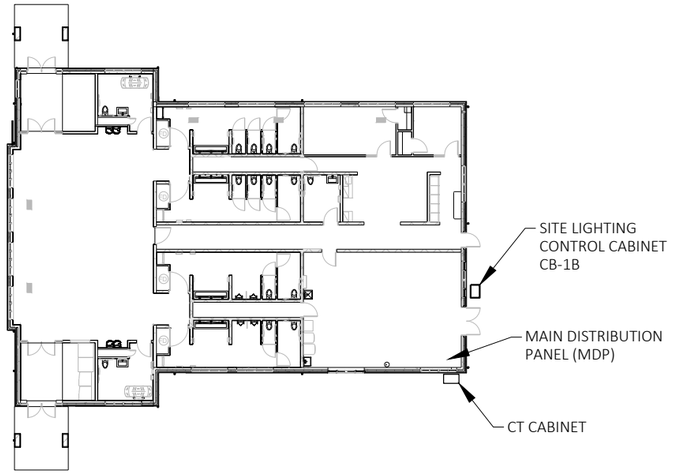
315+00 C

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	ELECTRICAL POWER LAYOUT PLAN - REST AREA 51	SHEET 107	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023004-UP_RA51_E-COM.DWG
LAYOUT NAME - 023007-up

PLOT DATE : 11/26/2024 11:34 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:100_XREF

2



BUILDING DETAIL
NOT TO SCALE

N

WORK TO BE COMPLETED UNDER
PROJECT ID 1225-10-73

BRIGHTSPEED COMM

WPS ELECTRIC
ABANDONED

WPS ELECTRIC
SERVICE LOOP

SI

615+00 F

605+00 F

610+00 F

WELL PUMP
3#3, #8GND, 1-2" C.

COMFORT
BUILDING

MAINTENANCE BUILDING

SERVICE FEEDING MAINTENANCE BUILDING

430+00 D

WELL PUMP

3#3, #8GND, 1-2" C.

WPS TRANSFORMER WITH THE PRIMARY FED TO THE SPLICE BOX AND SECONDARY TERMINATED IN CT CABINET ON THE BUILDING EXTERIOR. PROVIDED BY WPS

CT CABINET

(2) CONDUIT RIGID
NONMETALLIC SCHEDULE 40
2-INCH (INSTALL SCHEDULE 80
BELOW ROADWAYS)

WPS ELECTRIC
SERVICE LOCATION

SERVICE FEEDING COMFORT BUILDING

420+00 D

425+00 D

R/W

SI

ABANDONED SEPTIC FIELD

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	ELECTRICAL POWER LAYOUT PLAN - REST AREA 52	SHEET 108	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023004-UP_RA52_E-COM.DWG
LAYOUT NAME - 023009-up

PLOT DATE : 11/26/2024 11:35 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : ############

2

SITE PLAN GENERAL NOTES:

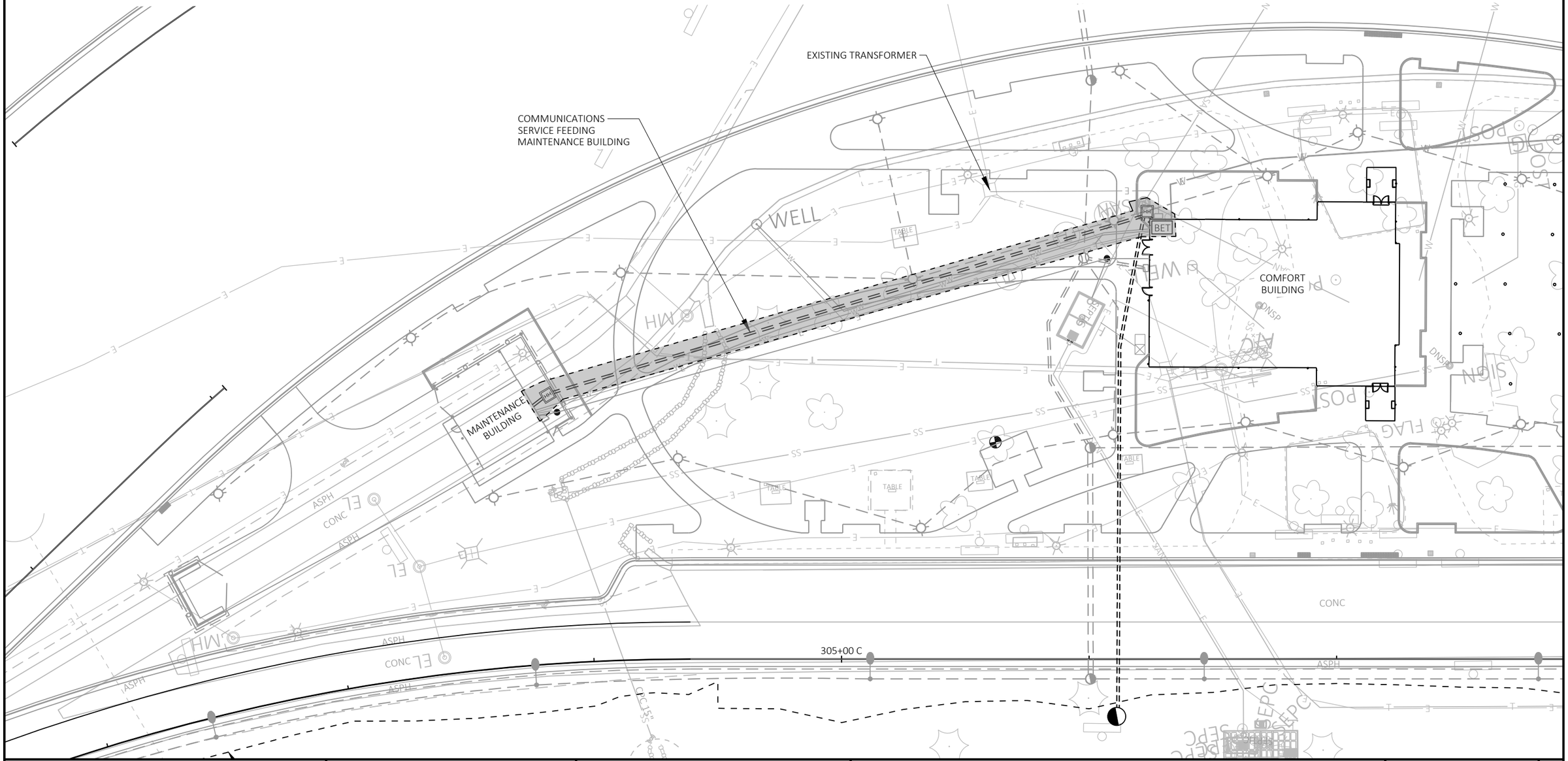
1. UNDERGROUND CONDUIT ROUTES ARE DIAGRAMMATIC ONLY, BUT REPRESENT PREFERRED PATH. FIELD VERIFY BEST POSSIBLE ROUTE BASED ON SITE CONDITIONS.
2. COORDINATE CONDUIT ENTRANCE LOCATION PRIOR TO INSTALLING.

LEGEND

- HH — 36"X24" HANDHOLE
- = = = — (2) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH; (1) 12 STRAND SINGLE-MODE OS2 OUTDOOR FIBER OPTIC CABLE; (1) SPARE
- = = = — (2) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH (SPARES) (INSTALL SCHEDULE 80 BELOW ROADWAYS)
- PULL BOXES NON-CONDUCTIVE 24X36-INCH

WORK TO BE COMPLETED UNDER PROJECT ID 1225-10-73

N



2

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	COMMUNICATIONS LAYOUT PLAN - REST AREA 51	SHEET 109	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023005-UP_RA51_COM.DWG
LAYOUT NAME - 023008-up Comm

PLOT DATE : 11/26/2024 11:35 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

SITE PLAN GENERAL NOTES:

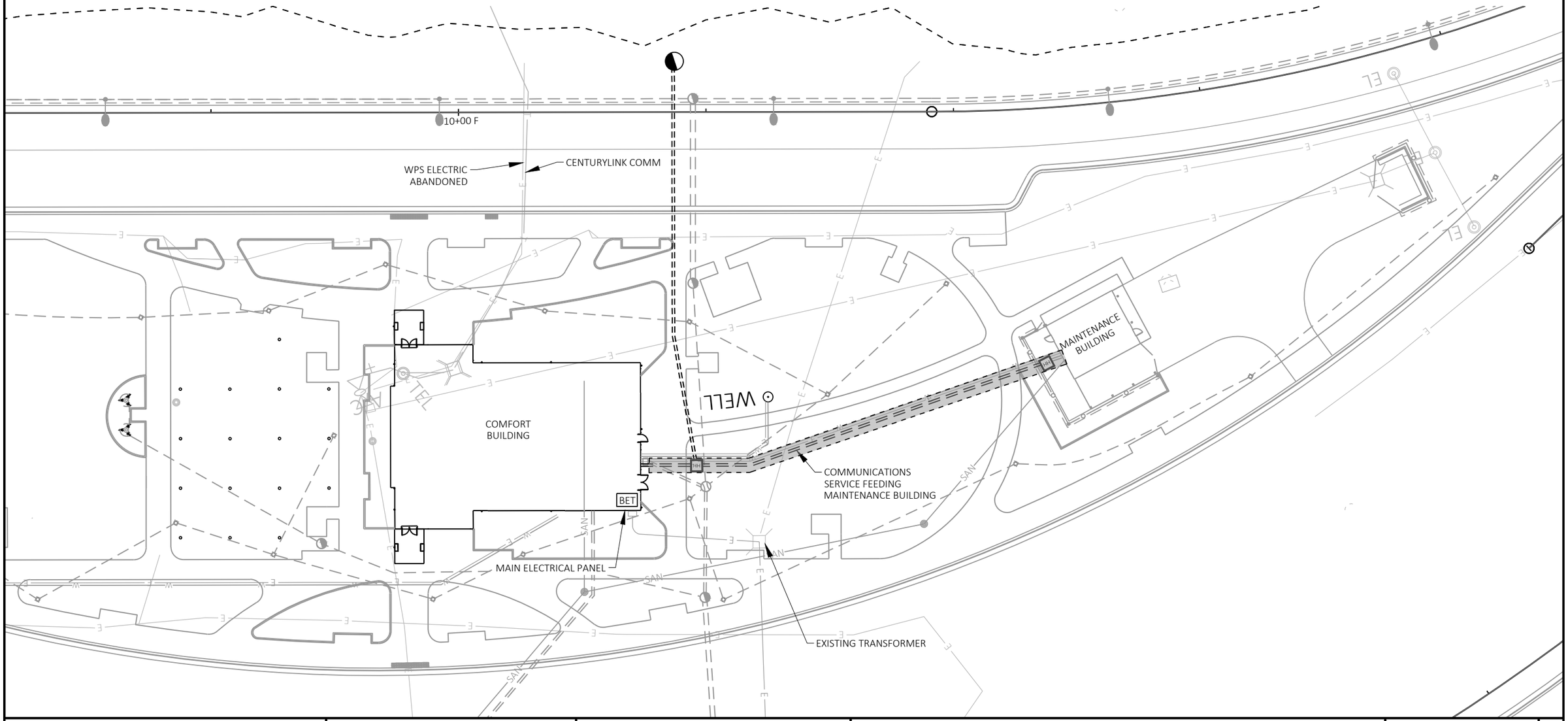
1. UNDERGROUND CONDUIT ROUTES ARE DIAGRAMMATIC ONLY, BUT REPRESENT PREFERRED PATH. FIELD VERIFY BEST POSSIBLE ROUTE BASED ON SITE CONDITIONS.
2. COORDINATE CONDUIT ENTRANCE LOCATION PRIOR TO INSTALLING.

LEGEND

- HH — 36"X24" HANDHOLE
- = = = — (2) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH (1) 12 STRAND SINGLE-MODE OS2 OUTDOOR FIBER OPTIC CABLE (1) SPARE
- = = = — (2) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH (SPARES) (INSTALL SCHEDULE 80 BELOW ROADWAYS)
- PULL BOXES NON-CONDUCTIVE 24X36-INCH

WORK TO BE COMPLETED UNDER PROJECT ID 1225-10-73

N



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	COMMUNICATIONS LAYOUT PLAN - REST AREA 52	SHEET 110	E

2

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON POLE

R-XX DENOTES SIGN NUMBER

N

MATCHLINE STA 114+00 A

WPS ELECTRIC

BRIGHTSPEED COMM

R/W

LUMEN (LEVEL 3) COMM

GRETZ RD

SI

110+00 A

CONC

ASPH

PCC: 113+76.79 A

BP: 100+00.00 A

PCC: 104+00.55 A

105+00 A

SIGN

SI

1870+00 SB

1865+00 SB

IH 43 SB

1860+00 SB

WPS ELECTRIC

BEGIN PROJECT

STA 1863+97.58 NB

Y = 383831.925

X = 194027.283

1860NB

IH 43 NB

1865NB

1870NB

BP: 400+00.00 D

405+00 D

PC: 406+77.03 D

BEGIN CONSTRUCTION

STA 406+00.00 D

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	SIGNING REMOVAL DETAILS - REST AREA 51	SHEET 111	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021106-RM_RA 51 SIGNING REMOVAL.DWG
LAYOUT NAME - 021105-rm Signing

PLOT DATE : 11/26/2024 11:36 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON POLE

R-XX DENOTES SIGN NUMBER

N

R/W

LUMEN (LEVEL 3) COMM

SI

EP: 117+06.59 A

PC: 116+68.16 A

WPS ELECTRIC

BRIGHTSPEED COMM

PT: 114+74.93 A

115+00 A

MATCHLINE STA 114+00 A

205+00 B

210+00 B

215+00 B

305+00 C

310+00 C

315+00 C

MATCHLINE STA 315+00 C

ABANDONED SEPTIC FIELD

CENTURYLINK COMM

R-1 NEXT TRUCK PARKING 11 MILES EXIT 157 REMOVE

R-2 PLANTINGS REMOVE

R-3 PLANTINGS REMOVE

R-4 PLANTINGS REMOVE

R-5 PLANTINGS REMOVE

R-6 NO DUMPING OR DEPOSIT OF HOUSEHOLD TRASH REMOVE

R-7 PLANTINGS REMOVE

R-8 PLANTINGS REMOVE

R-9 REMOVE

R-10 PLANTINGS REMOVE

R-11 PET WALKING AREA REMOVE

R-12 PLANTINGS REMOVE

R-13 DO NOT ENTER REMOVE

R-14 PET WALKING AREA REMOVE

R-15 NEXT TRUCK PARKING 11 MILES EXIT 157 REMOVE

R-16 SPEED LIMIT 25 REMOVE

R-17 REMOVE

R-18 CARS TRUCKS TRAILERS BUSES RV's REMOVE

R-19 REMOVE

R-20 CAUTION REMOVE

R-21 CAUTION REMOVE

R-22 NO OVERNIGHT CAMPING REMOVE

R-23 REMOVE

R-24 DO NOT ENTER REMOVE

R-25 SPEED LIMIT 25 REMOVE

R-26 PET WALKING AREA REMOVE

R-27 REMOVE

R-28 ONE WAY REMOVE

R-29 REMOVE

R-30 REMOVE

R-31 DO NOT ENTER REMOVE

R-32 SPEED LIMIT 25 REMOVE

R-33 PET WALKING AREA REMOVE

R-34 REMOVE

R-35 CAUTION REMOVE

R-36 CAUTION REMOVE

R-37 NO TURNS REMOVE

R-38 ONE WAY REMOVE

R-39 REMOVE

R-40 PET WALKING AREA REMOVE

R-41 ONE WAY REMOVE

R-42 PET WALKING AREA REMOVE

R-43 RESERVED PARKING THIS SPACE REMOVE

R-44 RESERVED PARKING THIS SPACE REMOVE

R-45 ONE WAY REMOVE

R-46 PET WALKING AREA REMOVE

R-47 PLANTINGS REMOVE

R-48 ONE WAY REMOVE

R-49 DO NOT ENTER REMOVE

R-50 PET WALKING AREA REMOVE

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	SIGNING REMOVAL DETAILS - REST AREA 51	SHEET 112	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021106-RM_RA 51 SIGNING REMOVAL.DWG
LAYOUT NAME - 021106-rm Signing

PLOT DATE : 11/26/2024 11:36 AM

PLOT BY : DAVID YAHNKE

PLOT NAME :

PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

LUMEN (LEVEL 3) COMM

R/W

MATCHLINE STA 315+00 C

00 C

R-51 WRONG WAY REMOVE

R-52 SPEED LIMIT 25 REMOVE

R-55 SPEED LIMIT 25 REMOVE

R-101 REST AREA REMOVE

SI

220+00 B

ASPH

CONC

ASPH

SI

END CONSTRUCTION
STA 222+25.00 B

225+00 B

IH 43 SB

1895+00 SB

1890+00 SB

1885+00 SB

R-53 WRONG WAY REMOVE

R-54 CARS TRUCKS TRAILERS BUSES RV's REMOVE

R-102 REST AREA REMOVE

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON POLE

R-XX DENOTES SIGN NUMBER

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	SIGNING REMOVAL DETAILS - REST AREA 51	SHEET 113	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021106-RM_RA 51 SIGNING REMOVAL.DWG
LAYOUT NAME - 021107-rm Signing

PLOT DATE : 11/26/2024 11:36 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

BRIGHTSPEED COMM

R/W

LUMEN (LEVEL 3) COMM

110+00 A

1870+00 SB

1865+00 SB

PCC: 104+00.55 A

105+00 A

IH 43 SB

1860+00 SB

N

R-102

REST AREA

REMOVE

1875+00 NB

WPS ELECTRIC

1870+00 NB

1865+00 NB

1860+00 NB

IH 43 NB

BP: 400+00.00 D

405+00 D

PC: 406+77.03 D

SI

R-107

CARS

TRUCKS TRAILERS BUSES RV's

REMOVE

410+00 D

SI

R-106

WRONG WAY

REMOVE

BP: 600+00.00 F

PC: 601+59.43 F

R-101

REST AREA

REMOVE

R/W

BEGIN CONSTRUCTION
STA 406+00.00 D

R-103

SPEED LIMIT 25

REMOVE

R-104

CARS

TRUCKS TRAILERS BUSES RV's

REMOVE

R-105

WRONG WAY

REMOVE

MATCHLINE STA 414+50 D

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

(RX-XX) DENOTES SIGN NUMBER

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	SIGNING REMOVAL DETAILS - REST AREA 52	SHEET 114	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021107-RM_RA 52 SIGNING REMOVAL.DWG
LAYOUT NAME - 021112-rm Signing

PLOT DATE : 11/26/2024 11:37 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

MATCHLINE STA 414+50 D

415+00 D

PT: 414+96.93 D

SI

605+00 F

PT: 605+99.57 F

610+00 F

PC: 611+91.22 F

615+00 F

MATCHLINE STA 502+00 E

CENTURYLINK COMM

WPS ELECTRIC

PC: 417+33.16 D

BP: 500+00.00 E

EP: 430+37.11 D

430+00 D

420+00 D

425+00 D

ABANDONED SEPTIC FIELD

FENCE TO REMAIN

R/W

R-108 CARS TRUCKS TRAILERS BUSES RVs's REMOVE

R-109 REMOVE

R-110 SPEED LIMIT 25 REMOVE

R-111 SPEED LIMIT 25 REMOVE

R-112 SPEED LIMIT 25 REMOVE

R-113 PET WALKING AREA REMOVE

R-114 DO NOT ENTER REMOVE

R-115 REMOVE

R-116 NEXT TRUCK PARKING 10 MILES EXIT 178 REMOVE

R-117 DO NOT ENTER REMOVE

R-118 REMOVE

R-119 PET WALKING AREA REMOVE

R-120 ONE WAY REMOVE

R-121 REMOVE

R-122 RESERVED PARKING REMOVE

R-123 REMOVE

R-124 REMOVE

R-125 ONE WAY REMOVE

R-126 NEXT TRUCK PARKING 10 MILES EXIT 178 REMOVE

R-127 NO TURNS REMOVE

R-128 PLANTINGS REMOVE

R-129 PLANTINGS REMOVE

R-130 SPEED LIMIT 25 REMOVE

R-131 PET WALKING AREA REMOVE

R-132 DO NOT ENTER REMOVE

R-133 ONE WAY REMOVE

R-134 ONE WAY REMOVE

R-135 REMOVE

R-136 NO OVERNIGHT CAMPING REMOVE

R-137 PET WALKING AREA REMOVE

R-138 ONE WAY REMOVE

R-139 PET WALKING AREA REMOVE

R-140 DO NOT ENTER REMOVE

R-141 PET WALKING AREA REMOVE

R-142 REMOVE

R-143 REMOVE

R-144 REMOVE

R-145 NO OVERNIGHT CAMPING REMOVE

R-146 NO DUMPING OR DEPOSIT OF HOUSEHOLD TRASH REMOVE

R-147 PET WALKING AREA REMOVE

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

RX-XX DENOTES SIGN NUMBER

N

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	SIGNING REMOVAL DETAILS - REST AREA 52	SHEET 115	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021107-RM_RA 52 SIGNING REMOVAL.DWG
LAYOUT NAME - 021113-rm Signing

PLOT DATE : 11/26/2024 11:37 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

RX-XX DENOTES SIGN NUMBER

1895+00 SB

1900+00 SB

IH 43 SB

END PROJECT
STA 1894+72.06 NB

1890+00 NB

1895+00 NB

1900+00 NB

IH 43 NB

515+00 E

510+00 E

505+00 E

PT: 512+65.35 E

EP: 517+15.51 E

EP: 617+16.96 F

PT: 616+75.90 F

PC: 502+23.78 E

MATCHLINE STA 502+00 E

SI

SI

ASPH

CONC

ASPH

SIGN

R/W

N

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	SIGNING REMOVAL DETAILS - REST AREA 52	SHEET 116	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\021107-RM_RA 52 SIGNING REMOVAL.DWG
LAYOUT NAME - 021114-rm Signing

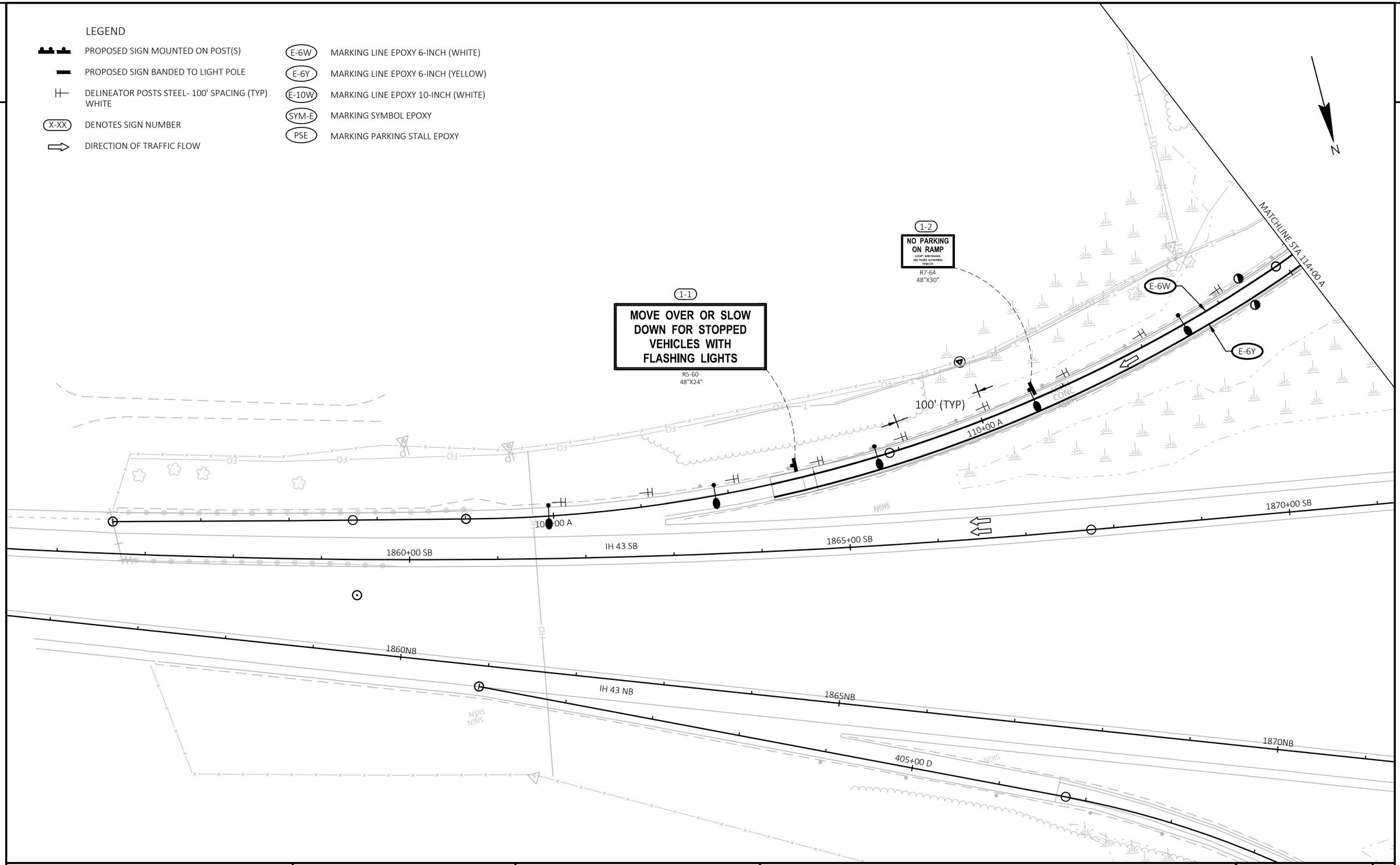
PLOT DATE : 11/26/2024 11:37 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN BANDED TO LIGHT POLE
- DELINEATOR POSTS STEEL- 100' SPACING (TYP) WHITE
- (X-XX) DENOTES SIGN NUMBER
- DIRECTION OF TRAFFIC FLOW
- (E-6W) MARKING LINE EPOXY 6-INCH (WHITE)
- (E-6Y) MARKING LINE EPOXY 6-INCH (YELLOW)
- (E-10W) MARKING LINE EPOXY 10-INCH (WHITE)
- (SYM-E) MARKING SYMBOL EPOXY
- (PSE) MARKING PARKING STALL EPOXY



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PERMANENT SIGNING AND PAVEMENT MARKNG - REST AREA 51	SHEET 117	E

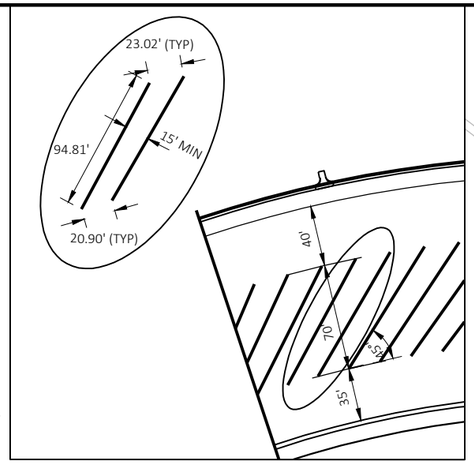
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LAYOUT NAME - 023201-ps

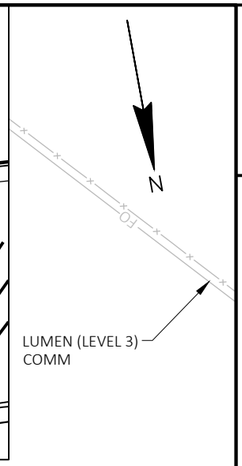
PLOT DATE : 11/26/2024 11:37 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN BANDED TO LIGHT POLE
- DELINEATOR POSTS STEEL- 100' SPACING (TYP) WHITE
- X-XX DENOTES SIGN NUMBER
- DIRECTION OF TRAFFIC FLOW
- E-6W MARKING LINE EPOXY 6-INCH (WHITE)
- E-6Y MARKING LINE EPOXY 6-INCH (YELLOW)
- E-10W MARKING LINE EPOXY 10-INCH (WHITE)
- SYM-E MARKING SYMBOL EPOXY
- PSE MARKING PARKING STALL EPOXY





2-14 NO PARKING ANY TIME SIGN VEHICLES
36"X36" (MOD)
(SEE DETAIL)

205+00 B

56 STALLS

PSE TYP

2-13 NO PARKING ANY TIME SIGN VEHICLES
36"X36" (MOD)
(SEE DETAIL)

210+00 B

E-6W

2-4 NO PARKING ANY TIME
R7-1L
18"X24"

2-3 NEXT TRUCK PARKING 4 MILES EXIT 164
D7-60
24"X36"

2-2 NO PARKING ANY TIME
R7-1R
18"X24"

2-1 EXIT
D52-54L
24"X24"

16'

COMFORT BUILDING

MAINTENANCE BUILDING

SEE SHEET:
PERMANENT SIGNING AND PAVEMENT MARKING - REST AREA 51 PLAZA

2-10 SPEED LIMIT 25
R2-1
30"X36"

2-5 DO NOT ENTER
R5-1
36"X36"

2-7 SPEED LIMIT 25
R2-1
30"X36"

2-6 NEXT TRUCK PARKING 4 MILES EXIT 164
D7-60
24"X36"

24'

E-6Y

E-10W

53 STALLS

305+00 C

310+00 C

PSE TYP

SYM-E TYP

WPS ELECTRIC

CENTURYLINK COMM

2-9 DO NOT ENTER
R5-1
36"X36"

2-8 CARS TRUCKS TRAILERS BUSES RV's
R8-74
72"X54"

315+00 B

MATCHLINE STA 114+00 A

MATCHLINE STA 315+00 C

115+00 A

±51 A

±89 C

±79 C

2-11 EXIT
D52-54L
24"X24"

2-12 YIELD
R1-2
48"X42"

ABANDONED SEPTIC FIELD

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PERMANENT SIGNING AND PAVEMENT MARKNG - REST AREA 51	SHEET 118	E

2

LUMEN (LEVEL 3) COMM

N

MATCHLINE STA 315+00 C

+41 B

+15 B

00 C

03 C

E-6W

E-10W

E-6Y

3-1
3-2
WRONG WAY
R5-1A
42"X30"

3-3
SPEED LIMIT 25
R2-1
30"X36"

3-5
NO PARKING ON RAMP
EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES
R7-64
48"X30"

3-6
SPEED LIMIT 25
W3-5
36"X36"

3-7
REST AREA
E5-54
72"X72"

3-4
CARS
TRUCKS
TRAILERS
BUSES RV's
R8-74
72"X54"

100' (TYP)

225+00 B

225+00 B

ASPH CONC ASPH

NDIS

1895+00 SB

1890+00 SB

1885+00 SB

LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN BANDED TO LIGHT POLE
- DELINEATOR POSTS STEEL- 100' SPACING (TYP) WHITE
- X-XX — DENOTES SIGN NUMBER
- DIRECTION OF TRAFFIC FLOW
- E-6W — MARKING LINE EPOXY 6-INCH (WHITE)
- E-6Y — MARKING LINE EPOXY 6-INCH (YELLOW)
- E-10W — MARKING LINE EPOXY 10-INCH (WHITE)
- SYM-E — MARKING SYMBOL EPOXY
- PSE — MARKING PARKING STALL EPOXY

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PERMANENT SIGNING AND PAVEMENT MARKNG - REST AREA 51	SHEET 119	E

2

2

MAINTENANCE BUILDING

COMFORT BUILDING

55+00 L

60+00

4-1 PET WALKING AREA R55-64B-R 24"X24"

4-2 NO OVERNIGHT CAMPING R55-51 18"X18"

4-3 PET WALKING AREA R55-64B-L 24"X24"

4-4 NO OVERNIGHT CAMPING R55-51 18"X18"

4-5 PET WALKING AREA R55-64B-L 24"X24"

4-6

4-7 PET WALKING AREA R55-64B-L 24"X24"

4-8

4-9 PET WALKING AREA R55-65 24"X24"

4-10 NO OVERNIGHT CAMPING R55-51 18"X18"

4-11 PET WALKING AREA R55-65 24"X24"

4-12 NO OVERNIGHT CAMPING R55-51 18"X18"

4-13 PET WALKING AREA R55-64B-R 24"X24"

4-14

4-15 PET WALKING AREA R55-64B-R 24"X24"

4-16

4-17 R7-8R 12"X18"

4-18 R7-8V 12"X6"

4-19 R7-8A 12"X18"

4-20 R7-8L 12"X18"

CENTURYLINK COMM

WPS ELECTRIC

LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN BANDED TO LIGHT POLE

DELINEATOR POSTS STEEL- 100' SPACING (TYP)
WHITE/RIGHT YELLOW/LEFT

X-XX DENOTES SIGN NUMBER

DIRECTION OF TRAFFIC FLOW

N

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PERMANENT SIGNING AND PAVEMENT MARKING - REST AREA 51 - PLAZA	SHEET 120	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023201-PS_RA51_PLAZA.DWG
LAYOUT NAME - 023207-ps_RA51_Plaza

PLOT DATE : 11/26/2024 11:38 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

WPS ELECTRIC

BRIGHTSPEED COMM

LUMEN (LEVEL 3) COMM

110+00 A

1870+00 SB

1865+00 SB

PCC: 104+00.55 A

105+00 A

IH 43 SB

1860+00 SB

WPS ELECTRIC

N

5-3

REST AREA

E5-54
72"X72"

1875NB

1870NB

1865NB

1860NB

405+00 D

100' (TYP)

±60 D

E-6Y

5-6

CARS
TRUCKS
TRAILERS
BUSES RV

R8-74
72"X54"

410+00 D

WRONG WAY

5-7

5-8

R5-1A
42"X30"

5-5

NO PARKING ON RAMP
EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES

R7-64
48"X30"

5-4

SPEED LIMIT 25

W3-5
36"X36"

5-9

SPEED LIMIT 25

R2-1
30"X36"

E-6W

MATCHLINE STA 414+00 D

LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN BANDED TO LIGHT POLE
- DELINEATOR POSTS STEEL- 100' SPACING (TYP) WHITE/RIGHT YELLOW/LEFT
- (X-XX) DENOTES SIGN NUMBER
- DIRECTION OF TRAFFIC FLOW
- (E-6W) MARKING LINE EPOXY 6-INCH (WHITE)
- (E-6Y) MARKING LINE EPOXY 6-INCH (YELLOW)
- (E-10W) MARKING LINE EPOXY 10-INCH (WHITE)
- (SYM-E) MARKING SYMBOL EPOXY
- (PSE) MARKING PARKING STALL EPOXY

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PERMANENT SIGNING AND PAVEMENT MARKNG - REST AREA 52	SHEET 121	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023201-PS_RA52.DWG
LAYOUT NAME - 023204-ps
PLOT DATE : 11/26/2024 11:38 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

MATCHLINE STA 414+00 D

MATCHLINE STA 502+00 E

6-1 SPEED LIMIT 25 R2-1 30"X36"

6-2 NEXT TRUCK PARKING 2 MILES EXIT 171 D7-60 24"X36"

6-3 DO NOT ENTER R5-1 36"X36"

6-4 CARS TRUCKS TRAILERS BUSES RV's R8-74 72"X54"

6-5 DO NOT ENTER R5-1 36"X36"

6-6 SPEED LIMIT 25 R2-1 30"X36"

6-7 EXIT D52-54L 24"X24"

6-8 NEXT TRUCK PARKING 2 MILES EXIT 171 D7-60 24"X36"

6-9 YIELD R1-2 48"X42"

6-10 NO PARKING ANY TIME R7-1R 18"X24"

6-11 NO PARKING ANY TIME R7-1L 18"X24"

6-12 NO PARKING ANY TIME GIGEM VANNELAN 36"X36" (MOD) (SEE DETAIL)

6-13 NO PARKING ANY TIME GIGEM VANNELAN 36"X36" (MOD) (SEE DETAIL)

E-10W

E-6W

E-6Y TYP

PSE TYP

SYM-E TYP

BRIGHTSPEED COMM

WPS ELECTRIC

54 STALLS

56 STALLS

SEE SHEET: PERMANENT SIGNING AND PAVEMENT MARKING - REST AREA 52 PLAZA

COMFORT BUILDING

MAINTENANCE BUILDING

+64 D

+51 D

+65 F

415+00 D

605+00 F

610+00 F

615+00 F

+69 F

+82 F

+92 F

420+00 D

425+00 D

430+00 D

RCCP 24"

RCCP 20"

CONC ASPH

ASPH CONC

CONC

PATH

CONC ISLAND

RAMP

CONFED SEPTIC FIELD

SEPV

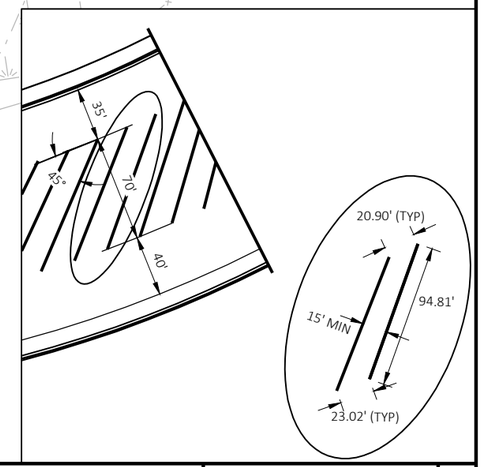
SEPC

MH

LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN BANDED TO LIGHT POLE
- DELINEATOR POSTS STEEL- 100' SPACING (TYP) WHITE/RIGHT YELLOW/LEFT
- (X-XX) DENOTES SIGN NUMBER
- DIRECTION OF TRAFFIC FLOW

- (E-6W) MARKING LINE EPOXY 6-INCH (WHITE)
- (E-6Y) MARKING LINE EPOXY 6-INCH (YELLOW)
- (E-10W) MARKING LINE EPOXY 10-INCH (WHITE)
- (SYM-E) MARKING SYMBOL EPOXY
- (PSE) MARKING PARKING STALL EPOXY



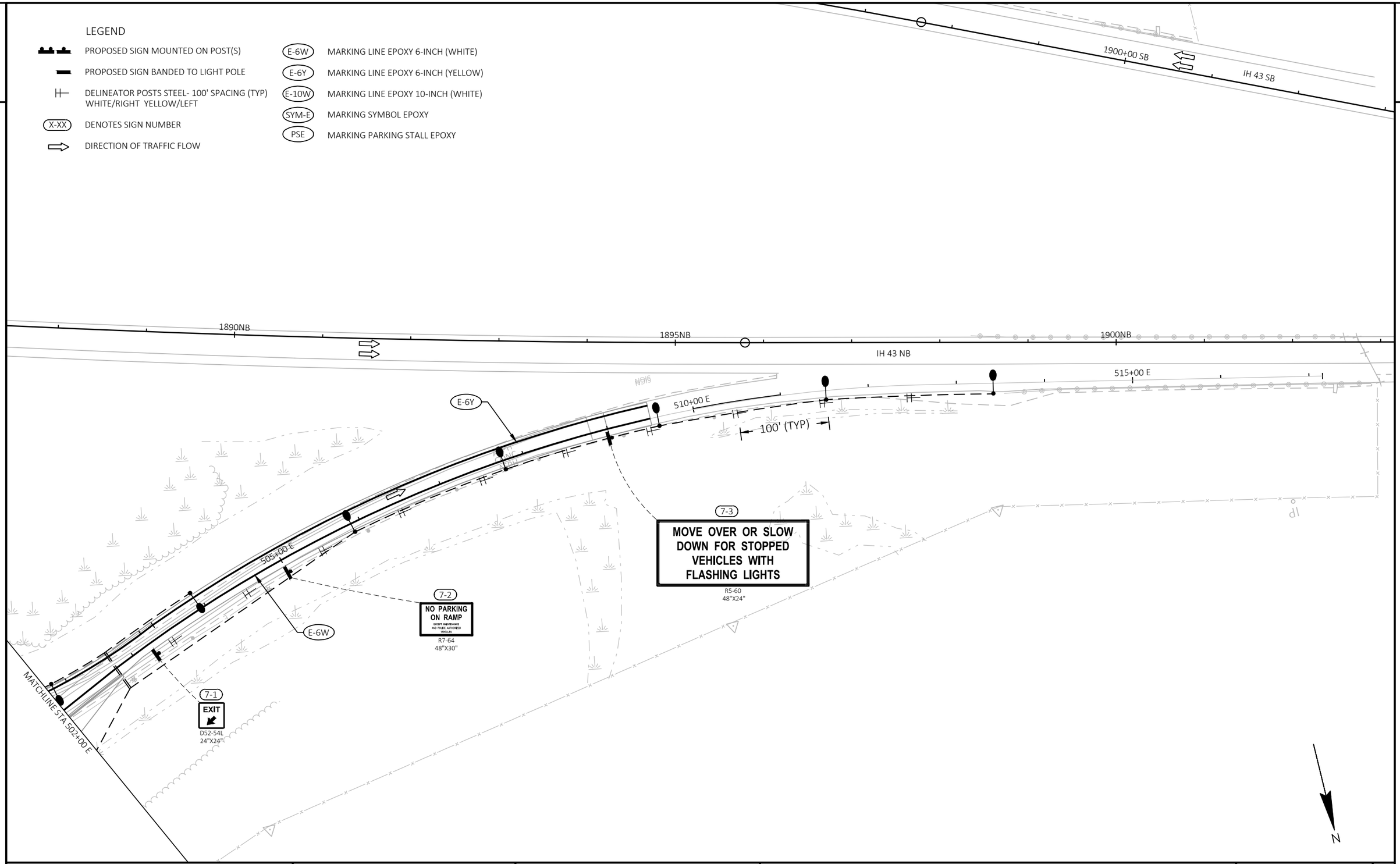
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PERMANENT SIGNING AND PAVEMENT MARKNG - REST AREA 52	SHEET 122	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023201-PS_RA52.DWG
LAYOUT NAME - 023205-ps
PLOT DATE : 11/26/2024 11:38 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN BANDED TO LIGHT POLE
- DELINEATOR POSTS STEEL- 100' SPACING (TYP) WHITE/RIGHT YELLOW/LEFT
- X-XX DENOTES SIGN NUMBER
- DIRECTION OF TRAFFIC FLOW
- E-6W MARKING LINE EPOXY 6-INCH (WHITE)
- E-6Y MARKING LINE EPOXY 6-INCH (YELLOW)
- E-10W MARKING LINE EPOXY 10-INCH (WHITE)
- SYM-E MARKING SYMBOL EPOXY
- PSE MARKING PARKING STALL EPOXY



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PERMANENT SIGNING AND PAVEMENT MARKNG - REST AREA 52	SHEET 123	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023201-PS_RA52.DWG
LAYOUT NAME - 023206-ps
PLOT DATE : 11/26/2024 11:38 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN BANDED TO LIGHT POLE

DELINEATOR POSTS STEEL- 100' SPACING (TYP)
WHITE/RIGHT YELLOW/LEFT

X-XX DENOTES SIGN NUMBER

DIRECTION OF TRAFFIC FLOW

N

8-1 PET WALKING AREA R55-65 24"X24"

8-2 PET WALKING AREA R55-65 24"X24"

8-3 NO OVERNIGHT CAMPING R55-51 18"X18"

8-4 PET WALKING AREA R55-64B-L 24"X24"

65+00 M

8-5 8-6 PET WALKING AREA R55-64B-L 24"X24"

8-7 8-8 PET WALKING AREA R55-64B-R 24"X24"

8-18 RESERVED PARKING R7-8A 12"X18"

8-19 VAN ACCESSIBLE R7-8V 12"X6"

8-17 RESERVED PARKING R7-8R 12"X18"

8-20 RESERVED PARKING R7-8L 12"X18"

BRIGHTSPEED COMM

WPS ELECTRIC

8-9 8-10 PET WALKING AREA R55-64B-L 24"X24"

COMFORT BUILDING

8-11 8-12 PET WALKING AREA R55-64B-R 24"X24"

8-13 PET WALKING AREA R55-64B-L 24"X24"

8-14 NO OVERNIGHT CAMPING R55-51 18"X18"

70+00 M

8-16 PET WALKING AREA R55-64B-R 24"X24"

8-15 NO OVERNIGHT CAMPING R55-51 18"X18"

MAINTENANCE BUILDING

CONC

ASPH

RCCP 24"

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PERMANENT SIGNING AND PAVEMENT MARKING - REST AREA 52 - PLAZA	SHEET 124	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023201-PS_RA52_PLAZA.DWG
LAYOUT NAME - 023208-ps_RA52_Plaza

PLOT DATE : 11/26/2024 11:39 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

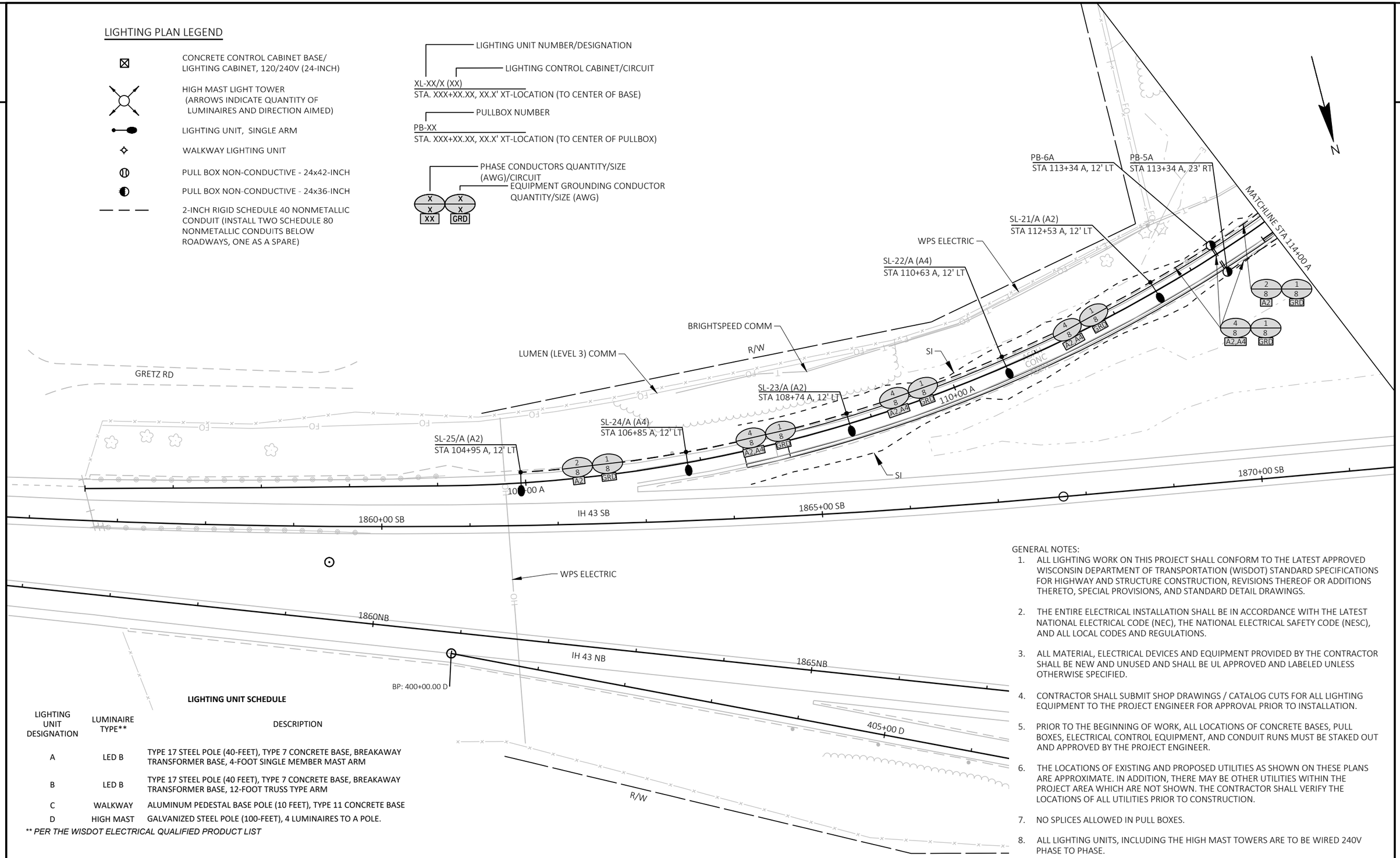
LIGHTING PLAN LEGEND

- CONCRETE CONTROL CABINET BASE/ LIGHTING CABINET, 120/240V (24-INCH)
- HIGH MAST LIGHT TOWER (ARROWS INDICATE QUANTITY OF LUMINAIRES AND DIRECTION AIMED)
- LIGHTING UNIT, SINGLE ARM
- WALKWAY LIGHTING UNIT
- PULL BOX NON-CONDUCTIVE - 24x42-INCH
- PULL BOX NON-CONDUCTIVE - 24x36-INCH
- 2-INCH RIGID SCHEDULE 40 NONMETALLIC CONDUIT (INSTALL TWO SCHEDULE 80 NONMETALLIC CONDUITS BELOW ROADWAYS, ONE AS A SPARE)

LIGHTING UNIT NUMBER/DESIGNATION
LIGHTING CONTROL CABINET/CIRCUIT
XL-XX/X (XX)
STA. XXX+XX.XX, XX.X' XT-LOCATION (TO CENTER OF BASE)

PULLBOX NUMBER
PB-XX
STA. XXX+XX.XX, XX.X' XT-LOCATION (TO CENTER OF PULLBOX)

PHASE CONDUCTORS QUANTITY/SIZE (AWG)/CIRCUIT
EQUIPMENT GROUNDING CONDUCTOR QUANTITY/SIZE (AWG)
X X / X X / XX / GRD



LIGHTING UNIT SCHEDULE

LIGHTING UNIT DESIGNATION	LUMINAIRE TYPE**	DESCRIPTION
A	LED B	TYPE 17 STEEL POLE (40-FEET), TYPE 7 CONCRETE BASE, BREAKAWAY TRANSFORMER BASE, 4-FOOT SINGLE MEMBER MAST ARM
B	LED B	TYPE 17 STEEL POLE (40 FEET), TYPE 7 CONCRETE BASE, BREAKAWAY TRANSFORMER BASE, 12-FOOT TRUSS TYPE ARM
C	WALKWAY	ALUMINUM PEDESTAL BASE POLE (10 FEET), TYPE 11 CONCRETE BASE
D	HIGH MAST	GALVANIZED STEEL POLE (100-FEET), 4 LUMINAIRES TO A POLE.

*** PER THE WISDOT ELECTRICAL QUALIFIED PRODUCT LIST*

GENERAL NOTES:

1. ALL LIGHTING WORK ON THIS PROJECT SHALL CONFORM TO THE LATEST APPROVED WISCONSIN DEPARTMENT OF TRANSPORTATION (WISDOT) STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, REVISIONS THEREOF OR ADDITIONS THERETO, SPECIAL PROVISIONS, AND STANDARD DETAIL DRAWINGS.
2. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST NATIONAL ELECTRICAL CODE (NEC), THE NATIONAL ELECTRICAL SAFETY CODE (NESC), AND ALL LOCAL CODES AND REGULATIONS.
3. ALL MATERIAL, ELECTRICAL DEVICES AND EQUIPMENT PROVIDED BY THE CONTRACTOR SHALL BE NEW AND UNUSED AND SHALL BE UL APPROVED AND LABELED UNLESS OTHERWISE SPECIFIED.
4. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS / CATALOG CUTS FOR ALL LIGHTING EQUIPMENT TO THE PROJECT ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
5. PRIOR TO THE BEGINNING OF WORK, ALL LOCATIONS OF CONCRETE BASES, PULL BOXES, ELECTRICAL CONTROL EQUIPMENT, AND CONDUIT RUNS MUST BE STAKED OUT AND APPROVED BY THE PROJECT ENGINEER.
6. THE LOCATIONS OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THESE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.
7. NO SPLICES ALLOWED IN PULL BOXES.
8. ALL LIGHTING UNITS, INCLUDING THE HIGH MAST TOWERS ARE TO BE WIRED 240V PHASE TO PHASE.

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	LIGHTING PLAN - REST AREA 51	SHEET 125	E

2

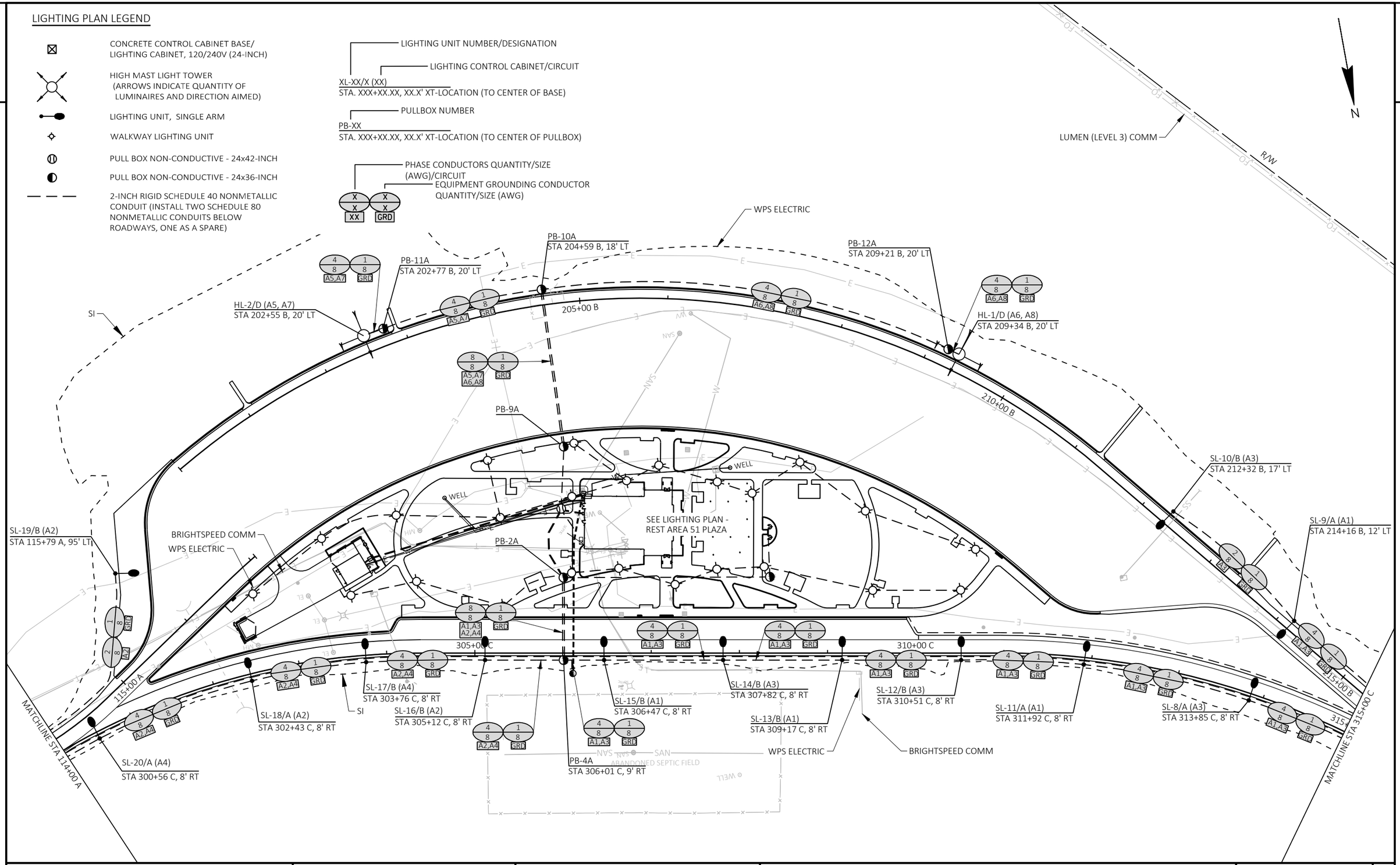
LIGHTING PLAN LEGEND

- CONCRETE CONTROL CABINET BASE/ LIGHTING CABINET, 120/240V (24-INCH)
- HIGH MAST LIGHT TOWER (ARROWS INDICATE QUANTITY OF LUMINAIRES AND DIRECTION AIMED)
- LIGHTING UNIT, SINGLE ARM
- WALKWAY LIGHTING UNIT
- PULL BOX NON-CONDUCTIVE - 24x42-INCH
- PULL BOX NON-CONDUCTIVE - 24x36-INCH
- 2-INCH RIGID SCHEDULE 40 NONMETALLIC CONDUIT (INSTALL TWO SCHEDULE 80 NONMETALLIC CONDUITS BELOW ROADWAYS, ONE AS A SPARE)

LIGHTING UNIT NUMBER/DESIGNATION
LIGHTING CONTROL CABINET/CIRCUIT
XL-XX/X (XX)
STA. XXX+XX.XX, XX.X' XT-LOCATION (TO CENTER OF BASE)

PULLBOX NUMBER
PB-XX
STA. XXX+XX.XX, XX.X' XT-LOCATION (TO CENTER OF PULLBOX)

PHASE CONDUCTORS QUANTITY/SIZE (AWG)/CIRCUIT
EQUIPMENT GROUNDING CONDUCTOR QUANTITY/SIZE (AWG)
X X X X XX GRD



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	LIGHTING PLAN - REST AREA 51	SHEET 126	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023601-LP_RA51.DWG
LAYOUT NAME - 023602-lp
PLOT DATE : 11/26/2024 11:39 AM
PLOT BY : DAVID YAHNKE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

LUMEN (LEVEL 3) COMM

R/W

N

MATCHLINE STA 315+00 C

00 C

PB-8A
STA 217+15 B, 12' LT

SL-6/A (A3)
STA 218+02 B, 12' LT

SL-7/A (A1)
STA 315+78 C, 8' RT

SL-5/A (A1)
STA 219+93 B, 12' LT

SL-4/A (A3)
STA 221+83 B, 12' LT

SL-3/A (A1)
STA 223+73 B, 12' LT

SL-2/A (A3)
STA 225+63 B, 12' LT

SL-1/A (A1)
STA 227+53 B, 12' LT

PB-7A
STA 316+75 C, 8' RT

SI

SI

224+00 B

225+00 B

ACPH

CONC

ASPH

SIGN

IH 43 SB

1895+00 SB

1890+00 SB

1885+00 SB

E

E

E

LIGHTING PLAN LEGEND

- CONCRETE CONTROL CABINET BASE/ LIGHTING CABINET, 120/240V (24-INCH)
- HIGH MAST LIGHT TOWER (ARROWS INDICATE QUANTITY OF LUMINAIRES AND DIRECTION AIMED)
- LIGHTING UNIT, SINGLE ARM
- WALKWAY LIGHTING UNIT
- PULL BOX NON-CONDUCTIVE - 24x42-INCH
- PULL BOX NON-CONDUCTIVE - 24x36-INCH
- 2-INCH RIGID SCHEDULE 40 NONMETALLIC CONDUIT (INSTALL TWO SCHEDULE 80 NONMETALLIC CONDUITS BELOW ROADWAYS, ONE AS A SPARE)

LIGHTING UNIT NUMBER/DESIGNATION
LIGHTING CONTROL CABINET/CIRCUIT
XL-XX/X (XX)
STA. XXX+XX.XX, XX.X' XT-LOCATION (TO CENTER OF BASE)

PULLBOX NUMBER
PB-XX
STA. XXX+XX.XX, XX.X' XT-LOCATION (TO CENTER OF PULLBOX)

PHASE CONDUCTORS QUANTITY/SIZE (AWG)/CIRCUIT
EQUIPMENT GROUNDING CONDUCTOR QUANTITY/SIZE (AWG)

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	LIGHTING PLAN - REST AREA 51	SHEET 127	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023601-LP_RA51.DWG
LAYOUT NAME - 023603-lp
PLOT DATE : 11/26/2024 11:39 AM
PLOT BY : DAVID YAHNKE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

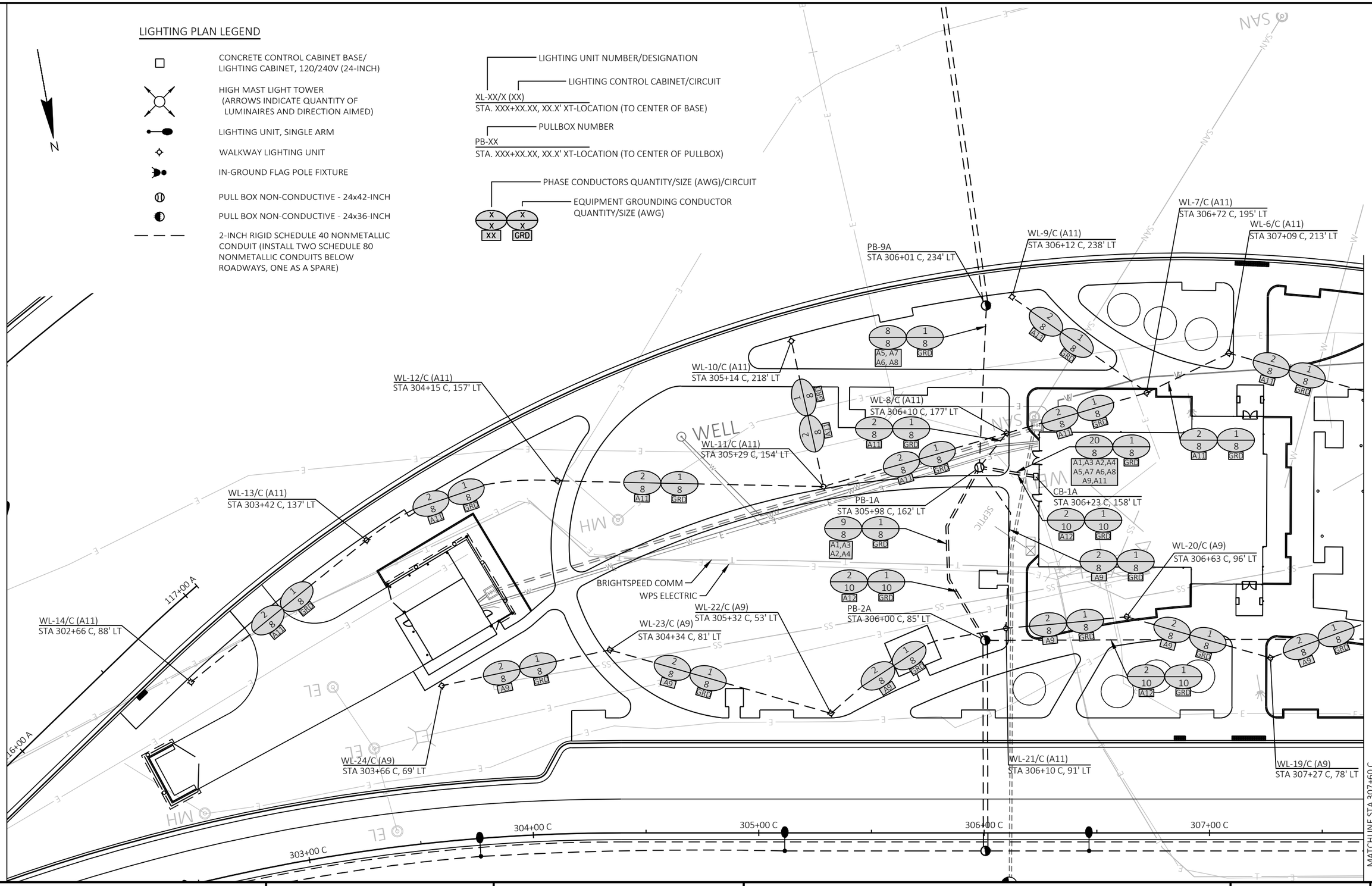
LIGHTING PLAN LEGEND

- CONCRETE CONTROL CABINET BASE/ LIGHTING CABINET, 120/240V (24-INCH)
- HIGH MAST LIGHT TOWER (ARROWS INDICATE QUANTITY OF LUMINAIRES AND DIRECTION AIMED)
- LIGHTING UNIT, SINGLE ARM
- WALKWAY LIGHTING UNIT
- IN-GROUND FLAG POLE FIXTURE
- PULL BOX NON-CONDUCTIVE - 24x42-INCH
- PULL BOX NON-CONDUCTIVE - 24x36-INCH
- 2-INCH RIGID SCHEDULE 40 NONMETALLIC CONDUIT (INSTALL TWO SCHEDULE 80 NONMETALLIC CONDUITS BELOW ROADWAYS, ONE AS A SPARE)

LIGHTING UNIT NUMBER/DESIGNATION
LIGHTING CONTROL CABINET/CIRCUIT
XL-XX/X (XX)
STA. XXX+XX.XX, XX.X' XT-LOCATION (TO CENTER OF BASE)

PULLBOX NUMBER
PB-XX
STA. XXX+XX.XX, XX.X' XT-LOCATION (TO CENTER OF PULLBOX)

PHASE CONDUCTORS QUANTITY/SIZE (AWG)/CIRCUIT
EQUIPMENT GROUNDING CONDUCTOR QUANTITY/SIZE (AWG)



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	LIGHTING PLAN - REST AREA 51 PLAZA	SHEET 128	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023601-LP_RA51_PLAZA.DWG
LAYOUT NAME - 023605-lp_Plaza
PLOT DATE : 11/26/2024 11:40 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LIGHTING PLAN LEGEND

- CONCRETE CONTROL CABINET BASE/ LIGHTING CABINET, 120/240V (24-INCH)
- HIGH MAST LIGHT TOWER (ARROWS INDICATE QUANTITY OF LUMINAIRES AND DIRECTION AIMED)
- LIGHTING UNIT, SINGLE ARM
- WALKWAY LIGHTING UNIT
- IN-GROUND FLAG POLE FIXTURE
- PULL BOX NON-CONDUCTIVE - 24x42-INCH
- PULL BOX NON-CONDUCTIVE - 24x36-INCH
- 2-INCH RIGID SCHEDULE 40 NONMETALLIC CONDUIT (INSTALL TWO SCHEDULE 80 NONMETALLIC CONDUITS BELOW ROADWAYS, ONE AS A SPARE)

XL-XX/X (XX)
STA. XXX+XX.XX, XX.X' XT-LOCATION (TO CENTER OF BASE)

- LIGHTING UNIT NUMBER/DESIGNATION
- LIGHTING CONTROL CABINET/CIRCUIT

PB-XX
STA. XXX+XX.XX, XX.X' XT-LOCATION (TO CENTER OF PULLBOX)

- PULLBOX NUMBER

X X / X X — XX / GRD

- PHASE CONDUCTORS QUANTITY/SIZE (AWG)/CIRCUIT
- EQUIPMENT GROUNDING CONDUCTOR QUANTITY/SIZE (AWG)

N

WL-3/C (A11)
STA 308+69 C, 216' LT

WL-4/C (A11)
STA 308+14 C, 181' LT

WL-5/C (A11)
STA 307+75 C, 194' LT

IN-GROUND FLAG POLE FIXTURE (TYP)

WL-2/C (A11)
STA 309+43 C, 161' LT

WL-17/C (A9)
STA 308+28 C, 98' LT

SEE BLOWUP

PB-3A
STA 308+35 C, 86' LT

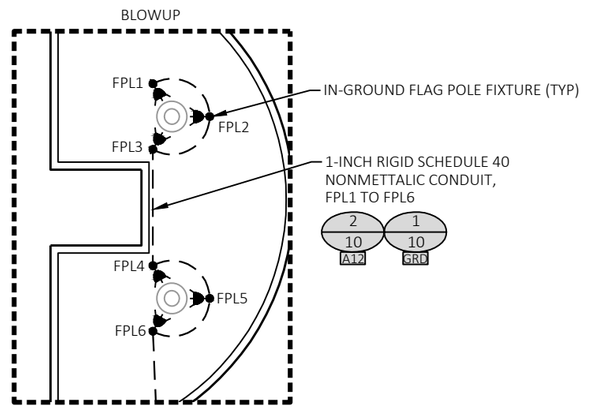
WL-1/C (A11)
STA 310+68 C, 117' LT

WL-16/C (A9)
STA 309+51 C, 71' LT

WL-15/C (A9)
STA 310+51 C, 71' LT

WL-18/C (A9)
STA 307+74 C, 95' LT

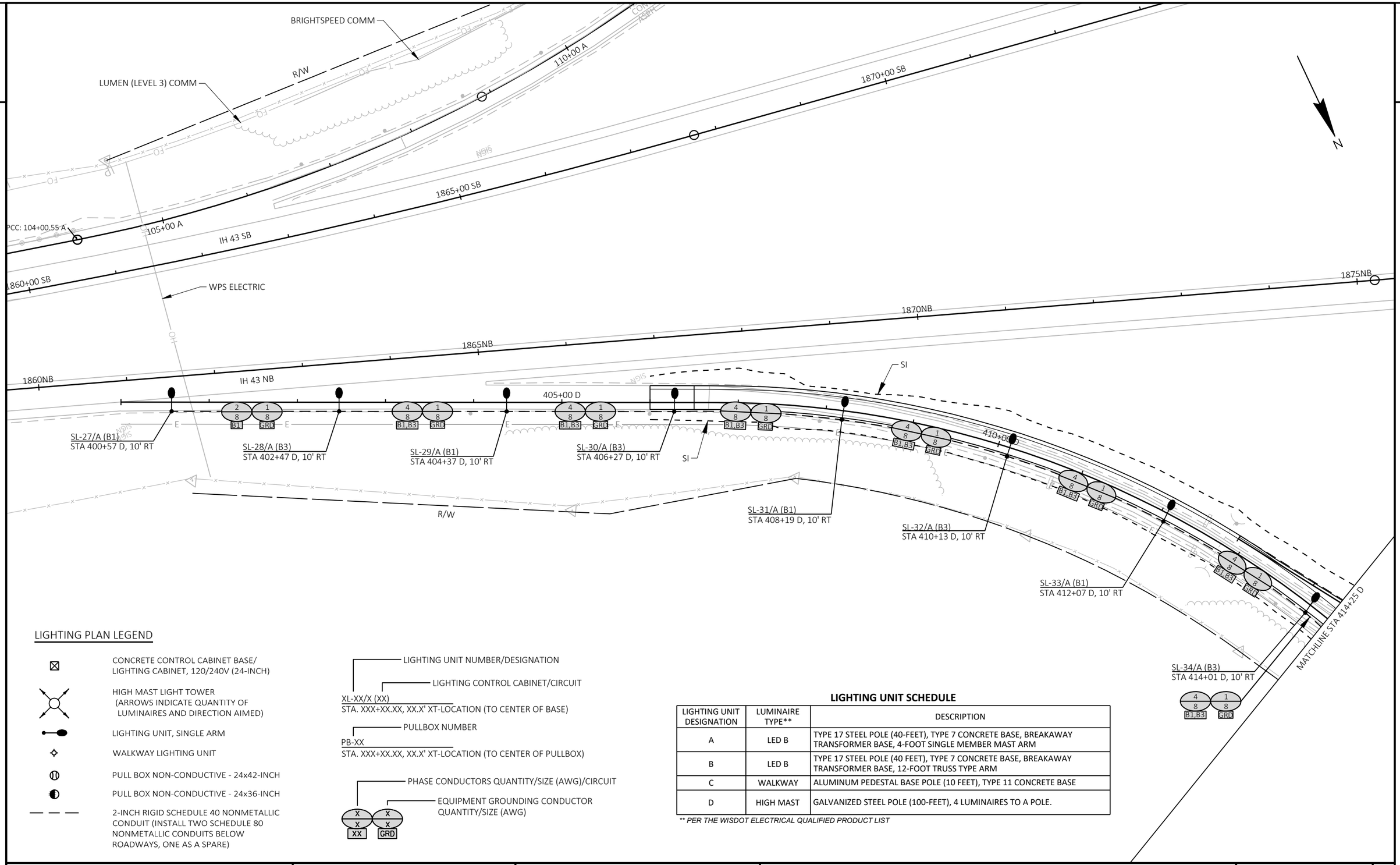
BLOWUP



308+00 C
309+00 C
310+00 C
311+00 C
312+00 C
313+00 C

MATCHLINE STA 307+60 C

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	LIGHTING PLAN - REST AREA 51 PLAZA	SHEET 129	E



LIGHTING PLAN LEGEND

- CONCRETE CONTROL CABINET BASE/ LIGHTING CABINET, 120/240V (24-INCH)
- HIGH MAST LIGHT TOWER (ARROWS INDICATE QUANTITY OF LUMINAIRES AND DIRECTION AIMED)
- LIGHTING UNIT, SINGLE ARM
- WALKWAY LIGHTING UNIT
- PULL BOX NON-CONDUCTIVE - 24x42-INCH
- PULL BOX NON-CONDUCTIVE - 24x36-INCH
- 2-INCH RIGID SCHEDULE 40 NONMETALLIC CONDUIT (INSTALL TWO SCHEDULE 80 NONMETALLIC CONDUITS BELOW ROADWAYS, ONE AS A SPARE)

LIGHTING UNIT NUMBER/DESIGNATION
LIGHTING CONTROL CABINET/CIRCUIT
XL-XX/X (XX)
STA. XXX+XX.XX, XX.X' XT-LOCATION (TO CENTER OF BASE)

PULLBOX NUMBER
PB-XX
STA. XXX+XX.XX, XX.X' XT-LOCATION (TO CENTER OF PULLBOX)

PHASE CONDUCTORS QUANTITY/SIZE (AWG)/CIRCUIT
EQUIPMENT GROUNDING CONDUCTOR QUANTITY/SIZE (AWG)

LIGHTING UNIT SCHEDULE

LIGHTING UNIT DESIGNATION	LUMINAIRE TYPE**	DESCRIPTION
A	LED B	TYPE 17 STEEL POLE (40-FEET), TYPE 7 CONCRETE BASE, BREAKAWAY TRANSFORMER BASE, 4-FOOT SINGLE MEMBER MAST ARM
B	LED B	TYPE 17 STEEL POLE (40 FEET), TYPE 7 CONCRETE BASE, BREAKAWAY TRANSFORMER BASE, 12-FOOT TRUSS TYPE ARM
C	WALKWAY	ALUMINUM PEDESTAL BASE POLE (10 FEET), TYPE 11 CONCRETE BASE
D	HIGH MAST	GALVANIZED STEEL POLE (100-FEET), 4 LUMINAIRES TO A POLE.

*** PER THE WISDOT ELECTRICAL QUALIFIED PRODUCT LIST*

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	LIGHTING PLAN - REST AREA 52	SHEET 130	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023602-LP_RA52.DWG
LAYOUT NAME - 023607-lp
PLOT DATE : 11/26/2024 11:41 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

LIGHTING PLAN LEGEND

- CONCRETE CONTROL CABINET BASE/ LIGHTING CABINET, 120/240V (24-INCH)
- HIGH MAST LIGHT TOWER (ARROWS INDICATE QUANTITY OF LUMINAIRES AND DIRECTION AIMED)
- LIGHTING UNIT, SINGLE ARM
- WALKWAY LIGHTING UNIT
- PULL BOX NON-CONDUCTIVE - 24x42-INCH
- PULL BOX NON-CONDUCTIVE - 24x36-INCH
- 2-INCH RIGID SCHEDULE 40 NONMETALLIC CONDUIT (INSTALL TWO SCHEDULE 80 NONMETALLIC CONDUITS BELOW ROADWAYS, ONE AS A SPARE)

LIGHTING UNIT NUMBER/DESIGNATION
LIGHTING CONTROL CABINET/CIRCUIT
XL-XX/X (XX)
STA. XXX+XX.XX, XX.X' XT-LOCATION (TO CENTER OF BASE)

PULLBOX NUMBER
PB-XX
STA. XXX+XX.XX, XX.X' XT-LOCATION (TO CENTER OF PULLBOX)

PHASE CONDUCTORS QUANTITY/SIZE (AWG)/CIRCUIT
EQUIPMENT GROUNDING CONDUCTOR QUANTITY/SIZE (AWG)

N

MATCHLINE STA 414+25 D

PB-10B
STA 414+55 D, 33' LT

SL-35/A (B1)
STA 602+19 F, 5' LT

SL-39/A (B1)
STA 605+87 F, 5' LT

SL-37/A (B3)
STA 603+99 F, 5' LT

SL-40/B (B3)
STA 607+22 F, 6' LT

SL-41/B (B1)
STA 608+57 F, 5' LT

SL-42/B (B3)
STA 609+92 F, 5' LT

BRIGHTSPEED COMM
WPS ELECTRIC

PB-8B
STA 610+95 F, 9' LT

SL-43/B (B2)
STA 611+27 F, 5' LT

SL-44/B (B4)
STA 612+63 F, 5' LT

SL-45/A (B2)
STA 613+96 F, 5' LT

MATCHLINE STA 502+00 E

415+00 D

605+00

610+00

615+00 F

PB-9B
STA 414+62 D, 13' RT

SL-36/A (B1)
STA 416+14 D, 10' RT

LUMENS UG COPPER
WPS ELECTRIC

SEE LIGHTING PLAN - REST AREA 52 PLAZA

PB-7B

SL-47/B (B2)
STA 501+39 E, 84' RT

SL-38/A (B3)
STA 417+83 D, 14' RT

SI

420+00 D

PB-3B

430+00 D

425+00 D

PB-5B
STA 421+21 D, 18' RT

HL-3/D (B5,B7)
STA 420+97 D, 20' RT

PB-4B
STA 425+66 D, 18' RT

HL-4/D (B6,B8)
STA 427+62 D, 20' RT

PB-6B
STA 427+17 D, 17' RT

R/W

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	LIGHTING PLAN - REST AREA 52	SHEET 131	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023602-LP_RA52.DWG
LAYOUT NAME - 023608-lp
PLOT DATE : 11/26/2024 11:41 AM
PLOT BY : DAVID YAHNKE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

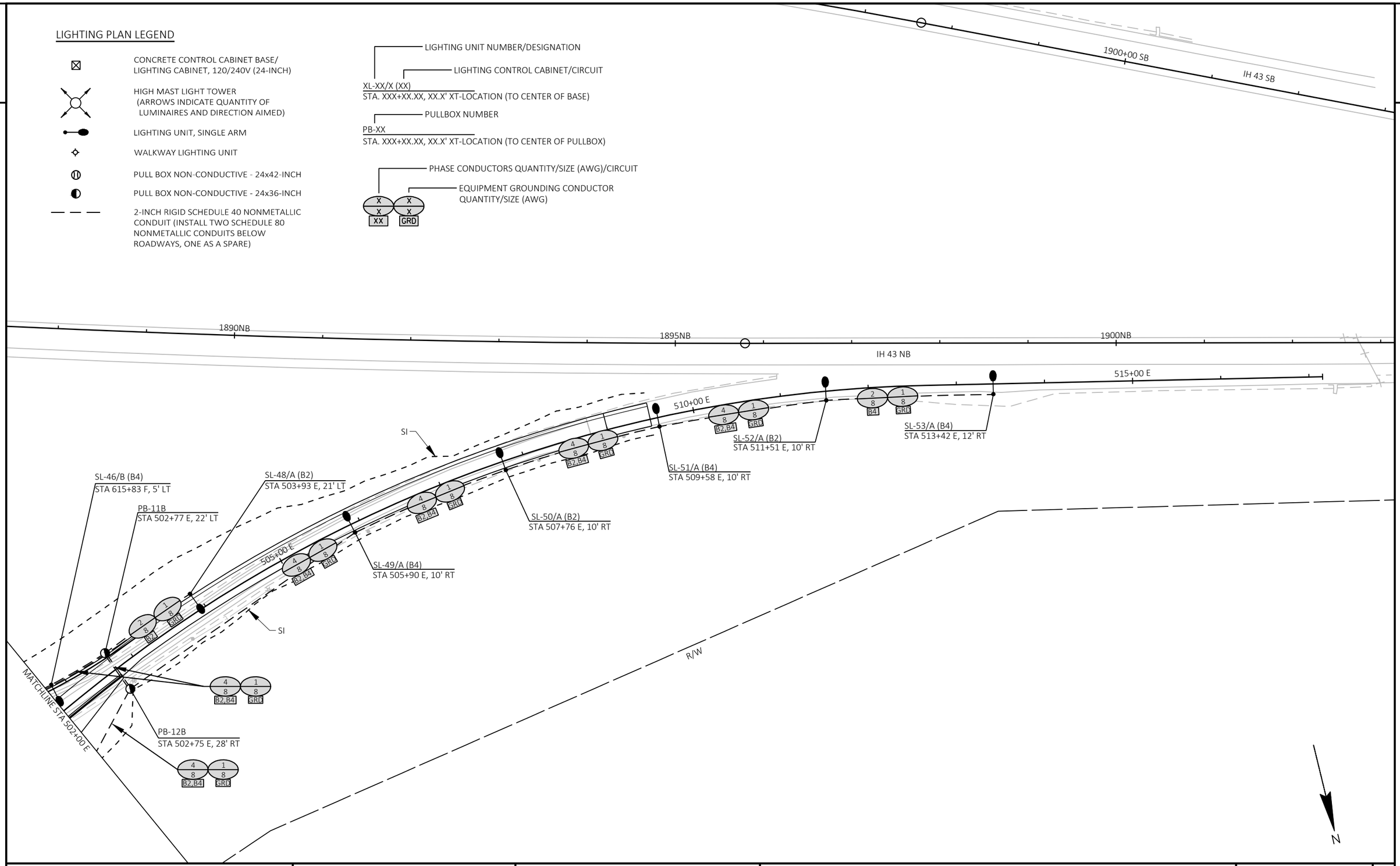
LIGHTING PLAN LEGEND

- CONCRETE CONTROL CABINET BASE/ LIGHTING CABINET, 120/240V (24-INCH)
- HIGH MAST LIGHT TOWER (ARROWS INDICATE QUANTITY OF LUMINAIRES AND DIRECTION AIMED)
- LIGHTING UNIT, SINGLE ARM
- WALKWAY LIGHTING UNIT
- PULL BOX NON-CONDUCTIVE - 24x42-INCH
- PULL BOX NON-CONDUCTIVE - 24x36-INCH
- 2-INCH RIGID SCHEDULE 40 NONMETALLIC CONDUIT (INSTALL TWO SCHEDULE 80 NONMETALLIC CONDUITS BELOW ROADWAYS, ONE AS A SPARE)

LIGHTING UNIT NUMBER/DESIGNATION
LIGHTING CONTROL CABINET/CIRCUIT
XL-XX/X (XX)
STA. XXX+XX.XX, XX.X' XT-LOCATION (TO CENTER OF BASE)

PULLBOX NUMBER
PB-XX
STA. XXX+XX.XX, XX.X' XT-LOCATION (TO CENTER OF PULLBOX)

PHASE CONDUCTORS QUANTITY/SIZE (AWG)/CIRCUIT
EQUIPMENT GROUNDING CONDUCTOR QUANTITY/SIZE (AWG)



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	LIGHTING PLAN - REST AREA 52	SHEET 132	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023602-LP_RA52.DWG
LAYOUT NAME - 023609-lp
PLOT DATE : 11/26/2024 11:41 AM
PLOT BY : DAVID YAHNKE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

606+00 F

607+00 F

608+00 F

609+00 F

610+00 F

611+00 F

MATCHLINE STA 611+75 F

N

WL-41/C (B11)
STA 609+70 F, 61' RT

WL-39/C (B11)
STA 610+93 F, 85' RT

PB-7B
STA 610+95 F, 69' RT

WL-44/C (B11)
STA 607+53 F, 73' RT

WL-45/C (B11)
STA 605+99 F, 95' RT

WL-43/C (B11)
STA 608+72 F, 83' RT

WL-42/C (B11)
STA 609+23 F, 80' RT

WL-40/C (B11)
STA 610+35 F, 80' RT

IN-GROUND FLAG POLE FIXTURE (TYP)

SEE BLOWUP

WL-32/C (B9)
STA 609+50 F, 130' RT

CB-1B
STA 610+75 F, 141' RT

WL-36/C (B9)
STA 607+64 F, 154' RT

PB-2B
STA 609+44 F, 174' RT

WL-34/C (B9)
STA 608+86 F, 166' RT

WL-35/C (B9)
STA 608+30 F, 196' RT

WL-30/C (B9)
STA 610+26 F, 178' RT

WL-29/C (B9)
STA 610+93 F, 156' RT

WL-38/C (B11)
STA 611+49 F, 114' RT

PB-1B
STA 611+00 F, 151' RT

PB-3B
STA 610+99 F, 196' RT

WL-28/C (B9)
STA 611+07 F, 197' RT

WL-33/C (B9)
STA 609+25 F, 178' RT

WL-31/C (B9)
STA 609+89 F, 196' RT

1-INCH RIGID SCHEDULE 40
NONMETALLIC CONDUIT,
FPL7 TO FPL12

IN GROUND FLAG POLE FIXTURE (TYP)

BLOWUP

FPL7

FPL8

FPL9

FPL10

FPL11

FPL12

LIGHTING PLAN LEGEND

- CONCRETE CONTROL CABINET BASE/ LIGHTING CABINET, 120/240V (24-INCH)
- HIGH MAST LIGHT TOWER (ARROWS INDICATE QUANTITY OF LUMINAIRES AND DIRECTION AIMED)
- LIGHTING UNIT, SINGLE ARM
- WALKWAY LIGHTING UNIT
- IN-GROUND FLAG POLE FIXTURE
- PULL BOX NON-CONDUCTIVE - 24x42-INCH
- PULL BOX NON-CONDUCTIVE - 24x36-INCH
- 2-INCH RIGID SCHEDULE 40 NONMETALLIC CONDUIT (INSTALL TWO SCHEDULE 80 NONMETALLIC CONDUITS BELOW ROADWAYS, ONE AS A SPARE)

LIGHTING UNIT NUMBER/DESIGNATION

LIGHTING CONTROL CABINET/CIRCUIT

XL-XX/X (X,X)
STA. XXX+XX.XX, XX.X' XT.-LOCATION (TO CENTER OF BASE)

PULLBOX NUMBER

PB-XX
STA. XXX+XX.XX, XX.X' XT.-LOCATION (TO CENTER OF PULLBOX)

PHASE CONDUCTORS QUANTITY/SIZE (AWG)/CIRCUIT

EQUIPMENT GROUNDING CONDUCTOR QUANTITY/SIZE (AWG)

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	LIGHTING PLAN - REST AREA 52 PLAZA	SHEET 133	E

LIGHTING PLAN LEGEND

- CONCRETE CONTROL CABINET BASE/ LIGHTING CABINET, 120/240V (24-INCH)
- HIGH MAST LIGHT TOWER (ARROWS INDICATE QUANTITY OF LUMINAIRES AND DIRECTION AIMED)
- LIGHTING UNIT, SINGLE ARM
- WALKWAY LIGHTING UNIT
- IN-GROUND FLAG POLE FIXTURE
- PULL BOX NON-CONDUCTIVE - 24x42-INCH
- PULL BOX NON-CONDUCTIVE - 24x36-INCH
- 2-INCH RIGID SCHEDULE 40 NONMETALLIC CONDUIT (INSTALL TWO SCHEDULE 80 NONMETALLIC CONDUITS BELOW ROADWAYS, ONE AS A SPARE)

LIGHTING UNIT NUMBER/DESIGNATION
LIGHTING CONTROL CABINET/CIRCUIT
XL-XX/X (X,X)
STA. XXX+XX.XX, XX.X' XT.-LOCATION (TO CENTER OF BASE)

PULLBOX NUMBER
PB-XX
STA. XXX+XX.XX, XX.X' XT.-LOCATION (TO CENTER OF PULLBOX)

PHASE CONDUCTORS QUANTITY/SIZE (AWG)/CIRCUIT
EQUIPMENT GROUNDING CONDUCTOR QUANTITY/SIZE (AWG)

MATCHLINE STA 611+75 F

612+00 F
613+00 F
614+00 F
615+00 F
616+00 F
501+00 E
502+00 E
429+00 D
430+00 D

WL-37/C (B11)
STA 611+97 F, 69' RT

WL-25/C (B9)
STA 614+04 F, 62' RT

WL-26/C (B9)
STA 613+02 F, 117' RT

WL-27/C (B9)
STA 612+19 F, 143' RT

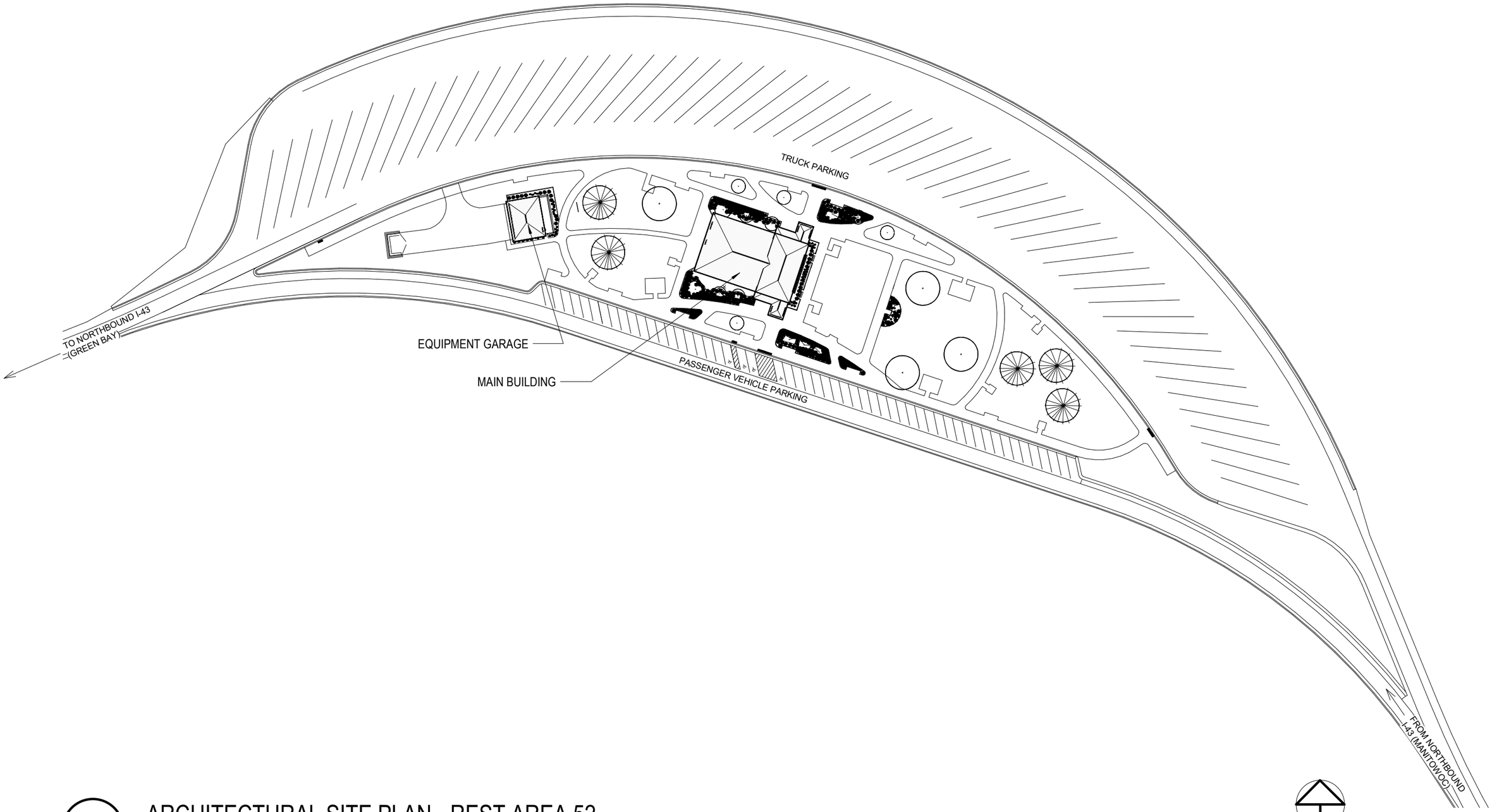
N

R/W

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	LIGHTING PLAN - REST AREA 52 PLAZA	SHEET 134	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023602-LP_RA52_PLAZA.DWG
LAYOUT NAME - 023611-lp_Plaza
PLOT DATE : 11/26/2024 11:41 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



1 ARCHITECTURAL SITE PLAN - REST AREA 52

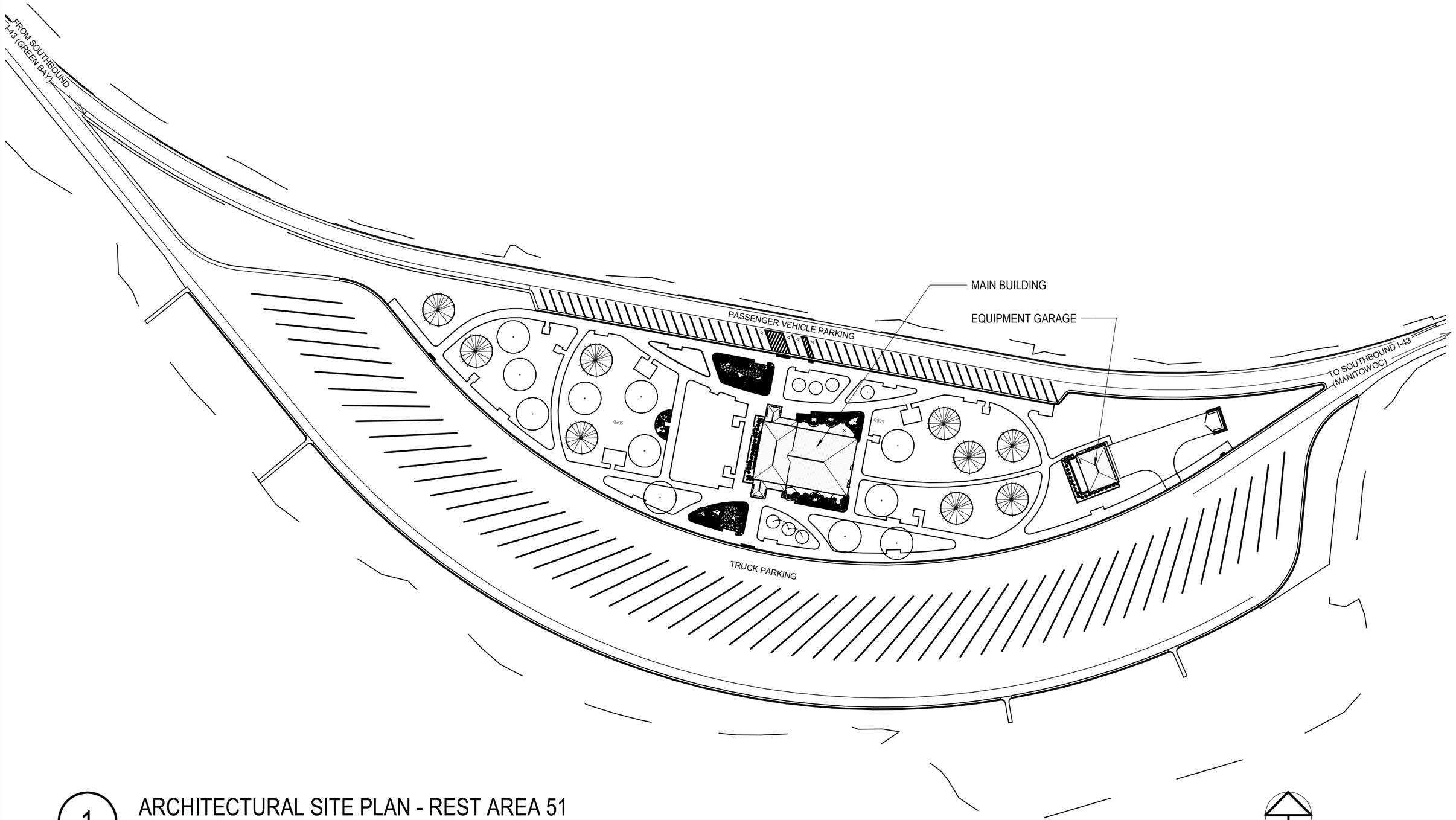
1" = 100'-0"

FOR INFORMATION ONLY - NOT FOR CONSTRUCTION

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	ARCHITECTURAL SITE PLAN - SAFETY REST AREA 52 (DENMARK)	SHEET A00.1	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 7/24/2024 2:38:52 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : 1" = 100'-0"

2



1 ARCHITECTURAL SITE PLAN - REST AREA 51

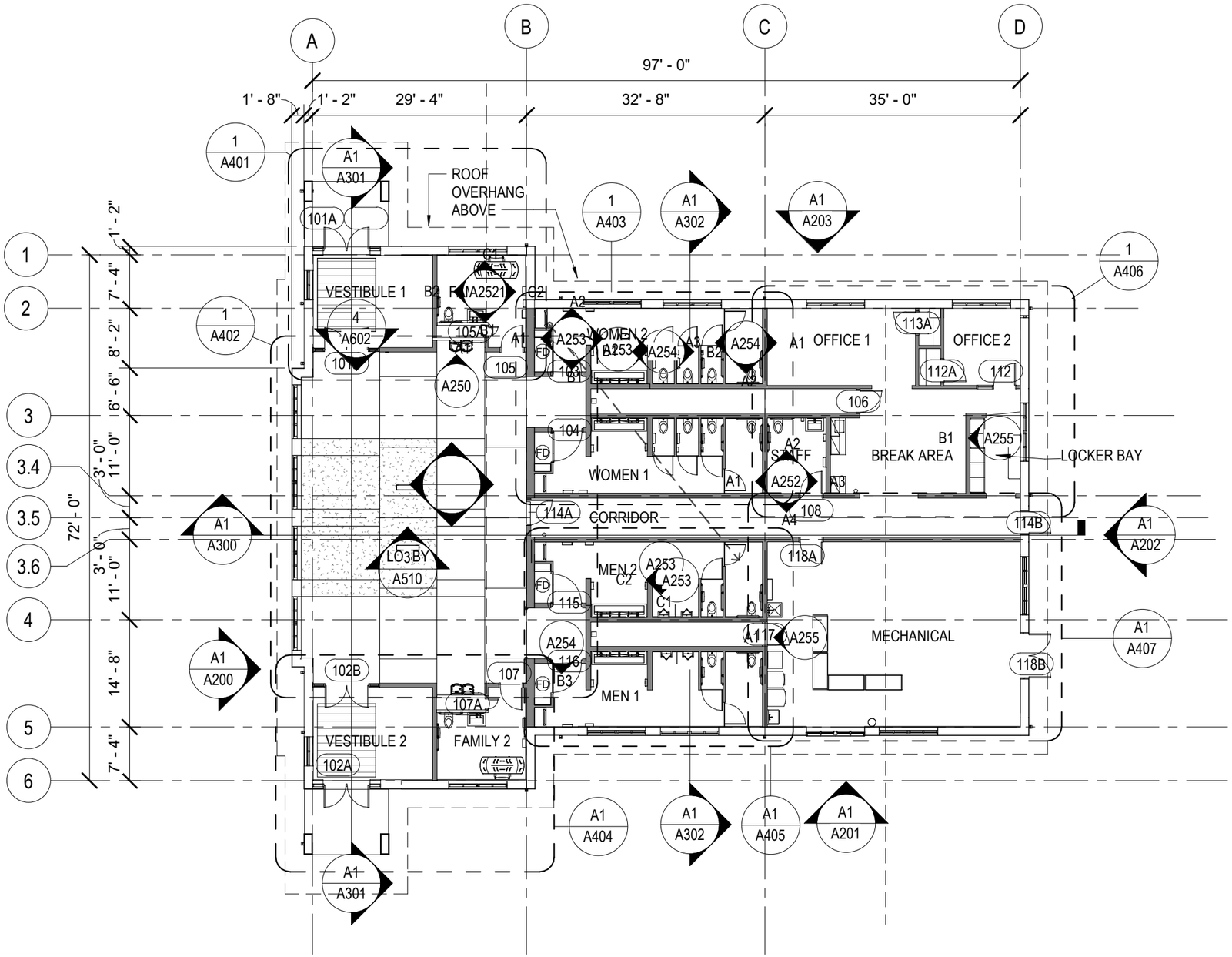
1" = 100'-0"

NORTH

FOR INFORMATION ONLY - NOT FOR CONSTRUCTION

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	ARCHITECTURAL SITE PLAN - SAFETY REST AREA 51 (MARIBEL)	SHEET A00[illegible]	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 7/24/2024 2:38:54 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : 1" = 100'-0"



A1 MAIN BUILDING - FLOOR PLAN

1/16" = 1'-0"

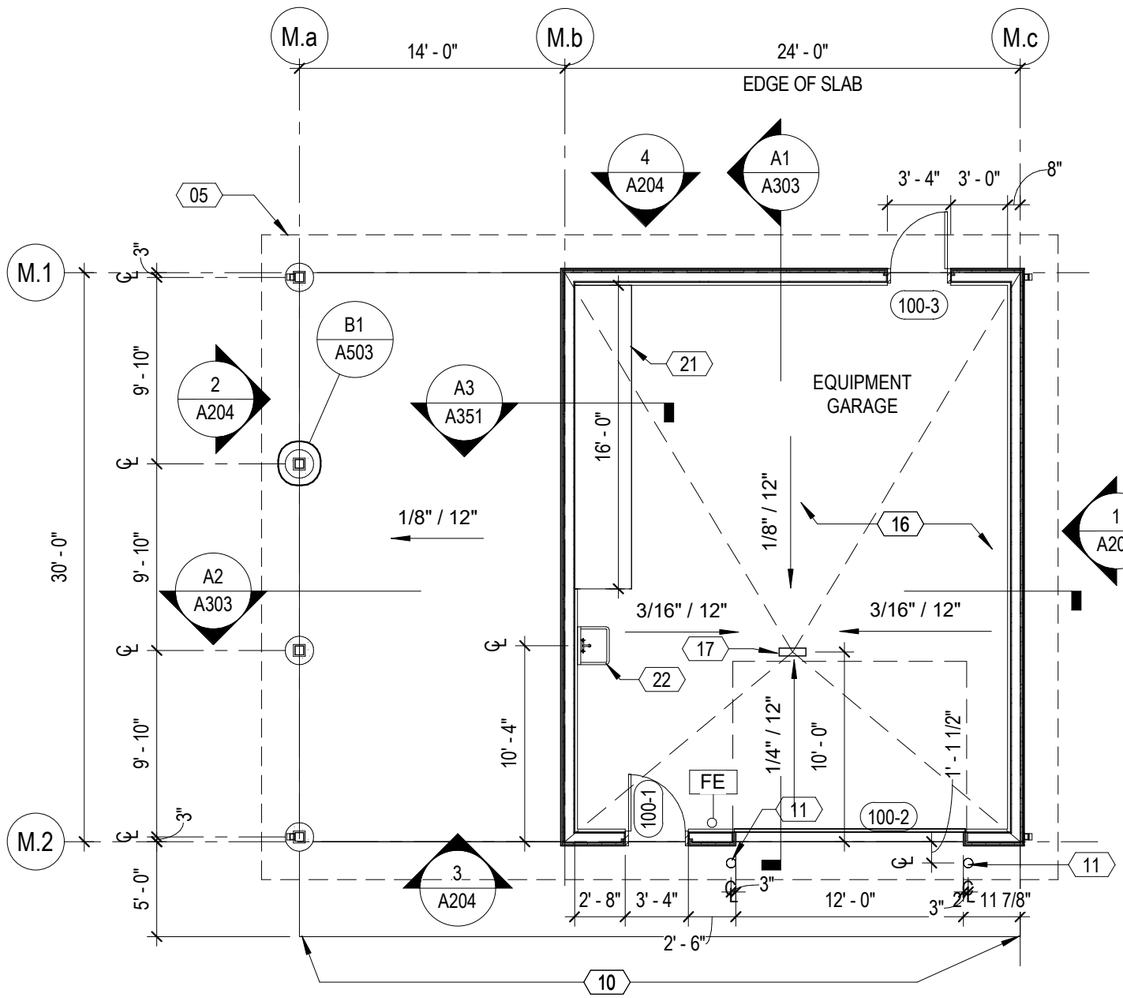
PLAN GENERAL NOTES

1. DO NOT SCALE DRAWINGS, IF DIMENSIONAL INFORMATION IS REQUIRED & NOT FOUND, NOTIFY ENGINEER FOR CLARIFICATION.
2. ALL DIMENSIONS ARE TO COLUMN CENTERLINES OR FACE OF MASONRY OR FACE OF PARTITION SUBSTRATE UNLESS NOTED OTHERWISE. ALL DIMENSIONS AT LOCATIONS WHERE CERAMIC TILE OCCURS ARE TO FACE OF PARTITION SUBSTRATE UNLESS NOTED OTHERWISE. ALL DIMENSIONS MUST BE IN ACCORDANCE WITH ALL APPLICABLE CODES AND ACCESSIBILITY STANDARDS. NOTIFY ENGINEER WITH ANY DISCREPANCIES.
3. ALL DOOR FRAMES ARE TO BE INSTALLED 4" AWAY OF ADJACENT PERPENDICULAR WALLS UNLESS NOTED OTHERWISE. REFER TO SHEET A-601 FOR DOOR SCHEDULE, DOOR AND FRAME ELEVATIONS.
4. PLAN DOES NOT REQUIRE FIRE OR SMOKE SEPARATIONS BETWEEN ROOMS IN THIS OCCUPANCY,
5. PROVIDE AND INSTALL FIRE TREATED BACKING AS REQUIRED FOR ALL WALL MOUNTED EQUIPMENT, TOILET ACCESSORIES AND THOSE ITEMS NOTED AS N.I.C.. VERIFY SIZE AND EXACT LOCATIONS OF BACKING WITH INDIVIDUAL EQUIPMENT SUPPLIER.
6. ALL WOOD BLOCKING AND CONCEALED LUMBER SHALL BE FIRE RETARDANT TREATED.
7. FIELD LOCATE ALL OPENINGS TO BE CUT AND/OR CORE DRILLED. CONTRACTORS SHALL SUBMIT DRAWINGS SHOWING OPENINGS AND REINFORCING PRIOR TO CUTTING OR DRILLING FOR APPROVAL.

FOR INFORMATION ONLY - NOT FOR CONSTRUCTION

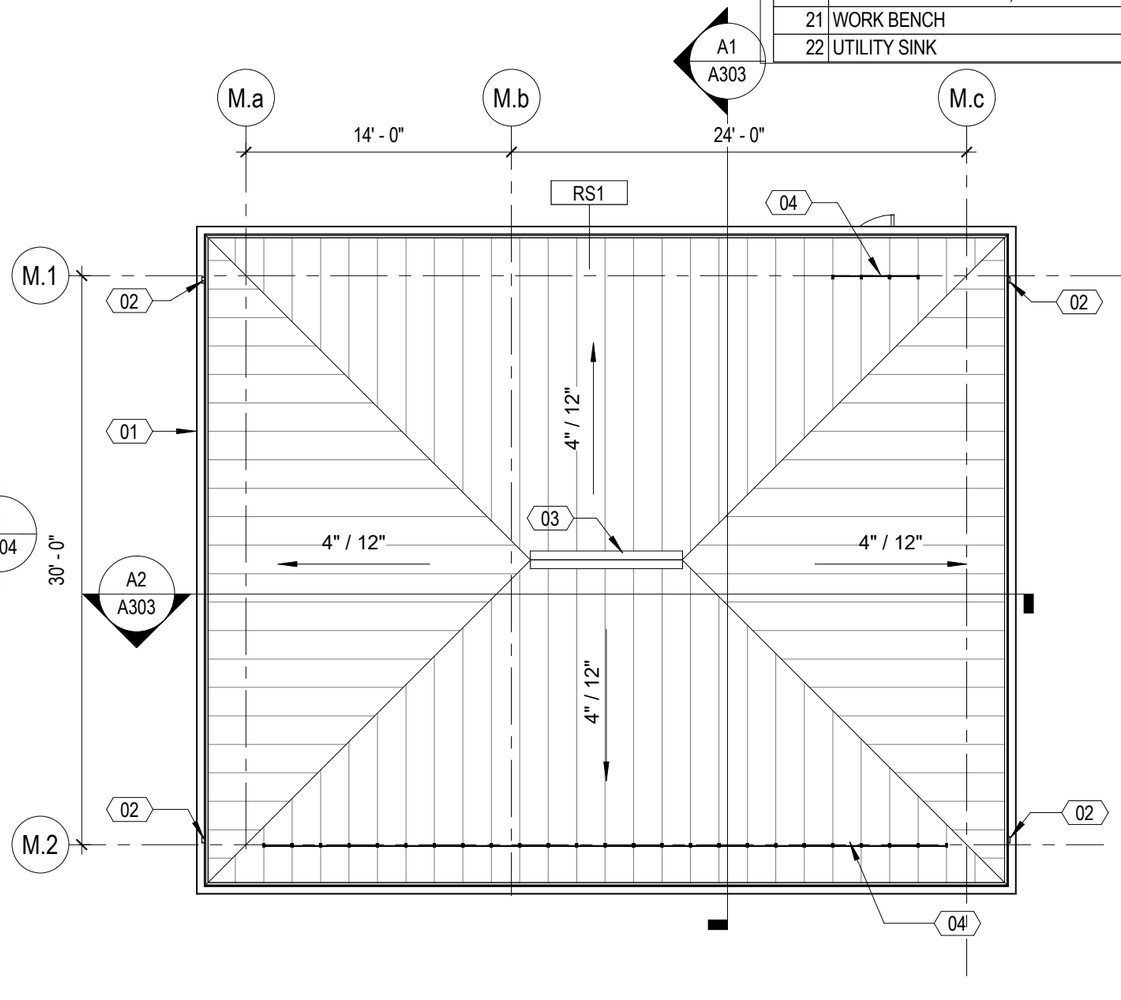
SHEET KEYNOTES

01	4 X 5 PREFORMED GUTTER - MATCH ROOF FINISH
02	PREFINISHED METAL DOWNSPOUT - MATCH ROOF FINISH
03	RIDGE VENT
04	SNOW GUARD
05	ROOF OVERHANG
10	CONCRETE APRON
11	6" DIA. x 42" H. METAL BOLLARD. PAINTED.
16	CONCRETE SLAB ON GRADE
17	ROUND FLOOR DRAIN, SEE PLUMBING
21	WORK BENCH
22	UTILITY SINK



A1 EQUIPMENT GARAGE - FLOOR PLAN

1/8" = 1'-0"



A2 EQUIPMENT GARAGE - ROOF PLAN

1/8" = 1'-0"

FOR INFORMATION ONLY - NOT FOR CONSTRUCTION

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	EQUIPMENT GARAGE - FLOOR AND ROOF PLANS	SHEET A107

E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 7/24/2024 2:38:54 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : As indicated

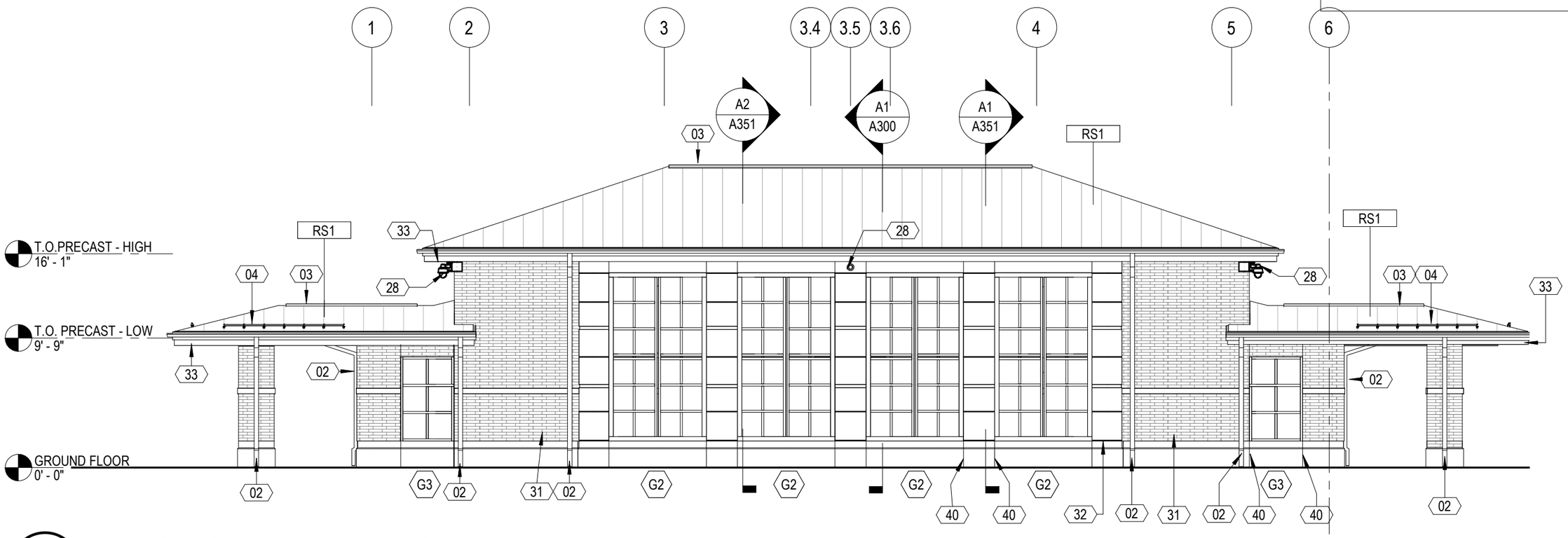
2

SHEET KEYNOTES

02	PREFINISHED METAL DOWNSPOUT - MATCH ROOF FINISH
03	RIDGE VENT
04	SNOW GUARD
28	SECURITY CAMERA - SEE COMMUNICATIONS
31	APC - WALL PATTERN 1
32	APC - WALL PATTERN 2
33	FIBER CEMENT TRIM/ OR FASCIA BOARD
40	PRECAST PANEL JOINT

GENERAL NOTES

1. SEE SHEET A001 FOR SYMBOLS AND TAGS.
2. SEE SHEETS I001 AND I002 FOR DESCRIPTIONS OF INTERIOR FINISHES.
3. SEE I501 FOR DETAILS OF TRANSITIONS BETWEEN INTERIOR MATERIALS.



A1 MAIN BUILDING - ELEVATION A

1/8" = 1'-0"

FOR INFORMATION ONLY - NOT FOR CONSTRUCTION

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	MAIN BUILDING - ELEVATION A	SHEET A20^	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 7/24/2024 2:38:56 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : As indicated

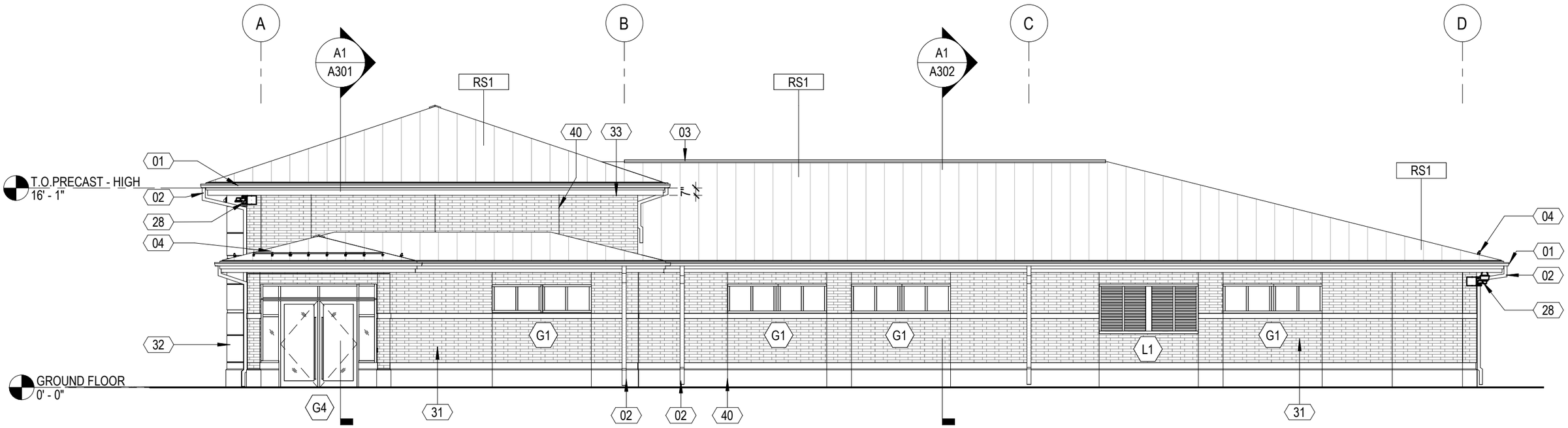
2

SHEET KEYNOTES

01	4 X 5 PREFORMED GUTTER - MATCH ROOF FINISH
02	PREFINISHED METAL DOWNSPOUT - MATCH ROOF FINISH
03	RIDGE VENT
04	SNOW GUARD
28	SECURITY CAMERA - SEE COMMUNICATIONS
31	APC - WALL PATTERN 1
32	APC - WALL PATTERN 2
33	FIBER CEMENT TRIM/ OR FASCIA BOARD
40	PRECAST PANEL JOINT

GENERAL NOTES

1. SEE SHEET A001 FOR SYMBOLS AND TAGS.
2. SEE SHEETS I001 AND I002 FOR DESCRIPTIONS OF INTERIOR FINISHES.
3. SEE I501 FOR DETAILS OF TRANSITIONS BETWEEN INTERIOR MATERIALS.



A1 MAIN BUILDING -ELEVATION B

1/8" = 1'-0"

FOR INFORMATION ONLY - NOT FOR CONSTRUCTION

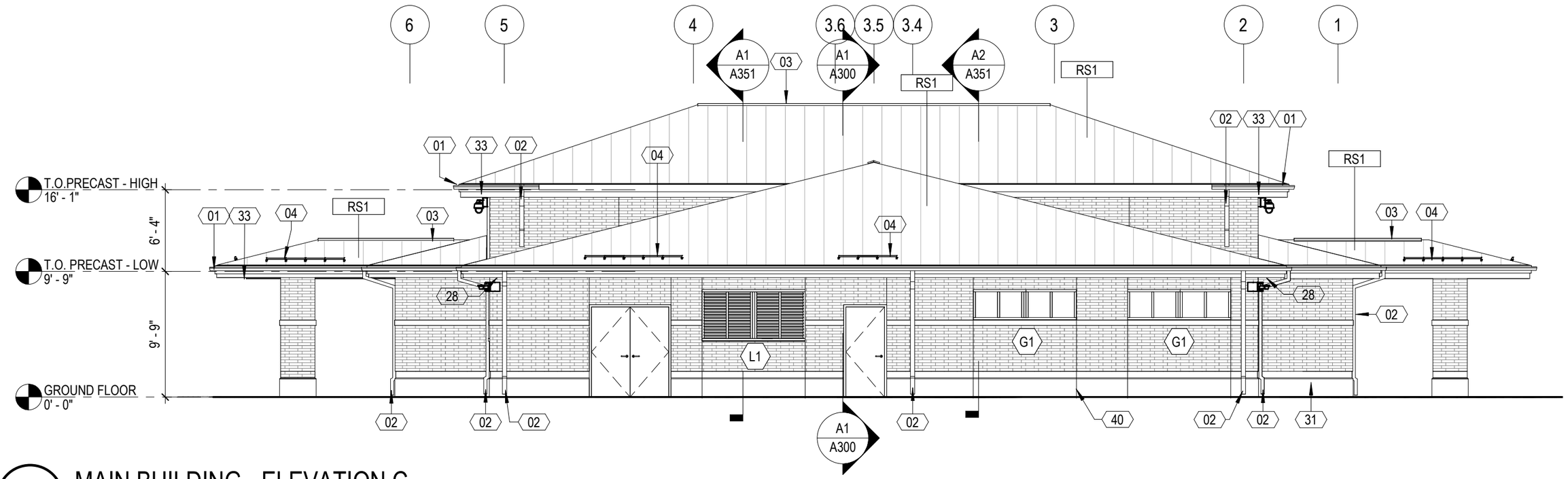
2

SHEET KEYNOTES

01	4 X 5 PREFORMED GUTTER - MATCH ROOF FINISH
02	PREFINISHED METAL DOWNSPOUT - MATCH ROOF FINISH
03	RIDGE VENT
04	SNOW GUARD
28	SECURITY CAMERA - SEE COMMUNICATIONS
31	APC - WALL PATTERN 1
33	FIBER CEMENT TRIM/ OR FASCIA BOARD
40	PRECAST PANEL JOINT

GENERAL NOTES

1. SEE SHEET A001 FOR SYMBOLS AND TAGS.
2. SEE SHEETS I001 AND I002 FOR DESCRIPTIONS OF INTERIOR FINISHES.
3. SEE I501 FOR DETAILS OF TRANSITIONS BETWEEN INTERIOR MATERIALS.



A1 MAIN BUILDING - ELEVATION C

1/8" = 1'-0"

FOR INFORMATION ONLY - NOT FOR CONSTRUCTION

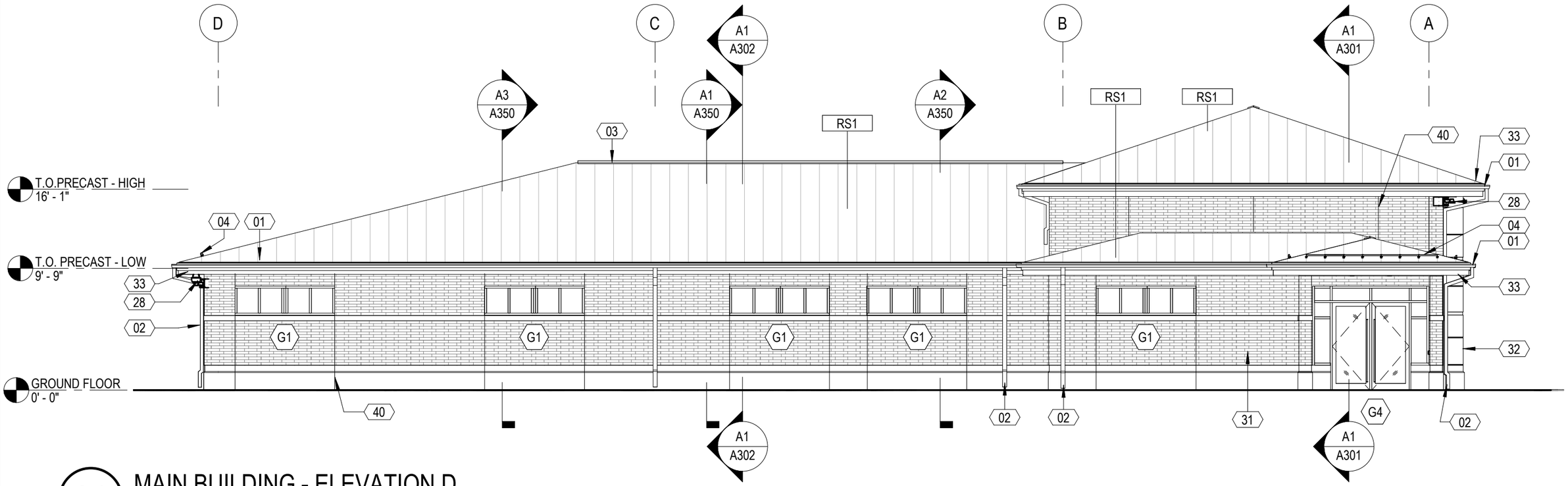
2

SHEET KEYNOTES

01	4 X 5 PREFORMED GUTTER - MATCH ROOF FINISH
02	PREFINISHED METAL DOWNSPOUT - MATCH ROOF FINISH
03	RIDGE VENT
04	SNOW GUARD
28	SECURITY CAMERA - SEE COMMUNICATIONS
31	APC - WALL PATTERN 1
32	APC - WALL PATTERN 2
33	FIBER CEMENT TRIM/ OR FASCIA BOARD
40	PRECAST PANEL JOINT

GENERAL NOTES

1. SEE SHEET A001 FOR SYMBOLS AND TAGS.
2. SEE SHEETS I001 AND I002 FOR DESCRIPTIONS OF INTERIOR FINISHES.
3. SEE I501 FOR DETAILS OF TRANSITIONS BETWEEN INTERIOR MATERIALS.

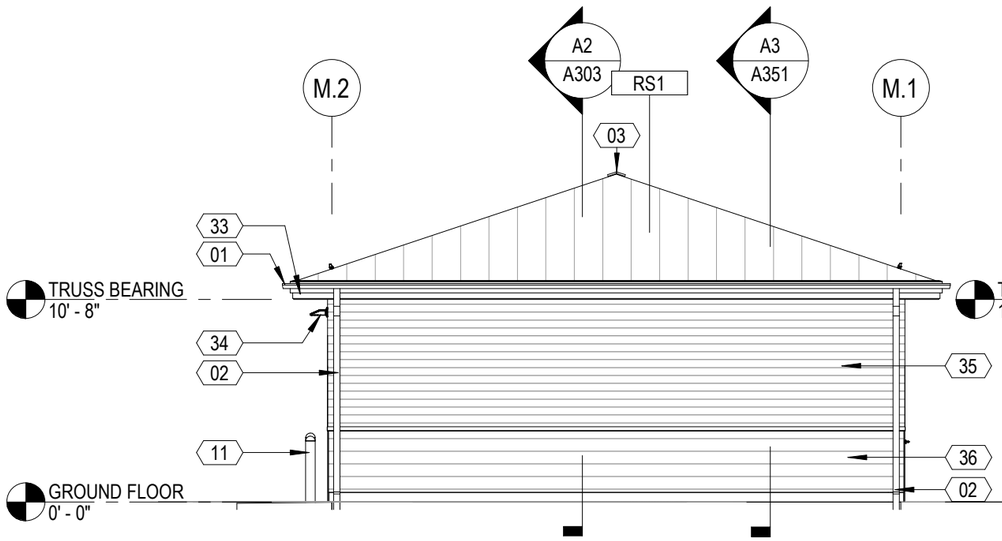


A1 MAIN BUILDING - ELEVATION D

1/8" = 1'-0"

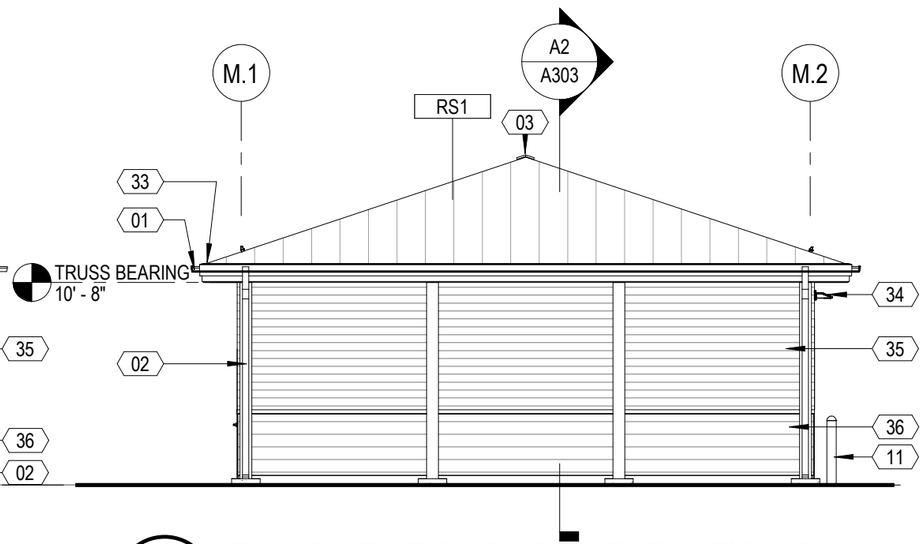
FOR INFORMATION ONLY - NOT FOR CONSTRUCTION

2



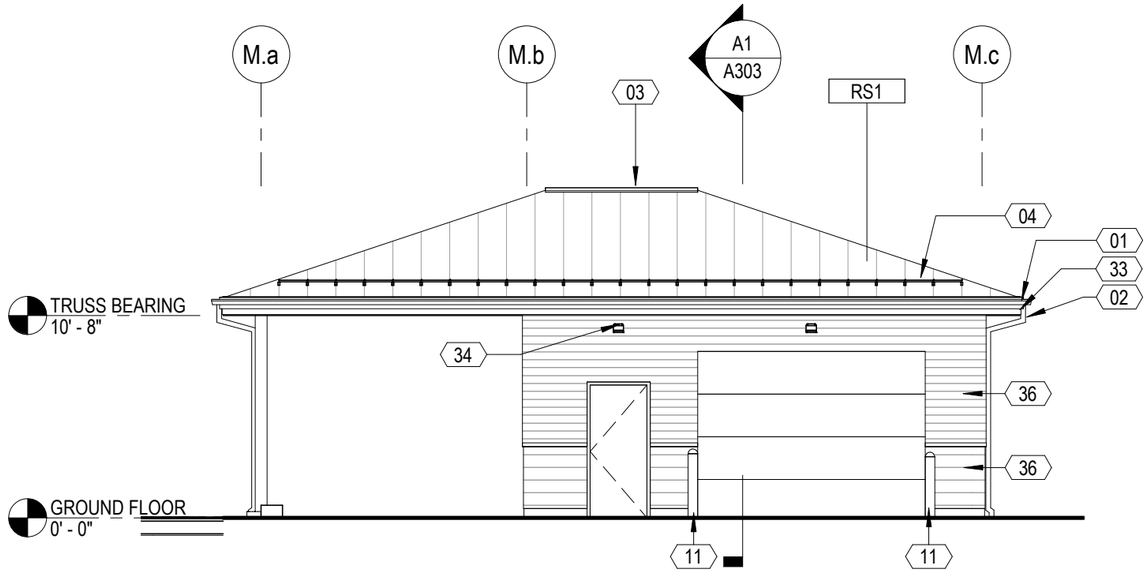
1 EQUIPMENT GARAGE - ELEVATION B

1/8" = 1'-0"



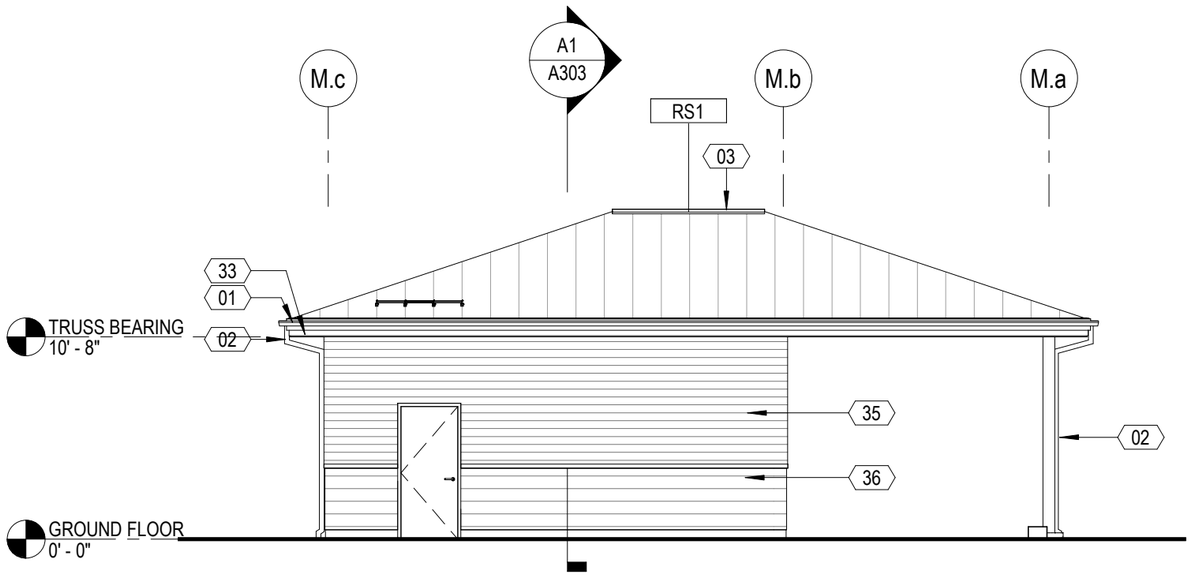
2 EQUIPMENT GARAGE - ELEVATION D

1/8" = 1'-0"



3 EQUIPMENT GARAGE - ELEVATION A

1/8" = 1'-0"



4 EQUIPMENT GARAGE - ELEVATION C

1/8" = 1'-0"

SHEET KEYNOTES

01	4 X 5 PREFORMED GUTTER - MATCH ROOF FINISH
02	PREFINISHED METAL DOWNSPOUT - MATCH ROOF FINISH
03	RIDGE VENT
04	SNOW GUARD
11	6" DIA. x 42" H. METAL BOLLARD. PAINTED.
33	FIBER CEMENT TRIM/ OR FASCIA BOARD
34	EXTERIOR LIGHTING
35	FCS WALL, 5" EXPOSURE
36	FCS WALL, 8" EXPOSURE

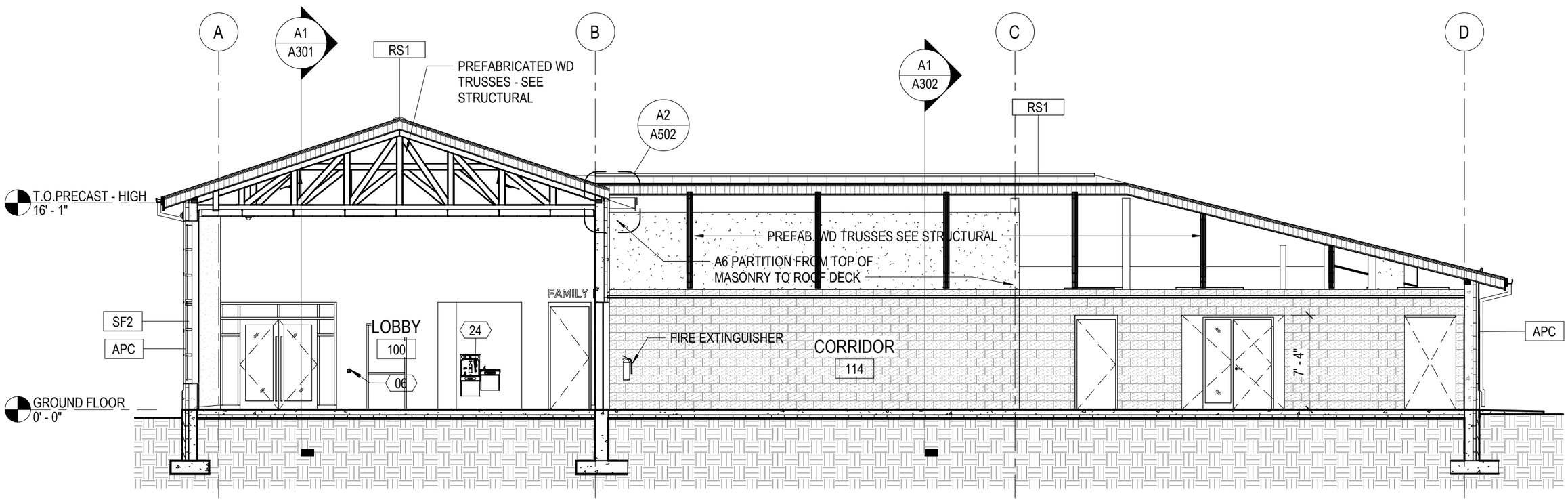
GENERAL NOTES

1. SEE SHEET A001 FOR SYMBOLS AND TAGS.
2. SEE SHEETS I001 AND I002 FOR DESCRIPTIONS OF INTERIOR FINISHES.
3. SEE I501 FOR DETAILS OF TRANSITIONS BETWEEN INTERIOR MATERIALS.

FOR INFORMATION ONLY - NOT FOR CONSTRUCTION

2

06	AUTOMATIC DOOR OPERATOR BUTTON
24	DRINKING FOUNTAIN



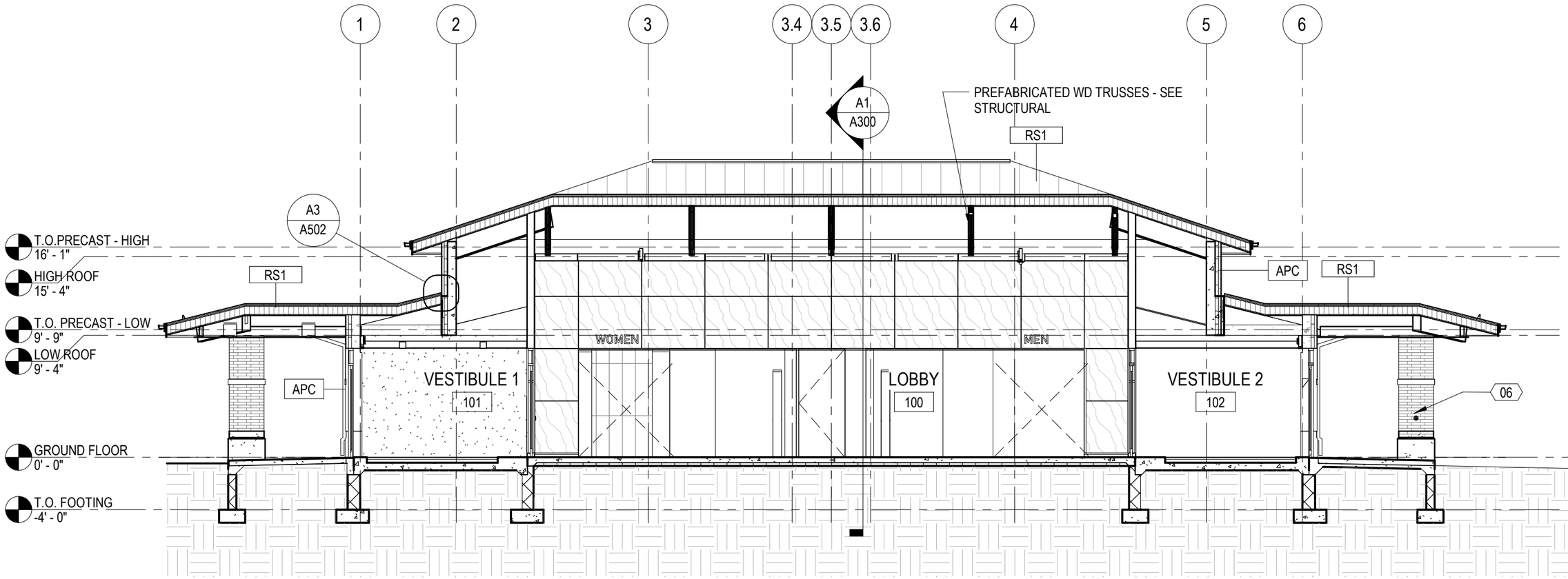
A1 MAIN BUILDING - TRANSVERSE SECTION

1/8" = 1'-0"

FOR INFORMATION ONLY - NOT FOR CONSTRUCTION

2

06 AUTOMATIC DOOR OPERATOR BUTTON



A1 MAIN BUILDING - LONGITUDINAL SECTION THROUGH LOBBY

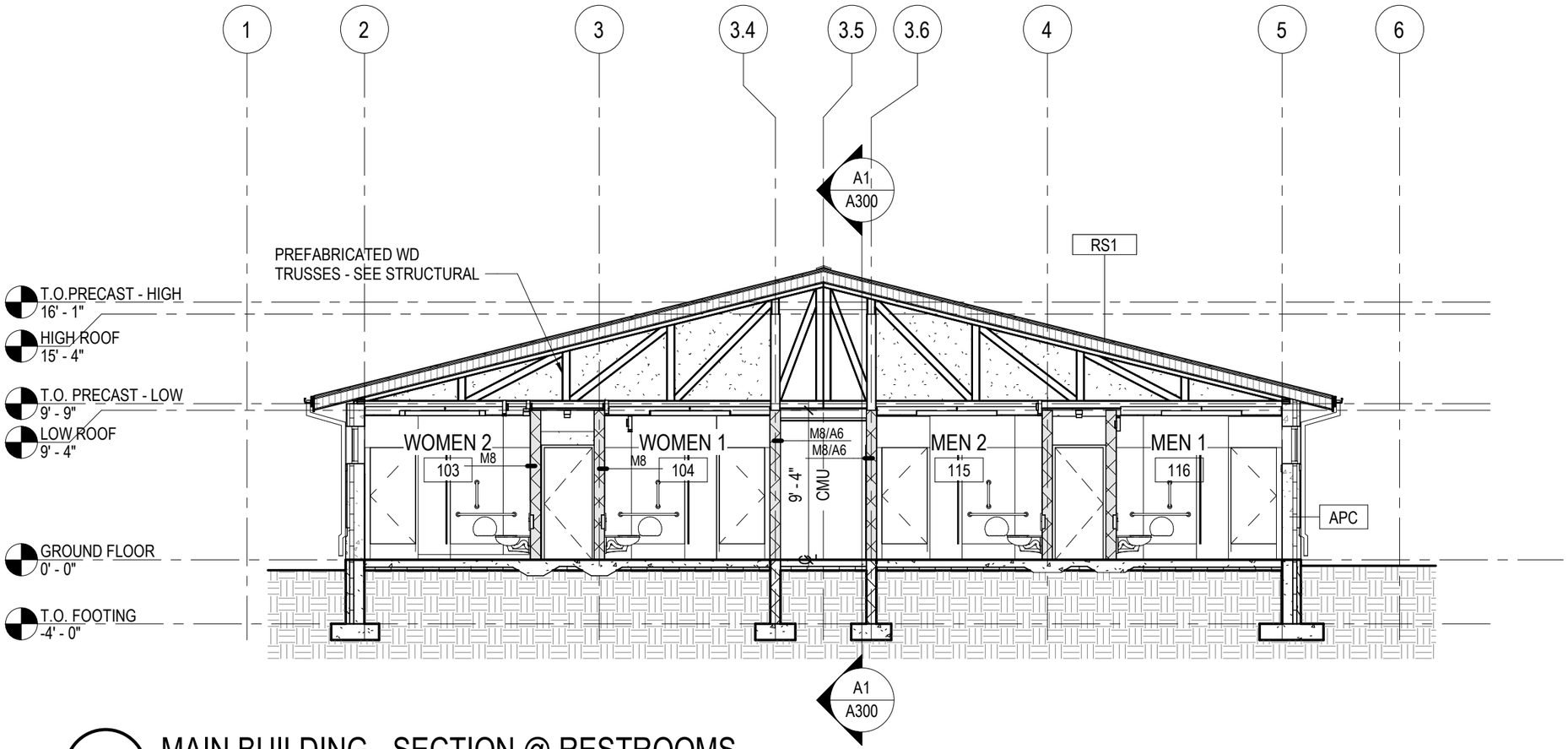
1/8" = 1'-0"

FOR INFORMATION ONLY - NOT FOR CONSTRUCTION

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	BUILDING SECTIONS	SHEET A301	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 7/24/2024 2:39:04 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : 1/8" = 1'-0"

2



A1 MAIN BUILDING - SECTION @ RESTROOMS

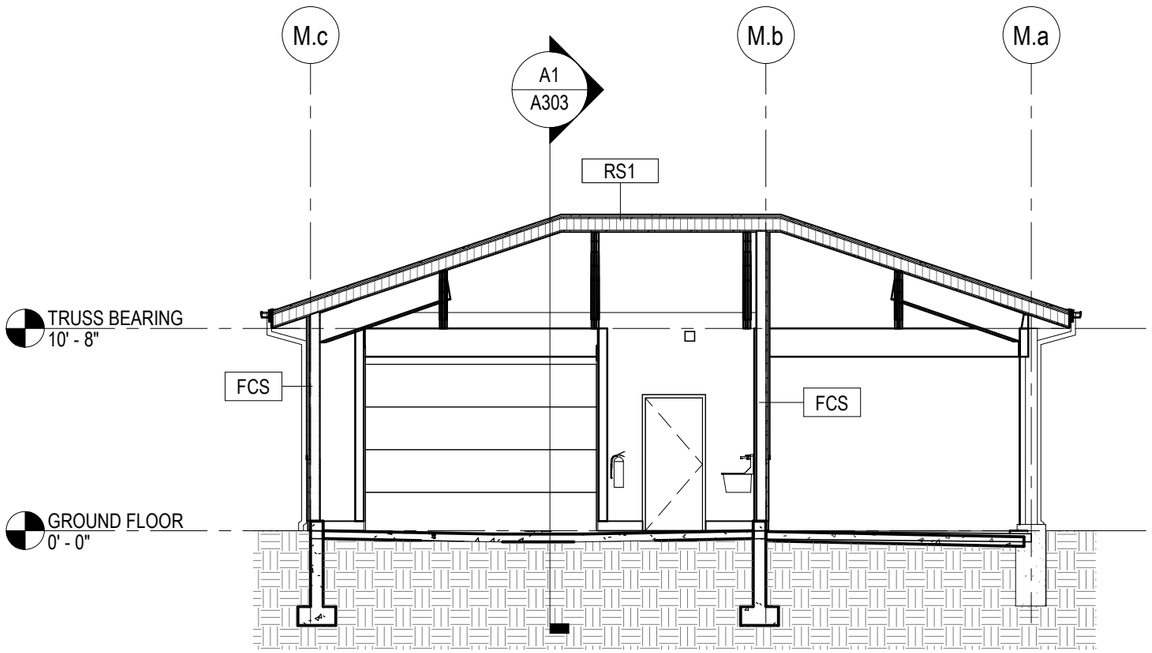
1/8" = 1'-0"

FOR INFORMATION ONLY - NOT FOR CONSTRUCTION

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	BUILDING SECTIONS	SHEET A30~146	E

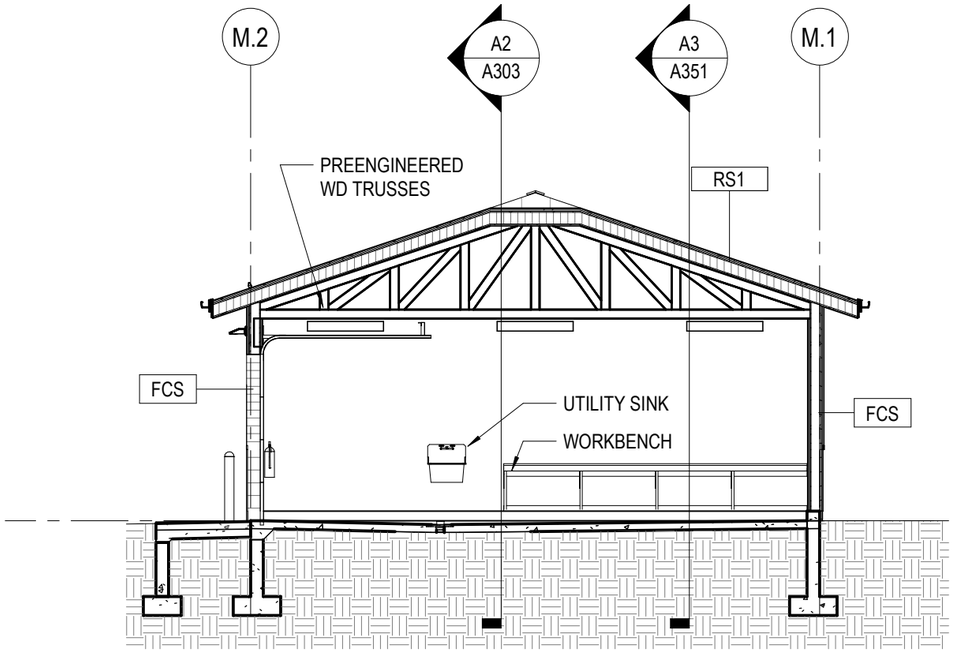
FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 7/24/2024 2:39:05 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : 1/8" = 1'-0"

2



A2 EQUIPMENT GARAGE - LONGITUDINAL SECTION

1/8" = 1'-0"



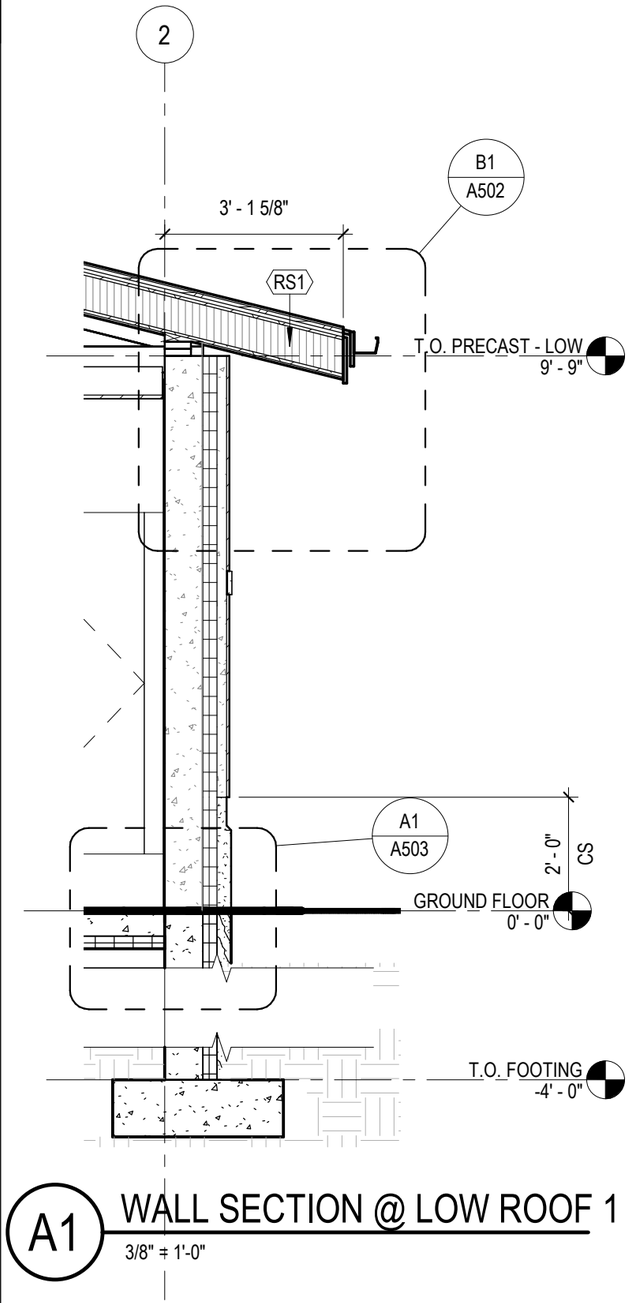
A1 EQUIPMENT GARAGE - TRANSVERSE SECTION

1/8" = 1'-0"

FOR INFORMATION ONLY - NOT FOR CONSTRUCTION

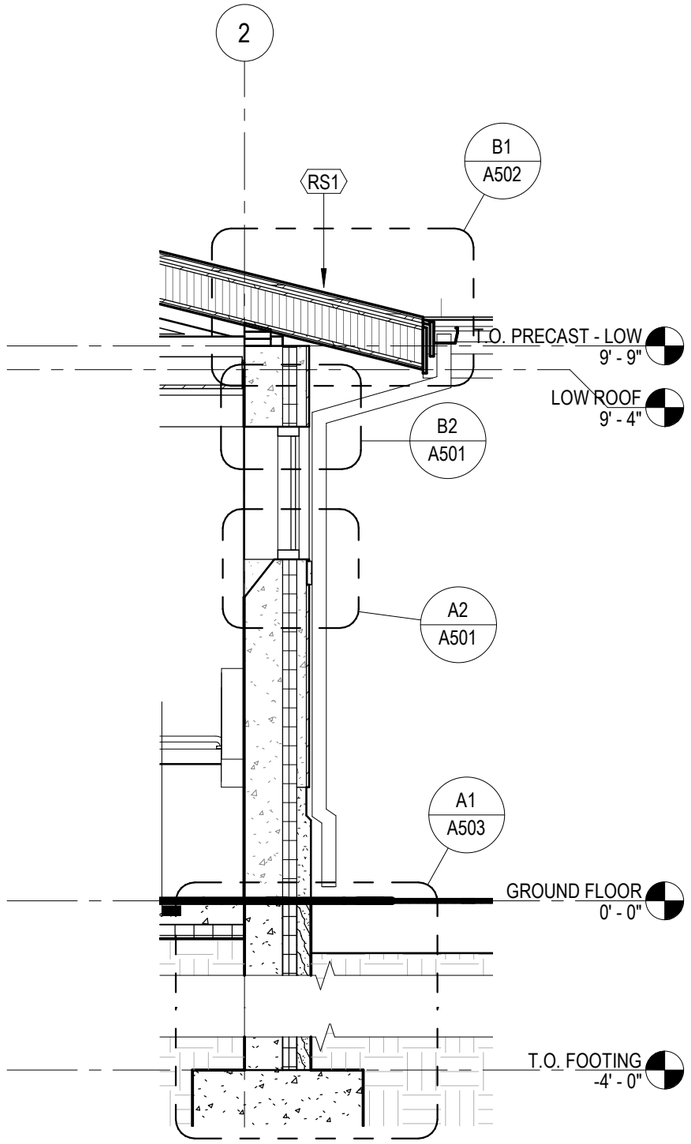
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	BUILDING SECTIONS	SHEET A30^	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 7/24/2024 2:39:05 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : 1/8" = 1'-0"



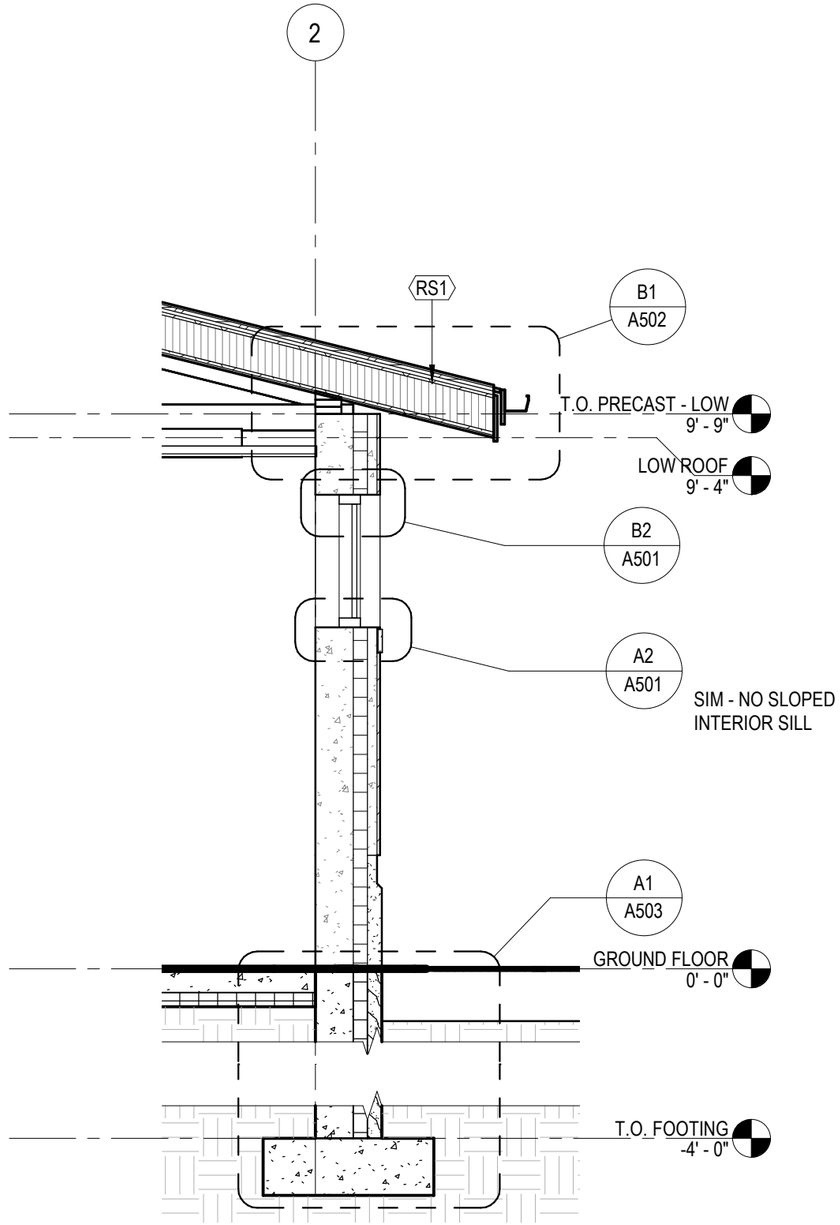
A1 WALL SECTION @ LOW ROOF 1

3/8" = 1'-0"



A2 WALL SECTION @ LOW ROOF WINDOW

3/8" = 1'-0"



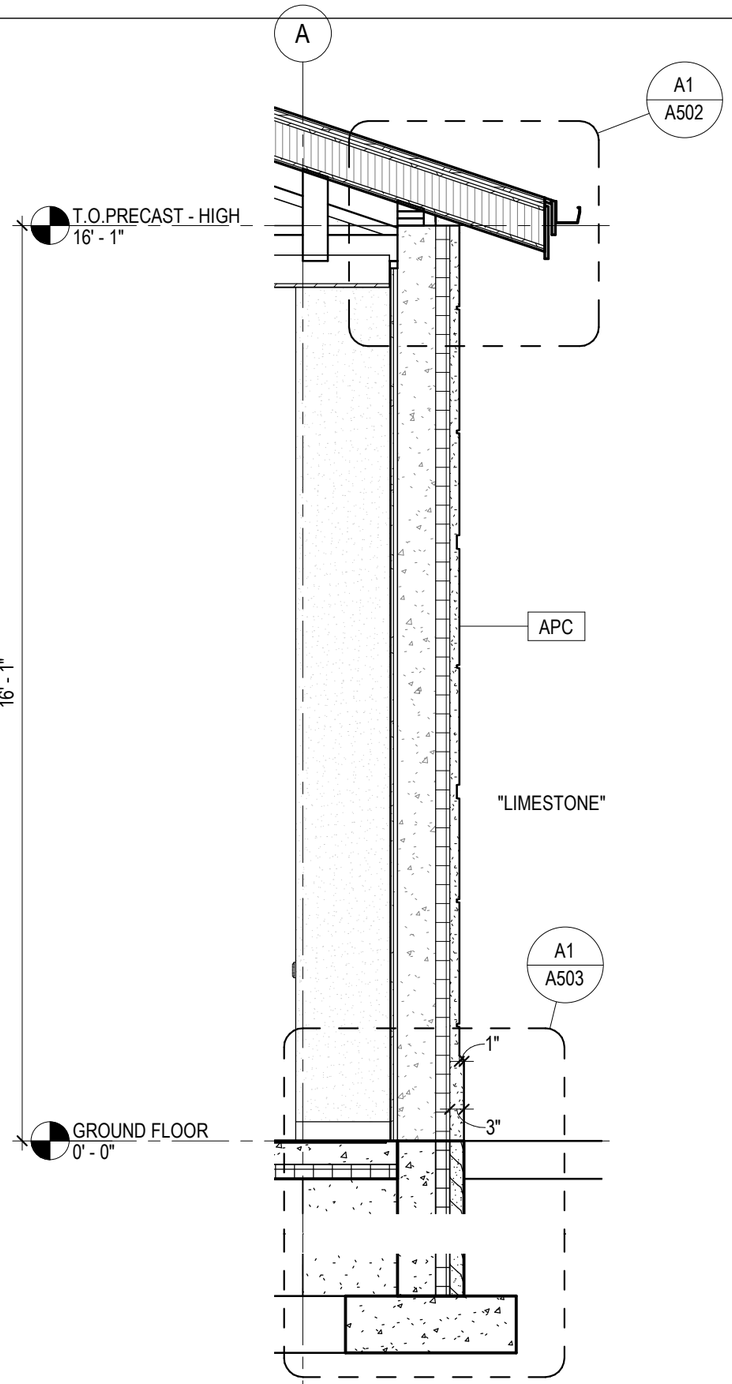
A3 WALL SECTION @ LOW ROOF 2

3/8" = 1'-0"

FOR INFORMATION ONLY - NOT FOR CONSTRUCTION

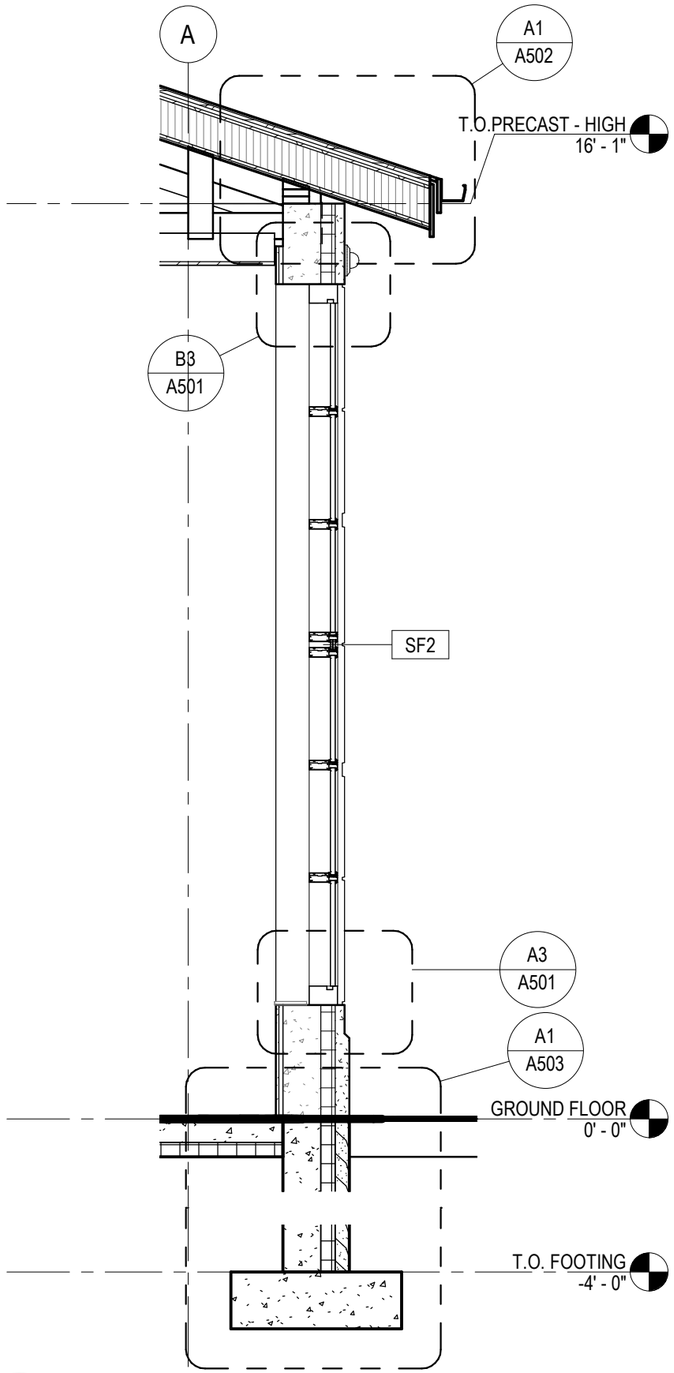
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	WALL SECTIONS	SHEET A35[illegible]	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 7/24/2024 2:39:07 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : 3/8" = 1'-0"



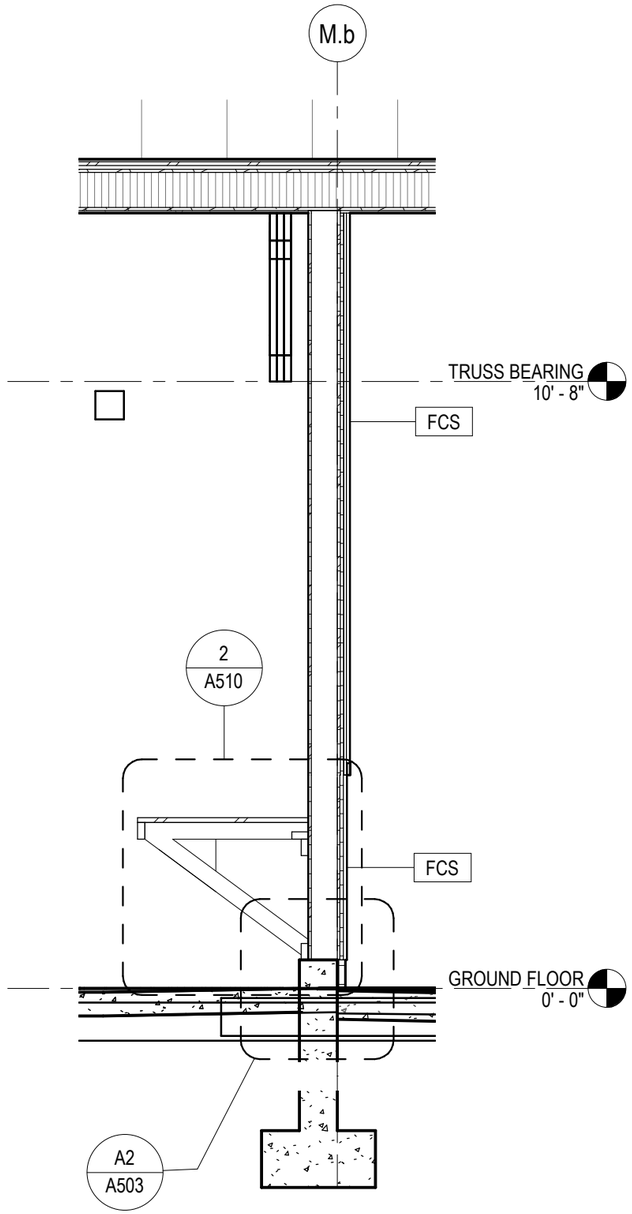
A1 WALL SECTION @ LOBBY1

3/8" = 1'-0"



A2 WALL SECTION @ LOBBY WINDOW

3/8" = 1'-0"



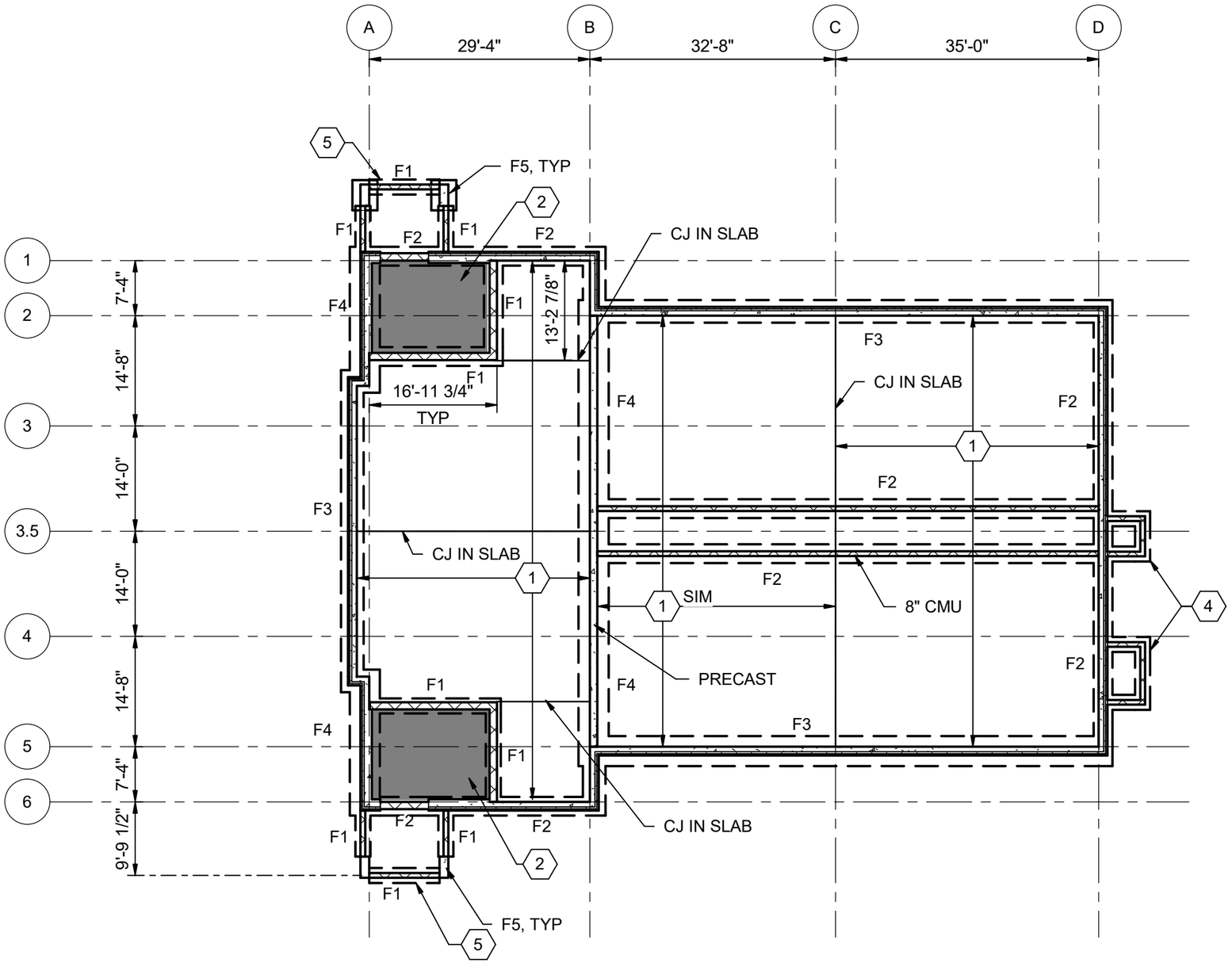
A3 SECTION - EQUIPMENT GARAGE

3/8" = 1'-0"

FOR INFORMATION ONLY - NOT FOR CONSTRUCTION

PROJECT NO: 1225-10-72		HWY: IH 43	COUNTY: MANITOWOC	WALL SECTIONS	SHEET A351	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 7/24/2024 2:39:10 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : 3/8" = 1'-0"



A1 FOUNDATION PLAN

1/16" = 1'-0"

GENERAL NOTES:

1. SEE SHEET S001 FOR STRUCTURAL NOTES.
2. SEE SHEET S500 SERIES FOR STANDARD DETAILS.
3. MARK "F-X" INDICATES FOOTING TYPE. SEE FOOTING SCHEDULE.
   A. PROVIDE DETAILS A1 - A3/S301.
   B. PROVIDE DETAIL B2/S301 FOR ALL NON-BEARING CMU INTERIOR WALLS - SEE ARCH.
4. TOP OF ALL FOOTINGS EL. -4'-0" UNO.
5. CENTER FOOTINGS ON ALL WALLS UNO.
6. PLACE 3/8" THICK EXPANSION MATERIAL BETWEEN ALL WALLS AND SLABS. CAULK TOP OF JOINT
7. PROVIDE CONSTRUCTION JOINT DETAIL B1/S501 AS SHOWN ON PLANS.
8. PROVIDE (3) CONSECUTIVE VERTICAL CORES UNDER TRUSS BEARING WITH #5 VERTICAL WITH MATCHING STD HOOKED DOWELS. REINFORCE WITH #5@32 " MAX WITH MATCHING DOWELS BETWEEN.

