GRE

JANUARY 2025

PROJECT ID: 1225-10-73

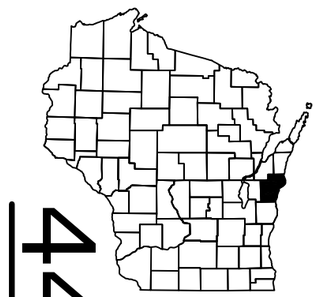
WITH: N/A

COUNTY: MANITOWOC

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 = 232



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
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

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

UTILITIES

- ELECTRIC
- FIBER OPTIC
- GAS
- SANITARY SEWER
- STORM SEWER
- TELEPHONE
- WATER
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MANITOWOC - GREEN BAY

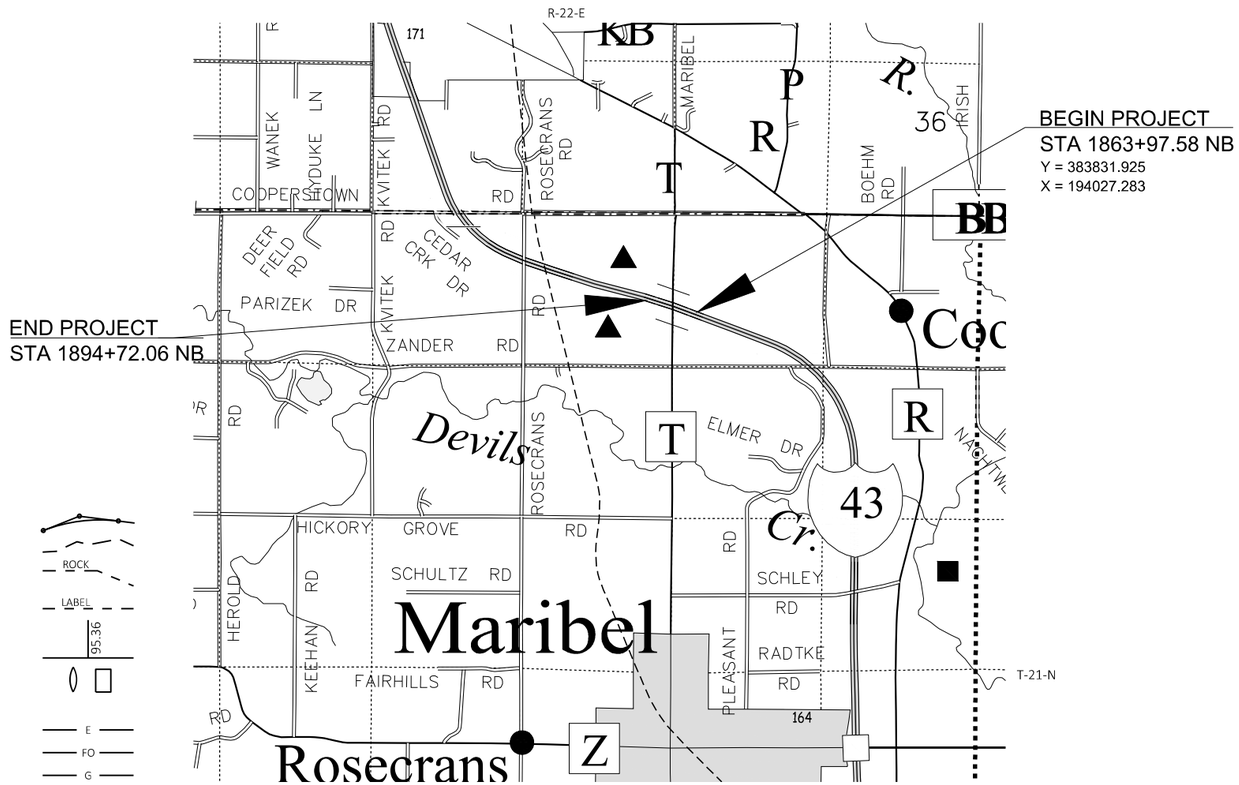
SRA 51 MARIBEL/SRA 52 DENMARK

IH 43

MANITOWOC COUNTY

STATE PROJECT NUMBER
1225-10-73

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1225-10-73	WISC 2025022	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

2

GENERAL NOTES

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

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

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

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

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
701 MIFFLIN ST
MADISON, WI 537013
PHONE: (608)658-2899
EMAIL: RYAN.BIRDSALL@LUMEN.COM

ELECTRIC

WISCONSIN PUBLIC SERVICE CORPORATION - ELECTRICITY
CHUCK WINDUS
227 W. CALUMET ST.
CHILTON, 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

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 PERRAN WAY
GREEN BAY, WI. 54304
PHONE: (920)366-4788
EMAIL: BRIAN.HAEN@DOT.WI.GOV

DNR LIAISON

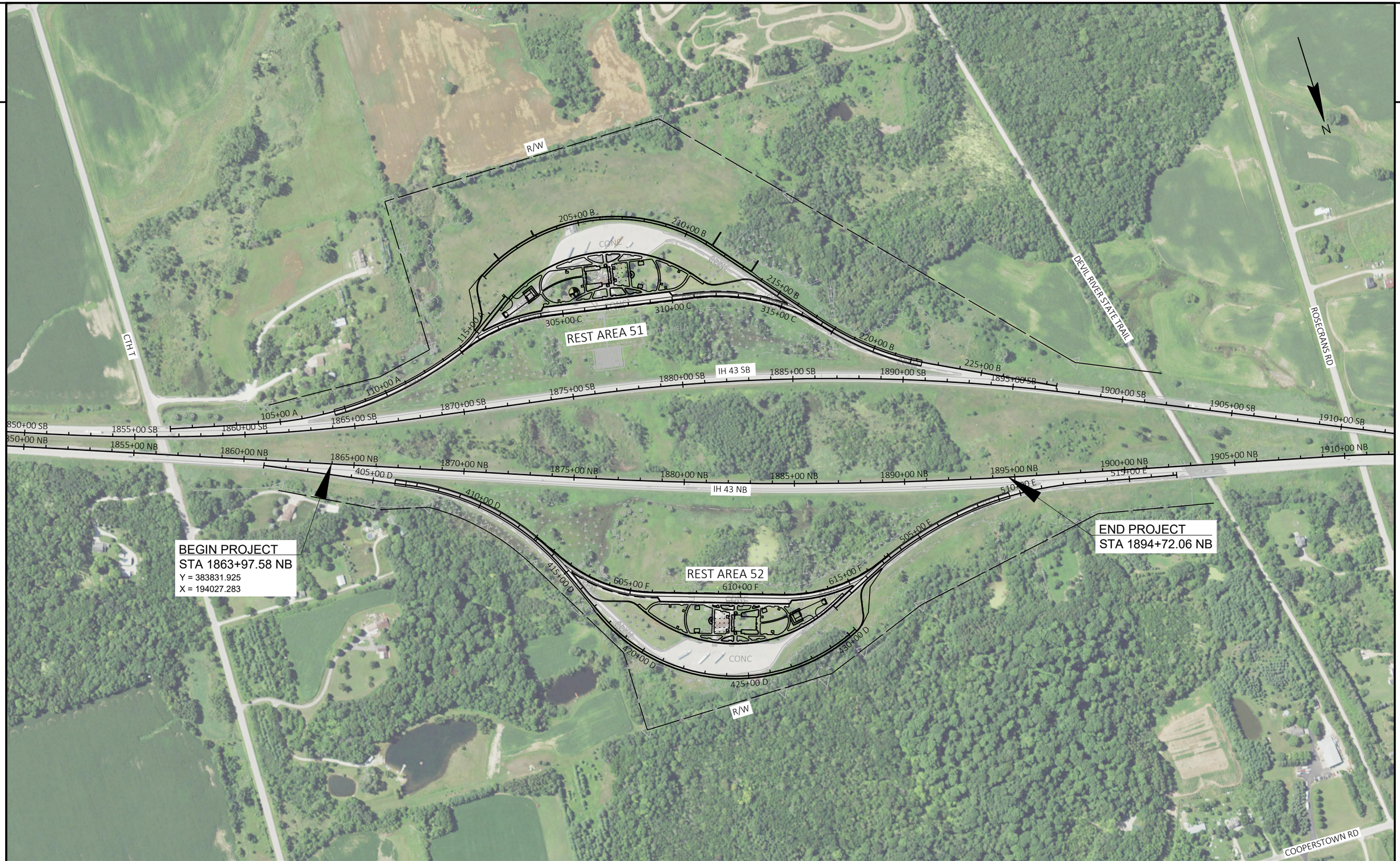
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
NORTHEAST REGION
ATTN: MATT SCHAEVE
2984 SHAWANO AVE.
GREEN BAY, WI 54313
PHONE: (920)366-1544
EMAIL: MATTHEW.SHAEVE@WISCONSIN.GOV

CONSULTANT CONTACT

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

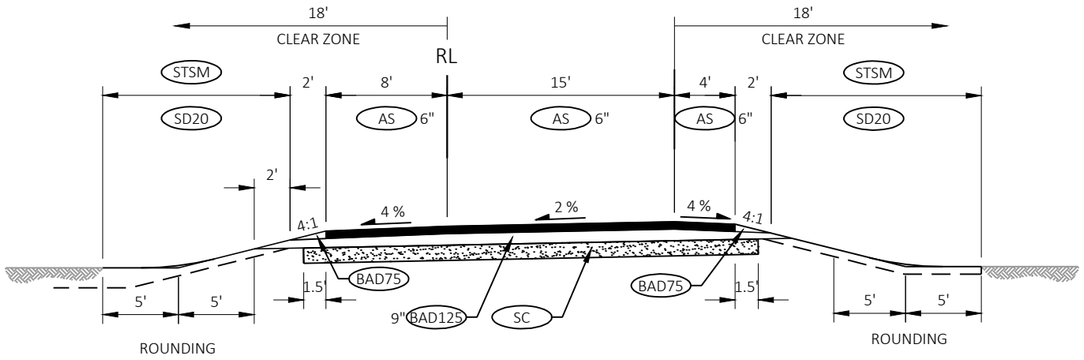
DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

2



PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	PROJECT OVERVIEW	SHEET 3	E

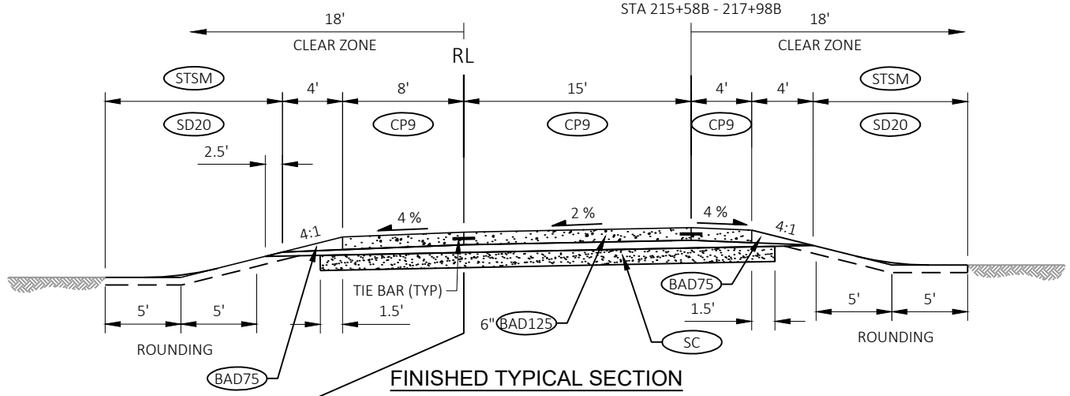
FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\020201-PO.DWG
LAYOUT NAME - 020201-po
PLOT DATE : 7/30/2024 3:35 PM
PLOT BY : DAVID YAHNKE
PLOT NAME :
PLOT SCALE : 1 IN:400 FT
WISDOT/CADDS SHEET 42



FINISHED TYPICAL SECTION

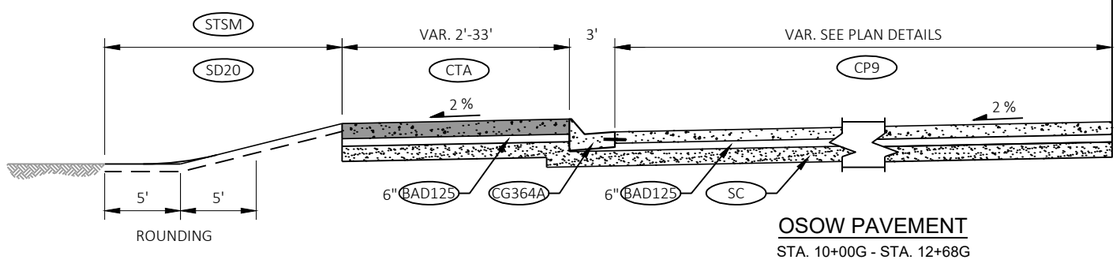
RAMP A STA. 107+50A - STA. 108+00A
RAMP B STA. 221+75B - STA. 222+25B

MATCHLINE RAMP C
STA 113+87A - 115+20A
STA 215+58B - 217+98B



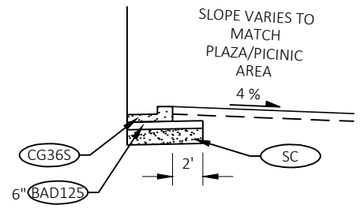
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RAMP B STA. 213+42B - STA. 221+75B



OSOW PAVEMENT

STA. 10+00G - STA. 12+68G

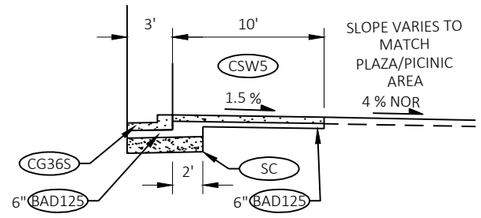


CURB

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

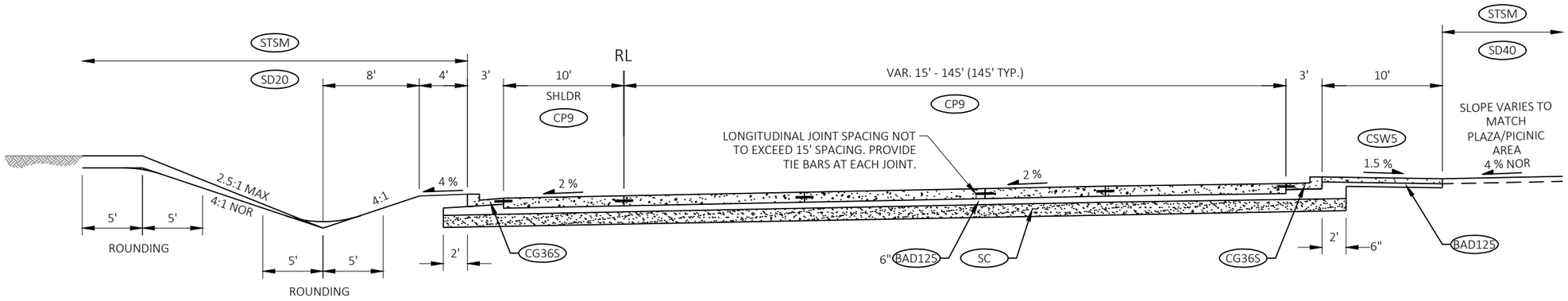
CG36S	CONCRETE CURB AND GUTTER 36-INCH TYPE A SPECIAL
CG364A	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
CP8	CONCRETE PAVEMENT 8-INCH
CP9	CONCRETE PAVEMENT 9-INCH
CTA	CONCRETE TRUCK APRON 12-INCH
STSM	SALVAGED TOPSOIL AND EROSION MAT CLASS 1, URBAN TYPE A
SD40	SEEDING MIXTURE NO 40, SEEDING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

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72



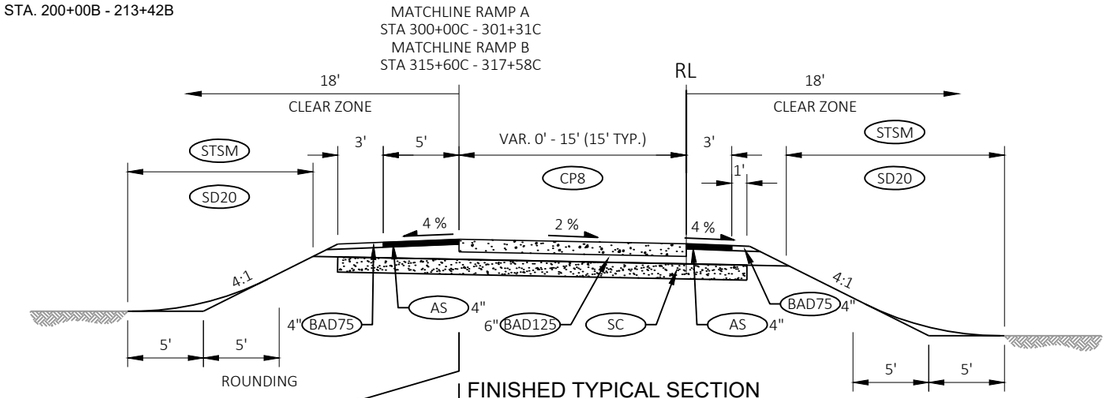
CURB & SIDEWALK

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



FINISHED TYPICAL SECTION

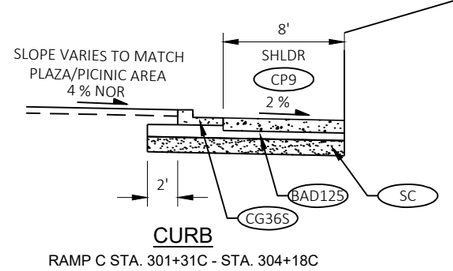
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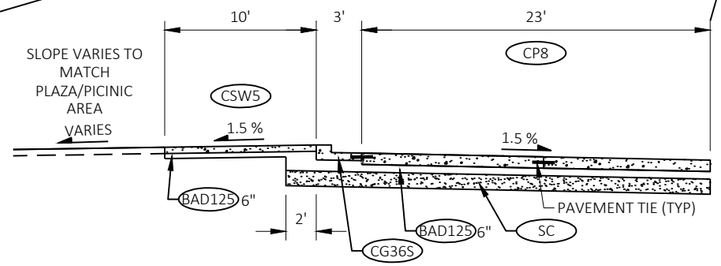
RAMP C STA. 300+00C - STA. 317+59C

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72



CURB

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

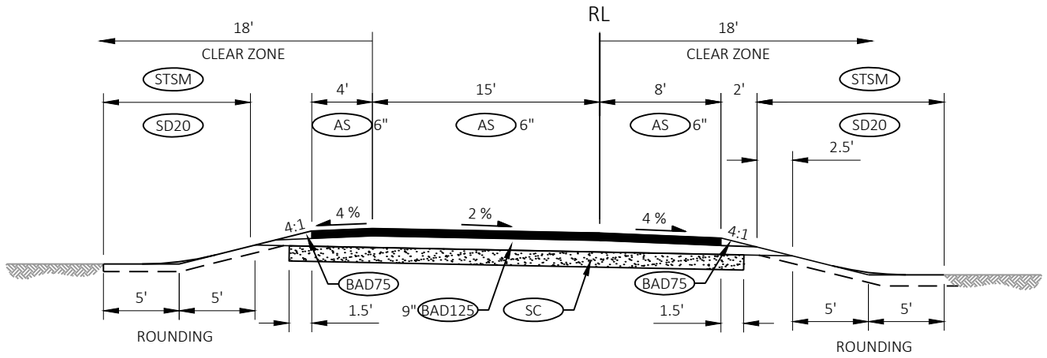


CAR PARKING

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

CG36S	CONCRETE CURB AND GUTTER 36-INCH TYPE A SPECIAL	AS	ASPHALTIC SURFACE
CG364A	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A	CSW5	CONCRETE SIDEWALK 5-INCH
CP8	CONCRETE PAVEMENT 8-INCH	BAD75	BASE AGGREGATE DENSE ¾-INCH
CP9	CONCRETE PAVEMENT 9-INCH	BAD125	BASE AGGREGATE DENSE 1¾-INCH
CTA	CONCRETE TRUCK APRON 12-INCH	SC	12" SELECT CRUSHED MATERIAL OVER GEOGRID TYPE SR
STSM	SALVAGED TOPSOIL AND EROSION MAT CLASS 1, URBAN TYPE A	SD20	SEEDING MIXTURE NO 20, SEEDING TEMPORARY, FERTILIZER TYPE B
SD40	SEEDING MIXTURE NO 40, SEEDING TEMPORARY, FERTILIZER TYPE B		

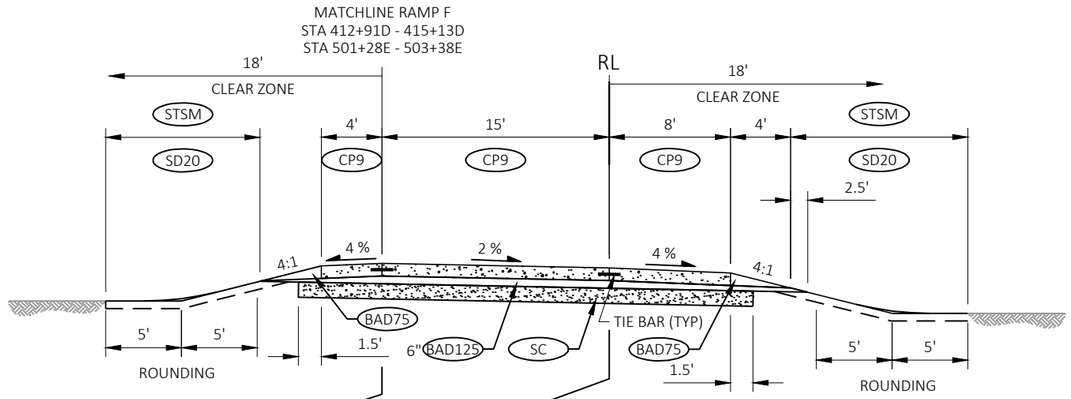
PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 5	E



FINISHED TYPICAL SECTION

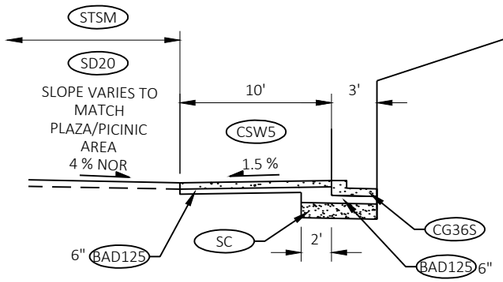
RAMP D STA. 406+00D - STA. 406+50D
RAMP E STA. 509+00E - STA. 509+50E

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



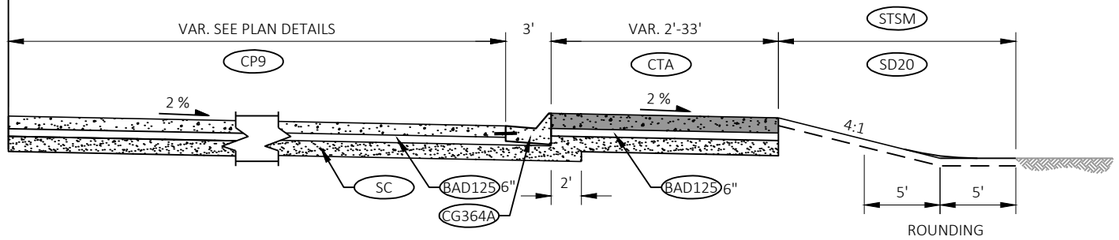
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RAMP D STA. 406+50D - STA. 416+38D
RAMP E STA. 500+00E - STA. 509+00E



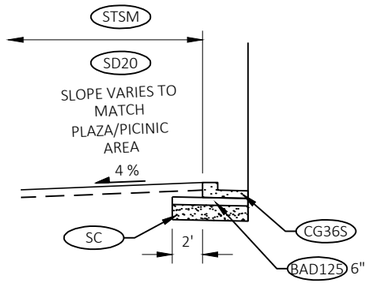
CURB & SIDEWALK

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



OSOW PAVEMENT

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



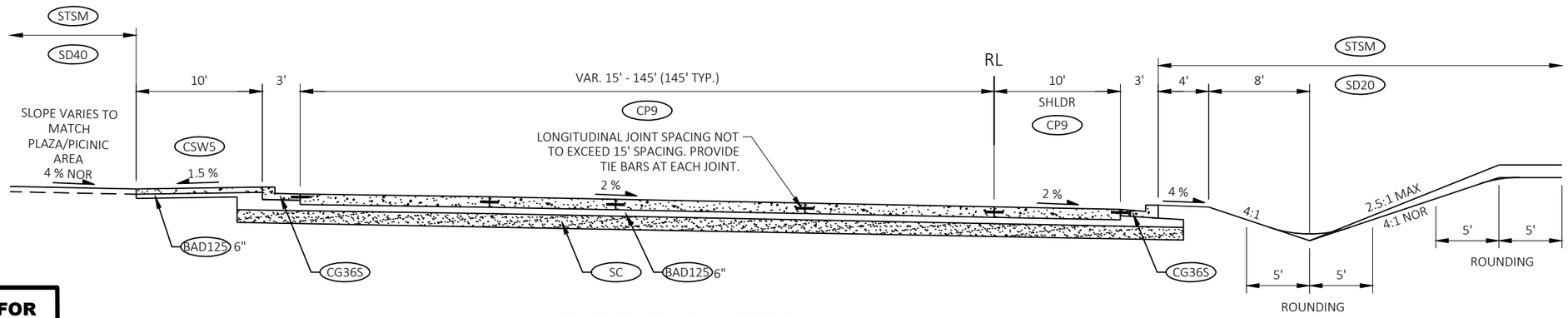
CURB

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

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72

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 A
SD40	SEEDING MIXTURE NO 40, SEEDING TEMPORARY, FERTILIZER TYPE B
AS	ASPHALTIC SURFACE
CSW5	CONCRETE SIDEWALK 5-INCH
BAD75	BASE AGGREGATE DENSE ¾-INCH
BAD125	BASE AGGREGATE DENSE 1¼-INCH
SC	12" SELECT CRUSHED MATERIAL OVER GEOGRID TYPE SR
SD20	SEEDING MIXTURE NO 20, SEEDING TEMPORARY, FERTILIZER TYPE B

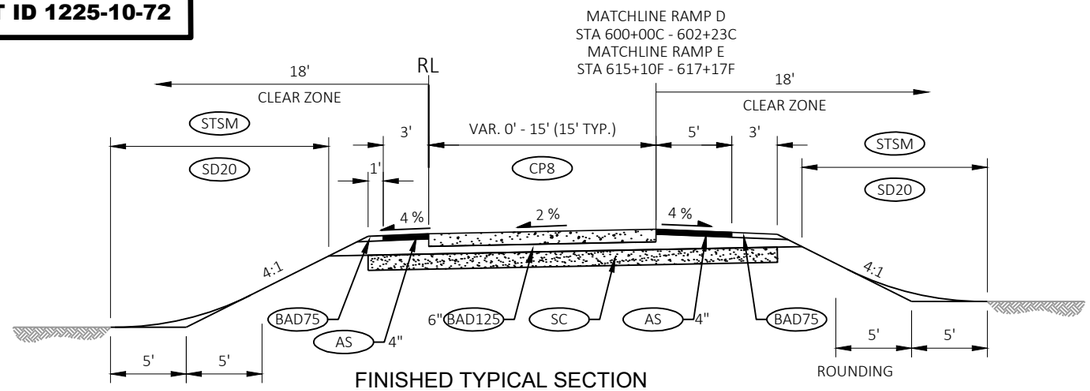
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FINISHED TYPICAL SECTION

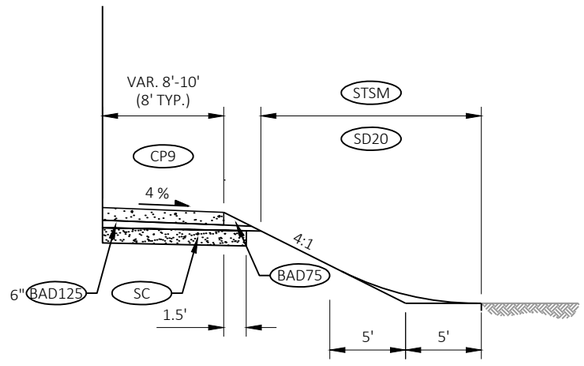
RAMP D STA. 416+38D - 430+37D

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72



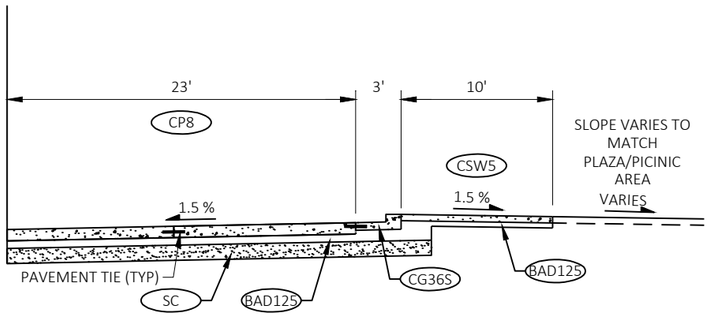
FINISHED TYPICAL SECTION

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



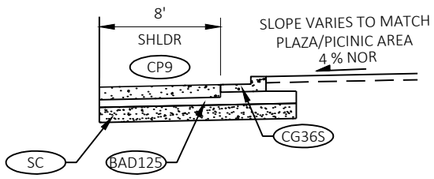
SHOULDER

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



CAR PARKING

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



CURB

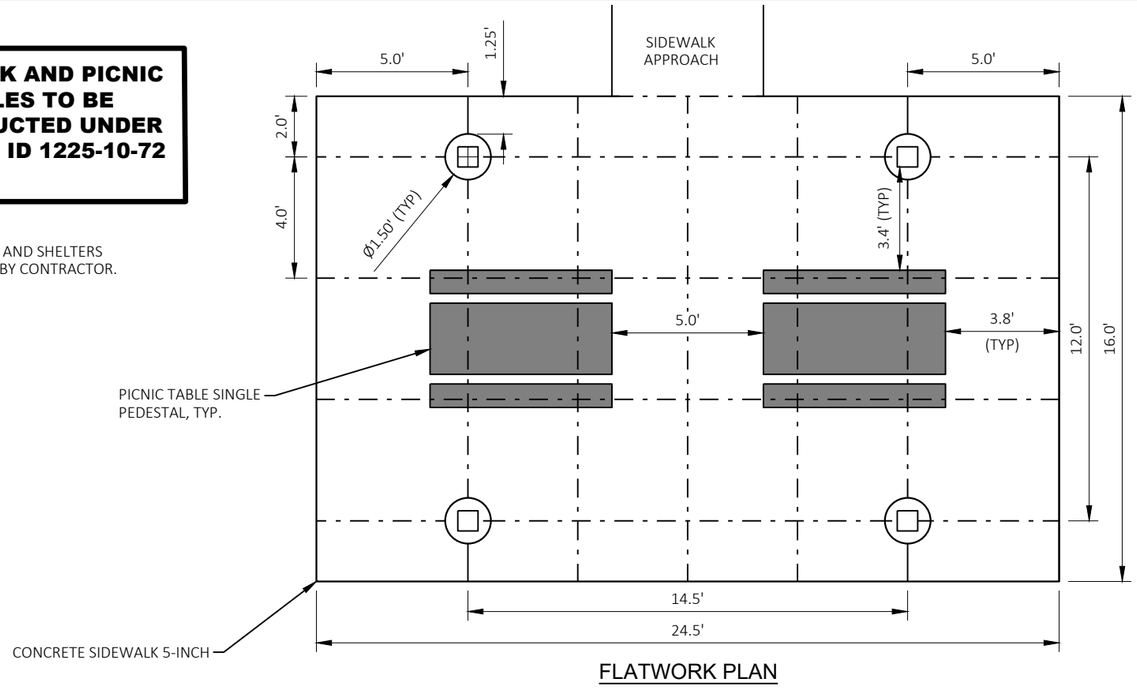
RAMP F STA. 612+23F - STA. 615+10F

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

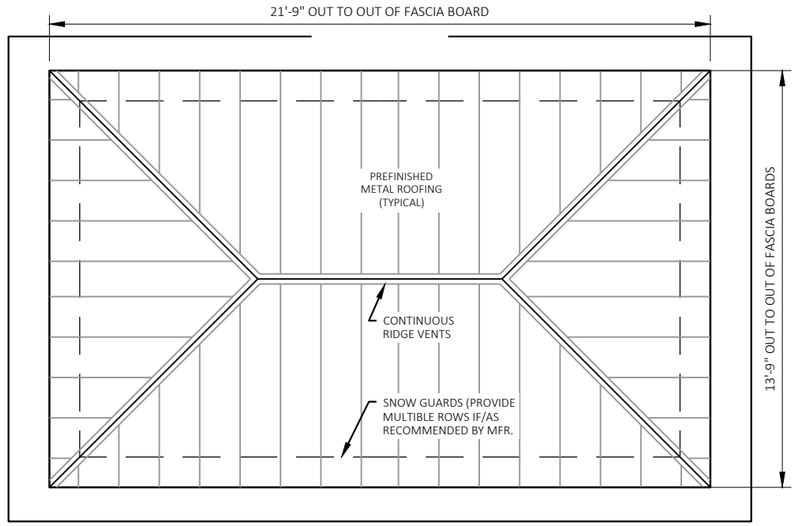
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SIDEWALK AND PICNIC TABLES TO BE CONSTRUCTED UNDER PROJECT ID 1225-10-72

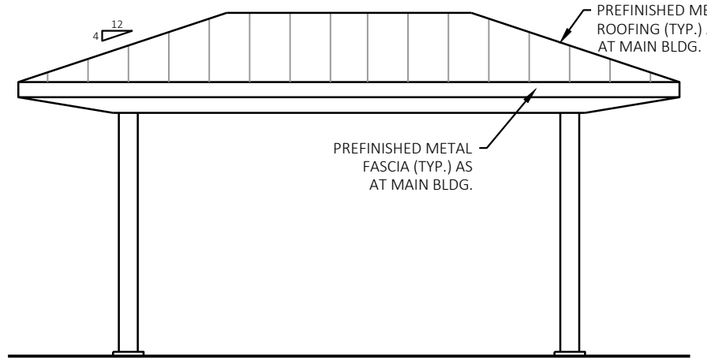
NOTES:
1. FOUNDATIONS AND SHELTERS INSTALLATION BY CONTRACTOR.



FLATWORK PLAN



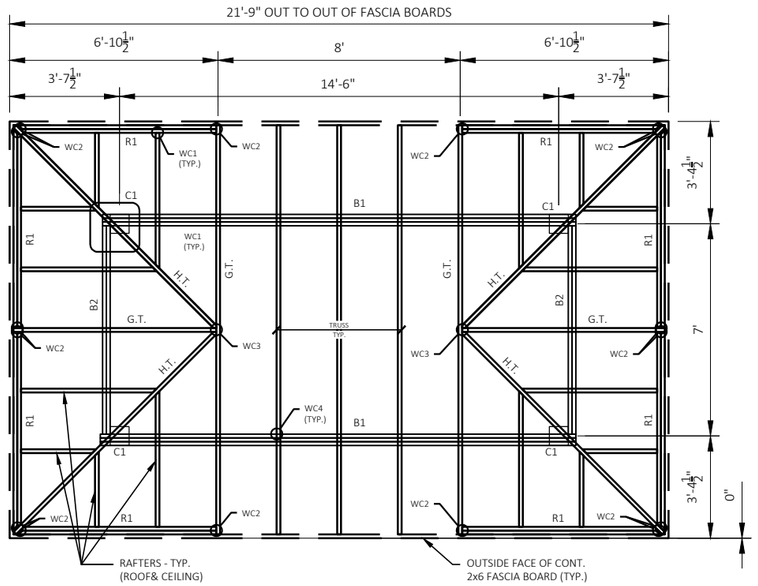
ROOF PLAN



ELEVATION

MEMBER SCHEDULE	
MARK	DESCRIPTION
R1	(2) 2x6 DFL #1/#2
B1	(3) 2x12 DFL SELECT STRUCTURAL
B2	(2) 2x12 DFL SELECT STRUCTURAL
C1	8x8 DFL CONSTRUCTION
G.T./H.T	TRUSS BY TRUSS MANUFACTORER
RAFTER	2x6 @ 24" O.C. DFL #1/#2
CEILING RAFTER	2x4 @ 24" O.C.

WOOD CONNECTION SCHEDULE	
MARK	DESCRIPTION
WC1	SIMPSON - A35 OR EQUAL
WC2	SIMPSON - U26-2 OR EQUAL
WC3	SIMPSON - MTHM OR EQUAL
WC4	SIMPSON - H2.5A OR EQUAL
WC5	SIMPSON - HUCQ410 OR EQUAL
WC6	SIMPSON - CPTZ OR EQUAL



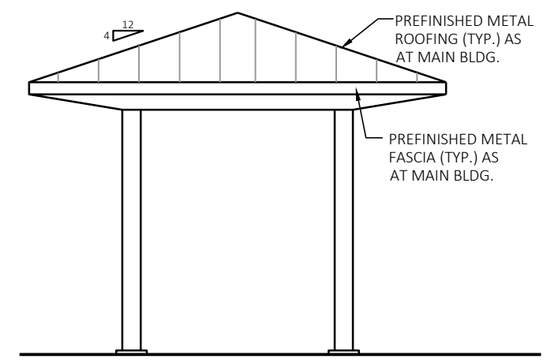
FRAMING PLAN

NOTE:
ALL CONNECTORS GALVANIZED, SEE DETAILS FOR OTHER CONNECTORS.

PICNIC SHELTER GENERAL NOTES:

1. ROOF, FASCIA AND SOFFIT MATERIALS AND COLORS SHALL BE SAME AS REST AREA BUILDING.

DETAIL OF PICNIC SHELTER LARGE

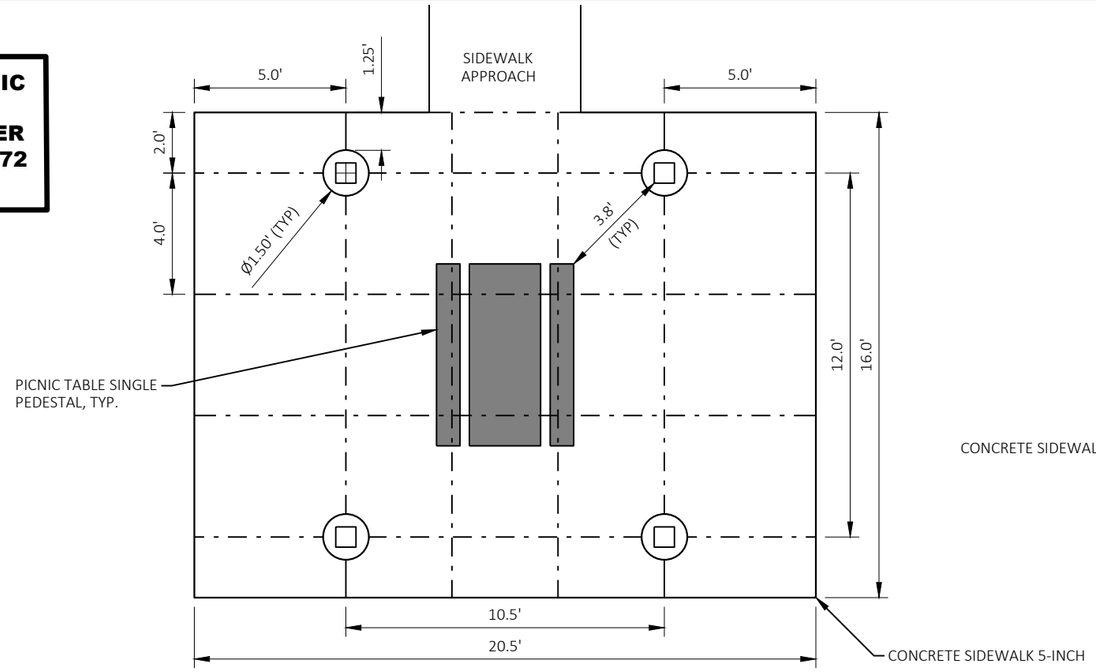


ELEVATION

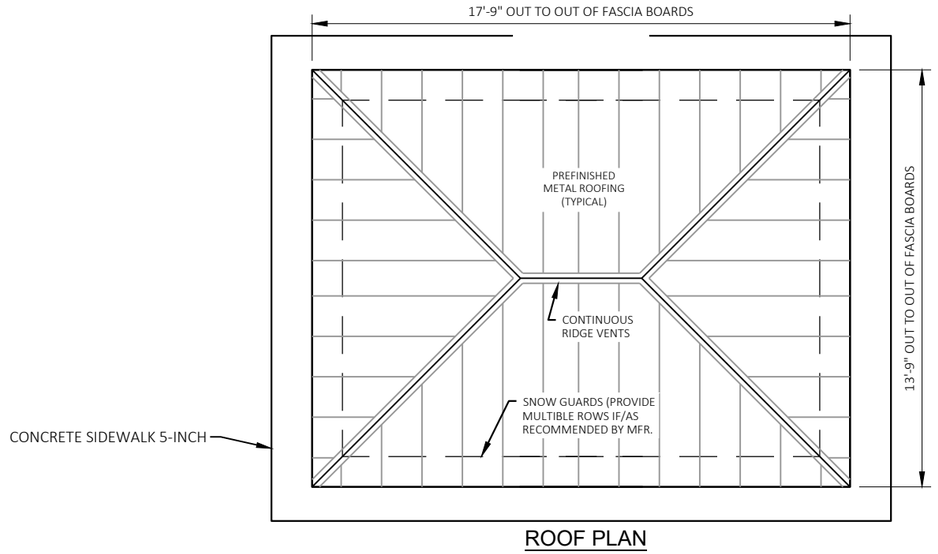
PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	CONSTRUCTION DETAILS	SHEET 8	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\021002-CD.DWG
LAYOUT NAME - 021020-cd
PLOT DATE : 7/30/2024 3:36 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

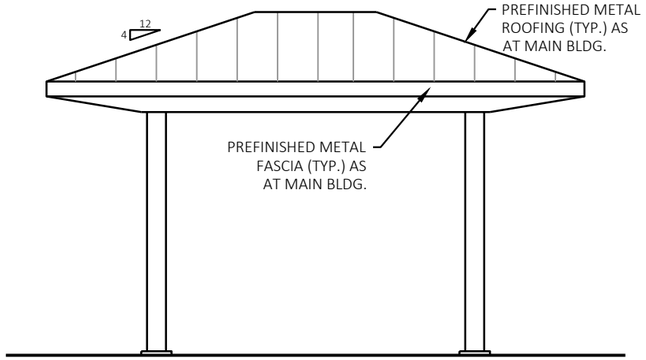
SIDEWALK AND PICNIC TABLES TO BE CONSTRUCTED UNDER PROJECT ID 1225-10-72



FLATWORK PLAN



ROOF PLAN

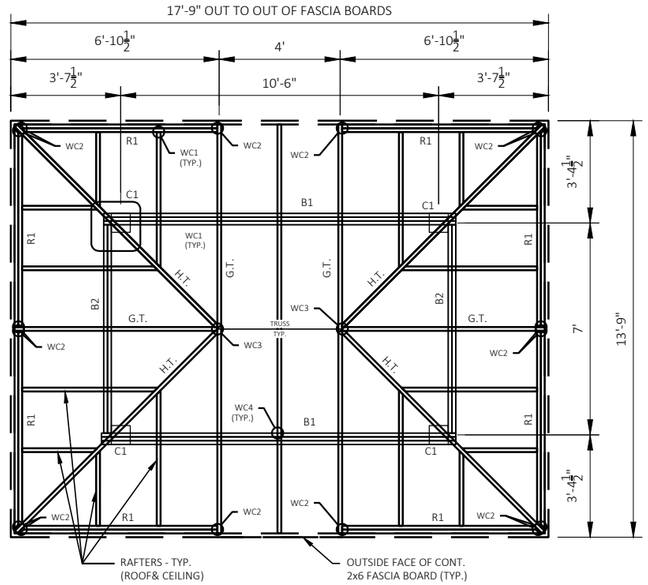


ELEVATION

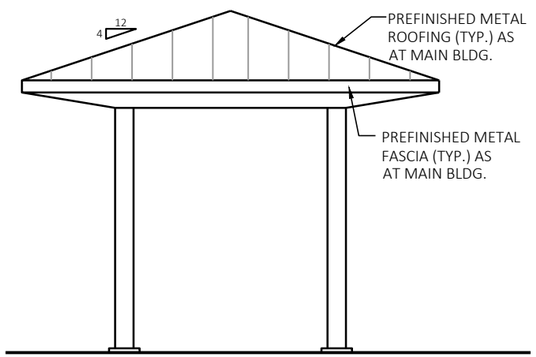
MEMBER SCHEDULE	
MARK	DESCRIPTION
R1	(2) 2x6 DFL #1/#2
B1	(3) 3x12 DFL SELECT STRUCTURAL
B2	(2) 2x12 DFL SELECT STRUCTURAL
C1	8x8 DFL CONSTRUCTION
G.T./H.T	TRUSS BY TRUSS MANUFACTORER
RAFTER	2x6 @ 24" O.C. DFL #1/#2
CEILING RAFTER	2x4 @ 24" O.C.

WOOD CONNECTION SCHEDULE	
MARK	DESCRIPTION
WC1	SIMPSON - A35 OR EQUAL
WC2	SIMPSON - U26-2 OR EQUAL
WC3	SIMPSON - MTHM OR EQUAL
WC4	SIMPSON - H2.5A OR EQUAL
WC5	SIMPSON - HUCQ410 OR EQUAL
WC6	SIMPSON - CPTZ OR EQUAL

NOTE:
ALL CONNECTORS GALVANIZED, SEE DETAILS FOR OTHER CONNECTORS.



FRAMING PLAN



ELEVATION

PICNIC SHELTER GENERAL NOTES:

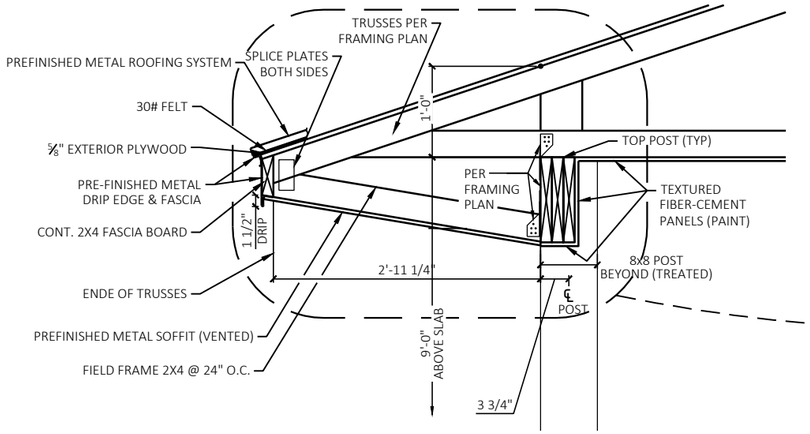
1. ROOF, FASCIA AND SOFFIT MATERIALS AND COLORS SHALL BE SAME AS REST AREA BUILDING.

DETAIL OF PICNIC SHELTER SMALL

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	CONSTRUCTION DETAILS	SHEET 9	E

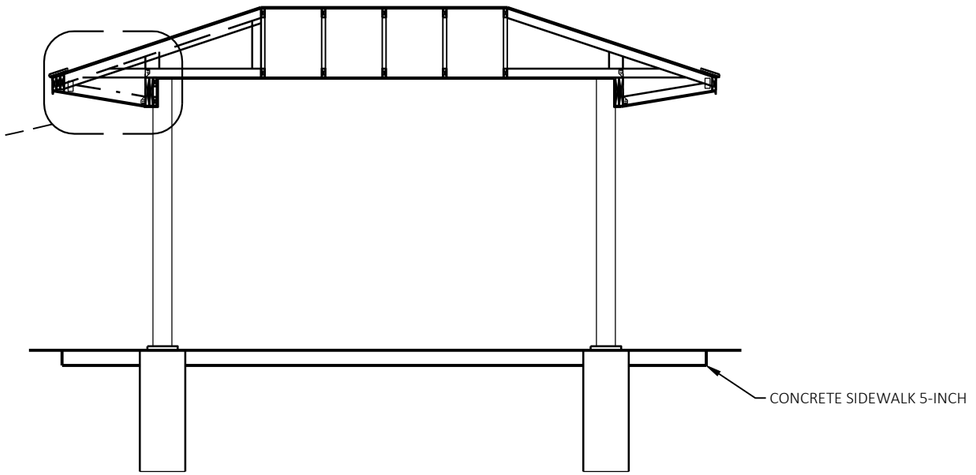
FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\021002-CD.DWG
LAYOUT NAME - 021021-cd
PLOT DATE : 7/30/2024 3:36 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:5 FT

2

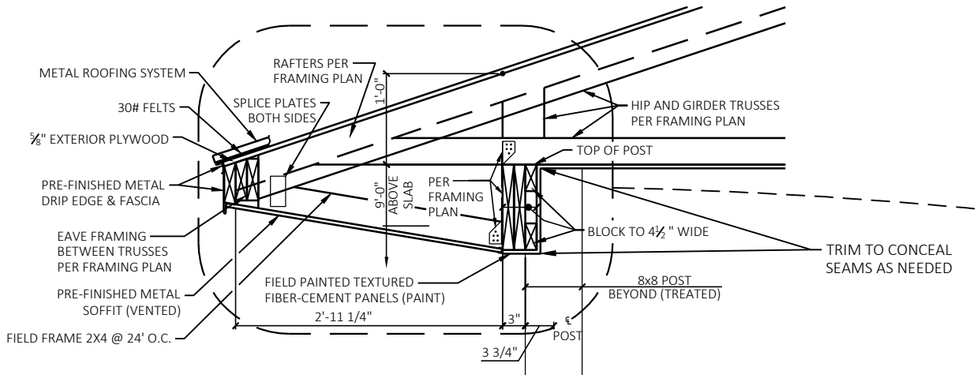


SIDE EAVES DETAIL

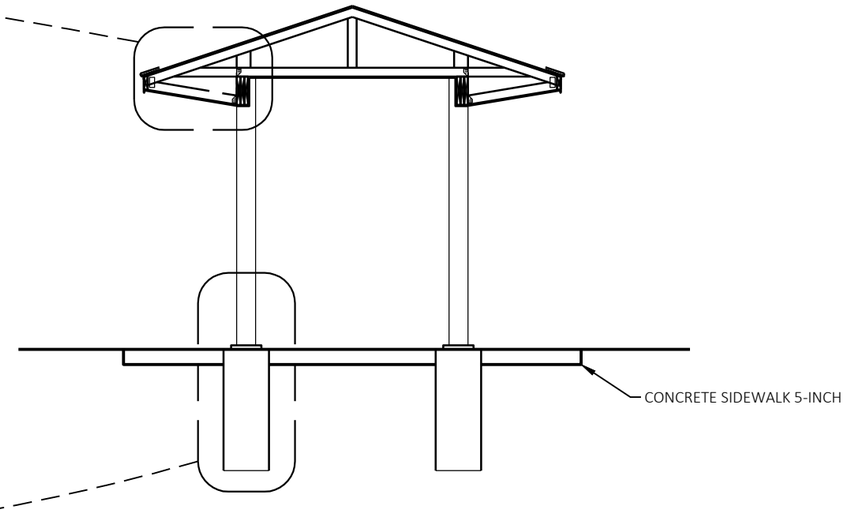
SIDEWALK AND PICNIC TABLES TO BE CONSTRUCTED UNDER PROJECT ID 1225-10-72



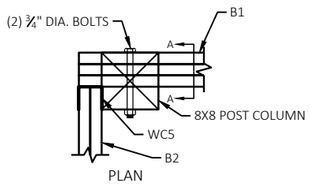
SECTION



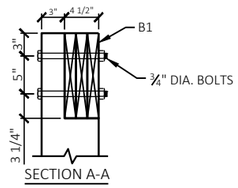
END EAVES DETAIL



SECTION

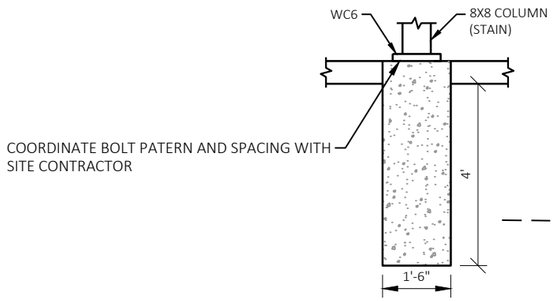


PLAN



SECTION A-A

BEAM BEARING DETAIL

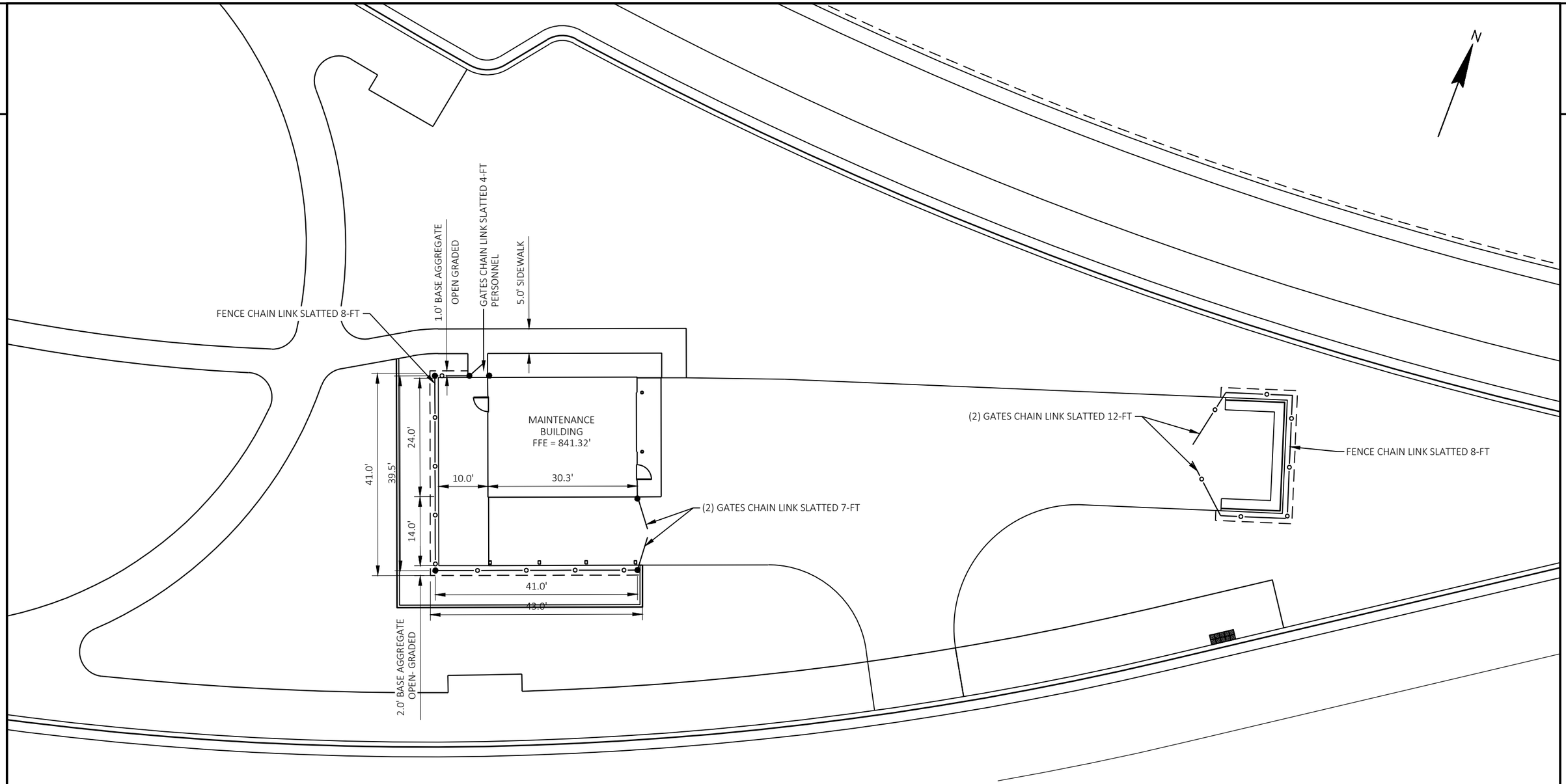


POST FOUNDATION DETAIL

DETAIL OF PICNIC SHELTER LARGE AND SMALL

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	CONSTRUCTION DETAILS	SHEET 10	E

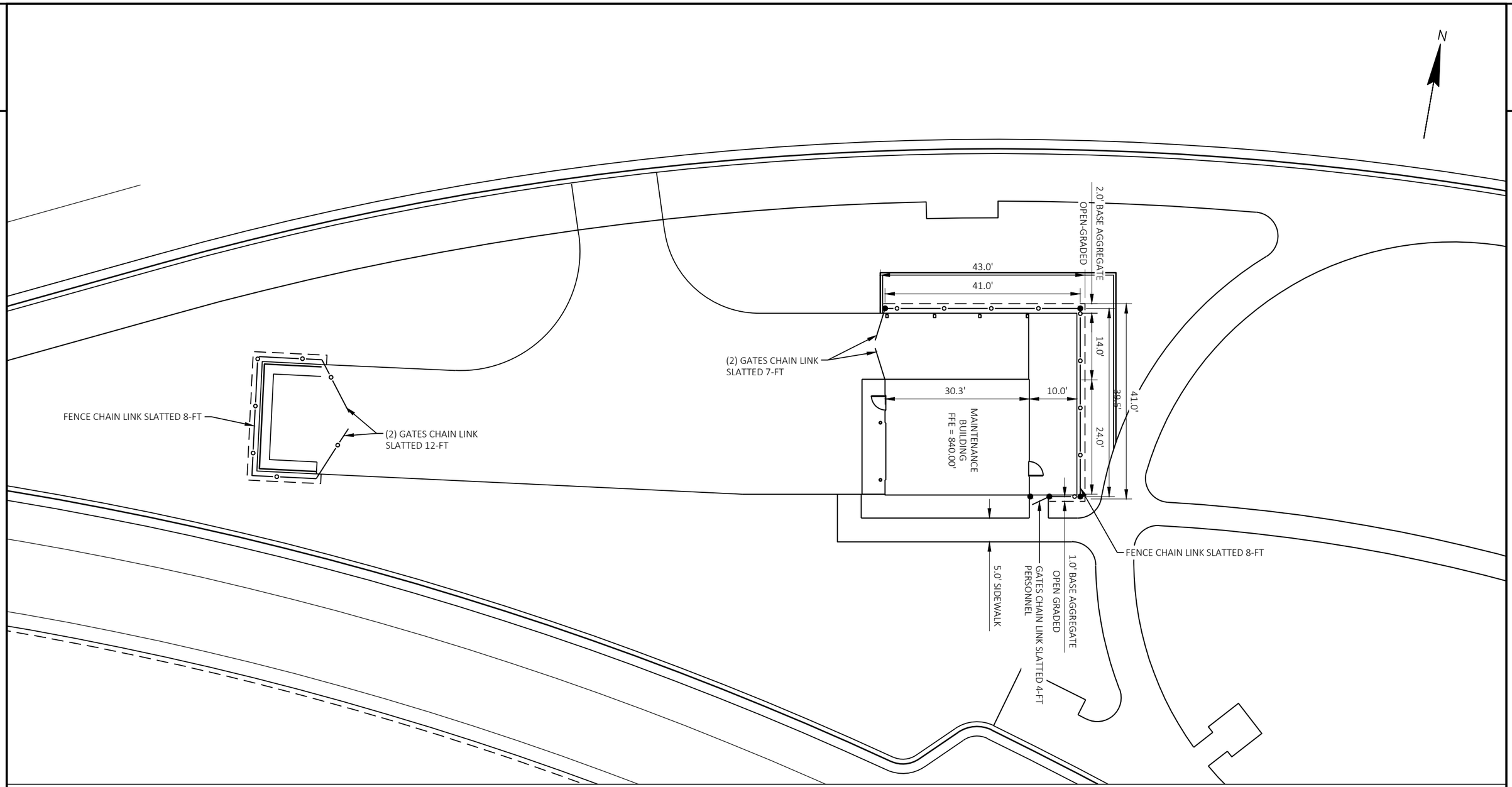
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REST AREA 51 MAINTENANCE BUILDING LAYOUT

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72

2



REST AREA 52 MAINTENANCE BUILDING LAYOUT

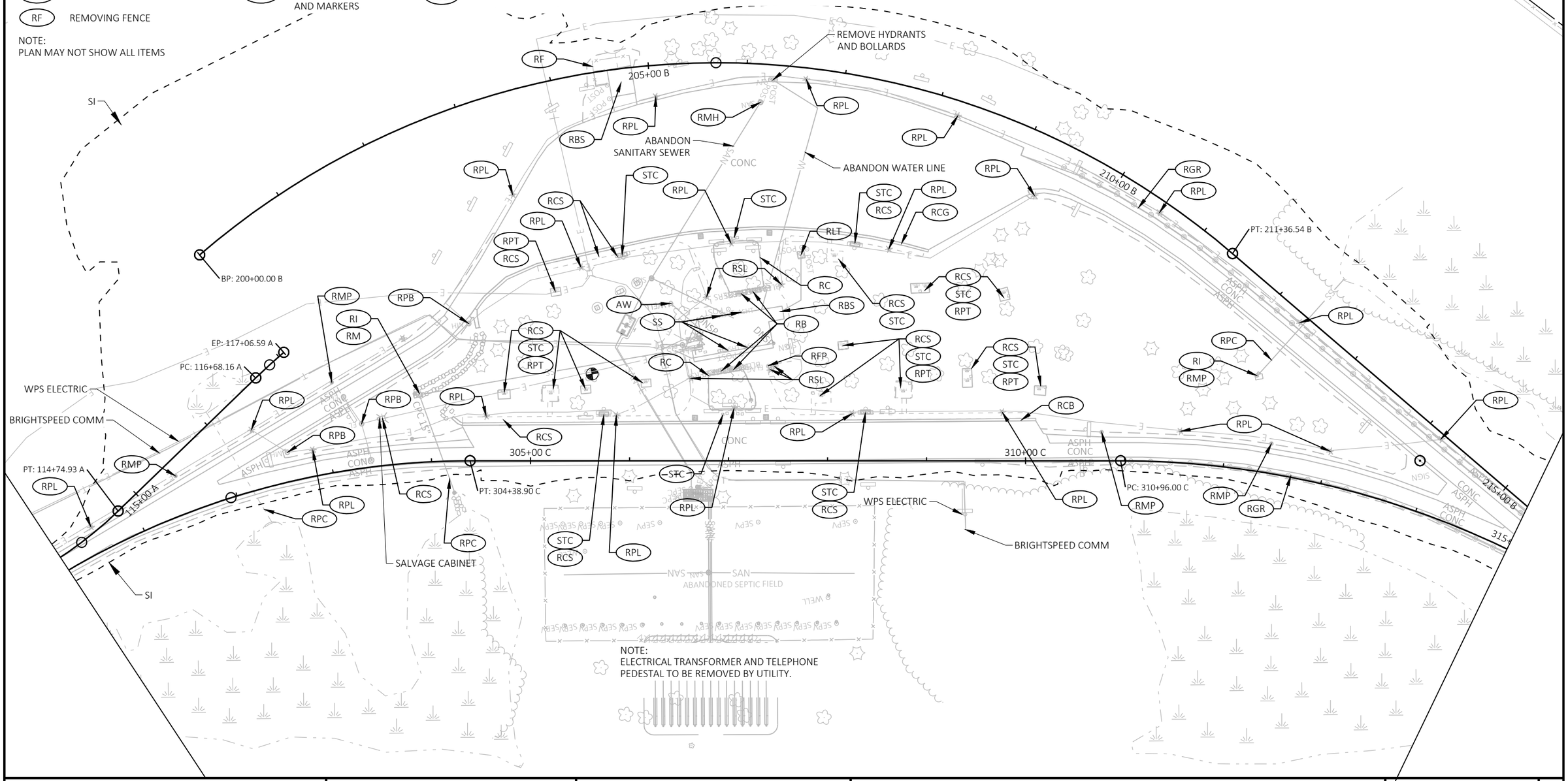
SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72

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	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 REMOVING SURFACE DRAINS		
RF	REMOVING FENCE						

NOTE:
PLAN MAY NOT SHOW ALL ITEMS

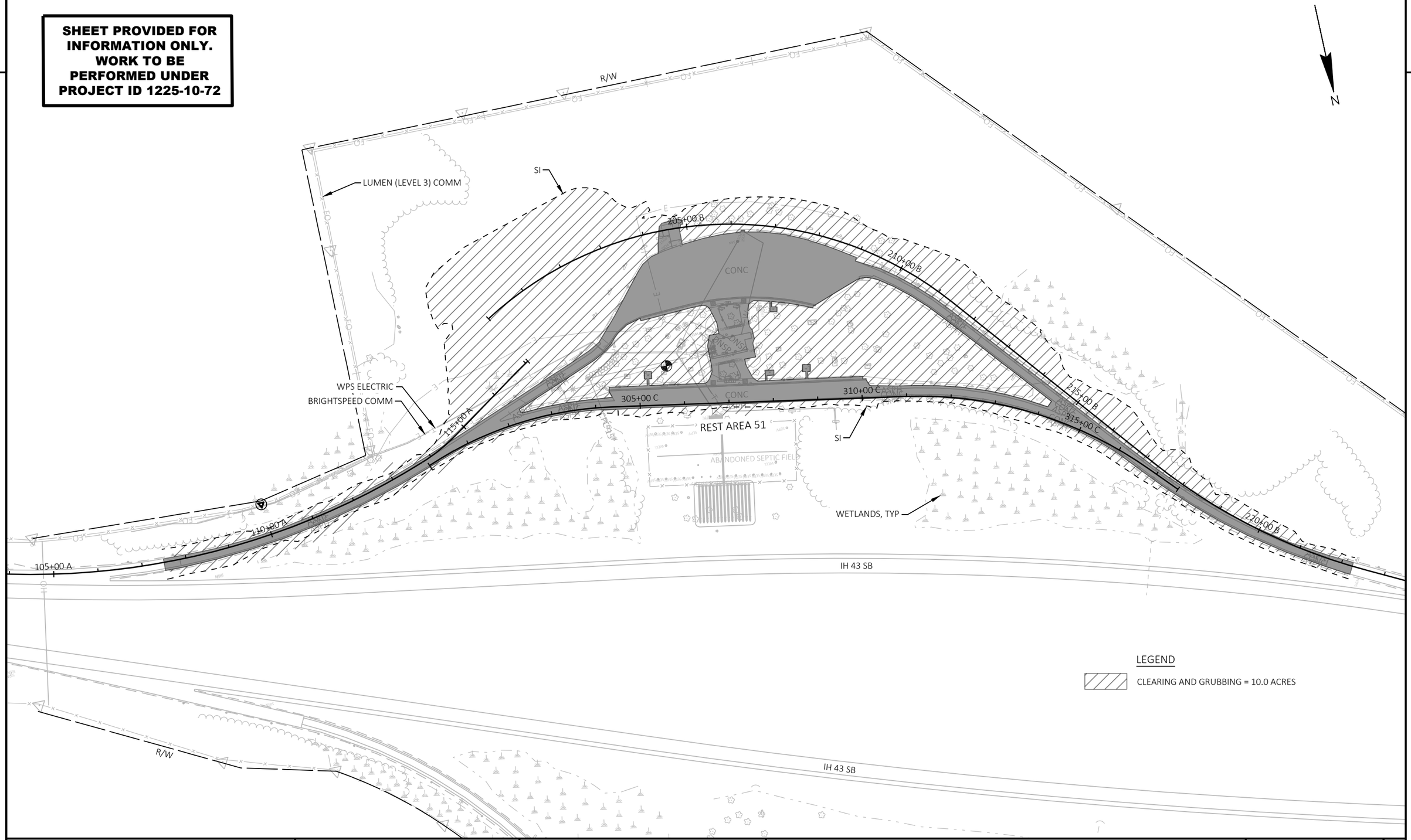
SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72



PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	REMOVAL DETAILS - REST AREA 51	SHEET 13	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\021101-RM_RA 51.DWG
LAYOUT NAME - 021102-rm
PLOT DATE : 7/30/2024 3:37 PM
PLOT BY : DAVID YAHNKE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72



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
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

415+00 D
PT: 414+96.93 D
SI
605+00 F
PT: 605+99.57 F
BRIGHTSPEED COMM
WPS ELECTRIC
SALVAGE CABINET
PC: 611+91.22 F
610+00 F
615+00 F
PC: 417+33.16 D
420+00 D
425+00 D
430+00 D
BP: 500+00.00 E
EP: 430+37.11 D
FENCE TO REMAIN
ABANDON SANITARY SEWER
ABANDON WATER LINE
REMOVE HYDRANTS AND BOLLARDS
ABANDONED SEPTIC FIELD
R/W
CONC
ASPH
RPL
RPC
RI
RM
RPS
RSL
RFP
RPT
RCS
RB
RBS
AW
STC
RMH
RF
RMP
RCG

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72

NOTE:
ELECTRICAL TRANSFORMER AND TELEPHONE PEDESTAL TO BE REMOVED BY OTHERS.

N

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	REMOVAL DETAILS - REST AREA 52	SHEET 15 E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\021104-RM_RA 52.DWG
LAYOUT NAME - 021109-rm
PLOT DATE : 7/30/2024 3:37 PM
PLOT BY : DAVID YAHNKE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

2

IH 43 SB

IH 43 SB

405+00 D

410+00 D

415+00 D

420+00 D

425+00 D

430+00 D

505+00 E

510+00 E

605+00 F

610+00 F

615+00 F

SI

SI

REST AREA 52

BRIGHTSPEED COMM

WPS ELECTRIC

CONC

CONC

CONC

ASPH

ASPH

ASPH

ASPH

ASPH

ASPH

R/W

ABANDONED SEPTIC FIELD

WETLAND, TYP

N

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72

LEGEND

CLEARING AND GRUBBING = 9.9 ACRES

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	REMOVAL DETAILS - REST AREA 52	SHEET 16	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\021105-RM_RA52.DWG
LAYOUT NAME - 021111-rm

PLOT DATE : 7/30/2024 3:38 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72

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
CD9	CONCRETE DRIVEWAY 9-INCH		
CSW5	CONCRETE SIDEWALK 5-INCH		

WORK TO BE COMPLETED UNDER PROJECT ID 1225-10-72

N

SI

BP: 50+00.00 L

BP: 200+00.00 B

51+00 L

52+00 L

53+00

54+00 L

MATCHLINE STA 54+40 L

EP: 117+06.59 A

117+00 A

PC: 116+68.16 A

116+00 A

115+00 A

CD9
18'

CSW5

10'

8'

5'

38'

23'

J55

J54

J56

J53

MAINTENANCE BUILDING

302+00 C

303+00 C

304+00 C

PT: 304+38.90 C

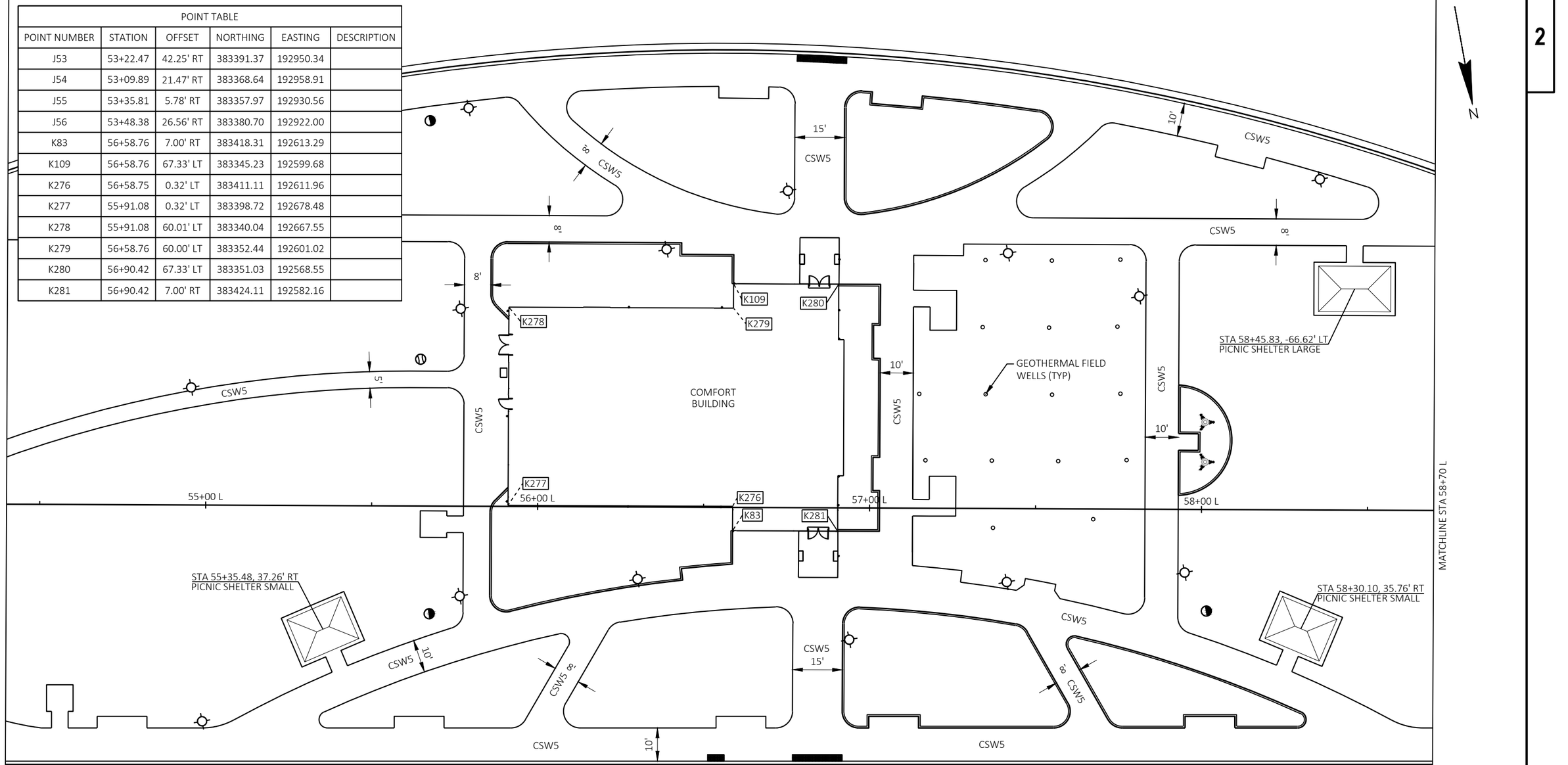
PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - RA 51 PLAZA	SHEET 17	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\021201-PD_RA 51-PLAZA.DWG
LAYOUT NAME - 021214_pd-Plaza

PLOT DATE : 7/30/2024 3:38 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

POINT TABLE					
POINT NUMBER	STATION	OFFSET	NORTHING	EASTING	DESCRIPTION
J53	53+22.47	42.25' RT	383391.37	192950.34	
J54	53+09.89	21.47' RT	383368.64	192958.91	
J55	53+35.81	5.78' RT	383357.97	192930.56	
J56	53+48.38	26.56' RT	383380.70	192922.00	
K83	56+58.76	7.00' RT	383418.31	192613.29	
K109	56+58.76	67.33' LT	383345.23	192599.68	
K276	56+58.75	0.32' LT	383411.11	192611.96	
K277	55+91.08	0.32' LT	383398.72	192678.48	
K278	55+91.08	60.01' LT	383340.04	192667.55	
K279	56+58.76	60.00' LT	383352.44	192601.02	
K280	56+90.42	67.33' LT	383351.03	192568.55	
K281	56+90.42	7.00' RT	383424.11	192582.16	



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
CSW5	CONCRETE SIDEWALK 5-INCH		

WORK TO BE COMPLETED UNDER PROJECT ID 1225-10-72

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - RA 51 PLAZA	SHEET 18 E

POINT TABLE					
POINT NUMBER	STATION	OFFSET	NORTHING	EASTING	DESCRIPTION
V94	68+49.51	0.32' RT	385067.10	192393.42	
V107	68+49.51	60.01' RT	385123.77	192412.14	
V108	67+81.83	60.00' RT	385102.53	192476.40	
V109	67+50.17	67.33' RT	385099.56	192508.77	
V110	67+50.08	7.06' LT	385028.90	192485.52	
V111	67+81.83	7.00' LT	385038.91	192455.39	
V138	67+81.83	67.33' RT	385109.50	192478.70	
W65	70+13.30	14.18' LT	385104.70	192233.35	
W66	70+39.98	28.53' LT	385099.44	192203.52	
W67	70+51.49	7.13' LT	385123.37	192199.30	
W68	70+24.81	7.22' RT	385128.63	192229.13	

SI

F 608+00 F 609+00 F 611+00 F

CSW5 10' CSW5 CSW5 10' CSW5 10' CSW5

STA 65+81.14, -36.67' LT
PICNIC SHELTER SMALL

STA 68+85.95, -29.05' LT
PICNIC SHELTER SMALL

65+00 M 66+00 M 67+00 M 68+00 M 69+00 M

V110 V111 V94 V107 V108 V109 V138

COMFORT BUILDING

8' CSW5 8' CSW5 5' CSW5

STA 65+81.38, 66.62' RT
PICNIC SHELTER LARGE

10' CSW5 8' CSW5 8' CSW5 8' CSW5 8' CSW5 10' CSW5 15'

MATCHLINE STA 69+40 M

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
CD9	CONCRETE DRIVEWAY 9-INCH		
CSW5	CONCRETE SIDEWALK 5-INCH		

WORK TO BE COMPLETED UNDER PROJECT ID 1225-10-72

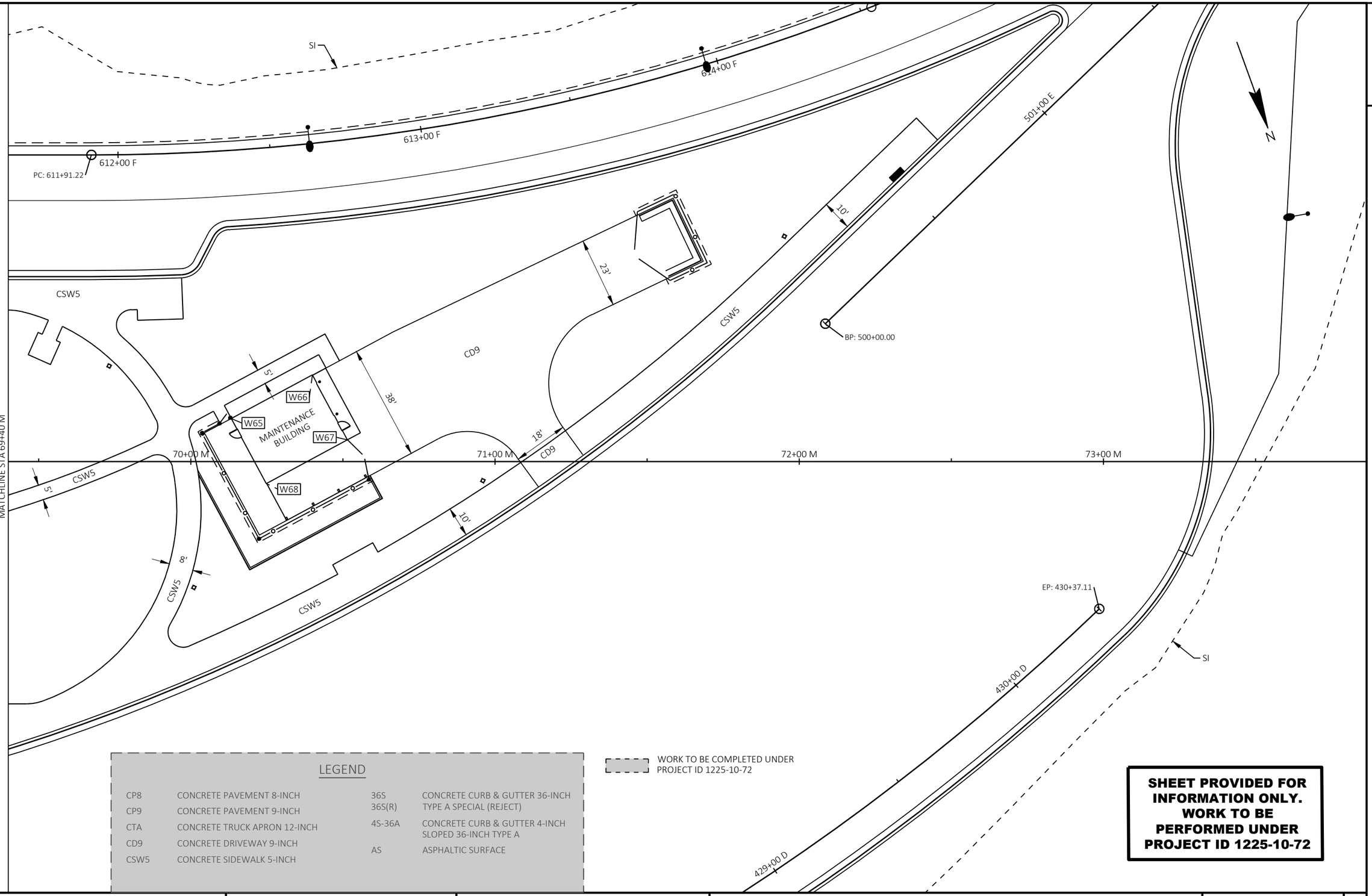
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PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - RA 52 PLAZA	SHEET 19	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\021211-PD_RA 52 - PLAZA.DWG
LAYOUT NAME - 021231-pd-Plaza

PLOT DATE : 7/30/2024 3:39 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:30

WISDOT/CADDS SHEET 42



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
CSW5	CONCRETE SIDEWALK 5-INCH		

WORK TO BE COMPLETED UNDER PROJECT ID 1225-10-72

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	PLAN DETAILS - RA 52 PLAZA	SHEET 20	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\021211-PD_RA 52 - PLAZA.DWG
LAYOUT NAME - 021232-pd-Plaza
PLOT DATE : 7/30/2024 3:39 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:30

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72

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
- EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 70, SALVAGED TOPSOIL, FERTILIZER TYPE B
- SILT FENCE
- EROSION BALE, BARRIER
- RIP RAP OR STONE DITCH CHECK
- SLOPE INTERCEPT
- ASPH — ASPHALTIC FLUME
- CONC — CONCRETE FLUME
- 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

115+00 A

WPS ELECTRIC

BRIGHTSPEED

10'X10' RIP RAP MEDIUM, GEOTEXTILE TYPE HR

215+00 B

315

10'X10' RIP RAP MEDIUM, GEOTEXTILE TYPE HR

ABANDONED SEPTIC FIELD

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	EROSION CONTROL - REST AREA 51	SHEET 21	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\022001-EC_RA51.DWG
LAYOUT NAME - 022002-ec

PLOT DATE : 7/30/2024 3:39 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72

2

2

LEGEND

- EROSION MAT UBAN 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
- EROSION MAT URBAN CLASS I TYPE B, SEEDING MIXTURE NO. 70, SALVAGED TOPSOIL, FERTILIZER TYPE B
- SILT FENCE
- EROSION BALE, BARRIER
- RIP RAP OR STONE DITCH CHECK
- SLOPE INTERCEPT
- ASPH — ASPHALTIC FLUME
- CONC — CONCRETE FLUME
- INLET PROTECTION A B C D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

10'X10' RIP RAP MEDIUM, GEOTEXTILE TYPE HR

BRIGHTSPEED COMM

WPS ELECTRIC

415+00 D

605+00 F

610+00 F

615+00 F

420+00 D

425+00 D

430+00 D

COMFORT BUILDING

MAINTENANCE BUILDING

ABANDONED SEPTIC FIELD

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	EROSION CONTROL - REST AREA 52	SHEET 22	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\022001-EC_RA52.DWG
LAYOUT NAME - 022005-ec

PLOT DATE : 7/30/2024 3:40 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

WORK TO BE COMPLETED UNDER
PROJECT ID 1225-10-72

LUMEN (LEVEL 3) COMM

N

SI

200

205+00 B

BASIN

P-200

201

P-201

P-202

P-203

P-204

CONC

210+00 B

325

P-325

326

104

103

202

P-103

WPS ELECTRIC

BRIGHTSPEED COMM

WPS ELECTRIC

COMFORT
BUILDING

203

204

205

STORM SEWER
COMPOSITE 8-INCH

102

ASPH
CONC

CONC

305+00 C

310+00 C

302

115+00 A

SI

STORM SEWER
COMPOSITE 8-INCH

WPS ELECTRIC

BRIGHTSPEED COMM

P-301

301

SAN

ABANDONED SEPTIC FIELD

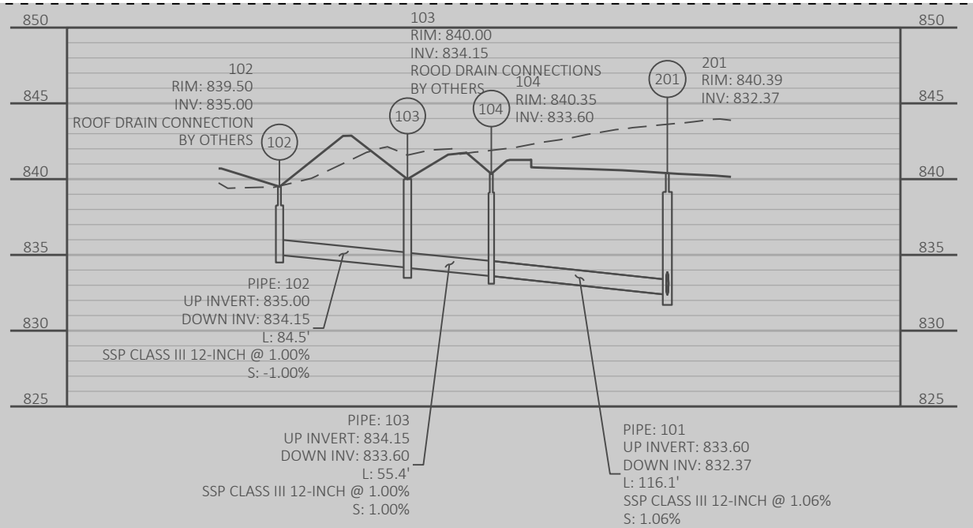
IH 43 SB

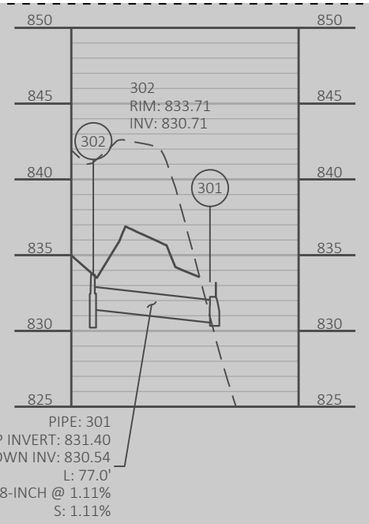
102	STA 304+83, 96.6' LT INLETS MEDIAN 1G-MS
103	STA 304+96, 180.1' LT INLETS MEDIAN 1G-MS
104	STA 305+38, 216.7' LT INLETS MEDIAN 1G-MS
200	STA 304+24, 403.7' LT APRON ENDWALLS FOR CPRC 18-INCH
201	STA 204+60, 74.6' RT MANHOLES 5-J
202	STA 308+03, 218.1' LT INLETS MEDIAN 1G-MS
203	STA 307+85, 165.2'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

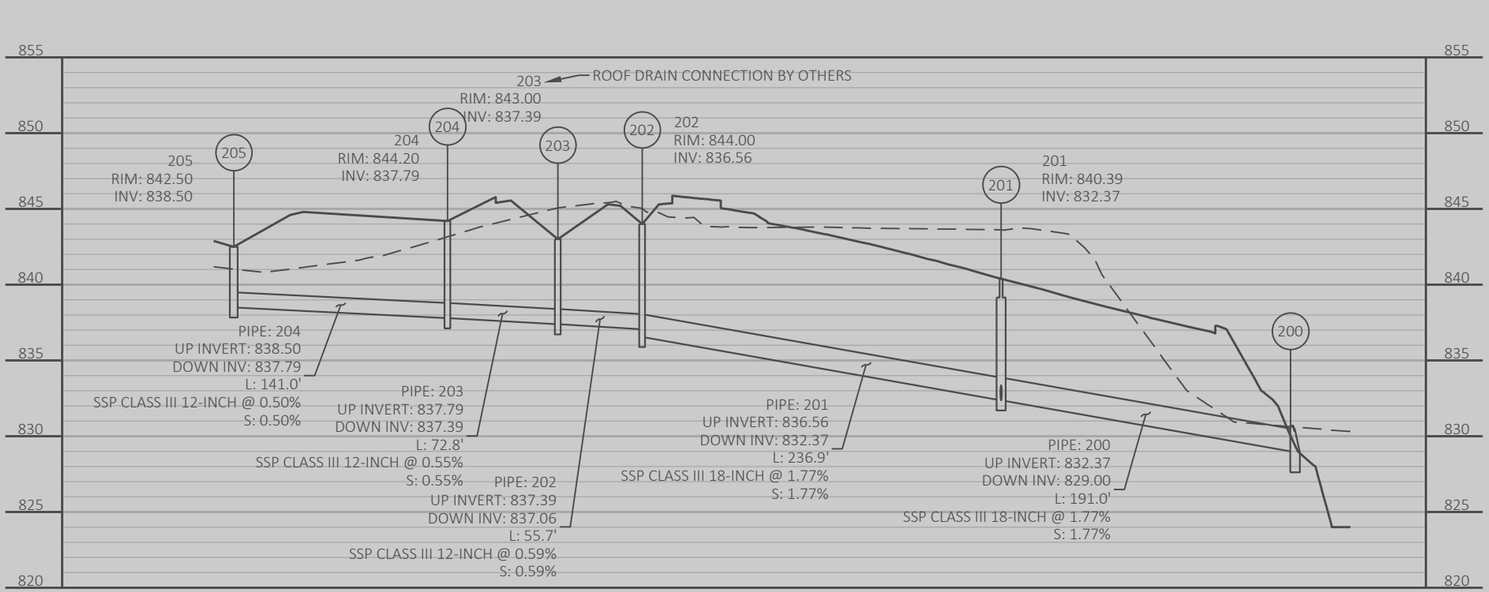
PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	STORM SEWER PLAN - REST AREA 51	SHEET 23	E

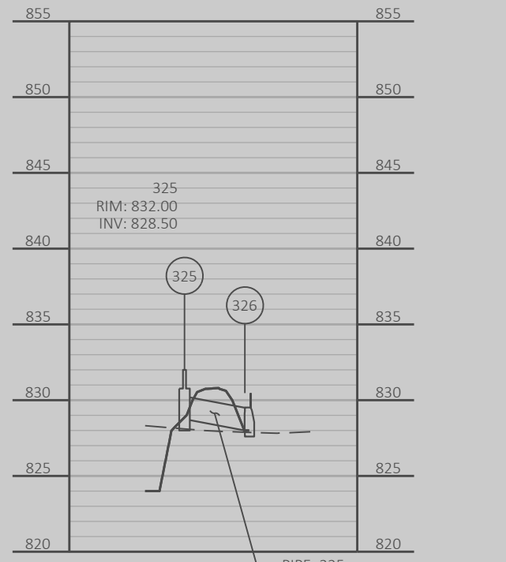
FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\022501-SS_RA51.DWG
LAYOUT NAME - 022501-ss
PLOT DATE : 7/30/2024 3:40 PM
PLOT BY : DAVID YAHNKE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

WORK TO BE COMPLETED UNDER
PROJECT ID 1225-10-72









PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	STORM SEWER PLAN - REST AREA 51	SHEET 24	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\022501-SS_RA51.DWG
LAYOUT NAME - 022502-ss
PLOT DATE : 7/30/2024 3:40 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

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

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

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

LEGEND

SURFACE WATER FLOW

WORK TO BE COMPLETED UNDER
PROJECT ID 1225-10-72

N

POND
BASIN

P-501

415+00 D

605+00 F

610+00 F

615+00 F

420+00 D

425+00 D

430+00 D

BRIGHTSPEED COMM

WPS ELECTRIC

STORM SEWER COMPOSITE 8-INCH

COMFORT
BUILDING

STORM SEWER
COMPOSITE 8-INCH

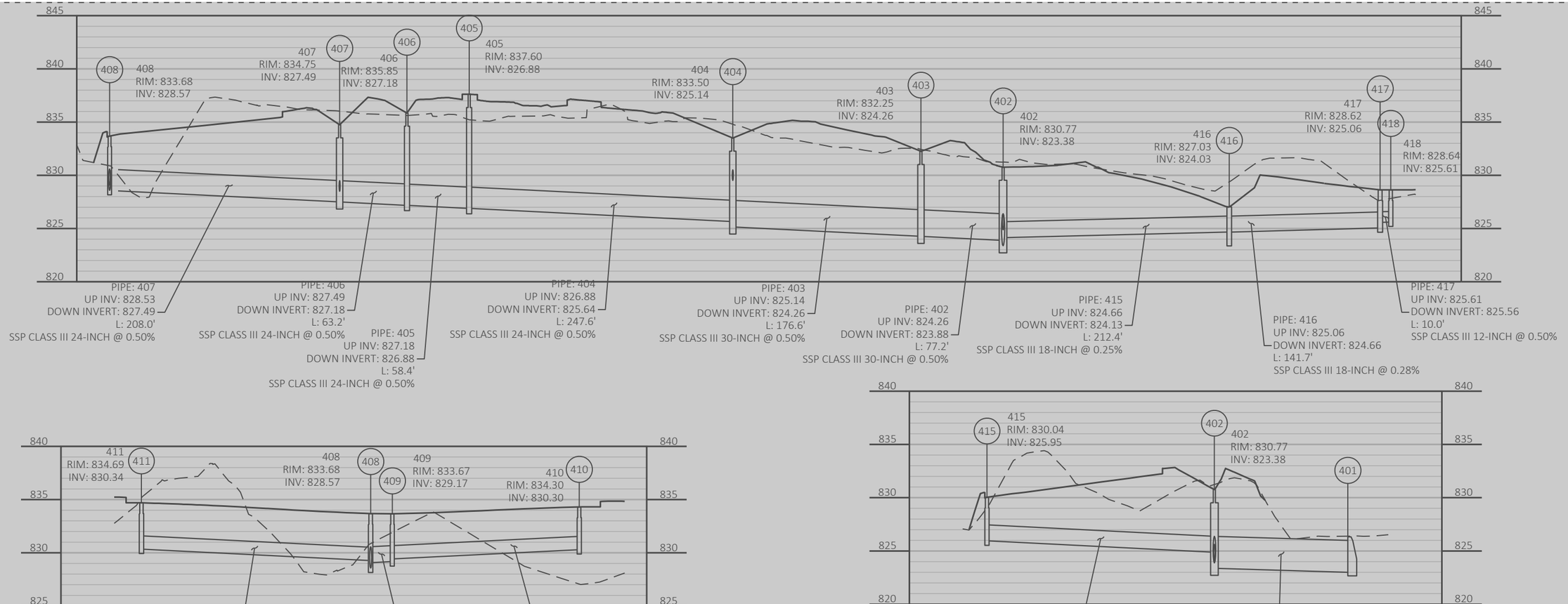
P-415 P-416 P-417 P-402 P-403 P-404 P-412 P-413 P-414 P-405 P-406 P-407 P-411 P-410 P-409 P-408

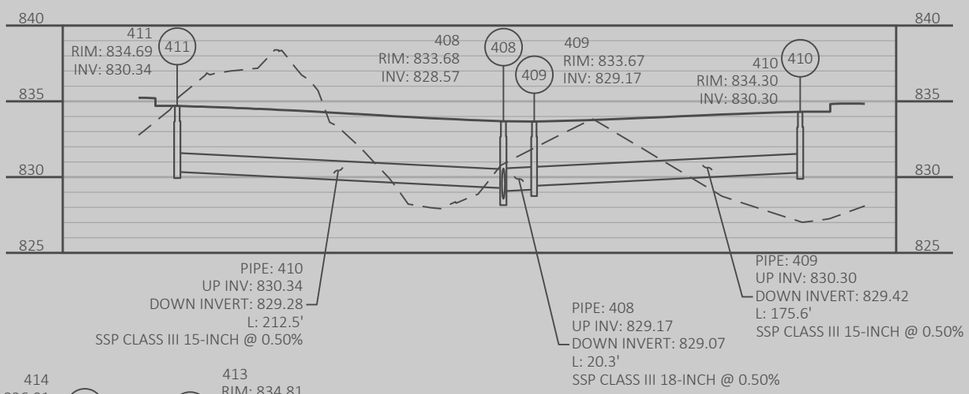
ABANDONED SEPTIC FIELD

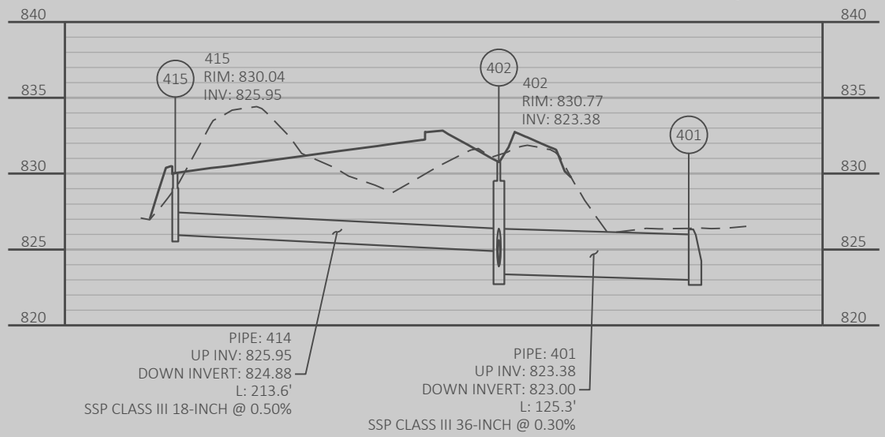
PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	STORM SEWER PLAN - REST AREA 52	SHEET 25	E

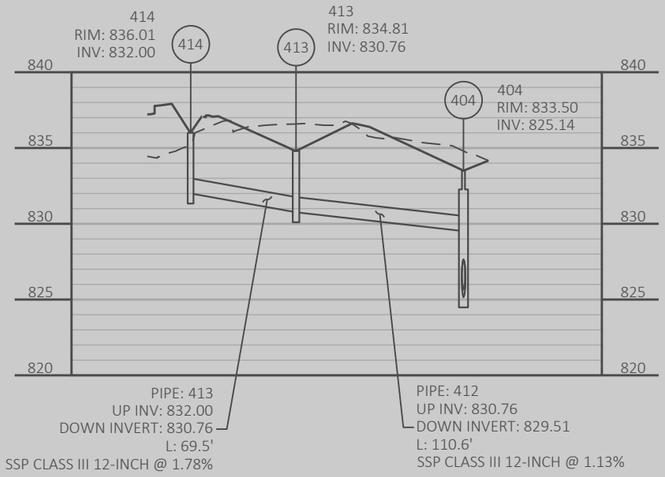
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LAYOUT NAME - 022503-ss

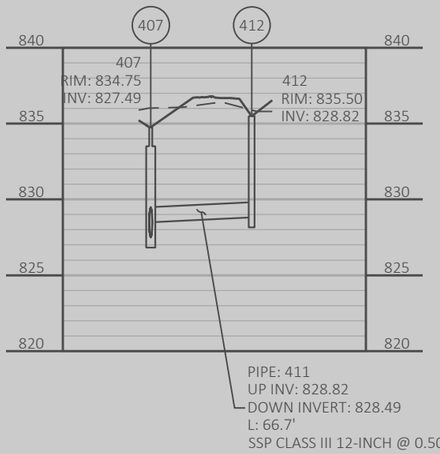
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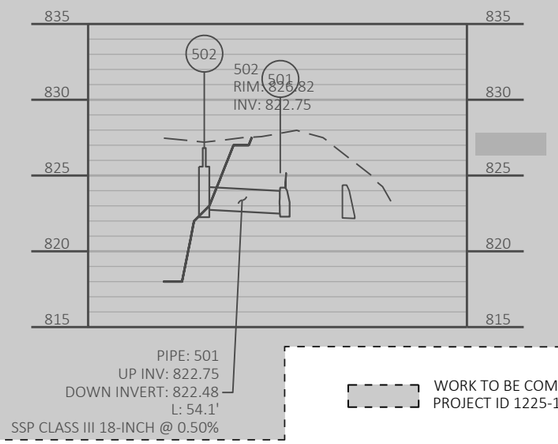






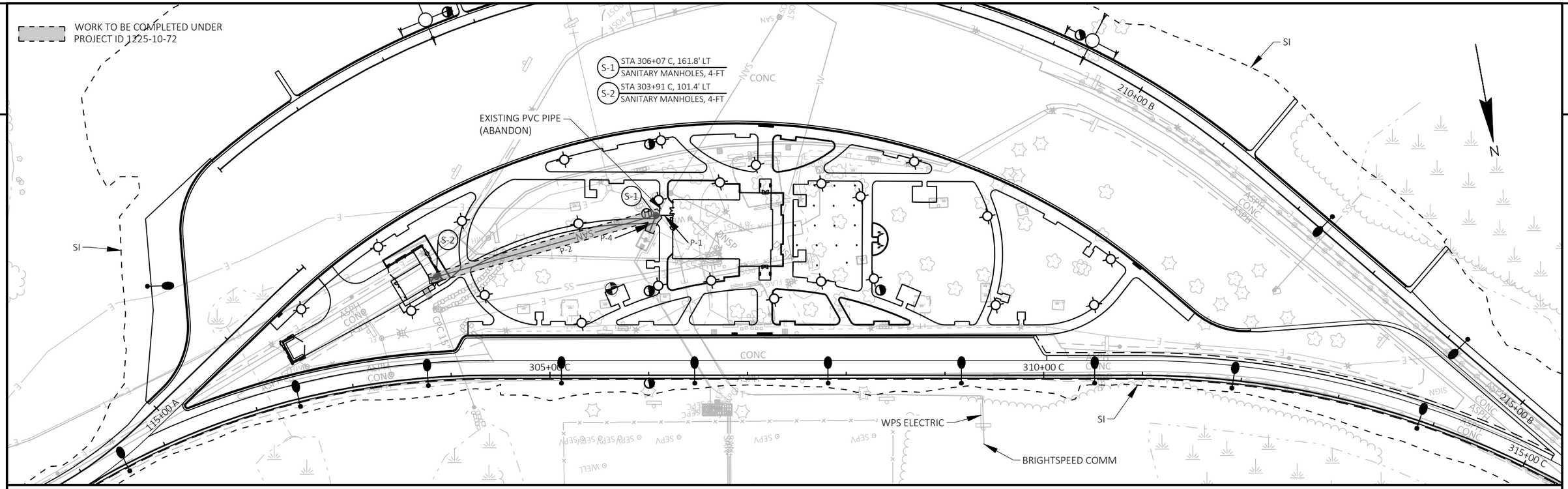


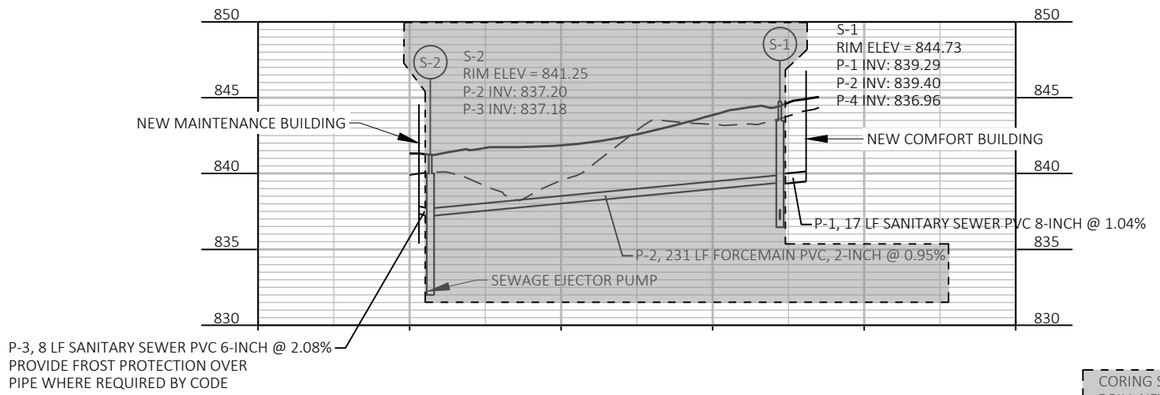


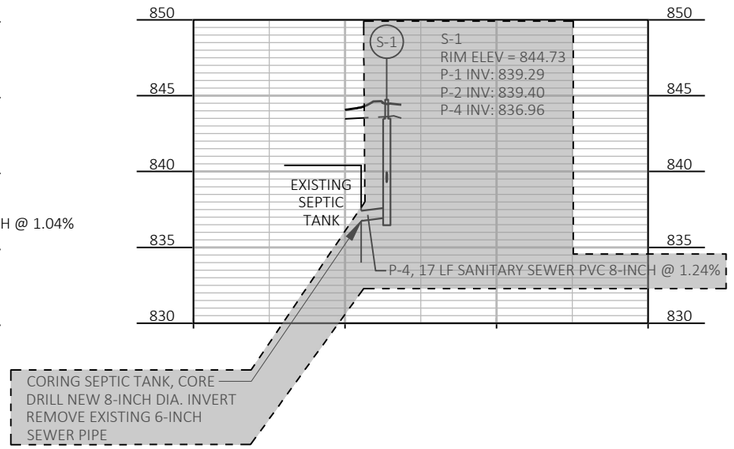


WORK TO BE COMPLETED UNDER PROJECT ID 1225-10-72

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	STORM SEWER PLAN - REST AREA 52	SHEET 26	E



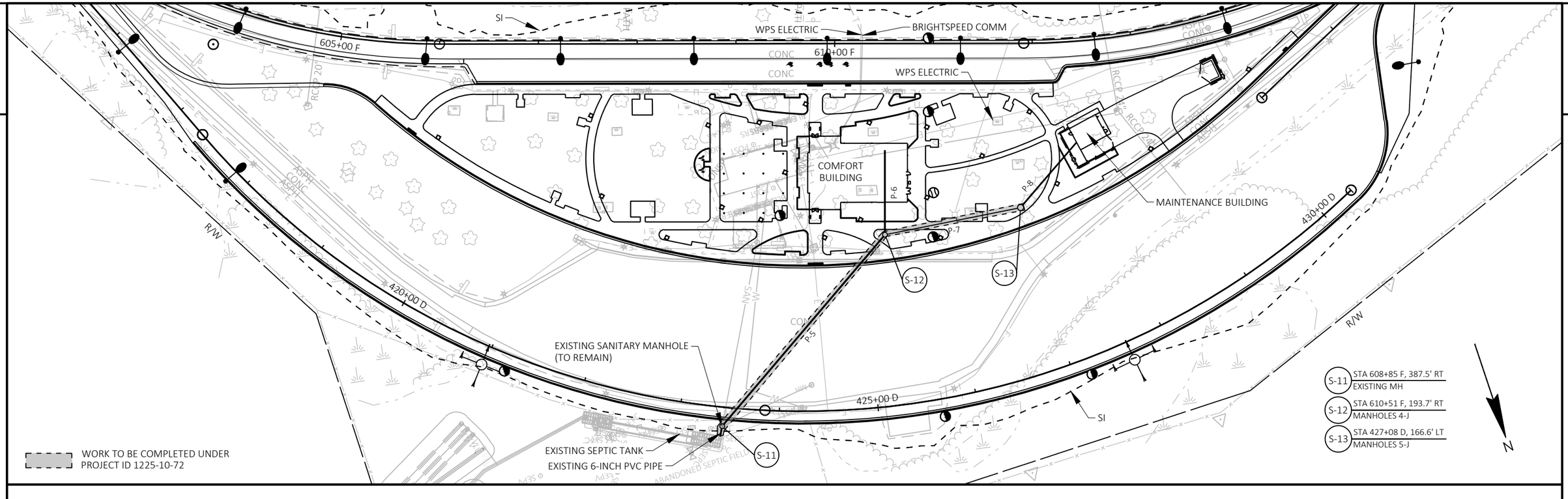


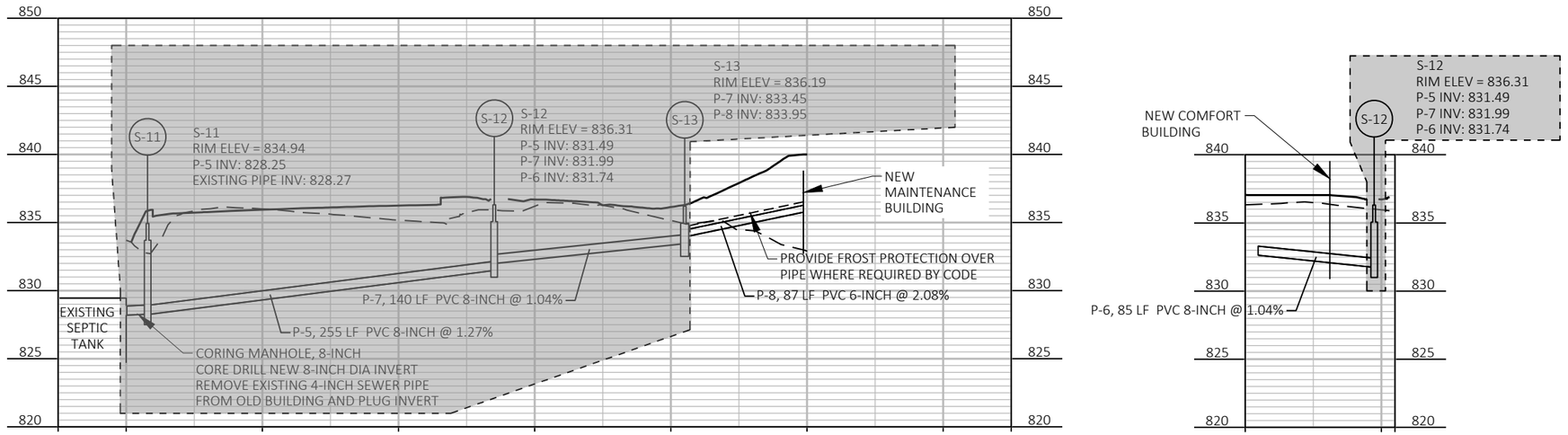


WISCONSIN PROFESSIONAL ENGINEER
DAVID M. SIMON
E-28713
MADISON, WI

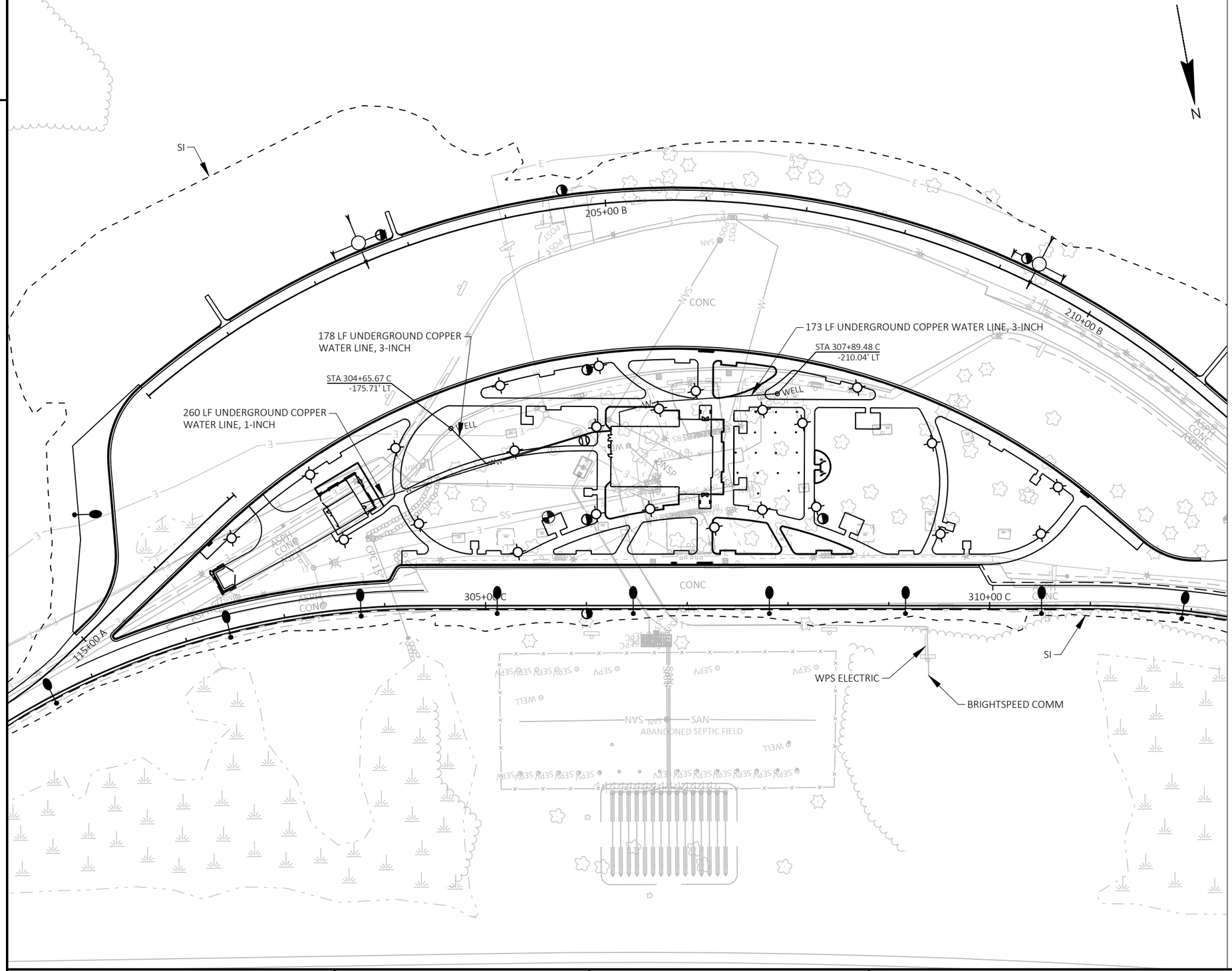
PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	SANITARY SEWER - REST AREA 51	SHEET 27	E

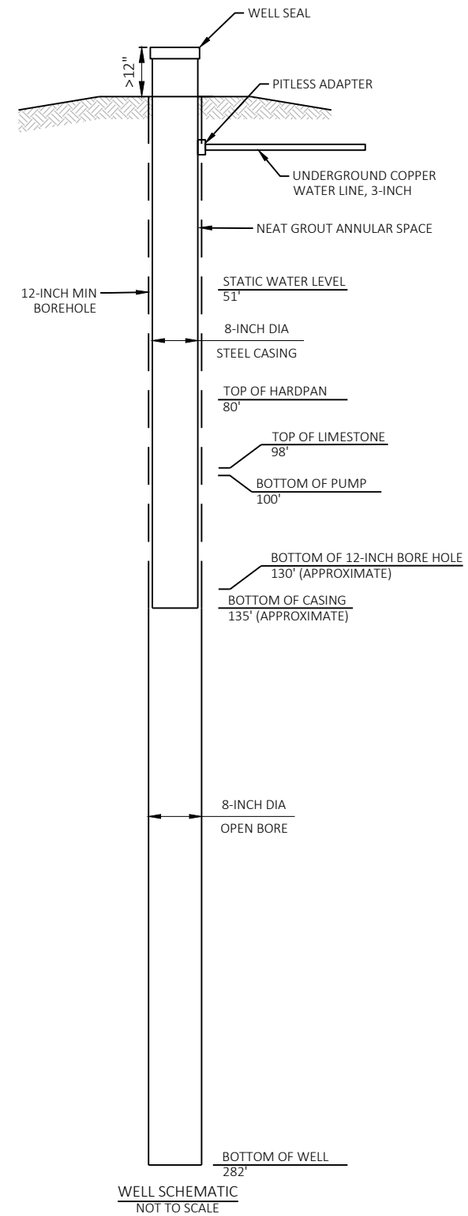
FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\023001-UP_RA51_SAN.DWG
LAYOUT NAME - 023001-up
PLOT DATE : 7/24/2024 7:39 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : ############





PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	SANITARY SEWER - REST AREA 52	SHEET 28	E



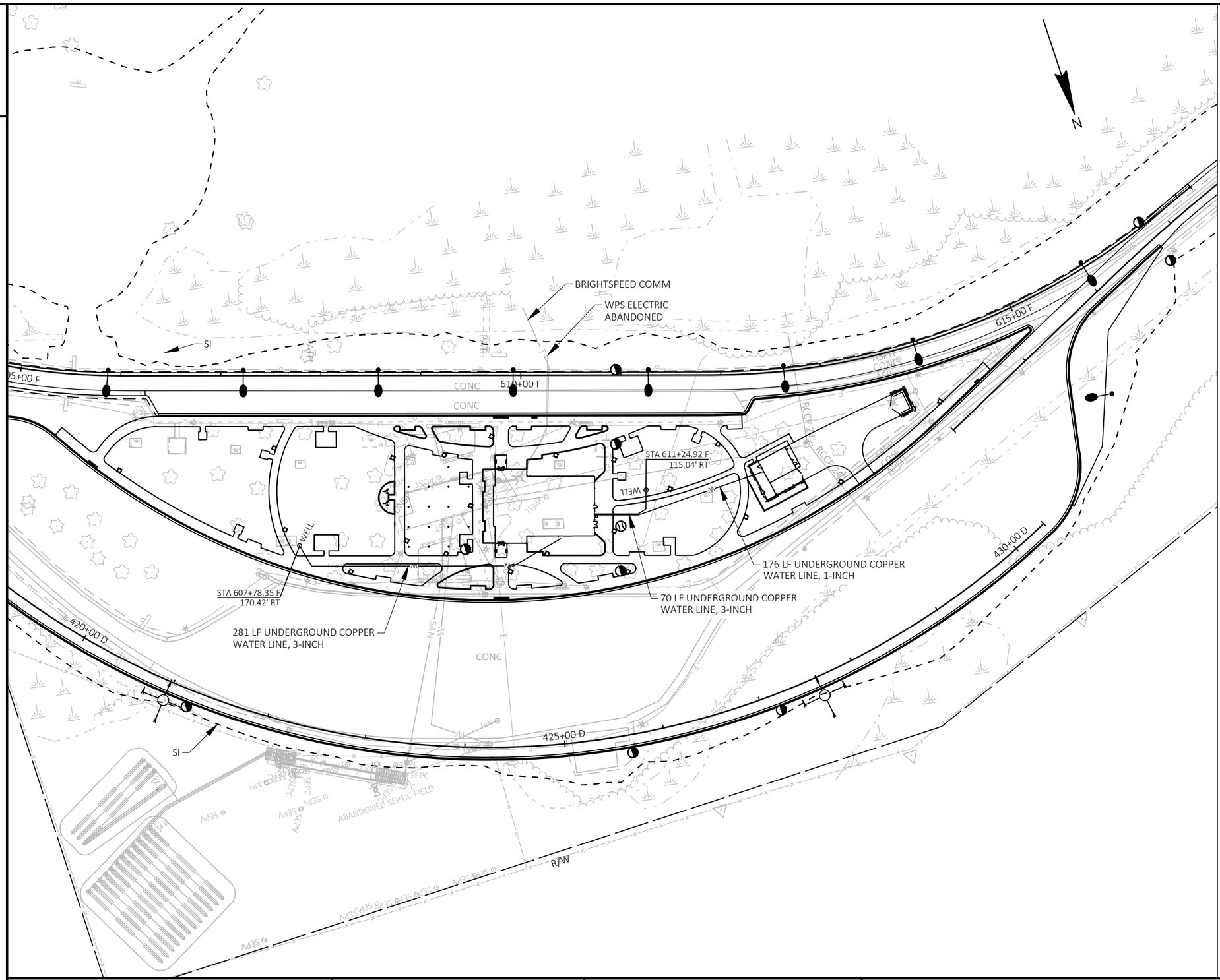


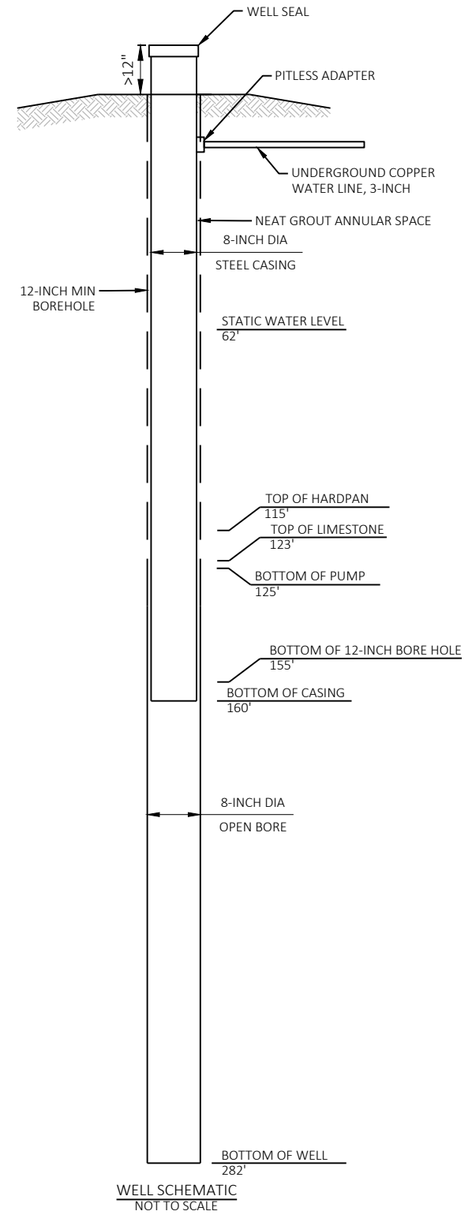
WELL SCHEMATIC
NOT TO SCALE

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	WATER SCHEMATIC - REST AREA 51	SHEET 29	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\023002-UP_RA51_WATER.DWG
LAYOUT NAME - 023003-up
PLOT DATE : 9/26/2024 1:05 PM PLOT BY : JASON KLEIST PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



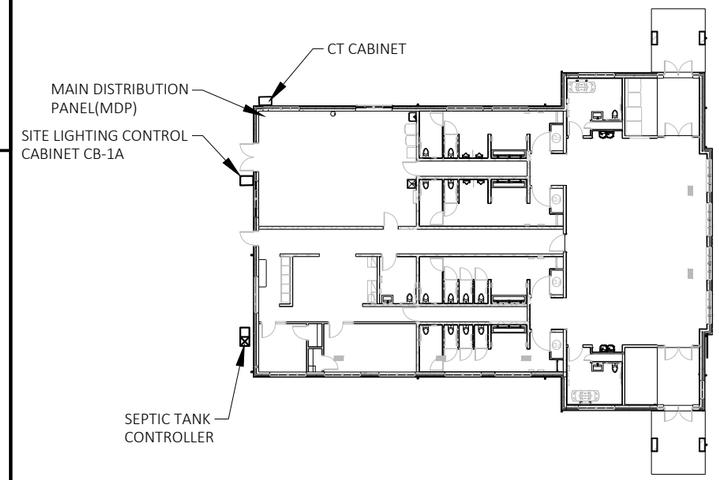


WELL SCHEMATIC
NOT TO SCALE

2

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	WATER SCHEMATIC - REST AREA 52	SHEET 30	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\023002-UP_RA52_WATER.DWG
LAYOUT NAME - 023004-up
PLOT DATE : 9/26/2024 1:06 PM
PLOT BY : JASON KLEIST
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.

N

LUMEN (LEVEL 3) COMM

R/W

WPS ELECTRIC

205+00 B

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. PROVIDED BY WPS

CT CABINET

MAIN ELECTRICAL PANEL

3#3, #8GND, 1-1 ¼" C.

WELL PUMP

3#3, #8GND, 1-1 ¼" C.

WELL PUMP

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

WPS ELECTRIC SERVICE LOCATION

MAINTENANCE BUILDING

COMFORT BUILDING

210+00 B

305+00 C

310+00 C

115+00 A

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

WPS ELECTRIC ABANDONED

BRIGHTSPEED COMM

ABANDONED SEPTIC FIELD

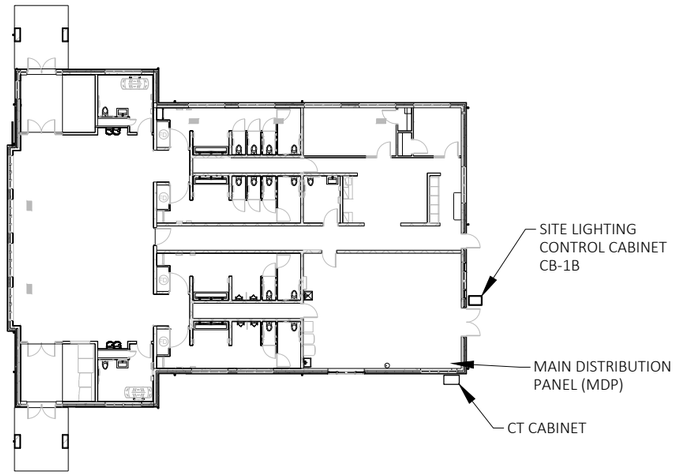
215+00 B

315+00 C

SI

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	ELECTRICAL POWER LAYOUT PLAN - REST AREA 51	SHEET 31	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\023004-UP_RA51_E-COM.DWG
LAYOUT NAME - 023007-up Elec
PLOT DATE : 11/21/2024 10:09 AM
PLOT BY : DAVID YAHNKE
PLOT NAME :
PLOT SCALE : 1:100_XREF
WISDOT/CADDS SHEET 42



BUILDING DETAIL
NOT TO SCALE

BRIGHTSPEED COMM
WPS ELECTRIC
ABANDONED
WPS ELECTRIC
SERVICE LOOP
SI
615+00 F
605+00 F
610+00 F
WELL PUMP
3#3, #8GND, 1-1 ¼" C.
COMFORT
BUILDING
WELL
MAINTENANCE BUILDING
SERVICE FEEDING MAINTENANCE BUILDING
430+00 D
WELL PUMP
3#3, #8GND, 1-1 ¼" 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
WPS ELECTRIC
SERVICE LOCATION
SERVICE FEEDING COMFORT BUILDING
420+00 D
425+00 D
R/W
ABANDONED SEPTIC FIELD
SI
N

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	ELECTRICAL POWER LAYOUT PLAN - REST AREA 52	SHEET 32	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\023004-UP_RA52_E-COM.DWG
LAYOUT NAME - 023010-up
PLOT DATE : 11/21/2024 10:23 AM
PLOT BY : DAVID YAHNKE
PLOT NAME :
PLOT SCALE : ############
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.

WORK TO BE COMPLETED UNDER PROJECT ID 1225-10-72

LEGEND

- 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

N

EXISTING TRANSFORMER

COMMUNICATIONS SERVICE FEEDING MAINTENANCE BUILDING

COMFORT BUILDING

MAINTENANCE BUILDING

WPS ELECTRIC

BRIGHTSPEED COMM

305+00 C

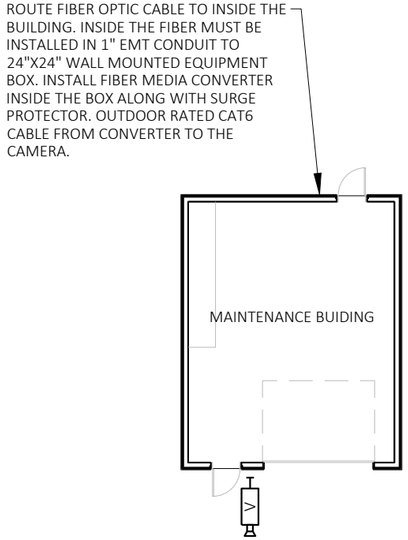
PULL BOX AND CONDUIT FOR FUTURE COMMUNICATIONS USE

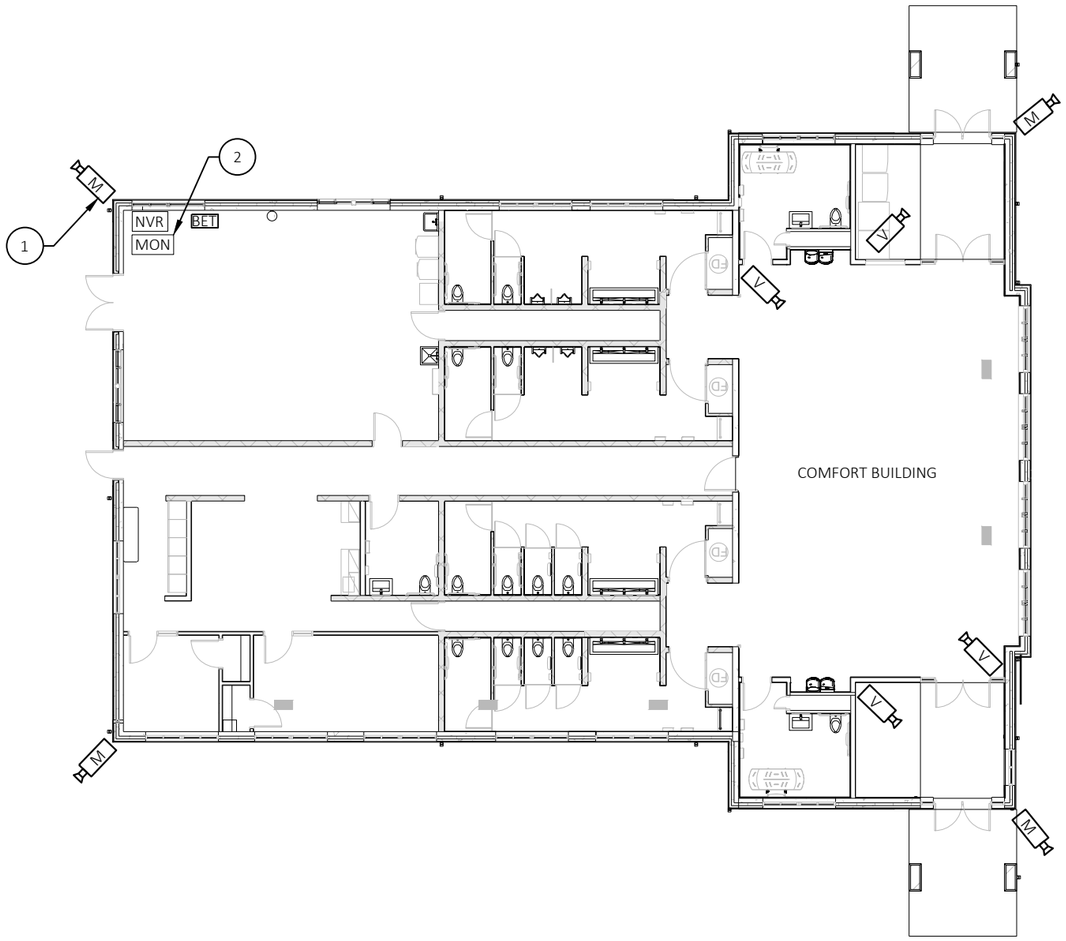
PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	COMMUNICATIONS LAYOUT PLAN - REST AREA 51	SHEET 33	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\023004-UP_RA51_COM.DWG
LAYOUT NAME - 023008-up Comm

PLOT DATE : 7/31/2024 7:48 AM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42





GENERAL NOTES

1. ALL TELECOMMUNICATIONS OUTLETS SHALL BE MOUNTED AT HEIGHTS ABOVE FINISHED FLOOR AS SHOWN IN THE DEVICE MOUNTING HEIGHT DETAIL U.N.O.
2. SEE ELECTRICAL SPECIFICATIONS FOR LOCATIONS WHERE GRS CONDUIT SHALL BE USED, OR WHERE IMC, EMT, OR PVC CONDUIT MAY BE USED.
3. TECHNOLOGY SYSTEMS EQUIPMENT/DEVICES SHALL BE MOUNTED SO AS TO ALLOW ACCESS TO ELECTRICAL AND MECHANICAL EQUIPMENT. ALL MOUNTING OF TECHNOLOGY SYSTEMS EQUIPMENT/DEVICES ON EQUIPMENT SHALL BE COORDINATED IN ADVANCE OF INSTALLATION.
4. ALL CONDUITS AND JUNCTION BOXES SHALL BE CONCEALED. CONTRACTOR SHALL USE CHASES AND CEILING SPACES PROVIDED. WHERE BOXES AND CONDUIT ARE NOTED TO BE INSTALLED EXPOSED, THEY SHALL BE PAINTED TO MATCH THE SURFACE.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OPENINGS REQUIRED IN WALLS. ALL CONDUITS THROUGH WALLS SHALL BE GROUTED OR SEALED INTO OPENINGS. PENETRATIONS THROUGH FLOORS AND FIRE-RATED WALLS SHALL BE FIRESTOPPED IN A MANNER THAT MAINTAINS THE RATING OF THE FLOOR OR WALL PENETRATED.
6. ALL DATA JACKS SHALL BE TERMINATED WITH ALL 4 PAIRS TO ALLOW FOR INTERCHANGEABILITY.
7. EXPOSED CABLE IS NOT PERMITTED. RUN ANY CABLE NOT CONCEALED BY ACOUSTICAL CEILING IN CONDUIT OR SURFACE MOUNT RACEWAY.
8. PROVIDE A CAT6 CABLE FROM EACH CAMERA LOCATION TO COMMUNICATIONS CABINET IN MECHANICAL ROOM. CABLE MUST BE RATED FOR THE ENVIRONMENT IN WHICH IT IS INSTALLED.

NOTES:

(1) MOUNT CAMERA BACK BOX INSIDE SOFFIT. PROVIDE BACKBOX SUPPORT PER MANUFACTURERS RECOMMENDATIONS. REFER TO COMMUNICATIONS DETAIL SHEET FOR ADDITIONAL MOUNTING INFORMATION. TYPICAL ALL EXTERIOR CAMERAS.

(2) COMMUNICATIONS CABINET LOCATION. MOUNT NVR AND KVM RACKMOUNT CONSOLE WITHIN CABINET. REFER TO E-501 FOR ADDITIONAL INFORMATION.

TECHNOLOGY SYMBOLS

MON KVM RACK CONSOLE

NVR NETWORK VIDEO RECORDER

VIDEO SURVEILLANCE SYMBOLS

XX — APPROXIMATE VIEWING ANGLE

CAMERA TYPE
C: DETENTION CORNER
F: FIXED
M: MULTISENSOR
O: FISHEYE
P: PAN-TILT-ZOOM
V: VARIFOCAL

MOUNTING MODIFIERS

XX CEILING MOUNT

XX WALL MOUNT

XX EXTERIOR CORNER MOUNT

2

SITE PLAN GENERAL NOTES:

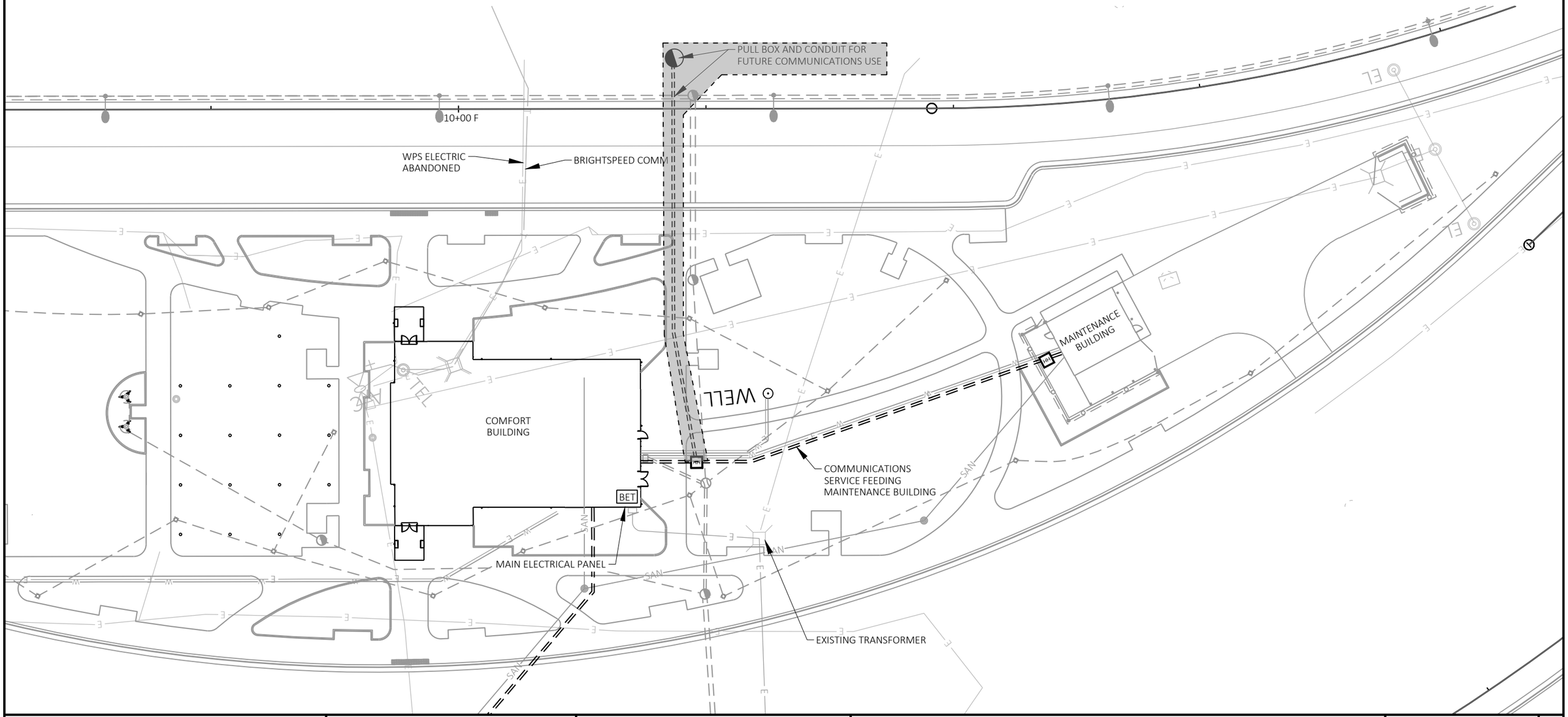
1. UNDERGROUND CONDUIT ROUTES ARE DIAGRAMMATIC ONLY, BUT REPRESENT PREFERRED PATH. FIELD VERIFY BEST POSSIBLE ROUTE BASED ON SITE CONDITIONS.
2. COORDINATE CONDUIT ENTRANCE LOCATION PRIOR TO INSTALLING.

LEGEND

- 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 NON-METALLIC SCHEDULE 40 2-INCH
  (SPARES) (INSTALL SCHEDULE 80 BELOW ROADWAYS)
- PULL BOXES NON-CONDUCTIVE 24X36-INCH

WORK TO BE COMPLETED UNDER PROJECT ID 1225-10-72

N



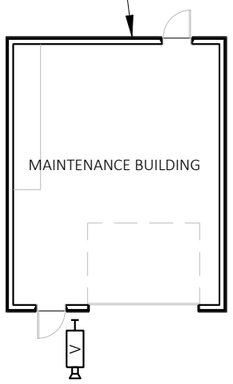
PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	COMMUNICATIONS LAYOUT PLAN - REST AREA 52	SHEET 35	E

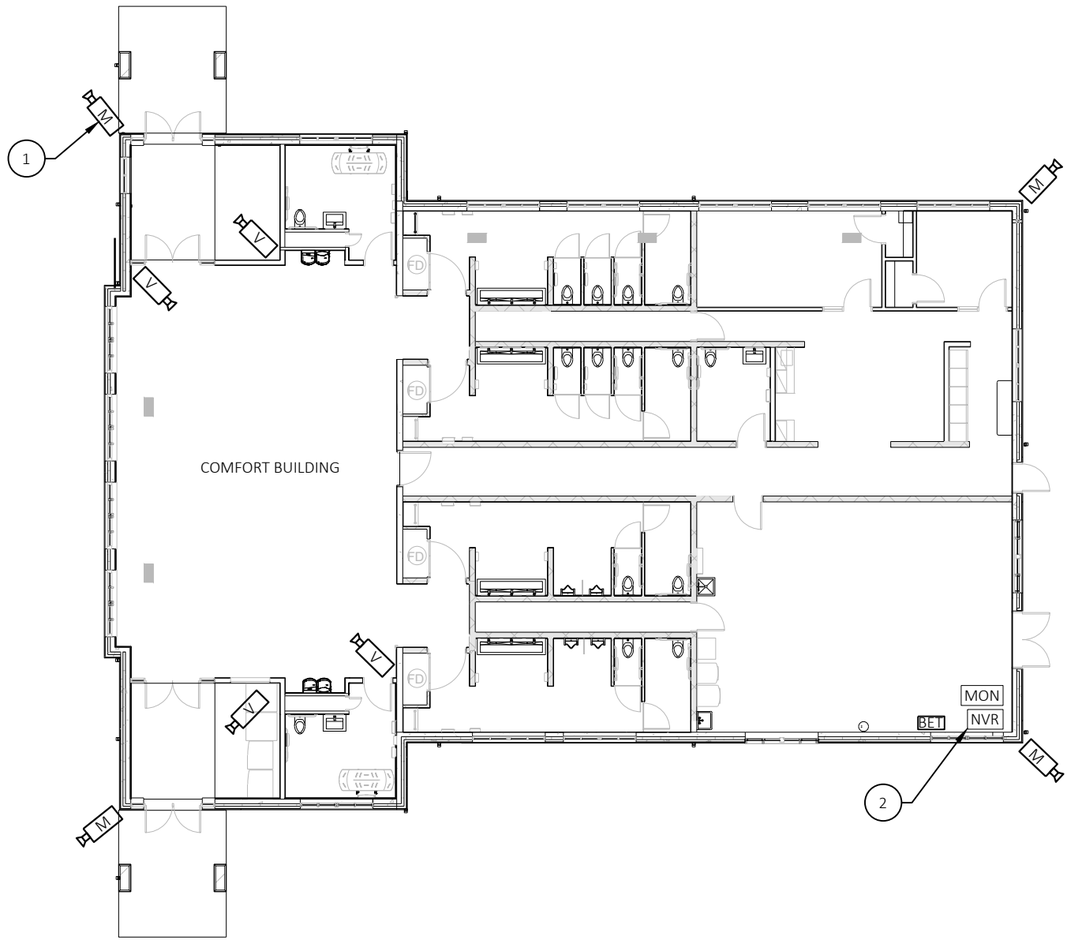
FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\023004-UP_RA52_COM.DWG
LAYOUT NAME - 023011-up

PLOT DATE : 7/30/2024 3:45 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

ROUTE FIBER OPTIC CABLE TO INSIDE THE BUILDING. INSIDE THE FIBER MUST BE INSTALLED IN 1" EMT CONDUIT TO 24"X24" WALL MOUNTED EQUIPMENT BOX. INSTALL FIBER MEDIA CONVERTER INSIDE THE BOX ALONG WITH SURGE PROTECTOR. OUTDOOR RATED CAT6 CABLE FROM CONVERTER TO THE CAMERA.





GENERAL NOTES

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5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OPENINGS REQUIRED IN WALLS. ALL CONDUITS THROUGH WALLS SHALL BE GROUTED OR SEALED INTO OPENINGS. PENETRATIONS THROUGH FLOORS AND FIRE-RATED WALLS SHALL BE FIRESTOPPED IN A MANNER THAT MAINTAINS THE RATING OF THE FLOOR OR WALL PENETRATED.
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8. PROVIDE A CAT6 CABLE FROM EACH CAMERA LOCATION TO COMMUNICATIONS CABINET IN MECHANICAL ROOM. CABLE MUST BE RATED FOR THE ENVIRONMENT IN WHICH IT IS INSTALLED.

NOTES:

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(2) COMMUNICATIONS CABINET LOCATION. MOUNT NVR AND KVM RACKMOUNT CONSOLE WITHIN CABINET. REFER TO E-501 FOR ADDITIONAL INFORMATION.

TECHNOLOGY SYMBOLS

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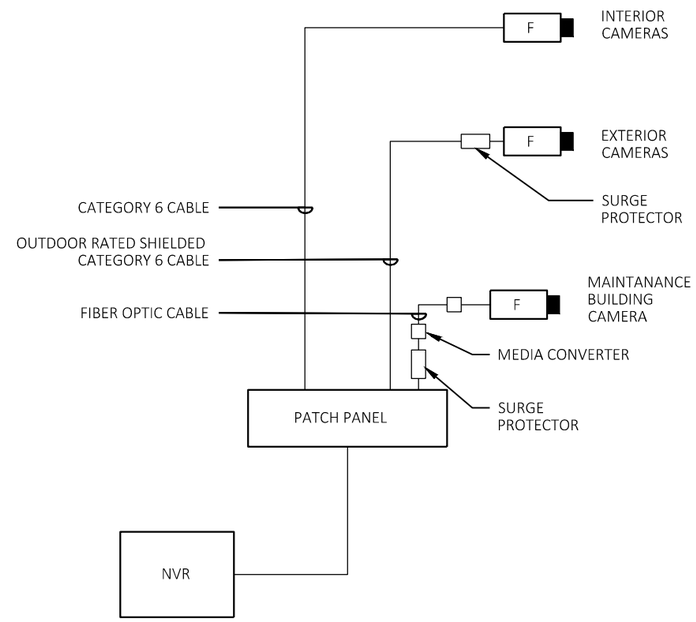
MOUNTING MODIFIERS

XX CEILING MOUNT

XX WALL MOUNT

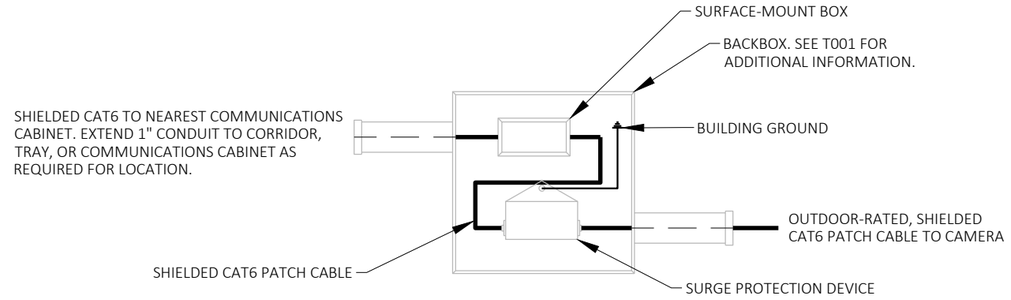
XX EXTERIOR CORNER MOUNT

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	COMMUNICATIONS LAYOUT PLAN - REST AREA 52	SHEET 36	E

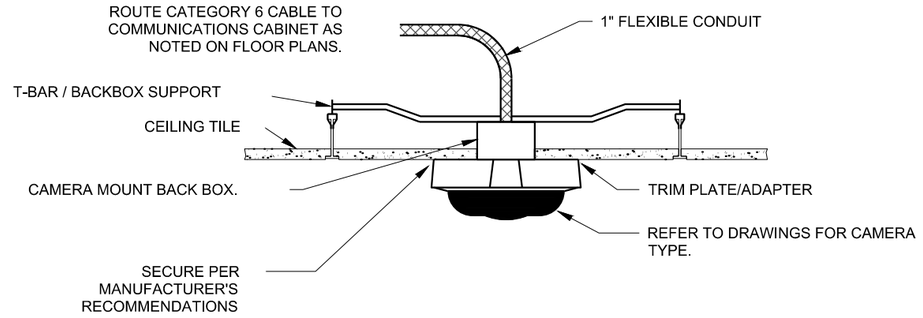


NOTES :
1. CAMERAS ARE DIAGRAMMATIC ONLY: REFER TO DRAWINGS FOR ACTUAL QUANTITIES.
2. PROVIDE IN-LINE SURGE PROTECTION FOR ANY EXTERIOR CAMERA.

DETAIL OF CAMERA ONE LINE DIAGRAM

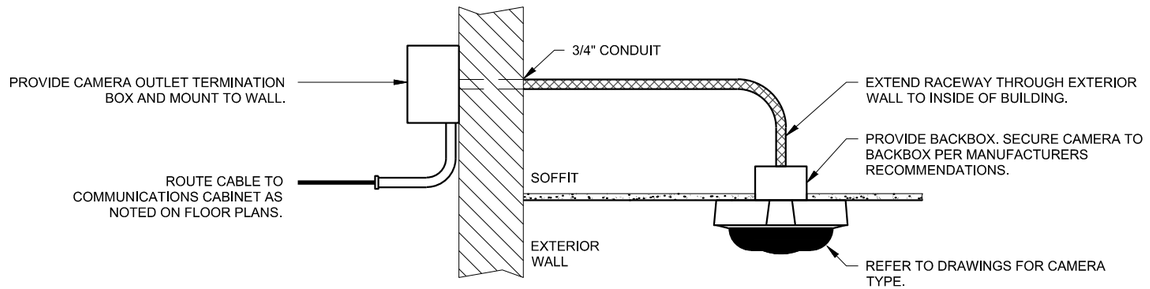


DETAIL OF CAMERA OUTLET TERMINATION BOX



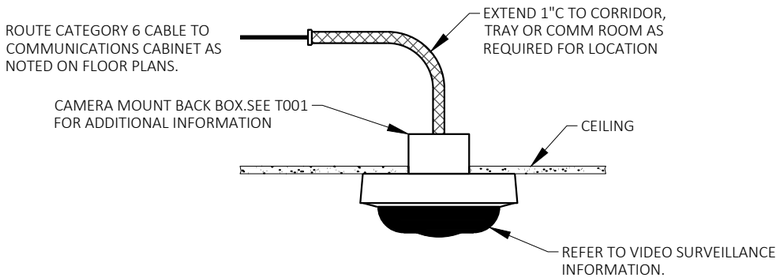
NOTES:
1. REFER TO DIVISION 26 SPECIFICATIONS FOR BACKBOX AND CONDUIT TYPE AND MOUNTING REQUIREMENTS.

DETAIL OF INTERIOR CAMERA ACOUSTICAL CEILING



NOTES:
1. BACKBOX SHALL BE RATED TO SUPPORT ASSOCIATED DEVICE INSTALLATION. REFER TO DIVISION 26 SPECIFICATIONS FOR CONDUIT TYPE AND SUPPORT REQUIREMENTS.
2. COORDINATE BACKBOX REQUIREMENTS AND SUPPORTS WITH DIVISION 26 CONTRACTOR PRIOR TO INSTALLATION.
3. REFER TO DIVISION 07 SPECIFICATIONS FOR PENETRATION SEAL REQUIREMENTS.

DETAIL OF EXTERIOR CAMERA CEILING SOFFIT



NOTES:
1. REFER TO DIVISION 26 SPECIFICATIONS FOR BACKBOX AND CONDUIT TYPE AND SUPPORT REQUIREMENTS

DETAIL OF INTERIOR CAMERA - GYP CEILING

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)

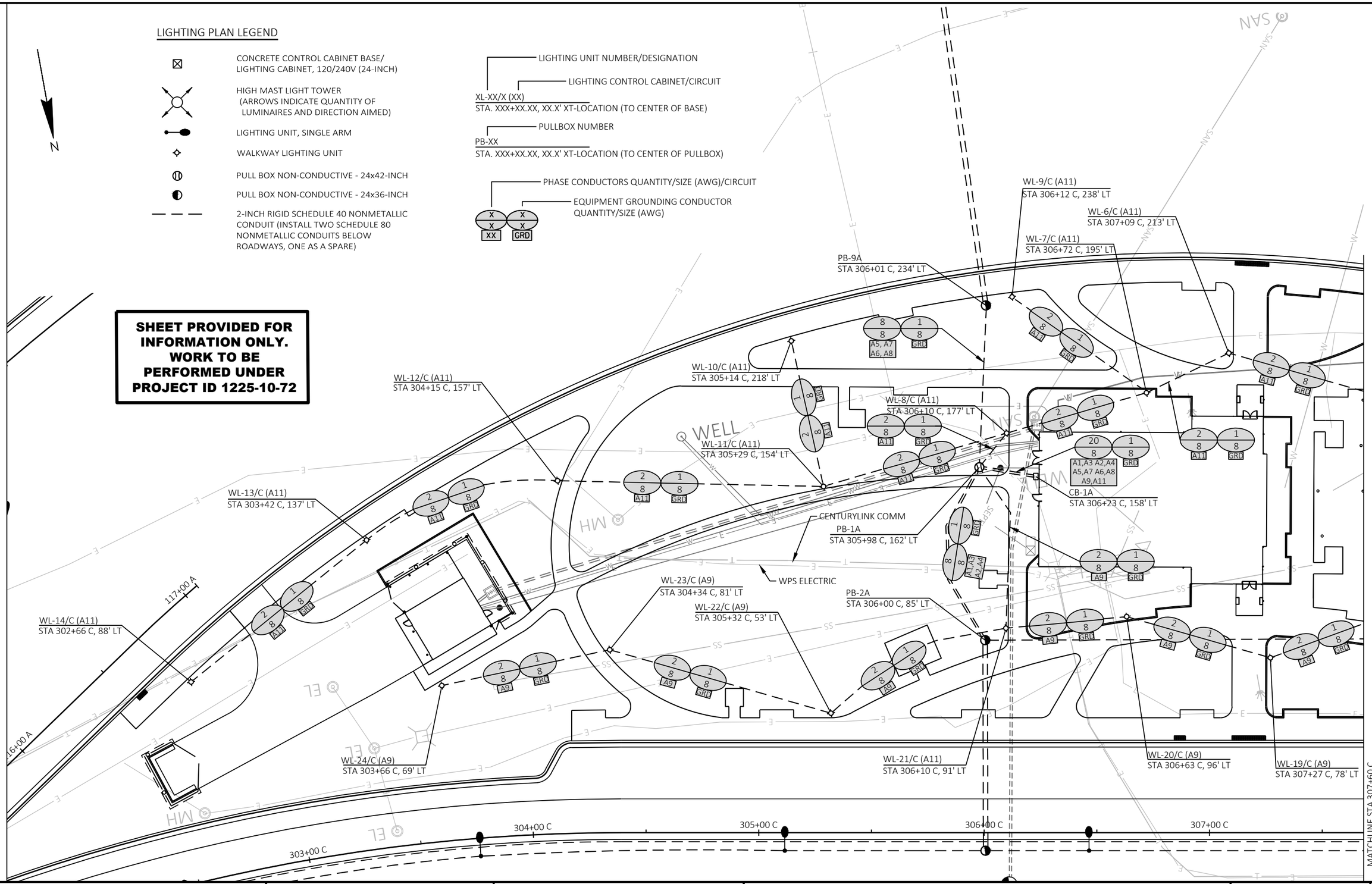
LIGHTING UNIT NUMBER/DESIGNATION
LIGHTING CONTROL CABINET/CIRCUIT
XL-XX/X (XX)
STA. XXX+XX.XX, XX.X' XT-LOCATION (TO CENTER OF BASE)

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)

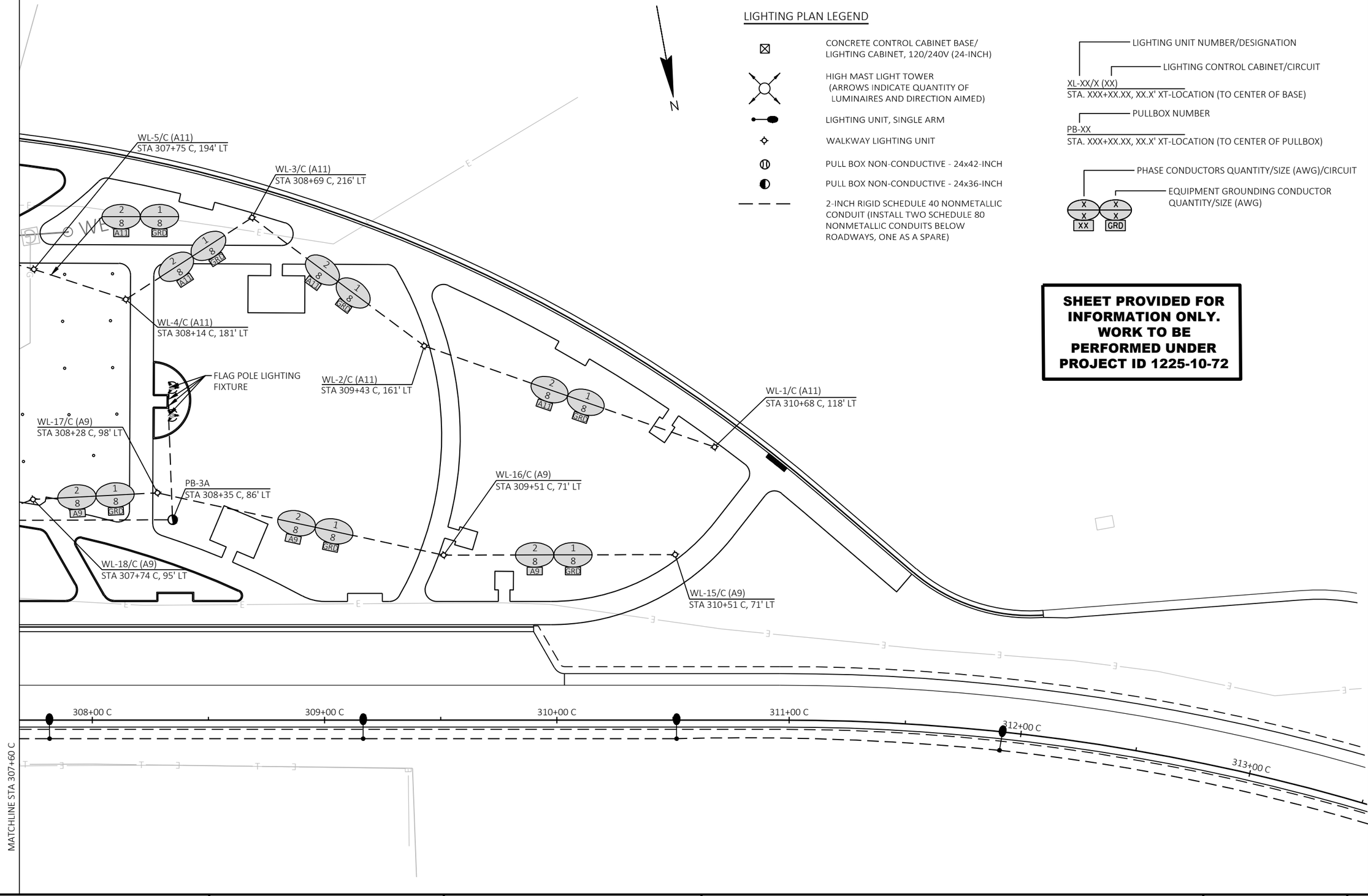
X X / X X / XX / GRD

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72



PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	LIGHTING PLAN - REST AREA 51 PLAZA	SHEET 38	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\023601-LP_RA51_PLAZA.DWG
LAYOUT NAME - 023605-lp_Plaza
PLOT DATE : 7/30/2024 3:46 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:40 FT



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)

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)

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	LIGHTING PLAN - REST AREA 51 PLAZA	SHEET 39	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\023601-LP_RA51_PLAZA.DWG
LAYOUT NAME - 023606-lp_Plaza
PLOT DATE : 7/30/2024 3:47 PM
PLOT BY : DAVID YAHNKE
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

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

STA 607+53 F, 73' RT

WL-44/C (B11)

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

FLAG POLE LIGHTING FIXTURE

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

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

PB-2B
STA 609+45 F, 171' RT

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

CB-1B
STA 610+75 F, 145' RT

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

WL-29/C (B9)
STA 610+93 F, 162' RT

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

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

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

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

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

PB-3B
STA 610+80 F, 197' RT

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

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72

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 (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: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	LIGHTING PLAN - REST AREA 52 PLAZA	SHEET 40	E

LIGHTING PLAN LEGEND

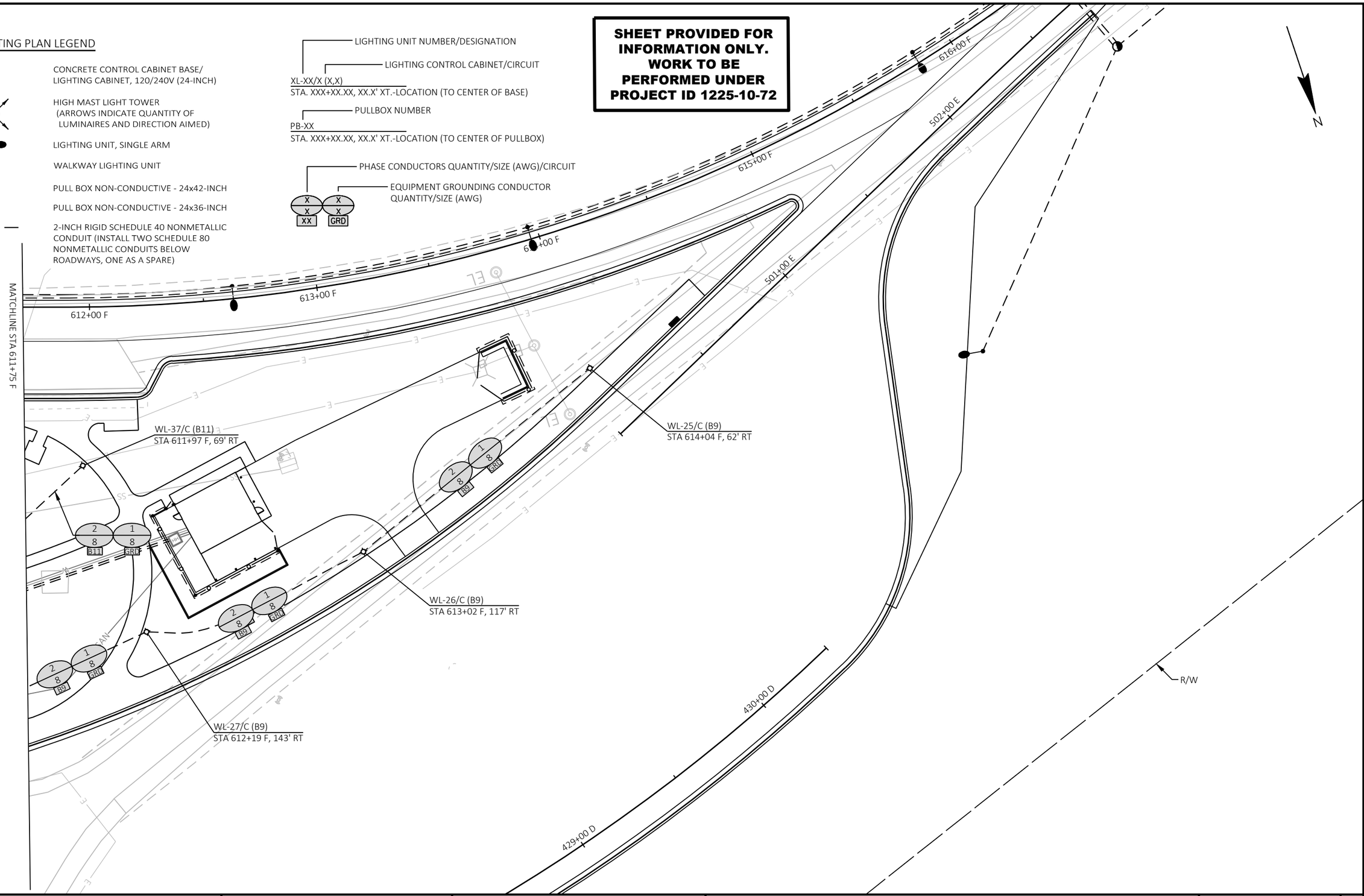
- CONCRETE CONTROL CABINET BASE/ LIGHTING CABINET, 120/240V (24-INCH)
- HIGH MAST LIGHT TOWER (ARROWS INDICATE QUANTITY OF LUMINAIRES AND DIRECTION AIMED)
- LIGHTING UNIT, SINGLE ARM
- WALKWAY LIGHTING UNIT
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LIGHTING CONTROL CABINET/CIRCUIT
XL-XX/X (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)

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72



PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	LIGHTING PLAN - REST AREA 52 PLAZA	SHEET 41	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\023602-LP_RA52_PLAZA.DWG
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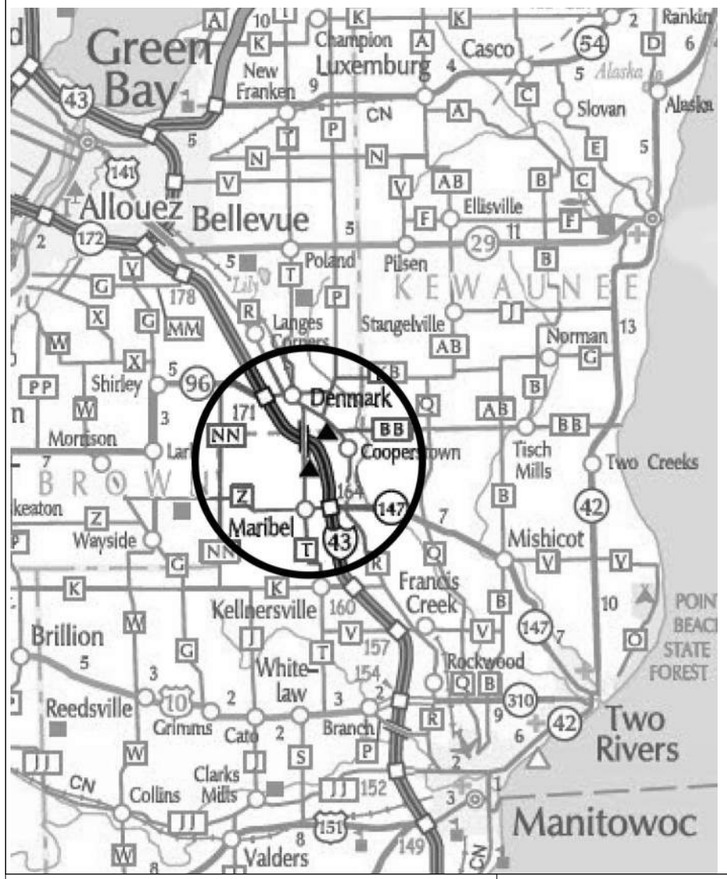
2

State of Wisconsin
Department of Transportation

Safety Rest Areas 51 and 52

Interstate Highway 43
Maribel and Denmark, Wisconsin

100% PS&E Set
1 August 2024





PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	TITLE SHEET	SHEET G00[illegible]42	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/21/2024 5:11:51 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE :

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01 ARCHITECTURE	
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A002	ABBREVIATIONS
A004	ARCHITECTURAL SITE PLAN - SAFETY REST AREA 52 (DENMARK)
A005	ARCHITECTURAL SITE PLAN - SAFETY REST AREA 51 (MARIBEL)
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A102	MAIN BUILDING - ROOF PLAN
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A407	MAIN BUILDING - ENLARGED FLOOR PLAN - MECHANICAL ROOM
A410	MAIN BUILDING - ENLARGED RCP - VESTIBULE 1 & FAMILY RM 1
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A412	MAIN BUILDING - ENLARGED RCP - VESTIBULE 2 & FAMILY RM 2
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A414	MAIN BUILDING - ENLARGED RCP - MENS ROOMS
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I601	MAIN BUILDING - FURNITURE PLAN
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S101	FOUNDATION PLAN
S111	ROOF FRAMING PLAN
S112	ROOF DIAPHRAM & WIND FORCES
S201	MAINTENANCE BUILDING
S301	STRUCTURAL SECTIONS
S302	STRUCTURAL BUILDING SECTIONS
S303	STRUCTURAL SECTIONS
S304	STRUCTURAL SECTIONS
S305	STRUCTURAL SECTIONS & DETAILS
S306	STRUCTURAL SECTION
S307	STRUCTURAL SECTIONS
S501	STRUCTURAL TYPICAL CONCRETE DETAILS
S502	STRUCTURAL BUILDING SECTIONS
04 MECHANICAL	
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M002	MECHANICAL LEGEND
M003	MECHANICAL LEGEND
M005	MECHANICAL LEGEND
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M102	GROUND LEVEL HVAC PLAN - AREA B
M103	RADIANT FLOORING
M104	EQUIPMENT GARAGE - HVAC PLAN
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M503	HVAC DETAILS
M504	HVAC DETAILS
M505	HVAC DETAILS
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P904	PLUMBING RISER DIAGRAMS
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06 ELECTRICAL	
E001	ELECTRICAL LEGEND
E101	GROUND LEVEL POWER PLAN - AREA A
E102	GROUND LEVEL POWER PLAN - AREA B
E111	GROUND LEVEL LIGHTING PLAN - AREA A
E112	GROUND LEVEL LIGHTING PLAN - AREA B
E121	EQUIPMENT GARAGE POWER AND LIGHTING PLANS
E501	ELECTRICAL DETAILS
E502	ELECTRICAL DETAILS
E601	ELECTRICAL DIAGRAMS
E602	ELECTRICAL DIAGRAMS
E651	ELECTRICAL SCHEDULES
E652	ELECTRICAL SCHEDULES
E653	ELECTRICAL SCHEDULES
E654	MECHANICAL/ELECTRICAL COORDINATION SCHEDULE
E655	ELECTRICAL SCHEDULES
E656	ELECTRICAL SCHEDULES
E657	ELECTRICAL SCHEDULES
E658	ELECTRICAL SCHEDULES
E659	ELECTRICAL SCHEDULES

2



DRAWING SECTIONS CERTIFIED BY THIS SEAL:

00 GENERAL
01 ARCHITECTURE
02 INTERIOR DESIGN



DRAWING SECTIONS CERTIFIED BY THIS SEAL:

03 STRUCTURAL



DRAWING SECTIONS CERTIFIED BY THIS SEAL:

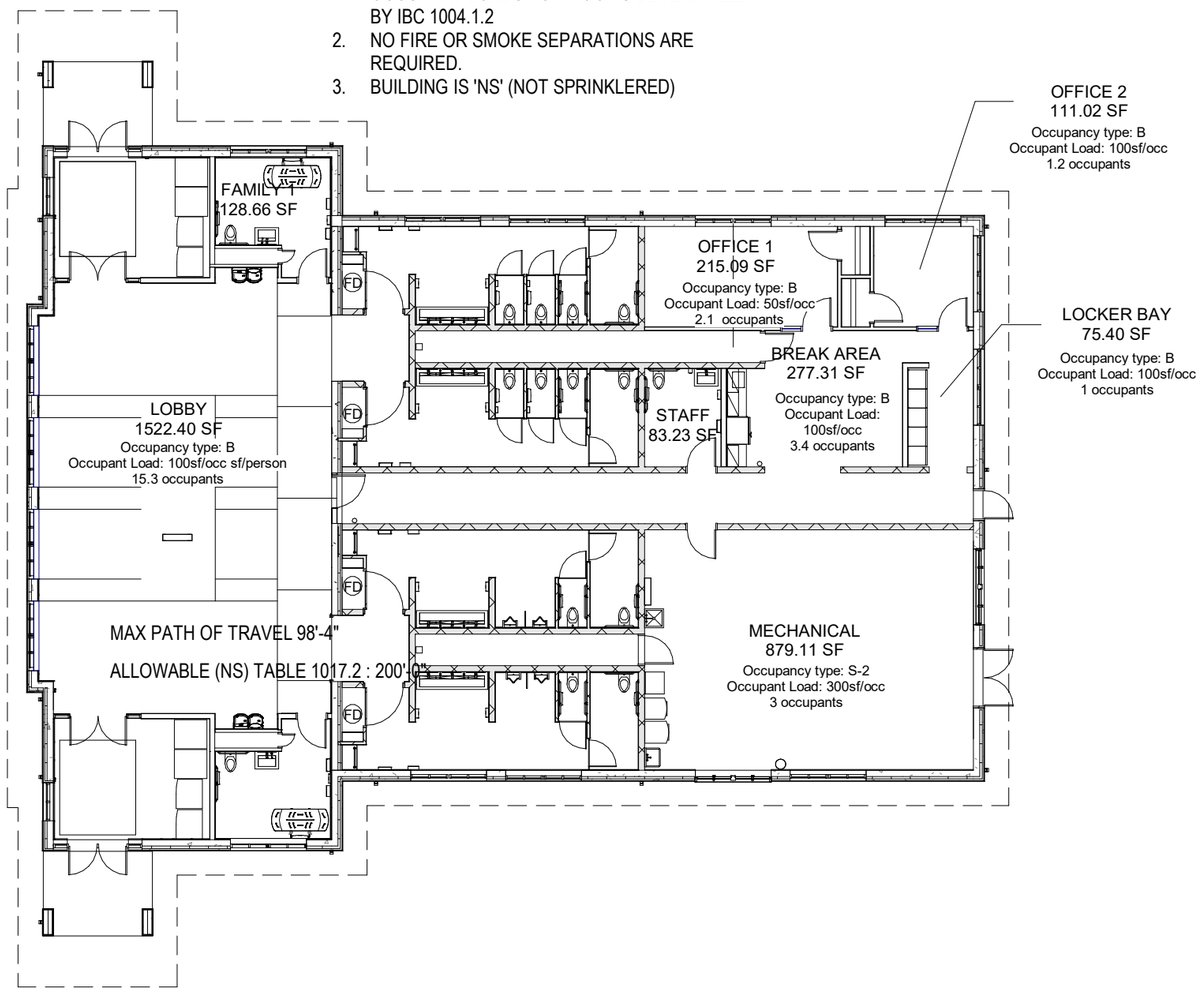
04 MECHANICAL
05 PLUMBING

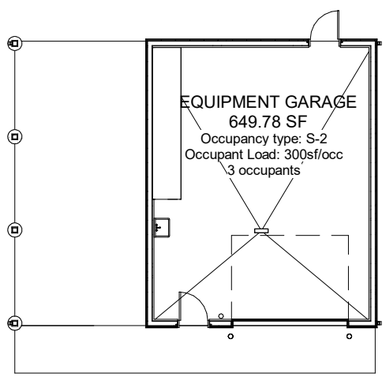


DRAWING SECTIONS CERTIFIED BY THIS SEAL:

06 ELECTRICAL

NOTES
1. OCCUPANT LOADS FOR ROOMS DETERMINED BY IBC 1004.1.2
2. NO FIRE OR SMOKE SEPARATIONS ARE REQUIRED.
3. BUILDING IS 'NS' (NOT SPRINKLERED)





Applicable Codes adopted by the State of Wisconsin

2015 International Building Code
2015 International Energy Conservation Code - Commercial
2015 International Existing Building Code
2015 International Fuel Gas Code
2015 International Mechanical Code
2018 Wisconsin Uniform Plumbing Code

2015 International Building Code

Occupancy Classification (304.1) B
Construction type (601, 602.3): III-B
Allowable area (506.2, 506.2.1):
A_t = 19,000
NS (Not Sprinklered) = 19,000
I_f = 0.52 sf
Aa, Not Sprinklered = 19,000 + (19,000 x 0.52) = 28,880 sf
Building area as designed: **6,430 gsf**

2015 Energy Conservation Code

Climate Zone: Table C301.1: Manitowoc County is in **Climate Zone 6A** (Cold Humid)
Interior design temperatures (C302.1): for heating, 72F maximum; for cooling, 75F minimum.

Table C402.1.3 OPAQUE THERMAL ENVELOPE INSULATION COMPONENT MIN. REQUIREMENTS, R-VALUE METHOD

Roofs
Insulation entirely above roof deck: R30ci
Walls
Mass: R13.3ci
Metal framed: R13 + R7.5ci
Wood framed: R13 + R7.5ci or R20+R3.8ci
Below grade wall: R7.5ci, protective covering required above grade to 6" below grade
Floors
Mass: R12.5ci
Slab on grade, unheated: R10 for 20" below
Slab on grade, heated: R15 for 36" below

Table C402.4 BUILDING ENVELOPE FENESTRATION MAXIMUM U-FACTOR AND SHGC REQUIREMENTS

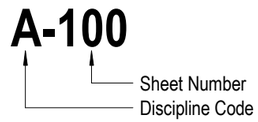
Item	U factor	SHGC
Fixed fenestration, west	0.36	0.40
Fixed fenestration, other	0.36	0.64
Entrance doors	0.77	0.64

1 MAIN BUILDING - CODE COMPLIANCE PLAN
1/16" = 1'-0"

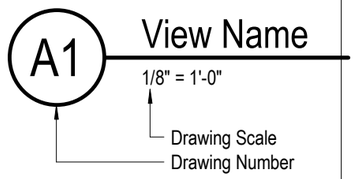
2 EQUIPMENT GARAGE - CODE COMPLIANCE PLAN
1/16" = 1'-0"

SYMBOLS LEGEND

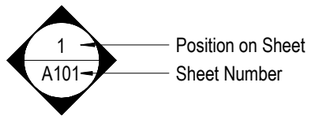
Sheet Number



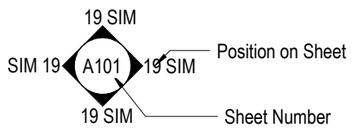
View Title



Exterior Elevations



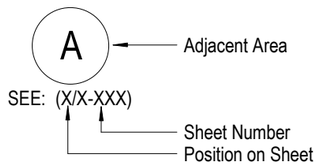
Interior Elevations



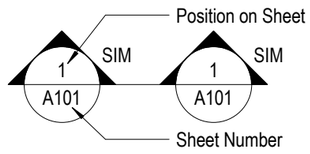
Match Lines



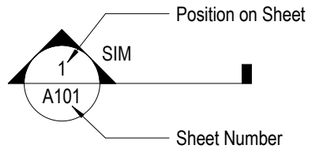
Area Reference



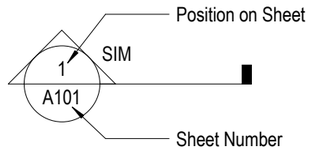
Building Section



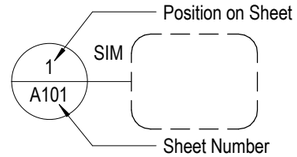
Wall Section



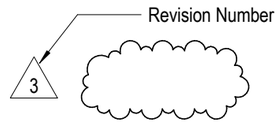
Detail - Section



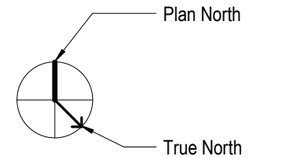
Detail - Plan/RCP



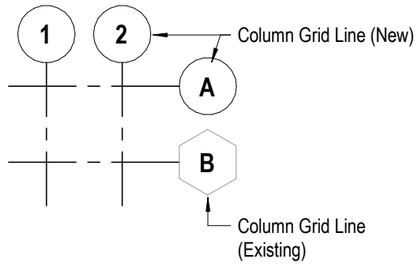
Drawing Revisions



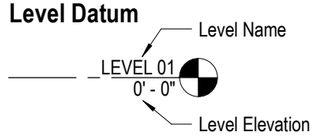
North Arrow



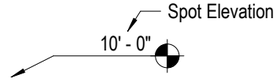
Column Grid Lines



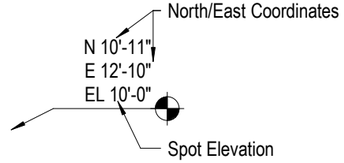
Level Datum



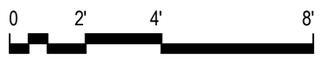
Spot Elevation



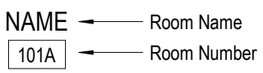
Spot Coordinates



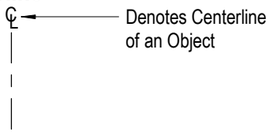
Graphic Scale



Room Tag



Centerline



Sheet Keynote



Keynote Tag - refer to Keynote Legend on sheet where occurs

Toilet Accessory Tag



Toilet Accessory per Toilet Accessory Mounting Diagram on Sheet A720

Exterior Assembly Tag



Refer to Sheet A520 for descriptions of exterior assemblies

Storefront, Window, & Louver Tag



Refer to Sheet A602 for Window and Storefront frame and glass types

Interior Finish Tag



Refer to sheets I001 and I002 for Interior Finish Schedule

Partition Type Tag



Refer to Sheet A701 for partition types

Door Number Tag



Refer to Sheet A601 for Door Schedule

Toilet Compartment Tag



Refer to Sheet A720 for compartment layouts

GENERAL NOTES

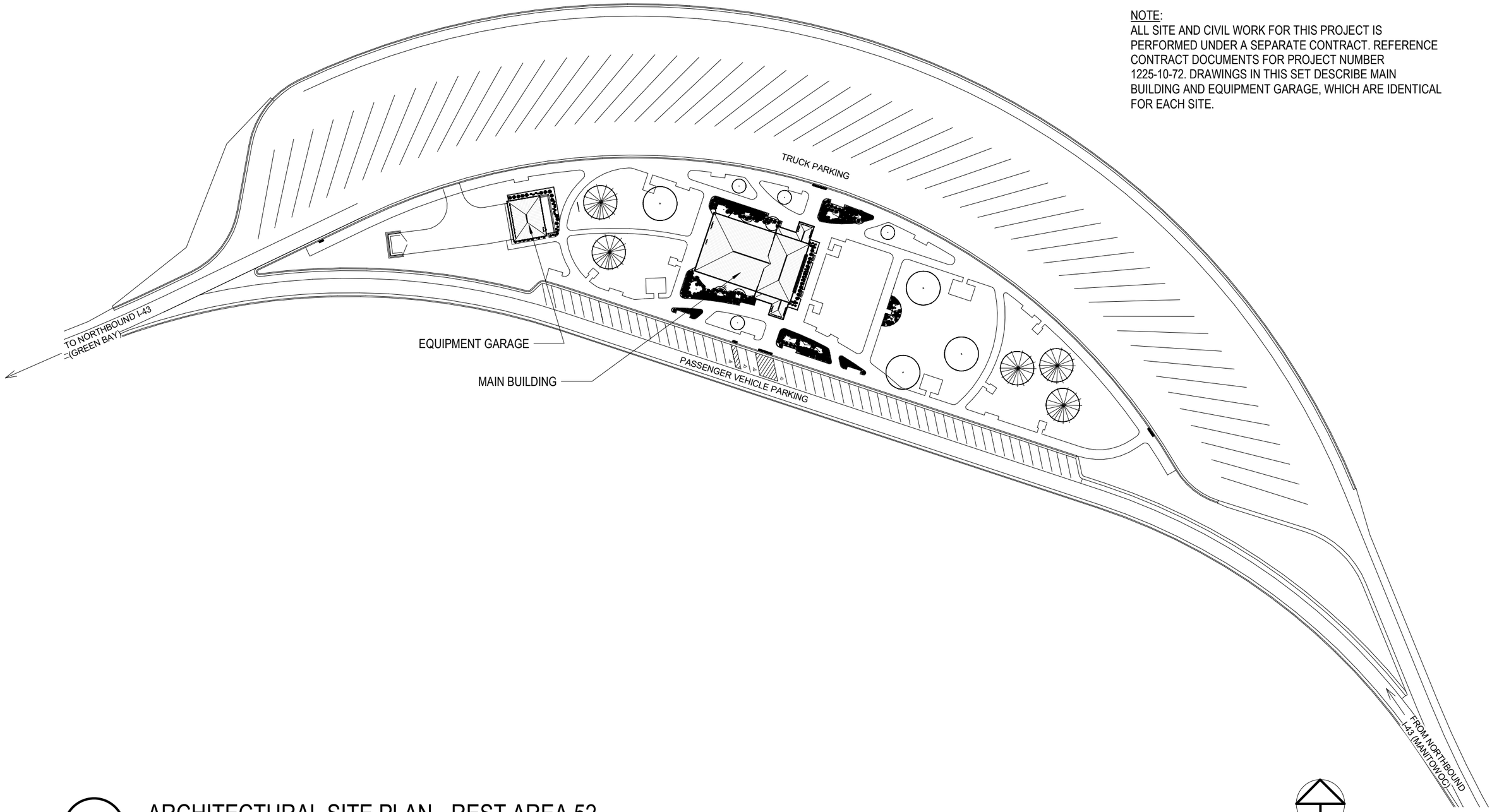
1. THE GENERAL CONTRACTOR SHALL PROVIDE DAILY CLEAN UP OF THE CONSTRUCTION SITE. ALL CONTRACTORS OR SUBCONTRACTORS SHALL CLEAN UP AND DISPOSE ANY PERSONAL, MAJOR SHIPPING CONTAINERS AND CONSTRUCTION DEBRIS DAILY.
2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS WITHIN PROJECT BOUNDARIES PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
3. SPECIFICATIONS ARE COMPLIMENTARY COMPONENTS OF THE CONTRACT DOCUMENTS, REVIEW ALL DRAWINGS AND SPECIFICATIONS FOR THE COMPLETE SCOPE OF WORK. NOTIFY ENGINEER IMMEDIATELY FOR CLARIFICATION OF INCONSISTENCIES, CONTRADICTIONS OR OMISSIONS.
4. AT ALL LOCATIONS WHERE DISSIMILAR MATERIALS MEET, PROVIDE AND INSTALL SEALANT CONTINUOUS.

ABBREVIATIONS

ACT	ACOUSTICAL CEILING TILE
AD	ACCESS DOOR
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
AL	ALUMINUM
AMB	AMBULATORY
AP	ACCESS PANEL
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
B	BASELINE
BO	BOARD
BLDG	BUILDING
BLK	BLOCK
BM	BEAM
B	BOTTOM
BRG	BEARING
CAP	CAPACITY
CD	CEILING DIFFUSER/ CONSTRUCTION DOCUMENT
CEM	CEMENT
CFMF	COLD-FORMED METAL FRAMING
CG	CORNER GUARD
CIP	CAST IRON PIPE, CAST IN PLACE
CJ	CONTROL JOINT
CKT	CIRCUIT
CLG	CEILING
CL	CENTERLINE
CLR	CLEAR
CM	CONSTRUCTION MANAGER
COL	COLUMN
COMM	COMMUNICATION
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CSK	COUNTERSUNK
CTR	CENTER
CPT	CARPET TILE
D	DEPTH, DEEP, DEGREE OF CURVATURE
DET	DETAIL
DIA	DIAMETER
DIM	DIMENSION
DMPR	DAMPER
DN	DOWN
DP	DISTRIBUTION PANEL
DWG	DRAWING
(E)	EXISTING
E	EAST
EA	EACH
EAN	EXCEPT AS NOTED
EL	ELEVATION
ELEC	ELECTRIC
EQ	EQUAL
EQUIP	EQUIPMENT
ER	EXHAUST REGISTER
EW	EACH WAY
EXIST / EXST	EXISTING
EXP	EXPANSION, EXPOSED
EXP JT	EXPANSION JOINT
EXT	EXTERIOR
FA	FIRE ALARM FABX FIRE ALARM BOX
FDN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FEH	FIRE EXTINGUISHER HOSE
FF	FINISHED FLOOR
FIN	FINISH
FL	FLOOR, FLASHING
FOM	FACE OF MASONRY
FR	FRAME
FS	FULL SIZE
FXTR	FIXTURE
GA	GAGE
GLV	GALVANIZED
GFI	GROUND FAULT INTERRUPT
GL	GLASS
GR	GRADE
GRD	GROUND
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
HC	HANDICAPPED
HDW	HARDWARE
HORIZ	HORIZONTAL
HP	HIGH POINT
HR	HOUR
HVY	HEAVY
ID	INSIDE DIAMETER, INSIDE DIMENSION
INT	INTERIOR
INSUL	INSULATION, INSULATED
INV	INVERT
JB	JUNCTION BOX
JCT	JUNCTION
JT	JOINT
JST	JOIST
K	KILO
KO	KNOCK OUT
KV	KILOVOLT
KVA	KILOVOLT-AMPERE
KW	KILOWATT
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LT	LIGHT
LP	LOW POINT
M	METER, MEGA
MACH	MACHINE
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MET	METAL
MIN	MINIMUM, MINUTE
MIR	MIRROR IMAGE
MISC	MISCELLANEOUS
MM,mm	MILLIMETER
MO	MASONRY OPENING,
MTD	MOUNTED
MTG	MOUNTING
MULL	MULLION
N	NORTH
NA	NOT APPLICABLE
NE	NORTHEAST
NEC	NATIONAL ELECTRIC CODE
NEUT	NEUTRAL
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
NW	NORTHWEST
O.C.	ON CENTER
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OPP	OPPOSITE
OVHD,OH	OVERHEAD
OHD	OVERHEAD DOOR
PB	PULL BOX
PCT	PORCELAIN TILE
PHN	PHENOLIC
PI	POINT OF INTERSECTION
PL	PLATE
PLAS	PLASTER
PNL	PANEL
PRELIM	PRELIMINARY
PRIM	PRIMARY
PT	PAINT
PTN	PARTITION
R	RADIUS, RISER, RUBBER SHEATH
RA	RETURN AIR
RAD	RADIUS
RB	RESILIENT VINYL BASE
RCP	REFLECTED CEILING PLAN
RECP	RECEPTACLE
REINF	REINFORCEMENT
REG	REGULATOR, REGISTER
REQD	REQUIRED
REV	REVISION
RM	ROOM
RO	ROUGH OPENING
RT	RESILIENT TILE
S	SOUTH
SCH	SCHEDULE
SE	SOUTHEAST
SG	SUPPLY GRILLE
SH	SHEET
SIM	SIMILAR
SL	SLOPE
SPEC	SPECIFICATION
SPF	SPRAY FOAM INSULATION
SQ	SQUARE
SR	SUPPLY REGISTER
STL	STEEL
S/S	STAINLESS STEEL
SSM	SOLID SURFACE MATERIAL
SUSP	SUSPENDED
TA	TOILET ACCESSORY
T&B	TOP AND BOTTOM
TB-X	TERRAZZO BASE
TEL	TELEPHONE
TEMP	TEMPERATURE, TEMPORARY
TF	TERRAZZO FLOOR
T.O.	TOP OF
TOS	TOP OF SLAB
TP	TEST PIT
TR	TOP REGISTER
TYP	TYPICAL
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
VCT	VINYL COMPOSITION TILE
VENT	VENTILATING
VERT	VERTICAL
VEST	VESTIBULE
W	WEST
WA	WATT
W/	WITH
W/O	WITHOUT
WD	WIDTH, WINDOW DIMENSION
WT	WEIGHT
WT-X	WALL TILE
2:1 SL	2 HORIZONTAL TO 1 VERTICAL SLOPE
1 ON 2	1 VERTICAL ON 2 HORIZONTAL SLOPE
	DEFLECTION ANGLE
Ø	DIAMETER, PHASE

2

NOTE:
ALL SITE AND CIVIL WORK FOR THIS PROJECT IS PERFORMED UNDER A SEPARATE CONTRACT. REFERENCE CONTRACT DOCUMENTS FOR PROJECT NUMBER 1225-10-72. DRAWINGS IN THIS SET DESCRIBE MAIN BUILDING AND EQUIPMENT GARAGE, WHICH ARE IDENTICAL FOR EACH SITE.



1 ARCHITECTURAL SITE PLAN - REST AREA 52

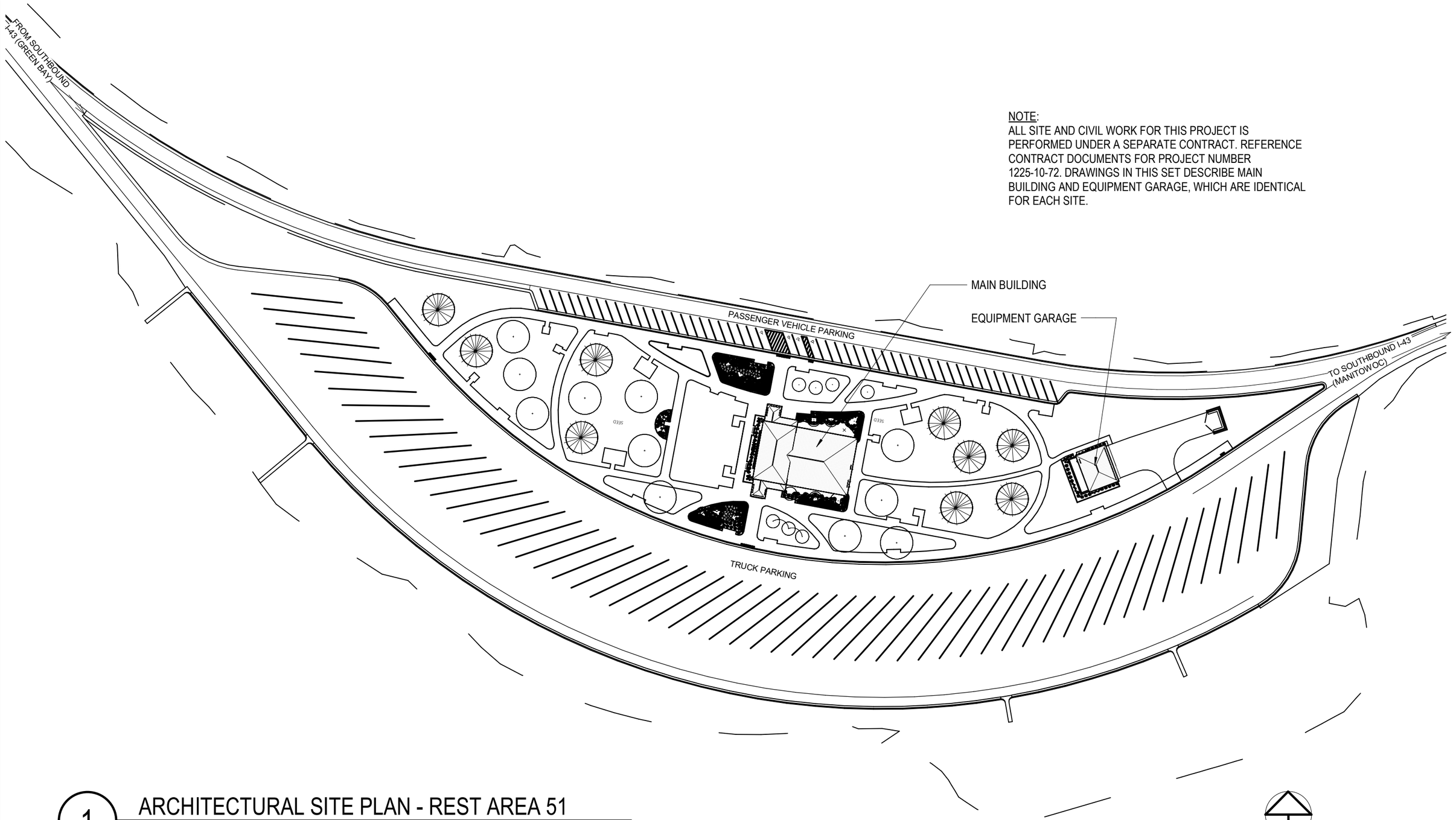
1" = 100'-0"

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	ARCHITECTURAL SITE PLAN - SAFETY REST AREA 52 (DENMARK)	SHEET A00.47	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/21/2024 5:10:51 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : 1" = 100'-0"

2

NOTE:
ALL SITE AND CIVIL WORK FOR THIS PROJECT IS PERFORMED UNDER A SEPARATE CONTRACT. REFERENCE CONTRACT DOCUMENTS FOR PROJECT NUMBER 1225-10-72. DRAWINGS IN THIS SET DESCRIBE MAIN BUILDING AND EQUIPMENT GARAGE, WHICH ARE IDENTICAL FOR EACH SITE.



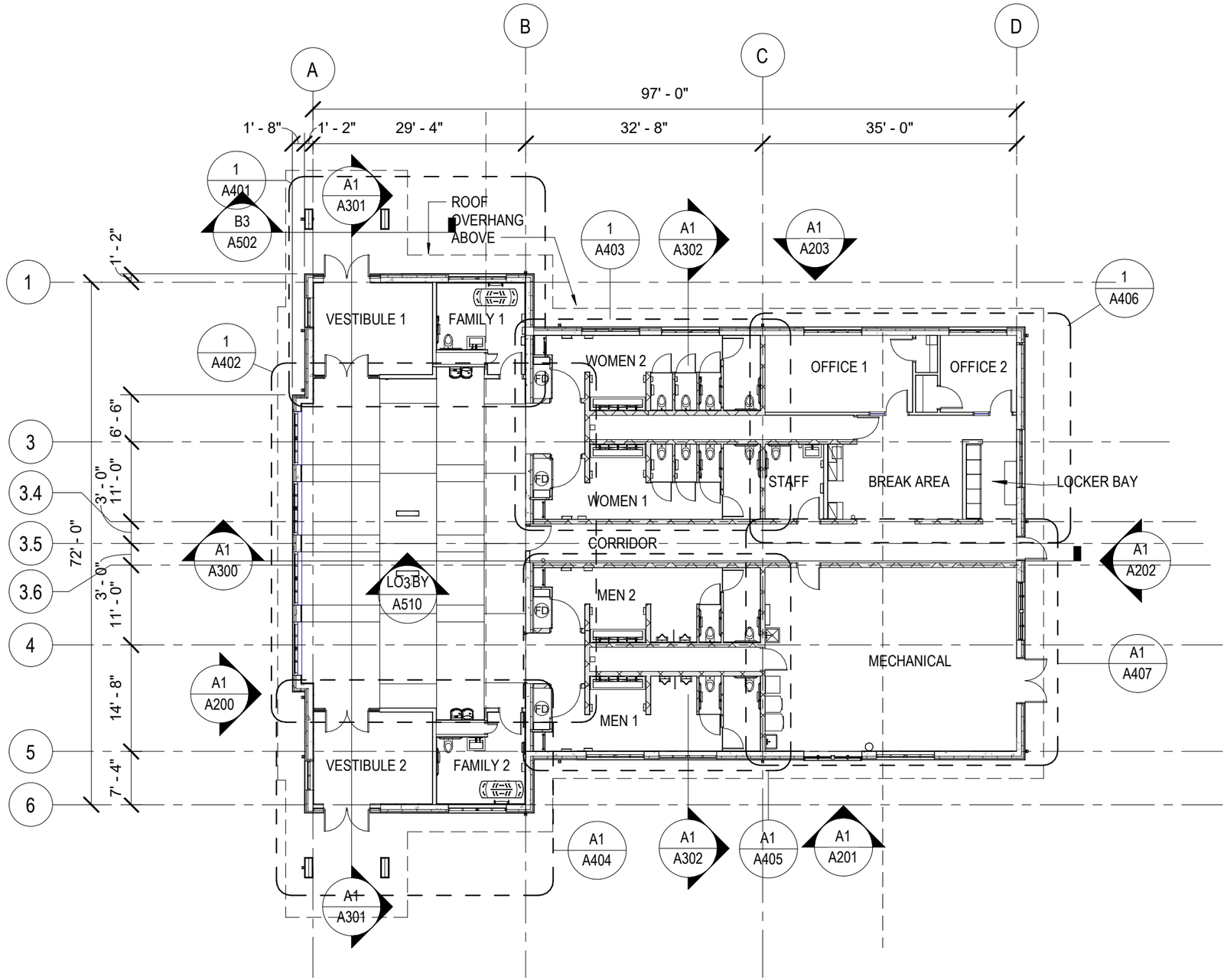
1 ARCHITECTURAL SITE PLAN - REST AREA 51

1" = 100'-0"

NORTH

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	ARCHITECTURAL SITE PLAN - SAFETY REST AREA 51 (MARIBEL)	SHEET A00-48	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/21/2024 5:10:53 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,

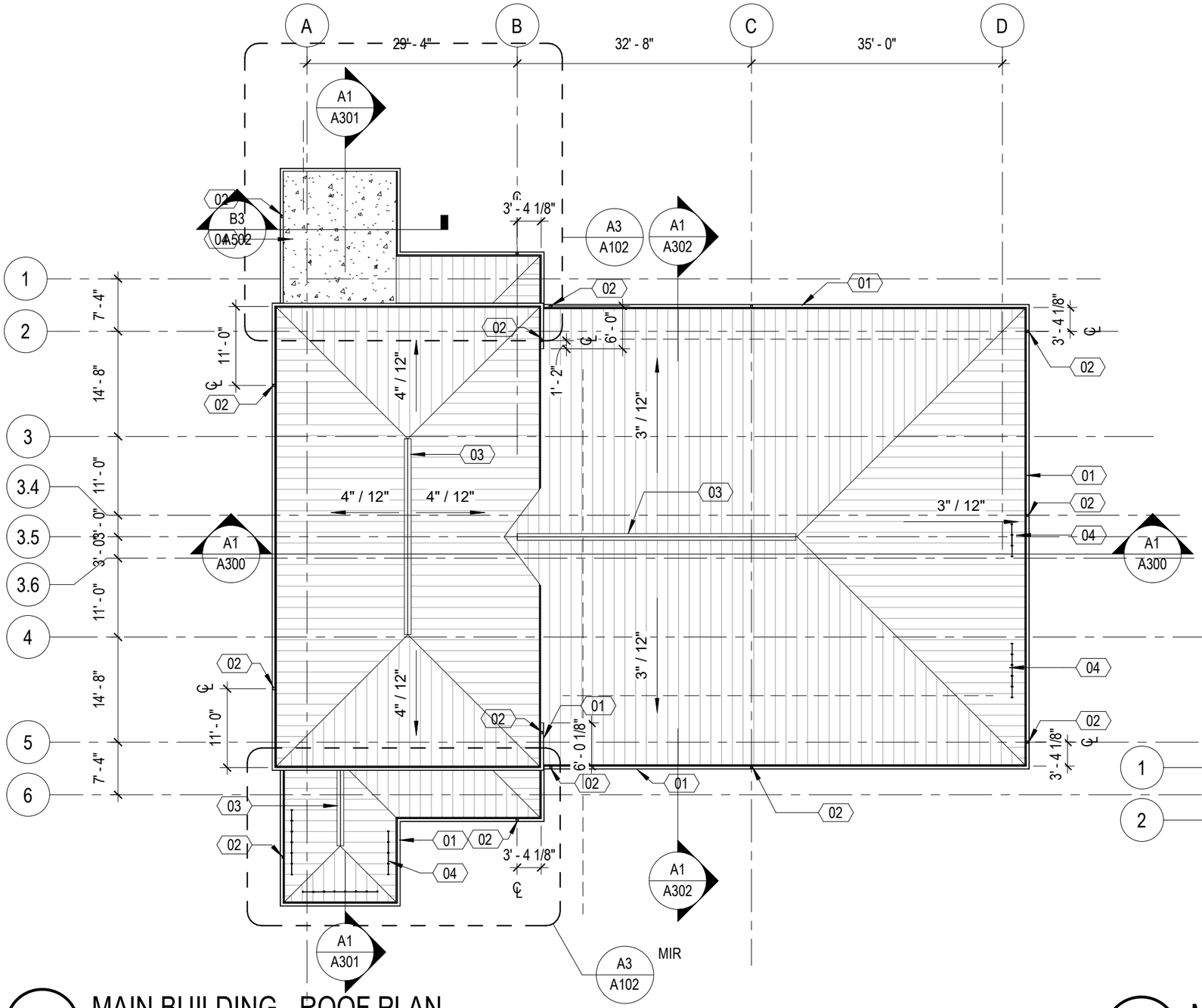
5. PROVIDE AND INSTALL FIRE TREATED BACKING AS REQUIRED FOR ALL WALL MOUNTED EQUIPMENT, TOILET ACCESSORIES AND THOSE ITEMS NOTED AS N.I.C.. VERIFY SIZE AND EXACT LOCATIONS OF BACKING WITH INDIVIDUAL EQUIPMENT SUPPLIER.

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.

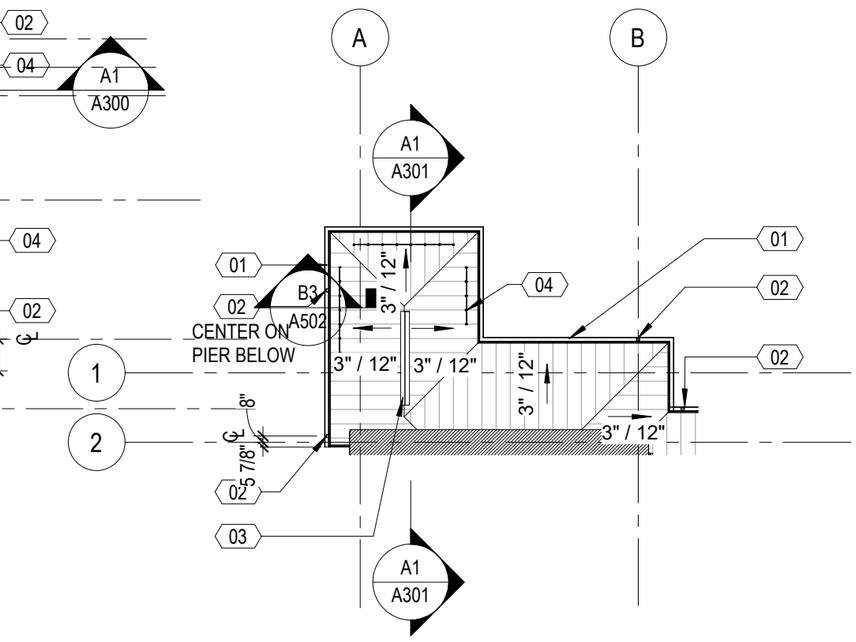
SHEET KEYNOTES

01	4 X 5 PREFORMED GUTTER - MATCH ROOF FINISH
02	PREFINISHED METAL DOWNSPOUT - MATCH ROOF FINISH
03	RIDGE VENT
04	SNOW GUARD



A1 MAIN BUILDING - ROOF PLAN

1/16" = 1'-0"

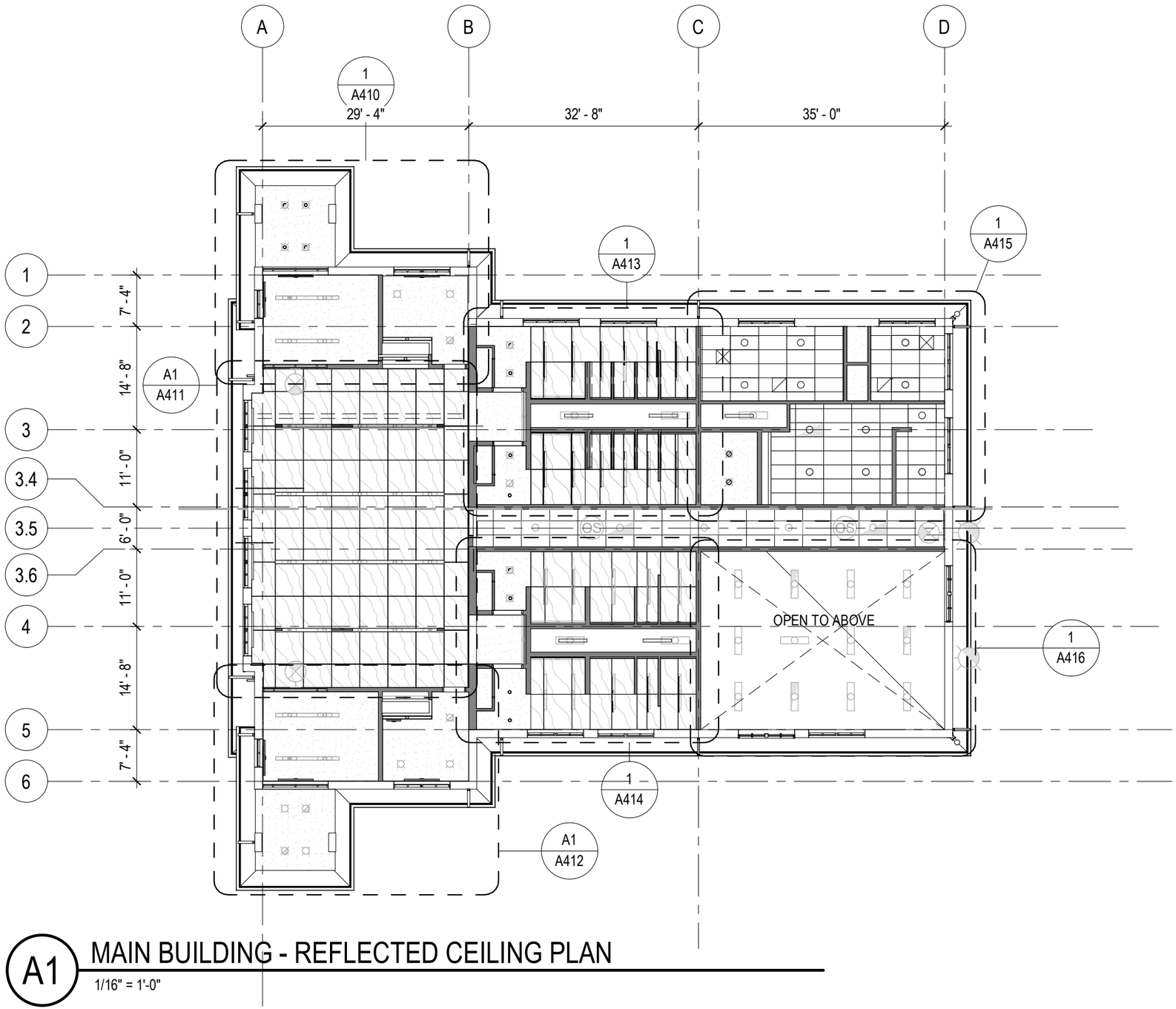


A3 MAIN BUILDING - ENTRY CANOPY ROOF PLAN

1/16" = 1'-0"

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	MAIN BUILDING - ROOF PLAN	SHEET A10[illegible]

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/21/2024 5:10:54 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : As indicated



A1 MAIN BUILDING - REFLECTED CEILING PLAN

1/16" = 1'-0"

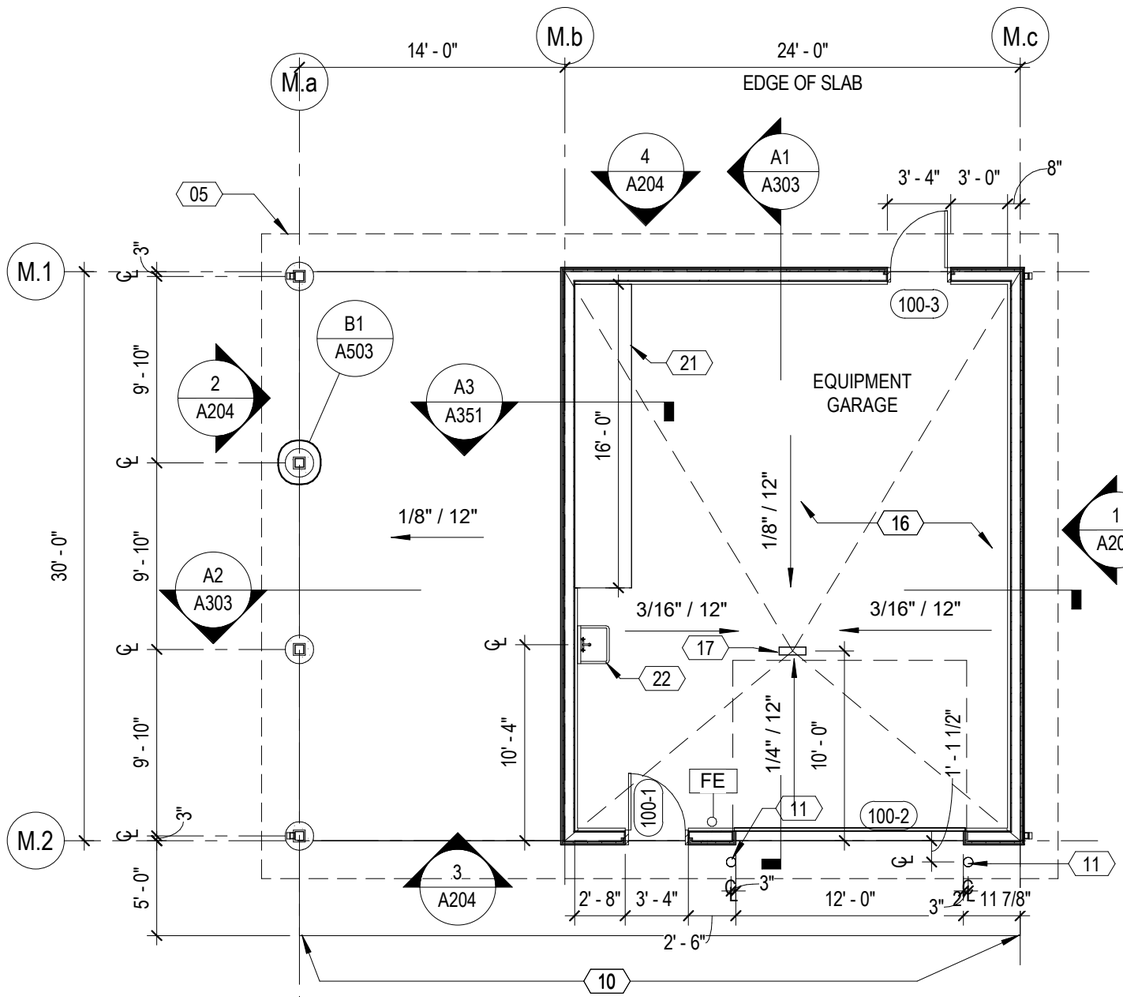
RCP GENERAL NOTES

1. SEE A001 FOR SYMBOL LEGEND
2. SOFFITS AND BULKHEADS SHALL BE 1 INCH BELOW ADJACENT SUSPENDED CEILING SYSTEMS, UNLESS NOTED OTHERWISE.
3. REFER TO ROOM FINISH SCHEDULE ON "I" SERIES SHEETS FOR MATERIAL DESIGNATIONS.
4. PROVIDE GYPSUM WALL BOARD AND METAL STUD BULK HEADS WHERE CEILINGS OF DIFFERENT HEIGHTS ABUT. DO NOT BUILD BULKHEADS OF ACOUSTICAL CEILING MATERIALS UNLESS SPECIFICALLY DESIGNED.
5. REFER TO MECHANICAL DRAWINGS (M SERIES) FOR QUANTITY AND TYPE OF DIFFUSERS, RETURN AIR GRILLES AND EXHAUST GRILLES, ETC. SCRIBE CEILING MATERIALS FOR A TIGHT FIT.
6. REFER TO ELECTRICAL DRAWINGS (E SERIES) FOR QUANTITY AND TYPE OF LIGHTS, SPEAKERS, DETECTORS, POWER OUTLETS, ETC. SCRIBE CEILING MATERIALS FOR A TIGHT FIT.
7. ALL SOFFITS ABOVE CASEWORK ARE TO BE GWB W/ METAL FRAMING AND ARE TO BE BUILT 1" BEYOND CASEWORK UNLESS NOTED OTHERWISE.
8. ACCESS PANELS MAY OR MAY NOT BE SHOWN, GENERAL CONTRACTOR IS TO PROVIDE AND INSTALL CEILING ACCESS PANELS AS REQUIRED FOR ACCESS TO ANY MECHANICAL AND/OR ELECTRICAL DEVICE LOCATED ABOVE THE CEILING.
9. SUSPENDED CEILING TILES IN EACH ROOM ARE TO BE CONFIGURED IN SUCH THAT NO LESS THAN ONE HALF A BOARD TILE EXISTS ADJACENT TO ANY ROOM WALL AND WITH EITHER A TILE OR A GRID AT THE CENTER OF THE ROOM IN EACH DIRECTION UNLESS NOTED OR DIMENSIONED OTHERWISE.
10. DO NOT FASTEN HANGER RODS BY SCREWING OR NAILING INTO SIP STRUCTURE ABOVE UNLESS ALL PENETRATIONS ARE SEALED AGAINST WATER VAPOR PENETRATION.

2

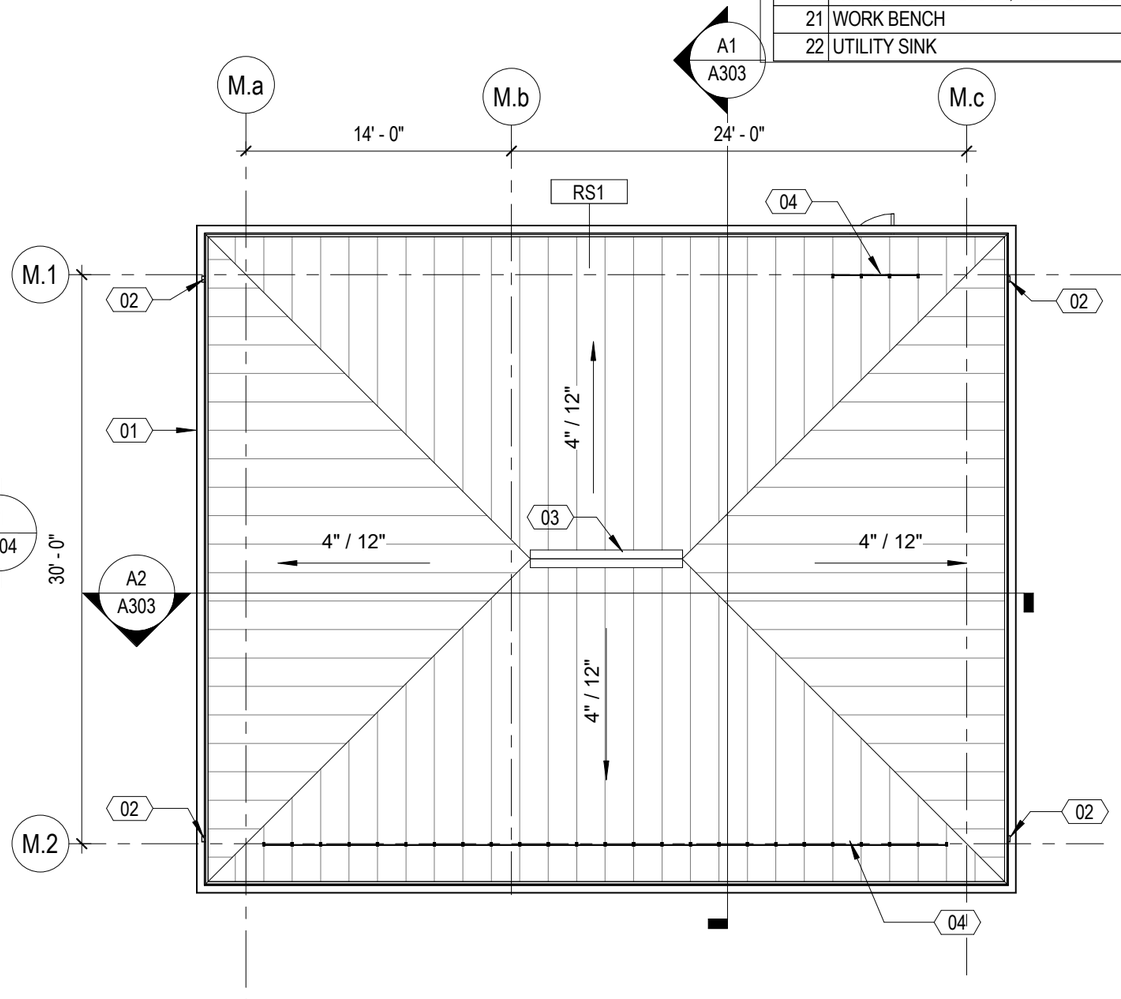
SHEET KEYNOTES

01	4 X 5 PREFORMED GUTTER - MATCH ROOF FINISH
02	PREFINISHED METAL DOWNSPOUT - MATCH ROOF FINISH
03	RIDGE VENT
04	SNOW GUARD
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"

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	EQUIPMENT GARAGE - FLOOR AND ROOF PLANS	SHEET A10-52 E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/21/2024 5:10:55 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : As indicated

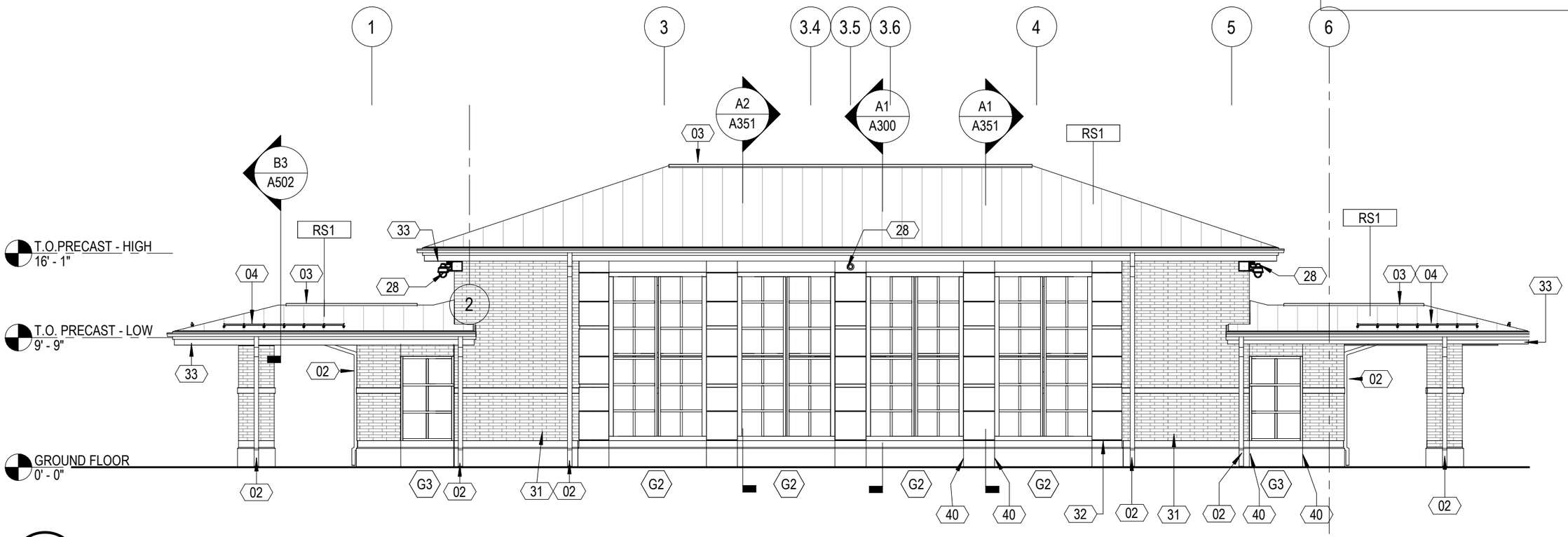
2

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"

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	MAIN BUILDING - ELEVATION A	SHEET A20[illegible]53 E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/21/2024 5:10:57 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : As indicated

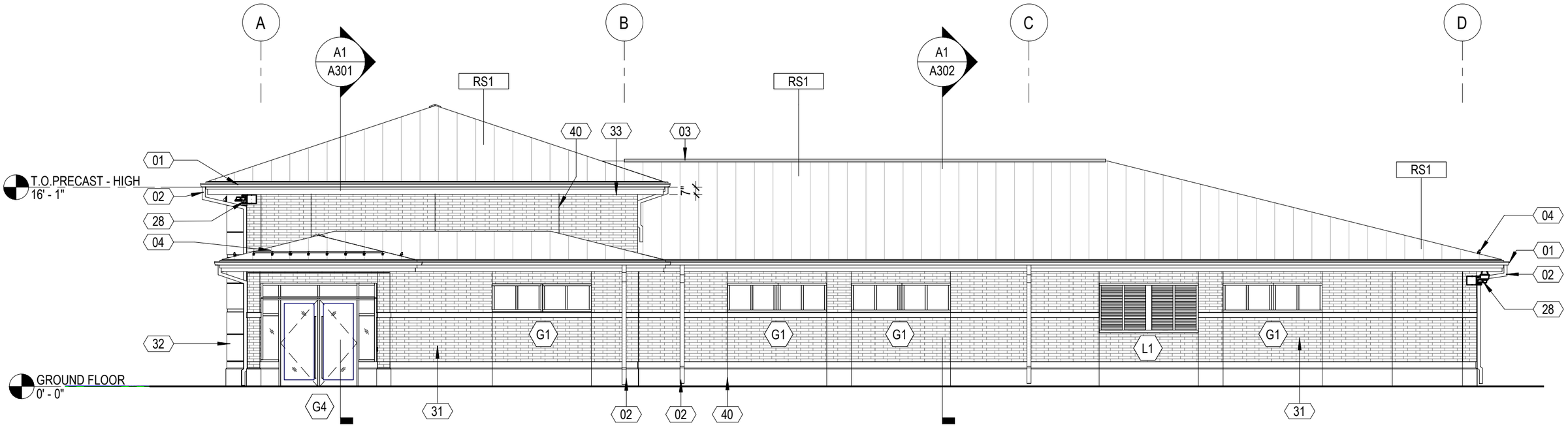
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SHEET KEYNOTES

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"

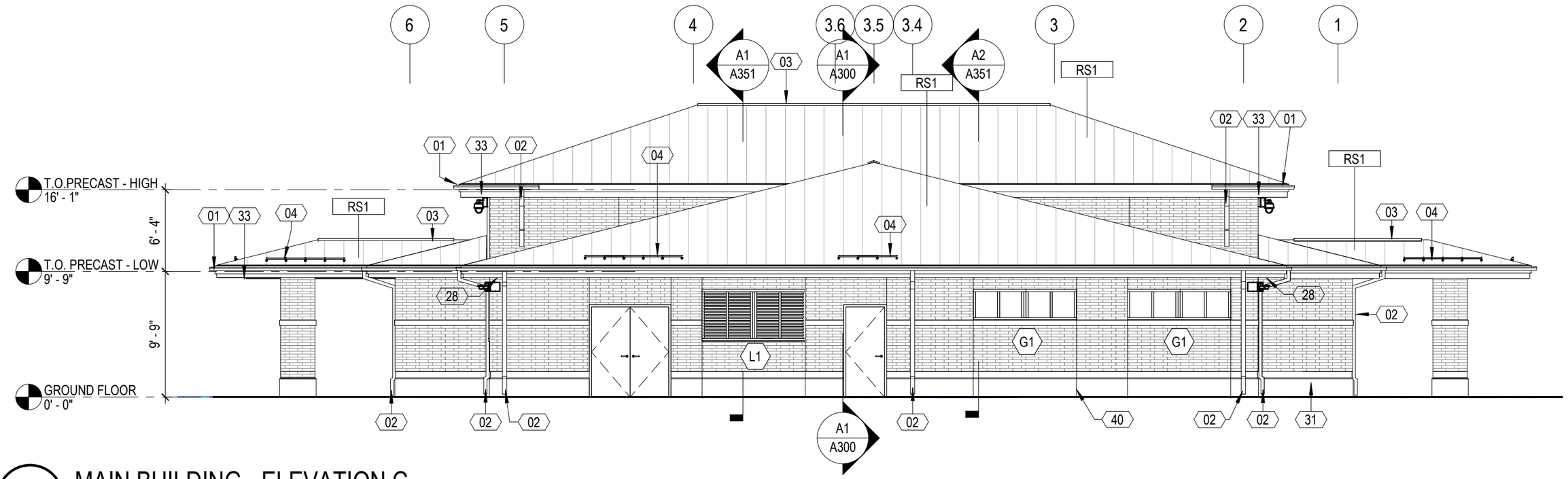
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SHEET KEYNOTES

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"

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	MAIN BUILDING - ELEVATION C	SHEET A20[illegible]55 E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/21/2024 5:11:01 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : As indicated

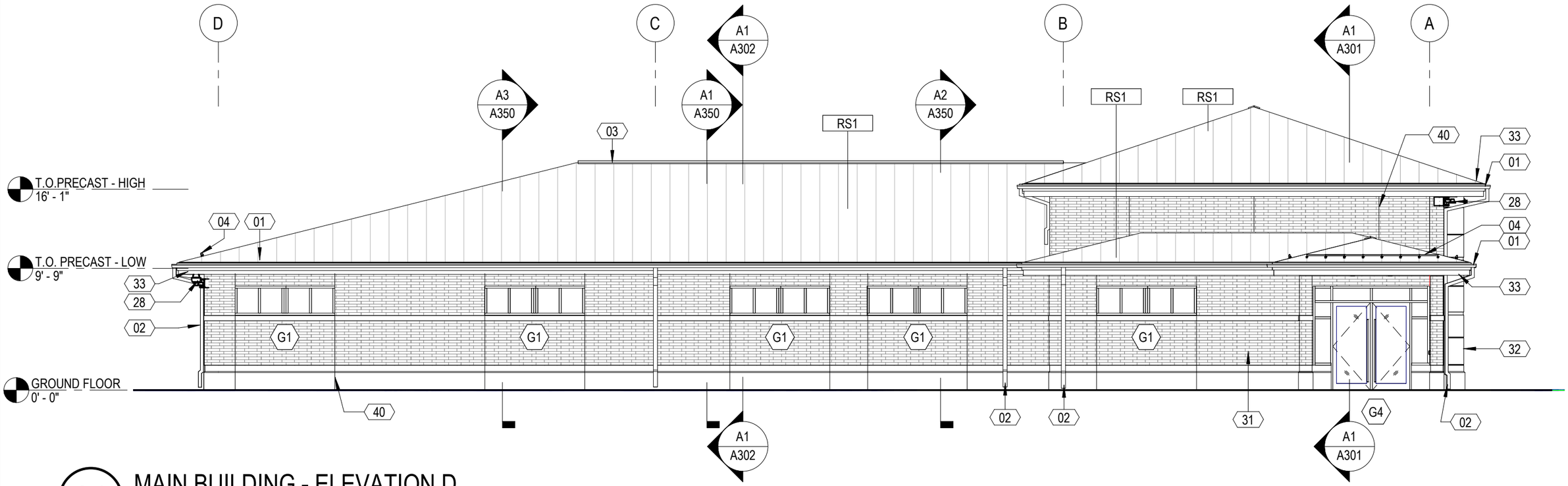
2

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.



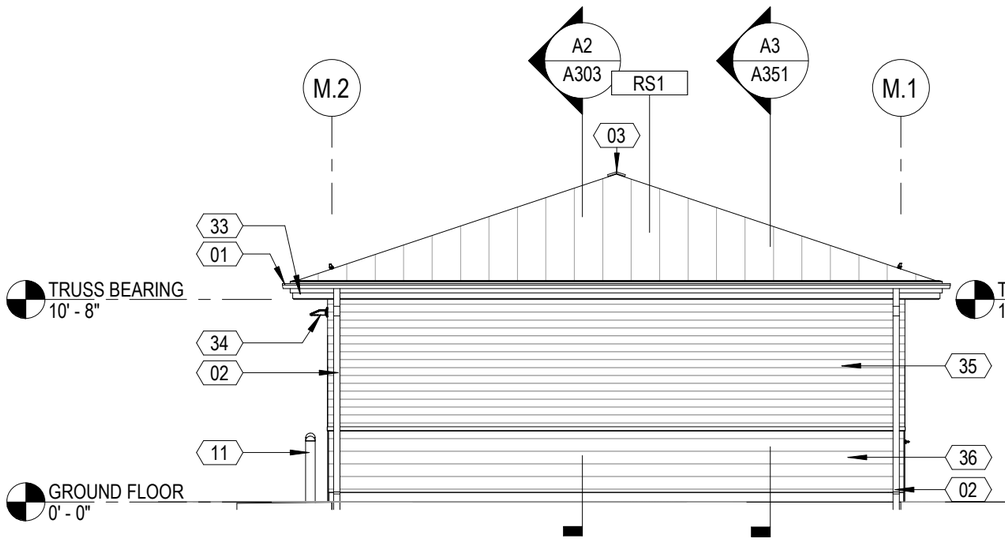
A1 MAIN BUILDING - ELEVATION D

1/8" = 1'-0"

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	MAIN BUILDING - ELEVATION D	SHEET A20-56 E

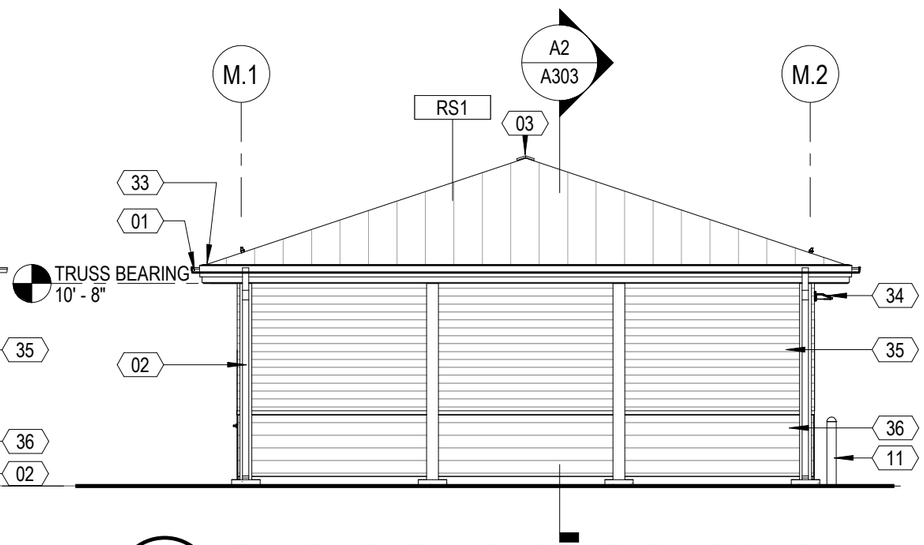
FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/21/2024 5:11:03 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : As indicated

2



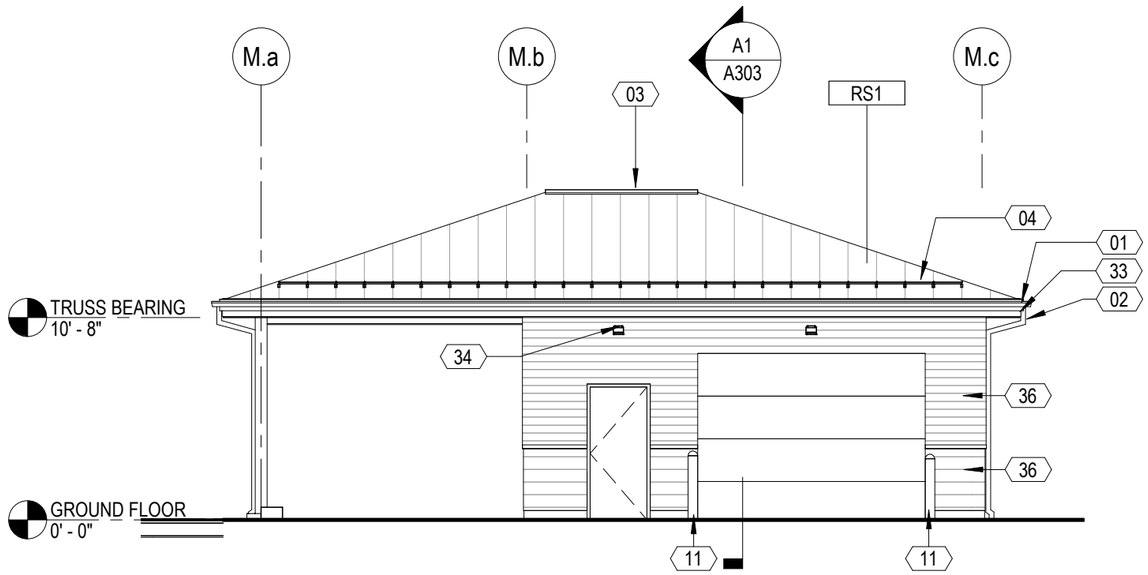
1 EQUIPMENT GARAGE - ELEVATION B

1/8" = 1'-0"



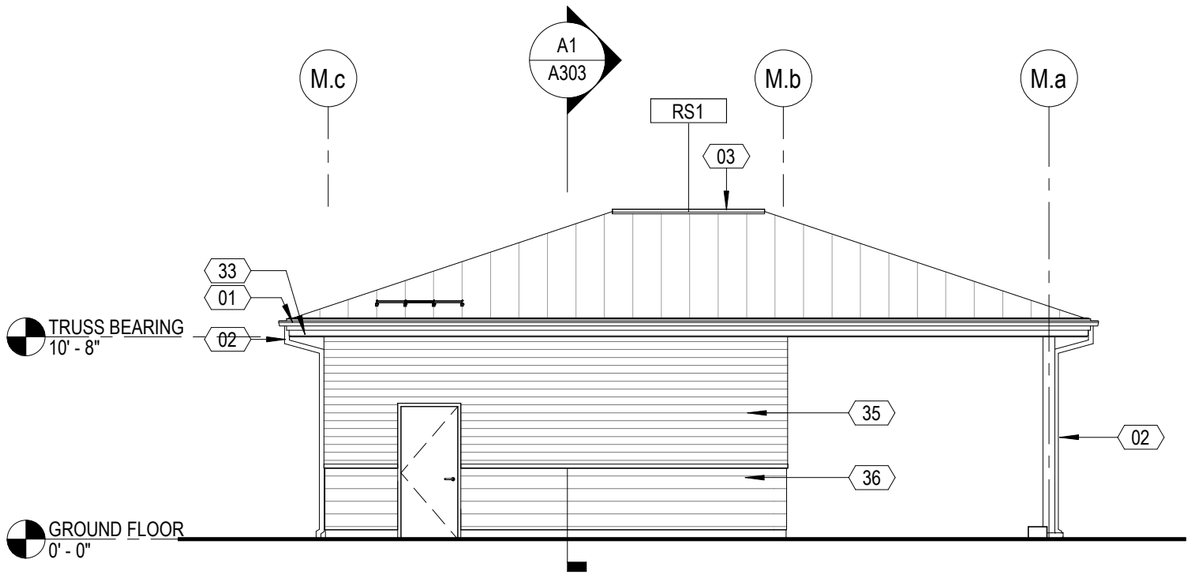
2 EQUIPMENT GARAGE - ELEVATION D

1/8" = 1'-0"



3 EQUIPMENT GARAGE - ELEVATION A

1/8" = 1'-0"



4 EQUIPMENT GARAGE - ELEVATION C

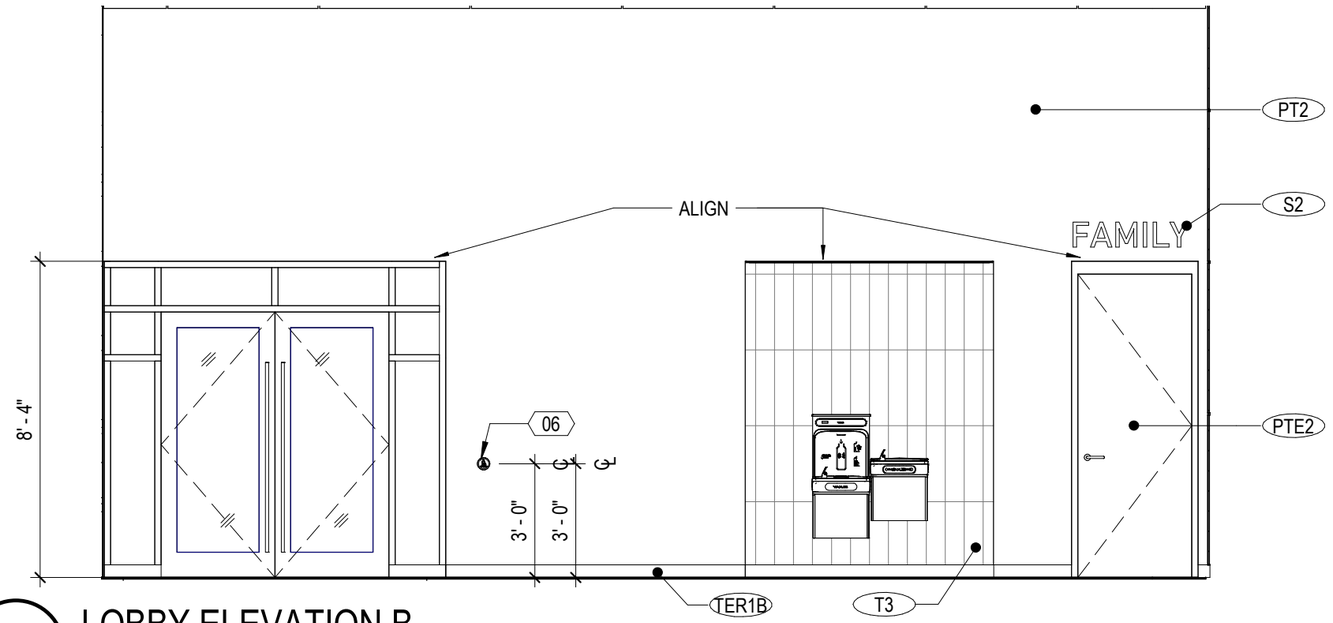
1/8" = 1'-0"

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

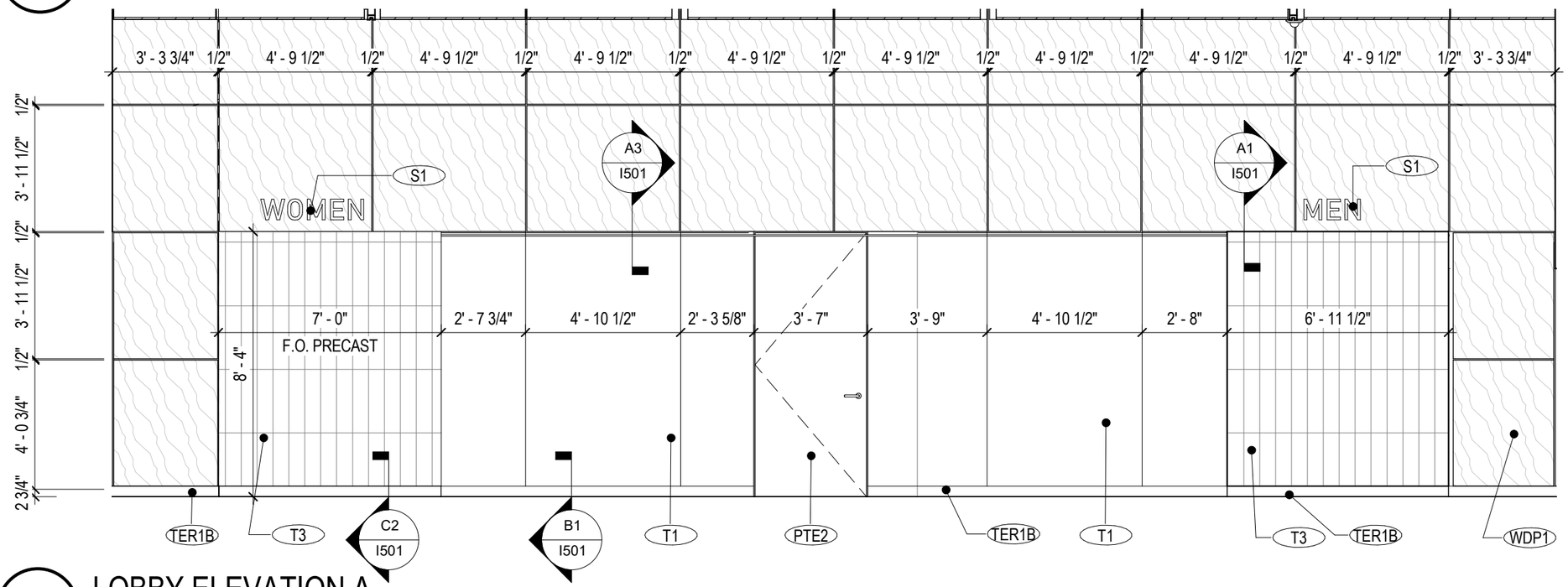
GENERAL NOTES

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.



A1 LOBBY ELEVATION B

1/4" = 1'-0"



B1 LOBBY ELEVATION A

1/4" = 1'-0"

SHEET KEYNOTES

06	AUTOMATIC DOOR OPERATOR BUTTON
PT2	PAINT 2
PTE2	EPOXY PAINT 2
S1	DIMENSIONAL LETTERING, OPAQUE WHITE
S2	DIMENSIONAL LETTERING, OPAQUE BLACK
T1	FILED TILE - WHITE
T3	ACCENT TILE
TER1B	
WDP1	WOOD WALL PANEL

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.

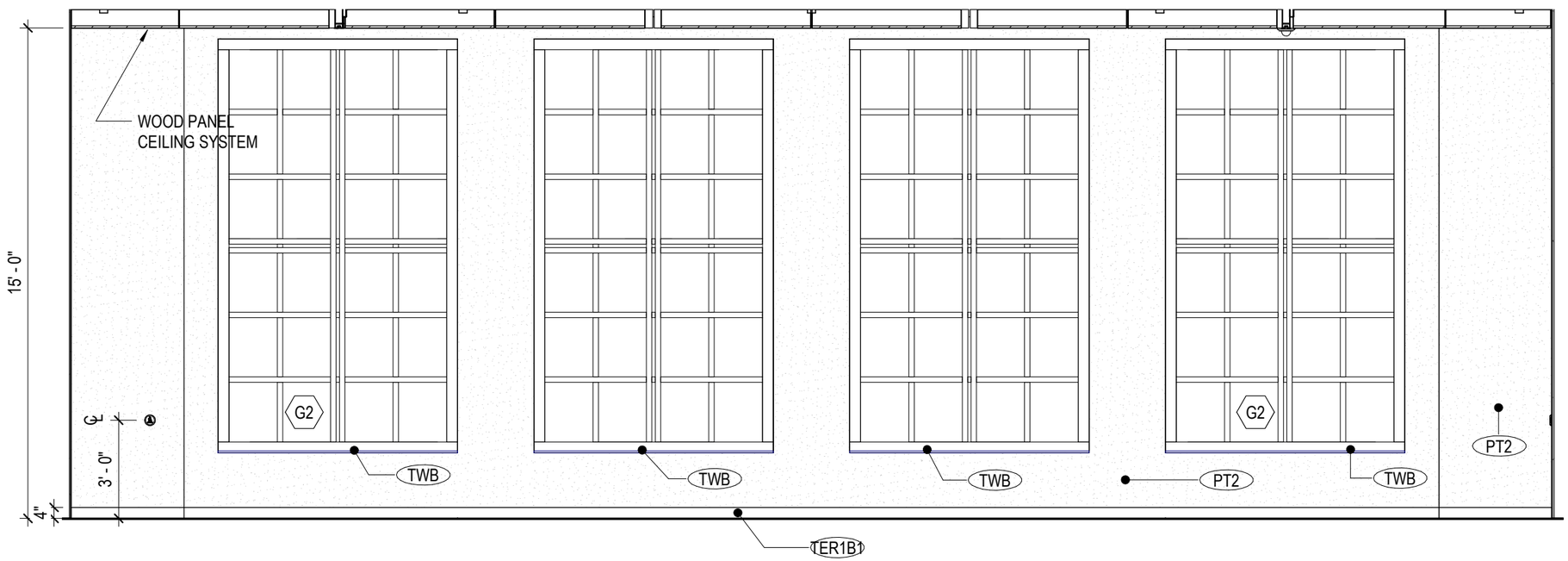
2

SHEET KEYNOTES

PT2	PAINT 2
TER1B1	TERRAZZO BASE 1
TWB	TERRAZZO WINDOW SILL, 3/4" TH - MATCH TER1

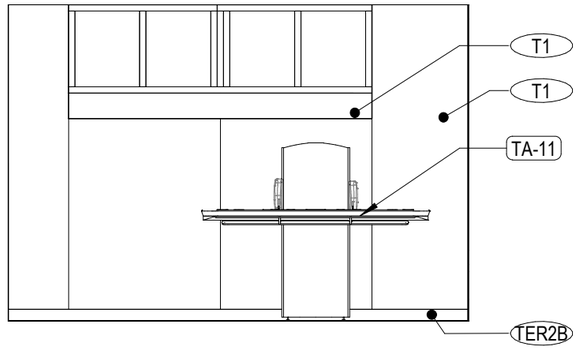
GENERAL NOTES

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.



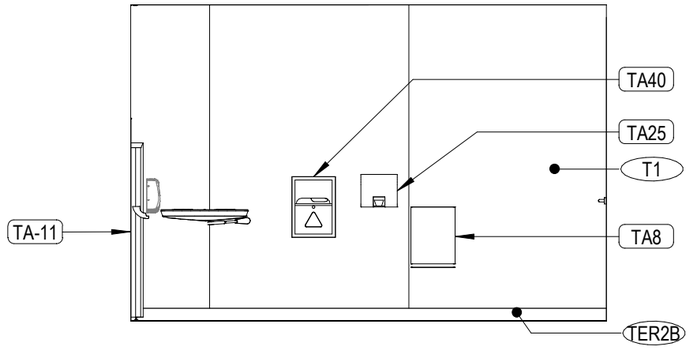
1 LOBBY ELEVATION C

1/4" = 1'-0"



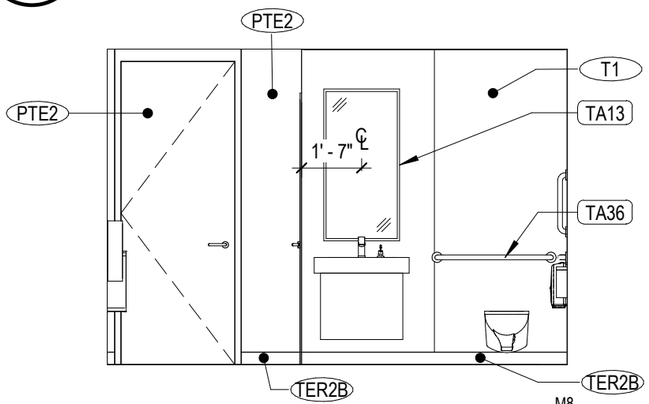
C1 FAMILY ROOM - REAR WALL

1/4" = 1'-0"



C2 FAMILY ROOM - LIFT WALL

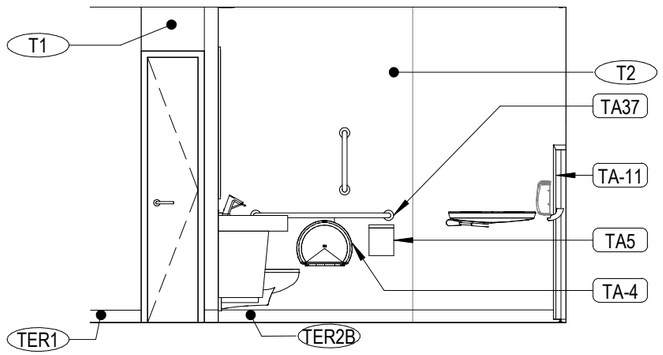
1/4" = 1'-0"



B1 FAMILY ROOM - WET WALL

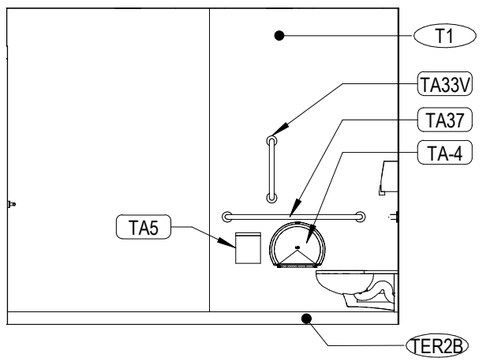
1/4" = 1'-0"

M8



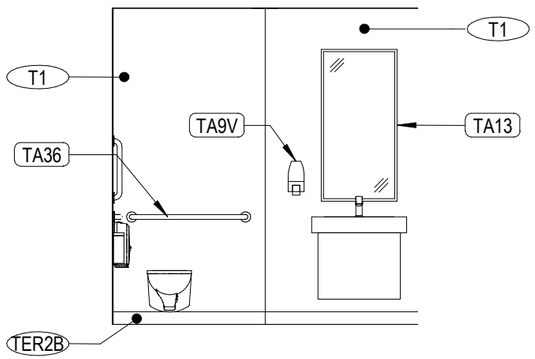
B2 FAMILY ROOM SIDE WALL

1/4" = 1'-0"



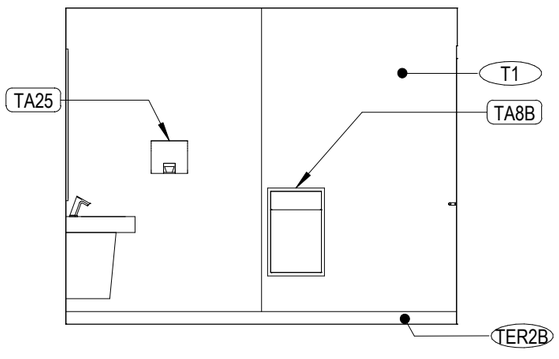
A1 STAFF TLT - ELEV 1

1/4" = 1'-0"



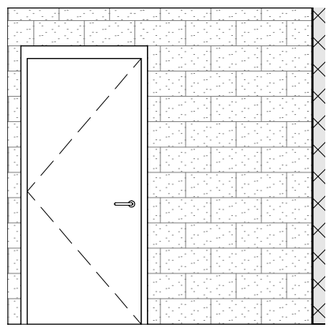
A2 STAFF TLT - ELEV 3

1/4" = 1'-0"



A3 STAFF TLT - ELEV 2

1/4" = 1'-0"



A4 STAFF TLT - ELEV 4

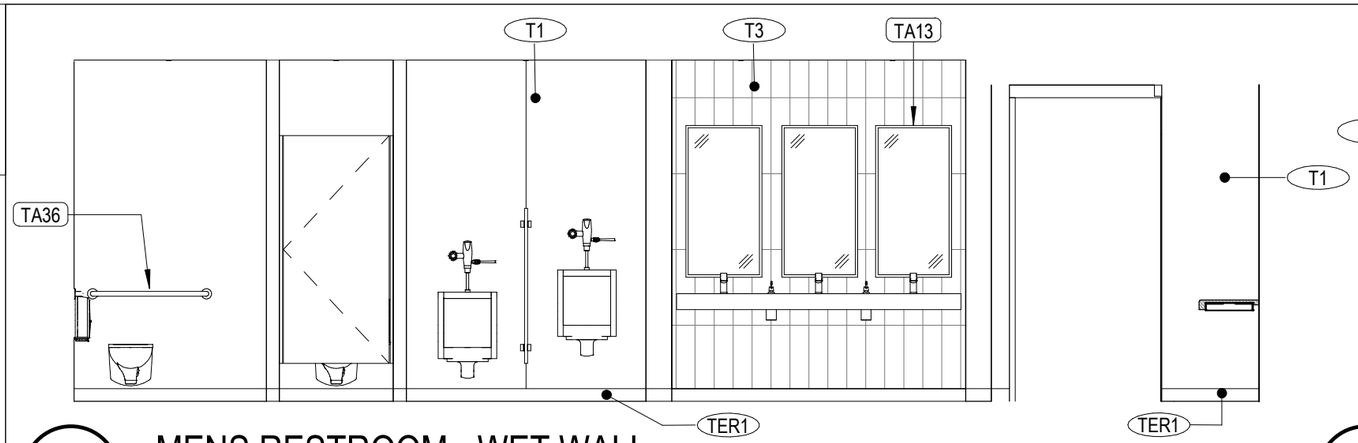
1/4" = 1'-0"

SHEET KEYNOTES

PTE2	EPOXY PAINT 2
T1	FILED TILE - WHITE
T2	ACCENT TILE - FAMILY ROOM
TER1	TERRAZZO 1, POURED IN PLACE
TER2B	

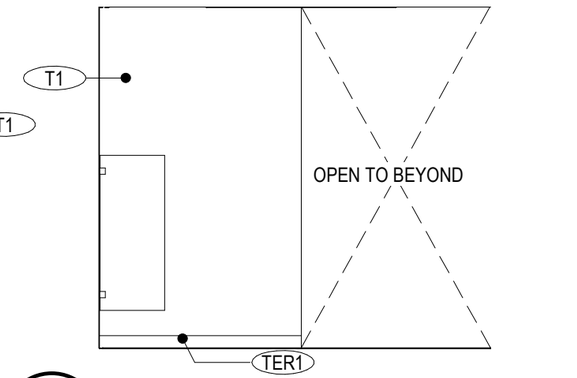
GENERAL NOTES

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.