PLAN KEYNOTES

1. PROVIDE 6" THICK CONCRETE SLAB W/ #4 @ 18" EA WAY, CTR'D. PROVIDE 1 ½" DEEP SAWED CONTROL JOINTS AT 10'-0" OC, MAXIMUM EACH WAY WITHIN 12 HOURS OF FINISHING SLAB. WET CURE SLAB FOR 7 DAYS AFTER PLACEMENT. HEAT-CORE TUBING @ SIM.
2. DENOTES CONCRETE SLAB W/ RECESS MAT. SEE SECTIONS ON SHEET S302. REFER TO MECHANICAL FOR HEAT-CORE REQUIREMENTS.
3. PROVIDE (3) CONSECUTIVE CORES UNDER EACH WOOD TRUSS W/ #5 VERTICAL AND MATCHING STD HOOK DOWELS.
4. STOOP FOUNDATION DETAIL A1/S303. SEE ARCH FOR DIMENSIONS AND LOCATION.
5. STOOP FOUNDATION DETAIL A2 & B1/S303.

FOOTING SCHEDULE			
MARK	*SIZE	LONGITUDINAL REINFORCEMENT	TRANSVERSE REINFORCEMENT
F1	2'-0" WIDE	(3) #5	
F2	2'-6" WIDE	(4) #5	
F3	3'-0" WIDE	(4) #5	
F4	4'-0" WIDE	(6) #5	#5 @ 8"
F5	3'-4" x 4'-0"	#5 @ 12" BOT.	#5 @ 12" BOT.

* ALL FOOTINGS SHALL BE 1'-0" THICK, UNO.

FOR INFORMATION ONLY - NOT FOR CONSTRUCTION

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	FOUNDATION PLAN	SHEET S101	E

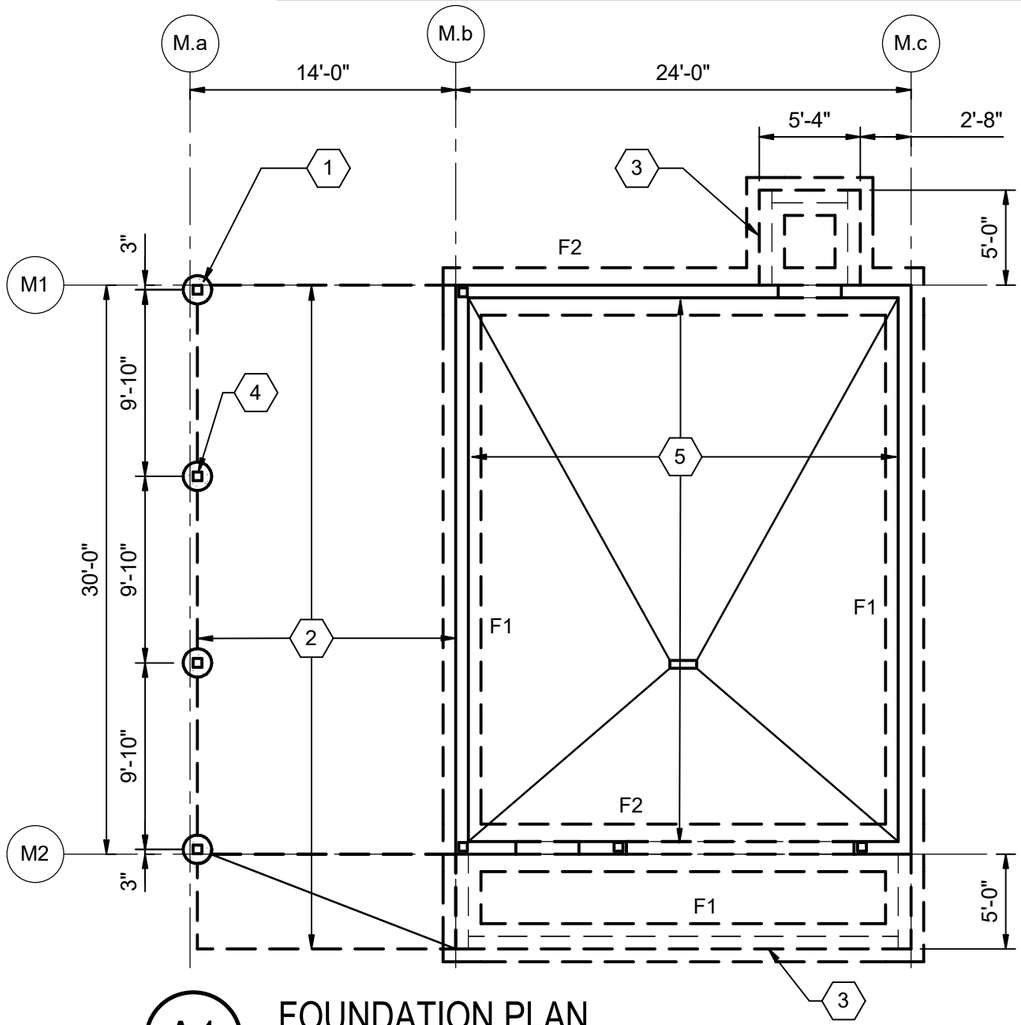
FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 7/24/2024 4:47:08 PM PLOT BY : PLOT NAME : PLOT SCALE : As indicated

GENERAL NOTES:

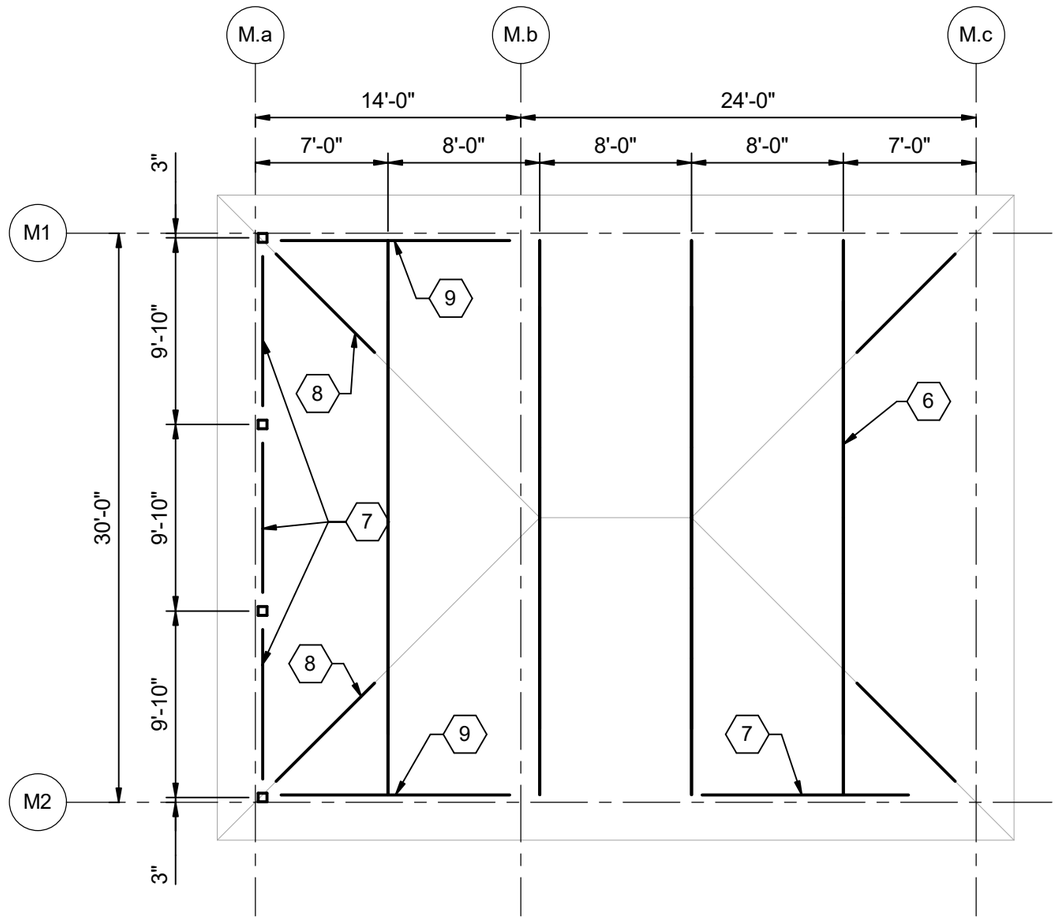
1. SEE SHEET S001 FOR STRUCTURAL NOTES.
2. SEE SHEET S501 & S502 FOR STANDARD DETAILS.
3. MARK "F-X" INDICATES FOOTING TYPE. SEE FOOTING SCHEDULE
   A. PROVIDE DETAILS B1/S301.
4. TOP OF ALL FOOTINGS IS EL -4'-0", UNO.
5. CENTER FOOTINGS ON ALL WALLS, UNO.
6. WALLS ARE WOOD-FRAMED CONVENTIONAL CONSTRUCTION; 2 X 6 @ 16" W/ SILL (5/8" DIA X 6" LONG J-TYPE @ 4'-0") AND DOUBLE TOP PLATE, AND DOUBLE 2 X 10 LINTELS W/ (2) JACK-STUDS.
7. PLACE 3/8" THICK EXPANSION MATERIAL BETWEEN ALL WALLS AND SLABS. CAULK TOP OF JOINT.
8. PROVIDE FLOOR SLOPING AS SHOWN ON ARCHITECTURAL.
9. ROOF SYSTEM IS STRUCTURAL INSULATED PANEL (SIP), PROPRIETARY.

PLAN KEYNOTES

1. 1'-4" DIA X 6'-0" (4" PROJ) CONCRETE PIER W/ (6) #7 VERT & #4 TIES @ 12", 3 @ 3" TOP, 4 LOCATIONS.
2. PROVIDE 4" THICK CONCRETE SLAB WITH #4 @ 18" EACH WAY. PROVIDE 1 ½" DEEP SAWED CONTROL JOINTS AT 10'-0" O.C. MAXIMUM EACH WAY WITHIN 12 HOURS OF FINISHING CONCRETE. WET CURE SLAB FOR 7 DAYS AFTER PLACEMENT.
3. PROVIDE SIM TO DETAIL A1/S303.
4. WOOD COLUMN 6 X 6 TYPICAL 4 LOCATIONS. CONNECT W/ SIMPSON ABU66Z OR EQUAL.
5. PROVIDE 8" CONCRETE WALL W/ #5 @ 12" EA WAY, CTR'D.
6. (2) PLY WOOD TRUSS W/ STD HEEL HEIGHT.
7. LVL 3-1/2" X 9-1/4", SINGLE BEVEL.
8. LVL 3-1/2" X 9-1/4", DOUBLE BEVEL, TYP 4 LOCATIONS.
9. LVL 3-1/2" X 14" SINGLE BEVEL, TYP 2 LOCATIONS. DOUBLE JACK-STUD BEARING.



A1 FOUNDATION PLAN
1/8" = 1'-0"



A2 ROOF FRAMING PLAN
1/8" = 1'-0"

FOR INFORMATION ONLY - NOT FOR CONSTRUCTION

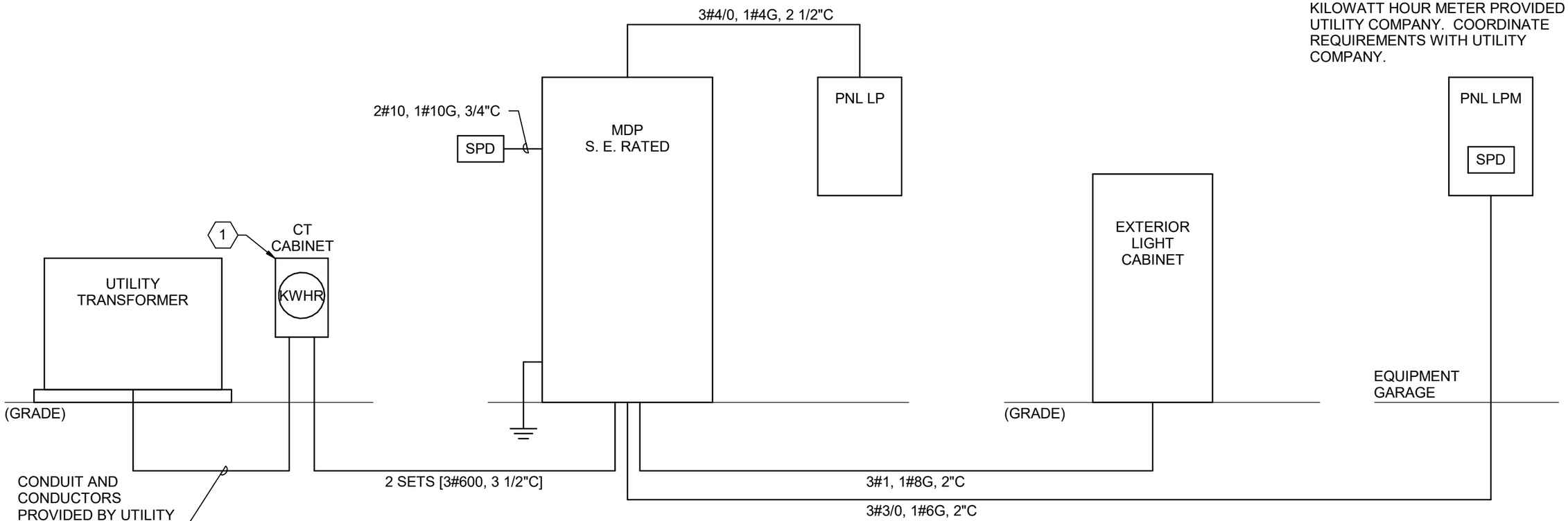
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	MAINTENANCE BUILDING	SHEET S201

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 7/24/2024 4:47:08 PM PLOT BY : PLOT NAME : PLOT SCALE : As indicated

E

KEYNOTES ⟨#⟩

1. PROVIDE CT CABINET. CT'S AND KILOWATT HOUR METER PROVIDED BY UTILITY COMPANY. COORDINATE REQUIREMENTS WITH UTILITY COMPANY.



1/- ONE-LINE POWER RISER DIAGRAM

NOT TO SCALE

FOR INFORMATION ONLY - NOT FOR CONSTRUCTION

2

2

COMFORT BUILDING

PICNIC SHELTER LARGE

FLAG

FLAG

53+00 L

54+00 L

55+00 L

56+00 L

57+00 L

58+00 L

59+00 L

60+00 L

MAINT BLDG

PICNIC SHELTER SMALL

SALVAGE AND REINSTALL HISTORICAL SIGN, USE DIMENSIONED POST CONSTRUCTION, SEE SDD HISTORICAL MARKER CONSTRUCTION

PICNIC SHELTER SMALL

LEGEND

- NEW OR SALVAGED TRASH RECEPTACLES
- NEW OR SALVAGED RECYCLING RECEPTACLES
- SALVAGED CIGARETTE SNUFFERS
- FLAG POLE
- PICNIC TABLE SINGLE PEDESTAL

N

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAZA FEATURES OVERVIEW - REST AREA 51	SHEET 153	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023101-PL_RA 51- TRASH AND RECYCLING.DWG
LAYOUT NAME - 021031-cd_RA 51 Plaza Layout

PLOT DATE : 11/26/2024 2:10 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- ⊠ NEW OR SALVAGED RECEPTACLES TRASH
- □ NEW OR SALVAGED RECEPTACLES RECYCLING
- ● SALVAGED CIGARETTE SNUFFERS
- PICNIC TABLE SINGLE PEDESTAL

N

53+00 L

54+00 L

55+00 L

56+00 L

MAINT BLDG

COMFORT BUILDING

PICNIC SHELTER SMALL

MATCHLINE STA 56+85 L

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAZA FEATURES - REST AREA 51	SHEET 154	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023101-PL_RA 51- TRASH AND RECYCLING.DWG
LAYOUT NAME - 021032-cd_RA 51 Plaza

PLOT DATE : 11/26/2024 11:42 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:30

2

LEGEND

- NEW OR SALVAGED RECEPTACLES TRASH
- NEW OR SALVAGED RECEPTACLES RECYCLING
- SALVAGED CIGARETTE SNUFFERS
- PICNIC TABLE SINGLE PEDESTAL

N

PICNIC SHELTER LARGE

FLAG

FLAG

MATCHLINE STA 56+85 L

57+00 L

58+00 L

59+00 L

60+00 L

61+00 L

HISTORICAL MARKER

PICNIC SHELTER SMALL

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAZA FEATURES - REST AREA 51	SHEET 155	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023101-PL_RA 51- TRASH AND RECYCLING.DWG
LAYOUT NAME - 021033-cd_RA 51 Plaza

PLOT DATE : 11/26/2024 11:42 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:30

2

2

LEGEND

- NEW OR SALVAGED TRASH RECEPTACLES
- NEW OR SALVAGED RECYCLING RECEPTACLES
- SALVAGED CIGARETTE SNUFFERS
- FLAG POLE
- PICNIC TABLE SINGLE PEDESTAL

N

PICNIC SHELTER SMALL

64+00 M

65+00 M

66+00 M

67+00 M

68+00 M

69+00 M

70+00 M

71+00 M

SALVAGE AND REINSTALL HISTORICAL SIGN, USE DIMENSIONED POST CONSTRUCTION, SEE SDD HISTORICAL MARKER CONSTRUCTION

FLAG

PICNIC SHELTER LARGE

COMFORT BUILDING

PICNIC SHELTER SMALL

MAINT BLDG

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAZA FEATURES OVERVIEW - REST AREA 52	SHEET 156	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023101-PL_RA 52- TRASH AND RECYCLING.DWG
LAYOUT NAME - 021034-cd_RA 52 Plaza Layout

PLOT DATE : 11/26/2024 2:10 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

LEGEND

- NEW OR SALVAGED RECEPTACLES TRASH
- NEW OR SALVAGED RECEPTACLES RECYCLING
- SALVAGED CIGARETTE SNUFFERS
- PICNIC TABLE SINGLE PEDESTAL

N

Q

PICNIC SHELTER SMALL

PICNIC SHELTER LARGE

HISTORICAL MARKER

FLAG

FLAG

M

64+00 M

65+00 M

66+00 M

67+00 M

MATCHLINE STA 67+50 M

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAZA FEATURES - REST AREA 52	SHEET 157	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023101-PL_RA 52- TRASH AND RECYCLING.DWG
LAYOUT NAME - 021035-cd_RA 52 Plaza

PLOT DATE : 11/26/2024 11:42 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:30

WISDOT/CADDS SHEET 42

2

2

LEGEND

⊠ NEW OR SALVAGED RECEPTACLES TRASH

□ NEW OR SALVAGED RECEPTACLES RECYCLING

● SALVAGED CIGARETTE SNUFFERS

PICNIC TABLE SINGLE PEDESTAL

N

PICNIC SHELTER SMALL

MAINT BLDG

COMFORT BUILDING

MATCHLINE STA 67+50 M

68+00 M

69+00 M

70+00 M

71+00 M

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAZA FEATURES - REST AREA 52	SHEET 158	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023101-PL_RA 52- TRASH AND RECYCLING.DWG
LAYOUT NAME - 021036-cd_RA 52 Plaza

PLOT DATE : 11/26/2024 11:42 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:30

2

N

STA 55+25.68 L
-102.17' LT

STA 55+82.56 L
-105.16' LT

STA 56+28.31 L
-114.45' LT

STA 56+44.50 L
-108.59' LT

STA 56+62.70 L
-103.79' LT

STA 57+88.81 L
-100.44' LT

GD
1

AS
1

AG
3

AS
1

B

STA 54+10.39 L
-32.04' LT

STA 54+68.46 L
-52.67' LT

PS
2

QB
1

STA 55+50.38 L
-59.41' LT

C

COMFORT BUILDING

PLACE DOUBLE SHREDDED
HARDWOOD MULCH AROUND
SEPTIC HATCHES

D

STA 58+14.64 L
-53.59' LT

AS
1

PS
1

STA 58+84.80 L
-52.15' LT

STA 59+42.35 L
-36.24' LT

STA 59+63.82 L
3.28' RT

STA 58+89.26 L
-9.19' LT

STA 58+29.02 L
3.80' RT

QB
1

F

AS
1

STA 60+15.18 L
19.73' RT

M

MAINTENANCE
BUILDING

54+00 L

55+00 L

56+00 L

57+00 L

58+00 L

59+00 L

60+00 L

STA 54+64.67 L
4.57' RT

STA 55+44.01 L
2.68' RT

FS
1

PS
3

G

AG
1

AG
2

AS
1

AS
1

AS
1

QB
1

GD
1

PS
2

K

L

STA 54+20.24 L
25.53' RT

STA 54+98.43 L
35.72' RT

STA 55+87.13 L
53.84' RT

STA 56+26.24 L
54.82' RT

STA 56+43.56 L
48.05' RT

STA 56+62.18 L
47.95' RT

STA 58+84.69 L
34.17' RT

STA 59+78.36 L
42.45' RT

STA 60+64.04 L
56.49' RT

LEGEND

SEEDING MIXTURE NO 40

NATIVE POLLINATOR SEEDING MIXTURE NO 90B

SOD LAWN

NOTE:
SEE PLANTING SCHEDULE FOR PLANTING DATA

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLANTING OVERVIEW - REST AREA 51	SHEET 159	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023101-PL_RA 51.DWG
LAYOUT NAME - 023101-pl

PLOT DATE : 11/26/2024 11:43 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : ##N#N#N####

2

NOTE:
GRID IS 8'x8'

N

STA 57+05.19 L
-106.31' LT

STA 57+39.89 L
-109.70' LT

STA 57+25 L
-104.77' LT

LANDSCAPE AREA B

SEE PLANTING SCHEDULE FOR PLANTING DATA

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLANTING - REST AREA 51	SHEET 160	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023101-PL_RA 51.DWG
LAYOUT NAME - 023103-pl B
PLOT DATE : 11/26/2024 11:43 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

2

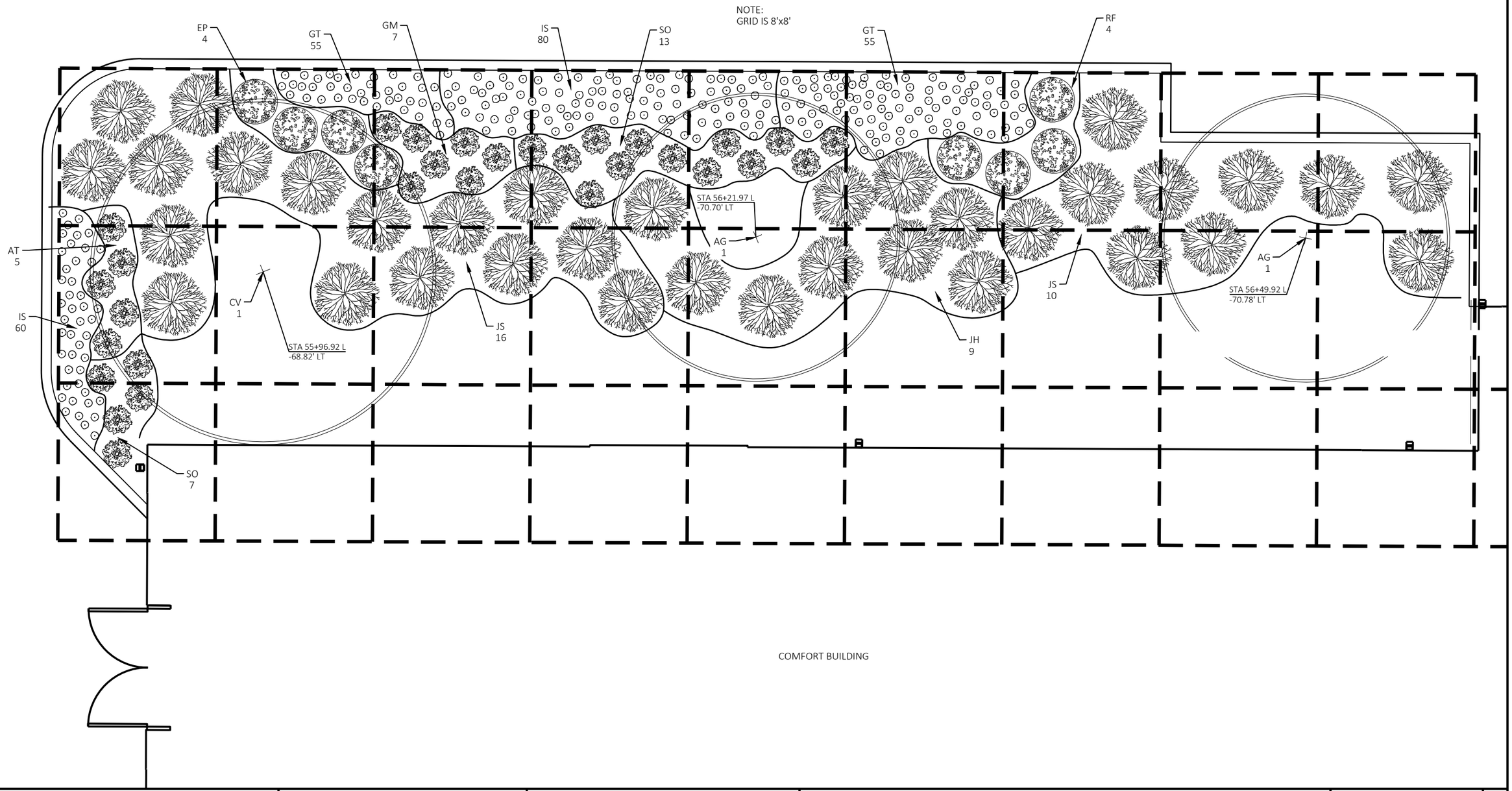
2

LANDSCAPE AREA C

SEE PLANTING SCHEDULE FOR PLANTING DATA

N

NOTE:
GRID IS 8'x8'



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLANTING - REST AREA 51	SHEET 161	E

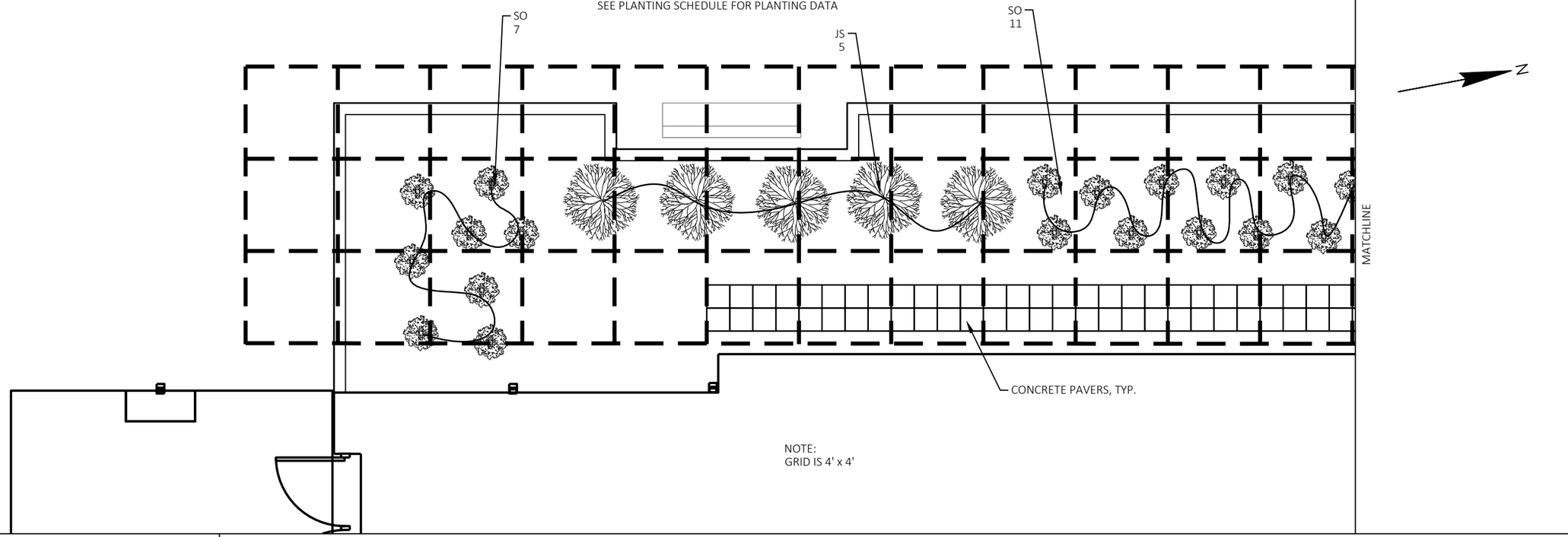
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LAYOUT NAME - 023104-pl C

PLOT DATE : 11/26/2024 11:43 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:5 FT

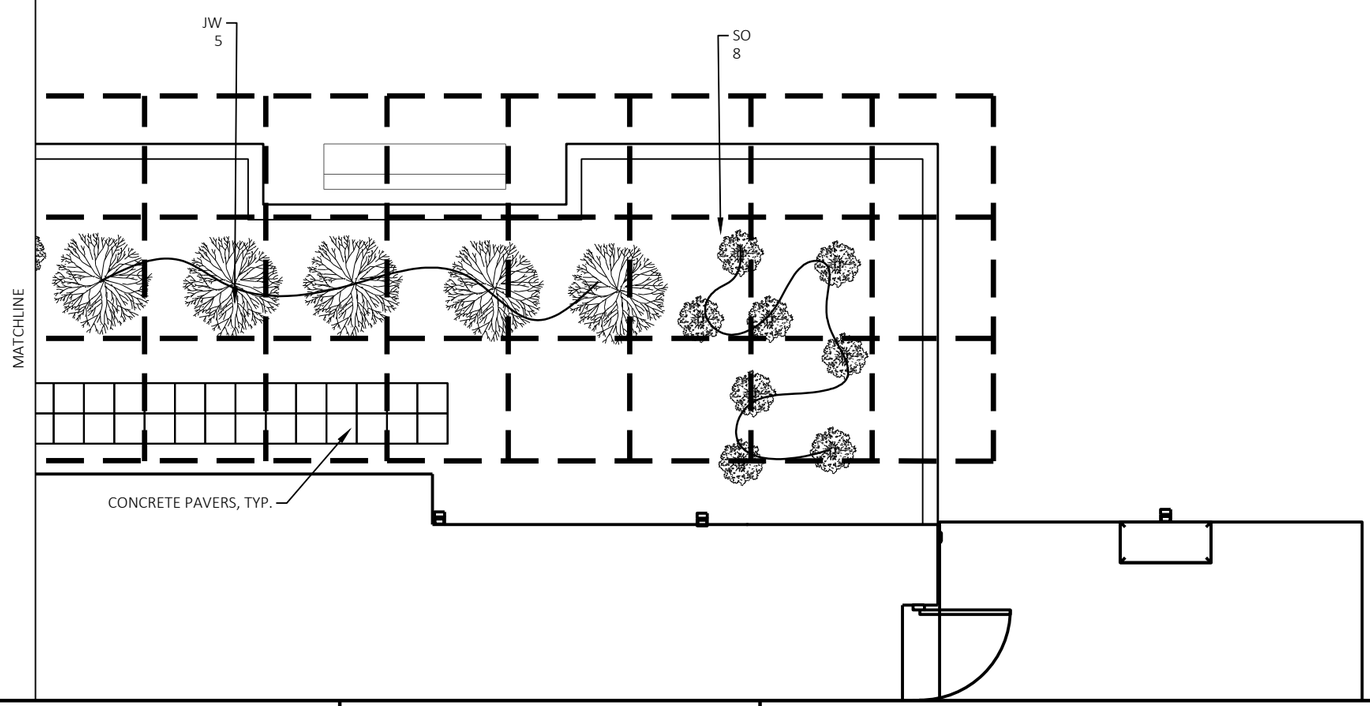
WISDOT/CADDS SHEET 42

LANDSCAPE AREA D

SEE PLANTING SCHEDULE FOR PLANTING DATA



NOTE:
GRID IS 4' x 4'



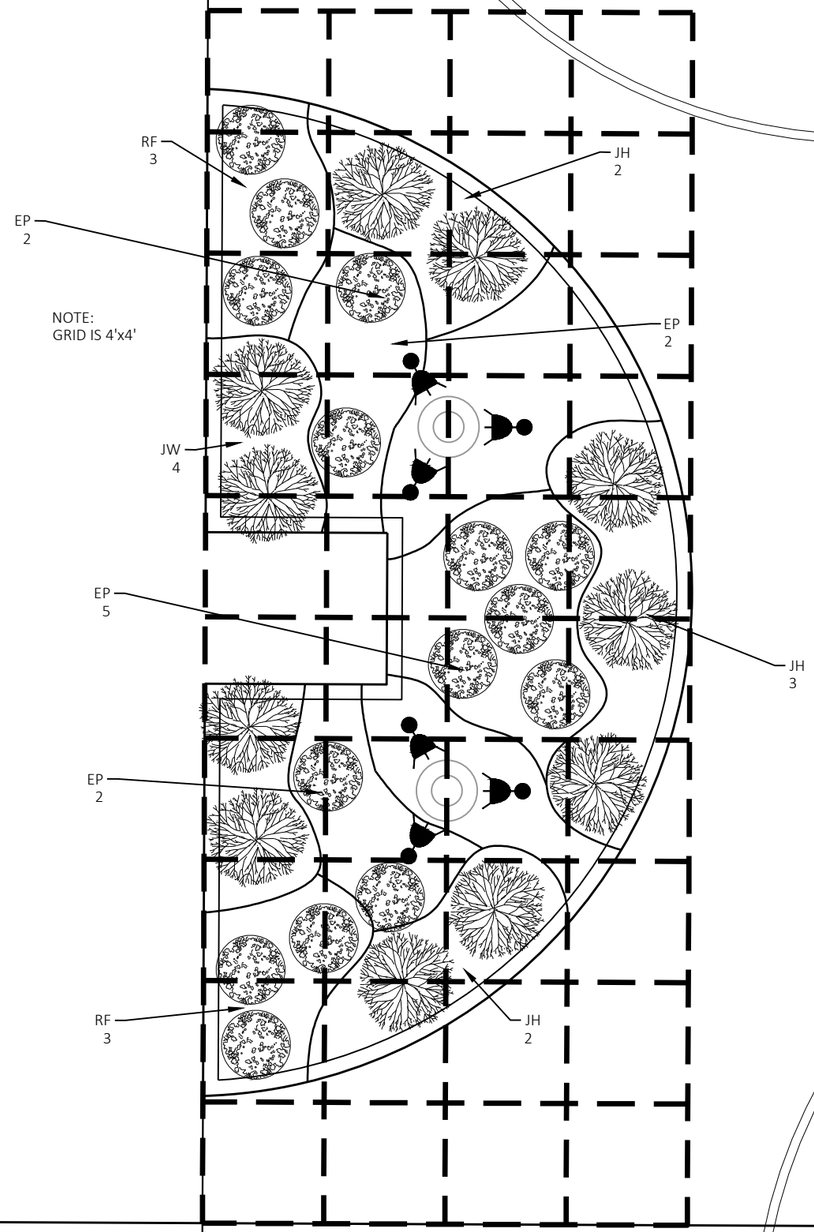
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLANTING - REST AREA 51	SHEET 162	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023101-PL_RA 51.DWG
LAYOUT NAME - 023105-pl D

PLOT DATE : 11/26/2024 11:43 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:5 FT

2

2





LANDSCAPE AREA F

SEE PLANTING SCHEDULE FOR PLANTING DATA

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLANTING - REST AREA 51	SHEET 163	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023101-PL_RA 51.DWG
LAYOUT NAME - 023106-pl F

PLOT DATE : 11/26/2024 11:44 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:5 FT

2

2

LANDSCAPE AREA G

SEE PLANTING SCHEDULE FOR PLANTING DATA

NOTE:
GRID IS 8'x8'

N

56+00 L

GT
11

ZA
10

IS
30

JH
20

JS
11

JH
15

STA 56+39.71 L
12.68' RT

AG
1

IS
60

AG
1
STA 56+20.44 L
16.51' RT

STA 55+95.55 L
19.85' RT

GT
60

CV
1

SO
14

ZA
7

IS
60

RF
4

GM
7

GT
70

SO
7

IS
40

EP
4

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLANTING - REST AREA 51	SHEET 164	E

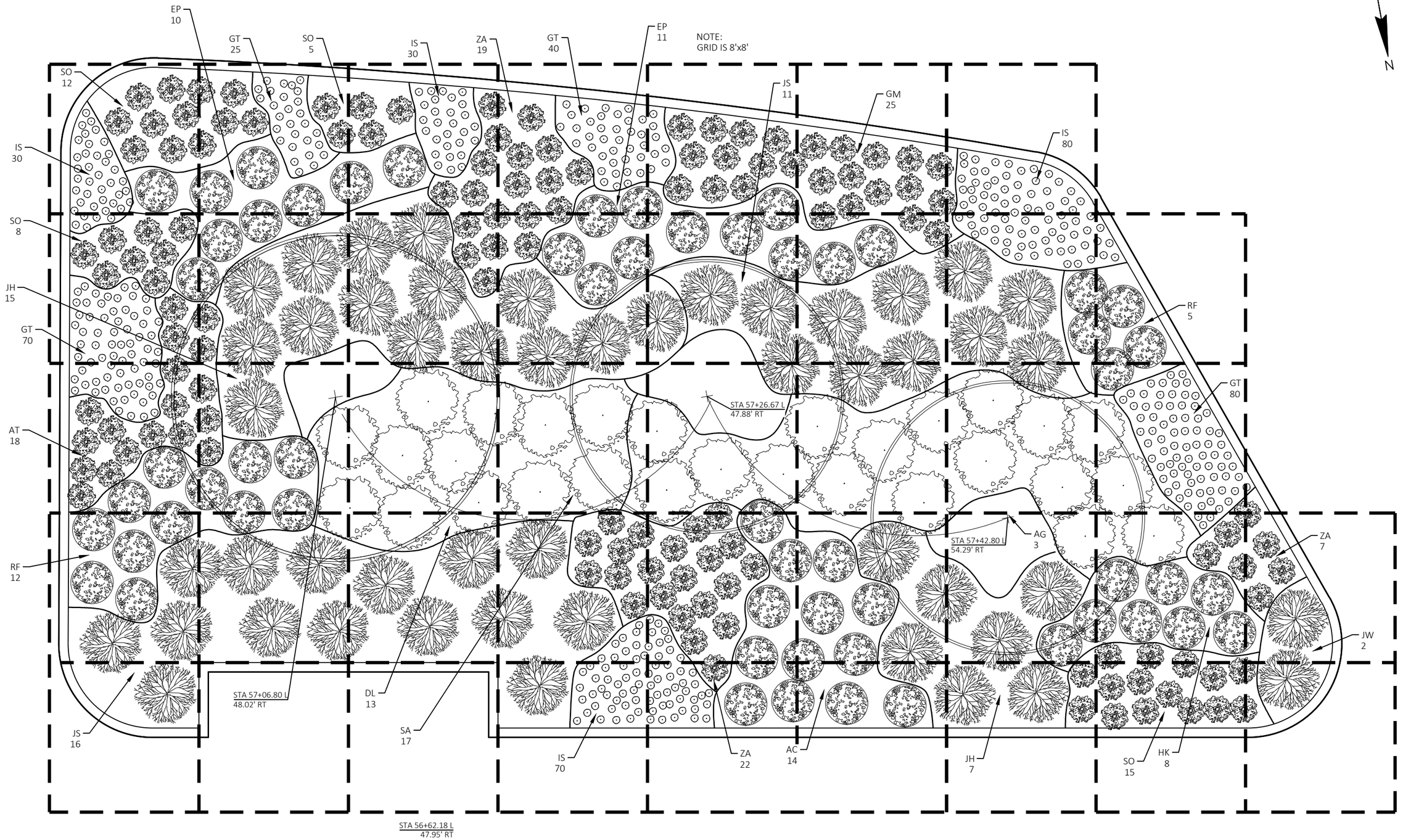
FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023101-PL_RA 51.DWG
LAYOUT NAME - 023107-pl G

PLOT DATE : 11/26/2024 11:44 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:5 FT

WISDOT/CADDS SHEET 42

LANDSCAPE AREA K

SEE PLANTING SCHEDULE FOR PLANTING DATA



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLANTING - REST AREA 51	SHEET 165	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023101-PL_RA 51.DWG
LAYOUT NAME - 023111-pl K

PLOT DATE : 11/26/2024 11:44 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:5 FT

WISDOT/CADDS SHEET 42

2

2

SJ
5

JS
5

SJ
9

JS
5

SJ
5

SJ
5

JS
5

JS
5

MAINTENANCE
BUILDING

NOTE:
GRID IS 8'x8'

LANDSCAPE AREA M

SEE PLANTING SCHEDULE FOR PLANTING DATA

N

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLANTING - REST AREA 51	SHEET 166	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023101-PL_RA 51.DWG
LAYOUT NAME - 023113-pl M

PLOT DATE : 11/26/2024 11:44 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

LEGEND

SEEDING MIXTURE NO 40

NATIVE POLLINATOR SEEDING MIXTURE NO 90B

SOD LAWN

NOTE:
SEE PLANTING SCHEDULE FOR PLANTING DATA

N

STA 64+42.78 M
-13.81' LT

STA 65+00.05 M
7.84' RT

PS
3

STA 64+62.13 M
23.47' RT

64+00 M

65+00 M

STA 66+12.86 M
-34.05' LT

GD
1

66+00 M

QB
1

STA 65+60.91 M
3.35' RT

AS
1

STA 66+20.28 M
56.12' RT

67+00 M

N

O

T

U

STA 67+93.05 M, -39.08' LT

AG
1

Q

S

68+00 M

B

V

STA 66+73.72 M, 99.67' RT

CV
1

W

STA 67+87.51 M, 100.57' RT

CV
1

PS
1

STA 69+42.86 M
-10.57' LT

69+00 M

70+00 M

71+0

PS
1

STA 69+67.64 M
36.21' RT

AS
1

STA 69+08.71 M
53.73' RT

Y

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLANTING OVERVIEW - REST AREA 52	SHEET 167	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023101-PL_RA 52.DWG
LAYOUT NAME - 023114-pl

PLOT DATE : 11/26/2024 11:45 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:50 FT

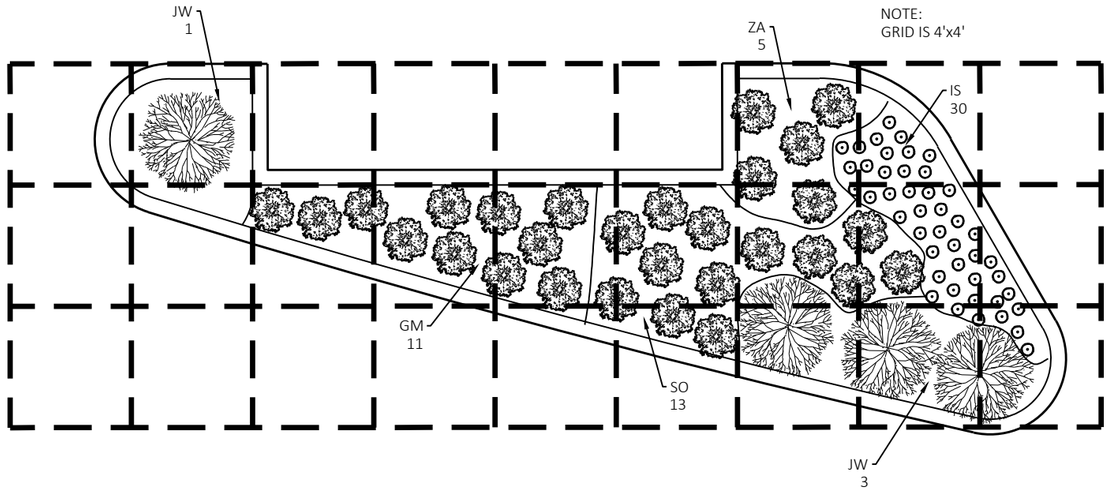
WISDOT/CADDS SHEET 42

2

N

LANDSCAPE AREA N

SEE PLANTING SCHEDULE FOR PLANTING DATA



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLANTING - REST AREA 52	SHEET 168	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023101-PL_RA 52.DWG
LAYOUT NAME - 023115-pl N
PLOT DATE : 11/26/2024 11:45 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

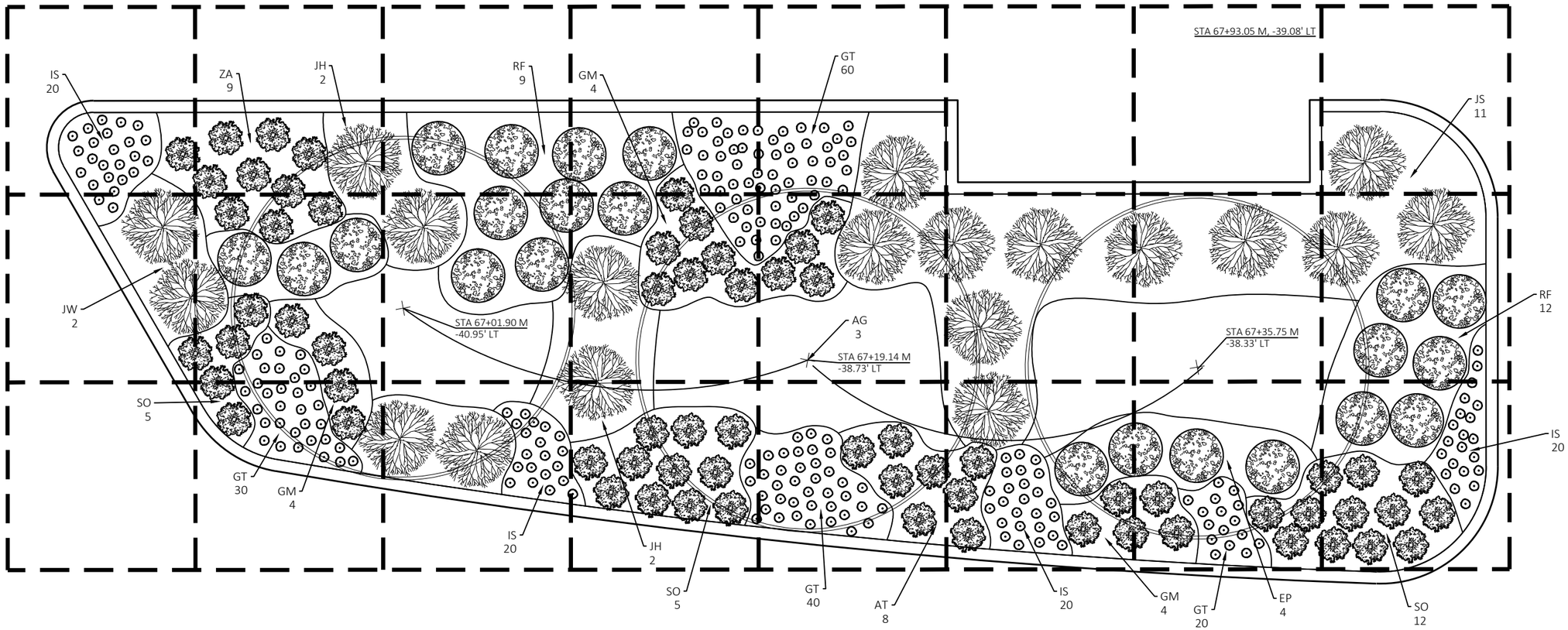
2

LANDSCAPE AREA O

SEE PLANTING SCHEDULE FOR PLANTING DATA

N

NOTE:
GRID IS 8'x8'



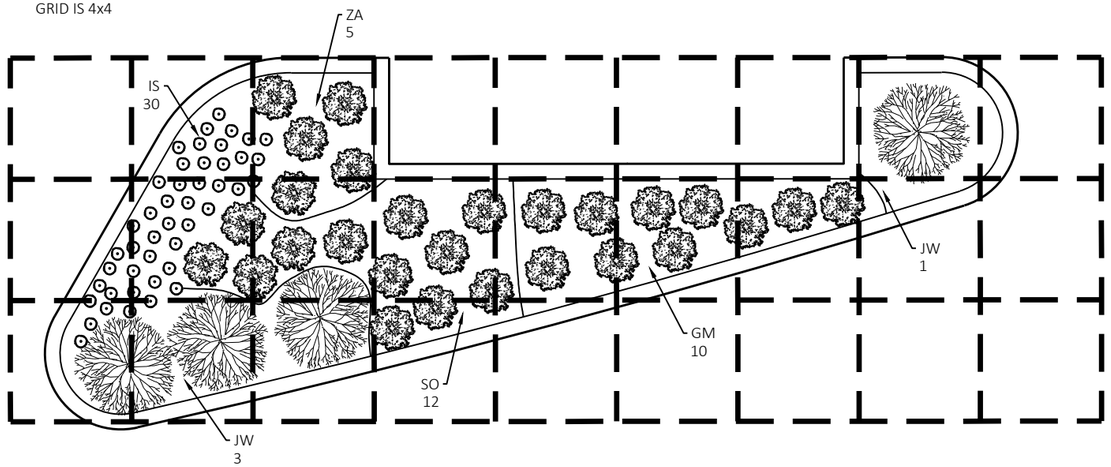
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLANTING - REST AREA 52	SHEET 169	E

2

LANDSCAPE AREA Q

SEE PLANTING SCHEDULE FOR PLANTING DATA

NOTE:
GRID IS 4x4

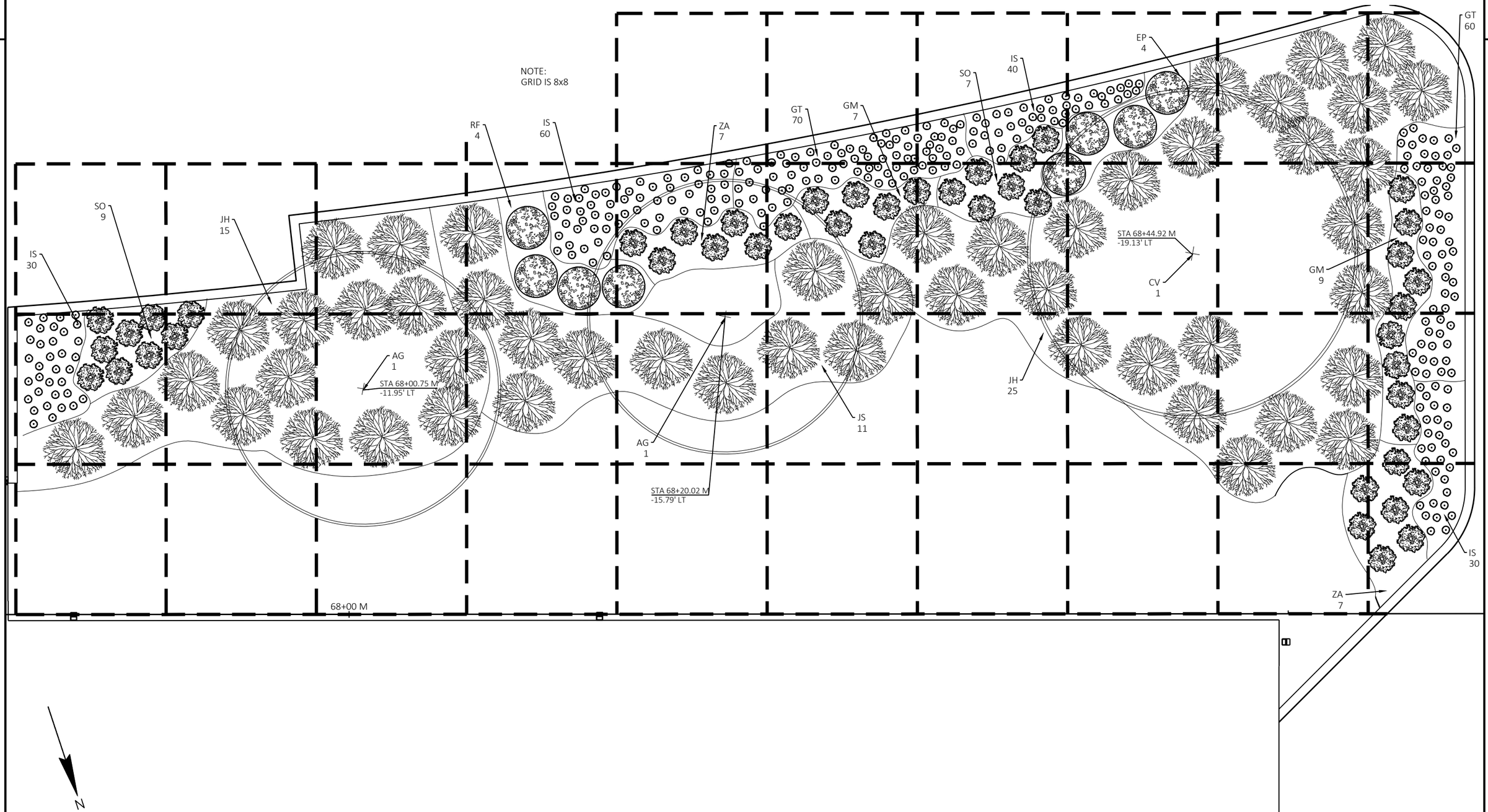


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLANTING - REST AREA 52	SHEET 170	E

LANDSCAPE AREA S

SEE PLANTING SCHEDULE FOR PLANTING DATA

NOTE:
GRID IS 8x8



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLANTING - REST AREA 52	SHEET 171	E

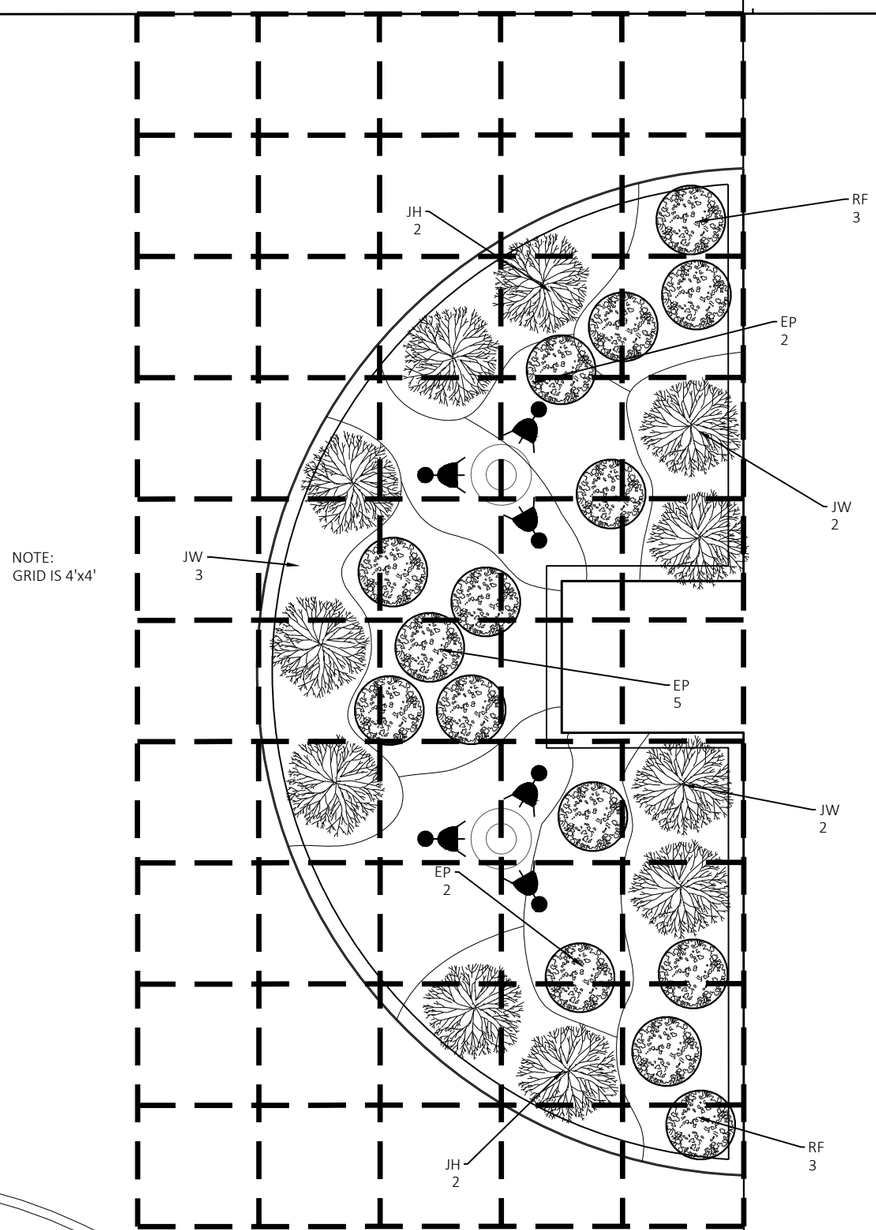
FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023101-PL_RA 52.DWG
LAYOUT NAME - 023120-pl S

PLOT DATE : 11/26/2024 11:45 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:5 FT

WISDOT/CADDS SHEET 42

LANDSCAPE AREA T

SEE PLANTING SCHEDULE FOR PLANTING DATA



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLANTING - REST AREA 52	SHEET 172	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023101-PL_RA 52.DWG
LAYOUT NAME - 023121-pl T

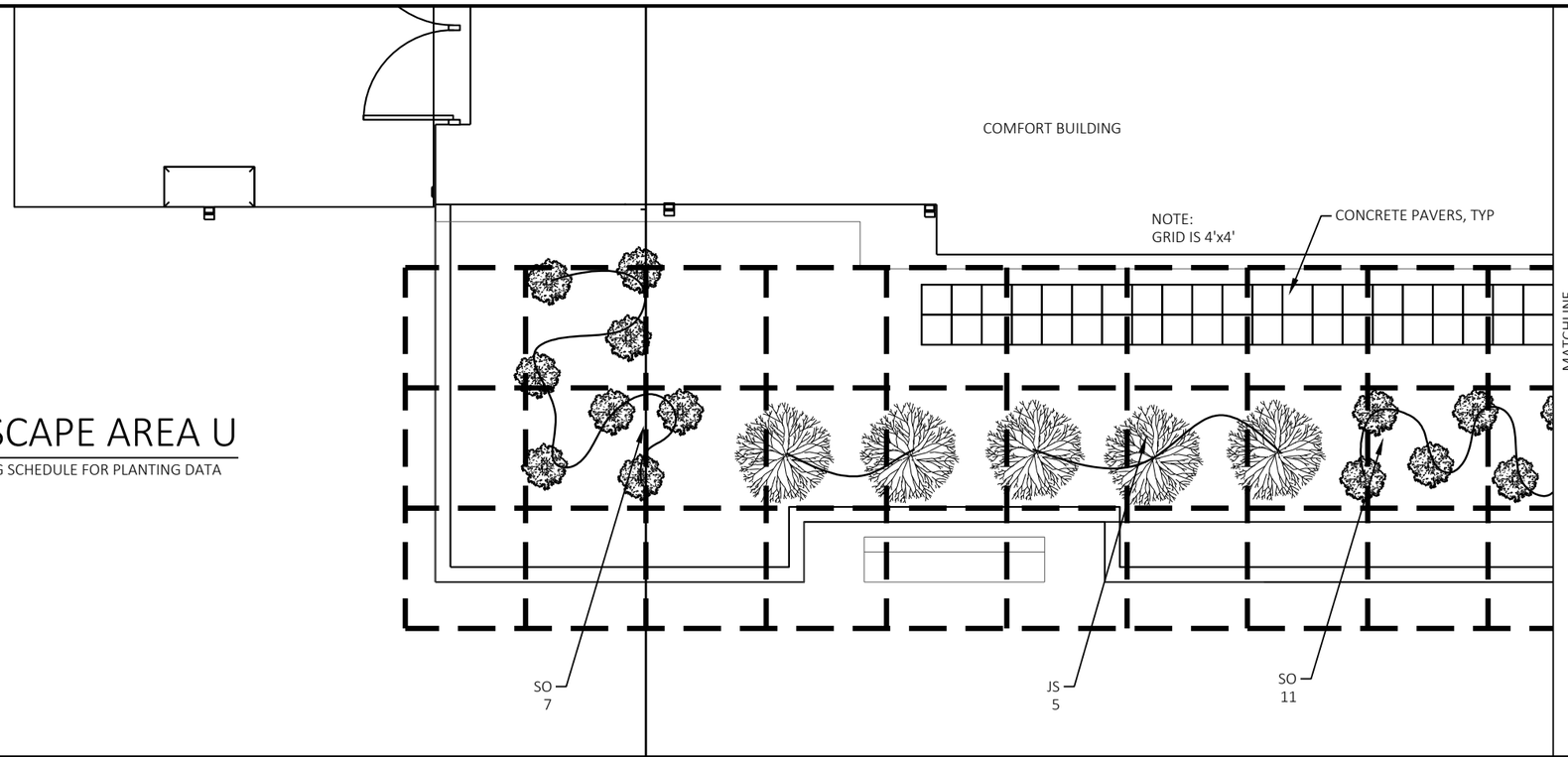
PLOT DATE : 11/26/2024 11:45 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:5 FT

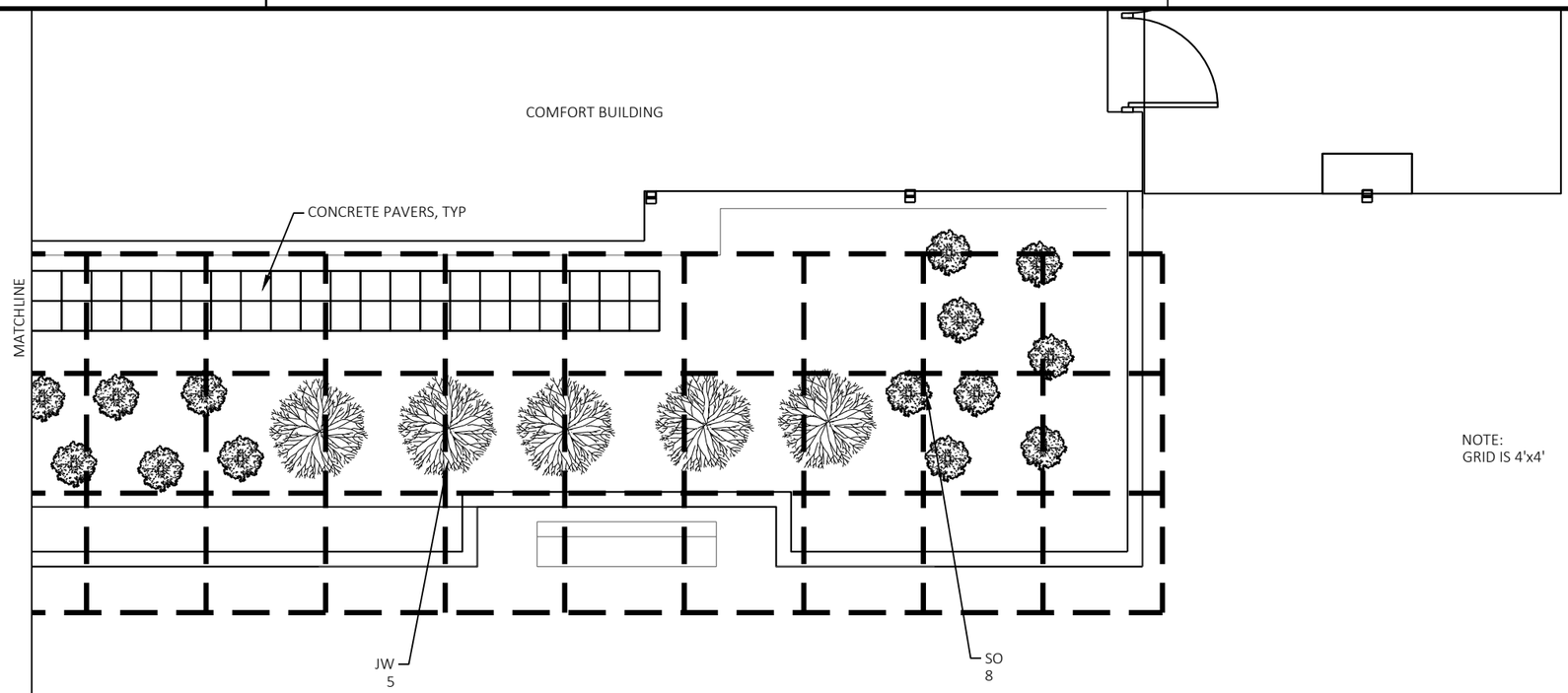
2

2

LANDSCAPE AREA U

SEE PLANTING SCHEDULE FOR PLANTING DATA





PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLANTING - REST AREA 52	SHEET 173	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023101-PL_RA 52.DWG
LAYOUT NAME - 023122-pl U
PLOT DATE : 11/26/2024 11:46 AM
PLOT BY : DAVID YAHNKE
PLOT NAME :
PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

2

LANDSCAPE AREA V

SEE PLANTING SCHEDULE FOR PLANTING DATA

COMFORT BUILDING

NOTE:
GRID IS 8'x8'

N

STA 67+90.67 M
70.78' RT

JS
10

AG
1

JH
9

STA 68+18.62 M
70.70' RT

AG
1

RF
4

GT
55

SO
13

JS
20

STA 68+43.67 M
68.82' RT

CV
1

IS
70

GM
7

GT
55

EP
4

AT
5

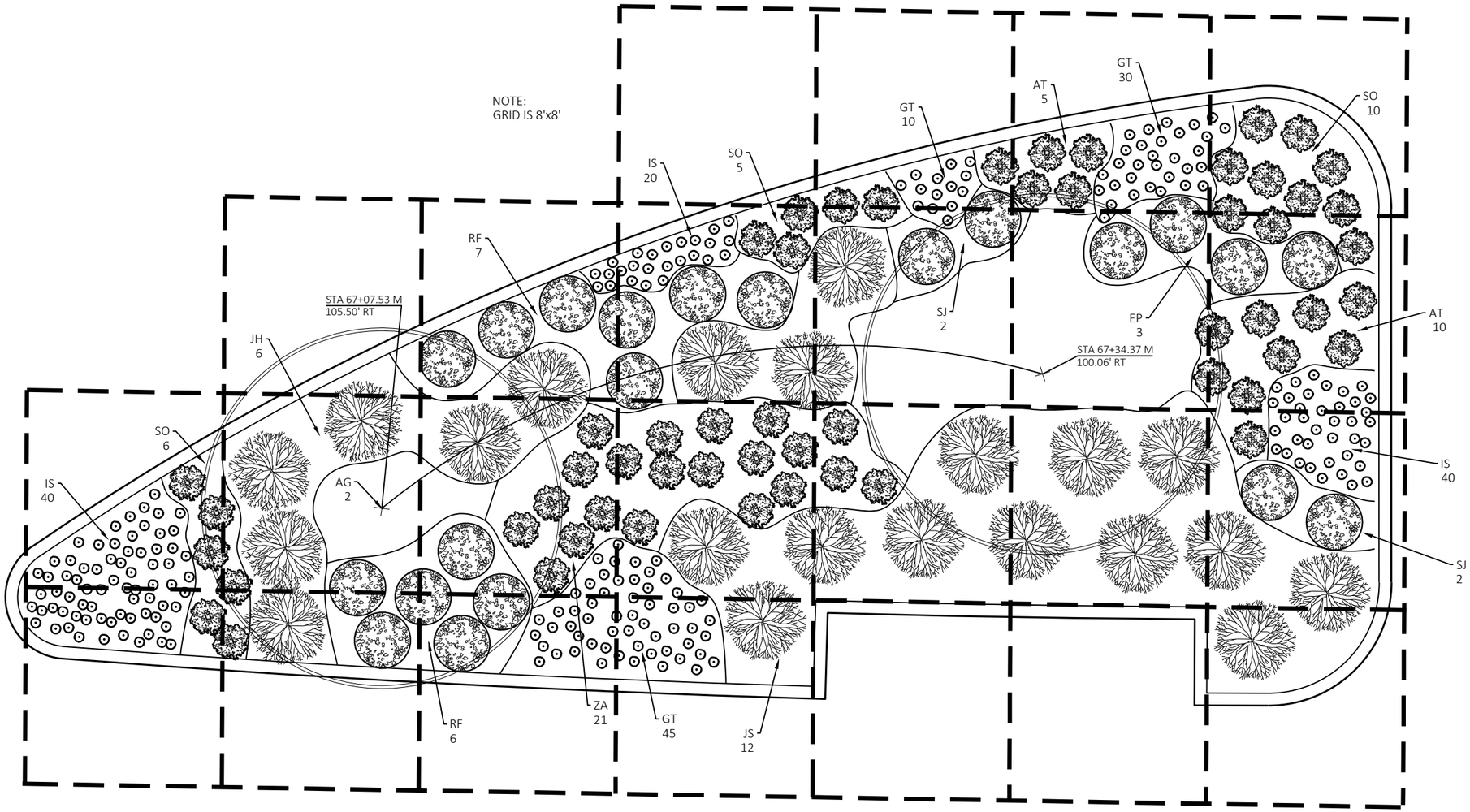
IS
30

2

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLANTING - REST AREA 52	SHEET 174	E

LANDSCAPE AREA W

SEE PLANTING SCHEDULE FOR PLANTING DATA



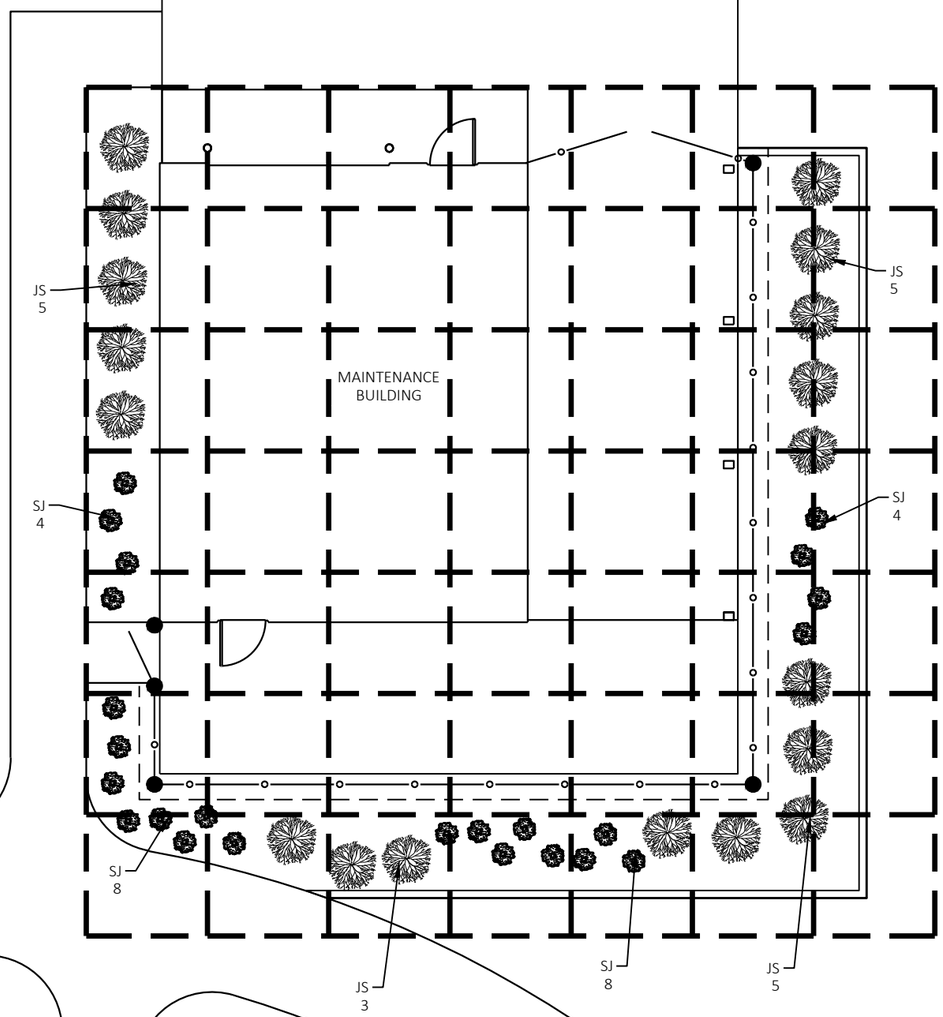
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLANTING - REST AREA 52	SHEET 175	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023101-PL_RA 52.DWG
LAYOUT NAME - 023124-pl W

PLOT DATE : 11/26/2024 11:46 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:5 FT

LANDSCAPE AREA Y

SEE PLANTING SCHEDULE FOR PLANTING DATA



N

NOTE:
GRID IS 8'x8'

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLANTING - REST AREA 52	SHEET 176	E

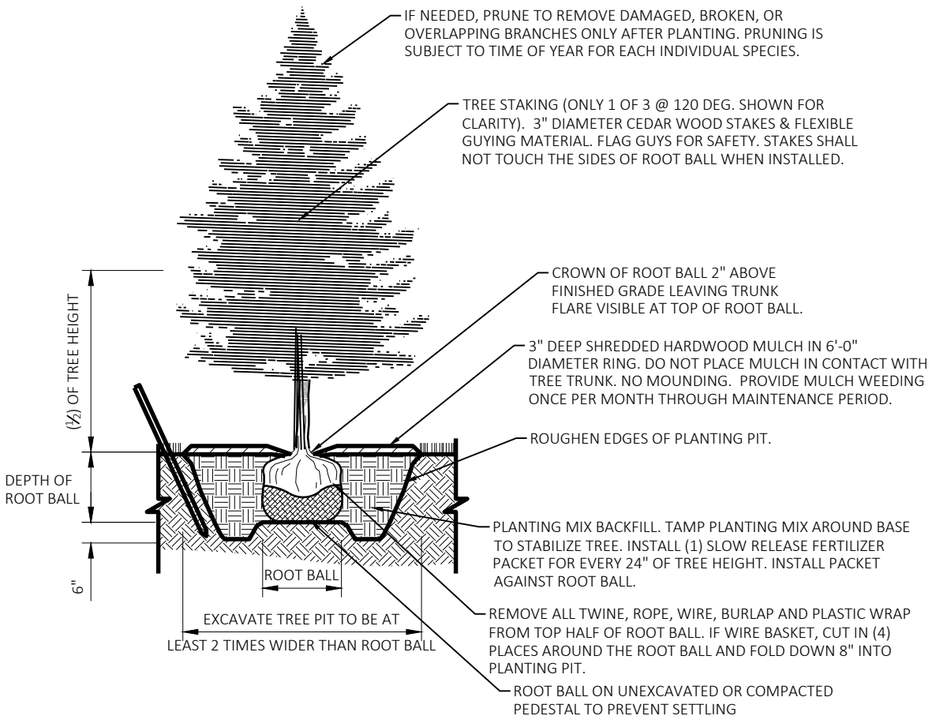
FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\023101-PL_RA 52.DWG
LAYOUT NAME - 023126-pl Y

PLOT DATE : 11/26/2024 11:46 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:10 FT

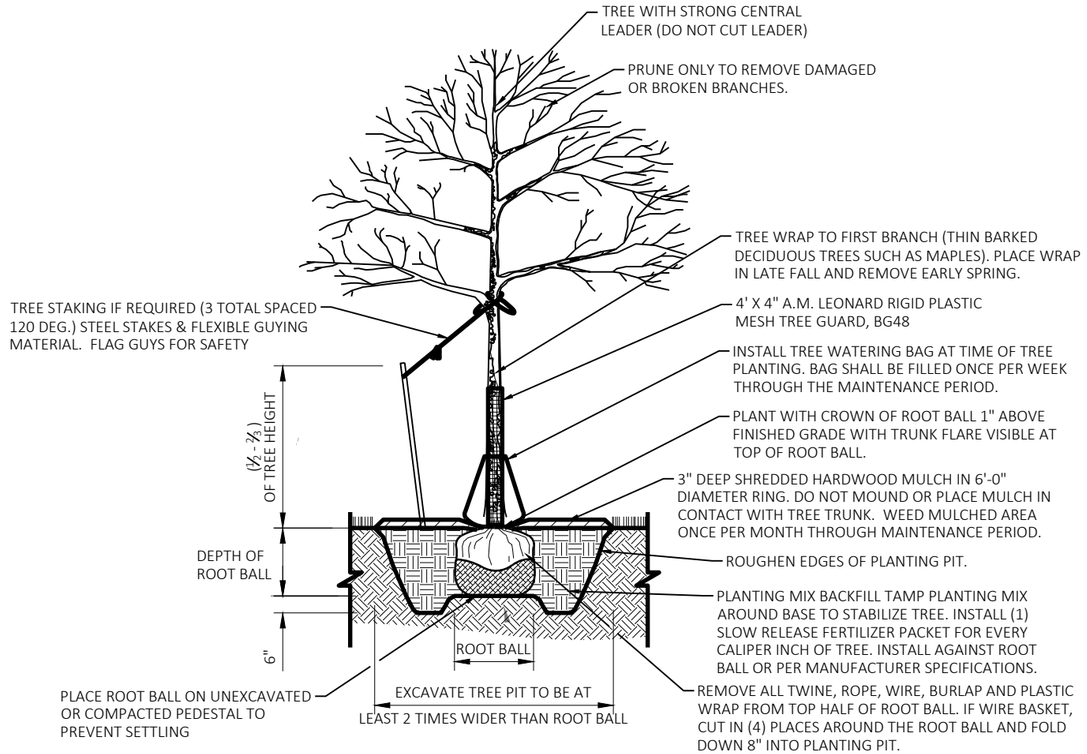
WISDOT/CADDS SHEET 42

2

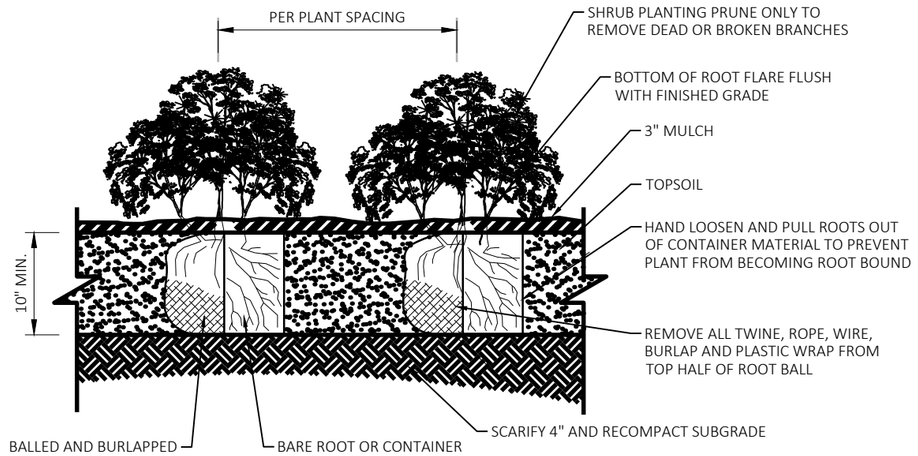
Plant Key	Scientific Name	Common Name	Height	Spread	Quantity RA51	Quantity RA52	Planting Condition	Size/ Remarks
Perennial								
AC	Aquilegia canadensis	Wild Columbine	1-3 feet	1-2 feet	20	-	Plug	Spacing mature spread on center
AT	Asclepias tuberosa	Butterfly Weed	1-3 feet	1-2 feet	40	28	Plug	Spacing mature spread on center
EP	Echinacea purpurea	Coneflower	2-4 feet	1-2 feet	45	24	Plug	Spacing mature spread on center
GT	Geum triflorum	Prairie Smoke	6-12 inches	6-12 inches	516	475	Plug	Spacing mature spread on center
RF	Rudbeckia fulgida	Black-Eyed Susan	2-3 feet	1-2 feet	47	48	Plug	Spacing mature spread on center
GM	Geranium maculatum	Wild Geranium	1-2 feet	1-2 feet	53	56	Plug	Spacing mature spread on center
IS	Iris spp.	Iris	Varies	Varies	725	480	Plug	Spacing mature spread on center
SO	Salvia officinalis	Sage	1-2 feet	1-2 feet	117	123	Plug	Spacing mature spread on center
ZA	Zizia aurea	Golden Alexander	1-3 Feet	1-2 feet	70	54	Plug	Spacing mature spread on center
Evergreen Shrubs								
JW	Juniperus horizontalis 'Wiltonii'	Blue Rug Juniper	6-8 inches	6-8 feet	4	22	Container	#1
JH	Juniperus horizontalis 'Blue Chip'	Blue Chip Juniper	1-2 feet	4-5 feet	87	63	Container	#1
JS	Juniperus sabina 'Broadmoor'	Broadmoor Juniper	2-3 feet	6-8 feet	115	87	Container	#1
Deciduous Shrubs								
DL	Diervilla lonicera	Bush Honeysuckle	2-3 feet	3-4 feet	29	-	Container	#1
SA	Symphoricarpos albus	Common Snowberry	2-5 feet	3-5 feet	17	-	Container	#1
SJ	Spiraea japonica 'Little Princess'	Little Princess Spirea	2-3 feet	3-4 feet	24	28	Container	#1
HK	Hypericum kalmianum	Kalm's St. John's Wort	2-3 feet	3-4 feet	18	-	Container	#1
Evergreen Trees								
PS	Pinus strobus	Eastern White Pine	50-80 feet	20-40 feet	9	5	B&B	6' specimen at planting
Deciduous Trees								
AG	Amelanchier grandifolia	Serviceberry	15-25 feet	15-20 feet	17	11	B&B	2.5-inch caliper at planting
AS	Acer saccharum	Sugar Maple	50-80 feet	40-60 feet	5	2	B&B	2.5-inch caliper at planting
CV	Crataegus viridis	Green Hawthorn	25-35 feet	25-35 feet	2	2	B&B	2.5-inch caliper at planting
GD	Gynocladus dioicus	Kentucky Coffee Tree	60-80 Feet	40 to 55 feet	2	1	B&B	2.5-inch caliper at planting
FG	Fagus grandifolia	American Beech	50-70 feet	40-60 feet	1	-	B&B	2.5-inch caliper at planting
QB	Quercus x bebbiana	White Oak/ Burr Oak Hybrid	60-75 feet	45-50 feet	3	1	B&B	2.5-inch caliper at planting



DETAIL OF EVERGREEN TREE PLANTING
NTS



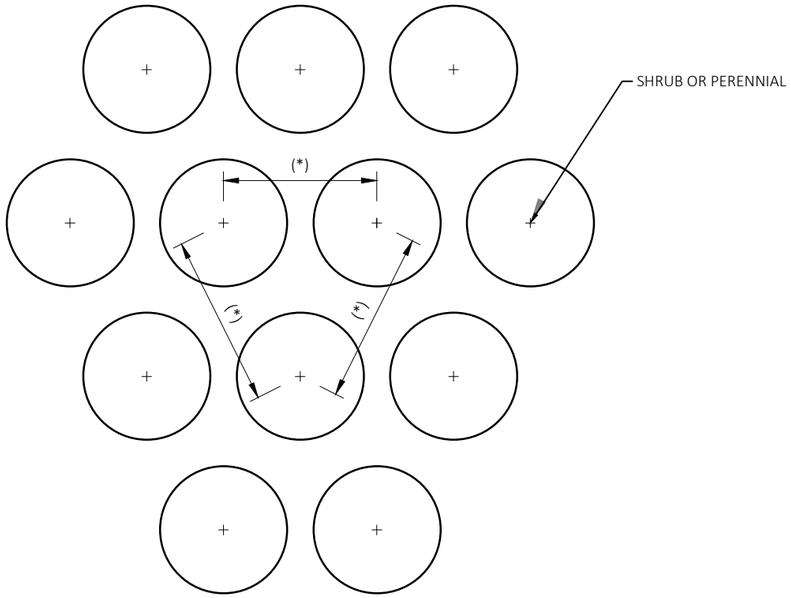
DETAIL OF TREE PLANTING
NTS



DETAIL OF SHRUB PLANTING
NTS

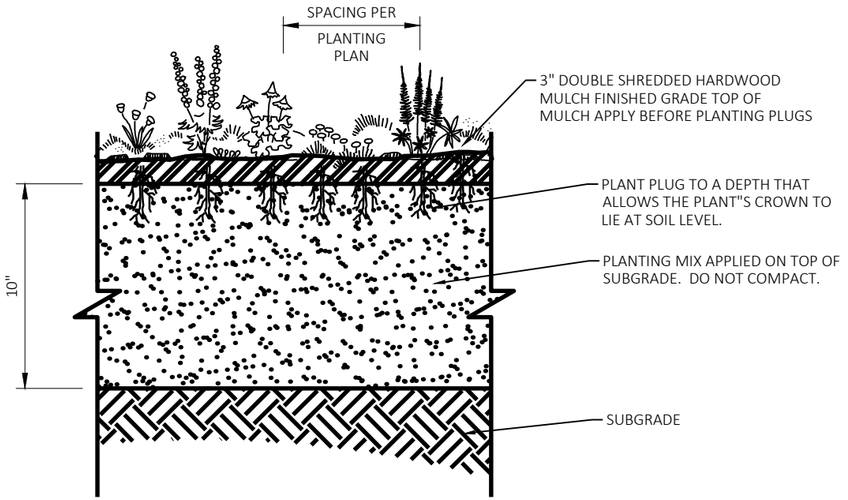
BAREROOT PLANTING NOTES:

1. SOAK ROOTS IN WATER FOR AT LEAST ONE HOUR BUT NOT MORE THAN 24 HOURS PRIOR TO PLANTING.
2. SCARIFY SIDES AND BOTTOMS OF HOLE.
3. PROCEED WITH CORRECTIVE PRUNING OF THE TOP AND BOTTOM ROOTS.
4. TRANSFER PLANT DIRECTLY FROM WATER TO HOLE. SET PLANT SO THE ROOT FLARE IS APPROXIMATELY AT THE FINISHED SOIL ELEVATION. SPREAD ROOTS OUT EVENLY. PLUMB AND IMMEDIATELY BACKFILL WITH PLANTING SOIL MIX.
5. WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL VOIDS.
6. BACKFILL VOIDS AND WATER SECOND TIME.
7. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.



(*) = SPECIFIED PLANT SPACING PER PLANTING LIST

DETAIL OF SHURB OR PERENNIAL PLANT SPACING
NTS



PERENNIAL PLUG PLANTING NOTES:

1. INSTALL PLUGS DURING DORMANCY IN EARLY SPRING.
2. SOAK TRAYS PRIOR TO LAYING OUT PLUGS. ROOTS IN WATER FOR AT LEAST ONE HOUR BUT NOT MORE THAN 24 HOURS PRIOR TO PLANTING.
3. THOROUGHLY WET PERENNIAL PLANTING BEDS PRIOR TO INSTALLATION.
4. REMOVE PLUGS FROM TRAYS BY PUSHING UP THROUGH BOTTOM LINER. DO NOT PULL BY VEGETATIVE MATERIAL.
5. TAMP IN SOIL AROUND LANDSCAPE PLUG TO INCREASE SOIL-ROOT CONTACT AND TO MINIMIZE FROST HEAVING.
6. WATER IMMEDIATELY AFTER PLANTING TO REDUCE AIR POCKETS.

DETAIL OF PERENNIAL PLUG PLANTING
NTS

LEGEND

FTMS CONVENTIONAL SYMBOLS

PROPOSED

POLE MOUNTED CABINET

24" X 42" CSCP PULL BOX

FTMS (ITS) CONDUIT

BREAKER DISCONNECT BOX

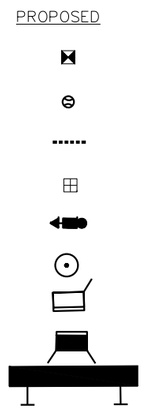
CCTV BASE, POLE, AND CAMERA

WIRELESS TRAFFIC SENSOR

WIRELESS TRAFFIC SENSOR REPEATER

WIRELESS TRAFFIC SENSOR ACCESS POINT

HYBRID DYNAMIC MESSAGE SIGN

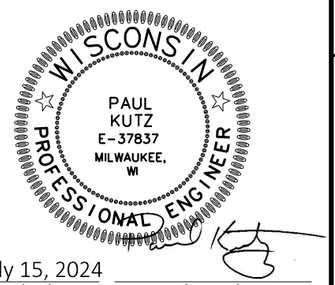


FTMS STANDARD ABBREVIATIONS

CCTV — CLOSED CIRCUIT TELEVISION SITE
PB — PULL BOX
DMS — DYNAMIC MESSAGE SIGN
S-F — STATE-FURNISHED

ORIGINAL PLANS PREPARED BY

HNTB
250 E. WISCONSIN AVE
MILWAUKEE, WI 53202
(414) 359-2300



July 15, 2024
(Date)

(Signature)

1. THESE PLANS AND THE ASSOCIATED SPECIAL PROVISIONS REFLECT CONDITIONS KNOWN DURING THE DEVELOPMENT OF THE PLANS AND TECHNICAL SPECIAL PROVISIONS. ALL SCALES, DIMENSIONS AND LOCATIONS SHOWN IN THESE PLANS ARE APPROXIMATE. ACTUAL PHYSICAL FIELD CONDITIONS SHALL PROVIDE THE BASIS FOR THE APPLICATION OF WORK SHOWN IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR THE APPLICATION OF ALL WORK SHOWN IN THE PLANS TO THE ACTUAL PHYSICAL FIELD CONDITIONS TO PROVIDE A COMPLETE AND ACCEPTED PROJECT. IN THE EVENT THAT ACTUAL PHYSICAL FIELD CONDITIONS AFFECT OR PREVENT THE APPLICATION OR PROGRESSION OF ANY WORK SHOWN IN THE PLANS OR TECHNICAL SPECIAL PROVISIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY, AND PRIOR TO ANY FURTHER WORK ACTIVITY. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY LOCATION CHANGES OTHER THAN MINOR ADJUSTMENTS.

2. BE AWARE THAT ALL EXISTING UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES WITHIN THE SCOPE OF THIS PROJECT MAY NOT BE LOCATED IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR LOCATING AND AVOIDING ALL UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES.

3. BE AWARE THAT NO TEST BORINGS WERE MADE WHERE CONDUITS, PULLBOXES, POLES, CABINET FOUNDATIONS, OR OTHER EQUIPMENT IS TO BE INSTALLED. THE CONTRACTOR IS FULLY RESPONSIBLE FOR EXAMINING THE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS.

4. NO TREES (AND/OR SHRUBS) SHALL BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

5. AREAS WITHIN THE RIGHT-OF-WAY DISTURBED SPECIFICALLY FOR FTMS CONSTRUCTION SHALL BE RESTORED TO THE ORIGINAL CONDITION WITH TOPSOIL, FERTILIZER, SEED, AND EROSION MAT, AND SHALL BE INCLUDED IN THE COST OF INSTALLING FTMS ITEMS. RESTORATION FOR AREAS DISTURBED FOR OTHER CONSTRUCTION OPERATIONS BUT ALSO CONTAINING FTMS CONSTRUCTION SHALL BE DONE ACCORDING TO REQUIREMENTS AND PAYMENT PROVISIONS FOR THE OTHER CONSTRUCTION OPERATIONS.

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

7. DUE TO RAMP, LANE, SHOULDER CLOSURE RESTRICTIONS, AND WORK UNDER OTHER CONTRACTS, SOME WORK MAY BE REQUIRED TO BE PERFORMED AT NIGHT.

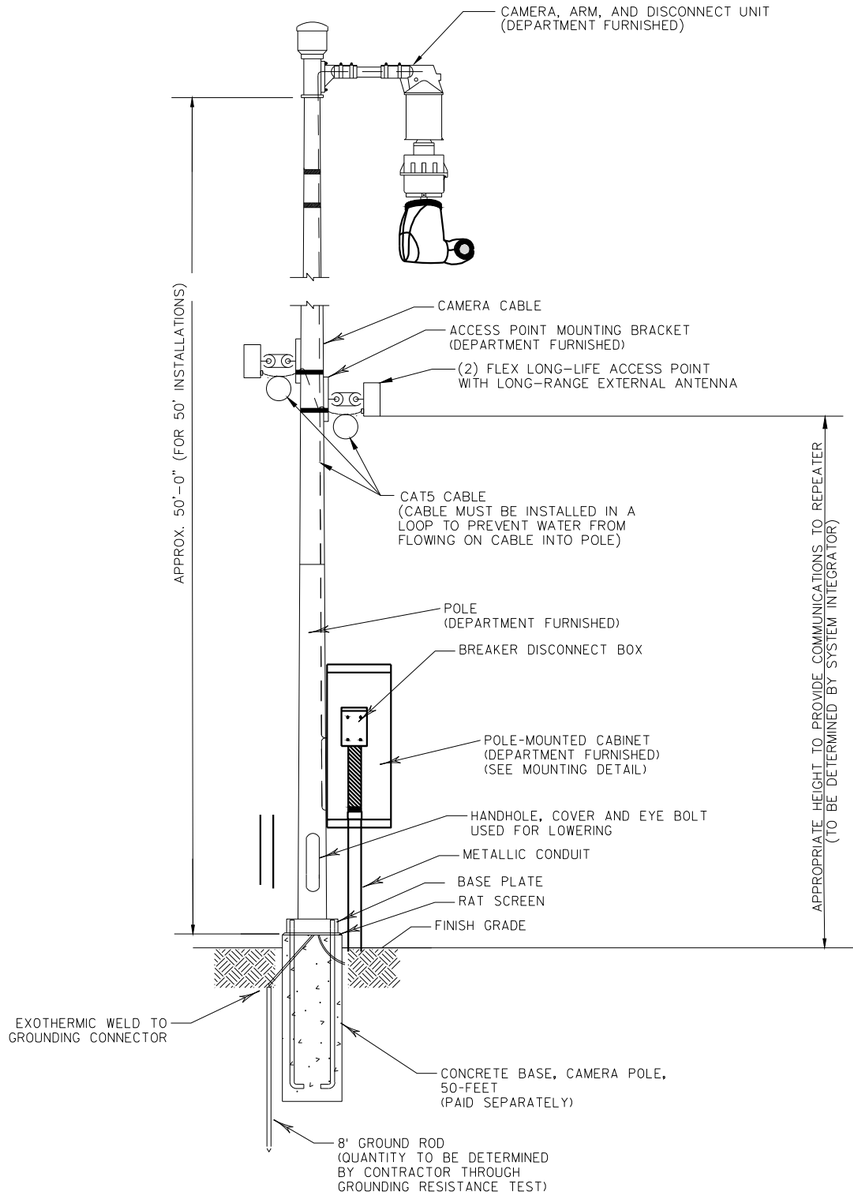
8. THE CONTRACTOR IS FULLY RESPONSIBLE FOR COORDINATING RAMP, LANE, SHOULDER, AND ROADWAY CLOSURES WITH OTHER CONTRACTS IN THE AREA.

9. THE CONTRACTOR SHALL CONTACT THE WISDOT STATEWIDE TRAFFIC OPERATIONS CENTER AT (414)227-2166 FIVE (5) WORKING DAYS PRIOR TO ENTERING ANY EXISTING WISDOT FTMS OR ITS CABINET.

10. ALL LOOP DETECTORS ARE STATIONED TO CENTER OF LEADING EDGE AS APPROACHED BY NORMAL VEHICLE PATH.

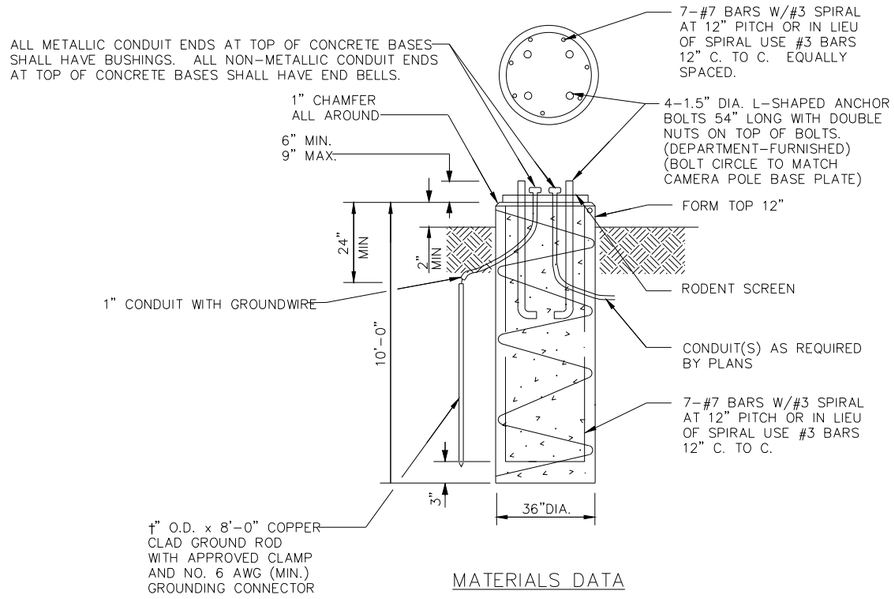
11. HAND DIG TRENCHES CROSSING EXISTING CONDUIT CONTAINING FIBER OPTIC CABLE.

12. VISUALLY VERIFY DEPTHS OF EXISTING CONDUITS CONTAINING FIBER OPTIC CABLE PRIOR TO CROSSING BY DIRECTIONAL BORE OR SPECIAL METHOD.



CAMERA POLE WITH CAMERA LOWERING HARDWARE

WITH ACCESS POINTS

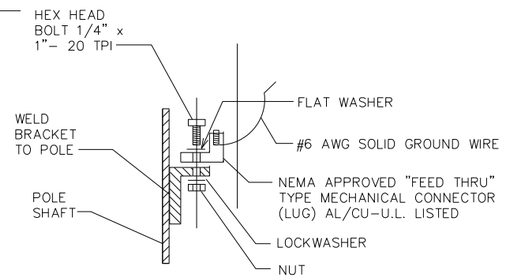


MATERIALS DATA

CONCRETE	f'c=3,500 psi
HIGH STRENGTH BAR STEEL REINFORCEMENT	fy = 60,000 psi

CONCRETE BASE, 50' CAMERA POLE

NOT TO SCALE



FIELD INSTALLED GROUNDING LUG

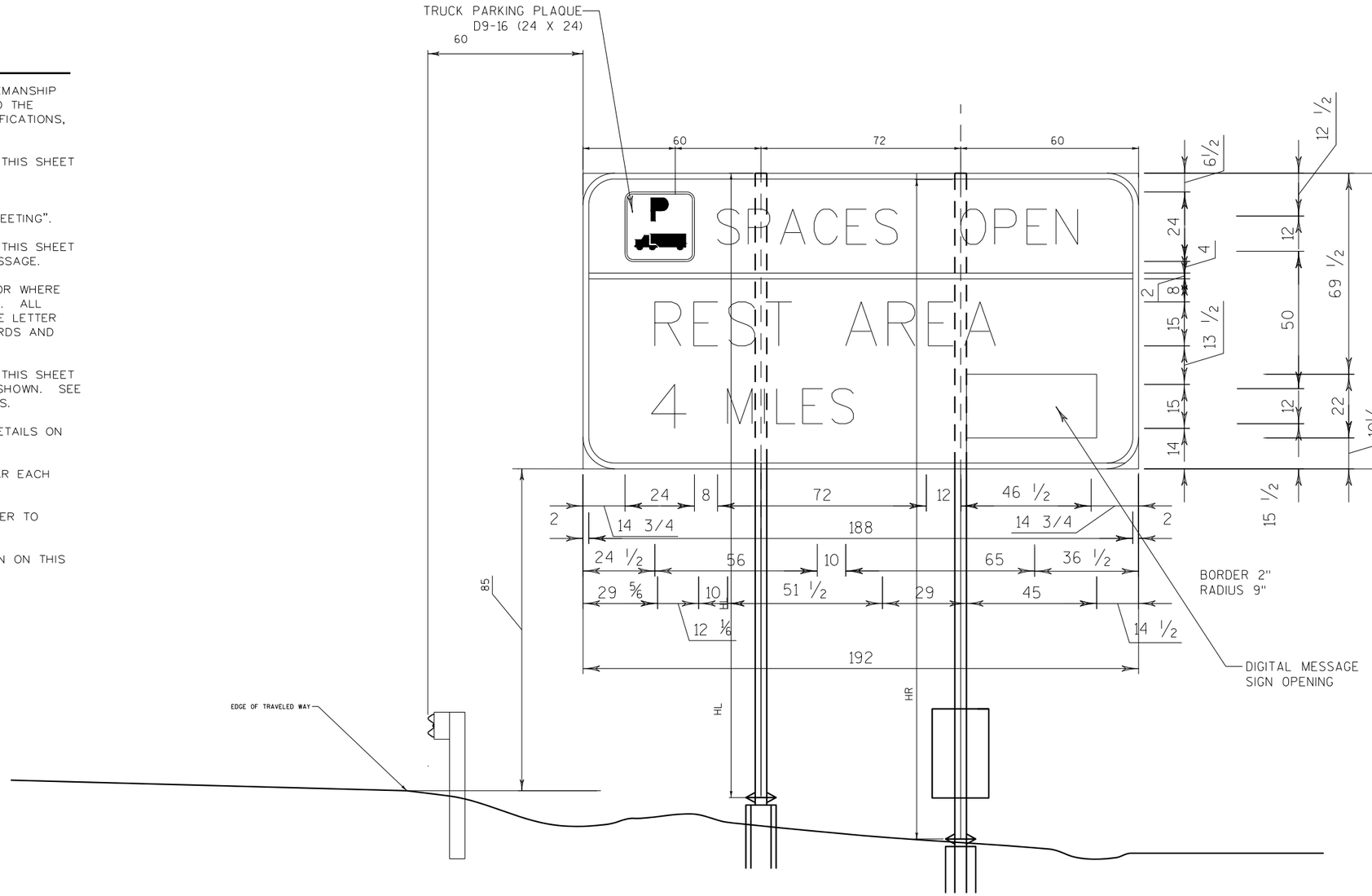
CAMERA POLES & FOUNDATIONS

NOTES

1) ALL HARDWARE AND FASTENERS SHALL BE STAINLESS STEEL
2) POLE DRAWINGS SHOWN FOR BIDDING INFORMATION PURPOSES ONLY. POLES WILL BE DEPARTMENT FURNISHED. BASE TO BE CONTRACTOR DESIGNED.
3) CONTRACTOR SHALL CONFIRM BOLT PATTERN OF CAMERA POLE PRIOR TO CONSTRUCTION OF CONCRETE BASE.
4) CONTRACTOR SHALL INSTALL GROUNDING LUG AS SHOWN

GENERAL NOTES:

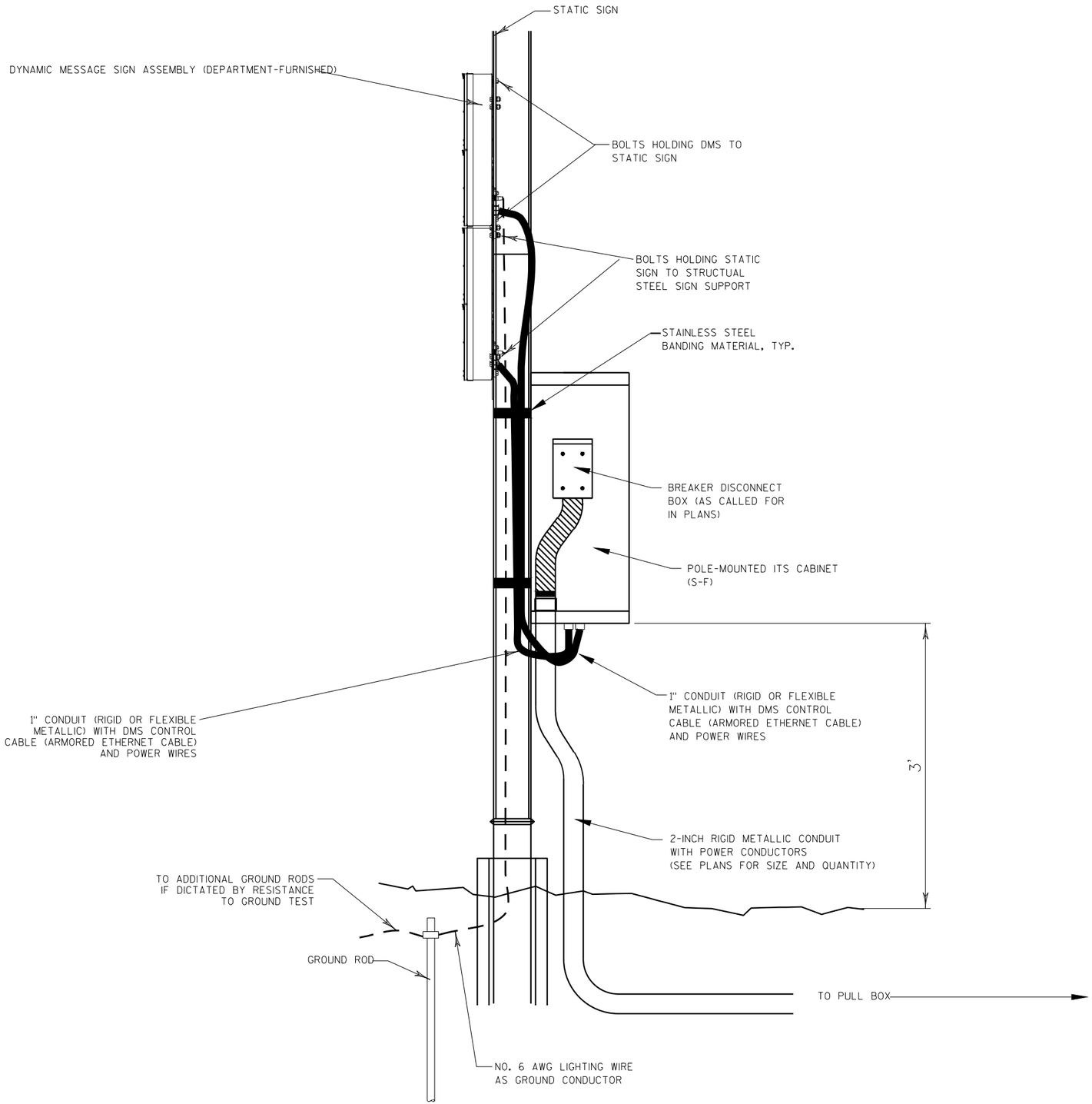
1. DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIRMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE PLANS.
2. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET ARE "SIGNS, TYPE I".
3. UNLESS OTHERWISE NOTED, TYPE I SIGNS ON THIS SHEET SHALL HAVE "TYPE SH REFLECTIVE SHEETING".
4. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE A BLUE BACKGROUND AND WHITE MESSAGE.
5. ALL UPPER CASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE SERIES "E" MODIFIED. ALL LOWERCASE MESSAGE WITH AN INITIAL UPPERCASE LETTER SHALL BE SERIES "E" MODIFIED. ALL CAPITAL WORDS AND NUMBERS ARE SERIES "E".
6. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE "TYPE A" OR "TYPE C" ARROWS AS SHOWN. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS.
7. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS ON ROUTE MARKER SHIELDS.
8. THE SIGN NUMBER IS DENOTED IN THE CIRCLE NEAR EACH DETAIL.
9. DO NOT SCALE. SIGN NOT DRAWN TO SCALE, REFER TO DIMENSIONS FOR ACTUAL SIGN LAYOUT.
10. UNLESS OTHERWISE NOTED, ALL DIMENSIONS SHOWN ON THIS SHEET ARE INCHES.



HYBRID DYNAMIC MESSAGE SIGN INSTALLATION (DMS-05-0020)
SOUTHBOUND I 43 AT WEST TOWN HALL ROAD
AND
HYBRID DYNAMIC MESSAGE SIGN INSTALLATION (DMS-36-0021)
NORTHBOUND I 43 AT HWY 147 / HWY Z

PROJECT NO: 1225-10-72	HWY: I 43	COUNTY: BROWN, MANITOWOC	FTMS CONSTRUCTION DETAILS	SHEET 182	E

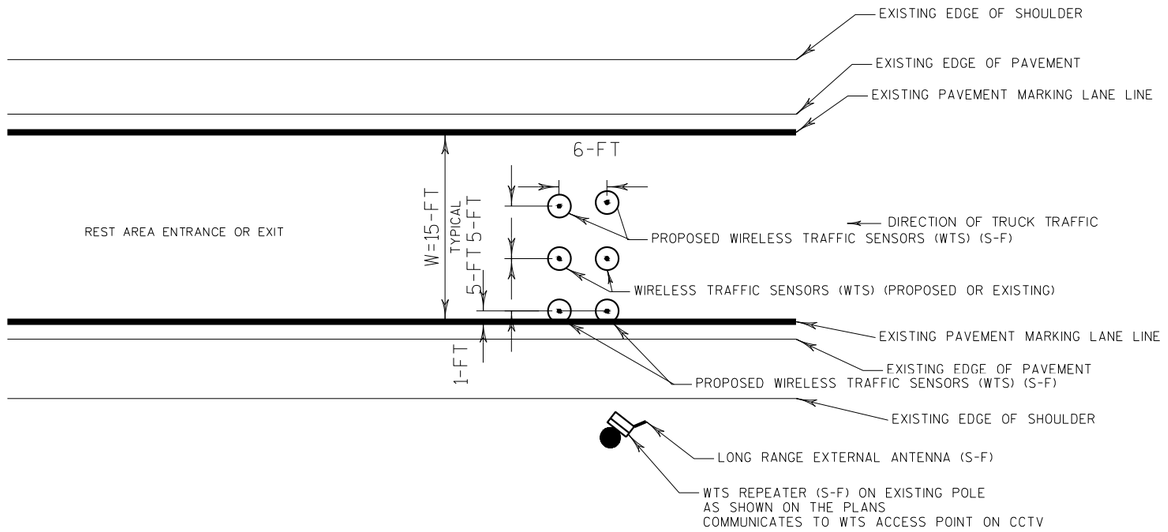
2



DYNAMIC MESSAGE SIGN COMPONENT INSTALLATION

PROJECT NO: 1225-10-72	HWY: I 43	COUNTY: BROWN, MANITOWOC	FTMS CONSTRUCTION DETAILS	SHEET 183	E

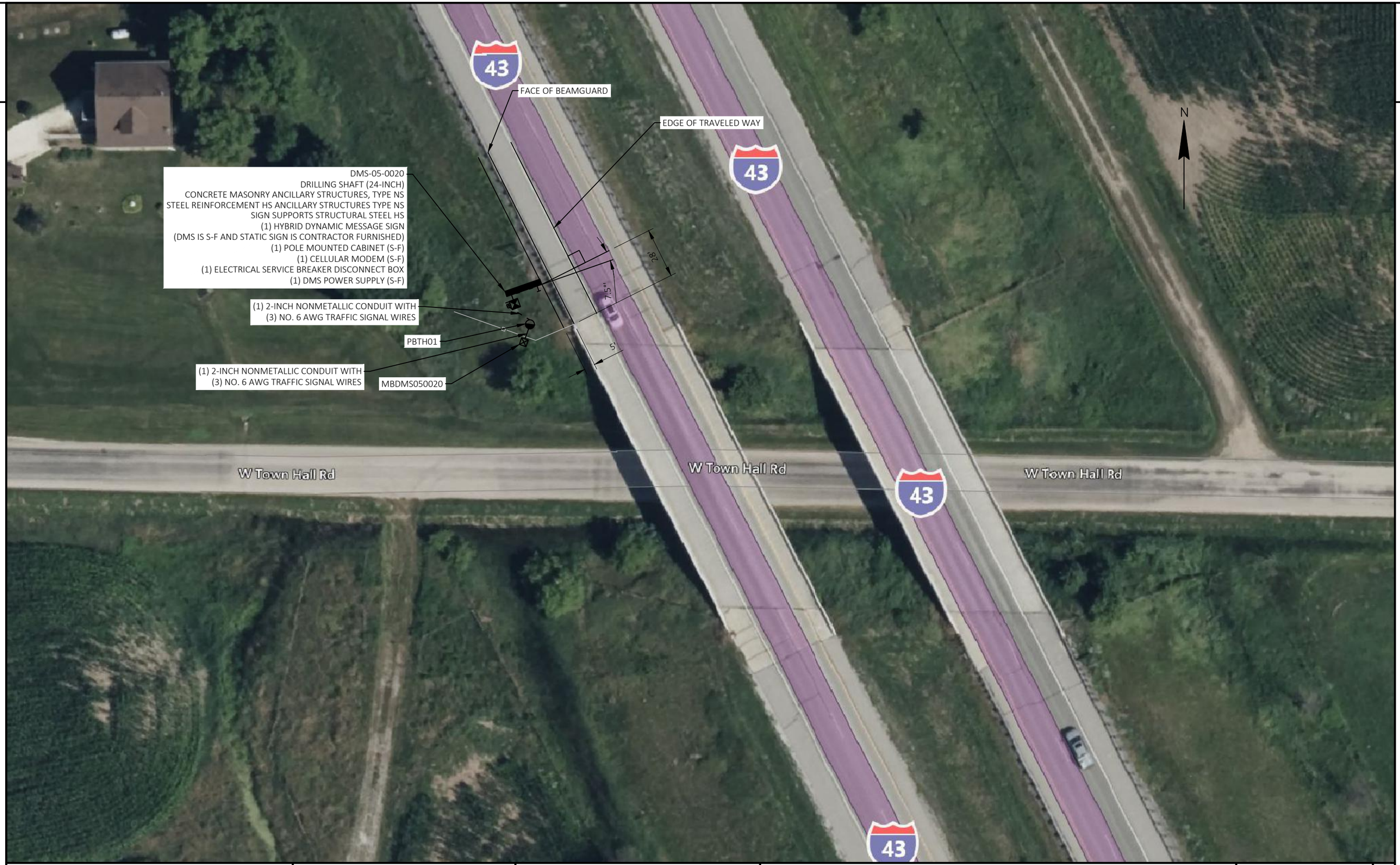
2



WIRELESS TRAFFIC SENSOR AND REPEATER

2

2



PROJECT NO: 1225-10-72	HWY: I 43	COUNTY: BROWN	FTMS DESIGN SHEETS	SHEET 185	E

2

2

N

MATCH LINE 71+00

430

STATION / OFFSET MEASURED TO
LEADING LEFT SENSOR OF ARRAY

WTSA616
WIRELESS TRAFFIC SENSOR ARRAY
(6) WIRELESS TRAFFIC SENSORS (S-F)

RAMP FROM REST AREA 52 TRUCK PARKING LOT TO I 43 NB

RAMP FROM REST AREA 52 CAR PARKING LOT TO I 43 NB

519

LP616
ON PROPOSED LIGHT POLE
(1) SOLAR POWEWRED WIRELESS TRAFFIC SENSOR REPEATER (S-F)

PROJECT NO: 1225-10-72	HWY: I 43	COUNTY: MANITOWOC	FTMS DESIGN SHEETS	SHEET 186	E

FILE NAME : I:\77532\BASE\MANITOWOC\12251002_RA51_52\12251002_MANCO_FTMS.DWG
LAYOUT NAME - 30

PLOT DATE : 5/10/2024 11:41 AM PLOT BY : PAUL KUTZ PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

CCTV-36-0115
(10 L.F.) DRILLING SHAFT 36-INCH DIAMETER
(1) 50-FOOT CAMERA POLE FOUNDATION
(1) INSTALL 50-FOOT CAMERA POLE (S-F)
(1) INSTALL CCTV CAMERA (S-F)
(2) INSTALL WIRELESS TRAFFIC SENSOR ACCESS POINT (S-F)
(1) POLE-MOUNTED CABINET (S-F)
(1) BREAKER DISCONNECT BOX
(1) 5-PORT CELLULAR MODEM (S-F)

(1) 2-INCH METALLIC CONDUIT WITH
(3) NO. 6 AWG TRAFFIC SIGNAL WIRES

REST AREA 52 TRUCK PARKING LOT

N

(1) 2-INCH NONMETALLIC CONDUIT WITH
(3) NO. 6 AWG TRAFFIC SIGNAL WIRES
(CONDUIT MAY BE CONSTRUCTED WITH LIGHTING CONDUIT BUT LIGHTING CONDUIT AND FTMS CONDUIT MAY NOT ENTER INTO OTHER SYSTEMS PULL BOXES)

PBRA5201

PBRA5202

PBRA5203

(1) 2-INCH NONMETALLIC CONDUIT WITH
(3) NO. 6 AWG TRAFFIC SIGNAL WIRES
(CONDUIT MAY BE CONSTRUCTED WITH LIGHTING CONDUIT BUT LIGHTING CONDUIT AND FTMS CONDUIT MAY NOT ENTER INTO OTHER SYSTEMS PULL BOXES)

RA52 POWER PANEL
FURNISH AND INSTALL 50-AMP CIRCUIT BREAKER IN CIRCUIT BREAKER PANEL AND CONNECT NO. 6 AWG TRAFFIC SIGNAL WIRES TO IT TO POWER CCTV-36-0115

MATCH LINE 65+50

REST AREA 52

RAMP FROM REST AREA 52 CAR PARKING LOT TO I 43 NB

REST AREA 52 CAR PARKING LOT

MATCH LINE 71+00

PROJECT NO: 1225-10-72	HWY: I 43	COUNTY: MANITOWOC	FTMS DESIGN SHEETS	SHEET 187	E

FILE NAME : I:\77532\BASE\MANITOWOC\12251002_RA51_52\12251002_MANCO_FTMS.DWG
LAYOUT NAME - 29

PLOT DATE : 5/10/2024 11:41 AM PLOT BY : PAUL KUTZ PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE 65+50

I 43 NB RAMP TO REST AREA 52 PARKING

I 43 NB RAMP TO REST AREA 52 TRUCK PARKING

LP416
ON PROPOSED LIGHT POLE
(1) SOLAR POWEWRED WIRELESS TRAFFIC SENSOR REPEATER (S-F)

WTSA416
WIRELESS TRAFFIC SENSOR ARRAY
(6) WIRELESS TRAFFIC SENSORS (S-F)

STATION / OFFSET MEASURED TO
LEADING LEFT SENSOR OF ARRAY

PROJECT NO: 1225-10-72	HWY: I 43	COUNTY: MANITOWOC	FTMS DESIGN SHEETS	SHEET 188	E

FILE NAME : I:\77532\BASE\MANITOWOC\12251002_RA51_52\12251002_MANCO_FTMS.DWG
LAYOUT NAME - 28

PLOT DATE : 5/10/2024 11:40 AM PLOT BY : PAUL KUTZ PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

147

Z

Z

N

BRIDGE EXPANSION JOINT

PB14702

PB14701

MBDMS360021

(1) 2-INCH NONMETALLIC CONDUIT WITH
(3) NO. 6 AWG TRAFFIC SIGNAL WIRES

(1) 2-INCH METALLIC CONDUIT WITH
(3) NO. 6 AWG TRAFFIC SIGNAL WIRES

DMS-36-0021
DRILLING SHAFT (24-INCH)
CONCRETE MASONRY ANCILLARY STRUCTURES, TYPE NS
STEEL REINFORCEMENT HS ANCILLARY STRUCTURES TYPE NS
SIGN SUPPORTS STRUCTURAL STEEL HS
(1) HYBRID DYNAMIC MESSAGE SIGN
(DMS IS S-F AND STATIC SIGN IS CONTRACTOR FURNISHED)
(1) POLE MOUNTED CABINET (S-F)
(1) CELLULAR MODEM (S-F)
(1) ELECTRICAL SERVICE BREAKER DISCONNECT BOX
(1) DMS POWER SUPPLY (S-F)

EDGE OF TRAVELED WAY

FACE OF BEAMGUARD

43

OH

79'

7.5"

5'

PROJECT NO: 1225-10-72	HWY: I 43	COUNTY: MANITOWOC	FTMS DESIGN SHEETS	SHEET 189	E

FILE NAME : I:\77532\BASE\MANITOWOC\12251002_RA51_52\12251002_MANCO_FTMS.DWG
LAYOUT NAME - 06

PLOT DATE : 5/10/2024 11:40 AM PLOT BY : PAUL KUTZ PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

I 43 SB RAMP TO REST AREA 51 TRUCK PARKING

I 43 SB RAMP TO REST AREA 51 CAR PARKING

STATION / OFFSET MEASURED TO LEADING LEFT SENSOR OF ARRAY

LP310
ON PROPOSED LIGHT POLE
(1) SOLAR POWEWRED WIRELESS TRAFFIC SENSOR REPEATER (S-F)

WTSA310
WIRELESS TRAFFIC SENSOR ARRAY
(6) WIRELESS TRAFFIC SENSORS (S-F)

EP: 65+00.00

MATCH LINE 60+50

N

PROJECT NO: 1225-10-72	HWY: I 43	COUNTY: MANITOWOC	FTMS DESIGN SHEETS	SHEET 190	E

FILE NAME : I:\77532\BASE\MANITOWOC\12251002_RA51_52\12251002_MANCO_FTMS.DWG
LAYOUT NAME - 33

PLOT DATE : 5/10/2024 11:41 AM PLOT BY : PAUL KUTZ PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

MATCH LINE 55+25

MATCH LINE 60+50

REST AREA 51 CAR PARKING LOT

REST AREA 51

REST AREA 51 TRUCK PARKING LOT

RA5101 POWER PANEL
FURNISH AND INSTALL 50-AMP CIRCUIT BREAKER
IN CIRCUIT BREAKER PANEL AND CONNECT
NO. 6 AWG TRAFFIC SIGNAL WIRES TO IT TO
POWER CCTV-36-0114

(1) 2-INCH NONMETALLIC CONDUIT WITH
(3) NO. 6 AWG TRAFFIC SIGNAL WIRES
(CONDUIT MAY BE CONSTRUCTED WITH
LIGHTING CONDUIT BUT LIGHTING CONDUIT
AND FTMS CONDUIT MAY NOT ENTER INTO
OTHER SYSTEMS PULL BOXES)

PBRA5104

PBRA5102

PBRA5101

PBRA5103

(1) 2-INCH NONMETALLIC CONDUIT WITH
(3) NO. 6 AWG TRAFFIC SIGNAL WIRES

(1) 2-INCH METALLIC CONDUIT WITH
(3) NO. 6 AWG TRAFFIC SIGNAL WIRES

CCTV-36-0114
(10 L.F.) DRILLING SHAFT 36-INCH DIAMETER
(1) 50-FOOT CAMERA POLE FOUNDATION
(1) INSTALL 50-FOOT CAMERA POLE (S-F)
(1) INSTALL CCTV CAMERA (S-F)
(2) INSTALL WIRELESS TRAFFIC SENSOR ACCESS POINT (S-F)
(1) POLE-MOUNTED CABINET (S-F)
(1) BREAKER DISCONNECT BOX
(1) 5-PORT CELLULAR MODEM (S-F)

SEPTIC

WELL

SAN

PROJECT NO: 1225-10-72	HWY: I 43	COUNTY: MANITOWOC	FTMS DESIGN SHEETS	SHEET 191	E

FILE NAME : I:\77532\BASE\MANITOWOC\12251002_RA51_52\12251002_MANCO_FTMS.DWG
LAYOUT NAME - 32

PLOT DATE : 5/10/2024 11:41 AM PLOT BY : PAUL KUTZ PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LP115
ON PROPOSED LIGHT POLE
(1) SOLAR POWEWRED WIRELESS TRAFFIC SENSOR REPEATER (S-F)

WTSA115
WIRELESS TRAFFIC SENSOR ARRAY
(6) WIRELESS TRAFFIC SENSORS (S-F)

STATION / OFFSET MEASURED TO
LEADING LEFT SENSOR OF ARRAY

REST AREA 51 CAR PARKING LOT

RAMP FROM REST AREA 51 CAR PARKING LOT TO I 43 SB

RAMP FROM REST AREA 51 TRUCK PARKING LOT TO I 43 SB

REST AREA 51 TRUCK PARKING LOT

PT: 114+74.93

BP: 10+00.00

PC: 10+19.91

PT: 10+99.77

PC: 116+68.10

EP: 117+06.39

PC: 11+82.92

BP: 50+00.00

EP: 12+67.95

MATCH LINE 55+25

N

PROJECT NO: 1225-10-72	HWY: I 43	COUNTY: MANITOWOC	FTMS DESIGN SHEETS	SHEET 192	E

FILE NAME : I:\77532\BASE\MANITOWOC\12251002_RA51_52\12251002_MANCO_FTMS.DWG
LAYOUT NAME - 31
PLOT DATE : 5/10/2024 11:41 AM
PLOT BY : PAUL KUTZ
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

UNDER CONSTRUCTION
MARCH 2025 - JUNE 2026

PLACE SIGN AT THE EXIT RAMP TO REST AREA 51 AND REST AREA 52. SIGN TO REMAIN IN PLACE FOR DURATION OF CONSTRUCTION.

N

SCALE, MILES 0 0.5 1

TRAFFIC CONTROL COVERING SIGNS TYPE I

REST AREA
3 MILES

PORTABLE CHANGEABLE MESSAGE SIGNS USED TO NOTIFY TRAFFIC OF ALL LANE OR SHOULDER CLOSURES.

PORTABLE CHANGEABLE MESSAGE SIGNS USED TO PRE-WARN TRAFFIC (10) TEN DAYS PRIOR TO CLOSING OF REST AREA.

TRAFFIC CONTROL COVERING SIGNS TYPE I

REST AREA
1 MILES

PORTABLE CHANGEABLE MESSAGE SIGNS USED TO NOTIFY TRAFFIC OF ALL LANE OR SHOULDER CLOSURES.

PCMS

PCMS

PCMS

PCMS

SAFETY REST AREA
NO. 52

SAFETY REST AREA
NO. 51

Fontenoy
Curran
Denmark
Maribel
Rosecrans
Cooperstown
Larrabee
COOPERSTOWN
Devils Cr.
Nenow
Town of Frank V
Cr.
Engledin
Heidmann L.
Harpt L.
Tuma L.
Black
KEWAUNEE CO.
T-22-N
43
I-43

LANE CLOSURE SCHEDULE		
STAGE	I-43 SOUTHBOUND	I-43 NORTHBOUND
STAGE 1	RIGHT SHOULDER CLOSURE	RIGHT SHOULDER CLOSURE
STAGE 2	NO LANE CLOSURE REQUIRED	NO LANE CLOSURE REQUIRED

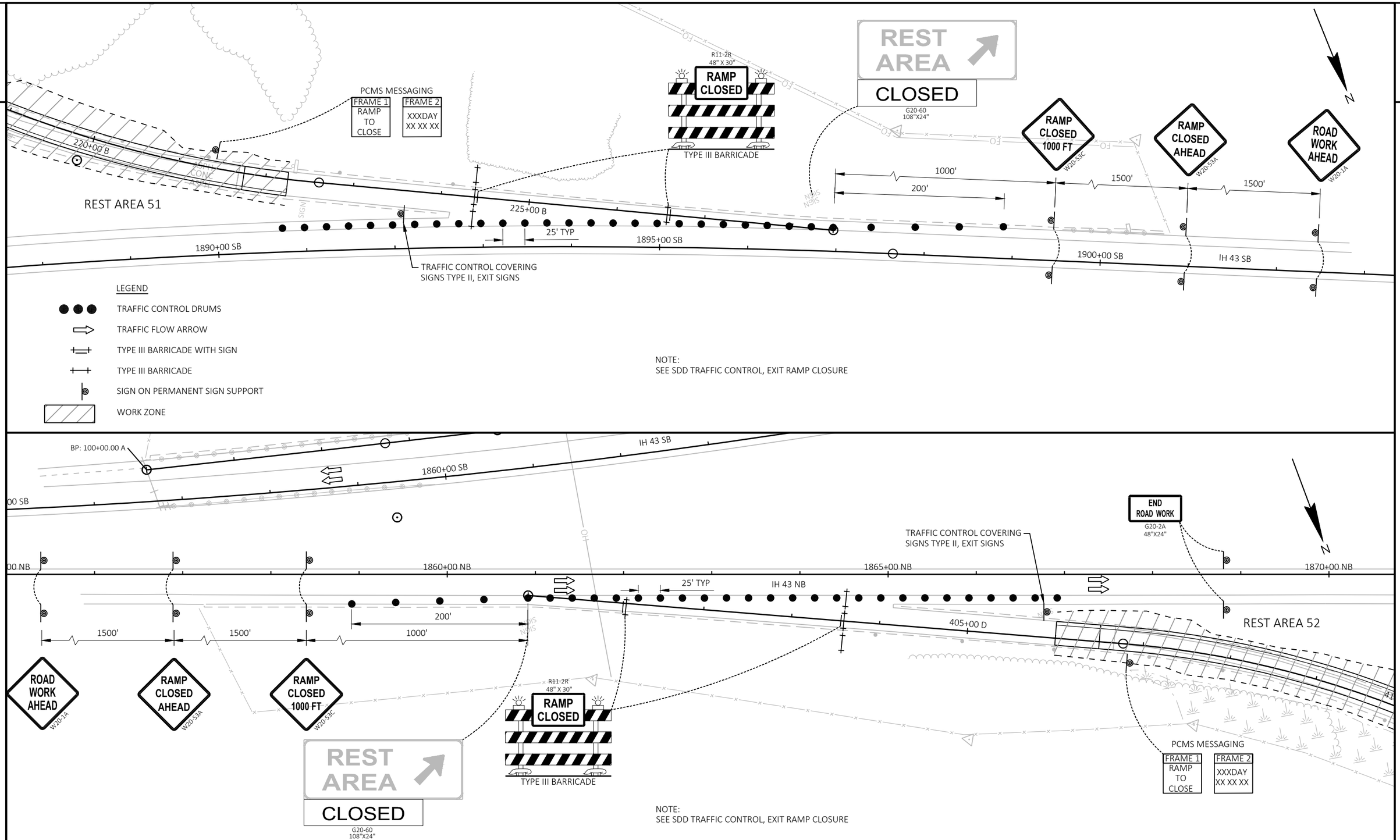
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	TRAFFIC CONTROL - AREA OVERVIEW	SHEET 193 E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\025100-TC_AREA OVERVIEW.DWG
LAYOUT NAME - 025100-tc_Area Overview

PLOT DATE : 11/26/2024 11:47 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:1 MI

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	TRAFFIC CONTROL - EXIT RAMP CLOSURE (MARCH CLOSURE)	SHEET 194	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\025101_TC-MARCH CLOSURE.DWG
LAYOUT NAME - 025101_tc

PLOT DATE : 11/26/2024 11:48 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

PCMS MESSAGING

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

R11-2R
48" X 30"
RAMP CLOSED
TYPE III BARRICADE

REST AREA
CLOSED
G20-60
108"X24"

RAMP CLOSED 1000 FT
W20-53C

RAMP CLOSED AHEAD
W20-53A

ROAD WORK AHEAD
W20-1A

N

220+00 B

REST AREA 51

1000'
200'
1500'
1500'

225+00 B
25' TYP
1890+00 SB
1895+00 SB
1900+00 SB
IH 43 SB

TRAFFIC CONTROL COVERING
SIGNS TYPE II, EXIT SIGNS

TEMPORARY MARKING LINE PAINT
6-INCH, WHITE
(ACROSS THE RAMP OPENING)

LEGEND

- TRAFFIC CONTROL DRUMS
- TRAFFIC FLOW ARROW
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE
- SIGN ON PERMANENT SIGN SUPPORT
- WORK ZONE

NOTE:
SEE SDD TRAFFIC CONTROL, EXIT RAMP CLOSURE

BP: 100+00.00 A
IH 43 SB
1860+00 SB
00 SB

TEMPORARY MARKING LINE
PAINT 6-INCH, WHITE
(ACROSS THE RAMP OPENING)

TRAFFIC CONTROL COVERING
SIGNS TYPE II, EXIT SIGNS

END
ROAD WORK
G20-2A
48"X24"

00 NB
1860+00 NB
1865+00 NB
1870+00 NB

25' TYP
IH 43 NB

200'
1000'
1500'
1500'

405+00 D

REST AREA 52

ROAD WORK AHEAD
W20-1A

RAMP CLOSED AHEAD
W20-53A

RAMP CLOSED 1000 FT
W20-53C

R11-2R
48" X 30"
RAMP CLOSED
TYPE III BARRICADE

REST AREA
CLOSED
G20-60
108"X24"

PCMS MESSAGING

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

NOTE:
SEE SDD TRAFFIC CONTROL, EXIT RAMP CLOSURE

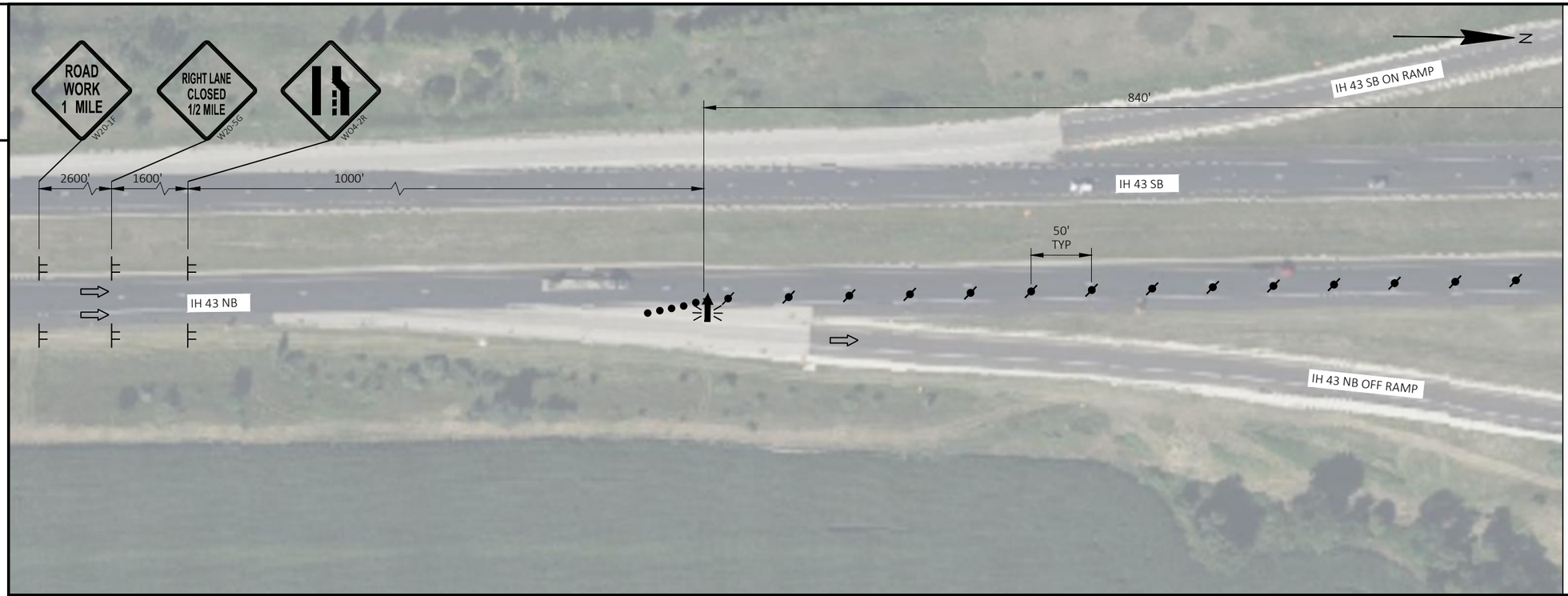
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	TRAFFIC CONTROL - EXIT RAMP CLOSURE	SHEET 195	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\025101_TC.DWG
LAYOUT NAME - 025101_tc

PLOT DATE : 11/26/2024 11:48 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

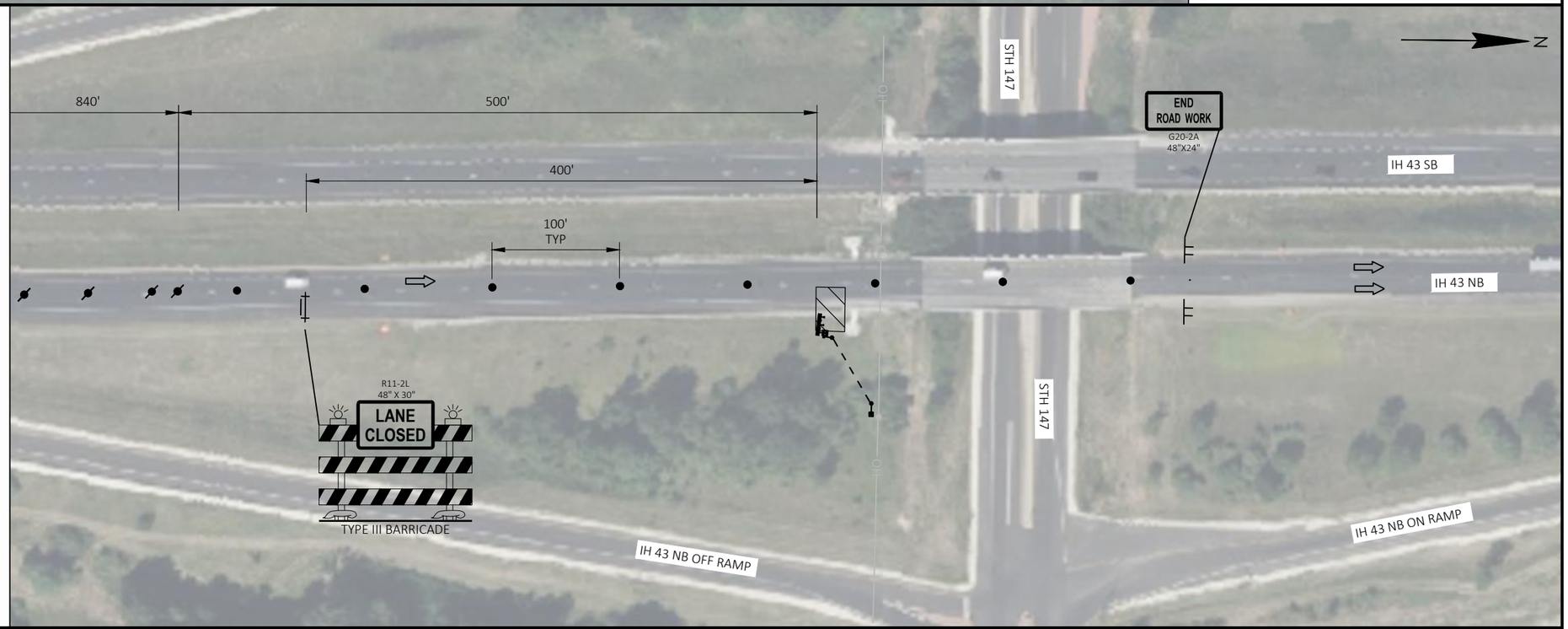
2



WISCONSIN
MATTHEW MAY
E-45043
MENOMONEE FALLS, WI
PROFESSIONAL ENGINEER
7/15/24

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- TYPE A WARNING LIGHT (FLASHING)
- WORK AREA
- DIRECTION OF TRAFFIC



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	TRAFFIC CONTROL	SHEET 196	E

FILE NAME : I:\77532\BASE\MANITOWOC\12251002_RA51_52\TRAFFIC CONTROL\12251002_MANCO_FTMS_TC.DWG
LAYOUT NAME - tc01

PLOT DATE : 6/24/2024 1:30 PM PLOT BY : MATTHEW MAY PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

LEGEND

WORK AREA

SOUTHBOUND RIGHT LANE CLOSURE

SDD TRAFFIC CONTROL LANE CLOSURE



N

PROJECT NO: 1225-10-72	HWY: I 43	COUNTY: BROWN	TRAFFIC CONTROL	SHEET 197	E

FILE NAME : I:\77532\BASE\BROWN\12251072_RESTAREAS5152\TRAFFIC CONTROL\12251002_BROWNCO_FTMS_TC.DWG
LAYOUT NAME - TC02

PLOT DATE : 6/24/2024 1:30 PM PLOT BY : MATTHEW MAY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

WORKZONE PROJECT ID 1225-10-72

WORKZONE PROJECT ID 1225-10-73

NOTES:

1. SEE WISDOT SDD TRAFFIC CONTROL, EXIT RAMP CLOSURE FOR STANDARD TRAFFIC CONTROL DEVICE LAYOUT

CONSTRUCTION
- SITE CLEARANCE AND DEMO INCLUDING TREE CLEARING & GRUBBING
- GRADING PREP FOR BUILDING CONSTRUCTION
- SELECT STORM SEWER AND SANITARY SEWER CONSTRUCTION

TRAFFIC
- REST AREAS ARE CLOSED
- WORK ZONE RESERVED FOR ID 1225-10-72

N

205+00 B

REST AREA 51 TRUCK LOT

210+00 B

PT: 211436.54 B

BP: 200+00.00 B

EP: 117+06.59 A

PC: 116+68.16 A

PT: 114+74.93 A

115+00 A

305+00 C

REST AREA 51 CAR LOT

310+00 C

PT: 304+38.90 C

PC: 310+96.00 C

215+00 B

315+00 C

BP: 300+00.00 C

PCC: 113+76.79 A

ABANDONED SEPTIC FIELD

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	STAGE 1 - REST AREA 51	SHEET 198	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\026001-S1_RA51.DWG
LAYOUT NAME - 026001-s1_RA51

PLOT DATE : 11/26/2024 11:49 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

: 600+00.00 F

PC: 601+59.43 F

415+00 D

PT: 414+96.93 D

PT: 605+99.57 F

605+00 F

PC: 611+91.22 F

610+00 F

REST AREA 52 CAR LOT

615+00 F

PT: 616+75.90 F

PC: 502+23.78 E

BP: 500+00.00 E

PC: 417+33.16 D

430+00 D

EP: 430+37.11 D

420+00 D

REST AREA 52 TRUCK LOT

425+00 D

ABANDONED SEPTIC FIELD

N

CONSTRUCTION
- SITE CLEARANCE AND DEMO INCLUDING TREE CLEARING & GRUBBING
- GRADING PREP FOR BUILDING CONSTRUCTION
- SELECT STORM SEWER AND SANITARY SEWER CONSTRUCTION

TRAFFIC
- REST AREAS ARE CLOSED
- WORK ZONE RESERVED FOR ID 1225-10-72

LEGEND

WORKZONE PROJECT ID 1225-10-72

WORKZONE PROJECT ID 1225-10-73

NOTES:

1. SEE WISDOT SDD TRAFFIC CONTROL, EXIT RAMP CLOSURE FOR STANDARD TRAFFIC CONTROL DEVICE LAYOUT

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	STAGE 1 - REST AREA 52	SHEET 199	E

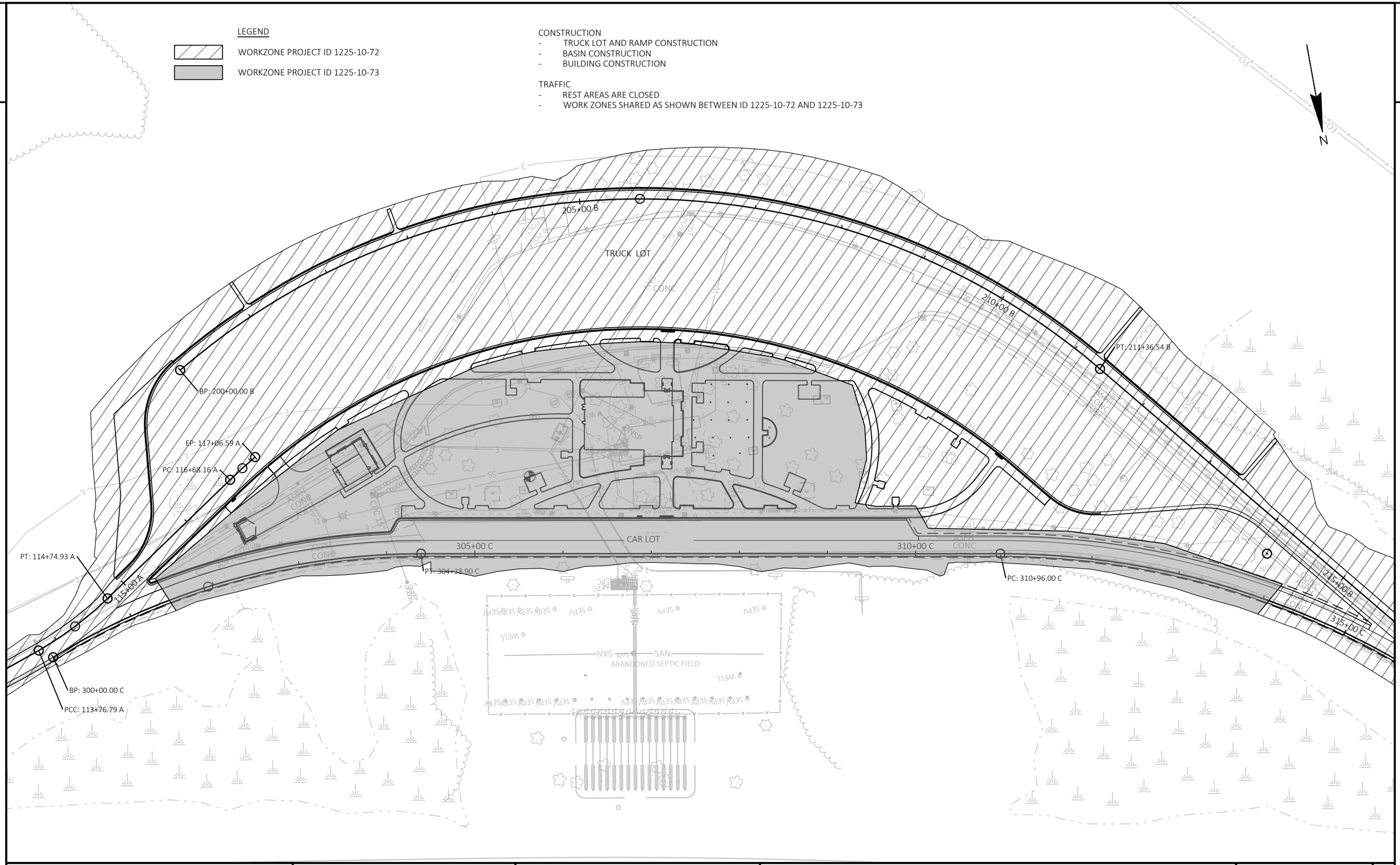
LEGEND

WORKZONE PROJECT ID 1225-10-72

WORKZONE PROJECT ID 1225-10-73

CONSTRUCTION
- TRUCK LOT AND RAMP CONSTRUCTION
- BASIN CONSTRUCTION
- BUILDING CONSTRUCTION

TRAFFIC
- REST AREAS ARE CLOSED
- WORK ZONES SHARED AS SHOWN BETWEEN ID 1225-10-72 AND 1225-10-73



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	STAGE 2 - REST AREA 51	SHEET 200	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\026002-S2_RA51.DWG
LAYOUT NAME - 026002-s2_RA51

PLOT DATE : 11/26/2024 11:49 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

: 600+00.00 F

PC: 601+59.43 F

415+00 D

PT: 414+96.93 D

PT: 605+99.57 F

605+00 F

PC: 611+91.22 F

610+00 F

REST AREA 52 CAR LOT

615+00 F

PT: 616+75.90 F

PC: 502+23.78 E

BP: 500+00.00 E

PC: 417+33.16 D

420+00 D

430+00 D

EP: 430+37.11 D

REST AREA 52 TRUCK LOT

425+00 D

ABANDONED SEPTIC FIELD

LEGEND

WORKZONE PROJECT ID 1225-10-72

WORKZONE PROJECT ID 1225-10-73

CONSTRUCTION
- TRUCK LOT AND RAMP CONSTRUCTION
- BASIN CONSTRUCTION
- BUILDING CONSTRUCTION

TRAFFIC
- REST AREAS ARE CLOSED
- WORK ZONES SHARED AS SHOWN BETWEEN ID 1225-10-72 AND 1225-10-73

N

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	STAGE 2 - REST AREA 52	SHEET 201	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\026002-S2_RA52.DWG
LAYOUT NAME - 026002-s2_RA52

PLOT DATE : 11/26/2024 11:50 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

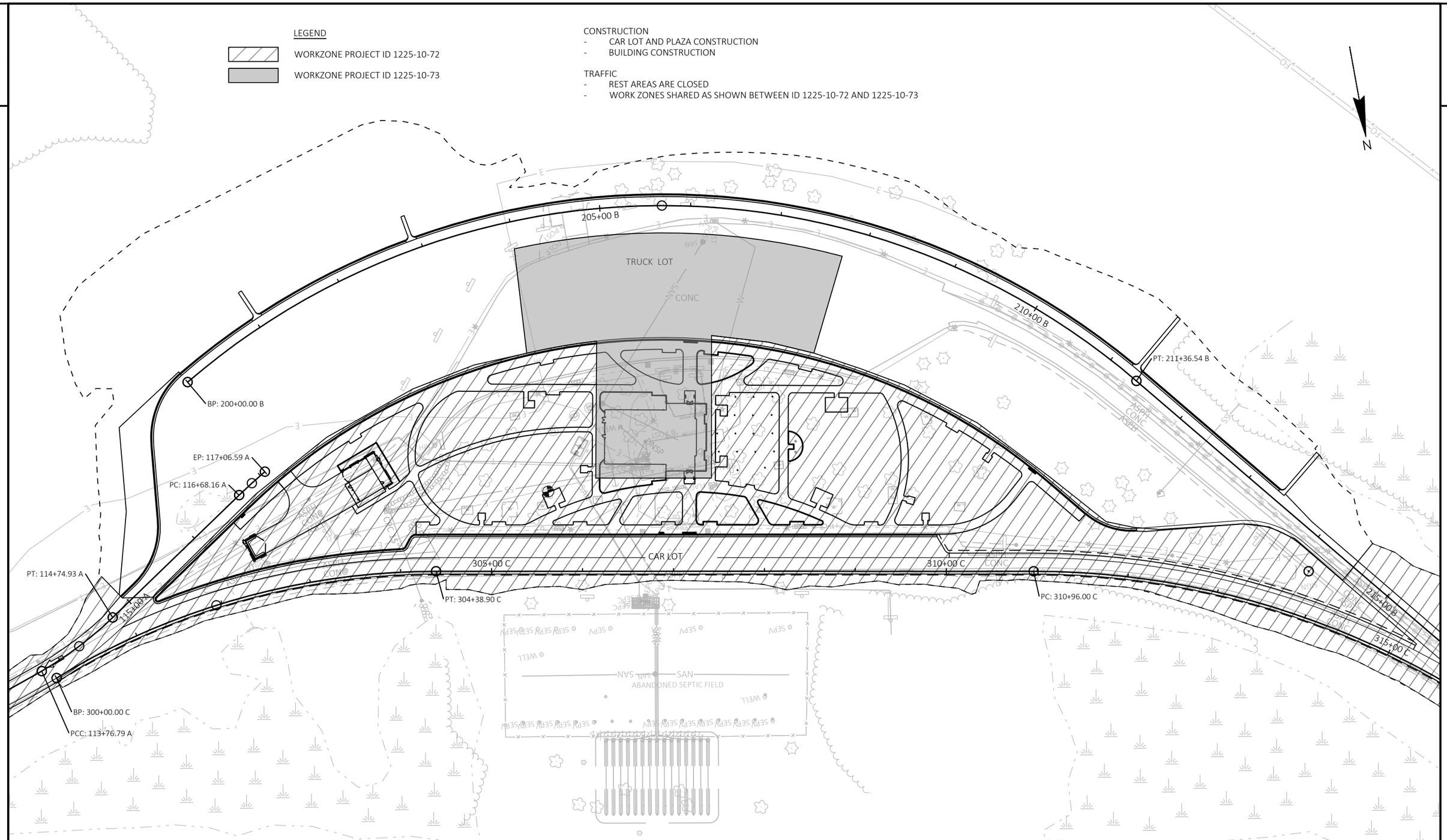
LEGEND

WORKZONE PROJECT ID 1225-10-72

WORKZONE PROJECT ID 1225-10-73

CONSTRUCTION
- CAR LOT AND PLAZA CONSTRUCTION
- BUILDING CONSTRUCTION

TRAFFIC
- REST AREAS ARE CLOSED
- WORK ZONES SHARED AS SHOWN BETWEEN ID 1225-10-72 AND 1225-10-73



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	STAGE 3 - REST AREA 51	SHEET 202	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\026003-S3_RA51.DWG
LAYOUT NAME - 026003-s3_RA51

PLOT DATE : 11/26/2024 11:50 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

: 600+00.00 F

PC: 501+59.43 F

415+00 D

PT: 414+96.93 D

605+00 F

PT: 605+99.57 F

PC: 611+91.22 F

610+00 F

615+00 F

PT: 616+75.90 F

PC: 502+23.78 E

REST AREA 52 CAR LOT

BP: 500+00.00 E

PC: 417+33.16 D

430+00 D

EP: 430+37.11 D

420+00 D

REST AREA 52 TRUCK LOT

425+00 D

ABANDONED SEPTIC FIELD

LEGEND

WORKZONE PROJECT ID 1225-10-72

WORKZONE PROJECT ID 1225-10-73

CONSTRUCTION
- CAR LOT AND PLAZA CONSTRUCTION
- BASIN CONSTRUCTION
- BUILDING CONSTRUCTION

TRAFFIC
- REST AREAS ARE CLOSED
- WORK ZONES SHARED AS SHOWN BETWEEN ID 1225-10-72 AND 1225-10-73

N

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	STAGE 3 - REST AREA 52	SHEET 203	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\026003-S3_RA52.DWG
LAYOUT NAME - 026003-s3_RA52

PLOT DATE : 11/26/2024 11:51 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

WORKZONE PROJECT ID 1225-10-72

WORKZONE PROJECT ID 1225-10-73

CONSTRUCTION
- COMPLETE SITE CONSTRUCTION
- BUILDING CONSTRUCTION COMPLETED

TRAFFIC
- REST AREAS ARE CLOSED
- WORK ZONE RESERVED FOR ID 1225-10-72

N

BP: 200+00.00 B

EP: 117+06.59 A

PC: 116+68.16 A

205+00 B

TRUCK LOT

210+00 B

PT: 211+36.54 B

PT: 114+74.93 A

115+00 A

305+00 C

PT: 304+38.90 C

CAR LOT

310+00 C

PC: 310+96.00 C

215+00 B

315+00 C

BP: 300+00.00 C

PCC: 113+76.79 A

ABANDONED SEPTIC FIELD

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	STAGE 4 - REST AREA 51	SHEET 204	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\026004-S4_RA51.DWG
LAYOUT NAME - 026004-s4_RA51

PLOT DATE : 11/26/2024 11:51 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

: 600+00.00 F

PC: 501+59.43 F

415+00 D

PT: 414+96.93 D

PT: 605+99.57 F

605+00 F

610+00 F

PC: 611+91.22 F

REST AREA 52 CAR LOT

615+00 F

PT: 616+75.90 F

PC: 502+23.78 E

BP: 500+00.00 E

PC: 417+33.16 D

420+00 D

430+00 D

EP: 430+37.11 D

REST AREA 52 TRUCK LOT

425+00 D

ABANDONED SEPTIC FIELD

LEGEND

WORKZONE PROJECT ID 1225-10-72

WORKZONE PROJECT ID 1225-10-73

CONSTRUCTION
- COMPLETE SITE CONSTRUCTION
- BUILDING CONSTRUCTION COMPLETED

TRAFFIC
- REST AREAS ARE CLOSED
- WORK ZONE RESERVED FOR ID 1225-10-72

N

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	STAGE 4 - REST AREA 52	SHEET 205	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\026004-S4_RA52.DWG
LAYOUT NAME - 026004-s4_RA52

PLOT DATE : 11/26/2024 11:52 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

CURVE 1
PI STA = 206+88.09 B
Y = 382879.220
X = 192520.481
DELTA = 81°23'56" RT
D = 7°09'43"
T = 688.09'
L = 1136.54'
R = 800.00'
PC STA = 200+00.00 B
Y = 383228.260
X = 193113.479
PT STA = 211+36.54 B
Y = 383413.348
X = 192086.681
DB = S59°31'08"W
DA = N39°04'56"W

CURVE 2
PI STA = 219+92.77 B
Y = 384077.984
X = 191546.887
DELTA = 23°40'49" LT
D = 4°21'26"
T = 275.68'
L = 543.49'
R = 1315.00'
PC STA = 217+17.09 B
Y = 383863.991
X = 191720.685
PT STA = 222+60.57 B
Y = 384204.156
X = 191301.777
DB = N39°04'56"W
DA = N62°45'45"W

CURVE 3
PI STA = 102+00.28 A
Y = 383512.036
X = 194483.666
DELTA = 0°33'09" LT
D = 0°08'17"
T = 200.28'
L = 400.55'
R = 41536.31'
PC STA = 100+00.00 A
Y = 383462.491
X = 194677.717
PT STA = 104+00.55 A
Y = 383559.708
X = 194289.146
DB = N75°40'38"W
DA = N76°13'47"W

CURVE 4
PI STA = 109+03.29 A
Y = 383681.731
X = 193801.433
DELTA = 33°45'23" LT
D = 3°27'28"
T = 502.75'
L = 976.24'
R = 1657.00'
PC STA = 104+00.55 A
Y = 383559.708
X = 194289.146
PT STA = 113+76.79 A
Y = 383512.177
X = 193328.142
DB = N75°57'12"W
DA = S70°17'25"W

CURVE 5
PI STA = 116+87.38 A
Y = 383350.044
X = 193064.100
DELTA = 3°17'11" RT
D = 8°33'06"
T = 19.22'
L = 38.43'
R = 670.00'
PC STA = 116+68.16 A
Y = 383360.727
X = 193080.079
PT STA = 117+06.59 A
Y = 383340.294
X = 193047.535
DB = S56°13'56"W
DA = S59°31'08"W