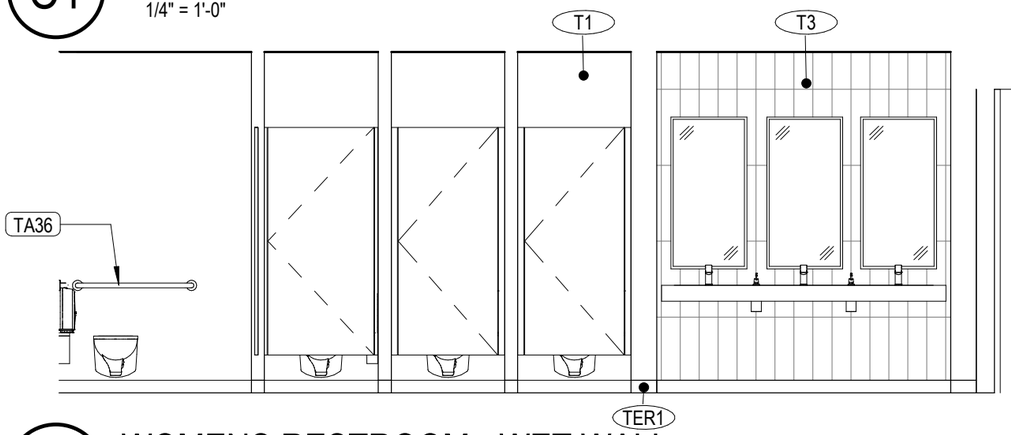
C1 MENS RESTROOM - WET WALL

1/4" = 1'-0"



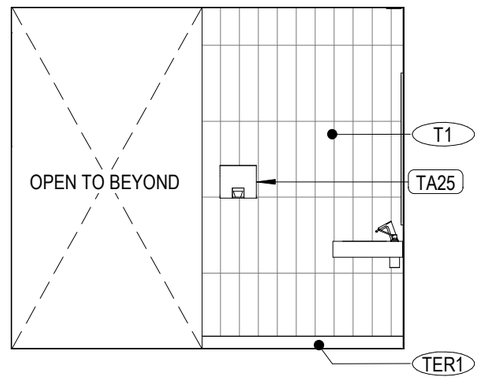
C2 MENS URINAL STALL - SIDE

1/4" = 1'-0"



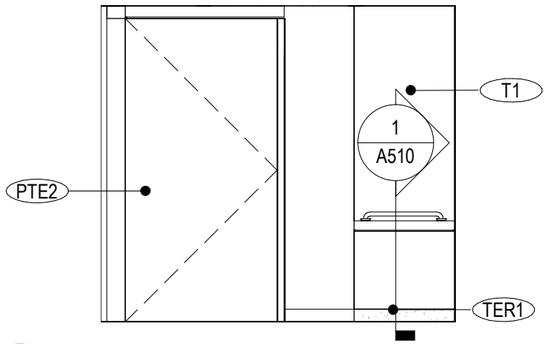
B1 WOMENS RESTROOM - WET WALL

1/4" = 1'-0"



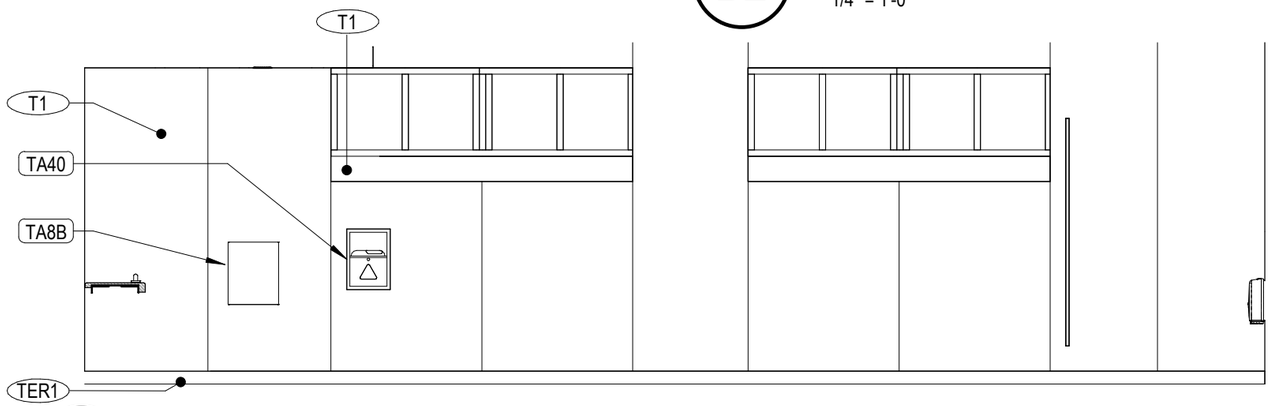
B2 WET WALL - SIDE

1/4" = 1'-0"



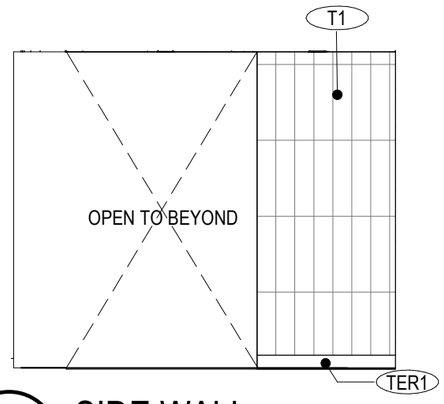
A1 CHANGING TABLE WALL

1/4" = 1'-0"



A2 RESTROOM - BACKWALL

1/4" = 1'-0"



A3 SIDE WALL

1/4" = 1'-0"

SHEET KEYNOTES

PTE2	EPOXY PAINT 2
T1	FILED TILE - WHITE
T3	ACCENT TILE
TER1	TERRAZZO 1, POURED IN PLACE

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.

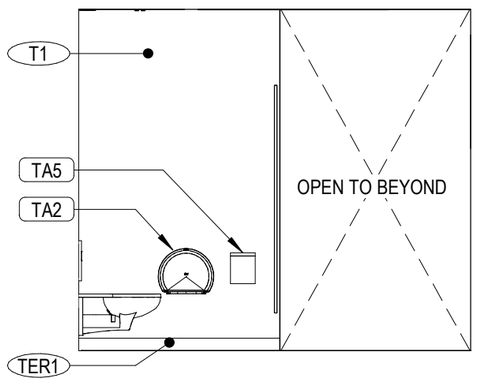
2

SHEET KEYNOTES

T1	FILED TILE - WHITE
TER1	TERRAZZO 1, POURED IN PLACE

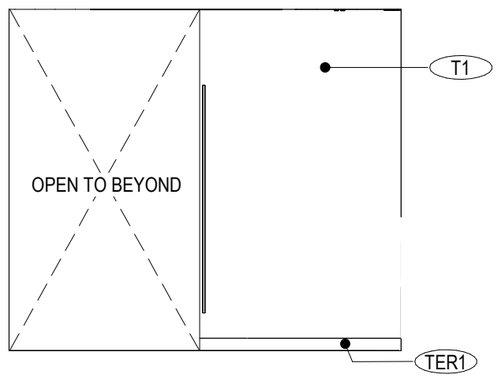
GENERAL NOTES

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.



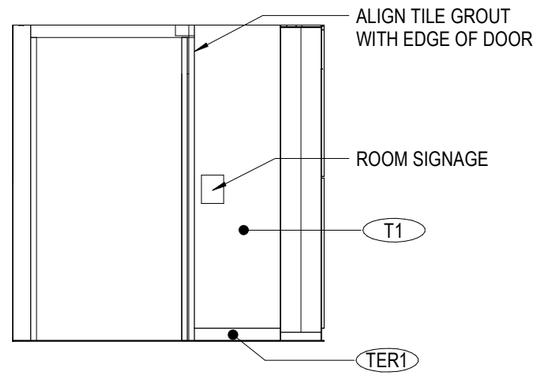
B1 TYP STALL - SIDE 1

1/4" = 1'-0"



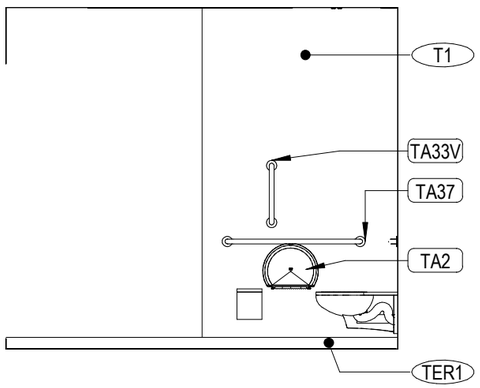
B2 TYP STALL - SIDE 2

1/4" = 1'-0"



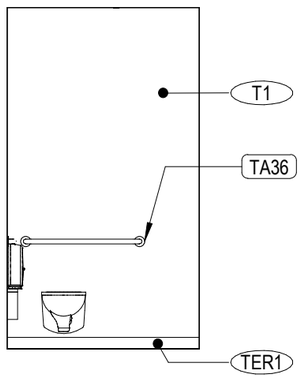
B3 TYP RESTROOM ENTRY DOOR WALL

1/4" = 1'-0"



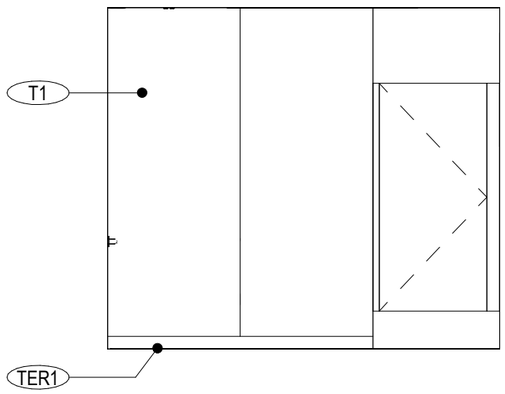
A1 TYP ADA STALL - SIDE WALL 1

1/4" = 1'-0"



A2 TYP ADA STALL - WET WALL

1/4" = 1'-0"



A3 TYP. ADA STALL - SIDE WALL 2

1/4" = 1'-0"

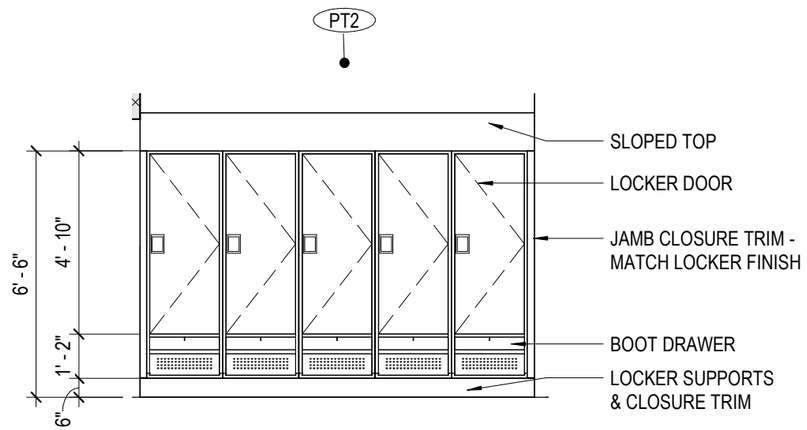
2

SHEET KEYNOTES

PT2	PAINT 2
SSF1	SOLID SURFACE COUNTER TOP

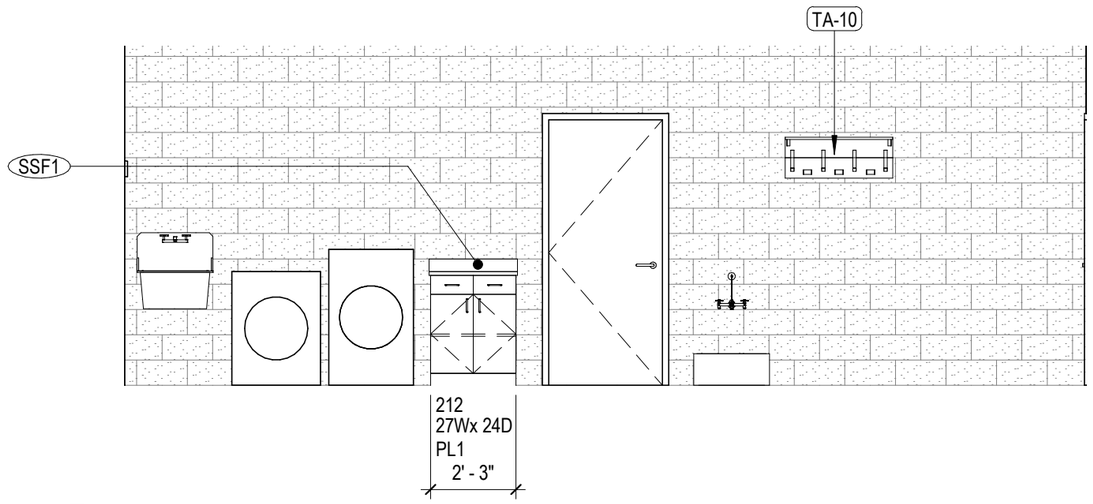
GENERAL NOTES

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.



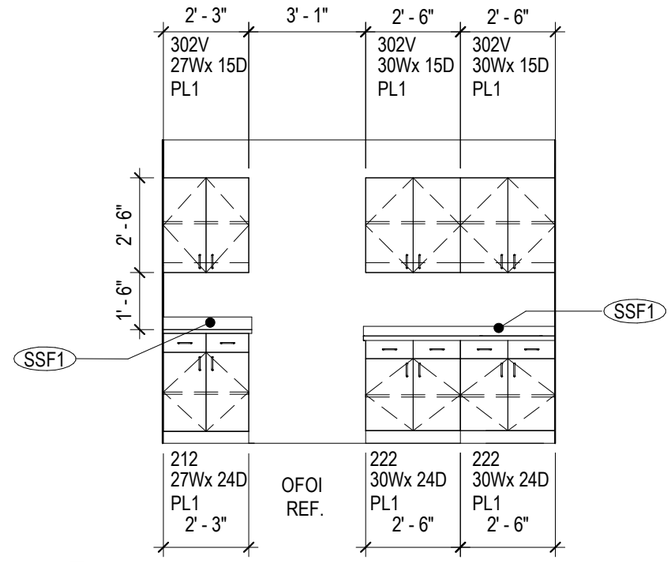
B1 LOCKER ELEVATION

1/4" = 1'-0"



A1 MECHANICAL - CASEWORK WALL

1/4" = 1'-0"



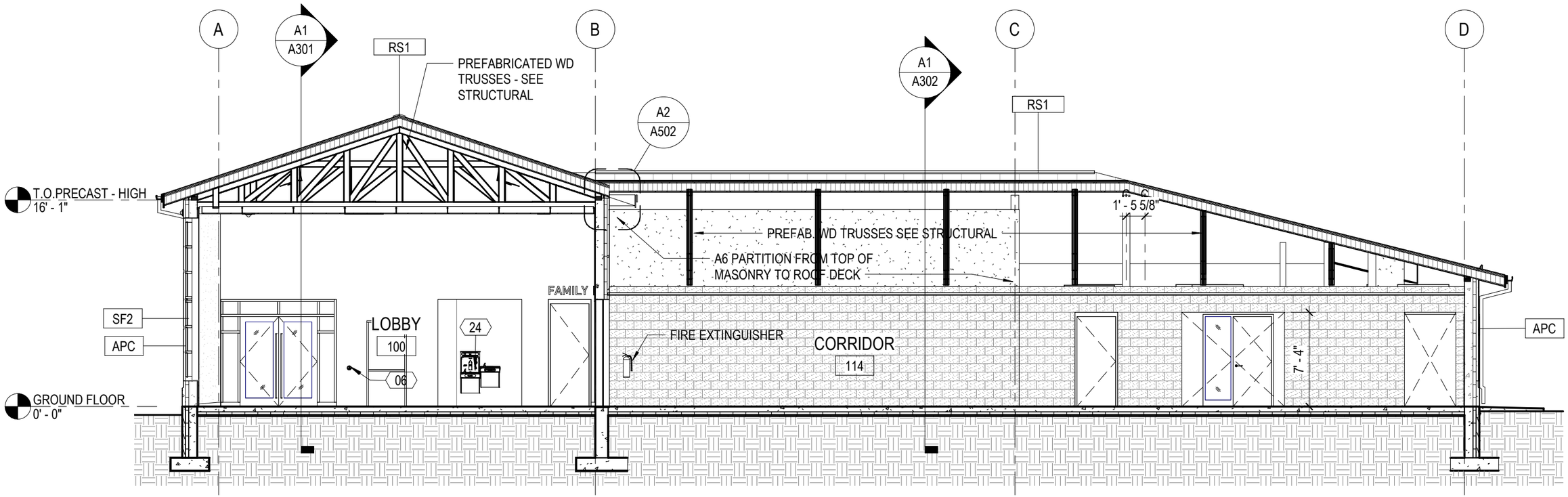
A2 BREAK AREA - CASEWORK WALL

1/4" = 1'-0"

SHEET KEYNOTES

06	AUTOMATIC DOOR OPERATOR BUTTON
24	DRINKING FOUNTAIN

2

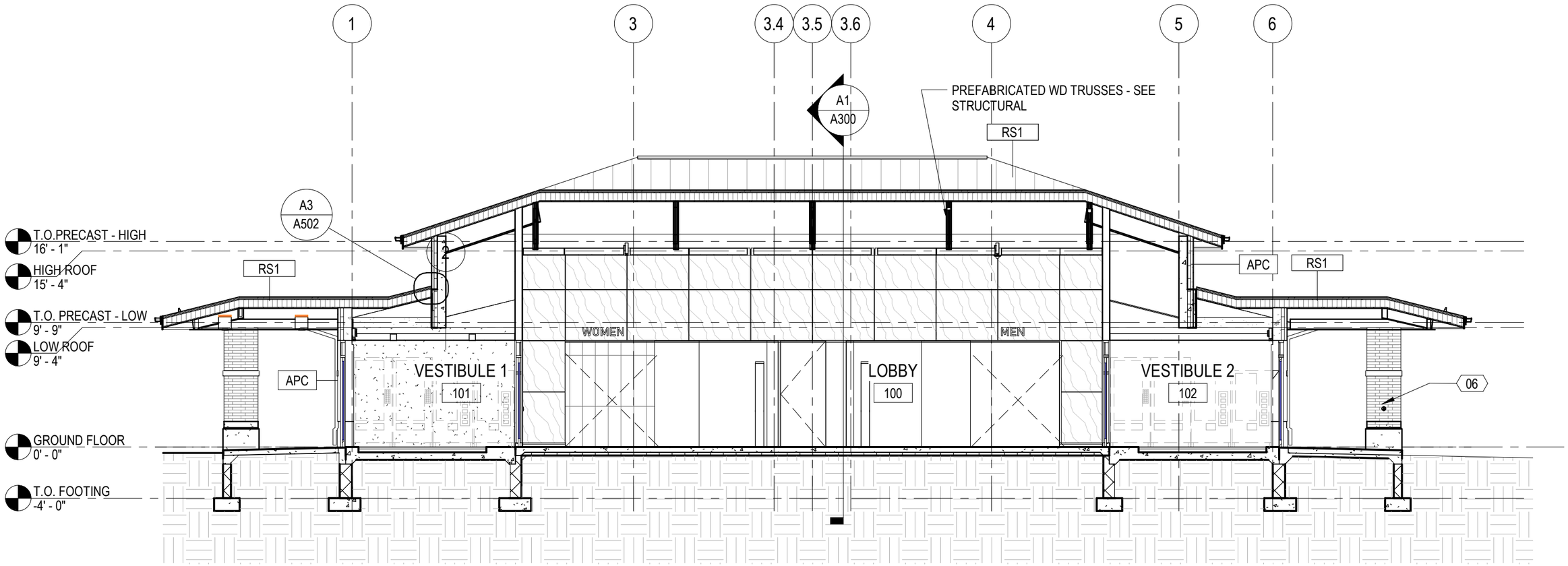


A1 MAIN BUILDING - TRANSVERSE SECTION

1/8" = 1'-0"

SHEET KEYNOTES

06	AUTOMATIC DOOR OPERATOR BUTTON



A1 MAIN BUILDING - LONGITUDINAL SECTION THROUGH LOBBY

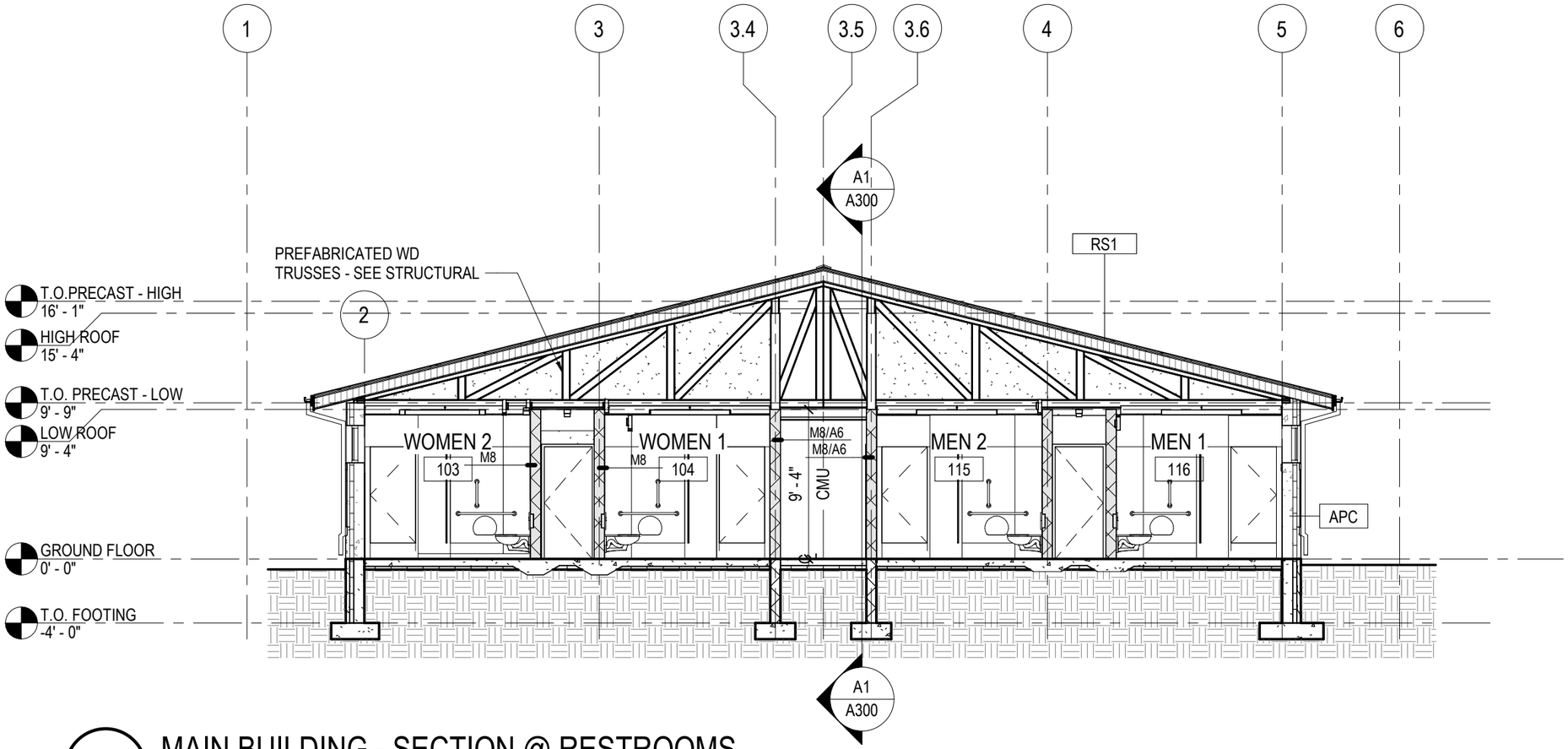
1/8" = 1'-0"

FOR INFORMATION ONLY - NOT FOR CONSTRUCTION

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

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/21/2024 5:11:13 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : 1/8" = 1'-0"

2



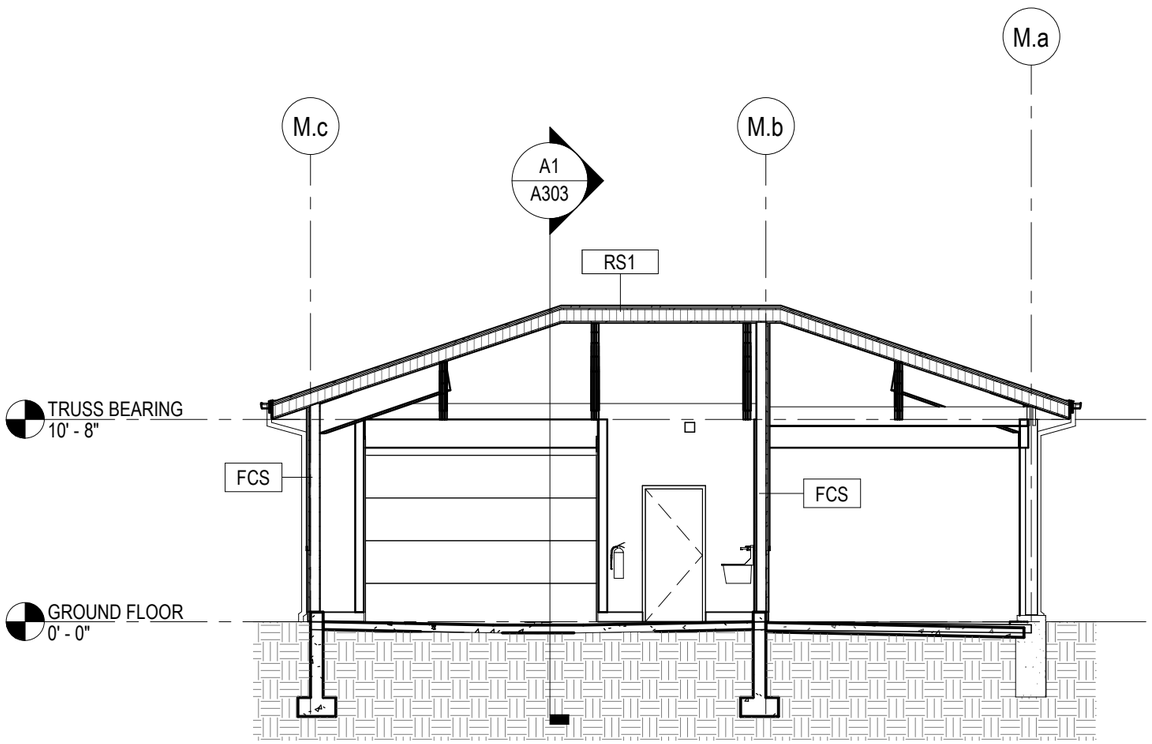
A1 MAIN BUILDING - SECTION @ RESTROOMS

1/8" = 1'-0"

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	BUILDING SECTIONS	SHEET A30[illegible]66	E

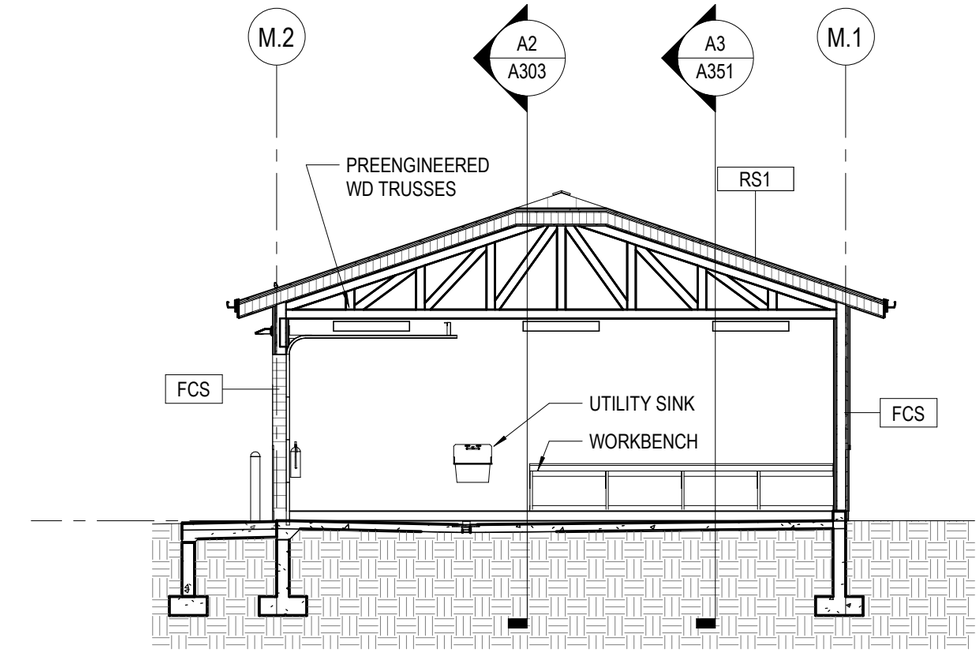
FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/21/2024 5:11:13 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : 1/8" = 1'-0"

2



A2 EQUIPMENT GARAGE - LONGITUDINAL SECTION

1/8" = 1'-0"



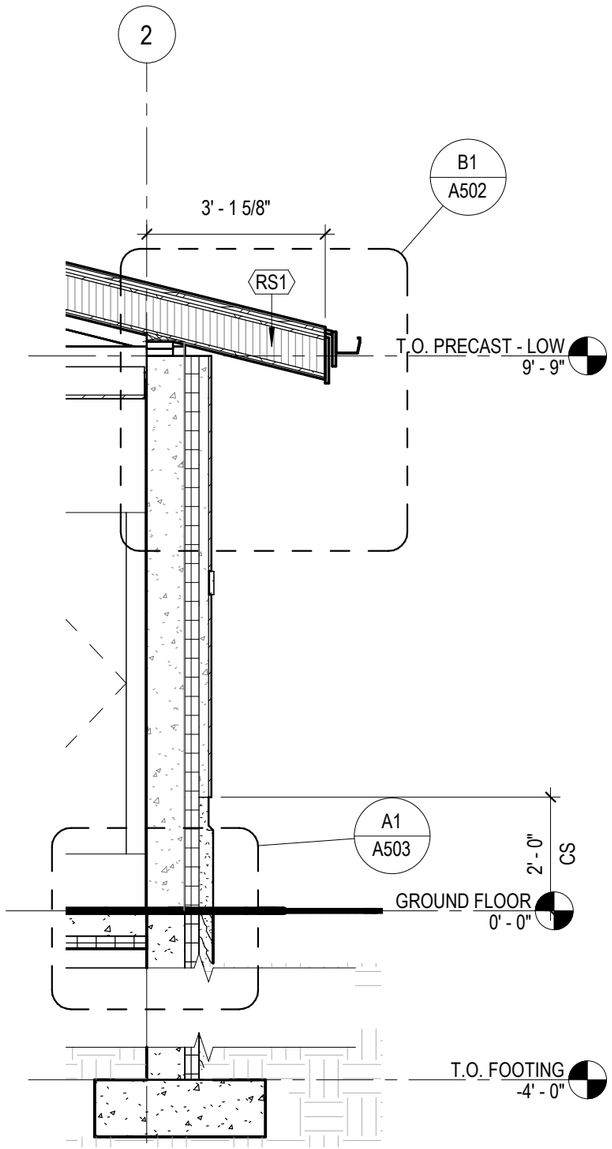
A1 EQUIPMENT GARAGE - TRANSVERSE SECTION

1/8" = 1'-0"

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	BUILDING SECTIONS	SHEET A30[illegible]67	E

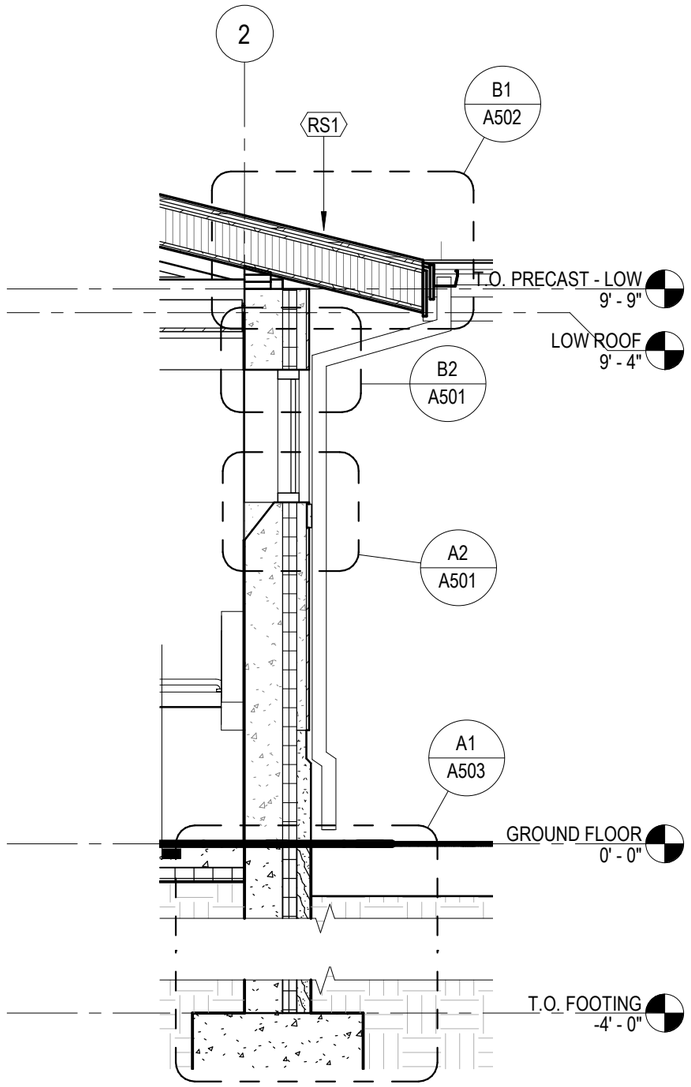
FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/21/2024 5:11:13 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : 1/8" = 1'-0"

2



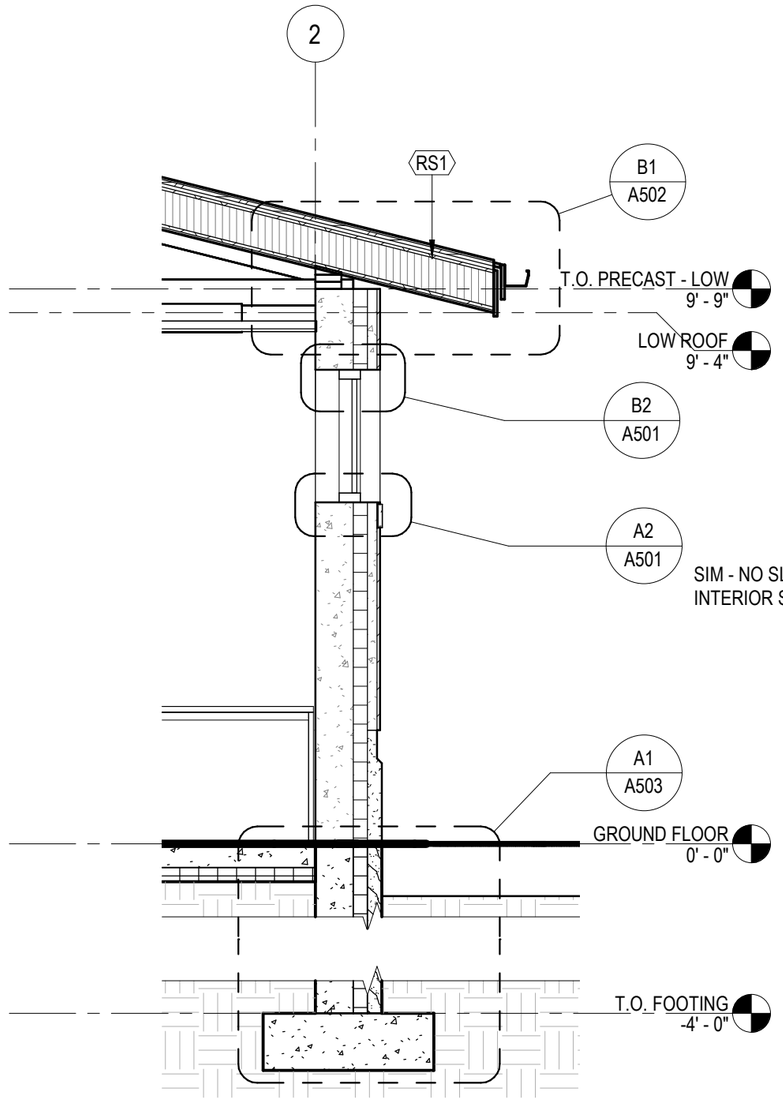
A1 WALL SECTION @ LOW ROOF 1

3/8" = 1'-0"



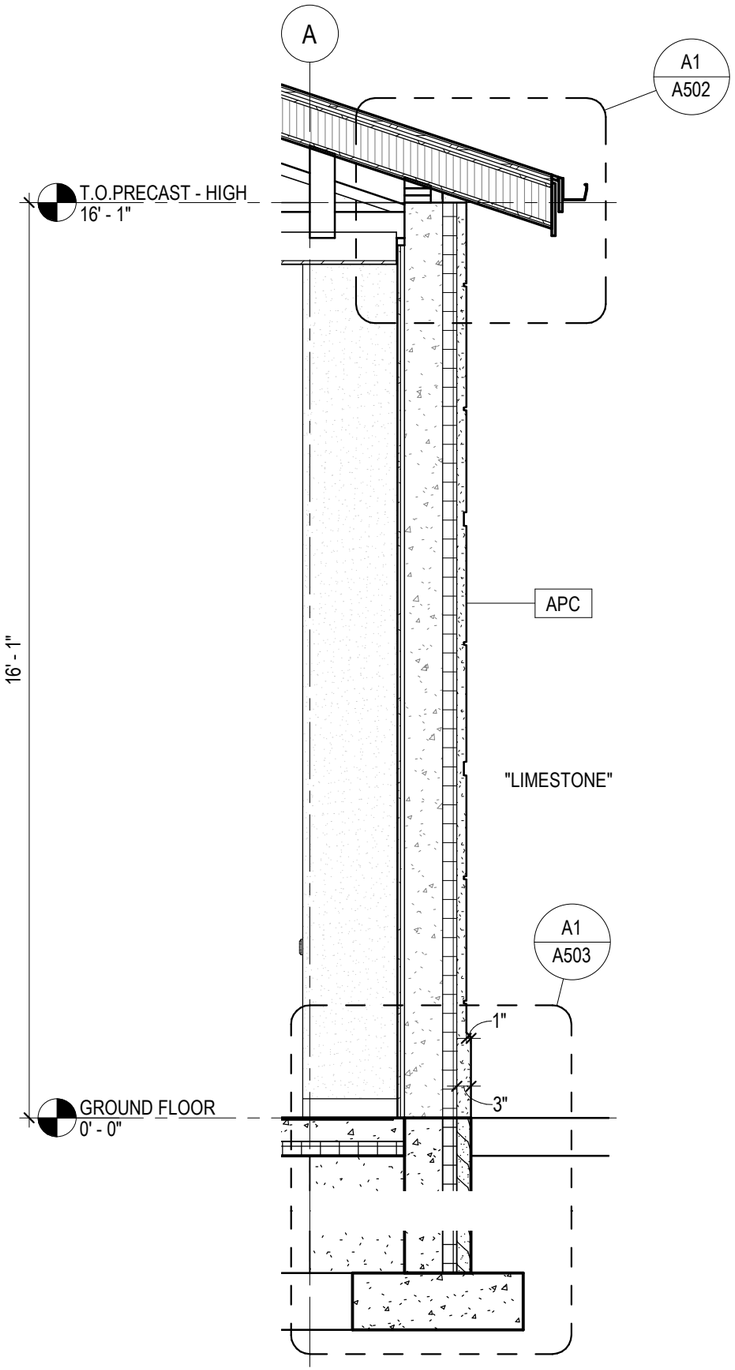
A2 WALL SECTION @ LOW ROOF WINDOW

3/8" = 1'-0"



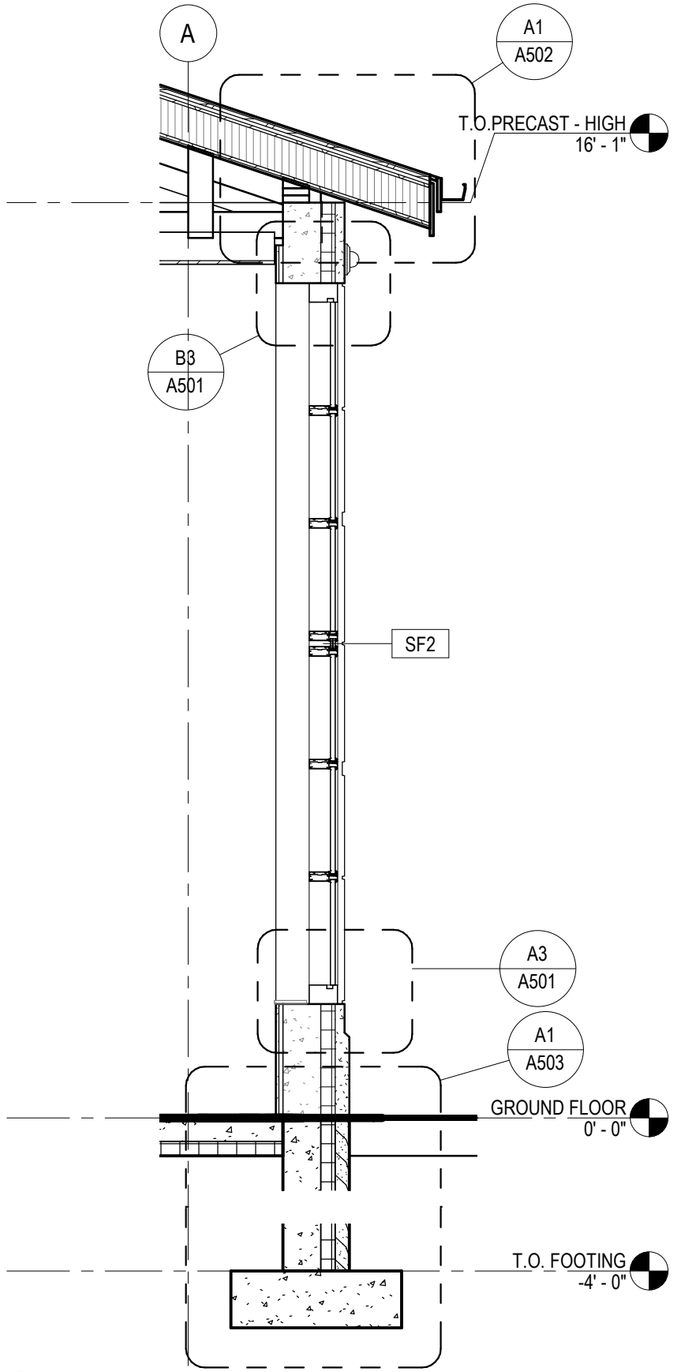
A3 WALL SECTION @ LOW ROOF 2

3/8" = 1'-0"



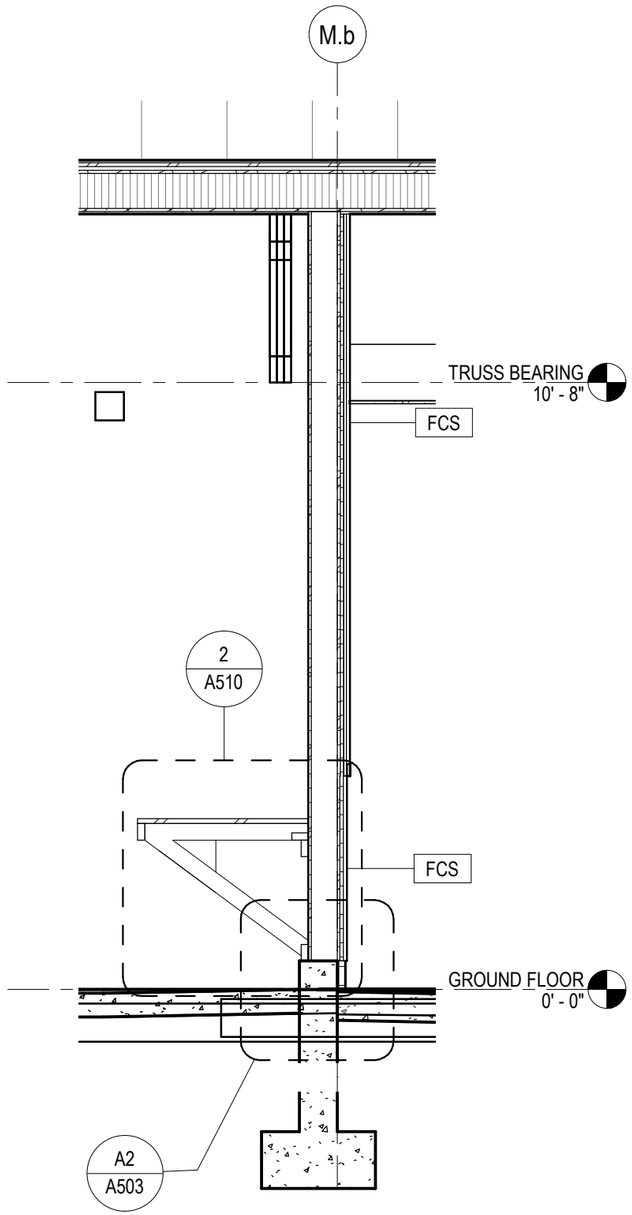
A1 WALL SECTION @ LOBBY1

3/8" = 1'-0"



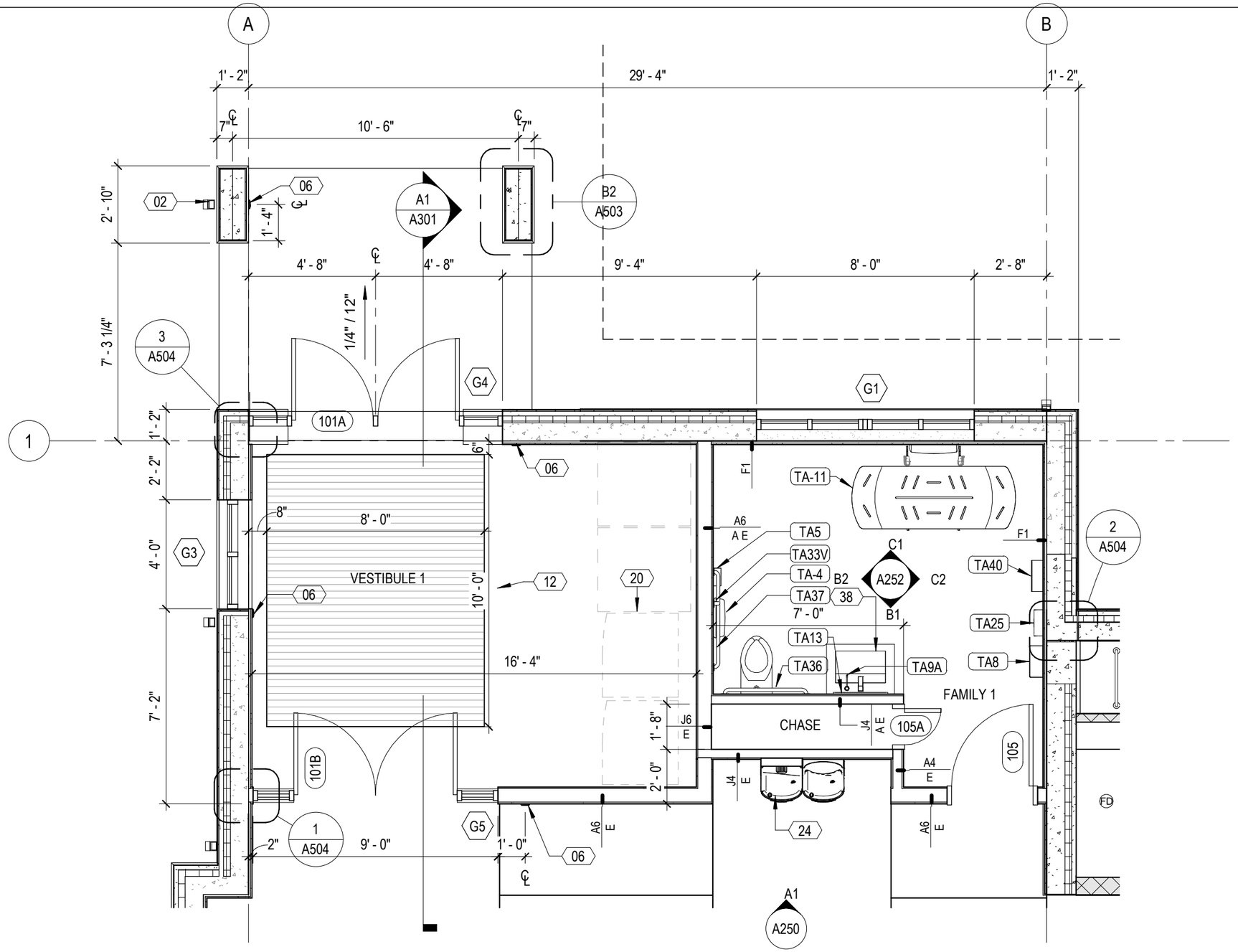
A2 WALL SECTION @ LOBBY WINDOW

3/8" = 1'-0"



A3 SECTION - EQUIPMENT GARAGE

3/8" = 1'-0"



SHEET KEYNOTES

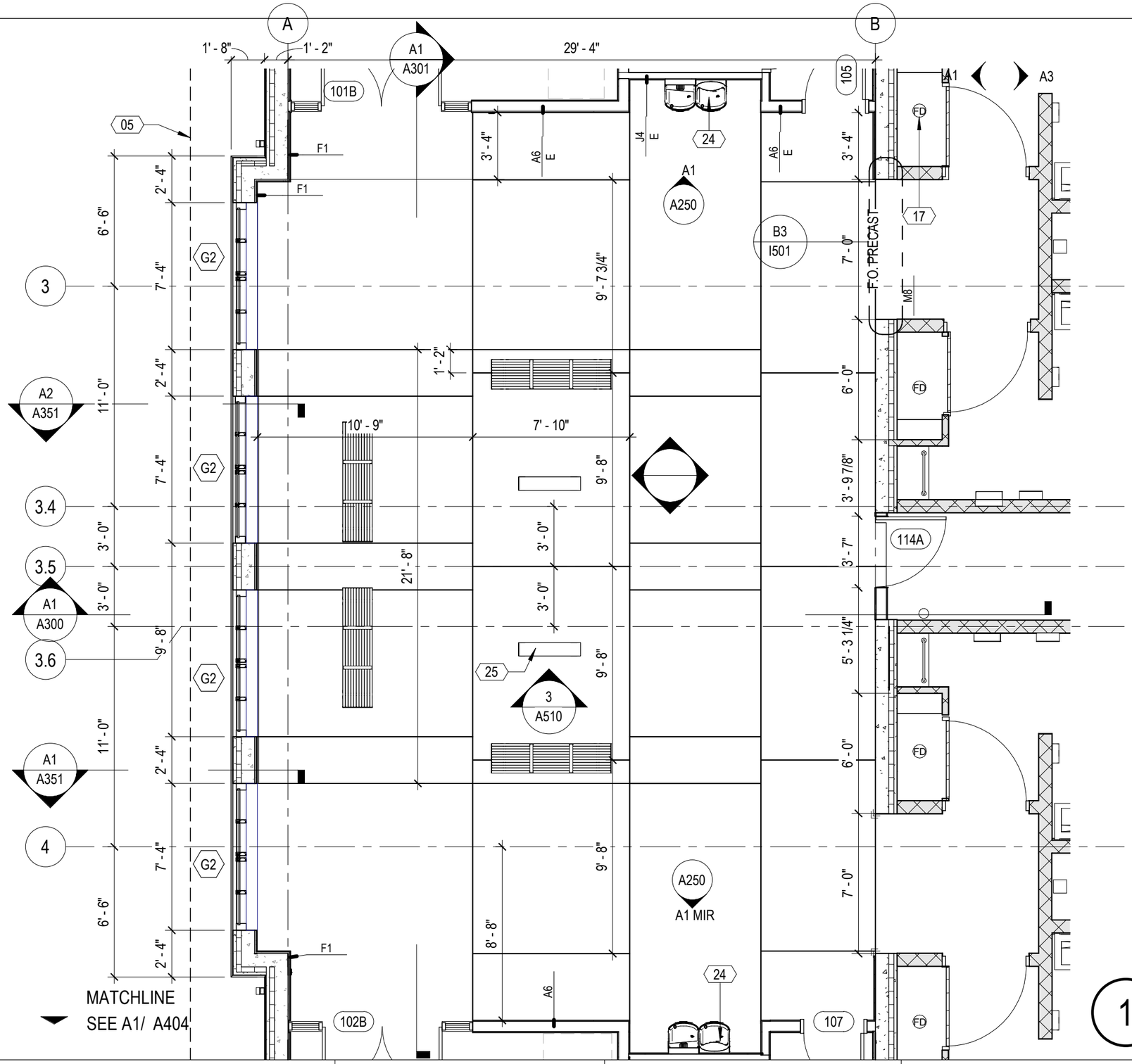
02	PREFINISHED METAL DOWNSPOUT - MATCH ROOF FINISH
06	AUTOMATIC DOOR OPERATOR BUTTON
12	ENTRANCE FLOOR MAT
20	VENDING MACHINES, NIC
24	DRINKING FOUNTAIN
38	LAVATORY - SEE PLUMBING

GENERAL NOTES

1. SEE SHEET A001 FOR SYMBOL LEGEND.
2. ROOMS 103/104 AND 115/116 ARE MIRRORED PLANS - NOTES AND DIMENSIONS PERTAIN TO BOTH ROOMS IN EACH PAIR.
3. CONTINUOUS TRENCH DRAINS IN RESTROOMS EXTENDS BENEATH CMU PARTITION WALLS - SEE PLUMBING DRAWINGS

1 MAIN BUILDING - ENLARGED PLAN - VESTIBULE 1 & FAMILY RM 1

1/4" = 1'-0"



SHEET KEYNOTES

05	ROOF OVERHANG
17	ROUND FLOOR DRAIN, SEE PLUMBING
24	DRINKING FOUNTAIN
25	INFORMATION DISPLAY

GENERAL NOTES

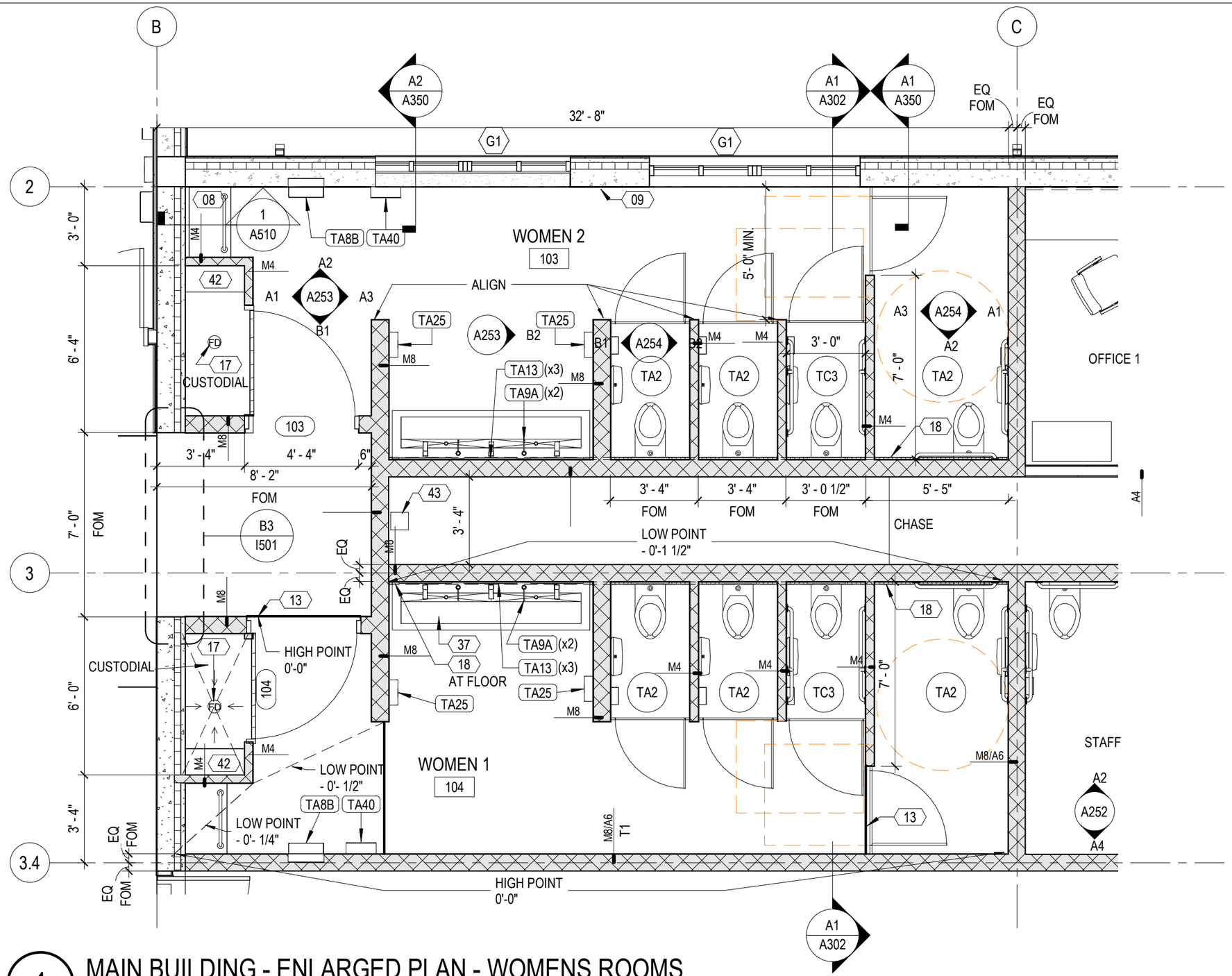
1. SEE SHEET A001 FOR SYMBOL LEGEND.
2. ROOMS 103/104 AND 115/116 ARE MIRRORED PLANS - NOTES AND DIMENSIONS PERTAIN TO BOTH ROOMS IN EACH PAIR.
3. CONTINUOUS TRENCH DRAINS IN RESTROOMS EXTENDS BENEATH CMU PARTITION WALLS - SEE PLUMBING DRAWINGS

1 MAIN BUILDING - ENLARGED PLAN - LOBBY

3/16" = 1'-0"

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	MAIN BUILDING - ENLARGED PLAN - LOBBY	SHEET A40[illegible]

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/21/2024 5:11:22 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : As indicated



1 MAIN BUILDING - ENLARGED PLAN - WOMENS ROOMS

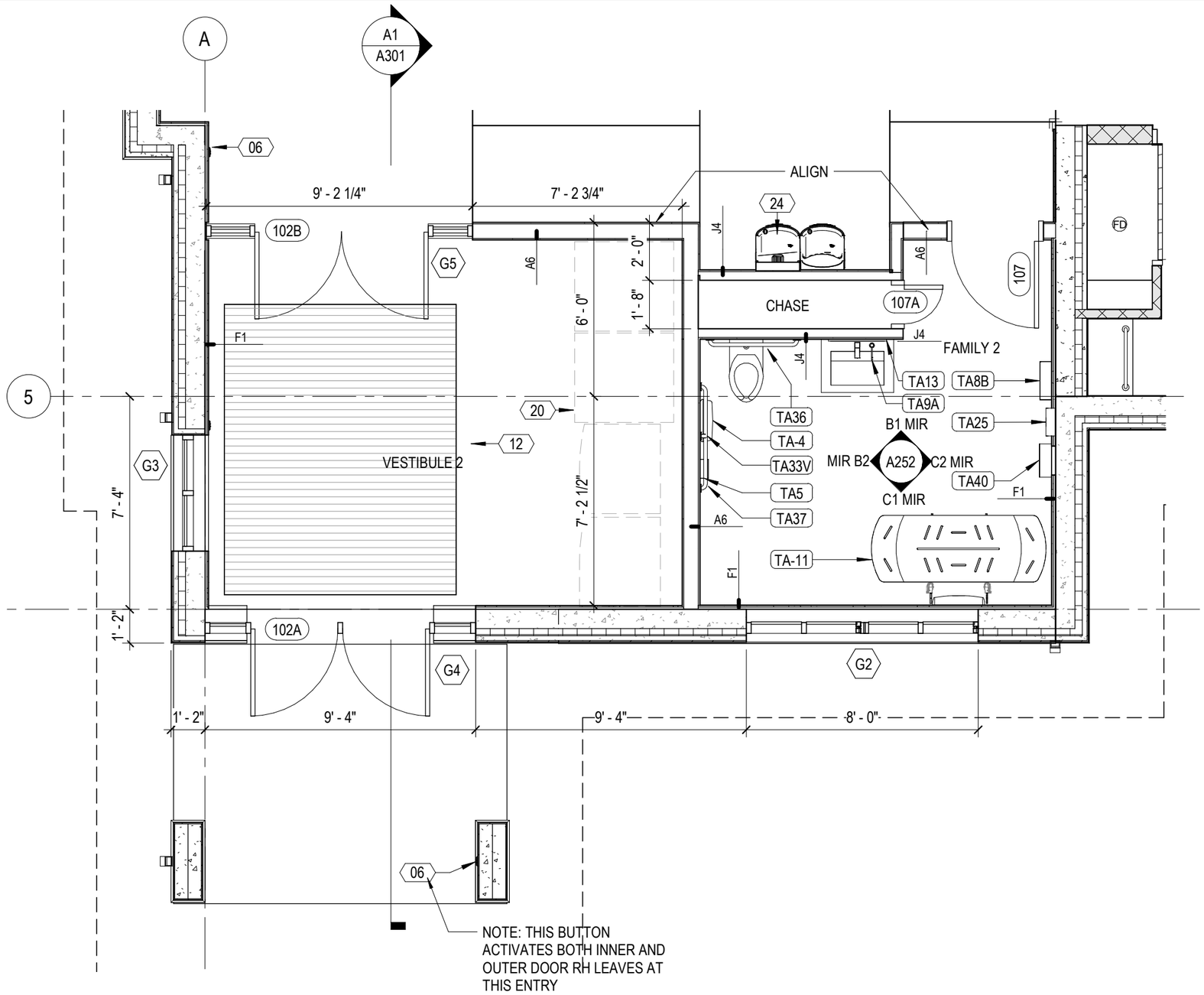
1/4" = 1'-0"

SHEET KEYNOTES

08	CHANGING TABLE
09	TILE FINISH APPLIED DIRECTLY ONTO APC WALL.
13	FLOOR CONTROL JOINT
17	ROUND FLOOR DRAIN, SEE PLUMBING
18	CONT. TRENCH DRAIN, SEE PLUMBING DRAWINGS.
37	GANG LAVATORY - SEE PLUMBING
42	12"D WALL MOUNTED ADJUSTABLE SHELVES - 5 SHELVES TO 7' AFF
43	SOAP TANK FOR RESTROOM SOAP DISPENSERS

GENERAL NOTES

1. SEE SHEET A001 FOR SYMBOL LEGEND.
2. ROOMS 103/104 AND 115/116 ARE MIRRORED PLANS - NOTES AND DIMENSIONS PERTAIN TO BOTH ROOMS IN EACH PAIR.
3. CONTINUOUS TRENCH DRAINS IN RESTROOMS EXTENDS BENEATH CMU PARTITION WALLS - SEE PLUMBING DRAWINGS



SHEET KEYNOTES

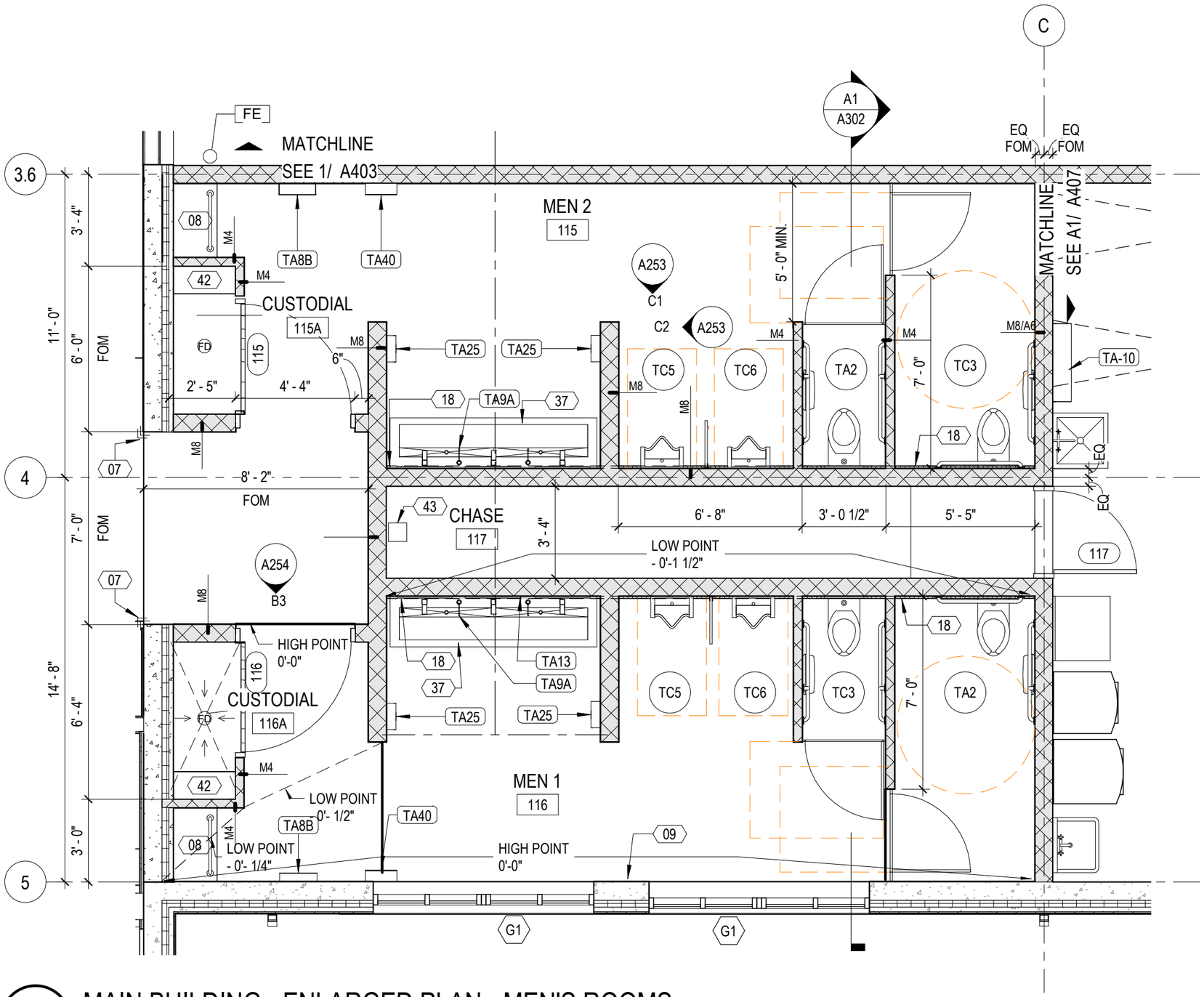
06	AUTOMATIC DOOR OPERATOR BUTTON
12	ENTRANCE FLOOR MAT
20	VENDING MACHINES, NIC
24	DRINKING FOUNTAIN

GENERAL NOTES

1. SEE SHEET A001 FOR SYMBOL LEGEND.
2. ROOMS 103/104 AND 115/116 ARE MIRRORED PLANS - NOTES AND DIMENSIONS PERTAIN TO BOTH ROOMS IN EACH PAIR.
3. CONTINUOUS TRENCH DRAINS IN RESTROOMS EXTENDS BENEATH CMU PARTITION WALLS - SEE PLUMBING DRAWINGS

A1 MAIN BUILDING - ENLARGED PLAN - VESTIBULE 2 & FAMILY RM 2

1/4" = 1'-0"



A1 MAIN BUILDING - ENLARGED PLAN - MEN'S ROOMS

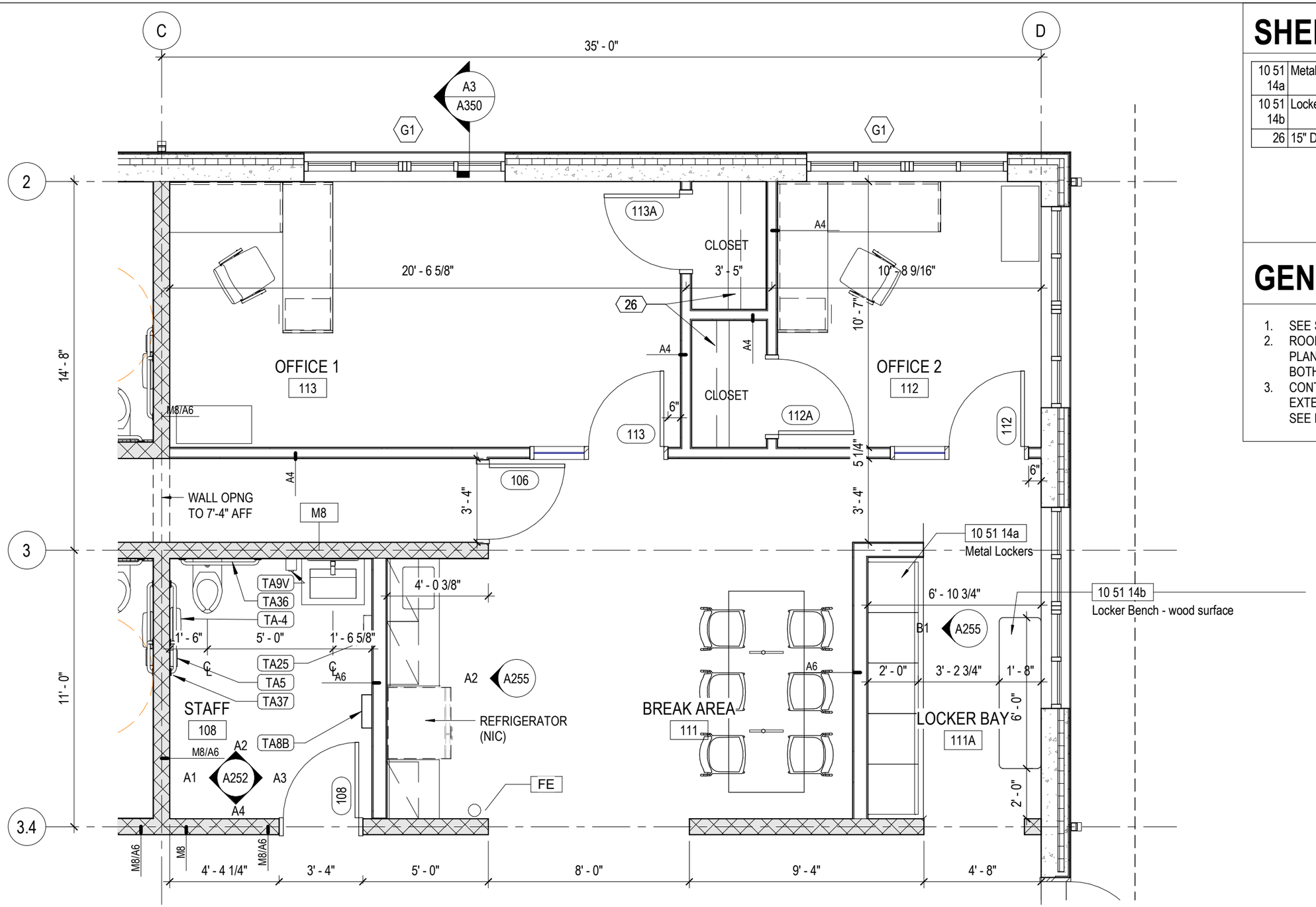
1/4" = 1'-0"

SHEET KEYNOTES

07	CORNER GUARD
08	CHANGING TABLE
09	TILE FINISH APPLIED DIRECTLY ONTO APC WALL.
18	CONT. TRENCH DRAIN, SEE PLUMBING DRAWINGS.
37	GANG LAVATORY - SEE PLUMBING
42	12"D WALL MOUNTED ADJUSTABLE SHELVES - 5 SHELVES TO 7' AFF
43	SOAP TANK FOR RESTROOM SOAP DISPENSERS

GENERAL NOTES

1. SEE SHEET A001 FOR SYMBOL LEGEND.
2. ROOMS 103/104 AND 115/116 ARE MIRRORED PLANS - NOTES AND DIMENSIONS PERTAIN TO BOTH ROOMS IN EACH PAIR.
3. CONTINUOUS TRENCH DRAINS IN RESTROOMS EXTENDS BENEATH CMU PARTITION WALLS - SEE PLUMBING DRAWINGS



1 MAIN BUILDING - ENLARGED PLAN - STAFF AREA

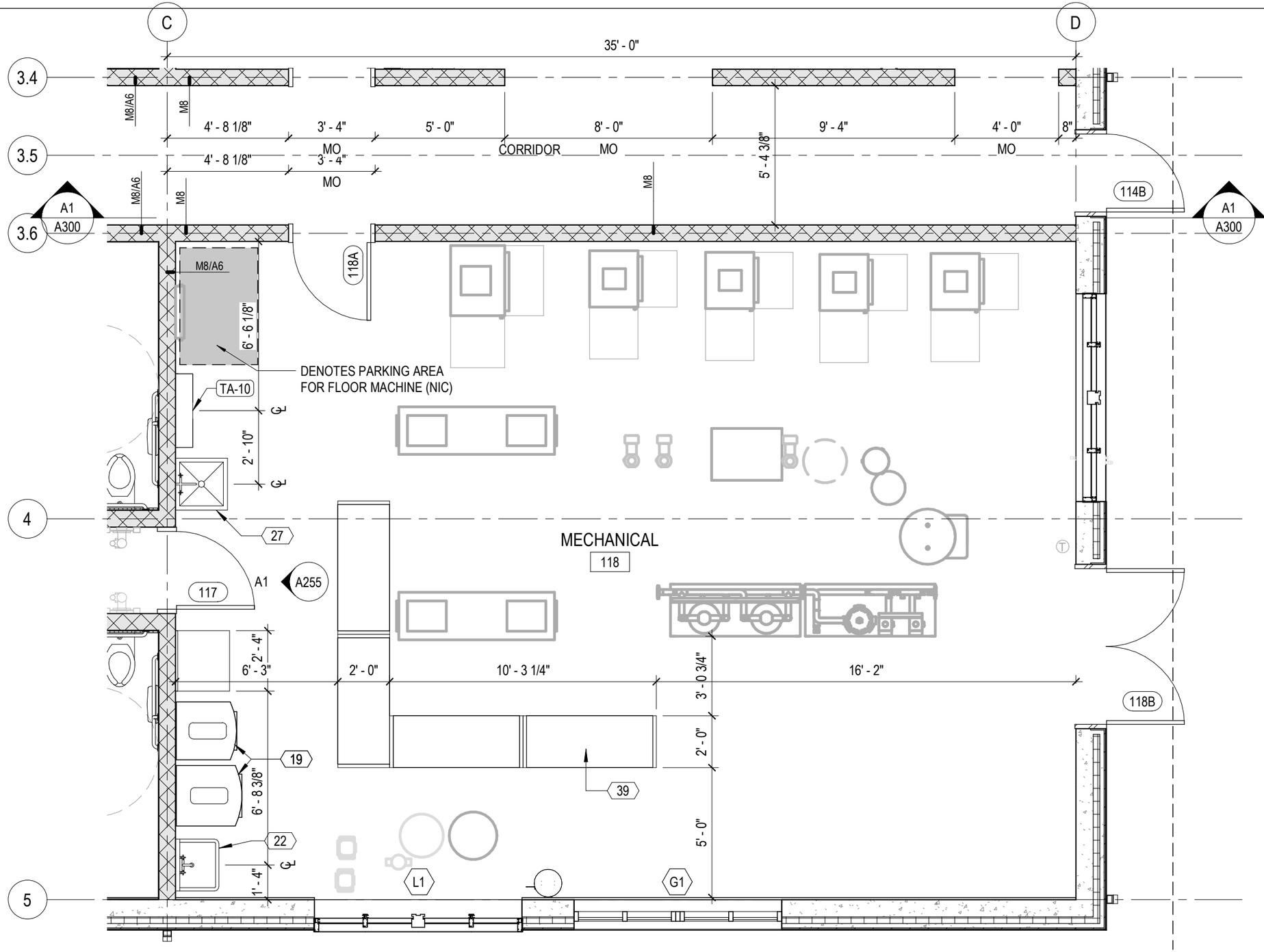
1/4" = 1'-0"

SHEET KEYNOTES

10 51 14a	Metal Lockers
10 51 14b	Locker Bench - wood surface
26	15" DEEP SHELF & COAT ROD

GENERAL NOTES

1. SEE SHEET A001 FOR SYMBOL LEGEND.
2. ROOMS 103/104 AND 115/116 ARE MIRRORED PLANS - NOTES AND DIMENSIONS PERTAIN TO BOTH ROOMS IN EACH PAIR.
3. CONTINUOUS TRENCH DRAINS IN RESTROOMS EXTENDS BENEATH CMU PARTITION WALLS - SEE PLUMBING DRAWINGS



SHEET KEYNOTES

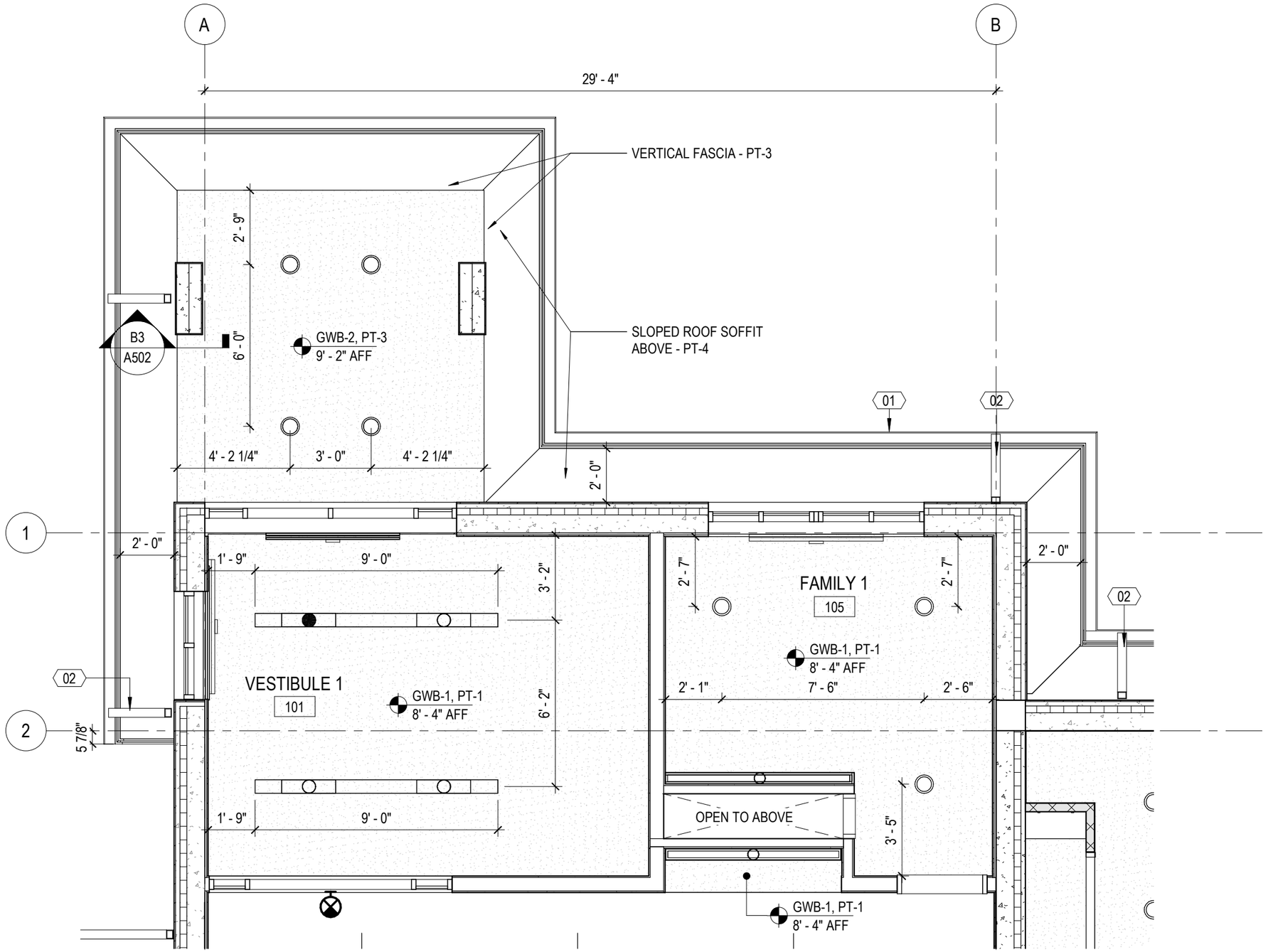
19	WASHER & DRYER MACHINES, NIC
22	UTILITY SINK
27	MOP SINK
39	STEEL SHELVING UNITS, 4 HIGH - 24"D x 60"W x 72"H

GENERAL NOTES

1. SEE SHEET A001 FOR SYMBOL LEGEND.
2. ROOMS 103/104 AND 115/116 ARE MIRRORED PLANS - NOTES AND DIMENSIONS PERTAIN TO BOTH ROOMS IN EACH PAIR.
3. CONTINUOUS TRENCH DRAINS IN RESTROOMS EXTENDS BENEATH CMU PARTITION WALLS - SEE PLUMBING DRAWINGS

A1 MAIN BUILDING - ENLARGED FLOOR PLAN - MECHANICAL ROOM

1/4" = 1'-0"



1 MAIN BUILDING - ENLARGED RCP - VESTIBULE 1 & FAMILY RM 1

1/4" = 1'-0"

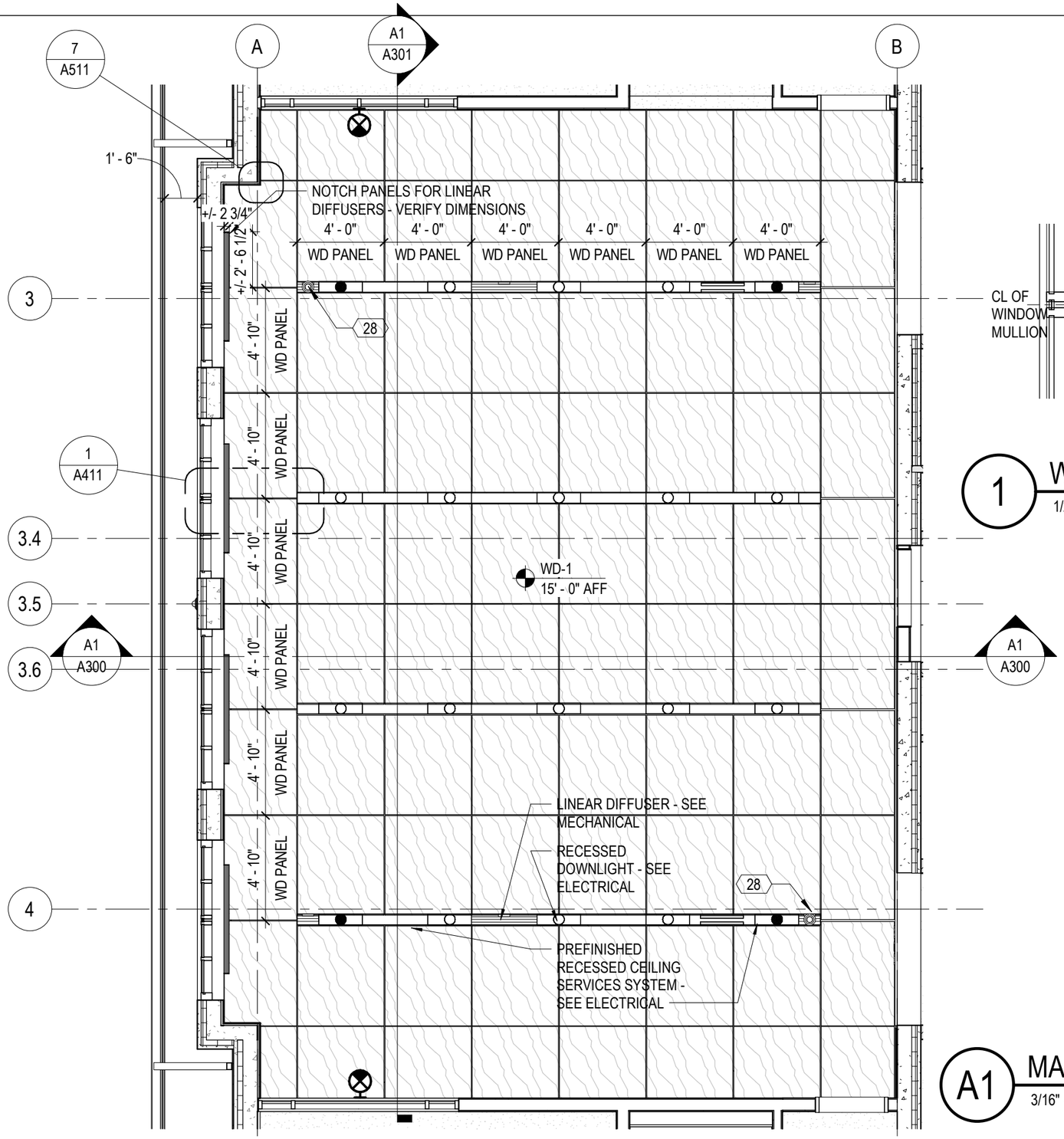
RCP NOTES

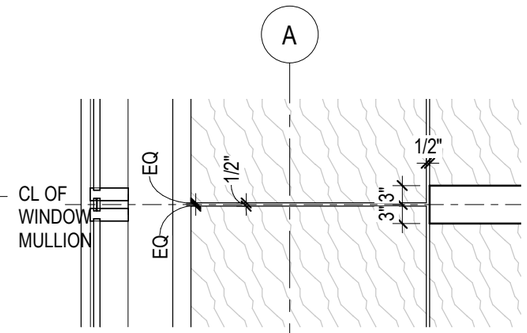
1. SEE SHEET A-001 FOR SYMBOL LEGEND
2. FOR EXTERIOR PAINT COLORS SEE SECTION 07 92 13
3. DIMENSIONS ARE MEASURED FROM F.O. FINISH TO F.O. FINISH U.O.N.
4. WOOD PANEL DIMENSIONS INCLUDE 1/4" GAP.
5. REFER TO ELECTRICAL LIGHTING PLANS FOR LIGHTING FIXTURE TYPE SCHEDULE.
6. GWB-1: 5/8" INTERIOR GYPSUM BOARD; SEE SECTION 09 29 00.
7. GWB-2: EXTERIOR GYPSUM SHEATHING; SEE SECTION 06 16 43.

RCP LEGEND

- RECESSED DOWNLIGHT
  Dark fill indicates emergency circuit
- LINEAR LIGHT
- TROUGH LIGHT
- LINEAR DIFFUSER
- SUPPLY DIFFUSER
- EXHAUST REGISTER
- RETURN GRILLE
- CEILING ACCESS PANEL
- EXIT LIGHT

KEYNOTES





1 WD PANEL DETAIL
1/2" = 1'-0"

A1 MAIN BLDG - ENLARGED RCP - LOBBY
3/16" = 1'-0"

RCP NOTES

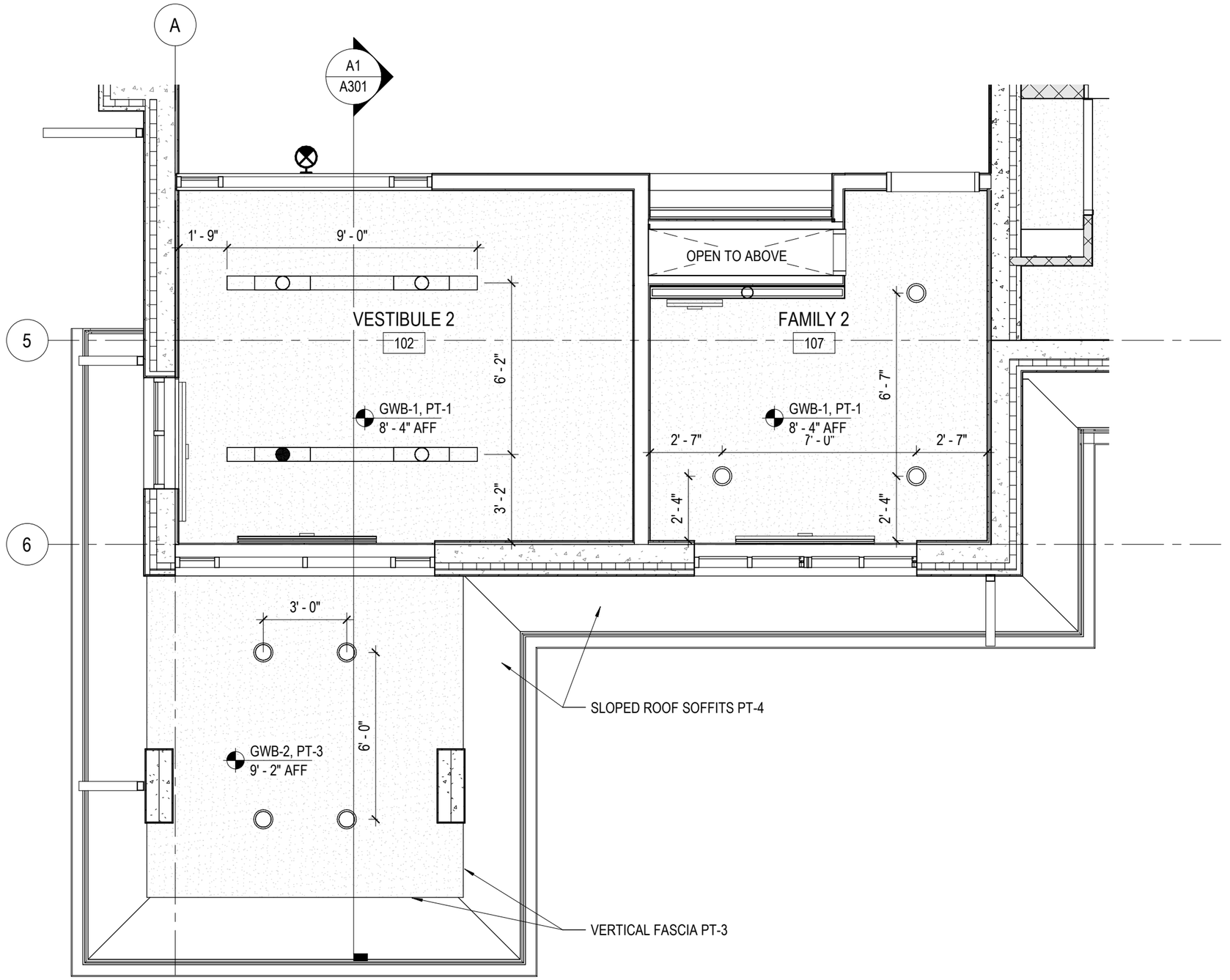
1. SEE SHEET A-001 FOR SYMBOL LEGEND
2. FOR EXTERIOR PAINT COLORS SEE SECTION 07 92 13
3. DIMENSIONS ARE MEASURED FROM F.O. FINISH TO F.O. FINISH U.O.N.
4. WOOD PANEL DIMENSIONS INCLUDE 1/4" GAP.
5. REFER TO ELECTRICAL LIGHTING PLANS FOR LIGHTING FIXTURE TYPE SCHEDULE.
6. GWB-1: 5/8" INTERIOR GYPSUM BOARD; SEE SECTION 09 29 00.
7. GWB-2: EXTERIOR GYPSUM SHEATHING; SEE SECTION 06 16 43.

RCP LEGEND

- RECESSED DOWNLIGHT — Dark fill indicates emergency circuit
- LINEAR LIGHT
- TROUGH LIGHT
- LINEAR DIFFUSER
- SUPPLY DIFFUSER
- EXHAUST REGISTER
- RETURN GRILLE
- CEILING ACCESS PANEL
- EXIT LIGHT

KEYNOTES

28	SECURITY CAMERA - SEE COMMUNICATIONS



A1 MAIN BUILDING - ENLARGED RCP - VESTIBULE 2 & FAMILY ROOM 2

1/4" = 1'-0"

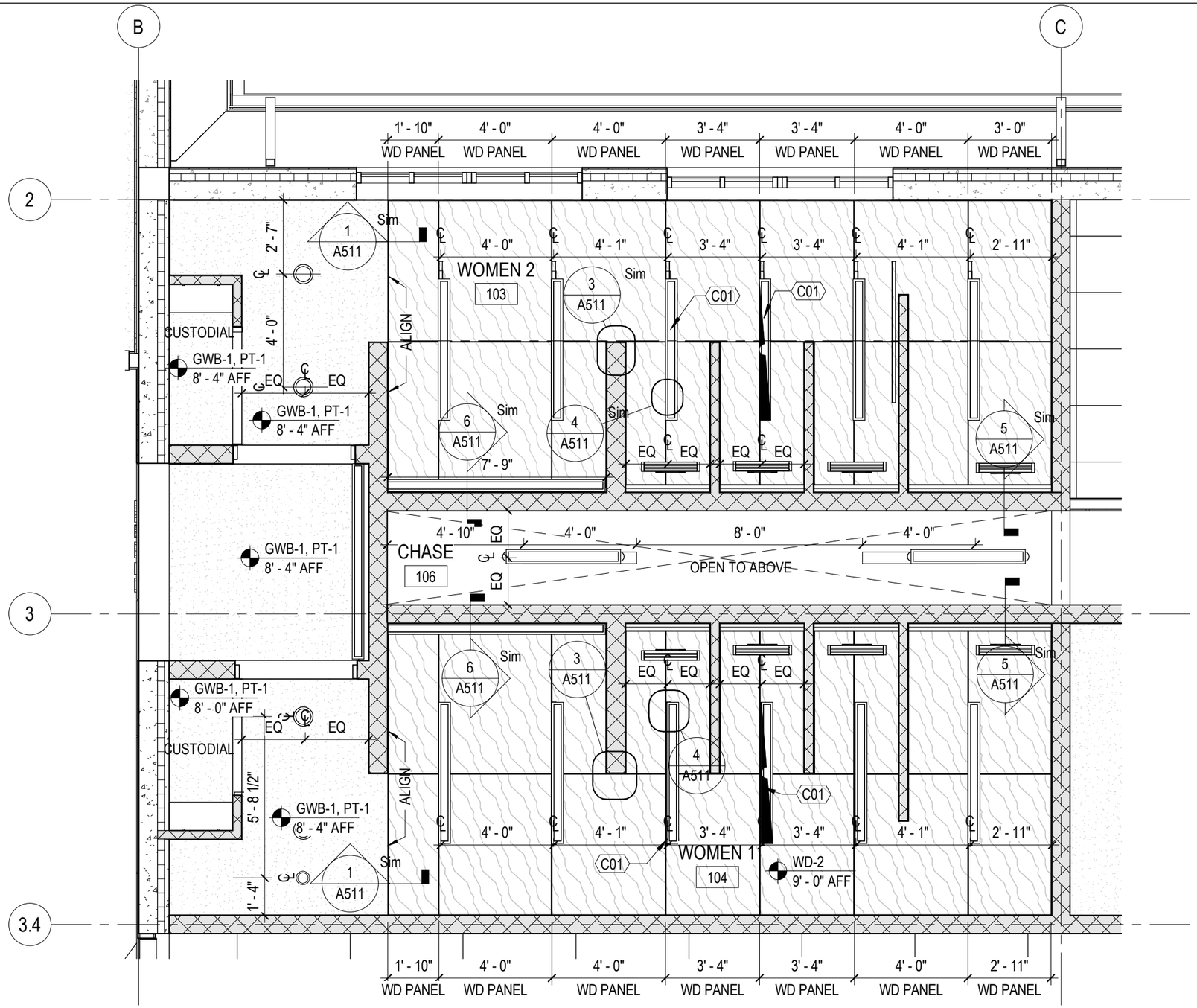
RCP NOTES

1. SEE SHEET A-001 FOR SYMBOL LEGEND
2. FOR EXTERIOR PAINT COLORS SEE SECTION 07 92 13
3. DIMENSIONS ARE MEASURED FROM F.O. FINISH TO F.O. FINISH U.O.N.
4. WOOD PANEL DIMENSIONS INCLUDE 1/4" GAP.
5. REFER TO ELECTRICAL LIGHTING PLANS FOR LIGHTING FIXTURE TYPE SCHEDULE.
6. GWB-1: 5/8" INTERIOR GYPSUM BOARD; SEE SECTION 09 29 00.
7. GWB-2: EXTERIOR GYPSUM SHEATHING; SEE SECTION 06 16 43.

RCP LEGEND

- RECESSED DOWNLIGHT — Dark fill indicates emergency circuit
- LINEAR LIGHT
- TROUGH LIGHT
- LINEAR DIFFUSER
- SUPPLY DIFFUSER
- EXHAUST REGISTER
- RETURN GRILLE
- CEILING ACCESS PANEL
- EXIT LIGHT

KEYNOTES



1 MAIN BUILDING - REFLECTED CEILING PLAN - WOMENS ROOMS

1/4" = 1'-0"

RCP NOTES

1. SEE SHEET A-001 FOR SYMBOL LEGEND
2. FOR EXTERIOR PAINT COLORS SEE SECTION 07 92 13
3. DIMENSIONS ARE MEASURED FROM F.O. FINISH TO F.O. FINISH U.O.N.
4. WOOD PANEL DIMENSIONS INCLUDE 1/4" GAP.
5. REFER TO ELECTRICAL LIGHTING PLANS FOR LIGHTING FIXTURE TYPE SCHEDULE.
6. GWB-1: 5/8" INTERIOR GYPSUM BOARD; SEE SECTION 09 29 00.
7. GWB-2: EXTERIOR GYPSUM SHEATHING; SEE SECTION 06 16 43.

RCP LEGEND

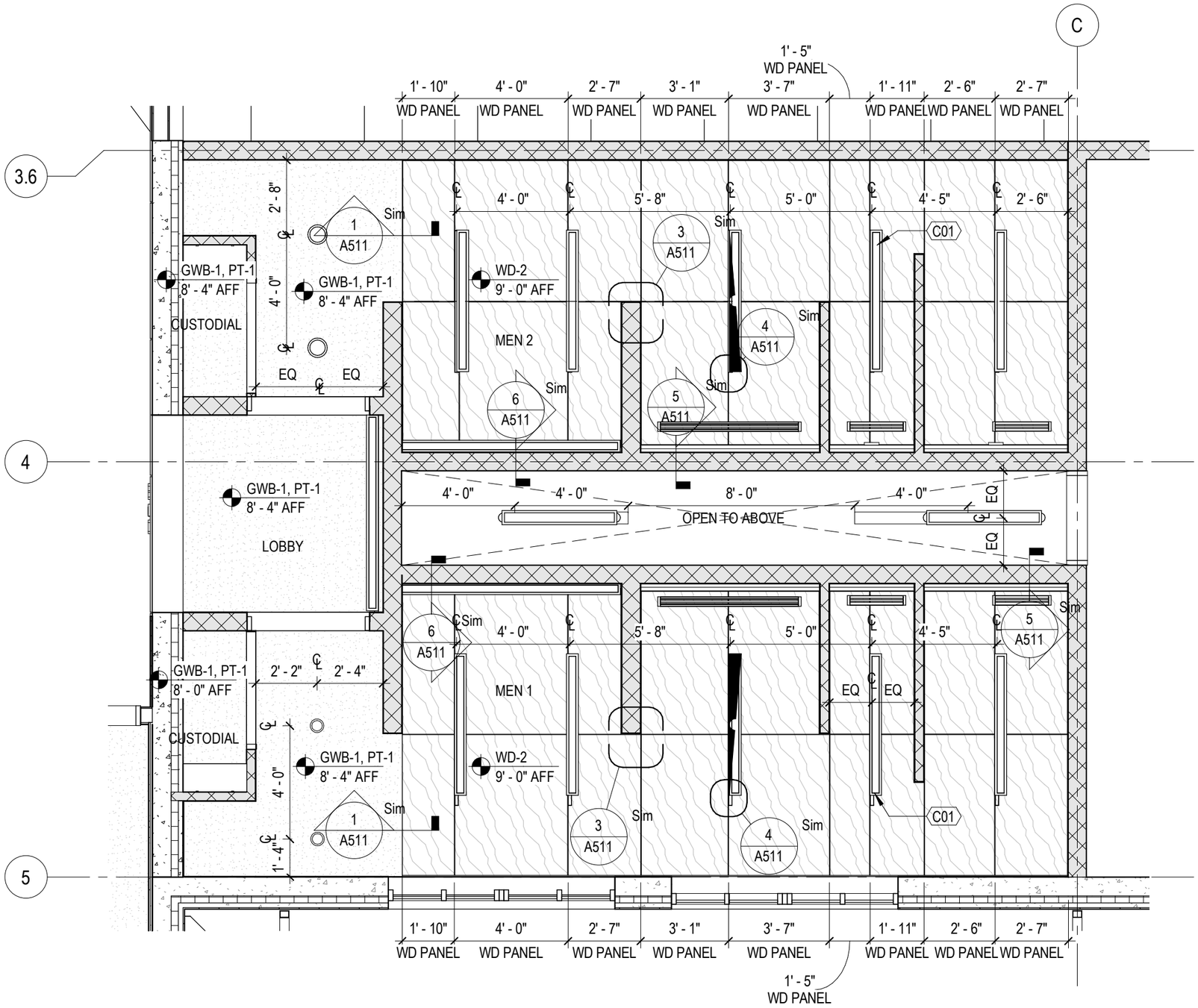
- RECESSED DOWNLIGHT — Dark fill indicates emergency circuit
- LINEAR LIGHT
- TROUGH LIGHT
- LINEAR DIFFUSER
- SUPPLY DIFFUSER
- EXHAUST REGISTER
- RETURN GRILLE
- CEILING ACCESS PANEL
- EXIT LIGHT

KEYNOTES

C01	

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	MAIN BUILDING - ENLARGED RCP - WOMENS	SHEET A41[illegible]	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/21/2024 5:11:28 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : As indicated



1 MAIN BUILDING - ENLARGED REFLECTED CEILING PLAN - MENS ROOMS

1/4" = 1'-0"

RCP NOTES

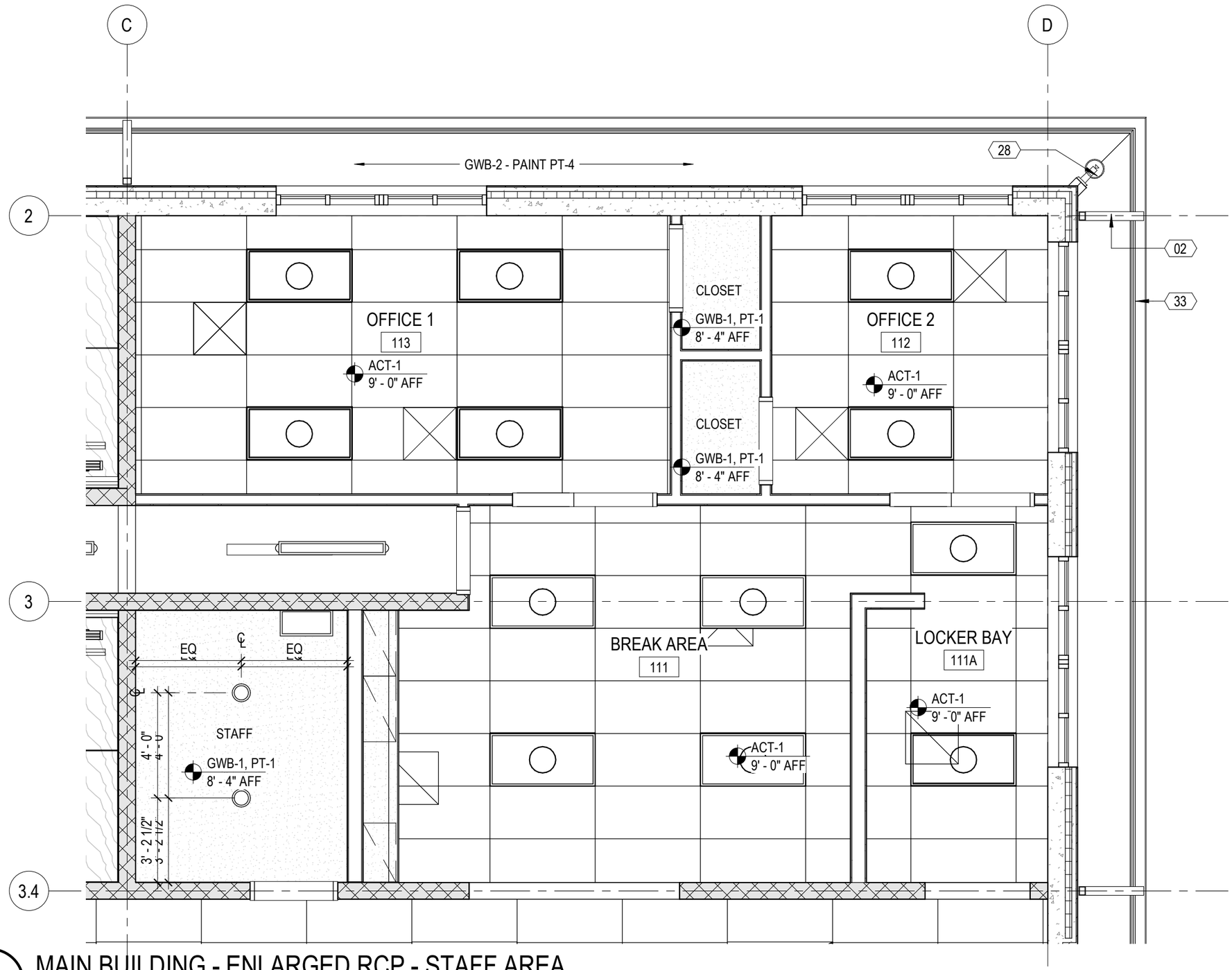
1. SEE SHEET A-001 FOR SYMBOL LEGEND
2. FOR EXTERIOR PAINT COLORS SEE SECTION 07 92 13
3. DIMENSIONS ARE MEASURED FROM F.O. FINISH TO F.O. FINISH U.O.N.
4. WOOD PANEL DIMENSIONS INCLUDE 1/4" GAP.
5. REFER TO ELECTRICAL LIGHTING PLANS FOR LIGHTING FIXTURE TYPE SCHEDULE.
6. GWB-1: 5/8" INTERIOR GYPSUM BOARD; SEE SECTION 09 29 00.
7. GWB-2: EXTERIOR GYPSUM SHEATHING; SEE SECTION 06 16 43.

RCP LEGEND

- RECESSED DOWNLIGHT — Dark fill indicates emergency circuit
- LINEAR LIGHT
- TROUGH LIGHT
- LINEAR DIFFUSER
- SUPPLY DIFFUSER
- EXHAUST REGISTER
- RETURN GRILLE
- CEILING ACCESS PANEL
- EXIT LIGHT

KEYNOTES

C01	



1 MAIN BUILDING - ENLARGED RCP - STAFF AREA

1/4" = 1'-0"

RCP NOTES

1. SEE SHEET A-001 FOR SYMBOL LEGEND
2. FOR EXTERIOR PAINT COLORS SEE SECTION 07 92 13
3. DIMENSIONS ARE MEASURED FROM F.O. FINISH TO F.O. FINISH U.O.N.
4. WOOD PANEL DIMENSIONS INCLUDE 1/4" GAP.
5. REFER TO ELECTRICAL LIGHTING PLANS FOR LIGHTING FIXTURE TYPE SCHEDULE.
6. GWB-1: 5/8" INTERIOR GYPSUM BOARD; SEE SECTION 09 29 00.
7. GWB-2: EXTERIOR GYPSUM SHEATHING; SEE SECTION 06 16 43.

RCP LEGEND

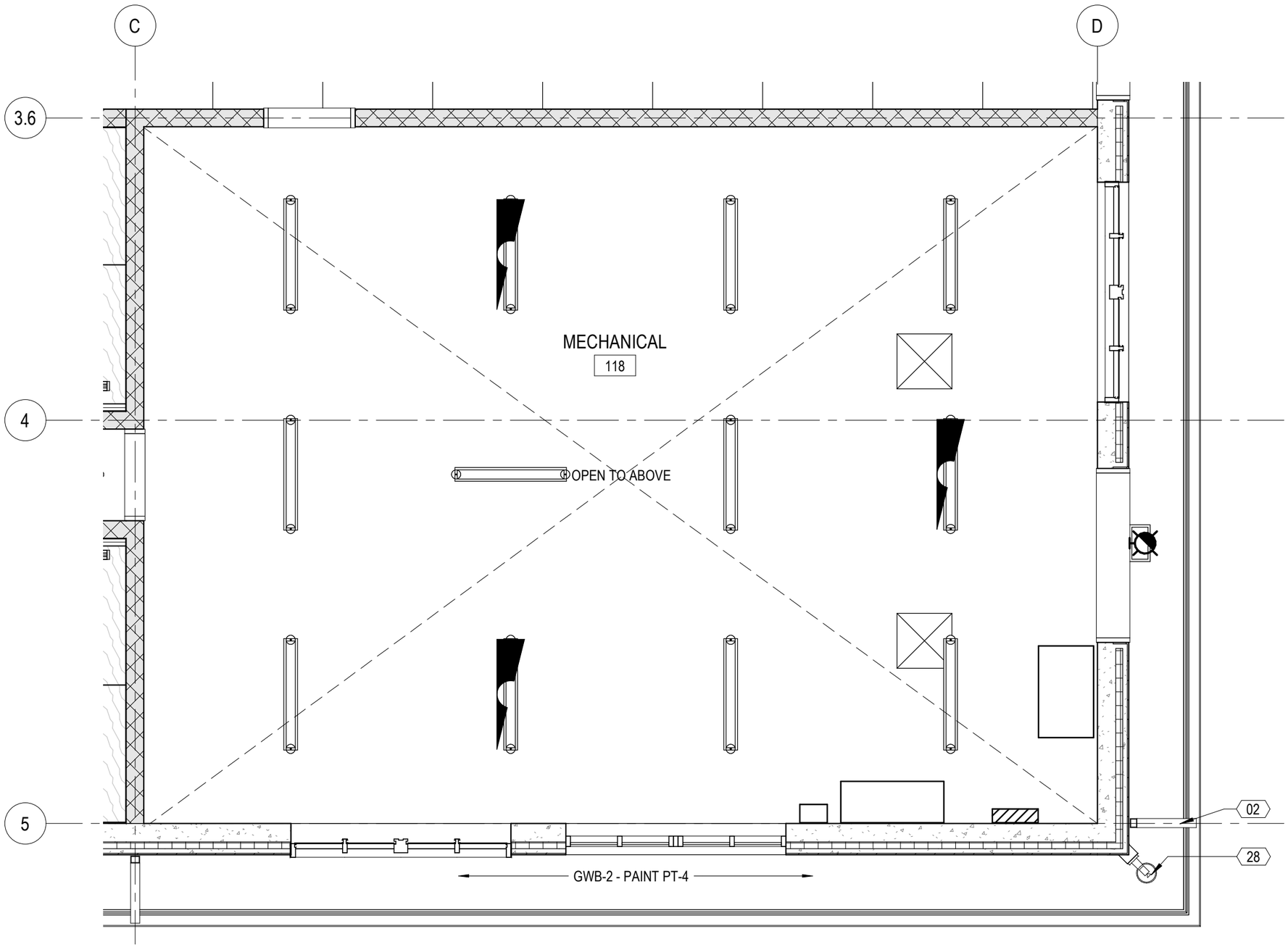
- RECESSED DOWNLIGHT — Dark fill indicates emergency circuit
- LINEAR LIGHT
- TROUGH LIGHT
- LINEAR DIFFUSER
- SUPPLY DIFFUSER
- EXHAUST REGISTER
- RETURN GRILLE
- CEILING ACCESS PANEL
- EXIT LIGHT

KEYNOTES

02	PREFINISHED METAL DOWNSPOUT - MATCH ROOF FINISH
28	SECURITY CAMERA - SEE COMMUNICATIONS
33	FIBER CEMENT TRIM/ OR FASCIA BOARD

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	MAIN BUILDING - ENLARGED RCP - STAFF AREA	SHEET A41-82	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/21/2024 5:11:29 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : As indicated



1 MAIN BUILDING - ENLARGED RCP - MECHANICAL ROOM

1/4" = 1'-0"

RCP NOTES

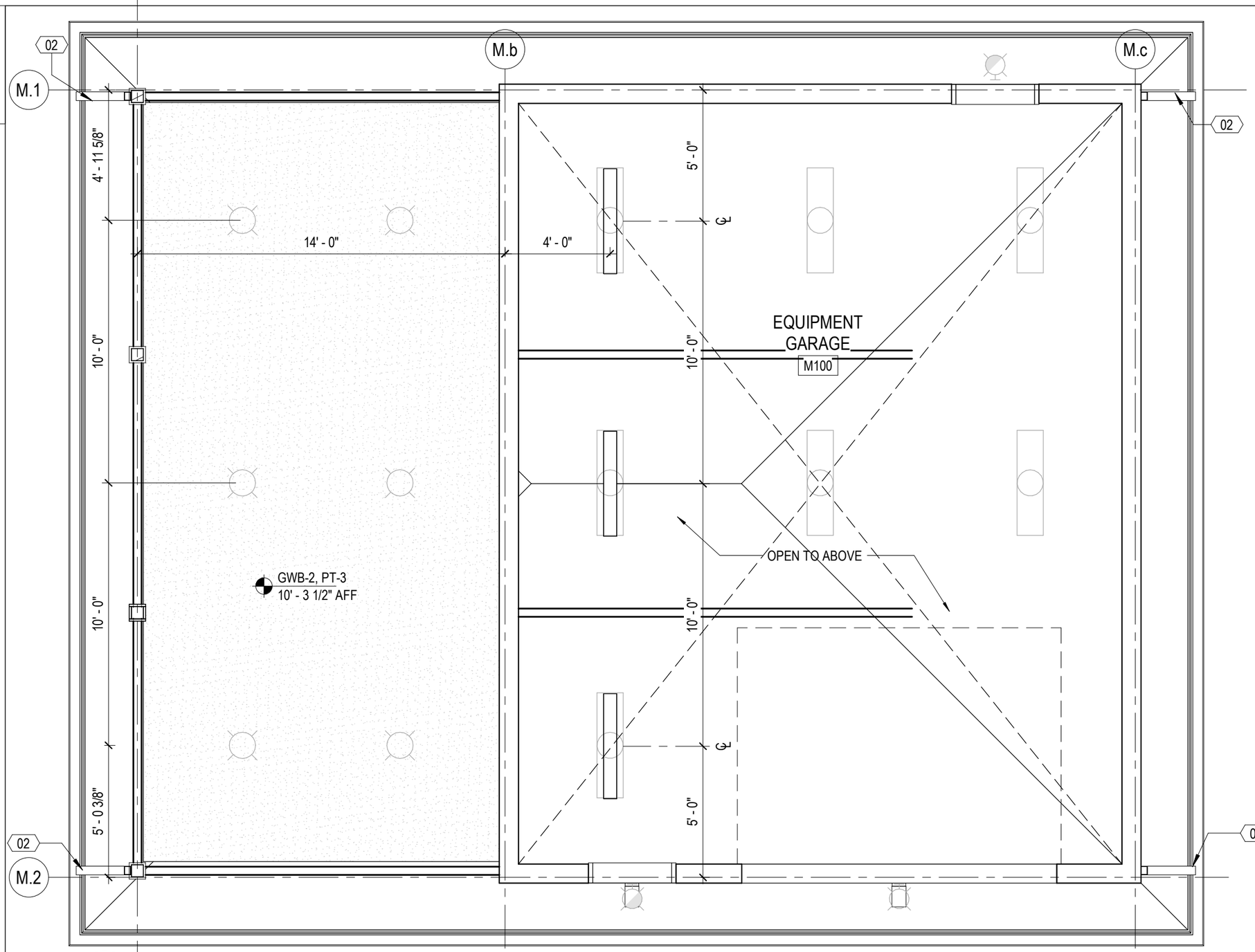
1. SEE SHEET A-001 FOR SYMBOL LEGEND
2. FOR EXTERIOR PAINT COLORS SEE SECTION 07 92 13
3. DIMENSIONS ARE MEASURED FROM F.O. FINISH TO F.O. FINISH U.O.N.
4. WOOD PANEL DIMENSIONS INCLUDE 1/4" GAP.
5. REFER TO ELECTRICAL LIGHTING PLANS FOR LIGHTING FIXTURE TYPE SCHEDULE.
6. GWB-1: 5/8" INTERIOR GYPSUM BOARD; SEE SECTION 09 29 00.
7. GWB-2: EXTERIOR GYPSUM SHEATHING; SEE SECTION 06 16 43.

RCP LEGEND

- RECESSED DOWNLIGHT — Dark fill indicates emergency circuit
- LINEAR LIGHT
- TROUGH LIGHT
- LINEAR DIFFUSER
- SUPPLY DIFFUSER
- EXHAUST REGISTER
- RETURN GRILLE
- CEILING ACCESS PANEL
- EXIT LIGHT

KEYNOTES

02	PREFINISHED METAL DOWNSPOUT - MATCH ROOF FINISH
28	SECURITY CAMERA - SEE COMMUNICATIONS



1 EQUIPMENT GARAGE - REFLECTED CEILING PLAN

1/4" = 1'-0"

RCP NOTES

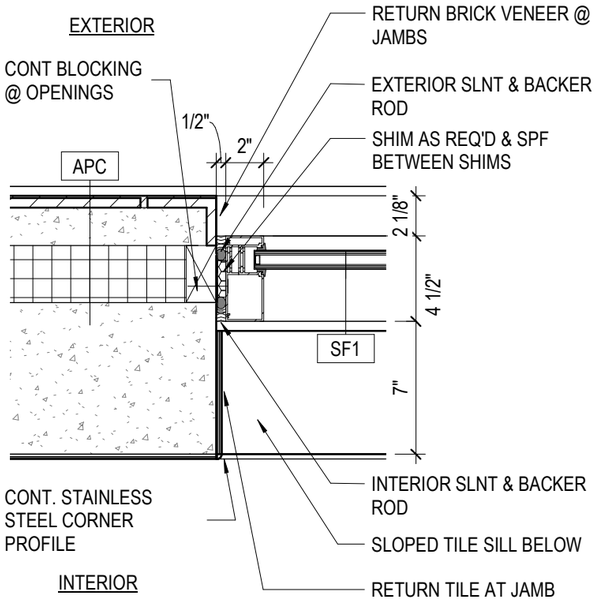
1. SEE SHEET A-001 FOR SYMBOL LEGEND
2. FOR EXTERIOR PAINT COLORS SEE SECTION 07 92 13
3. DIMENSIONS ARE MEASURED FROM F.O. FINISH TO F.O. FINISH U.O.N.
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5. REFER TO ELECTRICAL LIGHTING PLANS FOR LIGHTING FIXTURE TYPE SCHEDULE.
6. GWB-1: 5/8" INTERIOR GYPSUM BOARD; SEE SECTION 09 29 00.
7. GWB-2: EXTERIOR GYPSUM SHEATHING; SEE SECTION 06 16 43.

RCP LEGEND

- RECESSED DOWNLIGHT — Dark fill indicates emergency circuit
- LINEAR LIGHT
- TROUGH LIGHT
- LINEAR DIFFUSER
- SUPPLY DIFFUSER
- EXHAUST REGISTER
- RETURN GRILLE
- CEILING ACCESS PANEL
- EXIT LIGHT

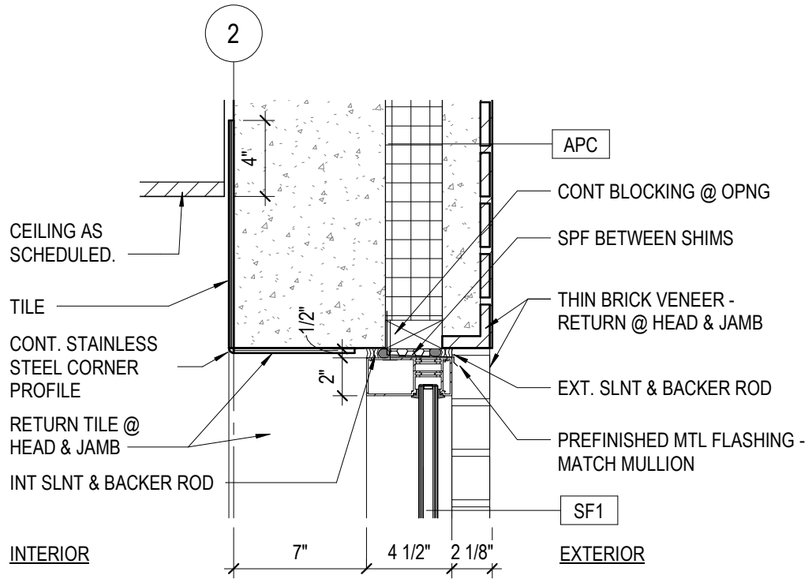
KEYNOTES

02	PREFINISHED METAL DOWNSPOUT - MATCH ROOF FINISH



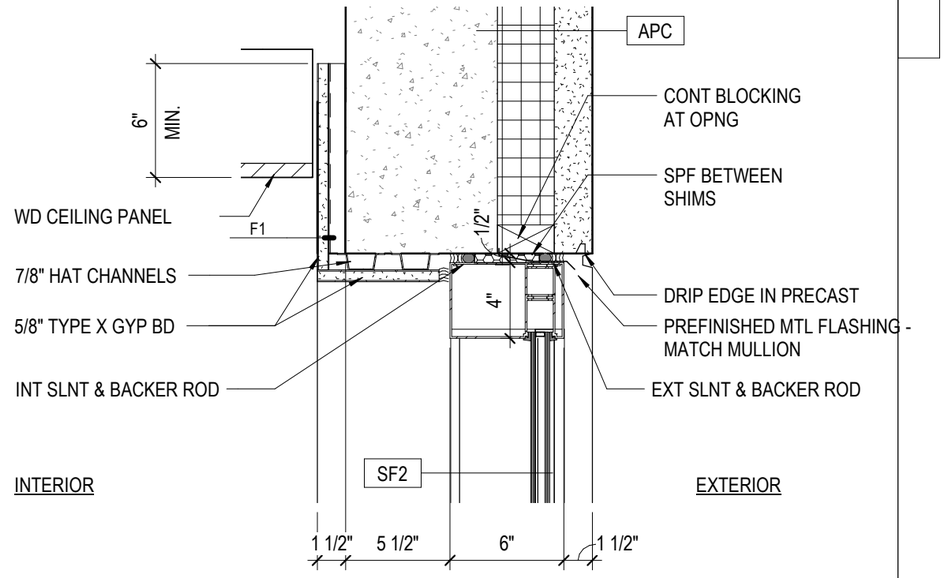
B1 WINDOW JAMB @ BRICK VENEER

1 1/2" = 1'-0"



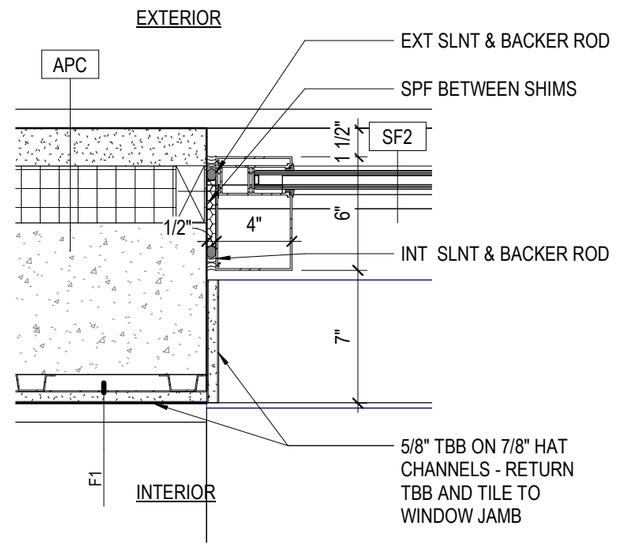
B2 WINDOW HEAD @ BRICK VENEER

1 1/2" = 1'-0"



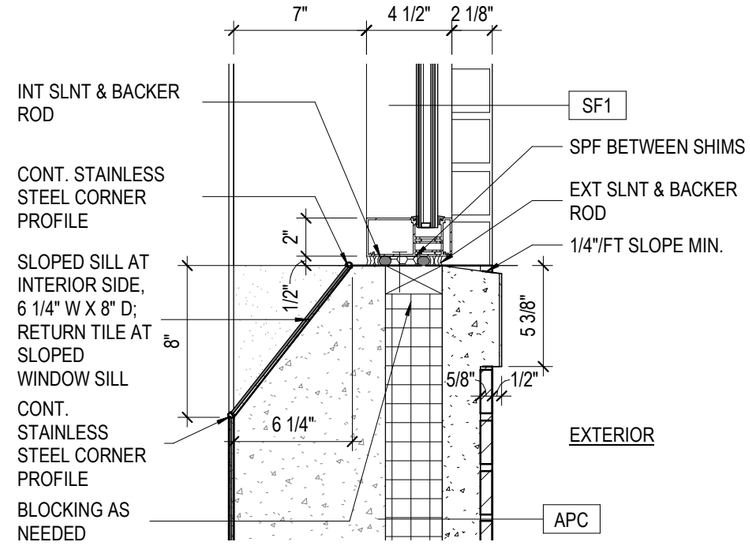
B3 WINDOW HEAD @ LOBBY WINDOWS

1 1/2" = 1'-0"



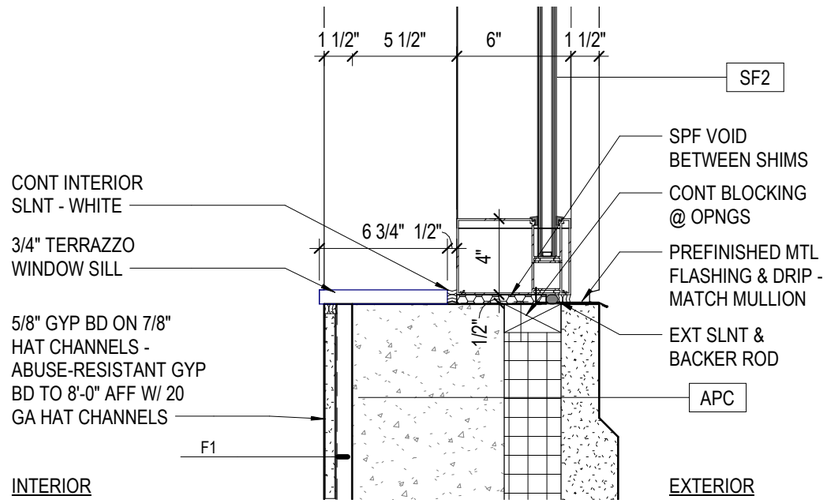
A1 WINDOW JAMB @ LOBBY WINDOWS

1 1/2" = 1'-0"



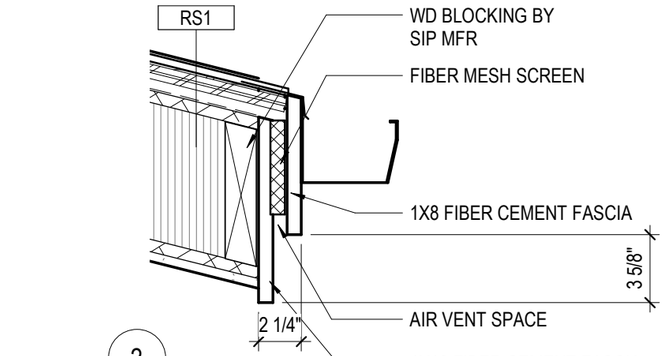
A2 WINDOW SILL @ RESTROOMS

1 1/2" = 1'-0"



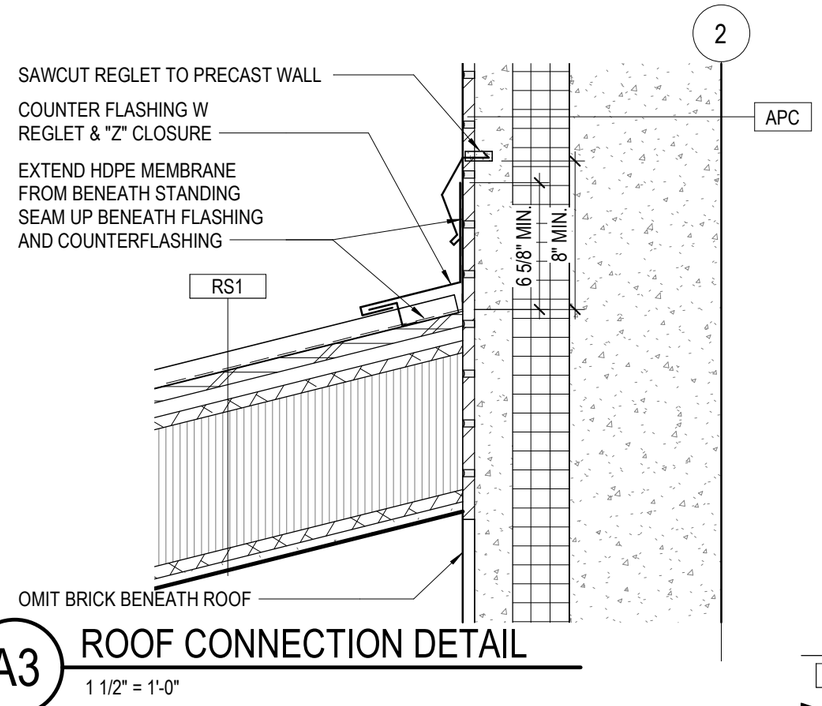
A3 WINDOW SILL @ LOBBY WINDOWS

1 1/2" = 1'-0"



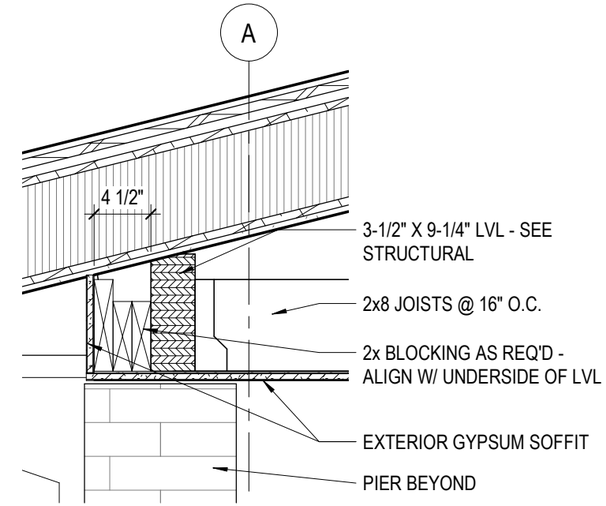
B2 FASCIA DETAIL

1 1/2" = 1'-0"



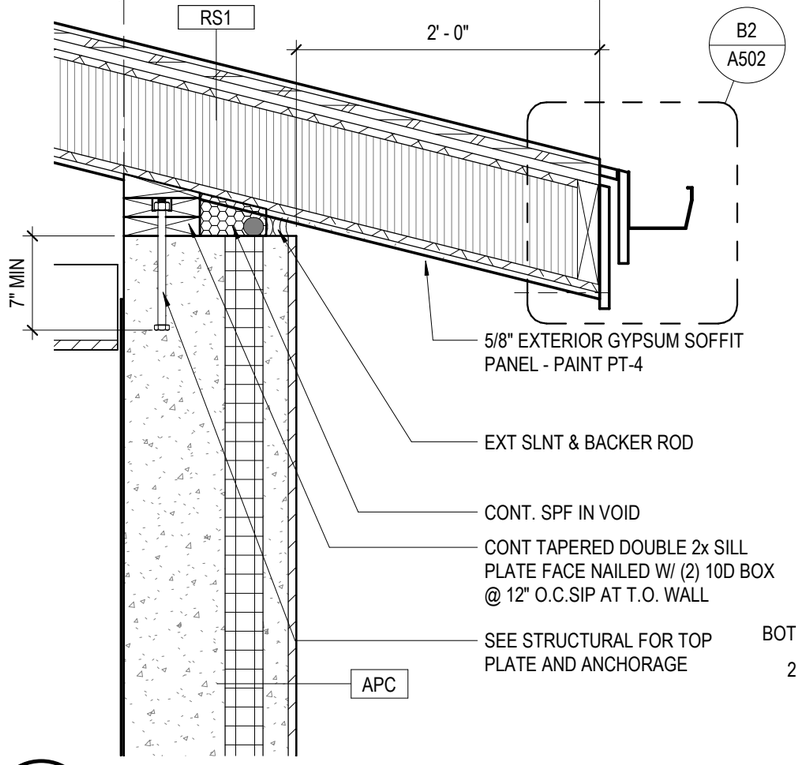
A3 ROOF CONNECTION DETAIL

1 1/2" = 1'-0"



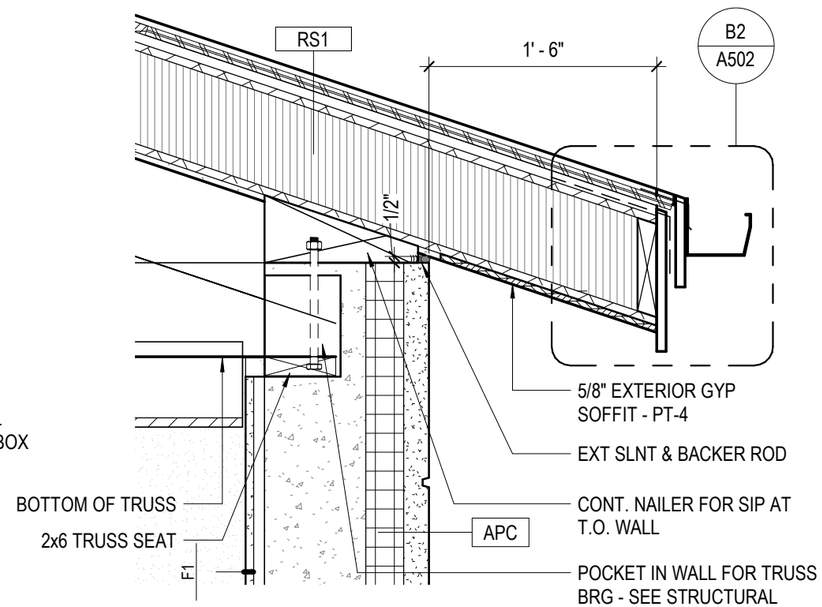
B3 DETAIL @ ENTRY SOFFIT

1" = 1'-0"



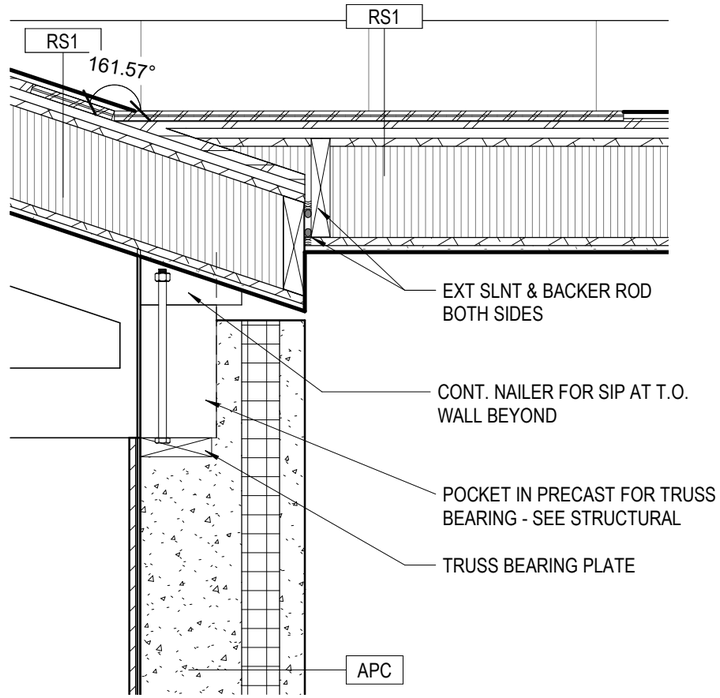
B1 ROOF EDGE DETAIL

1" = 1'-0"



A1 ROOF EDGE @ LOBBY HIGH ROOF

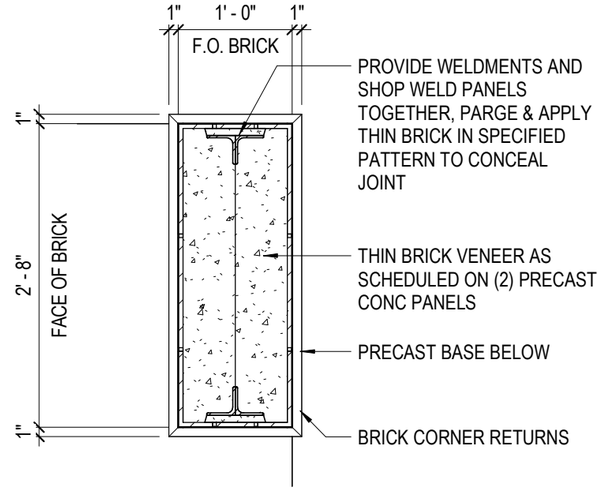
1" = 1'-0"



A2 JOIST BEARING @ GRID B

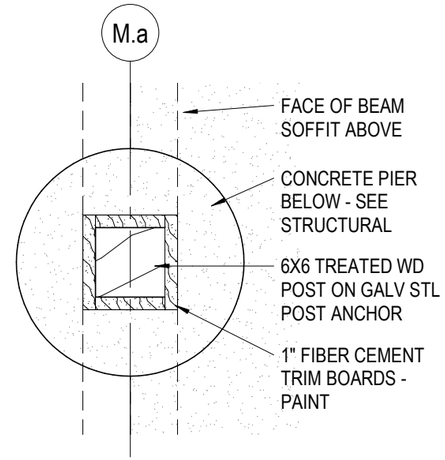
1" = 1'-0"

2



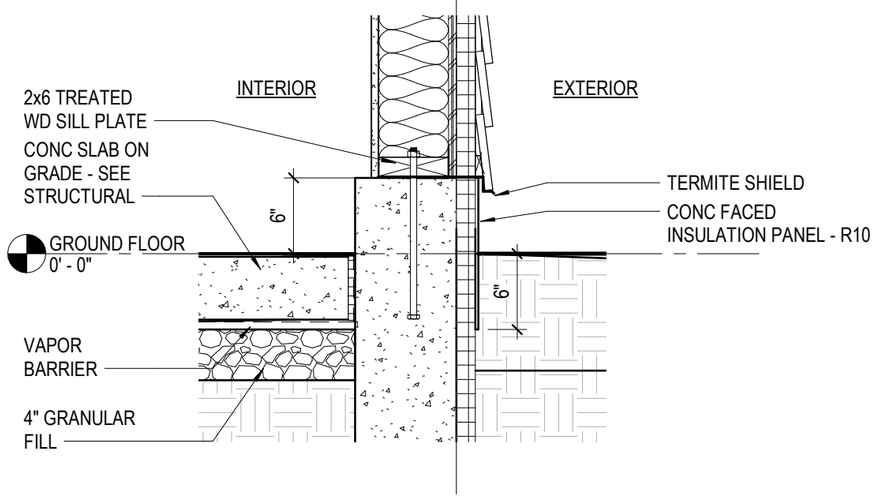
B2 PRECAST COLUMN DETAIL

3/4" = 1'-0"



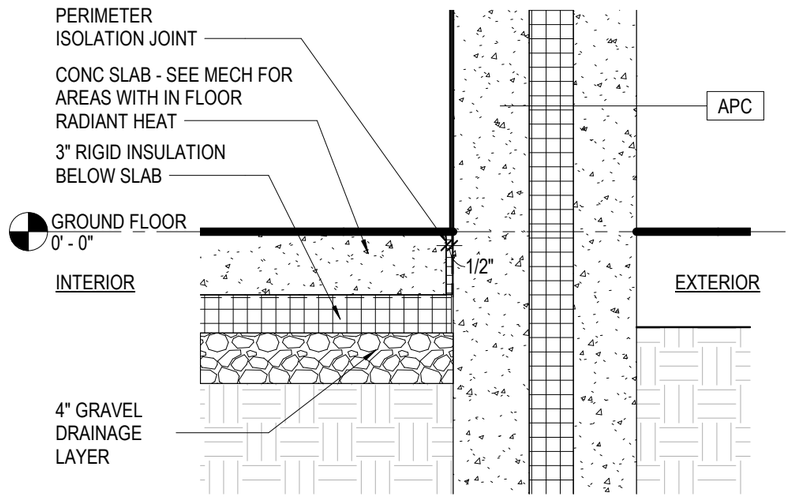
B1 COLUMN DETAIL

1" = 1'-0"



A2 LAP SIDING WALL AT GRADE

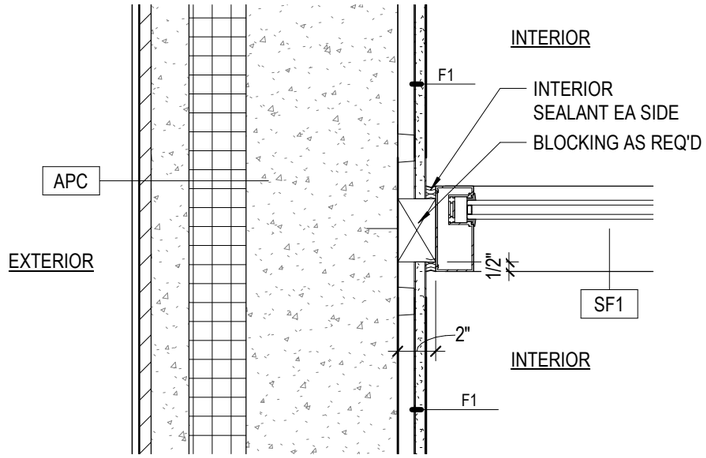
1" = 1'-0"



A1 PRECAST PANEL AT GRADE

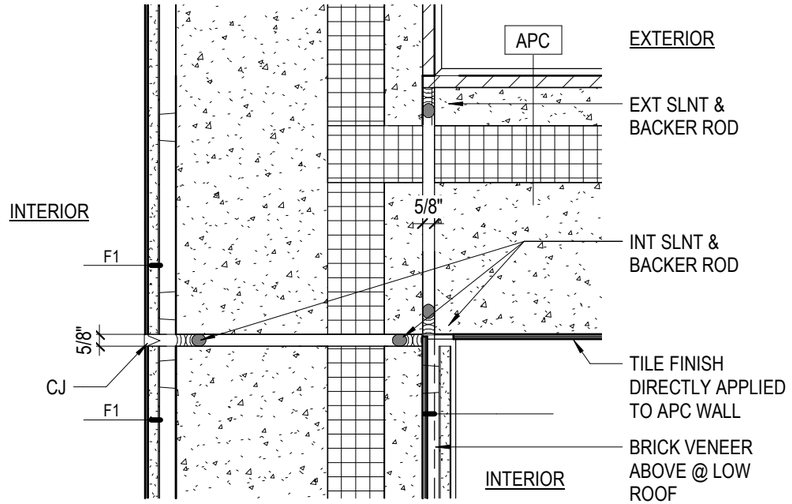
1" = 1'-0"

2



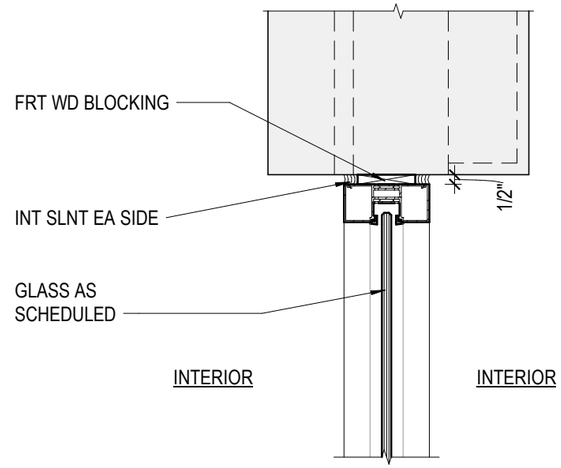
1 JAMB DETAIL

1 1/2" = 1'-0"



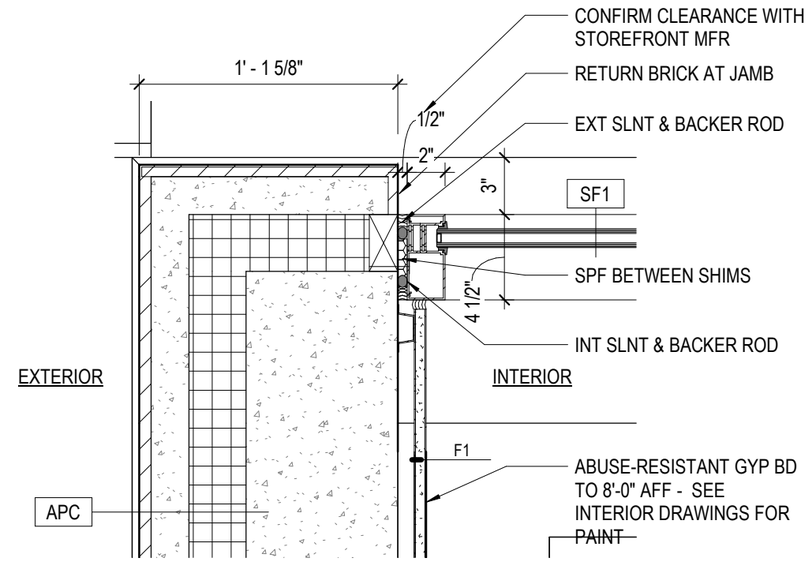
2 CORNER DETAIL

1 1/2" = 1'-0"



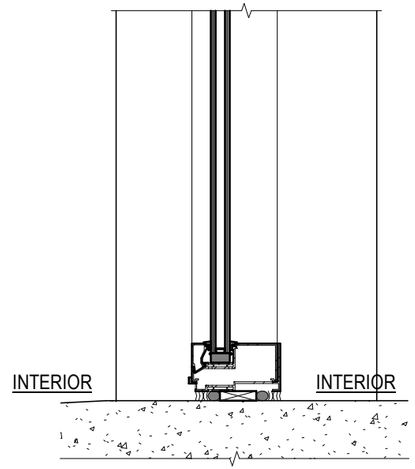
5 WINDOW HEAD @ INTERIOR PARITION

1 1/2" = 1'-0"



3 PLAN DETAIL 1

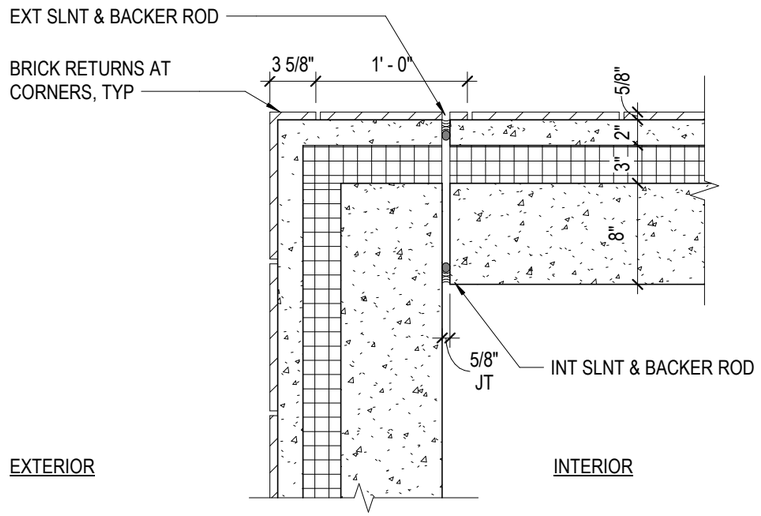
1 1/2" = 1'-0"



4 SILL MULLION

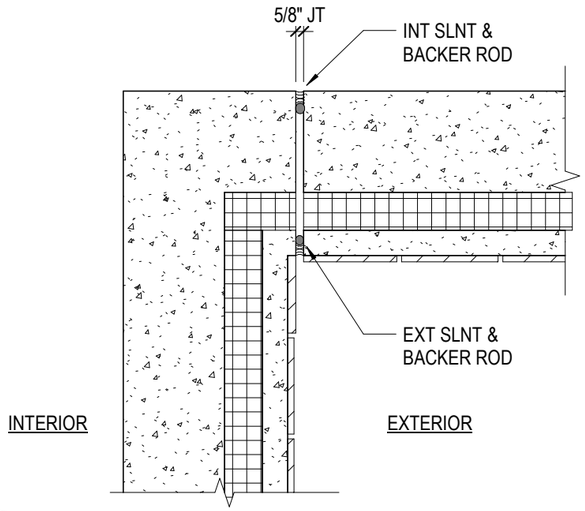
1 1/2" = 1'-0"

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	DETAILS - EXTERIOR	SHEET A50.88	E



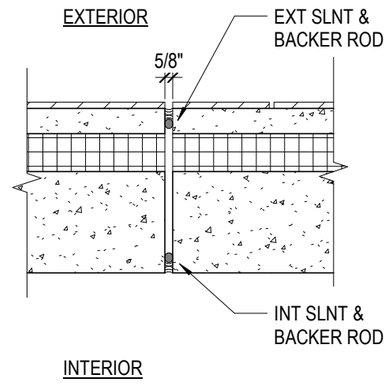
1 TYP. OUTER CORNER DETAIL

1" = 1'-0"



2 TYP. INNER CORNER DETAIL

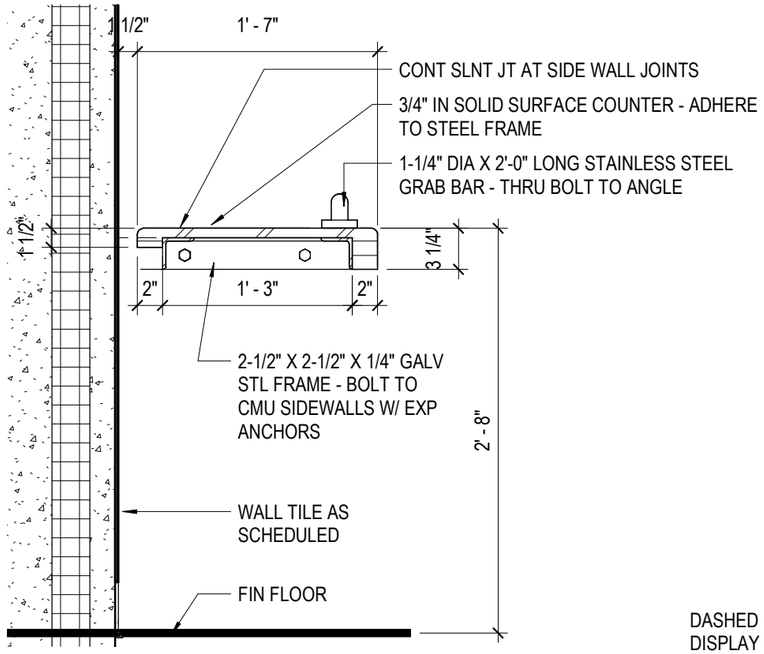
1" = 1'-0"



3 TYP. JT DETAIL

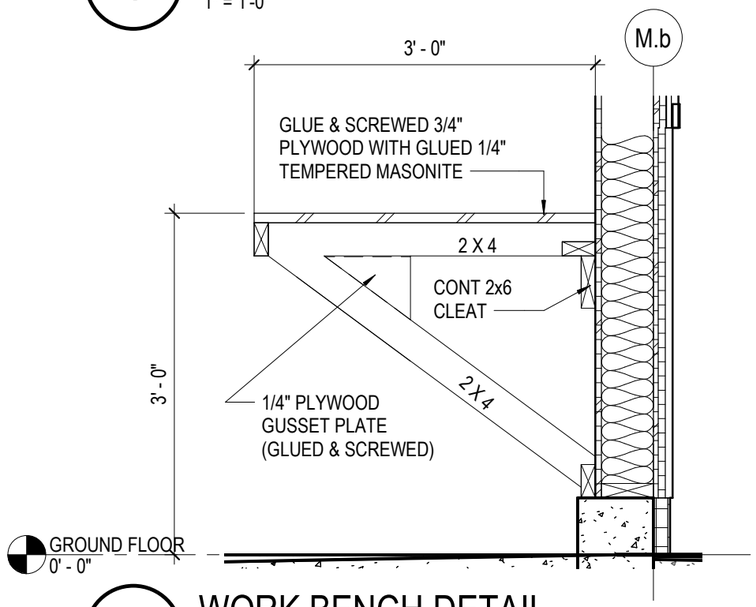
1" = 1'-0"

2



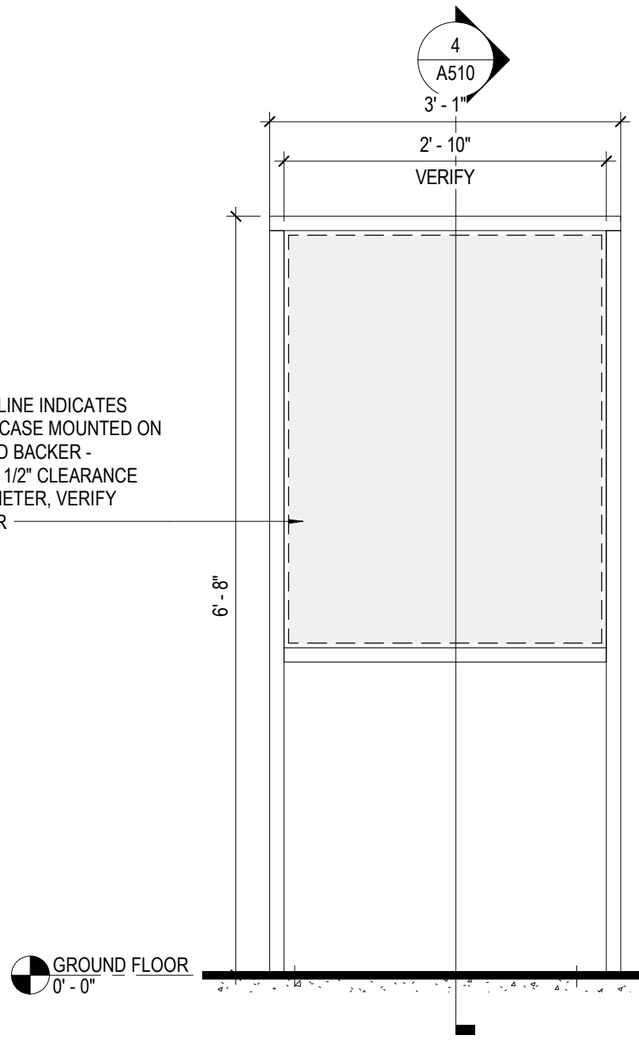
1 CHANGING TABLE

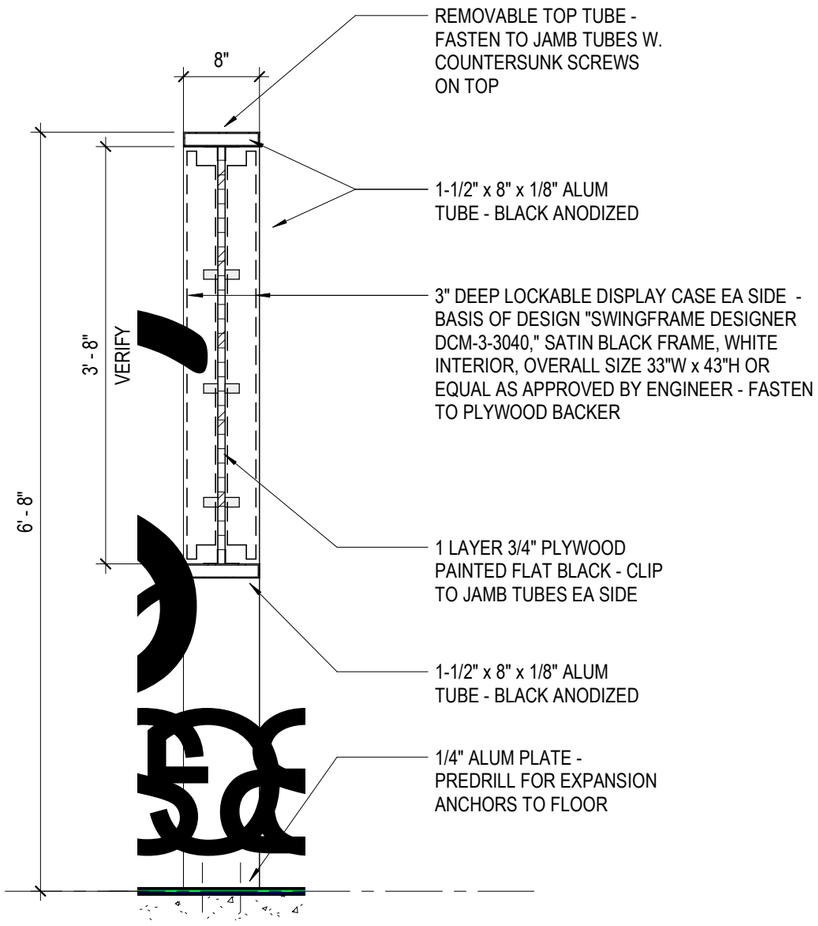
1" = 1'-0"



2 WORK BENCH DETAIL

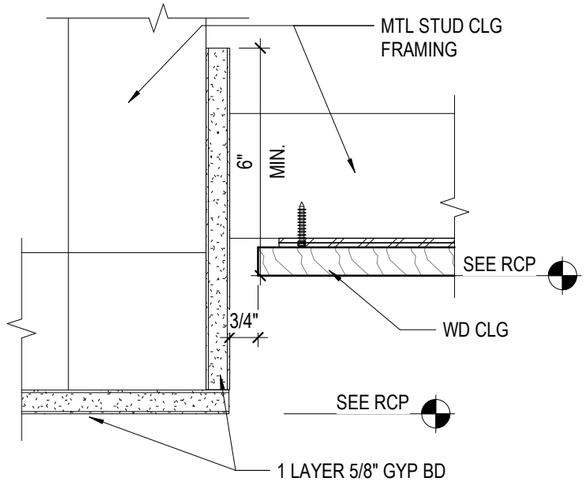
3/4" = 1'-0"





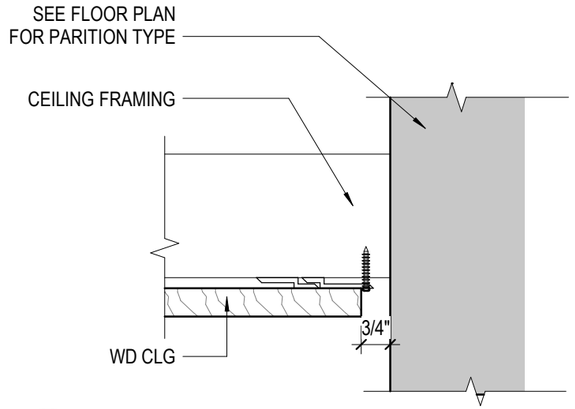
3 INFORMATIONAL DISPLAY ELEVATION AND SECTION

3/4" = 1'-0"



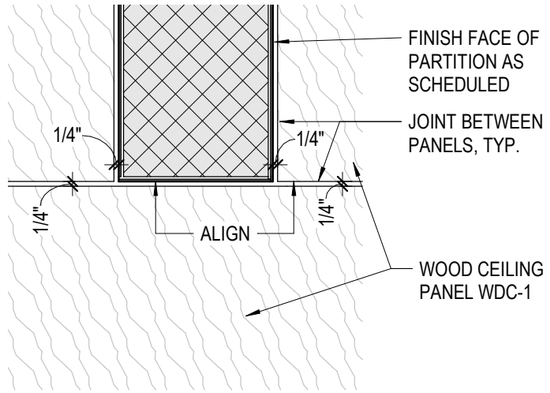
1 WD PANEL CLG AT GYP SOFFIT

3" = 1'-0"



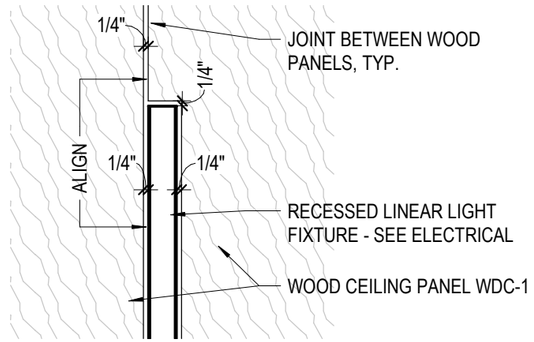
2 WD PANEL CLG END OF WALL

3" = 1'-0"



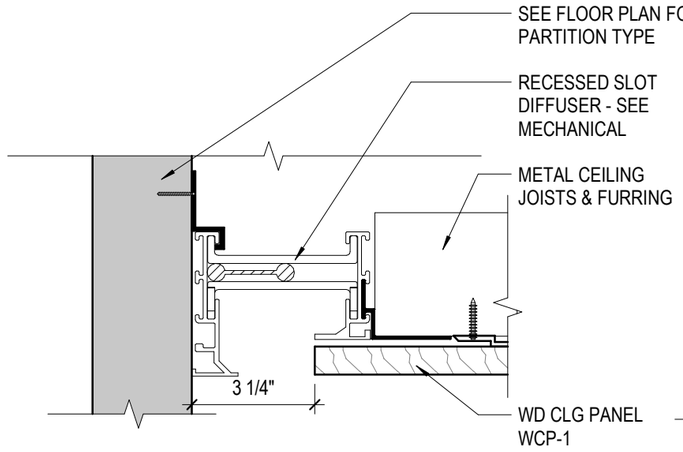
3 WD PANEL CLG AROUND PARTITION

1 1/2" = 1'-0"



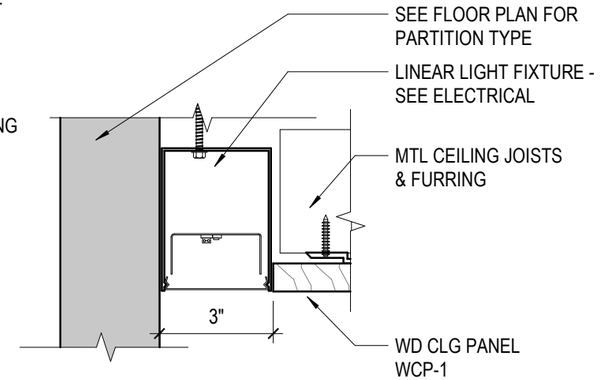
4 WD PANEL CLG AROUND LIGHT FIXTURE

1 1/2" = 1'-0"



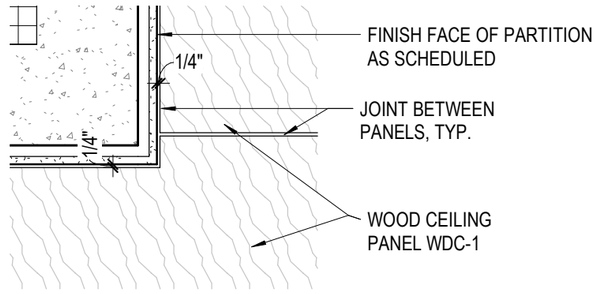
5 CEILING DIFFUSER OPENING

3" = 1'-0"



6 CEILING LINER LIGHT OPENING

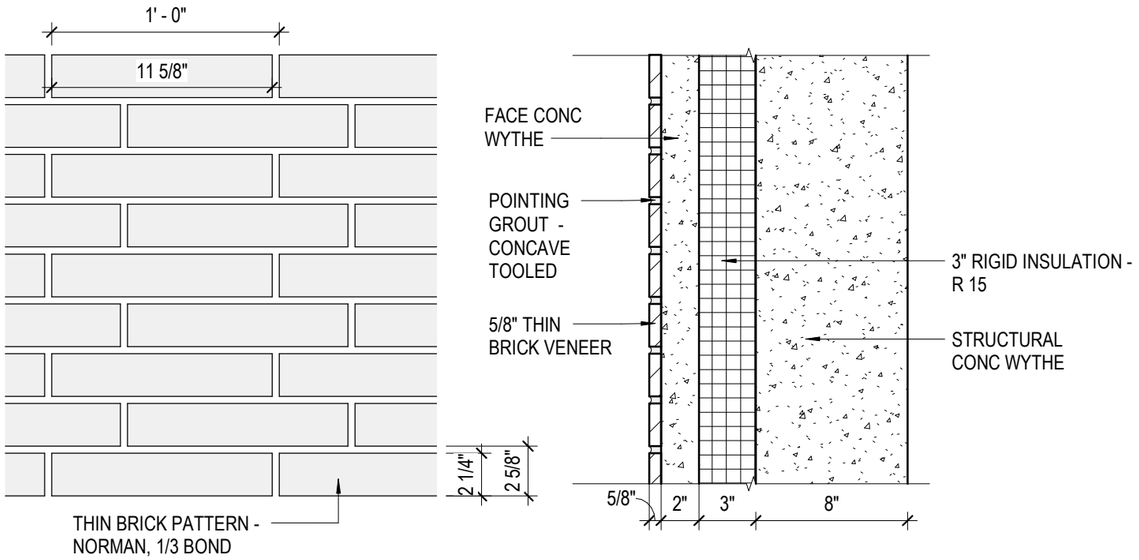
3" = 1'-0"



7 ENLARGED RCP - WOOD CEILING DETAIL

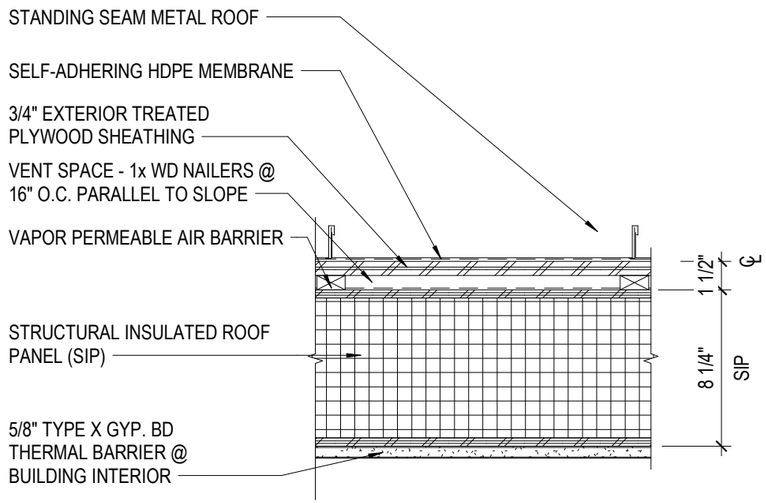
1" = 1'-0"

2



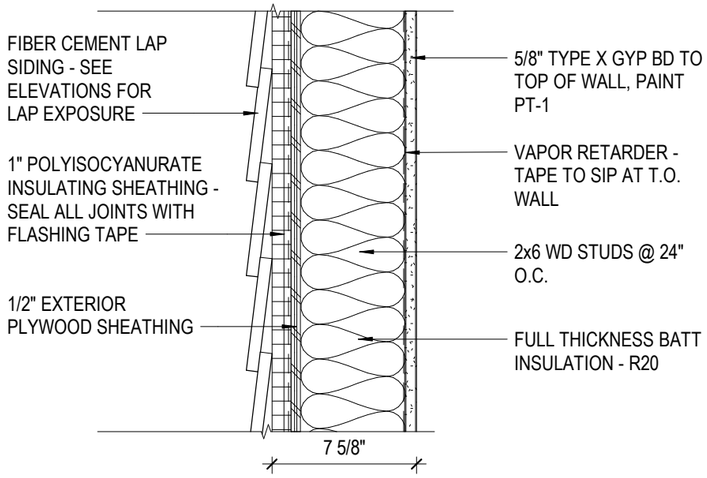
APC ARCHITECTURAL PRECAST CONCRETE WALL PANEL

1 1/2" = 1'-0"



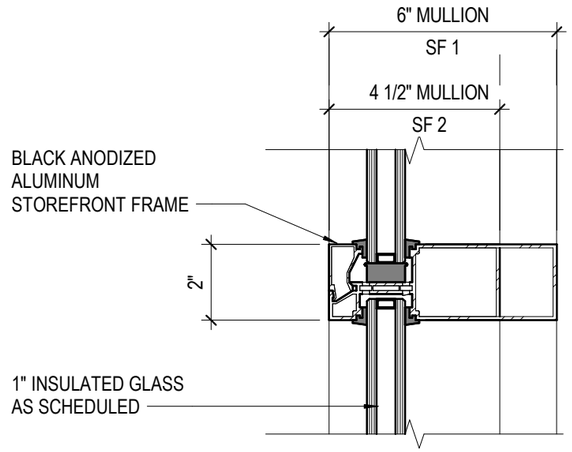
RS1 STANDING SEAM ROOF SYSTEM

1 1/2" = 1'-0"



FCS FIBER CEMENT SIDING WALL ASSEMBLY

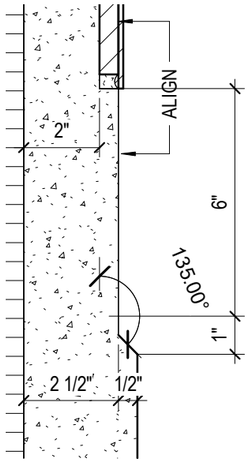
1 1/2" = 1'-0"



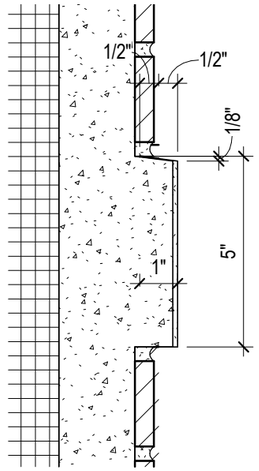
SF-X STOREFRONT SYSTEM

3" = 1'-0"

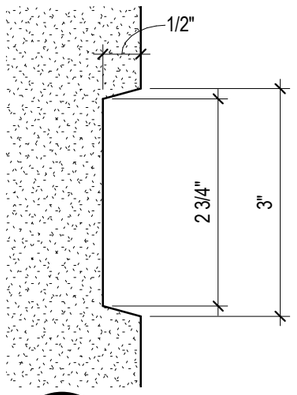
2



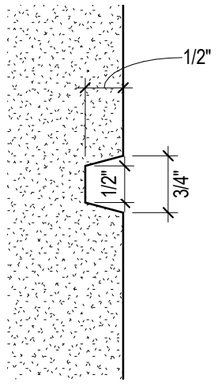
B1 BASE
3" = 1'-0"



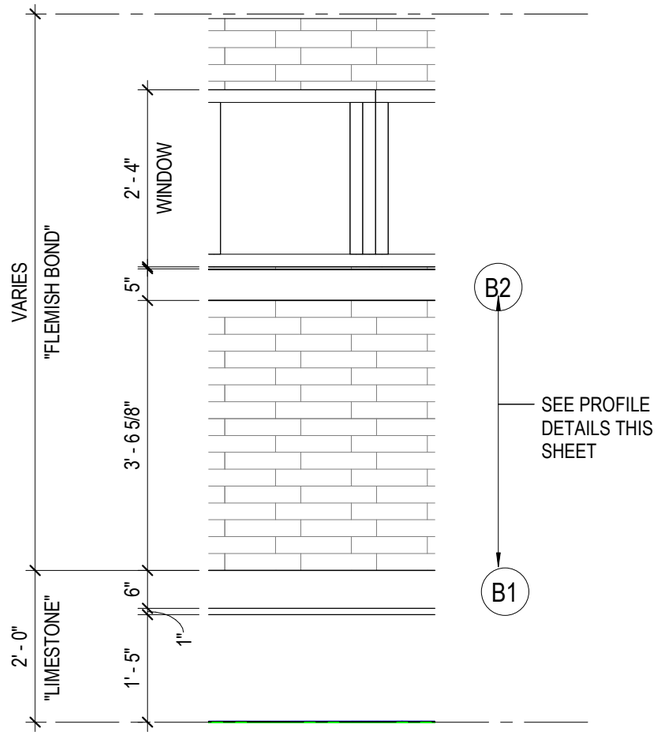
B2 REVEAL 1
3" = 1'-0"



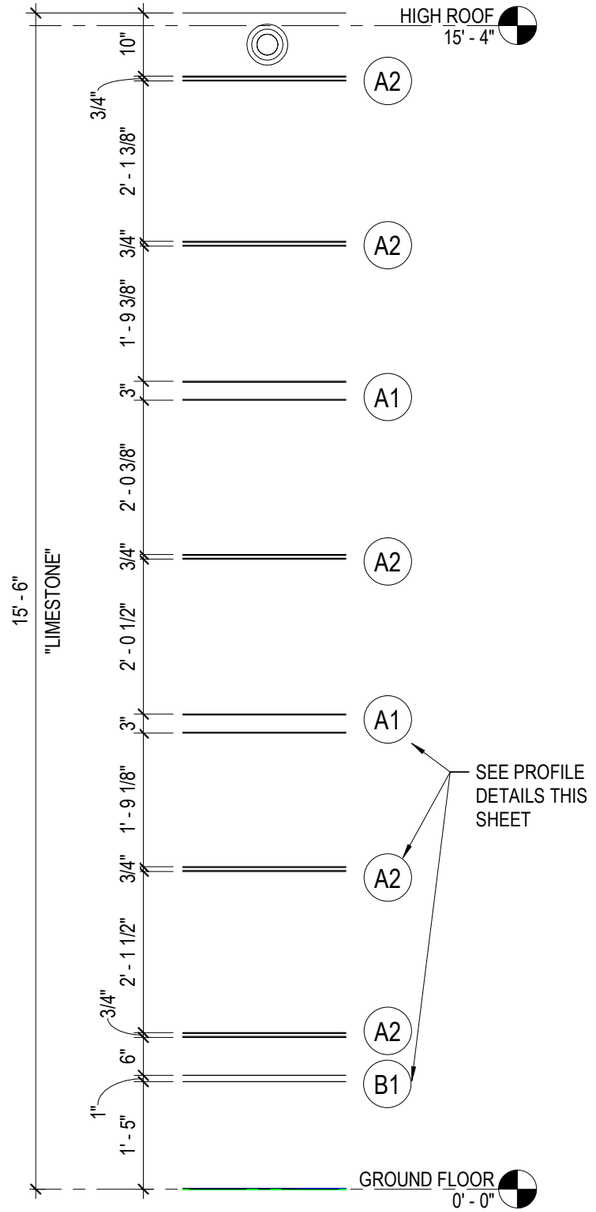
A1 REVEAL 2
6" = 1'-0"



A2 REVEAL 3
6" = 1'-0"



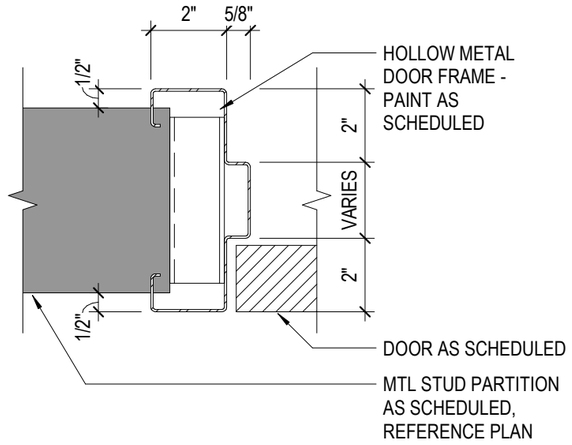
PATTERN 1



PATTERN 2

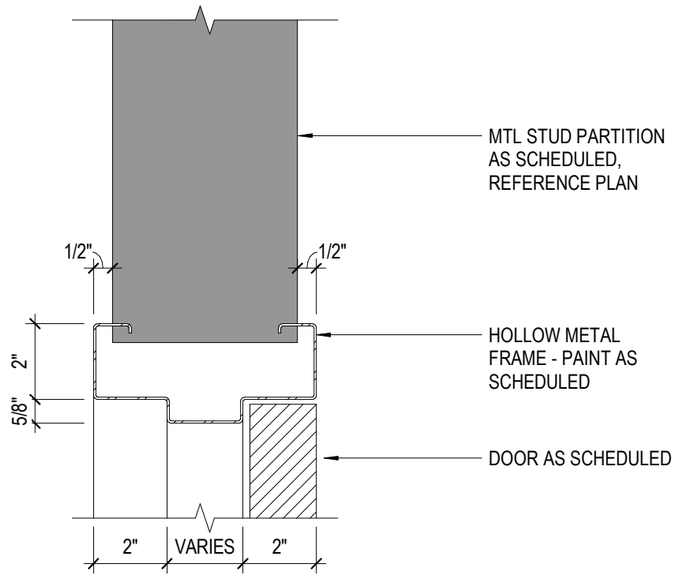
PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	ENLARGED PRECAST PANEL PATTERNS	SHEET A52 93	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/21/2024 5:11:48 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : As indicated



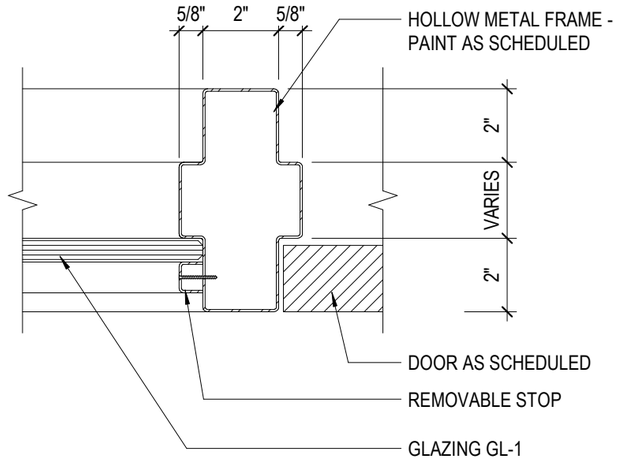
B1 JAMB - HM INTERIOR DOOR

3" = 1'-0"



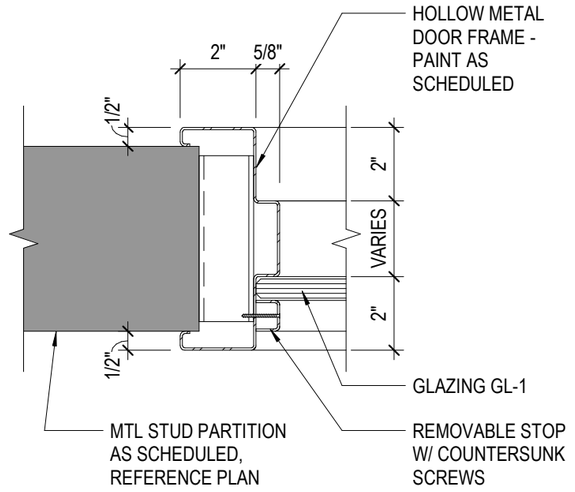
B2 HEAD - HM INTERIOR DOOR

3" = 1'-0"



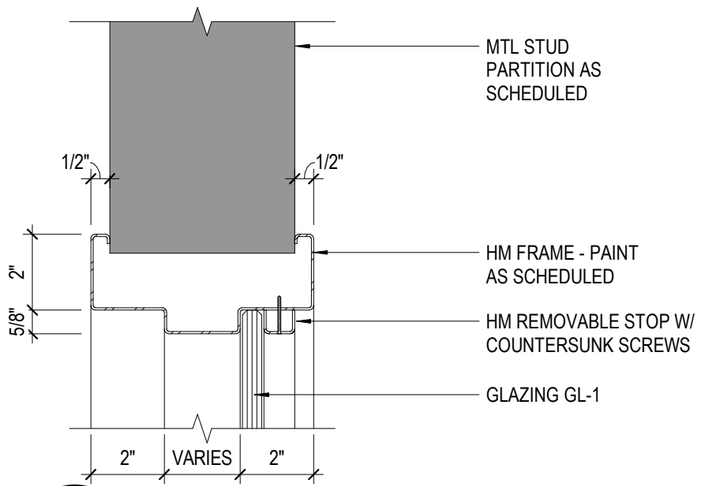
B3 MULLION - HM DOOR JAMB

3" = 1'-0"



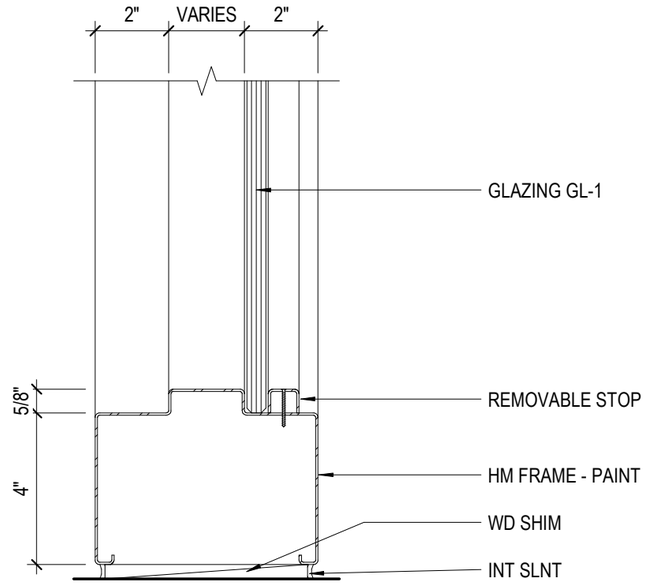
A1 JAMB - HM BORROWED LITE

3" = 1'-0"



A2 HEAD - HM BORROWED LITE

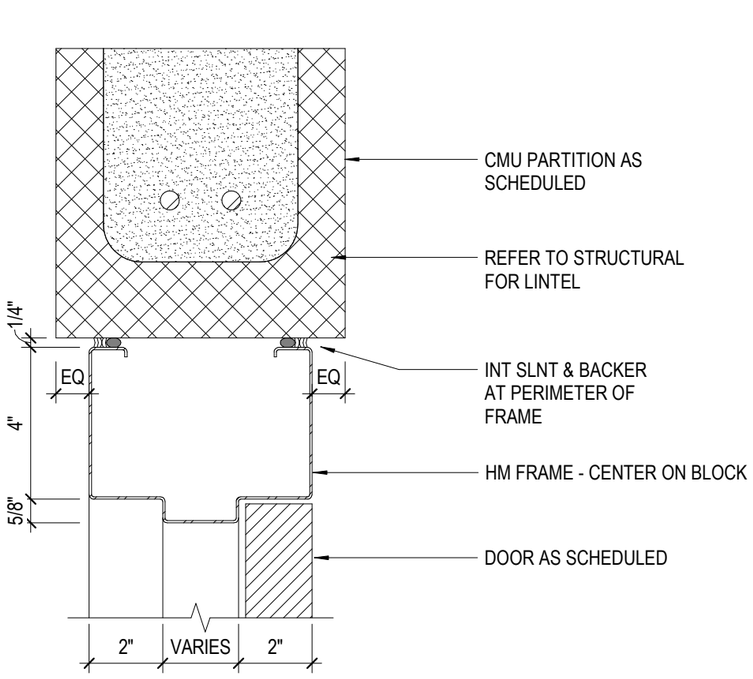
3" = 1'-0"



A3 SILL - HM BORROWED LITE @ FLOOR

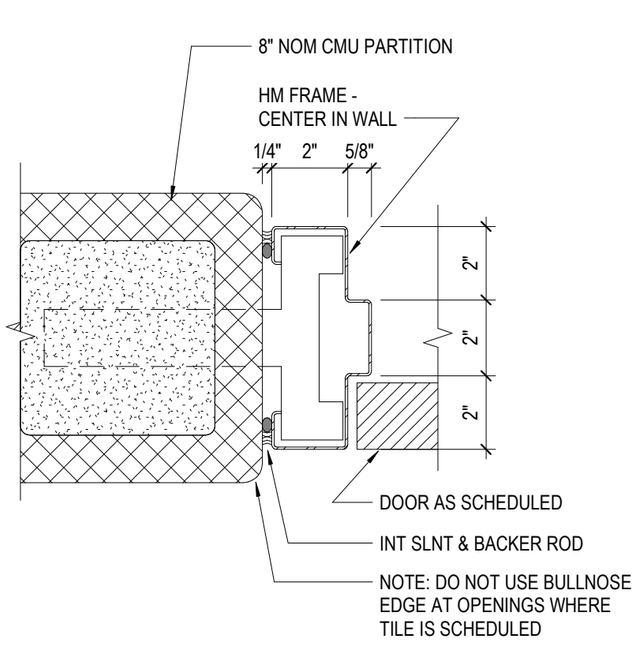
3" = 1'-0"

2



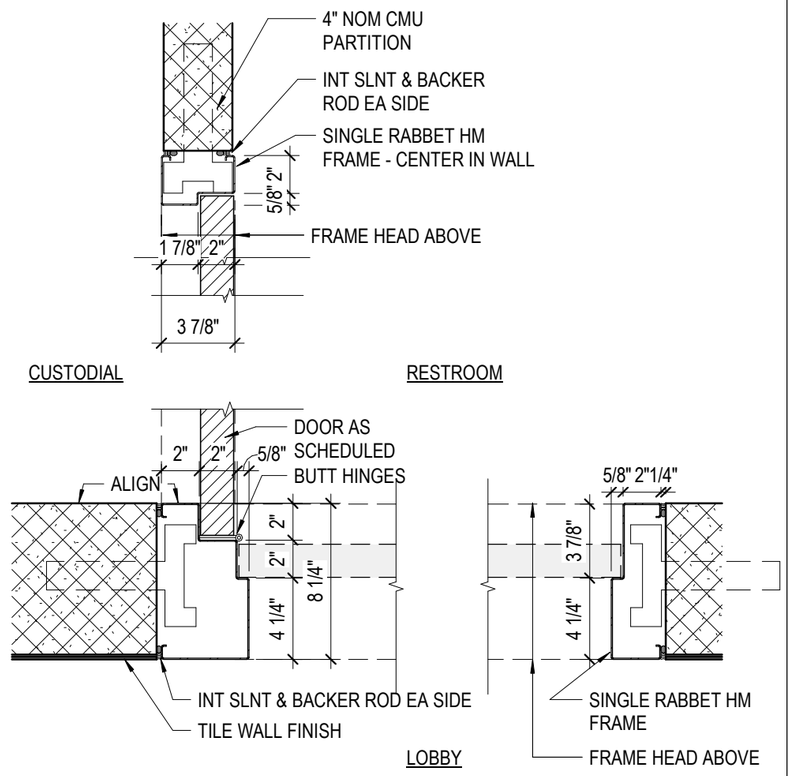
A1 HEAD - HM INTERIOR DOOR - CMU

3" = 1'-0"



A2 JAMB- HM FRAME @ 8" CMU

3" = 1'-0"



A3 JAMBS @ CUSTODIAL DOOR FRAME

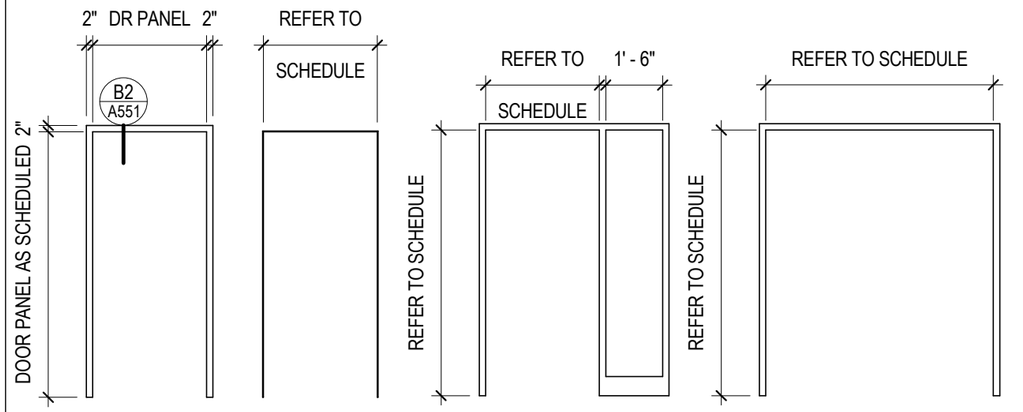
1 1/2" = 1'-0"

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	DOOR AND FRAME DETAILS	SHEET A55[illegible]95	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/21/2024 5:11:49 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : As indicated

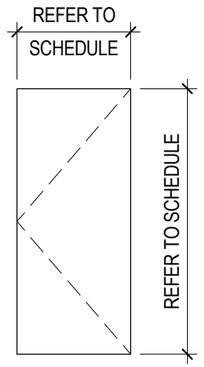
INTERIOR FRAME LEGEND GENERAL NOTES

1. REFER TO SHEETS A-551 THROUGH A-552 FOR THE RELATING HEAD, JAMB AND SILL DETAILS.

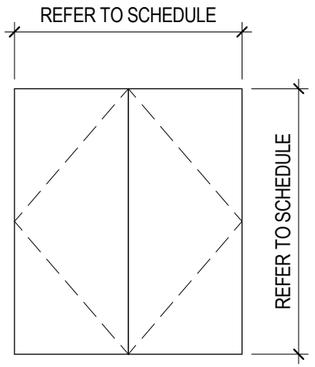


F01 (SINGLE OPENING) **F02** (SINGLE OPENING CONCEALED FRAME) **F11** (SIDELIGHT) **F06** (DOUBLE EGRESS OPENING)

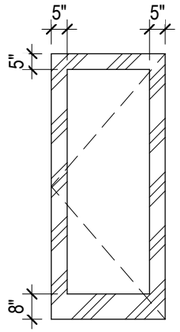
HM FRAME ELEVATIONS



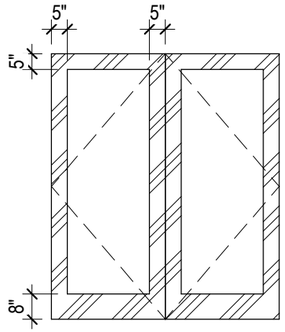
F (FLUSH)



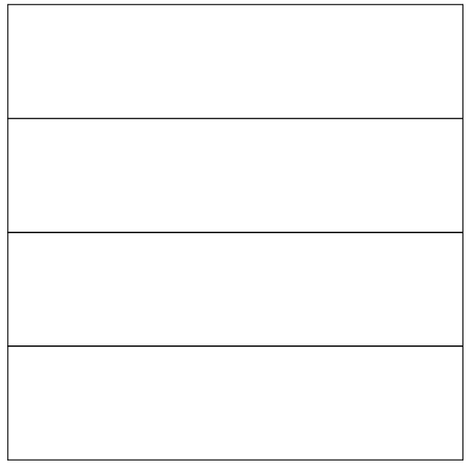
FF (DOUBLE FLUSH)



MS (STOREFRONT- MEDIUM STILE)



MS2 (STOREFRONT PAIR- MEDIUM STILE)

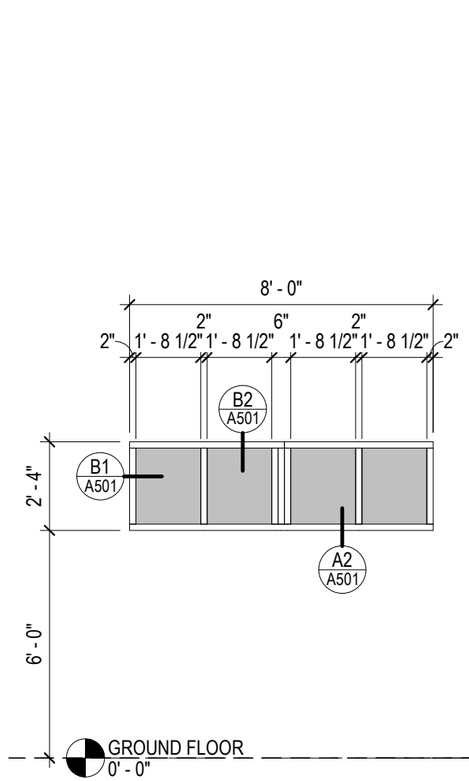


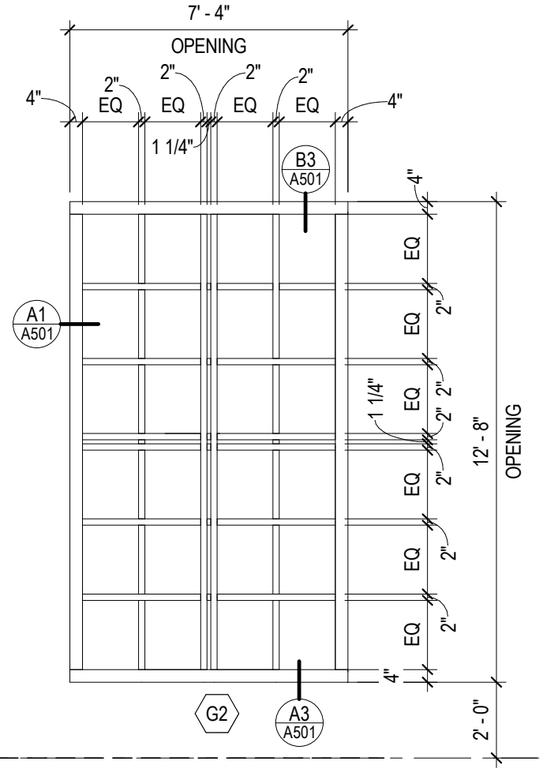
OS (OVERHEAD SECTIONAL)

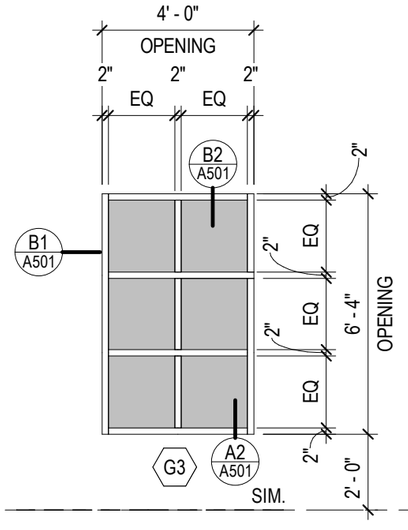
DOOR PANEL ELEVATION

Door Schedule

Door NO.	Width	Height	Thickness	FRAME TYPE	Frame Finish	Frame Material	Panel Finish	Panel Material	HDWR SET	PANEL
100-1	3' - 0"	7' - 0"	0' - 1 3/4"	F01	PT-5	HM	PT-5	HM	11	F
100-2	12' - 0"	9' - 0"	0' - 2"		MANUF.	STL		STL	13	OS
100-3	3' - 0"	7' - 0"	0' - 1 3/4"	F01	PT-5	HM	PT-5	HM	11	F
101A	3' - 0"	7' - 0"	0' - 1 3/4"	G4/A602	ANOD	ALUM	ANOD	ALUM	16	MS
101B	6' - 0"	7' - 0"	0' - 1 3/4"	G5/A602	ANOD	ALUM	ANOD	ALUM	15	MS2
102A	3' - 0"	7' - 0"	0' - 1 3/4"	G4/A602	ANOD	ALUM	ANOD	ALUM	16	MS
102B	5' - 11 3/4"	7' - 0"	0' - 1 3/4"	G5/A602	ANOD	ALUM	ANOD	ALUM	15	MS2
103	4' - 0"	8' - 0"	0' - 1 3/4"	A3/A552	PTE-2	HM	PTE-2	HM	17	F
104	4' - 0"	8' - 0"	0' - 1 3/4"	A3/A552	PTE-2	HM	PTE-2	HM	17	F
105	3' - 0"	8' - 0"	0' - 1 3/4"	F01	PTE-2	HM	PTE-2	HM	10	F
105A	1' - 4"	7' - 0"	0' - 1 3/4"	F01	PTE-2	HM	PTE-2	HM	08	F
106	3' - 0"	7' - 0"	0' - 1 3/4"	F01	PTE-2	HM	PTE-2	HM	06	F
107	3' - 0"	8' - 0"	0' - 1 3/4"	F01	PTE-2	HM	PTE-2	WD	10	F
107A	1' - 4"	7' - 0"	0' - 1 3/4"	F01	PTE-2	HM	PTE-2	HM	08	F
108	3' - 0"	7' - 0"	0' - 1 3/4"	F01	PTE-2	HM	PTE-2	HM	04	F
112	3' - 0"	7' - 0"	0' - 1 3/4"	F11	PT-2	HM	STN	WD	05	HG
112A	3' - 0"	7' - 0"	0' - 1 3/4"	F01	PT-2	HM	STN	WD	05	F
113	3' - 0"	7' - 0"	0' - 1 3/4"	F11	PT-2	HM	STN	WD	05	HG
113A	3' - 0"	7' - 0"	0' - 1 3/4"	F01	PT-2	HM	TBD	WD	02	F
114A	3' - 6"	8' - 3 1/2"	0' - 1 3/4"	F02	PT-2	HM	PT-2	HM	09	F
114B	3' - 0"	7' - 0"	0' - 1 3/4"	F01	PT-5	HM	PT-5	HM	14	F
115	4' - 0"	8' - 0"	0' - 1 3/4"	A3/A552	PTE-2	HM	PTE-2	HM	17	F
116	4' - 0"	8' - 0"	0' - 1 3/4"	A3/A552	PTE-2	HM	PTE-2	HM	17	F
117	3' - 0"	7' - 0"	0' - 1 3/4"	F01	PTE-2	HM	PTE-2	HM	07	F
118A	3' - 0"	7' - 0"	0' - 1 3/4"	F01	PTE-2	HM	PTE-2	HM	03	F
118B	6' - 0"	7' - 0"	0' - 1 3/4"	02	PT-5	HM	PT-5	HM	12	FF





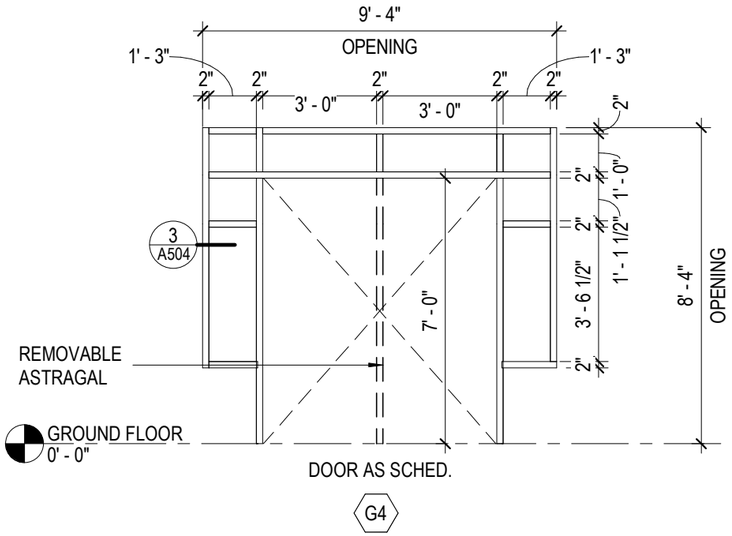


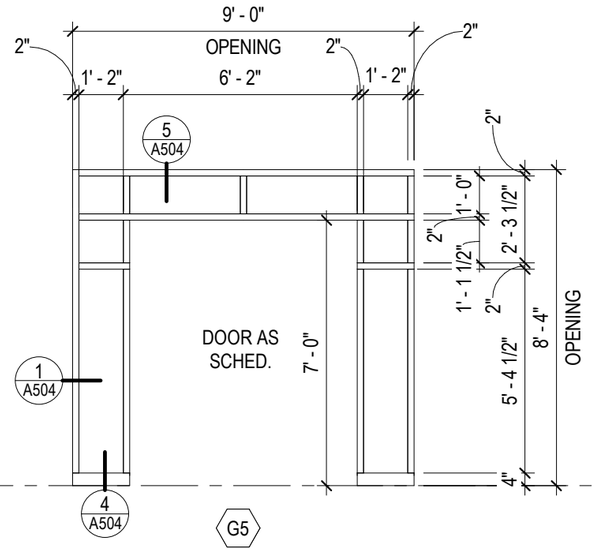
GLAZING TYPE

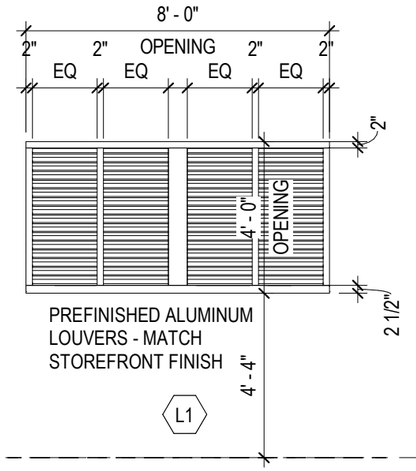
IG-1:
1" CLEAR INSULATED GLASS

IG-2:
1" FRIT INSULATED GLASS

NOTE: SEE SHEET A001 FOR SYMBOLS AND REFERENCES

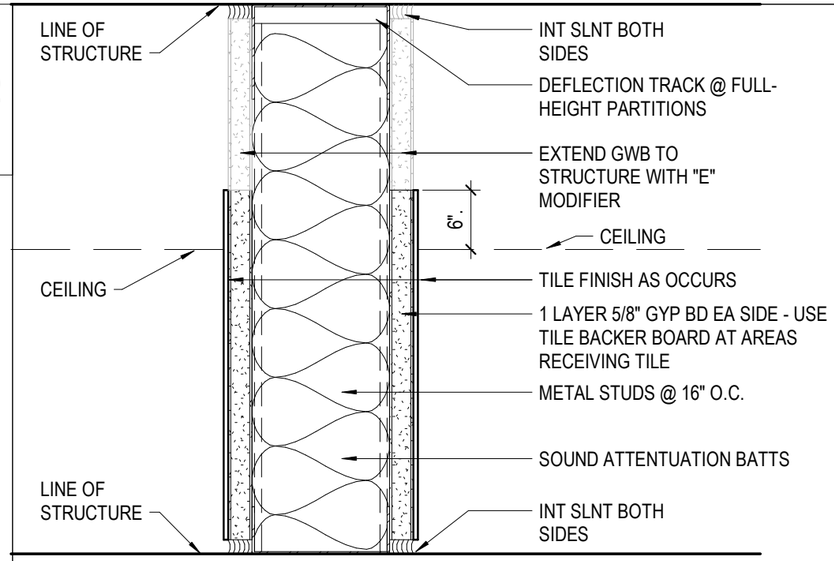






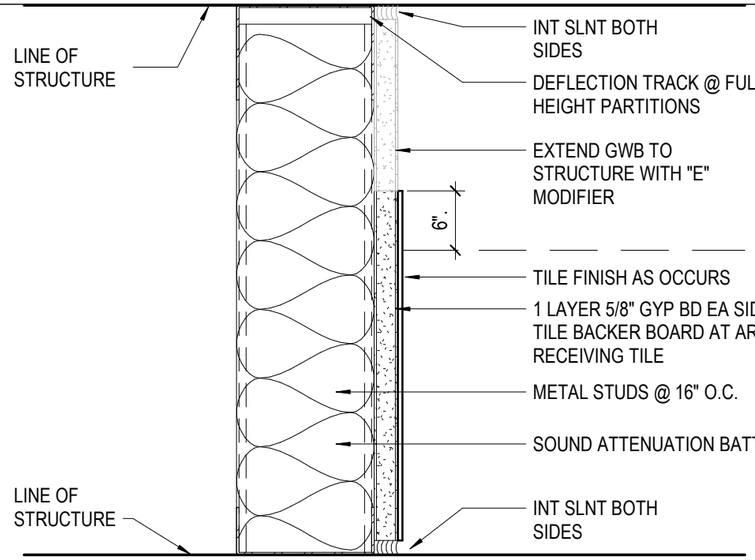
PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	STOREFRONT & LOUVER ELEVATIONS	SHEET A60[illegible]97	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/21/2024 5:11:49 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : As indicated



(TYPE A) NON-RATED PARTITION

MARK	STUD WIDTH	PRTN WIDTH	Design STC
A4	4"		
A6	6"		

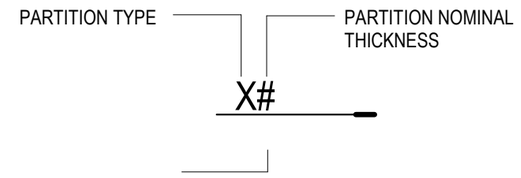


(TYPE J) NON-RATED PARTITION

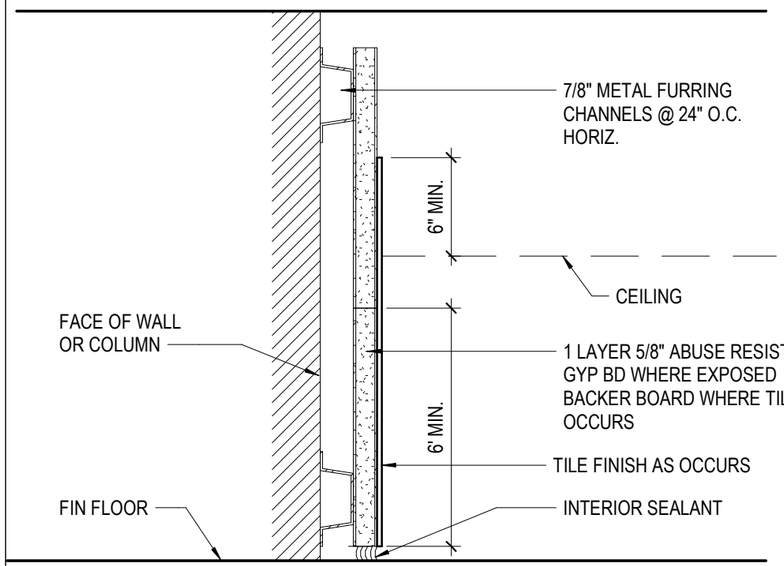
MARK	STUD WIDTH	PRTN WIDTH	Design STC
J4	4"	4 3/8"	
J6	6"	6 5/8"	

PARTITION LEGEND

THE TYPICAL PARTITION TAG SYMBOL DESIGNATION HAS TWO CHARACTERS. THE FIRST CHARACTER IS A LETTER INDICATING THE PARTITITON TYPE, THE SECOND CHARACTER IS A NUMERIC INDICATION OF THE STUD OR CMU WIDTH. ALL METAL STUD PARTITIONS HAVE FULL THICKNESS ACOUSTIC BATTS UNLESS NOTED OTHERWISE.

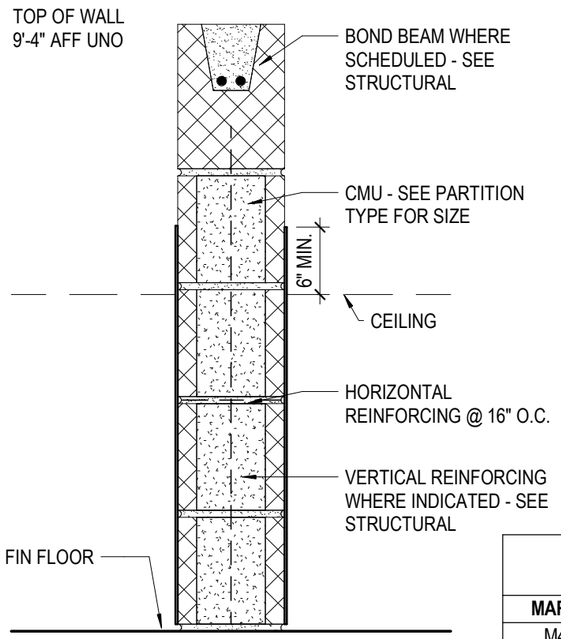


NOMINAL THICKNESS	STUD WIDTH	CMU WIDTH
1	7/8"	
2	1 5/8"	
3	2 1/2"	
4	4"	3 5/8"
6	6"	5 5/8"
8	8"	7 5/8"



(TYPE F) FURRING PARTITION

MARK	STUD WIDTH	PRTN WIDTH	Design STC
F1	7/8"		



(TYPE M) CMU PARTITION

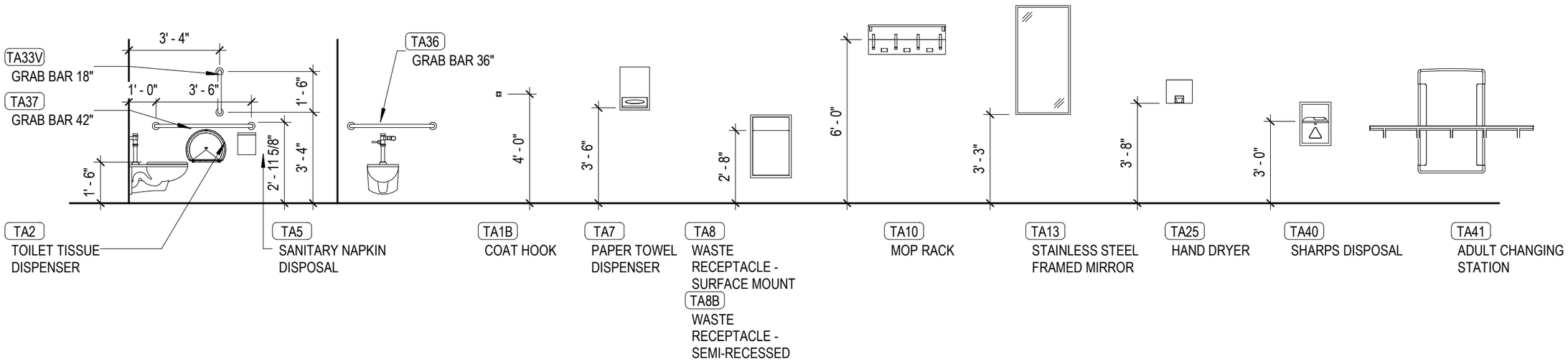
MARK	CMU WIDTH	PRTN WIDTH	Design STC
M4	3 5/8"		
M8	7 5/8"		
M8/A6	7 5/8"	7 7/8"	

PARTITION NOTES

1. **CMU PARTITIONS SHALL EXTEND TO 9'-4" AFF UNLESS NOTED OTHERWISE.**
2. **METAL STUD PARTITIONS EXTEND TO UNDERSIDE OF ROOF STRUCTURE ABOVE U.N.O.**
3. **5/8" TILE BACKER BOARD SHALL REPLACE 5/8" GYP BD WHERE TILE FINISHES ARE SCHEDULED.**
4. **EXPOSED PAINTED GYP BD IN PUBLIC AREAS SHALL BE ABUSE RESISTANT TO 8'-0"; REFER TO SPECIFICATIONS.**
5. **PARTITION M8/A6 INDICATES AN M8 WALL TO 9'-4" AFF WITH AN A6 WALL CONSTRUCTED FROM 9'-4" TO UNDERSIDE OF ROOF STRUCTURE.**

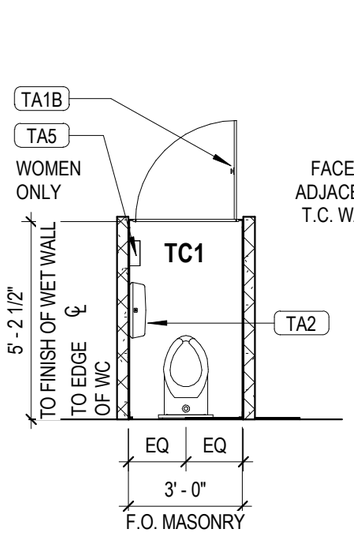
TOILET ROOM ACCESSORY MOUNTING HEIGHTS

SCALE: 1/4" = 1' - 0"



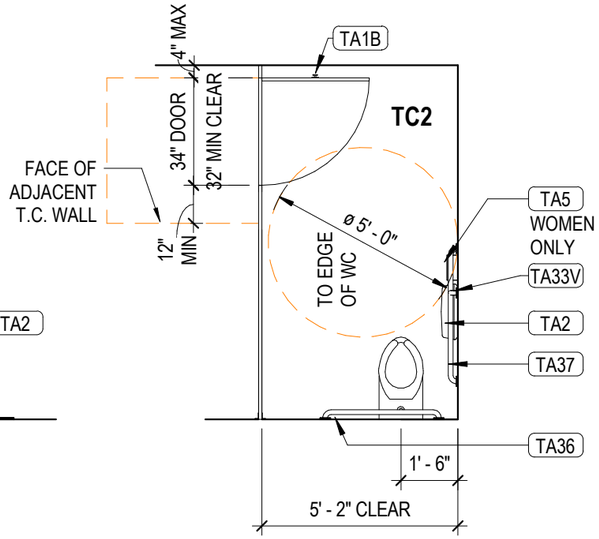
STANDARD TOILET COMPARTMENT LAYOUTS

SCALE: 1/4" = 1' - 0"



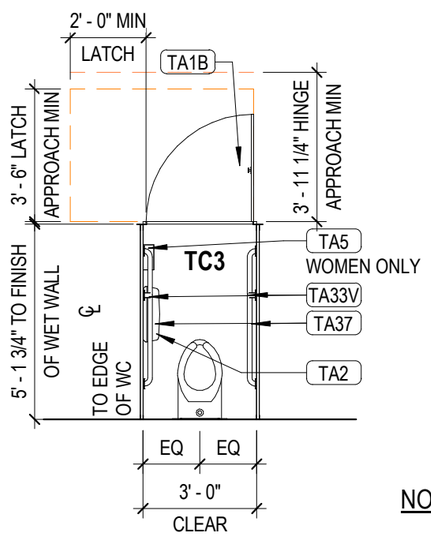
STANDARD TOILET COMPARTMENT

PLAN DESIGNATION **TC1**



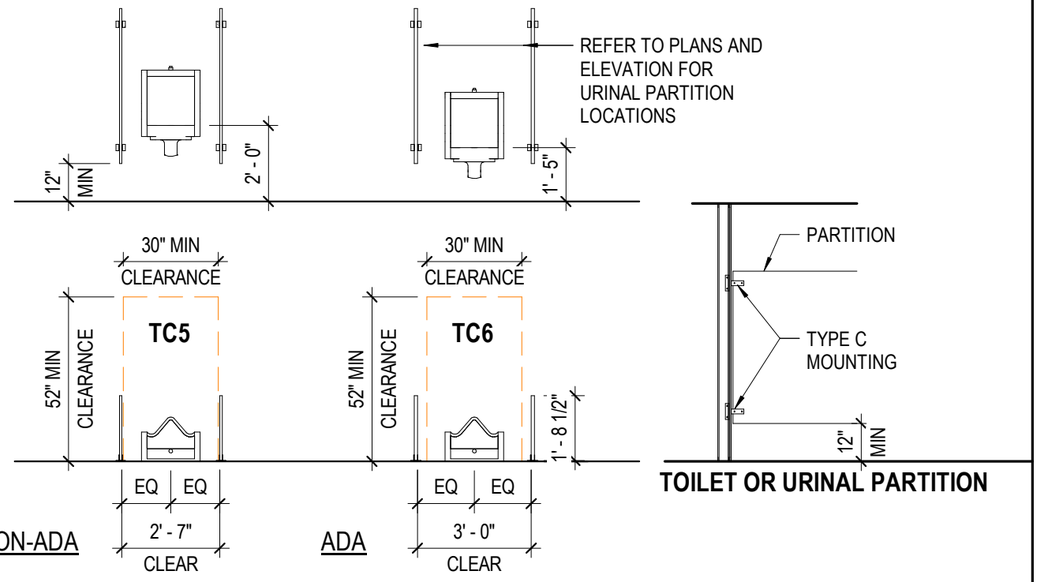
END OF ROW ACCESSIBLE TOILET COMPARTMENT

PLAN DESIGNATION **TC2**



AMBULATORY TOILET COMPARTMENT

PLAN DESIGNATION **TC3**



STANDARD URINAL TOILET COMPARTMENT

PLAN DESIGNATION **TC5**

PLAN DESIGNATION **TC6**

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	TOILET LAYOUTS AND MOUNTING DIAGRAM	SHEET A72[illegible]99 E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/21/2024 5:11:51 PM PLOT BY : HDR Inc. PLOT NAME : PLOT SCALE : 1/4" = 1'-0"

INTERIOR FINISH SCHEDULE

Code	Manufacturer	Series/ Style	Color	Size	Comments
T1	LAMINAM	LARGE FORMAT PORCELAIN TILE, CALCE COLLECTION	BIANCO	1000 x 3000mm (3mm THICK)	PROVIDE SHOP DRAWINGS OF PANEL LAYOUTS; EPOXY GROUT: MAPEI, 14 BISCUIT
T3	CROSSVILLE	COLOR BLOX 2.0	BLUE SUEDE SHOES	6" X 24"	ACCENT WALL TILE, EPOXY GROUT: MAPEI, 19 PEARL GRAY
TT1	SCHLUTER	COVE-SHAPED PROFILE, DILEX	STAINLESS STEEL	AS NEEDED PER DRAWINGS	--
TT2	SCHLUTER	FINEC TILE TRIM	STAINLESS STEEL	--	ALL EXPOSED TILE EDGES AND OUTSIDE CORNERS
ACT1	ARMSTRONG	#3257 OPTIMA, TEGULAR EDGE, 9/16" GRID	WHITE	24" X 48" X 3/4" THICK	--
RB1	MANNINGTON	BURKE COLLECTION, RUBBER WALL BASE	MOONBEAM 050	4"H ROLL GOODS	STRAIGHT AT CARPET, COVED AT SEALED CONCRETE
TER1 B1	TERRAZZO & MARBLE SUPPLY COMPANIES	APPLIED TERRAZZO WALL BASE	MATCH TER1	4"H	--
TER1 B2	TERRAZZO & MARBLE SUPPLY COMPANIES	INTEGRAL TERRAZZO WALL BASE	MATCH TER1	4"H	--
TER1	TERRAZZO & MARBLE SUPPLY COMPANIES	THIN-SET POURED EPOXY TERRAZZO, TERROXY	TM#23-2537	--	--
TER2	TERRAZZO & MARBLE SUPPLY COMPANIES	THIN-SET POURED EPOXY TERRAZZO, TERROXY	TM- #23-2225	--	ACCENT TERRAZZO
CFS1	SEE SPECIFICATION	--	--	--	--
CPT1	J+J FLOORING	KINETEX STRATA 1826	1848 FELDSPAR	18" X 36"	PATTERN: ASHLAR
WDC1	PARKLEX PRODEMA	INTERIOR PANELING, CEILINGS WITH OPTION A PERFORATION PATTERN	AMERICAN WALNUT	48" X 96" (12MM THICK)	LOBBY, MENS, AND WOMENS CEILING PANELS
WDP1	PARKLEX PRODEMA	INTERIOR PANELING, WALLS	AMERICAN WALNUT	24" X 96" (12MM THICK)	
PT1	SHERWIN WILLIAMS	LATEX, FLAT	SW7007 CEILING BRIGHT WHITE	--	ALL GYP CEILINGS, U.N.O.
PT2	SHERWIN WILLIAMS	LATEX, EGGSHELL	SW9166 DRIFT OF MIST	--	GYP WALLS IN OFFICES AND BREAKROOM
PTE1	SHERWIN WILLIAMS	EPOXY PAINT, SEMI-GLOSS	SW9166 DRIFT OF MIST	--	WALLS
PTE2	SHERWIN WILLIAMS	EPOXY PAINT TO METAL, SEMI-GLOSS	SW7568 NEUTRAL GROUND	--	HOLLOW METAL DOORS AND FRAMES AT FAMILY,CUSTODIAL, OFFICES

INTERIOR FINISH LEGEND- BASIS OF DESIGN CONT.

Code	Manufacturer	Series/ Style	Color	Size	Comments
WDC1	PARKLEX PRODEMA	INTERIOR PANELING, CEILINGS WITH OPTION A PERFORATION PATTERN	AMERICAN WALNUT	48" X 96" (12MM THICK)	LOBBY, MENS, AND WOMENS CEILING PANELS
WDP1	PARKLEX PRODEMA	INTERIOR PANELING, WALLS	AMERICAN WALNUT	24" X 96" (12MM THICK)	

09 91 23 INTERIOR PAINTING

PT1	SHERWIN WILLIAMS	LATEX, FLAT	SW7007 CEILING BRIGHT WHITE	--	ALL GYP CEILINGS, U.N.O.
PT2	SHERWIN WILLIAMS	LATEX, EGGSHELL	SW9166 DRIFT OF MIST	--	GYP WALLS IN OFFICES AND BREAKROOM
PTE1	SHERWIN WILLIAMS	EPOXY PAINT, SEMI-GLOSS	SW9166 DRIFT OF MIST	--	WALLS
PTE2	SHERWIN WILLIAMS	EPOXY PAINT TO METAL, SEMI-GLOSS	SW7568 NEUTRAL GROUND	--	HOLLOW METAL DOORS AND FRAMES AT FAMILY,CUSTODIAL, OFFICES

10 14 00 SIGNAGE

S1	--	ACRYLIC (THROUGH COLOR) DIMENSIONAL LETTERING, FONT TBD	OPAQUE WHITE	8"H, 1/4 "THICK LETTERS	INSTALL HORIZONTALLY. CONFIRM FONT WITH OWNER BEFORE ORDERING.
S2	--	ACRYLIC (THROUGH COLOR) DIMENSIONAL LETTERING, FONT TBD	OPAQUE BLACK	8"H, 1/4" THICK LETTERS	INSTALL HORIZONTALLY. CONFIRM FONT WITH OWNER BEFORE ORDERING.

10 26 00 WALL AND DOOR PROTECTION

CG1	CS ACROVYN	CORNER GUARD	STAINLESS STEEL	2" WING, 4'-0"H	--

12 32 00 ARCHITECTURAL CASEWORK

PL1	NEVAMAR	HIGH PRESSURE LAMINATE	FRAPPE	--	BREAKROOM VERTICAL SURFACES

12 36 63 SOLID SURFACE FABRICATION

SSF1	WILSONART	SOLID SURFACE	YUKON RIVERSTONE	--	CHANGING TABLES AND SINKS

12 48 13 ENTRANCE FLOOR MATS AND FRAMES

EM1	C+S CONSTRUCTION SPECIALTIES	ENTRANCE MAT SYSTEM, PEDIMAT M1 ENTRY MAT	--	--	--

2

INTERIOR FINISH PLAN LEGEND

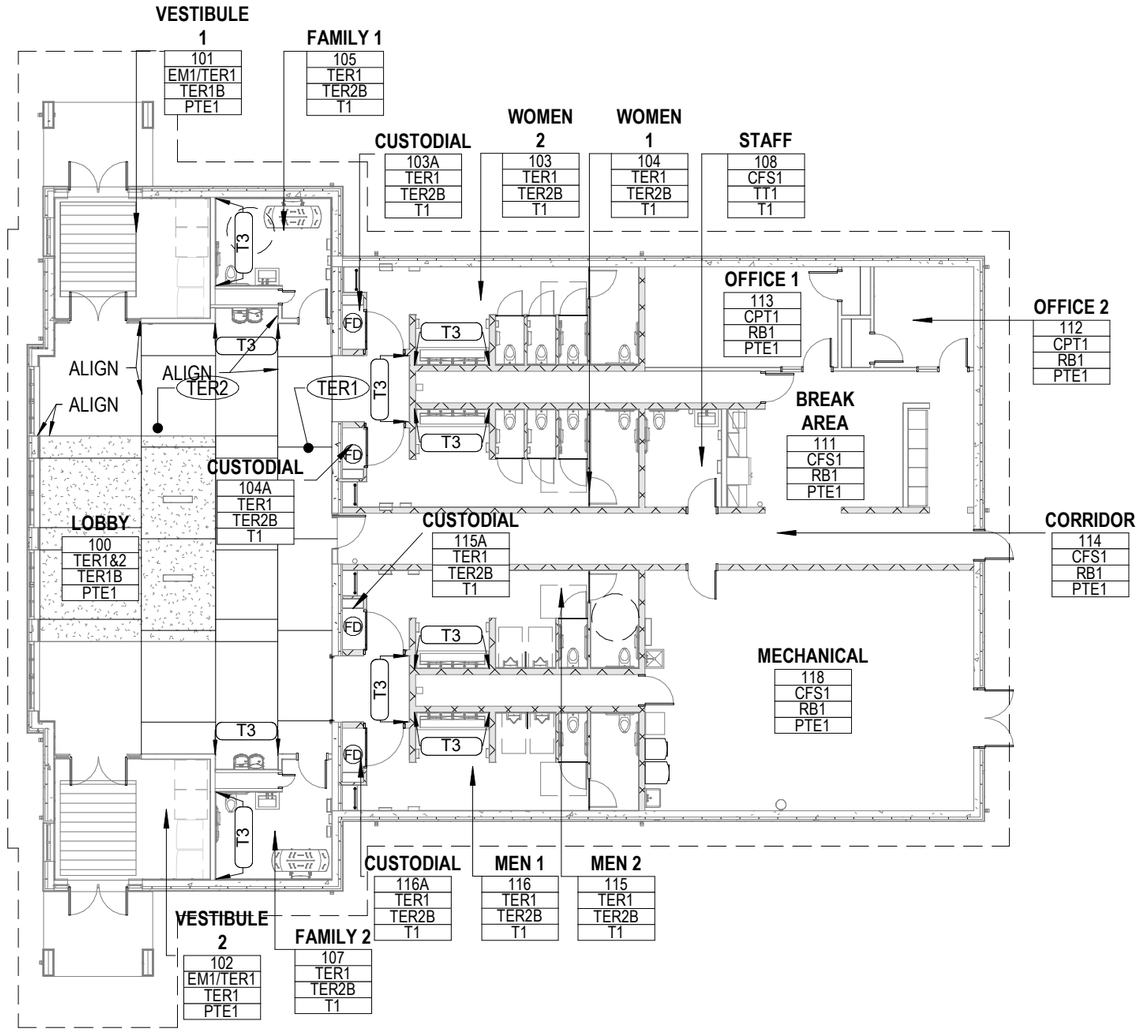
NOTE: REFER TO INTERIOR FINISH LEGEND ON SHEET I-001 FOR FINISH CODES AND DESCRIPTION OF MATERIALS.

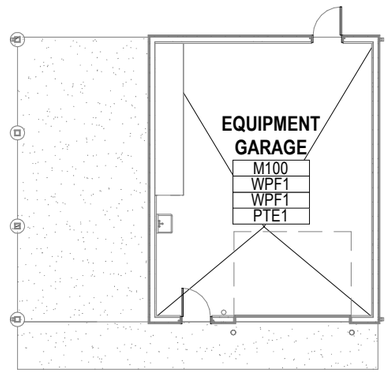
ROOM NAME
101
FLOOR
BASE
WALL

ROOM NUMBER
FLOOR FINISH
BASE FINISH
WALL FINISH

XXXX — WALL FINISH ACCENT

TER2





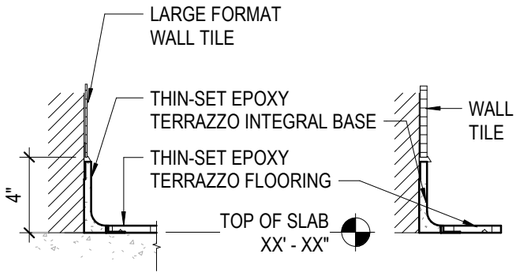
A1 GROUND LEVEL FINISH PLAN

1/16" = 1'-0"

A2 EQUIPMENT GARAGE FINISH PLAN

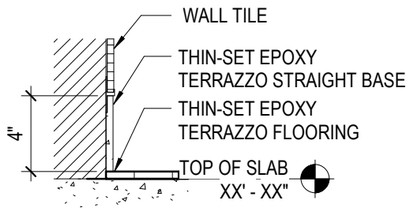
1/16" = 1'-0"

2



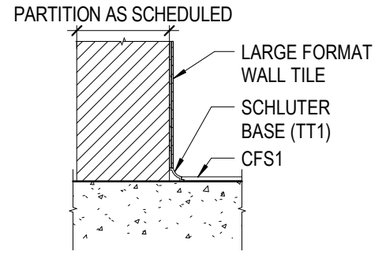
C1 INTEGRAL TERRAZZO BASE

1 1/2" = 1'-0"



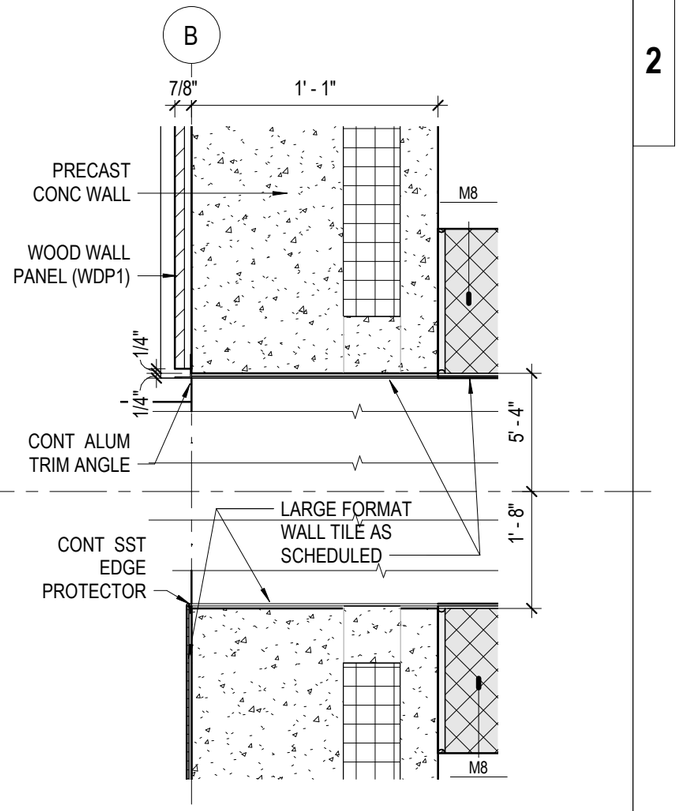
C2 PRECAST TERRAZZO BASE

1 1/2" = 1'-0"

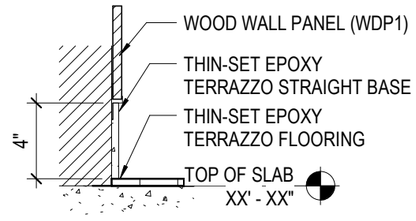


C3 SCHLUTER BASE

1 1/2" = 1'-0"

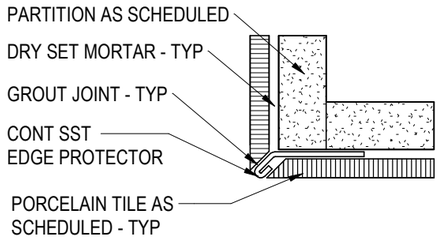


3



B1 TERRAZZO BASE @ WDP-1

1 1/2" = 1'-0"

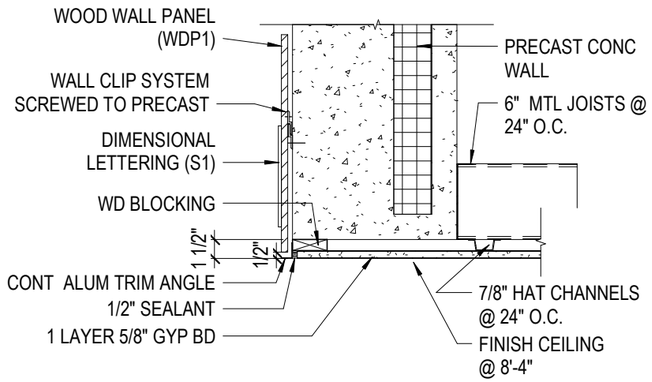


B2 CORNER @ WALL TILE

1 1/2" = 1'-0"

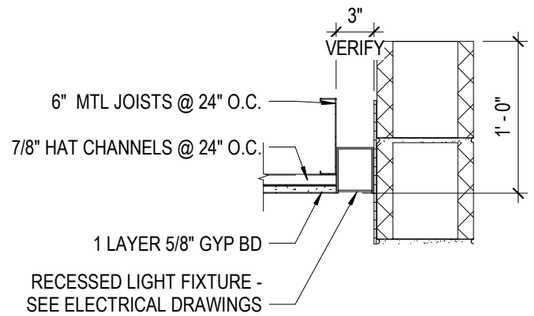
B3 WALL TRANSITIONS @ ALCOVE

1 1/2" = 1'-0"



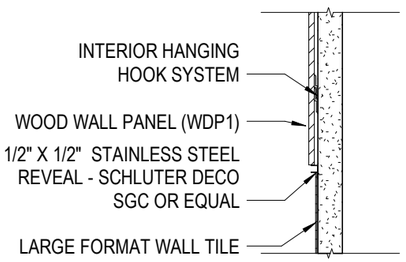
A1 WDP-1 @ SOFFIT

1" = 1'-0"



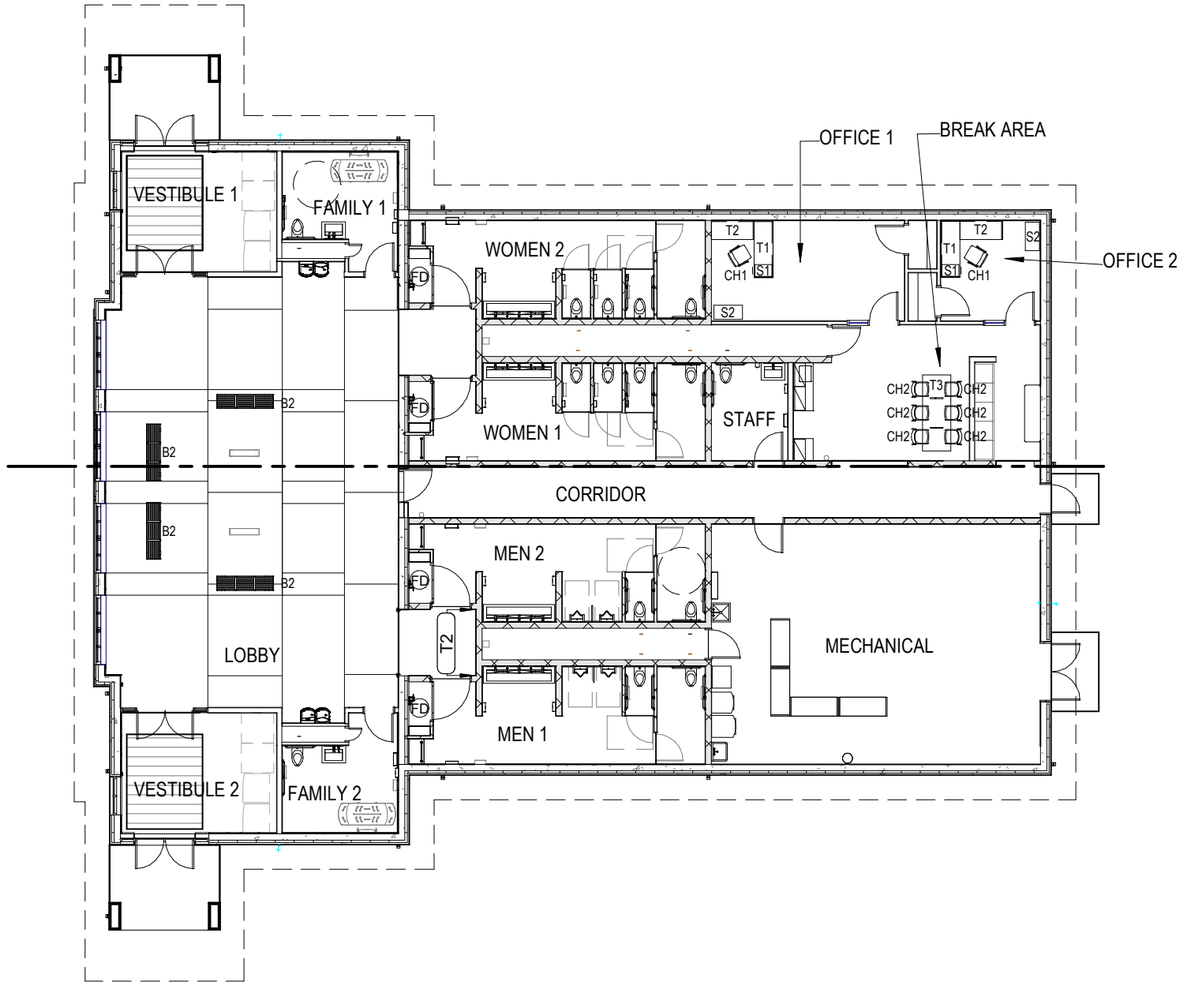
A2 SOFFIT @ ACCENT TILE WALL

1" = 1'-0"



A3 WOOD WALL PANEL TO WALL TILE

1" = 1'-0"



A1 MAIN BUILDING - FURNITURE PLAN

1/16" = 1'-0"

FURNITURE SCHEDULE

Tag	Product	Room	Comments	Qty
B2	FORMS AND SURFACES FLIGHT BENCH WITH BACKLESS	LOBBY		4
CH1	KI TORSION AIR TASK ARMCHAIR	(1) OFFICE 1, (1) OFFICE 2	KI TORSION AIR TASK SEATING, BLACK BASE, BLACK MESH BACK, UPHOLSTERY SEAT COLOR: TBD	2
CH2	KI STRIVE STACK CHAIR	BREAK AREA	KI STRIVE STACK SEATING, SLED BASE, ARMLESS, POLYPROPYLENE FRAME COLOR: TBD, SEAT AND BACK COLOR: XX	6
S1	KI 700 SERIES PEDESTAL	(1) OFFICE 1, (1) OFFICE 2	KI 700 PEDESTAL-FF, 15"W X 21-5/8"D X 27-7/8"H, UNIT COLOR: XX, XX PULL, LOCK, MODEL #: XX	2
S2	KI 700 SERIES STORAGE CABINET	(1) OFFICE 1, (1) OFFICE 2	KI 700 SERIES MULTIMEDIA STORAGE CABINET WITH 3 ADJUSTABLE SHELVES, 36"W X 18"D X 65-9/32"H, UNIT COLOR: XX, XX PULL, LOCK, MODEL #: XX	2
T1	KI 700 SERIES RECTANGULAR DESK	(1) OFFICE 1, (1) OFFICE 2	KI 700 SERIES DESK, 24"D X 72"W X 29"H, XX EDGE STYLE,COLOR: XX, LAMINATE COLOR: XX, EDGE COLOR: XX, GROMMET COLOR: XX, MODEL #: XX	2
T2	KI 700 SERIES RECTANGULAR DESK RETURN	(1) OFFICE 1, (1) OFFICE 2	KI 700 SERIES DESK RETURN, 24"D X 72"W X 29"H, EBT EDGE STYLE,COLOR: XX, LAMINATECOLOR: XX, EDGE COLOR: XX, GROMMET COLOR: XX, MODEL #: XX	2
T3	KI PORTICO RECTANGULAR TABLE	BREAK AREA	KI TORSION AIR TASK SEATING, BLACK BASE, BLACK MESH BACK, UPHOLSTERY SEAT COLOR: TBD	1

'XX' INDICATES SELECTION BY OWNER FROM MANUFACTURER'S FULL RANGE

2

2

STRUCTURAL NOTES

1. GENERAL
   A. ALL WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL CODES AND REGULATIONS.
   B. THESE CONTRACT DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE PROJECT MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATION AND SIZE OF PIPES, BLOCK OUTS, EQUIPMENT, DIMENSIONS, ETC. THAT ARE NOT INCLUDED.
   C. CONTRACTOR SHALL VERIFY THE SIZES, LOCATIONS, ELEVATIONS, AND DETAILS THAT AFFECT THE WORK AND INFORM THE OWNER AND ENGINEER OF ANY DISCREPANCIES IN DIMENSIONS, SIZES, LOCATIONS, AND CONDITIONS BEFORE PROCEEDING WITH THE WORK.
   D. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL TEMPORARY SUPPORTS, BRACING, AND SHALL MAINTAIN THE INTEGRITY AND STABILITY OF EXISTING AND NEW CONSTRUCTION FOR THE DURATION OF ALL CONSTRUCTION UNTIL PROJECT COMPLETION IS ACHIEVED.
2. APPLICABLE CODES AND STANDARDS
   A. 2015 INTERNATIONAL BUILDING CODE
   B. 2015 WISCONSIN BUILDING CODE
   C. ASCE 7-10 MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES
   D. ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
   E. ACI 530-13 BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES
   F. 2015 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION
   G. AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC)
   H. STRUCTURAL INSULATED PANEL ASSOCIATION (SIPA)
   I. AMERICAN INSTITUTE OF STEEL CONSTRUCTION, LRFD 14TH EDITION
   J. AMERICAN WELDING SOCIETY (AWS D1.4)
   K. INTERNATIONAL CODE COUNCIL (ICC)
   L. OSHA CFR 29, PART 1910

3. DESIGN CRITERIA
   A. THE FOLLOWING DESIGN LOADS AND CRITERIA APPLY TO ALL STRUCTURES UNLESS NOTED OTHERWISE.
      1. LIVE LOADS
         a. SLAB ON GRADE: 80 PSF
      2. WIND LOAD
         a. BASIC WIND SPEED: 115 MPH
         b. EXPOSURE CATEGORY: C
         c. IMPORTANCE FACTOR, Iw: 1.15
      3. SEISMIC LOAD
         a. RISK CATEGORY: II
         b. IMPORTANCE FACTOR: 1.0
         c. SPECTRAL RESPONSE ACCELERATION, SS: 0.058
         d. SPECTRAL RESPONCE ACCELERATION, S1: 0.036
         e. SITE CLASS: D
         f. SEISMIC DESIGN CATEGORY: A
      3. SEISMIC LOAD (CONT'D)
         g. SPECTRAL RESPONSE COEFFICIENT, SDS: 0.062
         h. SPECTRAL RESPONSE COEFFICIENT, SD1: 0.058
         i. DESIGN BASE SHEAR: V = 0.01 * WT
      4. SNOW LOADS
         a. GROUND SNOW LOAD, Pg: 35 PSF
         b. EXPOSURE FACTOR, Ce: 0.9
         c. IMPORTANCE FACTOR, Is: 1.0
         d. THERMAL FACTOR, Ct: 1.0

   B. THE FOLLOWING GEOTECHNICAL REPORT WAS DEVELOPED FOR THIS PROJECT AND IS THE BASIS OF THIS STRUCTURAL DESIGN.
      1. GEOTECHNICAL FIRM: GESTRA
      2. ADDRESS: IH-43, MANITOWOC COUNTY, WI
      3. PROJECT NUMBER: 22165-10
      4. REPORT DATE : JANUARY 3, 2023
      5. DESIGN CRITERIA
         a. FROST DEPTH: 4 FEET
         b. ALLOWABLE (NET) BEARING PRESSURE: 2,500 PSF

4. MATERIALS

A. CONCRETE	4,000 PSI @ 28 DAY
B. REINFORCEMENT	ASTM A615 GRADE 60
C. CONCRETE MASONRY UNIT (CMU)	
1. CONCRETE MASONRY UNIT	ASTM C90, GRADE N, TYPE I, 1,900 PSI MIN COMPRESSIVE STRENGTH
2. CORE REINFORCEMENT	ASTM A615 GRADE 60
3. JOINT REINFORCEMENT	TRUSS TYPE, #9 WIRE, ASTM A116, CL 3, GALV.
4. MORTAR	ASTM C270, TYPE S
5. GROUT	ASTM A476, 3,000 PSI COMP. STRENGTH
D. STEEL	
1. WIDE FLANGE & TEES	ASTM A992, GRADE 50
2. HOLLOW STRUCTURAL SECTION	ASTM A500, GRADE B (HSS)
3. STAINLESS STEEL	ASTM F593
4. ANGLES, CHANNELS & PLATES	ASTM A36
5. ANCHOR RODS	ASTM F1554 GRADE 55
6. POST INSTALLED ANCHOR	ACCORDANCE OF ICC REPORT
E. LUMBER	
1. DIMENSION LUMBER	DOUGLAS FIR OR SPF, GRADE 2 OR BETTER
2. ROOF SHEATING SYSTEM	STRUCTURAL INSULATION PANEL, PROPRIETY
3. LAMINATED VENEER LUMBER (LVL)	SOUTHERN PINE OR BETTER

5. CONSTRUCTION
   A. CONCRETE
      1. BAR SPLICES AND 90 DEGREE HOOKS SHALL BE AS SHOWN UNLESS NOTED:

SIZE	BAR (INCH)	BAR* (INCH)	HOOK (INCH)
#3	21	28	6
#4	28	37	8
#5	36	46	10
#6	42	55	12
#7	62	81	14

* DENOTE TOP BAR WITH MORE THAN 12" OF CONCRETE CAST BELOW

5. CONSTRUCTION (CONT'D):
      2. REINFORCING BARS SHALL HAVE THE FOLLOWING CLEAR COVER UNLESS NOTED
         a. CONCRETE CAST AGAINST EARTH 3"
         b. ALL OTHER CONCRETE 2"
      3. PROVIDE CONSTRUCTION JOINT @ 30'-0" OC MAX OR AS APPROVED BY ENGINEER.
      4. PROVIDE ADD'L MATCHING REINFORCEMENT (DIAGONAL) AT RE-ENTRANT CORNERS.

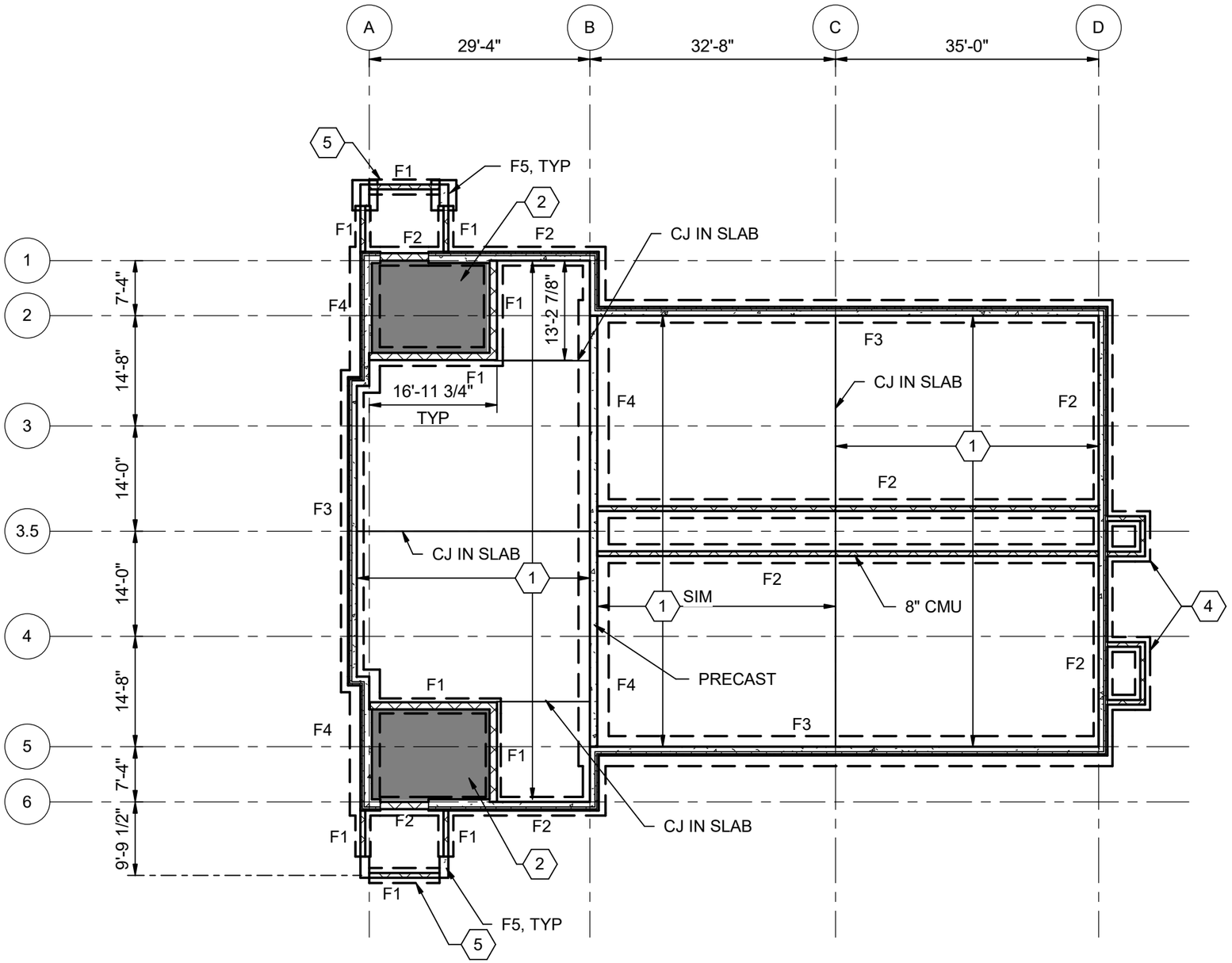
   B. MASONRY
      1. CONCRETE BLOCK SHALL BE LAID IN RUNNING BOND.
      2. PLACE JOINT REINFORCEMENT IN EVERY OTHER COURSE.
      3. ALL JOINTS SHALL BE CONCAVE TOOLED JOINTS.
      4. PROVIDE BOND BEAM AT TOP OF ALL WALLS. (1) #5 X CONT.