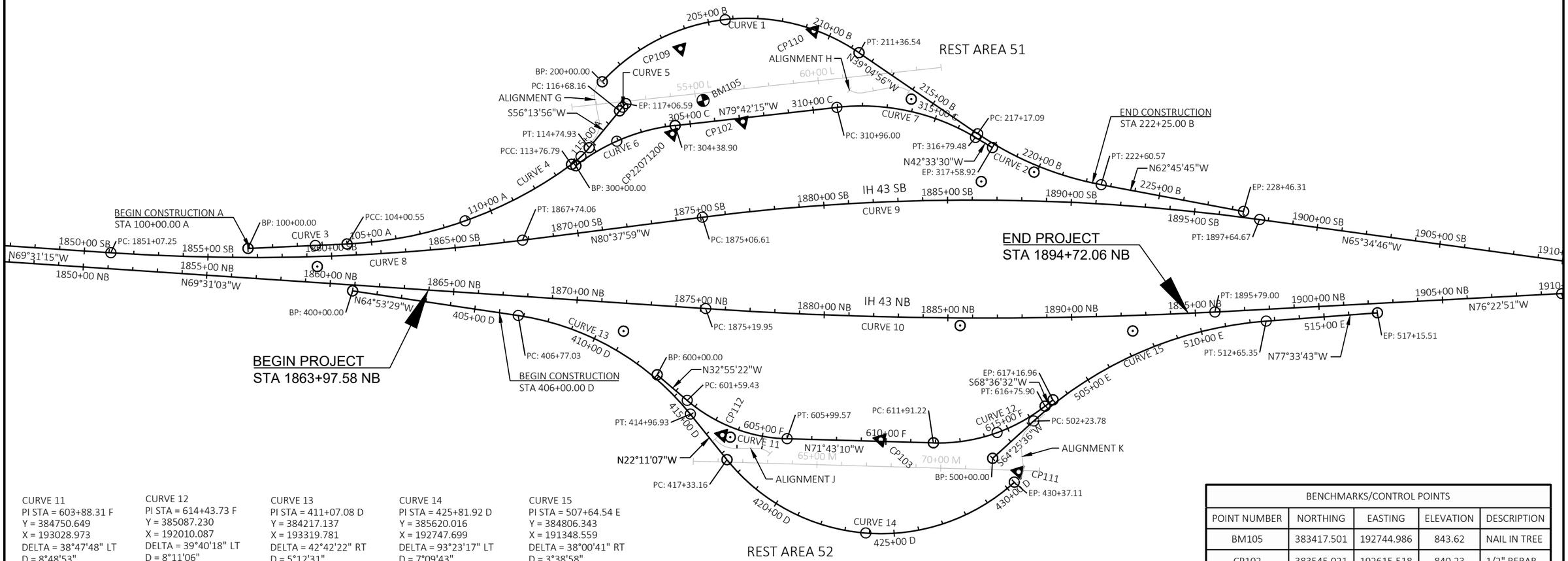
CURVE 6
PI STA = 302+25.13 C
Y = 383441.504
X = 193103.410
DELTA = 31°26'02" RT
D = 7°09'43"
T = 225.13'
L = 438.90'
R = 800.00'
PC STA = 300+00.00 C
Y = 383522.688
X = 193313.388
PT STA = 304+38.90 C
Y = 383481.741
X = 192881.909
DB = S68°51'43"W
DA = N79°42'15"W

CURVE 7
PI STA = 313+98.41 C
Y = 383653.236
X = 191937.851
DELTA = 37°08'44" RT
D = 6°21'58"
T = 302.41'
L = 583.48'
R = 900.00'
PC STA = 310+96.00 C
Y = 383599.186
X = 192235.390
PT STA = 316+79.48 C
Y = 383875.986
X = 191733.319
DB = N79°42'15"W
DA = N42°33'30"W

CURVE 8
PI STA = 1859+43.28 SB
Y = 383612.600
X = 194430.320
DELTA = 11°06'43" LT
D = 0°40'00"
T = 836.03'
L = 1666.81'
R = 8594.37'
PC STA = 1851+07.25 SB
Y = 383320.104
X = 195213.509
PT STA = 1867+74.06 SB
Y = 383748.669
X = 193605.442
DB = N69°31'15"W
DA = N80°37'59"W

CURVE 9
PI STA = 1886+42.18 SB
Y = 384052.720
X = 191762.230
DELTA = 15°03'13" RT
D = 0°40'00"
T = 1135.57'
L = 2258.05'
R = 8594.37'
PC STA = 1875+06.61 SB
Y = 383867.898
X = 192882.655
PT STA = 1897+64.67 SB
Y = 384522.201
X = 190728.257
DB = N80°37'59"W
DA = N65°34'46"W

CURVE 10
PI STA = 1885+50.71 NB
Y = 384585.350
X = 192010.280
DELTA = 6°51'49" LT
D = 0°20'00"
T = 1030.76'
L = 2059.05'
R = 17188.73'
PC STA = 1875+19.95 NB
Y = 384224.666
X = 192975.870
PT STA = 1895+79.00 NB
Y = 384828.057
X = 191008.506
DB = N69°31'03"W
DA = N76°22'51"W



CURVE 11
PI STA = 603+88.31 F
Y = 384750.649
X = 193028.973
DELTA = 38°47'48" LT
D = 8°48'53"
T = 228.88'
L = 440.13'
R = 650.00'
PC STA = 601+59.43 F
Y = 384558.526
X = 193153.371
PT STA = 605+99.57 F
Y = 384822.442
X = 192811.644
DB = N32°55'22"W
DA = N71°43'10"W

CURVE 12
PI STA = 614+43.73 F
Y = 385087.230
X = 192010.087
DELTA = 39°40'18" LT
D = 8°11'06"
T = 252.51'
L = 484.68'
R = 700.00'
PC STA = 611+91.22 F
Y = 385008.025
X = 192249.853
PT STA = 616+75.90 F
Y = 384995.131
X = 191774.972
DB = N71°43'10"W
DA = S68°36'32"W

CURVE 13
PI STA = 411+07.08 D
Y = 384217.137
X = 193319.781
DELTA = 42°42'22" RT
D = 5°12'31"
T = 430.05'
L = 819.90'
R = 1100.00'
PC STA = 406+77.03 D
Y = 384034.653
X = 193709.191
PT STA = 414+96.93 D
Y = 384615.347
X = 193157.394
DB = N64°53'29"W
DA = N22°11'07"W

CURVE 14
PI STA = 425+81.92 D
Y = 385620.016
X = 192747.699
DELTA = 93°23'17" LT
D = 7°09'43"
T = 848.76'
L = 1303.94'
R = 800.00'
PC STA = 417+33.16 D
Y = 384834.089
X = 193068.193
PT STA = 430+37.11 D
Y = 385253.634
X = 191982.086
DB = N22°11'07"W
DA = S64°25'36"W

CURVE 15
PI STA = 507+64.54 E
Y = 384806.343
X = 191348.559
DELTA = 38°00'41" RT
D = 3°38'58"
T = 540.77'
L = 1041.57'
R = 1570.00'
PC STA = 502+23.78 E
Y = 385039.774
X = 191836.350
PT STA = 512+65.35 E
Y = 384922.815
X = 190820.483
DB = S64°25'36"W
DA = N77°33'43"W

BENCHMARKS/CONTROL POINTS				
POINT NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
BM105	383417.501	192744.986	843.62	NAIL IN TREE
CP102	383545.021	192615.518	840.23	1/2" REBAR
CP103	384934.589	192449.655	833.19	1/2" REBAR
CP109	383190.518	192772.387	840.54	1/2" REBAR
CP110	383276.329	192236.127	844.10	1/2" REBAR
CP111	385218.648	191953.120	833.39	1/2" REBAR
CP112	384733.009	193057.532	829.78	1/2" REBAR
CP22071200	383510.923	192902.791	831.06	1/2" REBAR

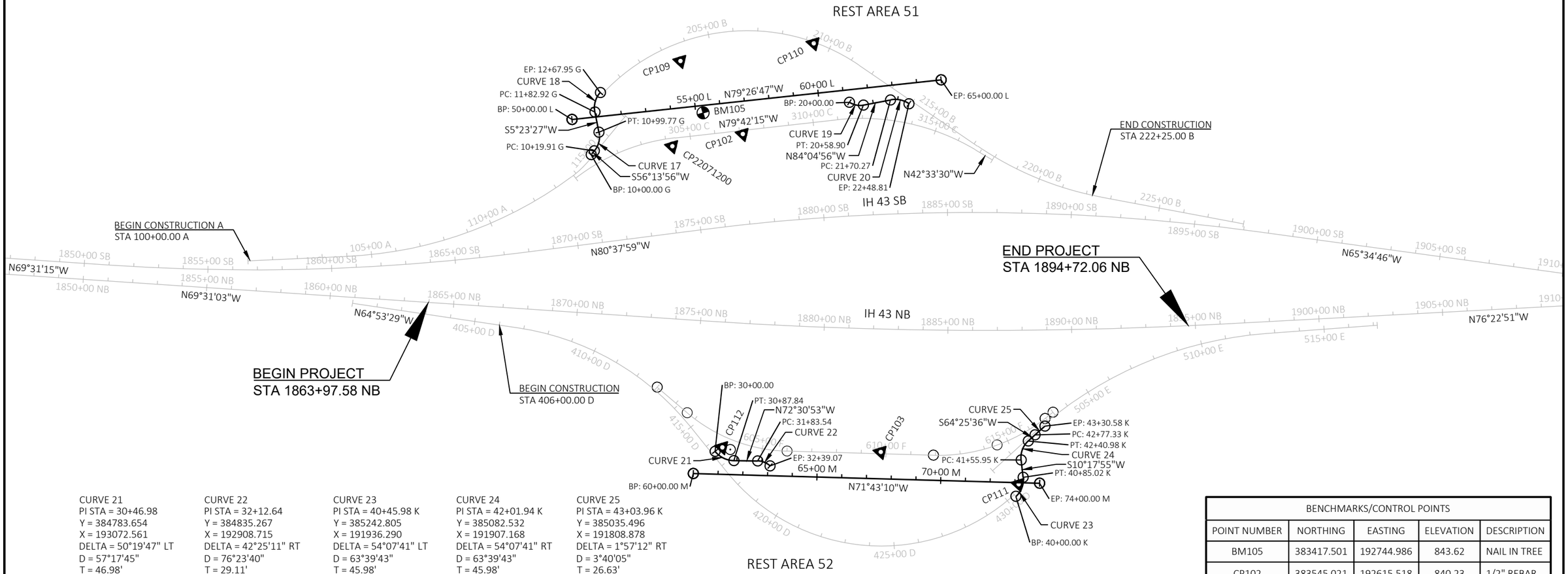
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	ALIGNMENT DETAILS	SHEET 206	E

CURVE 17
PI STA = 10+62.68 G
Y = 383414.124
X = 193174.332
DELTA = 50°50'29" LT
D = 63°39'43"
T = 42.78'
L = 79.86'
R = 90.00'
PC STA = 10+19.91 G
Y = 383437.899
X = 193209.890
PT STA = 10+99.77 G
Y = 383371.538
X = 193170.313
DB = S56°13'56"W
DA = S05°23'27"W

CURVE 18
PI STA = 12+28.91 G
Y = 383242.968
X = 193158.180
DELTA = 54°07'41" RT
D = 63°39'43"
T = 45.98'
L = 85.02'
R = 90.00'
PC STA = 11+82.92 G
Y = 383288.748
X = 193162.500
PT STA = 12+67.95 G
Y = 383219.642
X = 193118.551
DB = S05°23'27"W
DA = S59°31'08"W

CURVE 19
PI STA = 20+31.07
Y = 383569.805
X = 192146.410
DELTA = 45°00'00" LT
D = 76°23'40"
T = 31.07'
L = 58.90'
R = 75.00'
PC STA = 20+00.00
Y = 383545.691
X = 192165.995
PT STA = 20+58.90
Y = 383573.008
X = 192115.509
DB = N39°04'56"W
DA = N84°04'56"W

CURVE 20
PI STA = 22+11.69
Y = 383588.760
X = 191963.542
DELTA = 45°00'00" RT
D = 57°17'45"
T = 41.42'
L = 78.54'
R = 100.00'
PC STA = 21+70.27
Y = 383584.489
X = 192004.742
PT STA = 22+48.81
Y = 383620.913
X = 191937.428
DB = N84°04'56"W
DA = N39°04'56"W



CURVE 21
PI STA = 30+46.98
Y = 384783.654
X = 193072.561
DELTA = 50°19'47" LT
D = 57°17'45"
T = 46.98'
L = 87.84'
R = 100.00'
PC STA = 30+00.00
Y = 384740.150
X = 193090.301
PT STA = 30+87.84
Y = 384797.770
X = 193027.751
DB = N22°11'07"W
DA = N72°30'53"W

CURVE 22
PI STA = 32+12.64
Y = 384835.267
X = 192908.715
DELTA = 42°25'11" RT
D = 76°23'40"
T = 29.11'
L = 55.53'
R = 75.00'
PC STA = 31+83.54
Y = 384826.522
X = 192936.476
PT STA = 32+39.07
Y = 384860.449
X = 192894.121
DB = N72°30'53"W
DA = N30°05'43"W

CURVE 23
PI STA = 40+45.98 K
Y = 385242.805
X = 191936.290
DELTA = 54°07'41" LT
D = 63°39'43"
T = 45.98'
L = 85.02'
R = 90.00'
PC STA = 40+00.00 K
Y = 385262.655
X = 191977.769
PT STA = 40+85.02 K
Y = 385197.562
X = 191928.069
DB = S64°25'36"W
DA = S10°17'55"W

CURVE 24
PI STA = 42+01.94 K
Y = 385082.532
X = 191907.168
DELTA = 54°07'41" RT
D = 63°39'43"
T = 45.98'
L = 85.02'
R = 90.00'
PC STA = 41+55.95 K
Y = 385127.775
X = 191915.389
PT STA = 42+40.98 K
Y = 385062.682
X = 191865.689
DB = S10°17'55"W
DA = S64°25'36"W

CURVE 25
PI STA = 43+03.96 K
Y = 385035.496
X = 191808.878
DELTA = 1°57'12" RT
D = 3°40'05"
T = 26.63'
L = 53.25'
R = 1562.00'
PC STA = 42+77.33 K
Y = 385046.990
X = 191832.897
PT STA = 43+30.58 K
Y = 385024.827
X = 191784.481
DB = S64°25'36"W
DA = S66°22'48"W

BENCHMARKS/CONTROL POINTS				
POINT NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
BM105	383417.501	192744.986	843.62	NAIL IN TREE
CP102	383545.021	192615.518	840.23	1/2" REBAR
CP103	384934.589	192449.655	833.19	1/2" REBAR
CP109	383190.518	192772.387	840.54	1/2" REBAR
CP110	383276.329	192236.127	844.10	1/2" REBAR
CP111	385218.648	191953.120	833.39	1/2" REBAR
CP112	384733.009	193057.532	829.78	1/2" REBAR
CP22071200	383510.923	192902.791	831.06	1/2" REBAR

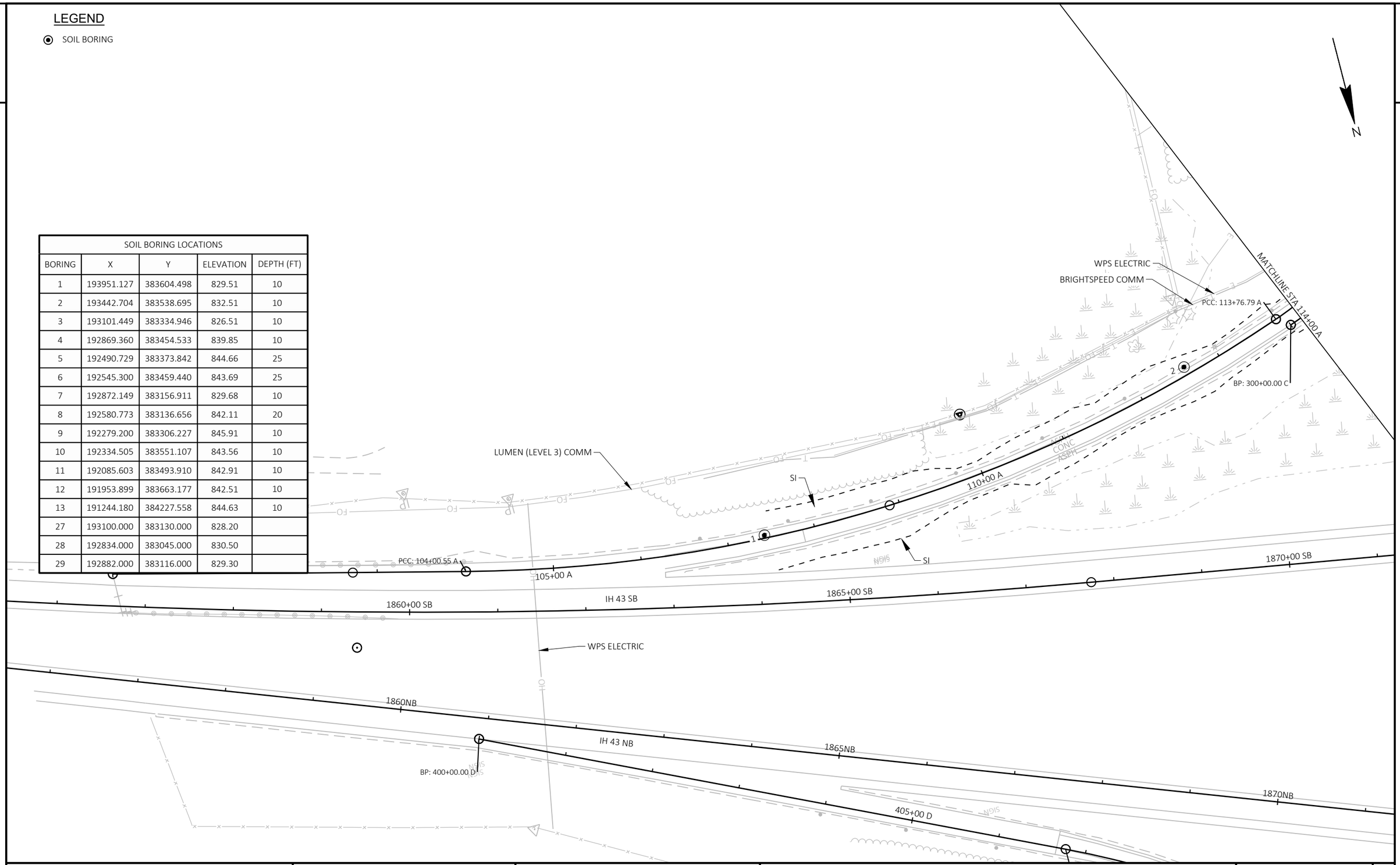
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	ALIGNMENT DETAILS	SHEET 207	E

2

LEGEND

SOIL BORING

SOIL BORING LOCATIONS				
BORING	X	Y	ELEVATION	DEPTH (FT)
1	193951.127	383604.498	829.51	10
2	193442.704	383538.695	832.51	10
3	193101.449	383334.946	826.51	10
4	192869.360	383454.533	839.85	10
5	192490.729	383373.842	844.66	25
6	192545.300	383459.440	843.69	25
7	192872.149	383156.911	829.68	10
8	192580.773	383136.656	842.11	20
9	192279.200	383306.227	845.91	10
10	192334.505	383551.107	843.56	10
11	192085.603	383493.910	842.91	10
12	191953.899	383663.177	842.51	10
13	191244.180	384227.558	844.63	10
27	193100.000	383130.000	828.20	
28	192834.000	383045.000	830.50	
29	192882.000	383116.000	829.30	



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	SOIL BORINGS - REST AREA 51	SHEET 208	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\027301-XX_RA51.DWG
LAYOUT NAME - 027301-xx

PLOT DATE : 11/26/2024 11:52 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LUMEN (LEVEL 3) COMM

LEGEND

SOIL BORING

N

SOIL BORING LOCATIONS				
BORING	X	Y	ELEVATION	DEPTH (FT)
1	193951.127	383604.498	829.51	10
2	193442.704	383538.695	832.51	10
3	193101.449	383334.946	826.51	10
4	192869.360	383454.533	839.85	10
5	192490.729	383373.842	844.66	25
6	192545.300	383459.440	843.69	25
7	192872.149	383156.911	829.68	10
8	192580.773	383136.656	842.11	20
9	192279.200	383306.227	845.91	10
10	192334.505	383551.107	843.56	10
11	192085.603	383493.910	842.91	10
12	191953.899	383663.177	842.51	10
13	191244.180	384227.558	844.63	10
SW-3	193100.000	383130.000	828.20	16
SW-4	192834.000	383045.000	830.50	16
HL-2	192882.000	383116.000	829.30	41

SI

SW-4

HL-2

SW-3

205+00 B

8

7

9

210+00 B

PT: 211+36.54 B

BP: 200+00.00 B

EP: 117+06.59 A

3

PC: 116+68.16 A

5

6

11

4

305+00 C

PT: 304+38.90 C

10

310+00 C

PC: 310+96.00 C

12

215+00 B

PT: 114+74.93 A

115+00 A

SI

WPS ELECTRIC

BRIGHTSPEED COMM

ABANDONED SEPTIC FIELD

MATCHLINE STA 114+00 A

MATCHLINE STA 315+00 C

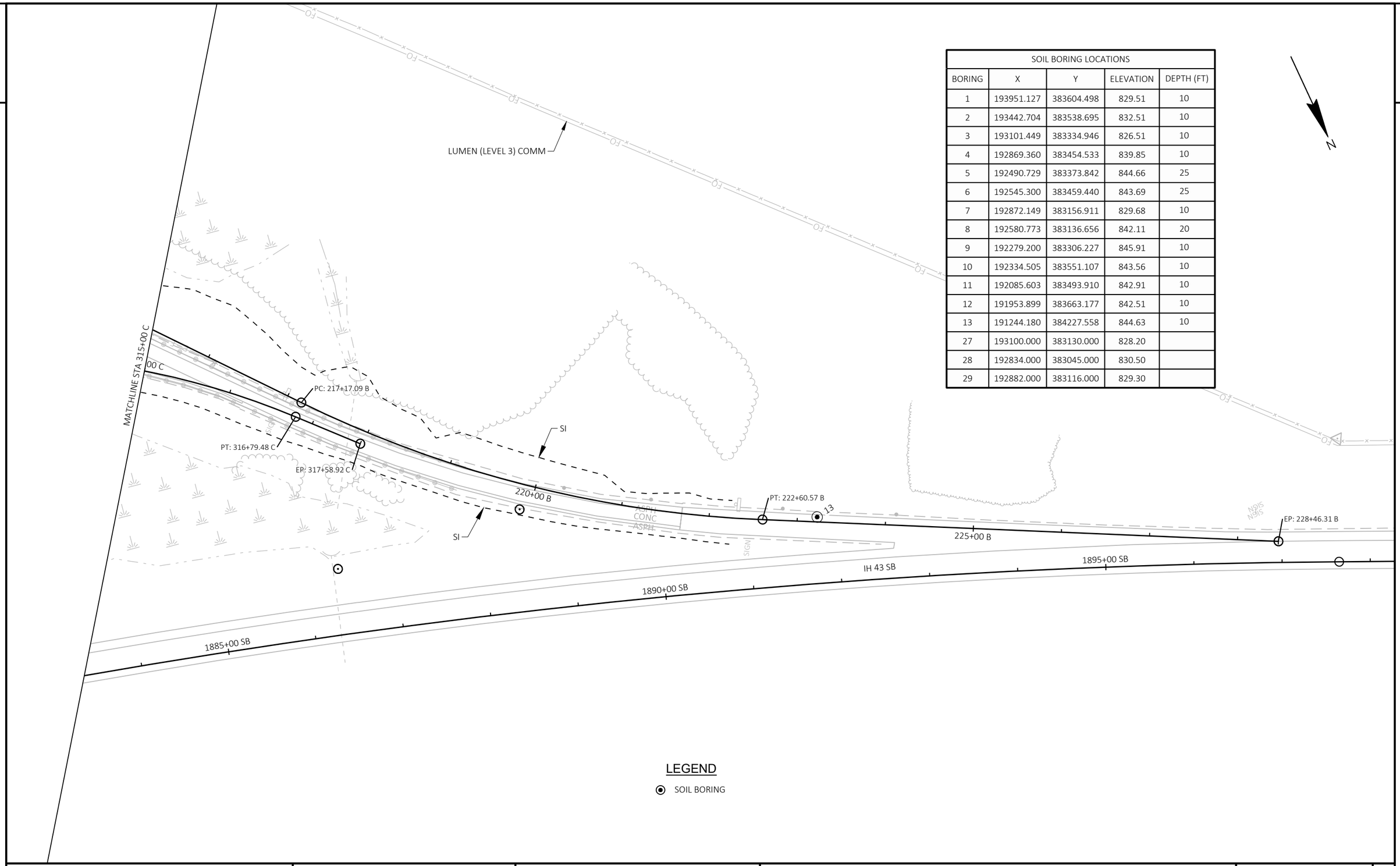
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	SOIL BORINGS - REST AREA 51	SHEET 209	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\027301-XX_RA51.DWG
LAYOUT NAME - 027302-xx

PLOT DATE : 11/26/2024 11:53 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

SOIL BORING LOCATIONS				
BORING	X	Y	ELEVATION	DEPTH (FT)
1	193951.127	383604.498	829.51	10
2	193442.704	383538.695	832.51	10
3	193101.449	383334.946	826.51	10
4	192869.360	383454.533	839.85	10
5	192490.729	383373.842	844.66	25
6	192545.300	383459.440	843.69	25
7	192872.149	383156.911	829.68	10
8	192580.773	383136.656	842.11	20
9	192279.200	383306.227	845.91	10
10	192334.505	383551.107	843.56	10
11	192085.603	383493.910	842.91	10
12	191953.899	383663.177	842.51	10
13	191244.180	384227.558	844.63	10
27	193100.000	383130.000	828.20	
28	192834.000	383045.000	830.50	
29	192882.000	383116.000	829.30	



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	SOIL BORINGS - REST AREA 51	SHEET 210	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\027301-XX_RA51.DWG
LAYOUT NAME - 027303-xx
PLOT DATE : 11/26/2024 11:53 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

MATERIAL SYMBOLS

ASPHALT · TOPSOIL · PEAT
CONCRETE · FILL · GRAVEL
SAND · CLAY · SILT
BOULDERS OR COBBLES · LIMESTONE · BEDROCK (UNKNOWN)
SHALE · SANDSTONE · IGNEOUS/ META

845 840 835 830 825 820 815

N 383538.695, E 193442.704
BOR SB-2, EL. 832.51
11 20 20 27 28

N 383604.498, E 193951.127
BOR SB-1, EL. 829.51
11 11 2.0 15 2.5 15 2.5

N 383334.946, E 193101.449
BOR SB-3, EL. 826.51
2 0.5 5 0.5 6 0.5 20 19

N 383454.533, E 192869.36
BOR SB-4, EL. 839.85
17 16 18 19

N 383156.911, E 192872.149
BOR SB-7, EL. 829.68
6 1.5 11 12 14 15

N 383136.656, E 192580.773
BOR SB-8, EL. 842.11
7 15 14 21 22 27 35 43

N 383459.44, E 192545.3
BOR SB-6, EL. 843.69
20 22 19 5 0.75 7 1.0 13 1.0 15 1.25 9 11 1.0

N 383373.842, E 192490.729
BOR SB-5, EL. 844.66
11 29 22 12 14 1.0 14 15 27 25

N 383306.227, E 192279.2
BOR SB-9, EL. 845.91
16 15 17 18 1.5

N 383551.107, E 192334.505
BOR SB-10, EL. 843.56
11 17 22 17

N 383493.91, E 192085.603
BOR SB-11, EL. 842.91
2 15 18 34 13

N 383663.177, E 191953.899
BOR SB-12, EL. 842.51
13 21 17 16 13

N 384227.558, E 191244.18
BOR SB-13, EL. 844.63
18 21 1.0 20 2.0 21

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	SOIL BORINGS - REST AREA 51	SHEET 211	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\027301-XX_RA51.DWG
LAYOUT NAME - 027304-xx
PLOT DATE : 11/26/2024 11:53 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : ############

2

MATERIAL SYMBOLS

ASPHALT
TOPSOIL
PEAT
CONCRETE
FILL
GRAVEL
SAND
CLAY
SILT
BOULDERS OR COBBLES
LIMESTONE
BEDROCK (UNKNOWN)
SHALE
SANDSTONE
IGNEOUS/ META

835
830
825
820
815
810
805

N 383130, E 192081
BOR SW-3, EL. 828.2

5
9
7
18
9
23
18
19

N 383045, E 192834
BOR SW-4, EL. 830.5

4
9
25
17
9
11
40
41

N383116 , E 192882
BOR HL-2, EL. 829.3

6
16
17
22
21
20
18
22
15
20
20
13
8

N383116 , E 192882
BOR HL-2, EL. 829.3

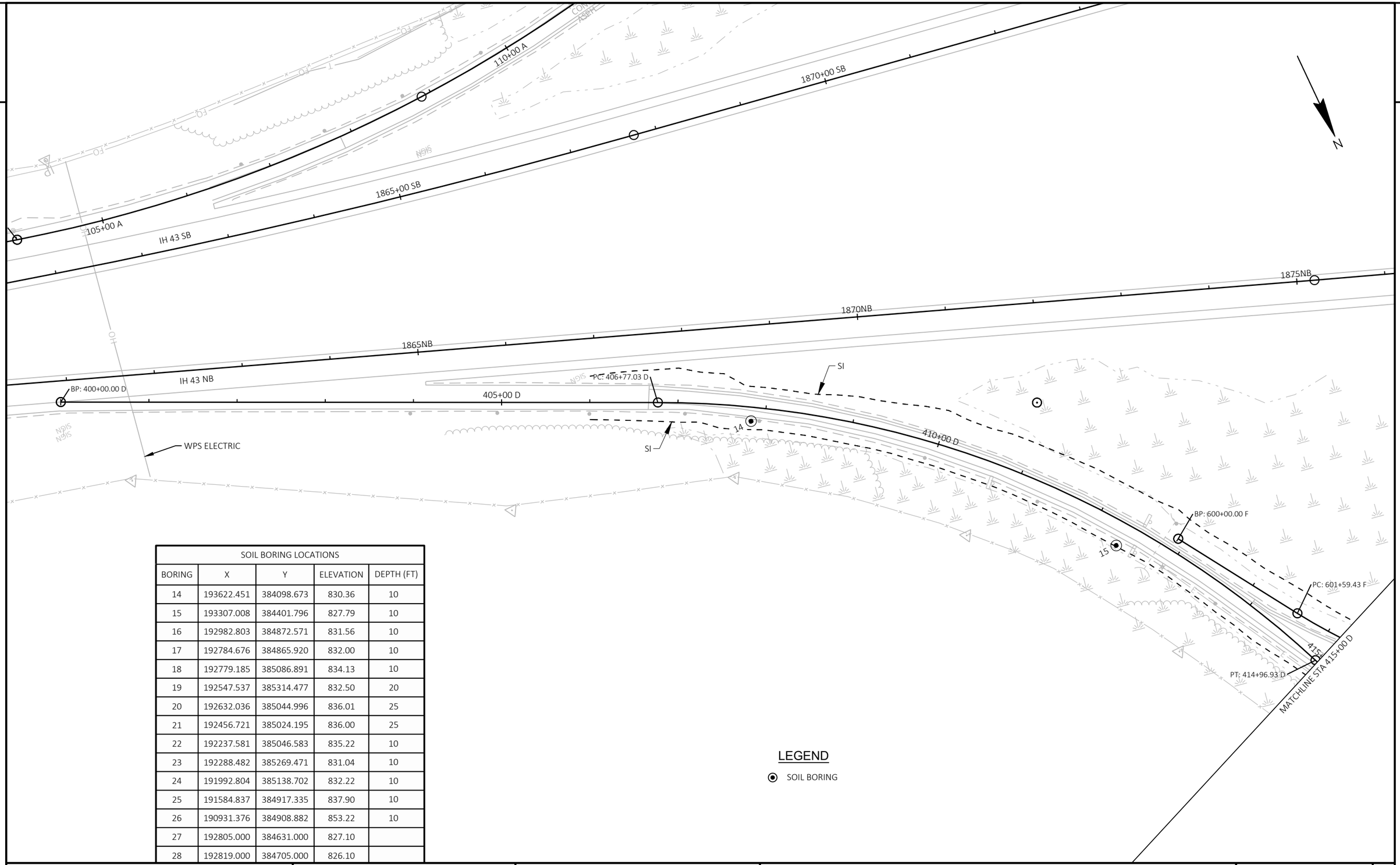
805
18
17
800
20
795
20

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	SOIL BORINGS - REST AREA 51	SHEET 212	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\027301-XX_RA51.DWG
LAYOUT NAME - 027305-xx

PLOT DATE : 11/26/2024 11:53 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : ##########

2



SOIL BORING LOCATIONS				
BORING	X	Y	ELEVATION	DEPTH (FT)
14	193622.451	384098.673	830.36	10
15	193307.008	384401.796	827.79	10
16	192982.803	384872.571	831.56	10
17	192784.676	384865.920	832.00	10
18	192779.185	385086.891	834.13	10
19	192547.537	385314.477	832.50	20
20	192632.036	385044.996	836.01	25
21	192456.721	385024.195	836.00	25
22	192237.581	385046.583	835.22	10
23	192288.482	385269.471	831.04	10
24	191992.804	385138.702	832.22	10
25	191584.837	384917.335	837.90	10
26	190931.376	384908.882	853.22	10
27	192805.000	384631.000	827.10	
28	192819.000	384705.000	826.10	

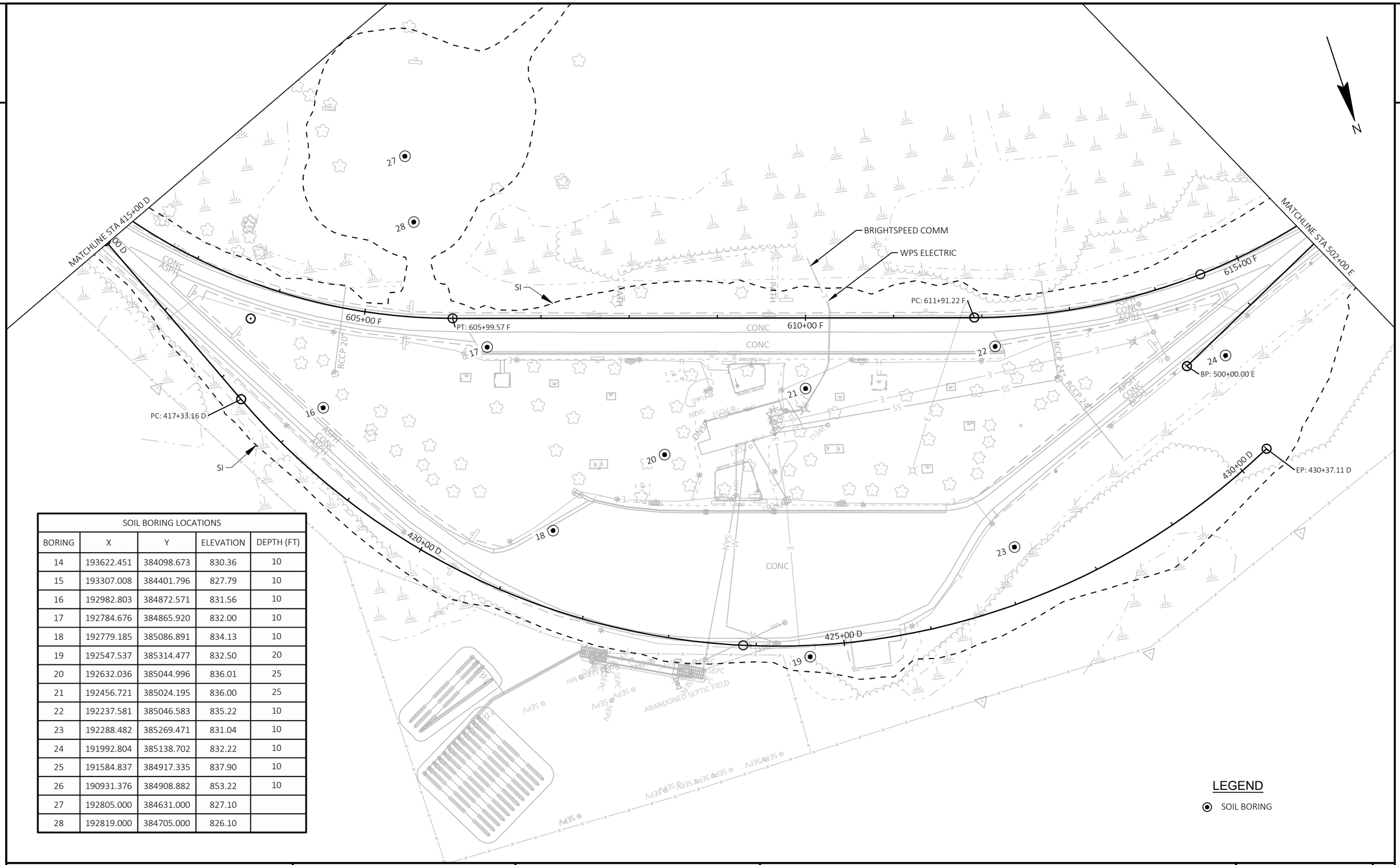
LEGEND

SOIL BORING

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	SOIL BORINGS - REST AREA 52	SHEET 213	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\027304-XX_RA52.DWG
LAYOUT NAME - 027306-xx
PLOT DATE : 11/26/2024 11:53 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



SOIL BORING LOCATIONS				
BORING	X	Y	ELEVATION	DEPTH (FT)
14	193622.451	384098.673	830.36	10
15	193307.008	384401.796	827.79	10
16	192982.803	384872.571	831.56	10
17	192784.676	384865.920	832.00	10
18	192779.185	385086.891	834.13	10
19	192547.537	385314.477	832.50	20
20	192632.036	385044.996	836.01	25
21	192456.721	385024.195	836.00	25
22	192237.581	385046.583	835.22	10
23	192288.482	385269.471	831.04	10
24	191992.804	385138.702	832.22	10
25	191584.837	384917.335	837.90	10
26	190931.376	384908.882	853.22	10
27	192805.000	384631.000	827.10	
28	192819.000	384705.000	826.10	

LEGEND

SOIL BORING

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	SOIL BORINGS - REST AREA 52	SHEET 214	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\027304-XX_RA52.DWG
LAYOUT NAME - 027307-xx
PLOT DATE : 11/26/2024 11:53 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

SOIL BORING LOCATIONS				
BORING	X	Y	ELEVATION	DEPTH (FT)
14	193622.451	384098.673	830.36	10
15	193307.008	384401.796	827.79	10
16	192982.803	384872.571	831.56	10
17	192784.676	384865.920	832.00	10
18	192779.185	385086.891	834.13	10
19	192547.537	385314.477	832.50	20
20	192632.036	385044.996	836.01	25
21	192456.721	385024.195	836.00	25
22	192237.581	385046.583	835.22	10
23	192288.482	385269.471	831.04	10
24	191992.804	385138.702	832.22	10
25	191584.837	384917.335	837.90	10
26	190931.376	384908.882	853.22	10
27	192805.000	384631.000	827.10	
28	192819.000	384705.000	826.10	

2

2

1900+00 SB

IH 43 SB

1895NB

1900NB

IH 43 NB

PT: 512+65.35 E

515+00 E

EP: 517+15.51 E

510+00 E

26

SIGN

SI

ASPH

CONC

ASPH

SI

25

505+00 E

EP: 617+16.96 F

PT: 616+75.90 F

PC: 502+23.78 E

MATCHLINE STA 502+00 E

dl

lp

LEGEND

SOIL BORING

N

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	SOIL BORINGS - REST AREA 52	SHEET 215	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\027304-XX_RA52.DWG
LAYOUT NAME - 027308-xx

PLOT DATE : 11/26/2024 11:53 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

MATERIAL SYMBOLS

ASPHALT | TOPSOIL | PEAT
CONCRETE | FILL | GRAVEL
SAND | CLAY | SILT
BOULDERS OR COBBLES | LIMESTONE | BEDROCK (UNKNOWN)
SHALE | SANDSTONE | IGNEOUS/ META

N 384908.882, E 190931.376
BOR SB-26, EL. 853.22
1
19
18
20

N 385024.195, E 192456.721
BOR SB-21, EL. 836
N 385044.996, E 192632.036
BOR SB-20, EL. 836.01
N 385086.891, E 192776.185
BOR SB-18, EL. 834.13
N 384865.92, E 192784.676
BOR SB-17, EL. 832
N 384872.571, E 192982.803
BOR SB-16, EL. 831.56
N 384098.673, E 193622.451
BOR SB-14, EL. 830.36
N 384401.796, E 193307.008
BOR SB-15, EL. 827.79
N 385046.583, E 192237.581
BOR SB-22, EL. 835.22
N 385314.477, E 192547.537
BOR SB-19, EL. 832.52
N 385269.471, E 192288.482
BOR SB-23, EL. 831.04
N 385138.702, E 191992.804
BOR SB-24, EL. 832.22
N 384361, E 192805
BOR SB-27, EL. 827.1
N 384705, E 192819
BOR SB-28, EL. 826.1

850 845 840 835 830 825 820 815 810

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	SOIL BORINGS - REST AREA 52	SHEET 216	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\027304-XX_RA52.DWG
LAYOUT NAME - 027309-xx
PLOT DATE : 11/26/2024 11:53 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : ##########

1225-10-72

Line	Item	Item Description	Unit	Total	Qty
0002	201.0115	Clearing	ACRE	21.000	21.000
0004	201.0215	Grubbing	ACRE	21.000	21.000
0006	203.0100	Removing Small Pipe Culverts	EACH	6.000	6.000
0008	203.0216.S	Abatement of Asbestos Containing Material (project) 01. 1225-10-72	EACH	1.000	1.000
0010	204.0100	Removing Concrete Pavement	SY	31,530.000	31,530.000
0012	204.0130	Removing Curb	LF	635.000	635.000
0014	204.0155	Removing Concrete Sidewalk	SY	3,485.000	3,485.000
0016	204.0165	Removing Guardrail	LF	1,849.000	1,849.000
0018	204.0170	Removing Fence	LF	217.000	217.000
0020	204.0180	Removing Delineators and Markers	EACH	34.000	34.000
0022	204.0190	Removing Surface Drains	EACH	4.000	4.000
0024	204.0195	Removing Concrete Bases	EACH	57.000	57.000
0026	204.0210	Removing Manholes	EACH	4.000	4.000
0028	204.0220	Removing Inlets	EACH	4.000	4.000
0030	204.0231	Removing Building (station) 01. 56+76 L	EACH	1.000	1.000
0032	204.0231	Removing Building (station) 02. 55+57 L	EACH	1.000	1.000
0034	204.0231	Removing Building (station) 03. 67+02 M	EACH	1.000	1.000
0036	204.0231	Removing Building (station) 04. 68+49 M	EACH	1.000	1.000
0038	204.0241	Site Clearance (parcel) 01. Rest Area 51	EACH	1.000	1.000
0040	204.0241	Site Clearance (parcel) 02. Rest Area 52	EACH	1.000	1.000
0042	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	819.000	819.000
0044	204.0265	Abandoning Wells	EACH	2.000	2.000
0046	204.9060.S	Removing (item description) 01. LP Tanks	EACH	2.000	2.000
0048	204.9060.S	Removing (item description) 02. Parking Light Assemblies	EACH	47.000	47.000
0050	204.9060.S	Removing (item description) 03. Picnic Shelter	EACH	4.000	4.000
0052	204.9060.S	Removing (item description) 04. Sidewalk Light Assemblies	EACH	10.000	10.000
0054	204.9060.S	Removing (item description) 05. Benches	EACH	8.000	8.000
0056	204.9060.S	Removing (item description) 06. Flag Pole	EACH	2.000	2.000
0058	204.9060.S	Removing (item description) 07. Picnic Tables	EACH	29.000	29.000
0060	204.9060.S	Removing (item description) 08. Bollards	EACH	10.000	10.000
0062	204.9060.S	Removing (item description) 09. Removing Electrical Conductors From Existing Conduit	EACH	2.000	2.000
0064	205.0100	Excavation Common	CY	75,217.000	75,217.000
0066	213.0100	Finishing Roadway (project) 01. 1225-10-72	EACH	1.000	1.000
0068	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,710.000	1,710.000
0070	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	29,630.000	29,630.000
0072	310.0115	Base Aggregate Open-Graded	CY	20.000	20.000
0074	312.0110	Select Crushed Material	TON	46,295.000	46,295.000
0076	415.0080	Concrete Pavement 8-Inch	SY	8,805.000	8,805.000
0078	415.0090	Concrete Pavement 9-Inch	SY	54,805.000	54,805.000
0080	415.2010	Concrete Truck Apron 12-inch	SY	1,380.000	1,380.000
0082	455.0605	Tack Coat	GAL	144.000	144.000
0084	465.0105	Asphaltic Surface	TON	680.000	680.000
0086	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	404.000	404.000
0088	522.0130	Culvert Pipe Reinforced Concrete Class III 30-Inch	LF	151.000	151.000
0090	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	4.000	4.000
0092	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	6.000	6.000
0094	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	2.000	2.000
0096	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	1.000	1.000
0098	531.1100	Concrete Masonry Ancillary Structures Type NS	CY	4.800	4.800

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Line	Item	Item Description	Unit	Total	Qty
0100	531.1140	Steel Reinforcement HS Ancillary Structures Type NS	LB	720.000	720.000
0102	531.2024	Drilling Shaft 24-Inch	LF	40.000	40.000
0104	531.2036	Drilling Shaft 36-Inch	LF	20.000	20.000
0106	531.2048	Drilling Shaft 48-Inch	LF	56.000	56.000
0108	531.4050	Foundation Camera Pole 50-FT	EACH	2.000	2.000
0110	531.4500	Foundation High Mast 100-FT (structure) 01. L-36-0001	EACH	1.000	1.000
0112	531.4500	Foundation High Mast 100-FT (structure) 02. L-36-0002	EACH	1.000	1.000
0114	531.4500	Foundation High Mast 100-FT (structure) 03. L-36-0003	EACH	1.000	1.000
0116	531.4500	Foundation High Mast 100-FT (structure) 04. L-36-0004	EACH	1.000	1.000
0118	532.4500	High Mast 100-FT (structure) 01. L-36-0001	EACH	1.000	1.000
0120	532.4500	High Mast 100-FT (structure) 02. L-36-0002	EACH	1.000	1.000
0122	532.4500	High Mast 100-FT (structure) 03. L-36-0003	EACH	1.000	1.000
0124	532.4500	High Mast 100-FT (structure) 04. L-36-0004	EACH	1.000	1.000
0126	601.0120	Concrete Curb Type J	LF	1,799.000	1,799.000
0128	601.0551	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type A	LF	565.000	565.000
0130	602.0410	Concrete Sidewalk 5-Inch	SF	74,337.000	74,337.000
0132	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	200.000	200.000
0134	602.0825	Concrete Driveway 9-Inch	SY	995.000	995.000
0136	602.3010	Concrete Surface Drains	CY	9.300	9.300
0138	602.3280	Concrete Rumble Strips, Transverse	SY	84.000	84.000
0140	606.0200	Riprap Medium	CY	34.800	34.800
0142	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	784.000	784.000
0144	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	389.000	389.000
0146	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	1,187.000	1,187.000
0148	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	585.000	585.000
0150	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	254.000	254.000
0152	608.0336	Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	LF	125.000	125.000
0154	611.0530	Manhole Covers Type J	EACH	7.000	7.000
0156	611.0612	Inlet Covers Type C	EACH	5.000	5.000
0158	611.0624	Inlet Covers Type H	EACH	7.000	7.000
0160	611.0642	Inlet Covers Type MS	EACH	12.000	12.000
0162	611.2004	Manholes 4-FT Diameter	EACH	2.000	2.000
0164	611.2005	Manholes 5-FT Diameter	EACH	5.000	5.000
0166	611.2006	Manholes 6-FT Diameter	EACH	1.000	1.000
0168	611.3230	Inlets 2x3-FT	EACH	7.000	7.000
0170	611.3901	Inlets Median 1 Grate	EACH	12.000	12.000
0172	611.9850.S	Pipe Grates (size) 01. 18-Inch	EACH	4.000	4.000
0174	611.9850.S	Pipe Grates (size) 02. 24-Inch	EACH	6.000	6.000
0176	611.9850.S	Pipe Grates (size) 03. 30-Inch	EACH	2.000	2.000
0178	611.9850.S	Pipe Grates (size) 04. 36-Inch	EACH	1.000	1.000
0180	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	140.000	140.000
0182	616.0700.S	Fence Safety	LF	3,000.000	3,000.000
0184	618.0100	Maintenance and Repair of Haul Roads (project) 01. 1225-10-72	EACH	1.000	1.000
0186	619.1000	Mobilization	EACH	1.000	1.000
0188	624.0100	Water	MGAL	438.100	438.100
0190	625.0100	Topsoil	SY	19,140.000	19,140.000
0192	625.0500	Salvaged Topsoil	SY	36,640.000	36,640.000
0194	628.1504	Silt Fence	LF	15,335.000	15,335.000
0196	628.1520	Silt Fence Maintenance	LF	15,335.000	15,335.000

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Line	Item	Item Description	Unit	Total	Qty
0198	628.1905	Mobilizations Erosion Control	EACH	30.000	30.000
0200	628.1910	Mobilizations Emergency Erosion Control	EACH	30.000	30.000
0202	628.2008	Erosion Mat Urban Class I Type B	SY	53,840.000	53,840.000
0204	628.7005	Inlet Protection Type A	EACH	15.000	15.000
0206	628.7015	Inlet Protection Type C	EACH	7.000	7.000
0208	628.7504	Temporary Ditch Checks	LF	175.000	175.000
0210	628.7555	Culvert Pipe Checks	EACH	14.000	14.000
0212	628.7560	Tracking Pads	EACH	2.000	2.000
0214	629.0210	Fertilizer Type B	CWT	43.900	43.900
0216	630.0120	Seeding Mixture No. 20	LB	2,060.000	2,060.000
0218	630.0140	Seeding Mixture No. 40	LB	575.000	575.000
0220	630.0200	Seeding Temporary	LB	1,240.000	1,240.000
0222	630.0400	Seeding Nurse Crop	LB	1.000	1.000
0224	630.0500	Seed Water	MGAL	1,325.000	1,325.000
0226	631.0300	Sod Water	MGAL	214.000	214.000
0228	631.1000	Sod Lawn	SY	9,365.000	9,365.000
0230	632.0101	Trees (species, root, size) 02. (Eastern White Pine) (6' Ht) (B&B)	EACH	14.000	14.000
0232	632.0101	Trees (species, root, size) 03. (Serviceberry) (2" Cal) (B&B)	EACH	28.000	28.000
0234	632.0101	Trees (species, root, size) 04. (Sugar Maple) (2.5" Cal) (B&B)	EACH	7.000	7.000
0236	632.0101	Trees (species, root, size) 05. (Green Hawthorn) (2.5" Cal) (B&B)	EACH	4.000	4.000
0238	632.0101	Trees (species, root, size) 06. (Kentucky Coffee Tree) (2" Cal) (B&B)	EACH	3.000	3.000
0240	632.0101	Trees (species, root, size) 07. (American Beech) (2.5" Cal) (B&B)	EACH	1.000	1.000
0242	632.0101	Trees (species, root, size) 08. (White Oak/Burr Oak Hybrid) (2.5" Cal) (B&B)	EACH	4.000	4.000
0244	632.0201	Shrubs (species, root, size) 01. (Blue Rug Juniper) (3 Gal) (CG)	EACH	26.000	26.000
0246	632.0201	Shrubs (species, root, size) 02. (Blue Chip Juniper) (3 Gal) (CG)	EACH	150.000	150.000
0248	632.0201	Shrubs (species, root, size) 03. (Broadmoor Juniper) (3 Gal) (CG)	EACH	202.000	202.000
0250	632.0201	Shrubs (species, root, size) 04. (Bush Honeysuckle) (3 Gal) (CG)	EACH	29.000	29.000
0252	632.0201	Shrubs (species, root, size) 05. (Common Snowberry) (3 Gal) (CG)	EACH	17.000	17.000
0254	632.0201	Shrubs (species, root, size) 06. (Little Princess Spirea) (2 Gal) (CG)	EACH	52.000	52.000
0256	632.0201	Shrubs (species, root, size) 07. (Kalm's St. John Wort) (3 Gal) (CG)	EACH	18.000	18.000
0258	632.9101	Landscape Planting Surveillance and Care Cycles	EACH	44.000	44.000
0260	633.0100	Delineator Posts Steel	EACH	49.000	49.000
0262	633.0500	Delineator Reflectors	EACH	49.000	49.000
0264	633.5200	Markers Culvert End	EACH	12.000	12.000
0266	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	32.000	32.000
0268	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	3.000	3.000
0270	634.0620	Posts Wood 4x6-Inch X 20-FT	EACH	9.000	9.000
0272	634.0812	Posts Tubular Steel 2x2-Inch X 12-FT	EACH	31.000	31.000
0274	635.0200	Sign Supports Structural Steel HS	LB	2,531.000	2,531.000
0276	637.1220	Signs Type I Reflective SH	SF	272.000	272.000
0278	637.2210	Signs Type II Reflective H	SF	579.800	579.800
0280	637.2230	Signs Type II Reflective F	SF	18.000	18.000
0282	638.2602	Removing Signs Type II	EACH	94.000	94.000
0284	638.3000	Removing Small Sign Supports	EACH	78.000	78.000
0286	640.1303.S	Pond Liner Clay	CY	6,610.000	6,610.000
0288	642.5401	Field Office Type D	EACH	1.000	1.000
0290	643.0300	Traffic Control Drums	DAY	27,994.000	27,994.000
0292	643.0420	Traffic Control Barricades Type III	DAY	3,684.000	3,684.000
0294	643.0705	Traffic Control Warning Lights Type A	DAY	7,368.000	7,368.000

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Line	Item	Item Description	Unit	Total	Qty
0296	643.0715	Traffic Control Warning Lights Type C	DAY	180.000	180.000
0298	643.0800	Traffic Control Arrow Boards	DAY	28.000	28.000
0300	643.0900	Traffic Control Signs	DAY	9,280.000	9,280.000
0302	643.0910	Traffic Control Covering Signs Type I	EACH	6.000	6.000
0304	643.0920	Traffic Control Covering Signs Type II	EACH	8.000	8.000
0306	643.1050	Traffic Control Signs PCMS	DAY	68.000	68.000
0308	643.3165	Temporary Marking Line Paint 6-Inch	LF	875.000	875.000
0310	643.5000	Traffic Control	EACH	1.000	1.000
0312	645.0120	Geotextile Type HR	SY	156.000	156.000
0314	645.0130	Geotextile Type R	SY	85.000	85.000
0316	645.0220	Geogrid Type SR	SY	73,065.000	73,065.000
0318	646.2020	Marking Line Epoxy 6-Inch	LF	14,595.000	14,595.000
0320	646.4020	Marking Line Epoxy 10-Inch	LF	660.000	660.000
0322	646.5220	Marking Symbol Epoxy	EACH	8.000	8.000
0324	646.8320	Marking Parking Stall Epoxy	LF	13,775.000	13,775.000
0326	646.9012	Marking Removal Line Water Blasting 6-Inch	LF	875.000	875.000
0328	650.4000	Construction Staking Storm Sewer	EACH	34.000	34.000
0330	650.4500	Construction Staking Subgrade	LF	10,313.000	10,313.000
0332	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	305.000	305.000
0334	650.6000	Construction Staking Pipe Culverts	EACH	4.000	4.000
0336	650.7000	Construction Staking Concrete Pavement	LF	10,442.000	10,442.000
0338	650.8501	Construction Staking Electrical Installations (project) 01. 1225-10-72	EACH	1.000	1.000
0340	650.9000	Construction Staking Curb Ramps	EACH	10.000	10.000
0342	650.9500	Construction Staking Sidewalk (project) 01. 1225-10-72	EACH	1.000	1.000
0344	650.9911	Construction Staking Supplemental Control (project) 01. 1225-10-72	EACH	1.000	1.000
0346	650.9920	Construction Staking Slope Stakes	LF	10,313.000	10,313.000
0348	652.0125	Conduit Rigid Metallic 2-Inch	LF	45.000	45.000
0350	652.0210	Conduit Rigid Nonmetallic Schedule 40 1-Inch	LF	145.000	145.000
0352	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	15,725.000	15,725.000
0354	652.0325	Conduit Rigid Nonmetallic Schedule 80 2-Inch	LF	2,064.000	2,064.000
0356	652.0800	Conduit Loop Detector	LF	144.000	144.000
0358	653.0140	Pull Boxes Steel 24x42-Inch	EACH	11.000	11.000
0360	653.0154	Pull Boxes Non-Conductive 24x36-Inch	EACH	28.000	28.000
0362	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	2.000	2.000
0364	653.0905	Removing Pull Boxes	EACH	8.000	8.000
0366	654.0107	Concrete Bases Type 7	EACH	52.000	52.000
0368	654.0111	Concrete Bases Type 11	EACH	45.000	45.000
0370	654.0220	Concrete Control Cabinet Bases Type 10	EACH	2.000	2.000
0372	654.0224	Concrete Control Cabinet Bases Type L24	EACH	2.000	2.000
0374	655.0610	Electrical Wire Lighting 12 AWG	LF	9,025.000	9,025.000
0376	655.0615	Electrical Wire Lighting 10 AWG	LF	2,400.000	2,400.000
0378	655.0620	Electrical Wire Lighting 8 AWG	LF	79,922.000	79,922.000
0380	655.0625	Electrical Wire Lighting 6 AWG	LF	1,305.000	1,305.000
0382	655.0700	Loop Detector Lead In Cable	LF	85.000	85.000
0384	655.0800	Loop Detector Wire	LF	600.000	600.000
0386	656.0201	Electrical Service Meter Breaker Pedestal (location) 01. MBDMS050020	EACH	1.000	1.000
0388	656.0201	Electrical Service Meter Breaker Pedestal (location) 02. MBDMS360021	EACH	1.000	1.000
0390	656.0501	Electrical Service Breaker Disconnect Box (location) 01. CCTV360115	EACH	1.000	1.000
0392	656.0501	Electrical Service Breaker Disconnect Box (location) 02. CCTV360114	EACH	1.000	1.000

Line	Item	Item Description	Unit	Total	Qty
0394	656.0501	Electrical Service Breaker Disconnect Box (location) 03. DMS050020	EACH	1.000	1.000
0396	656.0501	Electrical Service Breaker Disconnect Box (location) 04. DMS360021	EACH	1.000	1.000
0398	657.0210	Transformer Bases Breakaway 15-17 Inch Bolt Circle	EACH	52.000	52.000
0400	657.0336	Poles Type 17-Steel	EACH	52.000	52.000
0402	657.0620	Luminaire Arms Single Member 6-Inch Clamp 4-FT	EACH	37.000	37.000
0404	657.0725	Luminaire Arms Truss Type 6-Inch Clamp 15-FT	EACH	15.000	15.000
0406	659.0400	Luminaires High Mast Lighting LED	EACH	16.000	16.000
0408	659.0700	Lighting Units Walkway	EACH	45.000	45.000
0410	659.1120	Luminaires Utility LED B	EACH	52.000	52.000
0412	659.2124	Lighting Control Cabinets 120/240 24-Inch	EACH	2.000	2.000
0414	659.5000.S	Lamp, Ballast, LED, Switch Disposal by Contractor	EACH	57.000	57.000
0416	660.0500	High Mast Lowering Assembly (structure) 01. L-36-0001	EACH	1.000	1.000
0418	660.0500	High Mast Lowering Assembly (structure) 02. L-36-0002	EACH	1.000	1.000
0420	660.0500	High Mast Lowering Assembly (structure) 03. L-36-0003	EACH	1.000	1.000
0422	660.0500	High Mast Lowering Assembly (structure) 04. L-36-0004	EACH	1.000	1.000
0424	670.0101	Field System Integrator	EACH	1.000	1.000
0426	670.0201	ITS Documentation	EACH	1.000	1.000
0428	673.1225.S	Install Pole Mounted Cabinet	EACH	4.000	4.000
0430	677.0150	Install Camera Pole 50-FT	EACH	2.000	2.000
0432	677.0200	Install Camera Assembly	EACH	2.000	2.000
0434	678.0800	Install Cellular Modems	EACH	4.000	4.000
0436	690.0150	Sawing Asphalt	LF	32.000	32.000
0438	690.0250	Sawing Concrete	LF	60.000	60.000
0440	715.0715	Incentive Flexural Strength Concrete Pavement	DOL	19,497.000	19,497.000
0442	999.1800.S	Picnic Tables Single Pedestal	EACH	24.000	24.000
0444	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,100.000	2,100.000
0446	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	5,760.000	5,760.000
0448	SPV.0035	Special 01. Double Shredded Hardwood Mulch	CY	110.000	110.000
0450	SPV.0035	Special 02. Planting Mixture	CY	395.000	395.000
0452	SPV.0060	Special 01. Salvage Cigarette Snuffers	EACH	8.000	8.000
0454	SPV.0060	Special 02. Salvage Receptacles	EACH	59.000	59.000
0456	SPV.0060	Special 04. Salvage and Reinstall Historical Sign	EACH	2.000	2.000
0458	SPV.0060	Special 05. Coring Manhole	EACH	1.000	1.000
0460	SPV.0060	Special 06. Gates Chain Link Slatted 7FT	EACH	4.000	4.000
0462	SPV.0060	Special 07. Gates Chain Link Slatted 4FT Personnel	EACH	2.000	2.000
0464	SPV.0060	Special 08. Gates Chain Link Slatted 12FT	EACH	4.000	4.000
0466	SPV.0060	Special 09. Sewage Ejector Pump and Controls	EACH	1.000	1.000
0468	SPV.0060	Special 10. Coring Septic Tank 8-Inch	EACH	1.000	1.000
0470	SPV.0060	Special 11. Manholes Sanitary 4FT	EACH	3.000	3.000
0472	SPV.0060	Special 12. Manholes 5x5-FT Special	EACH	2.000	2.000
0474	SPV.0060	Special 14. Flag Pole 35FT	EACH	2.000	2.000
0476	SPV.0060	Special 15. Flag Pole 30FT	EACH	2.000	2.000
0478	SPV.0060	Special 16. In-Ground Flag Pole Fixture	EACH	12.000	12.000
0480	SPV.0060	Special 17. Benches	EACH	4.000	4.000
0482	SPV.0060	Special 18. Receptacles	EACH	35.000	35.000
0484	SPV.0060	Special 19. Ground Rod	EACH	4.000	4.000
0486	SPV.0060	Special 20. Install Hybrid Dynamic Message Sign	EACH	2.000	2.000
0488	SPV.0060	Special 21. Install Wireless Traffic Sensor	EACH	24.000	24.000
0490	SPV.0060	Special 22. Install Wireless Traffic Sensor Repeater	EACH	4.000	4.000

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Line	Item	Item Description	Unit	Total	Qty
0492	SPV.0060	Special 23. Install Wireless Traffic Sensor Access Point	EACH	4.000	4.000
0494	SPV.0060	Special 24. Rest Area 51 Drainage Basin Staking	EACH	1.000	1.000
0496	SPV.0060	Special 25. Rest Area 52 Drainage Basin Staking	EACH	1.000	1.000
0498	SPV.0060	Special 26. Manholes Sanitary 5FT	EACH	1.000	1.000
0500	SPV.0060	Special 31. Perennial (Wild Columbine)	EACH	20.000	20.000
0502	SPV.0060	Special 32. Perennial (Butterfly Weed)	EACH	68.000	68.000
0504	SPV.0060	Special 33. Perennial (ConeFlower)	EACH	69.000	69.000
0506	SPV.0060	Special 34. Perennial (Prairie Smoke)	EACH	991.000	991.000
0508	SPV.0060	Special 35. Perennial (Black-eyed Susan)	EACH	95.000	95.000
0510	SPV.0060	Special 36. Perennial (Wild Geranium)	EACH	109.000	109.000
0512	SPV.0060	Special 37. Perennial (Iris)	EACH	1,205.000	1,205.000
0514	SPV.0060	Special 38. Perennial (Sage)	EACH	240.000	240.000
0516	SPV.0060	Special 39. Perennial (Golden Alexander)	EACH	124.000	124.000
0518	SPV.0085	Special 01. Native Pollinator Seeding Mixture No. 90B	LB	0.250	0.250
0520	SPV.0090	Special 01. Concrete Curb & Gutter 36-Inch Type A Special	LF	6,950.000	6,950.000
0522	SPV.0090	Special 02. Sanitary Sewer, PVC, 8-Inch	LF	421.000	421.000
0524	SPV.0090	Special 04. Concrete Mow Curb	LF	305.000	305.000
0526	SPV.0090	Special 05. Fence Chain Link Slatted 8FT	LF	280.000	280.000
0528	SPV.0090	Special 06. Forcemain PVC, 2-Inch	LF	231.000	231.000
0530	SPV.0090	Special 07. Construction Staking, Sanitary Sewer System	LF	652.000	652.000
0532	SPV.0165	Special 01. Concrete Paver Walkway	SF	168.000	168.000

CLEARING

CATEGORY	LOCATION	201.0115 CLEARING ACRE	201.0215 GRUBBING ACRE
0010	RA 51	11.0	11.0
	TOTAL 0010	11.0	11.0
0020	RA 52	10.0	10.0
	TOTAL 0020	10.0	10.0
	PROJECT TOTAL	21.0	21.0

REMOVING DELINEATORS

CATEGORY	STATION	LOCATION	204.0180 REMOVING DELINEATORS AND MARKERS EACH
0010	106+70A	14' LT	1
0010	107+72A	13' LT	1
0010	108+70A	11' LT	1
0010	109+72A	11' LT	1
0010	110+78A	11' LT	1
0010	111+83A	11' LT	1
0010	113+79A	11' LT	1
0010	303+82C	24' LT	1
0010	310+77C	29' LT	1
0010	51+09L	135' RT	1
0010	52+66L	40' RT	1
0010	220+32B	7' LT	1
0010	221+32B	11' LT	1
0010	222+83B	14' LT	1
0010	224+12B	12' LT	1
		TOTAL 0010	15
0020	403+96D	13' RT	1
0020	404+95D	12' RT	1
0020	405+99D	13'' RT	1
0020	407+08D	12' RT	1
0020	407+94D	15' RT	1
0020	409+90D	19' RT	1
0020	411+29D	22' RT	1
0020	413+66D	22' RT	1
0020	503+67E	23' RT	1
0020	506+04E	16' RT	1
0020	507+15E	13' RT	1
0020	508+16E	11' RT	1
0020	509+16E	12' RT	1
0020	510+21E	13' RT	1
0020	70+60M	33' LT	1
0020	70+98M	87' LT	1
0020	71+94M	37' LT	1
0020	71+97M	110' LT	1
0020	73+49M	162' LT	1
		TOTAL 0020	19
		PROJECT TOTAL	34

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING SMALL PIPE CULVERTS

CATEGORY	STATION	LOCATION	SIZE	MATERIAL	203.0100 REMOVING SMALL PIPE CULVERTS EACH
0010	201+09 B	77' RT	24"	RCCP	1
0010	212+37 B	245' RT	15"	RCCP	1
0010	302+25 C	32' RT	24"	RCCP	1
		TOTAL 0010			3
0020	604+78 F	72' RT	20"	RCCP	1
0020	612+76 F	74' LT	24"	RCCP	2
		TOTAL 0020			3
		PROJECT TOTAL			6

REMOVING CONCRETE SIDEWALK

CATEGORY	LOCATION	204.0155 REMOVING CONCRETE SIDEWALK SY
0010	RA 51 PLAZA AREA	1,755
	TOTAL 0010	1,755
0020	RA 52 PLAZA AREA	1,730
	TOTAL 0020	1,730
	PROJECT TOTAL	3485

REMOVING SURFACE DRAINS

CATEGORY	STATION	LOCATION	204.0190 REMOVING SURFACE DRAINS EACH
0010	54+10L	30' LT	1
0010	53+94L	78' RT	1
		TOTAL 0010	2
0020	64+00M	61' LT	1
0020	65+23M	101' RT	1
		TOTAL 0020	2
		PROJECT TOTAL	4

REMOVING CURB

CATEGORY	STATION	TO	STATION	LOCATION	204.0130 REMOVING CURB LF
0010	205+66	-	206+25 B	RT - PLAZA	176
0010	306+80	-	307+28 C	LT - PLAZA	160
				TOTAL 0010	336
0020	423+35	-	424+01 D	LT - PLAZA	168
0020	609+12	-	609+54 F	RT - PLAZA	131
				TOTAL 0020	299
				PROJECT TOTAL	635

REMOVING GUARDRAIL

CATEGORY	STATION	TO	STATION	LOCATION	204.0165 REMOVING GUARDRAIL LF
0010	209+20 B	-	219+18 B	LT	998
0010	217+98 B	-	219+16 B	RT	118
0010	310+64 C	-	317+97 C	RT	733
				TOTAL 0010	1,849

REMOVING INLETS

CATEGORY	STATION	LOCATION	204.0220 REMOVING INLETS EACH
0010	53+52L	52' RT	1
0010	62+03L	28' RT	1
		TOTAL 0010	2
0020	62+41M	40' LT	1
0020	70+62M	34' LT	1
		TOTAL 0020	2
		PROJECT TOTAL	4

REMOVING BUILDING

CATEGORY	STATION	LOCATION	204.0231.01 REMOVING BUILDING (STATION) (01. 56+76L) EACH	204.0231.02 REMOVING BUILDING (STATION) (02. 55+57L) EACH	204.0231.03 REMOVING BUILDING (STATION) (03. 67+02L) EACH	204.0231.04 REMOVING BUILDING (STATION) (04.68+49L) EACH	REMARKS
0010	56+76L	11' LT	1				COMFORT BUILDING MAINTENANCE BUILDING
0010	55+57L	265' LT		1			
		TOTAL 0010	1	1	0	0	
0020	67+02M	24' RT			1		COMFORT BUILDING MAINTENANCE BUILDING
0020	68+49M	275' RT				1	
		TOTAL 0020	0	0	1	1	
		PROJECT TOTAL	1	1	1	1	

REMOVING CONCRETE BASES

CATEGORY	STATION	LOCATION	204.0195 REMOVING CONCRETE BASES EACH
0010	113+01A	11' LT	1
0010	50+24L	187' RT	1
0010	51+85L	88' RT	1
0010	53+38L	5' LT	1
0010	54+48L	150' LT	1
0010	55+92L	250' LT	1
0010	57+44L	268' LT	1
0010	58+97L	232' LT	1
0010	59+75L	152' LT	1
0010	61+01L	135' LT	1
0010	62+44L	24' LT	1
0010	63+87L	92' RT	1
0010	216+09B	2' RT	1
0010	62+75L	105' RT	1
0010	61+24L	86' RT	1
0010	59+44L	67' RT	1
0010	57+92L	69' RT	1
0010	56+73L	64' RT	1
0010	55+54L	72' RT	1
0010	54+22L	73' RT	1
0010	52+47L	108' RT	1
0010	55+17L	78' LT	1
0010	56+69L	103' LT	1
0010	58+28L	97' LT	1
0010	57+09L	25' RT	1
0010	57+14L	22' RT	1
0010	56+29L	34' RT	1
0010	56+45L	48' LT	1
0010	57+20L	61' LT	1
		TOTAL 0010	29
0020	412+92D	22' RT	1
0020	502+84E	22' RT	1
0020	504+71E	22' RT	1
0020	60+54M	102' LT	1
0020	61+87M	20' RT	1
0020	62+40M	85' LT	1
0020	63+20.M	142' RT	1
0020	64+41M	152' RT	1
0020	64+48M	54' LT	1
0020	65+44M	253' RT	1
0020	65+62M	105' RT	1
0020	65+88M	54' LT	1
0020	66+55M	78' RT	1
0020	66+63M	18' LT	1
0020	66+68M	20' LT	1
0020	66+91M	105' RT	1
0020	67+11M	270' RT	1
0020	67+14M	48' LT	1
0020	67+41M	74' RT	1
0020	67+49M	19' LT	1
0020	68+29M	53' LT	1
0020	68+41M	111' RT	1
0020	68+96M	249' RT	1
0020	69+75M	53' LT	1
0020	69+88M	133' RT	1
0020	71+22M	23' RT	1
0020	71+74M	101' LT	1
0020	72+77M	130' LT	1
		TOTAL 0020	28
		PROJECT TOTAL	57

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING FENCE

CATEGORY	LOCATION	204.0170 REMOVING FENCE LF
0010	RA 51 MAINTENANCE BUILDING	87
	TOTAL 0010	87
0020	RA 52 MAINTENANCE BUILDING	130
	TOTAL 0020	130
	PROJECT TOTAL	217

REMOVING MANHOLES

CATEGORY	STATION	LOCATION	204.0210 REMOVING MANHOLES EACH
0010	55+89L	67' LT	1
0010	56+97L	245' LT	1
		TOTAL 0010	2
0020	66+97M	100' RT	1
0020	67+52M	245' RT	1
		TOTAL 0020	2
		PROJECT TOTAL	4

REMOVING CONCRETE PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	204.0100 REMOVING CONCRETE PAVEMENT SY
0010	107+58 A	-	225+25 B		6,500
0010	115+71 A	-	215+22 B		9,270
				TOTAL 0010	15,770
0020	509+50 E	-	406+00 D		6,935
0020	501+45 E	-	415+15 D		8,825
				TOTAL 0020	15,760
				PROJECT TOTAL	31530

REMOVING STORM SEWER

CATEGORY	STATION	TO	STATION	LOCATION	204.0245.01 REMOVING STORM SEWER (SIZE) (01. 12-Inch) LF
0010	303+91	-	307+45 C	LT	365
				TOTAL 0010	365
0020	608+87	-	612+75 F	RT	454
				TOTAL 0020	454
				PROJECT TOTAL	819

REMOVING SIDEWALK LIGHTS

CATEGORY	STATION	LOCATION	204.9060.S.04 REMOVING (ITEM DESCRIPTION) (04. SIDEWALK LIGHT ASSEMBLIES) EACH	* 659.5000.S LAMP, BALLAST, LED, SWITCH DISPOSAL BY CONTRACTOR EACH
0010	56+29L	34' RT	1	1
0010	56+45L	48' LT	1	1
0010	57+14L	22' RT	1	1
0010	57+09L	25' RT	1	1
0010	57+20L	61' LT	1	1
		TOTAL 0010	5	5
0020	66+55M	78' RT	1	1
0020	66+63M	18' LT	1	1
0020	66+68M	20' LT	1	1
0020	67+41M	74' RT	1	1
0020	67+49M	19' LT	1	1
		TOTAL 0020	5	5
		TOTAL	10	10

REMOVING FLAG POLE

CATEGORY	STATION	LOCATION	204.9060.S.06 REMOVING (ITEM DESCRIPTION) (06. FLAG POLE) EACH
0010	57+07L	22' RT	1
		TOTAL 0010	1
0020	66+69M	13' LT	1
		TOTAL 0020	1
		PROJECT TOTAL	2

ABANDONING WELLS

CATEGORY	STATION	LOCATION	204.0265 ABANDONING WELLS EACH
0010	56+08L	41' LT	1
		TOTAL 0010	1
0020	68+01M	21' RT	1
		TOTAL 0020	1
		PROJECT TOTAL	2

REMOVING BENCHES

CATEGORY	STATION	LOCATION	204.9060.S.05 REMOVING (ITEM DESCRIPTION) (05. BENCHES) EACH
0010	56+56L	27' RT	1
0010	56+72L	24' RT	1
0010	56+80L	52' LT	1
0010	56+93L	54' LT	1
		TOTAL 0010	4
0020	66+84M	67' RT	1
0020	67+00M	63' RT	1
0020	67+07M	16' LT	1
0020	67+22M	20' LT	1
		TOTAL 0020	4
		PROJECT TOTAL	8

REMOVING LP TANKS

CATEGORY	STATION	LOCATION	204.9060.S.01 REMOVING (ITEM DESCRIPTION) (01. LP TANKS) EACH
0010	57+40L	91' LT	1
		TOTAL 0010	1
0020	67+55M	106' RT	1
		TOTAL 0020	1
		PROJECT TOTAL	2

REMOVING PARKING LIGHTS

CATEGORY	STATION	LOCATION	204.9060.S.02 REMOVING (ITEM DESCRIPTION) (02. PARKING LIGHT ASSEMBLIES) EACH	* 659.5000.S LAMP, BALLAST, LED, SWITCH DISPOSAL BY CONTRACTOR EACH
0010	113+00A	11' LT	1	1
0010	50+24L	187' RT	1	1
0010	51+85L	88' RT	1	1
0010	53+38L	5' LT	1	1
0010	52+47L	108' RT	1	1
0010	54+22L	73' RT	1	1
0010	55+54L	72' RT	1	1
0010	56+73L	64' RT	1	1
0010	57+92L	69' RT	1	1
0010	59+44L	67' RT	1	1
0010	61+24L	86' RT	1	1
0010	62+75L	105' RT	1	1
0010	59+75L	151' LT	1	1
0010	58+28L	97' LT	1	1
0010	56+69L	103' LT	1	1
0010	55+17L	78' LT	1	1
0010	54+48L	150' LT	1	1
0010	55+92L	250' LT	1	1
0010	57+44L	268' LT	1	1
0010	58+97L	232' LT	1	1
0010	61+02L	135' LT	1	1
0010	62+44L	25' LT	1	1
0010	63+87L	92' RT	1	1
0010	216+09B	2' RT	1	1
		TOTAL 0010	24	24
0020	412+92D	22' RT	1	1
0020	502+84E	22' RT	1	1
0020	504+71E	22' RT	1	1
0020	60+54M	102' LT	1	1
0020	61+87M	20' RT	1	1
0020	62+41M	85' LT	1	1
0020	63+20M	142' RT	1	1
0020	64+41M	152' RT	1	1
0020	64+48M	54' LT	1	1
0020	65+44M	253'RT	1	1
0020	65+62M	105' RT	1	1
0020	65+88M	54' LT	1	1
0020	66+91M	105'RT	1	1
0020	67+11M	270' RT	1	1
0020	67+14M	48' LT	1	1
0020	68+29M	53' LT	1	1
0020	68+41M	111' RT	1	1
0020	68+96M	249' RT	1	1
0020	69+75M	53' LT	1	1
0020	69+88M	133' RT	1	1
0020	71+22M	23' RT	1	1
0020	71+74M	101' LT	1	1
0020	72+77M	103' LT	1	1
		TOTAL 0020	23	23
		TOTAL	47	47

REMOVING PICNIC SHELTERS

CATEGORY	STATION	LOCATION	204.9060.S.03 REMOVING (ITEM DESCRIPTION) (03. PICNIC SHELTER) EACH
0010	54+87L	50' RT	1
0010	58+44L	45' RT	1
		TOTAL 0010	2
0020	64+32M	30' LT	1
0020	68+59M	28' LT	1
		TOTAL 0020	2
		PROJECT TOTAL	4

REMOVING PICNIC TABLES

CATEGORY	STATION	LOCATION	204.9060.S.07 REMOVING (ITEM DESCRIPTION) (07. PICNIC TABLES) EACH
0010	54+41L	51' RT	1
0010	54+88L	50' RT	1
0010	54+92L	54' LT	1
0010	55+23L	47' RT	1
0010	55+83L	38' RT	1
0010	57+61L	52' RT	1
0010	57+73L	90' LT	1
0010	57+83L	0.5' RT	1
0010	58+43L	47' RT	1
0010	58+56L	59' LT	1
0010	58+65L	59' LT	1
0010	59+08L	26' RT	1
0010	59+08L	36' RT	1
0010	59+45L	54' LT	1
0010	59+81L	44' RT	1
		TOTAL 0010	15
0020	63+91M	35' LT	1
0020	64+91M	26' LT	1
0020	65+38M	65' RT	1
0020	65+45M	65' RT	1
0020	65+55M	13' LT	1
0020	65+91M	91' RT	1
0020	66+27M	36' LT	1
0020	68+02M	48' RT	1
0020	68+14M	48' RT	1
0020	68+15M	10' LT	1
0020	68+59M	27' LT	1
0020	69+14M	70' RT	1
0020	69+41M	21' LT	1
0020	69+61M	20' RT	1
		TOTAL 0020	14
		PROJECT TOTAL	29

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

REMOVING BOLLARDS

CATEGORY	STATION	LOCATION	204.9060.S.08 REMOVING (ITEM DESCRIPTION) (08. BOLLARDS) EACH
0010	55+43L	262' LT	1
0010	55+45L	248' LT	1
0010	57+08L	268' LT	1
0010	57+13L	268' LT	1
0010	57+40L	98' LT	1
0010	57+46L	97' LT	1
		TOTAL 0010	6
0020	67+41M	268' RT	1
0020	67+45M	268' RT	1
0020	67+50M	109' RT	1
0020	67+55M	109' RT	1
		TOTAL 0020	4
		PROJECT TOTAL	10

ELECTRICAL REMOVALS

CATEGORY	LOCATION	204.9060.S.09 REMOVING (ITEM DESCRIPTION) (REMOVING ELECTRICAL CONDUCTORS FROM EXISTING CONDUIT) EACH
0010	RA 51	1
	TOTAL 0010	1
0020	RA 52	1
	TOTAL 0020	1
	PROJECT TOTAL	2

EARTHWORK SUMMARY

DIVISION	FROM/TO STATION	205.0100 COMMON EXCAVATION (1) CUT	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.30	MASS ORDINATE +/- (14)	WASTE
DIVISION 1							
REST AREA 51 RAMP A	105+00.00/117+06.59	1,736	1,736	736	957	779	
REST AREA 51 RAMP B	200+00.00/222+25.00	27,078	27,078	16,891	21,958	5,120	
REST AREA 51 RAMP C	300+00.00/317+58.92	10,399	10,399	159	207	10,192	
REST AREA 51 G	10+00.00/12+67.95	296	296	6,943	9,026	-8,730	
REST AREA 51 H	20+00.00/22+48.81	1,921	1,921	24	31	1,890	
REST AREA 51 PLAZA L	51+50.00/60+50.00	789	789	5,775	7,508	-6,719	
DIVISION 1 SUBTOTAL		42,219	42,219	30,528	39,686	2,533	2,533
DIVISION 2							
REST AREA 52 RAMP D	406+00.00/430+37.11	13,824	13,824	8,347	10,851	2,973	
REST AREA 52 RAMP E	500+00.00/509+50.00	1,870	1,870	617	802	1,068	
REST AREA 52 CARLOT F	600+00.00/617+16.96	2,375	2,375	1,951	2,536	-161	
REST AREA 52 J	30+00.00/32+39.07	1,410	1,410	103	134	1,276	
REST AREA 52 K	40+00.00/43+30.57	123	123	3,730	4,849	-4,726	
REST AREA 52 PLAZA M	64+00.00/72+50.00	252	252	7,896	10,265	-10,013	
REST AREA 52 DRAINAGE BASIN		13,144	13,144	319	415	12,729	
DIVISION 2 SUBTOTAL		32,998	32,998	22,963	29,852	3,146	3,146
GRAND TOTAL		75,217	75,217	53,491	69,538	5,679	5,679

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(13) EXPANDED FILL FACTOR = 1.30
(14) 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.

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

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CONCRETE PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	415.0080 CONCRETE PAVEMENT 8-INCH SY	415.0090 CONCRETE PAVEMENT 9-INCH SY	415.2010 CONCRETE TRUCK APRON 12-INCH SY	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF
0010	108+00 A	-	117+07 A			4,010		907
0010	10+00 G	-	12+67 G	OSOW			725	267
0010	200+00 B	-	221+75 B			23,120		2,175
0010	300+00 C	-	317+59 C		4,445			1,759
				TOTAL 0010	4,445	27,130	725	5,108
0020	406+50 D	-	430+37 D			23,740		2,387
0020	40+00 K	-	43+30 K	OSOW			655	330
0020	500+00 E	-	509+00 E			3,935		900
0020	600+00 F	-	617+17 F		4,360			1,717
				TOTAL 0020	4,360	27,675	655	5,334
				PROJECT TOTAL	8,805	54,805	1,380	10,442

BASE AGGREGATE

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	312.0110 SELECT CRUSHED MATERIAL TON	624.0100 WATER MGAL	645.0220 GEOGRID TYPE SR SY
0010	107+50A	-	108+00A	LT & RT	20	105	110	0.1	170
0010	108+00A	-	117+07A	LT & RT	290	1,625	2,740	35.0	4,325
0010	0+00 G	-	12+68 G	OSOW		270	520	4.0	815
0010	200+00B	-	221+75B	LT & RT	330	8,460	15,675	130.0	24,750
0010	221+75B	-	222+25B	LT & RT	20	105	110		170
0010	300+00C	-	317+59C	LT & RT	160	2,475	3,905	40.0	6,165
0010	MAINTENANCE	-	DRIVEWAY			165		3.0	
0010		-	SIDEWALK	PLAZA		1,600		15.0	
				TOTAL 0010	820	14,805	23,060	227.1	36,395
0020	406+00 D	-	406+50 D	LT & RT	20	105	110		170
0020	406+50 D	-	430+37 D	LT & RT	435	8,710	16,080	136.0	25,385
0020	40+00 K	-	43+31 K	OSOW		270	490	3.0	770
0020	500+00 E	-	509+00 E	LT & RT	275	1,570	2,665	30.0	4,205
0020	509+00 E	-	509+50 E	LT & RT	20	105	110		170
0020	600+00 F	-	617+17 F	LT & RT	140	2,440	3,780	25.0	5,970
0020	MAINTENANCE	-	DRIVEWAY			170		3.0	
0020		-	SIDEWALK	PLAZA		1,455		14.0	
				TOTAL 0020	890	14,825	23,235	211	36,670
				PROJECT TOTAL	1,710	29,630	46,295	438.1	73,065

PROJECT ITEMS

CATEGORY	LOCATION	213.0100.01 FINISHING ROADWAY (PROJECT) (01. 1225-10-72) EACH	618.0100.01 MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) (01. 1225-10-72) EACH	619.1000 MOBILIZATION EACH	642.5401 FIELD OFFICE TYPE D EACH	643.5000 TRAFFIC CONTROL EACH
0010	RA 51	0.50	0.50	0.50	0.50	0.50
	TOTAL 0010	0.50	0.50	0.50	0.50	0.50
0020	RA 52	0.50	0.50	0.50	0.50	0.50
	TOTAL 0020	0.50	0.50	0.50	0.50	0.50
	PROJECT TOTAL	1	1	1	1	1

FENCE

CATEGORY	LOCATION	310.0115 BASE AGGREGATE OPEN-GRADED CY	SPV.0060.06 SPECIAL (06. GATES CHAIN LINK SLATTED 7FT) EACH	SPV.0060.07 SPECIAL (07. GATES CHAIN LINK SLATTED 4FT PERSONNEL) EACH	SPV.0060.08 SPECIAL (08. GATES CHAIN LINK SLATTED 12FT) EACH	SPV.0090.05 SPECIAL (05. FENCE CHAIN LINK SLATTED 8FT) LF
0010	MAINTENANCE BLDG.	6	2	1		88
0010	TRASH DUMPSTER AREA	4			2	52
	TOTAL 0010	10	2	1	2	140
0020	MAINTENANCE BLDG.	6	2	1		88
0020	TRASH DUMPSTER AREA	4			2	52
	TOTAL 0020	10	2	1	2	140
	PROJECT TOTAL	20	4	2	4	280

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

3

ASPHALTIC SURFACE

CATEGORY	STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON
0010	107+50 A	-	108+00 A	LT & RT	15	75
0010	221+75 B	-	222+25 B	LT & RT	15	75
0010	300+00 C	-	317+58 C	RT	29	130
0010	310+03 C	-	315+23 C	LT	15	70
				TOTAL 0010	74	350
0020	406+00 D	-	406+50 D	LT & RT	15	75
0020	509+00 E	-	509+50 E	LT & RT	15	75
0020	600+00F	-	617+17 F	LT	28	125
0020	602+23 F	-	606+24 F	RT	12	55
				TOTAL 0020	70	330
				PROJECT TOTAL	144	680

CULVERT PIPE

CATEGORY	STATION	LOCATION	522.0124 CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	522.0130 CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	522.1030 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	* 611.9850.S.02 PIPE GRATES (SIZE) (02. 24 - INCH) EACH	* 611.9850.S.03 PIPE GRATES (SIZE) (03. 30 - INCH) EACH	* 633.5200 MARKERS CULVERT END EACH	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH
0010	115+69 A	113' LT			1		1		1	
	115+75 A		221							1
	115+78 A	108' RT			1		1		1	
	217+56 B	61.9' LT				1		1	1	
	217+77 B			151						1
	218+00 B	92.8' RT				1		1	1	
		TOTAL 0010	221	151	2	2	2	2	4	2
0020	412+75 D	38.3' LT			1		1		1	
	412+74 D		68							1
	412+76 D	29.2' RT			1		1		1	
	502+42 E	54.2' RT			1		1		1	
	502+46 E		115							1
	502+48 E	60.3' LT			1		1		1	
		TOTAL 0020	183	0	4	0	4	0	4	2
		TOTAL	404	151	6	2	6	2	8	4

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

HIGHMAST LIGHTING

CATEGORY	STRUCTURE	STATION	LOCATION	659.0400 LUMINAIRES HIGH MAST LIGHTING LED EACH	660.0500.01 HIGH MAST LOWERING ASSEMBLY (STRUCTURE) (01. L-36-0001) EACH	660.0500.02 HIGH MAST LOWERING ASSEMBLY (STRUCTURE) (02. L-36-0002) EACH	660.0500.03 HIGH MAST LOWERING ASSEMBLY (STRUCTURE) (03. L-36-0003) EACH	660.0500.04 HIGH MAST LOWERING ASSEMBLY (STRUCTURE) (04. L-36-0004) EACH
0010	HL-1	209+34 B	20' LT	4	1			
0010	HL-2	202+77 B	20' LT	4		1		
			TOTAL 0010	8	1	1	0	0
0020	HL-3	420+97 D	20' RT	4			1	
0020	HL-4	427+62 D	20' RT	4				1
			TOTAL 0020	8	0	0	1	1
			PROJECT TOTAL	16	1	1	1	1

ANCILLARY CONCRETE

CATEGORY	STATION	TO	STATION	LOCATION	601.0551 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A LF	602.0410 * CONCRETE SIDEWALK 5-INCH SF	602.0825 CONCRETE DRIVEWAY 9-INCH SY	602.3280 CONCRETE RUMBLE STRIPS, TRANSVERSE SY	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	SPV.0090.01 SPECIAL (01. CONCRETE CURB & GUTTER 36-INCH, TYPE A SPECIAL) LF	SPV.0090.04 SPECIAL (04. CONCRETE MOW CURB) LF
0010				PLAZA		38,490					
0010	115+20 A	-	212+44 B	RT						1,226	
0010	10+00 G	-	12+67 G	LT	268						
0010	200+00 B	-	213+34 B	LT						1,351	
0010	301+31 C	-	309+90 C	LT						875	
0010	57+93 L	-	57+93 L	LT					51		51
0010	308+00 C	-	308+25 C					42			
0010	MAITENANCE	-	DRIVEWAY				495		109	46	109
				TOTAL 0010	268	38,490	495	42	160	3,498	160
0020	MAINTENANCE	-	DRIVEWAY				500		94		94
0020	66+49 M	-	66+50 M	RT					51	46	51
0020				PLAZA		35,815					
0020	40+33 K	-	43+31 K	RT	297						
0020	417+84 D	-	501+26 E	LT						1,158	
0020	417+33 D	-	40+33 K	RT						1,357	
0020	614+00 F		614+25 F					42			
0020	606+37 F	-	615+09 F	RT						891	
				TOTAL 0020	297	35,815	500	42	145	3,452	145
				TOTAL	565	74,305	995	84	305	6,950	305

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

CONCRETE CURB TYPE J

CATEGORY	STATION	TO	STATION	LOCATION	601.0120 CONCRETE CURB TYPE J LF
0010	55+90 L	-	56+59 L	LT & RT	126
0010	55+91 L	-	56+58 L	LT	108
0010	56+91 L	-	57+03 L	LT & RT	108
0010	56+92 L	-	57+60 L	RT	195
0010	56+92 L	-	57+54 L	LT	175
0010	57+60 L	-	58+31 L	RT	174
0010	57+93 L	-	57+99 L	LT	45
				TOTAL 0010	931
0020	66+49 M	-	66+81 M	LT	82
0020	66+43 M	-	66+50 M	RT	45
0020	66+87 M	-	67+49 M	LT	156
0020	67+37 M	-	67+50 M	LT & RT	108
0020	66+92 M	-	67+49 M	RT	147
0020	67+82 M	-	68+59 M	RT	115
0020	67+82 M	-	68+59 M	LT	133
0020	68+31 M	-	68+63 M	LT	82
				TOTAL 0020	868
				PROJECT TOTAL	1799

DETECTABLE WARNING FIELDS

CATEGORY	STATION	LOCATION	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF	650.9000 CONSTRUCTION STAKING CURB RAMPS EACH
0010	206+06 B	RT 149'	30	1
0010	302+45 C	LT 87'	10	1
0010	306+86 C	LT 42'	10	1
0010	307+17 C	LT 42'	30	1
0010	310+95 C	LT 111'	20	1
		TOTAL 0010	100	5
0020	605+75 F	RT 89'	20	1
0020	609+80 F	RT 42'	30	1
0020	609+80 F	RT 223'	30	1
0020	610+13 F	RT 42'	10	1
0020	614+42 F	RT 54'	10	1
		TOTAL 0020	100	5
		PROJECT TOTAL	200	10

TRAFFIC COUNTER ITEMS

CATEGORY	STATION	LOCATION	NO. of Turns	* 602.0410 CONCRETE SIDEWALK 5-INCH SF	* 652.0210 CONDUIT RIGID NONMETALLIC SCHEDULE 40 1-INCH LF	652.0800 CONDUIT LOOP DETECTOR LF	* 653.0154 PULL BOXES NON-CONDUCTIVE 24X36-INCH EACH	654.0220 CONCRETE CONTROL CABINET BASES TYPE 10 EACH	655.0700 LOOP DETECTOR LEAD IN CABLE LF	655.0800 LOOP DETECTOR WIRE LF
0010	115+15 A	4' RT	5		20	35	1		20	150
	301+42 C	19' LT	5		10	35	1		10	150
	301+42 C	34' LT		16				1		
		TOTAL 0010		16	30	70	2	1	30	300
0020	615+00 F	30' RT	5	16	11	37	1	1	11	150
	615+43 F	20' RT	5		44	37	1		44	150
		TOTAL 0020		16	55	74	2	1	55	300
		TOTAL		32	85	144	4	2	85	600

SURFACE DRAINS

CATEGORY	STATION	LOCATION	602.3010 CONCRETE SURFACE DRAINS CY	645.0130 GEOTEXTILE TYPE R SY
0010	201+02 B	LT	2.0	19
0010	202+91 B	LT	1.2	11
0010	211+28 B	LT	3.3	30
0010	213+39 B	LT	2.8	25
		TOTAL 0010	9.3	85
		PROJECT TOTAL	9.3	85

RIP RAP & GEOTEXTILE FABRIC

CATEGORY	STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY
0010	201+02 B	LT	1.3	7
0010	202+91 B	LT	1.3	7
0010	211+28 B	LT	1.3	7
0010	213+39 B	LT	1.3	7
0010	217+55 B	RT	3.7	16
0010	302+27 C	RT	3.7	16
0010	203+00 B	LT	3.7	16
0010	313+60 C	RT	3.7	16
0010	12+13 G	LT	3.7	16
		TOTAL 0010	23.7	108
0020	412+76 D	RT	3.7	16
0020	502+48 E	LT	3.7	16
0020	605+51 F	LT	3.7	16
		TOTAL 0020	11.1	48
		PROJECT TOTAL	34.8	156

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

STORM SEWER STRUCTURES

CATEGORY	STRUCTURE	STATION	LOCATION	522.1018 * APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	611.0530 * MANHOLE COVERS TYPE J EACH	611.0612 INLET COVERS TYPE C EACH	611.0624 INLET COVERS TYPE H EACH	611.0642 INLET COVERS TYPE MS EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.3230 INLETS 2X3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.9850.S.01 PIPE GRATES (SIZE) (01. 18 - INCH) EACH	611.9850.S.04 PIPE GRATES (SIZE) (04. 36 - INCH) EACH	612.0406 PIPE UNDERDRAIN WRAPPED 6-INCH LF	633.5200 * MARKERS CULVERT END EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	SPV.0060.12 SPECIAL (12. MANHOLES 5X5, SPECIAL) EACH	RIM** ELEVATION	INVERET *** ELEVATION	DEPTH**** FT
0010	102	304+83 C	96.6' LT						1					1					1			839.50	835.00	4.50
0010	103	304+96 C	180.1' LT						1					1					1			840.00	834.15	5.85
0010	104	305+38 C	216.7' LT						1					1					1			840.35	833.60	6.75
0010	200	304+24 C	403.7' LT	1											1			1	1				829.00	
0010	201	204+60 B	74.6' RT			1					1								1			840.39	832.37	6.79
0010	202	308+03 C	218.1' LT						1					1					1			844.00	836.56	7.44
0010	203	307+85 C	165.2' LT						1					1					1			843.00	837.39	5.61
0010	204	308+58 C	163.8' LT						1					1					1			844.20	837.79	6.41
0010	205	309+94 C	124.8' LT						1					1					1			842.50	838.50	4.00
0010	301	313+60 C	32.4' RT	1											1			1	1				830.54	
0010	302	313+50 C	44.0' LT						1					1					1			833.71	830.71	3.00
0010	325	116+85 A	182.1' LT																1	1		832.00	828.50	3.50
0010	326	116+50 A	173.5' LT	1											1			1	1				828.00	
			TOTAL 0010	3	0	1	0	0	8	0	1	0	0	8	3	0	0	2	13	1				
0020	401	605+51 F	90.2' LT		1											1		1	1				823.00	
0020	402	605+74 F	33.3' RT				1					1							1			830.77	823.38	6.16
0020	416	603+74 F	52.7' RT						1					1					1			827.03	824.03	3.00
0020	417	418+00 D	10.0' RT					1					1				20		1			828.62	825.06	2.73
0020	418	418+10 D	10.0' RT					1					1				20		1			828.64	825.61	2.20
0020	415	419+33 D	10.0' RT					1					1				20		1			830.04	825.95	3.26
0020	403	606+42 F	66.1' RT				1				1								1			832.25	824.26	6.76
0020	404	608+18 F	82.7' RT				1				1								1			833.50	825.14	7.13
0020	405	610+64 F	56.5' RT			1				1									1			837.60	826.88	9.49
0020	406	611+10 F	92.1' RT				1			1									1			835.85	827.18	7.44
0020	407	611.21 F	154.3' RT				1				1								1			834.75	827.49	6.03
0020	408	426+97 D	9.9' RT					1					1				20		1			833.68	828.57	4.28
0020	409	427+17 D	9.9' RT					1					1				20		1			833.67	829.17	3.67
0020	410	428+91 D	10.0' RT					1					1				20		1			834.30	830.30	3.17
0020	411	424+84 D	10.0' RT					1					1				20		1			834.69	830.34	3.52
0020	412	610+71 F	197.6' RT						1					1					1			835.50	828.82	6.68
0020	413	609+17 F	131.5 RT						1					1					1			834.81	830.76	4.05
0020	414	608+96 F	197.9' RT						1					1					1			836.01	832.00	4.01
0020	419	426+95 D	2.1' RT			1					1								1			833.84	828.53	4.08
0020	502	606+48 F	268.3' LT																1	1		826.82	822.75	4.07
0020	501	606+79 F	311.9' LT	1											1			1	1				822.48	
			TOTAL 0020	1	1	2	5	7	4	2	4	1	7	4	1	1	140	2	21	1				
			TOTAL	4	1	3	5	7	12	2	5	1	7	12	4	1	140	4	34	2				

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMAKRS
** RIM ELEVATION IS AT THE INLET COVER FLOWLINE LOCATION
*** THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE
****DEPTH = RIM ELEV - COVER HEIGHT -6 INCH ADJUSTMENT RING HEIGHT - INVERT ELEV

STORM SEWER PIPE

CATEGORY	DOWNSTREAM STRUCTURE	TO	UPSTREAM STRUCTURE	PIPE	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	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	608.0336 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH LF	UPSTREAM ELEVATION	DISCHARGE ELEVATION	% SLOPE
	104	-	201	101	116						833.60	832.37	1.06
0010	102	-	103	102	85						835.00	834.15	1.00
	103	-	104	103	55						834.15	833.60	1.00
	201	-	200	200			191				832.37	829.00	1.70
	201	-	202	201			237				836.56	832.37	1.77
	202	-	203	202	56						837.39	837.06	0.59
	203	-	204	203	73						837.79	837.39	0.55
	204	-	205	204	141						838.50	837.79	0.50
	301	-	302	301			77				831.40	830.54	1.11
	325	-	326	325			40				828.75	828.00	1.88
				TOTAL 0010	526	0	545	0	0	0			
0020	401	-	402	401						125	823.38	823.00	0.30
	402	-	403	402					77		824.26	823.88	0.50
	403	-	404	403					177		825.14	824.26	0.50
	404	-	405	404				248			826.88	825.64	0.50
	405	-	406	405				58			827.18	826.88	0.50
	406	-	407	406				63			827.49	827.18	0.50
	407	-	408	407				208			828.53	827.49	0.50
	408	-	409	408			20				829.17	829.07	0.50
	409	-	410	409		176					830.30	829.42	0.50
	408	-	411	410		213					830.34	829.28	0.50
	407	-	412	411	67						828.82	828.49	0.50
	404	-	413	412	111						830.76	829.51	1.13
	413	-	414	413	70						832.00	830.76	1.78
	402	-	415	414			214				825.95	824.88	0.50
	402	-	416	415			212				824.66	824.13	0.25
	419	-	408	418				8			828.57	828.53	0.50
	416	-	417	416			142				825.06	824.66	0.28
	417	-	418	417	10						825.61	825.56	0.50
	501	-	502	501			54				822.75	822.48	0.50
				TOTAL 0020	258	389	642	585	254	125			
				PROJECT TOTAL	784	389	1,187	585	254	125			

FENCE SAFETY

CATEGORY	LOCATION	616.0700.S FENCE SAFETY LF	REMARKS
0010	RA 51	1,500	STAGING AREA DELINEATION
	TOTAL 0010	1,500	
0020	RA 52	1,500	STAGING AREA DELINEATION
	TOTAL 0020	1,500	
	PROJECT TOTAL	3,000	

SANITARY SEWER

CATEGORY	STATION	STRUCTURE	LOCATION	* 611.0530 MANHOLE COVERS TYPE J EACH	SPV.0060.05 SPECIAL (05. CORING MANHOLE) EACH	SPV.0060.09 SPECIAL (09. SEWAGE EJECTOR PUMP AND CONTROLS) EACH	SPV.0060.10 SPECIAL (10. CORING SEPTIC TANK 8-INCH) EACH	SPV.0060.11 SPECIAL (11. MANHOLES SANITARY 4FT) EACH	SPV.0060.26 SPECIAL (26. MANHOLES SANITARY 5FT) EACH	SPV.0090.02 SPECIAL (02. SANITARY SEWER, PVC 8-INCH) LF	SPV.0090.06 SPECIAL (06. FORCEMAIN, PVC, 2-INCH) LF	SPV.0090.07 SPECIAL (07. CONSTRUCTION STAKING, SANITARY SEWER SYSTEM) LF
0010	303+91 C	S-2	101.4' LT	1		1		1				
0010	306+07 C	S-1	161.8' LT	1				1				
0010	P-2										231	231
0010	P-4						1			17		17
			TOTAL 0010	2	0	1	1	2	0	17	231	248
0020	610+51 F	S-12	193.7' RT	1				1				
0020	611+88 F	S-13	166.5' RT	1					1			
0020	423+33 F	S-11	22.7' RT		1							
0020	P-5									264		264
0020	P-7									140		140
			TOTAL 0020	2	1	0	0	1	1	404	0	404
			TOTAL	4	1	1	1	3	1	421	231	652

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

RESTORATION

CATEGORY	STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	625.0500 SALVAGED TOPSOIL SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL	631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY	SPV.0035.01 SPECIAL (01. DOUBLE SHREDDED HARDWOOD MULCH) CY	SPV.0035.02 SPECIAL (02. PLANTING MIXTURE) CY	SPV.0165.01 SPECIAL (01. CONCRETE PAVER WALKWAY) SF
0010		-		PLAZA	11,910		6,335	7.5		285		142	128	5,575	40	130	84
0010	107+39 A	-	222+30 B	RT		4,005	4,005	2.5	180		110	90					
0010	107+39 A	-	222+31 B	LT		15,350	15,350	9.7	690		415	345					
0010		-	TREES	PLAZA											7	50	
				UNDISTRIBUTED			3,800	4.9	220	70	130	145	6	280			
				TOTAL 0010	11,910	19,355	29,490	24.6	1,090	355	655	722	134	5,855	47	180	84
0020	406+00 D	-	509+50 E	RT		6,060	6,060	4.0	270		165	140					
0020	406+00 D	-	509+50 E	LT		11,225	11,225	7.0	505		305	255					
0020		-		PLAZA	7,230		3,890	4.5		175		88	76	3,340	60	195	84
0020		-	TREES	PLAZA											3	20	
				UNDISTRIBUTED			3,175	3.8	195	45	115	120	4	170			
				TOTAL 0020	7,230	17,285	24,350	19.3	970	220	585	603	80	3,510	63	215	84
				PROJECT TOTAL	19,140	36,640	53,840	43.9	2,060	575	1,240	1,325	214	9,365	110	395	168

SILT FENCE

CATEGORY	STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF
0010	107+37 A	-	222+31 B	LT	3,595	3,595
0010	107+39 A	-	222+30 B	RT	2,870	2,870
0010	CLAY		LINER		880	880
				TOTAL 0010	7,345	7,345
0020	406+00 D	-	412+70 D	LT	700	700
0020	406+00 D	-	502+28 E	RT	2,745	2,745
0020	412+80 D	-	509+52 E	LT	3,180	3,180
0020	502+50 E	-	509+52 E	RT	705	705
0020	CLAY		LINER		660	660
				TOTAL 0020	7,990	7,990
				PROJECT TOTAL	15,335	15,335

EROSION CONTROL MOBILIZATION

CATEGORY	STATION	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	PROJECT		15	15
		TOTAL 0010	15	15
0020	PROJECT		15	15
		TOTAL 0020	15	15
		PROJECT TOTAL	30	30

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

EROSION CONTROL

CATEGORY	STATION	LOCATION	628.7005 INLET PROTECTION TYPE A EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7560 TRACKING PADS EACH
0010	303+89 C	70' LT	1				
0010	304+83 C	97' LT	1				
0010	304+98 C	178' LT	1				
0010	305+37 C	217' LT	1				
0010	307+85 C	166' LT	1				
0010	308+02 C	218' LT	1				
0010	308+58 C	164' LT	1				
0010	309+94 C	126' LT	1				
0010	313+50 C	46' LT	1				
0010	217+55 B	57' LT				5	
0010	104+37 A	42' LT			25		
0010	108+43 A	22' LT			25		
0010	109+22 A	42' RT			25		
0010	115+69 A	113' LT				3	
0010		UNDISTRIBUTED			50		1
		TOTAL 0010	9	0	125	8	1
0020	418+00 D	10' RT		1			
0020	418+10 D	10' RT		1			
0020	419+33 D	10' RT		1			
0020	424+84 D	10' RT		1			
0020	426+97 D	10' RT		1			
0020	427+17 D	10' RT		1			
0020	428+91 D	10' RT		1			
0020	502+42 E	54' RT				3	
0020	603+75 F	54' RT	1				
0020	604+78 F	71' RT	1				
0020	608+96 F	170' RT	1				
0020	609+16 F	129' RT	1				
0020	610+71 F	197' RT	1				
0020	612+77 F	74' RT	1				
0020	412+75	38' LT				3	
		UNDISTRIBUTED			50		1
		TOTAL 0020	6	7	50	6	1
		PROJECT TOTAL	15	7	175	14	2

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TREES & SHRUBS

CATEGORY	SPECIES	SIZE	ROOT	LOCATION	ITEM	632.0101.XX TREES EACH	632.0201.XX SHRUBS EACH
0010	BLUE RUG JUNIPER	3 Gal	CG	PLAZA	01		4
0010	BLUE CHIP JUNIPER	3 Gal	CG	PLAZA	02		87
0010	BROADMOOR JUNIPER	3 Gal	CG	PLAZA	03		115
0010	BUSH HONEYSUCKLE	3 Gal	CG	PLAZA	04		29
0010	COMMON SNOWBERRY	3 Gal	CG	PLAZA	05		17
0010	LITTLE PRINCESS SPIREA	2 Gal	CG	PLAZA	06		24
0010	KALM'S ST. JOHN WORT	3 Gal	CG	PLAZA	07		18
0010	EASTERN WHITE PINE	6' Ht	B & B	PLAZA	02	9	
0010	SERVICEBERRY	2"Cal	B & B	PLAZA	03	17	
0010	SUGAR MAPLE	2.5" Cal	B & B	PLAZA	04	5	
0010	GREEN HAWTHORNE	2.5" Cal	B & B	PLAZA	05	2	
0010	KENTUCKY COFFEE TREE	2" Cal	B & B	PLAZA	06	2	
0010	AMERICAN BEECH	2.5" Cal	B & B	PLAZA	07	1	
0010	WHITE OAK/BURR OAK HYBRID	2.5" Cal	B & B	PLAZA	08	3	
				TOTAL 0010		39	294
0020	BLUE RUG JUNIPER	3 Gal	CG	PLAZA	01		22
0020	BLUE CHIP JUNIPER	3 Gal	CG	PLAZA	02		63
0020	BROADMOOR JUNIPER	3 Gal	CG	PLAZA	03		87
0020	LITTLE PRINCESS SPIREA	2 Gal	CG	PLAZA	06		28
0020	EASTERN WHITE PINE	6' Ht	B & B	PLAZA	02	5	
0020	SERVICEBERRY	2" Cal	B & B	PLAZA	03	11	
0020	SUGAR MAPLE	2.5" Cal	B & B	PLAZA	04	2	
0020	GREEN HAWTHORNE	2.5" Cal	B & B	PLAZA	05	2	
0020	KENTUCKY COFFEE TREE	2" Cal	B & B	PLAZA	06	1	
0020	WHITE OAK/BURR OAK HYBRID	2.5" Cal	B & B	PLAZA	08	1	
				TOTAL 0020		22	200
				PROJECT TOTAL		61	494

LANDSCAPE PLANTING SURVEILLANCE

CATEGORY		LOCATION	632.9101 LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES EACH	REMARKS
0010	1ST GROWING SEASON	PROJECT	8	CYCLES BASED ON ONE VISIT EVERY TWO
0010	2ND GROWING SEASON	PROJECT	8	WEEKS BETWEEN MAY 15 AND SEPTEMBER 15
0010	UNDISTRIBUTED		6	
		TOTAL 0010	22	
0020	1ST GROWING SEASON	PROJECT	8	CYCLES BASED ON ONE VISIT EVERY TWO
0020	2ND GROWING SEASON	PROJECT	8	WEEKS BETWEEN MAY 15 AND SEPTEMBER 15
0020	UNDISTRIBUTED		6	
		TOTAL 0020	22	
		PROJECT TOTAL	44	

DELINEATORS

CATEGORY	STATION	TO	STATION	LOCATION	633.0100 DELINEATOR POSTS STEEL EACH	633.0500 DELINEATOR REFLECTORS EACH
0010	105+00 A	-	114+00 A	RT	10	10
0010	216+50 B	-	228+50 B	LT	13	13
				TOTAL 0010	23	23
0020	400+00 D	-	414+25 D	LT	16	16
0020	503+50 E	-	512+50 E	RT	10	10
				TOTAL 0020	26	26
				PROJECT TOTAL	49	49

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SIGNS TYPE II

CATEGORY	SIGN NO.	SIGN CODE	STATION	LOCATION	WIDTH (INCHES)	HEIGHT (INCHES)	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	634.0812 POSTS STEEL 2X2-INCH X 12-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	REMARKS
0010	1-1	R5-60	107+77 A	15' LT	48.00	24.00	1				8.0		INFORMATIONAL
0010	1-2	R7-64	110+63 A	12' LT	48.00	30.00	1				10.0		NO PARKING ON RAMP
0010	2-1	D52-54L	114+95 A	142' LT	24.00	24.00	1				4.0		EXIT
0010	2-2	R7-1R	114+10 A	22' LT	18.00	24.00	1				3.0		NO PARKING ANYTIME
0010	2-3	D7-60	116+34 A	25' RT	24.00	36.00	1				6.0		NEXT TRUCK PARKING
0010	2-4	R7-1L	116+00 A	133' LT	18.00	24.00	1				3.0		NO PARKING ANYTIME
0010	2-5	R5-1	213+91 B	27' RT	36.00	36.00	1				9.0		DO NOT ENTER
0010	2-6	D7-60	213+91 B	27' RT	24.00	36.00	W/2-5				6.0		NEXT TRUCK PARKING
0010	2-7	R2-1	214+16 B	12' LT	30.00	36.00	1				7.5		SPEED LIMIT 25
0010	2-8	R8-74	215+07 B	26' RT	72.00	54.00			2		27.0		INFORMATIONAL
0010	2-9	R5-1	310+60 C	11' RT	36.00	36.00	1				9.0		DO NOT ENTER
0010	2-10	R2-1	310+60 C	32' LT	30.00	36.00	1				7.5		SPEED LIMIT 25
0010	2-11	D52-54L	303+87 C	35' LT	24.00	24.00	1				4.0		EXIT
0010	2-12	R1-2	301+73 C	34' LT	48.00	42.00		1			7.0		YIELD
0010	2-13		200+50 B	20' LT	36.00	36.00	1				9.0		NO PARKING EXCEPT OSOW VEHICLES
0010	2-14		208+45 B	20' LT	36.00	36.00	1				9.0		NO PARKING EXCEPT OSOW VEHICLES
0010	3-1	R5-1A	218+11 B	16' LT	42.00	30.00	1				8.8		WRONG WAY
0010	3-2	R5-1A	218+11 B	27' RT	42.00	30.00			1		8.8		WRONG WAY
0010	3-3	R2-1	218+11 B	16' LT	30.00	36.00	W/3-1				7.5		SPEED LIMIT 25
0010	3-4	R8-74	218+11 B	27' RT	72.00	54.00	W/3-2				27.0		INFORMATIONAL
0010	3-5	R7-64	220+86 B	16' LT	48.00	30.00	1				10.0		NO PARKING ON RAMP
0010	3-6	W3-5	222+29 B	16' LT	36.00	36.00	1					9.00	REST AREA
0010	3-7	E5-54	222+29 B	16' LT	72.00	72.00			2		36.0		SPEED LIMIT 25 AHEAD
0010	4-1	R55-64B-R	53+90	64' RT	24.00	24.00				1.00	4.0		PET WALKING AREA
0010	4-2	R55-51	53+90	64' RT	18.00	18.00				W/4-1	2.3		NO OVERNIGHT CAMPING
0010	4-3	R55-64B-R	54+26	75' LT	24.00	24.00				1.00	4.0		PET WALKING AREA
0010	4-4	R55-51	54+26	75' LT	18.00	18.00				W/4-3	2.3		NO OVERNIGHT CAMPING
0010	4-5	R55-64B-L	55+08	106' LT	24.00	24.00				1.00	4.0		PET WALKING AREA
0010	4-6	R55-64B-L	56+19	122' LT	24.00	24.00				1.00	4.0		PET WALKING AREA
0010	4-7	R55-64B-L	57+20	120' LT	24.00	24.00				1.00	4.0		PET WALKING AREA
0010	4-8	R55-64B-L	58+15	103' LT	24.00	24.00				1.00	4.0		PET WALKING AREA
0010	4-9	R55-65	58+90	77' LT	24.00	24.00				1.00	4.0		PET WALKING AREA
0010	4-10	R55-51	58+90	77' LT	18.00	18.00				W/4-9	2.3		NO OVERNIGHT CAMPING
0010	4-11	R55-65	59+51	61' RT	24.00	24.00				1.00	4.0		PET WALKING AREA
0010	4-12	R55-51	59+51	61' RT	18.00	18.00				W/4-11	2.3		NO OVERNIGHT CAMPING
0010	4-13	R55-64B-R	58+06	62' RT	24.00	24.00				1.00	4.0		PET WALKING AREA
0010	4-14	R55-64B-R	57+20	63' RT	24.00	24.00				1.00	4.0		PET WALKING AREA
0010	4-15	R55-64B-R	55+89	63' RT	24.00	24.00				1.00	4.0		PET WALKING AREA
0010	4-16	R55-64B-R	55+00	64' RT	24.00	24.00				1.00	4.0		PET WALKING AREA
0010	4-17	R7-8R	56+43	63' RT	12.00	18.00				1.00	1.5		RESERVED PARKING
0010	4-18	R7-8V	56+43	63' RT	12.00	6.00				W/4-17	0.5		VAN ACCESSIBLE
0010	4-19	R7-8A	56+72	63' RT	12.00	18.00				1.00	1.5		RESERVED PARKING
0010	4-20	R7-8L	56+96	63' RT	12.00	18.00				1.00	1.5		RESERVED PARKING
				TOTAL 0010			16	1	5	15	289.0	9.00	

CONTINUED

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONTINUED

SIGNS TYPE II

CATEGORY	SIGN NO.	SIGN CODE	STATION	LOCATION	WIDTH (INCHES)	HEIGHT (INCHES)	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	634.0812 POSTS STEEL 2X2-INCH X 12-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	REMARKS
0020	5-3	E5-54	405+74 D	28' LT	72.00	72.00			2		36.0		REST AREA
0020	5-4	W3-5	406+18 D	20' RT	36.00	36.00	1					9.00	SPEED LIMIT 25 AHEAD
0020	5-5	R7-64	409+31 D	23' RT	48.00	30.00	1				10.0		NO PARKING ON RAMP
0020	5-6	R8-74	411+74 D	26' LT	72.00	54.00		1			27.0		INFORMATIONAL
0020	5-7	R5-1A	411+74 D	26' LT	42.00	30.00		W/5-6			8.8		WRONG WAY
0020	5-8	R5-1A	411+75 D	16' RT	42.00	30.00	1				8.8		WRONG WAY
0020	5-9	R2-1	411+75 D	16' RT	30.00	36.00	W/5-8				7.5		SPEED LIMIT 25
0020	6-1	R2-1	416+14 D	10' RT	30.00	36.00	1				7.5		SPEED LIMIT 25
0020	6-2	D7-60	416+27 D	27' LT	24.00	36.00	1				6.0		NEXT TRUCK PARKING
0020	6-3	R5-1	416+27 D	27' LT	36.00	36.00	W/6-2				9.0		DO NOT ENTER
0020	6-4	R8-74	416+04 D	38' LT	72.00	54.00			2		27.0		INFORMATIONAL
0020	6-5	R5-1	605+48 F	10' LT	36.00	36.00	1				9.0		DO NOT ENTER
0020	6-6	R2-1	605+51 F	29' RT	30.00	36.00	1				7.5		SPEED LIMIT 25
0020	6-7	D52-54L	612+59 F	34' RT	24.00	24.00	1				4.0		EXIT
0020	6-8	D7-60	614+30 F	44' RT	24.00	36.00	1				6.0		NEXT TRUCK PARKING
0020	6-9	R1-2	614+72 F	32' RT	48.00	42.00		1			7.0		YIELD
0020	6-10	R7-1R	501+89 E	44' RT	18.00	24.00	1				3.0		NO PARKING ANYTIME
0020	6-11	R7-1L	501+05 E	121' RT	18.00	24.00	1				3.0		NO PARKING ANYTIME
0020	6-12		421+93 D	19' RT	36.00	36.00	1				9.0		NO PARKING EXCEPT OSOW VEHICLES
0020	6-13		430+16 D	19' RT	36.00	36.00	1				9.0		NO PARKING EXCEPT OSOW VEHICLES
0020	7-1	D52-54L	503+25 E	15' RT	24.00	24.00	1				4.0		EXIT
0020	7-2	R7-64	505+03 E	16' RT	48.00	30.00	1				10.0		NO PARKING ON RAMP
0020	7-3	R5-60	509+02 E	11' RT	48.00	24.00	1				8.0		INFORMATIONAL
0020	8-1	R55-65	64+18	21' RT	24.00	24.00				1.00	4.0		PET WALKING AREA
0020	8-2	R55-65	64+17	46' LT	24.00	24.00				1.00	4.0		PET WALKING AREA
0020	8-3	R55-51	64+17	46' LT	18.00	18.00				W/8-2	2.3		NO OVERNIGHT CAMPING
0020	8-4	R55-64B-L	65+32	74' RT	24.00	24.00				1.00	4.0		PET WALKING AREA
0020	8-5	R55-64B-L	66+29	100' RT	24.00	24.00				1.00	4.0		PET WALKING AREA
0020	8-6	R55-64B-L	67+19	110' RT	24.00	24.00				1.00	4.0		PET WALKING AREA
0020	8-7	R55-64B-R	66+58	46' LT	24.00	24.00				1.00	4.0		PET WALKING AREA
0020	8-8	R55-64B-R	67+18	46' LT	24.00	24.00				1.00	4.0		PET WALKING AREA
0020	8-9	R55-64B-L	67+91	109' RT	24.00	24.00				1.00	4.0		PET WALKING AREA
0020	8-10	R55-64B-L	68+82	95' RT	24.00	24.00				1.00	4.0		PET WALKING AREA
0020	8-11	R55-64B-R	68+14	46' LT	24.00	24.00				1.00	4.0		PET WALKING AREA
0020	8-12	R55-64B-R	68+56	47' LT	24.00	24.00				1.00	4.0		PET WALKING AREA
0020	8-13	R55-64B-L	70+00	57' RT	24.00	24.00				1.00	4.0		PET WALKING AREA
0020	8-14	R55-51	70+00	57' RT	18.00	18.00				W/8-13	2.3		NO OVERNIGHT CAMPING
0020	8-15	R55-51	69+93	47' LT	18.00	18.00				1.00	2.3		NO OVERNIGHT CAMPING
0020	8-16	R55-64B-R	69+93	47' LT	24.00	24.00				W/8-15	4.0		PET WALKING AREA
0020	8-17	R7-8R	68+00	46' LT	12.00	18.00				1.00	1.5		RESERVED PARKING
0020	8-18	R7-8A	67+91	46' LT	12.00	18.00				1.00	1.5		RESERVED PARKING
0020	8-19	R7-8V	67+91	46' LT	12.00	6.00				W/8-18	0.5		VAN ACCESSIBLE
0020	8-20	R7-8L	67+43	46' LT	12.00	18.00				1.00	1.5		
				TOTAL 0020			16	2	4	16	290.8	9	
				PROJECT TOTAL			32	3	9	31	580	18	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING SIGNS

CATEGORY	STATION	LOCATION	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
0010	216+95B	1' LT	1	1
0010	216+95B	1'LT	1	1
0010	216+98B	39' RT	1	1
0010	216+98B	39' RT	1	1
0010	52+01L	119' RT	1	1
0010	52+83L	75' RT	1	1
0010	53+69L	89' LT	1	1
0010	54+04L	142' LT	1	1
0010	54+40L	198' LT	1	1
0010	54+86L	241' LT	1	1
0010	55+22L	262' LT	1	1
0010	55+23L	71' RT	1	1
0010	55+41L	66' RT	1	1
0010	55+60L	87' LT	1	1
0010	55+73L	149' RT	1	1
0010	56+17L	286' LT	1	1
0010	56+50L	64' RT	1	1
0010	56+54L	101' LT	1	1
0010	56+57L	92' LT	1	1
0010	56+68L	57' RT	1	1
0010	56+81L	290' LT	1	1
0010	56+92L	95' RT	1	1
0010	56+92L	75' RT	1	1
0010	56+92L	63' RT	1	1
0010	56+92L	103' LT	1	1
0010	57+17L	75' RT	1	1
0010	57+23L	123' RT	1	1
0010	57+93L	98' LT	1	1
0010	58+06L	64' RT	1	1
0010	58+09L	144' RT	1	1
0010	58+28L	63' RT	1	1
0010	58+61L	273' LT	1	1
0010	59+07L	170' RT	1	1
0010	59+24L	120' RT	1	1
0010	59+30L	251' LT	1	1
0010	60+14L	140' LT	1	1
0010	60+14L	140' LT	1	
0010	60+22L	179' LT	1	1
0010	60+22L	179' LT	1	
0010	60+28L	124' RT	1	1
0010	60+28L	124' RT	1	1
0010	60+28L	84' RT	1	
0010	63+08L	78' RT	1	1
0010	63+67L	130' RT	1	1
0010	63+67L	130' RT	1	1
		TOTAL 0010	45	42

REMOVING SIGNS

CATEGORY	STATION	LOCATION	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
0020	400+03D	30' RT	1	1
0020	405+87D	27' LT	1	1
0020	410+73D	22' LT	1	1
0020	412+54D	15' LT	1	1
0020	412+54D	15' LT	1	1
0020	412+57D	24 RT	1	1
0020	412+92D	22' RT	1	1
0020	60+54M	102' LT	1	
0020	60+83M	130' LT	1	1
0020	60+83M	130' LT	1	1
0020	61+33M	83' LT	1	1
0020	62+36M	342' LT	1	1
0020	63+14M	476' LT		1
0020	63+25M	73' LT	1	1
0020	63+25M	73' LT	1	
0020	63+25M	73' LT	1	
0020	63+26M	113' LT	1	1
0020	63+26M	113' LT	1	
0020	63+26M	113' LT	1	
0020	63+34M	395' LT	1	1
0020	63+72M	182' RT	1	1
0020	63+72M	182' RT	1	
0020	63+98M	143' RT	1	1
0020	63+98M	143' RT	1	
0020	64+48M	54' LT	1	
0020	65+36M	107' LT	1	1
0020	65+40M	52' LT	1	1
0020	65+40M	52' LT	1	1
0020	65+44M	253' RT	1	
0020	65+77M	50' LT	1	1
0020	66+06M	107' LT	1	1
0020	66+70M	28' LT	1	1
0020	66+77M	105' RT	1	1
0020	66+80M	100' RT	1	1
0020	66+89M	46'LT	1	1
0020	66+95M	58' LT	1	1
0020	67+14M	48' LT	1	
0020	67+14M	48' LT	1	
0020	67+19M	98' LT	1	1
0020	67+25M	104' LT	1	1
0020	67+27M	47' LT	1	1
0020	67+35M	107' LT	1	1
0020	67+54M	125' LT	1	1
0020	67+70M	290' RT	1	
0020	68+29M	53' LT	1	
0020	68+40M	49' LT	1	1
0020	68+96M	249' LT	1	
0020	69+12M	109' LT	1	1
0020	71+73M	71' LT	1	1
0020	72+54M	128' LT	1	1
		TOTAL 0020	49	36
		PROJECT TOTAL	94	78

POND LINER CLAY

CATEGORY	LOCATION	640.1303.S POND LINER CLAY CY
0010	REST AREA 51 BASIN	3,010
	TOTAL 0010	3,010
0020	REST AREA 52 BASIN	3,600
	TOTAL 0020	3,600
	PROJECT TOTAL	6610

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* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

TRAFFIC CONTROL

CATEGORY			LOCATION	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0800 TRAFFIC CONTROL ARROW BOARDS DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I EACH	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY
0010			RA 51 OFF RAMP	13,710	1,828	3,656			4,570	3	4	27
0010	TRUCK	SIGN	IH 43	287	14	28	90	14	70			7
			TOTAL 0010	13,997	1,842	3,684	90	14	4,640	3	4	34
0020			RA 52 OFF RAMP	13,710	1,828	3,656			4,570	3	2	27
0020	TRUCK	SIGN	IH 43	287	14	28	90	14	70			7
			TOTAL 0020	13,997	1,842	3,684	90	14	4,640	3	4	34
			PROJECT TOTAL	27,994	3,684	7,368	180	28	9,280	6	8	68

CONSTRUCTION STAKING

CATEGORY	LOCATION	650.8501.01 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) (01. 1225-10-72) EACH	650.9500.01 CONSTRUCTION STAKING SIDEWALK (PROJECT) (01. 1225-10-72) EACH	650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. 1225-10-72) EACH
0010	1225-10-72	0.50	0.50	0.50
	TOTAL 0010	0.50	0.50	0.50
0020	1225-10-72	0.50	0.50	0.50
	TOTAL 0020	0.50	0.50	0.50
	PROJECT TOTAL	1	1	1

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PAVEMENT MARKING

CATEGORY	STATION	TO	STATION	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH LF	646.2020 MARKING LINE EPOXY 6-INCH LF	646.4020 MARKING LINE EPOXY 10-INCH LF	646.5220 MARKING SYMBOL EPOXY EACH	646.8320 MARKING PARKING STALL EPOXY (6-INCH) LF	646.9012 MARKING REMOVAL LINE WATER BLASTING 6-INCH LF
0010	107+49	-	117+06 A		770				
0010	107+49 A	-	222+26 B		2,835				
0010	115+54	-	116+44 A		90				
0010	200+00	-	222+27 B		2,230				
0010	212+41	-	215+35 B		335				
0010	301+67	-	304+22 C		340				
0010	310+00	-	315+00 C		510				
0010	114+73	-	115+47 A			150			
0010	215+35	-	216+13 B			150			
0010	1892+50	-	1897+00 SB	450					450
0010		-	CAR LOT				4	1,470	
0010		-	TRUCK LOT					5,405	
			TOTAL 0010	450	7,110	300	4	6,875	450
0020	406+00 D	-	509+52 E		3,445				
0020	406+00 D	-	509+50 E		3,035				
0020	415+55	-	417+85 D		270				
0020	602+65	-	606+20 F		365				
0020	612+10	-	614+80 F		270				
0020	614+00	-	614+86 F		100				
0020	415+53	-	414+61 D			180			
0020	614+81	-	615+71 F			180			
0020	1860+75	-	1865+00 NB	425					425
0020		-	CAR LOT				4	1,495	
0020		-	TRUCK LOT					5,405	
			TOTAL 0020	425	7,485	360	4	6,900	425
			PROJECT TOTAL	875	14,595	660	8	13,775	875

EARTHWORK STAKING

CATEGORY	STATION	TO	STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	SPV.0060.24 SPECIAL (45. RA 51 DRAINAGE BASIN STAKING) EACH	SPV.0060.25 SPECIAL (46. RA 52 DRAINAGE BASIN STAKING) EACH
0010	107+50 A	-	117+00 A	LT & RT	950	950		
0010	200+00 B	-	225+00 B	LT & RT	2,500	2,500		
0010	300+00 C	-	317+59 C	LT & RT	1,759	1,759		
0010			RA 51 DRAINAGE BASIN				1	
				TOTAL 0010	5,209	5,209	1	0
0020	406+00 D	-	430+37 D	LT & RT	2,437	2,437		
0020	500+00 E	-	509+50 E	LT & RT	950	950		
0020	600+00 F	-	617+17 F	LT & RT	1,717	1,717		
0020			RA 52 DRAINAGE BASIN					1
				TOTAL 0020	5,104	5,104	0	1
				PROJECT TOTAL	10313	10313	1	1

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

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CATEGORY	FROM UNIT		TO UNIT	CONDUIT AND WIRE * 652.0210 CONDUIT RIGID NONMETALLIC SCHEDULE 40 1-INCH LF	* 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0325 CONDUIT RIGID NONMETALLIC SCHEDULE 80 2-INCH LF	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF
0010	SL-1	-	SL-2		190		274		627
0010	SL-2	-	SL-3		190		137		1,045
0010	SL-3	-	SL-4		190		137		1,045
0010	SL-4	-	SL-5		190		137		1,045
0010	SL-5	-	SL-6		190		137		1,045
0010	SL-6	-	PB 8A		87		-		479
0010	PB 8A	-	SL-9		299		137		1,645
0010	SL-9	-	SL-10		184		154		607
0010	PB 8A	-	PB 7A			80	-		440
0010	PB 7A	-	SL-7		97		137		534
0010	SL-7	-	SL-8		193		137		1,062
0010	SL-8	-	SL-11		193		137		1,062
0010	SL-11	-	SL-12		141		154		776
0010	SL-12	-	SL-13		134		154		737
0010	SL-13	-	SL-14		135		154		743
0010	SL-14	-	SL-15		135		154		743
0010	SL-15	-	PB4A		46		-		253
0010	PB4A	-	PB-2A			180	-		1,782
0010	PB4A	-	SL-16		89		154		490
0010	SL-16	-	SL-17		136		154		748
0010	SL-17	-	SL-18		133		137		732
0010	SL-18	-	SL-20		187		137		1,029
0010	SL-20	-	PB5A		105		-		578
0010	PB5A	-	PB6A			70	-		385
0010	SL-19	-	PB6A		239		154		789
0010	PB6A	-	SL-21		81		137		446
0010	SL-21	-	SL-22		190		137		1,045
0010	SL-22	-	SL-23		189		137		1,040
0010	SL-23	-	SL-24		189		137		1,040
0010	SL-24	-	SL-25		190		137		627
0010	PB9A	-	PB10A			350	-		3,465
0010	PB10A	-	PB11A		182		-		1,001
0010	PB11A	-	HL-2		22				121
0010	PB10A	-	PB12A		462		-		2,541
0010	PB12A	-	HL-1		13				72
0010	WL-1	-	WL-2		130		80		429
0010	WL-2	-	WL-3		90		40		297
0010	WL-3	-	WL-4		63		40		208
0010	WL-4	-	WL-5		43		40		142
0010	WL-5	-	WL-6		68		40		224
0010	WL-6	-	WL-7		40		40		132
0010	WL-7	-	WL-9		73		40		241
0010	WL-7	-	WL-8		63		40		208
0010	WL-8	-	WL-11		84		40		277
0010	WL-11	-	WL-10		65		40		215
0010	WL-11	-	WL-12		155		40		512
0010	WL-12	-	WL-13		95		40		314
0010	WL-13	-	WL-14		97		40		320
0010	WL-15	-	WL-16		97		80		320
0010	WL-16	-	WL-17		123		40		406
0010	WL-17	-	WL-18		53		40		175
0010	WL-18	-	WL-19		52		40		172
0010	WL-19	-	WL-20		65		40		215
0010	WL-20	-	WL-21		53		40		175
0010	WL-21	-	PB1A		73		-		241
0010	WL-21	-	WL-22		90		40		297
0010	WL-22	-	WL-23		100		40		330
0010	WL-23	-	WL-24		75		40		248
0010	PB1A	-	PB2A		80				792
0010	PB1A	-	PB9A		70				693
0010	PB2A	-	PB3A		230				759
0010	FUTURE		COMMUNICATIONS		300	108			
0010	CB 1A	-	FLAG POLE		385			1,200	
0010	FLAG POLE	-	FLAG POLE	30				100	
			TOTAL 0010	30	7,913	788	4,521	1,300	40,161

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CATEGORY	FROM UNIT		TO UNIT	CONDUIT AND WIRE * 652.0210 CONDUIT RIGID NONMETALLIC SCHEDULE 40 1-INCH LF	* 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0325 CONDUIT RIGID NONMETALLIC SCHEDULE 80 2-INCH LF	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF
0020	SL-27	-	SL-28		190		274		627
0020	SL-28	-	SL-29		190		137		1,045
0020	SL-29	-	SL-30		190		137		1,045
0020	SL-30	-	SL-31		192		137		1,056
0020	SL-31	-	SL-32		194		137		1,067
0020	SL-32	-	SL-33		194		137		1,067
0020	SL-33	-	SL-34		194		137		1,067
0020	SL-34	-	PB9B		61		-		336
0020	PB9B	-	SL-36		152		137		836
0020	SL-36	-	SL-38		169		137		558
0020	PB9B	-	PB10B			92	-		506
0020	PB10B	-	SL-35		50		137		275
0020	SL-35	-	SL-37		180		137		990
0020	SL-37	-	SL-39		188		137		1,034
0020	SL-39	-	SL-40		135		154		743
0020	SL-40	-	SL-41		135		154		743
0020	SL-41	-	SL-42		135		154		743
0020	SL-42	-	PB8B		103		-		567
0020	PB8B	-	PB7B			150	-		1,485
0020	PB8B	-	SL-43		32		154		176
0020	SL-43	-	SL-44		136		154		748
0020	SL-44	-	SL-45		133		137		732
0020	SL-45	-	SL-46		187		154		1,029
0020	SL-46	-	PB11B		70		-		385
0020	PB11B	-	SL-48		116		137		383
0020	PB11B	-	PB12B			96	-		528
0020	PB12B	-	SL-49		315		137		1,733
0020	SL-49	-	SL-50		186		137		1,023
0020	SL-50	-	SL-51		182		137		1,001
0020	SL-51	-	SL-52		193		137		1,062
0020	SL-52	-	SL-53		191		137		630
0020	PB3B	-	PB4B			360	-		3,564
0020	PB4B	-	PB5B		445		-		2,448
0020	PB5B	-	HL-3		24				132
0020	PB4B	-	PB6B		151		-		831
0020	PB6B	-	HL-4		45				248
0020	WL-25	-	WL-26		125		80		413
0020	WL-26	-	WL-27		100		40		330
0020	WL-27	-	WL-28		122		40		366
0020	WL-28	-	WL-29		37		40		122
0020	WL-29	-	WL-30		68		40		224
0020	WL-30	-	WL-31		40		40		132
0020	WL-31	-	WL-33		105		40		347
0020	WL-33	-	WL-32		53		40		175
0020	WL-33	-	WL-34		40		40		132
0020	WL-34	-	WL-35		64		40		211
0020	WL-35	-	WL-36		77		40		254
0020	WL-37	-	WL-38		63		80		208
0020	WL-38	-	WL-39		62		40		205
0020	WL-39	-	WL-40		60		40		198
0020	WL-40	-	WL-41		67		40		221
0020	WL-41	-	WL-42		48		40		158
0020	WL-42	-	WL-43		32		40		106
0020	WL-43	-	WL-44		117		40		386
0020	WL-44	-	WL-45		153		40		505
0020	PB1B	-	PB7B		85		-		842
0020	PB1B	-	PB3B		45		-		446
0020	PB3B	-	PB2B		135		-		1,337
0020	FUTURE		COMMUNICATIONS		224	108			
0020	SANITARY		SEWER		126	470			
0020	CB-1B	-	FLAG POLE		316		-	1,000	
0020	FLAG POLE	-	FLAG POLE	30			-	100	
			TOTAL 0020	30	7,422	1,276	4,504	1,100	39,761
			TOTAL	60	15,335	2,064	9,025	2,400	79,922

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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	MISCELLANEOUS QUANTITIES	SHEET 239	E

PULL BOXES

CATEGORY	FIXTURE	STATION	LOCATION	* 653.0154 PULL BOXES NON-CONDUCTIVE 24X36-INCH EACH	653.0164 PULL BOXES NON-CONDUCTIVE 24X42-INCH EACH
0010	PB-1A	306+07 C	164' LT		1
0010	PB-2A	306+00 C	85' LT	1	
0010	PB-3A	308+35 C	86' LT	1	
0010	PB-4A	306+01 C	9' RT	1	
0010	PB-5A	113+34 A	23' RT	1	
0010	PB-6A	113+34 A	12' LT	1	
001	PB-7A	316+75 C	8' RT	1	
0010	PB-8A	217+15 B	12' LT	1	
0010	PB-9A	306+01 C	234' LT	1	
0010	PB-10A	204+59 B	18' LT	1	
0010	PB-11A	202+77 B	20' LT	1	
0010	PB-12A	209+21 B	20' LT	1	
0010	FC	306+11 C	23' RT	1	
			TOTAL 0010	12	1
0020	PB-1B	610+97 F	156' RT		1
0020	PB-2B	609+45 F	171' RT	1	
0020	PB-38	610+80 F	197' RT	1	
0020	PB-4B	425+66 D	18' RT	1	
0020	PB-5B	421+21 D	18' RT	1	
0020	PB-6B	427+17 D	17' RT	1	
0020	PB-7B	610+95 F	69' RT	1	
0020	PB-8B	610+85 F	9' LT	1	
0020	PB-9B	414+62 D	13' RT	1	
0020	PB-10B	414+55 D	33' LT	1	
0020	PB-11B	502+77 E	22' LT	1	
0020	PB-12B	502+75 E	28' RT	1	
0020	FC	610+87 F	20' LT	1	
			TOTAL 0020	12	1
			TOTAL	24	2

REMOVING PULL BOXES

CATEGORY	STATION	LOCATION	653.0905 REMOVING PULL BOXES EACH
0010	52+23L	111' RT	1
0010	52+78L	55' RT	1
0010	52+97L	82' RT	1
0010	53+07L	118' RT	1
0010	54+04L	20' LT	1
0010	56+20L	1' RT	1
		TOTAL 0010	6
0020	67+54M	5' RT	1
0020	71+71M	84' LT	1
		TOTAL 0020	2
		PROJECT TOTAL	8

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ROADWAY LIGHTING

CATEGORY	FIXTURE	STATION	LOCATION	654.0107 CONCRETE BASES TYPE 7 EACH	657.0210 TRANSFORMER BASES BREAKAWAY 15-17 INCH BOLT CIRCLE EACH	657.0336 POLES TYPE 17-STEEL EACH	657.0620 LUMINAIRE ARMS SINGLE MEMBER 6-INCH CLAMP 4-FT EACH	657.0725 LUMINAIRE ARMS TRUSS TYPE 6-INCH CLAMP 15-FT EACH	659.1120 LUMINAIRES UTILITY LED B EACH
0010	SL-1	227+53 B	12' LT	1	1	1	1		1
0010	SL-2	225+63 B	12' LT	1	1	1	1		1
0010	SL-3	223+73 B	12' LT	1	1	1	1		1
0010	SL-4	221+83 B	12' LT	1	1	1	1		1
0010	SL-5	219+93 B	12' LT	1	1	1	1		1
0010	SL-6	218+02 B	12' LT	1	1	1	1		1
0010	SL-7	315+78 C	8' RT	1	1	1	1		1
0010	SL-8	313+85 C	8' RT	1	1	1	1		1
0010	SL-9	214+16 B	12' LT	1	1	1	1		1
0010	SL-10	212+32 B	17' LT	1	1	1		1	1
0010	SL-11	311+92 C	8' RT	1	1	1	1		1
0010	SL-12	310+51 C	8' RT	1	1	1		1	1
0010	SL-13	309+17 C	8' RT	1	1	1		1	1
0010	SL-14	307+82 C	8' RT	1	1	1		1	1
0010	SL-15	306+47 C	8' RT	1	1	1		1	1
0010	SL-16	305+12 C	8' RT	1	1	1		1	1
0010	SL-17	303+76 C	8' RT	1	1	1		1	1
0010	SL-18	302+43 C	8' RT	1	1	1	1		1
0010	SL-19	115+73 A	87' LT	1	1	1		1	1
0010	SL-20	300+56 C	8' RT	1	1	1	1		1
0010	SL-21	112+53 A	12' LT	1	1	1	1		1
0010	SL-22	110+63 A	12' LT	1	1	1	1		1
0010	SL-23	108+74 A	12' LT	1	1	1	1		1
0010	SL-24	106+85 A	12' LT	1	1	1	1		1
0010	SL-25	104+95 A	12' LT	1	1	1	1		1
			TOTAL 0010	25	25	25	17	8	25
0020	SL-27	400+57 D	10' RT	1	1	1	1		1
0020	SL-28	402+47 D	10' RT	1	1	1	1		1
0020	SL-29	404+37 D	10' RT	1	1	1	1		1
0020	SL-30	406+27 D	10' RT	1	1	1	1		1
0020	SL-31	408+19 D	10' RT	1	1	1	1		1
0020	SL-32	410+13 D	10' RT	1	1	1	1		1
0020	SL-33	412+07 D	10' RT	1	1	1	1		1
0020	SL-34	414+01 D	10' RT	1	1	1	1		1
0020	SL-35	602+19 F	5' LT	1	1	1	1		1
0020	SL-36	416+14 D	10' RT	1	1	1	1		1
0020	SL-37	603+99 F	5' LT	1	1	1	1		1
0020	SL-38	417+83 D	14' RT	1	1	1	1		1
0020	SL-39	605+87 F	5' LT	1	1	1	1		1
0020	SL-40	607+22 F	6' LT	1	1	1		1	1
0020	SL-41	608+57 F	5' LT	1	1	1		1	1
0020	SL-42	609+92 F	5' LT	1	1	1		1	1
0020	SL-43	611+27 F	5' LT	1	1	1		1	1
0020	SL-44	612+63 F	5' LT	1	1	1		1	1
0020	SL-45	613+96 F	5' LT	1	1	1	1		1
0020	SL-46	615+83 F	5' LT	1	1	1		1	1
0020	SL-47	501+39 E	84' RT	1	1	1		1	1
0020	SL-48	503+93 E	21' LT	1	1	1	1		1
0020	SL-49	505+90 E	10' RT	1	1	1	1		1
0020	SL-50	507+76 E	10' RT	1	1	1	1		1
0020	SL-51	509+58 E	10' RT	1	1	1	1		1
0020	SL-52	511+51 E	10' RT	1	1	1	1		1
0020	SL-53	513+42 E	12' RT	1	1	1	1		1
			TOTAL 0020	27	27	27	20	7	27
			PROJECT TOTAL	52	52	52	37	15	52

CONTROL CABINET & BASES

CATEGORY	STATION	LOCATION	654.0224 CONCRETE CONTROL CABINET BASES TYPE L24 EACH	659.2124 LIGHTING CONTROL CABINETS 120/240 24-INCH EACH
0010	306+22 C	163' LT	1	1
		TOTAL 0010	1	1
0020	610+76 F	145' RT	1	1
		TOTAL 0020	1	1
PROJECT TOTAL			2	2

WALKWAY LIGHTING UNITS

CATEGORY	FIXTURE	STATION	LOCATION	654.0111 CONCRETE BASES TYPE 11 EACH	659.0700 LIGHTING UNITS WALKWAY EACH
0010	WL-1	310+68 C	118' LT	1	1
0010	WL-2	309+43 C	161' LT	1	1
0010	WL-3	308+69 C	216' LT	1	1
0010	WL-4	308+14 C	181' LT	1	1
0010	WL-5	307+75 C	194' LT	1	1
0010	WL-6	307+09 C	213' LT	1	1
0010	WL-7	306+72 C	195' LT	1	1
0010	WL-8	306+10 C	177' LT	1	1
0010	WL-9	306+12 C	238' LT	1	1
0010	WL-10	305+14 C	218' LT	1	1
0010	WL-11	305+29 C	154' LT	1	1
0010	WL-12	304+15 C	157' LT	1	1
0010	WL-13	303+42 C	137' LT	1	1
0010	WL-14	302+66 C	88' LT	1	1
0010	WL-15	310+51 C	71' LT	1	1
0010	WL-16	309+51 C	71' LT	1	1
0010	WL-17	308+28 C	98' LT	1	1
0010	WL-18	307+74 C	95' LT	1	1
0010	WL-19	307+27 C	78' LT	1	1
0010	WL-20	306+63 C	96' LT	1	1
0010	WL-21	306+10 C	91' LT	1	1
0010	WL-22	305+32 C	53' LT	1	1
0010	WL-23	304+34 C	81' LT	1	1
0010	WL-24	303+66 C	69' LT	1	1
			TOTAL 0010	24	24
0020	WL-25	614+04 F	62' RT	1	1
0020	WL-26	613+02 F	117' RT	1	1
0020	WL-27	612+19 F	143' RT	1	1
0020	WL-28	611+07 F	197' RT	1	1
0020	WL-29	610+93 F	162' RT	1	1
0020	WL-30	610+26 F	178' RT	1	1
0020	WL-31	609+89 F	196' RT	1	1
0020	WL-32	609+50 F	130' RT	1	1
0020	WL-33	609+25 F	178' RT	1	1
0020	WL-34	608+86 F	166' RT	1	1
0020	WL-35	608+30 F	196' RT	1	1
0020	WL-36	607+64 F	154' RT	1	1
0020	WL-37	611+97 F	69' RT	1	1
0020	WL-38	611+49 F	114' RT	1	1
0020	WL-39	610+93 F	85' RT	1	1
0020	WL-40	610+35 F	80' RT	1	1
0020	WL-40	609+70 F	61' RT	1	1
0020	WL-42	609+23 F	80' RT	1	1
0020	WL-43	608+72 F	83' RT	1	1
0020	WL-44	607+53 F	73' RT	1	1
0020	WL-45	605+99 F	95' RT	1	1
			TOTAL 0020	21	21
			PROJECT TOTAL	45	45

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SAWING

CATEGORY	STATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
0010	107+50 A	8	15
0010	222+25 B	8	15
	TOTAL 0010	16	30
0020	406+00 D	8	15
0020	509+50 E	8	15
	TOTAL 0020	16	30
	PROJECT TOTAL	32	60

PICNIC TABLES SINGLE PEDESTAL

CATEGORY	STATION	LOCATION	999.1800.S PICNIC TABLES SINGLE PEDESTAL EACH
0010	54+57 L	58' RT	1
0010	55+08 L	66' LT	1
0010	55+36 L	37' RT	1
0010	55+69 L	5' RT	1
0010	57+22 L	4' LT	1
0010	57+22 L	64' LT	1
0010	58+30 L	35' RT	1
0010	58+41 L	67' LT	1
0010	58+52 L	66' LT	1
0010	59+28 L	38' RT	1
0010	59+45 L	56' RT	1
0010	60+13 L	9' LT	1
		TOTAL 0010	12
0020	64+58 M	41' LT	1
0020	64+94 M	52' RT	1
0020	65+20 M	22' LT	1
0020	65+76 M	66' RT	1
0020	65+81 M	37' LT	1
0020	65+87 M	66' RT	1
0020	67+18 M	1' RT	1
0020	67+19 M	61' RT	1
0020	68+77 M	0' RT	1
0020	68+86 M	29' LT	1
0020	69+25 M	65' RT	1
0020	69+52 M	38' LT	1
		TOTAL 0020	12
		PROJECT TOTAL	24

SALVAGE CIGARETTE SNUFFERS

CATEGORY	STATION	LOCATION	SPV.0060.01 SPECIAL (01. SALVAGE CIGARETTE SNUFFERS) EACH
0010	56+60L	29' LT	1
0010	56+66L	6' RT	1
0010	56+79L	33' LT	1
0010	56+85L	3' RT	1
		TOTAL 0010	4
0020	66+89M	8' RT	1
0020	66+99M	44' RT	1
0020	67+07M	3' RT	1
0020	67+18M	38' RT	1
		TOTAL 0020	4
		PROJECT TOTAL	8

SALVAGE RECEPTACLES

CATEGORY	STATION	LOCATION	SPV.0060.02 SPECIAL (02. SALVAGE RECEPTACLES) EACH
0010	54+36L	48' RT	1
0010	54+81L	43' RT	1
0010	55+38L	72' RT	1
0010	55+41L	72' RT	1
0010	55+44L	72' RT	1
0010	55+56L	89' LT	1
0010	55+58L	90' LT	1
0010	55+62L	91' LT	1
0010	56+57L	7' RT	1
0010	56+60L	6' RT	1
0010	56+61L	70' RT	1
0010	56+62L	6' RT	1
0010	56+66L	69' RT	1
0010	56+68L	108' LT	1
0010	56+72L	70' RT	1
0010	56+72L	108' LT	1
0010	56+75L	108' LT	1
0010	56+7L	70' RT	1
0010	56+79L	23' RT	1
0010	56+81L	70' RT	1
0010	56+99L	56' LT	1
0010	57+52L	49' RT	1
0010	57+91L	104' LT	1
0010	57+94L	103' LT	1
0010	57+97L	103' LT	1
0010	58+02L	68' RT	1
0010	58+05L	68' RT	1
0010	58+09L	68' RT	1
0010	58+50L	38' RT	1
0010	58+60L	55' LT	1
0010	59+12L	30' RT	1
0010	59+50L	51' LT	1
0010	59+87L	41' RT	1
		TOTAL 0010	33
0020	63+85M	31' LT	1
0020	65+42M	69' RT	1
0020	65+74M	54' LT	1
0020	65+77M	54' LT	1
0020	65+81M	54' LT	1
0020	66+02M	110' RT	1
0020	66+05M	110' RT	1
0020	66+08M	110' RT	1
0020	66+36M	32' LT	1
0020	66+77M	70' RT	1
0020	66+98M	111' RT	1
0020	67+00M	14' LT	1
0020	67+02M	111' RT	1
0020	67+02M	54' LT	1
0020	67+05M	111' RT	1
0020	67+06M	54' LT	1
0020	67+10M	54' LT	1
0020	67+14M	54' LT	1
0020	67+19M	54' LT	1
0020	68+13M	111' RT	1
0020	68+16M	111' RT	1
0020	68+20M	111' RT	1
0020	68+37M	53' LT	1
0020	68+40M	53' LT	1
0020	68+43M	53' LT	1
0020	69+65M	18' RT	1
		TOTAL 0020	26
		PROJECT TOTAL	59

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

HISTORICAL MARKERS

CATEGORY	STATION	LOCATION	SPV.0060.04 SPECIAL (04. SALVAGE AND REINSTALL HISTORICAL SIGN) EACH
0010	57+93 L	LT	1
		TOTAL 0010	1
0020	66+50 M	RT	1
		TOTAL 0020	1
		PROJECT TOTAL	2

FLAG POLES

CATEGORY	STATION	LOCATION	SPV.0060.14 SPECIAL (14. FLAG POLE 35 FT) EACH	SPV.0060.15 SPECIAL (15. FLAG POLE 30FT) EACH	SPV.0060.16 SPECIAL (16. IN-GROUND FLAG POLE FIXTURE) EACH
0010	58+01 L	14' LT	1		3
0010	58+01 L	26' LT		1	3
		TOTAL 0010	1	1	6
0020	66+42 M	15' RT	1		3
0020	66+42 M	27' RT		1	3
		TOTAL 0020	1	1	6
		PROJECT TOTAL	2	2	12

BENCHES

CATEGORY	STATION	LOCATION	SPV.0060.17 SPECIAL (17. BENCHES) EACH
0010	57+03 L	3' LT	1
0010	57+03 L	50' LT	1
		TOTAL 0010	2
0020	67+40 M	11' RT	1
0020	67+40 M	50' RT	1
		TOTAL 0020	2
		PROJECT TOTAL	4

RECEPTACLES

CATEGORY	LOCATION	SPV.0060.18 SPECIAL (18. RECEPTACLES) EACH
0010	PLAZA	16
	TOTAL 0010	16
0020	PLAZA	19
	TOTAL 0020	19
	PROJECT TOTAL	35

NATIVE POLLINATOR SEEDING

	630.0400	SPV.0085.01	
CATEGORY	LOCATION	SEEDING NURSE CROP LB	SPECIAL (01. NATIVE POLLINATOR SEEDING MIXTURE NO. 90B) LB	REMARKS
0010	RA 51	1	0.25	CYCLES BASED ON ONE VISIT EVERY TWO WEEKS BETWEEN MAY 15 AND SEPTEMBER 15
	TOTAL 0010	1	0.25	
	PROJECT TOTAL	1	1	

PERENNIALS

CATEGORY	LOCATION	SPV.0060.31 SPECIAL (31. PERENNIAL (WILD COLUMBINE) EACH	SPV.0060.32 SPECIAL (32. PERENNIAL (BUTTERFLY WEED) EACH	SPV.0060.33 SPECIAL (33. PERENNIAL (CONEFLOWER) EACH	SPV.0060.34 SPECIAL (34. PERENNIAL (PRAIRIE SMOKE) EACH	SPV.0060.35 SPECIAL (35. PERENNIAL (BLACK-EYED SUSAN) EACH	SPV.0060.36 SPECIAL (36. PERENNIAL (WILD GERANIUM) EACH	SPV.0060.37 SPECIAL (37. PERENNIAL (IRIS) EACH	SPV.0060.38 SPECIAL (38. PERENNIAL (SAGE) EACH	SPV.0060.39 SPECIAL (39. PERENNIAL (GOLDEN ALEXANDER) EACH
0010	PLAZA	20	40	45	516	47	53	725	117	70
	TOTAL 0010	20	40	45	516	47	53	725	117	70
0020	PLAZA		28	24	475	48	56	480	123	54
	TOTAL 0020	0	28	24	475	48	56	480	123	54
	PROJECT TOTAL	20	68	69	991	95	109	1,205	240	124

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

FTMS CONDUIT AND WIRE

CATEGORY	ROADWAY / SITE	ITEM ID	LINEAR DISTANCE	652.0125 CONDUIT RIGID METALLIC 2-INCH LF	* 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	655.0625 ELECTRICAL WIRE LIGHTING 6 AWG LF
	I 43					
0020	DMS-05-0020	MBDMS050020 - PBTH01	10	--	10	30
		PBTH01 - DMS-05-0020	15	15	--	45
	REST AREA 52	RA52 POWER PANEL - PBRA5203	30	--	30	90
		PBRA5203 - PBRA5202	75	--	75	225
		PBRA5202 - PBRA5201	40	--	40	120
		PBRA5201 - CCTV-36-0115	10	10	--	30
		CATEGORY 0020 SUBTOTALS		25	155	540
0010	DMS-36-0021	MBDMS360021 - PB14701	10	--	10	30
		PB14701 - PB14702	60	--	60	180
		PB14702 - DMS-36-0021	10	10	--	30
	REST AREA 51	RA51 POWER PANEL - PBRA5104	20	--	20	60
		PBRA5104 - PBRA5103	15	--	15	45
		PBRA5103 - PBRA5102	115	--	115	345
		PBRA5102 - PBRA5101	15	--	15	45
		PBRA5101 - CCTV-36-0114	10	10	--	30
		CATEGORY 0010 SUBTOTALS		20	235	765
		TOTALS		45	390	1305

MISCELLANEOUS ITEMS

ROADWAY / SITE	ROADWAY	670.0101 FIELD SYSTEM INTEGRATOR EACH	670.0201 ITS DOCUMENTATION EACH
	IH 43		
REST AREA 52		0.5	0.5
CATEGORY 0020 SUBTOTALS		0.5	0.5
REST AREA 51		0.5	0.5
CATEGORY 0010 SUBTOTALS		0.5	0.5
TOTALS		1	1

3

DMS EQUIPMENT

ROADWAY / SITE	LOCATION	656.0201.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL (MBDMS050020) EACH	657.0201.02 ELECTRICAL SERVICE METER BREAKER PEDESTAL (MBDMS360021) EACH	STEEL POST TYPE	INFO-ONLY PLAQUES SEQUENCE IDENTIFICATION EACH	531.1100 CONCRETE MASONRY ANCILLARY STRUCTURES TYPE NS CY	531.1140 STEEL REINFORCEMENT HS ANCILLARY STRUCTURES TYPE NS LB	531.2024 DRILLING SHAFT 24-INCH LF	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS LB	637.1220 SIGNS TYPE 1 REFLECTIVE SH SF	SPV.0060.20 INSTALL HYBRID DYNAMIC MESSAGE SIGN EACH	INFO ONLY - POST LENGTHS TO BE VERIFIED BY CONTRACTOR: POST NO. 1 LENGTH FT	POST NO. 2 LENGTH FT	SIGN OFFSET DISTANCE FT
REST AREA 52														
DMS-05-0020	I 43 SB AT W. TOWN HALL RD.	1	--	W12X26	1	2.4	360	20	1294	136	1	18.32	19.74	5*
	CATEGORY 0020 SUBTOTALS	1	--		1	2.4	360	20	1294	136	1			
REST AREA 51														
DMS-36-0021	I 43 NB AT HWY 147 / HWY Z	--	1	W12X26	1	2.4	360	20	1237	136	1	17.42	18.47	5*
	CATEGORY 0010 SUBTOTALS	--	1		1	2.4	360	20	1237	136	1			
	TOTALS	1	1	--	2	4.8	720	40	2531	272	2			

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

FTMS PULL BOXES AND VAULTS

CATEGORY	ROADWAY / SITE	ITEM ID.	LOCATION STATION	LOCATION OFFSET	531.2036 DRILLING SHAFT 36-INCH LF	531.4050 FOUNDATION CAMERA POLE 50-FT EACH	653.0140 PULL BOXES STEEL 24 X 42 - INCH EACH	656.0501.01 ELECTRICAL SERVICE BREAKER DISCONNECT BOX (01. CCTV360115) EACH	656.0501.02 ELECTRICAL SERVICE BREAKER DISCONNECT BOX (02. CCTV360114) EACH	656.0501.03 ELECTRICAL SERVICE BREAKER DISCONNECT BOX (03. DMS050020) EACH	656.0501.04 ELECTRICAL SERVICE BREAKER DISCONNECT BOX (04. DMS360021) EACH	673.1225.S INSTALL POLE MOUNTED CABINET EACH	677.0150 INSTALL CAMERA POLE 50-FT EACH	677.0200 INSTALL CAMERA ASSEMBLY EACH	678.0800 INSTALL CELLULAR MODEM EACH	SPV.0060.19 GROUND ROD EACH	SPV.0060.21 INSTALL WIRELESS TRAFFIC SENSOR EACH	SPV.0060.22 INSTALL WIRELESS TRAFFIC SENSOR REPEATER EACH	SPV.0060.23 INSTALL WIRELESS TRAFFIC SENSOR ACCESS POINT EACH
	I 43																		
0020	DMS-05-0020	PBTH01	--		--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		DMS-45-0020	--		--	--	--	--	--	1	--	1	--	--	1	1	--	--	--
	REST AREA 52	WTSA416	60+65	113.6' LT	--	--	--	--	--	--	--	--	--	--	--	--	6	--	--
		LP416	--		--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
		CCTV-36-0115	67+68	102.7' RT	10	1	--	1	--	--	--	1	1	1	1	1	--	--	2
		PBRA5201	--		--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		PBRA5202	--		--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		PBRA5203	--		--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		PBRA5204	--		--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		WTSA616	73+19	171.2' RT	--	--	--	--	--	--	--	--	--	--	--	--	6	--	--
		LP616	--		--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
	CATEGORY 0020 SUBTOTALS				10	1	5	1	--	1	--	2	1	1	2	2	12	2	2
0010	DMS-36-0021	PB14701	--		--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		PB14702	--		--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		DMS-36-0021	--		--	--	--	--	--	--	1	1	--	--	1	1	--	--	--
	REST AREA 51	WTSA310	63.79	97.4' RT	--	--	--	--	--	--	--	--	--	--	--	--	6	--	--
		LP310	--		--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
		CCTV-36-0114	56+72	118.7' LT	10	1	--	--	1	--	--	1	1	1	1	1	--	--	2
		PBRA5101	56+71	112.8' LT	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		PBRA5102	56+73	98.2' LT	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		PBRA5103	55+67	60.7' LT	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		PBRA5104	55+67	45.8' LT	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		WTSA115	50+80	162.3' RT	--	--	--	--	--	--	--	--	--	--	--	--	6	--	--
		LP115	--		--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
	CATEGORY 0010 SUBTOTALS				10	1	6	--	1	--	1	2	1	1	2	2	12	2	2
	TOTALS				20	2	11	1	1	1	1	4	2	2	4	4	24	4	4

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

FTMS CONDUIT AND WIRE

CATEGORY	ROADWAY / SITE	ITEM ID	LINEAR DISTANCE	652.0125 CONDUIT RIGID METALLIC 2-INCH LF	* 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	655.0625 ELECTRICAL WIRE LIGHTING 6 AWG LF
	I 43					
0020	DMS-05-0020	MBDMS050020 - PBTH01	10	--	10	30
		PBTH01 - DMS-05-0020	15	15	--	45
	REST AREA 52	RA52 POWER PANEL - PBRA5203	30	--	30	90
		PBRA5203 - PBRA5202	75	--	75	225
		PBRA5202 - PBRA5201	40	--	40	120
		PBRA5201 - CCTV-36-0115	10	10	--	30
		CATEGORY 0020 SUBTOTALS		25	155	540
0010	DMS-36-0021	MBDMS360021 - PB14701	10	--	10	30
		PB14701 - PB14702	60	--	60	180
		PB14702 - DMS-36-0021	10	10	--	30
	REST AREA 51	RA51 POWER PANEL - PBRA5104	20	--	20	60
		PBRA5104 - PBRA5103	15	--	15	45
		PBRA5103 - PBRA5102	115	--	115	345
		PBRA5102 - PBRA5101	15	--	15	45
		PBRA5101 - CCTV-36-0114	10	10	--	30
		CATEGORY 0010 SUBTOTALS		20	235	765
		TOTALS		45	390	1305

MISCELLANEOUS ITEMS

ROADWAY / SITE	ROADWAY	670.0101 FIELD SYSTEM INTEGRATOR EACH	670.0201 ITS DOCUMENTATION EACH
	IH 43		
REST AREA 52		0.5	0.5
CATEGORY 0020 SUBTOTALS		0.5	0.5
REST AREA 51		0.5	0.5
CATEGORY 0010 SUBTOTALS		0.5	0.5
TOTALS		1	1

3

DMS EQUIPMENT

ROADWAY / SITE	LOCATION	656.0201.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL (MBDMS050020) EACH	657.0201.02 ELECTRICAL SERVICE METER BREAKER PEDESTAL (MBDMS360021) EACH	STEEL POST TYPE	INFO-ONLY PLAQUES SEQUENCE IDENTIFICATION EACH	531.1100 CONCRETE MASONRY ANCILLARY STRUCTURES TYPE NS CY	531.1140 STEEL REINFORCEMENT HS ANCILLARY STRUCTURES TYPE NS LB	531.2024 DRILLING SHAFT 24-INCH LF	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS LB	637.1220 SIGNS TYPE 1 REFLECTIVE SH SF	SPV.0060.20 INSTALL HYBRID DYNAMIC MESSAGE SIGN EACH	INFO ONLY - POST LENGTHS TO BE VERIFIED BY CONTRACTOR: POST NO. 1 LENGTH FT	POST NO. 2 LENGTH FT	SIGN OFFSET DISTANCE FT
REST AREA 52														
DMS-05-0020	I 43 SB AT W. TOWN HALL RD.	1	--	W12X26	1	2.4	360	20	1604	136	1	22.00	28.00	5*
	CATEGORY 0020 SUBTOTALS	1	--		1	2.4	360	20	1604	136	1			
REST AREA 51														
DMS-36-0021	I 43 NB AT HWY 147 / HWY Z	--	1	W12X26	1	2.4	360	20	1448	136	1	20.00	24.00	5*
	CATEGORY 0010 SUBTOTALS	--	1		1	2.4	360	20	1448	136	1			
	TOTALS	1	1	--	2	4.8	720	40	3052	272	2			

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

FTMS PULL BOXES AND VAULTS

CATEGORY	ROADWAY / SITE	ITEM ID.	LOCATION STATION	LOCATION OFFSET	531.2036 DRILLING SHAFT 36-INCH LF	531.4050 FOUNDATION CAMERA POLE 50-FT EACH	653.0140 PULL BOXES STEEL 24 X 42 - INCH EACH	656.0501.01 ELECTRICAL SERVICE BREAKER DISCONNECT BOX (01. CCTV360115) EACH	656.0501.02 ELECTRICAL SERVICE BREAKER DISCONNECT BOX (02. CCTV360114) EACH	656.0501.03 ELECTRICAL SERVICE BREAKER DISCONNECT BOX (03. DMS050020) EACH	656.0501.04 ELECTRICAL SERVICE BREAKER DISCONNECT BOX (04. DMS360021) EACH	673.1225.S INSTALL POLE MOUNTED CABINET EACH	677.0150 INSTALL CAMERA POLE 50-FT EACH	677.0200 INSTALL CAMERA ASSEMBLY EACH	678.0800 INSTALL CELLULAR MODEM EACH	SPV.0060.19 GROUND ROD EACH	SPV.0060.21 INSTALL WIRELESS TRAFFIC SENSOR EACH	SPV.0060.22 INSTALL WIRELESS TRAFFIC SENSOR REPEATER EACH	SPV.0060.23 INSTALL WIRELESS TRAFFIC SENSOR ACCESS POINT EACH
	I 43																		
0020	DMS-05-0020	PBTH01	--		--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		DMS-45-0020	--		--	--	--	--	--	1	--	1	--	--	1	1	--	--	--
	REST AREA 52	WTSA416	60+65	113.6' LT	--	--	--	--	--	--	--	--	--	--	--	--	6	--	--
		LP416	--		--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
		CCTV-36-0115	67+68	102.7' RT	10	1	--	1	--	--	--	1	1	1	1	1	--	--	2
		PBRA5201	--		--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		PBRA5202	--		--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		PBRA5203	--		--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		PBRA5204	--		--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		WTSA616	73+19	171.2' RT	--	--	--	--	--	--	--	--	--	--	--	--	6	--	--
		LP616	--		--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
	CATEGORY 0020 SUBTOTALS				10	1	5	1	--	1	--	2	1	1	2	2	12	2	2
0010	DMS-36-0021	PB14701	--		--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		PB14702	--		--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		DMS-36-0021	--		--	--	--	--	--	--	1	1	--	--	1	1	--	--	--
	REST AREA 51	WTSA310	63.79	97.4' RT	--	--	--	--	--	--	--	--	--	--	--	--	6	--	--
		LP310	--		--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
		CCTV-36-0114	56+72	118.7' LT	10	1	--	--	1	--	--	1	1	1	1	1	--	--	2
		PBRA5101	56+71	112.8' LT	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		PBRA5102	56+73	98.2' LT	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		PBRA5103	55+67	60.7' LT	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		PBRA5104	55+67	45.8' LT	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
		WTSA115	50+80	162.3' RT	--	--	--	--	--	--	--	--	--	--	--	--	6	--	--
		LP115	--		--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
	CATEGORY 0010 SUBTOTALS				10	1	6	--	1	--	1	2	1	1	2	2	12	2	2
	TOTALS				20	2	11	1	1	1	1	4	2	2	4	4	24	4	4

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

BEGIN PROJECT
STA 1863+97.58 NB
Y = 383831.925
X = 194027.283

GRETZ RD

BP: 100+00.00 A

PCC: 104+00.55 A

105+00 A

110+00 A

MATCHLINE STA 111+00 A

WPS ELECTRIC

BRIGHTSPEED COMM

R/W

LUMEN (LEVEL 3) COMM

SI

SI

1855+00 SB

1860+00 SB

IH 43 SB

1865+00 SB

PT: 1867+74.06 SB

1855+00 NB

IH 43 NB

1860+00 NB

WPS ELECTRIC

BEGIN CONSTRUCTION
STA 107+50.00 A
MATCH EXISTING
SAW CUT REQ'D

N

5

5

VCL = 190.00
K = 443.32

VCL = 200.00
K = 370.37

STA 107+50.00
EL 829.93

PROPOSED PROFILE

0.37%

0.80%

ORIGINAL GROUND

VPC STA 107+55.00
VPC EL 829.95

VPI STA 108+50.00
VPI EL 830.30

VPT STA 109+45.00
VPT EL 831.06

VPC STA 110+00.00
VPC EL 831.50

VPI STA 111+00.00
VPI EL 832.30

EXISTING R/L ELEVATION

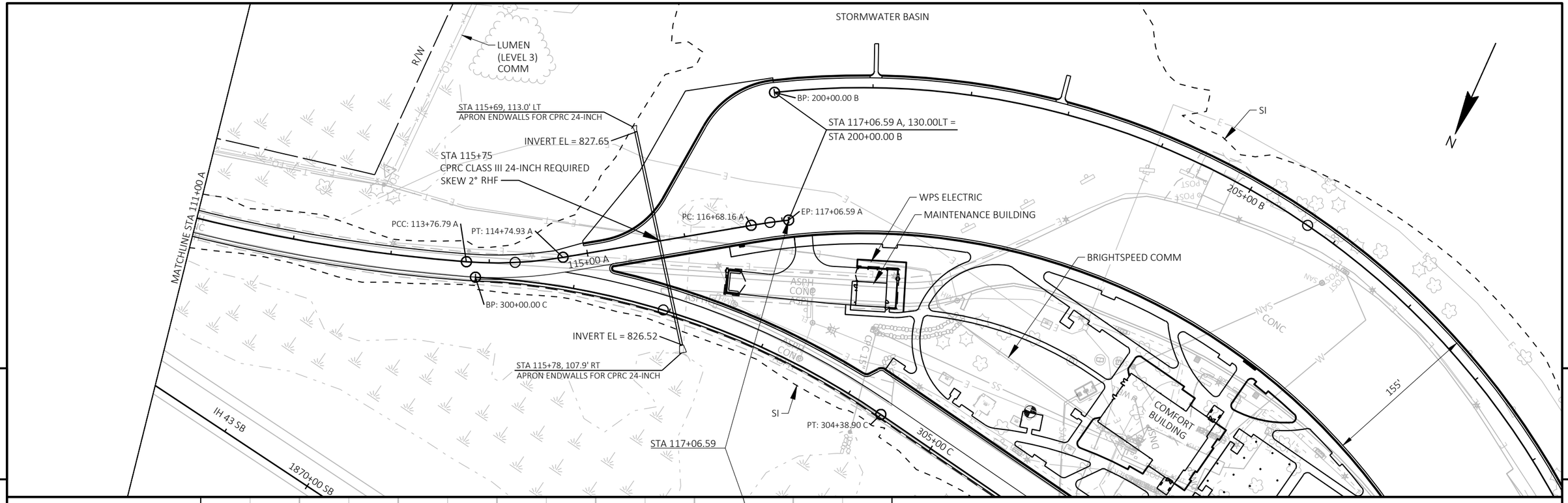
PROPOSED R/L ELEVATION

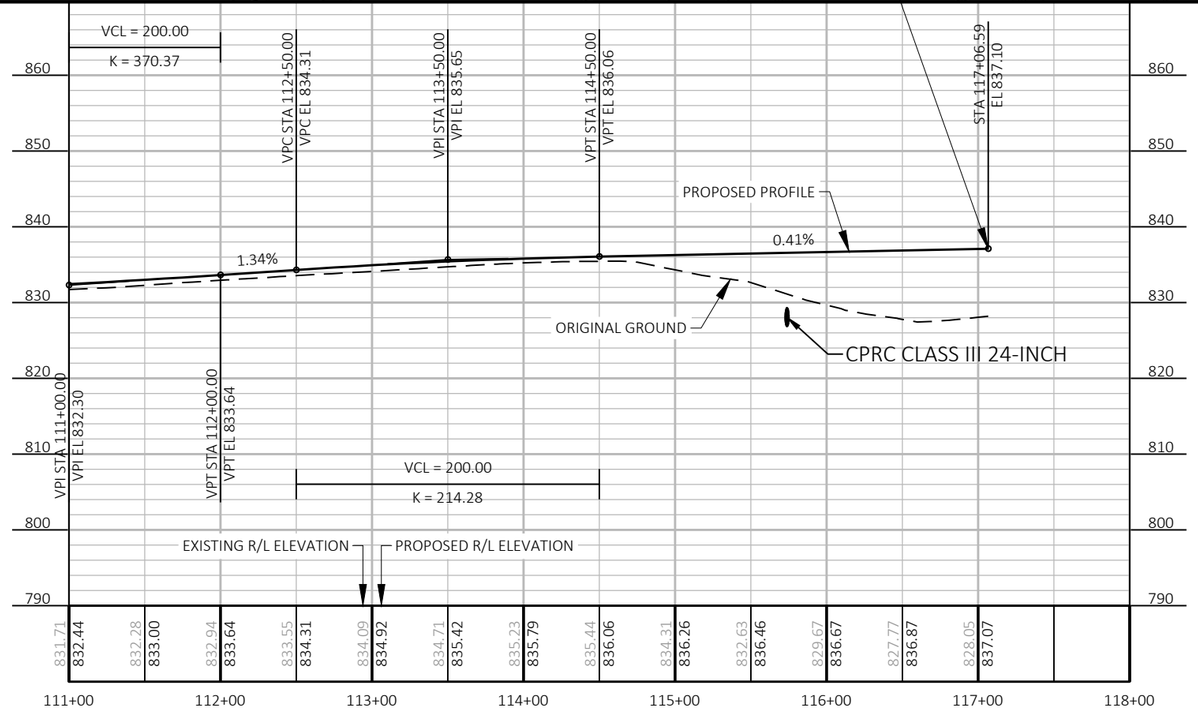
	827.67	827.74	828.04	828.30	828.56	828.79	829.08	829.44	829.72	829.80	829.83	829.74	829.78	829.85	829.86	829.93	829.93	829.92	830.14	830.06	830.40	830.20	830.72	830.36	831.10	830.71	831.50	831.15	831.93	831.71	832.44

860 850 840 830 820 810 800 790

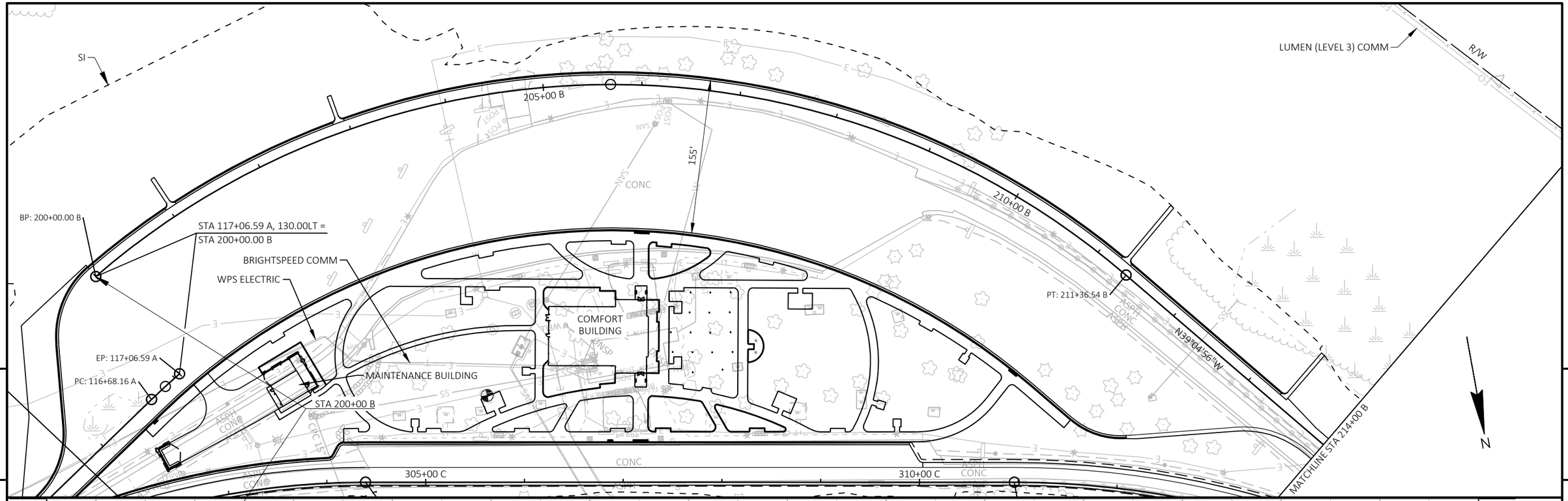
99+00 100+00 101+00 102+00 103+00 104+00 105+00 106+00 107+00 108+00 109+00 110+00 111+00

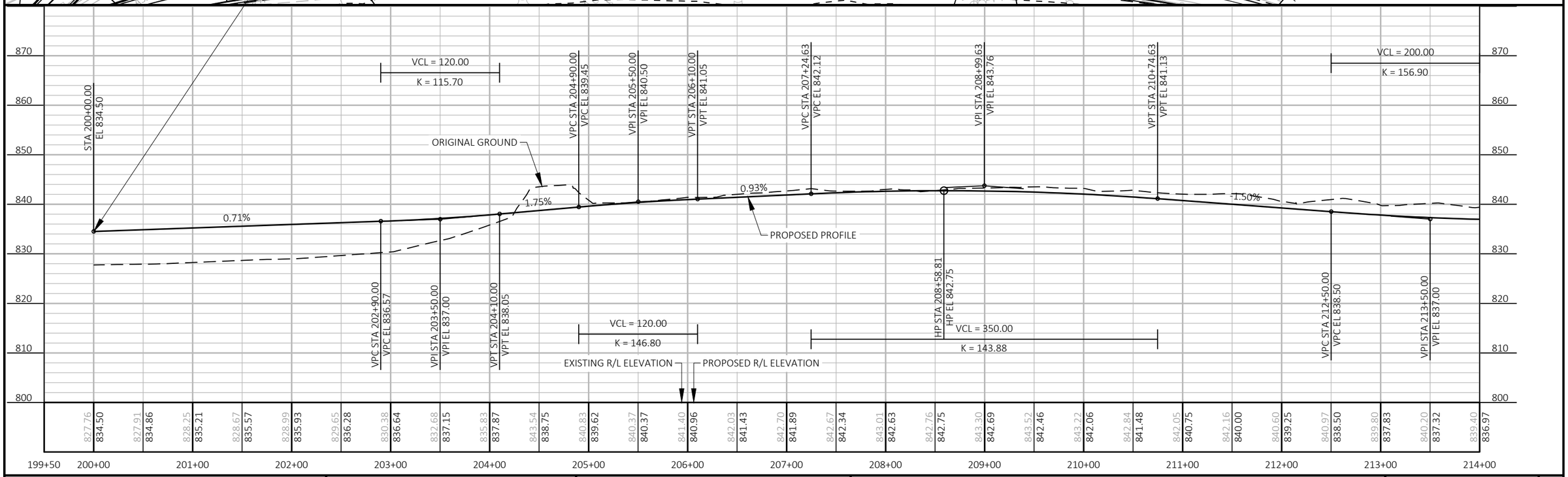
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN AND PROFILE: REST AREA 51 - IH 43 SB ENTRANCE RAMP	SHEET 248	E





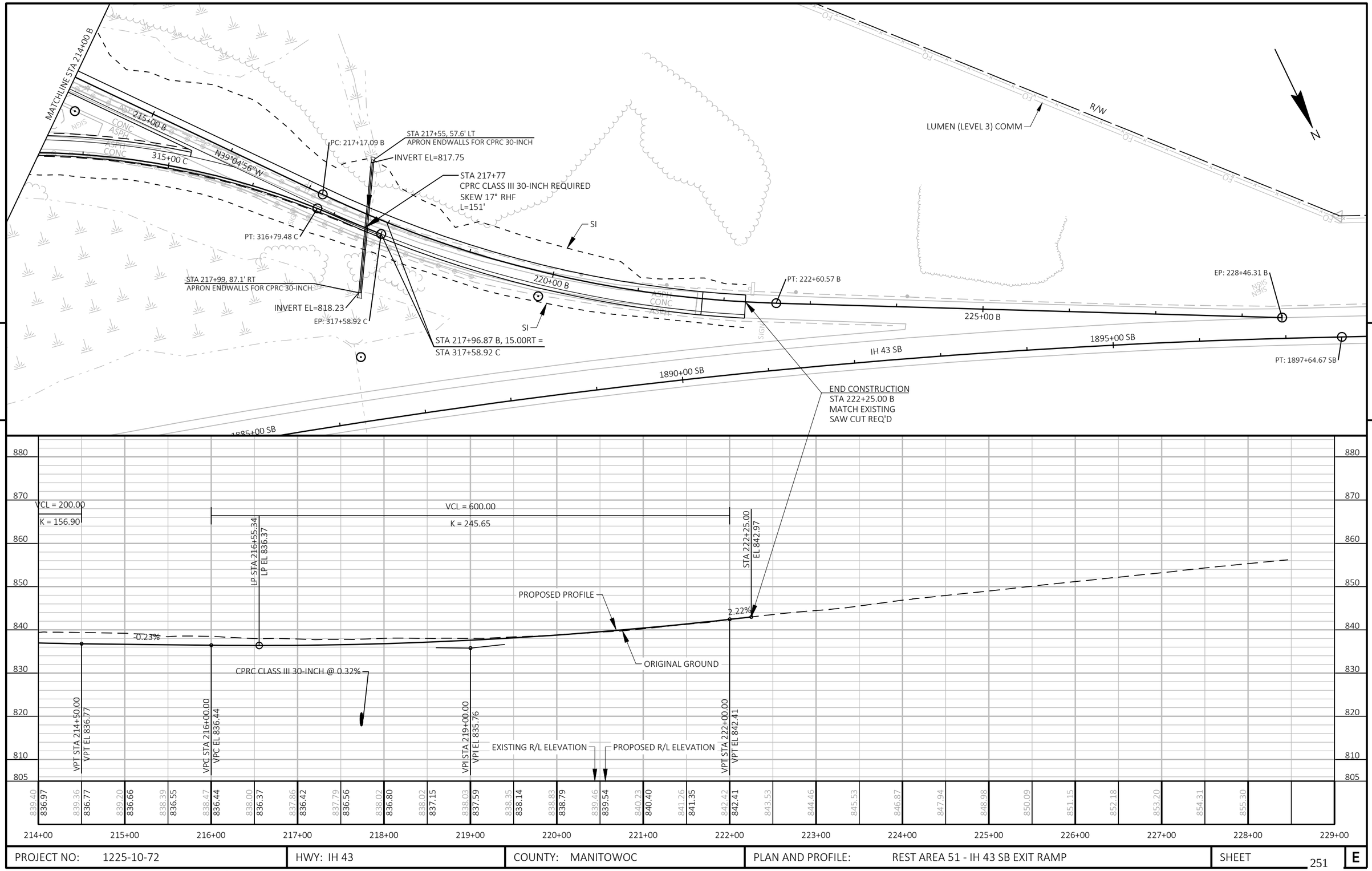
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN AND PROFILE: REST AREA 51 - IH 43 SB ENTRANCE RAMP	SHEET 249	E





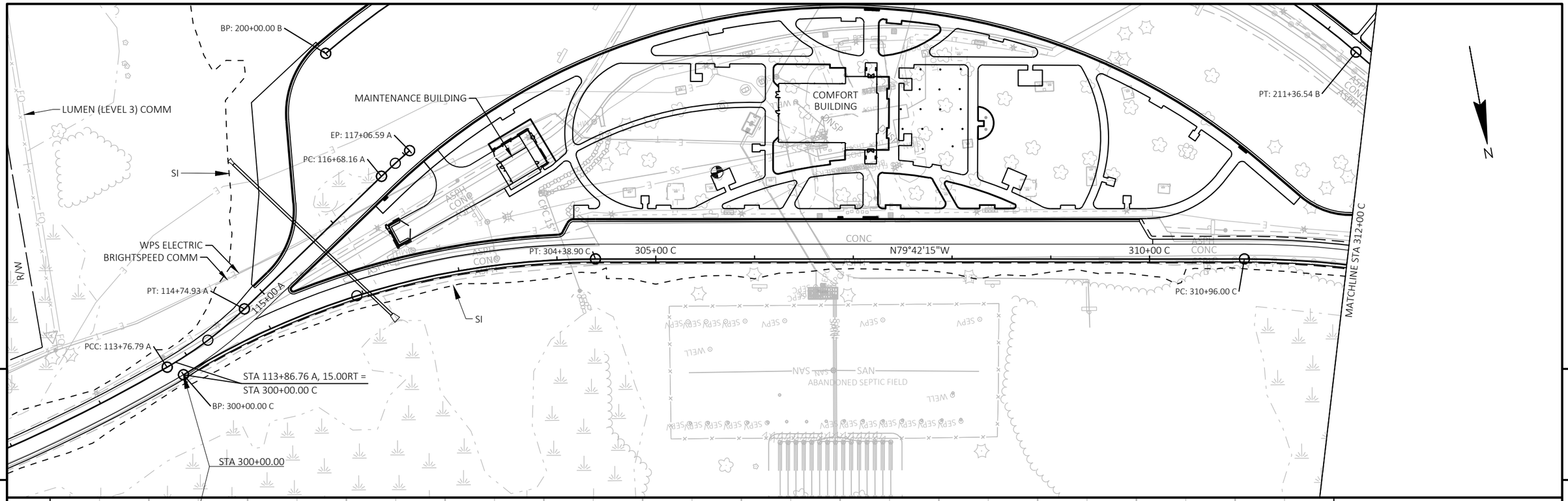
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN AND PROFILE: REST AREA 51 - TRUCK LOT	SHEET 250	E

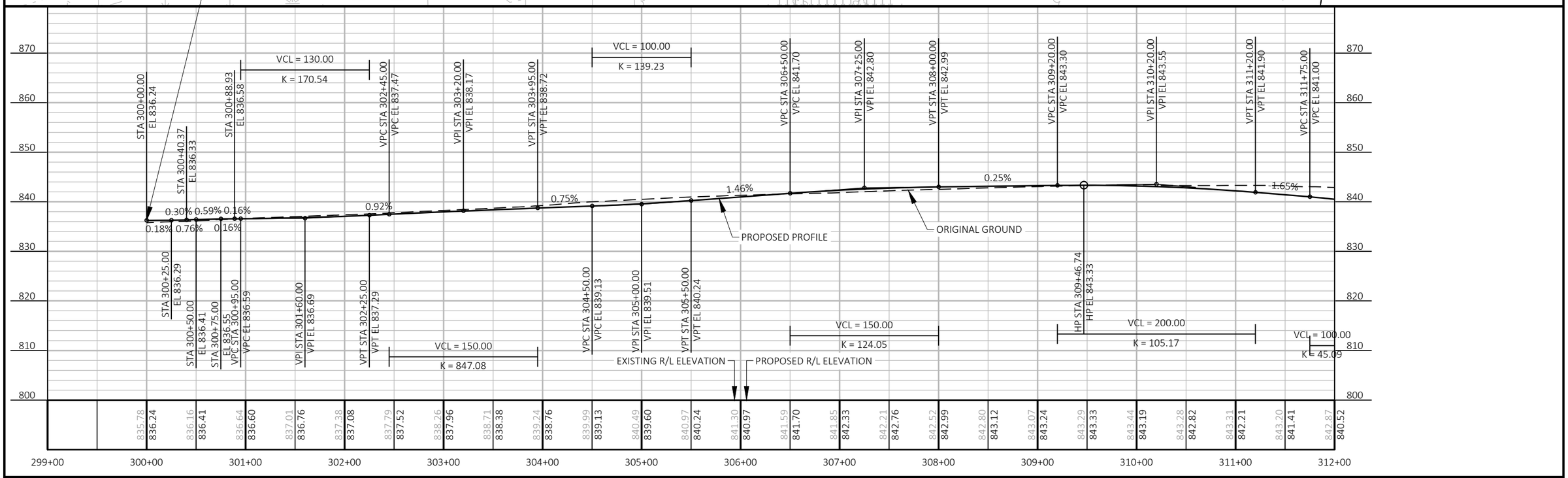
FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\050101-PP_RA51 B.DWG
LAYOUT NAME - 050103-pp B
PLOT DATE : 11/26/2024 11:56 AM
PLOT BY : DAVID YAHNKE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN AND PROFILE: REST AREA 51 - IH 43 SB EXIT RAMP	SHEET 251	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\050101-PP_RA51 B.DWG
LAYOUT NAME - 050104-pp B
PLOT DATE : 11/26/2024 11:56 AM
PLOT BY : DAVID YAHNKE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



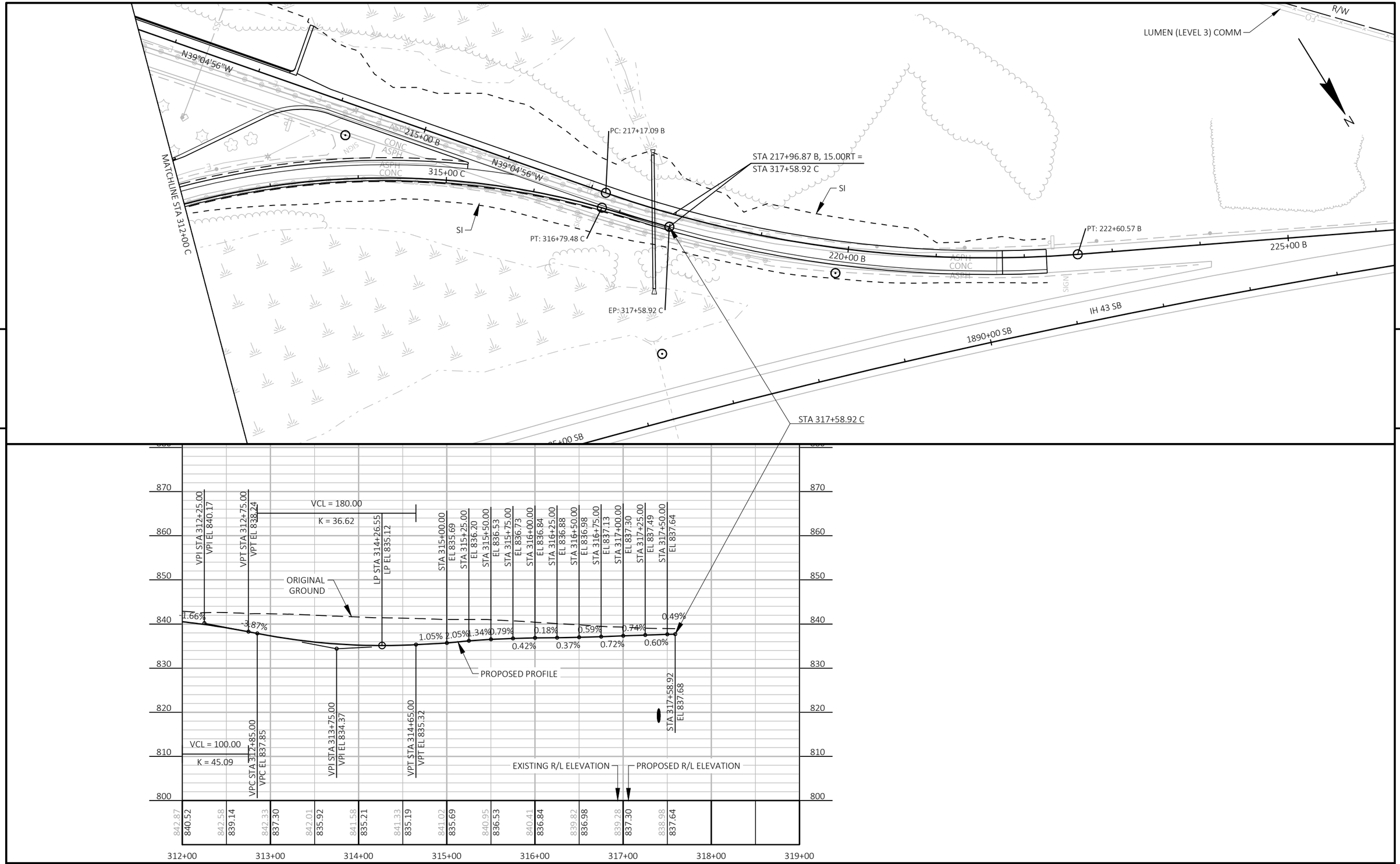


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN AND PROFILE: REST AREA 51 - CAR LOT	SHEET 252	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\050101-PP_RA51 C.DWG
LAYOUT NAME - 050105-pp C

PLOT DATE : 11/26/2024 11:57 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

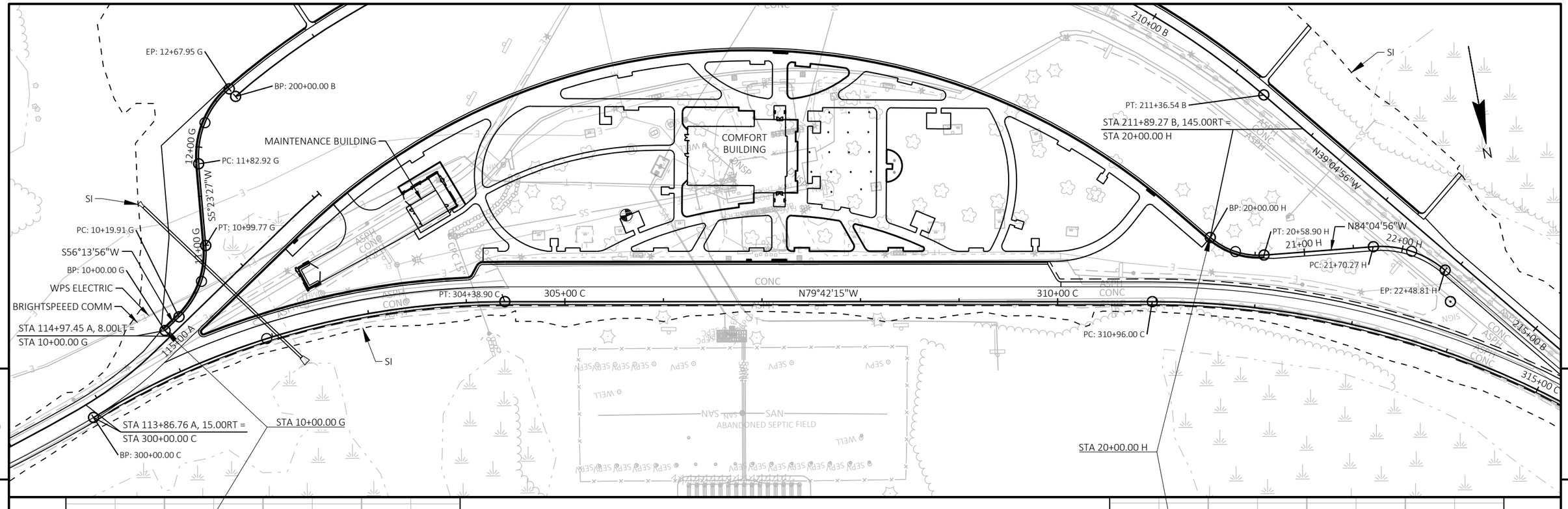


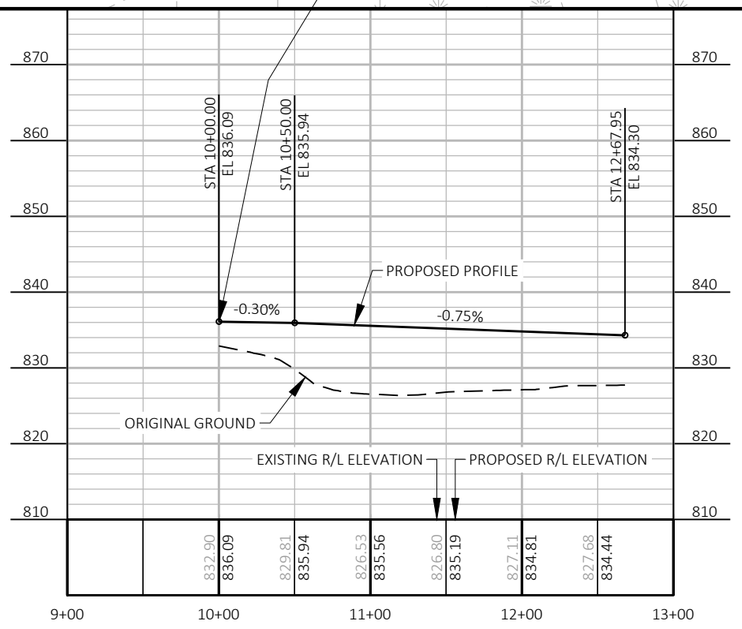
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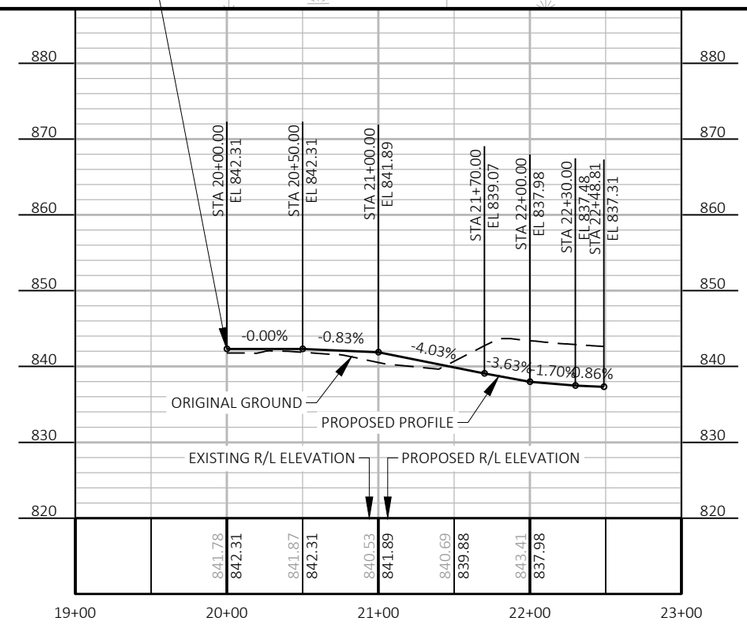
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN AND PROFILE: REST AREA 51-- CAR LOT	SHEET 253	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\050101-PP_RA51 C.DWG
LAYOUT NAME - 050106-pp C
PLOT DATE : 11/26/2024 11:57 AM
PLOT BY : DAVID YAHNKE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44





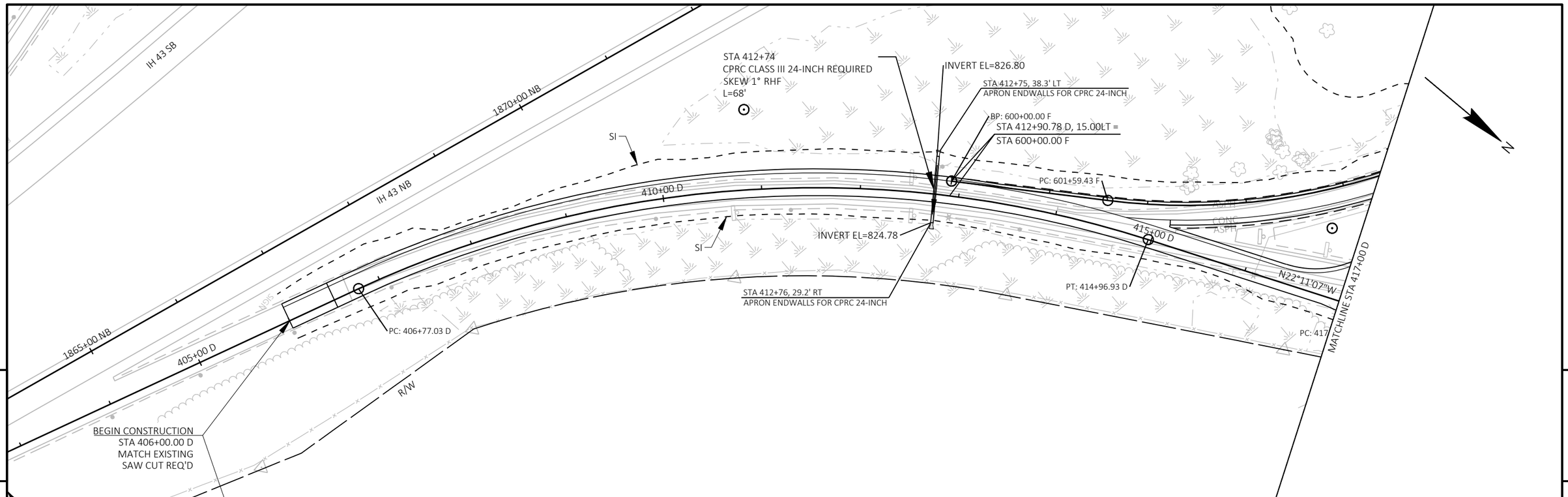


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN AND PROFILE: REST AREA 51 - TRUCK LOT ENTRANCE AND EXIT	SHEET 254	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\050101-PP_RA51 G-H.DWG
LAYOUT NAME - 050107-pp G-H

PLOT DATE : 11/26/2024 11:57 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

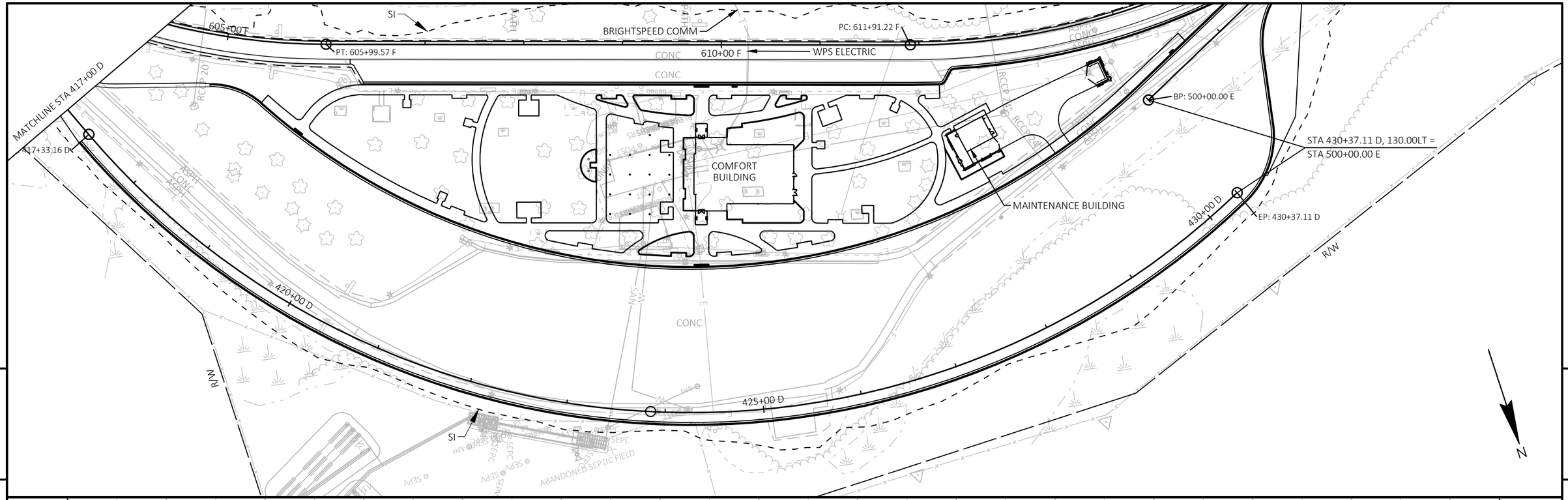


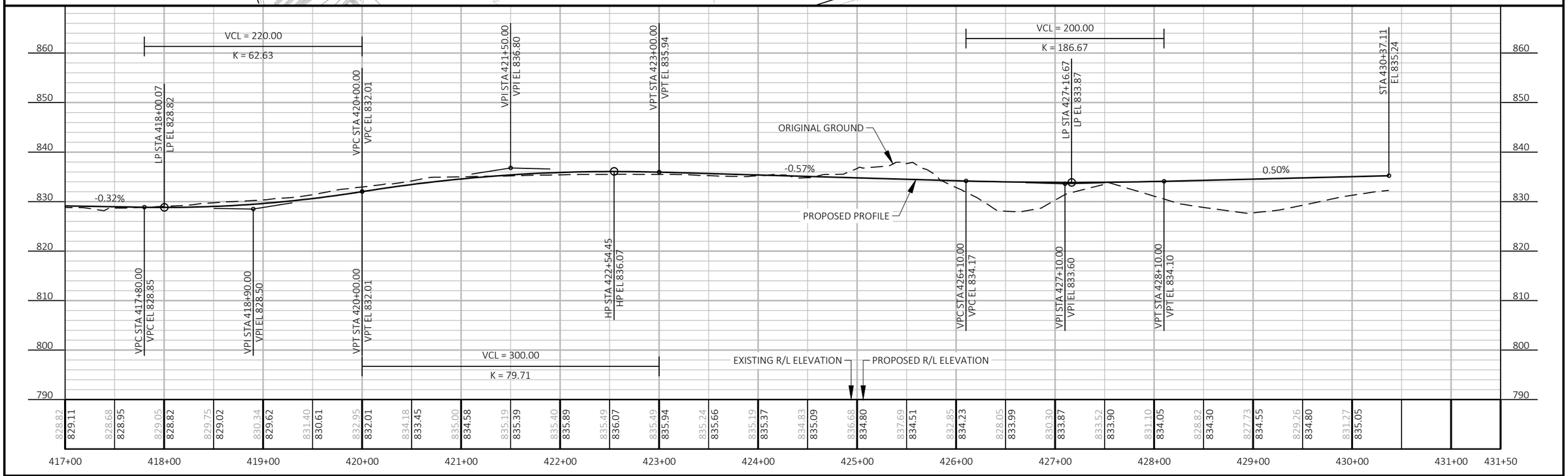
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN AND PROFILE: REST AREA 52 - IH 43 NB EXIT RAMP	SHEET 255 E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\050101-PP_RA52 D.DWG
LAYOUT NAME - 050108-pp D

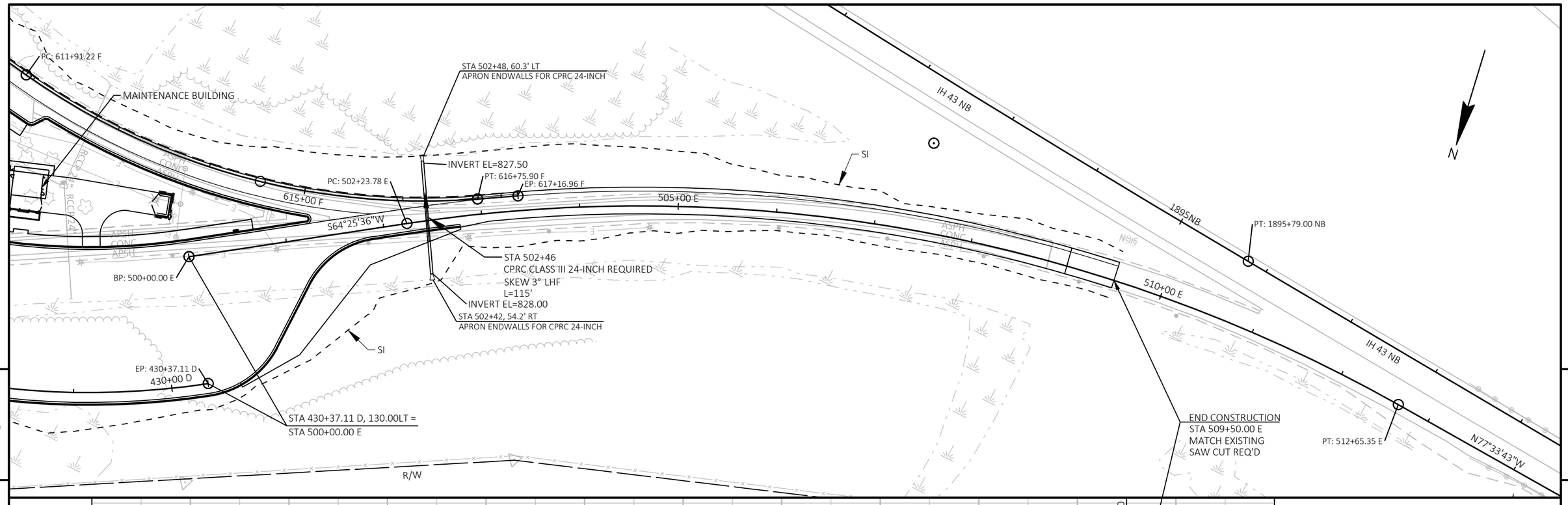
PLOT DATE : 11/26/2024 11:58 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44





PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN AND PROFILE: REST AREA 52 - TRUCK LOT	SHEET 256	E

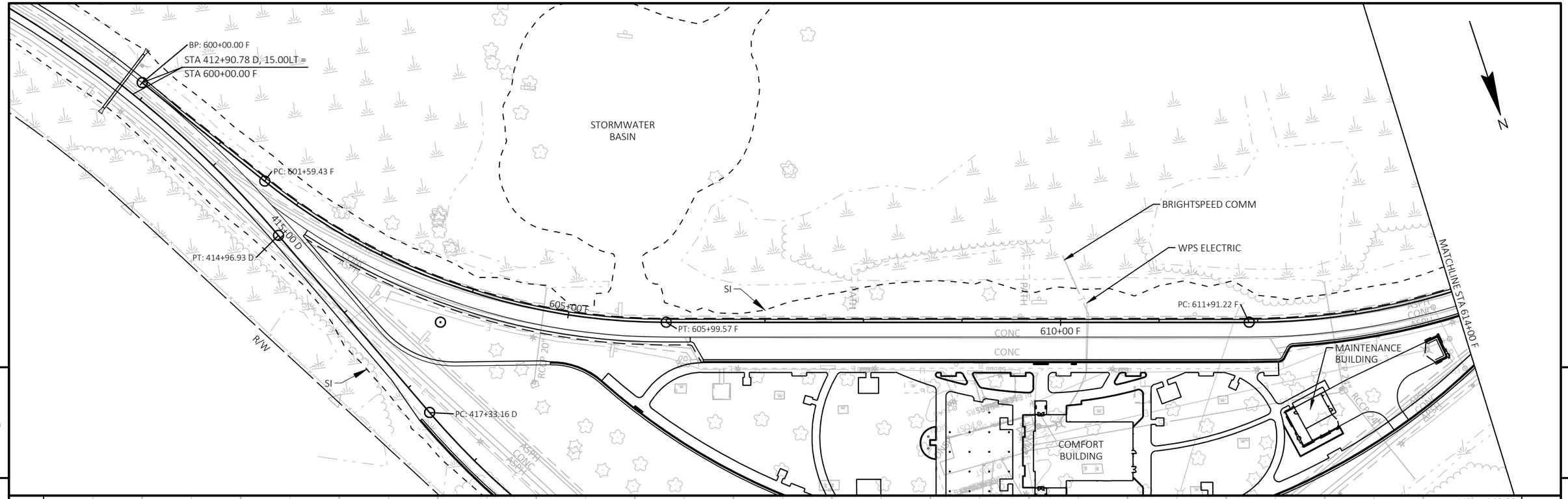


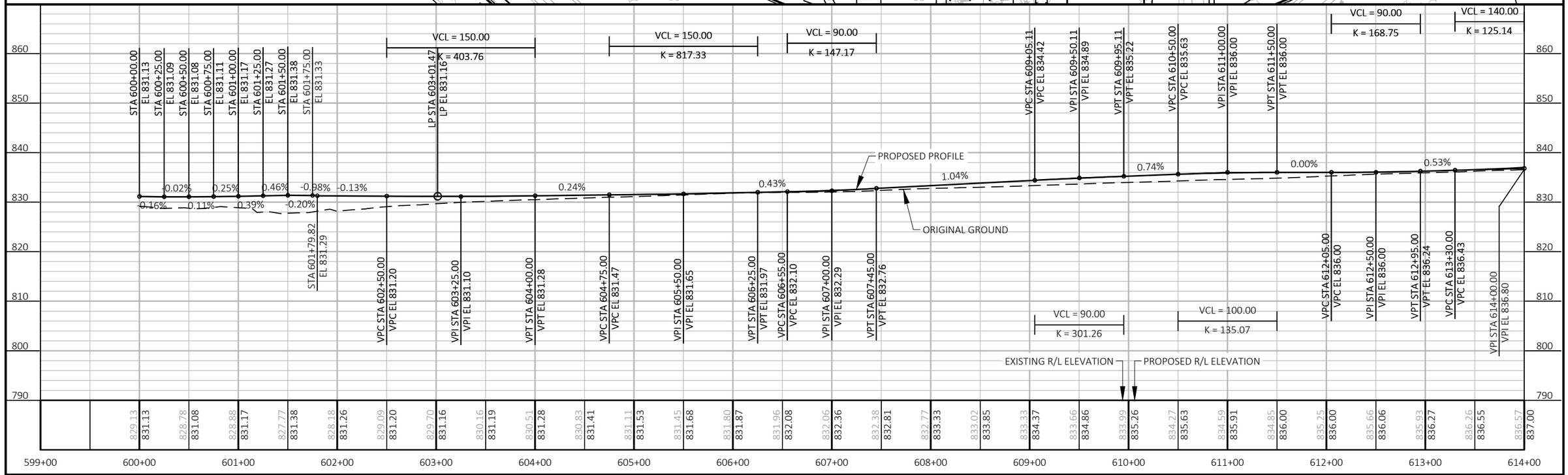
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN AND PROFILE: REST AREA 52 - IH 43 NB ENTRANCE RAMP	SHEET 257	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\050101-PP_RA52 E.DWG
LAYOUT NAME - 050110-pp E

PLOT DATE : 11/26/2024 11:58 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



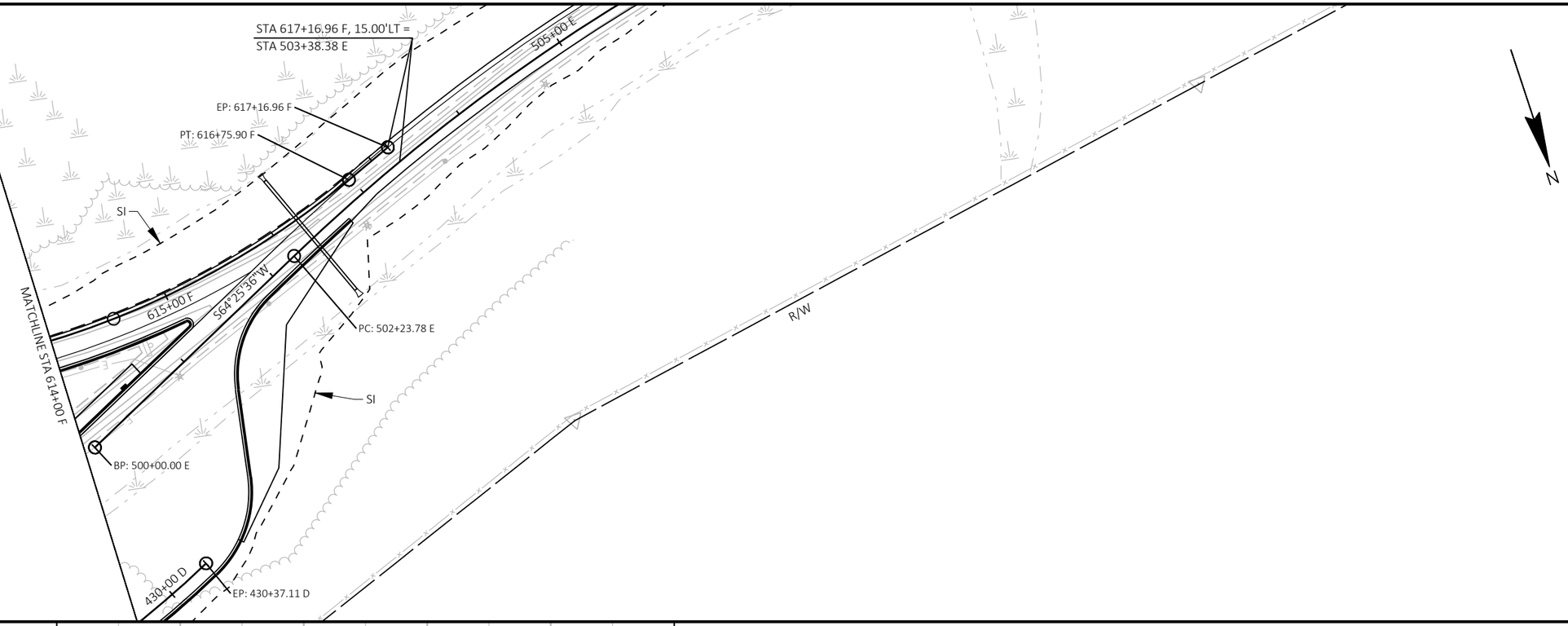


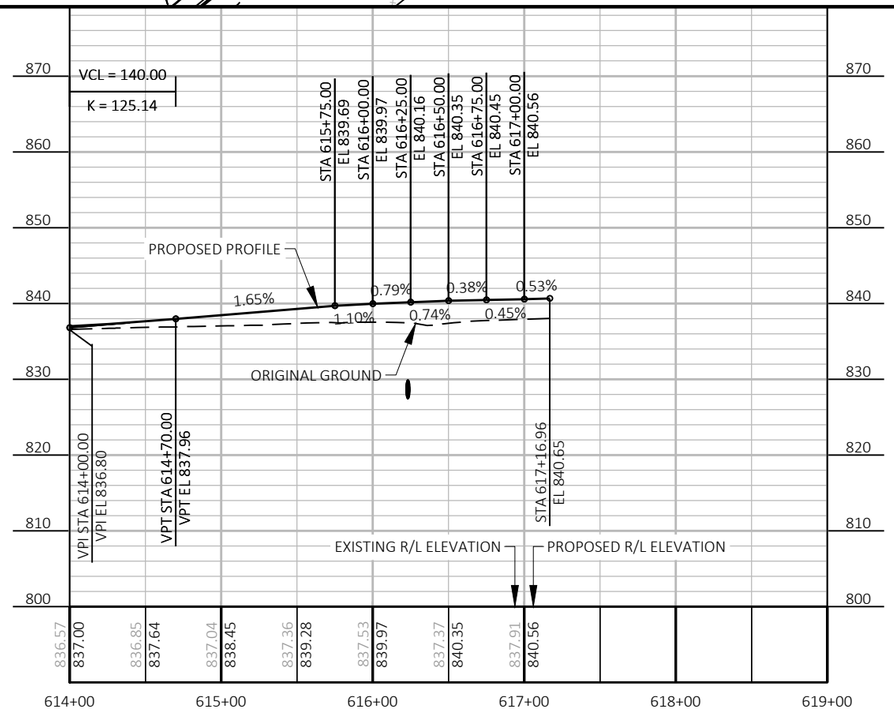
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN AND PROFILE: REST AREA 52 - CAR LOT	SHEET 258 E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\050101-PP_RA52 F.DWG
LAYOUT NAME - 050111-pp F

PLOT DATE : 11/26/2024 11:59 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

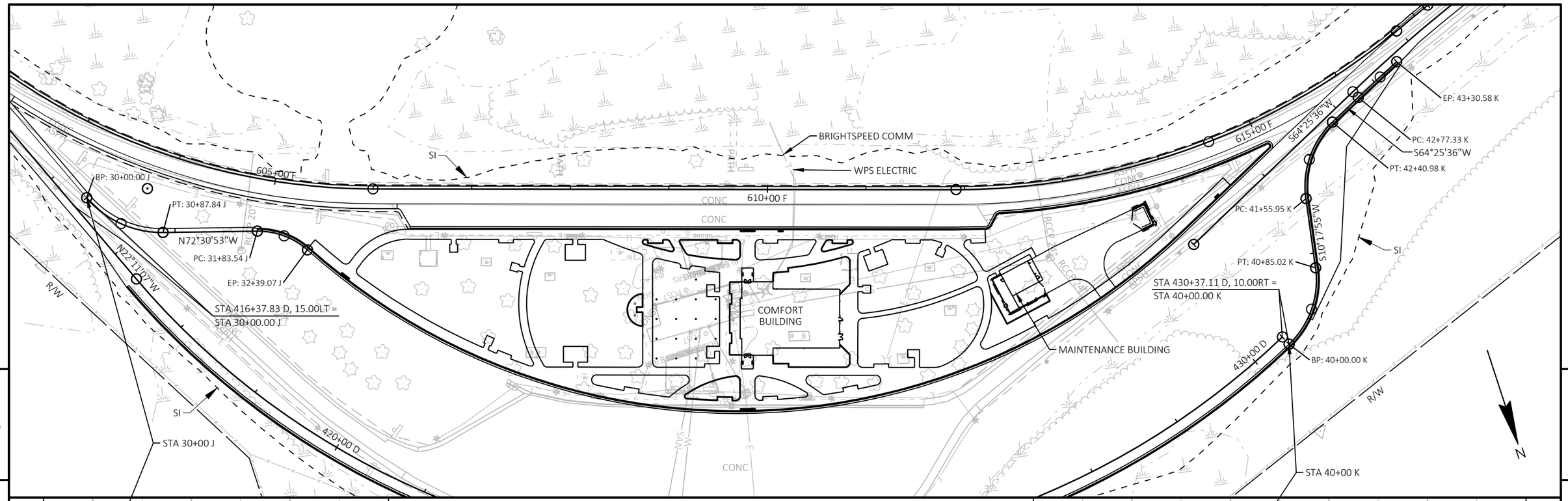
WISDOT/CADDS SHEET 44

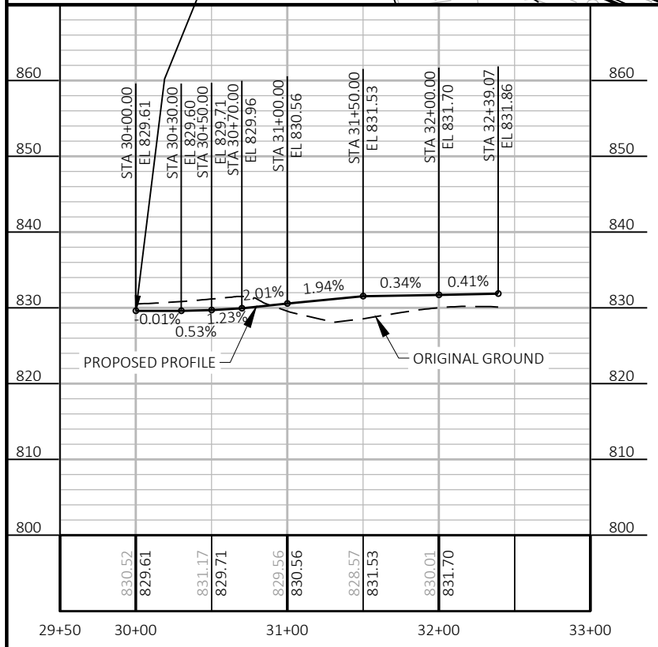


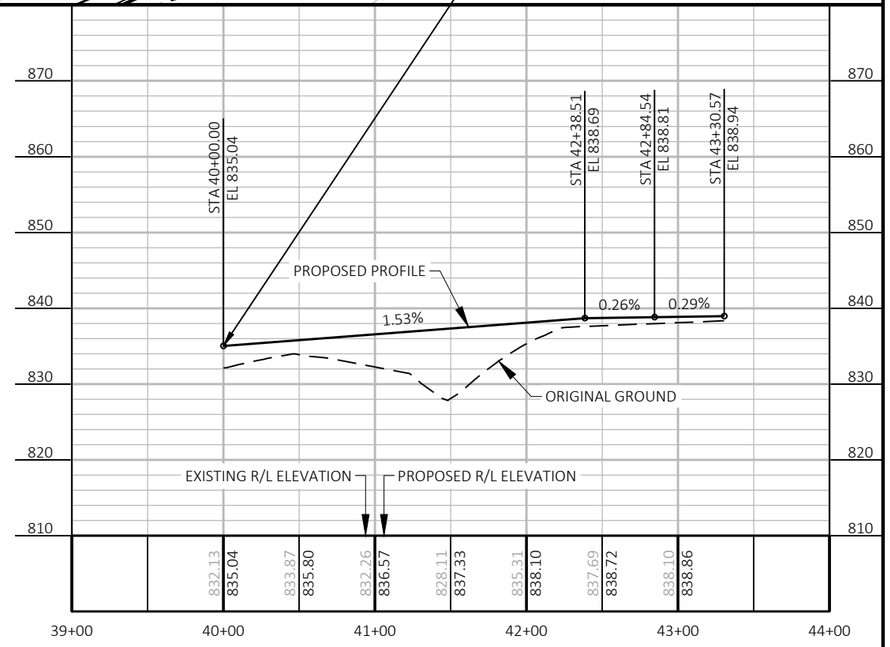


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN AND PROFILE: REST AREA 52 - CAR LOT	SHEET 259	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\050101-PP_RA52 F.DWG
LAYOUT NAME - 050112-pp F
PLOT DATE : 11/26/2024 11:59 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44







PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	PLAN AND PROFILE: REST AREA 52 - TRUCK LOT ENTRANCE - EXIT	SHEET 260	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\050101-PP_RA52 J-K.DWG
LAYOUT NAME - 050113-pp J-K

PLOT DATE : 11/26/2024 11:59 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

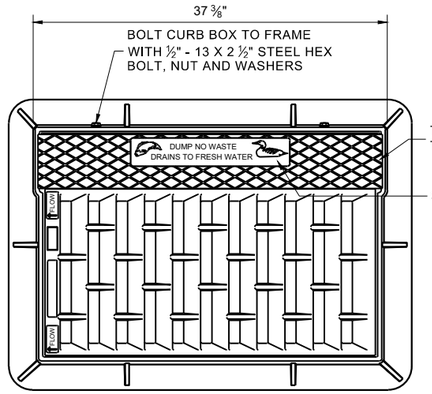
Standard Detail Drawing List

08A05-21A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-21B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-21E	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-04	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER
08B10-03	MANHOLES 3X3-FT, 4X4-FT, 5X5-FT AND 6X6-FT
08C07-03	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT & 2X3.5-FT
08C08-03	INLETS MEDIAN 1 AND 2 GRATE
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-21A	CURB RAMPS TYPES 1 AND 1-A
08D05-21B	CURB RAMPS TYPES 2 AND 3
08D05-21C	CURB RAMPS TYPES 4A AND 4A1
08D05-21D	CURB RAMPS TYPE 4B AND 4B1
08D05-21E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-21F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-21G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D18-04	DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	CONDUIT
09B04-12	PULL BOX
09B16-02	PULL BOX NON-CONDUCTIVE
09C05-10	CONCRETE CONTROL CABINET BASES
09C08-06	CONCRETE BASE, TYPE 7
09C10-03	TRANSFORMER BASE FOR 15" BOLT CIRCLE
09D03-03	POST MOUNTED CONTROLLER SERVICE INSTALLATION
09D04-03	LIGHTING CONTROL CABINET 120/240 VOLT
09E01-15F	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 17 (40 FEET)
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-06	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E04-06	WALKWAY LIGHTING UNIT AND CONCRETE BASE, TYPE 11
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
09H03-01	2 CIRCUIT METER BREAKER PEDESTAL
09H11-01	IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS
10A01-04	ELECTRICAL HANDHOLE WIRING
10A02-03	IDENTIFICATION PLAQUES LIGHT POLES
10A04-03	IDENTIFICATION PLAQUES UNDERDECK AND HIGH MAST LIGHTING
10A14-03A	ELECTRICAL DETAILS HIGH MAST LIGHTING
10A14-03B	ELECTRICAL DETAILS HIGH MAST LIGHTING
10A18-05A	LUMINAIRE ARMS, SINGLE MEMBER 6-INCH CLAMP
10A18-05B	LUMINAIRE ARMS, TRUSS TYPE 6-INCH CLAMP
13A03-07	CONCRETE PAVEMENT SHOULDERS
13A09-02	TRANSVERSE RUMBLE STRIPS, CONCRETE
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-14A	RURAL DOWELED CONCRETE PAVEMENT
13C11-14B	RURAL DOWELED CONCRETE PAVEMENT
13C13-11	URBAN DOWELED CONCRETE PAVEMENT
13C18-08A	CONCRETE PAVEMENT JOINTING
13C18-08C	CONCRETE PAVEMENT JOINT TYPES
13C18-08D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
13C19-03	HMA LONGITUDINAL JOINTS
14A02-01	TREE PLANTING DETAIL
14C02-03	HISTORICAL MARKER CONSTRUCTION
14C07-04A	PICNIC TABLE, SINGLE PEDESTAL
14C07-04B	PICNIC TABLE, SINGLE PEDESTAL
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15A04-07C	DELINEATOR BRACKET WITH REFLECTIVE SHEETING
15A04-07E	DELINEATOR POST WITH REFLECTIVE SHEETING
15B03-15A	FENCE CHAIN LINK
15B03-15B	FENCE CHAIN LINK

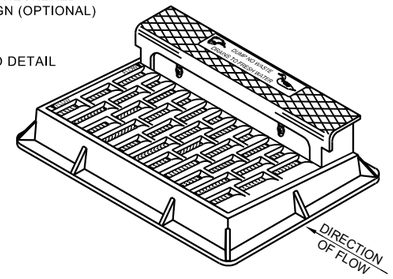
6

Standard Detail Drawing List

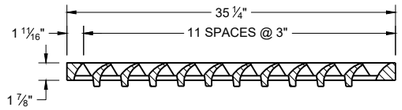
15C07-15A	PAVEMENT MARKING SYMBOLS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C36-01	PARKING STALL MARKING
15D12-12A	TRAFFIC CONTROL, LANE CLOSURE, WITH TEMPORARY RUMBLE STRIPS
15D16-06	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

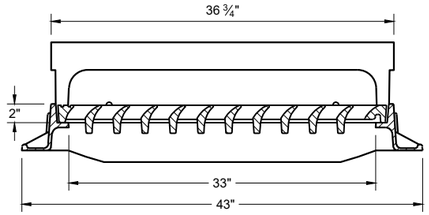


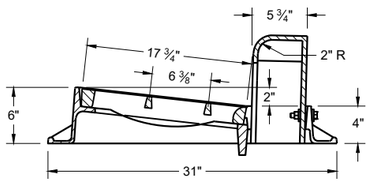
NOTE: EITHER CASTING IS ACCEPTABLE

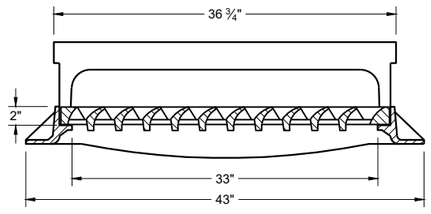


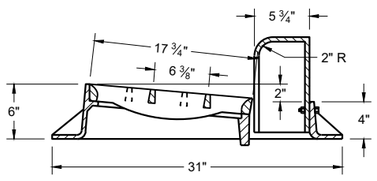
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"







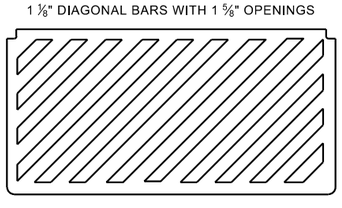




TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE

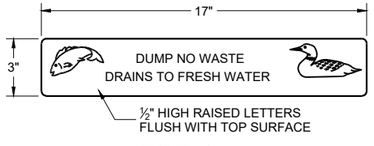
1 1/8" DIAGONAL BARS WITH 1 5/8" OPENINGS



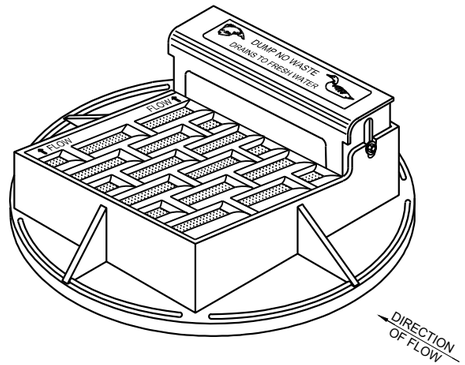
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

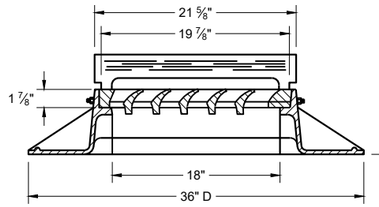


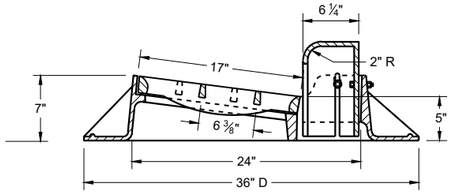
LOGO DETAIL



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

NOTE: EITHER CASTING IS ACCEPTABLE





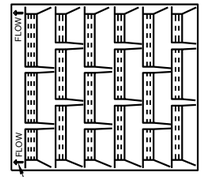
TYPE "A"

GENERAL NOTES

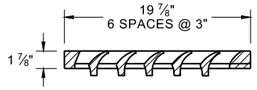
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

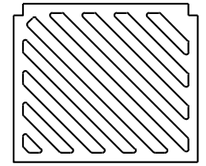
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



DIRECTION OF FLOW ARROWS



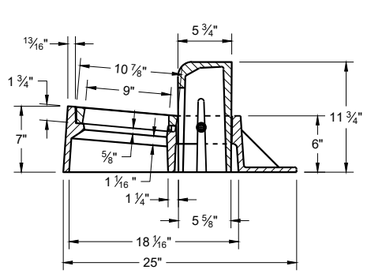
1" DIAGONAL BARS WITH 1 1/2" OPENINGS



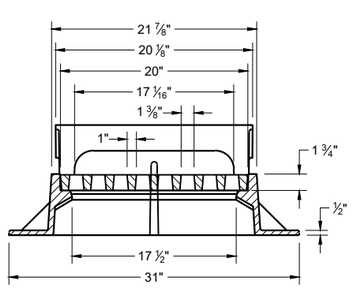
SPECIAL GRATE FOR TYPE "A" COVER

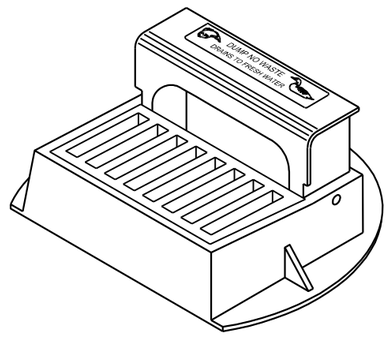
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "Z"





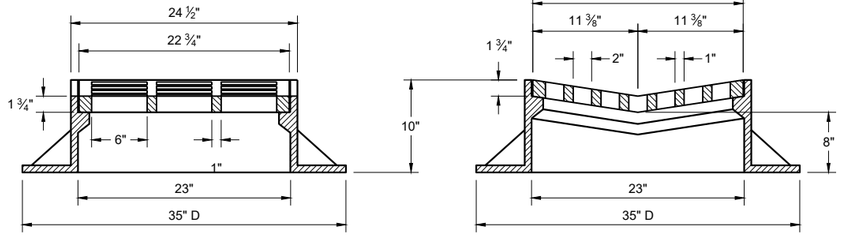
INLET COVERS
TYPES A, H, A-S, H-S AND Z

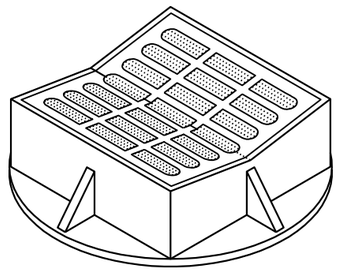
STATE OF WISCONSIN
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APPROVED
December 2023
DATE

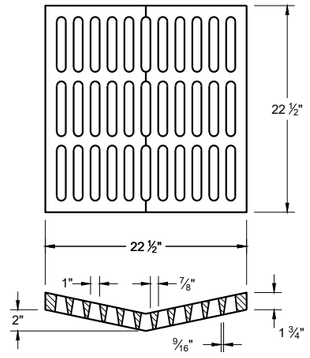
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

FHWA





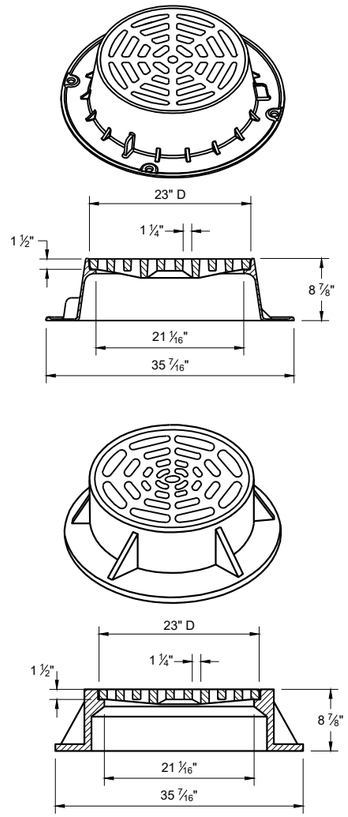
TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS POSSIBLE

NOTED AS TYPE B - A ON THE DRAINAGE TABLE



TYPE "C"

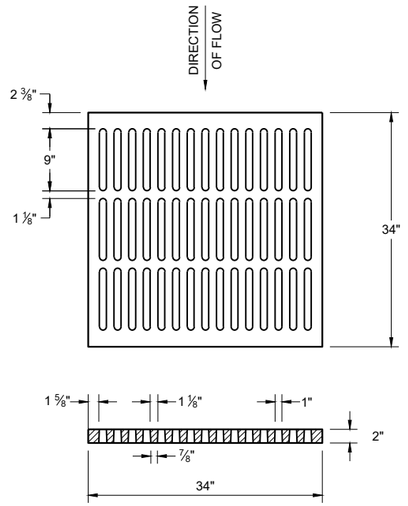
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

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

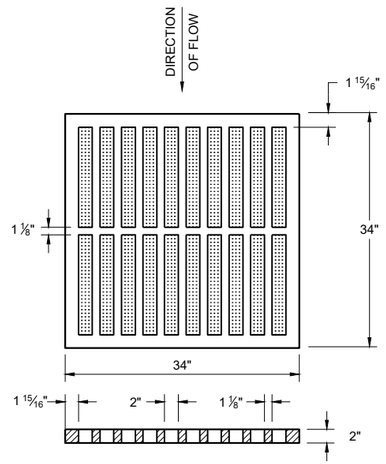
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS PERMITTED

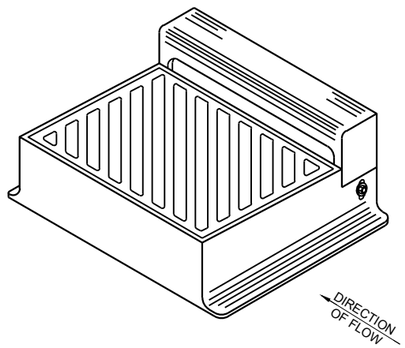
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



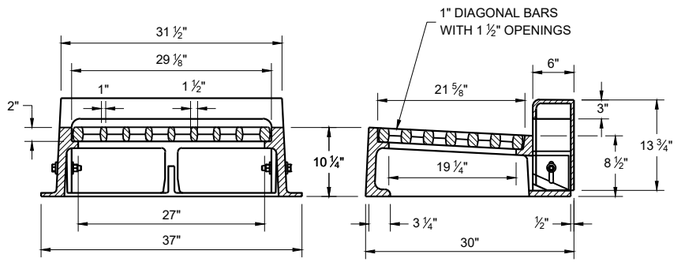
TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON THE DRAINAGE TABLE



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



TYPE "WM"

NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

INLET COVERS TYPES B, B-A, C, MS, MS-A AND WM

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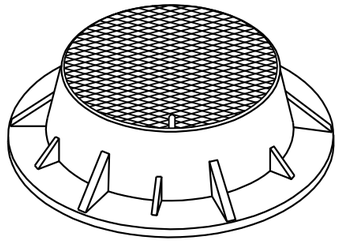
SDD 08A05-21b

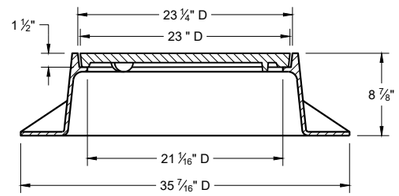
GENERAL NOTES

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

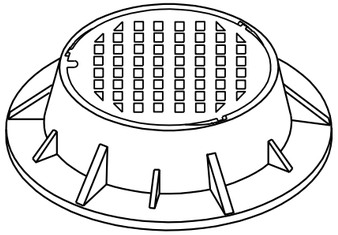
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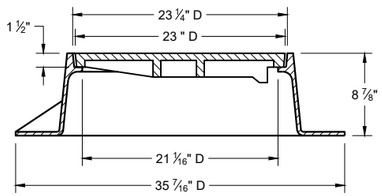




TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

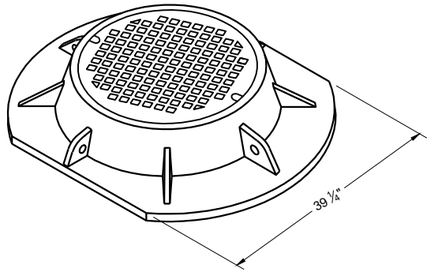


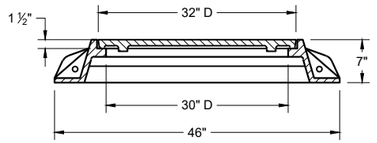


TYPE "J" SPECIAL

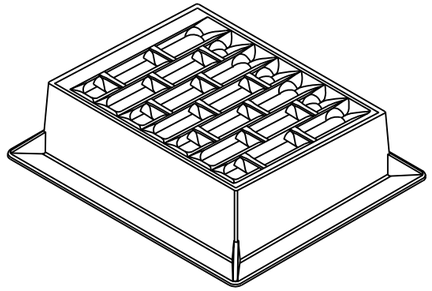
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

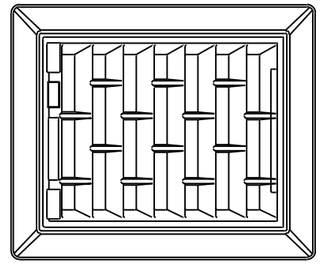
NOTE: EITHER CASTING IS ACCEPTABLE

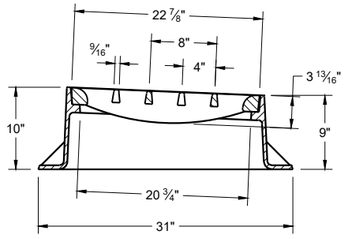


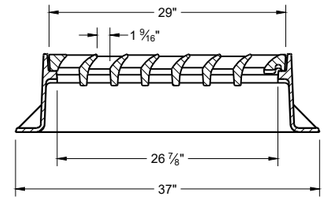


TYPE "K"

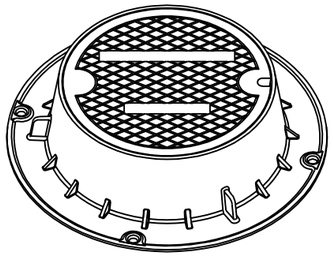


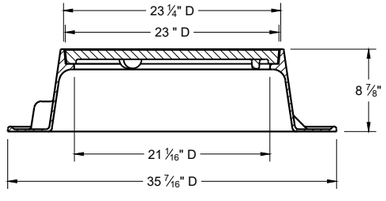






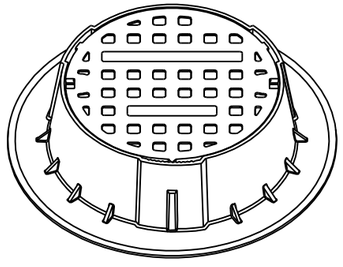
INLET COVER TYPE "BW"

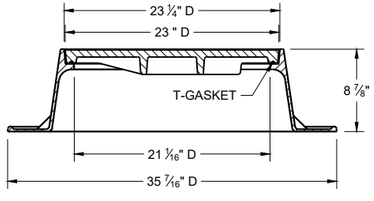




TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

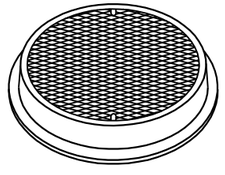


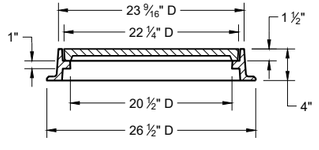


TYPE "J" SPECIAL

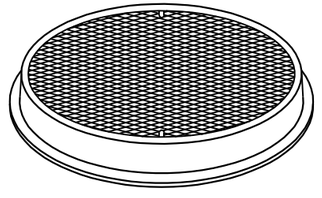
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

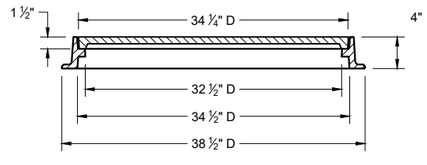
NOTE: EITHER CASTING IS ACCEPTABLE





TYPE "L"





TYPE "M"

INLET COVERS TYPES BW
MANHOLE COVERS TYPES K, J, J-S, L, AND M

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/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

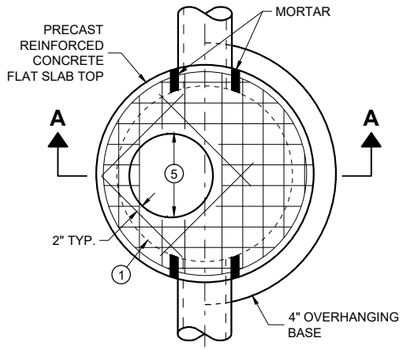
FHWA

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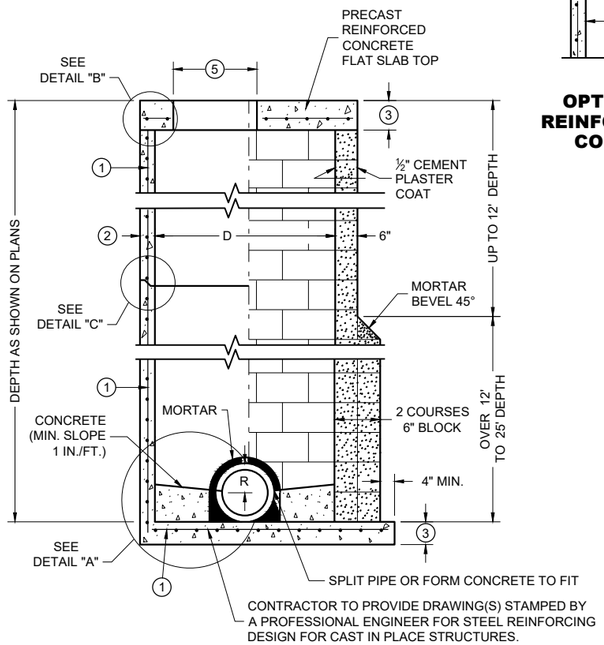
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PLAN VIEW

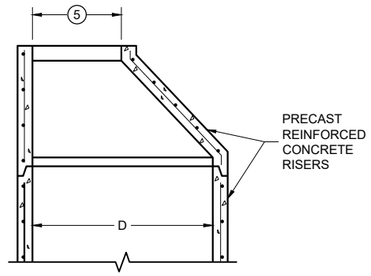
CIRCULAR OPENING



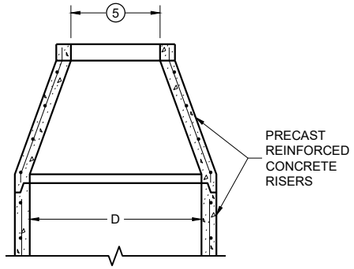
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

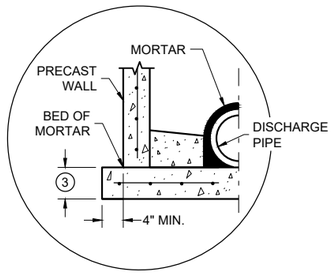
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)



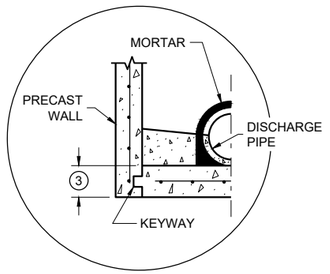
OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

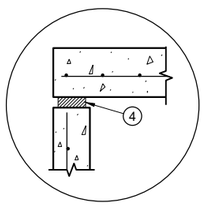


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

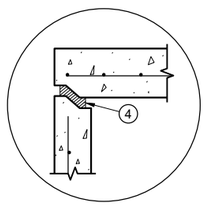


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

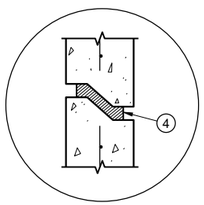
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B" **DETAIL "C"**

MANHOLE COVER OPENING MATRIX

OPENING SIZE (FT.) (5) \ MANHOLE COVER TYPE	C	ALL J'S	K	L	M
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES		MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
	180° SEPARATION (IN)	90° SEPARATION (IN)		
3-FT	15	12	4	6
4-FT	24	18	4	6
5-FT	36	24	5	8
6-FT	42	36	6	8
7-FT	48	36/42 *	7	8
8-FT	60	42	8	8
9-FT	66	54	9	10
10-FT	72	60	10	10

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES. SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

GENERAL NOTES

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

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

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

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

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF 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. 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 IMENSION 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 MANHOLE 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 PERMITTED 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 "D".

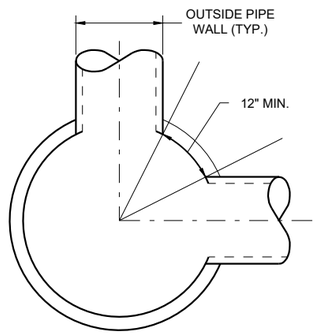
(1) FOR PRECAST MANHOLES AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(2) SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES

(3) SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.

(4) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.

(5) SEE MANHOLE COVER OPENING MATRIX.



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

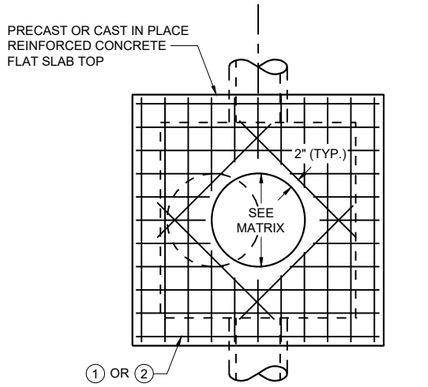
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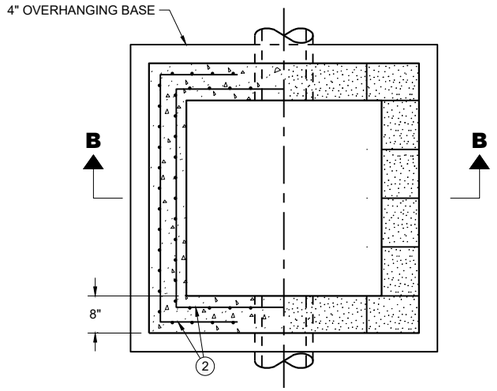
SDD 08B09-04

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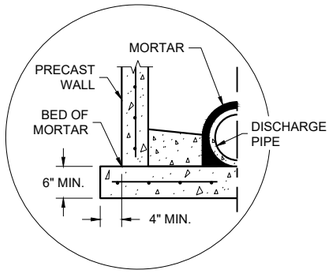
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PLAN VIEW
CIRCULAR OPENING

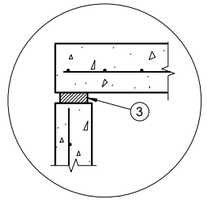


SECTION A - A
PLAN VIEW

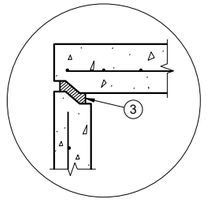


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"

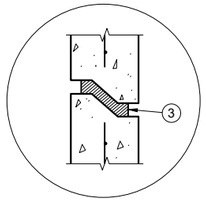


TOP WITH PLAIN END JOINT



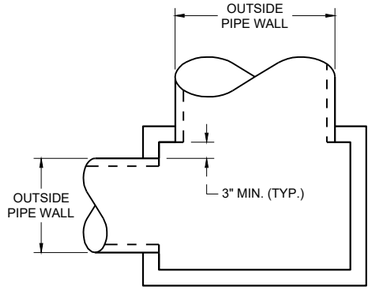
TOP WITH TONGUE AND GROOVE JOINT

DETAIL "B"

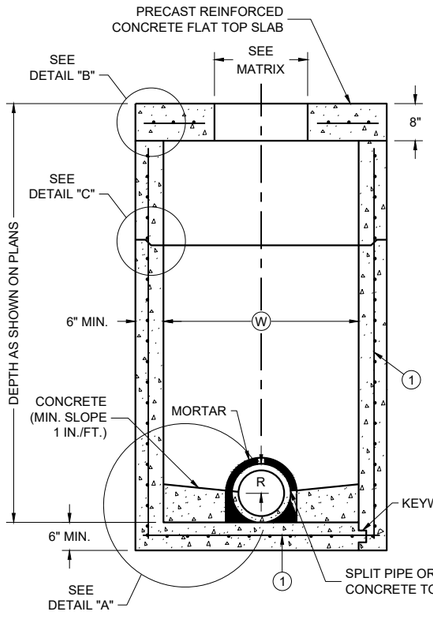


RISER WITH TONGUE AND GROOVE JOINT

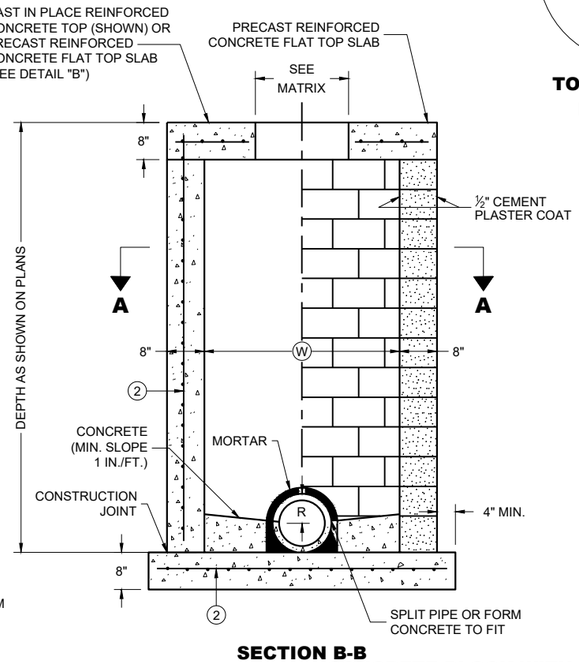
DETAIL "C"



DETAIL "D"



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE



SECTION B-B

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

CAST IN PLACE REINFORCED CONCRETE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)

SQUARE MANHOLES WITH FLAT TOP

MANHOLES 3 X 3-FT, 4 X 4 -FT, 5 X 5-FT AND 6 X 6-FT

GENERAL NOTES

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

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

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

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

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

PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

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 MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C913.

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

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN WIDTH.

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.

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

(1) FOR PRECAST MANHOLES AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

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

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

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 WxW-FT	MAXIMUM INSIDE PIPE DIAMETER (IN)
3 X 3 FT	24
4 X 4 FT	30
5 X 5 FT	42
6 X 6 FT	54

MANHOLES
3 X 3 -FT, 4 X 4-FT
5 X 5-FT AND 6 X 6-FT

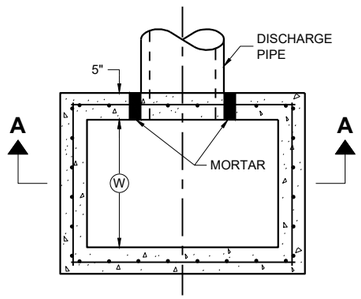
STATE OF WISCONSIN
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APPROVED
December 2023
DATE

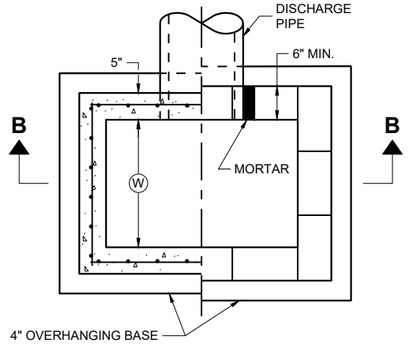
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

FHWA

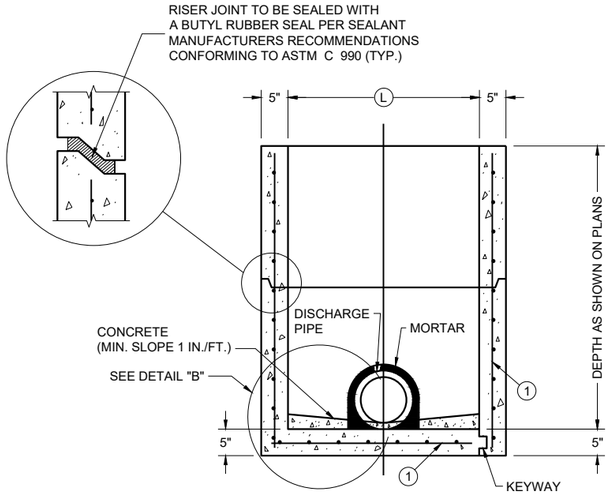
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PLAN VIEW



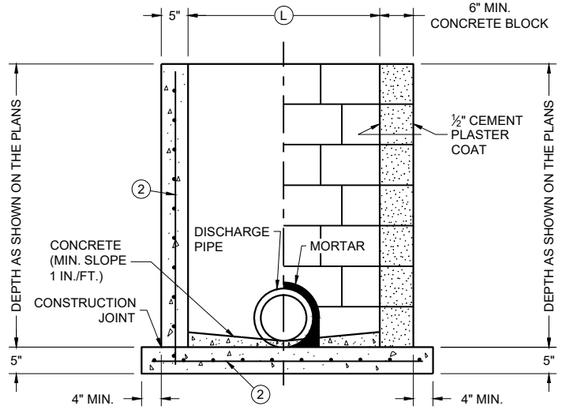
PLAN VIEW



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

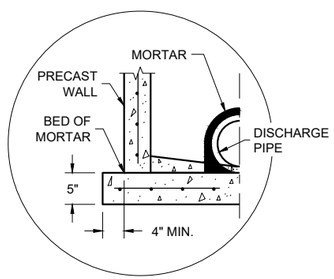
SECTION A - A



CAST IN PLACE REINFORCED CONCRETE

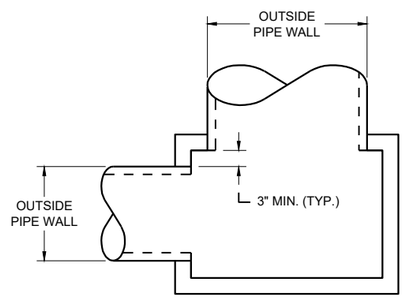
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)

SECTION B - B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "B"



DETAIL "A"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP N0T SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

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

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

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

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

CATCH BASIN COVER MATRIX

INLET SIZE	WIDTH (W) (FT.)	LENGTH (L) (FT.)	INLET COVER TYPE									
			ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM	V V-B
2 X 2-FT	2	2	X	X				X				
2 X 2.5-FT	2	2.5			X			X	X	X	X	
2 X 3-FT	2	3					X					
2.5 X 3-FT	2.5	3				X						
2 X 3.5-FT	2	3.5										X

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2 X 2-FT	12	12
2 X 2.5-FT	12	18
2 X 3-FT	12	24
2.5 X 3-FT	18	24
2 X 3.5-FT	12	30

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2X3.5-FT

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2 X 3.5-FT

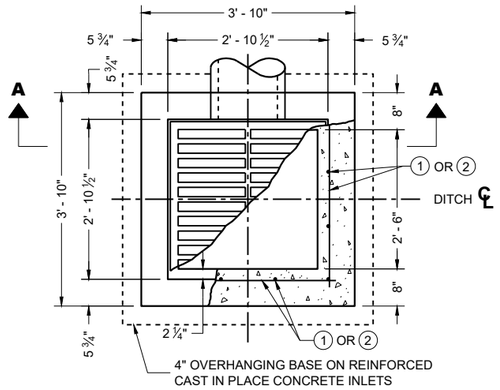
STATE OF WISCONSIN
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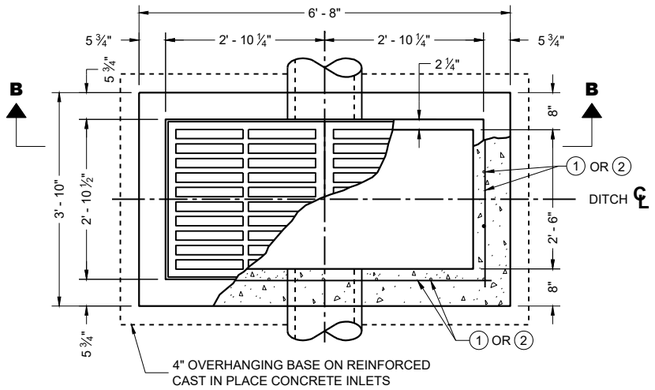
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

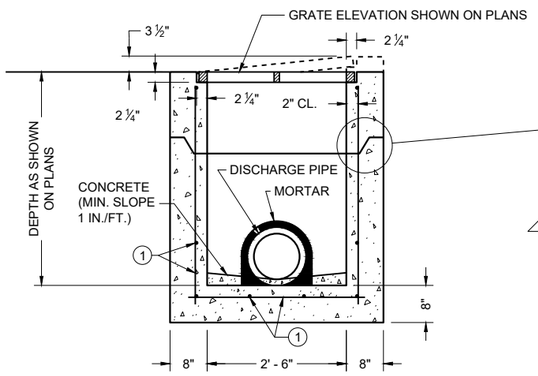
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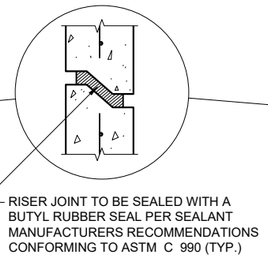
PLAN VIEW

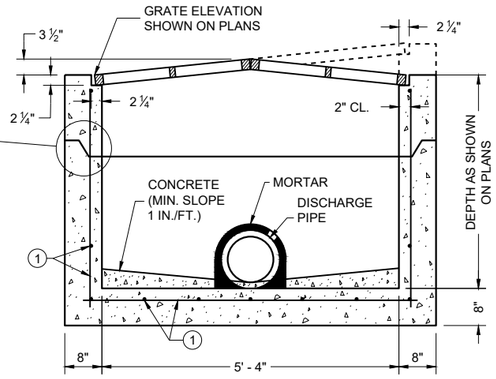


PLAN VIEW

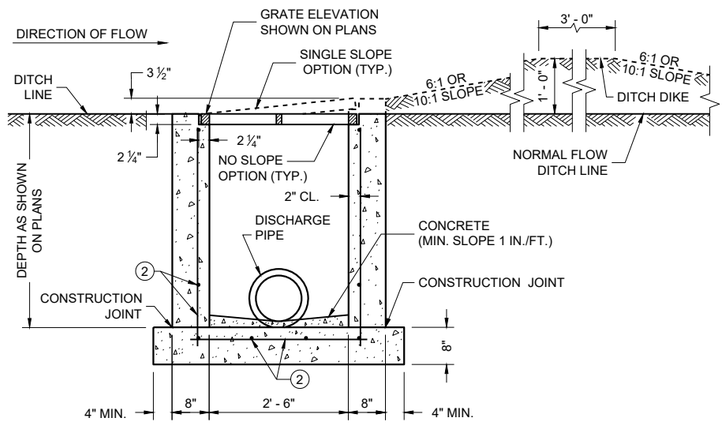


PRECAST REINFORCED CONCRETE SECTION A - A



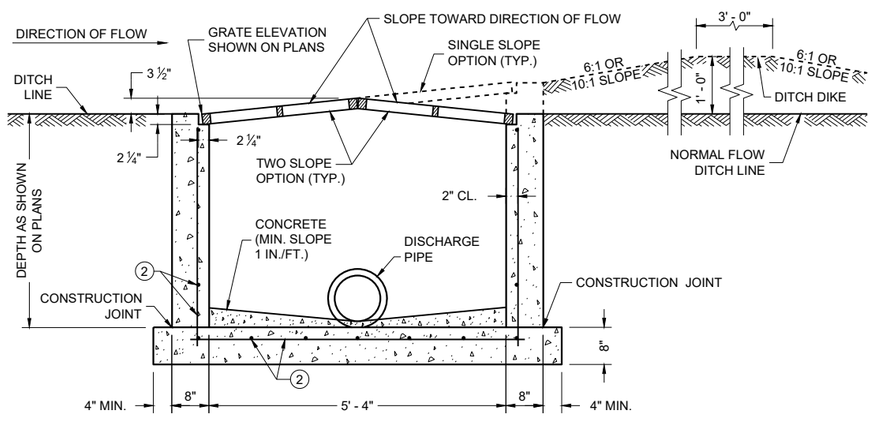


PRECAST REINFORCED CONCRETE SECTION B - B



REINFORCED CAST IN PLACE CONCRETE SECTION A - A

INLETS MEDIAN 1 GRATE



REINFORCED CAST IN PLACE CONCRETE SECTION B - B

INLETS MEDIAN 2 GRATE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP N0T SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

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

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

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

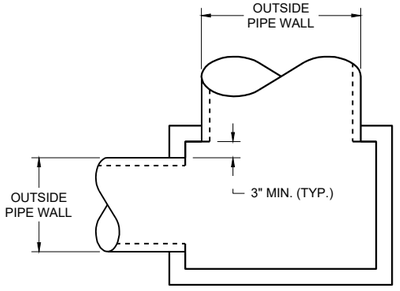
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

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

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

(1) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES 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.



DETAIL "A"

PIPE MATRIX

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

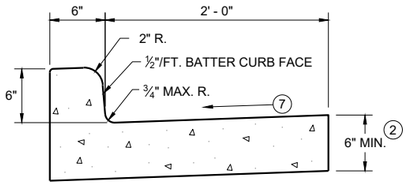
INLETS
MEDIAN 1 AND 2 GRATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

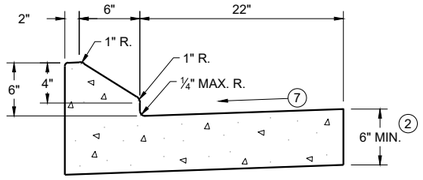
APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

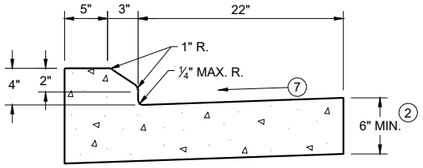
6
SDD 08C08-03



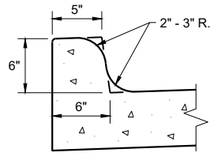
TYPES A (1) & D



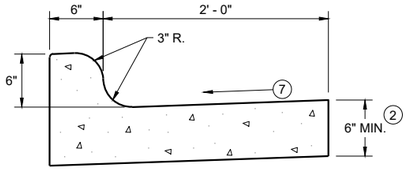
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

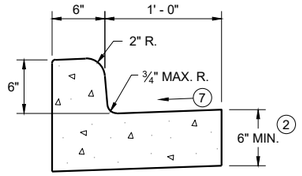


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



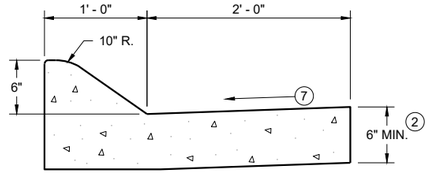
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

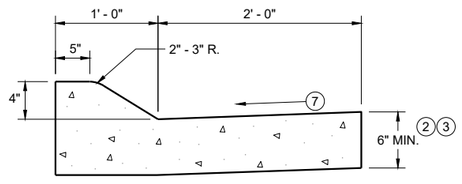


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

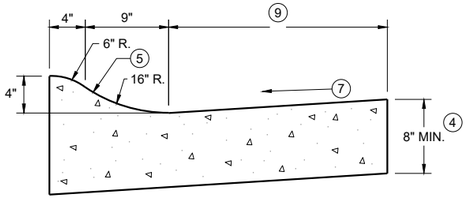


6" SLOPED CURB TYPES A (1) & D



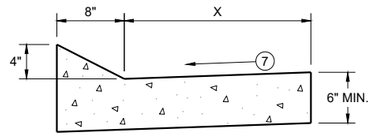
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

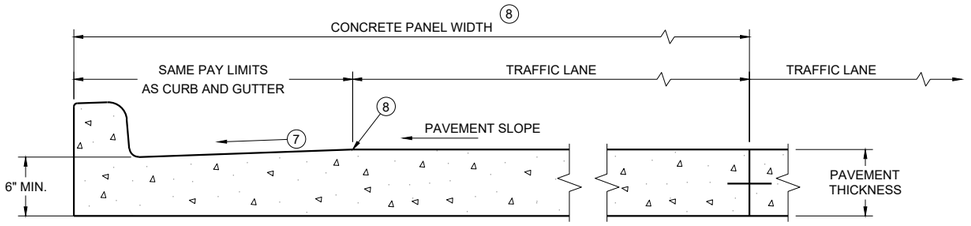


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

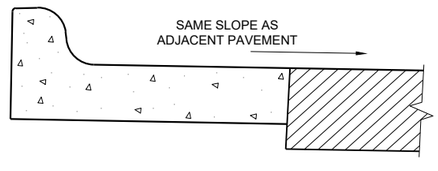
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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.

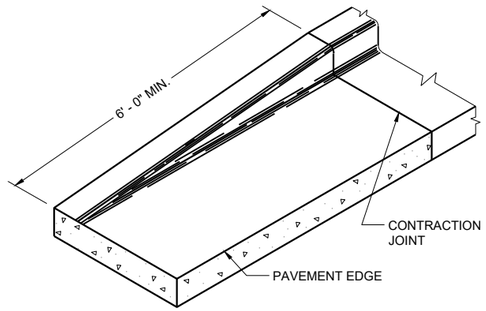
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(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

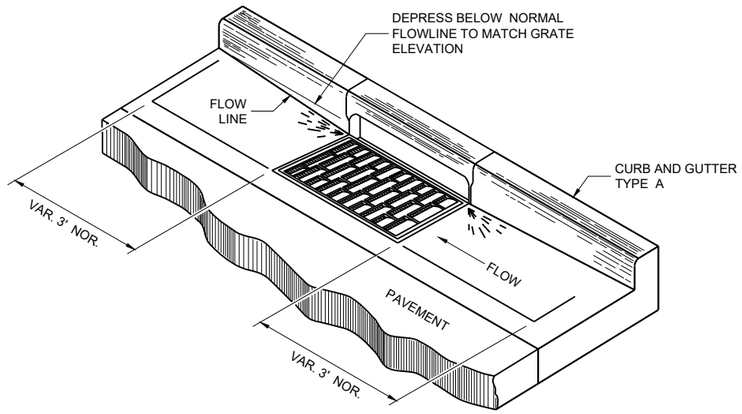
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01-23a



END SECTION CURB 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.

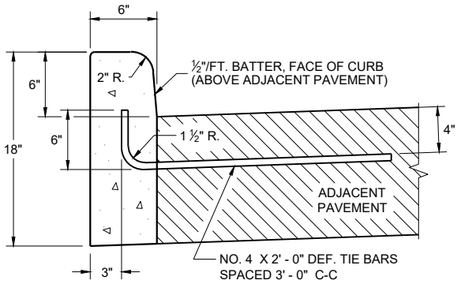
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

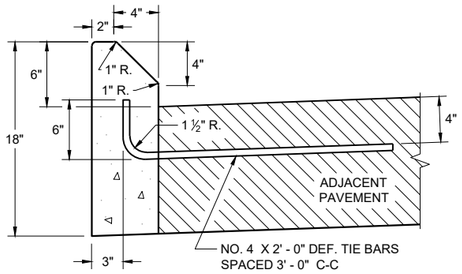
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(10) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

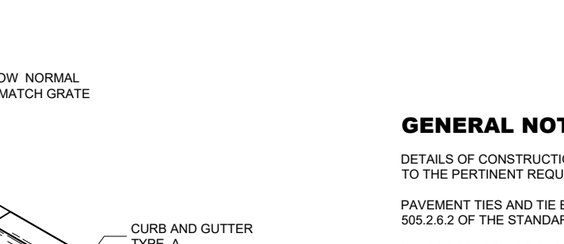


TYPES A (1) & D

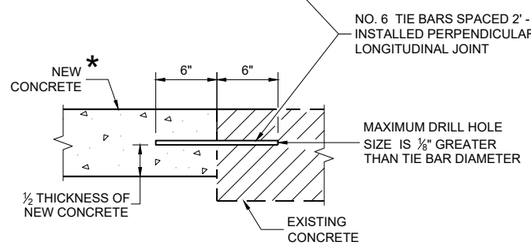


TYPES G (1) & J

CONCRETE CURB

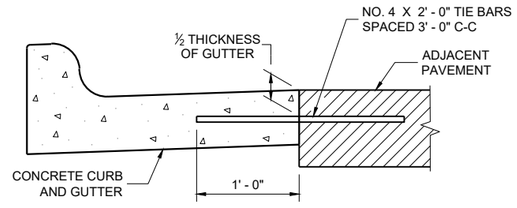


PLAN VIEW

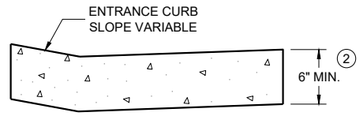


SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT

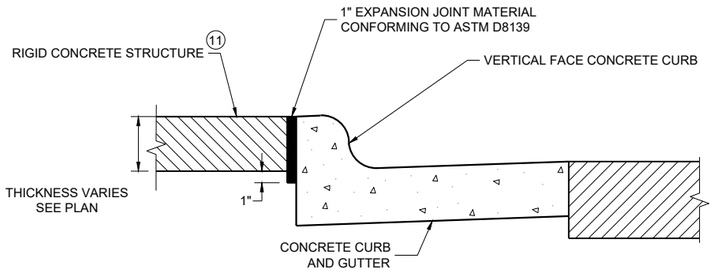


TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

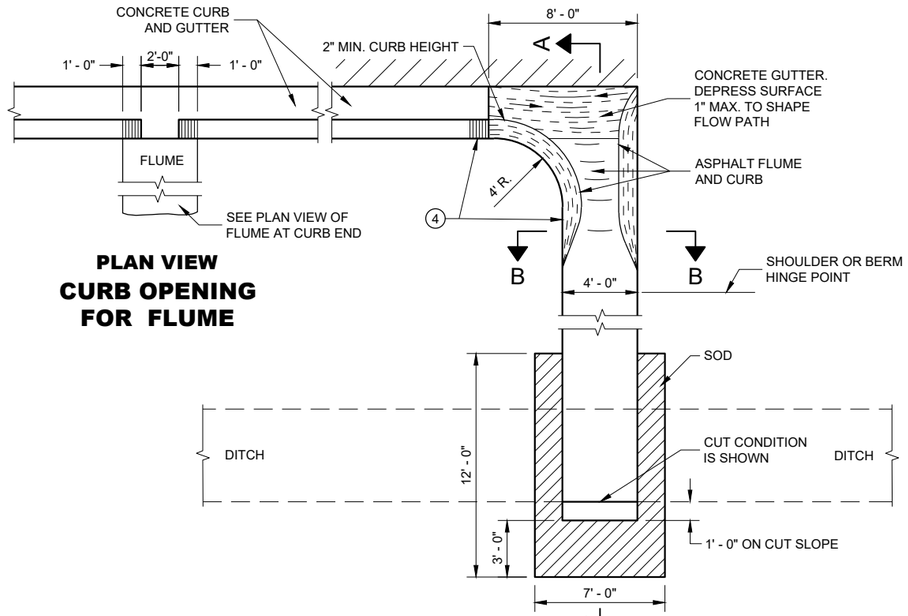
APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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SDD 08D01-23b

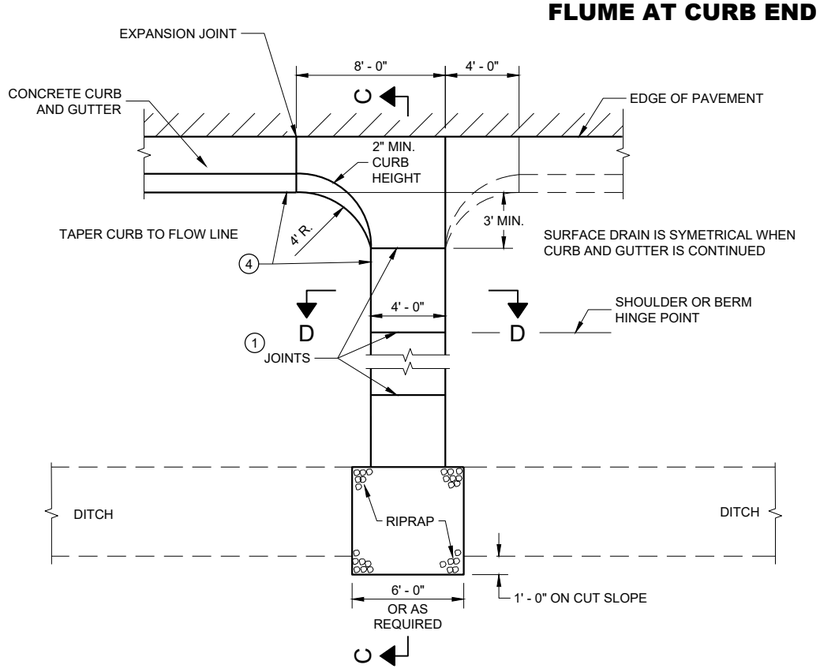
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



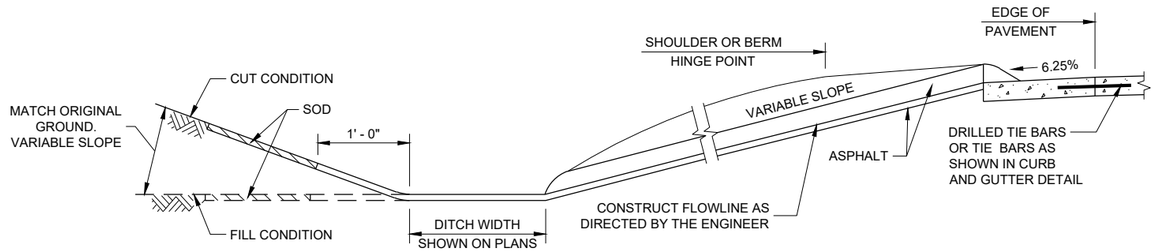
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

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

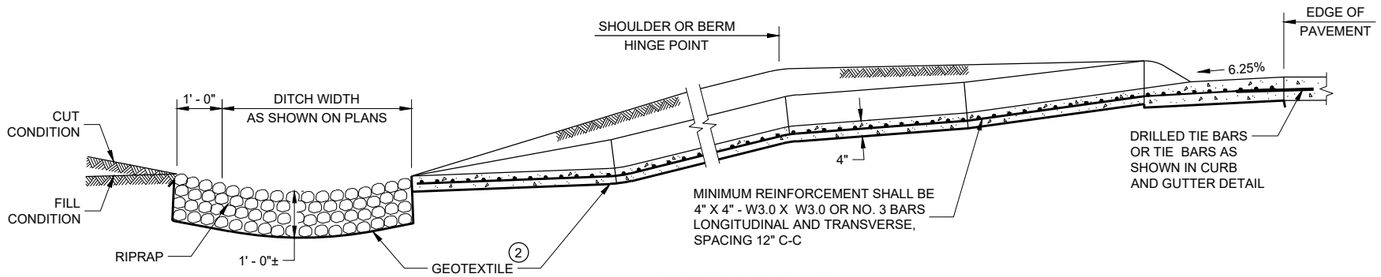
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.

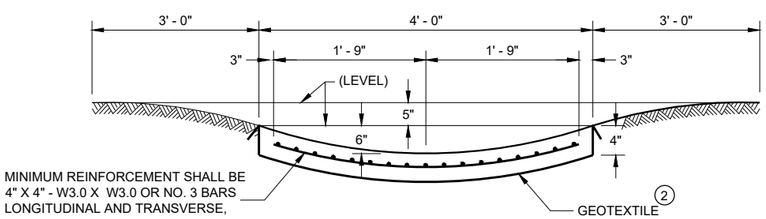


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

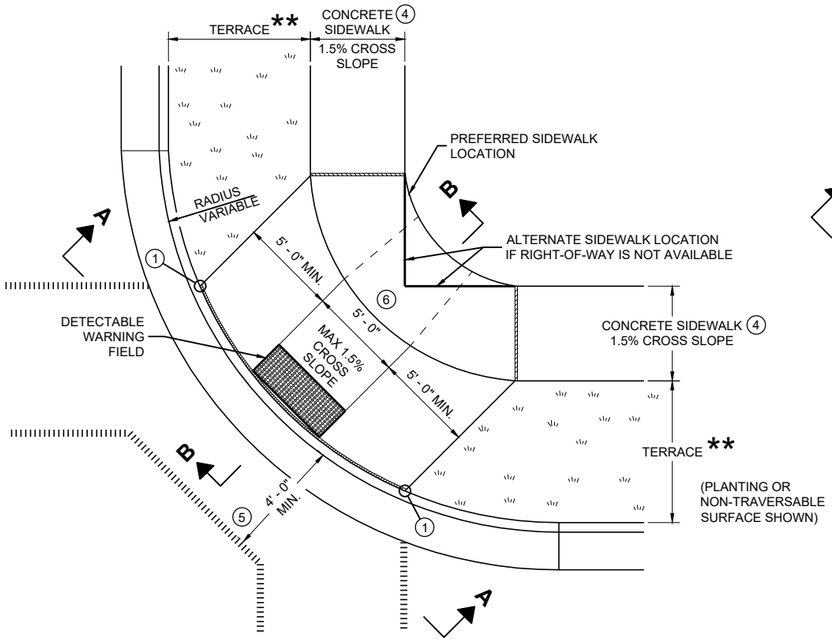
FHWA

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SDD 08D04 - 07

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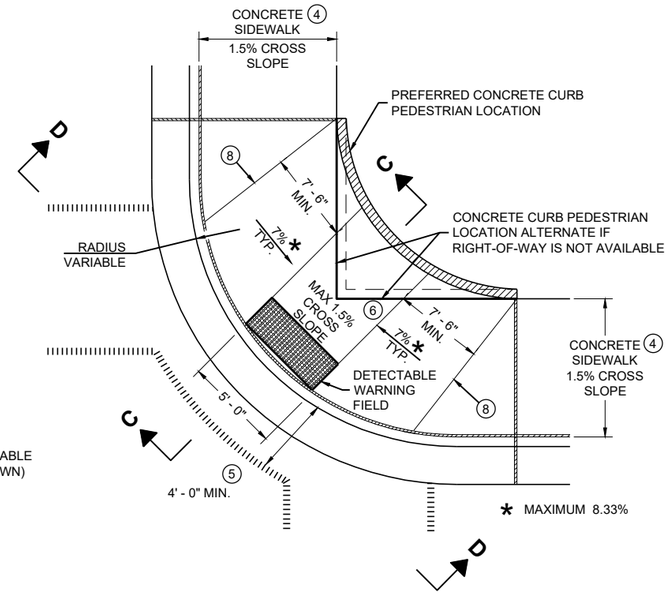
SDD 08D04 - 07



PLAN VIEW

CURB RAMP TYPE 1

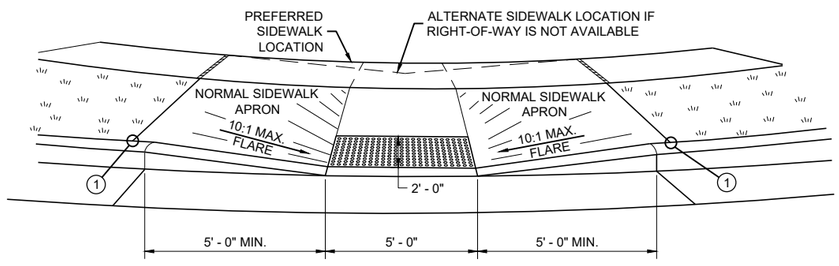
(CENTER OF CORNER RADIUS)



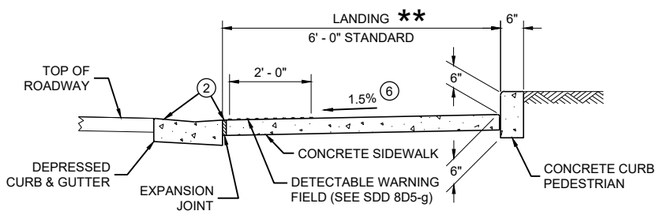
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

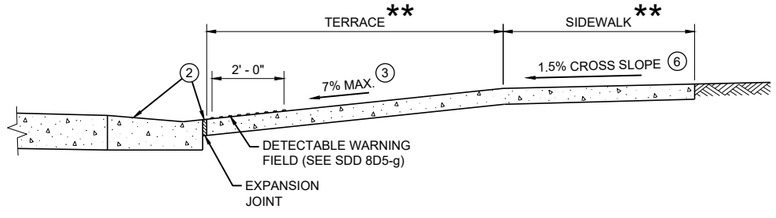


VIEW A - A FOR TYPE 1

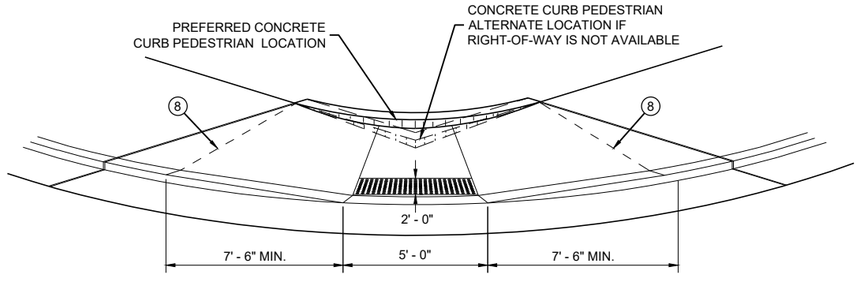


SECTION C - C FOR TYPE 1 - A

** 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. 4 FOOT WIDTH IS MEASURED FROM THE FLANGE LINE

(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.

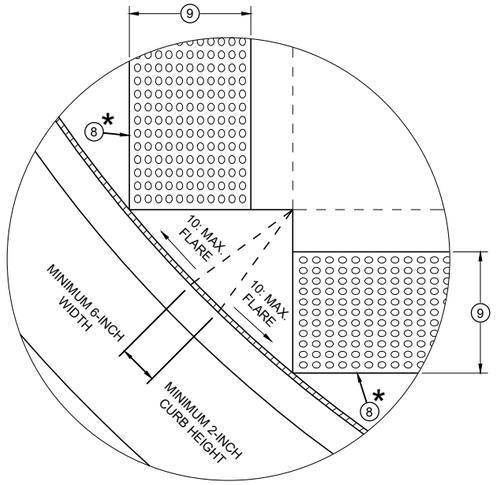
LEGEND

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

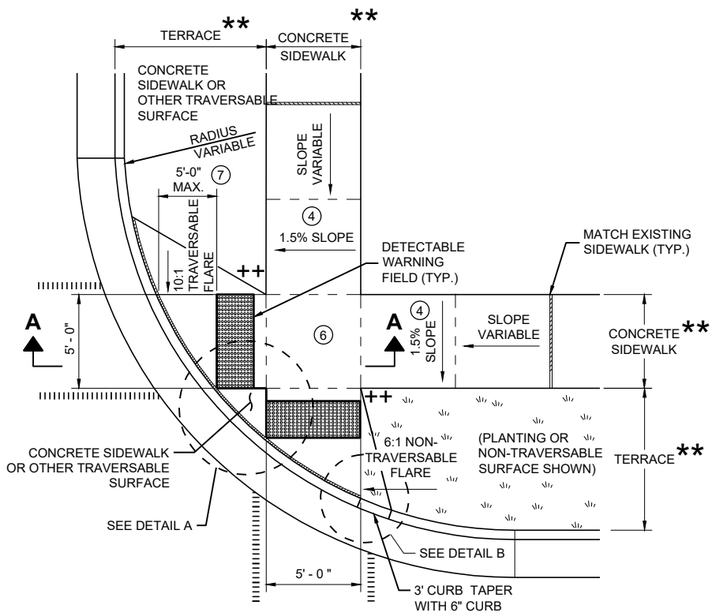
CURB RAMPS TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

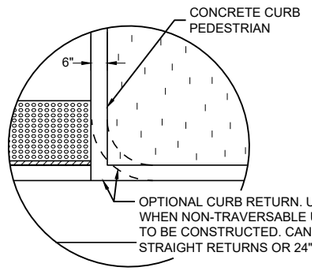
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SDD 08D05-21a



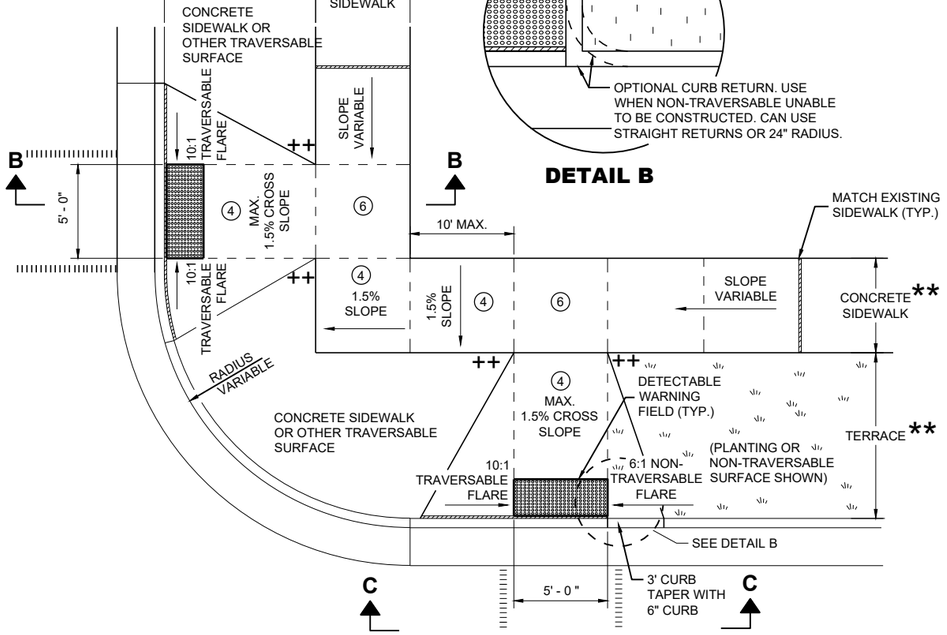
DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)



DETAIL B



PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)

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.

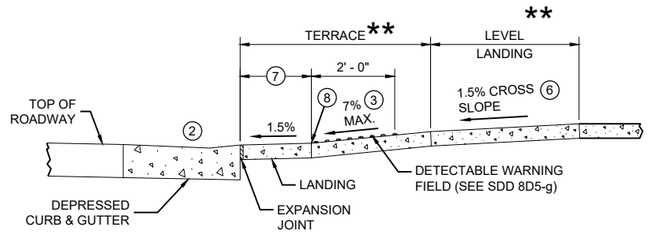
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(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.

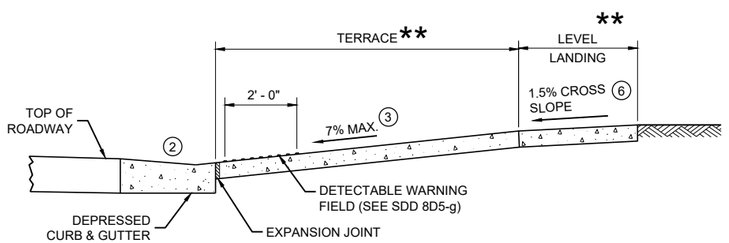


SECTION A - A FOR TYPE 2

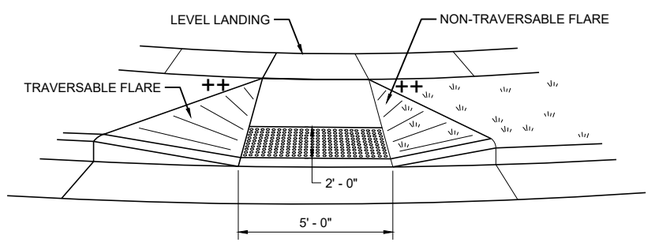
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



SECTION B - B FOR TYPE 3



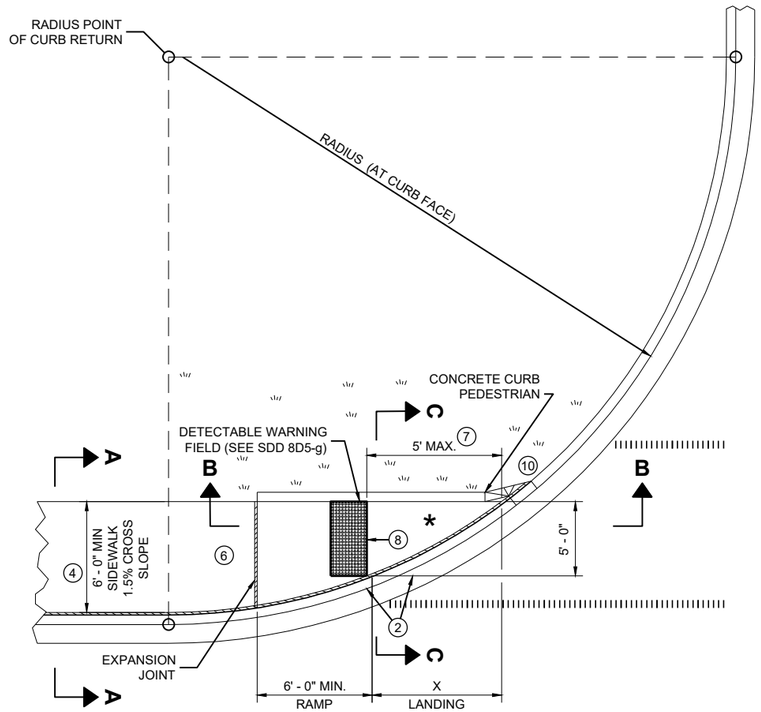
VIEW C - C FOR TYPE 3

LEGEND

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

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

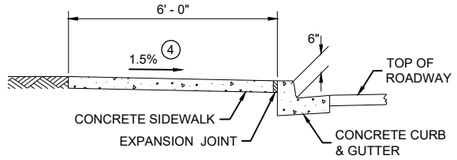


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"

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.

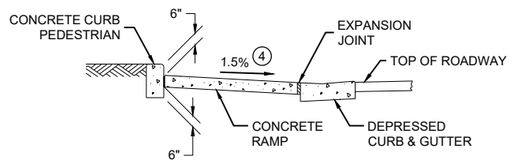
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

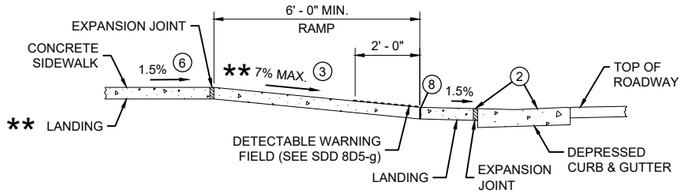
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)

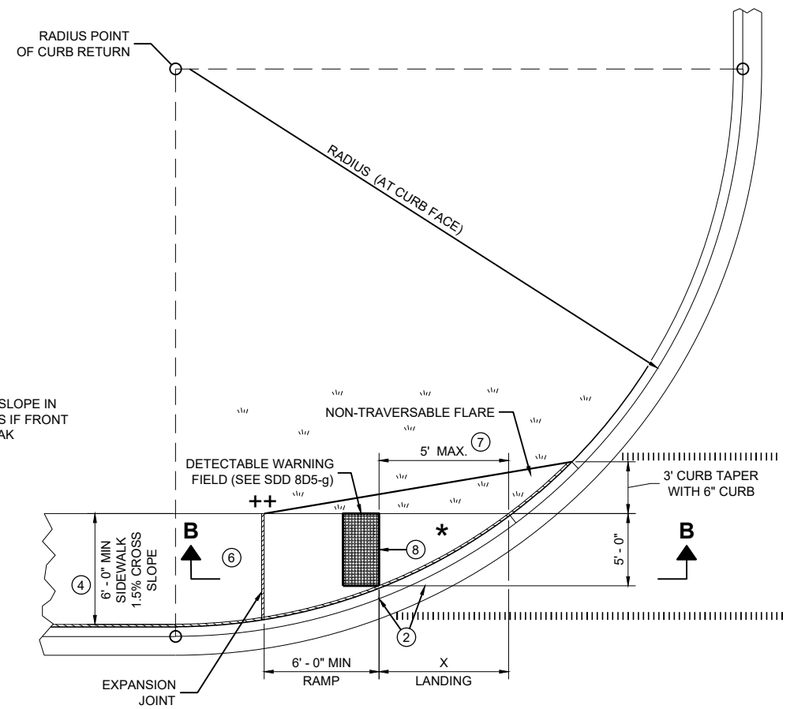


SECTION C - C FOR TYPE 4A



SECTION B - B FOR TYPE 4A AND TYPE 4A1

** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

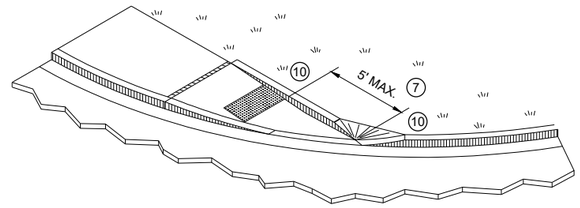


* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

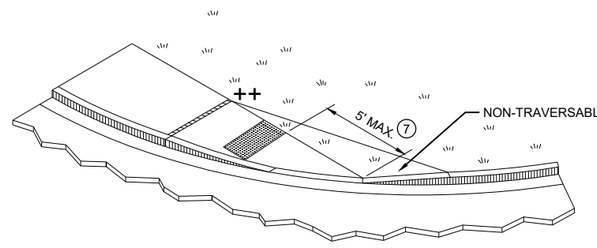
PLAN VIEW

CURB RAMP TYPE 4A1

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



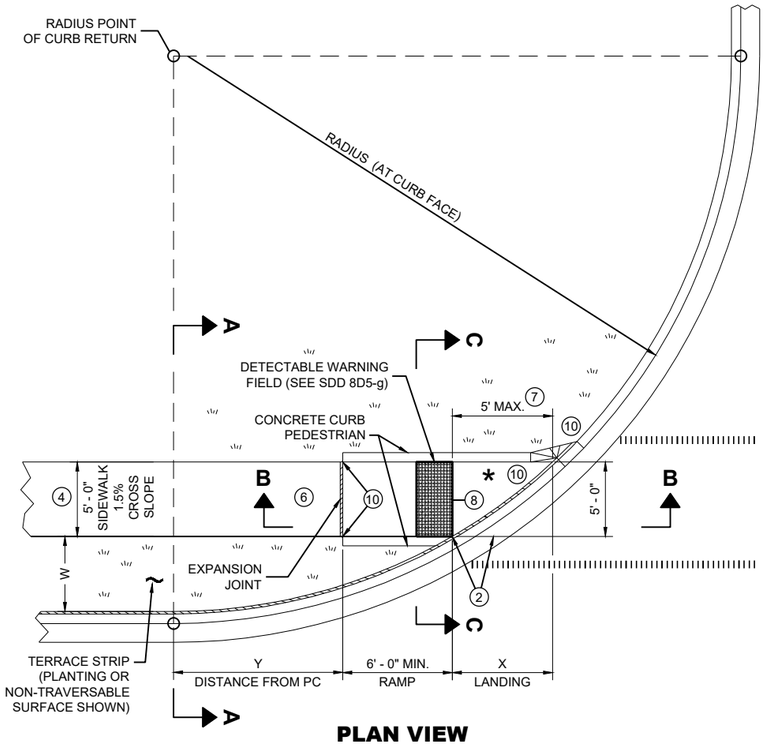
ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



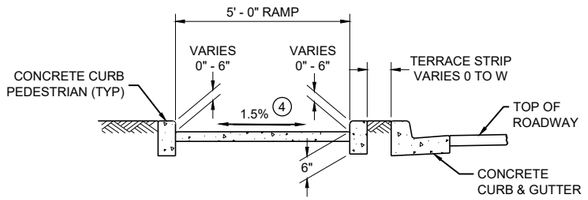
PLAN VIEW
CURB RAMP TYPE 4B

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 1/4"	0' - 5"	2' - 1"	1' - 4 1/2"	1' - 5"	2' - 1"	0' - 10"	2' - 7 1/2"	0' - 3 1/4"	3' - 0 1/4"						
15 FEET	4' - 6 3/4"	2' - 1 3/4"	3' - 9"	3' - 5 3/4"	3' - 1 1/4"	4' - 6"	2' - 6 3/4"	5' - 4 1/2"	2' - 1"	6' - 1"	1' - 8"	6' - 8 1/2"	1' - 3 1/4"	7' - 2 1/2"	0' - 10 3/4"	7' - 7 1/4"
20 FEET			4' - 11 1/2"	5' - 1 3/4"	4' - 3 1/4"	6' - 5 1/2"	3' - 8 3/4"	7' - 7"	3' - 3"	8' - 6 1/2"	2' - 10"	9' - 4 1/2"	2' - 5 1/2"	10' - 1 1/4"	2' - 1 1/4"	10' - 9"
30 FEET									4' - 10 3/4"	12' - 5 3/4"	4' - 5 1/2"	13' - 7 3/4"	4' - 0 3/4"	14' - 8 1/2"	3' - 8 1/2"	15' - 8 1/4"
40 FEET															4' - 10 3/4"	19' - 8 1/4"

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)



SECTION C - C FOR TYPE 4B

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.

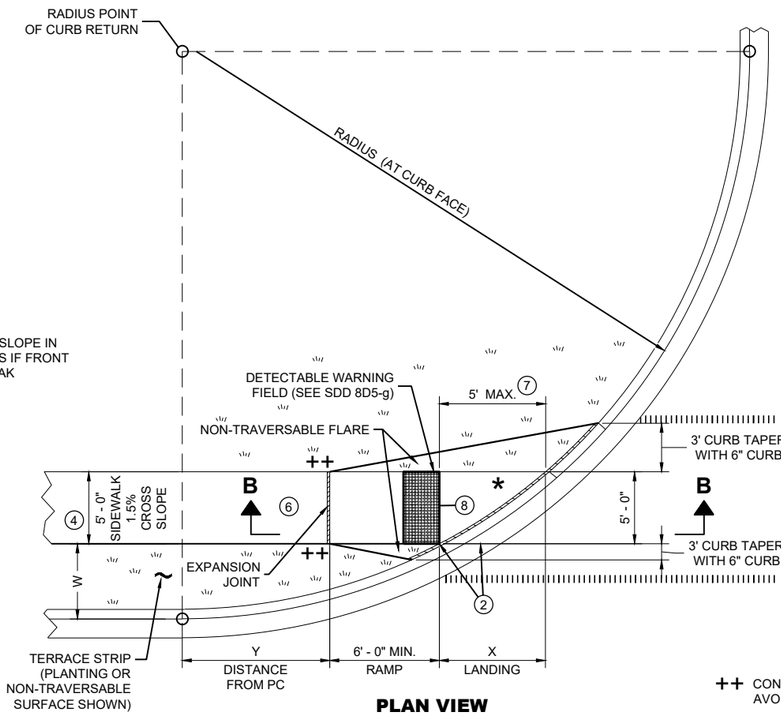
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

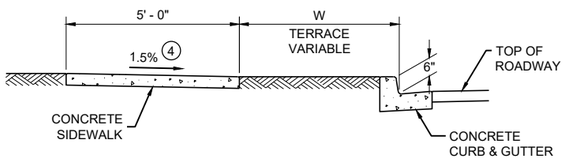
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

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

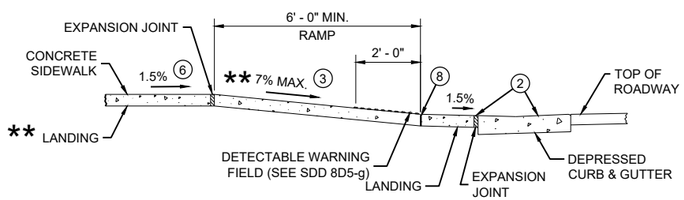
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



PLAN VIEW
CURB RAMP TYPE 4B1



SECTION A - A FOR TYPE 4B

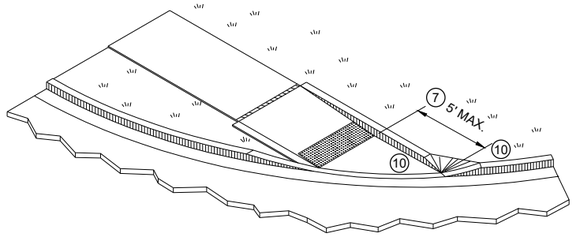


SECTION B - B FOR TYPE 4B AND TYPE 4B1

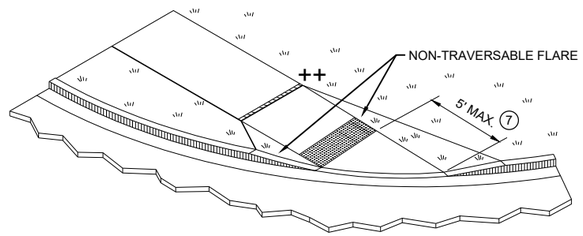
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

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

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



ISOMETRIC VIEW FOR TYPE 4B



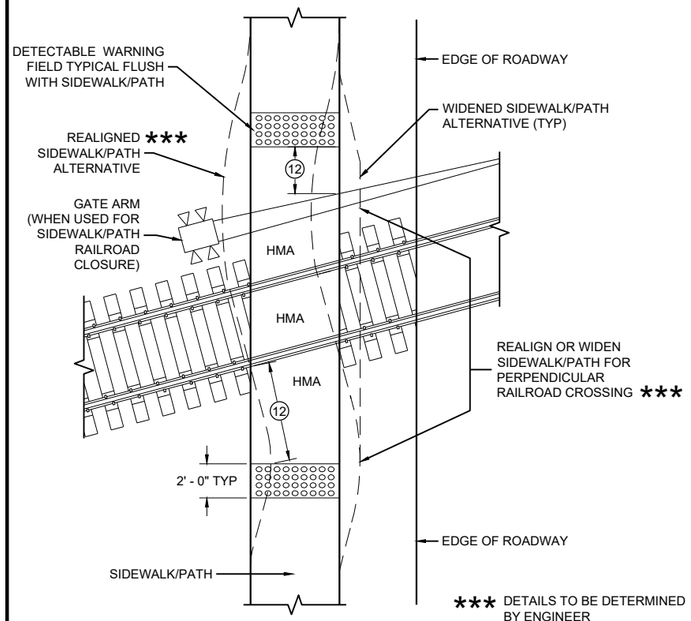
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

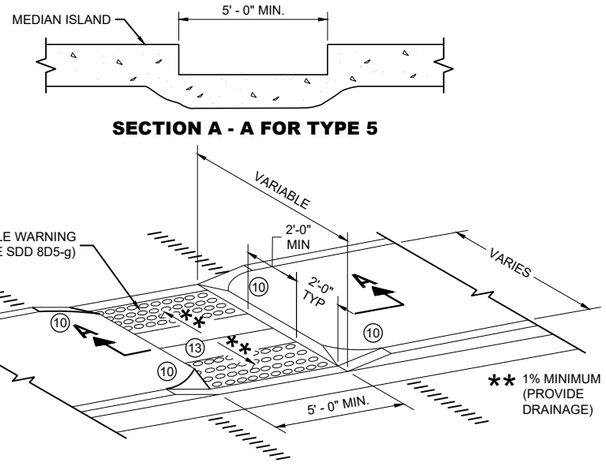
6

SDD 08D05-21d



CURB RAMP TYPE 8

DETECTABLE WARNINGS FOR SIDEWALKS OR SHARED USE PATHS AT RAILROAD CROSSINGS



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.

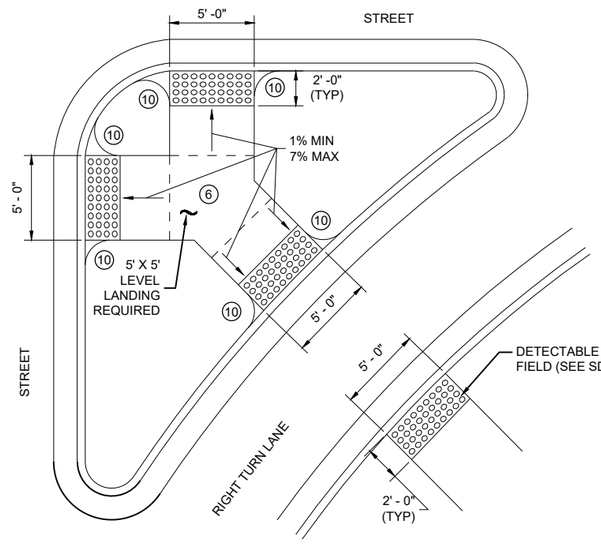
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(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/PATH. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD TRACK IS 15 FEET MAXIMUM AND 12 FEET MINIMUM, 15 FEET TYPICAL 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

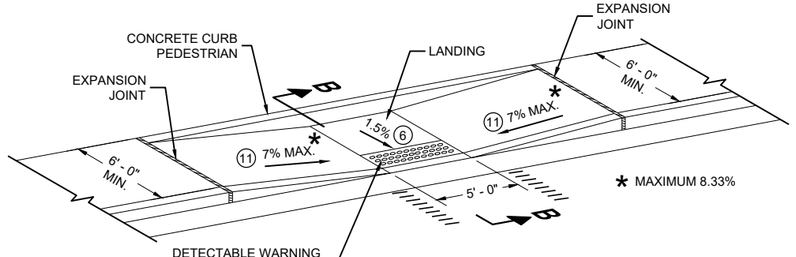
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

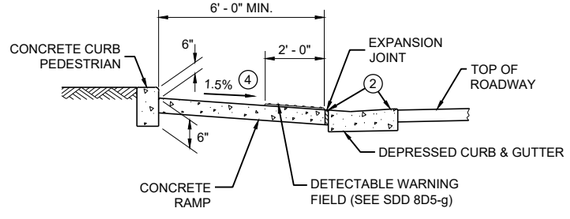
DETECTABLE WARNING AT ISLANDS

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

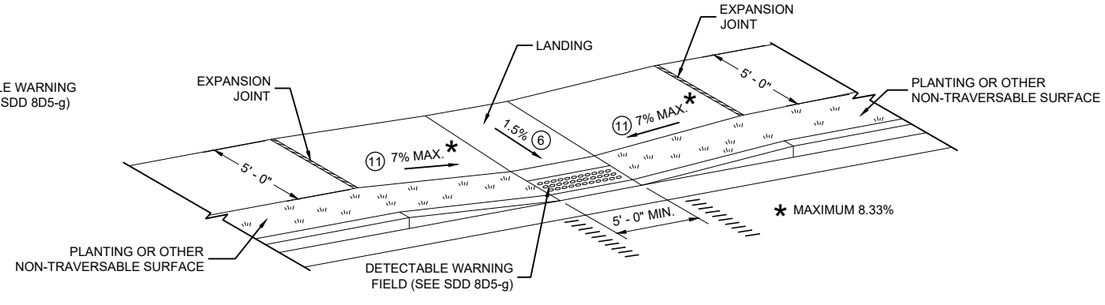


CURB RAMP TYPE 7A

FOR INTERSECTIONS AND MID BLOCK CROSSINGS



SECTION B - B FOR TYPE 7A



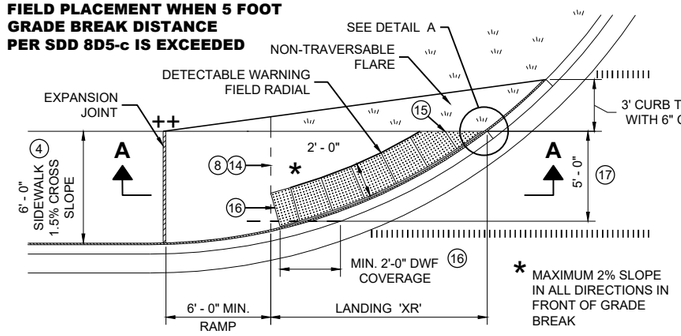
CURB RAMP TYPE 7B

FOR INTERSECTIONS AND MID BLOCK CROSSINGS

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

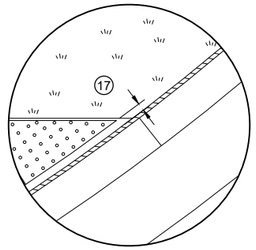
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED

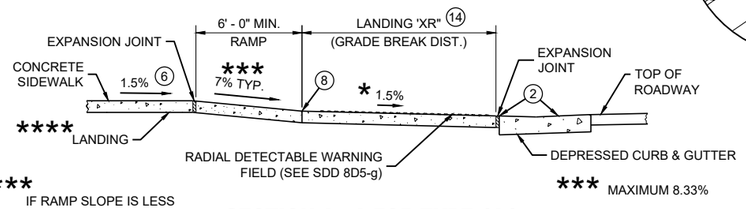


PLAN VIEW

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

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.

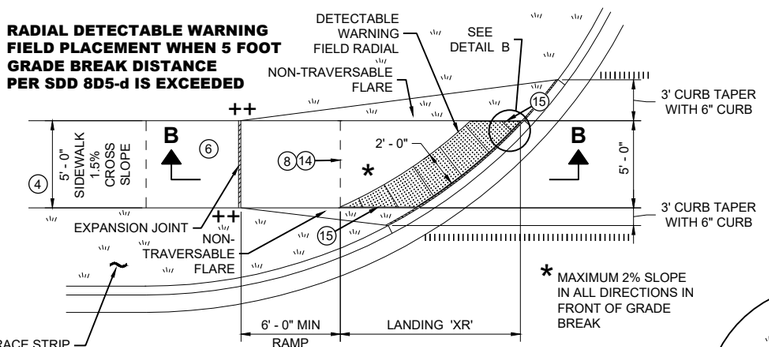
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(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.

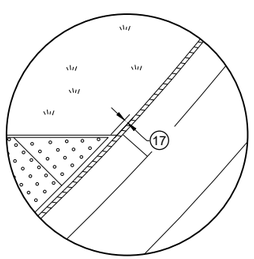
(17) A MAXIMUM 3 INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED

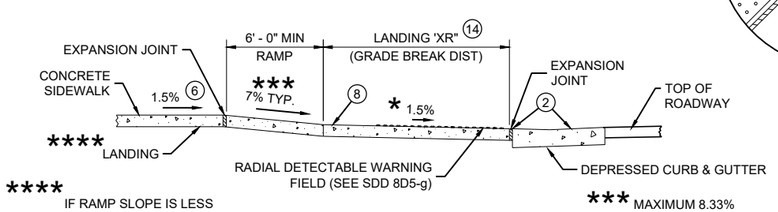


PLAN VIEW

CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B

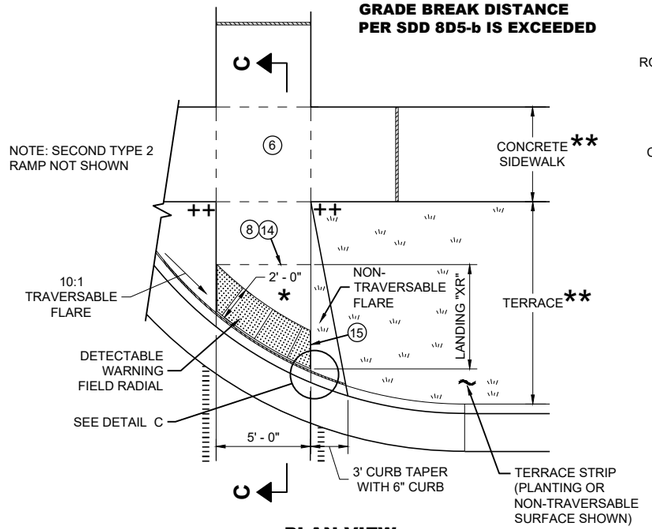


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

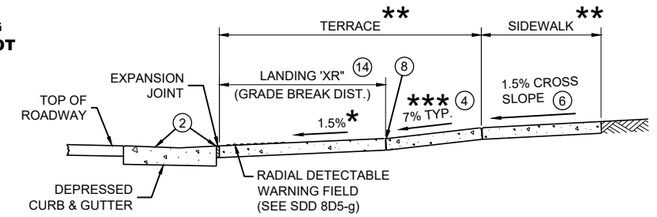
SECTION B - B FOR TYPE 4B1

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

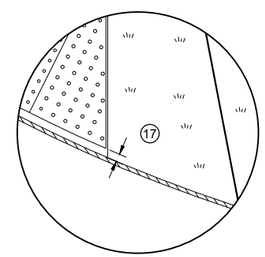


PLAN VIEW

CURB RAMP TYPE 2
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)



SECTION C - C FOR TYPE 2



DETAIL C

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

CURB RAMPS
RADIAL DETECTABLE WARNING

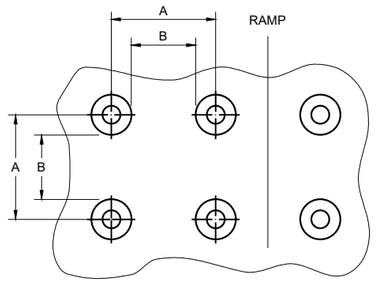
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

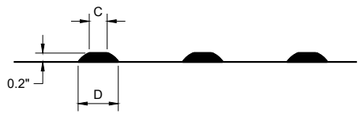
SDD 08D05-21f

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

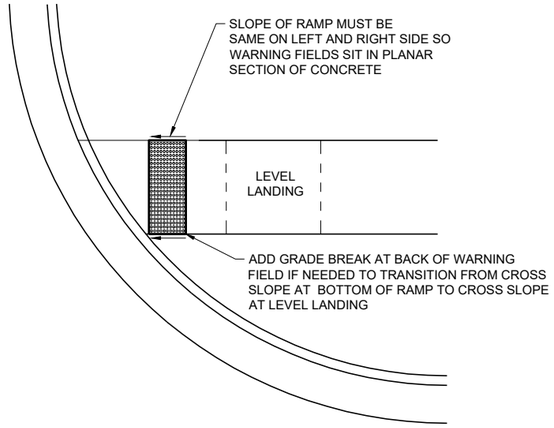
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW



DETECTABLE WARNING FIELD
PLANAR INSTALLATION

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.

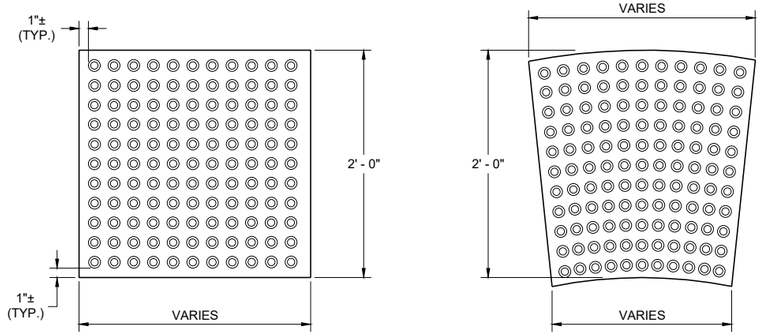
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. 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.

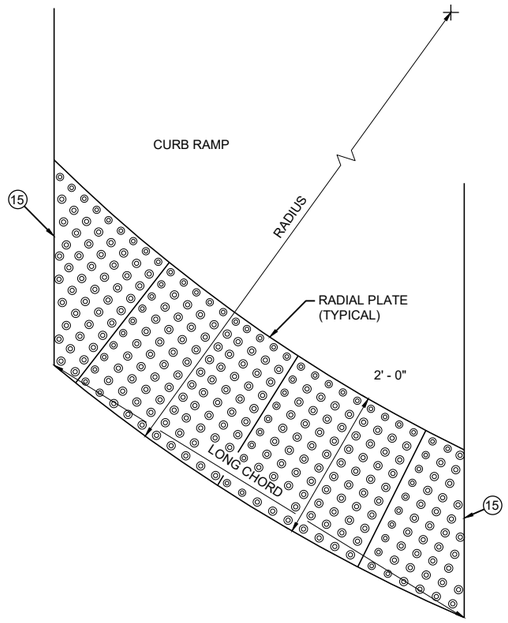
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



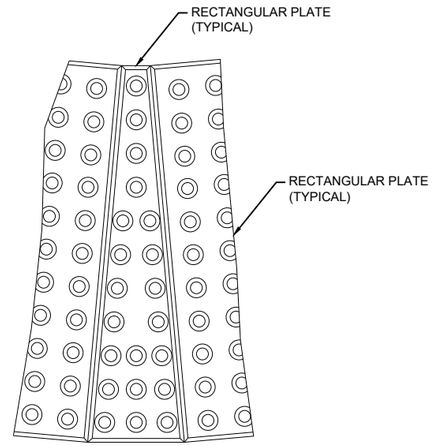
RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

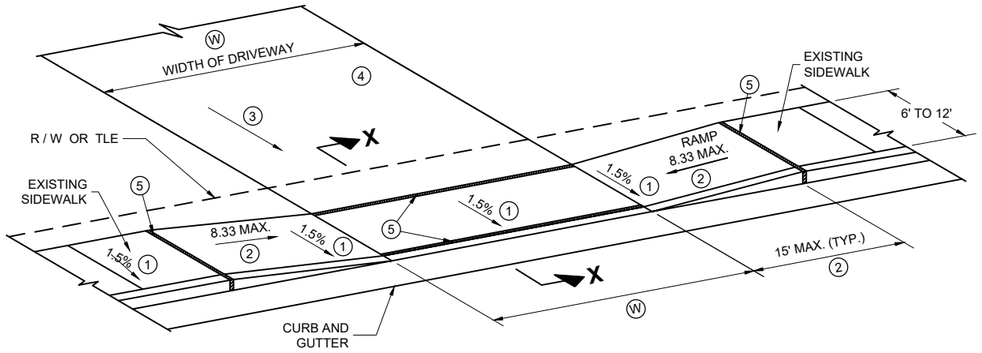
CURB RAMPS
RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

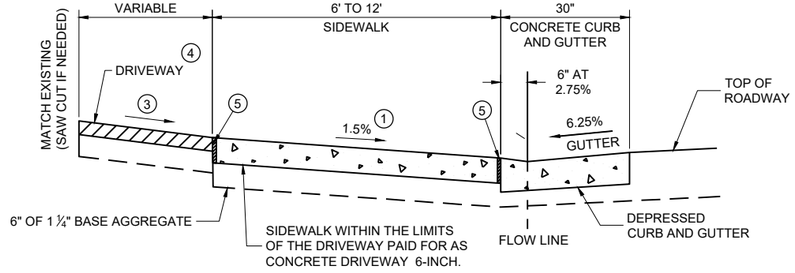
APPROVED
July 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

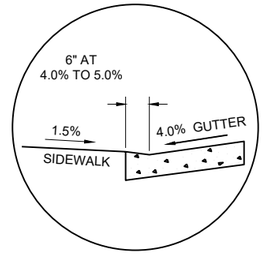
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SDD 08D05-21g



TYPE X
SIDEWALK ABUTS CURB AND GUTTER
TERRACE VARIES 0 TO 3 FEET



SECTION X - X



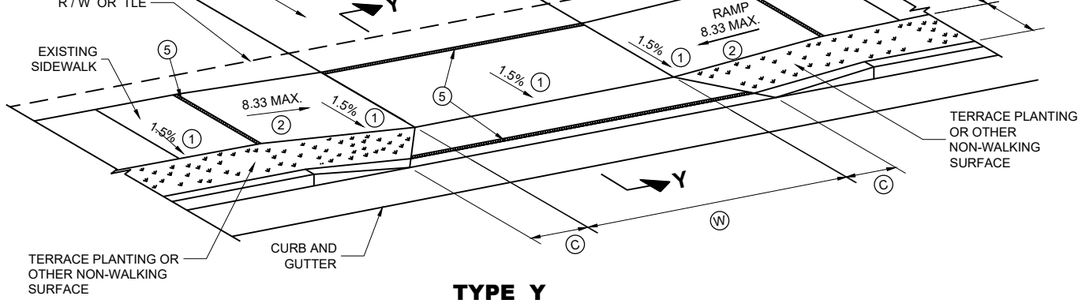
SECTION X - X
4% GUTTER SLOPE

Ⓦ: 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

16' MIN. - 35' MAX. COMMERCIAL (CE)

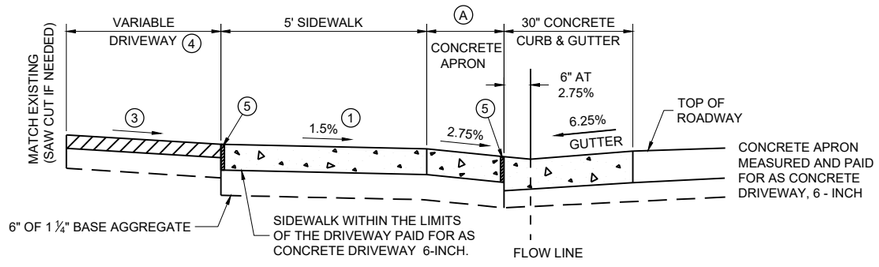
TABLE Y

Ⓐ FEET	Ⓒ FEET
3.5'	2.0'
4.5'	3.0'
5.5'	3.5'



TYPE Y
SIDEWALK WITH NARROWER TERRACE
TERRACE VARIES 4 TO 6 FEET

Ⓐ:MEASURE FROM BACK OF CURB

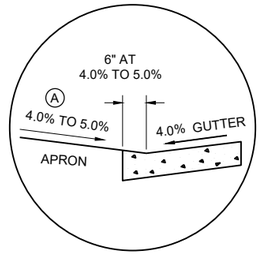


NOTE: SIDEWALK MY BE DEPRESSED IN DRIVEWAY AREAS

SECTION Y - Y

DRIVEWAY DETAIL WITH CONCRETE CURB AND GUTTER

(URBAN AND SUBURBAN)



SECTION Y - Y
4% GUTTER SLOPE

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

Ⓦ IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

① CONSTRUCTION TOLERANCE OF 0.5%± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

② THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

③ DRIVEWAY SLOPES: DESIRABLE MAXIMUM
- 10.5% UP AWAY FROM SIDEWALK (SAG)
- 8.5% DOWN AWAY FROM SIDEWALK (CREST)
- ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

④ DRIVEWAY TYPES
- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES.)