   C. LUMBER
      1. ALL SIZES SHOWN ON PLANS ARE NOMINAL SIZES
      2. ALL DIAPHRAGM NAILING SCHEDULES ARE SHOWN ON PLANS
      3. ALL SILL PLATES SHALL BE TREATED LUMBER
      4. WOOD-CANT SHALL BE:
         a. TREATED
         b. ANCHORED WITH RECESSED COUNTERSUNK HOLES PARALLEL TO CONNECTING SURFACE.
      5. CONNECTORS SHALL BE SIMPSON OR EQUAL. FOLLOW ALL MANUFACTURER'S REQUIREMENTS.

6. SPECIAL INSPECTIONS
   A. SPECIAL INSPECTIONS ARE REQUIRED IN ACCORDANCE WITH CHAPTER 1 AND 17 OF THE IBC. THE OWNER IS RESPONSIBLE FOR HIRING SPECIAL INSPECTORS FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE FOR THESE INSPECTIONS IN HIS CONSTRUCTION SCHEDULE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. SPECIAL INSPECTOR SHALL PROVIDE QUALIFICATIONS AND GENERAL PROCESS TO EOR FOR REVIEW.
   B. IN ACCORDANCE WITH CHAPTER 17 OF THE IBC, TESTING AND INSPECTION SHALL BE PERFORMED PER TABLE SHOWN BELOW.
   C. ANY SITE VISITS PERFORMED BY THE ENGINEER DURING KEY POINTS OF CONSTRUCTION ARE CONSIDERED FIELD OBSERVATIONS, NOT SPECIAL INSPECTIONS, AND THEREFORE DO NOT FULFILL THE SPECIAL INSPECTION REQUIREMENTS AS OUTLINED BELOW.

REQUIRED TESTING AND INSPECTIONS

DESCRIPTION	TESTING	INSPECTION	
SOILS	YES	YES	
CONCRETE	YES	YES	
REINFORCEMENT	NO	YES	
BOLTS INSTALLED IN CONCRETE	NO	YES	UNLESS VISUAL FAILURE
WELDING	NO	YES	UNLESS VISUAL FAILURE
MASONRY & GROUT	YES	YES	
LVL LUMBER	NO	YES	PERIODIC INSPECTION DURING INSTALLATION OF ANCHORAGE TO SUPPORTING STRUCTURE
WOOD TRUSSES	NO	YES	PERIODIC INSPECTION DURING INSTALLATION OF ANCHORAGE TO SUPPORTING STRUCTURE
DIAPHRAGM	NO	YES	INCLUDES WOOD-CANT CONNECTION



A1 FOUNDATION PLAN

1/16" = 1'-0"

GENERAL NOTES:

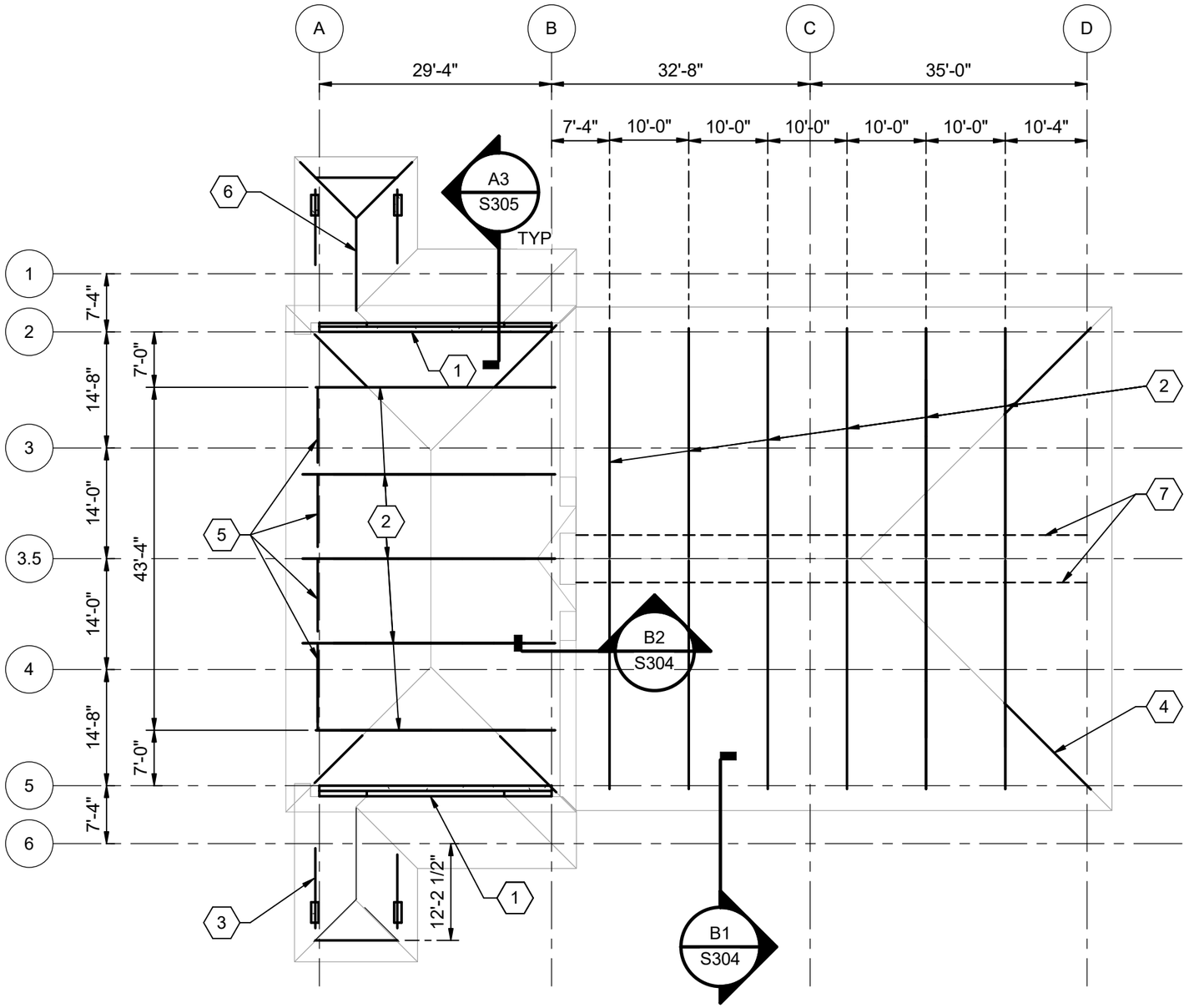
1. SEE SHEET S001 FOR STRUCTURAL NOTES.
2. SEE SHEET S500 SERIES FOR STANDARD DETAILS.
3. MARK "F-X" INDICATES FOOTING TYPE. SEE FOOTING SCHEDULE.
   A. PROVIDE DETAILS A1 - A3/S301.
   B. PROVIDE DETAIL B2/S301 FOR ALL NON-BEARING CMU INTERIOR WALLS - SEE ARCH.
4. TOP OF ALL FOOTINGS EL. -4'-0" UNO.
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.



A1 ROOF FRAMING PLAN

1/16" = 1'-0"

GENERAL NOTES:

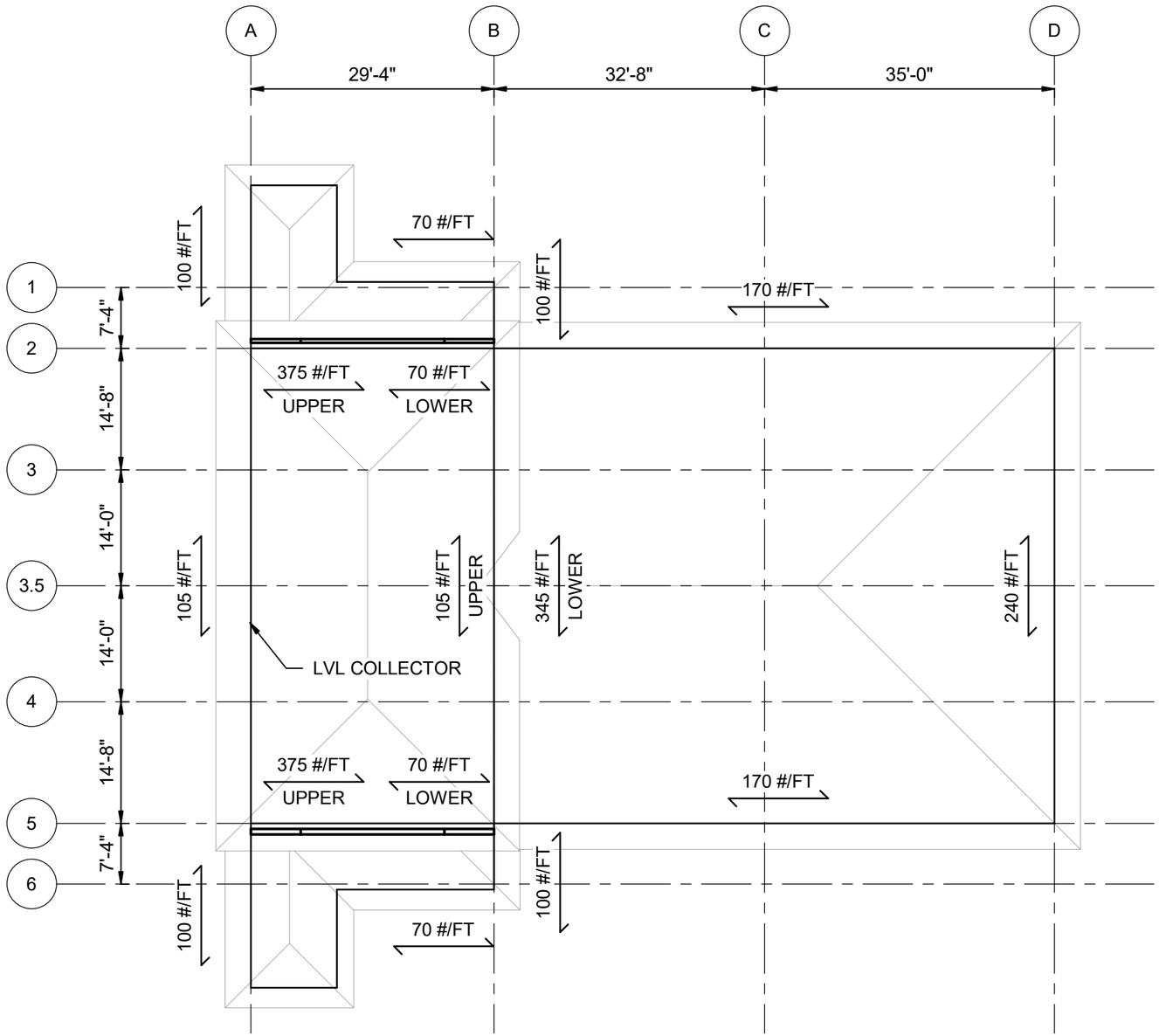
1. ROOF SYSTEM IS "STRUCTURAL INSULATED PANEL" (SIP), PROPRIETARY.
2. FASTEN STRUCTURAL INSULATED PANEL (SIP) TO ALL TRUSSES AND TREATED WOOD-CANT AS INDICATED BY SIP DESIGNER. SEE DIAPHRAGM PLAN.

PLAN KEYNOTES

1. SEE SPANDREL ELEVATION A1/S306 FOR ROOF SUPPORT OF LOWER LEVEL.
2. (3) PLY WOOD TRUSS W/ 8.5" HEEL HEIGHT. PROVIDE SECTION A1/S304 EACH END. SEE ELEVATION B1/S306 TYP PRECAST BEARING WALLS.
3. PROVIDE LVL 3-1/2" x 9-1/4" MINIMUM, SINGLE BEVEL, TYPICAL 6 LOCATIONS. PROVIDE SIMPSON HHRC OR EQUAL. SEE DETAILS A1 & A3/S307 FOR CONNECTIONS AT PRECAST WALL AND COLUMNS.
4. LVL 3-1/2" X 9-1/4" MINIMUM, DOUBLE BEVEL TYP 6 LOCATIONS. SEE DETAIL B/S307 AND SIMILAR TO SIMPSON HHRC OR EQUAL FOR CONNECTIONS.
5. LVL 3-1/2" x FITTED SINGLE BEVEL MINIMUM, TYP 4 LOCATIONS. SEE DETAIL B1/S307 FOR CONNECTION AT PRECAST WALL. PROVIDE SIMPSON HANGERS OR EQUAL AT WOOD TRUSSES.
6. PROVIDE (1) LVL 5-1/4" x 1'-2" RIDGE BEAM & (2) 3-1/2" x 9-1/4" DOUBLE BEVELED FRAMES. TYPICAL TWO LOCATIONS. SEE DETAIL A2/S307 FOR CONNECTION AT SPANDREL BEAM. PROVIDE SIMPSON HHRC OR EQUAL AT APEX.
7. PROVIDE TRUSS BEARING SECTION A3/S304 @ CMU. SEE DETAIL A2/S502 @ 8'-0" OPENING. SEE ARCH.

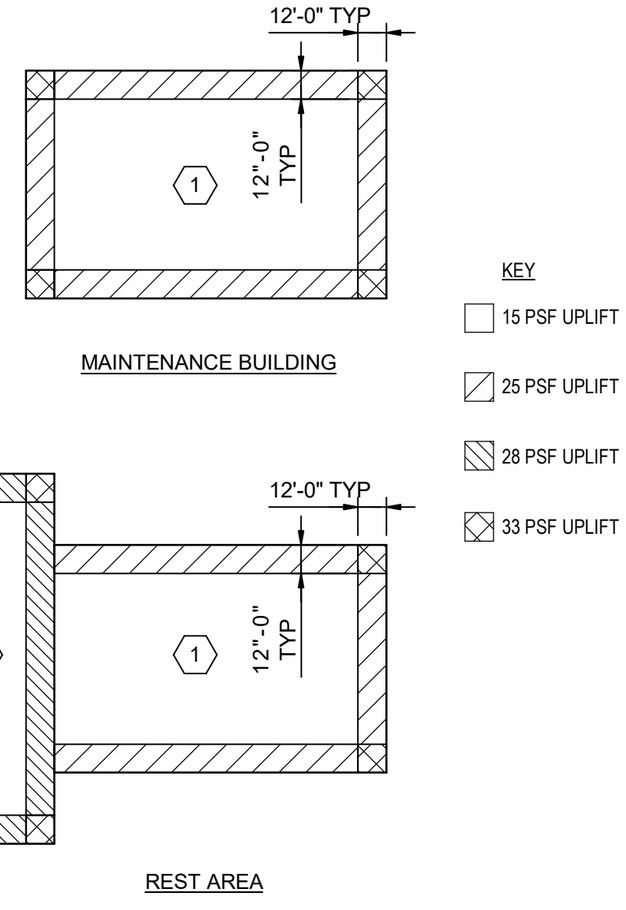
GENERAL NOTES:

1. LOWER ROOF LEVEL. ROOF DESIGNER SHALL USE SAME ROOF PRESSURES FOR MAINTENANCE BUILDING.



A1 ROOF DIAPHRAGM FORCES

ALL FORCES ARE LRFD



A2 WIND UPLIFT PLANS - ULTIMATE

1/32" = 1'-0"

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	ROOF DIAPHRAM & WIND FORCES	SHEET S11[illegible] 108	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/20/2024 12:07:28 AM PLOT BY : PLOT NAME : PLOT SCALE : As indicated

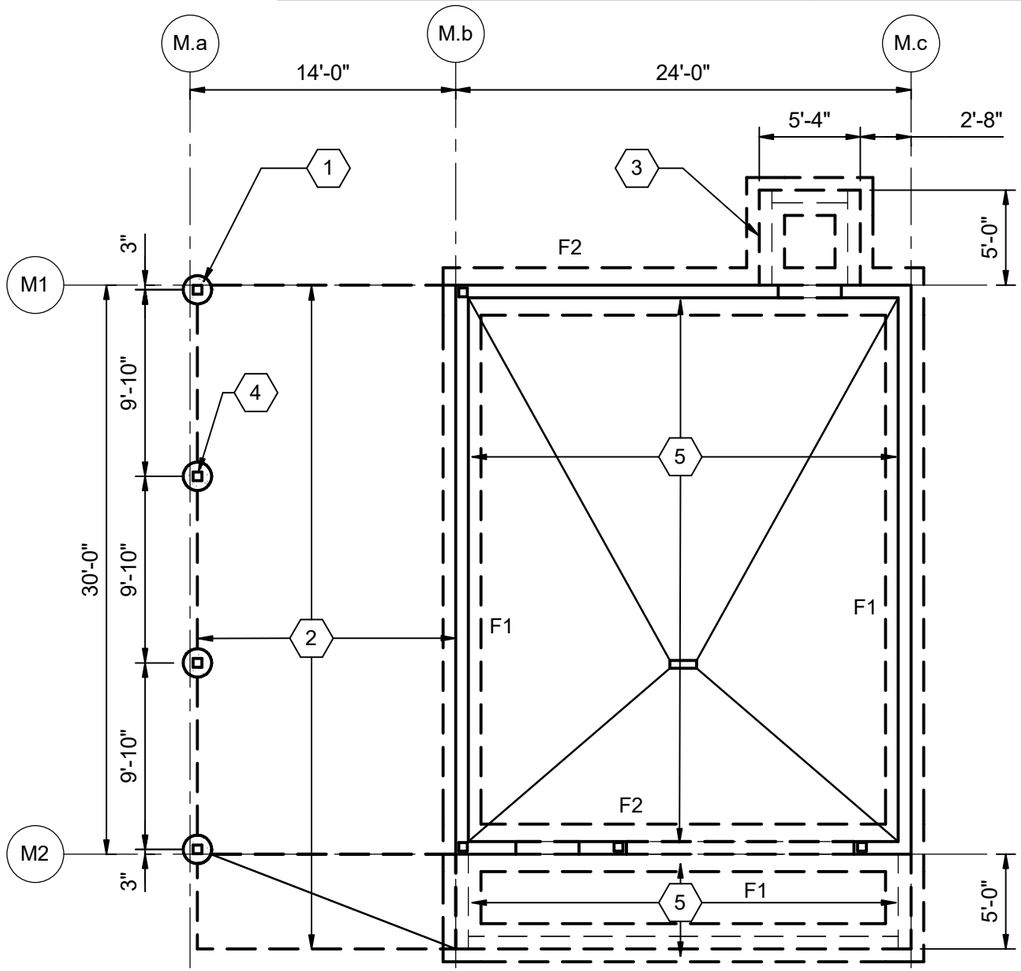
GENERAL NOTES:

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.

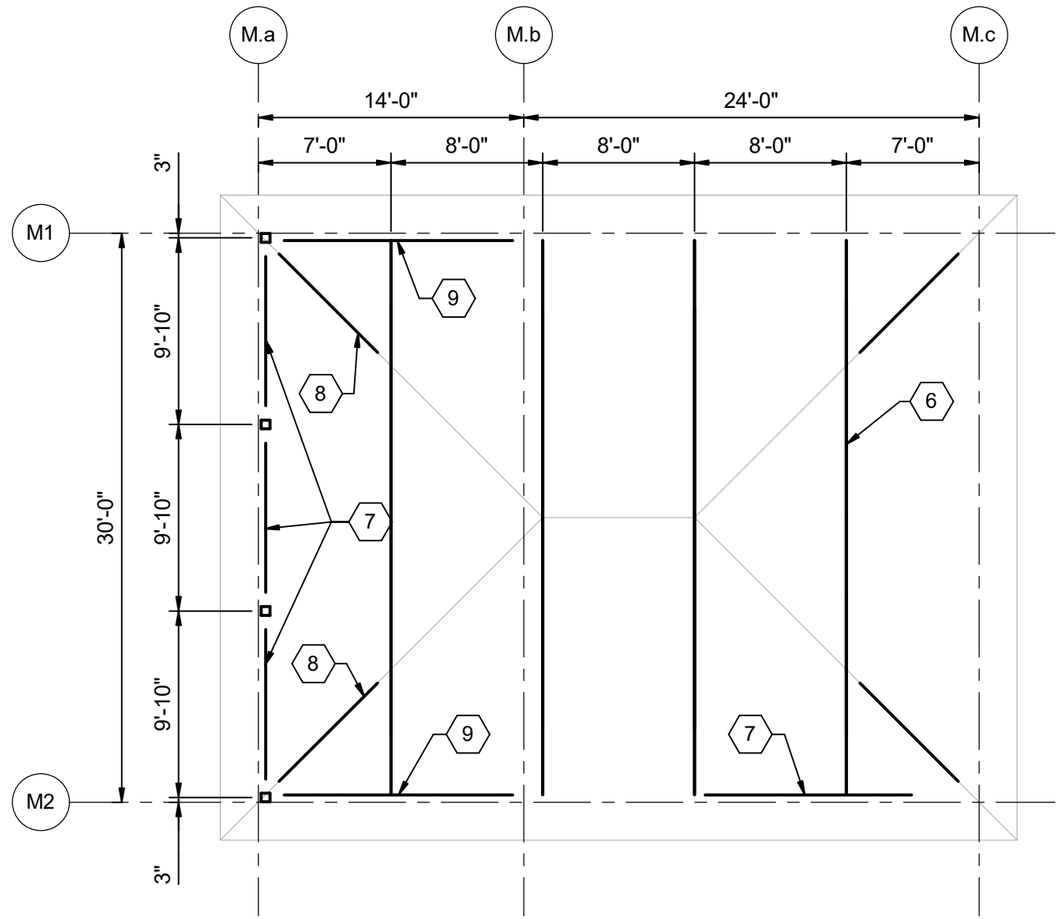
PLAN KEYNOTES

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 6" CONCRETE SLAB 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.

2

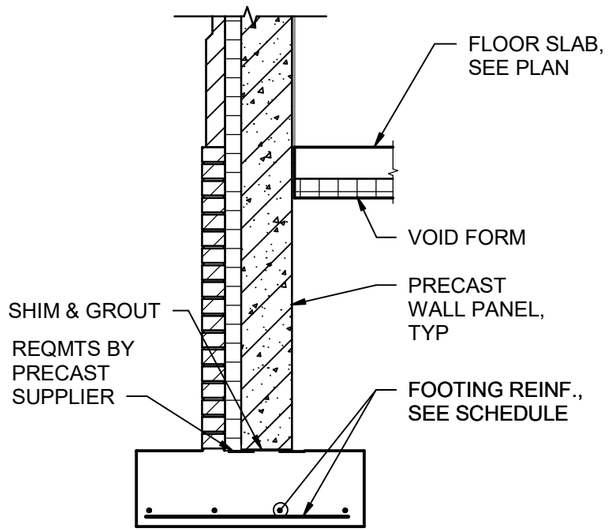


A1 FOUNDATION PLAN
1/8" = 1'-0"

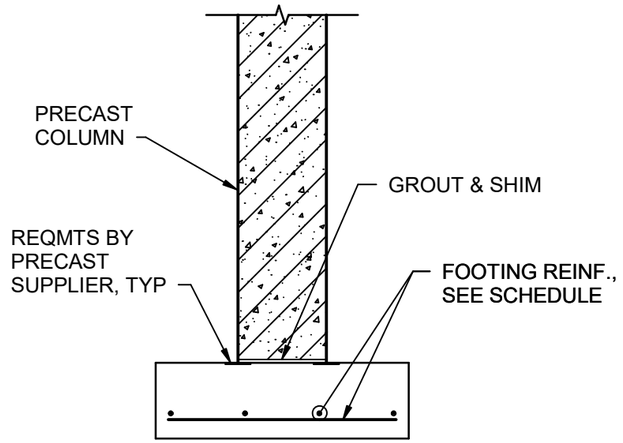


A2 ROOF FRAMING PLAN
1/8" = 1'-0"

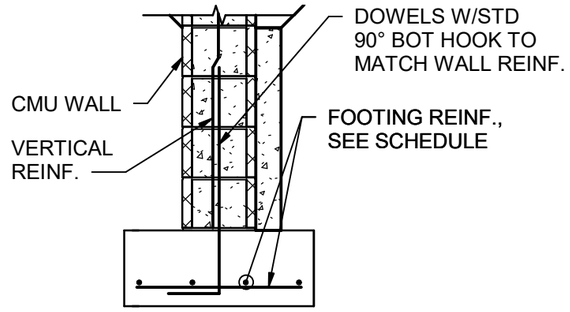
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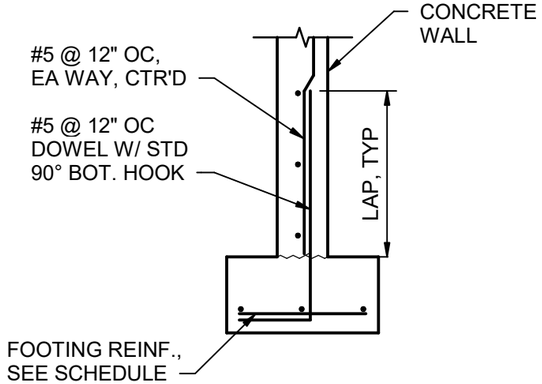
A1 SECTION
1/2" = 1'-0"



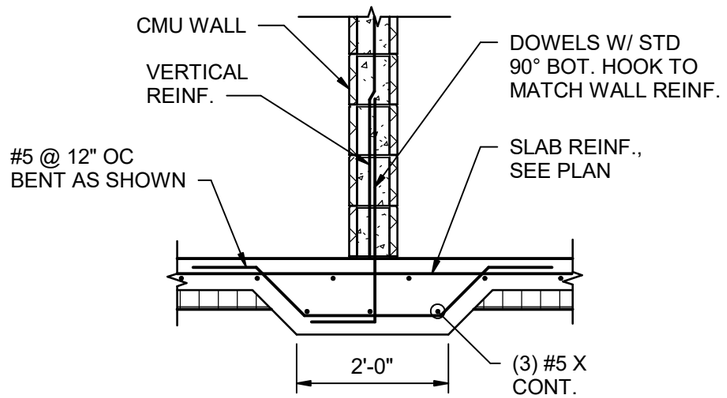
A2 SECTION
1/2" = 1'-0"



A3 SECTION
1/2" = 1'-0"

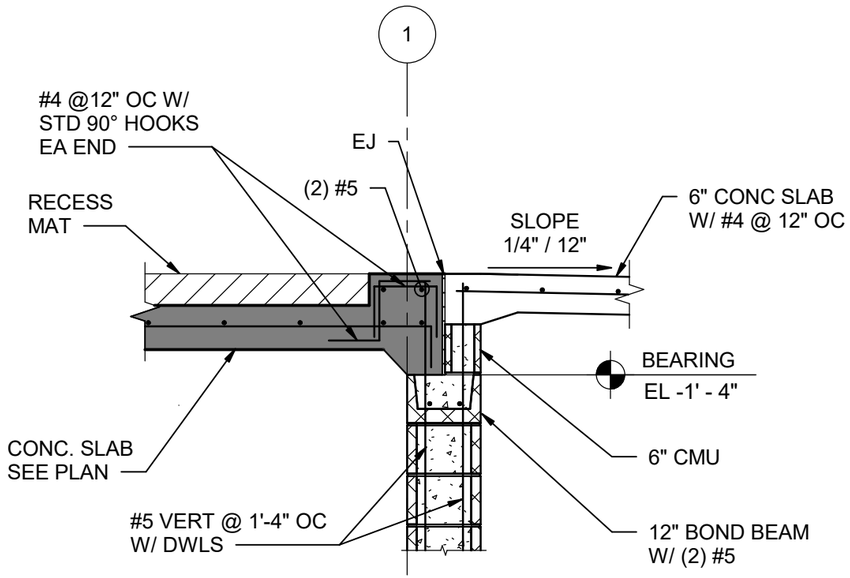


B1 SECTION
1/2" = 1'-0"



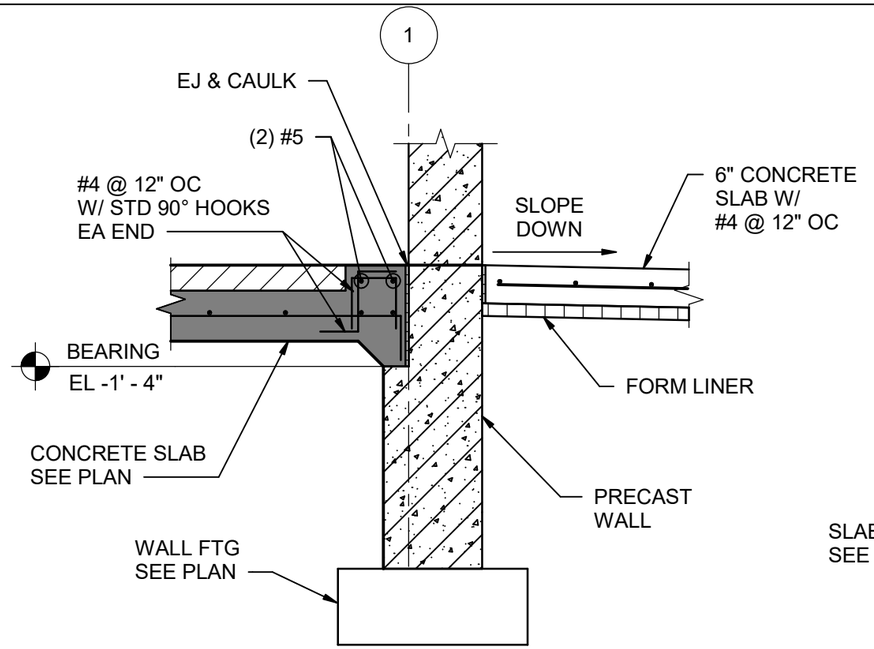
B2 SECTION
1/2" = 1'-0"

2

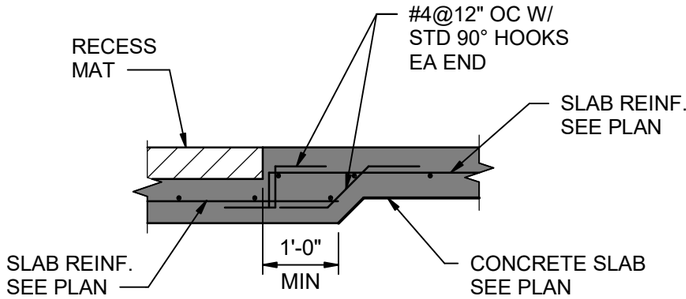


NOTE:
DOOR JAMB NOT SHOWN FOR CLARITY.

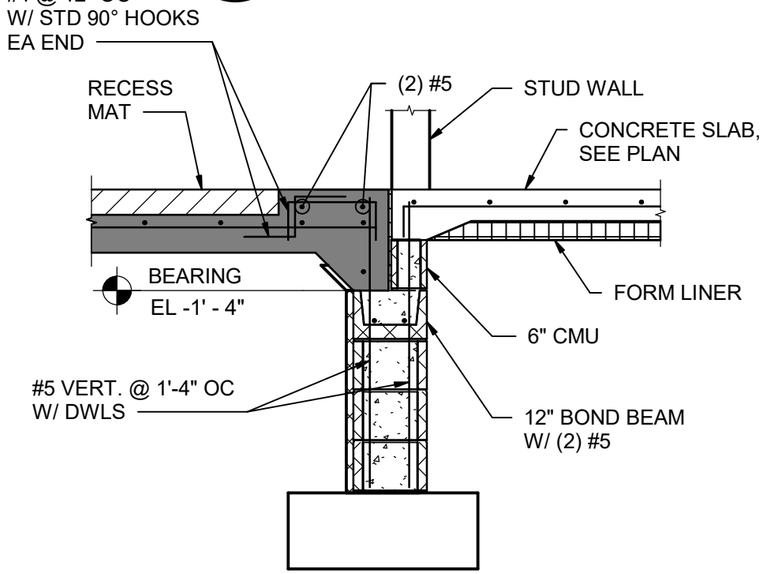
A1 SECTION
1/2" = 1'-0"



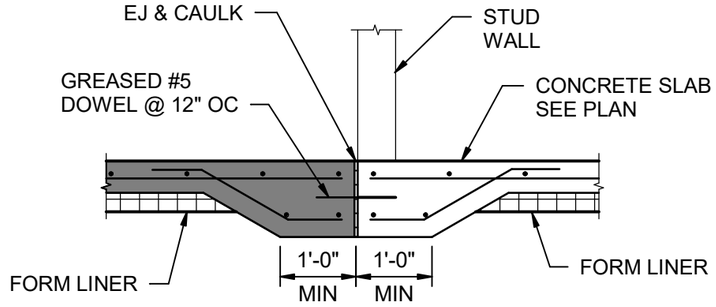
A2 SECTION
1/2" = 1'-0"



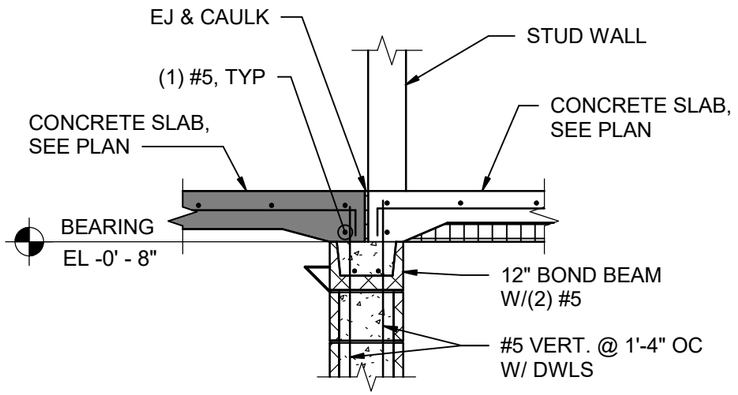
A3 SECTION
1/2" = 1'-0"



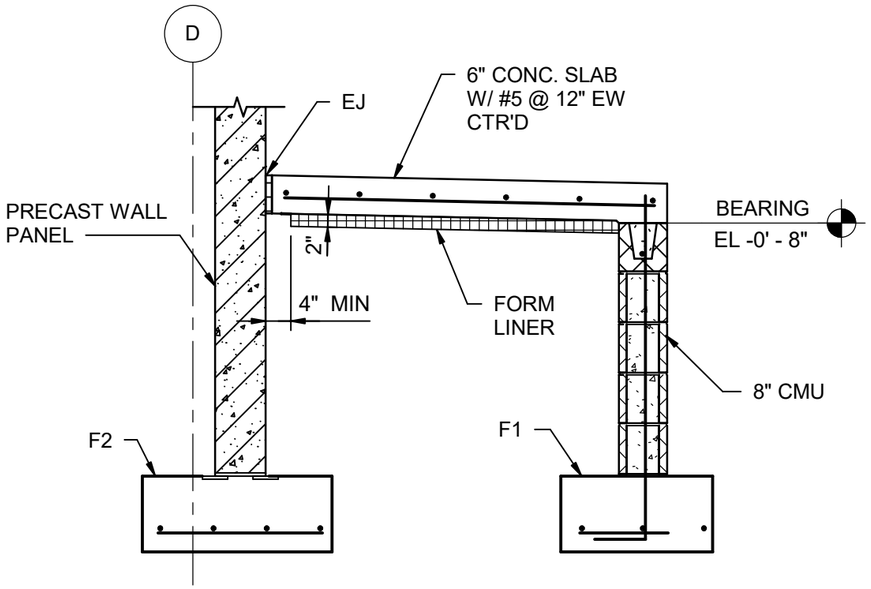
B1 SECTION
1/2" = 1'-0"



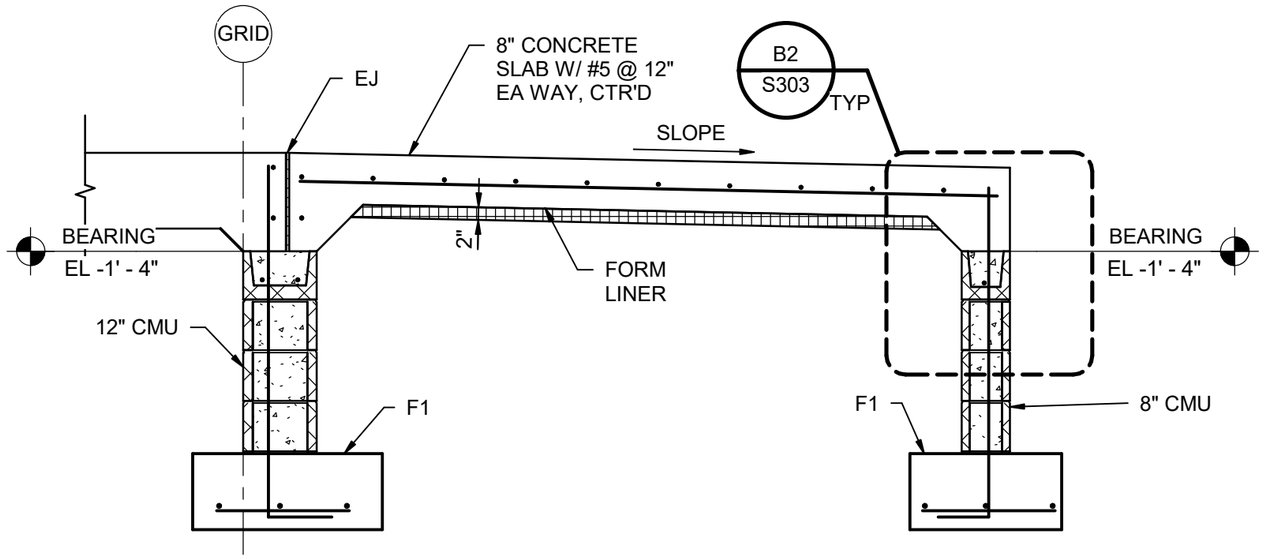
B2 SECTION
1/2" = 1'-0"



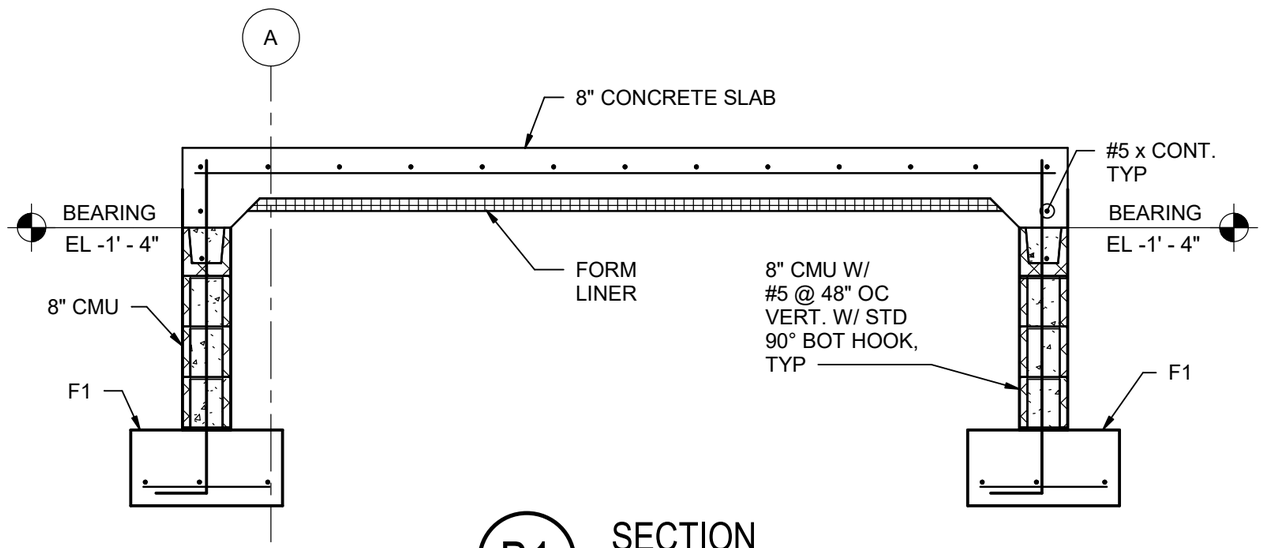
B3 SECTION
1/2" = 1'-0"



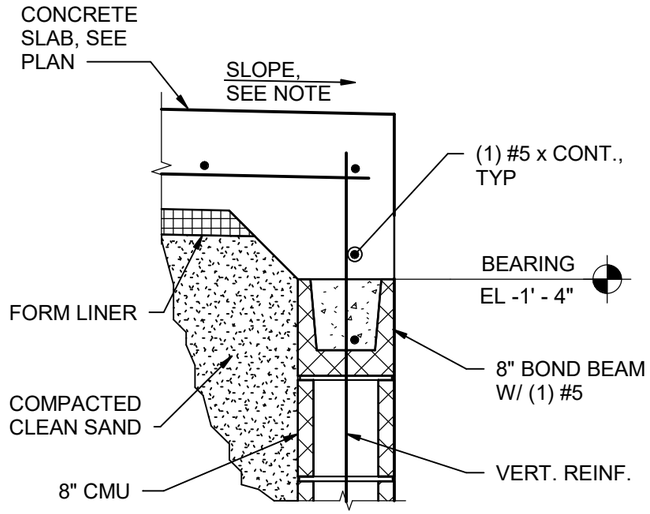
A1 SECTION
1/2" = 1'-0"



A2 SECTION
1/2" = 1'-0"



B1 SECTION
1/2" = 1'-0"



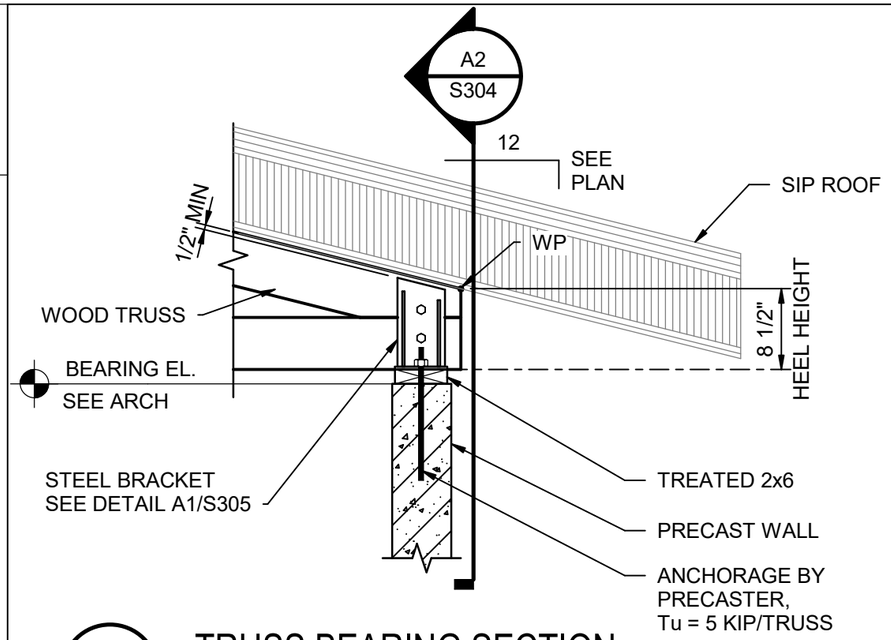
NOTE:
SEE ARCH FOR SLOPING REQUIREMENTS.

B2 DETAIL
1" = 1'-0"

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	STRUCTURAL SECTIONS	SHEET S303	E

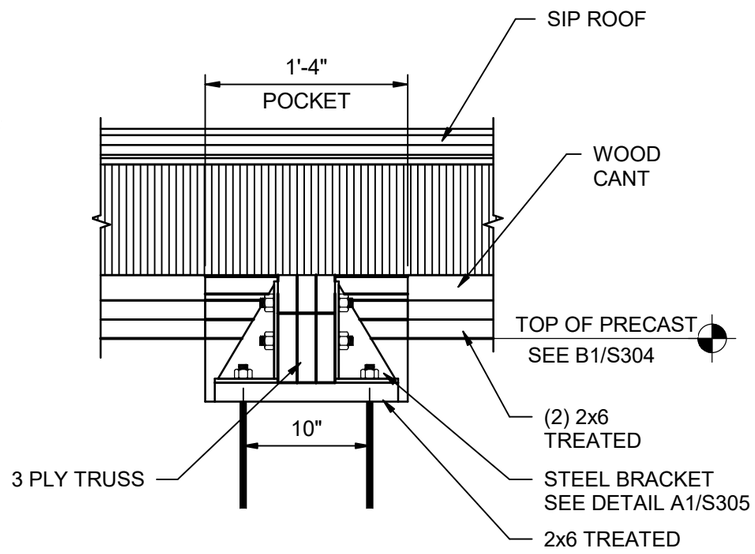
FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/20/2024 12:07:30 AM PLOT BY : PLOT NAME : PLOT SCALE : As indicated

2



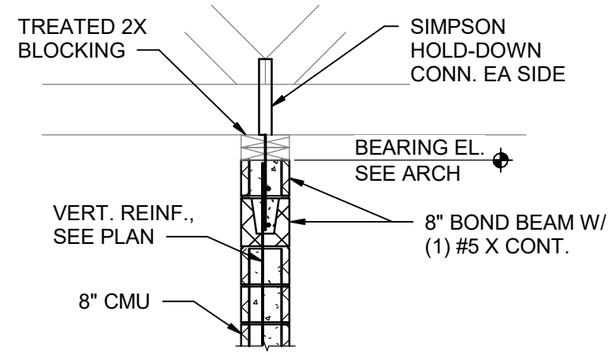
A1 TRUSS BEARING SECTION

3/4" = 1'-0"



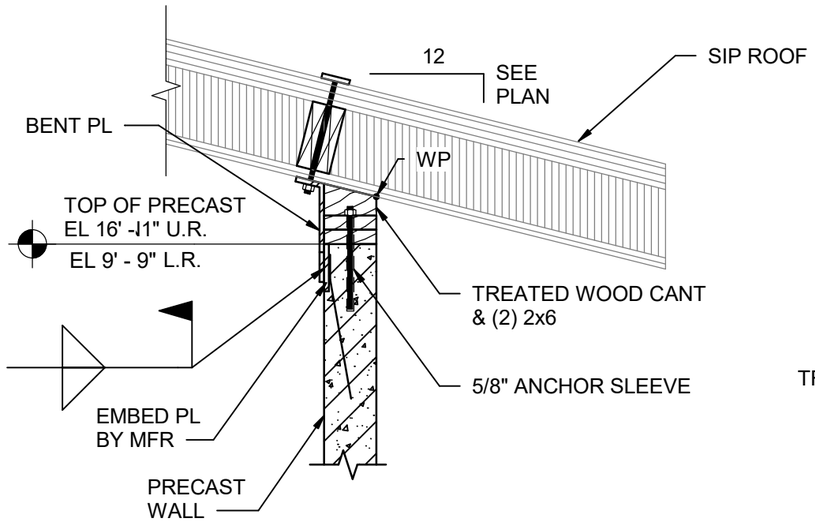
A2 SECTION

1" = 1'-0"



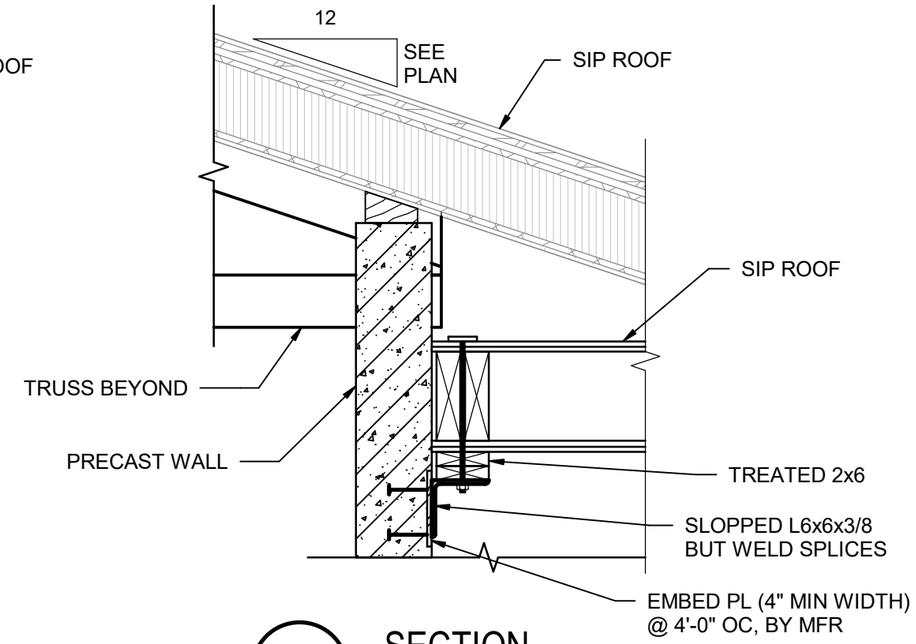
A3 SECTION

1/2" = 1'-0"



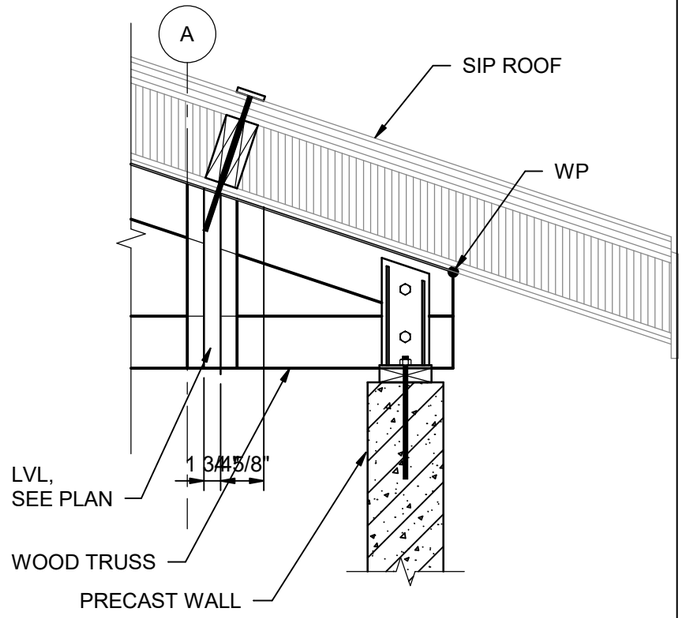
B1 SECTION

3/4" = 1'-0"



B2 SECTION

3/4" = 1'-0"



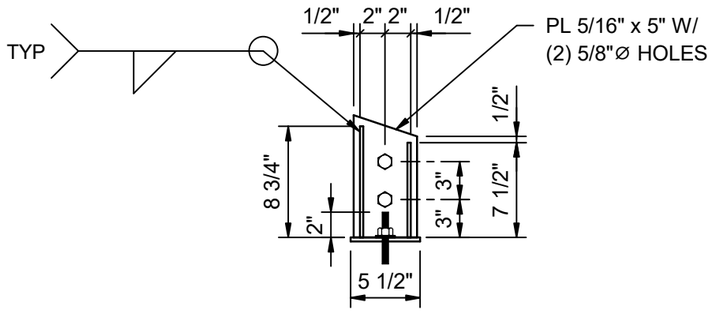
B3 SECTION

3/4" = 1'-0"

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	STRUCTURAL SECTIONS	SHEET S304

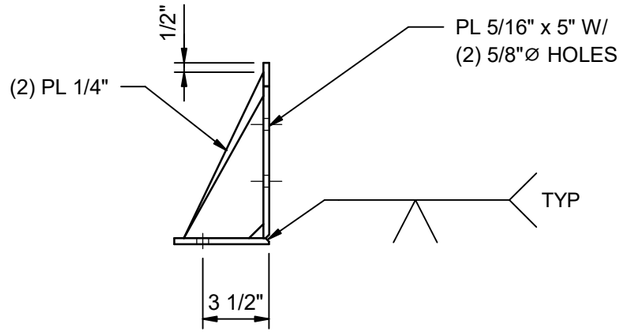
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FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/20/2024 12:07:31 AM PLOT BY : PLOT NAME : PLOT SCALE : As indicated

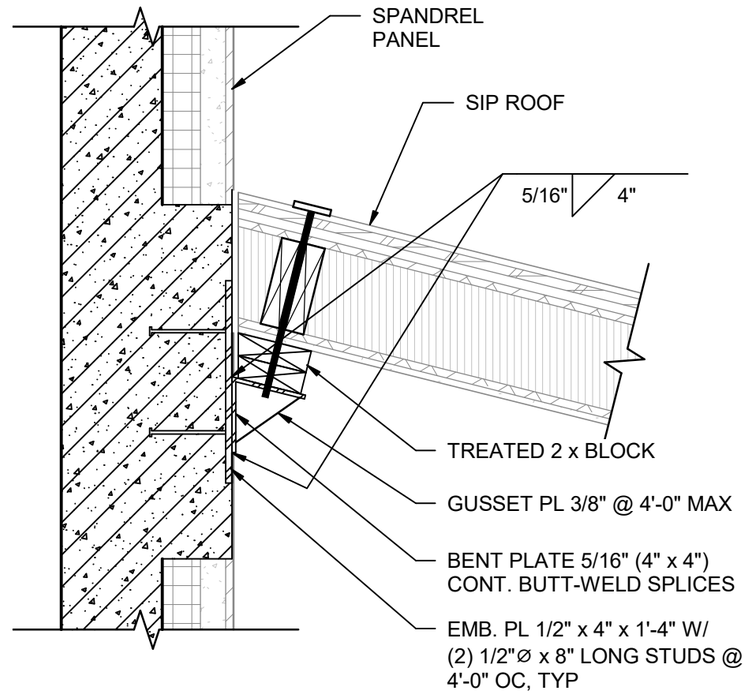


NOTE: CONTRACTOR SHALL VERIFY ALL TRUSS' GEOMETRY PRIOR TO STARTING FABRICATION OF THESE BRACKETS.

A1 DETAIL
1" = 1'-0"



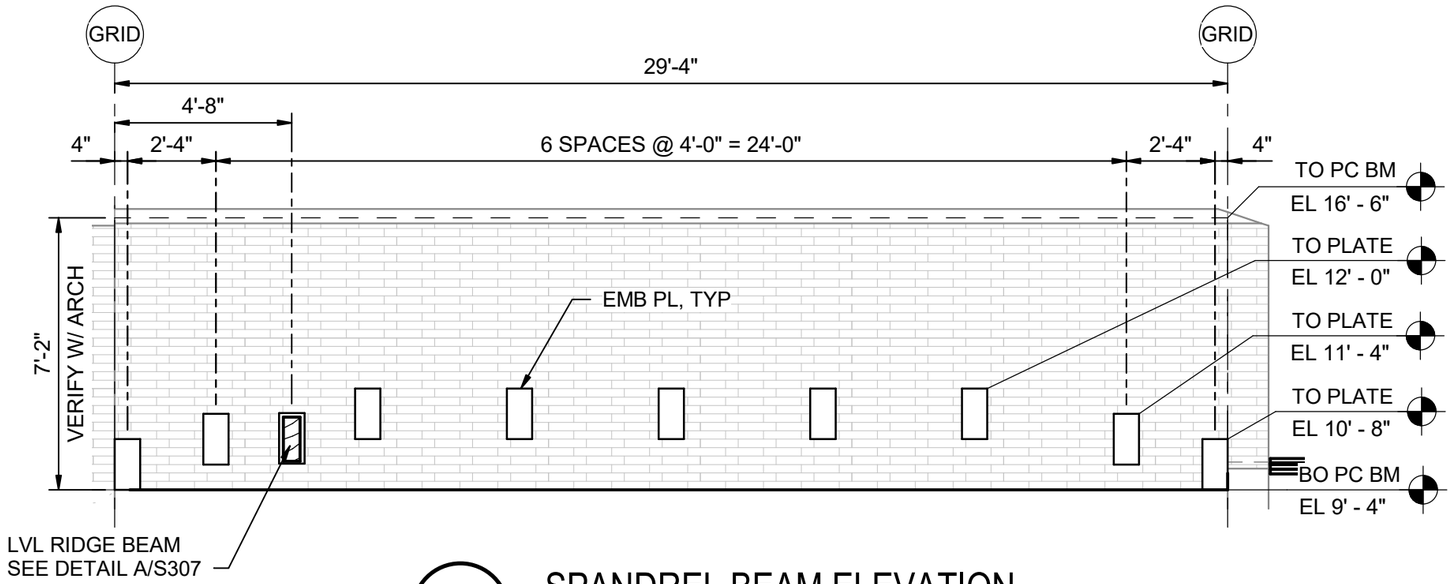
A2 SECTION
1 1/2" = 1'-0"



A3 SECTION
1" = 1'-0"

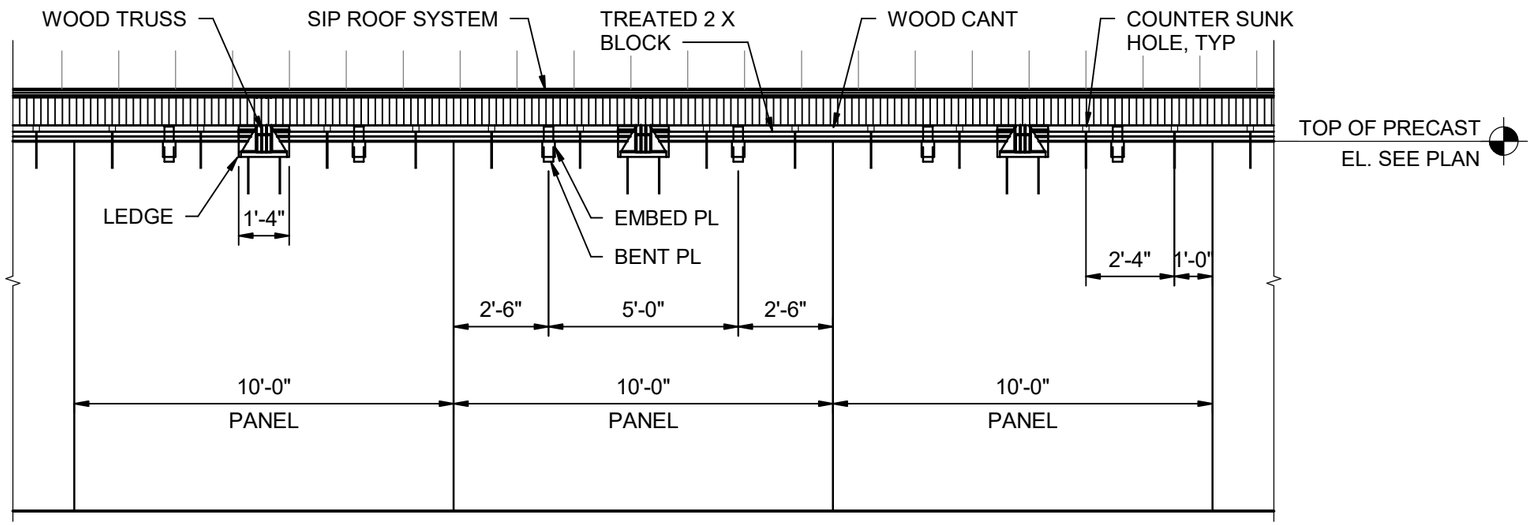
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2



A1 SPANDREL BEAM ELEVATION

1/4" = 1'-0"

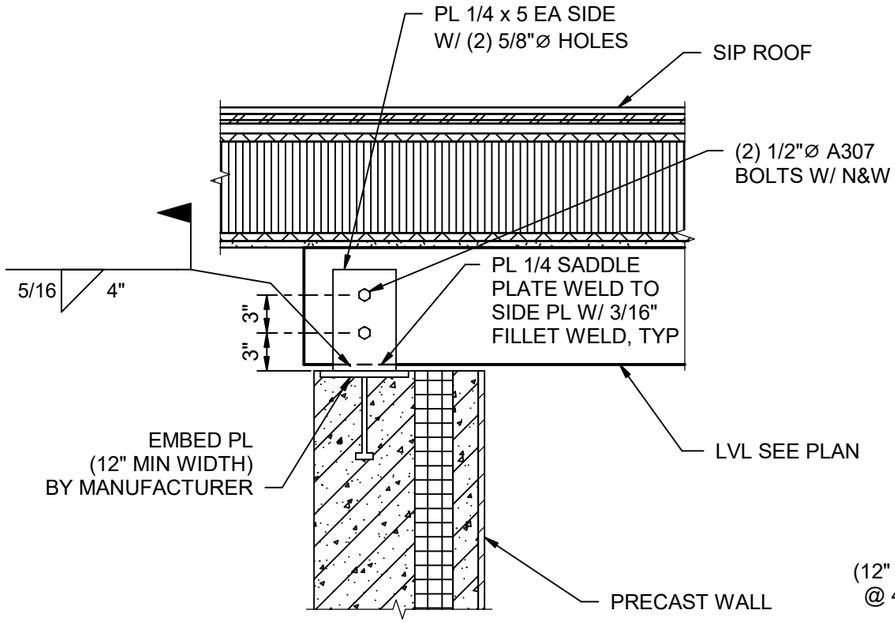


B1 WALL ELEVATION

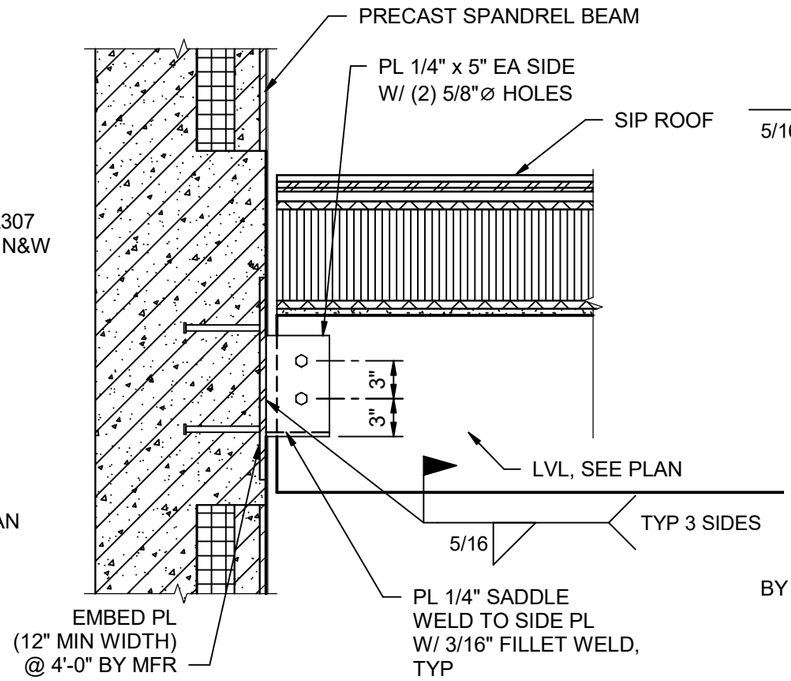
1/4" = 1'-0"

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	STRUCTURAL SECTION	SHEET S30[illegible]	E

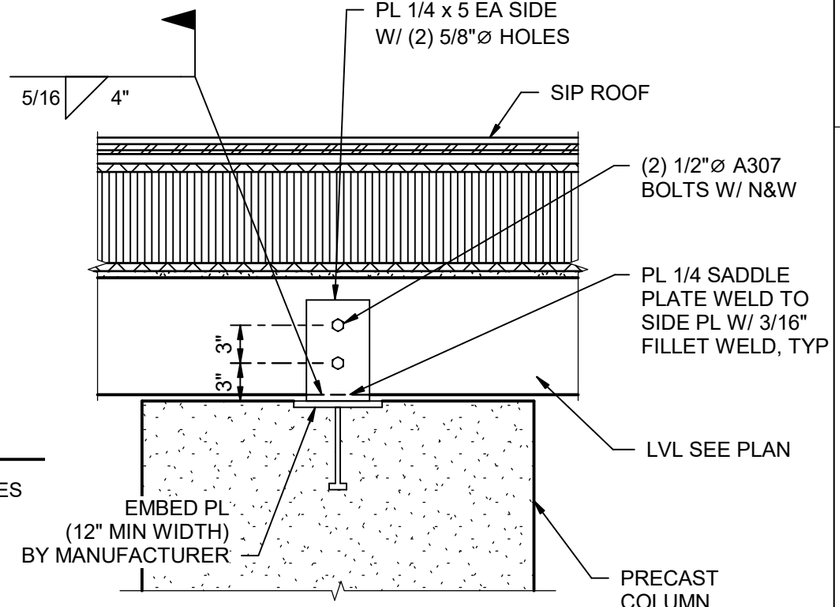
FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/20/2024 12:07:31 AM PLOT BY : PLOT NAME : PLOT SCALE : 1/4" = 1'-0"



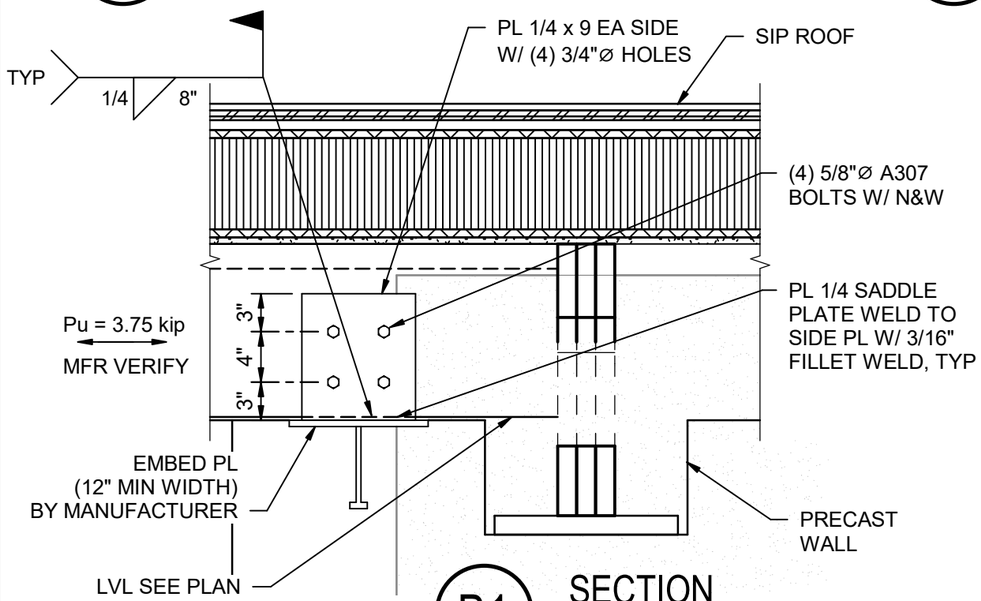
A1 SECTION
1" = 1'-0"



A2 SECTION
1" = 1'-0"

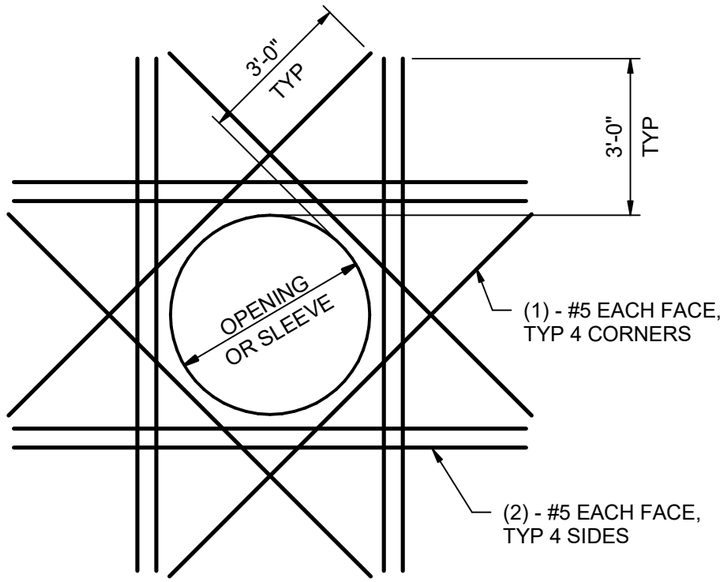


A3 SECTION
1" = 1'-0"



B1 SECTION
1" = 1'-0"

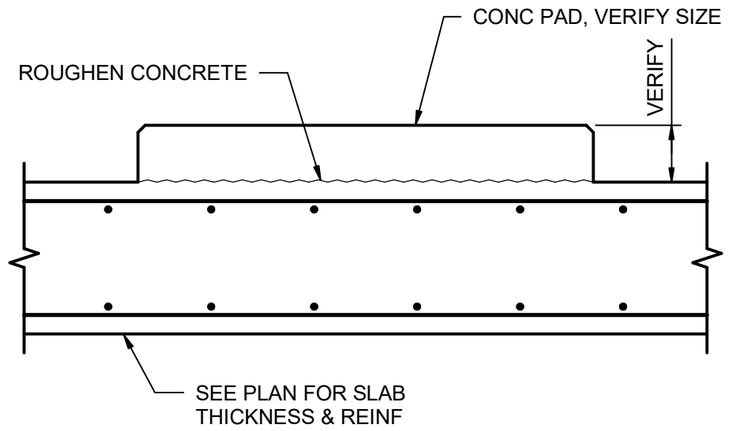
2



A1 REINFORCING AROUND OPENINGS

NTS

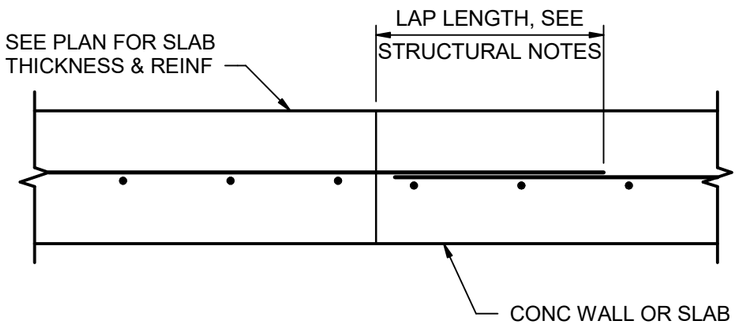
NOTE: SQUARE OPENINGS SIMILAR.



NOTE:
COORDINATE WITH MECH FOR SIZE AND LOCATION. REFERENCE STRUCTURAL NOTES FOR DOWELS INSTALLATION.

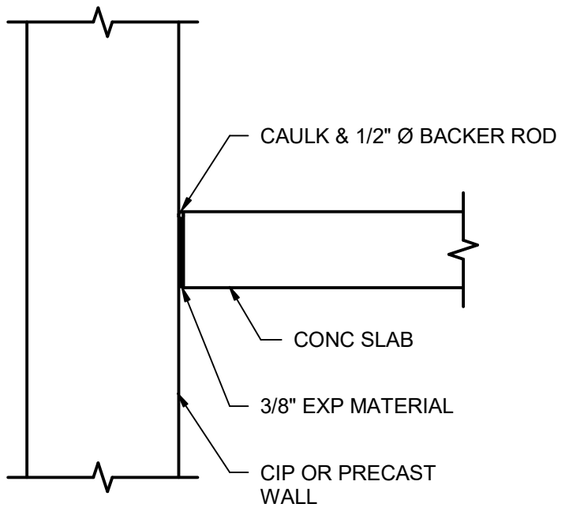
A2 UNREINFORCED PAD DETAIL

NTS



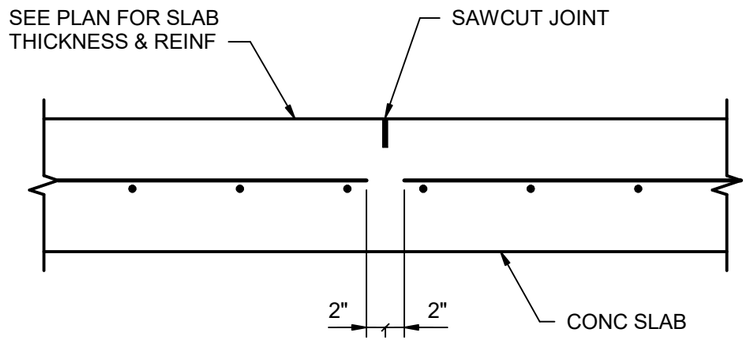
B1 CONSTRUCTION JOINT

NTS



B2 EXPANSION JOINT

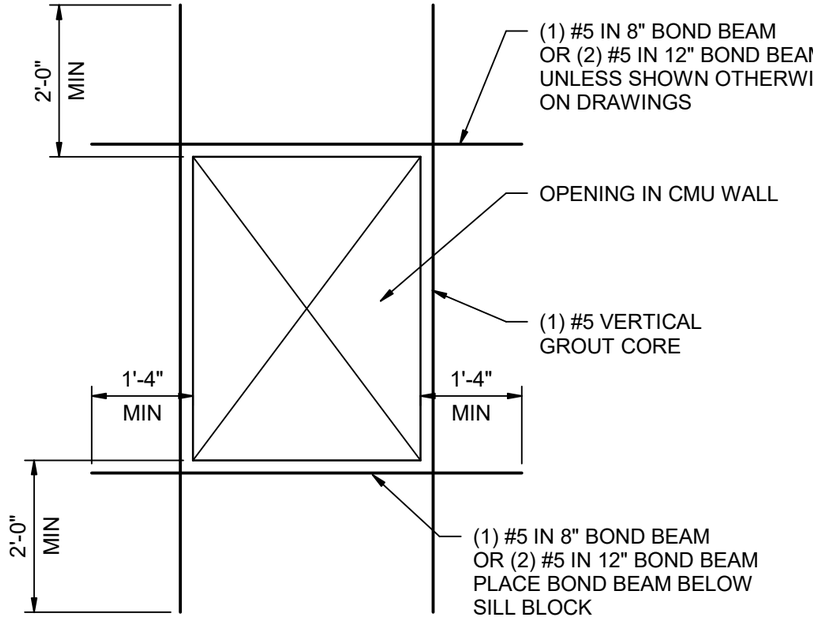
NTS



B3 CONTROL JOINT

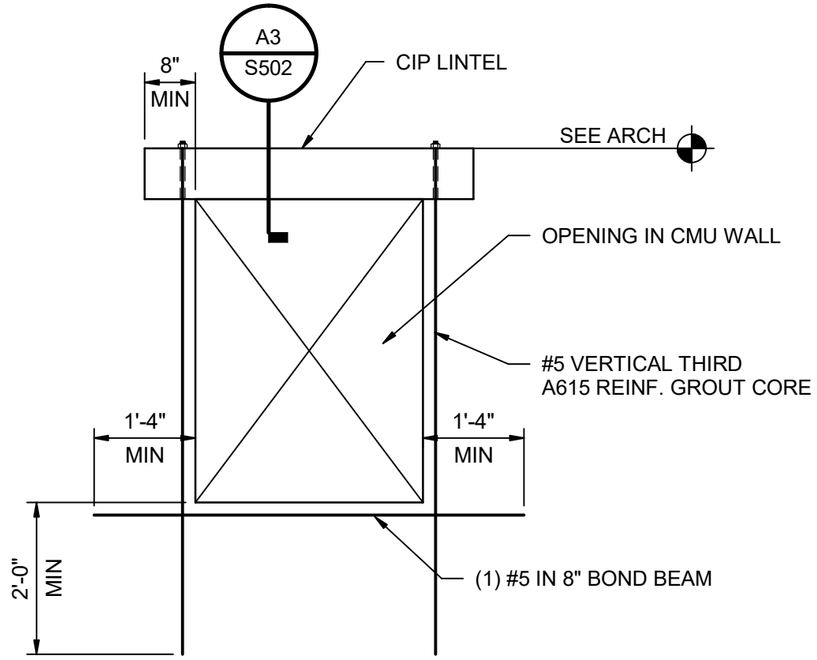
NTS

2



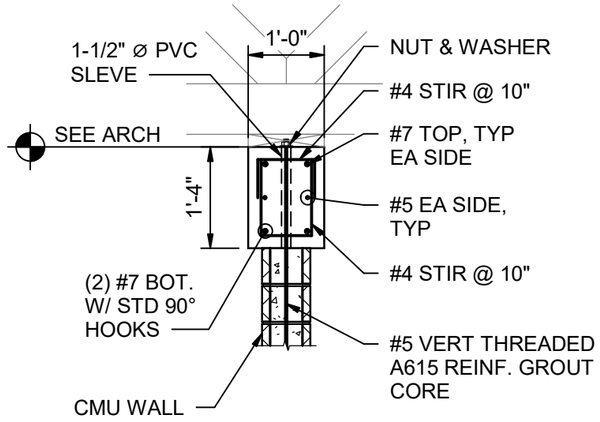
A1 TYP. REINF. AT CMU OPENING DETAIL

1/2" = 1'-0"



A2 TYP. REINF. A CMU OPENING WITH PRECAST LINTEL

1/2" = 1'-0"



A3 SECTION

1/2" = 1'-0"

GENERAL NOTES

GENERAL MECHANICAL NOTES

1. THESE NOTES ARE NOT ALL INCLUSIVE. REFER TO DRAWINGS AND SPECIFICATION FOR ADDITIONAL REQUIREMENTS.
2. THIS IS A STANDARD MECHANICAL (HVAC AND PLUMBING) SYMBOLOGY AND ABBREVIATIONS SHEET. LISTING OF SYMBOLS AND ABBREVIATIONS DOES NOT IMPLY ALL SYMBOLS AND ABBREVIATIONS HAVE BEEN USED ON THIS PROJECT.
3. VALVE SYMBOLS SHOWN HERE ARE APPLICABLE ONLY TO MECHANICAL SHEETS.
4. PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR COMPLETE AND OPERABLE SYSTEMS AS INDICATED ON THE DRAWINGS AS SPECIFIED, OR AS REQUIRED BY CODE.
5. MECHANICAL INSTALLATION SHALL COMPLY WITH THE ADA/ABA ACCESSIBILITY GUIDELINES.
6. DETAILS APPLY TO THE ENTIRE PROJECT AND ARE ONLY REFERENCED TO PROVIDE CLARITY IF THERE ARE MULTIPLE DETAILS THAT COULD APPLY TO A PARTICULAR PROJECT CONDITION.
7. COORDINATE LOCATION OF ALL MECHANICAL EQUIPMENT, DUCTWORK, AND PIPING WITH OTHER TRADES BEFORE PROCEEDING WITH WORK. DO NOT INSTALL MECHANICAL EQUIPMENT, DUCTWORK, OR PIPING ABOVE ELECTRICAL EQUIPMENT WHERE PROHIBITED BY ELECTRICAL CODES (SWITCHBOARDS, PANELS, ETC.).
8. LIGHT LINE WEIGHT INDICATES EXISTING PIPING, DUCTWORK, AND/OR EQUIPMENT TO REMAIN. BOLD LINE WEIGHT INDICATES NEW WORK TO BE INSTALLED AS WORK OF THIS CONTRACT.
9. COORDINATE INSTALLATION OF OUTSIDE AIR INTAKE WITH INSTALLATION OF PLUMBING VENTS, FLUES AND EXHAUST/RELIEF OUTLETS TO MAINTAIN 10' SEPARATION.
10. ALL WORK IN FINISHED SPACES SHALL BE LOCATED ABOVE CEILINGS, IN CHASES OR OTHER CONCEALED ACCESSIBLE LOCATIONS UNLESS NOTED OTHERWISE. LOCATE AND ARRANGE VALVES, DRAIN FITTINGS, ETC. TO BE ACCESSIBLE THROUGH LAY-IN CEILINGS, ACCESS PANELS OR ACCESS DOORS. PROVIDE AN ACCESS PANEL OR DOOR FOR ALL NON-ACCESSIBLE INSTALLATIONS. COORDINATE LOCATION OF ACCESS PANELS OR DOORS WITH THE ARCHITECT/ENGINEER AND OTHER TRADES.
11. ALL MATERIALS LOCATED IN PLENUM SHALL BE RATED FOR PLENUM INSTALLATION.
12. ALL DUCTWORK, PIPING, AND EQUIPMENT SUPPORTED FROM STRUCTURAL STEEL SHALL BE COORDINATED WITH ALL TRADES. ALL ATTACHMENTS TO STEEL BAR JOISTS, TRUSSES, OR JOIST GIRDERS SHALL BE AT PANEL POINTS OR AS SHOWN ON THE MECHANICAL OR STRUCTURAL DRAWINGS. WELDING TO STRUCTURAL MEMBERS SHALL NOT BE PERMITTED.
13. ALL MISCELLANEOUS METALS AND MATERIALS REQUIRED TO ENSURE PROPER INSTALLATION AND AS SHOWN IN DETAILS FOR PIPING, DUCTWORK, AND EQUIPMENT (UNLESS OTHERWISE NOTED) SHALL BE PROVIDED BY THE INSTALLING CONTRACTOR.
14. PROVIDE DIELECTRIC UNIONS AT ALL CONNECTIONS OF DISSIMILAR METALS (SUCH AS COPPER TO GALVANIZED STEEL).
15. PROVIDE ISOLATION VALVES AT EACH PIECE OF EQUIPMENT. ALSO PROVIDE ISOLATION VALVES ON EACH BRANCH AND/OR RISER SERVING MULTIPLE PIECES OF EQUIPMENT OR FIXTURES AND ELSEWHERE AS INDICATED. INSTALL VALVES AS CLOSE TO MAIN AS POSSIBLE.

GENERAL HVAC NOTES

1. DUCTWORK DIMENSIONS: FIRST NUMBER INDICATES SIDE OF DUCTWORK SHOWN. ALL DIMENSIONS ARE IN INCHES AND ARE INSIDE CLEAR DIMENSIONS.
2. VOLUME DAMPERS ABOVE PLASTER OR GYPBOARD CEILINGS SHALL HAVE EXTENSION RODS AND CHROME-PLATED ESCUTCHEON PLATES.
3. COORDINATE ALL GRILLE, REGISTER AND DIFFUSER LOCATIONS WITH REFLECTED CEILING PLAN, LIGHTING, AND ALL OTHER CEILING MOUNTED DEVICES.
4. PROVIDE FLEXIBLE CONNECTIONS IN ALL DUCTWORK AND PIPING SYSTEMS CONNECTED TO FANS, PUMPS AND OTHER EQUIPMENT WHICH REQUIRE VIBRATION ISOLATION.
5. PROVIDE ACCESSIBLE VOLUME DAMPERS OR OTHER MEANS OF AIRFLOW ADJUSTMENT AT ALL DUCT RUN-OUTS TO DIFFUSERS AND GRILLES.
6. PROVIDE DUCT ACCESS DOORS AT OUTSIDE AIR INTAKE PLENUMS.
7. ALL DUCT RUN-OUTS TO DIFFUSERS AND GRILLES SHALL BE THE SAME AS THE DIFFUSER OR GRILLE NECK SIZE UNLESS NOTED OTHERWISE.
8. ALL PIPING RUNOUTS SHALL BE 3/4" UNLESS NOTED OTHERWISE.

GENERAL MECHANICAL NOTES

1. THE CONTRACTOR SHALL COMPLETELY REMOVE ALL PIPING, DUCTWORK, COILS, EQUIPMENT, TERMINAL UNITS, ASSOCIATED CONTROLS, WIRING, AND OTHER ITEMS SHOWN BOLD AND/OR BOLD DASHED LINES UNLESS SPECIFICALLY NOTED OTHERWISE. THE ITEMS INDICATED ON THE DRAWINGS TO BE REMOVED ARE ONLY TO INDICATE IN GENERAL THE AMOUNT OF DEMOLITION WORK INVOLVED. A SITE INVESTIGATION BY THE CONTRACTOR MUST BE PERFORMED TO AID IN DETERMINING THE COMPLETE EXTENT OF WORK INVOLVED.
2. PIPING AND DUCTWORK EMBEDDED IN FLOORS, WALLS, AND CEILINGS MAY REMAIN IF SUCH MATERIALS DO NOT INTERFERE WITH NEW INSTALLATIONS. REMOVE MATERIALS ABOVE ACCESSIBLE CEILINGS. REMAINING PIPING SHALL BE DRAINED AND CAPPED WITHOUT CREATING DEAD LEGS IN THE SYSTEM. REMAINING DUCTWORK SHALL BE CAPPED.
3. LOCATE, IDENTIFY, AND PROTECT MECHANICAL SERVICES PASSING THROUGH DEMOLITION AREA AND SERVING OTHER AREAS OUTSIDE THE DEMOLITION LIMITS. MAINTAIN SERVICES TO AREAS OUTSIDE DEMOLITION LIMITS. WHEN SERVICES MUST BE INTERRUPTED, NOTIFY OWNER AND INSTALL TEMPORARY SERVICES FOR AFFECTED AREAS.
4. EXISTING EQUIPMENT BEING REMOVED AND CONSIDERED SALVAGEABLE BY THE OWNER SHALL BE TURNED OVER TO THE OWNER.
5. CONTRACTORS SHALL COORDINATE AND SCHEDULE ALL NECESSARY UTILITY SHUT-OFFS WITH OWNER PRIOR TO PROCEEDING WITH SUCH WORK.
6. COORDINATE SAW-CUTTING OF THE FLOOR OR WALL WITH OTHER TRADES.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING, PAINTING, REPAIRING OR REPLACEMENT OF ALL WALLS, FLOORS, CEILINGS, OR OTHER BUILDING ELEMENTS THAT ARE DISTURBED AS PART OF THE DEMOLITION OR INSTALLATION OF MECHANICAL WORK. SUCH WORK SHALL MATCH THE EXISTING CONSTRUCTION, FINISH, AND RATING. FIRE SEAL WALL OPENINGS AS REQUIRED.
8. REPLACE/REPAIR DAMAGED PIPING AND/OR DUCTWORK INSULATION TO MATCH EXISTING.
9. CONTRACTOR SHALL PROVIDE WORK IN PHASES AS REQUIRED BY THE CONTRACT DOCUMENTS WHILE MINIMIZING POTENTIAL WORK DELAYS AND UTILITY SHUT-DOWNS. COORDINATE ALL WORK WITH PROJECT PHASING PLAN AND WORK SHOWN ON DEMOLITION AND NEW PLANS. ALL EXISTING AREAS OF THE BUILDING NOT A PART OF A CURRENT PHASE OF WORK SHALL REMAIN OPERATIONAL WHILE WORK IN EACH INDIVIDUAL PHASE IS COMPLETED.

TEMPERATURE CONTROL DIAGRAM SYMBOLOGY

(X)
(X)

MISCELLANEOUS DEVICE IDENTIFIER

CO	SPACE CARBON MONOXIDE SENSOR
CO2	SPACE CARBON DIOXIDE SENSOR
H	SPACE HUMIDITY SENSOR
NO2	SPACE NITROGEN DIOXIDE SENSOR
S	SPACE TEMPERATURE SENSOR
T	THERMOSTAT

[X]
[X]

CONTROL DEVICE IDENTIFIER

AFS	AIRFLOW MEASURING STATION
AM	AIRFLOW MEASURING SENSOR
CO	CARBON MONOXIDE SENSOR
CO2	CARBON DIOXIDE SENSOR
F	FLOW SWITCH
FRZ	FREEZE STAT
H	HUMIDITY SENSOR
HS	HIGH STATIC SWITCH
LS	LOW STATIC SWITCH
NO2	NITROGEN DIOXIDE SENSOR
P	PRESSURE SENSOR
S	SPACE TEMPERATURE SENSOR
SD	SMOKE DETECTOR
T	TEMPERATURE SENSOR
TS	TEMPERATURE SWITCH
ΔP	DIFFERENTIAL PRESSURE SENSOR

<XX>

CONTROL INPUT/OUTPUT IDENTIFIER

AI	ANALOG INPUT
AO	ANALOG OUTPUT
DI	DIGITAL INPUT
DO	DIGITAL OUTPUT

XX/

COIL IDENTIFIERS

CC	CHILLED WATER COOLING COIL
DG	DIRECT FIRED GAS BURNER
DX	DIRECT EXPANSION COOLING COIL
EH	ELECTRIC HEATING COIL
ER	DIRECT EVAPORATIVE COIL
FC	FACE AND BYPASS COOLING COIL
FH	FACE AND BYPASS HEATING COIL
HC	HEATING HOT WATER HEATING COIL
IG	INDIRECT FIRED GAS BURNER
ST	STEAM HEATING COIL

CONTROL ABBREVIATIONS

BTU	BTU METER
COMM	COMMUNICATION
CT	CURRENT TRANSMITTER
EC	ELECTRONICALLY COMMUTATED
EF	EXHAUST FAN
FM	FLOW METER
M	MOTOR ACTUATOR
MA	MIXED AIR
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
OA	OUTDOOR AIR
RA	RETURN AIR
RL	RELIEF FAN
RF	RETURN FAN
SA	SUPPLY AIR
SF	SUPPLY FAN
TCC	TEMPERATURE CONTROL CONTRACTOR
VFC	VARIABLE FREQUENCY CONTROLLER

S — DUCT MOUNTED SMOKE DETECTOR

T — TEMPERATURE AVERAGING SENSOR

M — MOTOR OPERATED DAMPER

M — MOTOR OPERATED SINGLE BLADE DAMPER

BACKDRAFT DAMPER

HUMIDIFIER

AFS — AIRFLOW MEASURING STATION

INTAKE/ EXHAUST LOUVER

FILTER

FRZ — FREEZE STAT

XX — SEE CONTROL ABBREVIATIONS (TYP)

M — FAN

EC — FAN WITH EC MOTOR

PUMP

EC — PUMP WITH EC MOTOR

ABBREVIATIONS

AD	ACCESS DOOR
AFR	ABOVE FINISHED ROOF
AHU	AIR HANDLING UNIT
APD	AIR PRESSURE DROP
ARF	ABOVE RAISED FLOOR
AV	ABOVE RAISED FLOOR
BAS	BUILDING AUTOMATION SYSTEM
BDD	BACK DRAFT DAMPER
BHP	BRAKE HORSE POWER
BOE	BOTTOM OF EQUIPMENT
BTUH	BRITISH THERMAL UNITS PER HOUR
CAV	CONSTANT AIR VOLUME
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
COP	COEFFICIENT OF PERFORMANCE
COR	CONTRACTING OFFICER'S REPRESENTATIVE
CRAC	COMPUTER ROOM AIR CONDITIONER
CU	CONDENSING UNIT
DB	DRY BULB
DDC	DIRECT DIGITAL CONTROL
DH	DEHUMIDIFIER
DX	DIRECT EXPANSION
EAT	ENTERING AIR TEMPERATURE
EDH	ELECTRIC DUCT HEATER
EER	ENERGY EFFICIENCY RATIO
EMCS	ENERGY MANAGEMENT CONTROL SYSTEM
ERU	ENERGY RECOVERY UNIT
ESP	EXTERNAL STATIC PRESSURE
ESS	EMERGENCY SHUTOFF SWITCH
EWT	ENTERING WATER TEMPERATURE
F	FUTURE
FA	FREE AREA
FCP	FAN CONTROL PANEL
FCU	FAN COIL UNIT
FDBK	FEEDBACK
FLA	FULL LOAD AMPS
FLT	FILTER
FPB	FAN POWERED BOX
FPM	FEET PER MINUTE
GC	GENERAL CONTRACTOR
GE	GRAVITY EXHAUST
GI	GRAVITY INTAKE
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
I/O	INPUT/OUTPUT
I/P	CURRENT TO PNEUMATIC
IAQ	INDOOR AIR QUALITY
IPLV	INTEGRATED PART LOAD VALUE
LAT	LEAVING AIR TEMPERATURE
LVR	LOUVER
LWT	LEAVING WATER TEMPERATURE
MAU	MAKE-UP AIR UNIT
MBH	THOUSAND BTUH
MCC	MOTOR CONTROL CENTER
NC	NOISE CRITERIA
NO	NUMBER
NRC	NOISE REDUCTION COEFFICIENT
OS&Y	OUTSIDE SCREW AND YOKE
PD	PRESSURE DROP
PPH	POUNDS PER HOUR
RH	RELATIVE HUMIDITY
RTU	ROOFTOP UNIT
S	SIGNAL PORT
SCFM	STANDARD CUBIC FEET PER MINUTE
SEER	SEASONAL ENERGY EFFICIENCY RATIO
SP	STATIC PRESSURE
TC	TECHNOLOGY CONTRACTOR
TCP	TEMPERATURE CONTROL PANEL
TD	TEMPERATURE DIFFERENTIAL
TES	THERMAL ENERGY STORAGE
TSP	TOTAL STATIC PRESSURE
UH	UNIT HEATER
V&C	VALVE AND CAP
VAV	VARIABLE AIR VOLUME
VRF	VARIABLE REFRIGERANT FLOW
VTR	VENT THROUGH ROOF
WB	WET BULB
WC	WATER COLUMN
WPD	WATER PRESSURE DROP

PIPING SYSTEMS

- COLD WATER, POTABLE (CW)
- HOT WATER, POTABLE (HW)
- HOT WATER RECIRCULATING, POTABLE (HWC)
- NPW — NON POTABLE COLD WATER
- 140 — HOT WATER - TEMPERATURE, POTABLE
- TW — TEPID WATER, POTABLE
- TWR — TEPID WATER RETURN, POTABLE
- SAN — SANITARY SEWER BELOW GRADE
- SAN — SANITARY SEWER ABOVE GRADE
- V — SANITARY VENT
- AW — ACID WASTE
- AV — ACID VENT
- CWV — COMBINATION WASTE AND VENT
- PD — PRESSURE DRAINAGE
- SD — STORM DRAIN ABOVE GRADE
- SD — STORM DRAIN BELOW GRADE
- OD — STORM DRAIN OVERFLOW
- NG — NATURAL GAS
- LP — LIQUEFIED PROPANE
- CA — COMPRESSED AIR
- HWS — HEATING HOT WATER SUPPLY
- HWR — HEATING HOT WATER RETURN
- GHWS — GLYCOL HEATING HOT WATER SUPPLY
- GHWR — GLYCOL HEATING HOT WATER RETURN
- CHWS — CHILLED WATER SUPPLY
- CHWR — GLYCOL CHILLED WATER RETURN
- GCWS — GLYCOL CHILLED WATER SUPPLY
- GCWR
- CWS — CONDENSER WATER SUPPLY
- CWR — CONDENSER WATER RETURN
- RL — REFRIGERANT LIQUID
- RS — REFRIGERANT SUCTION
- CD — CONDENSATE DRAIN
- CPD — CONDENSATE PUMP DISCHARGE
- STM -15 — STEAM SUPPLY - PSI
- BBD — BOILER BLOW DOWN
- BF — BOILER FEED
- SV — STEAM VENT
- MU — MAKE-UP WATER

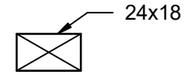
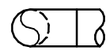
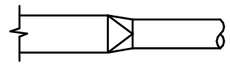
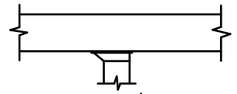
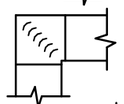
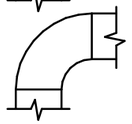
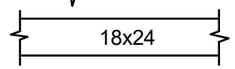
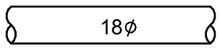
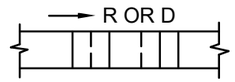
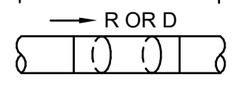
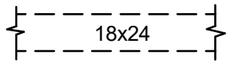
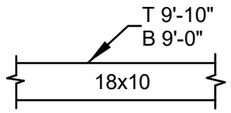
PIPING SYMBOLOGY

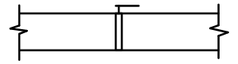
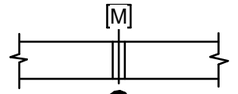
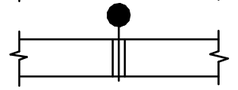
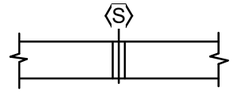
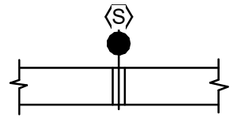
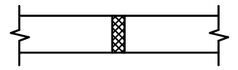
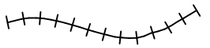
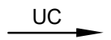
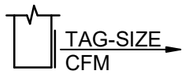
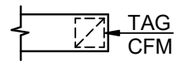
- PIPE ANCHOR
- PIPE GUIDE
- EXPANSION JOINT
- PT — PRESSURE/ TEMPERATURE PORT
- THERMOMETER
- THERMOWELL
- PRESSURE GAUGE
- T — TEMPERATURE GAUGE
- FLEXIBLE PIPING CONNECTION
- WYE STRAINER
- MANUAL AIR VENT
- A — AUTOMATIC AIR VENT
- M — METER (WATER, GAS, OTHER)
- FCO — FLOOR CLEANOUT
- CO — CLEANOUT
- WCO — WALL CLEANOUT
- GCO — DOUBLE GRADE CLEANOUT
- WATER HAMMER ARRESTOR
- E — EARTHQUAKE VALVE
- CONCENTRIC REDUCER
- ECCENTRIC REDUCER, FLAT ON BOTTOM
- ECCENTRIC REDUCER, FLAT ON TOP
- ELBOW, 90° TURN DOWN
- ELBOW, 90° TURN UP
- TEE, OUTLET UP
- TEE, OUTLET DOWN
- TEE, OUTLET UP W/ 90° TURN
- TEE, OUTLET DOWN W/ 90° TURN
- PIPE BREAK
- PIPE CAP
- BLIND FLANGE
- UNION
- FLOW ARROW
- SHUTOFF VALVE (NORMALLY OPEN)
- SHUTOFF VALVE (NORMALLY CLOSED)
- DRAIN VALVE
- CHECK VALVE
- VB — VACUUM BREAKER
- AUTOMATIC FLOW CONTROL VALVE
- CALIBRATED MANUAL BALANCING VALVE
- OR — PRESSURE-RELIEF VALVE
- PRESSURE-REDUCING VALVE (PRV)
- AUTOMATIC CONTROL VALVE, 2-WAY
- AUTOMATIC CONTROL VALVE, 3-WAY
- BFP — BACKFLOW PREVENTER
- XX-1 — PLUMBING FIXTURE

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	MECHANICAL LEGEND	SHEET M00	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/20/2024 12:25:26 AM PLOT BY : PLOT NAME : PLOT SCALE : 12" = 1'-0"

HVAC SYMBOLOGY

	SUPPLY AIR OR OUTSIDE AIR DUCT UP (SECTION CUT, FIRST DIMENSION DUCT WIDTH)
	SUPPLY AIR OR OUTSIDE AIR DUCT DOWN (NO SECTION CUT)
	RETURN AIR DUCT UP (SECTION CUT)
	RETURN AIR DUCT DOWN (NO SECTION CUT)
	EXHAUST AIR DUCT UP (NO SECTION CUT)
	EXHAUST AIR DUCT DOWN (NO SECTION CUT)
	ROUND ELBOW UP
	ROUND ELBOW DOWN
	TRANSITION - RECTANGULAR TO ROUND DUCT
	STANDARD BRANCH
	ELBOW - W/TURNING VANE (RECTANGULAR)
	ELBOW - (RECTANGULAR), SMOOTH RADIUS
	RECTANGULAR DUCT OR OPENING SIZE FIRST NUMBER INDICATES SIZE OF SIDE SHOWN
	ROUND DUCT SIZE
	RECTANGULAR DUCT INCLINE - RISE OR DROP IN RESPECT TO THE AIR FLOW
	ROUND DUCT INCLINE - RISE OR DROP IN RESPECT TO THE AIR FLOW
	HIDDEN DUCT
	DUCT/PIPE ELEVATION TAG ABOVE FINISH FLOOR

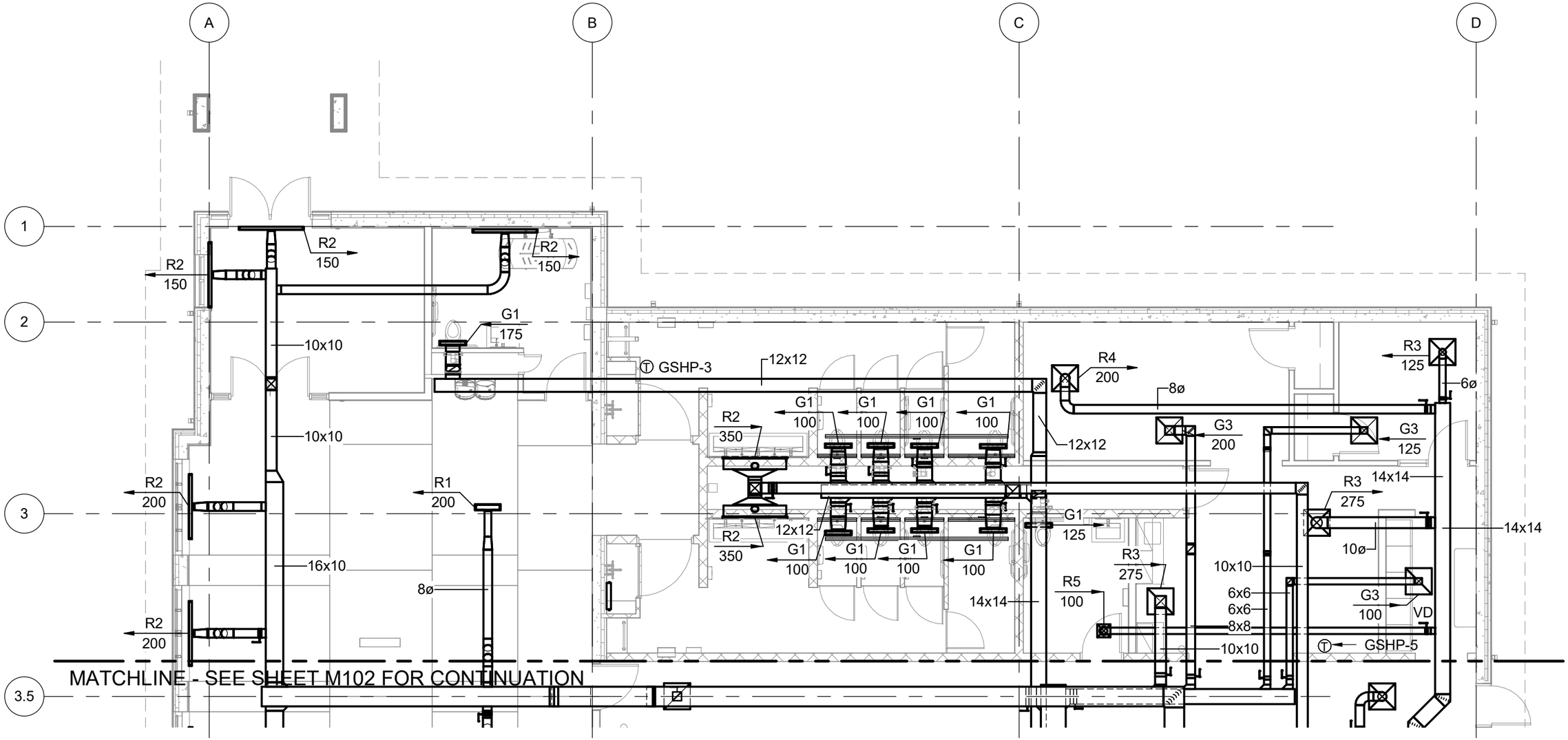
	VOLUME DAMPER
	MOTOR OPERATED DAMPER
	FIRE DAMPER
	SMOKE DAMPER
	SMOKE AND FIRE DAMPER
	FLEXIBLE CONNECTION
	FLEXIBLE DUCT - TWO LINE
	FLEXIBLE DUCT - ONE LINE
	ACOUSTICAL LINING - DUCT DIMENSIONS FOR NET FREE AREA
	UNDERCUT DOOR
	NEW TO EXISTING CONNECTION
	REMOVE EXISTING UP TO THIS POINT
	HVAC EMERGENCY SHUTDOWN SWITCH
	SUPPLY AIR REGISTER
	EXHAUST AIR OR RETURN AIR GRILLE
	EXHAUST AIR OR RETURN AIR GRILLE
	SUPPLY AIR ASSEMBLY SQUARE DIFFUSER
	SUPPLY AIR ASSEMBLY ROUND DIFFUSER

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	MECHANICAL LEGEND	SHEET M00[illegible]122 E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/20/2024 12:25:26 AM PLOT BY : PLOT NAME : PLOT SCALE : 12" = 1'-0"

GENERAL NOTES

1. DUCT LOCATIONS TO BE COORDINATED WITH TRUSSES.

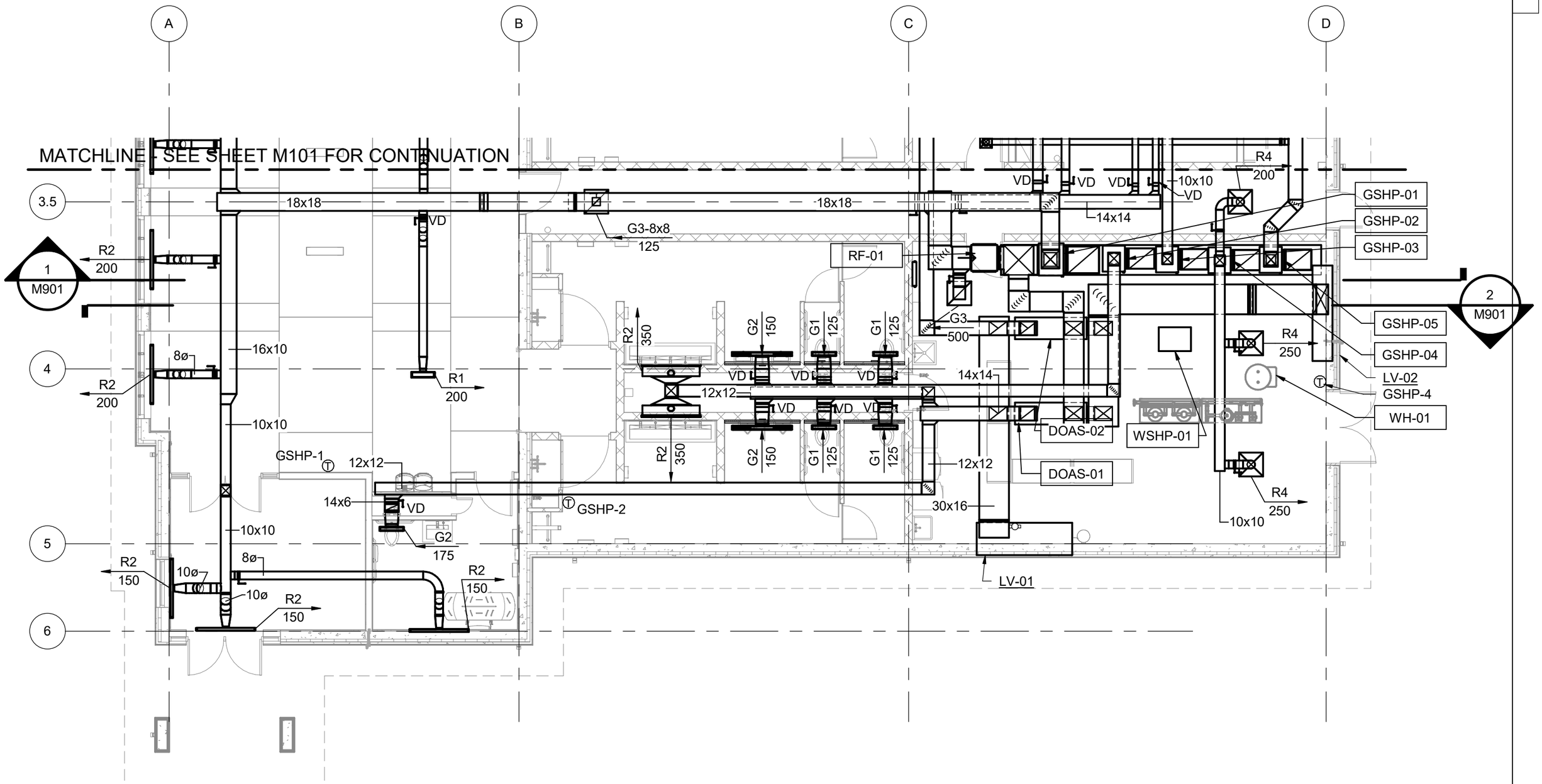


PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	GROUND LEVEL HVAC PLAN - AREA A	SHEET M10[illegible]

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/20/2024 12:25:27 AM PLOT BY : PLOT NAME : PLOT SCALE : 1/8" = 1'-0"

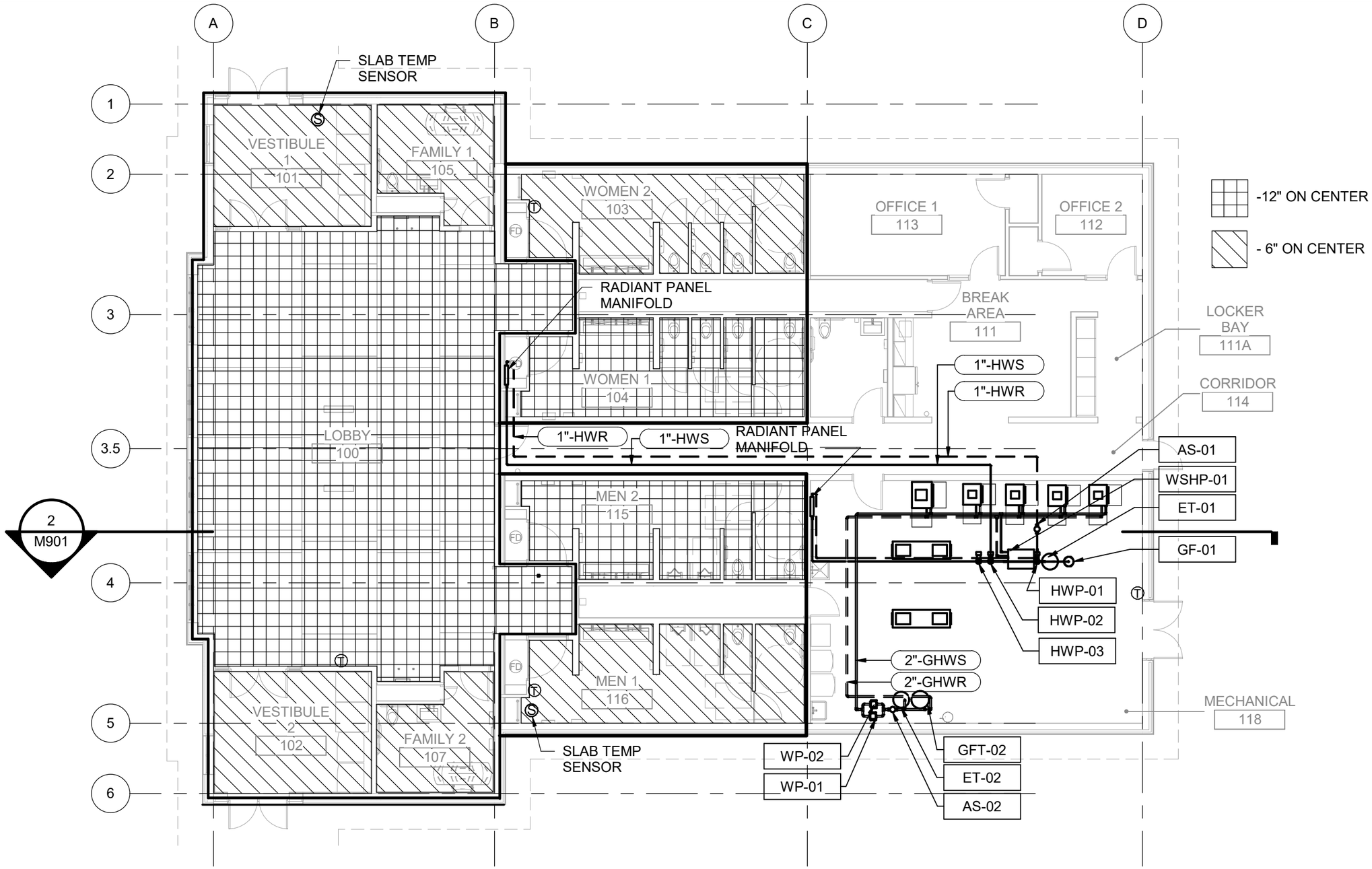
GENERAL NOTES

1. DUCT LOCATIONS TO BE COORDINATED WITH TRUSSES.



PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	GROUND LEVEL HVAC PLAN - AREA B	SHEET M10[illegible]	E

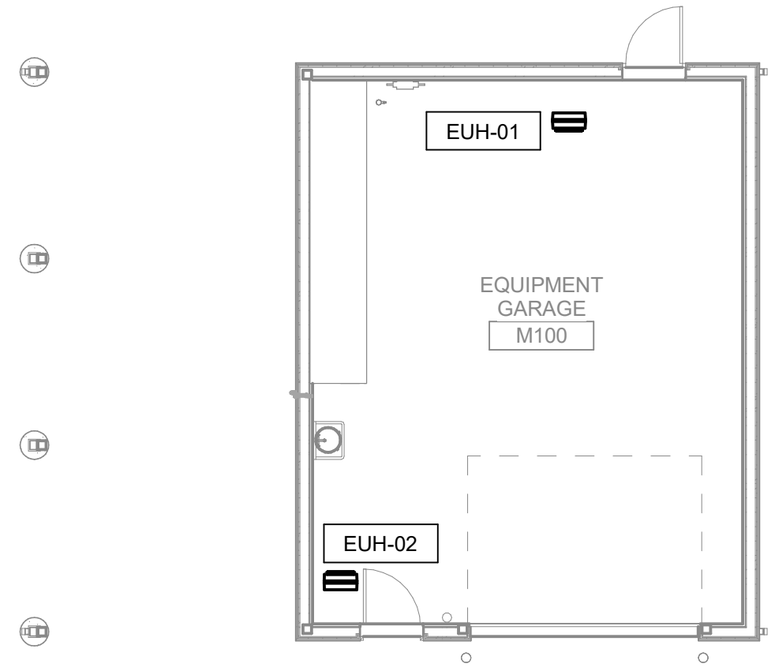
FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/20/2024 12:25:28 AM PLOT BY : PLOT NAME : PLOT SCALE : 1/8" = 1'-0"



PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	RADIANT FLOORING	SHEET M10[illegible]	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/20/2024 12:25:29 AM PLOT BY : PLOT NAME : PLOT SCALE : 3/32" = 1'-0"

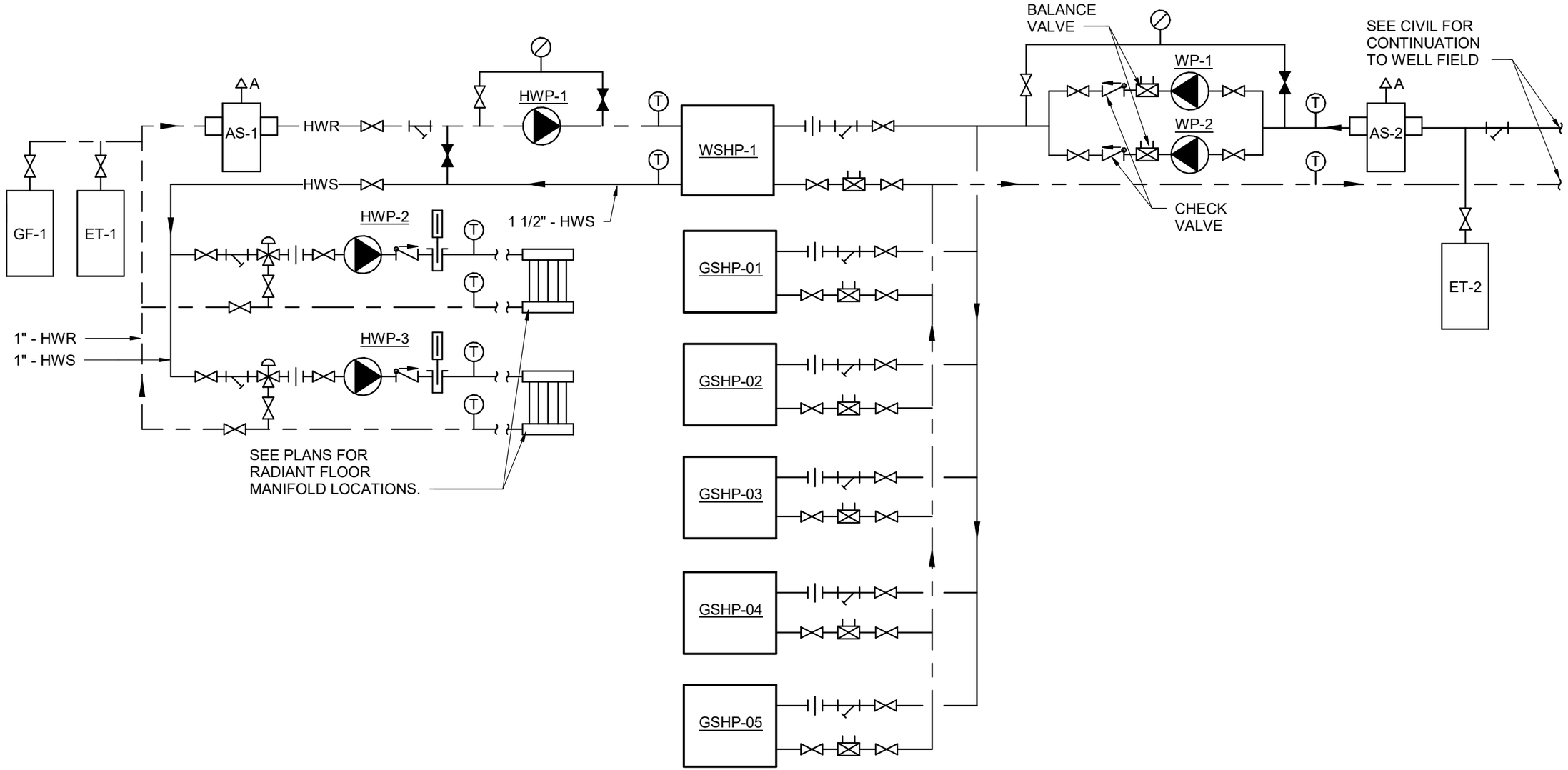
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PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	EQUIPMENT GARAGE - HVAC PLAN	SHEET M10[illegible]	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/20/2024 12:25:29 AM PLOT BY : PLOT NAME : PLOT SCALE : 1/8" = 1'-0"

2

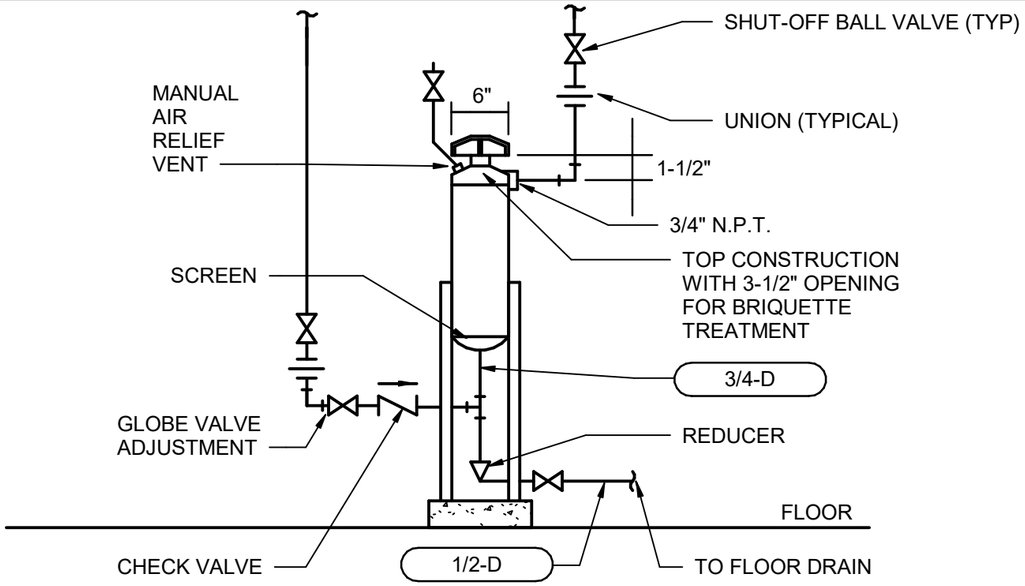


HVAC PIPING DETAIL

NOT TO SCALE

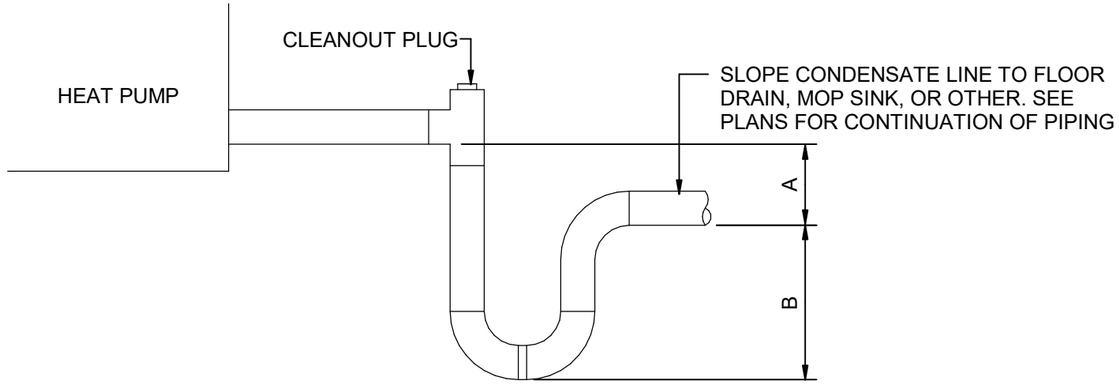
PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	HVAC DETAILS	SHEET M50[illegible]	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/20/2024 12:25:29 AM PLOT BY : PLOT NAME : PLOT SCALE : 12" = 1'-0"



CHEMICAL FEEDER PIPING DETAIL

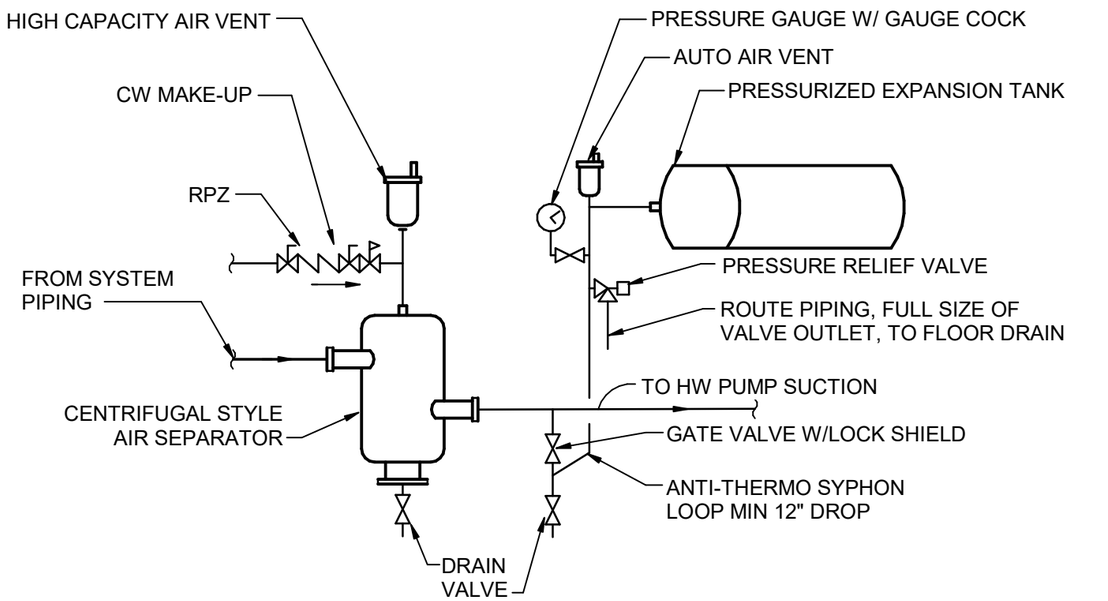
NOT TO SCALE



NOTES:
1. ON DRAW-THRU UNITS, THE (A) DIMENSION (IN INCHES) SHALL BE 1.5 TIMES THE AIR HANDLING UNITS SUCTION PRESSURE AT OPERATING CONDITIONS, BUT IN NO CASE LESS THAN 2-INCHES.
2. ON BLOW-THRU UNITS, THE (A) DIMENSION (IN INCHES) CAN BE AS SMALL AS 2 INCHES, BUT THE (B) DIMENSION (IN INCHES) SHALL BE 1.5 TIMES THE AIR HANDLING UNITS TOTAL STATIC PRESSURE BUT IN NO CASE LESS THAN 2 INCHES.

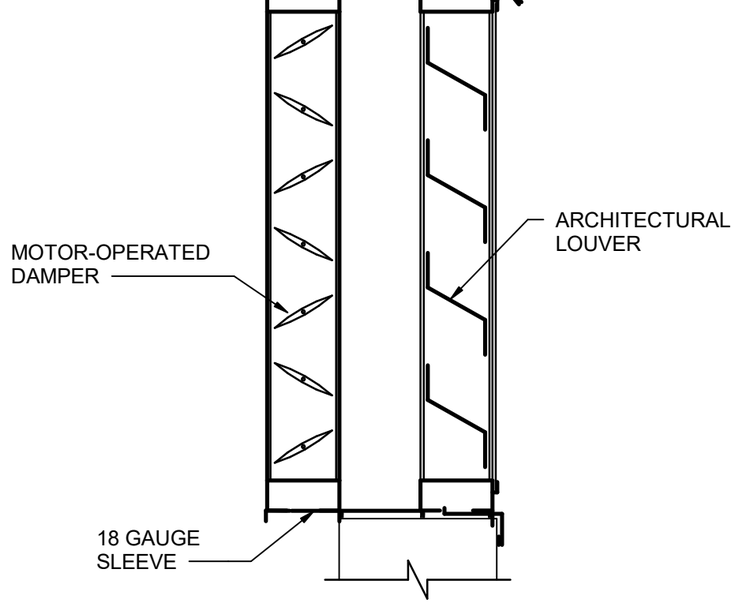
CONDENSATE DRAIN TRAP DETAIL

NOT TO SCALE



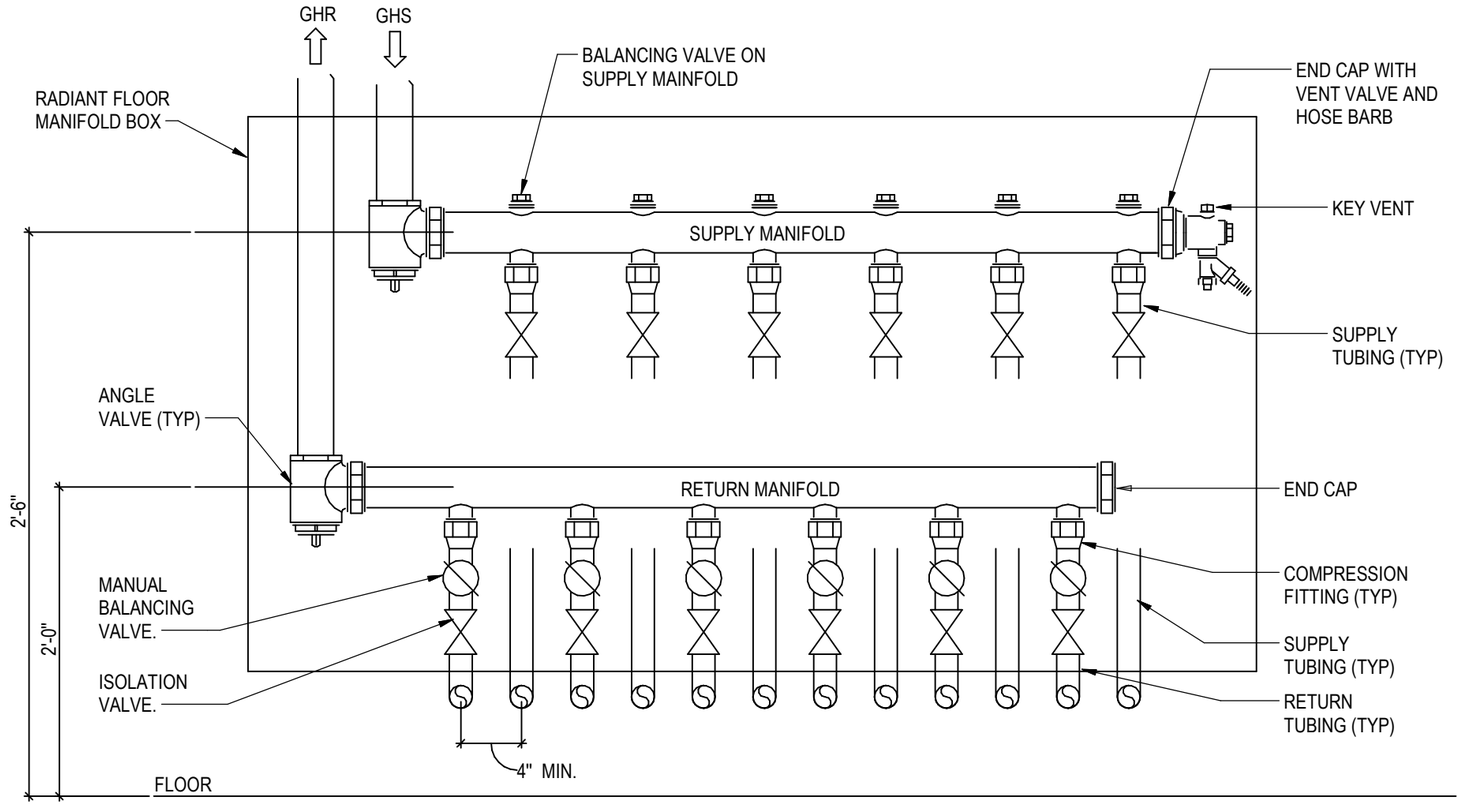
AIR SEPARATOR AND EXPANSION TANK DETAIL

NOT TO SCALE



LOUVER DETAIL

NOT TO SCALE

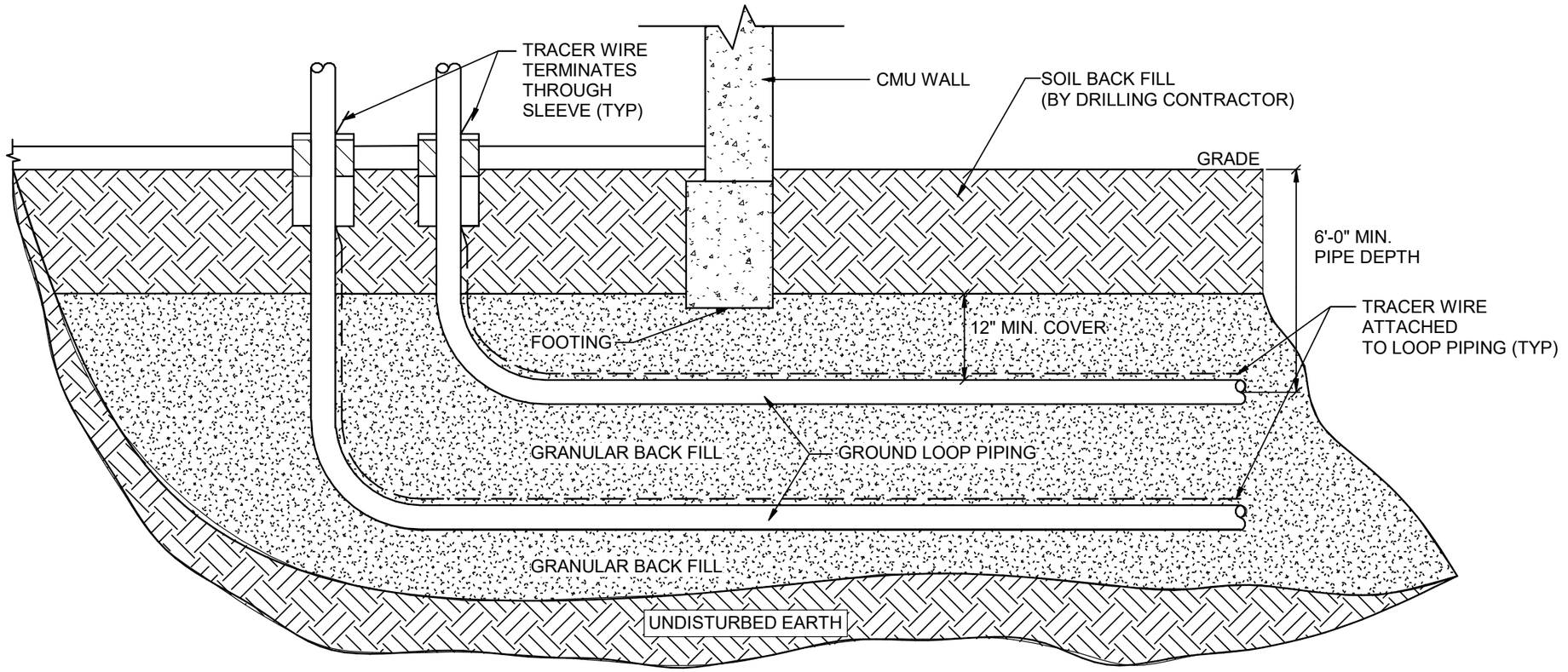


*FINAL NUMBER OF CIRCUITS TO BE DETERMINED UPON INSTALLED CONFIGURATION

RADIANT FLOORING MANIFOLD

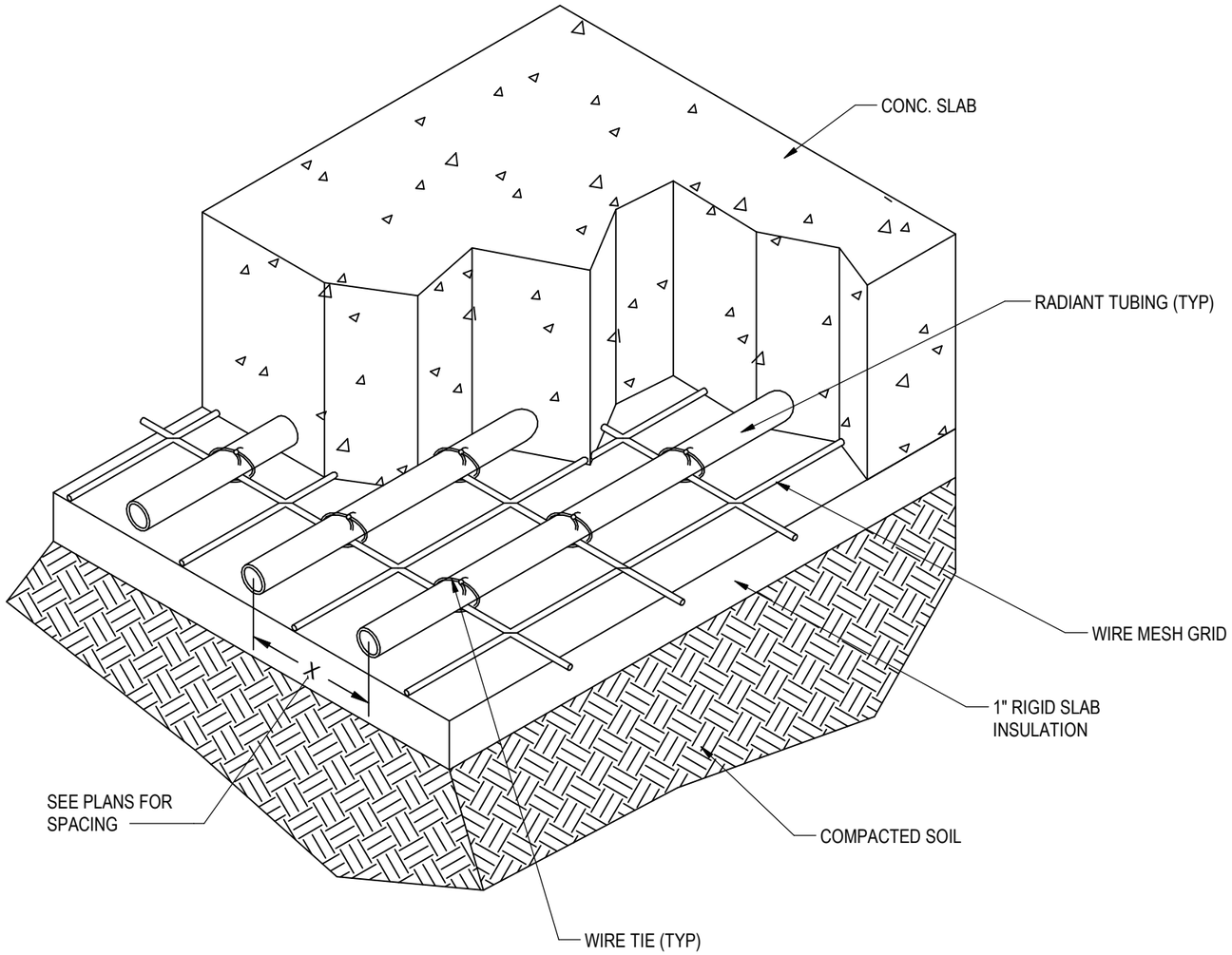
NOT TO SCALE

2



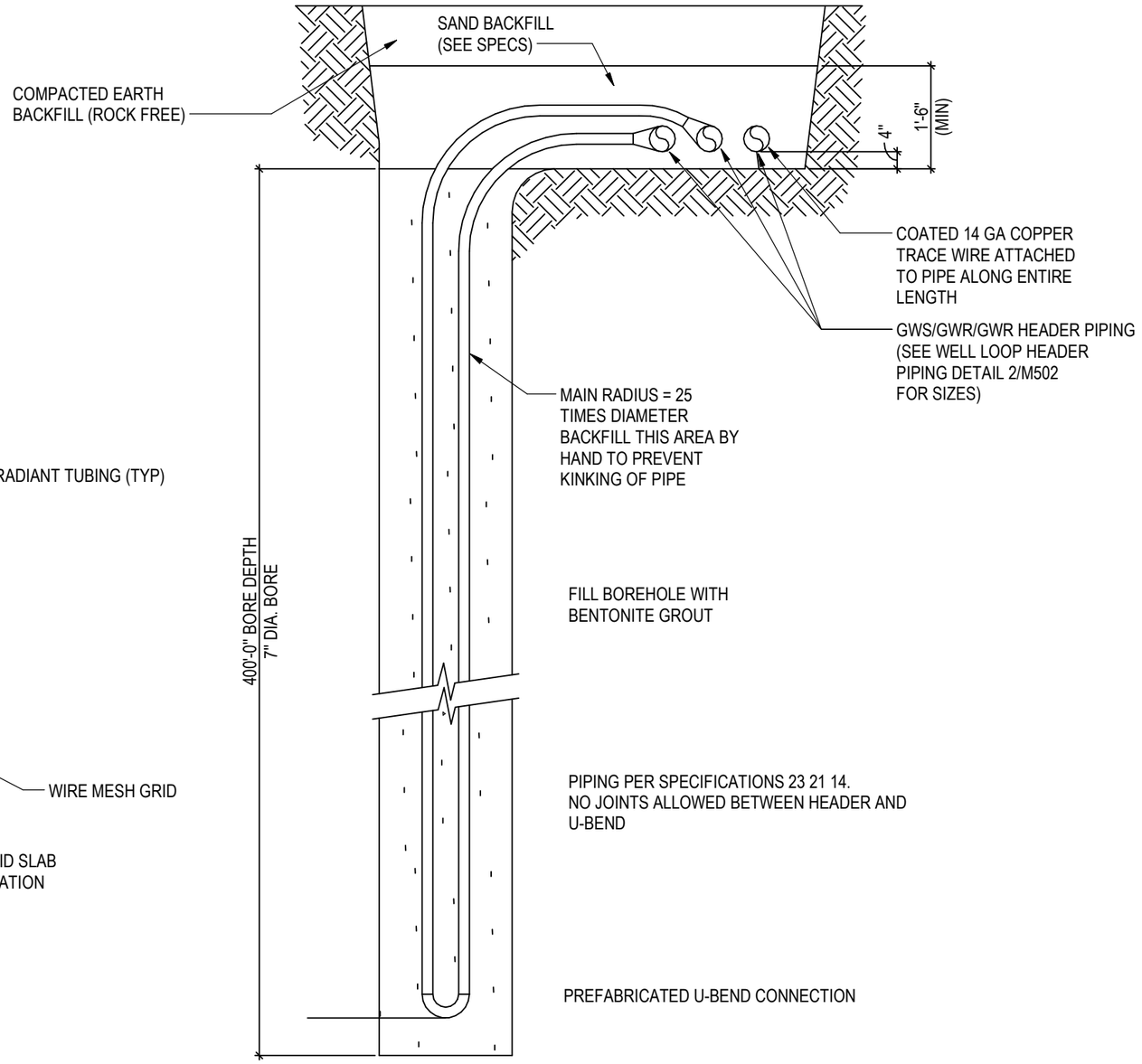
GEOTHERMAL CIRCUIT HEADER ENTRY DETAIL

NOT TO SCALE



RADIANT FLOORING PIPING LAYOUT

NOT TO SCALE



NOTE: GWS-GWR TO BE PIPED IN A REVERSE RETURN CONFIGURATION.

TYPICAL WELL DETIAL

NOT TO SCALE

GROUND SOURCE HEAT PUMP SCHEDULE

MARK	TOTAL AIR FLOW (CFM)	EXT. S.P. (IN. WG)	COOLING DATA										HEATING DATA						BASIS OF DESIGN	NOTES
			E.A.T. DB (°F)	E.A.T. WB (°F)	L.A.T. DB (°F)	TOTAL CAP. (MBTUH)	SENS. CAP. (MBTUH)	HEAT REJ. (MBTUH)	EER	WATER FLOW (GPM)	COOLING E.W.T. (°F)	COOLING L.W.T. (°F)	E.A.T. DB (°F)	L.A.T. DB (°F)	TOTAL CAP. (MBTUH)	COP	HEATING E.W.T (°F)	HEATING L.W.T. (°F)		
GSHP-01	2,160	0.5	75	63	52.9	68.0	51.7	84.1	14.3	18	85	94.3	70	97.2	63.8	3.8	40	34.8	DAIKIN WGTV0721	1, 2
GSHP-02	700	0.5	75	63	51.3	24.7	18.0	29.9	16	6	85	95.0	70	97.1	20.6	4.1	40	34.8	DAIKIN WGTV0261	1, 2
GSHP-03	700	0.5	75	63	51.3	24.7	18.0	29.9	16	6	85	95.0	70	97.1	20.6	4.1	40	34.8	DAIKIN WGTV0261	1, 2
GSHP-04	700	0.5	75	63	51.3	24.7	18.0	29.9	16	6	85	95.0	70	97.1	20.6	4.1	40	34.8	DAIKIN WGTV0261	1, 2
GSHP-05	700	0.5	75	63	51.3	24.7	18.0	29.9	16	6	85	95.0	70	97.1	20.6	4.1	40	34.8	DAIKIN WGTV0261	1, 2

NOTES:
1. UNIT TO HAVE VERTICAL DISCHARGE AND SIDE RETURN.
2. SEE SHEET E653 FOR ELECTRICAL INFO.

DEDICATED OUTDOOR AIR SYSTEM SCHEDULE

MARK	MIN. O.A. (CFM)	DESIGN O.A. (CFM)	FIXED PLATE HEAT EXCHANGER						SUPPLY FAN DATA			EXHAUST FAN DATA			BASIS OF DESIGN	NOTES
			WINTER HEAT RECOVERY			SUMMER HEAT RECOVERY										
			O.A. E.A.T DB/WB (°F)	R.A. E.A.T DB/WB (°F)	L.A.T. DB/WB (°F)	O.A. E.A.T DB/WB (°F)	R.A. E.A.T DB/WB (°F)	L.A.T. DB/WB (°F)	CFM	EXT. S.P. (IN. WG)	MOTOR POWER (KW)	CFM	EXT. S.P. (IN. WG)	MOTOR POWER (KW)		
DOAS-01	980	980	-8 / -8.1	70 / 49.7	41.7 / 32.3	89 / 74	75 / 62.4	83.9 / 69.1	980	0.75	0.8	980	0.75	0.8	OXYGEN 8 (B20IN - (525 - 1300 CFM))	1, 2, 3
DOAS-02	980	980	-8 / -8.1	70 / 49.7	41.7 / 32.3	89 / 74	75 / 62.4	83.9 / 69.1	980	0.75	0.8	980	0.75	0.8	OXYGEN 8 (B20IN - (525 - 1300 CFM))	1, 2, 3

NOTES:
1. UNIT TO HAVE A FIXED PLATE HEAT EXCHANGER.
2. PROVIDE UNIT WITH MERV 8 FILTERS.
3. SEE SHEET E653 FOR ELECTRICAL INFO.

FAN SCHEDULE

MARK	NOM. AIRFLOW (CFM)	OPERATING AIRFLOW (CFM)	S.P. (IN. WG)	FAN TYPE	BLADE TYPE	FAN RPM	S.P.L. 250 HZ MAX (dB)	MOTOR DATA			BASIS OF DESIGN	NOTES
								HP	DRIVE TYPE	MOTOR TYPE		
RF-01	2,650	2,650	0.50	INLINE	BACKWARD INCLINED	1,114	75	3/4	DIRECT	ECM	GREENHECK SQ-160-VG	1, 2

NOTES:
1. FAN TO HAVE AN ECM MOTOR.
2. SEE SHEET E653 FOR ELECTRICAL INFO.

WATER TO WATER HEAT PUMP SCHEDULE

MARK	(GPM)	P.D. (FT. WATER)	HEATING DATA							ELECTRICAL DATA			BASIS OF DESIGN	NOTES
			TOTAL CAP. MBH	GROUND WATER		IN FLOOR WATER		KW INPUT	MIN. COP	VOLT	PH	HZ		
				E.W.T. (°F)	L.W.T. (°F)	E.W.T. (°F)	L.W.T. (°F)							
WSHP-01	18	10.50	68,375	50.0	40.9	85.0	104.5	4.8	4.2	240	60	1	BOSCH WT071	

NOTES:

ELECTRIC UNIT HEATER SCHEDULE

MARK	SERVES	HEATING DATA					AIR DELIVERY DATA				RECOM'D MOUNTING HEIGHT	BASIS OF DESIGN	NOTES
		KW	VOLT	PH	HZ	HP	CFM	OUTLET VEL. (FPM)	E.A.T. (°F)	L.A.T. (°F)			
EUH-01	GARAGE	7.5	240	1	60	1/15	850	1,040	55	83	8	CHROMALOX LUH	1,2,3
EUH-02	GARAGE	7.5	240	1	60	1/16	850	1,040	55	83	8	CHROMALOX LUH	1,2,3

NOTES:

1. PROVIDE WITH UNIT MOUNTED DISCONECT.
2. PROVIDE WALL MOUNTED THERMOSTAT
3. PROVIDE WITH MANUFACTUER APPROVED WALL MOUNTING BRACKET.

PUMP SCHEDULE

MARK	LOCATION	SERVES	TYPE	FLOW (GPM)	HEAD (FT. WG)	MOTOR DATA			BASIS OF DESIGN	NOTES
						HP	RPM	V/PH		
HWP-01	MECH 118	RADIANT FLOORS	IN-LINE	21	45	1	3,800	120/1	TACO VR20H	1
HWP-02	MECH 118	RADIANT FLOORS	IN-LINE	14	52	1/3	3,500	208/1	GRUNDFOS MAGNA1 40-180 GF	
HWP-03	MECH 118	RADIANT FLOORS	IN-LINE	7	52	1/3	3,500	240/1	GRUNDFOS MAGNA1 40-180 GF	
WP-01	MECH 118	GEOTHERMAL WELL FIELD	IN-LINE	60	75	2	3,515	240/1	GRUNDFOS CRE-10-2	
WP-02	MECH 118	GEOTHERMAL WELL FIELD	IN-LINE	60	75	2	3,515	240/1	GRUNDFOS CRE-10-2	

NOTES:

1. PROVIDE WITH SUCTION DIFFUSER.

EXPANSION TANK SCHEDULE

MARK	LOCATION	SERVES	SYSTEM VOLUME (GAL)	TEMP RANGE (°F)		PRESS. RANGE (PSI)		TANK VOLUME (GAL)	ACCEPTANCE VOLUME (GAL)	TANK SIZE DIA x L (IN.)	BASIS OF DESIGN	NOTES
				MAX	MIN	MAX	MIN					
ET-01	MECH 118	RADIANT FLOORS	25	115	55	50	15	10	10	12 x 24	GRUNDFOS GNLA-35	1
ET-02	MECH 118	GEOTHERMAL WELL FIELD	55	95	38	50	15	23	23	16 x 38	GRUNDFOS GNLA-85	1

NOTES:

1. INSTALL PER MANUFACTURERS RECOMMENDATIONS.

HVAC EQUIPMENT

ENERGY RECOVERY UNITS

- THE ENERGY RECOVERY UNIT SHALL BE ENERGIZED WHENEVER THE BUILDING IS OCCUPIED.
- THE ENERGY RECOVERY UNITS SHALL BE CONTROLLED BY THE BMS SYSTEM FOR OCCUPIED AND UNOCCUPIED MODE.
- OCCUPIED MODE: THE OUTDOOR AIR MOTORIZED DAMPERS SHALL BE OPEN DURING OCCUPIED MODE. THE ENERGY RECOVERY VENTILATOR SUPPLY AND EXHAUST FANS SHALL RUN CONTINUOUSLY DURING OCCUPIED MODE.
- UNOCCUPIED MODE: THE OUTDOOR AIR MOTORIZED DAMPERS SHALL BE CLOSED DURING UNOCCUPIED MODE. THE ENERGY RECOVERY VENTILATOR SUPPLY AND EXHAUST FAN SHALL BE OFF DURING UNOCCUPIED MODE.

GROUND SOURCE HEAT PUMPS

- HEAT PUMP UNIT SHALL BE CONTROLLED BY A MICROPROCESSOR BASED CONTROLLER. THE HEAT PUMP FAN SHALL RUN CONTINUOUSLY DURING OCCUPIED HOURS. THE HEAT PUMP FAN SHALL CYCLE DURING UNOCCUPIED HOURS.
- COOLING: ON A CALL FOR COOLING THE HEAT PUMP SHALL OPERATE TO MAINTAIN SPACE TEMPERATURE OF 75°F (ADJUSTABLE).
- HEATING: ON A CALL FOR HEATING THE HEAT PUMP SHALL OPERATE TO MAINTAIN SPACE TEMPERATURE SETPOINT OF 70°F (ADJUSTABLE).
- DEHUMIDIFICATION: ON A CALL FOR DEHUMIDIFICATION THE HEAT PUMP SHALL OPERATE IN DEHUMIDIFICATION MODE TO MAINTAIN SPACE HUMIDITY SETPOINT OF 50% (ADJUSTABLE).

GEOTHERMAL WELLFIELD PUMPS

- PUMPS SHALL OPERATE IN A LEAD/LAG CONFIGURATION. ON A CALL FOR HEATING OR COOLING FROM ANY HEAT PUMP, THE LEAD PUMP SHALL ENERGIZE AND OPERATE AT A CONSTANT SPEED. IF THE LEAD PUMP DOES NOT ENERGIZE, THE LAG PUMP SHALL START AND OPERATE. THE LEAD/LAG PUMPS SHALL SWITCH ON A WEEKLY BASIS.

IN FLOOR RADIANT HEAT PUMP AND RECIRCULATION PUMPS

- HEATING: ON A CALL FOR HEATING THE HEAT PUMP SHALL OPERATE TO MAINTAIN A SUPPLY WATER TEMPERATURE OF 92°F. AT EACH ZONE, THE THREE-WAY VALVE SHALL MODULATE TO MAINTAIN A SPACE TEMPERATURE SETPOINT OF 70°F (ADJUSTABLE). ON A CALL FOR HEATING, THE PRIMARY AND SECONDARY RECIRCULATION PUMPS SHALL ENERGIZE AND OPERATE AT CONSTANT SPEED.
- SPACE SLAB TEMPERATURE SENSOR: THE FLOOR SLAB SHALL NEVER EXCEED 87°F. IF THE SLAB TEMPERATURE EXCEEDS 87°, THE THREE-WAY VALVE SHALL MODULATE TO LOWER THE SUPPLY WATER TEMPERATURE IN THAT ZONE.

AIR SEPARATOR SCHEDULE

MARK	LOCATION	SYSTEM SERVED	SYSTEM FLOW GPM	NOMINAL SYSTEM PIPE SIZE IN.	PRESSURE DROP FT.	MAX WORKING PRESSURE (PSIG)	BASIS OF DESIGN	NOTE
AS-01	MECH RM	RADIANT FLOORING	150	2	1.5	150	GRUNDFOS GBSR-020	1, 2
AS-02	MECH RM	GEOTHERMAL WELL LOOP	150	2	2.5	150	GRUNDFOS GBSR-020	1, 2

NOTES:

1. PROVIDE WITH AUTOMATIC AIR VENT.
2. PROVIDE A REMOVEABLE HEAD FOR CLEANING.

CHEMICAL AND GLYCOL FEEDER SCHEDULE

MARK	CAPACITY TANK GALLONS	SERVES	PUMP				CONTROL PANEL			BASIS OF DESIGN	NOTE
			GPM	PSI	HP	VOLTS/PH	NEMA	LOW LEVEL SWITCH	AMPS		
GF-01	5	RADIANT FLOORING	-	-	-	-	-	-	-	GTP DB5/QC	3
GF-02	15	GEOTHERMAL WELL LOOP	1.3	100	1/3	120/1	4	YES	5.0	GTP GP15-E4-1/AL-D...	1, 2

NOTES:

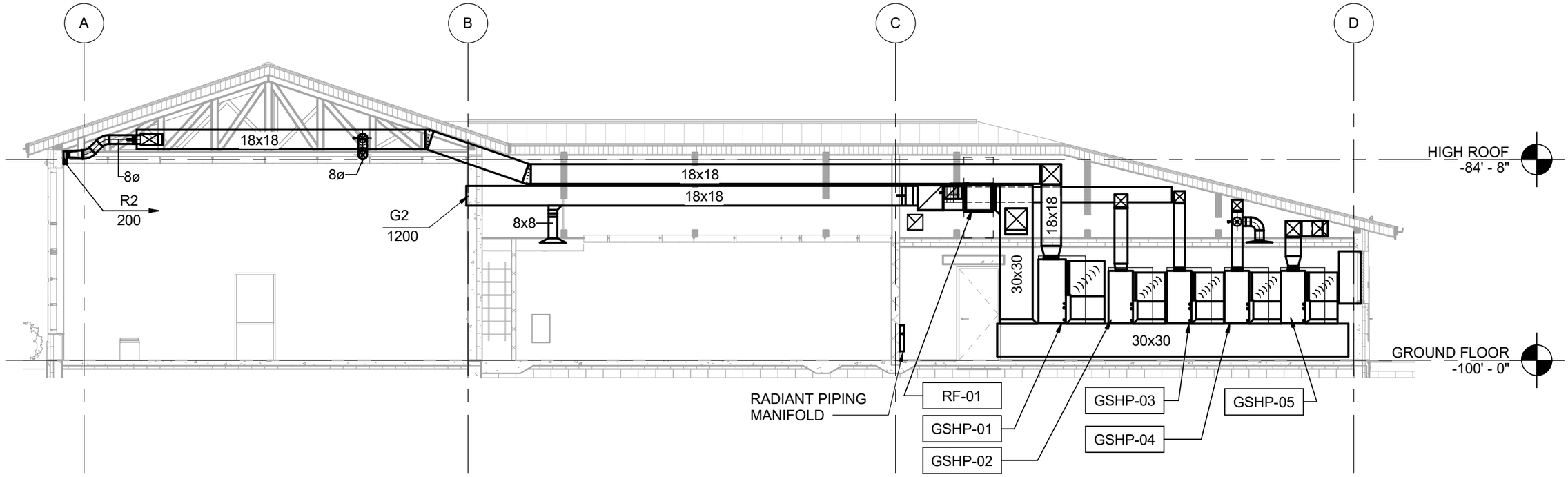
1. PRESSURE RANGE SETTINGS: 10-45 PSI CUT-IN, 20-50 PSI CUT-OUT, 10-30 PSI PRESSURE DIFFERENTIAL.
2. 8 FT 16 GA 115VAC POWER CORD ELECTRICAL CONNECTION, LOW LEVEL SWITCH, SUCTION STRAINER, DRAIN VALVE, CHECK VALVE, PRESSURE SWITCH, GAUGE, RELIEF VALVE AND ISOLATION VALVE.
3. PROVIDE FLOOR MOUNTING SUPPORT LEGS.

DIFFUSER, REGISTER AND GRILLE SCHEDULE

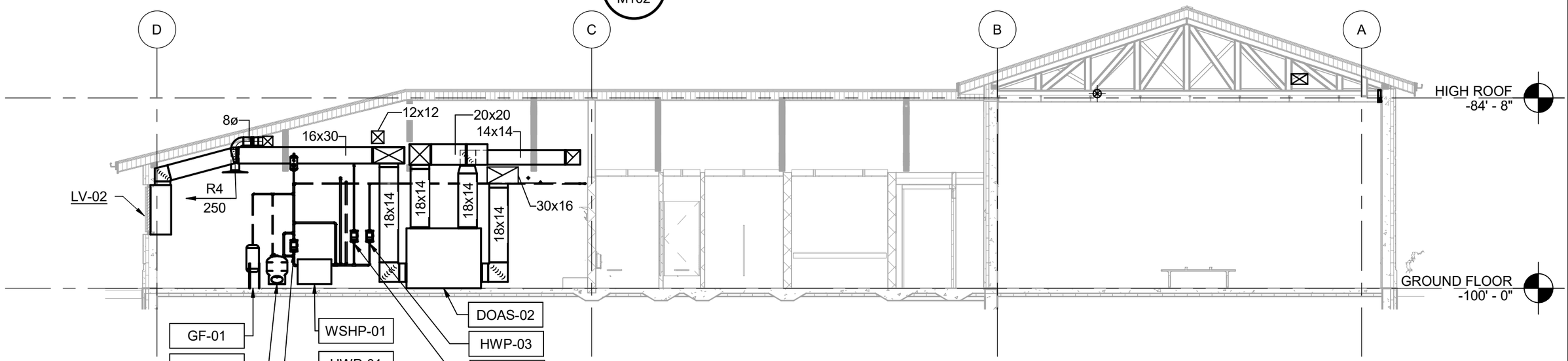
MARK	DESCRIPTION	MOUNTING	USE	FACE SIZE (IN)	NECK SIZE (IN)	MATERIAL	FINISH	MAX. P.D. (IN. WG)	MAX. N.C. AT P.D. SHOWN	ACCESSORIES	BASIS OF DESIGN	NOTES
R1	LINEAR SLOT	LAY-IN	SUPPLY AIR	24X5	8" DIA	ALUMINUM	WHITE	0.08	20	--	TITUS FTI-20	2
R2	LINEAR SLOT	LAY-IN	SUPPLY AIR	60X4	8" DIA	ALUMINUM	WHITE	0.08	20	--	TITUS FTI-15	1
R2	LINEAR SLOT	SURFACE MOUNT	SUPPLY AIR	60X6	SEE PLAN	ALUMINUM	WHITE	0.08	20	--	TITUS FL-10	3
R3	SQUARE, THREE CONE	LAY-IN	SUPPLY AIR	24X24	SEE PLAN	ALUMINUM	WHITE	0.08	30	--	TITUS TMS-AA	
R4	SQUARE, THREE CONE	LAY-IN	SUPPLY AIR	24X24	SEE PLAN	ALUMINUM	WHITE	0.08	30	--	TITUS TMS-AA	
R5	SQUARE, THREE CONE	SURFACE MOUNT	SUPPLY AIR	12X12	SEE PLAN	ALUMINUM	WHITE	0.08	30	--	TITUS TMS-AA	
G1	LINEAR SLOT	LAY-IN	RET/EXH AIR	24X5	8" DIA	ALUMINUM	WHITE	0.08	20	--	TITUS FTI-20	2
G2	LINEAR SLOT	LAY-IN	RET/EXH AIR	60X4	8" DIA	ALUMINUM	WHITE	0.08	20	--	TITUS FTI-15	1
G2	LINEAR SLOT	SURFACE MOUNT	RET/EXH AIR	60X14	SEE PLAN	ALUMINUM	WHITE	0.08	20	--	TITUS FL-30	4
G-3	EGG-CRATE	LAY-IN	RET/EXH AIR	24X24	SEE PLAN	ALUMINUM	WHITE	0.08	30	--	TITUS 50F	

NOTES:

1. 1-SLOT, UP TO 200 CFM.
2. 2-SLOT, UP TO 200 CFM.
3. 2-SLOT, UP TO 350 CFM.
4. 2-SLOT, UP TO 1200 CFM.



1 M102 HVAC SECTION 1



2 M102 HVAC SECTION 2

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	HVAC SECTIONS	SHEET M90[illegible]136	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/20/2024 12:25:31 AM PLOT BY : PLOT NAME : PLOT SCALE : 1/8" = 1'-0"

2

A

B

C

D

1

2

3

3.5

3"-SAN

2"-SAN

4"-SAN

4" SAN UP

2" SAN UP

4" SAN UP

4"-SAN

FCO

6"-SAN

2" SAN UP

2" SAN UP

4" SAN UP

6"-SAN

MATCHLINE - SEE SHEET P102 FOR CONTINUATION

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	UNDERFLOOR PLUMBING PLAN - AREA A	SHEET P10[illegible]	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/20/2024 12:25:32 AM PLOT BY : PLOT NAME : PLOT SCALE : 1/8" = 1'-0"

2

A

B

C

D

MATCHLINE - SEE SHEET P101 FOR CONTINUATION

3.5

4

5

6

6"-SAN

4"-SAN

4" SAN UP

2" SAN UP

2" SAN UP

4" SAN UP

4"-SAN

3"-SAN

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4"-SAN

4"-SAN

2" SAN UP

2" SAN UP

4" SAN UP

4" SAN UP

3"-SAN

2"-SAN

2"-SAN

6"-SAN

3" WATER SERVICE

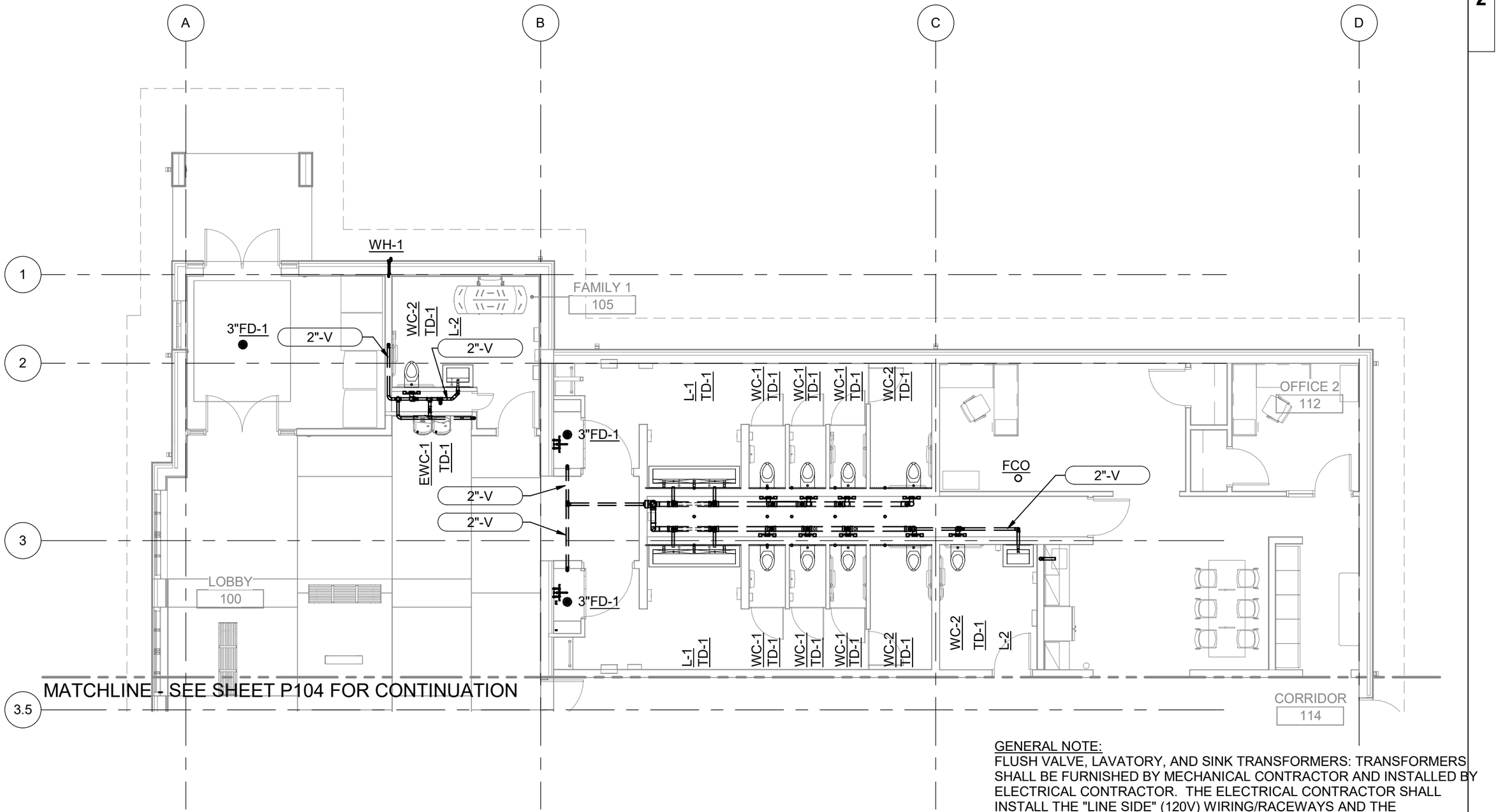
SEE CIVIL FOR CONTINUATION

1" TO EQUIPMENT GARAGE SEE CIVIL FOR CONTINUATION

SEE CIVIL FOR CONTINUATION

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	UNDERFLOOR PLUMBING PLAN - AREA B	SHEET P10[illegible]	E

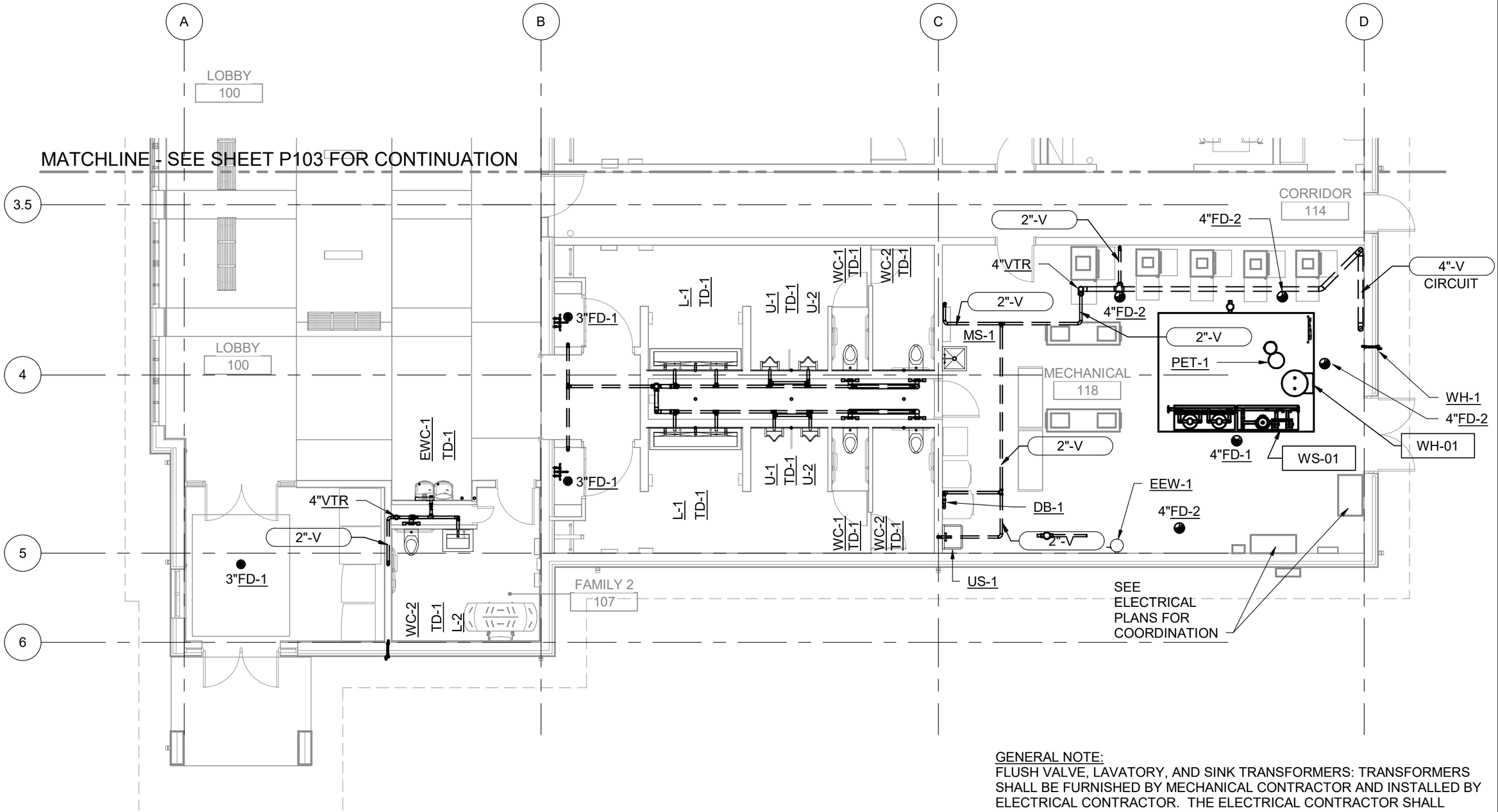
FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/20/2024 12:25:32 AM PLOT BY : PLOT NAME : PLOT SCALE : 1/8" = 1'-0"



GENERAL NOTE:
FLUSH VALVE, LAVATORY, AND SINK TRANSFORMERS: TRANSFORMERS SHALL BE FURNISHED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR. THE ELECTRICAL CONTRACTOR SHALL INSTALL THE "LINE SIDE" (120V) WIRING/RACEWAYS AND THE MECHANICAL CONTRACTOR SHALL INSTALL THE "LOAD SIDE" LOW VOLTAGE WIRING/RACEWAYS. REFER TO ELECTRICAL SPECIFICATIONS FOR INSTALLATION REQUIREMENTS FOR LOW VOLTAGE CABLE.

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	GROUND LEVEL SANITARY PLAN - AREA A	SHEET P10[illegible]	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/20/2024 12:25:33 AM PLOT BY : PLOT NAME : PLOT SCALE : As indicated

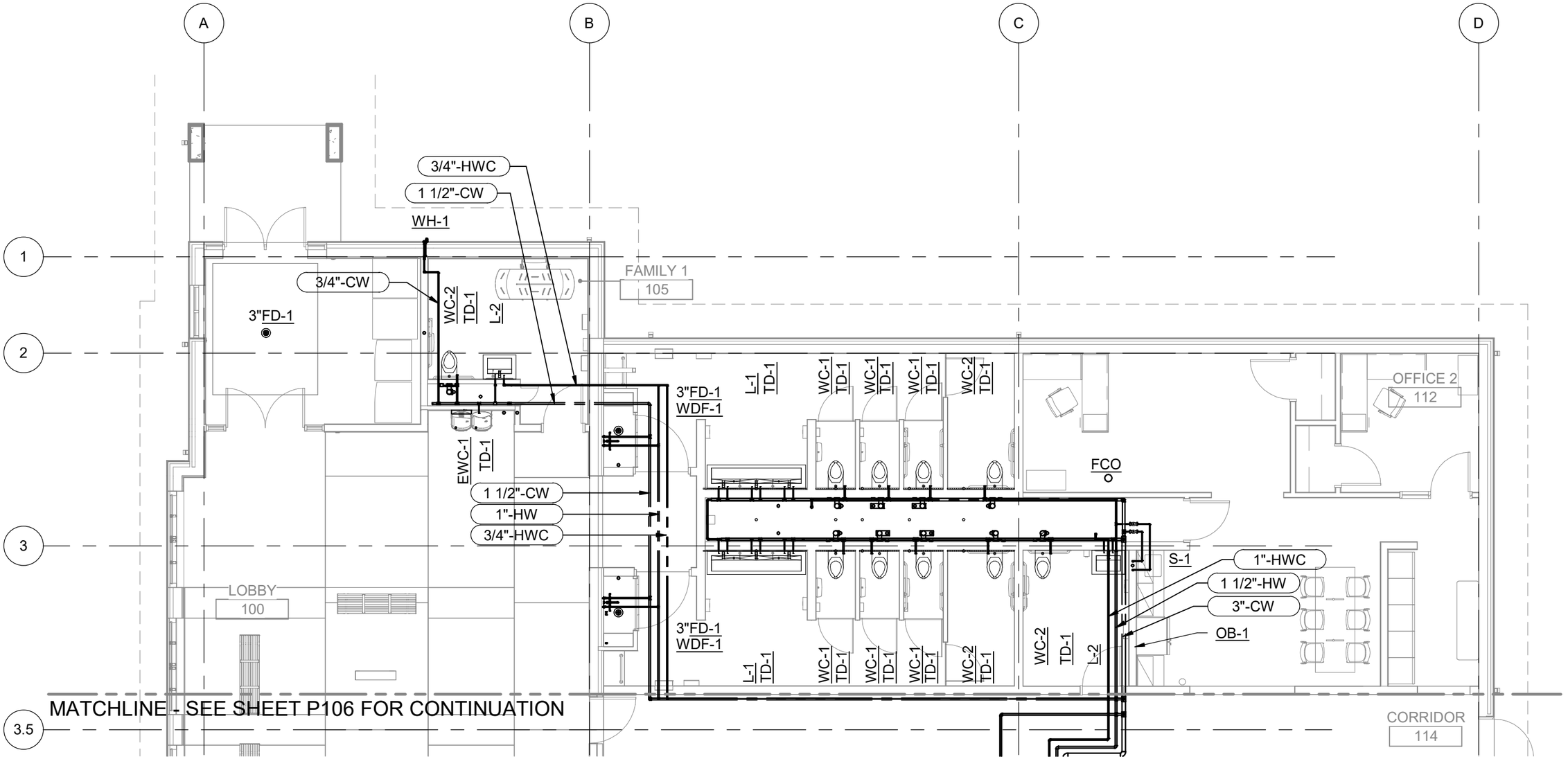


GENERAL NOTE:
FLUSH VALVE, LAVATORY, AND SINK TRANSFORMERS: TRANSFORMERS SHALL BE FURNISHED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR. THE ELECTRICAL CONTRACTOR SHALL INSTALL THE "LINE SIDE" (120V) WIRING/RACEWAYS AND THE MECHANICAL CONTRACTOR SHALL INSTALL THE "LOAD SIDE" LOW VOLTAGE WIRING/RACEWAYS. REFER TO ELECTRICAL SPECIFICATIONS FOR INSTALLATION REQUIREMENTS FOR LOW VOLTAGE CABLE.

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	GROUND LEVEL SANITARY PLAN - AREA B	SHEET P10[illegible]	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/20/2024 12:25:35 AM PLOT BY : PLOT NAME : PLOT SCALE : As indicated

2



PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	GROUND LEVEL WATER PLUMBING PLAN - AREA A	SHEET P107

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/20/2024 12:25:35 AM PLOT BY : PLOT NAME : PLOT SCALE : 1/8" = 1'-0"

E

2

A B C D

3.5

4

5

6

MATCHLINE - SEE SHEET P105 FOR CONTINUATION

LOBBY
100

VESTIBULE
2
102

3"FD-1

3/4"-CW

FAMILY 2
107

WDF-1

L-1 TD-1

U-1 TD-1 U-2

WC-1 TD-1

TD-1 WC-2

1 1/2"-CW

1"-HW

3/4"-HWC

EWC-1 TD-1

WDF-1

L-1 TD-1

U-1 TD-1 U-2

WC-1 TD-1

TD-1 WC-2

WC-2 TD-1 L-2

WH-1

3/4"-HWC

1 1/2"-CW

1"-HWC

1 1/2"-HW

MS-1

4"FD-1

4"FD-1

CORRIDOR
114

MECHANICAL
118

MVS-1

4"FD-1

WH-1

PET-1

WH-01

DB-1

4"FD-1

3"-CW

4"FD-1

WS-01

EEW-1

US-1

3"-CW

1 1/4"-HW

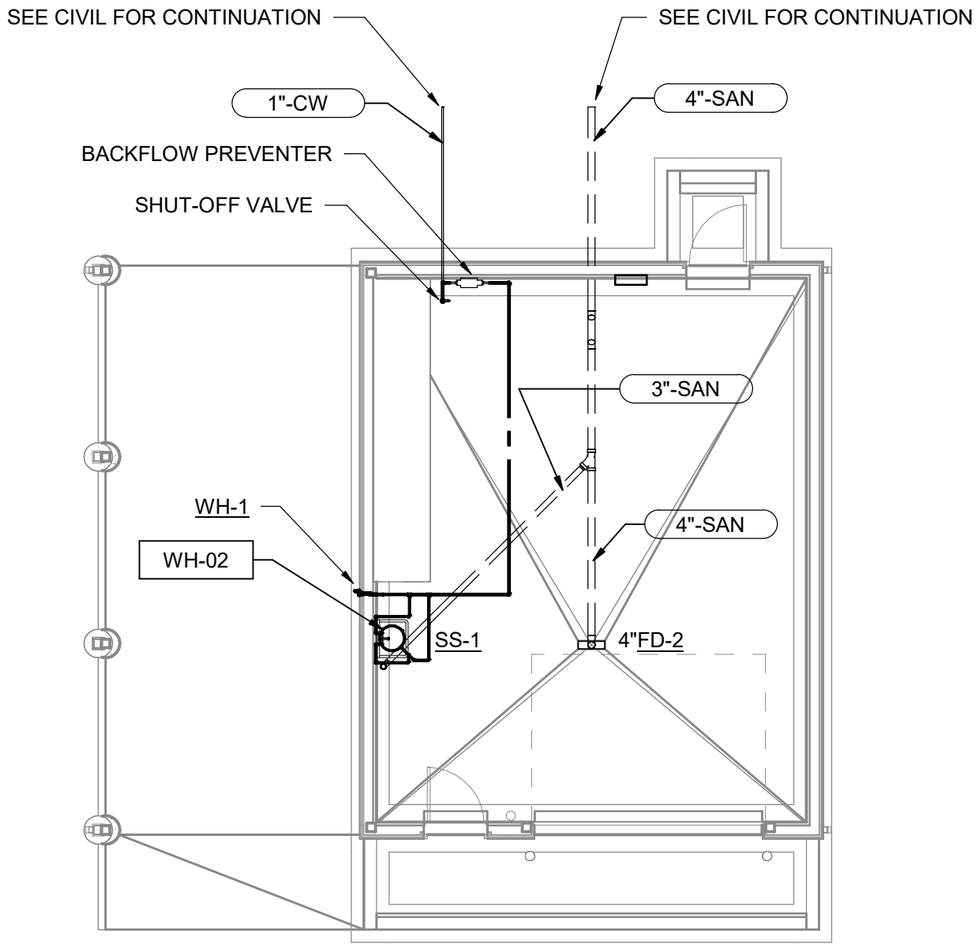
1 1/4"-CW

WATER
ENTRANCE

SEE ELEC
FOR
COORDINATION

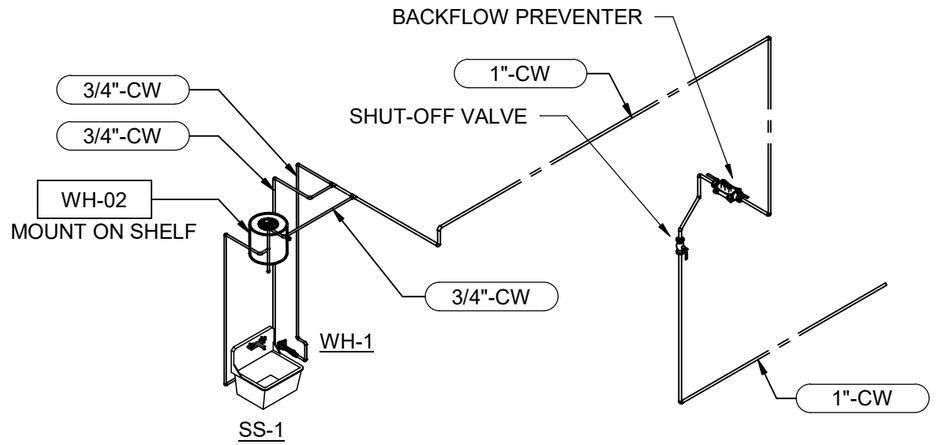
PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	GROUND LEVEL WATER PLUMBING PLAN - AREA B	SHEET P10[illegible]	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/20/2024 12:25:37 AM PLOT BY : PLOT NAME : PLOT SCALE : 1/8" = 1'-0"

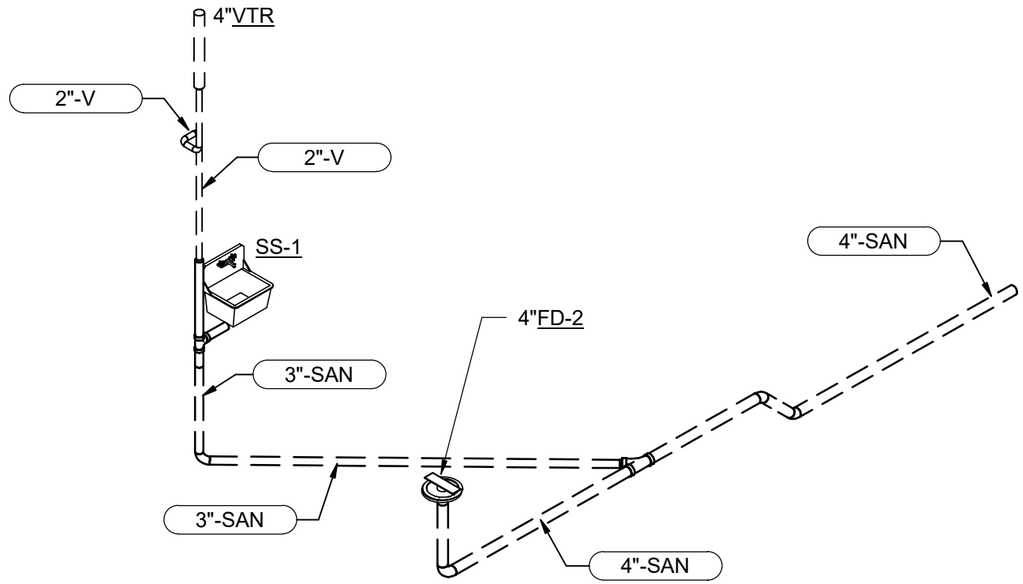


EQUIPMENT GARAGE PLUMBING PLAN

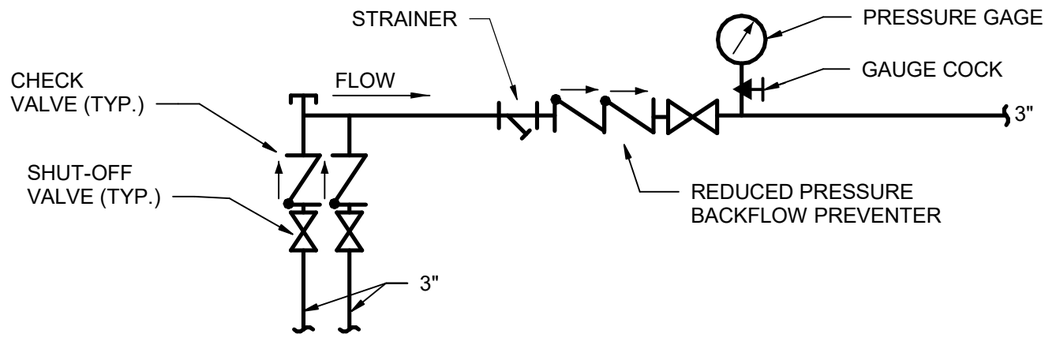
1/8" = 1'-0"



WATER RISER DIAGRAM

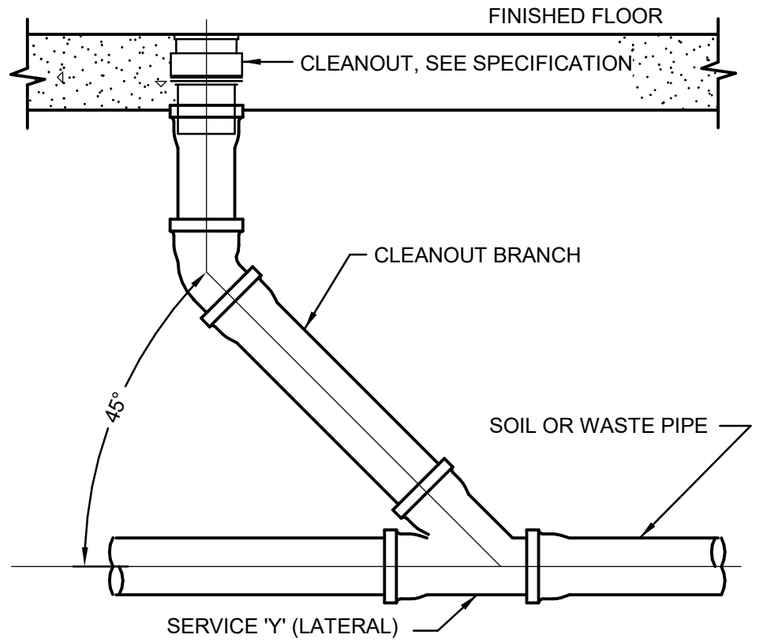


SANITARY RISER DIAGRAM



WATER SERVICE ENTRANCE DETAIL

NOT TO SCALE

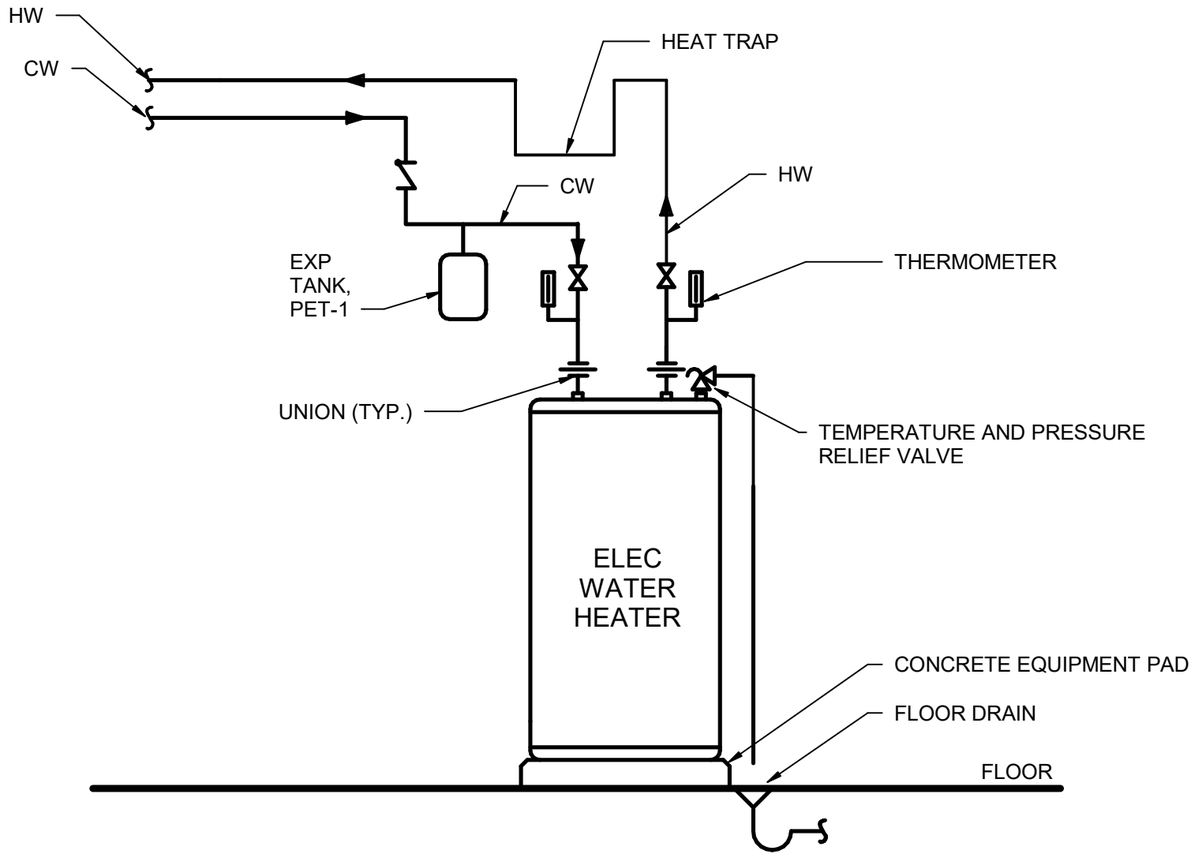


NOTES:

1. CLEANOUTS SHALL BE RECESSED 1/2" BELOW FINISHED SURFACE. COVER SHALL BE ACCESSIBLE FOR GENERAL MAINTENANCE.

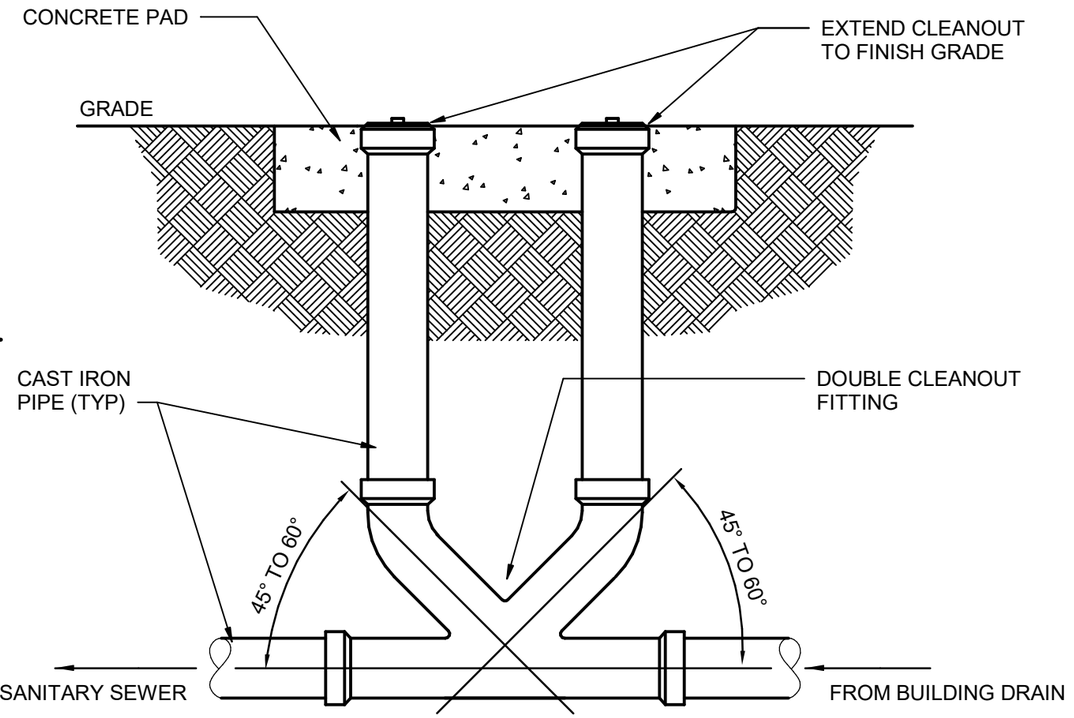
CLEANOUT THRU FLOOR

NOT TO SCALE



WATER HEATER PIPING CONNECTION DETAIL

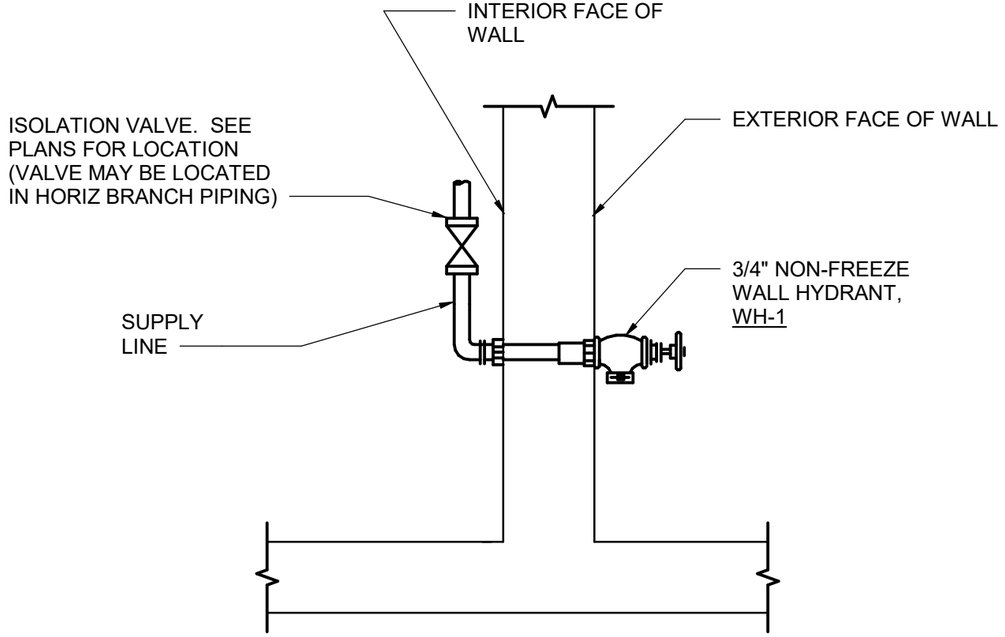
NOT TO SCALE



DOUBLE GRADE CLEANOUT DETAIL

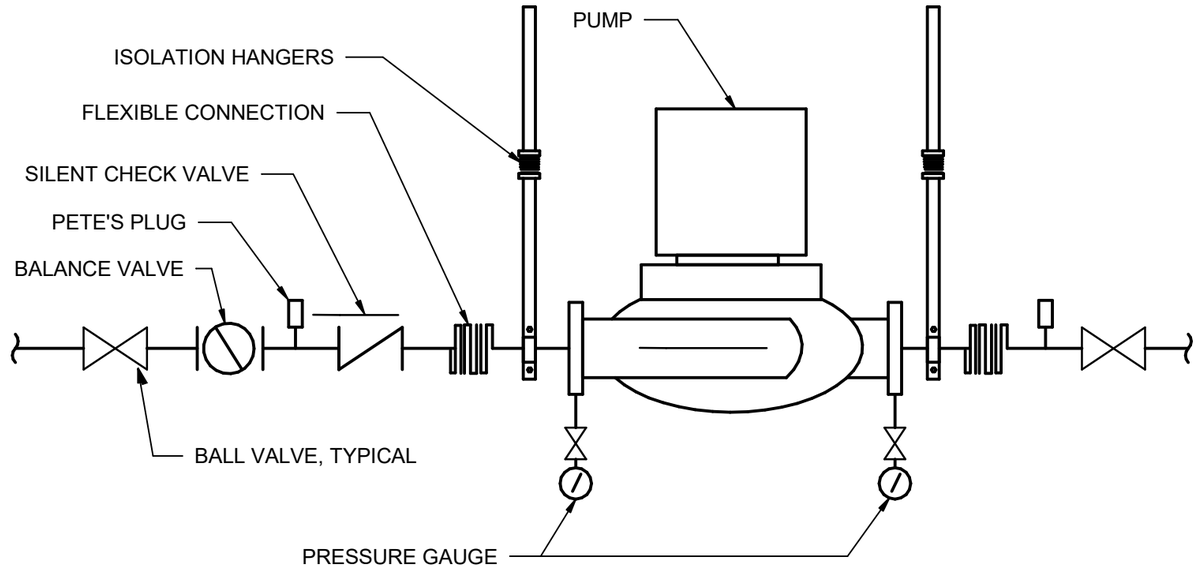
NOT TO SCALE

2



WALL HYDRANT INSTALLATION DETAIL

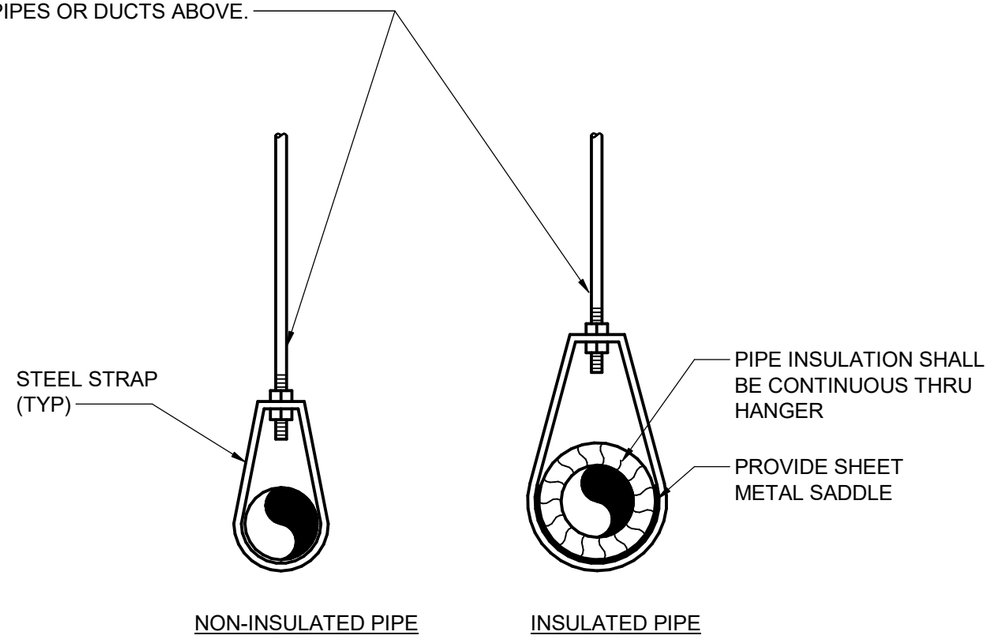
NOT TO SCALE



IN-LINE PUMP PIPING DETAIL

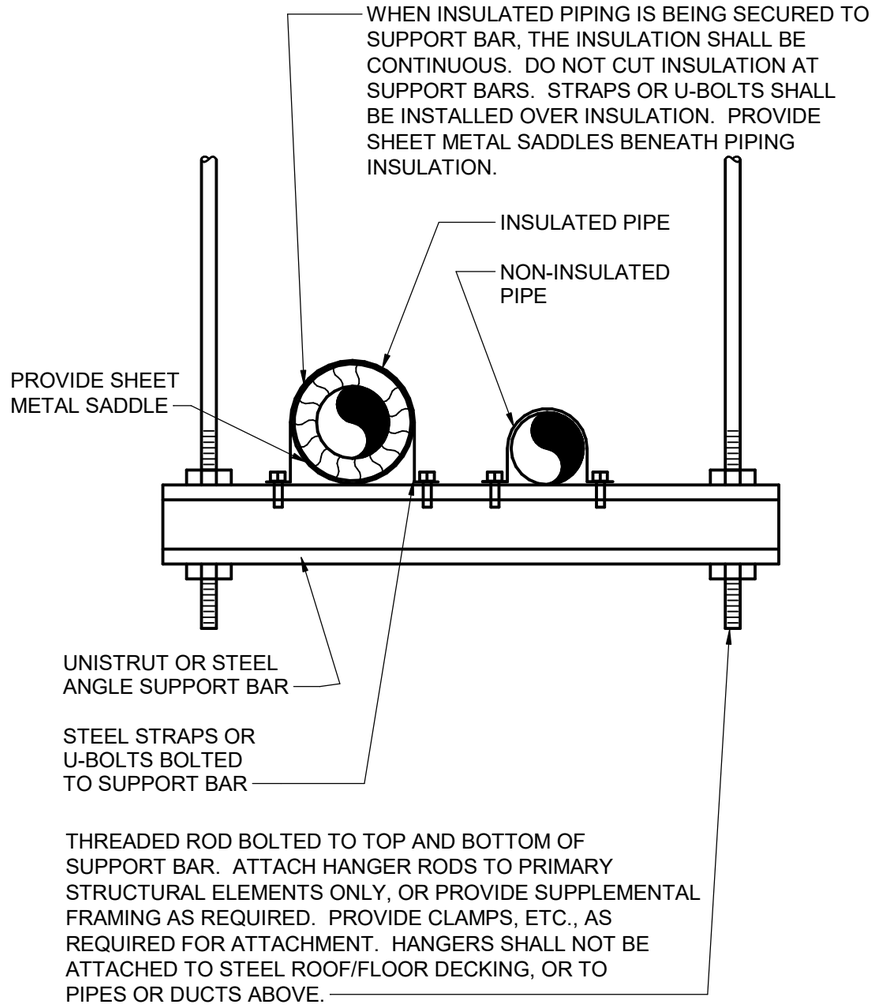
NOT TO SCALE

2



INDIVIDUAL PIPE HANGER DETAIL

NOT TO SCALE



TRAPEZE TYPE PIPE HANGER DETAIL

NOT TO SCALE

2

GENERAL NOTES FOR PLUMBING FIXTURE SCHEDULES

PLUMBING FIXTURES SHALL BE OF ONE OF THE MANUFACTURERS INDICATED AND IN ACCORDANCE WITH THE INFORMATION AND MANUFACTURERS CATALOG NUMBERS INDICATED. IF MANUFACTURES CATALOG NUMBERS HAVE BEEN UPDATED OR DELETED, FIXTURES SHALL BE ONE OF SIMILAR CONFIGURATION AND OF SIMILAR OR BETTER QUALITY THAN WHAT IS SPECIFIED.

VERIFY THE MOUNTING HEIGHT OF THE PLUMBING FIXTURES PRIOR TO ORDERING THE FIXTURES. MOUNTING HEIGHTS SHALL BE AS INDICATED ON ARCHITECTURAL DRAWINGS/PLUMBING FIXTURE SCHEDULES AND COMPLY WITH ADA REQUIREMENTS.

VERIFY COLOR OF FIXTURES WITH ARCHITECT PRIOR TO ORDERING.

COUNTER TOP SINKS: CONTRACTOR SHALL COORDINATE SIZE OF CABINET(S) AND SINK(S) PRIOR TO ODERING FIXTURE(S).

ALL FIXTURE STOPS SHALL BE LOOSE KEY.

ADA WATER CLOSETS: FLUSH CONTROLS SHALL BE MOUNTED ON THE WIDE SIDE OF THE WATER CLOSET STALL AND AT A HEIGHT THAT COMPLIES WITH ADA GUIDELINES.

L-1 LAV	FIXTURE: THREE STATION, WALL MOUNTED, STONE MOLDED BAISIN, WHITE, LAVATORY WITH FRONT OVERFLOW. OVERALL DIMENSTIONS 127" X 90" FAUCET: COMMERCIAL GRADE, ADA COMPLIANT, ELECTRONIC SENSOR ACTIVATED, DIE-CAST METAL HAND WASHING FAUCET. 0.5 GPM. HARDWIRED LESS TRANSFORMER, AERATED, ABOVE DECK, INTEGRATED SIDE MIXER.	FIXTURE: SLOAN ELRF-83000 FAUCET: SLOAN OPTIMA EAF-100	WASTE: 1 1/4" · VENT: 1 1/4" · CW: 1/2" · HW: 1/2" REMARKS: 
L-2 LAV	FIXTURE: ONE STATION, WALL MOUNTED, STONE MOLDED BAISIN, WHITE, LAVATORY WITH FRONT OVERFLOW. OVERALL DIMENSTIONS 30" X 24" FAUCET: COMMERCIAL GRADE, ADA COMPLIANT, ELECTRONIC SENSOR ACTIVATED, DIE-CAST METAL HAND WASHING FAUCET. 0.5 GPM. HARDWIRED LESS TRANSFORMER, AERATED, ABOVE DECK, INTEGRATED SIDE MIXER.	FIXTURE: SLOAN ELRF-81000 FAUCET: SLOAN OPTIMA EAF-100 PIPE COVERS: TRUEBRO LAV GUARD2	WASTE: 1 1/4" · VENT: 1 1/4" · CW: 1/2" · HW: 1/2" REMARKS: 

WC-1 WATER CLOSET	FIXTURE: WALL HUNG, VITREOUS CHINA, SIPHON JET WATER CLOSET WITH ELONGATED BOWL, 1-1/2" BACK SPUD, AND 2-1/8" TRAPWAY, AND BOLT CAPS. COLOR: WHITE. 1.6 GALLONS PER FLUSH. FLUSH VALVE: ENCLOSED, DIAPHRAGM TYPE, CHROME PLATED WITH DUAL FILTERED BY-PASS, SPUD COUPLING AND FLANGE FOR 1-1/2" BACK SPUD, ADA COMPLIANT, ADJUSTABLE TAILPIECE, VACUUM BREAKER FLUSH CONNECTION, AND 1" IPS SCREWDRIVER BAK-CHEK ANGLE STOP, VANDAL RESISTANT STOP CAP, 1.6 GALLONS PER FLUSH. SEAT: MOLDED PLASTIC, ELONGATED, SELF SUSTAINING CHECK HINGES, OPEN FRONT WITHOUT COVER. COLOR: WHITE.	FIXTURE: AMERICAN STANDARD "AFWALL" 2257.101 FLUSH VALVE: SLOAN "ROYAL" MODEL # 152 ESS SEAT: CHURCH 295SSCT	WASTE: 4" · VENT: 2" · CW: 1" · HW: - REMARKS: 
WC-2 WATER CLOSET (ADA)	FIXTURE: WALL HUNG, VITREOUS CHINA, SIPHON JET WATER CLOSET WITH ELONGATED BOWL, 1-1/2" BACK SPUD, AND 2-1/8" TRAPWAY, AND BOLT CAPS. COLOR: WHITE. 1.6 GALLONS PER FLUSH. MOUNT AT ADA HEIGHT. FLUSH VALVE: ENCLOSED, DIAPHRAGM TYPE, CHROME PLATED WITH DUAL FILTERED BY-PASS, SPUD COUPLING AND FLANGE FOR 1-1/2" BACK SPUD, ADA COMPLIANT, ADJUSTABLE TAILPIECE, VACUUM BREAKER FLUSH CONNECTION, AND 1" IPS SCREWDRIVER BAK-CHEK ANGLE STOP, VANDAL RESISTANT STOP CAP, 1.6 GALLONS PER FLUSH. SEAT: MOLDED PLASTIC, ELONGATED, SELF SUSTAINING CHECK HINGES, OPEN FRONT WITHOUT COVER. COLOR: WHITE.	FIXTURE: AMERICAN STANDARD "AFWALL" 2257.101 FLUSH VALVE: SLOAN "ROYAL" MODEL # 152 ESS SEAT: CHURCH 295SSCT	WASTE: 4" · VENT: 2" · CW: 1" · HW: - REMARKS: 

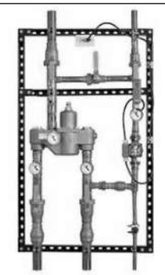
US-1 UTILITY SINK	FIXTURE: FLOOR MOUNTED LAUNDRY TUB WITH BAKED ENAMEL STEEL LEGS WITH LEVELING DEVICES, STRAINER AND PLUG. DIMENSIONS: 20-1/4" x 17-1/4" x 13" FAUCET: 4" FAUCET WITH CHROME PLATED BLADE HANDLES, 4" CENTERSET, CHROME PLATED, METAL CONSTRUCTED FAUCET WITH 4" BLADE HANDLES, 6-3/4" 360 DEG. SPOUT, AERATOR, AND HOSE ADAPTER.	FIXTURE: FIAT FL1 FAUCET: FIAT A1000	WASTE: 2" · VENT: 2" · CW: 3/4" · HW: 3/4" REMARKS: 
EWC-1 ELEC WATER COOLER	FIXTURE: SELF-CONTAINED, WALL MOUNT, BI-LEVEL ELECTRIC WATER COOLER WITH BOTTLE FILLING STATION. EASY TOUCH PUSHBAR ACTVATION FRONT AND SIDES, EXTRA DEEP BASIN, LIGHT GRAY GRANITE VINYL CLAD STEEL FINISH, FLEXIBLE SAFETY BUBBLER. ADA COMPLIANT. ELECTRONIC BOTTLE FILLER SENSOR AND LAMINAR FLOW BOTTLE FILLER. CHILLING CAPACITY OF 8GPH OF 50 DEG F DRINKING WATER, BASED UPON 80 DEG F INLET WATER AND 90 DEG F AMBIENT. ELECTRICAL: 120V/60HZ, 6.0 F.L. AMPS, 370 WATTS. CONFIRM HI/LO ORIENTATION WITH ARCHITECTURAL PLANS PRIOR TO ORDERING.	FIXTURE: ELKAY EZSTL8WSLK	WASTE: 1 1/2" · VENT: 1 1/2" · CW: 1/2" · HW: - REMARKS: 1, 3 
EEW-1 EMERG. EYE WASH	EYE WASH, WALL MOUNTED, STAINLESS STEEL BOWL. TWO SPRAY TYPE OUTLET HEADS WITH FLIP TOP DUST COVERS, INTERNAL FLOW CONTROL AND FILTER. 1/2" IPS CHROME PLATED BRASS STAY-OPEN BALL VALVE. 11-1/8" DIAMETER STAINLESS STEEL BOWL. HEAVY DUTY CAST ALUMINUM WALL BRACKET WITH CORROSION RESISTANT POWDER COATED FINISH. SUPPLY: 1/2" NPT FEMAILE INLET. WASTE: 1 1/4" NPT FEMALE OUTLET. ANSI COMPLIANT IDENTIFICATION SIGN. THERMOSTATIC MIXING VALVE AS REQUIRED BY ANSI Z358.1.	FIXTURE: GUARDIAN G1814 VALVE: GUARDIAN G3600LF	WASTE: 1 1/4" · VENT: 1 1/4" · CW: - · HW: - REMARKS: 2 

U-1 URINAL	FIXTURE: WALL HUNG, VITREOUS CHINA, WASHOUT URINAL WITH 3/4" INLET BACK SPUD, AND EXTENDED SIDES FOR PRIVACY. COLOR: WHITE. 0.5 GALLONS PER FLUSH. FLUSH VALVE: BACK MOUNT ENCLOSED, POLISHED CHROME FINISH, HARDWIRE SENSOR OPERATED FLUSHOMETER. DUAL FILTERED DIAPHRAGM ASSEMBLY, SPUD COUPLING AND FLANGE FOR 3/4" TOP SPUD, INFRARED SENSOR WITH HIGH AND LOW TARGET DETECTION. 3/4" SCREWDRIVER ANGLE STOP WITH VANDAL RESISTANT STOP CAP. 0.5 GALLONS PER FLUSH.	FIXTURE: AMERICAN STANDARD "WASHBROOK" 6590.001 FLUSH VALVE: SLOAN ROYAL 195 ESS HARDWIRE -0.5-HW	WASTE: 2" · VENT: 1-1/2" · CW: 3/4" · HW: - REMARKS: 
U-2 URINAL	FIXTURE: WALL HUNG, VITREOUS CHINA, WASHOUT URINAL WITH 3/4" INLET BACK SPUD, AND EXTENDED SIDES FOR PRIVACY. MOUNT AT ADA HEIGHT. COLOR: WHITE. 0.5 GALLONS PER FLUSH. FLUSH VALVE: BACK MOUNT ENCLOSED, POLISHED CHROME FINISH, HARDWIRE SENSOR OPERATED FLUSHOMETER. DUAL FILTERED DIAPHRAGM ASSEMBLY, SPUD COUPLING AND FLANGE FOR 3/4" TOP SPUD, INFRARED SENSOR WITH HIGH AND LOW TARGET DETECTION. 3/4" SCREWDRIVER ANGLE STOP WITH VANDAL RESISTANT STOP CAP. 0.5 GALLONS PER FLUSH.	FIXTURE: AMERICAN STANDARD "WASHBROOK" 6590.001 FLUSH VALVE: SLOAN ROYAL 195 ESS HARDWIRE -0.5-HW	WASTE: 2" · VENT: 1-1/2" · CW: 3/4" · HW: - REMARKS: 1 
MS-1 MOP SINK	ONE PIECE PRECAST TERRAZZO MOP SERVICE BASIN WITH FACTORY INSTALLED DRAIN WITH COMBINATION DOME STRAINER AND LINT BASKET FOR 3" CAULK JOINT. STAINLESS STEEL CAPS ON CURBS. CAULK ALL EDGES WHERE BASIN MEETS WALL WITH COLOR MATCHED SILICONE SEALANT. SIZE: 24"X24"X12". FAUCET: EXPOSED WALL MOUNT-MOUNT UTILITY FAUCET WITH CAST BRASS BODY AND INTEGRAL SUPPLY STOPS. CAST BRASS SPOUT WITH BUCKET HOOK, TOP BRACE, VANDAL RESISTANT METAL LEVER HANDLES, VACUUM BREAKER, AND 1/4 TURN WASHERLESS CERAMIC DISC VALVE CARTRIDGES. CHROME PLATED FINISH	FIXTURE: FIAT TSB-1000 FAUCET: AMERICAN STANDARD 8344.012 MOP HANGER BRACKET: FIAT #889-CC HOSE/BRACKET COMBO: FIAT #832-AA WALL GUARDS: FIAT #MSG 2424	WASTE: 3" · VENT: 2" · CW: 3/4" · HW: 3/4" REMARKS: 

REMARKS

1. SHALL COMPLY WITH ADA REQUIREMENTS.
2. ROUTE DRAIN (INDIRECTLY) TO NEAREST FLOOR DRAIN.
3. COORDINATE HI-LO ORIENTATION WITH ARCHITECTURAL PLANS PRIOR TO ODERING.

HB-1 HOSE BIBB	FIELD TESTABLE, BACKFLOW PROTECTED WALL FAUCET. FURNISHED WITH POLYCARBONATE WHEEL HANDLE AND LOOSE TEE KEY. ROUGH BRASS FINISH.	FIXTURE: WOODFORD MODEL 26-BR	WASTE: - | VENT: - | CW: 3/4" | HW: - REMARKS: 
WH-1 WALL HYDRANT	AUTOMATIC DRAINING, FREEZELESS WALL HYDRANT WITH HOSE CONNECTION BACKFLOW PROTECTION. HYDRANT WILL DRAIN AS HANDLE IS SHUT-OFF, EVEN IF HOSE IS ATTACHED. 3/4" MALE HOSE THREAD, TWO INDEPENDENT CHECK VALVES. HARDENED STAINLESS STEEL OPERATING STEM AND ONE-PIECE VALVE PLUNGER TO CONTROL BOTH FLOW AND DRAIN FUNCTIONS. FINISH: CHROME PLATED. PROVIDE LOOSE TEE KEY.	FIXTURE: WOODFORD MODEL 67	WASTE: - | VENT: - | CW: 3/4" | HW: - REMARKS: 
WHA WATER HAMMER ARREST.	SHOCK ABSORBER WITH STAINLESS STEEL SHELL, HYDRO-PNEUMATIC CUSHION OF ARGON GAS AND PURE GLYCERINE, ELASTOMER, BELLOWS, STAINLESS STEEL ADAPTER AND MALE THREADED PLUG. TYPE NO. | PDI SIZE | FIXTURE UNITS 5005 | A | 1-11 5010 | B | 12-32 5020 | C | 33-60 5030 | D | 61-113 5040 | E | 114-154 5050 | F | 155-330	FIXTURE: JR SMITH SERIES 5000	WASTE: - | VENT: - | CW: - | HW: - REMARKS: 

FD-1 FLOOR DRAIN	DRAIN: CAST IRON FLOOR DRAIN BODY WITH ANCHOR FLANGE, REVERSIBLE CLAMPING COLLAR, SEEPAGE OPENINGS, 1/2" PRIMER TAP WITH PLUG, AND ADJUSTABLE 5" ROUND SATIN FINISH NICKEL BRONZE TOP.	FIXTURE: WADE 1100-1-A5	WASTE: - | VENT: - | CW: - | HW: - REMARKS: 
FD-2 FLOOR DRAIN	DRAIN: CAST IRON FLOOR DRAIN BODY WITH ANCHOR FLANGE, INTEGRAL CLAMPING COLLAR, SEEPAGE OPENINGS, 1/2" PRIMER TAP WITH PLUG, GRATE SUPPORTED BUCKET, AND 12" ROUND DUCTILE IRON HEAVY DUTY GRATE.	FIXTURE: WADE 1200-12-TD	WASTE: - | VENT: - | CW: - | HW: - REMARKS: 
MVS-1 MIXING VALVE STATION	HIGH-LOW MIXING VALVE STATION: PRE-ASSEMBLED AND TESTED RECIRCULATION STATION WITH HIGH-LOW THERMOSTATIC MIXING VALVE, SHUT-OFF VALVES ON INLETS AND OUTLETS, TEMPERATURE/PRESSURE GAUGES ON INLETS, OUTLET SET-UP CONNECTION, RETURN LINE WITH RECIRCULATION PUMP, BALANCING VALVE, AND CHECK VALVES, GFCI OUTLET, MOUNTED TO ENAMEL COATED STRUT. OVERALL DIMENSIONS: 33" X 60" MOUNT TO EQUIPMENT PAD WITH ADDITIONAL SUPPORTS.	FIXTURE: BRADLEY NAVIGATOR NRS-4-RP4-R2-AQ-S	WASTE: - | VENT: - | CW: - | HW: - REMARKS: 
TD-1 TRENCH DRAIN	STAINLESS STEEL TRENCH DRAIN WITH STAINLESS STEEL SLOTTED GRATE. PROVIDE AND INSTALL PER MANUFACTURERS INSTRUCTIONS.	FIXTURE: ZURN Z899-THR	WASTE: 3" | VENT: - | CW: - | HW: - REMARKS: 

S-1 SINK	FIXTURE: SINGLE BOWL, SELF-RIMMING, COUNTER MOUNTED, 18 GAUGE TYPE 304 (18-8) STAINLESS STEEL WITH FAUCET LEDGE, SOUND DEADENING UNDERCOATING, PUNCHED TO MATCH FAUCET. DRAIN: CRUMB CUP STRAINER. OVERALL DIMENSIONS 22"x19-1/2"x7-5/8" DEEP. FAUCET: BELOW DECK MOUNTED SINK FAUCET WITH 8" FIXED CENTERS, CHROME PLATED FINISH. RESTRICTED SWING GOOSENECK SPOUT, 8" CENTER-TO-CENTER. 4" BLADE HANDLES WITH COLOR INDEX BUTTONS. CERAMIC 1/4 TURN CARTRIDGE, 1/2" SUPPLY INLETS AND COUPLING NUT. 1.5 GPM AERATOR.	FIXTURE: ELKAY LR2219 FAUCET: CHICAGO FAUCET 786-GR8E35V317X KAB	WASTE: 1 1/2" · VENT: 1 1/2" · CW: 1/2" · HW: 1/2" REMARKS: 
WDF-1 WASH DOWN FAUCET	FAUCET: BOTTOM FORK BRACE, CAST BRASS SPOUT WITH VACUUM BREAKER, CERAMIC DISC VALVES, INTEGRAL SUPPLY STOPS, OFFSET SHANKS WITH INTEGRAL CHECK VALVES, VANDAL RESISTANT BLADE HANDLES, BUCKET HOOK, 3/4" THREADED HOSE END, 1/2" NPT FEMALE INLETS. ADJUSTABLE CENTER-TO-CENTER: 6" TO 19".	FAUCET: AMERICAN STANDARD 8355.110	WASTE: - · VENT: - · CW: 3/4" · HW: 3/4" REMARKS: 

DB-1 OUTLET BOX	FIXTURE: WASHING MACHINE OUTLET BOX WITH INTEGRAL WATER HAMMER ARRESTER SINGLE LEVER VALVE. BOX MATERIAL: HOT DIPPED GALVANIZED STEEL; 20 GAUGE BOX AND 20 GAUGE FACEPLATE. VALVE AND DRAIN: SINGLE LEVER ARRESTER VALVE KIT WITH 1/2" CONNECTIONS; 2" THREADED DRAIN.	FIXTURE: GUY GRAY WB200HA	WASTE: 2" · VENT: 2" · CW: 1/2" · HW: 1/2" REMARKS: 
OB-1 OUTLET BOX	FIXTURE: ICE MAKER OUTLET BOX, 20 GAUGE BOX AND FACE PLATE. QUARTER TURN VALVE. ROUGH OPENING: 10"W X 8-3/4" H X 3-1/2" D. DIMENSIONS: 11-5/8" W X 9-1/2" H.	FIXTURE: GUY GRAY BIM875QT	WASTE: - · VENT: - · CW: 1/2" · HW: - REMARKS: 
SS-1 SERVICE SINK	WALL MOUNT STAINLESS STEEL (14-GAUGE, TYPE 304) SERVICE SINK WITH 1-1/2" ROLLED RIMS, 12" HIGH BACKSPLASH, AND 3-1/2" DRAIN OPENING. FURNISHED WITH WALL HANGER AND STAINLESS STEEL SUPPORT BRACKETS. DIMENSIONS: 21" X 17-1/2" X 39-3/4". FAUCET: 8" CENTERSET WALL MOUNT FAUCET WITH 3" BUCKET HOOK SPOUT, 2" LEVER HANDLES (6" REACH), 1/2" OFFSET INLETS ROUGH CHROME, CHROME PLATED BRASS MATERIALS, QUARTER TURN CERAMIC DISC VALVE, 2 FAUCET HOLES. 4.0 GPM.	FIXTURE: SINK: ELKAY ESSB2118C FAUCET: ELKAY LK940BR03L2H P-TRAP ELKAY LK173	WASTE: 3" · VENT: 2" · CW: 3/4" · HW: 3/4" REMARKS: 

2

WATER SOFTENER SCHEDULE

MARK	LOCATION	SERVES	SCALE PREVENTION TANK		CONN SIZE	CARTRIDGE FILTER			UV		BASIS OF DESIGN	NOTES
			QTY	SIZE		QTY	MICR...	TYPE	QTY	UV TRANSMITTANCE (UVT)		
WS-01	MECH 118	BUILDING	2	14"X65"	2"	1	5	PLEATED	2	95.00%	LYNC WQAS-100-D	1, 2

NOTES:
1. INSTALL UNIT AS SHOWN AND PER MANUFACTURERS RECOMMENDATIONS.
2. SEE M/E COORDINATION SCHEDULE ON ELECTRICAL SHEETS FOR ELECTRICAL INFORMATION.

WATER HEATER SCHEDULE

MARK	CAP.			STORAGE TANK		BASIS OF DESIGN	NOTES
	TEMP. RISE (°F)	RECOVERY (GPH)	L.W.T. (°F)	CAP. (GAL)	LINING		
WH-01	90.0	68	140.0	80	GLASS	AO SMITH DVE-80-15	1
WH-02	90.0	20	140.0	10	GLASS	AO SMITH DEL-10	1

NOTES:
1. SEE M/E COORDINATION SCHEDULE ON ELECTRICAL SHEETS.

PUMP SCHEDULE

MARK	LOCATION	SERVES	TYPE	FLOW (GPM)	HEAD (FT. WG)	MIN EFF (%)	BASIS OF DESIGN	NOTES
RCP-1	MECH 118	DOM HOT WTR	IN-LINE	5	10.00	NA	B&G ECOCIRC 19-16	1, 2, 3

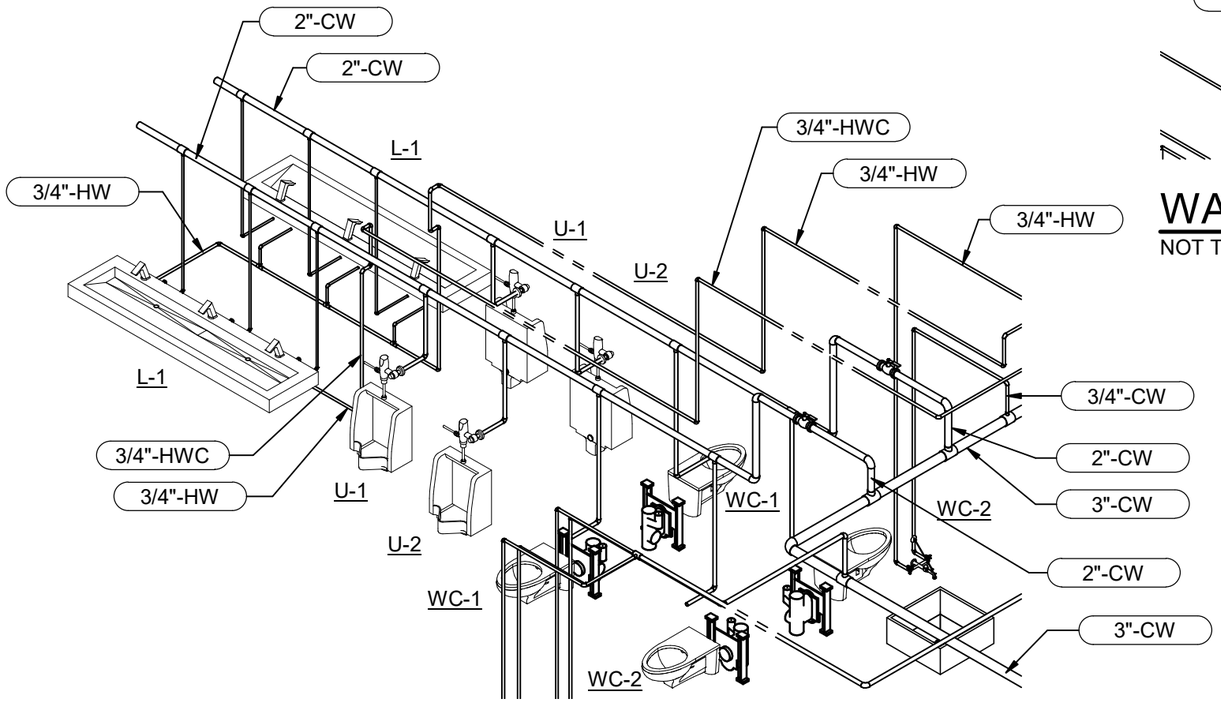
NOTES:
1. INSTALL UNIT AS PART OF MIXING VALVE STATION.
2. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
3. SEE M/E COORDINATION SCHEDULE ON ELECTRICAL SHEETS FOR ELECTRICAL INFORMATION.

EXPANSION TANK SCHEDULE

MARK	LOCATION	SERVES	SYSTEM VOLUME (GAL)	TEMP (°F)	PRESS. (PSI)	BLADDER PRESS. (PSI)	TANK VOLUME (GAL)	ACCEPTANCE VOLUME (GAL)	TANK SIZE DIA x L (IN.)	BASIS OF DESIGN	NOTES
				MAX	MAX						
PET-1	MECH 118	DOM HW		200.0	100.00	38.00	10.3	10.3	15-3/8X19-1/4	B&G PT-25V	1
PET-2	EQ GARAGE	DOM HW		200.0	150.00	38.00	2	2	8X12-5/8	B&G PT-5	1

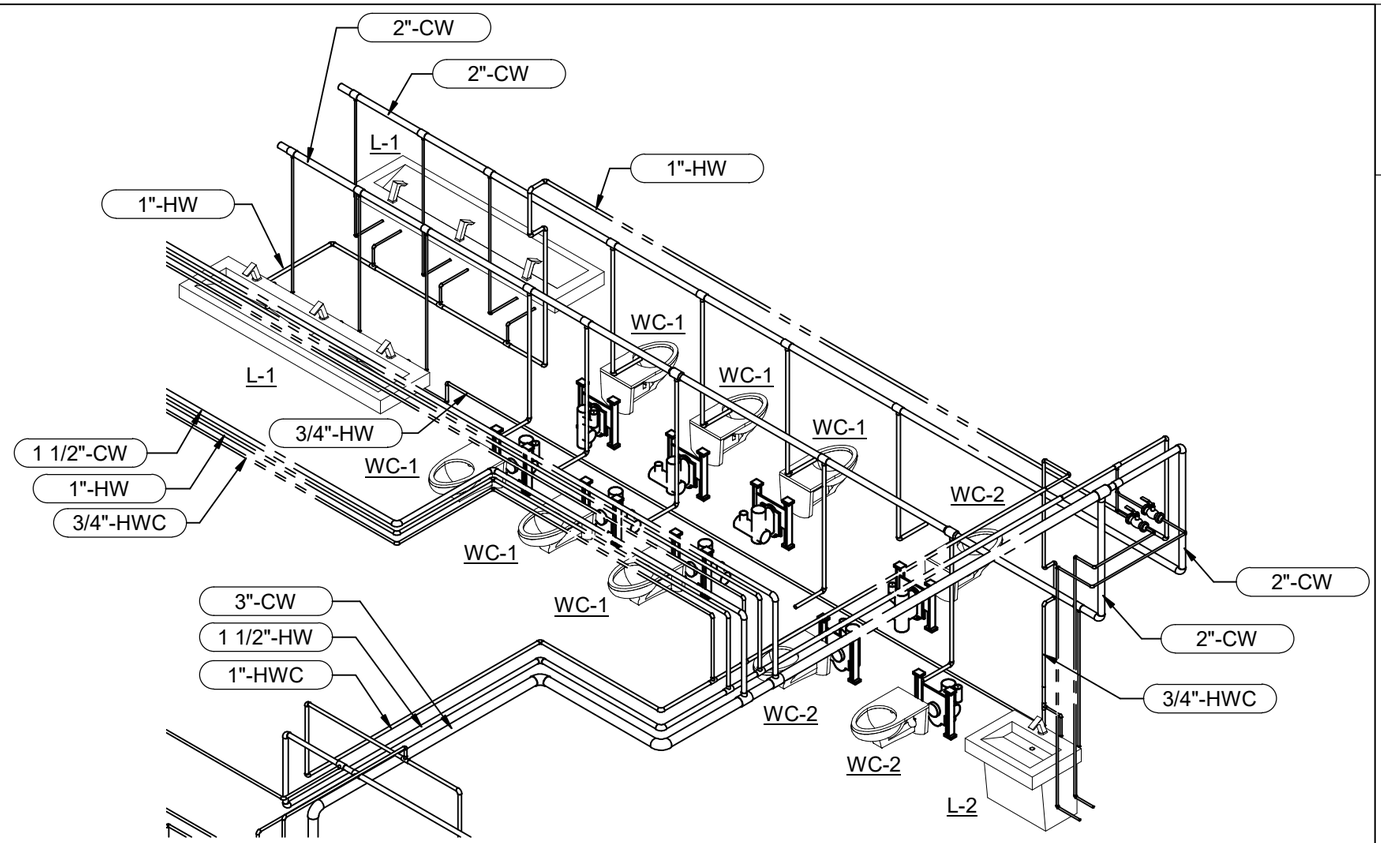
NOTES:
1. INSTALL PER MANUFACTURERS RECOMMENDATIONS.

2



WATER RISER DIAGRAM - MENS RESTROOM GROUP

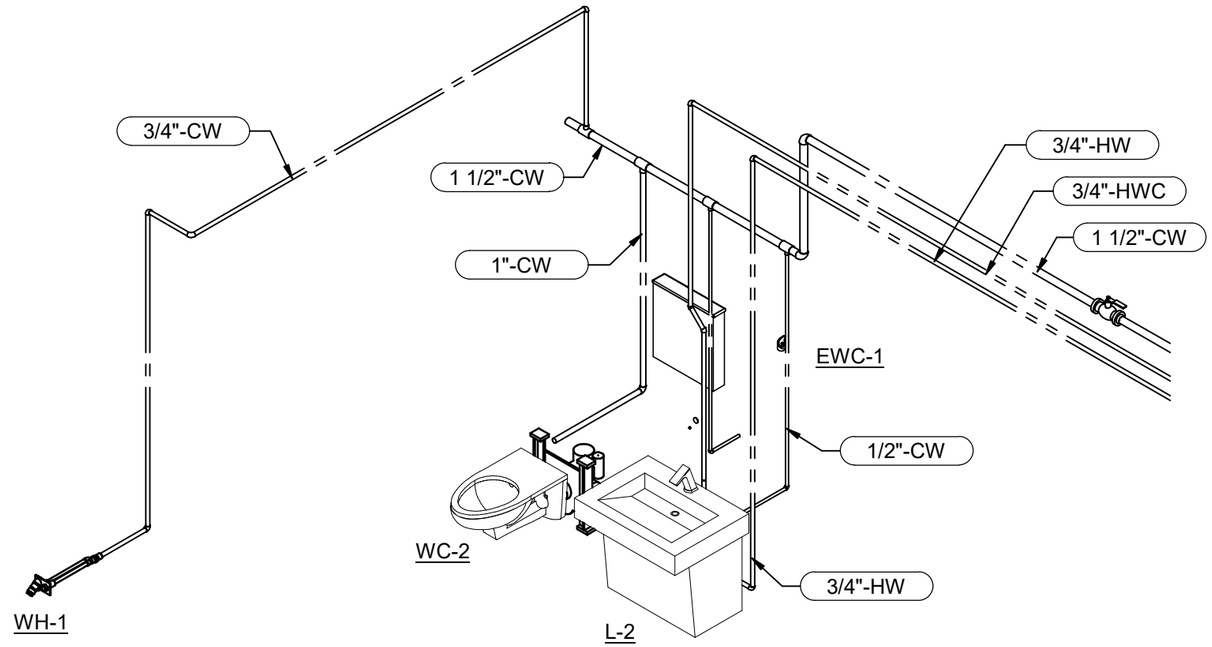
NOT TO SCALE



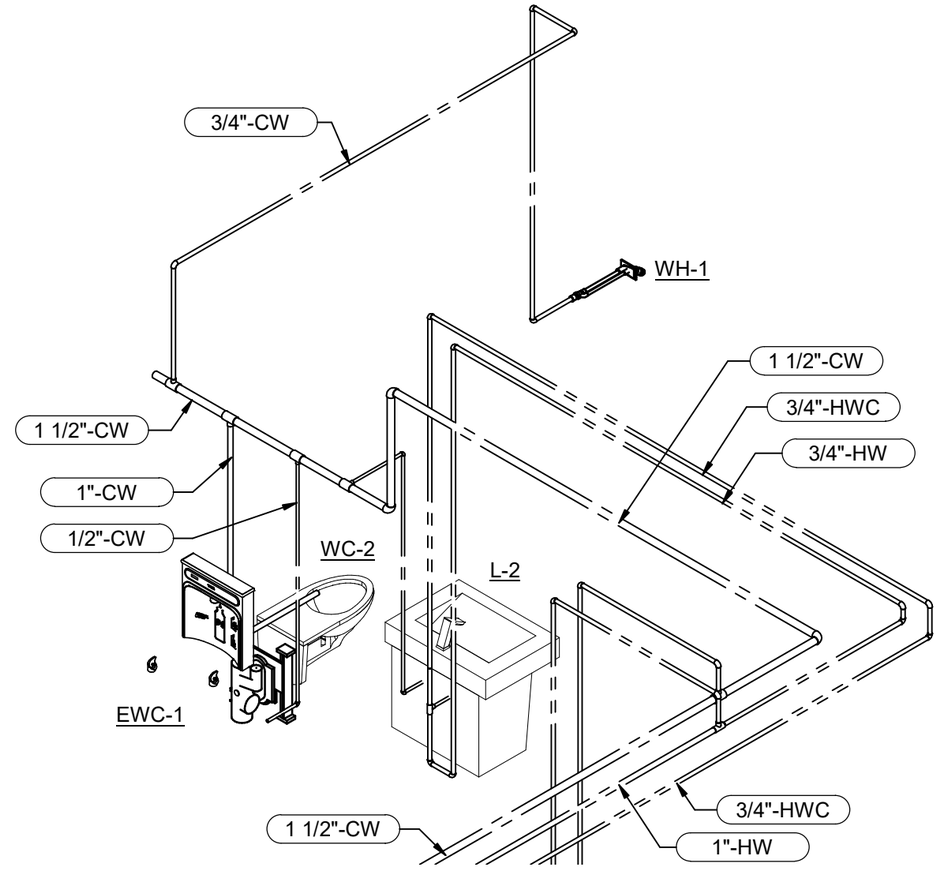
WATER RISER DIAGRAM - WOMENS RESTROOM GROUP

NOT TO SCALE

2



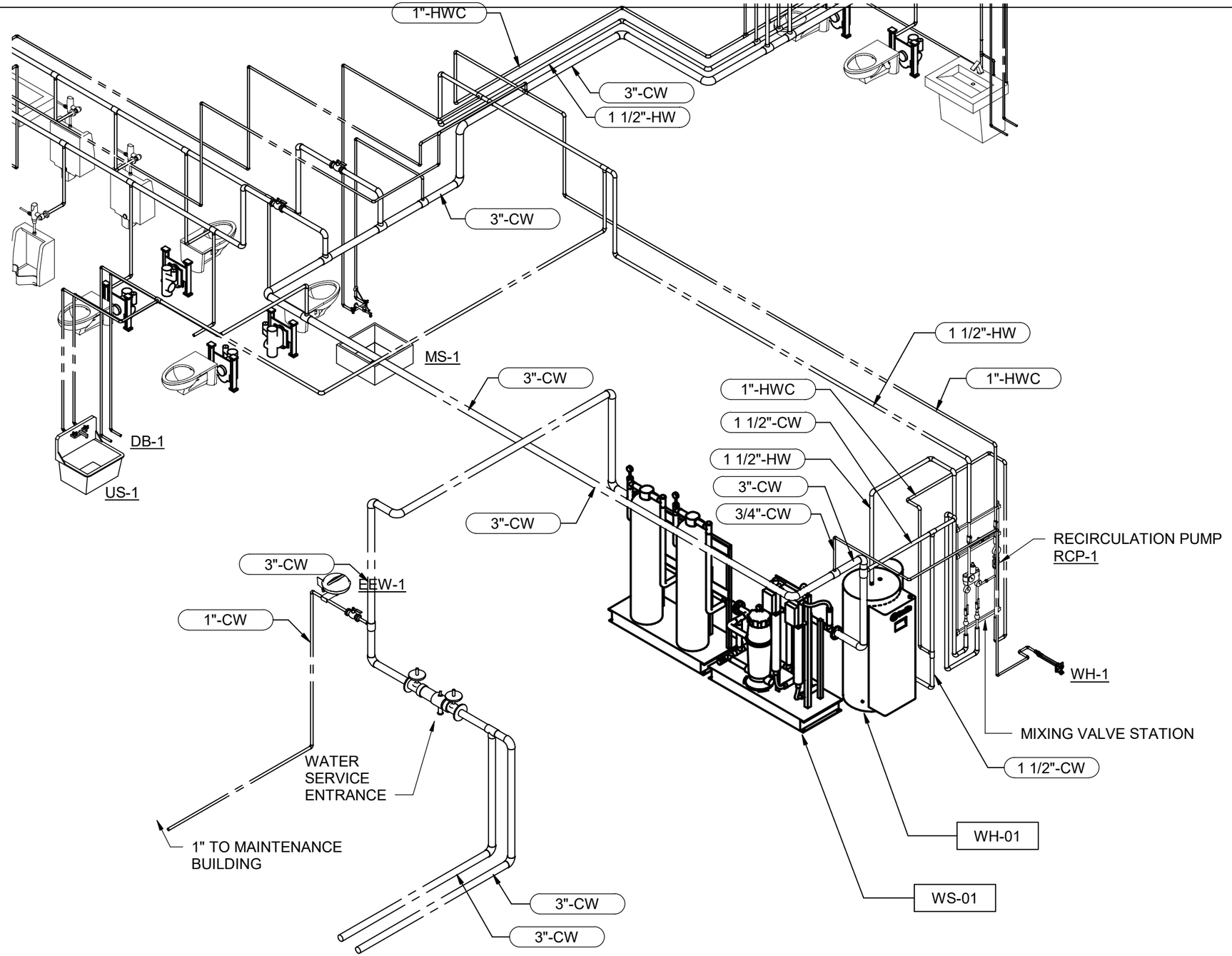
WATER RISER DIAGRAM - FAMILY 2 107



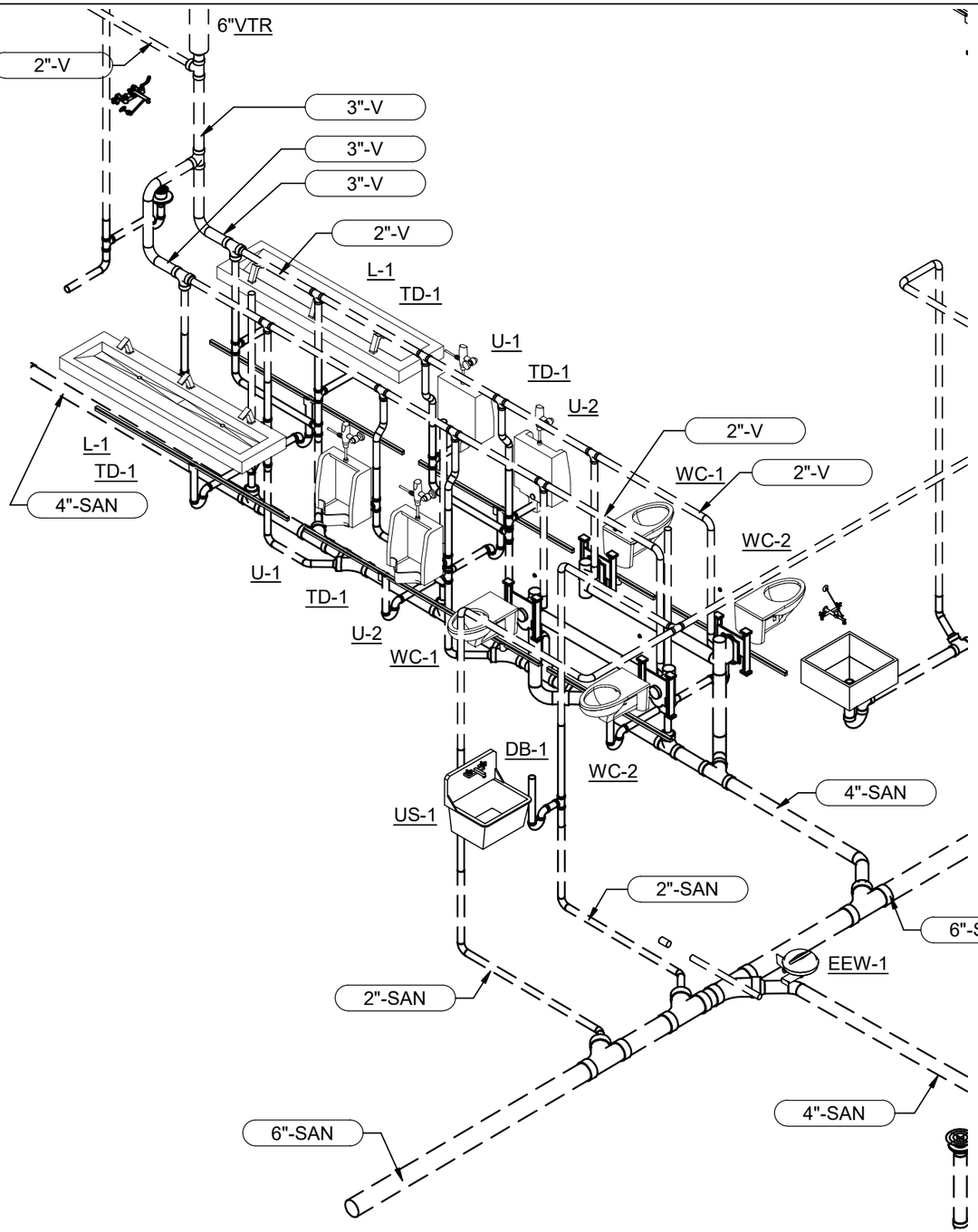
WATER RISER DIAGRAM - FAMILY 1 105

NOT TO SCALE

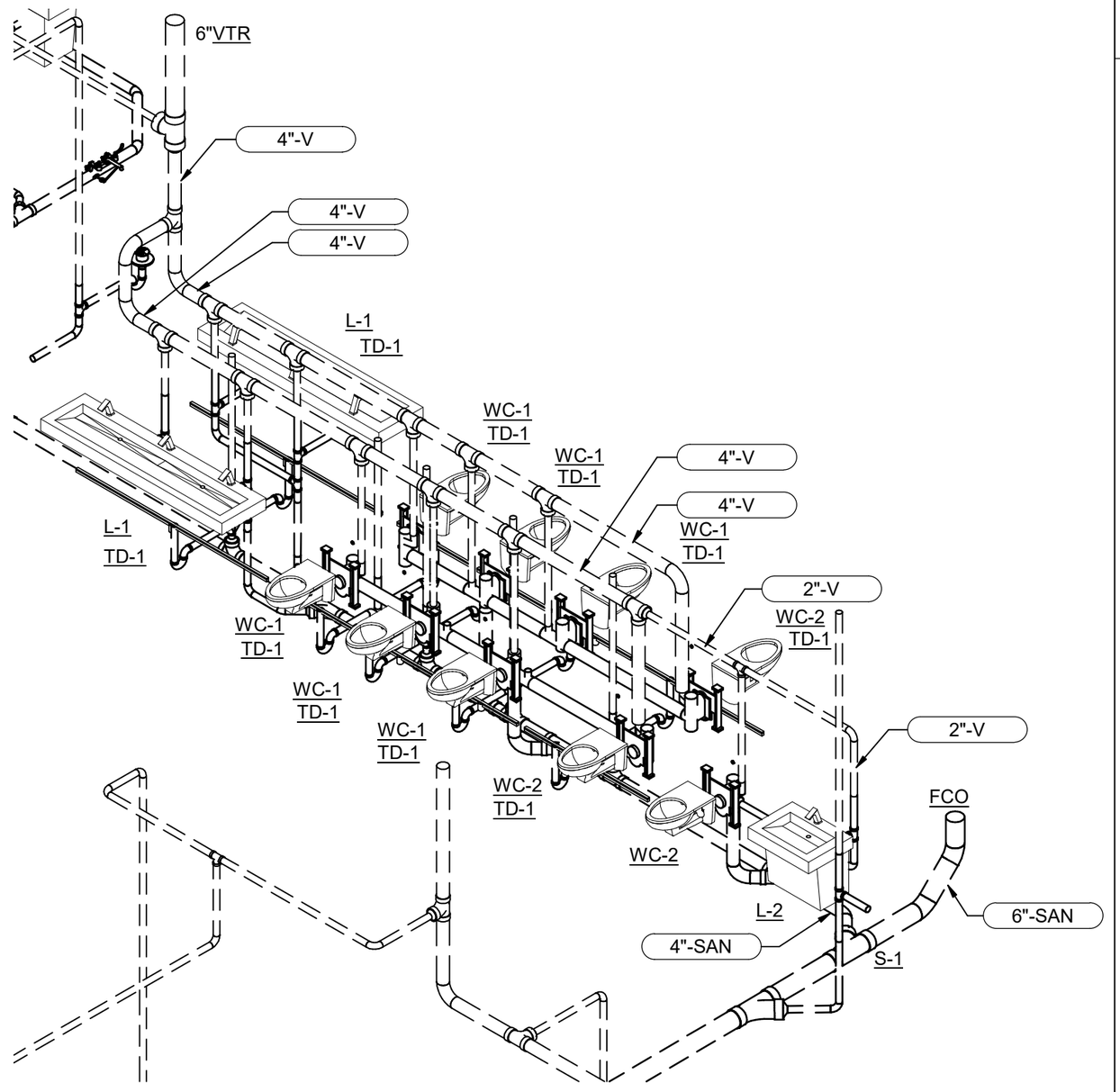
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WATER RISER DIAGRAM - MECHANICAL ROOM



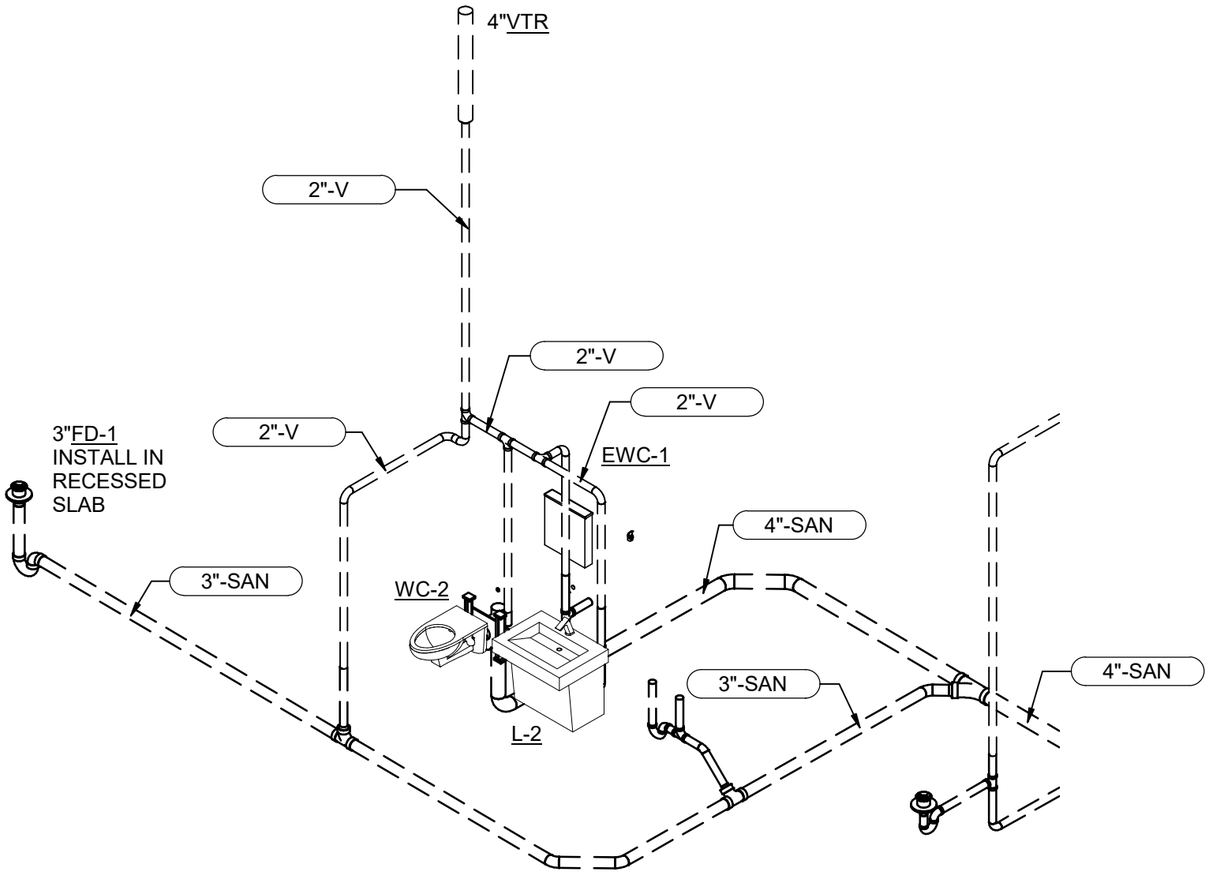
SANITARY RISER DIAGRAM - MENS RESTROOM GROUP



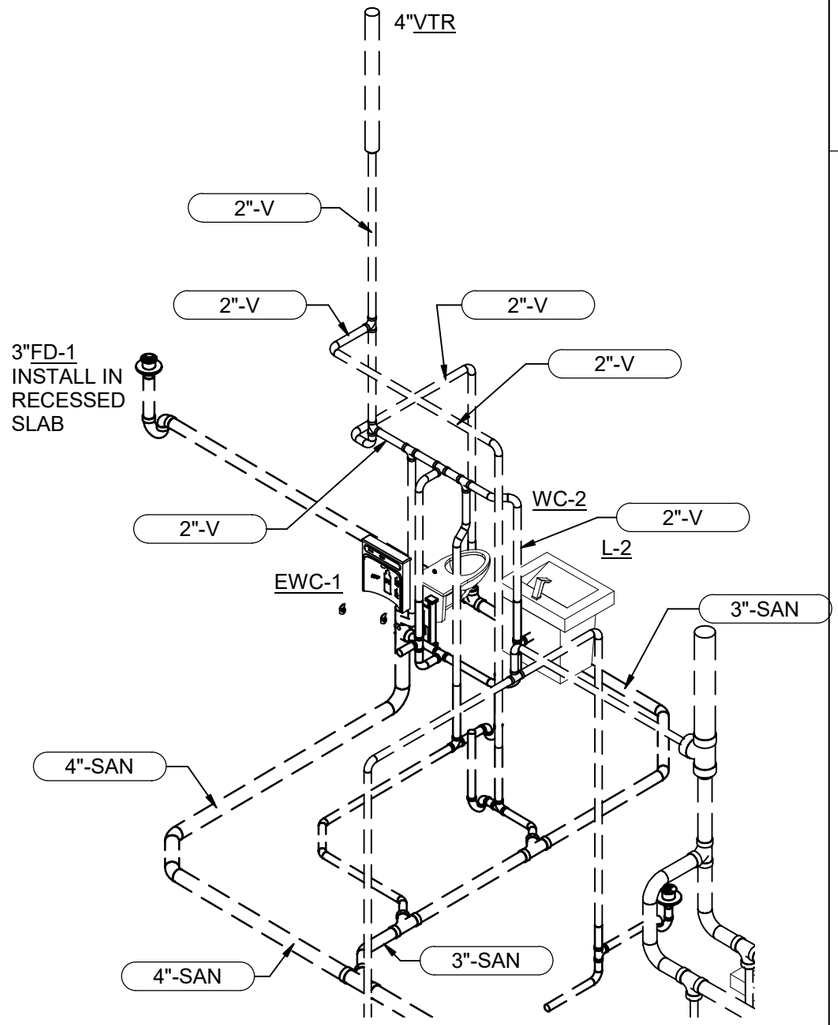
SANITARY RISER DIAGRAM - WOMENS RESTROOM GROUP

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	PLUMBING RISER DIAGRAMS	SHEET P90.156	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/20/2024 12:25:42 AM PLOT BY : PLOT NAME : PLOT SCALE :

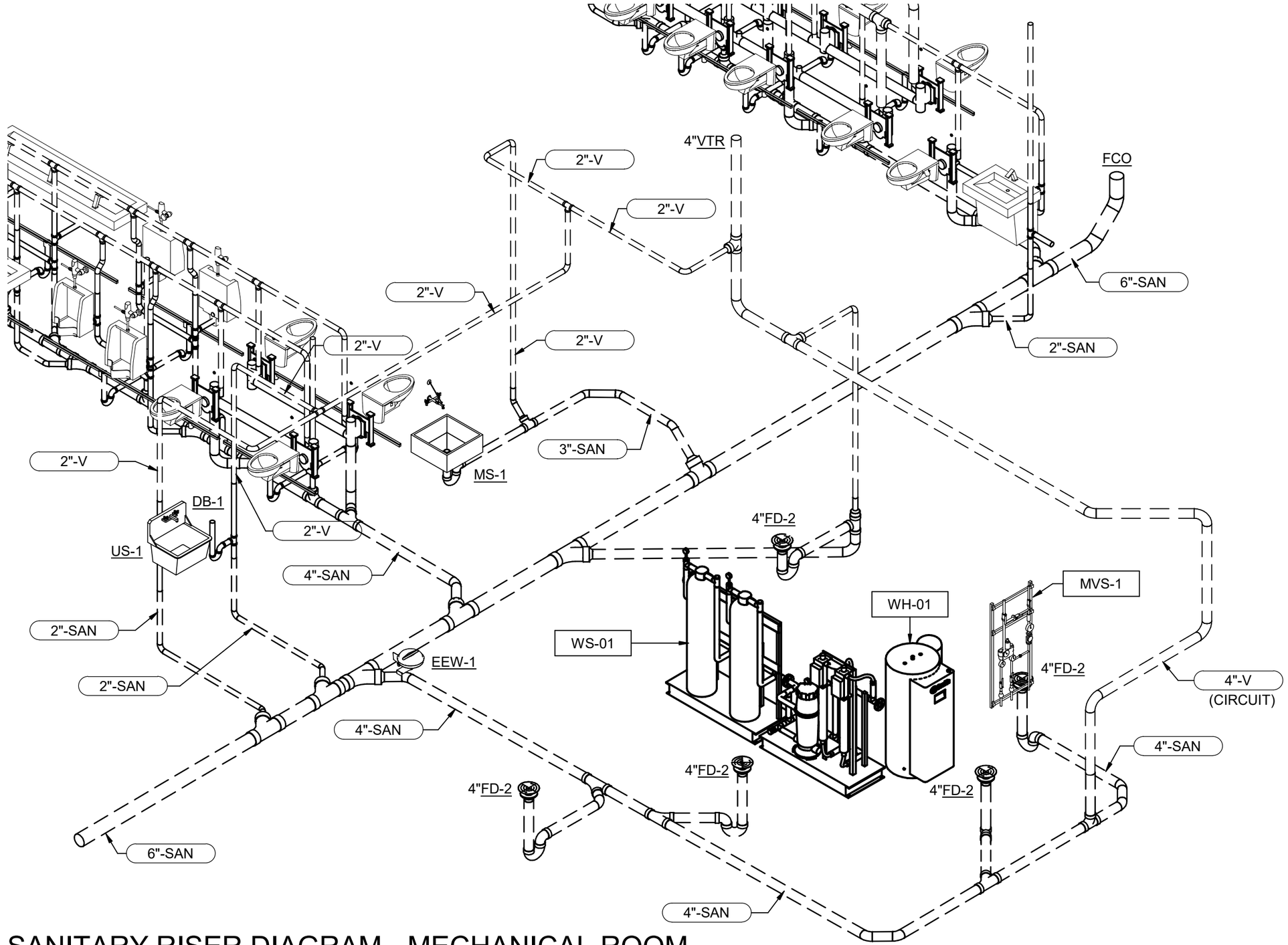


SANITARY RISER DIAGRAM - FAMILY 2 107



SANITARY RISER DIAGRAM - FAMILY 1 105

2



SANITARY RISER DIAGRAM - MECHANICAL ROOM

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	PLUMBING RISER DIAGRAMS	SHEET P90[illegible]	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/20/2024 12:25:44 AM PLOT BY : PLOT NAME : PLOT SCALE :

ELECTRICAL SYMBOLOGY

X Y X Y OR X Y — TWO RECEPTACLES IN 2-GANG BOX UNDER COMMON COVER PLATE

X Y — DUPLEX RECEPTACLE

X Y — SIMPLEX RECEPTACLE

X Y — SPECIAL-PURPOSE RECEPTACLE AS DEFINED ON PLANS

SUBSCRIPTS:

X - INDICATES TYPE
- G - GROUND FAULT CIRCUIT INTERRUPTER
- IG - ISOLATED GROUND
- TR - TAMPER RESISTANT
- PLH - PLUG LOAD HALF CONTROLLED
- PLD - PLUG LOAD DUAL CONTROLLED
- USB - USB CHARGING STATION
- SPD - SURGE PROTECTIVE DEVICE
- AC - MOUNTED 6" ABOVE COUNTER, COUNTER BACKSPLASH OR RIM OF SINK

Y - INDICATES CIRCUIT NUMBER FROM PANELBOARD

J OR J — JUNCTION OR PULL BOX

PANELBOARD (250V TO 600V)

PANELBOARD (LESS THAN 250V)

X — ELECTRICAL EQUIPMENT ENCLOSURE: SWITCHBOARD, MOTOR CONTROL CENTER, CONTROL PANEL, TRANSFORMER OR OTHER EQUIPMENT AS INDICATED. ESTIMATED SIZE AS INDICATED. WHEN USED X INDICATES EQUIPMENT TYPE.