⑤ ½" EXPANSION JOINT FILLER

DRIVEWAY AND SIDEWALK RAMPS TYPES X AND Y

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

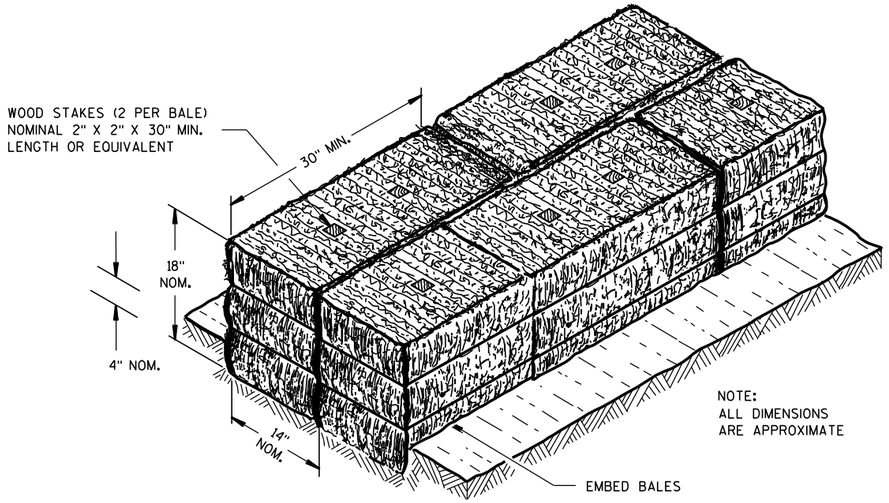
FHWA

SDD 08D18-04

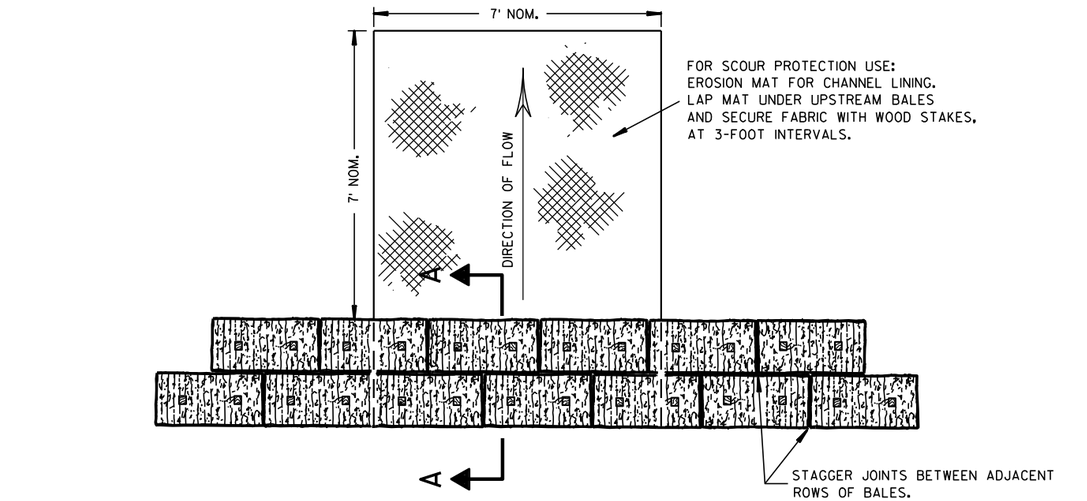
SDD 08D18-04

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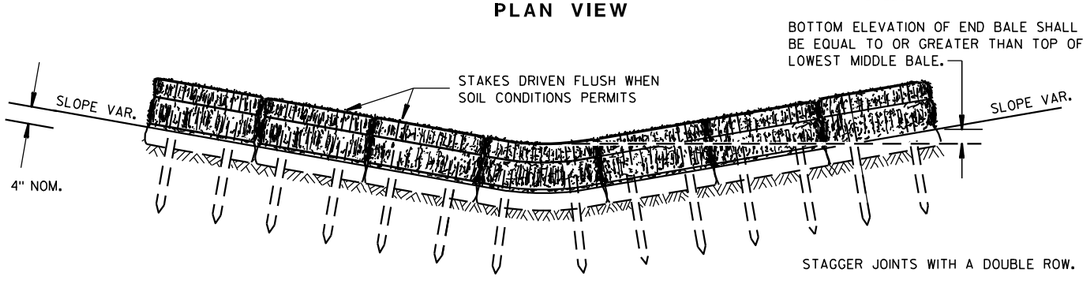
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SECTION A-A



PLAN VIEW



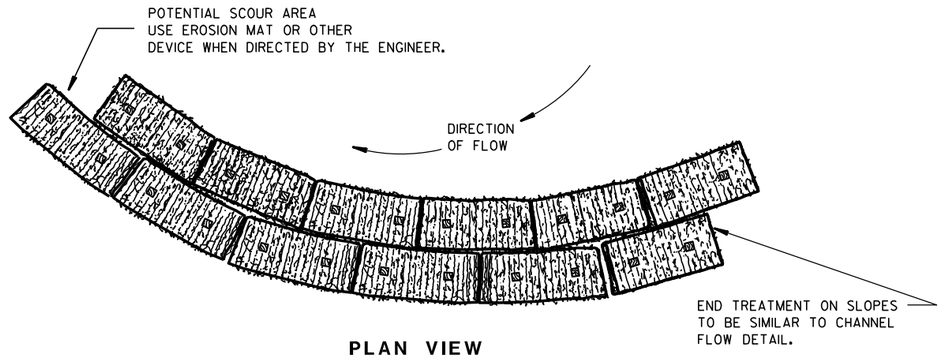
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

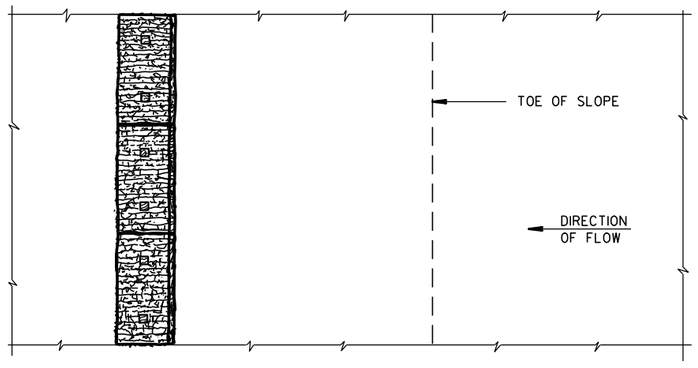
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

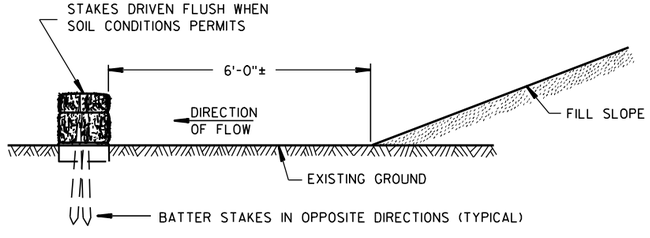


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

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

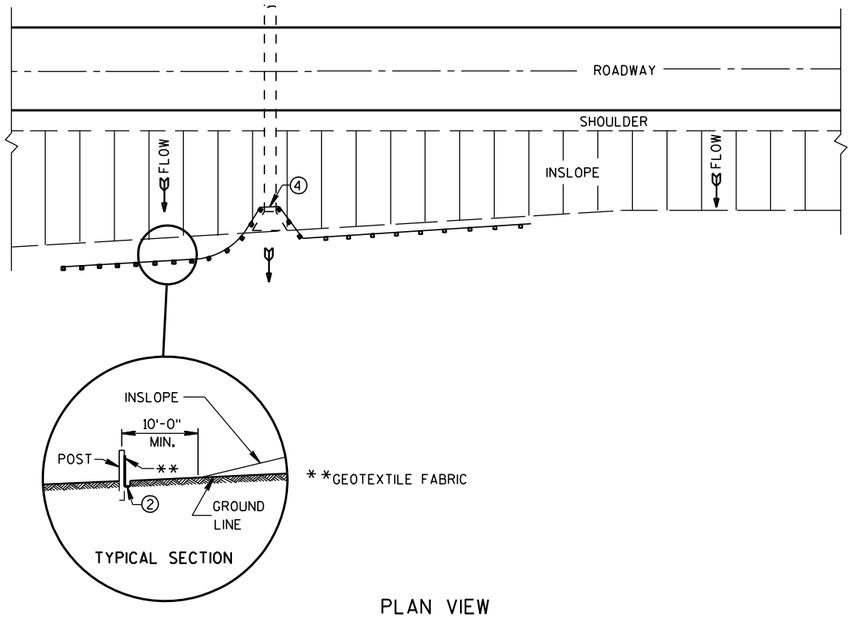
FHWA

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S.D.D. 8 E 8-3

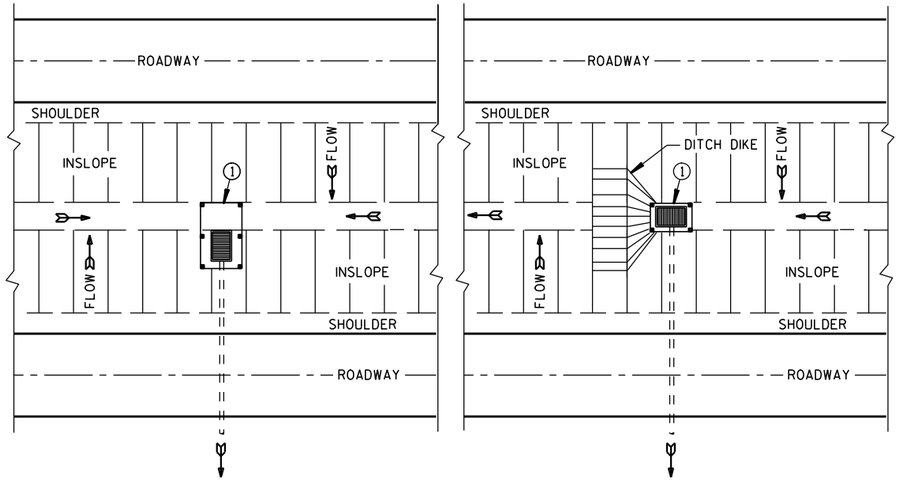
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S.D.D. 8 E 8-3



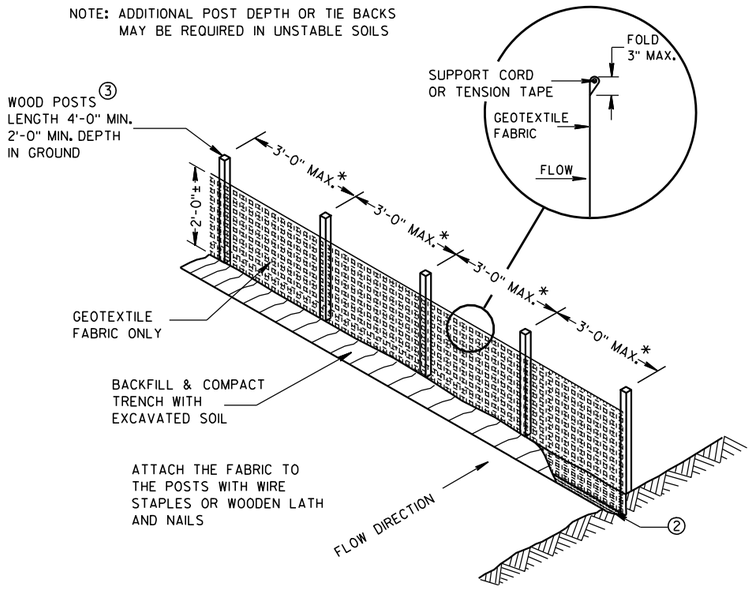
PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



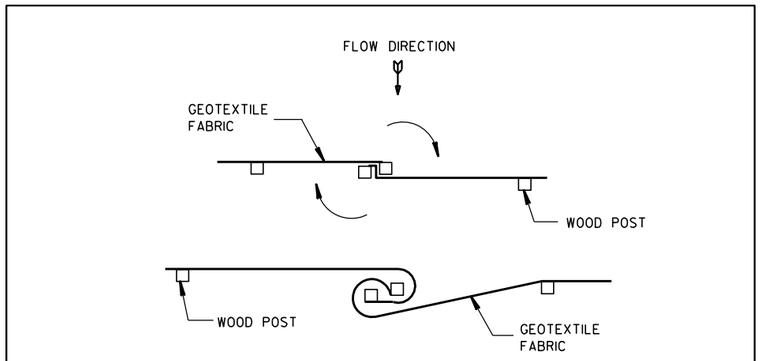
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS



*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

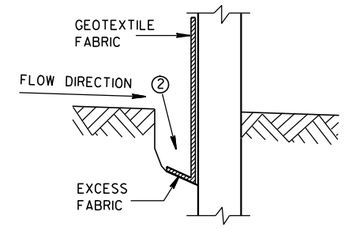


JOINING TWO LENGTHS OF SILT FENCE 5

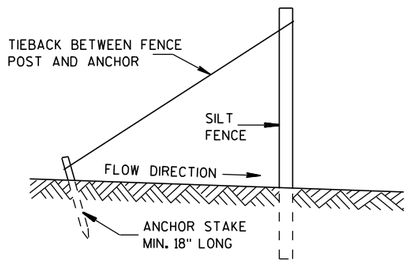
GENERAL NOTES

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

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



TRENCH DETAIL



SILT FENCE TIE BACK

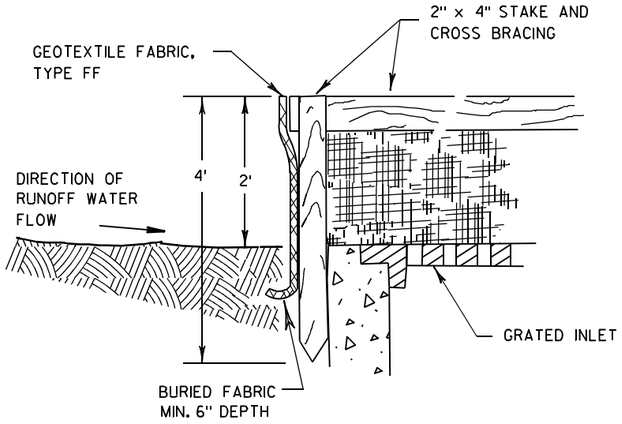
(WHEN REQUIRED BY THE ENGINEER)

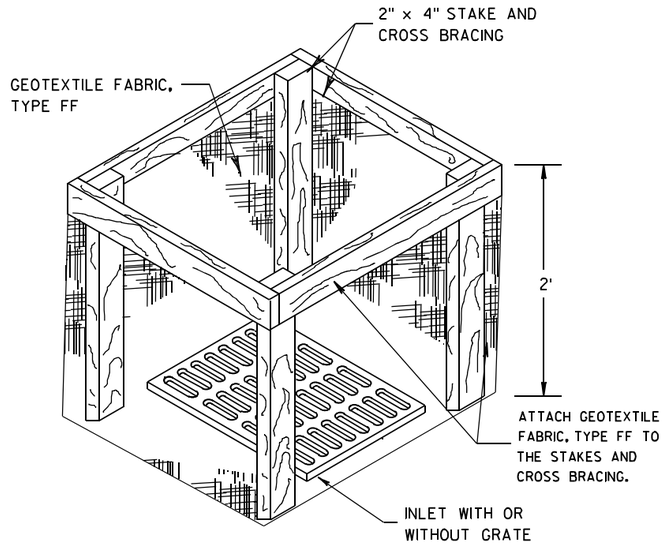
SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

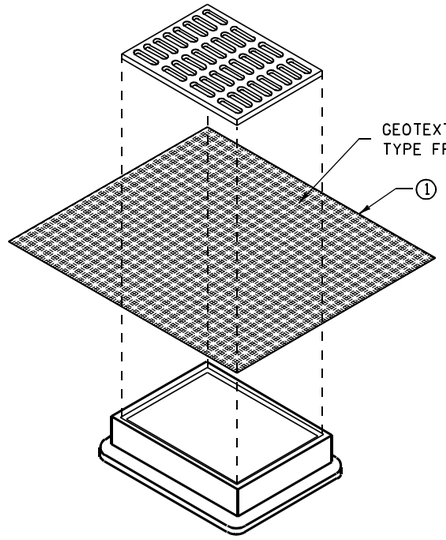
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 E 9-6



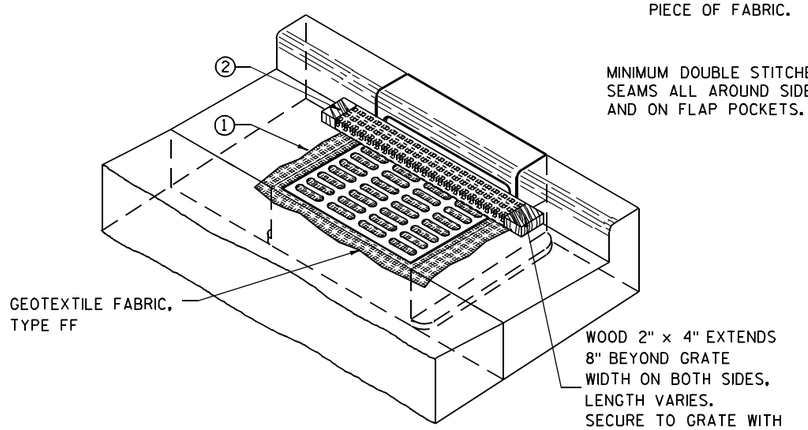


INLET PROTECTION, TYPE A

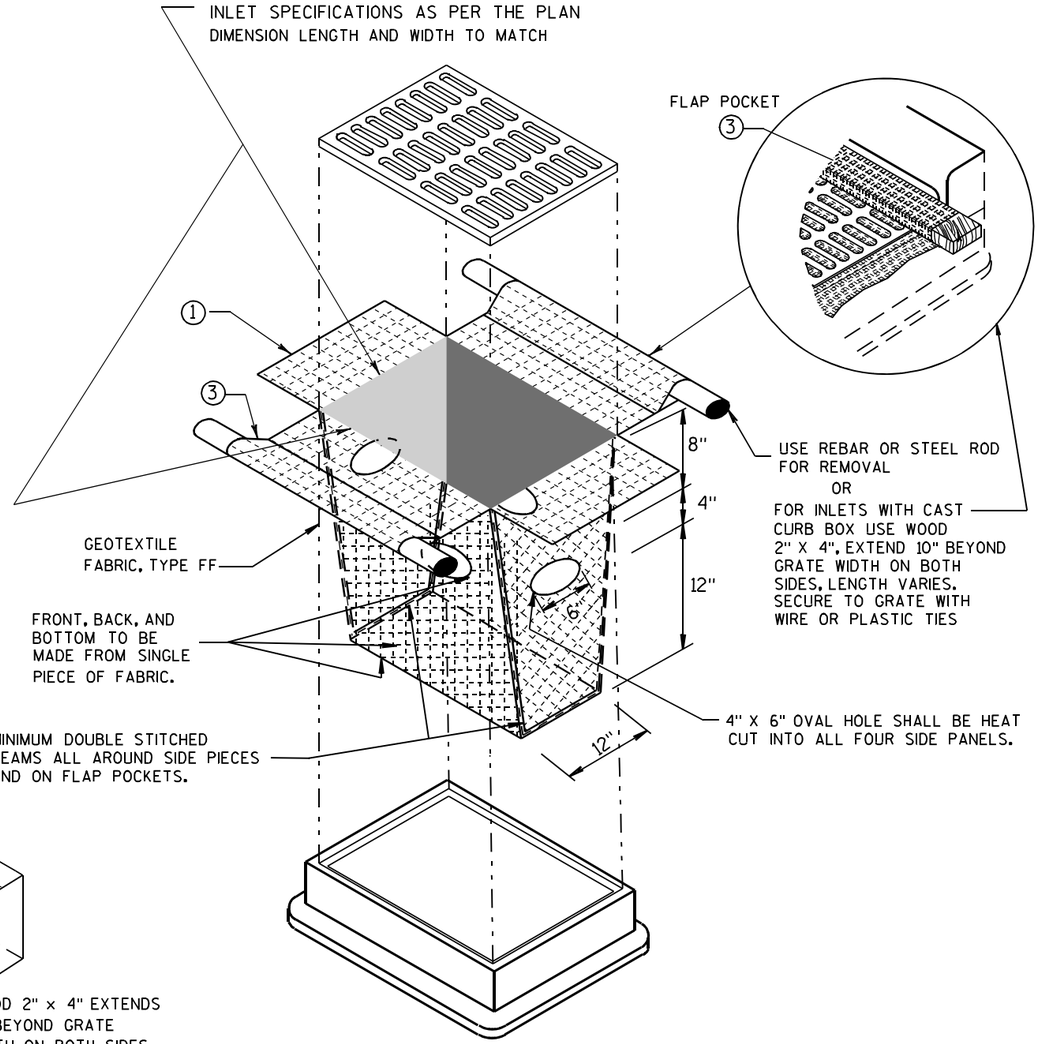


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

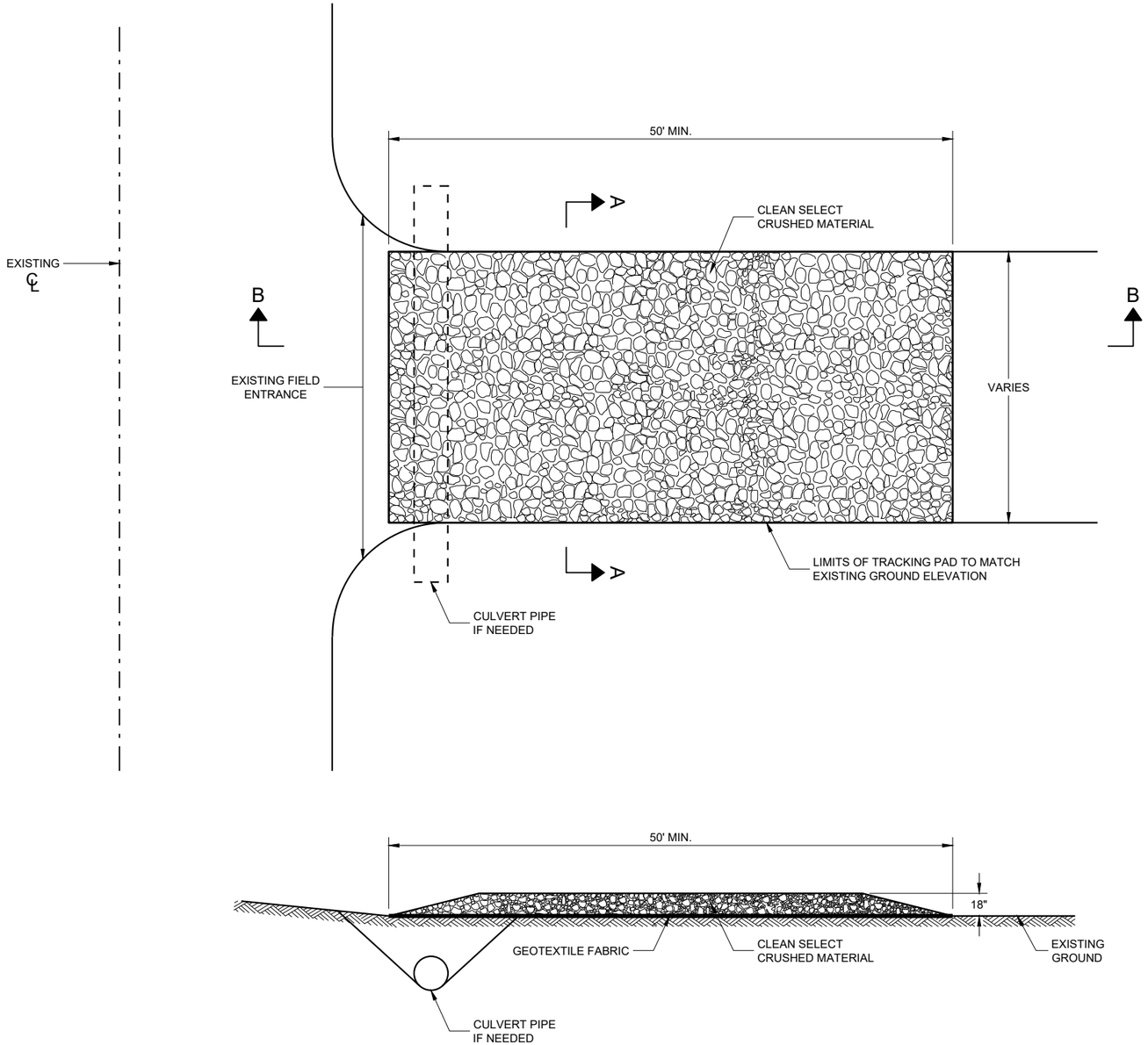
FHWA

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S.D.D. 8 E 10-2

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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.

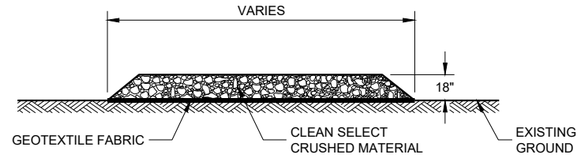
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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

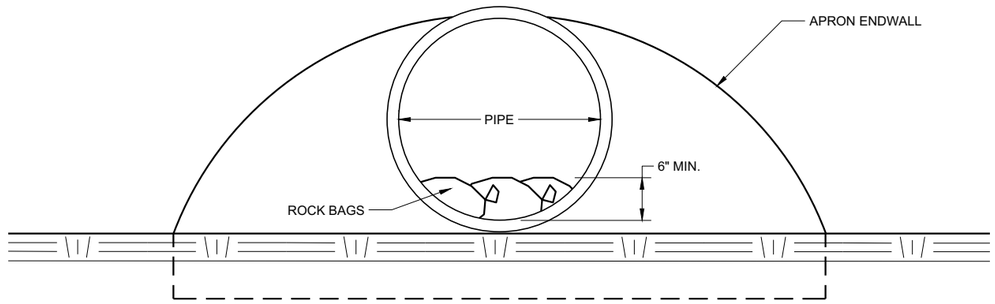
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/24/2011
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVE ENGINEER

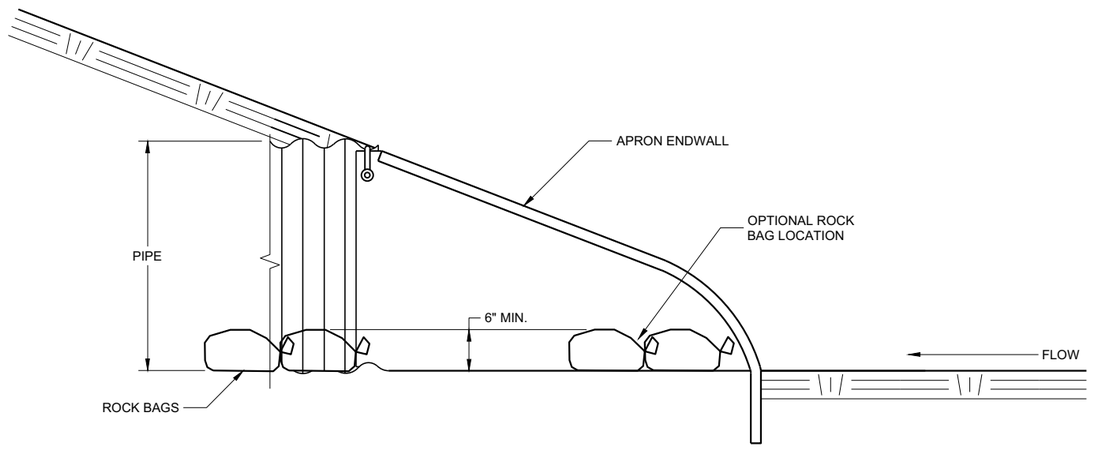
FHWA

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SDD 08E14 - 01



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA

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SDD 08E15 - 01

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SDD 08E15 - 01

METAL APRON ENDWALLS

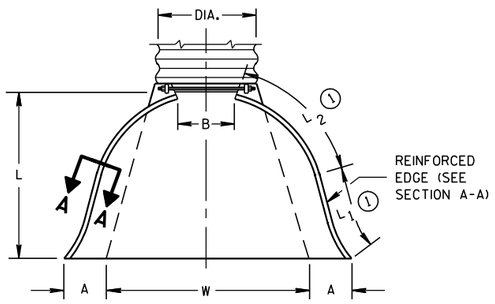
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

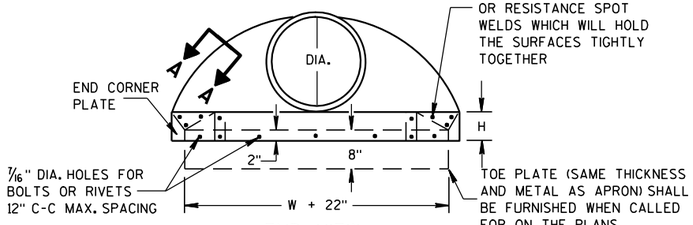
REINFORCED CONCRETE APRON ENDWALLS

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

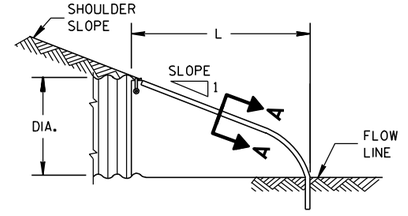
*MINIMUM
**MAXIMUM



PLAN VIEW

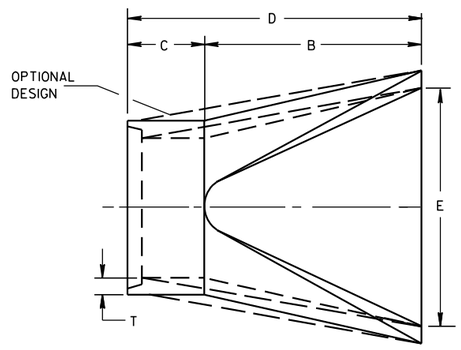


END VIEW

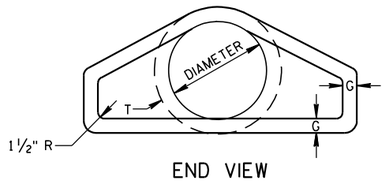


SIDE ELEVATION

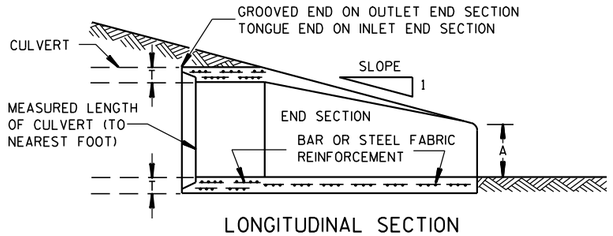
METAL ENDWALLS



PLAN

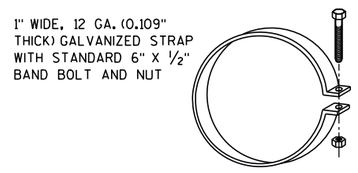


END VIEW



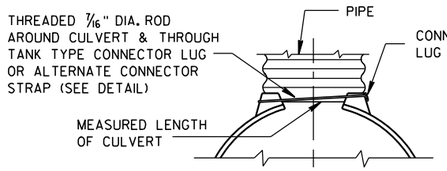
LONGITUDINAL SECTION

CONCRETE ENDWALLS

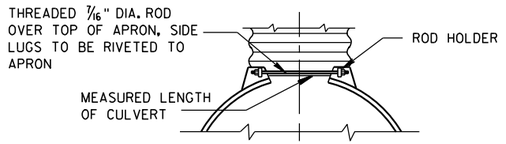


ALTERNATE FOR TYPE 1 CONNECTION

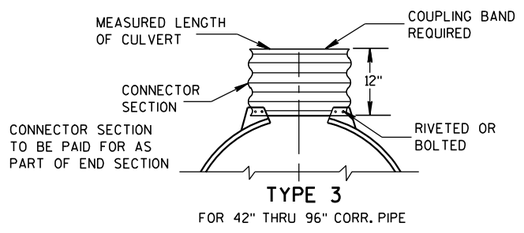
END SECTION CONNECTOR STRAP



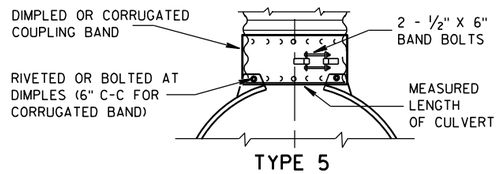
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

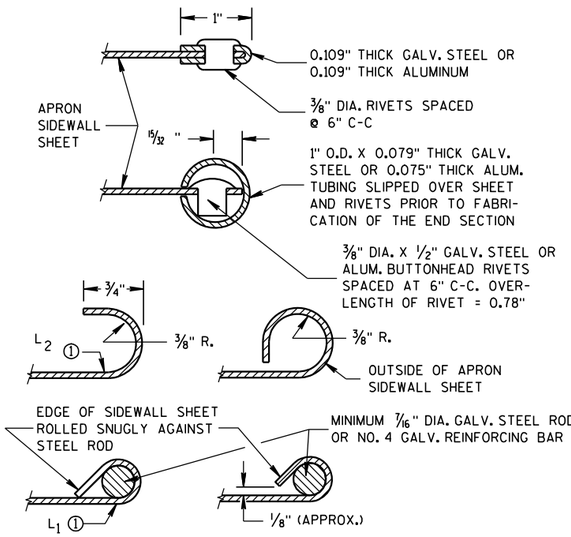
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

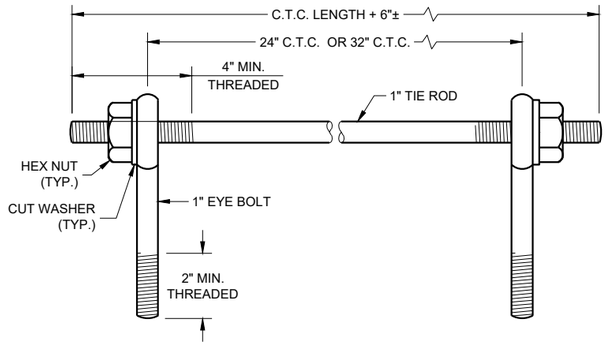
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

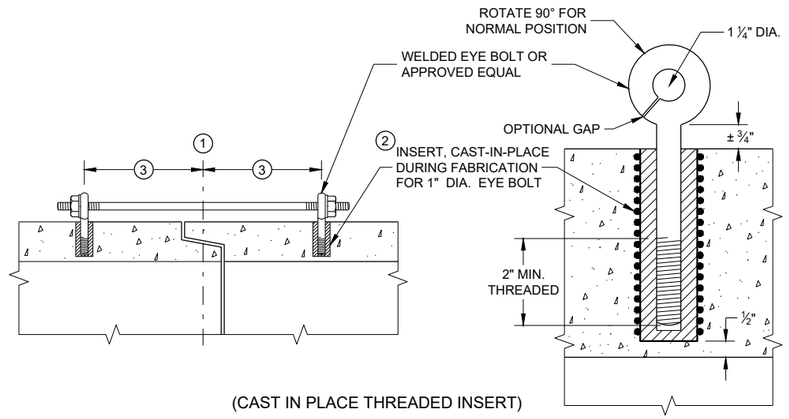
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 8 F 1-11



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) CENTER LINE 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.

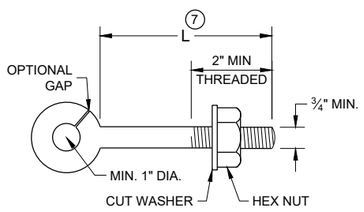
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

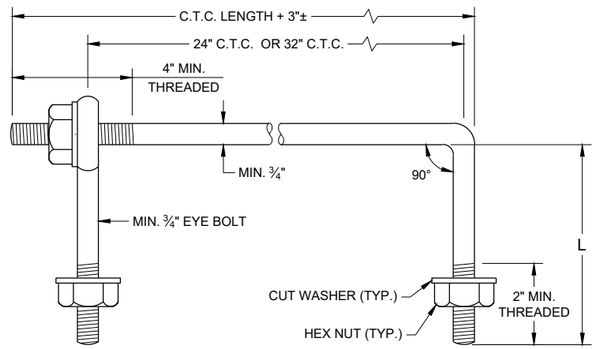
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

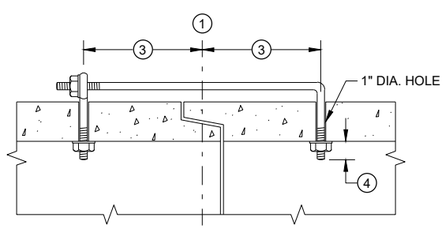


EYE BOLT (7)

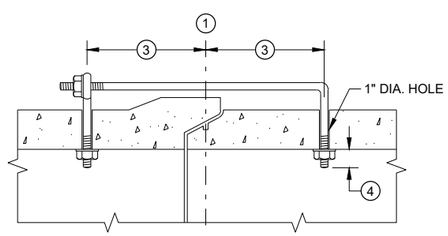
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

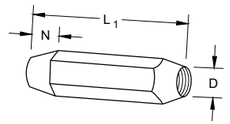
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

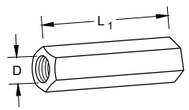
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



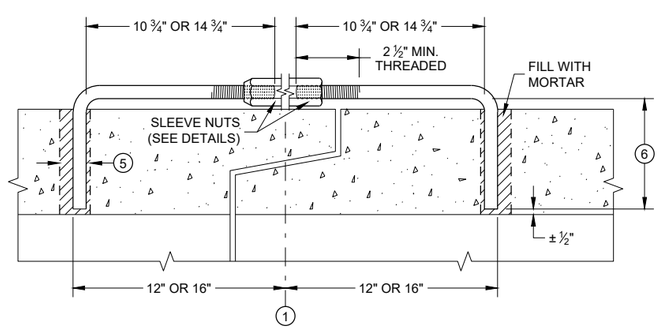
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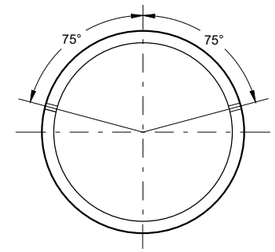
RIGHT AND LEFT THREADS

SLEEVE NUTS



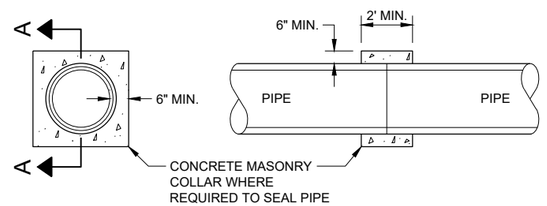
LONGITUDINAL SECTION

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

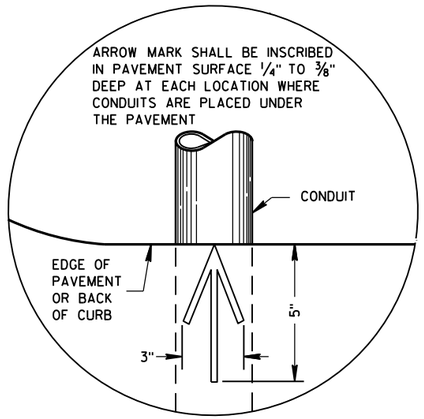
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

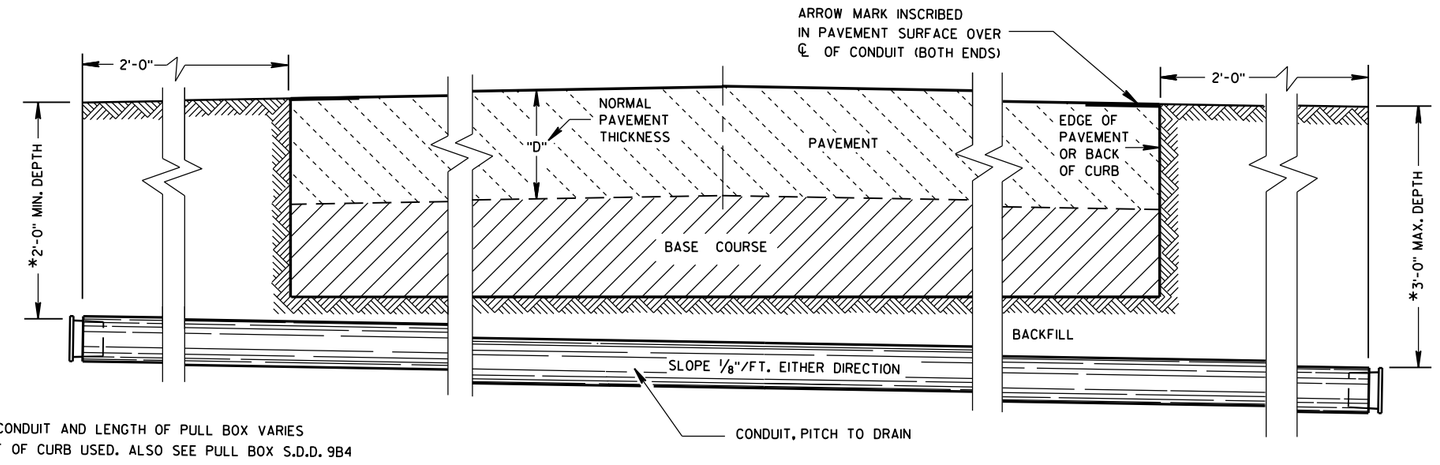
SDD 08F04 - 08

SDD 08F04 - 08



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.

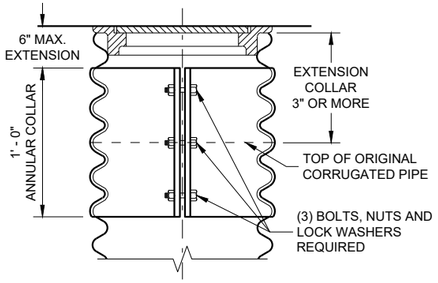
ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

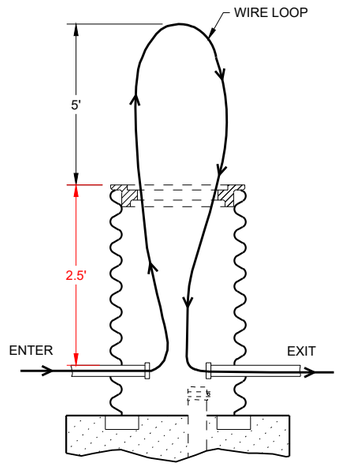
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 288
FHWA

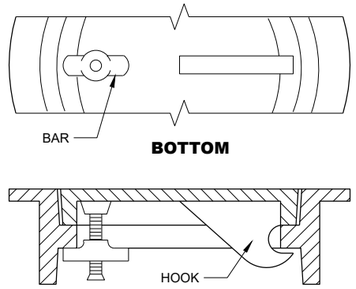
6
S.D.D. 9 B 2-10



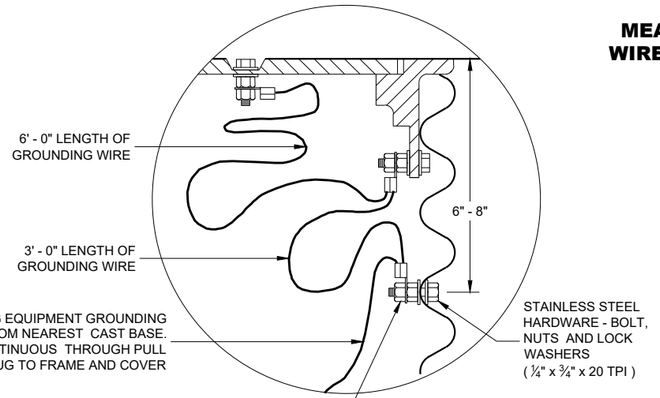
CORRUGATED PIPE EXTENDER



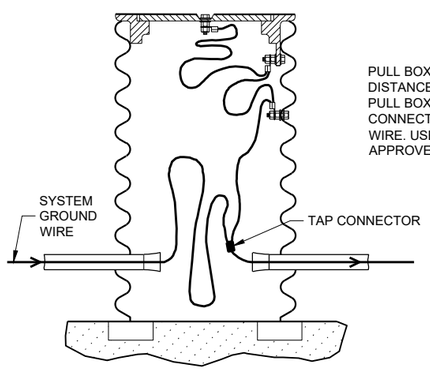
MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



ALTERNATE COVER (LOCKING)
TIGHTENING BAR TYPE

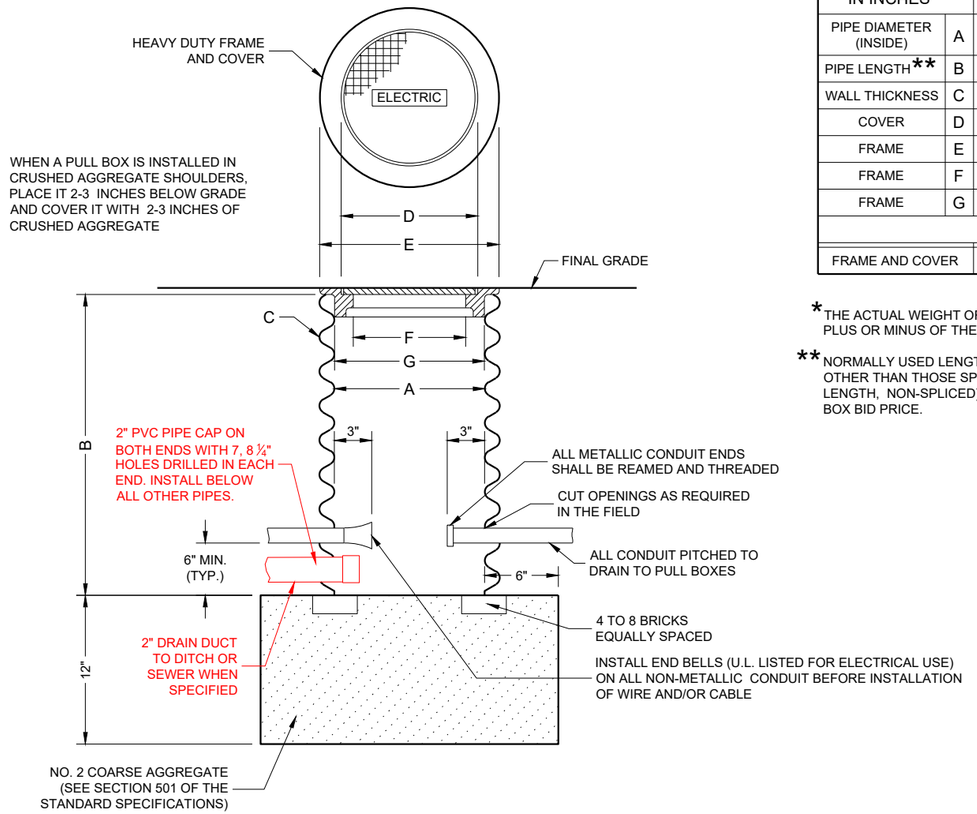


EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX 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

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 ¼".

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.

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 ¼	10 ¼	10 ¼	16 ¼	16 ¼	16 ¼	22 ¼	22 ¼	22 ¼
FRAME	E	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½	26 ½	26 ½	26 ½
FRAME	F	8 ½	8 ½	8 ½	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½
FRAME	G	11 ½	11 ½	11 ½	17 ½	17 ½	17 ½	23 ½	23 ½	23 ½
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.

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 289

FHWA

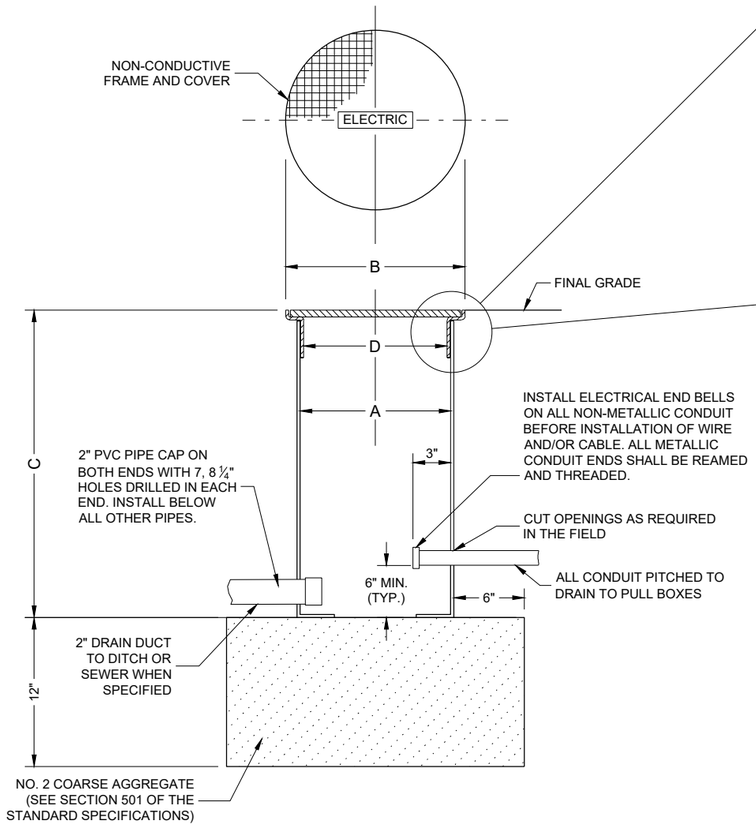
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SDD 09B04-12

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

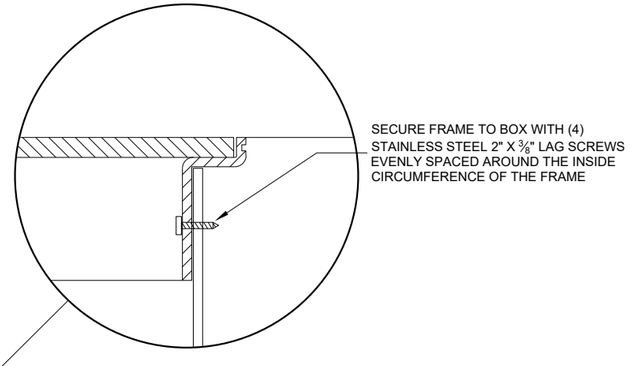
DIMENSION IN INCHES		NON- CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 ½	22 ½
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

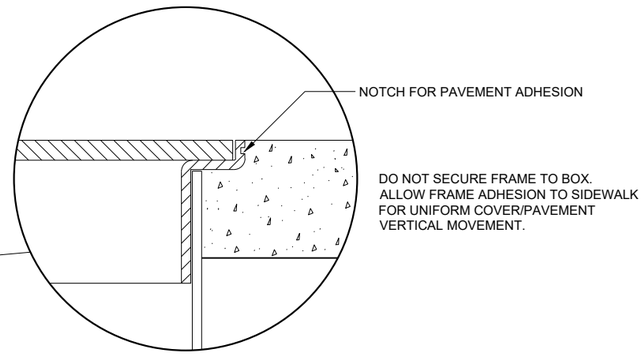
** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE.



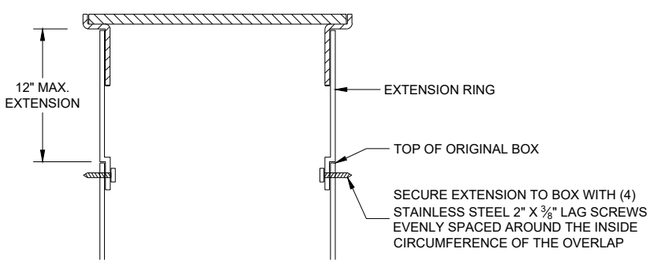
NON-CONDUCTIVE PULL BOX



INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



BOX EXTENSION

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN ½" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN ¼".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

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 ¼".

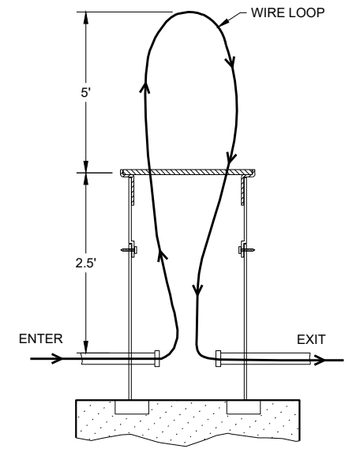
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

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

ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE.

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

PULL BOXES NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

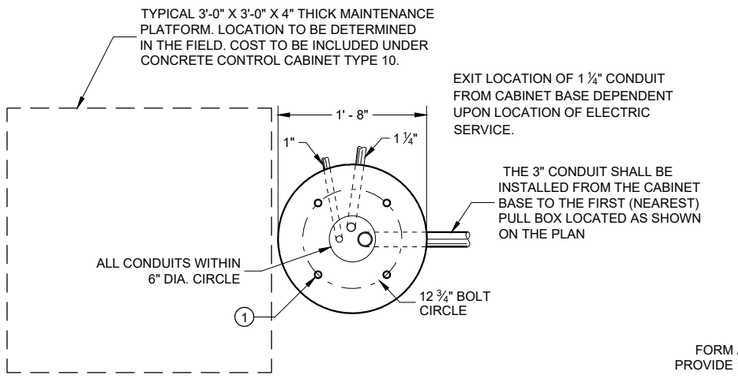
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 290

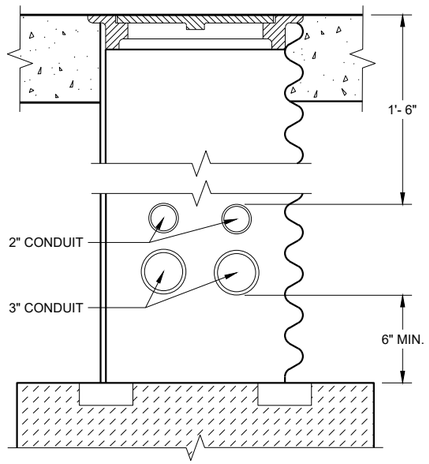
FHWA

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SDD 09B16 - 02

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

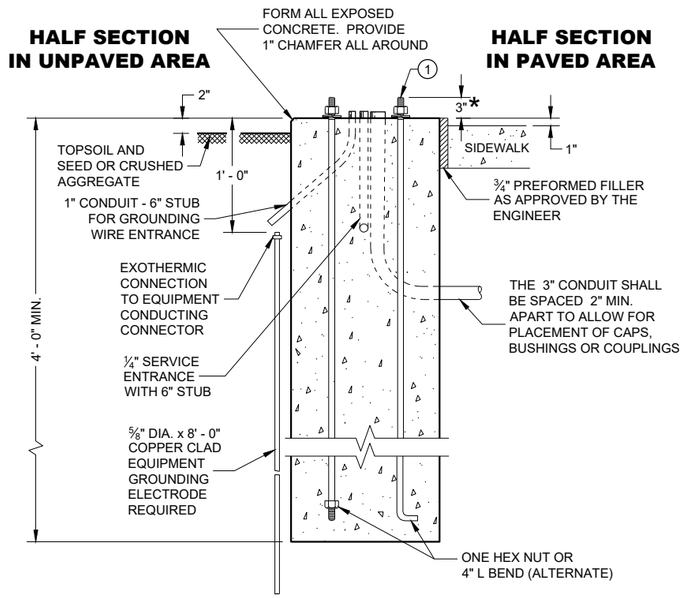
*INCLUDES MAINTENANCE PLATFORM.





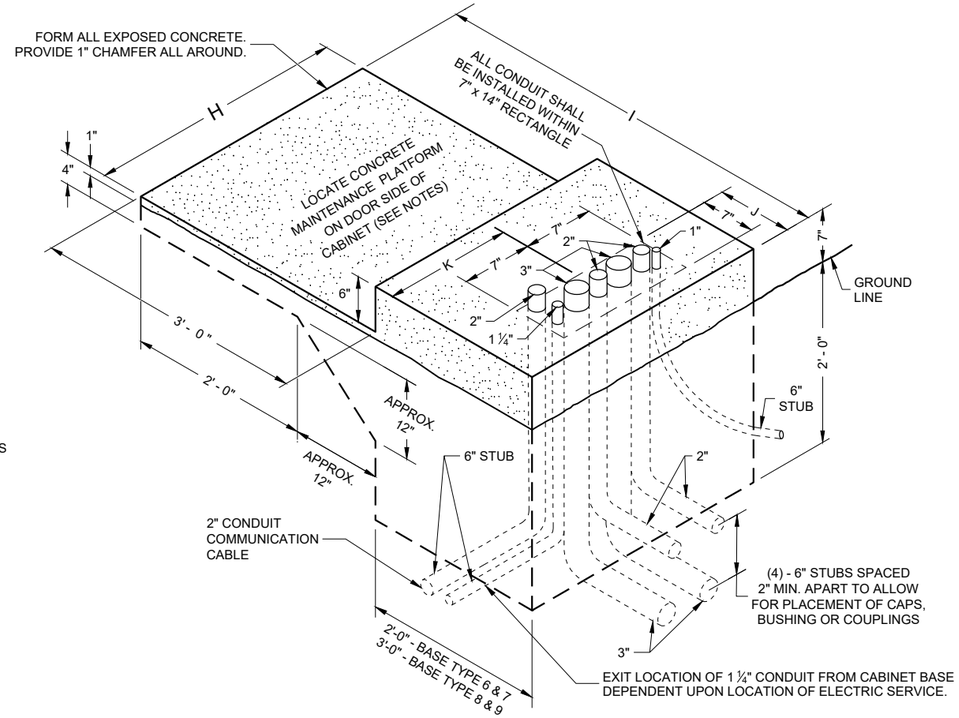
CONDUIT LOCATIONS IN 24" X 36" PULL BOX

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



TYPE 10

*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.



ISOMETRIC VIEW
TYPE 6, 7, 8 AND 9

GENERAL NOTES

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

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

WHEN REQUIRED TO CONNECT 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.

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

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

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

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF 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.

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

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

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

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

THE "L" BEND SHALL NOT BE THREADED.

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

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

(1) FOUR (4) ANCHOR RODS, 1" DIA. X 3'-6". ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2 OF THE STANDARD SPECIFICATIONS.

CONCRETE CABINET CONTROL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2016
DATE
/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI 291
FHWA

GENERAL NOTES

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

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER.

IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

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

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 THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2 OF THE STANDARD SPECIFICATIONS.

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

ANCHOR RODS SHALL BE 1" X 60".

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 TIMES 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 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 NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

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.

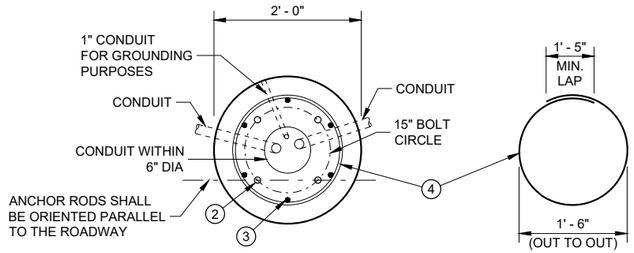
FOR USE WITH TYPE 7 AND TYPE 17 POLES.

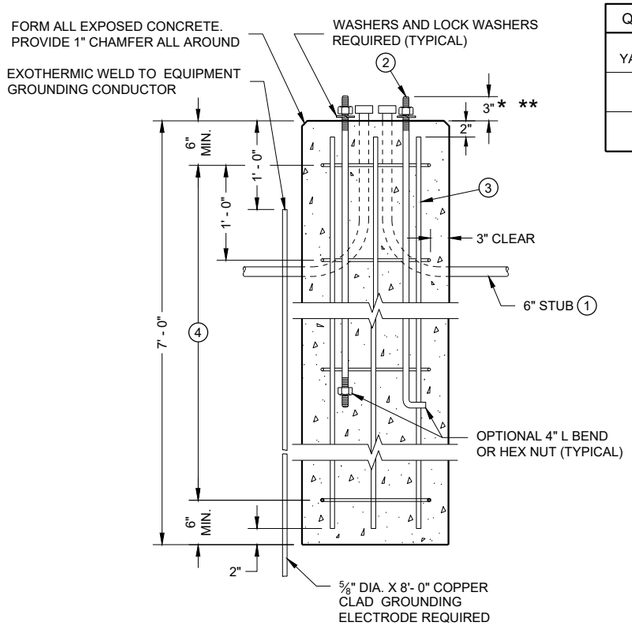
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

(2) (4) 1" DIA. X 5'-0" ANCHOR RODS.

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

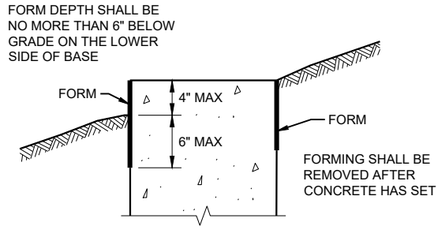
(4) (7) NO. 4 X 6'-2" BAR STEEL REINFORCEMENT @ 1'-0" C-C.



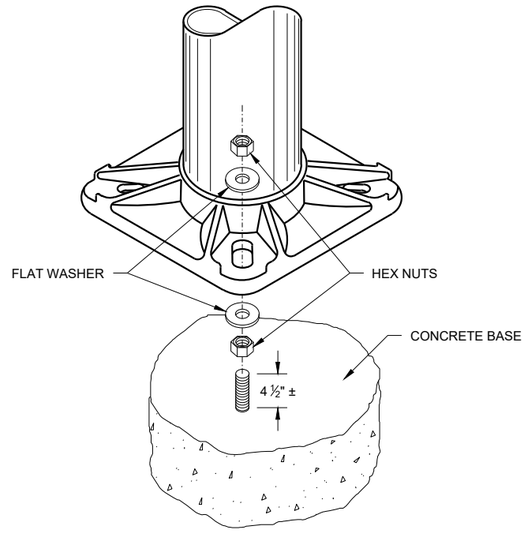


CONCRETE BASE, TYPE 7

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	0.8
LBS. OF HOOP BAR STEEL	29
LBS. OF VERTICAL BAR STEEL	60



FORMING DETAIL



NON-BREAKAWAY INSTALLATION
(LEVELING NUT)

* 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.

** FOR NON-BREAKAWAY INSTALLATIONS, 4 ½"± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASE TYPE 17

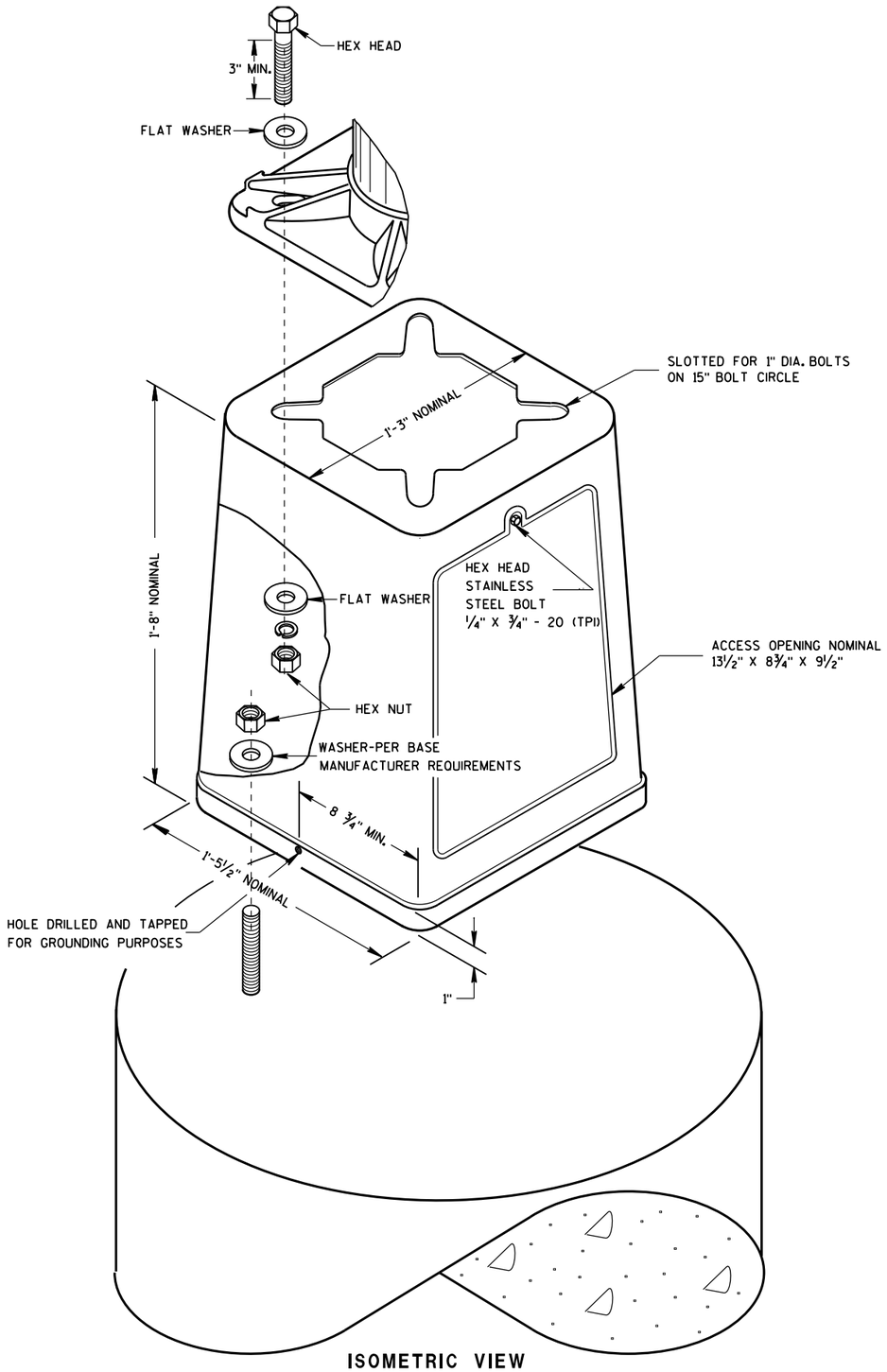
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Alex Crabtree — WIND LOADED STRUCTU PROGRAM LEADER

FHWA

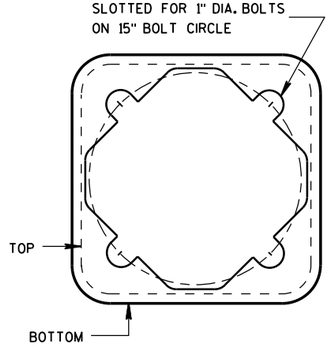
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SDD 09C08 - 05



ISOMETRIC VIEW

TRANSFORMER BASE



BOTTOM VIEW

GENERAL NOTES

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

BREAKAWAY BASES (WHERE REQUIRED) WILL BE MEASURED AND PAID AS SEPARATE ITEMS OF WORK IN ADDITION TO THE LIGHT POLE.

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 DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIMS SHALL BE SIZED TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

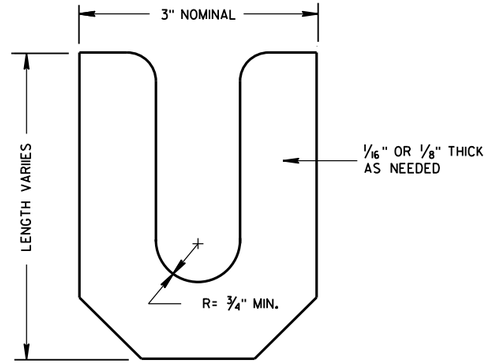
A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE TRANSFORMER BASE.

THE MECHANICAL CONNECTOR (GROUNDING LUG) SHALL BE INSTALLED USING THE TAPPED HOLE PROVIDED BY THE MANUFACTURER. THE MOUNTING BOLT HEXHEAD), NUT, WASHER AND LOCK WASHER SHALL BE STAINLESS STEEL, SIZED TO FIT THE THREADING AND HOLE SIZE, AND BE OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

SHOULD A GROUNDING LUG MOUNTING HOLE NOT BE PROVIDED, THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" X 3/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE. IT SHALL BE MOUNTED IN THE SAME LOCATION AS IS SHOWN ON THE DRAWING.

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

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



LEVELING SHIM



TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE FOR 15" BOLT CIRCLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

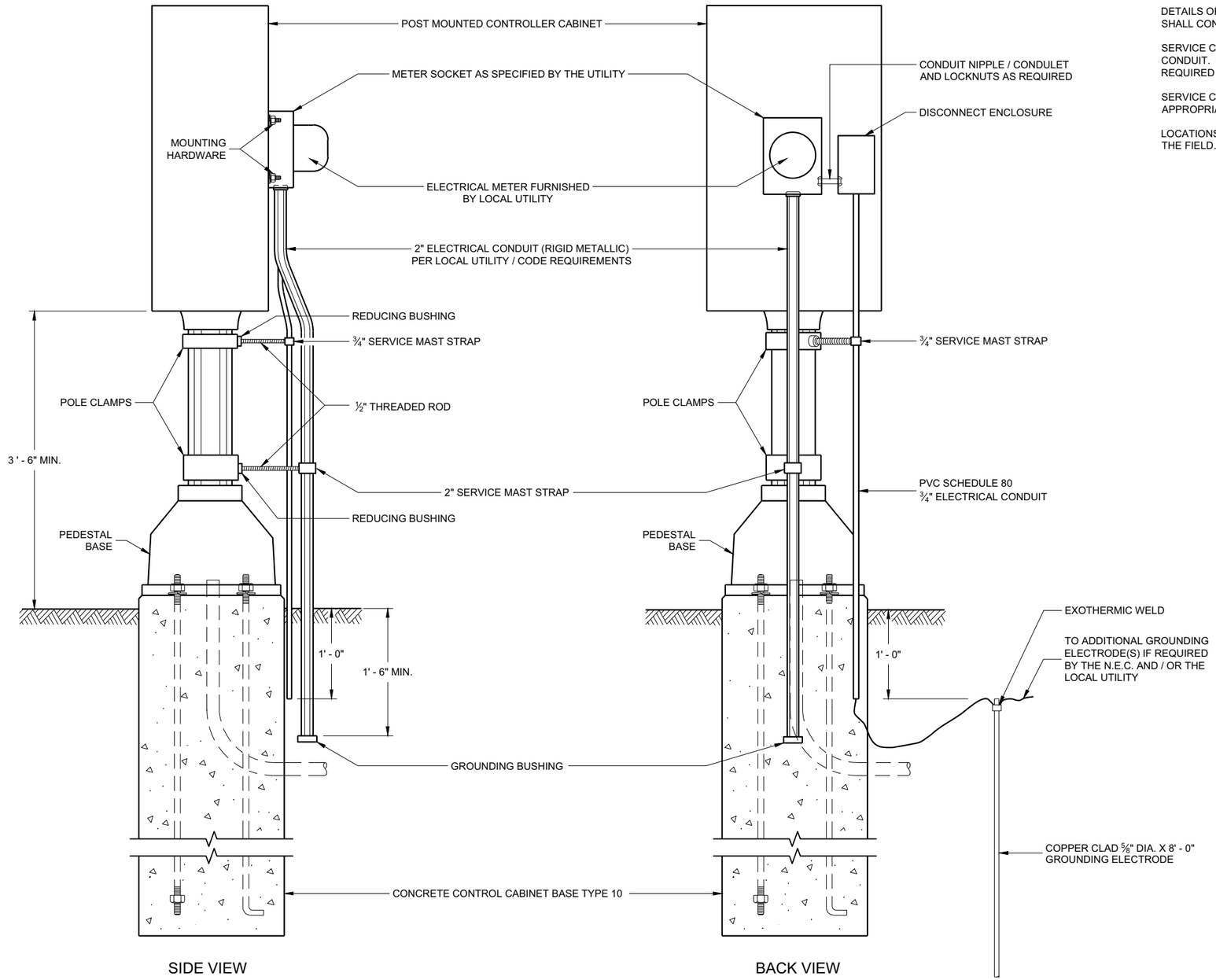
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 C 10-3

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S.D.D. 9 C 10-3



POST MOUNTED CONTROLLER SERVICE INSTALLATION

GENERAL NOTES

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

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID STEEL OR SCHEDULE 80 PVC ELECTRICAL CONDUIT. NIPPLES AND/OR CONDULETS, WITH LOCK NUTS AND GROUNDING BUSHINGS AS REQUIRED BY THE N.E.C. OR THE LOCAL UTILITY.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AS REQUIRED AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED ELECTRICAL CODE.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS UNLESS DETERMINED BY THE ENGINEER IN THE FIELD.

POST MOUNTED CONTROLLER SERVICE INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

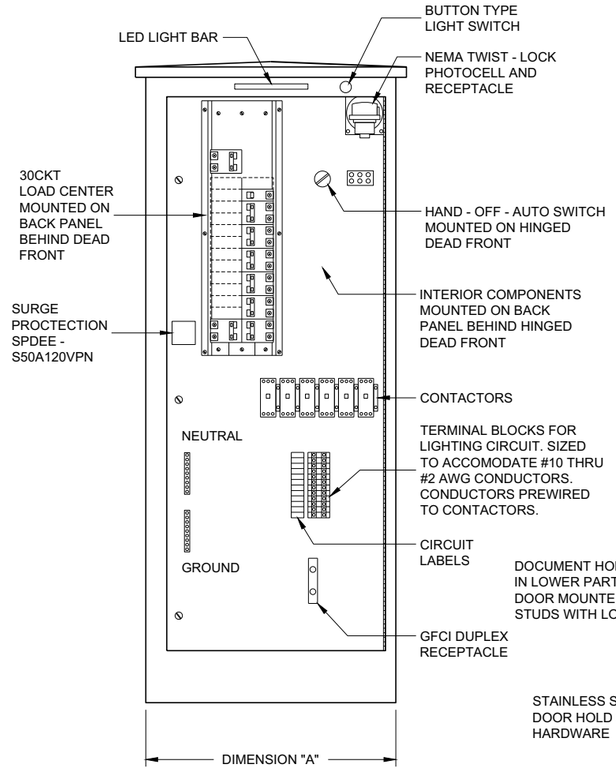
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 294

FHWA

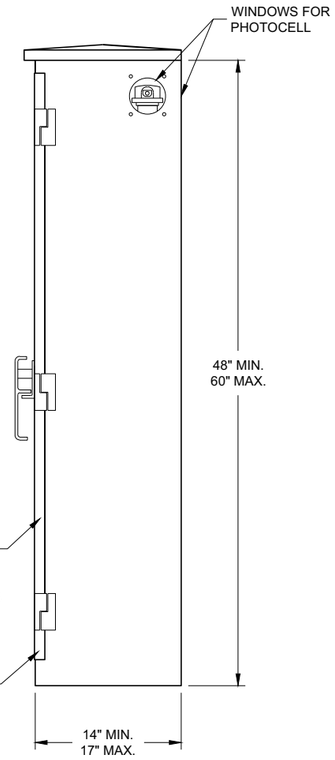
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SDD 09D03 - 03

FRONT INTERIOR ELEVATION



SIDE VIEW



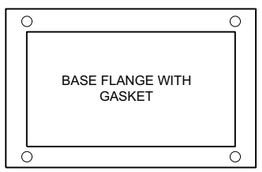
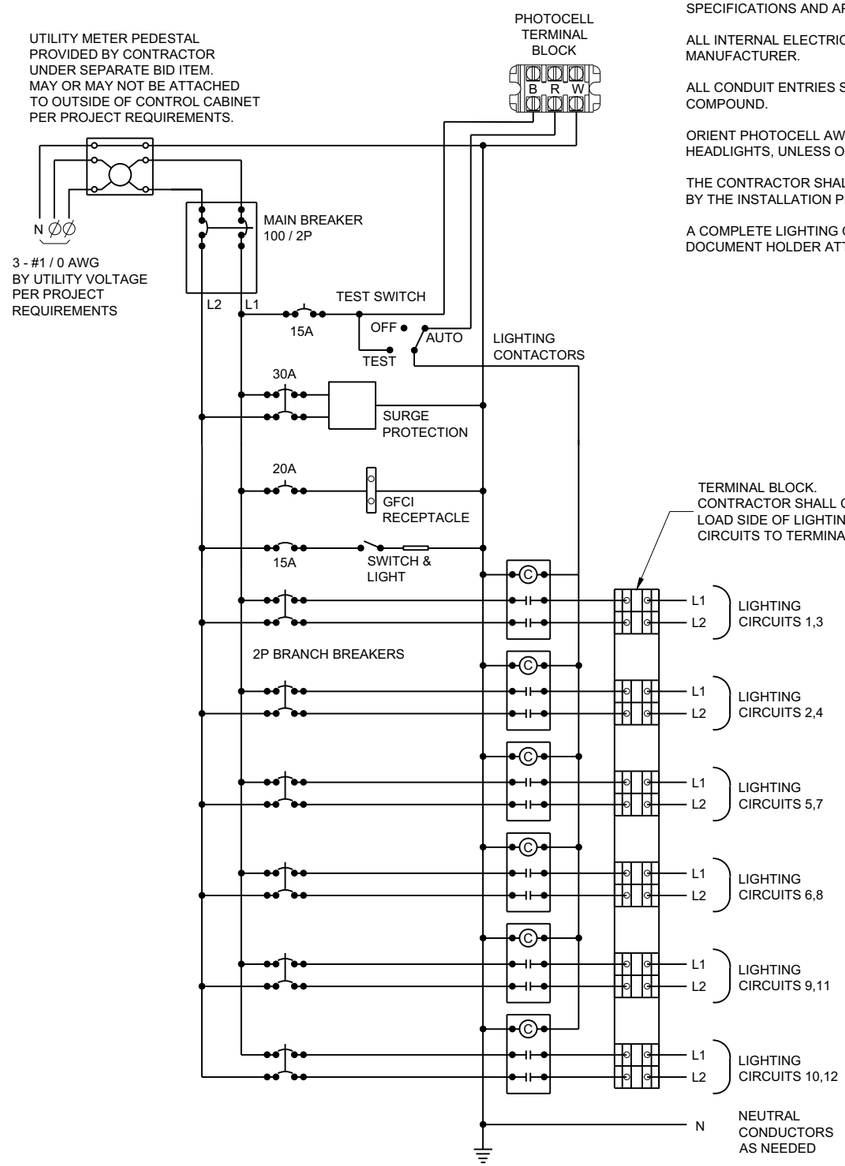


TABLE OF DIMENSIONS (INCHES)		
CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"

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

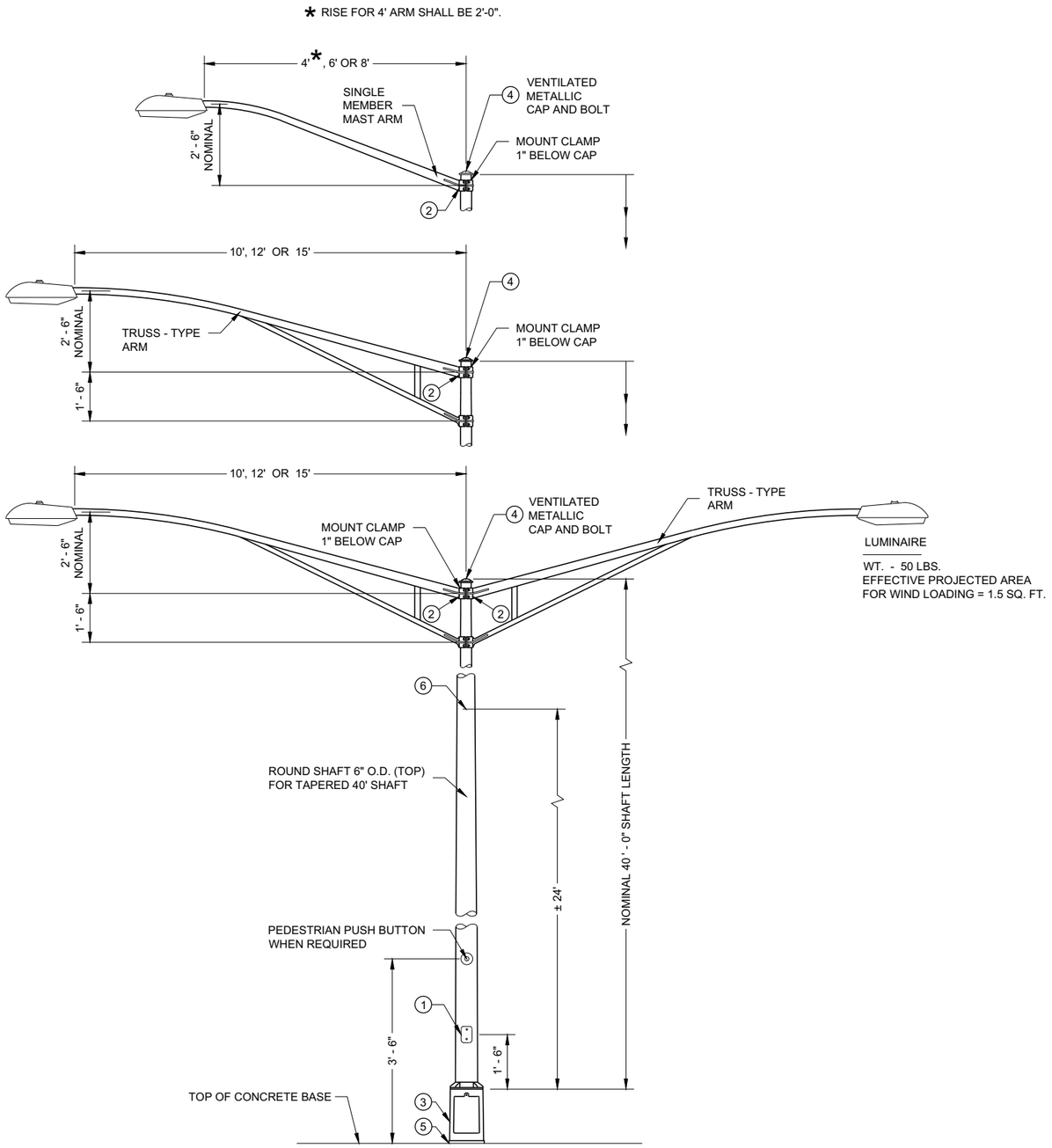
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
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/S/ Ahmet Demirbilek
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TYPE 17 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

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

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL LUMINAIRE POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 17 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 17 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SHOE BASE SHALL BE SLOTTED TO ACCEPT A 15" BOLT CIRCLE (14" X 16" SLOT) USING 1" ANCHOR RODS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

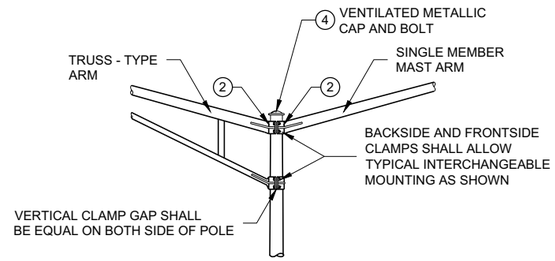
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM FHWA APPROVED TRANSFORMER BASE WHEN REQUIRED, SHALL HAVE AN ULTIMATE STATIC LOAD STRENGTH OF AT LEAST 40,000 FT. - LBS.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

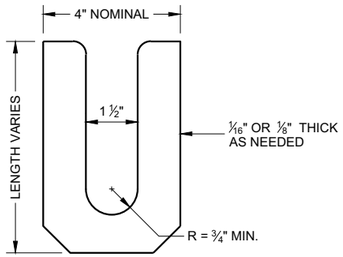
(6) INTERNAL DUMBELL - TYPE VIBRATION DAMPER.



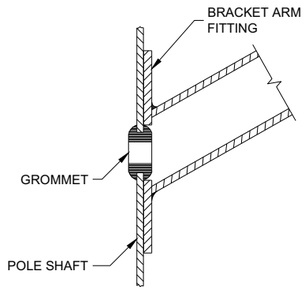
INTERCHANGEABLE MOUNTING DETAIL

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 17 (40 FEET)

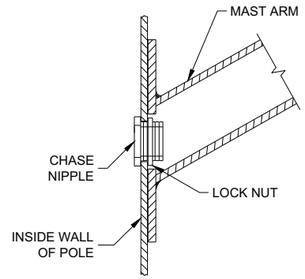
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SDD 09E01 - 15f



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.

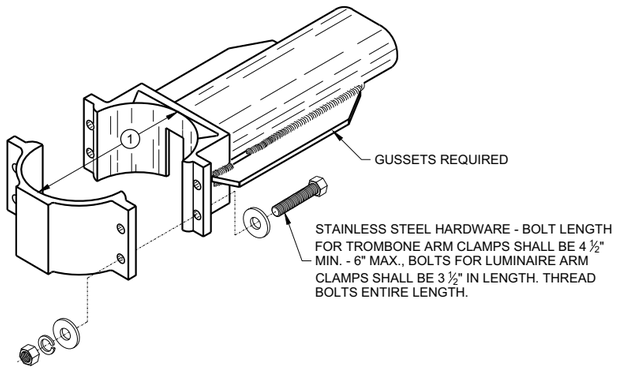
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(2) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

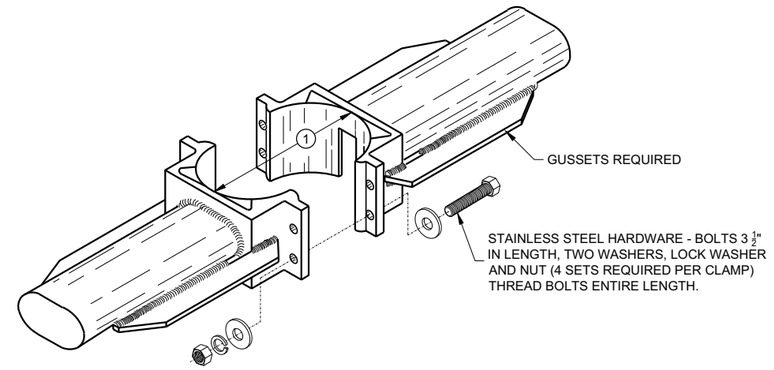
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(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.

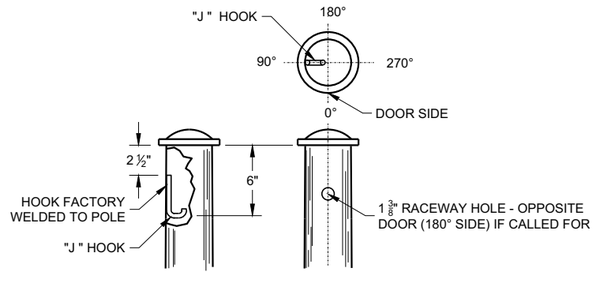
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



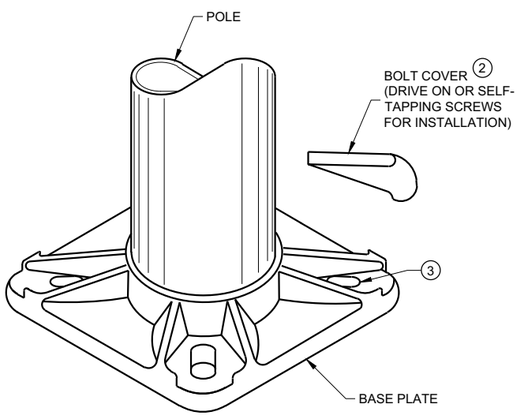
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



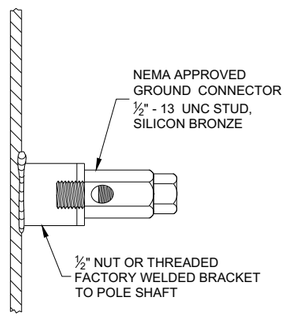
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

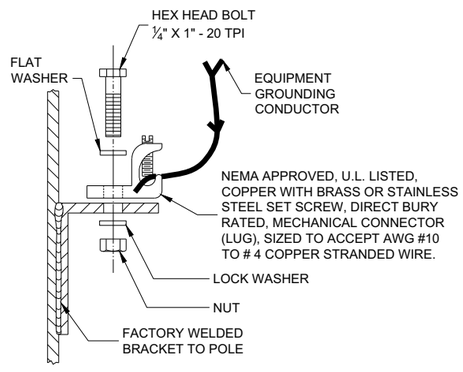


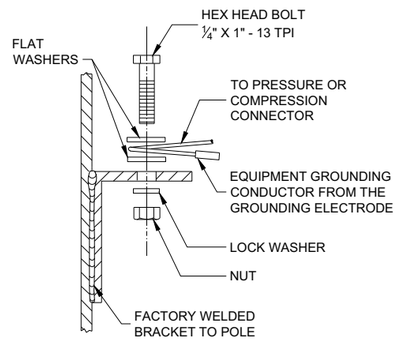
TYPICAL "J" HOOK LOCATION



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 297

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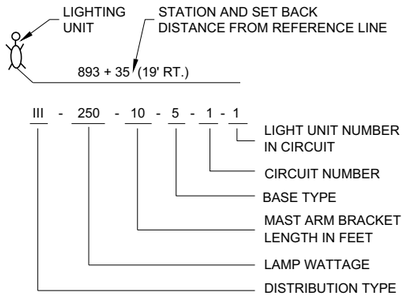
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SDD 09E01 - 15g

GENERAL NOTES

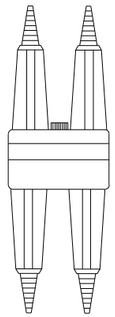
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

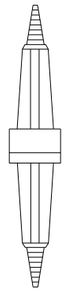
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.



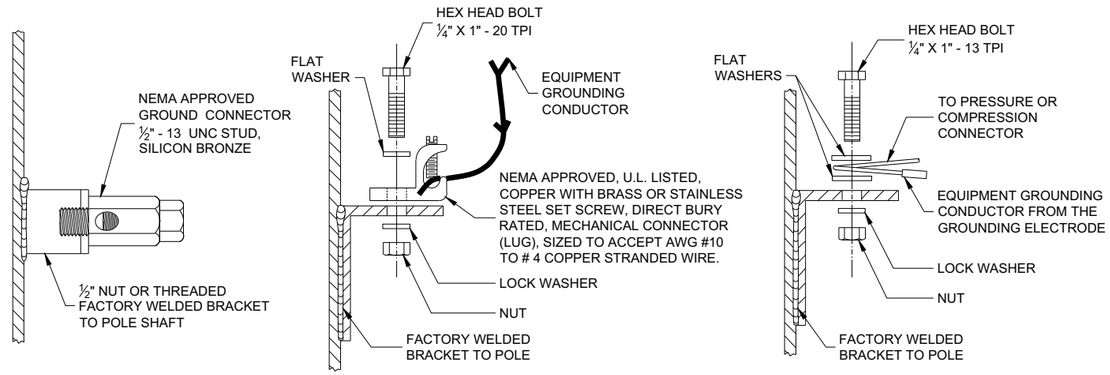
LIGHTING UNIT CODE
(TYPICAL)



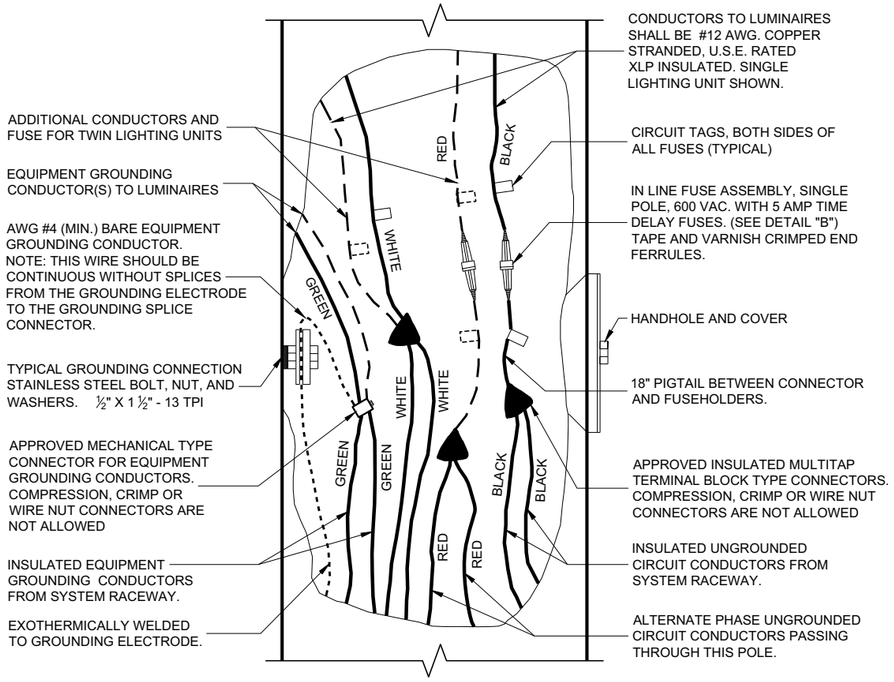
DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



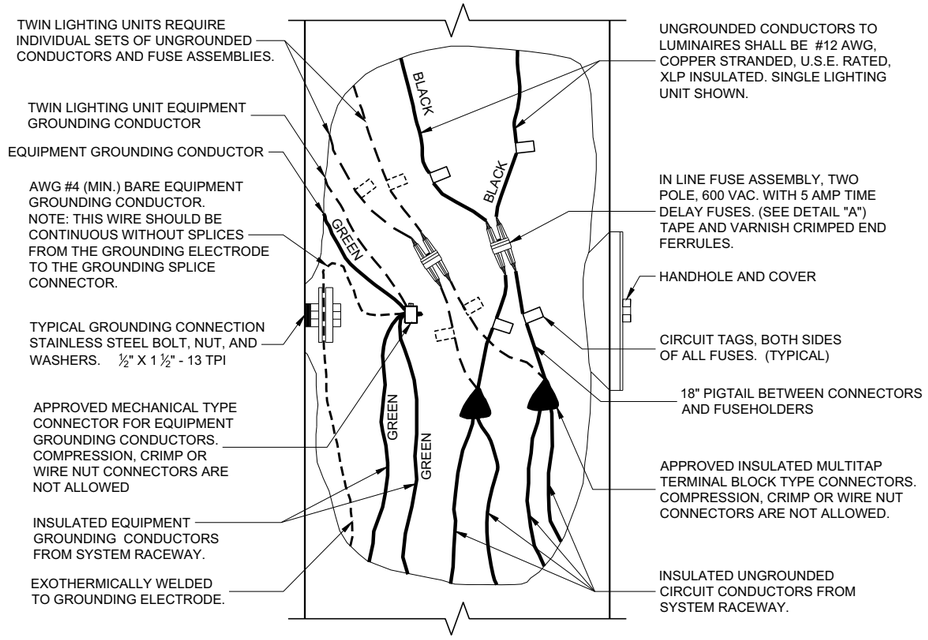
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH GROUNDING CONDUCTOR AND EQUIPMENT GROUNDING CONDUCTOR



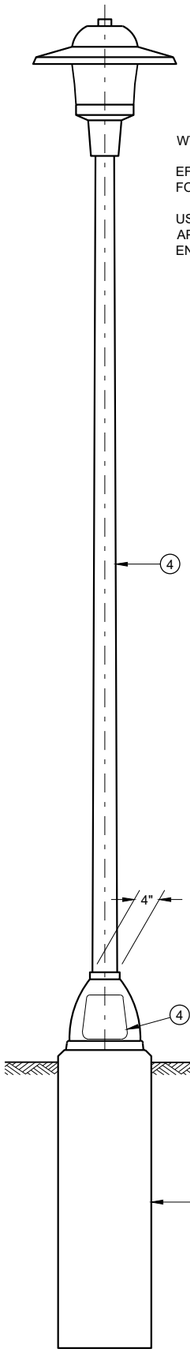
2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

NON - FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
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/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 298

FHWA



WALKWAY LIGHTING UNIT DETAIL

GENERAL NOTES

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

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

ANY DAMAGE TO THE CONCRETE BASE AND ANCHOR RODS DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

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

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR RODS STICK OUT ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

ANCHOR RODS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

FORM ALL EXPOSED CONCRETE CORNERS WITH 1" CHAMFER ALL AROUND. TOP OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT RUNS, NUMBER OF CONDUITS IN EACH CONCRETE BASE AND CONDUIT SIZE IS AS SHOWN ON THE PLANS. THE 1-INCH CONDUIT IS USED IN ALL BASES.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 TIMES THE DIAMETER OF THE CONDUIT.

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.

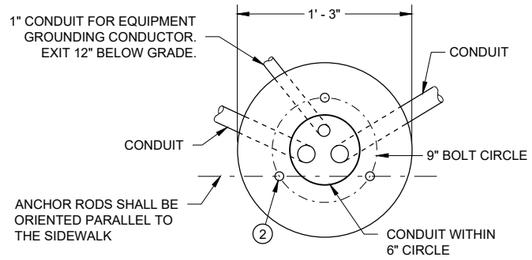
BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

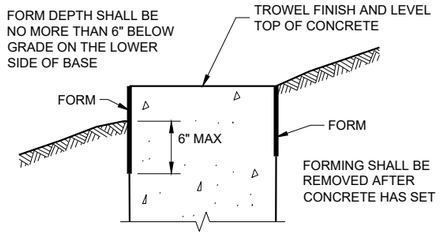
WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

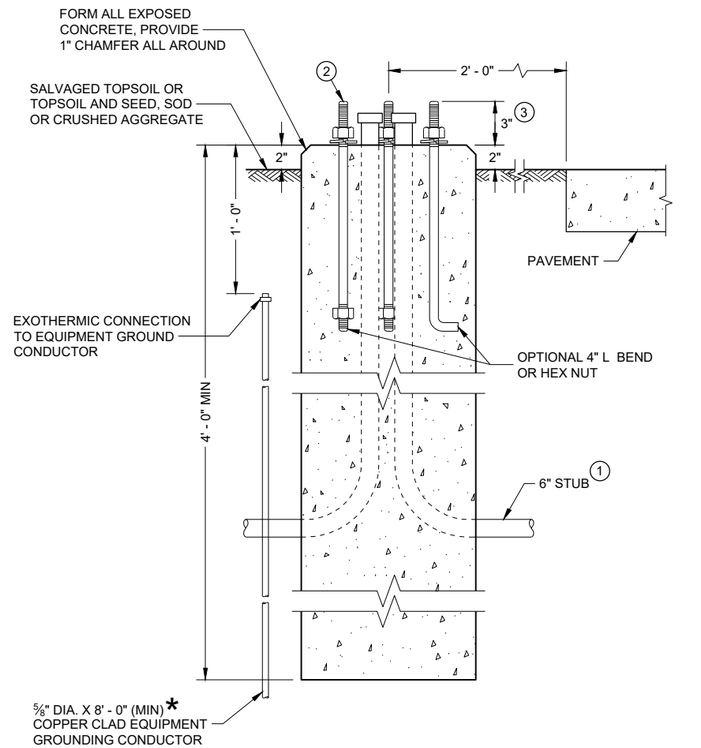
THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 2 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.



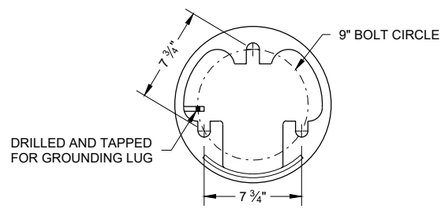


FORMING DETAIL

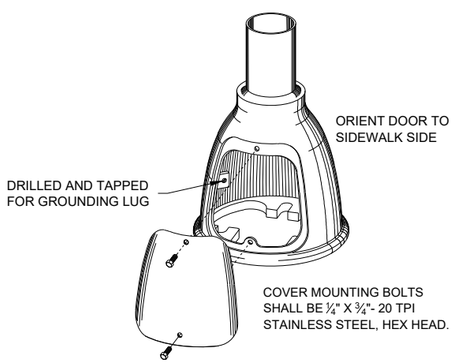


* GROUNDING ELECTRODE LENGTH MAY VARY, SEE SPECIAL PROVISIONS

CONCRETE BASE, TYPE 11



BOTTOM VIEW



WALKWAY PEDESTAL BASE, STANDARD DETAIL

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 OF THE ENGINEER.

2. THREE (3) ¾ INCH DIA. X 15-INCH ANCHOR RODS OR ¾ INCH DIA. X 19-INCH ANCHOR RODS INCLUDING THE 4-INCH "L" BEND. THE "L" BEND SHALL NOT BE THREADED. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2 AND 531.2.2 OF THE STANDARD SPECIFICATIONS.

3. 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.

4. PEDESTAL BASE-STANDARD:

   THE PEDESTAL BASE-STANDARD SHALL BE A ONE PIECE WELDED UNIT, WITH AN OVERALL HEIGHT OF TEN FEET.

   THE POLE SHALL BE ROUND, TAPERED, ALUMINUM WITH A 3-INCH OUTSIDE DIAMETER TOP AND 0.125 INCH WALL THICKNESS.

   HE BELL SHAPED BASE SHALL BE 12 ½ INCHES IN DIAMETER AND HAVE A 9-INCH BOLT CIRCLE. ANCHOR RODS SHALL BE INCLUDED WITH THE BASE.

   THE ACCESS DOOR OPENING SHALL BE APPROXIMATELY 7 ½ X 5 ¼ X 7 ½ -INCHES.

   THE FIXTURE AND PEDESTAL BASE-STANDARD SHALL BE PAINTED WITH AN EARTH COLORED THERMOSET POWDER COAT, ACRYLIC ENAMEL. THE ENAMEL SHALL BE FORMULATED TO SHOW NO APPRECIABLE FADING WITHIN FIVE YEARS.

   GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED BRASS OR COPPER TYPE. CONNECTION HARDWARE SHALL BE STAINLESS STEEL (BOLT, NUT, LOCK WASHER ¼" X ¾" - 20 TPI).

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

WALKWAY LIGHTING UNIT AND CONCRETE BASE, TYPE 11

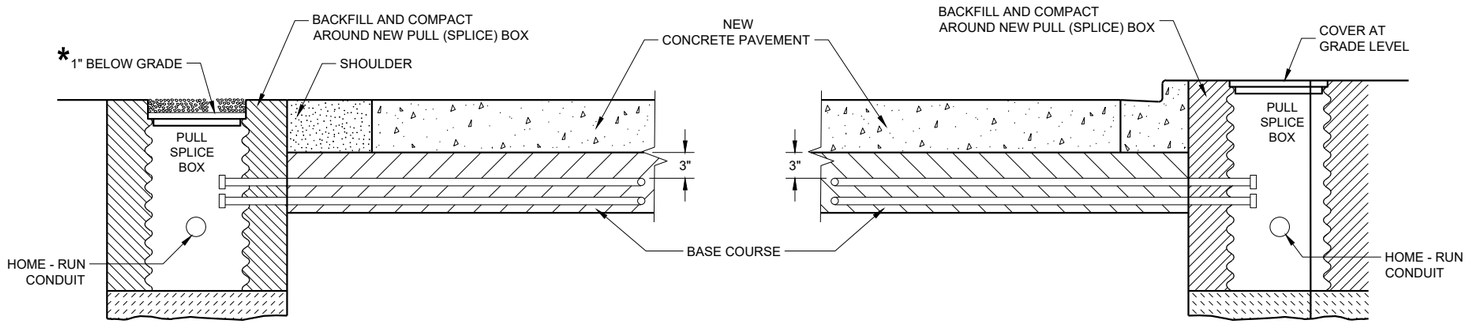
STATE OF WISCONSIN
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STATE ELECTRICAL ENGI 299

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SECTION A - A
NO CURB AND GUTTER

SECTION B - B
CURB AND GUTTER

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

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

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

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

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

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

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

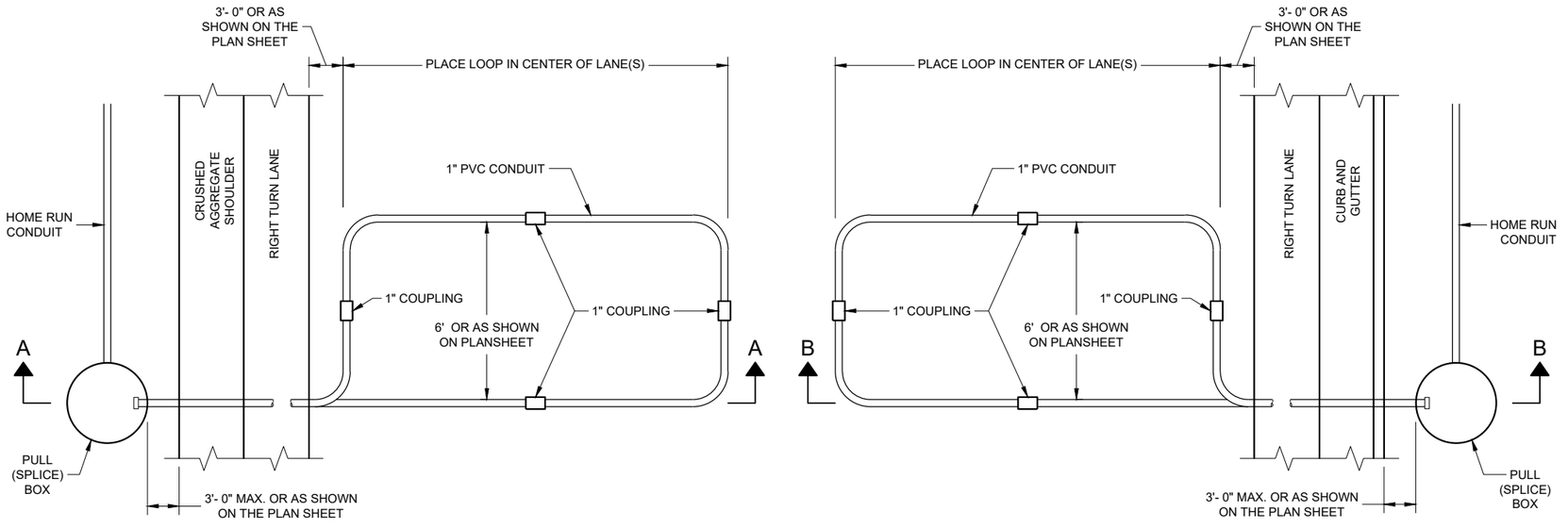
THE #12 AWG LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

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

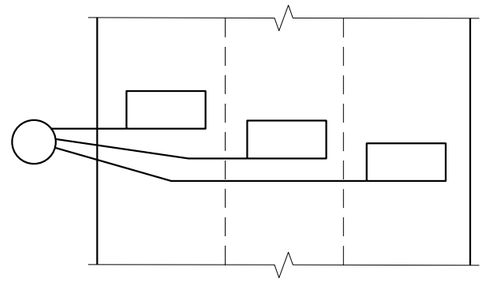
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN LOOP DETECTOR WITH 24" PULL (SPLICE) BOX



MULTI-LANE INSTALLATION

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)

STATE OF WISCONSIN
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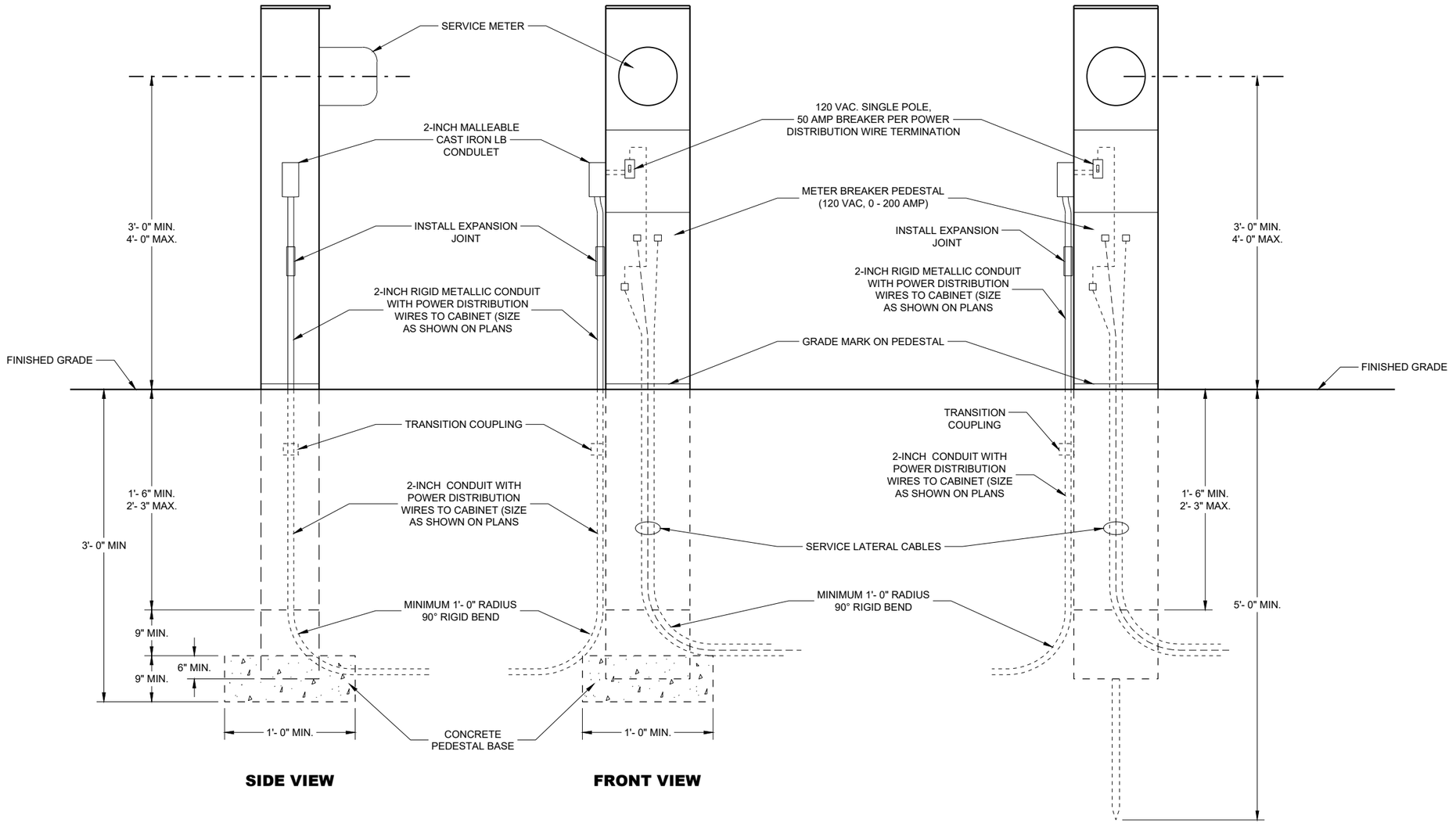
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2 CIRCUIT METER BREAKER PEDESTAL

ALTERNATE SUPPORTING STAKE
(IF APPROVED BY UTILITY)

2 CIRCUIT METER BREAKER PEDESTAL

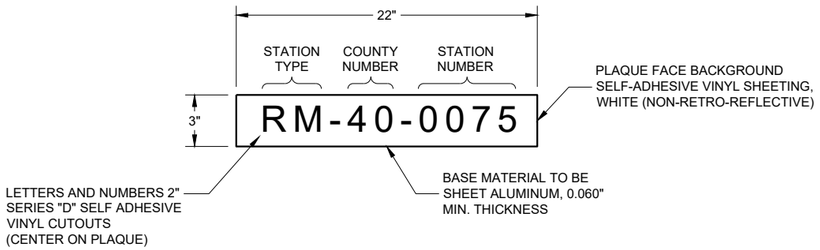
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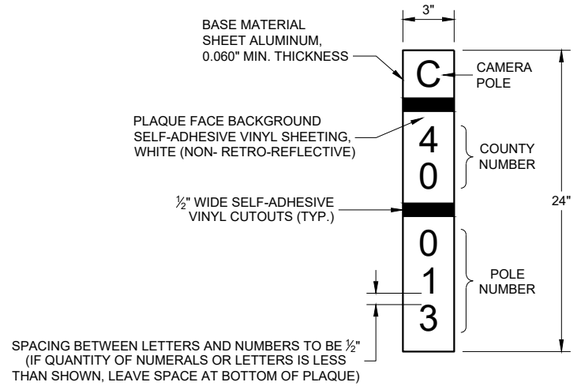
SDD 09H03 - 01

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CONTROL CABINET IDENTIFICATION PLAQUE DETAIL



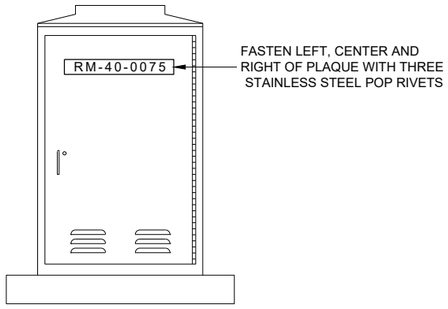
POLE IDENTIFICATION PLAQUE DETAIL

GENERAL NOTES

1. TWO PLAQUES PER CABINET REQUIRED ON CONTROL CABINET.
2. FASTEN ONE PLAQUE ON FRONT DOOR, UPPER HALF.
3. FASTEN ONE PLAQUE ON SIDE FACING LOCAL STREET. IF NO LOCAL STREET NEARBY, OR IF SUCH LOCATION COINCIDES WITH LOCATION OF PLAQUE IN NOTE 2 , FASTEN PLAQUE ON REAR OF CABINET, UPPER HALF.
4. COUNTY NUMBER NOT REQUIRED ON RAMP METER CABINETS.

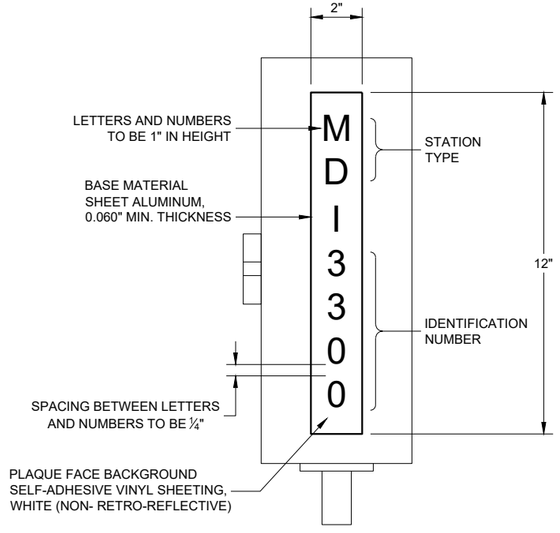
LEGEND STATION TYPE

RM - RAMP METER
CCTV - CLOSED CIRCUIT TELEVISION
ATR - AUTOMATIC TRAFFIC RECORDER
SDS - SYSTEM DETECTOR STATION
MD - MICROWAVE DETECTOR



CONTROL CABINET IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS

(TYPICAL ALL CONTROL CABINETS)



MICROWAVE DETECTOR FIELD CABINET IDENTIFICATION PLAQUE DETAIL

IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

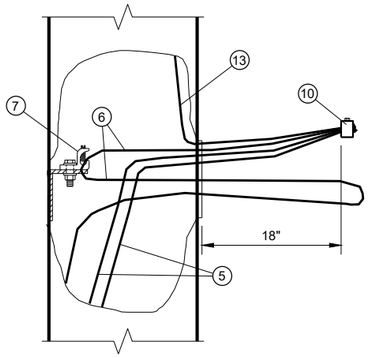
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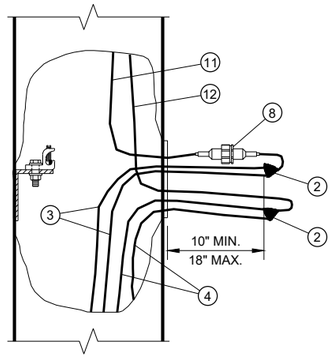
SDD 09H11 - 01

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SDD 09H11 - 01

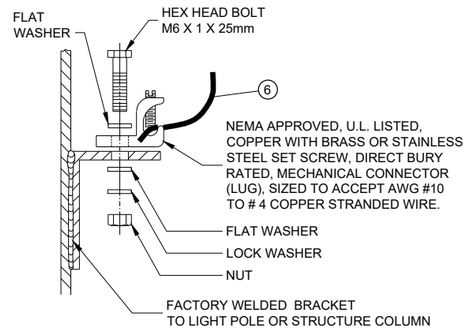


EQUIPMENT GROUNDING CONDUCTOR SLACK



UNGROUNDED CONDUCTOR SLACK (AND GROUNDED NEUTRAL SLACK IN GROUNDED NEUTRAL SYSTEM)

TYPICAL CONDUCTOR SLACK AT HANDHOLES



HANDHOLE GROUNDING LUG

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

GENERAL NOTES

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

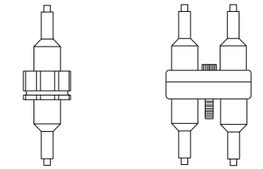
USE THIS DETAIL IN CONJUNCTION WITH THE ELECTRICAL DETAILS FOR THE APPLICATION, WHICH MAY BE A LIGHT POLE, SIGN BRIDGE, ETC.

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLE GROUNDING LUG TO THE CONNECTOR.

THREE POLE WIRES ARE SHOWN FOR A SINGLE LUMINAIRE LIGHT POLE. THREE ADDITIONAL POLE WIRES REQUIRED FOR TWIN LUMINAIRE LIGHT POLES ARE OMITTED FROM THE DRAWING FOR CLARITY. IN THE TWIN POLE CASE, BUNDLE EACH SET OF THREE WIRES WITH A NYLON CABLE TIE.

IN 3-PHASE SYSTEMS, THERE WILL BE ONE MORE UNGROUNDED LINE WIRE, WHICH IS OMITTED FROM THE DRAWING FOR CLARITY.

CIRCUIT TAGS SHALL BE INSTALLED ONLY WHERE REQUIRED IN THE SPECIAL PROVISIONS.



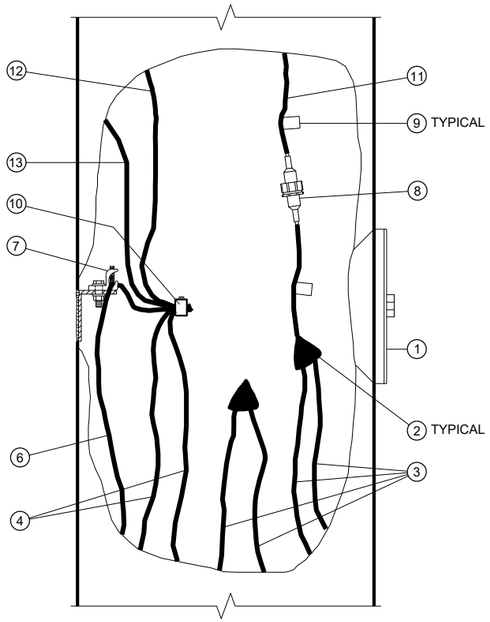
1 POLE (1P) 2 POLE (2P)

FUSE ASSEMBLIES

CONDUCTOR COLOR CODES

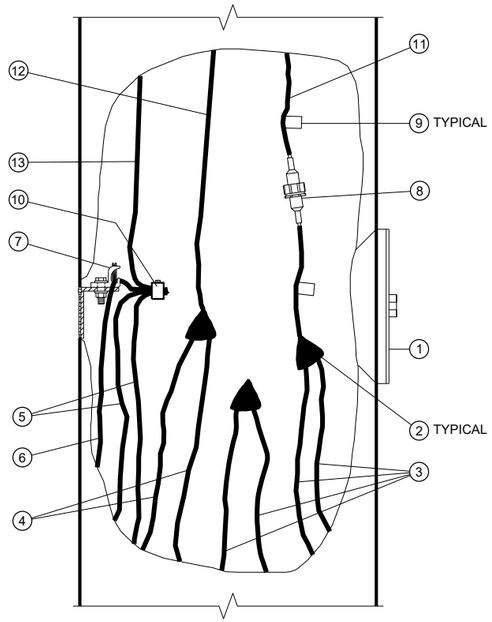
KEY	CONDUCTOR	COLOR
3	UNGROUNDED LINE WIRE	*
4	GROUNDED LINE WIRE	WHITE
5	SYSTEM GROUNDING LINE WIRE	GREEN
6	GROUNDING ELECTRODE CONDUCTOR	BARE
11	UNGROUNDED POLE WIRE	*
12	GROUNDED POLE WIRE	WHITE
13	EQUIPMENT GROUNDING POLE WIRE	GREEN

* FOLLOW COLOR CODING SHOWN IN THE PLANS. WHERE THE PLANS DO NOT SHOW COLOR CODING, USE BLACK FOR SINGLE LUMINAIRE POLES; BLACK AND RED FOR TWIN LUMINAIRE POLES.



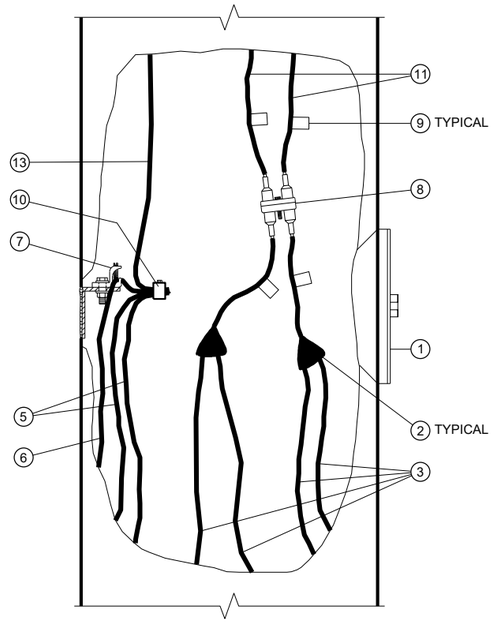
CUTAWAY HANDHOLE DETAIL

GROUNDED NEUTRAL SYSTEMS
1-ϕ



CUTAWAY HANDHOLE DETAIL

ISOLATED NEUTRAL SYSTEMS
1-ϕ SHOWN; 3-ϕ WYE SIMILAR
(SEE GENERAL NOTE)



CUTAWAY HANDHOLE DETAIL

PHASE TO PHASE SYSTEMS
1-ϕ SHOWN; 3-ϕ DELTA SIMILAR
(SEE GENERAL NOTE)

NOTE: REQUIRED CONDUCTOR SLACK NOT SHOWN ON "CUTAWAY HAND HOLE" DETAILS FOR DRAWING CLARITY, SEE "TYPICAL CONDUCTOR SLACK AT HANDHOLES" ON THIS SHEET.

1. HANDHOLE AND COVER
2. INSULATED SPLICE
3. UNGROUNDED LINE WIRE
4. GROUNDED LINE WIRE
5. SYSTEM GROUNDING LINE WIRE
6. GROUNDING ELECTRODE CONDUCTOR
7. HANDHOLE GROUNDING LUG
8. FUSE ASSEMBLY, 1P OR 2P AS REQUIRED
9. CIRCUIT TAG (SEE GENERAL NOTE)
10. REVERSIBLE PRESSURE OR COMPRESSION GROUNDING CONNECTOR (NOT INSULATED)
11. UNGROUNDED POLE WIRE
12. GROUNDED POLE WIRE
13. EQUIPMENT GROUNDING POLE WIRE

ELECTRICAL HANDHOLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

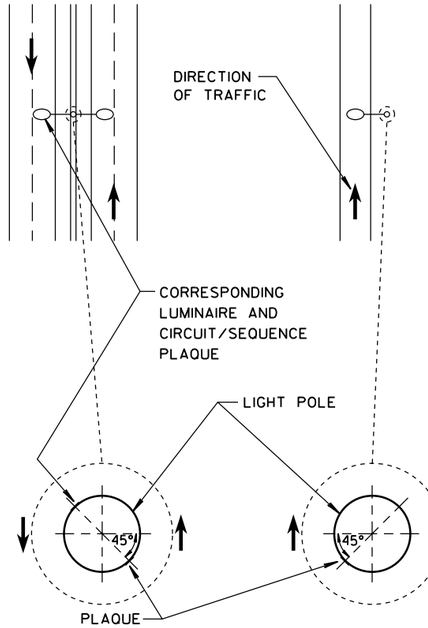
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MEDIAN POLE SINGLE ARM POLE

LOCATION OF LIGHT POLE CIRCUIT/SEQUENCE PLAQUE

GENERAL NOTES

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

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

WHERE SHOWN IN THE PLANS, REPLACEMENT PLAQUES WILL BE MEASURED AND PAID SEPARATELY.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETRORFLECTIVE

LINES - BLACK, 1/2" WIDE, SELF-ADHESIVE

CHARACTERS - BLACK, SELF-ADHESIVE, SERIES "D", SIZE AS SHOWN

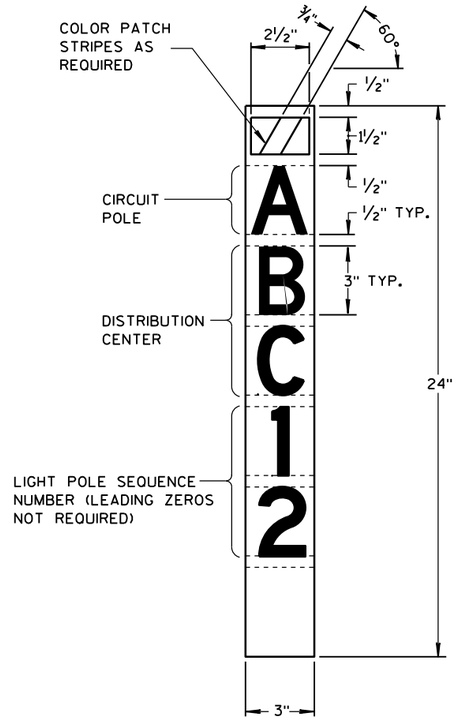
COLOR PATCHES - VARIOUS COLORS, SELF-ADHESIVE VINYL SHEETING

WITH THE APPROVAL OF THE ENGINEER, THE BASE MATERIAL MAY BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE SURFACE, IN CASES SUCH AS SMOOTH, CLEAN ALUMINUM POLES.

ALTERNATIVE COMPUTER-GENERATED SIGN LETTERING MAY BE ACCEPTED IF THE ENGINEER FINDS IT TO BE EQUIVALENT.

COLOR PATCH CODE FOR HPS AND LED LUMINAIRES

HPS	LED	COLOR PATCH CODE
1000 WATT		NO PATCH
400 WATT	CATEGORY D	ORANGE
310 WATT		BLUE
250 WATT	CATEGORY C	ORANGE WITH WHITE STRIPE
200 WATT		RED
150 WATT	CATEGORY B	GREEN
100 WATT	CATEGORY A	BROWN
70 WATT	CATEGORY UDL	BROWN WITH WHITE STRIPE



LIGHT POLE CIRCUIT/SEQUENCE PLAQUE

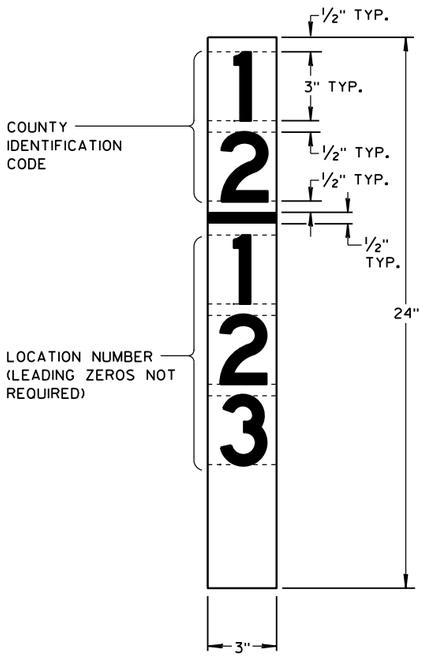
IDENTIFICATION PLAQUES LIGHT POLES

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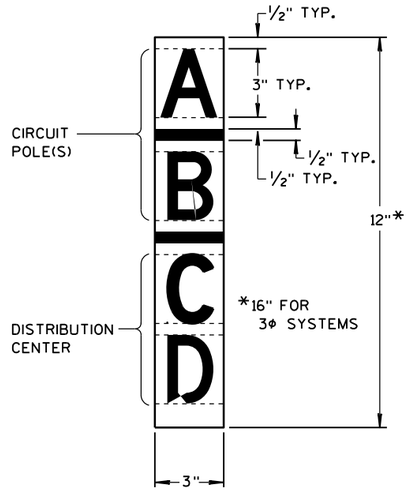
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Feb. 2015 — DATE
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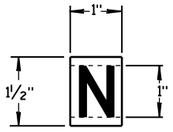
S.D.D. 10 A 2-3



HIGH MAST LIGHT TOWER STRUCTURE PLAQUE

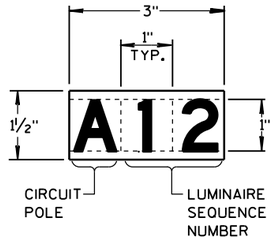


UNDERDECK LIGHTING OR HIGH MAST LIGHT TOWER CIRCUIT PLAQUE



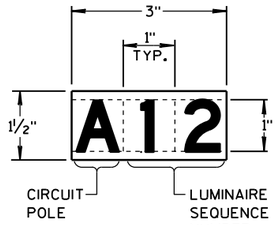
HIGH MAST LIGHT TOWER NORTH PLAQUE

(MOUNT ON LOWERING RING - INDICATING NORTH HEADING ^{2} ± 10^{o3} WHEN RING IS RAISED AND LATCHED)



HIGH MAST LIGHT TOWER LUMINAIRE SEQUENCE PLAQUE

(MOUNT ON LUMINAIRE RING)



UNDER DECK LUMINAIRE SEQUENCE DECAL

(MOUNT ON LUMINAIRE)

GENERAL NOTES

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

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

CONCRETE SURFACE - MASONRY ANCHORS

GALVANIZED STEEL SHAFT - STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

PLAQUE MATERIALS:

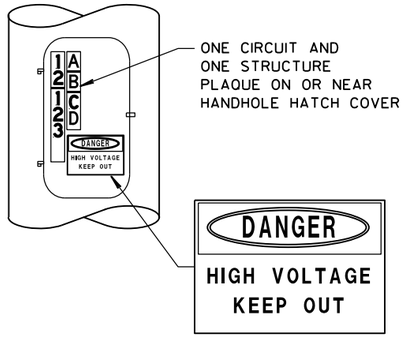
BASE - SHEET ALUMINUM, 0.060" THICK.

FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETRORFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

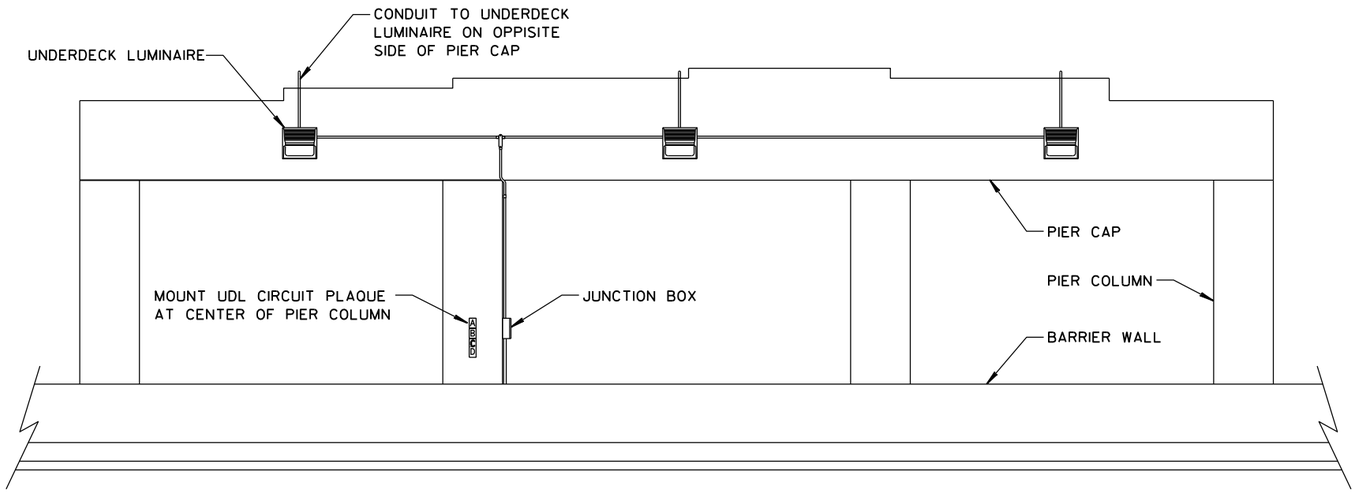
CHARACTERS - BLACK, SELF-ADHESIVE, SERIES "D", SIZE AS SHOWN

ALTERNATIVE COMPUTER-GENERATED SIGN LETTERING MAY BE ACCEPTED IF THE ENGINEER FINDS IT TO BE EQUIVALENT.



NOTE: NEMA PLAQUE SHOWN ABOVE IS REQUIRED ONLY IN PARK AND RIDE LOTS OR IN OTHER PEDESTRIAN ACCESSIBLE AREAS.

LOCATION OF HIGH MAST LIGHT TOWER STRUCTURE PLAQUE AND CIRCUIT PLAQUE



LOCATION OF UNDERDECK LIGHTING CIRCUIT PLAQUE

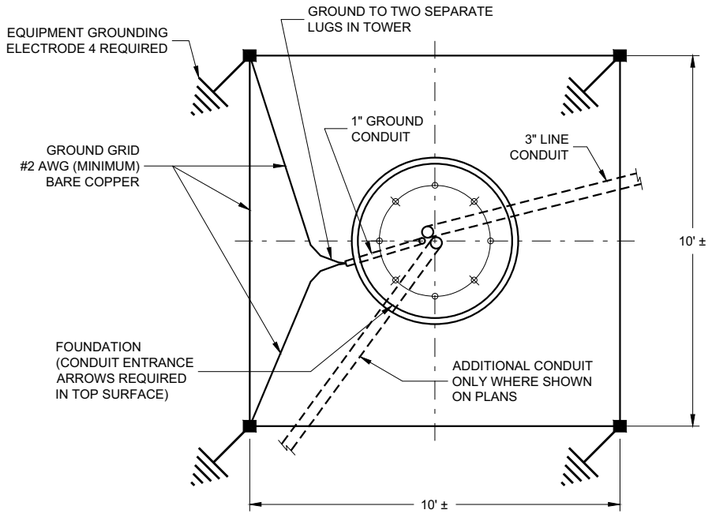
IDENTIFICATION PLAQUES UNDERDECK AND HIGH MAST LIGHTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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June, 2015 — DATE
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EQUIPMENT GROUNDING GRID AND FOUNDATION ELECTRICAL DETAILS

OVER CURRENT AND POWER CORD SCHEDULE

LINE VOLTAGE	HAND HOLE BREAKERS	INDIVIDUAL LUMINAIRE FUSES	POWER CORD	PRONGS ON LOAD BREAK DISCONNECT
1 - ϕ 120 / 240VAC: 3 WIRE	2 - 30A, 1P, 277VAC	20A	10 - 3 + GND "SO"	A, B, N, GND
1 - ϕ 240 / 480VAC: 3 WIRE	2 - 30A, 1P, 277VAC	10A	10 - 3 + GND "SO"	A, B, N, GND
3 - ϕ 480Y / 277VAC: 4 WIRE	3 - 30A, 1P, 277VAC	10A	10 - 4 + GND "SO"	X, Y, Z, N, GND
3 - ϕ 208Y/ 120VAC: 4 WIRE	3 - 30A, 1P, 277VAC	20A	10 - 4 + GND "SO"	X, Y, Z, N, GND
1 - ϕ 480VAC: 2 WIRE	1 - 20A, 2P, 600VAC	5A	10 - 3 + GND "SO"	A, B, N, GND

GENERAL NOTES

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

IN CASES WHERE THE PLANS SHOW LINE IN/LINE OUT DISTRIBUTION SYSTEMS, FURNISH FEED-THROUGH LUGS IN THE CIRCUIT BREAKER ENCLOSURE.

THE PLANS WILL SHOW WHICH CIRCUIT LEG(S) ARE CONNECTED TO EACH INSTALLATION.

FIELD RECODING OF UNGROUNDED CONDUCTORS IN TYPE "SO" CABLE MAY BE REQUIRED TO CONFORM TO SYSTEM COLOR CODING AS SHOWN IN THE PLANS.

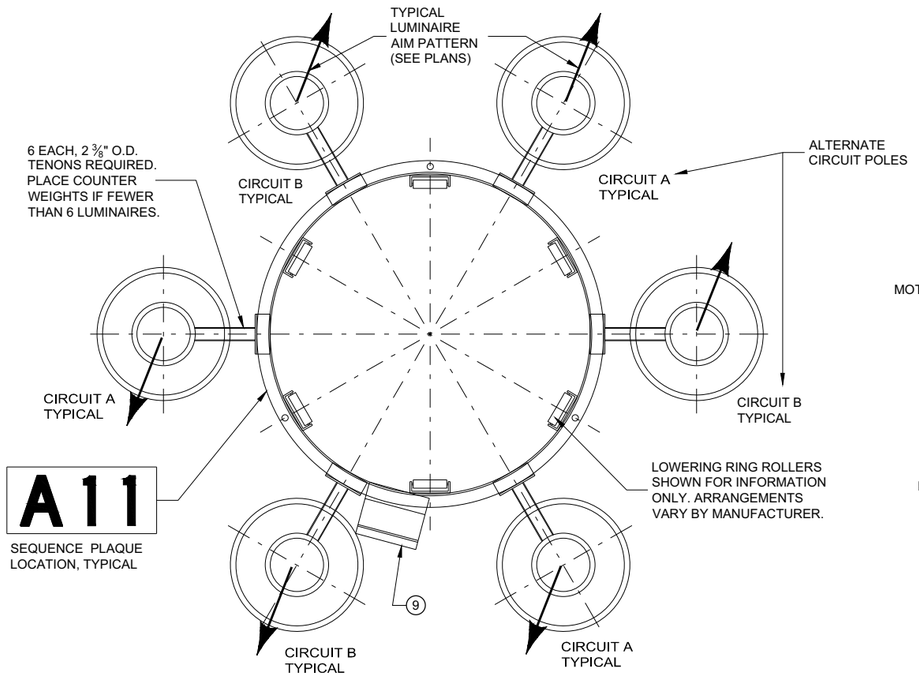
USE TIME DELAY FUSE PER LUMINAIRE MANUFACTURER RECOMMENDATION.

CIRCUIT BREAKERS SHALL BE MINIMUM 14 kAIC AT THE VOLTAGE SHOWN.

LOADBREAK DISCONNECTS SHALL BE MELTRIC TYPE "DR", 30 AMP, 600 VOLT. DO NOT SUBSTITUTE. FURNISH "FDP" FINGER/PALM DRAW PLATES (APPLIES TO THE PLUG AND RECEPTACLE ONLY, NOT TO THE APPLIANCE INLET). FURNISH "LP" MOISTURE PROTECTION (APPLIES TO THE PLUG ONLY, NOT TO THE RECEPTACLE OR THE APPLIANCE INLET).

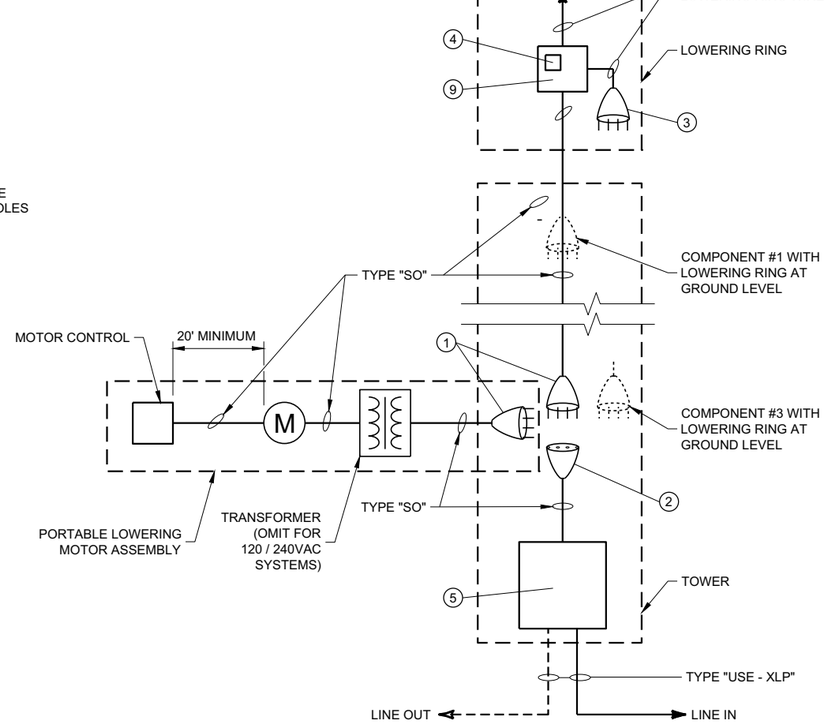
SURGE ARRESTORS SHALL BE 650 VAC, 2P OR 3P AS REQUIRED.

CIRCUIT BREAKER ENCLOSURES SHALL BE NEMA 1, 100 AMP, 600 VOLT, 2P OR 3P AS REQUIRED, SURFACE MOUNT. IN ALL SYSTEMS, FURNISH A MINIMUM 4 - TERMINAL GROUND BUS. IN ISOLATED NEUTRAL SYSTEMS, ADDITIONALLY FURNISH A MINIMUM 1-TERMINAL NEUTRAL BUS. BUSSES SHALL BE RATED FOR NO. 10 AWG THROUGH NO. 2 AWG CU.



LOWERING RING OPTICS PLAN

1 - ϕ CASE SHOWN; 3 - ϕ CASE SIMILAR



ONE LINE DIAGRAM

ANY LINE VOLTAGE PER OVER CURRENT AND POWER CORD SCHEDULE

LEGEND

P POLE (ELECTRICAL CIRCUIT)

ϕ PHASE (ELECTRICAL CURRENT)

EQUIPMENT GROUNDING ELECTRODE

■ EXOTHERMIC WELD

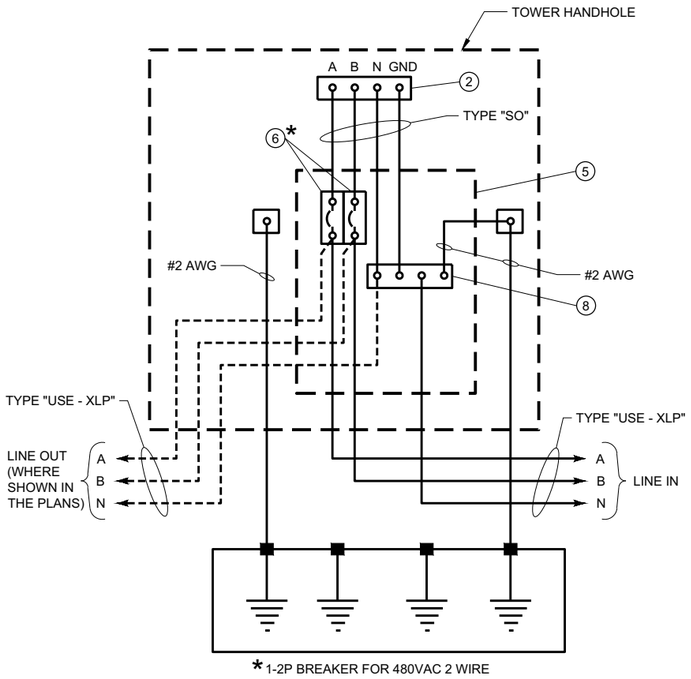
(1) LOADBREAK DISCONNECT - MALE PLUG
(2) LOADBREAK DISCONNECT - FEMALE RECEPTACLE
(3) LOADBREAK DISCONNECT - MALE APPLIANCE INLET
(4) SURGE ARRESTOR - 2P OR 3P AS REQUIRED
(5) CIRCUIT BREAKER ENCLOSURE
(6) CIRCUIT BREAKER
(7) CIRCUIT BREAKER ENCLOSURE NEUTRAL BUS
(8) CIRCUIT BREAKER ENCLOSURE EQUIPMENT GROUNDING BUS
(9) LOWERING RING JUNCTION BOX (WEEP HOLE REQUIRED)
(10) TERMINAL STRIP

ELECTRICAL DETAILS
HIGH MAST LIGHTING

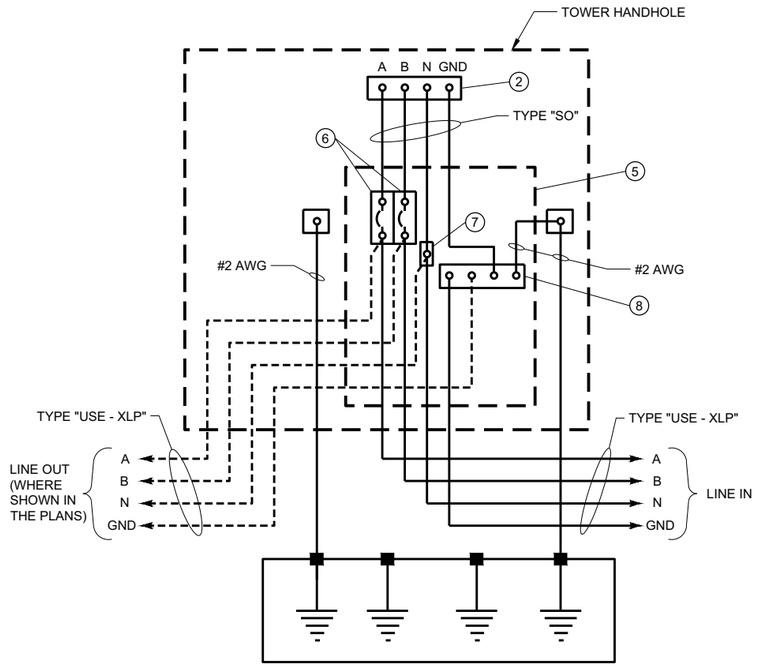
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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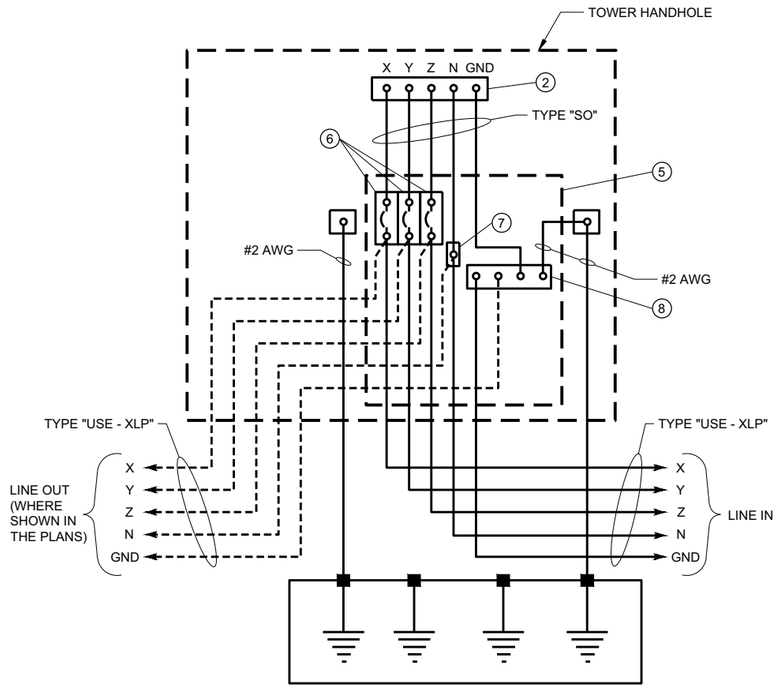
SDD 10A14 - 03a
SDD 10A14 - 03a



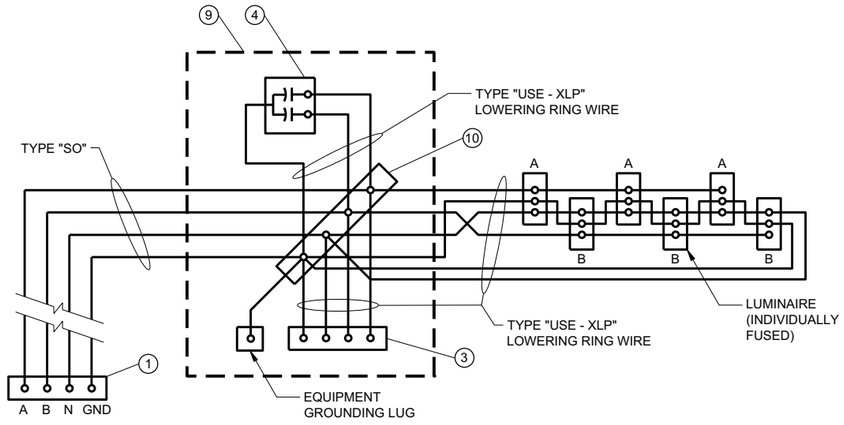
TYPICAL WIRING DIAGRAM-HANDHOLE
GROUNDED NEUTRAL SYSTEM
1 - ϕ 240 / 480VAC 3 WIRE OR 480VAC 2 WIRE



TYPICAL WIRING DIAGRAM-HANDHOLE
ISOLATED NEUTRAL SYSTEM
1 - ϕ 120 / 240VAC OR 240 / 480VAC 3 WIRE



TYPICAL WIRING DIAGRAM-HANDHOLE
ISOLATED NEUTRAL SYSTEM
3 - ϕ 480 / 277VAC 4 WIRE OR 3 - ϕ 208Y / 120VAC 4 WIRE



LOWERING RING JUNCTION BOX WIRING DIAGRAM
TYPICAL 1 - ϕ CASE SHOWN; 3 - ϕ CASE SIMILAR

LEGEND

A, B, X, Y, Z,	UNGROUNDED CIRCUIT CONDUCTORS
N	GROUNDED CIRCUIT CONDUCTORS
GND	EQUIPMENT GROUNDING CONDUCTOR
P	POLE (ELECTRICAL CIRCUIT)
ϕ	PHASE (ELECTRICAL CURRENT)
AIC	AMPERE INTERUPTING CAPACITY
	HANDHOLE GROUND LUG
	CIRCUIT BREAKER 1P
	SURGE ARRESTOR
	FUSED LUMINAIRE
	EQUIPMENT GROUNDING ELECTRODE
	TERMINAL
	SPLICE
	CONDUCTOR
	EXOTHERMIC WELD

1. LOADBREAK DISCONNECT - MALE PLUG
2. LOADBREAK DISCONNECT - FEMALE RECEPTACLE
3. LOADBREAK DISCONNECT - MALE APPLIANCE INLET
4. SURGE ARRESTOR - 2P OR 3P AS REQUIRED
5. CIRCUIT BREAKER ENCLOSURE
6. CIRCUIT BREAKER
7. CIRCUIT BREAKER ENCLOSURE NEUTRAL BUS
8. CIRCUIT BREAKER ENCLOSURE EQUIPMENT GROUNDING BUS
9. LOWERING RING JUNCTION BOX (WEEP HOLE REQUIRED)
10. TERMINAL STRIP

ELECTRICAL DETAILS
HIGH MAST LIGHTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

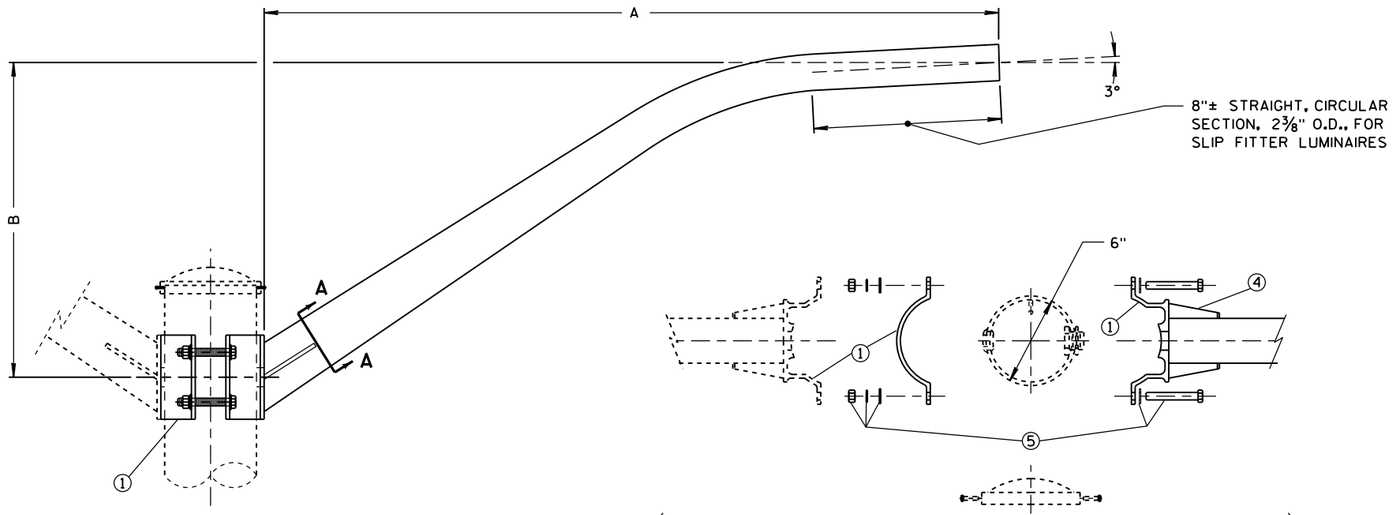
APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

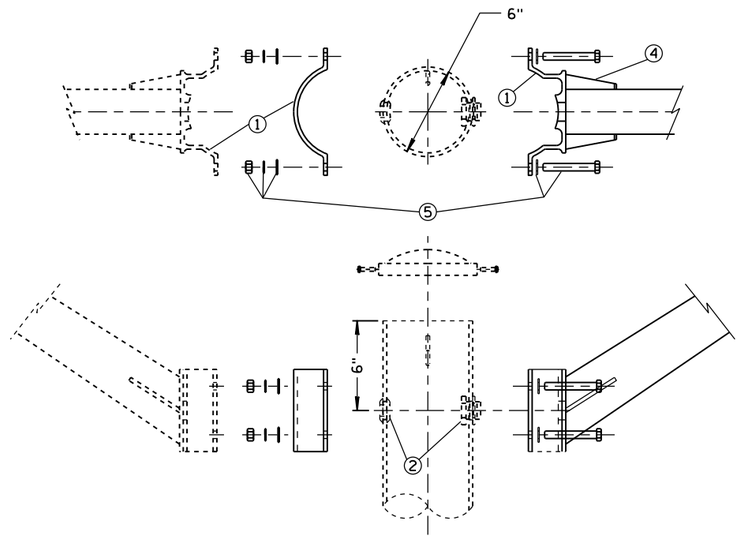
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SDD 10A14 - 03b



LUMINAIRE ARMS, SINGLE MEMBER, 6-INCH CLAMP - FOR POLES, TYPE 7, A OR E

VARIOUS LENGTHS (SEE TABLE)



CLAMP ASSEMBLY

SINGLE MEMBER CLAMP SHOWN

TYPE	DIM. A NOMINAL ARM LENGTH (FT)	DIM. B APPROX. RISE (FT)
SINGLE MEMBER	4.0	2.0
SINGLE MEMBER	8.0	3.0
SINGLE MEMBER	10.0	3.0
SINGLE MEMBER	15.0	3.0

GENERAL NOTES

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

ARMS AND CLAMP EXTRUSIONS SHALL BE CONSTRUCTED OF NATURAL FINISH 6063-T6 ALUMINUM.

HEAT TREATMENT OF WELDS IN STRUCTURAL AREAS IS REQUIRED.

ALL THREADED FASTENER COMPONENTS SHALL BE STAINLESS STEEL. NUTS SHALL BE HEX NUTS. BOLTS SHALL BE HEX HEAD. ALL THREADED SURFACES SHALL BE COATED WITH ANTI-SEIZE COMPOUND PRIOR TO INSTALLATION.

LUMINAIRE LOADING FOR DESIGN CALCULATION SHALL BE 50 LBS. IN WEIGHT AND 1.5 SQ. FT. FOR E.P.A..

① CLAMPS SHALL BE EXTRUDED ALUMINUM.

② RACE WAY: 1 3/8" FIELD DRILLED HOLE WITH 1" CHASE NIPPLE AND NUT (OR NEOPRENE GROMMET) PER EACH REQUIRED LUMINAIRE ARM. PROVIDE 1 1/2" HOLE IN CLAMP EXTRUSION TO CONTINUE RACEWAY.

③ STIFFENER

④ GUSSETS REQUIRED.

⑤ CLAMP BOLT ASSEMBLY (BOLT - 1/2"-13 UNC, 2 EACH - FLAT WASHER, LOCK WASHER, NUT) - 4 EACH PER CLAMP.

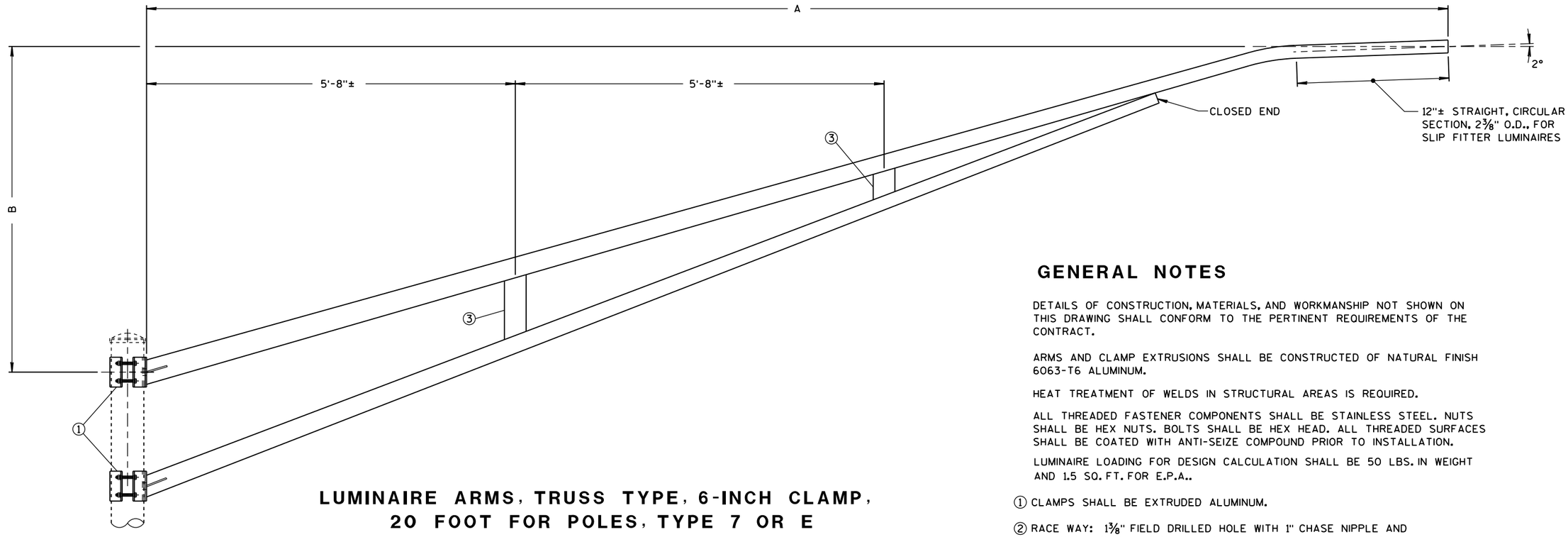
LUMINAIRE ARMS, SINGLE MEMBER 6-INCH CLAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 10 A 18-5a



LUMINAIRE ARMS, TRUSS TYPE, 6-INCH CLAMP, 20 FOOT FOR POLES, TYPE 7 OR E

UPPER AND LOWER TRUSS CHORD CLAMPS SIMILIAR

TYPE	DIM. A NOMINAL ARM LENGTH (FT)	DIM. B APPROX. RISE (FT)
TRUSS TYPE	20.0	5.0

GENERAL NOTES

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

ARMS AND CLAMP EXTRUSIONS SHALL BE CONSTRUCTED OF NATURAL FINISH 6063-T6 ALUMINUM.

HEAT TREATMENT OF WELDS IN STRUCTURAL AREAS IS REQUIRED.

ALL THREADED FASTENER COMPONENTS SHALL BE STAINLESS STEEL. NUTS SHALL BE HEX NUTS. BOLTS SHALL BE HEX HEAD. ALL THREADED SURFACES SHALL BE COATED WITH ANTI-SEIZE COMPOUND PRIOR TO INSTALLATION.

LUMINAIRE LOADING FOR DESIGN CALCULATION SHALL BE 50 LBS. IN WEIGHT AND 1.5 SQ. FT. FOR E.P.A..

① CLAMPS SHALL BE EXTRUDED ALUMINUM.

② RACE WAY: 1⅜" FIELD DRILLED HOLE WITH 1" CHASE NIPPLE AND NUT (OR NEOPRENE GROMMET) PER EACH REQUIRED LUMINAIRE ARM. PROVIDE 1½" HOLE IN CLAMP EXTRUSION TO CONTINUE RACEWAY. NOTE: NO RACEWAY ON LOWER TRUSS CORD CLAMP. FOR INFORMATION ONLY.

③ STIFFENER.

④ GUSSETS REQUIRED.

⑤ CLAMP BOLT ASSEMBLY (BOLT - ½"-13 UNC, 2 EACH - FLAT WASHER, LOCK WASHER, NUT) - 4 EACH PER CLAMP.

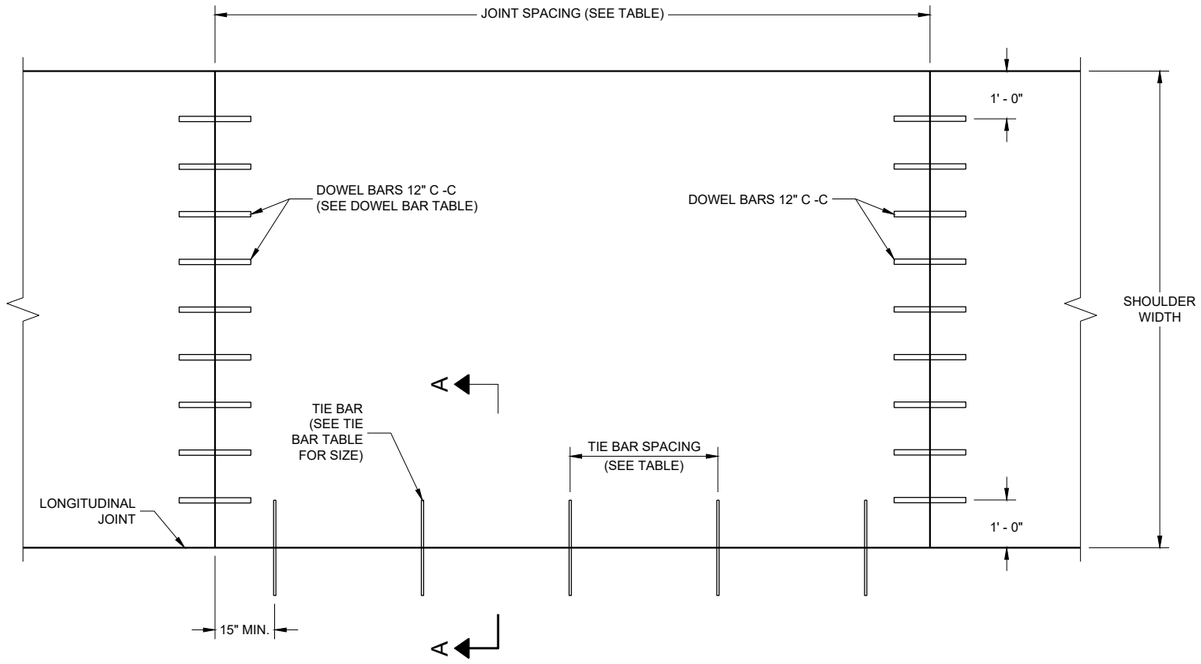
LUMINAIRE ARMS, TRUSS TYPE 6-INCH CLAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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S.D.D. 10 A 18-5b



PLAN VIEW

CONCRETE PAVEMENT SHOULDER

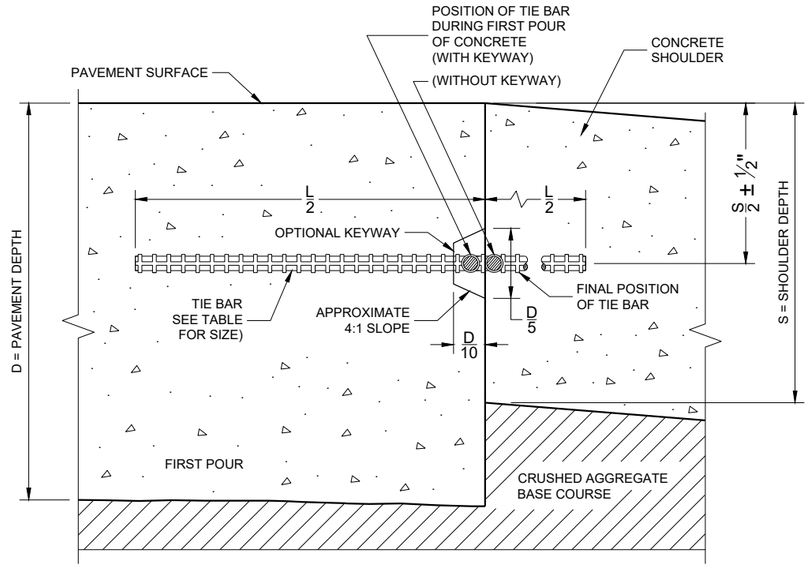
GENERAL NOTES

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

TRANSVERSE JOINT DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

FINISH THE SHOULDER PAVEMENT CONFORMING TO SUBSECTION 415.3.8 OF THE STANDARD SPECIFICATIONS.

TIE BARS SHALL CONFORM TO SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.



SECTION A - A

LONGITUDINAL CONSTRUCTION JOINT

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 BATS 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.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER ***	CONTRACTION JOINT SPACING
6", 6 ½"	NONE	12"
7", 7 ½"	1"	14"
8" & ABOVE	1 ¼"	15"

*** FOR DOWELED CONCRETE SHOULDERS WITH TRAPEZOIDAL CROSS SECTIONS, CHOSE THE APPROPRIATE DOWEL BAR DIAMETER BASED ON THE SMALLER PAVEMENT DEPTH (LIKELY THE OUTSIDE EDGE OF THE SHOULDER). IF USING BASKETS, USE BASKETS FRO THE AVERAGE THICKNESS OF THE CROSS SECTION.

CONCRETE PAVEMENT SHOULDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Peter Kemp
PAVEMENT SUPERVIS

FHWA

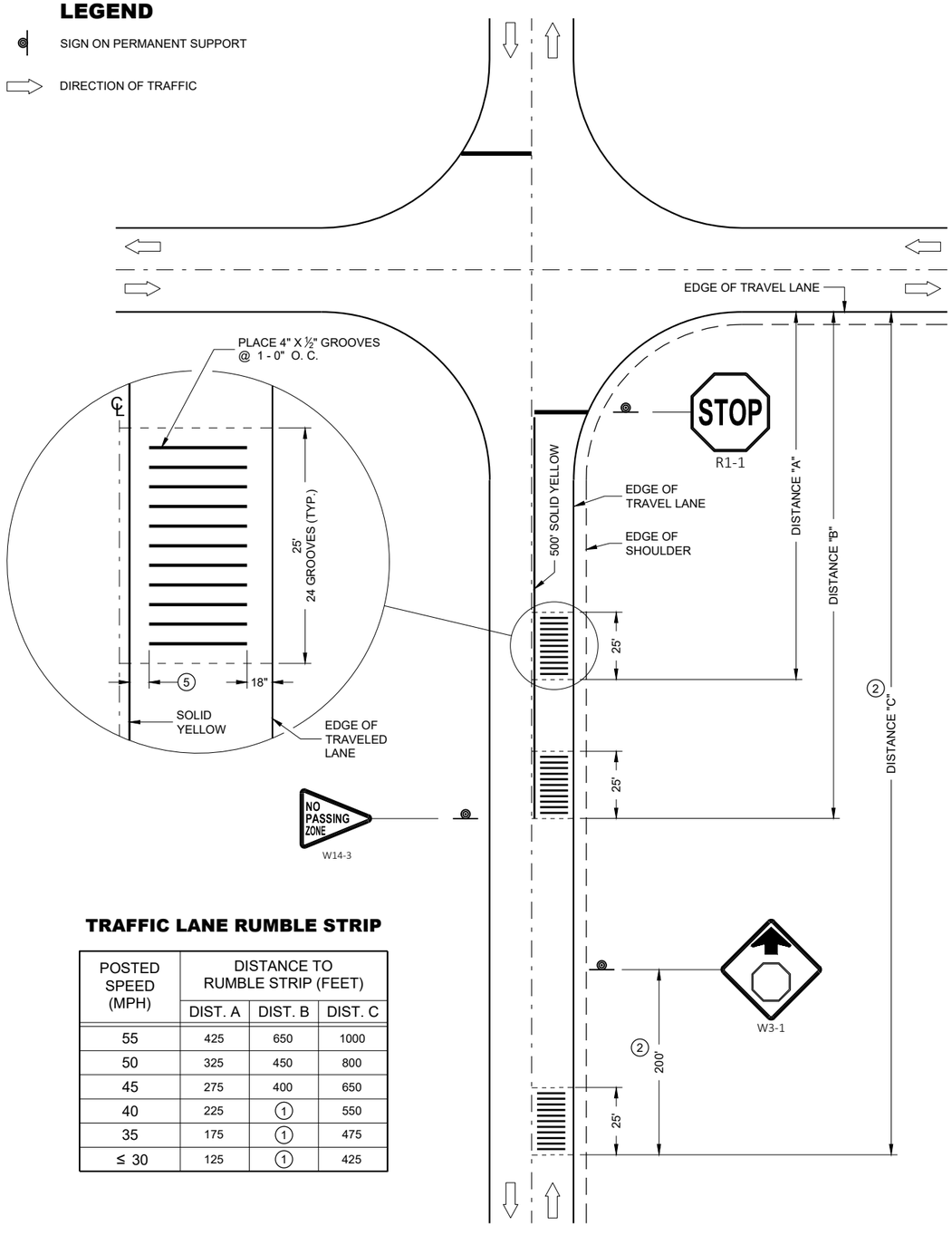
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SDD 13A03 - 07

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TRAFFIC LANE RUMBLE STRIP

POSTED SPEED (MPH)	DISTANCE TO RUMBLE STRIP (FEET)		
	DIST. A	DIST. B	DIST. C
55	425	650	1000
50	325	450	800
45	275	400	650
40	225	1	550
35	175	1	475
≤ 30	125	1	425

RUMBLE STRIP LOCATION

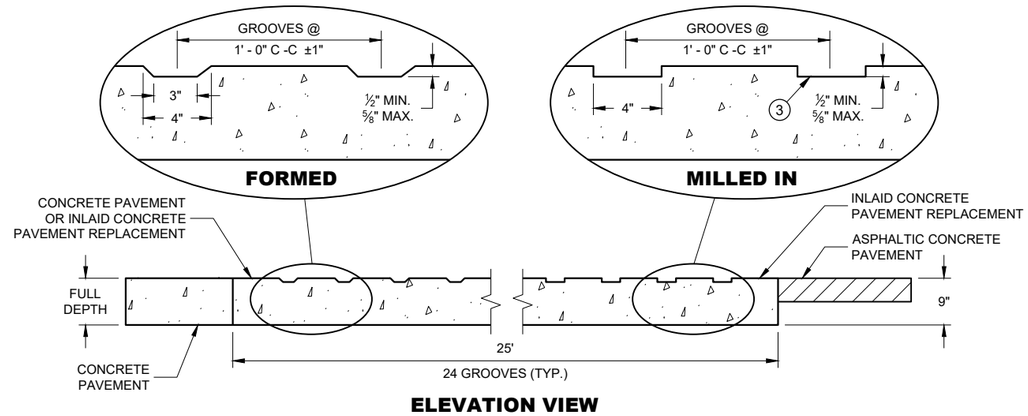
GENERAL NOTES

CONTRACTOR SHALL CONFIRM RUMBLE STRIP LOCATION WITH THE ENGINEER PRIOR TO INSTALLATION. THE ENGINEER MAY MODIFY THE RUMBLE STRIP LOCATION AS FIELD CONDITIONS DICTATE.

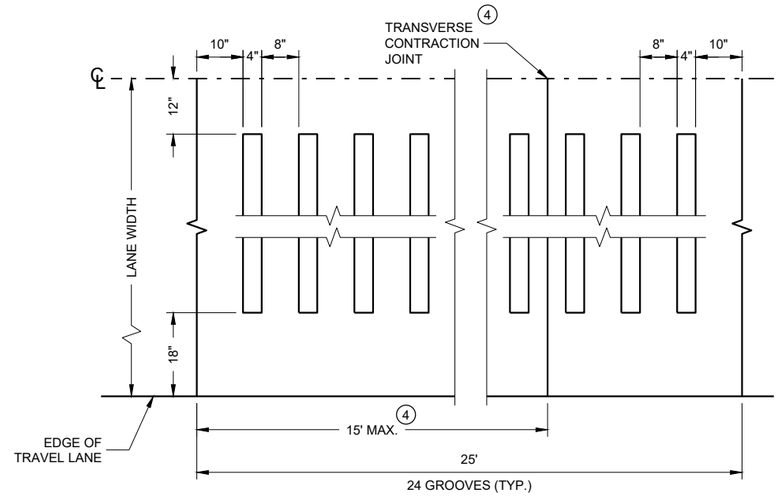
EXTEND CONCRETE FROM ℄ TO THE EDGE OF TRAVELED WAY.

PAVEMENT MARKING AND SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDE ELSEWHERE IN THE CONTRACT.

1. ELIMINATE THE MIDDLE SET OF RUMBLE STRIPS.
2. LOCATE RUMBLE STRIP 200 FEET IN ADVANCE OF W3-1 SIGN AS SHOWN. IF W3-1 IS NOT IN PLACE, USE DISTANCE "C".
3. TYPICAL VERTICAL VARIATION BETWEEN PEAKS AND VALLEYS WITHIN THE CUT APPROXIMATELY 1/16".
4. 15 FOOT MAXIMUM SPACING FOR TRANSVERSE CONTRACTION JOINT.
5. 12 INCH CLEAR BETWEEN THE SOLID YELLOW LINE AND THE EDGE OF THE RUMBLE.



ELEVATION VIEW



PLAN VIEW

CONCRETE PAVEMENT MILLED IN OR TOOLED IN

TRANSVERSE RUMBLE STRIPS, CONCRETE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodney Taylor — ROADWAY DESIGN STANDARDS UNIT SUPERVISOR

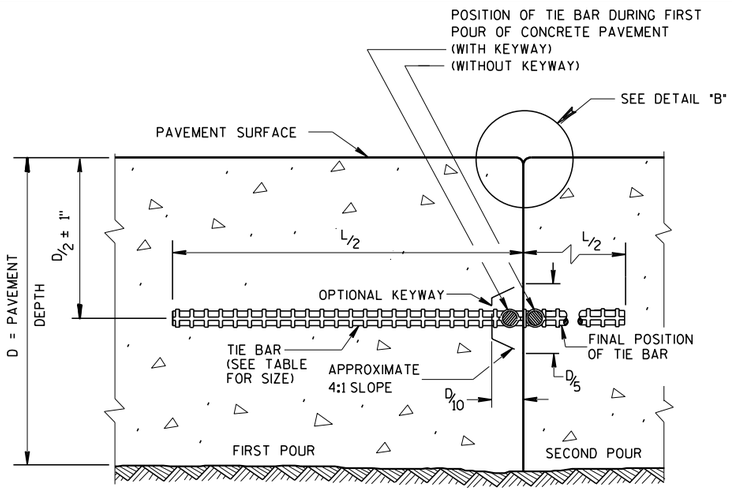
FHWA

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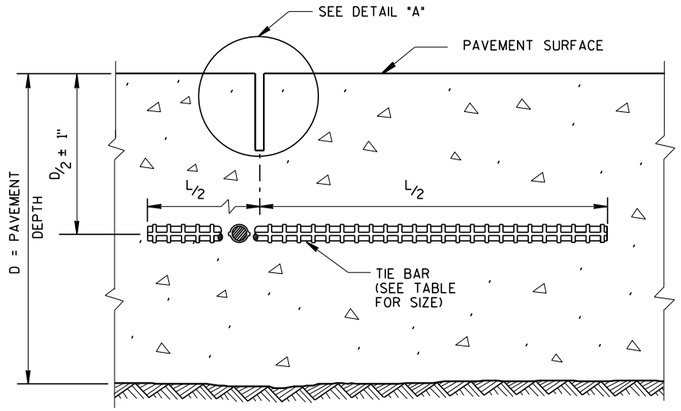
SDD 13A09 - 02

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SDD 13A09 - 02



CONSTRUCTION JOINT



SAWED JOINT

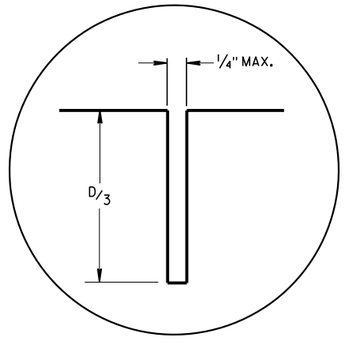
GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

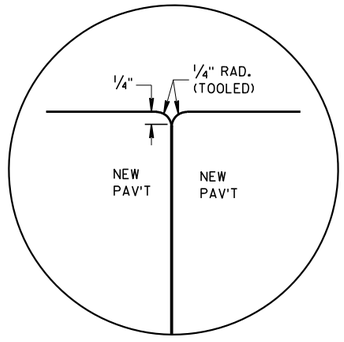
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

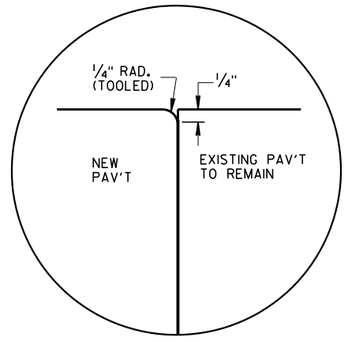
(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



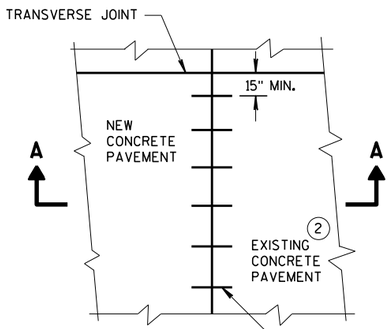
DETAIL "A"



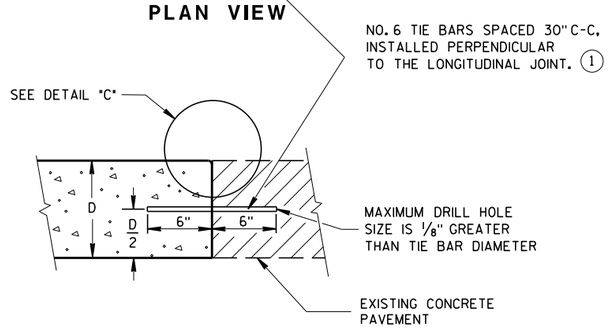
DETAIL "B"



DETAIL "C"



PLAN VIEW



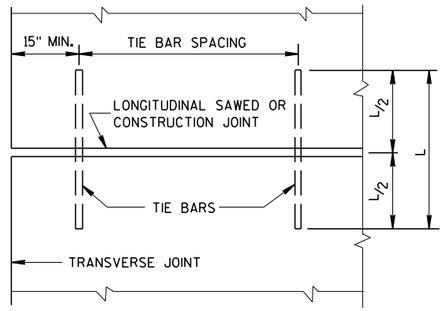
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

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

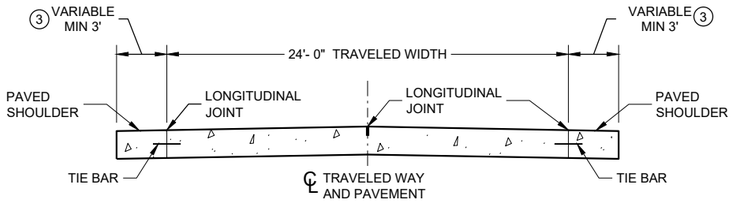
APPROVED
March 2018 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUPE
FHWA

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S.D.D. 13 C 1-19

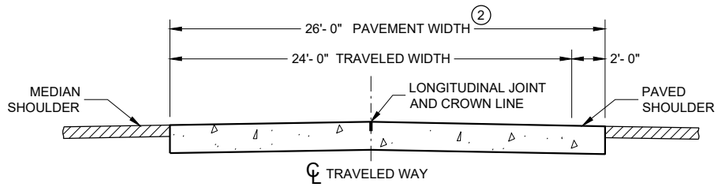
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S.D.D. 13 C 1-19

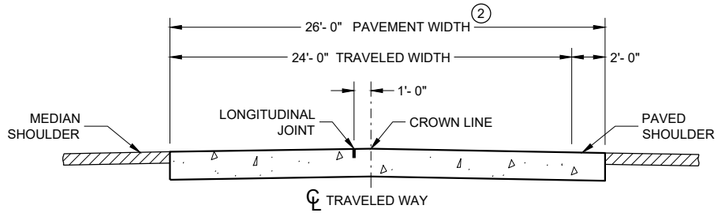


SECTION A - A

TWO-LANE TWO-WAY HIGHWAY (1)



SECTION B - B



ALTERNATIVE SECTION B - B

DIVIDED HIGHWAY (1)

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 FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

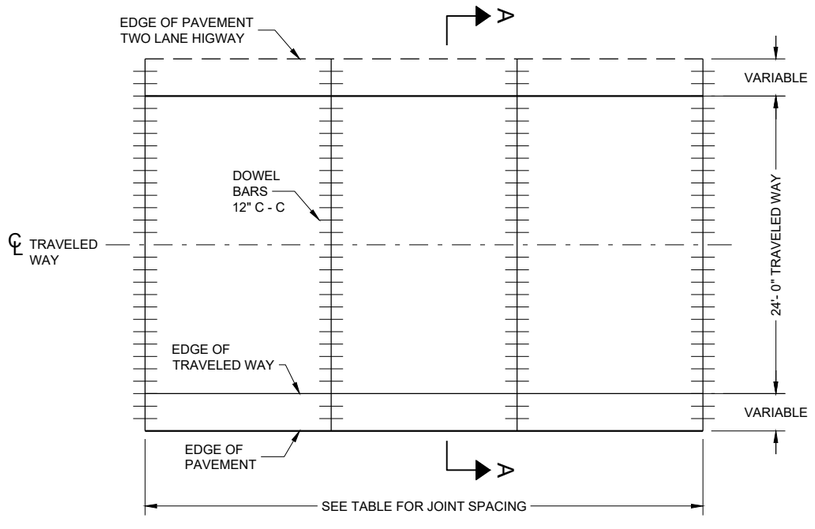
(1) REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

(2) MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED "PAVED SHOULDER" AS CONCRETE PAVEMENT.

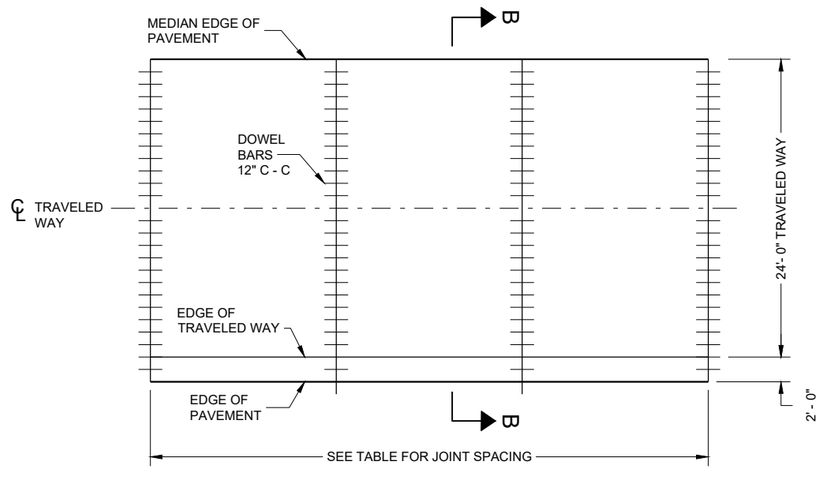
(3) SHOULDER WIDTHS LESS THAN 3 FEET SHALL BE PAVED INTEGRAL TO THE MAINLINE CONCRETE PAVEMENT, SEE SECTION B-B.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8" & ABOVE	1 ¼"	15'



CONTRACTION JOINT LAYOUT FOR TWO-LANE TWO-WAY HIGHWAY



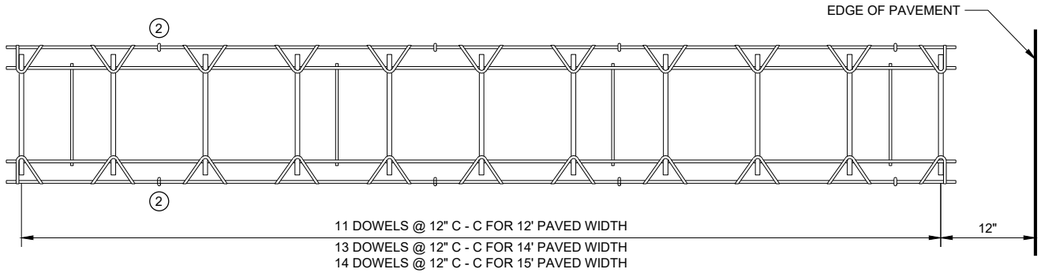
CONTRACTION JOINT LAYOUT FOR DIVIDED HIGHWAY

RURAL DOWELED CONCRETE PAVEMENT

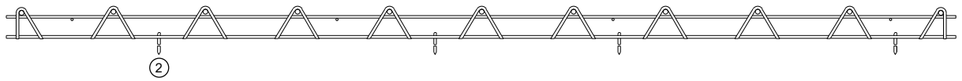
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTAT 313

SDD 13C11 - 14a

SDD13C11 - 14a



PLAN VIEW



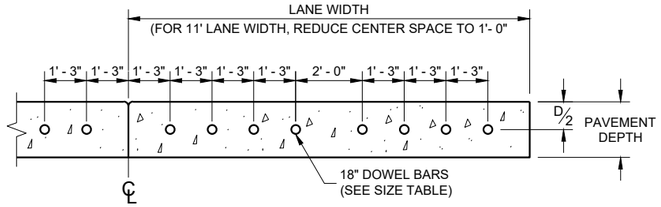
SIDE VIEW

(NORMAL TO CENTERLINE)

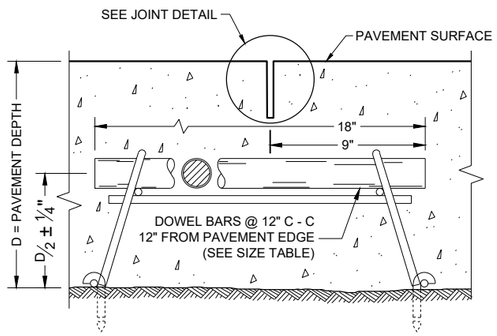
CONTRACTION JOINT DOWEL ASSEMBLY (1)

GENERAL NOTES

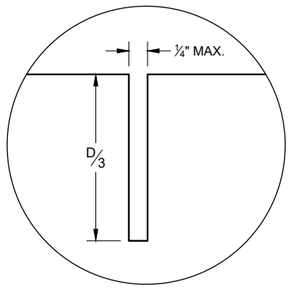
1. OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.
2. SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.
3. FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" 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 THE "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 AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



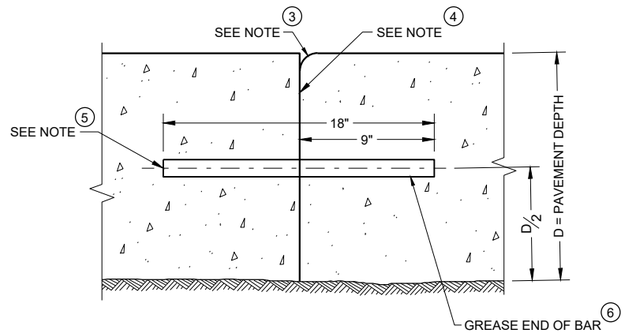
DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



DOWELED CONTRACTION JOINT



JOINT DETAIL



TRANSVERSE CONSTRUCTION JOINT

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

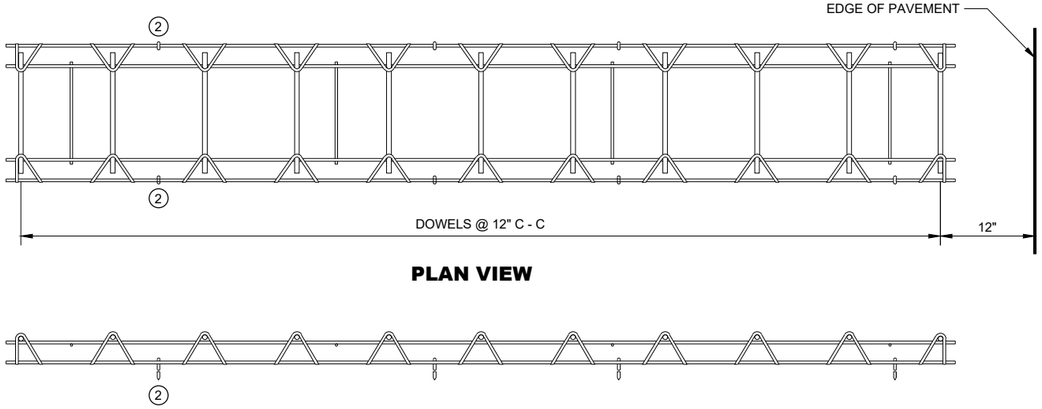
APPROVED
November 2022
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

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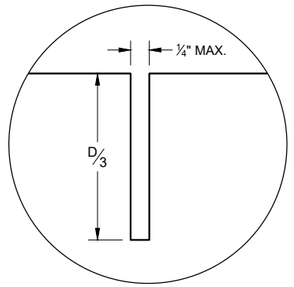
SDD 13C11 - 14b
SDD 13C11 - 14b



PLAN VIEW

SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY (1)



JOINT DETAIL

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 FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE 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 CONSTRUCTION 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.

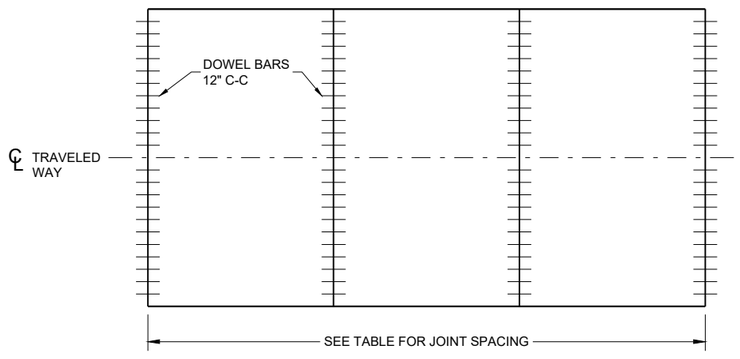
(3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.

(4) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

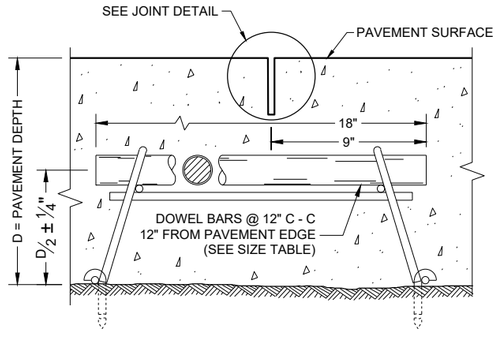
(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED 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 AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



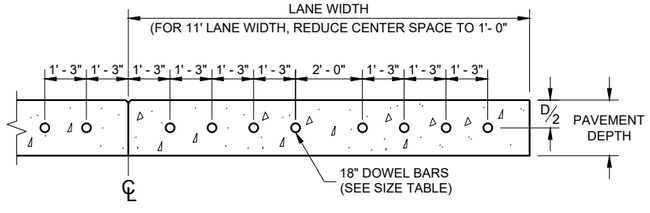
CONTRACTION JOINT LOCATIONS



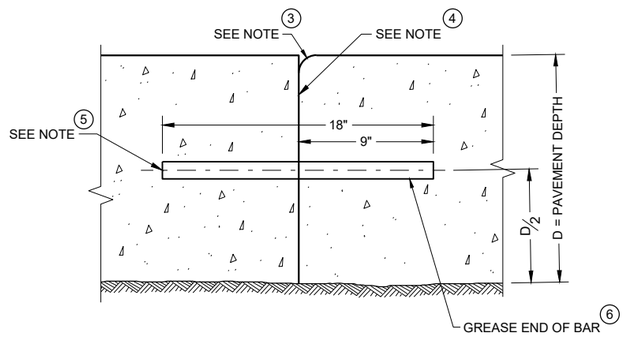
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8" & ABOVE	1 ¼"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



TRANSVERSE CONSTRUCTION JOINT

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

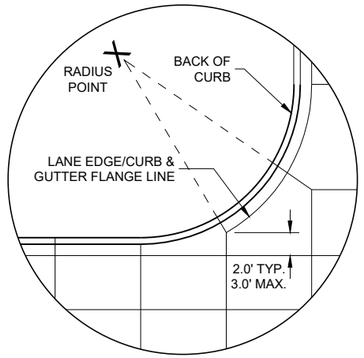
APPROVED
November 2022
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

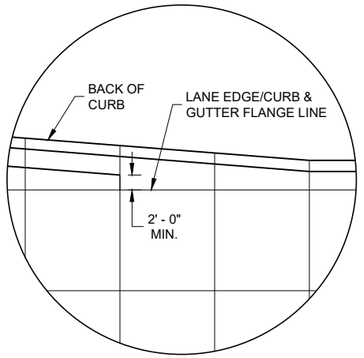
FHWA

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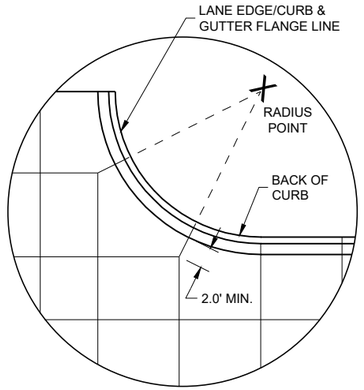
SDD 13C13 - 11



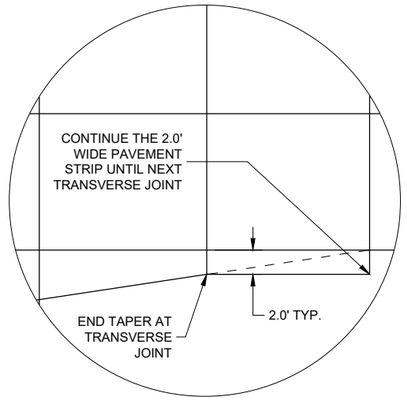
DETAIL "A"



DETAIL "B"



DETAIL "C"



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.

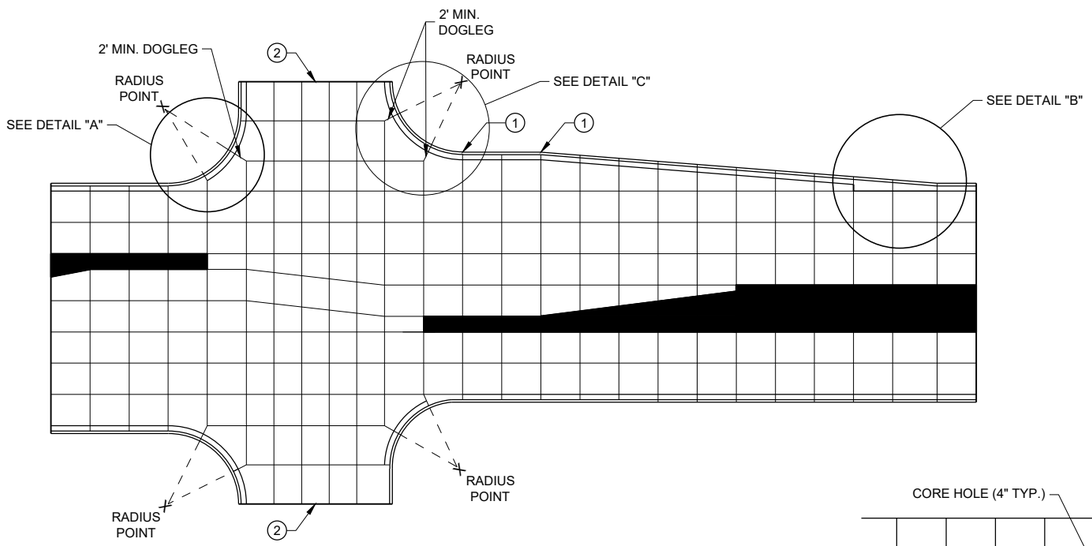
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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.

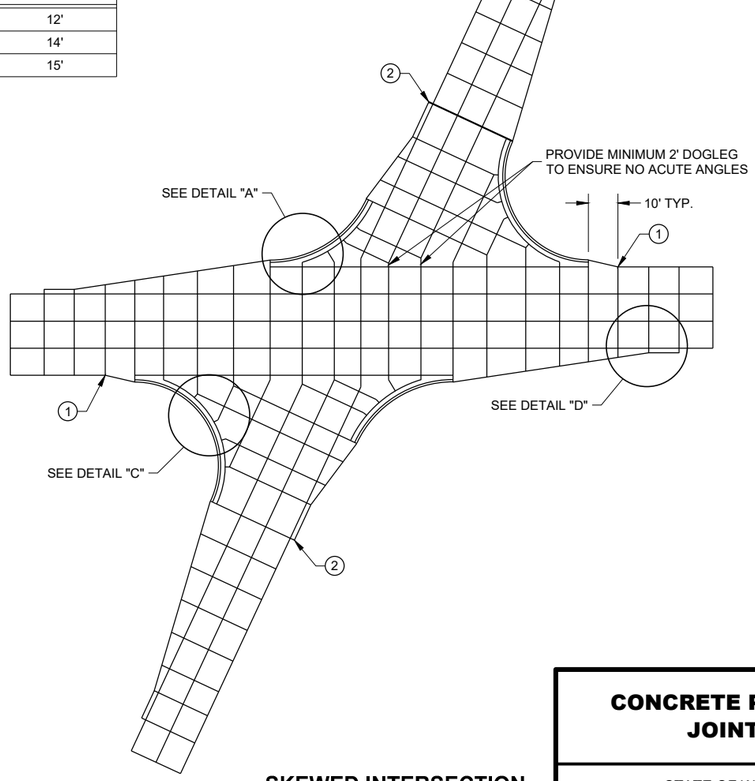
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



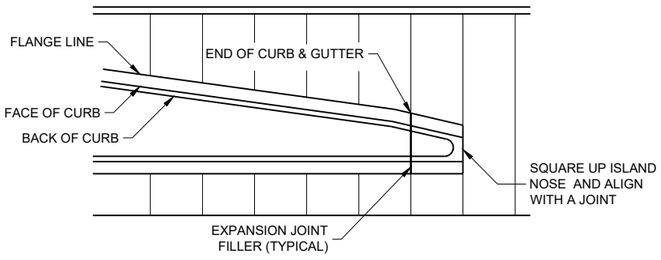
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

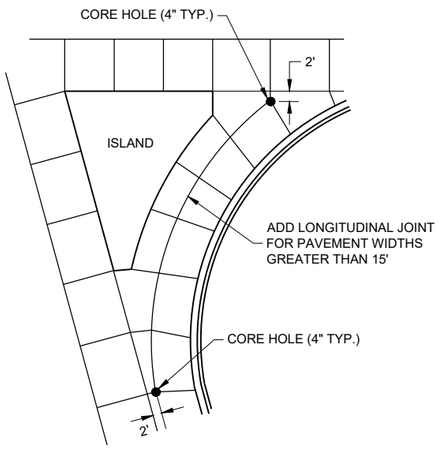
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

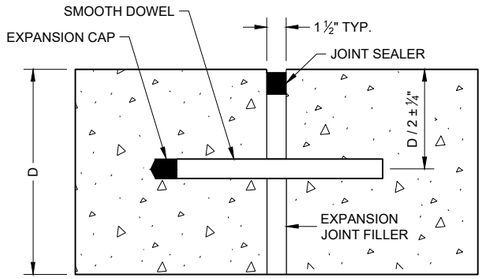
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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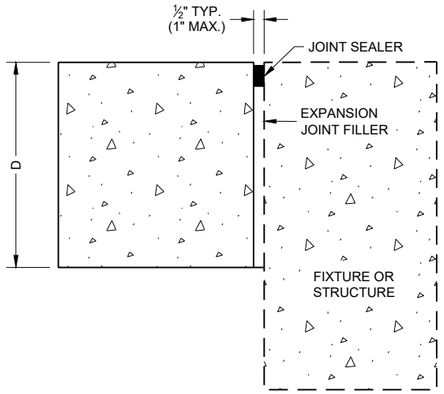
SDD 13C18 - 08a

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SDD 13C18 - 08a



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

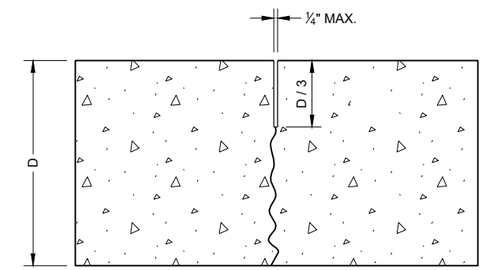
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

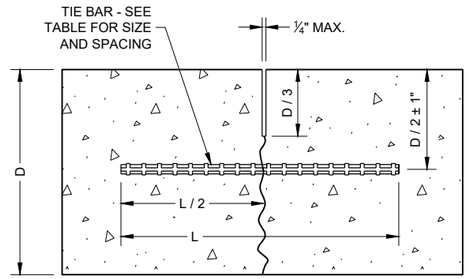
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

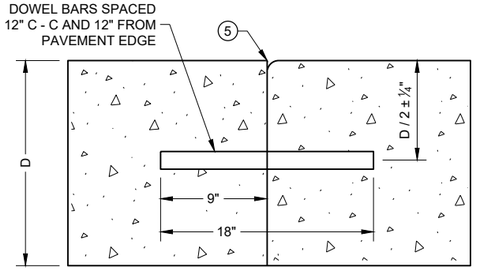
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM 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.



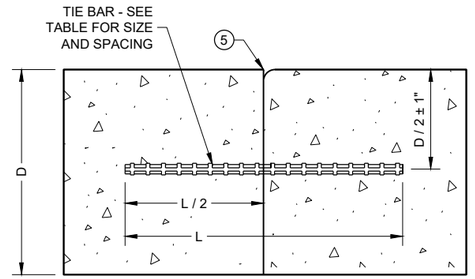
UNDOWELED TRANSVERSE



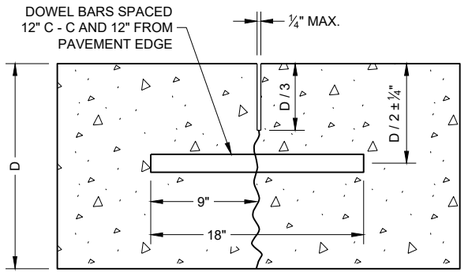
TIED LONGITUDINAL



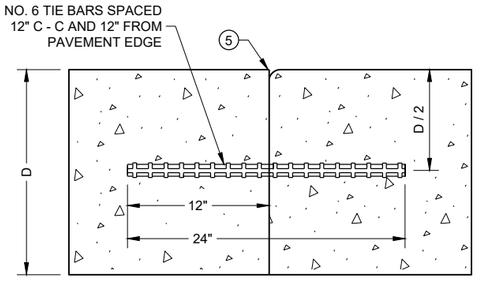
DOWELED TRANSVERSE (3)



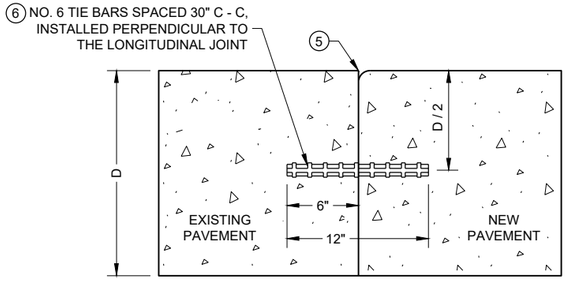
TIED LONGITUDINAL



DOWELED TRANSVERSE



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)

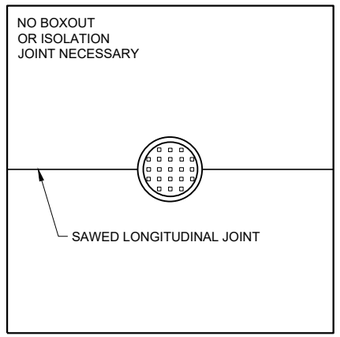


TIED LONGITUDINAL TO EXISTING

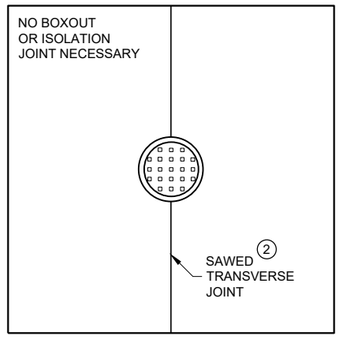
CONTRACTION JOINTS (2)

CONSTRUCTION JOINTS (4)

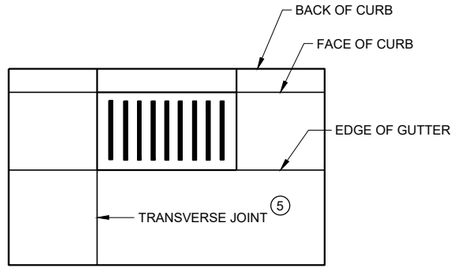
CONCRETE PAVEMENT JOINT TYPES



MANHOLE WITH LONGITUDINAL JOINT



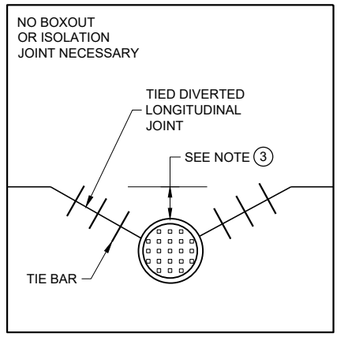
MANHOLE WITH TRANSVERSE JOINT



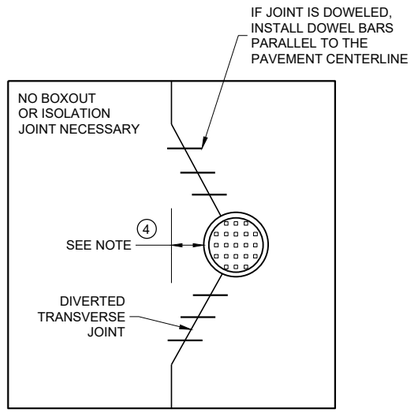
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

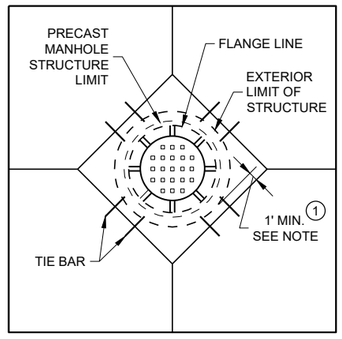
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF 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

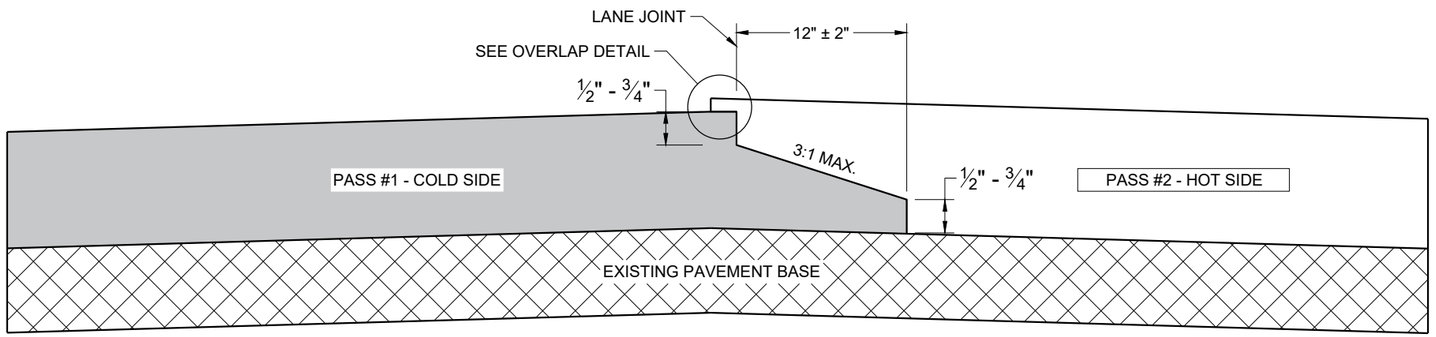
APPROVED
May 2023
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

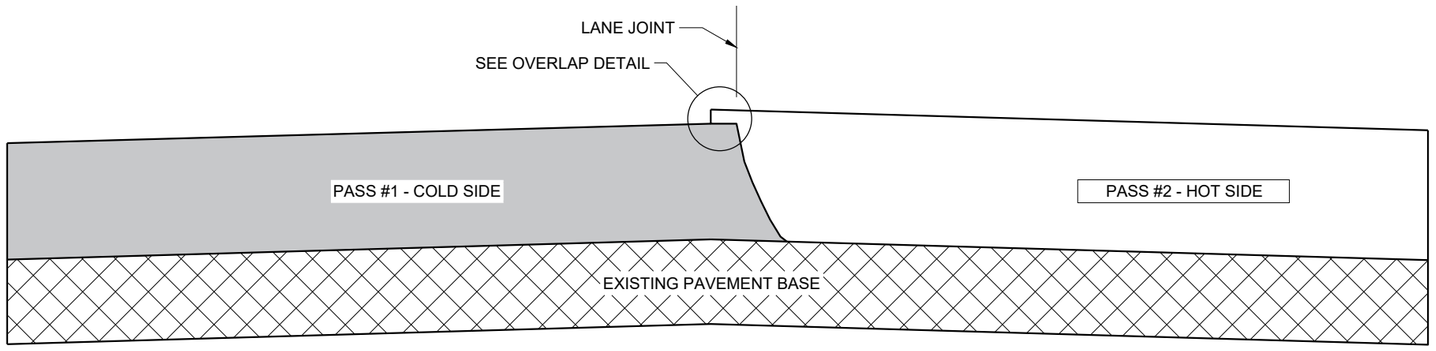
FHWA

6

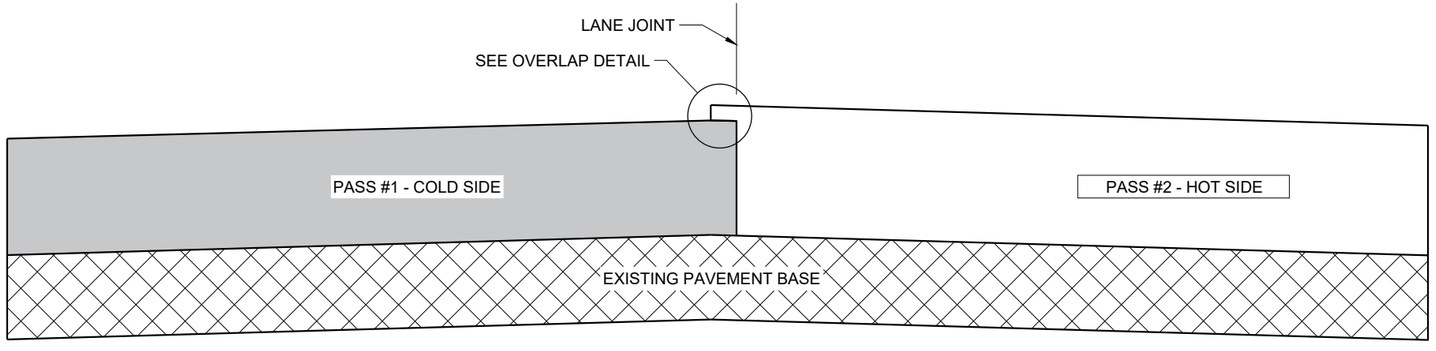
SDD13C18 - 08d



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

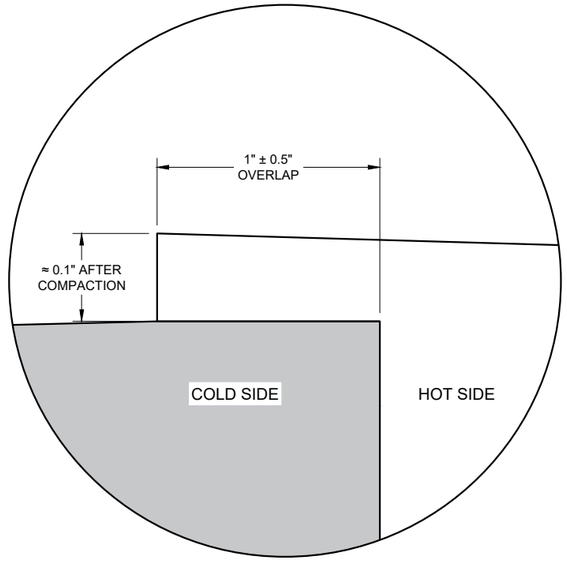
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

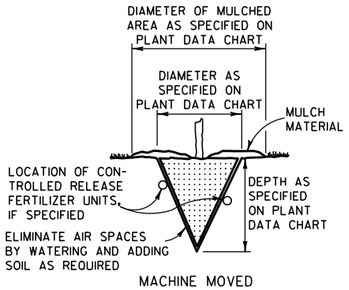
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

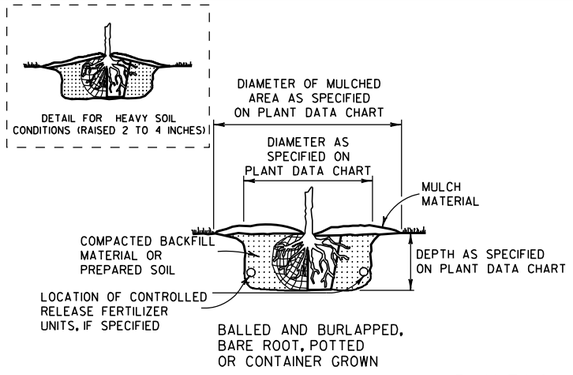
APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

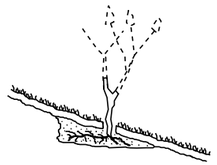
FHWA



MACHINE MOVED

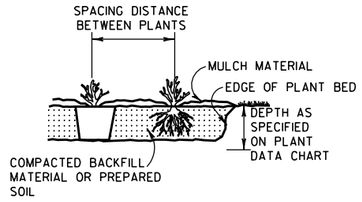


BALLED AND BURLAPPED, BARE ROOT, POTTED OR CONTAINER GROWN



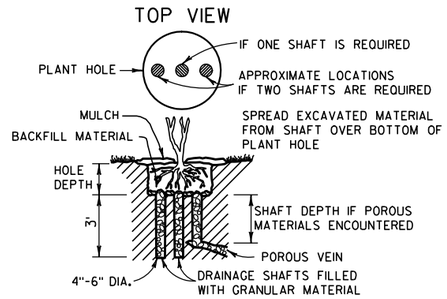
ACCOMMODATE ROOTS (SMOOTH AND STAGHORN SUMAC)

NOTE:
1) ENGINEER SHALL REQUIRE 3 SLITS IN POT TO SPEED DETERIORATION
2) METAL, PLASTIC OR OTHER NONDEGRADABLE POTS SHALL BE REMOVED PRIOR TO PLANTING



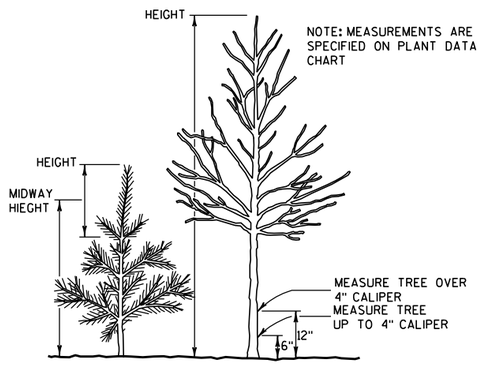
PREPARED BED (BARE ROOT AND POTTED)

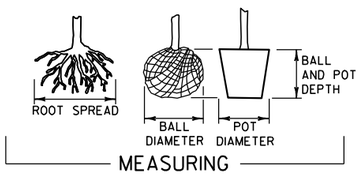
PLANTING



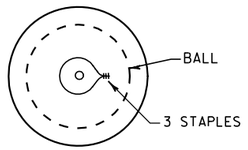
NOTE:
DRAINAGE SHAFT AS SPECIFIED ON PLANT DATA CHART

DRAINING

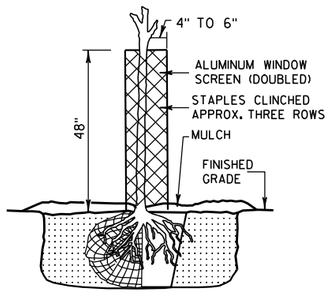




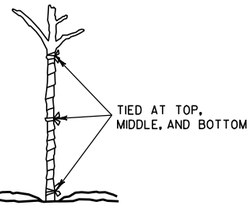
MEASURING



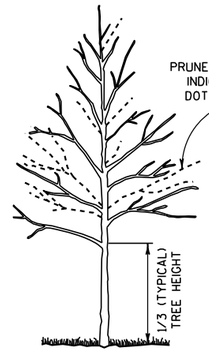
TOP VIEW



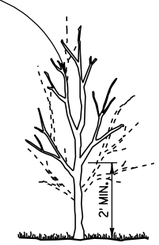
RODENT PROTECTION



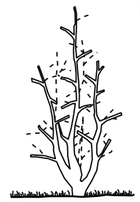
WRAPPING



TALL DECIDUOUS TREES (ASH, MAPLE, LINDEN, OAK)



SINGLE STEMMED LOW DECIDUOUS TREES (CRABS AND OTHER SINGLE STEM TYPE)



MULTI-STEMMED LOW DECIDUOUS TREES OR LARGE SHRUBS (HAWTHORN, SERVICEBERRY)

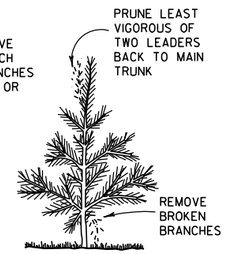
NOTE: WHEN PRUNING, PRESERVE CHARACTER AND SHAPE OF TREE. AVOID LEAVING STUBS - REMOVE BRANCH OR TWIG BACK TO THE NEAREST CROTCH
1) PRUNE TO REMOVE DEAD AND BROKEN BRANCHES
2) PRUNE TO REMOVE BRANCHES THAT TOUCH OR ARE TOO CLOSE TO OTHER BRANCHES



SHRUBS (GRAY DOGWOOD ARROWWOOD VIBURNUM)

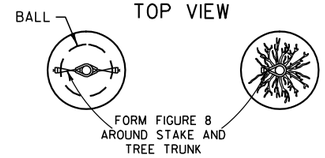


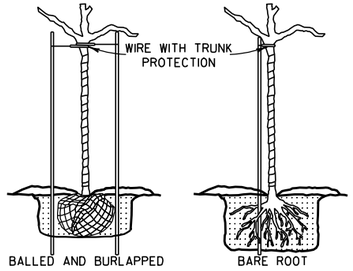
SUMAC

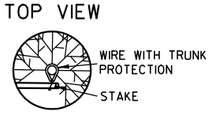


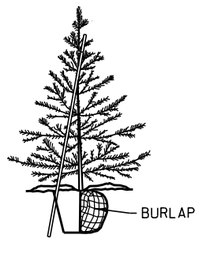
TREE TYPE EVERGREENS (PINE, SPRUCE, FIR) EVERGREENS USUALLY ARE NOT PRUNED

PRUNING



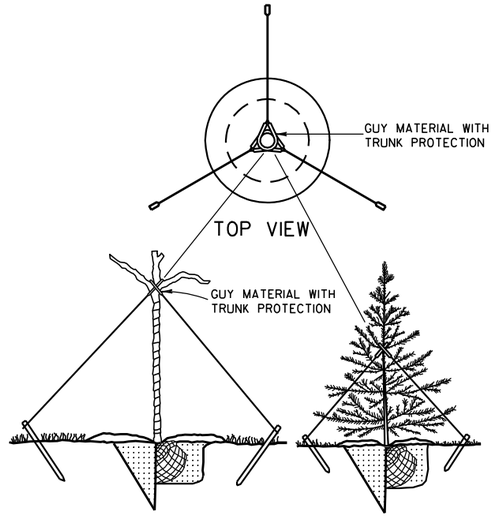






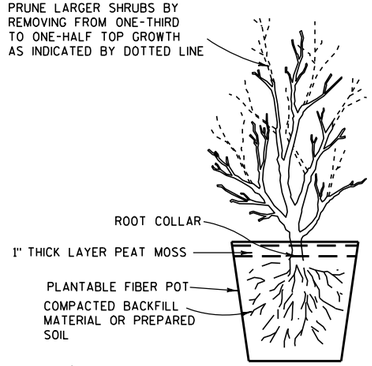
NOTE: BRACING STAKE
1) SHALL BE DRIVEN INTO THE GROUND AS CLOSE TO THE TREE AS POSSIBLE WITHOUT DAMAGING THE BRANCHES.
2) MAY BE DRIVEN AT SUCH AN ANGLE THAT IT DOES NOT PENETRATE THE BALL OR POT.
3) SHALL NOT PROTRUDE ABOVE THE TOP OF THE TREE; AND
4) SHALL HAVE A HOLE NEAR THE TOP TO HOLD THE WIRE IN PLACE.

BRACING



GUYING

PRUNE LARGER SHRUBS BY REMOVING FROM ONE-THIRD TO ONE-HALF TOP GROWTH AS INDICATED BY DOTTED LINE



POTTING

NOTES

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

BRACING, WRAPPING, GUYING, RODENT PROTECTION, FERTILIZER AND MULCH SHALL BE USED ONLY WHEN SPECIFIED ON THE PLANT DATA CHART (PART OF PLAN) OR SPECIAL PROVISIONS.

TREE PLANTING DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/11/94
DATE
/S/ Rory L. Rhinesmith
CHIEF METHODS DEVELOPMENT ENGINEER
FHWA

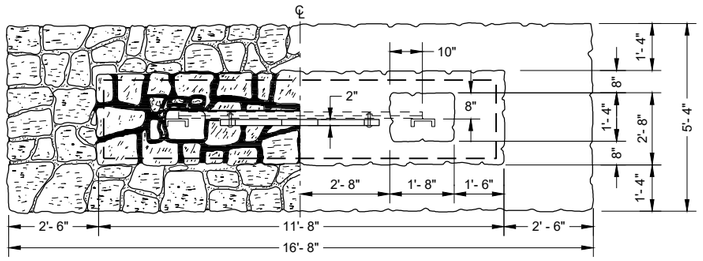
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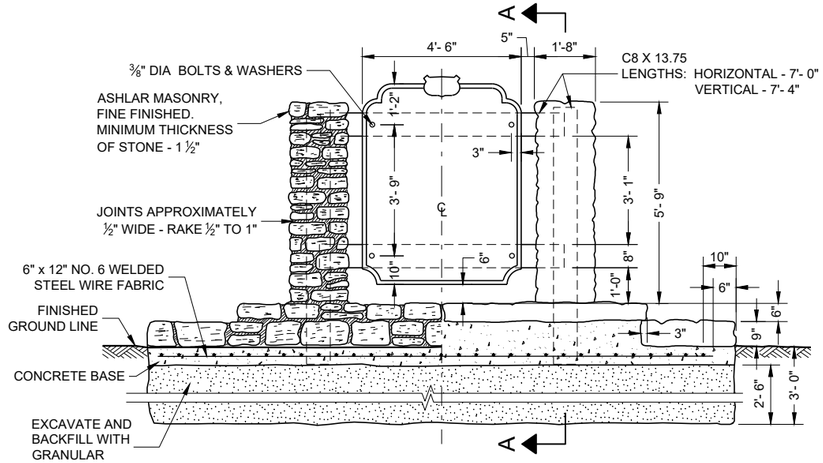
S.D.D. 14 A 2-1

6

S.D.D. 14 A 2-1

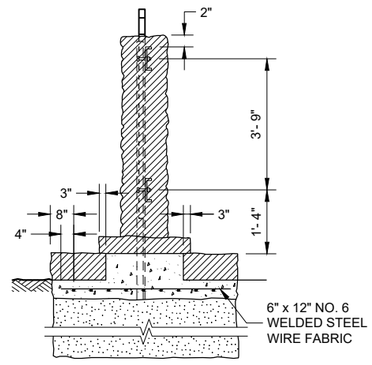


TOP VIEW

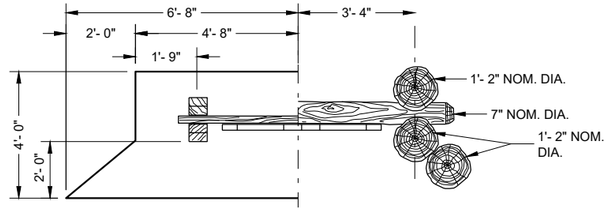


FRONT ELEVATION

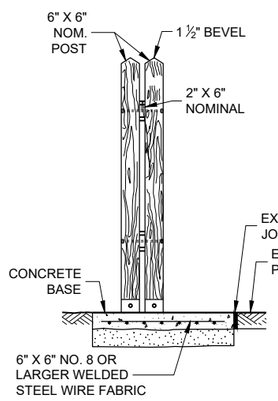
MASONRY CONSTRUCTION



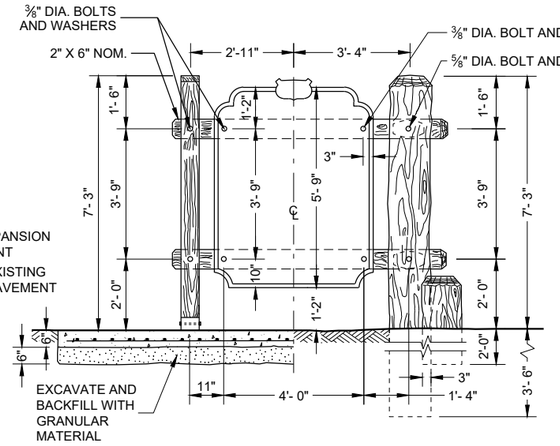
SECTION A - A



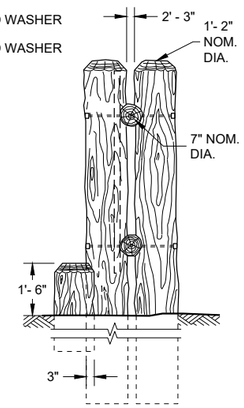
TOP VIEW



LEFT ELEVATION



FRONT ELEVATION



RIGHT ELEVATION

DIMENSIONED POST CONSTRUCTION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 615.

CAST ALUMINUM PLAQUE SHALL BE STATE FURNISHED.

ALL CARRIAGE BOLTS USED IN CONSTRUCTION SHALL BE CUT OFF FLUSH WITH THE NUTS AND ALL NUTS SHALL BE COUNTER SUNK, EXCEPT FOR THOSE FASTENED TO THE PLAQUE.

DIMENSIONED POSTS & RAILS

POSTS SHALL BE DOUGLAS FIR, CONSTRUCTION GRADE. CROSS MEMBERS SHALL BE DOUGLAS FIR, FINISHED LUMBER, GRADE "C" SELECT OR BETTER. POSTS AND CROSS MEMBERS SHALL BE PAINTED WITH TWO COATS OF BROWN WOOD STAIN.

WELDED STEEL POST BASES SHALL BE FABRICATED. BASES SHALL BE PAINTED WITH DARK BROWN PAINT. GENEROUSLY TREAT ALL END GRAIN, DRILLED HOLES AND CUT SURFACES.

RUSTIC POSTS AND RAILS

POSTS AND CROSS MEMBERS MAY BE FROM ONE OF THE FOLLOWING SPECIES (SALVAGED UTILITY POLES OR TREATED TIMBER PILINGS MAY BE USED).

- WHITE PINE
- RED (NORWAY) PINE
- NORTHERN RED CEDAR
- NORTHERN HEMLOCK OR OAK

THE ABOVE-GROUND PORTION OF THE TREATED AND UNTREATED POSTS AND RAILS SHALL BE PAINTED WITH TWO COATS OF BROWN WOOD STAIN.

BILL OF MATERIALS

DIMENSIONED POSTS CONSTRUCTION

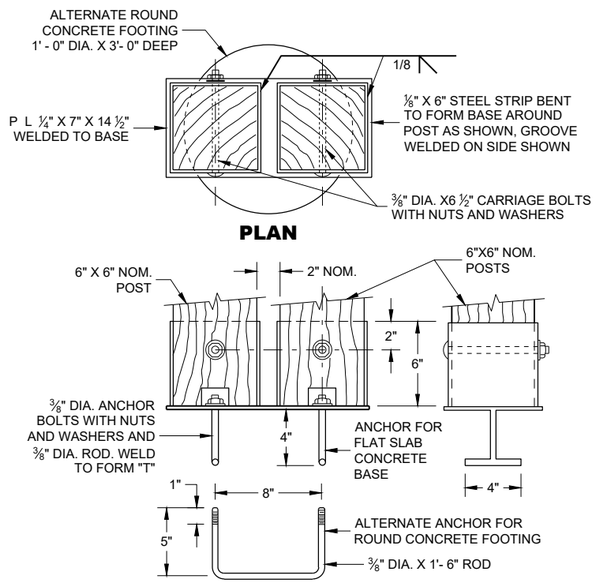
ITEM	UNIT	QUANTITY
CONCRETE (FLAT SLAB)	CY	0.80
WIRE FABRIC (FLAT SLAB)	SY	4.6
STEEL POST BASES	EA	2
POSTS	6" X 6" X 7' - 3"	4
LUMBER	2" X 6" X 6 - 10	2
ANCHOR BOLTS (FLAT SLAB)	⅜" X 5"	4
CARRIAGE BOLTS	⅜" X 4"	4
CARRIAGE BOLTS	⅜" X 14"	4
CARRIAGE BOLTS	⅜" X 6 ½"	4
ANCHOR BOLTS (ROUND FOOTING)	⅜" "U"	2
CONCRETE (ROUND FOOTING)	CY	0.17

RUSTIC POSTS CONSTRUCTION

ITEM	UNIT	QUANTITY
POSTS	1' - 2" DIA. X 10' - 9"	4
POSTS	1' - 2" DIA. X 3' - 6"	2
RAILS	7" DIA. X 8' - 10"	2
CARRIAGE BOLTS	⅜" X 8"	4
CARRIAGE BOLTS	⅝" X 27"	4

MASONRY CONSTRUCTION

ITEM	UNIT	QUANTITY
CONCRETE (FLAT SLAB)	CY	2.3
ASHLAR MASONRY	CY	3.5
WIRE FABRIC (FLAT SLAB)	SY	9.8
CHANNEL STEEL	LBS	396
CARRIAGE BOLTS	⅜" X 2 ¾"	4



POST BASE DETAIL

(DIMENSIONED POST CONSTRUCTION)

HISTORICAL MARKER CONSTRUCTION

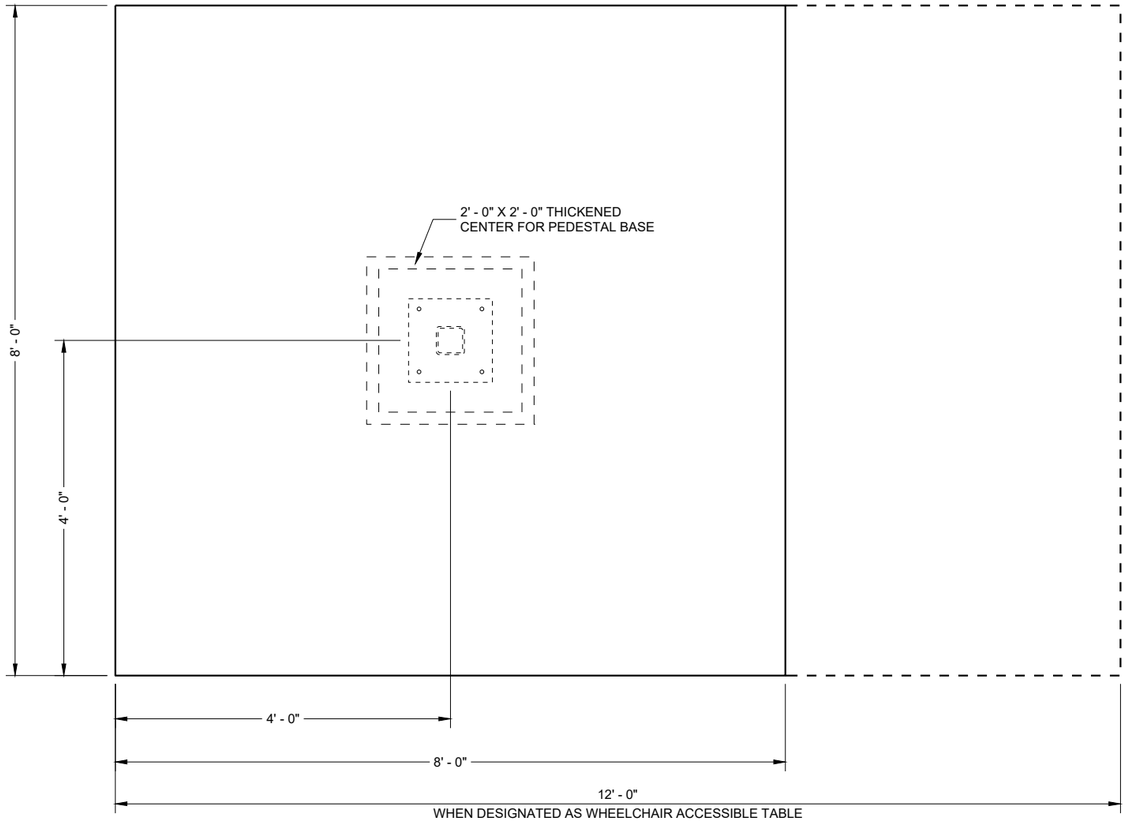
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

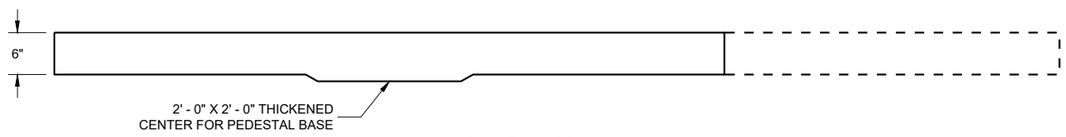
/S/ Joseph Coughlin
ROADSIDE FACILITIES ENG

FHWA

6
SDD 14C02 - 03



TOP VIEW



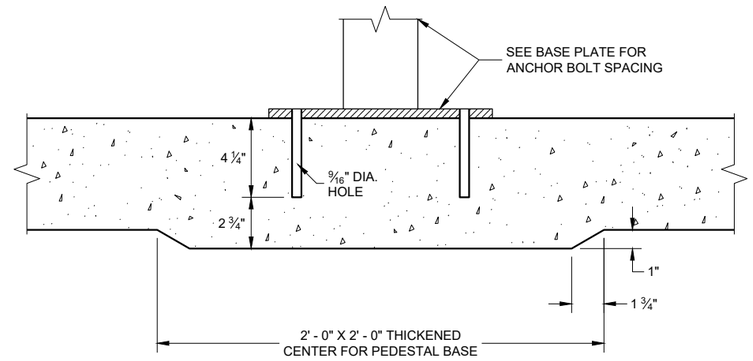
SLAB ELEVATION

GENERAL NOTES

PICNIC TABLE PAD SHALL BE PAID FOR AS CONCRETE SIDEWALK 6-INCH.

PICNIC TABLE PAD SHALL BE LEVEL.

WHEEL CHAIR ACCESSIBLE TABLES MUST HAVE SIDEWALK EXTENSION.



ANCHOR BOLT HOLE DETAIL

CONCRETE PAD FOR PICNIC TABLE

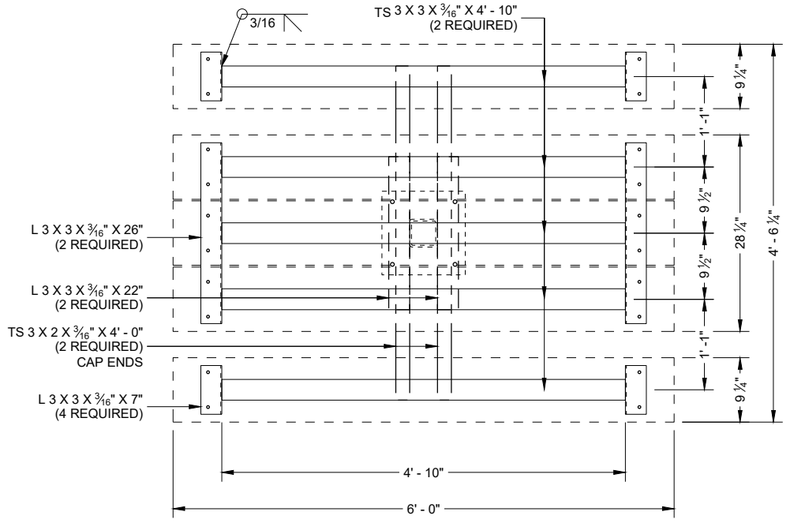
PICNIC TABLE
SINGLE PEDESTAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

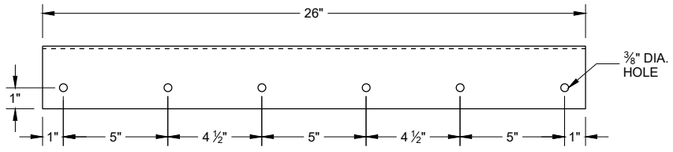
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SDD 14C07 - 04a

SDD 14C07 - 04a

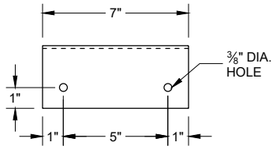


TOP VIEW



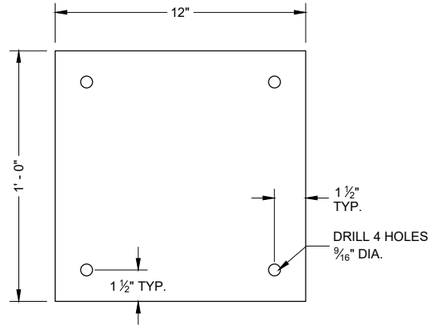
TOP ANGLE

L 3 X 3 X 3/16
(2 REQUIRED)



SEAT ANGLE

L 3 X 3 X 3/16
(4 REQUIRED)



BASE PLATE LAYOUT

GENERAL NOTES

ALL EDGES AND CORNERS OF CUT ANGLES TO BE ROUNDED TO PREVENT SHARP EDGES.

ALL STRUCTURAL TUBES TO BE 46 KSI YIELD, ALL OTHER STEEL TO BE 36 KSI YIELD MIN.

PLANKS TO BE MADE OF RECYCLED PLASTIC.

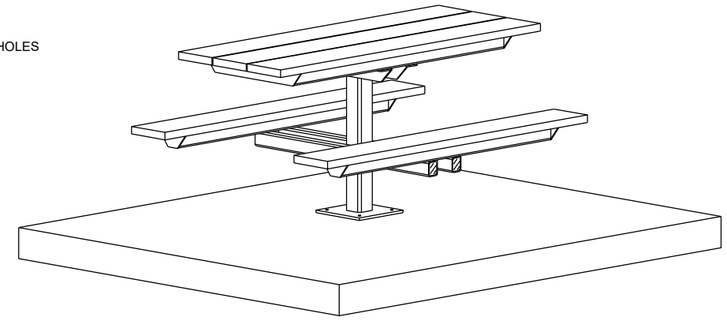
ACTUAL SIZE OF NOMINAL 2X10 PLANKS SHALL BE 1 ½" X 9 ¼".

ALL NUTS, BOLTS AND WASHERS SHALL BE ASTM A36.

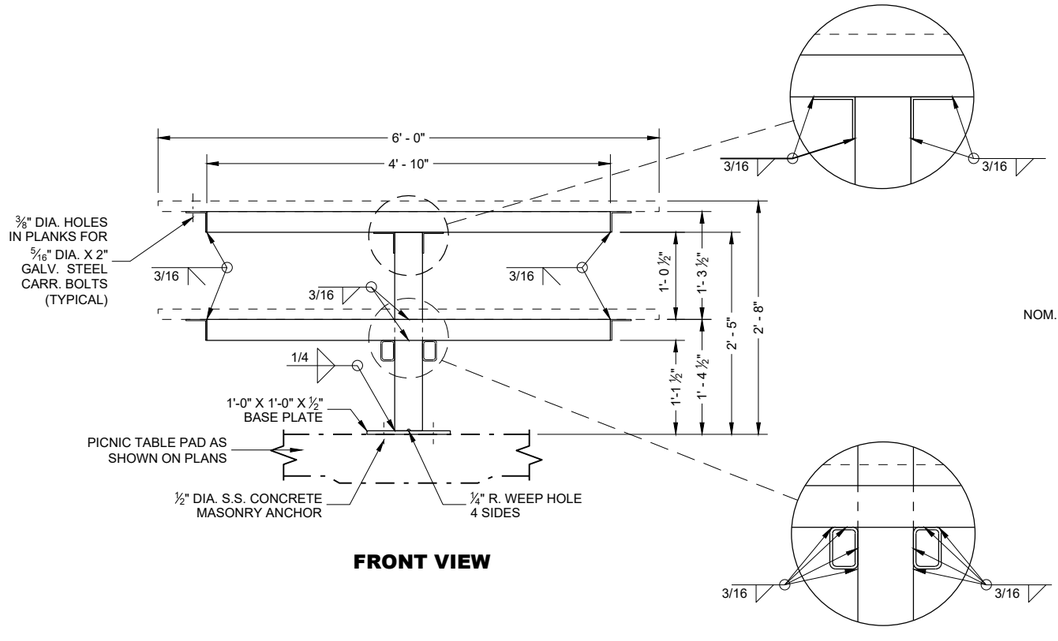
THE ½" DIA. STAINLESS STEEL CONCRETE MASONRY ANCHOR SHALL BE IN ACCORDANCE WITH SECTION 502.2.12 OF THE STANDARD SPECIFICATION.

THE TYPE "S" MASONRY ANCHOR SHALL DEVELOP A MIN. 2400 LBS. TENSION.

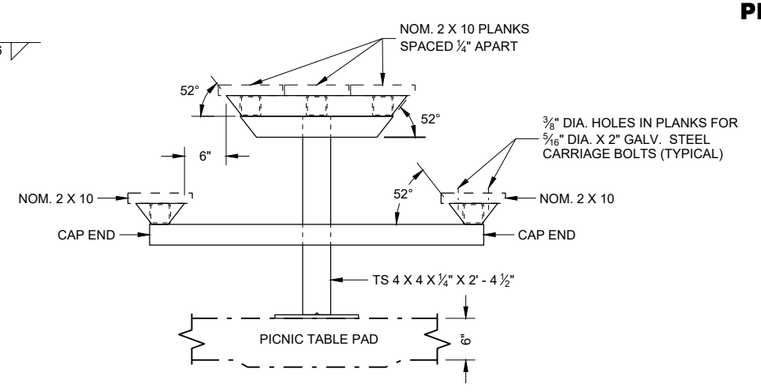
CONCRETE SHALL BE CURED A MINIMUM OF 7 DAYS PRIOR TO SETTING ANCHOR BOLTS.



PERSPECTIVE VIEW



FRONT VIEW



END VIEW

SINGLE PEDESTAL PICNIC TABLE

PICNIC TABLE
SINGLE PEDESTAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

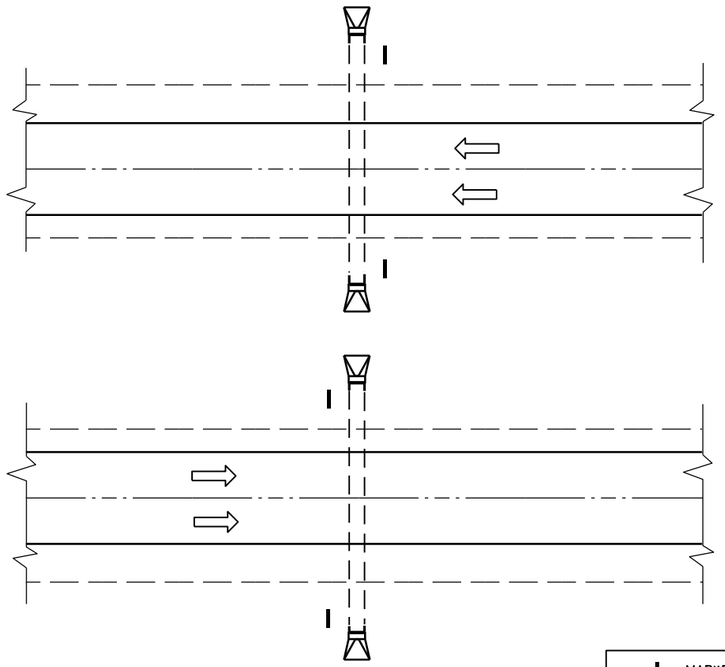
APPROVED
May 2021
DATE

/S/ Joseph Coughlin
ROADSIDE FACILITIES ENG

FHWA

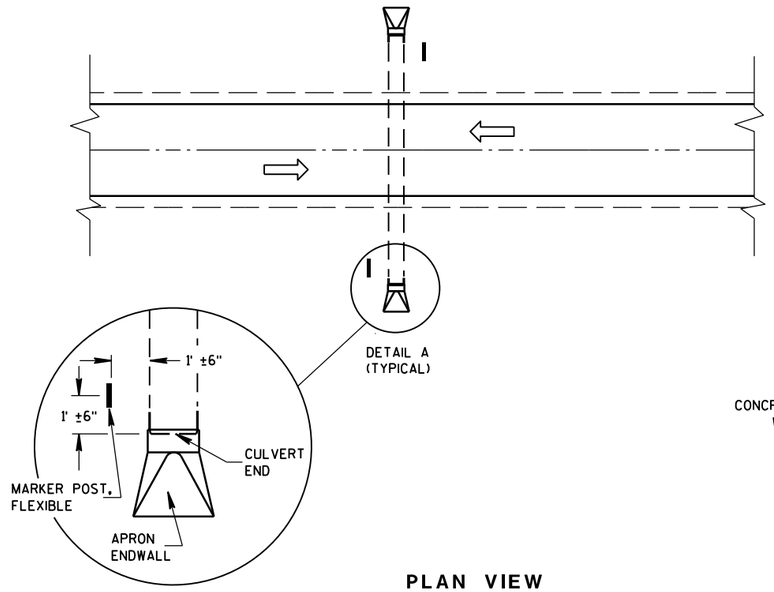
SDD14C07 - 04b

SDD14C07 - 04b



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

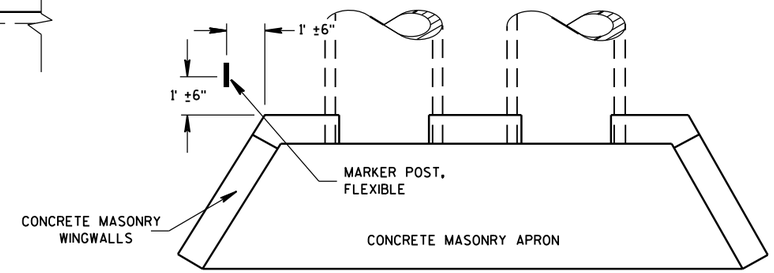
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

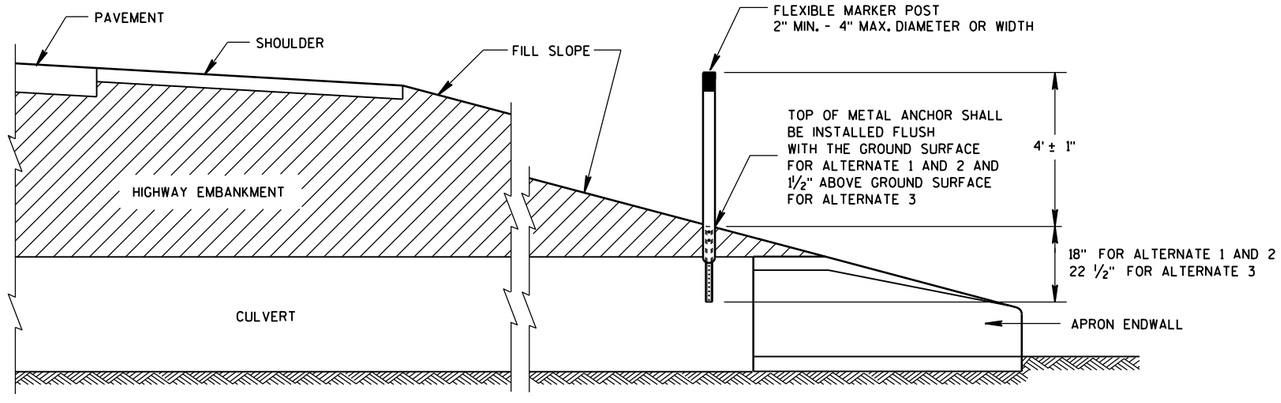
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

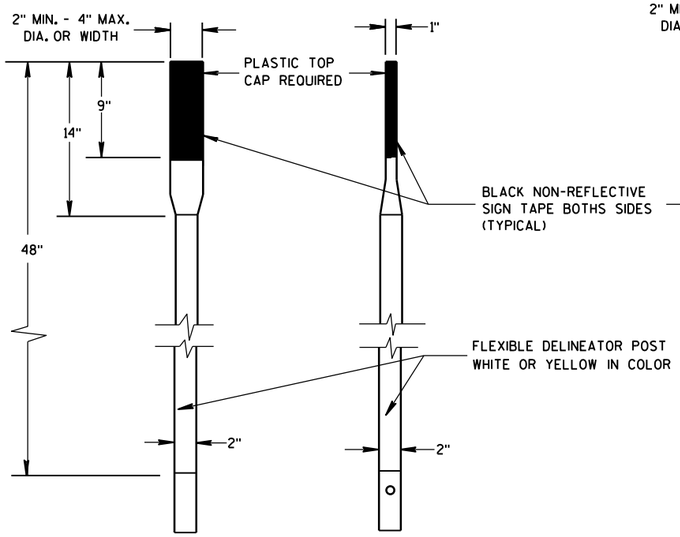
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

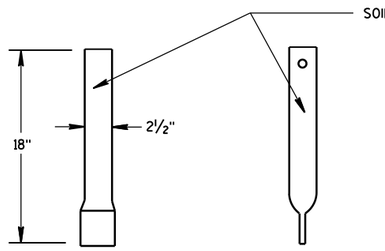
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S.D.D. 15 A 3-2a

6

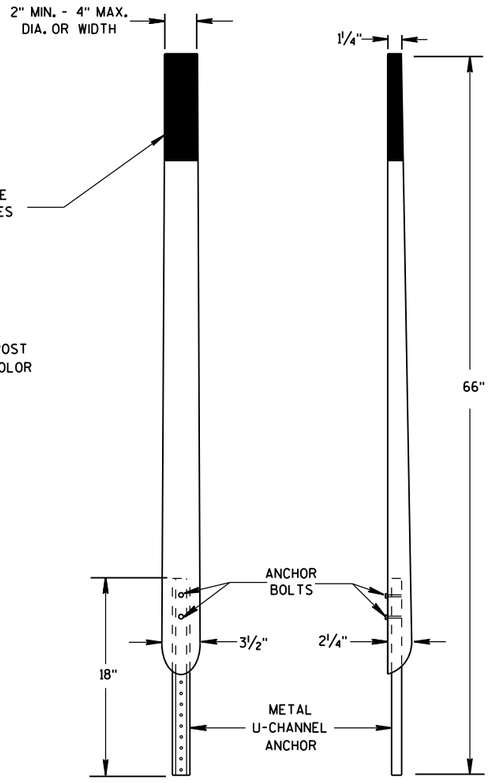
S.D.D. 15 A 3-2a





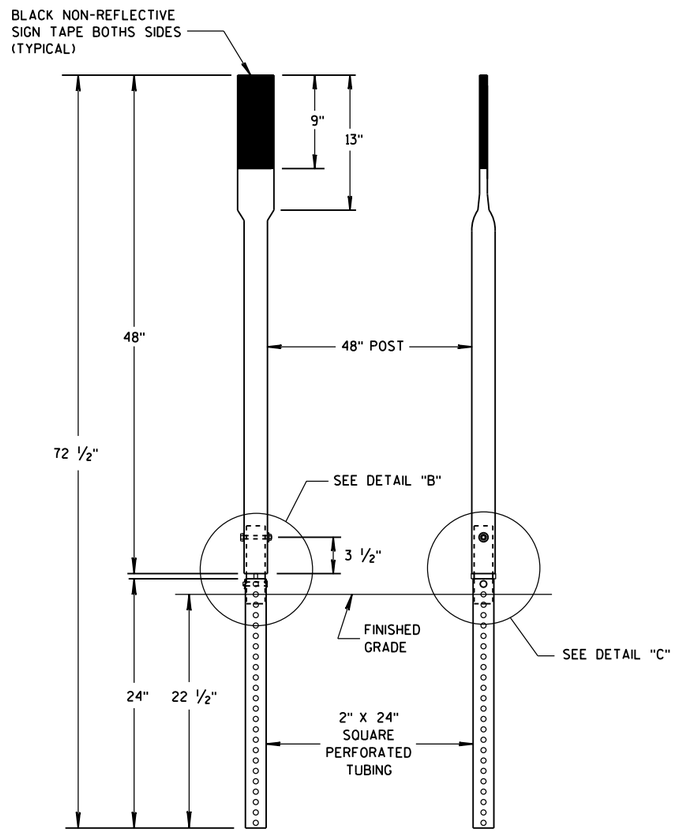
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

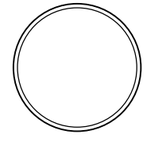
ALTERNATE 2



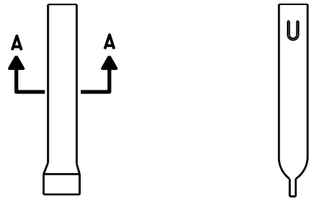
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

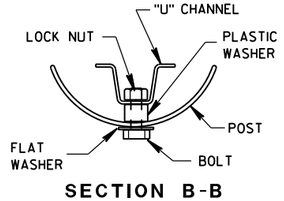


SECTION A-A

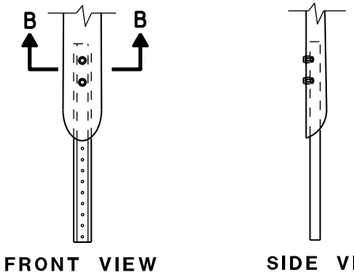


FRONT VIEW SIDE VIEW

ALTERNATE 1

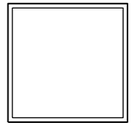


SECTION B-B

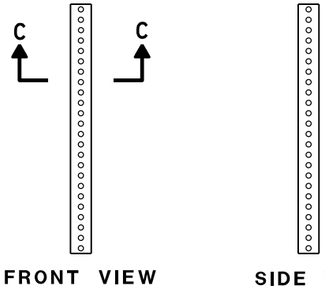


FRONT VIEW SIDE VIEW

ALTERNATE 2



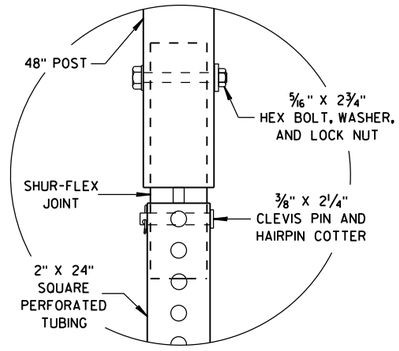
SECTION C-C



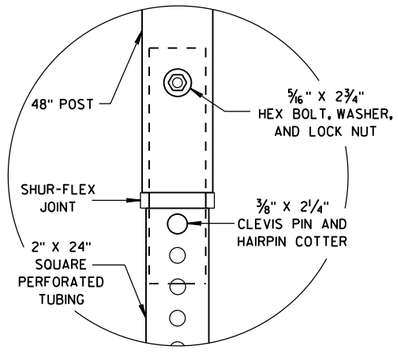
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

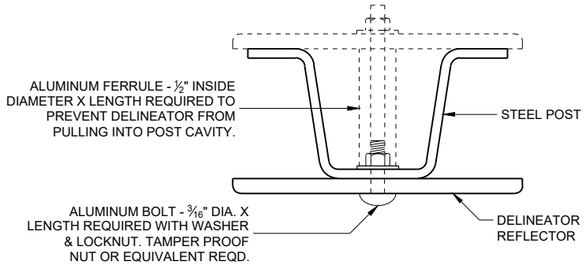
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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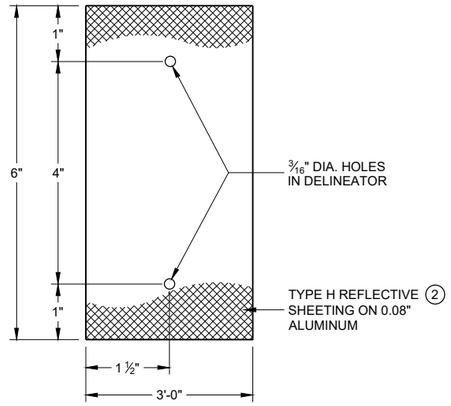
S.D.D. 15 A 3-2b

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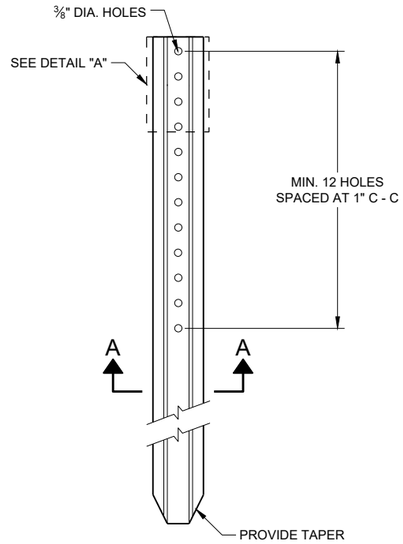
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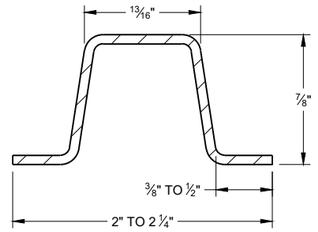
MOUNTING DETAIL FOR DELINEATOR REFLECTOR



DETAIL "A" 3" X 6" DELINEATOR REFLECTOR



DELINEATOR POST



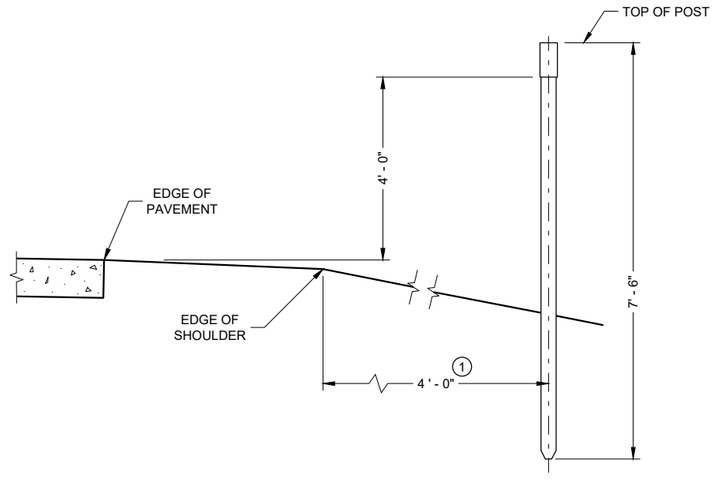
SECTION A - A

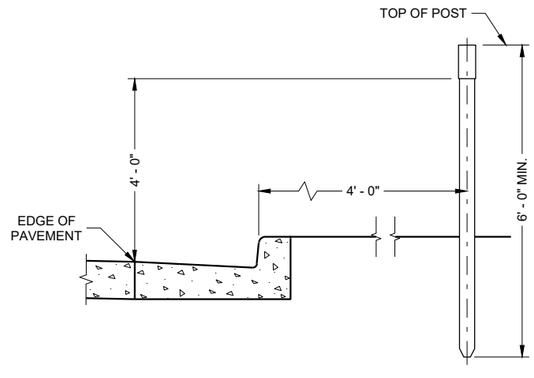
WEIGHT 1.12 LBS PER FT. \ 0.1 LB.

REFLECTOR SPACING TABLE

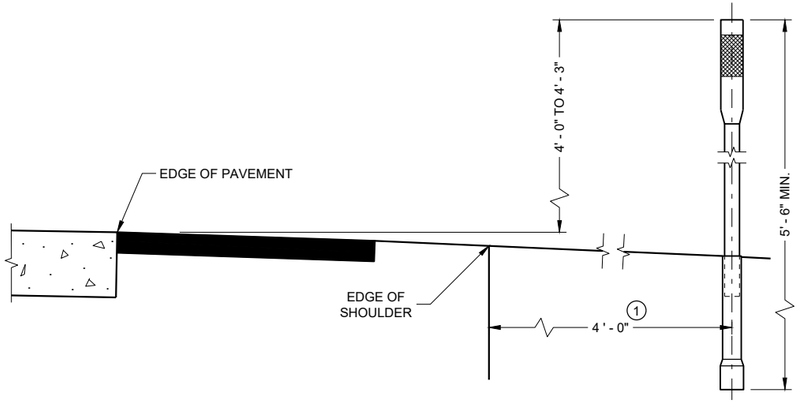
REFLECTOR SPACING	LOCATION
* 100' C-C	RAMPS
400' C-C	MAINLINE

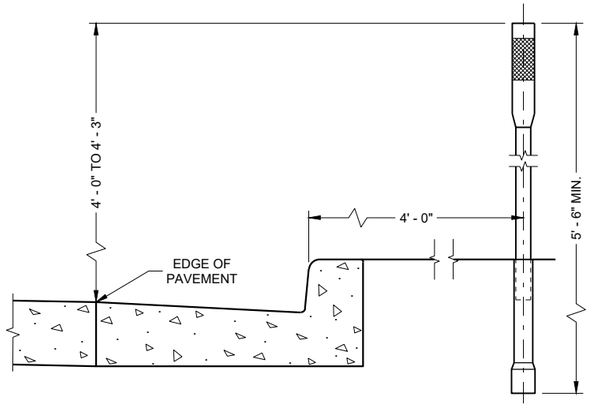
* START AT BEGINNING OF RAMP TAPER AND END AT END OF RAMP TAPER





TYPICAL INSTALLATIONS OF DELINEATOR POSTS





TYPICAL INSTALLATIONS OF FLEXIBLE DELINEATOR POSTS

GENERAL NOTES

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

1. DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.
2. FURNISH TYPE H SHEETING FROM THE APPROVED PRODUCTS LIST.

DELINEATOR POST WITH REFLECTIVE SHEETING

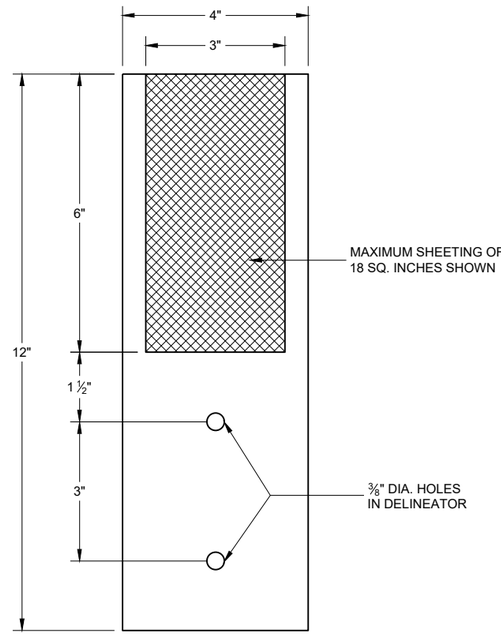
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

FHWA

6

SDD 15A04 - 07c



4" x 12" DELINEATOR
WITH REFLECTIVE SHEETING

6

6

SDD 15A04 - 07e

SDD15A04 - 07e

DELINEATOR
WITH REFLECTIVE SHEETING

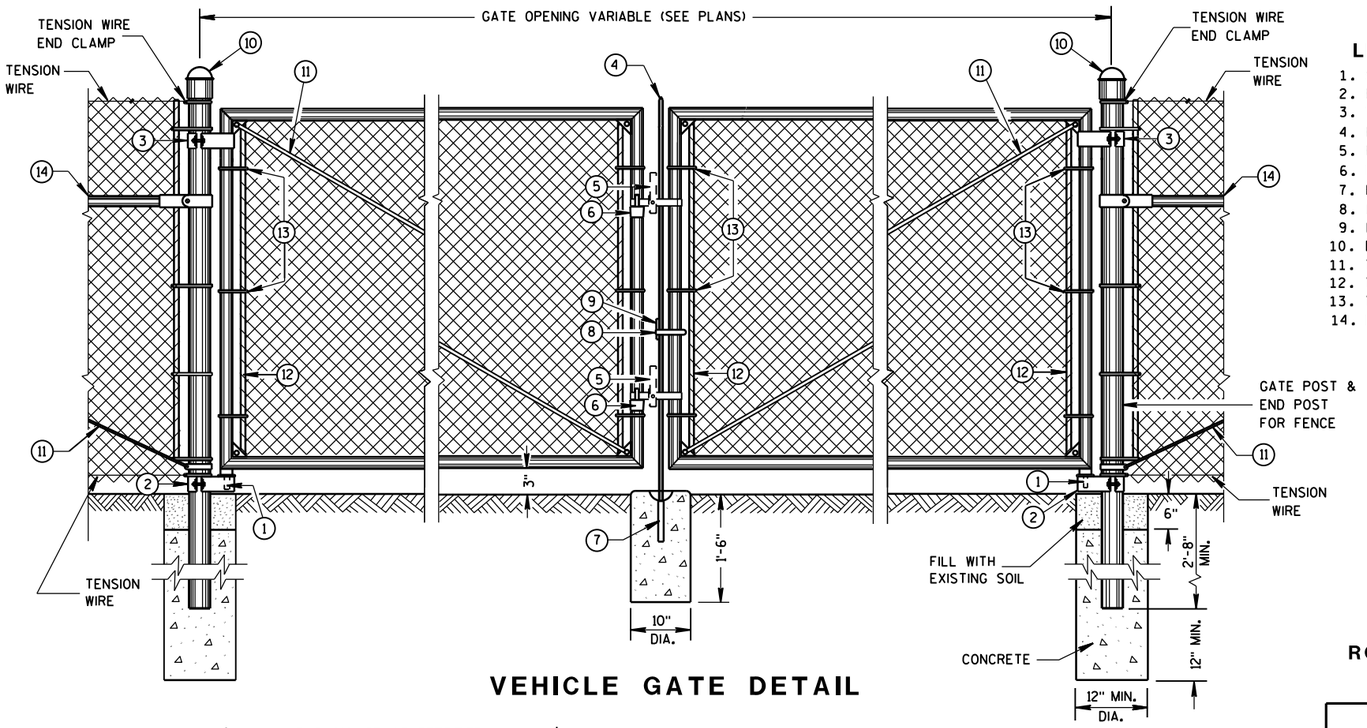
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

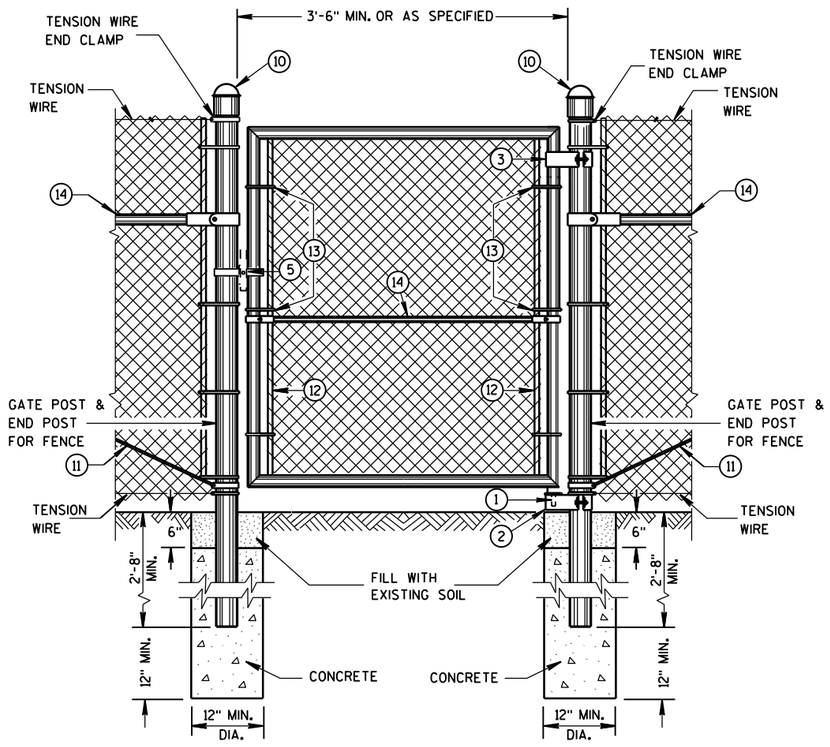
November 2021
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAR ENGINEER

FHWA



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH *
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

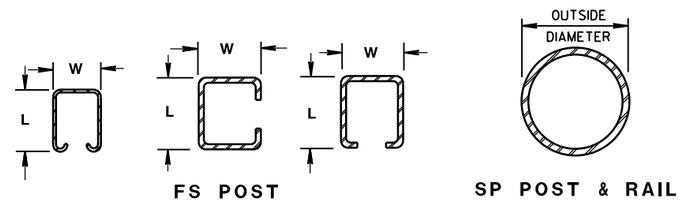
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.

USE TYPE 2, CLASS 3, MARCELLED/CRIMPED, TENSION WIRE PER ASTM A 817.



CROSS SECTIONS OF POSTS AND RAILS

ROLLED-FORMED STEEL FENCE POST (2.0 OZ./SQ. FT. COATING)

POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.400
FS3	2.250	1.700	2.780

ROUND STEEL FENCE POST (1.8 OZ./SQ. FT. COATING)

POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS **	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

REQUIRED POST SIZE FOR GATES

USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

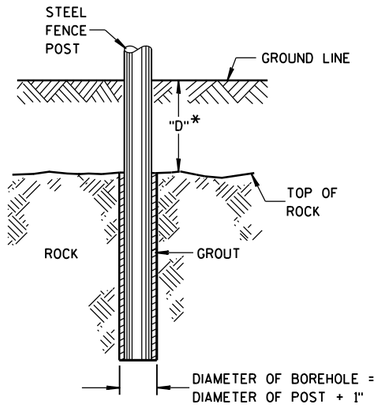
** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

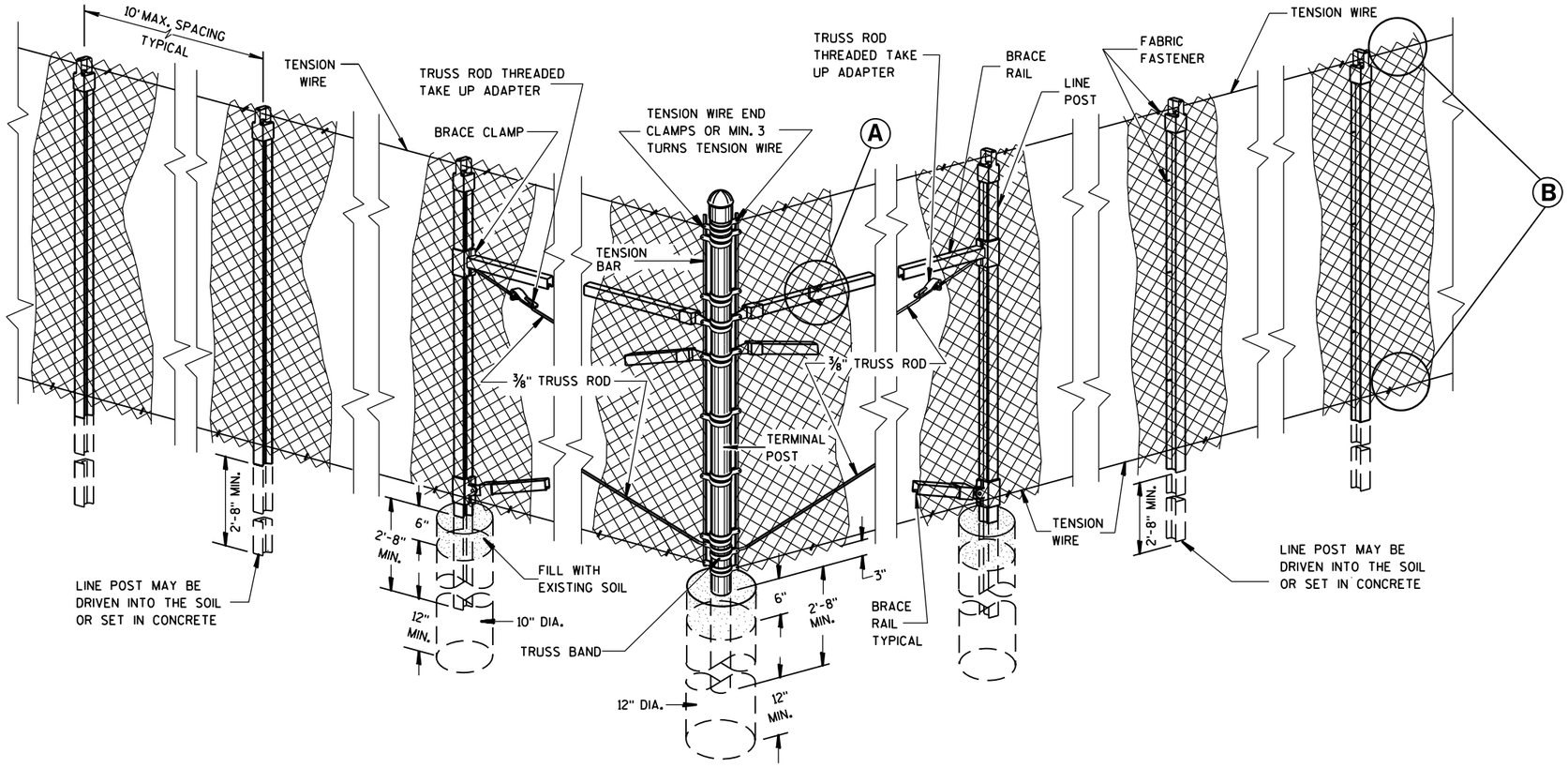
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S.D.D. 15 B 3-15a

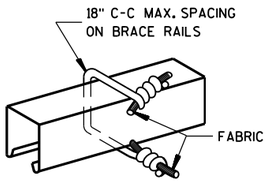


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



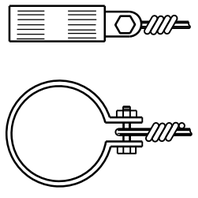
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



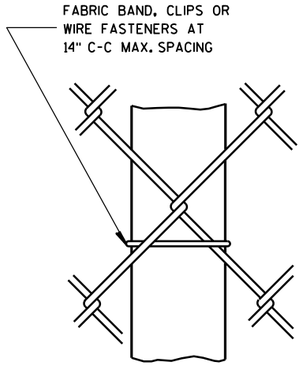
BRACE RAIL

FABRIC FASTENER

Ⓐ



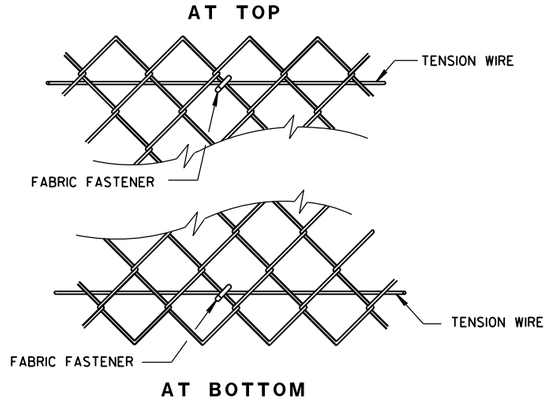
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

Ⓑ

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

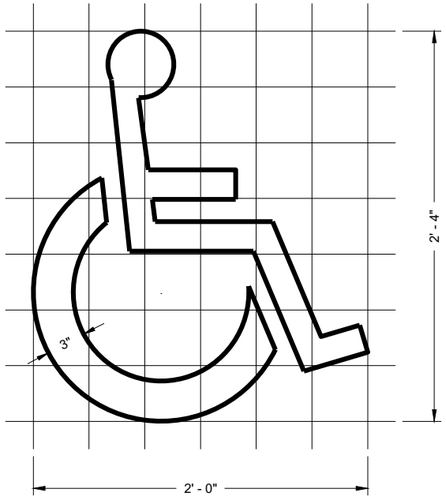
APPROVED
FEB. 2015 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

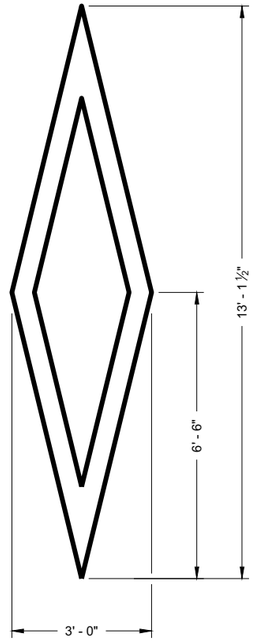
S.D.D. 15 B 3-15b

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

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.

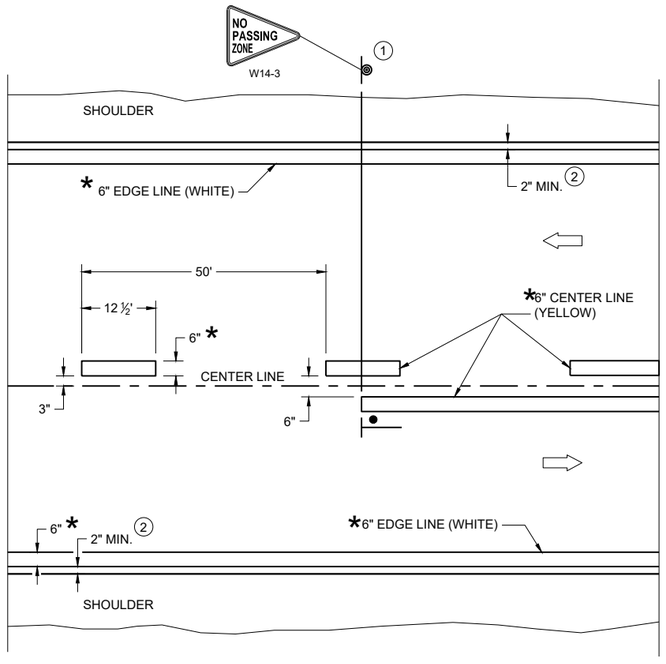
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

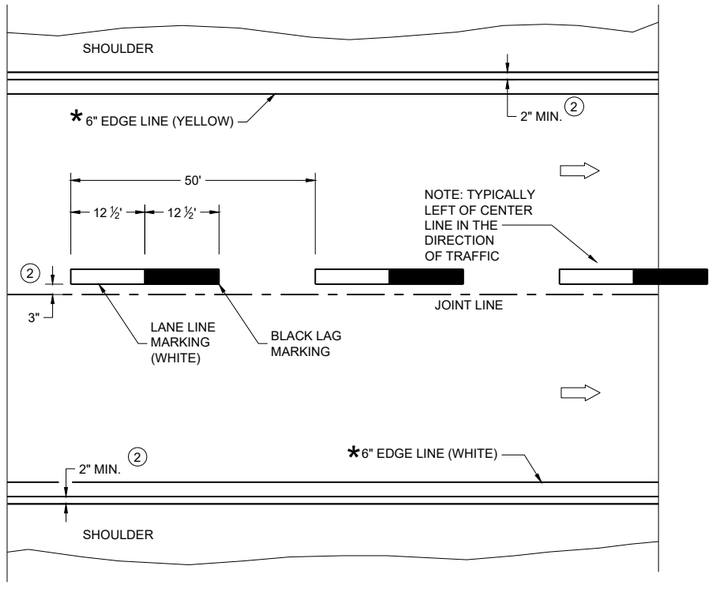
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

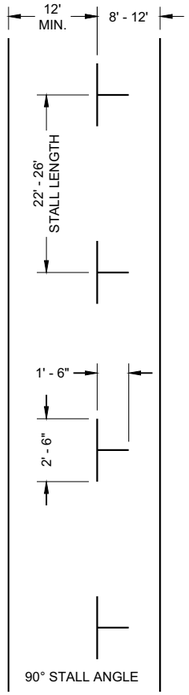
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — Statewide Pavement Marking Engineer
FHWA

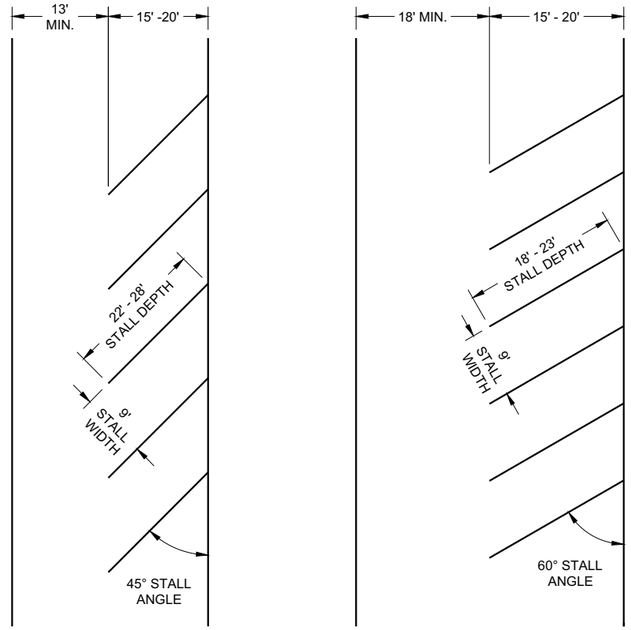
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SDD 15C08-23a

SDD 15C08-23a

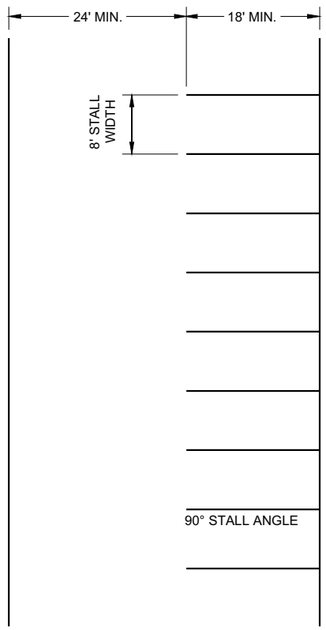


PARALLEL PARKING



ANGLED PARKING

(ANGLED PARKING IS NOT ALLOWED ON STATE HIGHWAYS UNLESS A DESIGN JUSTIFICATION HAS BEEN COMPLETED.)



PARKING LOTS

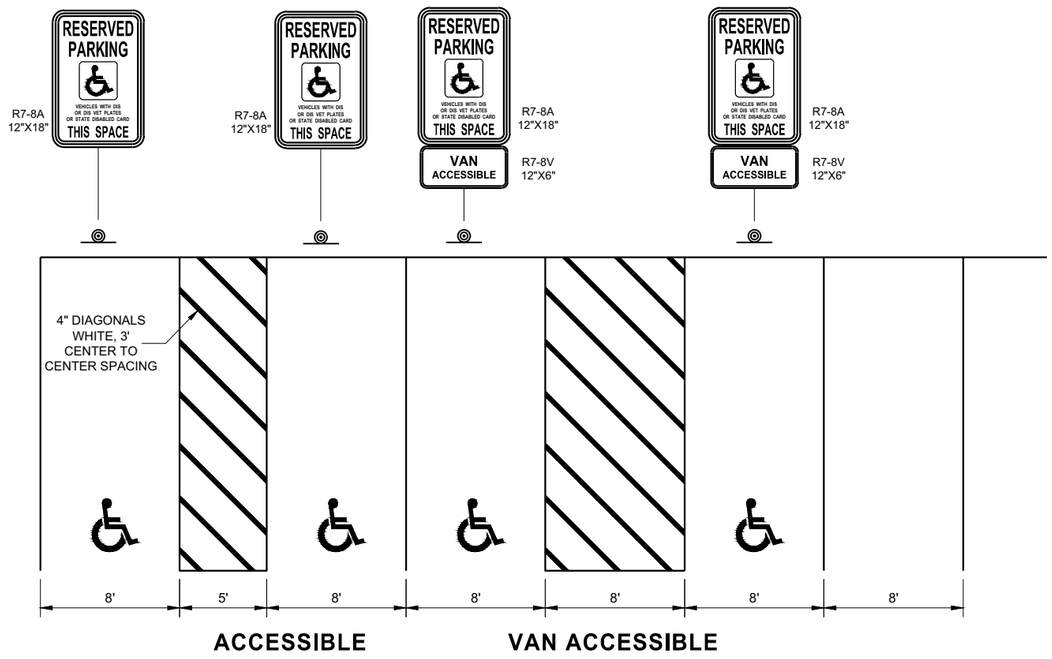
GENERAL NOTES

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

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

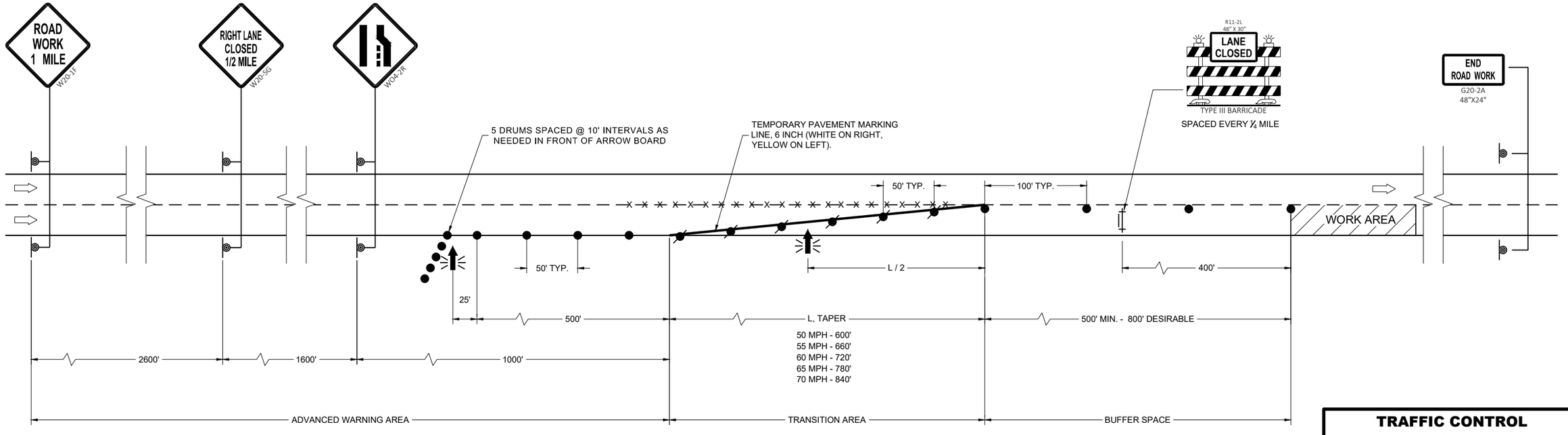
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL
LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2023
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

FHWA

6

SDD 15D12-12a

6

SDD 15D12-12a

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

GENERAL NOTES

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

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

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

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

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

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

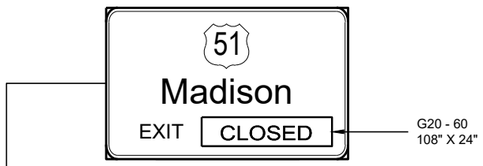
PLACE TEMPORARY PAVEMENT MARKING LINE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROP OFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN WORK IS NOT IN PROGRESS.

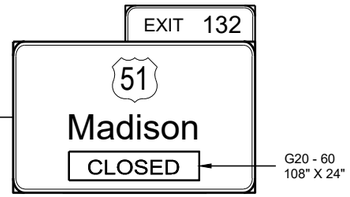
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

(1) W20 - 1A AND G20 - 2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

(2) PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



OR

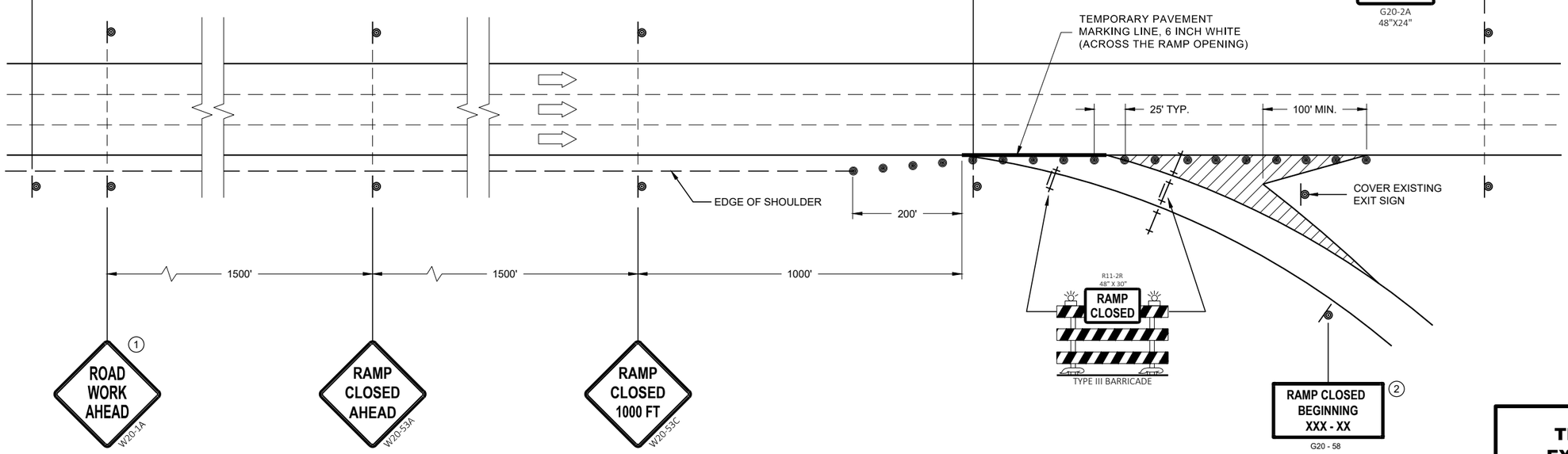


PLACE SIGN G20 - 60 OVER MILEAGE ON EXISTING E1 - 1A SIGN



COVER ARROW ON EXISTING E4 - 1 SIGN (COVERING SIGNS TYPE I)

G20 - 61
120 ' X 30"



OR

PCMS MESSAGING

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 15D16-06

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

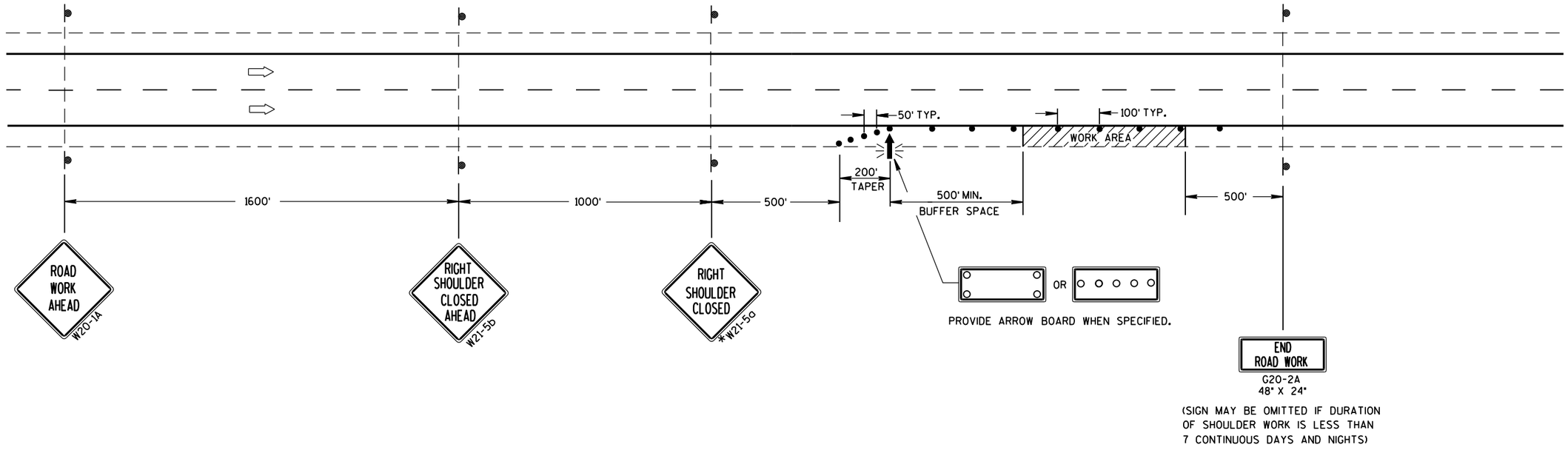
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

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

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

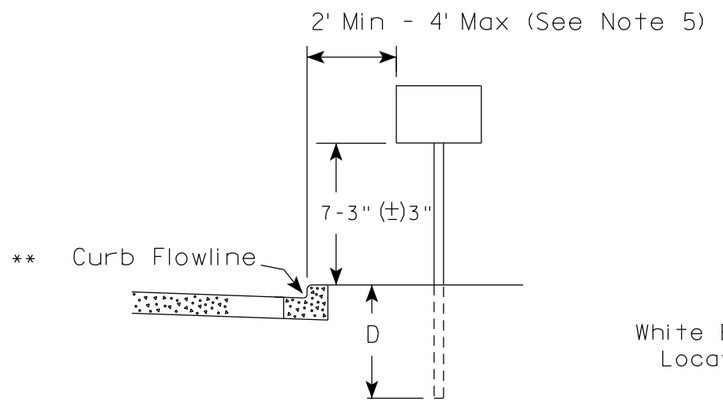
June 2016 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

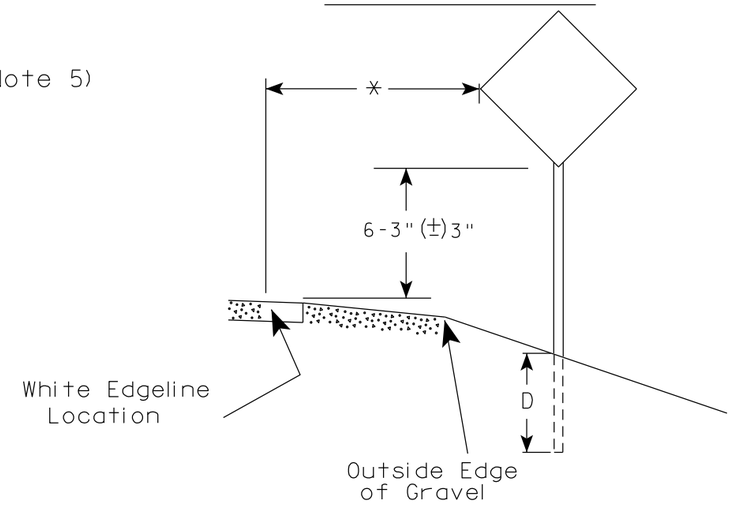
FHWA

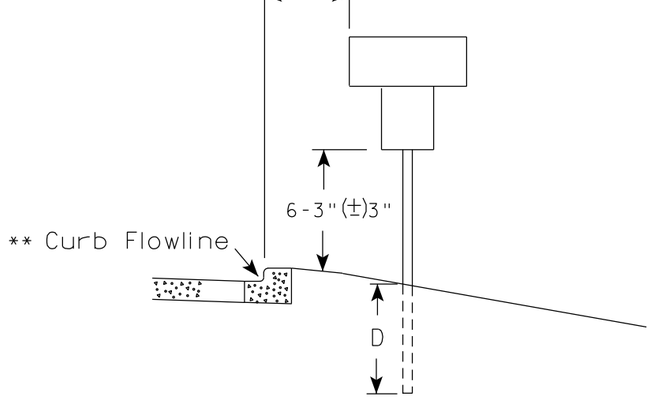
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S.D.D. 15 D 27-3

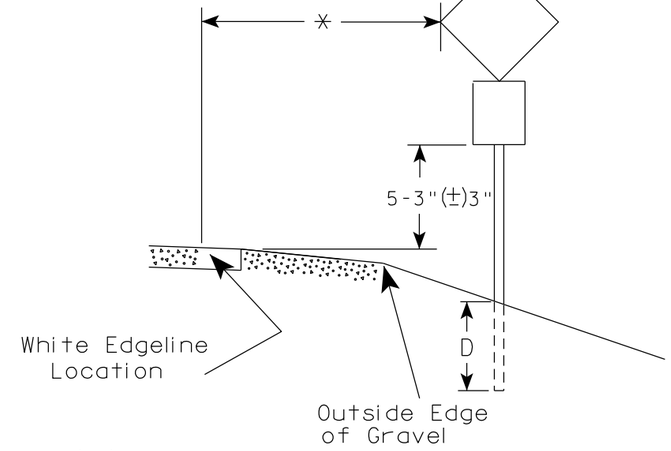
URBAN AREA



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" (±) 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".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

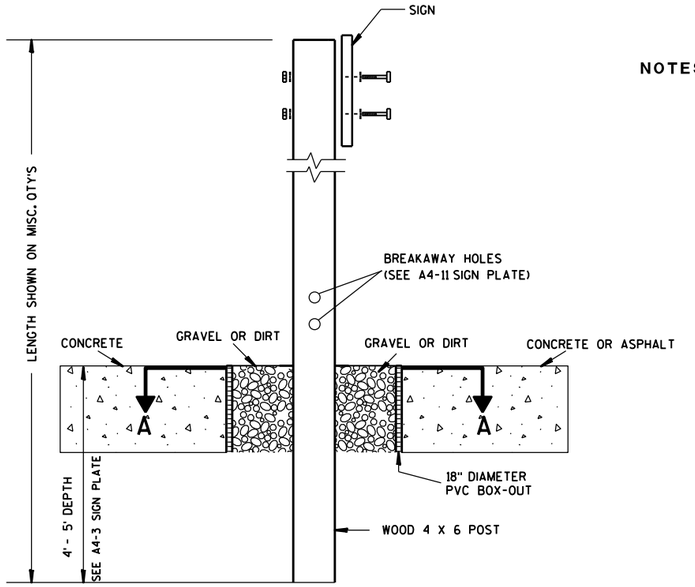
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

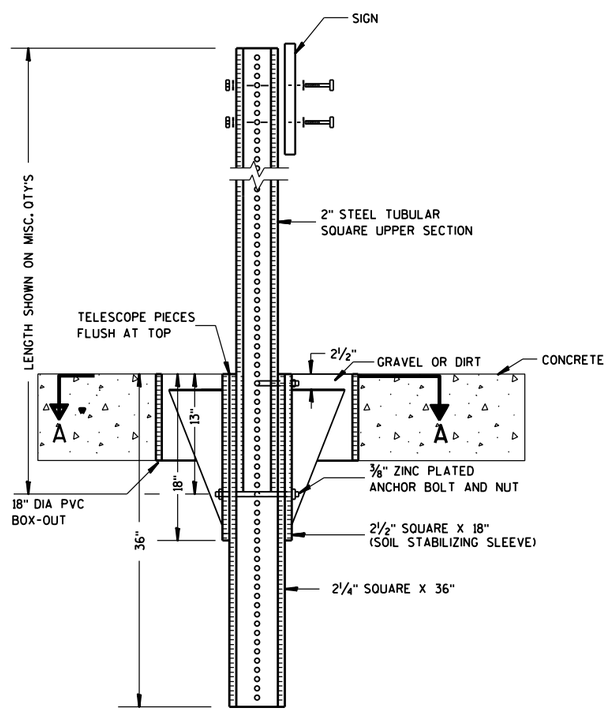
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 336	E



ELEVATION VIEW

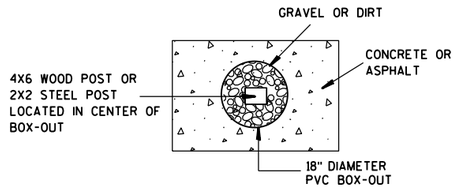
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

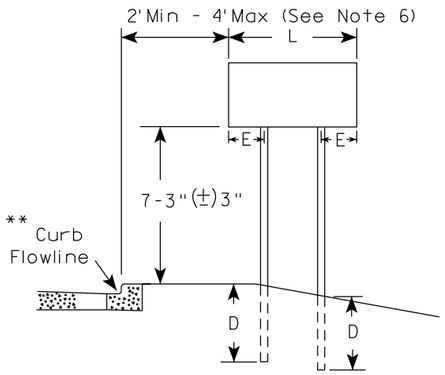
APPROVED Matthew R Rauch
for State Traffic Engineer

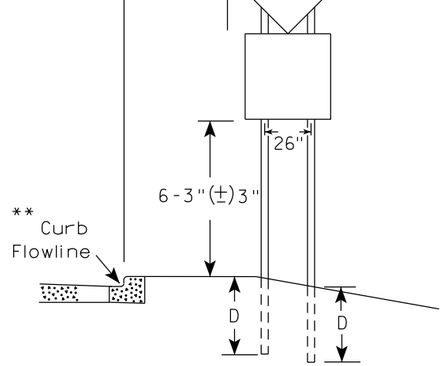
DATE 1/27/14 PLATE NO. A4-3B.1

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

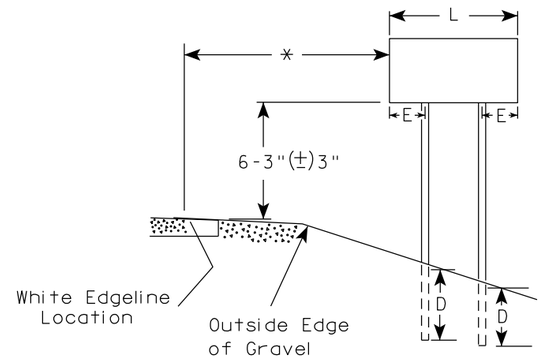
URBAN AREA

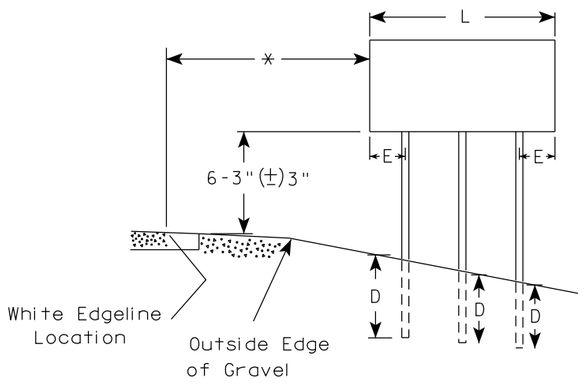


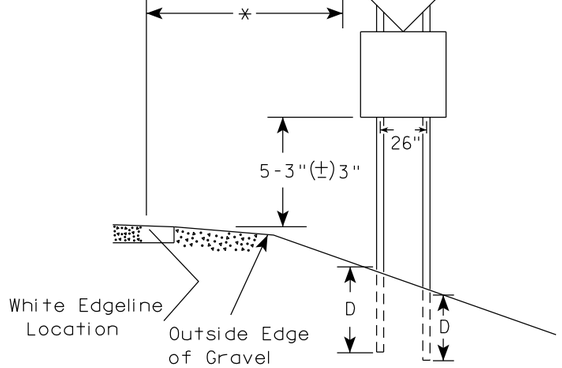


48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)







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" (±) 3" or 6'-3" (±) 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" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 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" (±) 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'

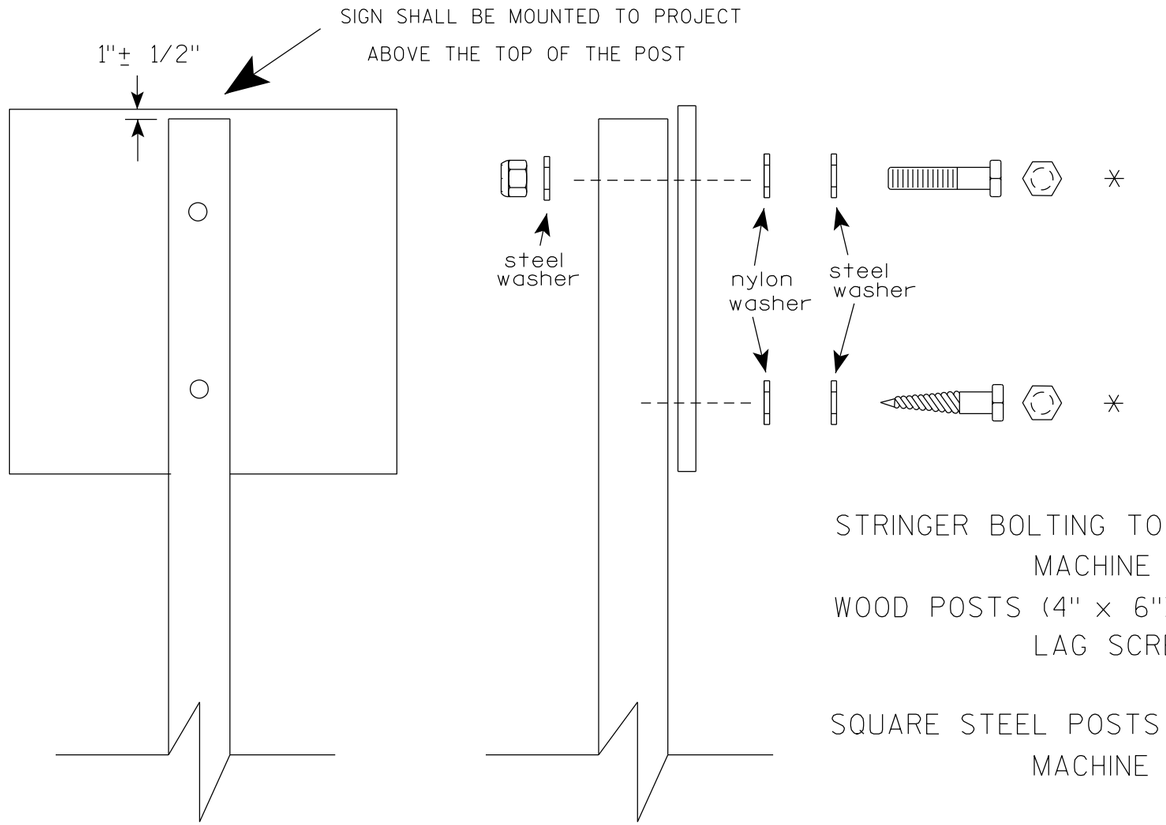
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 338	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

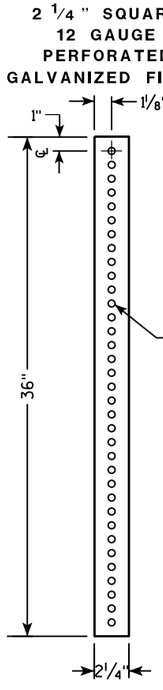
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

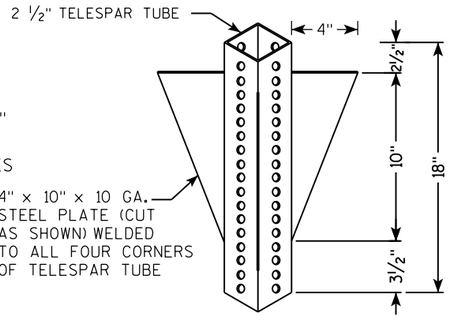
SHEET NO: 339 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

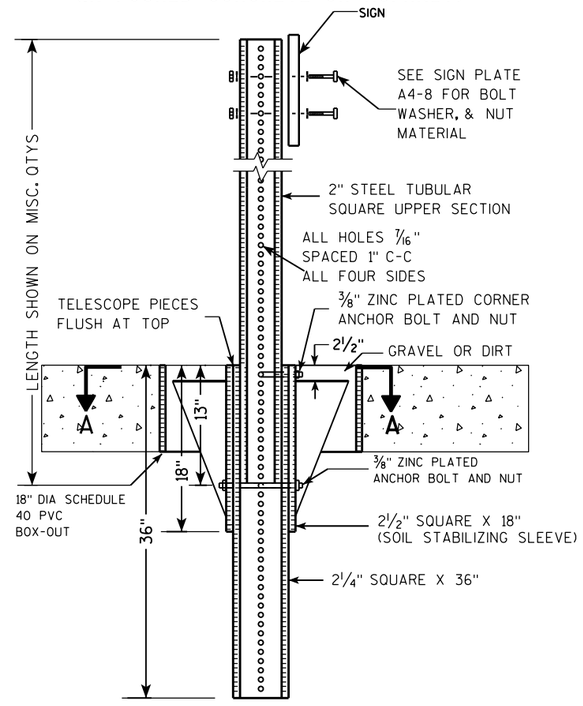
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



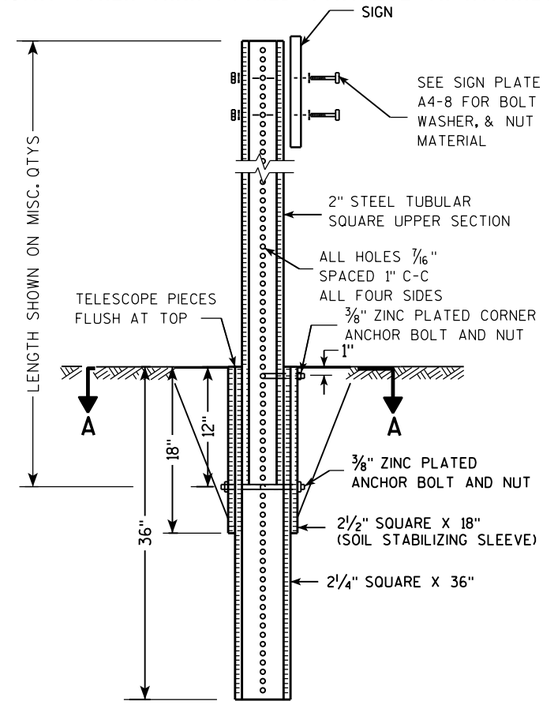
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

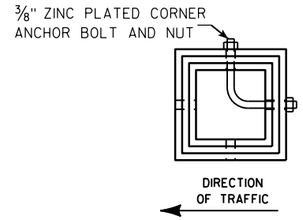


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

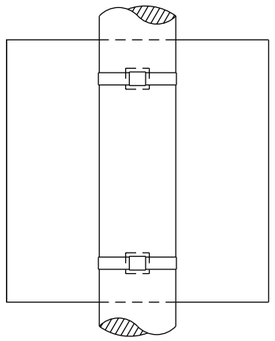
APPROVED Matthew R Rauch
for State Traffic Engineer

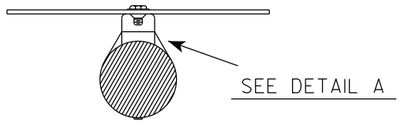
DATE 2/05/15 PLATE 340 A4-9.9

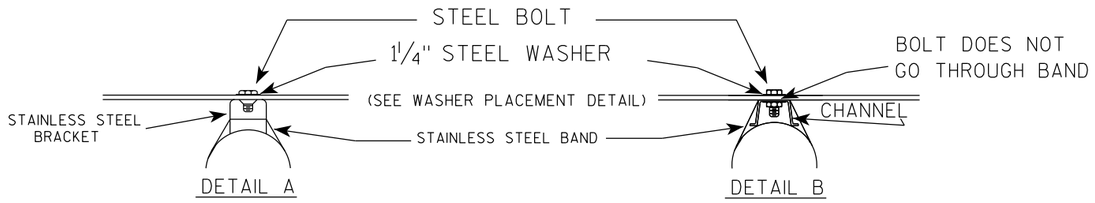
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

BANDING

SINGLE SIGN



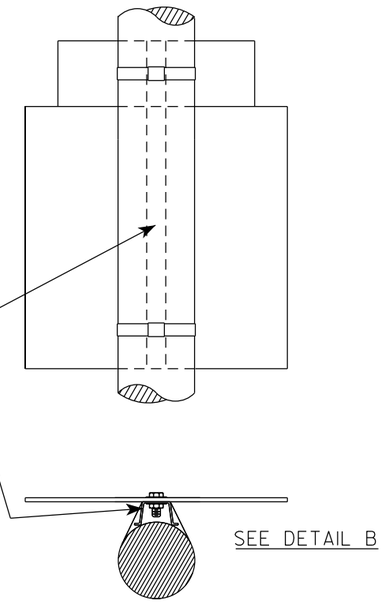




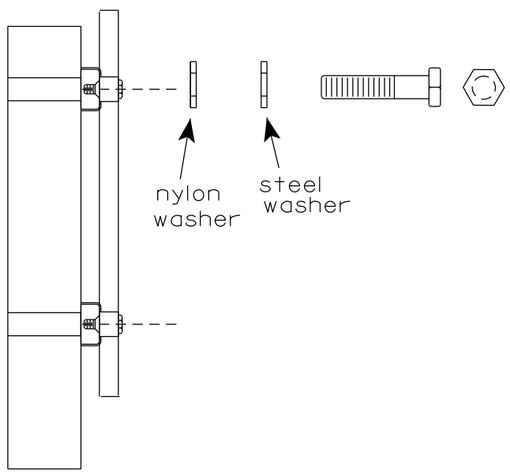
GENERAL NOTES

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

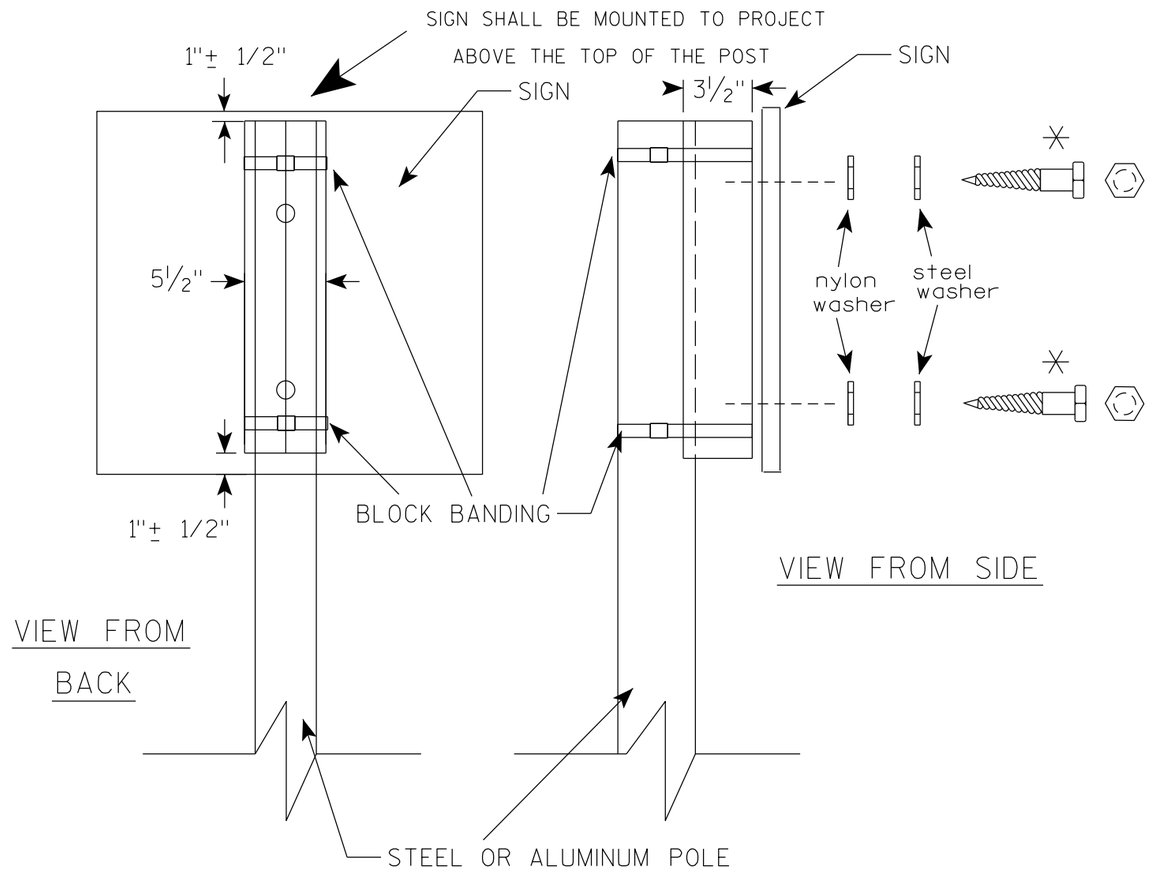
DATE 6/10/19 PLATE NO. A5-9.4

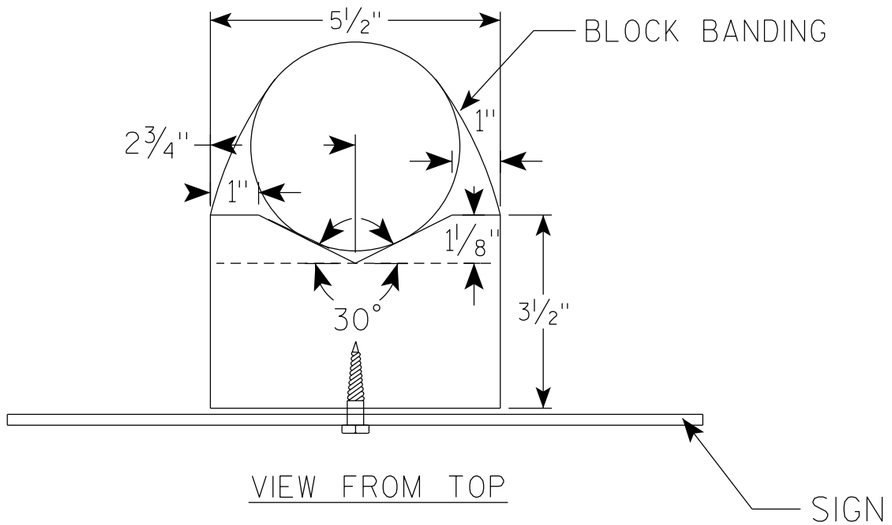
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 341	E

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)

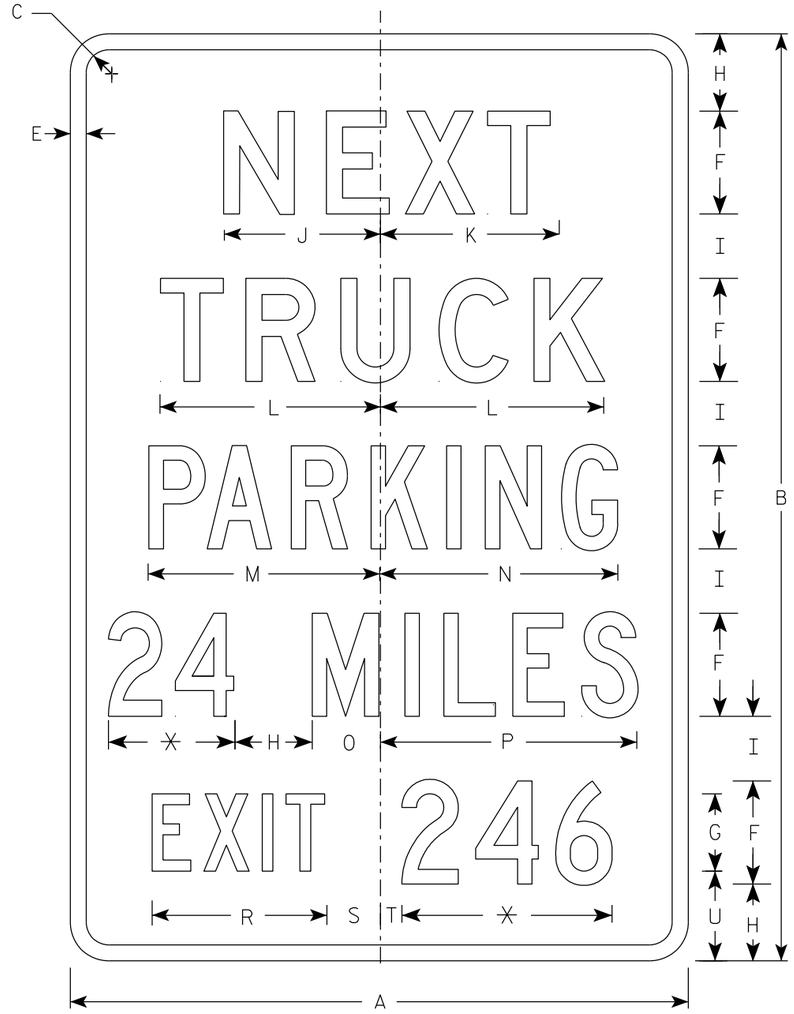
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 342 E



D7-60

✳=VARIES

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Blue
   Message - White - Type H Reflective
3. Message Series - See Note 5
4. Lines 1 & 2 Series D, lines 3, 4, & 5 Series C
5. Line 4 - Apply proper Mileage Number(s) and optically adjust spacing to achieve proper balance
6. Line 5 - Apply proper Exit Numbers and Letters, 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																											
2S	24	36	1 1/2		5/8	4	3	3	2 1/2	6	6 1/2	8 1/2	9	9 1/4	2 5/8	10		6 3/4	2	1	3 1/2						6.0
2M	24	36	1 1/2		5/8	4	3	3	2 1/2	6	6 1/2	8 1/2	9	9 1/4	2 5/8	10		6 3/4	2	1	3 1/2						6.0
3																											
4																											
5																											

STANDARD SIGN
D7-60

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2023 PLATE NO. D7-60.5

PROJECT NO:

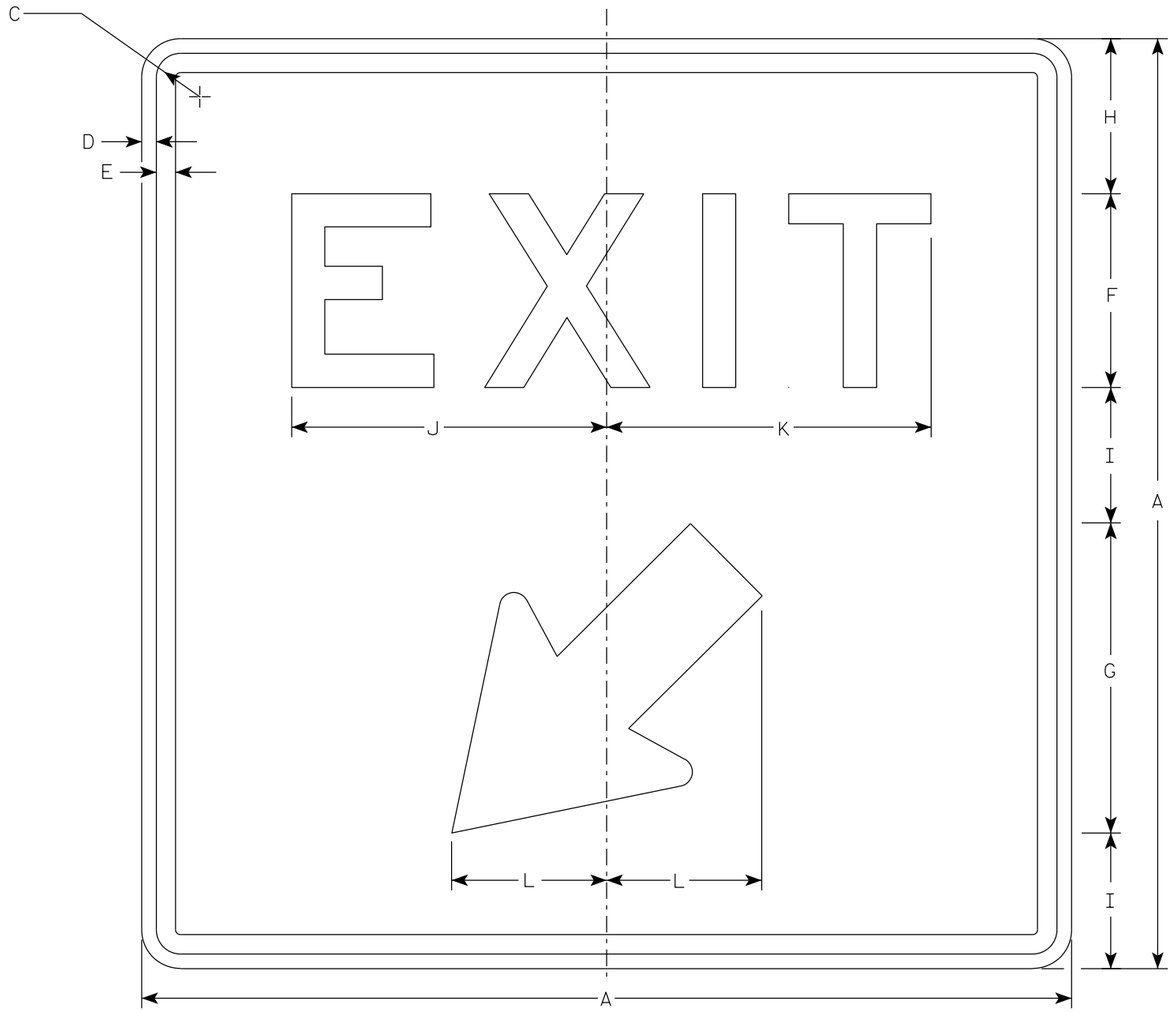
SHEET NO: 343 E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\D760.dgn PLOT DATE : 25-JAN 2023 1:46 PLOT BY : dotc4c

WISDOT/CADDS SHEET 42

7

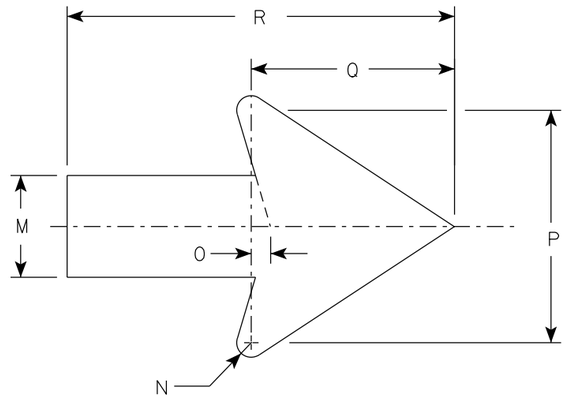
7



D52-54L

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. D52-54R is the same as D52-54L except that the arrow 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	24		1 1/2	3/8	1/2	5	8	4	3 1/2	8 1/8	8 3/8	4	2 5/8	3/8	1/2	6	5 1/4	10									4.0
2S	24		1 1/2	3/8	1/2	5	8	4	3 1/2	8 1/8	8 3/8	4	2 5/8	3/8	1/2	6	5 1/4	10									4.0
2M	24		1 1/2	3/8	1/2	5	8	4	3 1/2	8 1/8	8 3/8	4	2 5/8	3/8	1/2	6	5 1/4	10									4.0
3																											
4																											
5																											