EQUIPMENT TYPES:

ATS	-	AUTOMATIC TRANSFER SWITCH
CP	-	CONTROL PANEL
MTS	-	MANUAL TRANSFER SWITCH
MCC	-	MOTOR CONTROL CENTER
UPS	-	UNINTERRUPTIBLE POWER SUPPLY
VFD	-	VARIABLE FREQUENCY DRIVE
SB	-	SWITCHBOARD
SG	-	SWITCHGEAR
T	-	TRANSFORMER

Z X Y — CEILING/PENDANT/BOLLARD MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED

Z X Y — CEILING/PENDANT/BOLLARD MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED, EMERGENCY (INTERNAL OR EXTERNAL POWER SOURCE AS INDICATED)

X Y Z — WALL MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED

X Y Z — WALL MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED, EMERGENCY (INTERNAL OR EXTERNAL POWER SOURCE AS INDICATED)

Z Z X Y — CEILING/PENDANT MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED

Z X Y — WALL MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED

Z X Y — CEILING/PENDANT MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED, ALL OR PARTIAL EMERGENCY (INTERNAL OR EXTERNAL POWER SOURCE AS INDICATED

Z X Y — WALL MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED, ALL OR PARTIAL EMERGENCY (INTERNAL OR EXTERNAL POWER SOURCE AS INDICATED

OS — LOW VOLTAGE CEILING OCCUPANT SENSOR, PASSIVE INFRARED TECHNOLOGY

LC TC — WALL MOUNTED DIGITAL TIME SWITCH ASTRONOMIC 7-DAY/365 1 CIRCUIT 120/277 SPDT, WITH NEMA 1 ENCLOSURE

S — LINE VOLTAGE WALL SWITCH

S OD — WALL SWITCH OCCUPANT SENSOR, DUAL TECHNOLOGY WITH 0-10V DIMMING

S 3 — LINE VOLTAGE 3 WAY WALL SWITCH

LC X — LOW VOLTAGE LOAD CONTROLLER. LOCATED IN ACCESSIBLE CEILING. DEVICE TYPE DESIGNATION.

EC — LOW VOLTAGE UL 924 DEVICE. LOCATED IN ACCESSIBLE CEILING.

PC — LOW VOLTAGE RELAY CONTROL SYSTEM PHOTOCELL. INTEGRATION IN C1 CHANNEL. ARROW INDICATES DIRECTION AIMED.

(2) — WALL MOUNTED DATA OUTLET, NUMBER INDICATES QUANTITY OF JACKS IN OUTLET BOX "0" INDICATES CONDUIT AND DEVICE BOX ROUGH-IN ONLY

(2) — ABOVE CEILING DATA OUTLET, NUMBER INDICATES QUANTITY OF JACKS IN OUTLET BOX "0" INDICATES CONDUIT AND DEVICE BOX ROUGH-IN ONLY

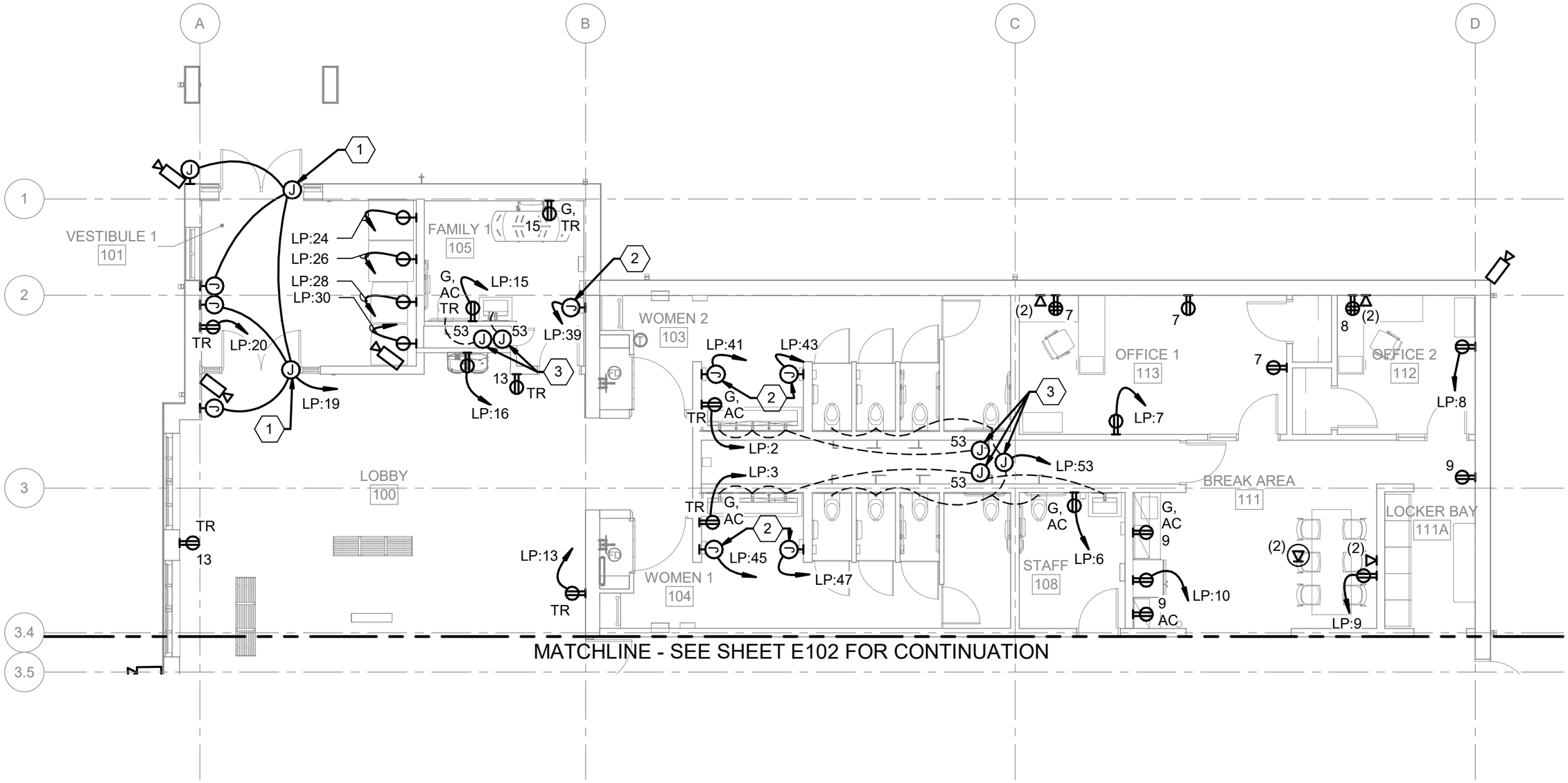
CCTV CAMERA

KEYNOTES (#)

1. PROVIDE CONNECTION TO DOOR OPERATOR AND ASSOCIATED HAND ACTUATORS. COORDINATE REQUIREMENTS WITH DOOR HARDWARE MANUFACTURER.
2. PROVIDE CONNECTION TO HAND DRYER.

KEYNOTES (#)

3. CONNECT 120 VOLT CIRCUIT TO BOX MOUNTED 24 VOLT TRANSFORMER FOR AUTOMATIC VALVES. TRANSFORMERS PROVIDED BY MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR TO PROVIDE 24 VOLT WIRING TO SENSORS. FIELD COORDINATE EXACT LOCATION OF TRANSFORMERS.



PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	GROUND LEVEL POWER PLAN - AREA A	SHEET E101

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/19/2024 11:55:50 PM PLOT BY : PLOT NAME : PLOT SCALE : 1/8" = 1'-0"

KEYNOTES (#)

1. PROVIDE CONNECTION TO DOOR OPERATOR AND ASSOCIATED HAND ACTUATORS. COORDINATE REQUIREMENTS WITH DOOR HARDWARE MANUFACTURER.
2. PROVIDE CONNECTION TO HAND DRYER.

KEYNOTES (#)

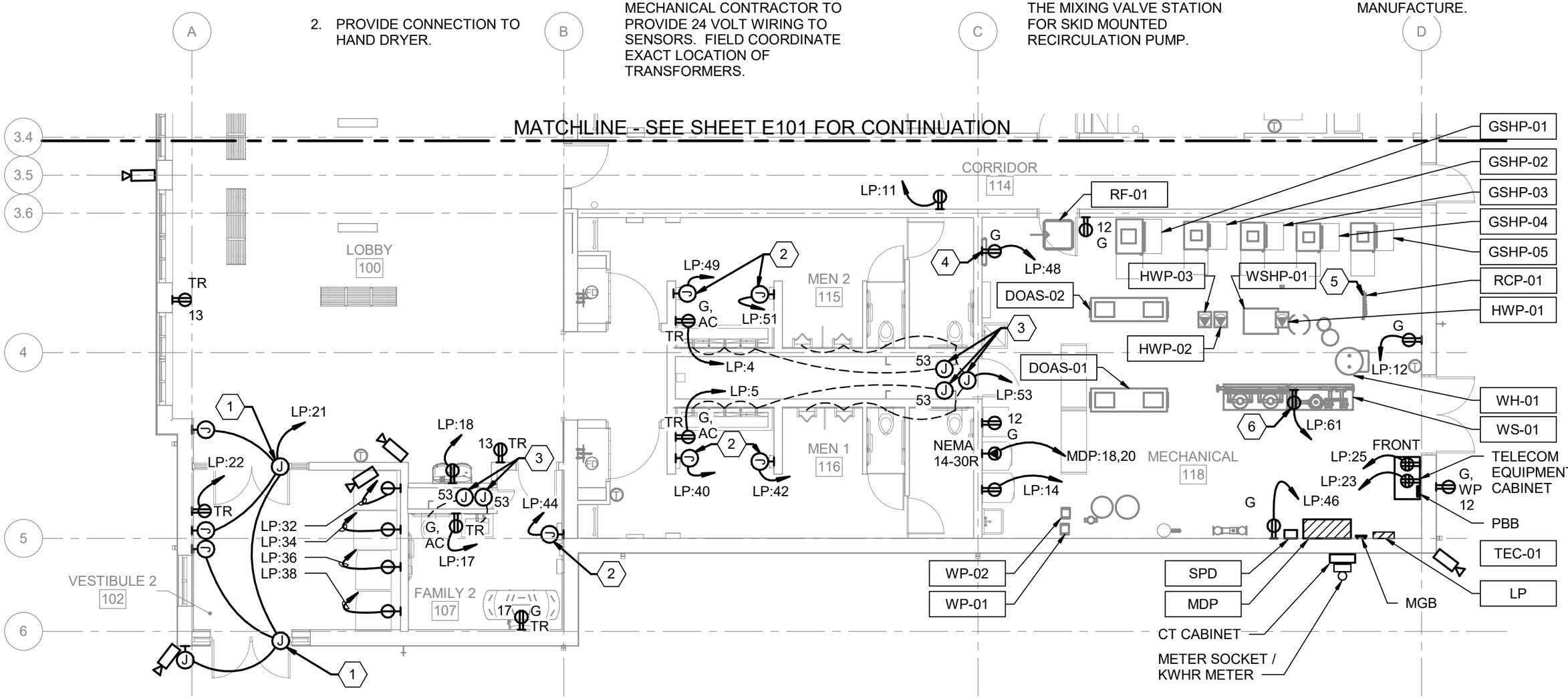
3. CONNECT 120 VOLT CIRCUIT TO BOX MOUNTED 24 VOLT TRANSFORMER FOR AUTOMATIC VALVES. TRANSFORMERS PROVIDED BY MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR TO PROVIDE 24 VOLT WIRING TO SENSORS. FIELD COORDINATE EXACT LOCATION OF TRANSFORMERS.

KEYNOTES (#)

4. DEDICATED RECEPTACLE FOR CHARGING OWNER PROVIDED FLOOR SCRUBBER.
5. CONNECT CIRCUIT TO THE GFCI RECEPTACLE PROVIDED ON THE MIXING VALVE STATION FOR SKID MOUNTED RECIRCULATION PUMP.

KEYNOTES (#)

6. MOUNT RECEPTACLE ON WATER SOFTENER SKID FOR CONNECTION OF UV DISINFECTION SYSTEM. COORDINATE EXACT LOCATION WITH EQUIPMENT MANUFACTURE.



PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	GROUND LEVEL POWER PLAN - AREA B	SHEET E10[illegible]

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/19/2024 11:55:51 PM PLOT BY : PLOT NAME : PLOT SCALE : 1/8" = 1'-0"

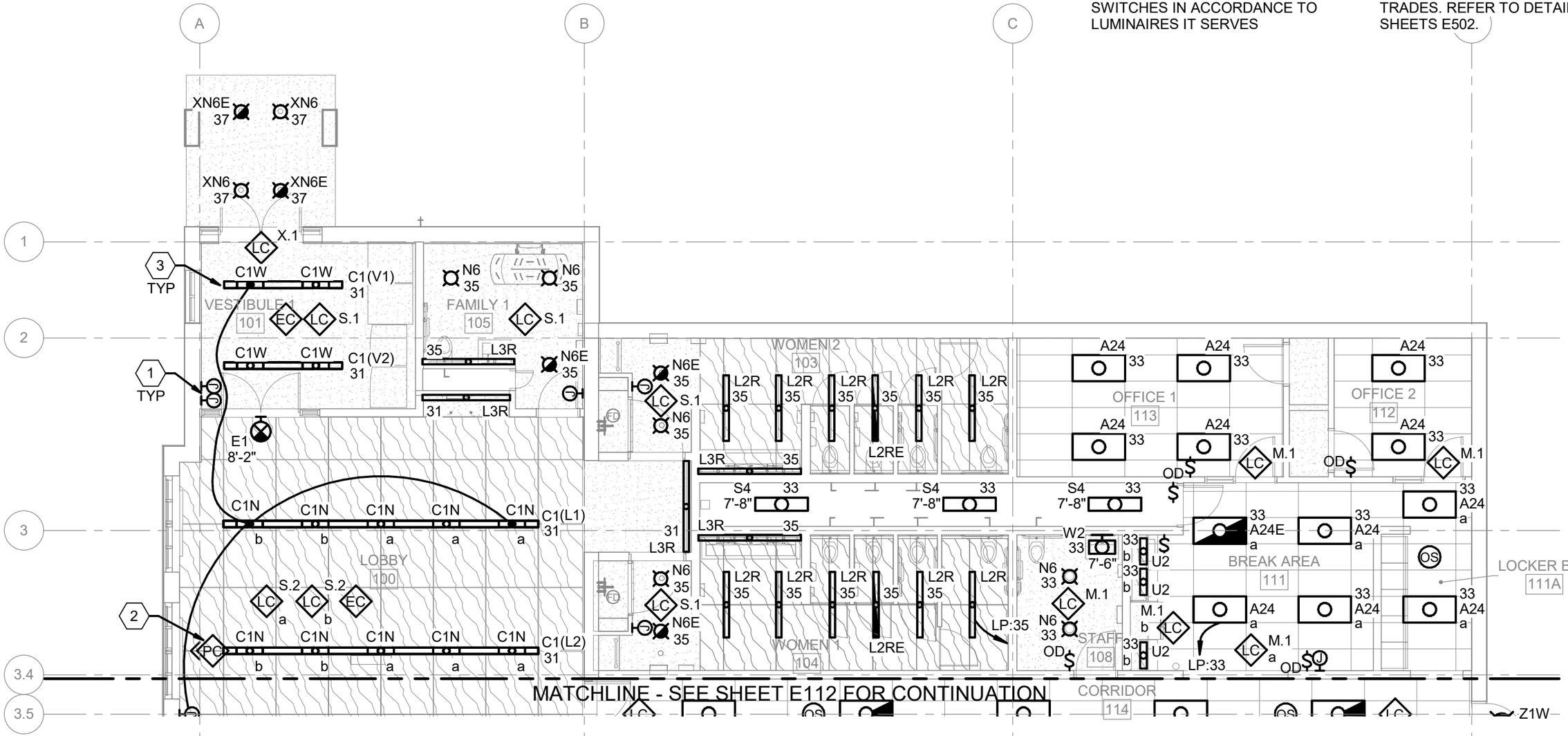
KEYNOTES (#)

1. J-BOX ON LIGHTING PLANS DENOTE WALL MOUNTED REMOTE EMERGENCY TEST SWITCH LOCATIONS. COORDINATE IN CONCEALED LOCATION WITH ALL OTHER TRADES. COORDINATE FINISHES WITH SPECIFICATION. LABEL SWITCHES IN ACCORDANCE TO LUMINAIRES IT SERVES

KEYNOTES (#)

2. COORDINATE PHOTOCELL SENSOR LOCATION IN CHANNEL 'C1' WITH MANUFACTURER.

3. LUMINAIRE TYPES 'C1' HAVE BUILDING SYSTEM INTEGRATION AND REQUIRE EARLY COORDINATION WITH TRADES. REFER TO DETAILS ON SHEETS E502.



KEYNOTES (#)

1. J-BOX ON LIGHTING PLANS DENOTE WALL MOUNTED REMOTE EMERGENCY TEST SWITCH LOCATIONS. COORDINATE IN CONCEALED LOCATION WITH ALL OTHER TRADES. COORDINATE FINISHES WITH SPECIFICATION. LABEL SWITCHES IN ACCORDANCE TO LUMINAIRES IT SERVES.

KEYNOTES (#)

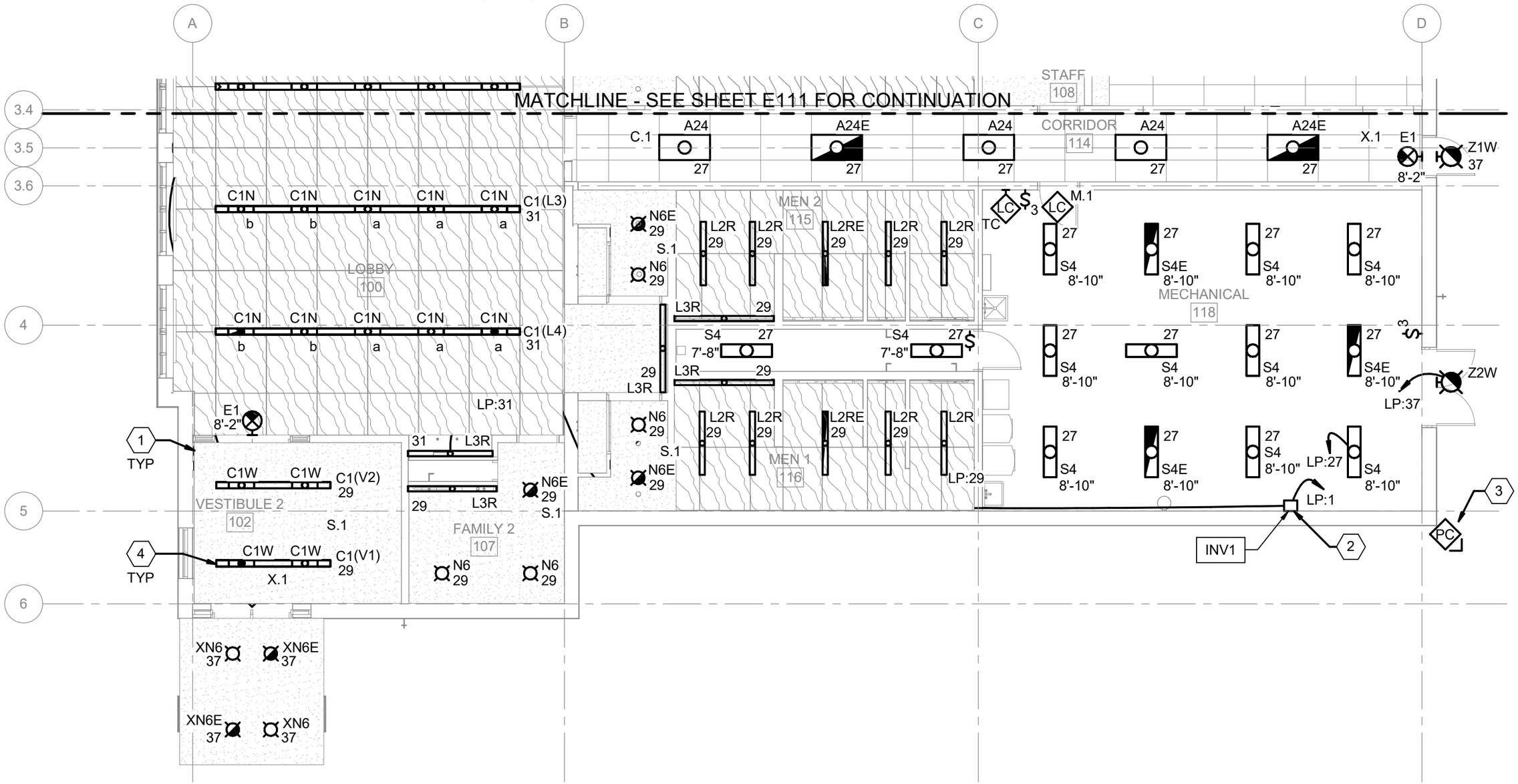
2. INVERTER TO BE WALL MOUNTED. REFER TO MANUFACTURER SPECIFICATION AND INSTALLATION GUIDELINES. INVERTER SERVES EMERGENCY C1W AND C1N FIXTURES.

KEYNOTES (#)

3. EXTERIOR RATED PHOTOCELL SENSOR. COORDINATE PHOTOCELL SENSOR LOCATION ABOVE EXTERIOR CAMERA. PHOTOCELL CONTROLS EXTERIOR LUMINAIRES.

KEYNOTES (#)

4. LUMINAIRE TYPES 'C1' HAVE BUILDING SYSTEM INTEGRATION AND REQUIRE EARLY COORDINATION WITH TRADES. REFER TO DETAILS ON SHEETS E502.



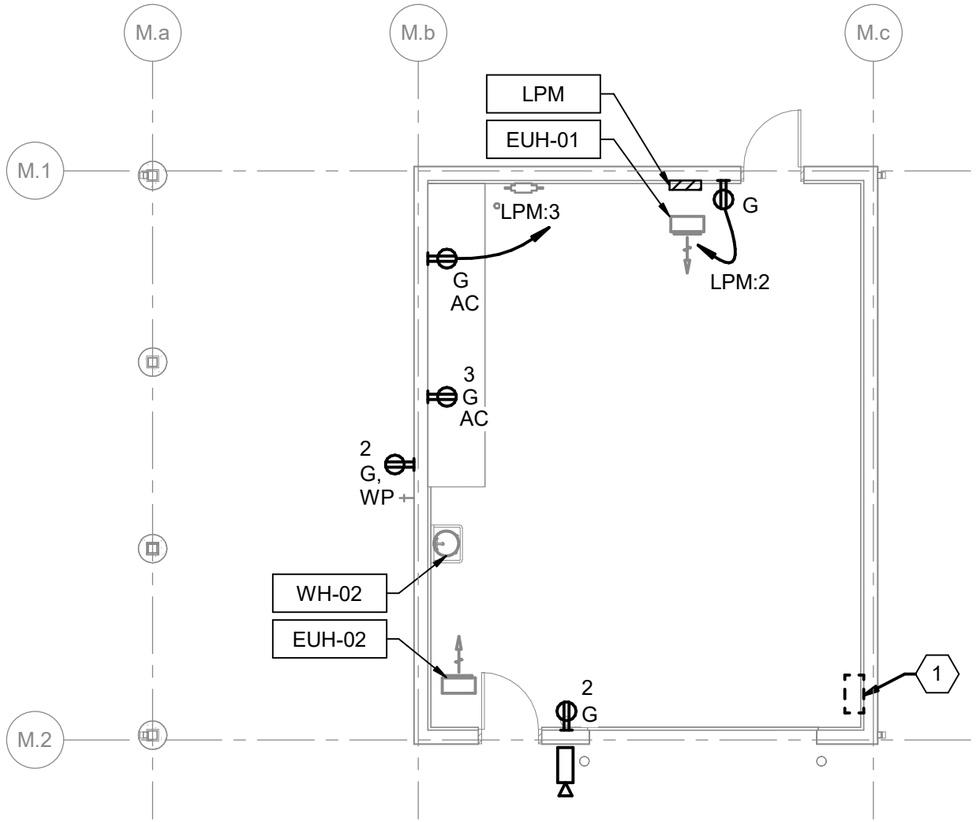
PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	GROUND LEVEL LIGHTING PLAN - AREA B	SHEET E11[illegible]	E

FILE NAME : WISDOT TITLEBLOCK.RFA PLOT DATE : 11/19/2024 11:55:53 PM PLOT BY : PLOT NAME : PLOT SCALE : 1/8" = 1'-0"

KEYNOTES (#)

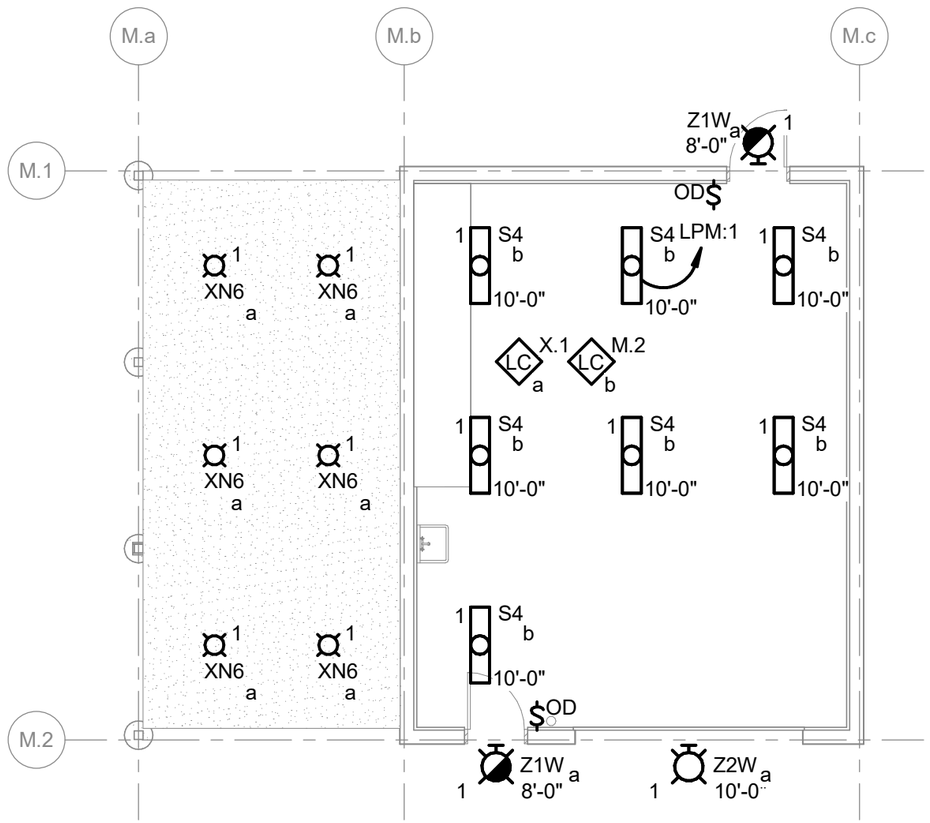
1. FUTURE ELECTRIC VEHICLE CHARGING STATION BY OWNER.

2



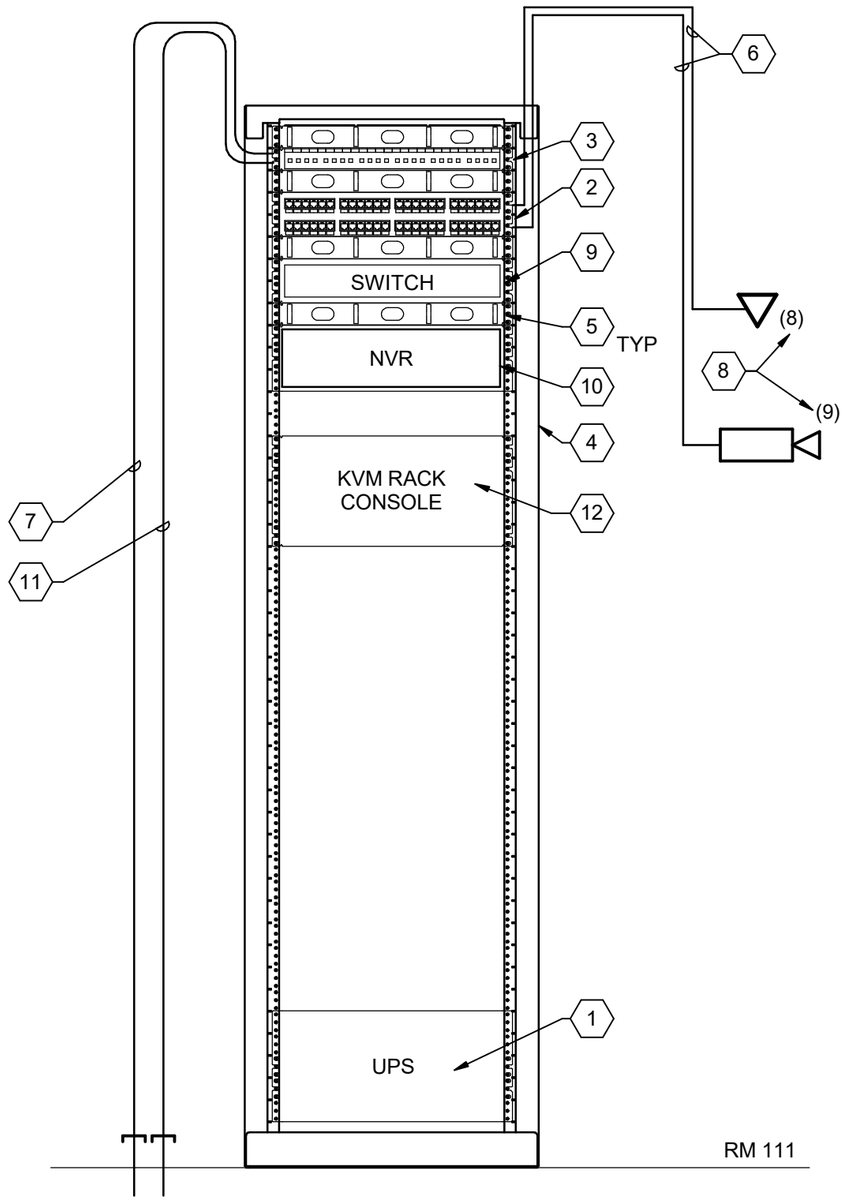
POWER PLAN - EQUIPMENT GARAGE

1/8" = 1'-0"



LIGHTING PLAN - EQUIPMENT GARAGE

1/8" = 1'-0"

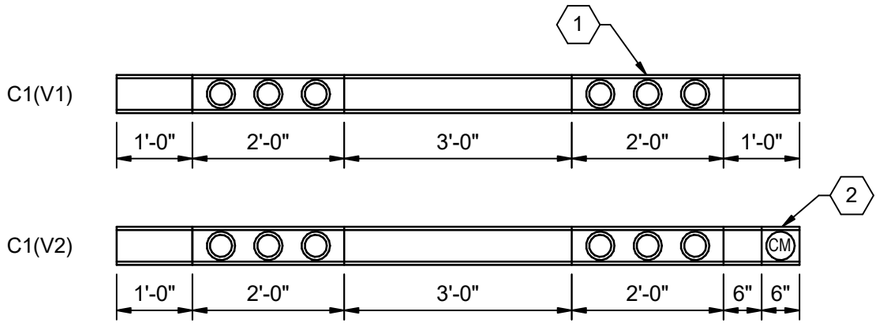


KEYNOTES (#)

1. UNINTERRUPTIBLE POWER SUPPLY (UPS) FURNISHED AND INSTALLED BY OWNER.
2. PROVIDE 48, PORT 2RU COPPER PATCH PANEL.
3. PROVIDE 24 PORT, FIBER OPTIC PATCH PANEL.
4. PROVIDE FLOOR MOUNTED EQUIPMENT CABINET FOR TELECOMMUNICATION NETWORK EQUIPMENT.
5. PROVIDE 1RU HORIZONTAL CABLE MANAGER.
6. CATEGORY 6 UTP COPPER CABLE.
7. OSP FIBER OPTIC CABLES FROM SERVICE PROVIDER.
8. NUMBER INDICATES APPROXIMATE QUANTITY OF CABLE DROPS. CONTRACTOR SHALL VERIFY EXACT QUANTITY WITH PLANS AND PROVIDE THE APPROPRIATE NUMBER OF PATCH PANELS PER SPECIFICATIONS.
9. NETWORK SWITCH FURNISHED AND INSTALLED BY OWNER.
10. NETWORK VIDEO RECORDER FOR SECURITY SYSTEM.
11. OSP FIBER OPTIC CABLE TO EQUIPMENT GARAGE.
12. VIDEO KVM (KEYBOARD, VIDEO, MOUSE) RACK CONSOLE FOR SECURITY SYSTEM

1 / - TELECOMMUNICATION EQUIPMENT CABINET TEC-01

NOT TO SCALE



1 - ENLARGED CHANNEL CONFIGURATION - VESTIBULE

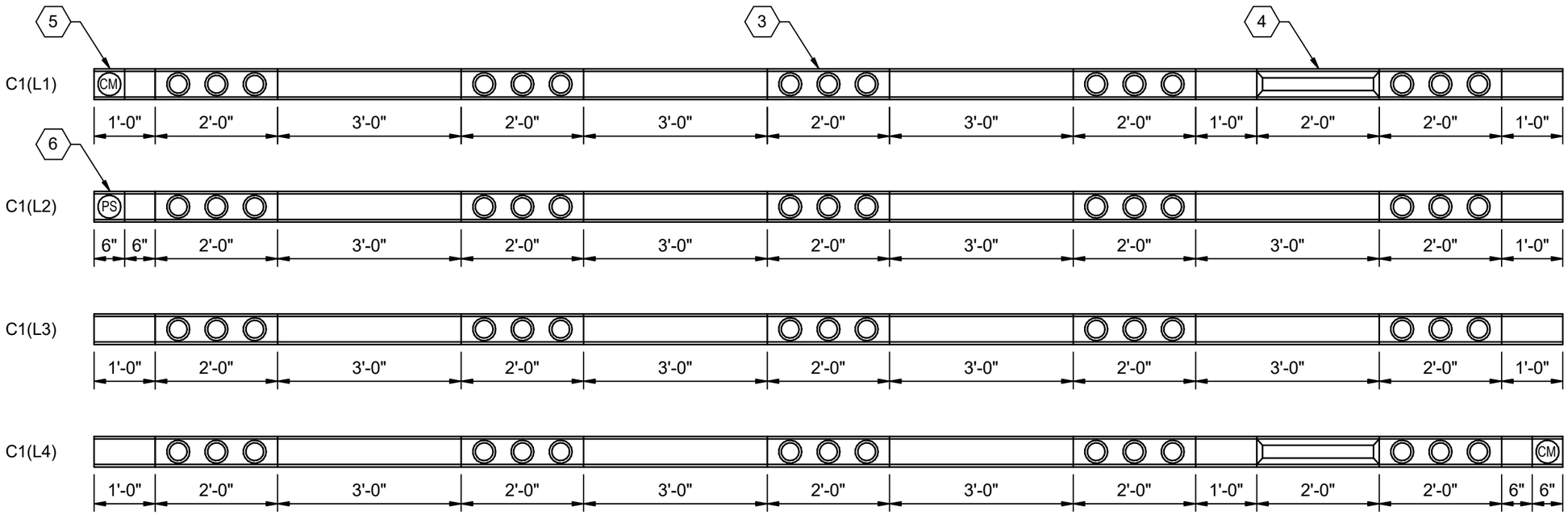
NOT TO SCALE

GENERAL NOTES

1. ELEMENTS WILL BE MOUNTED INSIDE OF CHANNEL EXTRUSION TYPE 'C1(XX)'.
2. INCRAMENTAL DIMENSIONS SHOW RELATIVE RELATIONSHIPS BEWTEEN DEVICES. VERIFY TOTAL CHANNEL LENGTH AND COORDINATE WITH OTHER TRADES.
3. LIGHT FIXTURE LOCATIONS TAKE PRECIDENT. REFER TO LIGHTING SHEETS FOR FIXTURE LOCATIONS, PATTERN TYPE, AND MOUNTING INFORMATION.
4. REFER TO 'LIGHTING EQUIPMENT SCHEDULE' FOR LUMINAIRE AND CHANNEL SPECIFICATIONS.

KEYNOTES (#)

1. LIGHT FIXTURE TYPE 'C1W'. SEE LIGHTING SHEETS.
2. CAMERA SEGMENT. SEE POWER SHEETS.
3. LIGHT FIXTURE TYPE 'C1N'. SEE LIGHTING SHEETS.
4. HAVAC RETURN AIR SEGMENT. SEE MECHANICAL SHEETS.
5. CAMERA SEGMENT. SEE POWER SHEETS.
6. PHOTOCELL SENSOR SEGMENT. SEE LIGHTING SHEETS.

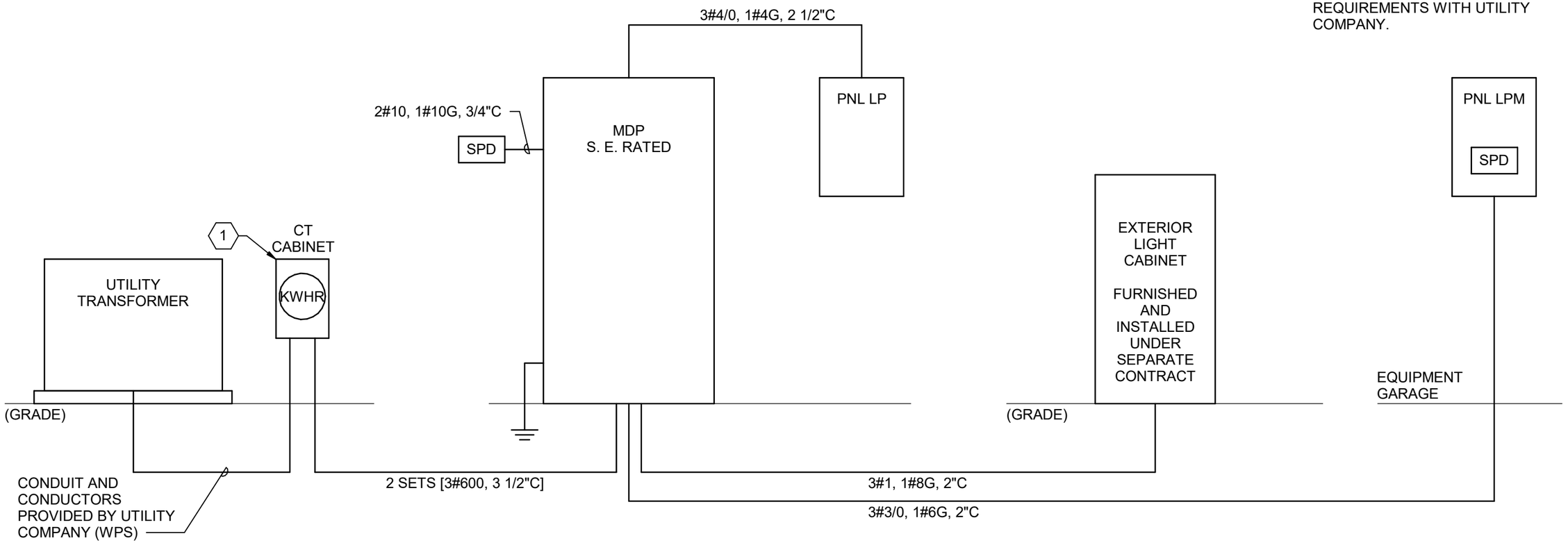


2 - ENLARGED CHANNEL CONFIGURATION - LOBBY

NOT TO SCALE

KEYNOTES ⟨#⟩

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

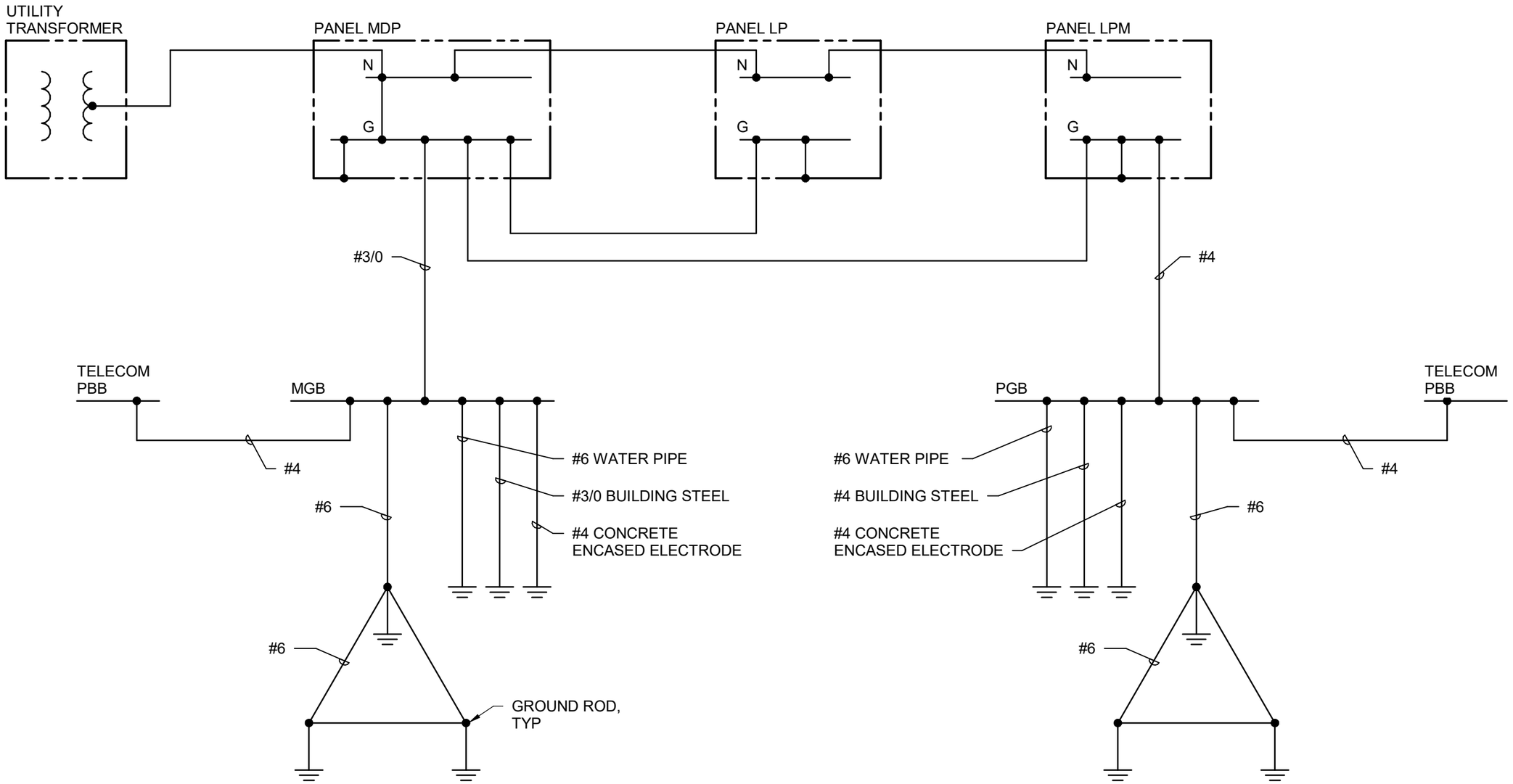


1
-

ONE-LINE POWER RISER DIAGRAM

NOT TO SCALE

2



1
-

GROUNDING ONE-LINE DIAGRAM

NOT TO SCALE

DISTRIBUTION PANEL: MDP

LOCATION: MECH ROOM | **VOLTS:** 120/240 | **A.I.C. RATING:** 46KA (MINIMUM)
SUPPLY FROM: UTILITY XFMR | **PHASE:** 1 | **MAINS TYPE:** MCB
MOUNTING: SURFACE | **WIRE:** 3+GND | **MAINS RATING:** 800A
ENCLOSURE: NEMA 1 | **INTEGRAL SPD:** NO | **SERVICE ENTRANCE LABEL:** YES

CKT NO.	DESCRIPTION	CONNECTED LOAD (VA) LTS	REC	MECH	MISC	OCP AMPS	P		OCP AMPS	P	CONNECTED LOAD (VA) LTS	REC	MECH	MISC	DESCRIPTION	CKT NO.
1	WP-01 (DUTY)			1,440		30	2	A	30	2					SPD	2
3				1,440				B								4
5	WP-02 (STANDBY) - 2,880 VA					30	2	A	225	2	2,850	3,600	3,885	12,400	PANEL LP	6
7								B			2,850	3,600	5,015	12,400		8
9	HWP-01			960		20	2	A	15	2			360		RF-1	10
11				960				B					360			12
13	SITE LIGHT PANEL	3,750				100	2	A	15	2			975		DOAS-02	14
15		3,750						B					975			16
17	LIFT STATION PUMP 1HP			920		20	2	A	30	2				2,500	DRYER RM 111 (NOTE 1)	18
19				920				B						2,500		20
21	GSHP-1			4,693		60	2	A	25	2			1,765		GSHP-5	22
23				4,693				B					1,765			24
25	GSHP-2			1,765		25	2	A	15	2			975		DOAS-01	26
27				1,765				B					975			28
29	GSHP-3			1,765		25	2	A	80	2			7,500		WH-01	30
31				1,765				B					7,500			32
33	GSHP-4			1,765		25	2	A	60	2			3,570		WSHP-01	34
35				1,765				B					3,570			36
37	WELL PUMP 1 - DUTY			5,750		125	2	A	200	2	350	800	10,000	6,000	PANEL LPM, (EQUIPMENT GARAGE)	38
39				5,750				B			350	800	10,000	6,000		40
41	WELL PUMP 2 - 11300 VA (STANDBY)					125	2	A	100	2					SPARE	42
43								B								44

LOAD SUMMARY

	LTS	REC	MECH	MISC	SPARE	TOTAL				PHASE BALANCE	
CONNECTED LOAD (KVA)	13.9	8.8	97.3	41.8	---	161.8		240	LINE-TO-LINE VOLTS	PHASE A (KVA)	81
DEMAND FACTOR	1.25	NEC	1.00	0.50	15%	---		674	CONNECTED AMPS	PHASE B (KVA)	81
DESIGN LOAD (KVA)	17.4	8.8	97.3	20.9	24.3	168.7		703	DESIGN AMPS		

BRANCH PANEL: LP

LOCATION: MECH ROOM
SUPPLY FROM: PANEL MDP
MOUNTING: SURFACE
ENCLOSURE: NEMA 1

VOLTS: 120/240
PHASE: 1
WIRE: 3+GND
INTEGRAL SPD: NO

A.I.C. RATING: 34KA (MINIMUM)
MAINS TYPE: MLO
MAINS RATING: 225A
SERVICE ENTRANCE LABEL: NO

CKT NO.	DESCRIPTION	CONNECTED LOAD (VA) LTS	REC	MECH	MISC	OCP AMPS	P		OCP AMPS	P	CONNECTED LOAD (VA) LTS	REC	MECH	MISC	DESCRIPTION	CKT NO.
1	LIGHTING INVERTER INV1	250				20	1	A	20	1		180			RECEPT RM 103	2
3	RECEPT RM 104		180			20	1	B	20	1		180			RECEPT RM 115	4
5	RECEPT RM 116		180			20	1	A	20	1		180			RECEPT RM 108	6
7	RECEPT RM 113		900			20	1	B	20	1		540			RECEPT RM 112	8
9	RECEPT RM 106 & 111A		540			20	1	A	20	1		1,000			REFRIG RM 106 (NOTE 1)	10
11	RECEPT RM 114		180			20	1	B	20	1		720			RECEPT RM 111	12
13	RECEPT RM 100		900			20	1	A	20	1				750	WASHER RM 111	14
15	RECEPT RM 105		570			20	1	B	20	1				500	WATER COOL RM 100 (NOTE 1)	16
17	RECEPT RM 107		570			20	1	A	20	1				500	WATER COOL RM 100 (NOTE 1)	18
19	DOORS RM 101				1,000	20	1	B	20	1		180			RECEPT RM 101	20
21	DOORS RM 102				1,000	20	1	A	20	1		180			RECEPT RM 102	22
23	RECEPT TEC-01 RM 111		360			20	1	B	20	1				1,200	VENDING RM 101 (NOTE 1)	24
25	RECEPT TEC-01 RM 111		360			20	1	A	20	1				1,200	VENDING RM 101 (NOTE 1)	26
27	LTS RM 118	1,040				20	1	B	20	1				1,200	VENDING RM 101 (NOTE 1)	28
29	LTS RM 116	975				20	1	A	20	1				1,200	VENDING RM 101 (NOTE 1)	30
31	LTS RM 100	1,190				20	1	B	20	1				1,200	VENDING RM 102 (NOTE 1)	32
33	LTS RM 111	875				20	1	A	20	1				1,200	VENDING RM 102 (NOTE 1)	34
35	LTS RM 104	1,075				20	1	B	20	1				1,200	VENDING RM 102 (NOTE 1)	36
37	LTS EXTERIOR	300				20	1	A	20	1				1,200	VENDING RM 102 (NOTE 1)	38
39	HAND DRY RM 105 (NOTE 1)				1,000	20	1	B	20	1				1,000	HAND DRY RM 116 (NOTE 1)	40
41	HAND DRY RM 103 (NOTE 1)				1,000	20	1	A	20	1				1,000	HAND DRY RM 116 (NOTE 1)	42
43	HAND DRY RM 103 (NOTE 1)				1,000	20	1	B	20	1				1,000	HAND DRY RM 107 (NOTE 1)	44
45	HAND DRY RM 104 (NOTE 1)				1,000	20	1	A	20	1				180	RECEPT RM 001	46
47	HAND DRY RM 104 (NOTE 1)				1,000	20	1	B	20	1				750	RECEPT FLOOR SCRUBBER	48
49	HAND DRY RM 115 (NOTE 1)				1,000	20	1	A	20	1			830		SEPTIC PUMP #1 1/3HP	50
51	HAND DRY RM 115 (NOTE 1)				1,000	20	1	B	20	1			830		SEPTIC PUMP #2 1/3HP	52
53	FLUSH VALVES - 24V XFMR				500	20	1	A	20	2			795		SEPTIC PUMP #3 3/4HP	54
55	HWP-02			670		15	1	B					795			56
57	HWP-03			670		15	1	A	20	2			795		SEPTIC PUMP #4 3/4HP	58
59	RCP-01			1,130		20	1	B					795			60
61	WS-01			500		20	1	A	20	2			795		SEPTIC PUMP #5 3/4HP	62
63	SPARE					20	1	B					795			64
65	SPARE					20	1	A	20	1					SPARE	66
67	SPARE					20	1	B	20	1					SPARE	68
69	SPARE					20	1	A							SPACE ONLY	70
71	SPARE					20	1	B							SPACE ONLY	72

LOAD SUMMARY

	LTS	REC	MECH	MISC	SPARE	TOTAL				PHASE BALANCE	
CONNECTED LOAD (KVA)	5.7	7.9	9.4	24.8	---	47.8		240	LINE-TO-LINE VOLTS	PHASE A (KVA)	20
DEMAND FACTOR	1.25	NEC	1.00	0.50	15%	---		199	CONNECTED AMPS	PHASE B (KVA)	22
DESIGN LOAD (KVA)	7.1	7.9	9.4	12.4	7.2	44.0		183	DESIGN AMPS		

NOTES
1. PROVIDE GFCI CIRCUIT BREAKER.

BRANCH PANEL: LPM

LOCATION: EQUIPMENT GARAGE
SUPPLY FROM: MDP
MOUNTING: SURFACE
ENCLOSURE: NEMA 1

VOLTS: 120 / 240
PHASE: 1
WIRE: 3+GND
INTEGRAL SPD: YES

A.I.C. RATING: 13 KA (MINIMUM)
MAINS TYPE: MCB
MAINS RATING: 200 A
SERVICE ENTRANCE LABEL: NO

CKT NO.	DESCRIPTION	CONNECTED LOAD (VA) LTS	REC	MECH	MISC	OCP AMPS	P		OCP AMPS	P	CONNECTED LOAD (VA) LTS	REC	MECH	MISC	DESCRIPTION	CKT NO.
1	LIGHTS	590				20	1	A	20	1		540			RECEPTACLE	2
3	RECEPTACLE		360			20	1	B	20	1		700			RECEPTACLE	4
5	EUH-01			3,750		40	2	A	20	1					SPARE	6
7				3,750				B	20	1					SPARE	8
9	WH-02			2,250		30	2	A	20	1					SPARE	10
11				2,250				B	20	1					SPARE	12
13	EV CHARGER				6,000	70	2	A	30	2					SPARE	14
15	(FUTURE)				6,000			B								16
17	EUH-02			3,750		40	2	A							SPACE ONLY	18
19				3,750				B							SPACE ONLY	20

LOAD SUMMARY

	LTS	REC	MECH	MISC	SPARE	TOTAL				PHASE BALANCE	
CONNECTED LOAD (KVA)	0.6	1.6	19.5	12.0	---	33.7		240	LINE-TO-LINE VOLTS	PHASE A (KVA)	17
DEMAND FACTOR	1.25	NEC	1.00	1.00	15%	---		140	CONNECTED AMPS	PHASE B (KVA)	17
DESIGN LOAD (KVA)	0.7	1.6	19.5	12.0	5.1	38.9		162	DESIGN AMPS		

MECHANICAL / ELECTRICAL COORDINATION SCHEDULE

ABBREVIATIONS:

A	AMPS	C	COMBINATION STARTER	E	ELECTRICAL CONTRACTOR	N1	NEMA 1
ENCL	ENCLOSURE	CB	CIRCUIT BREAKER	M	MECHANICAL CONTRACTOR	3R	NEMA 3R
HP	HORSEPOWER	CP	CONTROL PANEL	NF	NON-FUSED	4	NEMA 4
KW	KILOWATTS	IN	INTEGRAL WITH EQUIPMENT	S2	TWO POLE HP RATED TOGGLE...	4X	NEMA 4X
PH	PHASE	S	HP RATED TOGGLE SWITCH	VFD	VARIABLE FREQUENCY DRIVE	N7	NEMA 7
V	VOLTAGE	SS	SAFETY SWITCH, FUSED			N9	NEMA 9
W	WATTS	SSN	SAFETY SWITCH, NON-FUSED			N12	NEMA 12

EQUIPMENT			ELECTRICAL SYSTEM				DISCONNECT				CONTROLLER			
TAG	DESCRIPTION	LOAD	V	PH	WIRE, CONDUIT	PANEL: CIRCUIT	FURNISHED BY/ INSTALLED BY	TYPE	RATING (AMPS)	ENCL	FURNISHED BY/ INSTALLED BY	TYPE	ENCL	REMARKS
DOAS-01	DEDICATED OUTDOOR AIR SYSTEM	8.1A	240	1	2#12, 1#12G, 3/4"C	MDP:26,28	-	CB	-	-	M/IN	-	-	3
DOAS-02	DEDICATED OUTDOOR AIR SYSTEM	8.1A	240	1	2#12, 1#12G, 3/4"C	MDP:14,16	-	CB	-	-	M/IN	-	-	3
EUH-01	ELECTRIC UNIT HEATER	7.5KW	240	1	2#8, 1#10G, 3/4"C	LPM:5,7	M/IN	-	-	-	M/IN	-	-	2
EUH-02	ELECTRIC UNIT HEATER	7.5KW	240	1	2#8, 1#10G, 3/4"C	LPM:17,19	M/IN	-	-	-	M\IN	-	-	2
GSHP-01	GROUND SOURCE HEAT PUMP	39.1A	240	1	2#6, 1#10G, 3/4"C	MDP:23,25	-	CB	-	-	M/IN	-	-	3
GSHP-02	GROUND SOURCE HEAT PUMP	14.7A	240	1	2#10, 1#10G, 3/4"C	MDP:27,29	-	CB	-	-	M/IN	-	-	3
GSHP-03	GROUND SOURCE HEAT PUMP	14.7A	240	1	2#10, 1#10G, 3/4"C	MDP:31,33	-	CB	-	-	M/IN	-	-	3
GSHP-04	GROUND SOURCE HEAT PUMP	14.7A	240	1	2#10, 1#10G, 3/4"C	MDP:35,37	-	CB	-	-	M/IN	-	-	3
GSHP-05	GROUND SOURCE HEAT PUMP	14.7A	240	1	2#10, 1#10G, 3/4"C	MDP:22,24	-	CB	-	-	M/IN	-	-	3
HWP-01	HOT WATER PUMP	1HP	240	1	2#12, 1#12G, 3/4"C	MDP:9,11	-	CB	-	-	M/M	-	-	
HWP-02	HOT WATER PUMP	1/4HP	120	1	2#12, 1#12G, 3/4"C	LP:55	-	CB	-	-	M/M	-	-	
HWP-03	HOT WATER PUMP	1/4HP	120	1	2#12, 1#12G, 3/4"C	LP:57	-	CB	-	-	M/M	-	-	
RCP-01	RECIRC PUMP	1/2HP	120	1	2#12, 1#12G, 3/4"C	LP:59	-	CB	-	-	M/M	-	-	
RF-01	INLINE FAN	3/4HP	240	1	2#12, 1#12G, 3/4"C	MDP:10,12	-	CB	-	-	M/M	-	-	3
WH-01	ELECTRIC WATER HEATER	15KW	240	1	2#3, 1#8G, 1"C	MDP:30,32	-	CB	-	-	M/IN	-	-	3
WH-02	ELECTRIC WATER HEATER	5KW	240	1	2#10, 1#10G, 3/4"C	LPM:9,11	-	CB	-	-	M/IN	-	-	3
WP-01	GEOTHERMAL WELL FIELD PUMP	2 HP	240	1	2#12, 1#12G, 3/4"C	MDP:1,3	E/E	C	30	N1	-	FVNR	-	
WP-02	GEOTHERMAL WELL FIELD PUMP	2 HP	240	1	2#12, 1#12G, 3/4"C	MDP:5,7	E/E	C	30	N1	-	FVNR	-	
WSHP-01	HEAT PUMP (HEATED FLOORS)	29.7A	240	1	2#6, 1#10G, 3/4"C	MDP:34,36	-	CB	-	-	M/IN	-	-	3
-	SEPTIC PUMP #1	1/3HP	120	1	-, 1"C	LP:50	-	-	-	-	-	-	-	1
-	SEPTIC PUMP #2	1/3HP	120	1	-, 1"C	LP:52	-	-	-	-	-	-	-	1
-	SEPTIC PUMP #3	3/4HP	240	1	-, 1"C	LP:54,56	-	-	-	-	-	-	-	1
-	SEPTIC PUMP #4	3/4HP	240	1	-, 1"C	LP:58,60	-	-	-	-	-	-	-	1
-	SEPTIC PUMP #5	3/4HP	240	1	-, 1"C	LP:62,64	-	-	-	-	-	-	-	1
-	WELL PUMP #1	10HP	240	1	3#3, 1#8G, 1 1/4"C	MDP:37,39	-	-	-	-	-	-	-	1
-	WELL PUMP #2	10HP	240	1	3#3, 1#8G, 1 1/4"C	MDP:41,43	-	-	-	-	-	-	-	1
-	LIFT STATION PUMP	1HP	240	1	-, 1"C	MDP:17,19	-	-	-	-	-	-	-	1

GENERAL NOTES:

A. VERIFY/COORDINATE RATINGS FOR EQUIPMENT SUPPLIED BY THE SELECTED MANUFACTURER. WHERE RATINGS ARE OTHER THAN AS INDICATED FOR SPECIFIED UNIT, DISCONNECTS, MOTOR STARTERS, OVERCURRENT DEVICES AND RELATED REVISIONS SHALL BE PROVIDED ACCORDINGLY. THE CONTRACTOR THAT FURNISHES EQUIPMENT WITH RATINGS OTHER THAN AS NOTED SHALL BE RESPONSIBLE FOR COORDINATION AND COSTS FOR REVISIONS TO ACCOMMODATE SELECTED...

B. FRACTIONAL HORSEPOWER SINGLE PHASE MOTORS SHALL BE PROVIDED WITH INTEGRAL OVERLOAD PROTECTION.

C. WHERE FUSED SAFETY SWITCHES ARE INDICATED, PROVIDE FUSES SIZED PER MANUFACTURERS RECOMMENDATIONS.

D. ELECTRICAL CONTRACTOR SHALL PROVIDE CIRCUIT TO EQUIPMENT AS INDICATED.

E. WHERE DISCONNECT IS NOT SHOWN ON PLANS, LOCATE AT EQUIPMENT PER NEC.

F. MOTORS RATED 120 VOLT AND LESS THAN 1/3 HP SHALL HAVE 15/1 BRANCH CIRCUIT BREAKER IN PANEL. MOTORS RATED 120 VOLT, 1/3 HP AND LARGER SHALL HAVE 20/1 BRANCH CIRCUIT BREAKER IN PANEL.

G. REFER TO SPECIFICATIONS FOR SHORT CIRCUIT CURRENT RATING (SCCR) FOR EQUIPMENT.

H. REFER TO SPECIFICATIONS SECTION 23 09 00 FOR ADDITIONAL WIRING REQUIREMENTS, SUCH AS DAMPER OPERATORS.

REMARKS:

1. STUB CONDUIT 5 FEET OUT FROM BUILDING FOUNDATION AND CAP. CIRCUIT CONDUCTORS, CONDUIT, AND CIRCUIT CONNECTIONS TO THE CIRCUIT BREAKERS IN THE PANELBOARD FOR EQUIPMENT LOCATED ON THE SITE WILL BE PROVIDED BY A...
2. ELECTRIC UNIT HEATER PROVIDED WITH INTEGRAL POWER DISCONNECT SWITCH AND WALL MOUNTED THERMOSTAT. PROVIDE CONTROL WIRING FROM THERMOSTAT TO HEATER PER MANUFACTURER'S RECOMMENDATION.
3. DISCONNECT MEANS PROVIDED BY CIRCUIT BREAKER IN PANELBOARD SERVING EQUIPMENT.

LIGHTING EQUIPMENT SCHEDULE

TAG	DESCRIPTION	BASIS OF DESIGN (1)		INPUT LOAD (W)	VOLTAGE	MOUNT.	FINISH	COLOR TEMP (°K)	CRI	DLVD LUMENS	MAX SDCM	L70 (HRS)	DRIVER	REMARKS
		MANUF.	SERIES											
A24	2X4 NOMINAL RECESSED LED FLAT PANEL; SEAMLESS ALUMINUM FRAME; SMOOTH ACRYLIC LENS	LITHONIA *METALUX *WILLIAMS *COLUMBIA	EPANL	38	120	REC CLG	STANDARD	3500	80	4000	3	50,000+	0-10V 10% DIM	
A24E	2X4 NOMINAL RECESSED LED FLAT PANEL; SEAMLESS ALUMINUM FRAME; SMOOTH ACRYLIC LENS; INTEGRAL EMERGENCY BATTERY PACK; INTERNAL TEST SWITCH	LITHONIA *METALUX *WILLIAMS *COLUMBIA	EPANL	38	120	REC CLG	STANDARD	3500	80	4000	3	50,000+	0-10V 10% DIM	
C1(L1)	4.85" X 6.17" RECESSED CHANNEL TO RECEIVE MODULAR LED GIMBAL FLOOD LIGHTS AND FILLER PLATES; EXTRUDED ALUMINUM CONSTRUCTION; FLANGLESS SUITABLE FOR WOOD CEILING; 3 CIRCUIT; CAMERA SECTION BY OTHERS; HVAC SECTION BY OTHERS.	3G	3Gi-48RSL	-	120	REC CLG	BLACK	-	-	-	-	-	0-10V 1% DIM	1.
C1(L2)	4.85" X 6.17" RECESSED CHANNEL TO RECEIVE MODULAR LED GIMBAL FLOOD LIGHTS AND FILLER PLATES; EXTRUDED ALUMINUM CONSTRUCTION; FLANGLESS SUITABLE FOR WOOD CEILING; 2 CIRCUIT; PHOTOCELL SENSOR SECTION BY OTHERS.	3G	3Gi-48RSL	-	120	REC CLG	BLACK	-	-	-	-	-	0-10V 1% DIM	1.
C1(L3)	4.85" X 6.17" RECESSED CHANNEL TO RECEIVE MODULAR LED GIMBAL FLOOD LIGHTS AND FILLER PLATES; EXTRUDED ALUMINUM CONSTRUCTION; FLANGLESS SUITABLE FOR WOOD CEILING; 2 CIRCUIT.	3G	3Gi-48RSL	-	120	REC CLG	BLACK	-	-	-	-	-	0-10V 1% DIM	1.
C1(L4)	4.85" X 6.17" RECESSED CHANNEL TO RECEIVE MODULAR LED GIMBAL FLOOD LIGHTS AND FILLER PLATES; EXTRUDED ALUMINUM CONSTRUCTION; FLANGLESS SUITABLE FOR WOOD CEILING; 3 CIRCUIT; CAMERA SECTION BY OTHERS; HVAC SECTION BY OTHERS.	3G	3Gi-48RSL	-	120	REC CLG	BLACK	-	-	-	-	-	0-10V 1% DIM	1.
C1(V1)	4.85" X 6.17" RECESSED CHANNEL TO RECEIVE MODULAR LED GIMBAL FLOOD LIGHTS AND FILLER PLATES; EXTRUDED ALUMINUM CONSTRUCTION; FLANGLESS SUITABLE FOR WOOD CEILING; 2 CIRCUIT.	3G	3Gi-48RSL	-	120	REC CLG	BLACK	-	-	-	-	-	0-10V 1% DIM	1.
C1(V2)	4.85" X 6.17" RECESSED CHANNEL TO RECEIVE MODULAR LED GIMBAL FLOOD LIGHTS AND FILLER PLATES; EXTRUDED ALUMINUM CONSTRUCTION; FLANGLESS SUITABLE FOR WOOD CEILING; 1 CIRCUIT; CAMERA SECTION BY OTHERS.	3G	3Gi-48RSL	-	120	REC CLG	BLACK	-	-	-	-	-	0-10V 1% DIM	1.

LIGHTING EQUIPMENT SCHEDULE

TAG	DESCRIPTION	BASIS OF DESIGN (1)		INPUT LOAD (W)	VOLTAGE	MOUNT.	FINISH	COLOR TEMP (°K)	CRI	DLVD LUMENS	MAX SDCM	L70 (HRS)	DRIVER	REMARKS
		MANUF.	SERIES											
C1N	24" MODULAR THREE HEAD GIBAL FLOOD LIGHT TO FIT WITHIN TYPE C1 CHANNEL; MACHINED ALUMINUM DOUBLE GIMBAL WITH 360X45 DEGREE ADJUSTABILITY; 20 DEG DISTRIBUTION; REGRESSED LED FOR GLARE CONTROL; INTERCHANGEABLE REFLECTOR; DRIVER ACCESSIBLE FROM BELOW.	3G	3Gi-48RSL M5	(3x) 10.2	120	REC TYPE C1 CHANNEL	BLACK	3500	80	1015	3	50,000 (L90)	0-10V 1% DIM	4.
C1W	SAME AS C1N, 60 DEG DISTRIBUTION	-	-	-	-	-	-	-	-	-	-	-	-	4.
E1	12 5/8" X 8 5/8" X 4 3/8" LED WALL MOUNTED EXIT SIGN SINGLE FACE; RED LETTER; INTEGRAL EMERGENCY BATTERY PACK; INTERNAL TEST SWITCH	LITHONIA	EDGR	3.8	120	REC WALL	BRUSHED ALUMINUM	-	-	-	-	-	-	
INV1	12.5" X 12" X 10" EMERGENCY BACKUP INVERTER; SINUSOIDAL OUTPUT; MAX OUTPUT POWER 250VA; AUTOMATIC DIMMING 0-10V. MINIMUM 90 MINUTES OF ILLUMINATION TIME UPON FAILURE OF NORMAL POWER	BODINE	ELI-S-250	120	120	SURFACE WALL	STANDARD	-	-	-	-	-	-	
L2R	2-3/8" X 3-9/16" X 5'-0" LED RECESSED LINEAR; EXTRUDED ALUMINUM HOUSING; IMPACT RESISTANT LENS	SELUX	W60	4.9/FT	120	REC CLG	BLACK	3500	90	397/FT	3	60,000+	0-10V 1% DIM LINEAR	2.
L2RE	2-3/8" X 3-9/16" X 5'-0" LED RECESSED LINEAR; EXTRUDED ALUMINUM HOUSING; IMPACT RESISTANT LENS; INTEGRAL EMERGENCY BATTERY PACK; INTERNAL TEST SWITCH	SELUX	W60	4.9/FT	120	REC CLG	BLACK	3500	90	397/FT	3	60,000+	0-10V 1% DIM LINEAR	2.
L3R	2-7/8" X 6-1/8" RECESSED PERIMETER; EXTRUDED ALUMINUM HOUSING WITH FLANGE; 2" MICROPRISM REGRESS LENS; IMPACT RESISTANT ACRYLIC LENS; WALL TO WALL INSTALLATION	SELUX	W60PW	9.9/FT	120	REC CLG	WHITE	3500	90	768/FT	3	60,000+	0-10V 1% DIM LINEAR	e.
N6	6" DIA NOMINAL RECESSED DOWNLIGHT; 18 GA DIE FORMED STEEL HOUSING; 304 STAINLESS TRIM; WIDE DISTRIBUTION; FLAT WHITE REFLECTOR. 1/4" POLYCARBONATE FLUSH LENS; IP65 RATED; VANDAL RESISTANT	KENALL *NEWSTAR *KURTZON	HADL6 FF	24	120	REC CLG	WHITE	3500	80	1600	3	85,000	0-10V 1% DIM	
N6E	6" DIA NOMINAL RECESSED DOWNLIGHT; 18 GA DIE FORMED STEEL HOUSING; 304 STAINLESS TRIM; WIDE DISTRIBUTION; FLAT WHITE REFLECTOR. 1/4" POLYCARBONATE FLUSH LENS; IP65 RATED; VANDAL RESISTANT; INTEGRAL EMERGENCY BATTERY PACK; EXTERNAL TEST SWITCH	KENALL *NEWSTAR *KURTZON	HADL6 FF	24	120	REC CLG	WHITE	3500	80	1600	3	85,000	0-10V 1% DIM	

LIGHTING EQUIPMENT SCHEDULE

TAG	DESCRIPTION	BASIS OF DESIGN (1)		INPUT LOAD (W)	VOLTAGE	MOUNT.	FINISH	COLOR TEMP (°K)	CRI	DLVD LUMENS	MAX SDCM	L70 (HRS)	DRIVER	REMARKS
		MANUF.	SERIES											
S4	10.7" X 4' LED SUSPENDED STRIPLIGHT COLD-ROLLED STEEL HOUSING; DIFFUSE SNAP ON/OFF LENS; HANGER CHAIN; WHITE WIREGARD	LITHONIA *METALUX *WILLIAMS *COLUMBIA	ZL1D	59	120	SUSP	WHITE	3500	80	7480	3	50,000+	0-10V 10% DIM	
S4E	10.7" X 4' LED SUSPENDED STRIPLIGHT COLD-ROLLED STEEL HOUSING; DIFFUSE SNAP ON/OFF LENS; HANGER CHAIN; WHITE WIREGARD INTEGRAL RATED BATTERY PACK; INTERNAL TEST SWITCH	LITHONIA *METALUX *WILLIAMS *COLUMBIA	ZL1D	59	120	SUSP	WHITE	3500	80	7480	3	50,000+	0-10V 10% DIM	
U2	24" X 1" NOM LOW PROFILE UNDERCABINET LIGHT; 20 GA STEEL HOUSING; 1/8" ACRYLIC LENS; INTEGRAL ON/OFF OCCUPANCY SENSOR	NEWSTAR *ALCKO *KENALL	MUS	12	120	SURFACE	WHITE	3500K	80	1250	3	50,000+	ON/OFF	
W2	24" X 5.33" X 3.75" VANITY LIGHT; EXTRUDED ALUMINUM HOUSING WITH FLAT END CAPS; PEARLESCENT POLYCARBONATE LENS	KENALL	MLHA5V	25	120	SURFACE WALL	BLACK	3500K	80	2374	3	150,000	0-10V 1% DIM	
XN6	6" DIA NOMINAL RECESSED DOWNLIGHT; 18 GA DIE FORMED STEEL HOUSING; 304 STAINLESS TRIM; WIDE DISTRIBUTION; 1/4" POLYCARBONATE FLUSH LENS; IP65 RATED; VANDAL RESISTANT	KENALL *NEWSTAR *KURTZON	HADL6 FF	22	120	REC CLG	WHITE	3000	80	1600	3	85,000	0-10V 1% DIM	3.
XN6E	6" DIA NOMINAL RECESSED DOWNLIGHT; 18 GA DIE FORMED STEEL HOUSING; 304 STAINLESS TRIM; WIDE DISTRIBUTION; 1/4" POLYCARBONATE FLUSH LENS; IP65 RATED; VANDAL RESISTANT; INTEGRAL EMERGENCY COLD WEATHER RATED BATTERY PACK; EXTERNAL TEST SWITCH	KENALL *NEWSTAR *KURTZON	HADL6 FF	22	120	REC CLG	WHITE	3000	80	1600	3	85,000	0-10V 1% DIM	3.
Z1W	41.6" X 5.6" X 2.4" LINEAR WALL PACK; MARINE GRADE HEAT TREATED ALUMINUM HOUSING;POLYESTER POWDER COAT; UV OPAL POLYCARBONATE LENS WITH GASKET SEAL; WET LOCATION RATED; VANDAL RESITANT; INTEGRAL EMERGENCY COLD WEATHER RATED BATTERY PACK; INTERNAL TEST SWITCH	LUMINAIRE LED	BLD	15	120	MULLION MOUNTED	SILVER	3000	80	1461	3	130,000	0-10V 10% DIM	3.
Z2W	74" X 5.6" X 2.4" LINEAR WALL PACK; MARINE GRADE HEAT TREATED ALUMINUM HOUSING;POLYESTER POWDER COAT; UV OPAL POLYCARBONATE LENS WITH GASKET SEAL; WET LOCATION RATED; VANDAL RESITANT; INTEGRAL EMERGENCY COLD WEATHER RATED BATTERY PACK; INTERNAL TEST SWITCH	LUMINAIRE LED	BLD	30	120	MULLION MOUNTED	SILVER	3000	80	3003	3	130,000	0-10V 10% DIM	3.

LIGHTING EQUIPMENT SCHEDULE GENERAL NOTES

a. VERIFY COMPLETE LUMINAIRE CATALOG NUMBER AND INSTALLATION REQUIREMENTS PRIOR TO ORDERING.
b. CEILING MOUNTED LUMINAIRE TYPES SHALL HAVE LUMINAIRE MOUNTING COORDINATED WITH GRID TYPE OR CEILING MATERIAL TYPE. REFER TO ARCHITECTURAL SHEETS FOR GRID TYPE USED IN EACH AREA. WHERE LUMINAIRES ARE SHOWN TO BE MOUNTED IN GYP CEILING USE TRIM AND FLANGE OPTION. DO NOT USE MUD-IN TRIM OPTION UNLESS NOTED OTHERWISE. LUMINAIRES INSTALLED IN 9/16" GRID SHALL BE PROVIDED WITH MOUNTING CLIPS AS RECOMMENDED BY THE LUMINAIRE MANUFACTURER.
c. COORDINATE LUMINAIRE VOLTAGE WITH CIRCUITING. SEE LIGHTING PLANS.
d. IN ORDER TO ACHIEVE PROPER DIMMER PERFORMANCE, THE DRIVERS SHALL BE COMPATIBLE WITH THE LIGHTING CONTROL SYSTEM PROVIDED. WHEN A LINEAR DIMMING MODULE IS BEING PROVIDED, A LOGARITHMIC DIMMING DRIVER SHALL BE PROVIDED. THE LISTED DIMMING CURVES OF THE DIMMING MODULE AND THE DIMMING DRIVER SHALL BE MISMATCHED FOR OPTIMAL PERFORMANCE. THIS INFORMATION SHALL BE SUBMITTED A THE TIME OF LIGHTING EQUIPMENT SUBMITTALS. THE CUTSHEET SHALL NOTE IF A LINEAR OR LOGARITHMIC DRIVER IS TO BE PROVIDED. THE SHOP DRAWINGS WILL NOT BE APPROVED UNTIL ALL OUTLINED INFORMATION IS PROVIDED.
e. LUMINAIRE SHALL RUN WALL TO WALL SHOWN ON DRAWINGS. ALL CORNERS WHERE TWO LUMINAIRES MEET SHALL BE ILLUMINATED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ORDER THE CORRECT LENGTHS AND TO HAVE MANUFACTURER PROVIDE EXACT LENGTHS OR TELESCOPING END(S) SO THAT LUMINAIRE RUNS CONTINUOUSLY ENTIRE LENGTH OF THE WALL.
f. BASIS OF DESIGN MANUFACTURER AND SERIES ARE INDICATED. OTHER MANUFACTURERS WITH AN (*) PREFIX ARE OPTIONAL. REFER TO SPECIFICATIONS FOR SUBSTITUTION REQUIREMENTS.

LIGHTING EQUIPMENT SCHEDULE REMARKS

1. REFER TO DETAILS ON SHEET E502 FOR BUILDING SYSTEMS INTEGRATION AND RELATIVE LOCATIONS OF DEVICES WITHIN CHANNEL. COORDINATE LENGTH FO CHANNEL, CEILING TYPE, AD DEVICE SPECIFICATIONS WITH TRADES PRIOR TO ORDERING.
2. COORDINATE LENGTH OF LUMINAIRE AND CEILING TYPE WITH ARCHITECTURAL DRAWINGS.
3. LUMINAIRES TO BE PRIMARILY CONTROLLED BY PHOTOCELL LOCATED ON TRUE NORTH SIDE OF BUILDING AS SHOWN IN DRAWING.

LIGHTING CONTROL SEQUENCE OF OPERATIONS MATRIX

TYPE	ZONE	DESCRIPTION	CENTRAL TIMECLOCK: SCHEDULED TRANSITIONS (1): 60 MIN BEFORE SUNSET % ON	EVENT 1 TIME	EVENT 1 % ON	60 MIN AFTER SUNRISE % ON	MANUAL OVERRIDE	LOCAL WALL CONTROL	REMOTE WALL CONTROL	LOCAL OCCUPANT SENSOR (4): TASK TUNING (1): OCCUPIED (2) % ON	UNOCCUPIED % ON	AUTO RAISE	AUTO LOWER	TIME OUT (MINS)	AUTOMATIC PHOTOCONTROL (4): RAISE / LOWER	MINIMUM DIM %ON	MANUAL OVERRIDE	DISTRIBUTED (3)	REMARKS
C.1		AUTO ON - AUTO OFF	-	-	-	-	-	X	-	100	OFF	X	X	20	-	-	-	X	
S.1		ON 24/7	-	24/7	100	-	-	-	-	-	-	-	-	-	-	-	-	X	
S.2		ON 24/7 WITH PHOTOCELL DIMMING	-	24/7	100	-	-	-	-	-	-	-	-	-	X	-	-	X	
M.1		MANUAL ON - AUTO OFF	-	-	-	-	-	X	-	100	OFF	-	X	20	-	-	-	X	
M.2		AUTO ON - AUTO OFF	-	-	-	-	-	X	-	100	OFF	X	X	20	-	-	-	X	
M.3		MANUAL ON - MANUAL OFF	-	-	-	-	-	X	-	100	OFF	-	-	-	-	-	-	X	
X.1		EXTERIOR PHOTOCELL / TIMECLOCK REDUNDANCY (5)	100	-	-	OFF	-	-	-	-	-	-	-	-	-	-	-	-	

LIGHTING CONTROL SEQUENCE OF OPERATIONS MATRIX GENERAL NOTES

a. FOR SEQUENCES DESIGNATED AS EMERGENCY, UPON NORMAL POWER LOSS:
   1. RELAYS SHALL CLOSE, REGARDLESS OF NORMAL POWER STATE.
   2. WHERE DIMMING IS INDICATED, ZONES SHALL RAISE TO MAXIMUM OUTPUT
   3. MANUAL CONTROLS SHALL BE DISABLED FOR THE POWER OUTAGE DURATION.

b. EMERGENCY LIGHTING SHOULD BE CONTROLLED WITH NORMAL LIGHTS IN EACH ZONE UNLESS OTHERWISE INDICATED.

c. UPON ACTIVATION OF ANY OCCUPANCY SENSOR IN THE BUILDING, EGRESS LIGHTING ZONES TO BE ACTIVE TO 1 FC MINIMUM FOR THE DURATION ACTIVITY IS DETECTED.

d. TIMECLOCKS MUST BE EQUIPPED WITH POWER BACK-UP PROVISIONS TO ALLOW FOR ACCURATE TIMEKEEPING THROUGH A MINIMUM OF 10-HOUR POWER LOSS. TIMECLOCKS MUST HAVE SEASONAL DAYLIGHT ADJUSTMENT.

LIGHTING CONTROL SEQUENCE OF OPERATIONS MATRIX REMARKS

1. FIELD VERIFY PROGRAMMING AND DIM LEVEL WITH OWNER'S REPRESENTATIVE AND LIGHTING DESIGNER. ADJUST AS REQUIRED FOR OWNER PREFERENCE AND TO AVOID FLICKER.
2. WHERE OCCUPANCY SENSOR IS SET TO MANUAL-ON, THE INDICATED LEVEL SHALL BE ACTIVATED UPON PRESSING THE 'ON' BUTTON.
3. LOAD CONTROLLER DEVICES TO BE LOCATED IN THE VACINITIY OF THE CONTROLLED SPACE IN AN ACCESSIBLE LOCATION. DEVICE LOCATION INDICATED ON PLAN IS DIAGRAMATIC AND EXACT PLACEMENT SHALL BE DETERMINED IN FIELD WITH OTHER TRADES PER ALL APPLICABLE BUILDING CODES.
4. ZONES SHALL BE CONTROLLED WITH A COMMON AREA SENSOR. SEE PLANS FOR SENSOR LOCATION. DIMMING PERCENTAGE SHALL BE DEPENDENT ON PHOTOCELL LIGHT LEVELS.
5. ZONES SHALL BE CONTROLLED WITH PHOTOCELL AUTOMATICALLY AND CONTINUOUSLY. REDUNDANCY OF TIME CLOCK ALLOWS FOR CONTINUED OPERATION IF PHOTOCELL FAILS.

NOTES:

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

PT: 304+38.90 C

310+00 C

PC: 310+96.00 C

215+00 B

315+00 C

ABANDONED SEPTIC FIELD

BP: 300+00.00 C

PCC: 113+76.79 A

LEGEND

WORKZONE PROJECT ID 1225-10-72

WORKZONE PROJECT ID 1225-10-73

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	STAGE 1 - REST AREA 51	SHEET 178	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\026001-S1_RA51.DWG
LAYOUT NAME - 026001-s1_RA51

PLOT DATE : 9/26/2024 1:02 PM PLOT BY : JASON KLEIST 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

PC: 417+33.16 D

605+00 F

PT: 605+99.57 F

610+00 F
REST AREA 52 CAR LOT

PC: 611+91.22 F

615+00 F

PT: 616+75.90 F

PC: 502+23.78 E

BP: 500+00.00 E

430+00 D

EP: 430+37.11 D

420+00 D

REST AREA 52 TRUCK LOT

425+00 D

ABANDONED SEPTIC FIELD

N

LEGEND

WORKZONE PROJECT ID 1225-10-72

WORKZONE PROJECT ID 1225-10-73

NOTES:

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

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	STAGE 1 - REST AREA 52	SHEET 179	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\026001-S1_RA52.DWG
LAYOUT NAME - 026001-s1_RA52

PLOT DATE : 9/26/2024 1:02 PM PLOT BY : JASON KLEIST 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

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

205+00 B

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

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: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	STAGE 2 - REST AREA 51	SHEET 180	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\026002-S2_RA51.DWG
LAYOUT NAME - 026002-s2_RA51

PLOT DATE : 7/30/2024 3:49 PM 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

PC: 417+33.16 D

PT: 605+99.57 F

605+00 F

610+00 F

REST AREA 52 CAR LOT

PC: 611+91.22 F

615+00 F

PT: 616+75.90 F

PC: 502+23.78 E

BP: 500+00.00 E

430+00 D

EP: 430+37.11 D

420+00 D

REST AREA 52 TRUCK LOT

425+00 D

ABANDONED SEPTIC FIELD

N

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: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	STAGE 2 - REST AREA 52	SHEET 181	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\026002-S2_RA52.DWG
LAYOUT NAME - 026002-s2_RA52

PLOT DATE : 7/30/2024 3:49 PM PLOT BY : DAVID YAHNKE 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

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

N

205+00 B

TRUCK LOT

CONC

210+00 B

PT: 211+36.54 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

CAR LOT

310+00 C

PT: 304+38.90 C

PC: 310+96.00 C

215+00 B

315+00 C

SAN

ABANDONED SEPTIC FIELD

BP: 300+00.00 C

PCC: 113+76.79 A

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	STAGE 3 - REST AREA 51	SHEET 182	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\026003-S3_RA51.DWG
LAYOUT NAME - 026003-s3_RA51

PLOT DATE : 7/30/2024 3:49 PM 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

615+00 F

PT: 616+75.90 F

PC: 502+23.78 E

BP: 500+00.00 E

REST AREA 52 CAR LOT

REST AREA 52 TRUCK LOT

PC: 417+33.16 D

420+00 D

425+00 D

430+00 D

EP: 430+37.11 D

ABANDONED SEPTIC FIELD

N

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

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	STAGE 3 - REST AREA 52	SHEET 183	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\026003-S3_RA52.DWG
LAYOUT NAME - 026003-s3_RA52

PLOT DATE : 7/30/2024 3:50 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

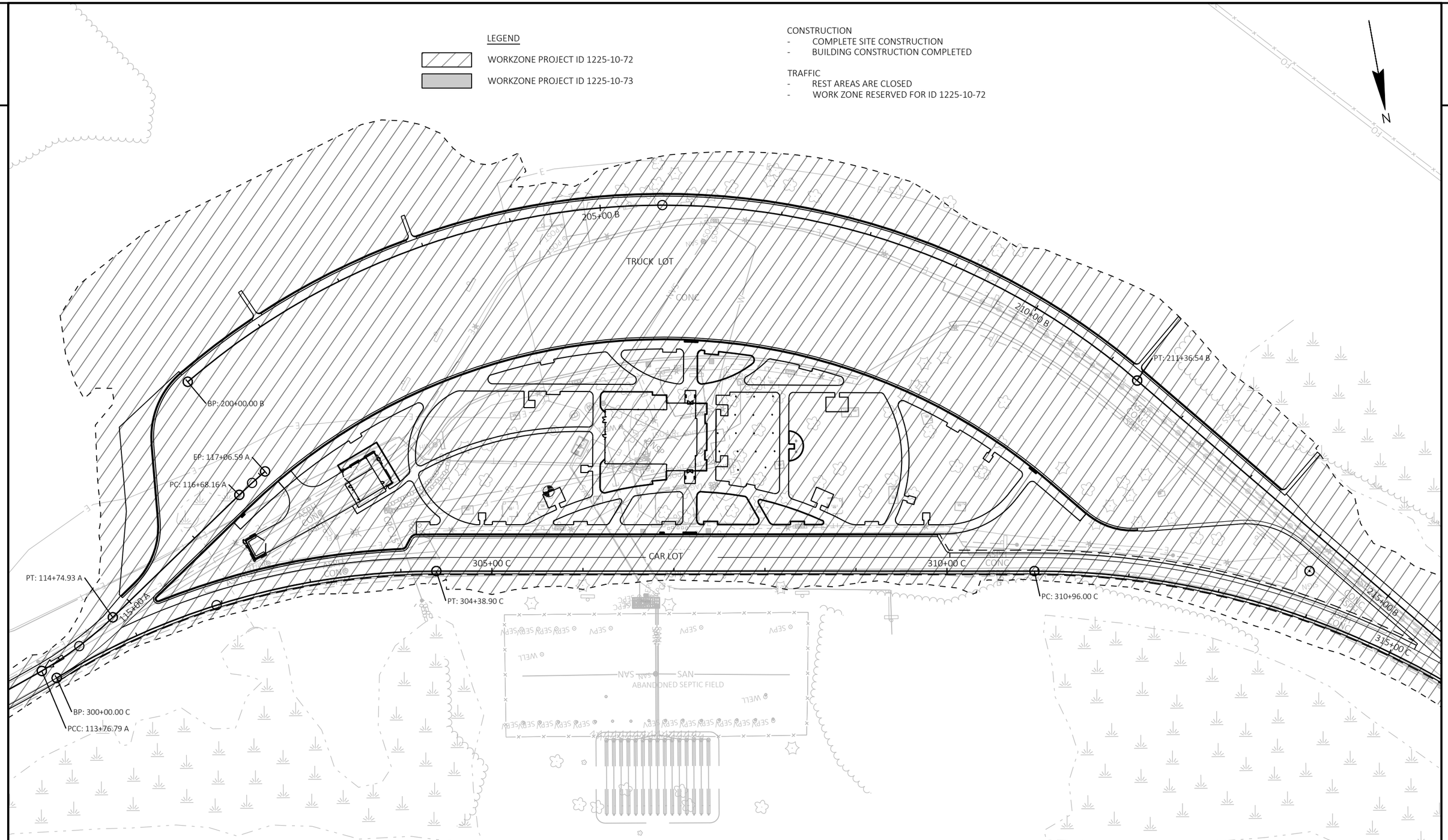
LEGEND

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



PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	STAGE 4 - REST AREA 51	SHEET 184	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\026004-S4_RA51.DWG
LAYOUT NAME - 026004-s4_RA51

PLOT DATE : 7/30/2024 3:50 PM 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

605+00 F

PT: 605+99.57 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

N

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

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	STAGE 4 - REST AREA 52	SHEET 185	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\026004-S4_RA52.DWG
LAYOUT NAME - 026004-s4_RA52

PLOT DATE : 7/30/2024 3:51 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

REST AREA 51

205+00 B
210+00 B
CP109
CP110
55+00 L
N79°26'47"W
60+00 L
BP: 50+00.00 L
BM105
EP: 65+00.00 L
215+00 B
N79°42'15"W
305+00 C
310+00 C
315+00 C
115+00 A
CP102
CP22071200
220+00 B
END CONSTRUCTION
STA 222+25.00 B
225+00 B
BEGIN CONSTRUCTION A
STA 100+00.00 A
110+00 A
105+00 A
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
N69°31'15"W
N80°37'59"W
N65°34'46"W
END PROJECT
STA 1894+72.06 NB
1850+00 NB
1855+00 NB
1860+00 NB
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
N69°31'03"W
N64°53'29"W
IH 43 NB
N76°22'51"W
BEGIN PROJECT
STA 1863+97.58 NB
405+00 D
410+00 D
BEGIN CONSTRUCTION
STA 406+00.00 D
415+00 D
605+00 F
610+00 F
615+00 F
CP103
65+00 M
70+00 M
BP: 60+00.00 M
N71°43'10"W
CP111
EP: 74+00.00 M
505+00 E
510+00 E
515+00 E
420+00 D
425+00 D
430+00 D

REST AREA 52

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
CP22071200	383510.923	192902.791	831.06	1/2" REBAR

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	ALIGNMENT DETAILS	SHEET 186	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\027202-AD.DWG
LAYOUT NAME - 027202-ad
PLOT DATE : 7/30/2024 3:51 PM
PLOT BY : DAVID YAHNKE
PLOT NAME :
PLOT SCALE : 1 IN:400 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

SI

205+00 B

210+00 B

BP: 200+00.00 B

EP: 117+06.59 A

PC: 116+68.16 A

PT: 114+74.93 A

115+00 A

SI

305+00 C

PT: 304+38.90 C

310+00 C

PC: 310+96.00 C

PT: 211+36.54 B

215+00 B

315+

WPS ELECTRIC

BRIGHTSPEED COMM

ABANDONED SEPTIC FIELD

CONC

ASPH

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	SOIL BORINGS - REST AREA 51	SHEET 187	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\027301-XX_RA51.DWG
LAYOUT NAME - 027302-xx

PLOT DATE : 7/30/2024 3:51 PM 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 383538.695, E 193442.704
BOR SB-2, EL. 832.51

N 383604.498, E 193951.127
BOR SB-1, EL. 829.51

N 383454.533, E 192869.36
BOR SB-4, EL. 839.85

N 383136.656, E 192580.773
BOR SB-8, EL. 842.11

N 383459.44, E 192545.3
BOR SB-6, EL. 843.69

N 383373.842, E 192490.729
BOR SB-5, EL. 844.66

N 383306.227, E 192279.2
BOR SB-9, EL. 845.91

N 383551.107, E 192334.505
BOR SB-10, EL. 843.56

N 383493.91, E 192085.603
BOR SB-11, EL. 842.91

N 383663.177, E 191953.899
BOR SB-12, EL. 842.51

N 384227.558, E 191244.18
BOR SB-13, EL. 844.63

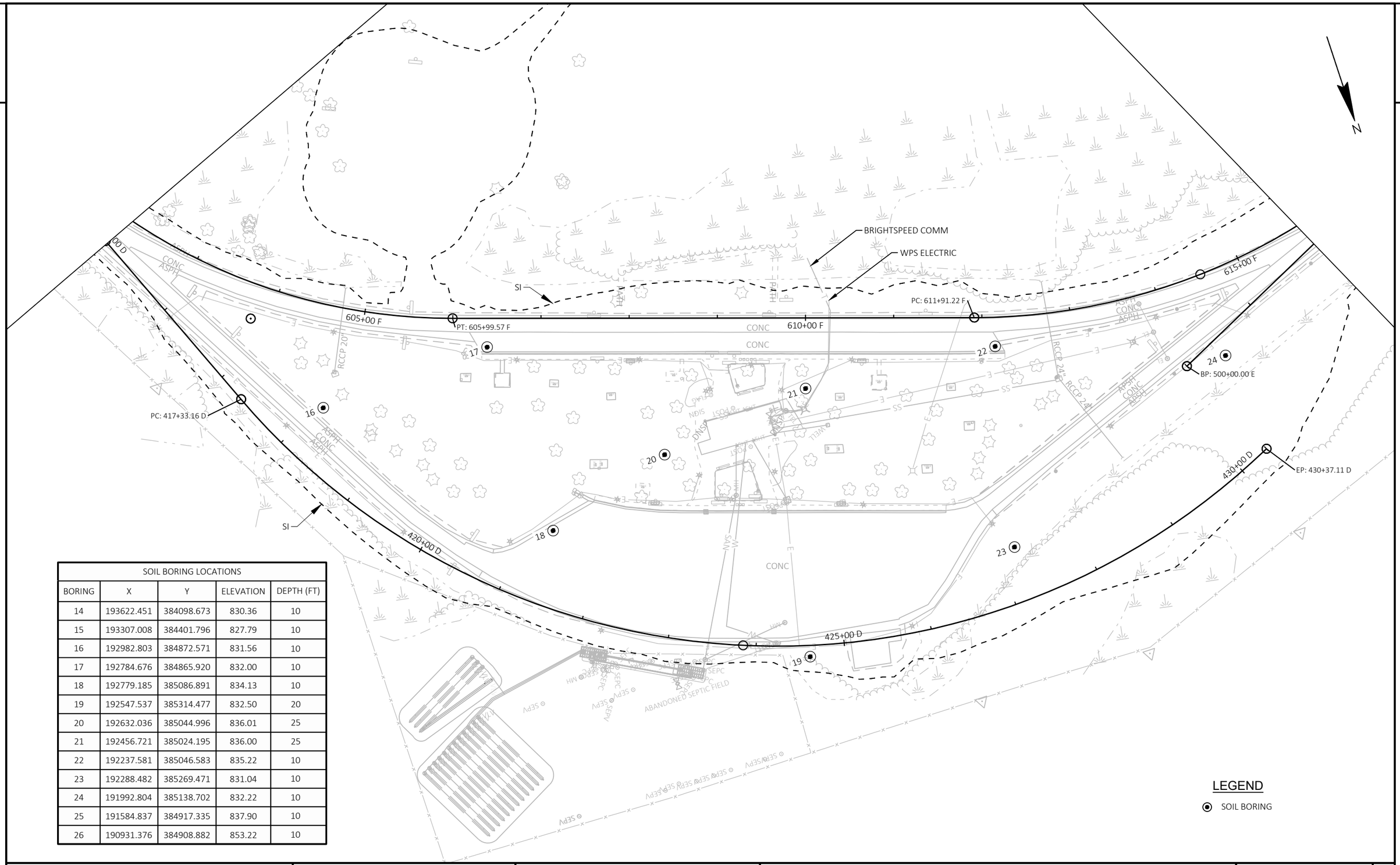
N 383156.911, E 192872.149
BOR SB-7, EL. 829.68

N 383334.946, E 193101.449
BOR SB-3, EL. 826.51

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	SOIL BORINGS - REST AREA 51	SHEET 188	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\027301-XX_RA51.DWG
LAYOUT NAME - 027304-xx

PLOT DATE : 7/30/2024 3:51 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : ############



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

LEGEND

SOIL BORING

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	SOIL BORINGS - REST AREA 52	SHEET 189	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\027304-XX_RA52.DWG
LAYOUT NAME - 027306-xx

PLOT DATE : 7/30/2024 3:52 PM 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

850 845 840 835 830 825 820 815 810

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
15 28 16 14 10 13 17 14

N 385044.996, E 192632.036
BOR SB-20, EL. 836.01
12 25 16 18 20 20 46 23 27

N 385086.891, E 192776.185
BOR SB-18, EL. 834.13
12 18 24 24 2.5

N 384865.92, E 192784.676
BOR SB-17, EL. 832

N 384872.571, E 192982.803
BOR SB-16, EL. 831.56
8 35 12 3.0 19 3.0 8 2.0

N 384098.673, E 193622.451
BOR SB-14, EL. 830.36
11 31 32 16 42

N 384401.796, E 193307.008
BOR SB-15, EL. 827.79
7 33 13 6 5

N 385314.477, E 192547.537
BOR SB-19, EL. 832.52
6 1.0 8 2 0.5 9 20 19 45 29

N 385046.583, E 192237.581
BOR SB-22, EL. 835.22
21 31 18 17

N 385269.471, E 192288.482
BOR SB-23, EL. 831.04
13 23 12 16 29

N 384917.35, E 191584.837
BOR SB-25, EL. 837.9
15 19 24 25 19

N 385138.702, E 191992.804
BOR SB-24, EL. 832.22
7 18 23 27 15

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	SOIL BORINGS - REST AREA 52	SHEET 190	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\027304-XX_RA52.DWG
LAYOUT NAME - 027308-xx

PLOT DATE : 7/30/2024 3:52 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : ##########

Estimate Of Quantities

1225-10-73

Line	Item	Item Description	Unit	Total	Qty
0002	213.0100	Finishing Roadway (project) 01. 1225-10-73	EACH	1.000	1.000
0004	608.6008	Storm Sewer Pipe Composite 8-Inch	LF	985.000	985.000
0006	618.0100	Maintenance and Repair of Haul Roads (project) 01. 1225-10-73	EACH	1.000	1.000
0008	619.1000	Mobilization	EACH	1.000	1.000
0010	639.0112	Drill Hole in Earth 12-Inch	LF	442.000	442.000
0012	639.0508	Drill Hole in Rock 8-Inch	LF	548.000	548.000
0014	639.0512	Drill Hole in Rock 12-Inch	LF	138.000	138.000
0016	639.1008	Well Casing Pipe 8-Inch	LF	590.000	590.000
0018	639.1700	Well Screen	LF	40.000	40.000
0020	639.2100	Grout for Sealing Well Casing	CF	108.000	108.000
0022	639.4000	Test Pumping	EACH	4.000	4.000
0024	SPV.0060	Special 01. Rest Area 51 Building, General Construction	EACH	1.000	1.000
0026	SPV.0060	Special 02. Rest Area 52 Building, General Construction	EACH	1.000	1.000
0028	SPV.0060	Special 03. Rest Area 51 Building, Plumbing	EACH	1.000	1.000
0030	SPV.0060	Special 04. Rest Area 52 Building, Plumbing	EACH	1.000	1.000
0032	SPV.0060	Special 05. Rest Area 51 Building, Heating and Ventilation	EACH	1.000	1.000
0034	SPV.0060	Special 06. Rest Area 52 Building, Heating and Ventilation	EACH	1.000	1.000
0036	SPV.0060	Special 07. Rest Area 51 Building, Electrical	EACH	1.000	1.000
0038	SPV.0060	Special 08. Rest Area 52 Building, Electrical	EACH	1.000	1.000
0040	SPV.0060	Special 09. Rest Area 51 Maintenance Building	EACH	1.000	1.000
0042	SPV.0060	Special 10. Rest Area 52 Maintenance Building	EACH	1.000	1.000
0044	SPV.0060	Special 11. Picnic Shelter Large	EACH	2.000	2.000
0046	SPV.0060	Special 12. Picnic Shelter Small	EACH	4.000	4.000
0048	SPV.0060	Special 13. Pitless Adaptor	EACH	4.000	4.000
0050	SPV.0060	Special 14. Well System Controls	EACH	2.000	2.000
0052	SPV.0060	Special 15. Well Pump	EACH	4.000	4.000
0054	SPV.0060	Special 16. Construction Staking, Water System	EACH	2.000	2.000
0056	SPV.0060	Special 24. Construction Staking, Building	EACH	4.000	4.000
0058	SPV.0060	Special 25. Coring Manhole	EACH	5.000	5.000
0060	SPV.0090	Special 01. Underground Copper Water Line, 3-Inch	LF	711.000	711.000
0062	SPV.0090	Special 02. Underground Copper Water Line, 1-Inch	LF	436.000	436.000
0064	SPV.0090	Special 03. Sanitary Sewer PVC, 6-Inch	LF	95.000	95.000
0066	SPV.0090	Special 04. Sanitary Sewer PVC, 8-Inch	LF	102.000	102.000
0068	SPV.0090	Special 05. Construction Staking, Sanitary Sewer System	LF	197.000	197.000

ROOF DRAINAGE

CATEGORY	STATION	LOCATION	608.6008 STORM SEWER PIPE COMPOSITE 8-INCH LF	SPV.0060.25 SPECIAL (25. CORING MANHOLE) EACH
0020	RA 51	Plaza	585	3
		TOTAL 0020	585	3
0040	RA 52	Plaza	400	2
		TOTAL 0040	400	2
		PROJECT TOTAL	985	5

MOBILIZATION

CATEGORY	LOCATION	619.1000 MOBILIZATION EACH
0010	REST AREA 51 - BUILDINGS	0.45
	TOTAL 0010	0.45
0020	REST AREA 51 - SITE	0.05
	TOTAL 0020	0.05
0030	REST AREA 52 - BUILDINGS	0.45
	TOTAL 0030	0.45
0040	REST AREA 52 - SITE	0.05
	TOTAL 0040	0.05
	PROJECT TOTAL	1

WATER WELLS

CATEGORY	STATION	LOCATION	639.0112 DRILL HOLE IN EARTH 12-INCH LF	639.0508 DRILL HOLE IN ROCK 8-INCH LF	639.0512 DRILL HOLE IN ROCK 12-INCH LF	639.1008 WELL CASING PIPE 8-INCH LF	639.1700 WELL SCREEN LF	639.2100 GROUT FOR SEALING WELL CASING CF	639.4000 TEST PUMPING EACH	SPV.0060.13 SPECIAL (13. PITLESS ADAPTER) EACH	SPV.0060.14 SPECIAL (14. WELL SYSTEM CONTROLS) EACH	SPV.0060.15 SPECIAL (15. WELL PUMP) EACH	SPV.0060.16 SPECIAL (16. CONSTRUCTION STAKING, WATER SYSTEM) EACH	SPV.0090.01 SPECIAL (01. UNDERGROUND COPPER WATER LINE, 3-INCH) LF	SPV.0090.02 SPECIAL (02. UNDERGROUND COPPER WATER LINE, 1-INCH) LF
0020	304+66.67 C	175.71 LT	98	147	37	135	10	27	1	1	1	1		187	
0020	307+89.48 C	210.04 LT	98	147	37	135	10	27	1	1		1		173	
0020	MAINTENACE BUILDING														260
0020	RA 51												1		
		TOTAL 0020	196	294	74	270	20	54	2	2	1	2	1	360	260
0040	607+78.35 F	170.42 RT	123	127	32	160	10	27	1	1	1	1		281	
0040	611+24.92 F	115.04 RT	123	127	32	160	10	27	1	1		1		70	
0040	MAINTENANCE BUILDING														176
0040	RA 52												1		
		TOTAL 0040	246	254	64	320	20	54	2	2	1	2	1	351	176
		PROJECT TOTAL	442	548	138	590	40	108	4	4	2	4	2	711	436

REST AREA 51 BUILDINGS

CATEGORY	LOCATION	SPV.0060.01 SPECIAL (01. REST AREA 51 BUILDING, GENERAL) EACH	SPV.0060.03 SPECIAL (03. REST AREA 51 BUILDING, PLUMBING) EACH	SPV.0060.05 SPECIAL (05. REST AREA 51 BUILDING, HEATING AND VENTILATION) EACH	SPV.0060.07 SPECIAL (07. REST AREA 51 BUILDING, ELECTRICAL) EACH	SPV.0060.09 SPECIAL (09. REST AREA 51 MAINTENANCE BUILDING) EACH
0010	REST AREA 51	1	1	1	1	1
	TOTAL 0010	1	1	1	1	1

REST AREA 52 BUILDING

CATEGORY	LOCATION	SPV.0060.02 SPECIAL (02. REST AREA 52 BUILDING, GENERAL) EACH	SPV.0060.04 SPECIAL (04. REST AREA 52 BUILDING, PLUMBING) EACH	SPV.0060.06 SPECIAL (06. REST AREA 52 BUILDING, HEATING AND VENTILATION) EACH	SPV.0060.08 SPECIAL (08. REST AREA 52 BUILDING, ELECTRICAL) EACH	SPV.0060.10 SPECIAL (10. REST AREA 52 MAINTENANCE BUILDING) EACH
0030	REST AREA 52	1	1	1	1	1
	TOTAL 0030	1	1	1	1	1

3

PICNIC SHELTERS

CATEGORY	STATION	LOCATION	SPV.0060.11 SPECIAL (11. PICNIC SHELTER LARGE) EACH	SPV.0060.12 SPECIAL (12. PICNIC SHELTER SMALL) EACH
0020	55+35 L	RT 37'		1
0020	58+46 L	LT 67'	1	
0020	58+30 L	RT 76'		1
		TOTAL 0020	1	2
0040	65+81 M	LT 37'		1
0040	65+81 M	RT 67'	1	
0040	68+86 M	Llt 29'		1
		TOTAL 0040	1	2
		PROJECT TOTAL	2	4

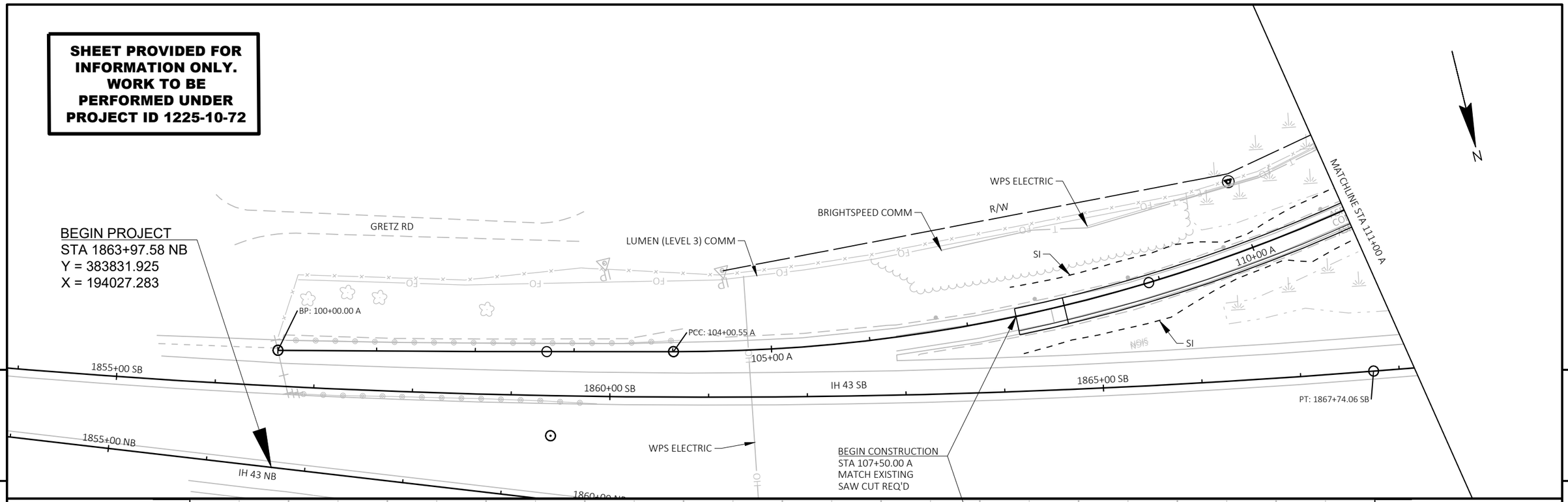
CONSTRUCTION STAKING, BUILDING

CATEGORY	LOCATION	SPV.0060.24 SPECIAL (CONSTRUCTION STAKING, BUILDING) EACH
0030	RA 51 COMFORT BUILDING	1
0030	RA 51 MAINTENANCE BUILDING	1
	TOTAL 0030	2
0040	RA 52 COMFORT BUILDING	1
0040	RA 52 MAINTENANCE BUILDING	1
	TOTAL 0040	2
	PROJECT TOTAL	4

SANITARY SEWER

CATEGORY	STRUCTURE	TO	STRUCTURE	PIPE RUN	SPV.0090.03 SPECIAL (03. SANITARY SEWER PVC, 6-INCH) LF	SPV.0090.04 SPECIAL (04. SANITARY SEWER PVC, 8-INCH) LF	SPV.0090.05 SPECIAL (05. CONSTRUCTION STAKING, SANITARY SEWER SYSTEM) LF
0020	MAINTENANCE BUILDING	-	S-2	P-3	8		
0020	NEW COMFORT BUILDING	-	S-1	P-1		17	
0020		-	RA 51				25
				TOTAL 0020	8	17	25
0040	MAINTENANCE BUILDING	-	S-13	P-8	87		
0040	NEW COMFORT BUILDING	-	S-12	P-6		85	
0040		-	RA 52				172
				TOTAL 0040	87	85	172
				PROJECT TOTAL	95	102	197

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72

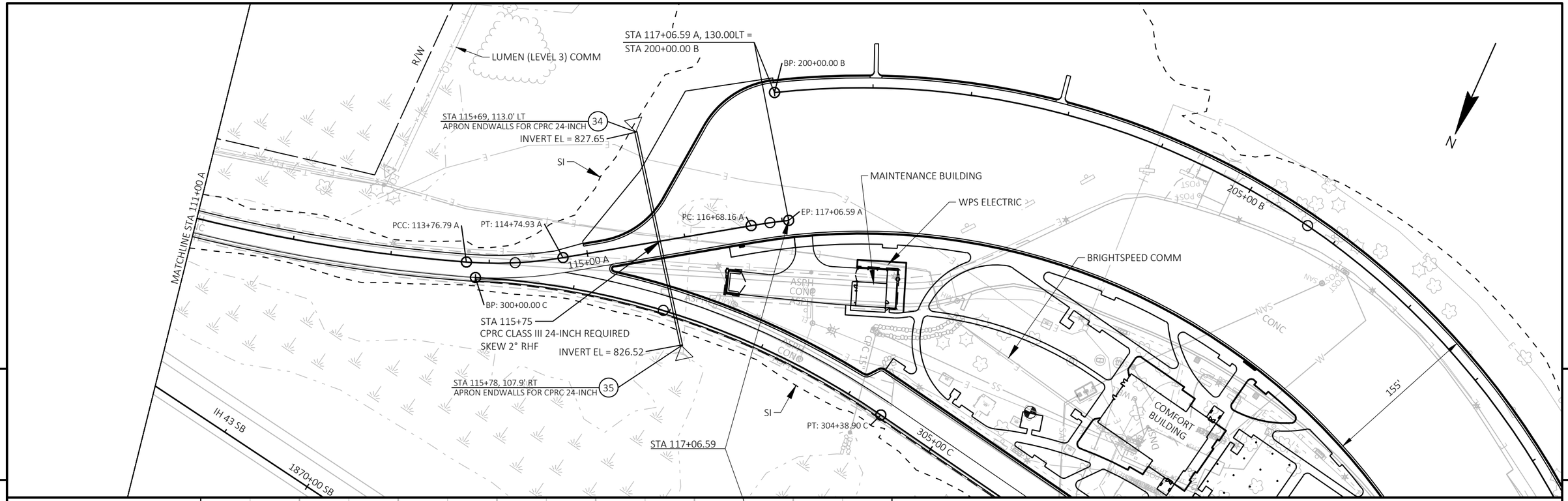


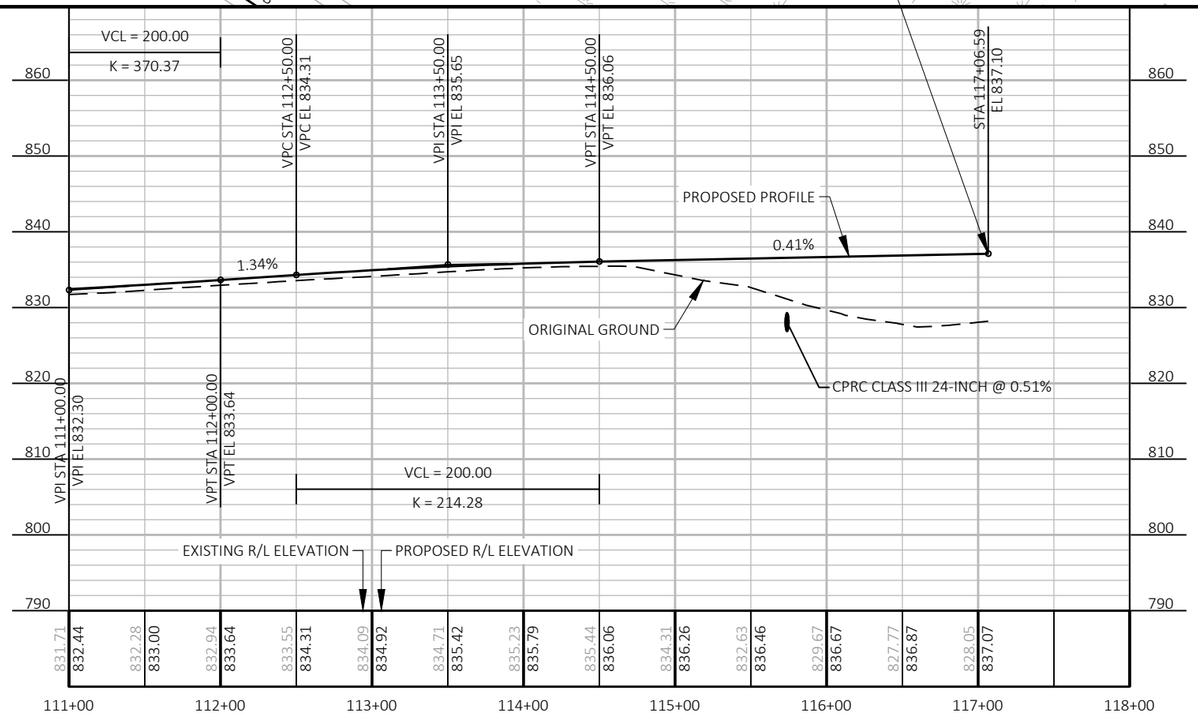
PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	PLAN AND PROFILE: REST AREA 51 - IH 43 SB ENTRANCE RAMP	SHEET 194	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\050101-PP_RA51 A.DWG
LAYOUT NAME - 050101-pp A

PLOT DATE : 7/30/2024 3:53 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

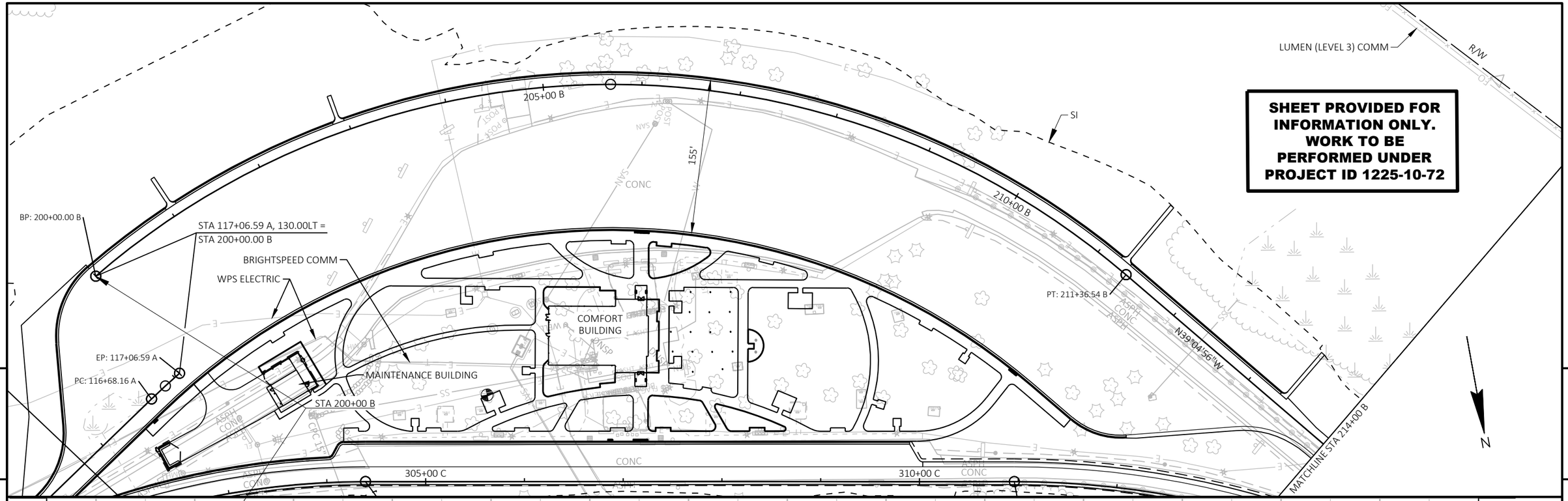


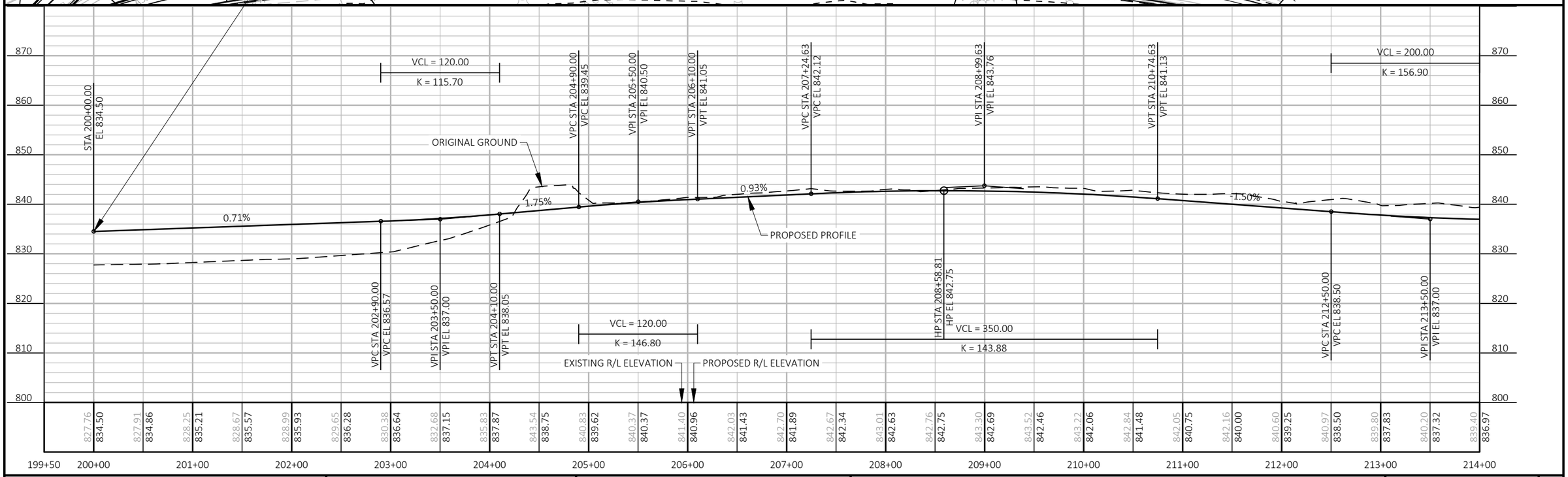


SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72

PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	PLAN AND PROFILE: REST AREA 51 - IH 43 SB ENTRANCE RAMP	SHEET 195	E