STANDARD SIGN
D52-54

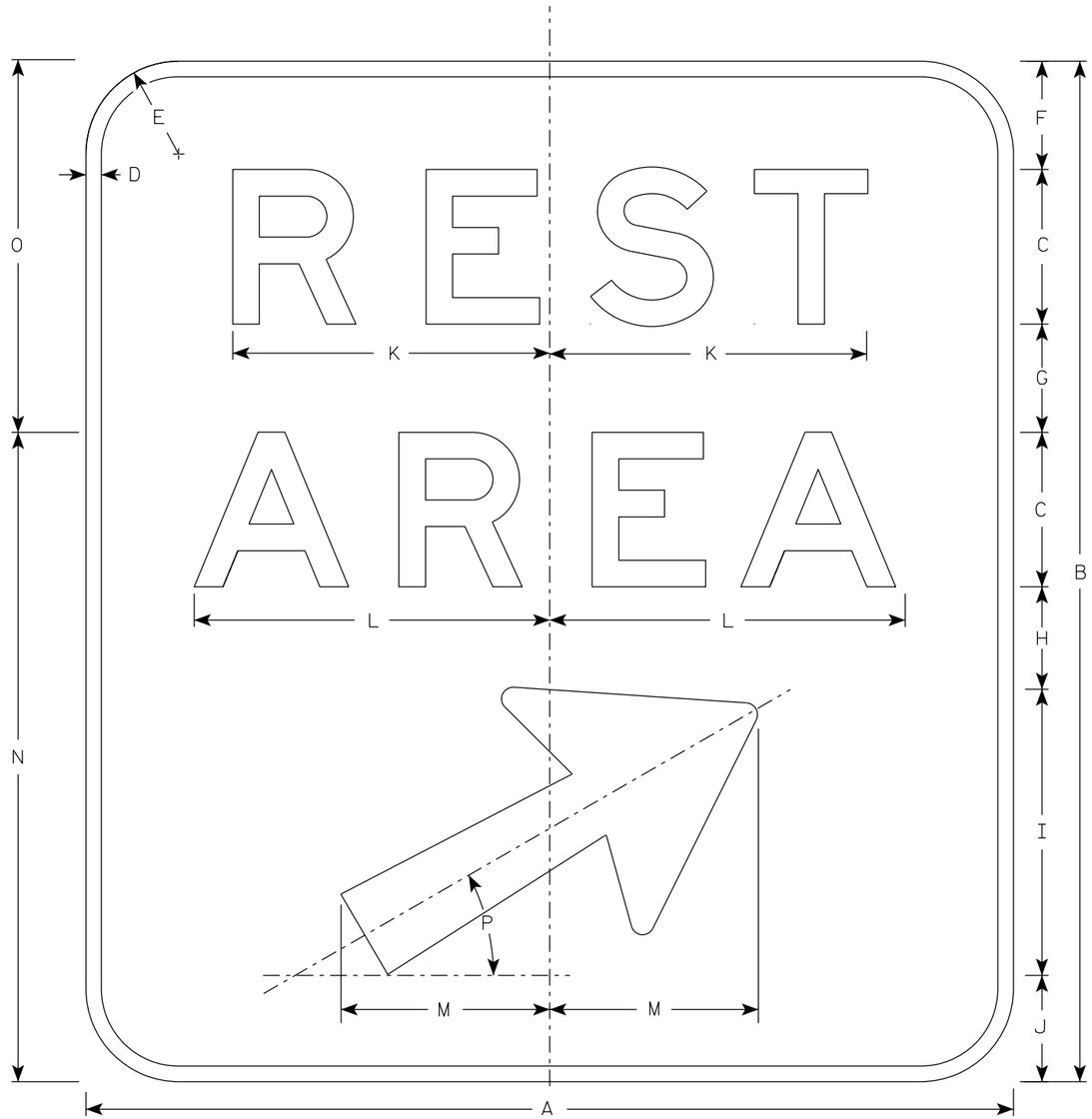
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2023 PLATE NO. D52-54.9

PROJECT NO:

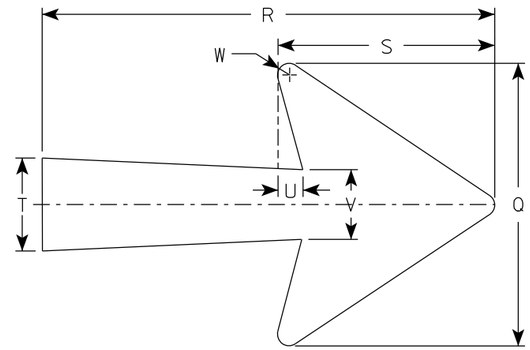
SHEET NO: 344 E



E5-54R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Blue
   Message - White
3. Message Series - E
4. Arrow is Type A as per A1-1 standard
5. Dimensions N & O Indicate cutting lines for splice.
6. E5-54L is the same as E5-54R except the arrow 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																											
2																											
3																											
4	60	66	10	1	6	7	7	6 5/8	18 1/2	6 7/8	21	23	13 1/2	42	24	30°	18 1/4	29 1/4	14	6	1 1/2	4 1/2	3/4				27.5
5	72	72	12	1	9	7 1/4	7	8	18 1/2	7 1/4	25	27	13 1/2	48	24	30°	18 1/4	29 1/4	14	6	1 1/2	4 1/2	3/4				36.0

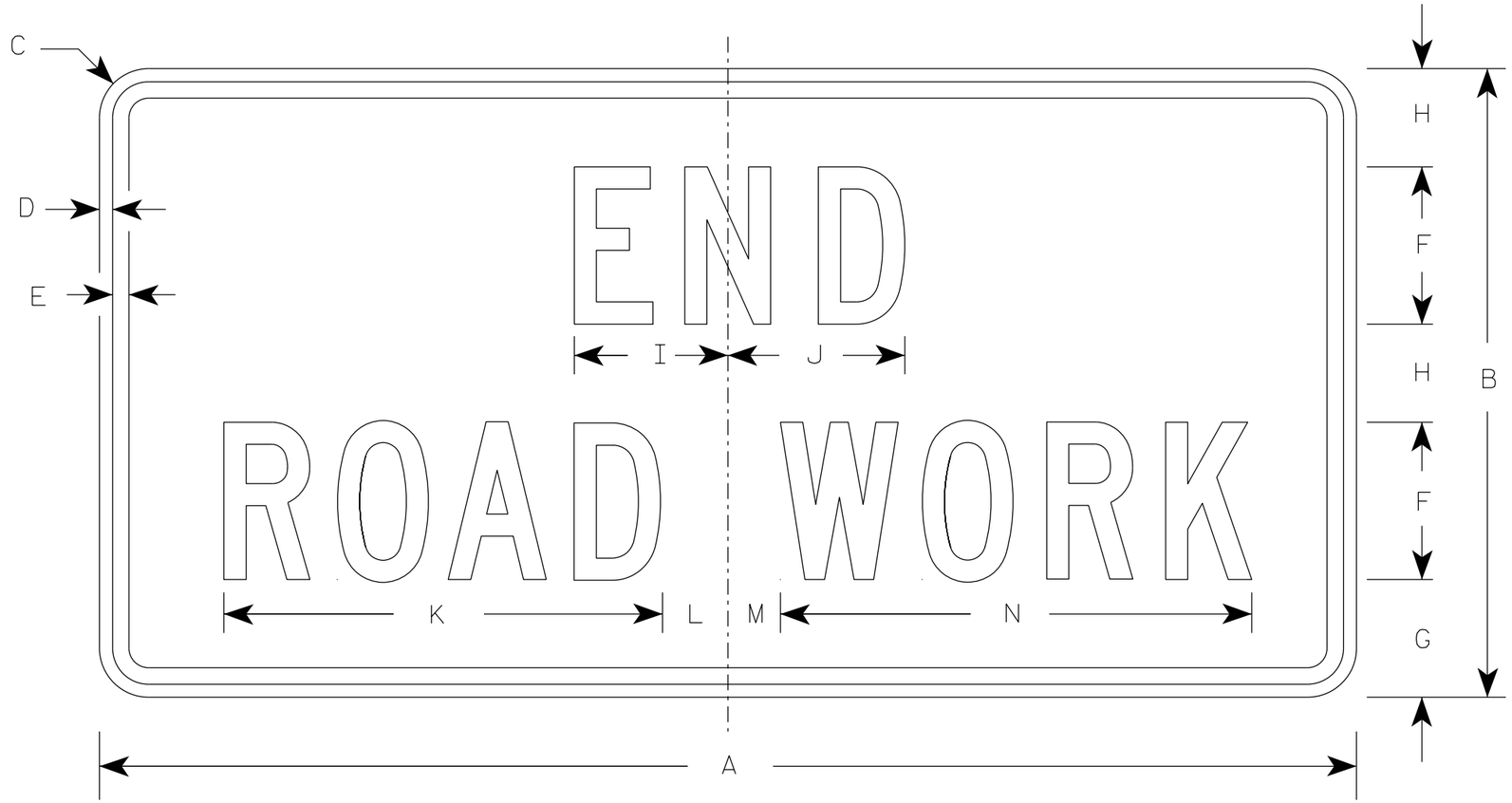
STANDARD SIGN
E5-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/23/2021 PLATE NO. E5-54.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 345 E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/2	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5
2	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
2M	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
3	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
4	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
5	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0

STANDARD SIGN

G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. G20-2A.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\G202A.dgn PLOT DATE : 26-JAN 2023 8:27 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - E
4. Material shall be .040 aluminmum



G20-60

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																											
3																											
4	108	24				12	6	14 7/8	78 1/4																		18.0
5																											

STANDARD SIGN
G20-60

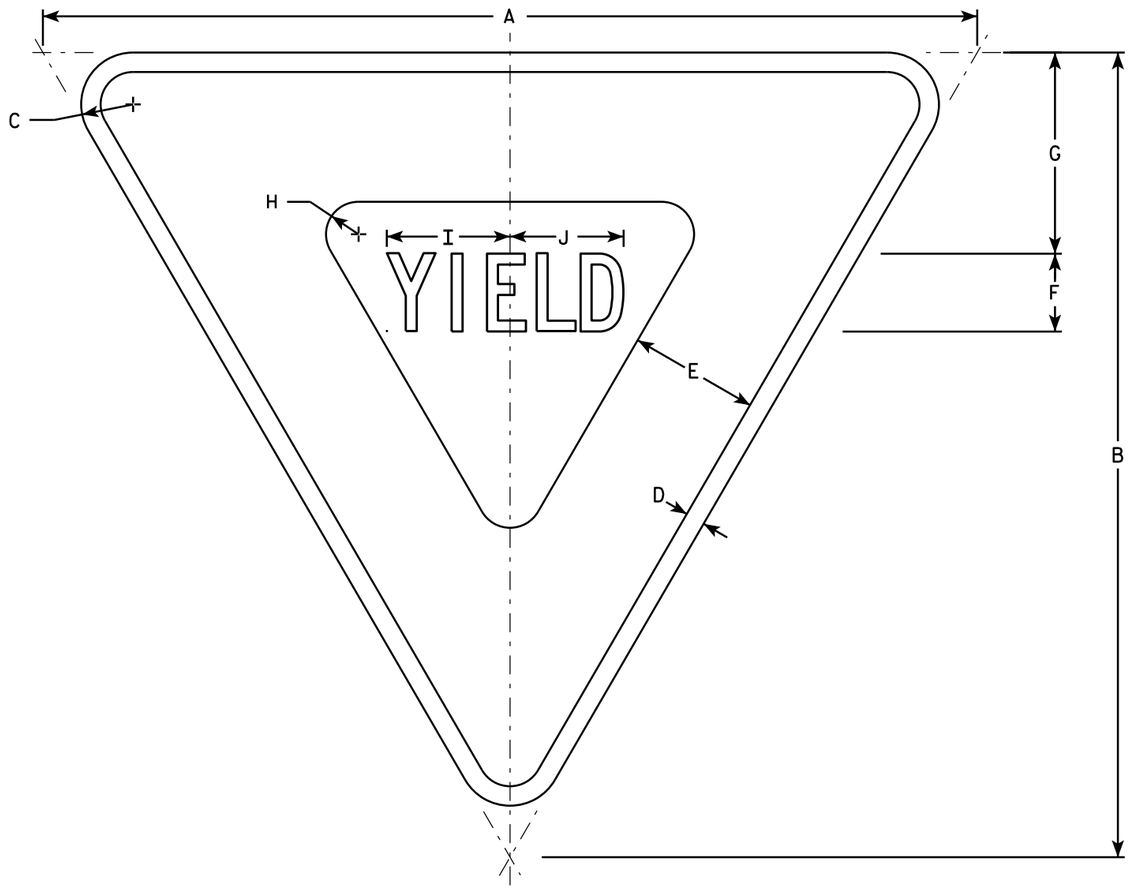
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/15 PLATE NO G20-60.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\G2060.DGN PLOT DATE : 13-MAY-2015 08:46 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 20.431338:1.000000 WISDOT/CADDS SHEET 42



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

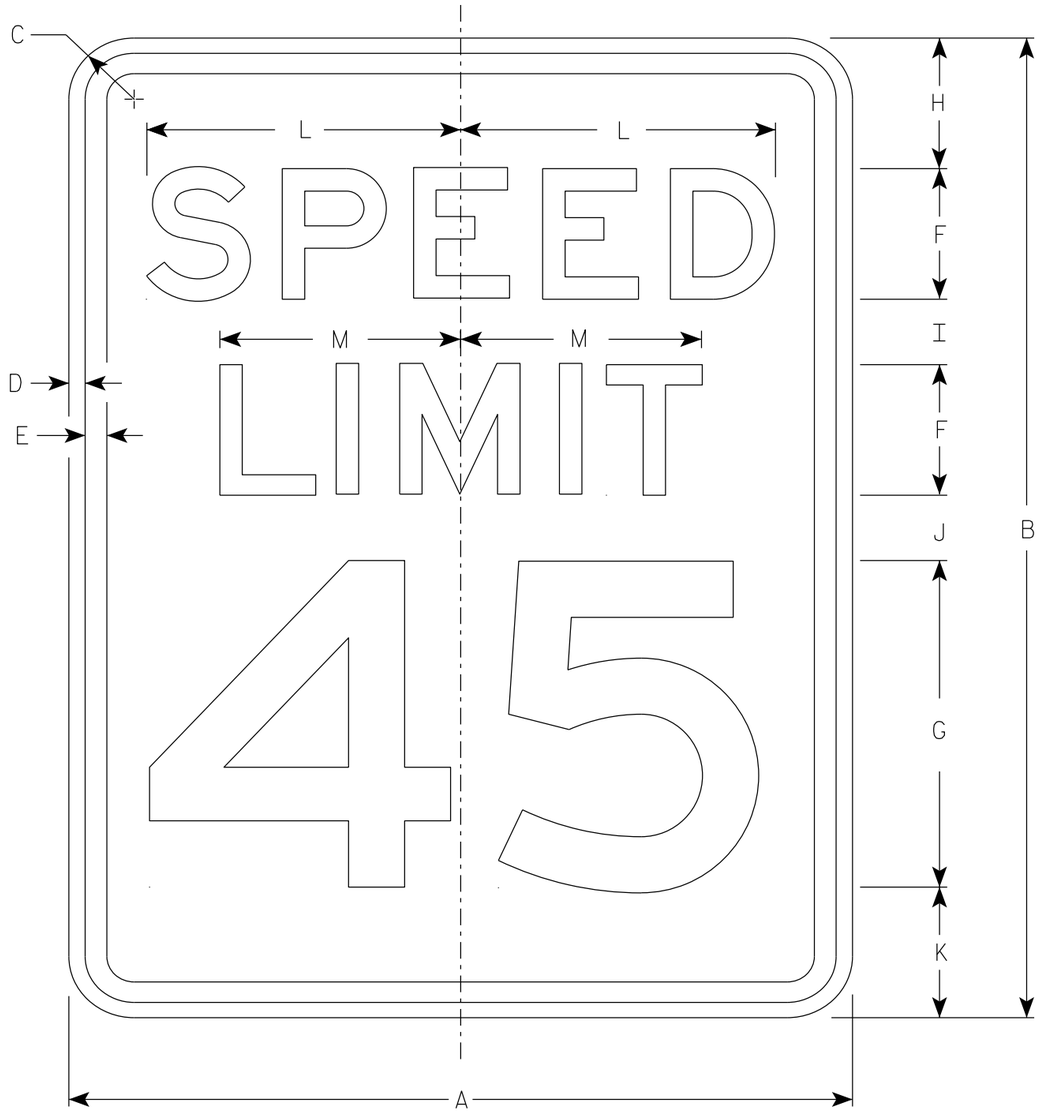
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE R1-2.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



R2-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. 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 1/2	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/2	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 7/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 7/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 7/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	3	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

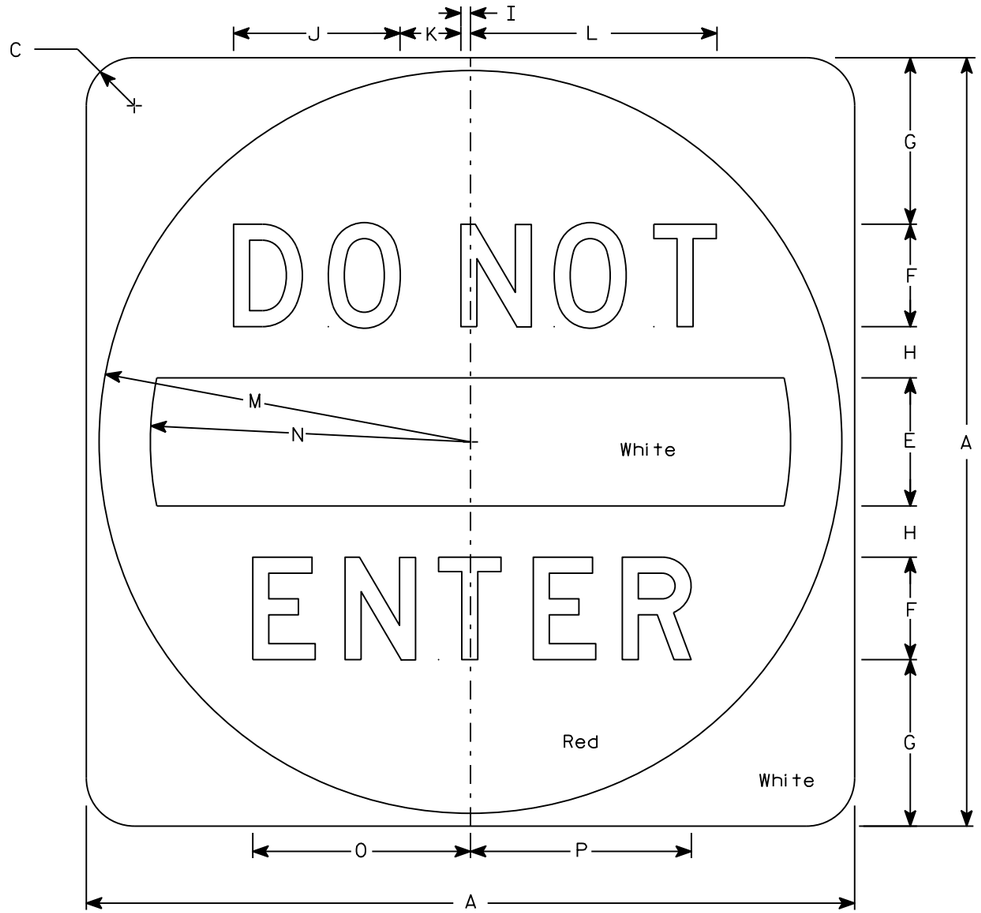
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/23 PLATE NO. R2-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 349 | 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

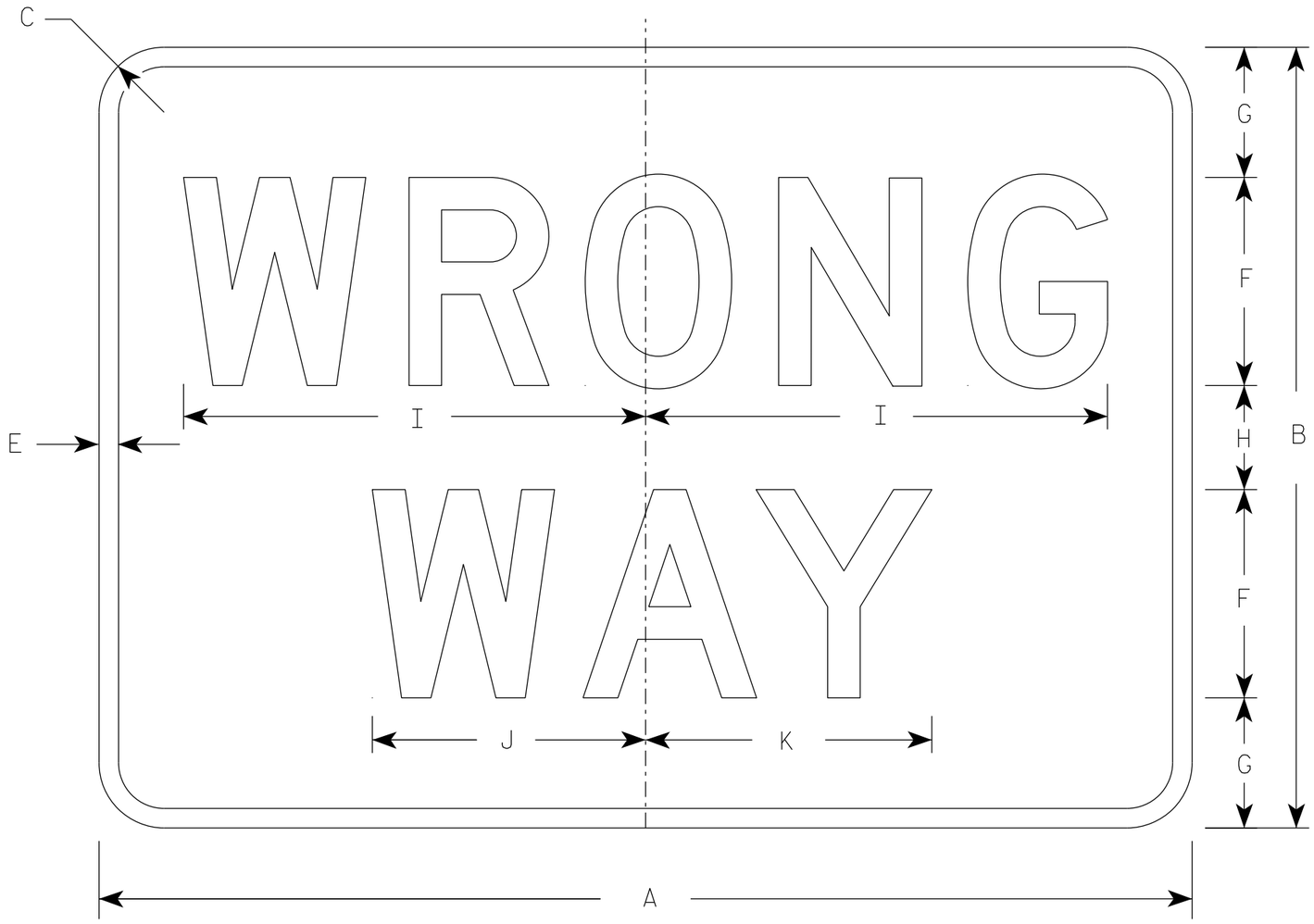
STANDARD SIGN
R5-1

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: 350 | E



R5-1A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Red
   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	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	1 1/2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	1 7/8		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	1 7/8		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	1 7/8		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	1 7/8		3/4	8	5	4	17 3/4	10 1/2	11																8.75

STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

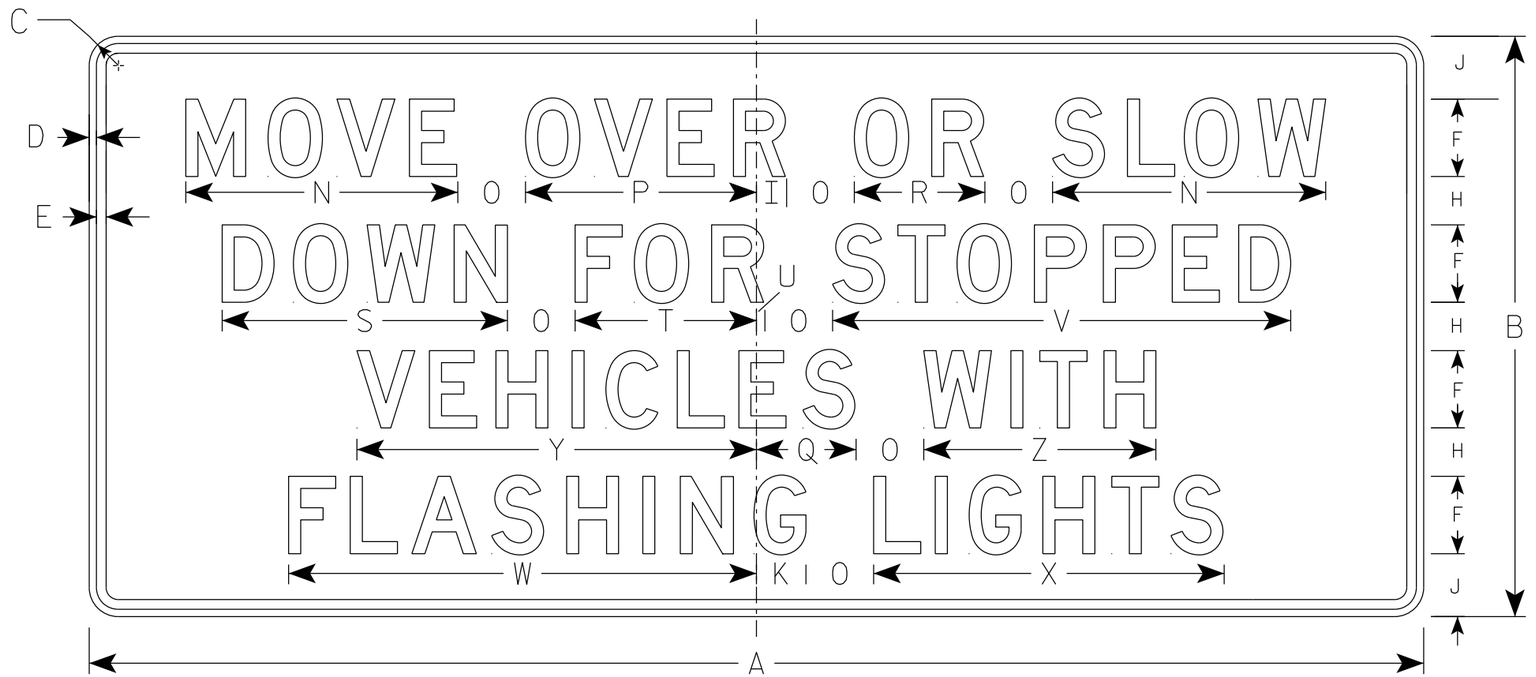
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/17/23 PLATE NO. R5-1A.3

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 - 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	48	24	1 7/8	3/8	3/8	3		2 1/4	1 1/4	2 5/8	1 3/4			10 1/4	2 1/2	8 5/8	3 3/4	4 7/8	10 5/8	6 7/8	1/4	17 1/4	17 1/2	13 1/4	15 1/8	8 7/8	8.0
2M	48	24	1 7/8	3/8	3/8	3		2 1/4	1 1/4	2 5/8	1 3/4			10 1/4	2 1/2	8 5/8	3 3/4	4 7/8	10 5/8	6 7/8	1/4	17 1/4	17 1/2	13 1/4	15 1/8	8 7/8	8.0
3																											
4	138	60	3	3/4	1	8		5	3 1/8	6 1/2	5			28 1/4	7	23 7/8	10 3/8	13 1/2	29 1/2	18 3/4	7/8	47 3/8	48 3/8	36 1/4	41 3/8	24	57.5
5	138	60	3	3/4	1	8		5	3 1/8	6 1/2	5			28 1/4	7	23 7/8	10 3/8	13 1/2	29 1/2	18 3/4	7/8	47 3/8	48 3/8	36 1/4	41 3/8	24	57.5

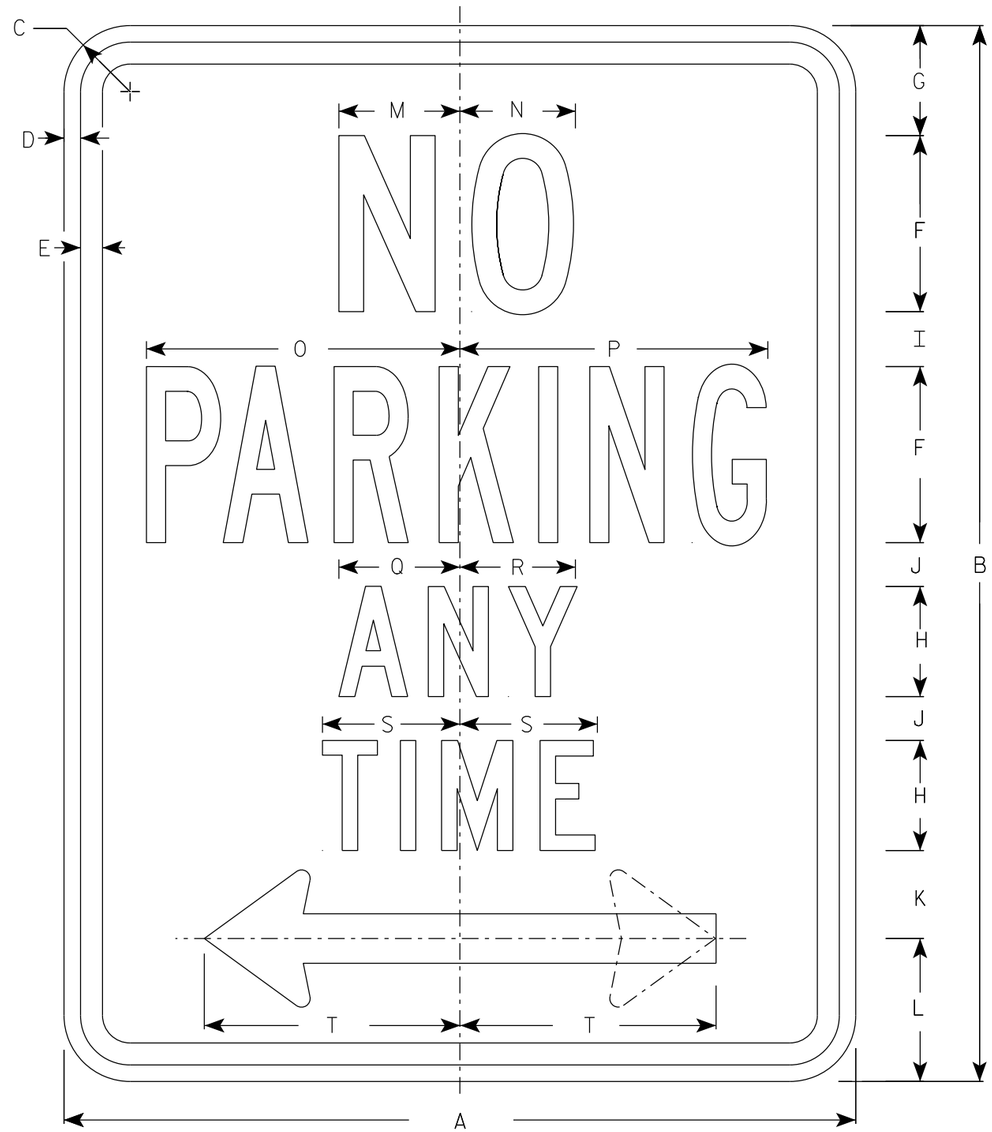
STANDARD SIGN
R5-60

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/30/23 PLATE NO. R5-60.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 352	E

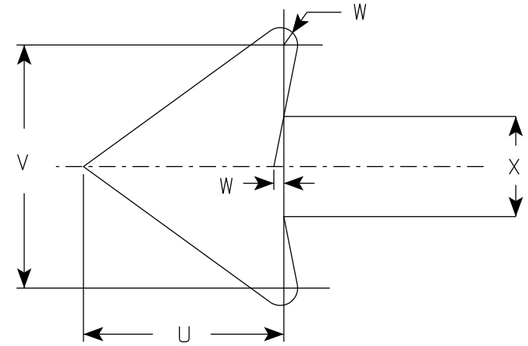


R7-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 4
4. Lines 1, 3 and 4 are series C, line 2 is series B.
5. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right 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 ½	⅜	⅜	3	1 ⅞	2	⅞	⅝	1 ½	2 ½	2	2	4 ⅞	4 ⅞	2 ¼	2 ⅛	2 ½	3 ⅞	1 ½	1 ¾	⅛	¾			1.5
2S	18	24	1 ½	⅜	½	4	2 ½	2 ½	1 ¼	1	2	3 ¼	2 ¾	2 ⅝	7 ⅛	7	2 ¾	2 ⅝	3 ⅛	5 ⅞	2 ¼	2 ⅝	¼	1 ⅛			3.0
2M	24	30	1 ½	⅜	½	5	3	3	2	1 ¼	2 ½	4	3 ¼	3 ⅜	9 ¼	9 ¼	3 ¼	3 ¼	3 ¾	7 ¾	3	3 ½	¼	1 ½			5.0
3	24	30	1 ½	⅜	½	5	3	3	2	1 ¼	2 ½	4	3 ¼	3 ⅜	9 ¼	9 ¼	3 ¼	3 ¼	3 ¾	7 ¾	3	3 ½	¼	1 ½			5.0
4																											
5																											

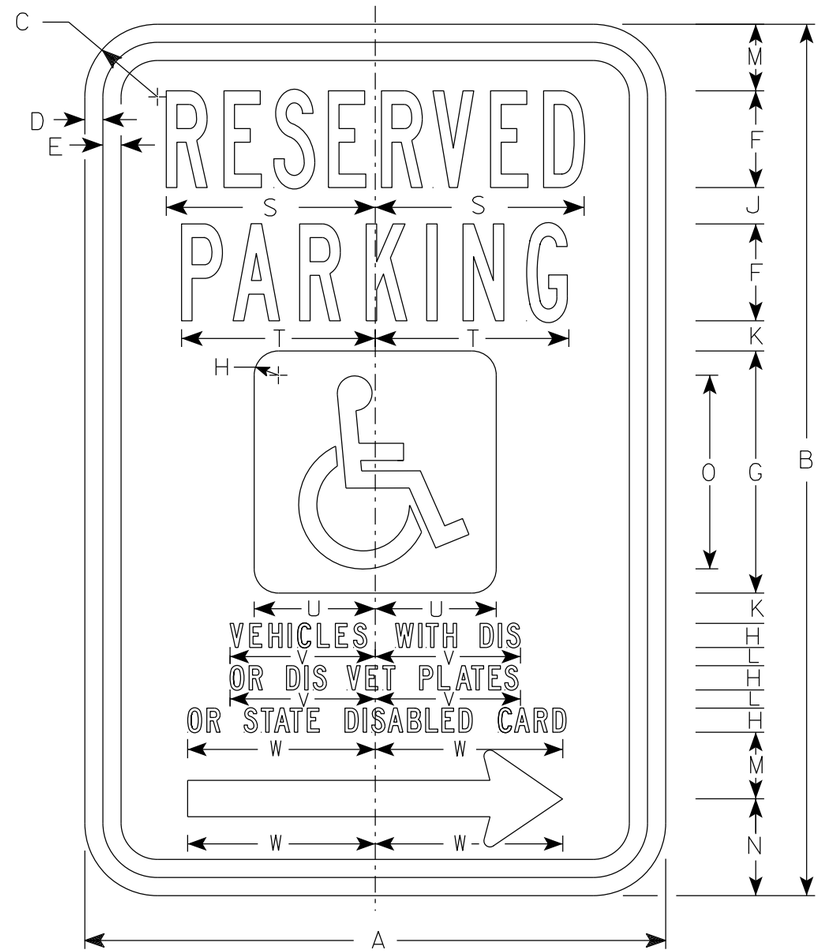
STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/26/23 PLATE NO. R7-1.11

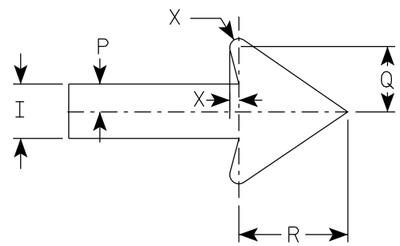
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 353 | E



R7-8R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Sign is white Type H Reflective; paraplegic background is blue.
   Message - Legend and border are green; paraplegic symbol is white
3. Message Series - Lines 1 & 2 are Series B
   Lines 3, 4, 5 & 6 are Series C
4. R7-8R (RIGHT ARROW)
   R7-8L (LEFT 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																											
2S	12	18	1 1/2	3/8	3/8	2	5	1/2	3/4	3/4	5/8	3/8	1 3/8	2	4	3/8	7/8	1 1/2	4 3/8	4	2 1/2	3	3 7/8	3/16			1.5
2M	18	24	1 1/2	3/8	1/2	3	6	3/4	1 1/8	7/8	5/8	1/2	1 7/8	2 7/8	5	5/8	1 3/8	2 1/4	6 1/2	5 3/8	3	4 1/2	5 7/8	1/8			3.0
3	18	24	1 1/2	3/8	1/2	3	6	3/4	1 1/8	7/8	5/8	1/2	1 7/8	2 7/8	5	5/8	1 3/8	2 1/4	6 1/2	5 3/8	3	4 1/2	5 7/8	1/8			3.0
4																											
5																											

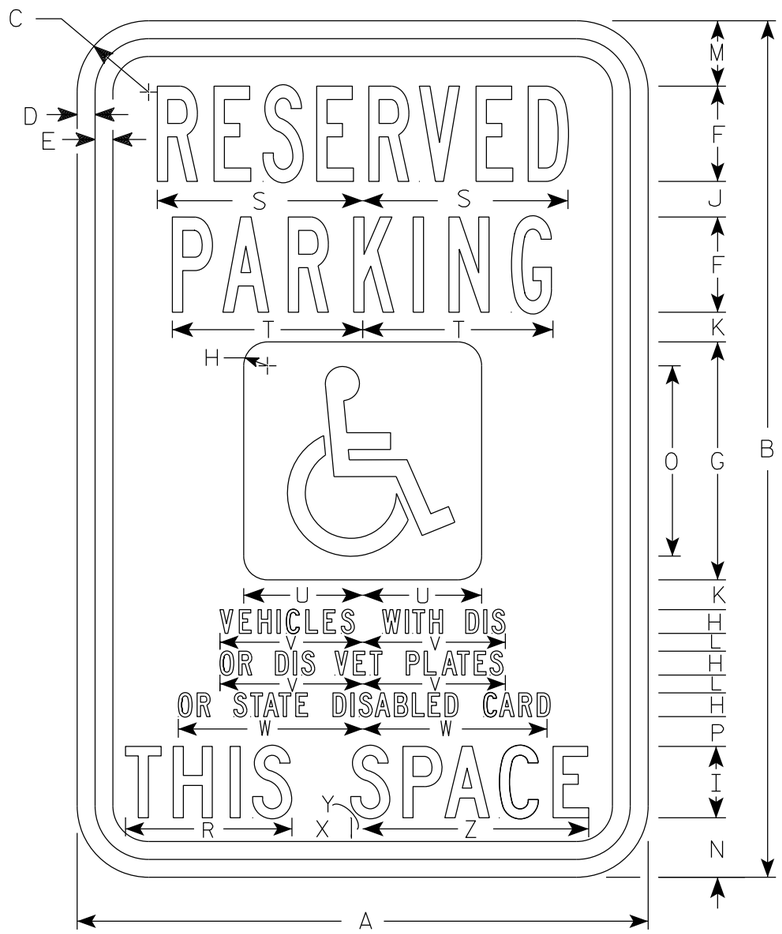
STANDARD SIGN
R7-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/9/23 PLATE NO. R7-8.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 354 | E



R7-8A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Sign is white Type H Reflective; paraplegic background is blue.
   Message - Legend and border are green; paraplegic symbol is white
3. Message Series - Lines 1 & 2 are Series B
   Lines 3, 4, 5 & 6 are 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																											
2S	12	18	1 1/2	3/8	3/8	2	5	1/2	1 1/2	3/4	5/8	3/8	1 3/8	1 1/4	4	5/8		3 1/2	4 3/8	4	2 1/2	3	3 7/8	1 1/4	1/4	4 3/4	1.5
2M	18	24	1 1/2	3/8	1/2	3	6	3/4	2	7/8	5/8	1/2	1 7/8	2	5	3/4		4 5/8	6 1/2	5 3/8	3	4 1/2	5 7/8	1 1/2	1/4	6 3/8	3.0
3	18	24	1 1/2	3/8	1/2	3	6	3/4	2	7/8	5/8	1/2	1 7/8	2	5	3/4		4 5/8	6 1/2	5 3/8	3	4 1/2	5 7/8	1 1/2	1/4	6 3/8	3.0
4																											
5																											

STANDARD SIGN
R7-8A

WISCONSIN DEPT OF TRANSPORTATION

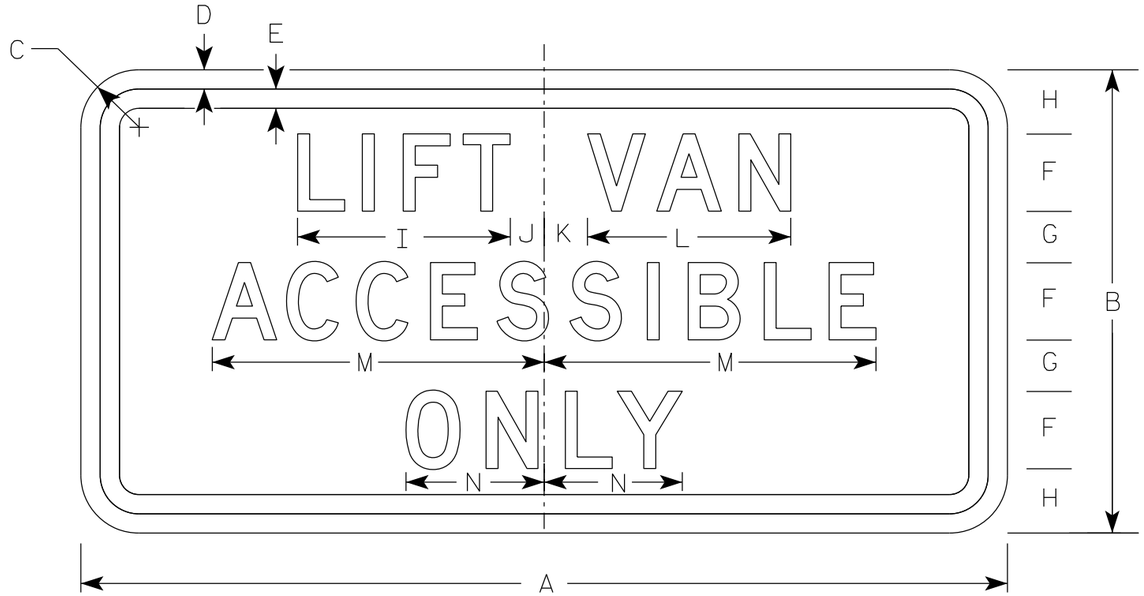
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/9/23 PLATE NO. R7-8A.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 355 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Green
3. Message Series - D



R7-8V

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	12	6	1 1/2	3/8	3/8	1	1/2	1	2 3/4	1/2	1/2	2 5/8	4 1/4	1 3/4													0.50
2M	18	9	1 1/2	3/8	3/8	1 1/2	1	1 1/4	4 1/8	5/8	7/8	4	6 1/2	2 5/8													1.125
3	18	9	1 1/2	3/8	3/8	1 1/2	1	1 1/4	4 1/8	5/8	7/8	4	6 1/2	2 5/8													1.125
4																											
5																											

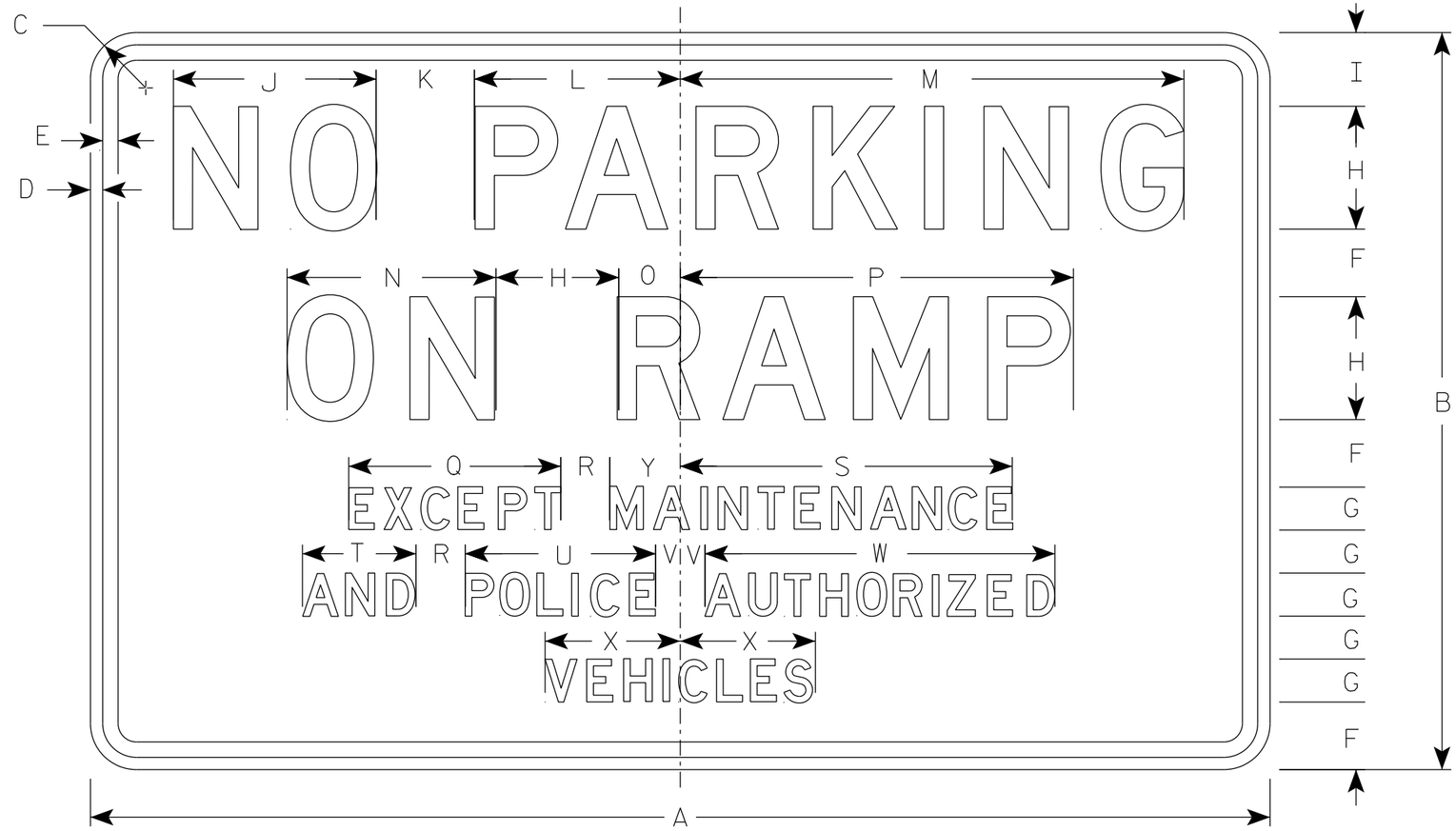
STANDARD SIGN
R7-8V

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew L Rauch
for State Traffic Engineer

DATE 11/9/23 PLATE NO. R7-8V.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 356 | E



R7-64

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - WHITE
   Message - Lines 1& 2 and Border are RED
   Lines 3, 4, & 5 are BLACK
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																											
2M																											
3	48	30	1 7/8	1/2	5/8	2 3/4	1 3/4	5	3	8 1/4	4	8 3/8	20 1/2	8 1/2	2 1/2	16	8 5/8	2	13 5/8	4 5/8	7 3/4	1	14 1/4	5 1/2			10.0
4	48	30	1 7/8	1/2	5/8	2 3/4	1 3/4	5	3	8 1/4	4	8 3/8	20 1/2	8 1/2	2 1/2	16	8 5/8	2	13 5/8	4 5/8	7 3/4	1	14 1/4	5 1/2			10.0
5	48	30	1 7/8	1/2	5/8	2 3/4	1 3/4	5	3	8 1/4	4	8 3/8	20 1/2	8 1/2	2 1/2	16	8 5/8	2	13 5/8	4 5/8	7 3/4	1	14 1/4	5 1/2			10.0

STANDARD SIGN
R7-64

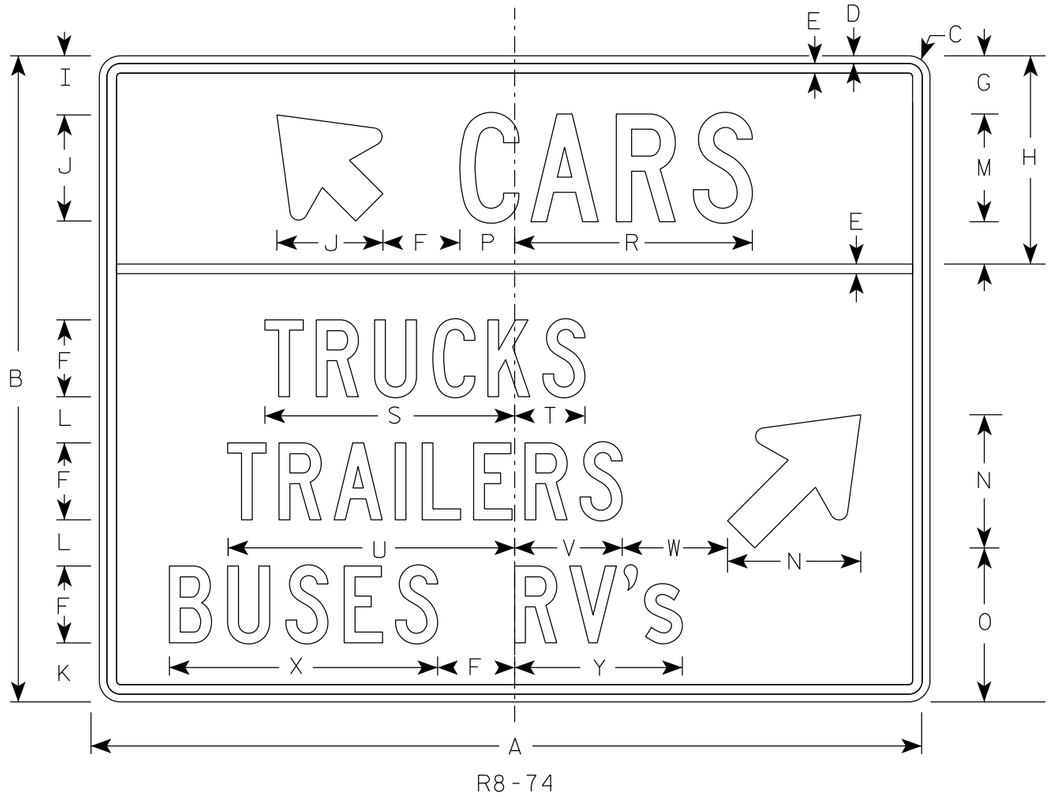
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/24 PLATE NO. R7-64.4

PROJECT NO:

SHEET NO: 357 E

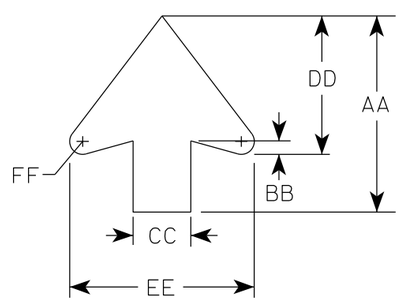


R8-74

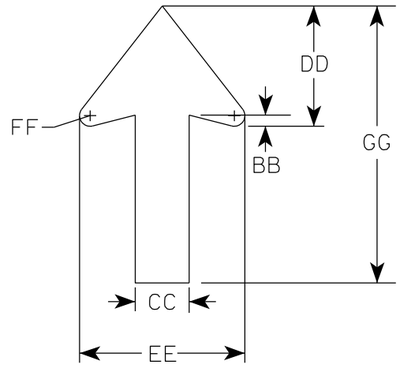
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C

Arrow Details



Top Arrow



Bottom 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	54	42	1 7/8	1/2	5/8	5	3 3/4	13 1/2	3 7/8	7	3 7/8	3	7	8 5/8	10	3 1/2		15 1/2	16 1/4	4 5/8	18 5/8	7	6 7/8	7 1/2	10 7/8		15.75
2M	54	42	1 7/8	1/2	5/8	5	3 3/4	13 1/2	3 7/8	7	3 7/8	3	7	8 5/8	10	3 1/2		15 1/2	16 1/4	4 5/8	18 5/8	7	6 7/8	7 1/2	10 7/8		15.75
3	72	54	3	3/4	1	7	4 3/8	16 3/4	4 3/8	9 7/8	4 3/4	3 5/8	9	14	11 7/8	4 1/2		20 1/8	22 1/2	6 5/8	26	10	6 7/8	24 3/4	17 7/8		27.00
4	72	54	3	3/4	1	7	4 3/8	16 3/4	4 3/8	9 7/8	4 3/4	3 5/8	9	14	11 7/8	4 1/2		20 1/8	22 1/2	6 5/8	26	10	6 7/8	24 3/4	17 7/8		27.00
5	72	54	3	3/4	1	7	4 3/8	16 3/4	4 3/8	9 7/8	4 3/4	3 5/8	9	14	11 7/8	4 1/2		20 1/8	22 1/2	6 5/8	26	10	6 7/8	24 3/4	17 7/8		27.00

SIZE	AA	BB	CC	DD	EE	FF	GG
1							
2S	8 1/2	3/8	2 5/8	5 1/2	8	3/8	11
2M	8 1/2	3/8	2 5/8	5 1/2	8	3/8	11
3	12	1/2	3 1/2	7 3/8	10 3/4	1/2	18
4	12	1/2	3 1/2	7 3/8	10 3/4	1/2	18
5	12	1/2	3 1/2	7 3/8	10 3/4	1/2	18

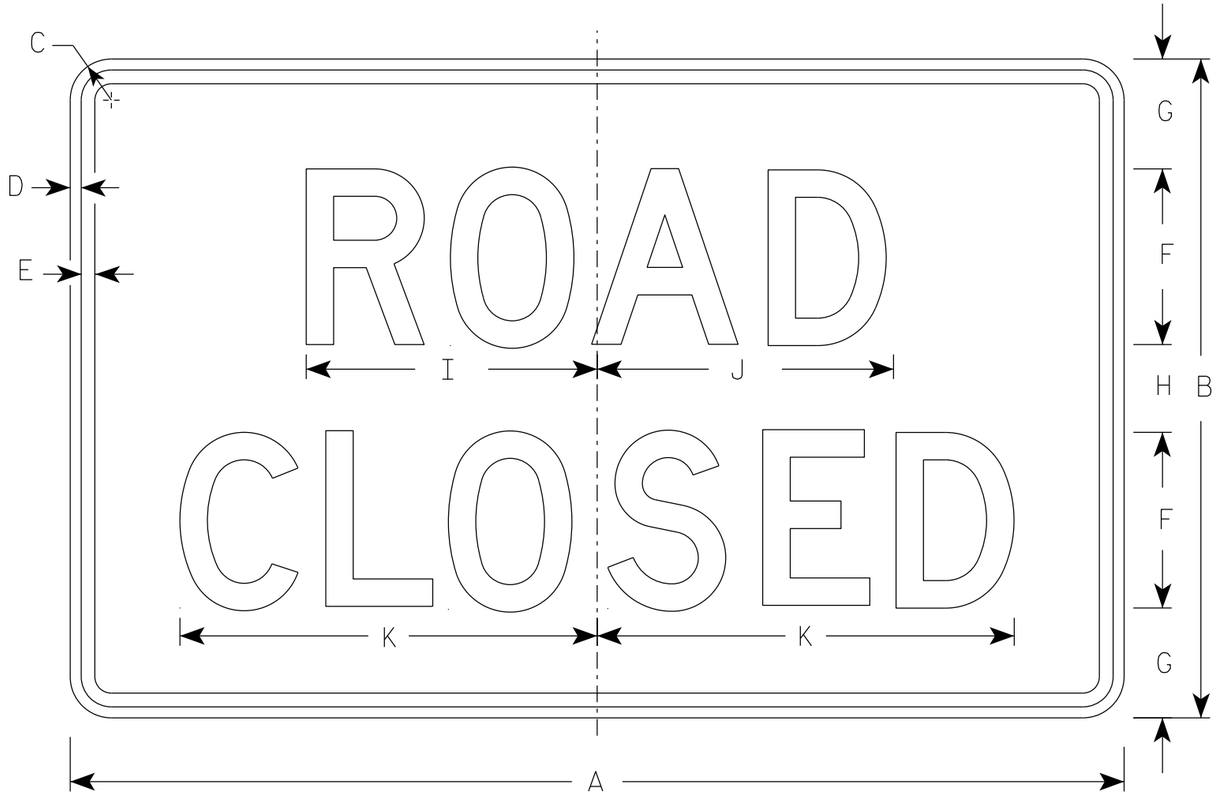
STANDARD SIGN
R8-74

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/12/24 PLATE NO. R8-74.10

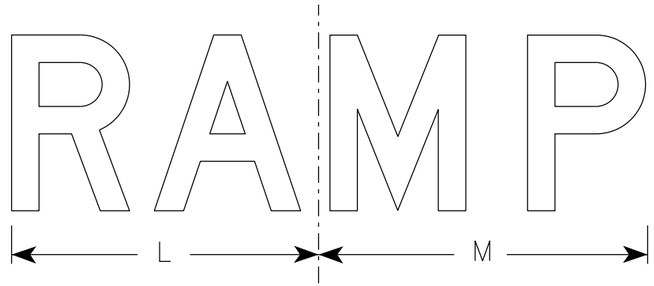
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 358	E



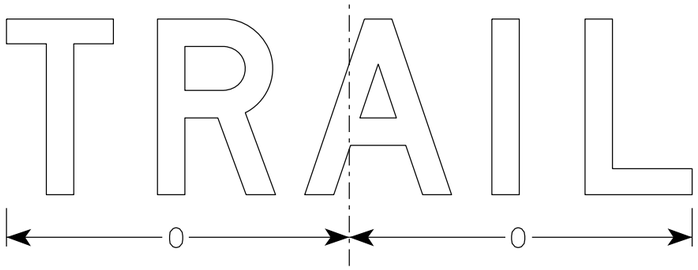
R11-2

NOTES

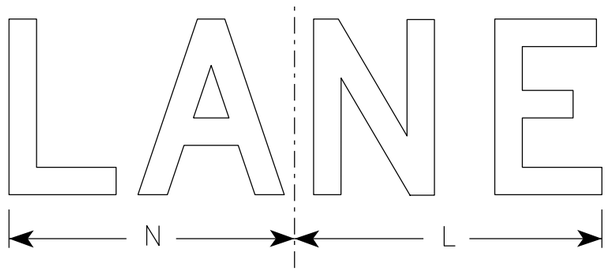
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the 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 7/8	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 7/8	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 7/8	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 7/8	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 7/8	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 2/5/24 PLATE NO. R11-2.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112.dgn PLOT DATE : 5-FEB 2024 2:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7



R55-61

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - Lines 1 and 2 are Series B.
   Lines 3, 4, 5 and 6 are 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	24	18	1 1/2	3/8	1/2	2	5/8	1 3/4	7/8	3 3/4	1 3/8	4 3/8		8 1/4	3	1	10 5/8	5 1/2	7 1/2	9 3/8	3/4	6 5/8	4 7/8	7 1/4	8 1/2		3.0
2S	24	18	1 1/2	3/8	1/2	2	5/8	1 3/4	7/8	3 3/4	1 3/8	4 3/8		8 1/4	3	1	10 5/8	5 1/2	7 1/2	9 3/8	3/4	6 5/8	4 7/8	7 1/4	8 1/2		3.0
2M	24	18	1 1/2	3/8	1/2	2	5/8	1 3/4	7/8	3 3/4	1 3/8	4 3/8		8 1/4	3	1	10 5/8	5 1/2	7 1/2	9 3/8	3/4	6 5/8	4 7/8	7 1/4	8 1/2		3.0
3																											
4																											
5																											

STANDARD SIGN
R55-61

WISCONSIN DEPT OF TRANSPORTATION

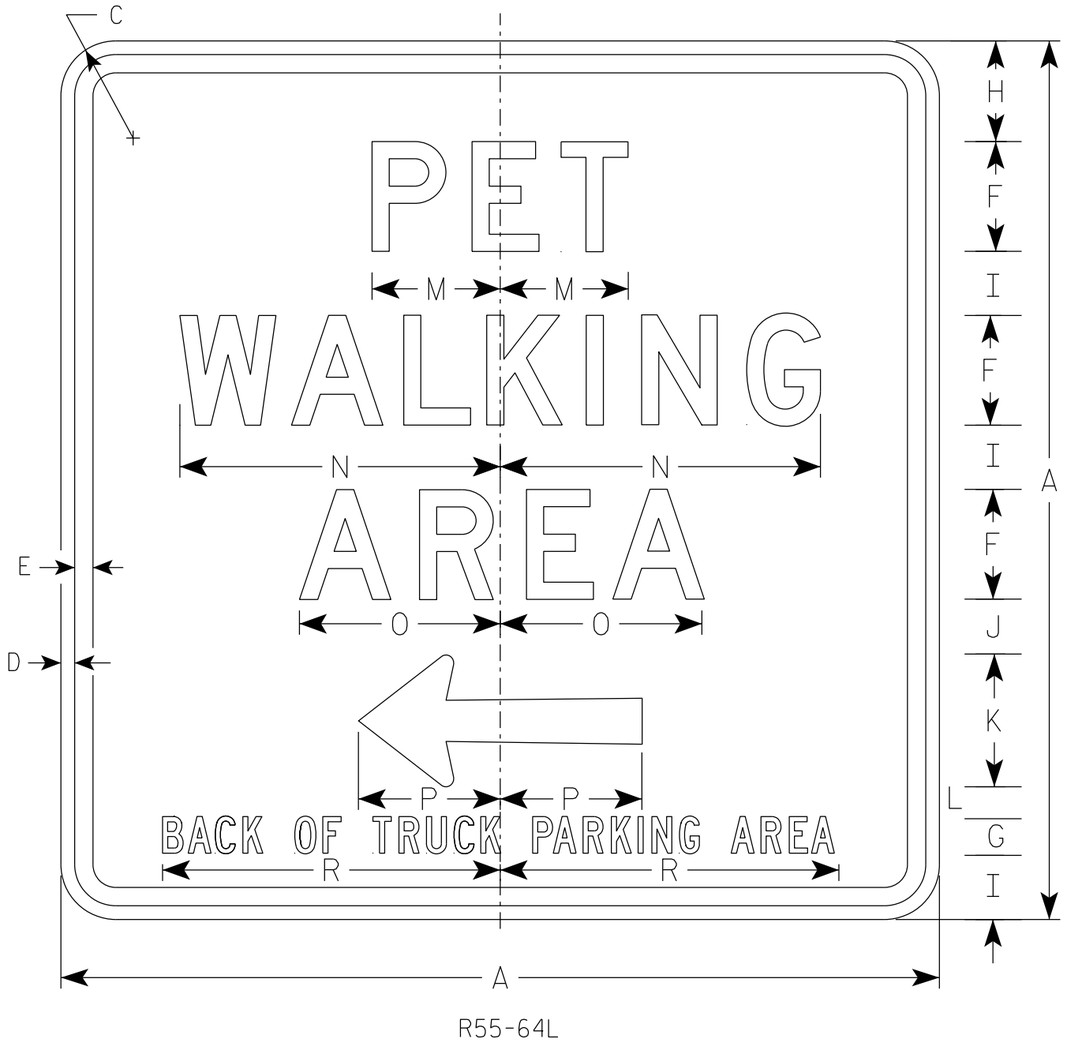
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/28/24 PLATE NO. R55-61.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 360 | E

7

7



R55-64L

NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - Lines 1, 2 & 3 are Series D
   Bottom line is Series C
4. R55-64R, R55-64AR and R55-64BR the same as R55-64L, R55-64AL and R55-64BL except arrow is reversed.

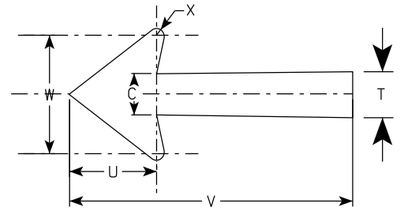


R55-64A



R55-64B

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		1 1/2	3/8	1/2	3	1	2 3/4	1 3/4	1 1/2	3 5/8	7/8	3 1/2	8 3/4	5 1/2	3 7/8		9 1/4	6 3/4	1 1/4	2 3/8	7 3/4	3 1/4	1/4			4.0
2M	24		1 1/2	3/8	1/2	3	1	2 3/4	1 3/4	1 1/2	3 5/8	7/8	3 1/2	8 3/4	5 1/2	3 7/8		9 1/4	6 3/4	1 1/4	2 3/8	7 3/4	3 1/4	1/4			4.0
3																											
4																											
5																											

STANDARD SIGN
R55-64

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/28/24 PLATE NO. R55-64.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME: C:\CAEFiles\Projects\tr_stdplate\R5564.DGN PLOT DATE : 28-FEB 2024 3:43 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



R55-65

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
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	24		1 1/2	3/8	1/2	3	4	5	3 1/2	8 3/4	5 1/2																4.0
2M	24		1 1/2	3/8	1/2	3	4	5	3 1/2	8 3/4	5 1/2																4.0
3																											
4																											
5																											

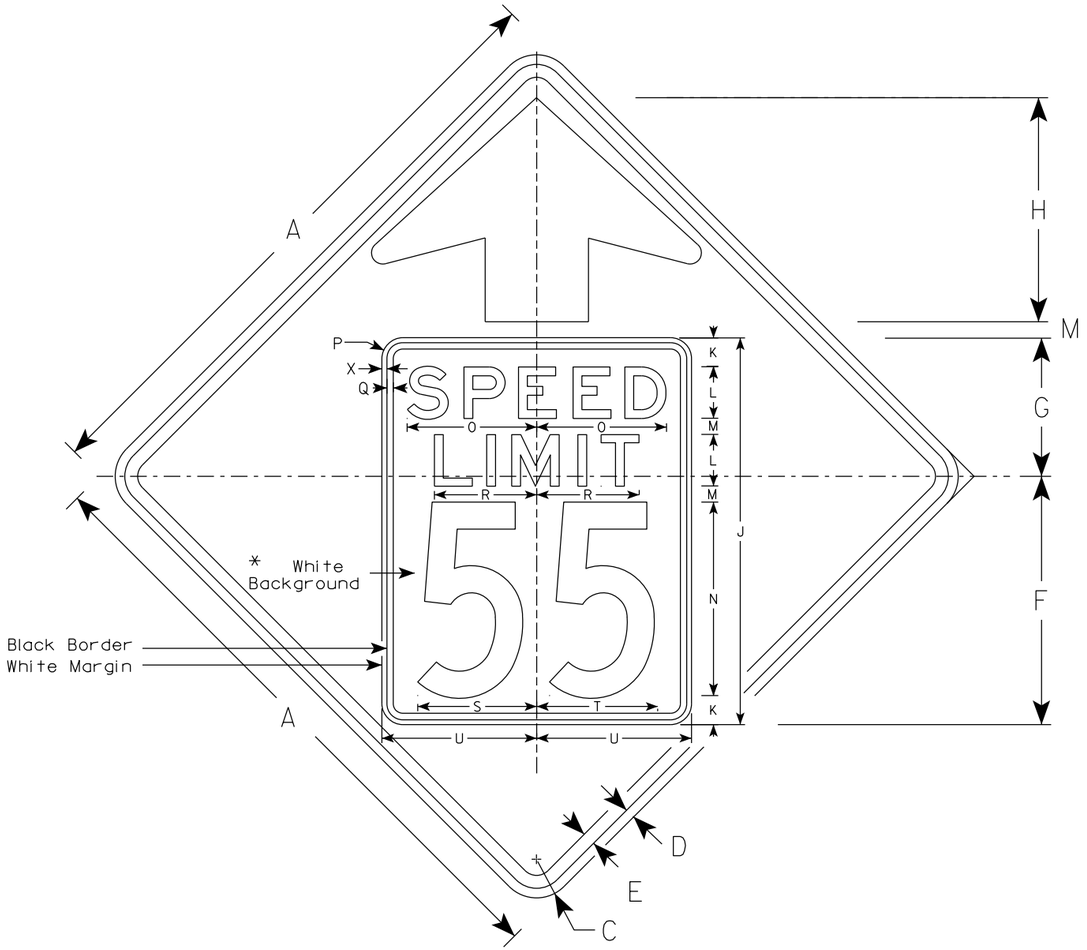
STANDARD SIGN
R55-65

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/28/24 PLATE NO. R55-65.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 362	E

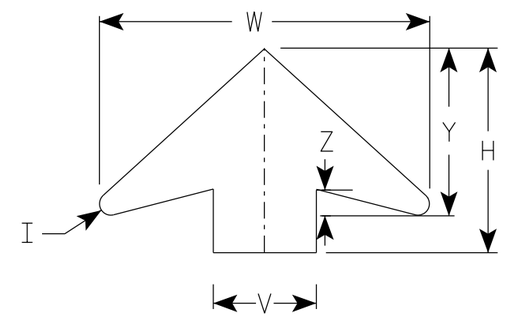


W3-5

NOTES

1. Sign is Type II - See Note 2 for Sheeting Type
2. Color: *
   Background - Yellow* (Type F Reflective)
   Message - Black
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background with black message (Type SH Reflective)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		2 1/4	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2M	36		2 1/4	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
3	36		2 1/4	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
4	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN

W3-5

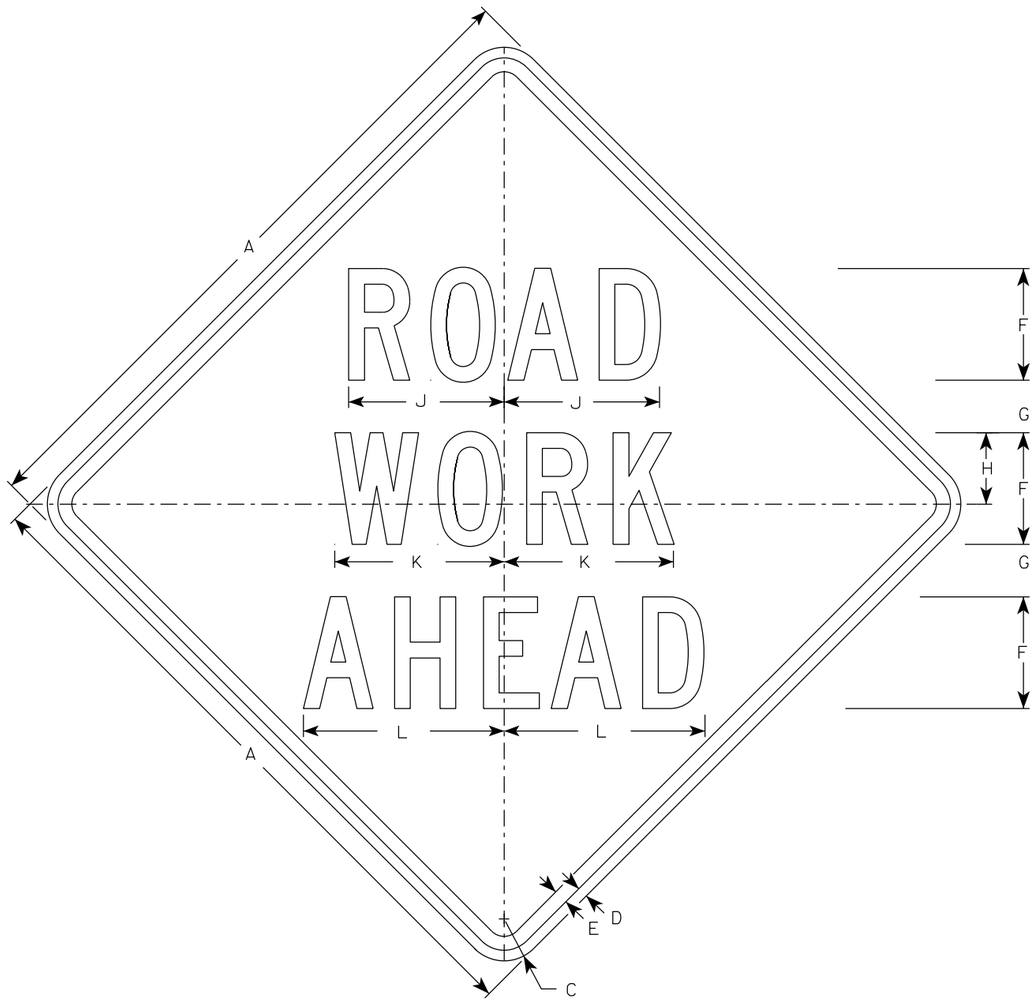
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

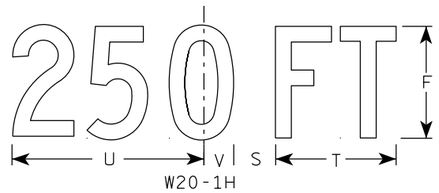
DATE 8/30/2023 PLATE NO. W3-5.7

PROJECT NO:

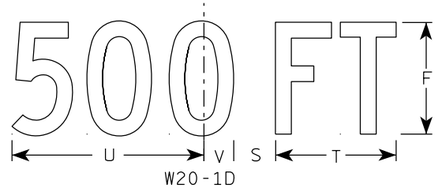
SHEET NO: 363 E



W20-1A



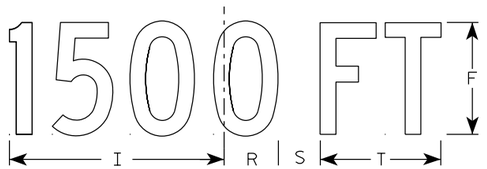
W20-1H



W20-1D



W20-1C



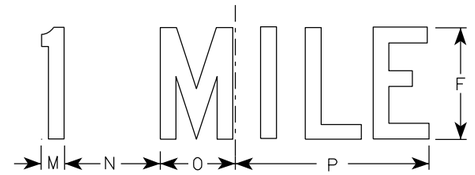
W20-1B

NOTES

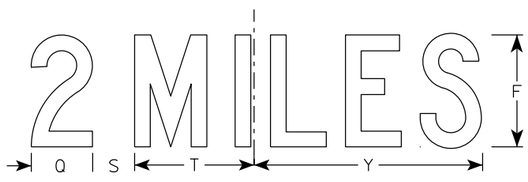
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G



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		2 1/4	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		3	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		3	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		3	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		3	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		3	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

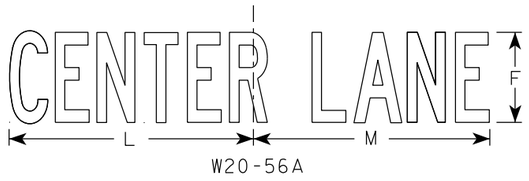
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

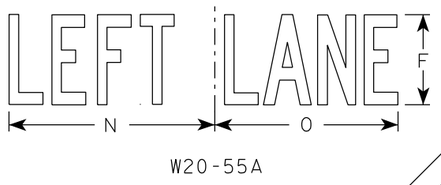
DATE 1/10/2024 PLATE NO. W20-1.12

PROJECT NO:

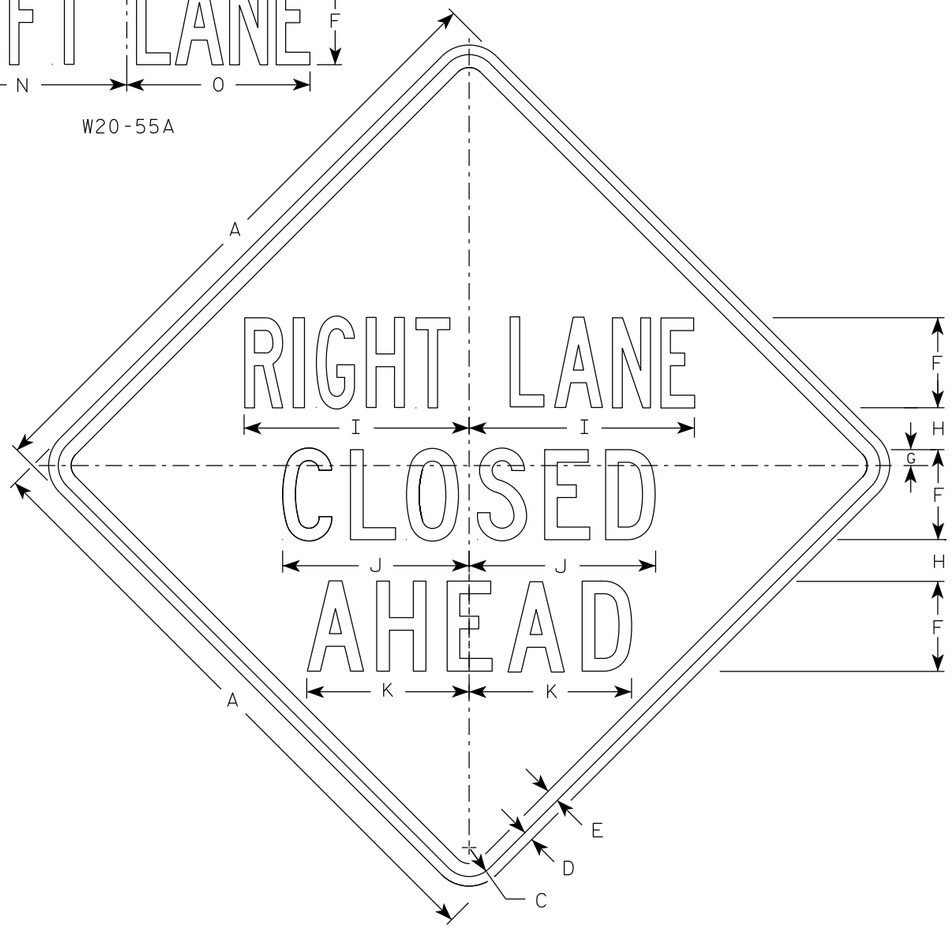
SHEET NO: 364 E



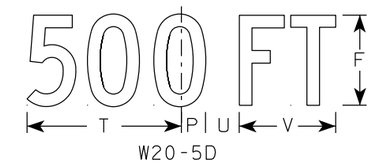
W20-56A



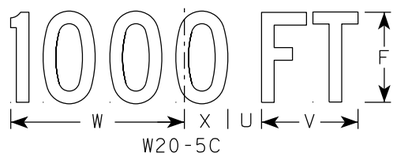
W20-55A



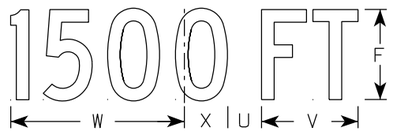
W20-5A



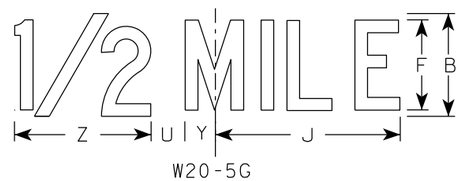
W20-5D



W20-5C



W20-5B



W20-5G



W20-5F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	2 1/4	5/8	3/4	5	7/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

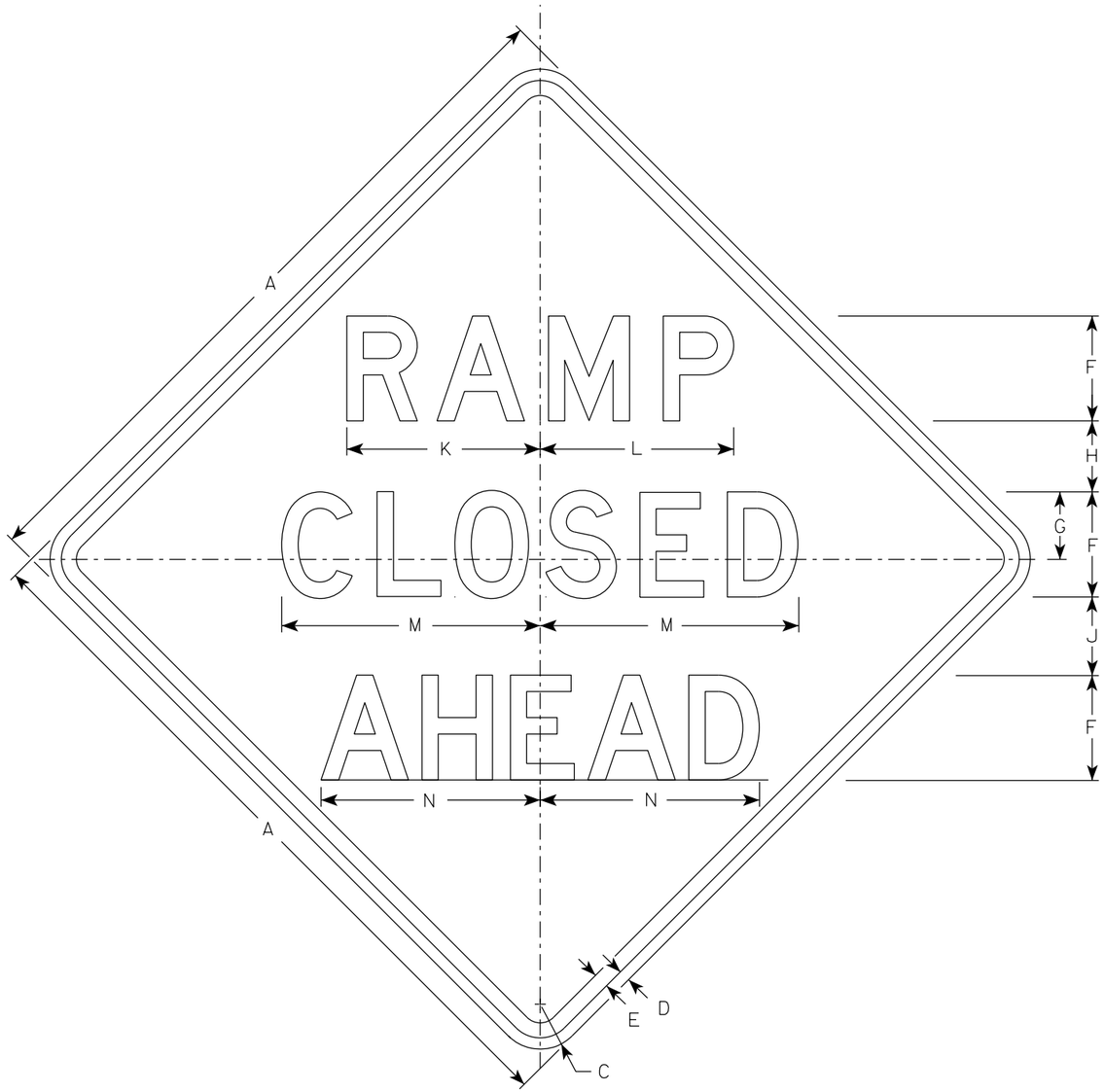
STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

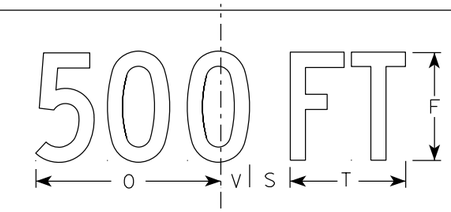
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/27/24 PLATE NO. W20-5.12

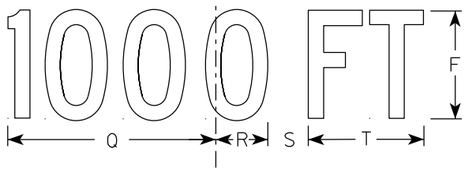
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 365 | E



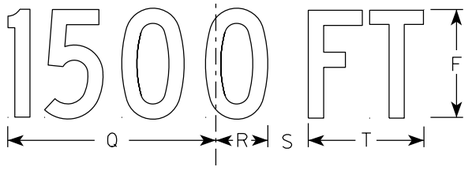
W20-53A



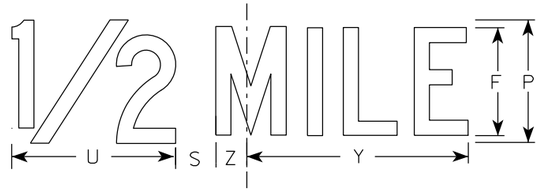
W20-53D



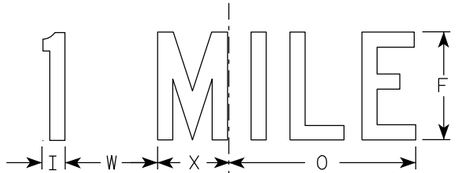
W20-53C



W20-53B



W20-53G



W20-53F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	9 1/4	9 1/4	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-53A,B,C,D,F,G

WISCONSIN DEPT OF TRANSPORTATION

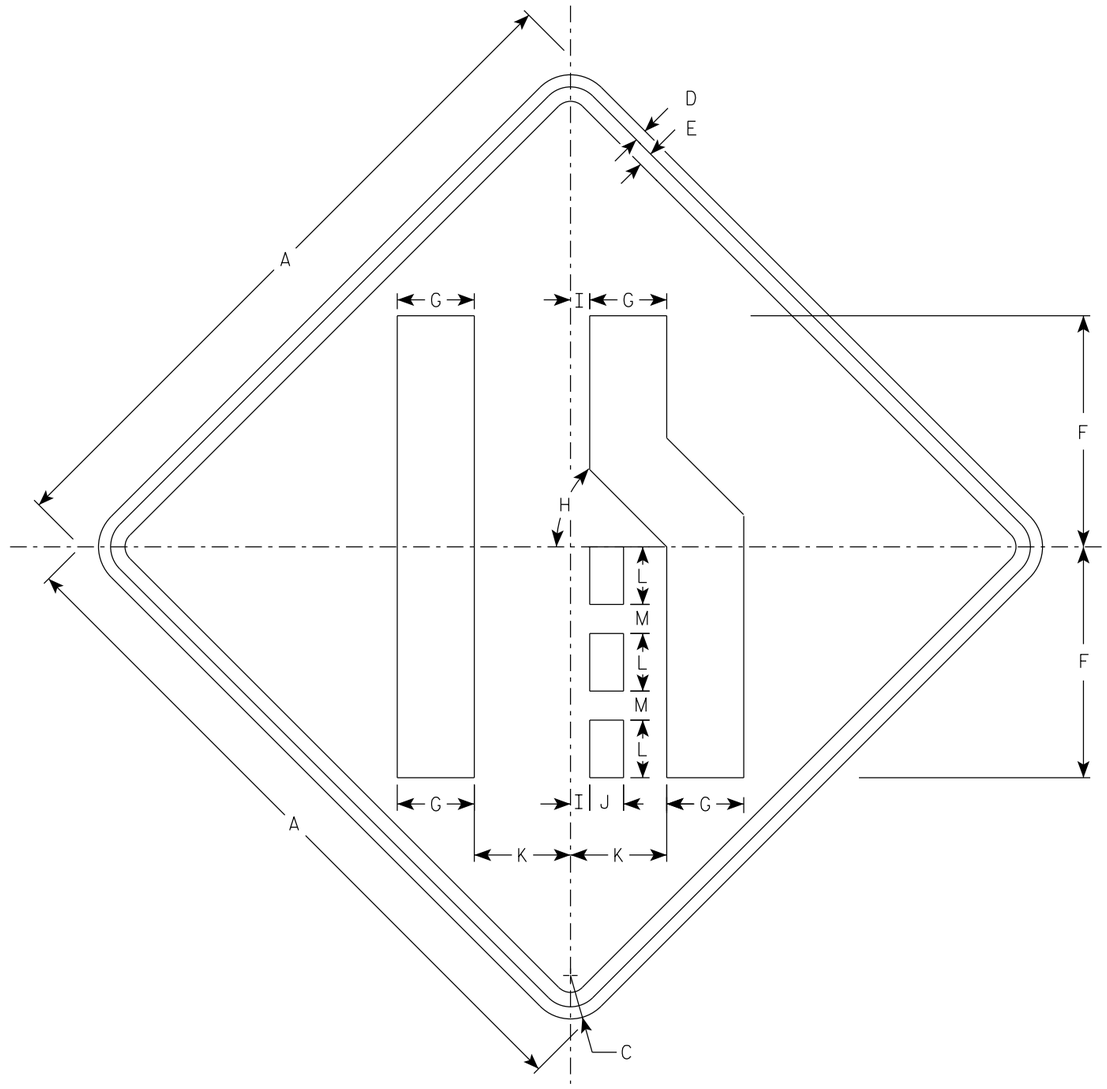
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-53.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W2053.DGN PLOT DATE : 10-JAN 2024 2:38 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

7



W04-2R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2024 PLATE NO. W04-2.2

PROJECT NO:

SHEET NO: 367 E

DIVISION 1 - RA51-RMP-A

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
							1.00	1.30	
					NOTE 1	NOTE 3	NOTE 1		NOTE 8
105+00.00	10500.00	0.00	0.00	5.59	0	0	0	0	0
105+50.00	10550.00	50.00	2.29	13.99	2	18	2	23	-21
106+00.00	10600.00	50.00	15.98	3.54	17	16	19	44	-25
106+50.00	10650.00	50.00	13.44	0.00	27	3	46	48	-2
107+00.00	10700.00	50.00	18.96	0.00	30	0	76	48	28
107+50.00	10750.00	50.00	99.85	0.00	110	0	186	48	138
108+00.00	10800.00	50.00	91.13	0.00	177	0	363	48	315
109+00.00	10900.00	100.00	83.69	0.00	324	0	687	48	639
110+00.00	11000.00	100.00	43.28	0.08	235	0	922	48	874
111+00.00	11100.00	100.00	47.23	3.74	168	7	1,090	57	1,033
112+00.00	11200.00	100.00	46.12	3.30	173	13	1,263	74	1,189
113+00.00	11300.00	100.00	40.74	1.10	161	8	1,424	85	1,340
114+00.00	11400.00	100.00	41.93	0.32	153	3	1,577	88	1,489
114+97.45	11497.45	97.45	23.02	75.65	117	137	1,694	267	1,428
115+00.00	11500.00	2.55	21.71	0.00	2	4	1,696	272	1,424
116+00.00	11600.00	100.00	0.00	50.14	40	93	1,736	393	1,343
117+00.00	11700.00	100.00	0.00	162.67	0	394	1,736	905	831
117+06.59	11706.59	6.59	0.00	163.02	0	40	1,736	957	779

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]

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PROJECT NO: 1225-10-72 | HWY: IH 43 | COUNTY: MANITOWOC | EARTHWORK DATA | SHEET 368 | E

DIVISION 1 - RA51-RMP-B

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
							1.00	1.30	
					NOTE 1	NOTE 3	NOTE 1		NOTE 8
200+00.00	20000.00	0.00	394.58	1150.79	0	0	0	0	0
201+00.00	20100.00	100.00	397.20	1038.94	1,466	4,055	1,466	5,272	-3,806
202+00.00	20200.00	100.00	370.37	937.80	1,421	3,661	2,887	10,031	-7,144
203+00.00	20300.00	100.00	687.30	366.00	1,959	2,414	4,846	13,169	-8,323
204+00.00	20400.00	100.00	674.81	57.61	2,522	784	7,368	14,188	-6,820
205+00.00	20500.00	100.00	732.10	25.50	2,605	154	9,973	14,388	-4,415
206+00.00	20600.00	100.00	651.03	103.79	2,561	239	12,534	14,699	-2,165
207+00.00	20700.00	100.00	611.14	158.76	2,337	486	14,871	15,331	-460
208+00.00	20800.00	100.00	547.55	113.89	2,146	505	17,017	15,987	1,030
209+00.00	20900.00	100.00	475.88	57.63	1,895	318	18,912	16,401	2,511
210+00.00	21000.00	100.00	361.77	195.39	1,551	469	20,463	17,011	3,453
211+00.00	21100.00	100.00	357.00	378.48	1,331	1,063	21,794	18,392	3,402
212+00.00	21200.00	100.00	108.58	254.44	862	1,172	22,656	19,916	2,740
213+00.00	21300.00	100.00	133.29	217.38	448	874	23,104	21,052	2,052
213+00.00	21300.00	0.00	0.00	0.00	0	0	23,104	21,052	2,052
213+33.98	21333.98	33.98	132.67	122.56	83	77	23,187	21,152	2,035
214+00.00	21400.00	66.02	192.58	24.23	398	179	23,585	21,385	2,200
215+00.00	21500.00	100.00	180.27	21.77	690	85	24,275	21,496	2,780
216+00.00	21600.00	100.00	112.48	1.59	542	43	24,817	21,551	3,266
217+00.00	21700.00	100.00	123.69	13.13	437	27	25,254	21,587	3,668
217+50.00	21750.00	50.00	93.67	73.70	201	80	25,455	21,691	3,765
217+75.00	21775.00	25.00	82.31	67.25	81	65	25,536	21,775	3,761
218+00.00	21800.00	25.00	145.93	23.67	106	42	25,642	21,830	3,812
219+00.00	21900.00	100.00	106.54	3.29	468	50	26,110	21,895	4,215
220+00.00	22000.00	100.00	81.32	11.49	348	27	26,458	21,930	4,528
221+00.00	22100.00	100.00	68.07	0.00	277	21	26,735	21,957	4,778
222+00.00	22200.00	100.00	78.26	0.46	271	1	27,006	21,958	5,048
222+25.00	22225.00	25.00	76.20	0.00	72	0	27,078	21,958	5,120

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]

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PROJECT NO: 1225-10-72 | HWY: IH 43 | COUNTY: MANITOWOC | EARTHWORK DATA | SHEET 369 | E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090101_EW.DWG
LAYOUT NAME - 090102_ew

PLOT DATE : 11/26/2024 11:59 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 1'

WISDOT/CADDS SHEET 49

DIVISION 1 - RA51-CARLOT-C

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
							1.00	1.30	
					NOTE 1	NOTE 3	NOTE 1		NOTE 8
300+00.00	30000.00	0.00	8.64	0.00	0	0	0	0	0
301+00.00	30100.00	100.00	50.45	0.00	109	0	109	0	109
302+00.00	30200.00	100.00	75.74	0.00	234	0	343	0	343
303+00.00	30300.00	100.00	70.11	0.00	270	0	613	0	613
304+00.00	30400.00	100.00	89.36	0.00	295	0	908	0	908
305+00.00	30500.00	100.00	150.34	0.00	444	0	1,352	0	1,352
306+00.00	30600.00	100.00	116.17	0.00	494	0	1,846	0	1,846
307+00.00	30700.00	100.00	67.71	3.24	341	6	2,187	8	2,179
308+00.00	30800.00	100.00	65.34	5.08	246	15	2,433	27	2,406
309+00.00	30900.00	100.00	84.95	1.32	278	12	2,711	43	2,668
310+00.00	31000.00	100.00	80.86	3.30	307	9	3,018	55	2,963
311+00.00	31100.00	100.00	174.54	29.58	473	61	3,491	134	3,357
312+00.00	31200.00	100.00	184.82	0.28	665	55	4,156	205	3,951
313+00.00	31300.00	100.00	473.34	0.00	1,219	1	5,375	207	5,168
314+00.00	31400.00	100.00	559.69	0.00	1,913	0	7,288	207	7,081
315+00.00	31500.00	100.00	324.44	0.00	1,637	0	8,925	207	8,718
316+00.00	31600.00	100.00	155.69	0.00	889	0	9,814	207	9,607
317+00.00	31700.00	100.00	80.95	0.00	438	0	10,252	207	10,045
317+58.92	31758.92	58.92	54.00	0.00	147	0	10,399	207	10,192

DIVISION 1 - RA51-TRUCKLOT EXIT-G

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
							1.00	1.30	
					NOTE 1	NOTE 3	NOTE 1		NOTE 8
10+00.00	1000.00	0.00	0.51	93.33	0	0	0	0	0
10+50.00	1050.00	50.00	0.00	327.00	0	389	0	506	-506
11+00.00	1100.00	50.00	0.00	828.30	0	1,070	0	1,897	-1,897
11+50.00	1150.00	50.00	0.00	1111.28	0	1,796	0	4,232	-4,232
12+00.00	1200.00	50.00	0.00	807.68	0	1,777	0	6,542	-6,542
12+50.00	1250.00	50.00	130.92	699.50	121	1,396	121	8,356	-8,235
12+67.95	1267.95	17.95	394.58	850.32	175	515	296	9,026	-8,730

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]

9

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PROJECT NO: 1225-10-72 | HWY: IH 43 | COUNTY: MANITOWOC | EARTHWORK DATA | SHEET 370 | E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090101_EW.DWG
LAYOUT NAME - 090103_ew

PLOT DATE : 11/26/2024 12:00 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1" = 1'

WISDOT/CADDS SHEET 49

DIVISION 1 - RA51-TRUCKLOT ENTRANCE-H

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
							1.00	1.30	
					NOTE 1	NOTE 3	NOTE 1		NOTE 8
20+00.00	2000.00	0.00	8.92	0.00	0	0	0	0	0
20+50.00	2050.00	50.00	64.55	6.39	68	6	68	8	60
21+00.00	2100.00	50.00	383.04	6.42	414	12	482	23	459
21+50.00	2150.00	50.00	398.42	0.00	724	6	1,206	31	1,175
22+00.00	2200.00	50.00	161.08	0.00	518	0	1,724	31	1,693
22+48.81	2248.81	48.81	57.10	0.00	197	0	1,921	31	1,890

DIVISION 1 - RA51-PLAZA L

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
							1.00	1.30	
					NOTE 1	NOTE 3	NOTE 1		NOTE 8
51+50.00	5150.00	0.00	0.00	44.90	0	0	0	0	0
52+00.00	5200.00	50.00	0.00	128.69	0	161	0	209	-209
52+50.00	5250.00	50.00	0.00	199.37	0	304	0	605	-605
53+00.00	5300.00	50.00	0.00	325.85	0	486	0	1,236	-1,236
53+50.00	5350.00	50.00	0.00	402.34	0	674	0	2,113	-2,113
54+00.00	5400.00	50.00	12.48	263.57	12	617	12	2,915	-2,903
54+50.00	5450.00	50.00	49.80	99.67	58	336	70	3,351	-3,281
55+00.00	5500.00	50.00	146.95	0.47	182	93	252	3,472	-3,220
55+50.00	5550.00	50.00	24.08	61.54	158	57	410	3,546	-3,136
56+00.00	5600.00	50.00	16.46	99.41	38	149	448	3,740	-3,292
56+50.00	5650.00	50.00	56.32	69.31	67	156	515	3,943	-3,428
57+00.00	5700.00	50.00	9.57	111.30	61	167	576	4,160	-3,584
57+50.00	5750.00	50.00	109.99	65.37	111	164	687	4,373	-3,686
58+00.00	5800.00	50.00	0.52	233.89	102	277	789	4,733	-3,944
58+50.00	5850.00	50.00	0.00	295.88	0	491	789	5,372	-4,583
59+00.00	5900.00	50.00	0.00	344.15	0	593	789	6,143	-5,354
59+50.00	5950.00	50.00	0.00	202.83	0	506	789	6,800	-6,011
60+00.00	6000.00	50.00	0.00	171.11	0	346	789	7,250	-6,461
60+50.00	6050.00	50.00	0.00	42.39	0	198	789	7,508	-6,719

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]

DIVISION 2 - RA52-RMP-D

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
							1.00	1.30	
					NOTE 1	NOTE 3	NOTE 1		NOTE 8
406+00.00	40600.00	0.00	79.29	0.00	0	0	0	0	0
407+00.00	40700.00	100.00	91.81	0.00	317	0	317	0	317
408+00.00	40800.00	100.00	78.36	0.07	315	0	632	0	632
409+00.00	40900.00	100.00	75.47	2.87	285	5	917	7	911
410+00.00	41000.00	100.00	68.46	15.74	267	34	1,184	51	1,133
411+00.00	41100.00	100.00	68.54	25.01	254	75	1,438	148	1,290
412+00.00	41200.00	100.00	70.30	29.95	257	102	1,695	281	1,414
413+00.00	41300.00	100.00	68.97	0.00	258	55	1,953	352	1,601
414+00.00	41400.00	100.00	66.98	0.00	252	0	2,205	352	1,853
415+00.00	41500.00	100.00	57.39	0.00	230	0	2,435	352	2,083
416+00.00	41600.00	100.00	81.88	0.47	258	1	2,693	354	2,339
417+00.00	41700.00	100.00	56.72	7.89	257	15	2,950	373	2,577
418+00.00	41800.00	100.00	76.91	3.57	247	21	3,197	400	2,797
418+00.00	41800.00	0.00	0.00	0.00	0	0	3,197	400	2,797
419+00.00	41900.00	100.00	424.08	49.88	785	92	3,982	520	3,462
420+00.00	42000.00	100.00	261.89	185.18	1,270	435	5,252	1,086	4,167
421+00.00	42100.00	100.00	130.29	274.44	726	851	5,978	2,192	3,786
422+00.00	42200.00	100.00	105.16	82.32	436	661	6,414	3,051	3,363
423+00.00	42300.00	100.00	143.77	56.46	461	257	6,875	3,385	3,490
424+00.00	42400.00	100.00	283.07	17.15	790	136	7,665	3,562	4,103
425+00.00	42500.00	100.00	494.79	7.12	1,440	45	9,105	3,621	5,485
426+00.00	42600.00	100.00	553.68	63.98	1,942	132	11,047	3,792	7,255
427+00.00	42700.00	100.00	306.94	174.26	1,594	441	12,641	4,365	8,276
428+00.00	42800.00	100.00	104.74	227.92	762	745	13,403	5,334	8,069
429+00.00	42900.00	100.00	39.67	649.98	267	1,626	13,670	7,448	6,222
430+00.00	43000.00	100.00	25.08	450.65	120	2,038	13,790	10,097	3,693
430+37.11	43037.11	37.11	24.92	392.96	34	580	13,824	10,851	2,973

DIVISION 2 - RA52-RMP-E

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
							1.00	1.30	
					NOTE 1	NOTE 3	NOTE 1		NOTE 8
500+00.00	50000.00	0.00	24.19	0.00	0	0	0	0	0
501+00.00	50100.00	100.00	22.57	0.00	87	0	87	0	87
502+00.00	50200.00	100.00	17.09	0.00	73	0	160	0	160
503+00.00	50300.00	100.00	47.75	0.19	120	0	280	0	280
504+00.00	50400.00	100.00	61.06	96.15	202	178	482	231	251
505+00.00	50500.00	100.00	56.89	56.22	218	282	700	598	102
506+00.00	50600.00	100.00	56.75	11.52	210	125	910	761	150
507+00.00	50700.00	100.00	69.54	2.91	234	27	1,144	796	348
508+00.00	50800.00	100.00	81.94	0.00	281	5	1,425	802	623
509+00.00	50900.00	100.00	80.14	0.00	300	0	1,725	802	923
509+50.00	50950.00	50.00	76.88	0.00	145	0	1,870	802	1,068

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]

DIVISION 2 - RA52-CARLOT-F

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
							1.00	1.30	
					NOTE 1	NOTE 3	NOTE 1		NOTE 8
600+00.00	60000.00	0.00	0.06	45.90	0	0	0	0	0
601+00.00	60100.00	100.00	1.10	29.05	2	139	2	181	-179
602+00.00	60200.00	100.00	8.17	40.51	17	129	19	348	-329
603+00.00	60300.00	100.00	49.76	17.95	107	108	126	489	-363
604+00.00	60400.00	100.00	47.37	8.00	180	48	306	551	-245
605+00.00	60500.00	100.00	42.94	8.68	167	31	473	592	-119
606+00.00	60600.00	100.00	61.74	8.35	194	32	667	633	34
607+00.00	60700.00	100.00	82.04	3.72	266	22	933	662	271
608+00.00	60800.00	100.00	64.44	12.95	271	31	1,204	702	502
609+00.00	60900.00	100.00	47.34	25.03	207	70	1,411	793	618
610+00.00	61000.00	100.00	31.00	26.36	145	95	1,556	917	640
611+00.00	61100.00	100.00	28.79	34.42	111	113	1,667	1,063	604
612+00.00	61200.00	100.00	47.52	17.40	141	96	1,808	1,188	620
613+00.00	61300.00	100.00	49.02	5.04	179	42	1,987	1,243	744
614+00.00	61400.00	100.00	46.59	9.91	177	28	2,164	1,279	885
615+00.00	61500.00	100.00	29.84	62.89	142	135	2,306	1,455	851
616+00.00	61600.00	100.00	3.68	114.41	62	328	2,368	1,881	487
617+00.00	61700.00	100.00	0.00	117.97	7	430	2,375	2,440	-65
617+16.96	61716.96	16.96	0.00	116.33	0	74	2,375	2,536	-161

DIVISION 2 - RA 52-TRUCKLOT ENTRANCE-J

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
							1.00	1.30	
					NOTE 1	NOTE 3	NOTE 1		NOTE 8
30+00.00	3000.00	0.00	24.40	0.00	0	0	0	0	0
30+50.00	3050.00	50.00	80.40	0.00	97	0	97	0	97
31+00.00	3100.00	50.00	279.11	1.34	333	1	430	1	429
31+50.00	3150.00	50.00	339.25	24.42	573	24	1,003	33	971
32+00.00	3200.00	50.00	54.80	27.10	365	48	1,368	95	1,273
32+39.07	3239.07	39.07	3.04	14.93	42	30	1,410	134	1,276

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]

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PROJECT NO: 1225-10-72 | HWY: IH 43 | COUNTY: MANITOWOC | EARTHWORK DATA | SHEET 373 | E

DIVISION 2 - RA 52-TRUCKLOT EXIT-K

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
							1.00	1.30	
					NOTE 1	NOTE 3	NOTE 1		NOTE 8
40+00.00	4000.00	0.00	0.73	375.17	0	0	0	0	0
40+50.00	4050.00	50.00	4.32	174.40	5	509	5	662	-657
41+00.00	4100.00	50.00	0.00	538.49	4	660	9	1,520	-1,511
41+50.00	4150.00	50.00	4.96	594.08	5	1,049	14	2,883	-2,869
42+00.00	4200.00	50.00	13.07	294.93	17	823	31	3,953	-3,922
42+50.00	4250.00	50.00	17.25	174.96	28	435	59	4,519	-4,460
43+00.00	4300.00	50.00	24.69	60.88	39	218	98	4,802	-4,704
43+30.57	4330.57	30.57	20.02	2.70	25	36	123	4,849	-4,726

DIVISION 2 - RA52-PLAZA M

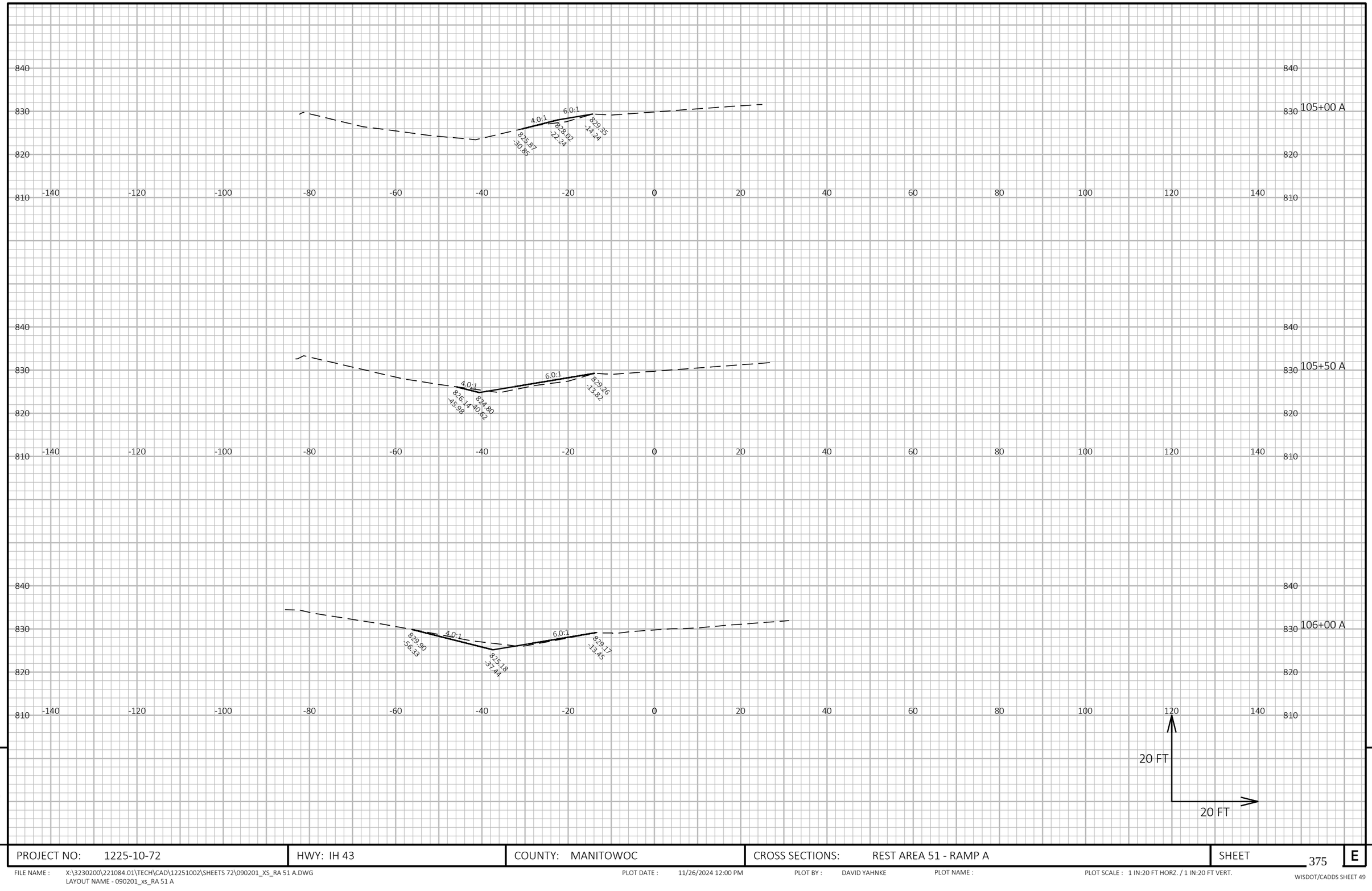
STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
							1.00	1.30	
					NOTE 1	NOTE 3	NOTE 1		NOTE 8
64+00.00	6400.00	0.00	0.00	146.37	0	0	0	0	0
64+50.00	6450.00	50.00	0.00	322.65	0	434	0	564	-564
65+00.00	6500.00	50.00	0.00	468.52	0	733	0	1,517	-1,517
65+50.00	6550.00	50.00	0.00	371.00	0	777	0	2,527	-2,527
66+00.00	6600.00	50.00	44.31	123.83	41	458	41	3,123	-3,082
66+50.00	6650.00	50.00	0.00	151.52	41	255	82	3,454	-3,372
67+00.00	6700.00	50.00	71.02	55.85	66	192	148	3,704	-3,556
67+50.00	6750.00	50.00	0.00	177.97	66	216	214	3,985	-3,771
68+00.00	6800.00	50.00	0.00	123.70	0	279	214	4,347	-4,133
68+50.00	6850.00	50.00	0.00	157.94	0	261	214	4,687	-4,473
69+00.00	6900.00	50.00	20.51	123.04	19	260	233	5,025	-4,792
69+50.00	6950.00	50.00	0.00	284.52	19	377	252	5,515	-5,263
70+00.00	7000.00	50.00	0.00	514.61	0	740	252	6,477	-6,225
70+50.00	7050.00	50.00	0.00	587.81	0	1,021	252	7,804	-7,552
71+00.00	7100.00	50.00	0.00	382.20	0	898	252	8,971	-8,719
71+50.00	7150.00	50.00	0.00	231.43	0	568	252	9,710	-9,458
72+00.00	7200.00	50.00	0.00	95.04	0	302	252	10,102	-9,850
72+50.00	7250.00	50.00	0.00	40.21	0	125	252	10,265	-10,013

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]

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PROJECT NO: 1225-10-72 | HWY: IH 43 | COUNTY: MANITOWOC | EARTHWORK DATA | SHEET 374 | E



9

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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - RAMP A	SHEET 375	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 A.DWG
LAYOUT NAME - 090201_xs_RA 51 A

PLOT DATE : 11/26/2024 12:00 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

106+50 A

4.0:1
6.0:1
827.35
-39.94
825.55
-32.76
828.94
-12.38

107+00 A

4.0:1
6.0:1
828.03
-38.02
825.92
-29.59
828.92
-11.61

107+50 A

TEL
R/L
RAMP A
R/L
IH 43 SB
4.0:1
6.0:1
7.0%
7.0%
7.0%
25.0:1
4.0:1
828.10
-30.14
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827.64
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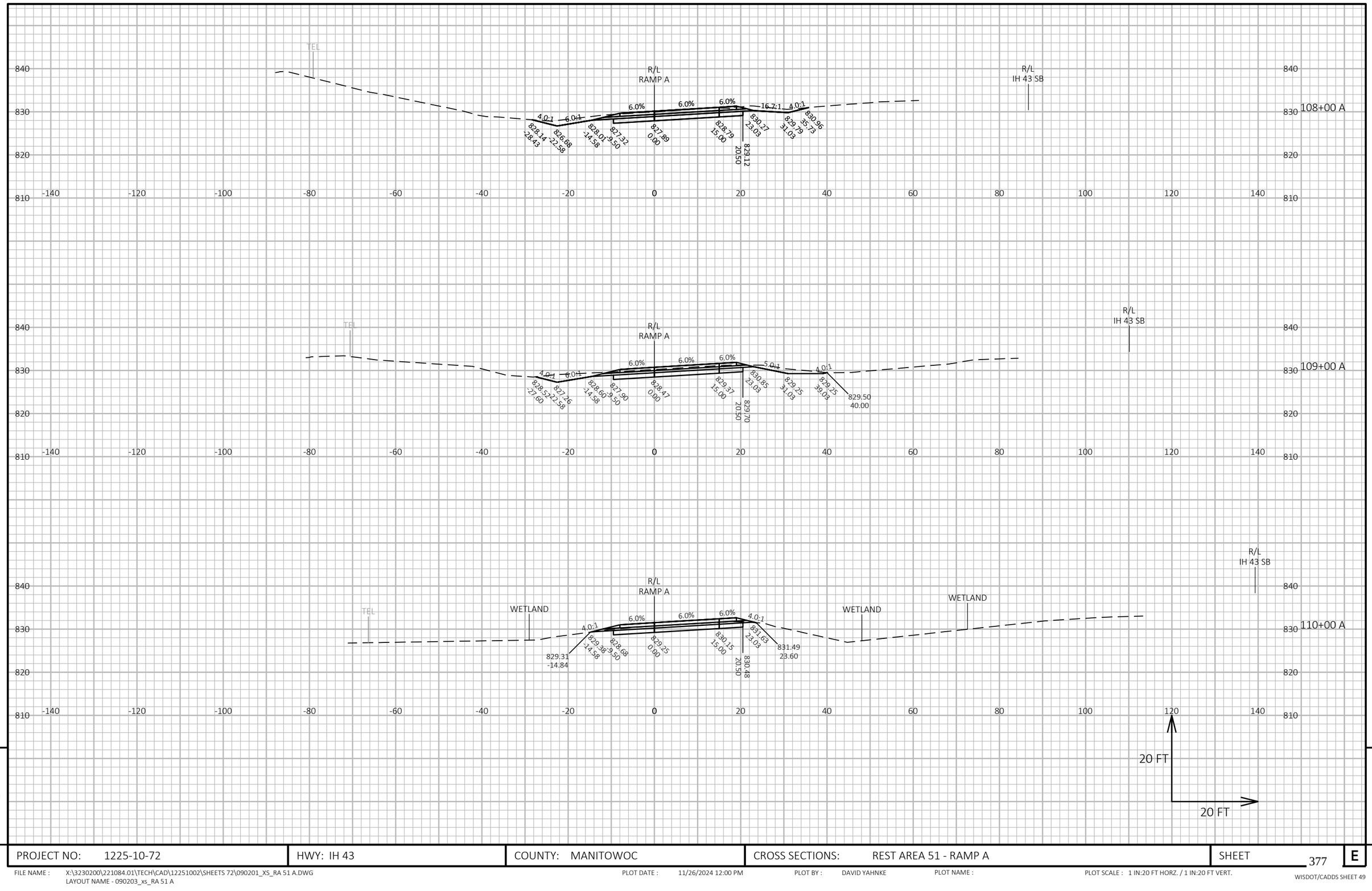
20 FT
20 FT

PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - RAMP A	SHEET 376	E

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LAYOUT NAME - 090202_xs_RA 51 A

PLOT DATE : 11/26/2024 12:00 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

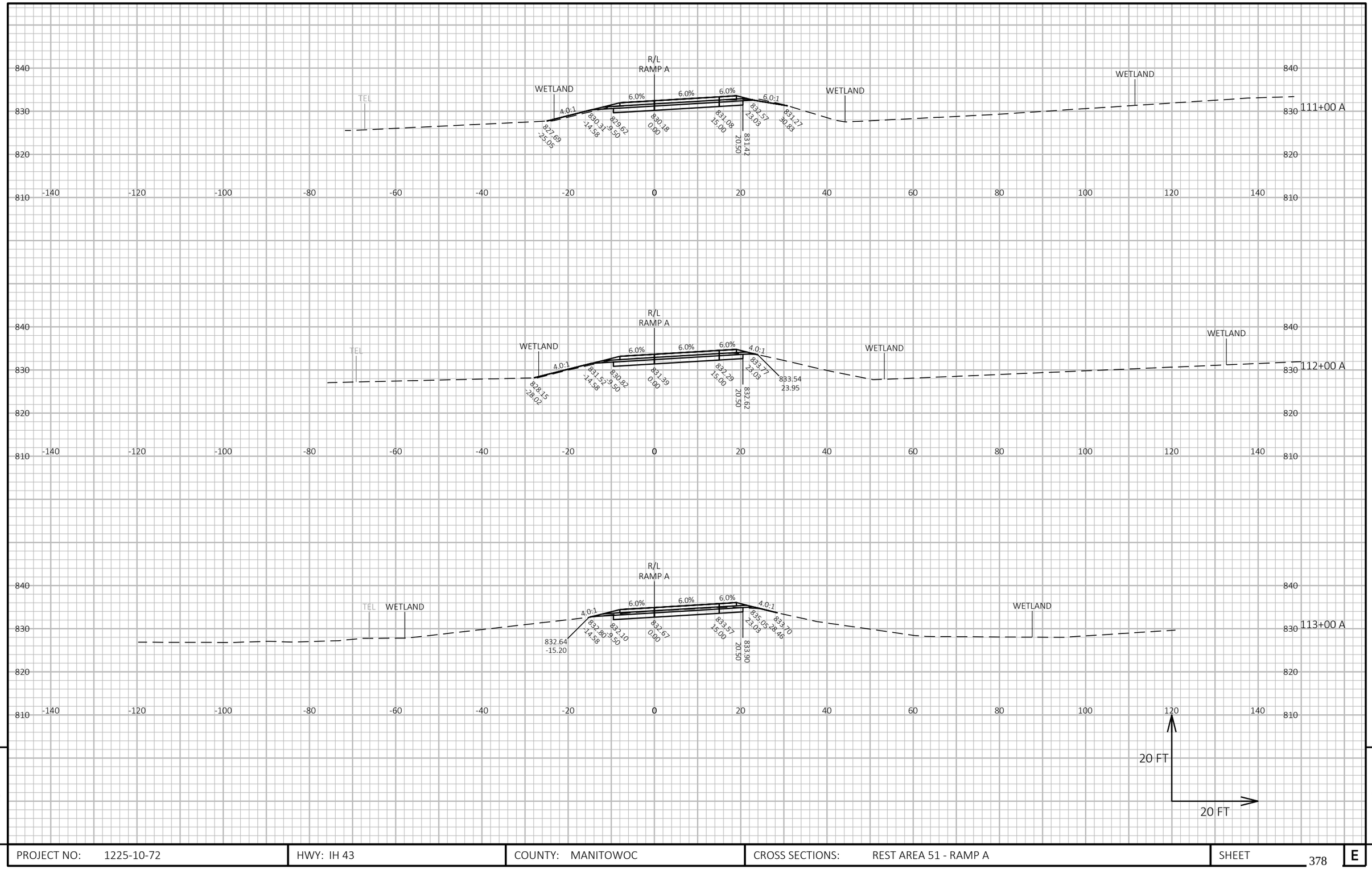


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - RAMP A	SHEET 377	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 A.DWG
LAYOUT NAME - 090203_xs_RA 51 A

PLOT DATE : 11/26/2024 12:00 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

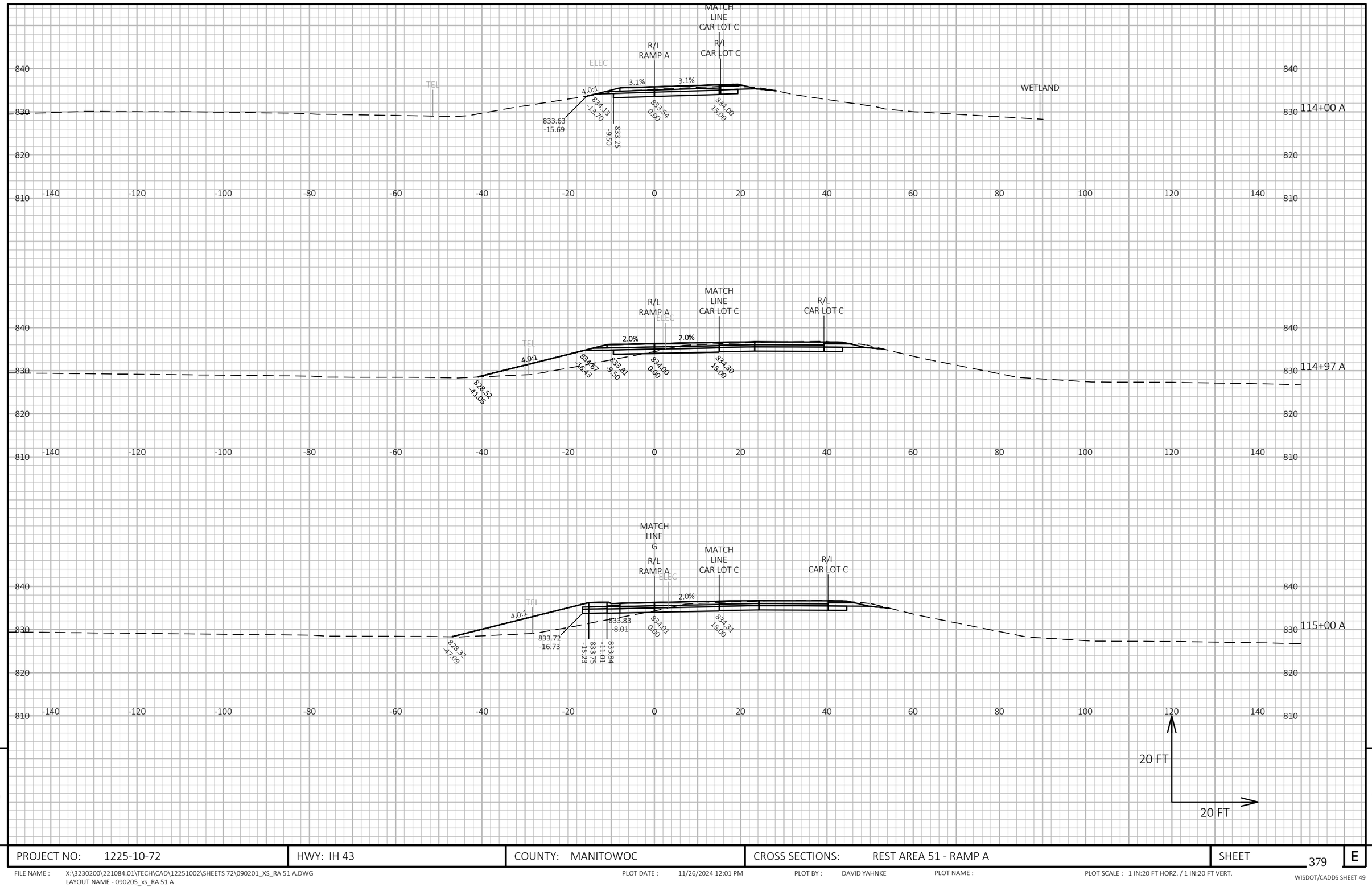


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - RAMP A	SHEET 378 E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 A.DWG
LAYOUT NAME - 090204_xs_RA 51 A

PLOT DATE : 11/26/2024 12:01 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

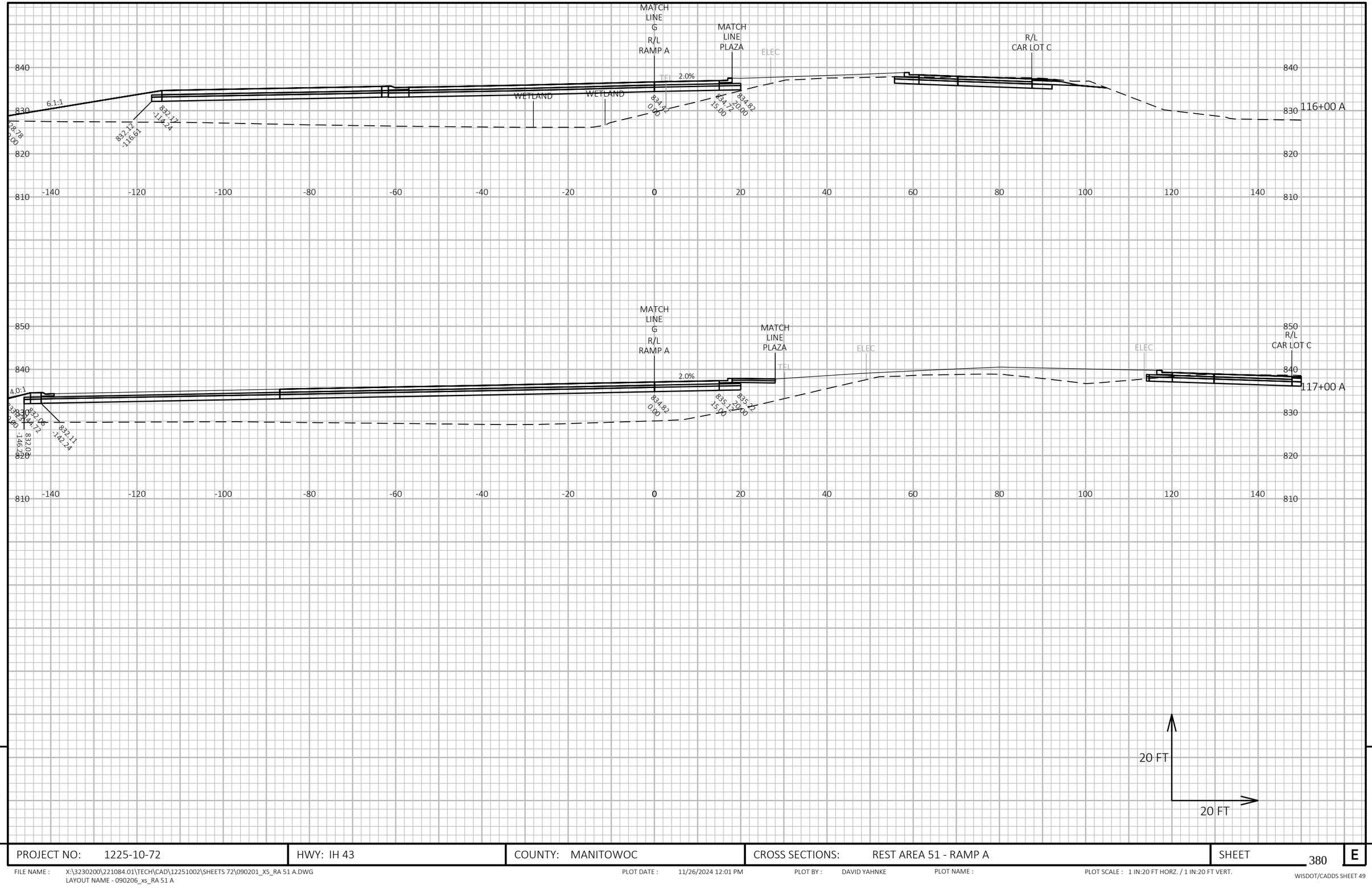


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - RAMP A	SHEET 379	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 A.DWG
LAYOUT NAME - 090205_xs_RA 51 A

PLOT DATE : 11/26/2024 12:01 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - RAMP A	SHEET 380	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 A.DWG
LAYOUT NAME - 090206_xs_RA 51 A

PLOT DATE : 11/26/2024 12:01 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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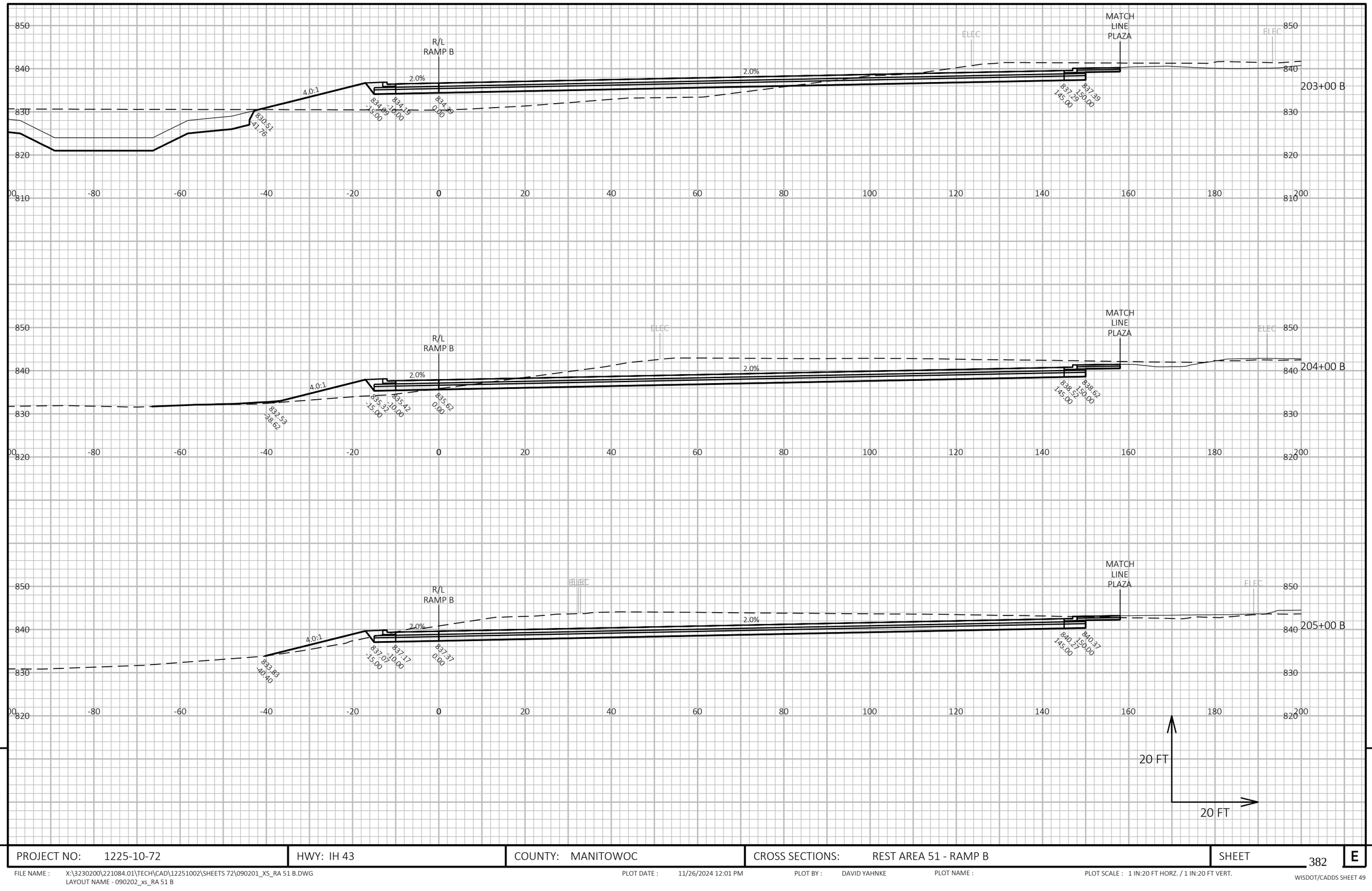
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - RAMP B	SHEET 381	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 B.DWG
LAYOUT NAME - 090201_xs_RA 51 B

PLOT DATE : 11/26/2024 12:01 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

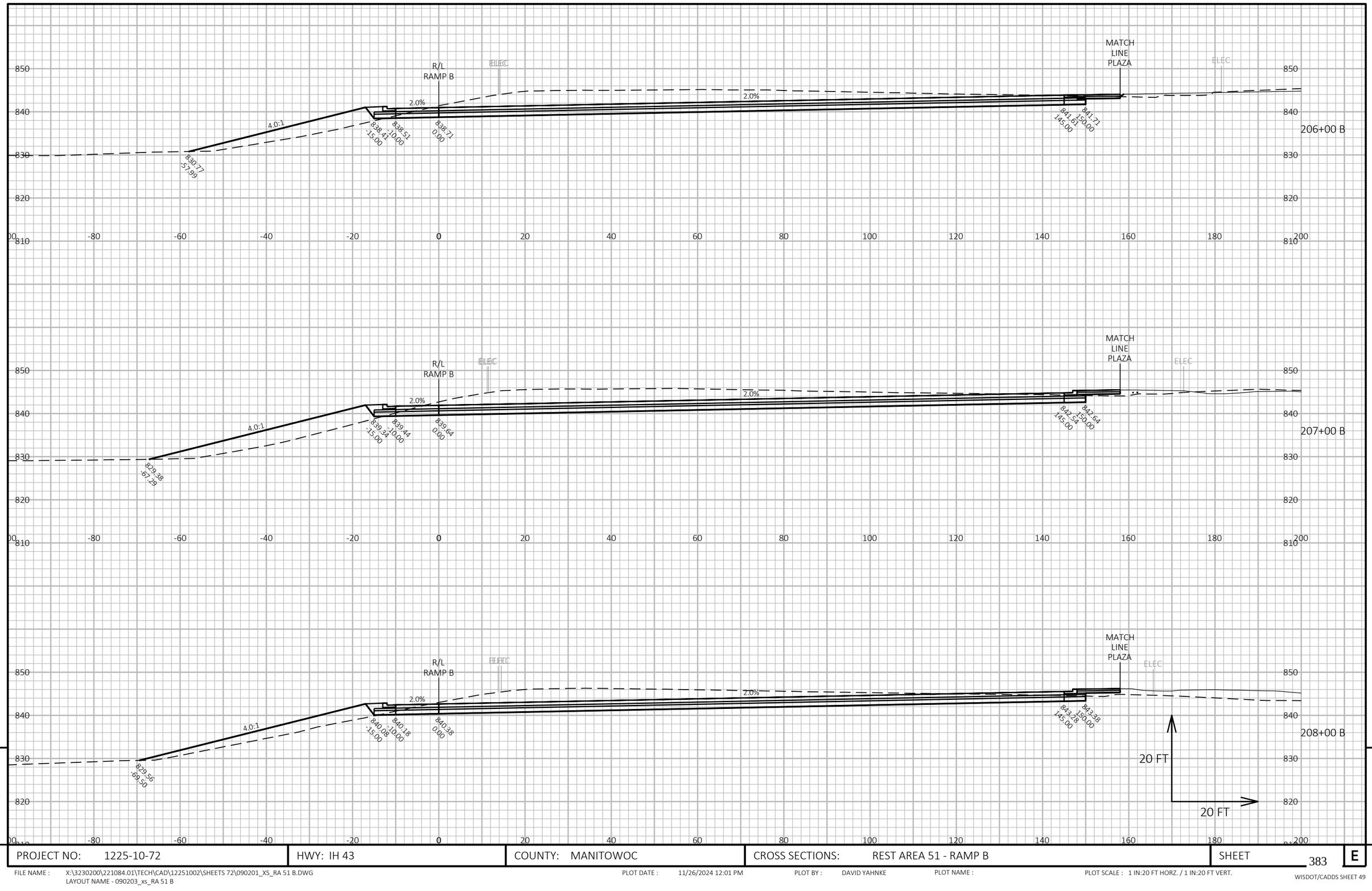


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - RAMP B	SHEET 382 E

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LAYOUT NAME - 090202_xs_RA 51 B

PLOT DATE : 11/26/2024 12:01 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

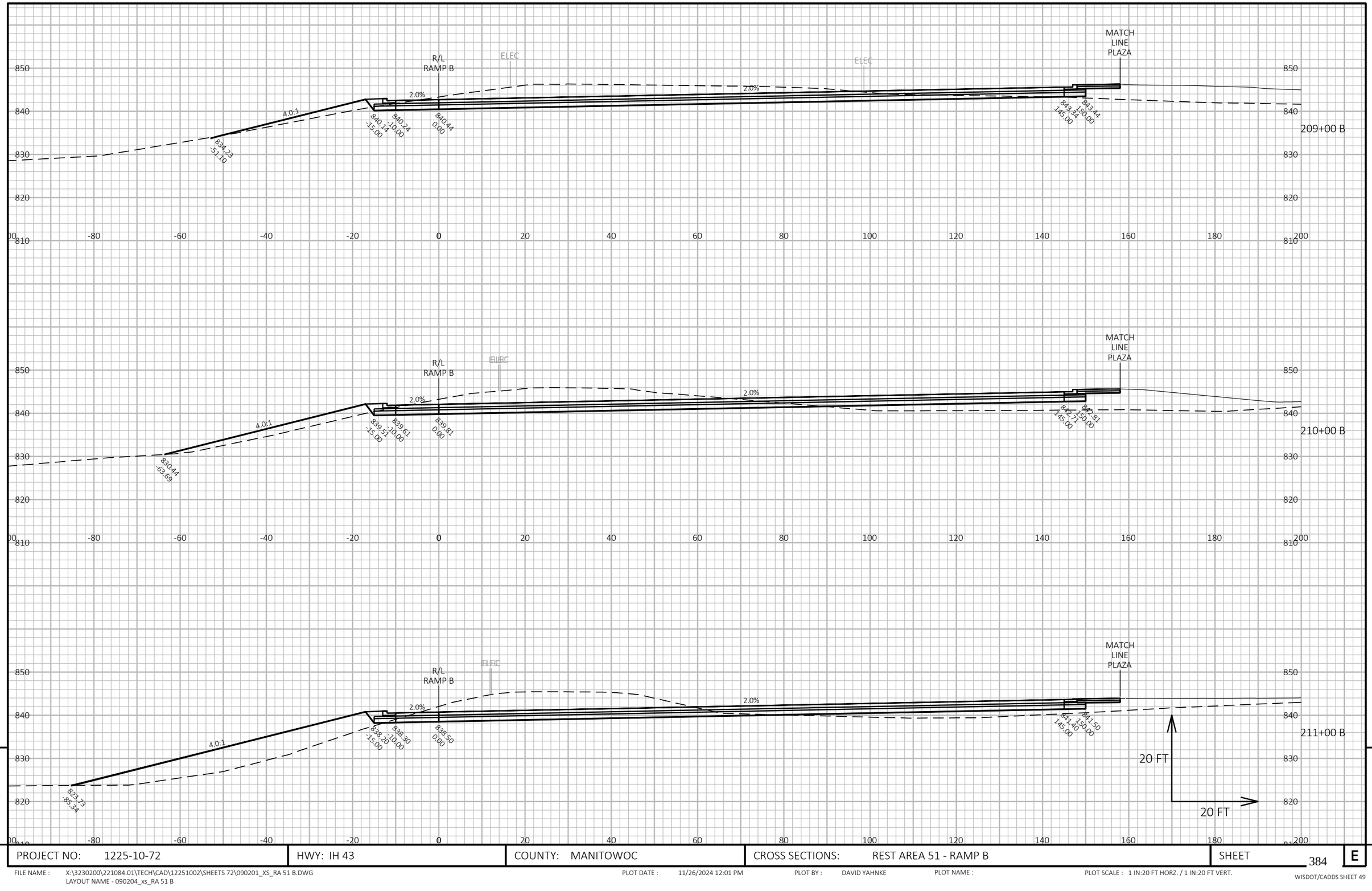


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - RAMP B	SHEET 383	E

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LAYOUT NAME - 090203_xs_RA 51 B

PLOT DATE : 11/26/2024 12:01 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



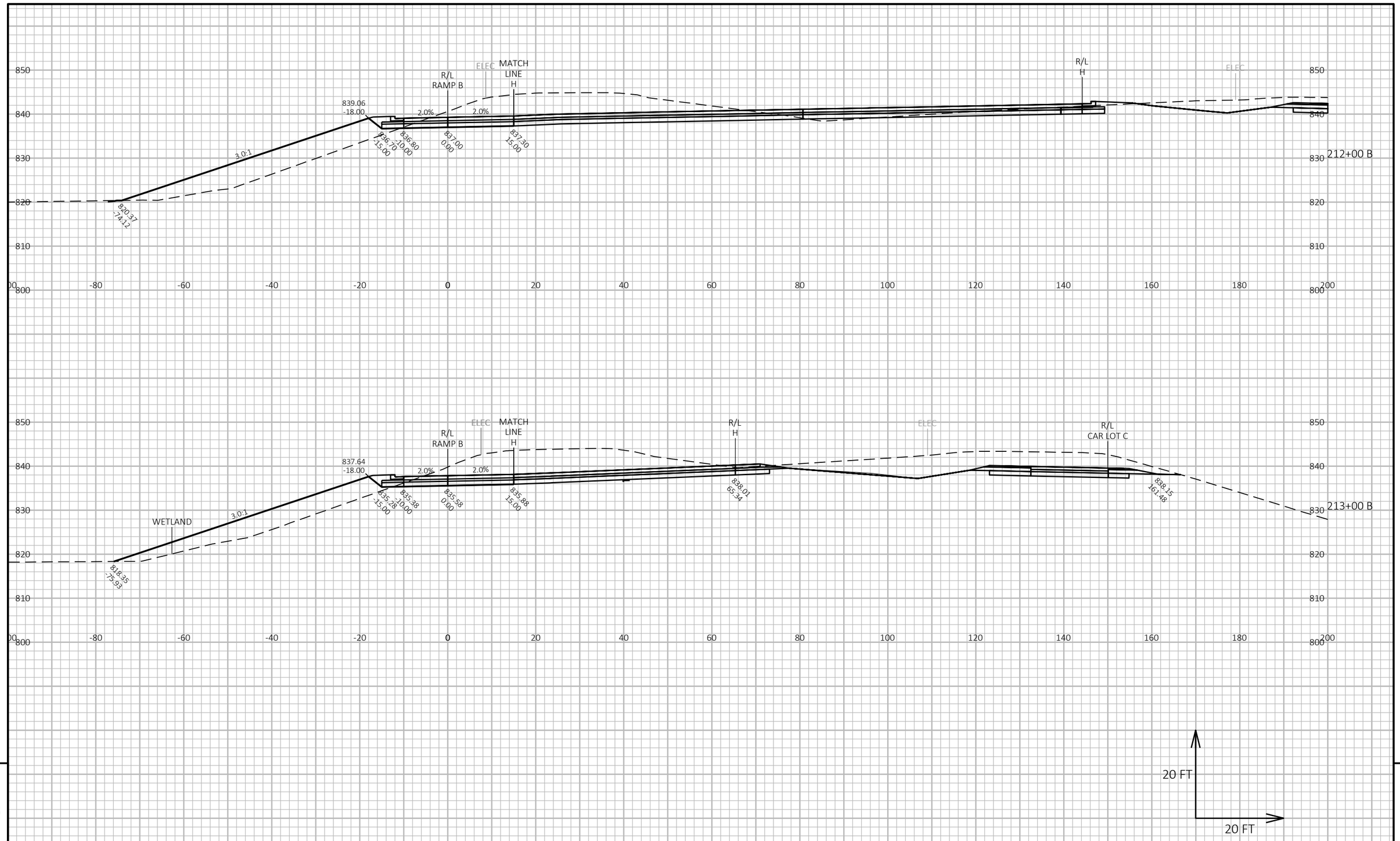
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - RAMP B	SHEET 384	E

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LAYOUT NAME - 090204_xs_RA 51 B

PLOT DATE : 11/26/2024 12:01 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

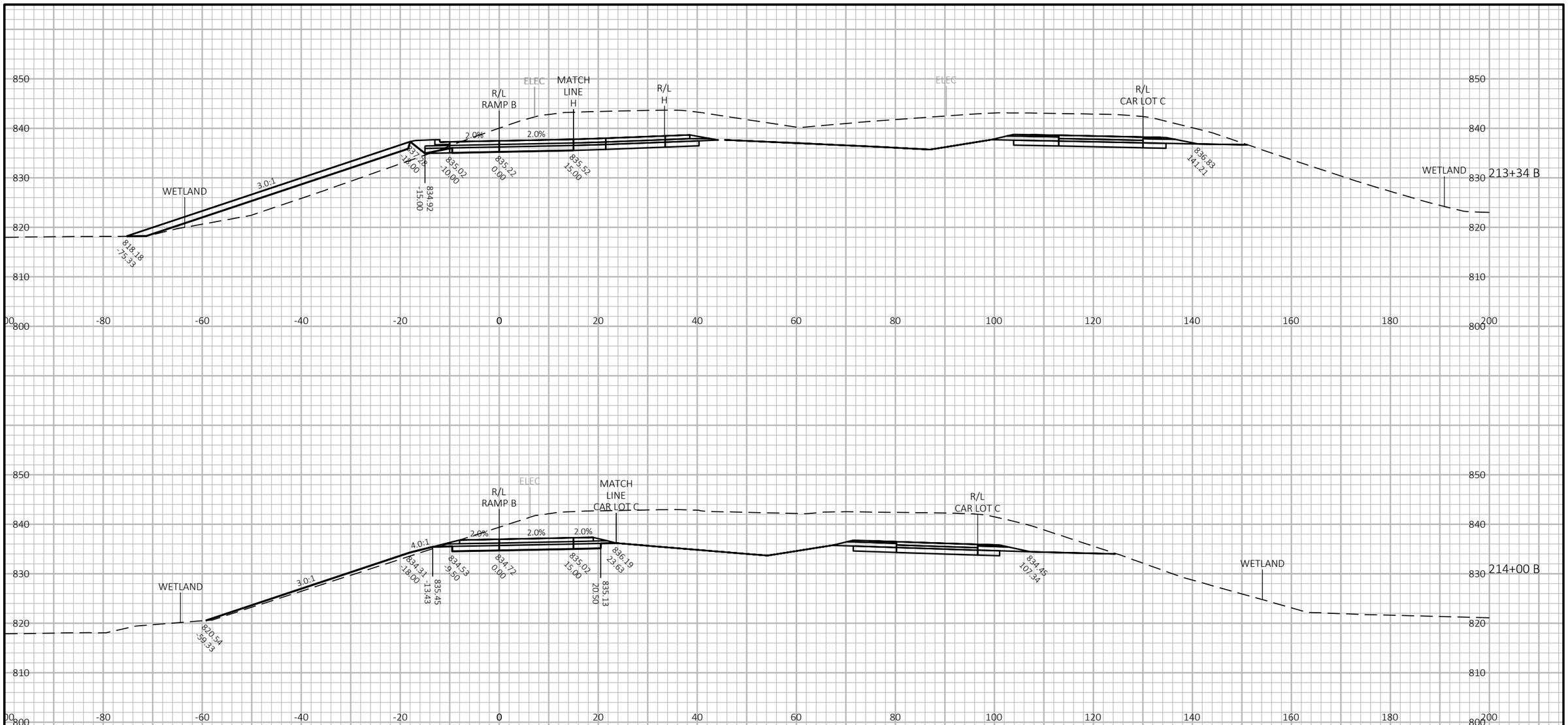


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - RAMP B	SHEET 385	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 B.DWG
LAYOUT NAME - 090205_xs_RA 51 B

PLOT DATE : 11/26/2024 12:01 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

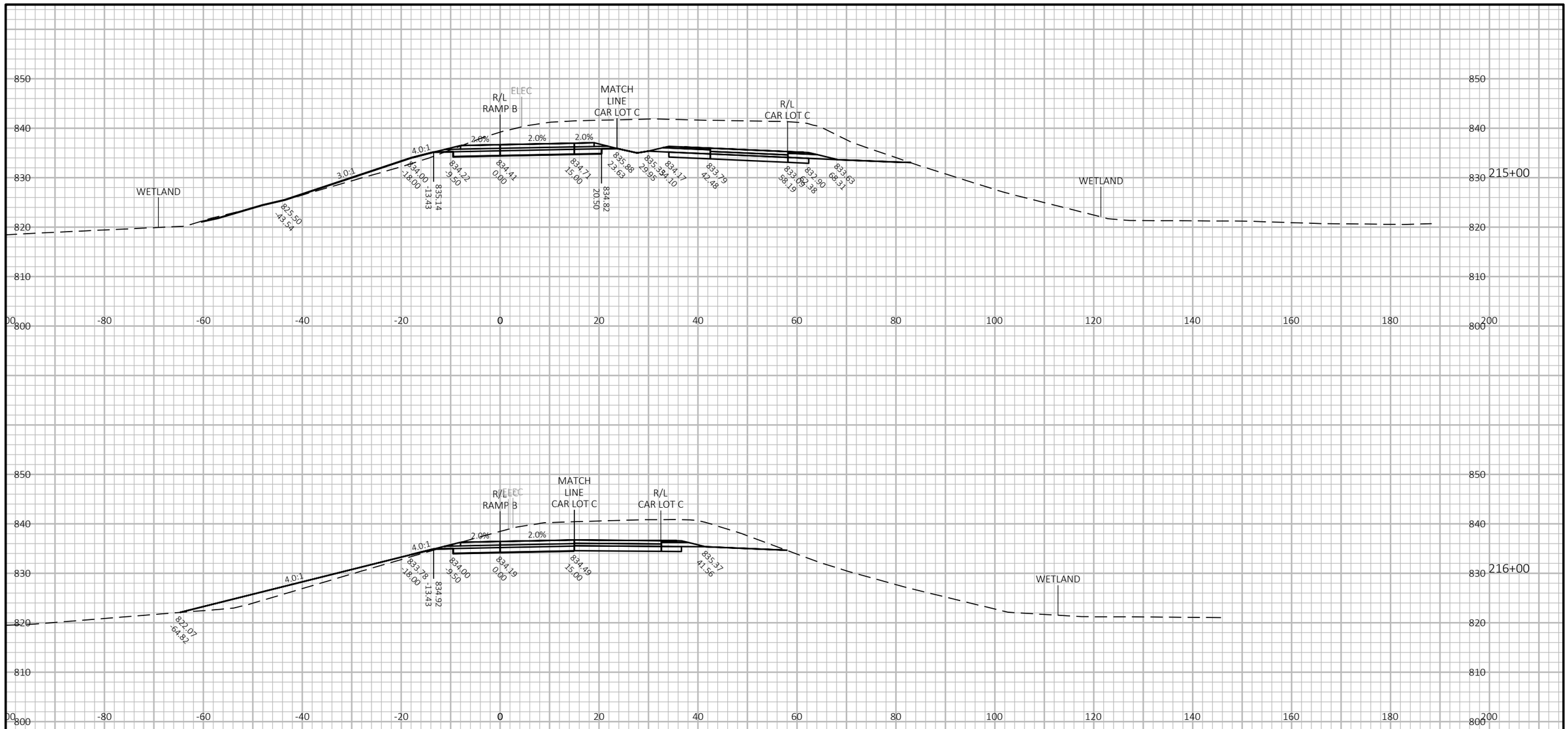


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - RAMP B	SHEET 386	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 B.DWG
LAYOUT NAME - 090206_xs_RA 51 B

PLOT DATE : 11/26/2024 12:01 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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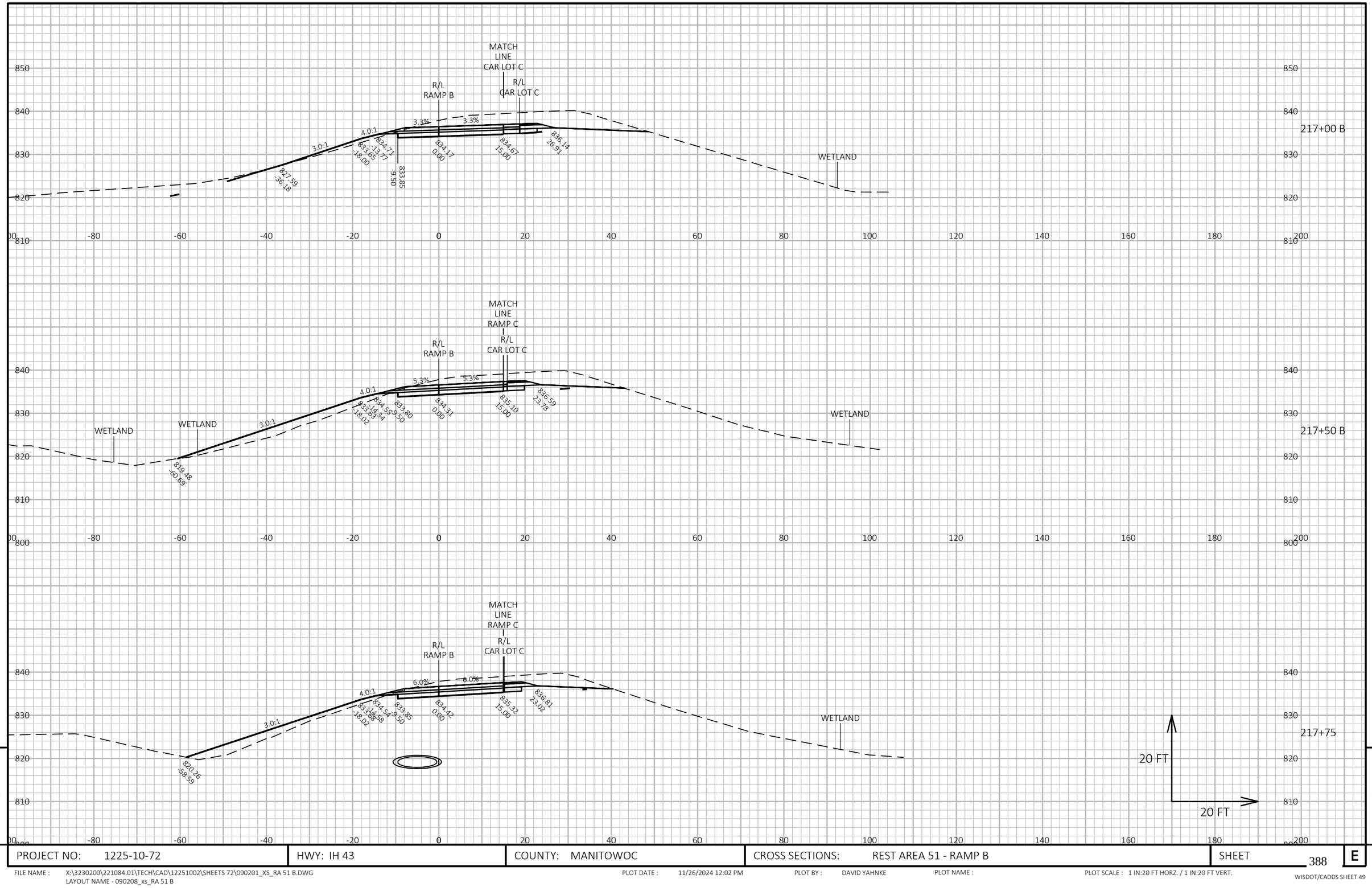
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - RAMP B	SHEET 387	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 B.DWG
LAYOUT NAME - 090207_xs_RA 51 B

PLOT DATE : 11/26/2024 12:01 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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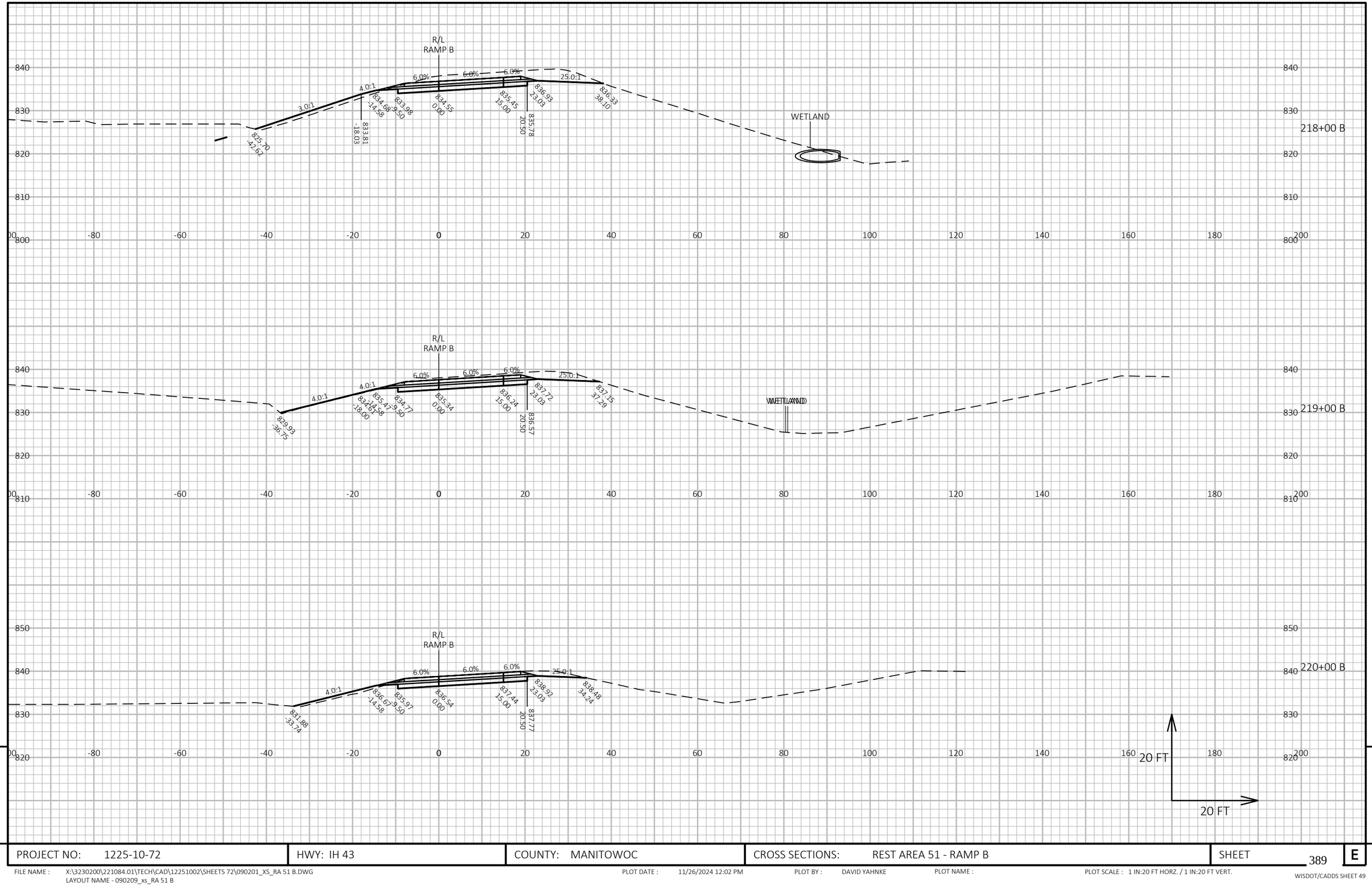
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - RAMP B	SHEET 388	E

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LAYOUT NAME - 090208_xs_RA 51 B

PLOT DATE : 11/26/2024 12:02 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

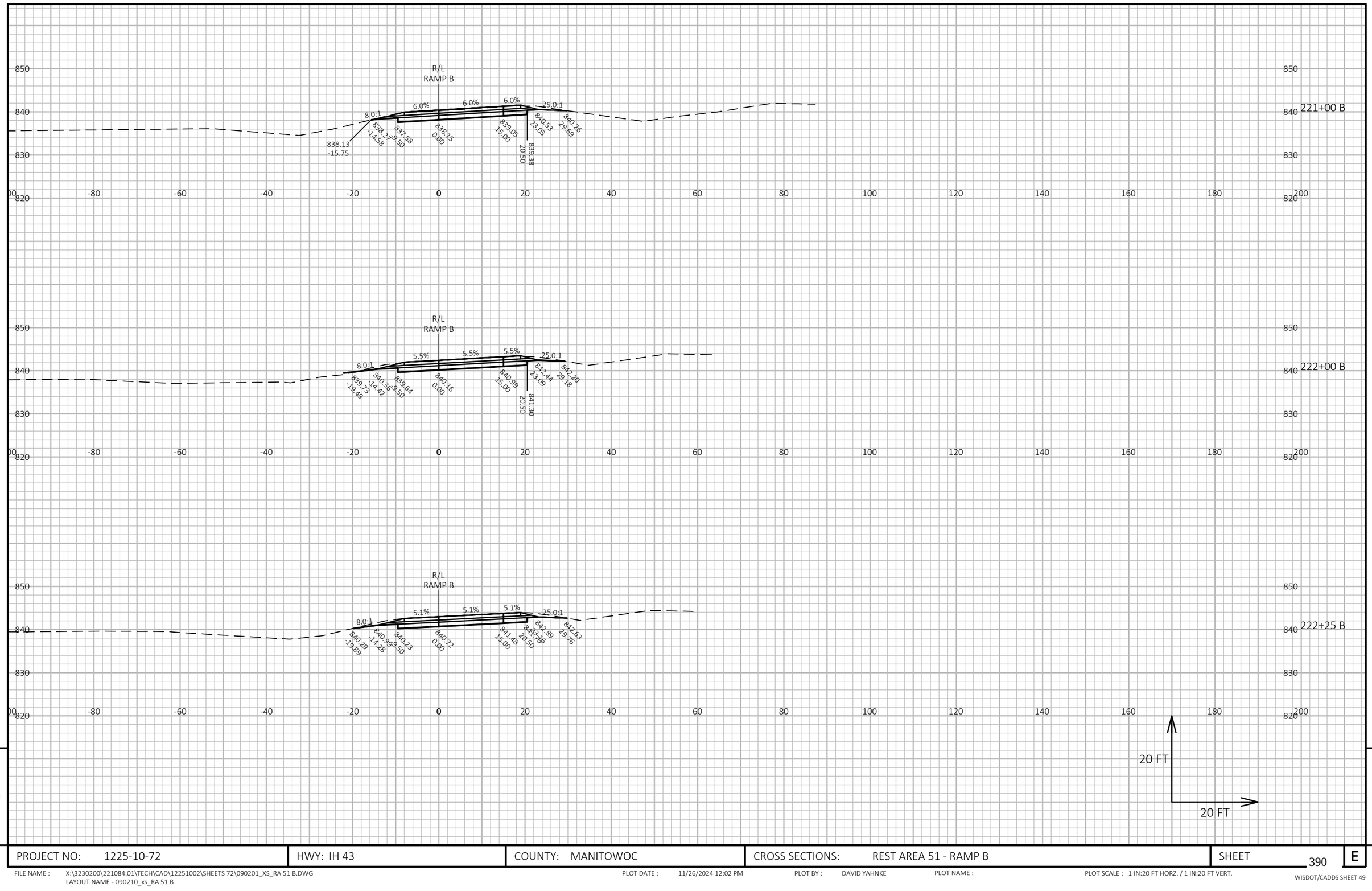


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - RAMP B	SHEET 389	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 B.DWG
LAYOUT NAME - 090209_xs_RA 51 B

PLOT DATE : 11/26/2024 12:02 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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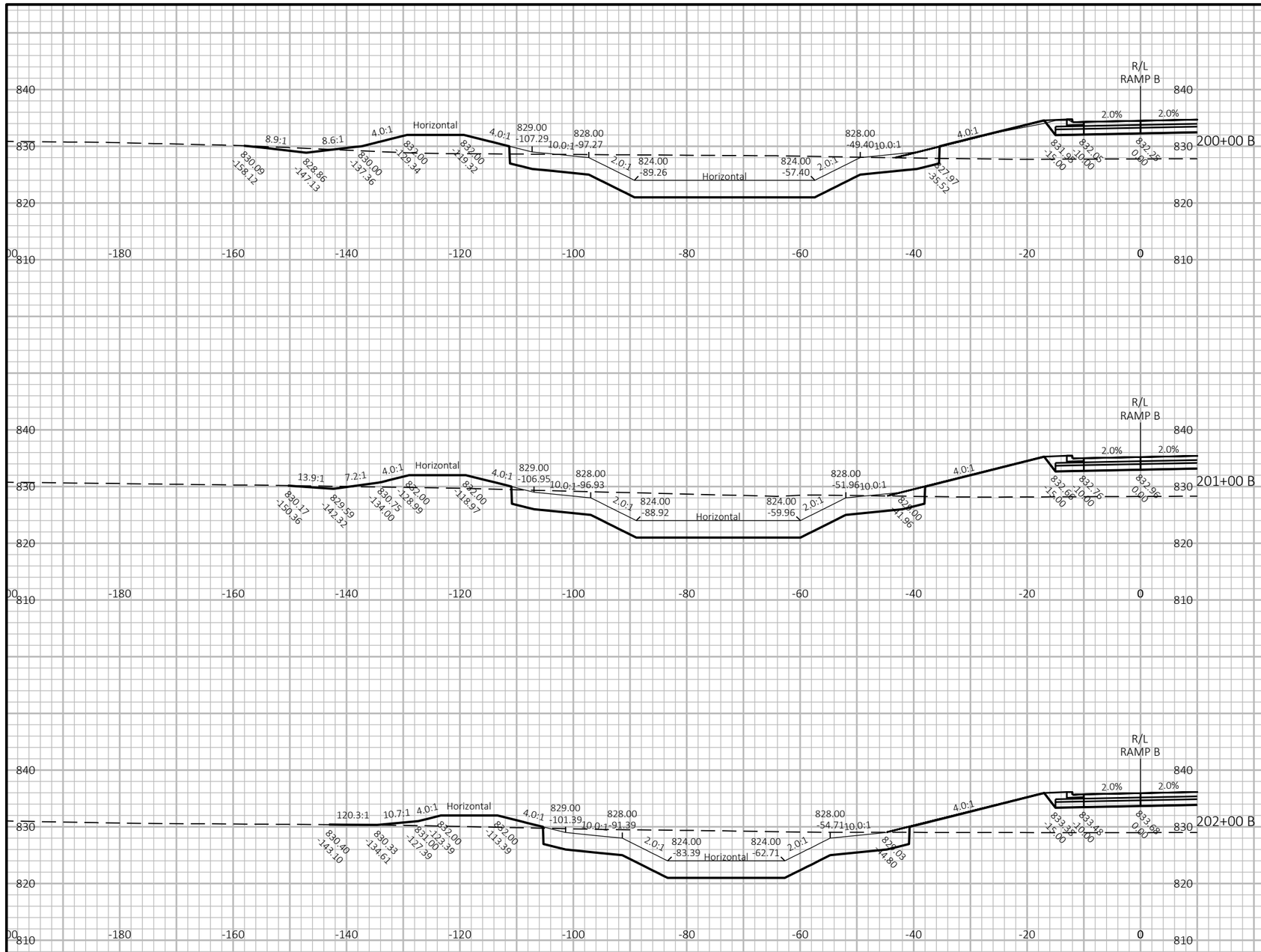
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - RAMP B	SHEET 390	E

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LAYOUT NAME - 090210_xs_RA 51 B

PLOT DATE : 11/26/2024 12:02 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

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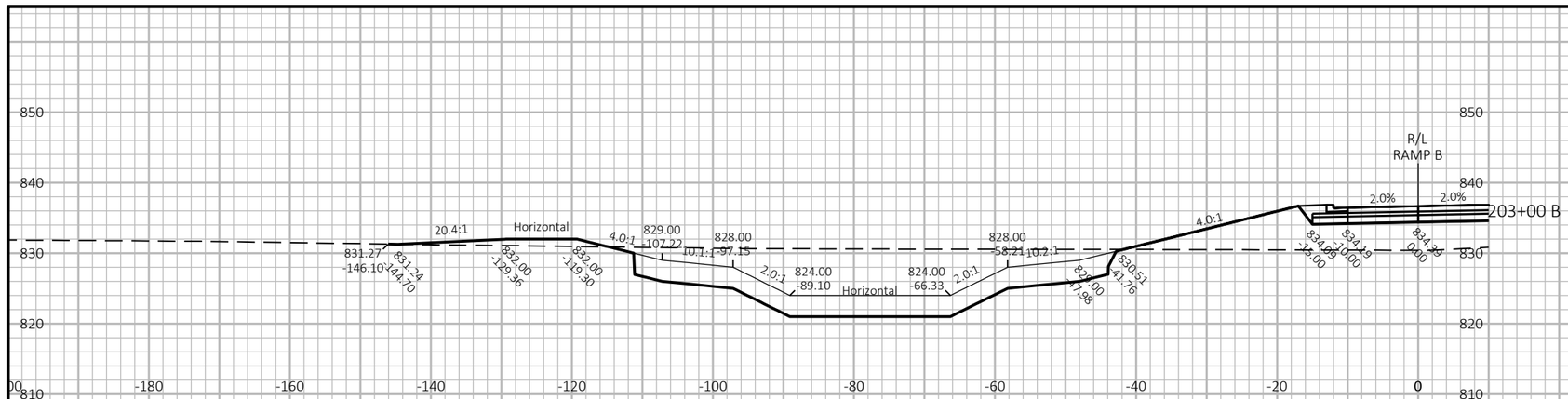


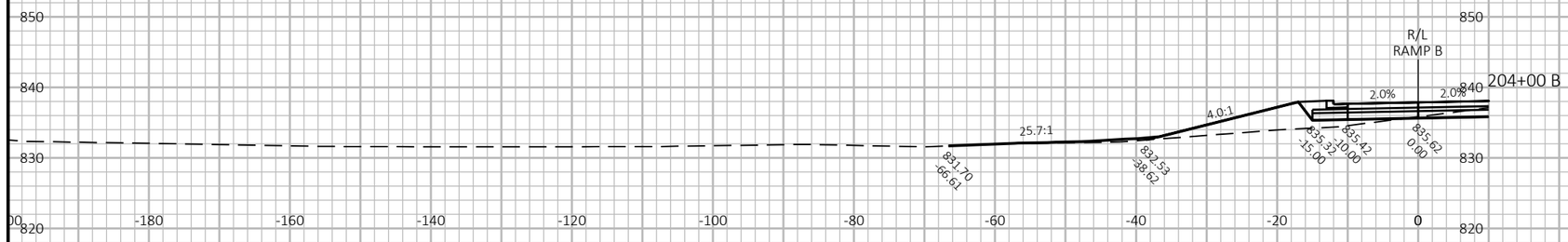
PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - RAMP B STORM WATER BASIN	SHEET 391 E

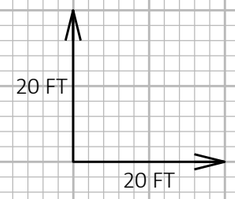
FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 B POND.DWG
LAYOUT NAME - 090201_xs_RA 51 B

PLOT DATE : 11/26/2024 12:02 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49







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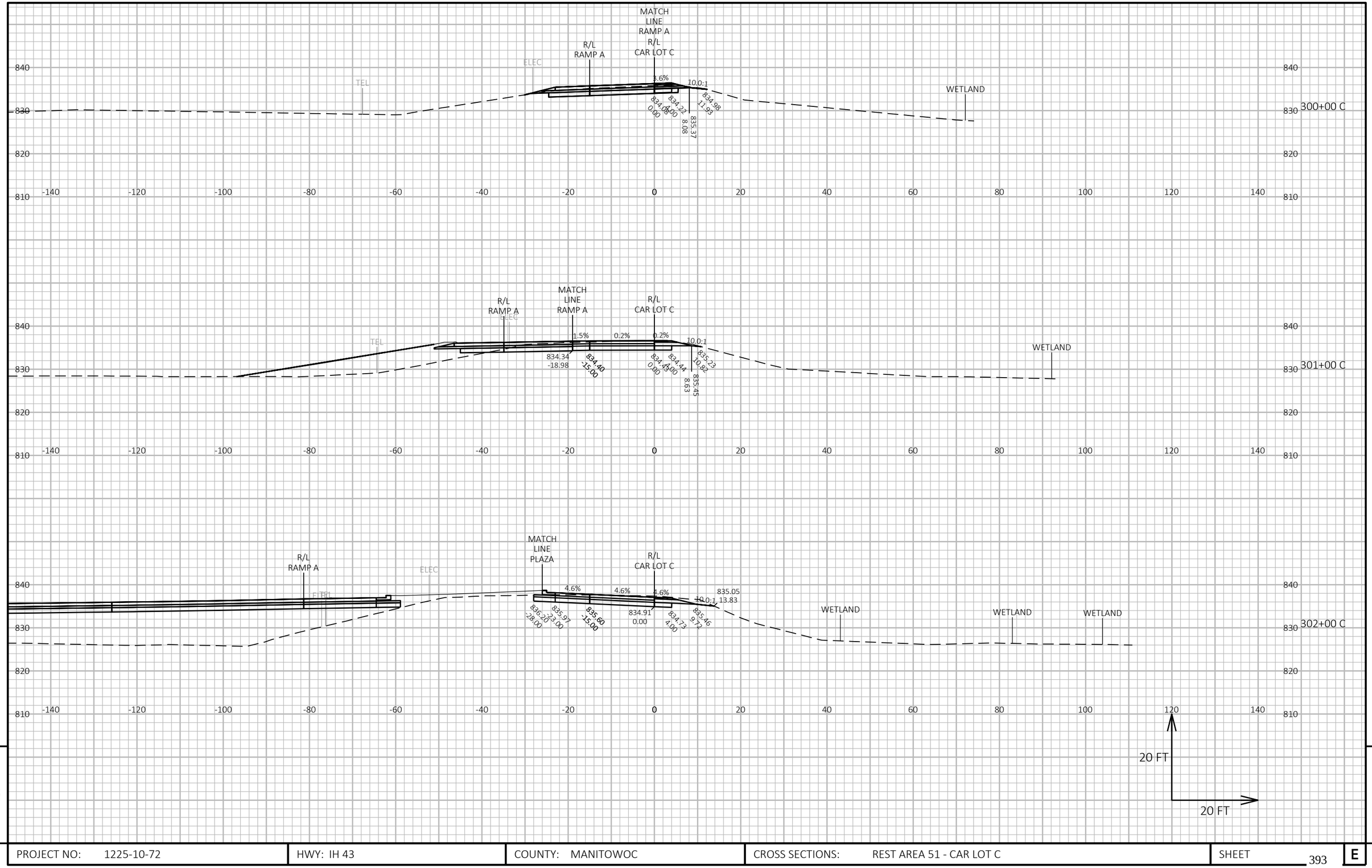
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - RAMP B STORM WATER BASIN	SHEET 392	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 B POND.DWG
LAYOUT NAME - 090202_xs_RA 51 B

PLOT DATE : 11/26/2024 12:02 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

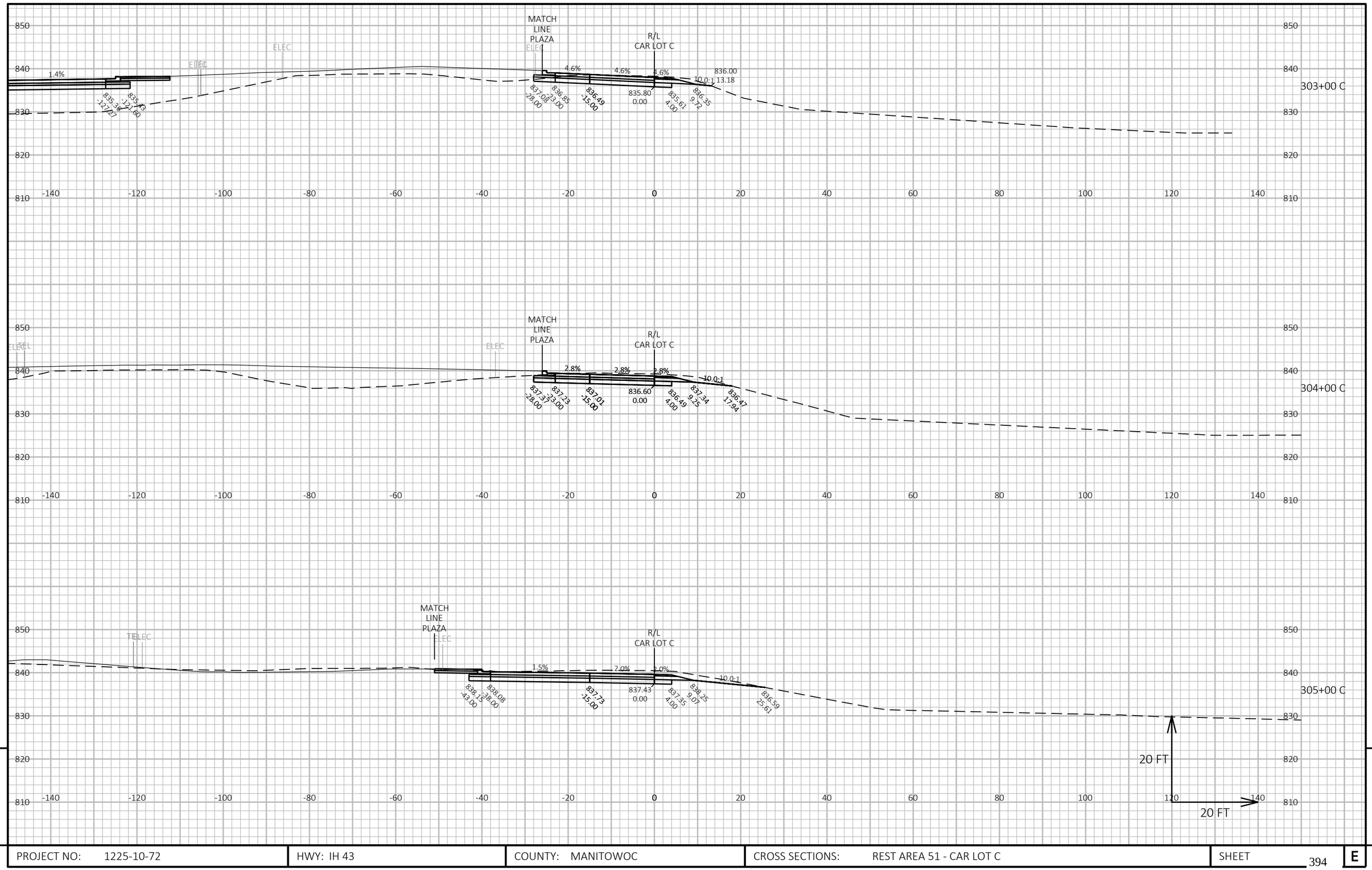


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - CAR LOT C	SHEET 393	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 C.DWG
LAYOUT NAME - 090201_xs

PLOT DATE : 11/26/2024 12:03 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

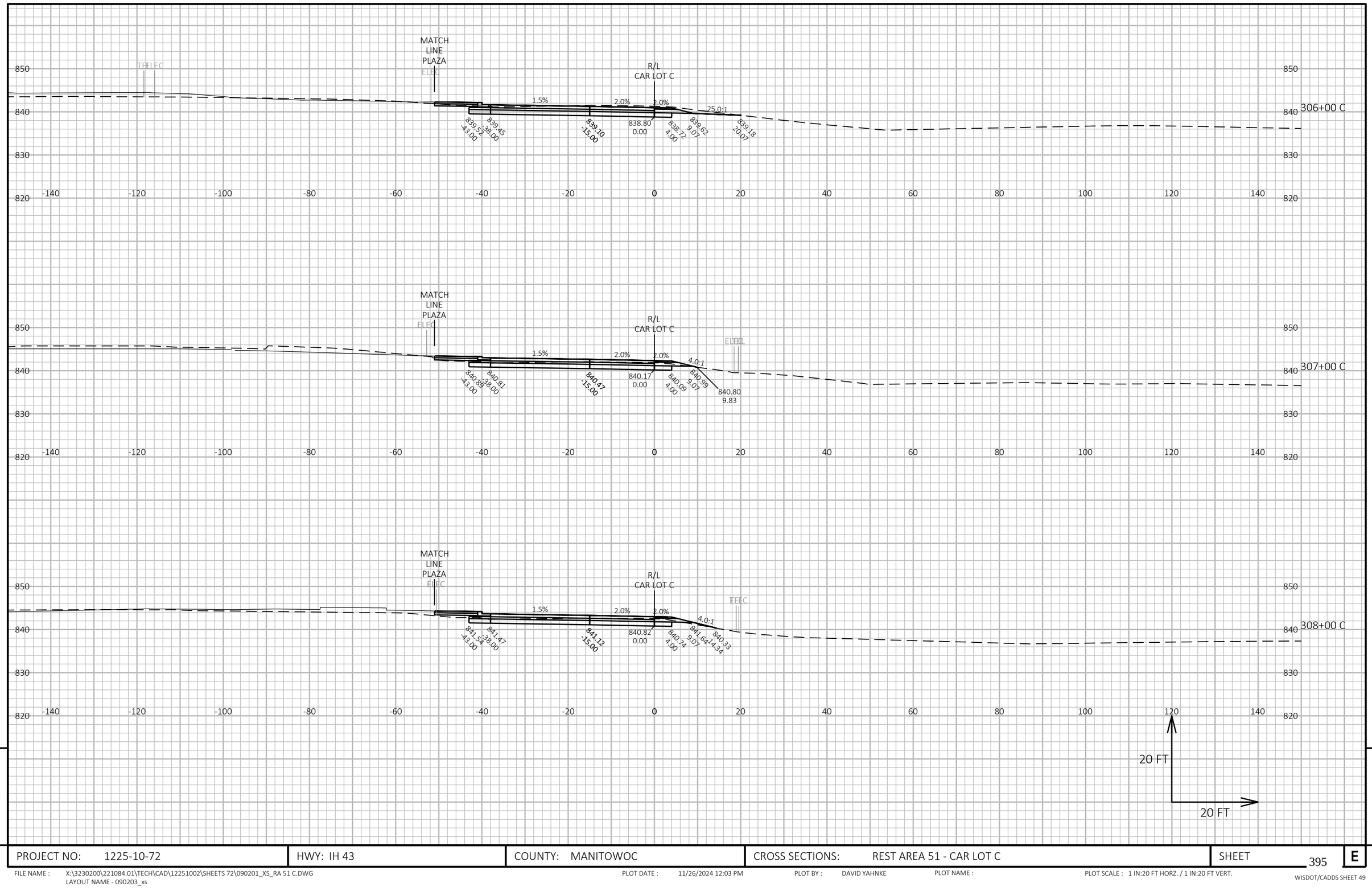


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - CAR LOT C	SHEET 394	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 C.DWG
LAYOUT NAME - 090202_xs

PLOT DATE : 11/26/2024 12:03 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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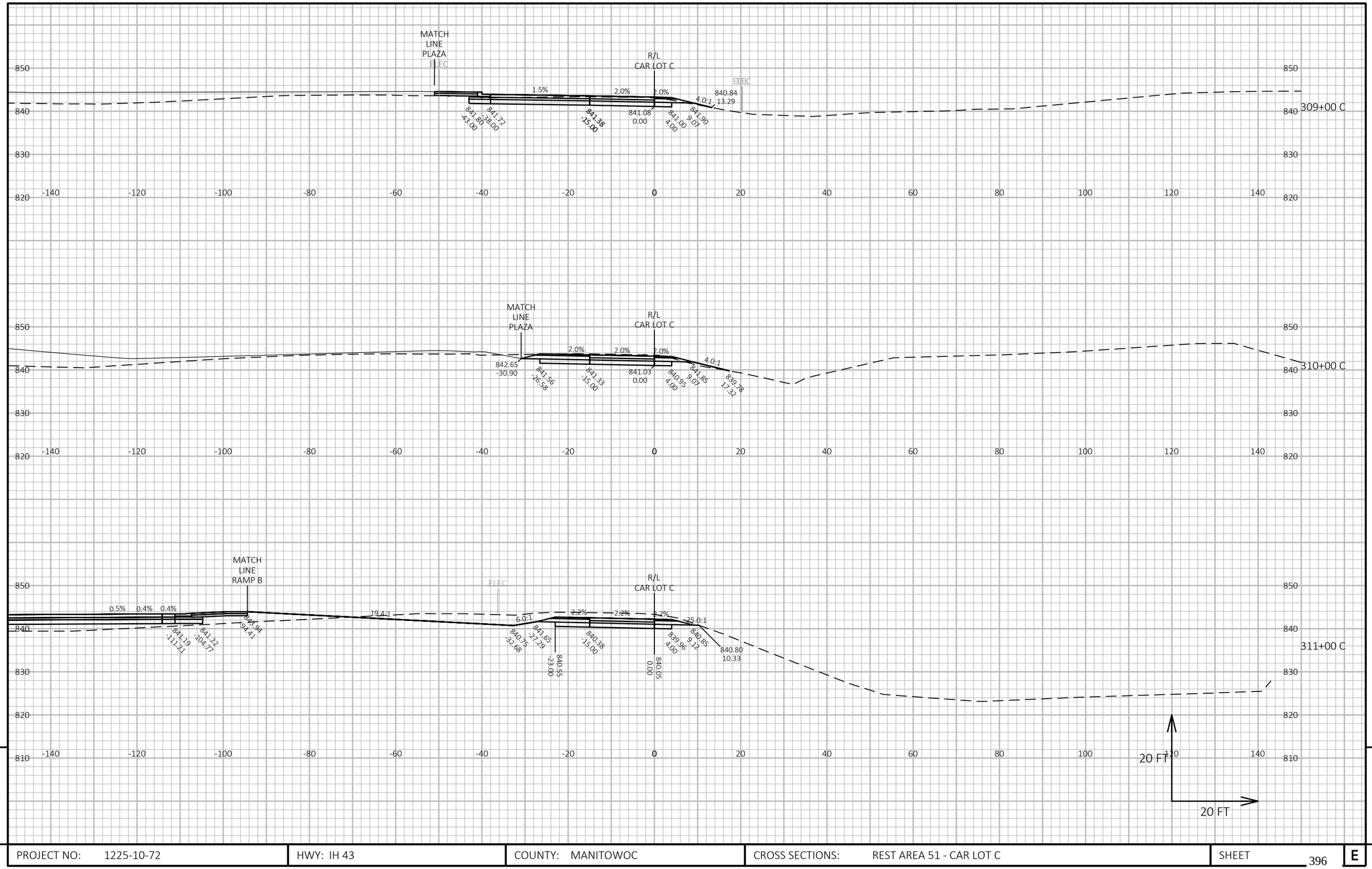
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - CAR LOT C	SHEET 395	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 C.DWG
LAYOUT NAME - 090203_xs

PLOT DATE : 11/26/2024 12:03 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

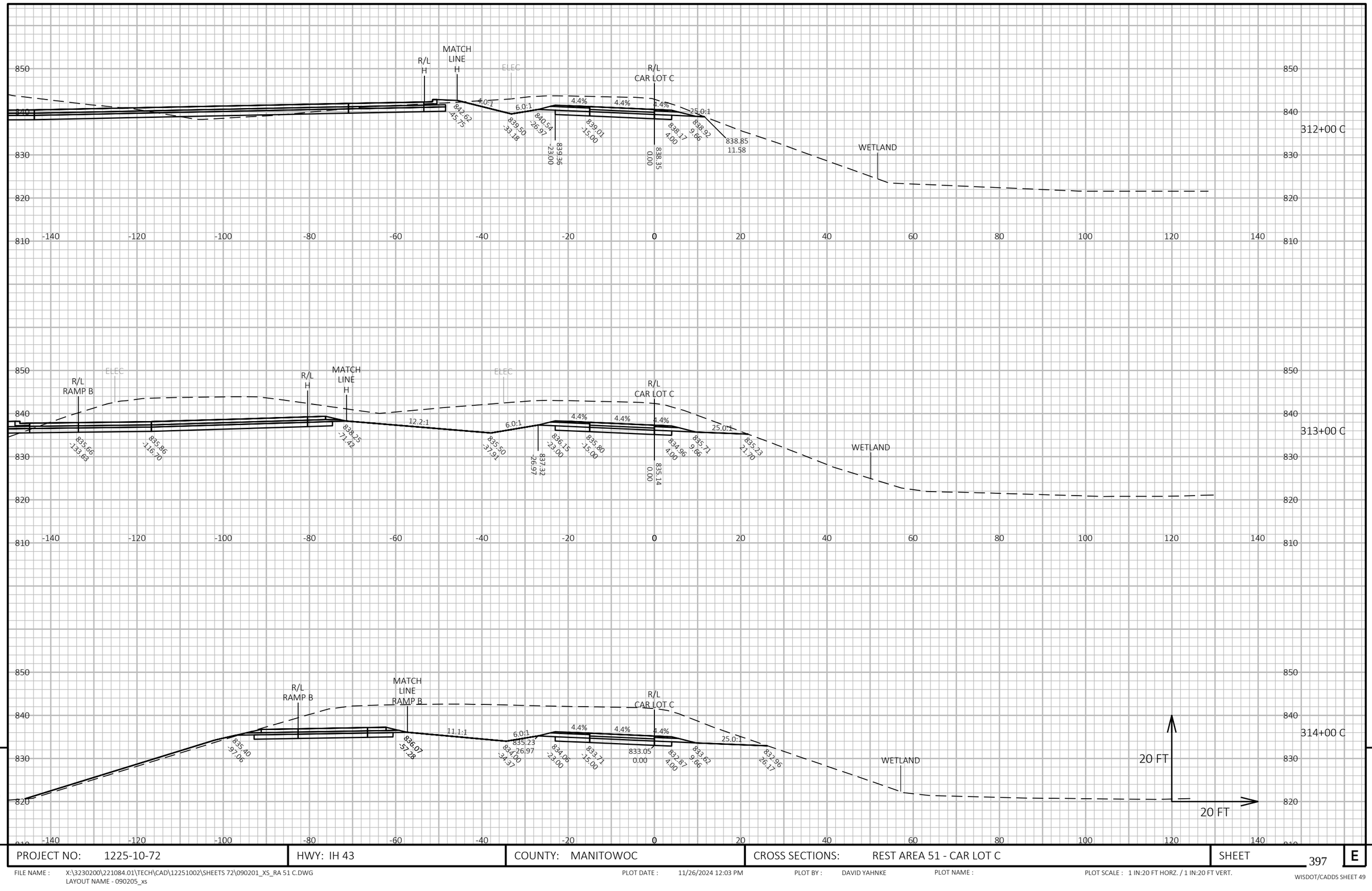


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - CAR LOT C	SHEET 396	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 C.DWG
LAYOUT NAME - 090204_xs

PLOT DATE : 11/26/2024 12:03 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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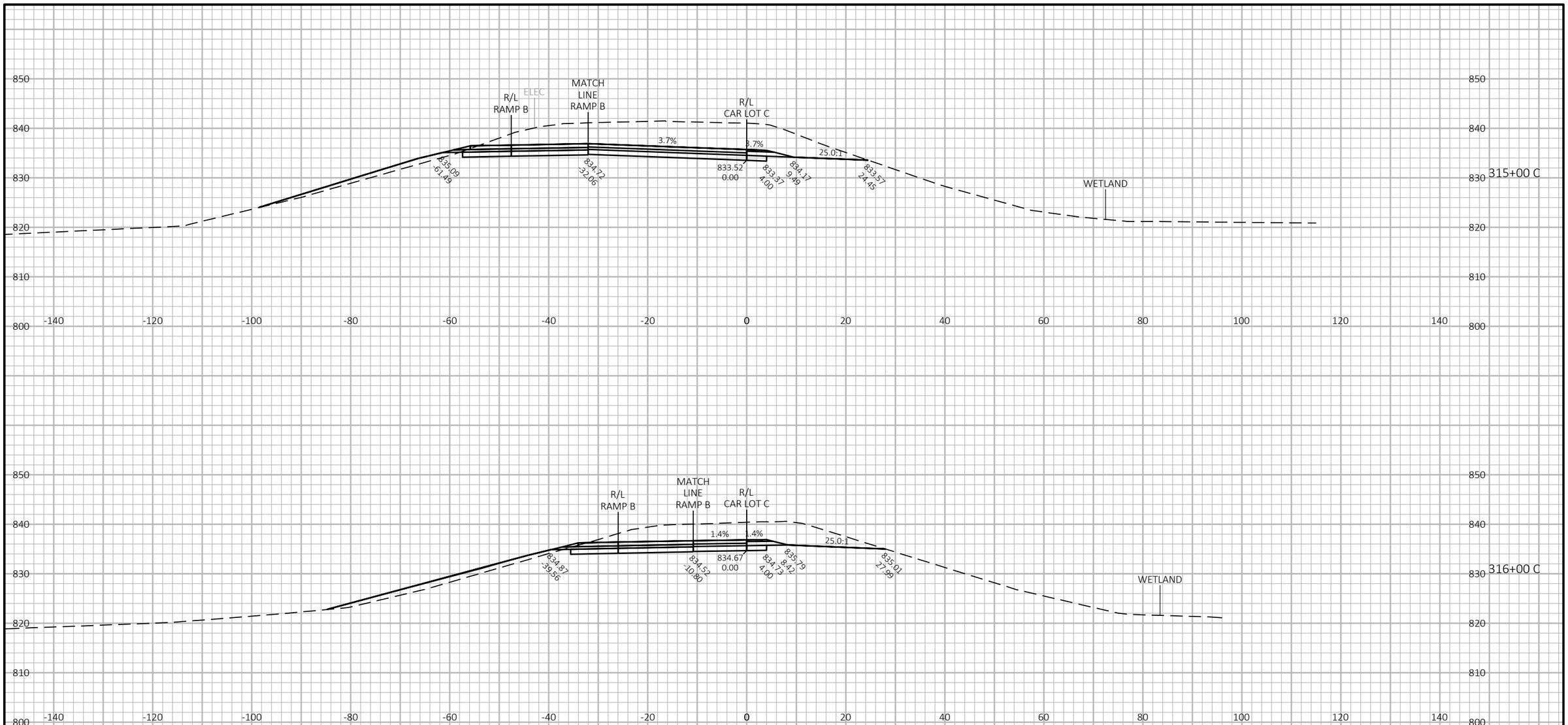
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - CAR LOT C	SHEET 397	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 C.DWG
LAYOUT NAME - 090205_xs

PLOT DATE : 11/26/2024 12:03 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

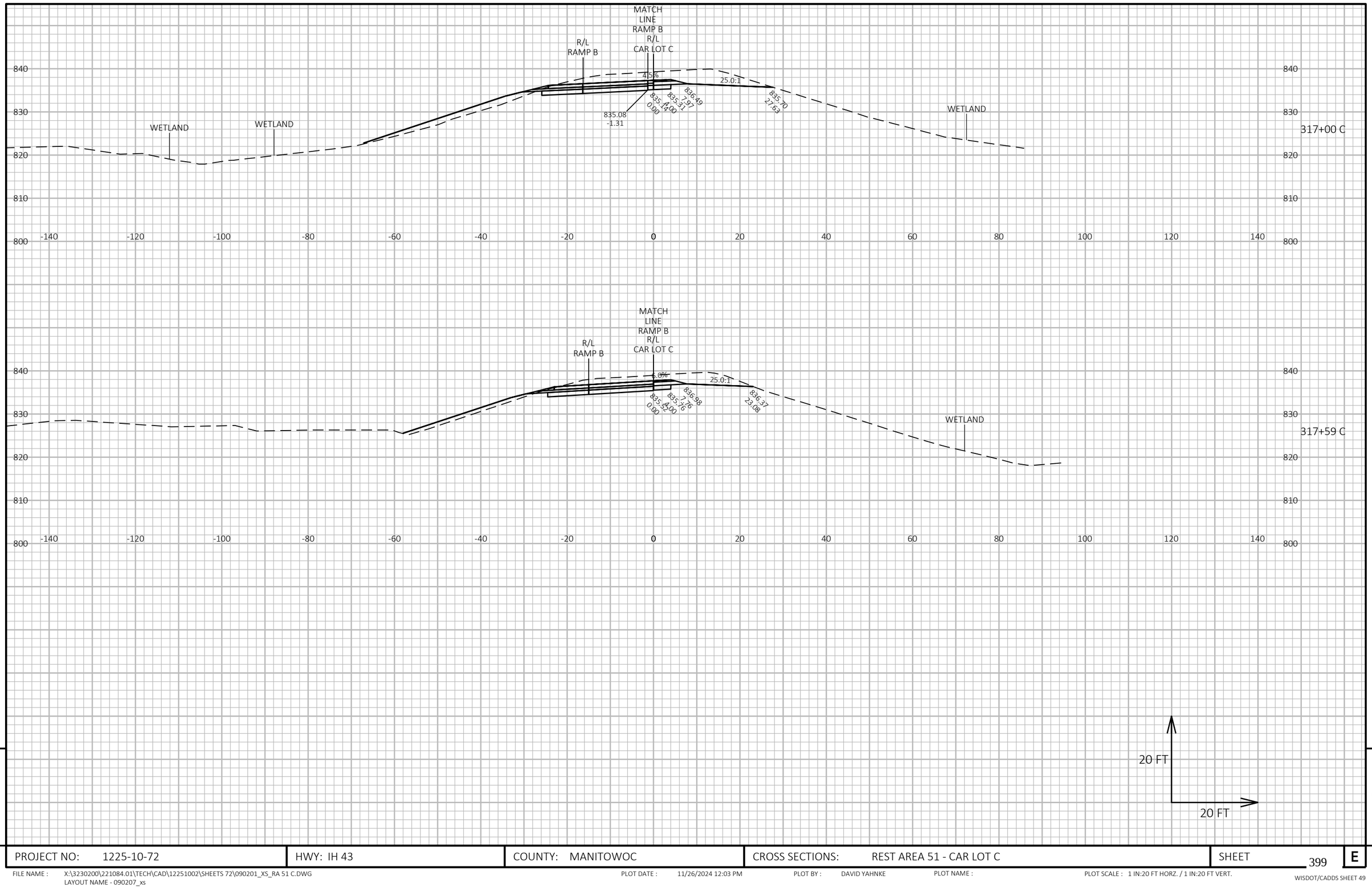


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - CAR LOT C	SHEET 398	E

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LAYOUT NAME - 090206_xs

PLOT DATE : 11/26/2024 12:03 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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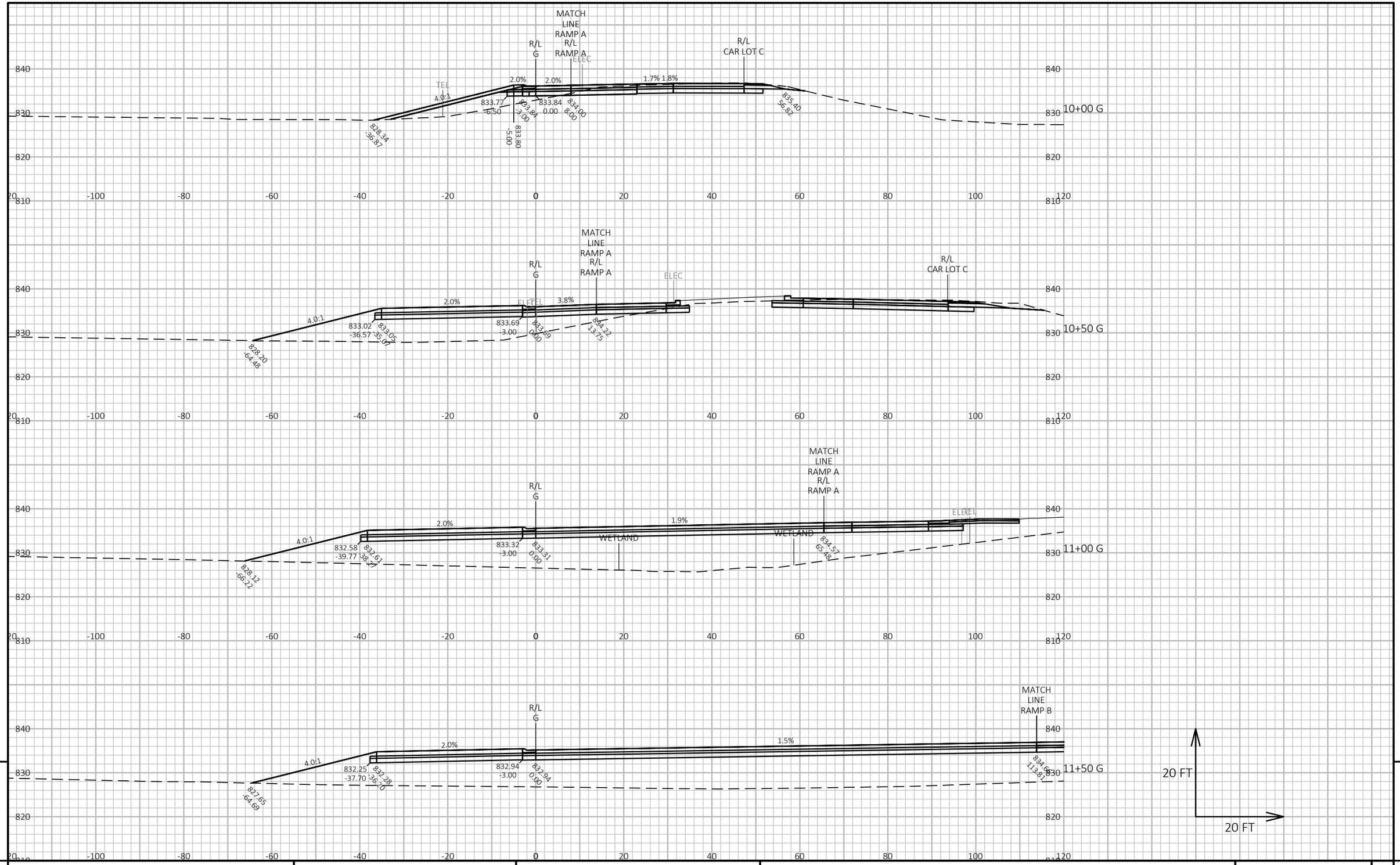
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - CAR LOT C	SHEET 399	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 C.DWG
LAYOUT NAME - 090207_xs

PLOT DATE : 11/26/2024 12:03 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

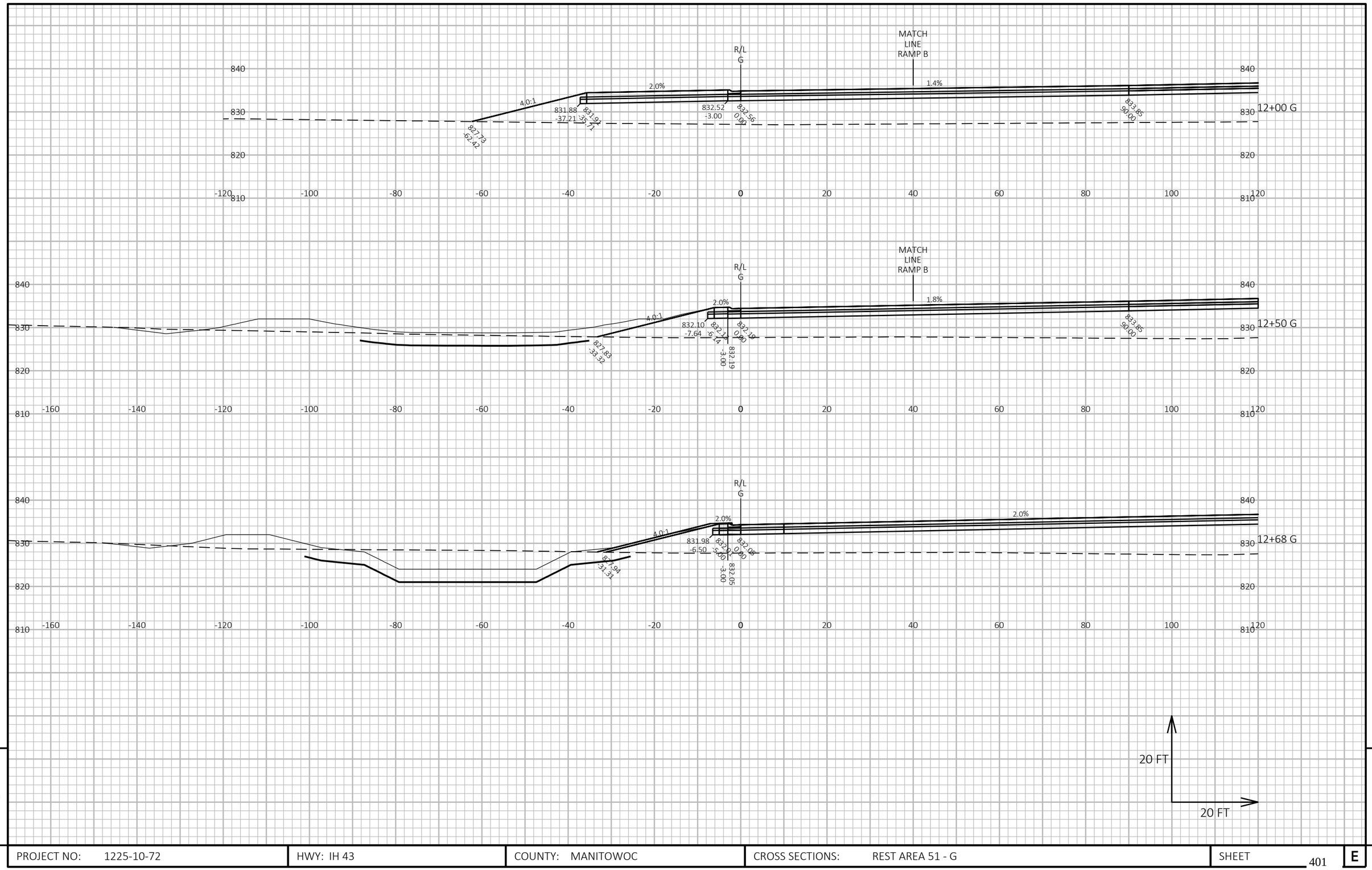


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - G	SHEET 400	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 G.DWG
LAYOUT NAME - 090201_xs

PLOT DATE : 11/26/2024 12:03 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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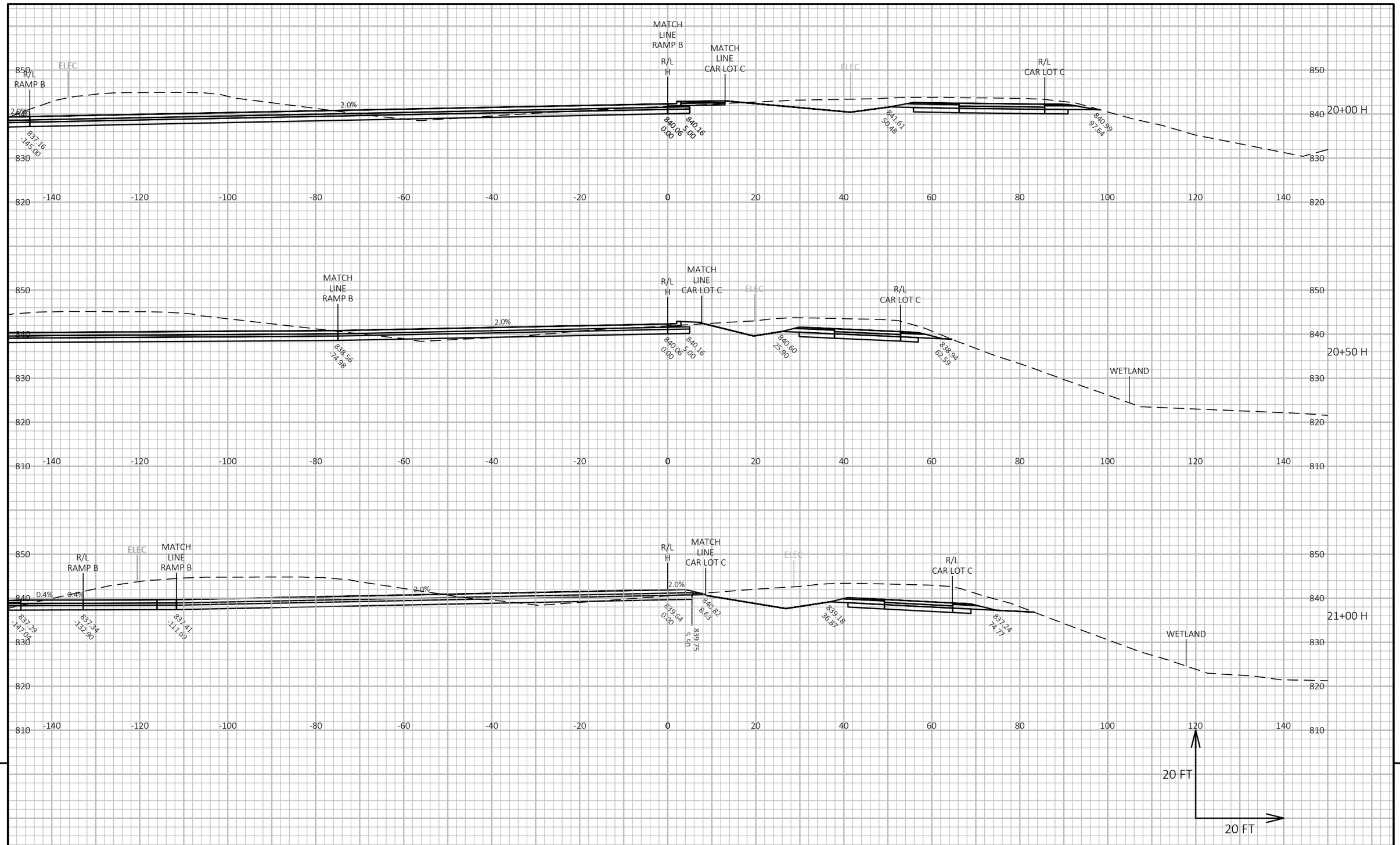
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FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 G.DWG
LAYOUT NAME - 090202_xs

PLOT DATE : 11/26/2024 12:03 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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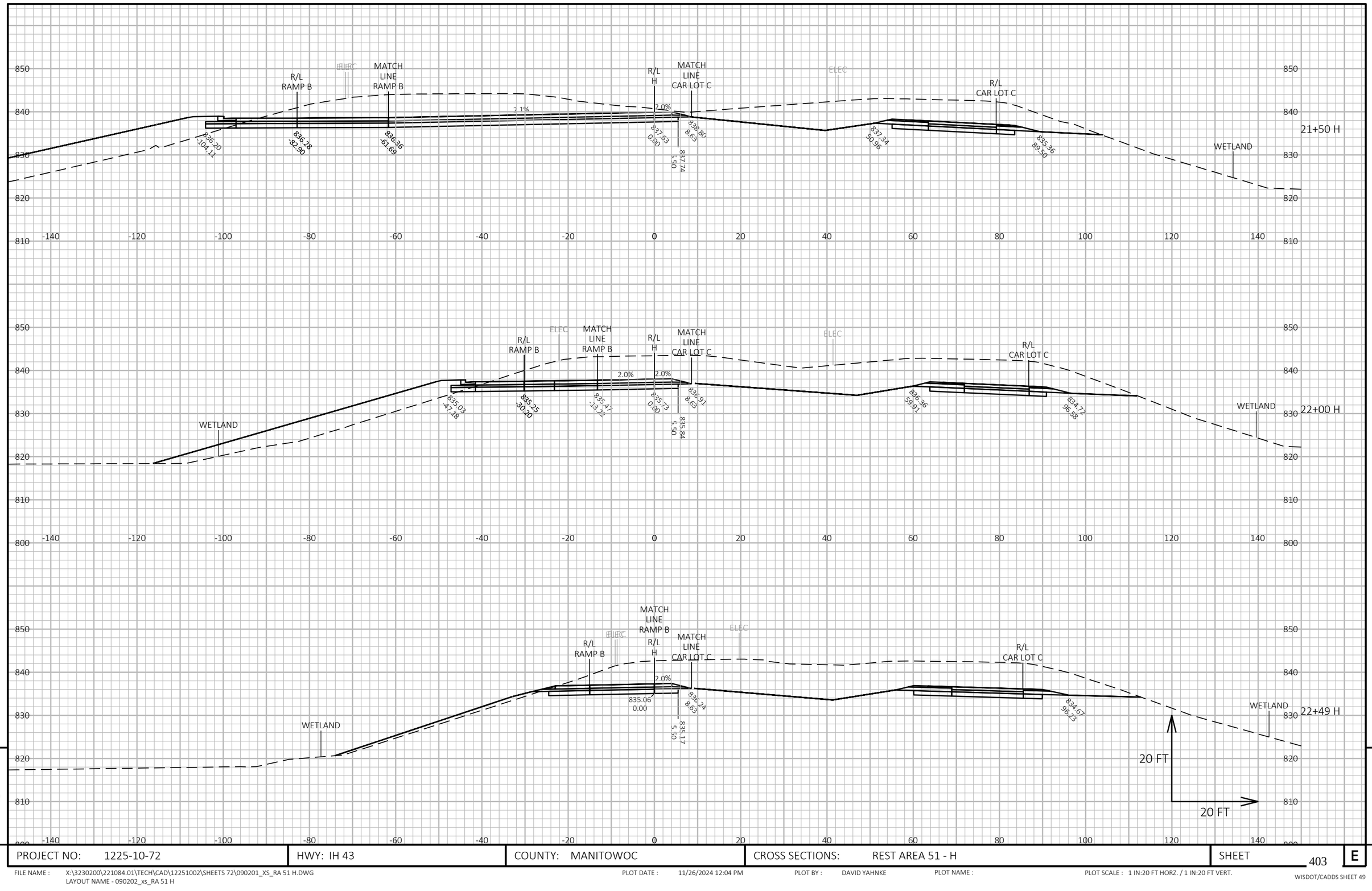
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - H	SHEET 402	E

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LAYOUT NAME - 090201_xs_RA 51 H

PLOT DATE : 11/26/2024 12:04 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

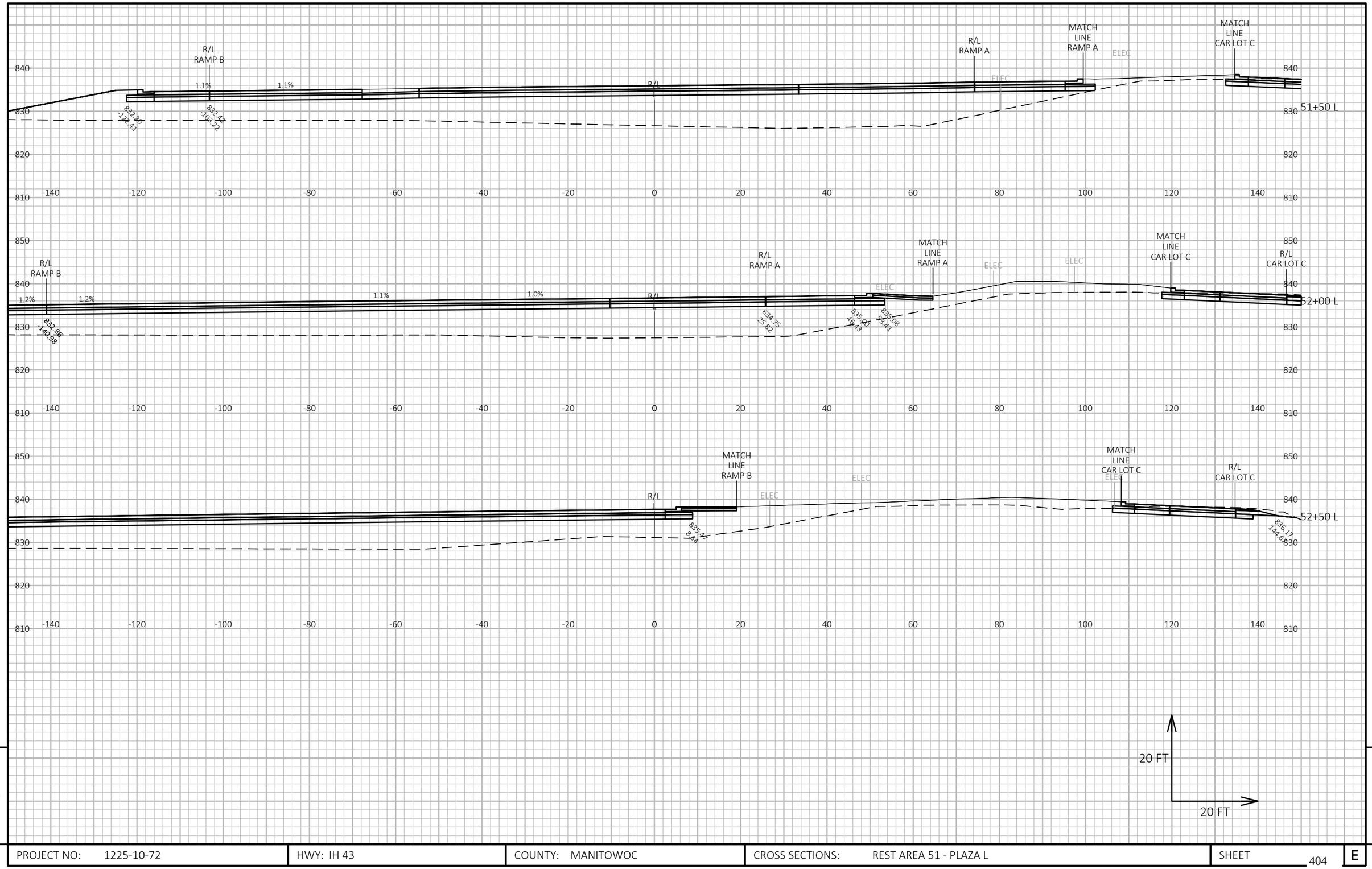


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - H	SHEET 403	E

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LAYOUT NAME - 090202_xs_RA 51 H

PLOT DATE : 11/26/2024 12:04 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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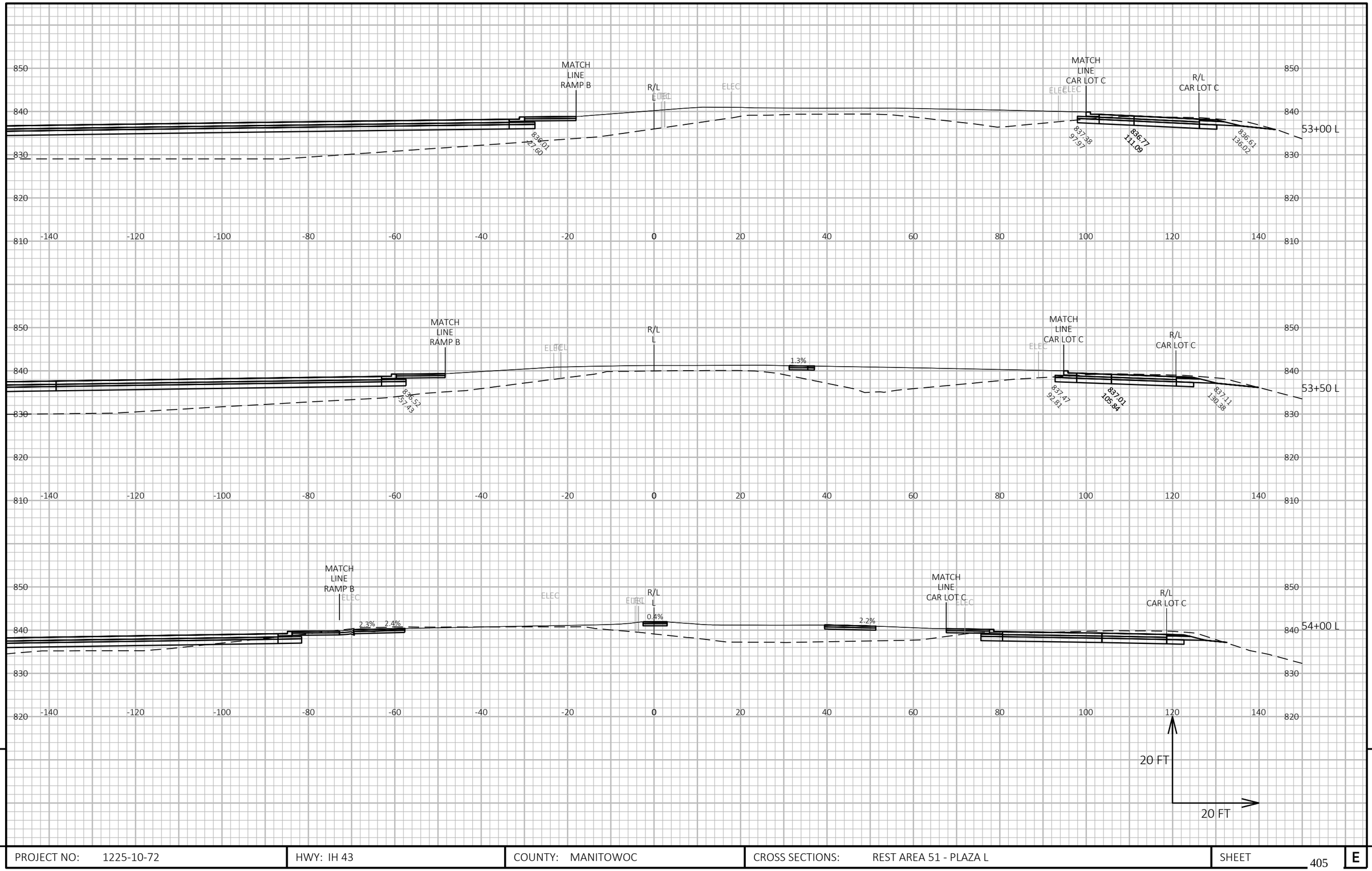
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - PLAZA L	SHEET 404	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 L.DWG
LAYOUT NAME - 090201_xs_RA 51 L

PLOT DATE : 11/26/2024 12:04 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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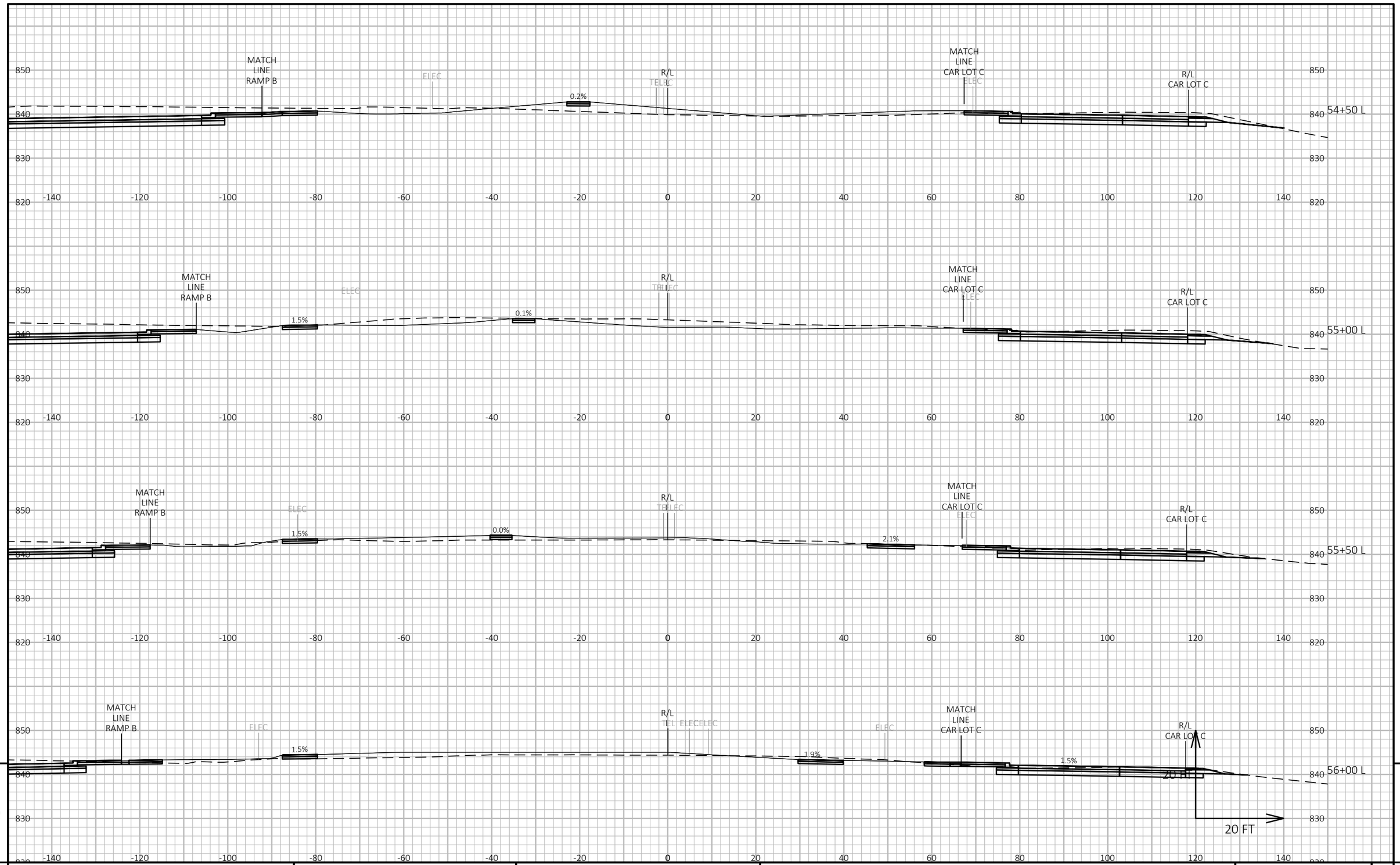
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FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 L.DWG
LAYOUT NAME - 090202_xs_RA 51 L

PLOT DATE : 11/26/2024 12:04 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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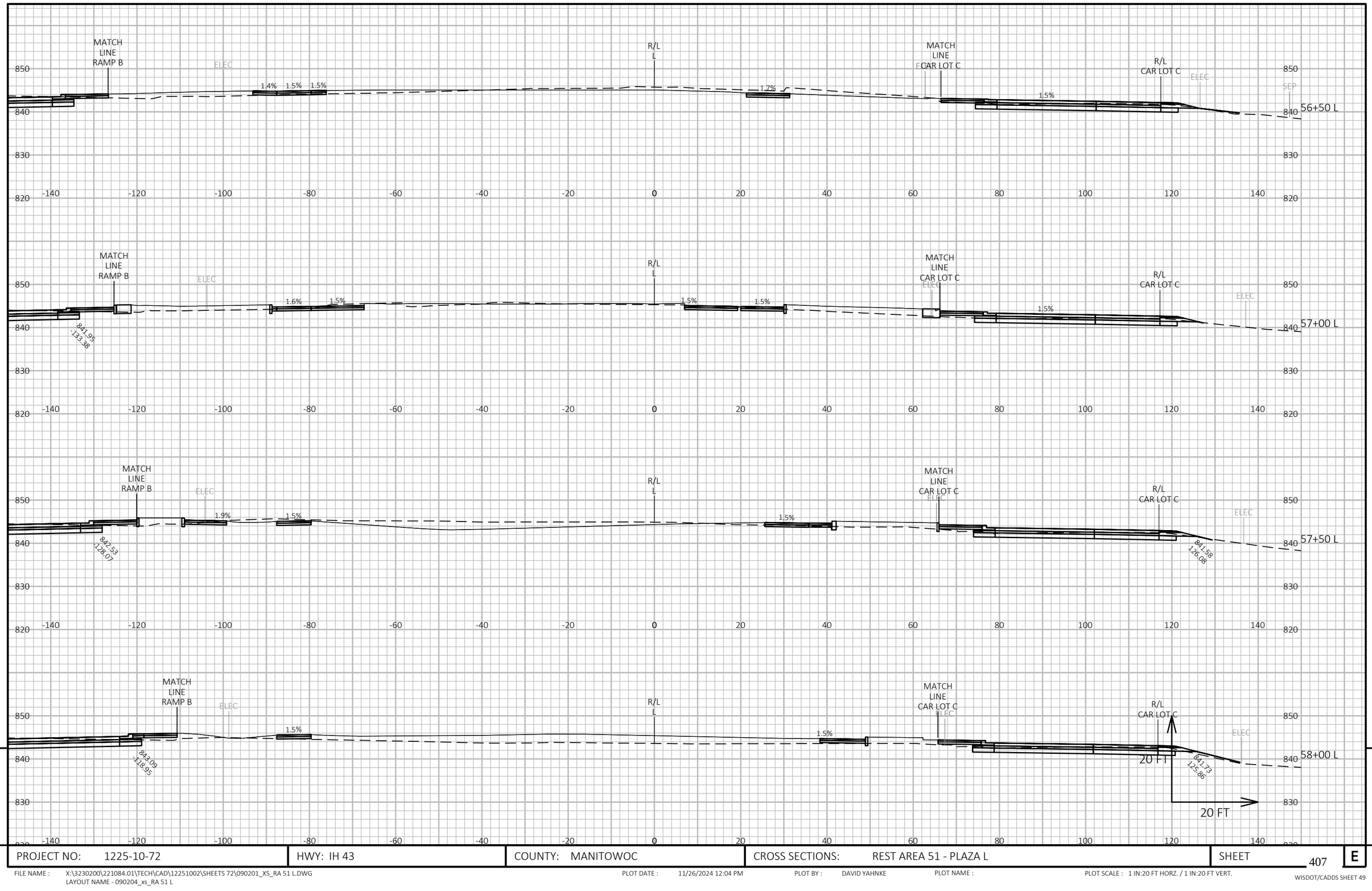
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - PLAZA L	SHEET 406	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 L.DWG
LAYOUT NAME - 090203_xs_RA 51 L

PLOT DATE : 11/26/2024 12:04 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



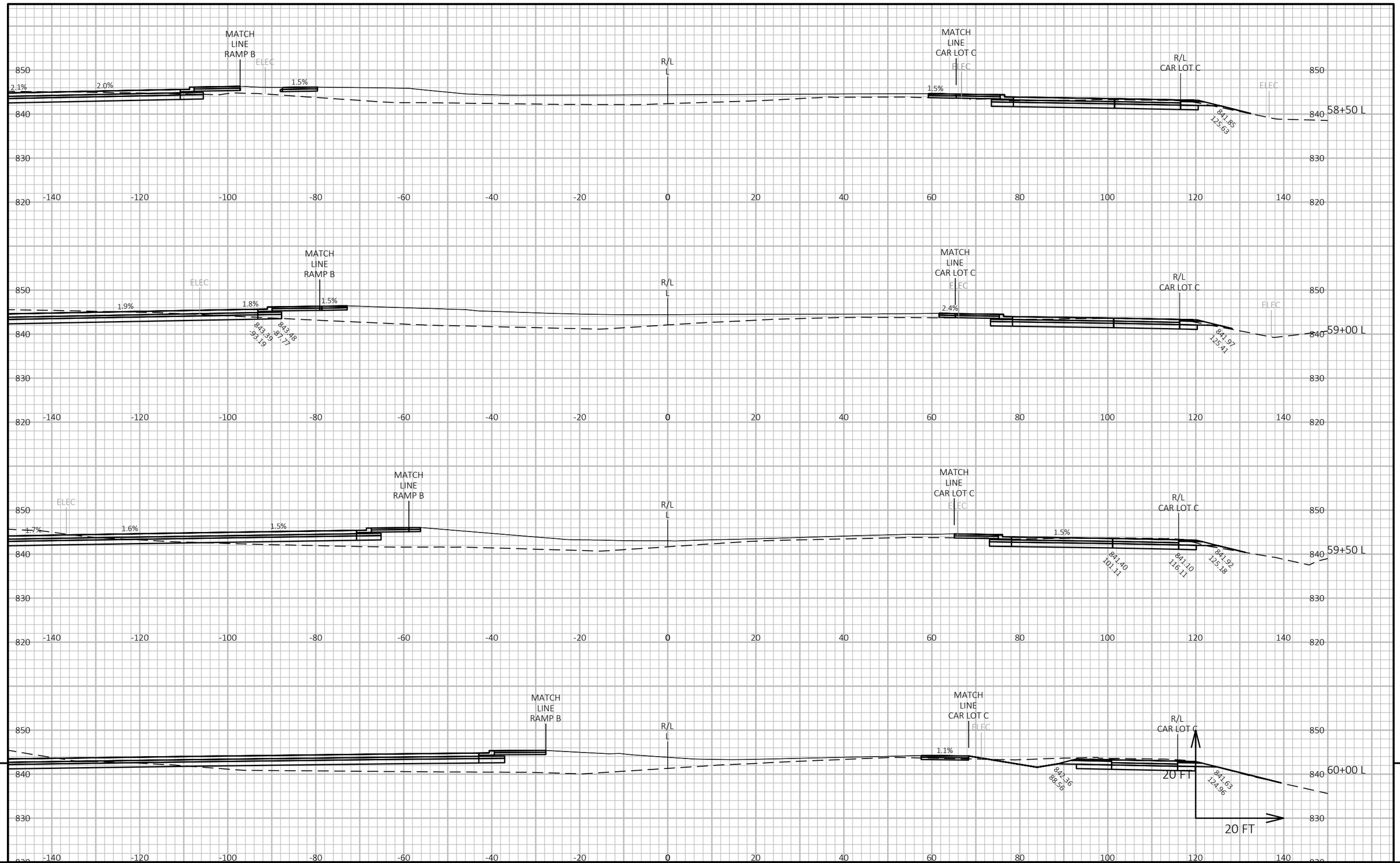
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - PLAZA L	SHEET 407	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 L.DWG
LAYOUT NAME - 090204_xs_RA 51 L

PLOT DATE : 11/26/2024 12:04 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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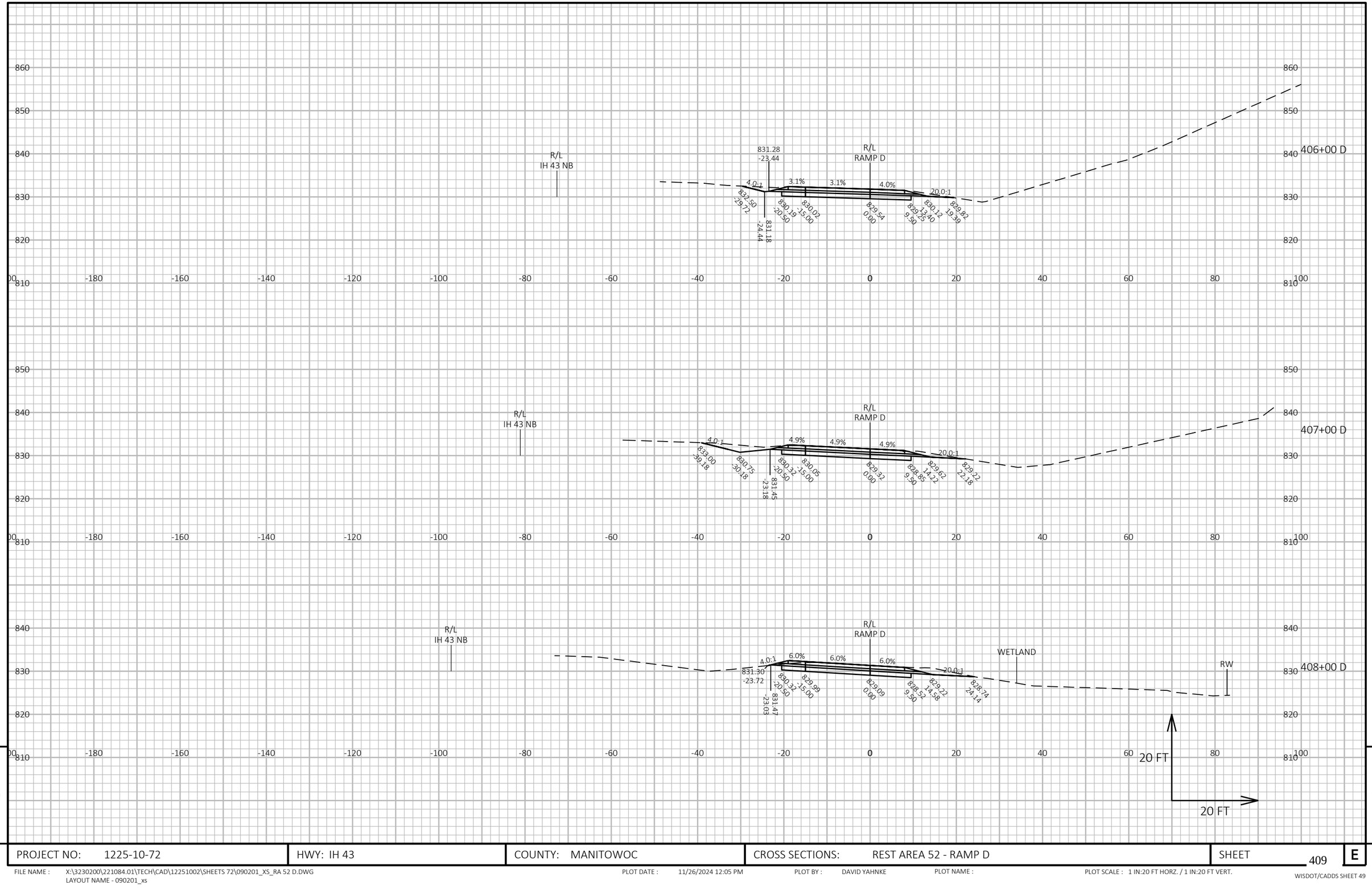
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 51 - PLAZA L	SHEET 408	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 51 L.DWG
LAYOUT NAME - 090205_xs_RA 51 L

PLOT DATE : 11/26/2024 12:04 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

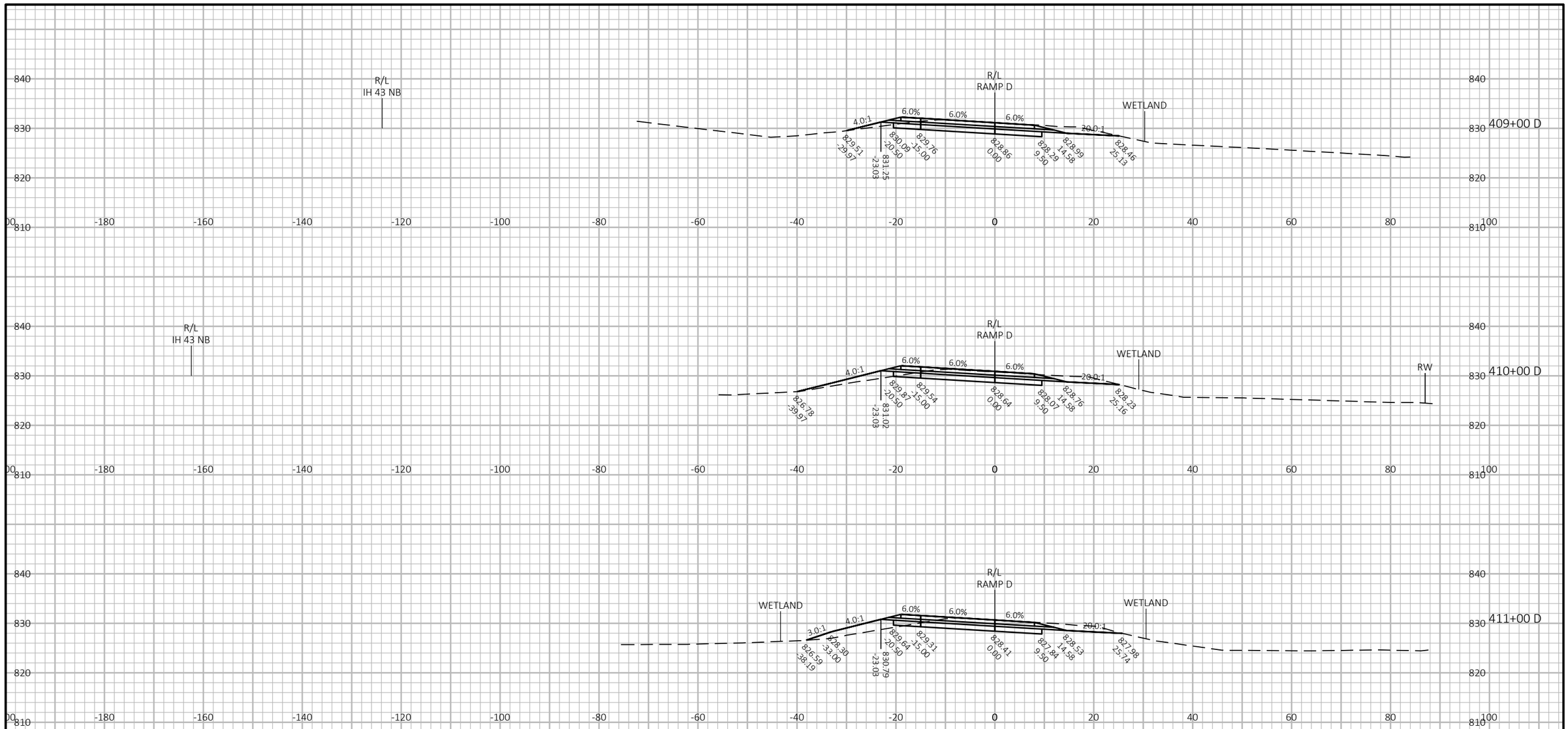


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - RAMP D	SHEET 409	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 D.DWG
LAYOUT NAME - 090201_xs

PLOT DATE : 11/26/2024 12:05 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

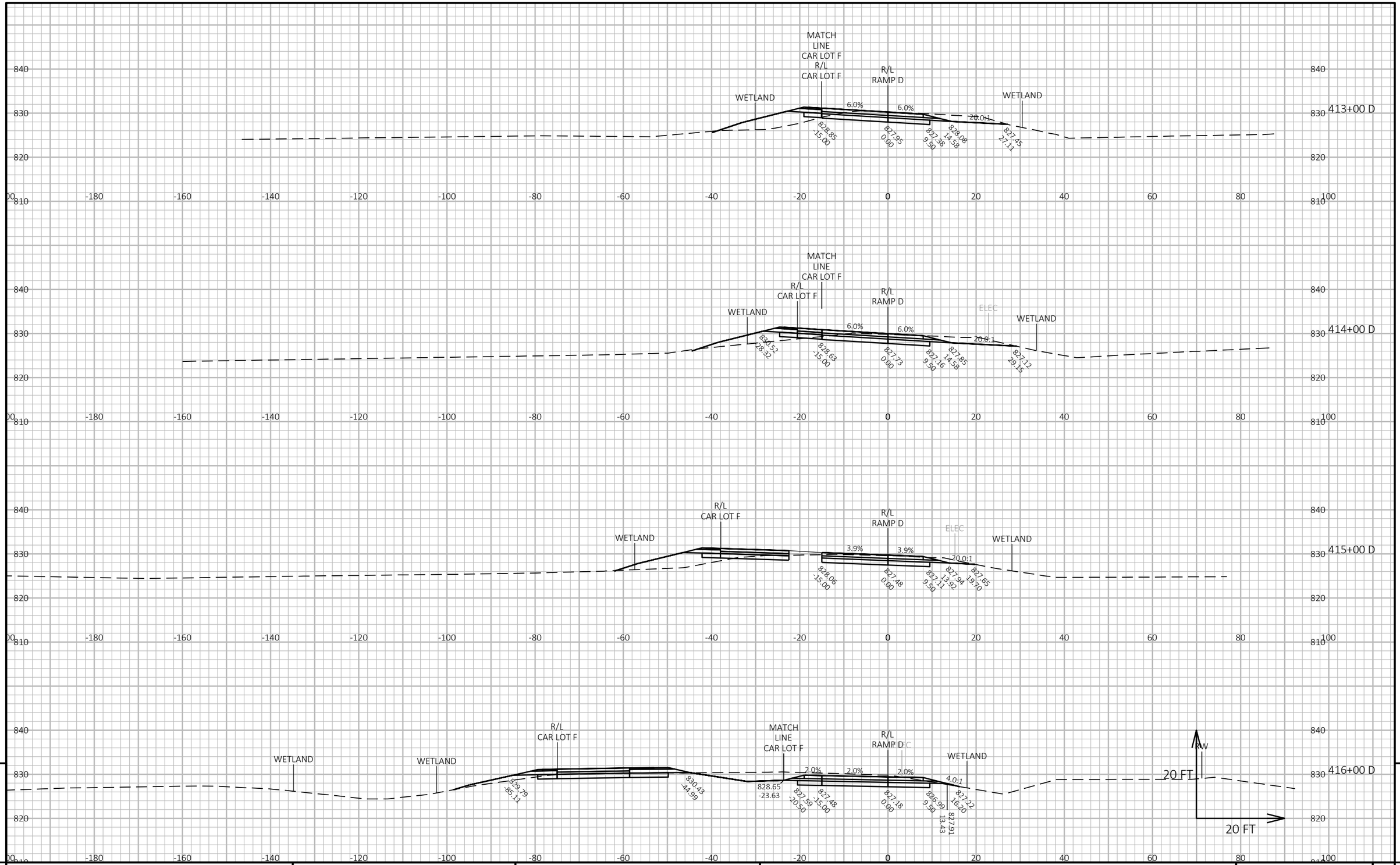


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - RAMP D	SHEET 410 E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 D.DWG
LAYOUT NAME - 090202_xs

PLOT DATE : 11/26/2024 12:05 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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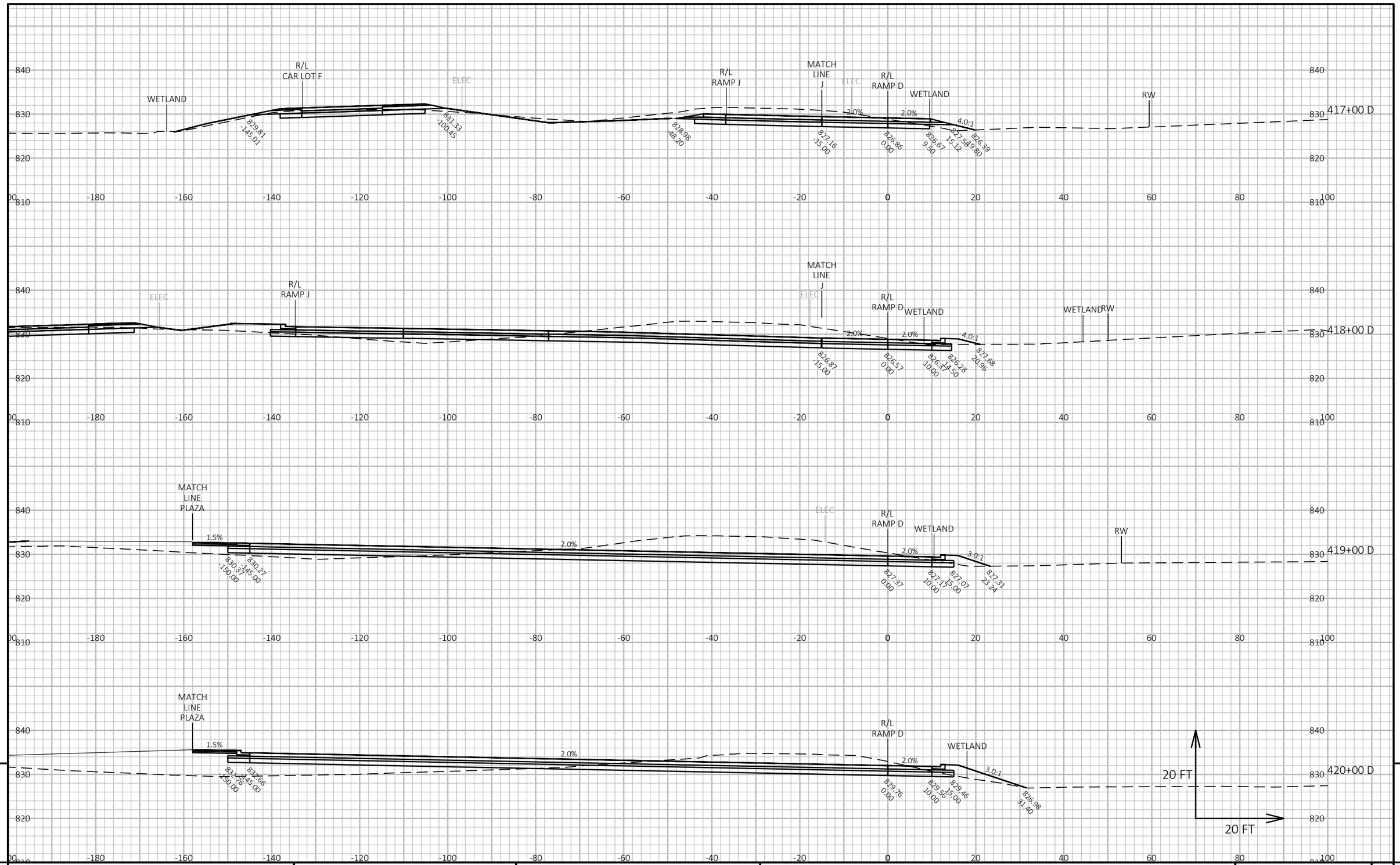
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - RAMP D	SHEET 411	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 D.DWG
LAYOUT NAME - 090203_xs

PLOT DATE : 11/26/2024 12:05 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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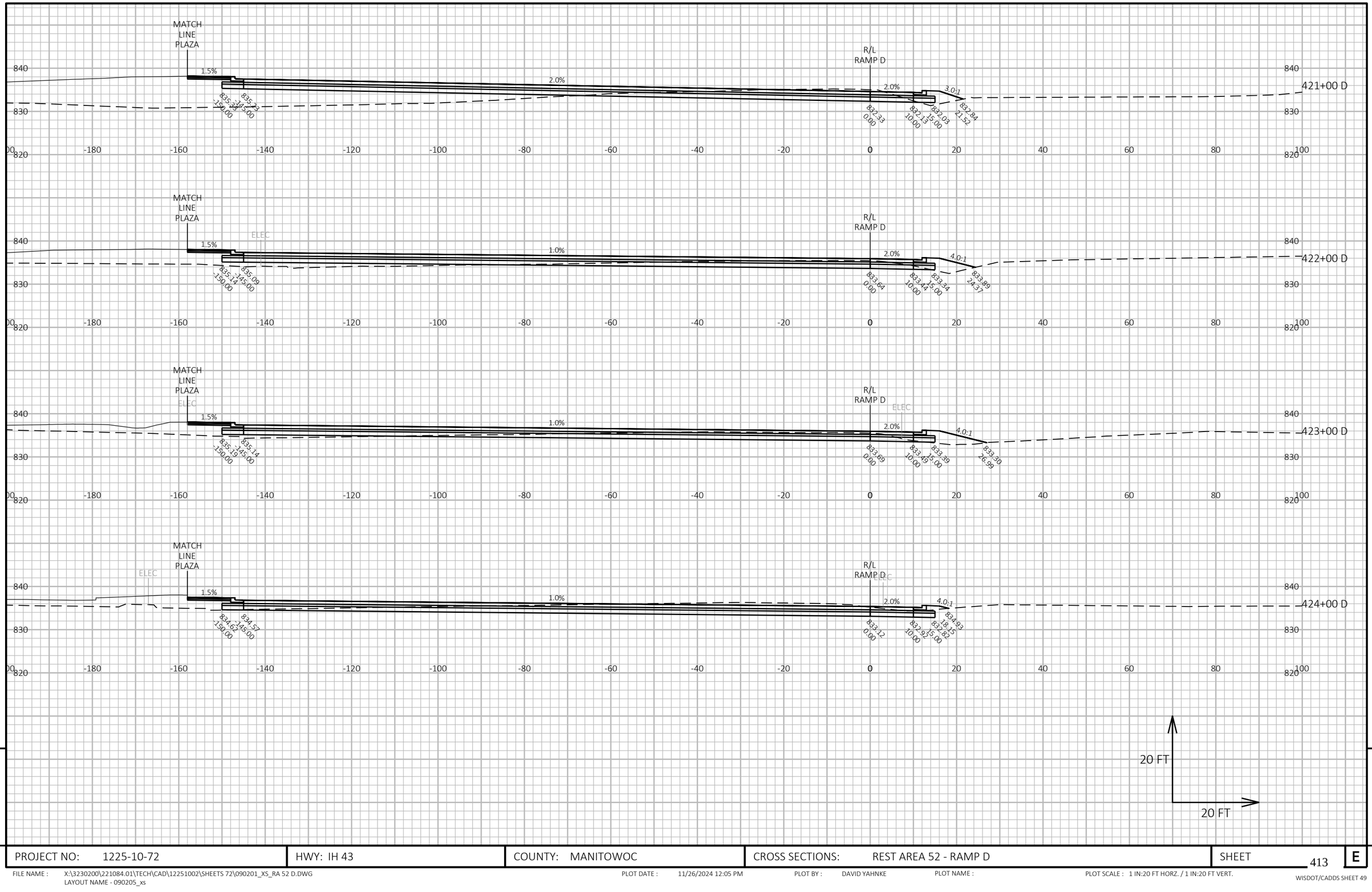
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - RAMP D	SHEET 412	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 D.DWG
LAYOUT NAME - 090204_xs

PLOT DATE : 11/26/2024 12:05 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

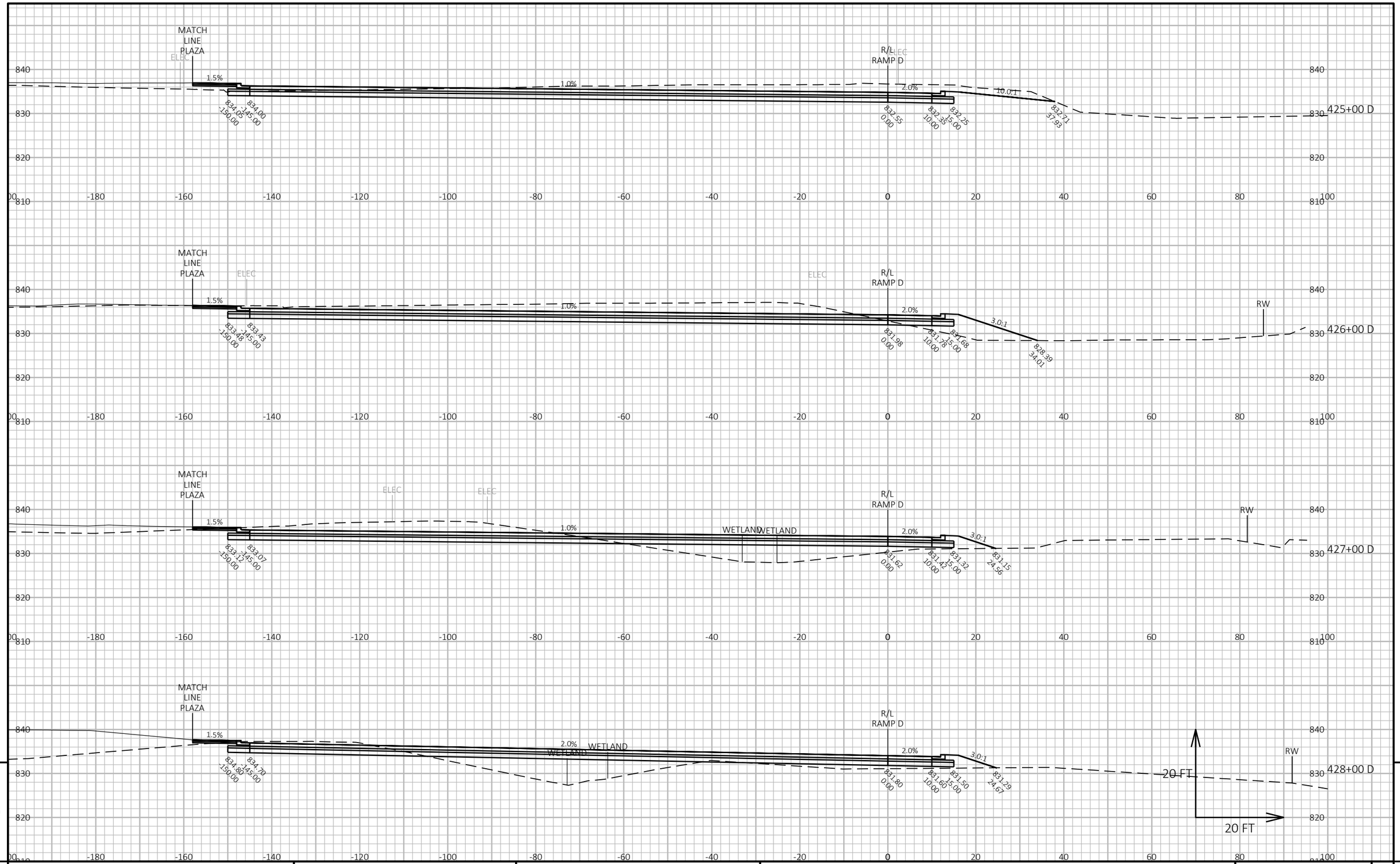


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - RAMP D	SHEET 413	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 D.DWG
LAYOUT NAME - 090205_xs

PLOT DATE : 11/26/2024 12:05 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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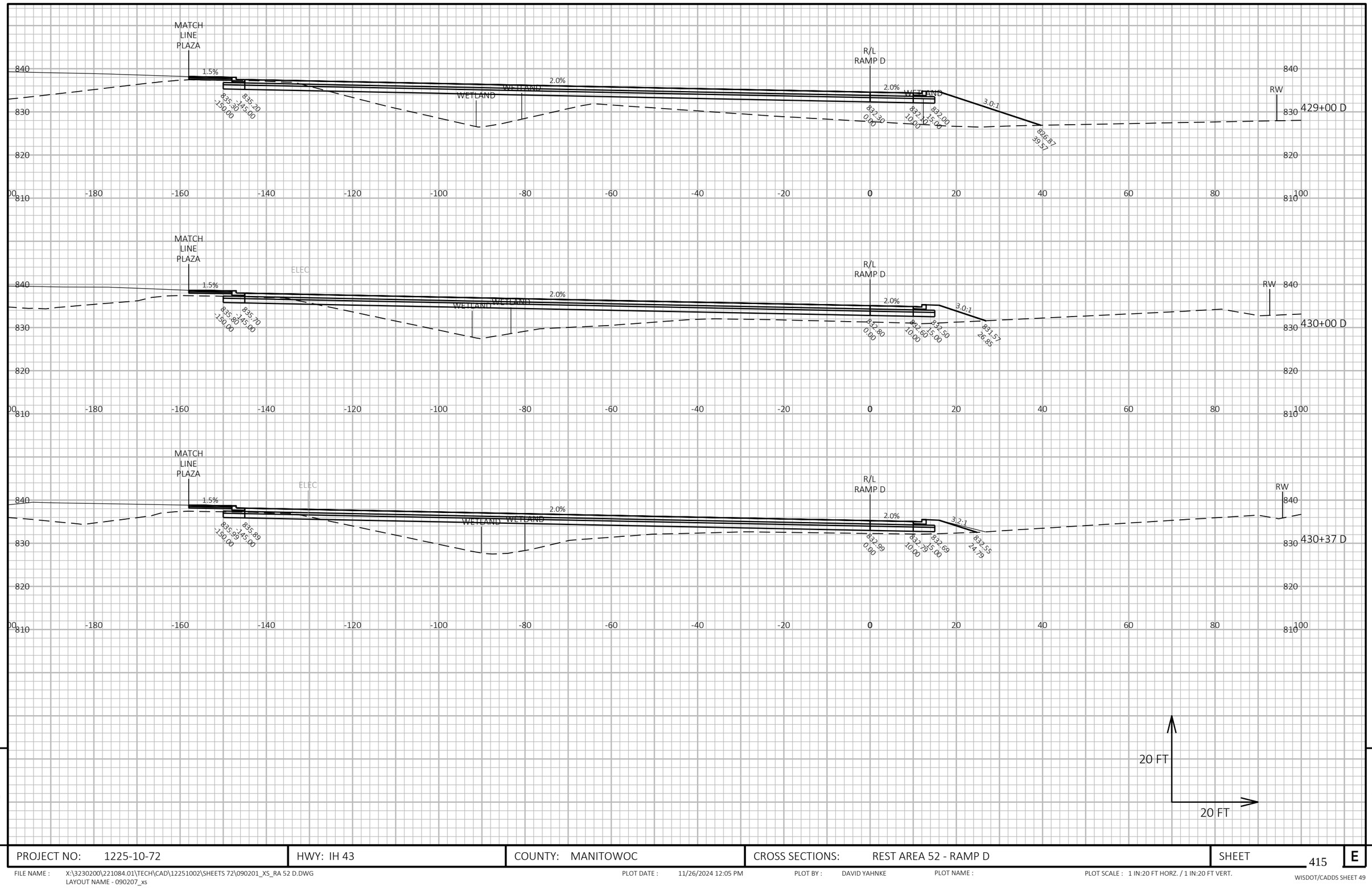
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - RAMP D	SHEET 414	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 D.DWG
LAYOUT NAME - 090206_xs

PLOT DATE : 11/26/2024 12:05 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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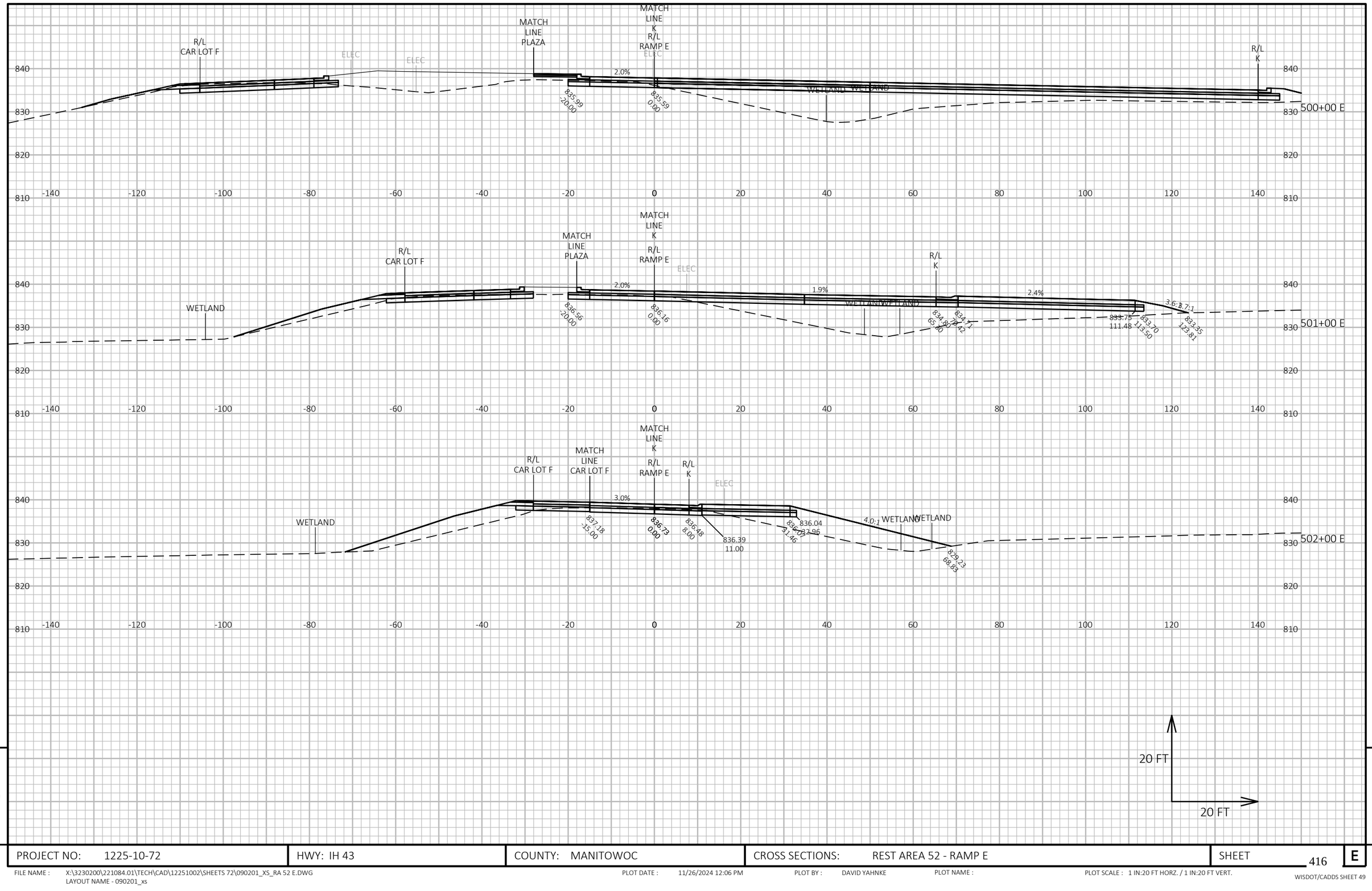
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - RAMP D	SHEET 415	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 D.DWG
LAYOUT NAME - 090207_xs

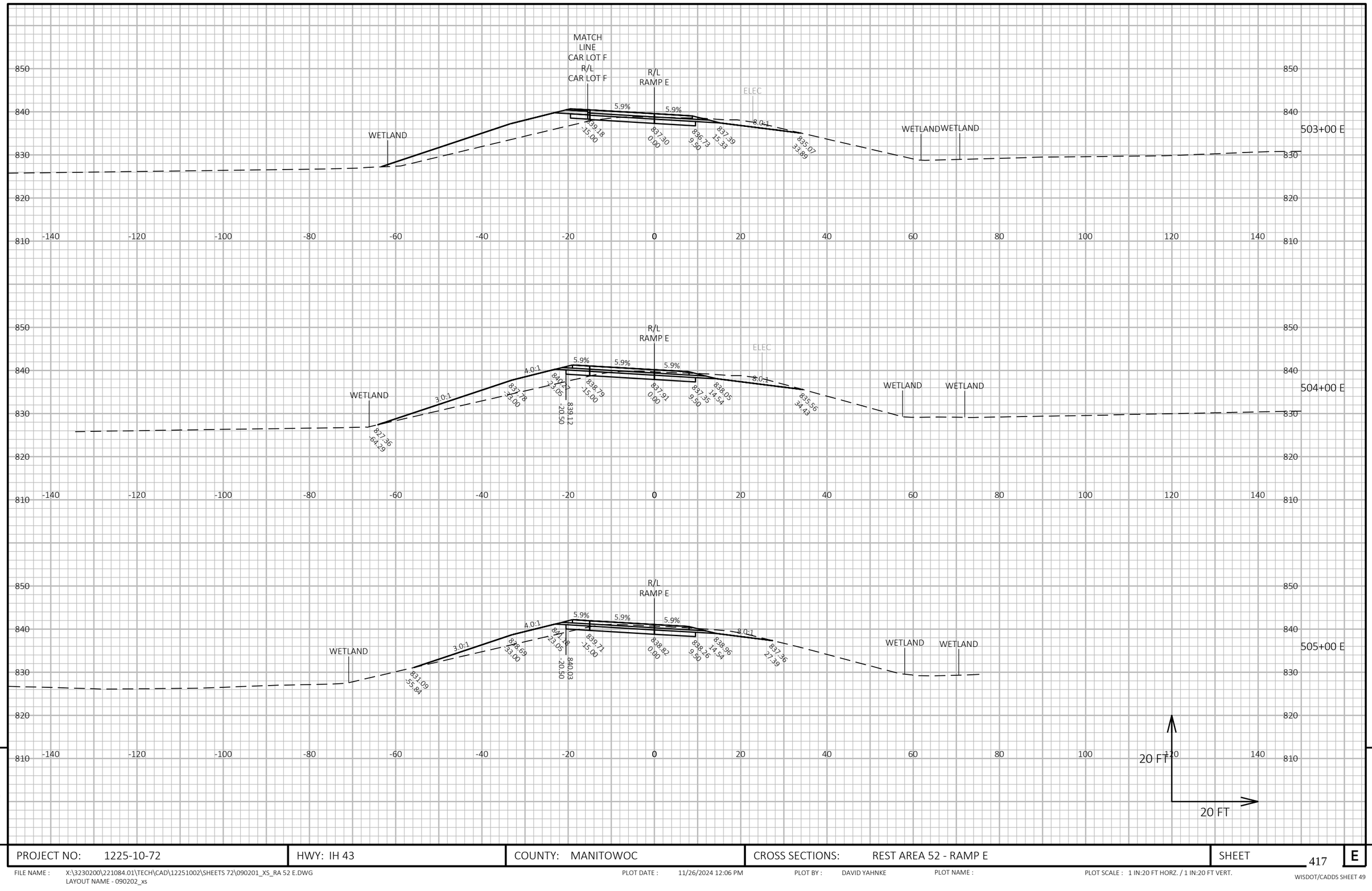
PLOT DATE : 11/26/2024 12:05 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - RAMP E	SHEET 416	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 E.DWG
LAYOUT NAME - 090201_xs
PLOT DATE : 11/26/2024 12:06 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



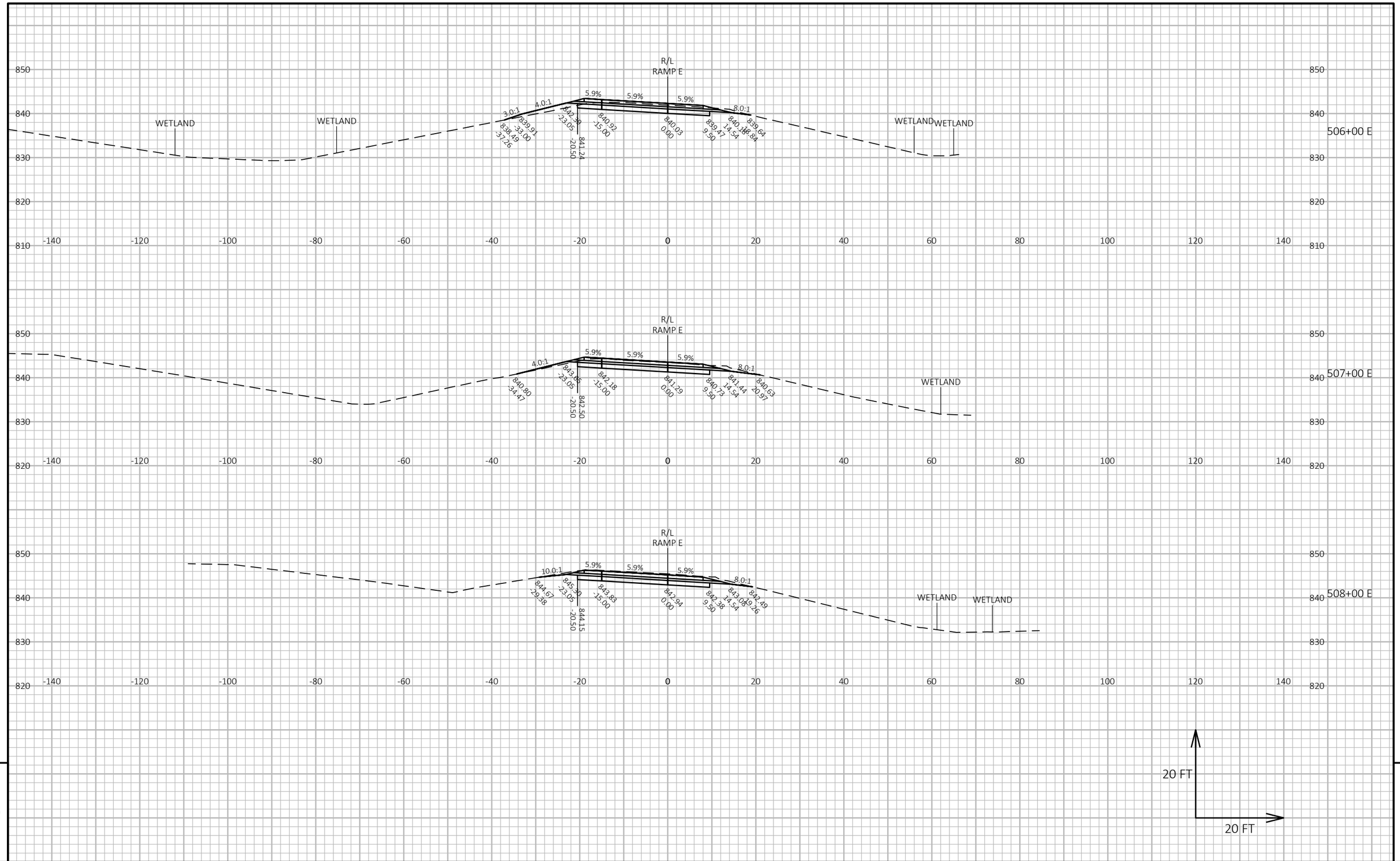
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - RAMP E	SHEET 417	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 E.DWG
LAYOUT NAME - 090202_xs

PLOT DATE : 11/26/2024 12:06 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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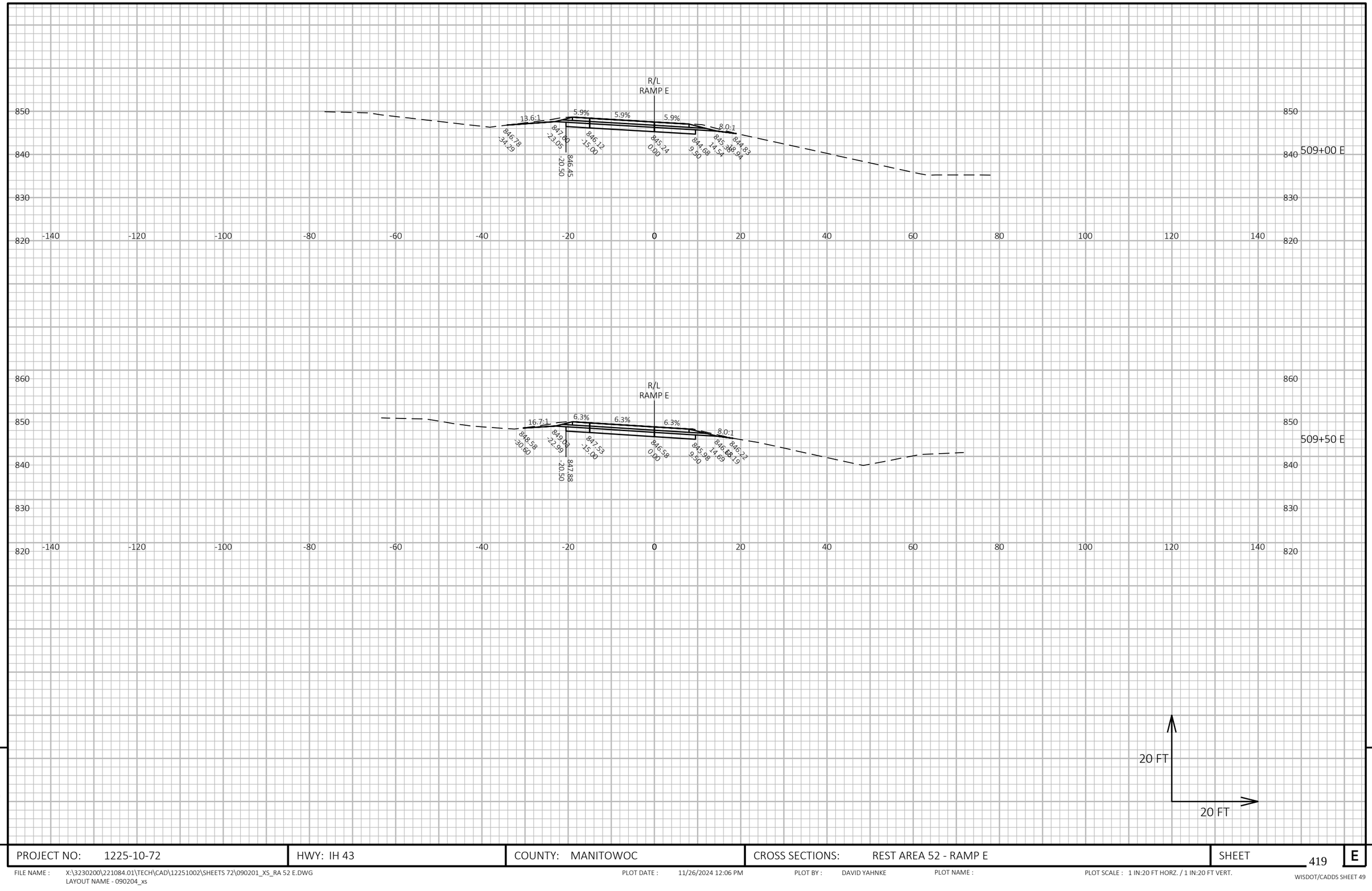
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - RAMP E	SHEET 418	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 E.DWG
LAYOUT NAME - 090203_xs

PLOT DATE : 11/26/2024 12:06 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



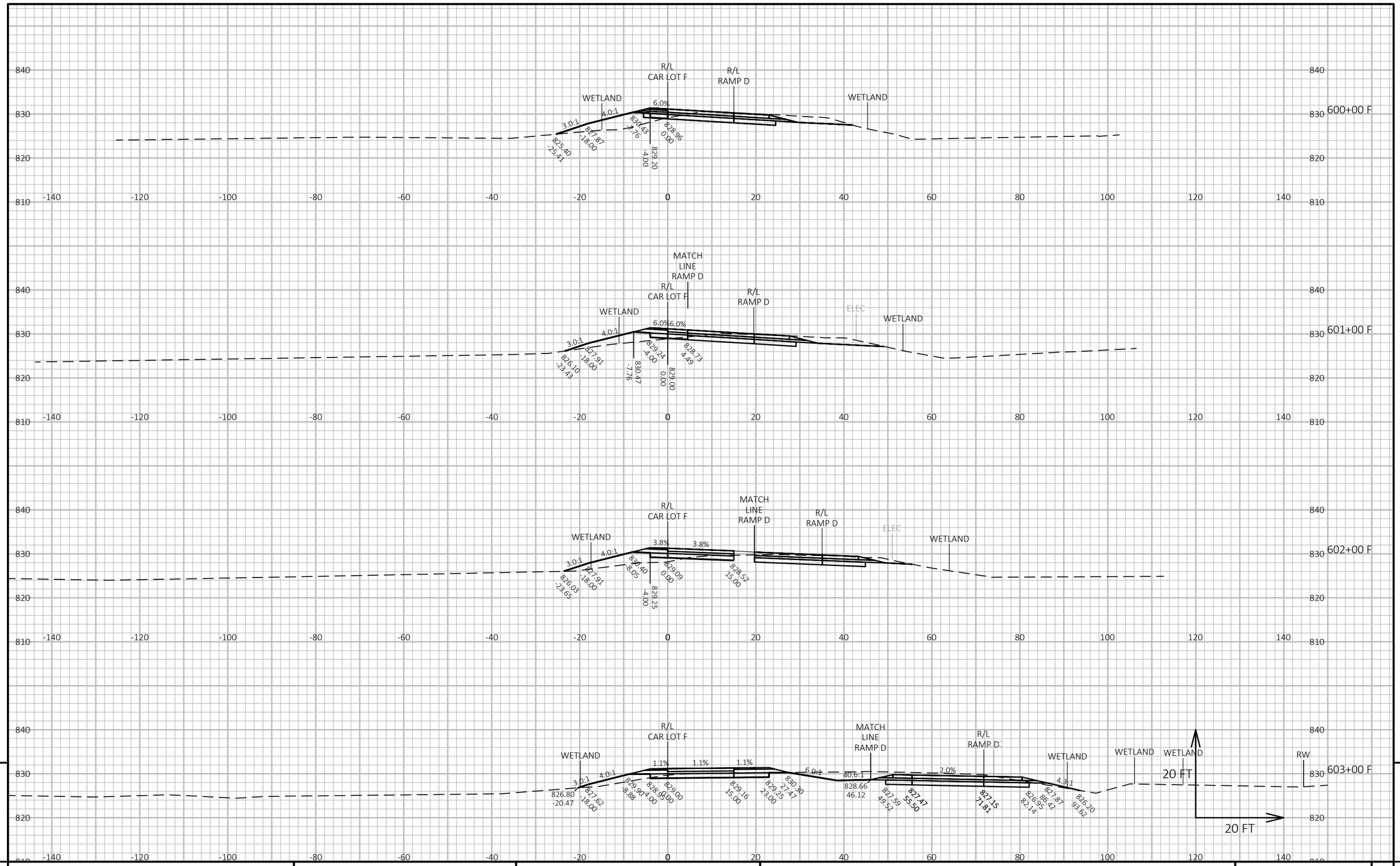
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - RAMP E	SHEET 419	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 E.DWG
LAYOUT NAME - 090204_xs

PLOT DATE : 11/26/2024 12:06 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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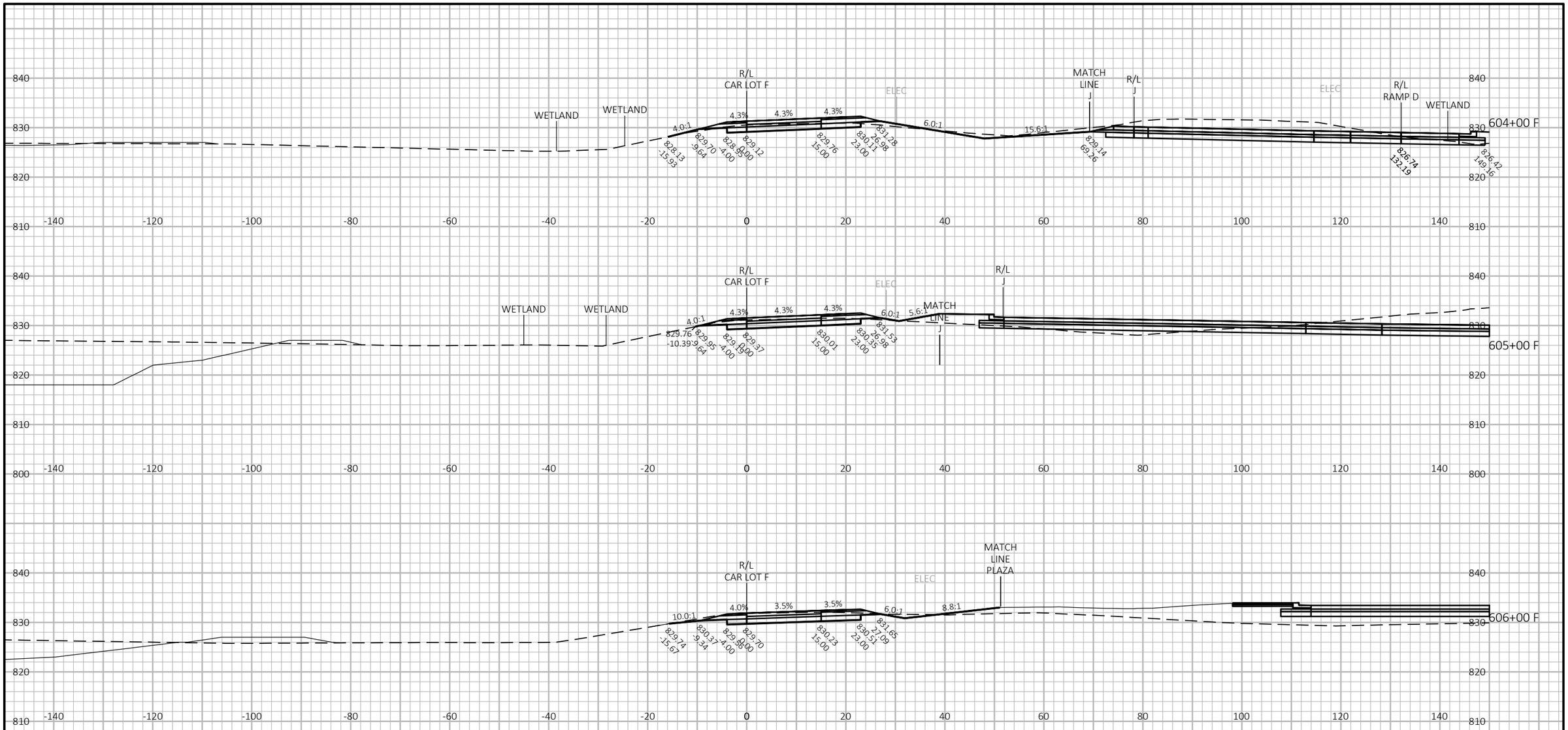
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - CAR LOT F	SHEET 420	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 F.DWG
LAYOUT NAME - 090201_xs

PLOT DATE : 11/26/2024 12:06 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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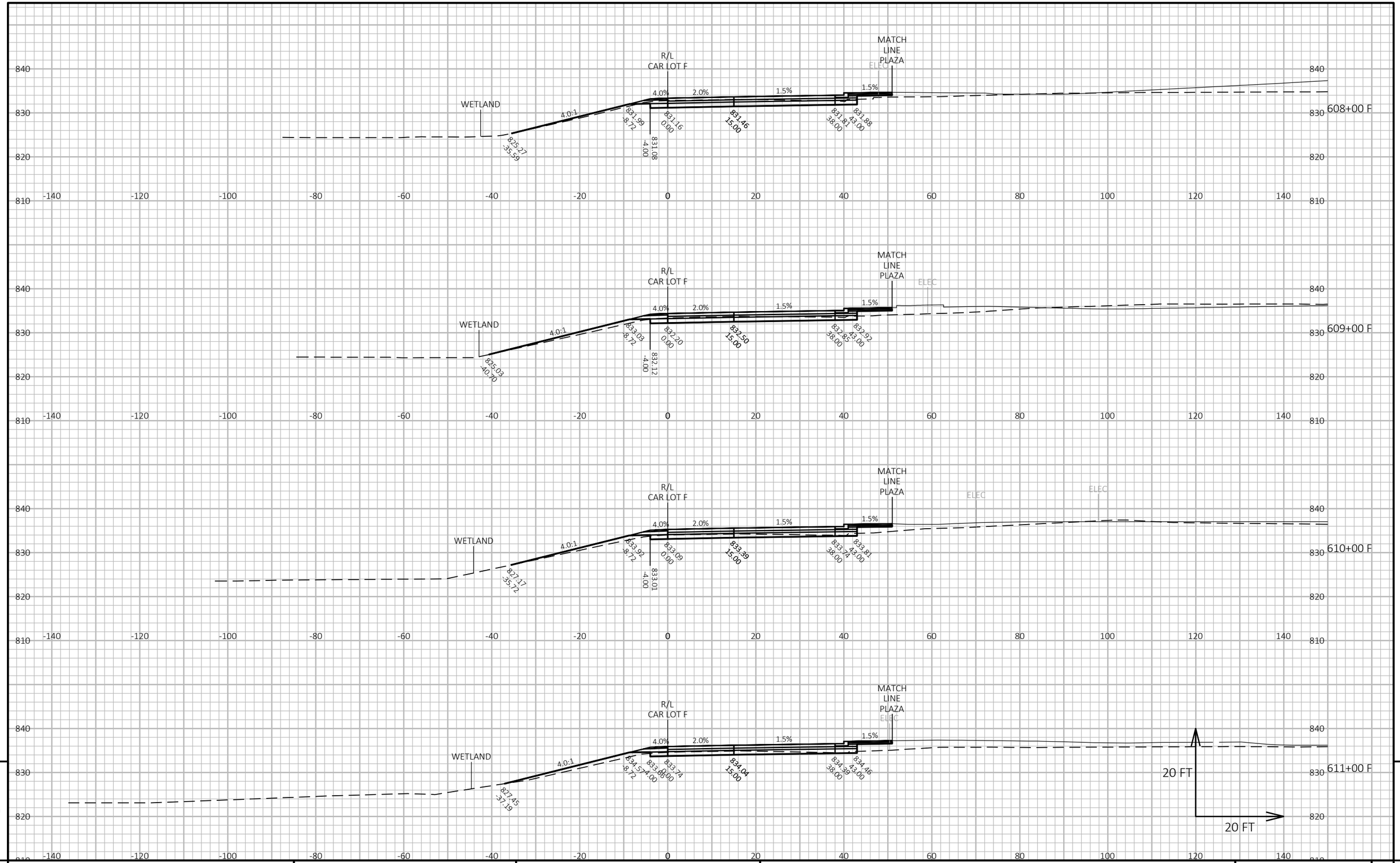
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - CAR LOT F	SHEET 421	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 F.DWG
LAYOUT NAME - 090202_xs

PLOT DATE : 11/26/2024 12:06 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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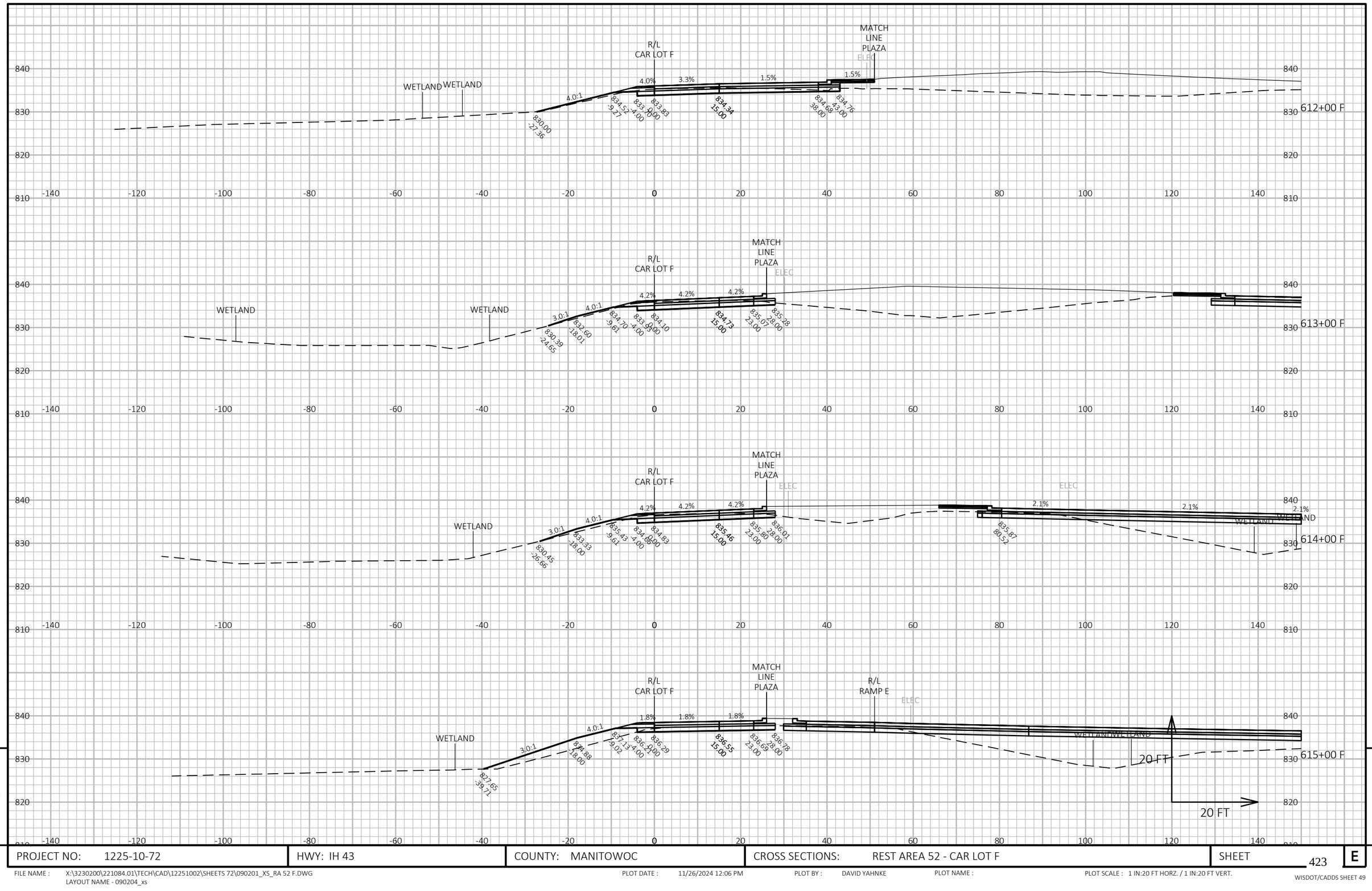
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - CAR LOT F	SHEET 422	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 F.DWG
LAYOUT NAME - 090203_xs

PLOT DATE : 11/26/2024 12:06 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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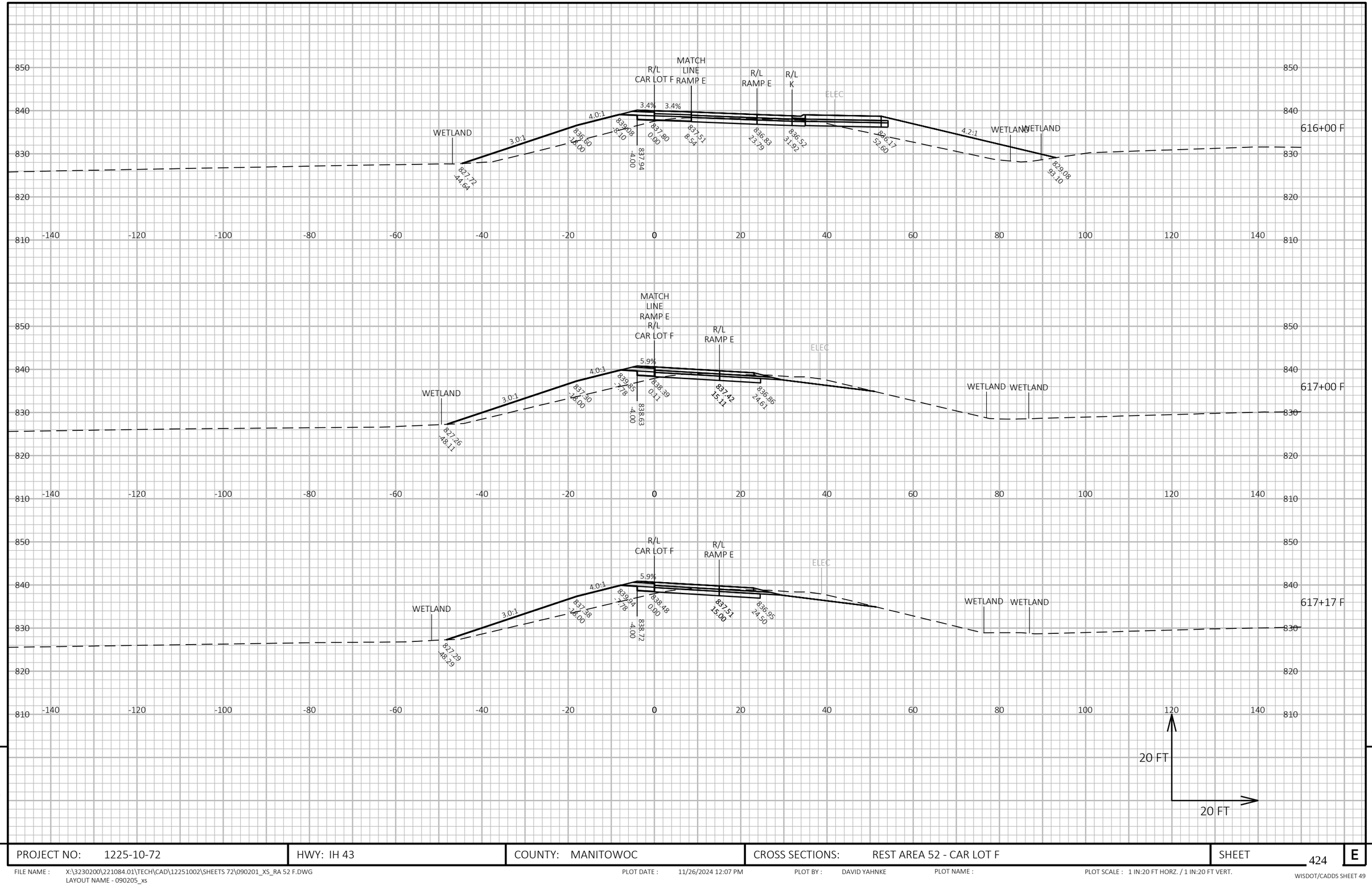
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - CAR LOT F	SHEET 423	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 F.DWG
LAYOUT NAME - 090204_xs

PLOT DATE : 11/26/2024 12:06 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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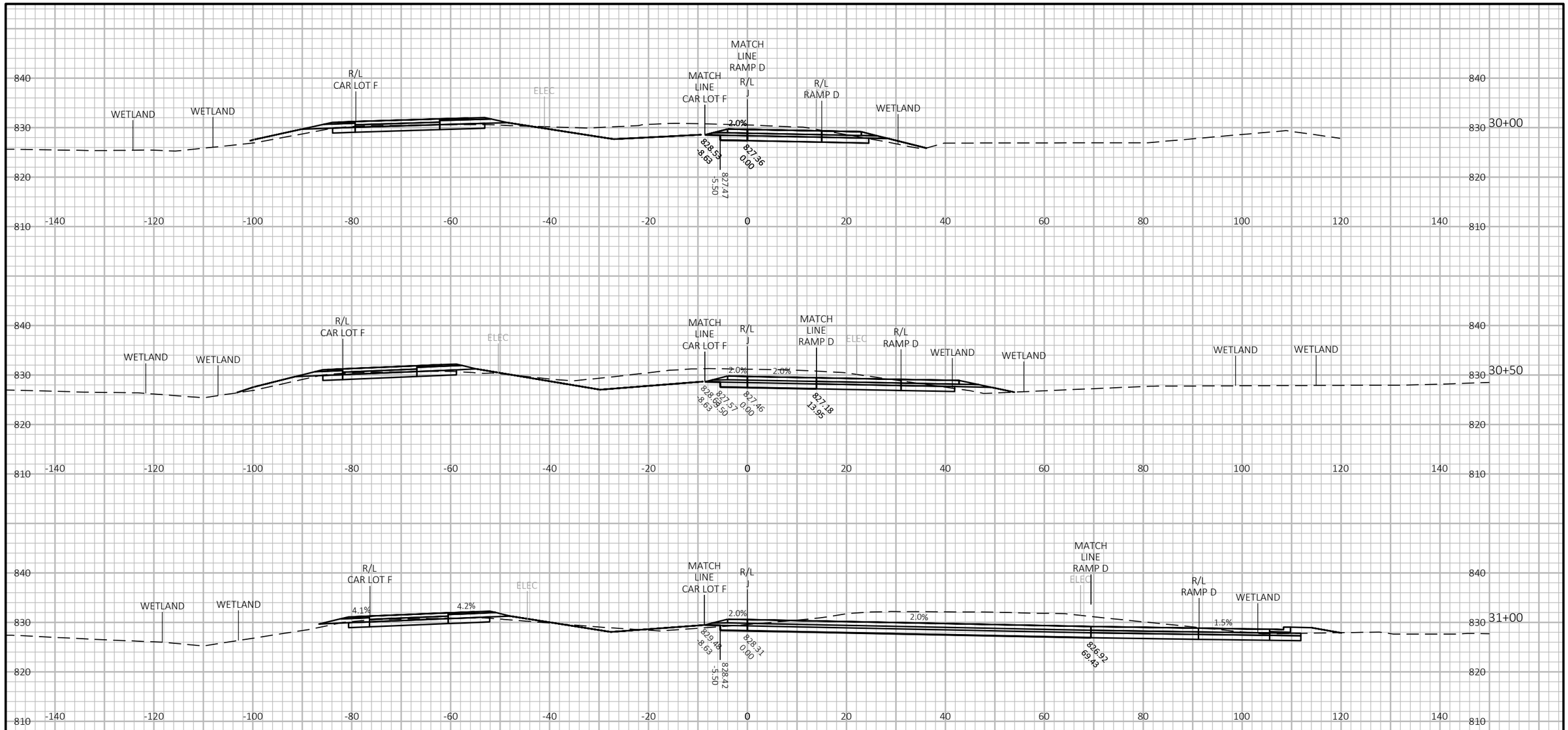
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - CAR LOT F	SHEET 424	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 F.DWG
LAYOUT NAME - 090205_xs

PLOT DATE : 11/26/2024 12:07 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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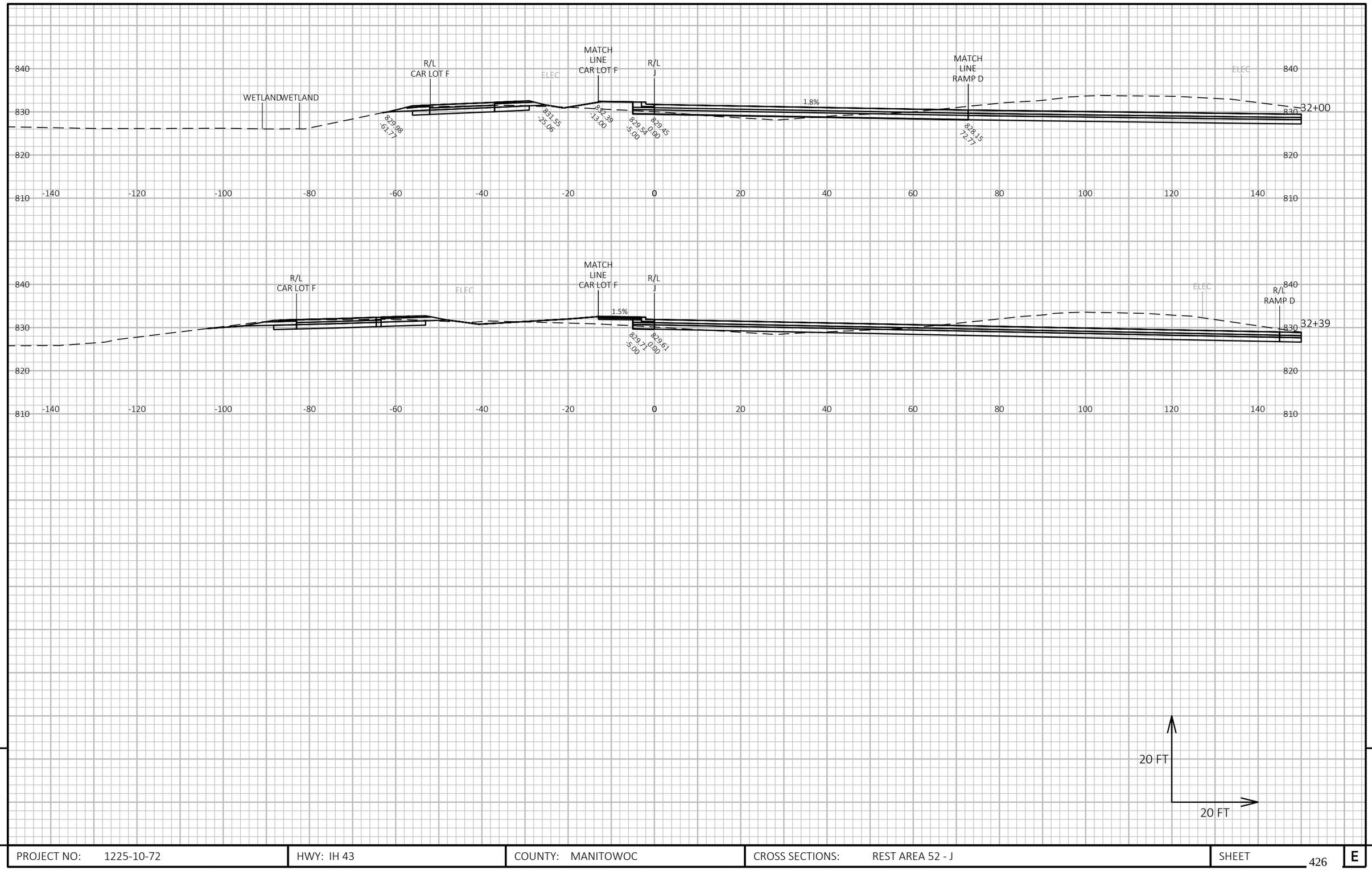
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - J	SHEET 425	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 J.DWG
LAYOUT NAME - 090201_xs_RA 52 J

PLOT DATE : 11/26/2024 12:07 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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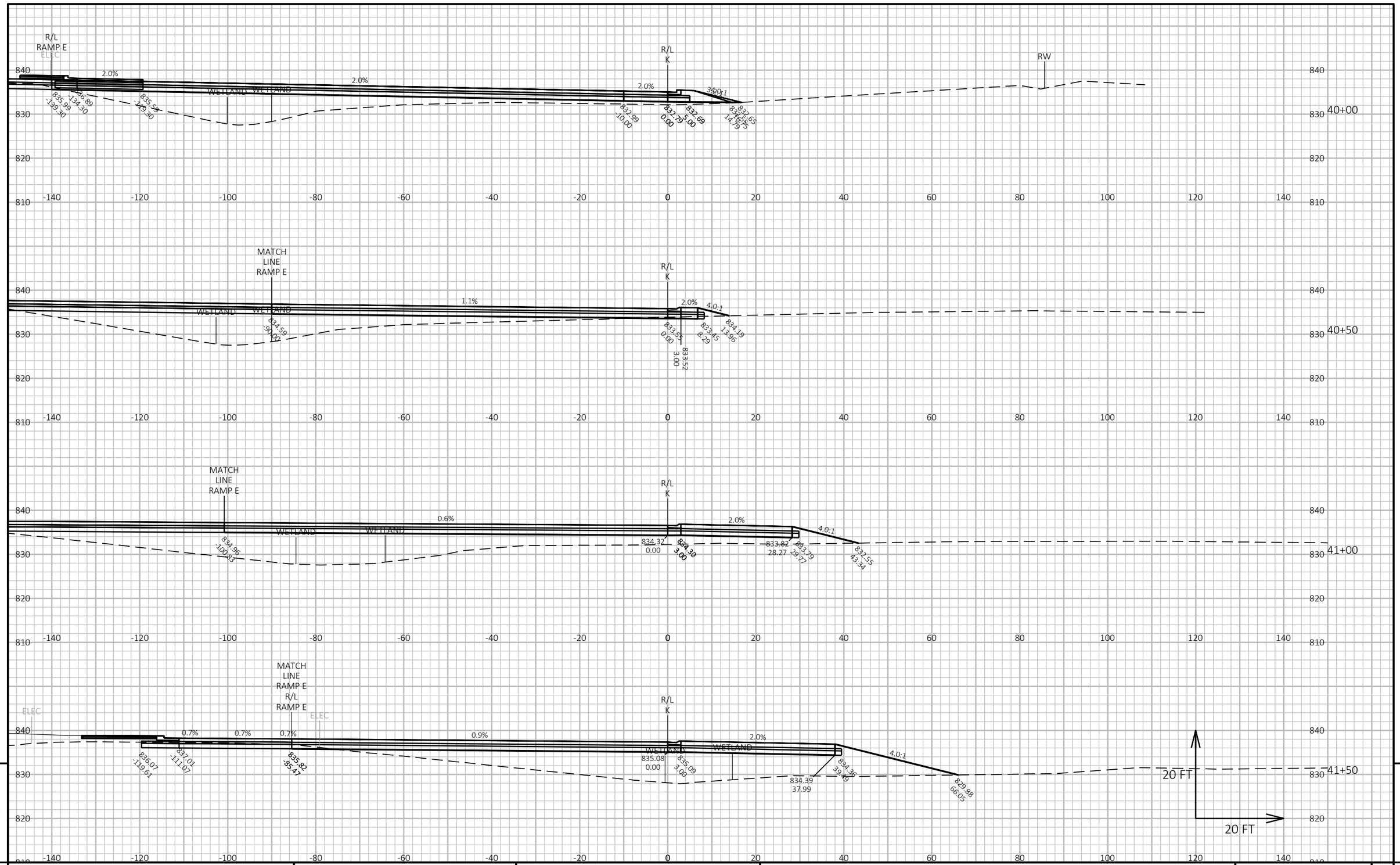
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - J	SHEET 426	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 J.DWG
LAYOUT NAME - 090202_xs_RA 52 J

PLOT DATE : 11/26/2024 12:07 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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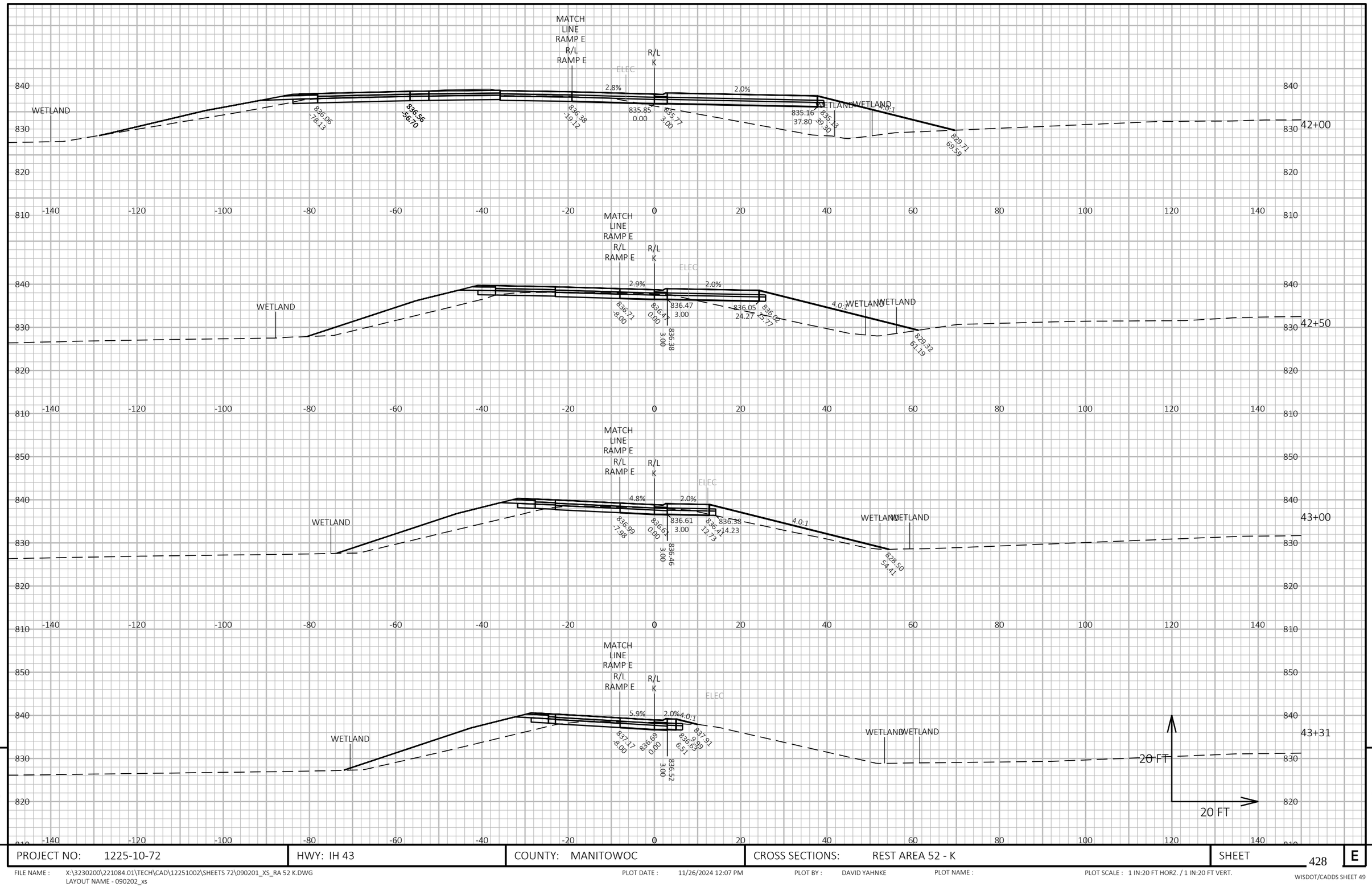
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - K	SHEET 427	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 K.DWG
LAYOUT NAME - 090201_xs

PLOT DATE : 11/26/2024 12:07 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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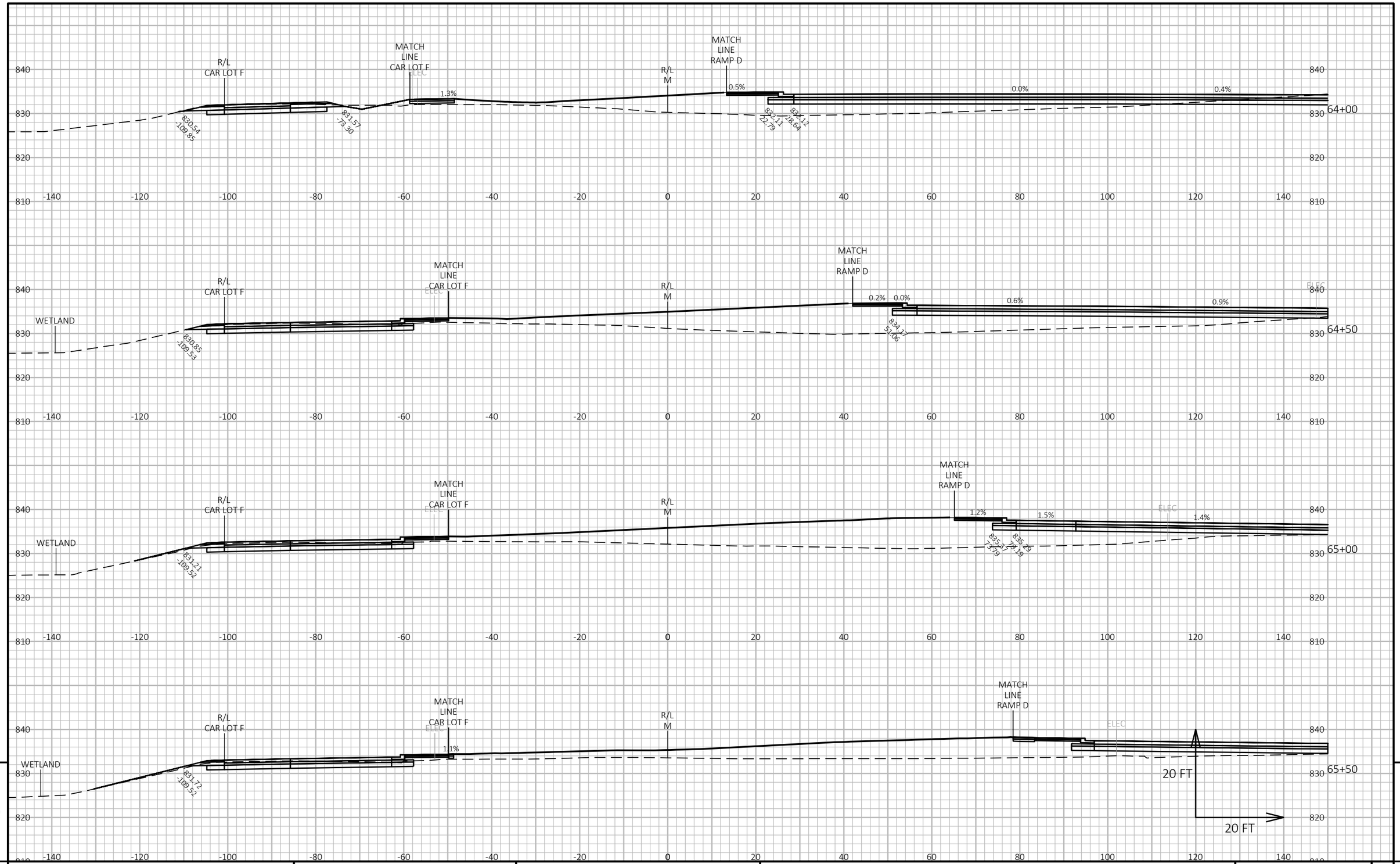
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - K	SHEET 428	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 K.DWG
LAYOUT NAME - 090202_xs

PLOT DATE : 11/26/2024 12:07 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - M	SHEET 429	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 M.DWG
LAYOUT NAME - 090201_xs_RA 52 M

PLOT DATE : 11/26/2024 12:08 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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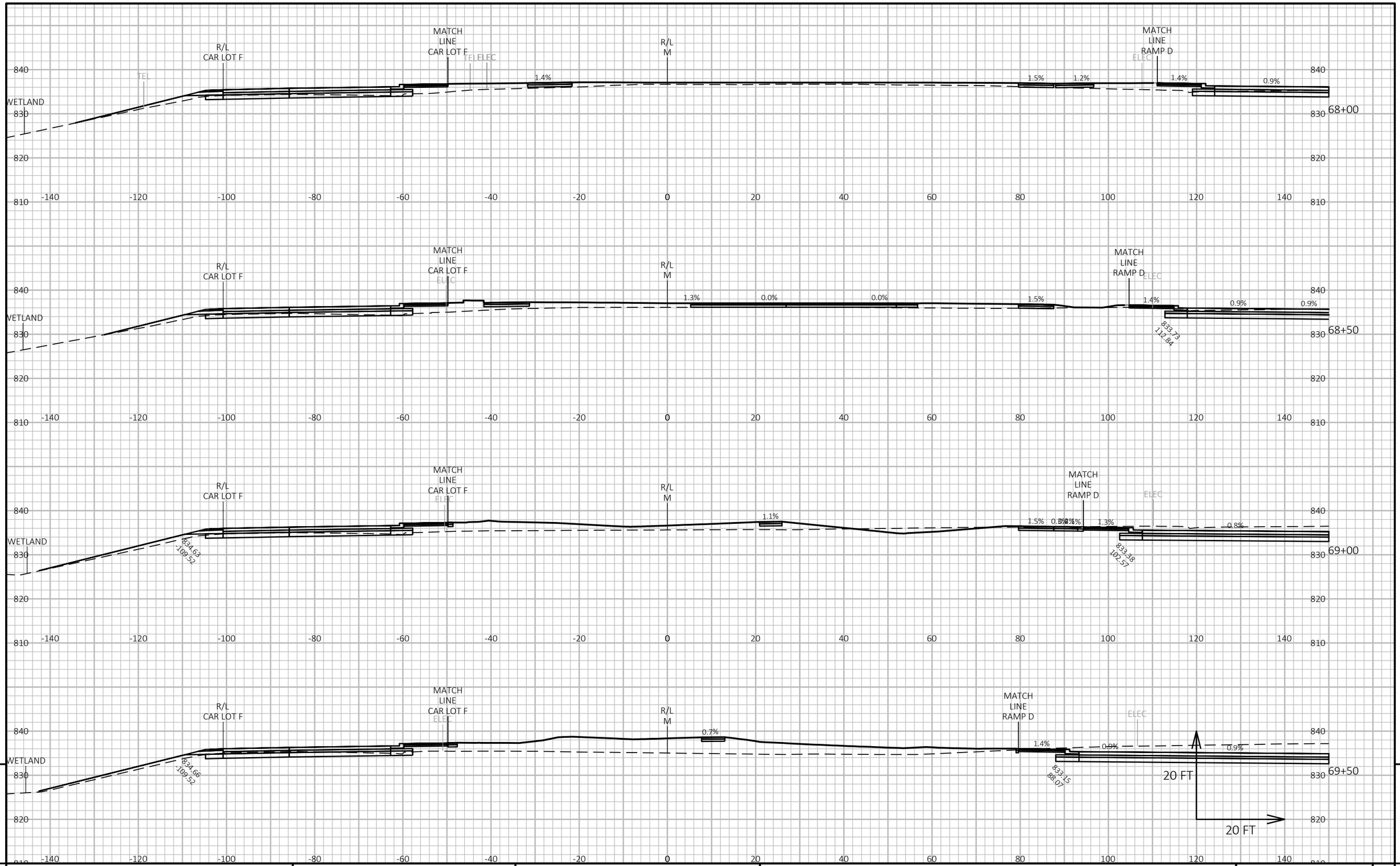
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - M	SHEET 430	E

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LAYOUT NAME - 090202_xs_RA 52 M

PLOT DATE : 11/26/2024 12:08 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

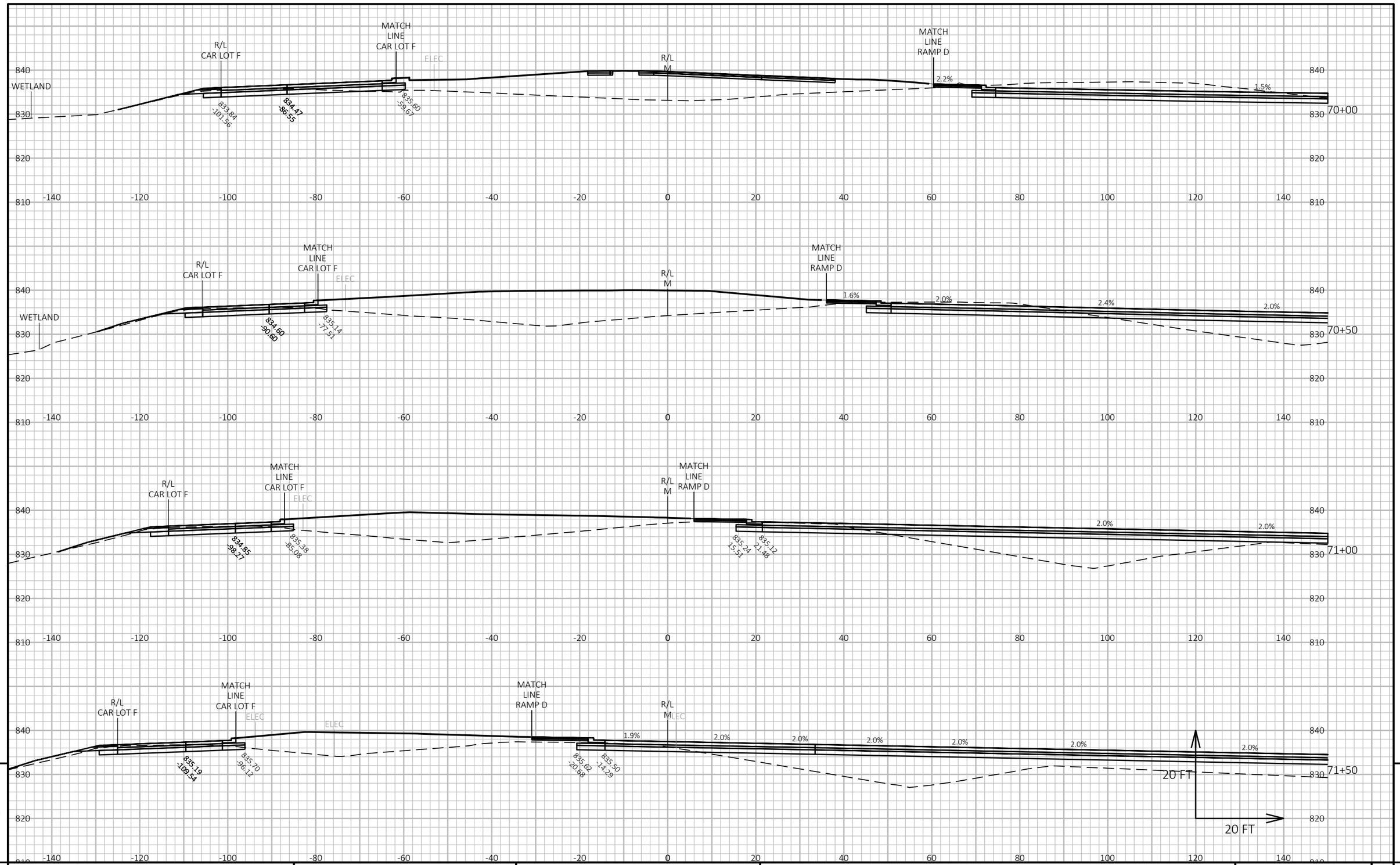


PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - M	SHEET 431	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 M.DWG
LAYOUT NAME - 090203_xs_RA 52 M

PLOT DATE : 11/26/2024 12:08 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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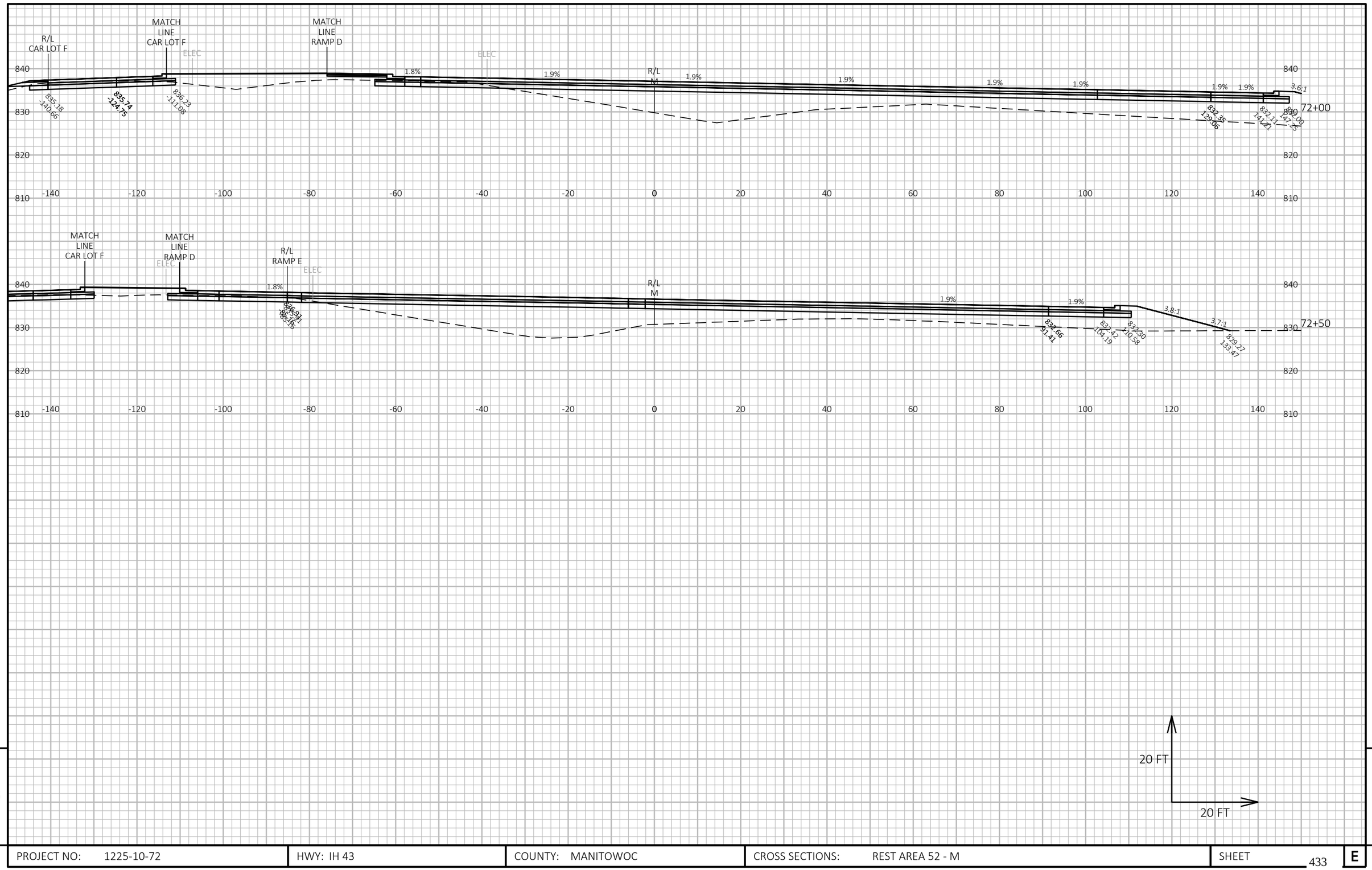
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PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - M	SHEET 432	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 M.DWG
LAYOUT NAME - 090204_xs_RA 52 M

PLOT DATE : 11/26/2024 12:08 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1225-10-72	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - M	SHEET 433	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 72\090201_XS_RA 52 M.DWG
LAYOUT NAME - 090205_xs_RA 52 M

PLOT DATE : 11/26/2024 12:08 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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through innovation and exceptional service.

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