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72





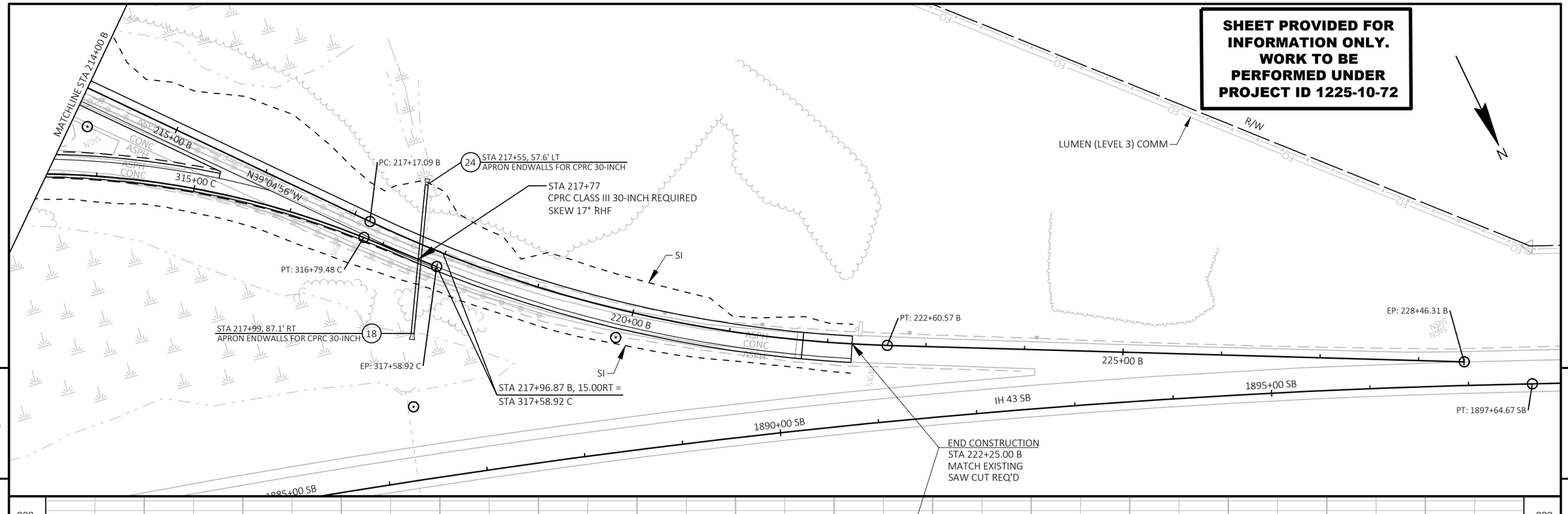
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FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\050101-PP_RA51 B.DWG
LAYOUT NAME - 050103-pp B

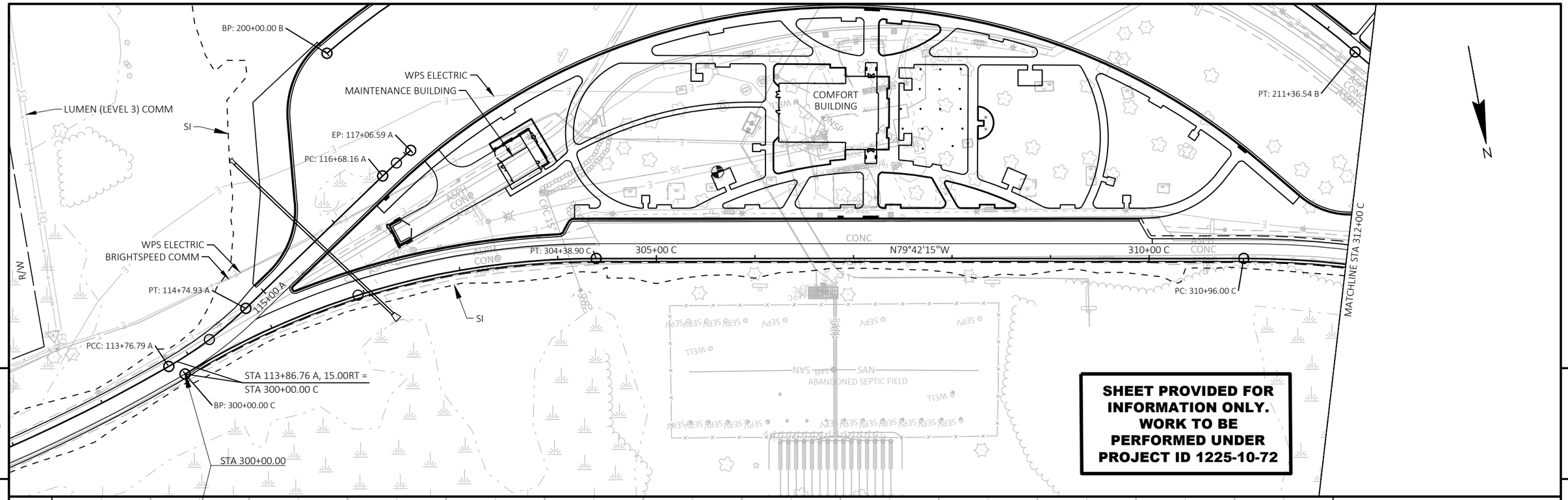
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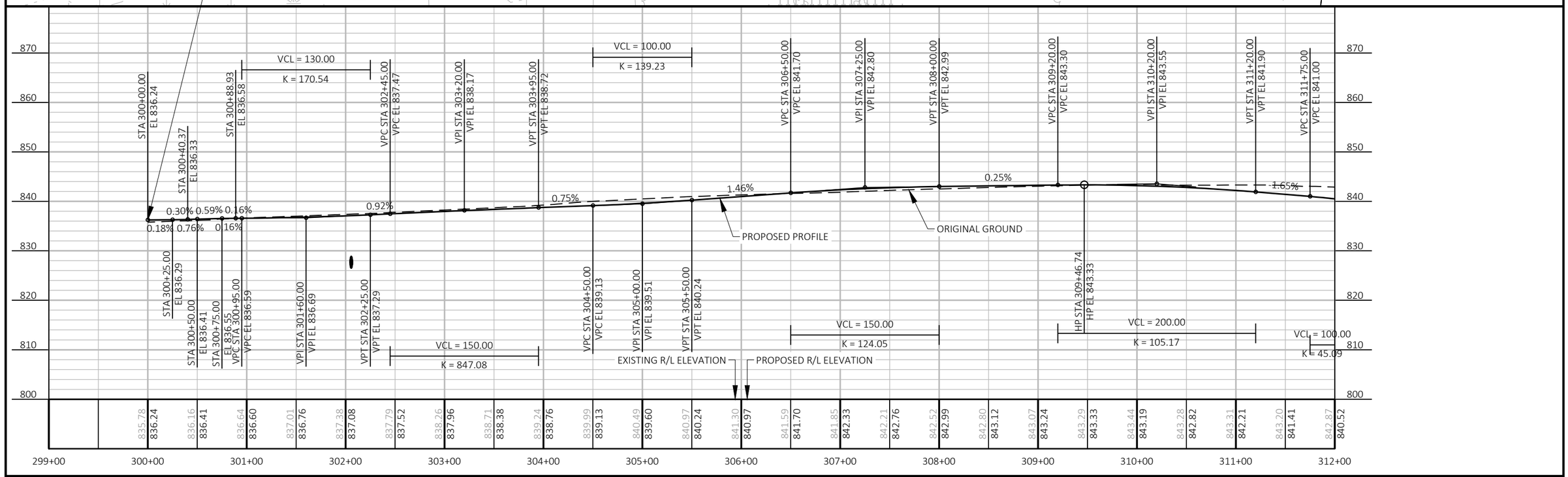
WISDOT/CADDS SHEET 44

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72



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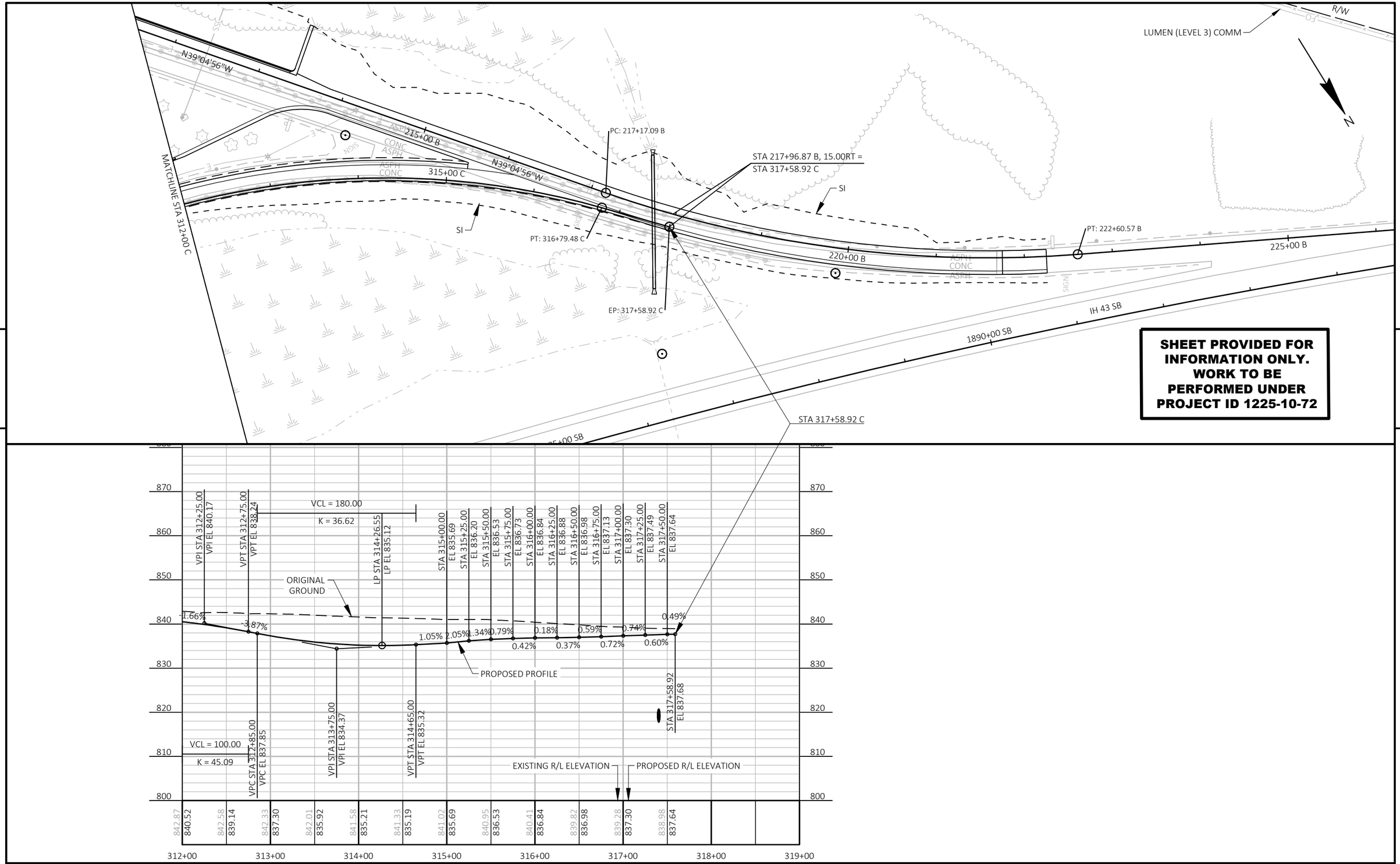


PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	PLAN AND PROFILE: REST AREA 51 - CAR LOT	SHEET 198 E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\050101-PP_RA51 C.DWG
LAYOUT NAME - 050105-pp C

PLOT DATE : 7/30/2024 3:54 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

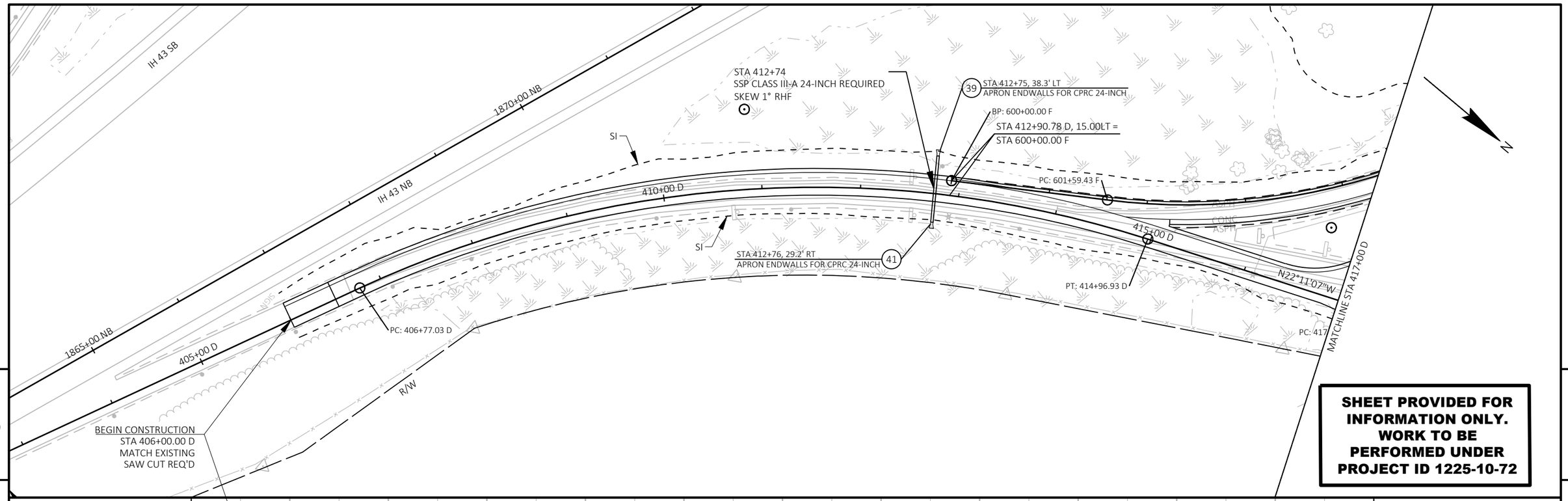


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PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	PLAN AND PROFILE: REST AREA 51-- CAR LOT	SHEET 199	E



SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72

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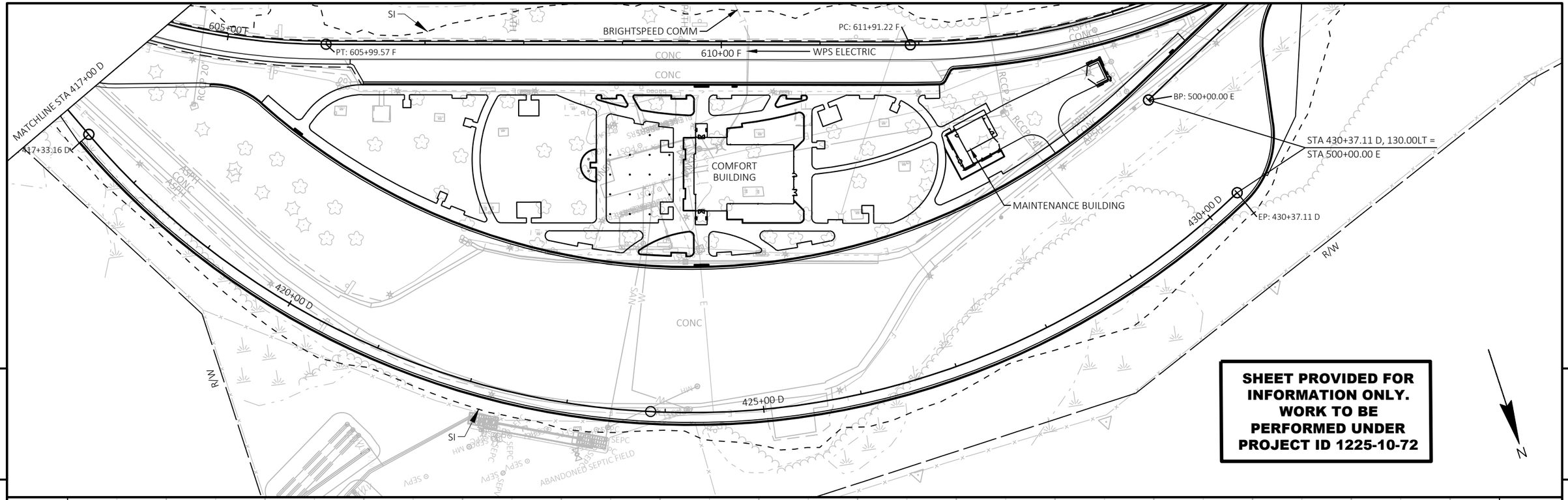
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PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	PLAN AND PROFILE: REST AREA 52 - IH 43 NB EXIT RAMP	SHEET 200 E

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LAYOUT NAME - 050108-pp D

PLOT DATE : 7/30/2024 3:54 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



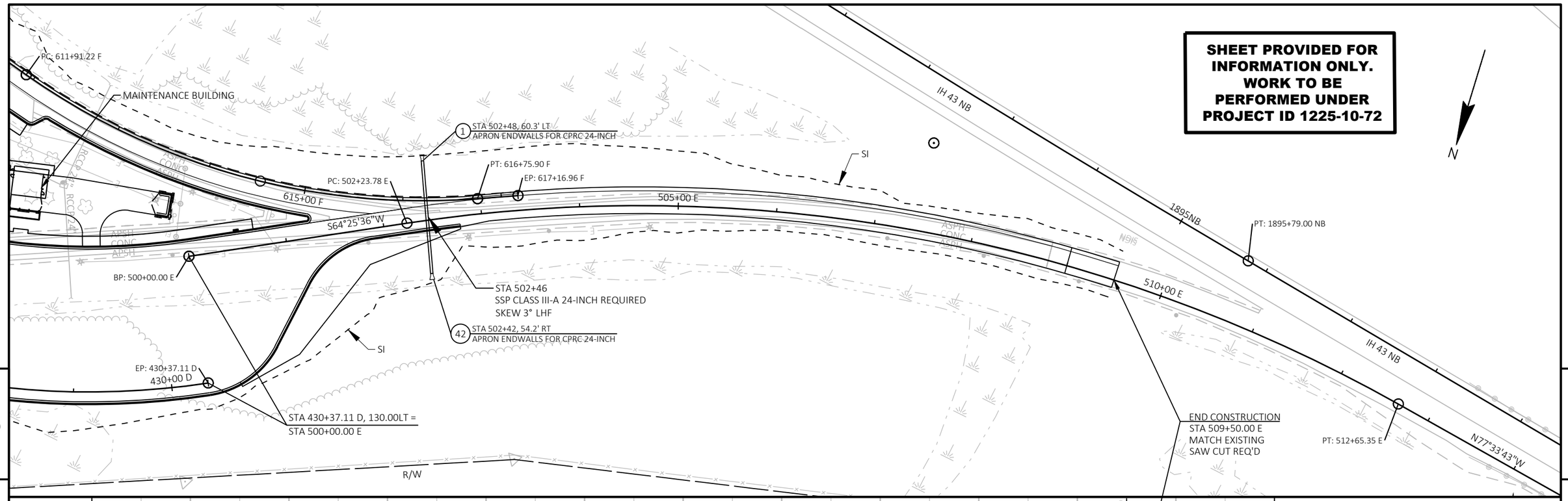
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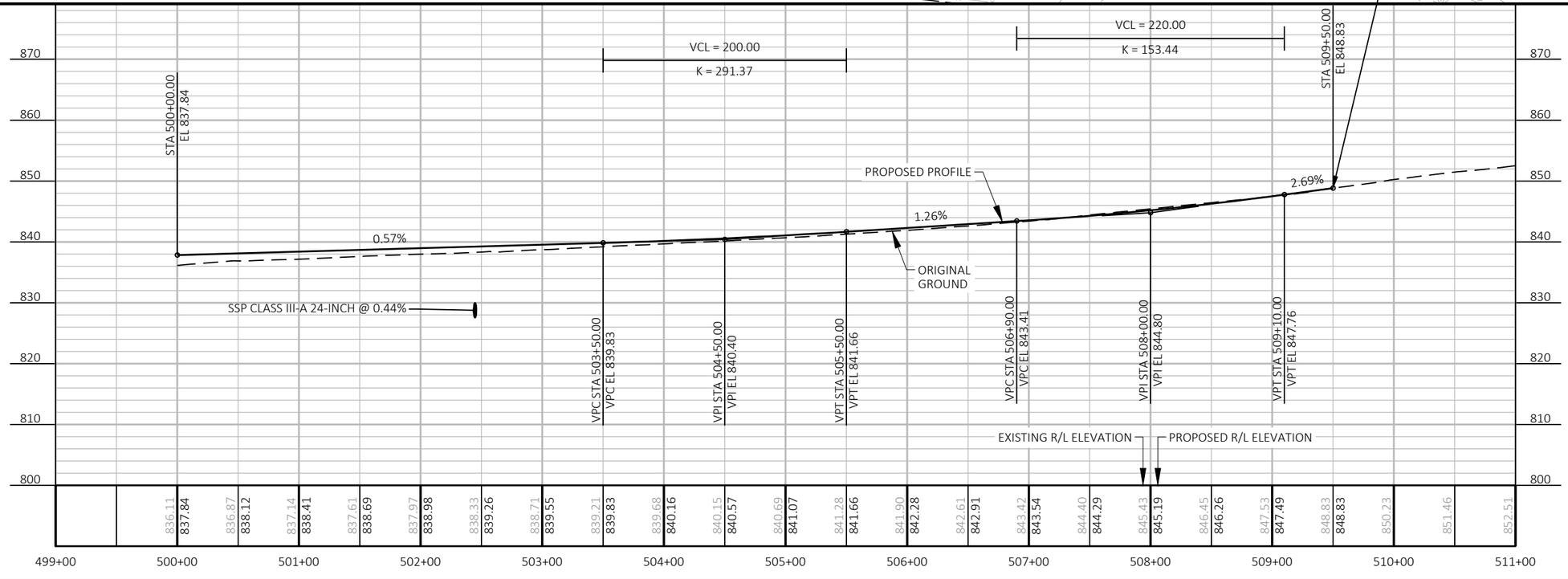
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LAYOUT NAME - 050109-pp D

PLOT DATE : 7/30/2024 3:54 PM PLOT BY : DAVID YAHNKE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72



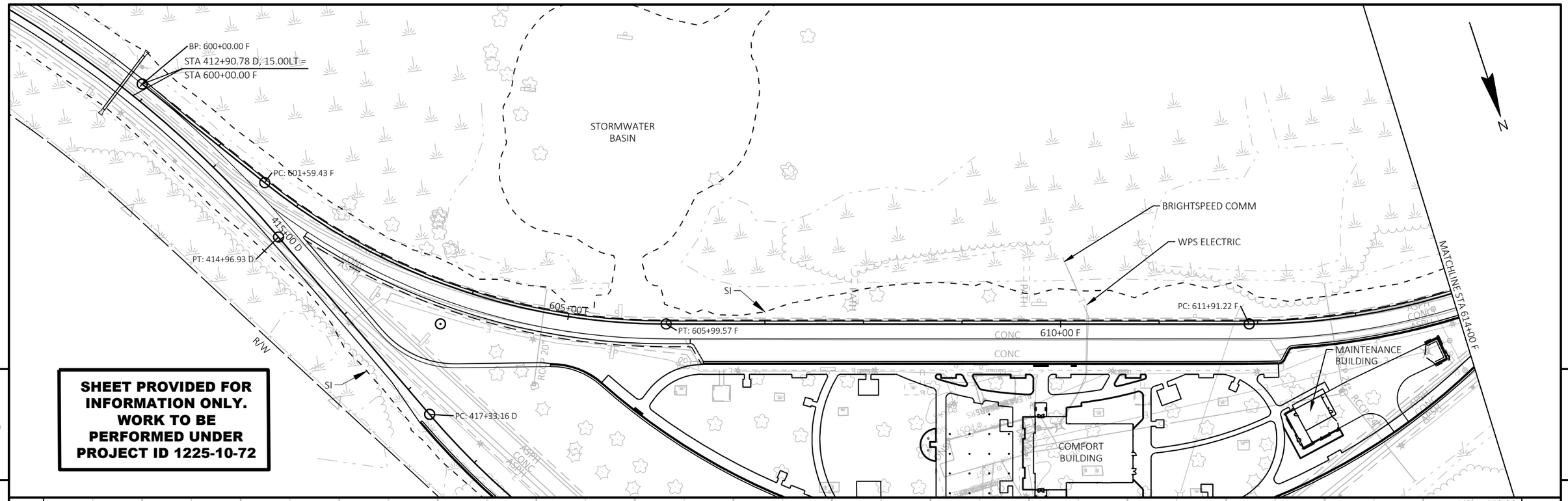


PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	PLAN AND PROFILE: REST AREA 52 - IH 43 NB ENTRANCE RAMP	SHEET 202	E

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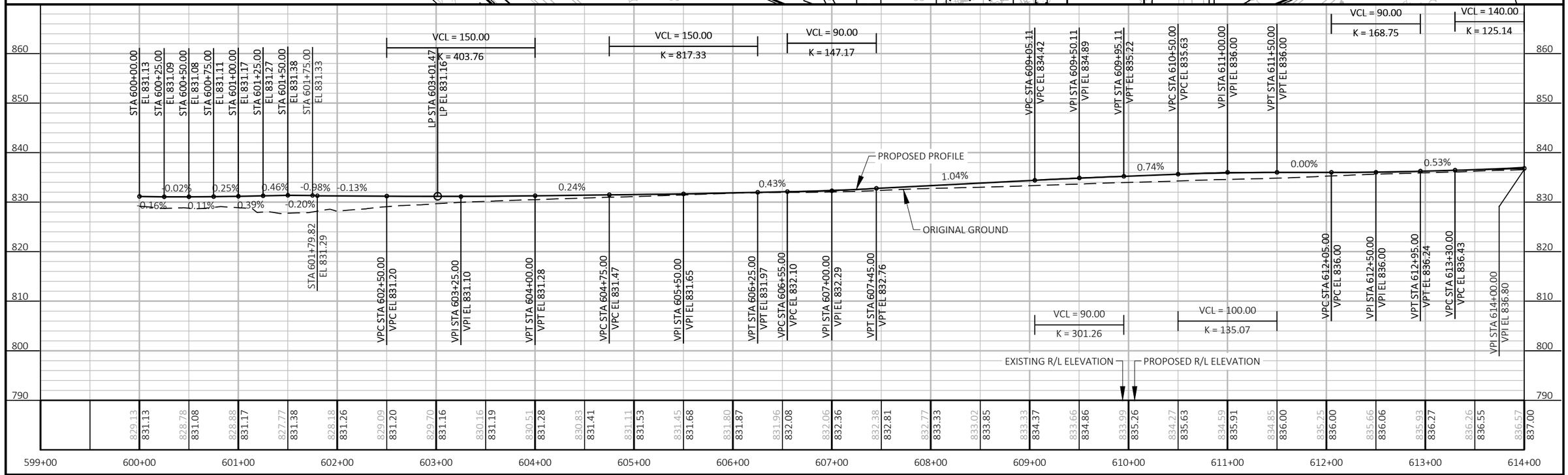
WISDOT/CADDS SHEET 44



SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72

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PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	PLAN AND PROFILE: REST AREA 52 - CAR LOT	SHEET 203 E

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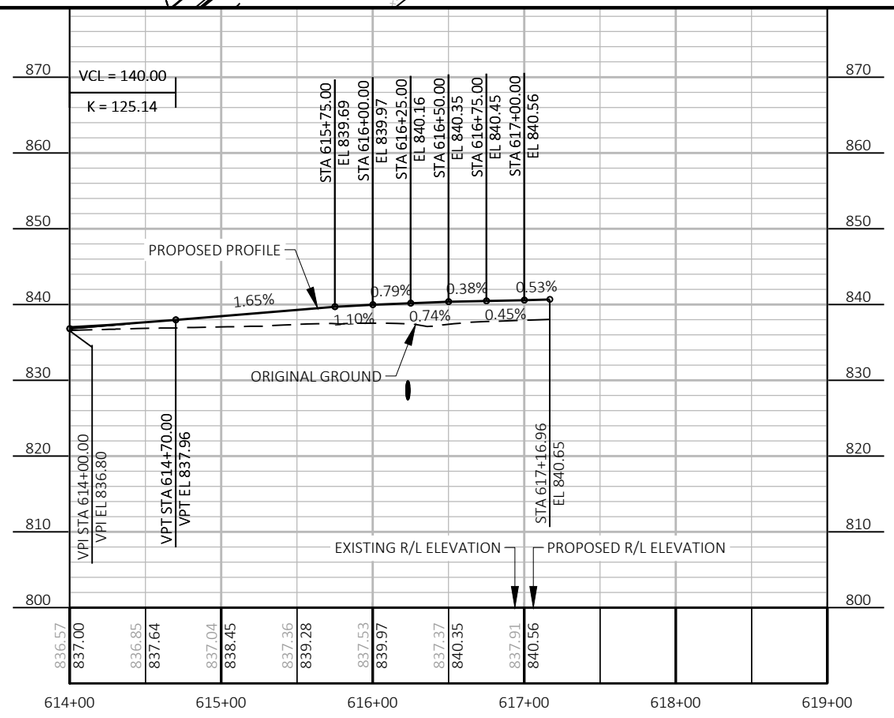
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SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72

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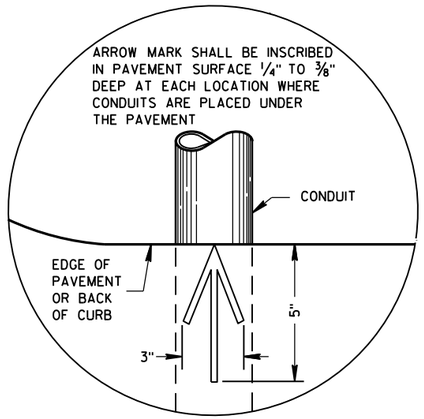
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Standard Detail Drawing List

09B02-10	CONDUIT

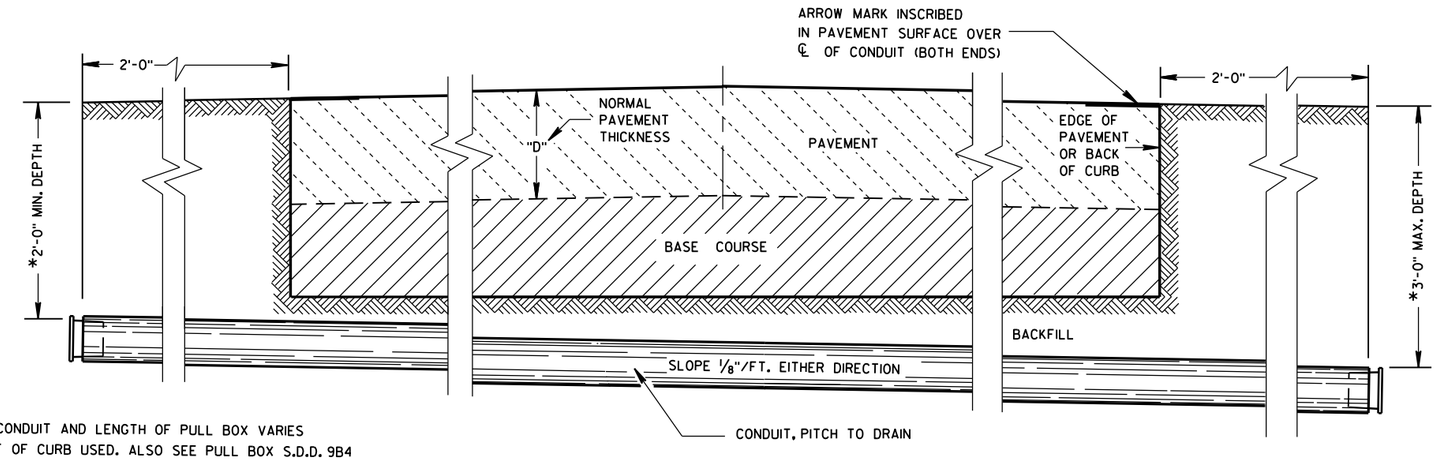
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PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

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

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

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

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

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

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

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

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

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

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

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

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

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

CONDUIT

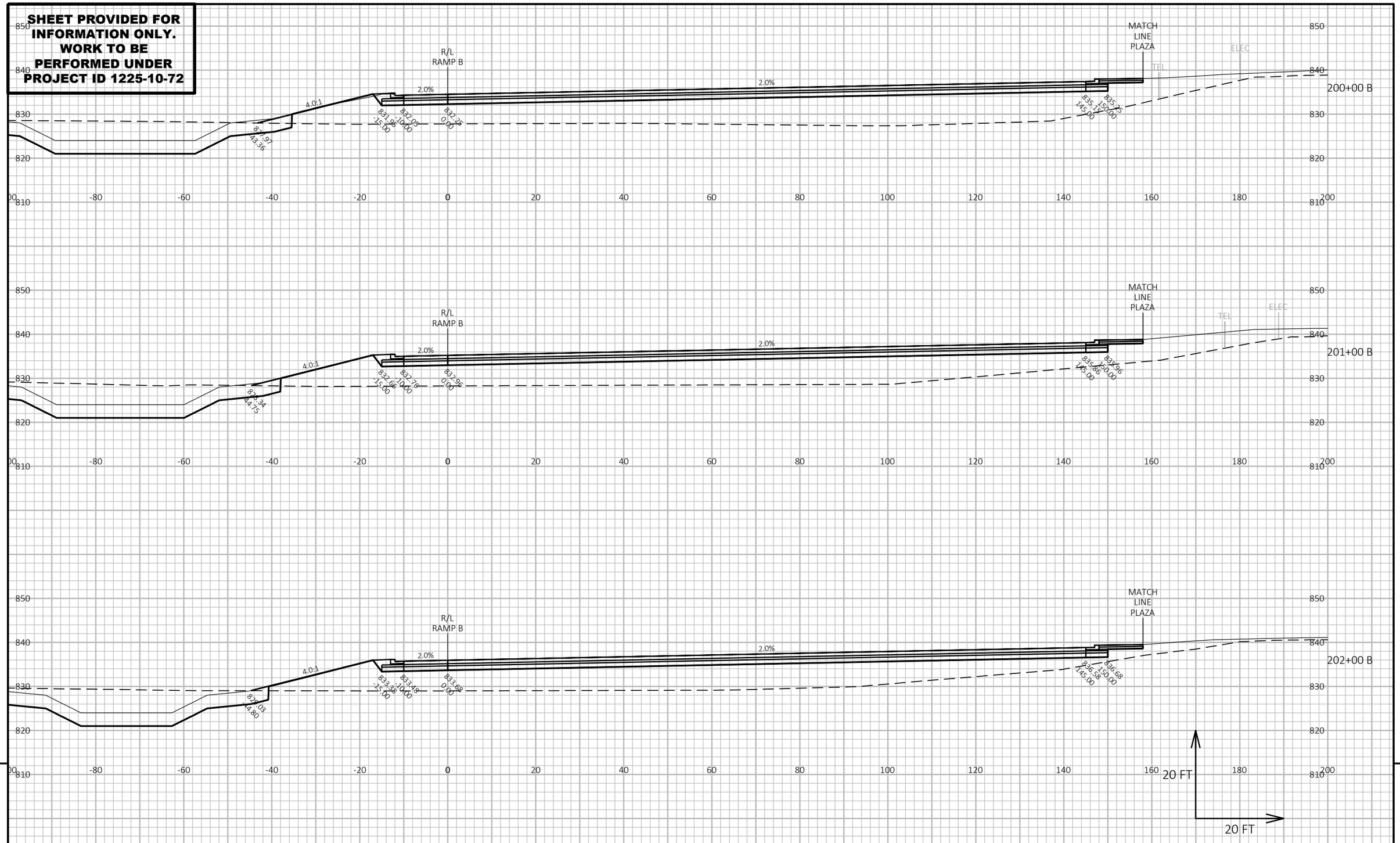
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 B 2-10

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72



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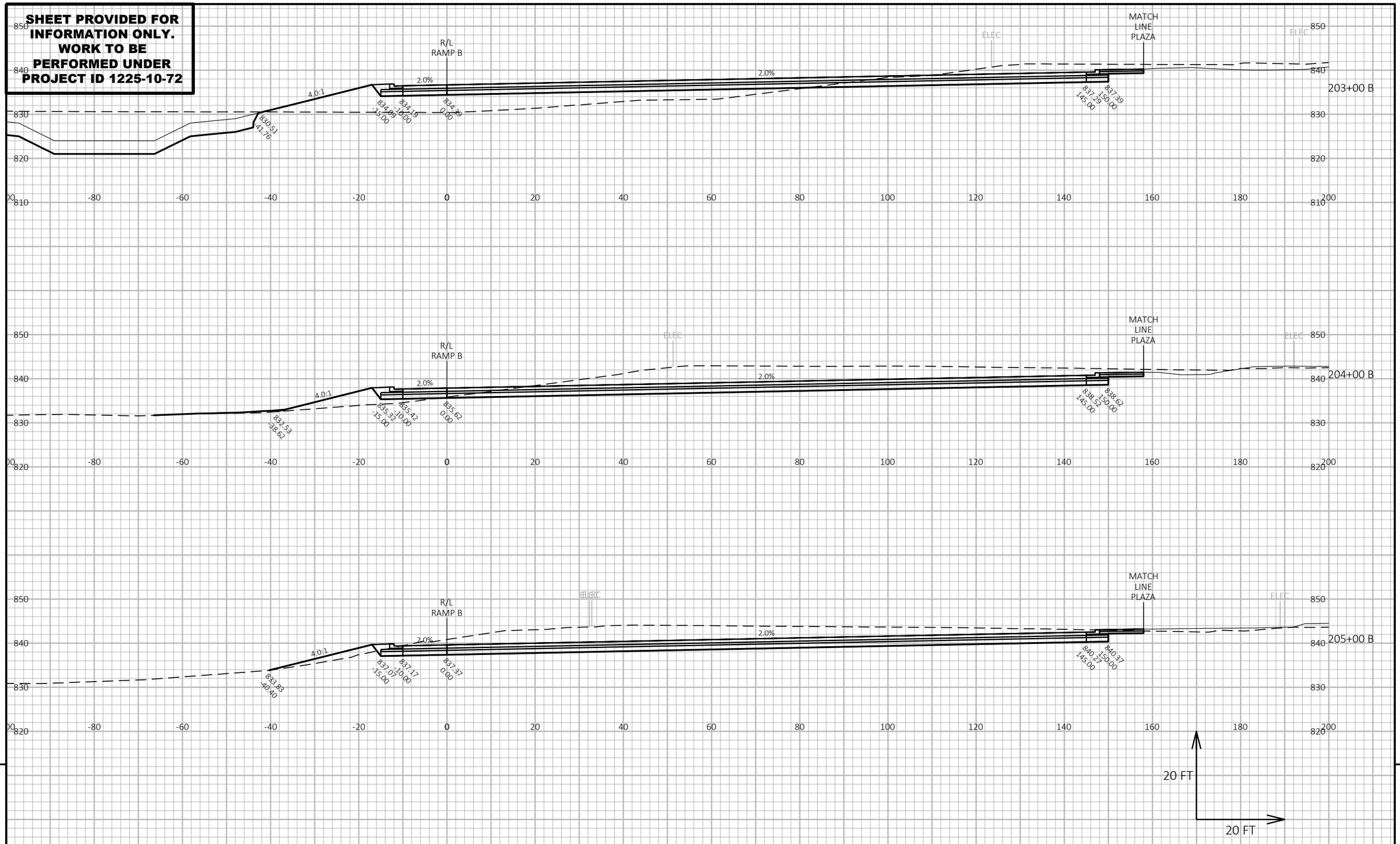
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PLOT DATE : 9/26/2024 12:52 PM PLOT BY : JASON KLEIST PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72



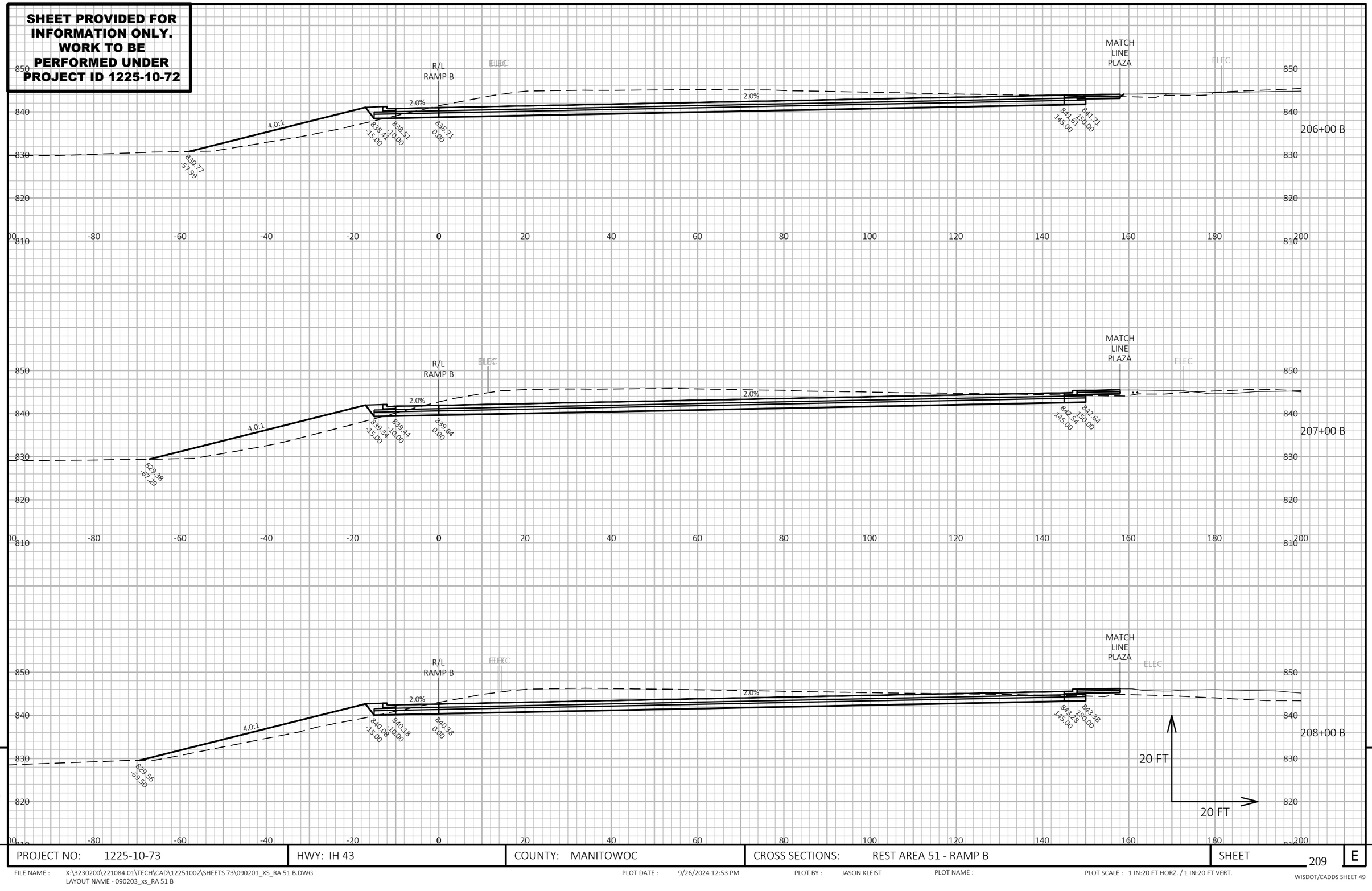
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WISDOT/CADDS SHEET 49

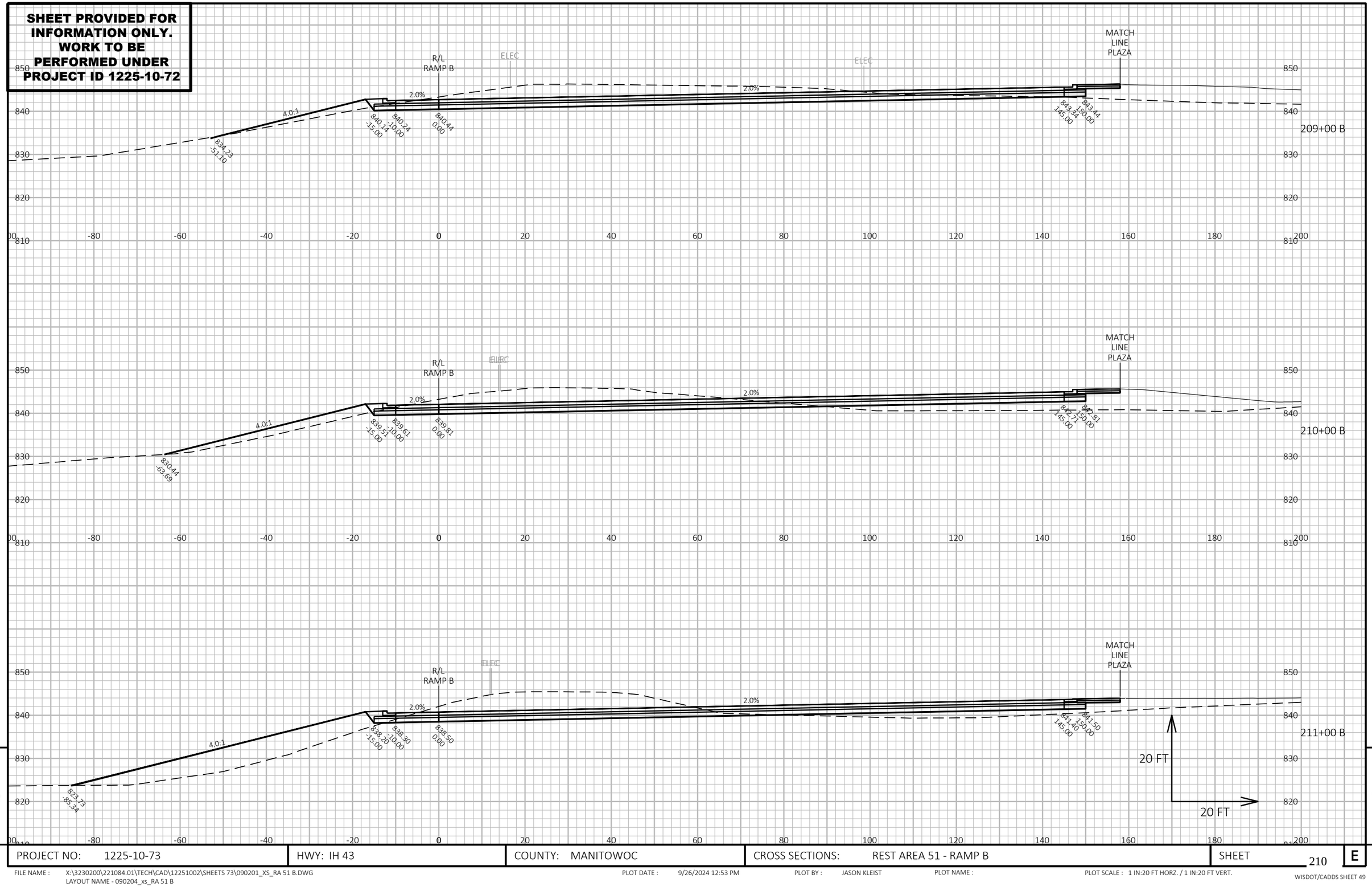
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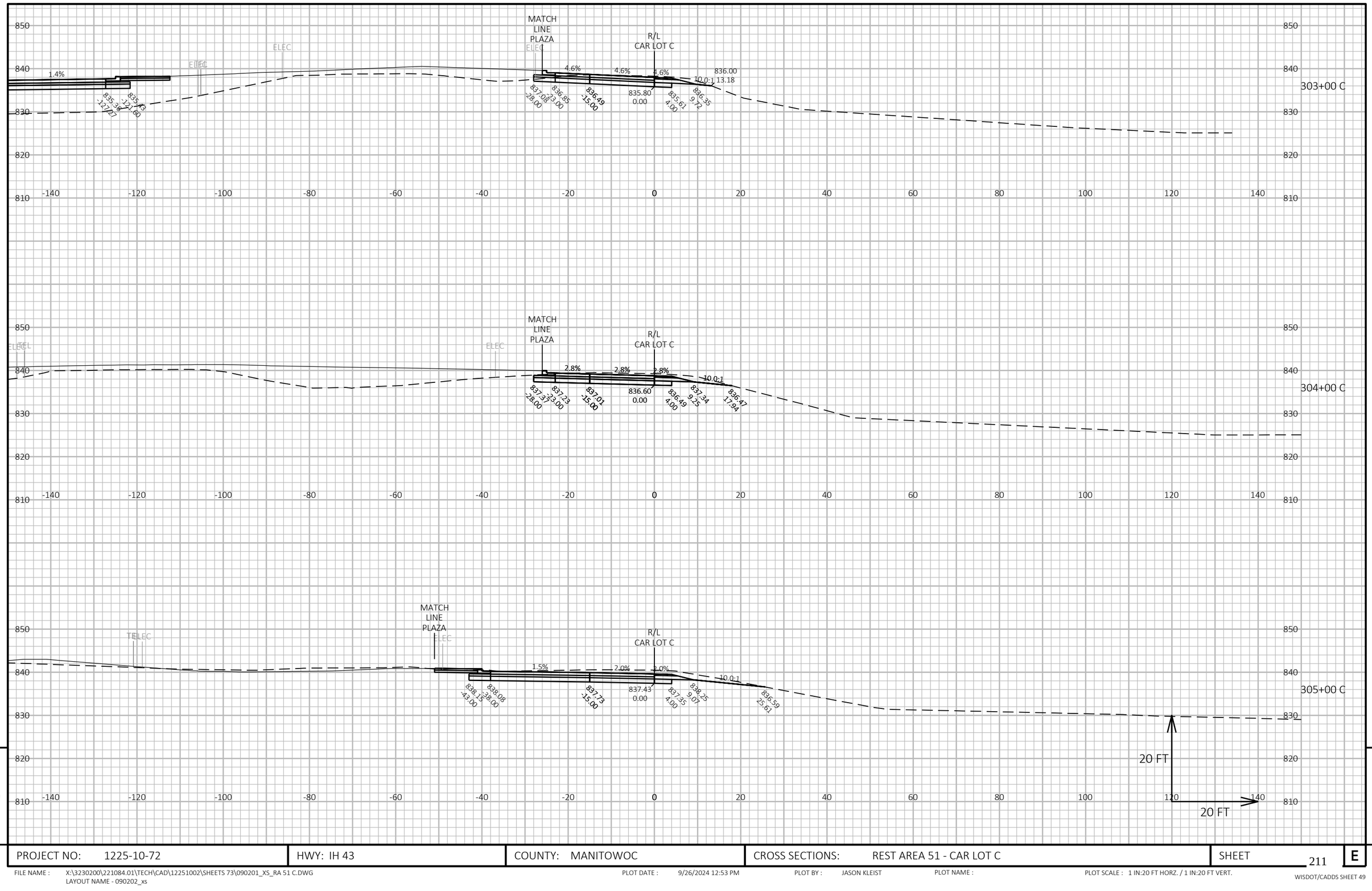


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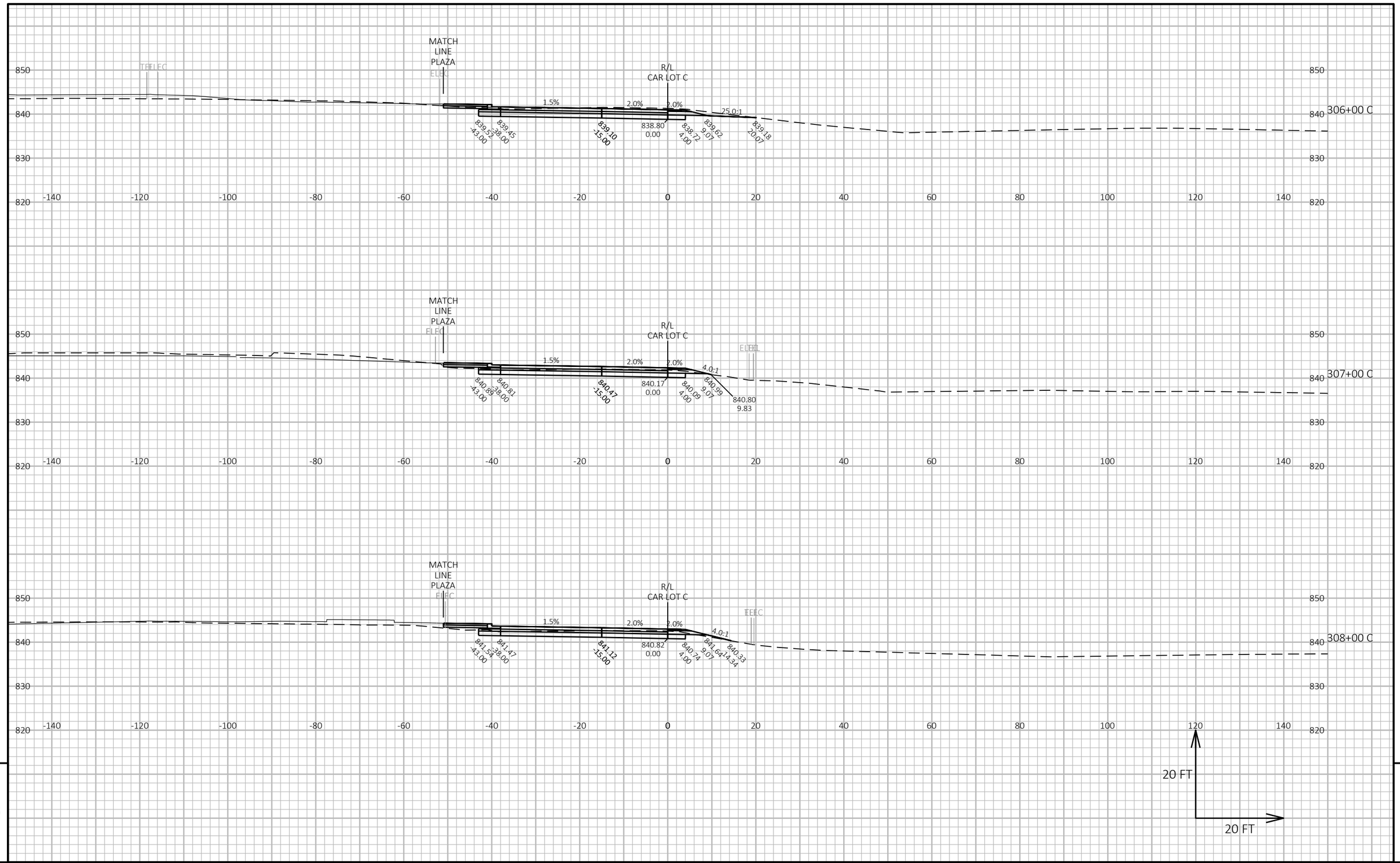
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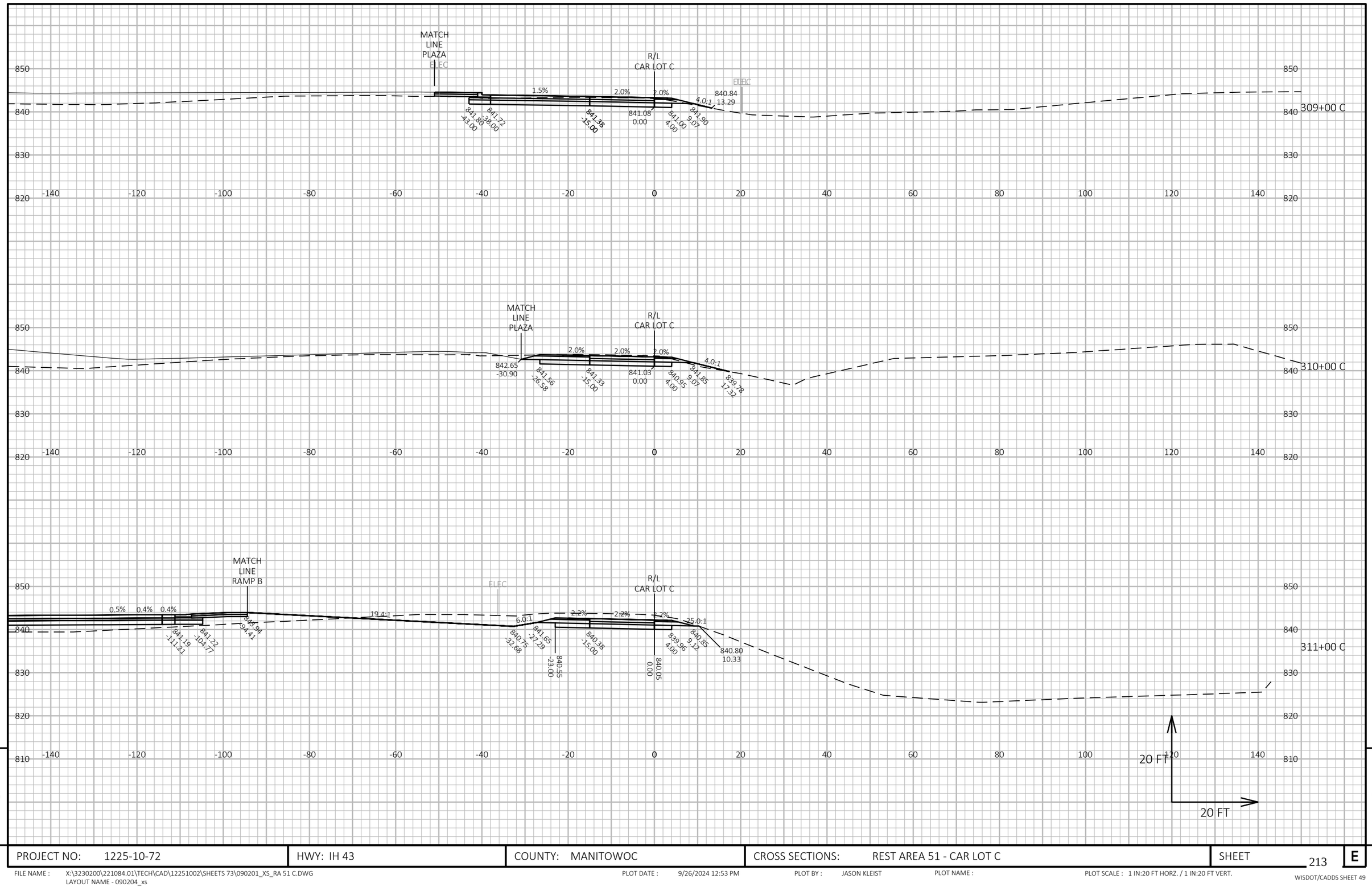
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WISDOT/CADDS SHEET 49



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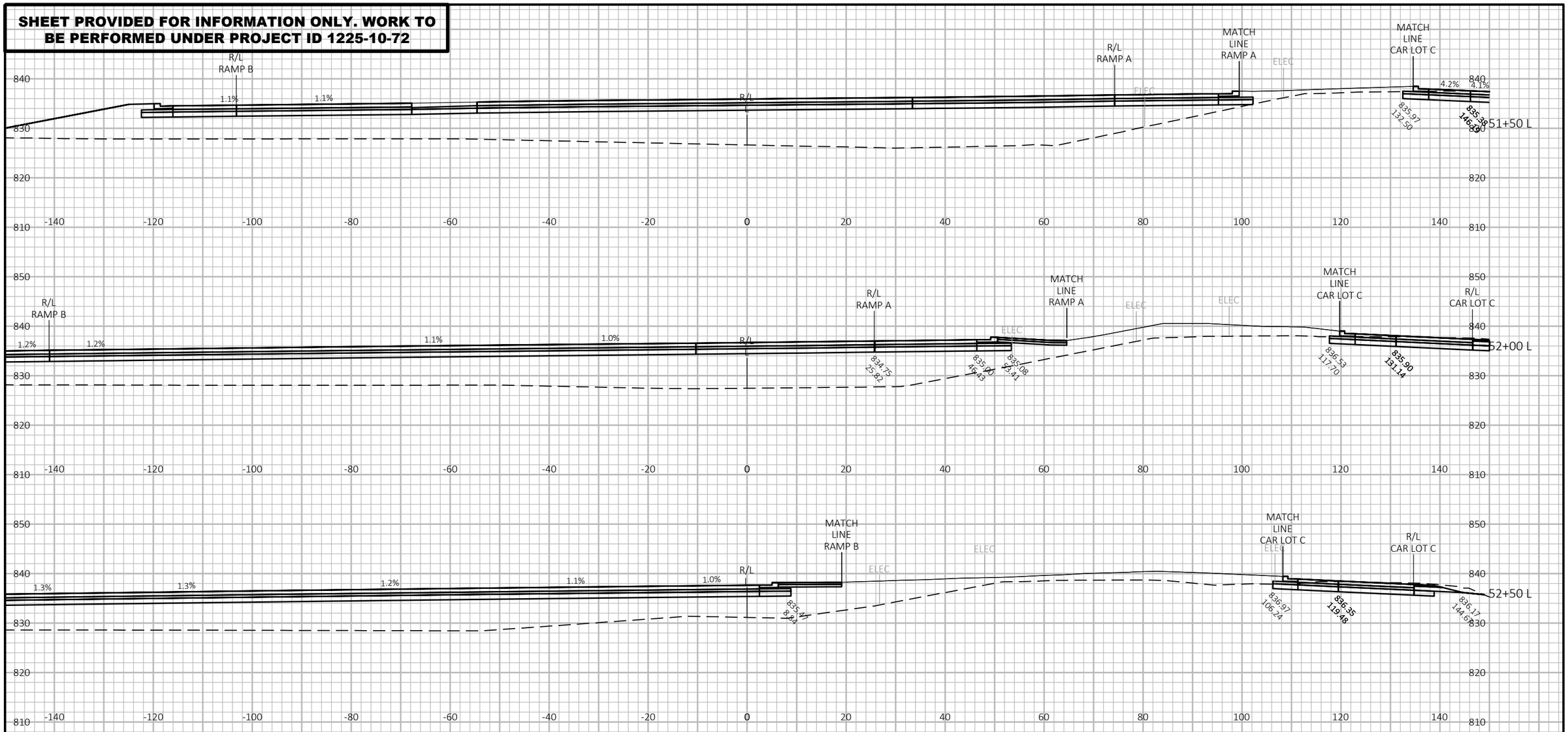
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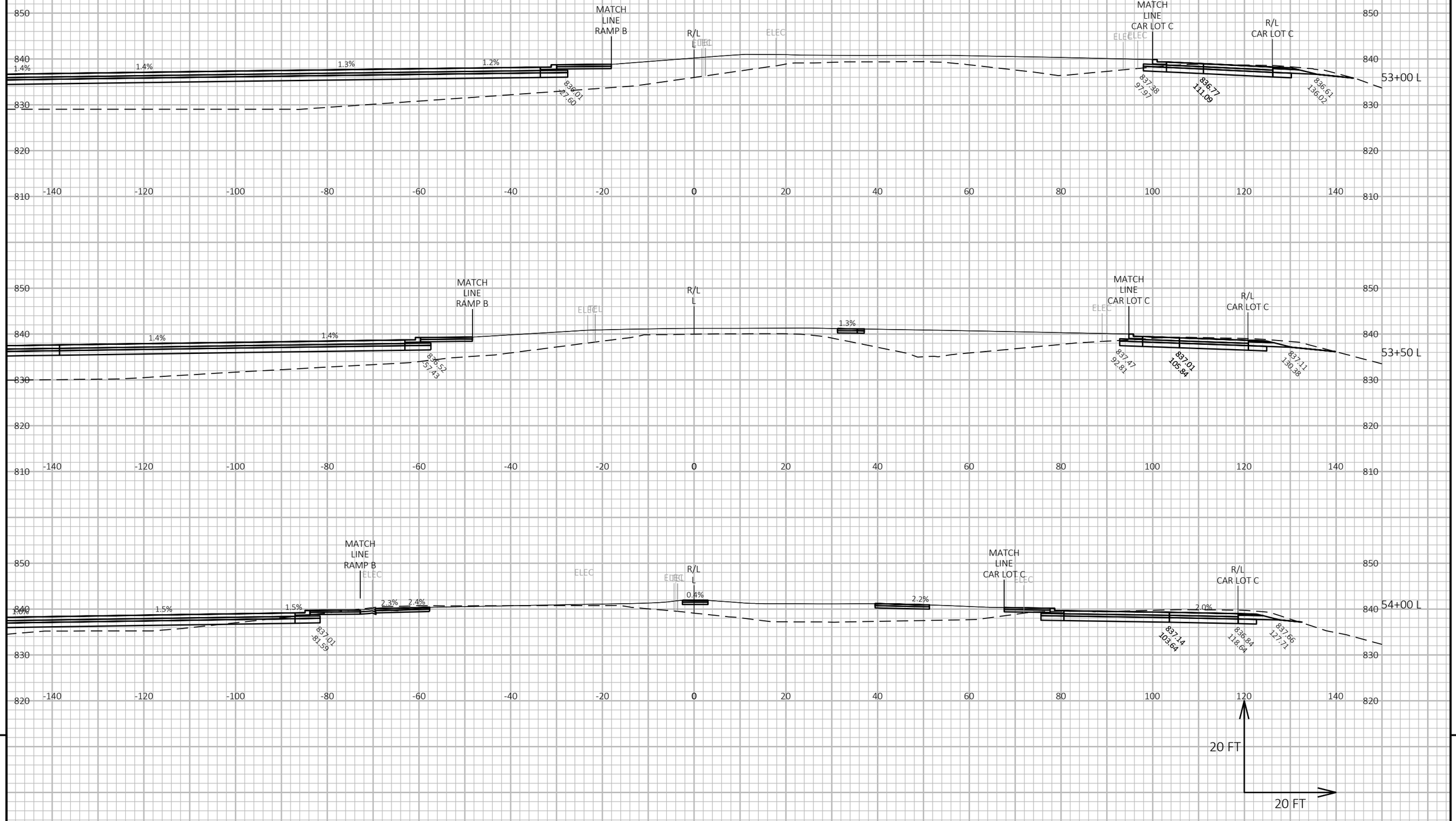
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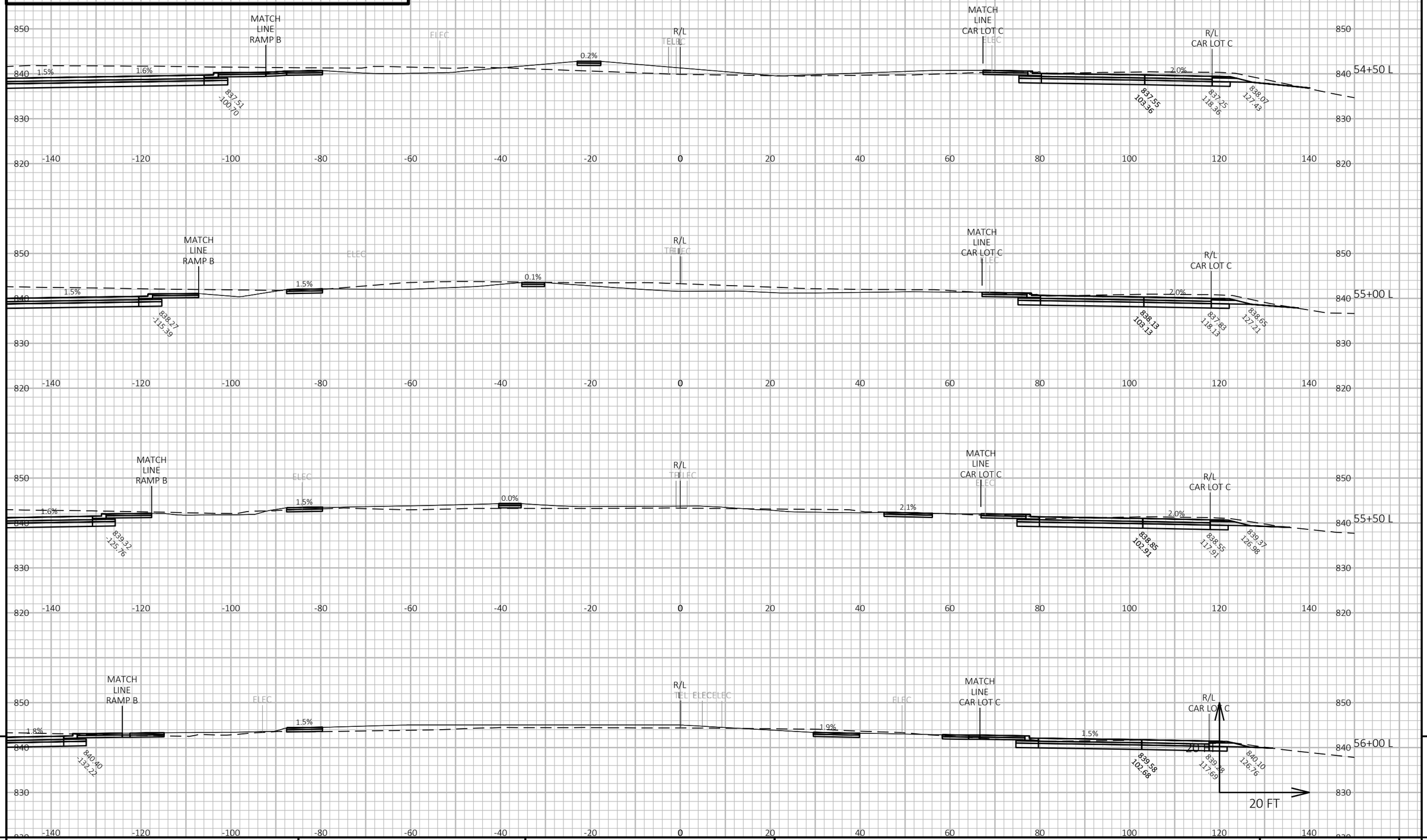
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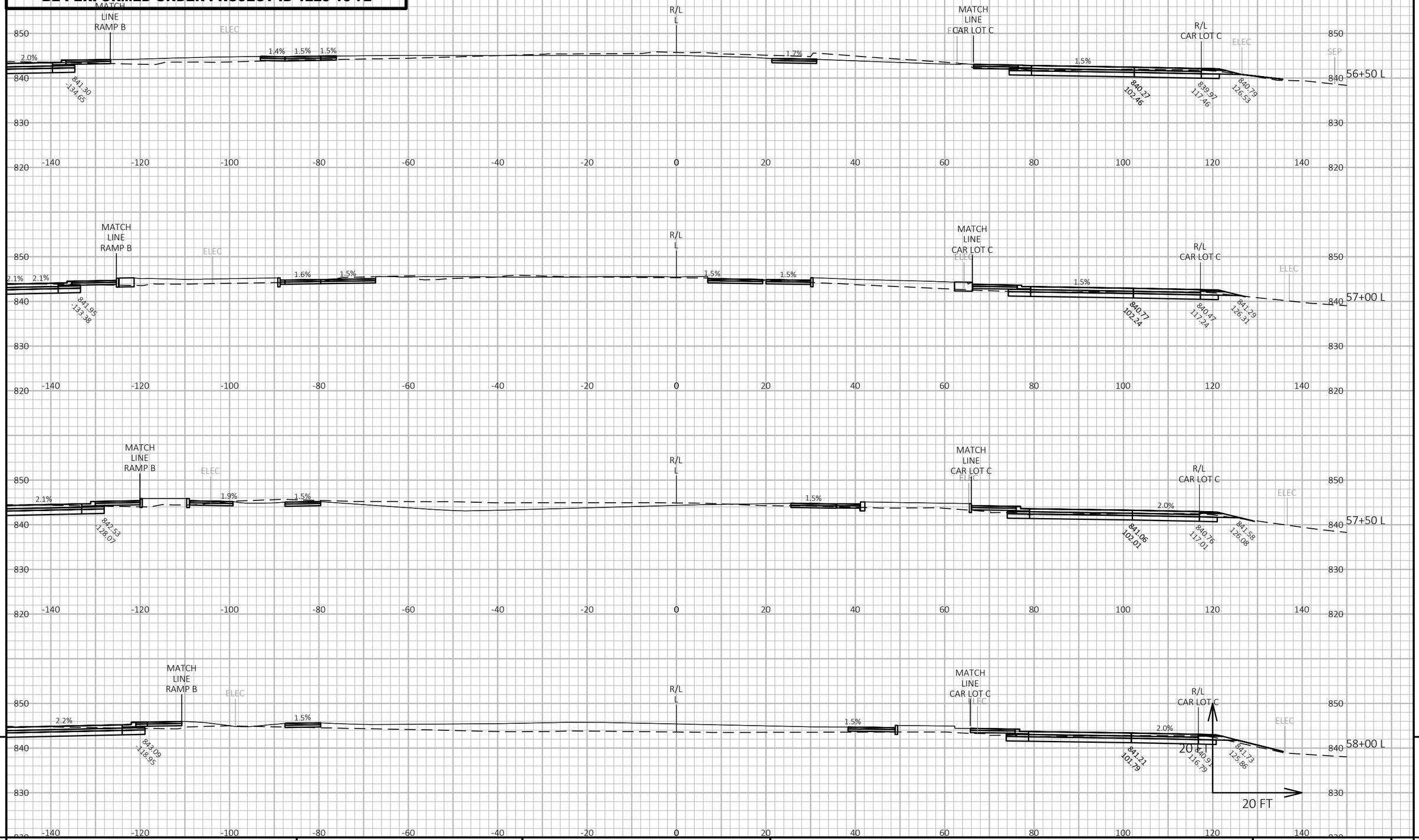
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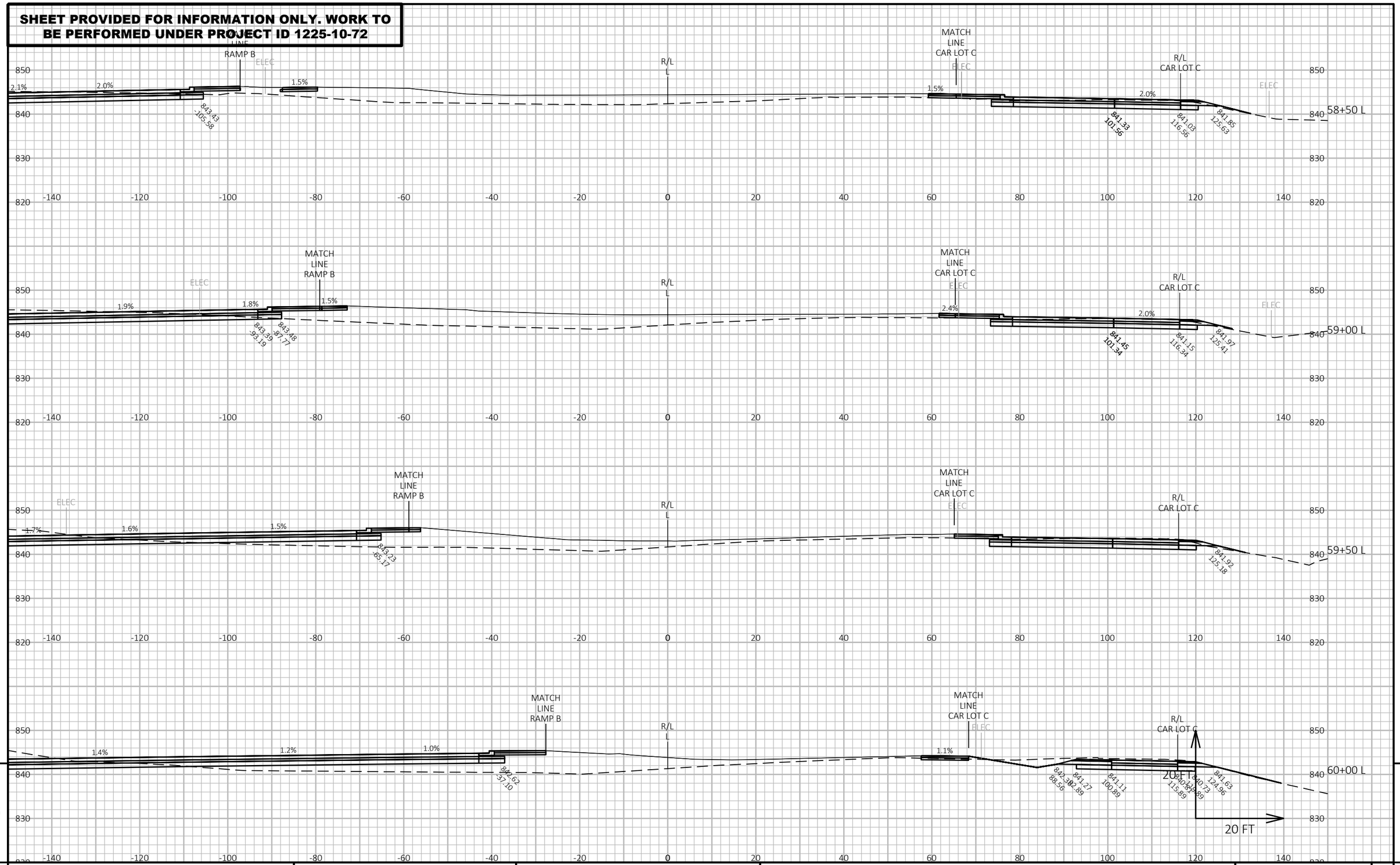
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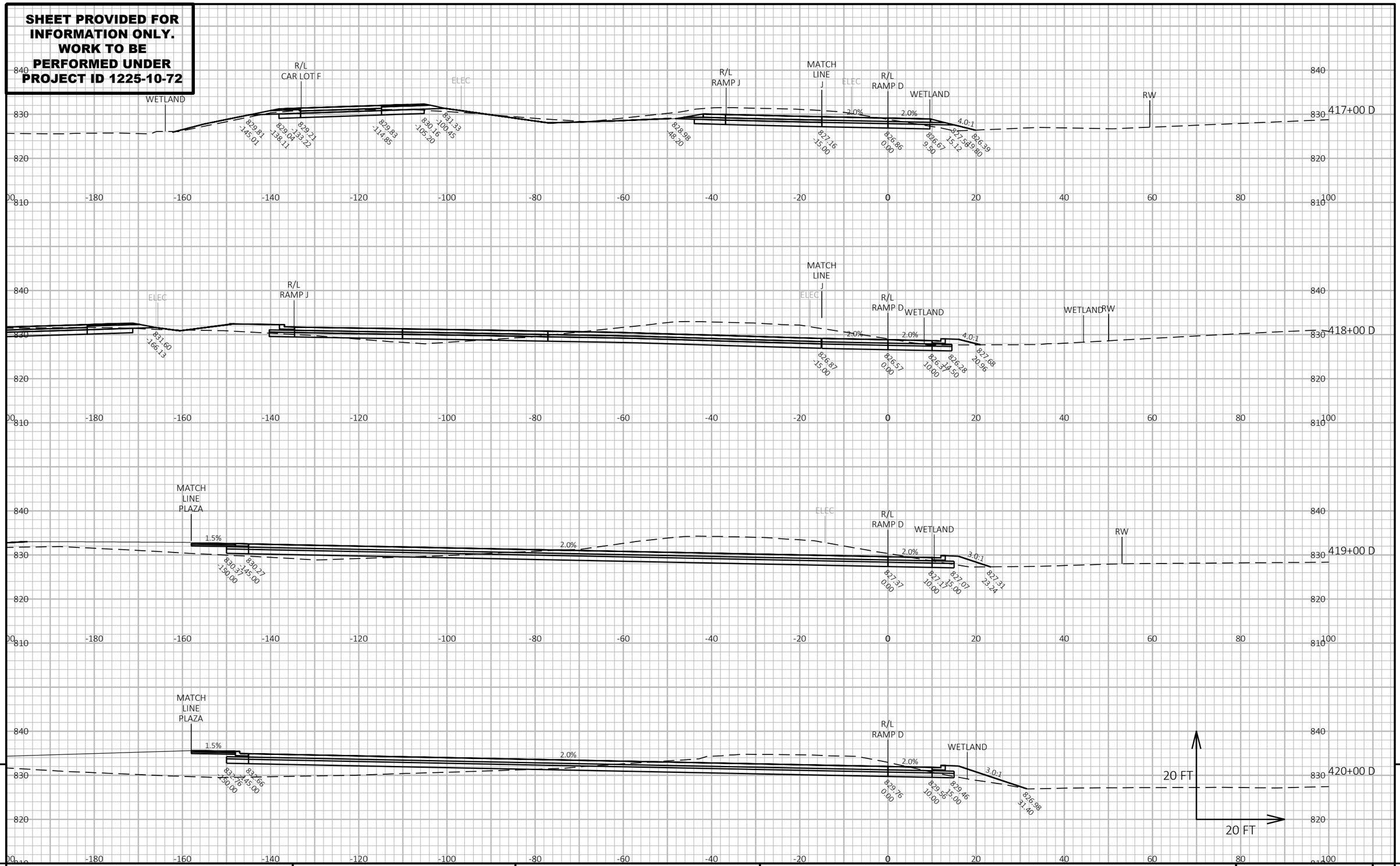
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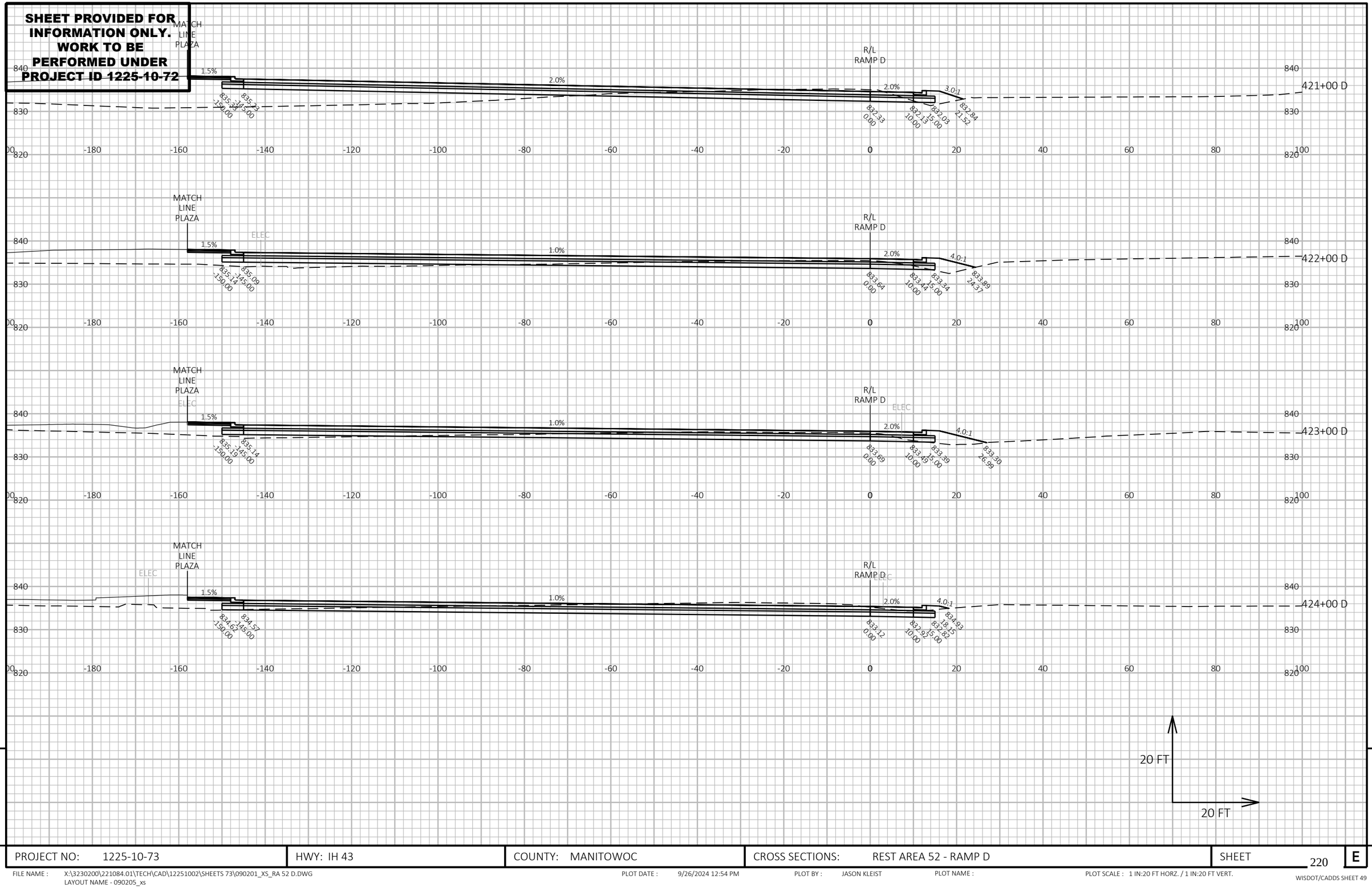
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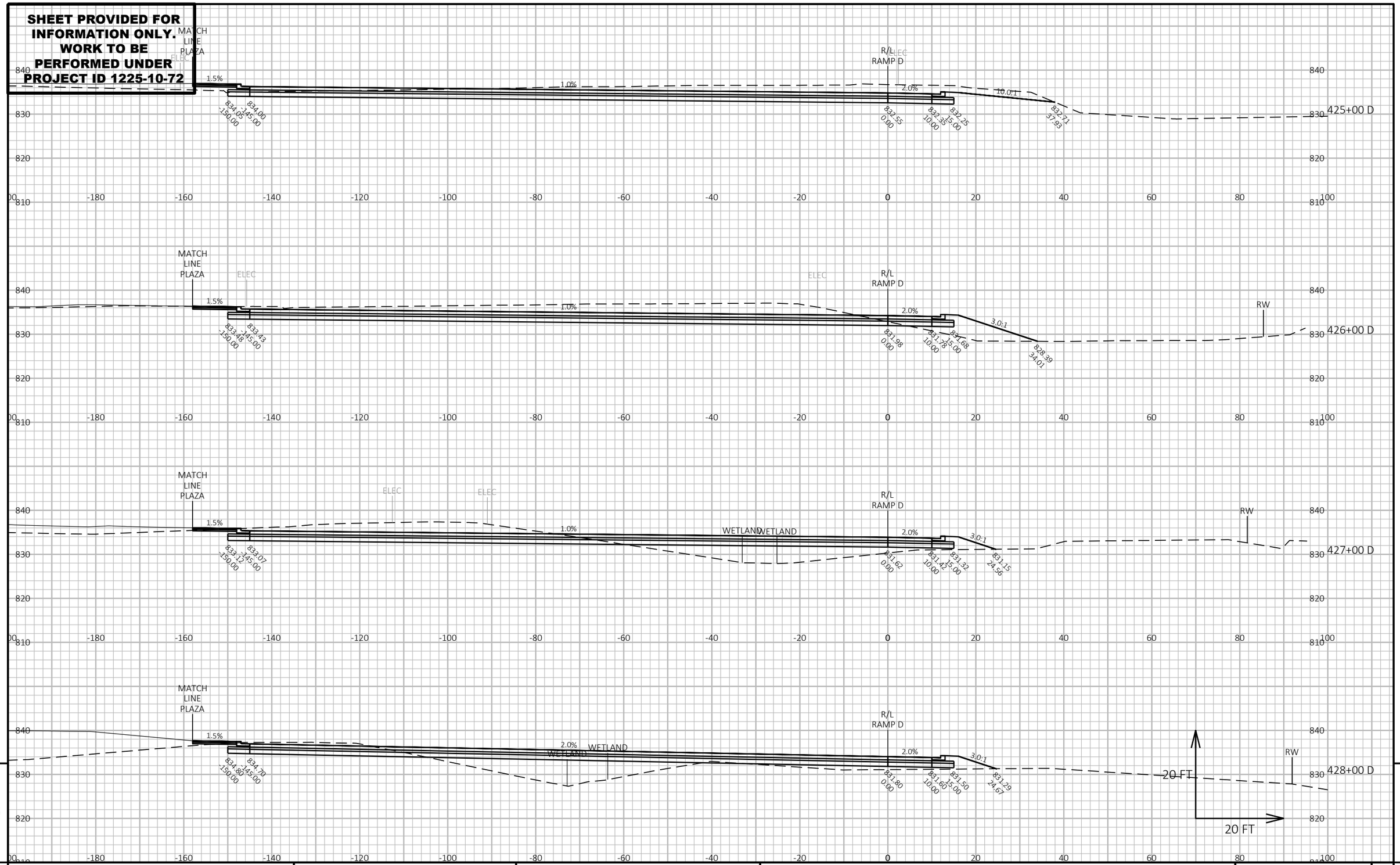
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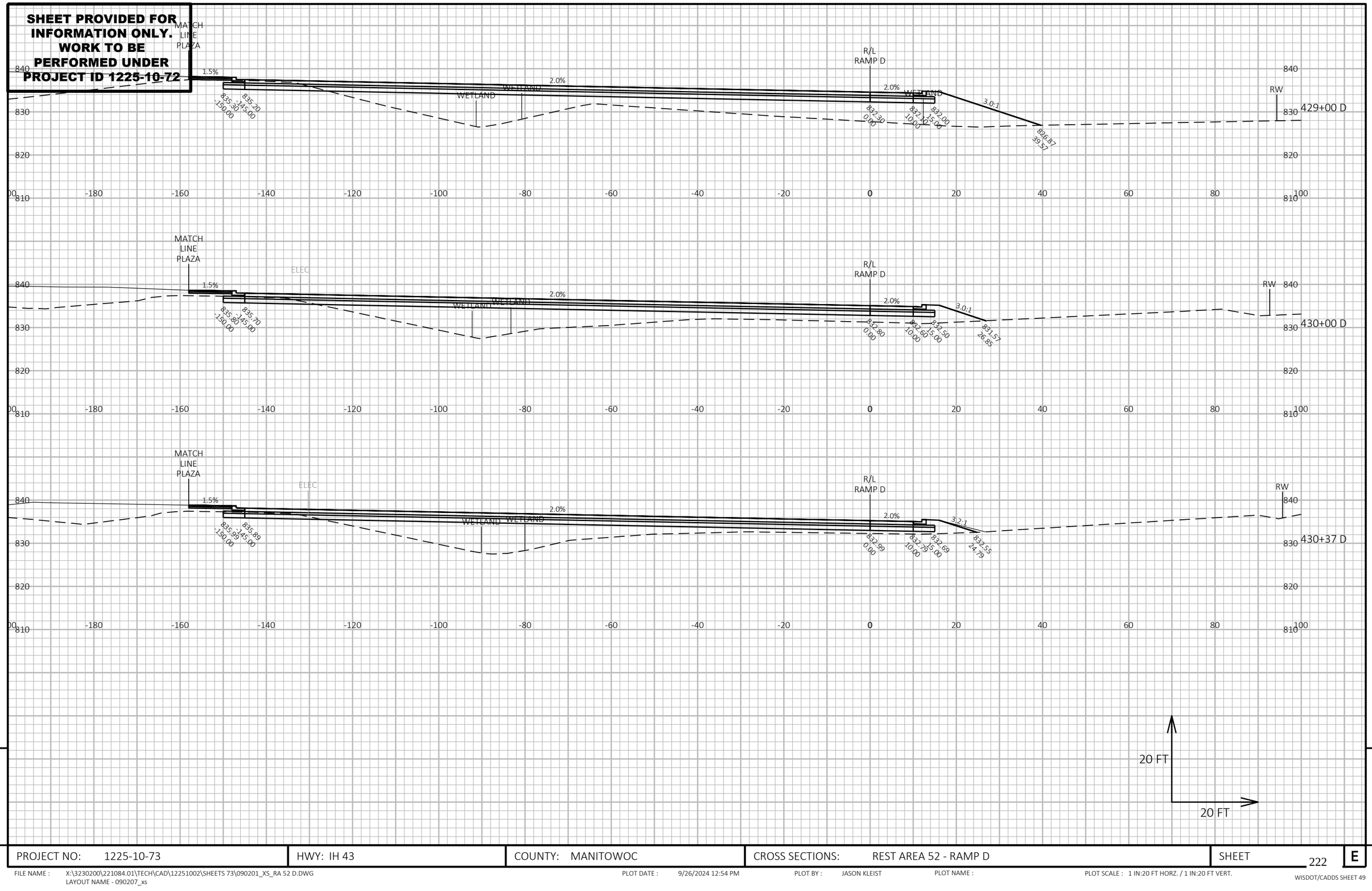
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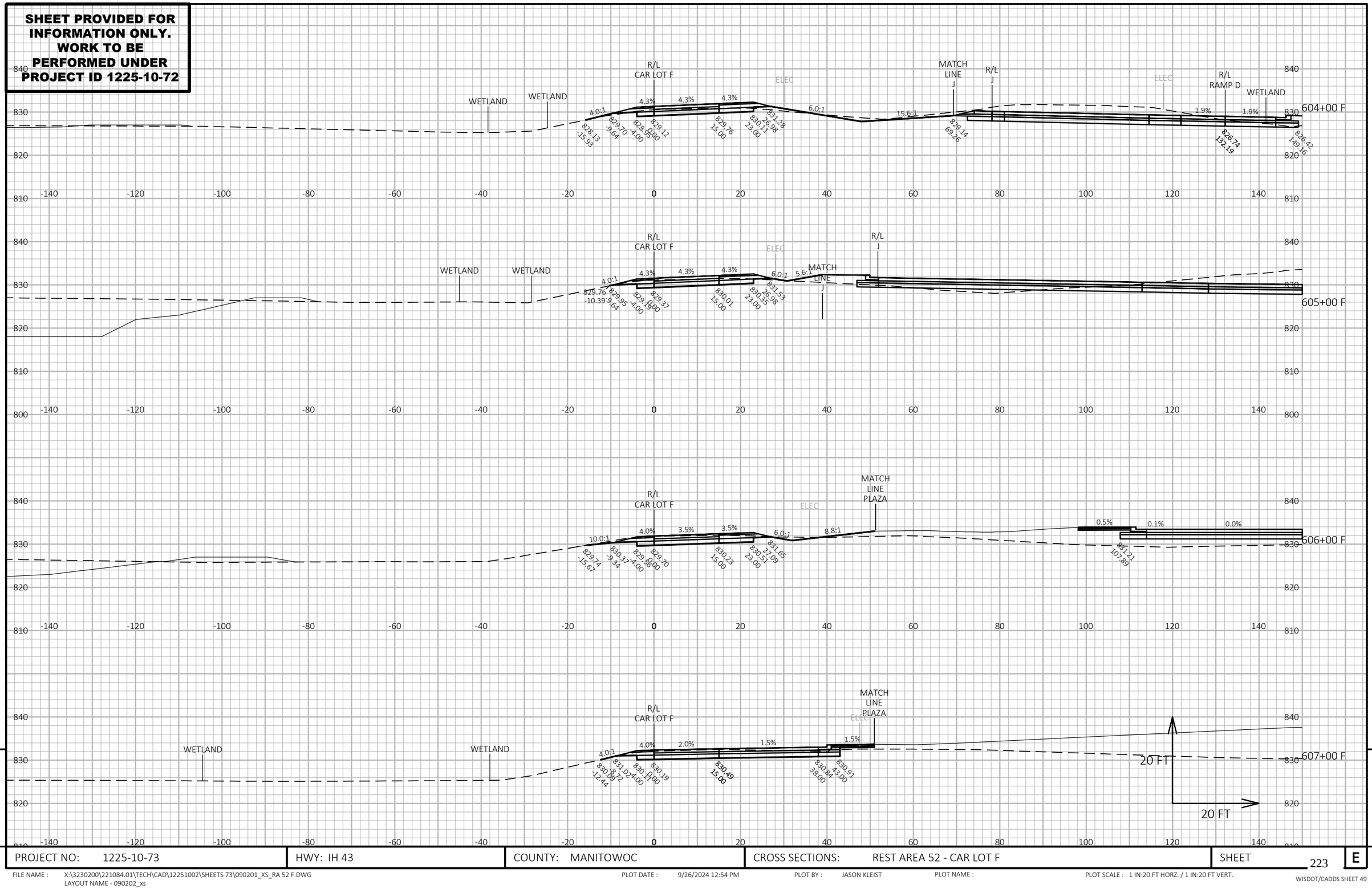
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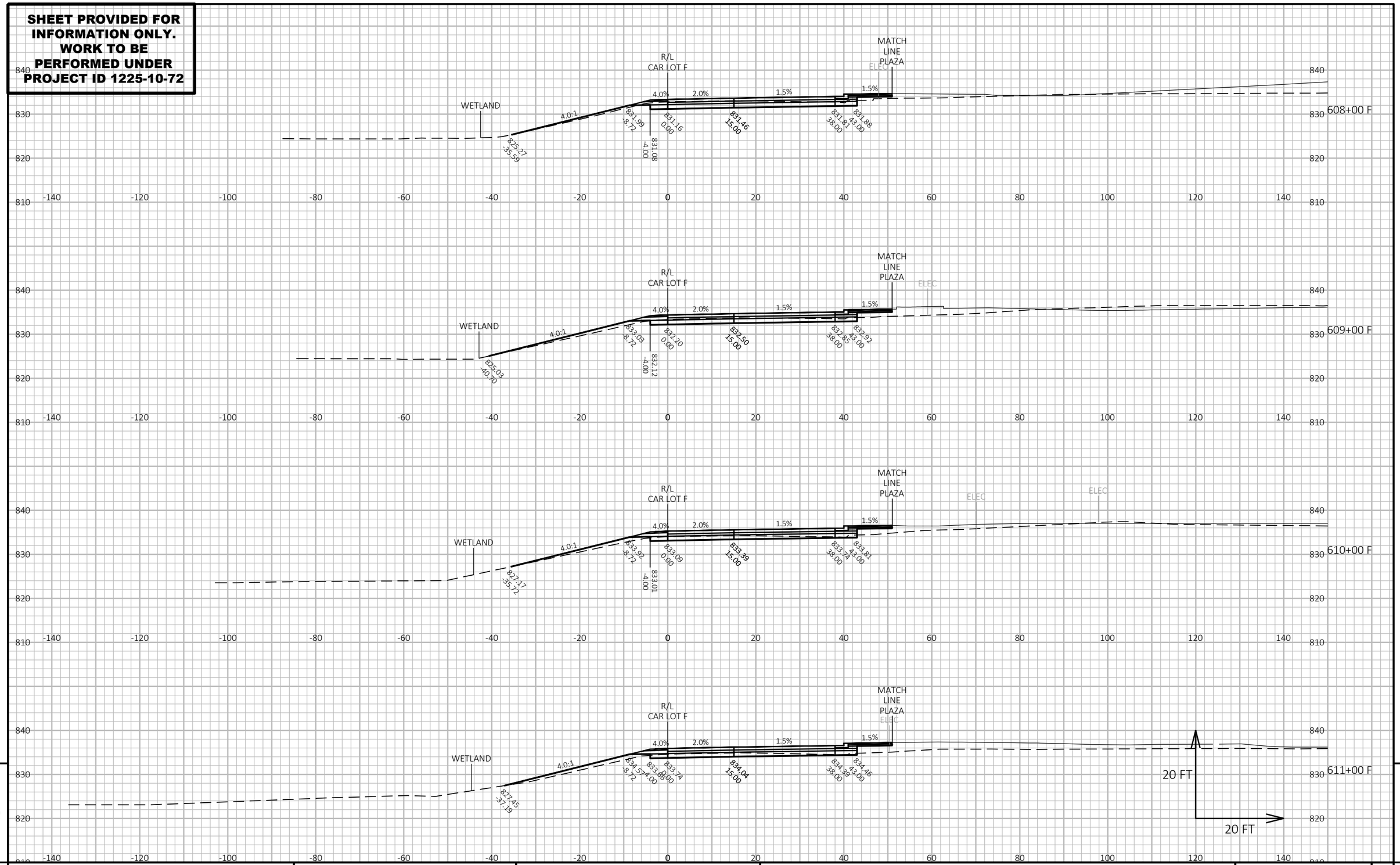
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PLOT DATE : 9/26/2024 12:54 PM PLOT BY : JASON KLEIST PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

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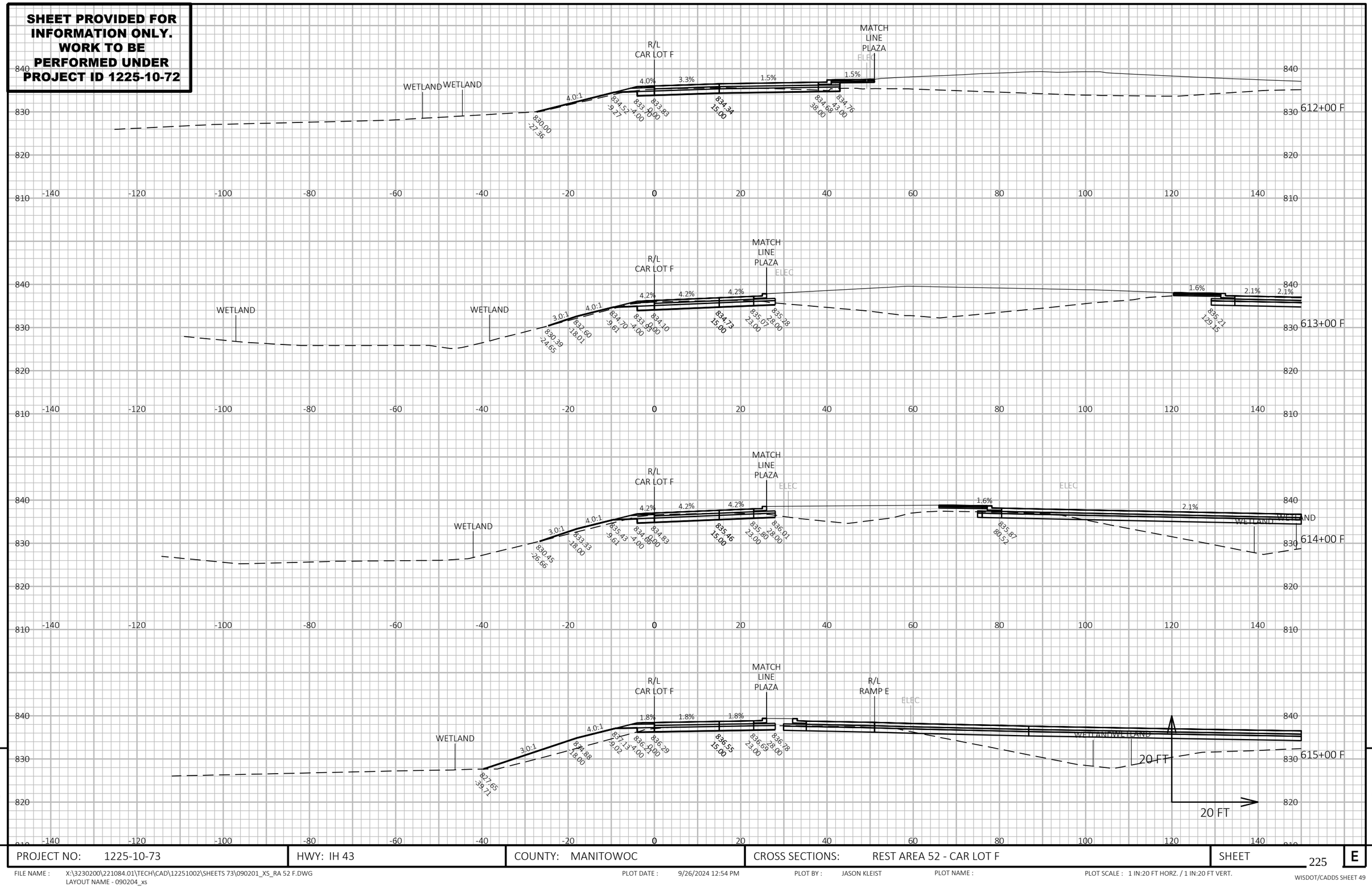
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FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\090201_XS_RA 52 F.DWG
LAYOUT NAME - 090203_xs

PLOT DATE : 9/26/2024 12:54 PM PLOT BY : JASON KLEIST PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72



9

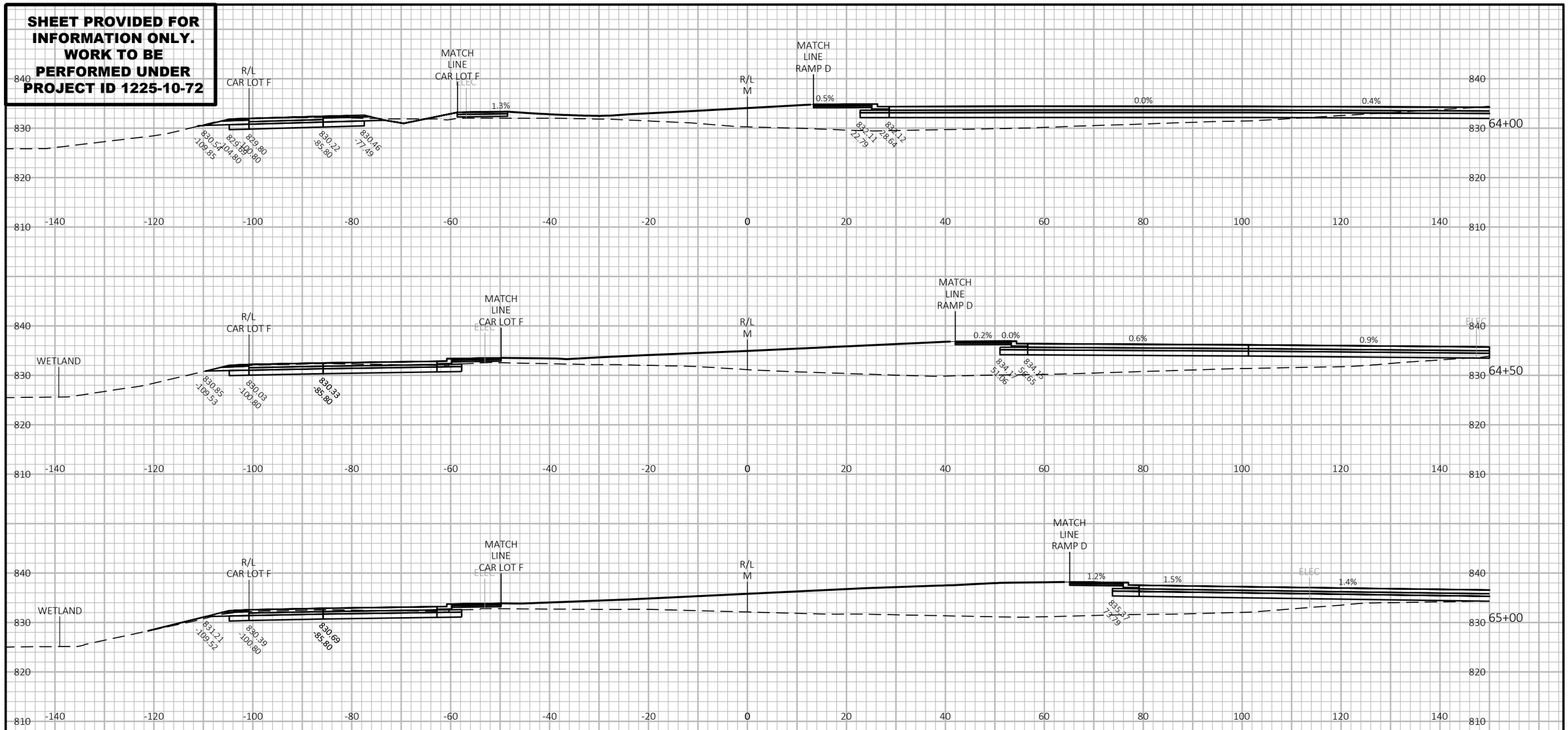
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PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - CAR LOT F	SHEET 225	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\090201_XS_RA 52 F.DWG
LAYOUT NAME - 090204_xs

PLOT DATE : 9/26/2024 12:54 PM PLOT BY : JASON KLEIST PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72



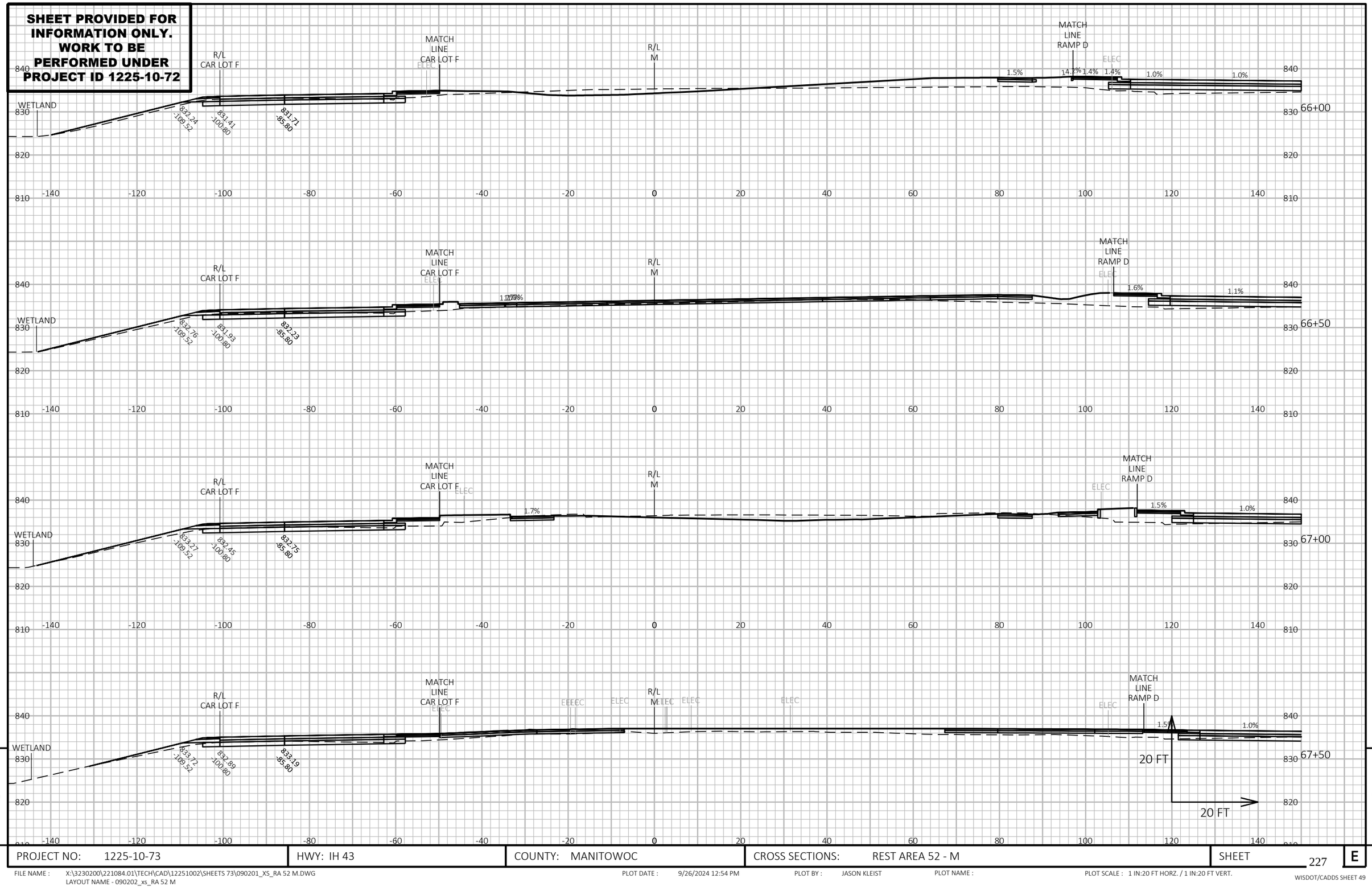
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FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\090201_XS_RA 52 M.DWG
LAYOUT NAME - 090201_xs_RA 52 M

PLOT DATE : 9/26/2024 12:54 PM PLOT BY : JASON KLEIST PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72



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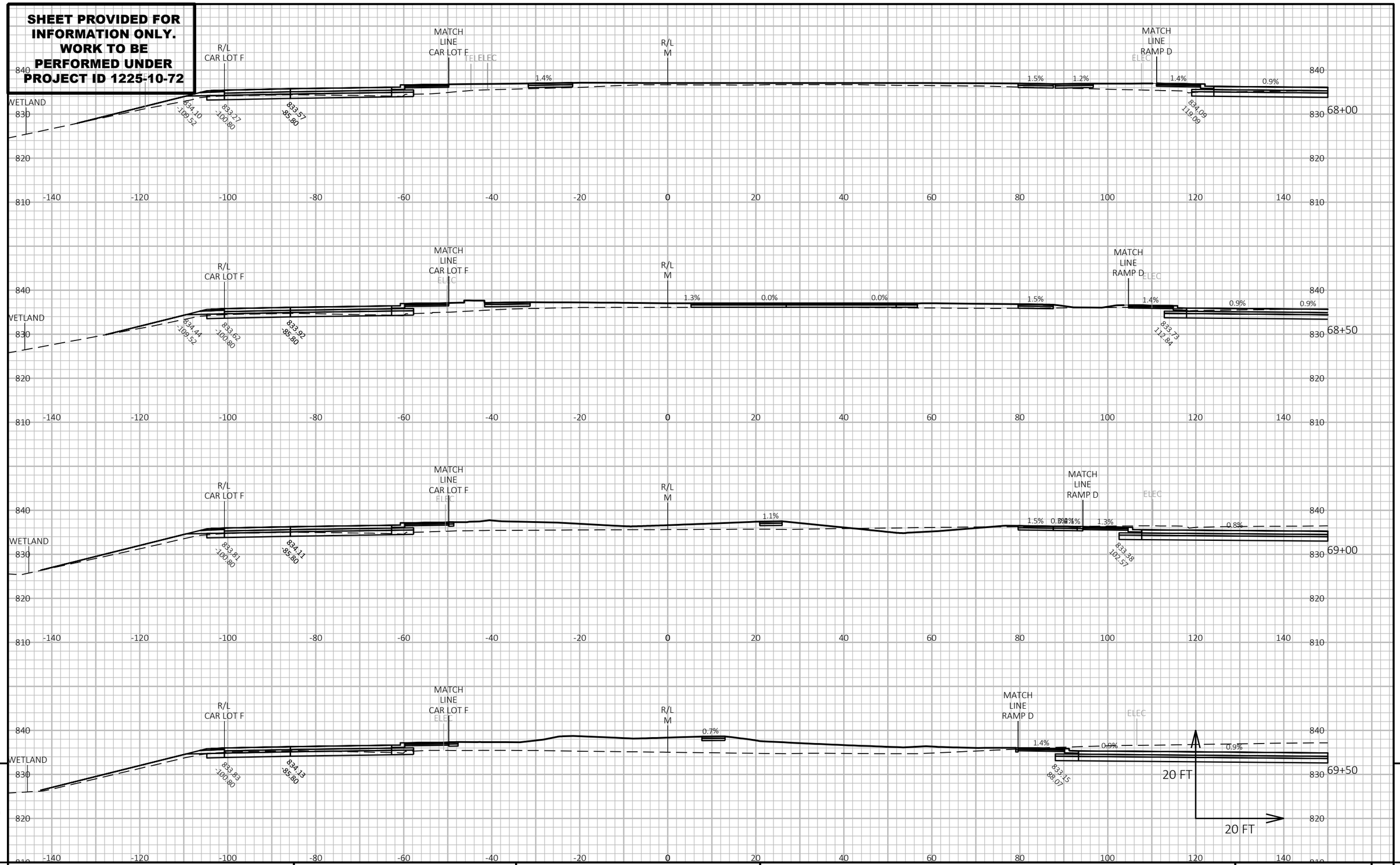
PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - M	SHEET 227	E

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LAYOUT NAME - 090202_xs_RA 52 M

PLOT DATE : 9/26/2024 12:54 PM PLOT BY : JASON KLEIST PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72



PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - M	SHEET 228	E

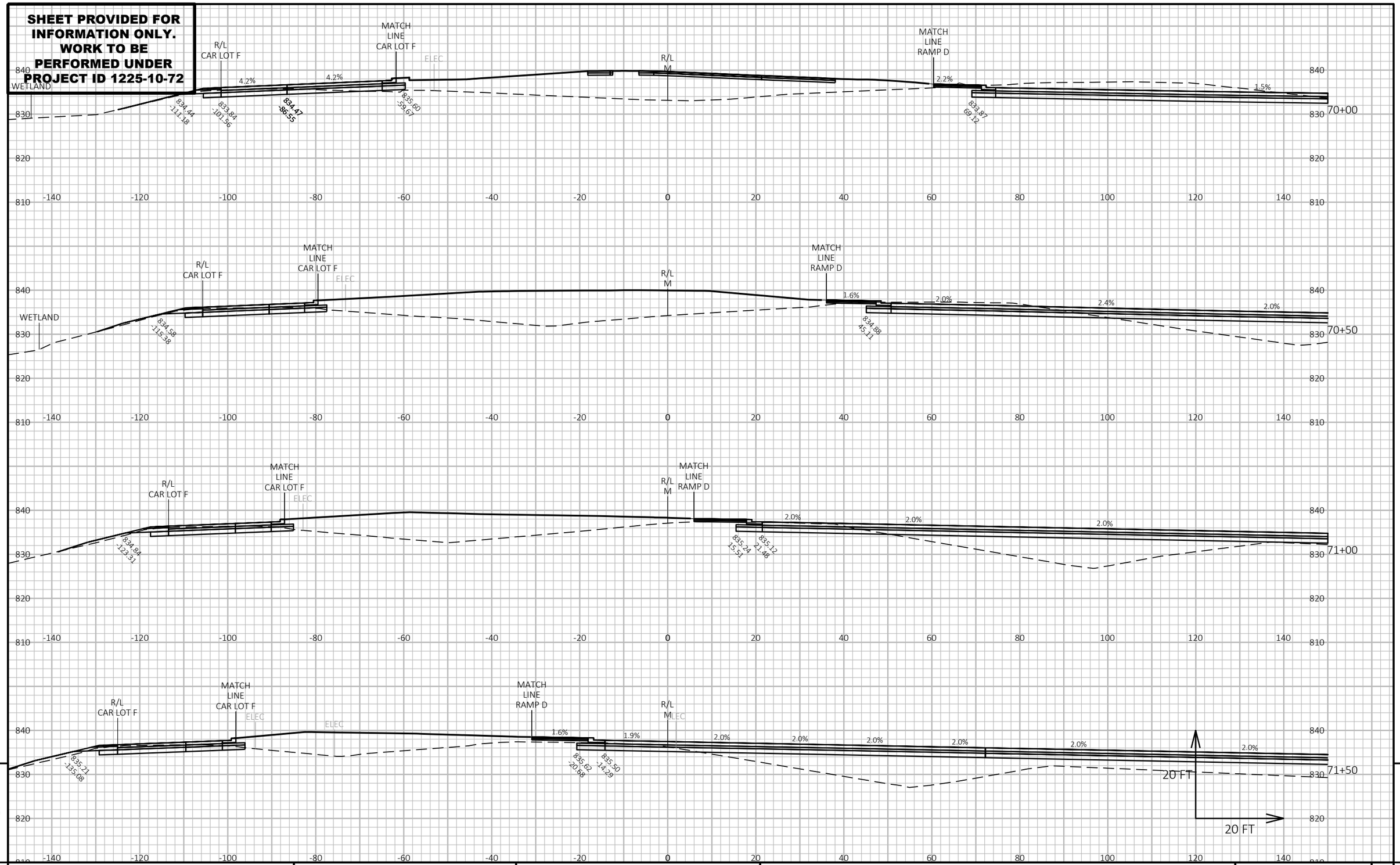
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LAYOUT NAME - 090203_xs_RA 52 M

PLOT DATE : 9/26/2024 12:54 PM PLOT BY : JASON KLEIST PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

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SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72



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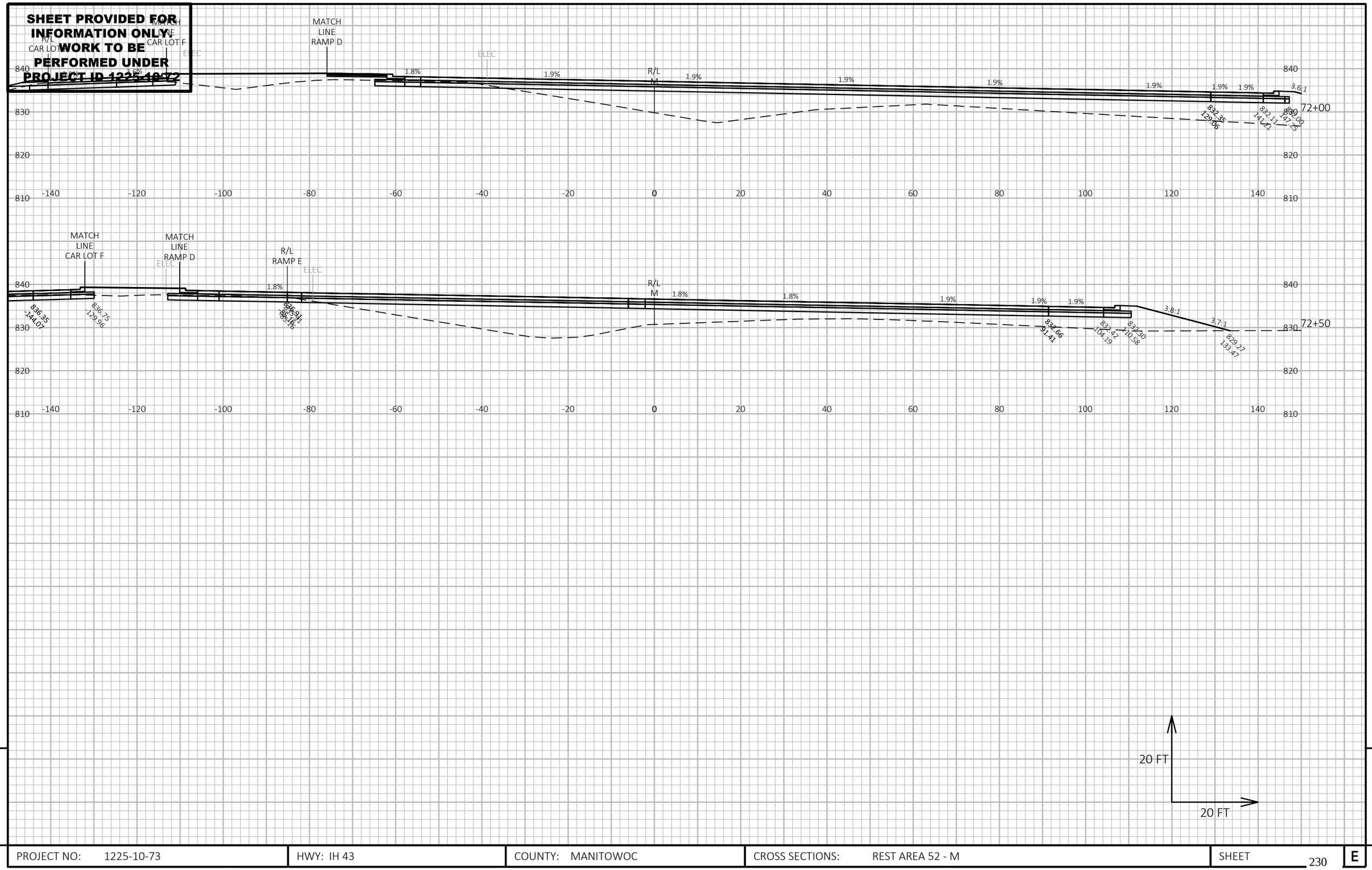
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PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - M	SHEET 229	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\090201_XS_RA 52 M.DWG
LAYOUT NAME - 090204_xs_RA 52 M

PLOT DATE : 9/26/2024 12:55 PM PLOT BY : JASON KLEIST PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

SHEET PROVIDED FOR INFORMATION ONLY. WORK TO BE PERFORMED UNDER PROJECT ID 1225-10-72



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20 FT

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PROJECT NO: 1225-10-73	HWY: IH 43	COUNTY: MANITOWOC	CROSS SECTIONS: REST AREA 52 - M	SHEET 230	E

FILE NAME : X:\3230200\221084.01\TECH\CAD\12251002\SHEETS 73\090201_XS_RA 52 M.DWG
LAYOUT NAME - 090205_xs_RA 52 M

PLOT DATE : 9/26/2024 12:55 PM PLOT BY : JASON KLEIST PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

Notes

Wisconsin Department of Transportation

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